Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-543

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	SW-846:8082	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6086	S	11/16/2009	
		1	RE03-10-6087	S	11/16/2009	
	SW-846:8270C	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

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Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-543

REQUEST NUMBER: 10-543

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13618	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13622	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13622	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13620	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13620	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13619	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13619	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13624	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13624	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13623	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13623	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13626	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13626	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13621	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13621	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13627	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13627	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13625	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13625	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6087	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6086	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6084	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6084	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6085	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6085	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:	Date	Time	Received By:	Date	Time
Printed Name / Signature	11/17/09	1400	Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13618 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	acc H
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608242	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — **COMPOSITE TIME INTERVAL:** — **WATER FLOWING:** YES / NO (NA)

BOREHOLE: YES / NO (NA) **BOREHOLE DECLINATION:** — **BOREHOLE DIRECTION:** —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Sandy gravel fill. Dark reddish brown (5 YR 3/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)2-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Samples: Background α: 26.7 MDA> β: 1776

COLLECTED BY (PRINT) M. Nauck, L. Horne **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11-16-09
(Signature) [illegible]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13619 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	QTB3
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608242	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0'	SCREEN/PORT DESC:		
FIELD MATRIX:	SR MK/16/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Strong brown tuff (7.5 YR 4/6)

SAMPLE COMMENTS: hit tuff @ 1.5 ft.

LOCATION DESC: 014(b)2-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Background
α: 26.7 DPM
β: 1776 DPM
samples: mDA7

COLLECTED BY (PRINT) J. Jordan **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13620 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1437	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608243	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand, reddish-brn (5YR 4/3), moist, w/ organic material

SAMPLE COMMENTS: tuff @ 1'

LOCATION DESC: 014(b)2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 4 ppm SAMPLES
BACKGROUND <MDA
α: 26.7
β: 1776

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Shendo	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) [signature]	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13621 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	JJS 11-16-09 ~~NA~~ QBT 3	OK
TIME COLLECTED (HH:MM)		1442	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608243		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R JJS 11-16-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: tuff (QBT 3), lt. reddish-brn (5YR 6/3), moist, hard

SAMPLE COMMENTS:

LOCATION DESC: 014b2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 2.0ppm Background
alpha: 26.7 < Samples
Beta: 1776

COLLECTED BY (PRINT) M. Nauch, L. Horne **REVIEWED BY (PRINT)** J. Jost

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) N. Shenda	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13622 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		1520	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608244		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: S: Hy Sand, reddish-brn (5YR 5/3), moist

SAMPLE COMMENTS:

LOCATION DESC: 014(b2)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.5 ppm
Alpha = 26.7
Beta = 1776

Samples < MDA

COLLECTED BY (PRINT) M. Nanch **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Elundo	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13623 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1523	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608244		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ _____ ~~WATER FLOWING: YES / NO~~ / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ _____ ~~BOREHOLE DIRECTION:~~ _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QBT 3 tuff, reddish-brn (5YR 5/3), moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm background - α: 26.7 DPM β: 1776 DPM SAMPLES: MOA>

COLLECTED BY (PRINT) M. Nauch **REVIEWED BY (PRINT)** J. Trujillo

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11-16-09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13624 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK ~~NA~~ 11-16-09
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	NA	SAMPLE TECH CODE:	NA	
LOCATION ID:	03-608245		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand (dark reddish gray 5YR 4/2) + tuff (QBT3), moist, plant roots

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-41

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm. BACKGROUND: Alpha: 26.7 DPM Beta: 1776 DPM SAMPLES: MDA>

COLLECTED BY (PRINT) M. Rauch, D. Thomas **REVIEWED BY (PRINT)** J. Isl

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rauch (Signature)	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature)	11-16-09 1715
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13625 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA QBT3	Ok
TIME COLLECTED (HH:MM)		1544	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608245		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JLJ	11-16-09	EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO / (NA) ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: tuff (QBT3) dk reddish-brn (5YR 3/2), v. moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
BACKGROUND:
Alpha = 26.7 DPM
Beta ~ 1776 DPM

SAMPLES: MDA 2

COLLECTED BY (PRINT) M. Nauch / D. Thomas **REVIEWED BY (PRINT)** J. J

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13626 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		1500	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608246		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO	NA	

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, brn (7.5YR 4/3), moist, no odor

SAMPLE COMMENTS: NA

LOCATION DESC: 014 (b) 2) 5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND: Alpha: 26.7 DPM Beta: 1776 DPM SAMPLES: MDA>

COLLECTED BY (PRINT) M. Shendo, B. Thomas REVIEWED BY (PRINT) J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Davis (Signature) [illegible]	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13627 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1505	SUB-MEDIA:	OTHER	↓
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	↓
LOCATION ID:	03-608246	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, reddish-brn (5YR 4/3), v. moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014b2-S

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0 ppm BACKGROUND Alpha = 26.7 DPM Beta = 1776 DPM SAMPLES: MDA >

COLLECTED BY (PRINT) M. Shenk / D. Thomas REVIEWED BY (PRINT) J. Jinks

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6084 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	SOIL	↓
PRS ID:	03-014(b), 03-014 (b2)	03-014 (b)	SAMPLE TECH CODE:	HA	↓
LOCATION ID:	UNK	ok	FIELD QC TYPE:	FD	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13618

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) J. [illegible] **REVIEWED BY (PRINT)** M. Ramos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Ramos	11/16/09	(Printed Name) Sherri Sherwood	11-16-09
(Signature) [illegible]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6085 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALUI	QBT 3
TIME COLLECTED (HH:MM)		1442	SUB-MEDIA:	SOIL	
PRS ID:	03-014(b),03-014 (b2)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JLS	11-16-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13621

SAMPLE COMMENTS: NA

LOCATION DESC: b2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.0 ppm background
Alpha 26.7 DPM MDA>
Beta 776 DPM

COLLECTED BY (PRINT) M. Nauch L. Home REVIEWED BY (PRINT) J. Josh

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sheri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sheri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6088 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1305	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b) 03-014 (b2)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	OK	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC: 03-014(b2) - 1

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) J. Trolan

REVIEWED BY (PRINT) M. Rains ~~M. Snow~~ JLT 11-16-09

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vaick	11-16-09 1715	(Printed Name) Sherri Sherwood	11-16-09 1715
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6090 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1423	SUB-MEDIA:	OTHER	↓
PRS ID:	03-014(b), 03-014 (b2)	03-014(b2)	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608242	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Shendo

REVIEWED BY (PRINT) M. Vaut

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vaut (Signature)	11-16-09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-~~6086~~ 6086 JLJ 11-16-09 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	SOIL	
PRS ID:	03-014(a) ~~03-014 (b)~~	03-014(a) OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ~~OK~~ NA JLJ 11-16-09 COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	~~2~~ JLJ 11-16-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of ~~RG-03-09-13619~~ RE03-10-5897

SAMPLE COMMENTS: NA

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) M. Ra[illegible] **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J[illegible]	11-16-09	(Printed Name) Sherri Sherwood	11-16-09
(Signature)	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-~~6087~~ ~~6086~~ 6087 JLJ 11-16-09 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	SOIL	
PRS ID:	~~03-014(b)-99-014~~ ~~(a2)~~ JLJ 11-16-09	03-014(b2) OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES/NO/NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 JLJ 11-16-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of ~~RE03-10-5897~~ RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) J. Trujillo REVIEWED BY (PRINT) M. Bains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Trujillo	11-16-09	(Printed Name) Sherri Sherwood	11-16-09
(Signature)	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-543 VALIDATION DATE: 01/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the FTB, sample RE03-10-6086, associated with all samples, benzene was detected. The associated sample results were NDs and, thus, were not qualified.
2. The ICV/CCV %Ds were >20% for chloromethane, acetone, 2-butanone and 2-hexanone. For the CCV associated with samples -09-13624 and -10-6085, the %D was >20% for 4-methyl-2-pentanone. The acetone result for samples -09-13618, -09-13620 and -09-13619 were detects and, thus, were qualified J,V7c. All other associated sample results were NDs and, thus, were qualified UJ,V7c.
3. The MS/MSD RPD for 2-hexanone was outside laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for VOCs, no sample data were qualified as a result.

Reviewed By: MLD **Level:** I **Date:** 01/19/410

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 01/19/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13618	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 14:15	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 13:50	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L707.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17	
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17	UJ,V7c
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17	
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17	
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17	
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17	
67-64-1	Acetone	J	4.33	ug/kg	1.94	5.83	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
74-88-4	Iodomethane	U	5.83	ug/kg	1.87	5.83	
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83	
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83	
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17	
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17	
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.385	1.17	
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17	
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17	
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17	
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17	
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17	
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.385	1.17	
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17	
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17	
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83	
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17	
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17	
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17	
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17	
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17	
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17	
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17	
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17	

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13618	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 14:15	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 13:50	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L707.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.87	5.83
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000080-56-8	.alpha.-Pinene	14.17	6.31	ug/kg	95	NJ

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 14:42	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 13:56	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L708.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07	
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07	UJ,V7c
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07	
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
74-88-4	Iodomethane	U	5.33	ug/kg	1.70	5.33	
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33	
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07	

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 14:42	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 13:56	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L708.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.70	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
000080-56-8	.alpha.-Pinene	14.17	13.9	ug/kg	96	NJ
013466-78-9	3-Carene	15.19	9.1	ug/kg	96	NJ

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318003	Date Received:	11/18/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13620	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 15:10	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 13:58	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L709.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07	
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07	UJ,V7c
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07	
67-64-1	Acetone		9.52	ug/kg	1.77	5.33	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33	
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33	
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07	

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318003	Date Received:	11/18/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13620	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 15:10	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 13:58	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L709.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.71	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318004	Date Received:	11/18/2009 08:50	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13619	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 15:38	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L710.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17	
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17	UJ,V7c
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17	
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17	
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17	
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17	
67-64-1	Acetone		14.4	ug/kg	1.94	5.85	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17	
74-88-4	Iodomethane	U	5.85	ug/kg	1.87	5.85	
75-09-2	Methylene chloride	U	5.85	ug/kg	2.34	5.85	
75-15-0	Carbon disulfide	U	5.85	ug/kg	1.46	5.85	
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17	
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17	
78-93-3	2-Butanone	U	5.85	ug/kg	1.76	5.85	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17	
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17	
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17	
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17	
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17	
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17	
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17	
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17	
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17	
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17	
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17	
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17	
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17	
108-10-1	4-Methyl-2-pentanone	U	5.85	ug/kg	1.46	5.85	
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17	
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17	
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17	
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17	
591-78-6	2-Hexanone	U	5.85	ug/kg	1.76	5.85	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17	
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.351	1.17	
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17	
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17	
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318004	Date Received:	11/18/2009 08:50	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13619	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 15:38	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L710.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.85	ug/kg	1.87	5.85
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318005	Date Received:	11/18/2009 08:50	%Moisture:	22.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13624	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/23/2009 14:12	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/23/2009 13:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112309V6\6M109.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.440	1.29	
74-87-3	Chloromethane	U	1.29	ug/kg	0.388	1.29	UJ,V7c
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.388	1.29	
74-83-9	Bromomethane	U	1.29	ug/kg	0.388	1.29	
75-00-3	Chloroethane	U	1.29	ug/kg	0.388	1.29	
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.388	1.29	
67-64-1	Acetone	U	6.47	ug/kg	2.15	6.47	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.388	1.29	
74-88-4	Iodomethane	U	6.47	ug/kg	2.07	6.47	
75-09-2	Methylene chloride	U	6.47	ug/kg	2.59	6.47	
75-15-0	Carbon disulfide	U	6.47	ug/kg	1.62	6.47	
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29	
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.388	1.29	
78-93-3	2-Butanone	U	6.47	ug/kg	1.94	6.47	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29	
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29	
67-66-3	Chloroform	U	1.29	ug/kg	0.388	1.29	
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.427	1.29	
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.388	1.29	
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.388	1.29	
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.388	1.29	
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.388	1.29	
71-43-2	Benzene	U	1.29	ug/kg	0.388	1.29	
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.427	1.29	
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29	
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.388	1.29	
74-95-3	Dibromomethane	U	1.29	ug/kg	0.388	1.29	
108-10-1	4-Methyl-2-pentanone	U	6.47	ug/kg	1.62	6.47	UJ,V7c
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29	
108-88-3	Toluene	U	1.29	ug/kg	0.388	1.29	
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29	
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.388	1.29	
591-78-6	2-Hexanone	U	6.47	ug/kg	1.94	6.47	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.388	1.29	
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.388	1.29	
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.388	1.29	
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.388	1.29	
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.388	1.29	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318005	Date Received:	11/18/2009 08:50	%Moisture:	22.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13624	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/23/2009 14:12	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/23/2009 13:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112309V6\6M109.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.388	1.29
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.388	2.59
95-47-6	o-Xylene	U	1.29	ug/kg	0.388	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.388	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.388	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.388	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.388	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.388	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.388	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.388	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.388	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.388	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.388	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.388	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.47	ug/kg	2.07	6.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13623	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 16:34	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:04	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L712.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04	UJ,V7c
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04	
67-64-1	Acetone	U	5.19	ug/kg	1.72	5.19	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19	
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19	
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04	
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13623	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 16:34	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:04	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L712.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318007	Date Received:	11/18/2009 08:50	%Moisture:	15.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13626	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 17:01	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:06	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L713.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.18	ug/kg	0.402	1.18	
74-87-3	Chloromethane	U	1.18	ug/kg	0.355	1.18	UJ,V7c
75-01-4	Vinyl chloride	U	1.18	ug/kg	0.355	1.18	
74-83-9	Bromomethane	U	1.18	ug/kg	0.355	1.18	
75-00-3	Chloroethane	U	1.18	ug/kg	0.355	1.18	
75-69-4	Trichlorofluoromethane	U	1.18	ug/kg	0.355	1.18	
67-64-1	Acetone	U	5.92	ug/kg	1.96	5.92	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.18	ug/kg	0.355	1.18	
74-88-4	Iodomethane	U	5.92	ug/kg	1.89	5.92	
75-09-2	Methylene chloride	U	5.92	ug/kg	2.37	5.92	
75-15-0	Carbon disulfide	U	5.92	ug/kg	1.48	5.92	
156-60-5	trans-1,2-Dichloroethylene	U	1.18	ug/kg	0.355	1.18	
75-34-3	1,1-Dichloroethane	U	1.18	ug/kg	0.355	1.18	
78-93-3	2-Butanone	U	5.92	ug/kg	1.78	5.92	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.18	ug/kg	0.355	1.18	
594-20-7	2,2-Dichloropropane	U	1.18	ug/kg	0.355	1.18	
67-66-3	Chloroform	U	1.18	ug/kg	0.355	1.18	
74-97-5	Bromochloromethane	U	1.18	ug/kg	0.391	1.18	
71-55-6	1,1,1-Trichloroethane	U	1.18	ug/kg	0.355	1.18	
563-58-6	1,1-Dichloropropene	U	1.18	ug/kg	0.355	1.18	
56-23-5	Carbon tetrachloride	U	1.18	ug/kg	0.355	1.18	
107-06-2	1,2-Dichloroethane	U	1.18	ug/kg	0.355	1.18	
71-43-2	Benzene	U	1.18	ug/kg	0.355	1.18	
79-01-6	Trichloroethylene	U	1.18	ug/kg	0.391	1.18	
78-87-5	1,2-Dichloropropane	U	1.18	ug/kg	0.355	1.18	
75-27-4	Bromodichloromethane	U	1.18	ug/kg	0.355	1.18	
74-95-3	Dibromomethane	U	1.18	ug/kg	0.355	1.18	
108-10-1	4-Methyl-2-pentanone	U	5.92	ug/kg	1.48	5.92	
10061-01-5	cis-1,3-Dichloropropylene	U	1.18	ug/kg	0.355	1.18	
108-88-3	Toluene	U	1.18	ug/kg	0.355	1.18	
10061-02-6	trans-1,3-Dichloropropylene	U	1.18	ug/kg	0.355	1.18	
79-00-5	1,1,2-Trichloroethane	U	1.18	ug/kg	0.355	1.18	
591-78-6	2-Hexanone	U	5.92	ug/kg	1.78	5.92	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.18	ug/kg	0.355	1.18	
127-18-4	Tetrachloroethylene	U	1.18	ug/kg	0.355	1.18	
124-48-1	Dibromochloromethane	U	1.18	ug/kg	0.355	1.18	
106-93-4	1,2-Dibromoethane	U	1.18	ug/kg	0.355	1.18	
108-90-7	Chlorobenzene	U	1.18	ug/kg	0.355	1.18	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318007	Date Received:	11/18/2009 08:50	%Moisture:	15.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13626	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 17:01	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:06	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L713.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.18	ug/kg	0.355	1.18
179601-23-1	m,p-Xylenes	U	2.37	ug/kg	0.355	2.37
95-47-6	o-Xylene	U	1.18	ug/kg	0.355	1.18
100-42-5	Styrene	U	1.18	ug/kg	0.355	1.18
75-25-2	Bromoform	U	1.18	ug/kg	0.355	1.18
79-34-5	1,1,2,2-Tetrachloroethane	U	1.18	ug/kg	0.355	1.18
96-18-4	1,2,3-Trichloropropane	U	1.18	ug/kg	0.355	1.18
108-86-1	Bromobenzene	U	1.18	ug/kg	0.355	1.18
103-65-1	n-Propylbenzene	U	1.18	ug/kg	0.355	1.18
95-49-8	2-Chlorotoluene	U	1.18	ug/kg	0.355	1.18
98-82-8	Isopropylbenzene	U	1.18	ug/kg	0.355	1.18
108-67-8	1,3,5-Trimethylbenzene	U	1.18	ug/kg	0.355	1.18
106-43-4	4-Chlorotoluene	U	1.18	ug/kg	0.355	1.18
98-06-6	tert-Butylbenzene	U	1.18	ug/kg	0.355	1.18
95-63-6	1,2,4-Trimethylbenzene	U	1.18	ug/kg	0.355	1.18
135-98-8	sec-Butylbenzene	U	1.18	ug/kg	0.355	1.18
99-87-6	4-Isopropyltoluene	U	1.18	ug/kg	0.355	1.18
541-73-1	1,3-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18
106-46-7	1,4-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18
104-51-8	n-Butylbenzene	U	1.18	ug/kg	0.355	1.18
96-12-8	1,2-Dibromo-3-chloropropane	U	1.18	ug/kg	0.355	1.18
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.92	ug/kg	1.89	5.92
630-20-6	1,1,1,2-Tetrachloroethane	U	1.18	ug/kg	0.355	1.18
95-50-1	1,2-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318008	Date Received:	11/18/2009 08:50	%Moisture:	4.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13621	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 17:29	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:08	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L714.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05	
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05	UJ,V7c
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05	
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05	
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05	
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05	
67-64-1	Acetone	U	5.24	ug/kg	1.74	5.24	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
74-88-4	Iodomethane	U	5.24	ug/kg	1.68	5.24	
75-09-2	Methylene chloride	U	5.24	ug/kg	2.10	5.24	
75-15-0	Carbon disulfide	U	5.24	ug/kg	1.31	5.24	
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05	
78-93-3	2-Butanone	U	5.24	ug/kg	1.57	5.24	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05	
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.346	1.05	
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05	
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05	
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05	
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05	
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05	
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.346	1.05	
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05	
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05	
108-10-1	4-Methyl-2-pentanone	U	5.24	ug/kg	1.31	5.24	
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05	
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05	
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05	
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05	
591-78-6	2-Hexanone	U	5.24	ug/kg	1.57	5.24	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05	
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05	
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05	
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318008	Date Received:	11/18/2009 08:50	%Moisture:	4.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13621	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 17:29	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:08	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L714.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.24	ug/kg	1.68	5.24
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318009	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13627	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 17:57	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L715.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08	
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08	UJ,V7c
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08	
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08	
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08	
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08	
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38	
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38	
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.34	5.38	
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08	
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08	
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08	
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08	
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08	
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08	
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08	
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08	
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08	
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08	
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08	
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.34	5.38	
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08	
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08	
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08	
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08	
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08	
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08	
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08	
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318009	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13627	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 17:57	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L715.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318010	Date Received:	11/18/2009 08:50	%Moisture:	16.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13625	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 18:25	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:12	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L716.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.409	1.20	
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20	UJ,V7c
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20	
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20	
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20	
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20	
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20	
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02	
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02	
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.50	6.02	
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20	
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20	
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20	
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20	
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20	
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20	
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20	
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20	
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20	
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20	
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20	
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20	
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20	
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20	
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20	
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.50	6.02	
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20	
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20	
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20	
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20	
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20	
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20	
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20	
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20	
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318010	Date Received:	11/18/2009 08:50	%Moisture:	16.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13625	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 18:25	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:12	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L716.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318011	Date Received:	11/18/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6087	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 18:52	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:14	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L717.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318011	Date Received:	11/18/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6087	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 18:52	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:14	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L717.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318012	Date Received:	11/18/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6086	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 19:20	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:16	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L718.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene		1.94	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318012	Date Received:	11/18/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6086	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 19:20	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:16	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L718.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318013	Date Received:	11/18/2009 08:50	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6084	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 19:48	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:18	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L719.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15	
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15	UJ,V7c
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15	
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15	
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15	
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15	
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73	
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73	
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73	
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15	
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15	
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15	
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15	
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15	
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15	
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15	
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15	
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15	
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73	
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15	
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15	
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15	
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15	
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15	
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15	

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318013	Date Received:	11/18/2009 08:50	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6084	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/22/2009 19:48	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/22/2009 14:18	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112209V6\6L719.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318014	Date Received:	11/18/2009 08:50	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6085	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/23/2009 14:40	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/23/2009 13:12	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112309V6\6M110.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.356	1.05	
74-87-3	Chloromethane	U	1.05	ug/kg	0.314	1.05	UJ,V7c
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.314	1.05	
74-83-9	Bromomethane	U	1.05	ug/kg	0.314	1.05	
75-00-3	Chloroethane	U	1.05	ug/kg	0.314	1.05	
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.314	1.05	
67-64-1	Acetone	U	5.23	ug/kg	1.74	5.23	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.314	1.05	
74-88-4	Iodomethane	U	5.23	ug/kg	1.67	5.23	
75-09-2	Methylene chloride	U	5.23	ug/kg	2.09	5.23	
75-15-0	Carbon disulfide	U	5.23	ug/kg	1.31	5.23	
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05	
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.314	1.05	
78-93-3	2-Butanone	U	5.23	ug/kg	1.57	5.23	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05	
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05	
67-66-3	Chloroform	U	1.05	ug/kg	0.314	1.05	
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.345	1.05	
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.314	1.05	
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.314	1.05	
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.314	1.05	
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.314	1.05	
71-43-2	Benzene	U	1.05	ug/kg	0.314	1.05	
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.345	1.05	
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05	
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.314	1.05	
74-95-3	Dibromomethane	U	1.05	ug/kg	0.314	1.05	
108-10-1	4-Methyl-2-pentanone	U	5.23	ug/kg	1.31	5.23	UJ,V7c
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05	
108-88-3	Toluene	U	1.05	ug/kg	0.314	1.05	
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05	
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.314	1.05	
591-78-6	2-Hexanone	U	5.23	ug/kg	1.57	5.23	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.314	1.05	
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.314	1.05	
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.314	1.05	
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.314	1.05	
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.314	1.05	

P.S. 1/19/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318014	Date Received:	11/18/2009 08:50	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6085	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925461	Inst:	VOA6.I	Dilution:	1
Run Date:	11/23/2009 14:40	Analyst:	RXD1	Purge Vol:	5 mL
Prep Date:	11/23/2009 13:12	Aliquot:	5 g	Final Volume:	5 mL
Data File:	112309V6\6M110.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.314	1.05
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.314	2.09
95-47-6	o-Xylene	U	1.05	ug/kg	0.314	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.314	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.314	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.314	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.314	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.314	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.314	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.314	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.314	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.314	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.314	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.314	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.23	ug/kg	1.67	5.23
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

P.S. 1/19/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-543 VALIDATION DATE: 01/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV/CCV %Ds were > 20% for pyridine; hexachlorocyclopentadiene; indeno(1,2,3-cd)pyrene and benzo(g,h,i)perylene. For the CCV associated with all samples except RE03-09-13625, -10-6084, -10-6085, -09-13620 and -09-13618 the %D was also >20% for 4-nitrophenol. Also, for the CCV associated with samples –09-13625, -10-6084, -10-6085, -09-13620 and -09-13618 the %Ds were also >20% for benzyl alcohol and dibenzo(a,h)anthracene. All associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The MS % R for benzyl alcohol and the MS/MSD RPDs for 2,4-dimethylphenol; 2,4-dinitrophenol and di-n-octylphthalate did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for SVOCs, no sample data were qualified as a result.

Reviewed By: MLD **Level:** I **Date:** 01/19/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 01/19/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13618	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.1	Dilution:	1
Run Date:	12/04/2009 18:15	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s810422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388	
108-95-2	Phenol	U	388	ug/kg	77.6	388	
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388	
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388	
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388	
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	388	
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8	
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388	
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388	
87-86-5	Pentachlorophenol	U	388	ug/kg	97.0	388	
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8	
110-86-1	Pyridine	U	388	ug/kg	77.6	388	UJ,SV7c
62-53-3	Aniline	U	388	ug/kg	116	388	
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388	
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388	
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388	
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388	
95-48-7	o-Cresol	U	388	ug/kg	77.6	388	
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388	
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388	
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388	
78-59-1	Isophorone	U	388	ug/kg	77.6	388	
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388	
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388	
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388	
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388	
65-85-0	Benzoic acid	U	776	ug/kg	194	776	
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8	
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388	
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388	
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8	
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388	
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388	
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8	
88-74-4	2-Nitroaniline	U	388	ug/kg	77.6	388	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	388	ug/kg	77.6	388	

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13618	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 18:15	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s810422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	388	ug/kg	77.6	388	
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388	
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8	
51-28-5	2,4-Dinitrophenol	U	776	ug/kg	147	776	
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388	
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388	
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8	
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388	
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388	
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388	
122-66-7	Azobenzene	U	388	ug/kg	77.6	388	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388	
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388	
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8	
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8	
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388	
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8	
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	388	
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8	
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388	
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.6	388	
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	388	
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8	
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8	
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8	UJ.SV7c
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8	
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8	
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.6	388	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	199	ug/kg		JA
629-62-9	Pentadecane	13.96	436	ug/kg	91	NJ

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13618	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 18:15	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s810422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14	310	ug/kg		J
1000188-72-8	2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	14.03	442	ug/kg	92	NJ

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318004	Date Received:	11/18/2009 08:50	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13619	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 17:09	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s810317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388	
108-95-2	Phenol	U	388	ug/kg	77.6	388	
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388	
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388	
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388	
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	388	
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8	
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388	
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388	UJ,SV7c
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388	
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8	
110-86-1	Pyridine	U	388	ug/kg	77.6	388	UJ,SV7c
62-53-3	Aniline	U	388	ug/kg	116	388	
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388	
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388	
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388	
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388	
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388	
95-48-7	o-Cresol	U	388	ug/kg	77.6	388	
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388	
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388	
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388	
78-59-1	Isophorone	U	388	ug/kg	77.6	388	
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388	
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388	
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388	
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388	
65-85-0	Benzoic acid	U	776	ug/kg	194	776	
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8	
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388	
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388	
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8	
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388	
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388	
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	388	ug/kg	77.6	388	
99-09-2	3-Nitroaniline	U	388	ug/kg	77.6	388	

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318004	Date Received:	11/18/2009 08:50	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13619	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 17:09	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s810317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	388	ug/kg	77.6	388	
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388	
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8	
51-28-5	2,4-Dinitrophenol	U	776	ug/kg	148	776	
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388	
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388	
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8	
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388	
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388	
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388	
122-66-7	Azobenzene	U	388	ug/kg	77.6	388	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388	
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388	
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8	
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8	
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388	
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8	
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	388	
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8	
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388	
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.6	388	
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	388	
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8	
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8	
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8	
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.6	388	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.2	257	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	241	ug/kg	97	NJ

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318004	Date Received:	11/18/2009 08:50	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13619	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 17:09	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s810317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.25	205	ug/kg		J

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318003	Date Received:	11/18/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13620	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 17:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s810421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.0	355	
108-95-2	Phenol	U	355	ug/kg	71.0	355	
95-57-8	2-Chlorophenol	U	355	ug/kg	71.0	355	
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.0	355	
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.0	355	
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.0	355	
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5	
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355	
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355	
87-86-5	Pentachlorophenol	U	355	ug/kg	88.8	355	
129-00-0	Pyrene	J	32.9	ug/kg	10.7	35.5	
110-86-1	Pyridine	U	355	ug/kg	71.0	355	UJ,SV7c
62-53-3	Aniline	U	355	ug/kg	107	355	
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.0	355	
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.0	355	
100-51-6	Benzyl alcohol	U	355	ug/kg	107	355	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.0	355	
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.0	355	
95-48-7	o-Cresol	U	355	ug/kg	71.0	355	
65794-96-9	m,p-Cresols	U	355	ug/kg	107	355	
67-72-1	Hexachloroethane	U	355	ug/kg	71.0	355	
98-95-3	Nitrobenzene	U	355	ug/kg	71.0	355	
78-59-1	Isophorone	U	355	ug/kg	71.0	355	
88-75-5	2-Nitrophenol	U	355	ug/kg	71.0	355	
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355	
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.0	355	
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.0	355	
65-85-0	Benzoic acid	U	710	ug/kg	178	710	
91-20-3	Naphthalene	U	35.5	ug/kg	10.7	35.5	
106-47-8	4-Chloroaniline	U	355	ug/kg	71.0	355	
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.0	355	
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.10	35.5	
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.0	355	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.0	355	
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.0	355	
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	355	ug/kg	71.0	355	
99-09-2	3-Nitroaniline	U	355	ug/kg	71.0	355	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318003	Date Received:	11/18/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13620	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 17:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s810421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	355	ug/kg	71.0	355	
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355	
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.7	35.5	
51-28-5	2,4-Dinitrophenol	U	710	ug/kg	135	710	
132-64-9	Dibenzofuran	U	355	ug/kg	71.0	355	
84-66-2	Diethylphthalate	U	355	ug/kg	71.0	355	
86-73-7	Fluorene	U	35.5	ug/kg	10.7	35.5	
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.0	355	
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.0	355	
100-01-6	4-Nitroaniline	U	355	ug/kg	107	355	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	355	ug/kg	71.0	355	
122-66-7	Azobenzene	U	355	ug/kg	71.0	355	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.0	355	
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.0	355	
85-01-8	Phenanthrene	J	18.6	ug/kg	10.7	35.5	
120-12-7	Anthracene	U	35.5	ug/kg	7.10	35.5	
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.0	355	
206-44-0	Fluoranthene		37.0	ug/kg	10.7	35.5	
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.0	355	
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.7	35.5	
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	107	355	
218-01-9	Chrysene	J	18.8	ug/kg	10.7	35.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.0	355	
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.0	355	
205-99-2	Benzo(b)fluoranthene	J	22.4	ug/kg	10.7	35.5	
207-08-9	Benzo(k)fluoranthene	J	15.5	ug/kg	10.7	35.5	
50-32-8	Benzo(a)pyrene	J	19.1	ug/kg	10.7	35.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.7	35.5	UJ SV7c
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.7	35.5	
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.7	35.5	
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.0	355	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	151	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.27	229	ug/kg	99	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318003	Date Received:	11/18/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13620	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 17:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s810421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.43	167	ug/kg		J
	Unknown	11.82	148	ug/kg		J
	Unknown	11.85	373	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.96	260	ug/kg	90	NJ
629-92-5	Nonadecane	12.9	157	ug/kg	83	NJ
	Unknown	13.39	192	ug/kg		J
	Unknown	13.59	145	ug/kg		J
	Unknown	13.96	485	ug/kg		J
	Unknown	16.49	162	ug/kg		J
	Unknown	17.95	245	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318008	Date Received:	11/18/2009 08:50	%Moisture:	4.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13621	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 18:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s810320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.6	348	
108-95-2	Phenol	U	348	ug/kg	69.6	348	
95-57-8	2-Chlorophenol	U	348	ug/kg	69.6	348	
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.6	348	
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.6	348	
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.6	348	
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8	
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348	
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348	UJ,SV7c
87-86-5	Pentachlorophenol	U	348	ug/kg	87.0	348	
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8	
110-86-1	Pyridine	U	348	ug/kg	69.6	348	UJ,SV7c
62-53-3	Aniline	U	348	ug/kg	104	348	
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.6	348	
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.6	348	
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348	
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.6	348	
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.6	348	
95-48-7	o-Cresol	U	348	ug/kg	69.6	348	
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348	
67-72-1	Hexachloroethane	U	348	ug/kg	69.6	348	
98-95-3	Nitrobenzene	U	348	ug/kg	69.6	348	
78-59-1	Isophorone	U	348	ug/kg	69.6	348	
88-75-5	2-Nitrophenol	U	348	ug/kg	69.6	348	
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348	
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.6	348	
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.6	348	
65-85-0	Benzoic acid	U	696	ug/kg	174	696	
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8	
106-47-8	4-Chloroaniline	U	348	ug/kg	69.6	348	
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.6	348	
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.96	34.8	
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.6	348	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.6	348	
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.6	348	
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.6	348	
99-09-2	3-Nitroaniline	U	348	ug/kg	69.6	348	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318008	Date Received:	11/18/2009 08:50	%Moisture:	4.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13621	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 18:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s810320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	348	ug/kg	69.6	348	
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348	
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8	
51-28-5	2,4-Dinitrophenol	U	696	ug/kg	132	696	
132-64-9	Dibenzofuran	U	348	ug/kg	69.6	348	
84-66-2	Diethylphthalate	U	348	ug/kg	69.6	348	
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8	
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.6	348	
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.6	348	
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	348	ug/kg	69.6	348	
122-66-7	Azobenzene	U	348	ug/kg	69.6	348	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.6	348	
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.6	348	
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8	
120-12-7	Anthracene	U	34.8	ug/kg	6.96	34.8	
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.6	348	
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8	
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.6	348	
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8	
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348	
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8	
117-81-7	bis(2-Ethylhexyl)phthalate	J	100	ug/kg	69.6	348	
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.6	348	
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8	
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8	
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8	
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.6	348	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	272	ug/kg		JA
80-56-8	.alpha.-Pinene	3.96	176	ug/kg	97	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318008	Date Received:	11/18/2009 08:50	%Moisture:	4.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13621	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 18:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s810320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
13466-78-9	3-Carene	4.53	189	ug/kg	94	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	203	ug/kg	98	NJ
	Unknown	11.87	151	ug/kg		J
	Unknown	11.9	238	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.01	159	ug/kg	90	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 16:11	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s810315.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355	
108-95-2	Phenol	U	355	ug/kg	70.9	355	
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355	
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355	
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355	
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355	
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5	
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355	
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355	UJ,SV7c
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355	
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5	
110-86-1	Pyridine	U	355	ug/kg	70.9	355	UJ,SV7c
62-53-3	Aniline	U	355	ug/kg	106	355	
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355	
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355	
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355	
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355	
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355	
95-48-7	o-Cresol	U	355	ug/kg	70.9	355	
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355	
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355	
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355	
78-59-1	Isophorone	U	355	ug/kg	70.9	355	
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355	
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355	
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355	
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355	
65-85-0	Benzoic acid	U	709	ug/kg	177	709	
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5	
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355	
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355	
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5	
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355	
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355	
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	355	ug/kg	70.9	355	
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 16:11	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s810315.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	355	ug/kg	70.9	355	
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355	
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5	
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709	
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355	
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355	
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5	
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355	
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355	
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355	
122-66-7	Azobenzene	U	355	ug/kg	70.9	355	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355	
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355	
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5	
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5	
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355	
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5	
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355	
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5	
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355	
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355	
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355	
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5	
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5	
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5	
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	181	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.96	175	ug/kg	97	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 16:11	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s810315.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-26-4	1S-.alpha.-Pinene	4.53	211	ug/kg	95	NJ
	Unknown	11.47	157	ug/kg		J
	Unknown	11.64	222	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13623	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 17:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s8I0318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	346	ug/kg	69.1	346	
108-95-2	Phenol	U	346	ug/kg	69.1	346	
95-57-8	2-Chlorophenol	U	346	ug/kg	69.1	346	
106-46-7	1,4-Dichlorobenzene	U	346	ug/kg	69.1	346	
621-64-7	N-Nitrosodipropylamine	U	346	ug/kg	69.1	346	
59-50-7	4-Chloro-3-methylphenol	U	346	ug/kg	69.1	346	
83-32-9	Acenaphthene	U	34.6	ug/kg	11.4	34.6	
121-14-2	2,4-Dinitrotoluene	U	346	ug/kg	34.6	346	
100-02-7	4-Nitrophenol	U	346	ug/kg	114	346	UJ,SV7c
87-86-5	Pentachlorophenol	U	346	ug/kg	86.4	346	
129-00-0	Pyrene	U	34.6	ug/kg	10.4	34.6	
110-86-1	Pyridine	U	346	ug/kg	69.1	346	UJ,SV7c
62-53-3	Aniline	U	346	ug/kg	104	346	
111-44-4	bis(2-Chloroethyl) ether	U	346	ug/kg	69.1	346	
541-73-1	1,3-Dichlorobenzene	U	346	ug/kg	69.1	346	
100-51-6	Benzyl alcohol	U	346	ug/kg	104	346	
95-50-1	1,2-Dichlorobenzene	U	346	ug/kg	69.1	346	
108-60-1	bis(2-Chloroisopropyl)ether	U	346	ug/kg	69.1	346	
95-48-7	o-Cresol	U	346	ug/kg	69.1	346	
65794-96-9	m,p-Cresols	U	346	ug/kg	104	346	
67-72-1	Hexachloroethane	U	346	ug/kg	69.1	346	
98-95-3	Nitrobenzene	U	346	ug/kg	69.1	346	
78-59-1	Isophorone	U	346	ug/kg	69.1	346	
88-75-5	2-Nitrophenol	U	346	ug/kg	69.1	346	
105-67-9	2,4-Dimethylphenol	U	346	ug/kg	121	346	
111-91-1	bis(2-Chloroethoxy)methane	U	346	ug/kg	69.1	346	
120-83-2	2,4-Dichlorophenol	U	346	ug/kg	69.1	346	
65-85-0	Benzoic acid	U	691	ug/kg	173	691	
91-20-3	Naphthalene	U	34.6	ug/kg	10.4	34.6	
106-47-8	4-Chloroaniline	U	346	ug/kg	69.1	346	
87-68-3	Hexachlorobutadiene	U	346	ug/kg	69.1	346	
91-57-6	2-Methylnaphthalene	U	34.6	ug/kg	6.91	34.6	
77-47-4	Hexachlorocyclopentadiene	U	346	ug/kg	69.1	346	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	346	ug/kg	69.1	346	
95-95-4	2,4,5-Trichlorophenol	U	346	ug/kg	69.1	346	
91-58-7	2-Chloronaphthalene	U	34.6	ug/kg	11.4	34.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	346	ug/kg	69.1	346	
99-09-2	3-Nitroaniline	U	346	ug/kg	69.1	346	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13623	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 17:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s810318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	346	ug/kg	69.1	346	
606-20-2	2,6-Dinitrotoluene	U	346	ug/kg	34.6	346	
208-96-8	Acenaphthylene	U	34.6	ug/kg	10.4	34.6	
51-28-5	2,4-Dinitrophenol	U	691	ug/kg	131	691	
132-64-9	Dibenzofuran	U	346	ug/kg	69.1	346	
84-66-2	Diethylphthalate	U	346	ug/kg	69.1	346	
86-73-7	Fluorene	U	34.6	ug/kg	10.4	34.6	
7005-72-3	4-Chlorophenylphenylether	U	346	ug/kg	69.1	346	
534-52-1	2-Methyl-4,6-dinitrophenol	U	346	ug/kg	69.1	346	
100-01-6	4-Nitroaniline	U	346	ug/kg	104	346	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	346	ug/kg	69.1	346	
122-66-7	Azobenzene	U	346	ug/kg	69.1	346	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	346	ug/kg	69.1	346	
118-74-1	Hexachlorobenzene	U	346	ug/kg	69.1	346	
85-01-8	Phenanthrene	U	34.6	ug/kg	10.4	34.6	
120-12-7	Anthracene	U	34.6	ug/kg	6.91	34.6	
84-74-2	Di-n-butylphthalate	U	346	ug/kg	69.1	346	
206-44-0	Fluoranthene	U	34.6	ug/kg	10.4	34.6	
85-68-7	Butylbenzylphthalate	U	346	ug/kg	69.1	346	
56-55-3	Benzo(a)anthracene	U	34.6	ug/kg	10.4	34.6	
91-94-1	3,3'-Dichlorobenzidine	U	346	ug/kg	104	346	
218-01-9	Chrysene	U	34.6	ug/kg	10.4	34.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	346	ug/kg	69.1	346	
117-84-0	Di-n-octylphthalate	U	346	ug/kg	69.1	346	
205-99-2	Benzo(b)fluoranthene	U	34.6	ug/kg	10.4	34.6	
207-08-9	Benzo(k)fluoranthene	U	34.6	ug/kg	10.4	34.6	
50-32-8	Benzo(a)pyrene	U	34.6	ug/kg	10.4	34.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.6	ug/kg	10.4	34.6	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	34.6	ug/kg	10.4	34.6	
191-24-2	Benzo(ghi)perylene	U	34.6	ug/kg	10.4	34.6	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	346	ug/kg	69.1	346	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	218	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	167	ug/kg	99	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318005	Date Received:	11/18/2009 08:50	%Moisture:	22.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13624	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 22:08	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s810327.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	430	ug/kg	86.1	430	
108-95-2	Phenol	U	430	ug/kg	86.1	430	
95-57-8	2-Chlorophenol	U	430	ug/kg	86.1	430	
106-46-7	1,4-Dichlorobenzene	U	430	ug/kg	86.1	430	
621-64-7	N-Nitrosodipropylamine	U	430	ug/kg	86.1	430	
59-50-7	4-Chloro-3-methylphenol	U	430	ug/kg	86.1	430	
83-32-9	Acenaphthene	U	43.0	ug/kg	14.2	43.0	
121-14-2	2,4-Dinitrotoluene	U	430	ug/kg	43.0	430	
100-02-7	4-Nitrophenol	U	430	ug/kg	142	430	UJ,SV7c
87-86-5	Pentachlorophenol	U	430	ug/kg	108	430	
129-00-0	Pyrene	J	32.6	ug/kg	12.9	43.0	
110-86-1	Pyridine	U	430	ug/kg	86.1	430	UJ,SV7c
62-53-3	Aniline	U	430	ug/kg	129	430	
111-44-4	bis(2-Chloroethyl) ether	U	430	ug/kg	86.1	430	
541-73-1	1,3-Dichlorobenzene	U	430	ug/kg	86.1	430	
100-51-6	Benzyl alcohol	U	430	ug/kg	129	430	
95-50-1	1,2-Dichlorobenzene	U	430	ug/kg	86.1	430	
108-60-1	bis(2-Chloroisopropyl)ether	U	430	ug/kg	86.1	430	
95-48-7	o-Cresol	U	430	ug/kg	86.1	430	
65794-96-9	m,p-Cresols	U	430	ug/kg	129	430	
67-72-1	Hexachloroethane	U	430	ug/kg	86.1	430	
98-95-3	Nitrobenzene	U	430	ug/kg	86.1	430	
78-59-1	Isophorone	U	430	ug/kg	86.1	430	
88-75-5	2-Nitrophenol	U	430	ug/kg	86.1	430	
105-67-9	2,4-Dimethylphenol	U	430	ug/kg	151	430	
111-91-1	bis(2-Chloroethoxy)methane	U	430	ug/kg	86.1	430	
120-83-2	2,4-Dichlorophenol	U	430	ug/kg	86.1	430	
65-85-0	Benzoic acid	U	861	ug/kg	215	861	
91-20-3	Naphthalene	U	43.0	ug/kg	12.9	43.0	
106-47-8	4-Chloroaniline	U	430	ug/kg	86.1	430	
87-68-3	Hexachlorobutadiene	U	430	ug/kg	86.1	430	
91-57-6	2-Methylnaphthalene	U	43.0	ug/kg	8.61	43.0	
77-47-4	Hexachlorocyclopentadiene	U	430	ug/kg	86.1	430	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	430	ug/kg	86.1	430	
95-95-4	2,4,5-Trichlorophenol	U	430	ug/kg	86.1	430	
91-58-7	2-Chloronaphthalene	U	43.0	ug/kg	14.2	43.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	430	ug/kg	86.1	430	
99-09-2	3-Nitroaniline	U	430	ug/kg	86.1	430	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318005	Date Received:	11/18/2009 08:50	%Moisture:	22.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13624	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 22:08	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s810327.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	430	ug/kg	86.1	430	
606-20-2	2,6-Dinitrotoluene	U	430	ug/kg	43.0	430	
208-96-8	Acenaphthylene	U	43.0	ug/kg	12.9	43.0	
51-28-5	2,4-Dinitrophenol	U	861	ug/kg	164	861	
132-64-9	Dibenzofuran	U	430	ug/kg	86.1	430	
84-66-2	Diethylphthalate	U	430	ug/kg	86.1	430	
86-73-7	Fluorene	U	43.0	ug/kg	12.9	43.0	
7005-72-3	4-Chlorophenylphenylether	U	430	ug/kg	86.1	430	
534-52-1	2-Methyl-4,6-dinitrophenol	U	430	ug/kg	86.1	430	
100-01-6	4-Nitroaniline	U	430	ug/kg	129	430	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	430	ug/kg	86.1	430	
122-66-7	Azobenzene	U	430	ug/kg	86.1	430	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	430	ug/kg	86.1	430	
118-74-1	Hexachlorobenzene	U	430	ug/kg	86.1	430	
85-01-8	Phenanthrene	J	14.0	ug/kg	12.9	43.0	
120-12-7	Anthracene	U	43.0	ug/kg	8.61	43.0	
84-74-2	Di-n-butylphthalate	U	430	ug/kg	86.1	430	
206-44-0	Fluoranthene	J	20.0	ug/kg	12.9	43.0	
85-68-7	Butylbenzylphthalate	U	430	ug/kg	86.1	430	
56-55-3	Benzo(a)anthracene	U	43.0	ug/kg	12.9	43.0	
91-94-1	3,3'-Dichlorobenzidine	U	430	ug/kg	129	430	
218-01-9	Chrysene	J	15.9	ug/kg	12.9	43.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	430	ug/kg	86.1	430	
117-84-0	Di-n-octylphthalate	U	430	ug/kg	86.1	430	
205-99-2	Benzo(b)fluoranthene	U	43.0	ug/kg	12.9	43.0	
207-08-9	Benzo(k)fluoranthene	U	43.0	ug/kg	12.9	43.0	
50-32-8	Benzo(a)pyrene	J	15.1	ug/kg	12.9	43.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.0	ug/kg	12.9	43.0	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	43.0	ug/kg	12.9	43.0	
191-24-2	Benzo(ghi)perylene	U	43.0	ug/kg	12.9	43.0	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	430	ug/kg	86.1	430	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	242	ug/kg		JA
593-45-3	Octadecane	14.03	205	ug/kg	95	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318005	Date Received:	11/18/2009 08:50	%Moisture:	22.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13624	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 22:08	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s810327.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.33	310	ug/kg		J
559-74-0	Friedelan-3-one	19.08	1270	ug/kg	94	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318010	Date Received:	11/18/2009 08:50	%Moisture:	16.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13625	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 15:44	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s810417.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401	
108-95-2	Phenol	U	401	ug/kg	80.2	401	
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401	
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401	
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401	
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401	
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1	
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401	
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401	
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401	
129-00-0	Pyrene	U	40.1	ug/kg	12.0	40.1	
110-86-1	Pyridine	U	401	ug/kg	80.2	401	UJ,SV7c
62-53-3	Aniline	U	401	ug/kg	120	401	
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401	
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401	
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401	
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401	
95-48-7	o-Cresol	U	401	ug/kg	80.2	401	
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401	
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401	
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401	
78-59-1	Isophorone	U	401	ug/kg	80.2	401	
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401	
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401	
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401	
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401	
65-85-0	Benzoic acid	U	802	ug/kg	200	802	
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1	
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401	
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401	
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1	
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401	
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401	
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	401	ug/kg	80.2	401	
99-09-2	3-Nitroaniline	U	401	ug/kg	80.2	401	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318010	Date Received:	11/18/2009 08:50	%Moisture:	16.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13625	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 15:44	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s810417.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401	
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401	
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1	
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802	
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401	
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401	
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1	
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401	
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401	
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401	
122-66-7	Azobenzene	U	401	ug/kg	80.2	401	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401	
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401	
85-01-8	Phenanthrene	U	40.1	ug/kg	12.0	40.1	
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1	
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401	
206-44-0	Fluoranthene	U	40.1	ug/kg	12.0	40.1	
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401	
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1	
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401	
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1	
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401	
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401	
205-99-2	Benzo(b)fluoranthene	U	40.1	ug/kg	12.0	40.1	
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1	
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1	
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1	
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1	
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	306	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318007	Date Received:	11/18/2009 08:50	%Moisture:	15.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13626	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 18:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s810319.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	393	ug/kg	78.7	393	
108-95-2	Phenol	U	393	ug/kg	78.7	393	
95-57-8	2-Chlorophenol	U	393	ug/kg	78.7	393	
106-46-7	1,4-Dichlorobenzene	U	393	ug/kg	78.7	393	
621-64-7	N-Nitrosodipropylamine	U	393	ug/kg	78.7	393	
59-50-7	4-Chloro-3-methylphenol	U	393	ug/kg	78.7	393	
83-32-9	Acenaphthene	U	39.3	ug/kg	13.0	39.3	
121-14-2	2,4-Dinitrotoluene	U	393	ug/kg	39.3	393	
100-02-7	4-Nitrophenol	U	393	ug/kg	130	393	UJ,SV7c
87-86-5	Pentachlorophenol	U	393	ug/kg	98.4	393	
129-00-0	Pyrene	U	39.3	ug/kg	11.8	39.3	
110-86-1	Pyridine	U	393	ug/kg	78.7	393	UJ,SV7c
62-53-3	Aniline	U	393	ug/kg	118	393	
111-44-4	bis(2-Chloroethyl) ether	U	393	ug/kg	78.7	393	
541-73-1	1,3-Dichlorobenzene	U	393	ug/kg	78.7	393	
100-51-6	Benzyl alcohol	U	393	ug/kg	118	393	
95-50-1	1,2-Dichlorobenzene	U	393	ug/kg	78.7	393	
108-60-1	bis(2-Chloroisopropyl)ether	U	393	ug/kg	78.7	393	
95-48-7	o-Cresol	U	393	ug/kg	78.7	393	
65794-96-9	m,p-Cresols	U	393	ug/kg	118	393	
67-72-1	Hexachloroethane	U	393	ug/kg	78.7	393	
98-95-3	Nitrobenzene	U	393	ug/kg	78.7	393	
78-59-1	Isophorone	U	393	ug/kg	78.7	393	
88-75-5	2-Nitrophenol	U	393	ug/kg	78.7	393	
105-67-9	2,4-Dimethylphenol	U	393	ug/kg	138	393	
111-91-1	bis(2-Chloroethoxy)methane	U	393	ug/kg	78.7	393	
120-83-2	2,4-Dichlorophenol	U	393	ug/kg	78.7	393	
65-85-0	Benzoic acid	U	787	ug/kg	197	787	
91-20-3	Naphthalene	U	39.3	ug/kg	11.8	39.3	
106-47-8	4-Chloroaniline	U	393	ug/kg	78.7	393	
87-68-3	Hexachlorobutadiene	U	393	ug/kg	78.7	393	
91-57-6	2-Methylnaphthalene	U	39.3	ug/kg	7.87	39.3	
77-47-4	Hexachlorocyclopentadiene	U	393	ug/kg	78.7	393	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	393	ug/kg	78.7	393	
95-95-4	2,4,5-Trichlorophenol	U	393	ug/kg	78.7	393	
91-58-7	2-Chloronaphthalene	U	39.3	ug/kg	13.0	39.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	393	ug/kg	78.7	393	
99-09-2	3-Nitroaniline	U	393	ug/kg	78.7	393	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318007	Date Received:	11/18/2009 08:50	%Moisture:	15.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13626	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 18:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s810319.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	393	ug/kg	78.7	393	
606-20-2	2,6-Dinitrotoluene	U	393	ug/kg	39.3	393	
208-96-8	Acenaphthylene	U	39.3	ug/kg	11.8	39.3	
51-28-5	2,4-Dinitrophenol	U	787	ug/kg	150	787	
132-64-9	Dibenzofuran	U	393	ug/kg	78.7	393	
84-66-2	Diethylphthalate	U	393	ug/kg	78.7	393	
86-73-7	Fluorene	U	39.3	ug/kg	11.8	39.3	
7005-72-3	4-Chlorophenylphenylether	U	393	ug/kg	78.7	393	
534-52-1	2-Methyl-4,6-dinitrophenol	U	393	ug/kg	78.7	393	
100-01-6	4-Nitroaniline	U	393	ug/kg	118	393	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	393	ug/kg	78.7	393	
122-66-7	Azobenzene	U	393	ug/kg	78.7	393	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	393	ug/kg	78.7	393	
118-74-1	Hexachlorobenzene	U	393	ug/kg	78.7	393	
85-01-8	Phenanthrene	U	39.3	ug/kg	11.8	39.3	
120-12-7	Anthracene	U	39.3	ug/kg	7.87	39.3	
84-74-2	Di-n-butylphthalate	U	393	ug/kg	78.7	393	
206-44-0	Fluoranthene	U	39.3	ug/kg	11.8	39.3	
85-68-7	Butylbenzylphthalate	U	393	ug/kg	78.7	393	
56-55-3	Benzo(a)anthracene	U	39.3	ug/kg	11.8	39.3	
91-94-1	3,3'-Dichlorobenzidine	U	393	ug/kg	118	393	
218-01-9	Chrysene	U	39.3	ug/kg	11.8	39.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	393	ug/kg	78.7	393	
117-84-0	Di-n-octylphthalate	U	393	ug/kg	78.7	393	
205-99-2	Benzo(b)fluoranthene	U	39.3	ug/kg	11.8	39.3	
207-08-9	Benzo(k)fluoranthene	U	39.3	ug/kg	11.8	39.3	
50-32-8	Benzo(a)pyrene	U	39.3	ug/kg	11.8	39.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.3	ug/kg	11.8	39.3	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	39.3	ug/kg	11.8	39.3	
191-24-2	Benzo(ghi)perylene	U	39.3	ug/kg	11.8	39.3	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	393	ug/kg	78.7	393	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.2	271	ug/kg		J
	Unknown	14.3	188	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318007	Date Received:	11/18/2009 08:50	%Moisture:	15.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13626	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 18:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s810319.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.34	200	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318009	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13627	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 19:09	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	s810321.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	356	ug/kg	71.3	356	
108-95-2	Phenol	U	356	ug/kg	71.3	356	
95-57-8	2-Chlorophenol	U	356	ug/kg	71.3	356	
106-46-7	1,4-Dichlorobenzene	U	356	ug/kg	71.3	356	
621-64-7	N-Nitrosodipropylamine	U	356	ug/kg	71.3	356	
59-50-7	4-Chloro-3-methylphenol	U	356	ug/kg	71.3	356	
83-32-9	Acenaphthene	U	35.6	ug/kg	11.8	35.6	
121-14-2	2,4-Dinitrotoluene	U	356	ug/kg	35.6	356	
100-02-7	4-Nitrophenol	U	356	ug/kg	118	356	UJ,SV7c
87-86-5	Pentachlorophenol	U	356	ug/kg	89.1	356	
129-00-0	Pyrene	U	35.6	ug/kg	10.7	35.6	
110-86-1	Pyridine	U	356	ug/kg	71.3	356	UJ,SV7c
62-53-3	Aniline	U	356	ug/kg	107	356	
111-44-4	bis(2-Chloroethyl) ether	U	356	ug/kg	71.3	356	
541-73-1	1,3-Dichlorobenzene	U	356	ug/kg	71.3	356	
100-51-6	Benzyl alcohol	U	356	ug/kg	107	356	
95-50-1	1,2-Dichlorobenzene	U	356	ug/kg	71.3	356	
108-60-1	bis(2-Chloroisopropyl)ether	U	356	ug/kg	71.3	356	
95-48-7	o-Cresol	U	356	ug/kg	71.3	356	
65794-96-9	m,p-Cresols	U	356	ug/kg	107	356	
67-72-1	Hexachloroethane	U	356	ug/kg	71.3	356	
98-95-3	Nitrobenzene	U	356	ug/kg	71.3	356	
78-59-1	Isophorone	U	356	ug/kg	71.3	356	
88-75-5	2-Nitrophenol	U	356	ug/kg	71.3	356	
105-67-9	2,4-Dimethylphenol	U	356	ug/kg	125	356	
111-91-1	bis(2-Chloroethoxy)methane	U	356	ug/kg	71.3	356	
120-83-2	2,4-Dichlorophenol	U	356	ug/kg	71.3	356	
65-85-0	Benzoic acid	U	713	ug/kg	178	713	
91-20-3	Naphthalene	U	35.6	ug/kg	10.7	35.6	
106-47-8	4-Chloroaniline	U	356	ug/kg	71.3	356	
87-68-3	Hexachlorobutadiene	U	356	ug/kg	71.3	356	
91-57-6	2-Methylnaphthalene	U	35.6	ug/kg	7.13	35.6	
77-47-4	Hexachlorocyclopentadiene	U	356	ug/kg	71.3	356	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	356	ug/kg	71.3	356	
95-95-4	2,4,5-Trichlorophenol	U	356	ug/kg	71.3	356	
91-58-7	2-Chloronaphthalene	U	35.6	ug/kg	11.8	35.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	356	ug/kg	71.3	356	
99-09-2	3-Nitroaniline	U	356	ug/kg	71.3	356	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318009	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13627	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 19:09	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	s810321.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	356	ug/kg	71.3	356	
606-20-2	2,6-Dinitrotoluene	U	356	ug/kg	35.6	356	
208-96-8	Acenaphthylene	U	35.6	ug/kg	10.7	35.6	
51-28-5	2,4-Dinitrophenol	U	713	ug/kg	135	713	
132-64-9	Dibenzofuran	U	356	ug/kg	71.3	356	
84-66-2	Diethylphthalate	U	356	ug/kg	71.3	356	
86-73-7	Fluorene	U	35.6	ug/kg	10.7	35.6	
7005-72-3	4-Chlorophenylphenylether	U	356	ug/kg	71.3	356	
534-52-1	2-Methyl-4,6-dinitrophenol	U	356	ug/kg	71.3	356	
100-01-6	4-Nitroaniline	U	356	ug/kg	107	356	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	356	ug/kg	71.3	356	
122-66-7	Azobenzene	U	356	ug/kg	71.3	356	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	356	ug/kg	71.3	356	
118-74-1	Hexachlorobenzene	U	356	ug/kg	71.3	356	
85-01-8	Phenanthrene	U	35.6	ug/kg	10.7	35.6	
120-12-7	Anthracene	U	35.6	ug/kg	7.13	35.6	
84-74-2	Di-n-butylphthalate	U	356	ug/kg	71.3	356	
206-44-0	Fluoranthene	U	35.6	ug/kg	10.7	35.6	
85-68-7	Butylbenzylphthalate	U	356	ug/kg	71.3	356	
56-55-3	Benzo(a)anthracene	U	35.6	ug/kg	10.7	35.6	
91-94-1	3,3'-Dichlorobenzidine	U	356	ug/kg	107	356	
218-01-9	Chrysene	U	35.6	ug/kg	10.7	35.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	356	ug/kg	71.3	356	
117-84-0	Di-n-octylphthalate	U	356	ug/kg	71.3	356	
205-99-2	Benzo(b)fluoranthene	U	35.6	ug/kg	10.7	35.6	
207-08-9	Benzo(k)fluoranthene	U	35.6	ug/kg	10.7	35.6	
50-32-8	Benzo(a)pyrene	U	35.6	ug/kg	10.7	35.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.6	ug/kg	10.7	35.6	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	35.6	ug/kg	10.7	35.6	
191-24-2	Benzo(ghi)perylene	U	35.6	ug/kg	10.7	35.6	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	356	ug/kg	71.3	356	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	259	ug/kg		JA
	Unknown	14.33	293	ug/kg		J

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318009	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13627	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 19:09	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	s810321.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.34	254	ug/kg		J

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318013	Date Received:	11/18/2009 08:50	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6084	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 16:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s810419.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382	
108-95-2	Phenol	U	382	ug/kg	76.4	382	
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382	
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382	
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382	
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382	
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2	
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382	
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382	
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382	
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2	
110-86-1	Pyridine	U	382	ug/kg	76.4	382	UJ,SV7c
62-53-3	Aniline	U	382	ug/kg	115	382	
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382	
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382	
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382	
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382	
95-48-7	o-Cresol	U	382	ug/kg	76.4	382	
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382	
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382	
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382	
78-59-1	Isophorone	U	382	ug/kg	76.4	382	
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382	
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382	
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382	
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382	
65-85-0	Benzoic acid	U	764	ug/kg	191	764	
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2	
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382	
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382	
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2	
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382	
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382	
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2	
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	382	ug/kg	76.4	382	

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318013	Date Received:	11/18/2009 08:50	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6084	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 16:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s810419.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	382	ug/kg	76.4	382	
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382	
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2	
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764	
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382	
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382	
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2	
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382	
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382	
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382	
122-66-7	Azobenzene	U	382	ug/kg	76.4	382	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382	
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382	
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2	
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2	
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.4	382	
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2	
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382	
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2	
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382	
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382	
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382	
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2	
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2	
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2	
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2	
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	217	ug/kg		JA
	Unknown	7.95	247	ug/kg		J

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318013	Date Received:	11/18/2009 08:50	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6084	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 16:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s810419.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.64	343	ug/kg		J
	Unknown	9.93	1080	ug/kg		J
17844-07-4	Todomatuic acid	10.33	832	ug/kg	93	NJ
	Unknown	15.13	663	ug/kg		J
	Unknown	15.84	163	ug/kg		J

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318014	Date Received:	11/18/2009 08:50	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6085	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 17:15	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s810420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.6	348	
108-95-2	Phenol	U	348	ug/kg	69.6	348	
95-57-8	2-Chlorophenol	U	348	ug/kg	69.6	348	
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.6	348	
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.6	348	
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.6	348	
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8	
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348	
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348	
87-86-5	Pentachlorophenol	U	348	ug/kg	87.0	348	
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8	
110-86-1	Pyridine	U	348	ug/kg	69.6	348	UJ,SV7c
62-53-3	Aniline	U	348	ug/kg	104	348	
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.6	348	
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.6	348	
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.6	348	
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.6	348	
95-48-7	o-Cresol	U	348	ug/kg	69.6	348	
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348	
67-72-1	Hexachloroethane	U	348	ug/kg	69.6	348	
98-95-3	Nitrobenzene	U	348	ug/kg	69.6	348	
78-59-1	Isophorone	U	348	ug/kg	69.6	348	
88-75-5	2-Nitrophenol	U	348	ug/kg	69.6	348	
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348	
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.6	348	
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.6	348	
65-85-0	Benzoic acid	U	696	ug/kg	174	696	
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8	
106-47-8	4-Chloroaniline	U	348	ug/kg	69.6	348	
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.6	348	
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.96	34.8	
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.6	348	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.6	348	
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.6	348	
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8	
88-74-4	2-Nitroaniline	U	348	ug/kg	69.6	348	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	348	ug/kg	69.6	348	

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318014	Date Received:	11/18/2009 08:50	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6085	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 17:15	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s810420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	348	ug/kg	69.6	348	
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348	
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8	
51-28-5	2,4-Dinitrophenol	U	696	ug/kg	132	696	
132-64-9	Dibenzofuran	U	348	ug/kg	69.6	348	
84-66-2	Diethylphthalate	U	348	ug/kg	69.6	348	
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8	
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.6	348	
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.6	348	
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	348	ug/kg	69.6	348	
122-66-7	Azobenzene	U	348	ug/kg	69.6	348	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.6	348	
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.6	348	
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8	
120-12-7	Anthracene	U	34.8	ug/kg	6.96	34.8	
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.6	348	
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8	
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.6	348	
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8	
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348	
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8	
117-81-7	bis(2-Ethylhexyl)phthalate	J	71.2	ug/kg	69.6	348	
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.6	348	
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8	
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8	
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8	UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8	
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8	
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.6	348	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	168	ug/kg		JA
	Unknown	4.21	150	ug/kg		J

P.S. 1/19/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318014	Date Received:	11/18/2009 08:50	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6085	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/04/2009 17:15	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s810420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1227-93-6	1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	10.22	369	ug/kg	90	NJ
	Unknown	11.59	536	ug/kg		J
	Unknown	11.83	475	ug/kg		J
	Unknown	11.86	403	ug/kg		J
	Unknown	11.92	140	ug/kg		J
	Unknown	11.99	1800	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.07	241	ug/kg	98	NJ
	Unknown	12.14	156	ug/kg		J
	Unknown	12.31	182	ug/kg		J
	Unknown	12.39	222	ug/kg		J

P.S. 1/19/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-543 VALIDATION DATE: 01/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None

Reviewed By: MLD **Level:** I **Date:** 01/19/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 01/19/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1942

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13618	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 01:27	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.91	mg/kg	2.52	7.75

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 02:06	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		17.2	mg/kg	2.30	7.08

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318003	Date Received:	11/18/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13620	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 02:44	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		32.1	mg/kg	2.30	7.07

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318004	Date Received:	11/18/2009 08:50	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13619	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 03:22	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	013f1301.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.09	mg/kg	2.53	7.80

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318005	Date Received:	11/18/2009 08:50	%Moisture:	22.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13624	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	10
Run Date:	11/26/2009 04:00	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	014f1401.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	31.6	mg/kg	27.9	85.9

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13623	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 04:38	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	015f1501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.69	mg/kg	2.24	6.89

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318007	Date Received:	11/18/2009 08:50	%Moisture:	15.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13626	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 06:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	018f1801.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.55	mg/kg	2.56	7.87

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318008	Date Received:	11/18/2009 08:50	%Moisture:	4.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13621	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 07:11	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	019f1901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		7.52	mg/kg	2.26	6.95

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318009	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13627	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 09:05	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	022f2201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.94	mg/kg	2.32	7.14

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318010	Date Received:	11/18/2009 08:50	%Moisture:	16.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13625	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 09:44	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	023f2301.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.02	mg/kg	2.60	8.01

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318013	Date Received:	11/18/2009 08:50	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6084	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 10:22	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	024f2401.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.37	mg/kg	2.48	7.64

P.S. 1/19/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318014	Date Received:	11/18/2009 08:50	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6085	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 11:01	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	025f2501.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.40	mg/kg	2.25	6.94

P.S. 1/19/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-543 VALIDATION DATE: 01/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The MS/MSD %Rs and/or RPDs for aroclor 1016 and aroclor 1260 did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for PCBs, no sample data were qualified as a result. It should be noted that the MS/MSD analyses were performed on a LANL parent sample from another RN. No sample data were qualified as a result.

Reviewed By: MLD **Level:** I **Date:** 01/19/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 01/19/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	10
Run Date:	11/30/2009 21:11	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	068f6801.d	**Column:**	1 CLP1	**Level:**	LOW
	068b6801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	38.8	ug/kg	12.9	38.8	1
11104-28-2	Aroclor-1221	U	38.8	ug/kg	12.9	38.8	1
11141-16-5	Aroclor-1232	U	38.8	ug/kg	12.9	38.8	1
53469-21-9	Aroclor-1242	U	38.8	ug/kg	12.9	38.8	1
12672-29-6	Aroclor-1248	U	38.8	ug/kg	12.9	38.8	1
11097-69-1	Aroclor-1254	U	38.8	ug/kg	12.9	38.8	1
11096-82-5	Aroclor-1260	U	38.8	ug/kg	12.9	38.8	1

P.S. 1/19/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 21:44	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.4	ug/kg	6.46	19.4	1
11104-28-2	Aroclor-1221	U	19.4	ug/kg	6.46	19.4	1
11141-16-5	Aroclor-1232	U	19.4	ug/kg	6.46	19.4	1
53469-21-9	Aroclor-1242	U	19.4	ug/kg	6.46	19.4	1
12672-29-6	Aroclor-1248	U	19.4	ug/kg	6.46	19.4	1
11097-69-1	Aroclor-1254	U	19.4	ug/kg	6.46	19.4	1
11096-82-5	Aroclor-1260	U	19.4	ug/kg	6.46	19.4	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318003	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13620	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 21:33	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.7	ug/kg	5.89	17.7	1
11104-28-2	Aroclor-1221	U	17.7	ug/kg	5.89	17.7	1
11141-16-5	Aroclor-1232	U	17.7	ug/kg	5.89	17.7	1
53469-21-9	Aroclor-1242	U	17.7	ug/kg	5.89	17.7	1
12672-29-6	Aroclor-1248	U	17.7	ug/kg	5.89	17.7	1
11097-69-1	Aroclor-1254	JP	14.9	ug/kg	5.89	17.7	1
11096-82-5	Aroclor-1260		18.4	ug/kg	5.89	17.7	2

P.S. 1/19/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 22:51	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.49	ug/kg	1.16	3.49	1
11104-28-2	Aroclor-1221	U	3.49	ug/kg	1.16	3.49	1
11141-16-5	Aroclor-1232	U	3.49	ug/kg	1.16	3.49	1
53469-21-9	Aroclor-1242	U	3.49	ug/kg	1.16	3.49	1
12672-29-6	Aroclor-1248	U	3.49	ug/kg	1.16	3.49	1
11097-69-1	Aroclor-1254	JP	2.60	ug/kg	1.16	3.49	1
11096-82-5	Aroclor-1260	J	3.30	ug/kg	1.16	3.49	2

P.S. 1/19/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	926712	Inst:	ECD2A.I	Dilution:	5
Run Date:	11/30/2009 21:22	Analyst:	JAOC	Inj. Vol:	1 uL
Prep Date:	11/27/2009 22:34	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	069f6901.d	Column:	1 CLP1	Level:	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.7	ug/kg	5.89	17.7	1
11104-28-2	Aroclor-1221	U	17.7	ug/kg	5.89	17.7	1
11141-16-5	Aroclor-1232	U	17.7	ug/kg	5.89	17.7	1
53469-21-9	Aroclor-1242	U	17.7	ug/kg	5.89	17.7	1
12672-29-6	Aroclor-1248	U	17.7	ug/kg	5.89	17.7	1
11097-69-1	Aroclor-1254		21.0	ug/kg	5.89	17.7	1
11096-82-5	Aroclor-1260	P	17.7	ug/kg	5.89	17.7	2

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13623	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 22:29	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	075f7501.d	**Column:**	1 CLP1	**Level:**	LOW
	075b7501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.46	ug/kg	1.15	3.46	1
11104-28-2	Aroclor-1221	U	3.46	ug/kg	1.15	3.46	1
11141-16-5	Aroclor-1232	U	3.46	ug/kg	1.15	3.46	1
53469-21-9	Aroclor-1242	U	3.46	ug/kg	1.15	3.46	1
12672-29-6	Aroclor-1248	U	3.46	ug/kg	1.15	3.46	1
11097-69-1	Aroclor-1254		69.3	ug/kg	1.15	3.46	1
11096-82-5	Aroclor-1260	P	51.4	ug/kg	1.15	3.46	2

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 22:18	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	074f7401.d	**Column:**	1 CLP1	**Level:**	LOW
	074b7401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	21.4	ug/kg	7.14	21.4	1
11104-28-2	Aroclor-1221	U	21.4	ug/kg	7.14	21.4	1
11141-16-5	Aroclor-1232	U	21.4	ug/kg	7.14	21.4	1
53469-21-9	Aroclor-1242	U	21.4	ug/kg	7.14	21.4	1
12672-29-6	Aroclor-1248	U	21.4	ug/kg	7.14	21.4	1
11097-69-1	Aroclor-1254	J	19.5	ug/kg	7.14	21.4	1
11096-82-5	Aroclor-1260	J	21.4	ug/kg	7.14	21.4	2

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 23:13	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	20.0	ug/kg	6.65	20.0	1
11104-28-2	Aroclor-1221	U	20.0	ug/kg	6.65	20.0	1
11141-16-5	Aroclor-1232	U	20.0	ug/kg	6.65	20.0	1
53469-21-9	Aroclor-1242	U	20.0	ug/kg	6.65	20.0	1
12672-29-6	Aroclor-1248	U	20.0	ug/kg	6.65	20.0	1
11097-69-1	Aroclor-1254	U	20.0	ug/kg	6.65	20.0	1
11096-82-5	Aroclor-1260	U	20.0	ug/kg	6.65	20.0	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 22:40	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.6	ug/kg	6.53	19.6	1
11104-28-2	Aroclor-1221	U	19.6	ug/kg	6.53	19.6	1
11141-16-5	Aroclor-1232	U	19.6	ug/kg	6.53	19.6	1
53469-21-9	Aroclor-1242	U	19.6	ug/kg	6.53	19.6	1
12672-29-6	Aroclor-1248	U	19.6	ug/kg	6.53	19.6	1
11097-69-1	Aroclor-1254	U	19.6	ug/kg	6.53	19.6	1
11096-82-5	Aroclor-1260	U	19.6	ug/kg	6.53	19.6	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13627	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 23:02	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	078f7801.d	**Column:**	1 CLP1	**Level:**	LOW
	078b7801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254	U	3.57	ug/kg	1.19	3.57	1
11096-82-5	Aroclor-1260	U	3.57	ug/kg	1.19	3.57	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6084	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 23:24	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	19.1	ug/kg	6.36	19.1	1
11104–28–2	Aroclor–1221	U	19.1	ug/kg	6.36	19.1	1
11141–16–5	Aroclor–1232	U	19.1	ug/kg	6.36	19.1	1
53469–21–9	Aroclor–1242	U	19.1	ug/kg	6.36	19.1	1
12672–29–6	Aroclor–1248	U	19.1	ug/kg	6.36	19.1	1
11097–69–1	Aroclor–1254	U	19.1	ug/kg	6.36	19.1	1
11096–82–5	Aroclor–1260	U	19.1	ug/kg	6.36	19.1	1

P.S. 1/19/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 23:36	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.49	ug/kg	1.16	3.49	1
11104-28-2	Aroclor-1221	U	3.49	ug/kg	1.16	3.49	1
11141-16-5	Aroclor-1232	U	3.49	ug/kg	1.16	3.49	1
53469-21-9	Aroclor-1242	U	3.49	ug/kg	1.16	3.49	1
12672-29-6	Aroclor-1248	U	3.49	ug/kg	1.16	3.49	1
11097-69-1	Aroclor-1254	JP	2.90	ug/kg	1.16	3.49	1
11096-82-5	Aroclor-1260		3.60	ug/kg	1.16	3.49	2

P.S. 1/19/10

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-543

REQUEST NUMBER: 10-543

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

241318 1.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13618	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13622	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13622	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13620	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13620	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13619	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13619	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13624	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13624	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13623	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13623	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13626	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13626	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13621	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13621	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13627	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13627	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13625	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13625	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6087	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6086	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6084	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6084	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6085	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6085	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/17/09	1700	Patricia Dover	[illegible]	11-18-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-543
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009
TURNAROUND/REPORT DUE: 12/17/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	SW-846:8082	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6086	S	11/16/2009	
		1	RE03-10-6087	S	11/16/2009	
	SW-846:8270C	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-543

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 23, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241318
SDG: 10-543

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 18, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-543
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241318
SDG: 10-543

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Sample Data Summary.....836
Quality Control Summary.....849
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Standards Data.....932
Quality Control Data.....1023
Miscellaneous Data.....1038

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241318
SDG # : 10-543

November 23, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 18, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241318001	RE03-09-13618
241318002	RE03-09-13622
241318003	RE03-09-13620
241318004	RE03-09-13619
241318005	RE03-09-13624
241318006	RE03-09-13623
241318007	RE03-09-13626
241318008	RE03-09-13621
241318009	RE03-09-13627
241318010	RE03-09-13625
241318011	RE03-10-6087
241318012	RE03-10-6086
241318013	RE03-10-6084
241318014	RE03-10-6085

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Valerie Davis

Valerie Davis

Project Manager

List of current GEL Certifications as of 23 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-543

REQUEST NUMBER: 10-543

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

241318 1.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13618	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13622	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13622	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13620	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13620	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13619	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13619	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13624	1	SEPTUM AMBER GLASS	8260B	Ice	S
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RE03-09-13623	1	SEPTUM AMBER GLASS	8260B	Ice	S
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RE03-09-13626	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13626	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13621	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13621	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13627	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13627	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13625	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13625	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6087	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6086	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6084	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6084	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6085	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6085	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/17/09	1700	Patricia Dover-Dorf	[illegible]	11-18-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-543

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13622	S	11/16/2009	
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		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	SW-846:8082	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-543

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6086	S	11/16/2009	
		1	RE03-10-6087	S	11/16/2009	
	SW-846:8270C	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-543

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-543**
Received By: Patricia Dover-Dent	**Date Received: November 18, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **30 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other (describe) **3-6C** **15C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?			X	Sample ID's affected: **time written on containers, not on COC**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S
7209 7848 9307 3C 7209 7848 9260 15C
7209 7848 9362 3C
7209 7848 9270 4C
7209 7848 9329 4C
7209 7848 9351 5C
7209 7848 9318 5C
7209 7848 9330 6C
7209 7848 9373 15C

PM (or PMA) review: Initials _____ Date 11/19/09

YLENE VALDEZ
S ALAMOS NATL LAB.
00 BLDG 1237 DPU 03

S ALAMOS, NM 87545
ITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AWE6L11570000

3°

FedEx Express

TRK# 0201 7209 7848 9307

WED - 18NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

3°

FedEx Express

MPS# 0263 7209 7848 9362
Mstr# 7209 7848 9351 0201

2 of 2

WED - 18NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

N ID: SAFA (505)665-9968
NE VALDEZ
LAMOS NATL LAB.
BLDG 1237 DPU 03

LAMOS, NM 87545
D STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

ERIE DAVIS
NERAL ENGINEERING LAB
40 SAVAGE RD

ARLESTON SC 29407
3)556-8171
F: 6B010AMR1A015AGWL0

4°

FedEx Express

MPS# 0263 7209 7848 9270
tr# 7209 7848 9259 0201

3 of 3

WED - 18NOV A1
PRIORITY OVERNIGHT

HSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4°

FedEx Express

MPS# 0263 7209 7848 9329
Mstr# 7209 7848 9318 0201

2 of 2

WED - 18NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

N ID: SAFA (505)665-9960
NE VALDEZ
LAMOS NATL LAB.
BLDG 1237 DPU 03

LAMOS, NM 87545
D STATES US

SHIP DATE: 17NOV09
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

.ERIE DAVIS
IERAL ENGINEERING LAB
10 SAVAGE RD

ARLESTON SC 29407
)556-8171
: 6B010AMR2A054196D0

5°

FedEx Express

1 of 2
7209 7848 9351
MASTER ##

WED - 18NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X CHSA

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

5°

FedEx Express

1 of 2
TRK# 0201 7209 7848 9318
MASTER

WED - 18NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156146-434 NRIT V3 08-05

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

6°

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WED - 18NOV A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9330

29407
SC-US
CHS

ORIGIN ID: SAFA
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A0224JFTO

15°

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WED - 18NOV A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9373

XX CHSA

29407
SC-US
CHS

Part # 158146-434 NRIT V3 09-06

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWLO

15°

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2 of 3

WED - 18NOV A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9260
Mstr# 7209 7848 9259 0201

XX CHSA

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CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

Case Narrative

ChemStation Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-543

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	925461
Prep Batch Number:	925460

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241318001	RE03-09-13618
241318002	RE03-09-13622
241318003	RE03-09-13620
241318004	RE03-09-13619
241318005	RE03-09-13624
241318006	RE03-09-13623
241318007	RE03-09-13626
241318008	RE03-09-13621
241318009	RE03-09-13627
241318010	RE03-09-13625
241318011	RE03-10-6087
241318012	RE03-10-6086
241318013	RE03-10-6084
241318014	RE03-10-6085
1201978557	Method Blank (MB)
1201978560	Laboratory Control Sample (LCS)
1201978561	Laboratory Control Sample (LCS)
1201981770	Method Blank (MB)
1201981771	Laboratory Control Sample (LCS)
1201981772	Laboratory Control Sample (LCS)
1201978558	241318001(RE03-09-13618) Post Spike (PS)
1201978559	241318001(RE03-09-13618) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
Samples 241318 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 013 and 014 in this SDG were analyzed on an "dry weight" basis. Samples 241318 011 and 012 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration

All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 241318001 (RE03-09-13618) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement

The spike duplicate recoveries within the acceptance limits, except 2-Hexanone. The results are reported. See NCR 762632.

Relative Percent Difference (RPD) Statement

The RPD between the matrix spike pair were not all within the acceptance limits. The results are reported. See NCR 762632.

Internal Standard (ISTD) Acceptance

The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Samples 241318005 (RE03-09-13624) and 241318014 (RE03-10-6085) were re-analyzed due to unacceptable recoveries in the initial analysis.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 762632 was generated for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will not be present on the Form I. These detected analytes are included in the calibrated method and as a result cannot be reported on the TIC quantitation report.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA6.I	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5975	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-543 GEL Work Order: 241318

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 11 DEC 2009 **Title: Data Validator**

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 14:15	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L707.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone	J	4.33	ug/kg	1.94	5.83
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.83	ug/kg	1.87	5.83
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.385	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.385	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13618**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 14:15**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 13:50**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L707.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.87	5.83
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000080-56-8	.alpha.-Pinene	14.17	6.31	ug/kg	95	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 14:42	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:56	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L708.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.70	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 14:42	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:56	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L708.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.70	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000080-56-8	.alpha.-Pinene	14.17	13.9	ug/kg	96	NJ
013466-78-9	3-Carene	15.19	9.1	ug/kg	96	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318003**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13620**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 15:10**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 13:58**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L709.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone		9.52	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318003**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13620**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 15:10**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 13:58**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L709.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.71	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 15:38	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L710.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone		14.4	ug/kg	1.94	5.85
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.85	ug/kg	1.87	5.85
75-09-2	Methylene chloride	U	5.85	ug/kg	2.34	5.85
75-15-0	Carbon disulfide	U	5.85	ug/kg	1.46	5.85
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.85	ug/kg	1.76	5.85
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.85	ug/kg	1.46	5.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.85	ug/kg	1.76	5.85
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 15:38	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L710.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.85	ug/kg	1.87	5.85
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/23/2009 14:12	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/23/2009 13:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112309V6\6M109.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.440	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.388	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.388	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.388	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.388	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.388	1.29
67-64-1	Acetone	U	6.47	ug/kg	2.15	6.47
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
74-88-4	Iodomethane	U	6.47	ug/kg	2.07	6.47
75-09-2	Methylene chloride	U	6.47	ug/kg	2.59	6.47
75-15-0	Carbon disulfide	U	6.47	ug/kg	1.62	6.47
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.388	1.29
78-93-3	2-Butanone	U	6.47	ug/kg	1.94	6.47
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.388	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.427	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.388	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.388	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.388	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.388	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.388	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.427	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.388	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.388	1.29
108-10-1	4-Methyl-2-pentanone	U	6.47	ug/kg	1.62	6.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.388	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.388	1.29
591-78-6	2-Hexanone	U	6.47	ug/kg	1.94	6.47
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.388	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.388	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.388	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.388	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.388	1.29

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/23/2009 14:12	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/23/2009 13:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112309V6\6M109.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.388	1.29
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.388	2.59
95-47-6	o-Xylene	U	1.29	ug/kg	0.388	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.388	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.388	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.388	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.388	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.388	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.388	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.388	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.388	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.388	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.388	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.388	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.47	ug/kg	2.07	6.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318006**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13623**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 16:34**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L712.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	U	5.19	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13623	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 16:34	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:04	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L712.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 17:01	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L713.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.18	ug/kg	0.402	1.18
74-87-3	Chloromethane	U	1.18	ug/kg	0.355	1.18
75-01-4	Vinyl chloride	U	1.18	ug/kg	0.355	1.18
74-83-9	Bromomethane	U	1.18	ug/kg	0.355	1.18
75-00-3	Chloroethane	U	1.18	ug/kg	0.355	1.18
75-69-4	Trichlorofluoromethane	U	1.18	ug/kg	0.355	1.18
67-64-1	Acetone	U	5.92	ug/kg	1.96	5.92
75-35-4	1,1-Dichloroethylene	U	1.18	ug/kg	0.355	1.18
74-88-4	Iodomethane	U	5.92	ug/kg	1.89	5.92
75-09-2	Methylene chloride	U	5.92	ug/kg	2.37	5.92
75-15-0	Carbon disulfide	U	5.92	ug/kg	1.48	5.92
156-60-5	trans-1,2-Dichloroethylene	U	1.18	ug/kg	0.355	1.18
75-34-3	1,1-Dichloroethane	U	1.18	ug/kg	0.355	1.18
78-93-3	2-Butanone	U	5.92	ug/kg	1.78	5.92
156-59-2	cis-1,2-Dichloroethylene	U	1.18	ug/kg	0.355	1.18
594-20-7	2,2-Dichloropropane	U	1.18	ug/kg	0.355	1.18
67-66-3	Chloroform	U	1.18	ug/kg	0.355	1.18
74-97-5	Bromochloromethane	U	1.18	ug/kg	0.391	1.18
71-55-6	1,1,1-Trichloroethane	U	1.18	ug/kg	0.355	1.18
563-58-6	1,1-Dichloropropene	U	1.18	ug/kg	0.355	1.18
56-23-5	Carbon tetrachloride	U	1.18	ug/kg	0.355	1.18
107-06-2	1,2-Dichloroethane	U	1.18	ug/kg	0.355	1.18
71-43-2	Benzene	U	1.18	ug/kg	0.355	1.18
79-01-6	Trichloroethylene	U	1.18	ug/kg	0.391	1.18
78-87-5	1,2-Dichloropropane	U	1.18	ug/kg	0.355	1.18
75-27-4	Bromodichloromethane	U	1.18	ug/kg	0.355	1.18
74-95-3	Dibromomethane	U	1.18	ug/kg	0.355	1.18
108-10-1	4-Methyl-2-pentanone	U	5.92	ug/kg	1.48	5.92
10061-01-5	cis-1,3-Dichloropropylene	U	1.18	ug/kg	0.355	1.18
108-88-3	Toluene	U	1.18	ug/kg	0.355	1.18
10061-02-6	trans-1,3-Dichloropropylene	U	1.18	ug/kg	0.355	1.18
79-00-5	1,1,2-Trichloroethane	U	1.18	ug/kg	0.355	1.18
591-78-6	2-Hexanone	U	5.92	ug/kg	1.78	5.92
142-28-9	1,3-Dichloropropane	U	1.18	ug/kg	0.355	1.18
127-18-4	Tetrachloroethylene	U	1.18	ug/kg	0.355	1.18
124-48-1	Dibromochloromethane	U	1.18	ug/kg	0.355	1.18
106-93-4	1,2-Dibromoethane	U	1.18	ug/kg	0.355	1.18
108-90-7	Chlorobenzene	U	1.18	ug/kg	0.355	1.18

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 17:01	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L713.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.18	ug/kg	0.355	1.18
179601-23-1	m,p-Xylenes	U	2.37	ug/kg	0.355	2.37
95-47-6	o-Xylene	U	1.18	ug/kg	0.355	1.18
100-42-5	Styrene	U	1.18	ug/kg	0.355	1.18
75-25-2	Bromoform	U	1.18	ug/kg	0.355	1.18
79-34-5	1,1,2,2-Tetrachloroethane	U	1.18	ug/kg	0.355	1.18
96-18-4	1,2,3-Trichloropropane	U	1.18	ug/kg	0.355	1.18
108-86-1	Bromobenzene	U	1.18	ug/kg	0.355	1.18
103-65-1	n-Propylbenzene	U	1.18	ug/kg	0.355	1.18
95-49-8	2-Chlorotoluene	U	1.18	ug/kg	0.355	1.18
98-82-8	Isopropylbenzene	U	1.18	ug/kg	0.355	1.18
108-67-8	1,3,5-Trimethylbenzene	U	1.18	ug/kg	0.355	1.18
106-43-4	4-Chlorotoluene	U	1.18	ug/kg	0.355	1.18
98-06-6	tert-Butylbenzene	U	1.18	ug/kg	0.355	1.18
95-63-6	1,2,4-Trimethylbenzene	U	1.18	ug/kg	0.355	1.18
135-98-8	sec-Butylbenzene	U	1.18	ug/kg	0.355	1.18
99-87-6	4-Isopropyltoluene	U	1.18	ug/kg	0.355	1.18
541-73-1	1,3-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18
106-46-7	1,4-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18
104-51-8	n-Butylbenzene	U	1.18	ug/kg	0.355	1.18
96-12-8	1,2-Dibromo-3-chloropropane	U	1.18	ug/kg	0.355	1.18
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.92	ug/kg	1.89	5.92
630-20-6	1,1,1,2-Tetrachloroethane	U	1.18	ug/kg	0.355	1.18
95-50-1	1,2-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318008**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**4.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13621**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 17:29**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:08**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L714.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.24	ug/kg	1.74	5.24
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.24	ug/kg	1.68	5.24
75-09-2	Methylene chloride	U	5.24	ug/kg	2.10	5.24
75-15-0	Carbon disulfide	U	5.24	ug/kg	1.31	5.24
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.24	ug/kg	1.57	5.24
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.346	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.346	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.24	ug/kg	1.31	5.24
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.24	ug/kg	1.57	5.24
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318008**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**4.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13621**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 17:29**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:08**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L714.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.24	ug/kg	1.68	5.24
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318009**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13627**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 17:57**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L715.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.34	5.38
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.34	5.38
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318009**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13627**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 17:57**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L715.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 18:25	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L716.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.409	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.50	6.02
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.50	6.02
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318010**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**16.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13625**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 18:25**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L716.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318011	**Date Received:**	11/18/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6087	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 18:52	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L717.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318011	**Date Received:**	11/18/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6087	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 18:52	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L717.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318012	**Date Received:**	11/18/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6086	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 19:20	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L718.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.94	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318012	**Date Received:**	11/18/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6086	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 19:20	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L718.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6084	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 19:48	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L719.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318013**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6084**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 19:48**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L719.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318014**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6085**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 14:40**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 13:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M110.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.356	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.314	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.314	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.314	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.314	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.314	1.05
67-64-1	Acetone	U	5.23	ug/kg	1.74	5.23
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
74-88-4	Iodomethane	U	5.23	ug/kg	1.67	5.23
75-09-2	Methylene chloride	U	5.23	ug/kg	2.09	5.23
75-15-0	Carbon disulfide	U	5.23	ug/kg	1.31	5.23
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.314	1.05
78-93-3	2-Butanone	U	5.23	ug/kg	1.57	5.23
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.314	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.345	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.314	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.314	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.314	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.314	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.314	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.345	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.314	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.314	1.05
108-10-1	4-Methyl-2-pentanone	U	5.23	ug/kg	1.31	5.23
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.314	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.314	1.05
591-78-6	2-Hexanone	U	5.23	ug/kg	1.57	5.23
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.314	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.314	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.314	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.314	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.314	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/23/2009 14:40	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/23/2009 13:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112309V6\6M110.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.314	1.05
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.314	2.09
95-47-6	o-Xylene	U	1.05	ug/kg	0.314	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.314	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.314	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.314	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.314	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.314	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.314	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.314	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.314	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.314	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.314	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.314	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.23	ug/kg	1.67	5.23
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quality Control Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-543

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201978560	LCS for batch 925460	98	101	102
1201978561	LCS for batch 925460	101	100	103
1201978557	MB for batch 925460	100	101	102
241318001	RE03-09-13618	125	124	130
241318002	RE03-09-13622	111	115	122
241318003	RE03-09-13620	101	105	112
241318004	RE03-09-13619	99	101	105
241318006	RE03-09-13623	105	110	114
241318007	RE03-09-13626	97	101	108
241318008	RE03-09-13621	103	105	111
241318009	RE03-09-13627	103	108	111
241318010	RE03-09-13625	104	101	103
241318011	RE03-10-6087	127	127	131
241318012	RE03-10-6086	119	122	125
241318013	RE03-10-6084	119	122	128
1201978558	RE03-09-13618PS	110	115	121
1201978559	RE03-09-13618PSD	99	106	109
1201981771	LCS for batch 925460	102	103	103
1201981772	LCS for batch 925460	101	100	105
1201981770	MB for batch 925460	100	102	104
241318005	RE03-09-13624	98	103	112
241318014	RE03-10-6085	100	101	106

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13618PS
Lab Sample ID: 1201978558
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 14.3
Analysis Date: 11/22/2009 20:43
Prep Batch ID: 925460
Batch ID: 925461
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	42.4	85	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	38.7	77	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	42.9	86	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	46.1	92	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	46.2	92	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	47.9	96	51-151
67-64-1	PS	Acetone	250	3.71	J	135	53	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	43.8	88	61-125
74-88-4	PS	Iodomethane	250	0.00	U	200	80	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	49.4	99	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	235	94	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	45.9	92	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	46.3	93	62-125
78-93-3	PS	2-Butanone	250	0.00	U	126	50	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	45.9	92	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	44.2	88	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	47.8	96	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	48.9	98	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	47.0	94	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	47.3	95	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	47.0	94	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	46.7	93	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13618PS
Lab Sample ID: 1201978558
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 14.3
Analysis Date: 11/22/2009 20:43
Prep Batch ID 925460
Batch ID: 925461
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	46.2	92	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	45.8	92	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	47.1	94	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	49.0	98	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	50.1	100	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	198	79	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	39.9	80	54-133
108-88-3	PS	Toluene	50.0	0.00	U	46.5	93	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	43.8	88	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	51.0	102	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	106	42	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	51.1	102	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	44.6	89	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	50.9	102	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	49.8	100	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	47.4	95	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	44.9	90	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	83.1	83	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	46.5	93	52-127
100-42-5	PS	Styrene	50.0	0.00	U	41.8	84	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	55.2	110	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	54.5	109	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13618PS
Lab Sample ID: 1201978558
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 14.3
Analysis Date: 11/22/2009 20:43
Prep Batch ID 925460
Batch ID: 925461
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	54.7	109	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	49.6	99	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	45.3	91	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	48.4	97	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	48.1	96	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	44.8	90	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	41.2	82	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	45.8	92	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	43.8	88	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	43.0	86	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	22.9	46	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	44.0	88	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	43.2	86	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	50.5	101	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	48.5	97	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	43.0	86	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13618PSD
Lab Sample ID: 1201978559
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 14.3
Analysis Date: 11/22/2009 21:11
Prep Batch ID: 925460
Batch ID: 925461
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	46.1	92	25-149	8	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	40.3	81	39-140	4	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	45.9	92	47-129	7	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	48.7	97	31-135	5	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	48.7	97	53-128	5	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	51.6	103	51-151	7	0-25
67-64-1	PSD	Acetone	250	3.71	J	134	52	21-153	1	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	46.2	92	61-125	5	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	207	83	53-142	4	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	49.4	99	59-136	0	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	248	99	46-129	6	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	48.1	96	56-126	5	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	47.7	95	62-125	3	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	112	45	26-152	12	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	47.2	94	60-130	3	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	47.6	95	55-135	7	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	48.4	97	60-127	1	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	47.2	94	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	50.3	101	59-131	7	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	50.2	100	57-128	6	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	50.6	101	58-136	7	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	45.2	90	58-126	3	0-25

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13618PSD
Lab Sample ID: 1201978559
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 14.3
Analysis Date: 11/22/2009 21:11 **Dilution:** 1
Prep Batch ID: 925460
Batch ID: 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	47.3	95	56-123	2	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	47.6	95	51-137	4	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	46.9	94	60-126	0	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	48.9	98	55-138	0	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	47.7	95	60-132	5	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	159	64	58-136	22	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	39.6	79	54-133	1	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	47.7	95	52-128	3	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	42.0	84	53-137	4	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	48.1	96	59-130	6	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	76.3	31	31-148	33 *	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	47.5	95	57-127	7	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	46.9	94	51-128	5	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	48.3	97	59-139	5	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	47.3	95	57-133	5	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	47.8	96	53-122	1	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	46.4	93	51-125	3	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	85.7	86	50-126	3	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	48.0	96	52-127	3	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	41.6	83	49-135	0	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	49.2	98	57-149	12	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	48.4	97	63-127	12	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13618PSD
Lab Sample ID: 1201978559
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 14.3
Analysis Date: 11/22/2009 21:11
Dilution: 1
Prep Batch ID: 925460
Batch ID: 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	48.6	97	57-149	12	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	47.6	95	49-131	4	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	45.9	92	40-136	1	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	48.1	96	44-135	1	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	48.2	96	44-140	0	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	45.1	90	42-140	1	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	40.9	82	44-132	1	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	46.5	93	42-142	2	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	39.0	78	43-137	12	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	43.7	87	39-139	2	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	23.3	47	38-145	2	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	43.1	86	43-129	2	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	41.6	83	44-125	4	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	43.9	88	47-151	14	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	49.0	98	59-131	1	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	41.7	83	43-129	3	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 925460 **Matrix:** SOIL

Lab Sample ID: 1201978560

Instrument: VOA6.I **Analysis Date:** 11/22/2009 12:49 **Dilution:** 1

Analyst: RXD1 **Prep Batch ID** 925460

Purge Vol: 5 mL **Batch ID:** 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	44.1	88	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	37.3	75	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	42.8	86	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	47.5	95	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	45.1	90	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	48.1	96	67-151
67-64-1	LCS	Acetone	250	0.0	167	67	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	44.1	88	70-125
74-88-4	LCS	Iodomethane	250	0.0	222	89	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	44.8	90	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	237	95	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	44.9	90	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	44.7	89	75-120
78-93-3	LCS	2-Butanone	250	0.0	157	63	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	44.3	89	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	45.0	90	74-135
67-66-3	LCS	Chloroform	50.0	0.0	45.0	90	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	44.7	89	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	46.4	93	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	48.6	97	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	48.1	96	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	42.5	85	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 925460 **Matrix:** SOIL
Lab Sample ID: 1201978560
Instrument: VOA6.I **Analysis Date:** 11/22/2009 12:49 **Dilution:** 1
Analyst: RXD1 **Prep Batch ID** 925460
Purge Vol: 5 mL **Batch ID:** 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	44.4	89	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	45.8	92	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	44.2	88	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	45.8	92	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	45.6	91	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	205	82	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	45.8	92	80-125
108-88-3	LCS	Toluene	50.0	0.0	45.4	91	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	48.2	96	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	45.9	92	76-120
591-78-6	LCS	2-Hexanone	250	0.0	152	61	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	45.4	91	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	46.2	92	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	47.4	95	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	47.2	94	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	46.6	93	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	45.6	91	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	92.6	93	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	46.2	92	74-120
100-42-5	LCS	Styrene	50.0	0.0	46.6	93	76-125
75-25-2	LCS	Bromoform	50.0	0.0	48.8	98	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	46.5	93	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 925460
Matrix: SOIL
Lab Sample ID: 1201978560
Instrument: VOA6.I
Analysis Date: 11/22/2009 12:49
Dilution: 1
Analyst: RXD1
Prep Batch ID: 925460
Purge Vol: 5 mL
Batch ID: 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	46.1	92	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	45.4	91	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	45.9	92	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	46.6	93	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	45.7	91	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	45.0	90	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	45.4	91	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	46.1	92	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	45.2	90	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	45.7	91	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	45.3	91	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	45.0	90	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	44.4	89	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	46.1	92	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	47.1	94	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	46.6	93	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	44.3	89	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: LCS for batch 925460
Lab Sample ID: 1201978561
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/22/2009 13:17
Dilution: 1
Prep Batch ID: 925460
Batch ID: 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	274	110	52-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 925460
Matrix: SOIL
Lab Sample ID: 1201981771
Instrument: VOA6.I
Analysis Date: 11/23/2009 11:25
Dilution: 1
Analyst: RXD1
Prep Batch ID: 925460
Purge Vol: 5 mL
Batch ID: 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	44.7	89	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	39.2	78	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	45.9	92	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	50.0	100	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	46.9	94	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	50.9	102	67-151
67-64-1	LCS	Acetone	250	0.0	184	73	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	46.1	92	70-125
74-88-4	LCS	Iodomethane	250	0.0	233	93	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	45.3	91	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	248	99	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	47.4	95	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	47.2	94	75-120
78-93-3	LCS	2-Butanone	250	0.0	172	69	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	46.7	93	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	48.3	97	74-135
67-66-3	LCS	Chloroform	50.0	0.0	47.5	95	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	47.5	95	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	49.0	98	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	50.9	102	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	51.3	103	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	45.0	90	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: LCS for batch 925460
Lab Sample ID: 1201981771
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/23/2009 11:25
Dilution: 1
Prep Batch ID: 925460
Batch ID: 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	47.0	94	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	48.3	97	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	47.1	94	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	48.8	98	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	48.3	97	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	216	86	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	48.9	98	80-125
108-88-3	LCS	Toluene	50.0	0.0	46.9	94	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	49.9	100	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	48.3	97	76-120
591-78-6	LCS	2-Hexanone	250	0.0	166	67	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	47.3	95	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	47.6	95	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	49.4	99	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	49.0	98	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	48.0	96	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	47.7	95	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	96.7	97	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	48.1	96	74-120
100-42-5	LCS	Styrene	50.0	0.0	48.5	97	76-125
75-25-2	LCS	Bromoform	50.0	0.0	50.8	102	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	48.9	98	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 925460 **Matrix:** SOIL

Lab Sample ID: 1201981771

Instrument: VOA6.I **Analysis Date:** 11/23/2009 11:25 **Dilution:** 1

Analyst: RXD1 **Prep Batch ID** 925460

Purge Vol: 5 mL **Batch ID:** 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	47.8	96	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	47.0	94	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	47.7	95	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	48.1	96	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	47.5	95	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	46.5	93	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	47.4	95	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	48.2	96	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	46.9	94	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	47.3	95	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	47.1	94	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	47.0	94	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	46.0	92	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	47.8	96	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	50.3	101	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	48.8	98	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	46.0	92	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: LCS for batch 925460
Lab Sample ID: 1201981772
Instrument: VOA6.I
Analyst: RXD1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/23/2009 12:21
Dilution: 1
Prep Batch ID: 925460
Batch ID: 925461

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	278	111	52-139

Method Blank Summary

SDG Number:	10-543	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925460	Instrument ID:	VOA6.I	Data File:	112209V6\6L706BL.D
Lab Sample ID:	1201978557	Prep Date:	11/22/2009 10:45	Analyzed:	11/22/09 13:45
Column:	DB-624				

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 925460	1201978560	112209V6\6L704LL.D	11/22/09	1249
02	LCS for batch 925460	1201978561	112209V6\6L705SL.D	11/22/09	1317
03	RE03-09-13618	241318001	112209V6\6L707.D	11/22/09	1415
04	RE03-09-13622	241318002	112209V6\6L708.D	11/22/09	1442
05	RE03-09-13620	241318003	112209V6\6L709.D	11/22/09	1510
06	RE03-09-13619	241318004	112209V6\6L710.D	11/22/09	1538
07	RE03-09-13623	241318006	112209V6\6L712.D	11/22/09	1634
08	RE03-09-13626	241318007	112209V6\6L713.D	11/22/09	1701
09	RE03-09-13621	241318008	112209V6\6L714.D	11/22/09	1729
10	RE03-09-13627	241318009	112209V6\6L715.D	11/22/09	1757
11	RE03-09-13625	241318010	112209V6\6L716.D	11/22/09	1825
12	RE03-10-6087	241318011	112209V6\6L717.D	11/22/09	1852
13	RE03-10-6086	241318012	112209V6\6L718.D	11/22/09	1920
14	RE03-10-6084	241318013	112209V6\6L719.D	11/22/09	1948
15	RE03-09-13618PS	1201978558	112209V6\6L721.D	11/22/09	2043
16	RE03-09-13618PSD	1201978559	112209V6\6L722.D	11/22/09	2111

Method Blank Summary

SDG Number:	10-543	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925460	Instrument ID:	VOA6.I	Data File:	112309V6\6M106BL.D
Lab Sample ID:	1201981770	Prep Date:	11/23/2009 09:05	Analyzed:	11/23/09 12:49
Column:	DB-624				

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 925460	1201981771	112309V6\6M103LL.D	11/23/09	1125
02 LCS for batch 925460	1201981772	112309V6\6M105SL.D	11/23/09	1221
03 RE03-09-13624	241318005	112309V6\6M109.D	11/23/09	1412
04 RE03-10-6085	241318014	112309V6\6M110.D	11/23/09	1440

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-543

Instrument ID: VOA6.I **Injection Date/Time:** 22-NOV-09 12:21

Column Description: DB-624 **Lab File ID** 112209V6\6L703.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	47.6
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.9
174	50.0 - 100.0% of mass 95	84.7
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	98
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]01	W6VM091122-01	112209V6\6L704.D	22-NOV-09 12:49
BLK01LCS	1201978560	112209V6\6L704LL.D	22-NOV-09 12:49
CCVMIX[B]02	W6VM091122-02	112209V6\6L705.D	22-NOV-09 13:17
BLK01SLCS	1201978561	112209V6\6L705SL.D	22-NOV-09 13:17
BLK01	1201978557	112209V6\6L706BL.D	22-NOV-09 13:45
RE03-09-13618	241318001	112209V6\6L707.D	22-NOV-09 14:15
RE03-09-13622	241318002	112209V6\6L708.D	22-NOV-09 14:42
RE03-09-13620	241318003	112209V6\6L709.D	22-NOV-09 15:10
RE03-09-13619	241318004	112209V6\6L710.D	22-NOV-09 15:38
RE03-09-13623	241318006	112209V6\6L712.D	22-NOV-09 16:34
RE03-09-13626	241318007	112209V6\6L713.D	22-NOV-09 17:01
RE03-09-13621	241318008	112209V6\6L714.D	22-NOV-09 17:29
RE03-09-13627	241318009	112209V6\6L715.D	22-NOV-09 17:57
RE03-09-13625	241318010	112209V6\6L716.D	22-NOV-09 18:25
RE03-10-6087	241318011	112209V6\6L717.D	22-NOV-09 18:52
RE03-10-6086	241318012	112209V6\6L718.D	22-NOV-09 19:20
RE03-10-6084	241318013	112209V6\6L719.D	22-NOV-09 19:48
RE03-09-13618MS	1201978558	112209V6\6L721.D	22-NOV-09 20:43
RE03-09-13618MSD	1201978559	112209V6\6L722.D	22-NOV-09 21:11

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-543

Instrument ID: VOA6.I **Injection Date/Time:** 23-NOV-09 10:30

Column Description: DB-624 **Lab File ID** 112309V6\6M101.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.3
75	30.0 - 60.0% of mass 95	48
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.9
174	50.0 - 100.0% of mass 95	84
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	96.3
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]03	W6VM091123-01	112309V6\6M102.D	23-NOV-09 10:57
BLK02LCS	1201981771	112309V6\6M103LL.D	23-NOV-09 11:25
CCVMIX[B]04	W6VM091123-03	112309V6\6M104.D	23-NOV-09 11:53
BLK02SLCS	1201981772	112309V6\6M105SL.D	23-NOV-09 12:21
BLK02	1201981770	112309V6\6M106BL.D	23-NOV-09 12:49
RE03-09-13624	241318005	112309V6\6M109.D	23-NOV-09 14:12
RE03-10-6085	241318014	112309V6\6M110.D	23-NOV-09 14:40

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-543

Instrument ID: VOA6.I **Injection Date/Time:** 24-OCT-09 12:23

Column Description: DB-624 **Lab File ID** 102409V6\6H603.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	20.5
75	30.0 - 60.0% of mass 95	48
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1
174	50.0 - 100.0% of mass 95	83.7
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.3
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W6VM091024-01	102409V6\6H604.D	24-OCT-09 12:52
ICALMIX[A]	W6VM091024-02	102409V6\6H605.D	24-OCT-09 13:20
ICALMIX[A]	W6VM091024-03	102409V6\6H606.D	24-OCT-09 13:48
ICALMIX[A]	W6VM091024-04	102409V6\6H607.D	24-OCT-09 14:16
ICALMIX[A]	W6VM091024-05	102409V6\6H608.D	24-OCT-09 14:43
ICALMIX[A]	W6VM091024-06	102409V6\6H609.D	24-OCT-09 15:11
ICALMIX[A]	W6VM091024-07	102409V6\6H610.D	24-OCT-09 15:39
ICALMIX[A]	W6VM091024-08	102409V6\6H612.D	24-OCT-09 16:35
ICVMIX[A]01	W6VM091024-09	102409V6\6H613.D	24-OCT-09 17:02
ICALMIX[B]	W6VM091024-11	102409V6\6H615.D	24-OCT-09 17:58
ICALMIX[B]	W6VM091024-12	102409V6\6H616.D	24-OCT-09 18:26
ICALMIX[B]	W6VM091024-13	102409V6\6H617.D	24-OCT-09 18:53
ICALMIX[B]	W6VM091024-14	102409V6\6H618.D	24-OCT-09 19:21
ICALMIX[B]	W6VM091024-15	102409V6\6H619.D	24-OCT-09 19:49
ICALMIX[B]	W6VM091024-16	102409V6\6H620.D	24-OCT-09 20:16
ICALMIX[B]	W6VM091024-17	102409V6\6H621.D	24-OCT-09 20:44
ICVMIX[B]02	W6VM091024-18	102409V6\6H623.D	24-OCT-09 21:39

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA6.I

GC Column: DB-624

Client SDG: 10-543

STD Analysis Time: 22-NOV-09 12:49

Data File: C:\msdchem\1\DATA\112209V6\6L704.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1849212		9.98	1350638		13.2	743976		15.6
Upper Limit	3698424		10.5	2701276		13.7	1487952		16.1
Lower Limit	924606		9.48	675319		12.7	371988		15.1
Sample ID									
BLK01LCS	1849212		9.98	1350638		13.2	743976		15.6
BLK01SLCS	1829360		9.98	1348325		13.2	743535		15.6
BLK01	1844001		9.98	1339689		13.2	711769		15.6
RE03-09-13618	1485232		9.98	1089570		13.2	570264		15.6
RE03-09-13622	1568365		9.98	1119869		13.2	549474		15.6
RE03-09-13620	1569972		9.98	1084421		13.2	492580		15.6
RE03-09-13619	1781951		9.98	1290392		13.2	668402		15.6
RE03-09-13623	1603359		9.98	1152683		13.2	581603		15.6
RE03-09-13626	1744682		9.98	1246811		13.2	612078		15.6
RE03-09-13621	1678548		9.98	1213141		13.2	603153		15.6
RE03-09-13627	1598795		9.98	1146121		13.2	588887		15.6
RE03-09-13625	1053720		9.98	775462		13.2	405832		15.6
RE03-10-6087	1326859		9.98	985584		13.2	502048		15.6
RE03-10-6086	1400531		9.98	1020790		13.2	530331		15.6
RE03-10-6084	1410897		9.98	1007526		13.2	495321		15.6
RE03-09-13618MS	1565220		9.98	1124800		13.2	565549		15.6
RE03-09-13618MSD	1318900		9.98	955753		13.2	495880		15.6

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA6.I

GC Column: DB-624

Client SDG: 10-543

STD Analysis Time: 23-NOV-09 10:57

Data File: C:\msdchem\1\DATA\112309V6\6M102.D

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1787432		9.98		1321956		13.2		707533		15.6	
Upper Limit	3574864		10.5		2643912		13.7		1415066		16.1	
Lower Limit	893716		9.48		660978		12.7		353767		15.1	
Sample ID												
BLK02LCS	1794727		9.98		1338264		13.2		739627		15.6	
BLK02SLCS	1760098		9.98		1326419		13.2		718415		15.6	
BLK02	1752242		9.98		1285459		13.2		682325		15.6	
RE03-09-13624	1720152		9.98		1220158		13.2		555824		15.6	
RE03-10-6085	1019758		9.98		729766		13.2		357572		15.6	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 14:15	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L707.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone	J	4.33	ug/kg	1.94	5.83
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.83	ug/kg	1.87	5.83
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.385	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.385	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 14:15	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L707.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.87	5.83
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000080-56-8	.alpha.-Pinene	14.17	6.31	ug/kg	95	NJ

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L707.D
Acq On : 22 Nov 2009 2:15 pm
Operator : RXD1
InstName : VOA6
Sample : |241318001|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 23 09:10:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1486914	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1089570	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	570264	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1485232	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1089570	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	570264	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.633	65	543498	62.27 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 124.54%		
43) Toluene-d8	11.626	98	1827852	62.20 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 124.40%		
61) Bromofluorobenzene	14.357	95	712497	65.16 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 130.32%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.713	50	340	N.D.	
4) Vinyl chloride	4.924	62	329	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	61695	3.71 ug/L	99
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.078	41	1788	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.078	76	537	N.D.	
15) Methylene chloride	7.298	84	31314	N.D.	
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	8.700	43	250	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	10.090	56	2483	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L707.D
Acq On : 22 Nov 2009 2:15 pm
Operator : RXD1
InstName : VOA6
Sample : |241318001|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 23 09:10:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.699	91	646	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	12.266	43	224	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	13.260	91	238	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.168	105	10036	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	14.583	91	238	N.D.	
66) 1,3,5-Trimethylbenzene	14.741	105	476	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	14.894	91	4030	N.D.	
69) tert-Butylbenzene	0.000		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	0.000		0m	N.D.	d
71) sec-Butylbenzene	15.327	105	555	N.D.	
72) 4-Isopropyltoluene	15.455	119	6097	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	15.601	146	192	N.D.	
75) n-Butylbenzene	15.887	91	785	N.D.	
76) 1,2-Dichlorobenzene	16.028	146	190	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.277	128	1543	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.078	41	1788	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.700	43	250	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L707.D
Acq On : 22 Nov 2009 2:15 pm
Operator : RXD1
InstName : VOA6
Sample : |241318001|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 23 09:10:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.066	42	1066	N.D.	
98)	Isobutyl alcohol	0.000		0	N.D.	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	0.000		0	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	0.000		0	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	0.000		0m	N.D.	d
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	0.000		0	N.D.	
111)	Benzyl chloride	0.000		0m	N.D.	d
112)	bis(2-Chloroisopropyl)...	16.113	45	185	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L707.D
Acq On : 22 Nov 2009 2:15 pm
Operator : RXD1
InstName : VOA6
Sample : |241318001|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 23 09:10:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

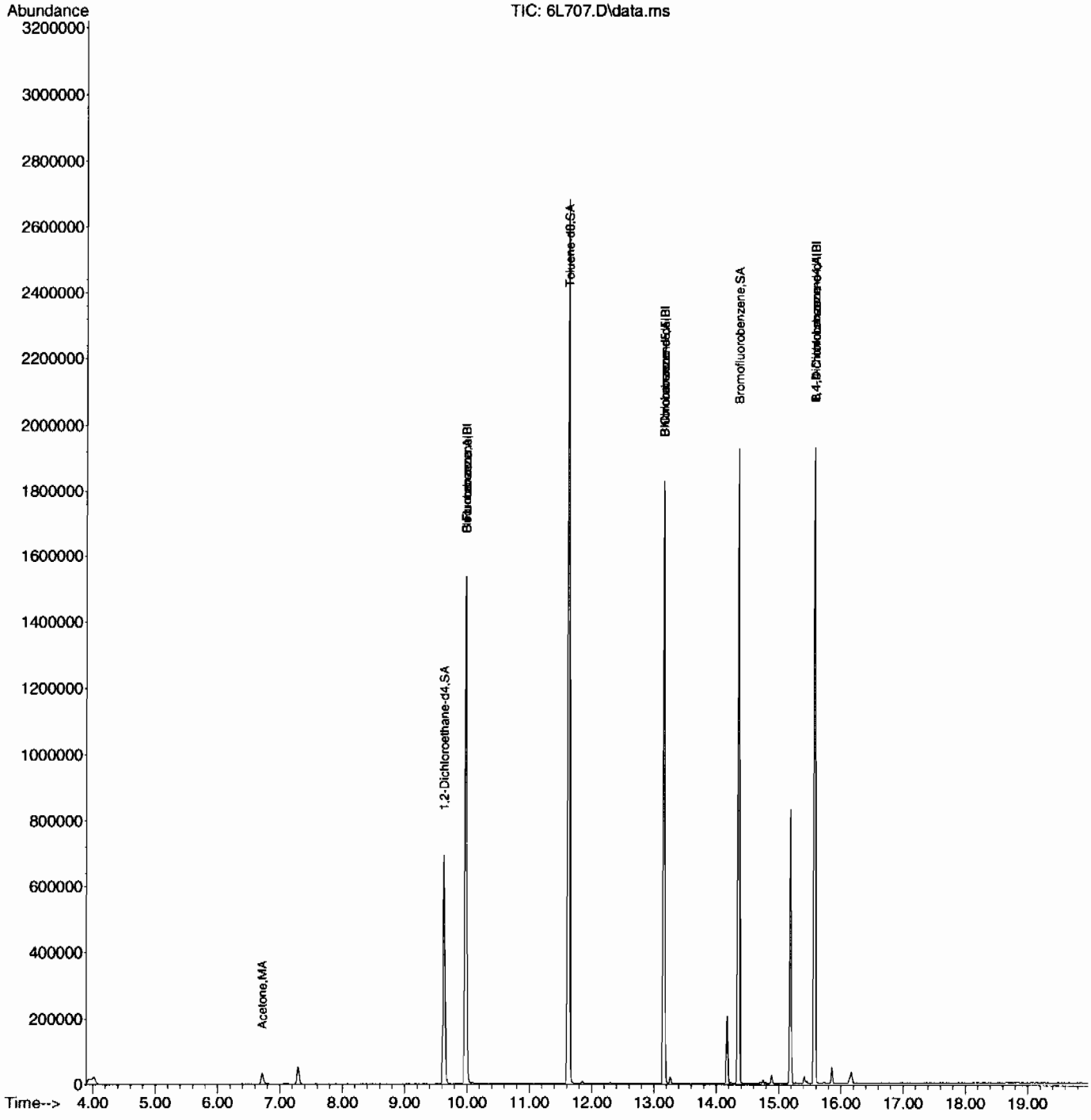

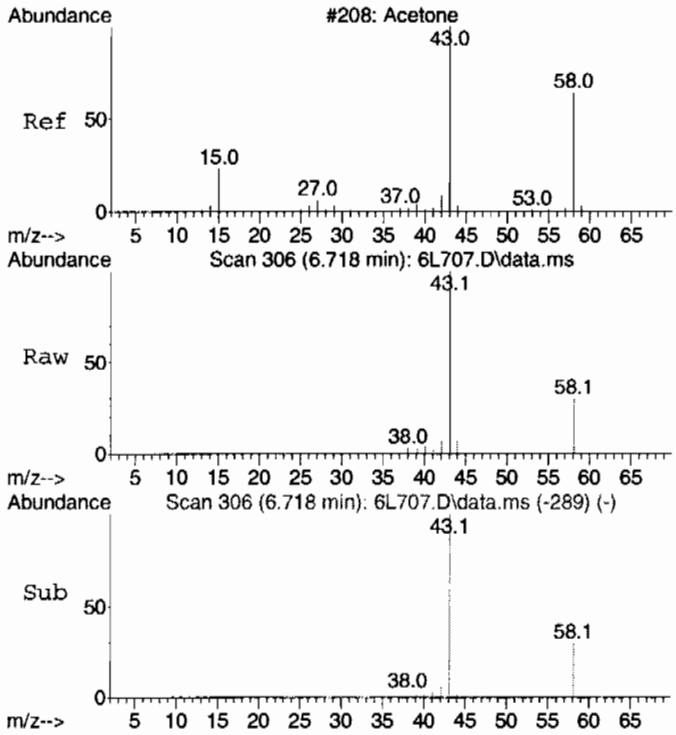

#9
Acetone
Concen: 3.71 ug/L
RT: 6.718 min Scan# 306
Delta R.T. 0.006 min
Lab File: 6L707.D
Acq: 22 Nov 2009 2:15 pm

Tgt Ion: 43 Resp: 61695

Ion	Ratio	Lower	Upper
43	100		
58	29.1	0.0	59.5

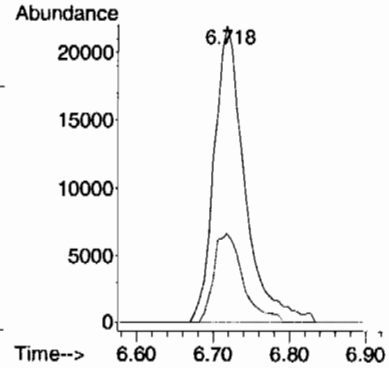

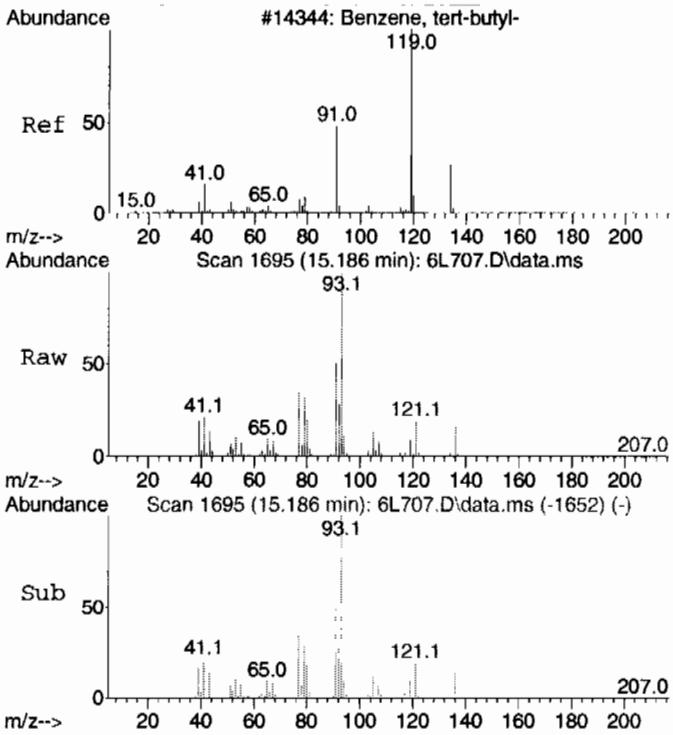

#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 0.66 ug/L
RT: 15.186 min Scan# 1695
Delta R.T. 0.079 min
Lab File: 6L707.D
Acq: 22 Nov 2009 2:15 pm

Tgt Ion:134 Resp: 4355

Ion	Ratio	Lower	Upper
134	100		
119	575.0	428.3	488.3#
91	3137.7	280.6	340.6#

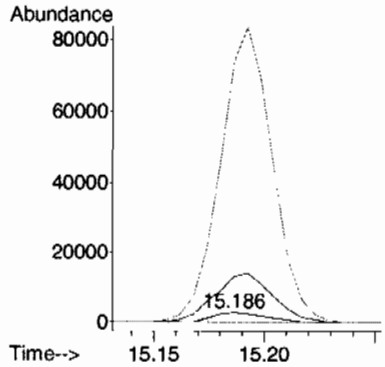

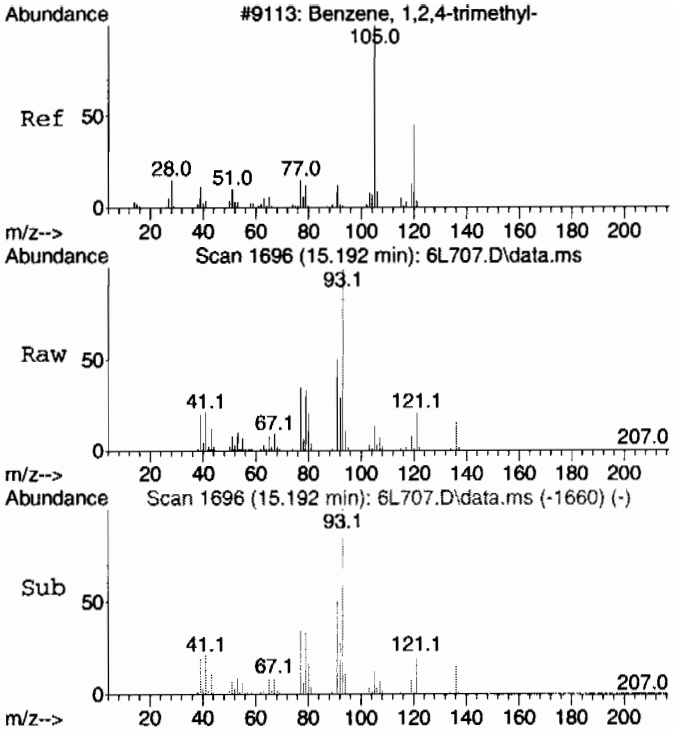

#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 1.23 ug/L
RT: 15.192 min Scan# 1696
Delta R.T. 0.042 min
Lab File: 6L707.D
Acq: 22 Nov 2009 2:15 pm

Tgt Ion:105 Resp: 38023

Ion	Ratio	Lower	Upper
105	100		
120	7.6	15.6	75.6#

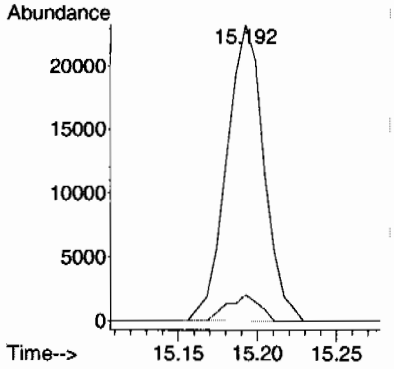

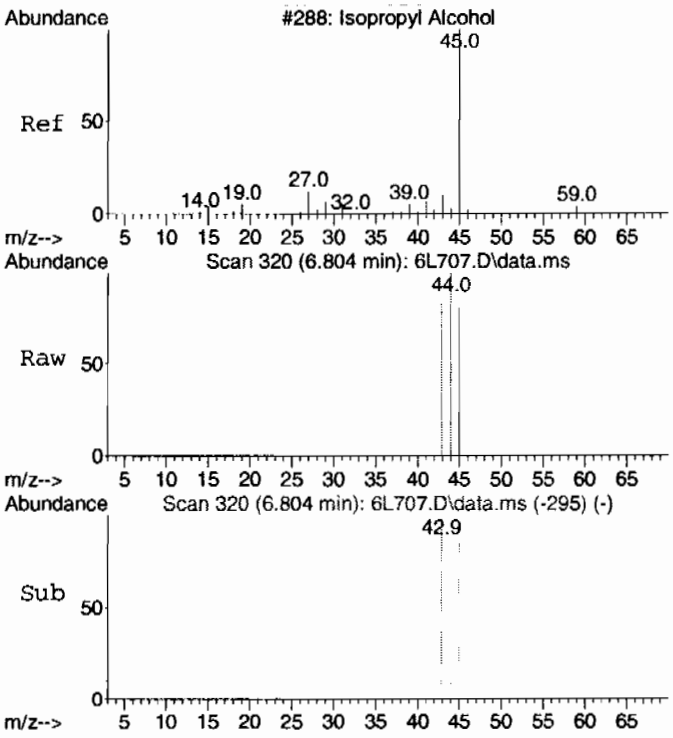

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 2.88 ug/L
RT: 6.804 min Scan# 320
Delta R.T. 0.006 min
Lab File: 6L707.D
Acq: 22 Nov 2009 2:15 pm

Tgt Ion: 45 Resp: 1787

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

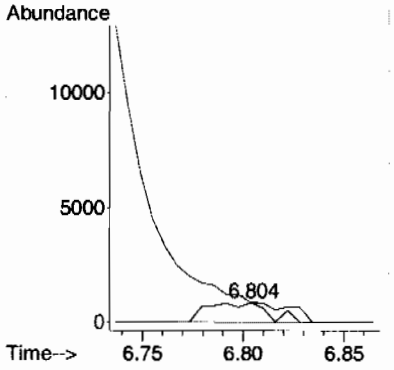

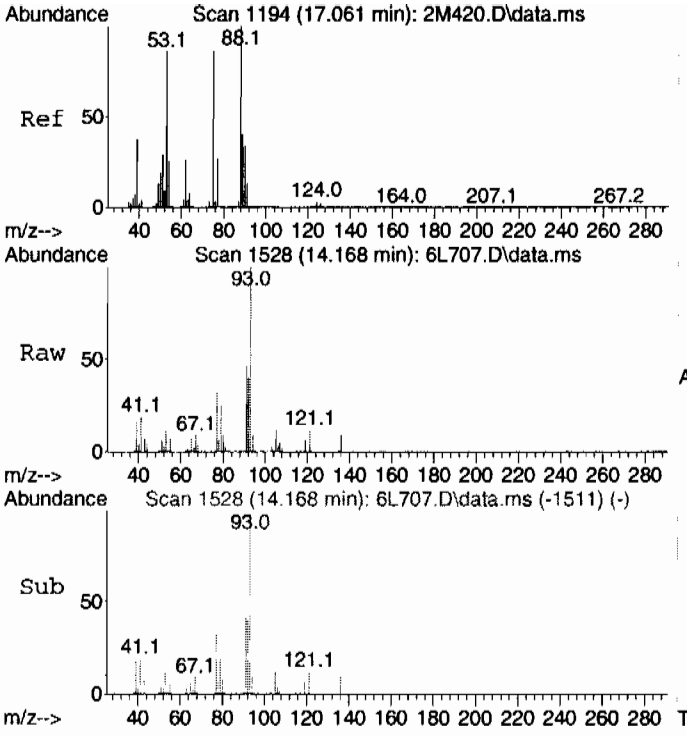

#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 3.24 ug/L
RT: 14.168 min Scan# 1528
Delta R.T. -0.037 min
Lab File: 6L707.D
Acq: 22 Nov 2009 2:15 pm

Tgt Ion: 53 Resp: 8439

Ion	Ratio	Lower	Upper
53	100		
88	0.0	73.1	133.1#
77	306.7	0.4	60.4#

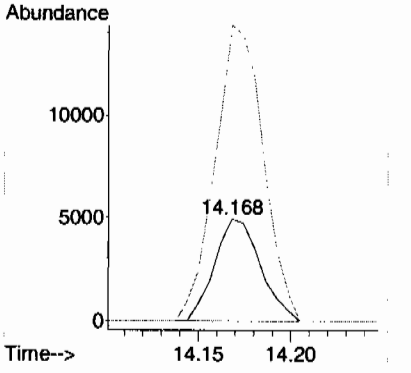

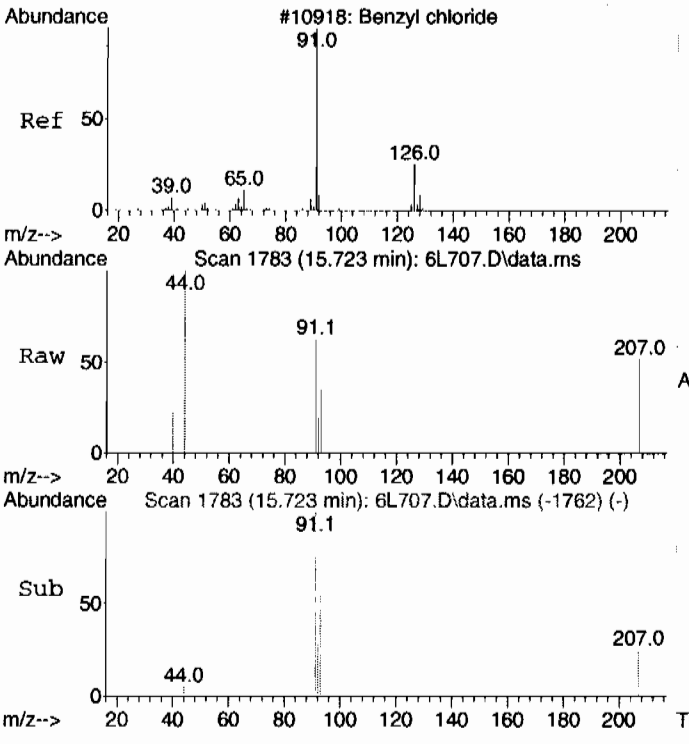

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.26 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.006 min
Lab File: 6L707.D
Acq: 22 Nov 2009 2:15 pm

Tgt Ion: 91 Resp: 3543

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

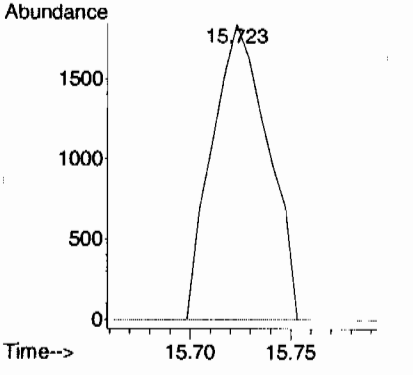

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L707.D
Acq On : 22 Nov 2009 2:15 pm
Operator : RXD1
Sample : |241318001|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****

Peak Number 1 .alpha.-Pinene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.174	5.41 ug/L	354837	B Chlorobenzene-d5	13.156

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	95
2	1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
3	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	91
4	.alpha.-Pinene	136	C10H16	000080-56-8	90
5	1R-.alpha.-Pinene	136	C10H16	007785-70-8	87

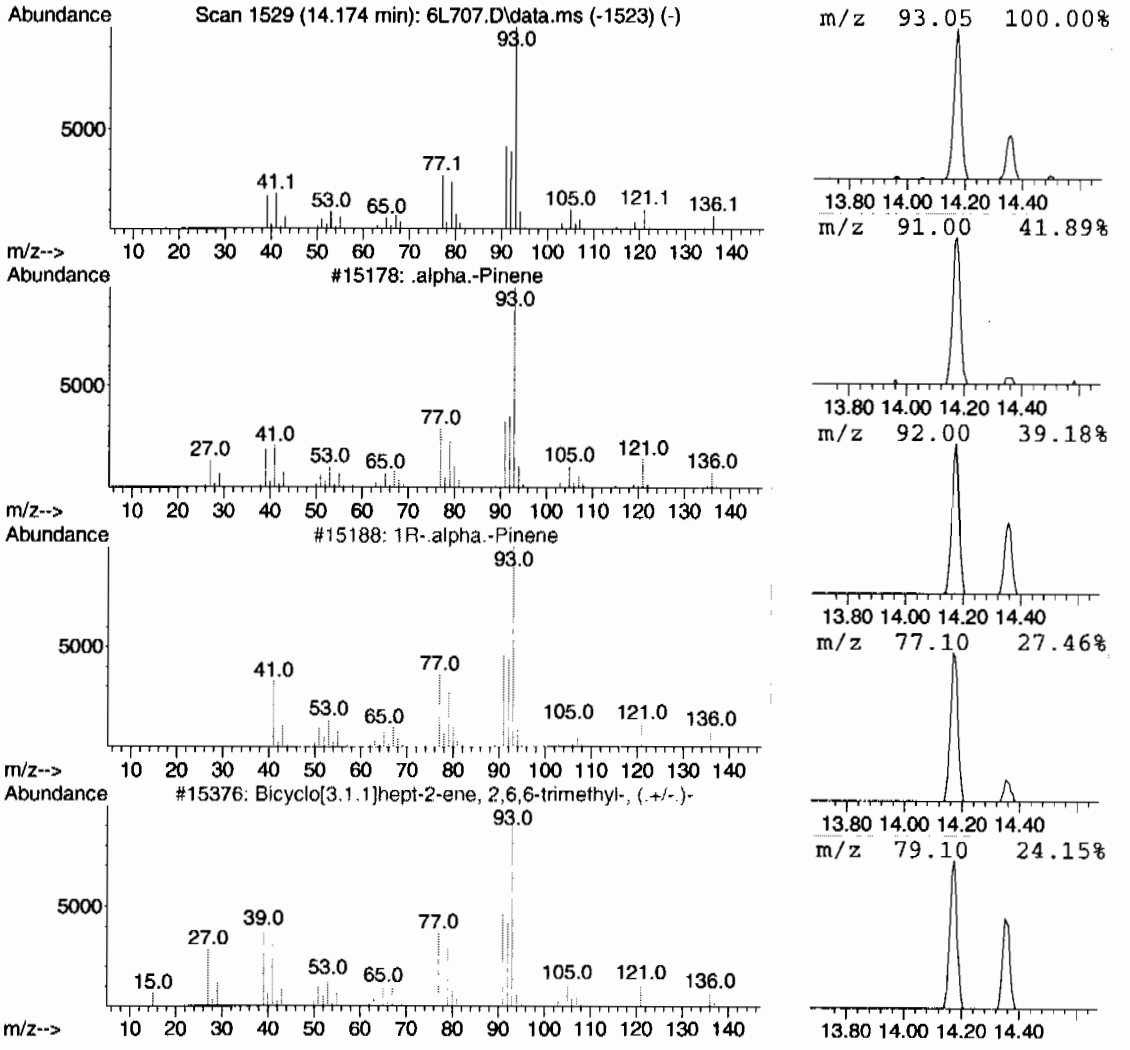

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L707.D
Acq On : 22 Nov 2009 2:15 pm
Operator : RXD1
Sample : |241318001|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
.alpha.-Pinene	14.174	5.4	ug/L	354837	4	13.156	3276690	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 14:42	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:56	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L708.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.70	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 14:42	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:56	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L708.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.70	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000080-56-8	.alpha.-Pinene	14.17	13.9	ug/kg	96	NJ
013466-78-9	3-Carene	15.19	9.1	ug/kg	96	NJ

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L708.D
Acq On : 22 Nov 2009 2:42 pm
Operator : RXD1
InstName : VOA6
Sample : |241318002|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 23 09:15:37 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1569665	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1119869	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	549474	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1568365	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1119869	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	549474	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.633	65	510775	55.44 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 110.88%		
43) Toluene-d8	11.626	98	1740062	57.61 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 115.22%		
61) Bromofluorobenzene	14.357	95	640807	60.83 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 121.66%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.693	50	483	N.D.	
4) Vinyl chloride	4.924	62	158	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	24683	Below Cal	99
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.103	41	403	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.090	76	207	N.D.	
15) Methylene chloride	7.292	84	28208	N.D.	
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	9.736	78	198	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L708.D
Acq On : 22 Nov 2009 2:42 pm
Operator : RXD1
InstName : VOA6
Sample : |241318002|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 23 09:15:37 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.693	91	427	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	13.833	106	256	N.D.	
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	14.577	91	435	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000		0m	N.D.	d
69) tert-Butylbenzene	0.000		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	0.000		0m	N.D.	d
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.455	119	817	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000		0	N.D.	
75) n-Butylbenzene	15.881	91	579	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.289	128	1253	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.103	41	403	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L708.D
Acq On : 22 Nov 2009 2:42 pm
Operator : RXD1
InstName : VOA6
Sample : |241318002|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 23 09:15:37 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.066	42	612	N.D.	
98)	Isobutyl alcohol	0.000		0	N.D.	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	0.000		0	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	0.000		0	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	0.000		0m	N.D.	d
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	0.000		0	N.D.	
111)	Benzyl chloride	0.000		0m	N.D.	d
112)	bis(2-Chloroisopropyl)...	16.162	45	805	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L708.D
Acq On : 22 Nov 2009 2:42 pm
Operator : RXD1
InstName : VOA6
Sample : |241318002|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 23 09:15:37 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

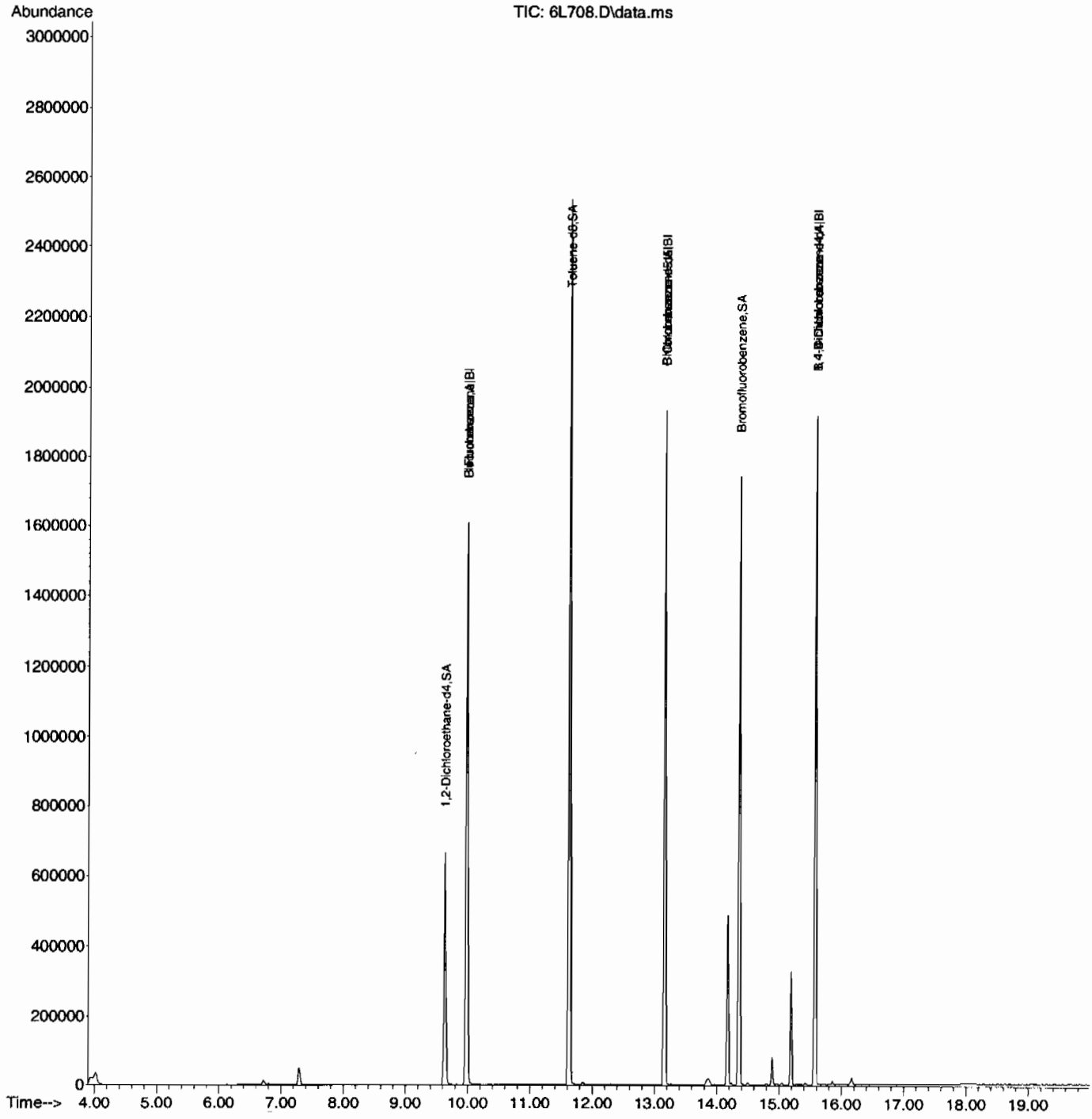

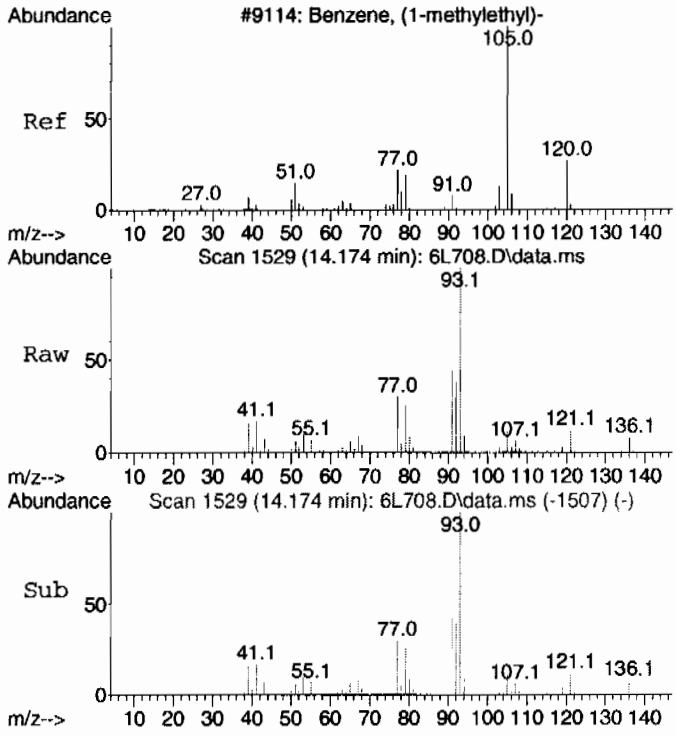

#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.68 ug/L
RT: 14.174 min Scan# 1529
Delta R.T. 0.018 min
Lab File: 6L708.D
Acq: 22 Nov 2009 2:42 pm

Tgt Ion:105 Resp: 23335

Ion	Ratio	Lower	Upper
105	100		
120	2.8	0.0	57.3

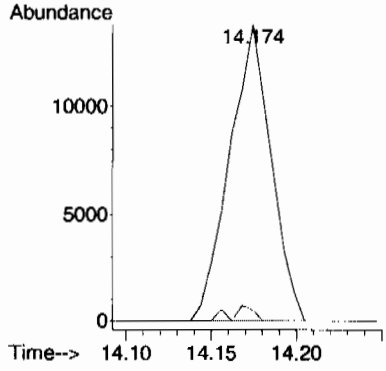

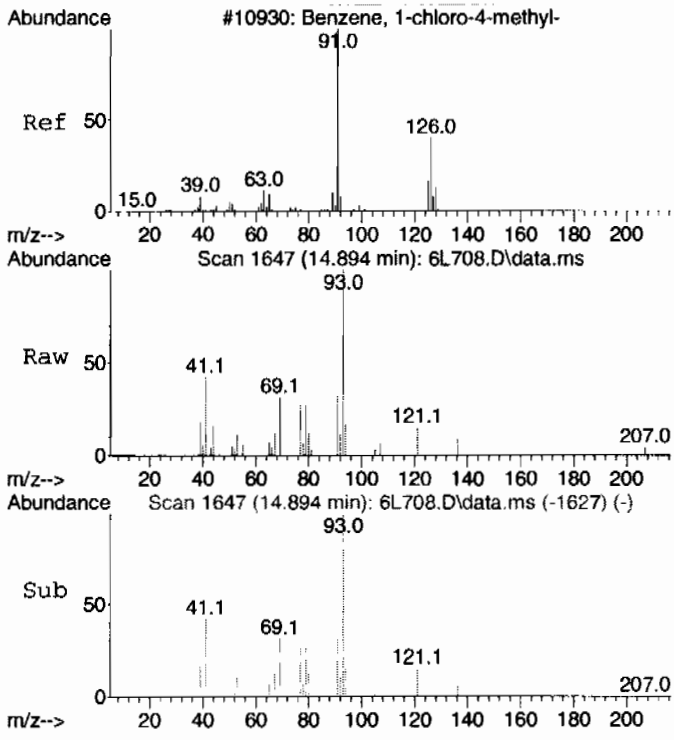

#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.42 ug/L
RT: 14.894 min Scan# 1647
Delta R.T. 0.055 min
Lab File: 6L708.D
Acq: 22 Nov 2009 2:42 pm

Tgt Ion: 91 Resp: 10170

Ion	Ratio	Lower	Upper
91	100		
126	0.0	4.9	64.9#

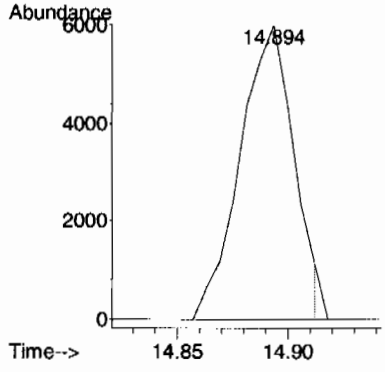

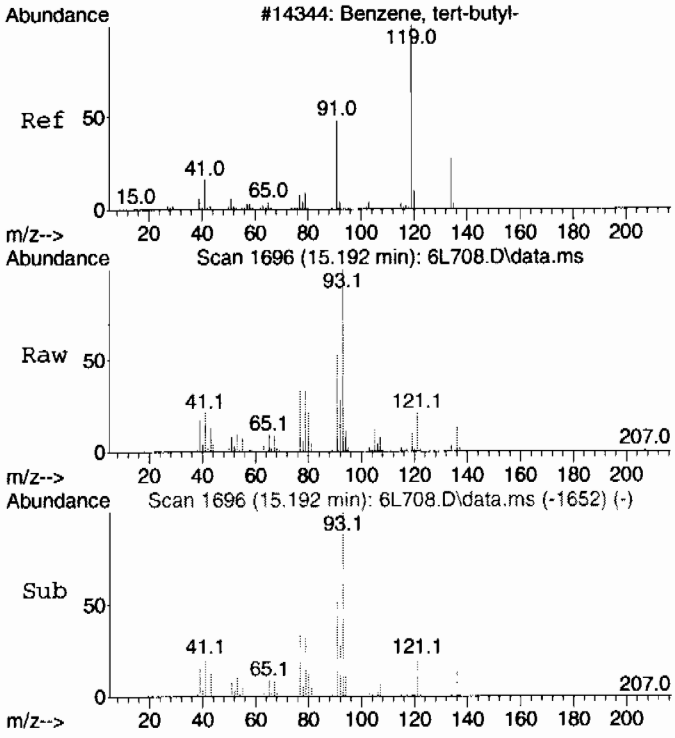

#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 0.31 ug/L
RT: 15.192 min Scan# 1696
Delta R.T. 0.085 min
Lab File: 6L708.D
Acq: 22 Nov 2009 2:42 pm

Tgt Ion:134 Resp: 1994

Ion	Ratio	Lower	Upper
134	100		
119	581.7	428.3	488.3#
91	2844.6	280.6	340.6#

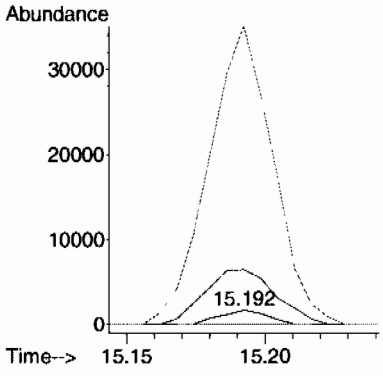

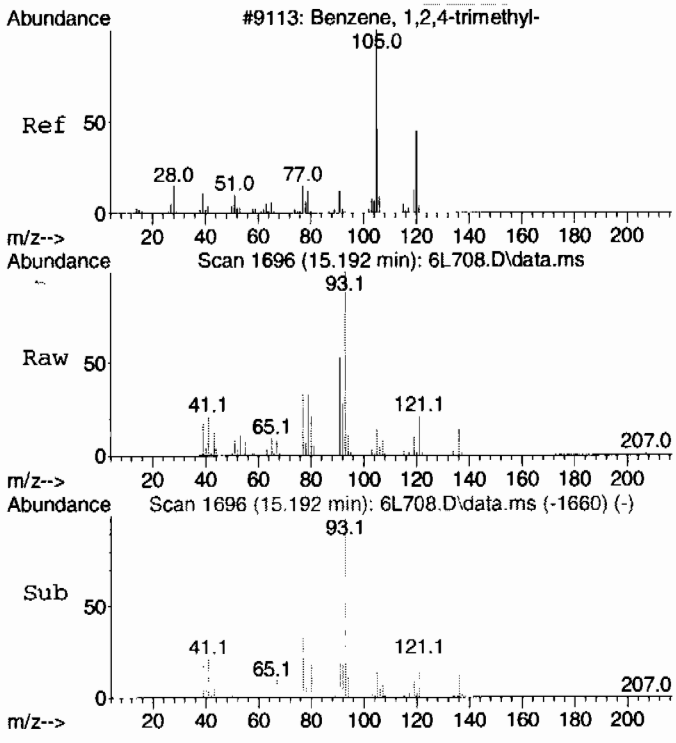

#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.54 ug/L
RT: 15.192 min Scan# 1696
Delta R.T. 0.042 min
Lab File: 6L708.D
Acq: 22 Nov 2009 2:42 pm

Tgt Ion:105 Resp: 16172

Ion	Ratio	Lower	Upper
105	100		
120	8.6	15.6	75.6#

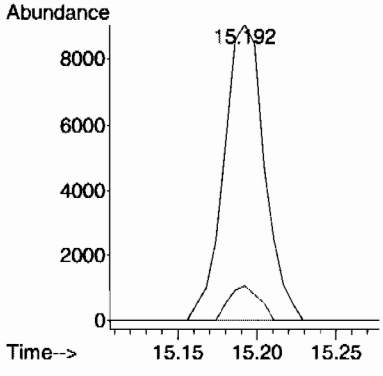

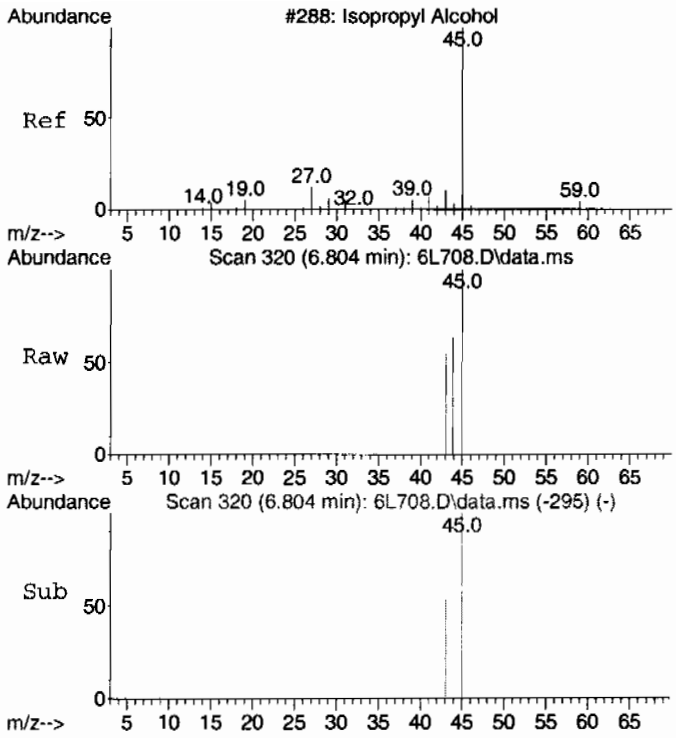

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 7.10 ug/L
RT: 6.804 min Scan# 320
Delta R.T. 0.006 min
Lab File: 6L708.D
Acq: 22 Nov 2009 2:42 pm

Tgt Ion: 45 Resp: 4654

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

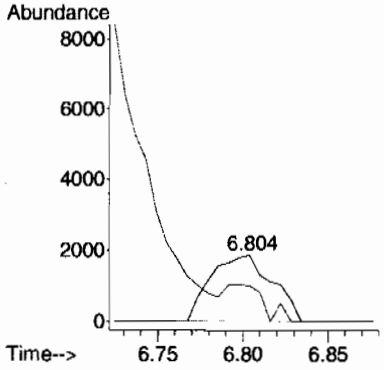

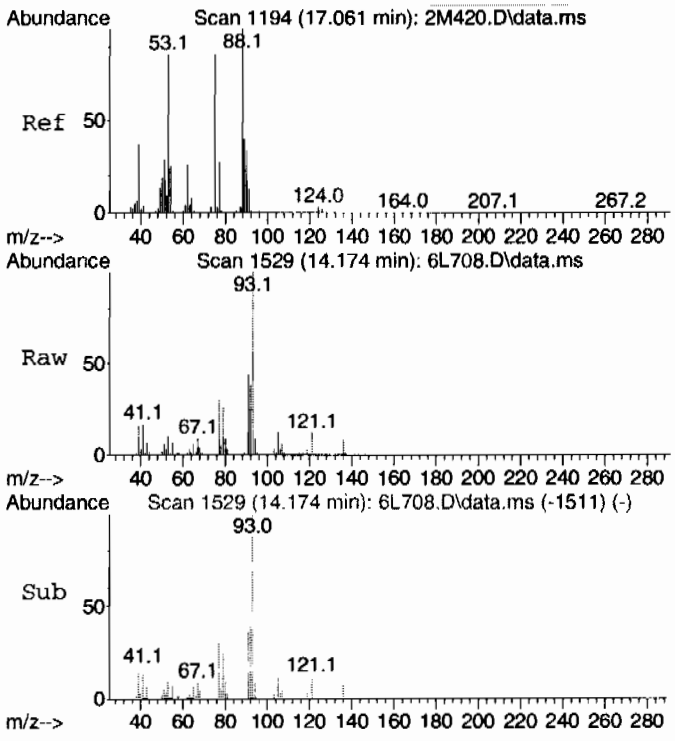

#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 7.80 ug/L
RT: 14.174 min Scan# 1529
Delta R.T. -0.031 min
Lab File: 6L708.D
Acq: 22 Nov 2009 2:42 pm

Tgt Ion: 53 Resp: 19590

Ion	Ratio	Lower	Upper
53	100		
88	0.0	73.1	133.1#
77	325.5	0.4	60.4#

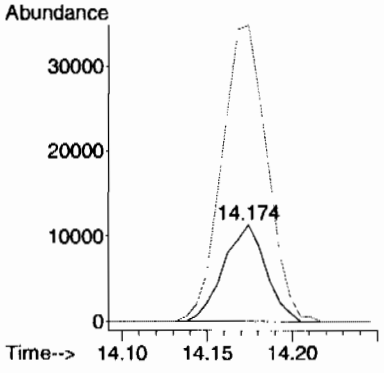

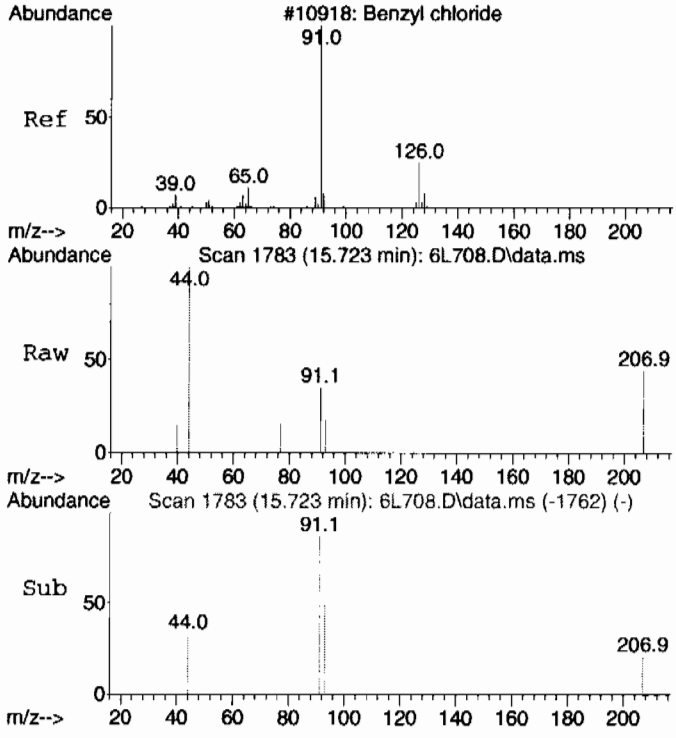

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.16 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.006 min
Lab File: 6L708.D
Acq: 22 Nov 2009 2:42 pm

Tgt Ion: 91 Resp: 2124

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

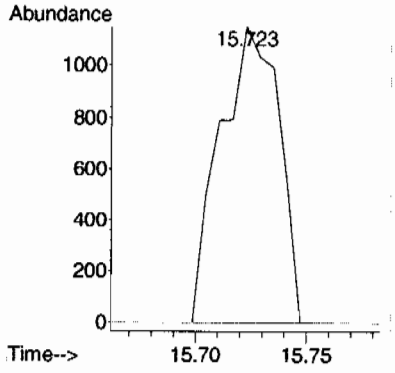

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L708.D
Acq On : 22 Nov 2009 2:42 pm
Operator : RXD1
Sample : |241318002|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****

Peak Number 1 .alpha.-Pinene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.174	13.02 ug/L	881096	B Chlorobenzene-d5	13.156

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	96
2	1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
3	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	95
4	1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
5	.alpha.-Pinene	136	C10H16	000080-56-8	94

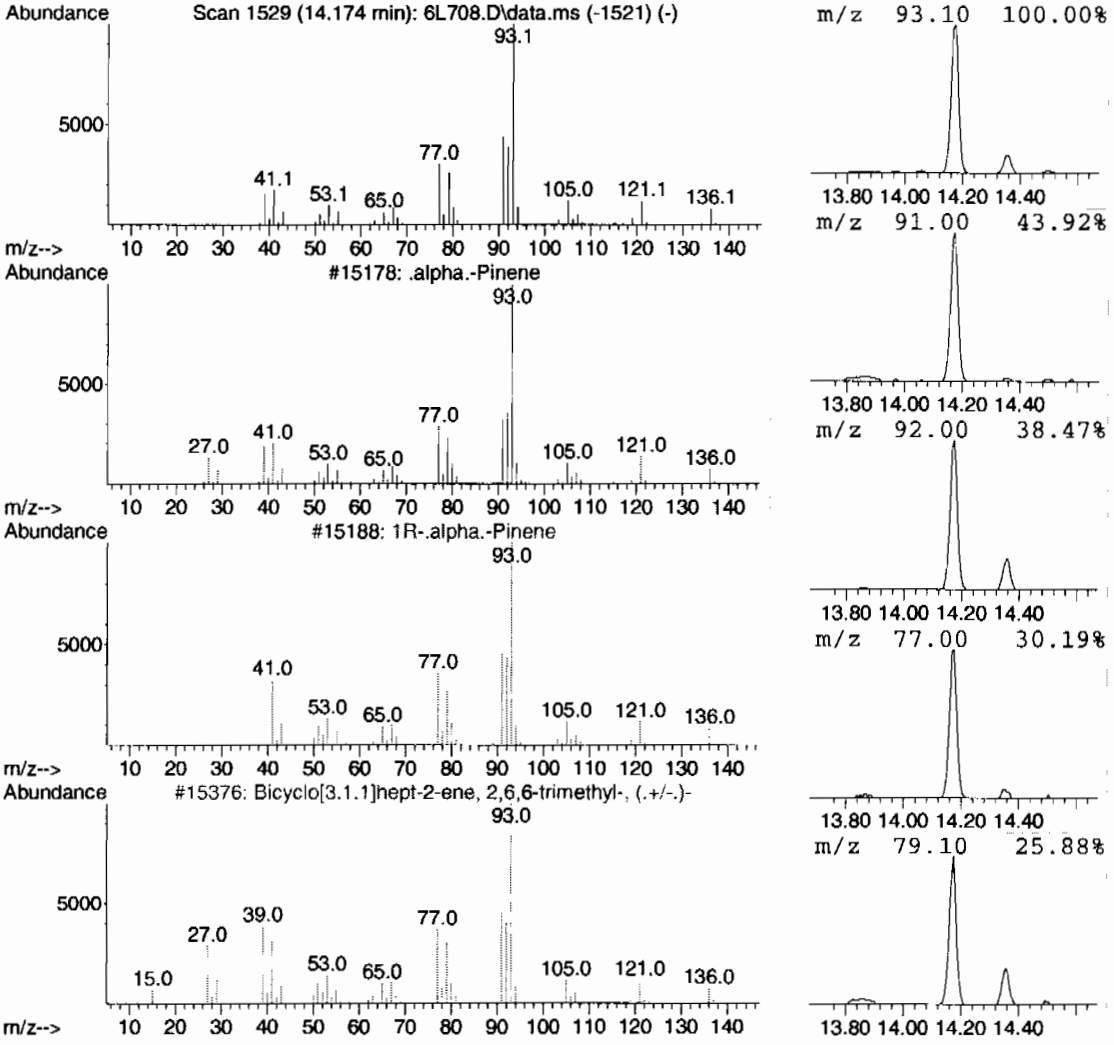

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L708.D
Acq On : 22 Nov 2009 2:42 pm
Operator : RXD1
Sample : |241318002|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****

Peak Number 2 3-Carene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.192	8.54 ug/L	547650	1,4-Dichlorobenzene-d4	15.576

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Carene	136	C10H16	013466-78-9	96
2	3-Carene	136	C10H16	013466-78-9	95
3	3-Carene	136	C10H16	013466-78-9	95
4	Bicyclo[4.1.0]hept-3-ene, 3,7,7-...	136	C10H16	000498-15-7	95
5	1R-.alpha.-Pinene	136	C10H16	007785-70-8	93

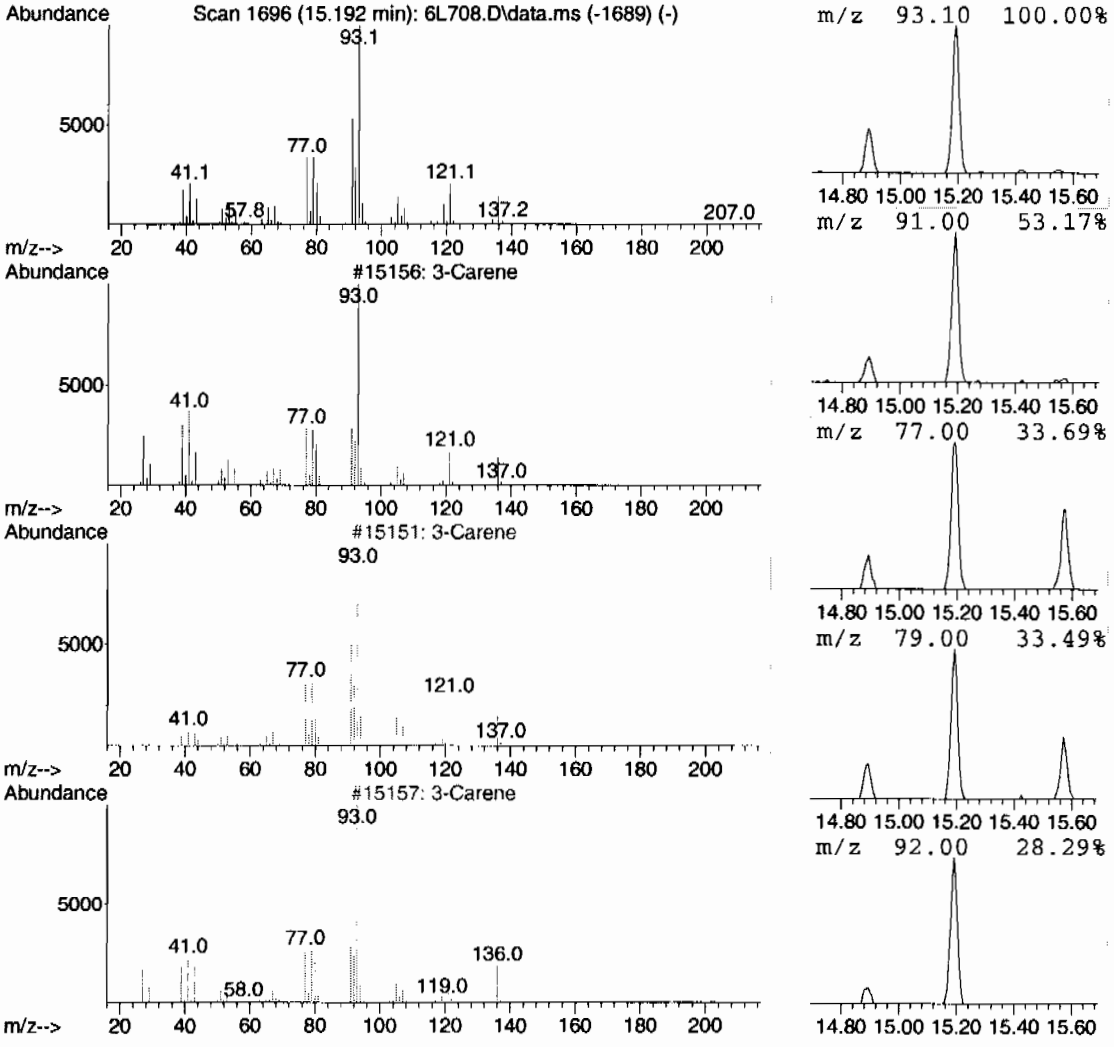

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L708.D
Acq On : 22 Nov 2009 2:42 pm
Operator : RXD1
Sample : |241318002|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
.alpha.-Pinene	14.174	13.0	ug/L	881096	4	13.156	3384730	50.0
3-Carene	15.192	8.5	ug/L	547650	5	15.576	3207680	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318003	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13620	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.1	**Dilution:**	1
Run Date:	11/22/2009 15:10	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L709.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone		9.52	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318003**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13620**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 15:10**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 13:58**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L709.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.71	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L709.D
Acq On : 22 Nov 2009 3:10 pm
Operator : RXD1
InstName : VOA6
Sample : |241318003|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 23 09:17:16 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1571228	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1084421	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	492580	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1569972	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1084421	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	492580	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	465733	50.50	ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 101.00%			
43) Toluene-d8	11.626	98	1530131	52.32	ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 104.64%			
61) Bromofluorobenzene	14.357	95	528487	55.96	ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 111.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.713	50	152	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.718	43	91801	8.93	ug/L	100
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.084	41	586	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.084	76	765	N.D.		
15) Methylene chloride	7.291	84	25869	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	8.700	43	1743	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	0.000		0	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L709.D
Acq On : 22 Nov 2009 3:10 pm
Operator : RXD1
InstName : VOA6
Sample : |241318003|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 23 09:17:16 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.699	91	3663	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.174	105	5096	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	14.503	91	207	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	14.894	91	2017	N.D.	
69) tert-Butylbenzene	15.192	134	668	N.D.	
70) 1,2,4-Trimethylbenzene	15.144	105	216	N.D.	
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.448	119	414	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000		0	N.D.	
75) n-Butylbenzene	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.289	128	1173	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.084	41	586	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.700	43	1743	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L709.D
Acq On : 22 Nov 2009 3:10 pm
Operator : RXD1
InstName : VOA6
Sample : |241318003|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 23 09:17:16 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.066	42	481	N.D.	
98) Isobutyl alcohol	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0m	N.D.	d
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.168	45	418	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L709.D
Acq On : 22 Nov 2009 3:10 pm
Operator : RXD1
InstName : VOA6
Sample : |241318003|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 23 09:17:16 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

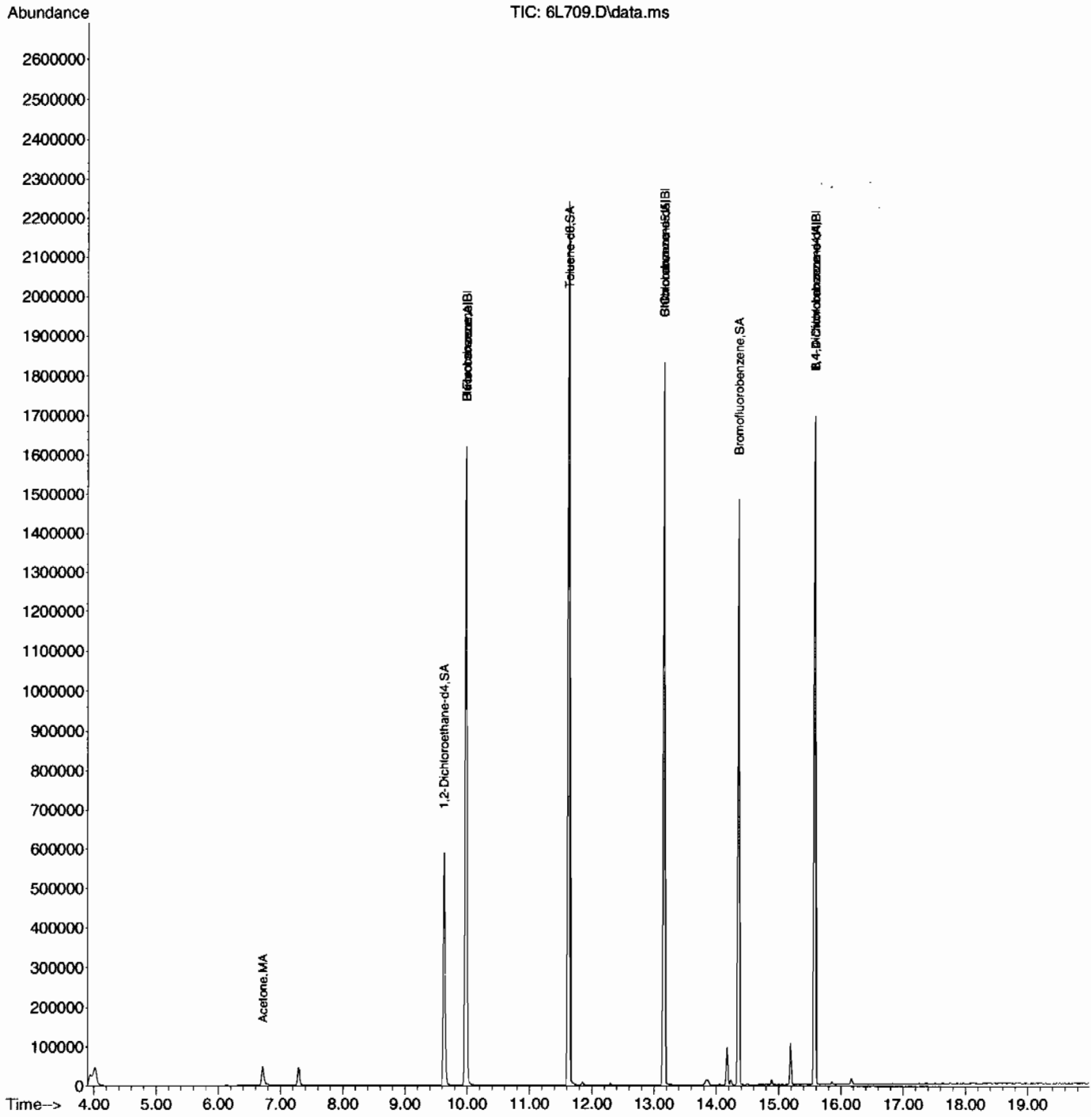

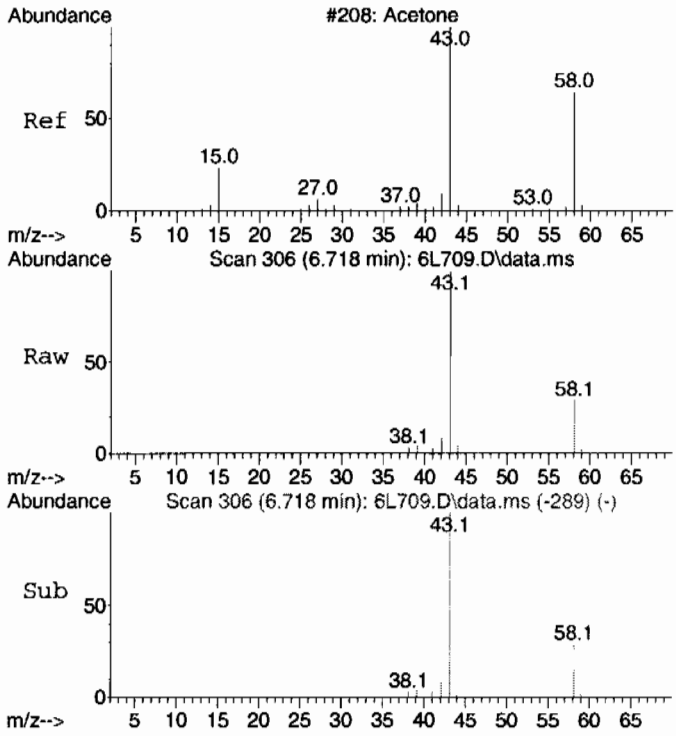

#9
Acetone
Concen: 8.93 ug/L
RT: 6.718 min Scan# 306
Delta R.T. 0.006 min
Lab File: 6L709.D
Acq: 22 Nov 2009 3:10 pm

Tgt Ion: 43 Resp: 91801

Ion	Ratio	Lower	Upper
43	100		
58	29.6	0.0	59.5

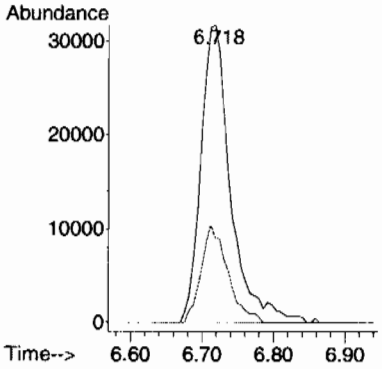

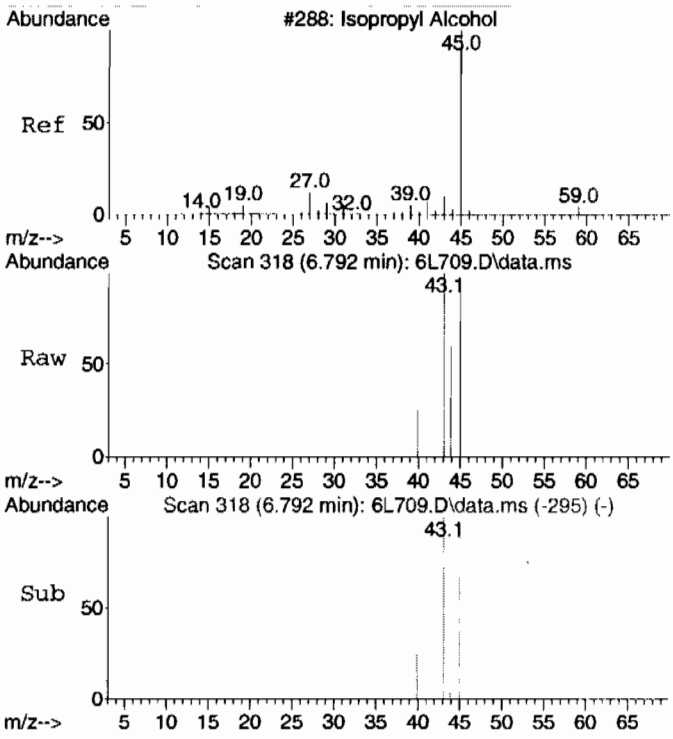

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 8.10 ug/L
RT: 6.792 min Scan# 318
Delta R.T. -0.006 min
Lab File: 6L709.D
Acq: 22 Nov 2009 3:10 pm

Tgt Ion: 45 Resp: 5314

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

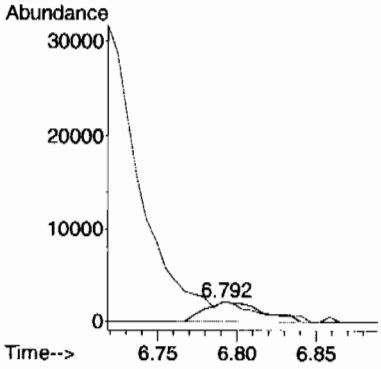

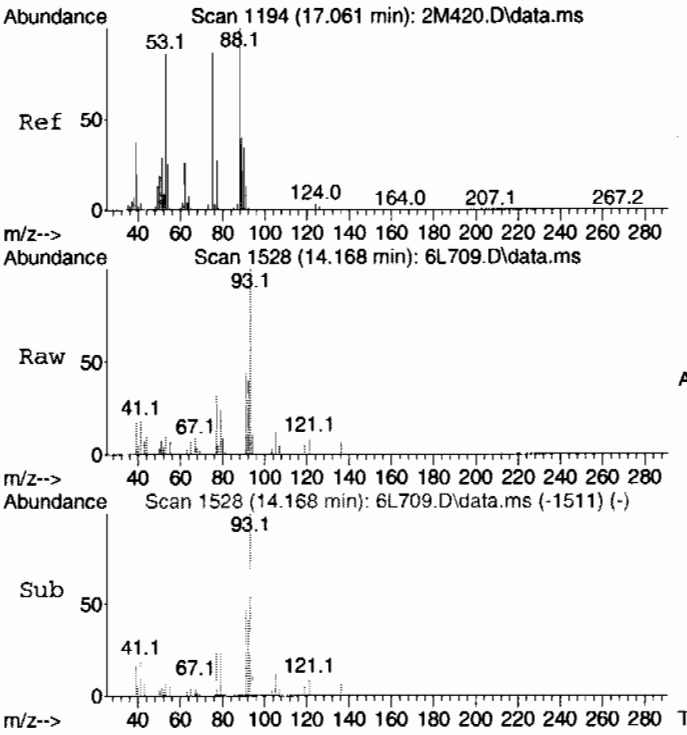

#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 1.74 ug/L
RT: 14.168 min Scan# 1528
Delta R.T. -0.037 min
Lab File: 6L709.D
Acq: 22 Nov 2009 3:10 pm

Tgt Ion: 53 Resp: 3925

Ion	Ratio	Lower	Upper
53	100		
88	0.0	73.1	133.1#
77	343.5	0.4	60.4#

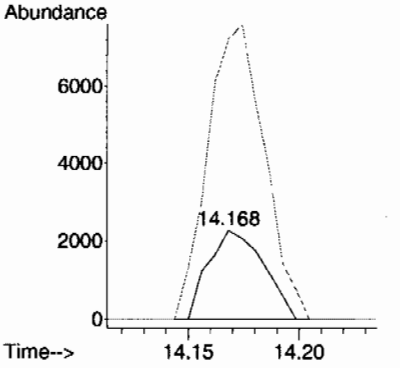

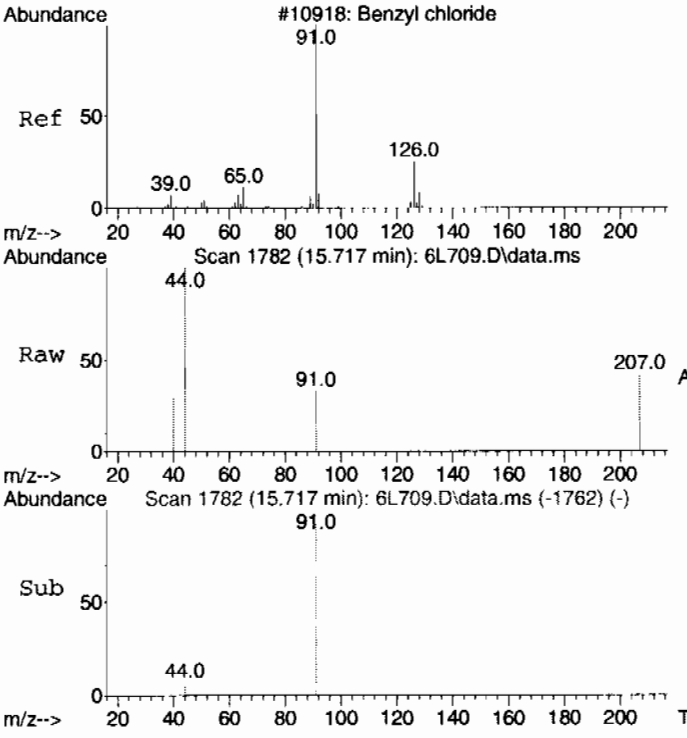

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.09 ug/L
RT: 15.717 min Scan# 1782
Delta R.T. -0.000 min
Lab File: 6L709.D
Acq: 22 Nov 2009 3:10 pm

Tgt Ion: 91 Resp: 1054

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

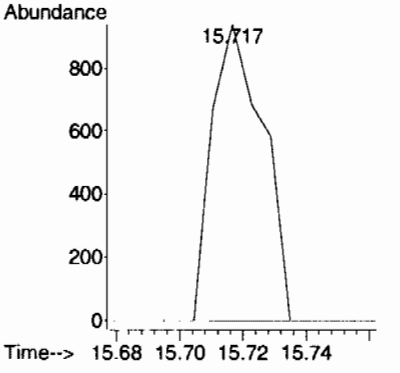

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L709.D
Acq On : 22 Nov 2009 3:10 pm
Operator : RXD1
Sample : |241318003|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L709.D
Acq On : 22 Nov 2009 3:10 pm
Operator : RXD1
Sample : |241318003|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 15:38	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L710.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone		14.4	ug/kg	1.94	5.85
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.85	ug/kg	1.87	5.85
75-09-2	Methylene chloride	U	5.85	ug/kg	2.34	5.85
75-15-0	Carbon disulfide	U	5.85	ug/kg	1.46	5.85
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.85	ug/kg	1.76	5.85
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.85	ug/kg	1.46	5.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.85	ug/kg	1.76	5.85
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318004**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13619**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 15:38**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L710.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.85	ug/kg	1.87	5.85
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L710.D
Acq On : 22 Nov 2009 3:38 pm
Operator : RXD1
InstName : VOA6
Sample : |241318004|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 23 09:19:19 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1783610	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1290392	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.577	152	668402	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1781951	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1290392	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.577	152	668402	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.633	65	520406	49.71 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 99.42%		
43) Toluene-d8	11.626	98	1763010	50.66 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 101.32%		
61) Bromofluorobenzene	14.357	95	670628	52.33 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 104.66%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.703	50	152	N.D.	
4) Vinyl chloride	4.924	62	163	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.712	43	123904	12.34 ug/L	99
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.084	41	1085	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.078	76	223	N.D.	
15) Methylene chloride	7.292	84	27042	Below Cal	95
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L710.D
Acq On : 22 Nov 2009 3:38 pm
Operator : RXD1
InstName : VOA6
Sample : |241318004|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 23 09:19:19 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	0.000		0	N.D.	
39)	2-Chloroethylvinyl ether	0.000		0	N.D.	
40)	cis-1,3-Dichloropropylene	0.000		0	N.D.	
42)	4-Methyl-2-pentanone	0.000		0	N.D.	
44)	Toluene	0.000		0	N.D.	
45)	trans-1,3-Dichloroprop...	0.000		0	N.D.	
46)	1,1,2-Trichloroethane	0.000		0	N.D.	
47)	2-Hexanone	0.000		0	N.D.	
48)	1,3-Dichloropropane	0.000		0	N.D.	
49)	Tetrachloroethylene	0.000		0	N.D.	
50)	Dibromochloromethane	0.000		0	N.D.	
51)	1,2-Dibromoethane	0.000		0	N.D.	
52)	Chlorobenzene	0.000		0	N.D.	
53)	1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54)	Ethylbenzene	0.000		0	N.D.	
55)	m,p-Xylenes	0.000		0	N.D.	
56)	o-Xylene	0.000		0	N.D.	
57)	Styrene	0.000		0	N.D.	
59)	Bromoform	0.000		0	N.D.	
60)	Isopropylbenzene	14.174	105	1936	N.D.	
62)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63)	1,2,3-Trichloropropane	0.000		0	N.D.	
64)	Bromobenzene	0.000		0	N.D.	
65)	n-Propylbenzene	0.000		0	N.D.	
66)	1,3,5-Trimethylbenzene	0.000		0	N.D.	
67)	2-Chlorotoluene	0.000		0	N.D.	
68)	4-Chlorotoluene	0.000		0	N.D.	
69)	tert-Butylbenzene	0.000		0	N.D.	
70)	1,2,4-Trimethylbenzene	15.192	105	1961	N.D.	
71)	sec-Butylbenzene	15.333	105	183	N.D.	
72)	4-Isopropyltoluene	0.000		0	N.D.	
73)	1,3-Dichlorobenzene	0.000		0	N.D.	
74)	1,4-Dichlorobenzene	0.000		0	N.D.	
75)	n-Butylbenzene	0.000		0	N.D.	
76)	1,2-Dichlorobenzene	0.000		0	N.D.	
77)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	0.000		0	N.D.	
79)	Hexachlorobutadiene	0.000		0	N.D.	
80)	Naphthalene	18.277	128	201	N.D.	
81)	1,2,3-Trichlorobenzene	0.000		0	N.D.	
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	0.000		0	N.D.	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	0.000		0m	N.D.	d
88)	Allyl chloride	7.084	41	1085	N.D.	
89)	tert-Butyl Alcohol	0.000		0m	N.D.	d
90)	Acrylonitrile	0.000		0	N.D.	
91)	Isopropyl ether	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L710.D
Acq On : 22 Nov 2009 3:38 pm
Operator : RXD1
InstName : VOA6
Sample : |241318004|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 23 09:19:19 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.059	42	190	N.D.	
98)	Isobutyl alcohol	0.000		0	N.D.	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	0.000		0	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	0.000		0	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	14.174	53	758	N.D.	
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	0.000		0	N.D.	
111)	Benzyl chloride	0.000		0m	N.D.	d
112)	bis(2-Chloroisopropyl)...	16.174	45	213	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L710.D
Acq On : 22 Nov 2009 3:38 pm
Operator : RXD1
InstName : VOA6
Sample : |241318004|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 23 09:19:19 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

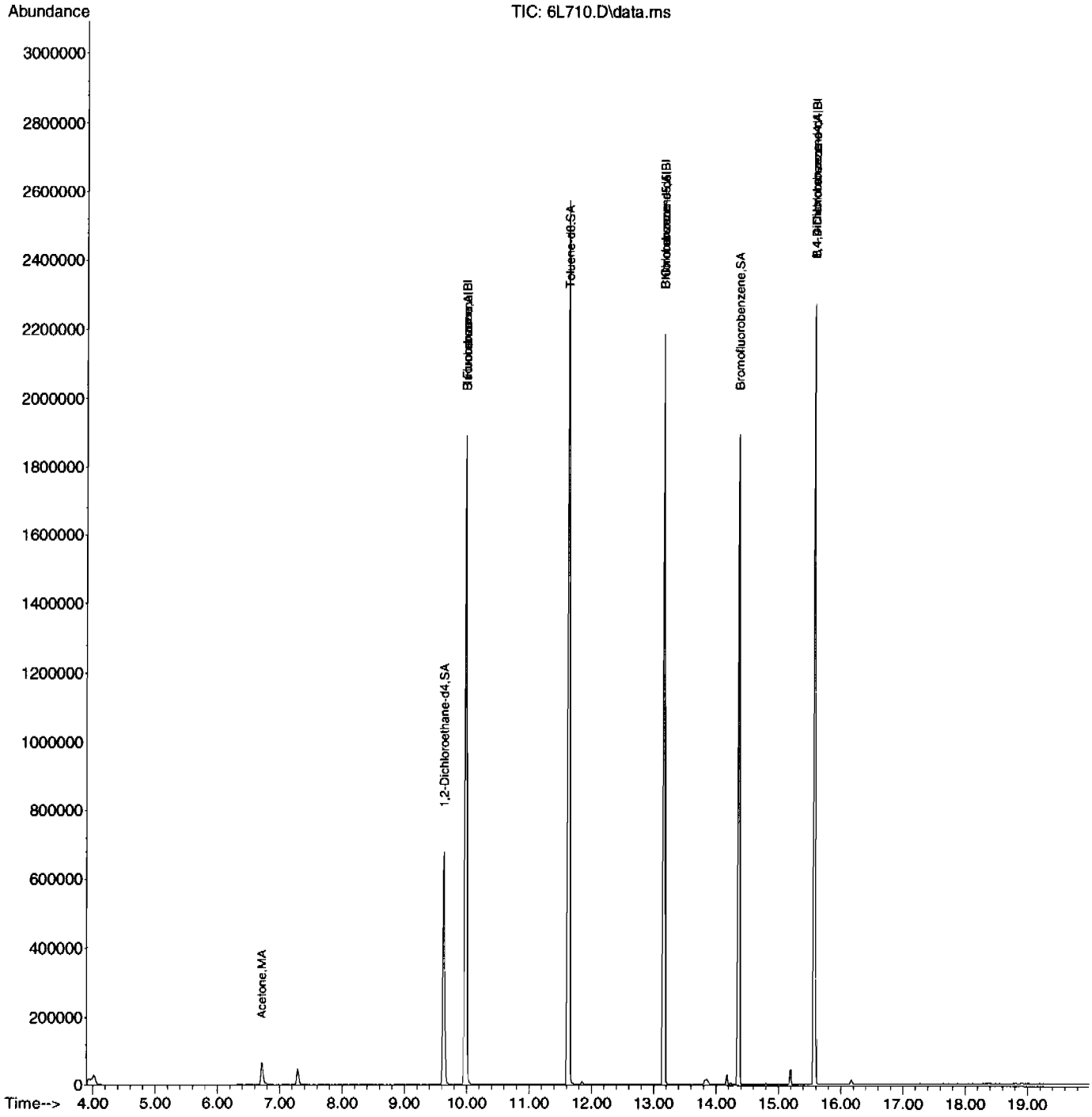

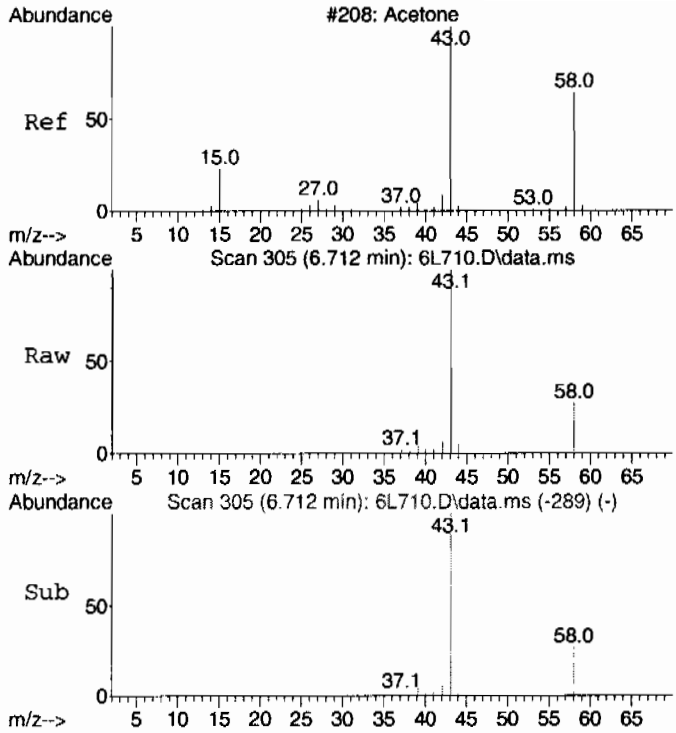

#9
Acetone
Concen: 12.34 ug/L
RT: 6.712 min Scan# 305
Delta R.T. 0.000 min
Lab File: 6L710.D
Acq: 22 Nov 2009 3:38 pm

Tgt Ion: 43 Resp: 123904

Ion	Ratio	Lower	Upper
43	100		
58	29.2	0.0	59.5

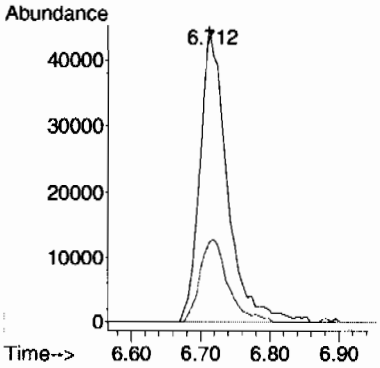

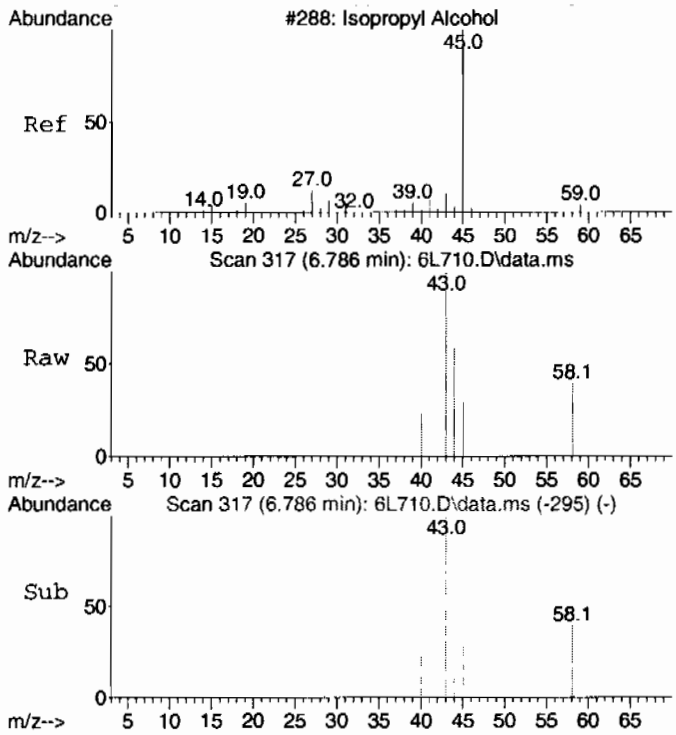

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 0.60 ug/L
RT: 6.786 min Scan# 317
Delta R.T. -0.012 min
Lab File: 6L710.D
Acq: 22 Nov 2009 3:38 pm

Tgt Ion: 45 Resp: 448

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

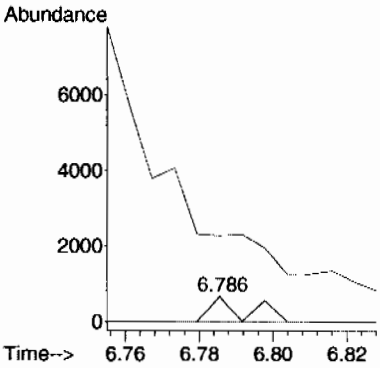

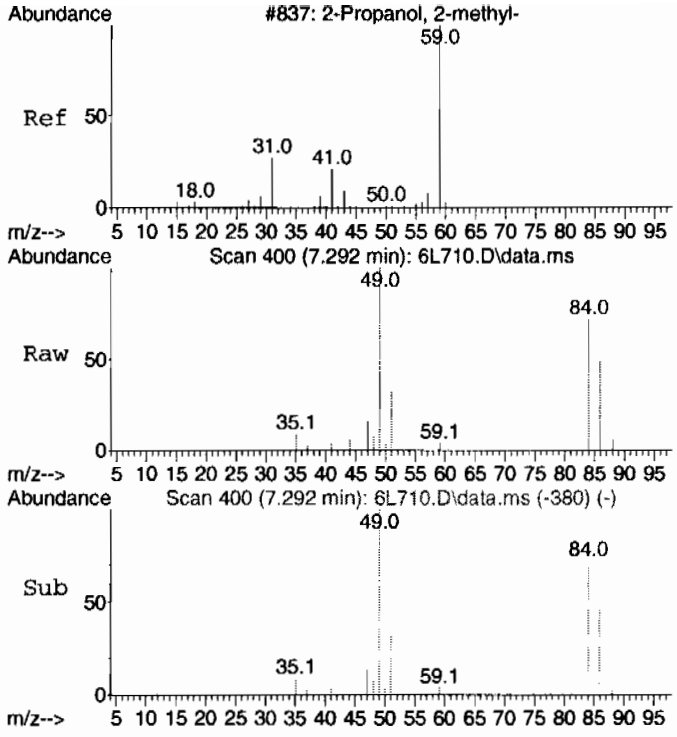

#89 BEFORE analyst DELETION
tert-Butyl Alcohol
Concen: 0.22 ug/L
RT: 7.292 min Scan# 400
Delta R.T. 0.001 min
Lab File: 6L710.D
Acq: 22 Nov 2009 3:38 pm

Tgt Ion: 59 Resp: 242

Ion	Ratio	Lower	Upper
59	100		
41	372.7	0.0	53.9#

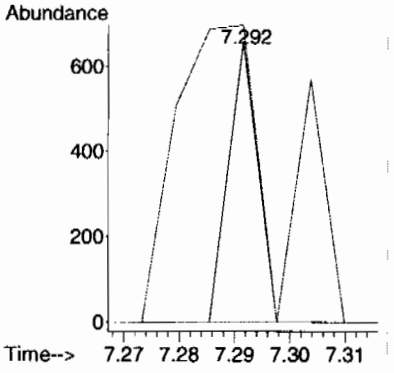

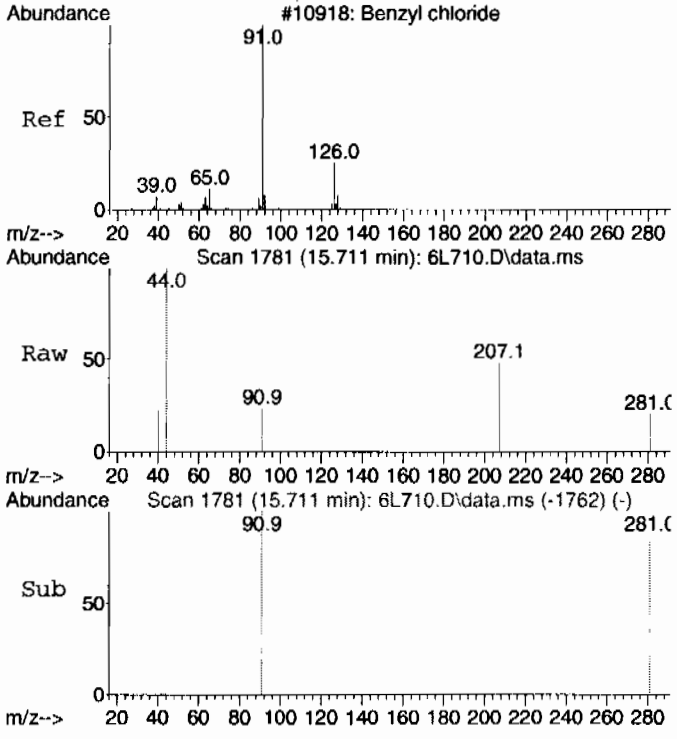

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.01 ug/L
RT: 15.711 min Scan# 1781
Delta R.T. -0.006 min
Lab File: 6L710.D
Acq: 22 Nov 2009 3:38 pm

Tgt Ion: 91 Resp: 229

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

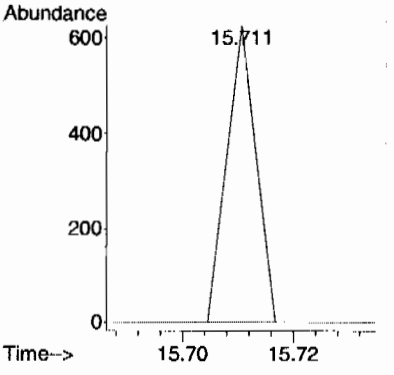

Library Search Compound Report
GEL Laboratories, LLC

```
Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L710.D
Acq On    : 22 Nov 2009   3:38 pm
Operator  : RXD1
Sample    : |241318004|925461|1|VOAF|1|VOA8260BS|
Misc      : LANL 5g N/A SOIL
ALS Vial  : 10   Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title  : Volatile Organics 8260B                    SubList :

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: default.P
```

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

```
Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L710.D
Acq On    : 22 Nov 2009   3:38 pm
Operator  : RXD1
Sample    : |241318004|925461|1|VOAF|1|VOA8260BS|
Misc      : LANL 5g N/A SOIL
ALS Vial  : 10   Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title  : Volatile Organics 8260B                    SubList :

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: default.P

                                                  |--Internal Standard---|
TIC Top Hit name      RT  EstConc Units Response  |#    RT     Resp  Conc|
-----------------------------------------------------------------------------
```

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13623	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 16:34	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:04	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L712.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	U	5.19	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13623	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 16:34	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:04	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L712.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L712.D
Acq On : 22 Nov 2009 4:34 pm
Operator : RXD1
InstName : VOA6
Sample : |241318006|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 23 09:20:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1603598	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1152683	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	581603	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1603359	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1152683	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	581603	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	494905	52.58 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 105.16%		
43) Toluene-d8	11.626	98	1711135	55.04 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 110.08%		
61) Bromofluorobenzene	14.357	95	637257	57.15 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 114.30%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	0.000		0	N.D.	
4) Vinyl chloride	4.924	62	171	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	51524	N.D.	
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.102	41	186	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.090	76	834	N.D.	
15) Methylene chloride	7.291	84	24487	Below Cal	98
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	10.090	56	2048	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L712.D
Acq On : 22 Nov 2009 4:34 pm
Operator : RXD1
InstName : VOA6
Sample : |241318006|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 23 09:20:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.699	91	1007	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.168	105	3296	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000		0	N.D.	
69) tert-Butylbenzene	15.192	134	189	N.D.	
70) 1,2,4-Trimethylbenzene	15.198	105	2139	N.D.	
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.454	119	250	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000		0	N.D.	
75) n-Butylbenzene	15.893	91	185	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.289	128	626	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.102	41	186	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L712.D
Acq On : 22 Nov 2009 4:34 pm
Operator : RXD1
InstName : VOA6
Sample : |241318006|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 23 09:20:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.065	42	192	N.D.	
98) Isobutyl alcohol	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.168	53	2287	N.D.	
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.155	45	394	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L712.D
Acq On : 22 Nov 2009 4:34 pm
Operator : RXD1
InstName : VOA6
Sample : |241318006|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 23 09:20:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

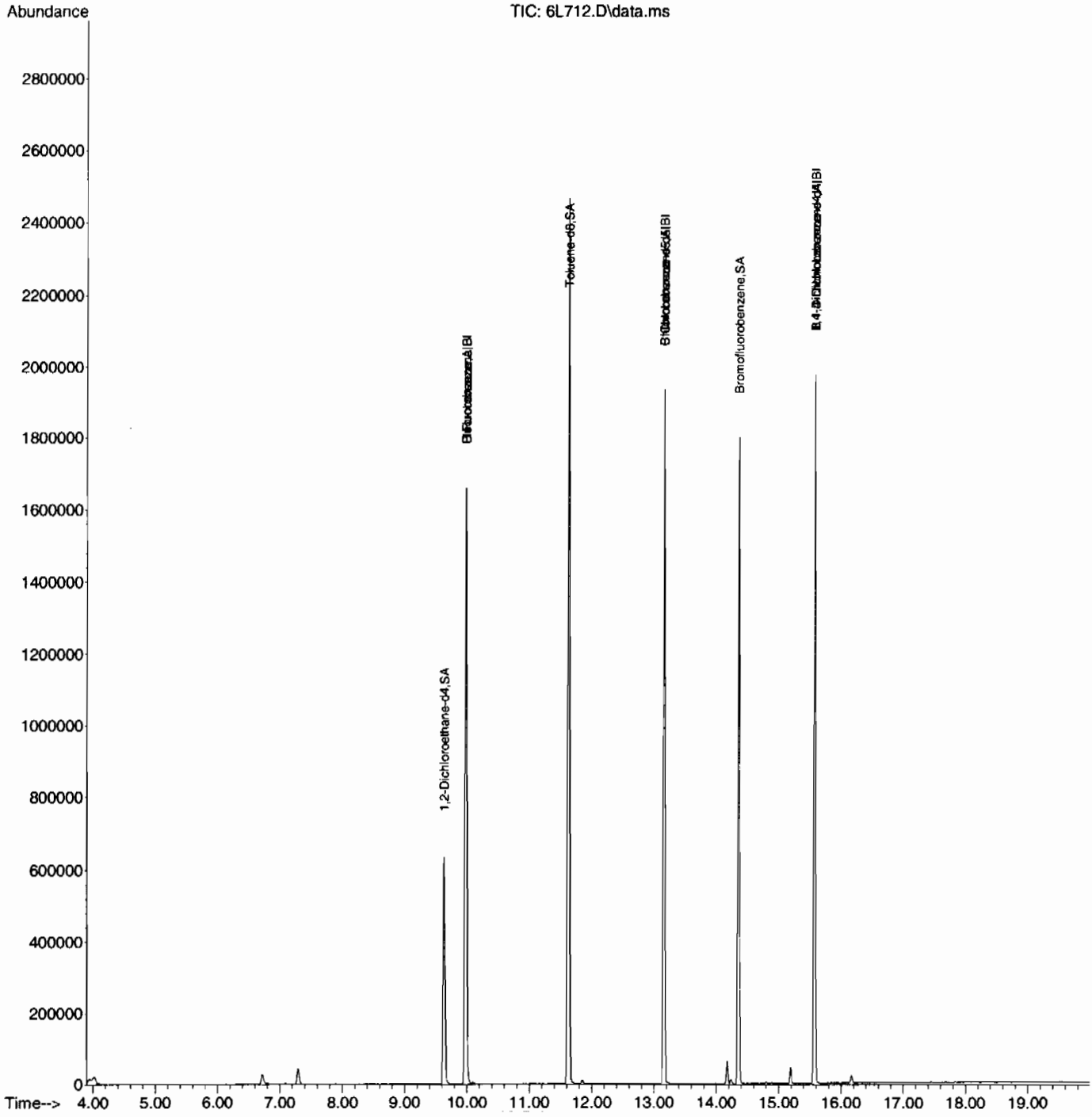

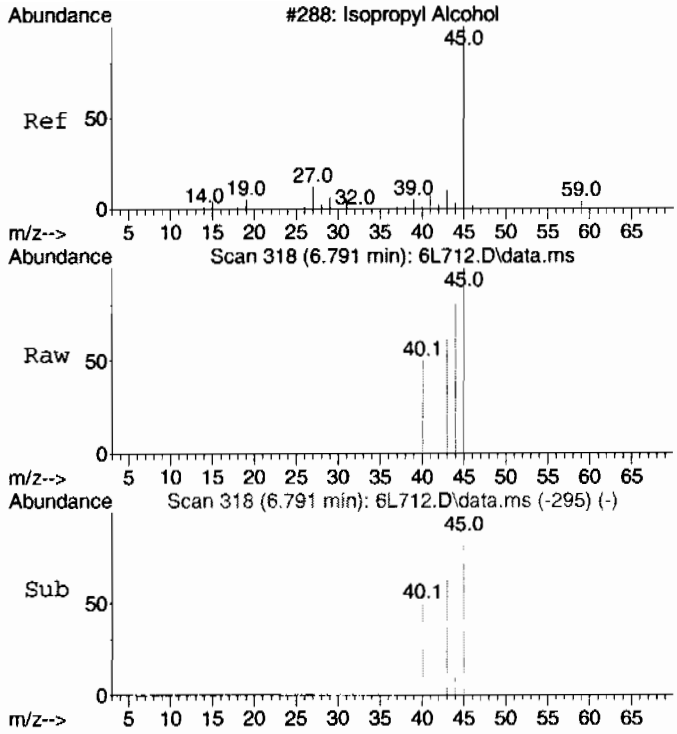

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 4.48 ug/L
RT: 6.791 min Scan# 318
Delta R.T. -0.007 min
Lab File: 6L712.D
Acq: 22 Nov 2009 4:34 pm

Tgt Ion: 45 Resp: 3002

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

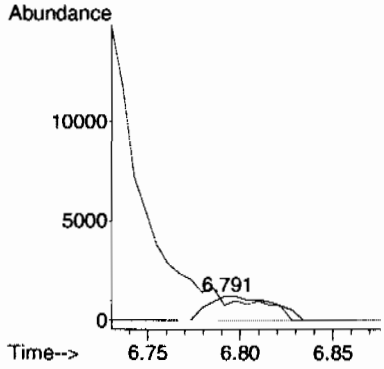

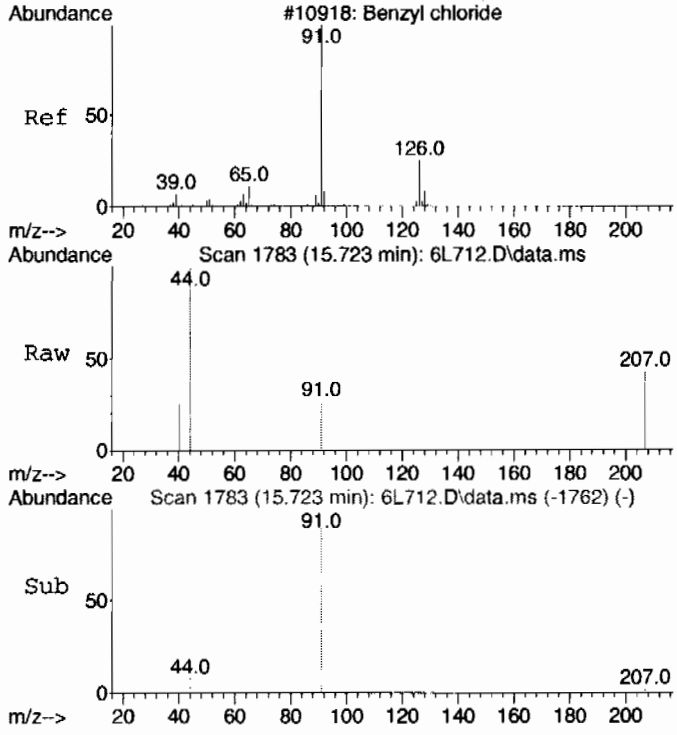

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.04 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.006 min
Lab File: 6L712.D
Acq: 22 Nov 2009 4:34 pm

Tgt Ion: 91 Resp: 495

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

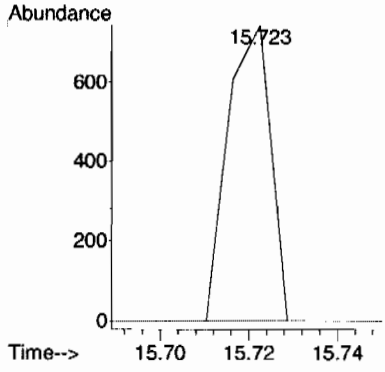

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L712.D
Acq On : 22 Nov 2009 4:34 pm
Operator : RXD1
Sample : |241318006|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L712.D
Acq On : 22 Nov 2009 4:34 pm
Operator : RXD1
Sample : |241318006|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 17:01	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L713.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.18	ug/kg	0.402	1.18
74-87-3	Chloromethane	U	1.18	ug/kg	0.355	1.18
75-01-4	Vinyl chloride	U	1.18	ug/kg	0.355	1.18
74-83-9	Bromomethane	U	1.18	ug/kg	0.355	1.18
75-00-3	Chloroethane	U	1.18	ug/kg	0.355	1.18
75-69-4	Trichlorofluoromethane	U	1.18	ug/kg	0.355	1.18
67-64-1	Acetone	U	5.92	ug/kg	1.96	5.92
75-35-4	1,1-Dichloroethylene	U	1.18	ug/kg	0.355	1.18
74-88-4	Iodomethane	U	5.92	ug/kg	1.89	5.92
75-09-2	Methylene chloride	U	5.92	ug/kg	2.37	5.92
75-15-0	Carbon disulfide	U	5.92	ug/kg	1.48	5.92
156-60-5	trans-1,2-Dichloroethylene	U	1.18	ug/kg	0.355	1.18
75-34-3	1,1-Dichloroethane	U	1.18	ug/kg	0.355	1.18
78-93-3	2-Butanone	U	5.92	ug/kg	1.78	5.92
156-59-2	cis-1,2-Dichloroethylene	U	1.18	ug/kg	0.355	1.18
594-20-7	2,2-Dichloropropane	U	1.18	ug/kg	0.355	1.18
67-66-3	Chloroform	U	1.18	ug/kg	0.355	1.18
74-97-5	Bromochloromethane	U	1.18	ug/kg	0.391	1.18
71-55-6	1,1,1-Trichloroethane	U	1.18	ug/kg	0.355	1.18
563-58-6	1,1-Dichloropropene	U	1.18	ug/kg	0.355	1.18
56-23-5	Carbon tetrachloride	U	1.18	ug/kg	0.355	1.18
107-06-2	1,2-Dichloroethane	U	1.18	ug/kg	0.355	1.18
71-43-2	Benzene	U	1.18	ug/kg	0.355	1.18
79-01-6	Trichloroethylene	U	1.18	ug/kg	0.391	1.18
78-87-5	1,2-Dichloropropane	U	1.18	ug/kg	0.355	1.18
75-27-4	Bromodichloromethane	U	1.18	ug/kg	0.355	1.18
74-95-3	Dibromomethane	U	1.18	ug/kg	0.355	1.18
108-10-1	4-Methyl-2-pentanone	U	5.92	ug/kg	1.48	5.92
10061-01-5	cis-1,3-Dichloropropylene	U	1.18	ug/kg	0.355	1.18
108-88-3	Toluene	U	1.18	ug/kg	0.355	1.18
10061-02-6	trans-1,3-Dichloropropylene	U	1.18	ug/kg	0.355	1.18
79-00-5	1,1,2-Trichloroethane	U	1.18	ug/kg	0.355	1.18
591-78-6	2-Hexanone	U	5.92	ug/kg	1.78	5.92
142-28-9	1,3-Dichloropropane	U	1.18	ug/kg	0.355	1.18
127-18-4	Tetrachloroethylene	U	1.18	ug/kg	0.355	1.18
124-48-1	Dibromochloromethane	U	1.18	ug/kg	0.355	1.18
106-93-4	1,2-Dibromoethane	U	1.18	ug/kg	0.355	1.18
108-90-7	Chlorobenzene	U	1.18	ug/kg	0.355	1.18

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318007**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**15.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13626**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 17:01**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L713.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.18	ug/kg	0.355	1.18
179601-23-1	m,p-Xylenes	U	2.37	ug/kg	0.355	2.37
95-47-6	o-Xylene	U	1.18	ug/kg	0.355	1.18
100-42-5	Styrene	U	1.18	ug/kg	0.355	1.18
75-25-2	Bromoform	U	1.18	ug/kg	0.355	1.18
79-34-5	1,1,2,2-Tetrachloroethane	U	1.18	ug/kg	0.355	1.18
96-18-4	1,2,3-Trichloropropane	U	1.18	ug/kg	0.355	1.18
108-86-1	Bromobenzene	U	1.18	ug/kg	0.355	1.18
103-65-1	n-Propylbenzene	U	1.18	ug/kg	0.355	1.18
95-49-8	2-Chlorotoluene	U	1.18	ug/kg	0.355	1.18
98-82-8	Isopropylbenzene	U	1.18	ug/kg	0.355	1.18
108-67-8	1,3,5-Trimethylbenzene	U	1.18	ug/kg	0.355	1.18
106-43-4	4-Chlorotoluene	U	1.18	ug/kg	0.355	1.18
98-06-6	tert-Butylbenzene	U	1.18	ug/kg	0.355	1.18
95-63-6	1,2,4-Trimethylbenzene	U	1.18	ug/kg	0.355	1.18
135-98-8	sec-Butylbenzene	U	1.18	ug/kg	0.355	1.18
99-87-6	4-Isopropyltoluene	U	1.18	ug/kg	0.355	1.18
541-73-1	1,3-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18
106-46-7	1,4-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18
104-51-8	n-Butylbenzene	U	1.18	ug/kg	0.355	1.18
96-12-8	1,2-Dibromo-3-chloropropane	U	1.18	ug/kg	0.355	1.18
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.92	ug/kg	1.89	5.92
630-20-6	1,1,1,2-Tetrachloroethane	U	1.18	ug/kg	0.355	1.18
95-50-1	1,2-Dichlorobenzene	U	1.18	ug/kg	0.355	1.18

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L713.D
Acq On : 22 Nov 2009 5:01 pm
Operator : RXD1
InstName : VOA6
Sample : |241318007|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 23 08:53:43 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1746855	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1246811	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	612078	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1744682	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1246811	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	612078	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	495822	48.36 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 96.72%		
43) Toluene-d8	11.626	98	1698206	50.50 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 101.00%		
61) Bromofluorobenzene	14.357	95	634819	54.09 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 108.18%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	0.000		0	N.D.	
4) Vinyl chloride	4.924	62	187	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.712	43	1357	Below Cal #	45
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.297	41	656	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.084	76	184	N.D.	
15) Methylene chloride	7.285	84	24043	Below Cal	93
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L713.D
Acq On : 22 Nov 2009 5:01 pm
Operator : RXD1
InstName : VOA6
Sample : |241318007|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 23 08:53:43 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.
39) 2-Chloroethylvinyl ether	0.000		0	N.D.
40) cis-1,3-Dichloropropylene	0.000		0	N.D.
42) 4-Methyl-2-pentanone	0.000		0	N.D.
44) Toluene	0.000		0	N.D.
45) trans-1,3-Dichloroprop...	0.000		0	N.D.
46) 1,1,2-Trichloroethane	0.000		0	N.D.
47) 2-Hexanone	0.000		0	N.D.
48) 1,3-Dichloropropane	0.000		0	N.D.
49) Tetrachloroethylene	0.000		0	N.D.
50) Dibromochloromethane	0.000		0	N.D.
51) 1,2-Dibromoethane	0.000		0	N.D.
52) Chlorobenzene	0.000		0	N.D.
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.
54) Ethylbenzene	0.000		0	N.D.
55) m,p-Xylenes	0.000		0	N.D.
56) o-Xylene	13.845	106	3223	N.D.
57) Styrene	0.000		0	N.D.
59) Bromoform	0.000		0	N.D.
60) Isopropylbenzene	0.000		0	N.D.
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.
63) 1,2,3-Trichloropropane	0.000		0	N.D.
64) Bromobenzene	0.000		0	N.D.
65) n-Propylbenzene	0.000		0	N.D.
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.
67) 2-Chlorotoluene	0.000		0	N.D.
68) 4-Chlorotoluene	0.000		0	N.D.
69) tert-Butylbenzene	0.000		0	N.D.
70) 1,2,4-Trimethylbenzene	0.000		0	N.D.
71) sec-Butylbenzene	0.000		0	N.D.
72) 4-Isopropyltoluene	0.000		0	N.D.
73) 1,3-Dichlorobenzene	0.000		0	N.D.
74) 1,4-Dichlorobenzene	0.000		0	N.D.
75) n-Butylbenzene	0.000		0	N.D.
76) 1,2-Dichlorobenzene	0.000		0	N.D.
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.
79) Hexachlorobutadiene	0.000		0	N.D.
80) Naphthalene	18.295	128	242	N.D.
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.
83) Chlorotrifluoroethylene	0.000		0	N.D.
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.
85) Acrolein	0.000		0	N.D.
86) Trichlorotrifluoroethane	0.000		0	N.D.
87) Isopropyl Alcohol	0.000		0	N.D.
88) Allyl chloride	7.297	41	657	N.D.
89) tert-Butyl Alcohol	0.000		0	N.D.
90) Acrylonitrile	0.000		0	N.D.
91) Isopropyl ether	0.000		0	N.D.
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.
93) Ethyl tert-butyl ether	0.000		0	N.D.
94) Ethyl acetate	0.000		0	N.D.

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L713.D
Acq On : 22 Nov 2009 5:01 pm
Operator : RXD1
InstName : VOA6
Sample : |241318007|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 23 08:53:43 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.065	42	406	N.D.	
98)	Isobutyl alcohol	0.000		0	N.D.	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	0.000		0	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	0.000		0	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	0.000		0	N.D.	
111)	Benzyl chloride	0.000		0	N.D.	
112)	bis(2-Chloroisopropyl)...	16.155	45	817	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L713.D
Acq On : 22 Nov 2009 5:01 pm
Operator : RXD1
InstName : VOA6
Sample : |241318007|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 23 08:53:43 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

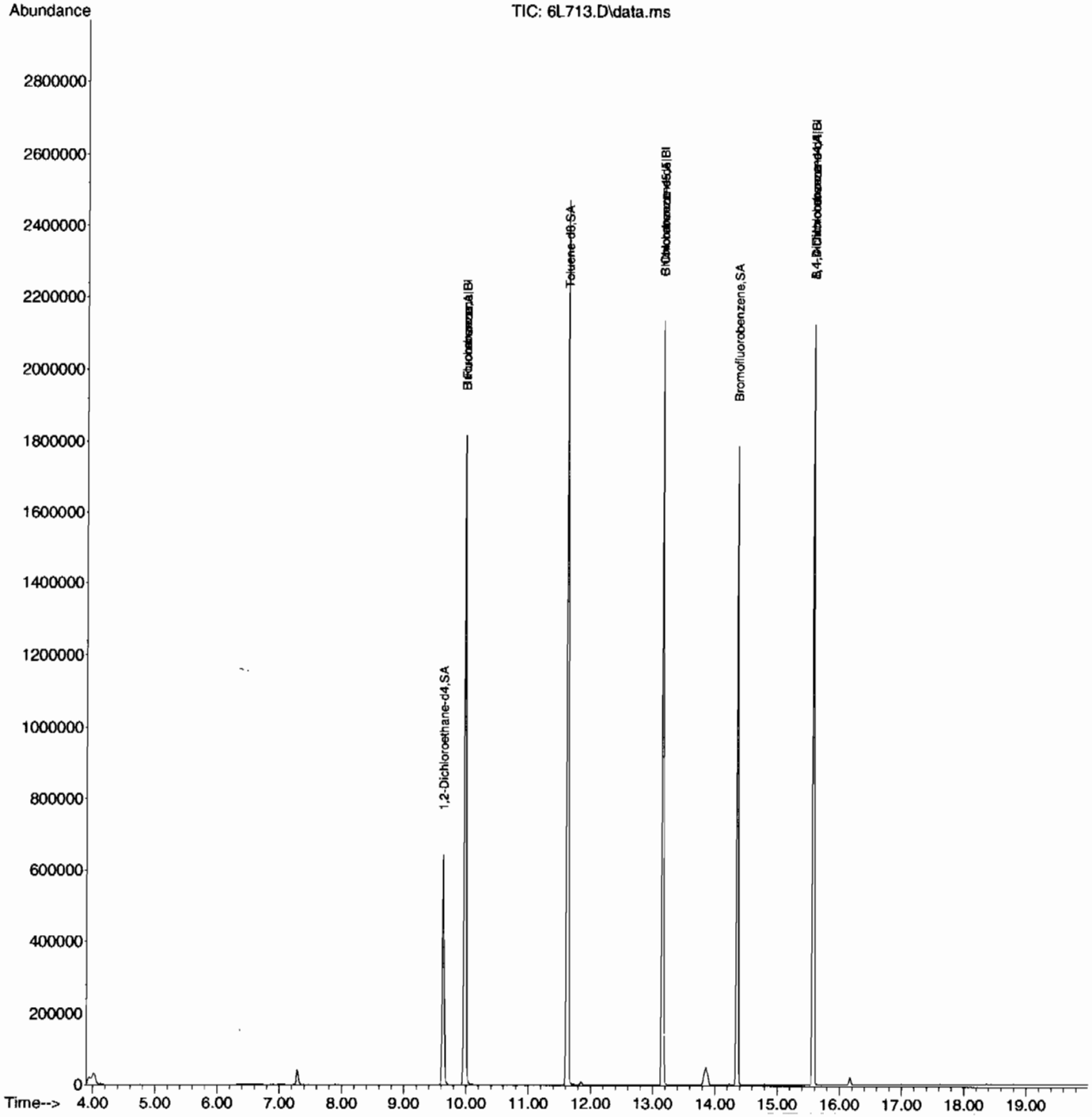

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L713.D
Acq On : 22 Nov 2009 5:01 pm
Operator : RXD1
Sample : |241318007|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L713.D
Acq On : 22 Nov 2009 5:01 pm
Operator : RXD1
Sample : |241318007|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318008**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**4.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13621**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 17:29**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:08**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L714.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.24	ug/kg	1.74	5.24
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.24	ug/kg	1.68	5.24
75-09-2	Methylene chloride	U	5.24	ug/kg	2.10	5.24
75-15-0	Carbon disulfide	U	5.24	ug/kg	1.31	5.24
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.24	ug/kg	1.57	5.24
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.346	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.346	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.24	ug/kg	1.31	5.24
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.24	ug/kg	1.57	5.24
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 17:29	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L714.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.24	ug/kg	1.68	5.24
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L714.D
Acq On : 22 Nov 2009 5:29 pm
Operator : RXD1
InstName : VOA6
Sample : |241318008|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 23 09:21:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1680044	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1213141	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	603153	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1678548	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1213141	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	603153	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	507625	51.48 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 102.96%		
43) Toluene-d8	11.626	98	1724105	52.70 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 105.40%		
61) Bromofluorobenzene	14.357	95	640621	55.40 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 110.80%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.823	50	684	N.D.	
4) Vinyl chloride	4.924	62	160	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.724	43	14751	Below Cal	95
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.291	41	507	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.096	76	372	N.D.	
15) Methylene chloride	7.291	84	24419	Below Cal	91
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	9.718	78	215	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L714.D
Acq On : 22 Nov 2009 5:29 pm
Operator : RXD1
InstName : VOA6
Sample : |241318008|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 23 09:21:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.699	91	7114	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	13.796	104	728	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.168	105	4958	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000		0	N.D.	
69) tert-Butylbenzene	15.186	134	726	N.D.	
70) 1,2,4-Trimethylbenzene	15.192	105	5361	N.D.	
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.454	119	1936	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000		0	N.D.	
75) n-Butylbenzene	15.887	91	233	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.295	128	196	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.291	41	507	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L714.D
Acq On : 22 Nov 2009 5:29 pm
Operator : RXD1
InstName : VOA6
Sample : |241318008|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 23 09:21:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.065	42	697	N.D.	
98) Isobutyl alcohol	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0m	N.D.	d
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.168	45	218	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L714.D
Acq On : 22 Nov 2009 5:29 pm
Operator : RXD1
InstName : VOA6
Sample : |241318008|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 23 09:21:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

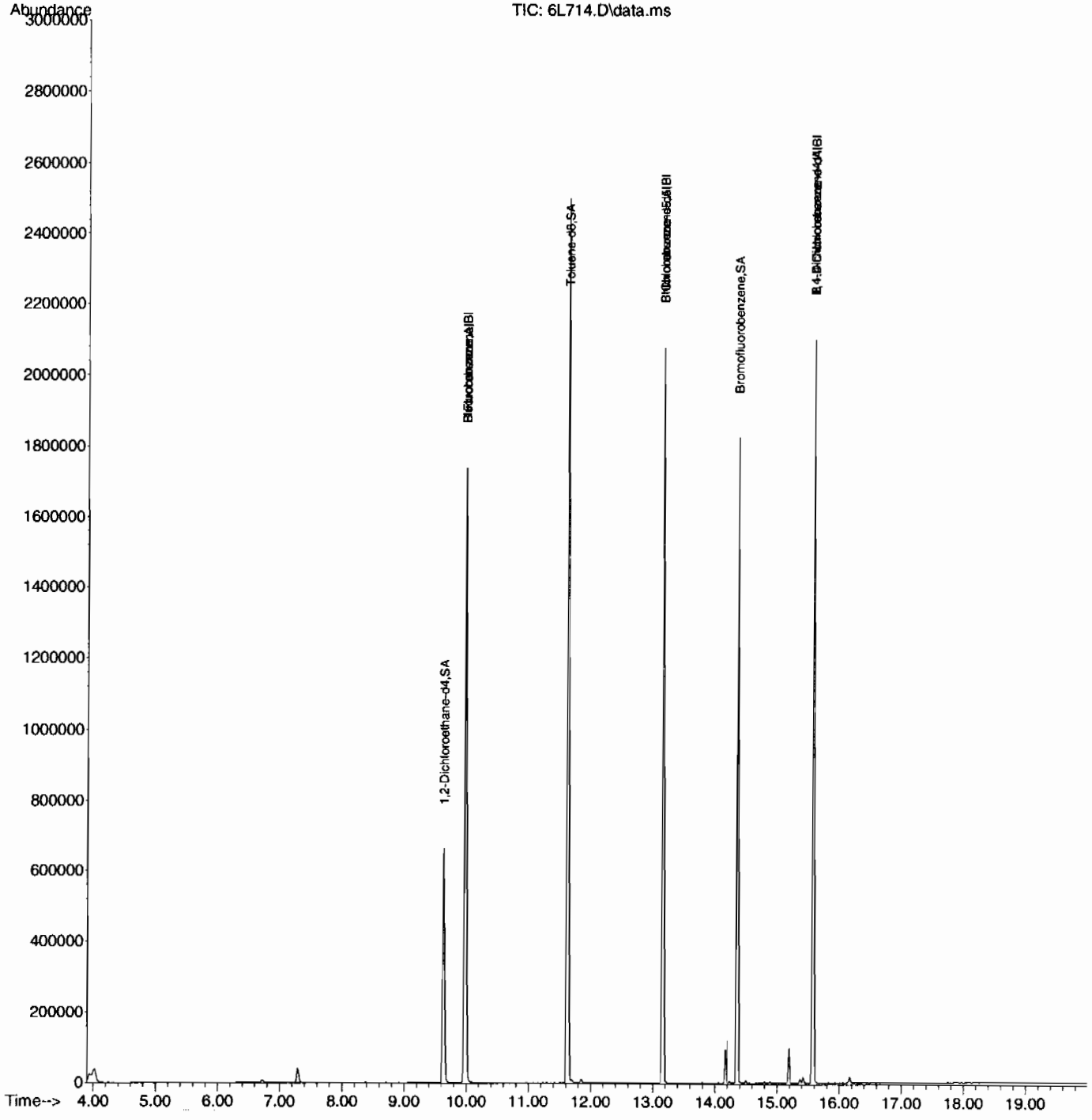

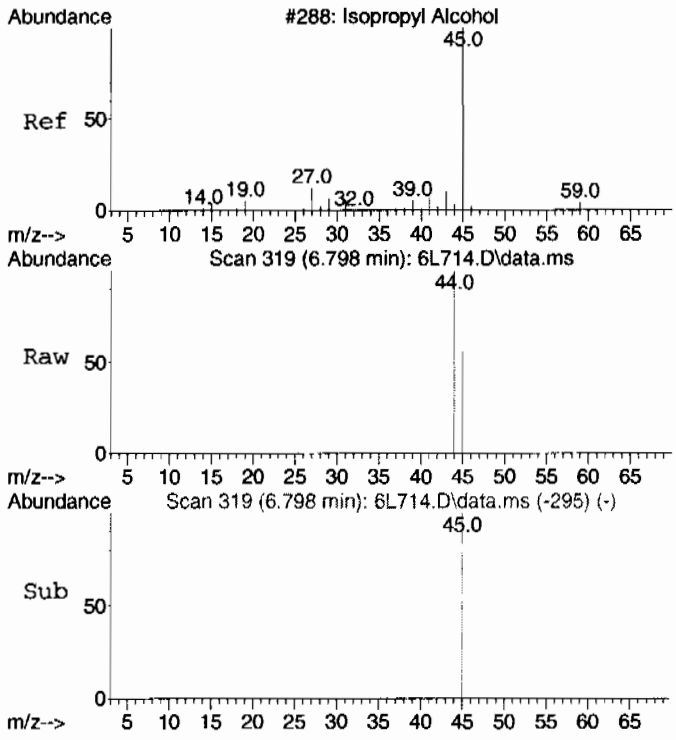

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 0.60 ug/L
RT: 6.798 min Scan# 319
Delta R.T. -0.000 min
Lab File: 6L714.D
Acq: 22 Nov 2009 5:29 pm

Tgt Ion: 45 Resp: 421

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

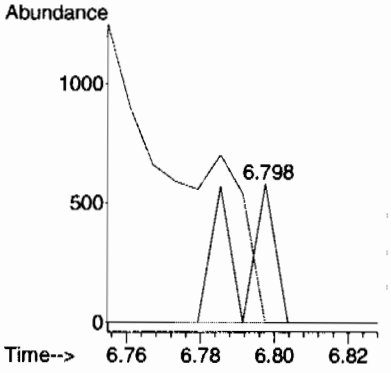

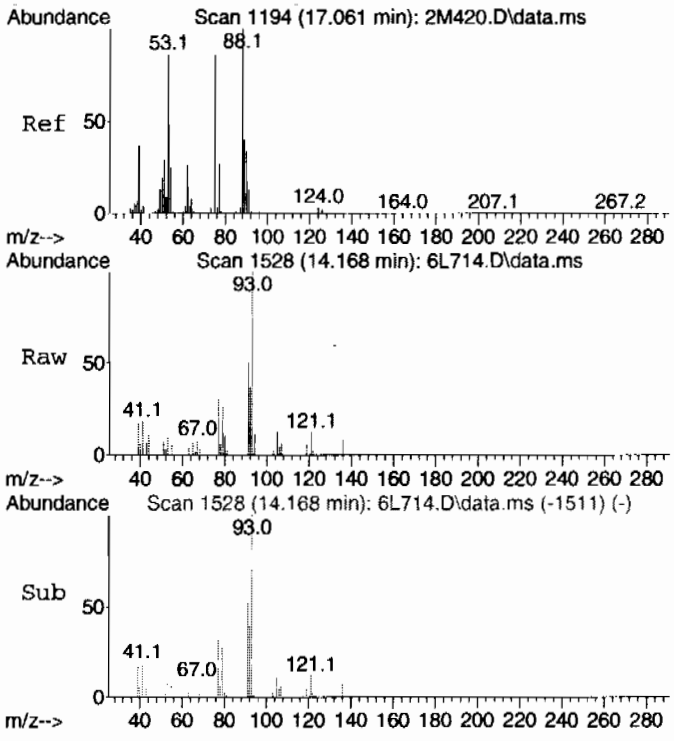

#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 1.25 ug/L
RT: 14.168 min Scan# 1528
Delta R.T. -0.037 min
Lab File: 6L714.D
Acq: 22 Nov 2009 5:29 pm

Tgt Ion: 53 Resp: 3448

Ion	Ratio	Lower	Upper
53	100		
88	0.0	73.1	133.1#
77	378.9	0.4	60.4#

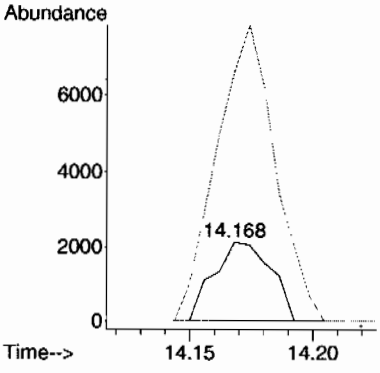

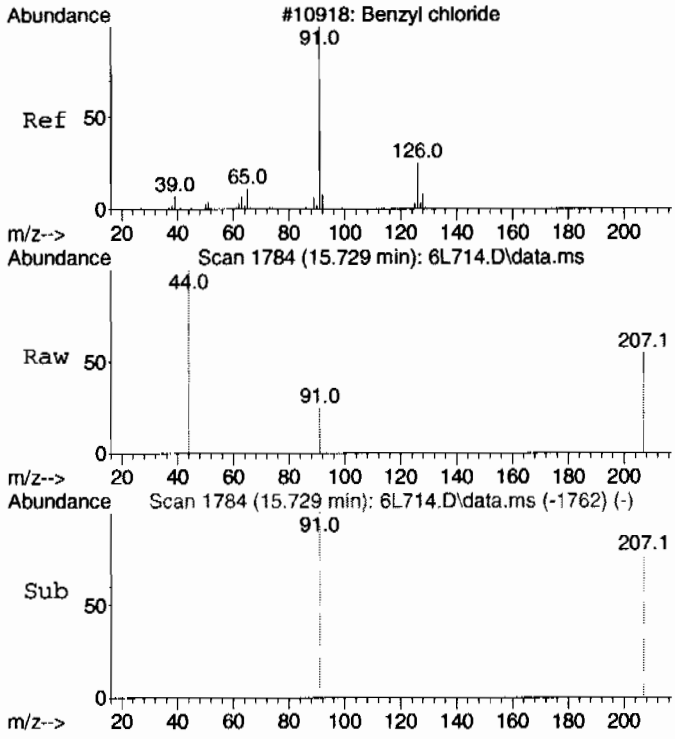

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.02 ug/L
RT: 15.729 min Scan# 1784
Delta R.T. 0.012 min
Lab File: 6L714.D
Acq: 22 Nov 2009 5:29 pm

Tgt Ion: 91 Resp: 263

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

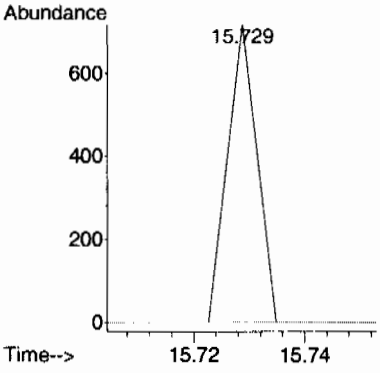

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L714.D
Acq On : 22 Nov 2009 5:29 pm
Operator : RXD1
Sample : |241318008|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L714.D
Acq On : 22 Nov 2009 5:29 pm
Operator : RXD1
Sample : |241318008|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13627	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 17:57	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L715.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.34	5.38
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.34	5.38
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13627	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 17:57	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L715.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L715.D
Acq On : 22 Nov 2009 5:57 pm
Operator : RXD1
InstName : VOA6
Sample : |241318009|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 09:22:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1600145	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.162	117	1146121	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	588887	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1598795	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.162	117	1146121	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	588887	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	484718	51.61 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 103.22%		
43) Toluene-d8	11.626	98	1674092	54.16 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 108.32%		
61) Bromofluorobenzene	14.357	95	629140	55.72 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 111.44%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.723	50	309	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	7464	Below Cal	90
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.084	41	206	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.090	76	586	N.D.	
15) Methylene chloride	7.291	84	27064	N.D.	
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L715.D
Acq On : 22 Nov 2009 5:57 pm
Operator : RXD1
InstName : VOA6
Sample : |241318009|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 09:22:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	0.000		0	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0m	N.D.	d
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000		0	N.D.	
69) tert-Butylbenzene	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000		0	N.D.	
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000		0	N.D.	
75) n-Butylbenzene	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	0.000		0	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.084	41	206	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L715.D
Acq On : 22 Nov 2009 5:57 pm
Operator : RXD1
InstName : VOA6
Sample : |241318009|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 09:22:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.059	42	840	N.D.	
98)	Isobutyl alcohol	0.000		0	N.D.	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	0.000		0	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	0.000		0	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	0.000		0	N.D.	
111)	Benzyl chloride	0.000		0	N.D.	
112)	bis(2-Chloroisopropyl)...	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L715.D
Acq On : 22 Nov 2009 5:57 pm
Operator : RXD1
InstName : VOA6
Sample : |241318009|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 09:22:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

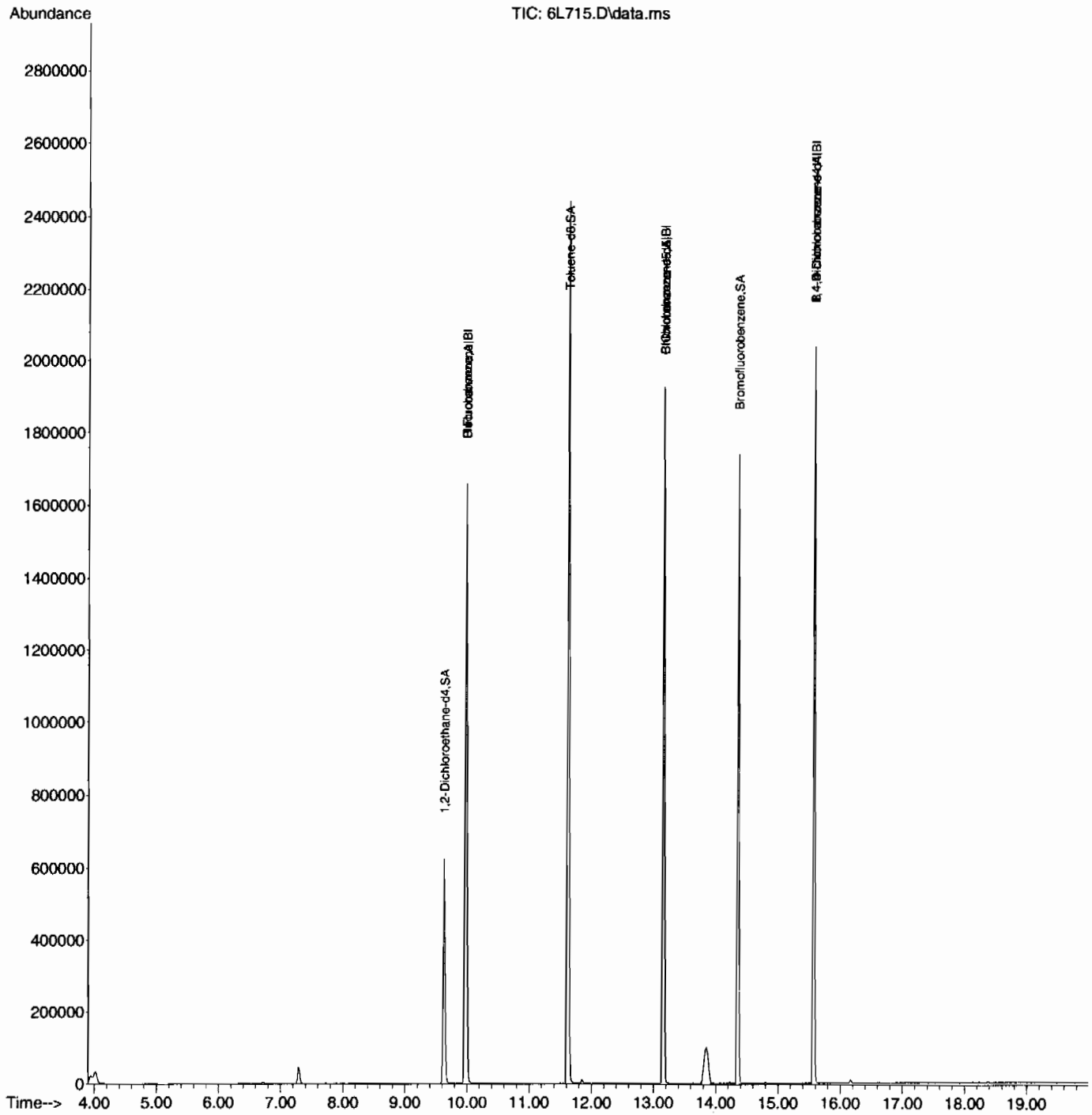

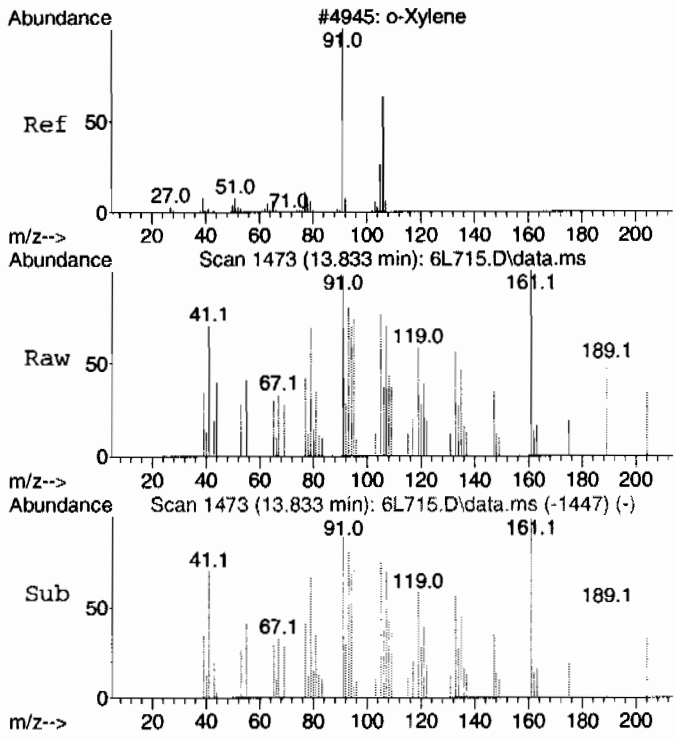

#56 BEFORE analyst DELETION
o-Xylene
Concen: 0.58 ug/L
RT: 13.833 min Scan# 1473
Delta R.T. 0.037 min
Lab File: 6L715.D
Acq: 22 Nov 2009 5:57 pm

Tgt Ion:106 Resp: 8604

Ion	Ratio	Lower	Upper
106	100		
91	372.1	175.0	235.0#

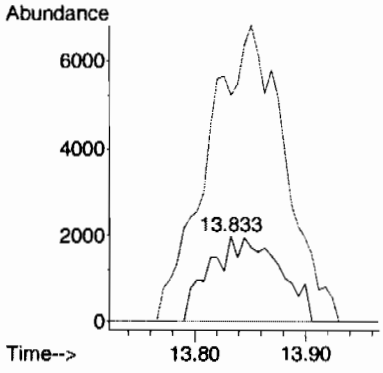

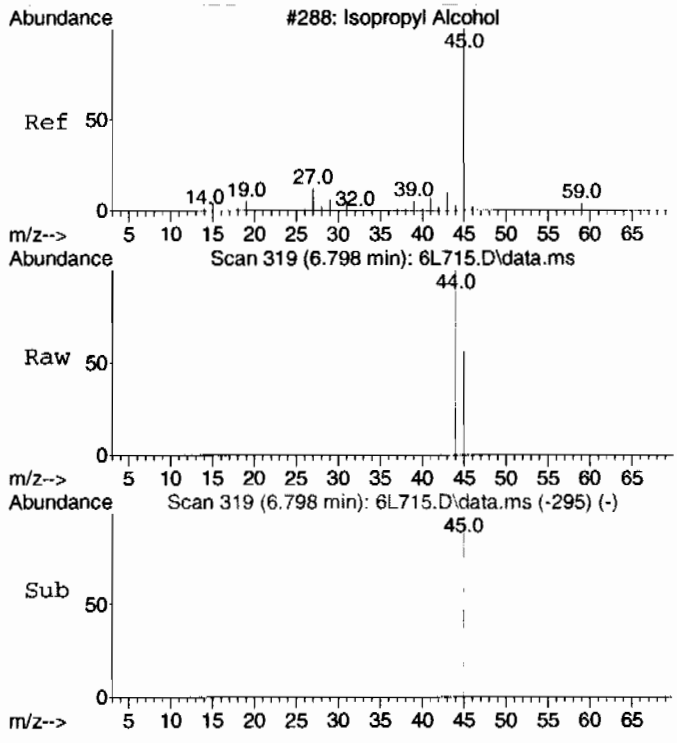

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 0.66 ug/L
RT: 6.798 min Scan# 319
Delta R.T. -0.000 min
Lab File: 6L715.D
Acq: 22 Nov 2009 5:57 pm

Tgt Ion: 45 Resp: 442

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

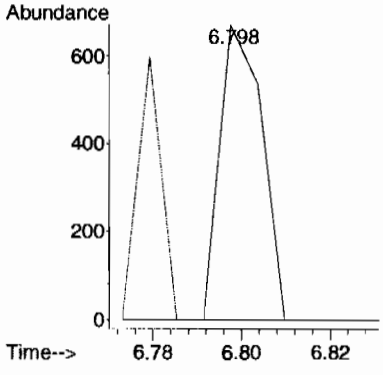

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L715.D
Acq On : 22 Nov 2009 5:57 pm
Operator : RXD1
Sample : |241318009|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L715.D
Acq On : 22 Nov 2009 5:57 pm
Operator : RXD1
Sample : |241318009|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 18:25	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L716.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.409	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.50	6.02
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.50	6.02
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 18:25	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L716.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT	Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L716.D
Acq On : 22 Nov 2009 6:25 pm
Operator : RXD1
InstName : VOA6
Sample : |241318010|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 09:23:22 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1053740	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	775462	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	405832	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1053720	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	775462	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	405832	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	322546	52.15 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 104.30%		
43) Toluene-d8	11.626	98	1058348	50.60 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 101.20%		
61) Bromofluorobenzene	14.357	95	401667	51.62 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 103.24%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	0.000		0	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	30268	Below Cal	99
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.084	41	448	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	0.000		0	N.D.	
15) Methylene chloride	7.297	84	17147	N.D.	
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L716.D
Acq On : 22 Nov 2009 6:25 pm
Operator : RXD1
InstName : VOA6
Sample : |241318010|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 09:23:22 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.693	91	450	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000		0	N.D.	
69) tert-Butylbenzene	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000		0	N.D.	
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000		0	N.D.	
75) n-Butylbenzene	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.283	128	201	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.084	41	448	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L716.D
Acq On : 22 Nov 2009 6:25 pm
Operator : RXD1
InstName : VOA6
Sample : |241318010|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 09:23:22 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.065	42	189	N.D.	
98) Isobutyl alcohol	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.162	45	186	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L716.D
Acq On : 22 Nov 2009 6:25 pm
Operator : RXD1
InstName : VOA6
Sample : |241318010|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 09:23:22 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

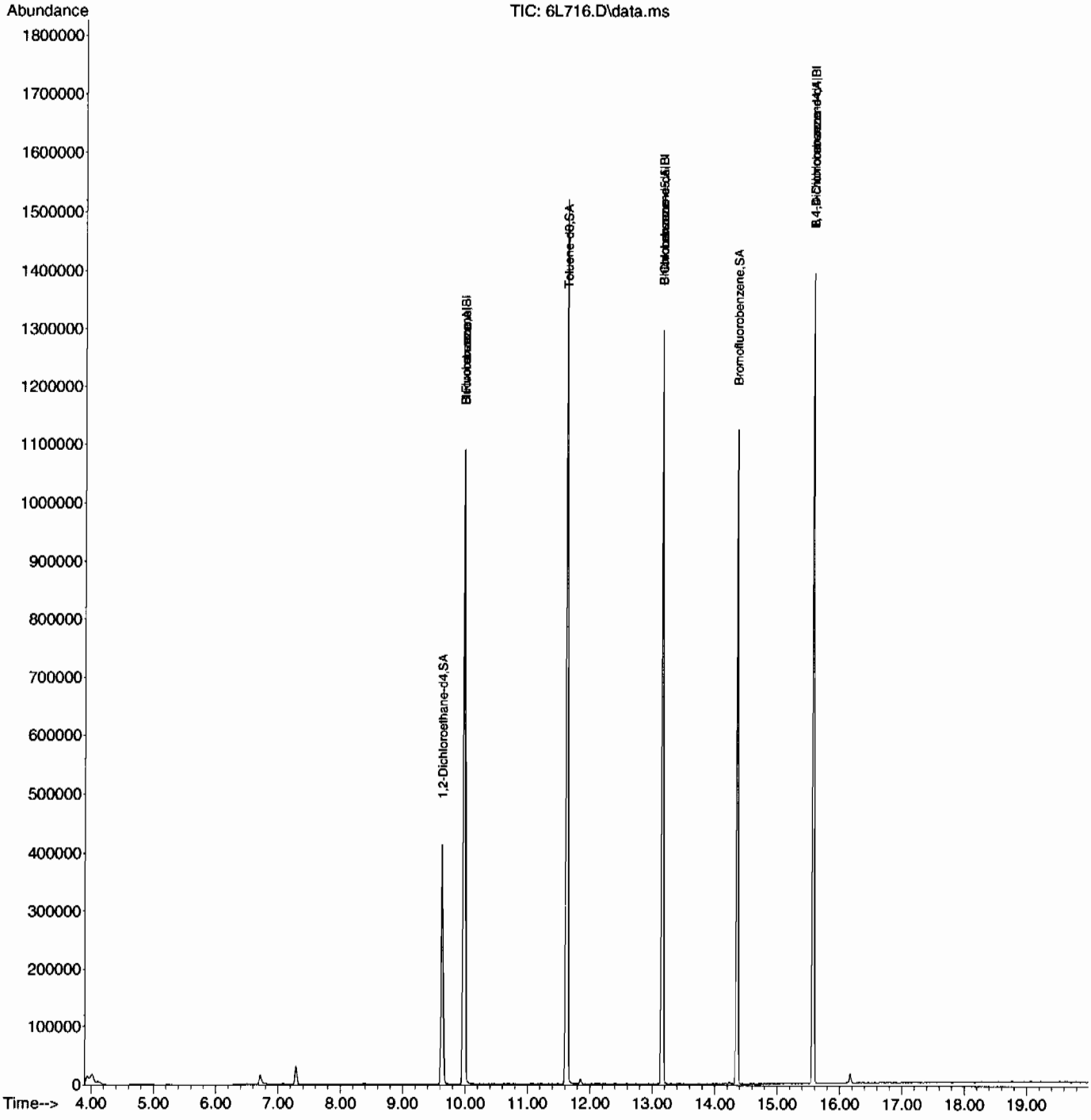

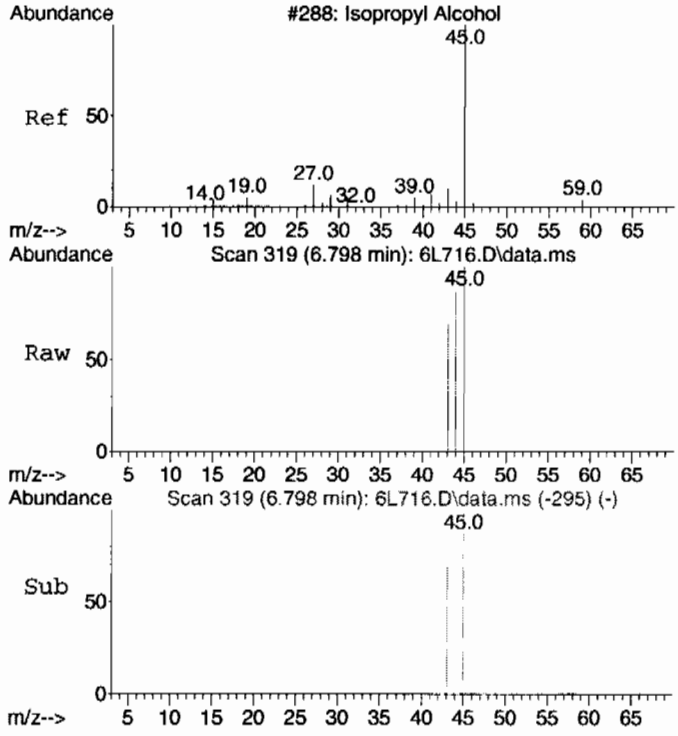

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 6.16 ug/L
RT: 6.798 min Scan# 319
Delta R.T. -0.000 min
Lab File: 6L716.D
Acq: 22 Nov 2009 6:25 pm

Tgt Ion: 45 Resp: 2713

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

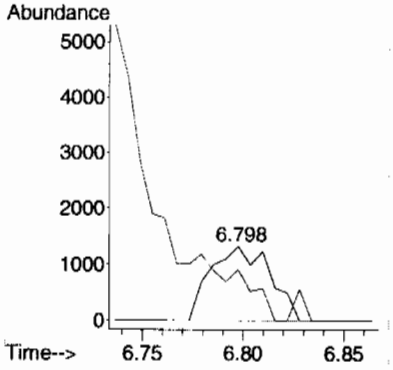

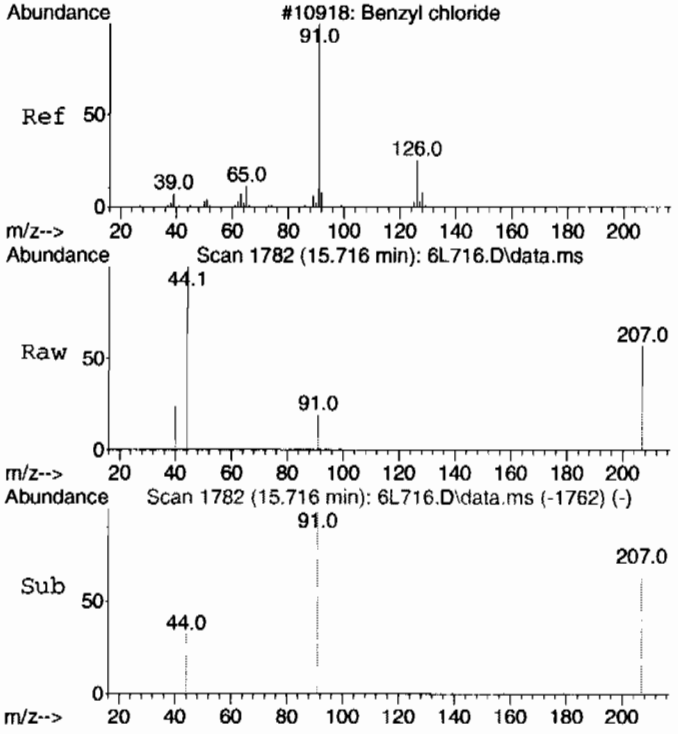

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.02 ug/L
RT: 15.716 min Scan# 1782
Delta R.T. -0.001 min
Lab File: 6L716.D
Acq: 22 Nov 2009 6:25 pm

Tgt Ion: 91 Resp: 185

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

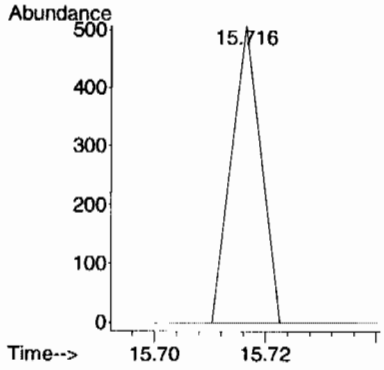

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L716.D
Acq On : 22 Nov 2009 6:25 pm
Operator : RXD1
Sample : |241318010|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L716.D
Acq On : 22 Nov 2009 6:25 pm
Operator : RXD1
Sample : |241318010|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318011	**Date Received:**	11/18/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6087	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 18:52	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L717.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318011**	**Date Received:**	**11/18/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6087**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 18:52**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L717.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L717.D
Acq On : 22 Nov 2009 6:52 pm
Operator : RXD1
InstName : VOA6
Sample : |241318011|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 09:23:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1326859	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	985584	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	502048	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1326859	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	985584	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	502048	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	494610	63.51 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery	= 127.02%	
43) Toluene-d8	11.626	98	1693269	63.70 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery	= 127.40%	
61) Bromofluorobenzene	14.357	95	631970	65.65 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery	= 131.30%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.672	50	161	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	7072	Below Cal	83
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.072	41	416	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	0.000		0	N.D.	
15) Methylene chloride	7.291	84	24974	N.D.	
16) tert-Butyl methyl ether	7.572	73	628	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	9.712	78	405	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L717.D
Acq On : 22 Nov 2009 6:52 pm
Operator : RXD1
InstName : VOA6
Sample : |241318011|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 09:23:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.699	91	1527	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000		0	N.D.	
69) tert-Butylbenzene	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000		0	N.D.	
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	15.454	119	190	N.D.	
73) 1,3-Dichlorobenzene	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	15.601	146	209	N.D.	
75) n-Butylbenzene	15.893	91	187	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.283	128	197	N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.072	41	416	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L717.D
Acq On : 22 Nov 2009 6:52 pm
Operator : RXD1
InstName : VOA6
Sample : |241318011|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 09:23:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.059	42	572	N.D.	
98) Isobutyl alcohol	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.162	45	2759	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L717.D
Acq On : 22 Nov 2009 6:52 pm
Operator : RXD1
InstName : VOA6
Sample : |241318011|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 09:23:57 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

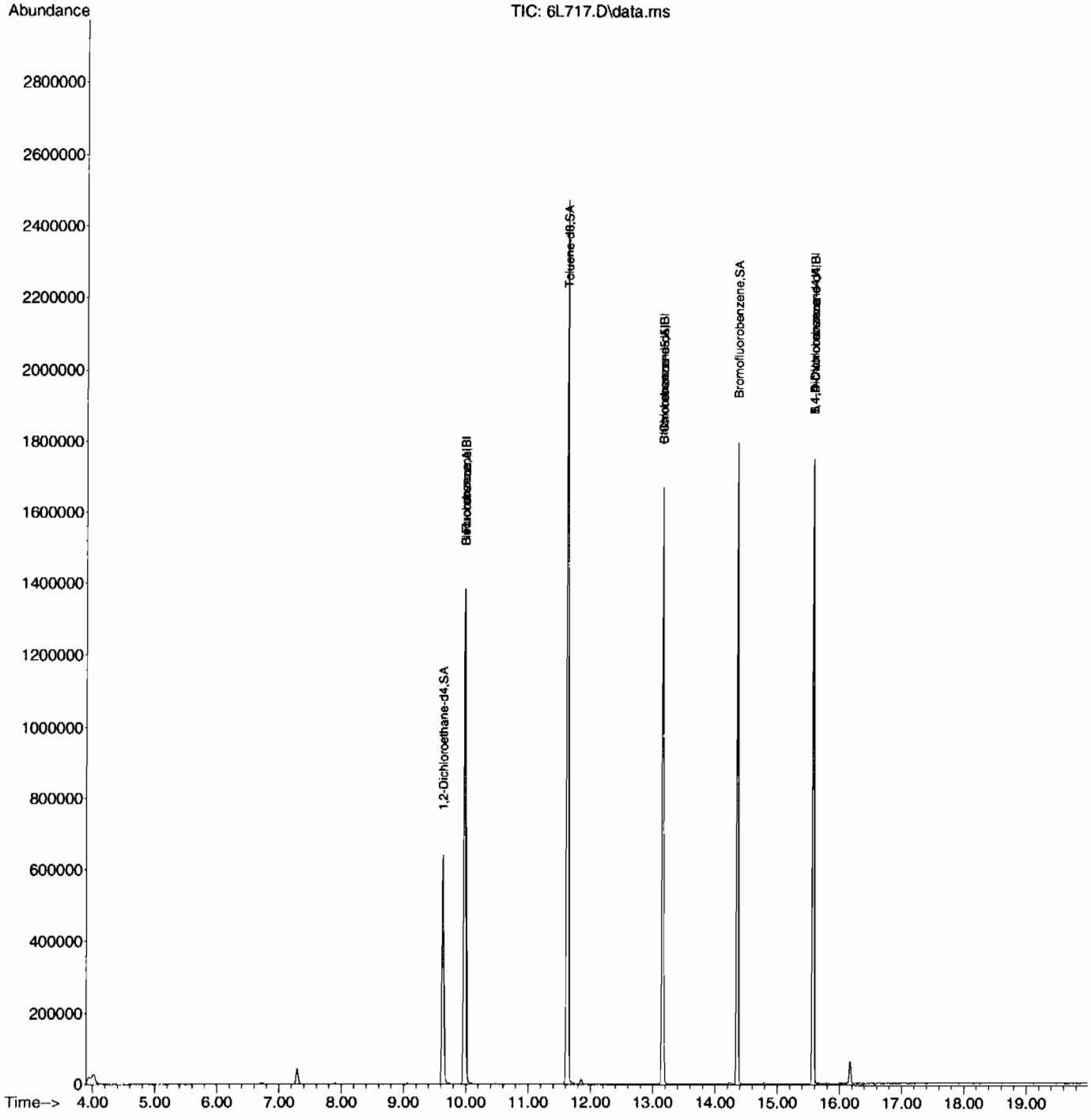

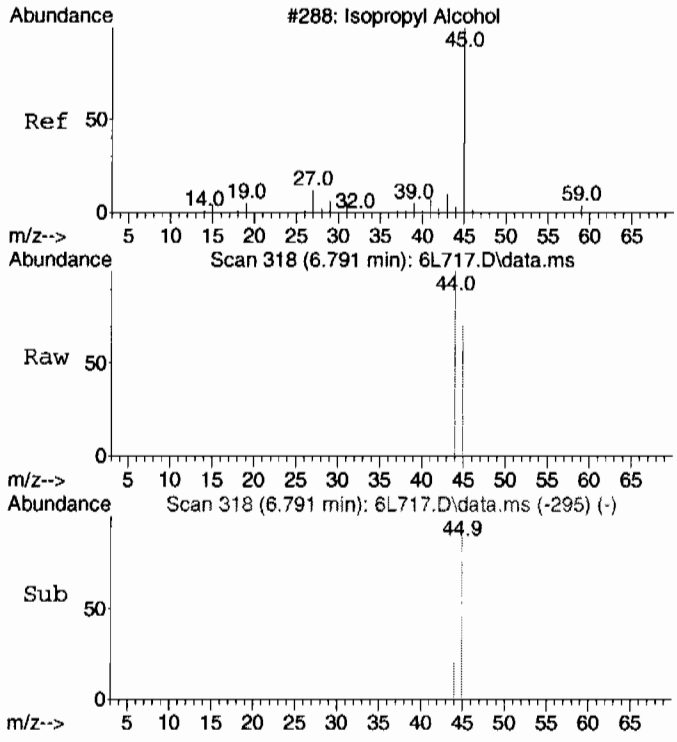

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 0.90 ug/L
RT: 6.791 min Scan# 318
Delta R.T. -0.007 min
Lab File: 6L717.D
Acq: 22 Nov 2009 6:52 pm

Tgt Ion: 45 Resp: 499

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

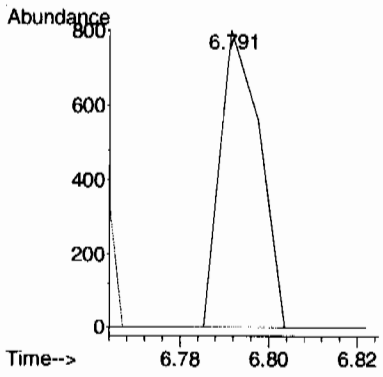

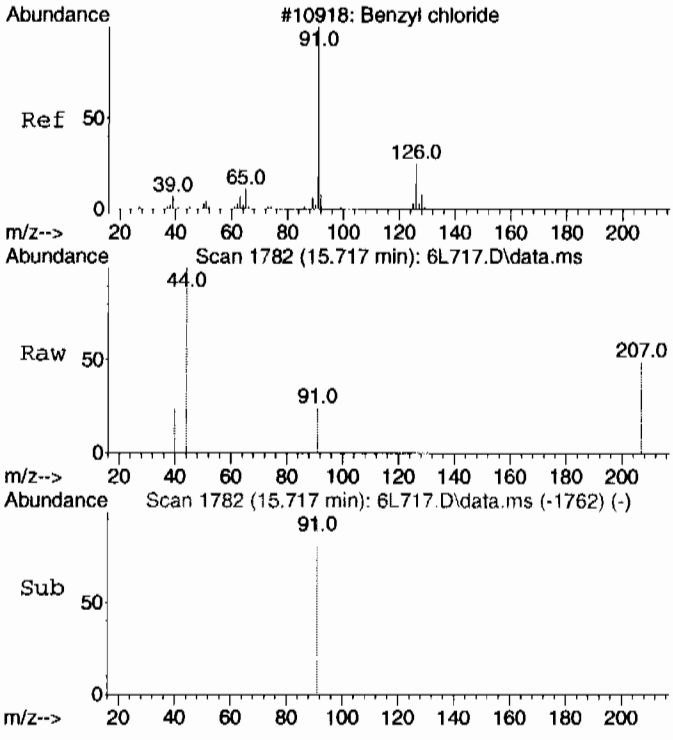

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.02 ug/L
RT: 15.717 min Scan# 1782
Delta R.T. -0.000 min
Lab File: 6L717.D
Acq: 22 Nov 2009 6:52 pm

Tgt Ion: 91 Resp: 237

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

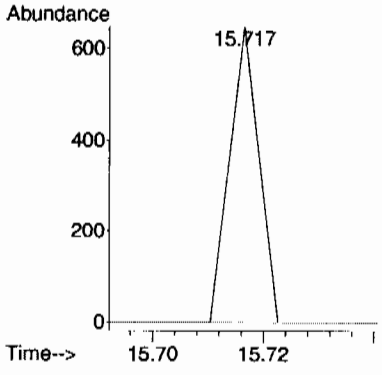

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L717.D
Acq On : 22 Nov 2009 6:52 pm
Operator : RXD1
Sample : |241318011|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L717.D
Acq On : 22 Nov 2009 6:52 pm
Operator : RXD1
Sample : |241318011|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318012	**Date Received:**	11/18/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6086	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 19:20	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L718.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.94	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318012**	**Date Received:**	**11/18/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6086**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 19:20**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L718.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L718.D
Acq On : 22 Nov 2009 7:20 pm
Operator : RXD1
InstName : VOA6
Sample : |241318012|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 09:24:26 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1402417	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1020790	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	530331	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1400531	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1020790	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	530331	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	491717	59.74 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 119.48%		
43) Toluene-d8	11.626	98	1675839	60.87 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 121.74%		
61) Bromofluorobenzene	14.357	95	633427	62.29 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 124.58%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.702	50	155	N.D.	
4) Vinyl chloride	4.924	62	164	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.724	43	5397	Below Cal	71
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.084	41	474	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.084	76	651	N.D.	
15) Methylene chloride	7.291	84	26172	N.D.	
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	9.724	78	55513	1.94 ug/L	96
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L718.D
Acq On : 22 Nov 2009 7:20 pm
Operator : RXD1
InstName : VOA6
Sample : |241318012|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 09:24:26 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	0.000		0	N.D.	
39)	2-Chloroethylvinyl ether	0.000		0	N.D.	
40)	cis-1,3-Dichloropropylene	0.000		0	N.D.	
42)	4-Methyl-2-pentanone	0.000		0	N.D.	
44)	Toluene	11.705	91	1597	N.D.	
45)	trans-1,3-Dichloroprop...	0.000		0	N.D.	
46)	1,1,2-Trichloroethane	0.000		0	N.D.	
47)	2-Hexanone	0.000		0	N.D.	
48)	1,3-Dichloropropane	0.000		0	N.D.	
49)	Tetrachloroethylene	0.000		0	N.D.	
50)	Dibromochloromethane	0.000		0	N.D.	
51)	1,2-Dibromoethane	0.000		0	N.D.	
52)	Chlorobenzene	0.000		0	N.D.	
53)	1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54)	Ethylbenzene	0.000		0	N.D.	
55)	m,p-Xylenes	0.000		0	N.D.	
56)	o-Xylene	0.000		0	N.D.	
57)	Styrene	0.000		0	N.D.	
59)	Bromoform	0.000		0	N.D.	
60)	Isopropylbenzene	0.000		0	N.D.	
62)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63)	1,2,3-Trichloropropane	0.000		0	N.D.	
64)	Bromobenzene	0.000		0	N.D.	
65)	n-Propylbenzene	0.000		0	N.D.	
66)	1,3,5-Trimethylbenzene	0.000		0	N.D.	
67)	2-Chlorotoluene	0.000		0	N.D.	
68)	4-Chlorotoluene	0.000		0	N.D.	
69)	tert-Butylbenzene	0.000		0	N.D.	
70)	1,2,4-Trimethylbenzene	0.000		0	N.D.	
71)	sec-Butylbenzene	0.000		0	N.D.	
72)	4-Isopropyltoluene	15.454	119	268	N.D.	
73)	1,3-Dichlorobenzene	0.000		0	N.D.	
74)	1,4-Dichlorobenzene	0.000		0	N.D.	
75)	n-Butylbenzene	0.000		0	N.D.	
76)	1,2-Dichlorobenzene	0.000		0	N.D.	
77)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	0.000		0	N.D.	
79)	Hexachlorobutadiene	0.000		0	N.D.	
80)	Naphthalene	18.283	128	1896	N.D.	
81)	1,2,3-Trichlorobenzene	0.000		0	N.D.	
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	0.000		0	N.D.	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	0.000		0m	N.D.	d
88)	Allyl chloride	7.084	41	474	N.D.	
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	0.000		0	N.D.	
91)	Isopropyl ether	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L718.D
Acq On : 22 Nov 2009 7:20 pm
Operator : RXD1
InstName : VOA6
Sample : |241318012|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 09:24:26 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.065	42	909	N.D.	
98)	Isobutyl alcohol	0.000		0	N.D.	
99)	Methyl tert-amyl ether	9.718	73	412	N.D.	
100)	Methyl methacrylate	0.000		0	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	0.000		0	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	0.000		0	N.D.	
111)	Benzyl chloride	0.000		0	N.D.	
112)	bis(2-Chloroisopropyl)...	16.168	45	2416	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L718.D
Acq On : 22 Nov 2009 7:20 pm
Operator : RXD1
InstName : VOA6
Sample : |241318012|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 09:24:26 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

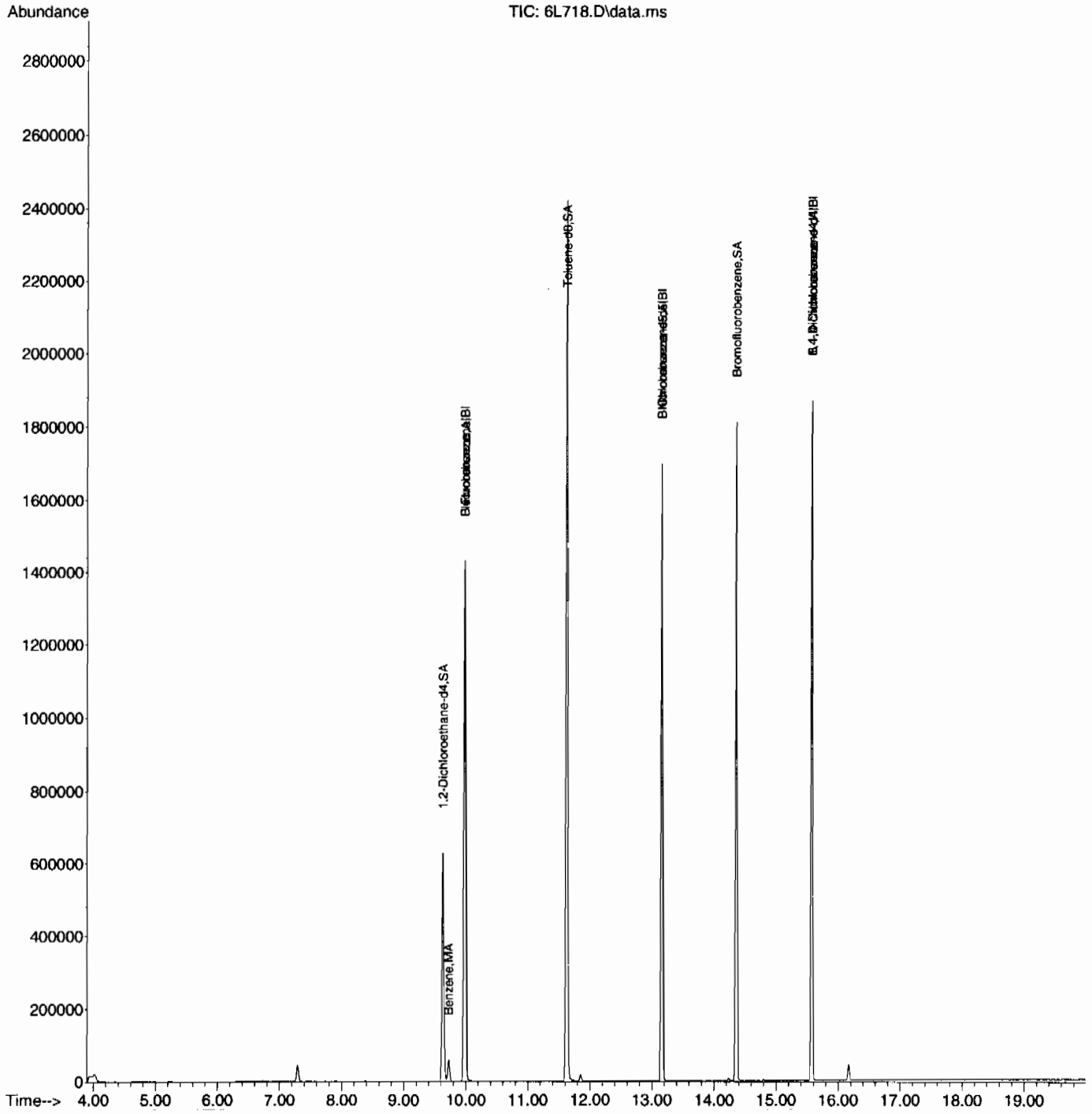

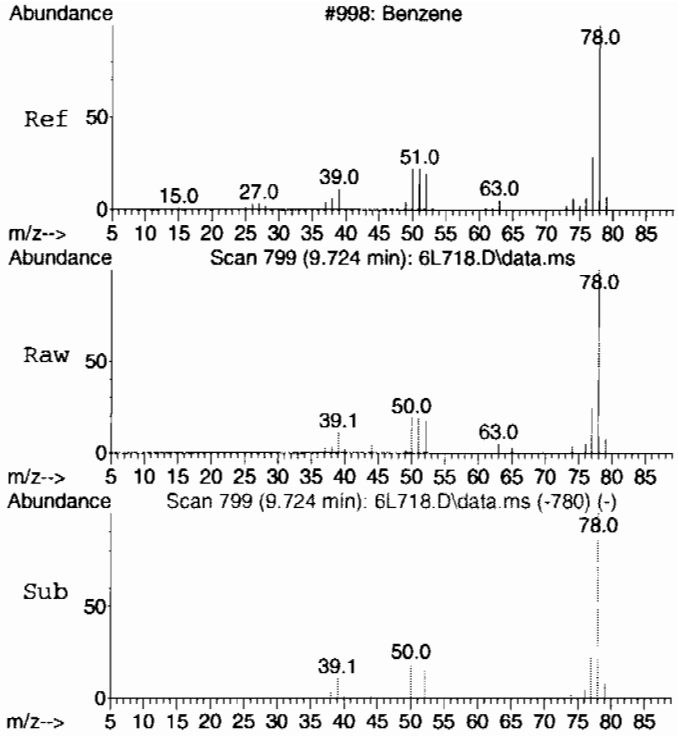

#31
Benzene
Concen: 1.94 ug/L
RT: 9.724 min Scan# 799
Delta R.T. -0.006 min
Lab File: 6L718.D
Acq: 22 Nov 2009 7:20 pm

Tgt Ion: 78 Resp: 55513

Ion	Ratio	Lower	Upper
78	100		
77	23.6	0.0	53.4
51	19.4	0.0	52.8

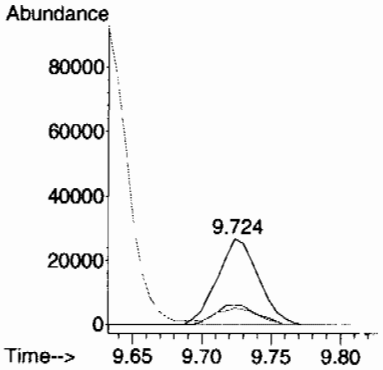

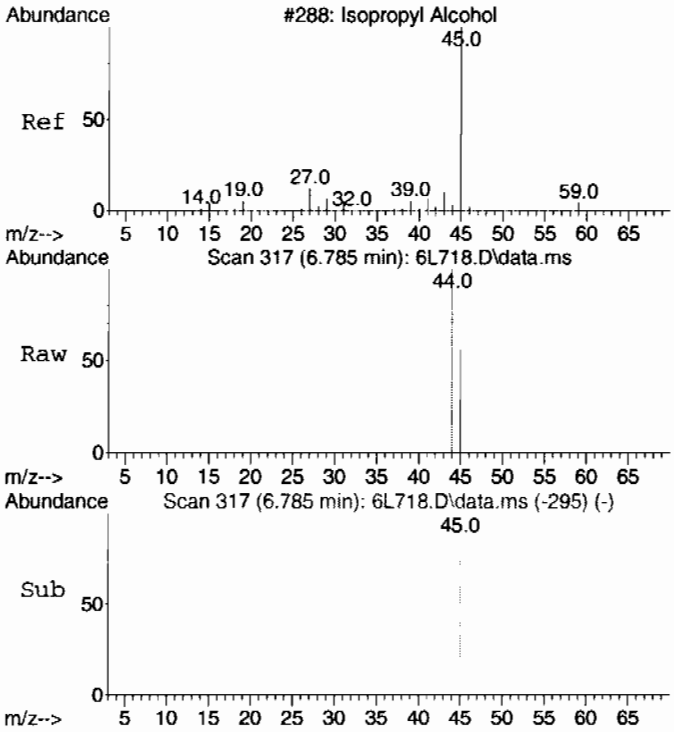

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 0.33 ug/L
RT: 6.785 min Scan# 317
Delta R.T. -0.013 min
Lab File: 6L718.D
Acq: 22 Nov 2009 7:20 pm

Tgt Ion: 45 Resp: 195

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

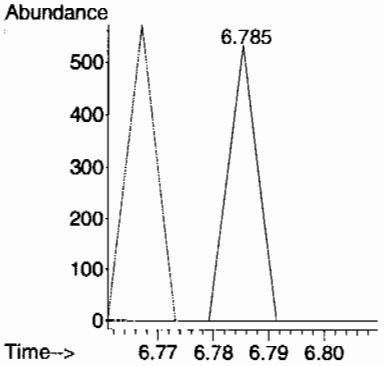

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L718.D
Acq On : 22 Nov 2009 7:20 pm
Operator : RXD1
Sample : |241318012|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L718.D
Acq On : 22 Nov 2009 7:20 pm
Operator : RXD1
Sample : |241318012|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318013**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6084**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 19:48**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 14:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L719.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6084	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 19:48	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 14:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L719.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L719.D
Acq On : 22 Nov 2009 7:48 pm
Operator : RXD1
InstName : VOA6
Sample : |241318013|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:54:02 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1412078	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1007526	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	495321	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1410897	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1007526	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	495321	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	491352	59.28 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 118.56%		
43) Toluene-d8	11.626	98	1654331	60.88 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 121.76%		
61) Bromofluorobenzene	14.357	95	608483	64.07 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 128.14%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.692	50	163	N.D.	
4) Vinyl chloride	4.914	62	155	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	16023	Below Cal	93
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.285	41	821	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.090	76	188	N.D.	
15) Methylene chloride	7.291	84	25779	N.D.	
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L719.D
Acq On : 22 Nov 2009 7:48 pm
Operator : RXD1
InstName : VOA6
Sample : |241318013|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:54:02 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.
39) 2-Chloroethylvinyl ether	0.000		0	N.D.
40) cis-1,3-Dichloropropylene	0.000		0	N.D.
42) 4-Methyl-2-pentanone	0.000		0	N.D.
44) Toluene	0.000		0	N.D.
45) trans-1,3-Dichloroprop...	0.000		0	N.D.
46) 1,1,2-Trichloroethane	0.000		0	N.D.
47) 2-Hexanone	0.000		0	N.D.
48) 1,3-Dichloropropane	0.000		0	N.D.
49) Tetrachloroethylene	0.000		0	N.D.
50) Dibromochloromethane	0.000		0	N.D.
51) 1,2-Dibromoethane	0.000		0	N.D.
52) Chlorobenzene	0.000		0	N.D.
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.
54) Ethylbenzene	0.000		0	N.D.
55) m,p-Xylenes	0.000		0	N.D.
56) o-Xylene	0.000		0	N.D.
57) Styrene	0.000		0	N.D.
59) Bromoform	0.000		0	N.D.
60) Isopropylbenzene	0.000		0	N.D.
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.
63) 1,2,3-Trichloropropane	0.000		0	N.D.
64) Bromobenzene	0.000		0	N.D.
65) n-Propylbenzene	0.000		0	N.D.
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.
67) 2-Chlorotoluene	0.000		0	N.D.
68) 4-Chlorotoluene	0.000		0	N.D.
69) tert-Butylbenzene	0.000		0	N.D.
70) 1,2,4-Trimethylbenzene	0.000		0	N.D.
71) sec-Butylbenzene	0.000		0	N.D.
72) 4-Isopropyltoluene	15.393	119	1239	N.D.
73) 1,3-Dichlorobenzene	0.000		0	N.D.
74) 1,4-Dichlorobenzene	0.000		0	N.D.
75) n-Butylbenzene	0.000		0	N.D.
76) 1,2-Dichlorobenzene	0.000		0	N.D.
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.
79) Hexachlorobutadiene	0.000		0	N.D.
80) Naphthalene	0.000		0	N.D.
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.
83) Chlorotrifluoroethylene	0.000		0	N.D.
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.
85) Acrolein	0.000		0	N.D.
86) Trichlorotrifluoroethane	0.000		0	N.D.
87) Isopropyl Alcohol	0.000		0	N.D.
88) Allyl chloride	7.285	41	820	N.D.
89) tert-Butyl Alcohol	0.000		0	N.D.
90) Acrylonitrile	0.000		0	N.D.
91) Isopropyl ether	0.000		0	N.D.
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.
93) Ethyl tert-butyl ether	0.000		0	N.D.
94) Ethyl acetate	0.000		0	N.D.

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L719.D
Acq On : 22 Nov 2009 7:48 pm
Operator : RXD1
InstName : VOA6
Sample : |241318013|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:54:02 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.065	42	669	N.D.	
98) Isobutyl alcohol	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L719.D
Acq On : 22 Nov 2009 7:48 pm
Operator : RXD1
InstName : VOA6
Sample : |241318013|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:54:02 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

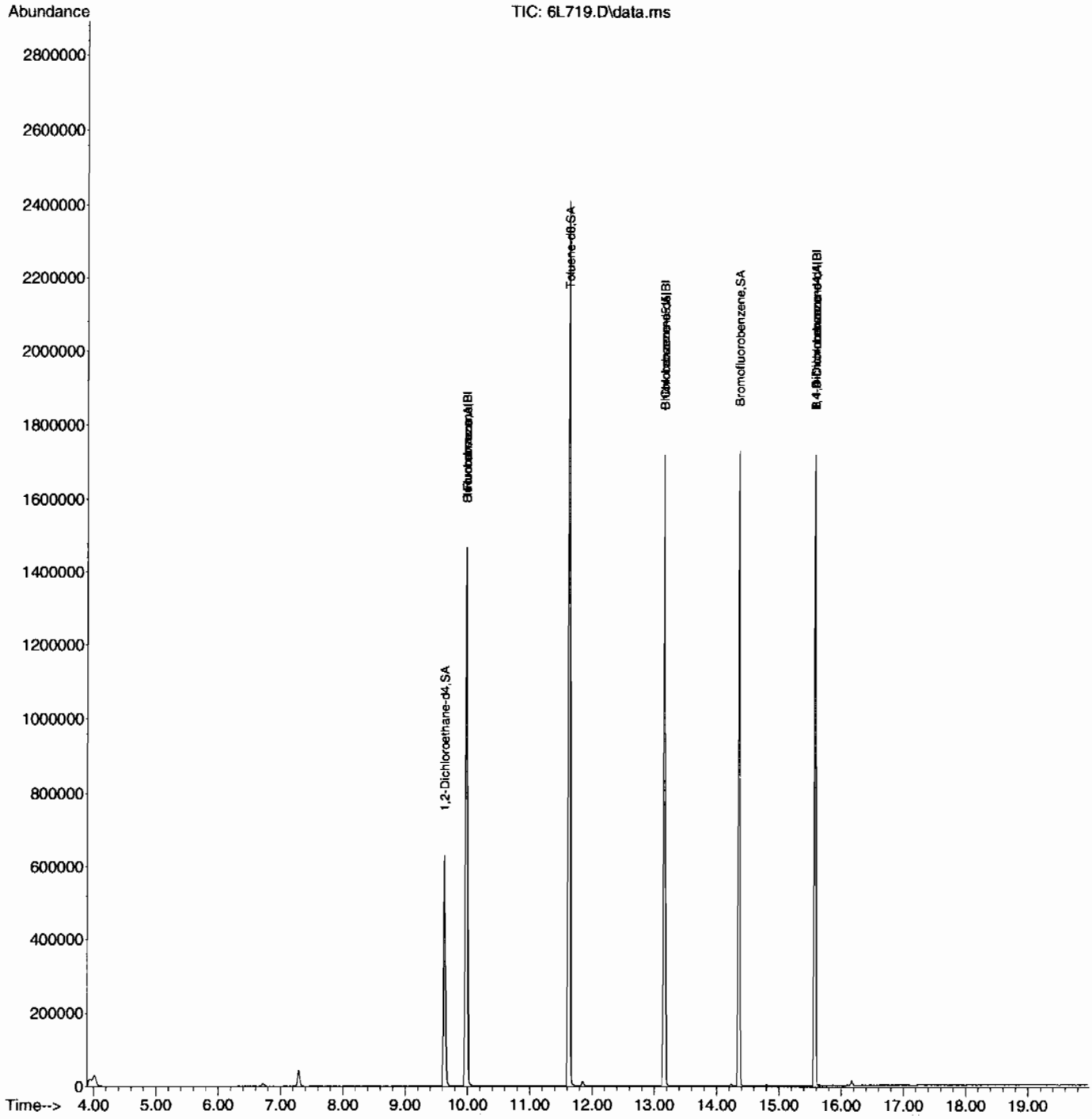

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L719.D
Acq On : 22 Nov 2009 7:48 pm
Operator : RXD1
Sample : |241318013|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L719.D
Acq On : 22 Nov 2009 7:48 pm
Operator : RXD1
Sample : |241318013|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318005**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**22.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13624**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 14:12**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 13:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M109.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.440	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.388	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.388	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.388	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.388	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.388	1.29
67-64-1	Acetone	U	6.47	ug/kg	2.15	6.47
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
74-88-4	Iodomethane	U	6.47	ug/kg	2.07	6.47
75-09-2	Methylene chloride	U	6.47	ug/kg	2.59	6.47
75-15-0	Carbon disulfide	U	6.47	ug/kg	1.62	6.47
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.388	1.29
78-93-3	2-Butanone	U	6.47	ug/kg	1.94	6.47
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.388	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.427	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.388	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.388	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.388	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.388	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.388	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.427	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.388	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.388	1.29
108-10-1	4-Methyl-2-pentanone	U	6.47	ug/kg	1.62	6.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.388	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.388	1.29
591-78-6	2-Hexanone	U	6.47	ug/kg	1.94	6.47
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.388	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.388	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.388	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.388	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.388	1.29

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318005**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**22.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13624**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 14:12**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 13:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M109.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.388	1.29
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.388	2.59
95-47-6	o-Xylene	U	1.29	ug/kg	0.388	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.388	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.388	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.388	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.388	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.388	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.388	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.388	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.388	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.388	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.388	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.388	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.47	ug/kg	2.07	6.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M109.D
Acq On : 23 Nov 2009 2:12 pm
Operator : RXD1
InstName : VOA6
Sample : |241318005|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 24 08:56:05 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1721947	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1220158	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	555824	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1720152	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1220158	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	555824	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.633	65	494611	48.94 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 97.88%		
43) Toluene-d8	11.626	98	1693766	51.47 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 102.94%		
61) Bromofluorobenzene	14.357	95	599235	56.23 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 112.46%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.703	50	728	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	3414	Below Cal #	45
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.298	41	1142	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	0.000		0	N.D.	
15) Methylene chloride	7.292	84	23517	Below Cal	99
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	9.718	78	454	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	10.096	56	5368	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M109.D
Acq On : 23 Nov 2009 2:12 pm
Operator : RXD1
InstName : VOA6
Sample : |241318005|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 24 08:56:05 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	0.000		0	N.D.	
39)	2-Chloroethylvinyl ether	0.000		0	N.D.	
40)	cis-1,3-Dichloropropylene	0.000		0	N.D.	
42)	4-Methyl-2-pentanone	0.000		0	N.D.	
44)	Toluene	11.699	91	760	N.D.	
45)	trans-1,3-Dichloroprop...	0.000		0	N.D.	
46)	1,1,2-Trichloroethane	0.000		0	N.D.	
47)	2-Hexanone	0.000		0	N.D.	
48)	1,3-Dichloropropane	0.000		0	N.D.	
49)	Tetrachloroethylene	0.000		0	N.D.	
50)	Dibromochloromethane	0.000		0	N.D.	
51)	1,2-Dibromoethane	0.000		0	N.D.	
52)	Chlorobenzene	0.000		0	N.D.	
53)	1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54)	Ethylbenzene	0.000		0	N.D.	
55)	m,p-Xylenes	0.000		0	N.D.	
56)	o-Xylene	0.000		0	N.D.	
57)	Styrene	0.000		0	N.D.	
59)	Bromoform	0.000		0	N.D.	
60)	Isopropylbenzene	0.000		0	N.D.	
62)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63)	1,2,3-Trichloropropane	0.000		0	N.D.	
64)	Bromobenzene	0.000		0	N.D.	
65)	n-Propylbenzene	0.000		0	N.D.	
66)	1,3,5-Trimethylbenzene	14.741	105	198	N.D.	
67)	2-Chlorotoluene	0.000		0	N.D.	
68)	4-Chlorotoluene	0.000		0	N.D.	
69)	tert-Butylbenzene	0.000		0	N.D.	
70)	1,2,4-Trimethylbenzene	0.000		0	N.D.	
71)	sec-Butylbenzene	0.000		0	N.D.	
72)	4-Isopropyltoluene	0.000		0	N.D.	
73)	1,3-Dichlorobenzene	0.000		0	N.D.	
74)	1,4-Dichlorobenzene	0.000		0	N.D.	
75)	n-Butylbenzene	15.894	91	466	N.D.	
76)	1,2-Dichlorobenzene	0.000		0	N.D.	
77)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	0.000		0	N.D.	
79)	Hexachlorobutadiene	0.000		0	N.D.	
80)	Naphthalene	18.289	128	452	N.D.	
81)	1,2,3-Trichlorobenzene	0.000		0	N.D.	
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	0.000		0	N.D.	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	0.000		0	N.D.	
88)	Allyl chloride	0.000		0	N.D.	
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	0.000		0	N.D.	
91)	Isopropyl ether	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M109.D
Acq On : 23 Nov 2009 2:12 pm
Operator : RXD1
InstName : VOA6
Sample : |241318005|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 24 08:56:05 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.072	42	976	N.D.	
98)	Isobutyl alcohol	0.000		0	N.D.	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	0.000		0	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	0.000		0	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	0.000		0	N.D.	
111)	Benzyl chloride	0.000		0m	N.D.	d
112)	bis(2-Chloroisopropyl)...	16.156	45	191	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M109.D
Acq On : 23 Nov 2009 2:12 pm
Operator : RXD1
InstName : VOA6
Sample : |241318005|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 24 08:56:05 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

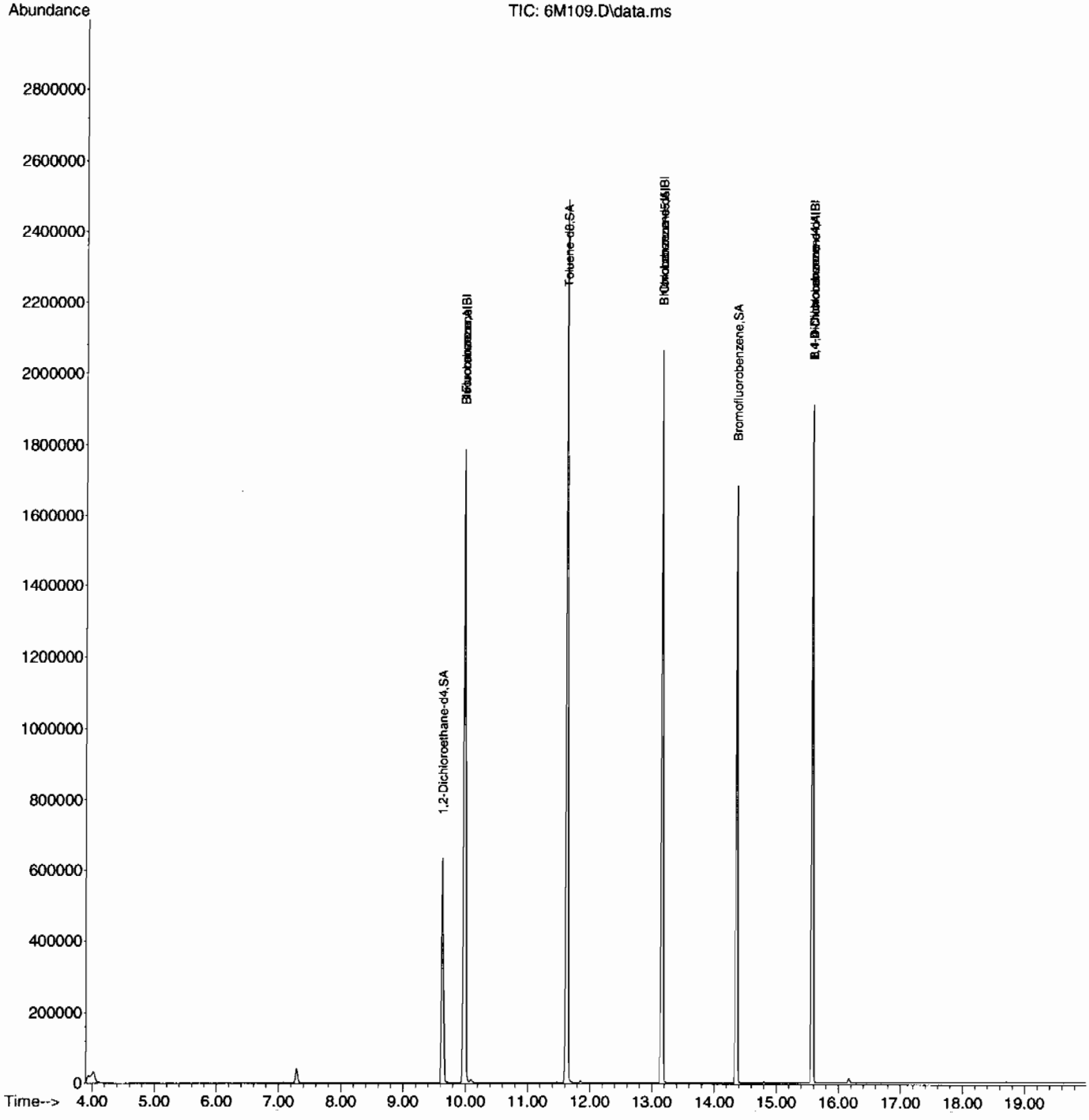

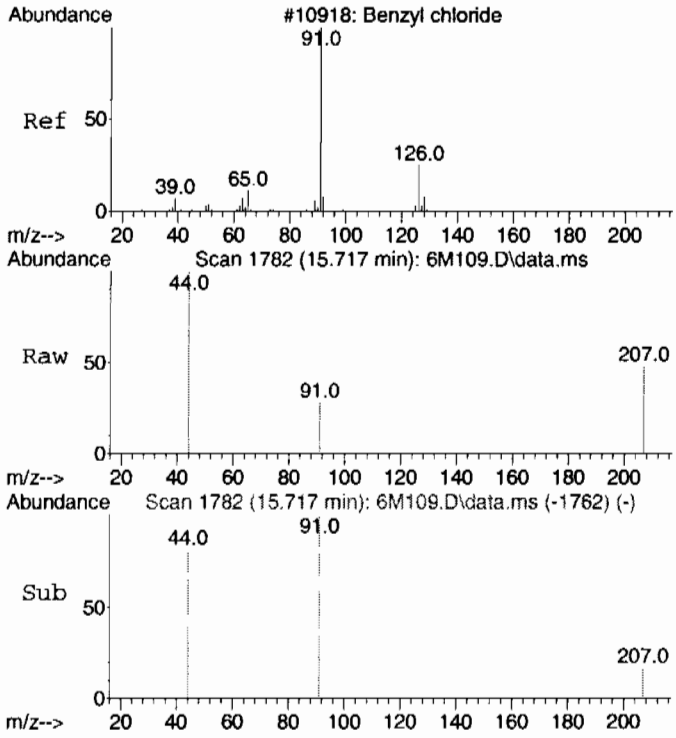

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.06 ug/L
RT: 15.717 min Scan# 1782
Delta R.T. -0.000 min
Lab File: 6M109.D
Acq: 23 Nov 2009 2:12 pm

Tgt Ion: 91 Resp: 826

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

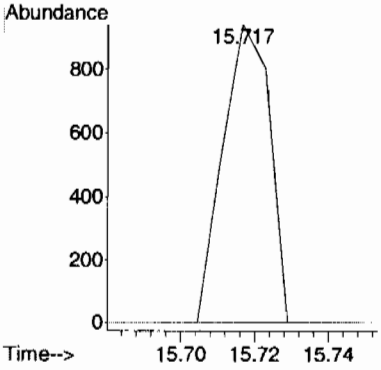

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M109.D
Acq On : 23 Nov 2009 2:12 pm
Operator : RXD1
Sample : |241318005|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M109.D
Acq On : 23 Nov 2009 2:12 pm
Operator : RXD1
Sample : |241318005|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318014**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6085**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 14:40**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 13:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M110.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.356	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.314	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.314	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.314	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.314	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.314	1.05
67-64-1	Acetone	U	5.23	ug/kg	1.74	5.23
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
74-88-4	Iodomethane	U	5.23	ug/kg	1.67	5.23
75-09-2	Methylene chloride	U	5.23	ug/kg	2.09	5.23
75-15-0	Carbon disulfide	U	5.23	ug/kg	1.31	5.23
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.314	1.05
78-93-3	2-Butanone	U	5.23	ug/kg	1.57	5.23
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.314	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.345	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.314	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.314	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.314	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.314	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.314	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.345	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.314	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.314	1.05
108-10-1	4-Methyl-2-pentanone	U	5.23	ug/kg	1.31	5.23
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.314	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.314	1.05
591-78-6	2-Hexanone	U	5.23	ug/kg	1.57	5.23
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.314	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.314	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.314	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.314	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.314	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/23/2009 14:40	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/23/2009 13:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112309V6\6M110.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.314	1.05
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.314	2.09
95-47-6	o-Xylene	U	1.05	ug/kg	0.314	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.314	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.314	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.314	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.314	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.314	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.314	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.314	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.314	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.314	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.314	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.314	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.23	ug/kg	1.67	5.23
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M110.D
Acq On : 23 Nov 2009 2:40 pm
Operator : RXD1
InstName : VOA6
Sample : |241318014|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 24 08:56:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1020172	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	729766	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	357572	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1019758	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	729766	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	357572	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	299453	50.01 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 100.02%		
43) Toluene-d8	11.626	98	997158	50.66 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 101.32%		
61) Bromofluorobenzene	14.357	95	363166	52.97 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 105.94%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	0.000		0	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.718	43	4881	Below Cal	52
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.291	41	406	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	0.000		0	N.D.	
15) Methylene chloride	7.291	84	14108	Below Cal	94
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M110.D
Acq On : 23 Nov 2009 2:40 pm
Operator : RXD1
InstName : VOA6
Sample : |241318014|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 24 08:56:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	0.000		0	N.D.	
39)	2-Chloroethylvinyl ether	0.000		0	N.D.	
40)	cis-1,3-Dichloropropylene	0.000		0	N.D.	
42)	4-Methyl-2-pentanone	0.000		0	N.D.	
44)	Toluene	0.000		0	N.D.	
45)	trans-1,3-Dichloroprop...	0.000		0	N.D.	
46)	1,1,2-Trichloroethane	0.000		0	N.D.	
47)	2-Hexanone	0.000		0	N.D.	
48)	1,3-Dichloropropane	0.000		0	N.D.	
49)	Tetrachloroethylene	0.000		0	N.D.	
50)	Dibromochloromethane	0.000		0	N.D.	
51)	1,2-Dibromoethane	0.000		0	N.D.	
52)	Chlorobenzene	0.000		0	N.D.	
53)	1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54)	Ethylbenzene	0.000		0	N.D.	
55)	m,p-Xylenes	0.000		0	N.D.	
56)	o-Xylene	0.000		0	N.D.	
57)	Styrene	0.000		0	N.D.	
59)	Bromoform	0.000		0	N.D.	
60)	Isopropylbenzene	14.174	105	435	N.D.	
62)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63)	1,2,3-Trichloropropane	0.000		0	N.D.	
64)	Bromobenzene	0.000		0	N.D.	
65)	n-Propylbenzene	0.000		0	N.D.	
66)	1,3,5-Trimethylbenzene	0.000		0	N.D.	
67)	2-Chlorotoluene	0.000		0	N.D.	
68)	4-Chlorotoluene	0.000		0	N.D.	
69)	tert-Butylbenzene	0.000		0	N.D.	
70)	1,2,4-Trimethylbenzene	0.000		0	N.D.	
71)	sec-Butylbenzene	0.000		0	N.D.	
72)	4-Isopropyltoluene	0.000		0	N.D.	
73)	1,3-Dichlorobenzene	0.000		0	N.D.	
74)	1,4-Dichlorobenzene	0.000		0	N.D.	
75)	n-Butylbenzene	0.000		0	N.D.	
76)	1,2-Dichlorobenzene	0.000		0	N.D.	
77)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	0.000		0	N.D.	
79)	Hexachlorobutadiene	0.000		0	N.D.	
80)	Naphthalene	18.283	128	207	N.D.	
81)	1,2,3-Trichlorobenzene	0.000		0	N.D.	
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	0.000		0	N.D.	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	0.000		0	N.D.	
88)	Allyl chloride	7.291	41	218	N.D.	
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	0.000		0	N.D.	
91)	Isopropyl ether	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M110.D
Acq On : 23 Nov 2009 2:40 pm
Operator : RXD1
InstName : VOA6
Sample : |241318014|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 24 08:56:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.065	42	214	N.D.	
98) Isobutyl alcohol	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.174	53	188	N.D.	
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M110.D
Acq On : 23 Nov 2009 2:40 pm
Operator : RXD1
InstName : VOA6
Sample : |241318014|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 24 08:56:41 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

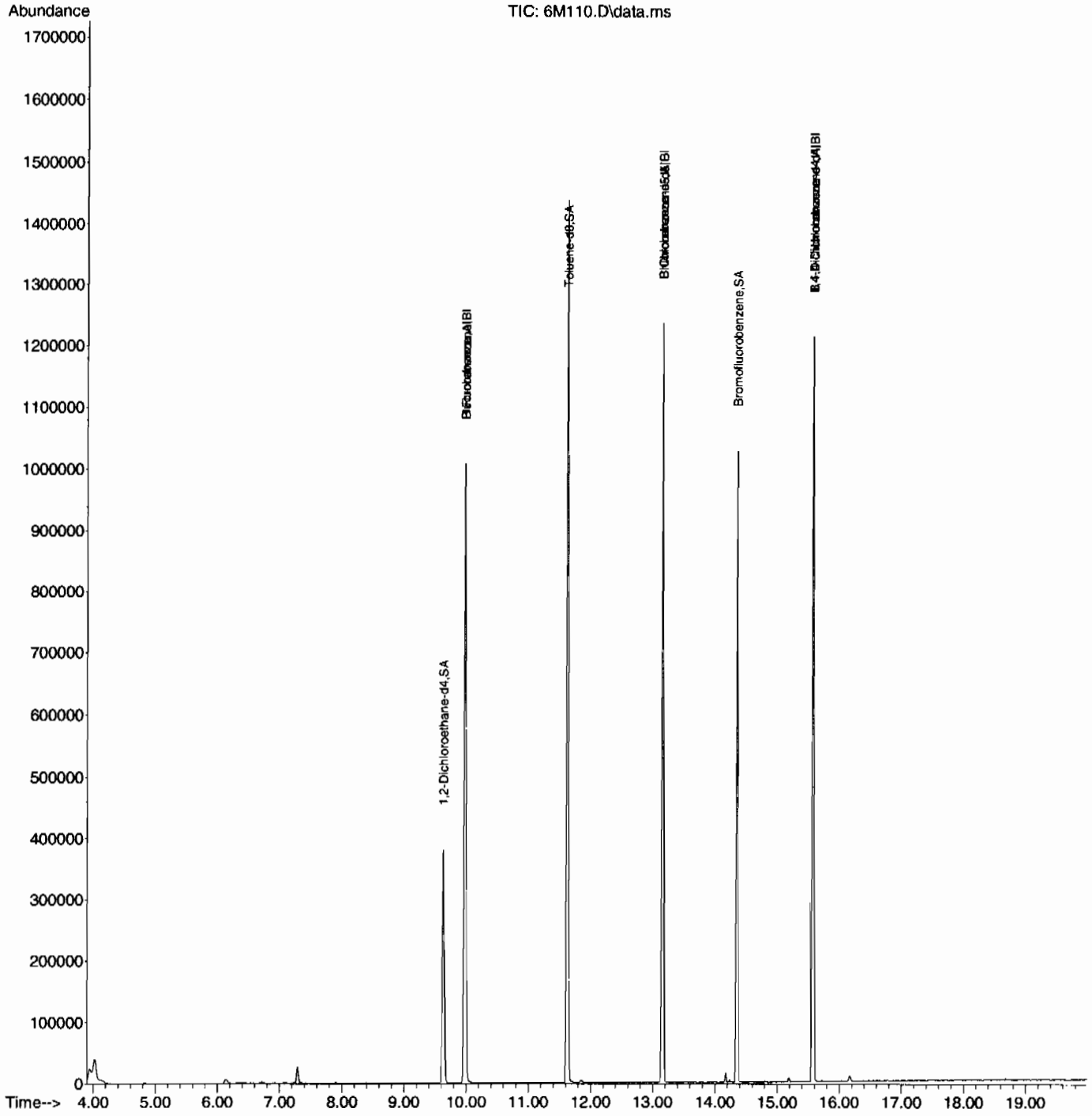

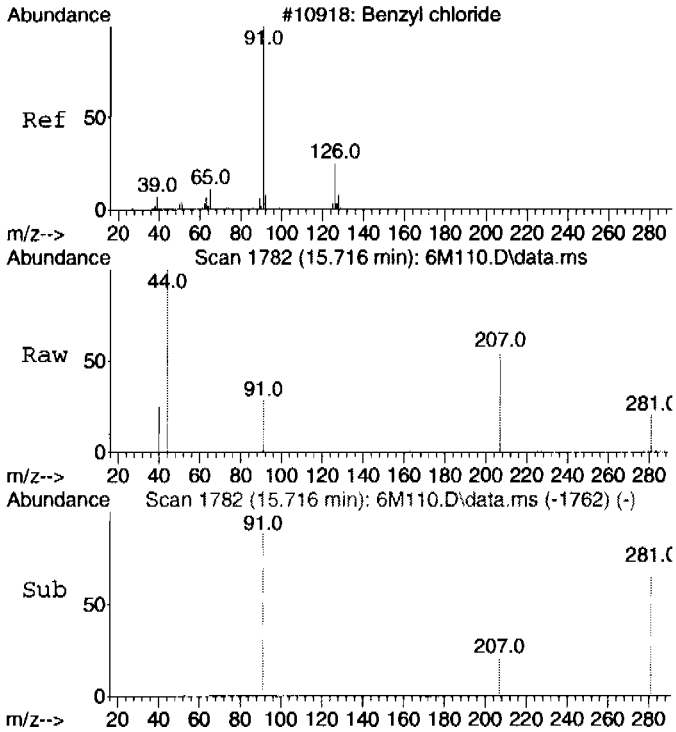

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.07 ug/L
RT: 15.716 min Scan# 1782
Delta R.T. -0.001 min
Lab File: 6M110.D
Acq: 23 Nov 2009 2:40 pm

Tgt Ion: 91 Resp: 574

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	43.2

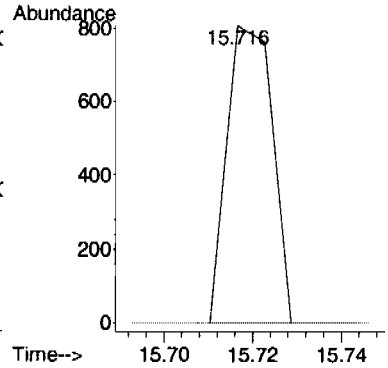

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M110.D
Acq On : 23 Nov 2009 2:40 pm
Operator : RXD1
Sample : |241318014|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M110.D
Acq On : 23 Nov 2009 2:40 pm
Operator : RXD1
Sample : |241318014|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Standards

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOA6
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Last Update : Tue Oct 27 15:11:11 2009
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\102409V6\6H612.D

Injection Date	Mix	Calibration File
24 Oct 2009 4:35 pm	A	C:\msdchem\1\DATA\102409V6\6H612.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\102409V6\6H615.D

Injection Date	Mix	Calibration File
24 Oct 2009 12:52 pm	A	C:\msdchem\1\DATA\102409V6\6H604.D
24 Oct 2009 5:58 pm	B	C:\msdchem\1\DATA\102409V6\6H615.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\102409V6\6H616.D

Injection Date	Mix	Calibration File
24 Oct 2009 1:20 pm	A	C:\msdchem\1\DATA\102409V6\6H605.D
24 Oct 2009 6:26 pm	B	C:\msdchem\1\DATA\102409V6\6H616.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\102409V6\6H617.D

Injection Date	Mix	Calibration File
24 Oct 2009 1:48 pm	A	C:\msdchem\1\DATA\102409V6\6H606.D
24 Oct 2009 6:53 pm	B	C:\msdchem\1\DATA\102409V6\6H617.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\102409V6\6H618.D

Injection Date	Mix	Calibration File
24 Oct 2009 2:16 pm	A	C:\msdchem\1\DATA\102409V6\6H607.D
24 Oct 2009 7:21 pm	B	C:\msdchem\1\DATA\102409V6\6H618.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\102409V6\6H619.D

Injection Date	Mix	Calibration File
24 Oct 2009 2:43 pm	A	C:\msdchem\1\DATA\102409V6\6H608.D
24 Oct 2009 7:49 pm	B	C:\msdchem\1\DATA\102409V6\6H619.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\102409V6\6H620.D

Injection Date	Mix	Calibration File
24 Oct 2009 3:11 pm	A	C:\msdchem\1\DATA\102409V6\6H609.D
24 Oct 2009 8:16 pm	B	C:\msdchem\1\DATA\102409V6\6H620.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\102409V6\6H610.D

Injection Date	Mix	Calibration File
24 Oct 2009 3:39 pm	A	C:\msdchem\1\DATA\102409V6\6H610.D
24 Oct 2009 8:44 pm	B	C:\msdchem\1\DATA\102409V6\6H621.D

Response Factor Report VOA6
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Last Update : Tue Oct 27 15:11:11 2009
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
2)MA Dichlorodifluoromethane	0.2007238	0.1949346 0.2036055	0.1893445	0.2059308	0.1969042	0.1770440	0.1955	AVRG		5.0404
3)MPA Chloromethane	0.3084075	0.3619218 0.3019886	0.3467605	0.3291348	0.3086569	0.2981566	0.3221	AVRG		7.5924
4)MCA Vinyl chloride	0.2684589	0.2739905 0.2603434	0.2814741	0.2714105	0.2689647	0.2569499	0.2688	AVRG		3.0620
5)MA Bromomethane	0.2006270	0.1851867 0.1951015	0.1963652	0.2027344	0.1929540	0.1942839	0.1953	AVRG		2.9085
6)MA Chloroethane	0.2092035	0.1914692 0.2037486	0.2147456	0.2061306	0.2025502	0.2059035	0.2048	AVRG		3.4819
7)MA Trichlorofluoromethane	0.3774625	0.3544923 0.3635442	0.3728827	0.3677065	0.3658663	0.3654967	0.3668	AVRG		1.9791
8)MA Ethyl ether	0.2596563	0.3126334 0.2560379	0.2962872	0.2735363	0.2679534	0.2626687	0.2755	AVRG		7.6505
9)MA Acetone 0.0295 | 0.1620 | 0.00	1870151	52426 3221230	81078	185693	379498	691980		LINR		0.9926
10)MCA 1,1-Dichloroethylene	0.3979092	0.3843097 0.3857425	0.3781450	0.3695250	0.3909570	0.3924777	0.3856	AVRG		2.4676
11)MA Iodomethane	0.4001063	0.3896549 0.3762245	0.3997866	0.3989849	0.4085247	0.4040238	0.3968	AVRG		2.7002
12)MA Acetonitrile	0.0399084	0.0468162 0.0379779	0.0425423	0.0417822	0.0421762	0.0392300	0.0415	AVRG		6.9560
13)MA Methyl acetate	0.2280450	0.2813401 0.2146164	0.2421859	0.2462554	0.2553215	0.2293565	0.2424	AVRG		8.9836
14)MA Carbon disulfide	0.7595449	0.7679612 0.6980109	0.7715408	0.7527462	0.7811560	0.7683611	0.7570	AVRG		3.6369
15)MA Methylene chloride 0.0162 | 0.2564 | 0.00	546232	1062533	49484	80943	128795	237075		LINR		0.9999
16)MA tert-Butyl methyl ether	0.7296931	0.7179598 0.7145189	0.7712044	0.7263157	0.7840294	0.7240151	0.7382	AVRG		3.7403

Response Factor Report VOA6
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Method File : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Last Update : Tue Oct 27 15:11:11 2009
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
17)MA trans-1,2-Dichloroethyle		0.3568109	0.3835086	0.3796059	0.3841761	0.3857647				
	0.3895242	0.3804338					0.3800	AVRG		2.8258
18)MA Vinyl acetate		0.4625029	0.5290185	0.5143261	0.5179135	0.5438303				
	0.5583933	0.5126229					0.5198	AVRG		5.8351
19)MPA 1,1-Dichloroethane		0.4599500	0.4825704	0.4741347	0.4772434	0.4765840				
	0.4790350	0.4673855					0.4738	AVRG		1.6279
20)MA 2-Butanone		0.2807418	0.2370045	0.2299866	0.2343313	0.2195873				
	0.2404963	0.2106839					0.2361	AVRG		9.4261
21)MA cis-1,2-Dichloroethylene		0.4300828	0.4309965	0.4184695	0.4324172	0.4311541				
	0.4298114	0.4223047					0.4279	AVRG		1.2412
22)MA 2,2-Dichloropropane		0.3716697	0.3876578	0.3716815	0.3749891	0.3831093				
	0.3856868	0.3768202					0.3788	AVRG		1.7525
23)MA Bromochloromethane		0.1277958	0.1284350	0.1264824	0.1294269	0.1307021				
	0.1307874	0.1294770					0.1290	AVRG		1.2094
24)MCA Chloroform		0.4355427	0.4429128	0.4215686	0.4317558	0.4293678				
	0.4295453	0.4237849					0.4306	AVRG		1.6637
25)MA 1,1,1-Trichloroethane		0.3619218	0.3682907	0.3639723	0.3806892	0.3793915				
	0.3884426	0.3807567					0.3748	AVRG		2.6745
26)MA Cyclohexane		0.5187869	0.5044548	0.4900244	0.5245400	0.5183907				
	0.5299105	0.5085298					0.5135	AVRG		2.6375
27)MA 1,1-Dichloropropene		0.3223814	0.3248255	0.3254928	0.3445817	0.3425936				
	0.3468416	0.3365580					0.3348	AVRG		3.0969
28)MA Carbon tetrachloride		0.3220573	0.3179186	0.3095263	0.3376541	0.3360144				
	0.3501342	0.3409238					0.3306	AVRG		4.3574
29)SA 1,2-Dichloroethane-d4		0.2960753	0.2960139	0.2936315	0.2906163	0.2917162				
	0.2948414	0.2914611					0.2935	AVRG		0.7672
30)MA 1,2-Dichloroethane		0.3809939	0.3510741	0.3530411	0.3600067	0.3599446				
	0.3561440	0.3488891					0.3586	AVRG		2.9974
31)MA Benzene	1.1026208	1.0306431	1.0413567	1.0098253	1.0176021	1.0057871				
	0.9932486	0.9652330					1.0208	AVRG		3.9563

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
32)MA Cyclohexene	0.5371723	0.5208313 0.5170407	0.5149796	0.5058987	0.5254021	0.5243029	0.5208	AVRG		1.8741
33)MA n-Butyl alcohol	0.0086957 0.0094544	0.0082651 0.0091611	0.0070081	0.0079388	0.0093399	0.0087643	0.0086	AVRG	#	9.5604
34)MA Trichloroethylene	0.2550768	0.2671844 0.2503287	0.2607029	0.2509823	0.2566304	0.2530034	0.2563	AVRG		2.3318
35)MCA 1,2-Dichloropropane	0.2750552	0.2760099 0.2720248	0.2804368	0.2747759	0.2767004	0.2818983	0.2767	AVRG		1.2320
36)MA Methylcyclohexane	0.4844007	0.4837092 0.4575290	0.4745630	0.4596024	0.4759361	0.4690220	0.4721	AVRG		2.2630
37)MA Dibromomethane	0.1429074	0.1351254 0.1440045	0.1481942	0.1432787	0.1424380	0.1412883	0.1425	AVRG		2.7383
38)MA Bromodichloromethane	0.3265399	0.2971014 0.3269517	0.3019164	0.3040197	0.3051931	0.3200302	0.3117	AVRG		3.9996
39)MA 2-Chloroethylvinyl ether	0.1576001	0.1378429 0.1522772	0.1404322	0.1750824	0.1514161	0.1522106	0.1524	AVRG		8.0256
40)MA cis-1,3-Dichloropropylen	0.4095452	0.3809440 0.4106327	0.3771963	0.3746474	0.3928717	0.4021872	0.3926	AVRG		3.8907
42)MA 4-Methyl-2-pentanone	0.1771311	0.1648743 0.1570270	0.1522393	0.1527760	0.1618423	0.1560351	0.1603	AVRG		5.4457
43)SA Toluene-d8	1.3587098	1.3361573 1.3365377	1.3457250	1.3480355	1.3489545	1.3652938	1.3485	AVRG		0.7952
44)MCA Toluene	1.4144873	1.5816166 1.3558467	1.5242297	1.4443527	1.4680095	1.4510983	1.4628	AVRG		5.0056
45)MA trans-1,3-Dichloropropyl	0.5098437	0.4254126 0.5114243	0.4503561	0.4677269	0.4837046	0.5001501	0.4784	AVRG		6.7676
46)MA 1,1,2-Trichloroethane	0.2386370	0.2357652 0.2354357	0.2307913	0.2416164	0.2345597	0.2383339	0.2364	AVRG		1.4662
47)MA 2-Hexanone	0.5249804	0.4920682 0.4509824	0.4441848	0.4402444	0.4627991	0.4503632	0.4665	AVRG		6.6507

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
48)MA 1,3-Dichloropropane		0.5209758	0.5145347	0.5038982	0.5107095	0.5052886				
	0.4898487	0.4710786					0.5023	AVRG		3.3612
49)MA Tetrachloroethylene		0.3111939	0.3083568	0.3032880	0.3039861	0.3009558				
	0.2963188	0.2816306					0.3008	AVRG		3.2374
50)MA Dibromochloromethane		0.2919334	0.3060094	0.3091726	0.3205701	0.3321987				
	0.3460405	0.3518813					0.3225	AVRG		6.8150
51)MA 1,2-Dibromoethane		0.2706896	0.2849511	0.2770418	0.2911055	0.2899760				
	0.2957487	0.2940682					0.2862	AVRG		3.2444
52)MPA Chlorobenzene		0.9711280	0.9693644	0.9448679	0.9487396	0.9563420				
	0.9311840	0.9080033					0.9471	AVRG		2.3404
53)MA 1,1,1,2-Tetrachloroethan		0.3054796	0.3283095	0.3376290	0.3362187	0.3433435				
	0.3455117	0.3376086					0.3334	AVRG		4.0506
54)MCA Ethylbenzene		1.7312976	1.6899749	1.6331798	1.6572100	1.6494010				
	1.6279277	1.5325696					1.6459	AVRG		3.7373
55)MA m,p-Xylenes		0.6471610	0.6820829	0.6548723	0.6680965	0.6720362				
	0.6527348	0.6202835					0.6568	AVRG		3.0741
56)MA o-Xylene		0.6542198	0.6577587	0.6531421	0.6539896	0.6528152				
	0.6444455	0.6192632					0.6479	AVRG		2.0492
57)MA Styrene		1.0109264	1.0001524	1.0447759	1.0635043	1.0841057				
	1.0747865	1.0389608					1.0453	AVRG		3.0169
59)MPA Bromoform		0.3495621	0.3406215	0.3560620	0.3833812	0.3999986				
	0.4226366	0.4398344					0.3846	AVRG		9.9083
60)MA Isopropylbenzene		3.1177793	3.1884546	3.1683438	3.2055781	3.1908421				
	3.0465878	2.9238089					3.1202	AVRG		3.2906
61)SA Bromofluorobenzene		0.9449537	0.9660872	0.9617003	0.9642455	0.9701518				
	0.9526179	0.9508924					0.9587	AVRG		0.9639
62)MPA 1,1,2,2-Tetrachloroethan		0.7057453	0.6722677	0.6574544	0.7063764	0.6897782				
	0.6882731	0.6805637					0.6858	AVRG		2.5655
63)MA 1,2,3-Trichloropropane		0.1990691	0.1742021	0.1949313	0.2073723	0.1912577				
	0.1924368	0.1923008					0.1931	AVRG		5.1976

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
64)MA Bromobenzene		0.7264134	0.8054848	0.7771054	0.7653581	0.7680099				
	0.7494610	0.7353363					0.7610	AVRG		3.5154
65)MA n-Propylbenzene		3.6735267	3.6737477	3.6176383	3.6645108	3.6579761				
	3.4915555	3.3272296					3.5866	AVRG		3.6635
66)MA 1,3,5-Trimethylbenzene		2.6711889	2.7792946	2.7226501	2.7336345	2.7117106				
	2.6114312	2.4895280					2.6742	AVRG		3.6250
67)MA 2-Chlorotoluene		0.7446062	0.8039157	0.7603922	0.7681091	0.7690425				
	0.7276538	0.7157612					0.7556	AVRG		3.8898
68)MA 4-Chlorotoluene		2.1851806	2.2868778	2.2220157	2.2117892	2.2141790				
	2.1383002	2.0863411					2.1921	AVRG		2.9376
69)MA tert-Butylbenzene		0.5649676	0.5920864	0.5845488	0.5865341	0.5838400				
	0.5765739	0.5609431					0.5785	AVRG		2.0076
70)MA 1,2,4-Trimethylbenzene		2.7331930	2.6910794	2.7301613	2.7809519	2.7773751				
	2.6880292	2.5935442					2.7135	AVRG		2.3710
71)MA sec-Butylbenzene		3.6321288	3.5608035	3.5421385	3.6068757	3.6577821				
	3.4786274	3.2896605					3.5383	AVRG		3.5316
72)MA 4-Isopropyltoluene		2.9061486	2.9490718	2.9158649	2.9853360	3.0222059				
	2.8716388	2.7397689					2.9129	AVRG		3.1413
73)MA 1,3-Dichlorobenzene		1.5438527	1.5166350	1.4567838	1.5150443	1.4984247				
	1.4430905	1.4159775					1.4843	AVRG		3.1192
74)MA 1,4-Dichlorobenzene		1.6059187	1.5911048	1.4884292	1.5328196	1.4993510				
	1.4638003	1.4300724					1.5159	AVRG		4.2713
75)MA n-Butylbenzene		2.7419181	2.8151016	2.6593335	2.7788935	2.8011419				
	2.7312392	2.5914164					2.7313	AVRG		2.9528
76)MA 1,2-Dichlorobenzene		1.4969474	1.4833700	1.4041921	1.4421347	1.4390281				
	1.3919804	1.3599410					1.4311	AVRG		3.4435
77)MA 1,2-Dibromo-3-chloroprop		0.1236369	0.1252147	0.1281818	0.1443507	0.1406293				
	0.1493052	0.1554590					0.1381	AVRG		9.0914
78)MA 1,2,4-Trichlorobenzene		1.0075358	1.0463740	0.9829938	1.0305835	1.0415767				
	1.0255568	0.9878176					1.0175	AVRG		2.4800

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
79)MA Hexachlorobutadiene	0.6574636	0.6750527 0.6279511	0.6678115	0.6233311	0.6567761	0.6764475	0.6550	AVRG		3.2805
80)MA Naphthalene	2.1370954	2.1166791 2.0950883	2.0761782	1.9496100	2.1145251	2.1445121	2.0905	AVRG		3.1746
81)MA 1,2,3-Trichlorobenzene	0.8544275	0.8777108 0.8433039	0.8617216	0.7953673	0.8411405	0.8607144	0.8478	AVRG		3.0883
83)B Chlorotrifluoroethylene	0.1629355	0.1708102 0.1779725	0.1476672	0.1824379	0.1652621	0.2149034	0.1746	AVRG		12.0617
84)B 2-Chloro-1,1,1-trifluoro	0.3375907	0.3244064 0.3251937	0.3158297	0.3284119	0.3215108	0.3290275	0.3260	AVRG		2.0809
85)B Acrolein	0.0532268	0.0488853 0.0540370	0.0471095	0.0496201	0.0502338	0.0502078	0.0505	AVRG		4.7833
86)B Trichlorotrifluoroethane	0.0965454	0.1045306 0.0911761	0.0993083	0.0971096	0.0985662	0.0967983	0.0977	AVRG		4.0730
87)B Isopropyl Alcohol	0.0215014	0.0190817 0.0222553	0.0195819	0.0210914	0.0215040	0.0212994	0.0209	AVRG		5.4559
88)B Allyl chloride	0.4724229	0.5054182 0.4259828	0.4784378	0.4819973	0.4856917	0.4774426	0.4753	AVRG		5.0918
89)B tert-Butyl Alcohol	0.0316031	0.0277314 0.0325111	0.0288508	0.0315146	0.0324509	0.0317448	0.0309	AVRG		6.0261
90)B Acrylonitrile	0.0987384	0.0907017 0.0937050	0.0918353	0.0963871	0.1018168	0.0979435	0.0959	AVRG		4.1685
91)B Isopropyl ether	1.0780483	1.0364692 1.0862944	1.0420861	1.0654553	1.0752739	1.0735639	1.0653	AVRG		1.7733
92)B 2-Chloro-1,3-butadiene	0.4145264	0.3888724 0.3968089	0.3787105	0.3861292	0.3985175	0.4016183	0.3950	AVRG		2.9636
93)B Ethyl tert-butyl ether	0.9130544	0.8614187 0.9303461	0.8653264	0.8903207	0.8980403	0.9004698	0.8941	AVRG		2.7544
94)B Ethyl acetate	0.2686732	0.2939252 0.2497619	0.2697549	0.2739178	0.2824004	0.2722150	0.2729	AVRG		4.9537

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
95)B Propionitrile	0.0382050	0.0355202 0.0367023	0.0348844	0.0372536	0.0388382	0.0380863	0.0371	AVRG		3.9394
96)B Methacrylonitrile	0.1714507	0.1625664 0.1602531	0.1676208	0.1724882	0.1757415	0.1719562	0.1689	AVRG		3.3502
97)B Tetrahydrofuran	0.0866751	0.0927781 0.0820687	0.0861200	0.0871745	0.0920829	0.0881280	0.0879	AVRG		4.1698
98)B Isobutyl alcohol	0.0108386	0.0101346 0.0104146	0.0098588	0.0104495	0.0110909	0.0110210	0.0105	AVRG		4.3740
99)B Methyl tert-amyl ether	0.7617875	0.7184414 0.7750501	0.7041133	0.7404660	0.7550933	0.7496584	0.7435	AVRG		3.3357
100)B Methyl methacrylate	0.1617700	0.1502524 0.1506462	0.1533109	0.1577906	0.1650336	0.1634223	0.1575	AVRG		3.9079
101)B 1,4-Dioxane	0.0024476	0.0022031 0.0023700	0.0026057	0.0026576	0.0026496	0.0025034	0.0025	AVRG	#	6.6696
102)B 2-Nitropropane	0.0850058	0.0730086 0.0821253	0.0656477	0.0716571	0.0801185	0.0810275	0.0769	AVRG		9.0300
104)B Ethyl methacrylate	0.2149971	0.2012856 0.2000614	0.2045332	0.2109058	0.2182954	0.2178551	0.2097	AVRG		3.6953
106)B 1-Chlorohexane	0.7513958	0.6993714 0.7619439	0.7448033	0.7522050	0.7767116	0.7631240	0.7499	AVRG		3.2778
107)B cis-1,4-Dichloro-2-buten	0.2443282	0.2014545 0.2330754	0.2127450	0.2254161	0.2390359	0.2433038	0.2285	AVRG		7.1266
108)B Cyclohexanone -0.0130 | 0.0379 | 0.00		10167	20656	60791	135250	294554		LINR		0.9981
109)B trans-1,4-Dichloro-2-but	0.2299809	0.2079240 0.2196742	0.2082846	0.2204964	0.2320928	0.2271758	0.2208	AVRG		4.4384
110)B Pentachloroethane	0.2715175	0.3276782 0.2725130	0.3329092	0.3375852	0.3562839	0.3225379	0.3173	AVRG		10.3030
111)B Benzyl chloride	1.2404109	1.1237605 1.0752331	1.1469744	1.2292171	1.2862199	1.2764704	1.1969	AVRG		6.8125

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
12)B bis(2-Chloroisopropyl)et	0.3772814	0.3707145 0.3547348	0.3447235	0.3832608	0.3903080	0.3860399	0.3724	AVRG		4.5585

#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-543

Instrument ID: VOA6.I **Injection Date** 24-OCT-09 17:02

Data File: 102409V6\6H613.D **Init. Cal. Date(s)** 24-OCT-09 12:52 - 24-OCT-09 20:4

Lab Sample ID W6VM091024-09 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.2935	0.289		.01		-1.53322	30		Averaged	
S	Toluene-d8	1.3485	1.353		.01		0.3337	30		Averaged	
S	Bromofluorobenzene	0.9587	0.953		.01		-0.59456	30		Averaged	
	Dichlorodifluoromethane	0.1955	0.17		.01		-13.04348	30		Averaged	
	Chloromethane	0.3221	0.253		.1		-21.45296	30		Averaged	spcc
	Vinyl chloride	0.2688	0.235		.01		-12.5744	20		Averaged	ccc
	Bromomethane	0.1953	0.173		.01		-11.41833	30		Averaged	
	Chloroethane	0.2048	0.181		.01		-11.62109	30		Averaged	
	Trichlorofluoromethane	0.3668	0.334		.01		-8.9422	30		Averaged	
	Ethyl ether	0.2755	0.23		.01		-16.51543	30		Averaged	
	1,1-Dichloroethylene	0.3856	0.339		.01		-12.08506	20		Averaged	ccc
	Acetone	250	194.46	250			-22.216	40		Linear	
	Iodomethane	0.3968	0.344		.01		-13.30645	30		Averaged	
	Acetonitrile	0.0415	0.035		.01		-15.66265	30		Averaged	
	Carbon disulfide	0.757	0.689		.01		-8.98283	30		Averaged	
	Methyl acetate	0.2424	0.195		.01		-19.55446	40		Averaged	
	Methylene chloride	50	45.14	50			-9.72	30		Linear	
	tert-Butyl methyl ether	0.7382	0.653		.01		-11.54159	30		Averaged	
	trans-1,2-Dichloroethylene	0.38	0.348		.01		-8.42105	30		Averaged	
	Vinyl acetate	0.5198	0.56		.01		7.73374	40		Averaged	
	1,1-Dichloroethane	0.4738	0.431		.1		-9.03335	30		Averaged	spcc
	2-Butanone	0.2361	0.169		.01		-28.42016	40		Averaged	
	cis-1,2-Dichloroethylene	0.4279	0.39		.01		-8.85721	30		Averaged	
	2,2-Dichloropropane	0.3788	0.353		.01		-6.81098	30		Averaged	
	Bromochloromethane	0.129	0.12		.01		-6.97674	30		Averaged	
	Chloroform	0.4306	0.392		.01		-8.96424	20		Averaged	ccc
	1,1,1-Trichloroethane	0.3748	0.349		.01		-6.88367	30		Averaged	
	Cyclohexane	0.5135	0.486		.01		-5.3554	30		Averaged	
	1,1-Dichloropropene	0.3348	0.317		.01		-5.31661	30		Averaged	
	Carbon tetrachloride	0.3306	0.314		.01		-5.02117	30		Averaged	
	1,2-Dichloroethane	0.3586	0.321		.01		-10.48522	30		Averaged	
	Benzene	1.0208	0.914		.01		-10.46238	30		Averaged	
	Cyclohexene	0.5208	0.474		.01		-8.98618	30		Averaged	
	n-Butyl alcohol	0.0086	0.008		.01		-6.97674	40		Averaged	
	Trichloroethylene	0.2563	0.232		.01		-9.48108	30		Averaged	
	1,2-Dichloropropane	0.2767	0.255		.01		-7.84243	20		Averaged	ccc
	Methylcyclohexane	0.4721	0.437		.01		-7.43487	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I **Injection Date** 24-OCT-09 17:02

Data File: 102409V6\6H613.D **Init. Cal. Date(s)** 24-OCT-09 12:52 24-OCT-09 20:4

Lab Sample ID W6VM091024-09 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1425	0.132		.01		-7.36842	30		Averaged	
Bromodichloromethane	0.3117	0.302		.01		-3.11197	30		Averaged	
2-Chloroethylvinyl ether	0.1524	0.148		.01		-2.88714	30		Averaged	
cis-1,3-Dichloropropylene	0.3926	0.379		.01		-3.46409	30		Averaged	
4-Methyl-2-pentanone	0.1603	0.138		.01		-13.91142	40		Averaged	
Toluene	1.4628	1.302		.01		-10.99262	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4784	0.47		.01		-1.75585	30		Averaged	
1,1,2-Trichloroethane	0.2364	0.219		.01		-7.36041	30		Averaged	
2-Hexanone	0.4665	0.362		.01		-22.40086	40		Averaged	
1,3-Dichloropropane	0.5023	0.453		.01		-9.81485	30		Averaged	
Tetrachloroethylene	0.3008	0.272		.01		-9.57447	30		Averaged	
Dibromochloromethane	0.3225	0.316		.01		-2.0155	30		Averaged	
1,2-Dibromoethane	0.2862	0.272		.01		-4.96157	30		Averaged	
Chlorobenzene	0.9471	0.876		.3		-7.50713	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3334	0.319		.01		-4.31914	30		Averaged	
Ethylbenzene	1.6459	1.503		.01		-8.68218	20		Averaged	ccc
m,p-Xylenes	0.6568	0.606		.01		-7.73447	30		Averaged	
o-Xylene	0.6479	0.597		.01		-7.85615	30		Averaged	
Styrene	1.0453	0.999		.01		-4.42935	30		Averaged	
Bromoform	0.3846	0.387		.1		0.62402	30		Averaged	spcc
Isopropylbenzene	3.1202	2.865		.01		-8.17896	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6858	0.63		.3		-8.13648	30		Averaged	spcc
1,2,3-Trichloropropane	0.1931	0.178		.01		-7.81978	30		Averaged	
Bromobenzene	0.761	0.699		.01		-8.14717	30		Averaged	
n-Propylbenzene	3.5866	3.294		.01		-8.15814	30		Averaged	
2-Chlorotoluene	0.7556	0.702		.01		-7.0937	30		Averaged	
1,3,5-Trimethylbenzene	2.6742	2.447		.01		-8.496	30		Averaged	
4-Chlorotoluene	2.1921	2.017		.01		-7.98777	30		Averaged	
tert-Butylbenzene	0.5785	0.542		.01		-6.30942	30		Averaged	
1,2,4-Trimethylbenzene	2.7135	2.512		.01		-7.42583	30		Averaged	
sec-Butylbenzene	3.5383	3.29		.01		-7.01749	30		Averaged	
4-Isopropyltoluene	2.9129	2.726		.01		-6.41629	30		Averaged	
1,3-Dichlorobenzene	1.4843	1.376		.01		-7.29637	30		Averaged	
1,4-Dichlorobenzene	1.5159	1.392		.01		-8.17336	30		Averaged	
n-Butylbenzene	2.7313	2.563		.01		-6.1619	30		Averaged	
1,2-Dichlorobenzene	1.4311	1.306		.01		-8.74153	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1381	0.136		.01		-1.52064	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I **Injection Dat** 24-OCT-09 17:02

Data File: 102409V6\6H613.D **Init. Cal. Date(s)** 24-OCT-09 12:52 24-OCT-09 20:4

Lab Sample ID W6VM091024-09 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.0175	0.978		.01		-3.88206	30		Averaged
Hexachlorobutadiene	0.655	0.628		.01		-4.12214	30		Averaged
Naphthalene	2.0905	1.953		.01		-6.57737	30		Averaged
1,2,3-Trichlorobenzene	0.8478	0.839		.01		-1.03798	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H613.D
Acq On : 24 Oct 2009 5:02 pm
Operator : RXY1
InstName : VOA6
Sample : |W6VM091024-09|ICV|1|VOAF|1|
Misc : ICV 5mL N/A MIX[A] 1011-01B+1022-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 27 15:16:03 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1996173	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.162	117	1493528	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	829029	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1994294	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.162	117	1493528	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	829029	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	577446	49.28 ug/L	0.00
43) Toluene-d8	11.626	98	2021096	50.18 ug/L	0.00
61) Bromofluorobenzene	14.357	95	789981	49.70 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.360	85	338415	43.36 ug/L	100
3) Chloromethane	4.713	50	505448	39.30 ug/L	99
4) Vinyl chloride	4.934	62	468202	43.63 ug/L	99
5) Bromomethane	5.508	94	346095	44.38 ug/L	100
6) Chloroethane	5.629	64	360957	44.14 ug/L	100
7) Trichlorofluoromethane	6.032	101	666367	45.51 ug/L	100
8) Ethyl ether	6.334	59	458395	41.67 ug/L	100
9) Acetone	6.718	43	1316903	194.46 ug/L	100
10) 1,1-Dichloroethylene	6.718	61	676169	43.92 ug/L	100
11) Iodomethane	6.962	142	3431388	216.63 ug/L	100
12) Acetonitrile	7.078	41	1753422	1058.55 ug/L	99
13) Methyl acetate	7.102	43	1941838	200.62 ug/L	100
14) Carbon disulfide	7.090	76	6878404	227.58 ug/L	100
15) Methylene chloride	7.291	84	494542	45.14 ug/L	99
16) tert-Butyl methyl ether	7.578	73	1303319	44.22 ug/L	99
17) trans-1,2-Dichloroethy...	7.627	61	694385	45.77 ug/L	99
18) Vinyl acetate	8.066	43	5592217	269.48 ug/L	99
19) 1,1-Dichloroethane	8.108	63	861058	45.52 ug/L	100
20) 2-Butanone	8.694	43	1687807	179.05 ug/L	100
21) cis-1,2-Dichloroethylene	8.748	61	779473	45.63 ug/L	100
22) 2,2-Dichloropropane	8.773	77	704144	46.56 ug/L	99
23) Bromochloromethane	9.023	128	239746	46.55 ug/L	97
24) Chloroform	9.059	83	782973	45.54 ug/L	99
25) 1,1,1-Trichloroethane	9.328	97	697149	46.59 ug/L	100
26) Cyclohexane	9.413	56	970195	47.32 ug/L	100
27) 1,1-Dichloropropene	9.486	75	633010	47.36 ug/L	99
28) Carbon tetrachloride	9.517	117	627089	47.51 ug/L	100
30) 1,2-Dichloroethane	9.712	62	641670	44.82 ug/L	100
31) Benzene	9.724	78	1823559	44.75 ug/L	100
32) Cyclohexene	9.834	67	945984	45.50 ug/L	99
33) n-Butyl alcohol	10.084	56	1652573	4825.31 ug/L	100
34) Trichloroethylene	10.370	95	462646	45.22 ug/L	99
35) 1,2-Dichloropropane	10.614	63	508778	46.06 ug/L	100
36) Methylcyclohexane	10.608	83	873265	46.33 ug/L	100
37) Dibromomethane	10.754	93	263426	46.32 ug/L	99
38) Bromodichloromethane	10.864	83	602735	48.44 ug/L	99
39) 2-Chloroethylvinyl ether	11.089	63	1481971	243.56 ug/L	100
40) cis-1,3-Dichloropropylene	11.315	75	756549	48.27 ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H613.D
Acq On : 24 Oct 2009 5:02 pm
Operator : RXY1
InstName : VOA6
Sample : |W6VM091024-09|ICV|1|VOAF|1|
Misc : ICV 5mL N/A MIX[A] 1011-01B+1022-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 27 15:16:03 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42)	4-Methyl-2-pentanone	11.413	58	1033202	215.81 ug/L	100
44)	Toluene	11.699	91	1944400	44.50 ug/L	100
45)	trans-1,3-Dichloroprop...	11.864	75	702631	49.17 ug/L	100
46)	1,1,2-Trichloroethane	12.083	83	327186	46.32 ug/L	99
47)	2-Hexanone	12.266	43	2702269	193.92 ug/L	99
48)	1,3-Dichloropropane	12.278	76	677303	45.14 ug/L	85
49)	Tetrachloroethylene	12.290	164	406791	45.27 ug/L	100
50)	Dibromochloromethane	12.540	129	471457	48.93 ug/L	100
51)	1,2-Dibromoethane	12.711	107	406428	47.54 ug/L	100
52)	Chlorobenzene	13.193	112	1308501	46.25 ug/L	100
53)	1,1,1,2-Tetrachloroethane	13.248	131	476126	47.80 ug/L	100
54)	Ethylbenzene	13.254	91	2245114	45.66 ug/L	100
55)	m,p-Xylenes	13.363	106	1809236	92.23 ug/L	100
56)	o-Xylene	13.796	106	891119	46.04 ug/L	99
57)	Styrene	13.802	104	1492623	47.80 ug/L	99
59)	Bromoform	14.064	173	320805	50.31 ug/L	99
60)	Isopropylbenzene	14.156	105	2375171	45.91 ug/L	100
62)	1,1,2,2-Tetrachloroethane	14.442	83	522535	45.95 ug/L	99
63)	1,2,3-Trichloropropane	14.528	110	147159	45.97 ug/L	97
64)	Bromobenzene	14.564	156	579597	45.93 ug/L	99
65)	n-Propylbenzene	14.583	91	2730500	45.92 ug/L	100
66)	1,3,5-Trimethylbenzene	14.741	105	2028588	45.75 ug/L	100
67)	2-Chlorotoluene	14.735	126	582372	46.48 ug/L	98
68)	4-Chlorotoluene	14.833	91	1672222	46.01 ug/L	99
69)	tert-Butylbenzene	15.107	134	449307	46.84 ug/L	100
70)	1,2,4-Trimethylbenzene	15.150	105	2082215	46.28 ug/L	100
71)	sec-Butylbenzene	15.333	105	2727415	46.49 ug/L	100
72)	4-Isopropyltoluene	15.454	119	2259925	46.79 ug/L	99
73)	1,3-Dichlorobenzene	15.515	146	1140762	46.35 ug/L	100
74)	1,4-Dichlorobenzene	15.601	146	1153672	45.90 ug/L	100
75)	n-Butylbenzene	15.887	91	2124867	46.92 ug/L	100
76)	1,2-Dichlorobenzene	16.021	146	1082497	45.62 ug/L	100
77)	1,2-Dibromo-3-chloropr...	16.881	157	112806	49.26 ug/L	99
78)	1,2,4-Trichlorobenzene	17.911	180	810901	48.07 ug/L	98
79)	Hexachlorobutadiene	18.076	225	520799	47.96 ug/L	99
80)	Naphthalene	18.289	128	1618904	46.71 ug/L	100
81)	1,2,3-Trichlorobenzene	18.625	180	695304	49.46 ug/L	99
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	6.468		0m	N.D. d	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	6.724		0m	N.D. d	
88)	Allyl chloride	7.078		0m	N.D. d	
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	7.578		0m	N.D. d	
91)	Isopropyl ether	8.066		0m	N.D. d	
92)	2-Chloro-1,3-butadiene	8.224		0m	N.D. d	
93)	Ethyl tert-butyl ether	8.480		0m	N.D. d	
94)	Ethyl acetate	8.694		0m	N.D. d	
95)	Propionitrile	8.700		0m	N.D. d	
96)	Methacrylonitrile	8.986		0m	N.D. d	
97)	Tetrahydrofuran	9.047		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H613.D
Acq On : 24 Oct 2009 5:02 pm
Operator : RXY1
InstName : VOA6
Sample : |W6VM091024-09|ICV|1|VOAF|1|
Misc : ICV 5mL N/A MIX[A] 1011-01B+1022-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 27 15:16:03 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	Isobutyl alcohol	9.413		0m	N.D.	d	
99)	Methyl tert-amyl ether	9.730		0m	N.D.	d	
100)	Methyl methacrylate	10.608		0m	N.D.	d	
101)	1,4-Dioxane	10.711		0m	N.D.	d	
102)	2-Nitropropane	11.089		0m	N.D.	d	
104)	Ethyl methacrylate	10.608		0m	N.D.	d	
106)	1-Chlorohexane	13.156		0m	N.D.	d	
107)	cis-1,4-Dichloro-2-butene	14.156		0m	N.D.	d	
108)	Cyclohexanone	0.000		0	N.D.		
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110)	Pentachloroethane	15.180		0m	N.D.	d	
111)	Benzyl chloride	15.692		0m	N.D.	d	
112)	bis(2-Chloroisopropyl)...	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H613.D
Acq On : 24 Oct 2009 5:02 pm
Operator : RXY1
InstName : VOA6
Sample : |W6VM091024-09|ICV|1|VOAF|1|
Misc : ICV 5mL N/A MIX[A] 1011-01B+1022-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 27 15:16:03 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

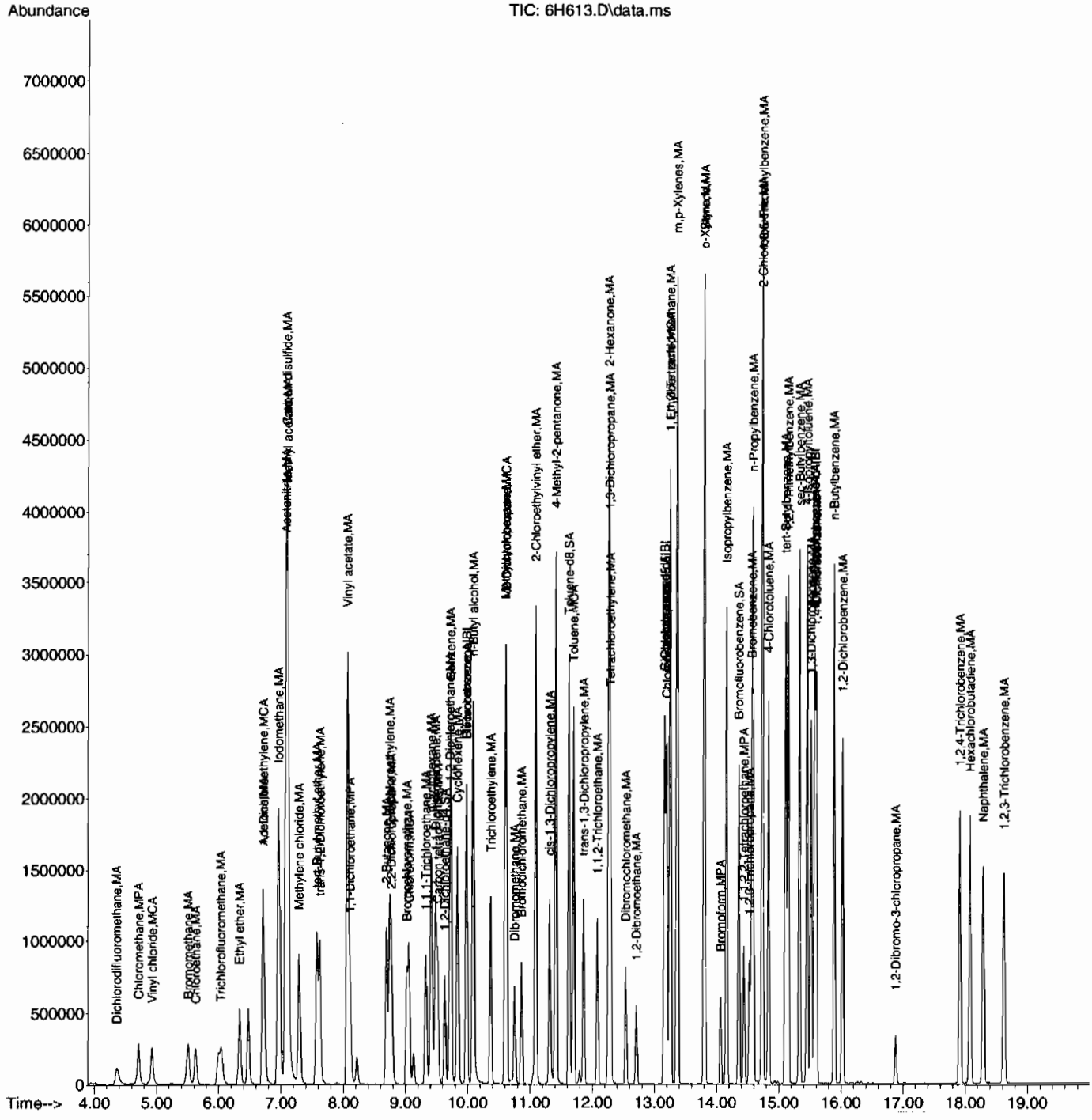

Continuing Calibration Summary

Client SDG: 10-543

Instrument ID: VOA6.I **Injection Dat** 24-OCT-09 21:39

Data File: 102409V6\6H623.D **Init. Cal. Date(s)** 24-OCT-09 12:52 - 24-OCT-09 20:4

Lab Sample ID W6VM091024-18 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.2935	0.296		.01		0.85179	30		Averaged
S	Toluene-d8	1.3485	1.351		.01		0.18539	30		Averaged
S	Bromofluorobenzene	0.9587	0.964		.01		0.55283	30		Averaged
	Chlorotrifluoroethylene	0.1746	0.151		.01		-13.51661	30		Averaged
	2-Chloro-1,1,1-trifluoroethane	0.326	0.329		.01		0.92025	30		Averaged
	Acrolein	0.0505	0.045		.01		-10.89109	30		Averaged
	Trichlorotrifluoroethane	0.0977	0.101		.01		3.37769	30		Averaged
	Isopropyl Alcohol	0.0209	0.021		.01		0.47847	40		Averaged
	Allyl chloride	0.4753	0.481		.01		1.19924	30		Averaged
	tert-Butyl Alcohol	0.0309	0.031		.01		0.32362	40		Averaged
	Acrylonitrile	0.0959	0.1		.01		4.27529	30		Averaged
	Isopropyl ether	1.0653	1.058		.01		-0.68525	30		Averaged
	2-Chloro-1,3-butadiene	0.395	0.404		.01		2.27848	30		Averaged
	Ethyl tert-butyl ether	0.8941	0.897		.01		0.32435	30		Averaged
	Ethyl acetate	0.2729	0.259		.01		-5.09344	40		Averaged
	Propionitrile	0.0371	0.038		.01		2.42588	30		Averaged
	Methacrylonitrile	0.1689	0.17		.01		0.65127	30		Averaged
	Tetrahydrofuran	0.0879	0.087		.01		-1.02389	30		Averaged
	Isobutyl alcohol	0.0105	0.01		.01		-4.7619	40		Averaged
	Methyl tert-amyl ether	0.7435	0.751		.01		1.00874	30		Averaged
	Methyl methacrylate	0.1575	0.161		.01		2.22222	30		Averaged
	Ethyl methacrylate	0.2097	0.213		.01		1.57368	30		Averaged
	1,4-Dioxane	0.0025	0.002		.01		-20	40		Averaged
	2-Nitropropane	0.0769	0.083		.01		7.93238	30		Averaged
	1-Chlorohexane	0.7499	0.727		.01		-3.05374	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2285	0.251		.01		9.84683	30		Averaged
	Cyclohexanone	1250	1008.1	1250			-19.352	40		Linear
	trans-1,4-Dichloro-2-butene	0.2208	0.235		.01		6.43116	30		Averaged
	Pentachloroethane	0.3173	0.287		.01		-9.54932	30		Averaged
	Benzyl chloride	1.1969	1.108		.01		-7.42752	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3724	0.356		.01		-4.40387	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H623.D
Acq On : 24 Oct 2009 9:39 pm
Operator : RXY1
InstName : VOA6
Sample : |W6VM091024-18|ICV|1|VOAF|1|
Misc : ICV 5mL N/A MIX[B] 0925-08B+0914-02D
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 27 15:15:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1922303	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.162	117	1452283	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	813717	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1920416	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.162	117	1452283	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	813717	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.633	65	569526	50.48 ug/L	0.00
43) Toluene-d8	11.626	98	1962661	50.11 ug/L	0.00
61) Bromofluorobenzene	14.357	95	784771	50.30 ug/L	0.00

Target Compounds				Qvalue
2) Dichlorodifluoromethane	4.290	0m	N.D. d	
3) Chloromethane	4.693	0m	N.D. d	
4) Vinyl chloride	4.924	0m	N.D. d	
5) Bromomethane	0.000	0	N.D.	
6) Chloroethane	0.000	0	N.D.	
7) Trichlorofluoromethane	0.000	0	N.D.	
8) Ethyl ether	6.340	0m	N.D. d	
9) Acetone	6.712	0m	N.D. d	
10) 1,1-Dichloroethylene	6.706	0m	N.D. d	
11) Iodomethane	6.968	0m	N.D. d	
12) Acetonitrile	7.029	0m	N.D. d	
13) Methyl acetate	7.103	0m	N.D. d	
14) Carbon disulfide	7.145	0m	N.D. d	
15) Methylene chloride	7.298	0m	N.D. d	
16) tert-Butyl methyl ether	7.584	0m	N.D. d	
17) trans-1,2-Dichloroethy...	0.000	0	N.D.	
18) Vinyl acetate	8.084	0m	N.D. d	
19) 1,1-Dichloroethane	8.218	0m	N.D. d	
20) 2-Butanone	8.706	0m	N.D. d	
21) cis-1,2-Dichloroethylene	8.706	0m	N.D. d	
22) 2,2-Dichloropropane	0.000	0	N.D.	
23) Bromochloromethane	0.000	0	N.D.	
24) Chloroform	9.059	0m	N.D. d	
25) 1,1,1-Trichloroethane	0.000	0	N.D.	
26) Cyclohexane	9.389	0m	N.D. d	
27) 1,1-Dichloropropene	9.480	0m	N.D. d	
28) Carbon tetrachloride	0.000	0	N.D.	
30) 1,2-Dichloroethane	9.736	0m	N.D. d	
31) Benzene	9.724	0m	N.D. d	
32) Cyclohexene	9.828	0m	N.D. d	
33) n-Butyl alcohol	10.084	0m	N.D. d	
34) Trichloroethylene	0.000	0	N.D.	
35) 1,2-Dichloropropane	0.000	0	N.D.	
36) Methylcyclohexane	10.596	0m	N.D. d	
37) Dibromomethane	0.000	0	N.D.	
38) Bromodichloromethane	0.000	0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	0	N.D.	
40) cis-1,3-Dichloropropylene	11.315	0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H623.D
Acq On : 24 Oct 2009 9:39 pm
Operator : RXY1
InstName : VOA6
Sample : |W6VM091024-18|ICV|1|VOAF|1|
Misc : ICV 5mL N/A MIX[B] 0925-08B+0914-02D
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 27 15:15:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.407		0m	N.D. d	
44) Toluene	11.699		0m	N.D. d	
45) trans-1,3-Dichloroprop...	11.858		0m	N.D. d	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	12.260		0m	N.D. d	
48) 1,3-Dichloropropane	12.284		0m	N.D. d	
49) Tetrachloroethylene	12.291		0m	N.D. d	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	12.717		0m	N.D. d	
52) Chlorobenzene	13.193		0m	N.D. d	
53) 1,1,1,2-Tetrachloroethane	13.248		0m	N.D. d	
54) Ethylbenzene	13.254		0m	N.D. d	
55) m,p-Xylenes	13.370		0m	N.D. d	
56) o-Xylene	13.796		0m	N.D. d	
57) Styrene	13.809		0m	N.D. d	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.156		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	14.436		0m	N.D. d	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	14.583		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	14.735		0m	N.D. d	
67) 2-Chlorotoluene	14.735		0m	N.D. d	
68) 4-Chlorotoluene	14.833		0m	N.D. d	
69) tert-Butylbenzene	15.180		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	15.156		0m	N.D. d	
71) sec-Butylbenzene	15.333		0m	N.D. d	
72) 4-Isopropyltoluene	15.455		0m	N.D. d	
73) 1,3-Dichlorobenzene	15.522		0m	N.D. d	
74) 1,4-Dichlorobenzene	15.601		0m	N.D. d	
75) n-Butylbenzene	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	16.022		0m	N.D. d	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.917		0m	N.D. d	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	18.277		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	18.625		0m	N.D. d	
83) Chlorotrifluoroethylene	4.290	116	872548	130.14 ug/L	100
84) 2-Chloro-1,1,1-trifluo...	5.065	118	1893744	151.25 ug/L	100
85) Acrolein	6.542	56	433395	223.56 ug/L	99
86) Trichlorotrifluoroethane	6.700	85	965506	257.25 ug/L	99
87) Isopropyl Alcohol	6.792	45	2027695	2525.73 ug/L	100
88) Allyl chloride	7.145	41	4616320	252.85 ug/L	100
89) tert-Butyl Alcohol	7.291	59	2934808	2471.62 ug/L	100
90) Acrylonitrile	7.548	53	958436	260.27 ug/L	99
91) Isopropyl ether	8.084	45	2032710	49.68 ug/L	100
92) 2-Chloro-1,3-butadiene	8.212	53	775307	51.10 ug/L	99
93) Ethyl tert-butyl ether	8.492	59	1723017	50.17 ug/L	100
94) Ethyl acetate	8.706	43	2485598	237.10 ug/L	100
95) Propionitrile	8.779	54	362661	254.71 ug/L	100
96) Methacrylonitrile	8.956	41	1630659	251.41 ug/L	100
97) Tetrahydrofuran	9.066	42	836634	247.92 ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H623.D
Acq On : 24 Oct 2009 9:39 pm
Operator : RXY1
InstName : VOA6
Sample : |W6VM091024-18|ICV|1|VOAF|1|
Misc : ICV 5mL N/A MIX[B] 0925-08B+0914-02D
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 27 15:15:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
98)	Isobutyl alcohol	9.395	41	982070	2425.00	ug/L	100	
99)	Methyl tert-amyl ether	9.742	73	1441435	50.48	ug/L	100	
100)	Methyl methacrylate	10.590	69	1547034	255.80	ug/L	99	
101)	1,4-Dioxane	10.699	88	236034	2467.03	ug/L	100	
102)	2-Nitropropane	11.077	43	795009	269.02	ug/L	99	
104)	Ethyl methacrylate	10.590	69	1547950	254.14	ug/L	99	
106)	1-Chlorohexane	13.059	55	591855	48.49	ug/L	100	
107)	cis-1,4-Dichloro-2-butene	14.205	53	1020949	274.57	ug/L	100	
108)	Cyclohexanone	14.321	42	611991	1008.10	ug/L	98	E
109)	trans-1,4-Dichloro-2-b...	14.491	53	956836	266.27	ug/L	100	
110)	Pentachloroethane	15.180	167	1168179	226.23	ug/L	100	
111)	Benzyl chloride	15.717	91	4508467	231.46	ug/L	100	
112)	bis(2-Chloroisopropyl)...	16.113	45	1448711	239.01	ug/L	100	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

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Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H623.D
Acq On    : 24 Oct 2009   9:39 pm
Operator  : RXY1
InstName  : VOA6
Sample    : |W6VM091024-18|ICV|1|VOAF|1|
Misc      : ICV 5mL N/A MIX[B] 0925-08B+0914-02D
ALS Vial  : 23   Sample Multiplier: 1

Quant Time: Oct 27 15:15:30 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title  : Volatile Organics 8260B
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE
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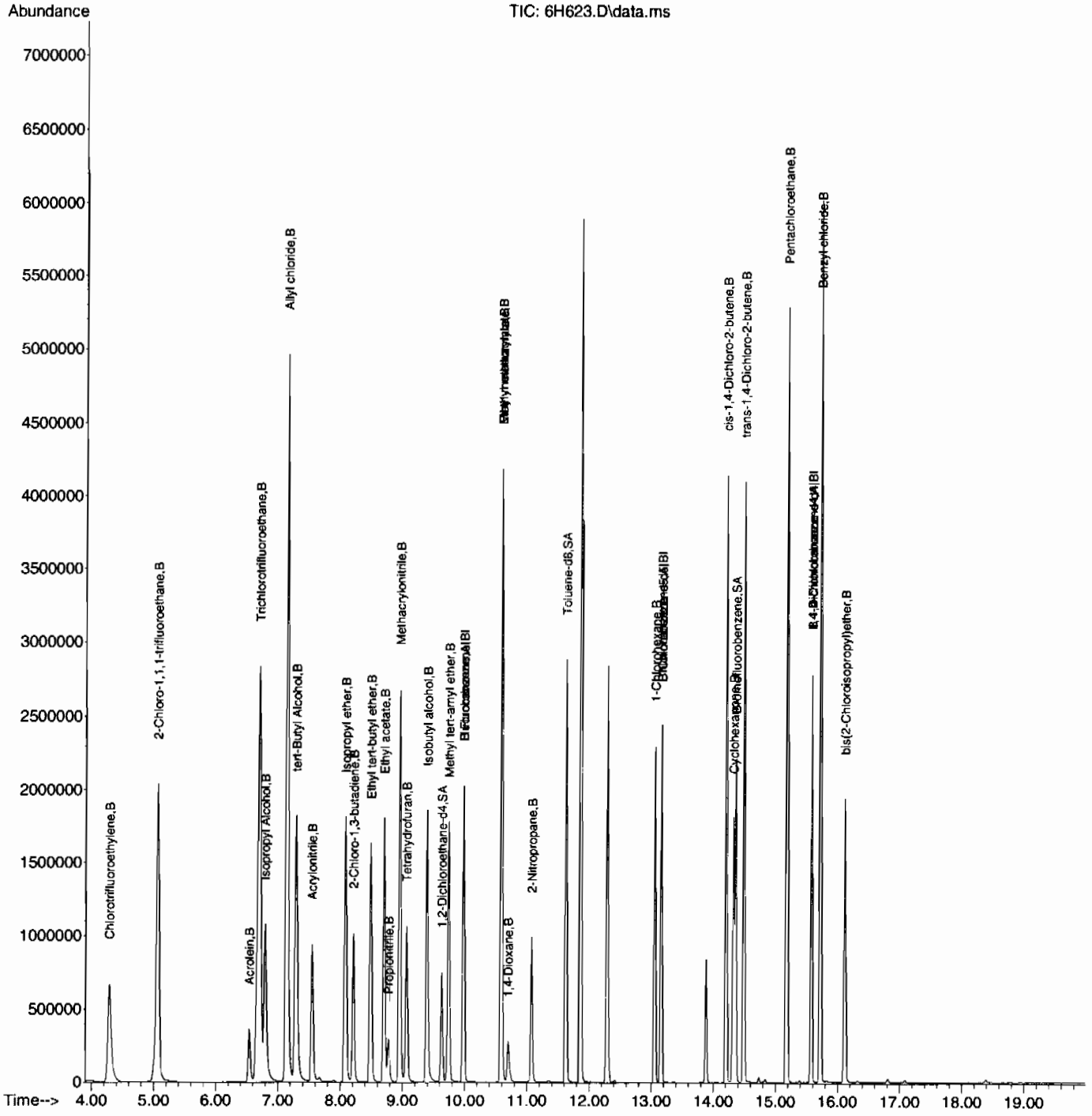

Continuing Calibration Summary

Client SDG: 10-543

Instrument ID: VOA6.I **Injection Dat** 22-NOV-09 12:49

Data File: 112209V6\6L704.D **Init. Cal. Date(s)** 24-OCT-09 12:52 - 24-OCT-09 20:4

Lab Sample ID W6VM091122-01 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.2935	0.289		.01		-1.53322	30		Averaged	
S	Toluene-d8	1.3485	1.367		.01		1.37189	30		Averaged	
S	Bromofluorobenzene	0.9587	0.979		.01		2.11745	30		Averaged	
	Dichlorodifluoromethane	0.1955	0.172		.01		-12.02046	30		Averaged	
	Chloromethane	0.3221	0.24		.1		-25.48898	30		Averaged	spcc
	Vinyl chloride	0.2688	0.23		.01		-14.43452	20		Averaged	ccc
	Bromomethane	0.1953	0.185		.01		-5.27394	30		Averaged	
	Chloroethane	0.2048	0.185		.01		-9.66797	30		Averaged	
	Trichlorofluoromethane	0.3668	0.353		.01		-3.76227	30		Averaged	
	Ethyl ether	0.2755	0.216		.01		-21.5971	30		Averaged	
	1,1-Dichloroethylene	0.3856	0.34		.01		-11.82573	20		Averaged	ccc
	Acetone	250	166.91	250			-33.236	40		Linear	
	Iodomethane	0.3968	0.352		.01		-11.29032	30		Averaged	
	Acetonitrile	0.0415	0.034		.01		-18.07229	30		Averaged	
	Carbon disulfide	0.757	0.718		.01		-5.15192	30		Averaged	
	Methyl acetate	0.2424	0.185		.01		-23.67987	40		Averaged	
	Methylene chloride	50	44.75	50			-10.5	30		Linear	
	tert-Butyl methyl ether	0.7382	0.615		.01		-16.68924	30		Averaged	
	trans-1,2-Dichloroethylene	0.38	0.341		.01		-10.26316	30		Averaged	
	Vinyl acetate	0.5198	0.54		.01		3.88611	40		Averaged	
	1,1-Dichloroethane	0.4738	0.424		.1		-10.51076	30		Averaged	spcc
	2-Butanone	0.2361	0.148		.01		-37.3147	40		Averaged	
	cis-1,2-Dichloroethylene	0.4279	0.379		.01		-11.4279	30		Averaged	
	2,2-Dichloropropane	0.3788	0.341		.01		-9.97888	30		Averaged	
	Bromochloromethane	0.129	0.115		.01		-10.85271	30		Averaged	
	Chloroform	0.4306	0.387		.01		-10.12541	20		Averaged	ccc
	1,1,1-Trichloroethane	0.3748	0.348		.01		-7.15048	30		Averaged	
	Cyclohexane	0.5135	0.467		.01		-9.0555	30		Averaged	
	1,1-Dichloropropene	0.3348	0.325		.01		-2.92712	30		Averaged	
	Carbon tetrachloride	0.3306	0.318		.01		-3.81125	30		Averaged	
	1,2-Dichloroethane	0.3586	0.304		.01		-15.22588	30		Averaged	
	Benzene	1.0208	0.906		.01		-11.24608	30		Averaged	
	Cyclohexene	0.5208	0.471		.01		-9.56221	30		Averaged	
	n-Butyl alcohol	0.0086	0.008		.01		-6.97674	40		Averaged	
	Trichloroethylene	0.2563	0.235		.01		-8.31057	30		Averaged	
	1,2-Dichloropropane	0.2767	0.245		.01		-11.45645	20		Averaged	ccc
	Methylcyclohexane	0.4721	0.436		.01		-7.64669	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I **Injection Date** 22-NOV-09 12:49

Data File: 112209V6\6L704.D **Init. Cal. Date(s)** 24-OCT-09 12:52 24-OCT-09 20:4

Lab Sample ID W6VM091122-01 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1425	0.13		.01		-8.77193	30		Averaged	
Bromodichloromethane	0.3117	0.285		.01		-8.56593	30		Averaged	
2-Chloroethylvinyl ether	0.1524	0.111		.01		-27.16535	30		Averaged	
cis-1,3-Dichloropropylene	0.3926	0.36		.01		-8.30362	30		Averaged	
4-Methyl-2-pentanone	0.1603	0.132		.01		-17.6544	40		Averaged	
Toluene	1.4628	1.327		.01		-9.28357	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4784	0.461		.01		-3.63712	30		Averaged	
1,1,2-Trichloroethane	0.2364	0.217		.01		-8.20643	30		Averaged	
2-Hexanone	0.4665	0.284		.01		-39.12111	40		Averaged	
1,3-Dichloropropane	0.5023	0.456		.01		-9.2176	30		Averaged	
Tetrachloroethylene	0.3008	0.278		.01		-7.57979	30		Averaged	
Dibromochloromethane	0.3225	0.306		.01		-5.11628	30		Averaged	
1,2-Dibromoethane	0.2862	0.27		.01		-5.66038	30		Averaged	
Chlorobenzene	0.9471	0.882		.3		-6.87361	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3334	0.311		.01		-6.71866	30		Averaged	
Ethylbenzene	1.6459	1.501		.01		-8.80369	20		Averaged	ccc
m,p-Xylenes	0.6568	0.608		.01		-7.42996	30		Averaged	
o-Xylene	0.6479	0.598		.01		-7.70181	30		Averaged	
Styrene	1.0453	0.974		.01		-6.82101	30		Averaged	
Bromoform	0.3846	0.376		.1		-2.23609	30		Averaged	spcc
Isopropylbenzene	3.1202	2.854		.01		-8.5315	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6858	0.638		.3		-6.96996	30		Averaged	spcc
1,2,3-Trichloropropane	0.1931	0.178		.01		-7.81978	30		Averaged	
Bromobenzene	0.761	0.691		.01		-9.19842	30		Averaged	
n-Propylbenzene	3.5866	3.295		.01		-8.13026	30		Averaged	
2-Chlorotoluene	0.7556	0.704		.01		-6.82901	30		Averaged	
1,3,5-Trimethylbenzene	2.6742	2.404		.01		-10.10396	30		Averaged	
4-Chlorotoluene	2.1921	1.989		.01		-9.26509	30		Averaged	
tert-Butylbenzene	0.5785	0.533		.01		-7.86517	30		Averaged	
1,2,4-Trimethylbenzene	2.7135	2.451		.01		-9.67385	30		Averaged	
sec-Butylbenzene	3.5383	3.233		.01		-8.62844	30		Averaged	
4-Isopropyltoluene	2.9129	2.638		.01		-9.43733	30		Averaged	
1,3-Dichlorobenzene	1.4843	1.336		.01		-9.99124	30		Averaged	
1,4-Dichlorobenzene	1.5159	1.347		.01		-11.1419	30		Averaged	
n-Butylbenzene	2.7313	2.517		.01		-7.84608	30		Averaged	
1,2-Dichlorobenzene	1.4311	1.267		.01		-11.4667	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1381	0.13		.01		-5.86531	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I **Injection Date** 22-NOV-09 12:49

Data File: 112209V6\6L704.D **Init. Cal. Date(s)** 24-OCT-09 12:52 24-OCT-09 20:4

Lab Sample ID W6VM091122-01 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.0175	0.932		.01		-8.40295	30		Averaged
Hexachlorobutadiene	0.655	0.573		.01		-12.51908	30		Averaged
Naphthalene	2.0905	1.91		.01		-8.6343	30		Averaged
1,2,3-Trichlorobenzene	0.8478	0.794		.01		-6.34584	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1851261	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1350638	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	743976	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1849212	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1350638	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	743976	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.632	65	534385	49.18	ug/L	0.00
43) Toluene-d8	11.626	98	1846095	50.68	ug/L	0.00
61) Bromofluorobenzene	14.357	95	728214	51.05	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.370	85	318916	44.06	ug/L	100
3) Chloromethane	4.713	50	444490	37.27	ug/L	100
4) Vinyl chloride	4.934	62	425678	42.77	ug/L	100
5) Bromomethane	5.508	94	343399	47.48	ug/L	99
6) Chloroethane	5.629	64	342265	45.13	ug/L	99
7) Trichlorofluoromethane	6.042	101	652842	48.07	ug/L	100
8) Ethyl ether	6.340	59	399587	39.17	ug/L	94
9) Acetone	6.718	43	1056013	166.91	ug/L	98
10) 1,1-Dichloroethylene	6.718	61	628955	44.06	ug/L	98
11) Iodomethane	6.962	142	3257821	221.77	ug/L	100
12) Acetonitrile	7.078	41	1576158	1026.02	ug/L	100
13) Methyl acetate	7.102	43	1710093	190.51	ug/L	98
14) Carbon disulfide	7.090	76	6648957	237.21	ug/L	100
15) Methylene chloride	7.297	84	454896	44.75	ug/L	95
16) tert-Butyl methyl ether	7.578	73	1139357	41.68	ug/L	99
17) trans-1,2-Dichloroethy...	7.627	61	632151	44.93	ug/L	97
18) Vinyl acetate	8.066	43	4998013	259.69	ug/L	98
19) 1,1-Dichloroethane	8.108	63	784073	44.69	ug/L	100
20) 2-Butanone	8.700	43	1373681	157.13	ug/L	97
21) cis-1,2-Dichloroethylene	8.748	61	700971	44.25	ug/L	97
22) 2,2-Dichloropropane	8.773	77	631168	45.00	ug/L	100
23) Bromochloromethane	9.023	128	213581	44.71	ug/L	94
24) Chloroform	9.059	83	717330	44.99	ug/L	99
25) 1,1,1-Trichloroethane	9.328	97	643387	46.37	ug/L	100
26) Cyclohexane	9.413	56	864570	45.47	ug/L	97
27) 1,1-Dichloropropene	9.486	75	602286	48.59	ug/L	95
28) Carbon tetrachloride	9.523	117	589227	48.14	ug/L	100
30) 1,2-Dichloroethane	9.712	62	563608	42.45	ug/L	100
31) Benzene	9.730	78	1676909	44.37	ug/L	98
32) Cyclohexene	9.834	67	872689	45.26	ug/L	96
33) n-Butyl alcohol	10.083	56	1543431	4859.40	ug/L	98
34) Trichloroethylene	10.364	95	434165	45.76	ug/L	99
35) 1,2-Dichloropropane	10.614	63	453054	44.22	ug/L	99
36) Methylcyclohexane	10.608	83	806862	46.16	ug/L	97
37) Dibromomethane	10.754	93	240585	45.61	ug/L	97
38) Bromodichloromethane	10.864	83	528283	45.78	ug/L	100
39) 2-Chloroethylvinyl ether	11.089	63	1023338	181.35	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	75	665960	45.82	ug/L	95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.412	58	888974	205.33 ug/L	97
44) Toluene	11.699	91	1792079	45.35 ug/L	100
45) trans-1,3-Dichloroprop...	11.864	75	622573	48.18 ug/L	97
46) 1,1,2-Trichloroethane	12.083	83	293372	45.93 ug/L	99
47) 2-Hexanone	12.260	43	1916650	152.09 ug/L	99
48) 1,3-Dichloropropane	12.278	76	615833	45.38 ug/L #	72
49) Tetrachloroethylene	12.290	164	375349	46.19 ug/L	99
50) Dibromochloromethane	12.540	129	412849	47.38 ug/L	100
51) 1,2-Dibromoethane	12.711	107	364716	47.17 ug/L	100
52) Chlorobenzene	13.193	112	1191033	46.55 ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.247	131	419448	46.57 ug/L	99
54) Ethylbenzene	13.254	91	2027553	45.60 ug/L	99
55) m,p-Xylenes	13.363	106	1643431	92.64 ug/L	99
56) o-Xylene	13.796	106	808143	46.17 ug/L	97
57) Styrene	13.802	104	1315671	46.59 ug/L	97
59) Bromoform	14.064	173	279449	48.83 ug/L	99
60) Isopropylbenzene	14.156	105	2123447	45.74 ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.442	83	474839	46.53 ug/L	99
63) 1,2,3-Trichloropropane	14.528	110	132427	46.09 ug/L	99
64) Bromobenzene	14.564	156	514129	45.40 ug/L	99
65) n-Propylbenzene	14.583	91	2451527	45.94 ug/L	99
66) 1,3,5-Trimethylbenzene	14.735	105	1788470	44.95 ug/L	100
67) 2-Chlorotoluene	14.735	126	524064	46.61 ug/L	96
68) 4-Chlorotoluene	14.833	91	1479878	45.37 ug/L	98
69) tert-Butylbenzene	15.107	134	396840	46.10 ug/L	98
70) 1,2,4-Trimethylbenzene	15.150	105	1823614	45.17 ug/L	99
71) sec-Butylbenzene	15.332	105	2405496	45.69 ug/L	100
72) 4-Isopropyltoluene	15.454	119	1962470	45.28 ug/L	100
73) 1,3-Dichlorobenzene	15.515	146	993649	44.99 ug/L	100
74) 1,4-Dichlorobenzene	15.601	146	1002303	44.44 ug/L	100
75) n-Butylbenzene	15.887	91	1872347	46.07 ug/L	100
76) 1,2-Dichlorobenzene	16.021	146	942646	44.27 ug/L	100
77) 1,2-Dibromo-3-chloropr...	16.881	157	96839	47.12 ug/L	97
78) 1,2,4-Trichlorobenzene	17.911	180	693594	45.81 ug/L	99
79) Hexachlorobutadiene	18.076	225	426157	43.73 ug/L	100
80) Naphthalene	18.289	128	1420856	45.68 ug/L	100
81) 1,2,3-Trichlorobenzene	18.618	180	590864	46.84 ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	6.804		0m	N.D. d	
88) Allyl chloride	7.078		0m	N.D. d	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	7.584		0m	N.D. d	
91) Isopropyl ether	8.066		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	8.224		0m	N.D. d	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.700		0m	N.D. d	
95) Propionitrile	8.693		0m	N.D. d	
96) Methacrylonitrile	8.974		0m	N.D. d	
97) Tetrahydrofuran	9.065		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
98) Isobutyl alcohol	9.413		0m	N.D.	d
99) Methyl tert-amyl ether	9.724		0m	N.D.	d
100) Methyl methacrylate	10.608		0m	N.D.	d
101) 1,4-Dioxane	10.717		0m	N.D.	d
102) 2-Nitropropane	11.089		0m	N.D.	d
104) Ethyl methacrylate	10.608		0m	N.D.	d
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.156		0m	N.D.	d
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	15.174		0m	N.D.	d
111) Benzyl chloride	15.729		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.162		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

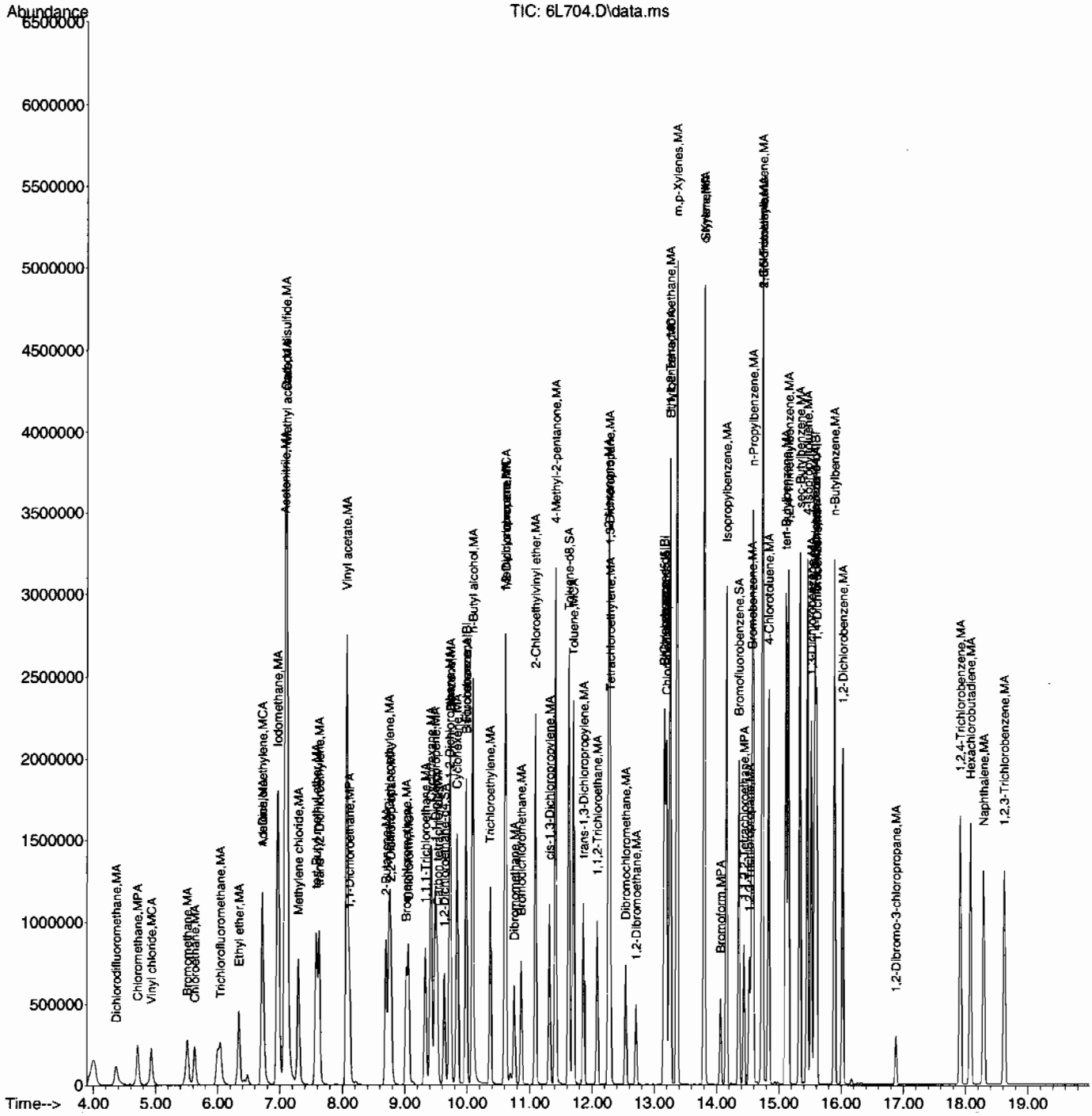

Continuing Calibration Summary

Client SDG: 10-543

Instrument ID: VOA6.I

Injection Date 22-NOV-09 13:17

Data File: 112209V6\6L705.D

Init. Cal. Date(s) 24-OCT-09 12:52 - 24-OCT-09 20:4

Lab Sample ID W6VM091122-02 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.2935	0.298		.01		1.53322	30		Averaged
S	Toluene-d8	1.3485	1.35		.01		0.11123	30		Averaged
S	Bromofluorobenzene	0.9587	0.99		.01		3.26484	30		Averaged
	Acrolein	0.0505	0.057		.01		12.87129	30		Averaged
	Trichlorotrifluoroethane	0.0977	0.107		.01		9.51894	30		Averaged
	Allyl chloride	0.4753	0.454		.01		-4.48138	30		Averaged
	Acrylonitrile	0.0959	0.101		.01		5.31804	30		Averaged
	2-Chloro-1,3-butadiene	0.395	0.415		.01		5.06329	30		Averaged
	Ethyl acetate	0.2729	0.266		.01		-2.5284	40		Averaged
	Propionitrile	0.0371	0.04		.01		7.81671	30		Averaged
	Methacrylonitrile	0.1689	0.169		.01		0.05921	30		Averaged
	Tetrahydrofuran	0.0879	0.093		.01		5.80205	30		Averaged
	Isobutyl alcohol	0.0105	0.011		.01		4.7619	40		Averaged
	Methyl methacrylate	0.1575	0.168		.01		6.66667	30		Averaged
	Ethyl methacrylate	0.2097	0.229		.01		9.20362	30		Averaged
	1,4-Dioxane	0.0025	0.003		.01		20	40		Averaged
	2-Nitropropane	0.0769	0.085		.01		10.53316	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2285	0.265		.01		15.97374	30		Averaged
	Cyclohexanone	1250	1068.71	1250			-14.5032	40		Linear
	trans-1,4-Dichloro-2-butene	0.2208	0.255		.01		15.48913	30		Averaged
	Pentachloroethane	0.3173	0.452		.01		42.45194	30	*	Averaged
	Benzyl chloride	1.1969	1.33		.01		11.12039	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3724	0.417		.01		11.97637	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705.D
Acq On : 22 Nov 2009 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-02|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1831924	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1348325	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	743535	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1829360	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1348325	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	743535	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	545497	50.73 ug/L	0.00
43) Toluene-d8	11.626	98	1820789	50.07 ug/L	0.00
61) Bromofluorobenzene	14.357	95	736268	51.65 ug/L	0.00

Target Compounds				Qvalue
2) Dichlorodifluoromethane	0.000	0	N.D.	
3) Chloromethane	4.713	0m	N.D. d	
4) Vinyl chloride	4.934	0m	N.D. d	
5) Bromomethane	0.000	0	N.D.	
6) Chloroethane	0.000	0	N.D.	
7) Trichlorofluoromethane	0.000	0	N.D.	
8) Ethyl ether	0.000	0	N.D.	
9) Acetone	6.712	0m	N.D. d	
10) 1,1-Dichloroethylene	6.700	0m	N.D. d	
11) Iodomethane	6.962	0m	N.D. d	
12) Acetonitrile	7.145	0m	N.D. d	
13) Methyl acetate	7.109	0m	N.D. d	
14) Carbon disulfide	7.145	0m	N.D. d	
15) Methylene chloride	7.285	0m	N.D. d	
16) tert-Butyl methyl ether	0.000	0	N.D.	
17) trans-1,2-Dichloroethy...	0.000	0	N.D.	
18) Vinyl acetate	8.078	0m	N.D. d	
19) 1,1-Dichloroethane	8.212	0m	N.D. d	
20) 2-Butanone	8.706	0m	N.D. d	
21) cis-1,2-Dichloroethylene	8.706	0m	N.D. d	
22) 2,2-Dichloropropane	0.000	0	N.D.	
23) Bromochloromethane	0.000	0	N.D.	
24) Chloroform	9.065	0m	N.D. d	
25) 1,1,1-Trichloroethane	0.000	0	N.D.	
26) Cyclohexane	9.395	0m	N.D. d	
27) 1,1-Dichloropropene	0.000	0	N.D.	
28) Carbon tetrachloride	0.000	0	N.D.	
30) 1,2-Dichloroethane	0.000	0	N.D.	
31) Benzene	9.724	0m	N.D. d	
32) Cyclohexene	0.000	0	N.D.	
33) n-Butyl alcohol	10.096	0m	N.D. d	
34) Trichloroethylene	10.376	0m	N.D. d	
35) 1,2-Dichloropropane	0.000	0	N.D.	
36) Methylcyclohexane	10.596	0m	N.D. d	
37) Dibromomethane	0.000	0	N.D.	
38) Bromodichloromethane	0.000	0	N.D.	
39) 2-Chloroethylvinyl ether	11.083	0m	N.D. d	
40) cis-1,3-Dichloropropylene	11.309	0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705.D
Acq On : 22 Nov 2009 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-02|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.413		0m	N.D. d	
44) Toluene	11.693		0m	N.D. d	
45) trans-1,3-Dichloroprop...	11.858		0m	N.D. d	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	12.272		0m	N.D. d	
48) 1,3-Dichloropropane	12.309		0m	N.D. d	
49) Tetrachloroethylene	12.290		0m	N.D. d	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	12.699		0m	N.D. d	
52) Chlorobenzene	13.187		0m	N.D. d	
53) 1,1,1,2-Tetrachloroethane	13.248		0m	N.D. d	
54) Ethylbenzene	13.248		0m	N.D. d	
55) m,p-Xylenes	13.363		0m	N.D. d	
56) o-Xylene	13.790		0m	N.D. d	
57) Styrene	13.802		0m	N.D. d	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.150		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	14.449		0m	N.D. d	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	14.564		0m	N.D. d	
65) n-Propylbenzene	14.583		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	14.741		0m	N.D. d	
67) 2-Chlorotoluene	14.735		0m	N.D. d	
68) 4-Chlorotoluene	14.833		0m	N.D. d	
69) tert-Butylbenzene	15.113		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	15.150		0m	N.D. d	
71) sec-Butylbenzene	15.339		0m	N.D. d	
72) 4-Isopropyltoluene	15.448		0m	N.D. d	
73) 1,3-Dichlorobenzene	15.515		0m	N.D. d	
74) 1,4-Dichlorobenzene	15.601		0m	N.D. d	
75) n-Butylbenzene	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	16.021		0m	N.D. d	
77) 1,2-Dibromo-3-chloropr...	16.881		0m	N.D. d	
78) 1,2,4-Trichlorobenzene	17.905		0m	N.D. d	
79) Hexachlorobutadiene	18.076		0m	N.D. d	
80) Naphthalene	18.289		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	18.625		0m	N.D. d	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	6.542	56	520249	281.72 ug/L	100
86) Trichlorotrifluoroethane	6.700	85	979075	273.85 ug/L	99
87) Isopropyl Alcohol	0.000		0m	N.D. d	
88) Allyl chloride	7.145	41	4151974	238.74 ug/L	98
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	7.547	53	928245	264.62 ug/L	99
91) Isopropyl ether	8.206	45	197	N.D.	
92) 2-Chloro-1,3-butadiene	8.212	53	759070	52.52 ug/L	94
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.706	43	2437312	244.06 ug/L	98
95) Propionitrile	8.779	54	362736	267.45 ug/L	100
96) Methacrylonitrile	8.956	41	1542888	249.72 ug/L	99
97) Tetrahydrofuran	9.065	42	846721	263.40 ug/L	96

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705.D
Acq On : 22 Nov 2009 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-02|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
98)	Isobutyl alcohol	9.395	41	1047809	2716.11	ug/L	99	
99)	Methyl tert-amyl ether	0.000		0	N.D.			
100)	Methyl methacrylate	10.590	69	1540136	267.34	ug/L	93	
101)	1,4-Dioxane	10.699	88	253941	2786.31	ug/L	94	
102)	2-Nitropropane	11.077	43	781996	277.79	ug/L	100	
104)	Ethyl methacrylate	10.590	69	1541236	272.54	ug/L	93	
106)	1-Chlorohexane	0.000		0	N.D.			
107)	cis-1,4-Dichloro-2-butene	14.205	53	986159	290.25	ug/L	96	
108)	Cyclohexanone	14.321	42	593409	1068.71	ug/L	98	E
109)	trans-1,4-Dichloro-2-b...	14.491	53	947902	288.69	ug/L	95	
110)	Pentachloroethane	15.180	167	1681319	356.34	ug/L	98	
111)	Benzyl chloride	15.717	91	4946209	277.90	ug/L	99	
112)	bis(2-Chloroisopropyl)...	16.113	45	1550345	279.93	ug/L	96	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705.D
Acq On : 22 Nov 2009 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091122-02|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

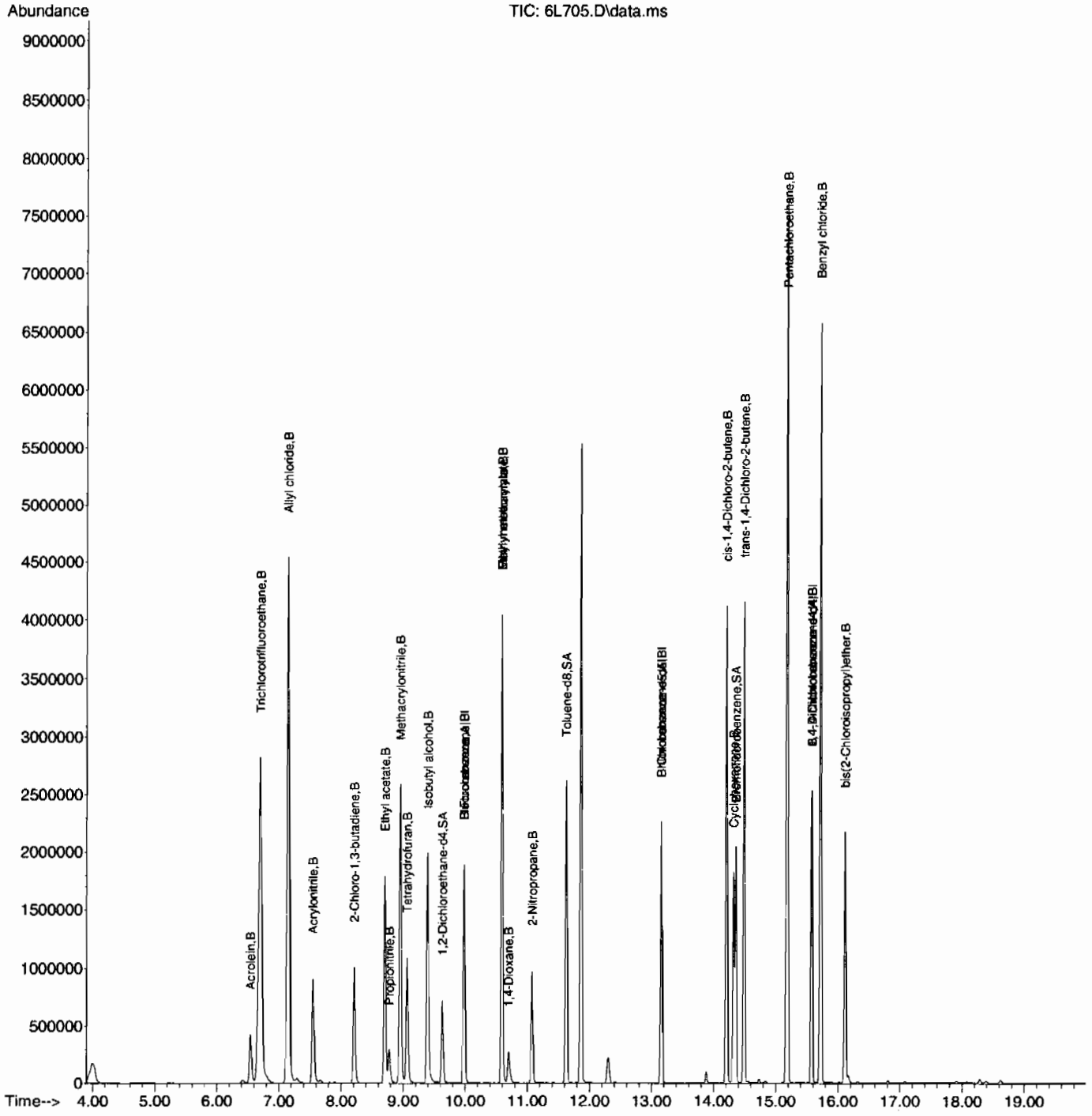

Continuing Calibration Summary

Client SDG: 10-543

Instrument ID: VOA6.I **Injection Date** 23-NOV-09 10:57

Data File: 112309V6\6M102.D **Init. Cal. Date(s)** 24-OCT-09 12:52 - 24-OCT-09 20:4

Lab Sample ID W6VM091123-01 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.2935	0.28917		.01		-1.4753	30		Averaged	
S	Toluene-d8	1.3485	1.364		.01		1.14943	30		Averaged	
S	Bromofluorobenzene	0.9587	0.99258		.01		3.53395	30		Averaged	
	Dichlorodifluoromethane	0.1955	0.16401		.01		-16.10742	30		Averaged	
	Chloromethane	0.3221	0.24065		.1		-25.28718	30		Averaged	spcc
	Vinyl chloride	0.2688	0.22716		.01		-15.49107	20		Averaged	ccc
	Bromomethane	0.1953	0.18388		.01		-5.84741	30		Averaged	
	Chloroethane	0.2048	0.18037		.01		-11.92871	30		Averaged	
	Trichlorofluoromethane	0.3668	0.34878		.01		-4.91276	30		Averaged	
	Ethyl ether	0.2755	0.20815		.01		-24.44646	30		Averaged	
	Acetone	250	179.69	250			-28.124	40		Linear	
	1,1-Dichloroethylene	0.3856	0.33161		.01		-14.00156	20		Averaged	ccc
	Iodomethane	0.3968	0.34742		.01		-12.44456	30		Averaged	
	Acetonitrile	0.0415	0.03275		.01		-21.08434	30		Averaged	
	Carbon disulfide	0.757	0.70576		.01		-6.76882	30		Averaged	
	Methyl acetate	0.2424	0.17504		.01		-27.78878	40		Averaged	
	Methylene chloride	50	42.8	50			-14.4	30		Linear	
	tert-Butyl methyl ether	0.7382	0.60104		.01		-18.58033	30		Averaged	
	trans-1,2-Dichloroethylene	0.38	0.3346		.01		-11.94737	30		Averaged	
	Vinyl acetate	0.5198	0.52387		.01		0.78299	40		Averaged	
	1,1-Dichloroethane	0.4738	0.41471		.1		-12.47151	30		Averaged	spcc
	2-Butanone	0.2361	0.15107		.01		-36.0144	40		Averaged	
	cis-1,2-Dichloroethylene	0.4279	0.3711		.01		-13.27413	30		Averaged	
	2,2-Dichloropropane	0.3788	0.34664		.01		-8.48997	30		Averaged	
	Bromochloromethane	0.129	0.11194		.01		-13.22481	30		Averaged	
	Chloroform	0.4306	0.38076		.01		-11.57455	20		Averaged	ccc
	1,1,1-Trichloroethane	0.3748	0.34385		.01		-8.25774	30		Averaged	
	Cyclohexane	0.5135	0.44803		.01		-12.74976	30		Averaged	
	1,1-Dichloropropene	0.3348	0.31276		.01		-6.58303	30		Averaged	
	Carbon tetrachloride	0.3306	0.31581		.01		-4.47368	30		Averaged	
	1,2-Dichloroethane	0.3586	0.29945		.01		-16.4947	30		Averaged	
	Benzene	1.0208	0.89676		.01		-12.15125	30		Averaged	
	Cyclohexene	0.5208	0.46061		.01		-11.55722	30		Averaged	
	n-Butyl alcohol	0.0086	0.008		.01		-6.97674	40		Averaged	
	Trichloroethylene	0.2563	0.22837		.01		-10.89739	30		Averaged	
	1,2-Dichloropropane	0.2767	0.24199		.01		-12.54427	20		Averaged	ccc
	Methylcyclohexane	0.4721	0.4214		.01		-10.73925	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I **Injection Date** 23-NOV-09 10:57

Data File: 112309V6\6M102.D **Init. Cal. Date(s)** 24-OCT-09 12:52 24-OCT-09 20:4

Lab Sample ID W6VM091123-01 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1425	0.12802		.01		-10.1614	30		Averaged	
Bromodichloromethane	0.3117	0.28361		.01		-9.01187	30		Averaged	
2-Chloroethylvinyl ether	0.1524	0.126		.01		-17.32283	30		Averaged	
cis-1,3-Dichloropropylene	0.3926	0.35786		.01		-8.8487	30		Averaged	
4-Methyl-2-pentanone	0.1603	0.12279		.01		-23.39988	40		Averaged	
Toluene	1.4628	1.2904		.01		-11.78562	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4784	0.44617		.01		-6.73704	30		Averaged	
1,1,2-Trichloroethane	0.2364	0.2117		.01		-10.44839	30		Averaged	
2-Hexanone	0.4665	0.2864		.01		-38.60665	40		Averaged	
1,3-Dichloropropane	0.5023	0.44402		.01		-11.60263	30		Averaged	
Tetrachloroethylene	0.3008	0.26823		.01		-10.82779	30		Averaged	
Dibromochloromethane	0.3225	0.29685		.01		-7.95349	30		Averaged	
1,2-Dibromoethane	0.2862	0.25889		.01		-9.54228	30		Averaged	
Chlorobenzene	0.9471	0.85734		.3		-9.47735	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3334	0.30327		.01		-9.03719	30		Averaged	
Ethylbenzene	1.6459	1.46091		.01		-11.23944	20		Averaged	ccc
m,p-Xylenes	0.6568	0.59351		.01		-9.63611	30		Averaged	
o-Xylene	0.6479	0.57655		.01		-11.0125	30		Averaged	
Styrene	1.0453	0.943		.01		-9.78666	30		Averaged	
Bromoform	0.3846	0.37061		.1		-3.63755	30		Averaged	spcc
Isopropylbenzene	3.1202	2.8114		.01		-9.8968	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6858	0.62145		.3		-9.3832	30		Averaged	spcc
1,2,3-Trichloropropane	0.1931	0.17057		.01		-11.66753	30		Averaged	
Bromobenzene	0.761	0.69334		.01		-8.89093	30		Averaged	
n-Propylbenzene	3.5866	3.26524		.01		-8.96002	30		Averaged	
2-Chlorotoluene	0.7556	0.69328		.01		-8.24775	30		Averaged	
1,3,5-Trimethylbenzene	2.6742	2.38042		.01		-10.98572	30		Averaged	
4-Chlorotoluene	2.1921	1.98648		.01		-9.38005	30		Averaged	
tert-Butylbenzene	0.5785	0.52916		.01		-8.52895	30		Averaged	
1,2,4-Trimethylbenzene	2.7135	2.4018		.01		-11.48701	30		Averaged	
sec-Butylbenzene	3.5383	3.18836		.01		-9.89006	30		Averaged	
4-Isopropyltoluene	2.9129	2.59784		.01		-10.81603	30		Averaged	
1,3-Dichlorobenzene	1.4843	1.31831		.01		-11.18305	30		Averaged	
1,4-Dichlorobenzene	1.5159	1.32337		.01		-12.70071	30		Averaged	
n-Butylbenzene	2.7313	2.452		.01		-10.2259	30		Averaged	
1,2-Dichlorobenzene	1.4311	1.23028		.01		-14.03256	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1381	0.11999		.01		-13.11369	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I **Injection Dat** 23-NOV-09 10:57

Data File: 112309V6\6M102.D **Init. Cal. Date(s)** 24-OCT-09 12:52 24-OCT-09 20:4

Lab Sample ID W6VM091123-01 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.0175	0.87632		.01		-13.87518	30		Averaged
Hexachlorobutadiene	0.655	0.56164		.01		-14.25344	30		Averaged
Naphthalene	2.0905	1.73755		.01		-16.88352	30		Averaged
1,2,3-Trichlorobenzene	0.8478	0.73874		.01		-12.86388	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M102.D
Acq On : 23 Nov 2009 10:57 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[A] 1111-01C+1122-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 23 11:19:14 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1788913	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1321956	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	707533	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1787432	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1321956	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	707533	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	517305	49.27 ug/L	0.00
43) Toluene-d8	11.626	98	1803153	50.58 ug/L	0.00
61) Bromofluorobenzene	14.357	95	702283	51.77 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.360	85	293397	41.95 ug/L	99
3) Chloromethane	4.713	50	430498	37.35 ug/L	99
4) Vinyl chloride	4.934	62	406367	42.25 ug/L	100
5) Bromomethane	5.508	94	328946	47.07 ug/L	99
6) Chloroethane	5.629	64	322674	44.03 ug/L	99
7) Trichlorofluoromethane	6.032	101	623941	47.55 ug/L	99
8) Ethyl ether	6.334	59	372355	37.77 ug/L	91
9) Acetone	6.712	43	1094555	179.69 ug/L	99
10) 1,1-Dichloroethylene	6.718	61	593227	43.00 ug/L	98
11) Iodomethane	6.962	142	3107489	218.91 ug/L	100
12) Acetonitrile	7.078	41	1464574	986.61 ug/L	99
13) Methyl acetate	7.102	43	1565680	180.50 ug/L	98
14) Carbon disulfide	7.084	76	6312711	233.06 ug/L	100
15) Methylene chloride	7.291	84	421747	42.80 ug/L	95
16) tert-Butyl methyl ether	7.578	73	1075203	40.71 ug/L	98
17) trans-1,2-Dichloroethy...	7.621	61	598564	44.03 ug/L	97
18) Vinyl acetate	8.066	43	4685825	251.96 ug/L	98
19) 1,1-Dichloroethane	8.108	63	741884	43.76 ug/L	99
20) 2-Butanone	8.694	43	1351292	159.96 ug/L	97
21) cis-1,2-Dichloroethylene	8.742	61	663857	43.36 ug/L	97
22) 2,2-Dichloropropane	8.773	77	620116	45.76 ug/L	99
23) Bromochloromethane	9.023	128	200247	43.38 ug/L	96
24) Chloroform	9.053	83	681152	44.21 ug/L	99
25) 1,1,1-Trichloroethane	9.328	97	615119	45.87 ug/L	99
26) Cyclohexane	9.413	56	801493	43.62 ug/L	96
27) 1,1-Dichloropropene	9.480	75	559507	46.72 ug/L	98
28) Carbon tetrachloride	9.517	117	564960	47.76 ug/L	100
30) 1,2-Dichloroethane	9.712	62	535691	41.75 ug/L	100
31) Benzene	9.724	78	1604225	43.92 ug/L	98
32) Cyclohexene	9.834	67	823999	44.22 ug/L	96
33) n-Butyl alcohol	10.084	56	1431979	4665.63 ug/L	99
34) Trichloroethylene	10.364	95	408542	44.56 ug/L	99
35) 1,2-Dichloropropane	10.614	63	432898	43.73 ug/L	100
36) Methylcyclohexane	10.608	83	753839	44.63 ug/L	97
37) Dibromomethane	10.754	93	229023	44.93 ug/L	97
38) Bromodichloromethane	10.864	83	507348	45.50 ug/L	100
39) 2-Chloroethylvinyl ether	11.089	63	1127026	206.68 ug/L	100
40) cis-1,3-Dichloropropylene	11.315	75	640173	45.58 ug/L	95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M102.D
Acq On : 23 Nov 2009 10:57 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[A] 1111-01C+1122-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 23 11:19:14 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.413	58	811601	191.53 ug/L	98
44) Toluene	11.699	91	1705846	44.11 ug/L	99
45) trans-1,3-Dichloroprop...	11.864	75	589816	46.63 ug/L	98
46) 1,1,2-Trichloroethane	12.083	83	279853	44.77 ug/L	99
47) 2-Hexanone	12.260	43	1893019	153.48 ug/L	99
48) 1,3-Dichloropropane	12.272	76	586972	44.20 ug/L #	73
49) Tetrachloroethylene	12.290	164	354592	44.58 ug/L	99
50) Dibromochloromethane	12.540	129	392422	46.02 ug/L	99
51) 1,2-Dibromoethane	12.711	107	342247	45.23 ug/L	100
52) Chlorobenzene	13.193	112	1133365	45.26 ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.248	131	400911	45.48 ug/L	99
54) Ethylbenzene	13.254	91	1931254	44.38 ug/L	100
55) m,p-Xylenes	13.363	106	1569178	90.37 ug/L	98
56) o-Xylene	13.796	106	762174	44.49 ug/L	99
57) Styrene	13.802	104	1246598	45.11 ug/L	98
59) Bromoform	14.065	173	262216	48.18 ug/L	99
60) Isopropylbenzene	14.156	105	1989158	45.05 ug/L	99
62) 1,1,2,2-Tetrachloroethane	14.442	83	439698	45.31 ug/L	98
63) 1,2,3-Trichloropropane	14.528	110	120683	44.17 ug/L	94
64) Bromobenzene	14.564	156	490561	45.55 ug/L	99
65) n-Propylbenzene	14.583	91	2310266	45.52 ug/L	100
66) 1,3,5-Trimethylbenzene	14.735	105	1684228	44.51 ug/L	100
67) 2-Chlorotoluene	14.735	126	490518	45.87 ug/L	97
68) 4-Chlorotoluene	14.833	91	1405502	45.31 ug/L	99
69) tert-Butylbenzene	15.107	134	374396	45.74 ug/L	97
70) 1,2,4-Trimethylbenzene	15.150	105	1699355	44.26 ug/L	96
71) sec-Butylbenzene	15.333	105	2255870	45.06 ug/L	99
72) 4-Isopropyltoluene	15.454	119	1838057	44.59 ug/L	99
73) 1,3-Dichlorobenzene	15.515	146	932747	44.41 ug/L	99
74) 1,4-Dichlorobenzene	15.601	146	936327	43.65 ug/L	100
75) n-Butylbenzene	15.887	91	1734872	44.89 ug/L	99
76) 1,2-Dichlorobenzene	16.021	146	870465	42.98 ug/L	99
77) 1,2-Dibromo-3-chloropr...	16.881	157	84896	43.44 ug/L	99
78) 1,2,4-Trichlorobenzene	17.911	180	620026	43.06 ug/L	99
79) Hexachlorobutadiene	18.076	225	397377	42.87 ug/L	100
80) Naphthalene	18.289	128	1229375	41.56 ug/L	100
81) 1,2,3-Trichlorobenzene	18.625	180	522682	43.57 ug/L	100
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	6.481		0m	N.D. d	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	6.712		0m	N.D. d	
88) Allyl chloride	7.078		0m	N.D. d	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	7.578		0m	N.D. d	
91) Isopropyl ether	8.066		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	8.224		0m	N.D. d	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.694		0m	N.D. d	
95) Propionitrile	8.694		0m	N.D. d	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	9.059		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M102.D
Acq On : 23 Nov 2009 10:57 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[A] 1111-01C+1122-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 23 11:19:14 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
98)	Isobutyl alcohol	9.413		0m	N.D.	d
99)	Methyl tert-amyl ether	9.730		0m	N.D.	d
100)	Methyl methacrylate	10.608		0m	N.D.	d
101)	1,4-Dioxane	10.705		0m	N.D.	d
102)	2-Nitropropane	11.089		0m	N.D.	d
104)	Ethyl methacrylate	10.608		0m	N.D.	d
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	14.156		0m	N.D.	d
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	15.180		0m	N.D.	d
111)	Benzyl chloride	15.717		0m	N.D.	d
112)	bis(2-Chloroisopropyl)...	16.168		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M102.D
Acq On : 23 Nov 2009 10:57 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-01|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[A] 1111-01C+1122-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 23 11:19:14 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

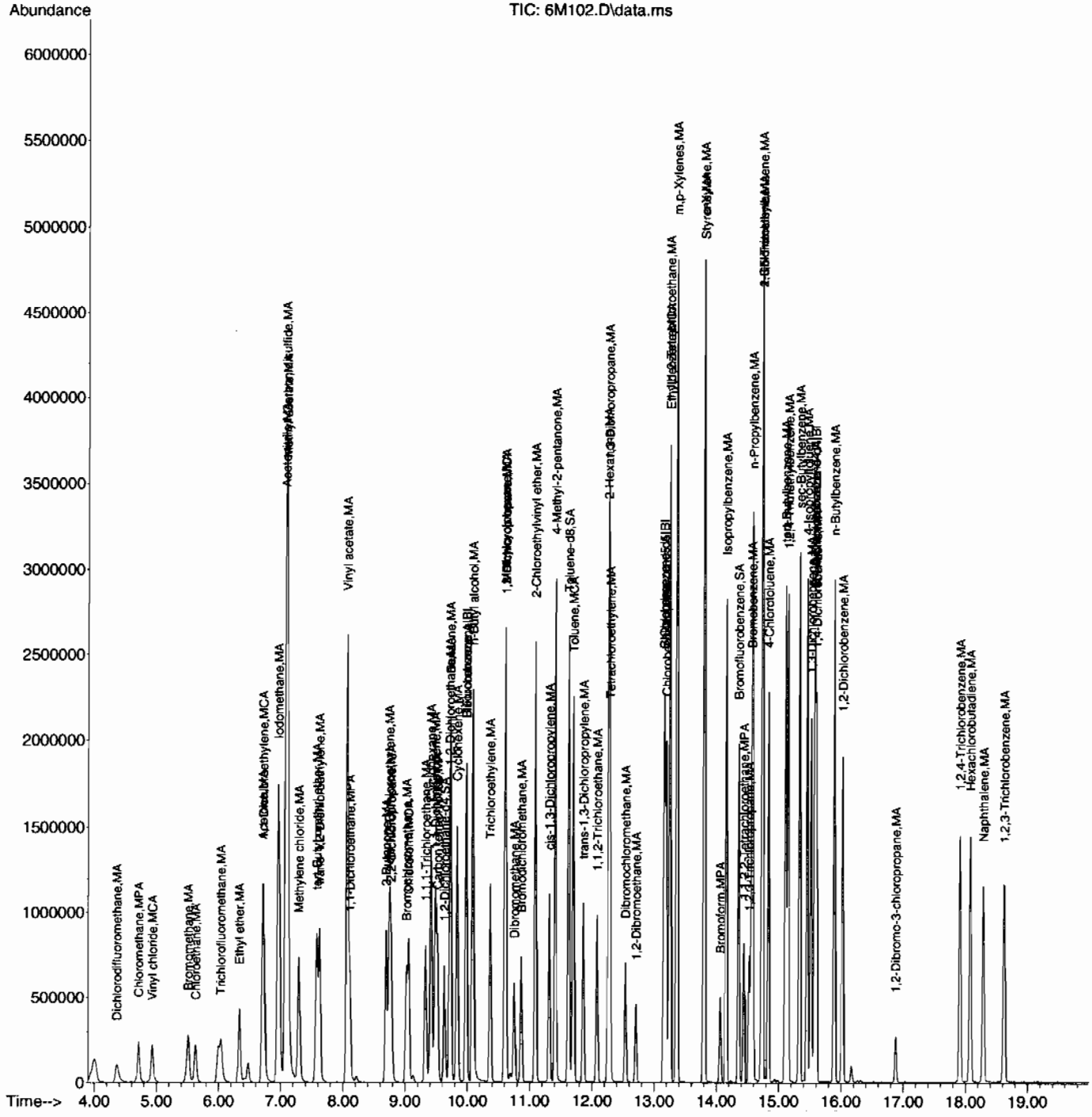

Continuing Calibration Summary

Client SDG: 10-543

Instrument ID: VOA6.I **Injection Dat** 23-NOV-09 11:53

Data File: 112309V6\6M104.D **Init. Cal. Date(s)** 24-OCT-09 12:52 - 24-OCT-09 20:4

Lab Sample ID W6VM091123-03 **Quant Type** ISTD **Method:** 102409V6\VOA6-8260-102409.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.2935	0.288		.01		-1.87394	30		Averaged
S	Toluene-d8	1.3485	1.37		.01		1.59436	30		Averaged
S	Bromofluorobenzene	0.9587	1.006		.01		4.93376	30		Averaged
	Acrolein	0.0505	0.052		.01		2.9703	30		Averaged
	Trichlorotrifluoroethane	0.0977	0.116		.01		18.73081	30		Averaged
	Allyl chloride	0.4753	0.494		.01		3.93436	30		Averaged
	Acrylonitrile	0.0959	0.092		.01		-4.06674	30		Averaged
	2-Chloro-1,3-butadiene	0.395	0.448		.01		13.41772	30		Averaged
	Ethyl acetate	0.2729	0.239		.01		-12.42213	40		Averaged
	Propionitrile	0.0371	0.035		.01		-5.66038	30		Averaged
	Methacrylonitrile	0.1689	0.156		.01		-7.63766	30		Averaged
	Tetrahydrofuran	0.0879	0.08		.01		-8.98749	30		Averaged
	Isobutyl alcohol	0.0105	0.009		.01		-14.28571	40		Averaged
	Methyl methacrylate	0.1575	0.159		.01		0.95238	30		Averaged
	Ethyl methacrylate	0.2097	0.212		.01		1.0968	30		Averaged
	1,4-Dioxane	0.0025	0.002		.01		-20	40		Averaged
	2-Nitropropane	0.0769	0.077		.01		0.13004	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2285	0.255		.01		11.59737	30		Averaged
	Cyclohexanone	1250	899.46	1250			-28.0432	40		Linear
	trans-1,4-Dichloro-2-butene	0.2208	0.241		.01		9.14855	30		Averaged
	Pentachloroethane	0.3173	0.489		.01		54.11283	30	*	Averaged
	Benzyl chloride	1.1969	1.32		.01		10.2849	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3724	0.351		.01		-5.74651	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M104.D
Acq On : 23 Nov 2009 11:53 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-03|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[B] 1118-08A
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 23 12:20:58 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1758062	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.162	117	1315705	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	711143	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1755733	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.162	117	1315705	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	711143	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.632	65	505879	49.02	ug/L	0.00
43) Toluene-d8	11.626	98	1803058	50.81	ug/L	0.00
61) Bromofluorobenzene	14.357	95	715512	52.48	ug/L	0.00

Target Compounds				Qvalue
2) Dichlorodifluoromethane	4.360	0m	N.D. d	
3) Chloromethane	4.713	0m	N.D. d	
4) Vinyl chloride	4.934	0m	N.D. d	
5) Bromomethane	0.000	0	N.D.	
6) Chloroethane	0.000	0	N.D.	
7) Trichlorofluoromethane	0.000	0	N.D.	
8) Ethyl ether	0.000	0	N.D.	
9) Acetone	6.712	0m	N.D. d	
10) 1,1-Dichloroethylene	6.706	0m	N.D. d	
11) Iodomethane	6.956	0m	N.D. d	
12) Acetonitrile	7.145	0m	N.D. d	
13) Methyl acetate	7.109	0m	N.D. d	
14) Carbon disulfide	7.145	0m	N.D. d	
15) Methylene chloride	7.291	0m	N.D. d	
16) tert-Butyl methyl ether	0.000	0	N.D.	
17) trans-1,2-Dichloroethy...	0.000	0	N.D.	
18) Vinyl acetate	8.072	0m	N.D. d	
19) 1,1-Dichloroethane	8.212	0m	N.D. d	
20) 2-Butanone	8.706	0m	N.D. d	
21) cis-1,2-Dichloroethylene	8.706	0m	N.D. d	
22) 2,2-Dichloropropane	0.000	0	N.D.	
23) Bromochloromethane	0.000	0	N.D.	
24) Chloroform	9.059	0m	N.D. d	
25) 1,1,1-Trichloroethane	0.000	0	N.D.	
26) Cyclohexane	9.389	0m	N.D. d	
27) 1,1-Dichloropropene	9.474	0m	N.D. d	
28) Carbon tetrachloride	0.000	0	N.D.	
30) 1,2-Dichloroethane	0.000	0	N.D.	
31) Benzene	9.730	0m	N.D. d	
32) Cyclohexene	9.834	0m	N.D. d	
33) n-Butyl alcohol	10.096	0m	N.D. d	
34) Trichloroethylene	10.364	0m	N.D. d	
35) 1,2-Dichloropropane	0.000	0	N.D.	
36) Methylcyclohexane	10.590	0m	N.D. d	
37) Dibromomethane	0.000	0	N.D.	
38) Bromodichloromethane	0.000	0	N.D.	
39) 2-Chloroethylvinyl ether	11.096	0m	N.D. d	
40) cis-1,3-Dichloropropylene	11.315	0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M104.D
Acq On : 23 Nov 2009 11:53 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-03|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[B] 1118-08A
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 23 12:20:58 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.413		0m	N.D. d	
44) Toluene	11.699		0m	N.D. d	
45) trans-1,3-Dichloroprop...	11.864		0m	N.D. d	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	12.266		0m	N.D. d	
48) 1,3-Dichloropropane	12.278		0m	N.D. d	
49) Tetrachloroethylene	12.290		0m	N.D. d	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	12.711		0m	N.D. d	
52) Chlorobenzene	13.199		0m	N.D. d	
53) 1,1,1,2-Tetrachloroethane	13.248		0m	N.D. d	
54) Ethylbenzene	13.254		0m	N.D. d	
55) m,p-Xylenes	13.363		0m	N.D. d	
56) o-Xylene	13.802		0m	N.D. d	
57) Styrene	13.802		0m	N.D. d	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.156		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	14.449		0m	N.D. d	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	14.577		0m	N.D. d	
65) n-Propylbenzene	14.583		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	14.735		0m	N.D. d	
67) 2-Chlorotoluene	14.729		0m	N.D. d	
68) 4-Chlorotoluene	14.833		0m	N.D. d	
69) tert-Butylbenzene	15.107		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	15.144		0m	N.D. d	
71) sec-Butylbenzene	15.333		0m	N.D. d	
72) 4-Isopropyltoluene	15.454		0m	N.D. d	
73) 1,3-Dichlorobenzene	15.515		0m	N.D. d	
74) 1,4-Dichlorobenzene	15.601		0m	N.D. d	
75) n-Butylbenzene	15.887		0m	N.D. d	
76) 1,2-Dichlorobenzene	16.015		0m	N.D. d	
77) 1,2-Dibromo-3-chloropr...	16.887		0m	N.D. d	
78) 1,2,4-Trichlorobenzene	17.917		0m	N.D. d	
79) Hexachlorobutadiene	18.070		0m	N.D. d	
80) Naphthalene	18.289		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	18.625		0m	N.D. d	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	6.542	56	455498	257.00 ug/L	100
86) Trichlorotrifluoroethane	6.700	85	1020121	297.29 ug/L	99
87) Isopropyl Alcohol	0.000		0m	N.D. d	
88) Allyl chloride	7.145	41	4338808	259.94 ug/L	98
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	7.547	53	803516	238.67 ug/L	100
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	8.212	53	785697	56.64 ug/L	93
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.706	43	2094741	218.55 ug/L	98
95) Propionitrile	8.779	54	303130	232.87 ug/L	100
96) Methacrylonitrile	8.956	41	1371202	231.24 ug/L	99
97) Tetrahydrofuran	9.065	42	700279	226.98 ug/L	96

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M104.D
Acq On : 23 Nov 2009 11:53 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-03|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[B] 1118-08A
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 23 12:20:58 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
98)	Isobutyl alcohol	9.395	41	829370	2240.03 ug/L	98	
99)	Methyl tert-amyl ether	0.000		0	N.D.		
100)	Methyl methacrylate	10.590	69	1391529	251.67 ug/L	94	
101)	1,4-Dioxane	10.705	88	213791	2444.14 ug/L	96	
102)	2-Nitropropane	11.077	43	676681	250.46 ug/L	99	
104)	Ethyl methacrylate	10.590	69	1392602	252.37 ug/L	93	
106)	1-Chlorohexane	0.000		0	N.D.		
107)	cis-1,4-Dichloro-2-butene	14.205	53	906289	278.89 ug/L	97	
108)	Cyclohexanone	14.320	42	476216	899.46 ug/L	99	E
109)	trans-1,4-Dichloro-2-b...	14.491	53	855488	272.41 ug/L	95	
110)	Pentachloroethane	15.180	167	1738132	385.16 ug/L	98	
111)	Benzyl chloride	15.717	91	4691939	275.62 ug/L	100	
112)	bis(2-Chloroisopropyl)...	16.113	45	1248636	235.72 ug/L	97	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M104.D
Acq On : 23 Nov 2009 11:53 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM091123-03|CCV|1|VOAF|1|VOA8260BLF|
Misc : CCV 5uL N/A MIX[B] 1118-08A
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 23 12:20:58 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

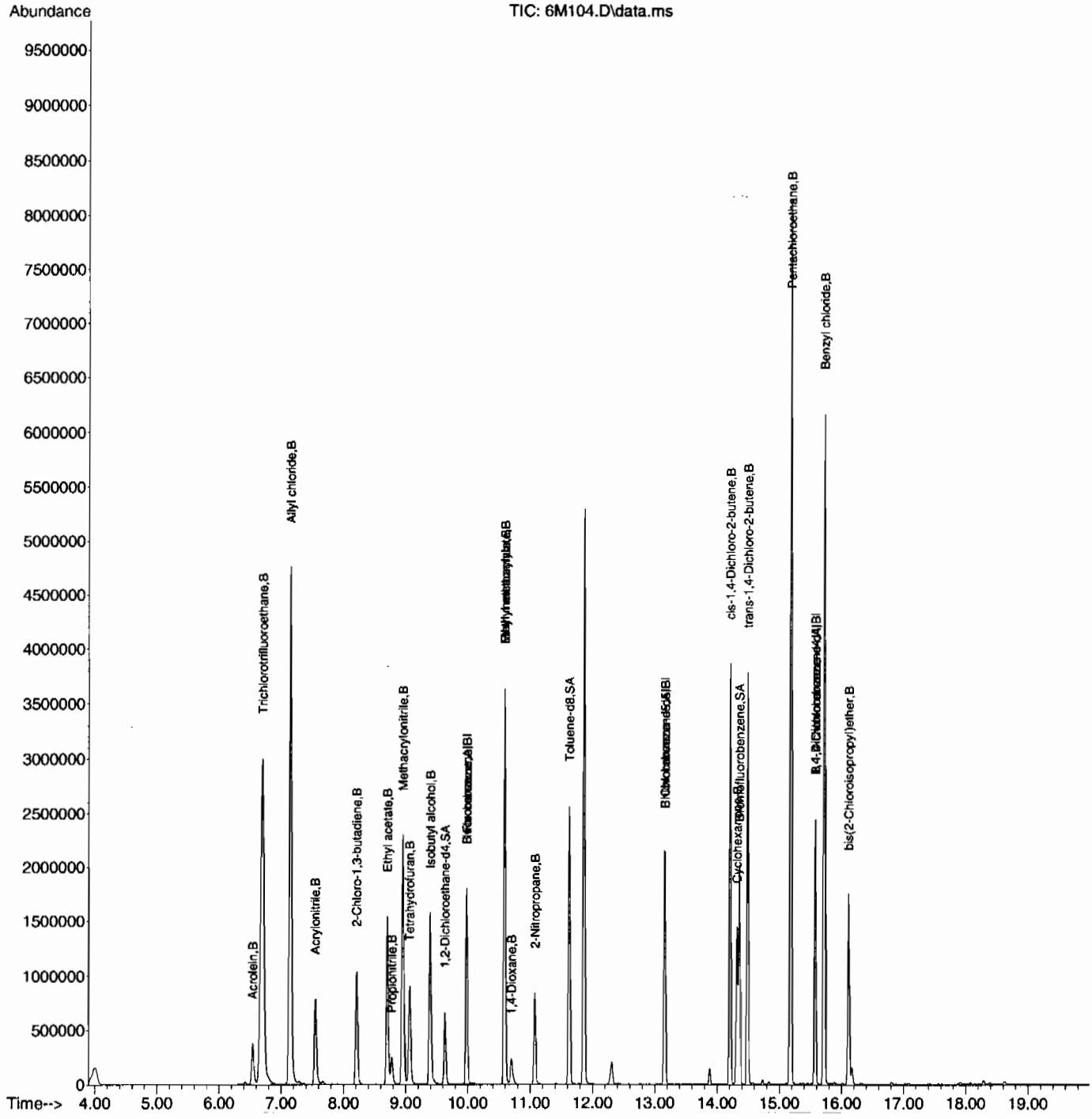

Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\102409V6\
Data File : 6H603.D
Acq On : 24 Oct 2009 12:23 pm
Operator : RXY1
Sample : |UVM090821-02|BFB|1|VOAF|1|
Misc : GEL 5mL N/A
ALS Vial : 3 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Title : Volatile Organics 8260B
Last Update : Mon Oct 26 15:34:49 2009

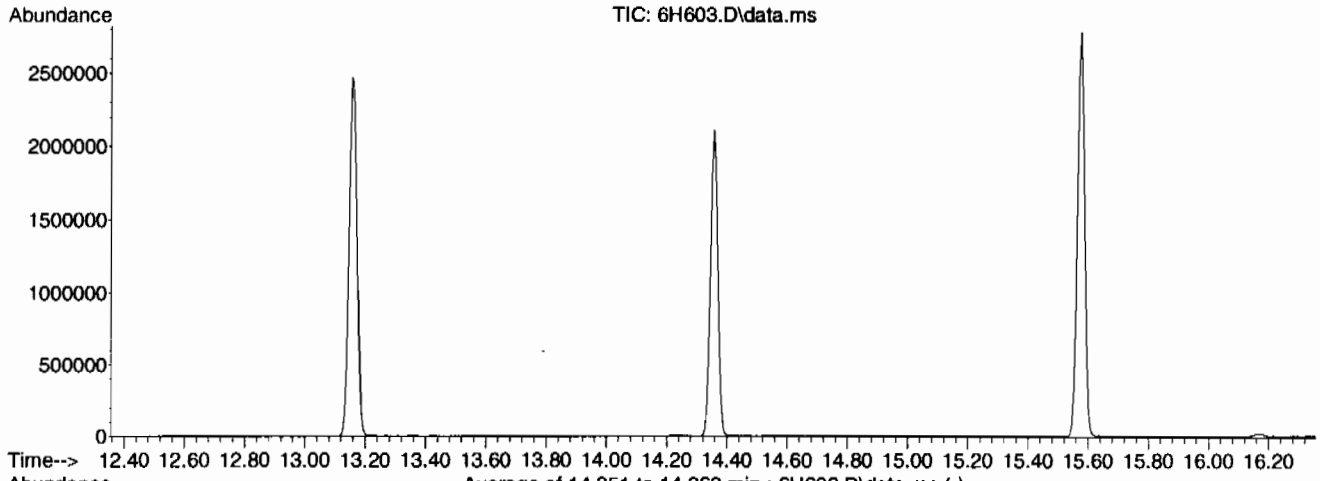

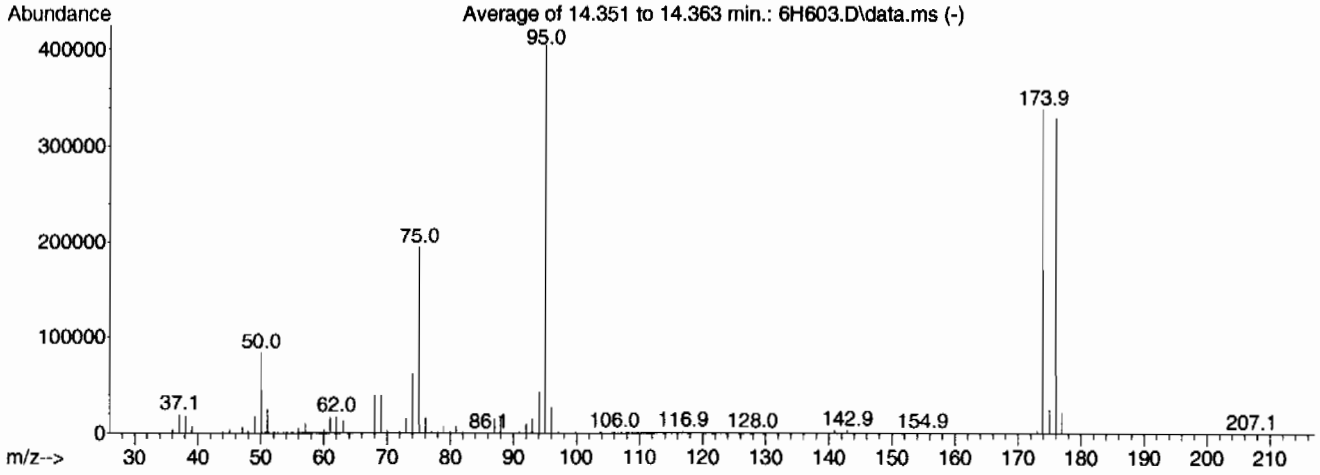

AutoFind: Scans 1558, 1559, 1560; Background Corrected with Scan 1550

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	83045	PASS
75	95	30	60	48.0	194368	PASS
95	95	100	100	100.0	404693	PASS
96	95	5	9	6.7	26976	PASS
173	174	0.00	2	1.0	3263	PASS
174	95	50	100	83.7	338645	PASS
175	174	5	9	7.2	24547	PASS
176	174	95	101	97.3	329429	PASS
177	176	5	9	6.7	22144	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L703.D
Acq On : 22 Nov 2009 12:21 pm
Operator : RXD1
Sample : |UVM091020-02|BFB|1|VOAF|1|
Misc : GEL 5mL N/A BFB
ALS Vial : 3 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Oct 27 15:11:11 2009

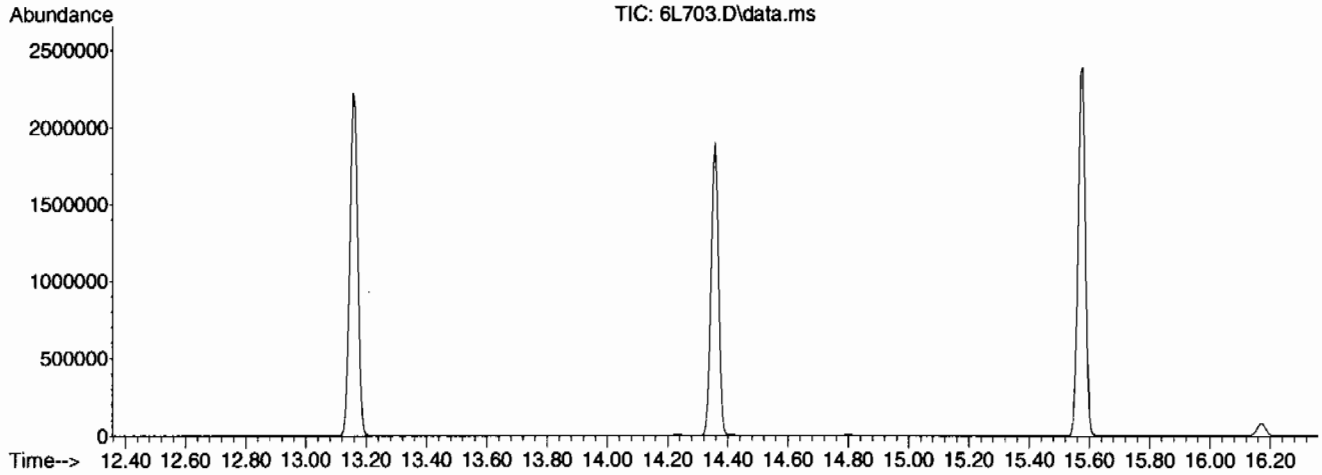

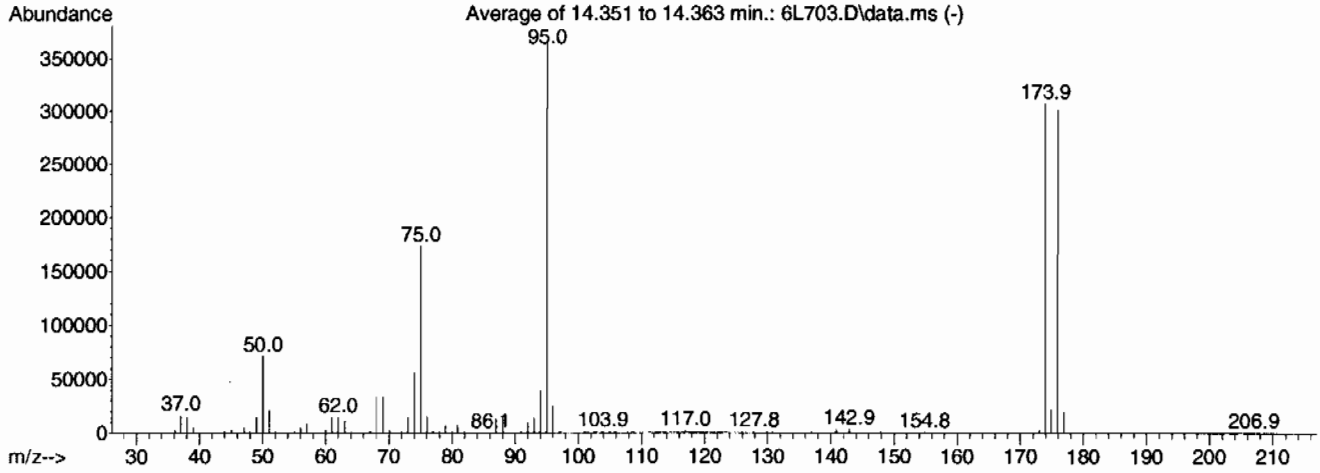

AutoFind: Scans 1558, 1559, 1560; Background Corrected with Scan 1550

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	70923	PASS
75	95	30	60	47.6	172971	PASS
95	95	100	100	100.0	363179	PASS
96	95	5	9	6.8	24728	PASS
173	174	0.00	2	0.9	2874	PASS
174	95	50	100	84.7	307605	PASS
175	174	5	9	7.2	22037	PASS
176	174	95	101	98.0	301504	PASS
177	176	5	9	6.5	19467	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M101.D
Acq On : 23 Nov 2009 10:30 am
Operator : RXD1
Sample : |UVM091020-02|BFB|1|VOAF|1|
Misc : GEL 5mL N/A BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Oct 27 15:11:11 2009

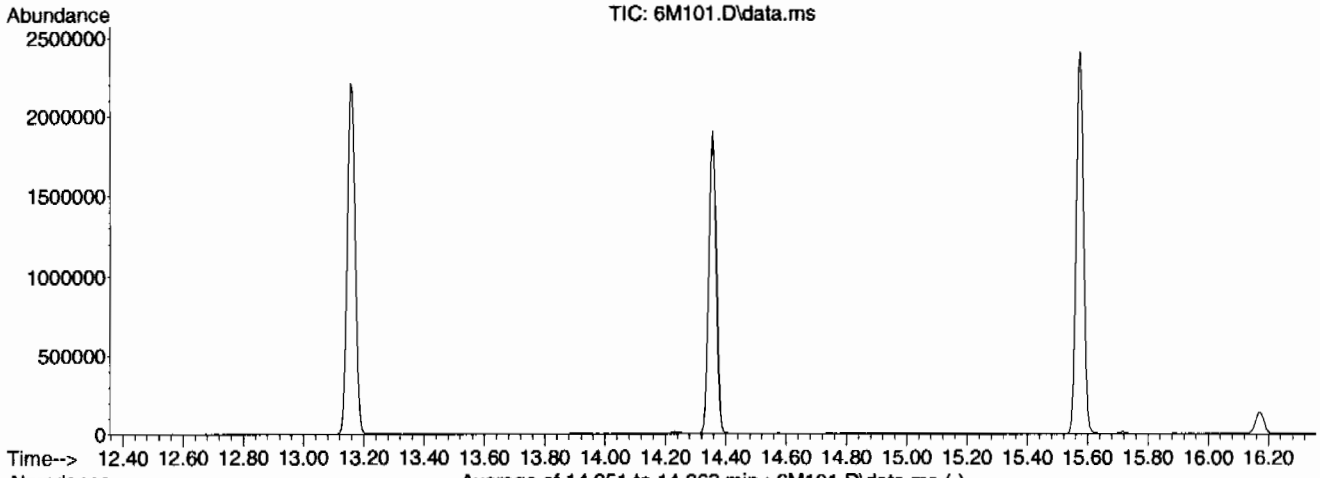

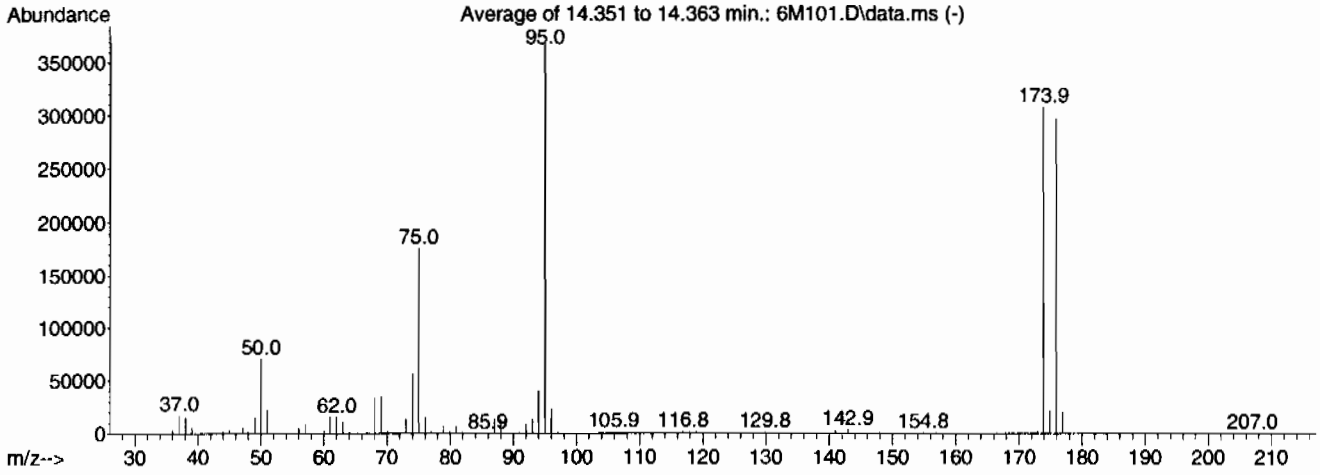

AutoFind: Scans 1558, 1559, 1560; Background Corrected with Scan 1550

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	70779	PASS
75	95	30	60	48.0	175915	PASS
95	95	100	100	100.0	366571	PASS
96	95	5	9	6.3	23088	PASS
173	174	0.00	2	0.9	2765	PASS
174	95	50	100	84.0	307776	PASS
175	174	5	9	6.9	21339	PASS
176	174	95	101	96.3	296448	PASS
177	176	5	9	6.8	20107	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978557**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 13:45**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 10:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L706BL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978557**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 13:45**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 10:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L706BL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L706BL.D
Acq On : 22 Nov 2009 1:45 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978557|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 22 14:08:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1845511	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1339689	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	711769	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1844001	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1339689	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	711769	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.633	65	543706	50.19 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 100.38%		
43) Toluene-d8	11.626	98	1826056	50.54 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 101.08%		
61) Bromofluorobenzene	14.357	95	698878	51.21 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 102.42%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.713	50	1282	N.D.	
4) Vinyl chloride	4.934	62	984	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.731	43	6744	Below Cal	88
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.078	41	720	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.096	76	896	N.D.	
15) Methylene chloride	7.298	84	16814	Below Cal	99
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	8.712	43	2091	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L706BL.D
Acq On : 22 Nov 2009 1:45 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978557|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 22 14:08:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.699	91	995	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	0.000		0	N.D.	
55) m,p-Xylenes	0.000		0	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	13.809	104	591	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	14.589	91	770	N.D.	
66) 1,3,5-Trimethylbenzene	14.735	105	433	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	14.839	91	619	N.D.	
69) tert-Butylbenzene	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.150	105	628	N.D.	
71) sec-Butylbenzene	15.333	105	1062	N.D.	
72) 4-Isopropyltoluene	15.455	119	1674	N.D.	
73) 1,3-Dichlorobenzene	15.509	146	199	N.D.	
74) 1,4-Dichlorobenzene	15.601	146	745	N.D.	
75) n-Butylbenzene	15.893	91	1686	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.905	180	504	N.D.	
79) Hexachlorobutadiene	18.076	225	183	N.D.	
80) Naphthalene	18.283	128	4303	N.D.	
81) 1,2,3-Trichlorobenzene	18.625	180	626	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000		0m	N.D.	d
88) Allyl chloride	7.115	41	1236	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.712	43	2091	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L706BL.D
Acq On : 22 Nov 2009 1:45 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978557|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 22 14:08:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	8.962	41	183	N.D.	
97)	Tetrahydrofuran	9.066	42	393	N.D.	
98)	Isobutyl alcohol	0.000		0m	N.D. d	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	10.590	69	449	N.D.	
101)	1,4-Dioxane	0.000		0	N.D.	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	10.590	69	449	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	14.205	53	419	N.D.	
108)	Cyclohexanone	0.000		0m	N.D. d	
109)	trans-1,4-Dichloro-2-b...	14.485	53	1187	N.D.	
110)	Pentachloroethane	15.180	167	2208	0.49 ug/L	77
111)	Benzyl chloride	15.717	91	13169	0.77 ug/L	88
112)	bis(2-Chloroisopropyl)...	16.113	45	7557	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L706BL.D
Acq On : 22 Nov 2009 1:45 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978557|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 22 14:08:55 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

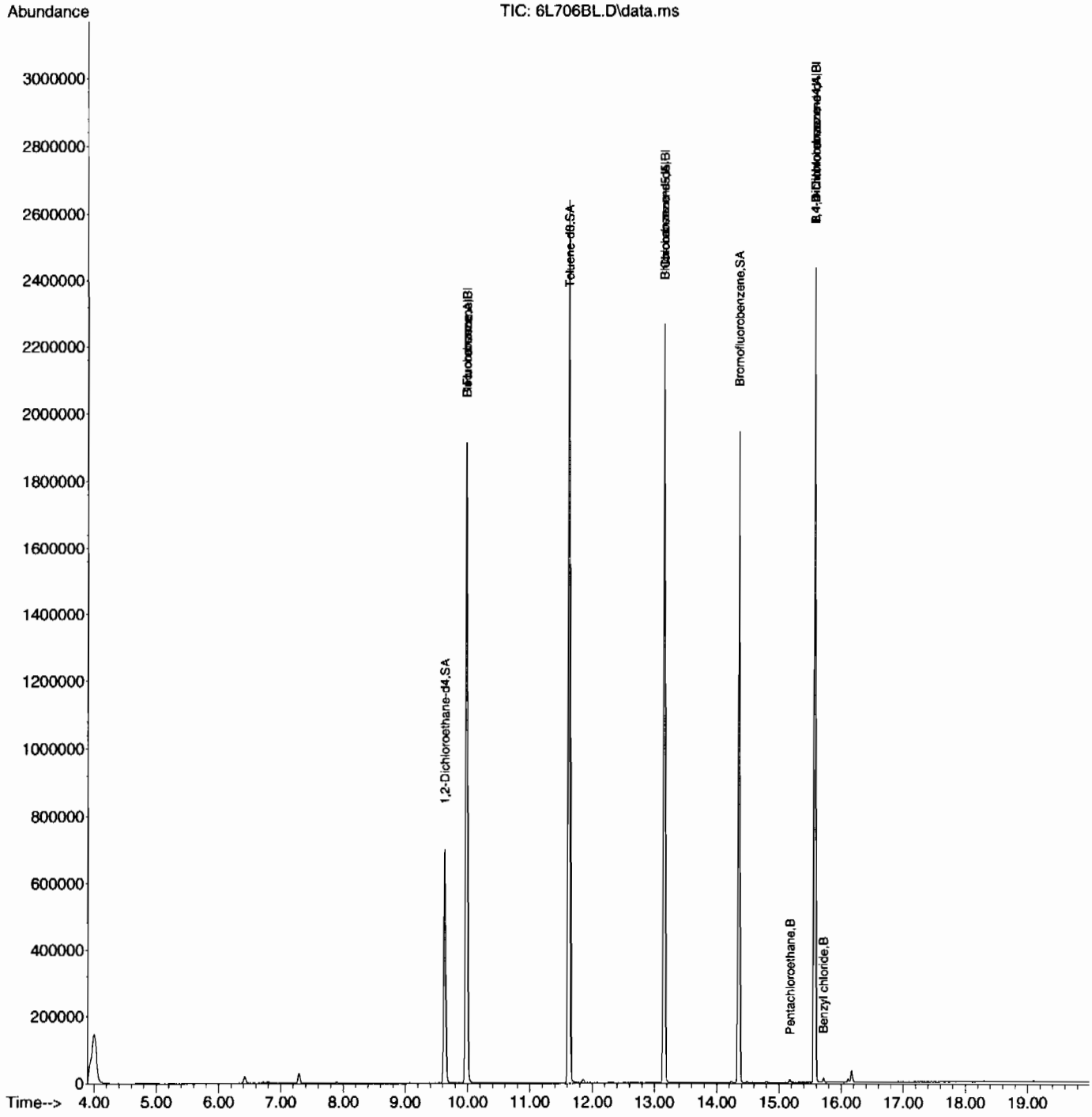

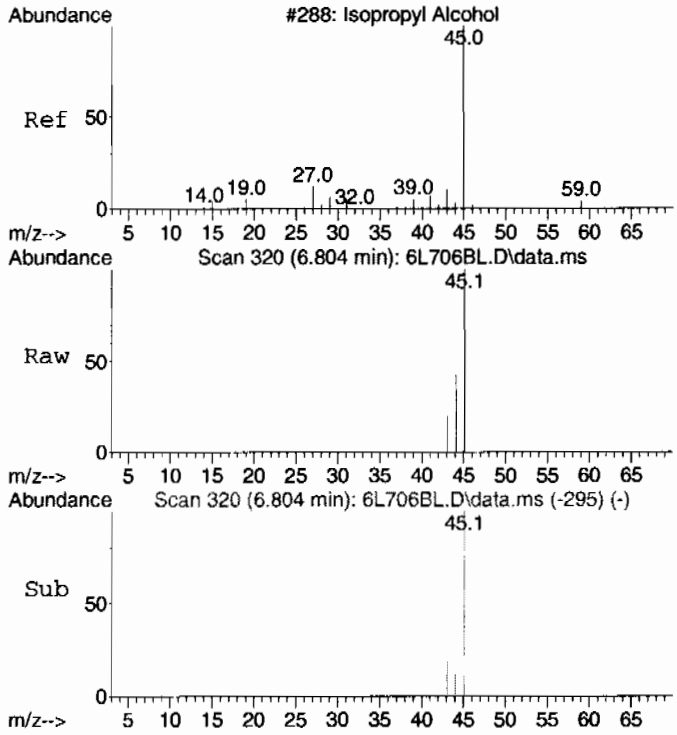

#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 10.43 ug/L
RT: 6.804 min Scan# 320
Delta R.T. 0.006 min
Lab File: 6L706BL.D
Acq: 22 Nov 2009 1:45 pm

Tgt Ion: 45 Resp: 8039

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.9

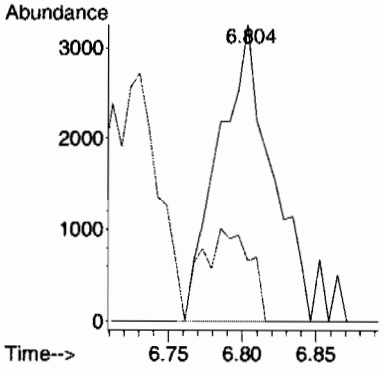

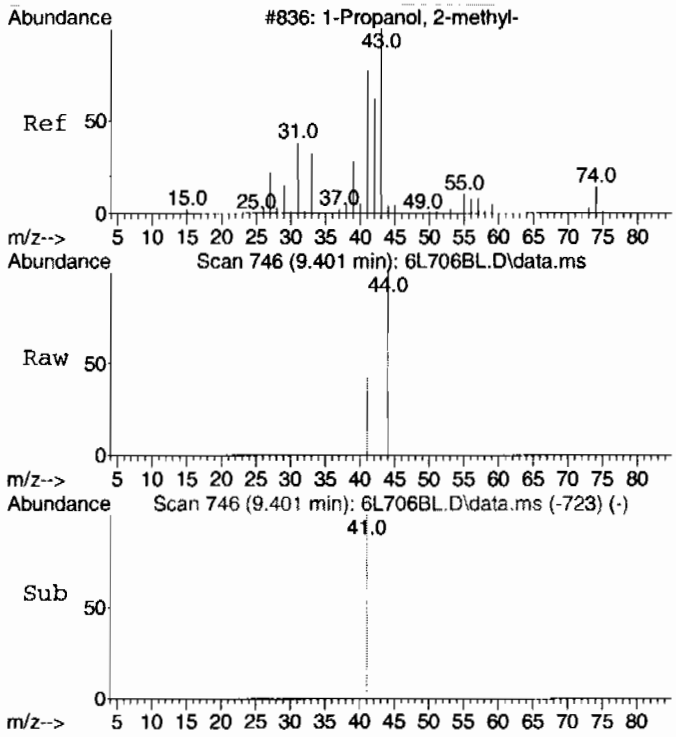

#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 0.52 ug/L
RT: 9.401 min Scan# 746
Delta R.T. 0.006 min
Lab File: 6L706BL.D
Acq: 22 Nov 2009 1:45 pm

Tgt Ion: 41 Resp: 203

Ion	Ratio	Lower	Upper
41	100		
43	0.0	114.4	174.4#

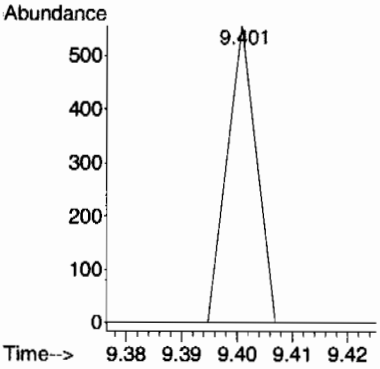

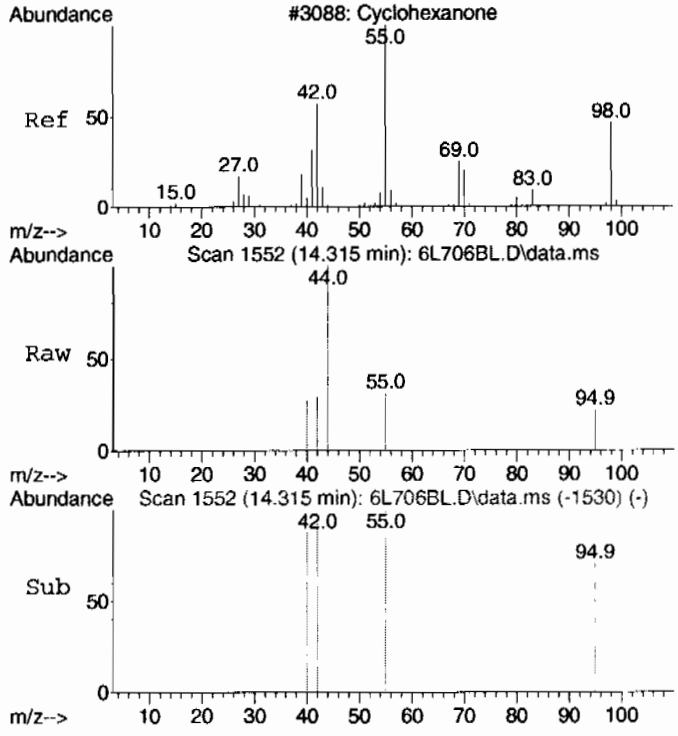

#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 18.86 ug/L
RT: 14.315 min Scan# 1552
Delta R.T. -0.005 min
Lab File: 6L706BL.D
Acq: 22 Nov 2009 1:45 pm

Tgt Ion: 42 Resp: 956

Ion	Ratio	Lower	Upper
42	100		
55	137.4	109.8	169.8
98	0.0	23.6	83.6#

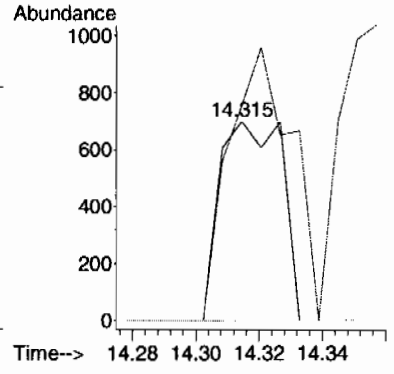

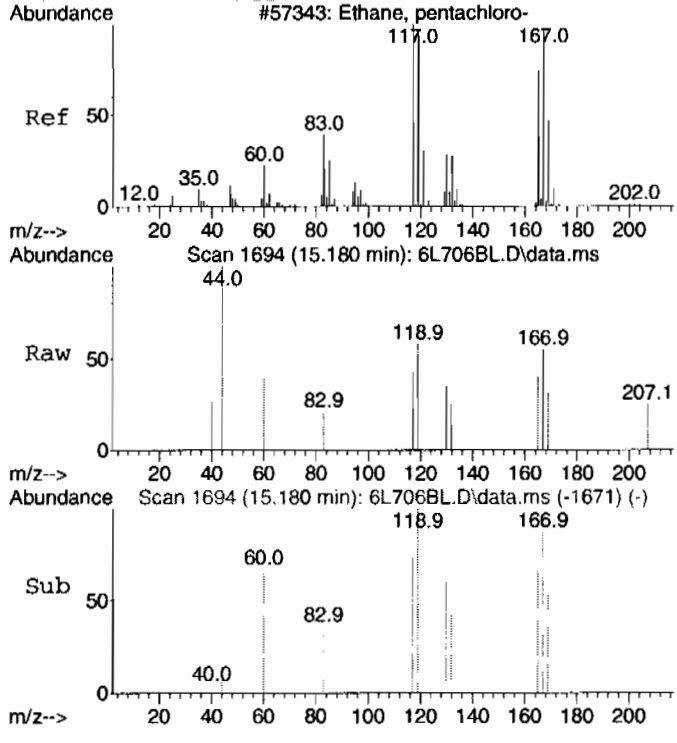

#110
Pentachloroethane
Concen: 0.49 ug/L
RT: 15.180 min Scan# 1694
Delta R.T. 0.000 min
Lab File: 6L706BL.D
Acq: 22 Nov 2009 1:45 pm

Tgt Ion:167 Resp: 2208

Ion	Ratio	Lower	Upper
167	100		
130	47.6	7.0	67.0
132	51.6	5.1	65.1

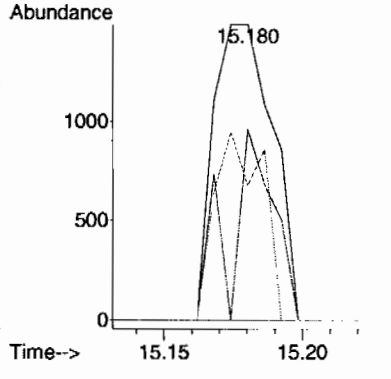

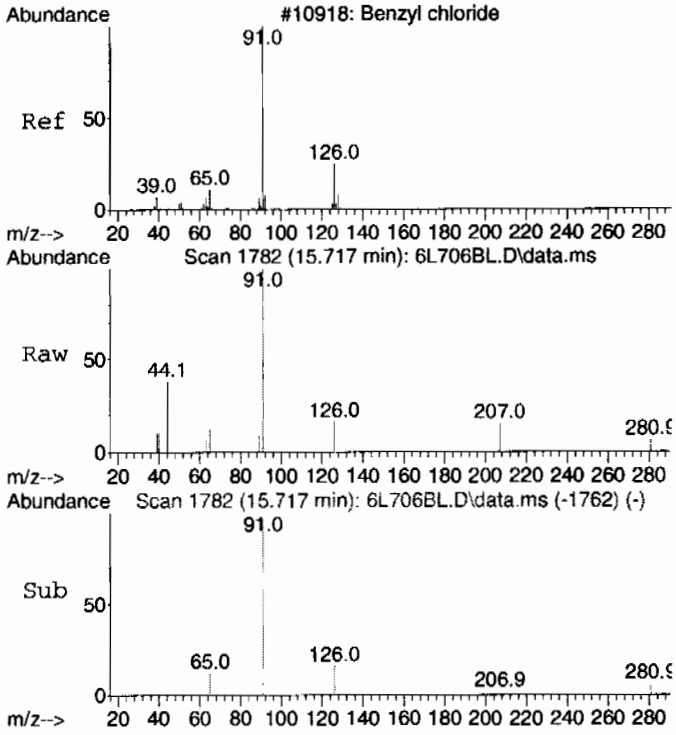

#111
Benzyl chloride
Concen: 0.77 ug/L
RT: 15.717 min Scan# 1782
Delta R.T. -0.000 min
Lab File: 6L706BL.D
Acq: 22 Nov 2009 1:45 pm

Tgt Ion: 91 Resp: 13169

Ion	Ratio	Lower	Upper
91	100		
126	16.4	0.0	52.6
65	9.1	0.0	43.2

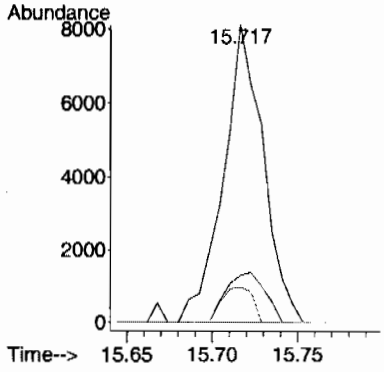

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L706BL.D
Acq On : 22 Nov 2009 1:45 pm
Operator : RXD1
Sample : |1201978557|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

```
Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L706BL.D
Acq On    : 22 Nov 2009   1:45 pm
Operator  : RXD1
Sample    : |1201978557|925461|1|VOAF|1|VOA8260BS|
Misc      : BLANK 5g N/A SOIL
ALS Vial  : 6   Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title  : Volatile Organics 8260B                    SubList :

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: default.P

                                                |--Internal Standard---|
TIC Top Hit name      RT  EstConc Units Response |#    RT     Resp  Conc|
-----------------------------------------------------------------------
```

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981770**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 12:49**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 09:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M106BL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543			**Matrix:**	SOIL
Lab Sample ID:	1201981770				
Client Sample:	QC for batch 925460	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 925460	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/23/2009 12:49	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/23/2009 09:05	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112309V6\6M106BL.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M106BL.D
Acq On : 23 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981770|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 23 13:30:39 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.980	96	1754331	50.00 ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1285459	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	682325	50.00 ug/L	0.00
82) B Fluorobenzene	9.980	96	1752242	50.00 ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1285459	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	682325	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	9.632	65	514300	49.95 ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 99.90%		
43) Toluene-d8	11.626	98	1767393	50.98 ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 101.96%		
61) Bromofluorobenzene	14.357	95	679521	51.94 ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 103.88%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.713	50	1398	N.D.	
4) Vinyl chloride	4.924	62	797	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.724	43	6220	Below Cal	78
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.139	41	687	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.090	76	183	N.D.	
15) Methylene chloride	7.291	84	6991	Below Cal	93
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	8.706	43	1818	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M106BL.D
Acq On : 23 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981770|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 23 13:30:39 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	0.000		0	N.D.	
39)	2-Chloroethylvinyl ether	0.000		0	N.D.	
40)	cis-1,3-Dichloropropylene	0.000		0	N.D.	
42)	4-Methyl-2-pentanone	0.000		0	N.D.	
44)	Toluene	11.699	91	1080	N.D.	
45)	trans-1,3-Dichloroprop...	0.000		0	N.D.	
46)	1,1,2-Trichloroethane	0.000		0	N.D.	
47)	2-Hexanone	0.000		0	N.D.	
48)	1,3-Dichloropropane	0.000		0	N.D.	
49)	Tetrachloroethylene	0.000		0	N.D.	
50)	Dibromochloromethane	0.000		0	N.D.	
51)	1,2-Dibromoethane	0.000		0	N.D.	
52)	Chlorobenzene	0.000		0	N.D.	
53)	1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54)	Ethylbenzene	0.000		0	N.D.	
55)	m,p-Xylenes	0.000		0	N.D.	
56)	o-Xylene	0.000		0	N.D.	
57)	Styrene	0.000		0	N.D.	
59)	Bromoform	0.000		0	N.D.	
60)	Isopropylbenzene	0.000		0	N.D.	
62)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63)	1,2,3-Trichloropropane	0.000		0	N.D.	
64)	Bromobenzene	0.000		0	N.D.	
65)	n-Propylbenzene	14.576	91	533	N.D.	
66)	1,3,5-Trimethylbenzene	14.741	105	524	N.D.	
67)	2-Chlorotoluene	0.000		0	N.D.	
68)	4-Chlorotoluene	14.833	91	223	N.D.	
69)	tert-Butylbenzene	0.000		0	N.D.	
70)	1,2,4-Trimethylbenzene	15.150	105	398	N.D.	
71)	sec-Butylbenzene	15.326	105	627	N.D.	
72)	4-Isopropyltoluene	15.448	119	644	N.D.	
73)	1,3-Dichlorobenzene	0.000		0	N.D.	
74)	1,4-Dichlorobenzene	15.607	146	734	N.D.	
75)	n-Butylbenzene	15.887	91	1447	N.D.	
76)	1,2-Dichlorobenzene	0.000		0	N.D.	
77)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	0.000		0	N.D.	
79)	Hexachlorobutadiene	0.000		0	N.D.	
80)	Naphthalene	18.283	128	2192	N.D.	
81)	1,2,3-Trichlorobenzene	0.000		0	N.D.	
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	0.000		0	N.D.	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	0.000		0	N.D.	
88)	Allyl chloride	7.139	41	687	N.D.	
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	0.000		0	N.D.	
91)	Isopropyl ether	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	8.706	43	1818	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M106BL.D
Acq On : 23 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981770|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 23 13:30:39 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	8.962	41	204	N.D.	
97)	Tetrahydrofuran	9.059	42	821	N.D.	
98)	Isobutyl alcohol	0.000		0m	N.D. d	
99)	Methyl tert-amyl ether	0.000		0	N.D.	
100)	Methyl methacrylate	10.589	69	773	N.D.	
101)	1,4-Dioxane	0.000		0m	N.D. d	
102)	2-Nitropropane	0.000		0	N.D.	
104)	Ethyl methacrylate	10.589	69	773	N.D.	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	14.199	53	1065	N.D.	
108)	Cyclohexanone	0.000		0m	N.D. d	
109)	trans-1,4-Dichloro-2-b...	14.491	53	1323	N.D.	
110)	Pentachloroethane	15.180	167	2500	0.58 ug/L	78
111)	Benzyl chloride	15.723	91	13594	0.83 ug/L	89
112)	bis(2-Chloroisopropyl)...	16.113	45	6055	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M106BL.D
Acq On : 23 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981770|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 23 13:30:39 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

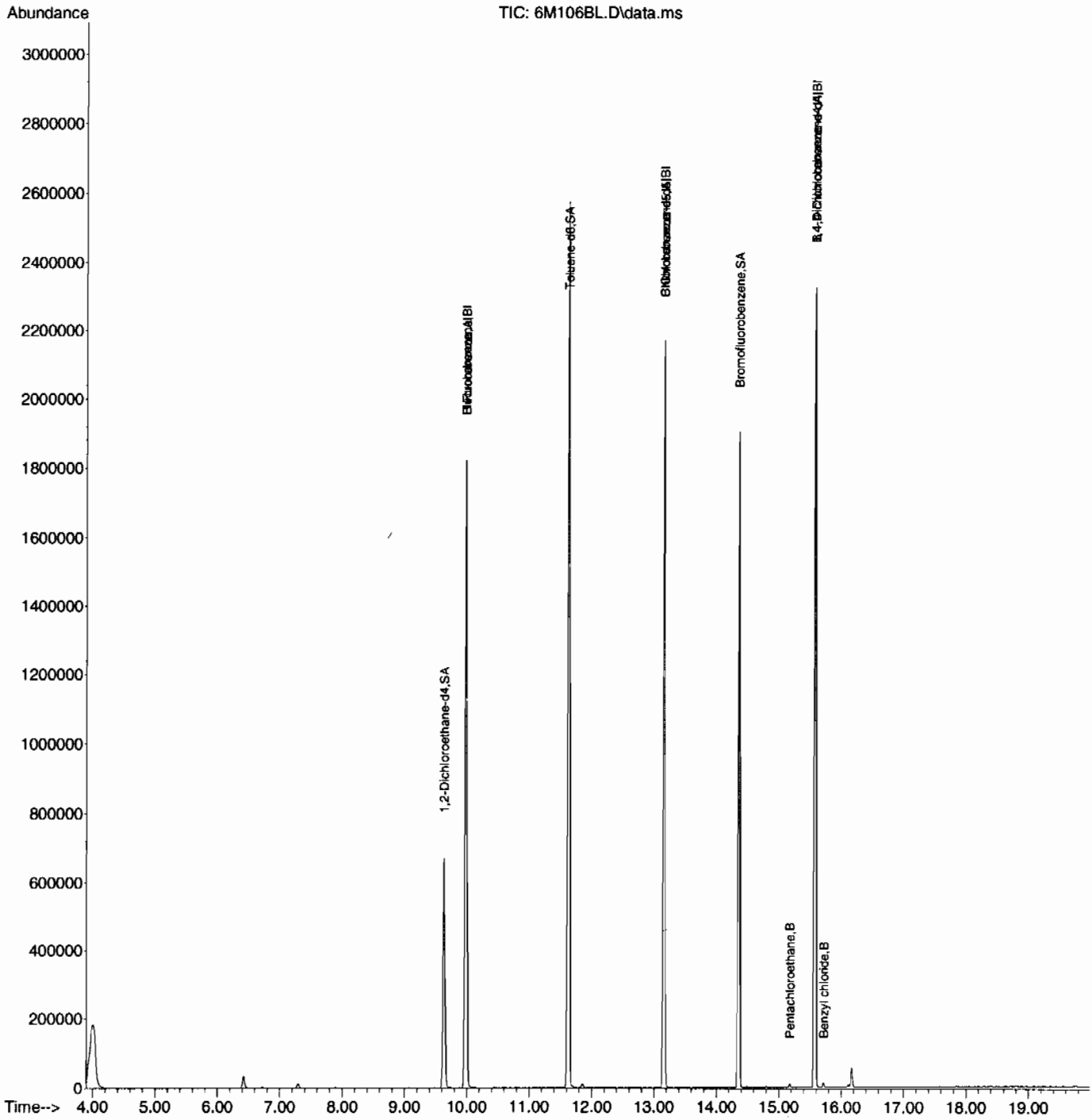

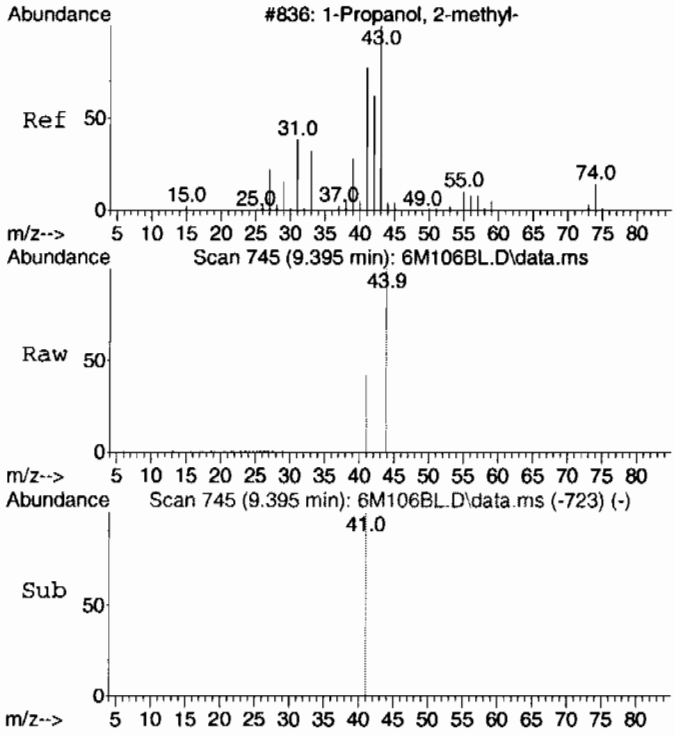

#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 0.55 ug/L
RT: 9.395 min Scan# 745
Delta R.T. -0.000 min
Lab File: 6M106BL.D
Acq: 23 Nov 2009 12:49 pm

Tgt Ion: 41 Resp: 204

Ion	Ratio	Lower	Upper
41	100		
43	91.7	114.4	174.4#

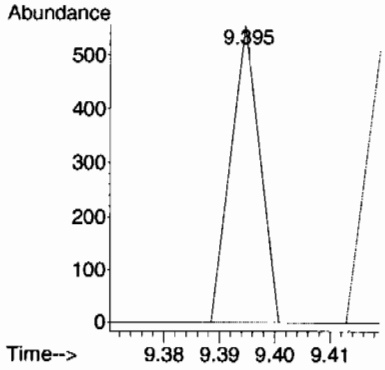

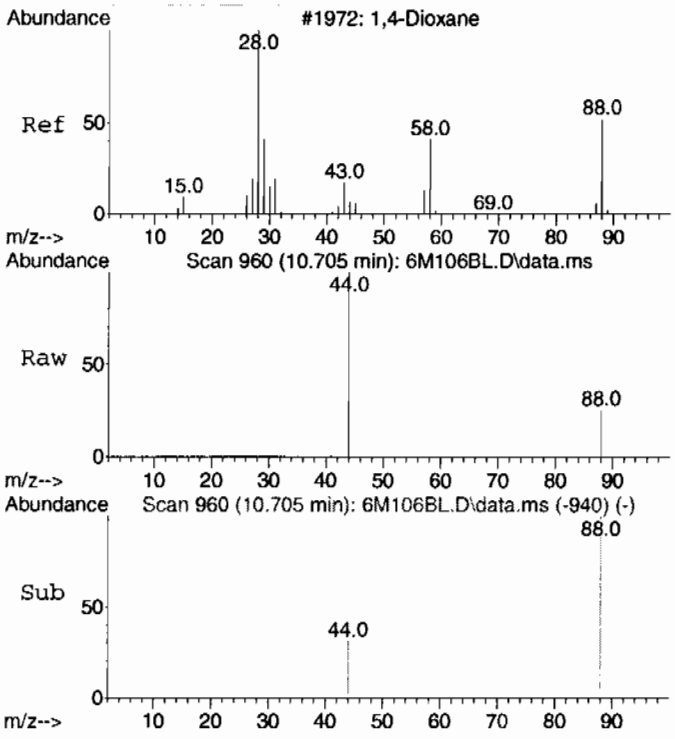

#101 BEFORE analyst DELETION
1,4-Dioxane
Concen: 2.10 ug/L
RT: 10.705 min Scan# 960
Delta R.T. 0.000 min
Lab File: 6M106BL.D
Acq: 23 Nov 2009 12:49 pm

Tgt Ion: 88 Resp: 183

Ion	Ratio	Lower	Upper
88	100		
58	0.0	48.5	108.5#

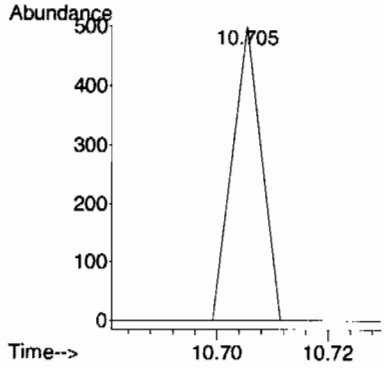

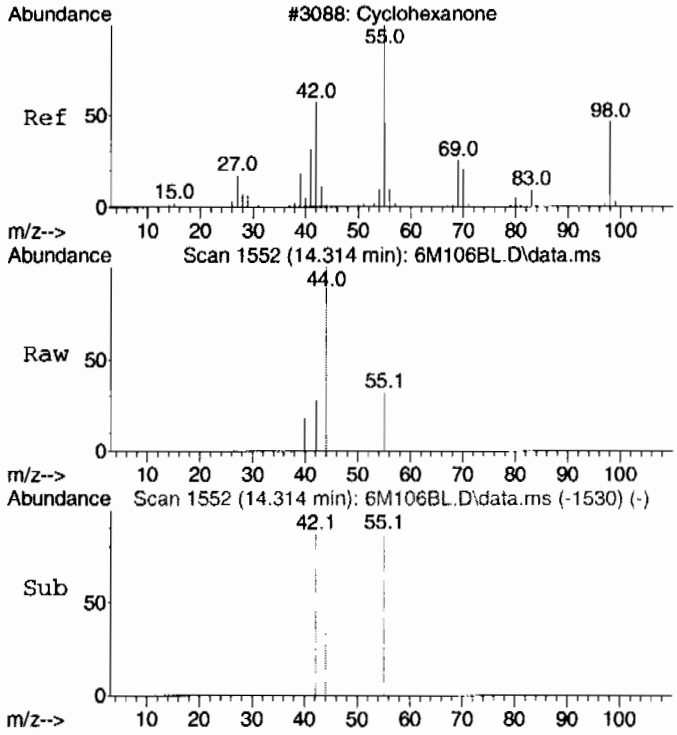

#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 18.17 ug/L
RT: 14.314 min Scan# 1552
Delta R.T. -0.006 min
Lab File: 6M106BL.D
Acq: 23 Nov 2009 12:49 pm

Tgt Ion: 42 Resp: 560

Ion	Ratio	Lower	Upper
42	100		
55	311.4	109.8	169.8#
98	0.0	23.6	83.6#

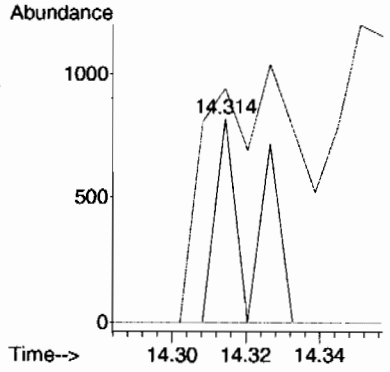

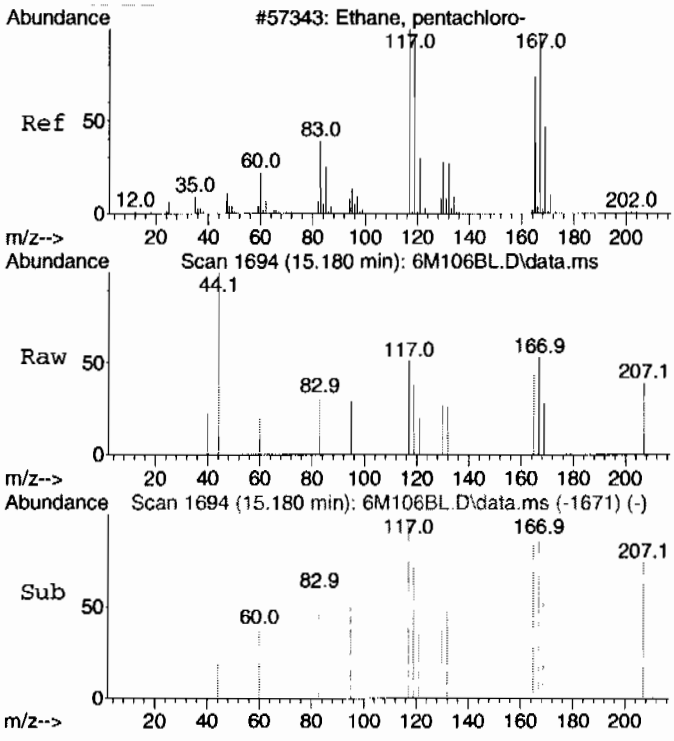

#110
Pentachloroethane
Concen: 0.58 ug/L
RT: 15.180 min Scan# 1694
Delta R.T. 0.000 min
Lab File: 6M106BL.D
Acq: 23 Nov 2009 12:49 pm

Tgt Ion:167 Resp: 2500

Ion	Ratio	Lower	Upper
167	100		
130	52.4	7.0	67.0
132	45.1	5.1	65.1

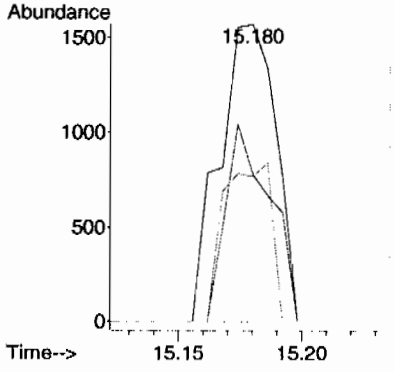

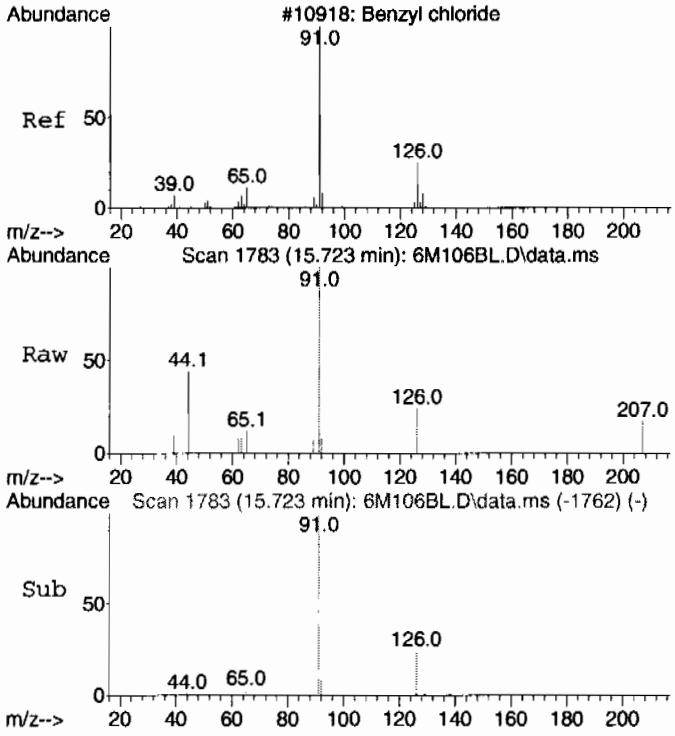

#111
Benzyl chloride
Concen: 0.83 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.006 min
Lab File: 6M106BL.D
Acq: 23 Nov 2009 12:49 pm

Tgt Ion: 91 Resp: 13594

Ion	Ratio	Lower	Upper
91	100		
126	16.7	0.0	52.6
65	10.2	0.0	43.2

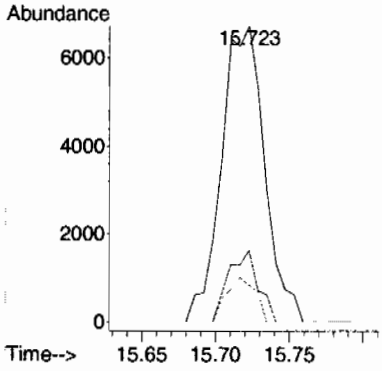

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M106BL.D
Acq On : 23 Nov 2009 12:49 pm
Operator : RXD1
Sample : |1201981770|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M106BL.D
Acq On : 23 Nov 2009 12:49 pm
Operator : RXD1
Sample : |1201981770|925461|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543			**Matrix:**	SOIL
Lab Sample ID:	1201978560				
Client Sample:	QC for batch 925460	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 925460	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 12:49	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 10:42	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L704LL.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		44.1	ug/kg	0.340	1.00
74-87-3	Chloromethane		37.3	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		42.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		47.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		45.1	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		48.1	ug/kg	0.300	1.00
67-64-1	Acetone		167	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		44.1	ug/kg	0.300	1.00
74-88-4	Iodomethane		222	ug/kg	1.60	5.00
75-09-2	Methylene chloride		44.8	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		237	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		44.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		44.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		157	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		44.3	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		45.0	ug/kg	0.300	1.00
67-66-3	Chloroform		45.0	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		44.7	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		46.4	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		48.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		48.1	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		42.5	ug/kg	0.300	1.00
71-43-2	Benzene		44.4	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		45.8	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		44.2	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		45.8	ug/kg	0.300	1.00
74-95-3	Dibromomethane		45.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		205	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		45.8	ug/kg	0.300	1.00
108-88-3	Toluene		45.4	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		48.2	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		45.9	ug/kg	0.300	1.00
591-78-6	2-Hexanone		152	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		45.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		46.2	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		47.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		47.2	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		46.6	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978560**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 12:49**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 10:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L704LL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		45.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		92.6	ug/kg	0.300	2.00
95-47-6	o-Xylene		46.2	ug/kg	0.300	1.00
100-42-5	Styrene		46.6	ug/kg	0.300	1.00
75-25-2	Bromoform		48.8	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		46.5	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		46.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		45.4	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		45.9	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		46.6	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		45.7	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		45.0	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		45.4	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		46.1	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		45.2	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.7	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		45.3	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		45.0	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		44.4	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		46.1	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.1	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		46.6	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		44.3	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704LL.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978560|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1851261	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1350638	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	743976	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1849212	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1350638	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	743976	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.632	65	534385	49.18	ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 98.36%			
43) Toluene-d8	11.626	98	1846095	50.68	ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 101.36%			
61) Bromofluorobenzene	14.357	95	728214	51.05	ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 102.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.370	85	318916	44.06	ug/L	100
3) Chloromethane	4.713	50	444490	37.27	ug/L	100
4) Vinyl chloride	4.934	62	425678	42.77	ug/L	100
5) Bromomethane	5.508	94	343399	47.48	ug/L	99
6) Chloroethane	5.629	64	342265	45.13	ug/L	99
7) Trichlorofluoromethane	6.042	101	652842	48.07	ug/L	100
8) Ethyl ether	6.340	59	399587	39.17	ug/L	94
9) Acetone	6.718	43	1056013	166.91	ug/L	98
10) 1,1-Dichloroethylene	6.718	61	628955	44.06	ug/L	98
11) Iodomethane	6.962	142	3257821	221.77	ug/L	100
12) Acetonitrile	7.078	41	1576158	1026.02	ug/L	100
13) Methyl acetate	7.102	43	1710093	190.51	ug/L	98
14) Carbon disulfide	7.090	76	6648957	237.21	ug/L	100
15) Methylene chloride	7.297	84	454896	44.75	ug/L	95
16) tert-Butyl methyl ether	7.578	73	1139357	41.68	ug/L	99
17) trans-1,2-Dichloroethy...	7.627	61	632151	44.93	ug/L	97
18) Vinyl acetate	8.066	43	4998013	259.69	ug/L	98
19) 1,1-Dichloroethane	8.108	63	784073	44.69	ug/L	100
20) 2-Butanone	8.700	43	1373681	157.13	ug/L	97
21) cis-1,2-Dichloroethylene	8.748	61	700971	44.25	ug/L	97
22) 2,2-Dichloropropane	8.773	77	631168	45.00	ug/L	100
23) Bromochloromethane	9.023	128	213581	44.71	ug/L	94
24) Chloroform	9.059	83	717330	44.99	ug/L	99
25) 1,1,1-Trichloroethane	9.328	97	643387	46.37	ug/L	100
26) Cyclohexane	9.413	56	864570	45.47	ug/L	97
27) 1,1-Dichloropropene	9.486	75	602286	48.59	ug/L	95
28) Carbon tetrachloride	9.523	117	589227	48.14	ug/L	100
30) 1,2-Dichloroethane	9.712	62	563608	42.45	ug/L	100
31) Benzene	9.730	78	1676909	44.37	ug/L	98
32) Cyclohexene	9.834	67	872689	45.26	ug/L	96
33) n-Butyl alcohol	10.083	56	1543431	4859.40	ug/L	98
34) Trichloroethylene	10.364	95	434165	45.76	ug/L	99
35) 1,2-Dichloropropane	10.614	63	453054	44.22	ug/L	99
36) Methylcyclohexane	10.608	83	806862	46.16	ug/L	97
37) Dibromomethane	10.754	93	240585	45.61	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704LL.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978560|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Bromodichloromethane	10.864	83	528283	45.78	ug/L		100
39)	2-Chloroethylvinyl ether	11.089	63	1023338	181.35	ug/L		99
40)	cis-1,3-Dichloropropylene	11.315	75	665960	45.82	ug/L		95
42)	4-Methyl-2-pentanone	11.412	58	888974	205.33	ug/L		97
44)	Toluene	11.699	91	1792079	45.35	ug/L		100
45)	trans-1,3-Dichloroprop...	11.864	75	622573	48.18	ug/L		97
46)	1,1,2-Trichloroethane	12.083	83	293372	45.93	ug/L		99
47)	2-Hexanone	12.260	43	1916650	152.09	ug/L		99
48)	1,3-Dichloropropane	12.278	76	615833	45.38	ug/L	#	72
49)	Tetrachloroethylene	12.290	164	375349	46.19	ug/L		99
50)	Dibromochloromethane	12.540	129	412849	47.38	ug/L		100
51)	1,2-Dibromoethane	12.711	107	364716	47.17	ug/L		100
52)	Chlorobenzene	13.193	112	1191033	46.55	ug/L		99
53)	1,1,1,2-Tetrachloroethane	13.247	131	419448	46.57	ug/L		99
54)	Ethylbenzene	13.254	91	2027553	45.60	ug/L		99
55)	m,p-Xylenes	13.363	106	1643431	92.64	ug/L		99
56)	o-Xylene	13.796	106	808143	46.17	ug/L		97
57)	Styrene	13.802	104	1315671	46.59	ug/L		97
59)	Bromoform	14.064	173	279449	48.83	ug/L		99
60)	Isopropylbenzene	14.156	105	2123447	45.74	ug/L		100
62)	1,1,2,2-Tetrachloroethane	14.442	83	474839	46.53	ug/L		99
63)	1,2,3-Trichloropropane	14.528	110	132427	46.09	ug/L		99
64)	Bromobenzene	14.564	156	514129	45.40	ug/L		99
65)	n-Propylbenzene	14.583	91	2451527	45.94	ug/L		99
66)	1,3,5-Trimethylbenzene	14.735	105	1788470	44.95	ug/L		100
67)	2-Chlorotoluene	14.735	126	524064	46.61	ug/L		96
68)	4-Chlorotoluene	14.833	91	1479878	45.37	ug/L		98
69)	tert-Butylbenzene	15.107	134	396840	46.10	ug/L		98
70)	1,2,4-Trimethylbenzene	15.150	105	1823614	45.17	ug/L		99
71)	sec-Butylbenzene	15.332	105	2405496	45.69	ug/L		100
72)	4-Isopropyltoluene	15.454	119	1962470	45.28	ug/L		100
73)	1,3-Dichlorobenzene	15.515	146	993649	44.99	ug/L		100
74)	1,4-Dichlorobenzene	15.601	146	1002303	44.44	ug/L		100
75)	n-Butylbenzene	15.887	91	1872347	46.07	ug/L		100
76)	1,2-Dichlorobenzene	16.021	146	942646	44.27	ug/L		100
77)	1,2-Dibromo-3-chloropr...	16.881	157	96839	47.12	ug/L		97
78)	1,2,4-Trichlorobenzene	17.911	180	693594	45.81	ug/L		99
79)	Hexachlorobutadiene	18.076	225	426157	43.73	ug/L		100
80)	Naphthalene	18.289	128	1420856	45.68	ug/L		100
81)	1,2,3-Trichlorobenzene	18.618	180	590864	46.84	ug/L		99
83)	Chlorotrifluoroethylene	0.000		0	N.D.			
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.			
85)	Acrolein	0.000		0	N.D.			
86)	Trichlorotrifluoroethane	0.000		0	N.D.			
87)	Isopropyl Alcohol	6.804		0m	N.D.		d	
88)	Allyl chloride	7.078		0m	N.D.		d	
89)	tert-Butyl Alcohol	0.000		0	N.D.			
90)	Acrylonitrile	7.584		0m	N.D.		d	
91)	Isopropyl ether	8.066		0m	N.D.		d	
92)	2-Chloro-1,3-butadiene	8.224		0m	N.D.		d	
93)	Ethyl tert-butyl ether	0.000		0	N.D.			
94)	Ethyl acetate	8.700		0m	N.D.		d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704LL.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978560|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	Propionitrile	8.693		0m	N.D.	d	
96)	Methacrylonitrile	8.974		0m	N.D.	d	
97)	Tetrahydrofuran	9.065		0m	N.D.	d	
98)	Isobutyl alcohol	9.413		0m	N.D.	d	
99)	Methyl tert-amyl ether	9.724		0m	N.D.	d	
100)	Methyl methacrylate	10.608		0m	N.D.	d	
101)	1,4-Dioxane	10.717		0m	N.D.	d	
102)	2-Nitropropane	11.089		0m	N.D.	d	
104)	Ethyl methacrylate	10.608		0m	N.D.	d	
106)	1-Chlorohexane	0.000		0	N.D.		
107)	cis-1,4-Dichloro-2-butene	14.156		0m	N.D.	d	
108)	Cyclohexanone	0.000		0	N.D.		
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110)	Pentachloroethane	15.174		0m	N.D.	d	
111)	Benzyl chloride	15.729		0m	N.D.	d	
112)	bis(2-Chloroisopropyl)...	16.162		0m	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L704LL.D
Acq On : 22 Nov 2009 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978560|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 13:21:21 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

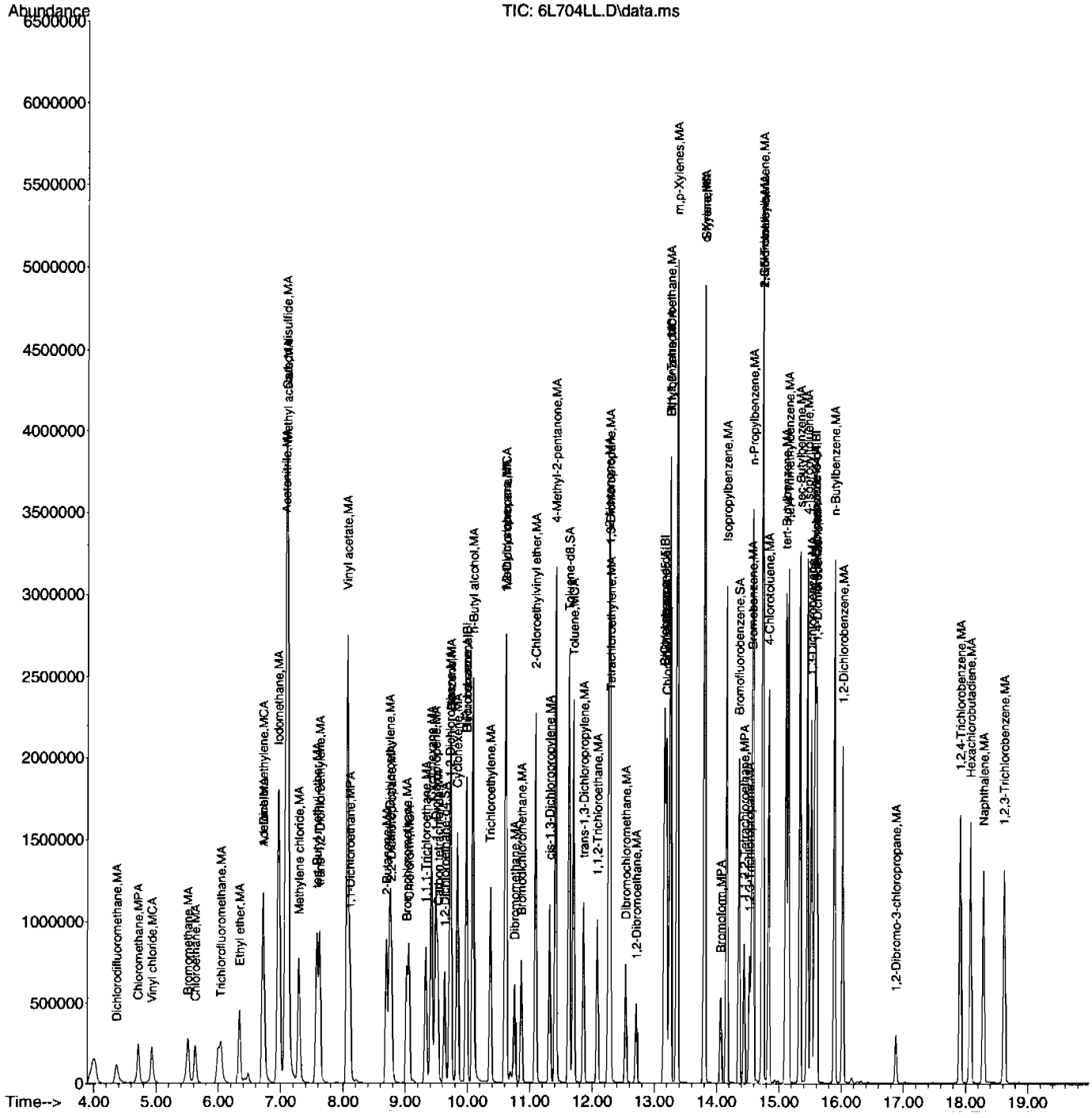

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543			**Matrix:**	SOIL
Lab Sample ID:	1201978561				
Client Sample:	QC for batch 925460	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 925460	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 13:17	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 10:43	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L705SL.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978561**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 13:17**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 10:43**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L705SL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		274	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705SL.D
Acq On : 22 Nov 2009 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978561|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1831924	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1348325	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	743535	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1829360	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1348325	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	743535	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.632	65	545497	50.73	ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 101.46%			
43) Toluene-d8	11.626	98	1820789	50.07	ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 100.14%			
61) Bromofluorobenzene	14.357	95	736268	51.65	ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 103.30%			

Target Compounds				Qvalue
2) Dichlorodifluoromethane	0.000	0	N.D.	
3) Chloromethane	4.713	0m	N.D. d	
4) Vinyl chloride	4.934	0m	N.D. d	
5) Bromomethane	0.000	0	N.D.	
6) Chloroethane	0.000	0	N.D.	
7) Trichlorofluoromethane	0.000	0	N.D.	
8) Ethyl ether	0.000	0	N.D.	
9) Acetone	6.712	0m	N.D. d	
10) 1,1-Dichloroethylene	6.700	0m	N.D. d	
11) Iodomethane	6.962	0m	N.D. d	
12) Acetonitrile	7.145	0m	N.D. d	
13) Methyl acetate	7.109	0m	N.D. d	
14) Carbon disulfide	7.145	0m	N.D. d	
15) Methylene chloride	7.285	0m	N.D. d	
16) tert-Butyl methyl ether	0.000	0	N.D.	
17) trans-1,2-Dichloroethy...	0.000	0	N.D.	
18) Vinyl acetate	8.078	0m	N.D. d	
19) 1,1-Dichloroethane	8.212	0m	N.D. d	
20) 2-Butanone	8.706	0m	N.D. d	
21) cis-1,2-Dichloroethylene	8.706	0m	N.D. d	
22) 2,2-Dichloropropane	0.000	0	N.D.	
23) Bromochloromethane	0.000	0	N.D.	
24) Chloroform	9.065	0m	N.D. d	
25) 1,1,1-Trichloroethane	0.000	0	N.D.	
26) Cyclohexane	9.395	0m	N.D. d	
27) 1,1-Dichloropropene	0.000	0	N.D.	
28) Carbon tetrachloride	0.000	0	N.D.	
30) 1,2-Dichloroethane	0.000	0	N.D.	
31) Benzene	9.724	0m	N.D. d	
32) Cyclohexene	0.000	0	N.D.	
33) n-Butyl alcohol	10.096	0m	N.D. d	
34) Trichloroethylene	10.376	0m	N.D. d	
35) 1,2-Dichloropropane	0.000	0	N.D.	
36) Methylcyclohexane	10.596	0m	N.D. d	
37) Dibromomethane	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705SL.D
Acq On : 22 Nov 2009 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978561|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	11.083		0m	N.D. d	
40) cis-1,3-Dichloropropylene	11.309		0m	N.D. d	
42) 4-Methyl-2-pentanone	11.413		0m	N.D. d	
44) Toluene	11.693		0m	N.D. d	
45) trans-1,3-Dichloroprop...	11.858		0m	N.D. d	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	12.272		0m	N.D. d	
48) 1,3-Dichloropropane	12.309		0m	N.D. d	
49) Tetrachloroethylene	12.290		0m	N.D. d	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	12.699		0m	N.D. d	
52) Chlorobenzene	13.187		0m	N.D. d	
53) 1,1,1,2-Tetrachloroethane	13.248		0m	N.D. d	
54) Ethylbenzene	13.248		0m	N.D. d	
55) m,p-Xylenes	13.363		0m	N.D. d	
56) o-Xylene	13.790		0m	N.D. d	
57) Styrene	13.802		0m	N.D. d	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	14.150		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	14.449		0m	N.D. d	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	14.564		0m	N.D. d	
65) n-Propylbenzene	14.583		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	14.741		0m	N.D. d	
67) 2-Chlorotoluene	14.735		0m	N.D. d	
68) 4-Chlorotoluene	14.833		0m	N.D. d	
69) tert-Butylbenzene	15.113		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	15.150		0m	N.D. d	
71) sec-Butylbenzene	15.339		0m	N.D. d	
72) 4-Isopropyltoluene	15.448		0m	N.D. d	
73) 1,3-Dichlorobenzene	15.515		0m	N.D. d	
74) 1,4-Dichlorobenzene	15.601		0m	N.D. d	
75) n-Butylbenzene	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	16.021		0m	N.D. d	
77) 1,2-Dibromo-3-chloropr...	16.881		0m	N.D. d	
78) 1,2,4-Trichlorobenzene	17.905		0m	N.D. d	
79) Hexachlorobutadiene	18.076		0m	N.D. d	
80) Naphthalene	18.289		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	18.625		0m	N.D. d	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	6.542	56	520249	281.72 ug/L	100
86) Trichlorotrifluoroethane	6.700	85	979075	273.85 ug/L	99
87) Isopropyl Alcohol	0.000		0m	N.D. d	
88) Allyl chloride	7.145	41	4151974	238.74 ug/L	98
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	7.547	53	928245	264.62 ug/L	99
91) Isopropyl ether	8.206	45	197	N.D.	
92) 2-Chloro-1,3-butadiene	8.212	53	759070	52.52 ug/L	94
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.706	43	2437312	244.06 ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705SL.D
Acq On : 22 Nov 2009 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978561|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
95)	Propionitrile	8.779	54	362736	267.45 ug/L	100	
96)	Methacrylonitrile	8.956	41	1542888	249.72 ug/L	99	
97)	Tetrahydrofuran	9.065	42	846721	263.40 ug/L	96	
98)	Isobutyl alcohol	9.395	41	1047809	2716.11 ug/L	99	
99)	Methyl tert-amyl ether	0.000		0	N.D.		
100)	Methyl methacrylate	10.590	69	1540136	267.34 ug/L	93	
101)	1,4-Dioxane	10.699	88	253941	2786.31 ug/L	94	
102)	2-Nitropropane	11.077	43	781996	277.79 ug/L	100	
104)	Ethyl methacrylate	10.590	69	1541236	272.54 ug/L	93	
106)	1-Chlorohexane	0.000		0	N.D.		
107)	cis-1,4-Dichloro-2-butene	14.205	53	986159	290.25 ug/L	96	
108)	Cyclohexanone	14.321	42	593409	1068.71 ug/L	98	E
109)	trans-1,4-Dichloro-2-b...	14.491	53	947902	288.69 ug/L	95	
110)	Pentachloroethane	15.180	167	1681319	356.34 ug/L	98	
111)	Benzyl chloride	15.717	91	4946209	277.90 ug/L	99	
112)	bis(2-Chloroisopropyl)...	16.113	45	1550345	279.93 ug/L	96	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

```
Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L705SL.D
Acq On    : 22 Nov 2009   1:17 pm
Operator  : RXD1
InstName  : VOA6
Sample    : |1201978561|925461|1|VOAF|1|VOA8260BS|
Misc      : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Nov 22 13:37:50 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title  : Volatile Organics 8260B                    SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE
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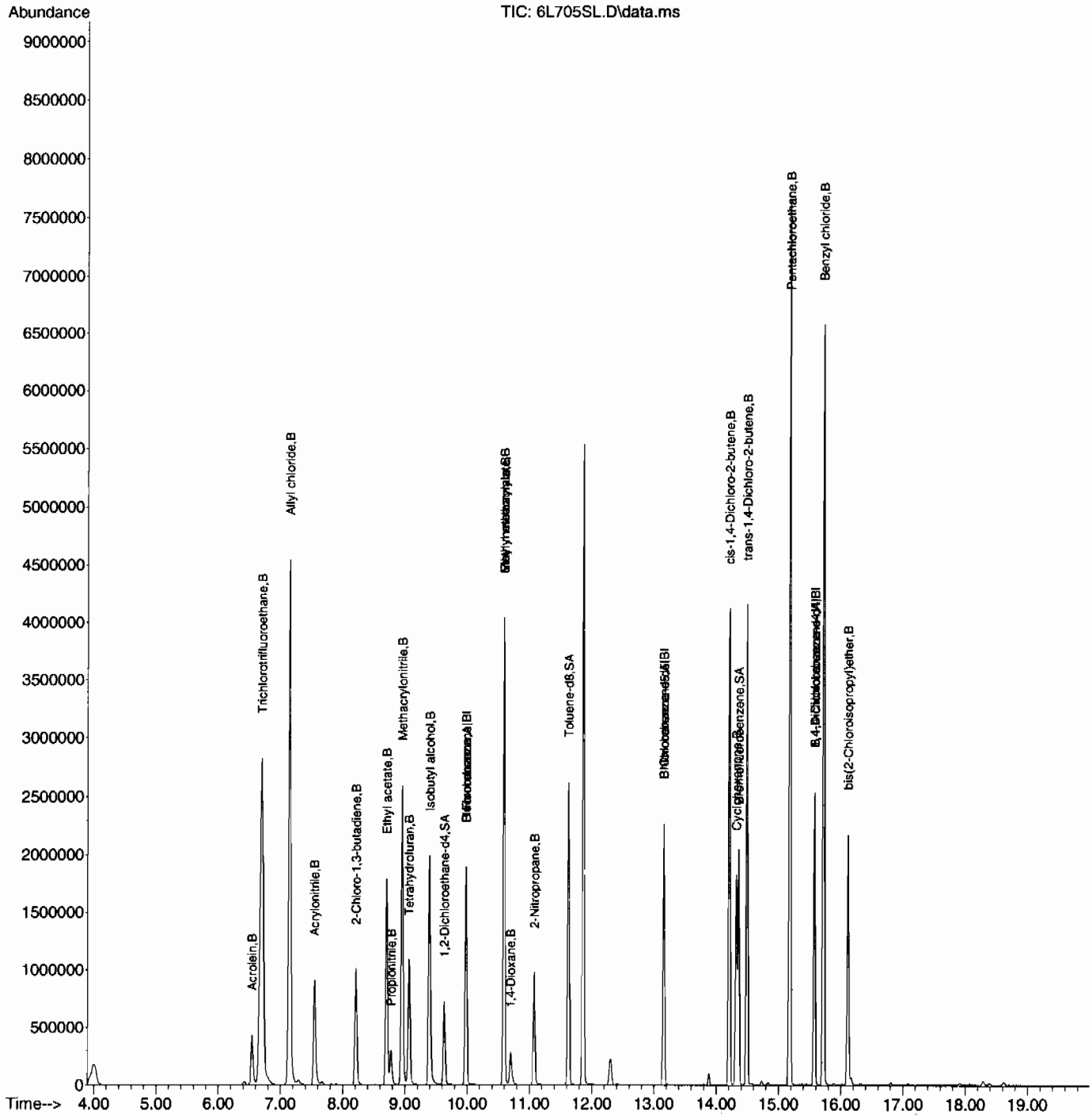

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543			**Matrix:**	SOIL
Lab Sample ID:	1201981771				
Client Sample:	QC for batch 925460	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 925460	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/23/2009 11:25	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/23/2009 09:03	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112309V6\6M103LL.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		44.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		39.2	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.9	ug/kg	0.300	1.00
74-83-9	Bromomethane		50.0	ug/kg	0.300	1.00
75-00-3	Chloroethane		46.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		50.9	ug/kg	0.300	1.00
67-64-1	Acetone		184	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		46.1	ug/kg	0.300	1.00
74-88-4	Iodomethane		233	ug/kg	1.60	5.00
75-09-2	Methylene chloride		45.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		248	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		47.4	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		47.2	ug/kg	0.300	1.00
78-93-3	2-Butanone		172	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.7	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		48.3	ug/kg	0.300	1.00
67-66-3	Chloroform		47.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		47.5	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		49.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		50.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		51.3	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		45.0	ug/kg	0.300	1.00
71-43-2	Benzene		47.0	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		48.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		47.1	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		48.8	ug/kg	0.300	1.00
74-95-3	Dibromomethane		48.3	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		216	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		48.9	ug/kg	0.300	1.00
108-88-3	Toluene		46.9	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		49.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		48.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		166	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		47.3	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		47.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		49.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		48.0	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981771**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 11:25**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 09:03**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M103LL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.7	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		96.7	ug/kg	0.300	2.00
95-47-6	o-Xylene		48.1	ug/kg	0.300	1.00
100-42-5	Styrene		48.5	ug/kg	0.300	1.00
75-25-2	Bromoform		50.8	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		48.9	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.8	ug/kg	0.300	1.00
108-86-1	Bromobenzene		47.0	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		47.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		48.1	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		47.5	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		46.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		47.4	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		48.2	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		46.9	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		47.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		47.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		47.0	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		46.0	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		47.8	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		50.3	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		48.8	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		46.0	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M103LL.D
Acq On : 23 Nov 2009 11:25 am
Operator : RXD1
InstName : VOA6
Sample : |1201981771|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 23 11:49:59 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1796936	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1338264	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	739627	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1794727	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1338264	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	739627	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.633	65	539507	51.15	ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 102.30%			
43) Toluene-d8	11.626	98	1856837	51.45	ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 102.90%			
61) Bromofluorobenzene	14.357	95	728514	51.37	ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 102.74%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.360	85	313719	44.65	ug/L	100
3) Chloromethane	4.713	50	453955	39.21	ug/L	99
4) Vinyl chloride	4.934	62	443248	45.88	ug/L	99
5) Bromomethane	5.508	94	351049	50.01	ug/L	99
6) Chloroethane	5.629	64	345489	46.93	ug/L	100
7) Trichlorofluoromethane	6.032	101	671038	50.91	ug/L	99
8) Ethyl ether	6.340	59	405810	40.98	ug/L	92
9) Acetone	6.718	43	1122626	183.67	ug/L	98
10) 1,1-Dichloroethylene	6.718	61	638432	46.07	ug/L	98
11) Iodomethane	6.962	142	3326083	233.26	ug/L	100
12) Acetonitrile	7.078	41	1613151	1081.84	ug/L	99
13) Methyl acetate	7.103	43	1759854	201.98	ug/L	98
14) Carbon disulfide	7.090	76	6755275	248.29	ug/L	100
15) Methylene chloride	7.292	84	446460	45.28	ug/L	97
16) tert-Butyl methyl ether	7.584	73	1192796	44.96	ug/L	98
17) trans-1,2-Dichloroethy...	7.627	61	647669	47.43	ug/L	96
18) Vinyl acetate	8.066	43	5154773	275.94	ug/L	98
19) 1,1-Dichloroethane	8.108	63	803923	47.21	ug/L	99
20) 2-Butanone	8.694	43	1462745	172.38	ug/L	96
21) cis-1,2-Dichloroethylene	8.749	61	718617	46.73	ug/L	97
22) 2,2-Dichloropropane	8.773	77	657089	48.27	ug/L	99
23) Bromochloromethane	9.023	128	220210	47.49	ug/L	93
24) Chloroform	9.059	83	735451	47.52	ug/L	100
25) 1,1,1-Trichloroethane	9.328	97	660354	49.03	ug/L	99
26) Cyclohexane	9.419	56	882032	47.79	ug/L	96
27) 1,1-Dichloropropene	9.480	75	612271	50.89	ug/L	97
28) Carbon tetrachloride	9.517	117	608939	51.25	ug/L	99
30) 1,2-Dichloroethane	9.712	62	579214	44.95	ug/L	99
31) Benzene	9.724	78	1725575	47.04	ug/L	98
32) Cyclohexene	9.834	67	899088	48.04	ug/L	96
33) n-Butyl alcohol	10.084	56	1636203	5307.22	ug/L	98
34) Trichloroethylene	10.364	95	444914	48.31	ug/L	99
35) 1,2-Dichloropropane	10.614	63	468690	47.13	ug/L	98
36) Methylcyclohexane	10.608	83	829266	48.88	ug/L	97
37) Dibromomethane	10.754	93	247233	48.29	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M103LL.D
Acq On : 23 Nov 2009 11:25 am
Operator : RXD1
InstName : VOA6
Sample : |1201981771|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 23 11:49:59 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	10.864	83	546372	48.78 ug/L	99
39)	2-Chloroethylvinyl ether	11.090	63	1146574	209.33 ug/L	99
40)	cis-1,3-Dichloropropylene	11.315	75	690115	48.91 ug/L	95
42)	4-Methyl-2-pentanone	11.413	58	927099	216.12 ug/L	97
44)	Toluene	11.699	91	1836304	46.90 ug/L	100
45)	trans-1,3-Dichloroprop...	11.864	75	639112	49.92 ug/L	98
46)	1,1,2-Trichloroethane	12.083	83	305445	48.26 ug/L	100
47)	2-Hexanone	12.260	43	2077359	166.37 ug/L	99
48)	1,3-Dichloropropane	12.278	76	636087	47.31 ug/L #	74
49)	Tetrachloroethylene	12.291	164	383126	47.58 ug/L	99
50)	Dibromochloromethane	12.540	129	426551	49.41 ug/L	100
51)	1,2-Dibromoethane	12.711	107	375530	49.02 ug/L	100
52)	Chlorobenzene	13.193	112	1217409	48.03 ug/L	99
53)	1,1,1,2-Tetrachloroethane	13.248	131	435588	48.81 ug/L	100
54)	Ethylbenzene	13.254	91	2101717	47.71 ug/L	99
55)	m,p-Xylenes	13.363	106	1699450	96.68 ug/L	99
56)	o-Xylene	13.796	106	833554	48.06 ug/L	98
57)	Styrene	13.802	104	1356236	48.47 ug/L	98
59)	Bromoform	14.065	173	289183	50.83 ug/L	99
60)	Isopropylbenzene	14.156	105	2190799	47.47 ug/L	100
62)	1,1,2,2-Tetrachloroethane	14.443	83	495801	48.87 ug/L	100
63)	1,2,3-Trichloropropane	14.528	110	136528	47.80 ug/L	99
64)	Bromobenzene	14.564	156	528965	46.99 ug/L	99
65)	n-Propylbenzene	14.583	91	2530848	47.70 ug/L	99
66)	1,3,5-Trimethylbenzene	14.735	105	1840121	46.52 ug/L	99
67)	2-Chlorotoluene	14.735	126	537591	48.09 ug/L	95
68)	4-Chlorotoluene	14.833	91	1535485	47.35 ug/L	99
69)	tert-Butylbenzene	15.107	134	412059	48.15 ug/L	96
70)	1,2,4-Trimethylbenzene	15.150	105	1883496	46.92 ug/L	97
71)	sec-Butylbenzene	15.333	105	2474265	47.27 ug/L	100
72)	4-Isopropyltoluene	15.455	119	2028963	47.09 ug/L	100
73)	1,3-Dichlorobenzene	15.515	146	1031989	47.00 ug/L	100
74)	1,4-Dichlorobenzene	15.601	146	1032194	46.03 ug/L	99
75)	n-Butylbenzene	15.887	91	1929640	47.76 ug/L	100
76)	1,2-Dichlorobenzene	16.022	146	972821	45.95 ug/L	99
77)	1,2-Dibromo-3-chloropr...	16.881	157	102772	50.30 ug/L	99
78)	1,2,4-Trichlorobenzene	17.911	180	719837	47.83 ug/L	99
79)	Hexachlorobutadiene	18.076	225	450211	46.47 ug/L	99
80)	Naphthalene	18.289	128	1499778	48.50 ug/L	100
81)	1,2,3-Trichlorobenzene	18.619	180	623969	49.76 ug/L	99
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	6.475		0m	N.D. d	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	6.712		0m	N.D. d	
88)	Allyl chloride	7.078		0m	N.D. d	
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	7.578		0m	N.D. d	
91)	Isopropyl ether	8.066		0m	N.D. d	
92)	2-Chloro-1,3-butadiene	8.212		0m	N.D. d	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	8.694		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M103LL.D
Acq On : 23 Nov 2009 11:25 am
Operator : RXD1
InstName : VOA6
Sample : |1201981771|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 23 11:49:59 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	8.694		0m	N.D.	d
96)	Methacrylonitrile	8.950		0m	N.D.	d
97)	Tetrahydrofuran	9.059		0m	N.D.	d
98)	Isobutyl alcohol	9.413		0m	N.D.	d
99)	Methyl tert-amyl ether	9.730		0m	N.D.	d
100)	Methyl methacrylate	10.608		0m	N.D.	d
101)	1,4-Dioxane	10.705		0m	N.D.	d
102)	2-Nitropropane	11.090		0m	N.D.	d
104)	Ethyl methacrylate	10.608		0m	N.D.	d
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	14.156		0m	N.D.	d
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	15.180		0m	N.D.	d
111)	Benzyl chloride	15.717		0m	N.D.	d
112)	bis(2-Chloroisopropyl)...	16.174		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M103LL.D
Acq On : 23 Nov 2009 11:25 am
Operator : RXD1
InstName : VOA6
Sample : |1201981771|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1111-01C+1122-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 23 11:49:59 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

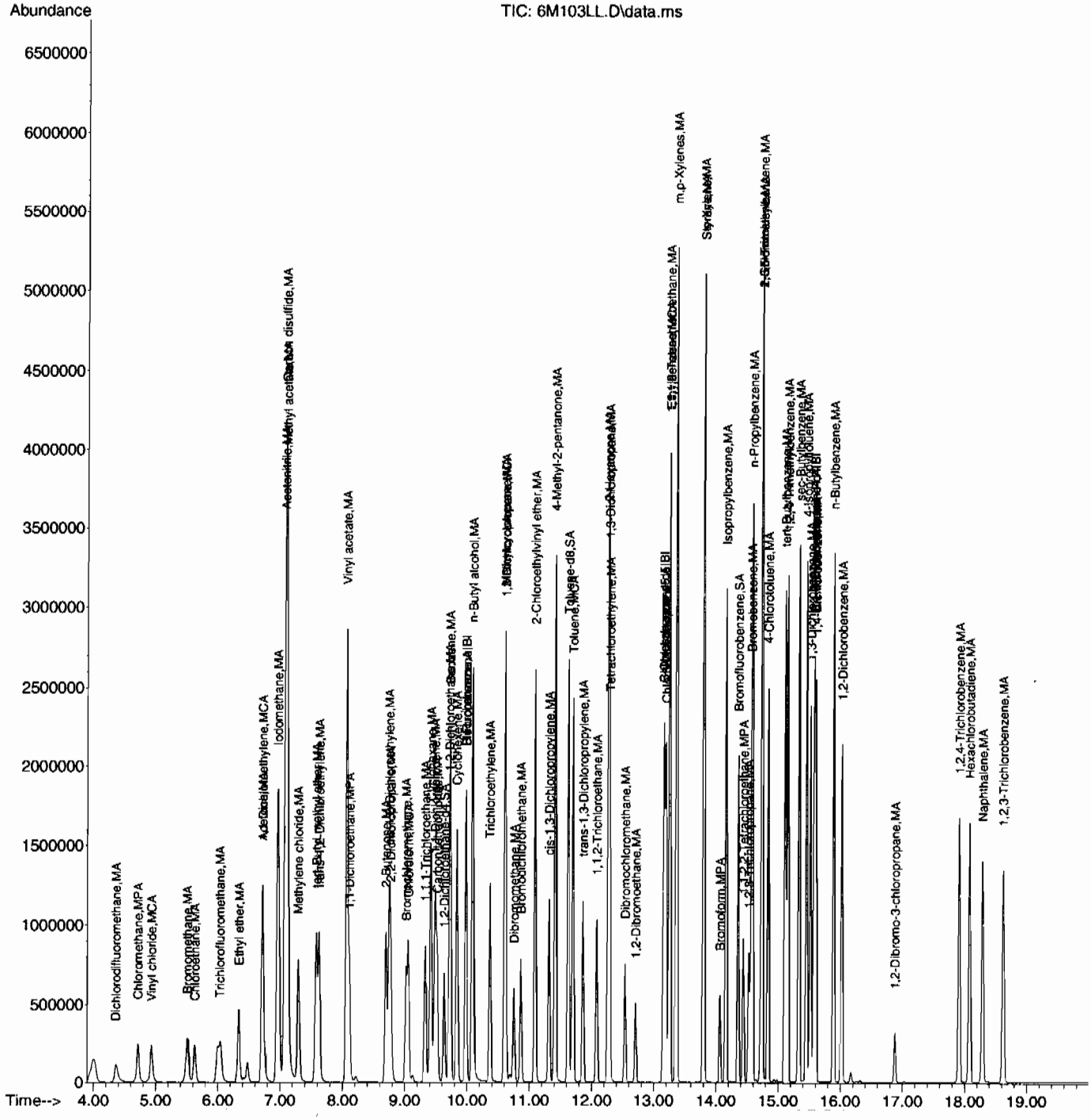

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981772**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 12:21**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 09:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M105SL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981772**				
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925460**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/23/2009 12:21**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/23/2009 09:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112309V6\6M105SL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		278	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M105SL.D
Acq On : 23 Nov 2009 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981772|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 23 13:29:08 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1761458	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.162	117	1326419	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	718415	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1760098	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.162	117	1326419	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	718415	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.632	65	520733	50.37	ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 100.74%			
43) Toluene-d8	11.626	98	1793110	50.12	ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 100.24%			
61) Bromofluorobenzene	14.357	95	722641	52.46	ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 104.92%			

Target Compounds				Qvalue
2) Dichlorodifluoromethane	0.000	0	N.D.	
3) Chloromethane	4.713	0m	N.D. d	
4) Vinyl chloride	4.934	0m	N.D. d	
5) Bromomethane	0.000	0	N.D.	
6) Chloroethane	0.000	0	N.D.	
7) Trichlorofluoromethane	0.000	0	N.D.	
8) Ethyl ether	0.000	0	N.D.	
9) Acetone	6.706	0m	N.D. d	
10) 1,1-Dichloroethylene	6.694	0m	N.D. d	
11) Iodomethane	6.962	0m	N.D. d	
12) Acetonitrile	7.145	0m	N.D. d	
13) Methyl acetate	7.102	0m	N.D. d	
14) Carbon disulfide	7.145	0m	N.D. d	
15) Methylene chloride	7.297	0m	N.D. d	
16) tert-Butyl methyl ether	0.000	0	N.D.	
17) trans-1,2-Dichloroethy...	0.000	0	N.D.	
18) Vinyl acetate	8.078	0m	N.D. d	
19) 1,1-Dichloroethane	8.218	0m	N.D. d	
20) 2-Butanone	8.706	0m	N.D. d	
21) cis-1,2-Dichloroethylene	8.706	0m	N.D. d	
22) 2,2-Dichloropropane	0.000	0	N.D.	
23) Bromochloromethane	0.000	0	N.D.	
24) Chloroform	9.059	0m	N.D. d	
25) 1,1,1-Trichloroethane	0.000	0	N.D.	
26) Cyclohexane	9.395	0m	N.D. d	
27) 1,1-Dichloropropene	0.000	0	N.D.	
28) Carbon tetrachloride	0.000	0	N.D.	
30) 1,2-Dichloroethane	0.000	0	N.D.	
31) Benzene	9.730	0m	N.D. d	
32) Cyclohexene	0.000	0	N.D.	
33) n-Butyl alcohol	10.102	0m	N.D. d	
34) Trichloroethylene	10.370	0m	N.D. d	
35) 1,2-Dichloropropane	0.000	0	N.D.	
36) Methylcyclohexane	10.589	0m	N.D. d	
37) Dibromomethane	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M105SL.D
Acq On : 23 Nov 2009 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981772|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 23 13:29:08 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	0.000		0	N.D.	
39)	2-Chloroethylvinyl ether	0.000		0	N.D.	
40)	cis-1,3-Dichloropropylene	0.000		0	N.D.	
42)	4-Methyl-2-pentanone	0.000		0	N.D.	
44)	Toluene	11.705		0m	N.D. d	
45)	trans-1,3-Dichloroprop...	11.870		0m	N.D. d	
46)	1,1,2-Trichloroethane	0.000		0	N.D.	
47)	2-Hexanone	12.266		0m	N.D. d	
48)	1,3-Dichloropropane	12.309		0m	N.D. d	
49)	Tetrachloroethylene	12.290		0m	N.D. d	
50)	Dibromochloromethane	0.000		0	N.D.	
51)	1,2-Dibromoethane	12.711		0m	N.D. d	
52)	Chlorobenzene	13.199		0m	N.D. d	
53)	1,1,1,2-Tetrachloroethane	13.241		0m	N.D. d	
54)	Ethylbenzene	13.254		0m	N.D. d	
55)	m,p-Xylenes	13.363		0m	N.D. d	
56)	o-Xylene	13.790		0m	N.D. d	
57)	Styrene	13.802		0m	N.D. d	
59)	Bromoform	0.000		0	N.D.	
60)	Isopropylbenzene	14.156		0m	N.D. d	
62)	1,1,2,2-Tetrachloroethane	14.491		0m	N.D. d	
63)	1,2,3-Trichloropropane	0.000		0	N.D.	
64)	Bromobenzene	0.000		0	N.D.	
65)	n-Propylbenzene	14.583		0m	N.D. d	
66)	1,3,5-Trimethylbenzene	14.741		0m	N.D. d	
67)	2-Chlorotoluene	14.735		0m	N.D. d	
68)	4-Chlorotoluene	14.833		0m	N.D. d	
69)	tert-Butylbenzene	15.180		0m	N.D. d	
70)	1,2,4-Trimethylbenzene	15.143		0m	N.D. d	
71)	sec-Butylbenzene	15.326		0m	N.D. d	
72)	4-Isopropyltoluene	15.448		0m	N.D. d	
73)	1,3-Dichlorobenzene	15.521		0m	N.D. d	
74)	1,4-Dichlorobenzene	15.601		0m	N.D. d	
75)	n-Butylbenzene	0.000		0	N.D.	
76)	1,2-Dichlorobenzene	16.021		0m	N.D. d	
77)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	17.917		0m	N.D. d	
79)	Hexachlorobutadiene	18.076		0m	N.D. d	
80)	Naphthalene	18.283		0m	N.D. d	
81)	1,2,3-Trichlorobenzene	18.612		0m	N.D. d	
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	6.541	56	456427	256.88 ug/L	99
86)	Trichlorotrifluoroethane	6.700	85	956559	278.08 ug/L	99
87)	Isopropyl Alcohol	0.000		0m	N.D. d	
88)	Allyl chloride	7.145	41	4092905	244.60 ug/L	98
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	7.547	53	805093	238.55 ug/L	100
91)	Isopropyl ether	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	8.212	53	752643	54.12 ug/L	95
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	8.706	43	2130625	221.75 ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M105SL.D
Acq On : 23 Nov 2009 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981772|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 23 13:29:08 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
95)	Propionitrile	8.779	54	309756	237.37 ug/L	100	
96)	Methacrylonitrile	8.956	41	1376659	231.59 ug/L	100	
97)	Tetrahydrofuran	9.065	42	727952	235.36 ug/L	96	
98)	Isobutyl alcohol	9.395	41	867818	2338.06 ug/L	98	
99)	Methyl tert-amyl ether	0.000		0	N.D.		
100)	Methyl methacrylate	10.589	69	1385183	249.90 ug/L	94	
101)	1,4-Dioxane	10.699	88	219023	2497.75 ug/L	94	
102)	2-Nitropropane	11.077	43	682277	251.90 ug/L	99	
104)	Ethyl methacrylate	10.589	69	1385917	249.13 ug/L	94	
106)	1-Chlorohexane	0.000		0	N.D.		
107)	cis-1,4-Dichloro-2-butene	14.205	53	891181	271.46 ug/L	95	
108)	Cyclohexanone	14.320	42	490620	916.95 ug/L	98	E
109)	trans-1,4-Dichloro-2-b...	14.491	53	851448	268.38 ug/L	95	
110)	Pentachloroethane	15.180	167	1648668	361.64 ug/L	98	
111)	Benzyl chloride	15.716	91	4583866	266.54 ug/L	99	
112)	bis(2-Chloroisopropyl)...	16.113	45	1306782	244.20 ug/L	96	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112309V6\
Data File : 6M105SL.D
Acq On : 23 Nov 2009 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |1201981772|925461|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1118-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 23 13:29:08 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

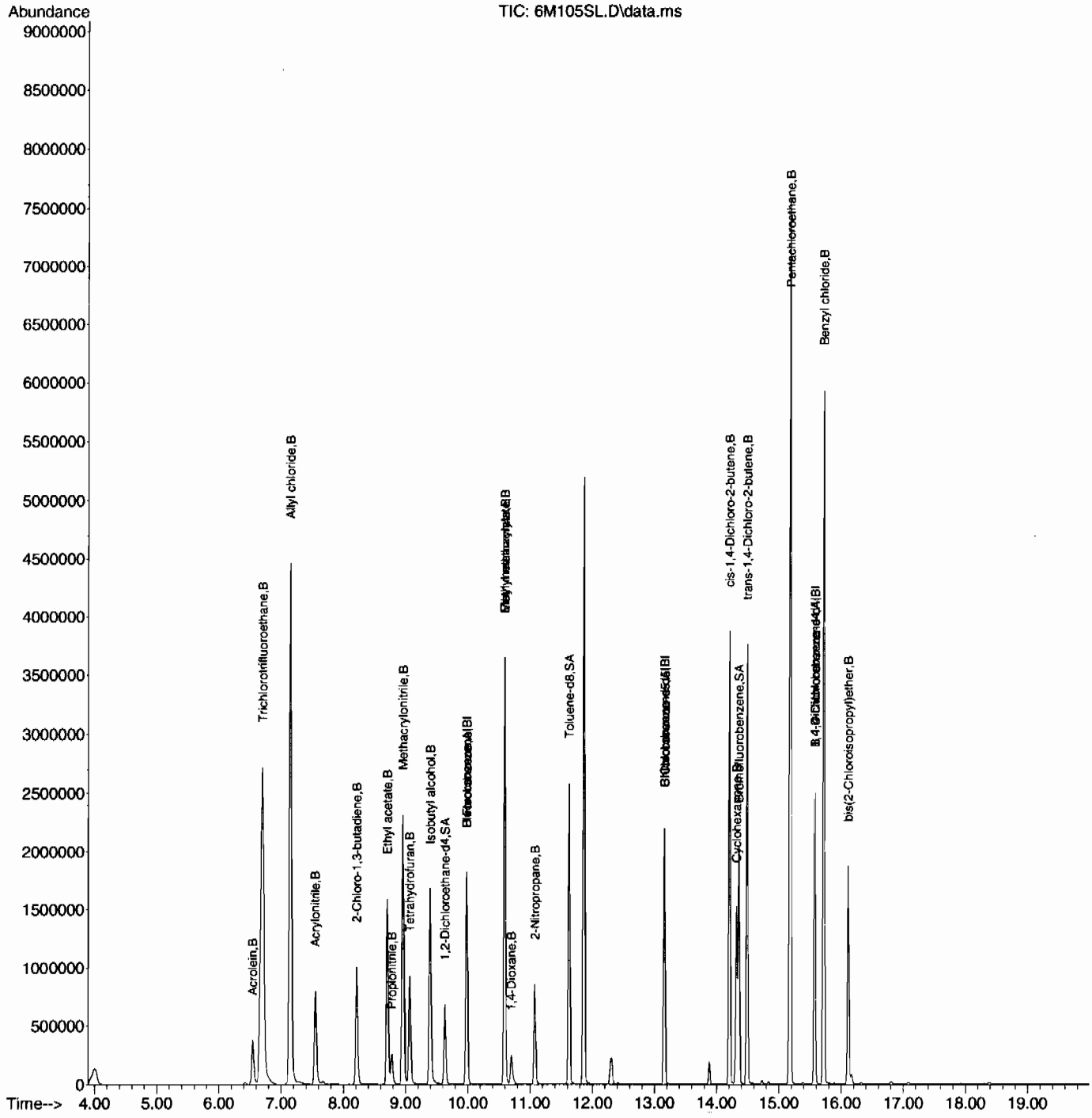

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978558**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.3**
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13618PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 20:43**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 13:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L721.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		49.5	ug/kg	0.397	1.17
74-87-3	Chloromethane		45.1	ug/kg	0.350	1.17
75-01-4	Vinyl chloride		50.0	ug/kg	0.350	1.17
74-83-9	Bromomethane		53.8	ug/kg	0.350	1.17
75-00-3	Chloroethane		53.8	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane		55.8	ug/kg	0.350	1.17
67-64-1	Acetone		158	ug/kg	1.94	5.83
75-35-4	1,1-Dichloroethylene		51.0	ug/kg	0.350	1.17
74-88-4	Iodomethane		233	ug/kg	1.87	5.83
75-09-2	Methylene chloride		57.6	ug/kg	2.33	5.83
75-15-0	Carbon disulfide		274	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene		53.5	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane		54.0	ug/kg	0.350	1.17
78-93-3	2-Butanone		147	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene		53.6	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane		51.6	ug/kg	0.350	1.17
67-66-3	Chloroform		55.8	ug/kg	0.350	1.17
74-97-5	Bromochloromethane		57.0	ug/kg	0.385	1.17
71-55-6	1,1,1-Trichloroethane		54.8	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene		55.2	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride		54.8	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane		54.5	ug/kg	0.350	1.17
71-43-2	Benzene		53.9	ug/kg	0.350	1.17
79-01-6	Trichloroethylene		53.4	ug/kg	0.385	1.17
78-87-5	1,2-Dichloropropane		54.9	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane		57.2	ug/kg	0.350	1.17
74-95-3	Dibromomethane		58.4	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone		230	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene		46.5	ug/kg	0.350	1.17
108-88-3	Toluene		54.2	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene		51.1	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane		59.5	ug/kg	0.350	1.17
591-78-6	2-Hexanone		124	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane		59.5	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene		52.0	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane		59.4	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane		58.1	ug/kg	0.350	1.17
108-90-7	Chlorobenzene		55.3	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978558**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.3**
Client Sample:	**QC for batch 925460**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13618PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925461**	**Inst:**	**VOA6.I**	**Dilution:**	**1**
Run Date:	**11/22/2009 20:43**	**Analyst:**	**RXD1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/22/2009 13:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**112209V6\6L721.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.4	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes		96.9	ug/kg	0.350	2.33
95-47-6	o-Xylene		54.2	ug/kg	0.350	1.17
100-42-5	Styrene		48.7	ug/kg	0.350	1.17
75-25-2	Bromoform		64.4	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane		63.6	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane		63.8	ug/kg	0.350	1.17
108-86-1	Bromobenzene		57.8	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene		52.9	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene		56.5	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene		56.1	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene		52.2	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene		48.1	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene		53.4	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene		51.1	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene		50.1	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene		26.6	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene		51.3	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene		50.4	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene		42.8	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane		58.8	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.87	5.83
630-20-6	1,1,1,2-Tetrachloroethane		56.6	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene		50.1	ug/kg	0.350	1.17

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L721.D
Acq On : 22 Nov 2009 8:43 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978558|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 241318001
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 23 08:54:12 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1566805	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1124800	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	565549	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1565220	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1124800	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	565549	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.632	65	506832	55.11	ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 110.22%			
43) Toluene-d8	11.626	98	1745967	57.56	ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 115.12%			
61) Bromofluorobenzene	14.357	95	657715	60.66	ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 121.32%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.360	85	259967	42.44	ug/L	100
3) Chloromethane	4.713	50	390813	38.71	ug/L	99
4) Vinyl chloride	4.934	62	361005	42.86	ug/L	100
5) Bromomethane	5.508	94	282160	46.10	ug/L	99
6) Chloroethane	5.629	64	296288	46.16	ug/L	100
7) Trichlorofluoromethane	6.032	101	550296	47.88	ug/L	99
8) Ethyl ether	6.340	59	367272	42.54	ug/L	99
9) Acetone	6.718	43	732103	135.08	ug/L	99
10) 1,1-Dichloroethylene	6.718	61	528804	43.77	ug/L	98
11) Iodomethane	6.962	142	2481145	199.56	ug/L	100
12) Acetonitrile	7.078	41	1425676	1096.55	ug/L	100
13) Methyl acetate	7.102	43	1441664	189.76	ug/L	98
14) Carbon disulfide	7.090	76	5566358	234.64	ug/L	100
15) Methylene chloride	7.291	84	422294	49.39	ug/L	95
16) tert-Butyl methyl ether	7.578	73	1075533	46.49	ug/L	98
17) trans-1,2-Dichloroethy...	7.627	61	545894	45.85	ug/L	97
18) Vinyl acetate	8.053	43	620	N.D.		
19) 1,1-Dichloroethane	8.108	63	687669	46.31	ug/L	99
20) 2-Butanone	8.694	43	934043	126.24	ug/L	96
21) cis-1,2-Dichloroethylene	8.748	61	615920	45.94	ug/L	97
22) 2,2-Dichloropropane	8.773	77	524922	44.22	ug/L	98
23) Bromochloromethane	9.023	128	197611	48.88	ug/L	93
24) Chloroform	9.059	83	645428	47.83	ug/L	99
25) 1,1,1-Trichloroethane	9.328	97	551479	46.96	ug/L	100
26) Cyclohexane	9.413	56	683172	42.45	ug/L	96
27) 1,1-Dichloropropene	9.480	75	496467	47.33	ug/L	96
28) Carbon tetrachloride	9.517	117	486795	46.99	ug/L	100
30) 1,2-Dichloroethane	9.712	62	525072	46.73	ug/L	100
31) Benzene	9.724	78	1477913	46.20	ug/L	98
32) Cyclohexene	9.834	67	726880	44.54	ug/L	95
33) n-Butyl alcohol	10.083	56	630098	2343.99	ug/L	100
34) Trichloroethylene	10.364	95	368052	45.83	ug/L	99
35) 1,2-Dichloropropane	10.620	63	408369	47.10	ug/L	99
36) Methylcyclohexane	10.608	83	597594	40.39	ug/L	97
37) Dibromomethane	10.754	93	223674	50.10	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L721.D
Acq On : 22 Nov 2009 8:43 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978558|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 241318001
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 23 08:54:12 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38)	Bromodichloromethane	10.864	83	478681	49.01 ug/L	100
39)	2-Chloroethylvinyl ether	11.089	63	998579	209.09 ug/L	99
40)	cis-1,3-Dichloropropylene	11.315	75	490194	39.85 ug/L	95
42)	4-Methyl-2-pentanone	11.412	58	712446	197.60 ug/L	98
44)	Toluene	11.699	91	1529174	46.47 ug/L	100
45)	trans-1,3-Dichloroprop...	11.864	75	471585	43.82 ug/L	98
46)	1,1,2-Trichloroethane	12.083	83	271220	50.99 ug/L	99
47)	2-Hexanone	12.260	43	1113923	106.14 ug/L	100
48)	1,3-Dichloropropane	12.272	76	576896	51.05 ug/L #	59
49)	Tetrachloroethylene	12.290	164	301572	44.56 ug/L	99
50)	Dibromochloromethane	12.540	129	369530	50.93 ug/L	100
51)	1,2-Dibromoethane	12.711	107	320583	49.79 ug/L	100
52)	Chlorobenzene	13.193	112	1009519	47.38 ug/L	99
53)	1,1,1,2-Tetrachloroethane	13.247	131	363886	48.51 ug/L	99
54)	Ethylbenzene	13.254	91	1663518	44.93 ug/L	100
55)	m,p-Xylenes	13.363	106	1227783	83.10 ug/L	99
56)	o-Xylene	13.796	106	677740	46.50 ug/L	99
57)	Styrene	13.802	104	982216	41.77 ug/L	100
59)	Bromoform	14.064	173	240199	55.22 ug/L	100
60)	Isopropylbenzene	14.156	105	1696654	48.07 ug/L	100
62)	1,1,2,2-Tetrachloroethane	14.436	83	422990	54.53 ug/L	100
63)	1,2,3-Trichloropropane	14.528	110	119386	54.67 ug/L #	89
64)	Bromobenzene	14.564	156	426838	49.59 ug/L	99
65)	n-Propylbenzene	14.583	91	1838724	45.32 ug/L	100
66)	1,3,5-Trimethylbenzene	14.735	105	1353487	44.75 ug/L	100
67)	2-Chlorotoluene	14.729	126	413835	48.42 ug/L	95
68)	4-Chlorotoluene	14.833	91	1022137	41.22 ug/L	98
69)	tert-Butylbenzene	15.107	134	299435	45.76 ug/L	97
70)	1,2,4-Trimethylbenzene	15.150	105	1345256	43.83 ug/L	97
71)	sec-Butylbenzene	15.332	105	1720713	42.99 ug/L	100
72)	4-Isopropyltoluene	15.454	119	752884	22.85 ug/L	99
73)	1,3-Dichlorobenzene	15.515	146	739195	44.03 ug/L	99
74)	1,4-Dichlorobenzene	15.601	146	741032	43.22 ug/L	100
75)	n-Butylbenzene	15.887	91	1133232	36.68 ug/L	100
76)	1,2-Dichlorobenzene	16.021	146	695784	42.98 ug/L	99
77)	1,2-Dibromo-3-chloropr...	16.881	157	78825	50.46 ug/L	99
78)	1,2,4-Trichlorobenzene	17.911	180	362139	31.47 ug/L	98
79)	Hexachlorobutadiene	18.076	225	198832	26.84 ug/L	99
80)	Naphthalene	18.289	128	839806	35.52 ug/L	100
81)	1,2,3-Trichlorobenzene	18.618	180	291832	30.43 ug/L	100
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	0.000		0	N.D.	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	6.798		0m	N.D. d	
88)	Allyl chloride	7.078		0m	N.D. d	
89)	tert-Butyl Alcohol	7.291		0m	N.D. d	
90)	Acrylonitrile	7.578		0m	N.D. d	
91)	Isopropyl ether	8.078		0m	N.D. d	
92)	2-Chloro-1,3-butadiene	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	8.694		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L721.D
Acq On : 22 Nov 2009 8:43 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978558|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 241318001
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 23 08:54:12 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	8.700		0m	N.D. d	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.059		0m	N.D. d	
98)	Isobutyl alcohol	9.413		0m	N.D. d	
99)	Methyl tert-amyl ether	9.724		0m	N.D. d	
100)	Methyl methacrylate	10.608		0m	N.D. d	
101)	1,4-Dioxane	10.748		0m	N.D. d	
102)	2-Nitropropane	11.089		0m	N.D. d	
104)	Ethyl methacrylate	10.608		0m	N.D. d	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	14.168		0m	N.D. d	
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	15.180		0m	N.D. d	
111)	Benzyl chloride	15.729		0m	N.D. d	
112)	bis(2-Chloroisopropyl)...	16.162		0m	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L721.D
Acq On : 22 Nov 2009 8:43 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978558|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 241318001
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 23 08:54:12 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

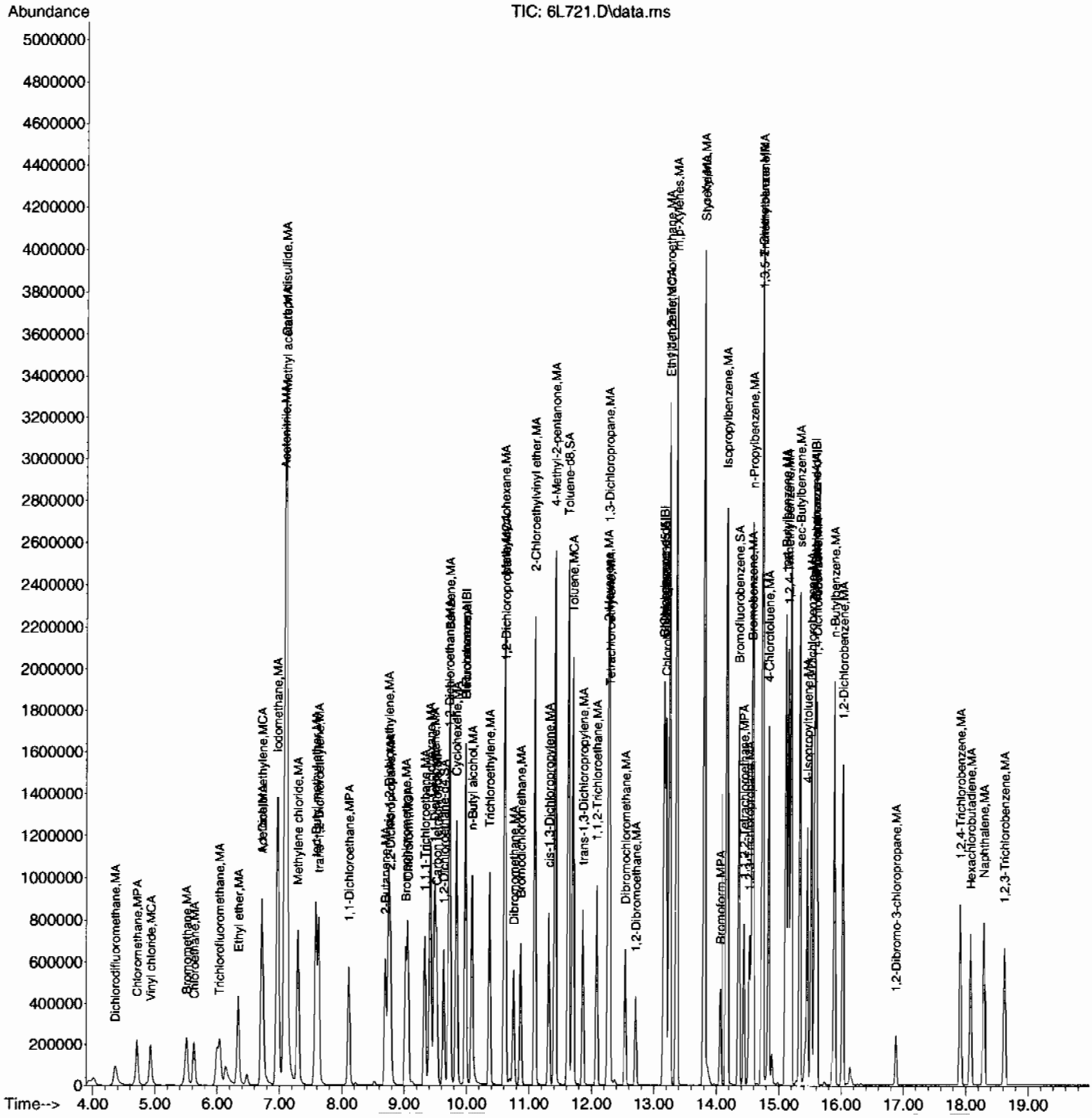

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201978559	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
Client Sample:	QC for batch 925460	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13618PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 21:11	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:54	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L722.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		53.8	ug/kg	0.397	1.17
74-87-3	Chloromethane		47.0	ug/kg	0.350	1.17
75-01-4	Vinyl chloride		53.5	ug/kg	0.350	1.17
74-83-9	Bromomethane		56.8	ug/kg	0.350	1.17
75-00-3	Chloroethane		56.7	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane		60.2	ug/kg	0.350	1.17
67-64-1	Acetone		156	ug/kg	1.94	5.83
75-35-4	1,1-Dichloroethylene		53.8	ug/kg	0.350	1.17
74-88-4	Iodomethane		242	ug/kg	1.87	5.83
75-09-2	Methylene chloride		57.6	ug/kg	2.33	5.83
75-15-0	Carbon disulfide		289	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene		56.1	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane		55.6	ug/kg	0.350	1.17
78-93-3	2-Butanone		131	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene		55.0	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane		55.6	ug/kg	0.350	1.17
67-66-3	Chloroform		56.5	ug/kg	0.350	1.17
74-97-5	Bromochloromethane		55.1	ug/kg	0.385	1.17
71-55-6	1,1,1-Trichloroethane		58.7	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene		58.5	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride		59.0	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane		52.7	ug/kg	0.350	1.17
71-43-2	Benzene		55.1	ug/kg	0.350	1.17
79-01-6	Trichloroethylene		55.5	ug/kg	0.385	1.17
78-87-5	1,2-Dichloropropane		54.7	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane		57.1	ug/kg	0.350	1.17
74-95-3	Dibromomethane		55.7	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone		185	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene		46.2	ug/kg	0.350	1.17
108-88-3	Toluene		55.6	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene		48.9	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane		56.1	ug/kg	0.350	1.17
591-78-6	2-Hexanone		89.0	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane		55.4	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene		54.7	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane		56.4	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane		55.1	ug/kg	0.350	1.17
108-90-7	Chlorobenzene		55.7	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201978559	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
Client Sample:	QC for batch 925460	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13618PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925461	**Inst:**	VOA6.I	**Dilution:**	1
Run Date:	11/22/2009 21:11	**Analyst:**	RXD1	**Purge Vol:**	5 mL
Prep Date:	11/22/2009 13:54	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	112209V6\6L722.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		54.2	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes		100	ug/kg	0.350	2.33
95-47-6	o-Xylene		56.0	ug/kg	0.350	1.17
100-42-5	Styrene		48.5	ug/kg	0.350	1.17
75-25-2	Bromoform		57.4	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane		56.4	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane		56.7	ug/kg	0.350	1.17
108-86-1	Bromobenzene		55.5	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene		53.6	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene		56.1	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene		56.2	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene		52.6	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene		47.6	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene		54.2	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene		45.4	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene		50.9	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene		27.1	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene		50.3	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene		48.5	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene		42.8	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane		51.1	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.87	5.83
630-20-6	1,1,1,2-Tetrachloroethane		57.2	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene		48.7	ug/kg	0.350	1.17

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L722.D
Acq On : 22 Nov 2009 9:11 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978559|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 241318001
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 23 08:54:17 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1320724	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	955753	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	495880	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1318900	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	955753	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	495880	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.633	65	383690	49.49	ug/L	0.00
Spiked Amount 50.000	Range 68 - 131		Recovery = 98.98%			
43) Toluene-d8	11.626	98	1366606	53.02	ug/L	0.00
Spiked Amount 50.000	Range 75 - 129		Recovery = 106.04%			
61) Bromofluorobenzene	14.357	95	519357	54.63	ug/L	0.00
Spiked Amount 50.000	Range 68 - 133		Recovery = 109.26%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.360	85	238106	46.11	ug/L	99
3) Chloromethane	4.713	50	342911	40.30	ug/L	99
4) Vinyl chloride	4.924	62	325737	45.88	ug/L	100
5) Bromomethane	5.498	94	251140	48.68	ug/L	99
6) Chloroethane	5.629	64	263215	48.65	ug/L	99
7) Trichlorofluoromethane	5.992	101	499962	51.60	ug/L	99
8) Ethyl ether	6.334	59	298370	40.99	ug/L	94
9) Acetone	6.712	43	610398	133.51	ug/L	100
10) 1,1-Dichloroethylene	6.712	61	470256	46.17	ug/L	98
11) Iodomethane	6.962	142	2171256	207.18	ug/L	100
12) Acetonitrile	7.072	41	1059428	966.68	ug/L	99
13) Methyl acetate	7.103	43	973049	151.94	ug/L	98
14) Carbon disulfide	7.084	76	4963306	248.20	ug/L	100
15) Methylene chloride	7.292	84	355889	49.38	ug/L	94
16) tert-Butyl methyl ether	7.578	73	856080	43.90	ug/L	98
17) trans-1,2-Dichloroethy...	7.621	61	482820	48.10	ug/L	97
18) Vinyl acetate	8.212	43	1634	N.D.		
19) 1,1-Dichloroethane	8.108	63	596390	47.65	ug/L	100
20) 2-Butanone	8.694	43	700442	112.31	ug/L	97
21) cis-1,2-Dichloroethylene	8.742	61	533235	47.18	ug/L	97
22) 2,2-Dichloropropane	8.773	77	476713	47.64	ug/L	99
23) Bromochloromethane	9.023	128	160967	47.23	ug/L	95
24) Chloroform	9.053	83	550953	48.43	ug/L	99
25) 1,1,1-Trichloroethane	9.328	97	497921	50.30	ug/L	99
26) Cyclohexane	9.413	56	629361	46.40	ug/L	95
27) 1,1-Dichloropropene	9.480	75	443440	50.15	ug/L	96
28) Carbon tetrachloride	9.517	117	441958	50.61	ug/L	99
30) 1,2-Dichloroethane	9.712	62	428041	45.19	ug/L	99
31) Benzene	9.724	78	1274029	47.25	ug/L	98
32) Cyclohexene	9.834	67	647669	47.08	ug/L	96
33) n-Butyl alcohol	10.084	56	381469	1683.49	ug/L	99
34) Trichloroethylene	10.364	95	322286	47.61	ug/L	99
35) 1,2-Dichloropropane	10.614	63	342951	46.92	ug/L	100
36) Methylcyclohexane	10.608	83	557657	44.72	ug/L	95
37) Dibromomethane	10.754	93	179637	47.74	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L722.D
Acq On : 22 Nov 2009 9:11 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978559|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 241318001
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 23 08:54:17 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Bromodichloromethane	10.864	83	402771	48.92 ug/L	99
39) 2-Chloroethylvinyl ether	11.090	63	757616	188.19 ug/L	100
40) cis-1,3-Dichloropropylene	11.315	75	410559	39.59 ug/L	95
42) 4-Methyl-2-pentanone	11.413	58	487110	159.00 ug/L	98
44) Toluene	11.699	91	1332379	47.65 ug/L	100
45) trans-1,3-Dichloroprop...	11.864	75	383742	41.97 ug/L	98
46) 1,1,2-Trichloroethane	12.083	83	217403	48.10 ug/L	100
47) 2-Hexanone	12.260	43	680656	76.33 ug/L	99
48) 1,3-Dichloropropane	12.272	76	455854	47.47 ug/L #	54
49) Tetrachloroethylene	12.291	164	269916	46.94 ug/L	100
50) Dibromochloromethane	12.540	129	297993	48.33 ug/L	99
51) 1,2-Dibromoethane	12.705	107	258494	47.25 ug/L	99
52) Chlorobenzene	13.193	112	865031	47.78 ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.248	131	312355	49.01 ug/L	99
54) Ethylbenzene	13.254	91	1461043	46.44 ug/L	99
55) m,p-Xylenes	13.364	106	1076416	85.74 ug/L	98
56) o-Xylene	13.796	106	595028	48.04 ug/L	100
57) Styrene	13.802	104	831169	41.60 ug/L	100
59) Bromoform	14.058	173	187609	49.19 ug/L	99
60) Isopropylbenzene	14.156	105	1490072	48.15 ug/L	99
62) 1,1,2,2-Tetrachloroethane	14.436	83	328931	48.36 ug/L	99
63) 1,2,3-Trichloropropane	14.528	110	93050	48.59 ug/L	100
64) Bromobenzene	14.564	156	359164	47.59 ug/L	99
65) n-Propylbenzene	14.583	91	1633253	45.92 ug/L	100
66) 1,3,5-Trimethylbenzene	14.735	105	1195992	45.09 ug/L	99
67) 2-Chlorotoluene	14.729	126	360506	48.11 ug/L	95
68) 4-Chlorotoluene	14.833	91	888149	40.85 ug/L	99
69) tert-Butylbenzene	15.107	134	266650	46.48 ug/L	94
70) 1,2,4-Trimethylbenzene	15.150	105	1048734	38.97 ug/L	100
71) sec-Butylbenzene	15.333	105	1531651	43.65 ug/L	99
72) 4-Isopropyltoluene	15.455	119	672345	23.27 ug/L	99
73) 1,3-Dichlorobenzene	15.516	146	634242	43.09 ug/L	99
74) 1,4-Dichlorobenzene	15.601	146	625062	41.58 ug/L	100
75) n-Butylbenzene	15.887	91	994718	36.72 ug/L	99
76) 1,2-Dichlorobenzene	16.022	146	592411	41.74 ug/L	100
77) 1,2-Dibromo-3-chloropr...	16.881	157	60059	43.85 ug/L	97
78) 1,2,4-Trichlorobenzene	17.911	180	314035	31.12 ug/L	100
79) Hexachlorobutadiene	18.076	225	182812	28.14 ug/L	99
80) Naphthalene	18.289	128	704553	33.98 ug/L	100
81) 1,2,3-Trichlorobenzene	18.619	180	254299	30.25 ug/L	98
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	6.798		0m	N.D. d	
88) Allyl chloride	7.072		0m	N.D. d	
89) tert-Butyl Alcohol	7.279		0m	N.D. d	
90) Acrylonitrile	7.578		0m	N.D. d	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.694		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L722.D
Acq On : 22 Nov 2009 9:11 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978559|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 241318001
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 23 08:54:17 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	Propionitrile	8.694		0m	N.D. d	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	9.066		0m	N.D. d	
98)	Isobutyl alcohol	9.413		0m	N.D. d	
99)	Methyl tert-amyl ether	9.730		0m	N.D. d	
100)	Methyl methacrylate	10.608		0m	N.D. d	
101)	1,4-Dioxane	10.760		0m	N.D. d	
102)	2-Nitropropane	11.090		0m	N.D. d	
104)	Ethyl methacrylate	10.608		0m	N.D. d	
106)	1-Chlorohexane	0.000		0	N.D.	
107)	cis-1,4-Dichloro-2-butene	14.156		0m	N.D. d	
108)	Cyclohexanone	0.000		0	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110)	Pentachloroethane	15.174		0m	N.D. d	
111)	Benzyl chloride	15.705		0m	N.D. d	
112)	bis(2-Chloroisopropyl)...	16.162		0m	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\112209V6\
Data File : 6L722.D
Acq On : 22 Nov 2009 9:11 pm
Operator : RXD1
InstName : VOA6
Sample : |1201978559|925461|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 241318001
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 23 08:54:17 2009
Quant Method : C:\msdchem\1\DATA\102409V6\VOA6-8260-102409.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Oct 27 15:11:11 2009
Response via : Initial Calibration
Integrator: RTE

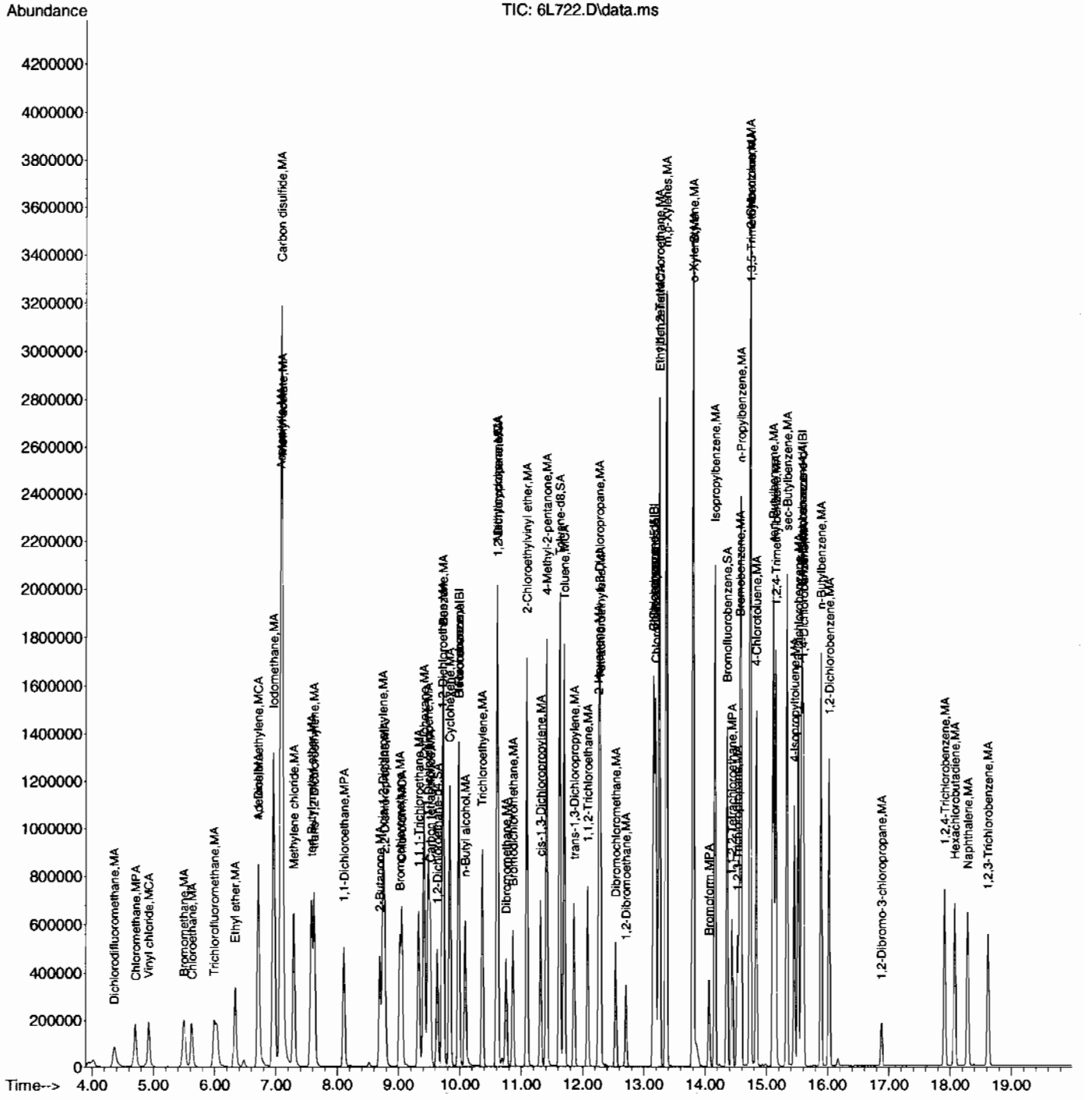

Miscellaneous

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **925460** Verified by: _____

Analyst: Ryan Dushak
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201978560 LCS	22-NOV-2009 10:42:00	Soil	5	5	1	
1201978561 LCS	22-NOV-2009 10:43:00	Soil	5	5	1	
1201978557 MB	22-NOV-2009 10:45:00	Soil	5	5	1	
241318001	22-NOV-2009 13:50:00	Soil	5	5	1	
1201978558 PS (241318001)	22-NOV-2009 13:52:00	Soil	5	5	1	
1201978559 PSD (241318001)	22-NOV-2009 13:54:00	Soil	5	5	1	
241318002	22-NOV-2009 13:56:00	Soil	5	5	1	
241318003	22-NOV-2009 13:58:00	Soil	5	5	1	
241318004	22-NOV-2009 14:00:00	Soil	5	5	1	
241318006	22-NOV-2009 14:04:00	Soil	5	5	1	
241318007	22-NOV-2009 14:06:00	Soil	5	5	1	
241318008	22-NOV-2009 14:08:00	Soil	5	5	1	
241318009	22-NOV-2009 14:10:00	Soil	5	5	1	
241318010	22-NOV-2009 14:12:00	Soil	5	5	1	
241318011	22-NOV-2009 14:14:00	Soil	5	5	1	
241318012	22-NOV-2009 14:16:00	Soil	5	5	1	
241318013	22-NOV-2009 14:18:00	Soil	5	5	1	
1201981771 LCS	23-NOV-2009 09:03:00	Soil	5	5	1	
1201981772 LCS	23-NOV-2009 09:04:00	Soil	5	5	1	
1201981770 MB	23-NOV-2009 09:05:00	Soil	5	5	1	
241318005	23-NOV-2009 13:10:00	Soil	5	5	1	
241318014	23-NOV-2009 13:12:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA6

Date: 10/24/2009 Method 8260B/624 Operator: RXD1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 4

Daily Instrument Readings:
Multiplier Voltage: 1412

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 10/24/2009

(See pg. for ICAL Std. Scl. Ids)

NaHSO4 lot # n/a
Cl test lot # 72612
Sequence Number: 102409V6

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	ICV	MS/ LCS	BFB
L-ICV	W6VM091024-09		5+5		
IS	UVM090910-01	1	1		
SS	UVM090821-02	1	1		
S-ICV	W6VM091024-18		5+5		
BFB	UVM090821-02				1

Purge Amount	
5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
10/24/2009	11:28	6H601.D	RINSE	GEL	BLANK	5mL	1	N/A	1	w	RXD1	N/A	X	RINSE
10/24/2009	11:55	6H602.D	RINSE	GEL	BLANK	5mL	1	N/A	2	w	RXD1	N/A	X	RINSE
10/24/2009	12:23	6H603.D	UVM090821-02	GEL	BFB	5mL	1	N/A	3	w	RXD1	N/A	O	
10/24/2009	12:52	6H604.D	W6VM091024-01	VSTD001	ICAL	5mL	1	N/A	4	w	RXD1	N/A	O	UVM090911-02B+UVM091012-02B
10/24/2009	13:20	6H605.D	W6VM091024-02	VSTD002	ICAL	5mL	1	N/A	5	w	RXD1	N/A	O	UVM090911-03B+UVM091012-03B
10/24/2009	13:48	6H606.D	W6VM091024-03	VSTD005	ICAL	5mL	1	N/A	6	w	RXD1	N/A	O	UVM090911-04B+UVM091012-04B
10/24/2009	14:16	6H607.D	W6VM091024-04	VSTD010	ICAL	5mL	1	N/A	7	w	RXD1	N/A	O	UVM090911-05B+UVM091012-05B
10/24/2009	14:43	6H608.D	W6VM091024-05	VSTD020	ICAL	5mL	1	N/A	8	w	RXD1	N/A	O	UVM090911-06B+UVM091012-06B
10/24/2009	15:11	6H609.D	W6VM091024-06	VSTD050	ICAL	5mL	1	N/A	9	w	RXD1	N/A	O	UVM090911-07B+UVM091012-07B
10/24/2009	15:39	6H610.D	W6VM091024-07	VSTD100	ICAL	5mL	1	N/A	10	w	RXD1	N/A	O	UVM090911-08B+UVM091012-08B
10/24/2009	16:07	6H611.D	RINSE	GEL	BLANK	5mL	1	N/A	11	w	RXD1	N/A	X	RINSE
10/24/2009	16:35	6H612.D	W6VM091024-08	VSTD0005	ICAL	5mL	1	N/A	12	w	RXD1	N/A	O	UVM090911-01B+UVM091012-01B
10/24/2009	17:02	6H613.D	W6VM091024-09	ICV	ICV	5mL	1	N/A	13	w	RXD1	N/A	O	UVM091011-01B+IVM091022-01
10/24/2009	17:30	6H614.D	W6VM091024-10	ICV	ICV	5mL	1	N/A	14	w	RXD1	N/A	X	UVM090914-01D+IVM091022-01
10/24/2009	17:58	6H615.D	W6VM091024-11	VSTD005S	ICAL	5mL	1	N/A	15	w	RXD1	N/A	O	UVM091023-01+UVM090921-01D
10/24/2009	18:26	6H616.D	W6VM091024-12	VSTD010S	ICAL	5mL	1	N/A	16	w	RXD1	N/A	O	UVM091023-02+UVM090921-02D
10/24/2009	18:53	6H617.D	W6VM091024-13	VSTD025S	ICAL	5mL	1	N/A	17	w	RXD1	N/A	O	UVM091023-03+UVM090921-03D
10/24/2009	19:21	6H618.D	W6VM091024-14	VSTD050S	ICAL	5mL	1	N/A	18	w	RXD1	N/A	O	UVM091023-04+UVM090921-04D
10/24/2009	19:49	6H619.D	W6VM091024-15	VSTD100S	ICAL	5mL	1	N/A	19	w	RXD1	N/A	O	UVM091023-05+UVM090921-05D
10/24/2009	20:16	6H620.D	W6VM091024-16	VSTD250S	ICAL	5mL	1	N/A	20	w	RXD1	N/A	O	UVM091023-06+UVM090921-06D
10/24/2009	20:44	6H621.D	W6VM091024-17	VSTD500S	ICAL	5mL	1	N/A	21	w	RXD1	N/A	O	UVM091023-07+UVM090921-07D
10/24/2009	21:11	6H622.D	RINSE	GEL	BLANK	5mL	1	N/A	22	w	RXD1	N/A	X	RINSE
10/24/2009	21:39	6H623.D	W6VM091024-18	ICV	ICV	5mL	1	N/A	23	w	RXD1	N/A	O	UVM090925-08B+UVM090914-02D
10/24/2009	22:07	6H624.D	RINSE	GEL	BLANK	5mL	1	N/A	24	w	RXD1	N/A	X	RINSE

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA6

Date: 11/22/2009 Method 8260B/624 Operator: RXD1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 4

Daily Instrument Readings:
Multiplier Voltage: 1541

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 10/24/2009

(See pg. 202 for ICAL Std. Scl. Ids)

NaHSO4 lot # n/a
Cl test lot # 72612
Sequence Number: W6VM112209V6

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W6VM091122-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS	W6VM091122-01			5+5	
BFB	UVM091020-02				1
SHORT	W6VM091122-02		5	5	
DHEC	N/A		0		

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/22/2009 11:25	6L701.D	12019---	BLANK	BLANK	5mL	1	N/A	1	w	RXD1	N/A	X	RINSE
11/22/2009 11:53	6L702.D	12019---	BLANK	BLANK	5mL	1	N/A	2	w	RXD1	N/A	X	RINSE, IS contamination
11/22/2009 12:21	6L703.D	UVM091020-02	GEL	BFB	5mL	1	N/A	3	s	RXD1	N/A	O	BFB
11/22/2009 12:49	6L704.D	W6VM091122-01	GEL	CCV/LCS	5g	1	N/A	4	s	RXD1	N/A	O	SOIL MIX[A] UVM091111-01C+IVM091122-01
11/22/2009 13:17	6L705.D	W6VM091122-02	GEL	CCV/LCS	5g	1	N/A	5	s	RXD1	N/A	O	SOIL MIX[B] UVM091118-08A
11/22/2009 13:45	6L706.D	12019---	BLANK	BLANK	5g	1	N/A	6	s	RXD1	N/A	O	SOIL
11/22/2009 14:15	6L707.D	241318001	LANL	925461	5g	1	N/A	7	s	RXD1	N/A	O	SOIL
11/22/2009 14:42	6L708.D	241318002	LANL	925461	5g	1	N/A	8	s	RXD1	N/A	O	SOIL
11/22/2009 15:10	6L709.D	241318003	LANL	925461	5g	1	N/A	9	s	RXD1	N/A	O	SOIL
11/22/2009 15:38	6L710.D	241318004	LANL	925461	5g	1	N/A	10	s	RXD1	N/A	O	SOIL
11/22/2009 16:06	6L711.D	241318005	LANL	925461	5g	1	N/A	11	s	RXD1	N/A	x	SOIL, SS high IS low, see 6M109
11/22/2009 16:34	6L712.D	241318006	LANL	925461	5g	1	N/A	12	s	RXD1	N/A	O	SOIL
11/22/2009 17:01	6L713.D	241318007	LANL	925461	5g	1	N/A	13	s	RXD1	N/A	O	SOIL
11/22/2009 17:29	6L714.D	241318008	LANL	925461	5g	1	N/A	14	s	RXD1	N/A	O	SOIL
11/22/2009 17:57	6L715.D	241318009	LANL	925461	5g	1	N/A	15	s	RXD1	N/A	O	SOIL
11/22/2009 18:25	6L716.D	241318010	LANL	925461	5g	1	N/A	16	s	RXD1	N/A	O	SOIL
11/22/2009 18:52	6L717.D	241318011	LANL	925461	5g	1	N/A	17	s	RXD1	N/A	O	SOIL
11/22/2009 19:20	6L718.D	241318012	LANL	925461	5g	1	N/A	18	s	RXD1	N/A	O	SOIL
11/22/2009 19:48	6L719.D	241318013	LANL	925461	5g	1	N/A	19	s	RXD1	N/A	O	SOIL
11/22/2009 20:16	6L720.D	241318014	LANL	925461	5g	1	N/A	20	s	RXD1	N/A	x	SOIL, SS high IS low, see 6M110
11/22/2009 20:43	6L721.D	1201978558	LANL	925461	5g	1	N/A	21	s	RXD1	N/A	O	SOIL MIX[A] MS 241318001
11/22/2009 21:11	6L722.D	1201978559	LANL	925461	5g	1	N/A	22	s	RXD1	N/A	O	SOIL MIX[A] MSD 241318001
11/22/2009 21:39	6L723.D	12019---	BLANK	BLANK	5mL	1	N/A	23	w	RXD1	N/A	X	RINSE

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA6

Date: 11/23/2009 Method 8260B/624 Operator: RXD1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 4

Daily Instrument Readings:
Multiplier Voltage: 1541

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 10/24/2009

(See pg. 202 for ICAL Std. Sci. Ids)

NaHSO4 lot # n/a
CI test lot # 72612
Sequence Number: 112309V6

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W6VM091123-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS	W6VM091123-01/02			5+5	
BFB	UVM091020-02				1
SHORT	W6VM091123-03/04		5	5	
DHEC	N/A		0		

Purge Amount	
5	Water Purge Vol:ML
varied	Soil Purge Wt.:G
x	Mid level ext. MeOH Vol:
100	ul
CY840	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable (O/X)	Comments
11/23/2009	10:30	6M101.D	UVM091020-02	GEL	BFB	5mL	1	N/A	1	w	RXD1	N/A	o	BFB
11/23/2009	10:57	6M102.D	W6VM091123-01	GEL	CCV/LCS	5mL	1	N/A	2	w	RXD1	N/A	o	MIX[A] UVM091111-01C+IVM091122-01
11/23/2009	11:25	6M103.D	W6VM091123-02	GEL	LCS	5g	1	N/A	3	s	RXD1	N/A	o	SOIL MIX[A] UVM091111-01C+IVM091122-01
11/23/2009	11:53	6M104.D	W6VM091123-03	GEL	CCV	5mL	1	N/A	4	w	RXD1	N/A	o	MIX[B] UVM091118-08A
11/23/2009	12:21	6M105.D	W6VM091123-04	GEL	LCS	5g	1	N/A	5	s	RXD1	N/A	o	SOIL MIX[B] UVM091118-08A
11/23/2009	12:49	6M106.D	12019---	BLANK	BLANK	5g	1	N/A	6	s	RXD1	N/A	o	SOIL
11/23/2009	13:16	6M107.D	12019---	BLANK	BLANK	5mL	1	N/A	7	w	RXD1	N/A	o	
11/23/2009	13:44	6M108.D	12019---	HB	HB	100uL	50	N/A	8	s	RXD1	N/A	o	SOIL
11/23/2009	14:12	6M109.D	241318005	LANL	925461	5g	1	N/A	9	s	RXD1	N/A	o	SOIL, rr of 6L711
11/23/2009	14:40	6M110.D	241318014	LANL	925461	5g	1	N/A	10	s	RXD1	N/A	o	SOIL, rr of 6L720
11/23/2009	15:07	6M111.D	241261001	GELC	925829	5mL	1	pH2	11	w	RXD1	N	o	
11/23/2009	15:35	6M112.D	241261002	GELC	925829	5mL	1	pH2	12	w	RXD1	N	o	
11/23/2009	16:03	6M113.D	241463001	COAN	925829	5mL	1	pH2	13	w	RXD1	N	o	
11/23/2009	16:31	6M114.D	241545002	COMM	925829	5mL	1	pH2	14	w	RXD1	N	o	
11/23/2009	16:59	6M115.D	1201979500	GELC	925829	5mL	1	pH2	15	w	RXD1	N	o	MIX[A] MS 241261001
11/23/2009	17:26	6M116.D	1201979501	GELC	925829	5mL	1	pH2	16	w	RXD1	N	o	MIX[A] MSD 241261001
11/23/2009	17:54	6M117.D	12019---	BLANK	BLANK	5mL	1	N/A	17	w	RXD1	N/A	x	RINSE
11/23/2009	18:22	6M118.D	1201971392	MECP	925832	500uL	10	N/A	18	w	RXD1	N/A	o	TCLPBLANK
11/23/2009	18:50	6M119.D	240934001	MECP	925832	500uL	10	N/A	19	w	RXD1	N/A	o	
11/23/2009	19:18	6M120.D	241324001	MECP	925836	100uL	50	N/A	20	s	RXD1	N/A	o	SOIL
11/23/2009	19:46	6M121.D	1201979460	MECP	925832	500uL	10	N/A	21	w	RXD1	N/A	o	MIX[A] MS 240934001
11/23/2009	20:14	6M122.D	1201979461	MECP	925832	500uL	10	N/A	22	w	RXD1	N/A	o	MIX[A] MSD 240934001
11/23/2009	20:41	6M123.D	1201979464	MECP	925836	100uL	50	N/A	23	s	RXD1	N/A	o	SOIL MIX[A] MS 241324001
11/23/2009	21:09	6M124.D	1201979465	MECP	925836	100uL	50	N/A	24	s	RXD1	N/A	o	SOIL MIX[A] MSD 241324001
11/23/2009	21:36	6M125.D	12019---	BLANK	BLANK	5mL	1	N/A	25	w	RXD1	N/A	x	RINSE

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
25-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925461	See Below		

Potentially affected work order(s)(SDG): 241318(10-543)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The relative percent differences (RPD) between the MS and MSD recoveries were not within the acceptance limits for the following: 2-Hexanone recovered at 33%. The limits are 0%-25%.	1. Narrate and report. The matrix of the sample was inconsistent and interfered with recoveries.
2. The MSD did not meet acceptance criteria for 2-Hexanone.	2. Narrate and report. The matrix of this sample was inconsistent and interfered with recoveries

Originator's Name:

Ryan Dushak 25-NOV-09

Data Validator/Group Leader:

Erin Haubert 11-DEC-09

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-543

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	925637
Prep Batch Number:	925632

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241318001	RE03-09-13618
241318002	RE03-09-13622
241318003	RE03-09-13620
241318004	RE03-09-13619
241318005	RE03-09-13624
241318006	RE03-09-13623
241318007	RE03-09-13626
241318008	RE03-09-13621
241318009	RE03-09-13627
241318010	RE03-09-13625
241318013	RE03-10-6084
241318014	RE03-10-6085
1201978974	Method Blank (MB)
1201978975	241318009(RE03-09-13627) Matrix Spike (MS)
1201978976	241318009(RE03-09-13627) Matrix Spike Duplicate (MSD)
1201978977	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 241318009 (RE03-09-13627) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS failed recovery for Benzyl alcohol. Please see the spike recovery report for the specific failure. The MSD displayed a passing but biased low recovery for that analyte. Therefore, failure was attributed to matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The MS/MSD RPD values failed for multiple target analtyes. Please see the spike recovery report for the specific failures. The analytes associated with failing RPD values displayed acceptable MS and MSD recoveries individually. Therefore, the data were reported un-qualified for the RPD value failures.

Internal Standard (ISTD) Acceptance
Sample 241318005failed to meet internal standard recovery acceptance criteria. The sample was re-analyzed and the failure confirmed. The first analysis data were reported and the re-analysis raw data have been placed in the Miscellaneous Section of the data report.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 766333. It is located in the Miscellaneous Section of the data report.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD8.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beachamy **Date:** 12-14-09

Roadmap for LANL 10-543 SVOA

This roadmap was analyzed by nat00999 on 12-05-2009, 14:23.
This roadmap was packaged by CHA01131 on 12-14-2009, 09:50.
This roadmap was packaged by dan01134 on 12-14-2009, 13:32.
This roadmap was reviewed by dan01134 on 12-14-2009, 13:33.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
■	N	/chem/MSD8.i/s120309.b/s810314.d	241318001	03-DEC-2009	15:40	10-543.sub	RE03-09-13618	10	925637	DUSE - see s810329
□	N	/chem/MSD8.i/s120309.b/s810315.d	241318002	03-DEC-2009	16:11	10-543.sub	RE03-09-13622	1	925637	
■	N	/chem/MSD8.i/s120309.b/s810316.d	241318003	03-DEC-2009	16:39	10-543.sub	RE03-09-13620	10	925637	DUSE - see s810330
□	N	/chem/MSD8.i/s120309.b/s810317.d	241318004	03-DEC-2009	17:09	10-543.sub	RE03-09-13619	1	925637	
□	N	/chem/MSD8.i/s120309.b/s810318.d	241318006	03-DEC-2009	17:39	10-543.sub	RE03-09-13623	1	925637	
□	N	/chem/MSD8.i/s120309.b/s810319.d	241318007	03-DEC-2009	18:10	10-543.sub	RE03-09-13626	1	925637	
□	N	/chem/MSD8.i/s120309.b/s810320.d	241318008	03-DEC-2009	18:39	10-543.sub	RE03-09-13621	1	925637	
□	N	/chem/MSD8.i/s120309.b/s810321.d	241318009	03-DEC-2009	19:09	10-543.sub	RE03-09-13627	1	925637	
■	N	/chem/MSD8.i/s120309.b/s810324.d	241318010	03-DEC-2009	20:39	10-543.sub	RE03-09-13625	1	925637	DUSE - failed surr - rr - see s810417
■	N	/chem/MSD8.i/s120309.b/s810325.d	241318013	03-DEC-2009	21:09	10-543.sub	RE03-10-6084	1	925637	DUSE - failed surr - rr- see s810419
■	N	/chem/MSD8.i/s120309.b/s810326.d	241318014	03-DEC-2009	21:38	10-543.sub	RE03-10-6085	1	925637	DUSE - failed surr - rr - see s810420
□	N	/chem/MSD8.i/s120309.b/s810327.d	241318005	03-DEC-2009	22:08	10-543.sub	RE03-09-13624	1	925637	failed IS rr - s810423 confirmed
■	N	/chem/MSD8.i/s120309.b/s810329.d	241318001	03-DEC-2009	23:08	10-543.sub	RE03-09-13618	1	925637	DUSE - failed IS - rr - see s810422
■	N	/chem/MSD8.i/s120309.b/s810330.d	241318003	03-DEC-2009	23:38	10-543.sub	RE03-09-13620	1	925637	DUSE - outside tune window - rr - see s810421
□	N	/chem/MSD8.i/s120409.b/s810417.d	241318010	04-DEC-2009	15:44	10-543.sub	RE03-09-13625	1	925637	USE - rr of s810324
□	N	/chem/MSD8.i/s120409.b/s810419.d	241318013	04-DEC-2009	16:45	10-543.sub	RE03-10-6084	1	925637	USE - rr of s810325
□	N	/chem/MSD8.i/s120409.b/s810420.d	241318014	04-DEC-2009	17:15	10-543.sub	RE03-10-6085	1	925637	USE - rr of s810326
□	N	/chem/MSD8.i/s120409.b/s810421.d	241318003	04-DEC-2009	17:45	10-543.sub	RE03-09-13620	1	925637	USE - rr of s810330
□	N	/chem/MSD8.i/s120409.b/s810422.d	241318001	04-DEC-2009	18:15	10-543.sub	RE03-09-13618	1	925637	USE - rr of s810329
■	N	/chem/MSD8.i/s120409.b/s810423.d	241318005	04-DEC-2009	18:45	10-543.sub	RE03-09-13624	1	925637	DUSE - failed IS - rr of s810327

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
□	Y	/chem/MSD8.i/s120309.b/s810309-1.d	1201978974	mb	03-DEC-2009	13:09	10-543.sub	SBLK01	1.00000	925637	

☐	Y	/chem/MSD8.i/s120309.b/s8l0310-1.d	1201978977	lcs	03-DEC-2009	13:39	10-543.sub	SBLK01LCS	1.00000	925637	
☐	Y	/chem/MSD8.i/s120409.b/s8l0416.d	1201978976	msd	04-DEC-2009	15:13	10-543.sub	RE03-09-13627MSD	1.00000	925637	
☐	Y	/chem/MSD8.i/s120409.b/s8l0418.d	1201978975	ms	04-DEC-2009	16:14	10-543.sub	RE03-09-13627MS	1.00000	925637	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 18:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s810422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388
108-95-2	Phenol	U	388	ug/kg	77.6	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.0	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.6	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388
95-48-7	o-Cresol	U	388	ug/kg	77.6	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388
78-59-1	Isophorone	U	388	ug/kg	77.6	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388
65-85-0	Benzoic acid	U	776	ug/kg	194	776
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	388	ug/kg	77.6	388
99-09-2	3-Nitroaniline	U	388	ug/kg	77.6	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 18:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s810422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.6	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	776	ug/kg	147	776
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388
122-66-7	Azobenzene	U	388	ug/kg	77.6	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.6	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.6	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	199	ug/kg		JA
629-62-9	Pentadecane	13.96	436	ug/kg	91	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 18:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s8I0422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14	310	ug/kg		J
1000188-72-8	2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	14.03	442	ug/kg	92	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 17:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s8l0317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388
108-95-2	Phenol	U	388	ug/kg	77.6	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.6	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388
95-48-7	o-Cresol	U	388	ug/kg	77.6	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388
78-59-1	Isophorone	U	388	ug/kg	77.6	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388
65-85-0	Benzoic acid	U	776	ug/kg	194	776
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.6	388
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	388	ug/kg	77.6	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 17:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s810317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.6	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	776	ug/kg	148	776
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388
122-66-7	Azobenzene	U	388	ug/kg	77.6	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.6	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.6	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.2	257	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	241	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 17:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s8l0317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.25	205	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318003	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13620	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s8l0421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.0	355
108-95-2	Phenol	U	355	ug/kg	71.0	355
95-57-8	2-Chlorophenol	U	355	ug/kg	71.0	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.0	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.0	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.0	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.8	355
129-00-0	Pyrene	J	32.9	ug/kg	10.7	35.5
110-86-1	Pyridine	U	355	ug/kg	71.0	355
62-53-3	Aniline	U	355	ug/kg	107	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.0	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.0	355
100-51-6	Benzyl alcohol	U	355	ug/kg	107	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.0	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.0	355
95-48-7	o-Cresol	U	355	ug/kg	71.0	355
65794-96-9	m,p-Cresols	U	355	ug/kg	107	355
67-72-1	Hexachloroethane	U	355	ug/kg	71.0	355
98-95-3	Nitrobenzene	U	355	ug/kg	71.0	355
78-59-1	Isophorone	U	355	ug/kg	71.0	355
88-75-5	2-Nitrophenol	U	355	ug/kg	71.0	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.0	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.0	355
65-85-0	Benzoic acid	U	710	ug/kg	178	710
91-20-3	Naphthalene	U	35.5	ug/kg	10.7	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	71.0	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.0	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.10	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.0	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.0	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.0	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	71.0	355
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	355	ug/kg	71.0	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318003**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13620**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s810421.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	71.0	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.7	35.5
51-28-5	2,4-Dinitrophenol	U	710	ug/kg	135	710
132-64-9	Dibenzofuran	U	355	ug/kg	71.0	355
84-66-2	Diethylphthalate	U	355	ug/kg	71.0	355
86-73-7	Fluorene	U	35.5	ug/kg	10.7	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.0	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.0	355
100-01-6	4-Nitroaniline	U	355	ug/kg	107	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	71.0	355
122-66-7	Azobenzene	U	355	ug/kg	71.0	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.0	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.0	355
85-01-8	Phenanthrene	J	18.6	ug/kg	10.7	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.10	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.0	355
206-44-0	Fluoranthene		37.0	ug/kg	10.7	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.0	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.7	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	107	355
218-01-9	Chrysene	J	18.8	ug/kg	10.7	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.0	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.0	355
205-99-2	Benzo(b)fluoranthene	J	22.4	ug/kg	10.7	35.5
207-08-9	Benzo(k)fluoranthene	J	15.5	ug/kg	10.7	35.5
50-32-8	Benzo(a)pyrene	J	19.1	ug/kg	10.7	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.7	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.7	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.7	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.0	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	151	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.27	229	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318003	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13620	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s8l0421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.43	167	ug/kg		J
	Unknown	11.82	148	ug/kg		J
	Unknown	11.85	373	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.96	260	ug/kg	90	NJ
629-92-5	Nonadecane	12.9	157	ug/kg	83	NJ
	Unknown	13.39	192	ug/kg		J
	Unknown	13.59	145	ug/kg		J
	Unknown	13.96	485	ug/kg		J
	Unknown	16.49	162	ug/kg		J
	Unknown	17.95	245	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s810320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.6	348
108-95-2	Phenol	U	348	ug/kg	69.6	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.6	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.6	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.6	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.6	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	87.0	348
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8
110-86-1	Pyridine	U	348	ug/kg	69.6	348
62-53-3	Aniline	U	348	ug/kg	104	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.6	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.6	348
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.6	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.6	348
95-48-7	o-Cresol	U	348	ug/kg	69.6	348
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.6	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.6	348
78-59-1	Isophorone	U	348	ug/kg	69.6	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.6	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.6	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.6	348
65-85-0	Benzoic acid	U	696	ug/kg	174	696
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.6	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.6	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.96	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.6	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.6	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.6	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline	U	348	ug/kg	69.6	348
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	348	ug/kg	69.6	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s8l0320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.6	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8
51-28-5	2,4-Dinitrophenol	U	696	ug/kg	132	696
132-64-9	Dibenzofuran	U	348	ug/kg	69.6	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.6	348
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.6	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.6	348
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.6	348
122-66-7	Azobenzene	U	348	ug/kg	69.6	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.6	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.6	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.96	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.6	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.6	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	J	100	ug/kg	69.6	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.6	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.6	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	272	ug/kg		JA
80-56-8	.alpha.-Pinene	3.96	176	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s810320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	4.53	189	ug/kg	94	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	203	ug/kg	98	NJ
	Unknown	11.87	151	ug/kg		J
	Unknown	11.9	238	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.01	159	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13622**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:11**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0315.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	355	ug/kg	70.9	355
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 16:11	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s810315.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	181	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.96	175	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 16:11	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s8l0315.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-26-4	1S-.alpha.-Pinene	4.53	211	ug/kg	95	NJ
	Unknown	11.47	157	ug/kg		J
	Unknown	11.64	222	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318006**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13623**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:39**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s810318.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	346	ug/kg	69.1	346
108-95-2	Phenol	U	346	ug/kg	69.1	346
95-57-8	2-Chlorophenol	U	346	ug/kg	69.1	346
106-46-7	1,4-Dichlorobenzene	U	346	ug/kg	69.1	346
621-64-7	N-Nitrosodipropylamine	U	346	ug/kg	69.1	346
59-50-7	4-Chloro-3-methylphenol	U	346	ug/kg	69.1	346
83-32-9	Acenaphthene	U	34.6	ug/kg	11.4	34.6
121-14-2	2,4-Dinitrotoluene	U	346	ug/kg	34.6	346
100-02-7	4-Nitrophenol	U	346	ug/kg	114	346
87-86-5	Pentachlorophenol	U	346	ug/kg	86.4	346
129-00-0	Pyrene	U	34.6	ug/kg	10.4	34.6
110-86-1	Pyridine	U	346	ug/kg	69.1	346
62-53-3	Aniline	U	346	ug/kg	104	346
111-44-4	bis(2-Chloroethyl) ether	U	346	ug/kg	69.1	346
541-73-1	1,3-Dichlorobenzene	U	346	ug/kg	69.1	346
100-51-6	Benzyl alcohol	U	346	ug/kg	104	346
95-50-1	1,2-Dichlorobenzene	U	346	ug/kg	69.1	346
108-60-1	bis(2-Chloroisopropyl)ether	U	346	ug/kg	69.1	346
95-48-7	o-Cresol	U	346	ug/kg	69.1	346
65794-96-9	m,p-Cresols	U	346	ug/kg	104	346
67-72-1	Hexachloroethane	U	346	ug/kg	69.1	346
98-95-3	Nitrobenzene	U	346	ug/kg	69.1	346
78-59-1	Isophorone	U	346	ug/kg	69.1	346
88-75-5	2-Nitrophenol	U	346	ug/kg	69.1	346
105-67-9	2,4-Dimethylphenol	U	346	ug/kg	121	346
111-91-1	bis(2-Chloroethoxy)methane	U	346	ug/kg	69.1	346
120-83-2	2,4-Dichlorophenol	U	346	ug/kg	69.1	346
65-85-0	Benzoic acid	U	691	ug/kg	173	691
91-20-3	Naphthalene	U	34.6	ug/kg	10.4	34.6
106-47-8	4-Chloroaniline	U	346	ug/kg	69.1	346
87-68-3	Hexachlorobutadiene	U	346	ug/kg	69.1	346
91-57-6	2-Methylnaphthalene	U	34.6	ug/kg	6.91	34.6
77-47-4	Hexachlorocyclopentadiene	U	346	ug/kg	69.1	346
88-06-2	2,4,6-Trichlorophenol	U	346	ug/kg	69.1	346
95-95-4	2,4,5-Trichlorophenol	U	346	ug/kg	69.1	346
91-58-7	2-Chloronaphthalene	U	34.6	ug/kg	11.4	34.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	346	ug/kg	69.1	346
99-09-2	3-Nitroaniline	U	346	ug/kg	69.1	346

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13623	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 17:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s8I0318.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	346	ug/kg	69.1	346
606-20-2	2,6-Dinitrotoluene	U	346	ug/kg	34.6	346
208-96-8	Acenaphthylene	U	34.6	ug/kg	10.4	34.6
51-28-5	2,4-Dinitrophenol	U	691	ug/kg	131	691
132-64-9	Dibenzofuran	U	346	ug/kg	69.1	346
84-66-2	Diethylphthalate	U	346	ug/kg	69.1	346
86-73-7	Fluorene	U	34.6	ug/kg	10.4	34.6
7005-72-3	4-Chlorophenylphenylether	U	346	ug/kg	69.1	346
534-52-1	2-Methyl-4,6-dinitrophenol	U	346	ug/kg	69.1	346
100-01-6	4-Nitroaniline	U	346	ug/kg	104	346
	p-Nitroaniline					
122-39-4	Diphenylamine	U	346	ug/kg	69.1	346
122-66-7	Azobenzene	U	346	ug/kg	69.1	346
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	346	ug/kg	69.1	346
118-74-1	Hexachlorobenzene	U	346	ug/kg	69.1	346
85-01-8	Phenanthrene	U	34.6	ug/kg	10.4	34.6
120-12-7	Anthracene	U	34.6	ug/kg	6.91	34.6
84-74-2	Di-n-butylphthalate	U	346	ug/kg	69.1	346
206-44-0	Fluoranthene	U	34.6	ug/kg	10.4	34.6
85-68-7	Butylbenzylphthalate	U	346	ug/kg	69.1	346
56-55-3	Benzo(a)anthracene	U	34.6	ug/kg	10.4	34.6
91-94-1	3,3'-Dichlorobenzidine	U	346	ug/kg	104	346
218-01-9	Chrysene	U	34.6	ug/kg	10.4	34.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	346	ug/kg	69.1	346
117-84-0	Di-n-octylphthalate	U	346	ug/kg	69.1	346
205-99-2	Benzo(b)fluoranthene	U	34.6	ug/kg	10.4	34.6
207-08-9	Benzo(k)fluoranthene	U	34.6	ug/kg	10.4	34.6
50-32-8	Benzo(a)pyrene	U	34.6	ug/kg	10.4	34.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.6	ug/kg	10.4	34.6
53-70-3	Dibenzo(a,h)anthracene	U	34.6	ug/kg	10.4	34.6
191-24-2	Benzo(ghi)perylene	U	34.6	ug/kg	10.4	34.6
120-82-1	1,2,4-Trichlorobenzene	U	346	ug/kg	69.1	346

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	218	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	167	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 22:08	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s8l0327.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	430	ug/kg	86.1	430
108-95-2	Phenol	U	430	ug/kg	86.1	430
95-57-8	2-Chlorophenol	U	430	ug/kg	86.1	430
106-46-7	1,4-Dichlorobenzene	U	430	ug/kg	86.1	430
621-64-7	N-Nitrosodipropylamine	U	430	ug/kg	86.1	430
59-50-7	4-Chloro-3-methylphenol	U	430	ug/kg	86.1	430
83-32-9	Acenaphthene	U	43.0	ug/kg	14.2	43.0
121-14-2	2,4-Dinitrotoluene	U	430	ug/kg	43.0	430
100-02-7	4-Nitrophenol	U	430	ug/kg	142	430
87-86-5	Pentachlorophenol	U	430	ug/kg	108	430
129-00-0	Pyrene	J	32.6	ug/kg	12.9	43.0
110-86-1	Pyridine	U	430	ug/kg	86.1	430
62-53-3	Aniline	U	430	ug/kg	129	430
111-44-4	bis(2-Chloroethyl) ether	U	430	ug/kg	86.1	430
541-73-1	1,3-Dichlorobenzene	U	430	ug/kg	86.1	430
100-51-6	Benzyl alcohol	U	430	ug/kg	129	430
95-50-1	1,2-Dichlorobenzene	U	430	ug/kg	86.1	430
108-60-1	bis(2-Chloroisopropyl)ether	U	430	ug/kg	86.1	430
95-48-7	o-Cresol	U	430	ug/kg	86.1	430
65794-96-9	m,p-Cresols	U	430	ug/kg	129	430
67-72-1	Hexachloroethane	U	430	ug/kg	86.1	430
98-95-3	Nitrobenzene	U	430	ug/kg	86.1	430
78-59-1	Isophorone	U	430	ug/kg	86.1	430
88-75-5	2-Nitrophenol	U	430	ug/kg	86.1	430
105-67-9	2,4-Dimethylphenol	U	430	ug/kg	151	430
111-91-1	bis(2-Chloroethoxy)methane	U	430	ug/kg	86.1	430
120-83-2	2,4-Dichlorophenol	U	430	ug/kg	86.1	430
65-85-0	Benzoic acid	U	861	ug/kg	215	861
91-20-3	Naphthalene	U	43.0	ug/kg	12.9	43.0
106-47-8	4-Chloroaniline	U	430	ug/kg	86.1	430
87-68-3	Hexachlorobutadiene	U	430	ug/kg	86.1	430
91-57-6	2-Methylnaphthalene	U	43.0	ug/kg	8.61	43.0
77-47-4	Hexachlorocyclopentadiene	U	430	ug/kg	86.1	430
88-06-2	2,4,6-Trichlorophenol	U	430	ug/kg	86.1	430
95-95-4	2,4,5-Trichlorophenol	U	430	ug/kg	86.1	430
91-58-7	2-Chloronaphthalene	U	43.0	ug/kg	14.2	43.0
88-74-4	2-Nitroaniline	U	430	ug/kg	86.1	430
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	430	ug/kg	86.1	430

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 22:08	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s8l0327.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	430	ug/kg	86.1	430
606-20-2	2,6-Dinitrotoluene	U	430	ug/kg	43.0	430
208-96-8	Acenaphthylene	U	43.0	ug/kg	12.9	43.0
51-28-5	2,4-Dinitrophenol	U	861	ug/kg	164	861
132-64-9	Dibenzofuran	U	430	ug/kg	86.1	430
84-66-2	Diethylphthalate	U	430	ug/kg	86.1	430
86-73-7	Fluorene	U	43.0	ug/kg	12.9	43.0
7005-72-3	4-Chlorophenylphenylether	U	430	ug/kg	86.1	430
534-52-1	2-Methyl-4,6-dinitrophenol	U	430	ug/kg	86.1	430
100-01-6	4-Nitroaniline	U	430	ug/kg	129	430
	p-Nitroaniline					
122-39-4	Diphenylamine	U	430	ug/kg	86.1	430
122-66-7	Azobenzene	U	430	ug/kg	86.1	430
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	430	ug/kg	86.1	430
118-74-1	Hexachlorobenzene	U	430	ug/kg	86.1	430
85-01-8	Phenanthrene	J	14.0	ug/kg	12.9	43.0
120-12-7	Anthracene	U	43.0	ug/kg	8.61	43.0
84-74-2	Di-n-butylphthalate	U	430	ug/kg	86.1	430
206-44-0	Fluoranthene	J	20.0	ug/kg	12.9	43.0
85-68-7	Butylbenzylphthalate	U	430	ug/kg	86.1	430
56-55-3	Benzo(a)anthracene	U	43.0	ug/kg	12.9	43.0
91-94-1	3,3'-Dichlorobenzidine	U	430	ug/kg	129	430
218-01-9	Chrysene	J	15.9	ug/kg	12.9	43.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	430	ug/kg	86.1	430
117-84-0	Di-n-octylphthalate	U	430	ug/kg	86.1	430
205-99-2	Benzo(b)fluoranthene	U	43.0	ug/kg	12.9	43.0
207-08-9	Benzo(k)fluoranthene	U	43.0	ug/kg	12.9	43.0
50-32-8	Benzo(a)pyrene	J	15.1	ug/kg	12.9	43.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.0	ug/kg	12.9	43.0
53-70-3	Dibenzo(a,h)anthracene	U	43.0	ug/kg	12.9	43.0
191-24-2	Benzo(ghi)perylene	U	43.0	ug/kg	12.9	43.0
120-82-1	1,2,4-Trichlorobenzene	U	430	ug/kg	86.1	430

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	242	ug/kg		JA
593-45-3	Octadecane	14.03	205	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 22:08	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s810327.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.33	310	ug/kg		J
559-74-0	Friedelan-3-one	19.08	1270	ug/kg	94	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 15:44	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s810417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401
108-95-2	Phenol	U	401	ug/kg	80.2	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	U	40.1	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.2	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401
95-48-7	o-Cresol	U	401	ug/kg	80.2	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401
78-59-1	Isophorone	U	401	ug/kg	80.2	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401
65-85-0	Benzoic acid	U	802	ug/kg	200	802
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	401	ug/kg	80.2	401
99-09-2	3-Nitroaniline	U	401	ug/kg	80.2	401

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 15:44	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s810417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	p-Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401
122-66-7	Azobenzene	U	401	ug/kg	80.2	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401
85-01-8	Phenanthrene	U	40.1	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401
206-44-0	Fluoranthene	U	40.1	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401
205-99-2	Benzo(b)fluoranthene	U	40.1	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	306	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s810319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	393	ug/kg	78.7	393
108-95-2	Phenol	U	393	ug/kg	78.7	393
95-57-8	2-Chlorophenol	U	393	ug/kg	78.7	393
106-46-7	1,4-Dichlorobenzene	U	393	ug/kg	78.7	393
621-64-7	N-Nitrosodipropylamine	U	393	ug/kg	78.7	393
59-50-7	4-Chloro-3-methylphenol	U	393	ug/kg	78.7	393
83-32-9	Acenaphthene	U	39.3	ug/kg	13.0	39.3
121-14-2	2,4-Dinitrotoluene	U	393	ug/kg	39.3	393
100-02-7	4-Nitrophenol	U	393	ug/kg	130	393
87-86-5	Pentachlorophenol	U	393	ug/kg	98.4	393
129-00-0	Pyrene	U	39.3	ug/kg	11.8	39.3
110-86-1	Pyridine	U	393	ug/kg	78.7	393
62-53-3	Aniline	U	393	ug/kg	118	393
111-44-4	bis(2-Chloroethyl) ether	U	393	ug/kg	78.7	393
541-73-1	1,3-Dichlorobenzene	U	393	ug/kg	78.7	393
100-51-6	Benzyl alcohol	U	393	ug/kg	118	393
95-50-1	1,2-Dichlorobenzene	U	393	ug/kg	78.7	393
108-60-1	bis(2-Chloroisopropyl)ether	U	393	ug/kg	78.7	393
95-48-7	o-Cresol	U	393	ug/kg	78.7	393
65794-96-9	m,p-Cresols	U	393	ug/kg	118	393
67-72-1	Hexachloroethane	U	393	ug/kg	78.7	393
98-95-3	Nitrobenzene	U	393	ug/kg	78.7	393
78-59-1	Isophorone	U	393	ug/kg	78.7	393
88-75-5	2-Nitrophenol	U	393	ug/kg	78.7	393
105-67-9	2,4-Dimethylphenol	U	393	ug/kg	138	393
111-91-1	bis(2-Chloroethoxy)methane	U	393	ug/kg	78.7	393
120-83-2	2,4-Dichlorophenol	U	393	ug/kg	78.7	393
65-85-0	Benzoic acid	U	787	ug/kg	197	787
91-20-3	Naphthalene	U	39.3	ug/kg	11.8	39.3
106-47-8	4-Chloroaniline	U	393	ug/kg	78.7	393
87-68-3	Hexachlorobutadiene	U	393	ug/kg	78.7	393
91-57-6	2-Methylnaphthalene	U	39.3	ug/kg	7.87	39.3
77-47-4	Hexachlorocyclopentadiene	U	393	ug/kg	78.7	393
88-06-2	2,4,6-Trichlorophenol	U	393	ug/kg	78.7	393
95-95-4	2,4,5-Trichlorophenol	U	393	ug/kg	78.7	393
91-58-7	2-Chloronaphthalene	U	39.3	ug/kg	13.0	39.3
88-74-4	2-Nitroaniline	U	393	ug/kg	78.7	393
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	393	ug/kg	78.7	393

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s810319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	393	ug/kg	78.7	393
606-20-2	2,6-Dinitrotoluene	U	393	ug/kg	39.3	393
208-96-8	Acenaphthylene	U	39.3	ug/kg	11.8	39.3
51-28-5	2,4-Dinitrophenol	U	787	ug/kg	150	787
132-64-9	Dibenzofuran	U	393	ug/kg	78.7	393
84-66-2	Diethylphthalate	U	393	ug/kg	78.7	393
86-73-7	Fluorene	U	39.3	ug/kg	11.8	39.3
7005-72-3	4-Chlorophenylphenylether	U	393	ug/kg	78.7	393
534-52-1	2-Methyl-4,6-dinitrophenol	U	393	ug/kg	78.7	393
100-01-6	4-Nitroaniline	U	393	ug/kg	118	393
	p-Nitroaniline					
122-39-4	Diphenylamine	U	393	ug/kg	78.7	393
122-66-7	Azobenzene	U	393	ug/kg	78.7	393
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	393	ug/kg	78.7	393
118-74-1	Hexachlorobenzene	U	393	ug/kg	78.7	393
85-01-8	Phenanthrene	U	39.3	ug/kg	11.8	39.3
120-12-7	Anthracene	U	39.3	ug/kg	7.87	39.3
84-74-2	Di-n-butylphthalate	U	393	ug/kg	78.7	393
206-44-0	Fluoranthene	U	39.3	ug/kg	11.8	39.3
85-68-7	Butylbenzylphthalate	U	393	ug/kg	78.7	393
56-55-3	Benzo(a)anthracene	U	39.3	ug/kg	11.8	39.3
91-94-1	3,3'-Dichlorobenzidine	U	393	ug/kg	118	393
218-01-9	Chrysene	U	39.3	ug/kg	11.8	39.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	393	ug/kg	78.7	393
117-84-0	Di-n-octylphthalate	U	393	ug/kg	78.7	393
205-99-2	Benzo(b)fluoranthene	U	39.3	ug/kg	11.8	39.3
207-08-9	Benzo(k)fluoranthene	U	39.3	ug/kg	11.8	39.3
50-32-8	Benzo(a)pyrene	U	39.3	ug/kg	11.8	39.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.3	ug/kg	11.8	39.3
53-70-3	Dibenzo(a,h)anthracene	U	39.3	ug/kg	11.8	39.3
191-24-2	Benzo(ghi)perylene	U	39.3	ug/kg	11.8	39.3
120-82-1	1,2,4-Trichlorobenzene	U	393	ug/kg	78.7	393

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.2	271	ug/kg		J
	Unknown	14.3	188	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.34	200	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318009**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13627**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:09**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.19 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0321.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	356	ug/kg	71.3	356
108-95-2	Phenol	U	356	ug/kg	71.3	356
95-57-8	2-Chlorophenol	U	356	ug/kg	71.3	356
106-46-7	1,4-Dichlorobenzene	U	356	ug/kg	71.3	356
621-64-7	N-Nitrosodipropylamine	U	356	ug/kg	71.3	356
59-50-7	4-Chloro-3-methylphenol	U	356	ug/kg	71.3	356
83-32-9	Acenaphthene	U	35.6	ug/kg	11.8	35.6
121-14-2	2,4-Dinitrotoluene	U	356	ug/kg	35.6	356
100-02-7	4-Nitrophenol	U	356	ug/kg	118	356
87-86-5	Pentachlorophenol	U	356	ug/kg	89.1	356
129-00-0	Pyrene	U	35.6	ug/kg	10.7	35.6
110-86-1	Pyridine	U	356	ug/kg	71.3	356
62-53-3	Aniline	U	356	ug/kg	107	356
111-44-4	bis(2-Chloroethyl) ether	U	356	ug/kg	71.3	356
541-73-1	1,3-Dichlorobenzene	U	356	ug/kg	71.3	356
100-51-6	Benzyl alcohol	U	356	ug/kg	107	356
95-50-1	1,2-Dichlorobenzene	U	356	ug/kg	71.3	356
108-60-1	bis(2-Chloroisopropyl)ether	U	356	ug/kg	71.3	356
95-48-7	o-Cresol	U	356	ug/kg	71.3	356
65794-96-9	m,p-Cresols	U	356	ug/kg	107	356
67-72-1	Hexachloroethane	U	356	ug/kg	71.3	356
98-95-3	Nitrobenzene	U	356	ug/kg	71.3	356
78-59-1	Isophorone	U	356	ug/kg	71.3	356
88-75-5	2-Nitrophenol	U	356	ug/kg	71.3	356
105-67-9	2,4-Dimethylphenol	U	356	ug/kg	125	356
111-91-1	bis(2-Chloroethoxy)methane	U	356	ug/kg	71.3	356
120-83-2	2,4-Dichlorophenol	U	356	ug/kg	71.3	356
65-85-0	Benzoic acid	U	713	ug/kg	178	713
91-20-3	Naphthalene	U	35.6	ug/kg	10.7	35.6
106-47-8	4-Chloroaniline	U	356	ug/kg	71.3	356
87-68-3	Hexachlorobutadiene	U	356	ug/kg	71.3	356
91-57-6	2-Methylnaphthalene	U	35.6	ug/kg	7.13	35.6
77-47-4	Hexachlorocyclopentadiene	U	356	ug/kg	71.3	356
88-06-2	2,4,6-Trichlorophenol	U	356	ug/kg	71.3	356
95-95-4	2,4,5-Trichlorophenol	U	356	ug/kg	71.3	356
91-58-7	2-Chloronaphthalene	U	35.6	ug/kg	11.8	35.6
88-74-4	2-Nitroaniline	U	356	ug/kg	71.3	356
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	356	ug/kg	71.3	356

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13627	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 19:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	s810321.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	356	ug/kg	71.3	356
606-20-2	2,6-Dinitrotoluene	U	356	ug/kg	35.6	356
208-96-8	Acenaphthylene	U	35.6	ug/kg	10.7	35.6
51-28-5	2,4-Dinitrophenol	U	713	ug/kg	135	713
132-64-9	Dibenzofuran	U	356	ug/kg	71.3	356
84-66-2	Diethylphthalate	U	356	ug/kg	71.3	356
86-73-7	Fluorene	U	35.6	ug/kg	10.7	35.6
7005-72-3	4-Chlorophenylphenylether	U	356	ug/kg	71.3	356
534-52-1	2-Methyl-4,6-dinitrophenol	U	356	ug/kg	71.3	356
100-01-6	4-Nitroaniline	U	356	ug/kg	107	356
	p-Nitroaniline					
122-39-4	Diphenylamine	U	356	ug/kg	71.3	356
122-66-7	Azobenzene	U	356	ug/kg	71.3	356
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	356	ug/kg	71.3	356
118-74-1	Hexachlorobenzene	U	356	ug/kg	71.3	356
85-01-8	Phenanthrene	U	35.6	ug/kg	10.7	35.6
120-12-7	Anthracene	U	35.6	ug/kg	7.13	35.6
84-74-2	Di-n-butylphthalate	U	356	ug/kg	71.3	356
206-44-0	Fluoranthene	U	35.6	ug/kg	10.7	35.6
85-68-7	Butylbenzylphthalate	U	356	ug/kg	71.3	356
56-55-3	Benzo(a)anthracene	U	35.6	ug/kg	10.7	35.6
91-94-1	3,3'-Dichlorobenzidine	U	356	ug/kg	107	356
218-01-9	Chrysene	U	35.6	ug/kg	10.7	35.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	356	ug/kg	71.3	356
117-84-0	Di-n-octylphthalate	U	356	ug/kg	71.3	356
205-99-2	Benzo(b)fluoranthene	U	35.6	ug/kg	10.7	35.6
207-08-9	Benzo(k)fluoranthene	U	35.6	ug/kg	10.7	35.6
50-32-8	Benzo(a)pyrene	U	35.6	ug/kg	10.7	35.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.6	ug/kg	10.7	35.6
53-70-3	Dibenzo(a,h)anthracene	U	35.6	ug/kg	10.7	35.6
191-24-2	Benzo(ghi)perylene	U	35.6	ug/kg	10.7	35.6
120-82-1	1,2,4-Trichlorobenzene	U	356	ug/kg	71.3	356

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	259	ug/kg		JA
	Unknown	14.33	293	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13627	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 19:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	s810321.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.34	254	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6084	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 16:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s8I0419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	382	ug/kg	76.4	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6084	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 16:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s8l0419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.4	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	217	ug/kg		JA
	Unknown	7.95	247	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6084	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 16:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s8l0419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.64	343	ug/kg		J
	Unknown	9.93	1080	ug/kg		J
17844-07-4	Todomatuic acid	10.33	832	ug/kg	93	NJ
	Unknown	15.13	663	ug/kg		J
	Unknown	15.84	163	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.6	348
108-95-2	Phenol	U	348	ug/kg	69.6	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.6	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.6	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.6	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.6	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	87.0	348
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8
110-86-1	Pyridine	U	348	ug/kg	69.6	348
62-53-3	Aniline	U	348	ug/kg	104	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.6	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.6	348
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.6	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.6	348
95-48-7	o-Cresol	U	348	ug/kg	69.6	348
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.6	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.6	348
78-59-1	Isophorone	U	348	ug/kg	69.6	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.6	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.6	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.6	348
65-85-0	Benzoic acid	U	696	ug/kg	174	696
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.6	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.6	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.96	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.6	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.6	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.6	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.6	348
99-09-2	3-Nitroaniline	U	348	ug/kg	69.6	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.6	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8
51-28-5	2,4-Dinitrophenol	U	696	ug/kg	132	696
132-64-9	Dibenzofuran	U	348	ug/kg	69.6	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.6	348
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.6	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.6	348
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.6	348
122-66-7	Azobenzene	U	348	ug/kg	69.6	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.6	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.6	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.96	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.6	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.6	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	J	71.2	ug/kg	69.6	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.6	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.6	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	168	ug/kg		JA
	Unknown	4.21	150	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1227-93-6	1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	10.22	369	ug/kg	90	NJ
	Unknown	11.59	536	ug/kg		J
	Unknown	11.83	475	ug/kg		J
	Unknown	11.86	403	ug/kg		J
	Unknown	11.92	140	ug/kg		J
	Unknown	11.99	1800	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.07	241	ug/kg	98	NJ
	Unknown	12.14	156	ug/kg		J
	Unknown	12.31	182	ug/kg		J
	Unknown	12.39	222	ug/kg		J

QC Summary

Semi-Volatile

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Surrogate Recovery Report

SDG Number: 10-543

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201978974	MB for batch 925632	85	77	88	79	61	83
1201978977	LCS for batch 925632	80	74	80	75	63	78
241318002	RE03-09-13622	78	71	81	73	54	79
241318004	RE03-09-13619	82	77	87	76	59	90
241318006	RE03-09-13623	63	60	66	58	43	65
241318007	RE03-09-13626	63	63	67	66	54	82
241318008	RE03-09-13621	76	72	80	72	59	87
241318009	RE03-09-13627	67	63	71	64	55	83
241318005	RE03-09-13624	67	66	72	69	43	100
1201978976	RE03-09-13627MSD	68	63	66	64	56	72
241318010	RE03-09-13625	67	65	68	66	44	65
1201978975	RE03-09-13627MS	61	59	60	57	45	57
241318013	RE03-10-6084	62	60	63	60	40	64
241318014	RE03-10-6085	72	67	72	68	47	66
241318003	RE03-09-13620	75	73	74	71	57	79
241318001	RE03-09-13618	74	72	72	70	58	76

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13627MS
Lab Sample ID: 1201978975
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 7
Analysis Date: 12/04/2009 16:14
Prep Batch ID: 925632
Batch ID: 925637
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1780	0.00	U	1050	59	32-90
108-95-2	MS	Phenol	1780	0.00	U	1000	56	32-105
95-57-8	MS	2-Chlorophenol	1780	0.00	U	941	53	33-106
106-46-7	MS	1,4-Dichlorobenzene	1780	0.00	U	922	52	33-95
621-64-7	MS	N-Nitrosodipropylamine	1780	0.00	U	1000	56	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1780	0.00	U	952	53	38-119
83-32-9	MS	Acenaphthene	1780	0.00	U	932	52	39-100
121-14-2	MS	2,4-Dinitrotoluene	1780	0.00	U	982	55	42-107
100-02-7	MS	4-Nitrophenol	1780	0.00	U	1040	58	24-120
87-86-5	MS	Pentachlorophenol	1780	0.00	U	870	49	26-121
129-00-0	MS	Pyrene	1780	0.00	U	924	52	34-120
110-86-1	MS	Pyridine	1780	0.00	U	688	39	30-95
62-53-3	MS	Aniline	1780	0.00	U	884	50	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1780	0.00	U	850	48	34-101
541-73-1	MS	1,3-Dichlorobenzene	1780	0.00	U	872	49	31-97
100-51-6	MS	Benzyl alcohol	1780	0.00	U	293	16 *	17-120
95-50-1	MS	1,2-Dichlorobenzene	1780	0.00	U	883	50	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1780	0.00	U	876	49	32-113
95-48-7	MS	o-Cresol	1780	0.00	U	989	55	31-119
65794-96-9	MS	m,p-Cresols	1780	0.00	U	1190	67	35-125
67-72-1	MS	Hexachloroethane	1780	0.00	U	762	43	30-100
98-95-3	MS	Nitrobenzene	1780	0.00	U	974	55	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-543**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13627MS**	**Matrix:**	**S**
Lab Sample ID:	**1201978975**	**%Moisture:**	**7**
Instrument:	**MSD8.I**	**Analysis Date:**	**12/04/2009 16:14**
Analyst:	**NAG1**	**Prep Batch ID:**	**925632**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925637**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1780	0.00	U	1120	63	34-110
88-75-5	MS	2-Nitrophenol	1780	0.00	U	974	55	32-108
105-67-9	MS	2,4-Dimethylphenol	1780	0.00	U	590	33	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1780	0.00	U	924	52	35-108
120-83-2	MS	2,4-Dichlorophenol	1780	0.00	U	937	53	38-110
65-85-0	MS	Benzoic acid	3570	0.00	U	1930	54	18-134
91-20-3	MS	Naphthalene	1780	0.00	U	1000	56	31-105
106-47-8	MS	4-Chloroaniline	1780	0.00	U	1070	60	29-123
87-68-3	MS	Hexachlorobutadiene	1780	0.00	U	724	41	31-109
91-57-6	MS	2-Methylnaphthalene	1780	0.00	U	1050	59	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1780	0.00	U	1090	61	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1780	0.00	U	804	45	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1780	0.00	U	941	53	37-116
91-58-7	MS	2-Chloronaphthalene	1780	0.00	U	921	52	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1780	0.00	U	782	44	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1780	0.00	U	1060	59	39-117
131-11-3	MS	Dimethylphthalate	1780	0.00	U	1020	57	41-105
606-20-2	MS	2,6-Dinitrotoluene	1780	0.00	U	1010	57	41-103
208-96-8	MS	Acenaphthylene	1780	0.00	U	1020	57	41-103
51-28-5	MS	2,4-Dinitrophenol	1780	0.00	U	642	36	25-104
132-64-9	MS	Dibenzofuran	1780	0.00	U	1070	60	40-114
84-66-2	MS	Diethylphthalate	1780	0.00	U	962	54	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13627MS
Lab Sample ID: 1201978975
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 7
Analysis Date: 12/04/2009 16:14
Prep Batch ID 925632
Batch ID: 925637
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1780	0.00	U	909	51	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1780	0.00	U	851	48	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1780	0.00	U	845	47	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1780	0.00	U	1120	63	35-139
122-39-4	MS	Diphenylamine	1780	0.00	U	962	54	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1780	0.00	U	980	55	37-118
101-55-3	MS	4-Bromophenylphenylether	1780	0.00	U	1010	57	39-112
118-74-1	MS	Hexachlorobenzene	1780	0.00	U	766	43	38-113
85-01-8	MS	Phenanthrene	1780	0.00	U	1010	57	38-110
120-12-7	MS	Anthracene	1780	0.00	U	1050	59	38-112
84-74-2	MS	Di-n-butylphthalate	1780	0.00	U	1020	57	42-119
206-44-0	MS	Fluoranthene	1780	0.00	U	894	50	38-119
85-68-7	MS	Butylbenzylphthalate	1780	0.00	U	956	54	39-126
56-55-3	MS	Benzo(a)anthracene	1780	0.00	U	955	54	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1780	0.00	U	928	52	35-106
218-01-9	MS	Chrysene	1780	0.00	U	1040	58	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1780	0.00	U	1030	58	40-125
117-84-0	MS	Di-n-octylphthalate	1780	0.00	U	1000	56	30-147
205-99-2	MS	Benzo(b)fluoranthene	1780	0.00	U	901	51	38-117
207-08-9	MS	Benzo(k)fluoranthene	1780	0.00	U	985	55	39-120
50-32-8	MS	Benzo(a)pyrene	1780	0.00	U	997	56	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1780	0.00	U	1090	61	32-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number:	**10-543**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13627MS**	**Matrix:**	**S**
Lab Sample ID:	**1201978975**	**%Moisture:**	**7**
Instrument:	**MSD8.I**	**Analysis Date:**	**12/04/2009 16:14**
Analyst:	**NAG1**	**Prep Batch ID:**	**925632**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925637**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1780	0.00	U	1100	62	32-124
191-24-2	MS	Benzo(ghi)perylene	1780	0.00	U	1050	59	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1780	0.00	U	868	49	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-543**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13627MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201978976**	**%Moisture:**	**7**
Instrument:	**MSD8.I**	**Analysis Date:**	**12/04/2009 15:13**
Analyst:	**NAG1**	**Prep Batch ID:**	**925632**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925637**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD	N-Methyl-N-nitrosomethylam	1780	0.00	U	1180	66	32-90	11	0-30
108-95-2	MSD	Phenol	1780	0.00	U	1040	59	32-105	4	0-30
95-57-8	MSD	2-Chlorophenol	1780	0.00	U	1030	58	33-106	9	0-30
106-46-7	MSD	1,4-Dichlorobenzene	1780	0.00	U	1040	58	33-95	12	0-30
621-64-7	MSD	N-Nitrosodipropylamine	1780	0.00	U	1090	61	31-109	9	0-30
59-50-7	MSD	4-Chloro-3-methylphenol	1780	0.00	U	1030	58	38-119	7	0-30
83-32-9	MSD	Acenaphthene	1780	0.00	U	1010	57	39-100	8	0-30
121-14-2	MSD	2,4-Dinitrotoluene	1780	0.00	U	1180	66	42-107	18	0-30
100-02-7	MSD	4-Nitrophenol	1780	0.00	U	1330	75	24-120	25	0-30
87-86-5	MSD	Pentachlorophenol	1780	0.00	U	1010	57	26-121	15	0-30
129-00-0	MSD	Pyrene	1780	0.00	U	1130	63	34-120	20	0-30
110-86-1	MSD	Pyridine	1780	0.00	U	736	41	30-95	7	0-30
62-53-3	MSD	Aniline	1780	0.00	U	972	55	34-111	9	0-30
111-44-4	MSD	bis(2-Chloroethyl) ether	1780	0.00	U	949	53	34-101	11	0-30
541-73-1	MSD	1,3-Dichlorobenzene	1780	0.00	U	1000	56	31-97	14	0-30
100-51-6	MSD	Benzyl alcohol	1780	0.00	U	378	21	17-120	25	0-30
95-50-1	MSD	1,2-Dichlorobenzene	1780	0.00	U	1010	57	32-102	13	0-30
108-60-1	MSD	bis(2-Chloroisopropyl)ether	1780	0.00	U	960	54	32-113	9	0-30
95-48-7	MSD	o-Cresol	1780	0.00	U	1070	60	31-119	7	0-30
65794-96-9	MSD	m,p-Cresols	1780	0.00	U	1340	75	35-125	11	0-30
67-72-1	MSD	Hexachloroethane	1780	0.00	U	858	48	30-100	12	0-30
98-95-3	MSD	Nitrobenzene	1780	0.00	U	1100	62	33-108	12	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13627MSD
Lab Sample ID: 1201978976
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 7
Analysis Date: 12/04/2009 15:13
Prep Batch ID: 925632
Batch ID: 925637
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1780	0.00	U	1230	69	34-110	10	0-30
88-75-5	MSD 2-Nitrophenol	1780	0.00	U	1090	61	32-108	12	0-30
105-67-9	MSD 2,4-Dimethylphenol	1780	0.00	U	1180	66	32-115	67 *	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1780	0.00	U	1040	58	35-108	12	0-30
120-83-2	MSD 2,4-Dichlorophenol	1780	0.00	U	1100	62	38-110	16	0-30
65-85-0	MSD Benzoic acid	3560	0.00	U	2390	67	18-134	21	0-30
91-20-3	MSD Naphthalene	1780	0.00	U	1110	63	31-105	11	0-30
106-47-8	MSD 4-Chloroaniline	1780	0.00	U	978	55	29-123	9	0-30
87-68-3	MSD Hexachlorobutadiene	1780	0.00	U	827	46	31-109	13	0-30
91-57-6	MSD 2-Methylnaphthalene	1780	0.00	U	1170	66	32-110	11	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1780	0.00	U	1320	74	21-122	19	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1780	0.00	U	936	53	37-108	15	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1780	0.00	U	989	55	37-116	5	0-30
91-58-7	MSD 2-Chloronaphthalene	1780	0.00	U	1030	58	37-103	12	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1780	0.00	U	902	51	36-115	14	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1780	0.00	U	1220	68	39-117	14	0-30
131-11-3	MSD Dimethylphthalate	1780	0.00	U	1130	63	41-105	10	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1780	0.00	U	1120	63	41-103	10	0-30
208-96-8	MSD Acenaphthylene	1780	0.00	U	1110	62	41-103	9	0-30
51-28-5	MSD 2,4-Dinitrophenol	1780	0.00	U	959	54	25-104	40 *	0-30
132-64-9	MSD Dibenzofuran	1780	0.00	U	1190	67	40-114	10	0-30
84-66-2	MSD Diethylphthalate	1780	0.00	U	1110	62	43-110	14	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: RE03-09-13627MSD
Lab Sample ID: 1201978976
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 7
Analysis Date: 12/04/2009 15:13
Dilution: 1
Prep Batch ID: 925632
Batch ID: 925637

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1780	0.00	U	1020	57	48-99	11	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1780	0.00	U	971	55	42-111	13	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1780	0.00	U	1080	61	19-118	24	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1780	0.00	U	1330	74	35-139	17	0-30
122-39-4	MSD	Diphenylamine	1780	0.00	U	1120	63	41-112	15	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1780	0.00	U	1100	62	37-118	12	0-30
101-55-3	MSD	4-Bromophenylphenylether	1780	0.00	U	1170	65	39-112	14	0-30
118-74-1	MSD	Hexachlorobenzene	1780	0.00	U	924	52	38-113	19	0-30
85-01-8	MSD	Phenanthrene	1780	0.00	U	1190	67	38-110	16	0-30
120-12-7	MSD	Anthracene	1780	0.00	U	1230	69	38-112	16	0-30
84-74-2	MSD	Di-n-butylphthalate	1780	0.00	U	1230	69	42-119	19	0-30
206-44-0	MSD	Fluoranthene	1780	0.00	U	1070	60	38-119	18	0-30
85-68-7	MSD	Butylbenzylphthalate	1780	0.00	U	1210	68	39-126	24	0-30
56-55-3	MSD	Benzo(a)anthracene	1780	0.00	U	1210	68	39-110	24	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1780	0.00	U	1010	57	35-106	8	0-30
218-01-9	MSD	Chrysene	1780	0.00	U	1250	70	39-109	19	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1780	0.00	U	1290	72	40-125	23	0-30
117-84-0	MSD	Di-n-octylphthalate	1780	0.00	U	1560	87	30-147	43 *	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1780	0.00	U	1220	69	38-117	30	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1780	0.00	U	1320	74	39-120	29	0-30
50-32-8	MSD	Benzo(a)pyrene	1780	0.00	U	1250	70	40-115	22	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1780	0.00	U	1010	56	32-120	8	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-543**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13627MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201978976**	**%Moisture:**	**7**
Instrument:	**MSD8.I**	**Analysis Date:**	**12/04/2009 15:13**
Analyst:	**NAG1**	**Prep Batch ID:**	**925632**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925637**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1780	0.00	U	1010	57	32-124	8	0-30
191-24-2	MSD Benzo(ghi)perylene	1780	0.00	U	899	50	28-119	15	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1780	0.00	U	1030	58	31-105	17	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **10-543**
Client ID: **LCS for batch 925632**
Lab Sample ID: **1201978977**
Instrument: **MSD8.I**
Analyst: **NAG1**
Inj. Vol: **.5 uL**

Sample Type: **Laboratory Control Sample**
Matrix: **SOIL**
Analysis Date: **12/03/2009 13:39**
Dilution: **1**
Prep Batch ID: **925632**
Batch ID: **925637**

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1450	87	31-95
108-95-2	LCS	Phenol	1670	0.0	1200	72	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1220	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1170	70	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1220	73	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1170	70	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1150	69	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1260	76	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1300	78	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1070	64	38-116
129-00-0	LCS	Pyrene	1670	0.0	1150	69	43-108
110-86-1	LCS	Pyridine	1670	0.0	909	55	13-129
62-53-3	LCS	Aniline	1670	0.0	962	58	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1090	65	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1130	68	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	922	55	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1150	69	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1100	66	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1270	76	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1390	84	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1050	63	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1210	73	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: LCS for batch 925632
Lab Sample ID: 1201978977
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 13:39
Dilution: 1
Prep Batch ID: 925632
Batch ID: 925637

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1350	81	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1200	72	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1230	74	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1120	67	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1190	71	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	2530	76	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1190	71	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1100	66	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	932	56	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1250	75	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1310	78	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1040	62	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1200	72	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1120	67	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	985	59	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1180	71	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1270	76	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1150	69	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1240	74	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	917	55	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1300	78	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1230	74	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: LCS for batch 925632
Lab Sample ID: 1201978977
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 13:39
Dilution: 1
Prep Batch ID: 925632
Batch ID: 925637

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1130	68	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1060	64	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1080	65	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1340	81	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1170	70	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1210	73	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1230	74	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	982	59	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1260	75	45-107
120-12-7	LCS	Anthracene	1670	0.0	1280	77	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1320	79	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1110	67	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1260	76	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1240	75	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1240	74	45-98
218-01-9	LCS	Chrysene	1670	0.0	1310	78	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1360	81	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1260	75	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1160	70	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1240	74	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1270	76	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1240	75	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: LCS for batch 925632
Lab Sample ID: 1201978977
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 13:39
Dilution: 1
Prep Batch ID 925632
Batch ID: 925637

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1380	83	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1360	82	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1100	66	36-109

Method Blank Summary

SDG Number:	10-543	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925632	Instrument ID:	MSD8.I	Data File:	s810309-1.d
Lab Sample ID:	1201978974	Prep Date:	11/24/2009 21:41	Analyzed:	12/03/09 13:09
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 925632	1201978977	s810310-1.d	12/03/09	1339
02	RE03-09-13622	241318002	s810315.d	12/03/09	1611
03	RE03-09-13619	241318004	s810317.d	12/03/09	1709
04	RE03-09-13623	241318006	s810318.d	12/03/09	1739
05	RE03-09-13626	241318007	s810319.d	12/03/09	1810
06	RE03-09-13621	241318008	s810320.d	12/03/09	1839
07	RE03-09-13627	241318009	s810321.d	12/03/09	1909
08	RE03-09-13624	241318005	s810327.d	12/03/09	2208
09	RE03-09-13627MSD	1201978976	s810416.d	12/04/09	1513
10	RE03-09-13625	241318010	s810417.d	12/04/09	1544
11	RE03-09-13627MS	1201978975	s810418.d	12/04/09	1614
12	RE03-10-6084	241318013	s810419.d	12/04/09	1645
13	RE03-10-6085	241318014	s810420.d	12/04/09	1715
14	RE03-09-13620	241318003	s810421.d	12/04/09	1745
15	RE03-09-13618	241318001	s810422.d	12/04/09	1815

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-543

Instrument ID: MSD8.I **Injection Date/Time:** 03-DEC-09 11:17

Column Description: J & W DB-5MS **Lab File ID** /chem/MSD8.i/s120309.b/s8I0305.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	39.4
68	Less than 2% of mass 69	0
69	Mass 69 Relative Abundance	49.8
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.7
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	25.7
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	97.3
442	Greater than 40% of mass 198	60.1
443	17 - 23% of mass 442	19.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-13.2	/chem/MSD8.i/s120309.b/s8I0306	03-DEC-09 11:34
AP12CVS	WBN091201-03.3	/chem/MSD8.i/s120309.b/s8I0307	03-DEC-09 12:08
SBLK01	1201978974	/chem/MSD8.i/s120309.b/s8I0309	03-DEC-09 13:09
SBLK01LCS	1201978977	/chem/MSD8.i/s120309.b/s8I0310	03-DEC-09 13:39
RE03-09-13622	241318002	/chem/MSD8.i/s120309.b/s8I0315	03-DEC-09 16:11
RE03-09-13619	241318004	/chem/MSD8.i/s120309.b/s8I0317	03-DEC-09 17:09
RE03-09-13623	241318006	/chem/MSD8.i/s120309.b/s8I0318	03-DEC-09 17:39
RE03-09-13626	241318007	/chem/MSD8.i/s120309.b/s8I0319	03-DEC-09 18:10
RE03-09-13621	241318008	/chem/MSD8.i/s120309.b/s8I0320	03-DEC-09 18:39
RE03-09-13627	241318009	/chem/MSD8.i/s120309.b/s8I0321	03-DEC-09 19:09
RE03-09-13624	241318005	/chem/MSD8.i/s120309.b/s8I0327	03-DEC-09 22:08

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-543

Instrument ID: MSD8.I **Injection Date/Time:** 04-DEC-09 08:24

Column Description: J & W DB-5MS **Lab File ID** /chem/MSD8.i/s120409.b/s8l0402.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.1
68	Less than 2% of mass 69	0.8
69	Mass 69 Relative Abundance	47.6
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	51.2
197	0 - 1% of mass 198	0.3
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	25.4
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	98.8
442	Greater than 40% of mass 198	62.9
443	17 - 23% of mass 442	19.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-13.2	/chem/MSD8.i/s120409.b/s8l0403	04-DEC-09 08:40
AP12CVS	WBN091201-03.2	/chem/MSD8.i/s120409.b/s8l0404	04-DEC-09 09:12
RE03-09-13627MSD	1201978976	/chem/MSD8.i/s120409.b/s8l0416	04-DEC-09 15:13
RE03-09-13625	241318010	/chem/MSD8.i/s120409.b/s8l0417	04-DEC-09 15:44
RE03-09-13627MS	1201978975	/chem/MSD8.i/s120409.b/s8l0418	04-DEC-09 16:14
RE03-10-6084	241318013	/chem/MSD8.i/s120409.b/s8l0419	04-DEC-09 16:45
RE03-10-6085	241318014	/chem/MSD8.i/s120409.b/s8l0420	04-DEC-09 17:15
RE03-09-13620	241318003	/chem/MSD8.i/s120409.b/s8l0421	04-DEC-09 17:45
RE03-09-13618	241318001	/chem/MSD8.i/s120409.b/s8l0422	04-DEC-09 18:15

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-543

Instrument ID: MSD8.I **Injection Date/Time:** 28-NOV-09 19:39

Column Description: J & W DB-5MS **Lab File ID** /chem/MSD8.i/s112809.b/s8k2603.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	46.7
68	Less than 2% of mass 69	1.2
69	Mass 69 Relative Abundance	50.3
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	54
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	27.7
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	87.2
442	Greater than 40% of mass 198	75.4
443	17 - 23% of mass 442	20

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091111-16	/chem/MSD8.i/s112809.b/s8k260	28-NOV-09 20:24
MEGA010	WBN091111-15	/chem/MSD8.i/s112809.b/s8k260	28-NOV-09 20:58
MEGA020	WBN091111-14	/chem/MSD8.i/s112809.b/s8k260	28-NOV-09 21:32
MEGA040	WBN091111-13.1	/chem/MSD8.i/s112809.b/s8k260	28-NOV-09 22:05
MEGA050	WBN091111-12	/chem/MSD8.i/s112809.b/s8k260	28-NOV-09 22:39
MEGA080	WBN091111-11	/chem/MSD8.i/s112809.b/s8k261	28-NOV-09 23:13
MEGA100	WBN091111-10	/chem/MSD8.i/s112809.b/s8k261	28-NOV-09 23:46
MEGA120	WBN091111-09	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 00:20
AP010	WBN091111-01	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 00:54
AP020	WBN091111-02	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 01:24
AP040	WBN091111-03.1	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 01:55
AP050	WBN091111-04	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 02:25
AP080	WBN091111-05	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 02:54
AP100	WBN091111-06	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 03:24
AP120	WBN091111-07	/chem/MSD8.i/s112809.b/s8k261	29-NOV-09 03:54
APICV	WBN091111-08.1	/chem/MSD8.i/s112809.b/s8k262	29-NOV-09 04:57

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-543

Instrument ID: MSD8.I **Injection Date/Time:** 29-NOV-09 11:33

Column Description: J & W DB-5MS **Lab File ID** /chem/MSD8.i/s112809.b/s8k2624.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	50.4
68	Less than 2% of mass 69	1.1
69	Mass 69 Relative Abundance	54.2
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	55
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	7.4
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	4.9
441	Present, but less than mass 443	86.9
442	Greater than 40% of mass 198	85.1
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091106-05.2	/chem/MSD8.i/s112809.b/s8k263	29-NOV-09 18:53

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-543

Instrument: MSD8.I

STD Analysis Time: 03-DEC-09 11:34

GC Column: J&W DB-5MS

Data File: s810306.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	219219		4.59	855464		5.85	478305		7.72	875093		9.32	822971		12.3	678930		14.5
Upper Limit	438438		5.09	1710928		6.35	956610		8.22	1750186		9.82	1645942		12.8	1357860		15.0
Lower Limit	109610		4.09	427732		5.35	239153		7.22	437547		8.82	411486		11.8	339465		14.0
Sample ID																		
BLK01	245648		4.58	893535		5.85	525269		7.72	962963		9.32	908655		12.3	735546		14.5
BLK01LCS	234172		4.58	893584		5.85	527313		7.72	983816		9.32	914429		12.3	783074		14.5
RE03-09-13622	203997		4.58	755096		5.85	447203		7.72	805365		9.32	705643		12.3	504205		14.5
RE03-09-13619	207294		4.58	759830		5.85	444928		7.72	776120		9.32	624449		12.3	417313		14.5
RE03-09-13623	191412		4.58	713594		5.85	413587		7.71	741267		9.32	655026		12.3	473538		14.5
RE03-09-13626	222568		4.58	801611		5.85	470391		7.72	852743		9.32	692337		12.3	349737		14.5
RE03-09-13621	201140		4.58	735762		5.85	430282		7.72	773051		9.32	654974		12.3	379729		14.5
RE03-09-13627	214050		4.58	774309		5.85	455072		7.72	809436		9.32	677556		12.3	414684		14.5
RE03-09-13624	279880		4.58	989590		5.85	574219		7.72	988405		9.32	560232		12.3	250667	*	14.4

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-543

Instrument: MSD8.I

STD Analysis Time: 04-DEC-09 08:40

GC Column: J&W DB-5MS

Data File: s8I0403.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	215717		4.54	825027		5.81	496920		7.67	933927		9.27	920458		12.2	857890		14.4
Upper Limit	431434		5.04	1650054		6.31	993840		8.17	1867854		9.77	1840916		12.7	1715780		14.9
Lower Limit	107859		4.04	412514		5.31	248460		7.17	466964		8.77	460229		11.7	428945		13.9
Sample ID																		
RE03-09-13627MSD	315112		4.54	1174988		5.81	691477		7.67	1276857		9.27	1171438		12.2	780462		14.4
RE03-09-13625	293967		4.53	1064208		5.8	606749		7.66	1069000		9.27	943467		12.2	735841		14.4
RE03-09-13627MS	265615		4.53	999400		5.81	589813		7.67	1082606		9.27	1019475		12.2	864064		14.4
RE03-10-6084	314270		4.53	1132016		5.81	655590		7.66	1162769		9.27	1075834		12.2	692096		14.4
RE03-10-6085	321965		4.54	1176926		5.81	687368		7.67	1239211		9.27	1214618		12.2	798333		14.4
RE03-09-13620	297748		4.54	1097525		5.81	641371		7.67	1136803		9.27	1044678		12.2	622956		14.4
RE03-09-13618	298913		4.54	1101100		5.81	646146		7.67	1177196		9.27	1111998		12.2	720751		14.4

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 18:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s8l0422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388
108-95-2	Phenol	U	388	ug/kg	77.6	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.0	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.6	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388
95-48-7	o-Cresol	U	388	ug/kg	77.6	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388
78-59-1	Isophorone	U	388	ug/kg	77.6	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388
65-85-0	Benzoic acid	U	776	ug/kg	194	776
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.6	388
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	388	ug/kg	77.6	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13618**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:15**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0422.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.6	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	776	ug/kg	147	776
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388
122-66-7	Azobenzene	U	388	ug/kg	77.6	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.6	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.6	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	199	ug/kg		JA
629-62-9	Pentadecane	13.96	436	ug/kg	91	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13618	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 18:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s8l0422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14	310	ug/kg		J
1000188-72-8	2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	14.03	442	ug/kg	92	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810422.d
Lab Smp Id: 241318001 Client Smp ID: RE03-09-13618
Inj Date : 04-DEC-2009 18:15
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318001|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	14.25500	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.539	4.539	(1.000)	298913	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	1101100	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	646146	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.273	(1.000)	1177196	40.0000	
* 91 Chrysene-d12	240	12.196	12.206	(1.000)	1111998	40.0000	
* 98 Perylene-d12	264	14.363	14.373	(1.000)	720751	40.0000	
$ 3 2-Fluorophenol	112	3.387	3.377	(0.746)	531596	74.4479	2890
$ 5 Phenol-d5	99	4.158	4.158	(0.916)	646340	72.1084	2800
$ 20 Nitrobenzene-d5	82	5.068	5.073	(0.873)	288391	36.0928	1400
$ 39 2-Fluorobiphenyl	172	6.934	6.935	(0.904)	625131	35.0131	1360
$ 60 2,4,6-Tribromophenol	329	8.515	8.516	(1.111)	173371	58.0888	2250
$ 81 p-Terphenyl-d14	244	10.982	10.982	(0.900)	790834	38.2231	1480

ION RATIO REPORT

SV REPORT

Data file: s810422.d
Report Date: 12/05/2009 08:48
Lab. ID: 241318001 SampleType: SAMPLE
Injection Date: 04-DEC-2009 18:15
Operator: nagl Instrument: MSD8.i
Sample Info: |241318001|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8207_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	34950	4.16	4.23	80-120	100	(T)
93	1010	4.21	4.23	214-274	3	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	44908	5.07	4.91	80-120	100	(T)
42	19682	5.07	4.91	24- 84	44	(T)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	87836	7.67	7.43	80-120	100	(T)
63	1544	7.66	7.43	31- 91	2	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	87836	7.67	7.86	80-120	100	(T)
89	1409	7.66	7.86	47-107	2	(QT)
63	1544	7.66	7.86	21- 81	2	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	707	8.52	8.30	80-120	100	(T)
105	1289	8.51	8.30	11- 71	182	(QT)
51	1055	8.51	8.30	15- 75	149	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810422.d
Lab Smp Id: 241318001 Client Smp ID: RE03-09-13618
Inj Date : 04-DEC-2009 18:15
Operator : nag1 Inst ID: MSD8.i
Smp Info : |241318001|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	14.25500	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.539	1715783	40.000
* 98 Perylene-d12	14.363	1930894	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.149	220476	5.13995940	199	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Pentadecane					CAS #: 629-62-9		
13.958	542316	11.2345083	436	91	NIST05.L	66067	98
Unknown					CAS #:		
13.996	385173	7.97917273	310	0		0	98
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e					CAS #: 1000188-72-8		
14.025	550226	11.3983646	442	92	NIST05.L	69963	98

Data File: /chem/MSD8.i/s120409.b/s810422.d
Date : 04-DEC-2009 18:15
Client ID: RE03-09-13618
Sample Info: |241318001|925637|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20

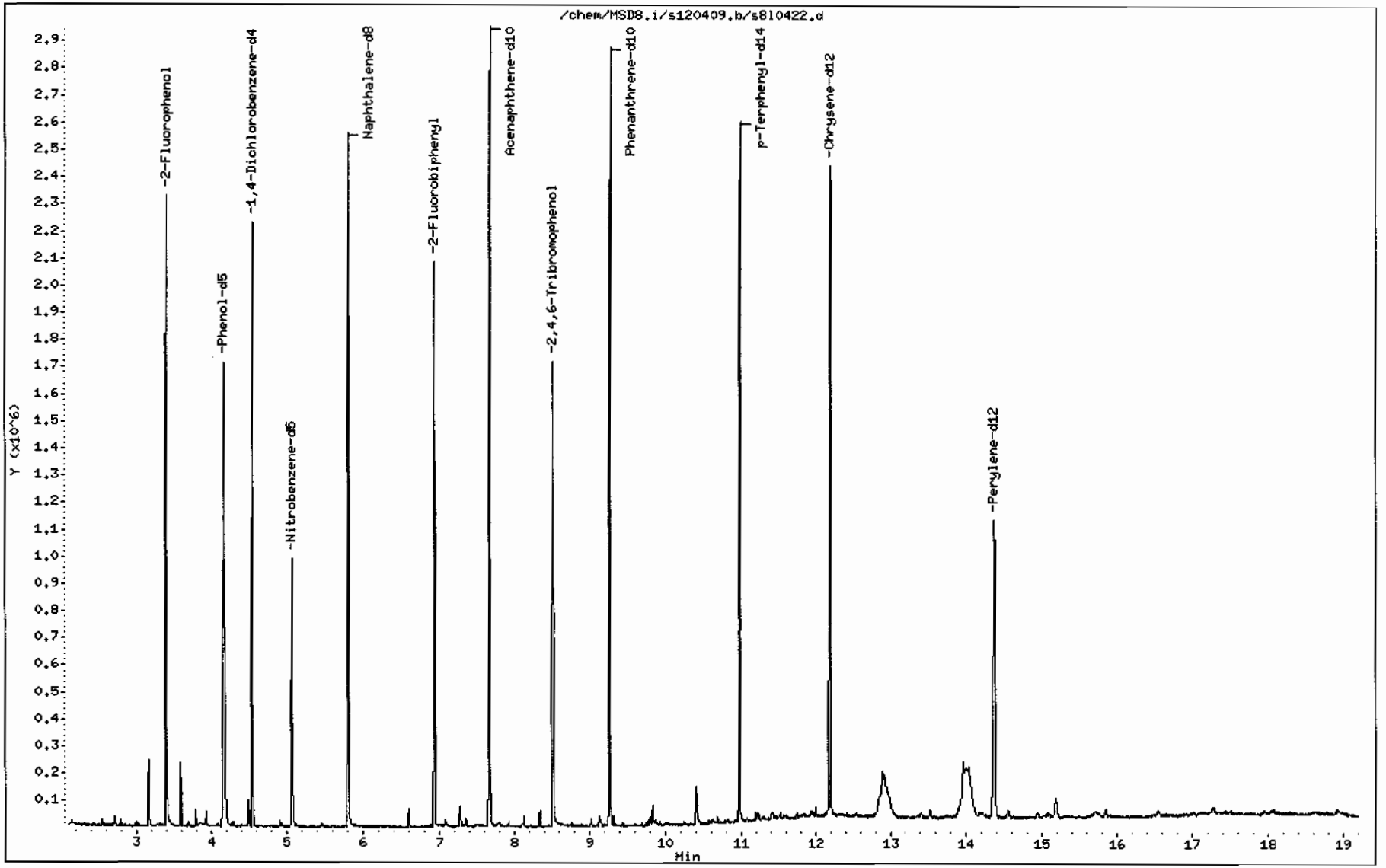

Data File: /chem/MSD8.i/s120409.b/s810422.d

Date : 04-DEC-2009 18:15

Client ID: RE03-09-13618

Instrument: MSD8.i

Sample Info: |241318001|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	72	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116

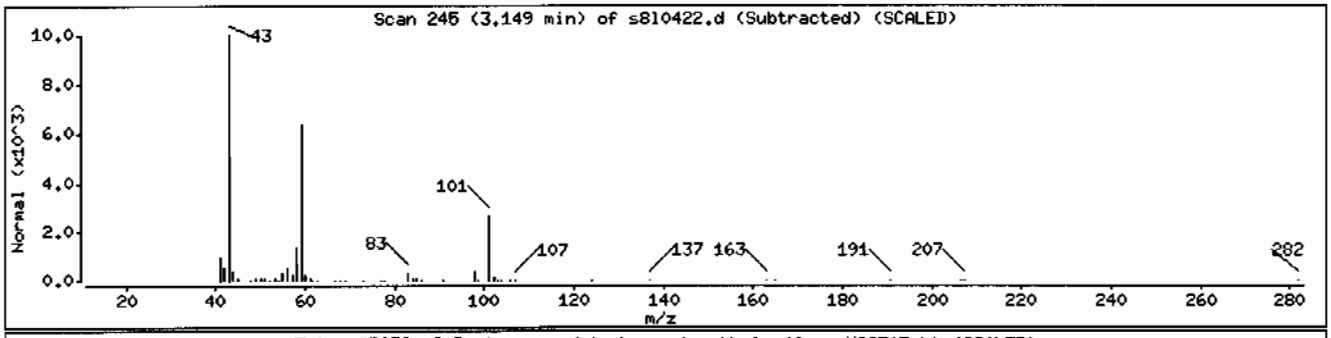

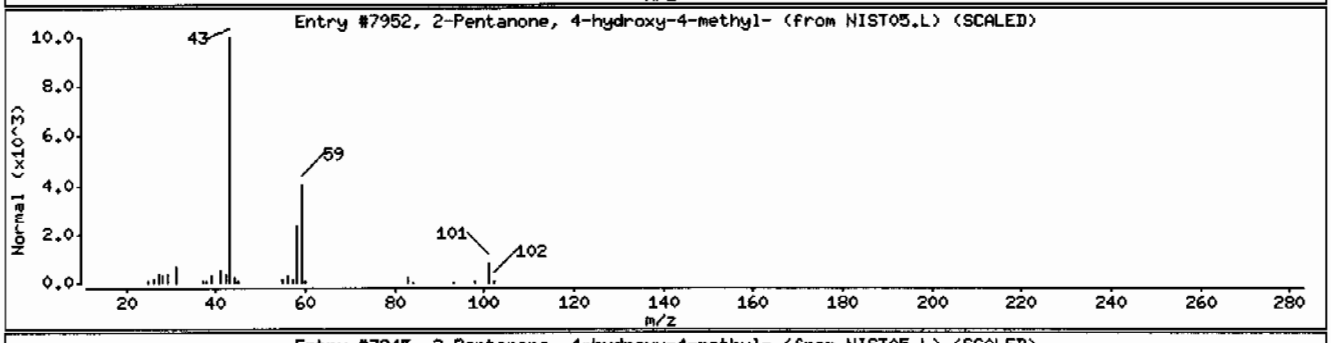

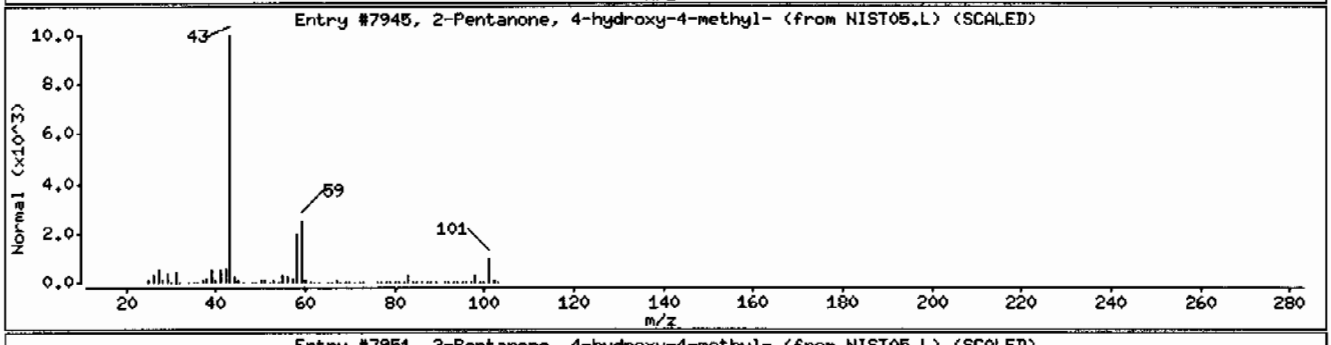

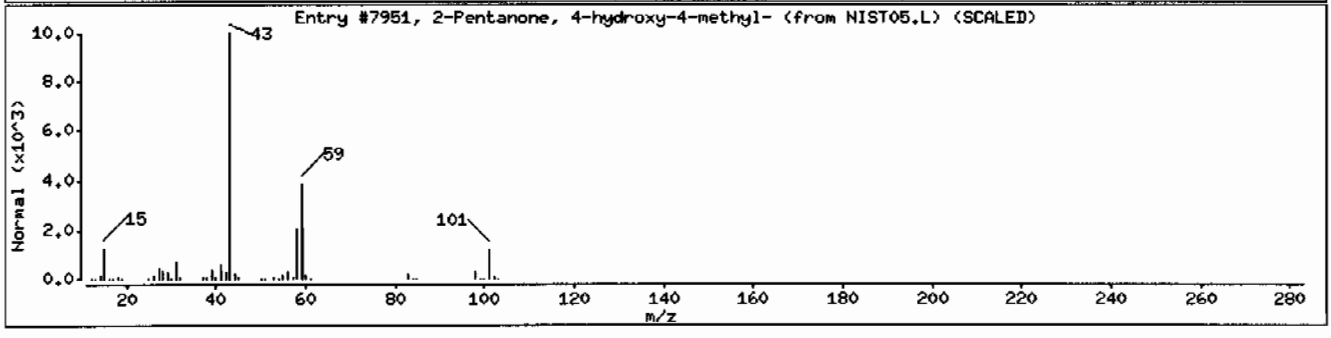

Data File: /chem/MSD8.i/s120409.b/s810422.d

Date : 04-DEC-2009 18:15

Client ID: RE03-09-13618

Instrument: MSD8.i

Sample Info: |24131800|192563711|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentadecane	629-62-9	NIST05.L	66067	91	C15H32	212
Eicosane	112-95-8	NIST05.L	113492	90	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	74	C20H42	282

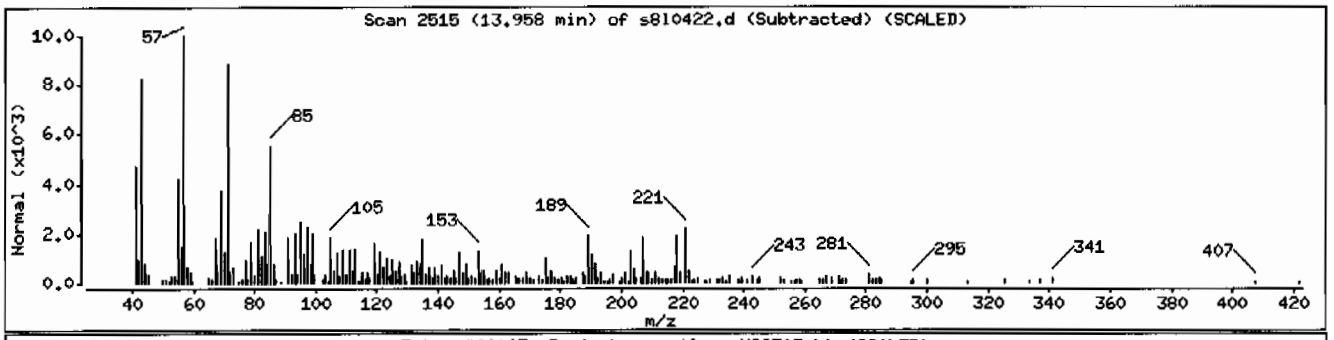

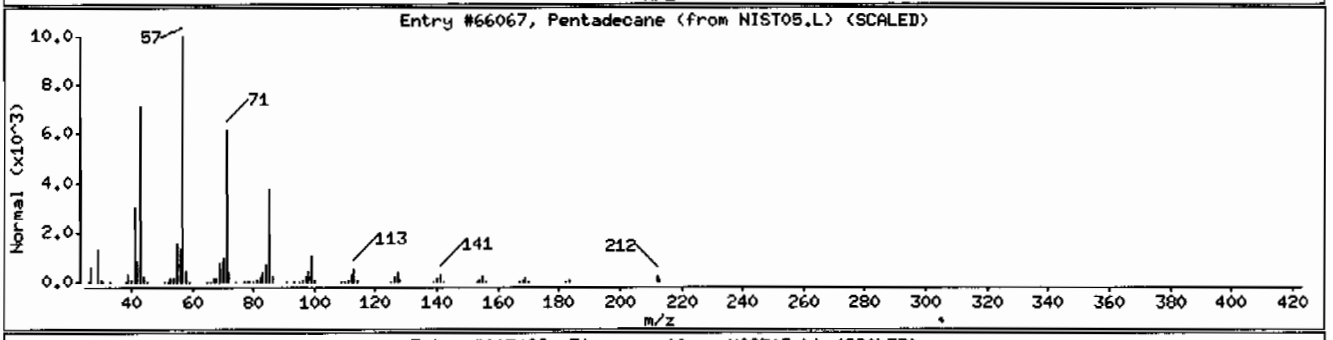

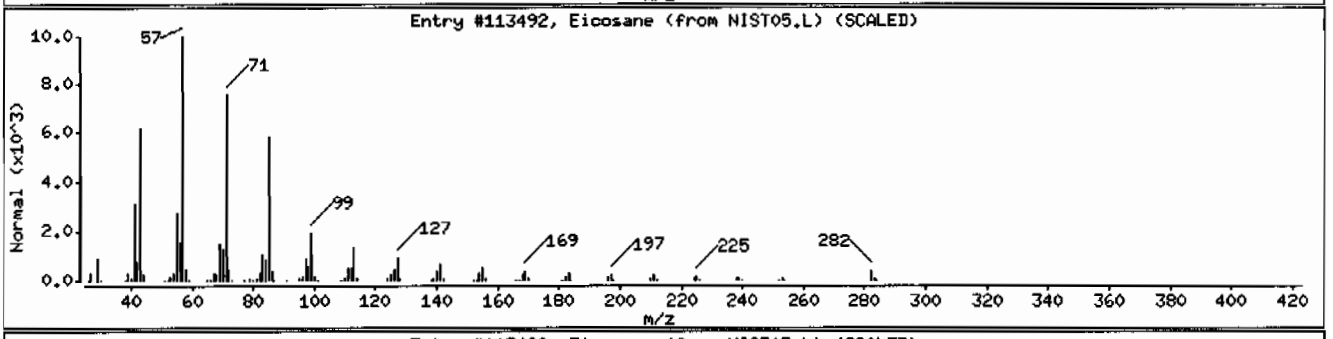

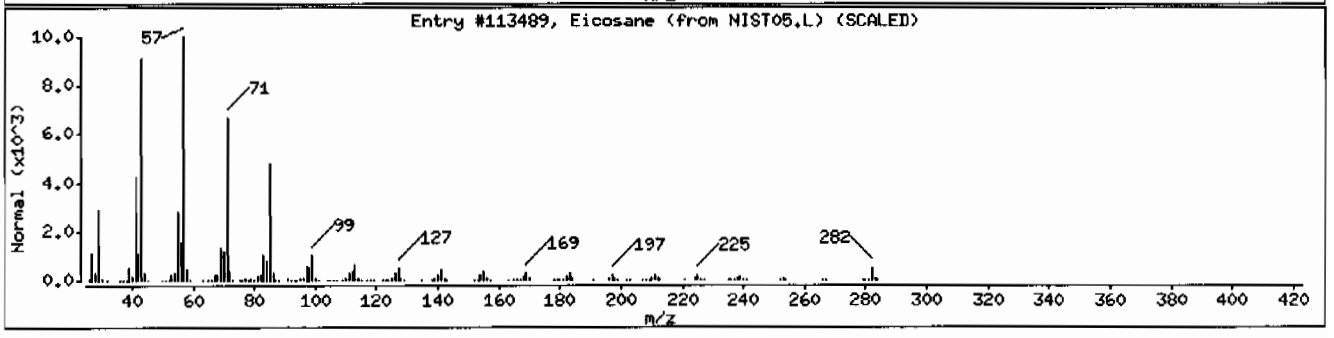

Data File: /chem/MSD8.i/s120409.b/s810422.d

Date : 04-DEC-2009 18:15

Client ID: RE03-09-13618

Instrument: MSD8.i

Sample Info: |2413180011925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Isopropenyl-4a,8-dimethyl-1,2,3,4,4a,5	1000193-57-0	NIST05.L	59944	51	C15H24	204
1H-3a,7-Methanoazulene, 2,3,6,7,8,8a-hex	560-32-7	NIST05.L	60044	51	C15H24	204
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	46	C15H220	218

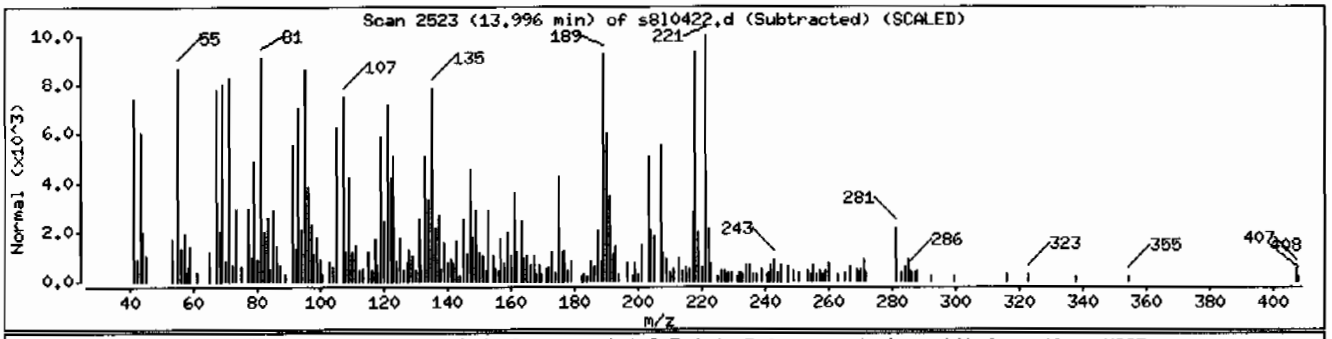

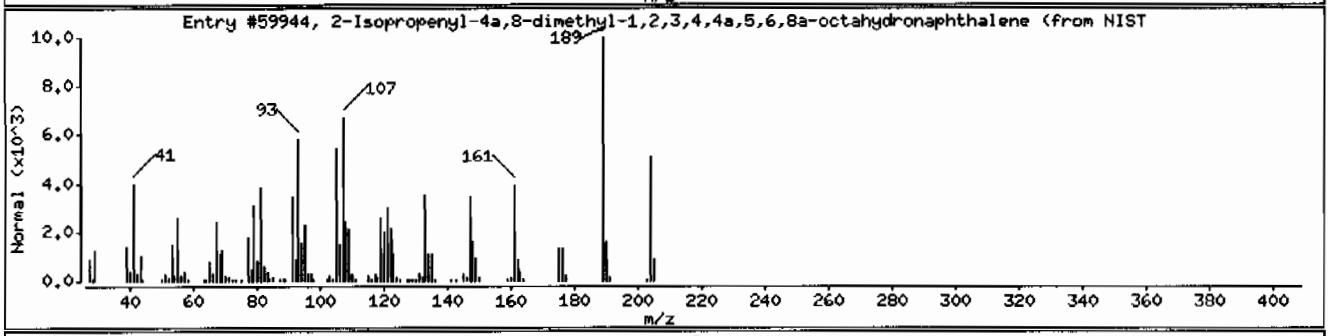

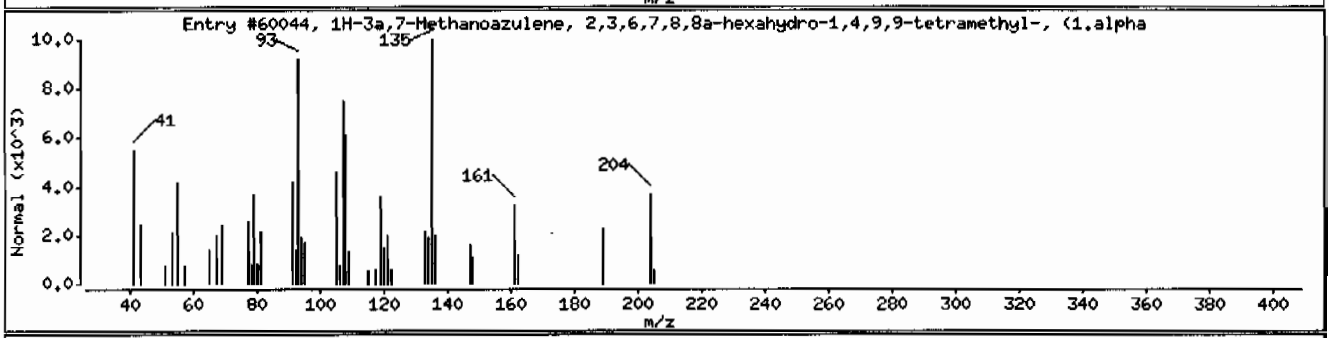

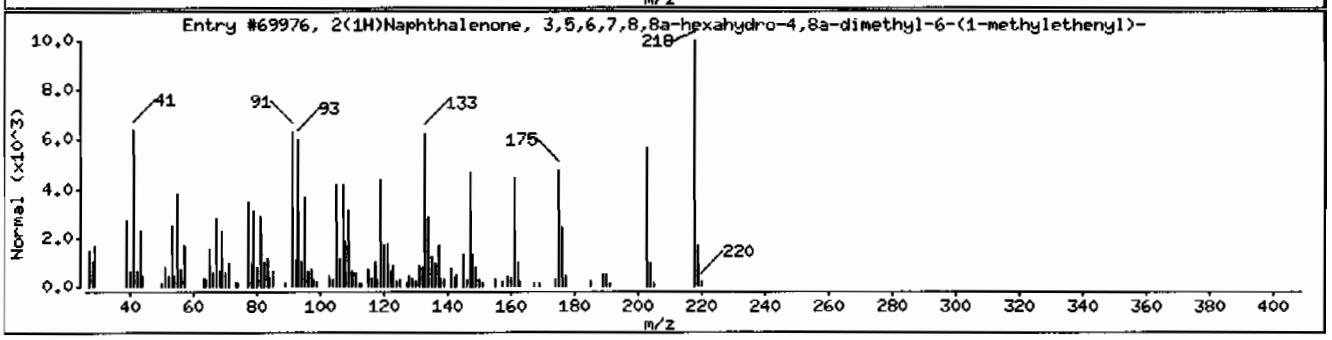

Data File: /chem/MSD8.i/s120409.b/s810422.d

Date : 04-DEC-2009 18:15

Client ID: RE03-09-13618 Instrument: MSD8.i

Sample Info: |2413180011925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	1000188-72-8	NIST05.L	69963	92	C15H220	218
2-Isopropenyl-4a,8-dimethyl-1,2,3,4,4a,5	1000193-57-0	NIST05.L	59944	41	C15H24	204
Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,	1000164-02-6	NIST05.L	72958	25	C15H260	222

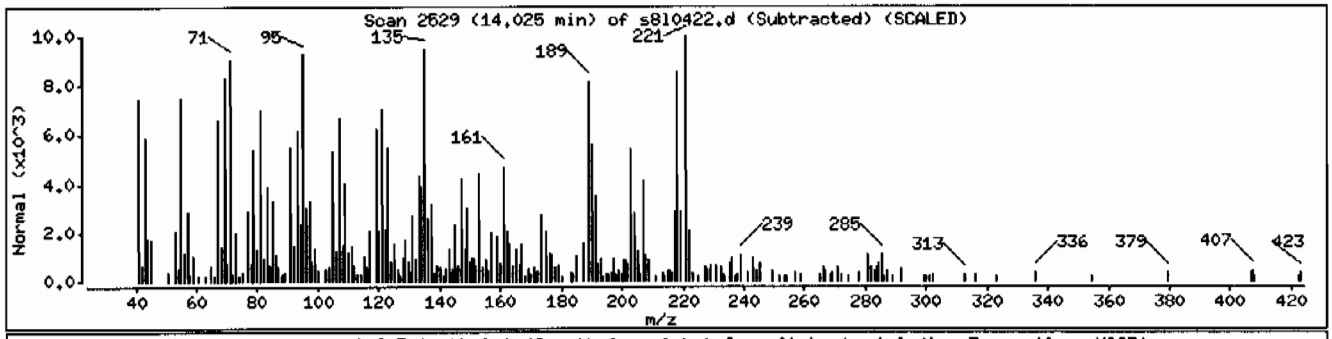

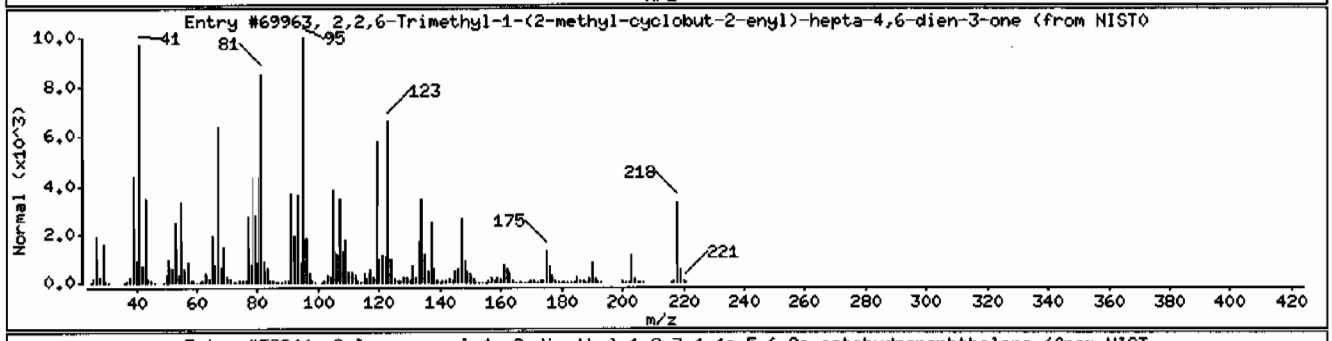

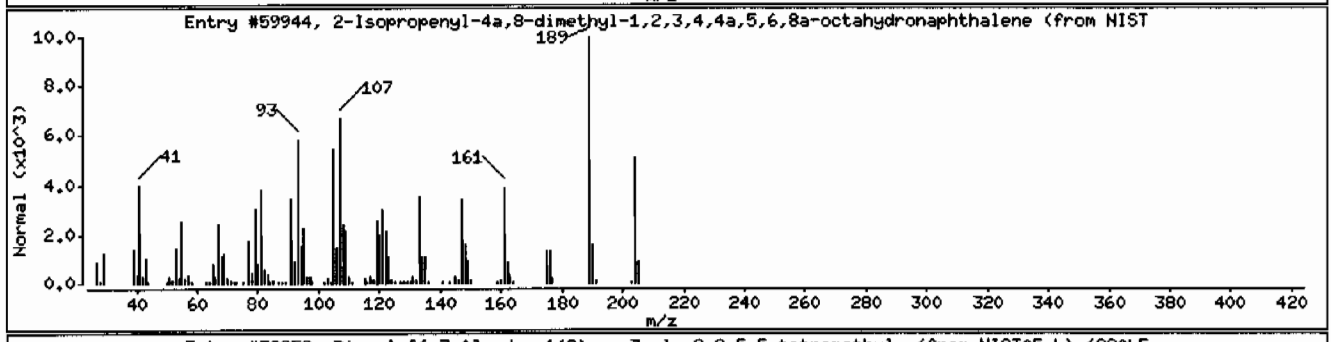

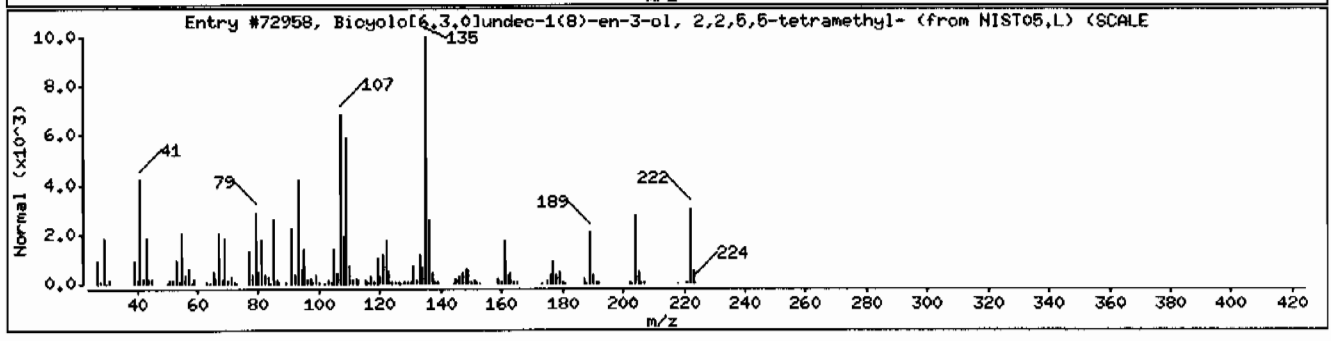

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318004**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13619**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:09**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0317.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388
108-95-2	Phenol	U	388	ug/kg	77.6	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.6	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388
95-48-7	o-Cresol	U	388	ug/kg	77.6	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388
78-59-1	Isophorone	U	388	ug/kg	77.6	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388
65-85-0	Benzoic acid	U	776	ug/kg	194	776
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.6	388
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	388	ug/kg	77.6	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318004**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13619**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:09**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0317.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.6	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	776	ug/kg	148	776
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388
122-66-7	Azobenzene	U	388	ug/kg	77.6	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.6	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.6	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.2	257	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	241	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 17:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s810317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.25	205	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810317.d
Lab Smp Id: 241318004 Client Smp ID: RE03-09-13619
Inj Date : 03-DEC-2009 17:09
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318004|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	14.56180	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	207294	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	759830	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.720	(1.000)	444928	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	776120	40.0000	
* 91 Chrysene-d12	240	12.258	12.268	(1.000)	624449	40.0000	
* 98 Perylene-d12	264	14.449	14.458	(1.000)	417313	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.748)	404828	81.7522	3170
$ 5 Phenol-d5	99	4.196	4.201	(0.916)	480957	77.3729	3000
$ 20 Nitrobenzene-d5	82	5.110	5.120	(0.874)	239079	43.3602	1680
$ 39 2-Fluorobiphenyl	172	6.977	6.982	(0.904)	466080	37.9106	1470
$ 60 2,4,6-Tribromophenol	329	8.563	8.563	(1.110)	121299	59.0221	2290
$ 81 p-Terphenyl-d14	244	11.030	11.030	(0.900)	525201	45.2036	1750

ION RATIO REPORT

SV REPORT

Data file: s810317.d
Report Date: 12/03/2009 17:54
Lab. ID: 241318004 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:09
Operator: nagl Instrument: MSD8.i
Sample Info: |241318004|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	31810	4.20	4.27	80-120	100	(T)
93	1779	4.25	4.27	227-287	6	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	37217	5.11	4.96	80-120	100	(T)
42	20711	5.11	4.96	25- 85	56	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	57138	7.72	7.48	80-120	100	(T)
63	871	7.71	7.48	33- 93	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	57138	7.72	7.91	80-120	100	(T)
89	413	7.72	7.91	47-107	1	(QT)
63	871	7.71	7.91	20- 80	2	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	887	8.56	8.35	80-120	100	(T)
105	1027	8.56	8.35	11- 71	116	(QT)
51	1007	8.56	8.35	11- 71	113	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810317.d
Lab Smp Id: 241318004 Client Smp ID: RE03-09-13619
Inj Date : 03-DEC-2009 17:09
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318004|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	14.56180	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1285500	40.000
* 46 Acenaphthene-d10	7.715	1901115	40.000
* 91 Chrysene-d12	12.258	1728654	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.196	212669	6.61747813	257	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
7.320	294517	6.19671560	240	97	NIST05.L	60024	46
Unknown				CAS #:			
11.249	228708	5.29216543	205	0		0	91

Data File: /chem/MSD8.i/s120309.b/s810317.d

Date : 03-DEC-2009 17:09

Client ID: RE03-09-13619

Sample Info: |24131800419256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD8.i

Operator: nag1

Column diameter: 0.20

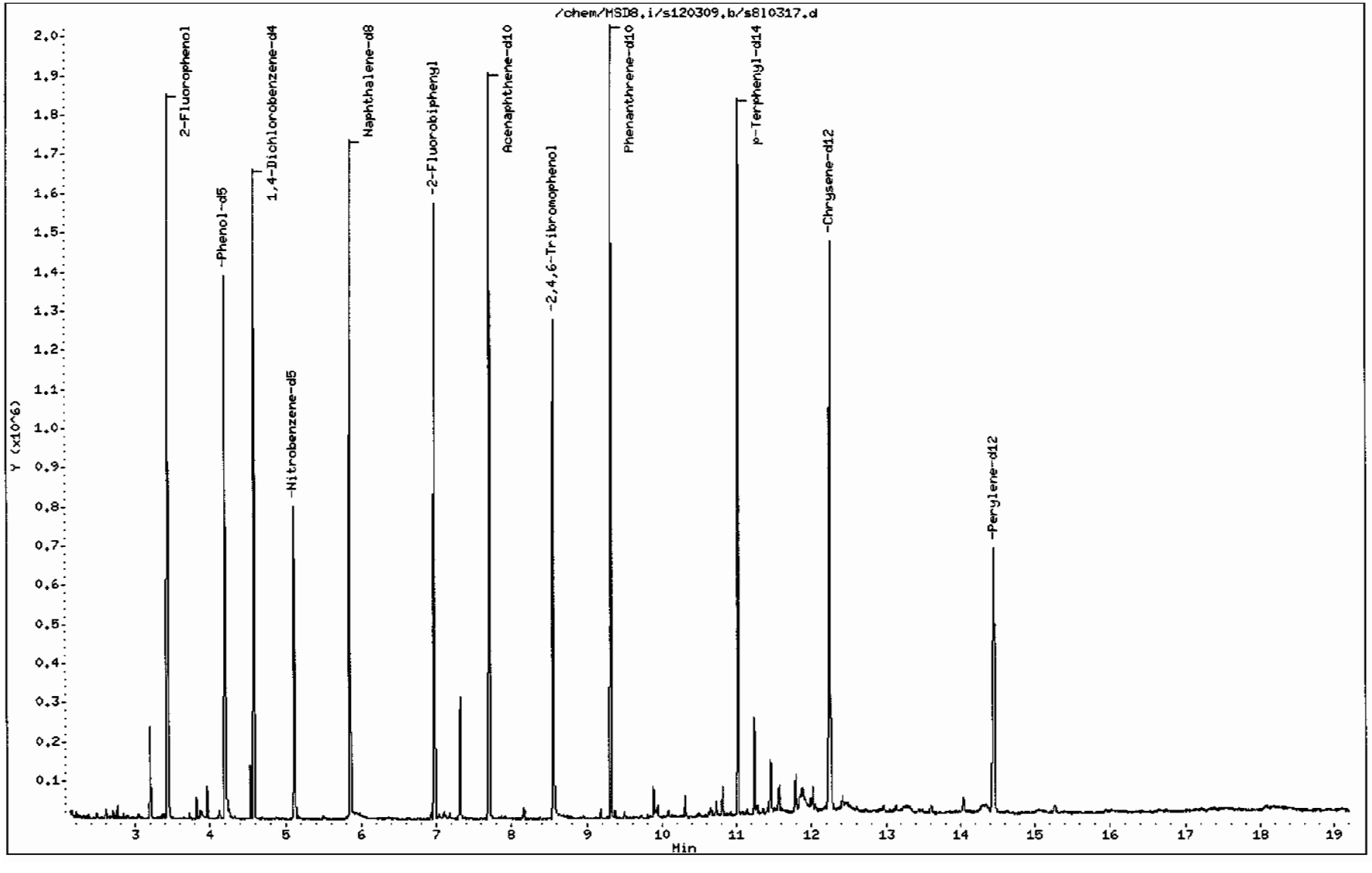

Data File: /chem/MSD8.i/s120309.b/s810317.d

Date : 03-DEC-2009 17:09

Client ID: RE03-09-13619

Instrument: MSD8.i

Sample Info: 1241318004192563711ISVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	72	C6H12O2	116
Hydrazine, 1,1-bis(1-methylethyl)-	921-14-2	NIST05.L	8044	50	C6H16N2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116

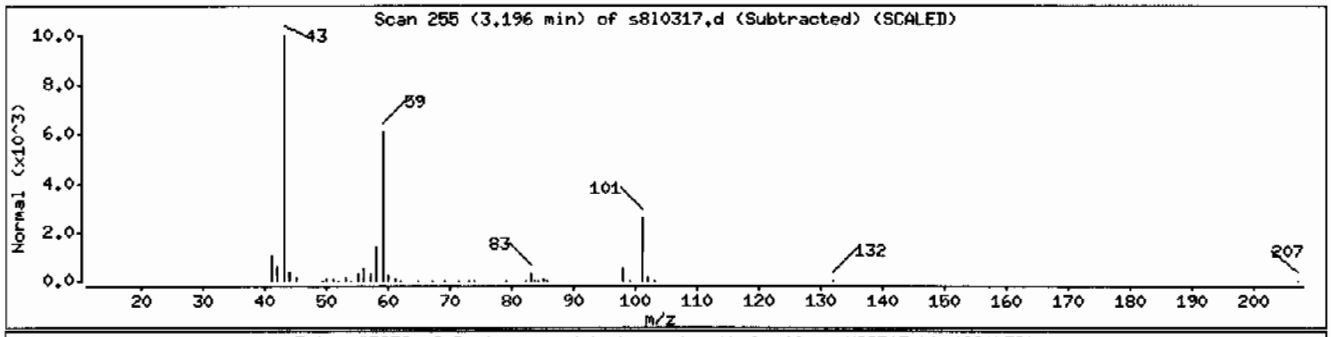

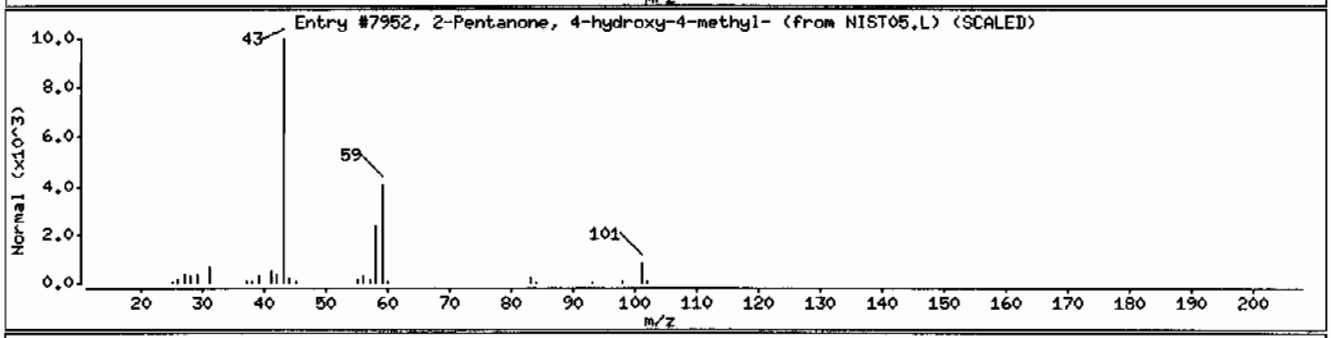

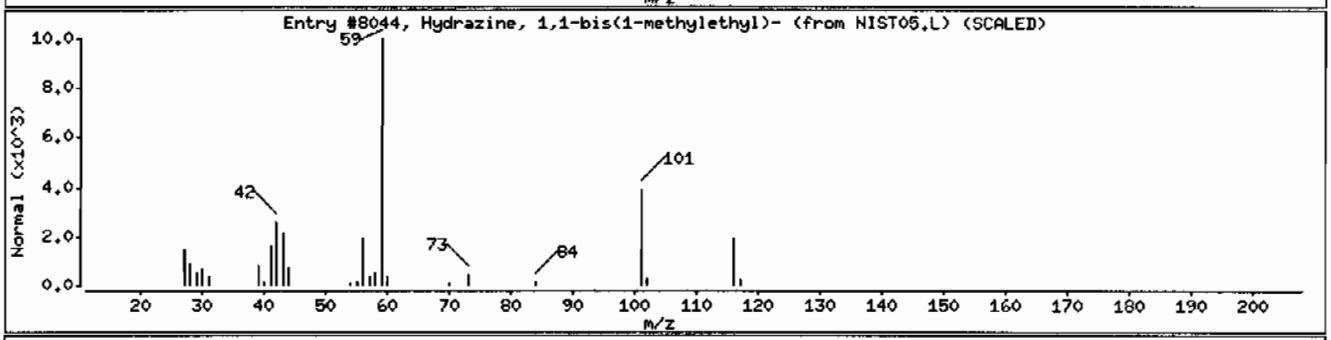

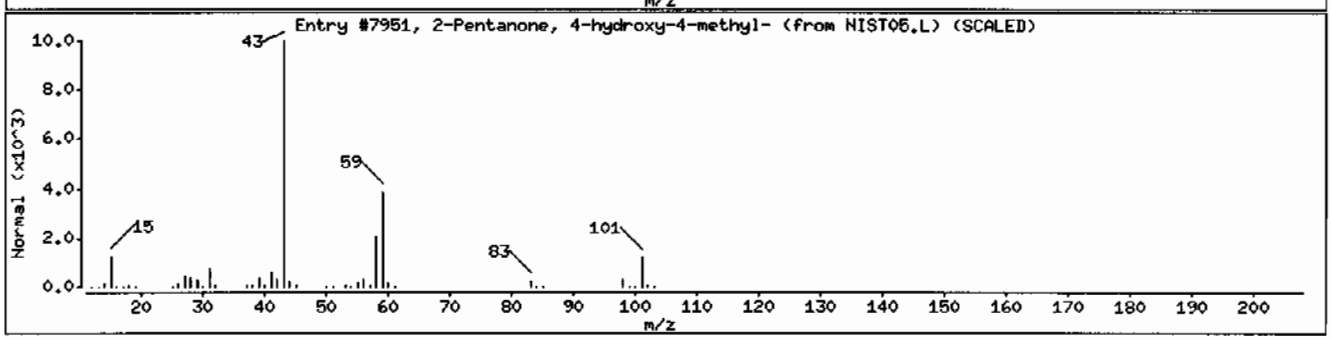

Data File: /chem/MSD8.i/s120309.b/s810317.d

Date : 03-DEC-2009 17:09

Client ID: RE03-09-13619 Instrument: MSD8.i

Sample Info: |2413180041925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	97	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	96	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	95	C15H24	204

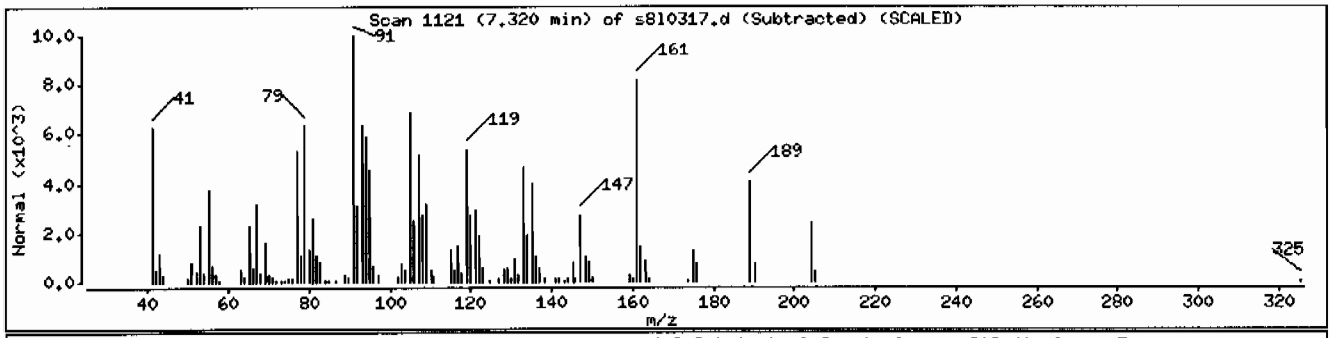

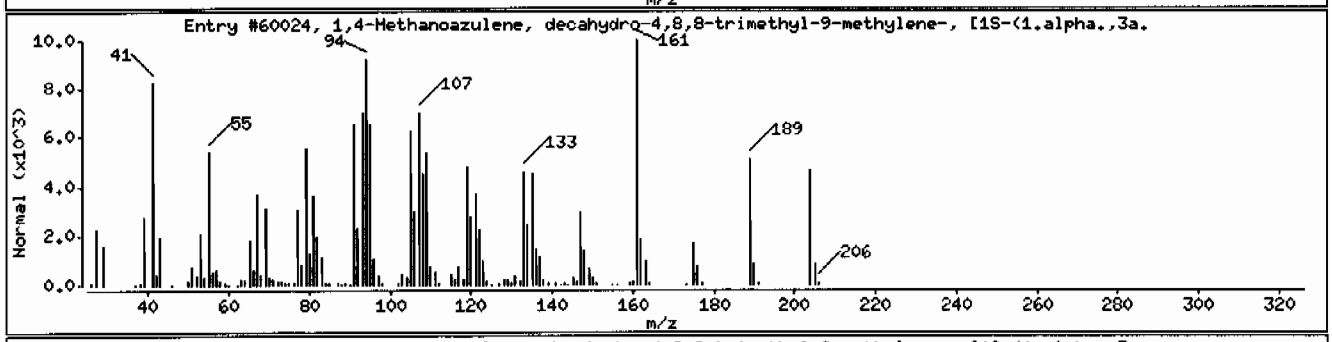

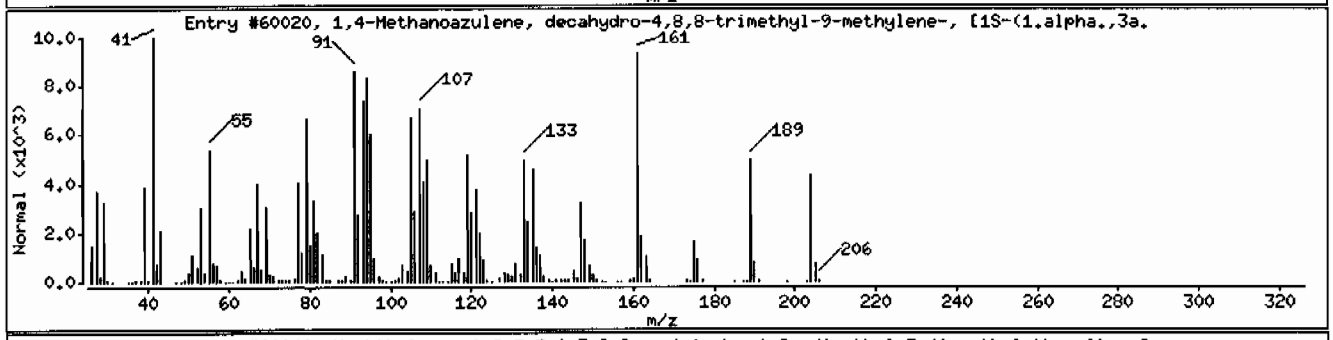

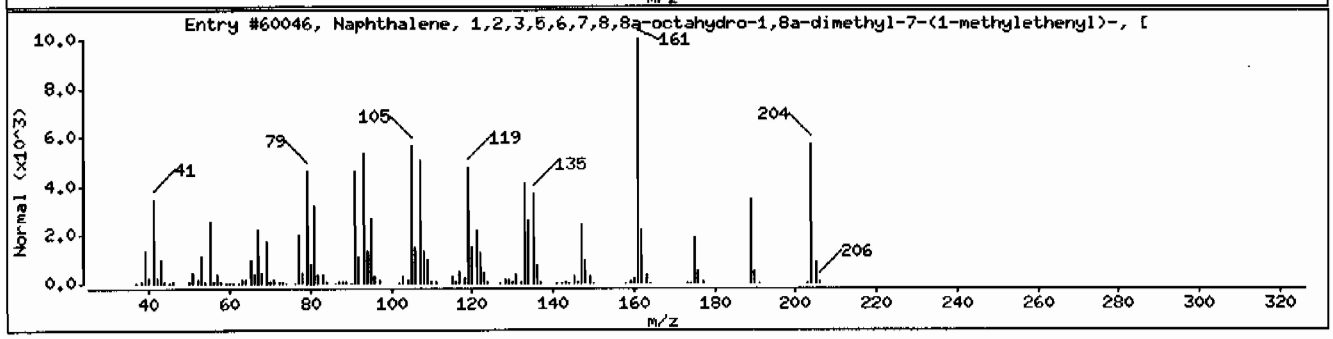

Data File: /chem/MSD8.i/s120309.b/s810317.d

Date : 03-DEC-2009 17:09

Client ID: RE03-09-13619 Instrument: MSD8.i

Sample Info: 1241318004|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-(1-Phenyl-propyl)-1H-tetrazole	1000301-39-1	NIST05.L	48350	55	C10H12N4	188
Pentacyclo[7.5.0.0(2,8).0(5,14).0(7,11)]	79772-15-9	NIST05.L	48786	43	C14H20	188
Benzene, 1-(1-methyl-2-propenyl)-4-(2-me	57438-46-7	NIST05.L	48792	27	C14H20	188

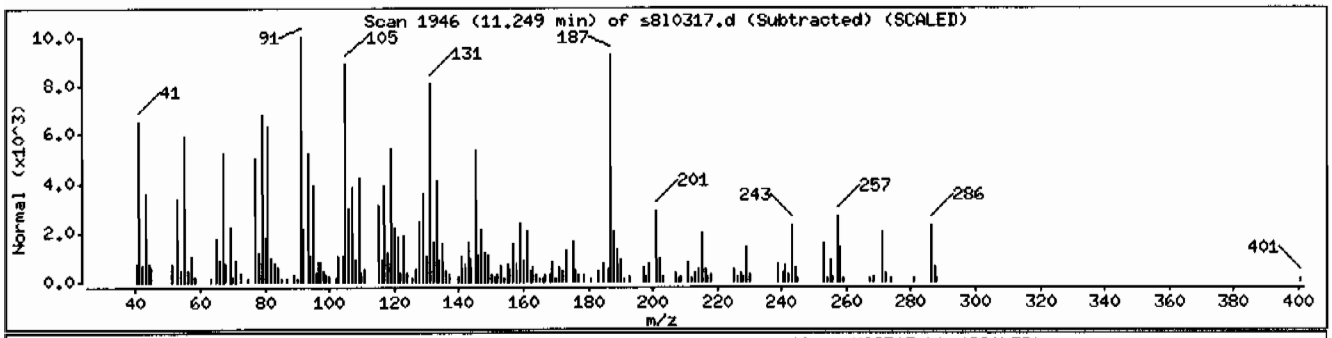

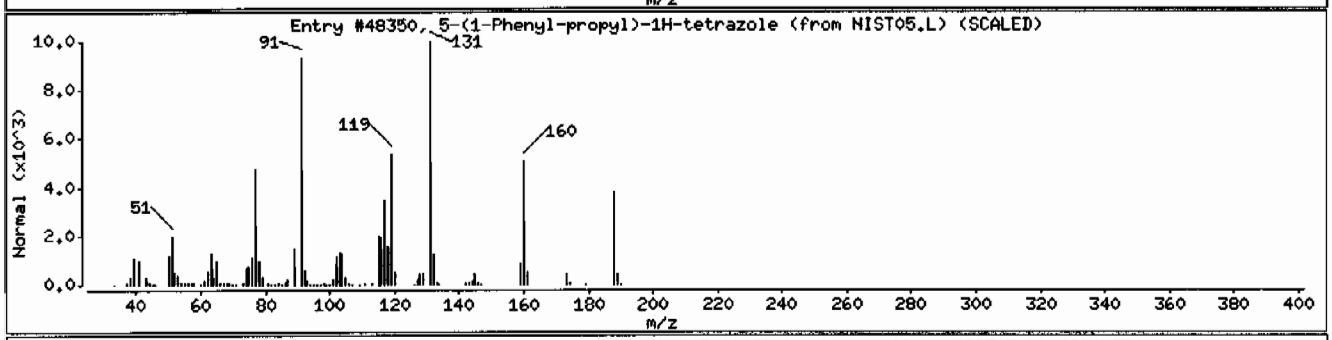

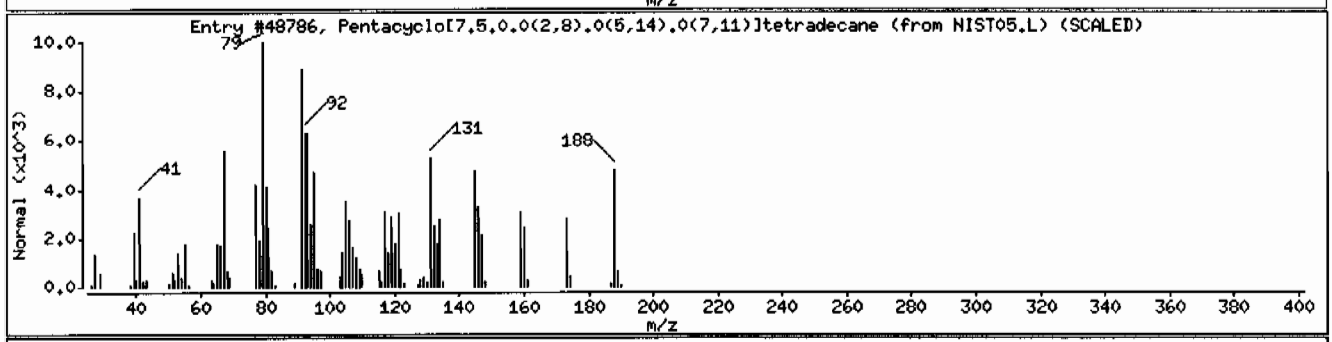

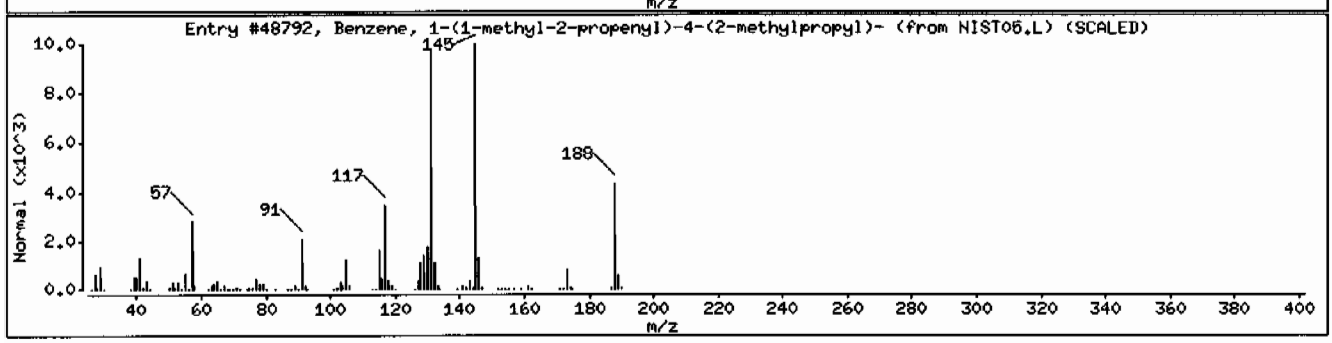

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318003**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13620**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0421.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.0	355
108-95-2	Phenol	U	355	ug/kg	71.0	355
95-57-8	2-Chlorophenol	U	355	ug/kg	71.0	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.0	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.0	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.0	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.8	355
129-00-0	Pyrene	J	32.9	ug/kg	10.7	35.5
110-86-1	Pyridine	U	355	ug/kg	71.0	355
62-53-3	Aniline	U	355	ug/kg	107	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.0	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.0	355
100-51-6	Benzyl alcohol	U	355	ug/kg	107	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.0	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.0	355
95-48-7	o-Cresol	U	355	ug/kg	71.0	355
65794-96-9	m,p-Cresols	U	355	ug/kg	107	355
67-72-1	Hexachloroethane	U	355	ug/kg	71.0	355
98-95-3	Nitrobenzene	U	355	ug/kg	71.0	355
78-59-1	Isophorone	U	355	ug/kg	71.0	355
88-75-5	2-Nitrophenol	U	355	ug/kg	71.0	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.0	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.0	355
65-85-0	Benzoic acid	U	710	ug/kg	178	710
91-20-3	Naphthalene	U	35.5	ug/kg	10.7	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	71.0	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.0	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.10	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.0	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.0	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.0	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	71.0	355
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	355	ug/kg	71.0	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318003	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13620	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s810421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	71.0	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.7	35.5
51-28-5	2,4-Dinitrophenol	U	710	ug/kg	135	710
132-64-9	Dibenzofuran	U	355	ug/kg	71.0	355
84-66-2	Diethylphthalate	U	355	ug/kg	71.0	355
86-73-7	Fluorene	U	35.5	ug/kg	10.7	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.0	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.0	355
100-01-6	4-Nitroaniline	U	355	ug/kg	107	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	71.0	355
122-66-7	Azobenzene	U	355	ug/kg	71.0	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.0	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.0	355
85-01-8	Phenanthrene	J	18.6	ug/kg	10.7	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.10	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.0	355
206-44-0	Fluoranthene		37.0	ug/kg	10.7	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.0	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.7	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	107	355
218-01-9	Chrysene	J	18.8	ug/kg	10.7	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.0	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.0	355
205-99-2	Benzo(b)fluoranthene	J	22.4	ug/kg	10.7	35.5
207-08-9	Benzo(k)fluoranthene	J	15.5	ug/kg	10.7	35.5
50-32-8	Benzo(a)pyrene	J	19.1	ug/kg	10.7	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.7	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.7	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.7	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.0	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	151	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.27	229	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318003**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13620**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0421.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.43	167	ug/kg		J
	Unknown	11.82	148	ug/kg		J
	Unknown	11.85	373	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.96	260	ug/kg	90	NJ
629-92-5	Nonadecane	12.9	157	ug/kg	83	NJ
	Unknown	13.39	192	ug/kg		J
	Unknown	13.59	145	ug/kg		J
	Unknown	13.96	485	ug/kg		J
	Unknown	16.49	162	ug/kg		J
	Unknown	17.95	245	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810421.d
Lab Smp Id: 241318003 Client Smp ID: RE03-09-13620
Inj Date : 04-DEC-2009 17:45
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318003|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	6.18070	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.539	4.539	(1.000)	297748	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	1097525	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	641371	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.273	(1.000)	1136803	40.0000	
* 91 Chrysene-d12	240	12.201	12.206	(1.000)	1044678	40.0000	
* 98 Perylene-d12	264	14.363	14.373	(1.000)	622956	40.0000	
$ 3 2-Fluorophenol	112	3.387	3.377	(0.746)	531649	74.7467	2650
$ 5 Phenol-d5	99	4.158	4.158	(0.916)	653910	73.2384	2600
$ 20 Nitrobenzene-d5	82	5.068	5.073	(0.873)	293009	36.7902	1310
$ 39 2-Fluorobiphenyl	172	6.935	6.935	(0.904)	630005	35.5488	1260
$ 60 2,4,6-Tribromophenol	329	8.511	8.516	(1.110)	167687	56.6027	2010
$ 81 p-Terphenyl-d14	244	10.982	10.982	(0.900)	768742	39.5496	1400

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	10.820	10.830	(0.887)	27974	0.92742	32.9(a)
68 Phenanthrene	178	9.292	9.297	(1.003)	13039	0.52412	18.6(a)
76 Fluoranthene	202	10.573	10.582	(1.141)	31940	1.04269	37.0
92 Chrysene	228	12.225	12.239	(1.002)	12340	0.52885	18.8(a)
95 Benzo(b)fluoranthene	252	13.725	13.735	(0.956)	10479	0.63109	22.4(a)
96 Benzo(k)fluoranthene	252	13.763	13.787	(0.958)	6857	0.43636	15.5(a)
97 Benzo(a)pyrene	252	14.258	14.273	(0.993)	7423	0.53694	19.1(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s810421.d
Report Date: 12/05/2009 08:48
Lab. ID: 241318003 SampleType: SAMPLE
Injection Date: 04-DEC-2009 17:45
Operator: nagl Instrument: MSD8.i
Sample Info: |241318003|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8207_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	33499	4.16	4.23	80-120	100	(T)
93	10333	4.21	4.23	214-274	31	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45843	5.07	4.91	80-120	100	(T)
42	21047	5.07	4.91	24- 84	46	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	86444	7.67	7.43	80-120	100	(T)
63	1425	7.66	7.43	31- 91	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	86444	7.67	7.86	80-120	100	(T)
89	1310	7.66	7.86	47-107	2	(QT)
63	1425	7.66	7.86	21- 81	2	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	405	8.50	8.30	80-120	100	(T)
105	1078	8.51	8.30	11- 71	266	(QT)
51	1001	8.51	8.30	15- 75	247	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	13039	9.29	9.30	80-120	100	( )
179	2179	9.29	9.30	0- 46	17	( )
176	2342	9.29	9.30	0- 49	18	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
69 Anthracene			CAS#: 120-12-7			
178	13039	9.29	9.35	80-120	100	(T)
179	2179	9.29	9.35	0- 46	17	(T)
176	2342	9.29	9.35	0- 48	18	(T)
76 Fluoranthene			CAS#: 206-44-0			
202	31940	10.57	10.58	80-120	100	( )
203	5888	10.57	10.58	0- 48	18	( )
101	4100	10.57	10.58	0- 42	13	( )
79 Pyrene			CAS#: 129-00-0			
202	27974	10.82	10.83	80-120	100	( )
200	5740	10.82	10.83	0- 50	21	( )
101	4487	10.82	10.83	0- 44	16	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	14535	12.18	12.18	80-120	100	( )
226	4294	12.18	12.18	0- 56	30	( )
229	3838	12.18	12.18	0- 50	26	( )
92 Chrysene			CAS#: 218-01-9			
228	12340	12.23	12.24	80-120	100	( )
229	3599	12.23	12.24	0- 51	29	( )
226	3616	12.23	12.24	0- 59	29	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	10479	13.73	13.73	80-120	100	( )
253	3348	13.72	13.73	0- 52	32	( )
125	2035	13.73	13.73	0- 42	19	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	6857	13.76	13.79	80-120	100	( )
253	1380	13.76	13.78	0- 52	20	( )
125	785	13.76	13.79	0- 43	11	( )
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	7423	14.26	14.27	80-120	100	( )
253	2621	14.24	14.27	0- 52	35	( )
125	2170	14.26	14.27	0- 39	29	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810421.d
Lab Smp Id: 241318003 Client Smp ID: RE03-09-13620
Inj Date : 04-DEC-2009 17:45
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318003|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	6.18070	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.539	1717173	40.000
* 46 Acenaphthene-d10	7.668	2669889	40.000
* 91 Chrysene-d12	12.201	2927896	40.000
* 98 Perylene-d12	14.363	1678691	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.149	182537	4.25203139	151	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
7.273	430787	6.45400199	229	99	NIST05.L	60024	46
Unknown					CAS #:		
11.425	344835	4.71102552	167	0		0	91
Unknown					CAS #:		
11.820	305625	4.17535740	148	0		0	91
Unknown					CAS #:		
11.854	768216	10.4951227	373	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
11.963	535796	7.31988012	260	90	NIST05.L	125037	91
Nonadecane					CAS #: 629-92-5		
12.901	324429	4.43224396	157	83	NIST05.L	104271	91
Unknown					CAS #:		
13.392	226776	5.40364460	192	0		0	98
Unknown					CAS #:		
13.587	171209	4.07959109	145	0		0	98
Unknown					CAS #:		
13.959	572732	13.6471146	485	0		0	98
Unknown					CAS #:		
16.487	191332	4.55907749	162	0		0	98
Unknown					CAS #:		
17.949	289104	6.88879959	245	0		0	98

Data File: /chem/MSD8.i/s120409.b/s810421.d
Date : 04-DEC-2009 17:45
Client ID: RE03-09-13620
Sample Info: |241318003|925637|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20

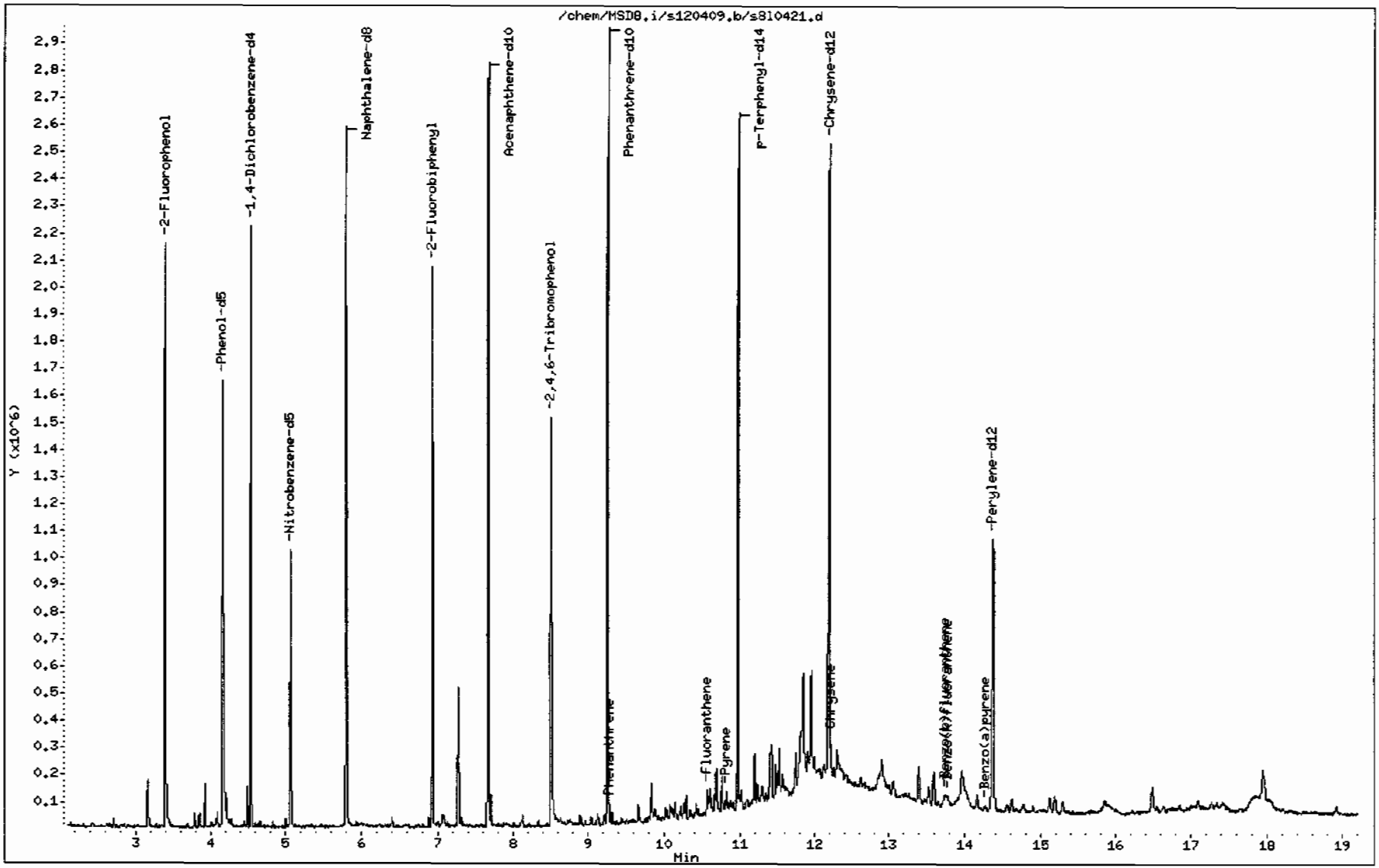

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: 1241318003192563711ISVHF11LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 32.9 ug/Kg

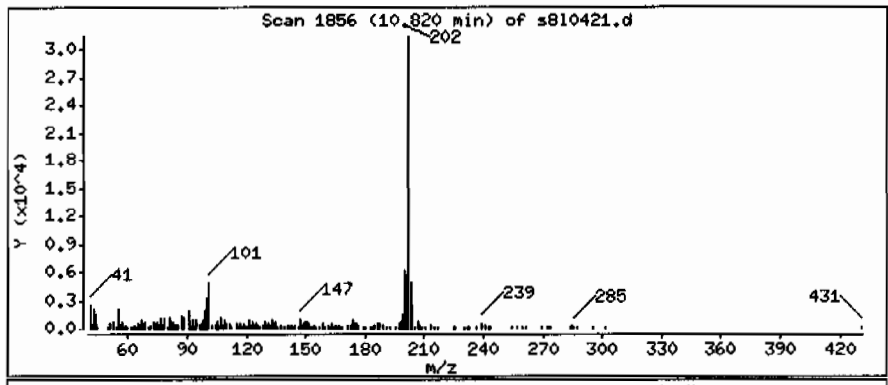

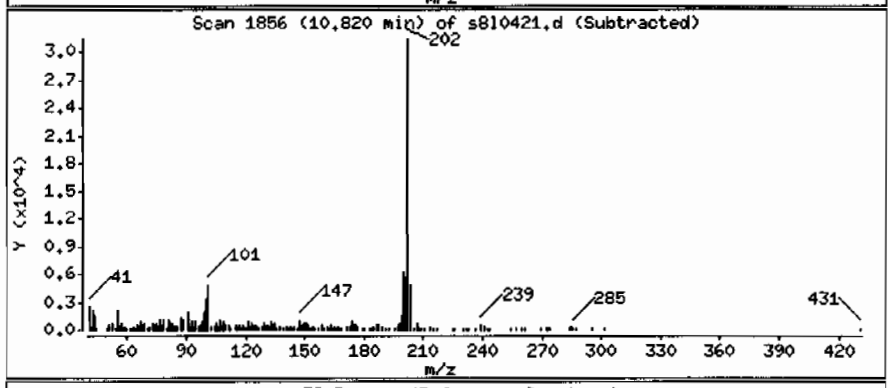

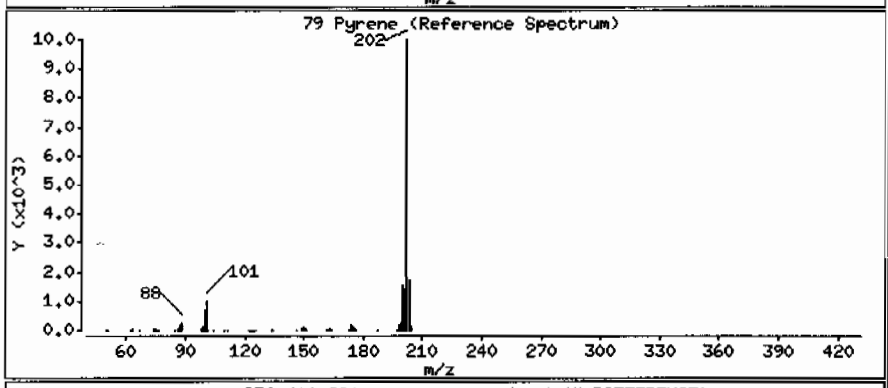

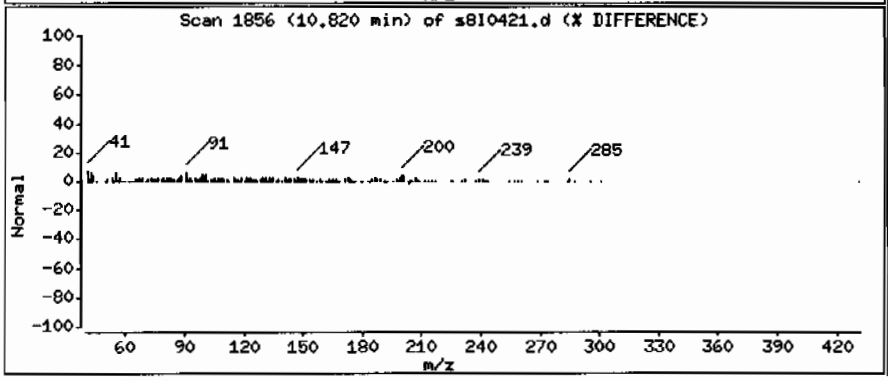

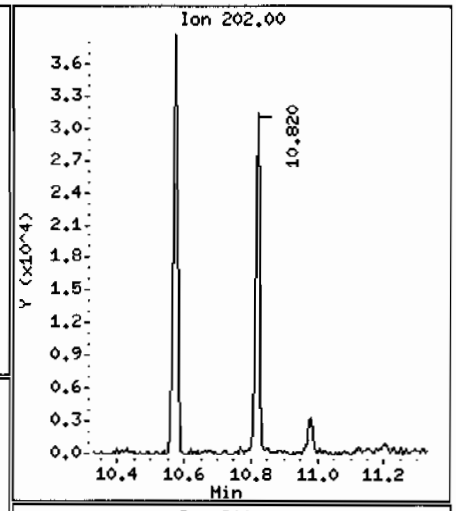

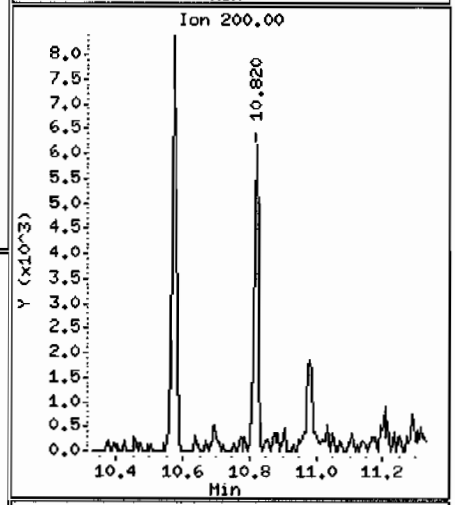

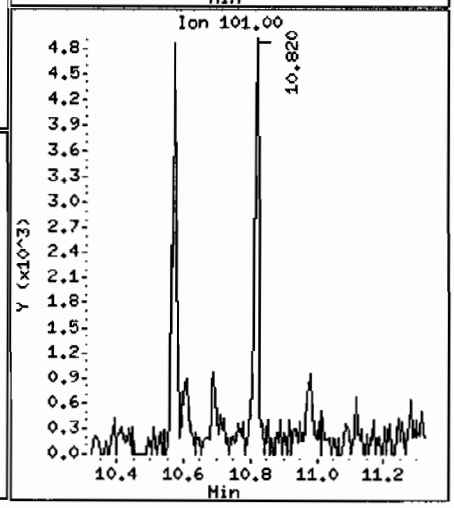

Data File: /chem/HSD8.i/s120409.b/s810421.d

Page 3

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: HSD8.i

Sample Info: 1241318003192563711ISVMF11ILANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 18.6 ug/Kg

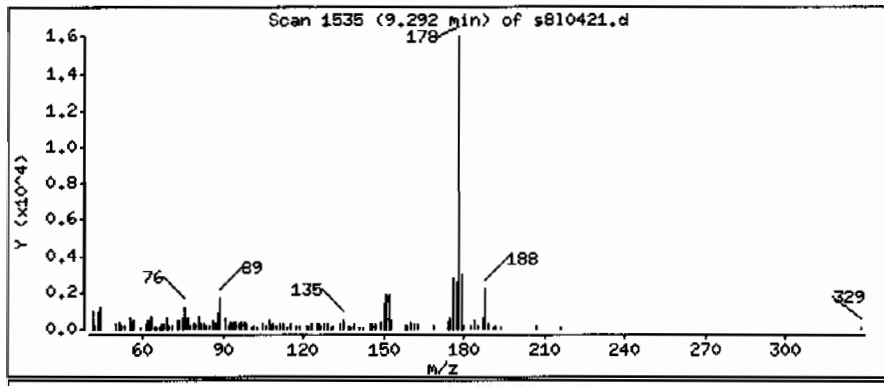

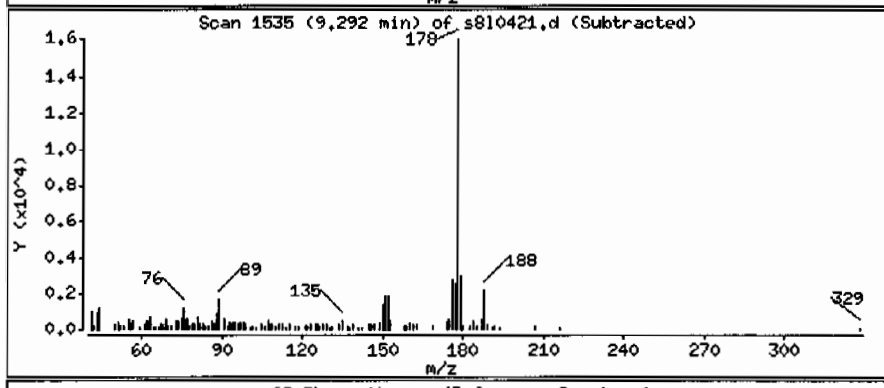

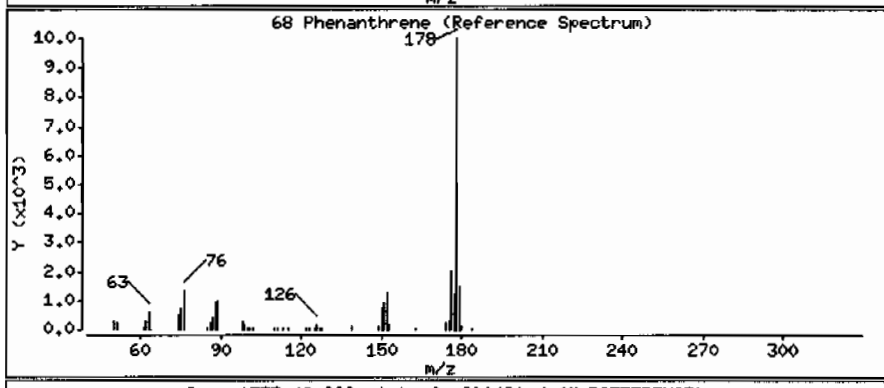

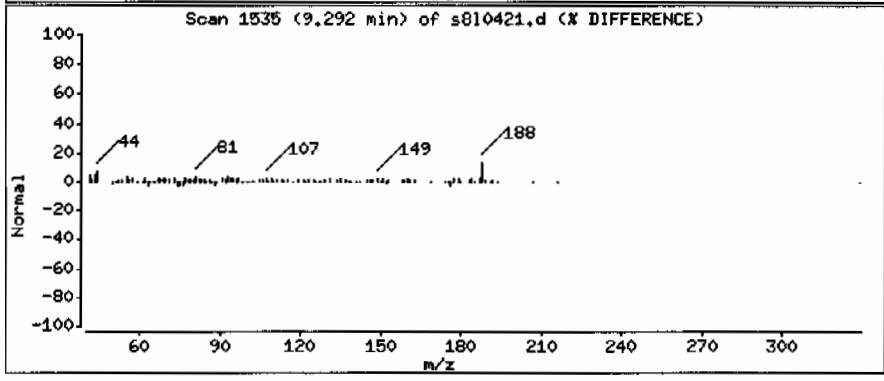

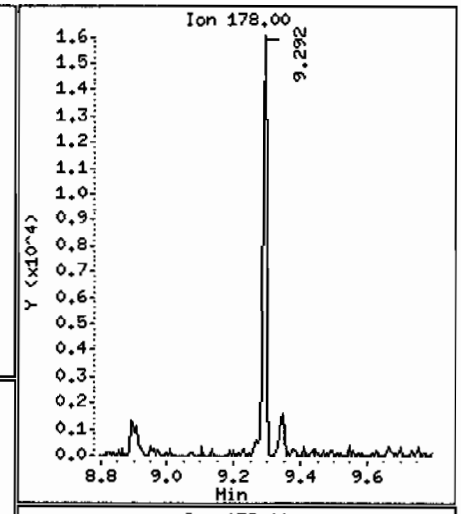

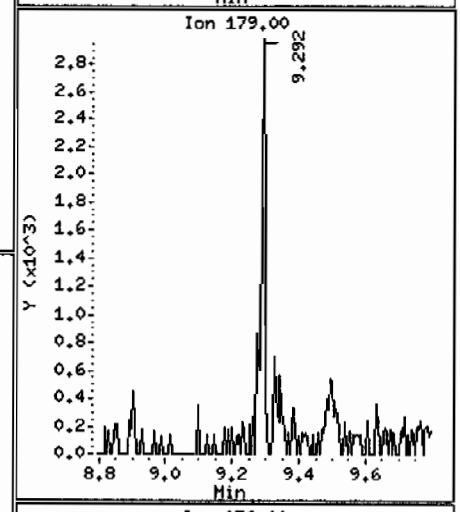

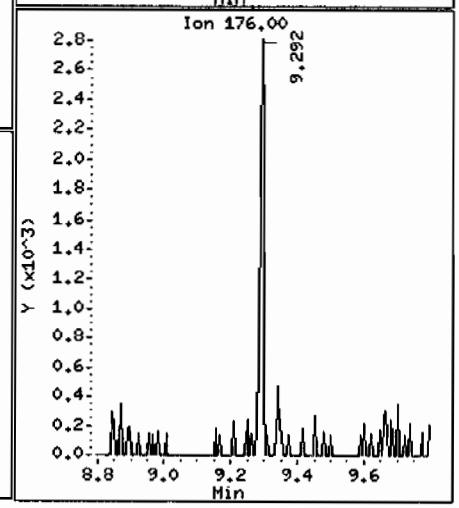

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: 1241318003|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 37.0 ug/Kg

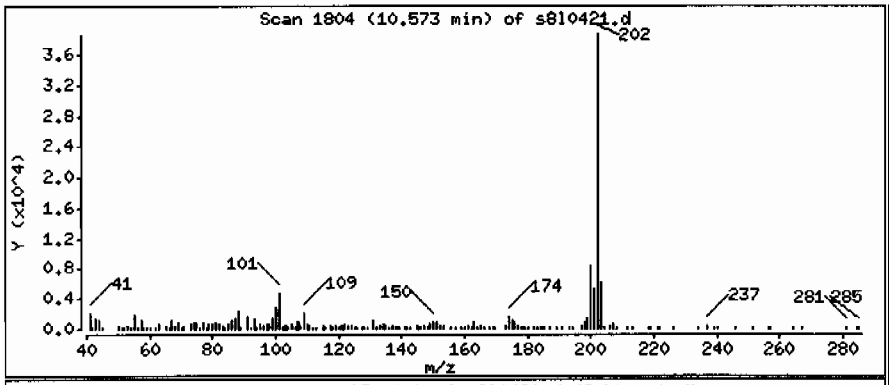

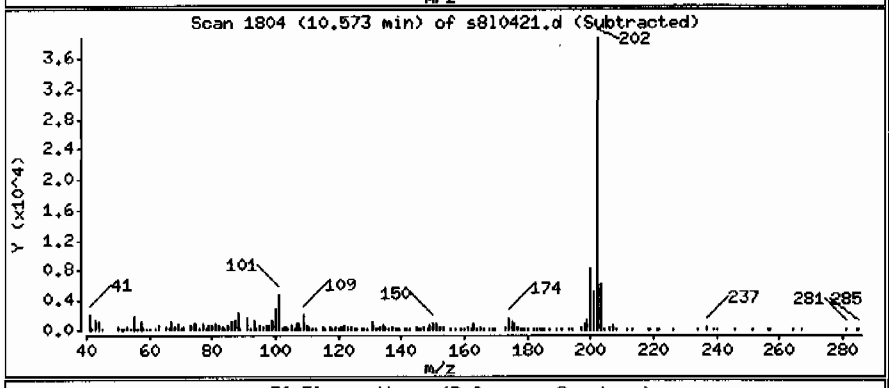

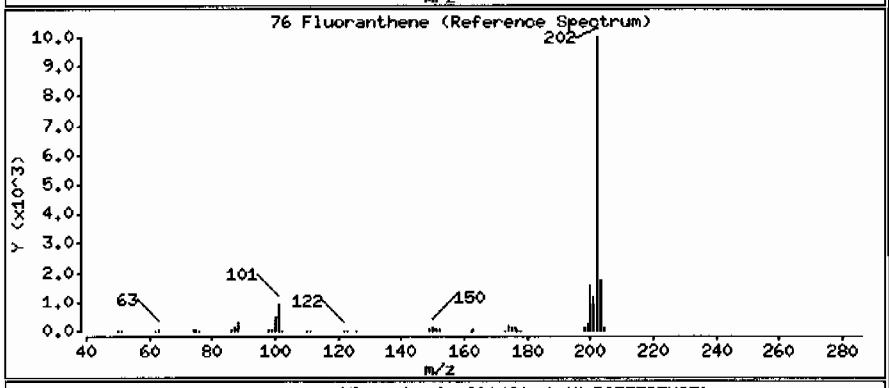

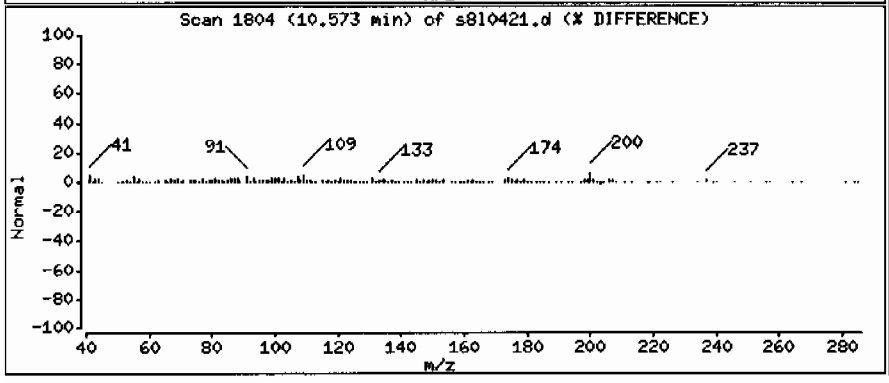

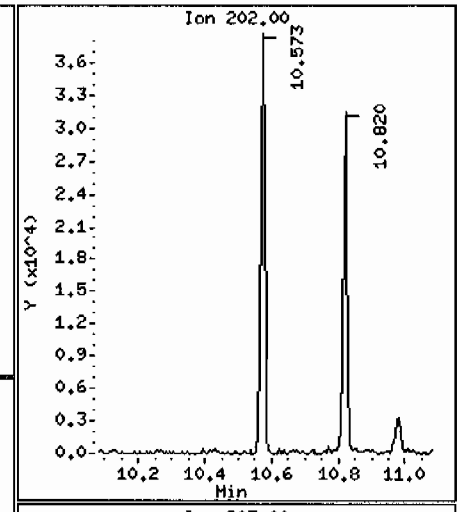

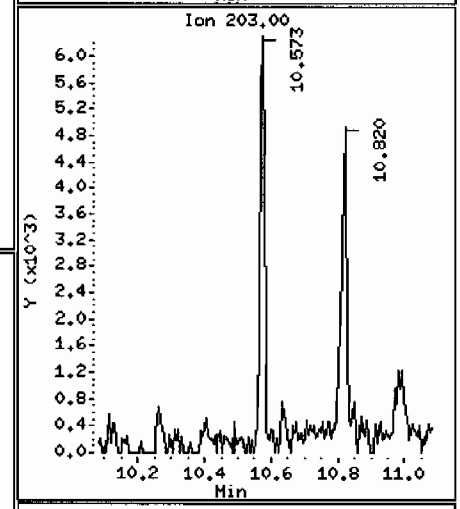

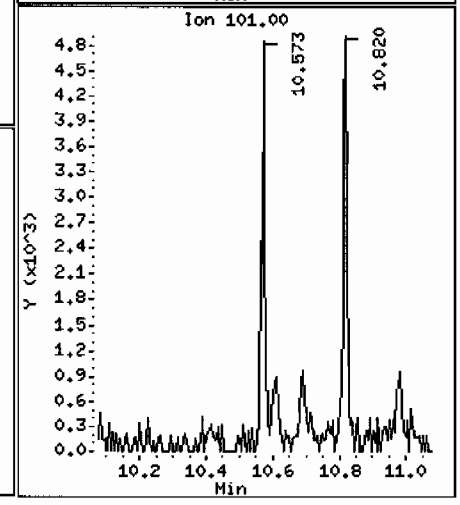

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: 1241318003|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 18.8 ug/Kg

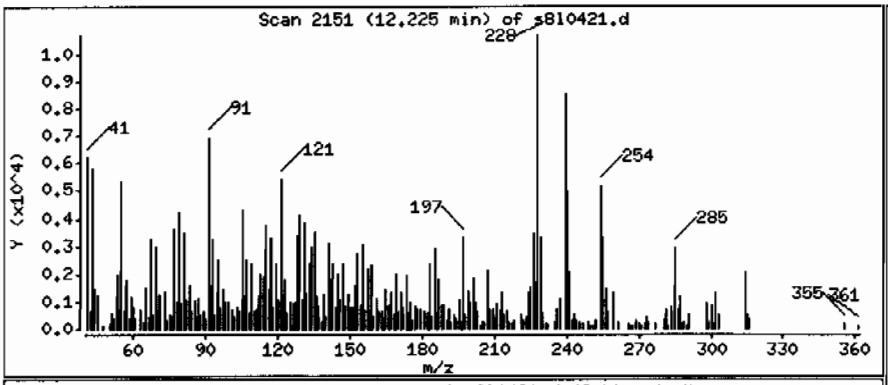

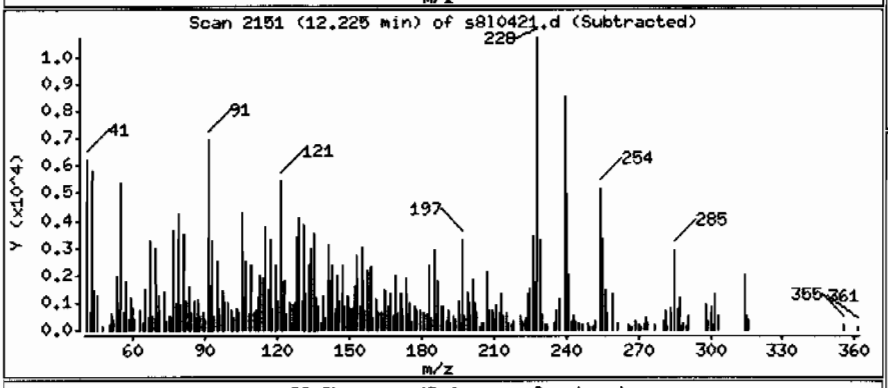

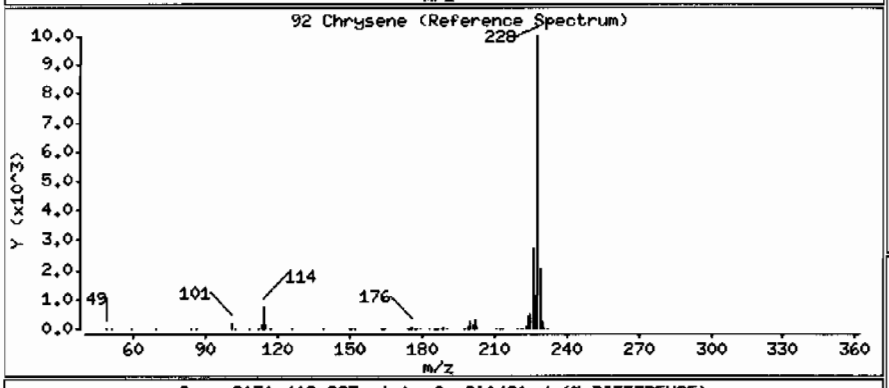

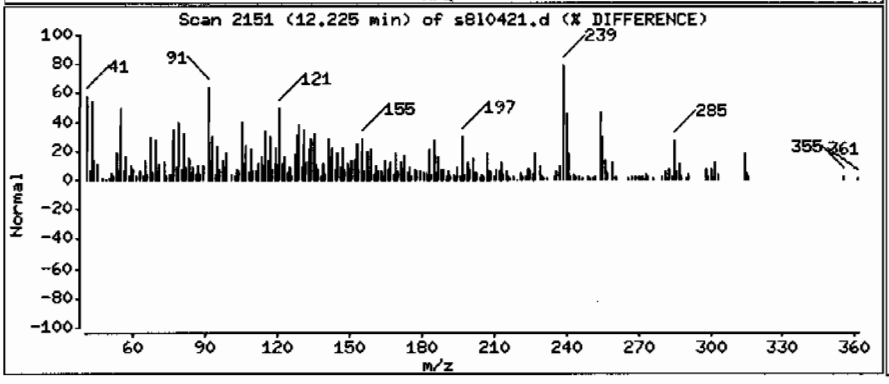

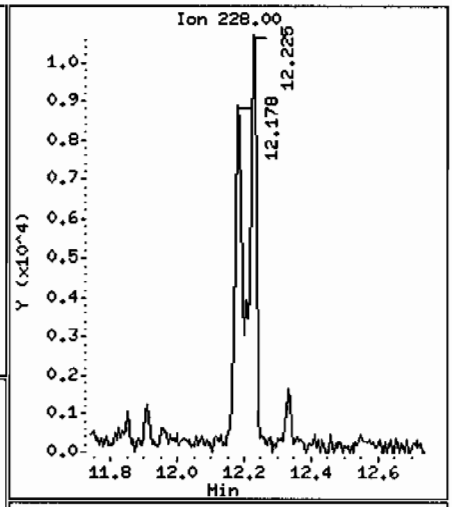

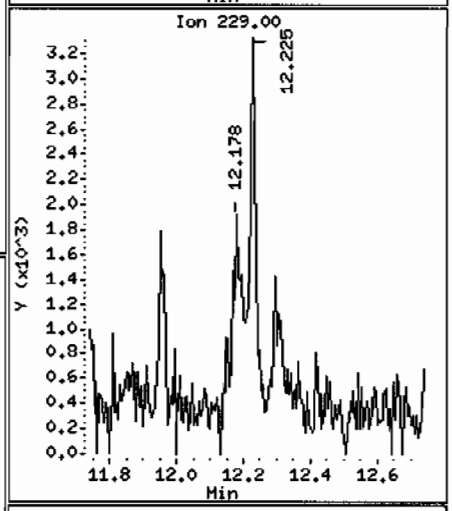

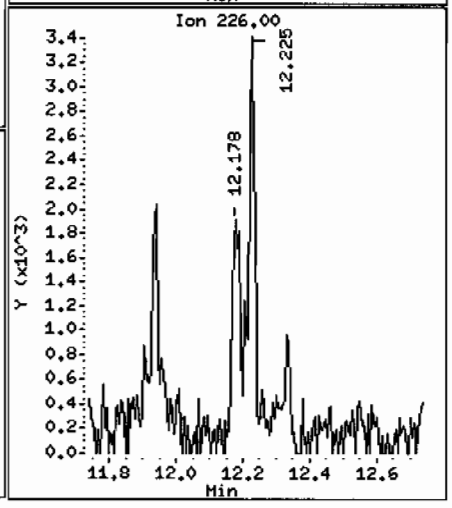

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: |2413180031925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 22.4 ug/Kg

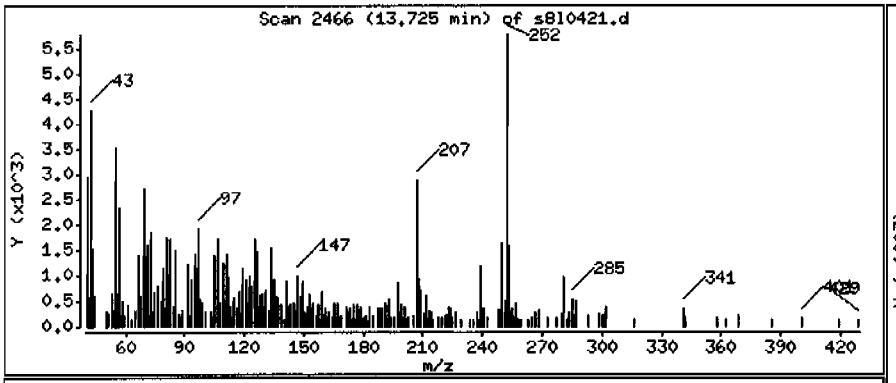

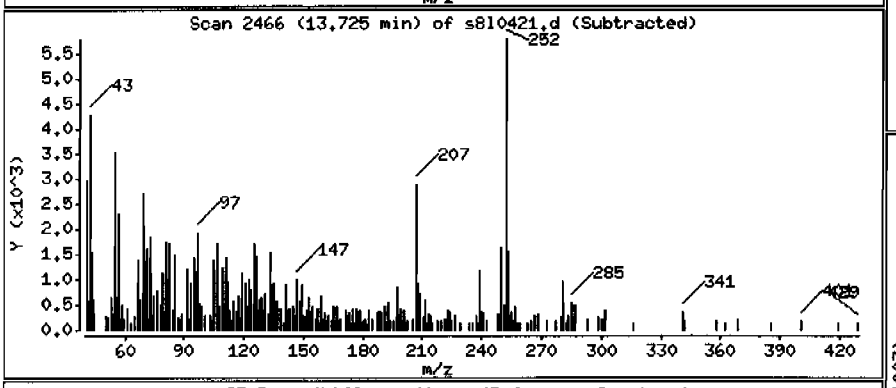

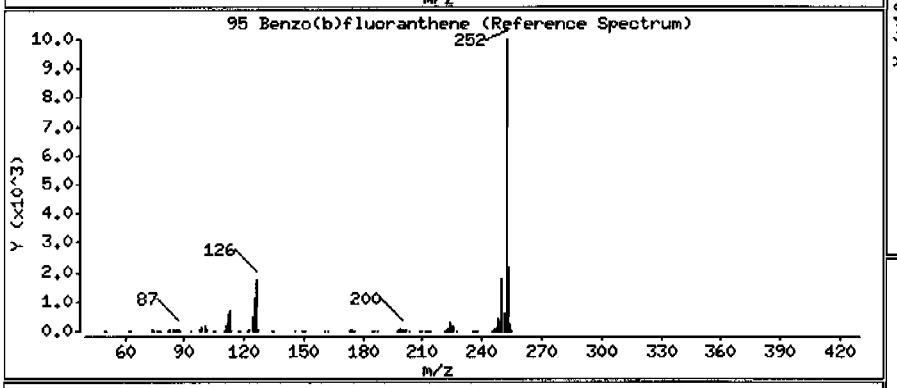

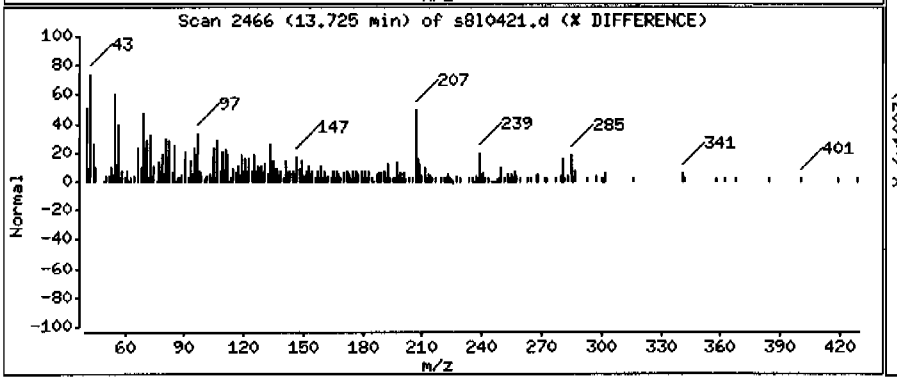

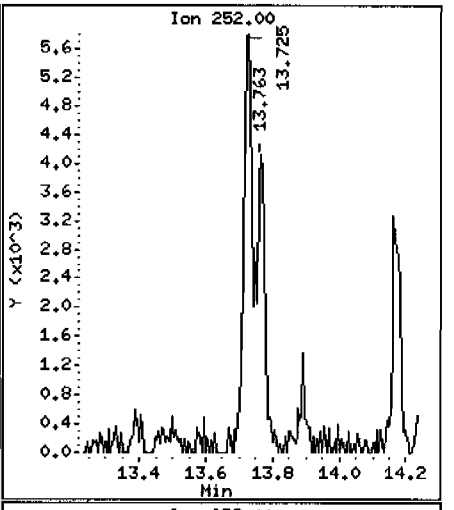

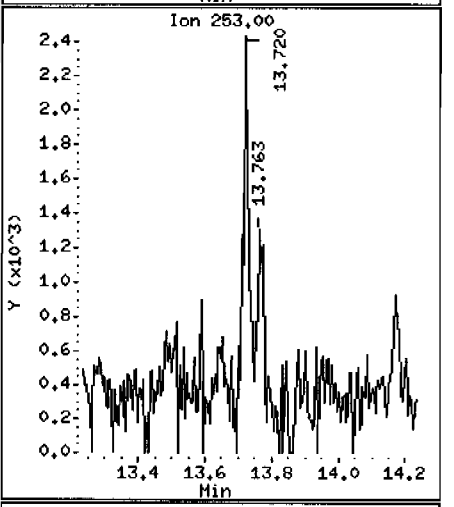

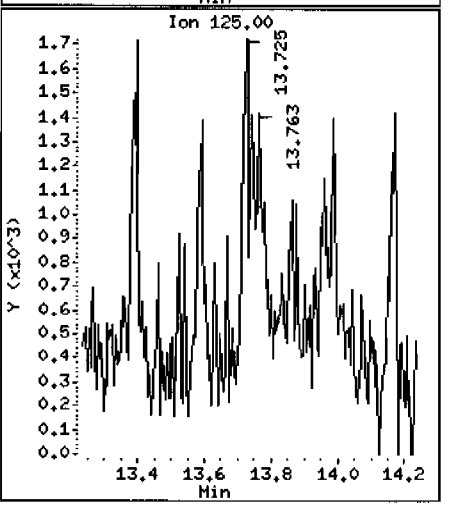

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: 1241318003|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

96 Benzo(k)fluoranthene

Concentration: 15.5 ug/Kg

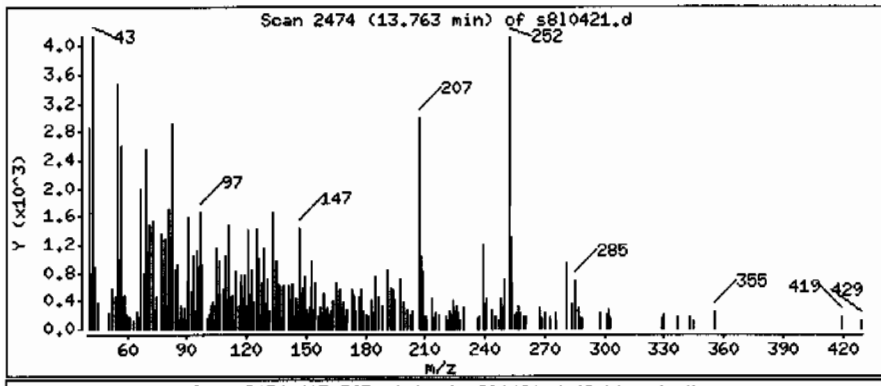

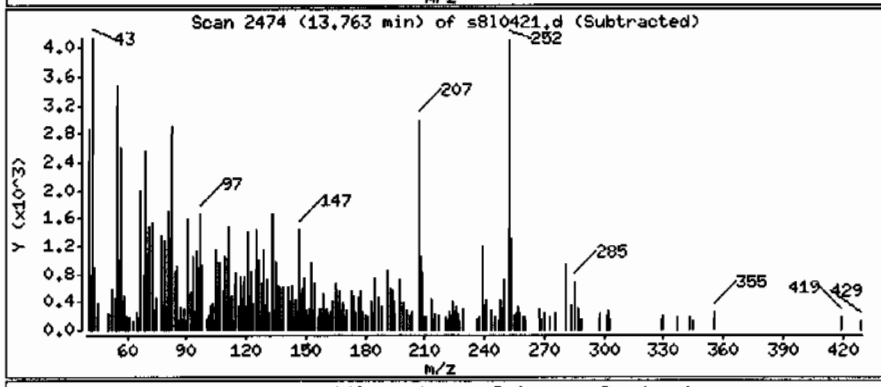

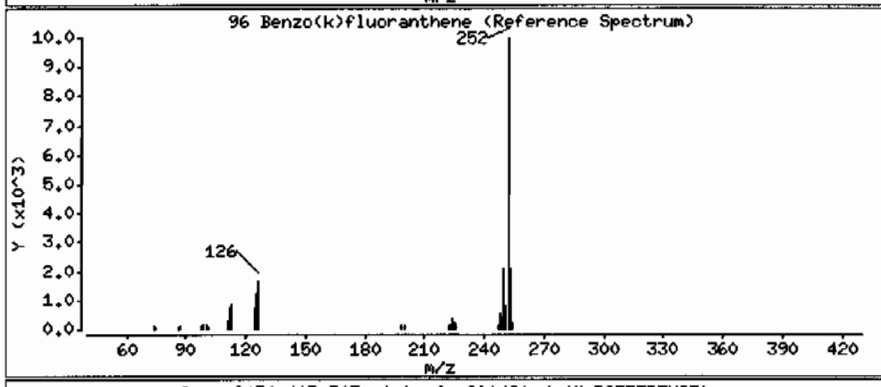

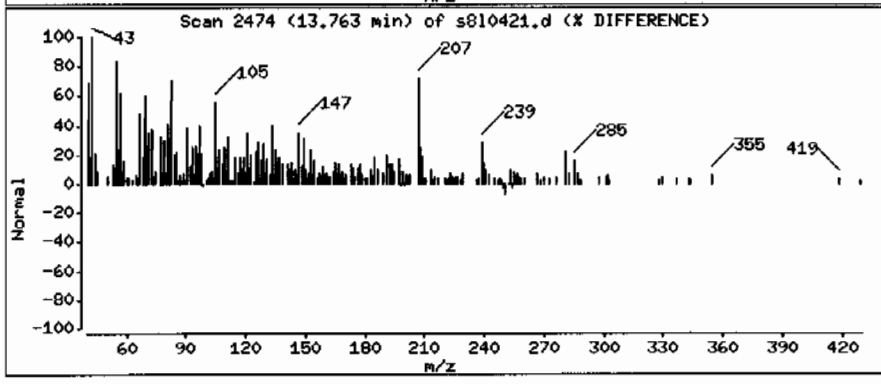

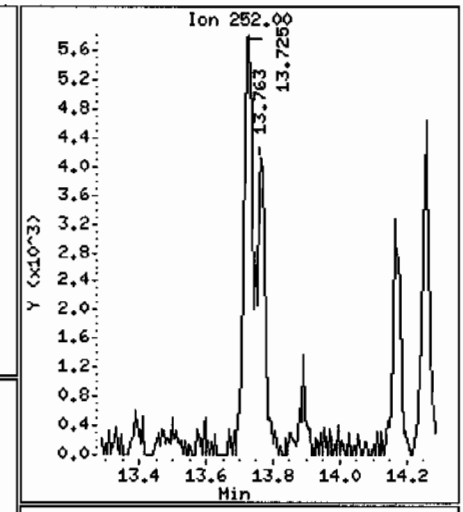

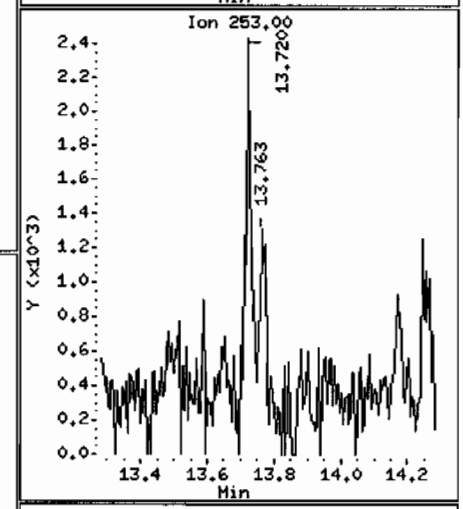

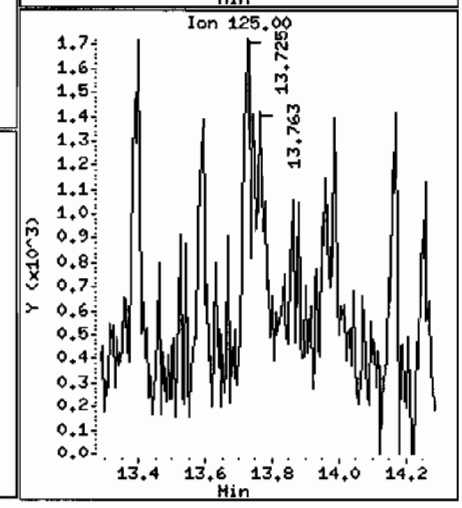

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 | Instrument: MSD8.i

Sample Info: 1241318003192563711ISVMF11ILANL

Volume Injected (uL): 0.5 | Operator: nag1

Column phase: J&W DB-5MS | Column diameter: 0.20

97 Benzo(a)pyrene | Concentration: 19.1 ug/Kg

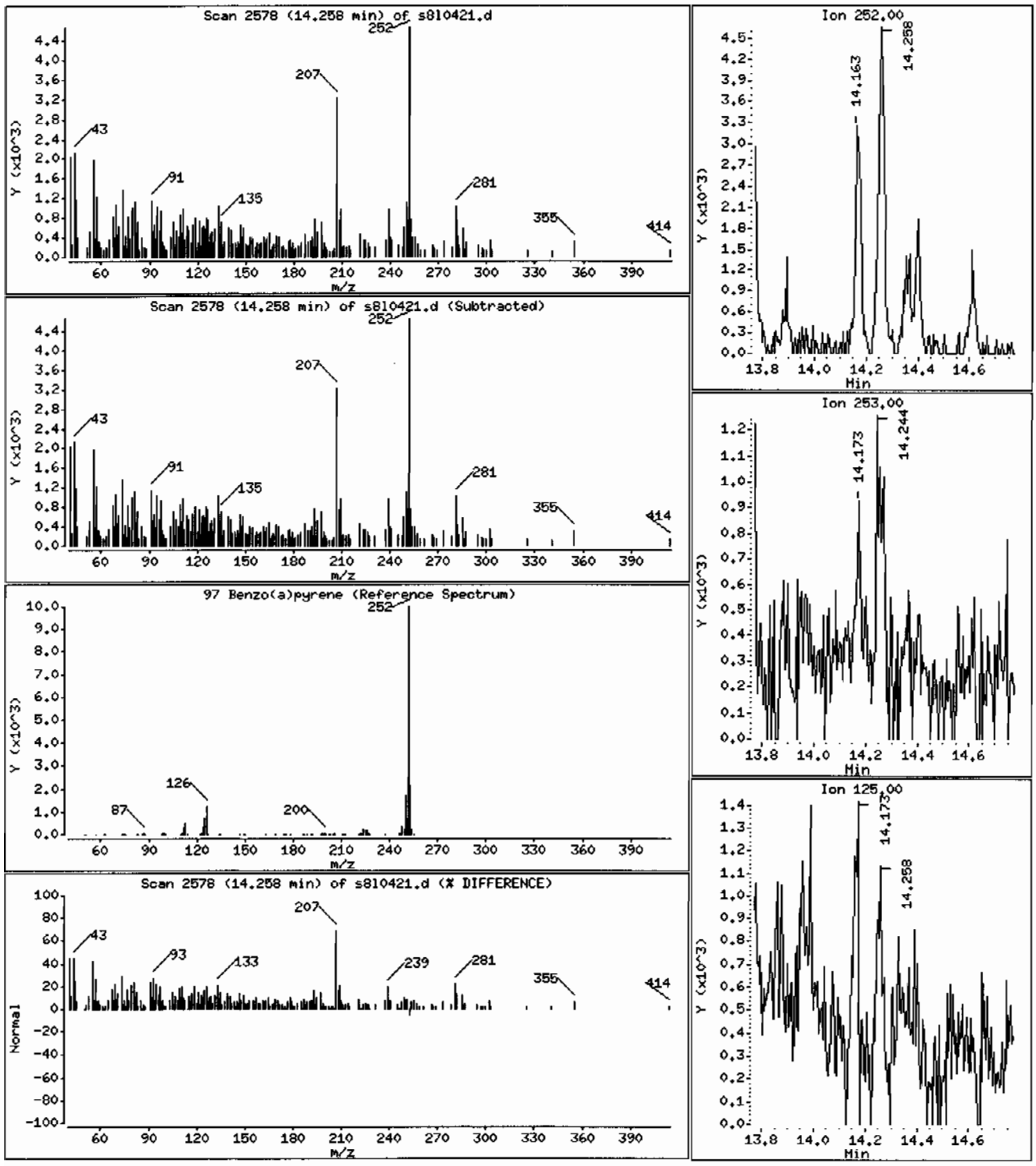

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: I241318003192563711ISVMFI1ILANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	39	C6H12O2	116

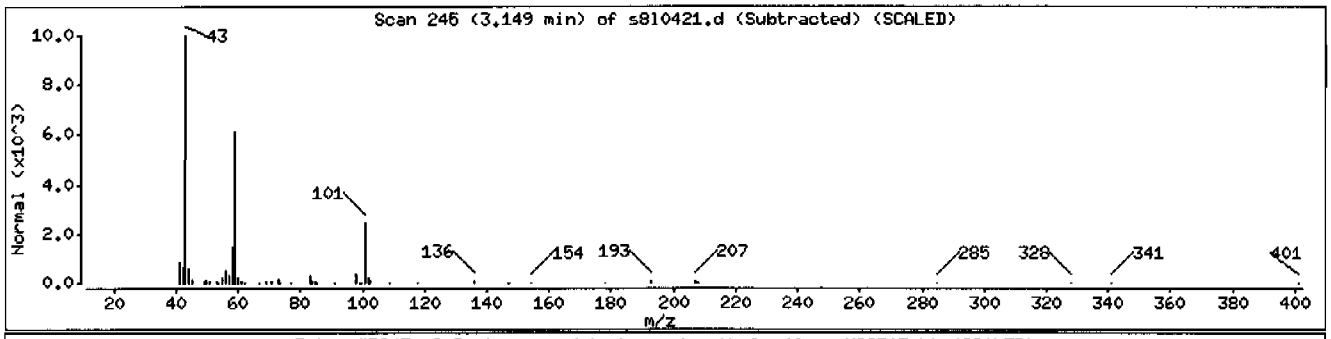

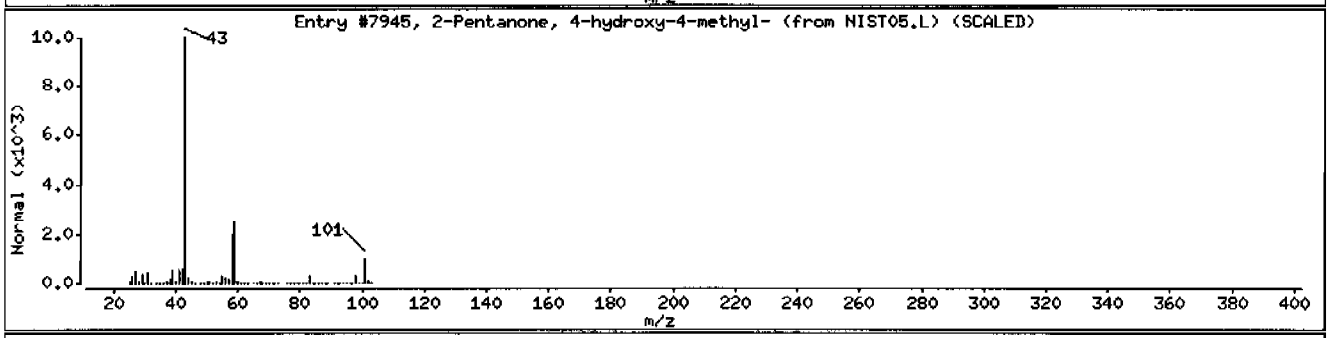

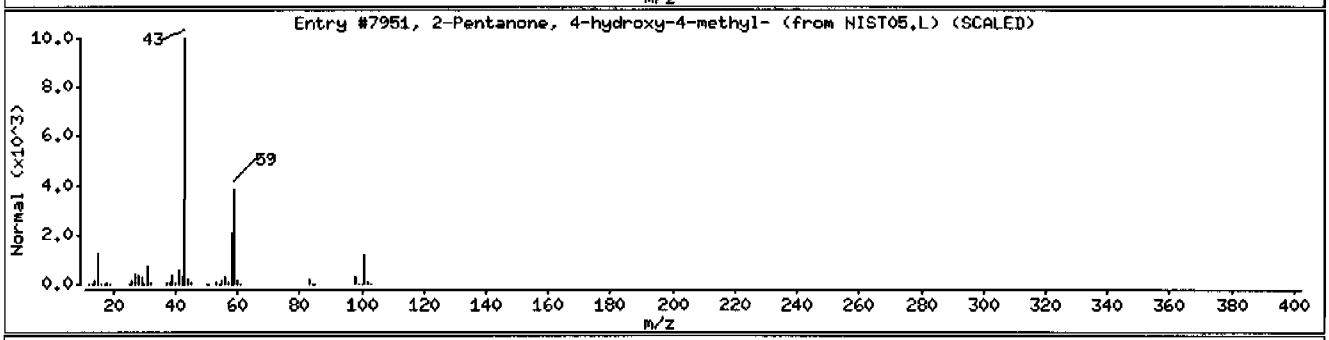

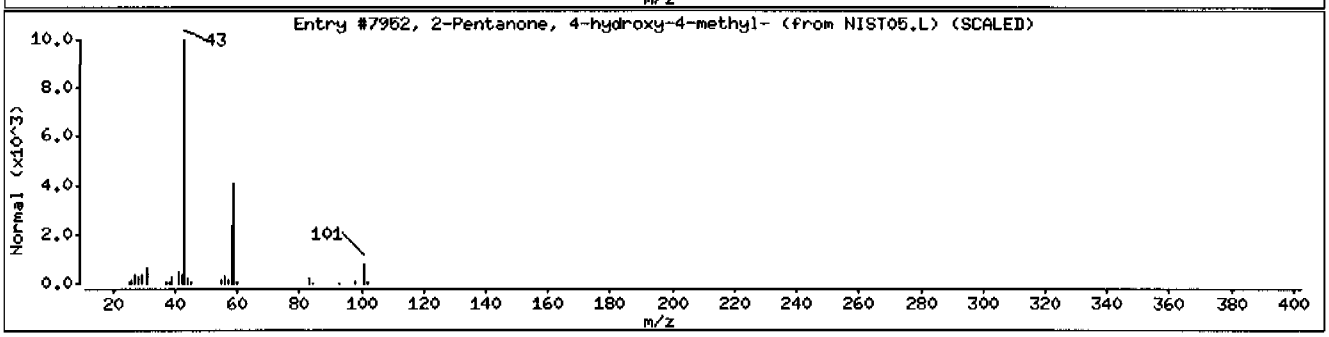

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: |2413180031925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	96	C15H24	204

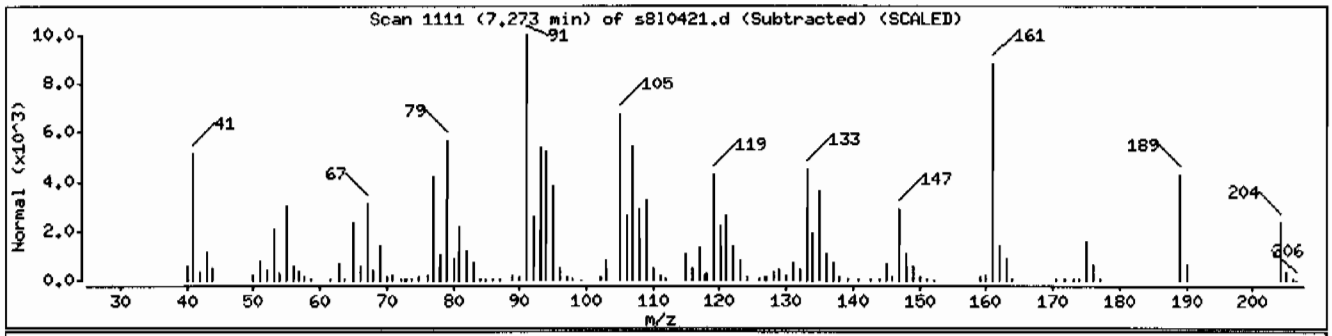

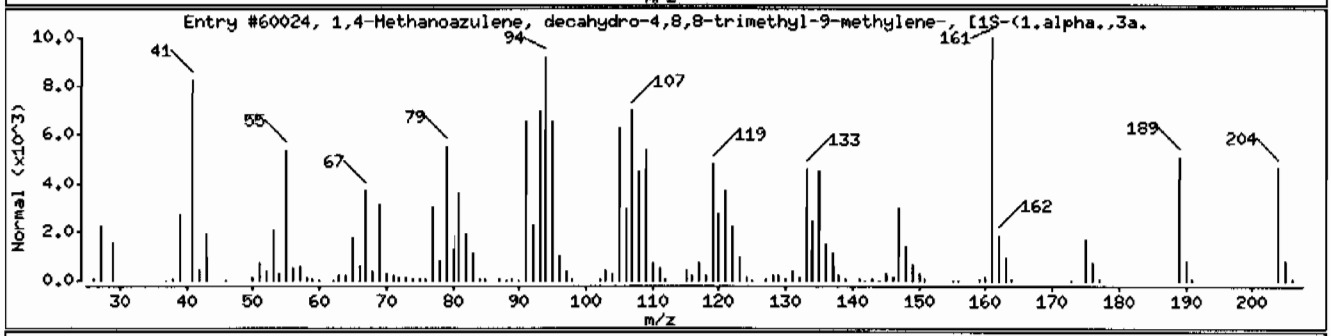

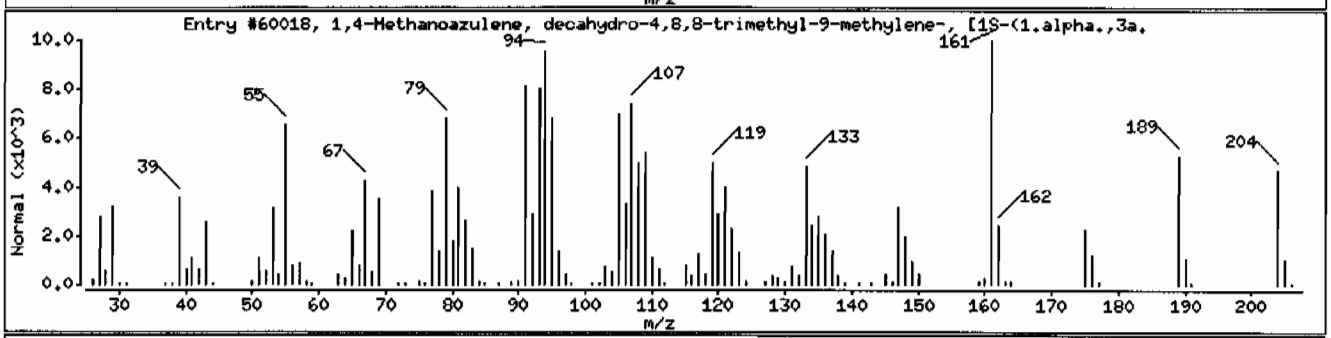

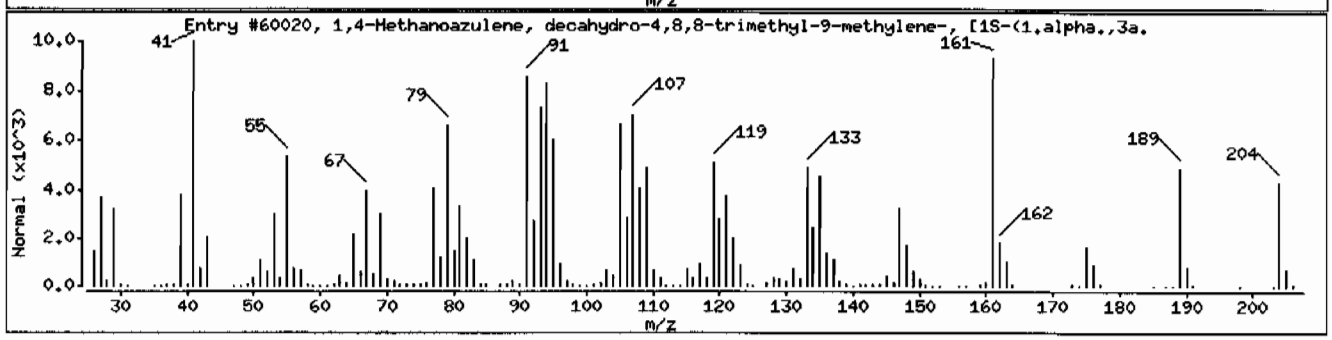

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 Instrument: MSD8.i

Sample Info: 1241318003192563711ISVHF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5HS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-(bromomethyl)-4-fluoro-	459-46-1	NIST05.L	48897	43	C7H6BrF	188
Cyclopropylpyrrol4-[3-(1H-imidazol-4-yl)	1000311-87-8	NIST05.L	115313	43	C16H19N3O2	285
1-Bromo-9-thiabicyclo[3.3.1]nonane 9,9-d	19669-16-0	NIST05.L	93640	38	C8H13BrO2S	252

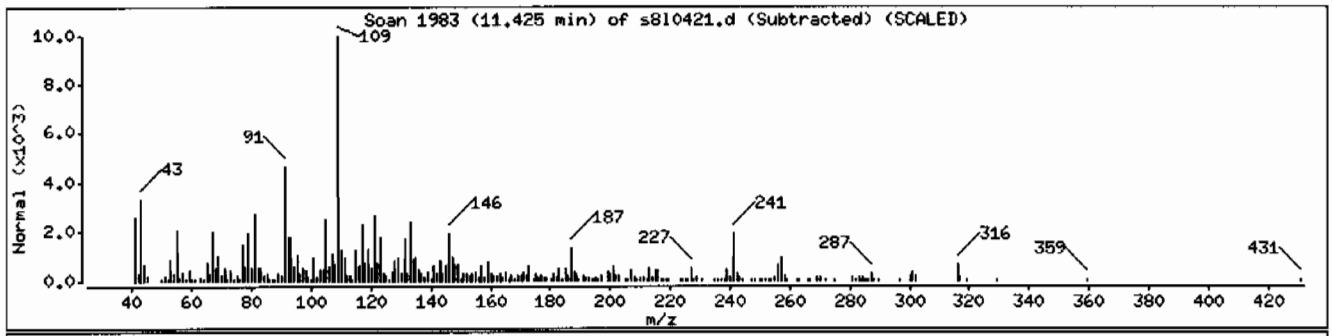

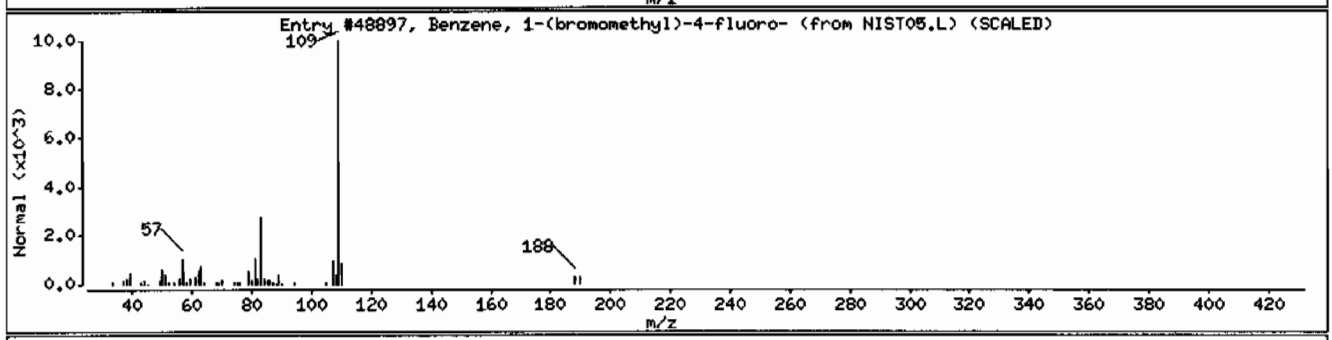

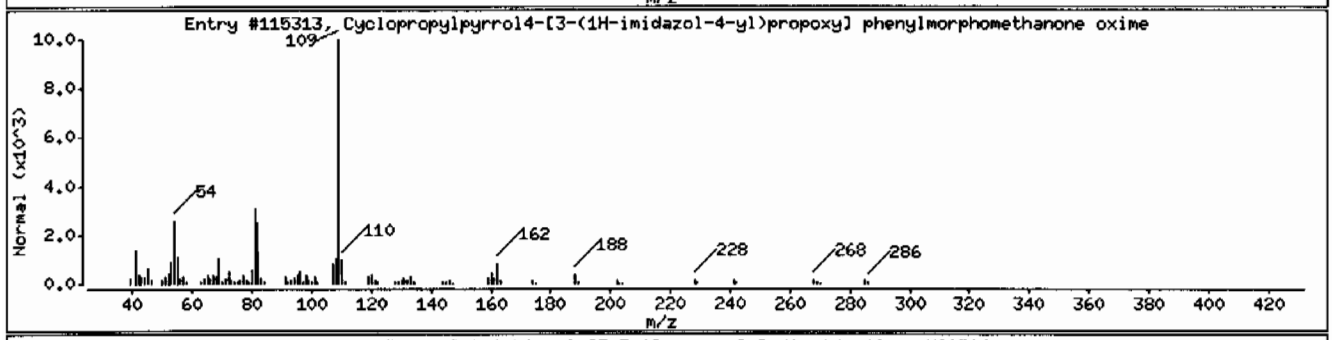

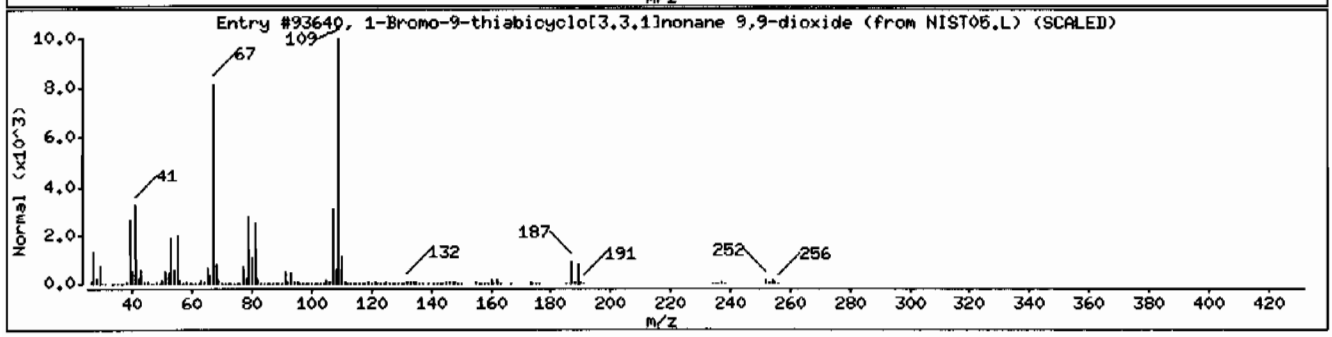

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 Instrument: MSD8.i

Sample Info: 1241318003192563711ISVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
6,9-Octadecadiynoic acid, methyl ester	56847-03-1	NIST05.L	118643	47	C19H30O2	290
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	35	C22H22O	302
Crinan, 1-methoxy-, (1.alpha.)-	41928-92-1	NIST05.L	116641	32	C17H21NO3	287

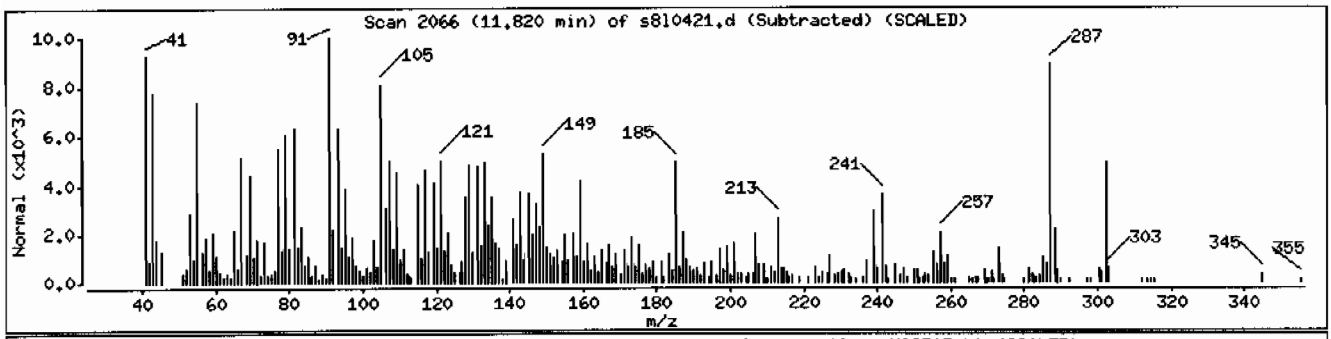

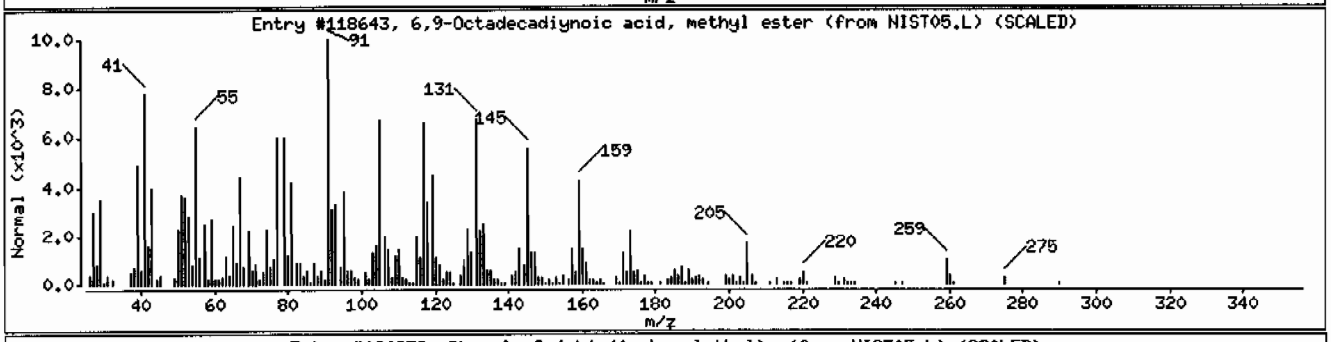

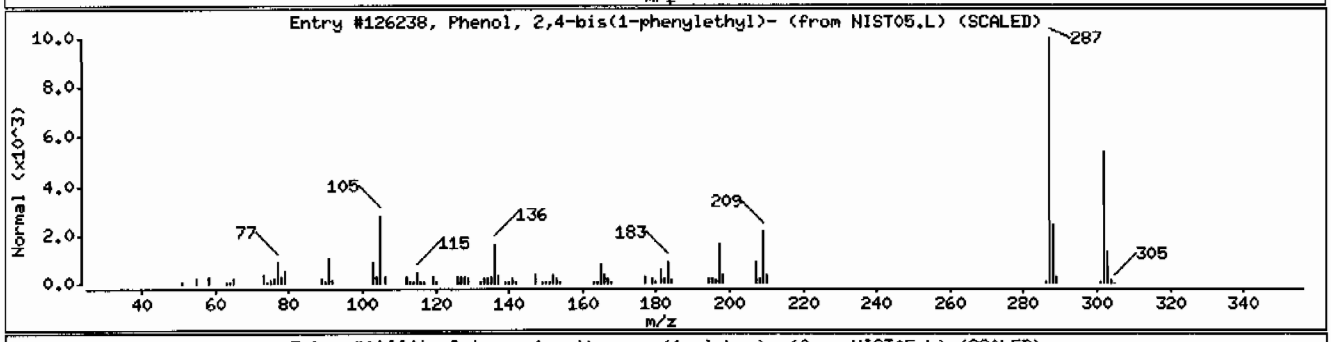

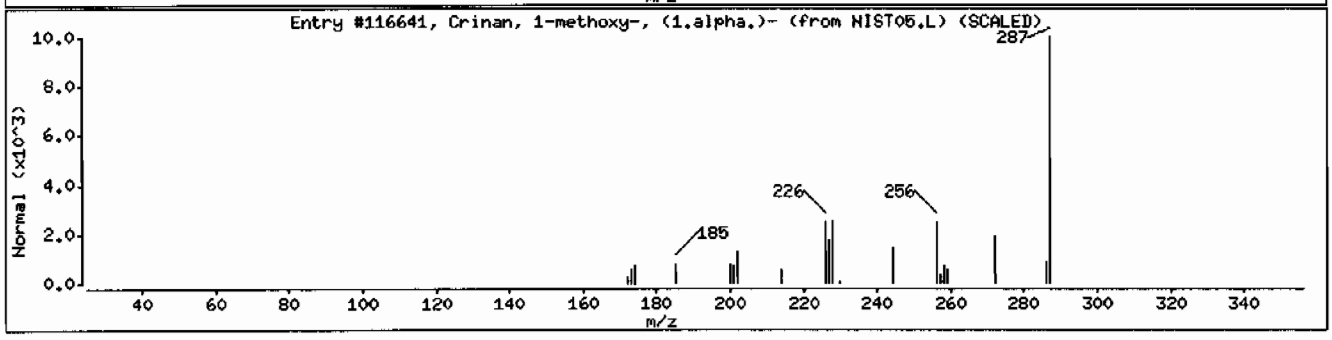

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: |2413180031925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-7-exo-vinylbicyclo[4.2.0]oct-1(	107914-89-6	NIST05.L	21954	35	C11H16	148
Pheneturide	90-49-3	NIST05.L	61046	15	C11H14N2O2	206
Pyridine, 3-butyl-	539-32-2	NIST05.L	15050	11	C9H13N	135

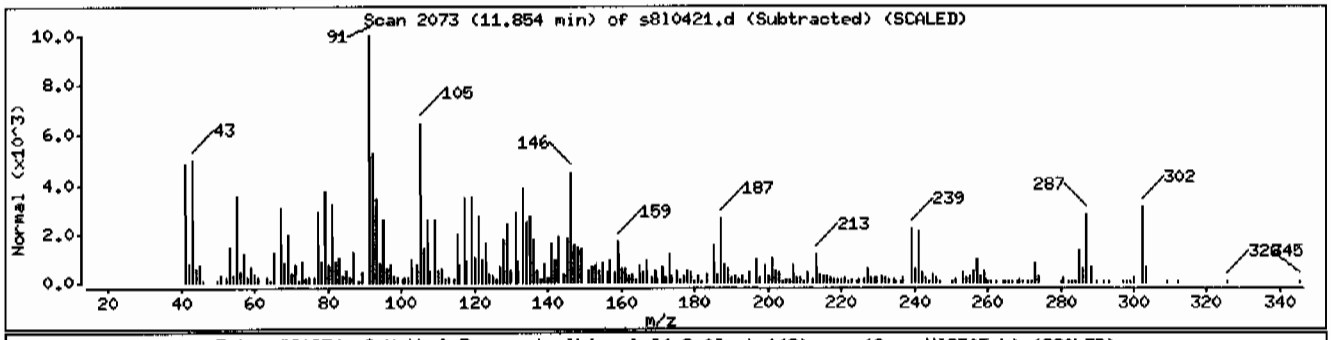

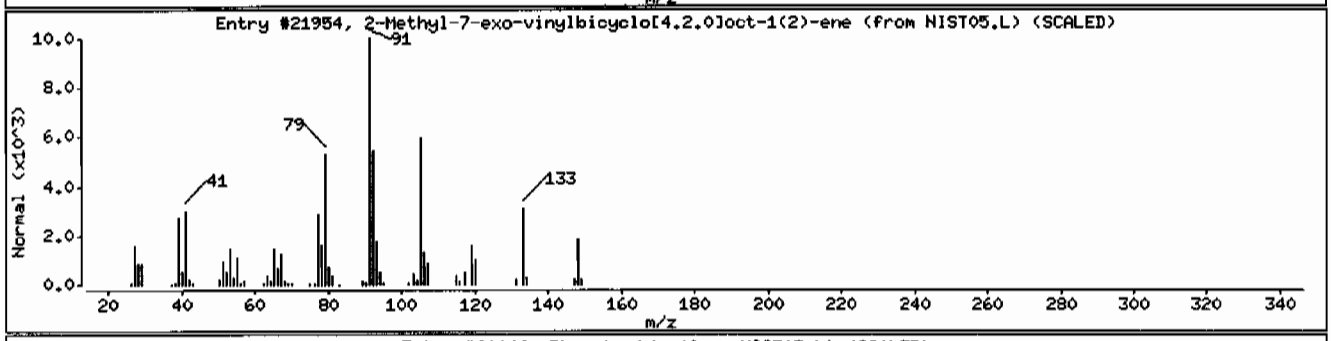

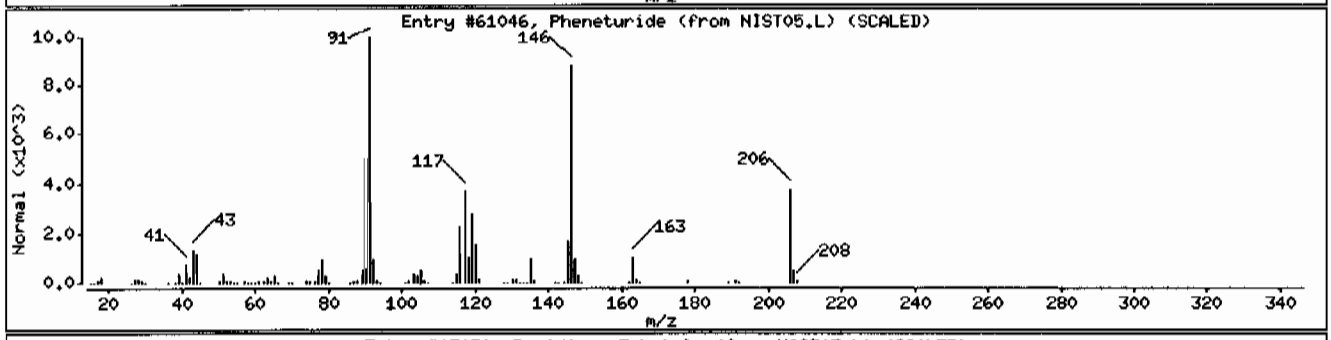

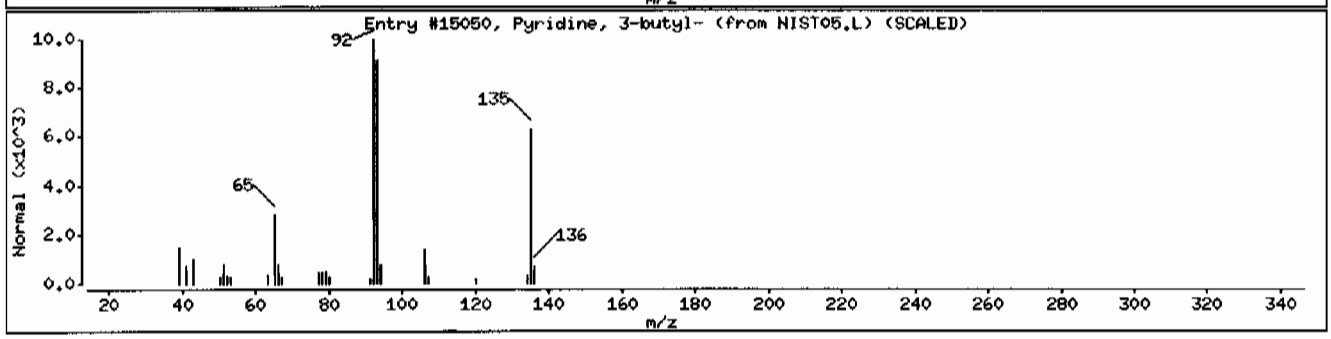

Data File: /chem/HSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 Instrument: HSD8.i

Sample Info: |2413180031925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	90	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	81	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	76	C20H28O2	300

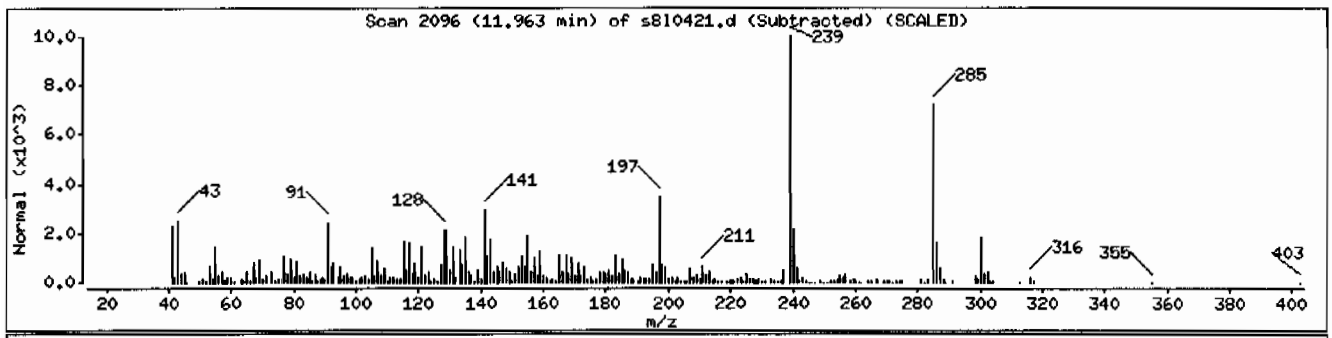

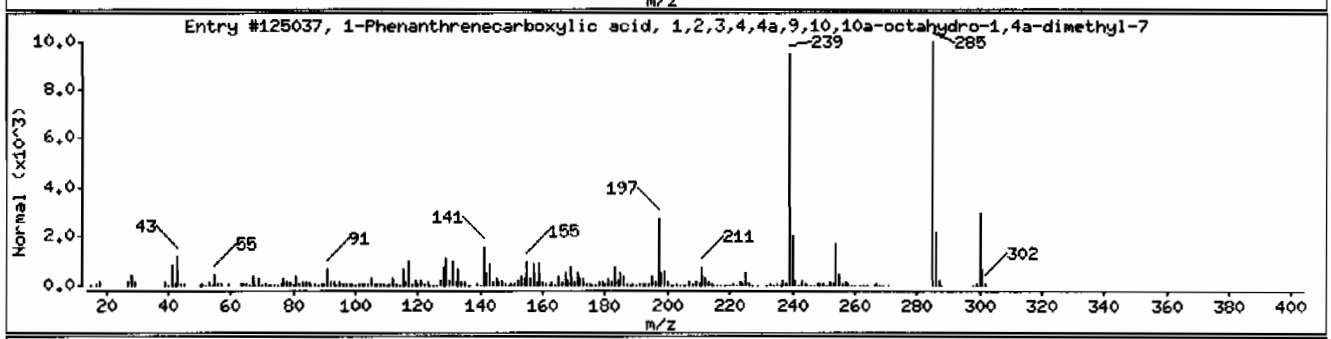

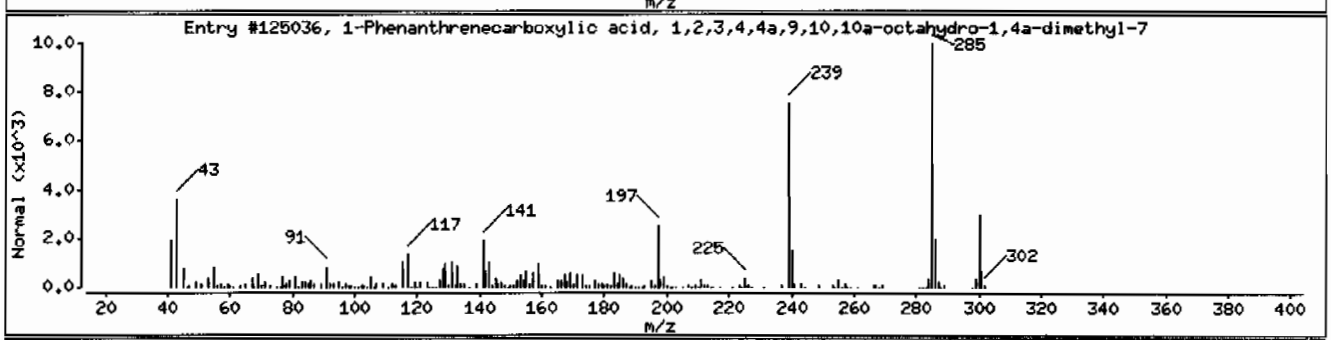

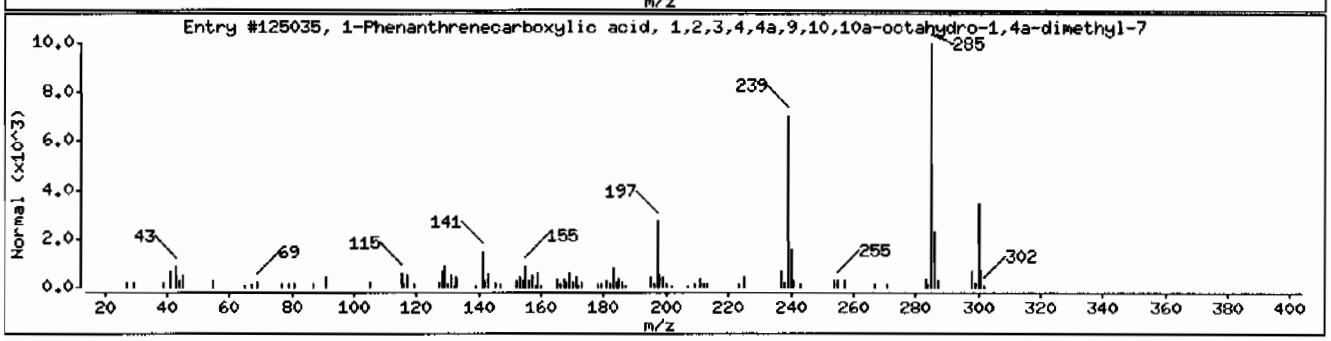

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 Instrument: MSD8.i

Sample Info: 1241318003192563711|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonadecane	629-92-5	NIST05.L	104271	83	C19H40	268
Hexadecane	544-76-3	NIST05.L	76088	80	C16H34	226
Eicosane	112-95-8	NIST05.L	113489	74	C20H42	282

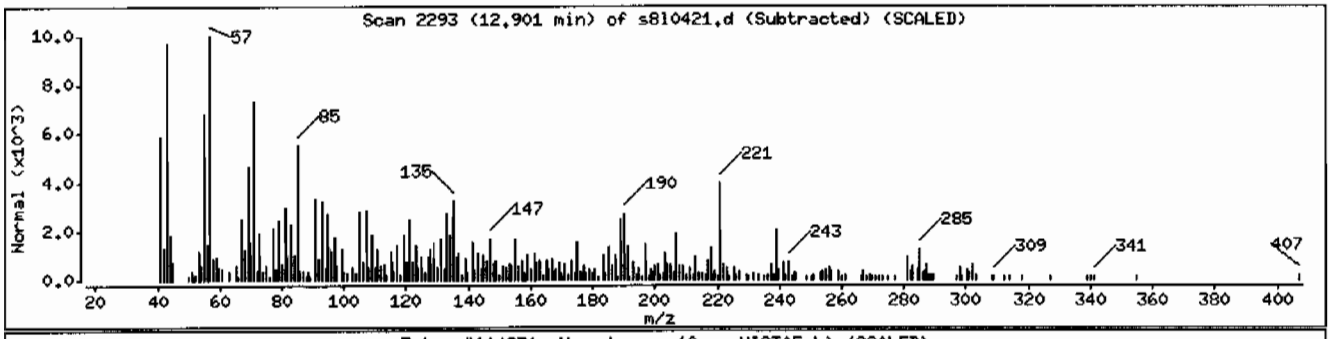

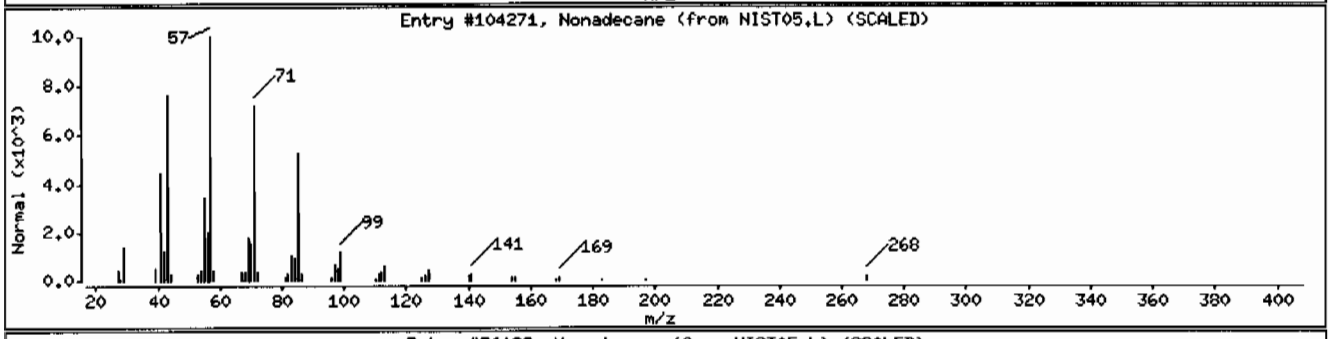

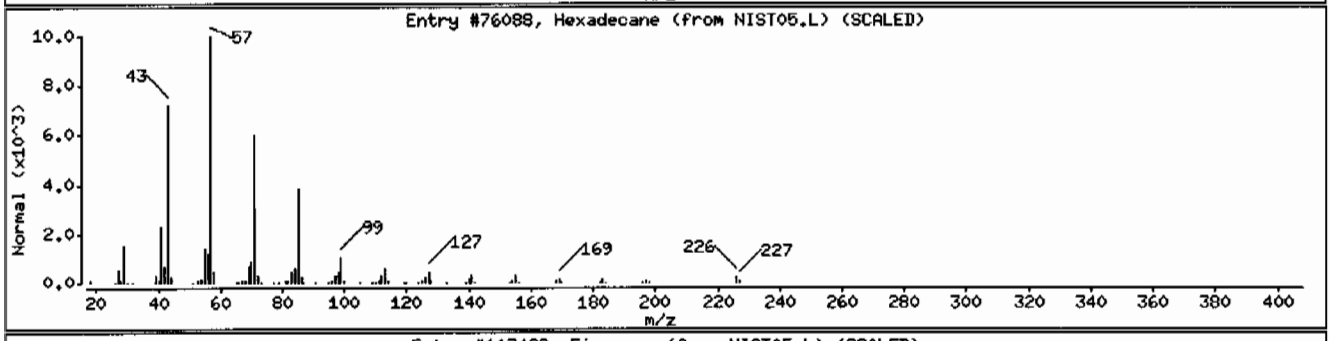

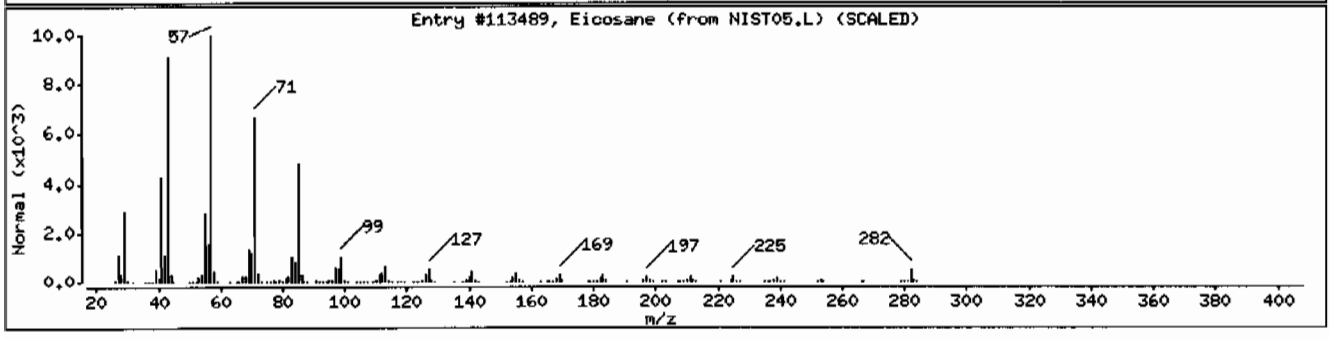

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 Instrument: MSD8.i

Sample Info: 1241318003192563711ISVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Z-5-Nonadecene	1000131-11-8	NIST05.L	102861	46	C19H38	266
1-Nonadecene	18435-45-5	NIST05.L	102860	46	C19H38	266
Cyclohexane, 1,2-dimethyl-3-pentyl-4-pro	62376-17-4	NIST05.L	74543	38	C16H32	224

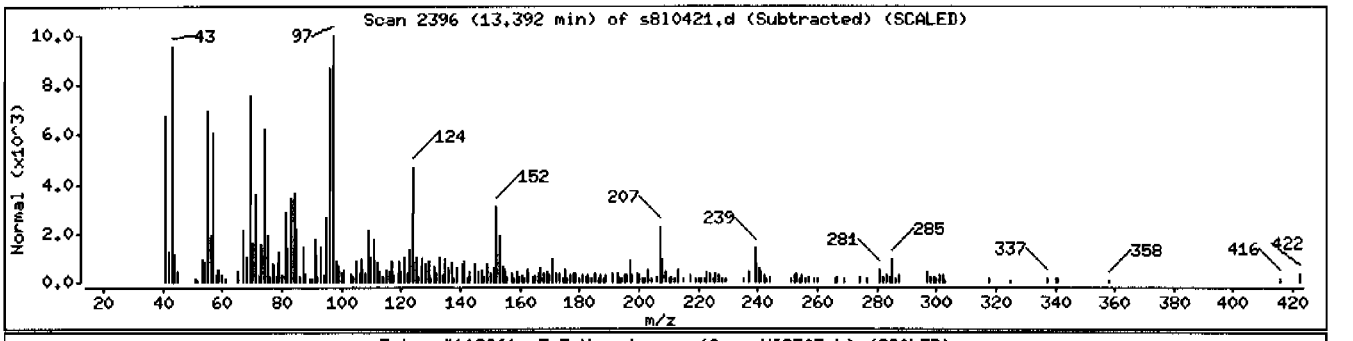

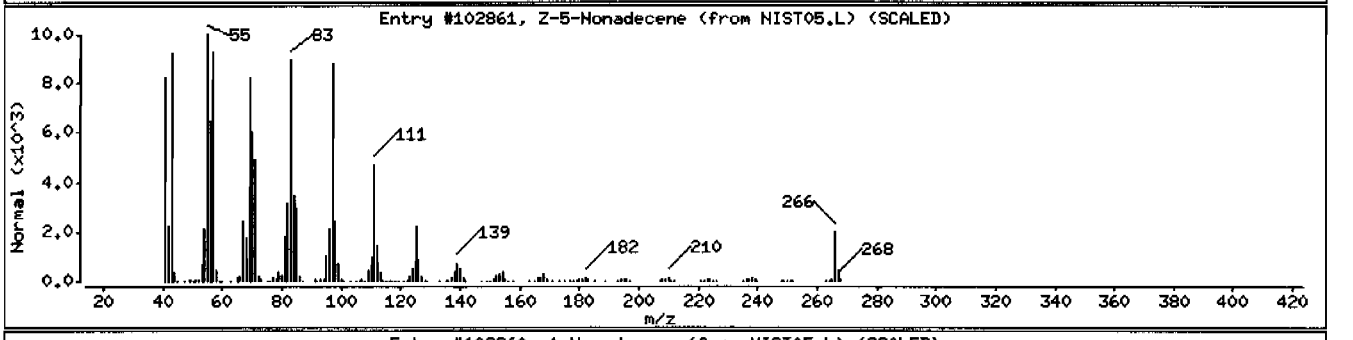

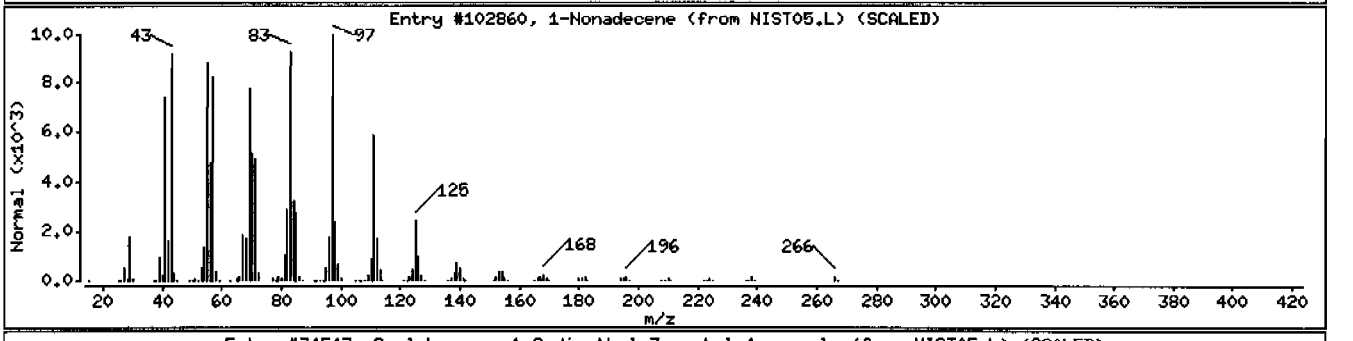

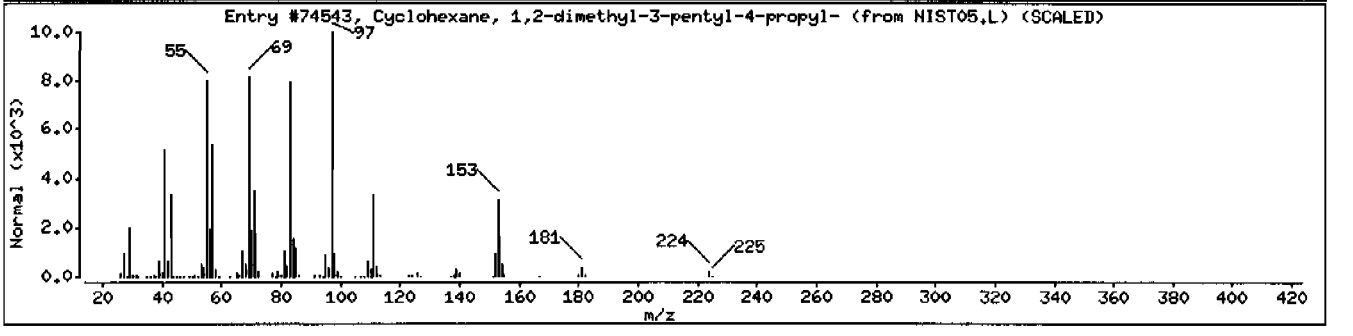

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 Instrument: MSD8.i

Sample Info: |24131800319256371|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 2,4-diisopropyl-1,1-dimethy	1000149-60-5	NIST05.L	54561	43	C14H28	196
Cyclohexane, 1,2-dimethyl-3-pentyl-4-pro	62376-17-4	NIST05.L	74543	41	C16H32	224
3-Hexadecene, (Z)-	34303-81-6	NIST05.L	74528	35	C16H32	224

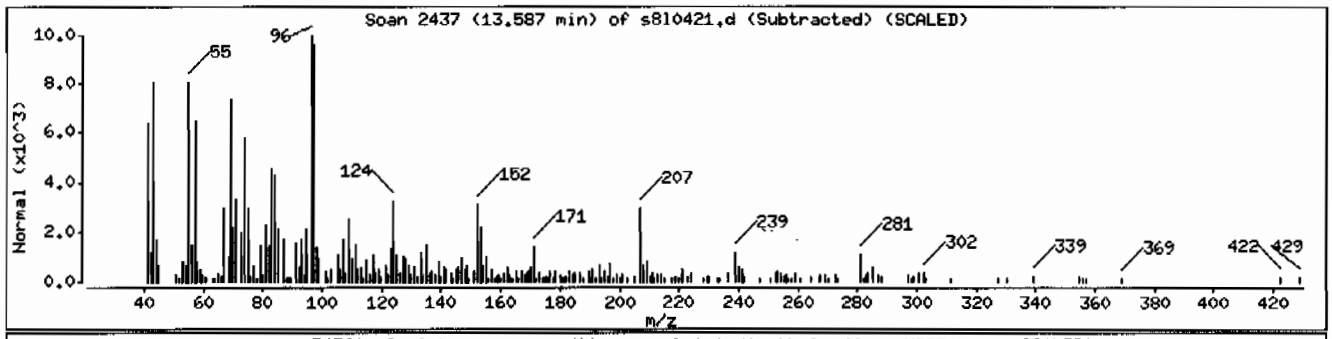

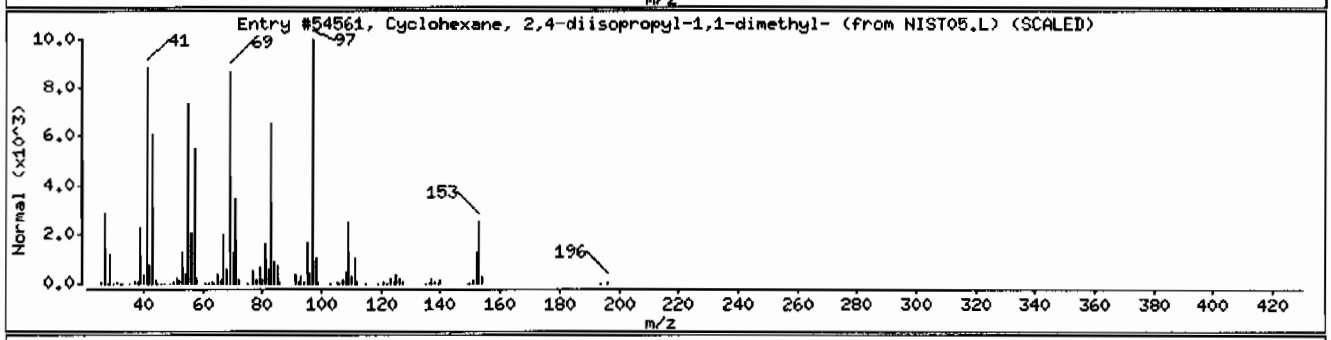

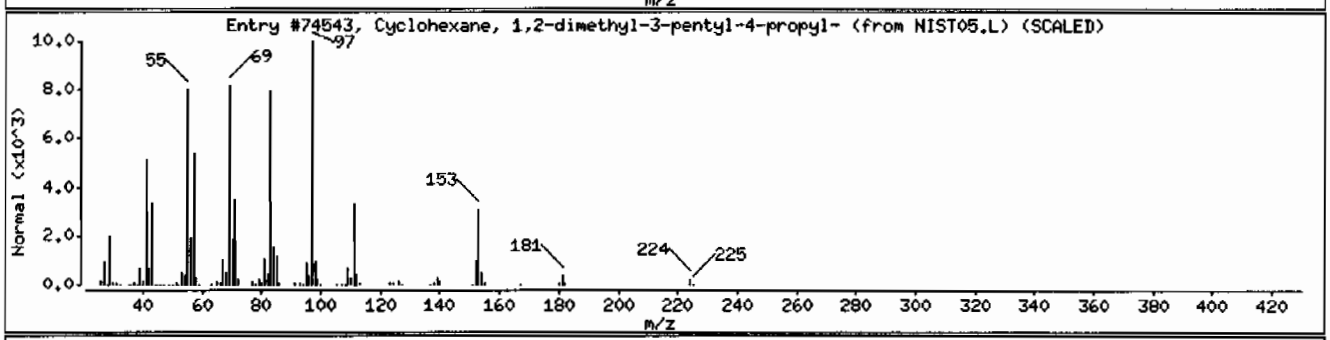

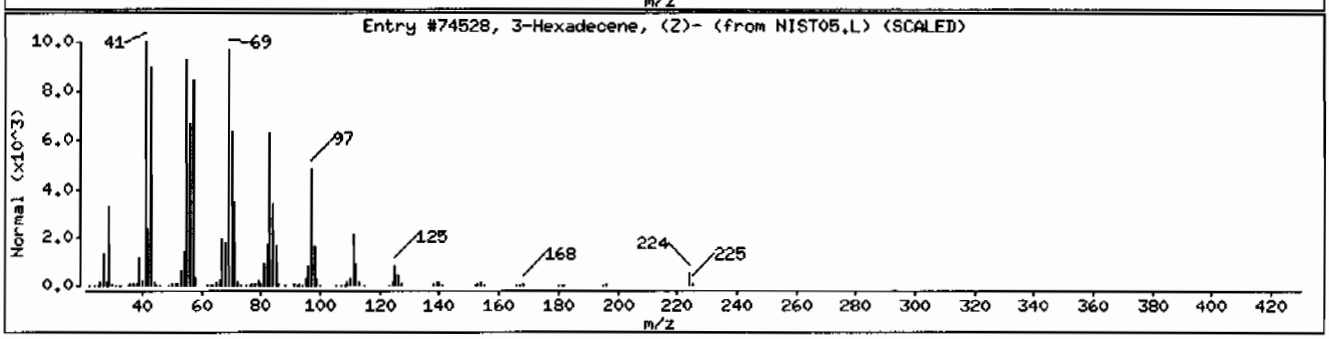

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: |24131800319256371|ISVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Heptadecane	629-78-7	NIST05.L	85523	74	C17H36	240
Heptadecane	629-78-7	NIST05.L	85525	64	C17H36	240
Heptadecane	629-78-7	NIST05.L	85524	64	C17H36	240

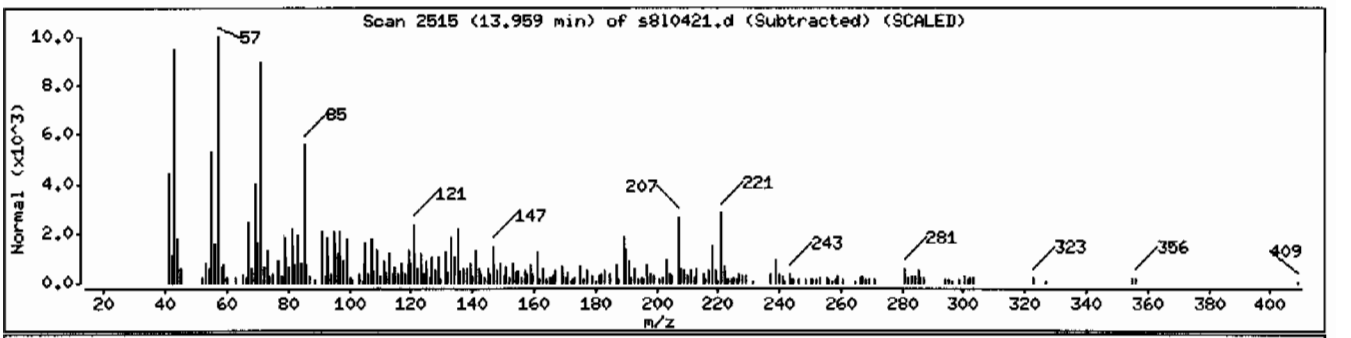

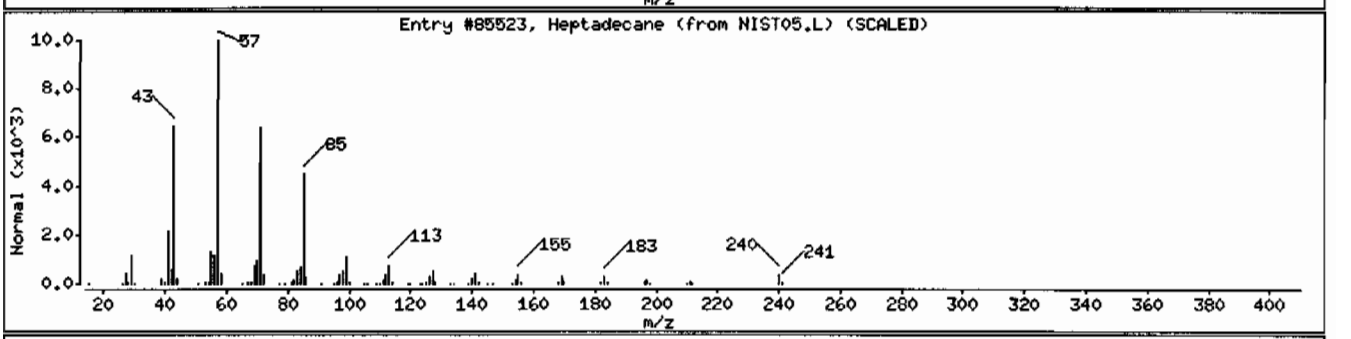

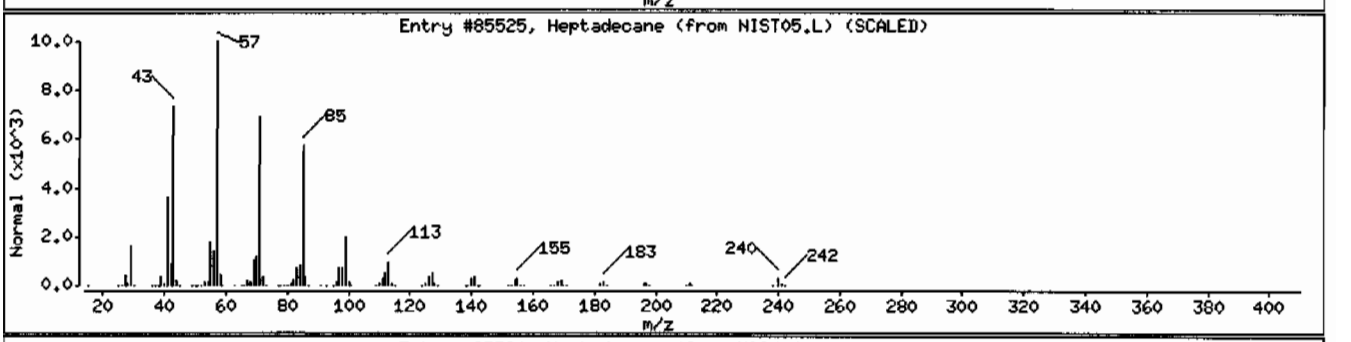

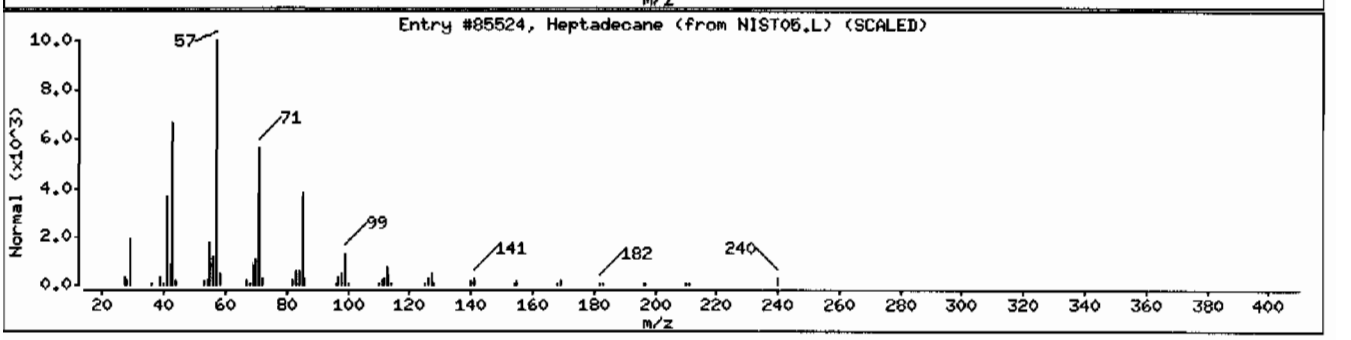

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620

Instrument: MSD8.i

Sample Info: 1241318003192563711|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,4a-Trimethyl-5,6-dimethylenedecahydr	1000193-60-8	NIST05.L	59893	47	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	46	C15H24	204
1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60083	38	C15H24	204

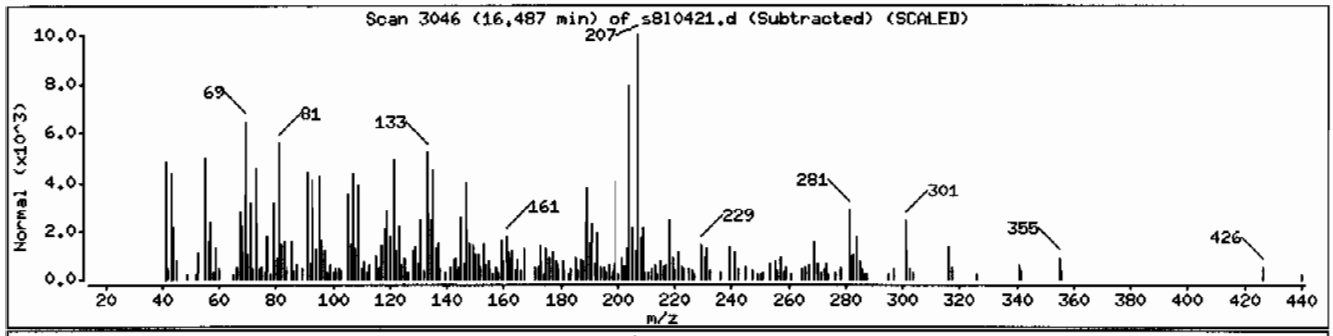

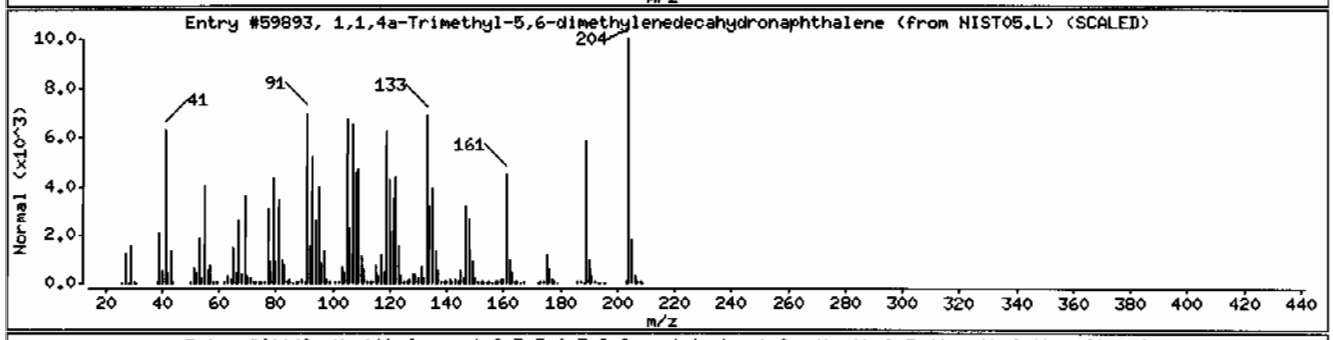

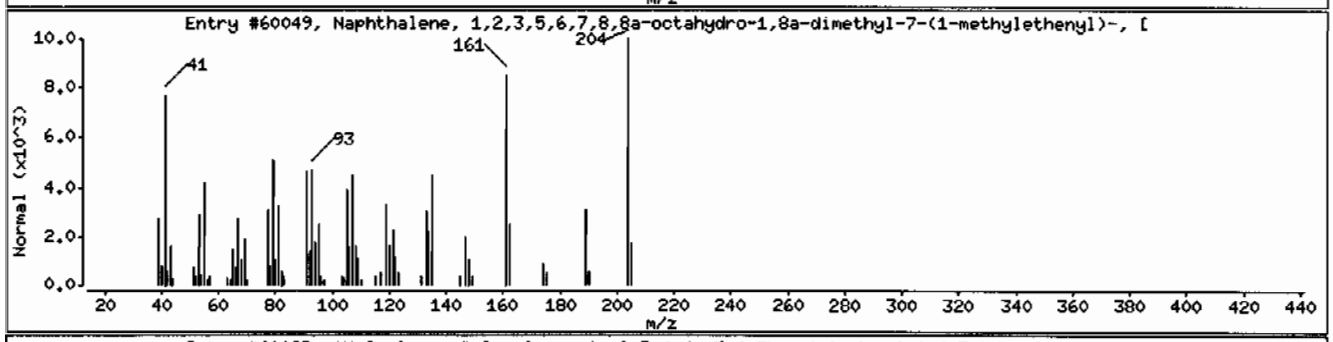

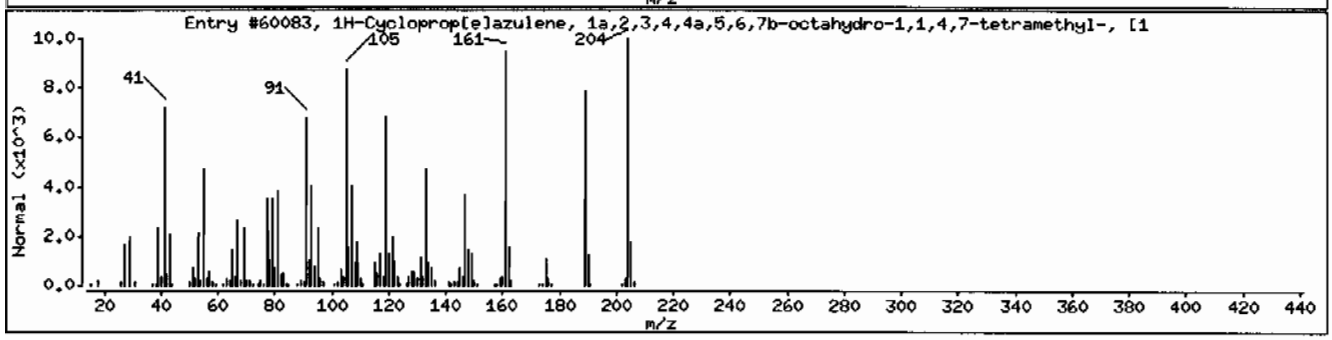

Data File: /chem/MSD8.i/s120409.b/s810421.d

Date : 04-DEC-2009 17:45

Client ID: RE03-09-13620 Instrument: MSD8.i

Sample Info: |2413180031925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholest-4-en-26-oic acid, 3-oxo-	23017-97-2	NIST05.L	174360	64	C27H42O3	414
3-Chloropropionic acid, 2,6-dimethylnon-	1000299-21-8	NIST05.L	95921	52	C14H21ClO2	256
Androst-4-en-3-one, 17-(3-cyclopentyl-1-	58-20-8	NIST05.L	173909	50	C27H40O3	412

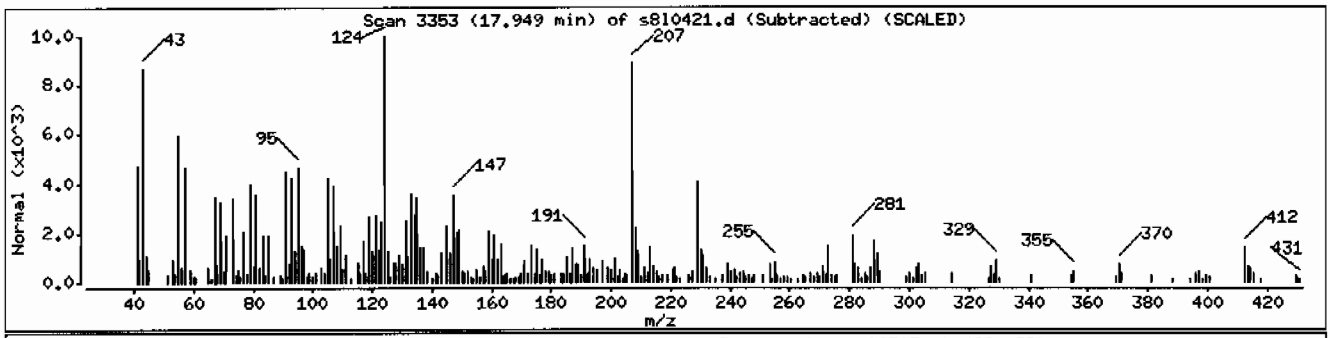

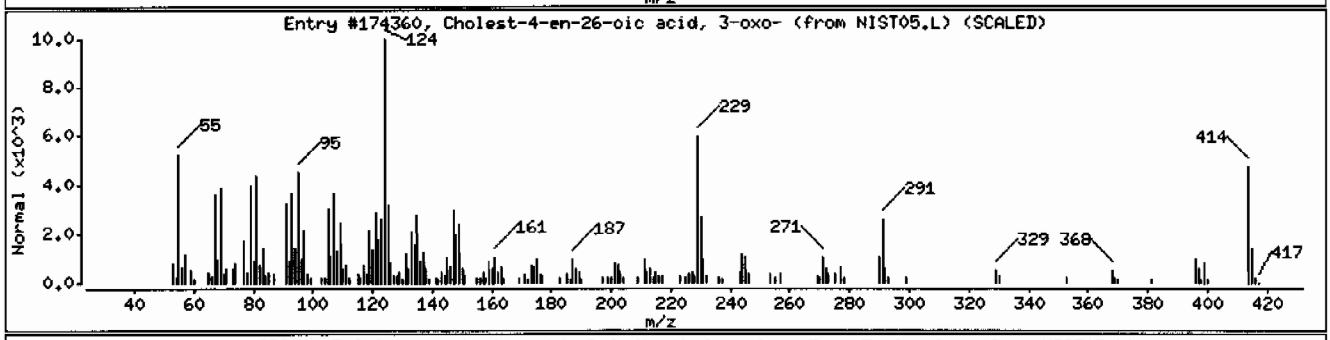

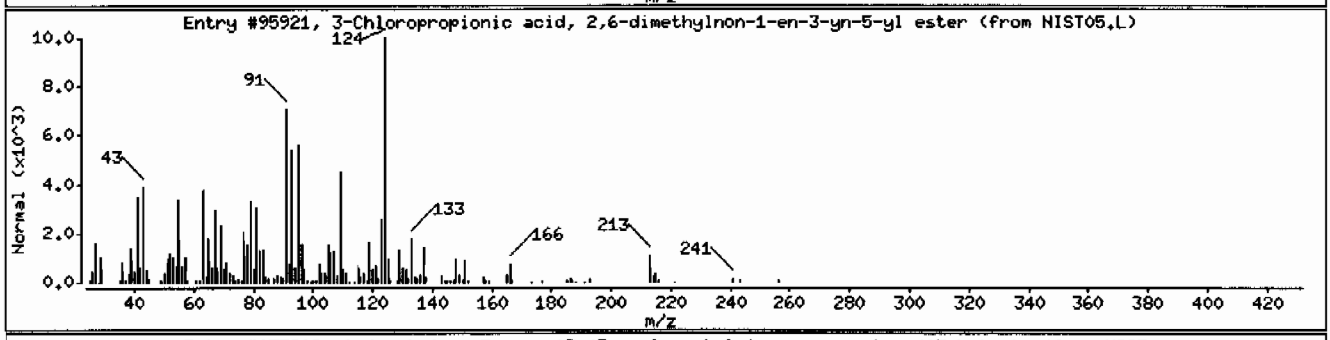

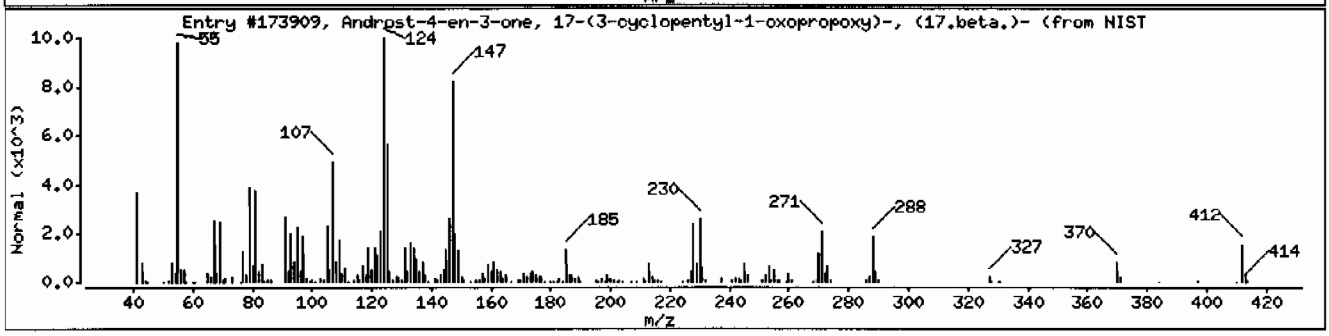

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s810320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.6	348
108-95-2	Phenol	U	348	ug/kg	69.6	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.6	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.6	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.6	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.6	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	87.0	348
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8
110-86-1	Pyridine	U	348	ug/kg	69.6	348
62-53-3	Aniline	U	348	ug/kg	104	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.6	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.6	348
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.6	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.6	348
95-48-7	o-Cresol	U	348	ug/kg	69.6	348
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.6	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.6	348
78-59-1	Isophorone	U	348	ug/kg	69.6	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.6	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.6	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.6	348
65-85-0	Benzoic acid	U	696	ug/kg	174	696
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.6	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.6	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.96	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.6	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.6	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.6	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline	U	348	ug/kg	69.6	348
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	348	ug/kg	69.6	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s8l0320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.6	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8
51-28-5	2,4-Dinitrophenol	U	696	ug/kg	132	696
132-64-9	Dibenzofuran	U	348	ug/kg	69.6	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.6	348
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.6	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.6	348
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.6	348
122-66-7	Azobenzene	U	348	ug/kg	69.6	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.6	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.6	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.96	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.6	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.6	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	J	100	ug/kg	69.6	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.6	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.6	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	272	ug/kg		JA
80-56-8	.alpha.-Pinene	3.96	176	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s8l0320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	4.53	189	ug/kg	94	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	203	ug/kg	98	NJ
	Unknown	11.87	151	ug/kg		J
	Unknown	11.9	238	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.01	159	ug/kg	90	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810320.d
Lab Smp Id: 241318008 Client Smp ID: RE03-09-13621
Inj Date : 03-DEC-2009 18:39
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318008|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	4.64490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	201140	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	735762	40.0000	
* 46 Acenaphthene-d10	164	7.716	7.720	(1.000)	430282	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	773051	40.0000	
* 91 Chrysene-d12	240	12.259	12.268	(1.000)	654974	40.0000	
* 98 Perylene-d12	264	14.449	14.458	(1.000)	379729	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.748)	363733	75.7007	2640
$ 5 Phenol-d5	99	4.197	4.201	(0.916)	435043	72.1279	2510
$ 20 Nitrobenzene-d5	82	5.111	5.120	(0.874)	213478	39.9836	1390
$ 39 2-Fluorobiphenyl	172	6.977	6.982	(0.904)	428731	36.0597	1260
$ 60 2,4,6-Tribromophenol	329	8.563	8.563	(1.110)	116842	58.7885	2050
$ 81 p-Terphenyl-d14	244	11.035	11.030	(0.900)	529357	43.4379	1510

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
93 bis(2-Ethylhexyl)phthalate	149	12.239	12.244	(0.998)	33044	2.88371	100(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s810320.d
Report Date: 12/04/2009 06:32
Lab. ID: 241318008 SampleType: SAMPLE
Injection Date: 03-DEC-2009 18:39
Operator: nagl Instrument: MSD8.i
Sample Info: |241318008|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	26386	4.20	4.27	80-120	100	(T)
93	3577	4.25	4.27	227-287	14	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	34628	5.11	4.96	80-120	100	(T)
42	16853	5.11	4.96	25- 85	49	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	57963	7.72	7.48	80-120	100	(T)
63	320	7.72	7.48	33- 93	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	57963	7.72	7.91	80-120	100	(T)
89	999	7.71	7.91	47-107	2	(QT)
63	320	7.72	7.91	20- 80	1	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	353	8.55	8.35	80-120	100	(T)
105	1229	8.56	8.35	11- 71	347	(QT)
51	745	8.56	8.35	11- 71	211	(QT)
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	33044	12.24	12.24	80-120	100	( )
167	10163	12.24	12.24	0- 59	31	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810320.d
Lab Smp Id: 241318008 Client Smp ID: RE03-09-13621
Inj Date : 03-DEC-2009 18:39
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318008|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	4.64490	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1223145	40.000
* 46 Acenaphthene-d10	7.716	1833136	40.000
* 91 Chrysene-d12	12.259	1914467	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.192	238536	7.80073410	272	0		0	10
.alpha.-Pinene				CAS #: 80-56-8			
3.963	154578	5.05508677	176	97	NIST05.L	15178	10
3-Carene				CAS #: 13466-78-9			
4.535	166094	5.43170678	189	94	NIST05.L	15151	10
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
7.320	266612	5.81762228	202	98	NIST05.L	60023	46
Unknown				CAS #:			
11.868	206987	4.32470014	150	0		0	91
Unknown				CAS #:			
11.901	327703	6.84686839	238	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 1740-19-8			
12.006	218366	4.56244490	159	90	NIST05.L	125034	91

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621

Sample Info: |24131800819256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1

Column diameter: 0.20

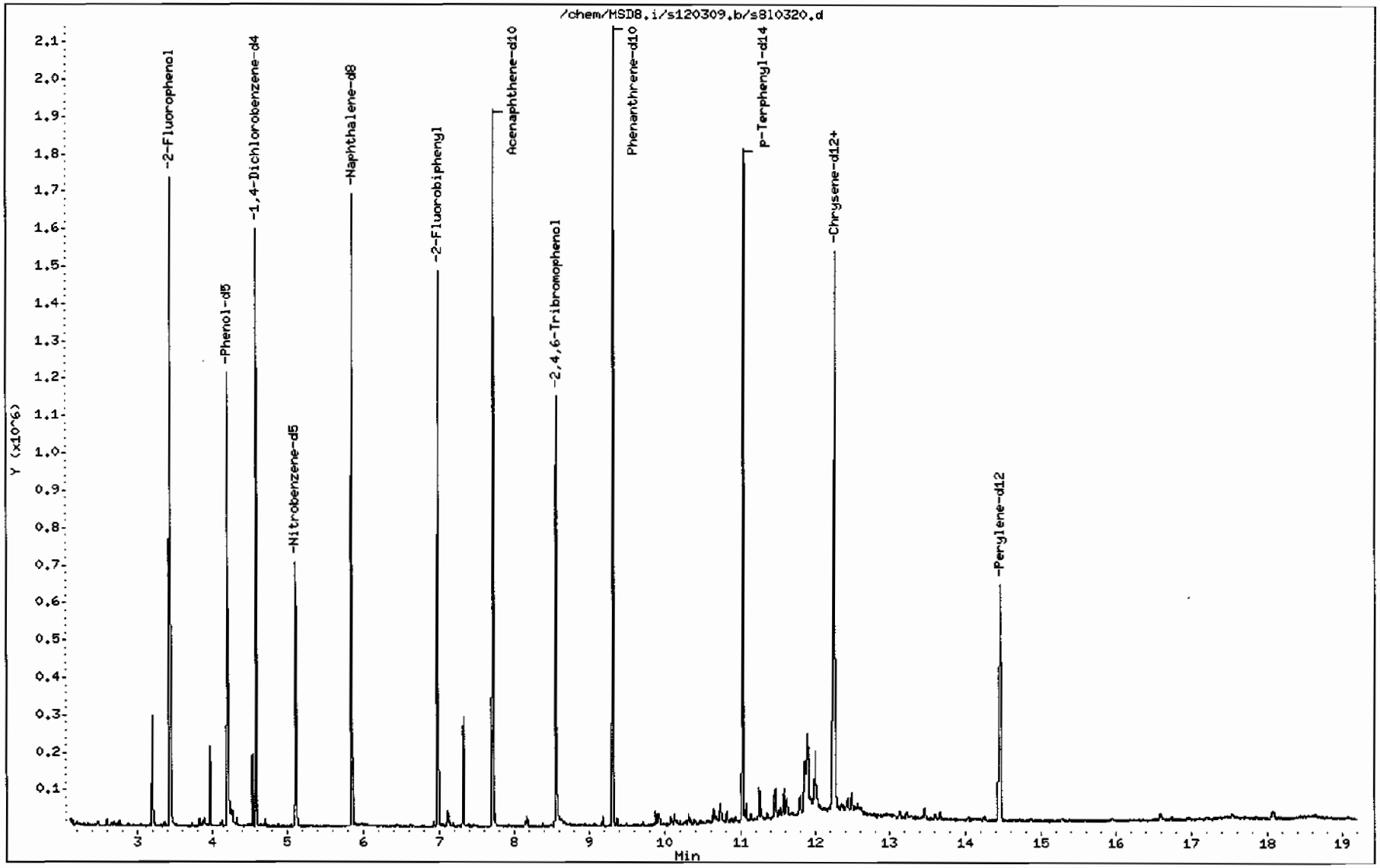

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621

Instrument: MSD8.i

Sample Info: |24131800819256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 100 ug/Kg

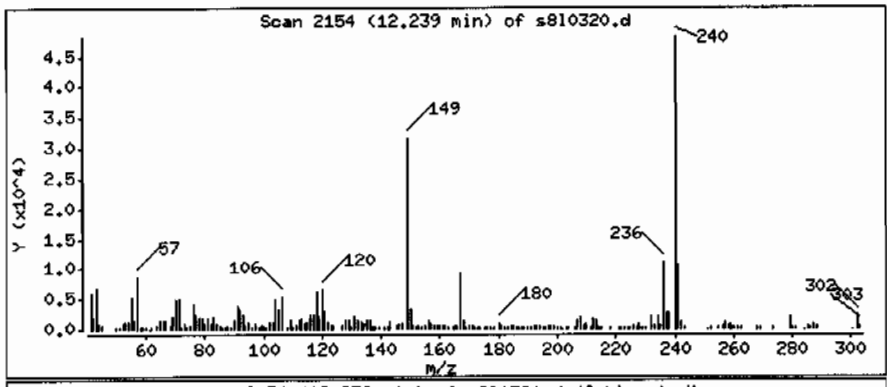

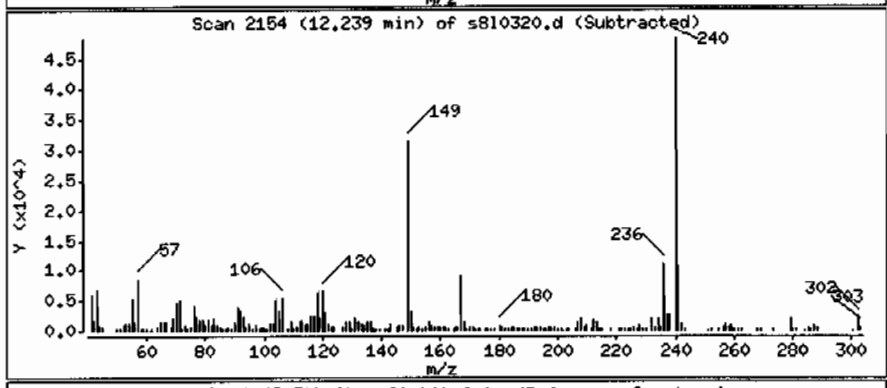

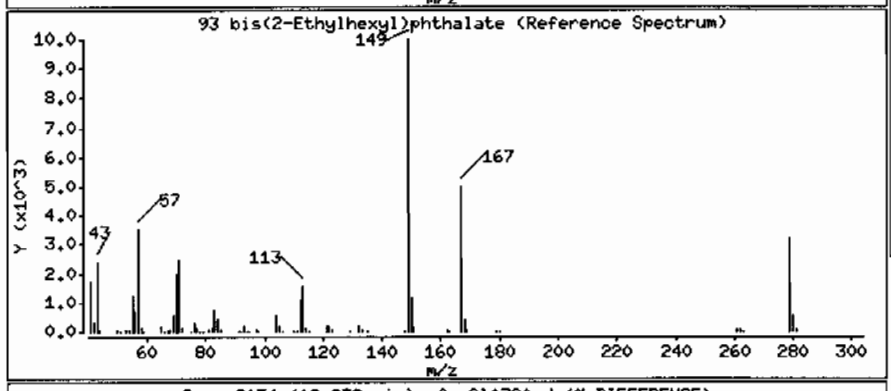

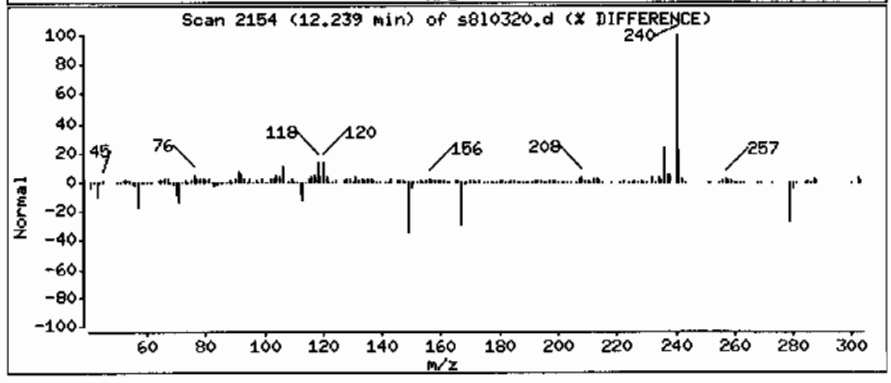

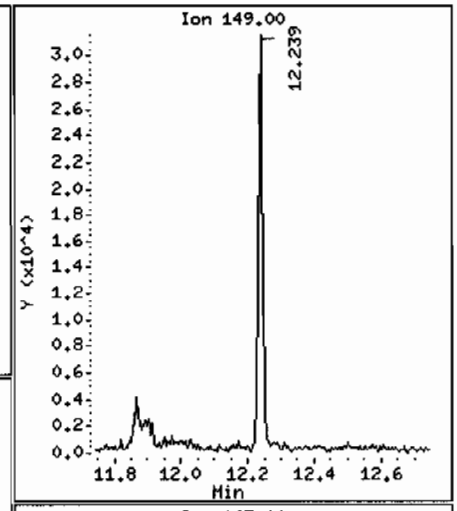

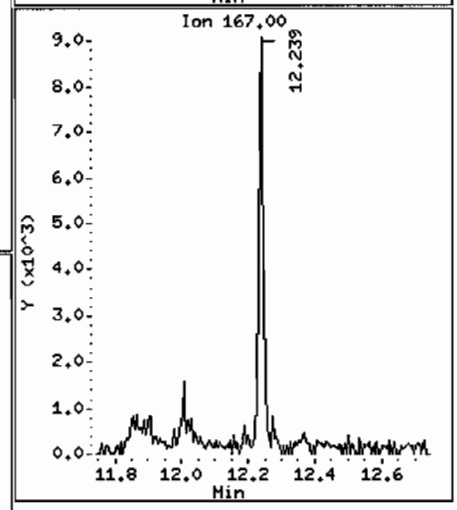

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621 Instrument: MSD8.i

Sample Info: |24131800819256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3944	38	C4H7NO2	101

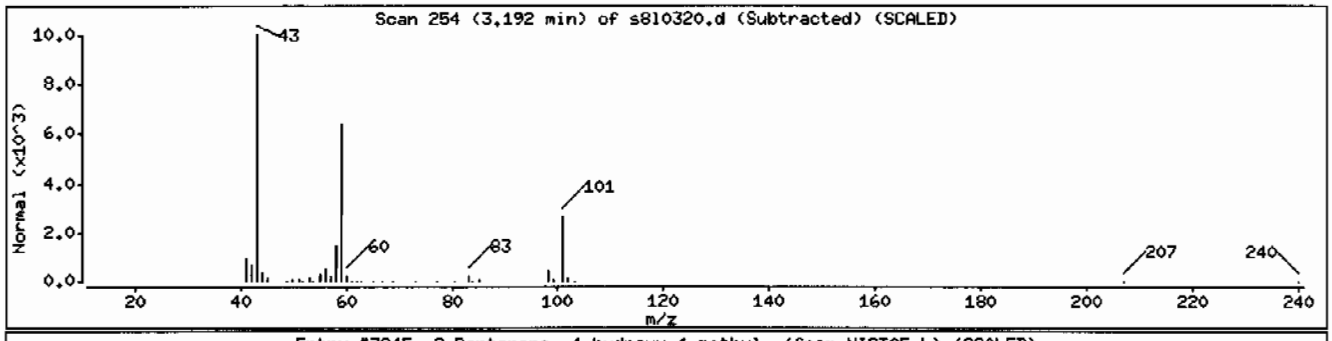

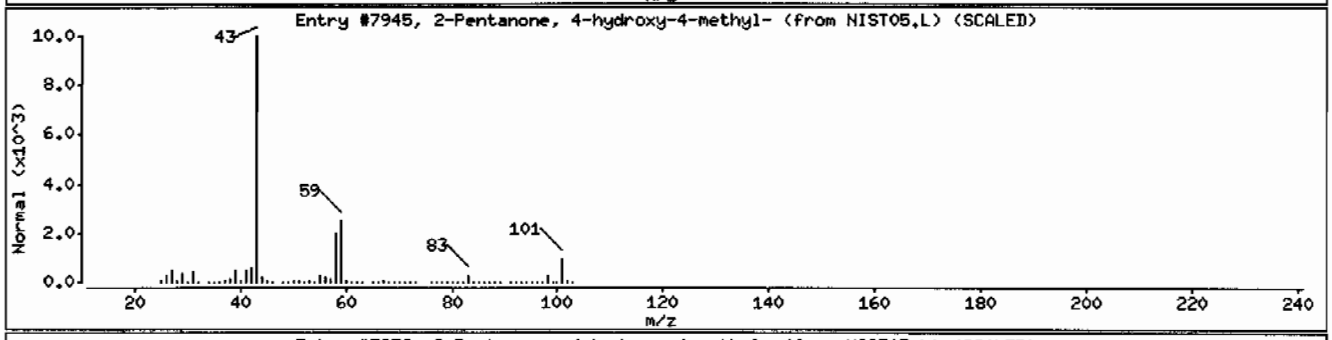

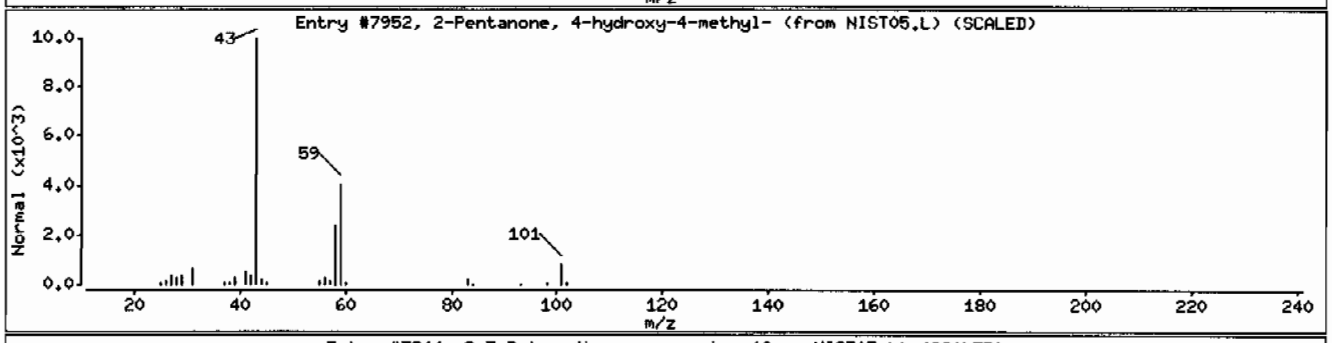

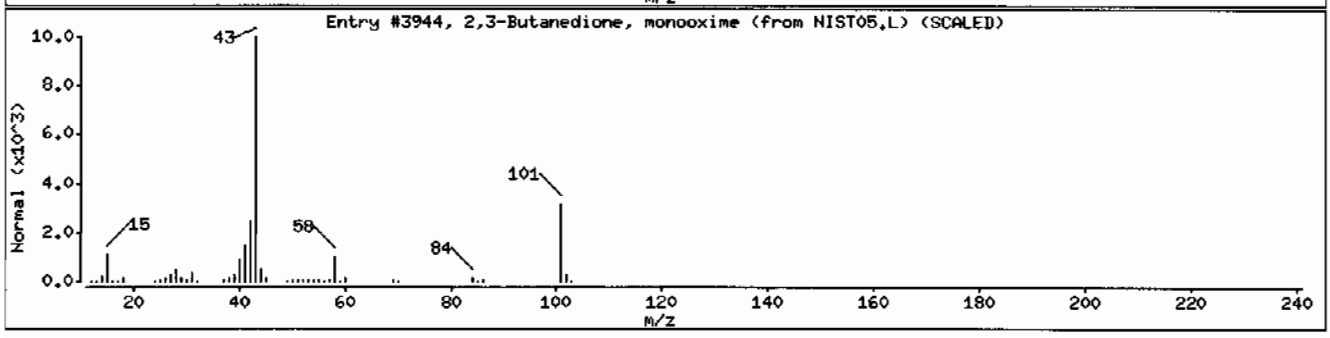

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621

Instrument: MSD8.i

Sample Info: 1241318008192563711ISVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.alpha.-Pinene	80-56-8	NIST05.L	15178	97	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	96	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136

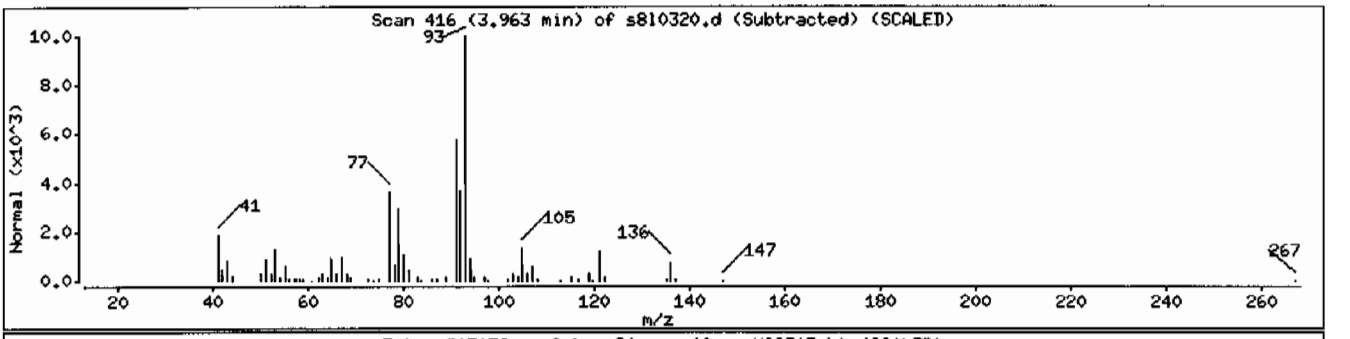

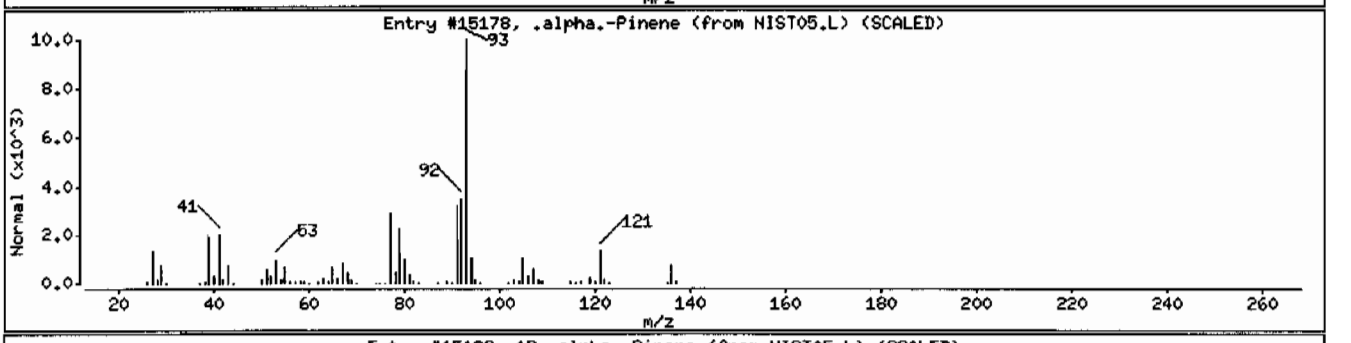

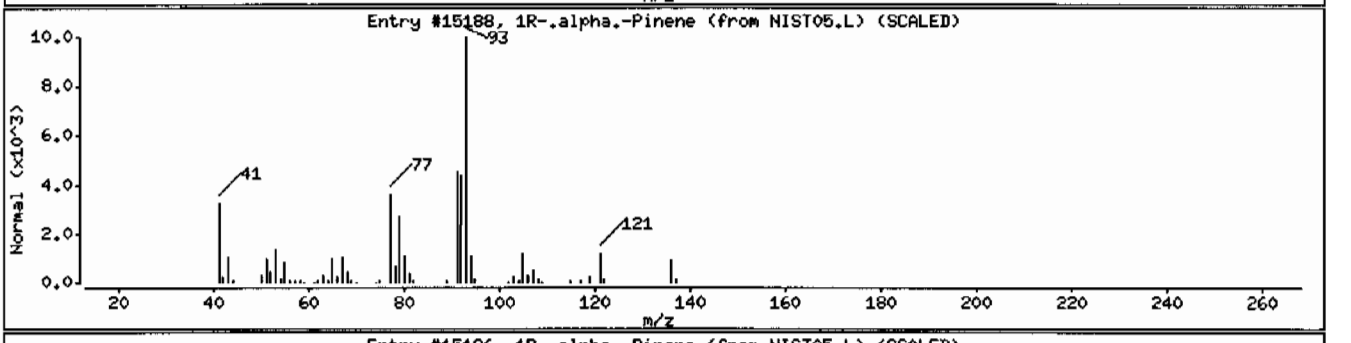

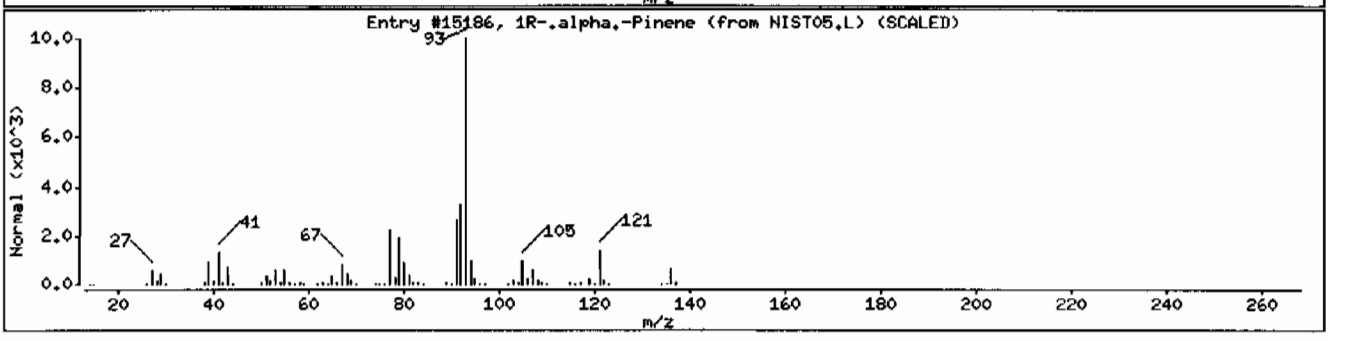

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621 Instrument: MSD8.i

Sample Info: |24131800|925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15151	94	C10H16	136
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST05.L	15385	94	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	94	C10H16	136

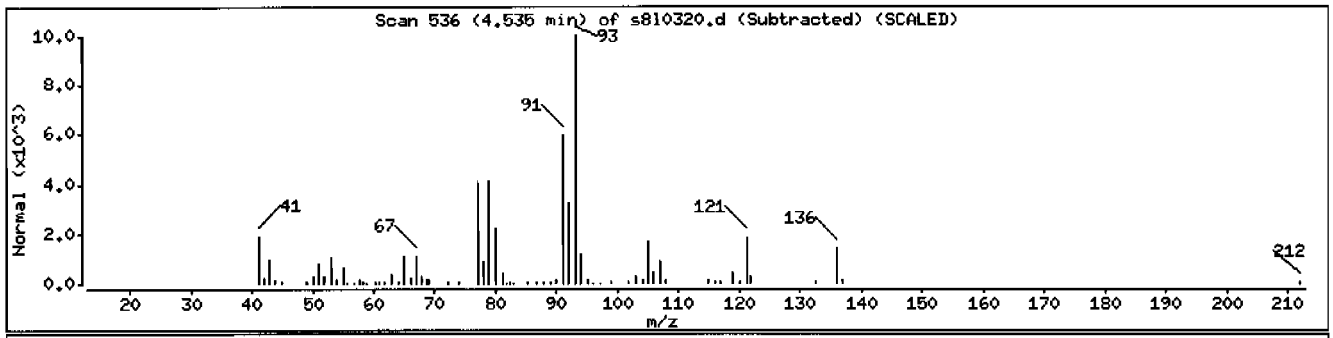

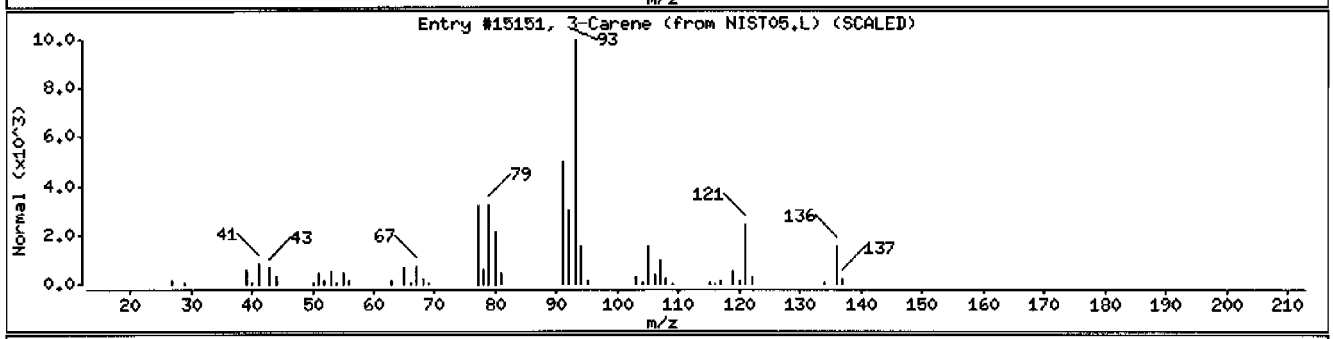

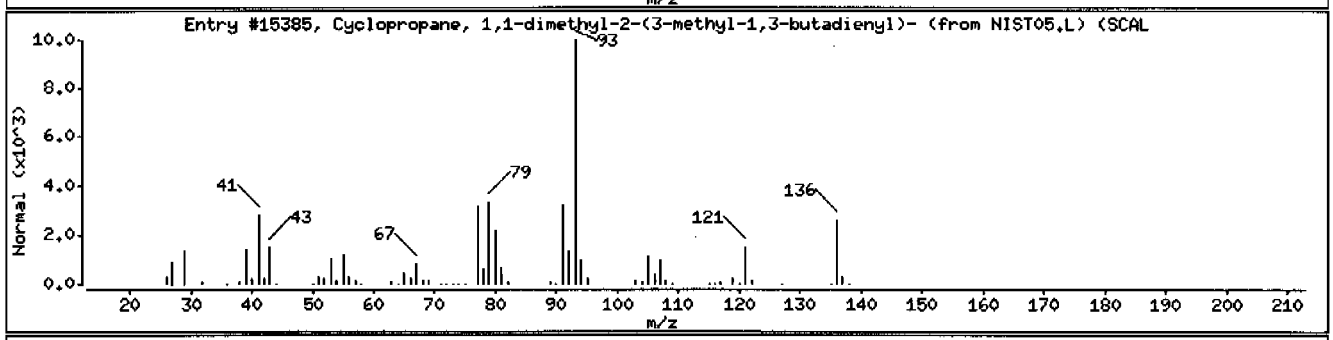

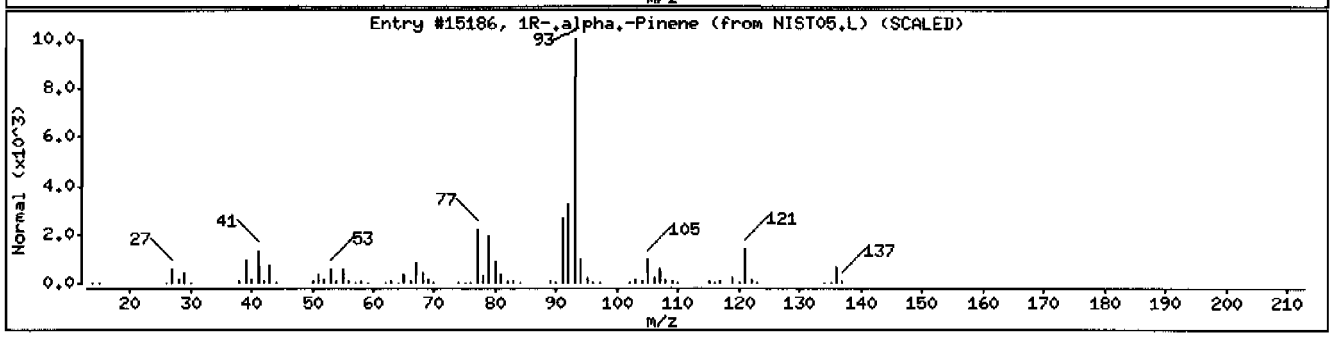

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621 Instrument: MSD8.i

Sample Info: 1241318008|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	97	C15H24	204
Seychellene	20085-93-2	NIST05.L	59790	94	C15H24	204

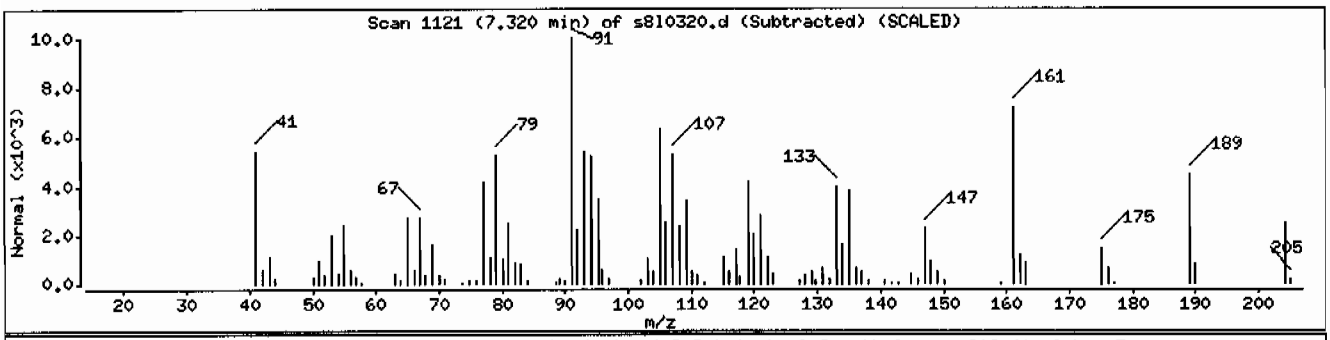

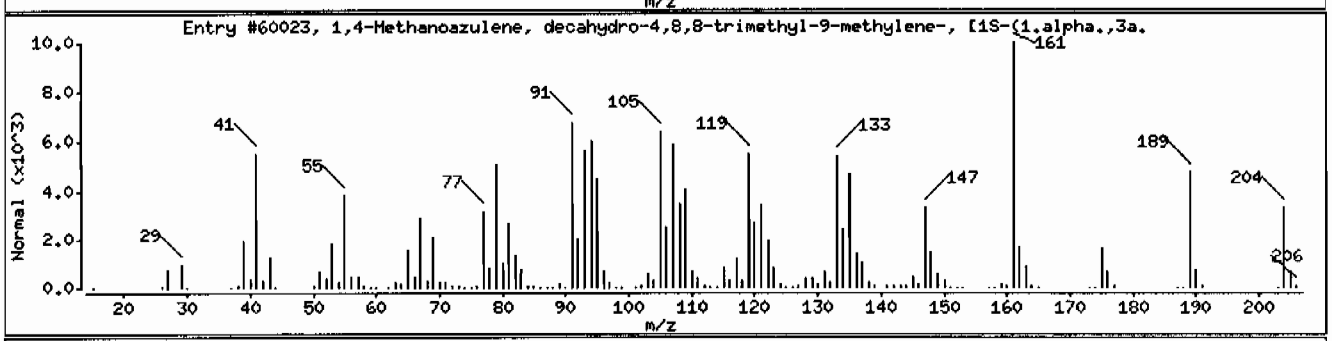

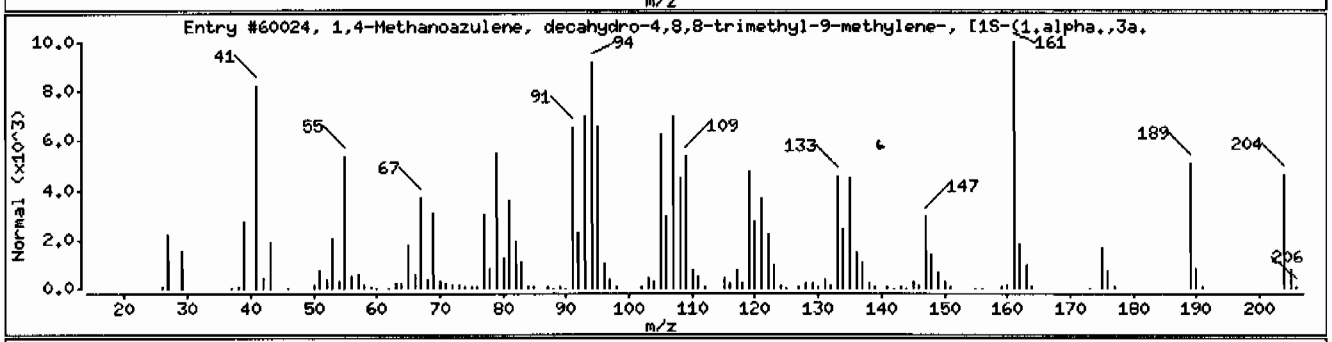

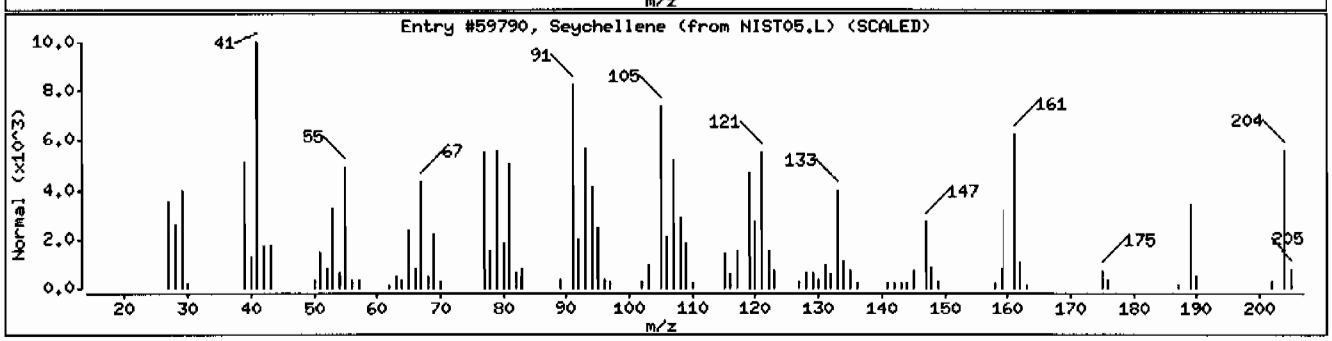

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621

Instrument: MSD8.i

Sample Info: |2413180081925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	46	C22H22O	302
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	125840	46	C16H14O6	302
Thiophene-2-carbonitrile, 5-tert-butyl-3	1000268-00-9	NIST05.L	125862	46	C16H15ClN2S	302

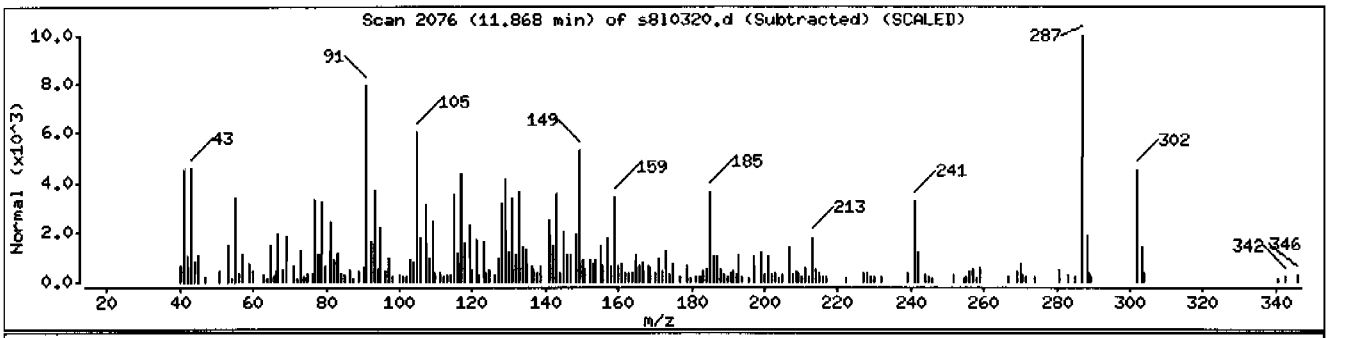

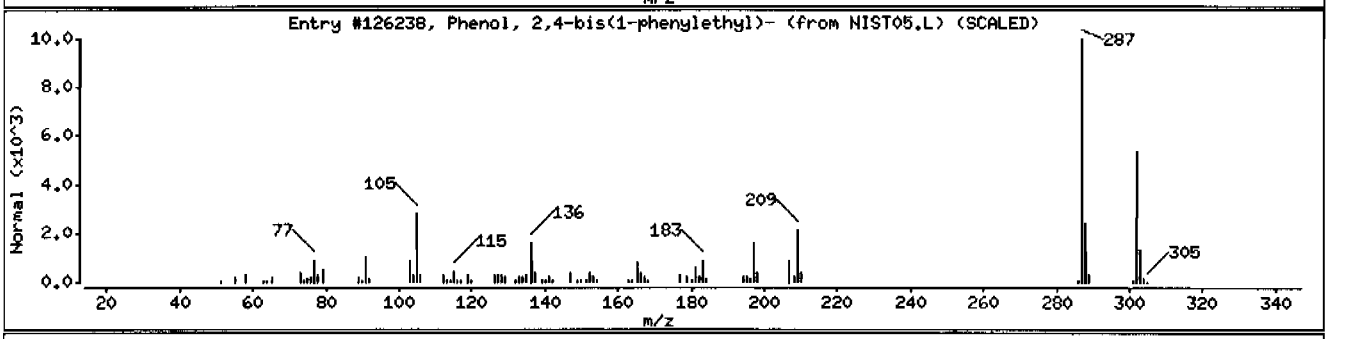

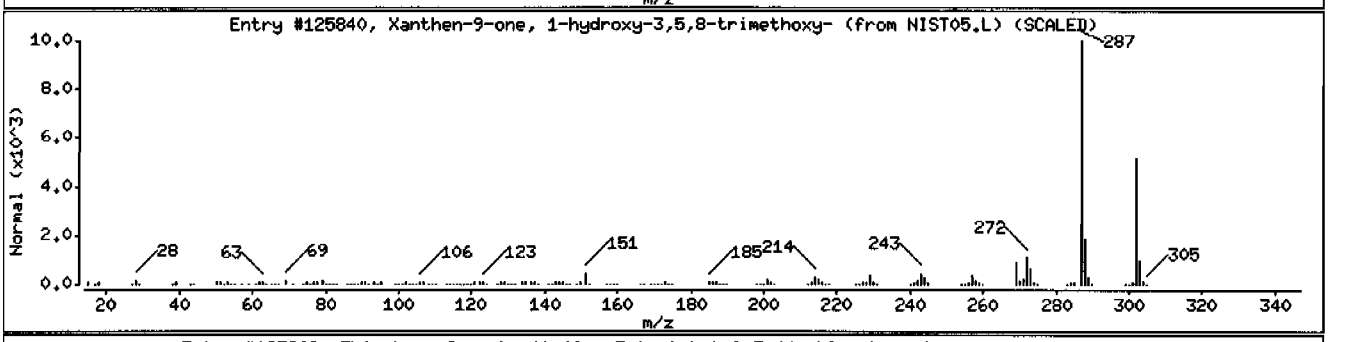

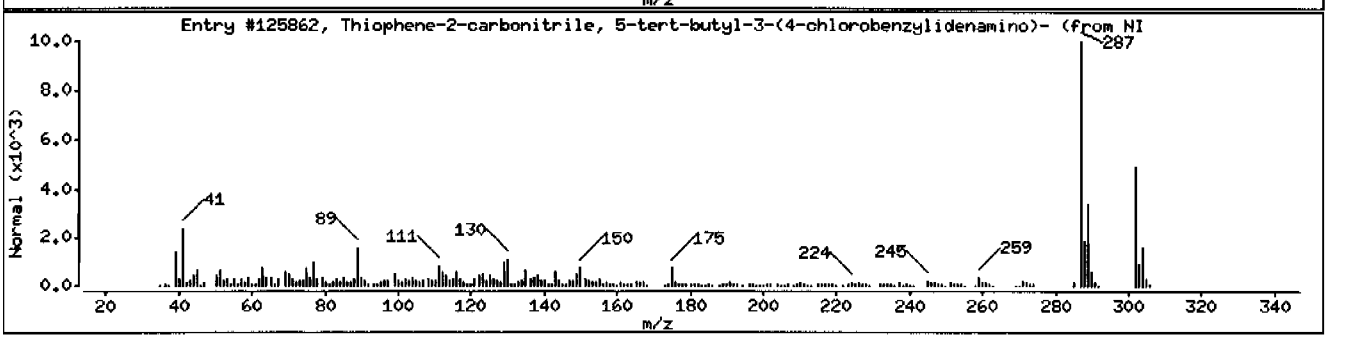

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621 Instrument: MSD8.i

Sample Info: 1241318008|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dispiro[2.1.2.4]undecane, 8-methylene-	61567-08-9	NIST05.L	30873	27	C12H18	162
4,4-Dimethyl-1,1a,3a,4,5,6-hexahydrocycl	264628-27-5	NIST05.L	21964	18	C11H16	148
5,12-Dioxapentacyclo[7.5.2.0(2.8).0(3.7)	3951-53-9	NIST05.L	117008	15	C15H1206	288

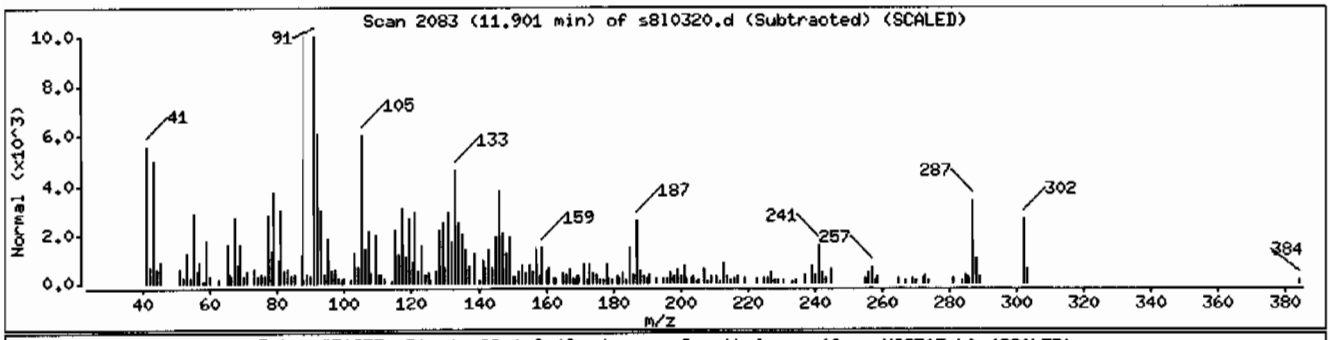

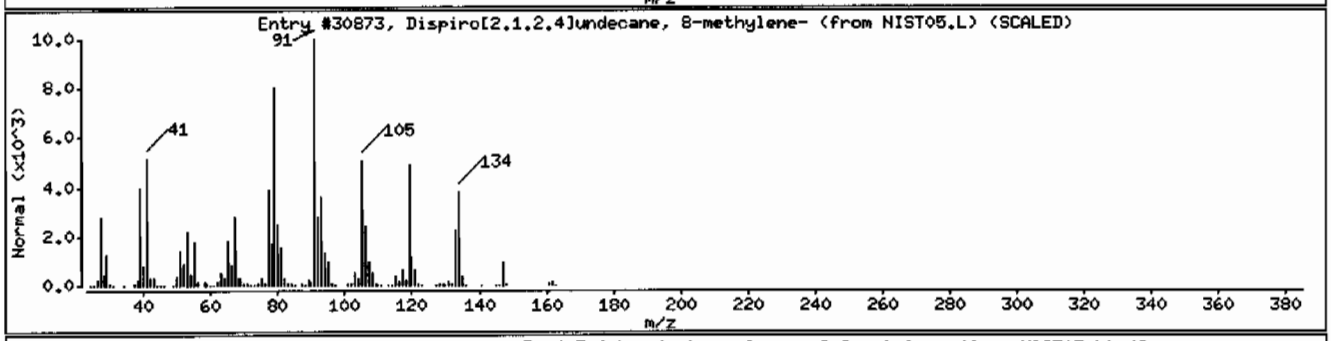

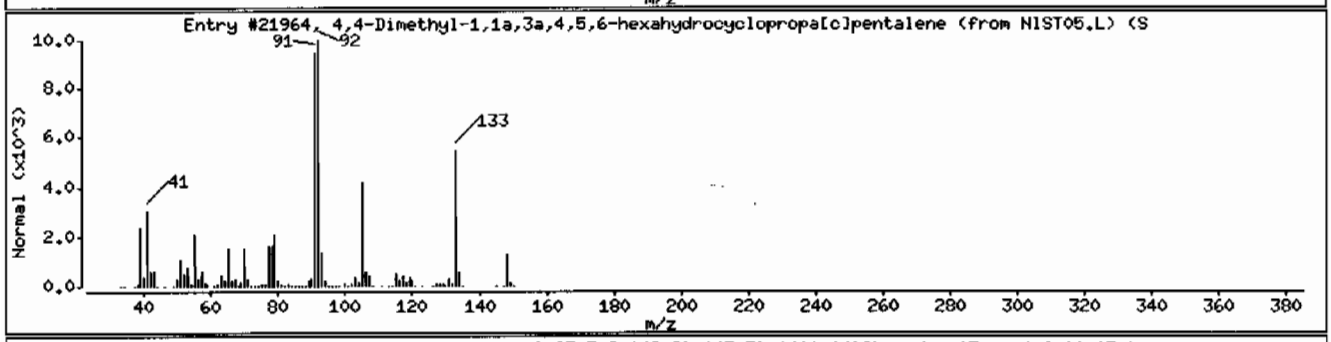

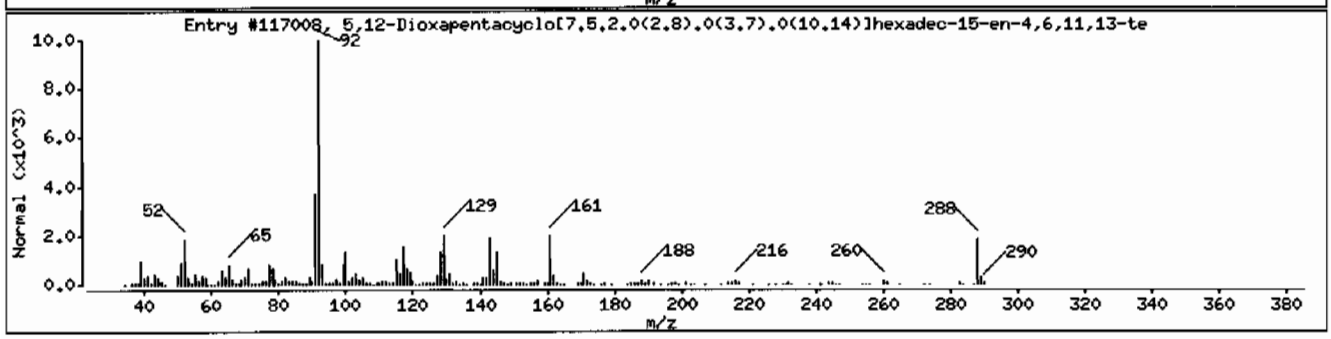

Data File: /chem/MSD8.i/s120309.b/s810320.d

Date : 03-DEC-2009 18:39

Client ID: RE03-09-13621

Instrument: MSD8.i

Sample Info: |24131800819256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	90	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	50	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	49	C21H30O2	314

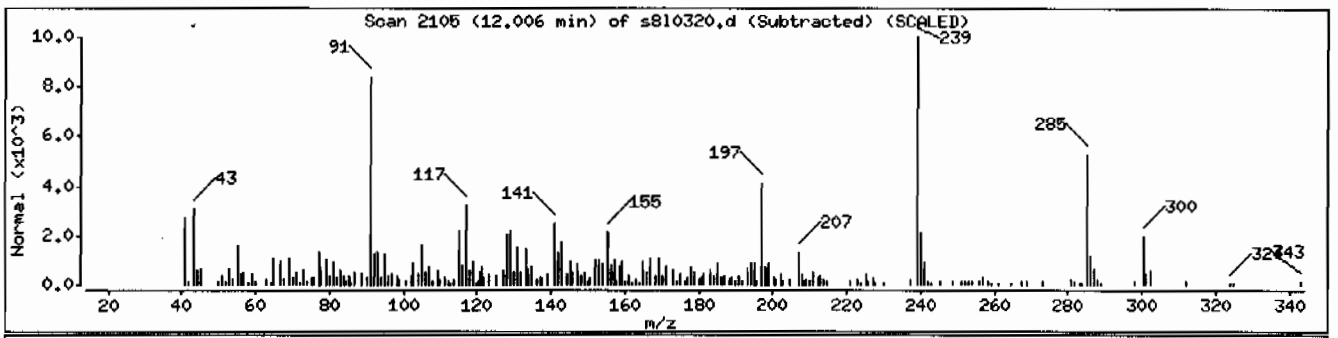

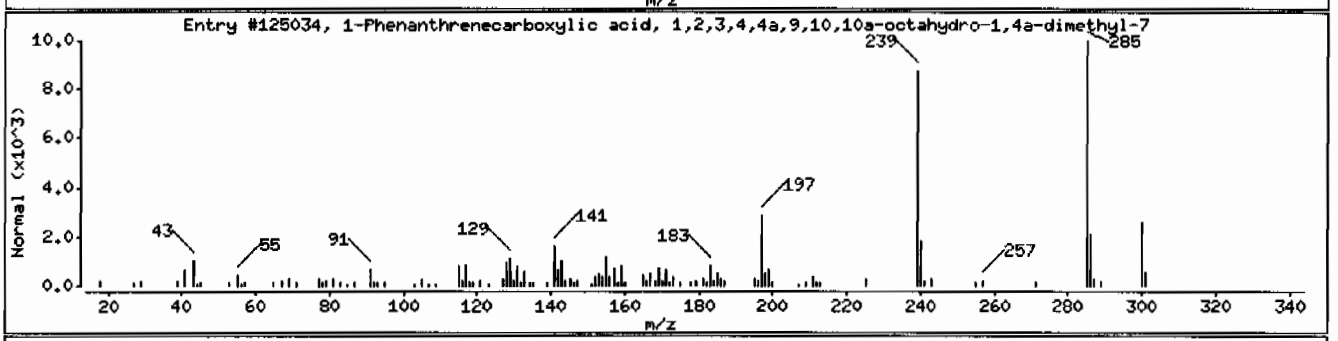

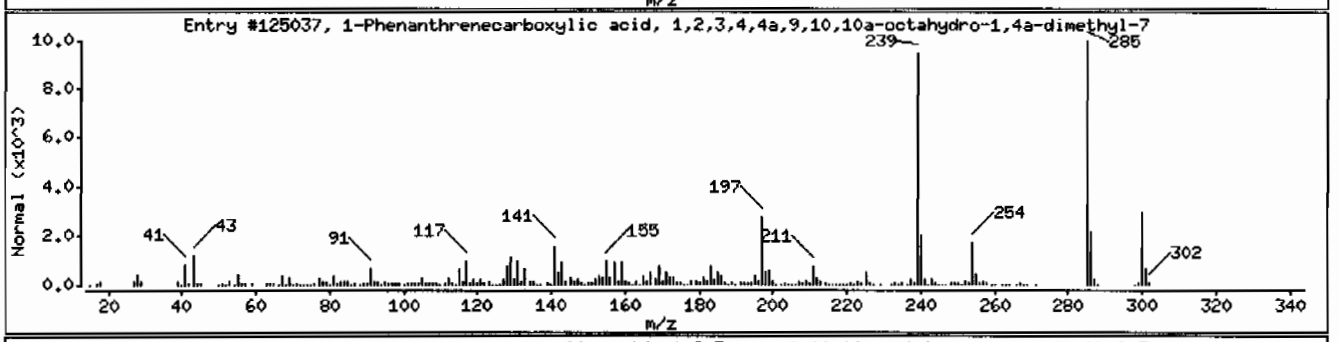

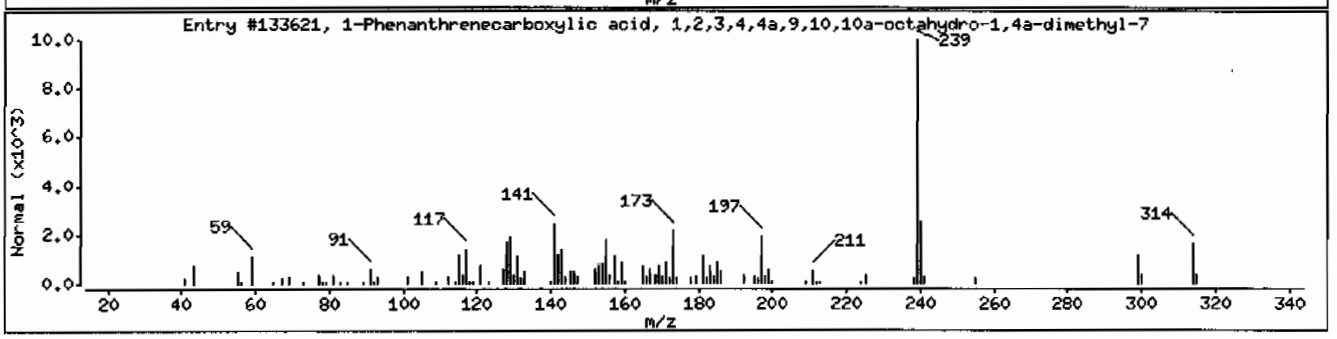

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13622**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:11**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0315.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	355	ug/kg	70.9	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13622**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:11**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0315.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	181	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.96	175	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 16:11	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s8l0315.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-26-4	1S-.alpha.-Pinene	4.53	211	ug/kg	95	NJ
	Unknown	11.47	157	ug/kg		J
	Unknown	11.64	222	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810315.d
Lab Smp Id: 241318002 Client Smp ID: RE03-09-13622
Inj Date : 03-DEC-2009 16:11
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318002|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	6.11800	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	203997	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	755096	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.720	(1.000)	447203	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	805365	40.0000	
* 91 Chrysene-d12	240	12.263	12.268	(1.000)	705643	40.0000	
* 98 Perylene-d12	264	14.454	14.458	(1.000)	504205	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.748)	380866	78.1563	2770
$ 5 Phenol-d5	99	4.196	4.201	(0.916)	434980	71.1075	2520
$ 20 Nitrobenzene-d5	82	5.111	5.120	(0.874)	221907	40.4981	1440
$ 39 2-Fluorobiphenyl	172	6.977	6.982	(0.904)	448527	36.2973	1290
$ 60 2,4,6-Tribromophenol	329	8.558	8.563	(1.109)	112050	54.2443	1920
$ 81 p-Terphenyl-d14	244	11.030	11.030	(0.899)	518458	39.4887	1400

ION RATIO REPORT

SV REPORT

Data file: s810315.d
Report Date: 12/03/2009 16:27
Lab. ID: 241318002 SampleType: SAMPLE
Injection Date: 03-DEC-2009 16:11
Operator: nagl Instrument: MSD8.i
Sample Info: |241318002|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	27243	4.20	4.27	80-120	100	(T)
93	4331	4.25	4.27	227-287	16	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	35284	5.11	4.96	80-120	100	(T)
42	18680	5.11	4.96	25- 85	53	(T)
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	4158	7.32	7.12	80-120	100	(T)
164	361	7.32	7.12	3- 63	9	(T)
127	468	7.32	7.12	10- 70	11	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	58583	7.72	7.48	80-120	100	(T)
63	1128	7.71	7.48	33- 93	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	58583	7.72	7.91	80-120	100	(T)
89	1184	7.71	7.91	47-107	2	(QT)
63	1128	7.71	7.91	20- 80	2	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	947	8.56	8.35	80-120	100	(T)
105	1329	8.56	8.35	11- 71	140	(QT)
51	553	8.56	8.35	11- 71	58	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810315.d
Lab Smp Id: 241318002 Client Smp ID: RE03-09-13622
Inj Date : 03-DEC-2009 16:11
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318002|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	6.11800	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1245672	40.000
* 91 Chrysene-d12	12.263	1985672	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.192	158924	5.10323968	181	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.963	154019	4.94573818	175	97	NIST05.L	15188	10
1S-.alpha.-Pinene					CAS #: 7785-26-4		
4.534	185723	5.96377219	211	95	NIST05.L	15185	10
Unknown					CAS #:		
11.468	220132	4.43440249	157	0		0	91
Unknown					CAS #:		
11.644	310510	6.25500692	222	0		0	91

Data File: /chem/MSD8.i/s120309.b/s810315.d

Date : 03-DEC-2009 16:11

Client ID: RE03-09-13622

Sample Info: 1241318002192563711|SVMF11|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1

Column diameter: 0.20

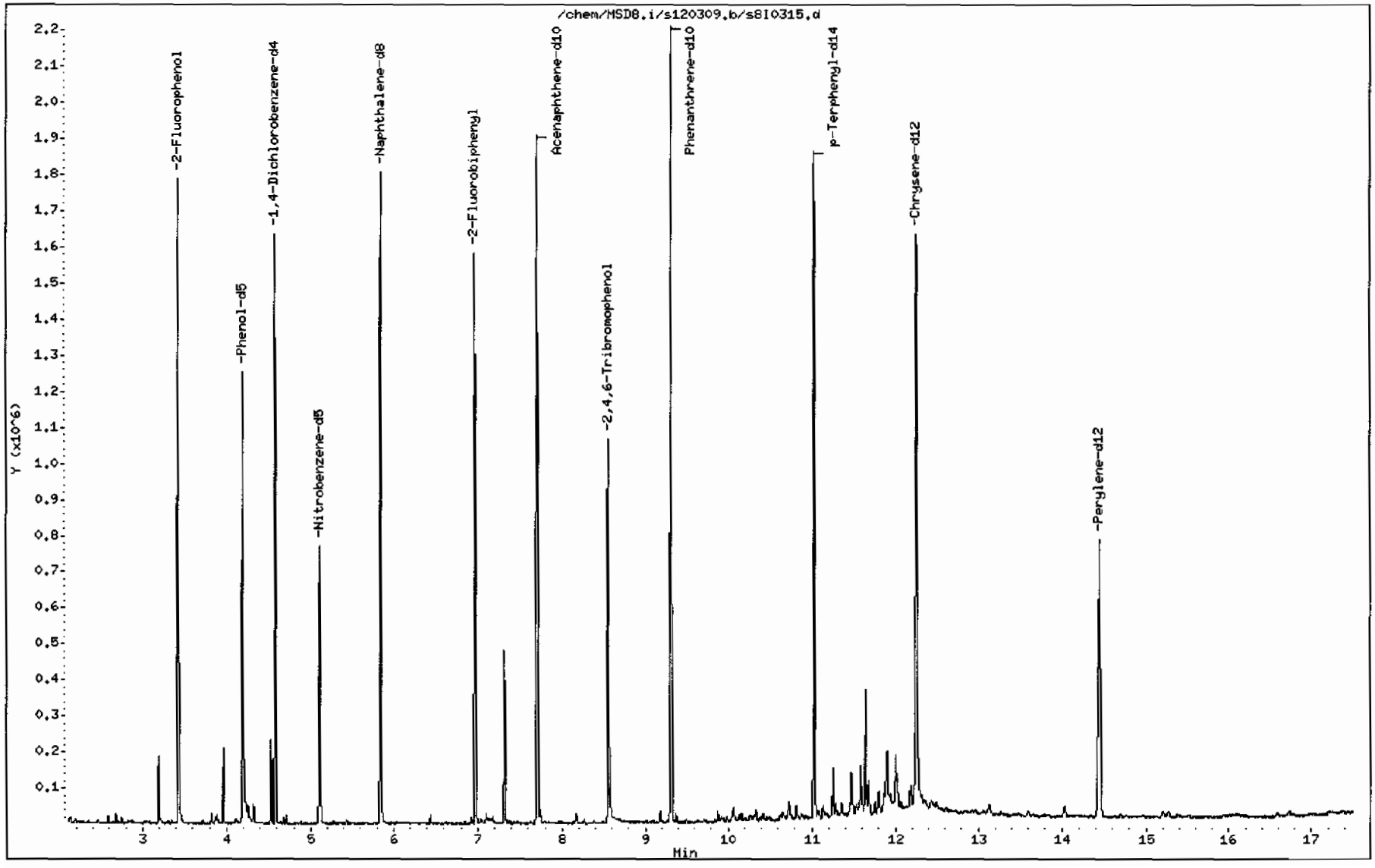

Data File: /chem/MSD8.i/s120309.b/s810315.d

Date : 03-DEC-2009 16:11

Client ID: RE03-09-13622

Instrument: MSD8.i

Sample Info: |2413180021925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116

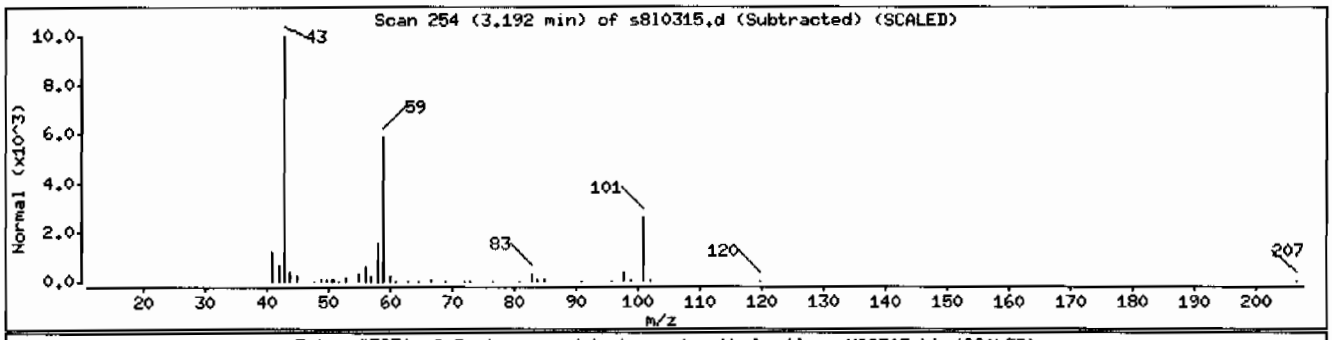

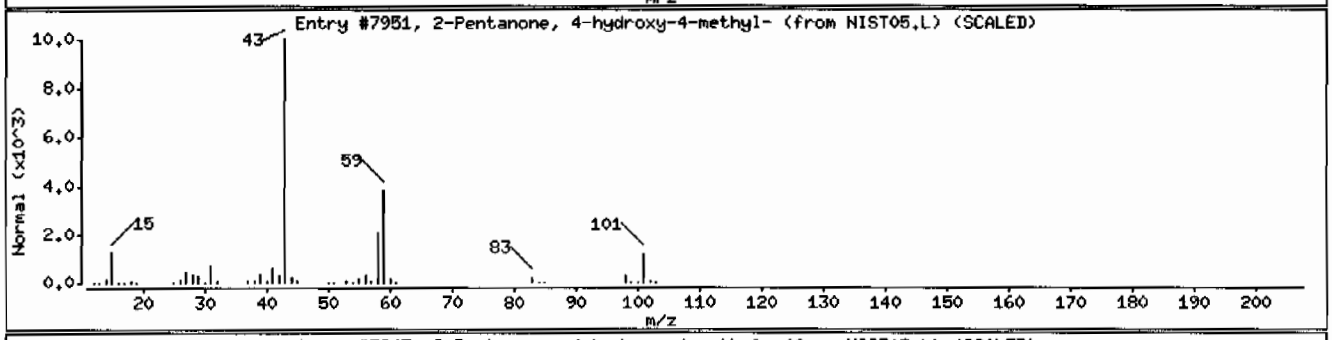

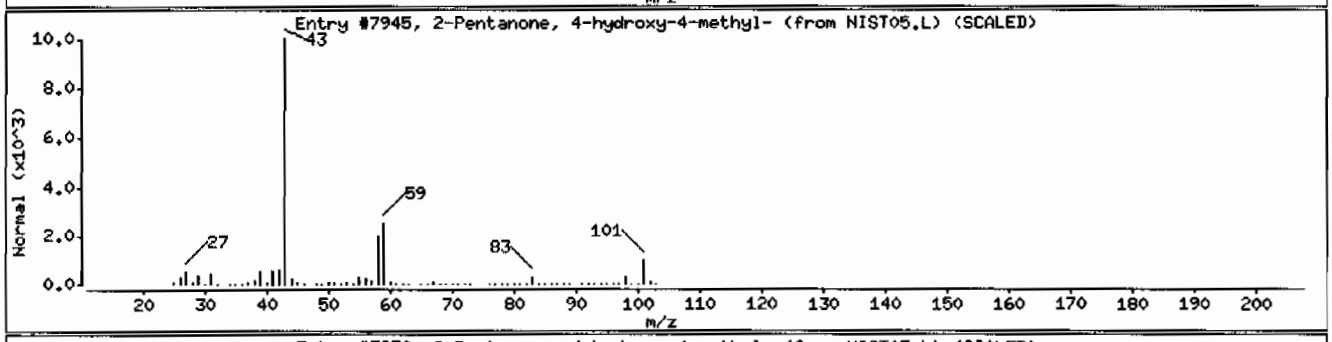

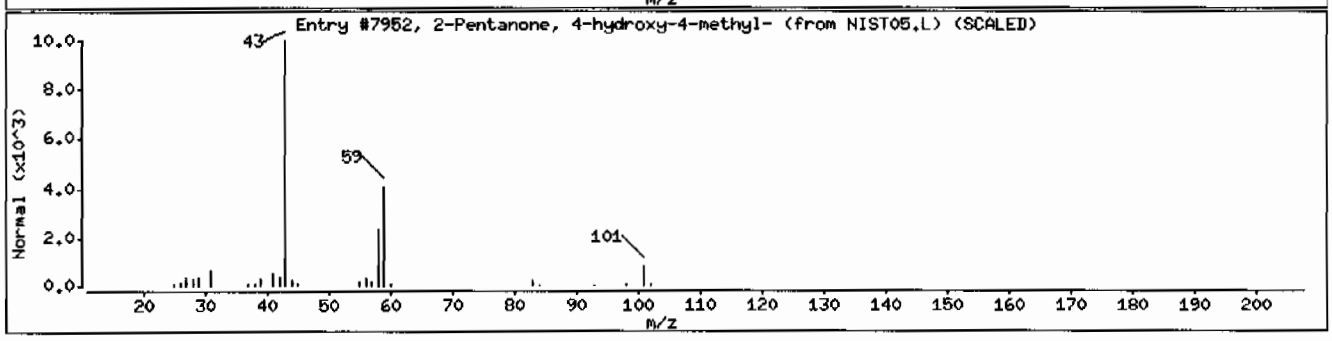

Data File: /chem/MSD8.i/s120309.b/s810315.d

Date : 03-DEC-2009 16:11

Client ID: RE03-09-13622 Instrument: MSD8.i

Sample Info: |24131800219256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST05.L	15376	97	C10H16	136
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15186	95	C10H16	136

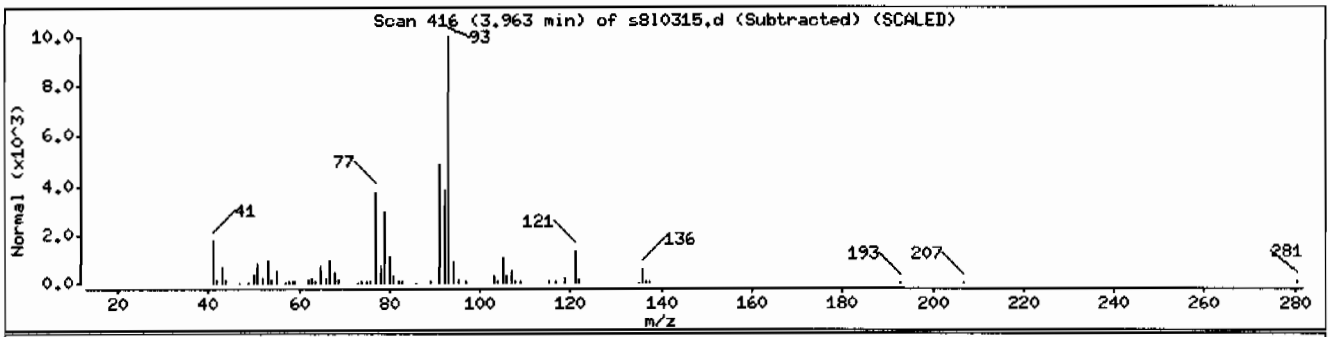

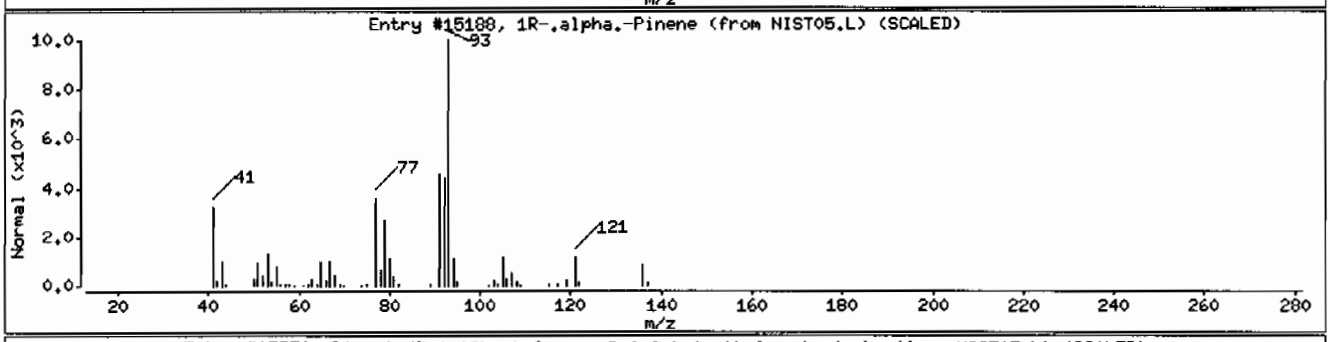

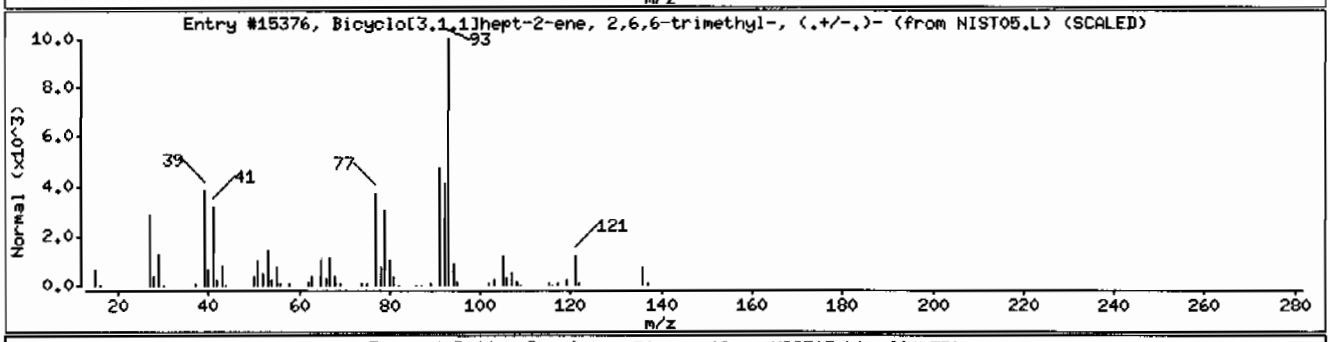

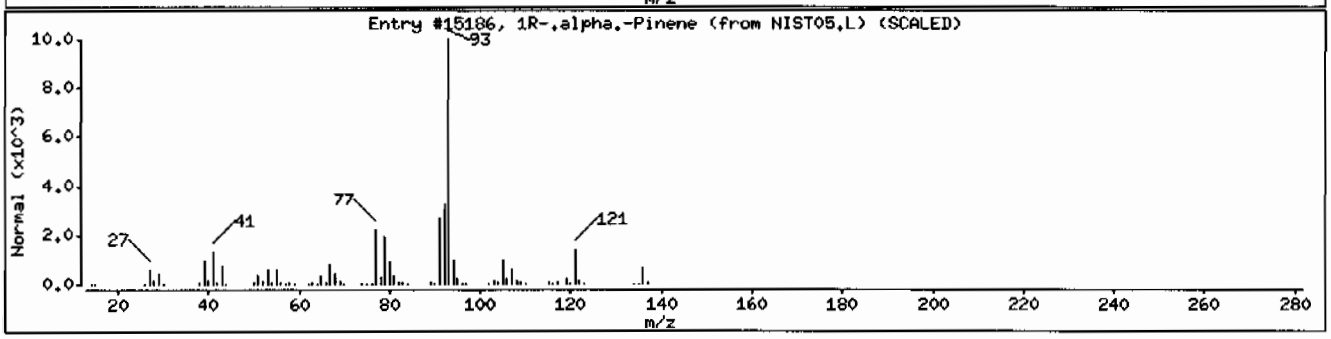

Data File: /chem/MSD8.i/s120309.b/s810315.d

Date : 03-DEC-2009 16:11

Client ID: RE03-09-13622

Instrument: MSD8.i

Sample Info: |2413180021925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	95	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	95	C10H16	136
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NIST05.L	15355	94	C10H16	136

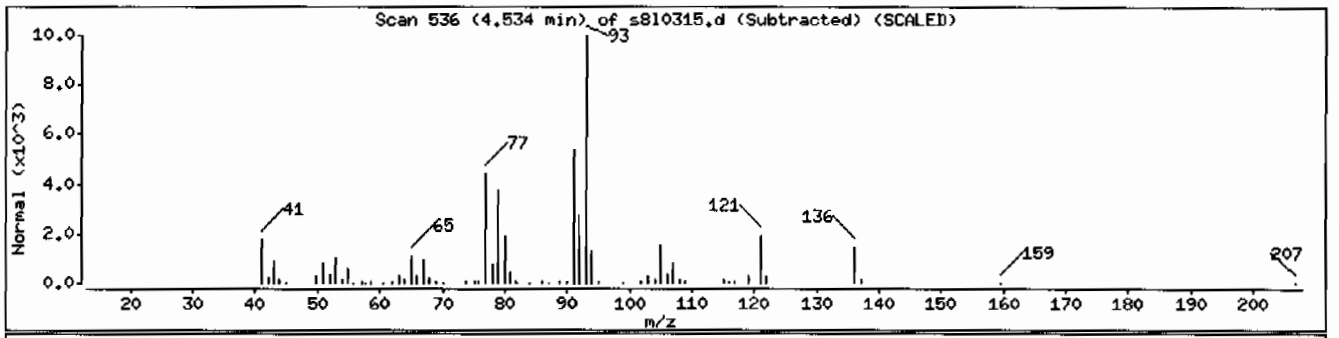

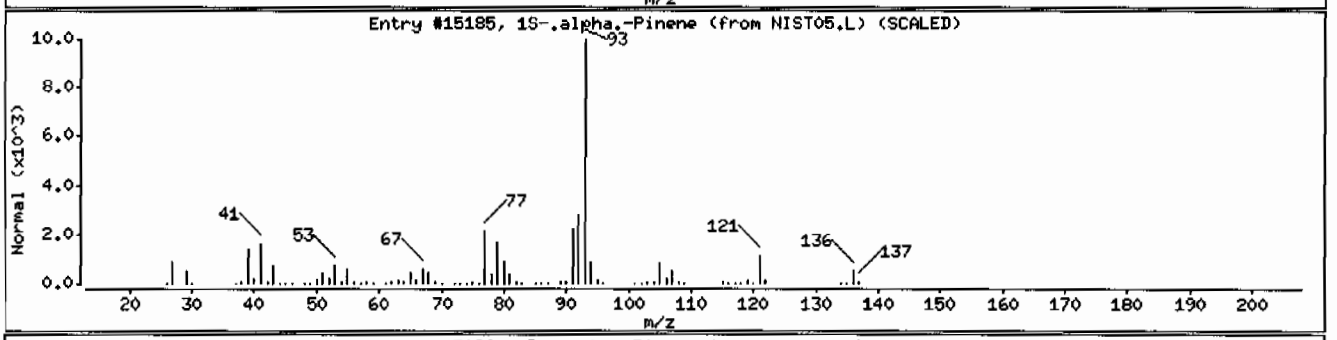

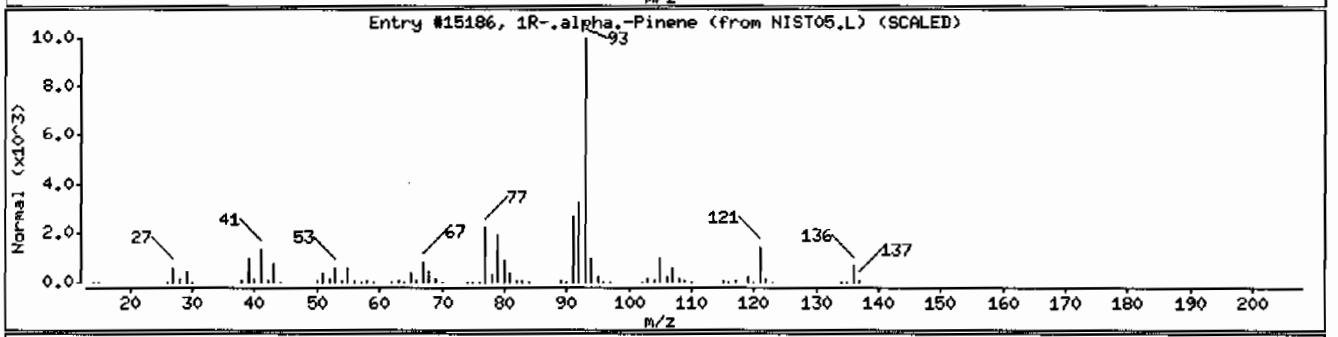

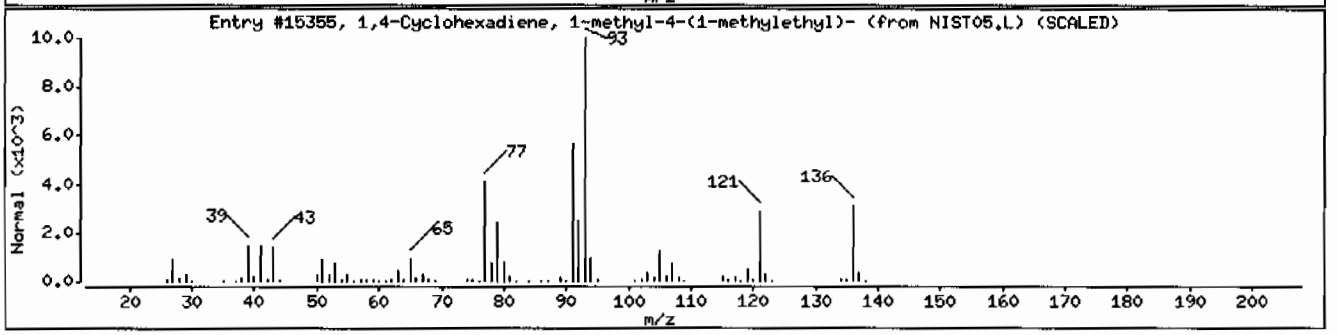

Data File: /chem/MSD8.i/s120309.b/s810315.d

Date : 03-DEC-2009 16:11

Client ID: RE03-09-13622

Instrument: MSD8.i

Sample Info: |24131800219256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 7-ethenyl	1686-62-0	NIST05.L	134782	64	C21H32O2	316
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	60	C21H32O2	316
s-Indacen-1(2H)-one, 3,5,6,7-tetrahydro-	38754-94-8	NIST05.L	96361	52	C18H24O	256

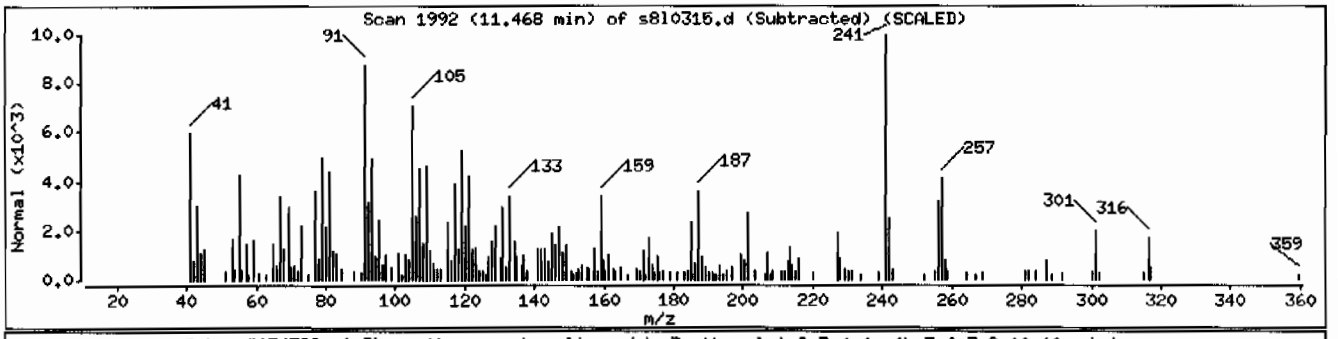

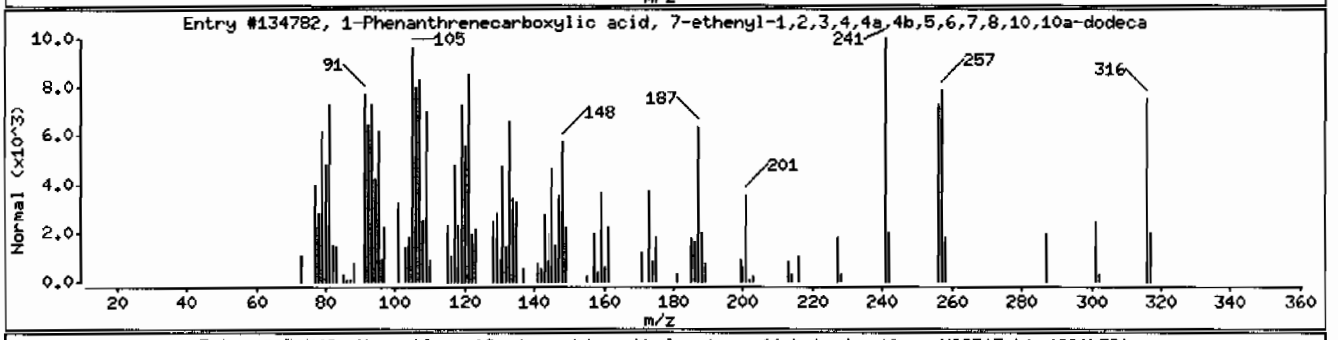

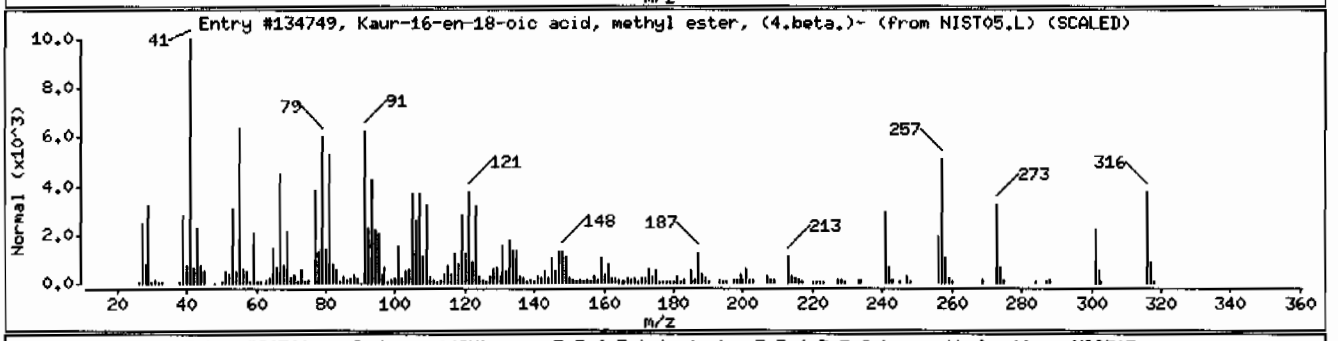

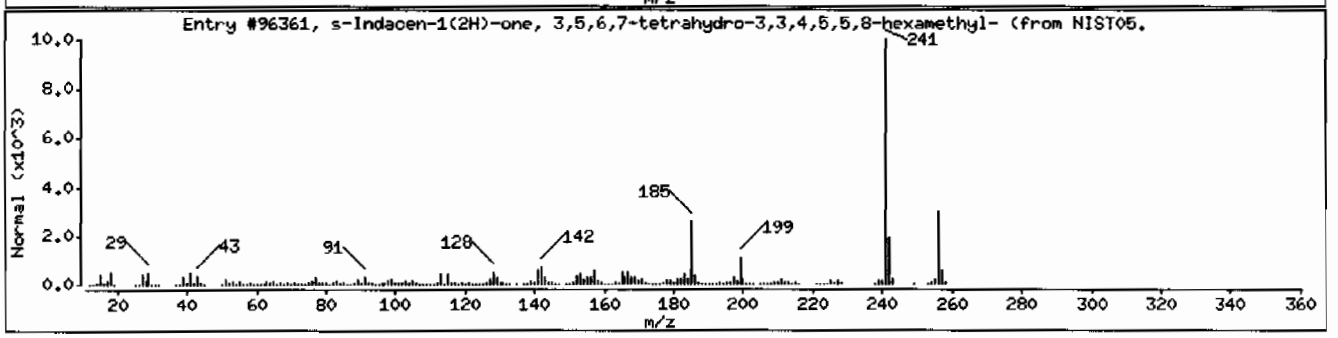

Data File: /chem/MSD8.i/s120309.b/s810315.d

Date : 03-DEC-2009 16:11

Client ID: RE03-09-13622

Instrument: MSD8.i

Sample Info: |24131800219256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3.2.1]oct-2-ene, 3-methyl-4-meth	49826-53-1	NIST05.L	14453	45	C10H14	134
3a,6-Methano-3aH-indene, 2,3,4,5,6,7-hex	98640-10-9	NIST05.L	14456	38	C10H14	134
Benzene, tert-butyl-	98-06-6	NIST05.L	14344	38	C10H14	134

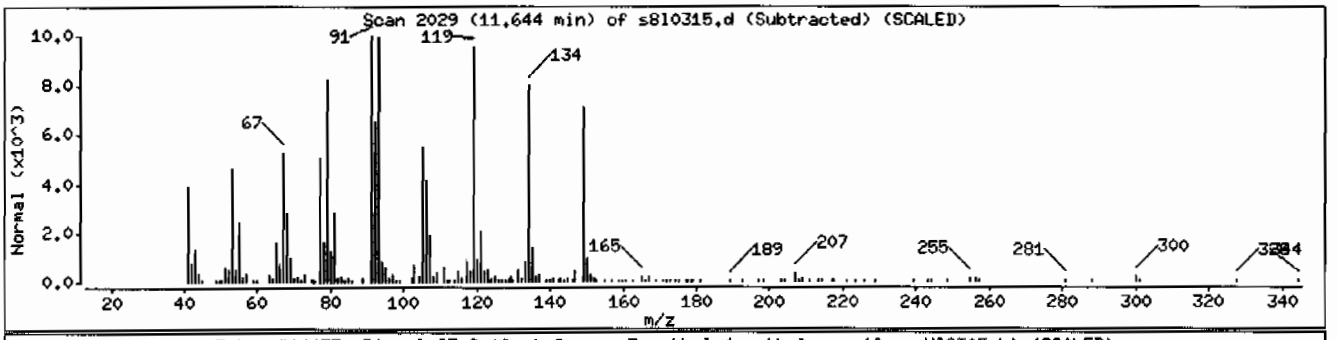

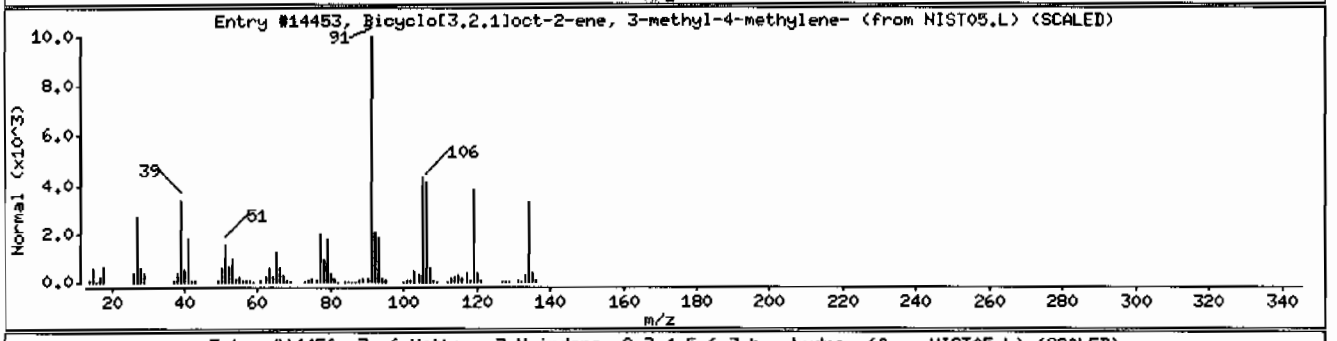

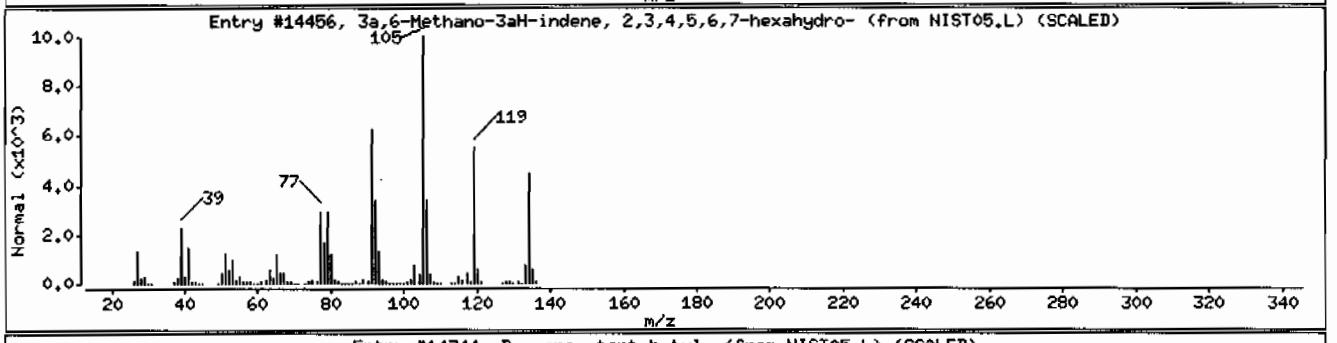

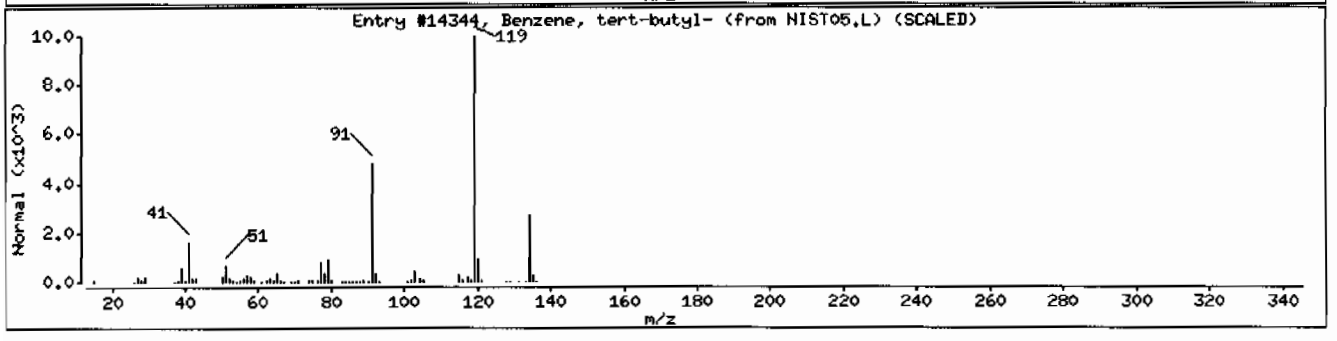

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13623	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 17:39	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s810318.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	346	ug/kg	69.1	346
108-95-2	Phenol	U	346	ug/kg	69.1	346
95-57-8	2-Chlorophenol	U	346	ug/kg	69.1	346
106-46-7	1,4-Dichlorobenzene	U	346	ug/kg	69.1	346
621-64-7	N-Nitrosodipropylamine	U	346	ug/kg	69.1	346
59-50-7	4-Chloro-3-methylphenol	U	346	ug/kg	69.1	346
83-32-9	Acenaphthene	U	34.6	ug/kg	11.4	34.6
121-14-2	2,4-Dinitrotoluene	U	346	ug/kg	34.6	346
100-02-7	4-Nitrophenol	U	346	ug/kg	114	346
87-86-5	Pentachlorophenol	U	346	ug/kg	86.4	346
129-00-0	Pyrene	U	34.6	ug/kg	10.4	34.6
110-86-1	Pyridine	U	346	ug/kg	69.1	346
62-53-3	Aniline	U	346	ug/kg	104	346
111-44-4	bis(2-Chloroethyl) ether	U	346	ug/kg	69.1	346
541-73-1	1,3-Dichlorobenzene	U	346	ug/kg	69.1	346
100-51-6	Benzyl alcohol	U	346	ug/kg	104	346
95-50-1	1,2-Dichlorobenzene	U	346	ug/kg	69.1	346
108-60-1	bis(2-Chloroisopropyl)ether	U	346	ug/kg	69.1	346
95-48-7	o-Cresol	U	346	ug/kg	69.1	346
65794-96-9	m,p-Cresols	U	346	ug/kg	104	346
67-72-1	Hexachloroethane	U	346	ug/kg	69.1	346
98-95-3	Nitrobenzene	U	346	ug/kg	69.1	346
78-59-1	Isophorone	U	346	ug/kg	69.1	346
88-75-5	2-Nitrophenol	U	346	ug/kg	69.1	346
105-67-9	2,4-Dimethylphenol	U	346	ug/kg	121	346
111-91-1	bis(2-Chloroethoxy)methane	U	346	ug/kg	69.1	346
120-83-2	2,4-Dichlorophenol	U	346	ug/kg	69.1	346
65-85-0	Benzoic acid	U	691	ug/kg	173	691
91-20-3	Naphthalene	U	34.6	ug/kg	10.4	34.6
106-47-8	4-Chloroaniline	U	346	ug/kg	69.1	346
87-68-3	Hexachlorobutadiene	U	346	ug/kg	69.1	346
91-57-6	2-Methylnaphthalene	U	34.6	ug/kg	6.91	34.6
77-47-4	Hexachlorocyclopentadiene	U	346	ug/kg	69.1	346
88-06-2	2,4,6-Trichlorophenol	U	346	ug/kg	69.1	346
95-95-4	2,4,5-Trichlorophenol	U	346	ug/kg	69.1	346
91-58-7	2-Chloronaphthalene	U	34.6	ug/kg	11.4	34.6
88-74-4	2-Nitroaniline	U	346	ug/kg	69.1	346
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	346	ug/kg	69.1	346

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13623	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925637	Inst:	MSD8.I	Dilution:	1
Run Date:	12/03/2009 17:39	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:41	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s810318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	346	ug/kg	69.1	346
606-20-2	2,6-Dinitrotoluene	U	346	ug/kg	34.6	346
208-96-8	Acenaphthylene	U	34.6	ug/kg	10.4	34.6
51-28-5	2,4-Dinitrophenol	U	691	ug/kg	131	691
132-64-9	Dibenzofuran	U	346	ug/kg	69.1	346
84-66-2	Diethylphthalate	U	346	ug/kg	69.1	346
86-73-7	Fluorene	U	34.6	ug/kg	10.4	34.6
7005-72-3	4-Chlorophenylphenylether	U	346	ug/kg	69.1	346
534-52-1	2-Methyl-4,6-dinitrophenol	U	346	ug/kg	69.1	346
100-01-6	4-Nitroaniline	U	346	ug/kg	104	346
	p-Nitroaniline					
122-39-4	Diphenylamine	U	346	ug/kg	69.1	346
122-66-7	Azobenzene	U	346	ug/kg	69.1	346
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	346	ug/kg	69.1	346
118-74-1	Hexachlorobenzene	U	346	ug/kg	69.1	346
85-01-8	Phenanthrene	U	34.6	ug/kg	10.4	34.6
120-12-7	Anthracene	U	34.6	ug/kg	6.91	34.6
84-74-2	Di-n-butylphthalate	U	346	ug/kg	69.1	346
206-44-0	Fluoranthene	U	34.6	ug/kg	10.4	34.6
85-68-7	Butylbenzylphthalate	U	346	ug/kg	69.1	346
56-55-3	Benzo(a)anthracene	U	34.6	ug/kg	10.4	34.6
91-94-1	3,3'-Dichlorobenzidine	U	346	ug/kg	104	346
218-01-9	Chrysene	U	34.6	ug/kg	10.4	34.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	346	ug/kg	69.1	346
117-84-0	Di-n-octylphthalate	U	346	ug/kg	69.1	346
205-99-2	Benzo(b)fluoranthene	U	34.6	ug/kg	10.4	34.6
207-08-9	Benzo(k)fluoranthene	U	34.6	ug/kg	10.4	34.6
50-32-8	Benzo(a)pyrene	U	34.6	ug/kg	10.4	34.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.6	ug/kg	10.4	34.6
53-70-3	Dibenzo(a,h)anthracene	U	34.6	ug/kg	10.4	34.6
191-24-2	Benzo(ghi)perylene	U	34.6	ug/kg	10.4	34.6
120-82-1	1,2,4-Trichlorobenzene	U	346	ug/kg	69.1	346

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	218	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.32	167	ug/kg	99	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810318.d
Lab Smp Id: 241318006 Client Smp ID: RE03-09-13623
Inj Date : 03-DEC-2009 17:39
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318006|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	3.63840	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	191412	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	713594	40.0000	
* 46 Acenaphthene-d10	164	7.711	7.720	(1.000)	413587	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	741267	40.0000	
* 91 Chrysene-d12	240	12.259	12.268	(1.000)	655026	40.0000	
* 98 Perylene-d12	264	14.454	14.458	(1.000)	473538	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.748)	287876	62.9582	2180
$ 5 Phenol-d5	99	4.197	4.201	(0.916)	344463	60.0127	2070
$ 20 Nitrobenzene-d5	82	5.106	5.120	(0.873)	170398	32.9063	1140
$ 39 2-Fluorobiphenyl	172	6.978	6.982	(0.905)	334119	29.2364	1010
$ 60 2,4,6-Tribromophenol	329	8.558	8.563	(1.110)	81897	42.8695	1480
$ 81 p-Terphenyl-d14	244	11.030	11.030	(0.900)	398433	32.6920	1130

ION RATIO REPORT

SV REPORT

Data file: s810318.d
Report Date: 12/03/2009 17:57
Lab. ID: 241318006 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:39
Operator: nagl Instrument: MSD8.i
Sample Info: |241318006|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	22617	4.20	4.27	80-120	100	(T)
93	1978	4.25	4.27	227-287	9	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	28533	5.11	4.96	80-120	100	(T)
42	14008	5.11	4.96	25- 85	49	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	54389	7.71	7.48	80-120	100	(T)
63	856	7.71	7.48	33- 93	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	54389	7.71	7.91	80-120	100	(T)
89	1225	7.71	7.91	47-107	2	(QT)
63	856	7.71	7.91	20- 80	2	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	164	8.54	8.35	80-120	100	(T)
105	1012	8.55	8.35	11- 71	615	(QT)
51	523	8.55	8.35	11- 71	318	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810318.d
Lab Smp Id: 241318006 Client Smp ID: RE03-09-13623
Inj Date : 03-DEC-2009 17:39
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318006|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	3.63840	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1200441	40.000
* 46 Acenaphthene-d10	7.711	1790579	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.192	189658	6.31959956	218	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
7.320	216486	4.83611457	167	99	NIST05.L	60020	46

Data File: /chem/MSD8.i/s120309.b/s810318.d

Date : 03-DEC-2009 17:39

Client ID: RE03-09-13623

Sample Info: |2413180061925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1

Column diameter: 0.20

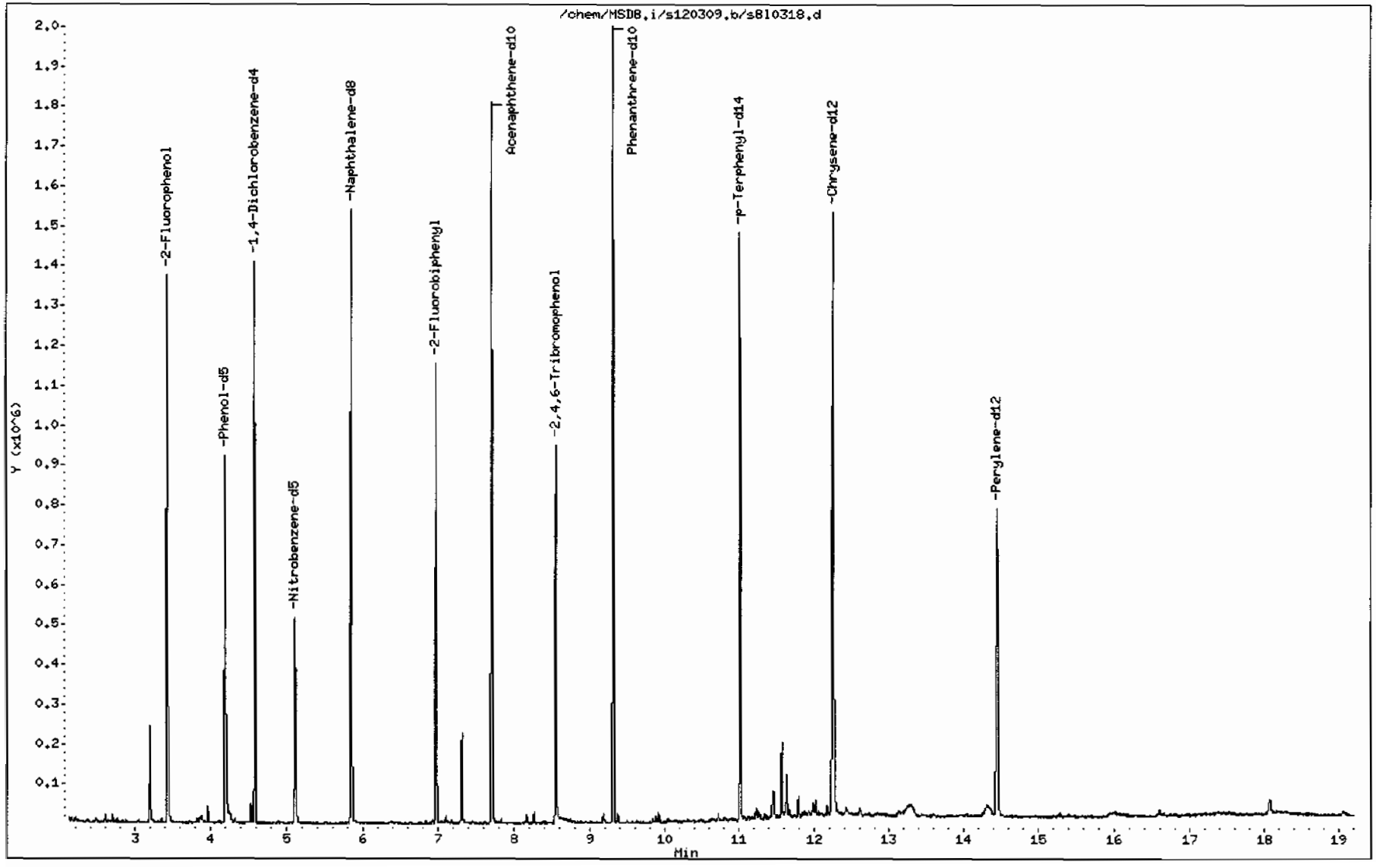

Data File: /chem/MSD8.i/s120309.b/s810318.d

Date : 03-DEC-2009 17:39

Client ID: RE03-09-13623

Instrument: MSD8.i

Sample Info: |2413180061925637|1|SVMF|1|LANL

Volume Injected (uL): 0.6

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116

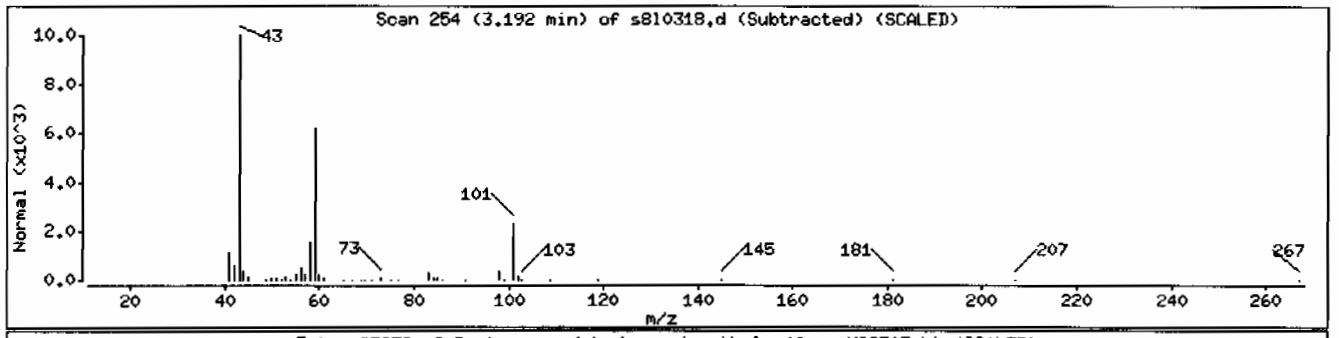

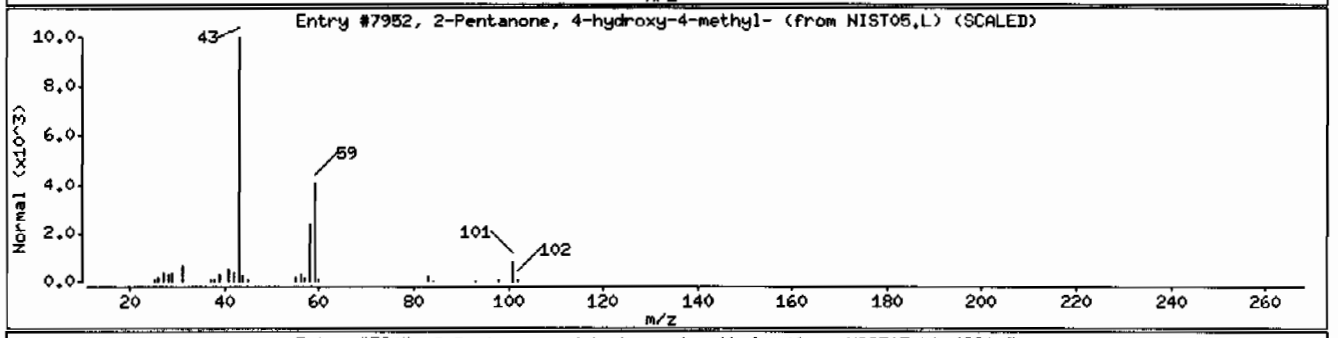

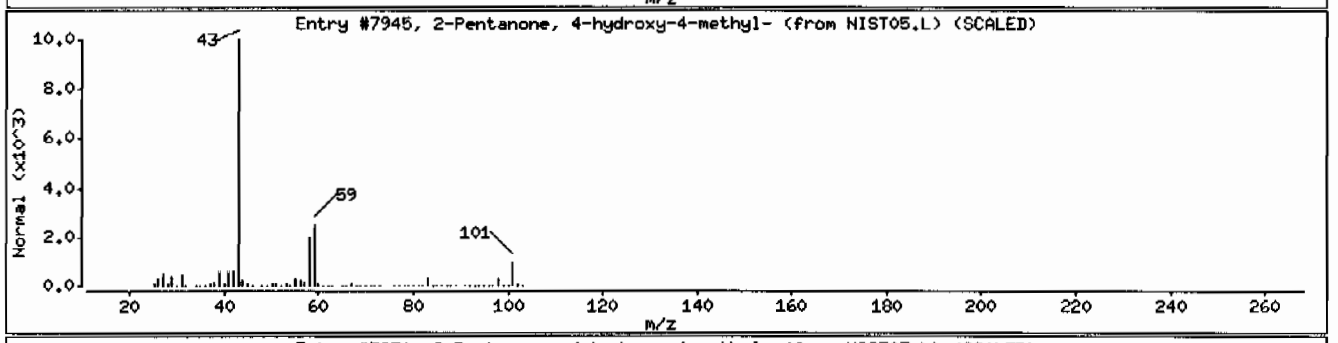

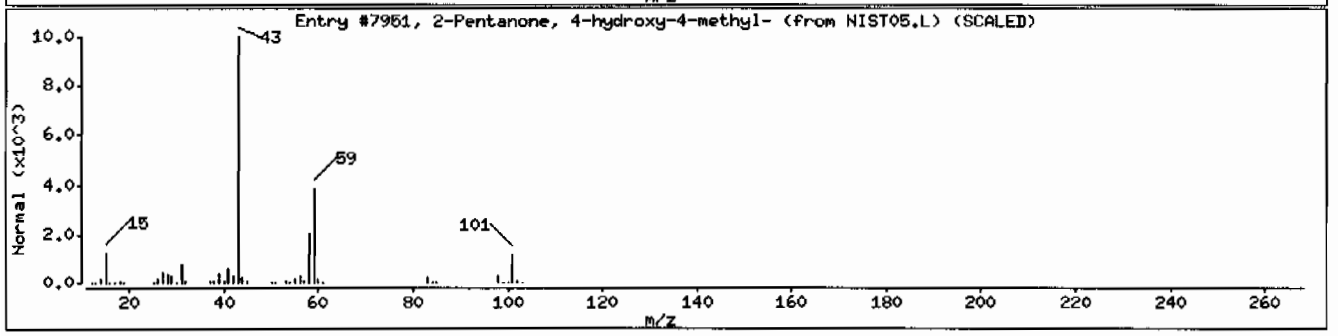

Data File: /chem/MSD8.i/s120309.b/s810318.d

Date : 03-DEC-2009 17:39

Client ID: RE03-09-13623

Instrument: MSD8.i

Sample Info: |241318006|9256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	96	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	95	C15H24	204

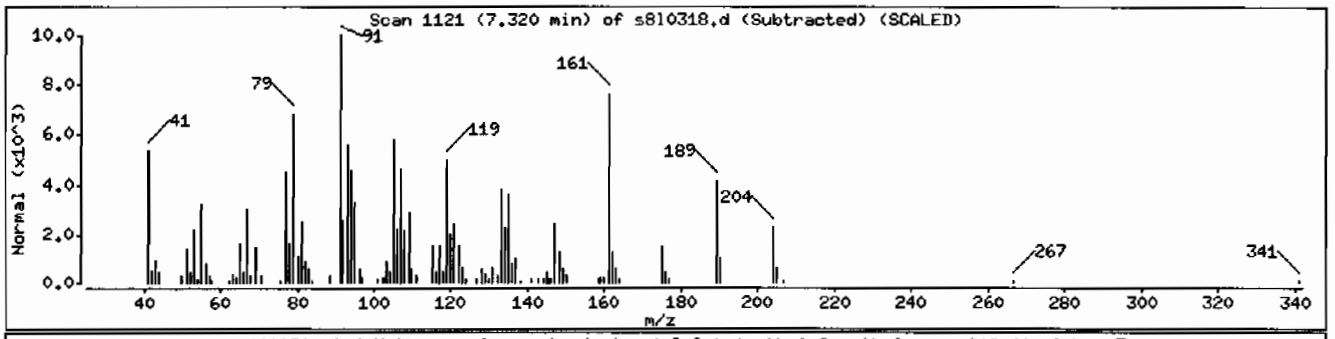

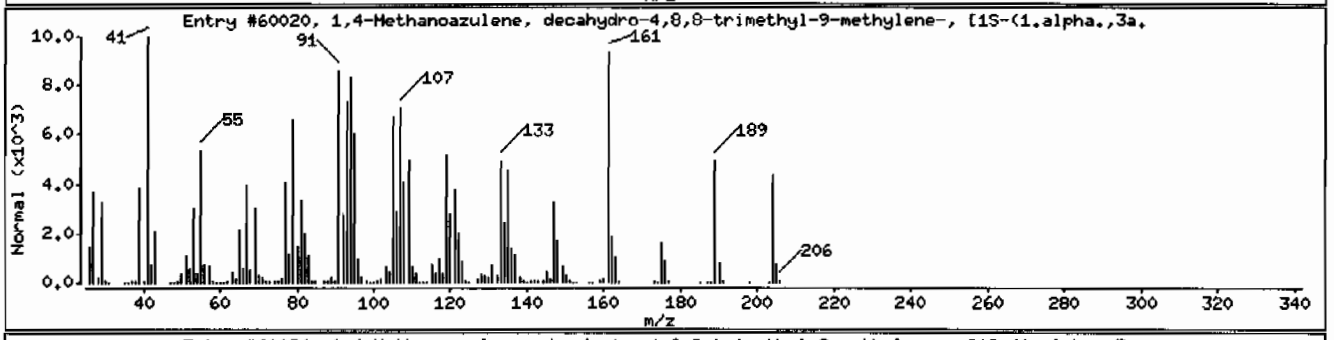

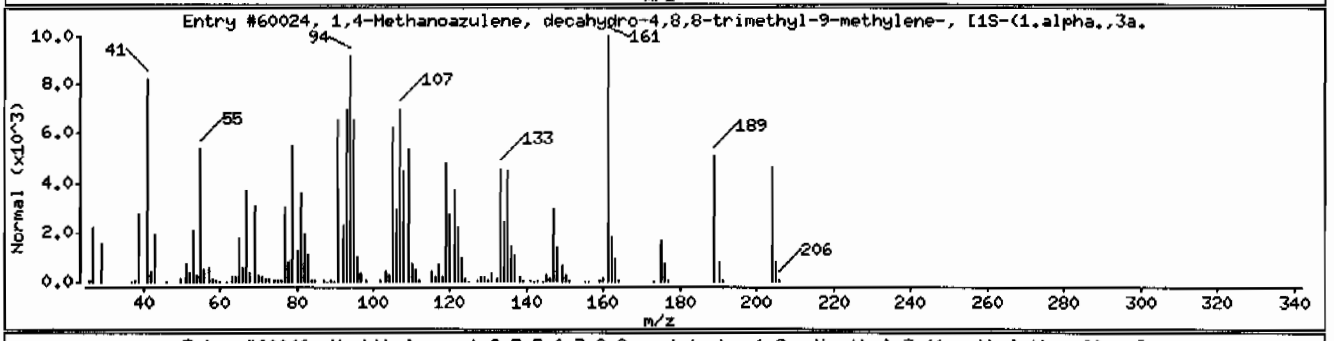

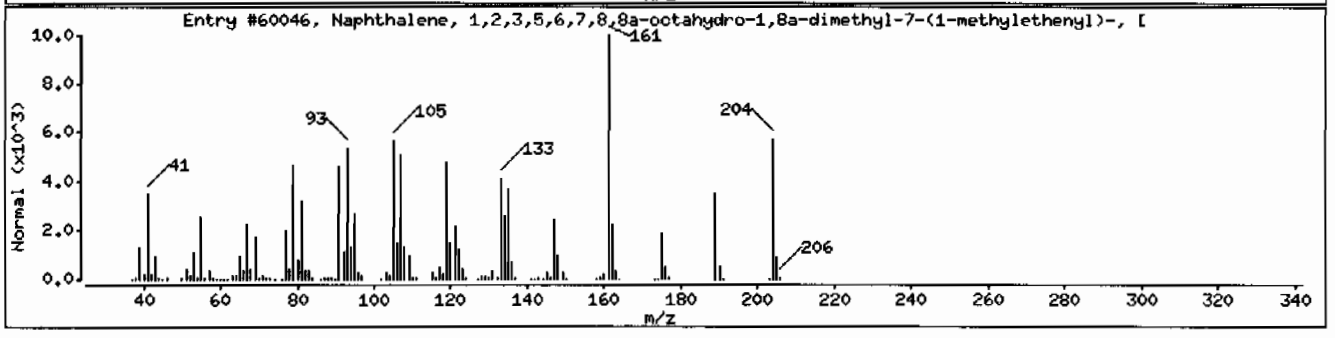

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 22:08	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s810327.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	430	ug/kg	86.1	430
108-95-2	Phenol	U	430	ug/kg	86.1	430
95-57-8	2-Chlorophenol	U	430	ug/kg	86.1	430
106-46-7	1,4-Dichlorobenzene	U	430	ug/kg	86.1	430
621-64-7	N-Nitrosodipropylamine	U	430	ug/kg	86.1	430
59-50-7	4-Chloro-3-methylphenol	U	430	ug/kg	86.1	430
83-32-9	Acenaphthene	U	43.0	ug/kg	14.2	43.0
121-14-2	2,4-Dinitrotoluene	U	430	ug/kg	43.0	430
100-02-7	4-Nitrophenol	U	430	ug/kg	142	430
87-86-5	Pentachlorophenol	U	430	ug/kg	108	430
129-00-0	Pyrene	J	32.6	ug/kg	12.9	43.0
110-86-1	Pyridine	U	430	ug/kg	86.1	430
62-53-3	Aniline	U	430	ug/kg	129	430
111-44-4	bis(2-Chloroethyl) ether	U	430	ug/kg	86.1	430
541-73-1	1,3-Dichlorobenzene	U	430	ug/kg	86.1	430
100-51-6	Benzyl alcohol	U	430	ug/kg	129	430
95-50-1	1,2-Dichlorobenzene	U	430	ug/kg	86.1	430
108-60-1	bis(2-Chloroisopropyl)ether	U	430	ug/kg	86.1	430
95-48-7	o-Cresol	U	430	ug/kg	86.1	430
65794-96-9	m,p-Cresols	U	430	ug/kg	129	430
67-72-1	Hexachloroethane	U	430	ug/kg	86.1	430
98-95-3	Nitrobenzene	U	430	ug/kg	86.1	430
78-59-1	Isophorone	U	430	ug/kg	86.1	430
88-75-5	2-Nitrophenol	U	430	ug/kg	86.1	430
105-67-9	2,4-Dimethylphenol	U	430	ug/kg	151	430
111-91-1	bis(2-Chloroethoxy)methane	U	430	ug/kg	86.1	430
120-83-2	2,4-Dichlorophenol	U	430	ug/kg	86.1	430
65-85-0	Benzoic acid	U	861	ug/kg	215	861
91-20-3	Naphthalene	U	43.0	ug/kg	12.9	43.0
106-47-8	4-Chloroaniline	U	430	ug/kg	86.1	430
87-68-3	Hexachlorobutadiene	U	430	ug/kg	86.1	430
91-57-6	2-Methylnaphthalene	U	43.0	ug/kg	8.61	43.0
77-47-4	Hexachlorocyclopentadiene	U	430	ug/kg	86.1	430
88-06-2	2,4,6-Trichlorophenol	U	430	ug/kg	86.1	430
95-95-4	2,4,5-Trichlorophenol	U	430	ug/kg	86.1	430
91-58-7	2-Chloronaphthalene	U	43.0	ug/kg	14.2	43.0
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	430	ug/kg	86.1	430
99-09-2	3-Nitroaniline	U	430	ug/kg	86.1	430

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318005**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**22.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13624**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:08**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s810327.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	430	ug/kg	86.1	430
606-20-2	2,6-Dinitrotoluene	U	430	ug/kg	43.0	430
208-96-8	Acenaphthylene	U	43.0	ug/kg	12.9	43.0
51-28-5	2,4-Dinitrophenol	U	861	ug/kg	164	861
132-64-9	Dibenzofuran	U	430	ug/kg	86.1	430
84-66-2	Diethylphthalate	U	430	ug/kg	86.1	430
86-73-7	Fluorene	U	43.0	ug/kg	12.9	43.0
7005-72-3	4-Chlorophenylphenylether	U	430	ug/kg	86.1	430
534-52-1	2-Methyl-4,6-dinitrophenol	U	430	ug/kg	86.1	430
100-01-6	4-Nitroaniline	U	430	ug/kg	129	430
	p-Nitroaniline					
122-39-4	Diphenylamine	U	430	ug/kg	86.1	430
122-66-7	Azobenzene	U	430	ug/kg	86.1	430
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	430	ug/kg	86.1	430
118-74-1	Hexachlorobenzene	U	430	ug/kg	86.1	430
85-01-8	Phenanthrene	J	14.0	ug/kg	12.9	43.0
120-12-7	Anthracene	U	43.0	ug/kg	8.61	43.0
84-74-2	Di-n-butylphthalate	U	430	ug/kg	86.1	430
206-44-0	Fluoranthene	J	20.0	ug/kg	12.9	43.0
85-68-7	Butylbenzylphthalate	U	430	ug/kg	86.1	430
56-55-3	Benzo(a)anthracene	U	43.0	ug/kg	12.9	43.0
91-94-1	3,3'-Dichlorobenzidine	U	430	ug/kg	129	430
218-01-9	Chrysene	J	15.9	ug/kg	12.9	43.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	430	ug/kg	86.1	430
117-84-0	Di-n-octylphthalate	U	430	ug/kg	86.1	430
205-99-2	Benzo(b)fluoranthene	U	43.0	ug/kg	12.9	43.0
207-08-9	Benzo(k)fluoranthene	U	43.0	ug/kg	12.9	43.0
50-32-8	Benzo(a)pyrene	J	15.1	ug/kg	12.9	43.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.0	ug/kg	12.9	43.0
53-70-3	Dibenzo(a,h)anthracene	U	43.0	ug/kg	12.9	43.0
191-24-2	Benzo(ghi)perylene	U	43.0	ug/kg	12.9	43.0
120-82-1	1,2,4-Trichlorobenzene	U	430	ug/kg	86.1	430

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	242	ug/kg		JA
593-45-3	Octadecane	14.03	205	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 22:08	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s8l0327.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.33	310	ug/kg		J
559-74-0	Friedelan-3-one	19.08	1270	ug/kg	94	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810327.d
Lab Smp Id: 241318005 Client Smp ID: RE03-09-13624
Inj Date : 03-DEC-2009 22:08
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318005|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	22.67890	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	279880	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	989590	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.720	(1.000)	574219	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	988405	40.0000	
* 91 Chrysene-d12	240	12.258	12.268	(1.000)	560232	40.0000	
* 98 Perylene-d12	264	14.444	14.458	(1.000)	250667	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.748)	449905	67.2922	2900
$ 5 Phenol-d5	99	4.201	4.201	(0.917)	554491	66.0682	2840
$ 20 Nitrobenzene-d5	82	5.111	5.120	(0.874)	257433	35.8488	1540
$ 39 2-Fluorobiphenyl	172	6.977	6.982	(0.904)	544754	34.3331	1480
$ 60 2,4,6-Tribromophenol	329	8.563	8.563	(1.110)	113923	42.9517	1850
$ 81 p-Terphenyl-d14	244	11.030	11.030	(0.900)	521474	50.0275	2150

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	10.873	10.882	(0.887)	12238	0.75656	32.6(a)
68 Phenanthrene	178	9.339	9.349	(1.002)	7056	0.32621	14.0(a)
76 Fluoranthene	202	10.625	10.635	(1.140)	12395	0.46539	20.0(a)
92 Chrysene	228	12.287	12.301	(1.002)	4628	0.36985	15.9(a)
97 Benzo(a)pyrene	252	14.344	14.358	(0.993)	1955	0.35144	15.1(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s810327.d
Report Date: 12/04/2009 06:33
Lab. ID: 241318005 SampleType: SAMPLE
Injection Date: 03-DEC-2009 22:08
Operator: nagl Instrument: MSD8.i
Sample Info: |241318005|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	29136	4.20	4.27	80-120	100	(T)
93	1015	4.25	4.27	227-287	3	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	38192	5.11	4.96	80-120	100	(T)
42	18894	5.11	4.96	25- 85	49	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	77004	7.72	7.48	80-120	100	(T)
63	345	7.72	7.48	33- 93	0	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	77004	7.72	7.91	80-120	100	(T)
89	1196	7.72	7.91	47-107	2	(QT)
63	345	7.72	7.91	20- 80	0	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	361	8.56	8.35	80-120	100	(T)
105	863	8.56	8.35	11- 71	239	(QT)
51	669	8.55	8.35	11- 71	185	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	7056	9.34	9.35	80-120	100	( )
179	1138	9.34	9.35	0- 46	16	( )
176	1195	9.34	9.35	0- 48	17	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
69 Anthracene			CAS#: 120-12-7			
178	7056	9.34	9.40	80-120	100	(T)
179	1138	9.34	9.40	0- 46	16	( )
176	1195	9.34	9.41	0- 49	17	(T)
76 Fluoranthene			CAS#: 206-44-0			
202	12395	10.63	10.63	80-120	100	( )
203	2217	10.63	10.63	0- 48	18	( )
101	2215	10.63	10.63	0- 41	18	( )
79 Pyrene			CAS#: 129-00-0			
202	12238	10.87	10.88	80-120	100	( )
200	2472	10.87	10.88	0- 51	20	( )
101	2158	10.87	10.88	0- 43	18	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	6290	12.24	12.25	80-120	100	( )
226	1852	12.24	12.25	0- 56	29	( )
229	1205	12.26	12.25	0- 50	19	( )
92 Chrysene			CAS#: 218-01-9			
228	4628	12.29	12.30	80-120	100	( )
229	1584	12.29	12.30	0- 50	34	( )
226	1451	12.28	12.30	0- 59	31	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	2663	13.81	13.82	80-120	100	( )
253	1073	13.81	13.82	0- 52	40	( )
125	619	13.82	13.82	0- 41	23	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	2663	13.81	13.86	80-120	100	( )
253	1073	13.81	13.87	0- 52	40	(T)
125	608	13.82	13.86	0- 42	23	( )
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	1955	14.34	14.36	80-120	100	( )
253	808	14.35	14.36	0- 51	41	( )
125	1099	14.35	14.36	0- 39	56	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810327.d
Lab Smp Id: 241318005 Client Smp ID: RE03-09-13624
Inj Date : 03-DEC-2009 22:08
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318005|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J̄ & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	22.67890	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1612225	40.000
* 98 Perylene-d12	14.444	691706	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.192	226934	5.63032013	242	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Octadecane					CAS #: 593-45-3		
14.035	82558	4.77414225	205	95	NIST05.L	94929	98
Unknown					CAS #:		
14.325	124621	7.20660450	310	0		0	98
Friedelan-3-one					CAS #: 559-74-0		
19.078	508516	29.4064751	1260	94	NIST05.L	176566	98

Data File: /chem/MSD8.i/s120309.b/s810327.d
Date : 03-DEC-2009 22:08
Client ID: RE03-09-13624
Sample Info: 1241318005192563711ISVMF11LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20

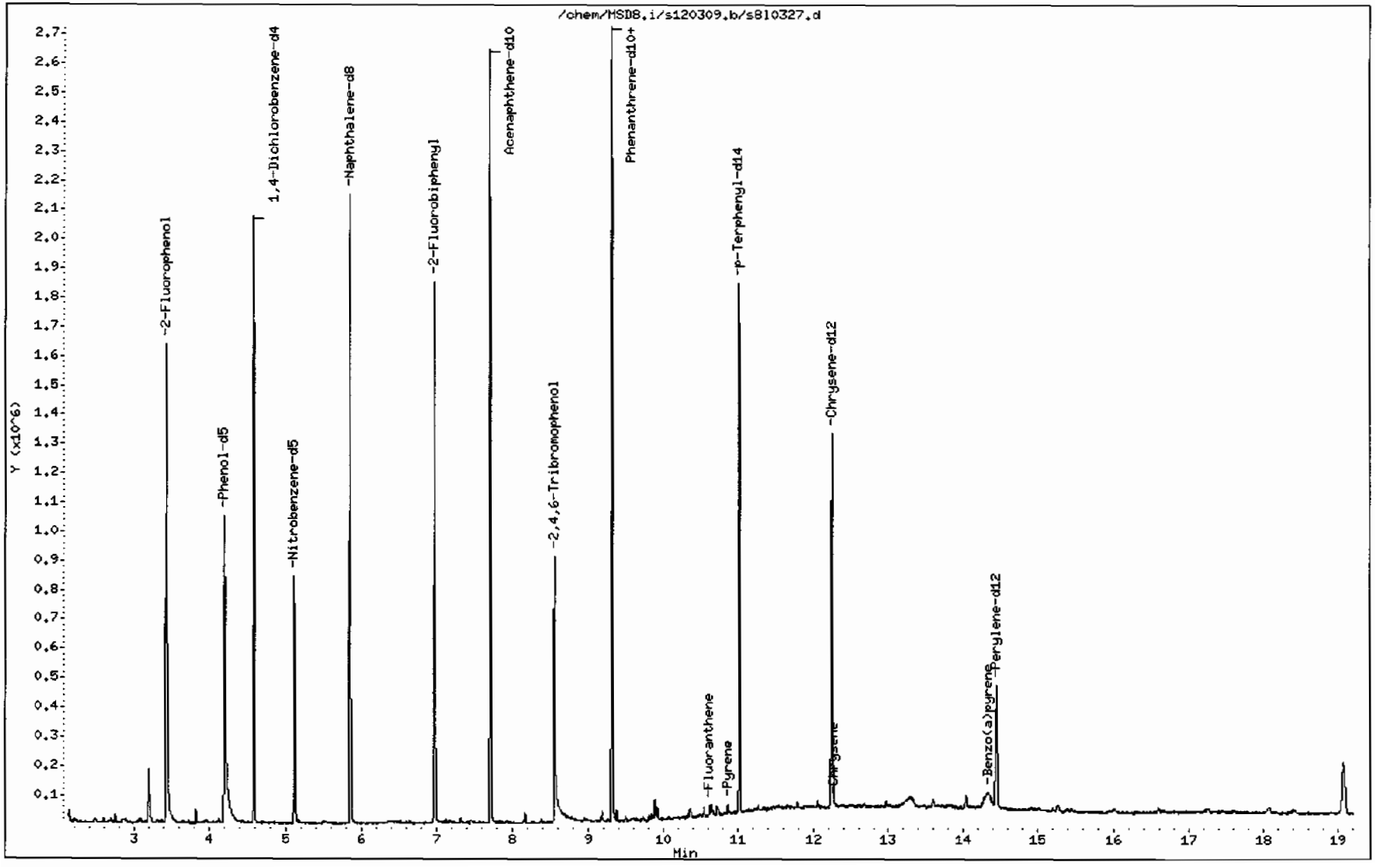

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 32.6 ug/Kg

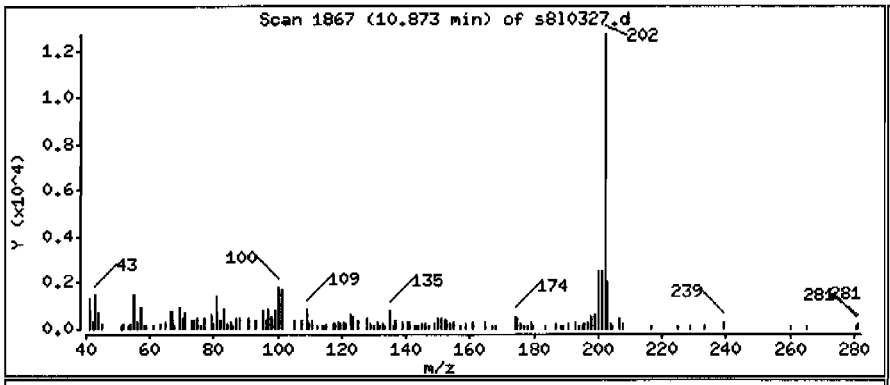

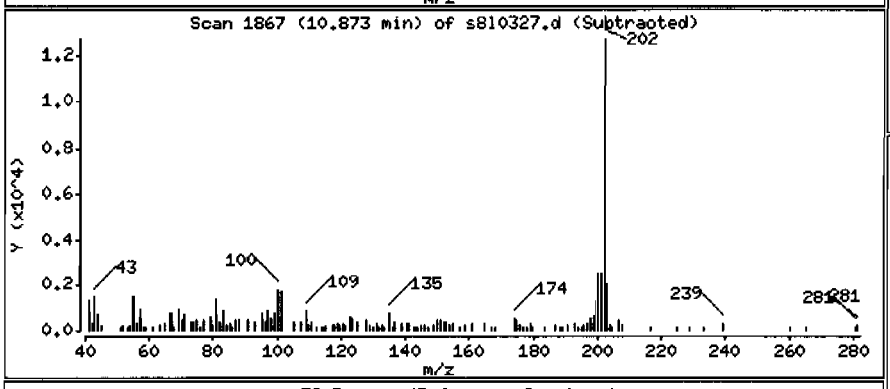

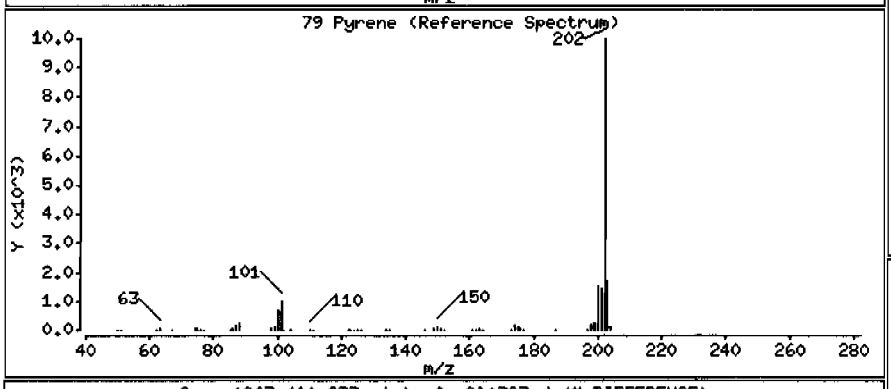

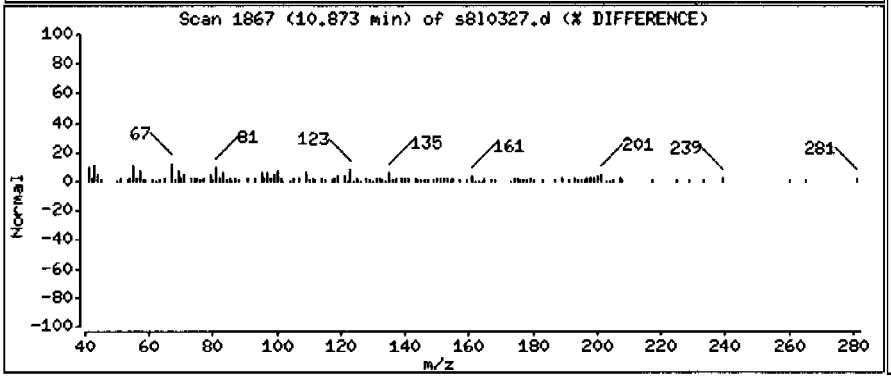

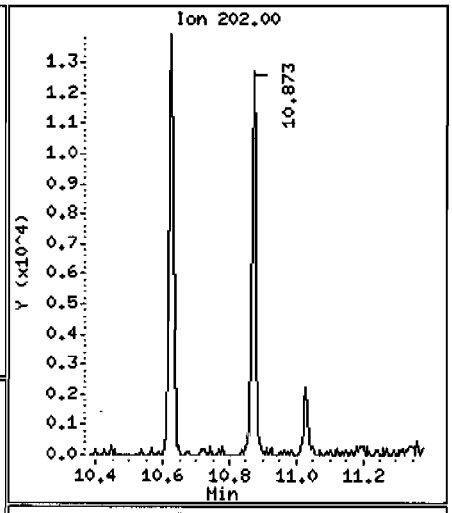

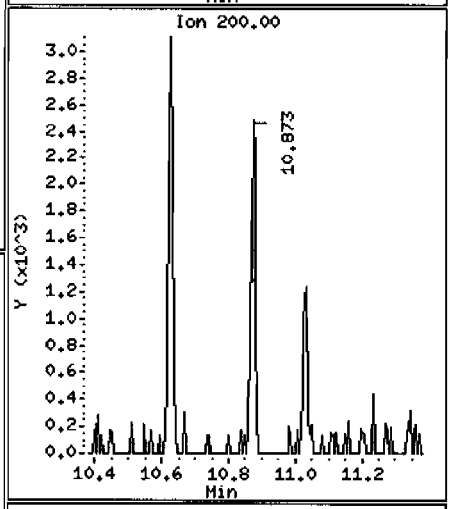

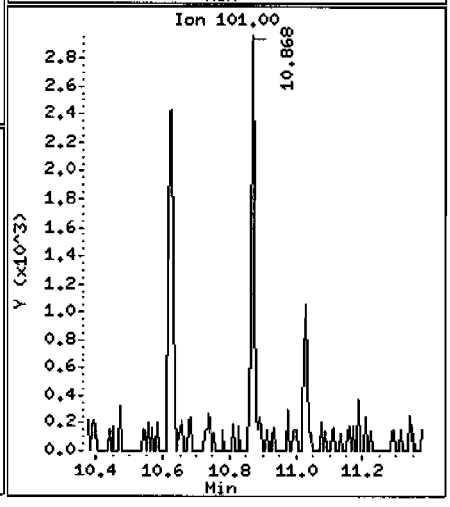

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 14.0 ug/Kg

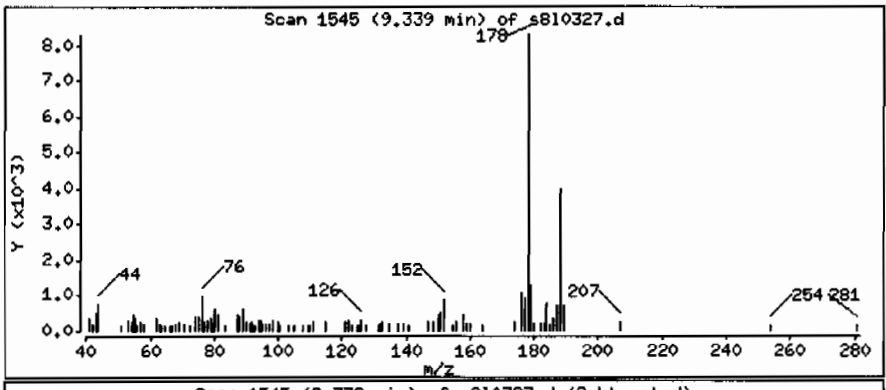

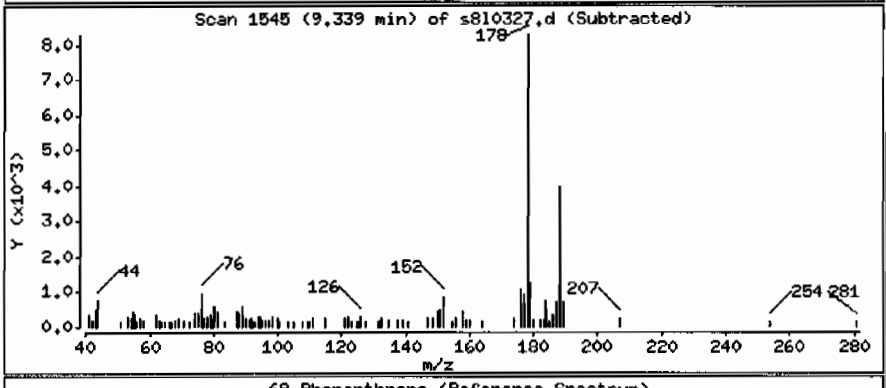

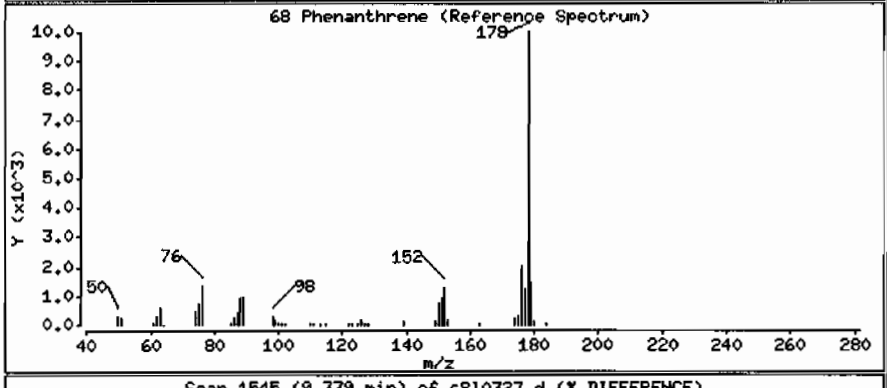

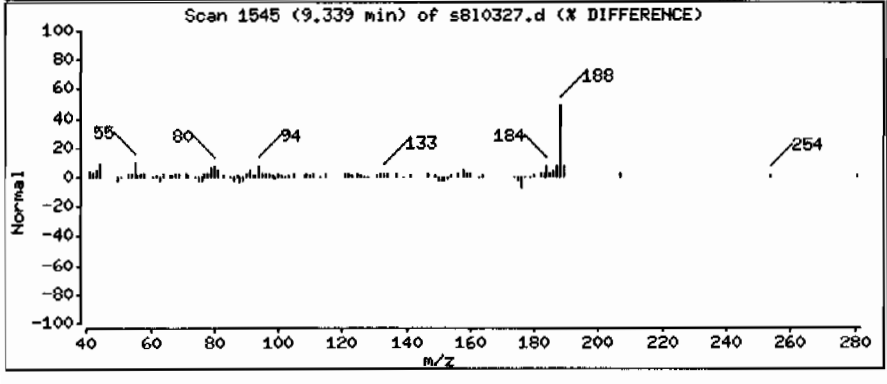

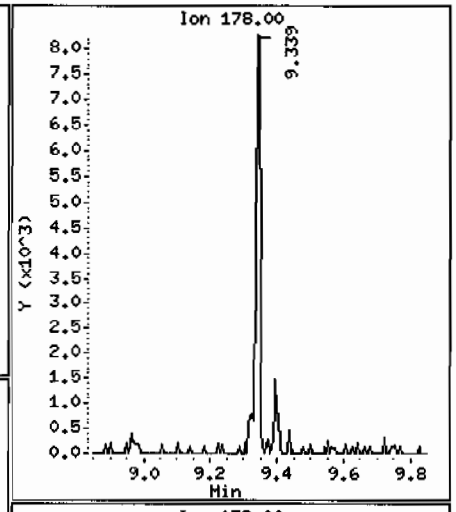

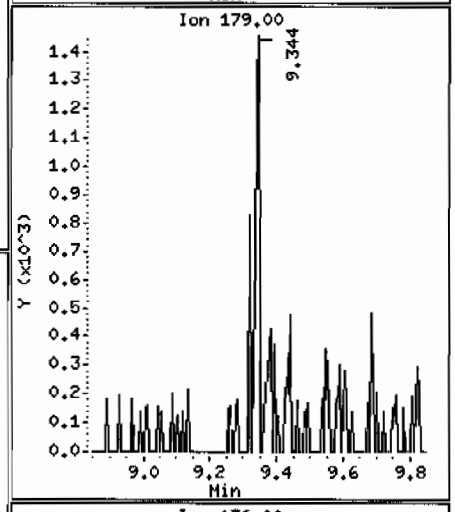

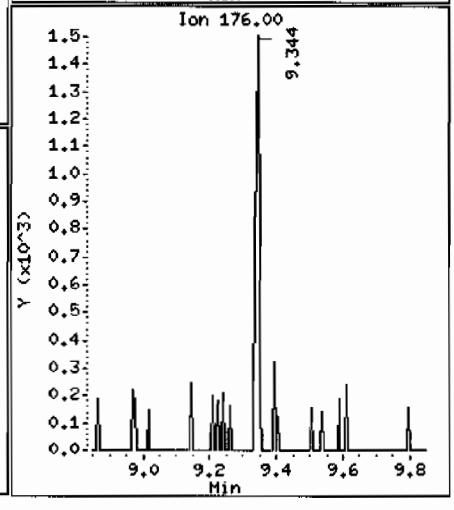

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: 1241318005192563711ISVMFI1ILANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 20.0 ug/Kg

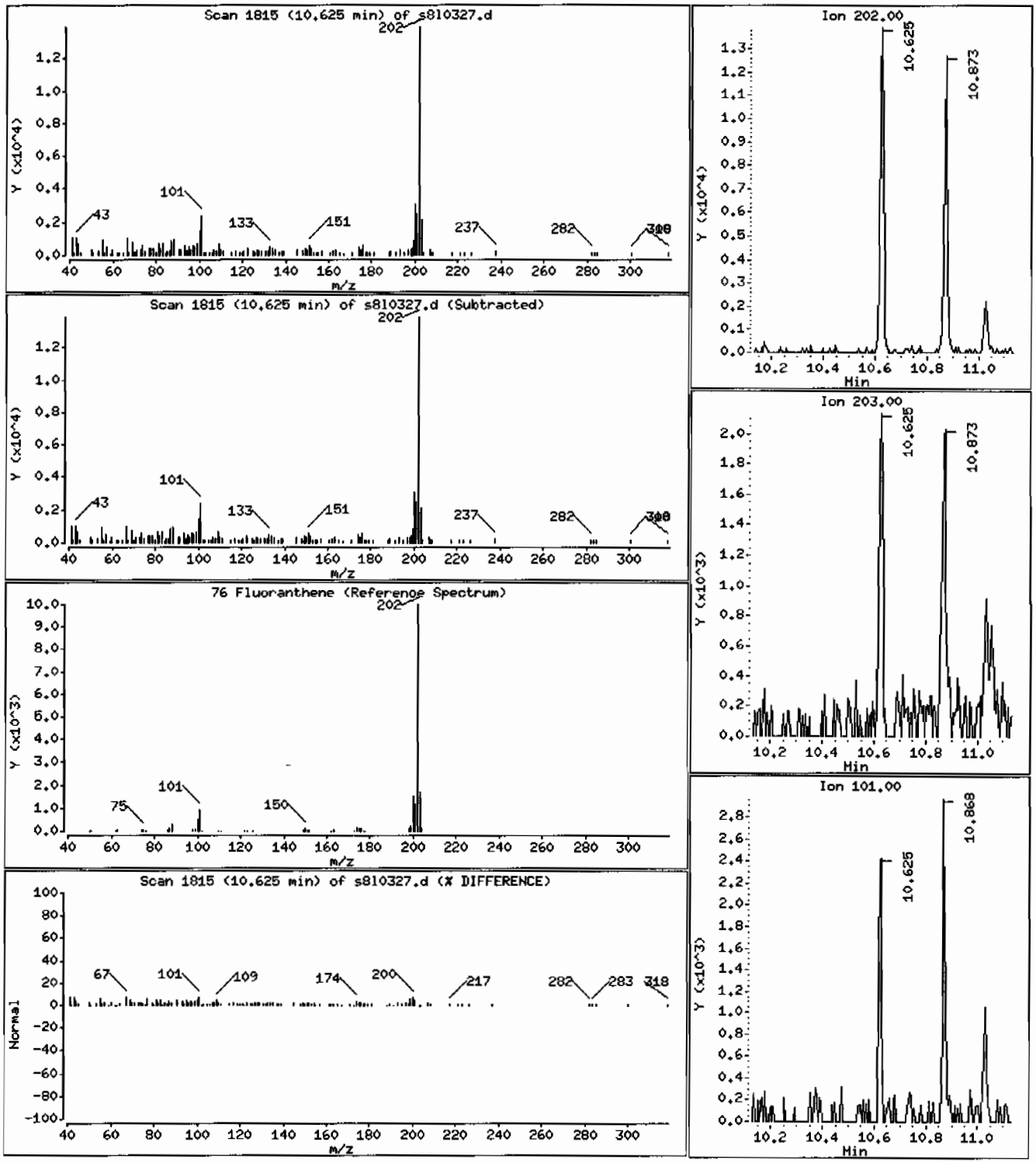

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 15.9 ug/Kg

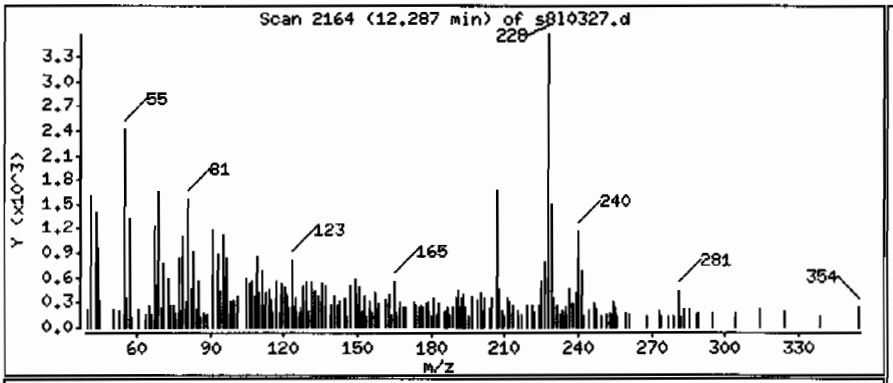

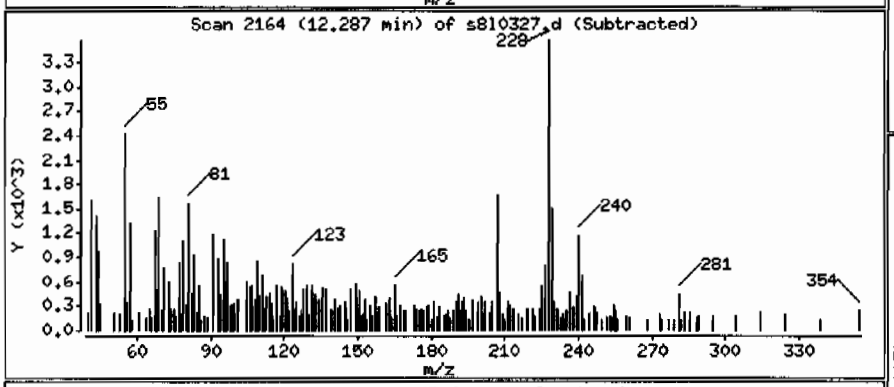

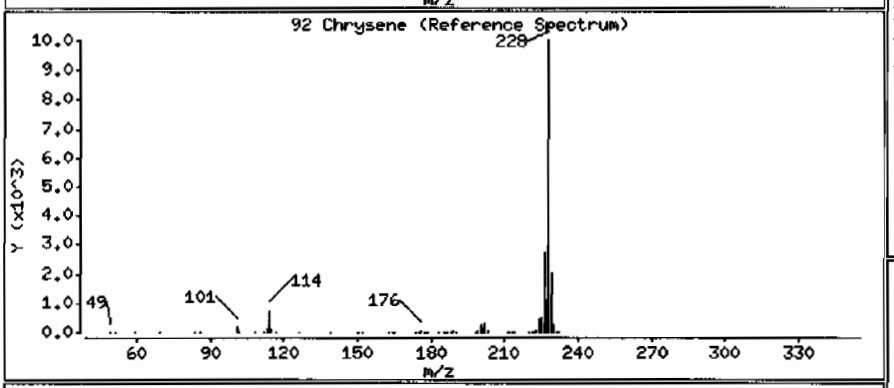

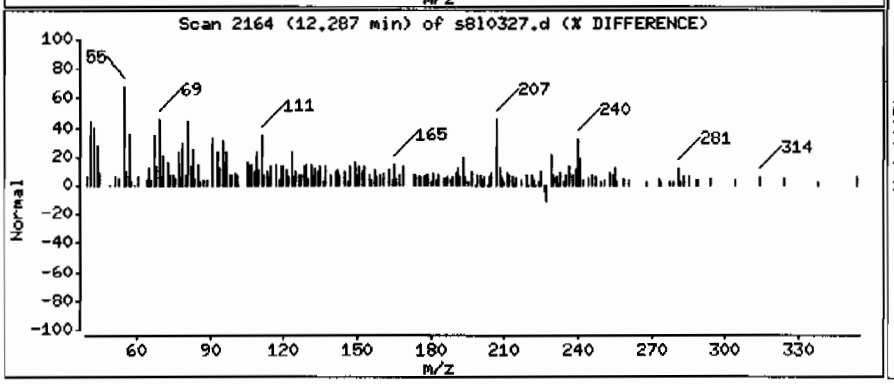

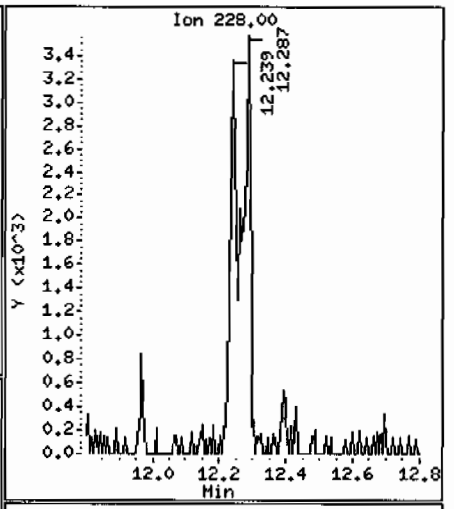

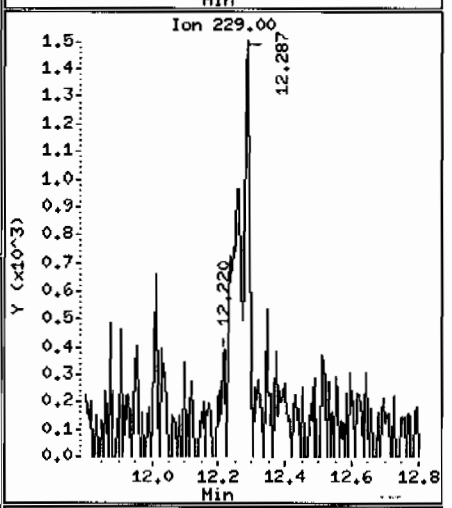

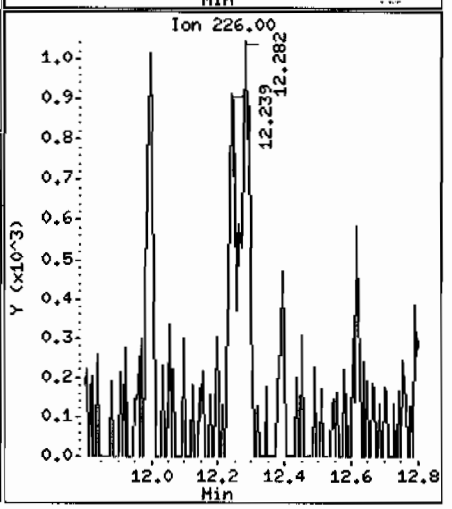

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |24131B0051925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 15.1 ug/Kg

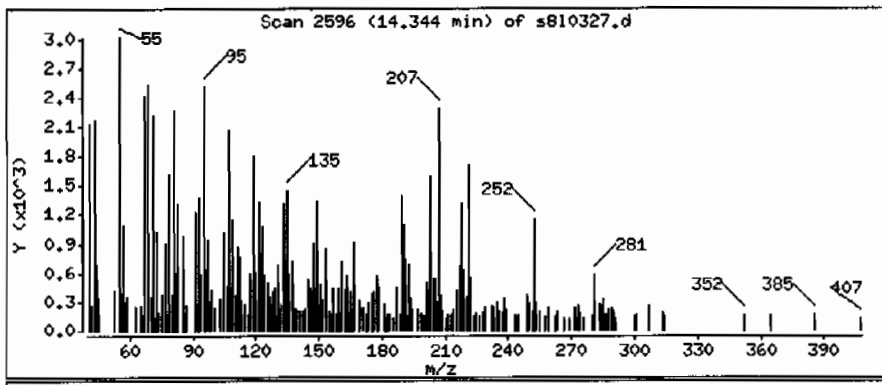

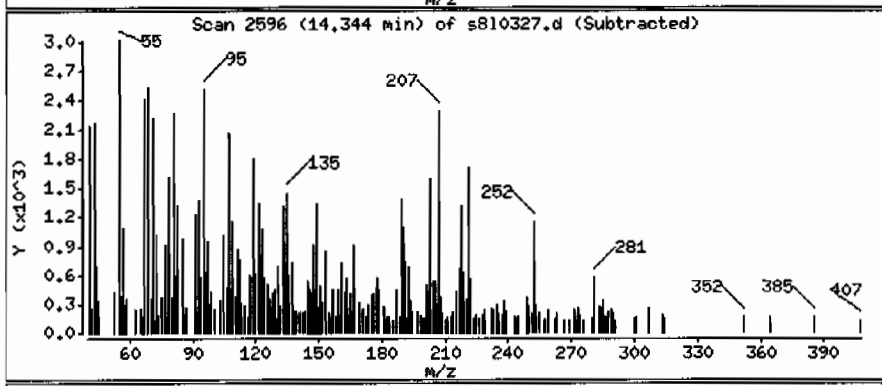

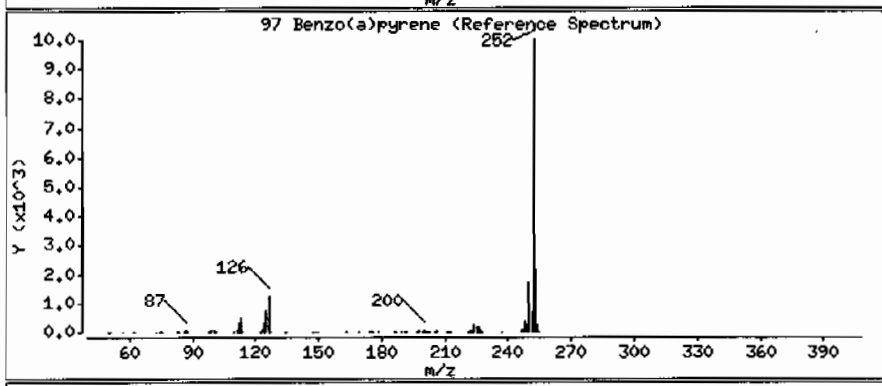

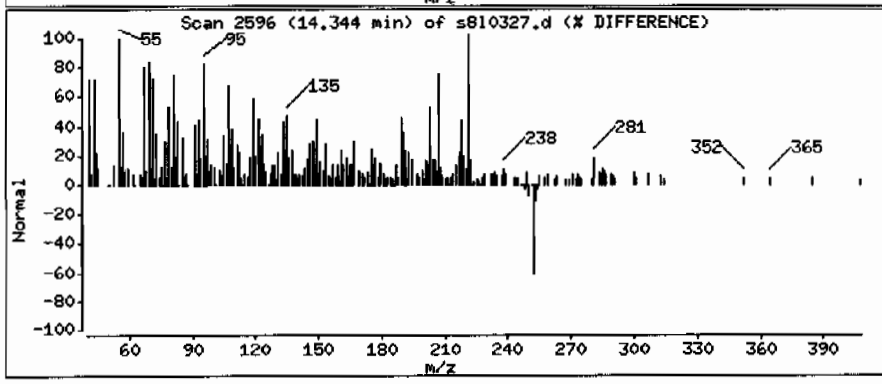

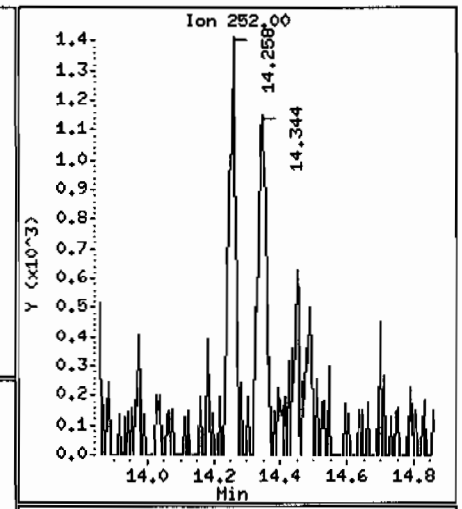

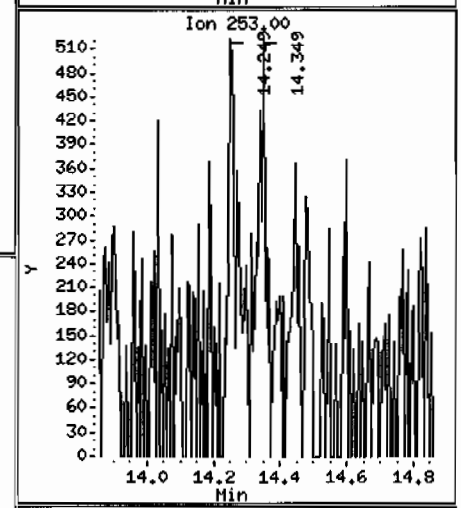

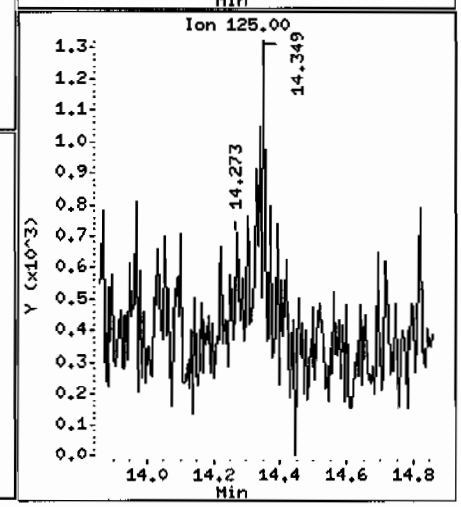

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |24131800519256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	72	C6H12O2	116
Hydrazine, 1,1-bis(1-methylethyl)-	921-14-2	NIST05.L	8044	50	C6H16N2	116
Propane, 1,1-dipropoxy-	4744-11-0	NIST05.L	30019	38	C9H20O2	160

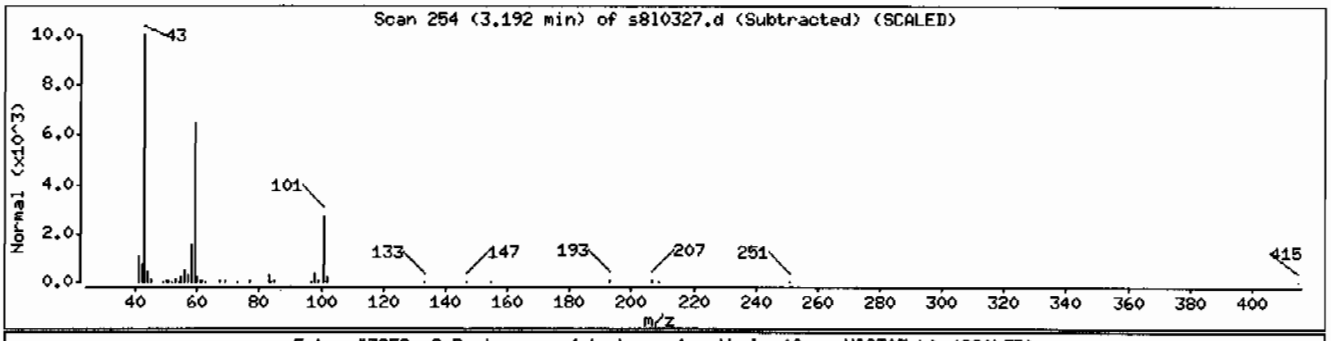

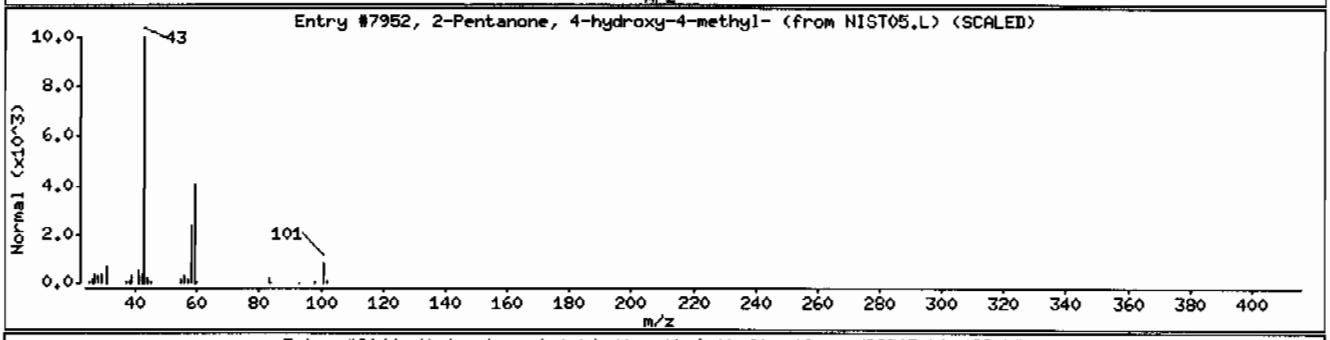

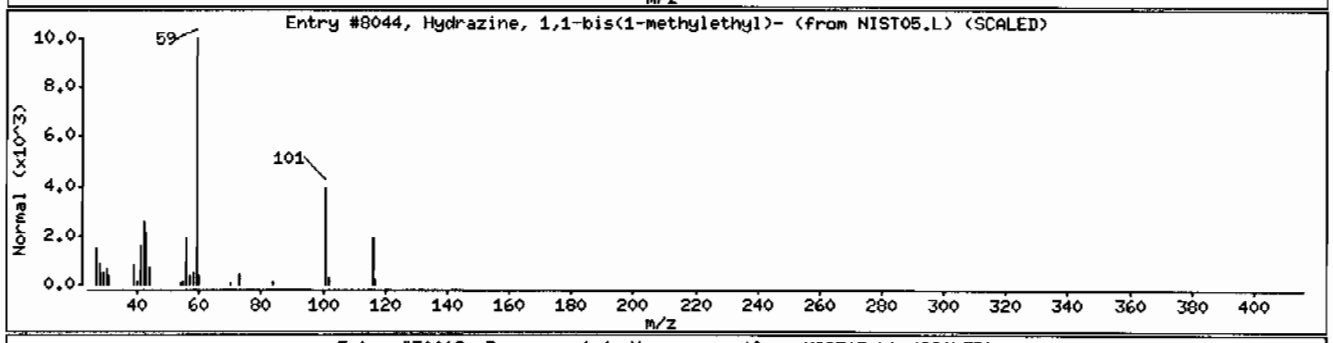

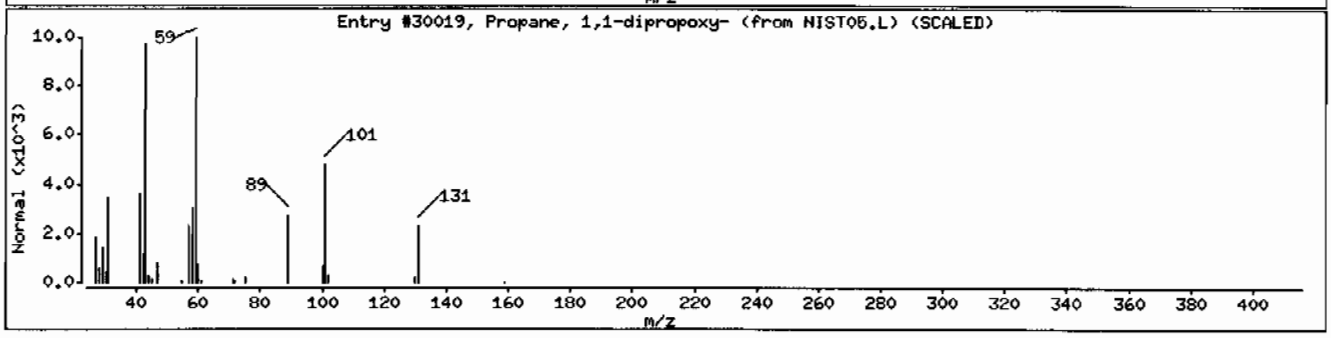

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: 1241318005|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane	593-45-3	NIST05.L	94929	95	C18H38	254
Octadecane	593-45-3	NIST05.L	94931	95	C18H38	254
Heptadecane	629-78-7	NIST05.L	85525	95	C17H36	240

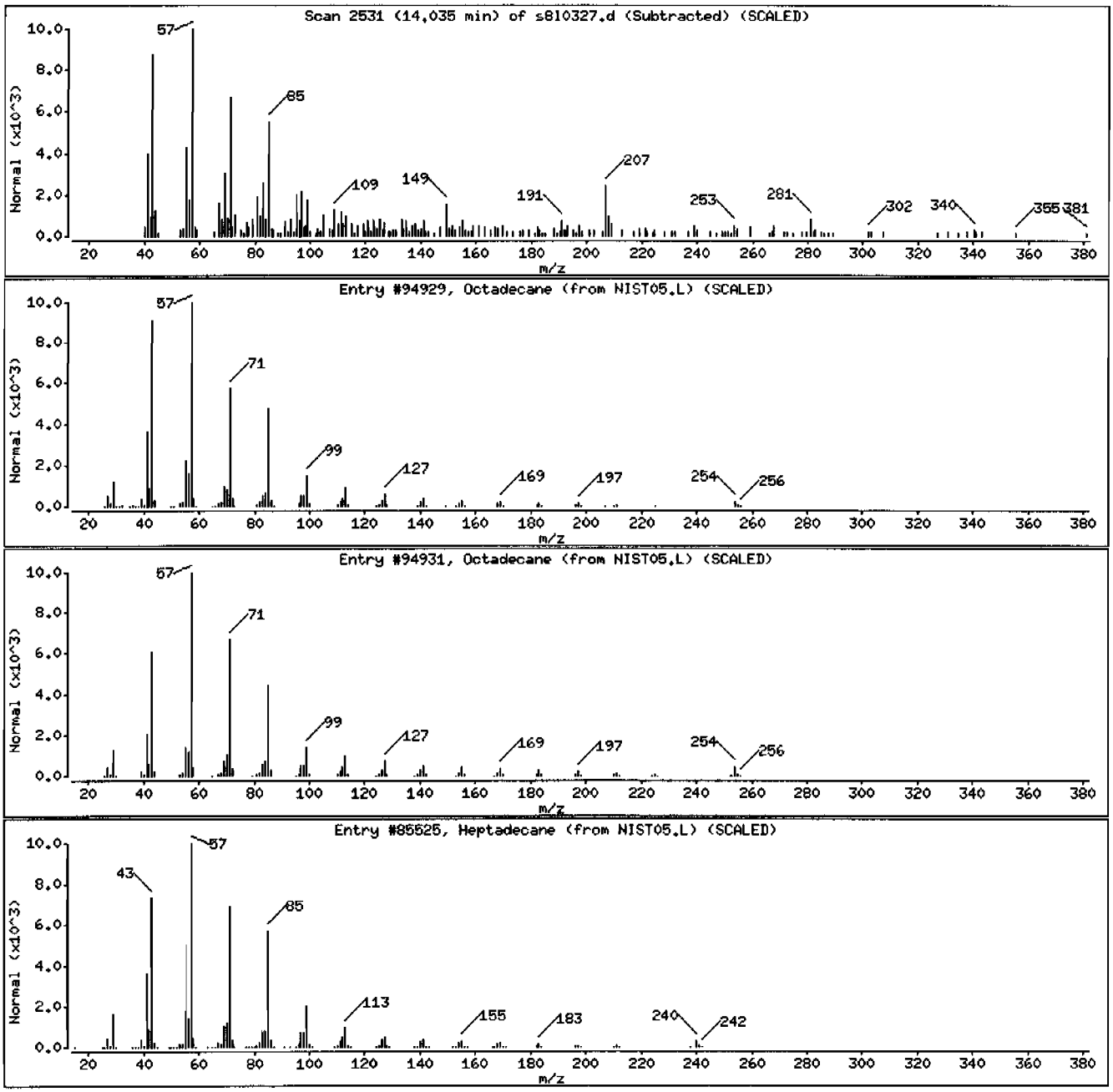

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
6-Isopropenyl-4,8a-dimethyl-4a,5,6,7,8,8	86917-79-5	NIST05.L	69971	38	C15H220	218
3,4-Bis-(methylthio)-quinoline	74579-34-3	NIST05.L	71769	35	C11H11NS2	221
Cyclohexane, 1,1'-(1,3-butadiene-1,4-diy	55712-53-3	NIST05.L	70026	25	C16H26	218

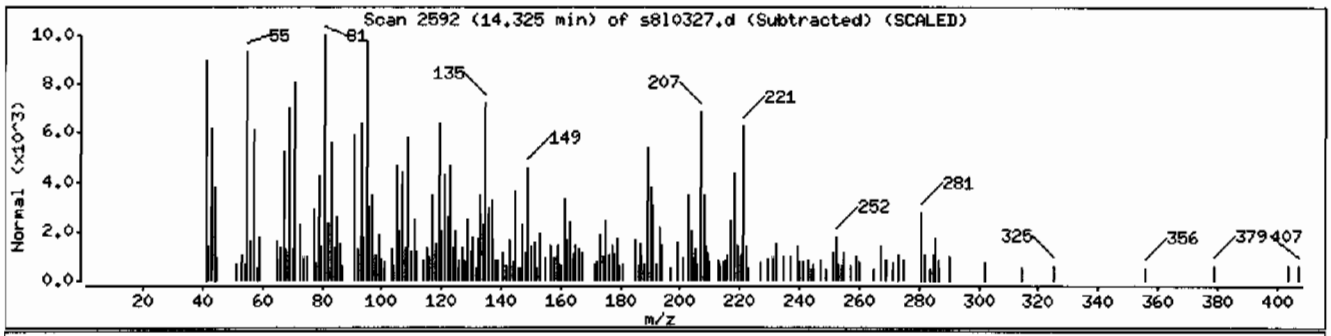

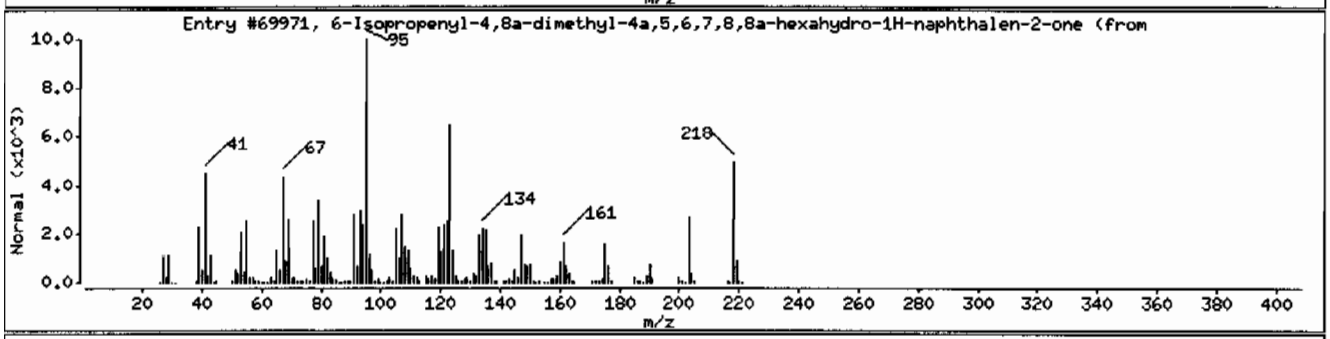

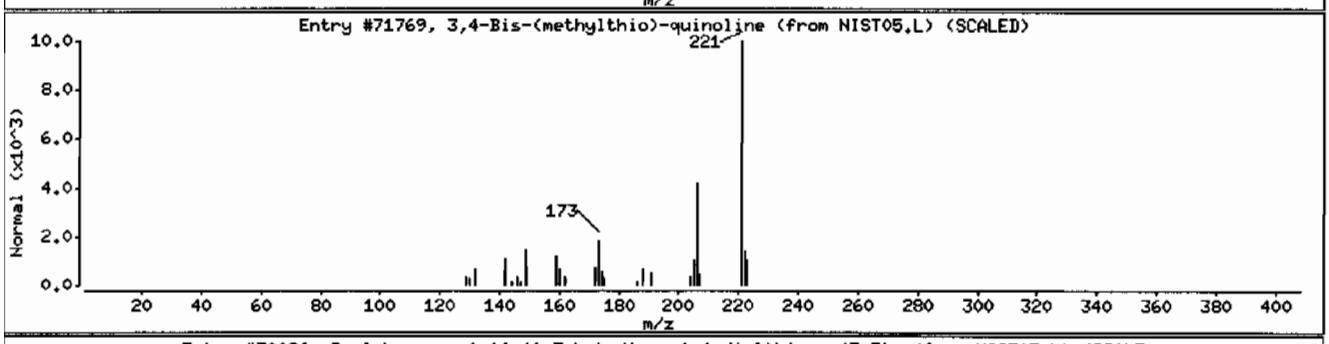

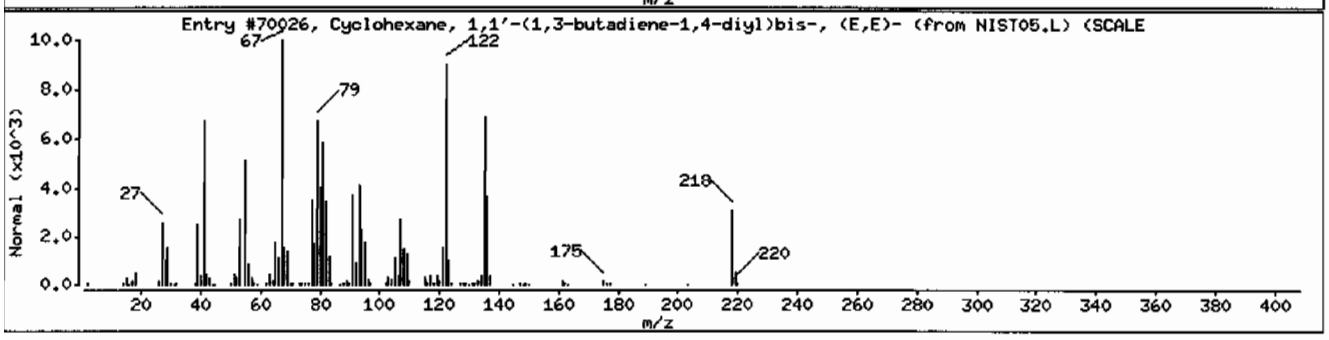

Data File: /chem/MSD8.i/s120309.b/s810327.d

Date : 03-DEC-2009 22:08

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: 1241318005192563711ISVHF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	94	C30H50O	426
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NIST05.L	171460	70	C28H48O	400
(-)-Neoclovene-(II), dihydro-	1000152-83-6	NIST05.L	61550	53	C15H26	206

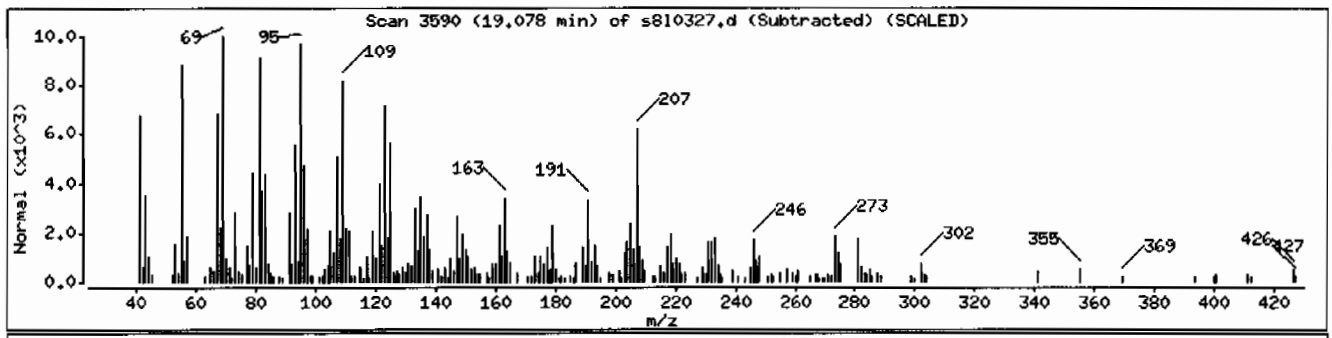

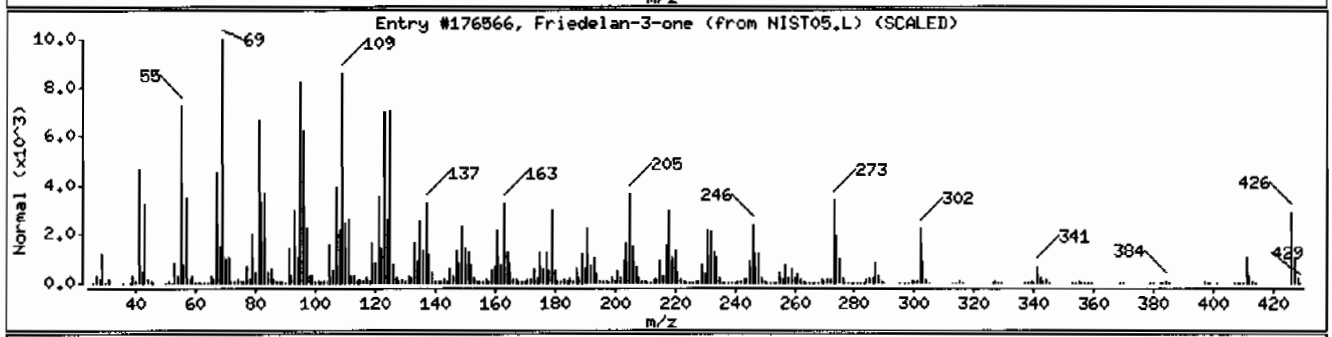

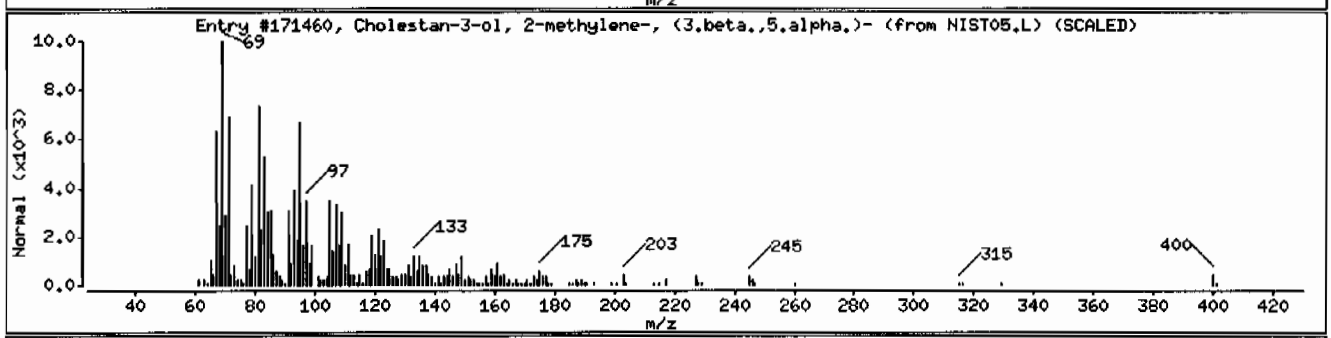

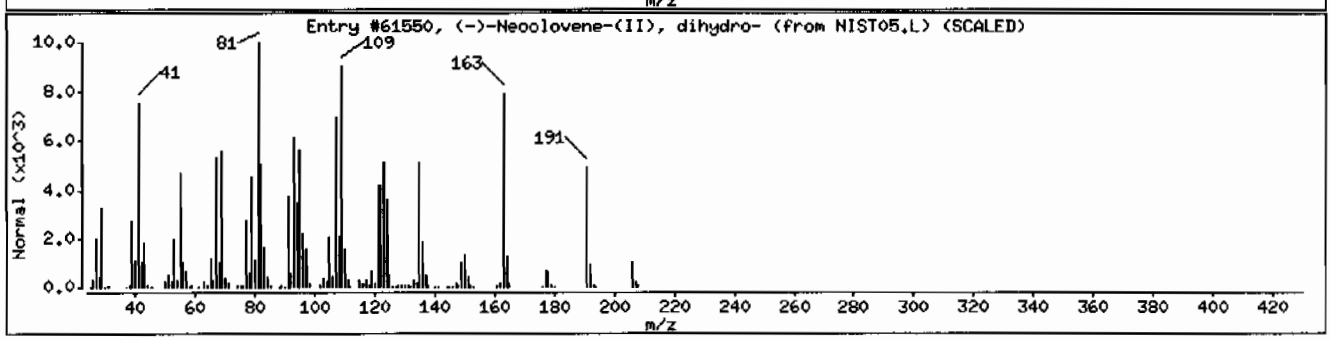

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318010**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**16.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13625**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.1**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:44**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s810417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401
108-95-2	Phenol	U	401	ug/kg	80.2	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	U	40.1	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.2	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401
95-48-7	o-Cresol	U	401	ug/kg	80.2	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401
78-59-1	Isophorone	U	401	ug/kg	80.2	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401
65-85-0	Benzoic acid	U	802	ug/kg	200	802
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.2	401
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	401	ug/kg	80.2	401

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318010**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**16.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13625**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:44**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s810417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	p-Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401
122-66-7	Azobenzene	U	401	ug/kg	80.2	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401
85-01-8	Phenanthrene	U	40.1	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401
206-44-0	Fluoranthene	U	40.1	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401
205-99-2	Benzo(b)fluoranthene	U	40.1	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	306	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810417.d
Lab Smp Id: 241318010 Client Smp ID: RE03-09-13625
Inj Date : 04-DEC-2009 15:44
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318010|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	16.91440	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.535	4.539	(1.000)	293967	40.0000	
* 29 Naphthalene-d8	136	5.801	5.806	(1.000)	1064208	40.0000	
* 46 Acenaphthene-d10	164	7.663	7.668	(1.000)	606749	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.273	(1.000)	1069000	40.0000	
* 91 Chrysene-d12	240	12.197	12.206	(1.000)	943467	40.0000	
* 98 Perylene-d12	264	14.363	14.373	(1.000)	735841	40.0000	
$ 3 2-Fluorophenol	112	3.387	3.377	(0.747)	471596	67.1564	2690
$ 5 Phenol-d5	99	4.149	4.158	(0.915)	571900	64.8771	2600
$ 20 Nitrobenzene-d5	82	5.063	5.073	(0.873)	264428	34.2410	1370
$ 39 2-Fluorobiphenyl	172	6.930	6.935	(0.904)	552972	32.9825	1320
$ 60 2,4,6-Tribromophenol	329	8.511	8.516	(1.111)	122135	43.5791	1750
$ 81 p-Terphenyl-d14	244	10.977	10.982	(0.900)	574764	32.7422	1310

ION RATIO REPORT

SV REPORT

Data file: s810417.d
Report Date: 12/04/2009 16:06
Lab. ID: 241318010 SampleType: SAMPLE
Injection Date: 04-DEC-2009 15:44
Operator: nagl Instrument: MSD8.i
Sample Info: |241318010|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8207_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	30535	4.15	4.23	80-120	100	(T)
93	210	4.21	4.23	214-274	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	40045	5.06	4.91	80-120	100	(T)
42	19538	5.06	4.91	24- 84	49	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	82135	7.66	7.43	80-120	100	(T)
63	272	7.66	7.43	31- 91	0	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	82135	7.66	7.86	80-120	100	(T)
89	1319	7.66	7.86	47-107	2	(QT)
63	272	7.66	7.86	21- 81	0	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	966	8.51	8.30	80-120	100	(T)
105	695	8.51	8.30	11- 71	72	(QT)
51	670	8.51	8.30	15- 75	69	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810417.d
Lab Smp Id: 241318010 Client Smp ID: RE03-09-13625
Inj Date : 04-DEC-2009 15:44
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318010|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J̄ & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	16.91440	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.535	1675881	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.154	319287	7.62074892	306	0		0	10

Data File: /chem/MSD8.i/s120409.b/s810417.d
Date : 04-DEC-2009 15:44
Client ID: REO3-09-13625
Sample Info: |241318010|925637|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20

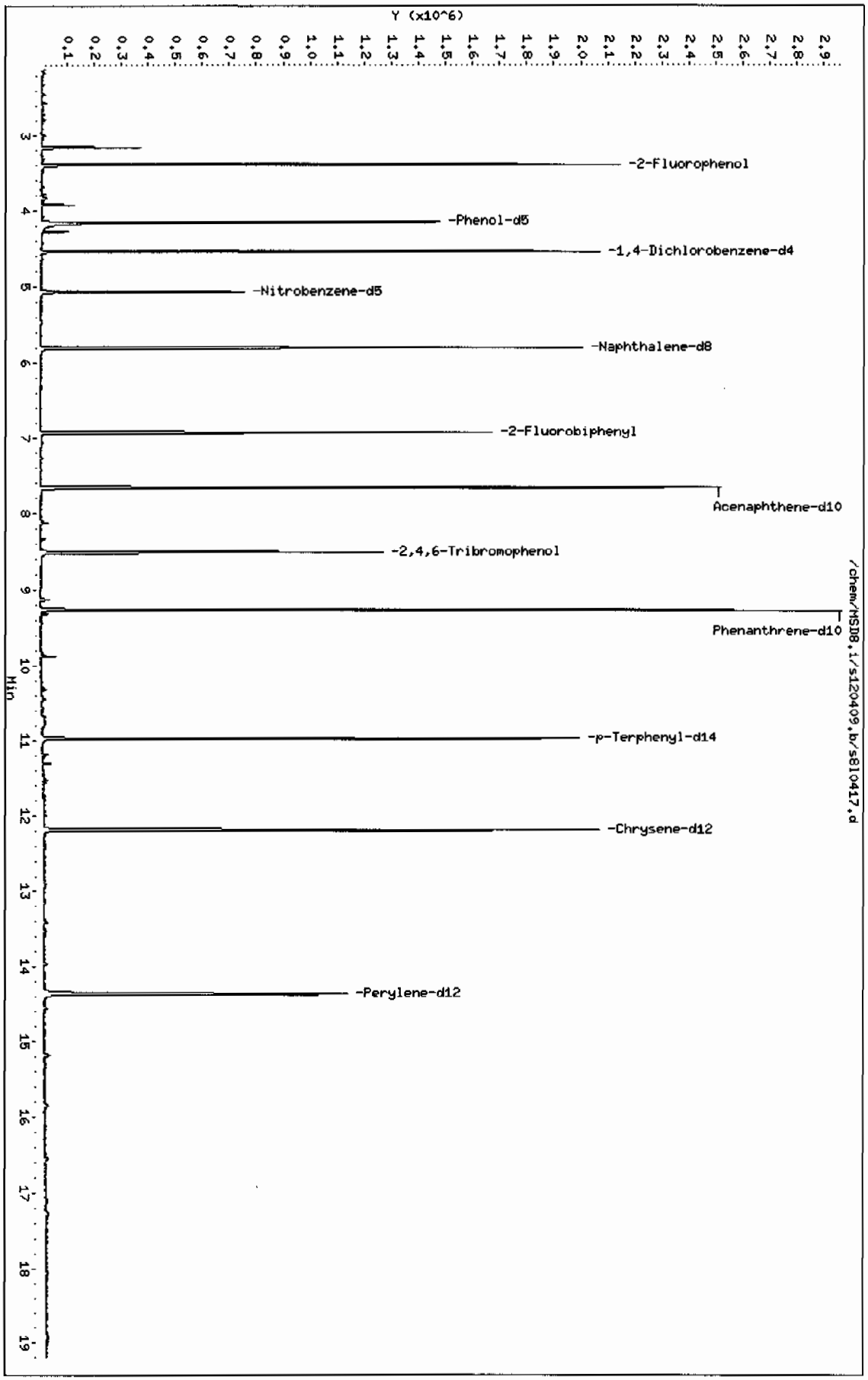

Page 1

Data File: /chem/MSD8.i/s120409.b/s810417.d

Date : 04-DEC-2009 15:44

Client ID: RE03-09-13625

Instrument: MSD8.i

Sample Info: 1241318010192563711ISVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116

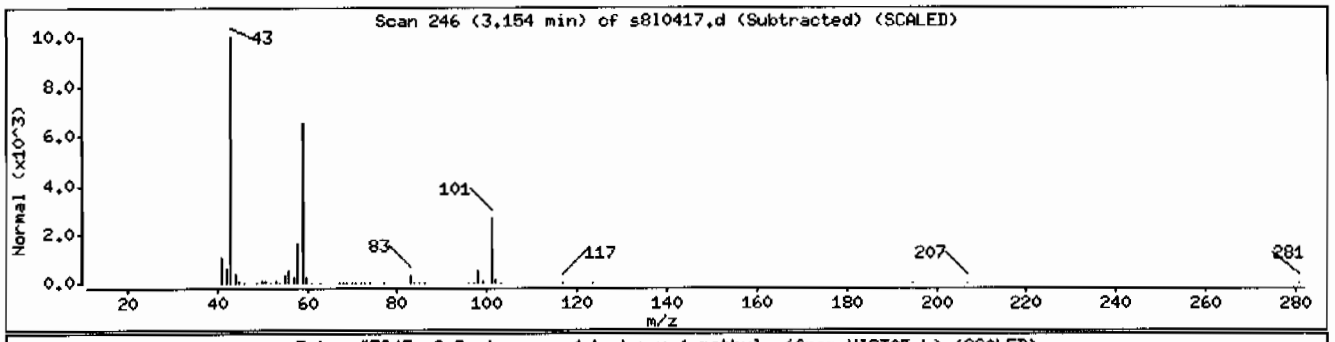

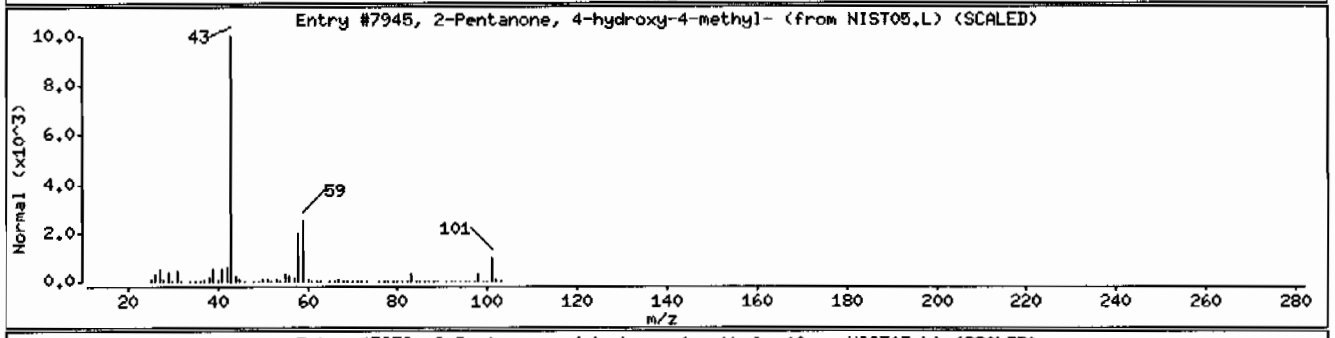

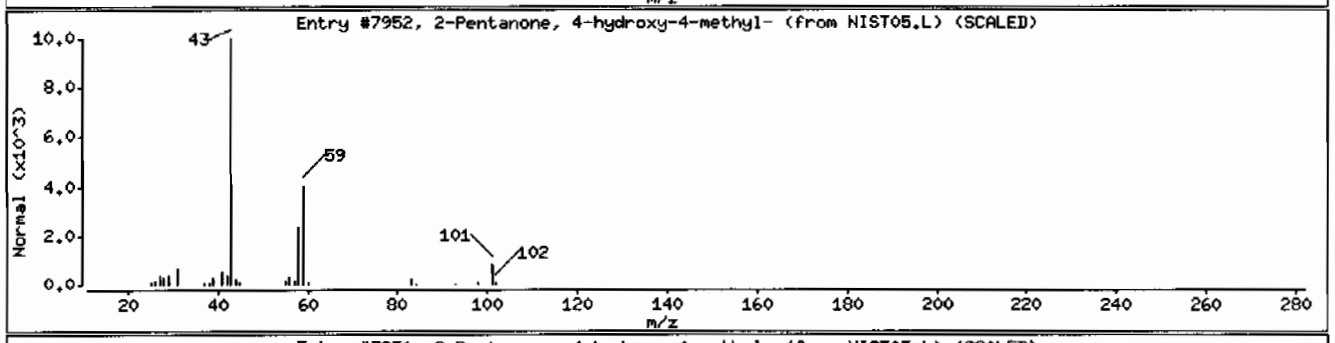

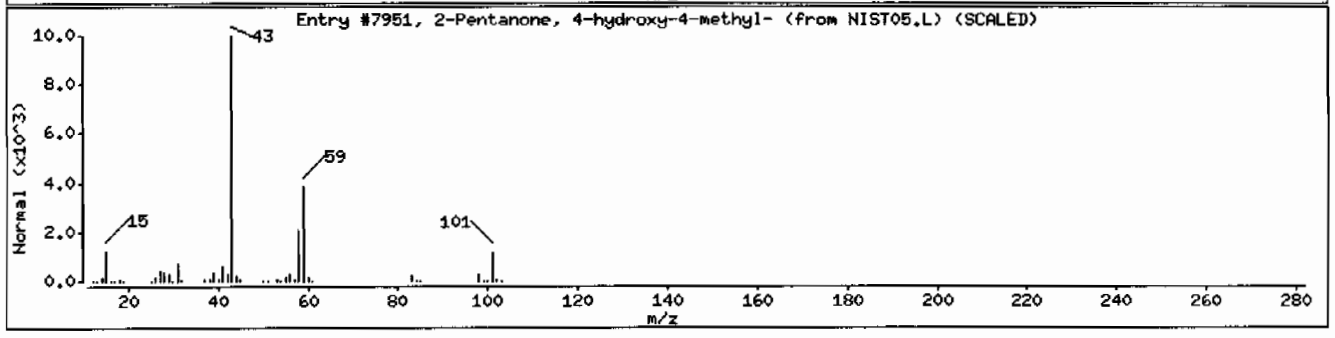

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	393	ug/kg	78.7	393
108-95-2	Phenol	U	393	ug/kg	78.7	393
95-57-8	2-Chlorophenol	U	393	ug/kg	78.7	393
106-46-7	1,4-Dichlorobenzene	U	393	ug/kg	78.7	393
621-64-7	N-Nitrosodipropylamine	U	393	ug/kg	78.7	393
59-50-7	4-Chloro-3-methylphenol	U	393	ug/kg	78.7	393
83-32-9	Acenaphthene	U	39.3	ug/kg	13.0	39.3
121-14-2	2,4-Dinitrotoluene	U	393	ug/kg	39.3	393
100-02-7	4-Nitrophenol	U	393	ug/kg	130	393
87-86-5	Pentachlorophenol	U	393	ug/kg	98.4	393
129-00-0	Pyrene	U	39.3	ug/kg	11.8	39.3
110-86-1	Pyridine	U	393	ug/kg	78.7	393
62-53-3	Aniline	U	393	ug/kg	118	393
111-44-4	bis(2-Chloroethyl) ether	U	393	ug/kg	78.7	393
541-73-1	1,3-Dichlorobenzene	U	393	ug/kg	78.7	393
100-51-6	Benzyl alcohol	U	393	ug/kg	118	393
95-50-1	1,2-Dichlorobenzene	U	393	ug/kg	78.7	393
108-60-1	bis(2-Chloroisopropyl)ether	U	393	ug/kg	78.7	393
95-48-7	o-Cresol	U	393	ug/kg	78.7	393
65794-96-9	m,p-Cresols	U	393	ug/kg	118	393
67-72-1	Hexachloroethane	U	393	ug/kg	78.7	393
98-95-3	Nitrobenzene	U	393	ug/kg	78.7	393
78-59-1	Isophorone	U	393	ug/kg	78.7	393
88-75-5	2-Nitrophenol	U	393	ug/kg	78.7	393
105-67-9	2,4-Dimethylphenol	U	393	ug/kg	138	393
111-91-1	bis(2-Chloroethoxy)methane	U	393	ug/kg	78.7	393
120-83-2	2,4-Dichlorophenol	U	393	ug/kg	78.7	393
65-85-0	Benzoic acid	U	787	ug/kg	197	787
91-20-3	Naphthalene	U	39.3	ug/kg	11.8	39.3
106-47-8	4-Chloroaniline	U	393	ug/kg	78.7	393
87-68-3	Hexachlorobutadiene	U	393	ug/kg	78.7	393
91-57-6	2-Methylnaphthalene	U	39.3	ug/kg	7.87	39.3
77-47-4	Hexachlorocyclopentadiene	U	393	ug/kg	78.7	393
88-06-2	2,4,6-Trichlorophenol	U	393	ug/kg	78.7	393
95-95-4	2,4,5-Trichlorophenol	U	393	ug/kg	78.7	393
91-58-7	2-Chloronaphthalene	U	39.3	ug/kg	13.0	39.3
88-74-4	2-Nitroaniline	U	393	ug/kg	78.7	393
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	393	ug/kg	78.7	393

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318007**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**15.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13626**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 18:10**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0319.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	393	ug/kg	78.7	393
606-20-2	2,6-Dinitrotoluene	U	393	ug/kg	39.3	393
208-96-8	Acenaphthylene	U	39.3	ug/kg	11.8	39.3
51-28-5	2,4-Dinitrophenol	U	787	ug/kg	150	787
132-64-9	Dibenzofuran	U	393	ug/kg	78.7	393
84-66-2	Diethylphthalate	U	393	ug/kg	78.7	393
86-73-7	Fluorene	U	39.3	ug/kg	11.8	39.3
7005-72-3	4-Chlorophenylphenylether	U	393	ug/kg	78.7	393
534-52-1	2-Methyl-4,6-dinitrophenol	U	393	ug/kg	78.7	393
100-01-6	4-Nitroaniline	U	393	ug/kg	118	393
	p-Nitroaniline					
122-39-4	Diphenylamine	U	393	ug/kg	78.7	393
122-66-7	Azobenzene	U	393	ug/kg	78.7	393
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	393	ug/kg	78.7	393
118-74-1	Hexachlorobenzene	U	393	ug/kg	78.7	393
85-01-8	Phenanthrene	U	39.3	ug/kg	11.8	39.3
120-12-7	Anthracene	U	39.3	ug/kg	7.87	39.3
84-74-2	Di-n-butylphthalate	U	393	ug/kg	78.7	393
206-44-0	Fluoranthene	U	39.3	ug/kg	11.8	39.3
85-68-7	Butylbenzylphthalate	U	393	ug/kg	78.7	393
56-55-3	Benzo(a)anthracene	U	39.3	ug/kg	11.8	39.3
91-94-1	3,3'-Dichlorobenzidine	U	393	ug/kg	118	393
218-01-9	Chrysene	U	39.3	ug/kg	11.8	39.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	393	ug/kg	78.7	393
117-84-0	Di-n-octylphthalate	U	393	ug/kg	78.7	393
205-99-2	Benzo(b)fluoranthene	U	39.3	ug/kg	11.8	39.3
207-08-9	Benzo(k)fluoranthene	U	39.3	ug/kg	11.8	39.3
50-32-8	Benzo(a)pyrene	U	39.3	ug/kg	11.8	39.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.3	ug/kg	11.8	39.3
53-70-3	Dibenzo(a,h)anthracene	U	39.3	ug/kg	11.8	39.3
191-24-2	Benzo(ghi)perylene	U	39.3	ug/kg	11.8	39.3
120-82-1	1,2,4-Trichlorobenzene	U	393	ug/kg	78.7	393

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.2	271	ug/kg		J
	Unknown	14.3	188	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 18:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.34	200	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810319.d
Lab Smp Id: 241318007 Client Smp ID: RE03-09-13626
Inj Date : 03-DEC-2009 18:10
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318007|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	15.51040	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	222568	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	801611	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.720	(1.000)	470391	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	852743	40.0000	
* 91 Chrysene-d12	240	12.258	12.268	(1.000)	692337	40.0000	
* 98 Perylene-d12	264	14.449	14.458	(1.000)	349737	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.748)	335950	63.1870	2490
$ 5 Phenol-d5	99	4.196	4.201	(0.916)	422624	63.3229	2490
$ 20 Nitrobenzene-d5	82	5.111	5.120	(0.874)	195234	33.5628	1320
$ 39 2-Fluorobiphenyl	172	6.977	6.982	(0.904)	427700	32.9056	1290
$ 60 2,4,6-Tribromophenol	329	8.563	8.563	(1.110)	117328	53.9995	2120
$ 81 p-Terphenyl-d14	244	11.030	11.030	(0.900)	530557	41.1869	1620

ION RATIO REPORT

SV REPORT

Data file: s810319.d
Report Date: 12/04/2009 06:32
Lab. ID: 241318007 SampleType: SAMPLE
Injection Date: 03-DEC-2009 18:10
Operator: nagl Instrument: MSD8.i
Sample Info: |241318007|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	25857	4.20	4.27	80-120	100	(T)
93	180	4.25	4.27	227-287	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	31153	5.11	4.96	80-120	100	(T)
42	16121	5.11	4.96	25- 85	52	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	62883	7.72	7.48	80-120	100	(T)
63	992	7.71	7.48	33- 93	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	62883	7.72	7.91	80-120	100	(T)
89	1383	7.72	7.91	47-107	2	(QT)
63	992	7.71	7.91	20- 80	2	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	827	8.55	8.35	80-120	100	(T)
105	895	8.56	8.35	11- 71	108	(QT)
51	983	8.55	8.35	11- 71	119	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810319.d
Lab Smp Id: 241318007 Client Smp ID: RE03-09-13626
Inj Date : 03-DEC-2009 18:10
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318007|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J̄ & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	15.51040	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1348006	40.000
* 98 Perylene-d12	14.449	996554	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.196	232149	6.88866091	271	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Unknown				CAS #:			
14.296	119020	4.77727105	188	0		0	98
Unknown				CAS #:			
14.339	126491	5.07712511	200	0		0	98

Data File: /chem/MSD8.i/s120309.b/s810319.d

Date : 03-DEC-2009 18:10

Client ID: RE03-09-13626

Sample Info: 1241318007192563711|SVMF11|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1

Column diameter: 0.20

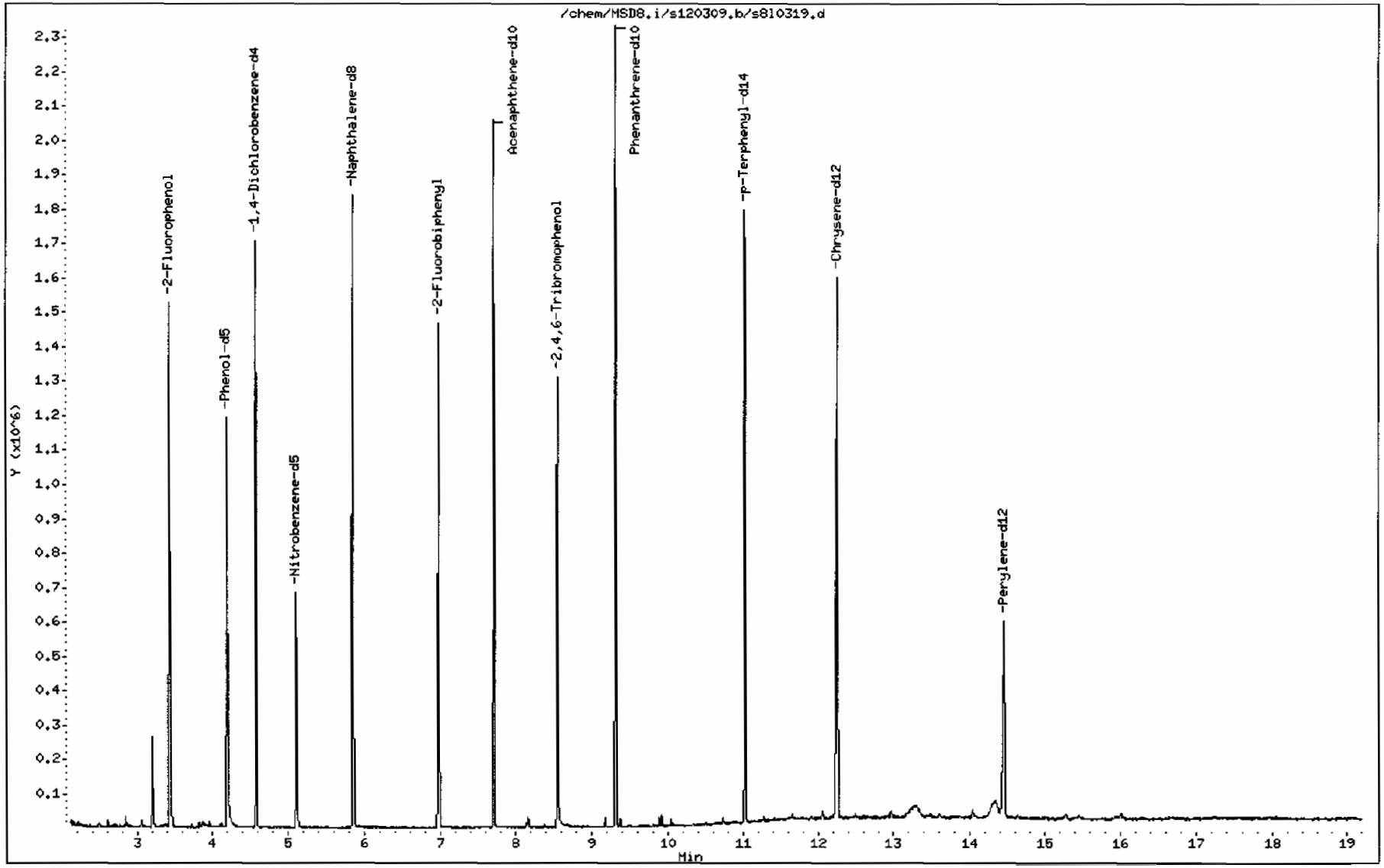

Data File: /chem/MSD8.i/s120309.b/s810319.d

Date : 03-DEC-2009 18:10

Client ID: RE03-09-13626

Instrument: MSD8.i

Sample Info: |24131800|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C6H12O2	116

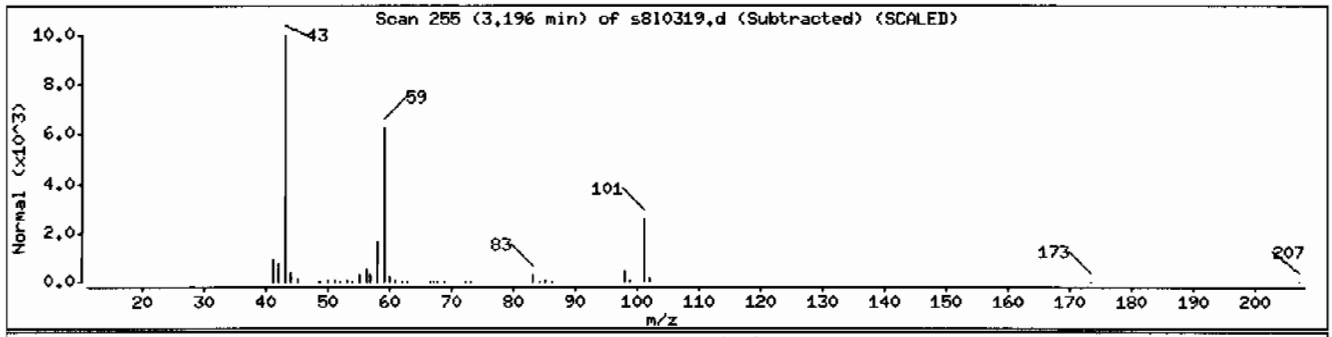

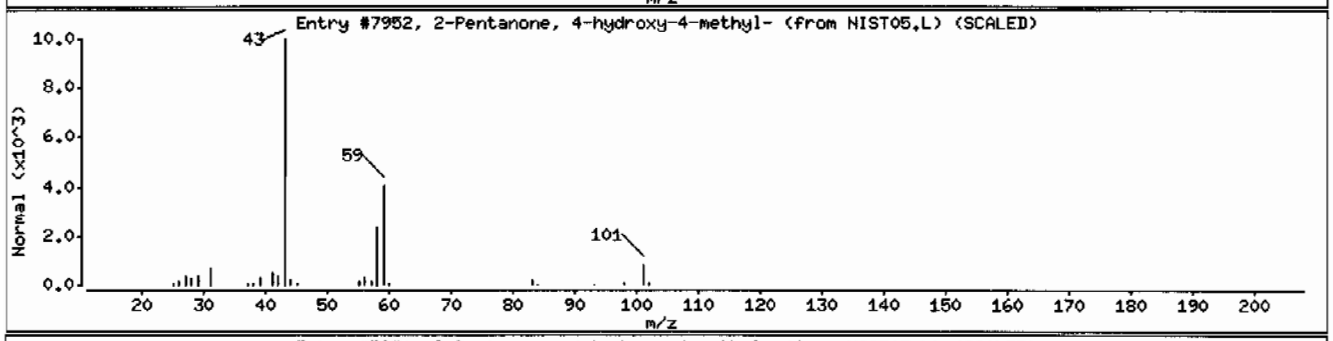

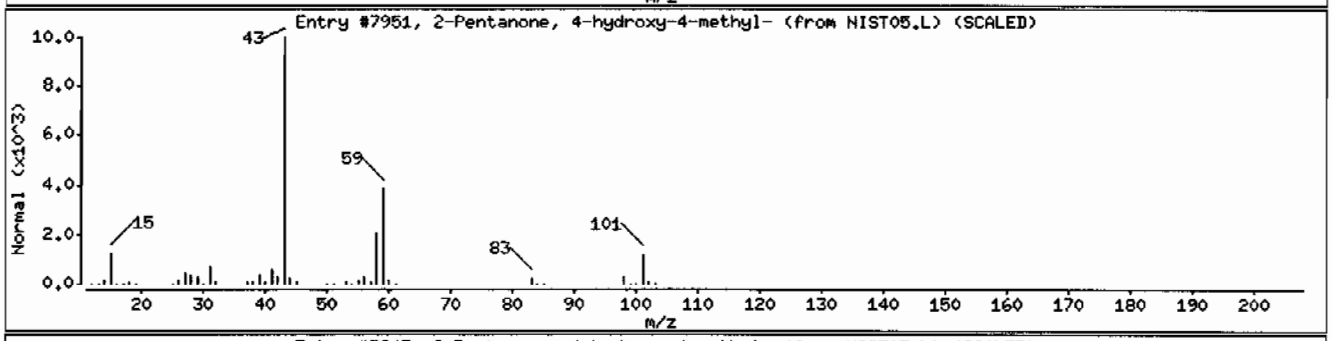

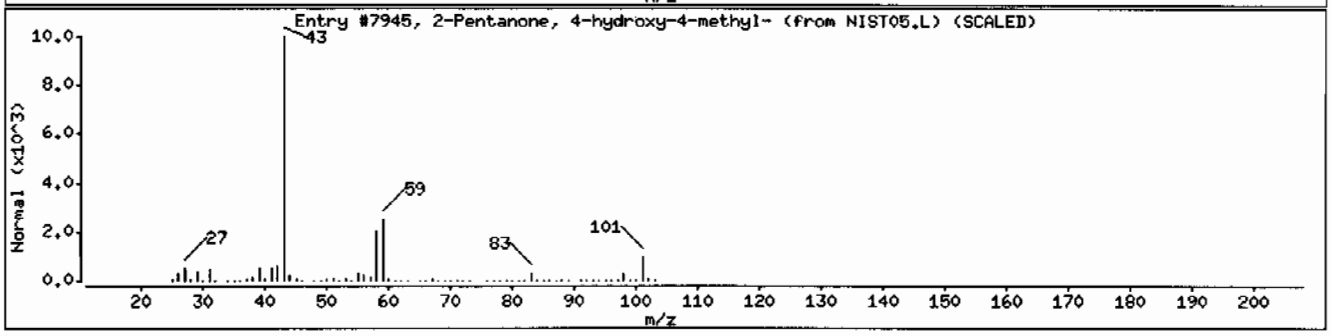

Data File: /chem/MSD8.i/s120309.b/s810319.d

Date : 03-DEC-2009 18:10

Client ID: RE03-09-13626

Instrument: MSD8.i

Sample Info: |24131800719256371|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Isopropyl-octahydrobenzo[e][1,2]oxazin	1000193-38-1	NIST05.L	62748	25	C12H20N2O	208
Aciphyllyl alcohol	87745-29-7	NIST05.L	71345	22	C15H24O	220
Isolongifolan-8-ol	1139-08-8	NIST05.L	72917	22	C15H26O	222

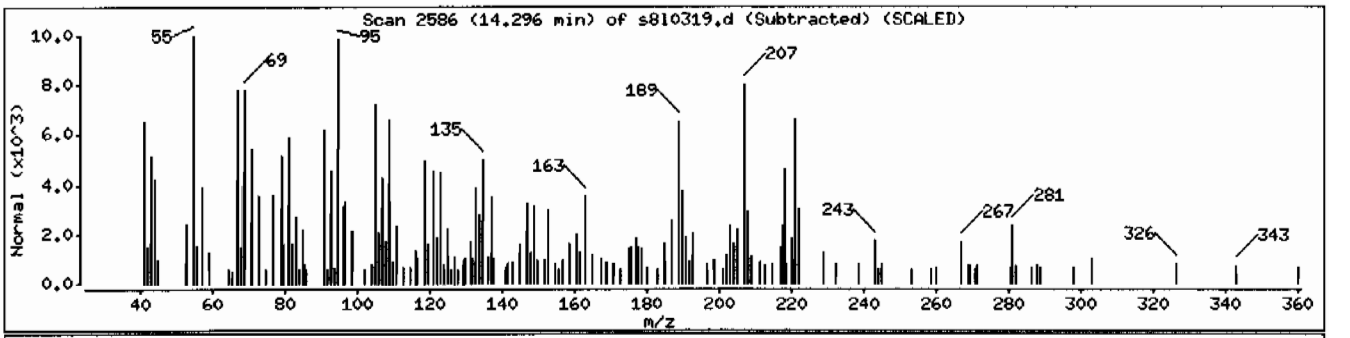

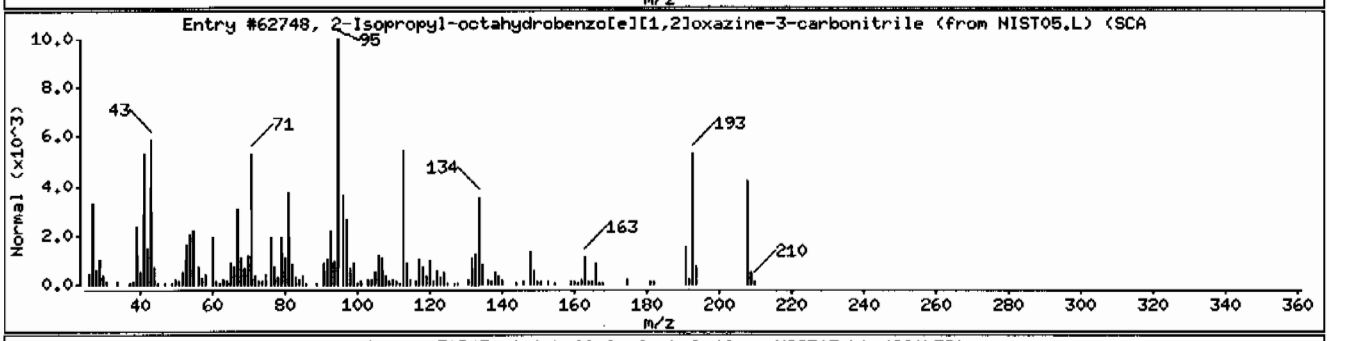

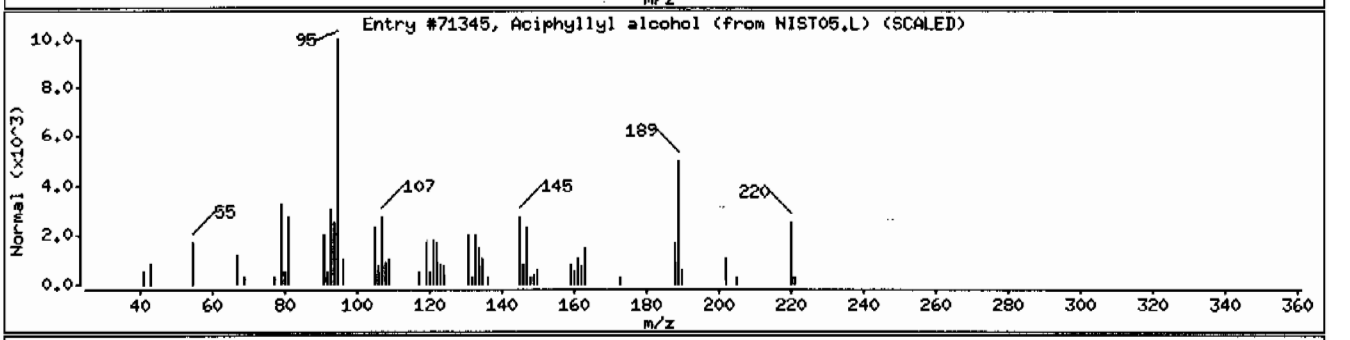

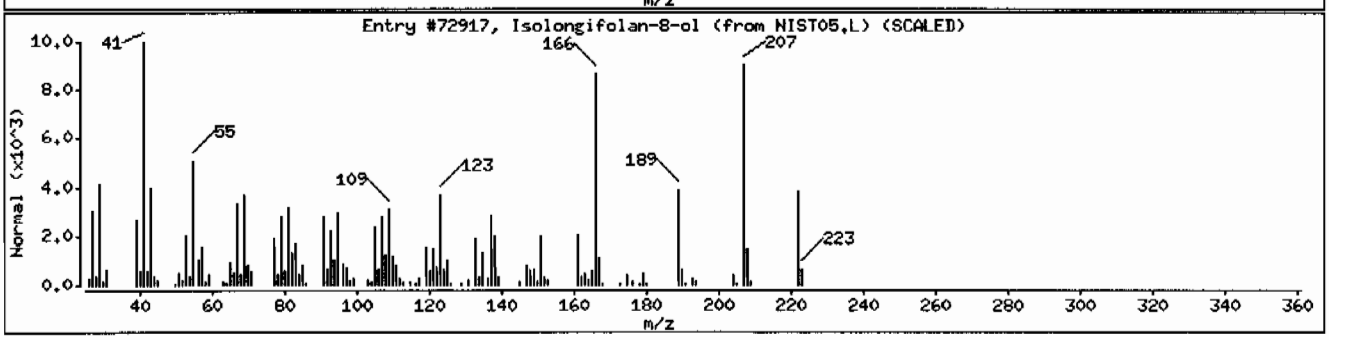

Data File: /chem/MSD8.i/s120309.b/s810319.d

Date : 03-DEC-2009 18:10

Client ID: RE03-09-13626 Instrument: MSD8.i

Sample Info: |2413180071925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4,8-Methanoazulen-9-ol, decahydro-2,2,4,	4586-22-5	NIST05.L	72979	45	C15H26O	222
Thieno[2,3-b]pyridine-2-carbonitrile, 3-	147992-88-9	NIST05.L	69359	25	C10H10N4S	218
2-Amino-4-cyanomethyl-6-piperidino-1,3,5	1000241-05-9	NIST05.L	69370	20	C10H14N6	218

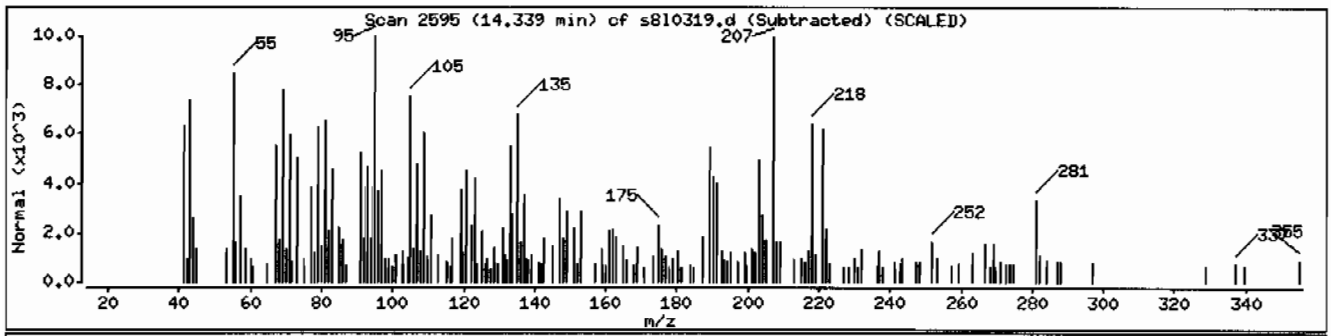

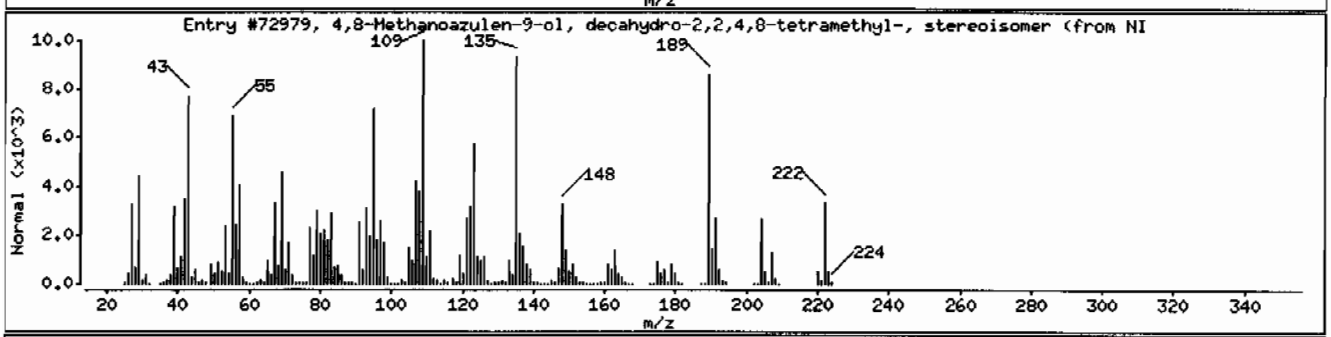

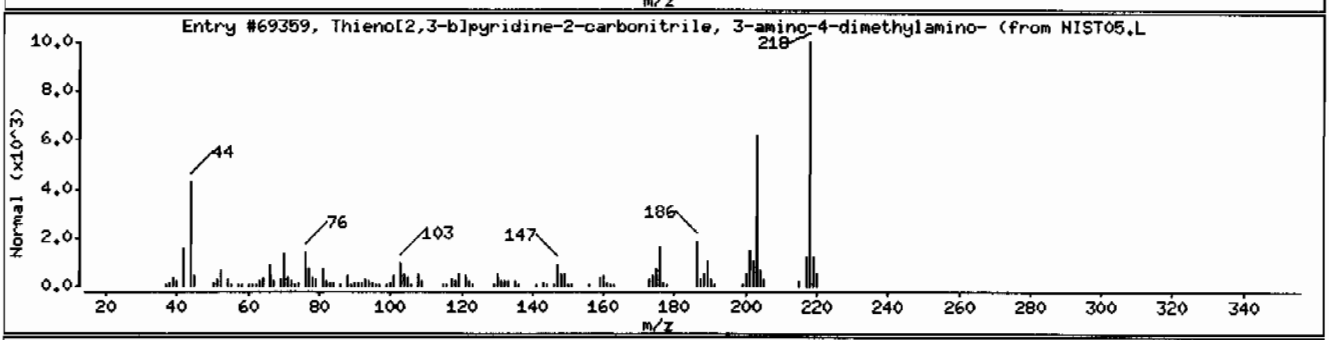

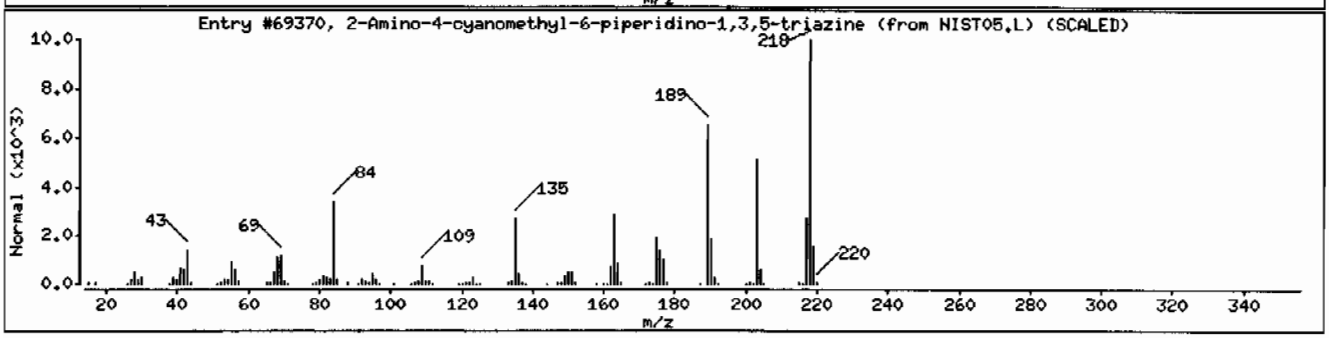

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13627	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 19:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	s810321.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	356	ug/kg	71.3	356
108-95-2	Phenol	U	356	ug/kg	71.3	356
95-57-8	2-Chlorophenol	U	356	ug/kg	71.3	356
106-46-7	1,4-Dichlorobenzene	U	356	ug/kg	71.3	356
621-64-7	N-Nitrosodipropylamine	U	356	ug/kg	71.3	356
59-50-7	4-Chloro-3-methylphenol	U	356	ug/kg	71.3	356
83-32-9	Acenaphthene	U	35.6	ug/kg	11.8	35.6
121-14-2	2,4-Dinitrotoluene	U	356	ug/kg	35.6	356
100-02-7	4-Nitrophenol	U	356	ug/kg	118	356
87-86-5	Pentachlorophenol	U	356	ug/kg	89.1	356
129-00-0	Pyrene	U	35.6	ug/kg	10.7	35.6
110-86-1	Pyridine	U	356	ug/kg	71.3	356
62-53-3	Aniline	U	356	ug/kg	107	356
111-44-4	bis(2-Chloroethyl) ether	U	356	ug/kg	71.3	356
541-73-1	1,3-Dichlorobenzene	U	356	ug/kg	71.3	356
100-51-6	Benzyl alcohol	U	356	ug/kg	107	356
95-50-1	1,2-Dichlorobenzene	U	356	ug/kg	71.3	356
108-60-1	bis(2-Chloroisopropyl)ether	U	356	ug/kg	71.3	356
95-48-7	o-Cresol	U	356	ug/kg	71.3	356
65794-96-9	m,p-Cresols	U	356	ug/kg	107	356
67-72-1	Hexachloroethane	U	356	ug/kg	71.3	356
98-95-3	Nitrobenzene	U	356	ug/kg	71.3	356
78-59-1	Isophorone	U	356	ug/kg	71.3	356
88-75-5	2-Nitrophenol	U	356	ug/kg	71.3	356
105-67-9	2,4-Dimethylphenol	U	356	ug/kg	125	356
111-91-1	bis(2-Chloroethoxy)methane	U	356	ug/kg	71.3	356
120-83-2	2,4-Dichlorophenol	U	356	ug/kg	71.3	356
65-85-0	Benzoic acid	U	713	ug/kg	178	713
91-20-3	Naphthalene	U	35.6	ug/kg	10.7	35.6
106-47-8	4-Chloroaniline	U	356	ug/kg	71.3	356
87-68-3	Hexachlorobutadiene	U	356	ug/kg	71.3	356
91-57-6	2-Methylnaphthalene	U	35.6	ug/kg	7.13	35.6
77-47-4	Hexachlorocyclopentadiene	U	356	ug/kg	71.3	356
88-06-2	2,4,6-Trichlorophenol	U	356	ug/kg	71.3	356
95-95-4	2,4,5-Trichlorophenol	U	356	ug/kg	71.3	356
91-58-7	2-Chloronaphthalene	U	35.6	ug/kg	11.8	35.6
88-74-4	2-Nitroaniline	U	356	ug/kg	71.3	356
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	356	ug/kg	71.3	356

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318009**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13627**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:09**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.19 g**	**Final Volume:**	**1 mL**
Data File:	**s810321.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	356	ug/kg	71.3	356
606-20-2	2,6-Dinitrotoluene	U	356	ug/kg	35.6	356
208-96-8	Acenaphthylene	U	35.6	ug/kg	10.7	35.6
51-28-5	2,4-Dinitrophenol	U	713	ug/kg	135	713
132-64-9	Dibenzofuran	U	356	ug/kg	71.3	356
84-66-2	Diethylphthalate	U	356	ug/kg	71.3	356
86-73-7	Fluorene	U	35.6	ug/kg	10.7	35.6
7005-72-3	4-Chlorophenylphenylether	U	356	ug/kg	71.3	356
534-52-1	2-Methyl-4,6-dinitrophenol	U	356	ug/kg	71.3	356
100-01-6	4-Nitroaniline	U	356	ug/kg	107	356
	p-Nitroaniline					
122-39-4	Diphenylamine	U	356	ug/kg	71.3	356
122-66-7	Azobenzene	U	356	ug/kg	71.3	356
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	356	ug/kg	71.3	356
118-74-1	Hexachlorobenzene	U	356	ug/kg	71.3	356
85-01-8	Phenanthrene	U	35.6	ug/kg	10.7	35.6
120-12-7	Anthracene	U	35.6	ug/kg	7.13	35.6
84-74-2	Di-n-butylphthalate	U	356	ug/kg	71.3	356
206-44-0	Fluoranthene	U	35.6	ug/kg	10.7	35.6
85-68-7	Butylbenzylphthalate	U	356	ug/kg	71.3	356
56-55-3	Benzo(a)anthracene	U	35.6	ug/kg	10.7	35.6
91-94-1	3,3'-Dichlorobenzidine	U	356	ug/kg	107	356
218-01-9	Chrysene	U	35.6	ug/kg	10.7	35.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	356	ug/kg	71.3	356
117-84-0	Di-n-octylphthalate	U	356	ug/kg	71.3	356
205-99-2	Benzo(b)fluoranthene	U	35.6	ug/kg	10.7	35.6
207-08-9	Benzo(k)fluoranthene	U	35.6	ug/kg	10.7	35.6
50-32-8	Benzo(a)pyrene	U	35.6	ug/kg	10.7	35.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.6	ug/kg	10.7	35.6
53-70-3	Dibenzo(a,h)anthracene	U	35.6	ug/kg	10.7	35.6
191-24-2	Benzo(ghi)perylene	U	35.6	ug/kg	10.7	35.6
120-82-1	1,2,4-Trichlorobenzene	U	356	ug/kg	71.3	356

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	259	ug/kg		JA
	Unknown	14.33	293	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13627	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 19:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	s810321.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	14.34	254	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810321.d
Lab Smp Id: 241318009 Client Smp ID: RE03-09-13627
Inj Date : 03-DEC-2009 19:09
Operator : nag1 Inst ID: MSD8.i
Smp Info : |241318009|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	7.04810	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	214050	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	774309	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.720	(1.000)	455072	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	809436	40.0000	
* 91 Chrysene-d12	240	12.258	12.268	(1.000)	677556	40.0000	
* 98 Perylene-d12	264	14.449	14.458	(1.000)	414684	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.748)	342407	66.9643	2390
$ 5 Phenol-d5	99	4.196	4.201	(0.916)	404796	63.0653	2250
$ 20 Nitrobenzene-d5	82	5.111	5.120	(0.874)	198626	35.3499	1260
$ 39 2-Fluorobiphenyl	172	6.977	6.982	(0.904)	404178	32.1427	1140
$ 60 2,4,6-Tribromophenol	329	8.563	8.563	(1.110)	115029	54.7235	1950
$ 81 p-Terphenyl-d14	244	11.030	11.030	(0.900)	523419	41.5192	1480

ION RATIO REPORT

SV REPORT

Data file: s810321.d
Report Date: 12/04/2009 06:32
Lab. ID: 241318009 SampleType: SAMPLE
Injection Date: 03-DEC-2009 19:09
Operator: nagl Instrument: MSD8.i
Sample Info: |241318009|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	25516	4.20	4.27	80-120	100	(T)
93	173	4.32	4.27	227-287	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	30563	5.11	4.96	80-120	100	(T)
42	15422	5.11	4.96	25- 85	50	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	61228	7.72	7.48	80-120	100	(T)
63	896	7.72	7.48	33- 93	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	61228	7.72	7.91	80-120	100	(T)
89	783	7.71	7.91	47-107	1	(QT)
63	896	7.72	7.91	20- 80	1	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	249	8.56	8.35	80-120	100	(T)
105	1164	8.56	8.35	11- 71	466	(QT)
51	912	8.56	8.35	11- 71	365	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810321.d
Lab Smp Id: 241318009 Client Smp ID: RE03-09-13627
Inj Date : 03-DEC-2009 19:09
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318009|925637|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	7.04810	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1294645	40.000
* 98 Perylene-d12	14.449	1137916	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.192	235155	7.26546786	259	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown				CAS #:			
14.325	234264	8.23482722	293	0		0	98
Unknown				CAS #:			
14.339	202442	7.11622589	254	0		0	98

Data File: /chem/MSD8.i/s120309.b/s810321.d
Date : 03-DEC-2009 19:09
Client ID: RE03-09-13627
Sample Info: 1241318009192563711|SVMF11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20

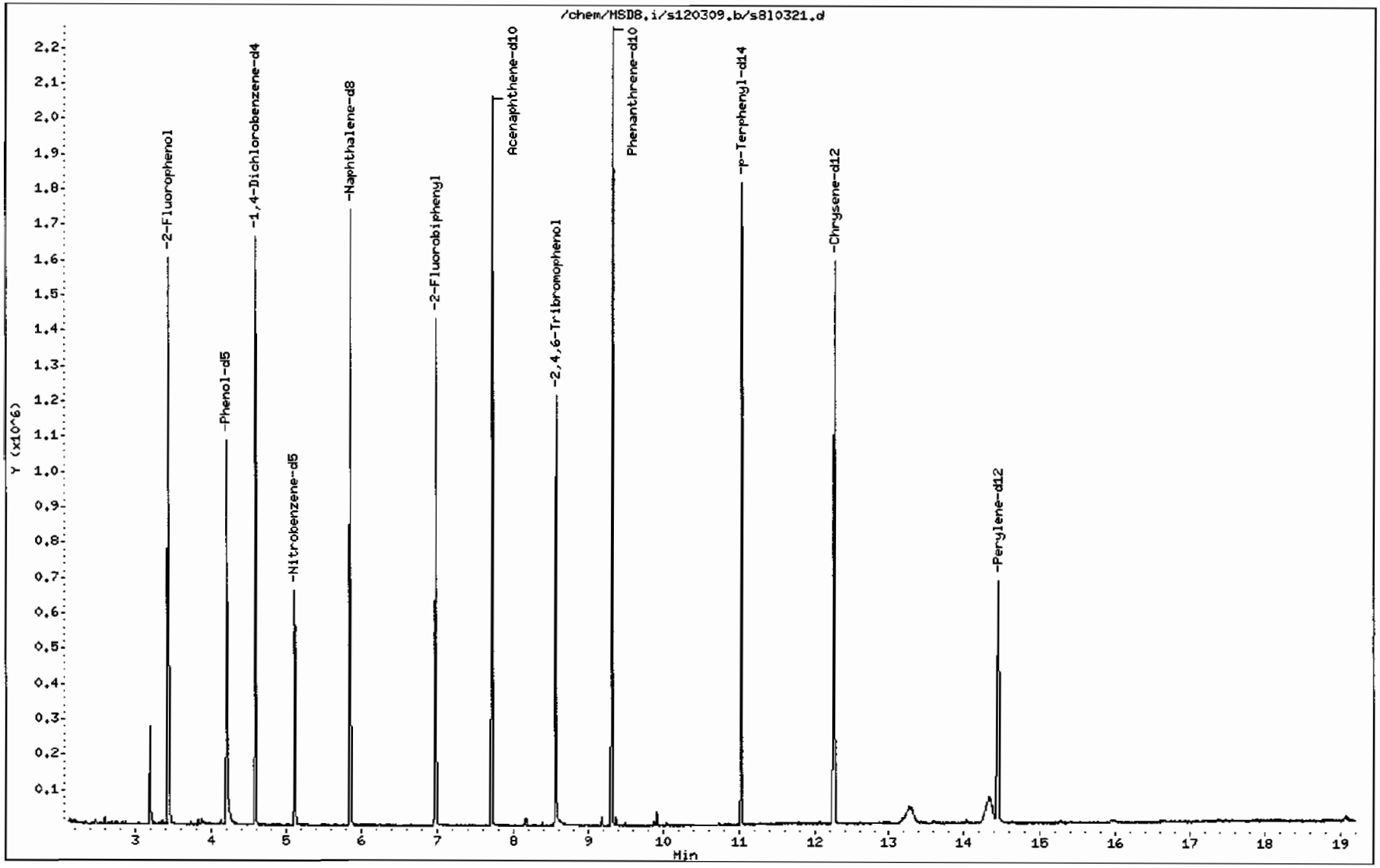

Data File: /chem/MSD8.i/s120309.b/s810321.d

Date : 03-DEC-2009 19:09

Client ID: RE03-09-13627

Instrument: MSD8.i

Sample Info: |24131800919256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

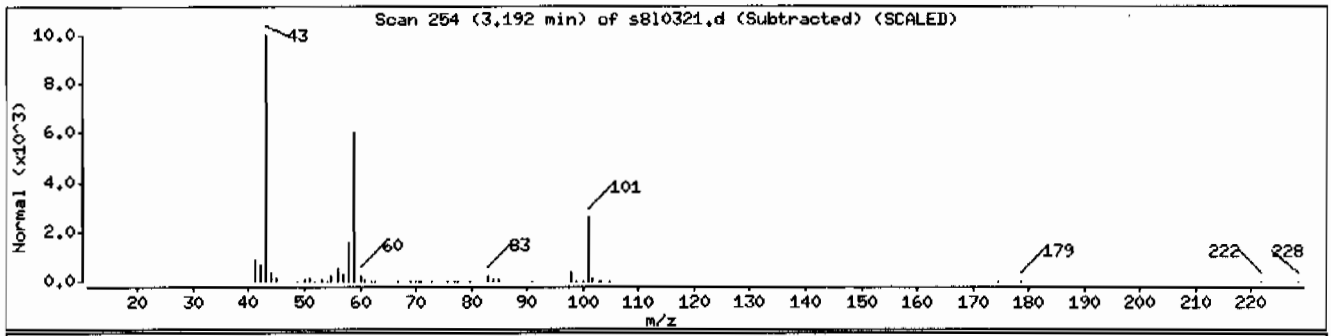

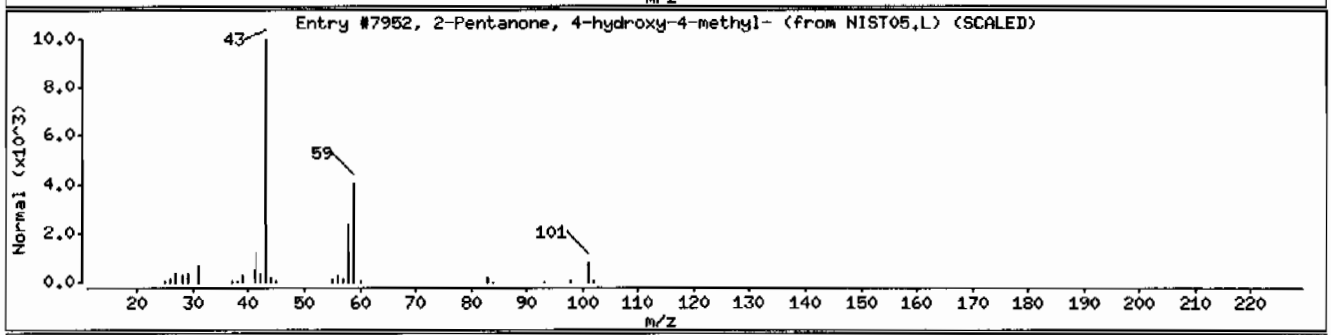

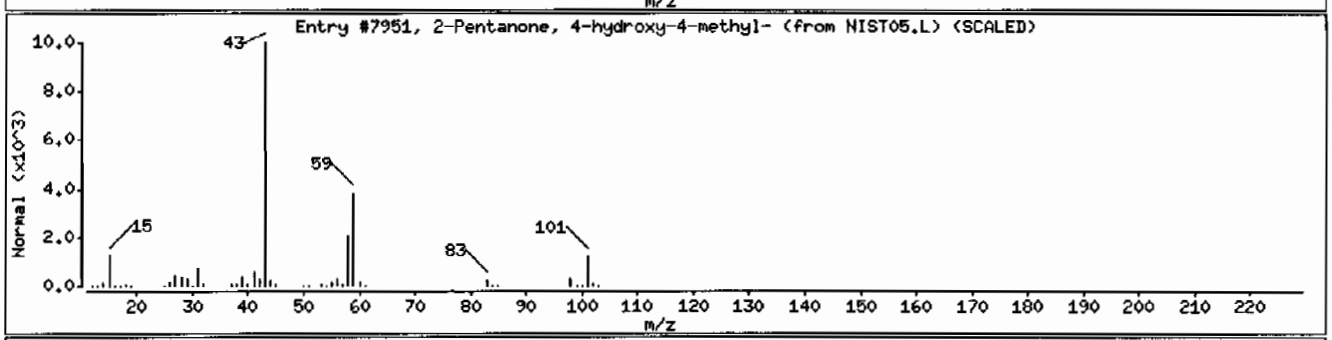

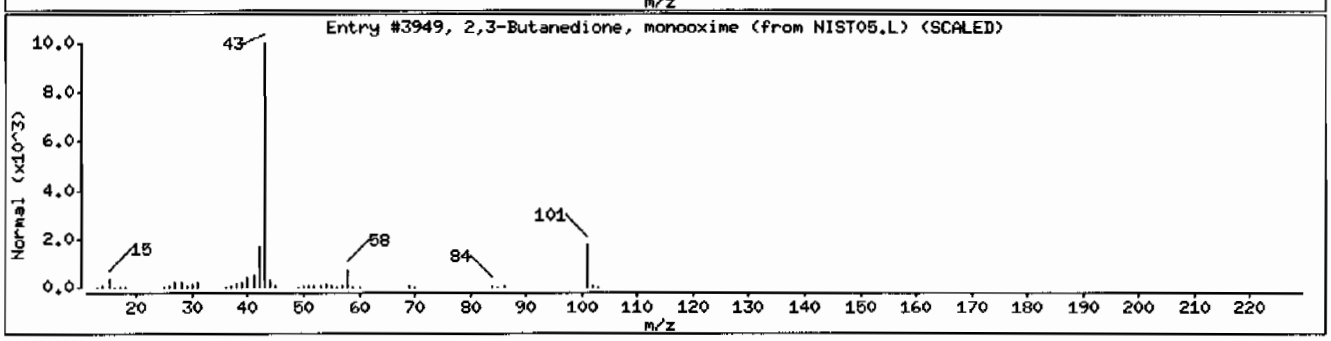

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Date : 03-DEC-2009 19:09

Client ID: RE03-09-13627 Instrument: MSD8.i

Sample Info: |24131800919256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	43	C15H2402	236
1-(4-Methoxymethyl-2,3,5,6-tetramethylph	1000202-09-3	NIST05.L	72764	25	C14H2202	222
Solavetivone	54878-25-0	NIST05.L	69924	25	C15H220	218

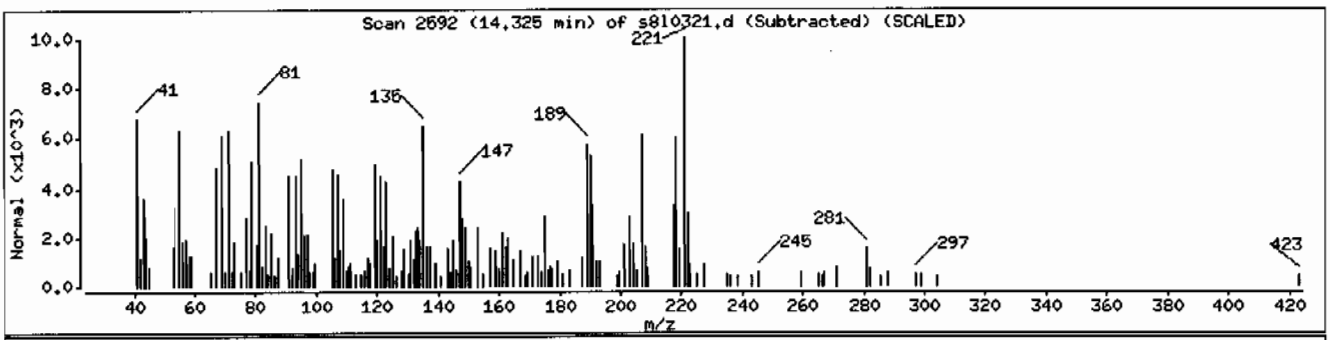

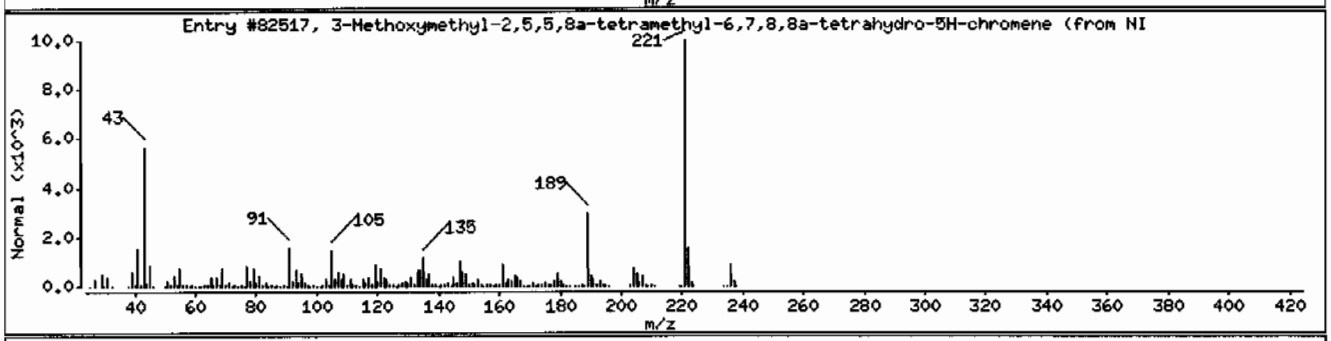

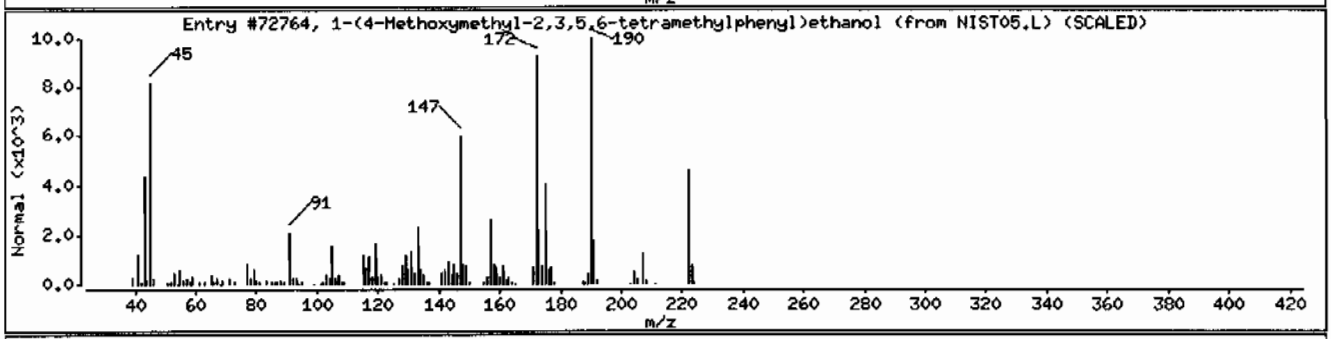

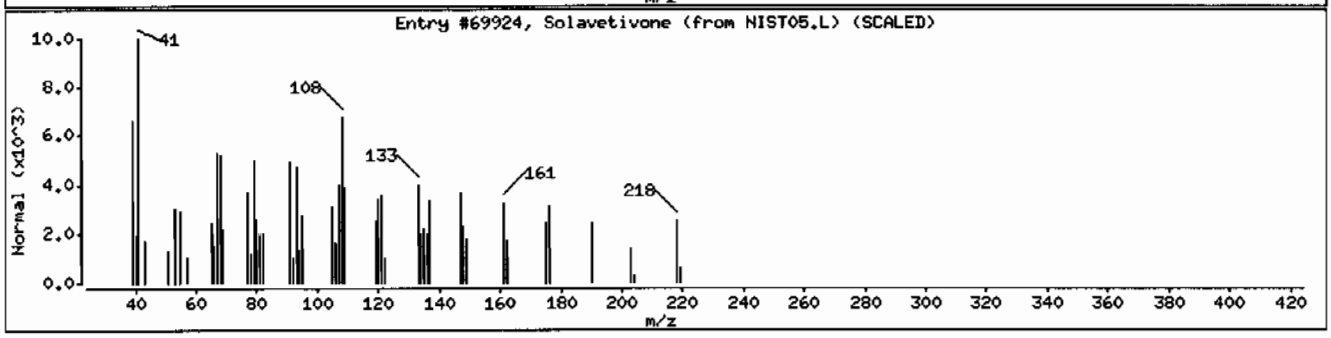

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Date : 03-DEC-2009 19:09

Client ID: RE03-09-13627

Instrument: MSD8.i

Sample Info: |2413180091925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Methylene-2b-hydroxymethyl-3,3-dimethy	1000144-10-6	NIST05.L	72989	72	C15H260	222
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	49	C15H220	218
Decahydro-8a-ethyl-1,1,4a,6-tetramethyln	1000100-23-6	NIST05.L	73085	41	C16H30	222

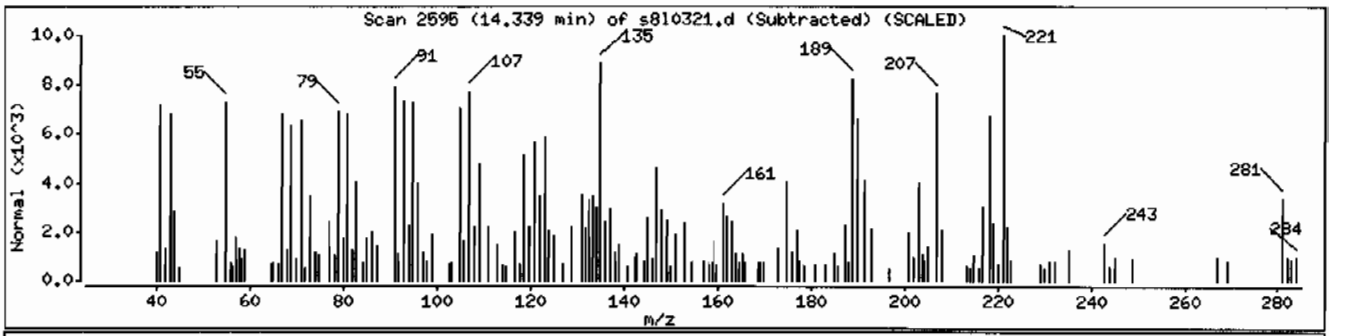

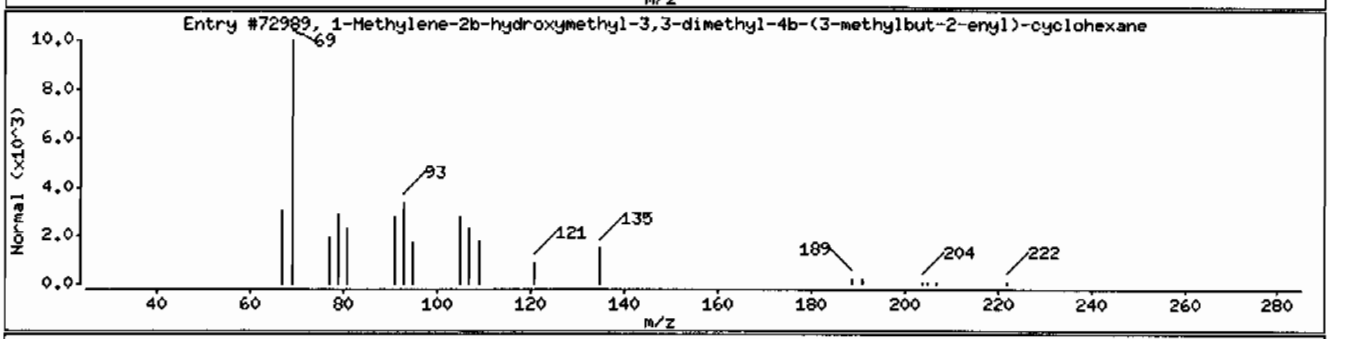

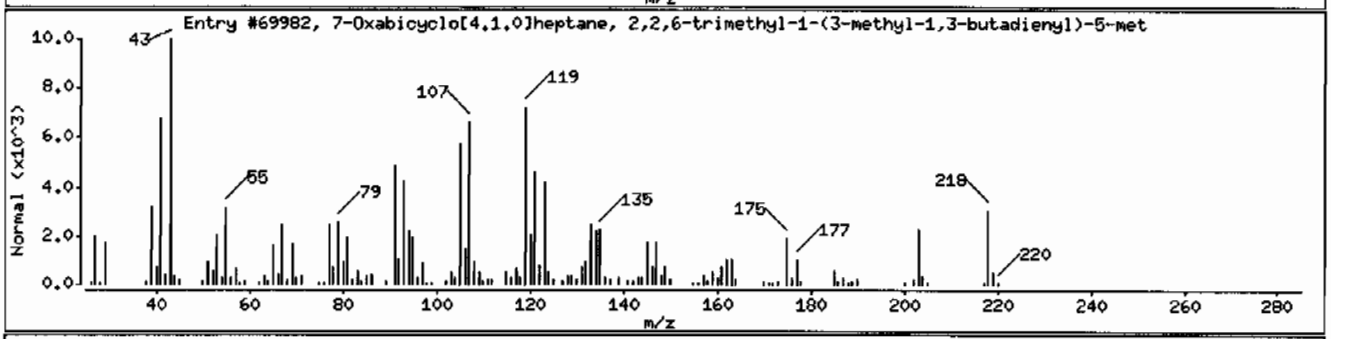

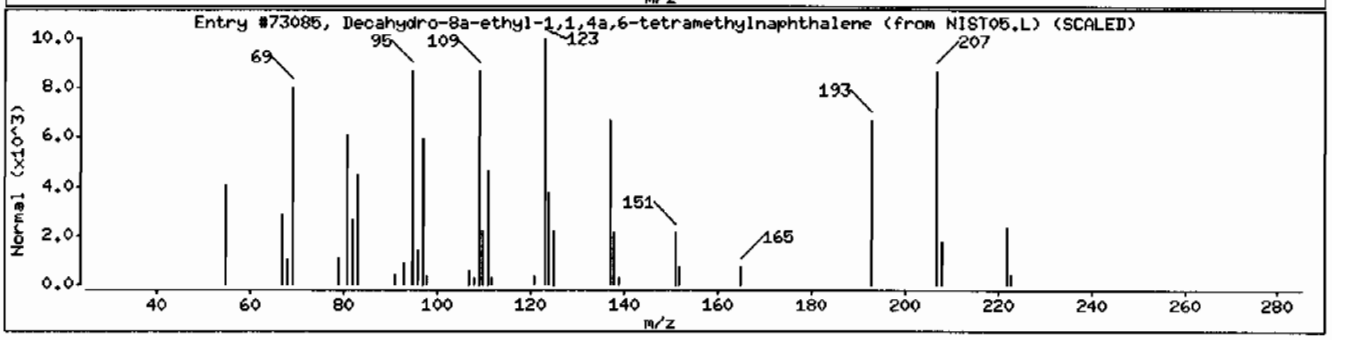

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6084	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 16:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s8l0419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	382	ug/kg	76.4	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318013**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6084**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0419.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.4	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	217	ug/kg		JA
	Unknown	7.95	247	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6084	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 16:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s8l0419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.64	343	ug/kg		J
	Unknown	9.93	1080	ug/kg		J
17844-07-4	Todomatuic acid	10.33	832	ug/kg	93	NJ
	Unknown	15.13	663	ug/kg		J
	Unknown	15.84	163	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810419.d
Lab Smp Id: 241318013 Client Smp ID: RE03-10-6084
Inj Date : 04-DEC-2009 16:45
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318013|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	12.80070	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.534	4.539	(1.000)	314270	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	1132016	40.0000	
* 46 Acenaphthene-d10	164	7.663	7.668	(1.000)	655590	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.273	(1.000)	1162769	40.0000	
* 91 Chrysene-d12	240	12.196	12.206	(1.000)	1075834	40.0000	
* 98 Perylene-d12	264	14.358	14.373	(1.000)	692096	40.0000	
$ 3 2-Fluorophenol	112	3.387	3.377	(0.747)	464527	61.8762	2360
$ 5 Phenol-d5	99	4.153	4.158	(0.916)	562784	59.7184	2280
$ 20 Nitrobenzene-d5	82	5.068	5.073	(0.873)	256945	31.2790	1190
$ 39 2-Fluorobiphenyl	172	6.930	6.935	(0.904)	541134	29.8719	1140
$ 60 2,4,6-Tribromophenol	329	8.511	8.516	(1.111)	122052	40.3050	1540
$ 81 p-Terphenyl-d14	244	10.982	10.982	(0.900)	643593	32.1522	1230

ION RATIO REPORT

SV REPORT

Data file: s810419.d
Report Date: 12/05/2009 08:47
Lab. ID: 241318013 SampleType: SAMPLE
Injection Date: 04-DEC-2009 16:45
Operator: nag1 Instrument: MSD8.i
Sample Info: |241318013|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8207_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	29780	4.15	4.23	80-120	100	(T)
93	410	4.22	4.23	214-274	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	38291	5.07	4.91	80-120	100	(T)
42	17009	5.06	4.91	24- 84	44	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	88201	7.66	7.43	80-120	100	(T)
63	734	7.66	7.43	31- 91	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	88201	7.66	7.86	80-120	100	(T)
89	1260	7.67	7.86	47-107	1	(QT)
63	734	7.66	7.86	21- 81	1	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	350	8.51	8.30	80-120	100	(T)
105	1253	8.51	8.30	11- 71	358	(QT)
51	878	8.51	8.30	15- 75	251	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810419.d
Lab Smp Id: 241318013 Client Smp ID: RE03-10-6084
Inj Date : 04-DEC-2009 16:45
Operator : nag1 Inst ID: MSD8.i
Smp Info : |241318013|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	12.80070	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.534	1784226	40.000
* 46 Acenaphthene-d10	7.663	2704033	40.000
* 67 Phenanthrene-d10	9.268	2881603	40.000
* 98 Perylene-d12	14.358	1854015	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.153	253471	5.68248618	217	0		0	10
Unknown				CAS #:			
7.953	436295	6.45398815	246	0		0	46
Unknown				CAS #:			
9.639	647318	8.98552309	343	0		0	67
Unknown				CAS #:			
9.934	2032821	28.2179210	1080	0		0	67
Todomatuic acid				CAS #: 17844-07-4			
10.330	1568578	21.7736895	832	93	NIST05.L	93307	67
Unknown				CAS #:			
15.130	804169	17.3497729	663	0		0	98
Unknown				CAS #:			
15.839	197708	4.26551056	163	0		0	98

Data File: /chem/MSD8.i/s120409.b/s810419.d

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084

Sample Info: 1241318013192563711ISVMF11LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1

Column diameter: 0.20

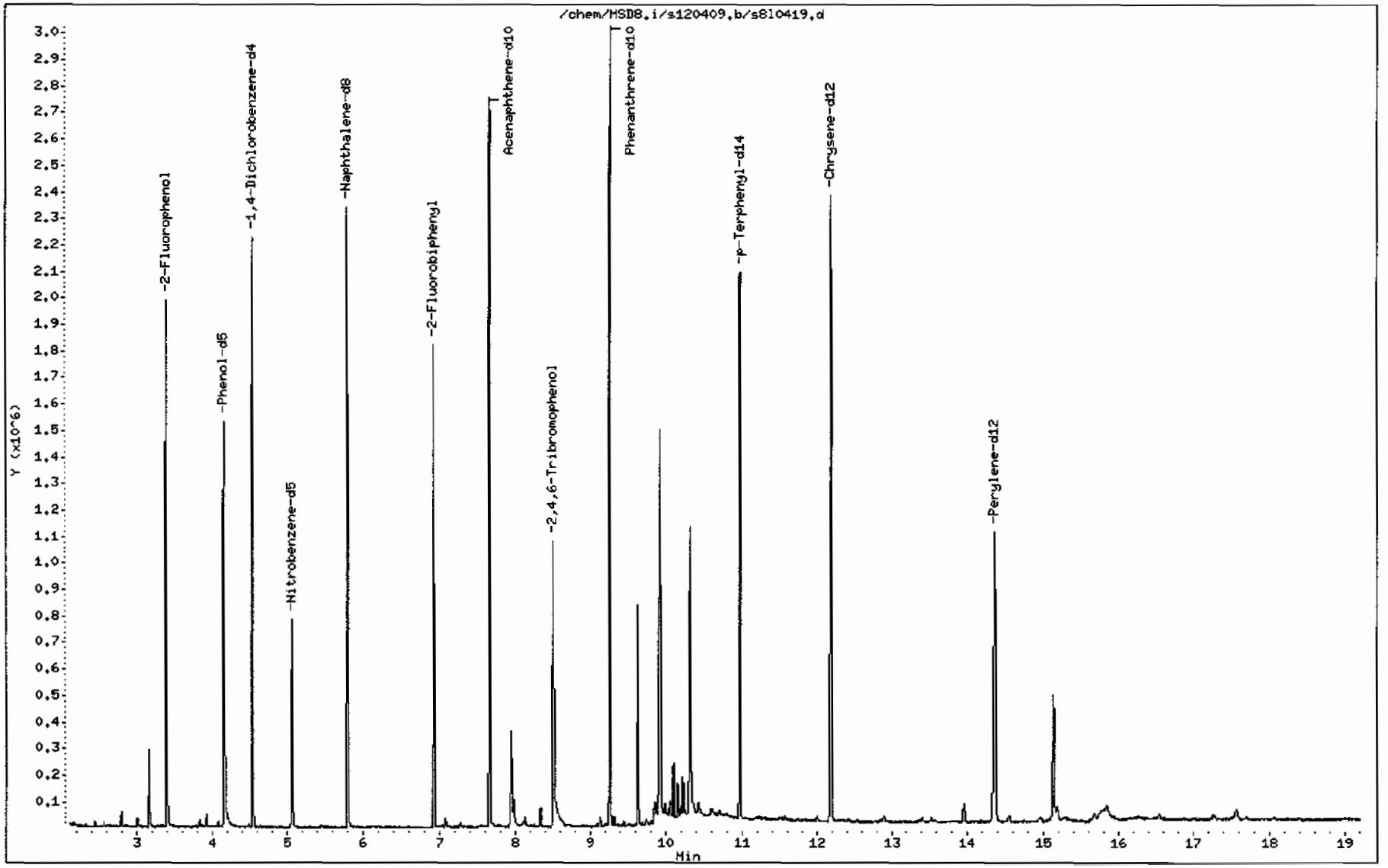

Data File: /chem/MSD8.i/s120409.b/s810419.d

Page 1

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084

Instrument: MSD8.i

Sample Info: 1241318013192563711ISVMF111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3944	38	C4H7NO2	101
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	28	C6H12O2	116

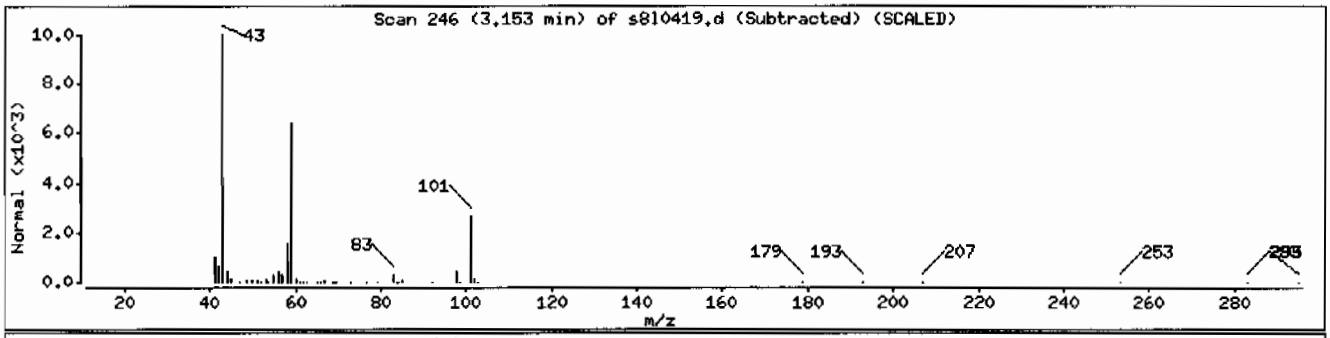

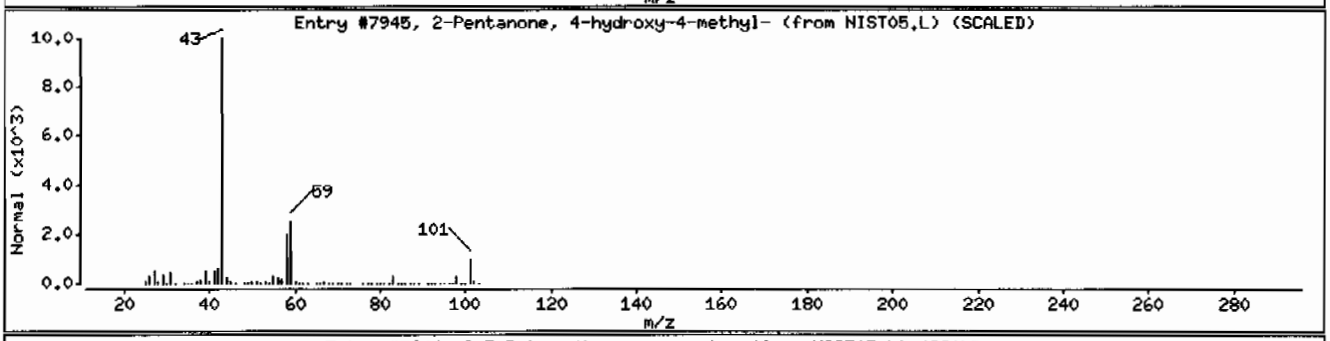

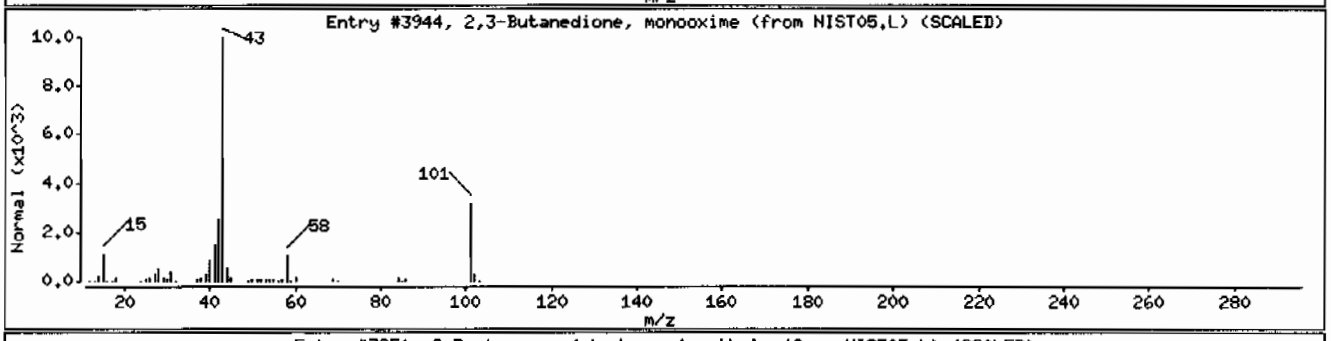

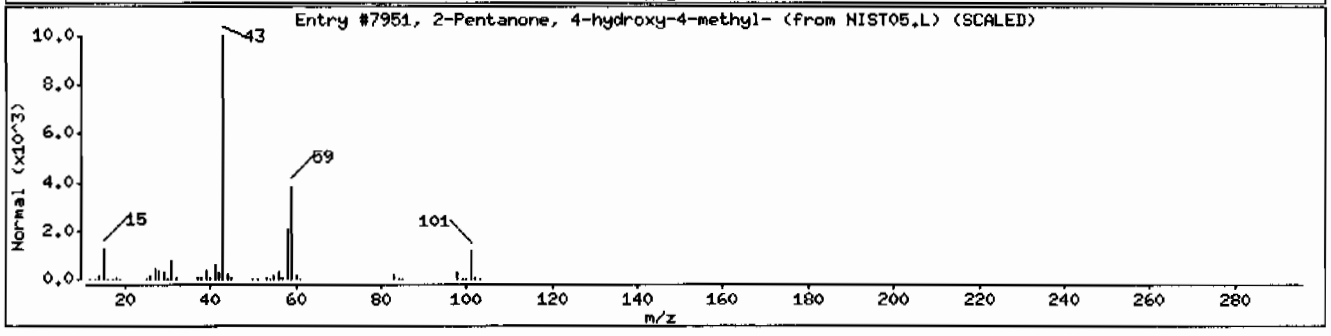

Data File: /chem/MSD8.i/s120409.b/s810419.d

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084 Instrument: MSD8.i

Sample Info: |2413180131925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Methoxymethyl-2,7-dimethylcyclohepta-1	73992-48-0	NIST05.L	32121	68	C11H16O	164
Benzenebutanoic acid, 2,5-dimethyl-	1453-06-1	NIST05.L	51120	64	C12H16O2	192
Benzenepropanoic acid, .beta.,.beta.-dim	25080-84-6	NIST05.L	51209	47	C12H16O2	192

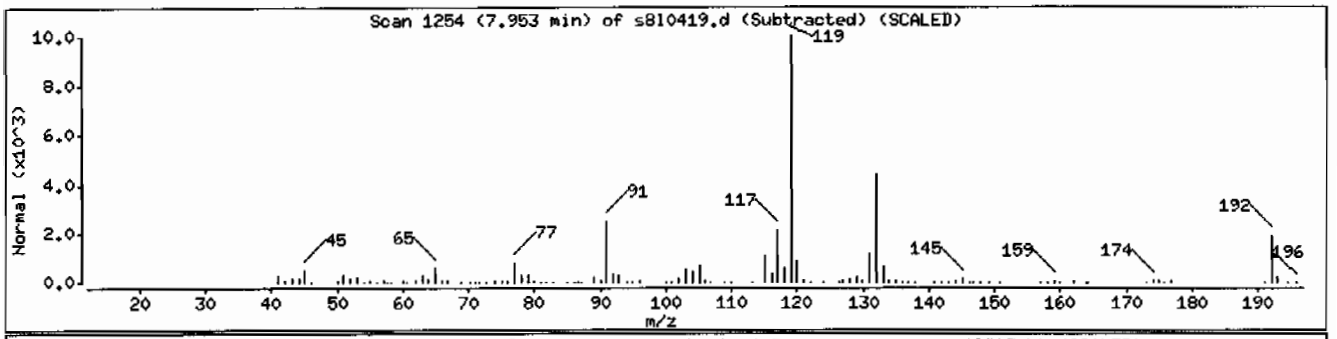

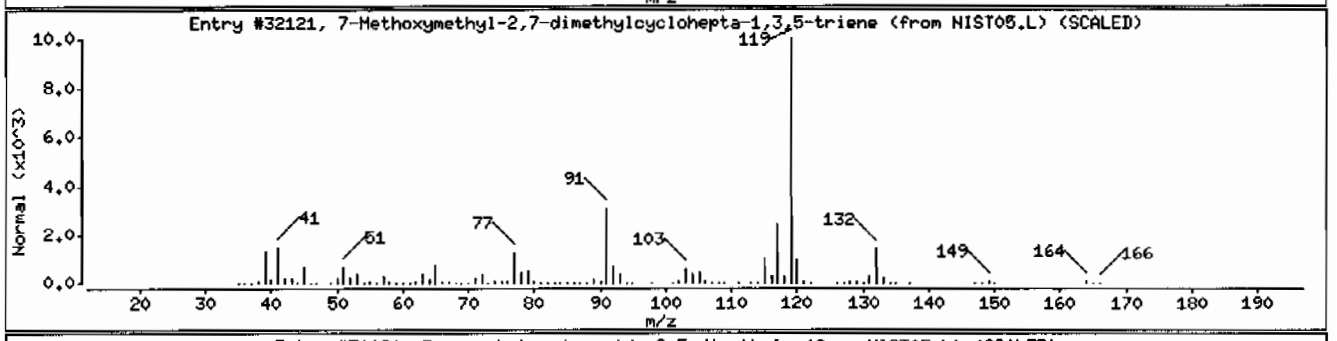

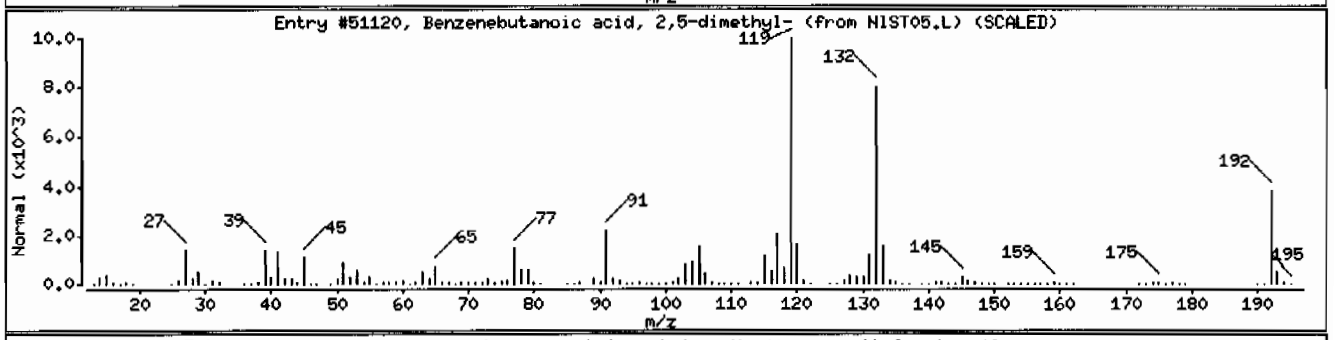

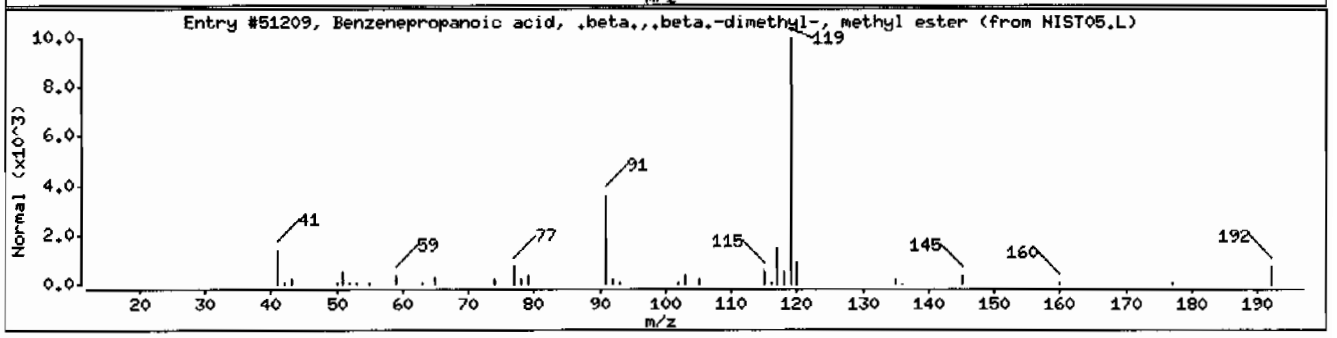

Data File: /chem/MSD8.i/s120409.b/s810419.d

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084 Instrument: MSD8.i

Sample Info: |241318013|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrimido[4,5-b]benzothiophene-2,4(1H,3H)	27285-09-2	NIST05.L	72190	64	C10H10N2O2S	222
5,8-Dimethoxy-1,4-dihydro-2,3-quinoxalin	1790-90-5	NIST05.L	72200	64	C10H10N2O4	222
4-Ethoxy-2,5-dimethoxy-1-(2-propenyl)ben	1000122-67-4	NIST05.L	72593	55	C13H18O3	222

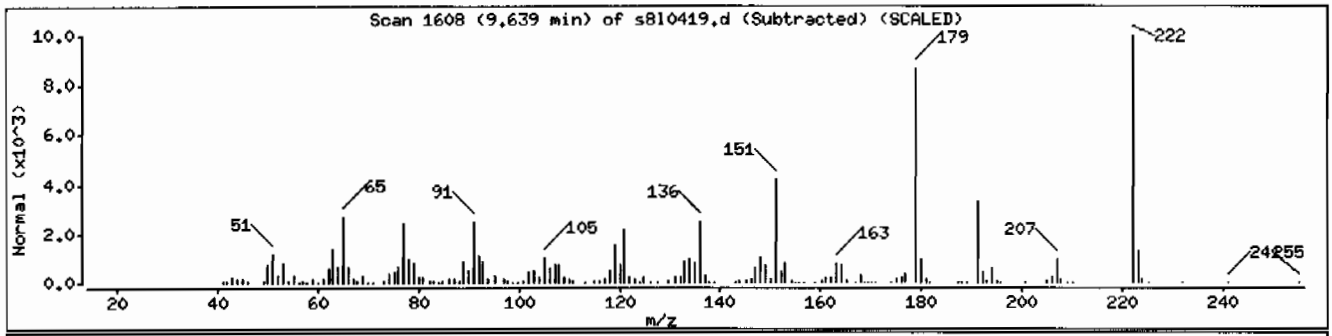

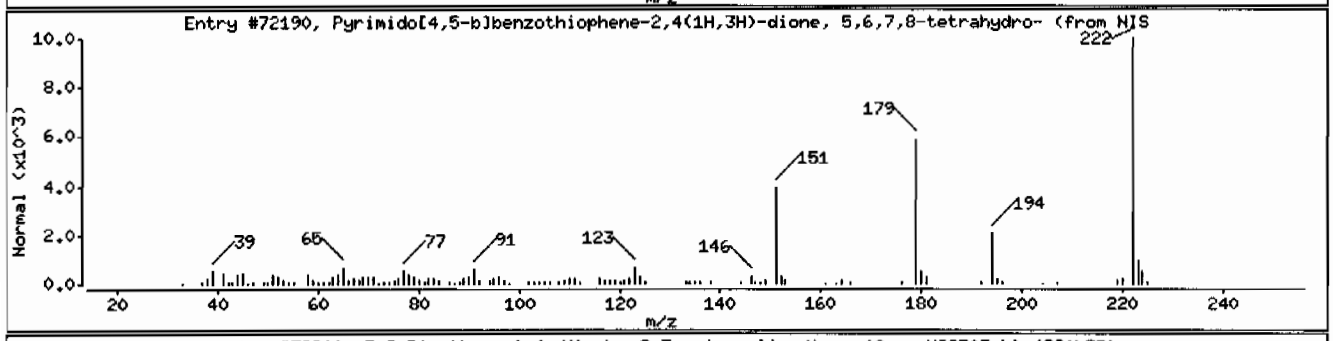

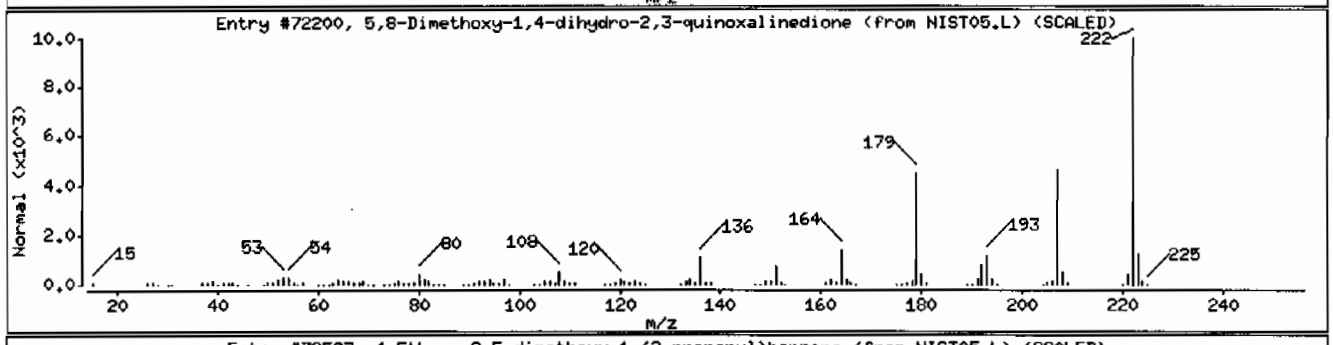

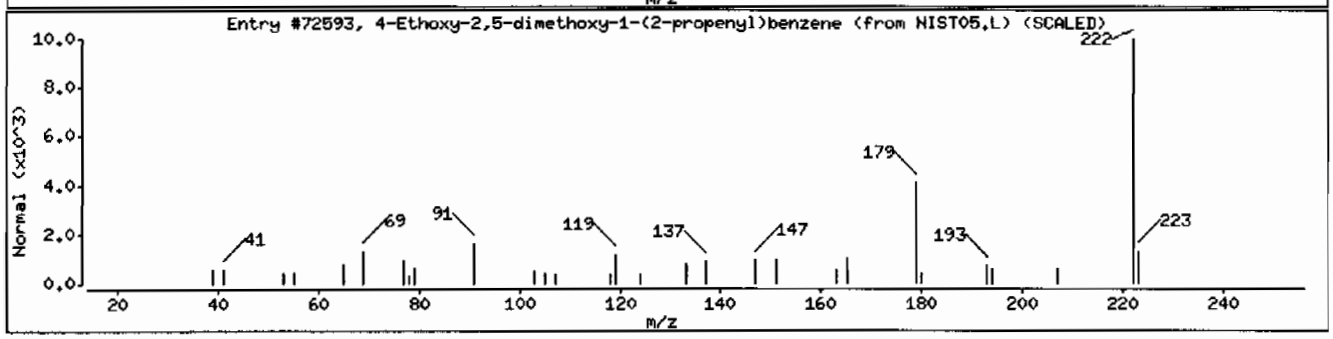

Data File: /chem/MSD8.i/s120409.b/s810419.d

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084 Instrument: MSD8.i

Sample Info: |2413180131925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Fluoro-2-methylbenzoic acid	33184-16-6	NIST05.L	26419	60	C8H7FO2	154
Acetamide, N-(4-ethoxyphenyl)-	62-44-2	NIST05.L	42242	46	C10H13NO2	179
Acetamide, N-(4-ethoxyphenyl)-	62-44-2	NIST05.L	42243	38	C10H13NO2	179

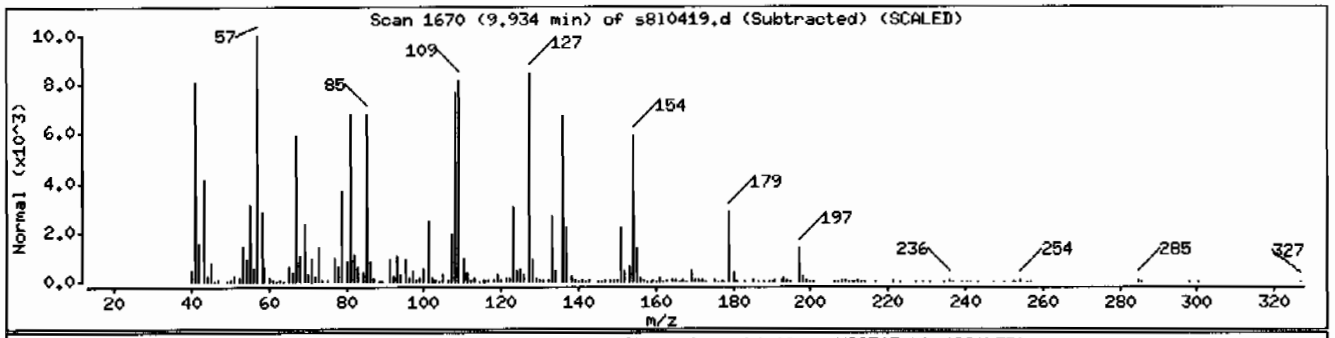

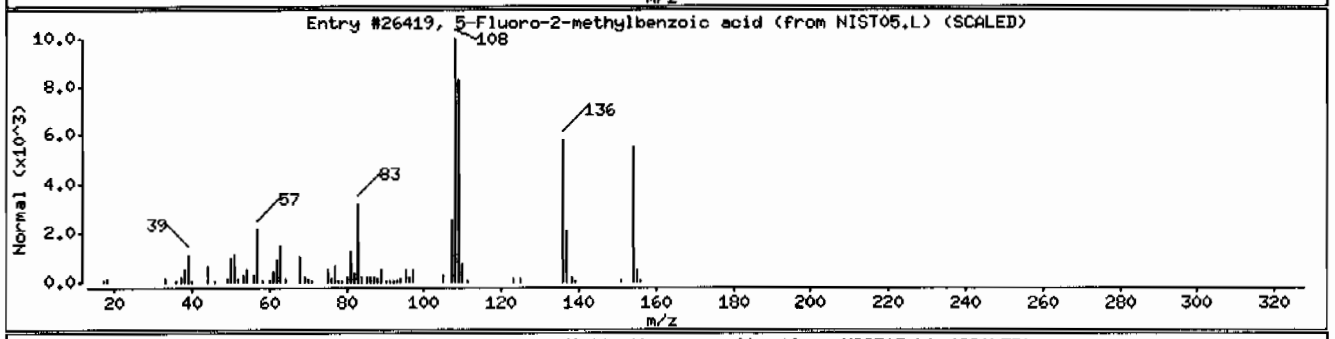

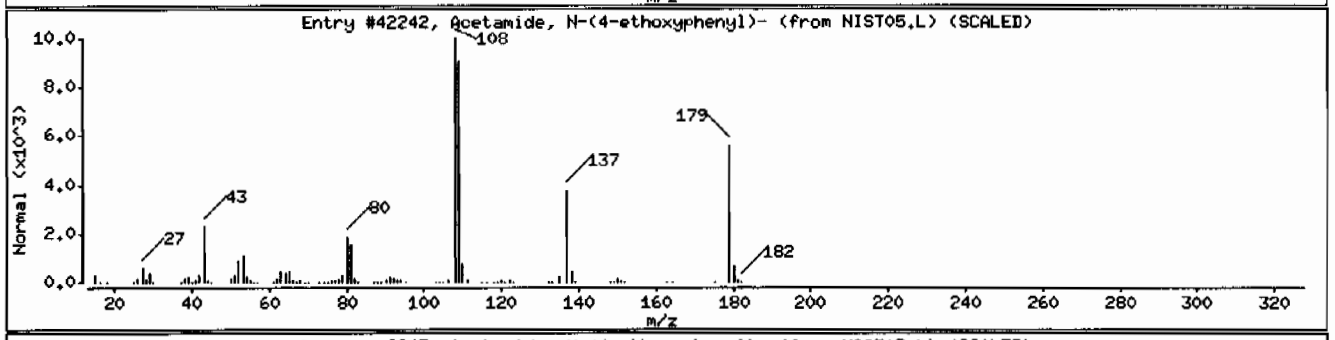

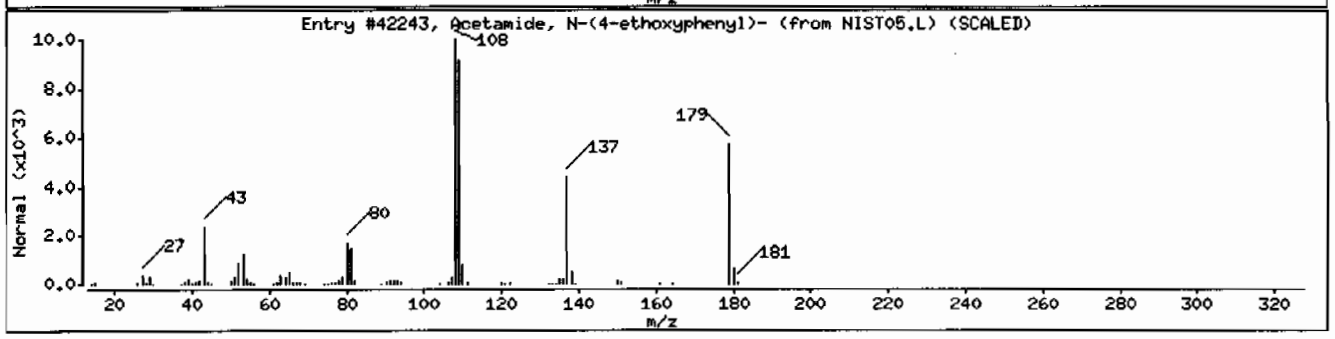

Data File: /chem/MSD8.i/s120409.b/s810419.d

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084 Instrument: MSD8.i

Sample Info: 1241318013192563711SVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Todomatuic acid	17844-07-4	NIST05.L	93307	93	C15H2403	252
(R-(R*,R*))-4-(1,5-Dimethyl-3-oxohexyl)-	6753-22-6	NIST05.L	93322	86	C15H2403	252
4-Azaindol-2(3H)-one	32501-05-6	NIST05.L	14688	35	C7H6N2O	134

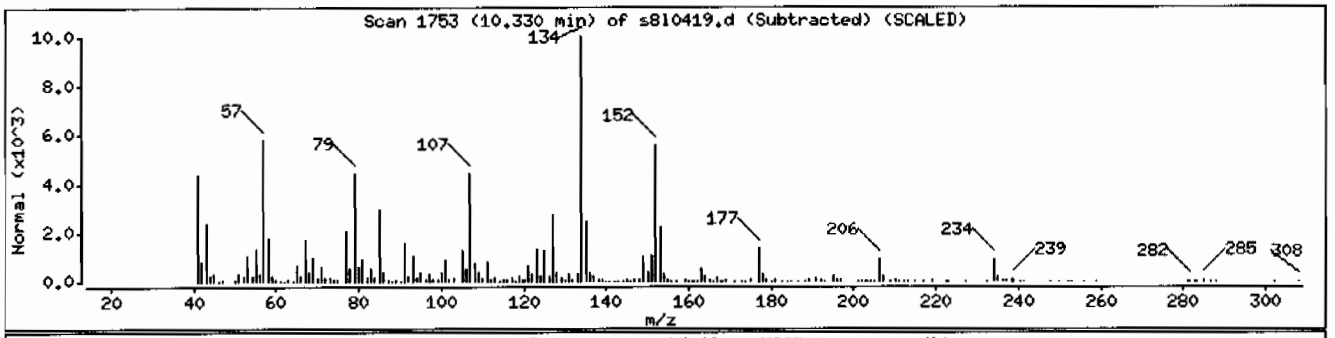

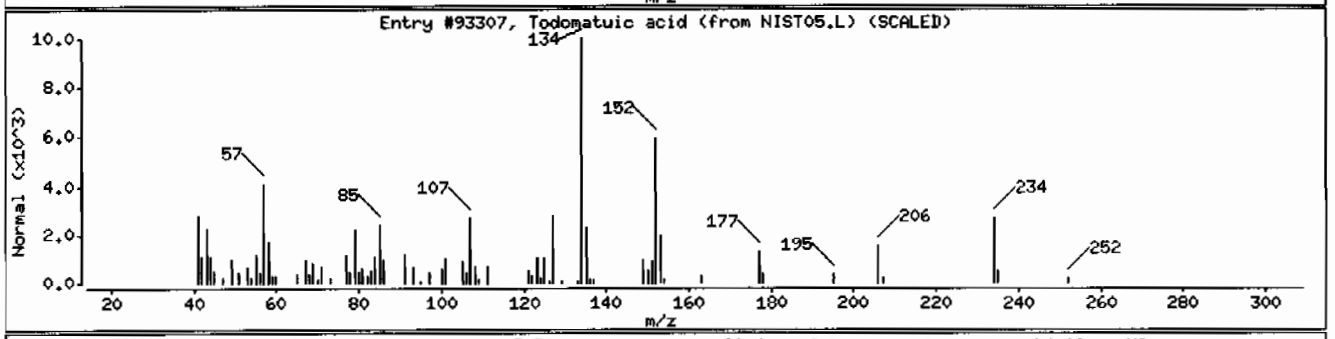

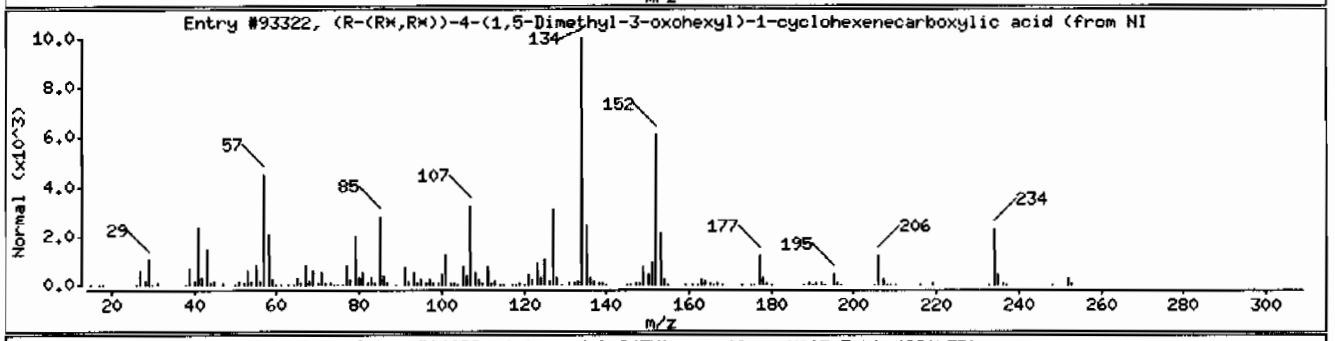

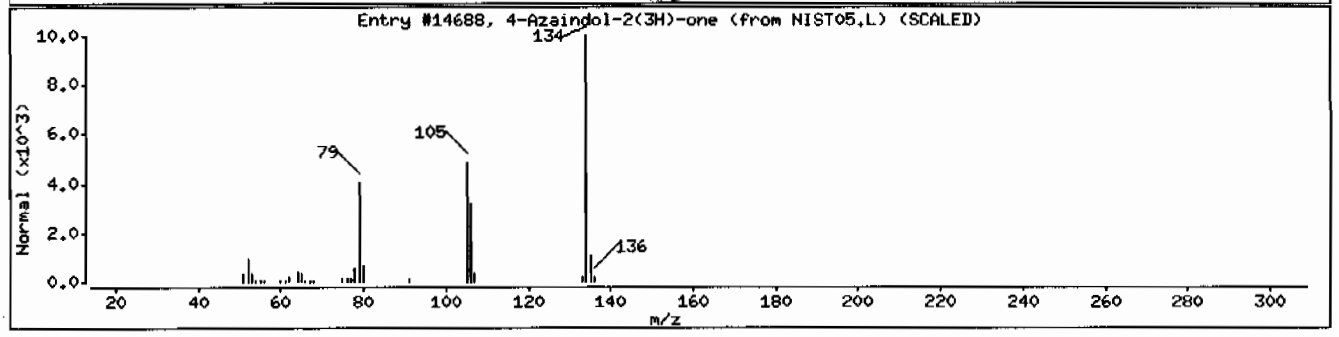

Data File: /chem/MSD8.i/s120409.b/s810419.d

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084 Instrument: MSD8.i

Sample Info: |24131801319256371|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nagi

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3,4,6-Tetrafluorophenyl isothiocyanate	84348-86-7	NIST05.L	62291	27	C7HF4NS	207
1,3-Dihydroxy-6,7-dihydro-5H-cyclopenta(	52903-70-5	NIST05.L	40814	25	C9H8N2O2	176
1-Hydroxy-2,2-dimethyl-5-phenylpyrrolidi	1000305-98-0	NIST05.L	50595	25	C12H17NO	191

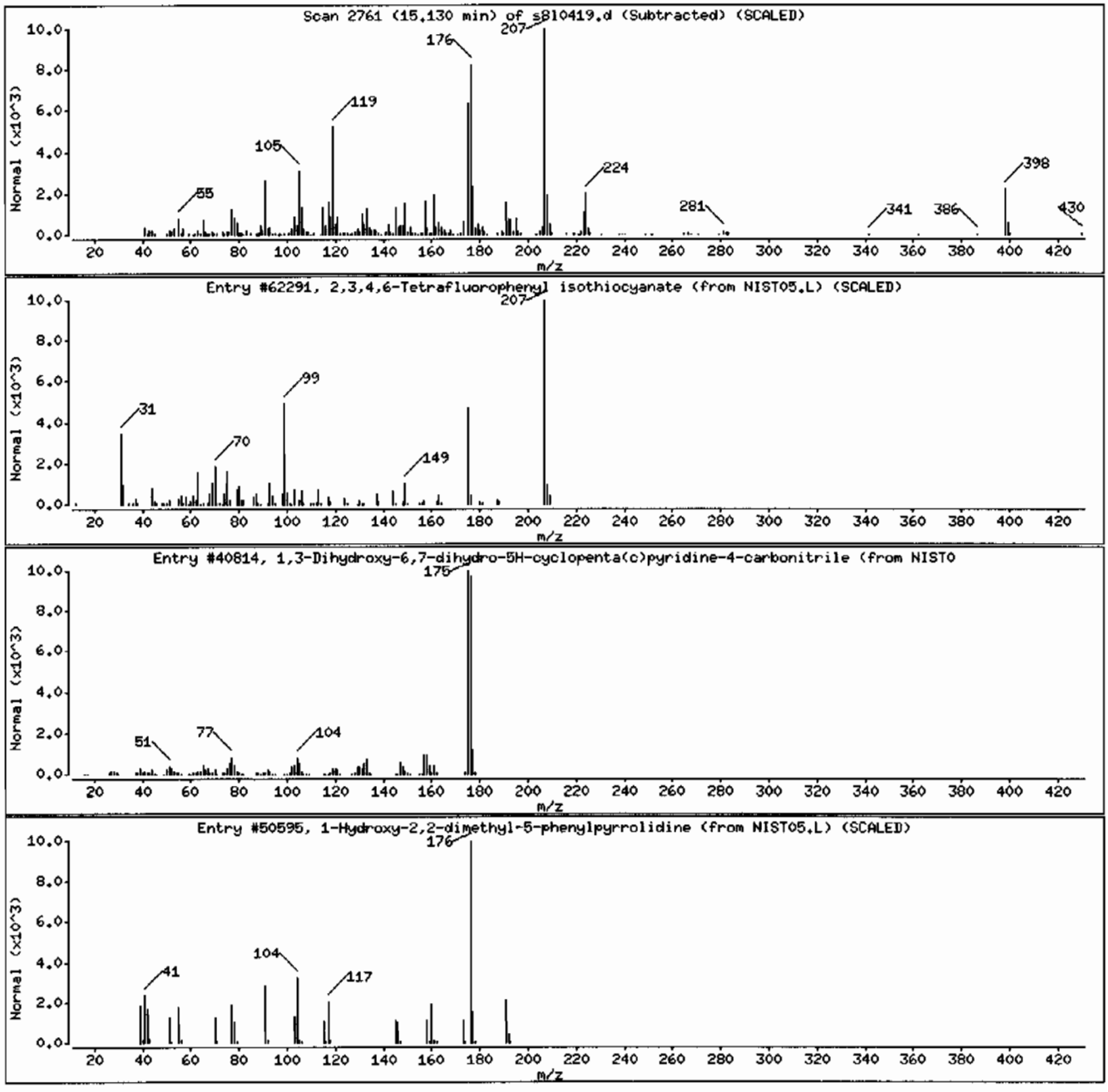

Data File: /chem/MSD8.i/s120409.b/s810419.d

Date : 04-DEC-2009 16:45

Client ID: RE03-10-6084 Instrument: MSD8.i

Sample Info: |24131801319256371|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Furancarboxylic acid, tetrahydro-3-hyd	42151-37-1	NIST05.L	102276	50	C13H14O6	266
3-Penten-2-one, 4-(2,2,6-trimethyl-7-oxa	89128-12-1	NIST05.L	72791	49	C14H22O2	222
(4-Methoxy-phenyl)-(2-nitrocyclohexyl)-m	103077-68-5	NIST05.L	101799	43	C14H19NO4	265

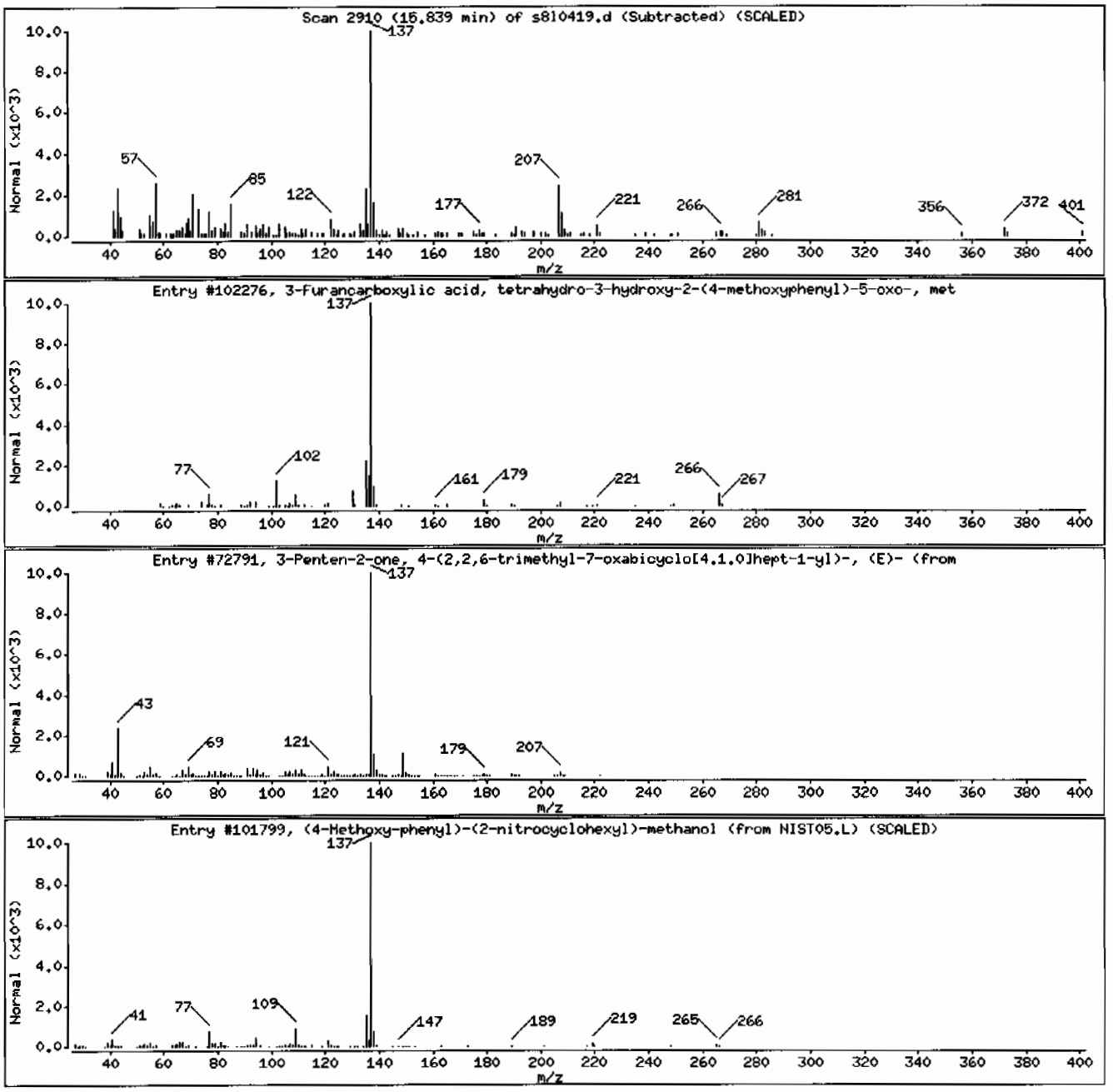

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.6	348
108-95-2	Phenol	U	348	ug/kg	69.6	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.6	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.6	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.6	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.6	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	87.0	348
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8
110-86-1	Pyridine	U	348	ug/kg	69.6	348
62-53-3	Aniline	U	348	ug/kg	104	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.6	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.6	348
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.6	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.6	348
95-48-7	o-Cresol	U	348	ug/kg	69.6	348
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.6	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.6	348
78-59-1	Isophorone	U	348	ug/kg	69.6	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.6	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.6	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.6	348
65-85-0	Benzoic acid	U	696	ug/kg	174	696
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.6	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.6	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.96	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.6	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.6	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.6	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.6	348
99-09-2	3-Nitroaniline	U	348	ug/kg	69.6	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s8l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.6	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8
51-28-5	2,4-Dinitrophenol	U	696	ug/kg	132	696
132-64-9	Dibenzofuran	U	348	ug/kg	69.6	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.6	348
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.6	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.6	348
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.6	348
122-66-7	Azobenzene	U	348	ug/kg	69.6	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.6	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.6	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.96	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.6	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.6	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	J	71.2	ug/kg	69.6	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.6	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.6	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	168	ug/kg		JA
	Unknown	4.21	150	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/04/2009 17:15	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s810420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1227-93-6	1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	10.22	369	ug/kg	90	NJ
	Unknown	11.59	536	ug/kg		J
	Unknown	11.83	475	ug/kg		J
	Unknown	11.86	403	ug/kg		J
	Unknown	11.92	140	ug/kg		J
	Unknown	11.99	1800	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.07	241	ug/kg	98	NJ
	Unknown	12.14	156	ug/kg		J
	Unknown	12.31	182	ug/kg		J
	Unknown	12.39	222	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810420.d
Lab Smp Id: 241318014 Client Smp ID: RE03-10-6085
Inj Date : 04-DEC-2009 17:15
Operator : nag1 Inst ID: MSD8.i
Smp Info : |241318014|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	4.42560	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.539	4.539	(1.000)	321965	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	1176926	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	687368	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.273	(1.000)	1239211	40.0000	
* 91 Chrysene-d12	240	12.206	12.206	(1.000)	1214618	40.0000	
* 98 Perylene-d12	264	14.373	14.373	(1.000)	798333	40.0000	
$ 3 2-Fluorophenol	112	3.387	3.377	(0.746)	555273	72.1961	2510
$ 5 Phenol-d5	99	4.158	4.158	(0.916)	651628	67.4933	2350
$ 20 Nitrobenzene-d5	82	5.068	5.073	(0.873)	309200	36.2040	1260
$ 39 2-Fluorobiphenyl	172	6.930	6.935	(0.904)	645537	33.9877	1180
$ 60 2,4,6-Tribromophenol	329	8.511	8.516	(1.110)	150461	47.3894	1650
$ 81 p-Terphenyl-d14	244	10.982	10.982	(0.900)	748228	33.1084	1150

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
93 bis(2-Ethylhexyl)phthalate	149	12.182	12.182	(0.998)	43477	2.04599	71.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s810420.d
Report Date: 12/05/2009 08:47
Lab. ID: 241318014 SampleType: SAMPLE
Injection Date: 04-DEC-2009 17:15
Operator: nagl Instrument: MSD8.i
Sample Info: |241318014|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8207_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	30080	4.16	4.23	80-120	100	(T)
93	13506	4.21	4.23	214-274	45	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45492	5.07	4.91	80-120	100	(T)
42	22319	5.07	4.91	24- 84	49	(T)
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	11450	7.27	7.07	80-120	100	(T)
164	797	7.27	7.07	4- 64	7	(T)
127	1207	7.27	7.07	10- 70	11	(T)
42 o-Nitroaniline				CAS#: 88-74-4		
65	14779	7.27	7.17	80-120	100	(T)
92	17548	7.27	7.17	36- 96	119	(QT)
138	1016	7.27	7.17	80-140	7	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	91839	7.67	7.43	80-120	100	(T)
63	643	7.66	7.43	31- 91	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	91839	7.67	7.86	80-120	100	(T)
89	1429	7.66	7.86	47-107	2	(QT)
63	643	7.66	7.86	21- 81	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	960	8.51	8.30	80-120	100	(T)
105	1026	8.51	8.30	11- 71	107	(QT)
51	868	8.51	8.30	15- 75	90	(QT)
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	43477	12.18	12.18	80-120	100	( )
167	15110	12.19	12.18	0- 59	35	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810420.d
Lab Smp Id: 241318014 Client Smp ID: RE03-10-6085
Inj Date : 04-DEC-2009 17:15
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318014|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	4.42560	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.539	1834241	40.000
* 67 Phenanthrene-d10	9.268	3049076	40.000
* 91 Chrysene-d12	12.206	4639418	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.153	221123	4.82211232	168	0		0	10
Unknown					CAS #:		
4.211	197693	4.31117632	150	0		0	10
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah					CAS #: 1227-93-6		
10.225	809348	10.6176146	369	90	NIST05.L	118755	67
Unknown					CAS #:		
11.592	1787547	15.4118211	536	0		0	91
Unknown					CAS #:		
11.830	1582258	13.6418630	474	0		0	91
Unknown					CAS #:		
11.863	1345021	11.5964624	403	0		0	91
Unknown					CAS #:		
11.925	466821	4.02482010	140	0		0	91
Unknown					CAS #:		
11.992	5997963	51.7130627	1800	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
12.073	803510	6.92767795	241	98	NIST05.L	125034	91
Unknown					CAS #:		
12.139	521117	4.49295345	156	0		0	91
Unknown					CAS #:		
12.311	605525	5.22069368	182	0		0	91
Unknown					CAS #:		
12.392	740636	6.38559222	222	0		0	91

Data File: /chem/MSD8.i/s120409.b/s810420.d
Date : 04-DEC-2009 17:15
Client ID: RE03-10-6085
Sample Info: |24131801419256371|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20

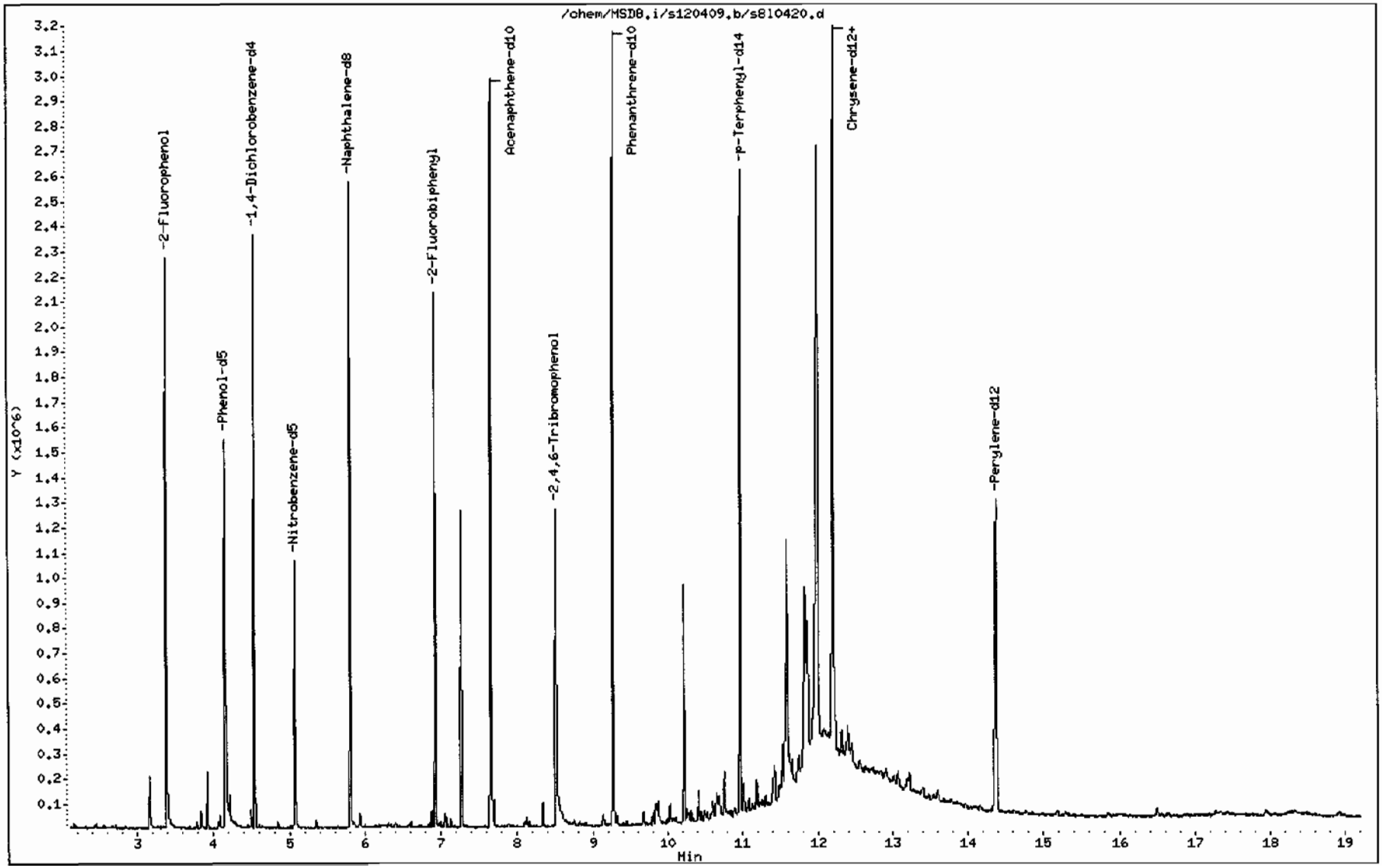

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085

Instrument: MSD8.i

Sample Info: |24131801419256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 71.2 ug/Kg

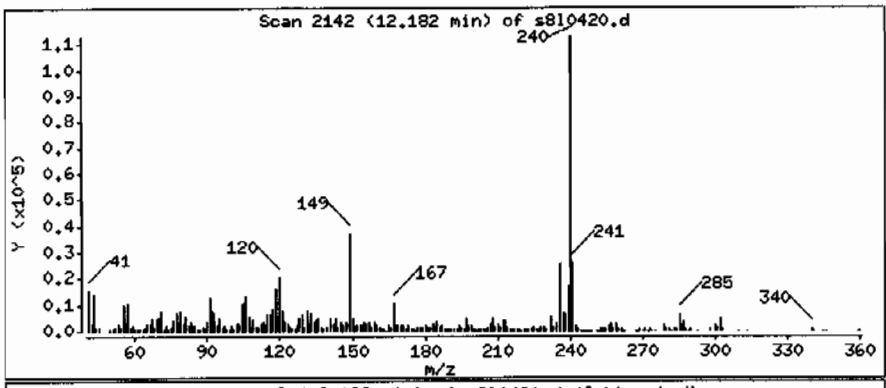

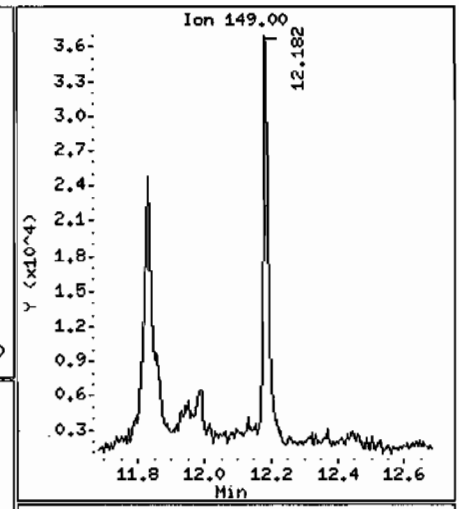

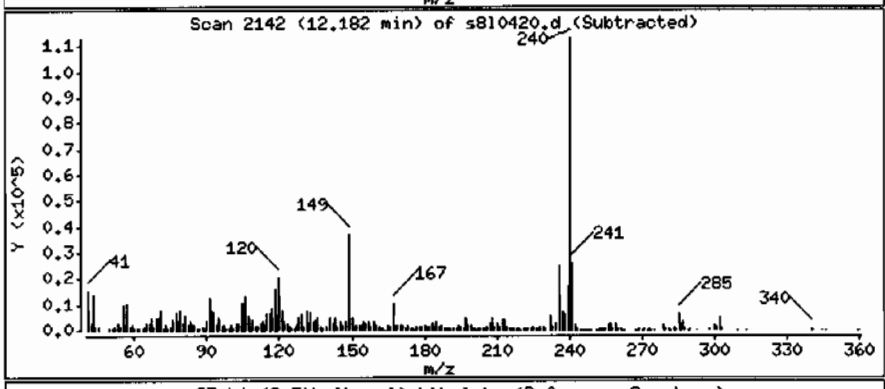

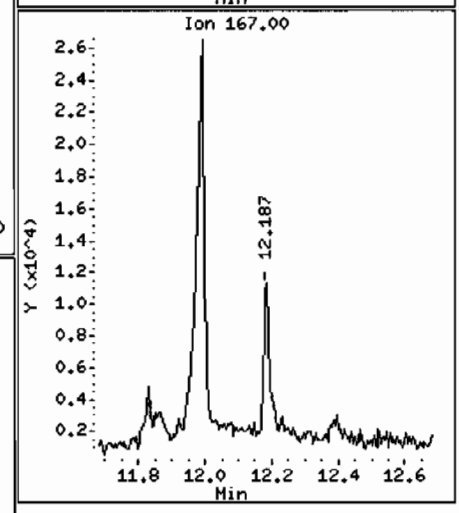

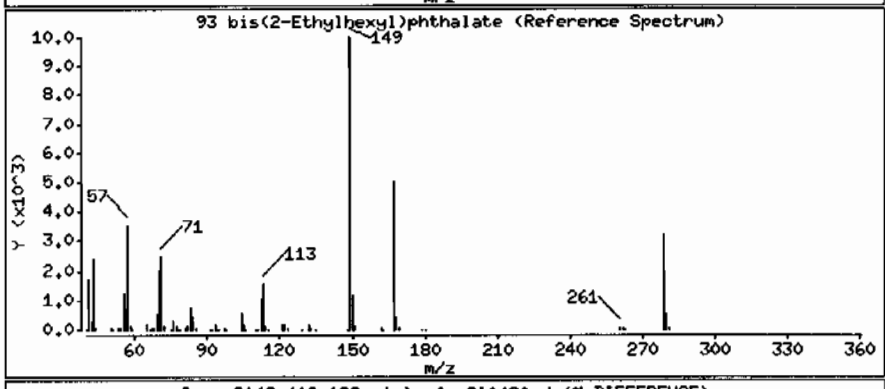

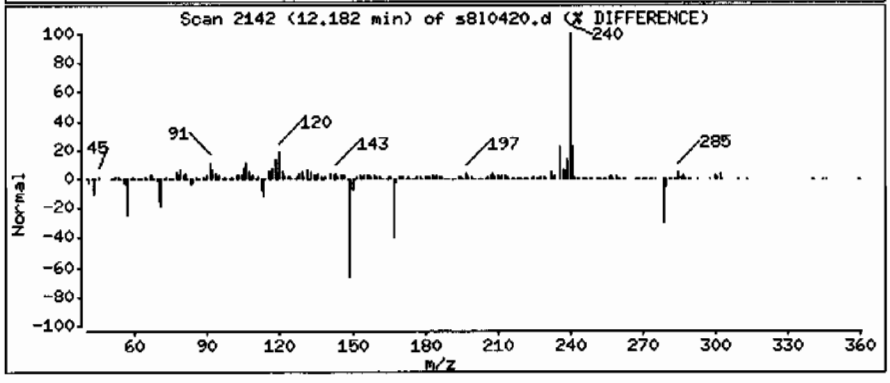

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085

Instrument: MSD8.i

Sample Info: |24131801419256371|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	64	C6H12O2	116
Propane, 1,1-dipropoxy-	4744-11-0	NIST05.L	30019	38	C9H20O2	160

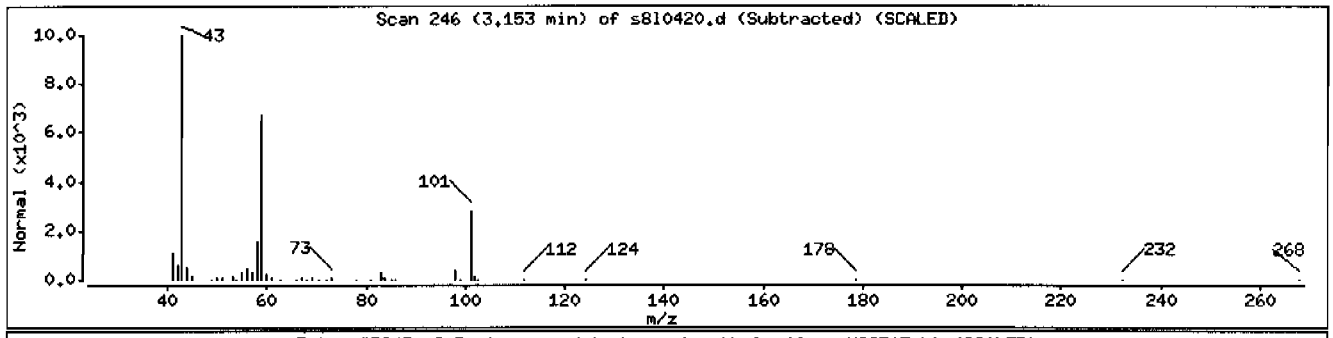

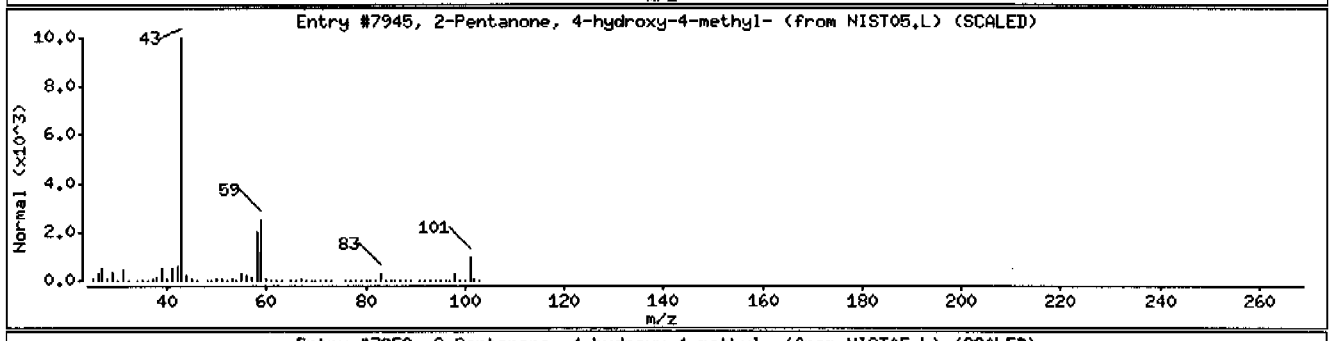

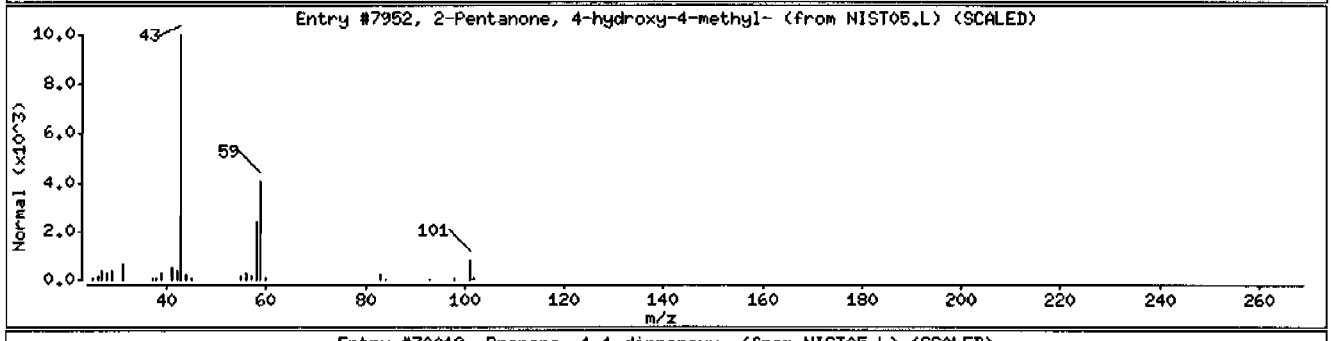

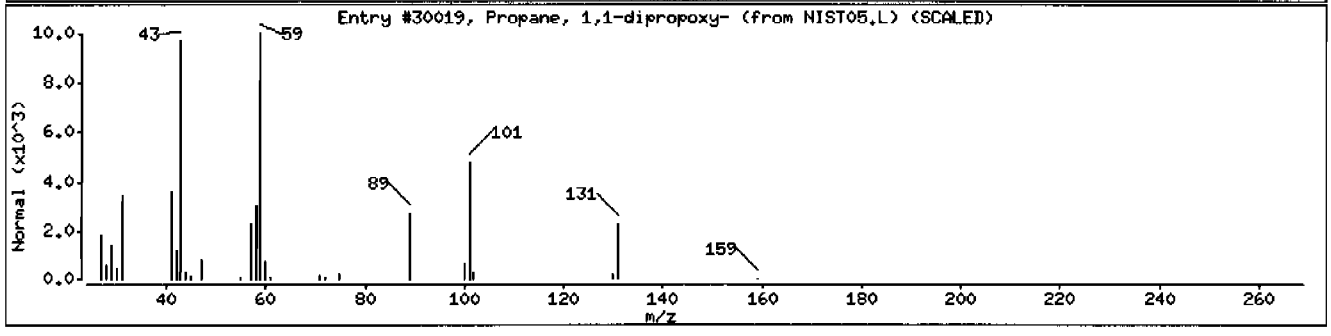

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085 Instrument: MSD8.i

Sample Info: |2413180141925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.beta.-Phellandrene	555-10-2	NIST05.L	15198	55	C10H16	136
Cyclohexanecarboxamide, 1-hydroxy-N-phen	112681-21-7	NIST05.L	70490	53	C13H17NO2	219
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST05.L	15373	50	C10H16	136

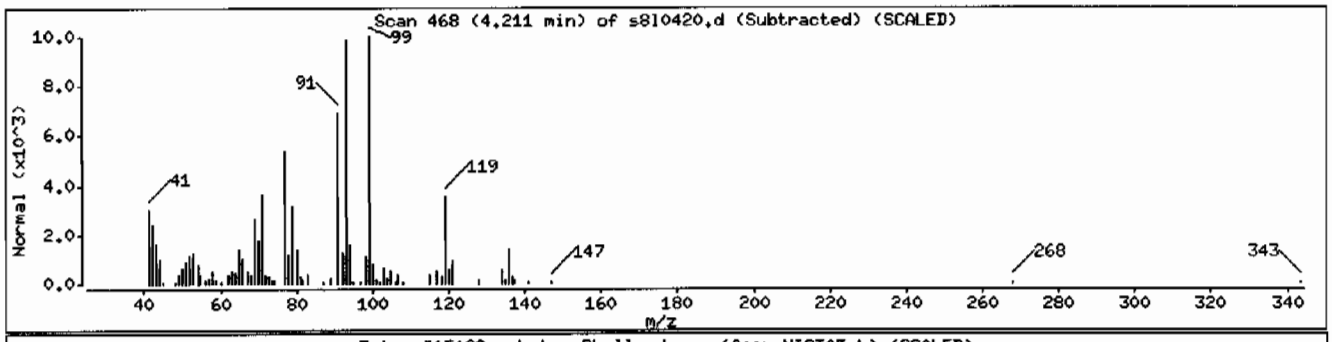

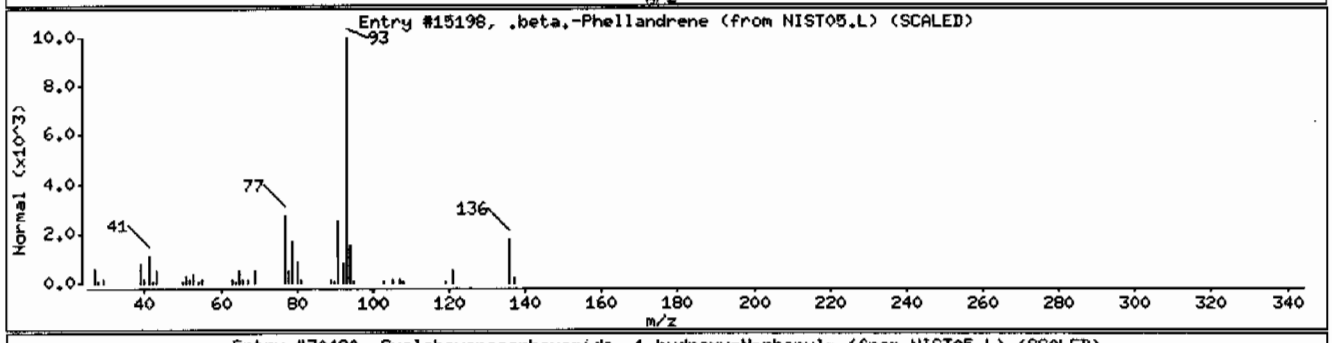

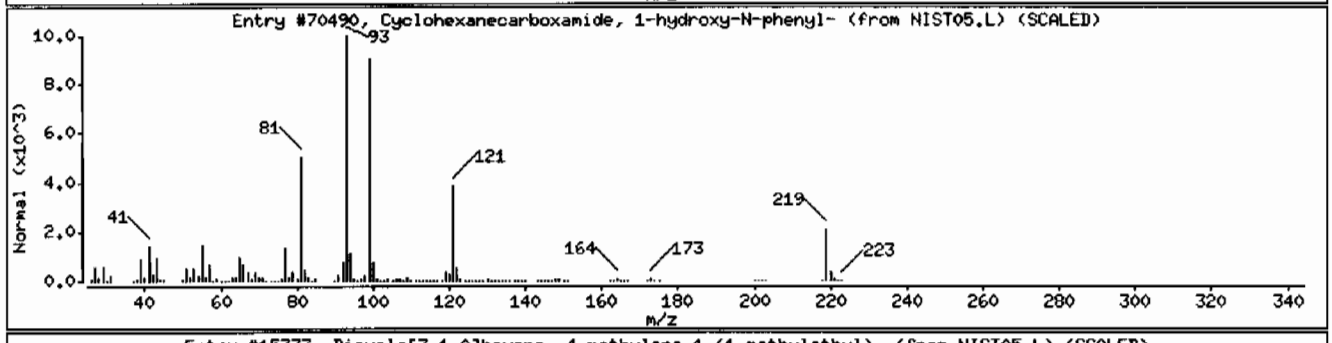

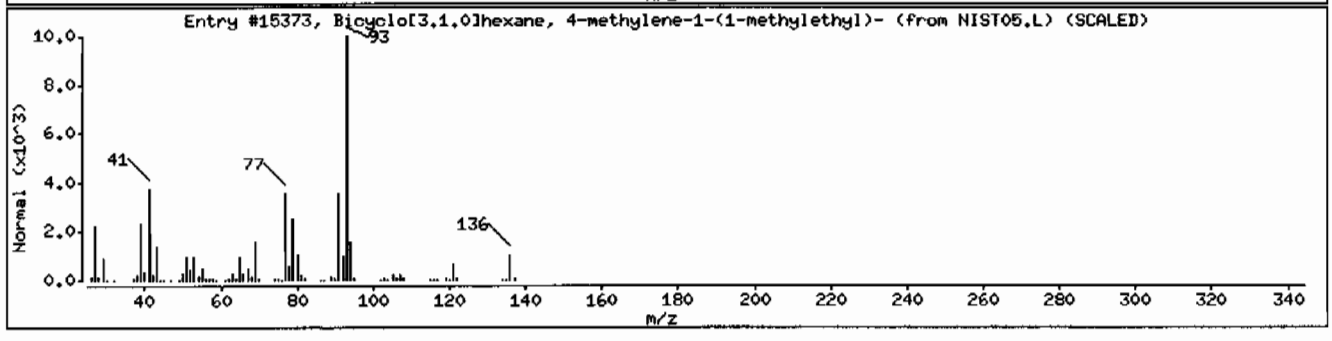

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085

Instrument: MSD8.i

Sample Info: 1241318014|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	1227-93-6	NIST05.L	118755	90	C20H340	290
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	596-84-9	NIST05.L	118754	52	C20H340	290
Pyrazine, tetraethyl-	38325-19-8	NIST05.L	51229	25	C12H20N2	192

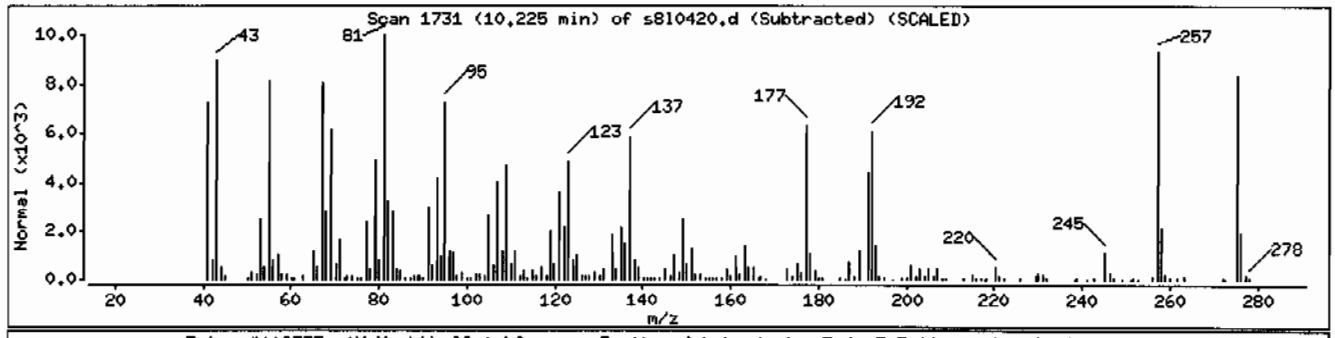

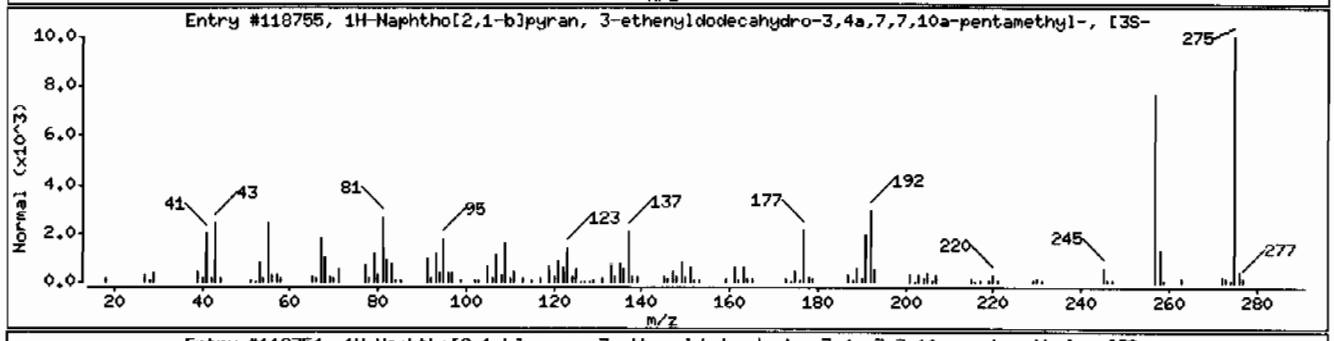

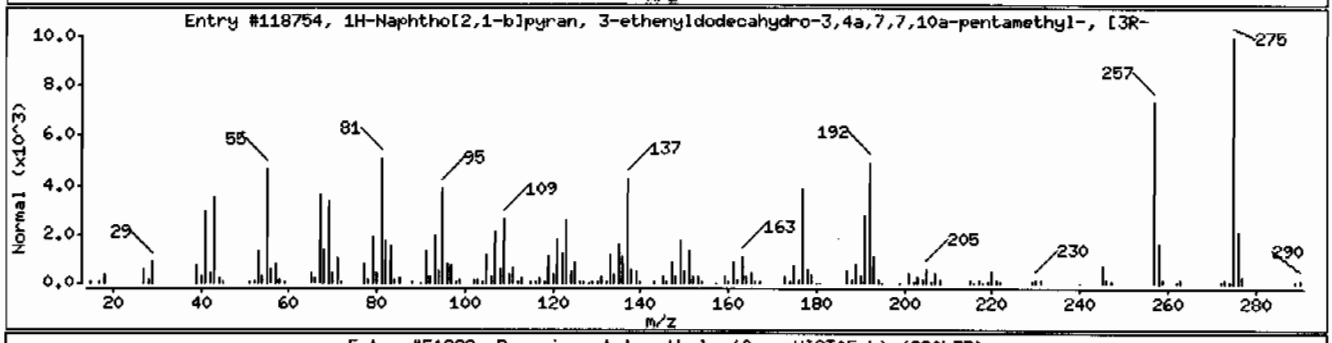

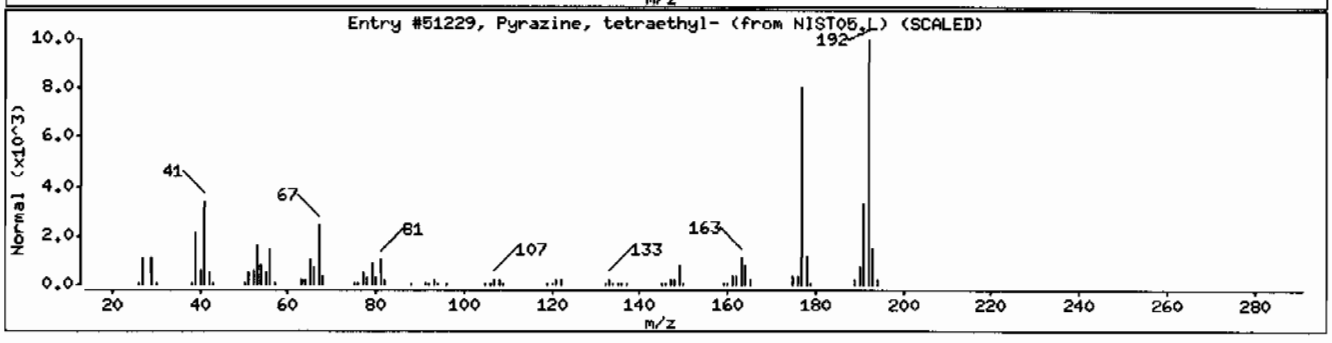

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Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085

Instrument: MSD8.i

Sample Info: |24131801419256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[7.3.0.0(2,6)]dodecane, trans-sy	30159-12-7	NIST05.L	32226	46	C12H20	164
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	46	C10H16	136
trans-8-Isopropylbicyclo[4.3.0]non-3-ene	1000145-85-2	NIST05.L	32207	38	C12H20	164

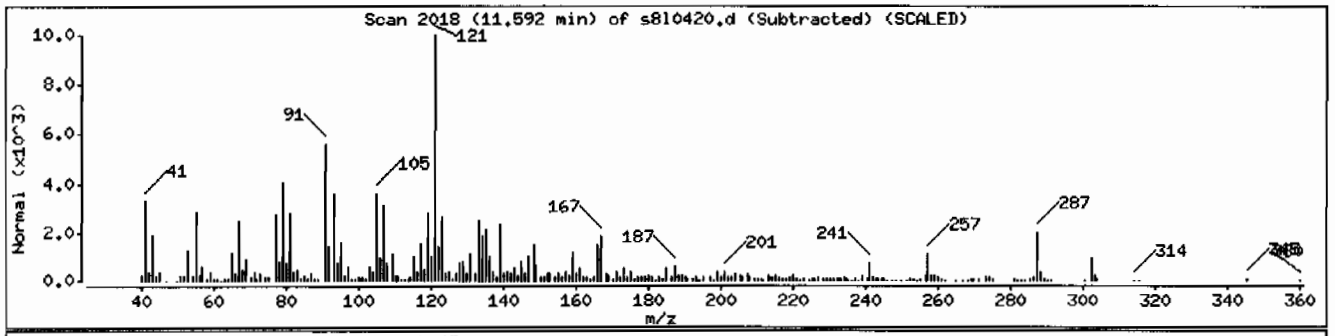

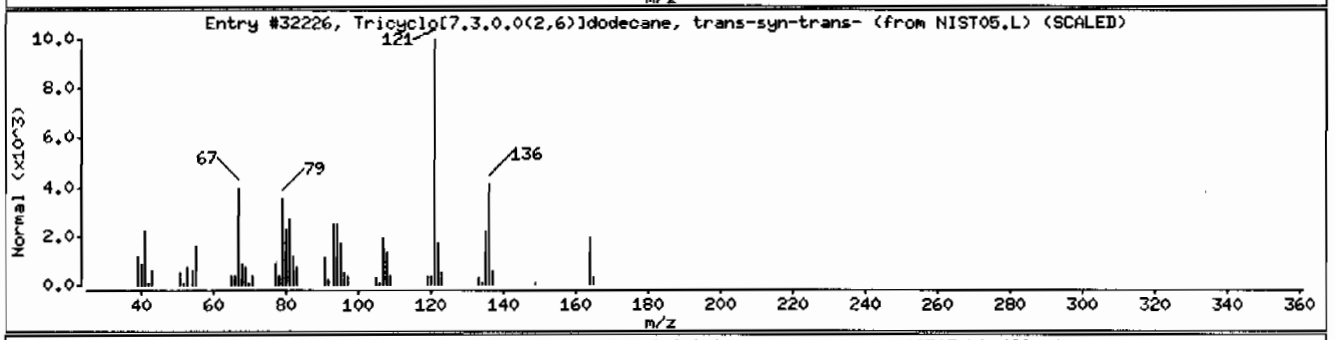

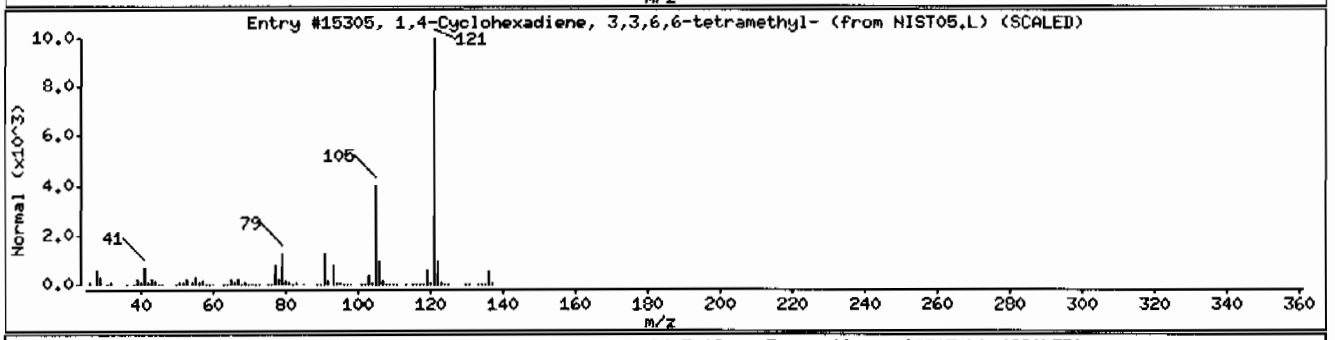

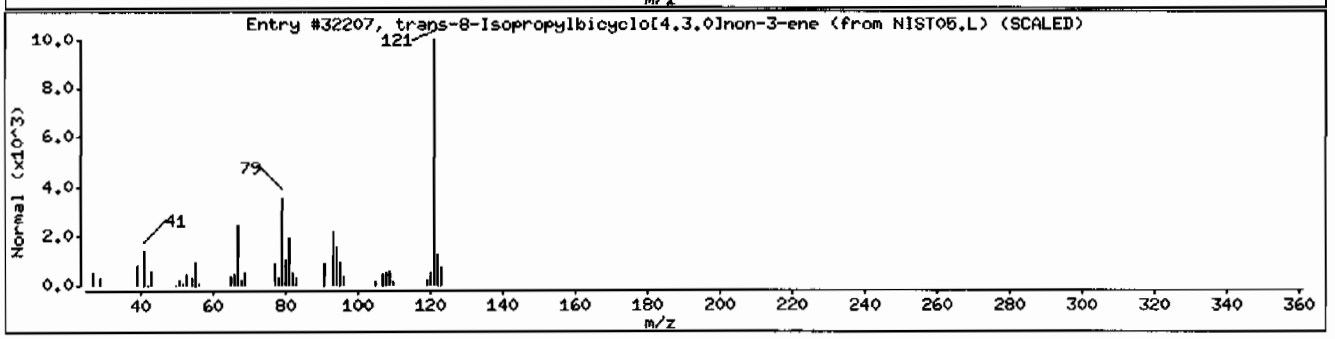

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085 Instrument: MSD8.i

Sample Info: |241318014|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	47	C22H22O	302
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	125840	46	C16H14O6	302
Thiophene-2-carbonitrile, 5-tert-butyl-3	1000268-00-9	NIST05.L	125862	35	C16H15ClN2S	302

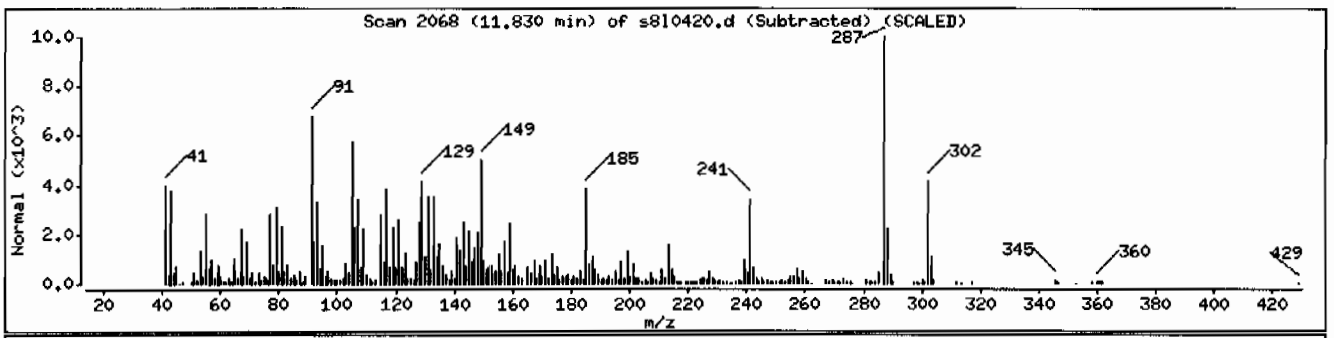

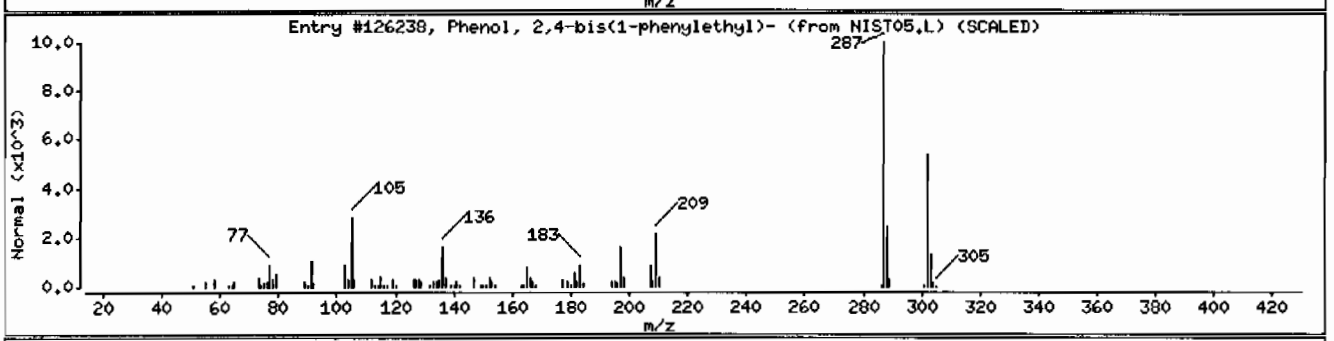

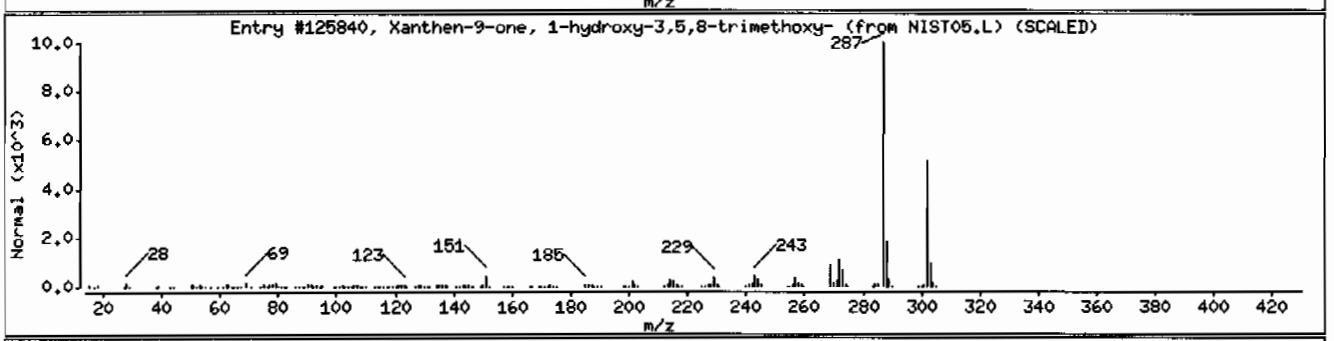

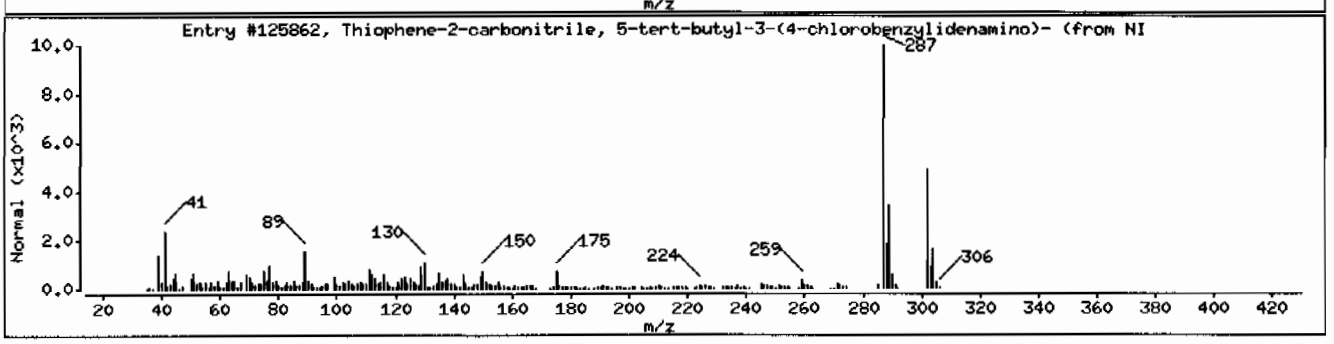

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Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085 Instrument: MSD8.i

Sample Info: |24131801419256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dispiro[2.0.2.5]undecane, 8-methylene-	51567-09-0	NIST05.L	30874	22	C12H18	162
Dispiro[2.1.2.4]undecane, 8-methylene-	51567-08-9	NIST05.L	30873	22	C12H18	162
1-Benzylazetidine	7730-39-4	NIST05.L	21409	11	C10H13N	147

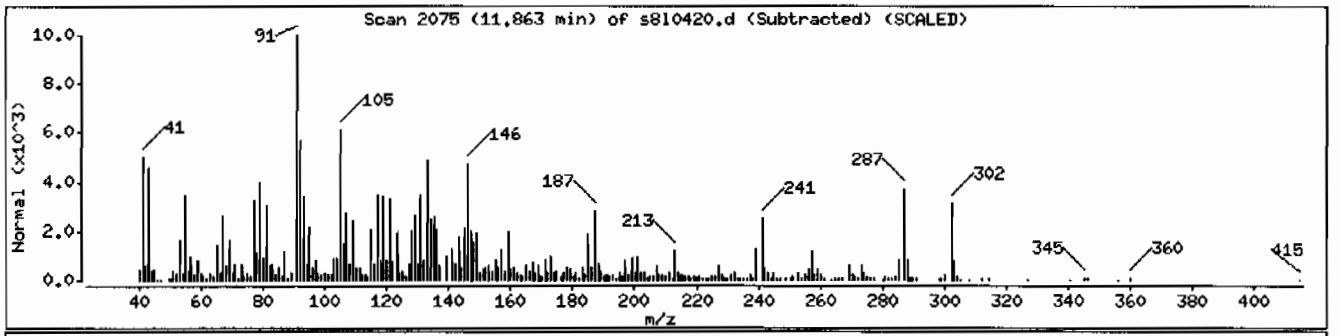

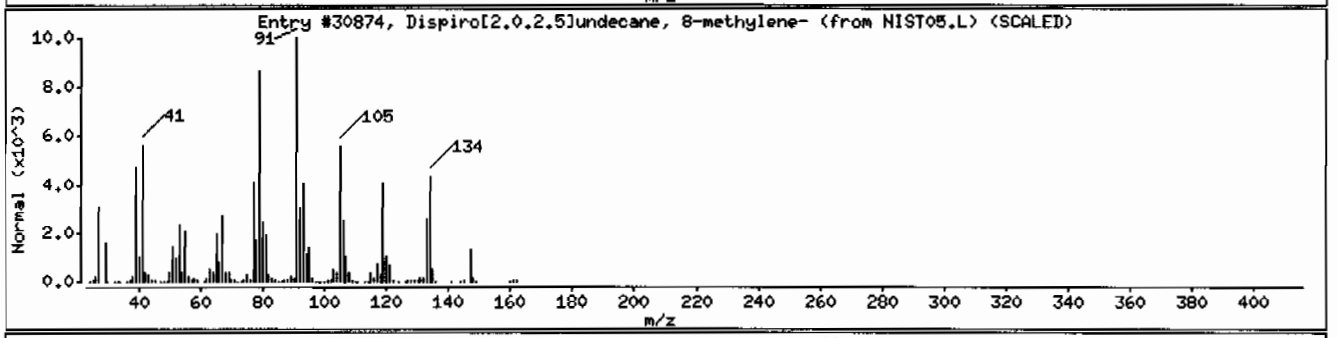

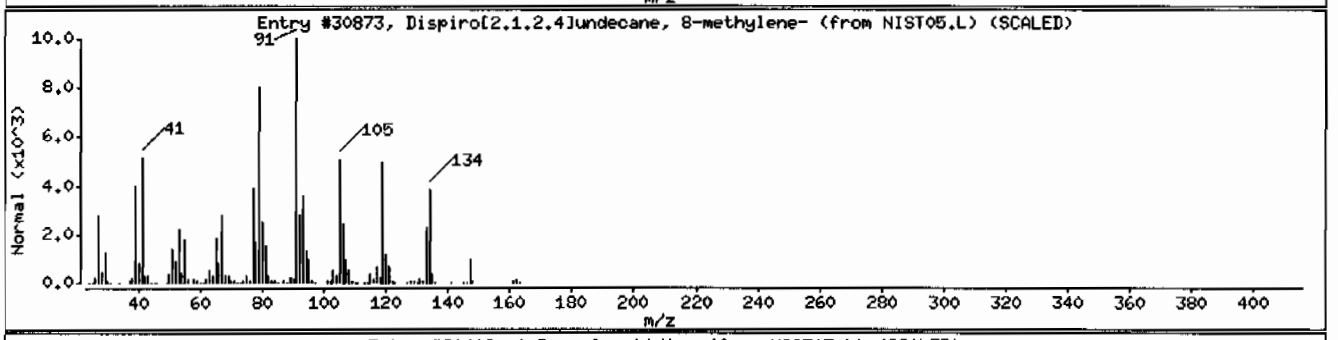

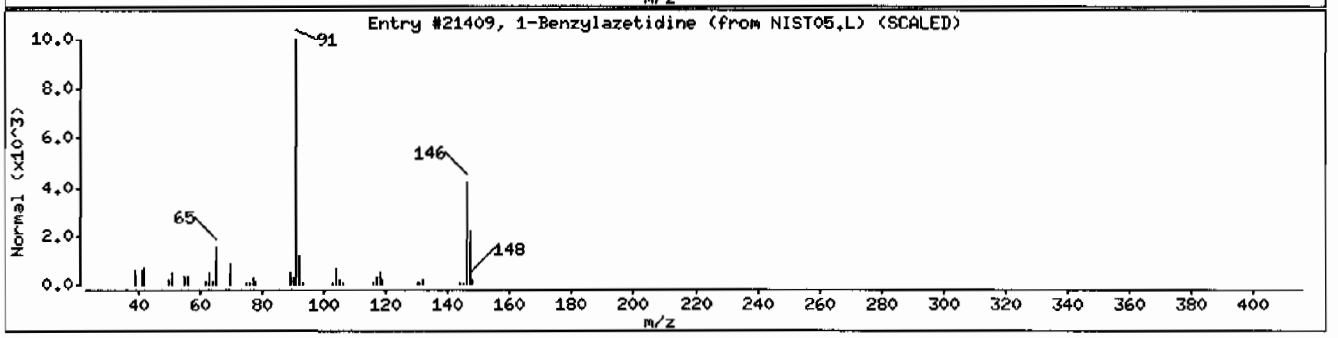

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085

Instrument: MSD8.i

Sample Info: |24131801419256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Quinolinecarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	41	C13H10F3NO3	285
2-Chloro-6-methoxyquinoline-4-carboxylic	20335-34-6	NIST05.L	82920	35	C11H8ClNO3	237
9,10-Anthracenedione, 1-amino-4-hydroxy-	116-85-8	NIST05.L	84516	35	C14H9NO3	239

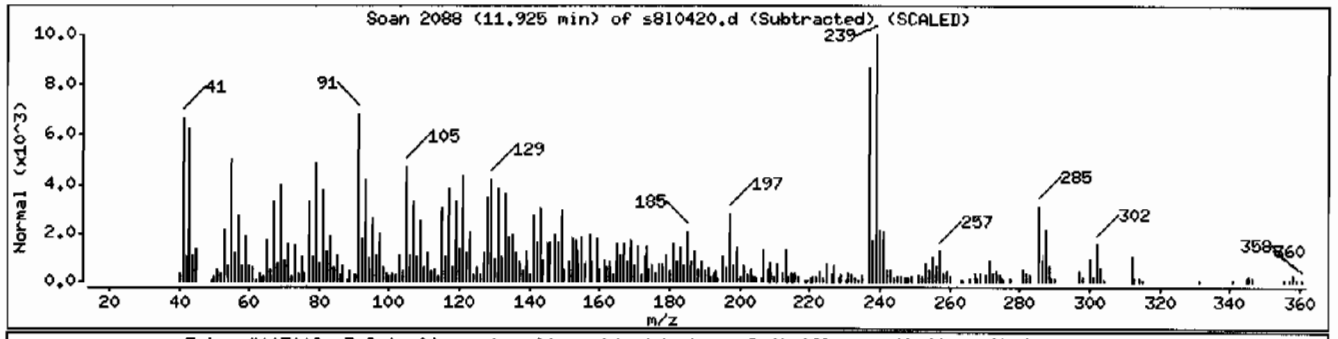

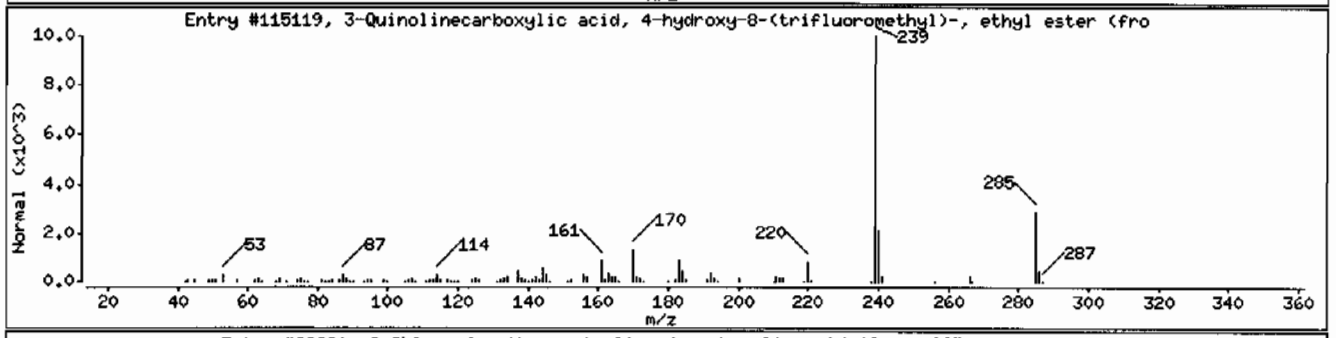

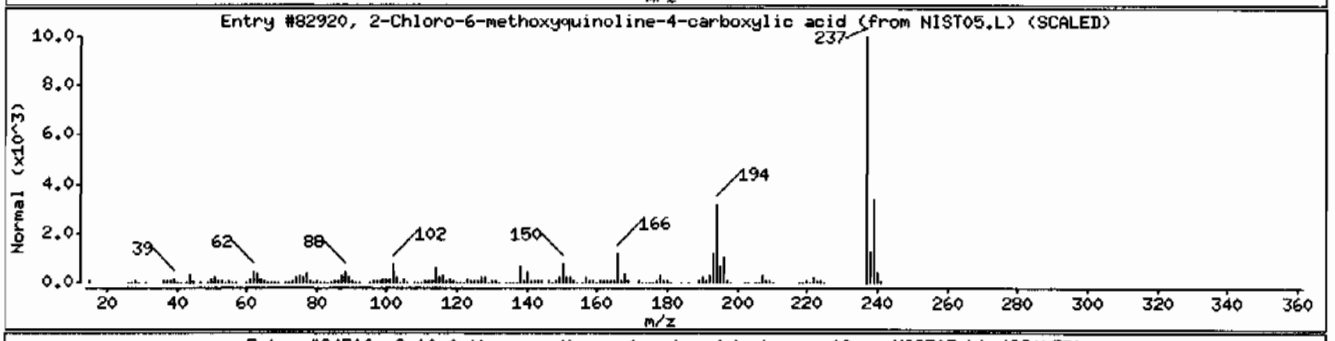

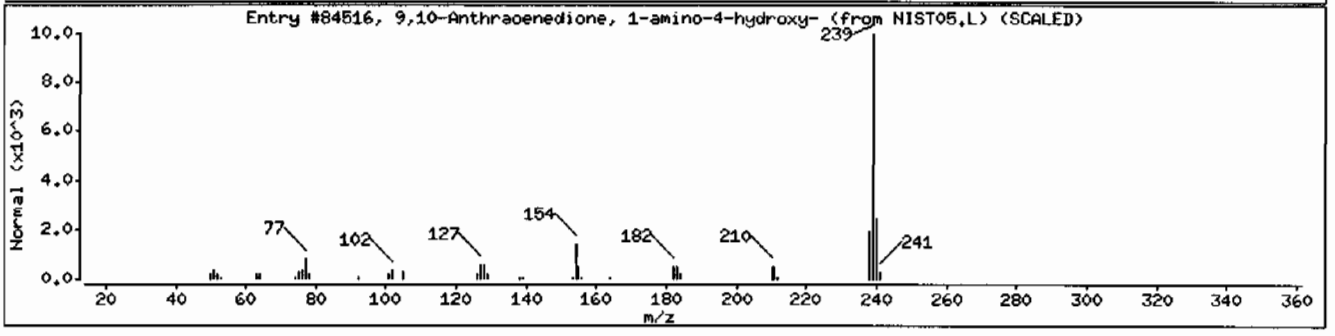

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085

Instrument: MSD8.i

Sample Info: |2413180141925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	93	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	91	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	91	C20H28O2	300

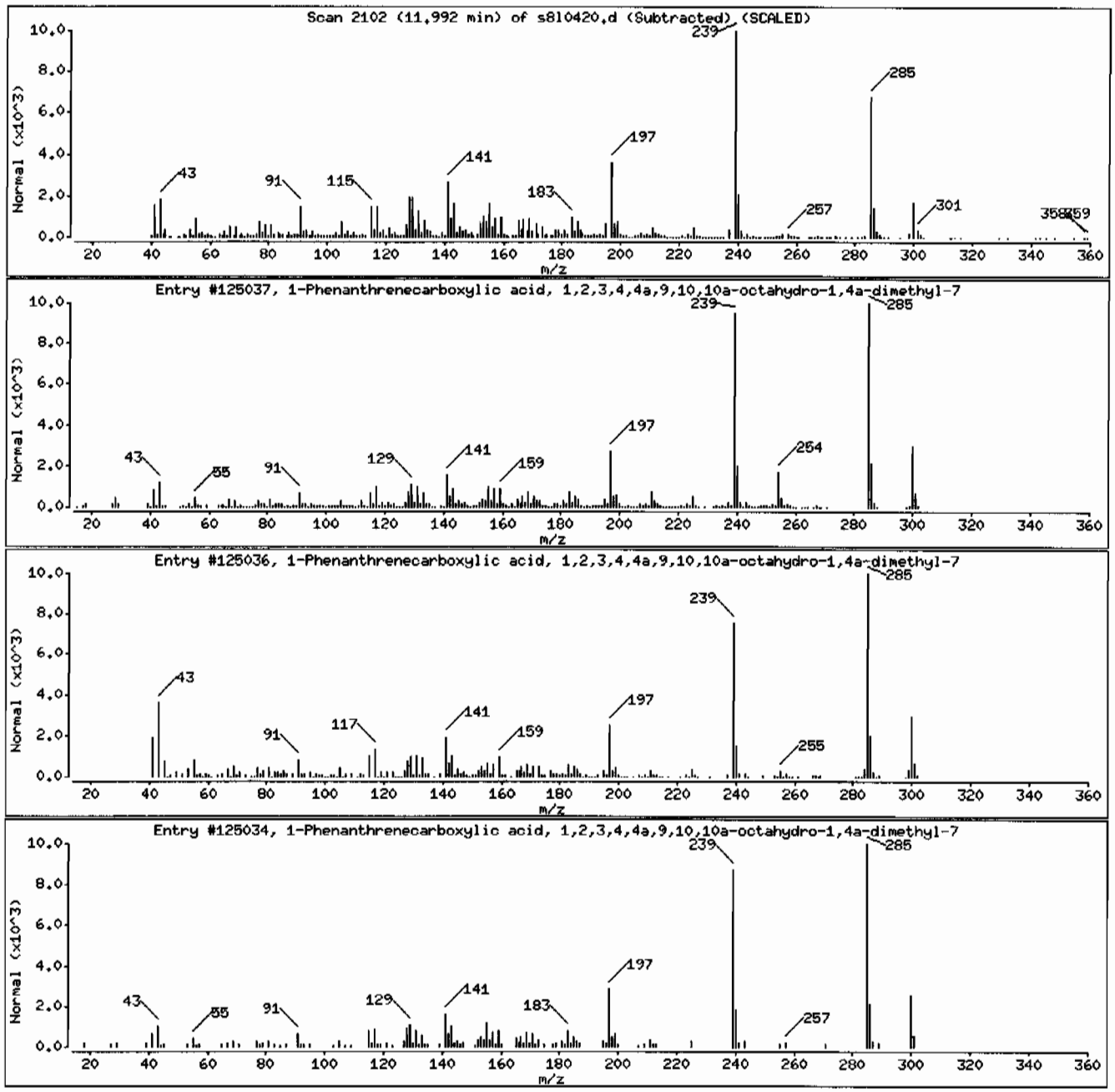

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Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085 Instrument: MSD8.i

Sample Info: |2413180141925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	98	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	95	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	81	C20H28O2	300

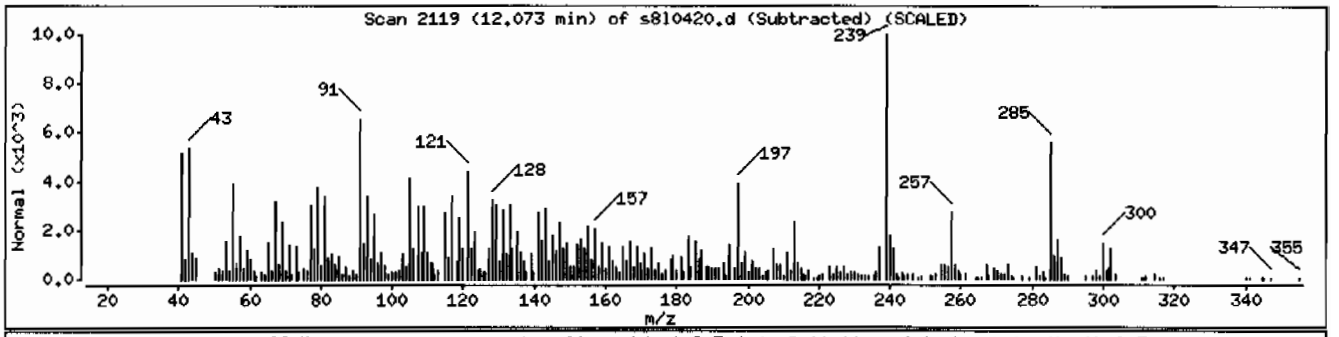

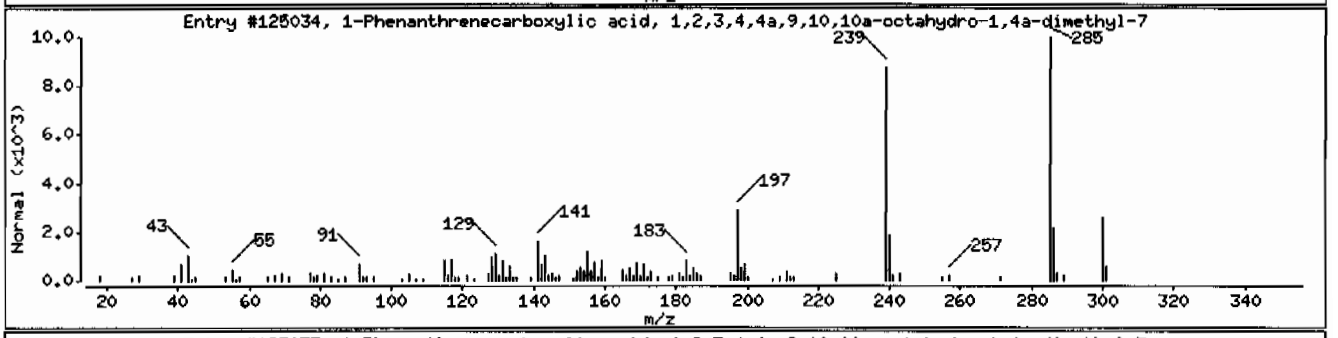

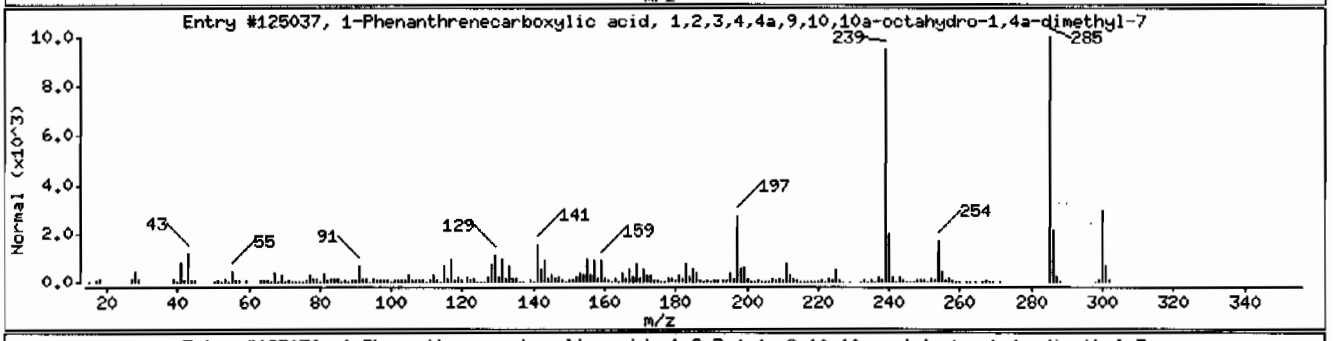

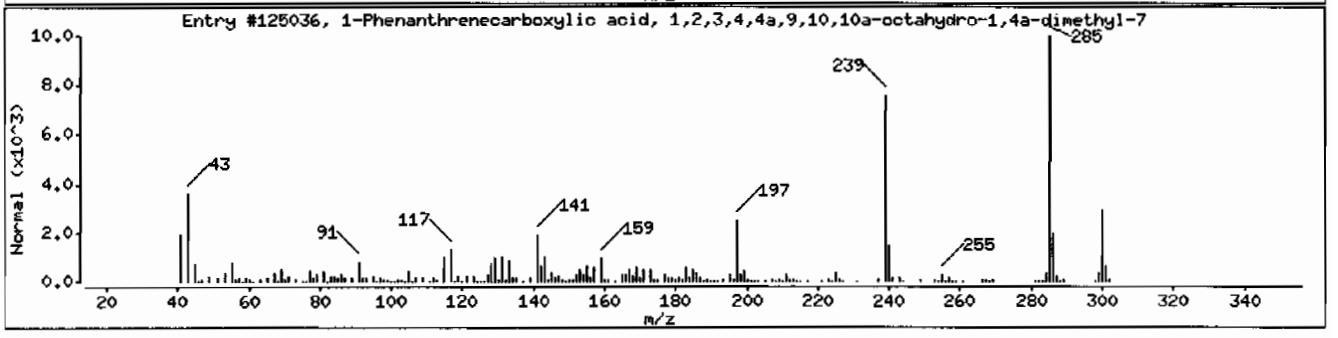

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Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085 Instrument: MSD8.i

Sample Info: |2413180141925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	64	C17H20N2O3	300
Ethyl 4-hydroxy-7-trifluoromethyl-3-quin	391-02-6	NIST05.L	115118	49	C13H10F3NO3	285
3-Quinolinecarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	47	C13H10F3NO3	285

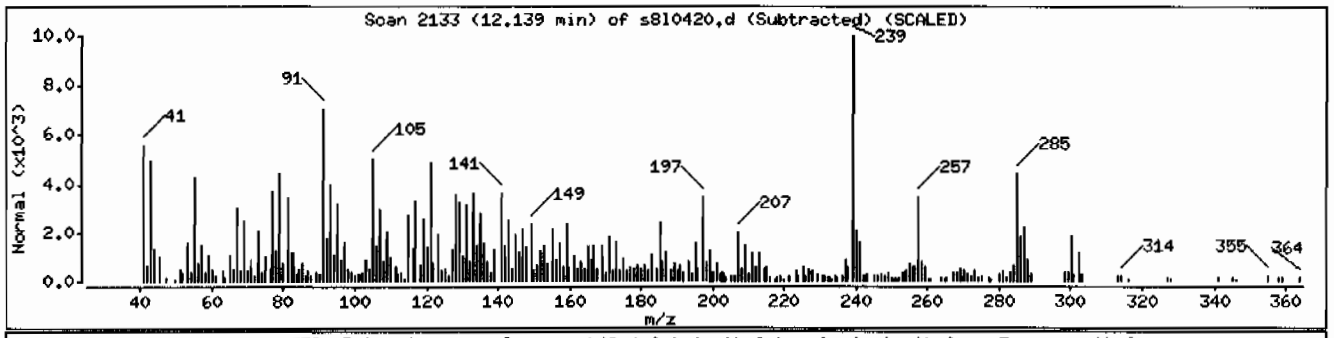

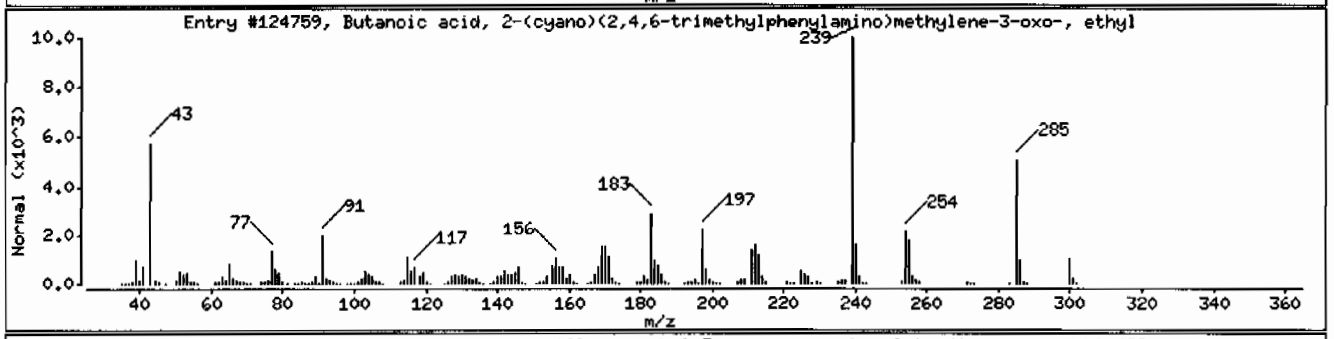

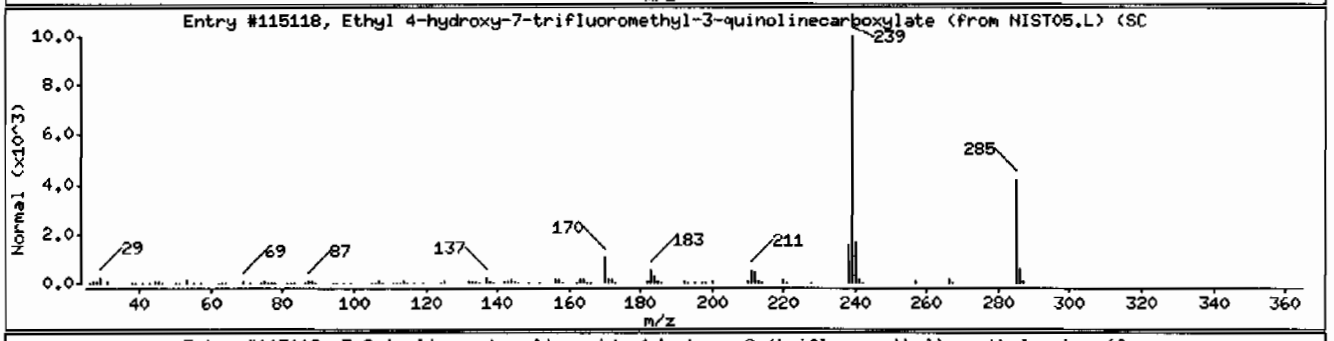

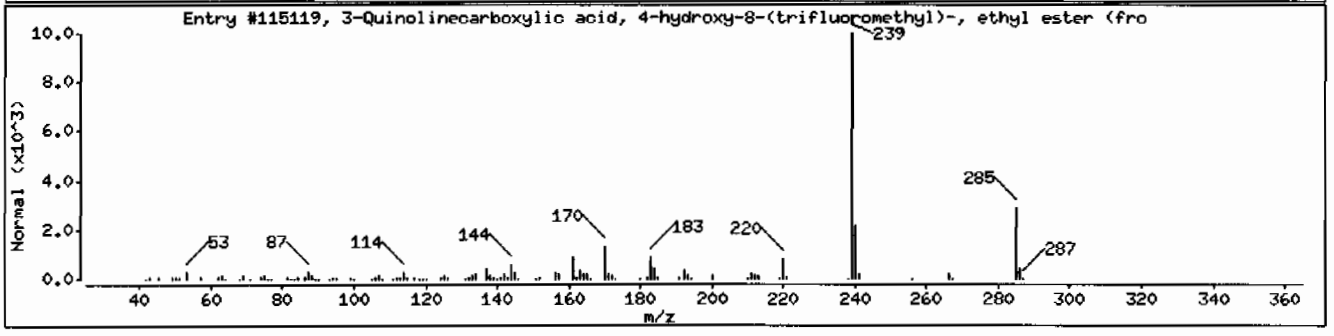

Data File: /chem/MSD8.i/s120409.b/s810420.d

Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085

Instrument: MSD8.i

Sample Info: |24131801419256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	38	C17H20N2O3	300
4-Adamantan-1-yl-benzoic acid isopropyl	1000294-16-4	NIST05.L	123765	35	C20H26O2	298
2-Methyl-1-pyridin-3-yl-3-(2,2,2-trichlo	1000277-72-3	NIST05.L	155108	27	C16H15Cl3N2O	356

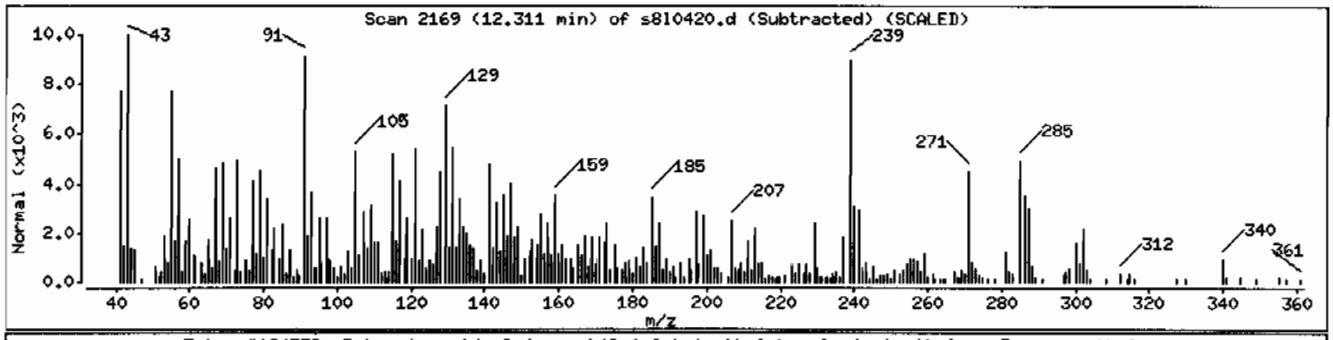

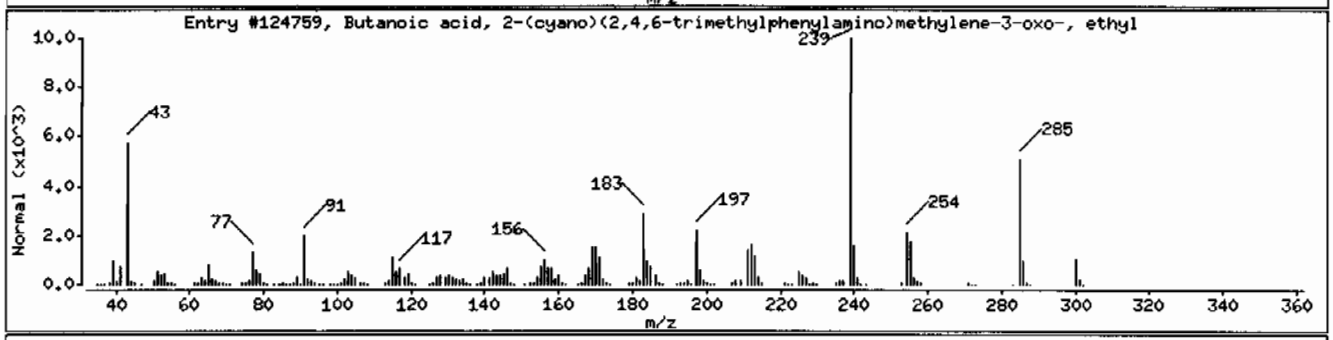

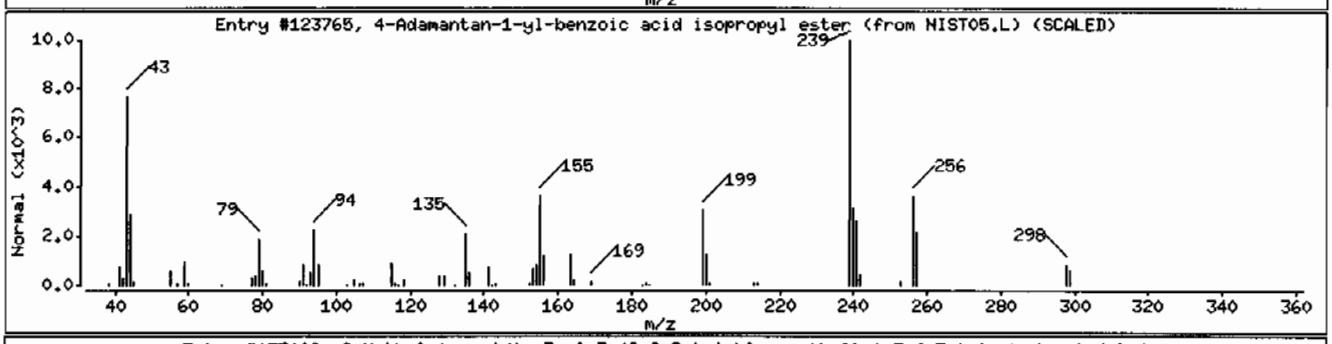

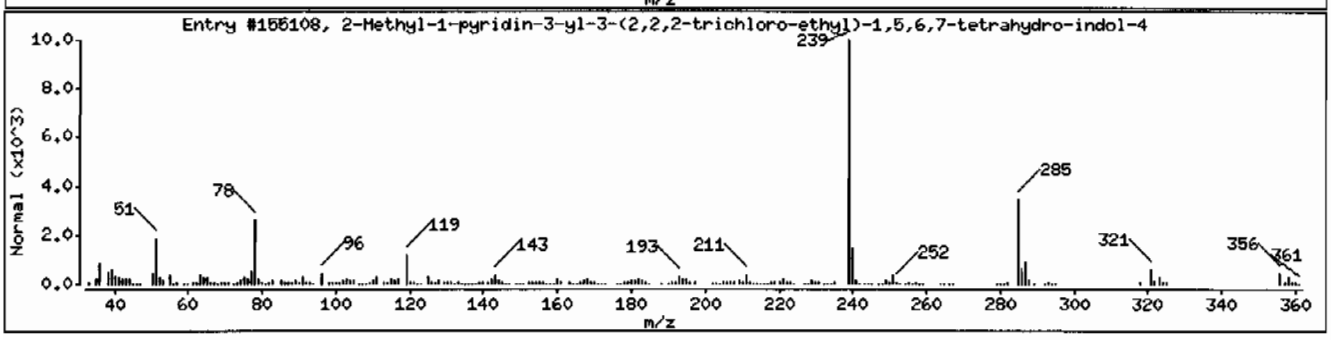

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Date : 04-DEC-2009 17:15

Client ID: RE03-10-6085 Instrument: MSD8.i

Sample Info: |24131801419256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, N-(9-hydroxy-9H-fluoren-2-yl)	57229-41-1	NIST05.L	84555	25	C15H13NO2	239
Pyrido[2,3-d]pyrimidin-5(8H)-one, 4-meth	161465-98-1	NIST05.L	83107	15	C14H11N3O	237
Thieno[2,3-d]pyrimidine-6-carbonitrile,	1000311-13-6	NIST05.L	83280	15	C8H7N5S2	237

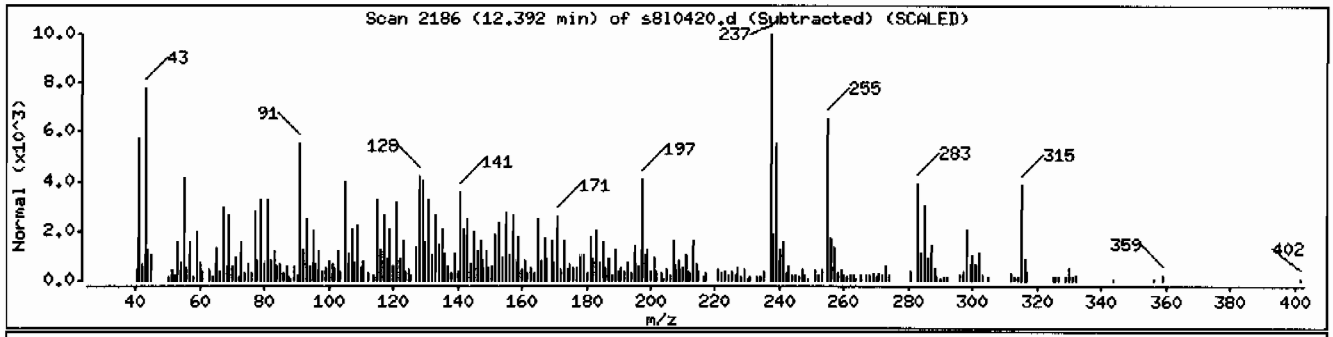

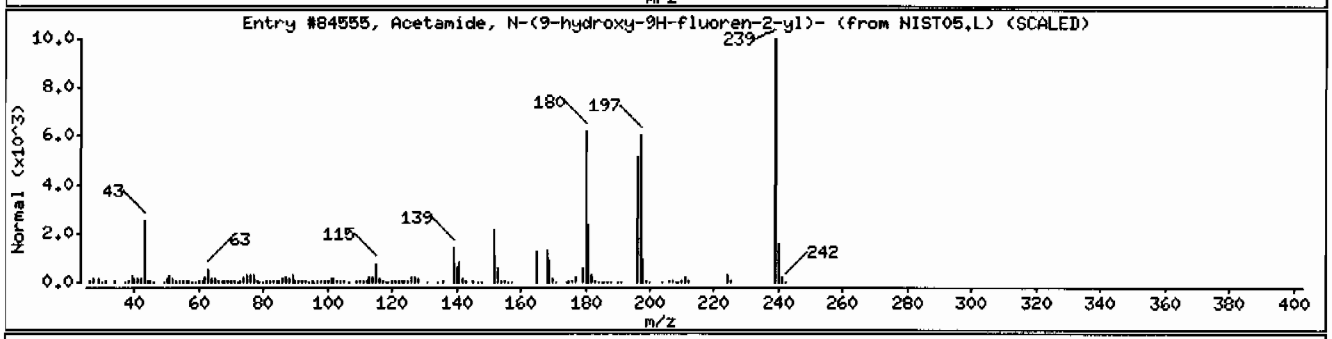

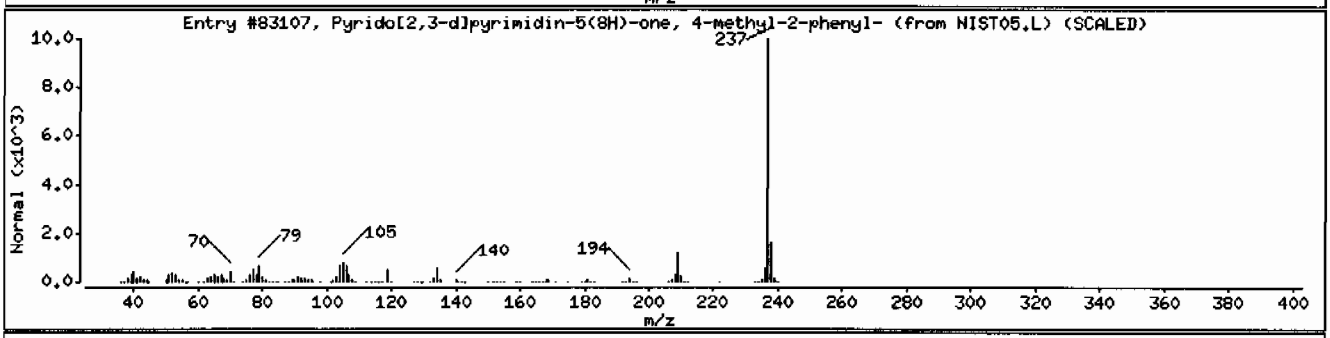

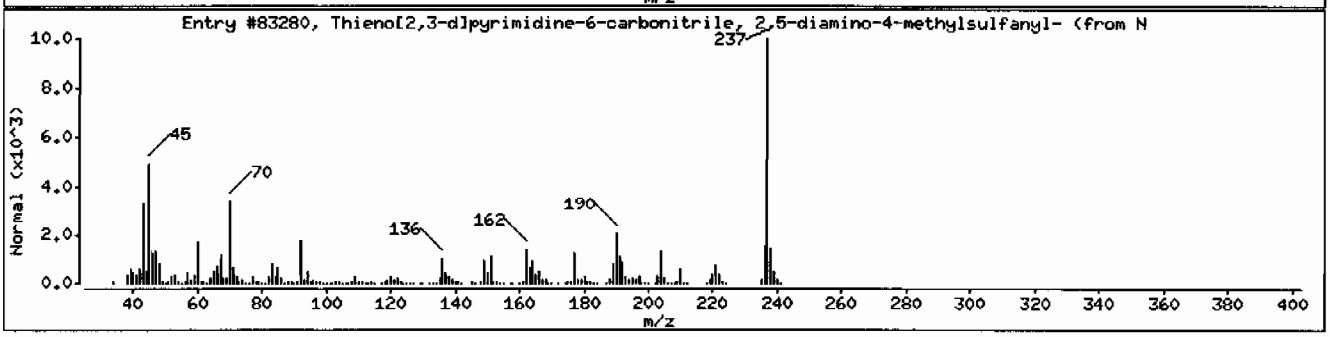

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 03-Dec-2009 12:01

Calibration History

Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Start Cal Date: 28-NOV-2009 20:24
End Cal Date : 30-NOV-2009 11:07

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
28-NOV-2009 20:24	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2605.d
Cal Level: 2 , Cal Amount: 10.00000		
30-NOV-2009 08:10	NEV	/chem/MSD8.i/s112809.b/s8k2644.d
29-NOV-2009 15:51	HEX	/chem/MSD8.i/s112809.b/s8k2633.d
29-NOV-2009 12:20	PEST	/chem/MSD8.i/s112809.b/s8k2626.d
29-NOV-2009 00:54	AP12	/chem/MSD8.i/s112809.b/s8k2613.d
28-NOV-2009 20:58	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2606.d
Cal Level: 3 , Cal Amount: 20.00000		
30-NOV-2009 08:40	NEV	/chem/MSD8.i/s112809.b/s8k2645.d
29-NOV-2009 16:21	HEX	/chem/MSD8.i/s112809.b/s8k2634.d
29-NOV-2009 12:49	PEST	/chem/MSD8.i/s112809.b/s8k2627.d
29-NOV-2009 01:24	AP12	/chem/MSD8.i/s112809.b/s8k2614.d
28-NOV-2009 21:32	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2607.d
Cal Level: 4 , Cal Amount: 40.00000		
30-NOV-2009 09:10	NEV	/chem/MSD8.i/s112809.b/s8k2646.d
29-NOV-2009 16:51	HEX	/chem/MSD8.i/s112809.b/s8k2635.d
29-NOV-2009 13:19	PEST	/chem/MSD8.i/s112809.b/s8k2628.d
29-NOV-2009 01:55	AP12	/chem/MSD8.i/s112809.b/s8k2615.d
28-NOV-2009 22:05	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2608.d
Cal Level: 5 , Cal Amount: 50.00000		
30-NOV-2009 09:39	NEV	/chem/MSD8.i/s112809.b/s8k2647.d
29-NOV-2009 17:22	HEX	/chem/MSD8.i/s112809.b/s8k2636.d
29-NOV-2009 13:50	PEST	/chem/MSD8.i/s112809.b/s8k2629.d
29-NOV-2009 02:25	AP12	/chem/MSD8.i/s112809.b/s8k2616.d
28-NOV-2009 22:39	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2609.d
Cal Level: 6 , Cal Amount: 80.00000		
30-NOV-2009 10:09	NEV	/chem/MSD8.i/s112809.b/s8k2648.d
29-NOV-2009 17:52	HEX	/chem/MSD8.i/s112809.b/s8k2637.d
29-NOV-2009 14:20	PEST	/chem/MSD8.i/s112809.b/s8k2630.d
29-NOV-2009 02:54	AP12	/chem/MSD8.i/s112809.b/s8k2617.d
28-NOV-2009 23:13	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2610.d
Cal Level: 7 , Cal Amount: 100.00000		

30-NOV-2009 10:38	NEV	/chem/MSD8.i/s112809.b/s8k2649.d
29-NOV-2009 18:22	HEX	/chem/MSD8.i/s112809.b/s8k2638.d
29-NOV-2009 14:51	PEST	/chem/MSD8.i/s112809.b/s8k2631.d
29-NOV-2009 03:24	AP12	/chem/MSD8.i/s112809.b/s8k2618.d
28-NOV-2009 23:46	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2611.d

Cal Level: 8 , Cal Amount: 120.00000		
30-NOV-2009 11:07	NEV	/chem/MSD8.i/s112809.b/s8k2650.d
29-NOV-2009 15:21	PEST	/chem/MSD8.i/s112809.b/s8k2632.d
29-NOV-2009 03:54	AP12	/chem/MSD8.i/s112809.b/s8k2619.d
29-NOV-2009 00:20	MEGAIICARE	/chem/MSD8.i/s112809.b/s8k2612.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 11:34	MEGAIICARE	/chem/MSD8.i/s120309.b/s810306.d

Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 09:12	MEGAIICARE	/chem/MSD8.i/s120309.b/s810304.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-NOV-2009 20:24
End Cal Date : 30-NOV-2009 11:07
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Cal Date : 03-Dec-2009 12:00 nat00999

Calibration File Names:
Level 1: /chem/MSD8.i/s112809.b/s8k2605.d
Level 2: /chem/MSD8.i/s112809.b/s8k2644.d
Level 3: /chem/MSD8.i/s112809.b/s8k2645.d
Level 4: /chem/MSD8.i/s112809.b/s8k2646.d
Level 5: /chem/MSD8.i/s112809.b/s8k2647.d
Level 6: /chem/MSD8.i/s112809.b/s8k2648.d
Level 7: /chem/MSD8.i/s112809.b/s8k2649.d
Level 8: /chem/MSD8.i/s112809.b/s8k2650.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.46188	0.52415	0.51923	0.51040	0.49993					
	0.49582	0.51411					AVRG		0.50364		4.16326
2 Pyridine	+++++	0.79483	0.88634	0.88949	0.86186	0.86803					
	0.85793	0.84742					AVRG		0.85799		3.68926
4 Aniline	+++++	0.52296	0.55065	0.54686	0.54703	0.55459					
	0.53420	0.55670					AVRG		0.54472		2.21081
209 Benzaldehyde	+++++	0.86002	0.90218	0.83396	0.86410	0.76400					
	0.75440	0.73022					AVRG		0.81556		8.04907
6 Phenol	+++++	1.07872	1.27541	1.23693	1.21494	1.26881					
	1.22182	1.25543					AVRG		1.22172		5.48688

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Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.64169	0.66740	0.71210	0.70682	0.71113	0.71426					
	0.69730	0.70207					AVRG		0.69410		3.73924
8 2-Chlorophenol	+++++	0.95962	1.03624	1.05786	1.06617	1.13223					
	1.10363	1.14124					AVRG		1.07100		5.85039
203 n-Decane	+++++	0.87451	0.89291	0.87968	0.87849	0.86068					
	0.86675	0.87136					AVRG		0.87491		1.18163
9 1,3-Dichlorobenzene	+++++	1.13196	1.22387	1.23352	1.21441	1.23795					
	1.23532	1.25732					AVRG		1.21919		3.33605
11 1,4-Dichlorobenzene	+++++	1.11661	1.18836	1.23696	1.23114	1.23658					
	1.23819	1.24180					AVRG		1.21281		3.81153
12 Benzyl alcohol	+++++	0.51605	0.66098	0.63604	0.64462	0.65736					
	0.64041	0.64748					AVRG		0.62899		8.04111
13 1,2-Dichlorobenzene	+++++	1.06519	1.18205	1.19304	1.20699	1.21790					
	1.20628	1.21624					AVRG		1.18396		4.55024
14 bis(2-Chloroisopropyl)ether	+++++	1.06631	1.15470	1.14562	1.16212	1.16403					
	1.14708	1.13822					AVRG		1.13973		2.95318
15 o-Cresol	+++++	0.79685	0.85103	0.85854	0.85777	0.88347					
	0.85761	0.85581					AVRG		0.85158		3.08951

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Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.16263	1.17677	1.11834	1.18670	1.15708					
	1.17425	1.17961					AVRG		1.16505		1.96800
17 N-Nitrosodipropylamine	0.64529	0.71737	0.79308	0.80269	0.83497	0.81795					
	0.81065	0.81131					AVRG		0.77916		8.27943
18 m,p-Cresols	+++++	0.88326	1.08034	1.06906	1.09446	1.11601					
	1.10089	1.09550					AVRG		1.06279		7.57964
19 Hexachloroethane	+++++	0.48363	0.53269	0.53468	0.54346	0.54677					
	0.55376	0.53832					AVRG		0.53333		4.32874
21 Nitrobenzene	+++++	0.33347	0.34360	0.34276	0.32000	0.29405					
	0.32730	0.33202					AVRG		0.32760		5.17323
22 Isophorone	+++++	0.53324	0.55020	0.54559	0.52294	0.47599					
	0.53887	0.53995					AVRG		0.52954		4.75556
23 2-Nitrophenol	+++++	0.13739	0.14986	0.15280	0.15141	0.13841					
	0.15639	0.16039					AVRG		0.14952		5.79366
24 2,4-Dimethylphenol	+++++	0.25964	0.28099	0.27287	0.26283	0.24439					
	0.27618	0.27769					AVRG		0.26780		4.83759
25 bis(2-Chloroethoxy)methane	+++++	0.30907	0.32752	0.32748	0.32021	0.28702					
	0.32715	0.33536					AVRG		0.31912		5.11869

GEL Laboratories LLC

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Method file : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.23848	0.23601	0.24077	0.22993	0.21845					
	0.24858	0.24914					AVRG		0.23734		4.52462
27 Benzoic acid	+++++	+++++	0.15656	0.18868	0.17870	0.17993					
	0.17650	0.19556					AVRG		0.17932		7.38963
28 1,2,4-Trichlorobenzene	+++++	0.29694	0.30844	0.30469	0.29669	0.26549					
	0.30339	0.30432					AVRG		0.29714		4.90970
30 Naphthalene	0.90496	0.84117	0.86796	0.86575	0.82691	0.76434					
	0.86353	0.86708					AVRG		0.85022		4.87268
204 alpha-Terpineol	+++++	0.16712	0.18158	0.18274	0.17975	0.16649					
	0.18567	0.18649					AVRG		0.17855		4.67429
31 4-Chloroaniline	+++++	0.23144	0.28331	0.28498	0.28046	0.25863					
	0.27454	0.29044					AVRG		0.27197		7.56193
189 Caprolactam	+++++	0.07667	0.08125	0.07844	0.08322	0.07884					
	0.08267	0.07897					AVRG		0.08001		3.01677
32 Hexachlorobutadiene	+++++	0.22385	0.23332	0.23635	0.22784	0.20295					
	0.22912	0.22853					AVRG		0.22599		4.83496
33 4-Chloro-3-methylphenol	+++++	0.25166	0.27017	0.27463	0.26313	0.24240					
	0.27232	0.26216					AVRG		0.26235		4.46779

GEL Laboratories LLC

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Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.55513	0.55088	0.59481	0.59733	0.57515	0.53810					
	0.61145	0.60827					AVRG		0.57889		4.86146
35 1-Methylnaphthalene	0.53574	0.50793	0.52918	0.53564	0.51821	0.47771					
	0.54374	0.54092					AVRG		0.52363		4.21478
36 Hexachlorocyclopentadiene	+++++	0.18945	0.20675	0.21978	0.19300	0.22407					
	0.19514	0.21509					AVRG		0.20618		6.74455
208 1,1'-Biphenyl	+++++	1.13010	1.19341	1.15480	1.22061	1.16003					
	1.18145	1.14989					AVRG		1.17004		2.60350
205 2,3-Dichloroaniline	+++++	0.43394	0.46957	0.49790	0.48728	0.51224					
	0.51488	0.53392					AVRG		0.49282		6.73882
37 2,4,6-Trichlorophenol	+++++	0.32642	0.35667	0.36919	0.36373	0.38515					
	0.38812	0.40070					AVRG		0.37000		6.63668
38 2,4,5-Trichlorophenol	+++++	0.30380	0.35188	0.36121	0.35050	0.36737					
	0.38272	0.39421					AVRG		0.35881		8.08333
40 2-Chloronaphthalene	0.84504	0.92838	1.01767	1.03476	1.00014	1.01999					
	1.02479	1.04713					AVRG		0.98974		6.94291
42 o-Nitroaniline	+++++	0.31867	0.35229	0.34697	0.34491	0.34978					
	0.34010	0.35025					AVRG		0.34328		3.37202

GEL Laboratories LLC

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Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	12665	46283	92298	108132	196242					
	201351	243362					LINR	0.04546	0.22616		0.99354
43 Dimethylphthalate	+++++	1.06229	1.15918	1.20270	1.17429	1.17737					
	1.18625	1.18426					AVRG		1.16376		4.00834
44 2,6-Dinitrotoluene	+++++	0.25056	0.26727	0.27899	0.27787	0.28456					
	0.29078	0.29124					AVRG		0.27732		5.20004
45 Acenaphthylene	1.37074	1.50644	1.60382	1.61315	1.58388	1.59695					
	1.61861	1.64316					AVRG		1.56709		5.67255
47 Acenaphthene	0.92480	0.95707	1.03543	1.09516	1.06143	1.07836					
	1.11586	1.08636					AVRG		1.04431		6.56455
48 2,4-Dinitrophenol	+++++	+++++	0.11292	0.14618	0.13159	0.16161					
	0.14940	0.17150					AVRG		0.14553		14.43336
49 Dibenzofuran	+++++	1.41676	1.49788	1.50919	1.47450	1.50663					
	1.50469	1.53076					AVRG		1.49149		2.47463
50 2,4-Dinitrotoluene	+++++	0.33415	0.35354	0.36910	0.36684	0.37519					
	0.37317	0.38835					AVRG		0.36576		4.75487
51 Diethylphthalate	+++++	1.20172	1.25954	1.29111	1.24965	1.23673					
	1.24014	1.22451					AVRG		1.24334		2.25684

GEL Laboratories LLC

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Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
52 4-Nitrophenol	+++++	0.11515	0.16204	0.15975	0.14983	0.16297						
	0.14010	0.16810					AVRG		0.15113		12.19801	
53 Fluorene	1.18253	1.14175	1.25716	1.28721	1.25294	1.30308						
	1.30905	1.33390					AVRG		1.25845		5.24408	
54 4-Chlorophenylphenylether	+++++	0.63878	0.65637	0.67564	0.67404	0.68365						
	0.69660	0.70768					AVRG		0.67611		3.44790	
220 Hydroquinone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
55 2-Methyl-4,6-dinitrophenol	+++++	14235	42274	92022	104230	201595						
	232629	259691					LINR	0.13134	0.13345		0.99939	
56 p-Nitroaniline	+++++	0.15068	0.17879	0.21983	0.19559	0.21816						
	0.19841	0.22055					AVRG		0.19743		13.08372	
133 Diphenylamine	+++++	0.47516	0.51347	0.52513	0.53137	0.53742						
	0.53500	0.56018					AVRG		0.52539		5.00505	
58 1,2-Diphenylhydrazine	+++++	0.61455	0.63942	0.65784	0.66381	0.64463						
	0.63228	0.64812					AVRG		0.64295		2.55518	
59 Tributylphosphate	+++++	1.40068	1.36668	1.40070	1.39796	1.40699						
	1.38413	1.40308					AVRG		1.39432		1.01390	

GEL Laboratories LLC

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Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
61 4-Bromophenylphenylether	+++++	0.16022	0.17561	0.18577	0.19271	0.19357					
	0.19826	0.20155					AVRG		0.18681		7.76420
63 Hexachlorobenzene	+++++	0.21405	0.23054	0.23997	0.24340	0.24905					
	0.24596	0.25732					AVRG		0.24004		5.87178
207 Atrazine	+++++	0.03893	0.04448	0.04043	0.04045	0.03451					
	0.03282	0.03193					AVRG		0.03765		12.35337
65 Pentachlorophenol	+++++	20027	56681	104794	131638	251251					
	306344	356869					LINR	0.19507	0.18201		0.99357
206 n-Octadecane	+++++	0.29025	0.30961	0.31315	0.32587	0.31295					
	0.31340	0.32860					AVRG		0.31341		3.98763
68 Phenanthrene	0.84357	0.82828	0.86387	0.88102	0.89399	0.89380					
	0.89557	0.90284					AVRG		0.87537		3.12610
69 Anthracene	0.75832	0.84672	0.89917	0.89787	0.90931	0.91706					
	0.89335	0.92996					AVRG		0.88147		6.28560
72 Di-n-butylphthalate	+++++	0.99142	1.08868	1.11452	1.13305	1.08644					
	1.07428	1.08757					AVRG		1.08228		4.13610
76 Fluoranthene	0.91875	0.99781	1.07750	1.09510	1.10521	1.14744					
	1.15001	1.13086					AVRG		1.07784		7.49034

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INITIAL CALIBRATION DATA

Start Cal Date : 28-NOV-2009 20:24
End Cal Date : 30-NOV-2009 11:07
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
77 Benzidine	+++++	58318	90525	313338	343990	609662					
	763041	833054					LINR	0.05945	0.35613		0.99201
79 Pyrene	1.06375	1.06620	1.15120	1.23431	1.28293	1.13843					
	1.10779	1.19488					AVRG		1.15493		6.78426
85 Butylbenzylphthalate	+++++	0.46259	0.52215	0.56753	0.60724	0.54225					
	0.51759	0.55350					AVRG		0.53898		8.39125
89 Benzo(a)anthracene	1.03547	0.92206	0.96071	0.98717	0.99518	0.97536					
	0.95286	0.97481					AVRG		0.97545		3.40170
90 3,3'-Dichlorobenzidine	+++++	0.21117	0.25582	0.29371	0.30170	0.29852					
	0.29637	0.28397					AVRG		0.27732		11.92056
92 Chrysene	0.87163	0.87510	0.92346	0.92036	0.92385	0.88998					
	0.87002	0.87297					AVRG		0.89342		2.78770
93 bis(2-Ethylhexyl)phthalate	0.55806	0.64628	0.72864	0.77600	0.78088	0.70969					
	0.68562	0.71326					AVRG		0.69980		10.33953
94 Di-n-octylphthalate	+++++	1.06846	1.29131	1.61091	1.61055	1.30760					
	1.19957	1.42101					AVRG		1.35849		14.95453
95 Benzo(b)fluoranthene	0.88037	0.96322	1.01734	1.11629	1.14819	1.14094					
	1.08017	1.18296					AVRG		1.06619		9.78396

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	100 Level 7	120 Level 8									
96 Benzo(k)fluoranthene	0.90982	0.95739	1.02892	1.10167	1.09110	0.97241					
	0.97824	1.03247					AVRG		1.00900		6.60187
97 Benzo(a)pyrene	0.71603	0.82938	0.90507	0.92719	0.93970	0.92487					
	0.91661	0.94263					AVRG		0.88769		8.79548
99 Indeno(1,2,3-cd)pyrene	0.61046	0.79838	0.74116	0.68940	0.70881	0.74725					
	0.86212	0.72659					AVRG		0.73552		10.11008
100 Dibenzo(a,h)anthracene	0.65421	0.62622	0.62528	0.56417	0.58097	0.62956					
	0.71621	0.62041					AVRG		0.62713		7.33635
101 Benzo(ghi)perylene	0.62446	0.67696	0.62238	0.55200	0.58162	0.59478					
	0.71405	0.58666					AVRG		0.61912		8.62367
102 1,4-Dioxane	+++++	0.29630	0.30373	0.30138	0.32034	0.31548					
	0.31300	0.32415					AVRG		0.31063		3.33762
103 Methyl methacrylate	+++++	0.16219	0.17177	0.16669	0.18000	0.18047					
	0.17988	0.18115					AVRG		0.17459		4.43044
104 Ethyl methacrylate	+++++	0.65761	0.70756	0.67070	0.71050	0.69289					
	0.70086	0.69487					AVRG		0.69071		2.83255
105 2-Picoline	+++++	1.16098	1.17781	1.14900	1.21834	1.17091					
	1.16981	1.17834					AVRG		1.17503		1.84310

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	100 Level 7	120 Level 8									
106 N-Nitrosomethylethylamine	+++++	0.45687	0.44165	0.42340	0.43845	0.41647					
	0.43212	0.43041					AVRG		0.43420		3.02787
107 Methyl methanesulfonate	+++++	0.61094	0.61767	0.57348	0.59740	0.54145					
	0.53499	0.51297					AVRG		0.56984		7.16585
108 N-Nitrosodiethylamine	+++++	0.43005	0.46902	0.45073	0.47670	0.46547					
	0.46593	0.47537					AVRG		0.46189		3.55677
109 Ethyl Methanesulfonate	+++++	0.58850	0.59806	0.58675	0.60802	0.56859					
	0.57205	0.57053					AVRG		0.58464		2.57626
110 Pentachloroethane	+++++	0.36535	0.35178	0.34525	0.35578	0.35082					
	0.35217	0.34957					AVRG		0.35296		1.78791
111 N-Nitrosopyrrolidine	+++++	0.46860	0.48721	0.49212	0.50640	0.47009					
	0.46498	0.48386					AVRG		0.48189		3.10051
113 N-Nitrosomorpholine	+++++	0.68230	0.68727	0.66959	0.70080	0.65248					
	0.67299	0.67307					AVRG		0.67693		2.24643
114 o-Toluidine	+++++	1.49255	1.58210	1.49342	1.54851	1.50130					
	1.55191	1.54134					AVRG		1.53016		2.26860
115 N-Nitrosopiperidine	+++++	0.13491	0.13910	0.13493	0.14650	0.13730					
	0.14413	0.13978					AVRG		0.13952		3.17020

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	100 Level 7	120 Level 8									
116 a,a-Dimethylphenethylamine	+++++	0.52420	0.58963	0.59904	0.62964	0.62601					
	0.64703	0.63648					AVRG		0.60743		6.90815
117 Triethylphosphorothioate	+++++	0.17130	0.16560	0.16489	0.17311	0.17604					
	0.17021	0.17871					AVRG		0.17141		2.96786
118 2,6-Dichlorophenol	+++++	0.21476	0.21597	0.21266	0.22441	0.22233					
	0.22997	0.22241					AVRG		0.22036		2.79057
119 Hexachloropropene	+++++	0.14108	0.15345	0.13773	0.14230	0.14340					
	0.14765	0.14807					AVRG		0.14481		3.62758
120 p-Phenylenediamine	+++++	0.22449	0.21740	0.22558	0.22566	0.18757					
	0.18758	0.16632					AVRG		0.20494		11.76374
121 N-Nitrosodi-n-butylamine	+++++	0.25014	0.26561	0.23930	0.24765	0.23589					
	0.23439	0.22690					AVRG		0.24284		5.26567
122 Safrole	+++++	0.19107	0.19714	0.20033	0.21257	0.20722					
	0.21499	0.21144					AVRG		0.20497		4.36899
123 1,2,4,5-Tetrachlorobenzene	+++++	0.48723	0.51879	0.51099	0.53599	0.50570					
	0.52047	0.50828					AVRG		0.51249		2.93759
124 Isosafrole	+++++	0.32105	0.32563	0.31810	0.34130	0.32948					
	0.33278	0.33697					AVRG		0.32933		2.54660

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
125 1,4-Naphthoquinone	+++++	0.30550	0.31463	0.28738	0.28943	0.22833					
	0.22901	+++++					AVRG		0.27571		13.71749
126 m-Dinitrobenzene	+++++	0.17119	0.17933	0.18955	0.18609	0.19324					
	0.18741	0.19866					AVRG		0.18650		4.84204
127 Pentachlorobenzene	+++++	0.47021	0.48967	0.46909	0.49911	0.47172					
	0.48706	0.47648					AVRG		0.48048		2.40778
128 1-Naphthylamine	+++++	0.76024	0.85022	0.86040	0.90743	0.85435					
	0.86888	0.84394					AVRG		0.84935		5.23732
129 2-Naphthylamine	+++++	0.84719	0.89862	0.92649	0.95292	0.91081					
	0.92396	0.88108					AVRG		0.90587		3.79762
130 2,3,4,6-Tetrachlorophenol	+++++	0.27428	0.30736	0.31805	0.31570	0.33541					
	0.32549	0.34703					AVRG		0.31762		7.30616
131 5-Nitro-o-toluidine	+++++	0.24448	0.27142	0.26998	0.28290	0.28511					
	0.28522	0.27386					AVRG		0.27328		5.21549
132 Thionazin	+++++	0.16477	0.16910	0.16619	0.16624	0.17390					
	0.17778	0.18202					AVRG		0.17143		3.85918
134 Sulfotepp	+++++	0.10476	0.11263	0.11327	0.11157	0.11320					
	0.11338	0.11722					AVRG		0.11229		3.34392

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
135 Phorate	+++++	0.31144	0.33425	0.33818	0.32914	0.32070					
	0.32065	0.32044					AVRG		0.32497		2.86044
136 1,3,5-Trinitrobenzene	+++++	0.12811	0.11976	0.11925	0.12854	0.12461					
	0.12889	0.13180					AVRG		0.12585		3.82648
137 Phenacetin	+++++	0.22346	0.25889	0.25853	0.26190	0.26656					
	0.26319	0.26262					AVRG		0.25645		5.77136
138 Diallate	+++++	0.18886	0.20236	0.20063	0.20828	0.20057					
	0.20249	0.20816					AVRG		0.20162		3.22292
139 Dimethoate	+++++	0.16179	0.18312	0.18940	0.19420	0.19195					
	0.19097	0.19260					AVRG		0.18629		6.10706
140 4-Aminobiphenyl	+++++	0.45772	0.52098	0.58277	0.59228	0.61395					
	0.61022	0.60925					AVRG		0.56959		10.32660
141 Pentachloronitrobenzene	+++++	0.08955	0.09469	0.09260	0.09442	0.09514					
	0.09525	0.09543					AVRG		0.09387		2.26587
142 Pronamide	+++++	0.26467	0.27294	0.27228	0.29132	0.27474					
	0.27635	0.28051					AVRG		0.27612		2.98761
143 Dinoseb	+++++	18647	60076	131389	156146	294868					
	349952	382248					LINR	0.14853	0.19902		0.99974

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	100 Level 7	120 Level 8									
144 Disulfoton	+++++	0.26604	0.28470	0.28725	0.28044	0.28000					
	0.27270	0.27588					AVRG		0.27814		2.60812
145 Methyl parathion	+++++	0.13425	0.15992	0.17833	0.17936	0.18451					
	0.17945	0.18506					AVRG		0.17155		10.76421
146 4-Nitroquinoline-1-oxide	+++++	4228	7428	10523	11135	16569					
	19274	22347					LINR	-0.59963	0.00678		0.99041
147 Methapyrilene	+++++	0.29828	0.31112	0.28725	0.28577	0.22589					
	0.22202	+++++					AVRG		0.27172		14.03037
148 Isodrin	+++++	0.10169	0.10915	0.10865	0.11536	0.11278					
	0.11455	0.11602					AVRG		0.11117		4.57731
149 Aramite	+++++	0.04835	0.05517	0.05429	0.05416	0.05172					
	0.05008	0.05060					AVRG		0.05205		4.90015
150 Kepone	+++++	0.07320	0.05213	0.07202	0.07734	0.07536					
	0.07935	0.08085					AVRG		0.07289		13.28796
151 p-(Dimethylamino)azobenzene	+++++	0.24155	0.26261	0.27313	0.29221	0.27469					
	0.27651	0.29386					AVRG		0.27351		6.53190
152 Chlorobenzilate	+++++	0.29795	0.32375	0.31591	0.35576	0.32970					
	0.33861	0.35863					AVRG		0.33147		6.52495

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	100 Level 7	120 Level 8									
153 3,3'-Dimethylbenzidine	+++++	0.47143	0.38985	0.52154	0.55546	0.51094					
	0.50028	0.48066					AVRG		0.49002		10.63214
154 Famphur	+++++	0.36572	0.42322	0.43695	0.42540	0.43034					
	0.41392	0.41472					AVRG		0.41575		5.65693
155 2-Acetylaminofluorene	+++++	0.22945	0.28472	0.28784	0.29109	0.28543					
	0.28191	0.26148					AVRG		0.27456		8.05010
157 7,12Dimethylbenz(a)anthracene	+++++	0.44192	0.53071	0.52645	0.55735	0.57122					
	0.55933	0.59660					AVRG		0.54051		9.17022
158 3-Methylcholanthrene	+++++	0.34964	0.38934	0.38108	0.39435	0.39075					
	0.39160	0.38749					AVRG		0.38346		4.03735
26 Phthalic anhydride	+++++	0.13790	0.16700	0.19418	0.19412	0.14002					
	0.17762	0.17603					AVRG		0.16955		13.61468
173 Carbazole	0.63887	0.61494	0.66882	0.71894	0.71820	0.76587					
	0.74501	0.77992					AVRG		0.70632		8.47230
174 Hexachlorophene	+++++	333255	1419180	1797891	2541562	2209319					
	3347342	+++++					LINR	6.86373	0.10424		0.99390
179 Dibenzo(a,e)pyrene	+++++	0.30264	0.27380	0.22745	0.24220	0.27717					
	0.34243	0.27781					AVRG		0.27764		13.64513

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	100 Level 7	120 Level 8									
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-
184 p-Benzoquinone	+++++	0.04170	0.06130	0.07746	0.10303	0.08763					
	0.11068	0.09074					AVRG		0.08179		29.30041 <-
191 Parathion	+++++	0.06485	0.07220	0.08251	0.08293	0.08185					
	0.08535	0.08415					AVRG		0.07912		9.63978
192 Methoxychlor	+++++	0.60226	0.65093	0.64468	0.64924	0.65169					
	0.65734	0.59540					AVRG		0.63593		4.04064
210 m-Toluidine	+++++	0.57578	0.67951	0.73460	0.72892	0.88072					
	0.82339	+++++					AVRG		0.73715		14.54591
211 p-Toluidine	+++++	0.53585	0.54921	0.58392	0.55846	0.52582					
	0.53619	0.39391					AVRG		0.52620		11.66208
212 Cis Diallate	+++++	0.20345	0.20907	0.18855	0.19362	0.19720					
	0.19218	0.19712					AVRG		0.19731		3.53907
213 Trans Diallate	+++++	0.22219	0.23807	0.23603	0.24504	0.23596					
	0.23822	0.24490					AVRG		0.23720		3.22292
214 1,4-Dinitrobenzene	+++++	0.18435	0.20595	0.22334	0.21286	0.22150					
	0.20934	0.23250					AVRG		0.21283		7.28702

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	100 Level 7	120 Level 8									
215 2-Ethoxyethanol	+++++	0.32006	0.38722	0.38900	0.38773	0.38927					
	0.37511	0.39812					AVRG		0.37808		6.99585
216 Methylenebis(2-chloroaniline)	+++++	18228	47377	99740	112566	265285					
	311933	303380					LINR	0.13396	0.16681		0.99707
229 2,2'-Dichlorobenzil	+++++	0.48924	0.52875	0.56941	0.58512	0.60106					
	0.58862	0.58590					AVRG		0.56401		7.15334
230 4-Chlorothioanisole	+++++	0.23750	0.25065	0.26308	0.26313	0.27405					
	0.28368	0.28465					AVRG		0.26525		6.50412
231 4-Chlorothiophenol	+++++	20991	46449	88404	133877	260221					
	374487	433016					LINR	0.18976	0.23940		0.99695
232 bis(p-Chlorophenyl)sulfone	+++++	0.31298	0.32748	0.33953	0.33698	0.34733					
	0.33872	0.34124					AVRG		0.33489		3.38402
233 bis(p-Chlorophenyl)disulfide	+++++	0.10207	0.11552	0.12030	0.12206	0.12717					
	0.12552	0.12764					AVRG		0.12004		7.49777
234 Diphenyl disulfide	+++++	0.21313	0.21311	0.22244	0.21966	0.23382					
	0.23246	0.23030					AVRG		0.22356		3.93541
235 Diphenyl sulfide	+++++	0.78820	0.81042	0.85026	0.85151	0.87760					
	0.88001	0.88405					AVRG		0.84886		4.35518

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-NOV-2009 20:24
End Cal Date : 30-NOV-2009 11:07
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
236 Phenyl sulfone	+++++	0.35214	0.36206	0.36107	0.37219	0.37583					
	0.38420	0.38578					AVRG		0.37047		3.39593
237 Hydroxymethyl phthalimide	+++++	0.12302	0.15295	0.13522	0.13725	0.10507					
	0.12961	0.13756					AVRG		0.13152		11.26778
238 Phthalic acid	+++++	7431	21210	54930	83422	156976					
	228305	+++++					LINR	0.22901	0.14802		0.99815
239 Thiophenol	+++++	31995	67252	127723	192811	357700					
	512158	589944					LINR	0.16016	1.15656		0.99809
240 bis(Chloromethyl)ether	+++++	0.87847	0.78890	0.82802	0.81374	0.85117					
	0.90371	0.87309					AVRG		0.84816		4.74950
241 Octachlorostyrene	+++++	0.08444	0.08827	0.09064	0.09027	0.09341					
	0.09946	0.09984					AVRG		0.09233		6.16240
M 222 Trichlorophenols	+++++	0.31511	0.35427	0.36520	0.35711	0.37626					
	0.38542	0.39746					AVRG		0.36441		7.31334
M 223 Tetrachlorophenols	+++++	0.27428	0.30736	0.31805	0.31570	0.33541					
	0.32549	0.34703					AVRG		0.31762		7.30616
M 224 Benzo(b,k)fluoranthene	0.89509	0.96031	1.02313	1.10898	1.11965	1.05668					
	1.02921	1.10771					AVRG		1.03759		7.61216

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-NOV-2009 20:24
End Cal Date : 30-NOV-2009 11:07
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Cal Date : 03-Dec-2009 12:00 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
M 225 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 3 2-Fluorophenol	+++++	0.86013	0.93819	0.98131	0.96702	0.98709						
	0.96832	0.98666					AVRG		0.95553		4.74370	
$ 5 Phenol-d5	+++++	1.06636	1.22469	1.20017	1.21062	1.23878						
	1.20136	1.25433					AVRG		1.19947		5.16605	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.28560	0.30782	0.29730	0.28284	0.26297						
	0.29594	0.29938					AVRG		0.29026		5.06108	
$ 39 2-Fluorobiphenyl	+++++	1.03836	1.09360	1.10691	1.10412	1.11219						
	1.12291	1.15883					AVRG		1.10527		3.27155	
$ 60 2,4,6-Tribromophenol	+++++	0.14918	0.17523	0.18370	0.18066	0.19727						
	0.20173	0.20557					AVRG		0.18476		10.48645	
$ 81 p-Terphenyl-d14	+++++	0.67622	0.71719	0.77361	0.81522	0.74151						
	0.71061	0.77536					AVRG		0.74424		6.34183	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-NOV-2009 20:24
End Cal Date : 30-NOV-2009 11:07
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Cal Date : 03-Dec-2009 12:00 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 29-NOV-2009 04:57
Lab File ID: s8k2621.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD8.i/s112809.b/MSD8-8270C-112809.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.81556	0.68781	0.68781	0.000	-15.66370	60.00000	Averaged
16 Acetophenone	1.16505	1.12379	1.12379	0.000	-3.54148	60.00000	Averaged
189 Caprolactam	0.08001	0.08437	0.08437	0.000	5.45485	60.00000	Averaged
208 1,1'-Biphenyl	1.17004	1.24334	1.24334	0.000	6.26469	60.00000	Averaged
207 Atrazine	0.03765	0.04013	0.04013	0.000	6.58913	60.00000	Averaged
77 Benzidine	42.66208	40.00000	0.35866	0.000	6.65521	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.27732	0.30492	0.30492	0.000	9.95270	60.00000	Averaged
102 1,4-Dioxane	0.31063	0.38230	0.38230	0.000	23.07218	60.00000	Averaged
103 Methyl methacrylate	0.17459	0.21058	0.21058	0.000	20.61549	60.00000	Averaged
104 Ethyl methacrylate	0.69071	0.86512	0.86512	0.000	25.25108	60.00000	Averaged
105 2-Picoline	1.17503	1.13038	1.13038	0.000	-3.79931	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43420	0.44118	0.44118	0.000	1.60905	60.00000	Averaged
107 Methyl methanesulfonate	0.56984	0.62974	0.62974	0.000	10.51208	60.00000	Averaged
108 N-Nitrosodiethylamine	0.46189	0.46787	0.46787	0.000	1.29384	60.00000	Averaged
109 Ethyl Methanesulfonate	0.58464	0.74960	0.74960	0.000	28.21443	60.00000	Averaged
110 Pentachloroethane	0.35296	0.48041	0.48041	0.000	36.10916	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.48189	0.48013	0.48013	0.000	-0.36563	60.00000	Averaged
113 N-Nitrosomorpholine	0.67693	0.66751	0.66751	0.000	-1.39104	60.00000	Averaged
114 o-Toluidine	1.53016	1.49623	1.49623	0.000	-2.21717	60.00000	Averaged
115 N-Nitrosopiperidine	0.13952	0.13995	0.13995	0.000	0.30464	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.60743	0.61102	0.61102	0.000	0.59146	60.00000	Averaged
118 2,6-Dichlorophenol	0.22036	0.22863	0.22863	0.000	3.75402	60.00000	Averaged
119 Hexachloropropene	0.14481	0.22357	0.22357	0.000	54.38615	60.00000	Averaged
120 p-Phenylenediamine	0.20494	0.21403	0.21403	0.000	4.43524	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.24284	0.25751	0.25751	0.000	6.04189	60.00000	Averaged
122 Safrole	0.20497	0.23924	0.23924	0.000	16.72289	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.51249	0.56002	0.56002	0.000	9.27443	60.00000	Averaged
124 Isosafrole	0.32933	0.44264	0.44264	0.000	34.40787	60.00000	Averaged
125 1,4-Naphthoquinone	0.27571	0.29092	0.29092	0.000	5.51542	60.00000	Averaged
127 Pentachlorobenzene	0.48048	0.50485	0.50485	0.000	5.07174	60.00000	Averaged
128 1-Naphthylamine	0.84935	0.89623	0.89623	0.000	5.51976	60.00000	Averaged
129 2-Naphthylamine	0.90587	0.96548	0.96548	0.000	6.58017	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27328	0.28617	0.28617	0.000	4.71663	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.12585	0.17543	0.17543	0.000	39.39051	60.00000	Averaged
137 Phenacetin	0.25645	0.27989	0.27989	0.000	9.13779	60.00000	Averaged
138 Diallate	0.20162	0.19584	0.19584	0.000	-2.86577	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s8k2621.d
Analysis Type:
Lab Sample ID: WBN091111-08.1
Method: /chem/MSD8.i/s112809.b/MSD8-8270C-112809.m

Injection Date: 29-NOV-2009 04:57
Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Init. Cal. Times: 20:24 11:07
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.19731	0.25373	0.25373	0.000	28.59444	60.00000	Averaged
213 Trans Diallate	0.23720	0.23041	0.23041	0.000	-2.86577	60.00000	Averaged
140 4-Aminobiphenyl	0.56959	0.60603	0.60603	0.000	6.39630	60.00000	Averaged
141 Pentachloronitrobenzene	0.09387	0.09429	0.09429	0.000	0.45044	60.00000	Averaged
142 Pronamide	0.27612	0.29261	0.29261	0.000	5.97294	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	61.15803	40.00000	0.01442	0.000	52.89509	60.00000	Linear
147 Methapyrilene	0.27172	0.28515	0.28515	0.000	4.94248	60.00000	Averaged
148 Isodrin	0.11117	0.10511	0.10511	0.000	-5.45192	60.00000	Averaged
149 Aramite	0.05205	0.04925	0.04925	0.000	-5.38079	60.00000	Averaged
150 Kepone	0.07289	0.07623	0.07623	0.000	4.57241	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.27351	0.26548	0.26548	0.000	-2.93703	60.00000	Averaged
152 Chlorobenzilate	0.33147	0.32773	0.32773	0.000	-1.13002	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.49002	0.50116	0.50116	0.000	2.27358	60.00000	Averaged
155 2-Acetylaminofluorene	0.27456	0.27737	0.27737	0.000	1.02493	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.54051	0.54792	0.54792	0.000	1.37092	60.00000	Averaged
158 3-Methylcholanthrene	0.38346	0.42016	0.42016	0.000	9.57095	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD8.i/s112809.b/s8k2621.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: APICV
Inj Date : 29-NOV-2009 04:57
Operator : nagl Inst ID: MSD8.i
Smp Info : |WBN091111-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s112809.b/MSD8-8270C-112809.m
Meth Date : 30-Nov-2009 15:47 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 11:07 Cal File: s8k2650.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.706	4.706	(1.000)	236048	40.0000	
* 29 Naphthalene-d8	136	5.982	5.982	(1.000)	804686	40.0000	
* 46 Acenaphthene-d10	164	7.849	7.849	(1.000)	486156	40.0000	
* 67 Phenanthrene-d10	188	9.463	9.463	(1.000)	961284	40.0000	
* 91 Chrysene-d12	240	12.439	12.439	(1.000)	904294	40.0000	
* 98 Perylene-d12	264	14.701	14.701	(1.000)	643814	40.0000	
209 Benzaldehyde	77	4.306	4.306	(0.915)	162356	40.0000	33.7
16 Acetophenone	105	5.087	5.087	(1.081)	265269	40.0000	38.6
189 Caprolactam	113	6.415	6.415	(1.072)	67893	40.0000	42.2
208 1,1'-Biphenyl	154	7.225	7.225	(0.921)	604457	40.0000	42.5
207 Atrazine	173	9.130	9.130	(0.965)	38578	40.0000	42.6
77 Benzidine	184	10.901	10.901	(0.876)	324335	40.0000	42.7
90 3,3'-Dichlorobenzidine	252	12.368	12.368	(0.994)	275741	40.0000	44.0
102 1,4-Dioxane	88	2.349	2.349	(0.499)	90240	40.0000	49.2
103 Methyl methacrylate	100	2.349	2.349	(0.499)	49708	40.0000	48.2
104 Ethyl methacrylate	69	2.858	2.858	(0.607)	204211	40.0000	50.1
105 2-Picoline	93	3.111	3.111	(0.661)	266825	40.0000	38.5
106 N-Nitrosomethylethylamine	88	3.177	3.177	(0.675)	104140	40.0000	40.6
107 Methyl methanesulfonate	80	3.406	3.406	(0.724)	148650	40.0000	44.2
108 N-Nitrosodiethylamine	102	3.739	3.739	(0.795)	110440	40.0000	40.5
109 Ethyl Methanesulfonate	79	3.977	3.977	(0.845)	176941	40.0000	51.3
110 Pentachloroethane	167	4.449	4.449	(0.945)	113400	40.0000	54.4
111 N-Nitrosopyrrolidine	100	5.073	5.073	(1.078)	113334	40.0000	39.8(Q)
113 N-Nitrosomorpholine	56	5.106	5.106	(1.085)	157565	40.0000	39.4
114 o-Toluidine	106	5.125	5.125	(1.089)	353183	40.0000	39.1
115 N-Nitrosopiperidine	114	5.415	5.415	(0.905)	112614	40.0000	40.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.811	5.811	(0.971)	491683	40.0000	40.2
118 2,6-Dichlorophenol	162	6.058	6.058	(1.013)	183976	40.0000	41.5
119 Hexachloropropene	213	6.092	6.092	(1.018)	179901	40.0000	61.8
120 p-Phenylenediamine	108	6.420	6.420	(1.073)	172228	40.0000	41.8
121 N-Nitrosodi-n-butylamine	84	6.392	6.392	(1.068)	207217	40.0000	42.4
122 Safrole	162	6.625	6.625	(1.107)	192515	40.0000	46.7
123 1,2,4,5-Tetrachlorobenzene	216	6.906	6.906	(0.880)	272259	40.0000	43.7
124 Isosafrole	162	7.177	7.177	(0.914)	215194	40.0000	53.8
125 1,4-Naphthoquinone	158	7.435	7.435	(0.947)	141433	40.0000	42.2
127 Pentachlorobenzene	250	8.025	8.025	(1.022)	245434	40.0000	42.0
128 1-Naphthylamine	143	8.154	8.154	(1.039)	435709	40.0000	42.2
129 2-Naphthylamine	143	8.239	8.239	(1.050)	469372	40.0000	42.6
131 5-Nitro-o-toluidine	152	8.444	8.444	(1.076)	139124	40.0000	41.9
136 1,3,5-Trinitrobenzene	75	8.820	8.820	(0.932)	168634	40.0000	55.8
137 Phenacetin	108	8.887	8.887	(0.939)	269050	40.0000	43.6(Q)
138 Diallate	86	8.858	8.858	(0.936)	188262	40.0000	38.8
212 Cis Diallate	86	8.958	8.958	(0.947)	36586	6.00000	7.7
213 Trans Diallate	86	8.858	8.858	(0.936)	188262	34.0000	33.0
140 4-Aminobiphenyl	169	9.244	9.244	(0.977)	582564	40.0000	42.6
141 Pentachloronitrobenzene	237	9.258	9.258	(0.978)	90641	40.0000	40.2(Q)
142 Pronamide	173	9.296	9.296	(0.982)	281281	40.0000	42.4
146 4-Nitroquinoline-1-oxide	101	10.311	10.311	(1.090)	13866	40.0000	61.2
147 Methapyrilene	58	10.382	10.382	(1.097)	274113	40.0000	42.0
148 Isodrin	193	10.611	10.611	(1.121)	101043	40.0000	37.8
149 Aramite	185	11.135	11.135	(1.177)	47345	40.0000	37.8(H)
150 Kepone	272	11.777	11.777	(1.245)	73274	40.0000	41.8
151 p-(Dimethylamino)azobenzene	120	11.325	11.325	(0.910)	240068	40.0000	38.8
152 Chlorobenzilate	251	11.368	11.368	(0.914)	296362	40.0000	39.5
153 3,3'-Dimethylbenzidine	212	11.692	11.692	(0.940)	453197	40.0000	40.9
155 2-Acetylaminofluorene	181	12.001	12.001	(0.965)	250825	40.0000	40.4
157 7,12Dimethylbenz(a)anthracene	256	14.025	14.025	(0.954)	352760	40.0000	40.5
158 3-Methylcholanthrene	268	15.220	15.220	(1.035)	270508	40.0000	43.8(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD8.i/s112809.b/s8k2621.d
Date : 29-NOV-2009 04:57
Client ID: APICV
Sample Info: WBN091111-06,1|40 PPM|1|SVMF1|1|APICV
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20

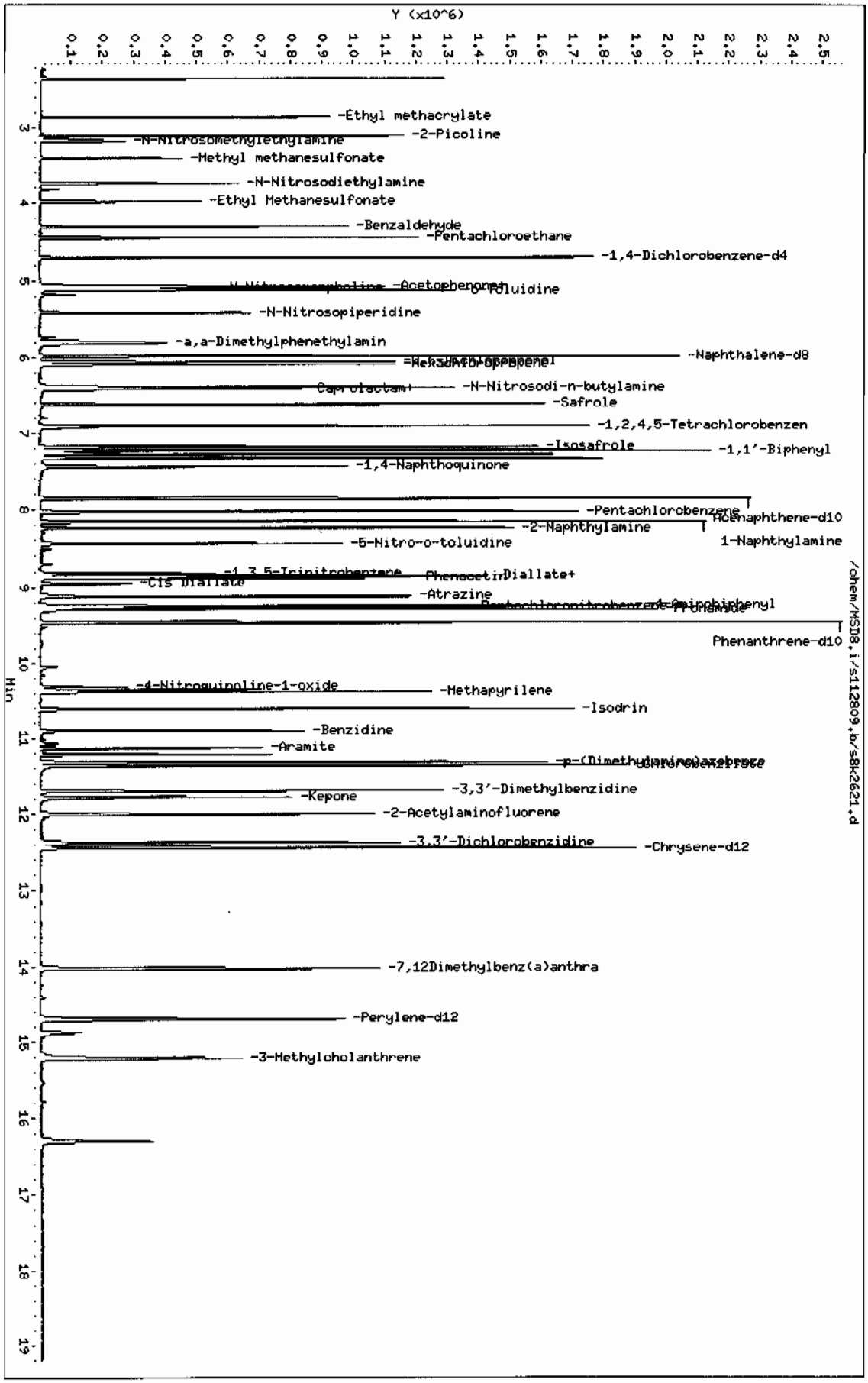

Data File: /chem/MSD8.i/s112809.b/s8k2639.d
Report Date: 30-Nov-2009 11:24

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s8k2639.d
Analysis Type:
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD8.i/s112809.b/MSD8-8270C-112809.m

Injection Date: 29-NOV-2009 18:53
Init. Cal. Date(s): 28-NOV-2009 29-NOV-2009
Init. Cal. Times: 20:24 18:22

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.95553	0.92304	0.92304	0.000	-3.39984	60.00000	Averaged
$ 5 Phenol-d5	1.19947	1.13758	1.13758	0.000	-5.16000	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.29026	0.29928	0.29928	0.000	3.10573	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.10527	1.10737	1.10737	0.000	0.18948	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.18476	0.17940	0.17940	0.000	-2.90070	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.74424	0.68455	0.68455	0.000	-8.02085	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.50364	0.55242	0.55242	0.000	9.68457	60.00000	Averaged
2 Pyridine	0.85799	0.67044	0.67044	0.000	-21.85918	60.00000	Averaged
4 Aniline	0.54472	0.50823	0.50823	0.000	-6.69805	60.00000	Averaged
6 Phenol	1.22172	1.13909	1.13909	0.001	-6.76353	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.69410	0.68211	0.68211	0.000	-1.72714	60.00000	Averaged
8 2-Chlorophenol	1.07100	0.99037	0.99037	0.000	-7.52836	60.00000	Averaged
203 n-Decane	0.87491	0.90988	0.90988	0.000	3.99690	60.00000	Averaged
9 1,3-Dichlorobenzene	1.21919	1.09275	1.09275	0.000	-10.37122	60.00000	Averaged
11 1,4-Dichlorobenzene	1.21281	1.09880	1.09880	0.001	-9.40017	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.18396	1.03353	1.03353	0.000	-12.70582	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.13973	1.10315	1.10315	0.000	-3.20905	60.00000	Averaged
12 Benzyl alcohol	0.62899	0.57426	0.57426	0.000	-8.70114	60.00000	Averaged
15 o-Cresol	0.85158	0.76159	0.76159	0.000	-10.56703	60.00000	Averaged
18 m,p-Cresols	1.06279	0.99144	0.99144	0.000	-6.71309	60.00000	Averaged
17 N-Nitrosodipropylamine	0.77916	0.75970	0.75970	0.050	-2.49843	60.00000	Averaged spcc
19 Hexachloroethane	0.53333	0.51223	0.51223	0.000	-3.95525	60.00000	Averaged
21 Nitrobenzene	0.32760	0.30524	0.30524	0.000	-6.82567	60.00000	Averaged
22 Isophorone	0.52954	0.52903	0.52903	0.000	-0.09704	60.00000	Averaged
23 2-Nitrophenol	0.14952	0.13627	0.13627	0.001	-8.86276	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.26780	0.23531	0.23531	0.000	-12.13026	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31912	0.28931	0.28931	0.000	-9.34124	60.00000	Averaged
26 2,4-Dichlorophenol	0.23734	0.20864	0.20864	0.001	-12.09269	20.00000	Averaged ccc
27 Benzoic acid	0.17932	0.17229	0.17229	0.000	-3.92111	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.29714	0.26629	0.26629	0.000	-10.38095	60.00000	Averaged
30 Naphthalene	0.85022	0.73803	0.73803	0.000	-13.19456	60.00000	Averaged
204 alpha-Terpineol	0.17855	0.20619	0.20619	0.000	15.47900	60.00000	Averaged
31 4-Chloroaniline	0.27197	0.23506	0.23506	0.000	-13.57069	60.00000	Averaged
32 Hexachlorobutadiene	0.22599	0.18145	0.18145	0.001	-19.70981	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.26235	0.23718	0.23718	0.001	-9.59389	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.57889	0.50120	0.50120	0.000	-13.42051	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 29-NOV-2009 18:53
Lab File ID: s8k2639.d Init. Cal. Date(s): 28-NOV-2009 29-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 18:22
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD8.i/s112809.b/MSD8-8270C-112809.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.52363	0.48018	0.48018	0.000	-8.29808	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.20618	0.25897	0.25897	0.050	25.60119	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.49282	0.48775	0.48775	0.000	-1.02933	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.37000	0.34078	0.34078	0.001	-7.89551	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.35881	0.34041	0.34041	0.000	-5.12801	60.00000	Averaged	
40	2-Chloronaphthalene	0.98974	0.89764	0.89764	0.000	-9.30487	60.00000	Averaged	
42	o-Nitroaniline	0.34328	0.31536	0.31536	0.000	-8.13481	60.00000	Averaged	
41	m-Nitroaniline	36.76262	40.00000	0.19757	0.000	-8.09346	60.00000	Linear	
43	Dimethylphthalate	1.16376	1.07627	1.07627	0.000	-7.51840	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.27732	0.23459	0.23459	0.000	-15.41075	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.36576	0.31099	0.31099	0.000	-14.97535	60.00000	Averaged	
45	Acenaphthylene	1.56709	1.43142	1.43142	0.000	-8.65742	60.00000	Averaged	
47	Acenaphthene	1.04431	0.95276	0.95276	0.001	-8.76638	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	0.14553	0.11909	0.11909	0.050	-18.16742	60.00000	Averaged	spcc
49	Dibenzofuran	1.49149	1.29429	1.29429	0.000	-13.22136	60.00000	Averaged	
51	Diethylphthalate	1.24334	1.20410	1.20410	0.000	-3.15597	60.00000	Averaged	
52	4-Nitrophenol	0.15113	0.13792	0.13792	0.050	-8.74329	60.00000	Averaged	spcc
53	Fluorene	1.25845	1.12681	1.12681	0.000	-10.46038	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.67611	0.62525	0.62525	0.000	-7.52155	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	33.49113	40.00000	0.09421	0.000	-16.27217	60.00000	Linear	
56	p-Nitroaniline	0.19743	0.18538	0.18538	0.000	-6.10231	60.00000	Averaged	
133	Diphenylamine	0.52539	0.46304	0.46304	0.001	-11.86786	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.64295	0.57529	0.57529	0.000	-10.52378	60.00000	Averaged	
61	4-Bromophenylphenylether	0.18681	0.18708	0.18708	0.000	0.14229	60.00000	Averaged	
63	Hexachlorobenzene	0.24004	0.19659	0.19659	0.000	-18.10235	60.00000	Averaged	
65	Pentachlorophenol	34.86313	40.00000	0.12313	0.001	-12.84219	20.00000	Linear	ccc
206	n-Octadecane	0.31341	0.32160	0.32160	0.000	2.61344	60.00000	Averaged	
68	Phenanthrene	0.87537	0.74550	0.74550	0.000	-14.83526	60.00000	Averaged	
69	Anthracene	0.88147	0.75644	0.75644	0.000	-14.18473	60.00000	Averaged	
72	Di-n-butylphthalate	1.08228	1.01658	1.01658	0.000	-6.07057	60.00000	Averaged	
76	Fluoranthene	1.07784	0.91288	0.91288	0.001	-15.30396	20.00000	Averaged	ccc
79	Pyrene	1.15493	1.03418	1.03418	0.000	-10.45520	60.00000	Averaged	
85	Butylbenzylphthalate	0.53898	0.48480	0.48480	0.000	-10.05307	60.00000	Averaged	
89	Benzo(a)anthracene	0.97545	0.83763	0.83763	0.000	-14.12942	60.00000	Averaged	
92	Chrysene	0.89342	0.79250	0.79250	0.000	-11.29626	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	0.69980	0.65131	0.65131	0.000	-6.92919	60.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 29-NOV-2009 18:53
Lab File ID: s8k2639.d Init. Cal. Date(s): 28-NOV-2009 29-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 18:22
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD8.i/s112809.b/MSD8-8270C-112809.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.35849	1.21713	1.21713	0.001	-10.40576	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	1.06619	0.91842	0.91842	0.000	-13.85924	60.00000	Averaged	
	96 Benzo(k)fluoranthene	1.00900	0.91610	0.91610	0.000	-9.20709	60.00000	Averaged	
	97 Benzo(a)pyrene	0.88769	0.80497	0.80497	0.001	-9.31830	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	0.73552	0.55507	0.55507	0.000	-24.53421	60.00000	Averaged	
	100 Dibenzo(a,h)anthracene	0.62713	0.51238	0.51238	0.000	-18.29740	60.00000	Averaged	
	101 Benzo(ghi)perylene	0.61912	0.48107	0.48107	0.000	-22.29762	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18650	0.16725	0.16725	0.000	-10.31960	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.31762	0.31234	0.31234	0.000	-1.66086	60.00000	Averaged	
	143 Dinoseb	36.67327	40.00000	0.15291	0.000	-8.31684	60.00000	Linear	
	173 Carbazole	0.70632	0.62899	0.62899	0.000	-10.94886	60.00000	Averaged	
	184 p-Benzoquinone	0.08179	0.09962	0.09962	0.000	21.79163	60.00000	Averaged	
	192 Methoxychlor	0.63593	0.61914	0.61914	0.000	-2.64026	60.00000	Averaged	
	211 p-Toluidine	0.52620	0.86981	0.86981	0.000	65.30126	60.00000	Averaged	<-
	210 m-Toluidine	0.73715	1.04702	1.04702	0.000	42.03593	60.00000	Averaged	
	26 Phthalic anhydride	0.16955	0.15201	0.15201	0.000	-10.34292	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.27764	0.21090	0.21090	0.000	-24.03937	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.21283	0.20047	0.20047	0.000	-5.81103	60.00000	Averaged	
	215 2-Ethoxyethanol	0.37808	0.39518	0.39518	0.000	4.52317	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	36.33924	40.00000	0.12920	0.000	-9.15191	60.00000	Linear	
M	222 Trichlorophenols	0.36441	0.34060	0.34060	0.000	-6.53300	60.00000	Averaged	
M	223 Tetrachlorophenols	0.31762	0.31234	0.31234	0.000	-1.66086	60.00000	Averaged	
M	224 Benzo(b,k)fluoranthene	1.03759	0.91726	0.91726	0.000	-11.59726	60.00000	Averaged	

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Data file : /chem/MSD8.i/s112809.b/s8k2639.d
Lab Smp Id: WBN091106-05.2 Client Smp ID: MEGAICV
Inj Date : 29-NOV-2009 18:53
Operator : nagl Inst ID: MSD8.i
Smp Info : |WBN091106-05.2|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s112809.b/MSD8-8270C-112809.m
Meth Date : 30-Nov-2009 11:24 nat00999 Quant Type: ISTD
Cal Date : 29-NOV-2009 16:51 Cal File: s8k2635.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.711	4.711	(1.000)	188574	40.0000	
* 29 Naphthalene-d8	136	5.987	5.987	(1.000)	742480	40.0000	
* 46 Acenaphthene-d10	164	7.854	7.854	(1.000)	413221	40.0000	
* 67 Phenanthrene-d10	188	9.463	9.463	(1.000)	819659	40.0000	
* 91 Chrysene-d12	240	12.444	12.444	(1.000)	752223	40.0000	
* 98 Perylene-d12	264	14.711	14.711	(1.000)	616498	40.0000	
$ 3 2-Fluorophenol	112	3.535	3.535	(0.750)	174062	40.0000	38.6
$ 5 Phenol-d5	99	4.316	4.316	(0.916)	214518	40.0000	37.9
$ 20 Nitrobenzene-d5	82	5.244	5.244	(0.876)	222209	40.0000	41.2
$ 39 2-Fluorobiphenyl	172	7.111	7.111	(0.905)	457588	40.0000	40.1
$ 60 2,4,6-Tribromophenol	329	8.701	8.701	(1.108)	74133	40.0000	38.8
$ 81 p-Terphenyl-d14	244	11.173	11.173	(0.898)	514934	40.0000	36.8
1 N-Methyl-N-nitrosomethylamine	74	2.554	2.554	(0.542)	104172	40.0000	43.9
2 Pyridine	79	2.592	2.592	(0.550)	126427	40.0000	31.2
4 Aniline	66	4.396	4.396	(0.933)	95839	40.0000	37.3
6 Phenol	94	4.330	4.330	(0.919)	214803	40.0000	37.3
7 bis(2-Chloroethyl) ether	63	4.439	4.439	(0.942)	128628	40.0000	39.3
8 2-Chlorophenol	128	4.511	4.511	(0.958)	186758	40.0000	37.0
203 n-Decane	43	4.525	4.525	(0.961)	171580	40.0000	41.6
9 1,3-Dichlorobenzene	146	4.658	4.658	(0.989)	206064	40.0000	35.8
11 1,4-Dichlorobenzene	146	4.725	4.725	(1.003)	207205	40.0000	36.2
13 1,2-Dichlorobenzene	146	4.873	4.873	(1.034)	194896	40.0000	34.9
14 bis(2-Chloroisopropyl)ether	45	4.944	4.944	(1.050)	208026	40.0000	38.7
12 Benzyl alcohol	108	4.820	4.820	(1.023)	108291	40.0000	36.5
15 o-Cresol	107	4.906	4.906	(1.041)	143617	40.0000	35.8
18 m,p-Cresols	107	5.063	5.063	(1.075)	186960	40.0000	37.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.087	5.087	(1.080)	143259	40.0000	39.0
19 Hexachloroethane	117	5.211	5.211	(1.106)	96594	40.0000	38.4
21 Nitrobenzene	77	5.268	5.268	(0.880)	226635	40.0000	37.3
22 Isophorone	82	5.501	5.501	(0.919)	392792	40.0000	40.0
23 2-Nitrophenol	139	5.582	5.582	(0.932)	101178	40.0000	36.4
24 2,4-Dimethylphenol	122	5.596	5.596	(0.935)	174716	40.0000	35.1
25 bis(2-Chloroethoxy)methane	93	5.701	5.701	(0.952)	214804	40.0000	36.3
26 2,4-Dichlorophenol	162	5.825	5.825	(0.973)	154909	40.0000	35.2
27 Benzoic acid	105	5.706	5.706	(0.953)	127921	40.0000	38.4
28 1,2,4-Trichlorobenzene	180	5.920	5.920	(0.989)	197717	40.0000	35.8
30 Naphthalene	128	6.011	6.011	(1.004)	547975	40.0000	34.7
204 alpha-Terpineol	59	5.997	5.997	(1.002)	153090	40.0000	46.2
31 4-Chloroaniline	127	6.044	6.044	(1.010)	174530	40.0000	34.6
32 Hexachlorobutadiene	225	6.120	6.120	(1.022)	134724	40.0000	32.1
33 4-Chloro-3-methylphenol	107	6.530	6.530	(1.091)	176105	40.0000	36.2
34 2-Methylnaphthalene	142	6.730	6.730	(1.124)	372130	40.0000	34.6
35 1-Methylnaphthalene	142	6.839	6.839	(1.142)	356526	40.0000	36.7
36 Hexachlorocyclopentadiene	237	6.892	6.892	(0.878)	107011	40.0000	50.2
205 2,3-Dichloroaniline	161	7.025	7.025	(0.894)	201547	40.0000	39.6
37 2,4,6-Trichlorophenol	196	7.020	7.020	(0.894)	140819	40.0000	36.8
38 2,4,5-Trichlorophenol	196	7.054	7.054	(0.898)	140666	40.0000	37.9
40 2-Chloronaphthalene	162	7.254	7.254	(0.924)	370925	40.0000	36.3
42 o-Nitroaniline	65	7.349	7.349	(0.936)	130312	40.0000	36.7
41 m-Nitroaniline	138	7.792	7.792	(0.992)	81641	40.0000	36.8
43 Dimethylphthalate	163	7.544	7.544	(0.961)	444736	40.0000	37.0
44 2,6-Dinitrotoluene	165	7.611	7.611	(0.969)	96936	40.0000	33.8
50 2,4-Dinitrotoluene	165	8.044	8.044	(1.024)	128507	40.0000	34.0
45 Acenaphthylene	152	7.706	7.706	(0.981)	591494	40.0000	36.5
47 Acenaphthene	154	7.892	7.892	(1.005)	393700	40.0000	36.5
48 2,4-Dinitrophenol	184	7.901	7.901	(1.006)	49212	40.0000	32.7
49 Dibenzofuran	168	8.073	8.073	(1.028)	534828	40.0000	34.7
51 Diethylphthalate	149	8.297	8.297	(1.056)	497560	40.0000	38.7
52 4-Nitrophenol	139	7.949	7.949	(1.012)	56991	40.0000	36.5
53 Fluorene	166	8.444	8.444	(1.075)	465623	40.0000	35.8
54 4-Chlorophenylphenylether	204	8.430	8.430	(1.073)	258368	40.0000	37.0
55 2-Methyl-4,6-dinitrophenol	198	8.482	8.482	(0.896)	77220	40.0000	33.5
56 p-Nitroaniline	138	8.454	8.454	(1.076)	76604	40.0000	37.6
133 Diphenylamine	169	8.558	8.558	(0.904)	379533	40.0000	35.2
58 1,2-Diphenylhydrazine	77	8.606	8.606	(0.909)	471541	40.0000	35.8
61 4-Bromophenylphenylether	248	8.963	8.963	(0.947)	153340	40.0000	40.0
63 Hexachlorobenzene	284	9.039	9.039	(0.955)	161134	40.0000	32.8
65 Pentachlorophenol	266	9.239	9.239	(0.976)	100925	40.0000	34.9
206 n-Octadecane	57	9.301	9.301	(0.983)	263599	40.0000	41.0
68 Phenanthrene	178	9.492	9.492	(1.003)	611058	40.0000	34.1
69 Anthracene	178	9.544	9.544	(1.009)	620019	40.0000	34.3
72 Di-n-butylphthalate	149	10.058	10.058	(1.063)	833247	40.0000	37.6
76 Fluoranthene	202	10.778	10.778	(1.139)	748254	40.0000	33.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	11.025	11.025	(0.886)	777937	40.0000	35.8
85 Butylbenzylphthalate	149	11.697	11.697	(0.940)	364674	40.0000	36.0
89 Benzo(a)anthracene	228	12.425	12.425	(0.998)	630082	40.0000	34.3
92 Chrysene	228	12.482	12.482	(1.003)	596136	40.0000	35.5
93 bis(2-Ethylhexyl)phthalate	149	12.406	12.406	(0.997)	489933	40.0000	37.2
94 Di-n-octylphthalate	149	13.363	13.363	(0.908)	750356	40.0000	35.8
95 Benzo(b)fluoranthene	252	14.049	14.049	(0.955)	566204	40.0000	34.4
96 Benzo(k)fluoranthene	252	14.097	14.097	(0.958)	564776	40.0000	36.3
97 Benzo(a)pyrene	252	14.606	14.606	(0.993)	496262	40.0000	36.3
99 Indeno(1,2,3-cd)pyrene	276	16.644	16.644	(1.131)	342198	40.0000	30.2
100 Dibenzo(a,h)anthracene	278	16.678	16.678	(1.134)	315882	40.0000	32.7
101 Benzo(ghi)perylene	276	17.144	17.144	(1.165)	296577	40.0000	31.1
126 m-Dinitrobenzene	168	7.582	7.582	(0.965)	69111	40.0000	35.9
130 2,3,4,6-Tetrachlorophenol	232	8.192	8.192	(1.043)	129066	40.0000	39.3
143 Dinoseb	211	9.430	9.430	(0.996)	125334	40.0000	36.7
173 Carbazole	167	9.706	9.706	(1.026)	515555	40.0000	35.6
184 p-Benzoquinone	54	3.963	3.963	(0.841)	18785	40.0000	48.7
192 Methoxychlor	227	12.306	12.306	(0.989)	465734	40.0000	38.9
211 p-Toluidine	106	5.130	5.130	(1.089)	164023	40.0000	66.1
210 m-Toluidine	106	5.163	5.163	(1.096)	197441	40.0000	56.8
26 Phthalic anhydride	104	6.782	6.782	(1.133)	112868	40.0000	35.9
179 Dibenzo(a,e)pyrene	302	20.630	20.630	(1.402)	130019	40.0000	30.4
214 1,4-Dinitrobenzene	75	7.497	7.497	(0.955)	82837	40.0000	37.7
215 2-Ethoxyethanol	59	2.344	2.344	(0.498)	74520	40.0000	41.8
216 Methylenebis(2-chloroaniline)	231	12.373	12.373	(0.994)	97188	40.0000	36.3
M 222 Trichlorophenols	196				281485	80.0000	74.8
M 223 Tetrachlorophenols	232				129066	40.0000	39.3
M 224 Benzo(b,k)fluoranthene	252				1130980	80.0000	70.7

Data File: /chem/MSD8.i/s112809.b/s8k2639.d
Date : 29-NOV-2009 18:53
Client ID: MEGAICV
Sample Info: IWBN091106-05,2l40 PPM!!SVHF!!IMEGAICV

Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nagl
Column diameter: 0.20

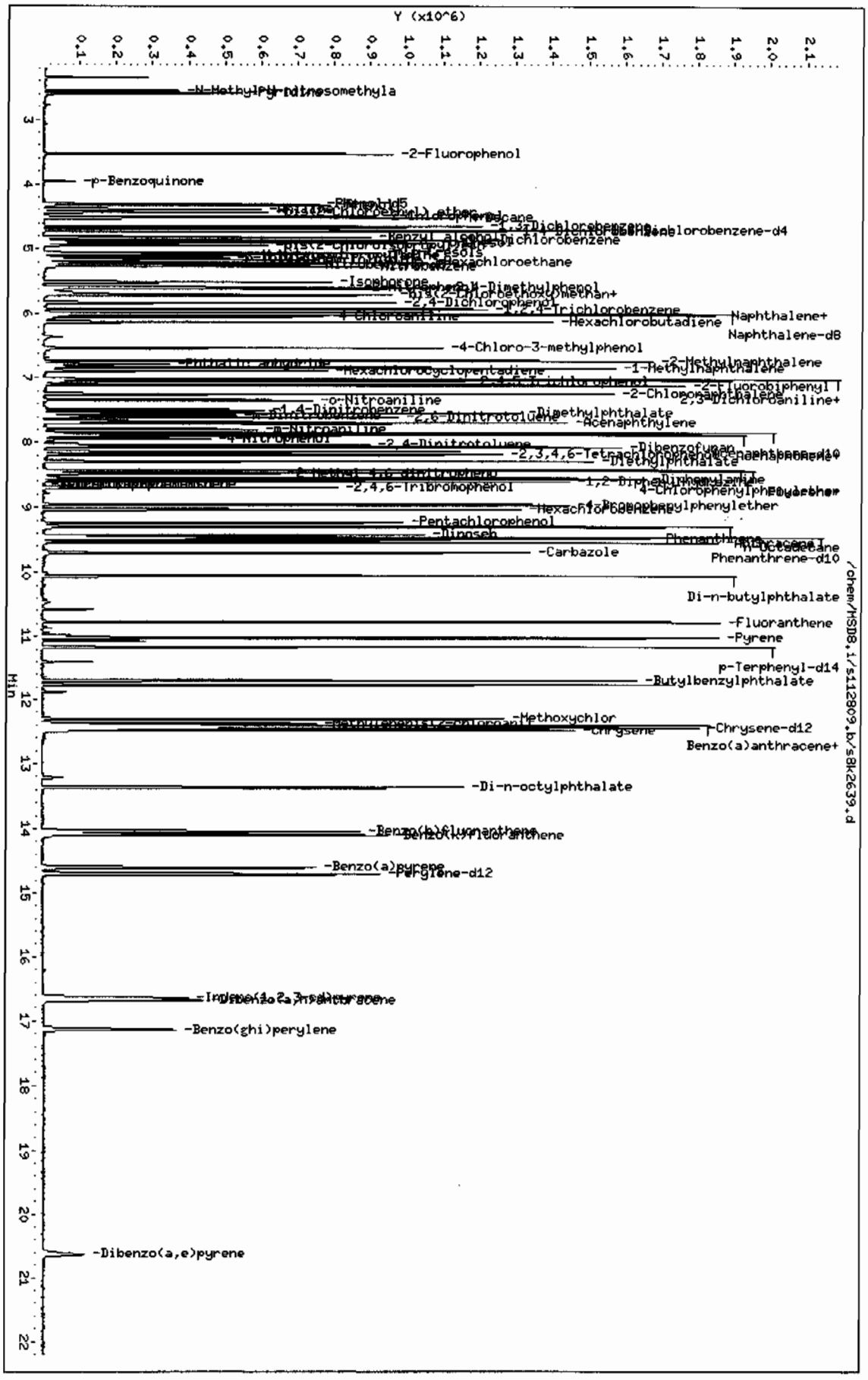

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 03-DEC-2009 11:34
Lab File ID: s810306.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091111-13.2 Quant Type: ISTD
Method: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.95553	1.00601	1.00601	0.000	5.28269	60.00000	Averaged
$ 5 Phenol-d5	1.19947	1.21248	1.21248	0.000	1.08455	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.29026	0.26913	0.26913	0.000	-7.27955	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.10527	1.00086	1.00086	0.000	-9.44679	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.18476	0.14199	0.14199	0.000	-23.15046	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.74424	0.63335	0.63335	0.000	-14.90054	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.50364	0.58848	0.58848	0.000	16.84445	60.00000	Averaged
2 Pyridine	0.85799	0.96696	0.96696	0.000	12.70117	60.00000	Averaged
4 Aniline	0.54472	0.47581	0.47581	0.000	-12.65031	60.00000	Averaged
6 Phenol	1.22172	1.23841	1.23841	0.001	1.36549	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.69410	0.62732	0.62732	0.000	-9.62100	60.00000	Averaged
8 2-Chlorophenol	1.07100	1.08825	1.08825	0.000	1.61118	60.00000	Averaged
203 n-Decane	0.87491	0.73504	0.73504	0.000	-15.98685	60.00000	Averaged
9 1,3-Dichlorobenzene	1.21919	1.25691	1.25691	0.000	3.09369	60.00000	Averaged
11 1,4-Dichlorobenzene	1.21281	1.24156	1.24156	0.001	2.37111	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.18396	1.22447	1.22447	0.000	3.42144	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.13973	0.99148	0.99148	0.000	-13.00739	60.00000	Averaged
12 Benzyl alcohol	0.62899	0.54627	0.54627	0.000	-13.15209	60.00000	Averaged
15 o-Cresol	0.85158	0.86022	0.86022	0.000	1.01460	60.00000	Averaged
18 m,p-Cresols	1.06279	1.08632	1.08632	0.000	2.21472	60.00000	Averaged
17 N-Nitrosodipropylamine	0.77916	0.76580	0.76580	0.050	-1.71445	60.00000	Averaged spcc
19 Hexachloroethane	0.53333	0.48509	0.48509	0.000	-9.04559	60.00000	Averaged
21 Nitrobenzene	0.32760	0.29895	0.29895	0.000	-8.74727	60.00000	Averaged
22 Isophorone	0.52954	0.49101	0.49101	0.000	-7.27703	60.00000	Averaged
23 2-Nitrophenol	0.14952	0.14755	0.14755	0.001	-1.31717	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.26780	0.26680	0.26680	0.000	-0.37373	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31912	0.29146	0.29146	0.000	-8.66721	60.00000	Averaged
26 2,4-Dichlorophenol	0.23734	0.22353	0.22353	0.001	-5.81673	20.00000	Averaged ccc
27 Benzoic acid	0.17932	0.15814	0.15814	0.000	-11.81076	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.29714	0.27379	0.27379	0.000	-7.85758	60.00000	Averaged
30 Naphthalene	0.85022	0.80888	0.80888	0.000	-4.86146	60.00000	Averaged
204 alpha-Terpineol	0.17855	0.14794	0.14794	0.000	-17.14439	60.00000	Averaged
31 4-Chloroaniline	0.27197	0.27289	0.27289	0.000	0.33684	60.00000	Averaged
32 Hexachlorobutadiene	0.22599	0.18337	0.18337	0.001	-18.86002	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.26235	0.23674	0.23674	0.001	-9.76191	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.57889	0.56534	0.56534	0.000	-2.34083	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 03-DEC-2009 11:34
Lab File ID: s810306.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091111-13.2 Quant Type: ISTD
Method: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.52363	0.50941	0.50941	0.000	-2.71709	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.20618	0.17690	0.17690	0.050	-14.20247	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.49282	0.45386	0.45386	0.000	-7.90597	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.37000	0.32197	0.32197	0.001	-12.98084	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.35881	0.33589	0.33589	0.000	-6.38978	60.00000	Averaged	
40	2-Chloronaphthalene	0.98974	0.95859	0.95859	0.000	-3.14749	60.00000	Averaged	
42	o-Nitroaniline	0.34328	0.28352	0.28352	0.000	-17.40964	60.00000	Averaged	
41	m-Nitroaniline	44.18751	40.00000	0.23955	0.000	10.46877	60.00000	Linear	
43	Dimethylphthalate	1.16376	1.07751	1.07751	0.000	-7.41147	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.27732	0.26397	0.26397	0.000	-4.81469	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.36576	0.35141	0.35141	0.000	-3.92531	60.00000	Averaged	
45	Acenaphthylene	1.56709	1.50704	1.50704	0.000	-3.83221	60.00000	Averaged	
47	Acenaphthene	1.04431	0.99547	0.99547	0.001	-4.67694	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	0.14553	0.14065	0.14065	0.050	-3.35775	60.00000	Averaged	spcc
49	Dibenzofuran	1.49149	1.33060	1.33060	0.000	-10.78672	60.00000	Averaged	
51	Diethylphthalate	1.24334	1.10172	1.10172	0.000	-11.39072	60.00000	Averaged	
52	4-Nitrophenol	0.15113	0.19039	0.19039	0.050	25.97452	60.00000	Averaged	spcc
53	Fluorene	1.25845	1.11486	1.11486	0.000	-11.41026	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.67611	0.55088	0.55088	0.000	-18.52204	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	40.81253	40.00000	0.11864	0.000	2.03132	60.00000	Linear	
56	p-Nitroaniline	0.19743	0.21633	0.21633	0.000	9.57094	60.00000	Averaged	
133	Diphenylamine	0.52539	0.49721	0.49721	0.001	-5.36325	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.64295	0.61321	0.61321	0.000	-4.62601	60.00000	Averaged	
61	4-Bromophenylphenylether	0.18681	0.15867	0.15867	0.000	-15.06434	60.00000	Averaged	
63	Hexachlorobenzene	0.24004	0.19188	0.19188	0.000	-20.06352	60.00000	Averaged	
65	Pentachlorophenol	36.34821	40.00000	0.12989	0.001	-9.12948	20.00000	Linear	ccc
206	n-Octadecane	0.31341	0.27572	0.27572	0.000	-12.02359	60.00000	Averaged	
68	Phenanthrene	0.87537	0.87242	0.87242	0.000	-0.33683	60.00000	Averaged	
69	Anthracene	0.88147	0.90379	0.90379	0.000	2.53269	60.00000	Averaged	
72	Di-n-butylphthalate	1.08228	1.00369	1.00369	0.000	-7.26147	60.00000	Averaged	
76	Fluoranthene	1.07784	0.94003	0.94003	0.001	-12.78519	20.00000	Averaged	ccc
79	Pyrene	1.15493	1.02340	1.02340	0.000	-11.38877	60.00000	Averaged	
85	Butylbenzylphthalate	0.53898	0.49207	0.49207	0.000	-8.70338	60.00000	Averaged	
89	Benzo(a)anthracene	0.97545	0.92114	0.92114	0.000	-5.56748	60.00000	Averaged	
92	Chrysene	0.89342	0.88066	0.88066	0.000	-1.42898	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	0.69980	0.67249	0.67249	0.000	-3.90309	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s810306.d
Analysis Type:
Lab Sample ID: WBN091111-13.2
Method: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m

Injection Date: 03-DEC-2009 11:34
Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Init. Cal. Times: 20:24 11:07
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.35849	1.23337	1.23337	0.001	-9.21004	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	1.06619	0.96650	0.96650	0.000	-9.35009	60.00000	Averaged	
	96 Benzo(k)fluoranthene	1.00900	0.94683	0.94683	0.000	-6.16205	60.00000	Averaged	
	97 Benzo(a)pyrene	0.88769	0.84694	0.84694	0.001	-4.58987	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	0.73552	0.73840	0.73840	0.000	0.39150	60.00000	Averaged	
	100 Dibenzo(a,h)anthracene	0.62713	0.64056	0.64056	0.000	2.14099	60.00000	Averaged	
	101 Benzo(ghi)perylene	0.61912	0.60911	0.60911	0.000	-1.61678	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18650	0.17166	0.17166	0.000	-7.95559	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.31762	0.27606	0.27606	0.000	-13.08444	60.00000	Averaged	
	143 Dinoseb	37.16581	40.00000	0.15536	0.000	-7.08548	60.00000	Linear	
	173 Carbazole	0.70632	0.67590	0.67590	0.000	-4.30723	60.00000	Averaged	
	184 p-Benzoquinone	0.08179	0.03174	0.03174	0.000	-61.18883	60.00000	Averaged	<-
	192 Methoxychlor	0.63593	0.62079	0.62079	0.000	-2.38082	60.00000	Averaged	
	211 p-Toluidine	0.52620	0.54618	0.54618	0.000	3.79885	60.00000	Averaged	
	210 m-Toluidine	0.73715	0.66829	0.66829	0.000	-9.34160	60.00000	Averaged	
	26 Phthalic anhydride	0.16955	0.10824	0.10824	0.000	-36.16057	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.27764	0.26065	0.26065	0.000	-6.12153	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.21283	0.19494	0.19494	0.000	-8.40943	60.00000	Averaged	
	215 2-Ethoxyethanol	0.37808	0.35759	0.35759	0.000	-5.41898	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	35.23998	40.00000	0.12462	0.000	-11.90004	60.00000	Linear	
M	222 Trichlorophenols	0.36441	0.32893	0.32893	0.000	-9.73588	60.00000	Averaged	
M	223 Tetrachlorophenols	0.31762	0.27606	0.27606	0.000	-13.08444	60.00000	Averaged	
M	224 Benzo(b,k)fluoranthene	1.03759	0.95666	0.95666	0.000	-7.79999	60.00000	Averaged	

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Data file : /chem/MSD8.i/s120309.b/s810306.d
Lab Smp Id: WBN091111-13.2 Client Smp ID: MEGACVS
Inj Date : 03-DEC-2009 11:34
Operator : nag1 Inst ID: MSD8.i
Smp Info : |WBN091111-13.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.587	4.587	(1.000)	219219	40.0000	
* 29 Naphthalene-d8	136	5.854	5.854	(1.000)	855464	40.0000	
* 46 Acenaphthene-d10	164	7.720	7.720	(1.000)	478305	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	875093	40.0000	
* 91 Chrysene-d12	240	12.268	12.268	(1.000)	822971	40.0000	
* 98 Perylene-d12	264	14.458	14.458	(1.000)	678930	40.0000	
$ 3 2-Fluorophenol	112	3.420	3.420	(0.746)	220536	40.0000	42.1
$ 5 Phenol-d5	99	4.201	4.201	(0.916)	265799	40.0000	40.4
$ 20 Nitrobenzene-d5	82	5.120	5.120	(0.875)	230235	40.0000	37.1
$ 39 2-Fluorobiphenyl	172	6.982	6.982	(0.904)	478717	40.0000	36.2
$ 60 2,4,6-Tribromophenol	329	8.563	8.563	(1.109)	67914	40.0000	30.7
$ 81 p-Terphenyl-d14	244	11.030	11.030	(0.899)	521227	40.0000	34.0
1 N-Methyl-N-nitrosomethylamine	74	2.434	2.434	(0.531)	129006	40.0000	46.7
2 Pyridine	79	2.473	2.473	(0.539)	211976	40.0000	45.1
4 Aniline	66	4.273	4.273	(0.931)	104306	40.0000	34.9
6 Phenol	94	4.211	4.211	(0.918)	271482	40.0000	40.5
7 bis(2-Chloroethyl) ether	63	4.315	4.315	(0.941)	137520	40.0000	36.2
8 2-Chlorophenol	128	4.387	4.387	(0.956)	238566	40.0000	40.6
203 n-Decane	43	4.401	4.401	(0.960)	161135	40.0000	33.6
9 1,3-Dichlorobenzene	146	4.534	4.534	(0.989)	275539	40.0000	41.2
11 1,4-Dichlorobenzene	146	4.601	4.601	(1.003)	272174	40.0000	40.9
13 1,2-Dichlorobenzene	146	4.749	4.749	(1.035)	268426	40.0000	41.4
14 bis(2-Chloroisopropyl)ether	45	4.825	4.825	(1.052)	217351	40.0000	34.8
12 Benzyl alcohol	108	4.696	4.696	(1.024)	119752	40.0000	34.7
15 o-Cresol	107	4.787	4.787	(1.044)	188577	40.0000	40.4
18 m,p-Cresols	107	4.939	4.939	(1.077)	238143	40.0000	40.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.958	4.958	(1.081)	167879	40.0000	39.3
19 Hexachloroethane	117	5.082	5.082	(1.108)	106340	40.0000	36.4
21 Nitrobenzene	77	5.139	5.139	(0.878)	255737	40.0000	36.5
22 Isophorone	82	5.377	5.377	(0.919)	420038	40.0000	37.1
23 2-Nitrophenol	139	5.454	5.454	(0.932)	126226	40.0000	39.5
24 2,4-Dimethylphenol	122	5.477	5.477	(0.936)	228236	40.0000	39.8
25 bis(2-Chloroethoxy)methane	93	5.577	5.577	(0.953)	249331	40.0000	36.5
26 2,4-Dichlorophenol	162	5.696	5.696	(0.973)	191224	40.0000	37.7
27 Benzoic acid	105	5.577	5.577	(0.953)	135284	40.0000	35.3
28 1,2,4-Trichlorobenzene	180	5.792	5.792	(0.989)	234218	40.0000	36.8
30 Naphthalene	128	5.877	5.877	(1.004)	691970	40.0000	38.0
204 alpha-Terpineol	59	5.873	5.873	(1.003)	126556	40.0000	33.1
31 4-Chloroaniline	127	5.920	5.920	(1.011)	233446	40.0000	40.1
32 Hexachlorobutadiene	225	5.992	5.992	(1.024)	156868	40.0000	32.4
33 4-Chloro-3-methylphenol	107	6.406	6.406	(1.094)	202526	40.0000	36.1
34 2-Methylnaphthalene	142	6.601	6.601	(1.128)	483626	40.0000	39.1
35 1-Methylnaphthalene	142	6.706	6.706	(1.146)	435779	40.0000	38.9
36 Hexachlorocyclopentadiene	237	6.758	6.758	(0.875)	84612	40.0000	34.3
205 2,3-Dichloroaniline	161	6.892	6.892	(0.893)	217082	40.0000	36.8
37 2,4,6-Trichlorophenol	196	6.892	6.892	(0.893)	153999	40.0000	34.8
38 2,4,5-Trichlorophenol	196	6.925	6.925	(0.897)	160656	40.0000	37.4
40 2-Chloronaphthalene	162	7.120	7.120	(0.922)	458496	40.0000	38.7
42 o-Nitroaniline	65	7.220	7.220	(0.935)	135608	40.0000	33.0
41 m-Nitroaniline	138	7.663	7.663	(0.993)	114579	40.0000	44.2
43 Dimethylphthalate	163	7.415	7.415	(0.961)	515379	40.0000	37.0
44 2,6-Dinitrotoluene	165	7.482	7.482	(0.969)	126259	40.0000	38.1
50 2,4-Dinitrotoluene	165	7.911	7.911	(1.025)	168079	40.0000	38.4
45 Acenaphthylene	152	7.568	7.568	(0.980)	720824	40.0000	38.5
47 Acenaphthene	154	7.754	7.754	(1.004)	476136	40.0000	38.1
48 2,4-Dinitrophenol	184	7.773	7.773	(1.007)	67272	40.0000	38.6
49 Dibenzofuran	168	7.939	7.939	(1.028)	636434	40.0000	35.7
51 Diethylphthalate	149	8.168	8.168	(1.058)	526956	40.0000	35.4
52 4-Nitrophenol	139	7.825	7.825	(1.014)	91064	40.0000	50.4
53 Fluorene	166	8.306	8.306	(1.076)	533243	40.0000	35.4
54 4-Chlorophenylphenylether	204	8.296	8.296	(1.075)	263488	40.0000	32.6
55 2-Methyl-4,6-dinitrophenol	198	8.354	8.354	(0.896)	103818	40.0000	40.8
56 p-Nitroaniline	138	8.320	8.320	(1.078)	103470	40.0000	43.8
133 Diphenylamine	169	8.425	8.425	(0.904)	435107	40.0000	37.8
58 1,2-Diphenylhydrazine	77	8.473	8.473	(0.909)	536615	40.0000	38.1
61 4-Bromophenylphenylether	248	8.825	8.825	(0.947)	138851	40.0000	34.0
63 Hexachlorobenzene	284	8.901	8.901	(0.955)	167912	40.0000	32.0
65 Pentachlorophenol	266	9.106	9.106	(0.977)	113664	40.0000	36.3
206 n-Octadecane	57	9.173	9.173	(0.984)	241283	40.0000	35.2
68 Phenanthrene	178	9.349	9.349	(1.003)	763446	40.0000	39.9
69 Anthracene	178	9.401	9.401	(1.009)	790904	40.0000	41.0
72 Di-n-butylphthalate	149	9.925	9.925	(1.065)	878321	40.0000	37.1
76 Fluoranthene	202	10.635	10.635	(1.141)	822616	40.0000	34.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	10.882	10.882	(0.887)	842230	40.0000	35.4
85 Butylbenzylphthalate	149	11.554	11.554	(0.942)	404959	40.0000	36.5
89 Benzo(a)anthracene	228	12.249	12.249	(0.998)	758075	40.0000	37.8
92 Chrysene	228	12.301	12.301	(1.003)	724754	40.0000	39.4
93 bis(2-Ethylhexyl)phthalate	149	12.244	12.244	(0.998)	553440	40.0000	38.4
94 Di-n-octylphthalate	149	13.168	13.168	(0.911)	837372	40.0000	36.3
95 Benzo(b)fluoranthene	252	13.820	13.820	(0.956)	656183	40.0000	36.2
96 Benzo(k)fluoranthene	252	13.863	13.863	(0.959)	642830	40.0000	37.5
97 Benzo(a)pyrene	252	14.358	14.358	(0.993)	575015	40.0000	38.2
99 Indeno(1,2,3-cd)pyrene	276	16.349	16.349	(1.131)	501323	40.0000	40.2
100 Dibenzo(a,h)anthracene	278	16.382	16.382	(1.133)	434893	40.0000	40.8
101 Benzo(ghi)perylene	276	16.839	16.839	(1.165)	413540	40.0000	39.4
126 m-Dinitrobenzene	168	7.449	7.449	(0.965)	82105	40.0000	36.8
130 2,3,4,6-Tetrachlorophenol	232	8.058	8.058	(1.044)	132040	40.0000	34.8
143 Dinoseb	211	9.296	9.296	(0.997)	135955	40.0000	37.2
173 Carbazole	167	9.568	9.568	(1.027)	591474	40.0000	38.3
184 p-Benzoquinone	54	3.839	3.839	(0.837)	6959	40.0000	15.5
192 Methoxychlor	227	12.144	12.144	(0.990)	510895	40.0000	39.0
211 p-Toluidine	106	5.001	5.001	(1.090)	119734	40.0000	41.5
210 m-Toluidine	106	5.034	5.034	(1.098)	146502	40.0000	36.3
26 Phthalic anhydride	104	6.649	6.649	(1.136)	92596	40.0000	25.5
179 Dibenzo(a,e)pyrene	302	20.139	20.139	(1.393)	176961	40.0000	37.6
214 1,4-Dinitrobenzene	75	7.368	7.368	(0.954)	93239	40.0000	36.6
215 2-Ethoxyethanol	59	2.225	2.225	(0.485)	78390	40.0000	37.8
216 Methylenebis(2-chloroaniline)	231	12.206	12.206	(0.995)	102556	40.0000	35.2
M 222 Trichlorophenols	196				314655	80.0000	72.2
M 223 Tetrachlorophenols	232				132040	40.0000	34.8
M 224 Benzo(b,k)fluoranthene	252				1299013	80.0000	73.8

Data File: /chem/MSD8.i/s120309.b/s810306.d
Date : 03-DEC-2009 11:34
Client ID: MEGACVS
Sample Info: IWBN091111-13,2140 PPM|1|SVMF1|MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20

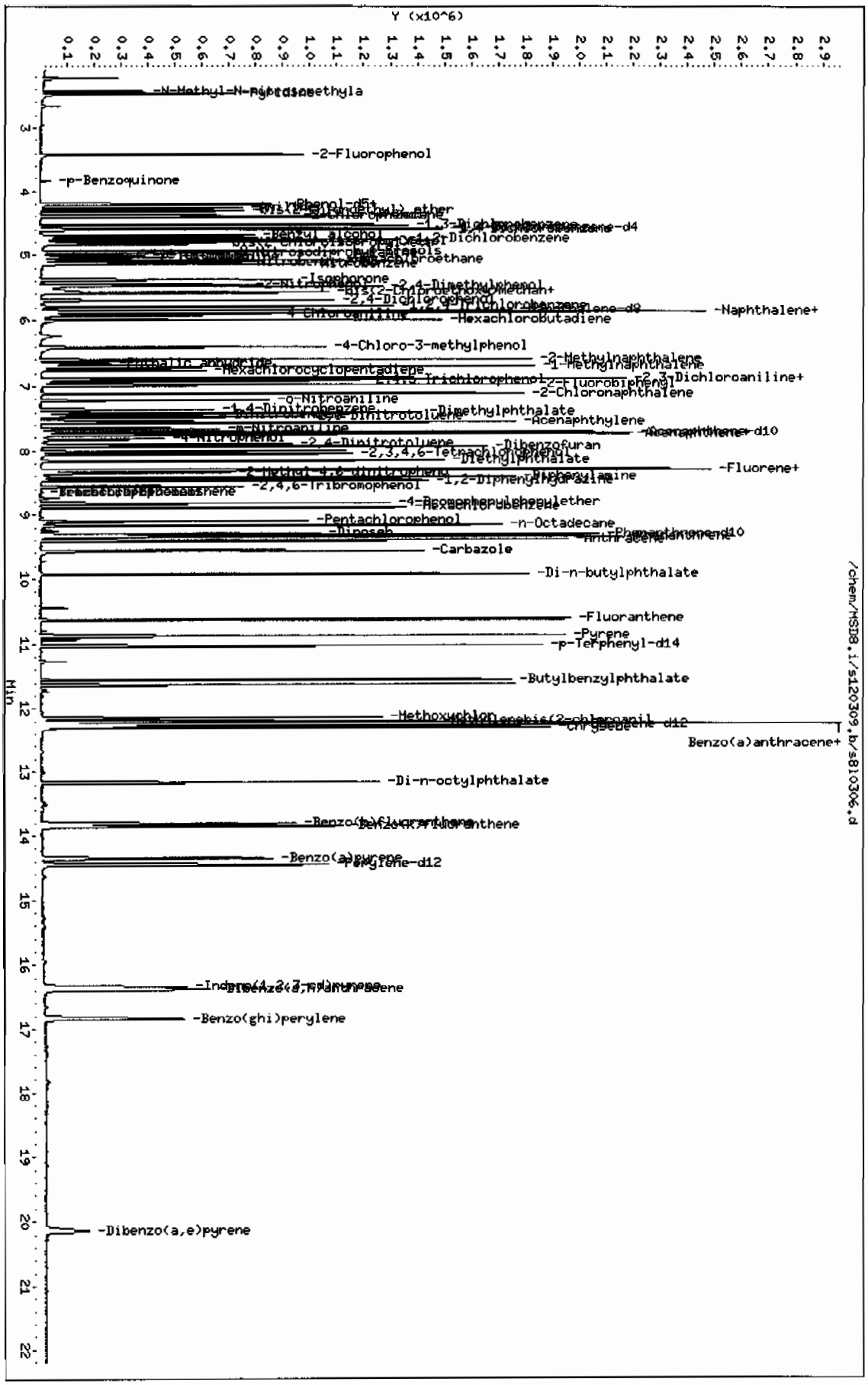

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 03-DEC-2009 12:08
Lab File ID: s810307.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091201-03.3 Quant Type: ISTD
Method: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.81556	0.85307	0.85307	0.000	4.60003	60.00000	Averaged
16 Acetophenone	1.16505	1.11222	1.11222	0.000	-4.53470	60.00000	Averaged
189 Caprolactam	0.08001	0.08284	0.08284	0.000	3.53942	60.00000	Averaged
208 1,1'-Biphenyl	1.17004	1.15773	1.15773	0.000	-1.05178	60.00000	Averaged
207 Atrazine	0.03765	0.04197	0.04197	0.000	11.47827	60.00000	Averaged
77 Benzidine	51.38255	40.00000	0.43630	0.000	28.45639	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.27732	0.29271	0.29271	0.000	5.54883	60.00000	Averaged
102 1,4-Dioxane	0.31063	0.33687	0.33687	0.000	8.44696	60.00000	Averaged
103 Methyl methacrylate	0.17459	0.18080	0.18080	0.000	3.55540	60.00000	Averaged
104 Ethyl methacrylate	0.69071	0.70465	0.70465	0.000	2.01741	60.00000	Averaged
105 2-Picoline	1.17503	1.19712	1.19712	0.000	1.88008	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43420	0.45566	0.45566	0.000	4.94346	60.00000	Averaged
107 Methyl methanesulfonate	0.56984	0.54172	0.54172	0.000	-4.93518	60.00000	Averaged
108 N-Nitrosodiethylamine	0.46189	0.48536	0.48536	0.000	5.07953	60.00000	Averaged
109 Ethyl Methanesulfonate	0.58464	0.58644	0.58644	0.000	0.30725	60.00000	Averaged
110 Pentachloroethane	0.35296	0.31871	0.31871	0.000	-9.70483	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.48189	0.50671	0.50671	0.000	5.15051	60.00000	Averaged
113 N-Nitrosomorpholine	0.67693	0.55416	0.55416	0.000	-18.13632	60.00000	Averaged
114 o-Toluidine	1.53016	1.50909	1.50909	0.000	-1.37716	60.00000	Averaged
115 N-Nitrosopiperidine	0.13952	0.14308	0.14308	0.000	2.55231	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.60743	0.53812	0.53812	0.000	-11.41104	60.00000	Averaged
118 2,6-Dichlorophenol	0.22036	0.22637	0.22637	0.000	2.72957	60.00000	Averaged
119 Hexachloropropene	0.14481	0.14064	0.14064	0.000	-2.87944	60.00000	Averaged
120 p-Phenylenediamine	0.20494	0.27154	0.27154	0.000	32.49590	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.24284	0.22965	0.22965	0.000	-5.43220	60.00000	Averaged
122 Safrole	0.20497	0.20516	0.20516	0.000	0.09262	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.51249	0.44987	0.44987	0.000	-12.21935	60.00000	Averaged
124 Isosafrole	0.32933	0.33055	0.33055	0.000	0.37119	60.00000	Averaged
125 1,4-Naphthoquinone	0.27571	0.30319	0.30319	0.000	9.96580	60.00000	Averaged
127 Pentachlorobenzene	0.48048	0.41461	0.41461	0.000	-13.70809	60.00000	Averaged
128 1-Naphthylamine	0.84935	0.92610	0.92610	0.000	9.03578	60.00000	Averaged
129 2-Naphthylamine	0.90587	0.99366	0.99366	0.000	9.69152	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27328	0.28736	0.28736	0.000	5.15065	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.12585	0.14423	0.14423	0.000	14.60019	60.00000	Averaged
137 Phenacetin	0.25645	0.25447	0.25447	0.000	-0.77109	60.00000	Averaged
138 Diallate	0.20162	0.19465	0.19465	0.000	-3.45658	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s810307.d
Analysis Type:
Lab Sample ID: WBN091201-03.3
Method: /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m

Injection Date: 03-DEC-2009 12:08
Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Init. Cal. Times: 20:24 11:07
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.19731	0.19004	0.19004	0.000	-3.68573	60.00000	Averaged
213 Trans Diallate	0.23720	0.22900	0.22900	0.000	-3.45658	60.00000	Averaged
140 4-Aminobiphenyl	0.56959	0.57524	0.57524	0.000	0.99103	60.00000	Averaged
141 Pentachloronitrobenzene	0.09387	0.07526	0.07526	0.000	-19.82354	60.00000	Averaged
142 Pronamide	0.27612	0.26907	0.26907	0.000	-2.55183	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	77.94440	40.00000	0.01727	0.000	94.86101	60.00000	Linear <-
147 Methapyrilene	0.27172	0.28295	0.28295	0.000	4.13100	60.00000	Averaged
148 Isodrin	0.11117	0.10152	0.10152	0.000	-8.68098	60.00000	Averaged
149 Aramite	0.05205	0.04825	0.04825	0.000	-7.31069	60.00000	Averaged
150 Kepone	0.07289	0.07455	0.07455	0.000	2.26791	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.27351	0.27387	0.27387	0.000	0.13074	60.00000	Averaged
152 Chlorobenzilate	0.33147	0.29881	0.29881	0.000	-9.85404	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.49002	0.58564	0.58564	0.000	19.51288	60.00000	Averaged
155 2-Acetylaminofluorene	0.27456	0.34422	0.34422	0.000	25.37132	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.54051	0.47559	0.47559	0.000	-12.01183	60.00000	Averaged
158 3-Methylcholanthrene	0.38346	0.38378	0.38378	0.000	0.08357	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810307.d
Lab Smp Id: WBN091201-03.3 Client Smp ID: AP12CVS
Inj Date : 03-DEC-2009 12:08
Operator : nagl Inst ID: MSD8.i
Smp Info : |WBN091201-03.3|40 PPM|1|SVMF|1|AP12CVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:11 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.582	(1.000)	267463	40.0000	
* 29 Naphthalene-d8	136	5.853	5.853	(1.000)	931077	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.715	(1.000)	565059	40.0000	
* 67 Phenanthrene-d10	188	9.325	9.325	(1.000)	1054070	40.0000	
* 91 Chrysene-d12	240	12.263	12.263	(1.000)	972358	40.0000	
* 98 Perylene-d12	264	14.454	14.454	(1.000)	741362	40.0000	
209 Benzaldehyde	77	4.182	4.182	(0.913)	228165	40.0000	41.8
16 Acetophenone	105	4.963	4.963	(1.083)	297478	40.0000	38.2
189 Caprolactam	113	6.287	6.287	(1.074)	77130	40.0000	41.4
208 1,1'-Biphenyl	154	7.092	7.092	(0.919)	654188	40.0000	39.6
207 Atrazine	173	8.996	8.996	(0.965)	44242	40.0000	44.6
77 Benzidine	184	10.763	10.763	(0.878)	424242	40.0000	51.4
90 3,3'-Dichlorobenzidine	252	12.201	12.201	(0.995)	284620	40.0000	42.2
102 1,4-Dioxane	88	2.239	2.239	(0.489)	90099	40.0000	43.4
103 Methyl methacrylate	100	2.239	2.239	(0.489)	48357	40.0000	41.4
104 Ethyl methacrylate	69	2.749	2.749	(0.600)	188467	40.0000	40.8
105 2-Picoline	93	3.001	3.001	(0.655)	320185	40.0000	40.8
106 N-Nitrosomethylethylamine	88	3.068	3.068	(0.670)	121872	40.0000	42.0
107 Methyl methanesulfonate	80	3.292	3.292	(0.718)	144890	40.0000	38.0
108 N-Nitrosodiethylamine	102	3.620	3.620	(0.790)	129815	40.0000	42.0
109 Ethyl Methanesulfonate	79	3.858	3.858	(0.842)	156851	40.0000	40.1
110 Pentachloroethane	167	4.325	4.325	(0.944)	85242	40.0000	36.1
111 N-Nitrosopyrrolidine	100	4.949	4.949	(1.080)	135527	40.0000	42.1(Q)
113 N-Nitrosomorpholine	56	4.982	4.982	(1.087)	148217	40.0000	32.7
114 o-Toluidine	106	5.001	5.001	(1.091)	403625	40.0000	39.4
115 N-Nitrosopiperidine	114	5.287	5.287	(0.903)	133222	40.0000	41.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.658	5.658	(0.967)	501029	40.0000	35.4
118 2,6-Dichlorophenol	162	5.930	5.930	(1.013)	210771	40.0000	41.1
119 Hexachloropropene	213	5.963	5.963	(1.019)	130947	40.0000	38.8
120 p-Phenylenediamine	108	6.292	6.292	(1.075)	252824	40.0000	53.0
121 N-Nitrosodi-n-butylamine	84	6.268	6.268	(1.071)	213821	40.0000	37.8
122 Safrole	162	6.496	6.496	(1.110)	191016	40.0000	40.0
123 1,2,4,5-Tetrachlorobenzene	216	6.773	6.773	(0.878)	254203	40.0000	35.1
124 Isosafrole	162	7.049	7.049	(0.914)	186781	40.0000	40.1
125 1,4-Naphthoquinone	158	7.301	7.301	(0.946)	171321	40.0000	44.0
127 Pentachlorobenzene	250	7.892	7.892	(1.023)	234281	40.0000	34.5
128 1-Naphthylamine	143	8.015	8.015	(1.039)	523299	40.0000	43.6
129 2-Naphthylamine	143	8.101	8.101	(1.050)	561477	40.0000	43.9
131 5-Nitro-o-toluidine	152	8.311	8.311	(1.077)	162374	40.0000	42.1
136 1,3,5-Trinitrobenzene	75	8.692	8.692	(0.932)	152025	40.0000	45.8
137 Phenacetin	108	8.758	8.758	(0.939)	268234	40.0000	39.7(Q)
138 Diallate	86	8.730	8.730	(0.936)	205178	40.0000	38.6
212 Cis Diallate	86	8.825	8.825	(0.946)	30047	6.00000	5.8
213 Trans Diallate	86	8.730	8.730	(0.936)	205178	34.0000	32.8
140 4-Aminobiphenyl	169	9.111	9.111	(0.977)	606342	40.0000	40.4
141 Pentachloronitrobenzene	237	9.120	9.120	(0.978)	79330	40.0000	32.1(Q)
142 Pronamide	173	9.163	9.163	(0.983)	283620	40.0000	39.0
146 4-Nitroquinoline-1-oxide	101	10.173	10.173	(1.091)	18202	40.0000	77.9
147 Methapyrilene	58	10.244	10.244	(1.099)	298247	40.0000	41.6
148 Isodrin	193	10.468	10.468	(1.123)	107012	40.0000	36.5
149 Aramite	185	10.996	10.996	(1.179)	50856	40.0000	37.1
150 Kepone	272	11.620	11.620	(1.246)	78576	40.0000	40.9
151 p-(Dimethylamino)azobenzene	120	11.182	11.182	(0.912)	266296	40.0000	40.0
152 Chlorobenzilate	251	11.230	11.230	(0.916)	290550	40.0000	36.0
153 3,3'-Dimethylbenzidine	212	11.549	11.549	(0.942)	569449	40.0000	47.8
155 2-Acetylaminofluorene	181	11.844	11.844	(0.966)	334701	40.0000	50.1
157 7,12Dimethylbenz(a)anthracene	256	13.801	13.801	(0.955)	352582	40.0000	35.2
158 3-Methylcholanthrene	268	14.954	14.954	(1.035)	284523	40.0000	40.0(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD8.i/s120309.b/s810307.d
Date : 03-DEC-2009 12:08
Client ID: AP12CVS
Sample Info: IWBN091201-03,3140 PPM1:1:SVHF1:1:AP12CVS
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20

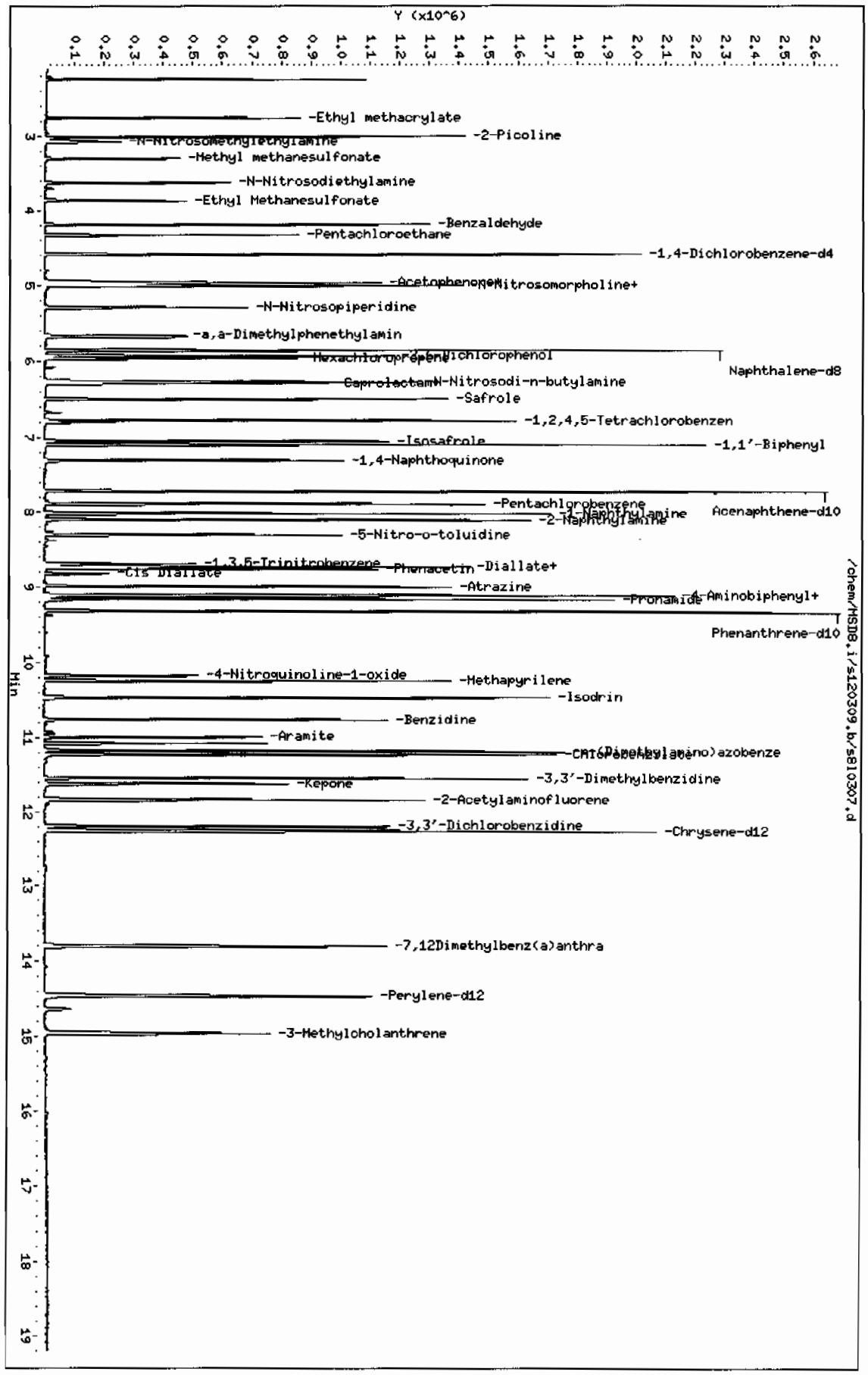

Data File: /chem/MSD8.i/s120409.b/s810403.d
Report Date: 04-Dec-2009 13:41

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 04-DEC-2009 08:40
Lab File ID: s810403.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091111-13.2 Quant Type: ISTD
Method: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.95553	0.98104	0.98104	0.000	2.66972	60.00000	Averaged
$ 5 Phenol-d5	1.19947	1.25688	1.25688	0.000	4.78589	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.29026	0.28776	0.28776	0.000	-0.86402	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.10527	0.98178	0.98178	0.000	-11.17284	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.18476	0.14037	0.14037	0.000	-24.02521	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.74424	0.63292	0.63292	0.000	-14.95808	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.50364	0.59644	0.59644	0.000	18.42470	60.00000	Averaged
2 Pyridine	0.85799	1.00473	1.00473	0.000	17.10316	60.00000	Averaged
4 Aniline	0.54472	0.52795	0.52795	0.000	-3.07766	60.00000	Averaged
6 Phenol	1.22172	1.26994	1.26994	0.001	3.94640	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.69410	0.68470	0.68470	0.000	-1.35345	60.00000	Averaged
8 2-Chlorophenol	1.07100	1.05089	1.05089	0.000	-1.87747	60.00000	Averaged
203 n-Decane	0.87491	0.79356	0.79356	0.000	-9.29852	60.00000	Averaged
9 1,3-Dichlorobenzene	1.21919	1.30938	1.30938	0.000	7.39698	60.00000	Averaged
11 1,4-Dichlorobenzene	1.21281	1.27391	1.27391	0.001	5.03829	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.18396	1.26791	1.26791	0.000	7.09062	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.13973	1.12329	1.12329	0.000	-1.44214	60.00000	Averaged
12 Benzyl alcohol	0.62899	0.29514	0.29514	0.000	-53.07784	60.00000	Averaged
15 o-Cresol	0.85158	0.90132	0.90132	0.000	5.84011	60.00000	Averaged
18 m,p-Cresols	1.06279	1.10420	1.10420	0.000	3.89634	60.00000	Averaged
17 N-Nitrosodipropylamine	0.77916	0.81942	0.81942	0.050	5.16676	60.00000	Averaged spcc
19 Hexachloroethane	0.53333	0.50991	0.50991	0.000	-4.39121	60.00000	Averaged
21 Nitrobenzene	0.32760	0.33607	0.33607	0.000	2.58616	60.00000	Averaged
22 Isophorone	0.52954	0.56912	0.56912	0.000	7.47346	60.00000	Averaged
23 2-Nitrophenol	0.14952	0.15571	0.15571	0.001	4.13685	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.26780	0.30559	0.30559	0.000	14.11317	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31912	0.32747	0.32747	0.000	2.61819	60.00000	Averaged
26 2,4-Dichlorophenol	0.23734	0.23549	0.23549	0.001	-0.77937	20.00000	Averaged ccc
27 Benzoic acid	0.17932	0.14953	0.14953	0.000	-16.61168	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.29714	0.28565	0.28565	0.000	-3.86799	60.00000	Averaged
30 Naphthalene	0.85022	0.86917	0.86917	0.000	2.22898	60.00000	Averaged
204 alpha-Terpineol	0.17855	0.16626	0.16626	0.000	-6.88373	60.00000	Averaged
31 4-Chloroaniline	0.27197	0.27885	0.27885	0.000	2.52946	60.00000	Averaged
32 Hexachlorobutadiene	0.22599	0.19091	0.19091	0.001	-15.52335	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.26235	0.26304	0.26304	0.001	0.26294	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.57889	0.60479	0.60479	0.000	4.47497	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 04-DEC-2009 08:40
Lab File ID: s810403.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091111-13.2 Quant Type: ISTD
Method: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.52363	0.55669	0.55669	0.000	6.31201	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.20618	0.14120	0.14120	0.050	-31.51521	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.49282	0.44974	0.44974	0.000	-8.74044	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.37000	0.30815	0.30815	0.001	-16.71655	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.35881	0.32555	0.32555	0.000	-9.27114	60.00000	Averaged	
40	2-Chloronaphthalene	0.98974	0.95420	0.95420	0.000	-3.59096	60.00000	Averaged	
42	o-Nitroaniline	0.34328	0.29254	0.29254	0.000	-14.78142	60.00000	Averaged	
41	m-Nitroaniline	41.29692	40.00000	0.22321	0.000	3.24231	60.00000	Linear	
43	Dimethylphthalate	1.16376	1.12209	1.12209	0.000	-3.58089	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.27732	0.27384	0.27384	0.000	-1.25600	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.36576	0.36990	0.36990	0.000	1.13073	60.00000	Averaged	
45	Acenaphthylene	1.56709	1.54367	1.54367	0.000	-1.49472	60.00000	Averaged	
47	Acenaphthene	1.04431	1.01360	1.01360	0.001	-2.94043	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	0.14553	0.11700	0.11700	0.050	-19.60829	60.00000	Averaged	spcc
49	Dibenzofuran	1.49149	1.35636	1.35636	0.000	-9.05983	60.00000	Averaged	
51	Diethylphthalate	1.24334	1.16164	1.16164	0.000	-6.57110	60.00000	Averaged	
52	4-Nitrophenol	0.15113	0.15508	0.15508	0.050	2.61385	60.00000	Averaged	spcc
53	Fluorene	1.25845	1.15098	1.15098	0.000	-8.53989	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.67611	0.55940	0.55940	0.000	-17.26170	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	37.74796	40.00000	0.10841	0.000	-5.63010	60.00000	Linear	
56	p-Nitroaniline	0.19743	0.18679	0.18679	0.000	-5.38813	60.00000	Averaged	
133	Diphenylamine	0.52539	0.49671	0.49671	0.001	-5.45883	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.64295	0.62374	0.62374	0.000	-2.98871	60.00000	Averaged	
61	4-Bromophenylphenylether	0.18681	0.15644	0.15644	0.000	-16.26008	60.00000	Averaged	
63	Hexachlorobenzene	0.24004	0.19159	0.19159	0.000	-20.18352	60.00000	Averaged	
65	Pentachlorophenol	35.30885	40.00000	0.12516	0.001	-11.72788	20.00000	Linear	ccc
206	n-Octadecane	0.31341	0.29572	0.29572	0.000	-5.64256	60.00000	Averaged	
68	Phenanthrene	0.87537	0.89711	0.89711	0.000	2.48353	60.00000	Averaged	
69	Anthracene	0.88147	0.93528	0.93528	0.000	6.10439	60.00000	Averaged	
72	Di-n-butylphthalate	1.08228	1.05445	1.05445	0.000	-2.57148	60.00000	Averaged	
76	Fluoranthene	1.07784	0.97421	0.97421	0.001	-9.61388	20.00000	Averaged	ccc
79	Pyrene	1.15493	1.02382	1.02382	0.000	-11.35222	60.00000	Averaged	
85	Butylbenzylphthalate	0.53898	0.50481	0.50481	0.000	-6.33926	60.00000	Averaged	
89	Benzo(a)anthracene	0.97545	0.94301	0.94301	0.000	-3.32633	60.00000	Averaged	
92	Chrysene	0.89342	0.89909	0.89909	0.000	0.63382	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	0.69980	0.69767	0.69767	0.000	-0.30497	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 04-DEC-2009 08:40
Lab File ID: s810403.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091111-13.2 Quant Type: ISTD
Method: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.35849	1.22438	1.22438	0.001	-9.87184	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	1.06619	0.93626	0.93626	0.000	-12.18642	60.00000	Averaged	
	96 Benzo(k)fluoranthene	1.00900	0.91743	0.91743	0.000	-9.07597	60.00000	Averaged	
	97 Benzo(a)pyrene	0.88769	0.85576	0.85576	0.001	-3.59635	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	0.73552	0.81269	0.81269	0.000	10.49196	60.00000	Averaged	
	100 Dibenzo(a,h)anthracene	0.62713	0.79480	0.79480	0.000	26.73671	60.00000	Averaged	
	101 Benzo(ghi)perylene	0.61912	0.78603	0.78603	0.000	26.95940	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18650	0.16441	0.16441	0.000	-11.84390	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.31762	0.26254	0.26254	0.000	-17.34017	60.00000	Averaged	
	143 Dinoseb	36.19946	40.00000	0.15055	0.000	-9.50136	60.00000	Linear	
	173 Carbazole	0.70632	0.71563	0.71563	0.000	1.31728	60.00000	Averaged	
	184 p-Benzoquinone	0.08179	0.05626	0.05626	0.000	-31.21730	60.00000	Averaged	
	192 Methoxychlor	0.63593	0.61472	0.61472	0.000	-3.33517	60.00000	Averaged	
	211 p-Toluidine	0.52620	0.60198	0.60198	0.000	14.40216	60.00000	Averaged	
	210 m-Toluidine	0.73715	0.69961	0.69961	0.000	-5.09338	60.00000	Averaged	
	26 Phthalic anhydride	0.16955	0.14390	0.14390	0.000	-15.12714	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.27764	0.48953	0.48953	0.000	76.31561	60.00000	Averaged	<-
	214 1,4-Dinitrobenzene	0.21283	0.18982	0.18982	0.000	-10.81270	60.00000	Averaged	
	215 2-Ethoxyethanol	0.37808	0.33699	0.33699	0.000	-10.86635	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	36.79874	40.00000	0.13112	0.000	-8.00315	60.00000	Linear	
M	222 Trichlorophenols	0.36441	0.31685	0.31685	0.000	-13.05097	60.00000	Averaged	
M	223 Tetrachlorophenols	0.31762	0.26254	0.26254	0.000	-17.34017	60.00000	Averaged	
M	224 Benzo(b,k)fluoranthene	1.03759	0.92684	0.92684	0.000	-10.67405	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810403.d
Lab Smp Id: WBN091111-13.2 Client Smp ID: MEGACVS
Inj Date : 04-DEC-2009 08:40
Operator : nagl Inst ID: MSD8.i
Smp Info : |WBN091111-13.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclpl

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.539	4.539	(1.000)	215717	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	825027	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	496920	40.0000	
* 67 Phenanthrene-d10	188	9.273	9.273	(1.000)	933927	40.0000	
* 91 Chrysene-d12	240	12.206	12.206	(1.000)	920458	40.0000	
* 98 Perylene-d12	264	14.373	14.373	(1.000)	857890	40.0000	
$ 3 2-Fluorophenol	112	3.377	3.377	(0.744)	211627	40.0000	41.1
$ 5 Phenol-d5	99	4.158	4.158	(0.916)	271130	40.0000	41.9
$ 20 Nitrobenzene-d5	82	5.073	5.073	(0.874)	237407	40.0000	39.6
$ 39 2-Fluorobiphenyl	172	6.935	6.935	(0.904)	487868	40.0000	35.5
$ 60 2,4,6-Tribromophenol	329	8.516	8.516	(1.111)	69754	40.0000	30.4
$ 81 p-Terphenyl-d14	244	10.982	10.982	(0.900)	582576	40.0000	34.0
1 N-Methyl-N-nitrosomethylamine	74	2.392	2.392	(0.527)	128662	40.0000	47.4
2 Pyridine	79	2.435	2.435	(0.536)	216737	40.0000	46.8
4 Aniline	66	4.230	4.230	(0.932)	113888	40.0000	38.8
6 Phenol	94	4.168	4.168	(0.918)	273947	40.0000	41.6
7 bis(2-Chloroethyl) ether	63	4.273	4.273	(0.941)	147702	40.0000	39.4
8 2-Chlorophenol	128	4.339	4.339	(0.956)	226695	40.0000	39.2
203 n-Decane	43	4.358	4.358	(0.960)	171184	40.0000	36.3
9 1,3-Dichlorobenzene	146	4.487	4.487	(0.988)	282455	40.0000	43.0
11 1,4-Dichlorobenzene	146	4.558	4.558	(1.004)	274804	40.0000	42.0
13 1,2-Dichlorobenzene	146	4.701	4.701	(1.036)	273509	40.0000	42.8
14 bis(2-Chloroisopropyl)ether	45	4.777	4.777	(1.052)	242313	40.0000	39.4
12 Benzyl alcohol	108	4.654	4.654	(1.025)	63666	40.0000	18.8
15 o-Cresol	107	4.744	4.744	(1.045)	194429	40.0000	42.3
18 m,p-Cresols	107	4.897	4.897	(1.079)	238194	40.0000	41.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.911	4.911	(1.082)	176763	40.0000	42.1
19 Hexachloroethane	117	5.035	5.035	(1.109)	109996	40.0000	38.2
21 Nitrobenzene	77	5.092	5.092	(0.877)	277270	40.0000	41.0
22 Isophorone	82	5.330	5.330	(0.918)	469536	40.0000	43.0
23 2-Nitrophenol	139	5.406	5.406	(0.931)	128463	40.0000	41.6
24 2,4-Dimethylphenol	122	5.430	5.430	(0.935)	252123	40.0000	45.6
25 bis(2-Chloroethoxy)methane	93	5.530	5.530	(0.952)	270172	40.0000	41.0
26 2,4-Dichlorophenol	162	5.654	5.654	(0.974)	194284	40.0000	39.7
27 Benzoic acid	105	5.525	5.525	(0.952)	123368	40.0000	33.4
28 1,2,4-Trichlorobenzene	180	5.744	5.744	(0.989)	235665	40.0000	38.4
30 Naphthalene	128	5.830	5.830	(1.004)	717086	40.0000	40.9
204 alpha-Terpineol	59	5.830	5.830	(1.004)	137168	40.0000	37.2
31 4-Chloroaniline	127	5.873	5.873	(1.011)	230060	40.0000	41.0
32 Hexachlorobutadiene	225	5.949	5.949	(1.025)	157508	40.0000	33.8
33 4-Chloro-3-methylphenol	107	6.363	6.363	(1.096)	217019	40.0000	40.1
34 2-Methylnaphthalene	142	6.554	6.554	(1.129)	498971	40.0000	41.8
35 1-Methylnaphthalene	142	6.658	6.658	(1.147)	459281	40.0000	42.5
36 Hexachlorocyclopentadiene	237	6.711	6.711	(0.875)	70167	40.0000	27.4
205 2,3-Dichloroaniline	161	6.844	6.844	(0.893)	223487	40.0000	36.5
37 2,4,6-Trichlorophenol	196	6.844	6.844	(0.893)	153124	40.0000	33.3
38 2,4,5-Trichlorophenol	196	6.878	6.878	(0.897)	161771	40.0000	36.3
40 2-Chloronaphthalene	162	7.073	7.073	(0.922)	474159	40.0000	38.6
42 o-Nitroaniline	65	7.173	7.173	(0.935)	145369	40.0000	34.1
41 m-Nitroaniline	138	7.616	7.616	(0.993)	110917	40.0000	41.3
43 Dimethylphthalate	163	7.368	7.368	(0.961)	557589	40.0000	38.6
44 2,6-Dinitrotoluene	165	7.435	7.435	(0.970)	136077	40.0000	39.5
50 2,4-Dinitrotoluene	165	7.863	7.863	(1.025)	183810	40.0000	40.4
45 Acenaphthylene	152	7.520	7.520	(0.981)	767080	40.0000	39.4
47 Acenaphthene	154	7.706	7.706	(1.005)	503678	40.0000	38.8
48 2,4-Dinitrophenol	184	7.720	7.720	(1.007)	58138	40.0000	32.2
49 Dibenzofuran	168	7.887	7.887	(1.029)	674002	40.0000	36.4
51 Diethylphthalate	149	8.120	8.120	(1.059)	577242	40.0000	37.4
52 4-Nitrophenol	139	7.778	7.778	(1.014)	77064	40.0000	41.0
53 Fluorene	166	8.258	8.258	(1.077)	571946	40.0000	36.6
54 4-Chlorophenylphenylether	204	8.249	8.249	(1.076)	277977	40.0000	33.1
55 2-Methyl-4,6-dinitrophenol	198	8.301	8.301	(0.895)	101249	40.0000	37.7
56 p-Nitroaniline	138	8.268	8.268	(1.078)	92821	40.0000	37.8
133 Diphenylamine	169	8.378	8.378	(0.903)	463891	40.0000	37.8
58 1,2-Diphenylhydrazine	77	8.420	8.420	(0.908)	582524	40.0000	38.8
61 4-Bromophenylphenylether	248	8.778	8.778	(0.947)	146100	40.0000	33.5
63 Hexachlorobenzene	284	8.849	8.849	(0.954)	178932	40.0000	31.9
65 Pentachlorophenol	266	9.054	9.054	(0.976)	116889	40.0000	35.3
206 n-Octadecane	57	9.125	9.125	(0.984)	276182	40.0000	37.7
68 Phenanthrene	178	9.297	9.297	(1.003)	837831	40.0000	41.0
69 Anthracene	178	9.354	9.354	(1.009)	873481	40.0000	42.4
72 Di-n-butylphthalate	149	9.878	9.878	(1.065)	984777	40.0000	39.0
76 Fluoranthene	202	10.582	10.582	(1.141)	909845	40.0000	36.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	10.830	10.830	(0.887)	942387	40.0000	35.4
85 Butylbenzylphthalate	149	11.501	11.501	(0.942)	464658	40.0000	37.5
89 Benzo(a)anthracene	228	12.182	12.182	(0.998)	867997	40.0000	38.7
92 Chrysene	228	12.239	12.239	(1.003)	827570	40.0000	40.2
93 bis(2-Ethylhexyl)phthalate	149	12.182	12.182	(0.998)	642176	40.0000	39.9
94 Di-n-octylphthalate	149	13.101	13.101	(0.912)	1050383	40.0000	36.0
95 Benzo(b)fluoranthene	252	13.735	13.735	(0.956)	803204	40.0000	35.1
96 Benzo(k)fluoranthene	252	13.787	13.787	(0.959)	787051	40.0000	36.4
97 Benzo(a)pyrene	252	14.273	14.273	(0.993)	734150	40.0000	38.6
99 Indeno(1,2,3-cd)pyrene	276	16.244	16.244	(1.130)	697201	40.0000	44.2
100 Dibenzo(a,h)anthracene	278	16.287	16.287	(1.133)	681854	40.0000	50.7
101 Benzo(ghi)perylene	276	16.735	16.735	(1.164)	674323	40.0000	50.8
126 m-Dinitrobenzene	168	7.401	7.401	(0.965)	81697	40.0000	35.3
130 2,3,4,6-Tetrachlorophenol	232	8.011	8.011	(1.045)	130462	40.0000	33.1
143 Dinoseb	211	9.249	9.249	(0.997)	140605	40.0000	36.2
173 Carbazole	167	9.516	9.516	(1.026)	668342	40.0000	40.5
184 p-Benzoquinone	54	3.797	3.797	(0.836)	12136	40.0000	27.5
192 Methoxychlor	227	12.082	12.082	(0.990)	565828	40.0000	38.7
211 p-Toluidine	106	4.958	4.958	(1.092)	129857	40.0000	45.8
210 m-Toluidine	106	4.992	4.992	(1.100)	150917	40.0000	38.0
26 Phthalic anhydride	104	6.601	6.601	(1.137)	118724	40.0000	33.9
179 Dibenzo(a,e)pyrene	302	19.987	19.987	(1.391)	419961	40.0000	70.5
214 1,4-Dinitrobenzene	75	7.320	7.320	(0.955)	94326	40.0000	35.7
215 2-Ethoxyethanol	59	2.187	2.187	(0.482)	72695	40.0000	35.6
216 Methylenebis(2-chloroaniline)	231	12.144	12.144	(0.995)	120688	40.0000	36.8
M 222 Trichlorophenols	196				314895	80.0000	69.6
M 223 Tetrachlorophenols	232				130462	40.0000	33.1
M 224 Benzo(b,k)fluoranthene	252				1590255	80.0000	71.5

Data File: /chem/MSD8.i/s120409.b/s810403.d
Date : 04-DEC-2009 08:40
Client ID: MEGACVS
Sample Info: IWBK091111-13,2140 PPM!1!SVMF!1!MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20

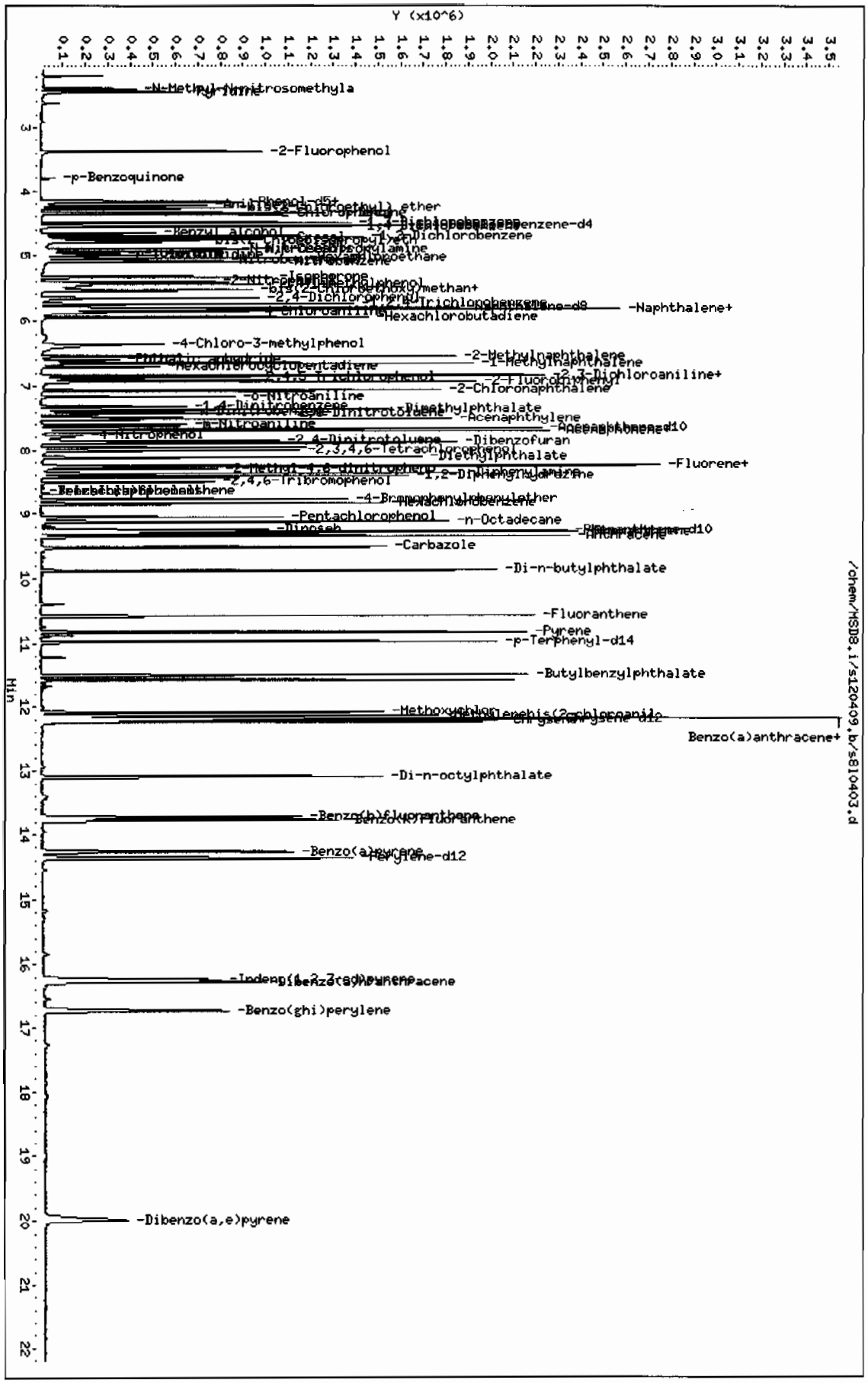

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 04-DEC-2009 09:12
Lab File ID: s810404.d Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Analysis Type: Init. Cal. Times: 20:24 11:07
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.81556	0.85126	0.85126	0.000	4.37809	60.00000	Averaged
16 Acetophenone	1.16505	1.11392	1.11392	0.000	-4.38889	60.00000	Averaged
189 Caprolactam	0.08001	0.07935	0.07935	0.000	-0.82342	60.00000	Averaged
208 1,1'-Biphenyl	1.17004	1.10298	1.10298	0.000	-5.73138	60.00000	Averaged
207 Atrazine	0.03765	0.04114	0.04114	0.000	9.26765	60.00000	Averaged
77 Benzidine	29.87568	40.00000	0.24482	0.000	-25.31080	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.27732	0.24702	0.24702	0.000	-10.92680	60.00000	Averaged
102 1,4-Dioxane	0.31063	0.30406	0.30406	0.000	-2.11353	60.00000	Averaged
103 Methyl methacrylate	0.17459	0.17294	0.17294	0.000	-0.94850	60.00000	Averaged
104 Ethyl methacrylate	0.69071	0.71180	0.71180	0.000	3.05259	60.00000	Averaged
105 2-Picoline	1.17503	1.15896	1.15896	0.000	-1.36712	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43420	0.45208	0.45208	0.000	4.11950	60.00000	Averaged
107 Methyl methanesulfonate	0.56984	0.51309	0.51309	0.000	-9.95994	60.00000	Averaged
108 N-Nitrosodiethylamine	0.46189	0.49733	0.49733	0.000	7.67182	60.00000	Averaged
109 Ethyl Methanesulfonate	0.58464	0.60689	0.60689	0.000	3.80529	60.00000	Averaged
110 Pentachloroethane	0.35296	0.32635	0.32635	0.000	-7.53782	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.48189	0.50224	0.50224	0.000	4.22174	60.00000	Averaged
113 N-Nitrosomorpholine	0.67693	0.53748	0.53748	0.000	-20.59961	60.00000	Averaged
114 o-Toluidine	1.53016	1.55987	1.55987	0.000	1.94142	60.00000	Averaged
115 N-Nitrosopiperidine	0.13952	0.14301	0.14301	0.000	2.49755	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.60743	0.54102	0.54102	0.000	-10.93350	60.00000	Averaged
118 2,6-Dichlorophenol	0.22036	0.20782	0.20782	0.000	-5.68790	60.00000	Averaged
119 Hexachloropropene	0.14481	0.11162	0.11162	0.000	-22.91701	60.00000	Averaged
120 p-Phenylenediamine	0.20494	0.20437	0.20437	0.000	-0.27749	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.24284	0.24589	0.24589	0.000	1.25751	60.00000	Averaged
122 Safrole	0.20497	0.19094	0.19094	0.000	-6.84224	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.51249	0.42693	0.42693	0.000	-16.69640	60.00000	Averaged
124 Isosafrole	0.32933	0.31397	0.31397	0.000	-4.66430	60.00000	Averaged
125 1,4-Naphthoquinone	0.27571	0.29611	0.29611	0.000	7.39614	60.00000	Averaged
127 Pentachlorobenzene	0.48048	0.39909	0.39909	0.000	-16.93989	60.00000	Averaged
128 1-Naphthylamine	0.84935	0.85365	0.85365	0.000	0.50581	60.00000	Averaged
129 2-Naphthylamine	0.90587	0.87365	0.87365	0.000	-3.55618	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27328	0.24165	0.24165	0.000	-11.57535	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.12585	0.12650	0.12650	0.000	0.51828	60.00000	Averaged
137 Phenacetin	0.25645	0.21899	0.21899	0.000	-14.60904	60.00000	Averaged
138 Diallate	0.20162	0.20537	0.20537	0.000	1.85842	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s810404.d
Analysis Type:
Lab Sample ID: WBN091201-03.2
Method: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m

Injection Date: 04-DEC-2009 09:12
Init. Cal. Date(s): 28-NOV-2009 30-NOV-2009
Init. Cal. Times: 20:24 11:07
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.19731	0.21239	0.21239	0.000	7.64361	60.00000	Averaged
213 Trans Diallate	0.23720	0.24161	0.24161	0.000	1.85842	60.00000	Averaged
140 4-Aminobiphenyl	0.56959	0.45232	0.45232	0.000	-20.58876	60.00000	Averaged
141 Pentachloronitrobenzene	0.09387	0.07288	0.07288	0.000	-22.35837	60.00000	Averaged
142 Pronamide	0.27612	0.26709	0.26709	0.000	-3.26760	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	51.27471	40.00000	0.01275	0.000	28.18678	60.00000	Linear
147 Methapyrilene	0.27172	0.27535	0.27535	0.000	1.33325	60.00000	Averaged
148 Isodrin	0.11117	0.10240	0.10240	0.000	-7.89043	60.00000	Averaged
149 Aramite	0.05205	0.04831	0.04831	0.000	-7.19081	60.00000	Averaged
150 Kepone	0.07289	0.07212	0.07212	0.000	-1.05593	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.27351	0.28437	0.28437	0.000	3.97150	60.00000	Averaged
152 Chlorobenzilate	0.33147	0.30779	0.30779	0.000	-7.14541	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.49002	0.48779	0.48779	0.000	-0.45419	60.00000	Averaged
155 2-Acetylaminofluorene	0.27456	0.28767	0.28767	0.000	4.77746	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.54051	0.48165	0.48165	0.000	-10.88933	60.00000	Averaged
158 3-Methylcholanthrene	0.38346	0.38690	0.38690	0.000	0.89714	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810404.d
Lab Smp Id: WBN091201-03.2 Client Smp ID: AP12CVS
Inj Date : 04-DEC-2009 09:12
Operator : nag1 Inst ID: MSD8.i
Smp Info : |WBN091201-03.2|40 PPM|1|SVMF|1|AP12CVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:40 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.539	4.539	(1.000)	233752	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	837831	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	495869	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.268	(1.000)	883053	40.0000	
* 91 Chrysene-d12	240	12.192	12.192	(1.000)	731474	40.0000	
* 98 Perylene-d12	264	14.358	14.358	(1.000)	588115	40.0000	
209 Benzaldehyde	77	4.139	4.139	(0.912)	198984	40.0000	41.8
16 Acetophenone	105	4.915	4.915	(1.083)	260381	40.0000	38.2
189 Caprolactam	113	6.230	6.230	(1.073)	66481	40.0000	39.7
208 1,1'-Biphenyl	154	7.044	7.044	(0.919)	546934	40.0000	37.7
207 Atrazine	173	8.944	8.944	(0.965)	36329	40.0000	43.7
77 Benzidine	184	10.711	10.711	(0.879)	179079	40.0000	29.9
90 3,3'-Dichlorobenzidine	252	12.135	12.135	(0.995)	180689	40.0000	35.6
102 1,4-Dioxane	88	2.187	2.187	(0.482)	71075	40.0000	39.2
103 Methyl methacrylate	100	2.187	2.187	(0.482)	40424	40.0000	39.6
104 Ethyl methacrylate	69	2.701	2.701	(0.595)	166384	40.0000	41.2
105 2-Picoline	93	2.954	2.954	(0.651)	270910	40.0000	39.4
106 N-Nitrosomethylethylamine	88	3.020	3.020	(0.665)	105675	40.0000	41.6
107 Methyl methanesulfonate	80	3.249	3.249	(0.716)	119935	40.0000	36.0
108 N-Nitrosodiethylamine	102	3.577	3.577	(0.788)	116252	40.0000	43.1
109 Ethyl Methanesulfonate	79	3.815	3.815	(0.841)	141862	40.0000	41.5
110 Pentachloroethane	167	4.282	4.282	(0.943)	76286	40.0000	37.0
111 N-Nitrosopyrrolidine	100	4.896	4.896	(1.079)	117399	40.0000	41.7(Q)
113 N-Nitrosomorpholine	56	4.934	4.934	(1.087)	125638	40.0000	31.8
114 o-Toluidine	106	4.954	4.954	(1.091)	364622	40.0000	40.8
115 N-Nitrosopiperidine	114	5.239	5.239	(0.902)	119816	40.0000	41.0

Compounds	QUANT S1G MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.634	5.634	(0.970)	453282	40.0000	35.6
118 2,6-Dichlorophenol	162	5.882	5.882	(1.013)	174122	40.0000	37.7
119 Hexachloropropene	213	5.915	5.915	(1.019)	93522	40.0000	30.8
120 p-Phenylenediamine	108	6.239	6.239	(1.075)	171230	40.0000	39.9
121 N-Nitrosodi-n-butylamine	84	6.220	6.220	(1.071)	206018	40.0000	40.5
122 Safrole	162	6.449	6.449	(1.111)	159977	40.0000	37.3
123 1,2,4,5-Tetrachlorobenzene	216	6.725	6.725	(0.877)	211699	40.0000	33.3
124 Isosafrole	162	7.001	7.001	(0.913)	155687	40.0000	38.1
125 1,4-Naphthoquinone	158	7.254	7.254	(0.946)	146830	40.0000	43.0
127 Pentachlorobenzene	250	7.839	7.839	(1.022)	197894	40.0000	33.2
128 1-Naphthylamine	143	7.968	7.968	(1.039)	423297	40.0000	40.2
129 2-Naphthylamine	143	8.049	8.049	(1.050)	433218	40.0000	38.6
131 5-Nitro-o-toluidine	152	8.258	8.258	(1.077)	119826	40.0000	35.4
136 1,3,5-Trinitrobenzene	75	8.644	8.644	(0.933)	111710	40.0000	40.2
137 Phenacetin	108	8.701	8.701	(0.939)	193377	40.0000	34.2(Q)
138 Diallate	86	8.677	8.677	(0.936)	181352	40.0000	40.7
212 Cis Diallate	86	8.777	8.777	(0.947)	28133	6.00000	6.4
213 Trans Diallate	86	8.677	8.677	(0.936)	181352	34.0000	34.6
140 4-Aminobiphenyl	169	9.058	9.058	(0.977)	399424	40.0000	31.8
141 Pentachloronitrobenzene	237	9.068	9.068	(0.978)	64358	40.0000	31.0(Q)
142 Pronamide	173	9.111	9.111	(0.983)	235859	40.0000	38.7
146 4-Nitroquinoline-1-oxide	101	10.116	10.116	(1.091)	11259	40.0000	51.3
147 Methapyrilene	58	10.192	10.192	(1.100)	243145	40.0000	40.5
148 Isodrin	193	10.415	10.415	(1.124)	90426	40.0000	36.8
149 Aramite	185	10.949	10.949	(1.181)	42660	40.0000	37.1
150 Kepone	272	11.563	11.563	(1.248)	63688	40.0000	39.6
151 p-(Dimethylamino)azobenzene	120	11.130	11.130	(0.913)	208010	40.0000	41.6
152 Chlorobenzilate	251	11.177	11.177	(0.917)	225139	40.0000	37.1
153 3,3'-Dimethylbenzidine	212	11.492	11.492	(0.943)	356809	40.0000	39.8
155 2-Acetylaminofluorene	181	11.777	11.777	(0.966)	210426	40.0000	41.9
157 7,12Dimethylbenz(a)anthracene	256	13.711	13.711	(0.955)	283268	40.0000	35.6
158 3-Methylcholanthrene	268	14.858	14.858	(1.035)	227544	40.0000	40.4(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD8.i/s120409.b/s810404.d
Date : 04-DEC-2009 09:12
Client ID: AP12CVS
Sample Info: IWBN091201-03,2140 PPM1ISVMF11AP12CVS
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20

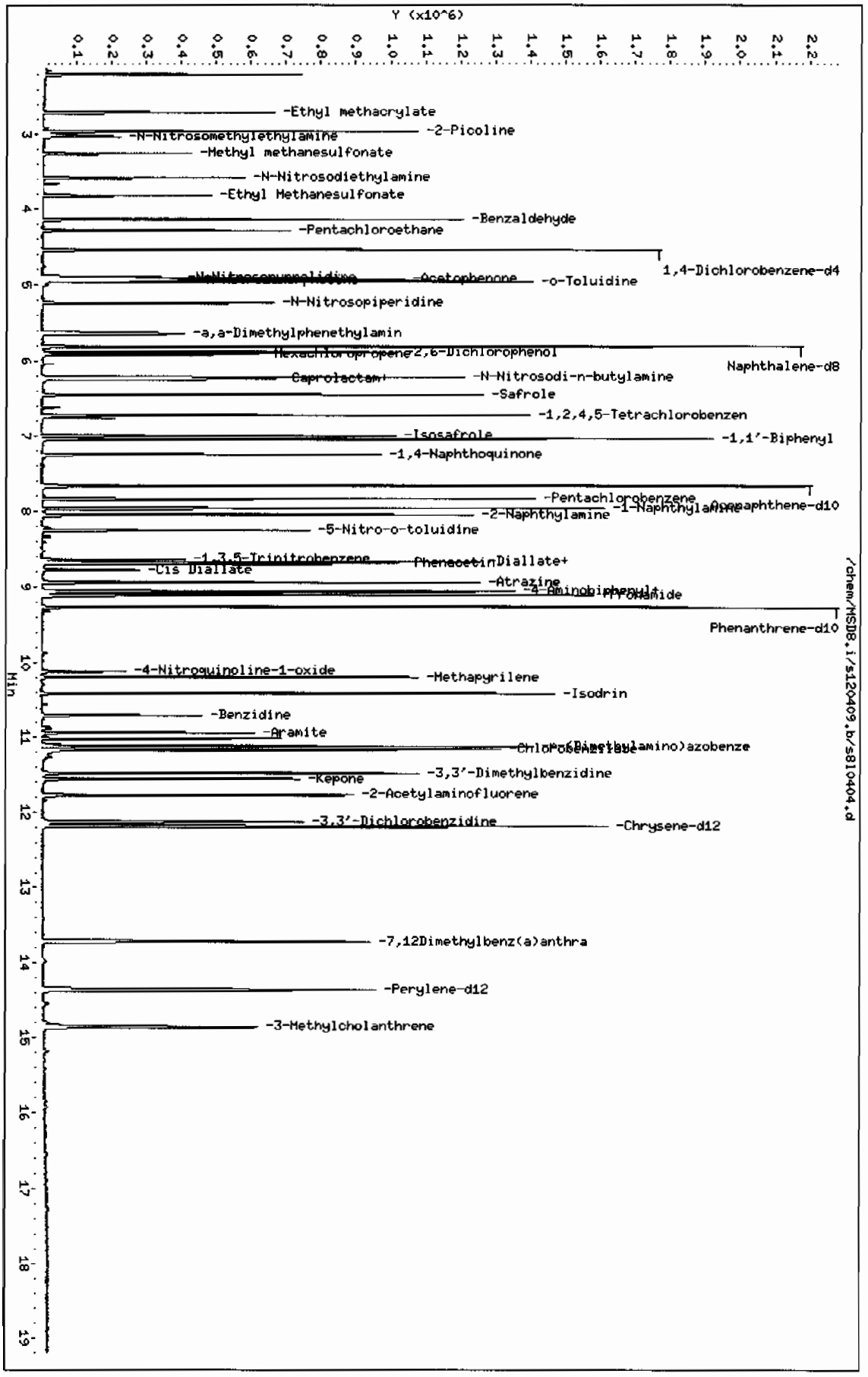

QC Data

Data File: /chem/MSD8.i/s112809.b/s8k2603.d

Page 1

Date : 28-NOV-2009 19:39

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

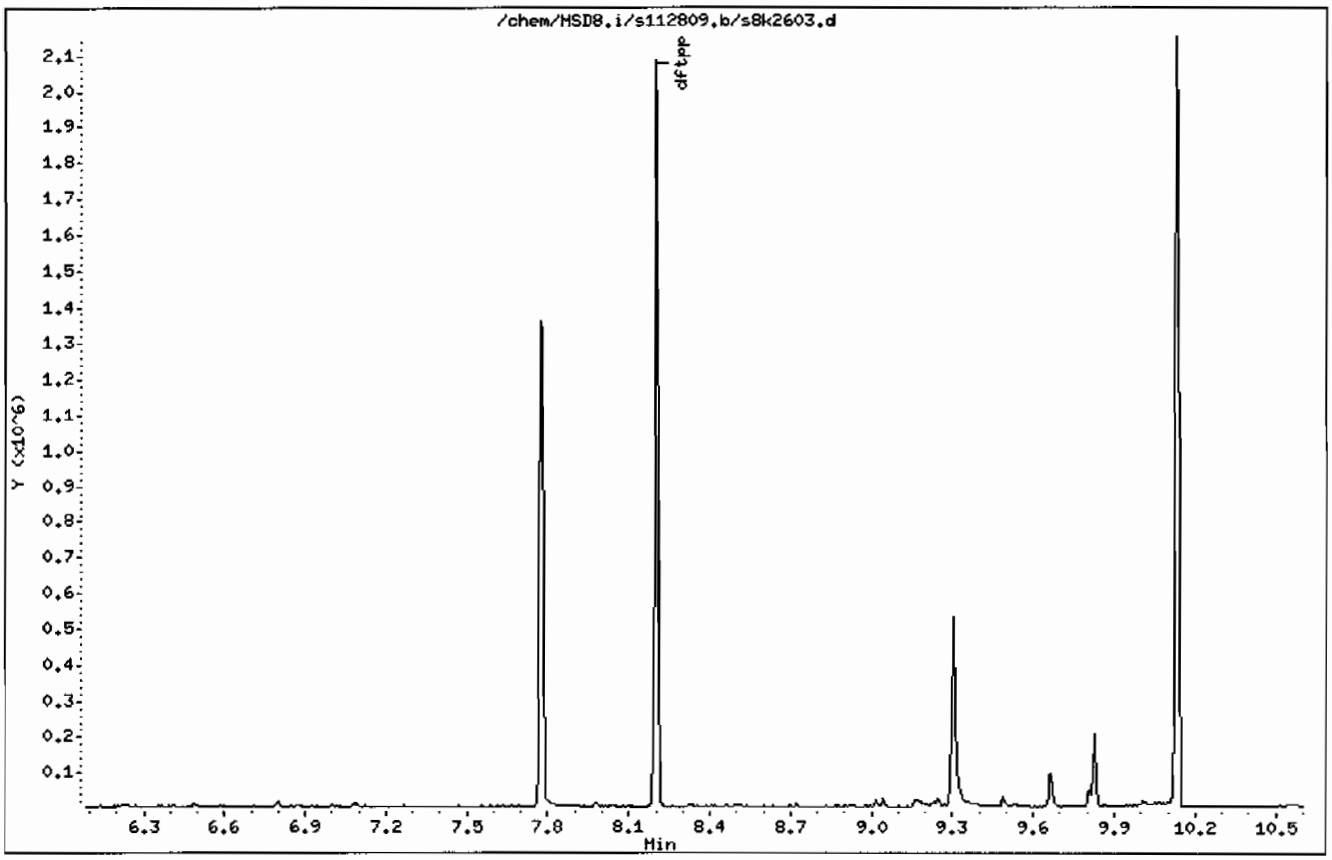

Data File: /chem/MSD8.i/s112809.b/s8k2603.d

Date : 28-NOV-2009 19:39

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

1 dftpp

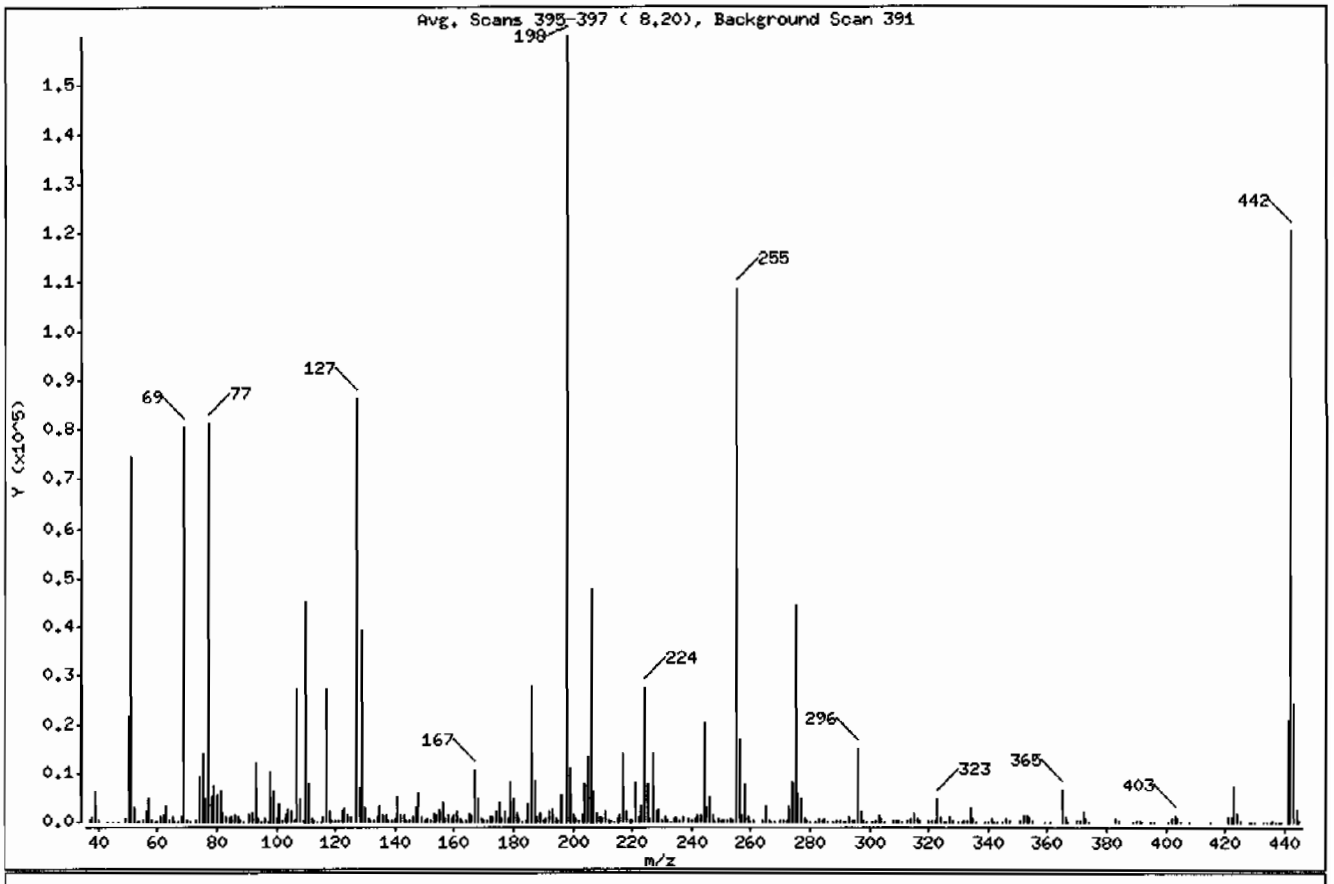

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	46.74
68	Less than 2.00% of mass 69	0.59 (1.18)
69	Mass 69 relative abundance	50.31
70	Less than 2.00% of mass 69	0.21 (0.41)
127	40.00 - 60.00% of mass 198	54.03
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	27.71
365	Greater than 1.00% of mass 198	4.12
441	Present, but less than mass 443	13.18
442	Greater than 40.00% of mass 198	75.43
443	17.00 - 23.00% of mass 442	15.11 (20.04)

Data File: /chem/MSD8.i/s112809.b/s8k2603.d

Date : 28-NOV-2009 19:39

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8k2603.d
Spectrum: Avg. Scans 395-397 (8.20), Background Scan 391
Location of Maximum: 198.00
Number of points: 336

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	386	130.00	2902	216.00	1326	310.00	237
38.00	996	131.00	569	217.00	14110	311.00	95
39.00	6060	132.00	392	218.00	2136	313.00	209
40.00	256	133.00	214	219.00	209	314.00	808
43.00	44	134.00	1097	220.00	328	315.00	1789
45.00	84	135.00	3323	221.00	8170	316.00	906
47.00	166	136.00	1301	222.00	1036	317.00	246
49.00	647	137.00	1630	223.00	3386	320.00	279
50.00	21848	138.00	328	224.00	27664	321.00	344
51.00	74680	139.00	269	225.00	7605	322.00	214
52.00	3046	140.00	588	226.00	722	323.00	4716
53.00	124	141.00	5099	227.00	13788	324.00	1122
54.00	45	142.00	1362	228.00	2213	325.00	144
55.00	522	143.00	1447	229.00	2536	326.00	50
56.00	2282	144.00	188	230.00	301	327.00	1082
57.00	4617	145.00	204	231.00	1161	328.00	491
58.00	282	146.00	1237	232.00	361	330.00	54
59.00	41	147.00	2964	233.00	115	331.00	48
60.00	34	148.00	5828	234.00	678	332.00	412
61.00	1023	149.00	1178	235.00	1219	333.00	519
62.00	1465	150.00	452	236.00	325	334.00	3025
63.00	3248	151.00	700	237.00	1237	335.00	702
64.00	531	152.00	187	239.00	579	336.00	127
65.00	1227	153.00	1885	240.00	331	339.00	60
66.00	45	154.00	1517	241.00	756	340.00	48
67.00	116	155.00	2621	242.00	1385	341.00	639
68.00	946	156.00	4097	243.00	1597	342.00	123
69.00	80392	157.00	635	244.00	20360	343.00	70
70.00	330	158.00	1335	245.00	3068	345.00	93
71.00	34	159.00	871	246.00	4959	346.00	702
73.00	488	160.00	1496	247.00	1379	347.00	245
74.00	9149	161.00	2174	248.00	180	351.00	196
75.00	13952	162.00	704	249.00	784	352.00	1511
76.00	4679	163.00	159	250.00	281	353.00	1339
77.00	81016	164.00	275	251.00	335	354.00	1282

Data File: /chem/MSD8.i/s112809.b/s8k2603.d

Date : 28-NOV-2009 19:39

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8k2603.d
Spectrum: Avg. Scans 395-397 (8.20), Background Scan 391
Location of Maximum: 198.00
Number of points: 336

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	5245	165.00	1819	252.00	308	355.00	378
79.00	7434	166.00	1546	253.00	721	359.00	104
80.00	5400	167.00	10482	254.00	246	361.00	39
81.00	6398	168.00	4798	255.00	108624	365.00	6580
82.00	1751	169.00	906	256.00	16712	366.00	1159
83.00	1279	170.00	450	257.00	1530	367.00	48
84.00	593	171.00	399	258.00	7801	370.00	201
85.00	991	172.00	1004	259.00	1070	371.00	424
86.00	1495	173.00	1228	260.00	162	372.00	2027
87.00	938	174.00	2023	261.00	255	373.00	632
88.00	429	175.00	3974	264.00	297	374.00	70
89.00	124	176.00	898	265.00	3283	383.00	656
91.00	1480	177.00	2098	266.00	510	384.00	193
92.00	1788	178.00	738	267.00	77	389.00	46
93.00	12139	179.00	7991	268.00	154	390.00	233
94.00	581	180.00	4878	270.00	285	391.00	268
95.00	89	181.00	1865	271.00	251	392.00	60
96.00	666	182.00	554	272.00	414	395.00	102
97.00	182	183.00	139	273.00	3221	396.00	37
98.00	10178	184.00	522	274.00	8142	401.00	114
99.00	6164	185.00	3629	275.00	44272	402.00	828
100.00	648	186.00	27888	276.00	5937	403.00	1505
101.00	3714	187.00	8359	277.00	4840	404.00	651
102.00	220	188.00	1089	278.00	717	405.00	76
103.00	1486	189.00	1662	279.00	242	408.00	74
104.00	2396	190.00	363	280.00	35	415.00	110
105.00	2302	191.00	778	282.00	106	421.00	926
106.00	211	192.00	2144	283.00	568	422.00	1175
107.00	27096	193.00	2400	284.00	445	423.00	7351
108.00	4627	194.00	823	285.00	689	424.00	1740
109.00	540	195.00	366	286.00	138	425.00	258
110.00	45048	196.00	5504	288.00	59	428.00	44
111.00	7832	198.00	159744	289.00	346	429.00	160
112.00	908	199.00	11090	290.00	346	430.00	47
113.00	261	200.00	1303	291.00	99	433.00	62

Data File: /chem/MSD8.i/s112809.b/s8k2603.d

Date : 28-NOV-2009 19:39

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8k2603.d

Spectrum: Avg. Scans 395-397 (8.20), Background Scan 391

Location of Maximum: 198.00

Number of points: 336

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	63	201.00	667	292.00	158	434.00	125
115.00	34	202.00	278	293.00	1051	435.00	35
116.00	1157	203.00	1468	294.00	357	436.00	184
117.00	27304	204.00	7724	295.00	267	437.00	99
118.00	2130	205.00	13396	296.00	15029	438.00	47
119.00	197	206.00	47656	297.00	2030	439.00	159
120.00	484	207.00	6297	298.00	197	441.00	21056
121.00	241	208.00	1870	299.00	50	442.00	120528
122.00	2050	209.00	990	301.00	169	443.00	24144
123.00	3003	210.00	616	302.00	475	444.00	2715
124.00	1572	211.00	2066	303.00	1404	445.00	243
125.00	1127	212.00	386	304.00	560		
127.00	86336	213.00	210	305.00	50		
128.00	6800	214.00	85	308.00	269		
129.00	39288	215.00	787	309.00	202		

Data File: /chem/MSD8.i/s112809.b/s8k2624.d

Page 1

Date : 29-NOV-2009 11:33

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

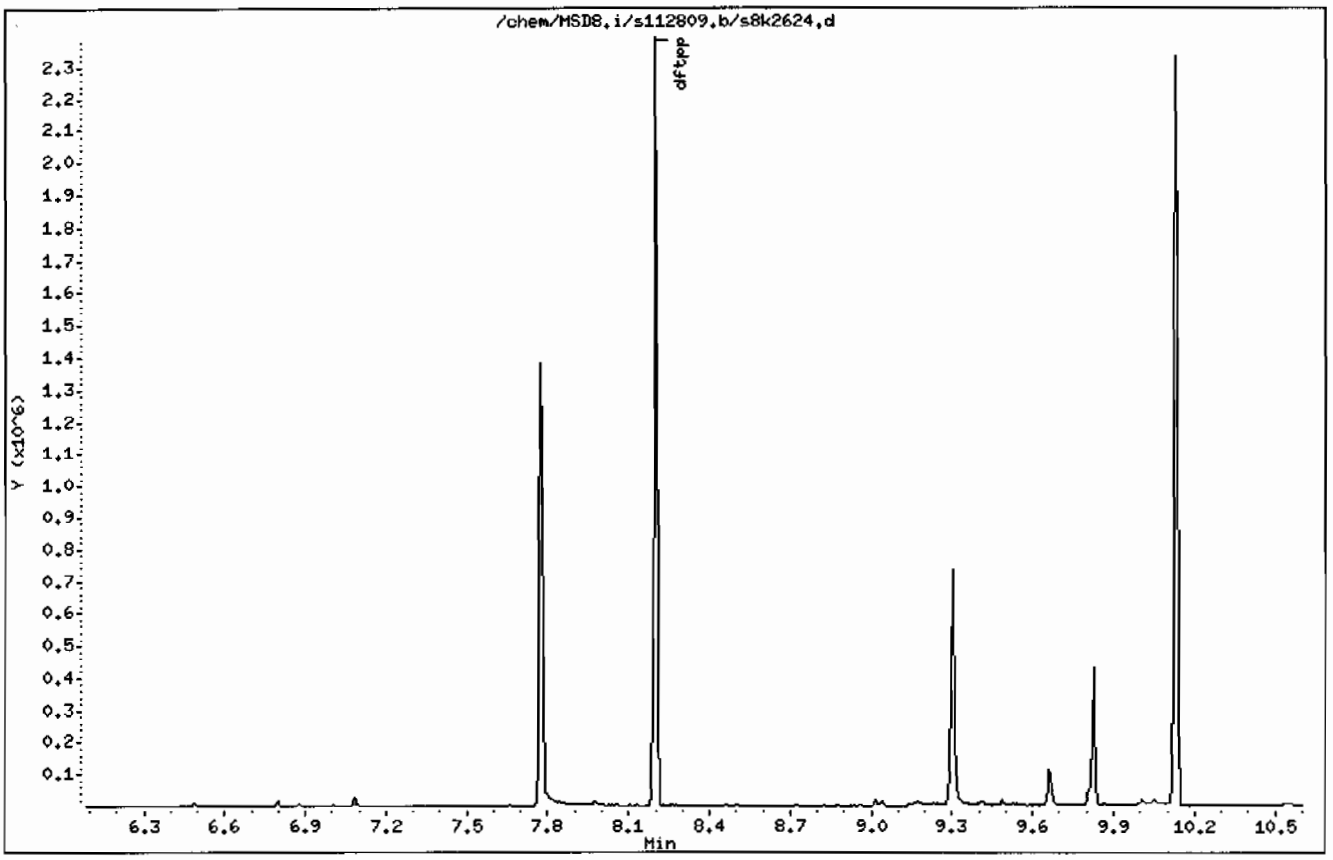

Data File: /chem/MSD8.i/s112809.b/s8k2624.d

Date : 29-NOV-2009 11:33

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

1 dftpp

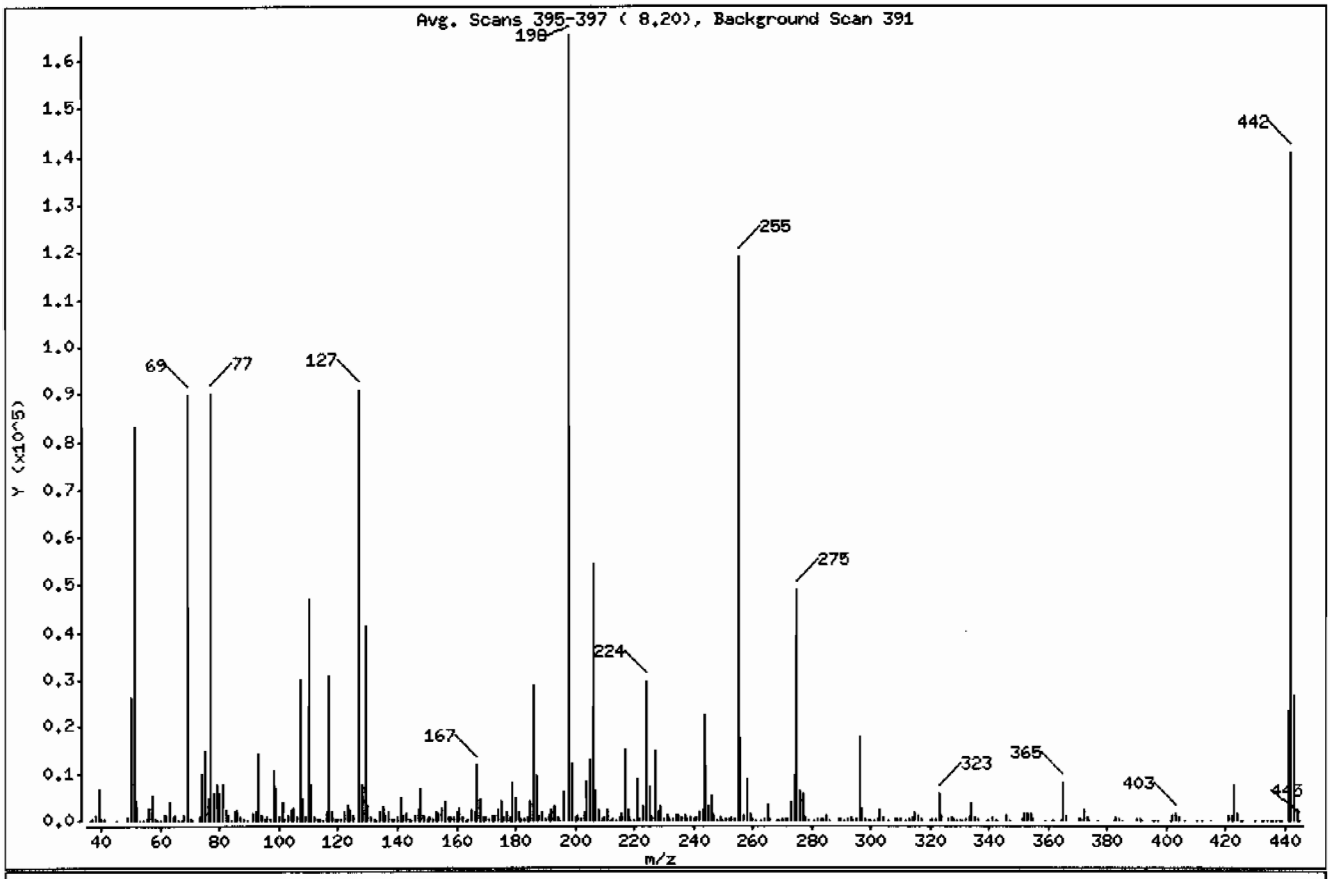

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	50.36
68	Less than 2.00% of mass 69	0.62 (1.15)
69	Mass 69 relative abundance	54.22
70	Less than 2.00% of mass 69	0.32 (0.59)
127	40.00 - 60.00% of mass 198	54.98
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.43
275	10.00 - 30.00% of mass 198	29.59
365	Greater than 1.00% of mass 198	4.91
441	Present, but less than mass 443	14.04
442	Greater than 40.00% of mass 198	85.10
443	17.00 - 23.00% of mass 442	16.16 (18.99)

Data File: /chem/MSD8.i/s112809.b/s8k2624.d

Date : 29-NOV-2009 11:33

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVHF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8k2624.d
Spectrum: Avg. Scans 395-397 (8.20), Background Scan 391
Location of Maximum: 198.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	109	131.00	663	218.00	2159	312.00	59
37.00	382	132.00	330	219.00	137	313.00	200
38.00	1194	133.00	140	220.00	129	314.00	792
39.00	6804	134.00	1784	221.00	8602	315.00	1866
40.00	334	135.00	3205	222.00	479	316.00	1265
41.00	389	136.00	1321	223.00	3022	317.00	257
45.00	136	137.00	1869	224.00	29600	320.00	176
49.00	827	138.00	376	225.00	7186	321.00	530
50.00	26384	139.00	211	226.00	903	322.00	352
51.00	83320	140.00	739	227.00	14760	323.00	5528
52.00	4241	141.00	4955	228.00	2064	324.00	1018
53.00	151	142.00	1325	229.00	3029	326.00	254
54.00	43	143.00	1439	230.00	378	327.00	792
55.00	556	144.00	445	231.00	1207	328.00	308
56.00	2508	145.00	162	232.00	201	329.00	98
57.00	5186	146.00	1005	233.00	287	330.00	80
58.00	330	147.00	2343	234.00	1095	331.00	51
59.00	56	148.00	6660	235.00	1032	332.00	423
60.00	47	149.00	1129	236.00	898	333.00	623
61.00	1120	150.00	463	237.00	1142	334.00	3649
62.00	1160	151.00	809	238.00	351	335.00	847
63.00	3754	152.00	278	239.00	596	336.00	203
64.00	588	153.00	2045	240.00	493	339.00	38
65.00	1327	154.00	1698	241.00	790	340.00	132
66.00	58	155.00	2809	242.00	1787	341.00	649
67.00	112	156.00	4289	243.00	2178	342.00	47
68.00	1030	157.00	734	244.00	22256	343.00	102
69.00	89704	158.00	802	245.00	3002	346.00	1154
70.00	531	159.00	695	246.00	5217	347.00	148
71.00	33	160.00	1916	247.00	1082	351.00	209
73.00	888	161.00	2694	248.00	125	352.00	1450
74.00	9883	162.00	831	249.00	796	353.00	1354
75.00	14860	163.00	184	250.00	109	354.00	1410
76.00	4525	164.00	272	251.00	355	355.00	239
77.00	90240	165.00	2105	252.00	291	359.00	119

Data File: /chem/MSD8.i/s112809.b/s8k2624.d

Date : 29-NOV-2009 11:33

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nag1

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s8k2624.d
Spectrum: Avg. Scans 395-397 (8.20), Background Scan 391
Location of Maximum: 198.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	5792	166.00	1819	253.00	599	361.00	49
79.00	7453	167.00	11752	254.00	291	362.00	51
80.00	5598	168.00	4733	255.00	118896	364.00	71
81.00	7472	169.00	929	256.00	17400	365.00	8121
82.00	2099	170.00	584	257.00	1271	366.00	1143
83.00	1139	171.00	567	258.00	8638	370.00	291
84.00	149	172.00	1002	259.00	1394	371.00	519
85.00	1887	173.00	1316	260.00	305	372.00	2463
86.00	2447	174.00	2164	261.00	170	373.00	938
87.00	896	175.00	4054	263.00	58	374.00	88
88.00	381	176.00	773	264.00	300	377.00	62
89.00	176	177.00	1974	265.00	3416	382.00	35
91.00	1710	178.00	666	266.00	459	383.00	942
92.00	1934	179.00	8136	268.00	37	384.00	275
93.00	13882	180.00	5038	269.00	127	385.00	34
94.00	1091	181.00	2082	270.00	235	390.00	427
95.00	232	182.00	361	271.00	236	391.00	213
96.00	720	183.00	400	272.00	447	392.00	165
97.00	205	184.00	847	273.00	3774	395.00	49
98.00	10625	185.00	4327	274.00	9415	396.00	103
99.00	6767	186.00	29080	275.00	48952	397.00	39
100.00	661	187.00	9358	276.00	6462	401.00	117
101.00	3622	188.00	995	277.00	5745	402.00	1168
102.00	231	189.00	1918	278.00	893	403.00	1649
103.00	1080	190.00	431	279.00	182	404.00	697
104.00	2358	191.00	983	281.00	37	406.00	66
105.00	2571	192.00	2320	282.00	304	410.00	45
106.00	601	193.00	3002	283.00	493	412.00	34
107.00	30192	194.00	711	284.00	468	415.00	57
108.00	4659	195.00	122	285.00	1107	421.00	1238
109.00	707	196.00	5985	286.00	118	422.00	1307
110.00	47288	198.00	165376	289.00	264	423.00	7663
111.00	7668	199.00	12290	290.00	224	424.00	1472
112.00	832	200.00	935	291.00	103	425.00	92
113.00	400	201.00	998	292.00	325	426.00	47

Date : 29-NOV-2009 11:33

Client ID: DFTPP Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 Operator: nag1

Column phase: J & W DB-5MS Column diameter: 0.20

Data File: s8k2624.d
Spectrum: Avg. Scans 395-397 (8.20), Background Scan 391
Location of Maximum: 198.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	213	202.00	284	293.00	897	430.00	56
115.00	43	203.00	1742	294.00	169	432.00	57
116.00	1975	204.00	8257	295.00	270	433.00	95
117.00	30656	205.00	12999	296.00	17840	434.00	171
118.00	1931	206.00	54480	297.00	2481	435.00	110
119.00	306	207.00	6558	298.00	214	436.00	87
120.00	208	208.00	2284	299.00	55	437.00	126
121.00	242	209.00	549	300.00	52	438.00	70
122.00	1772	210.00	938	301.00	184	439.00	46
123.00	3430	211.00	2330	302.00	361	441.00	23224
124.00	2093	212.00	50	303.00	2296	442.00	140736
125.00	1329	213.00	255	304.00	673	443.00	26728
127.00	90960	214.00	83	306.00	38	444.00	2255
128.00	7705	215.00	724	308.00	330	445.00	126
129.00	41368	216.00	1648	309.00	198		
130.00	3427	217.00	15396	310.00	284		

Data File: /chem/MSD8.i/s120309.b/s810305.d

Page 1

Date : 03-DEC-2009 11:17

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

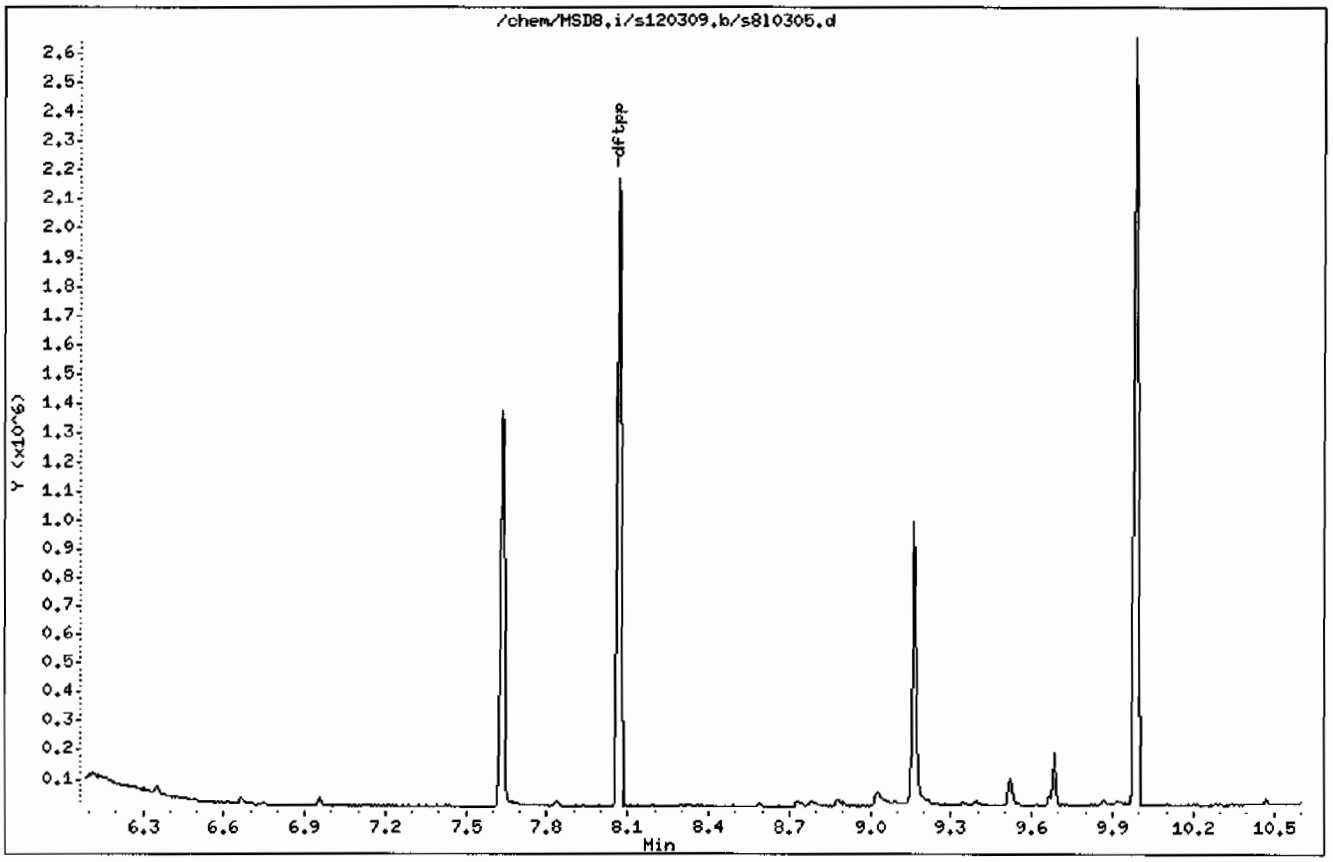

Data File: /chem/MSD8.i/s120309.b/s810305.d

Date : 03-DEC-2009 11:17

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

1 dftpp

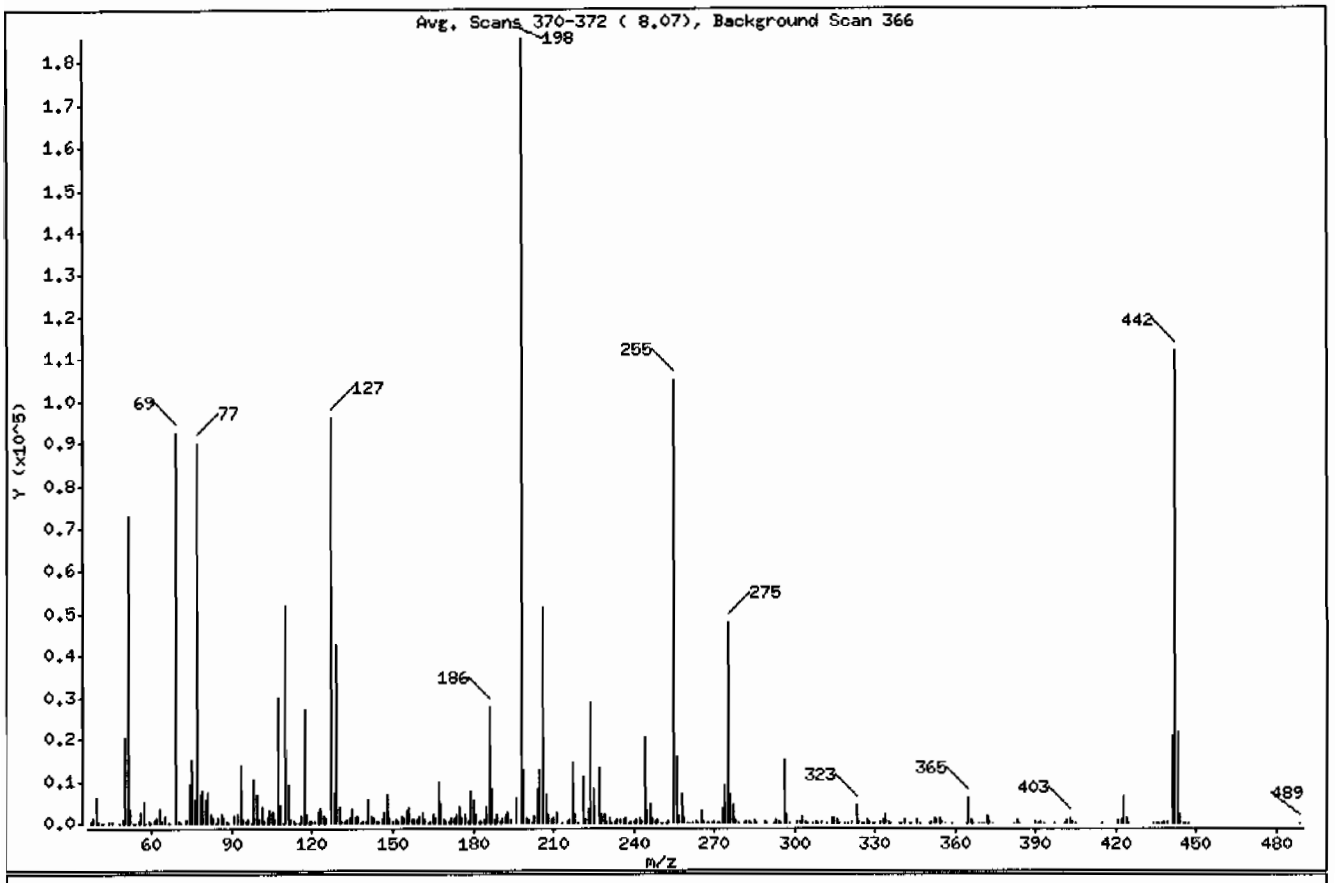

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	39.42
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	49.83
70	Less than 2.00% of mass 69	0.26 (0.53)
127	40.00 - 60.00% of mass 198	51.73
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	25.71
365	Greater than 1.00% of mass 198	3.17
441	Present, but less than mass 443	11.37
442	Greater than 40.00% of mass 198	60.13
443	17.00 - 23.00% of mass 442	11.68 (19.43)

Data File: /chem/MSD8.i/s120309.b/s810305.d

Date : 03-DEC-2009 11:17

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s810305.d
Spectrum: Avg. Scans 370-372 (8.07), Background Scan 366
Location of Maximum: 198.00
Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	265	128.00	7389	216.00	870	310.00	256
38.00	1126	129.00	42792	217.00	14345	312.00	111
39.00	5857	130.00	3705	218.00	1945	314.00	1115
40.00	400	131.00	600	219.00	106	315.00	1193
41.00	74	132.00	600	221.00	10889	316.00	690
42.00	59	133.00	692	222.00	1036	317.00	175
44.00	422	134.00	1222	223.00	3589	319.00	108
45.00	242	135.00	3558	224.00	29144	320.00	133
48.00	125	136.00	1309	225.00	7967	321.00	434
49.00	816	137.00	1776	227.00	13268	323.00	4175
50.00	20488	138.00	208	228.00	2140	324.00	475
51.00	73192	139.00	390	229.00	2202	325.00	37
52.00	3506	140.00	614	230.00	420	326.00	46
53.00	133	141.00	5522	231.00	1230	327.00	929
54.00	49	142.00	1814	232.00	174	328.00	449
55.00	537	143.00	1264	233.00	496	329.00	103
56.00	2623	144.00	518	234.00	926	330.00	53
57.00	5175	145.00	263	235.00	1020	332.00	410
58.00	142	146.00	990	236.00	669	333.00	707
59.00	264	147.00	2748	237.00	1236	334.00	2340
60.00	46	148.00	6655	238.00	101	335.00	541
61.00	881	149.00	1263	239.00	600	336.00	38
62.00	1072	150.00	272	240.00	397	339.00	37
63.00	3566	151.00	889	241.00	704	340.00	89
64.00	624	152.00	586	242.00	1246	341.00	656
65.00	1678	153.00	1884	243.00	289	343.00	52
66.00	194	154.00	1183	244.00	20448	344.00	39
67.00	43	155.00	3015	245.00	3072	346.00	857
69.00	92520	156.00	4015	246.00	4666	347.00	161
70.00	492	157.00	1052	247.00	1265	350.00	107
71.00	128	158.00	1053	248.00	311	351.00	221
73.00	759	159.00	853	249.00	869	352.00	1297
74.00	9523	160.00	1700	250.00	91	353.00	854
75.00	14741	161.00	2520	251.00	191	354.00	1189
76.00	5409	162.00	713	252.00	191	355.00	302

Data File: /chem/MSD8.i/s120309.b/s810305.d

Date : 03-DEC-2009 11:17

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nag1

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s810305.d
Spectrum: Avg. Scans 370-372 (8.07), Background Scan 366
Location of Maximum: 198.00
Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	90104	163.00	204	253.00	622	356.00	37
78.00	6732	164.00	483	255.00	105056	359.00	122
79.00	7830	165.00	2309	256.00	15693	364.00	103
80.00	5572	166.00	1451	257.00	1629	365.00	5888
81.00	7366	167.00	10026	258.00	6955	366.00	918
82.00	2000	168.00	4516	259.00	1270	367.00	39
83.00	1492	169.00	947	260.00	174	369.00	47
84.00	118	170.00	347	261.00	153	370.00	118
85.00	1273	171.00	460	262.00	36	371.00	75
86.00	2008	172.00	1110	263.00	284	372.00	1889
87.00	1102	173.00	1477	264.00	132	373.00	516
88.00	341	174.00	2256	265.00	2944	374.00	50
89.00	187	175.00	3668	266.00	322	382.00	82
91.00	1720	176.00	1305	267.00	99	383.00	646
92.00	2196	177.00	2328	268.00	92	384.00	138
93.00	13453	178.00	532	269.00	112	390.00	280
94.00	685	179.00	7635	270.00	220	391.00	150
95.00	260	180.00	5508	271.00	153	392.00	246
96.00	714	181.00	2186	272.00	82	393.00	34
97.00	68	182.00	507	273.00	3548	397.00	36
98.00	10047	183.00	261	274.00	9174	401.00	207
99.00	6703	184.00	828	275.00	47736	402.00	719
100.00	869	185.00	3875	276.00	6707	403.00	1069
101.00	3635	186.00	27760	277.00	4422	404.00	429
102.00	274	187.00	7984	278.00	840	405.00	47
103.00	1281	188.00	805	279.00	138	415.00	55
104.00	3013	189.00	2340	281.00	45	421.00	931
105.00	2774	190.00	343	282.00	329	422.00	974
106.00	869	191.00	1384	283.00	422	423.00	6373
107.00	29920	192.00	2241	284.00	155	424.00	1099
108.00	4191	193.00	2685	285.00	898	425.00	180
109.00	45	194.00	810	286.00	46	434.00	44
110.00	52184	196.00	5959	289.00	275	435.00	38
111.00	8777	198.00	185664	290.00	149	436.00	68
112.00	988	199.00	12889	292.00	132	437.00	52

Data File: /chem/MSD8.i/s120309.b/s810305.d

Date : 03-DEC-2009 11:17

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s810305.d

Spectrum: Avg. Scans 370-372 (8.07), Background Scan 366

Location of Maximum: 198.00

Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	295	200.00	1083	293.00	1005	438.00	255
114.00	102	201.00	985	294.00	325	439.00	389
115.00	207	202.00	144	295.00	150	441.00	21104
116.00	1678	203.00	1791	296.00	14805	442.00	111640
117.00	27208	204.00	7922	297.00	2003	443.00	21688
118.00	1962	205.00	12863	298.00	72	444.00	2180
119.00	337	206.00	51440	301.00	214	445.00	116
120.00	336	207.00	6805	302.00	244	446.00	56
121.00	272	208.00	2096	303.00	1737	447.00	39
122.00	2412	209.00	743	304.00	613	489.00	41
123.00	3402	210.00	1162	305.00	39		
124.00	1673	211.00	2419	307.00	74		
125.00	1258	213.00	166	308.00	280		
127.00	96056	215.00	608	309.00	41		

Data File: /chem/MSD8.i/s120409.b/s810402.d

Page 1

Date : 04-DEC-2009 08:24

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

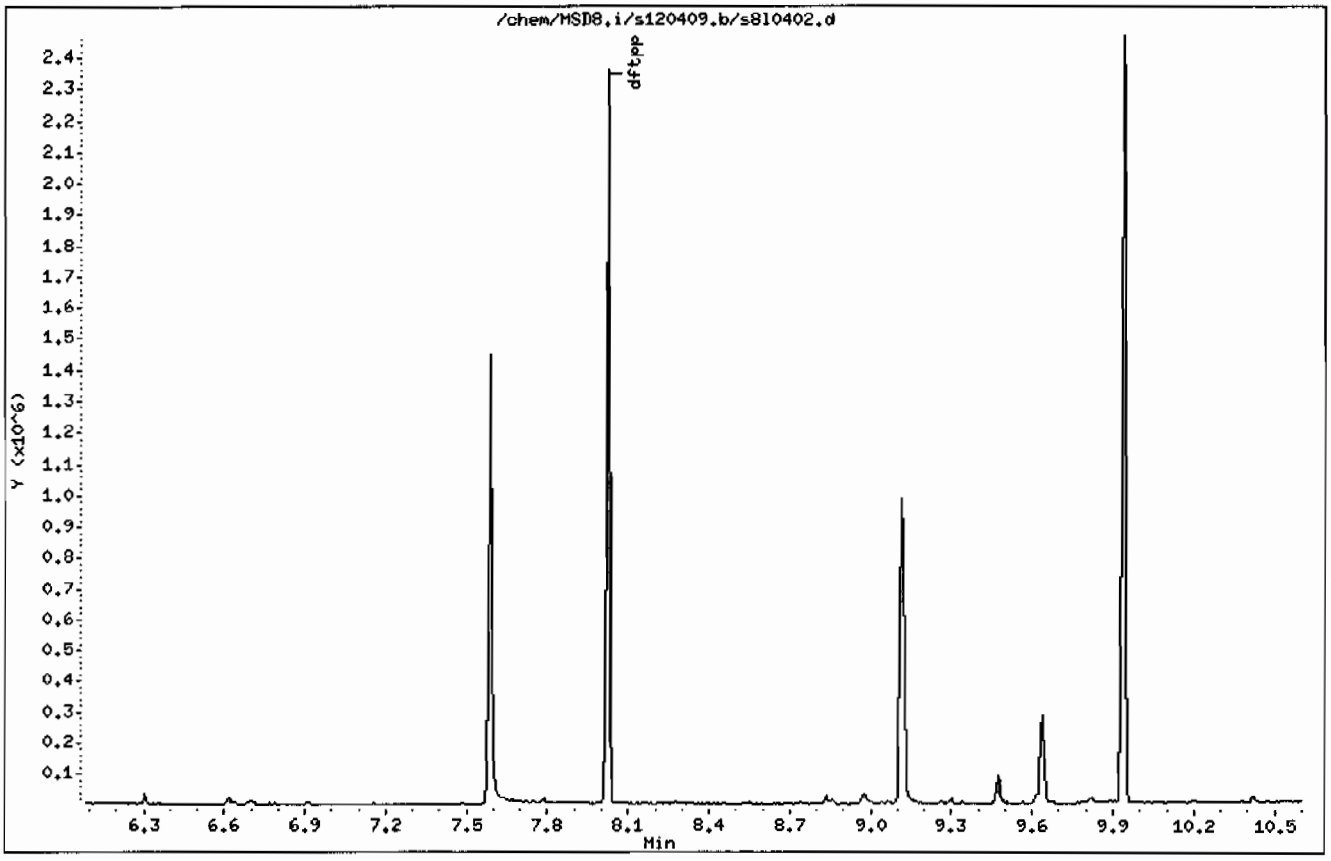

Data File: /chem/MSD8.i/s120409.b/s810402.d

Date : 04-DEC-2009 08:24

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

1 dftpp

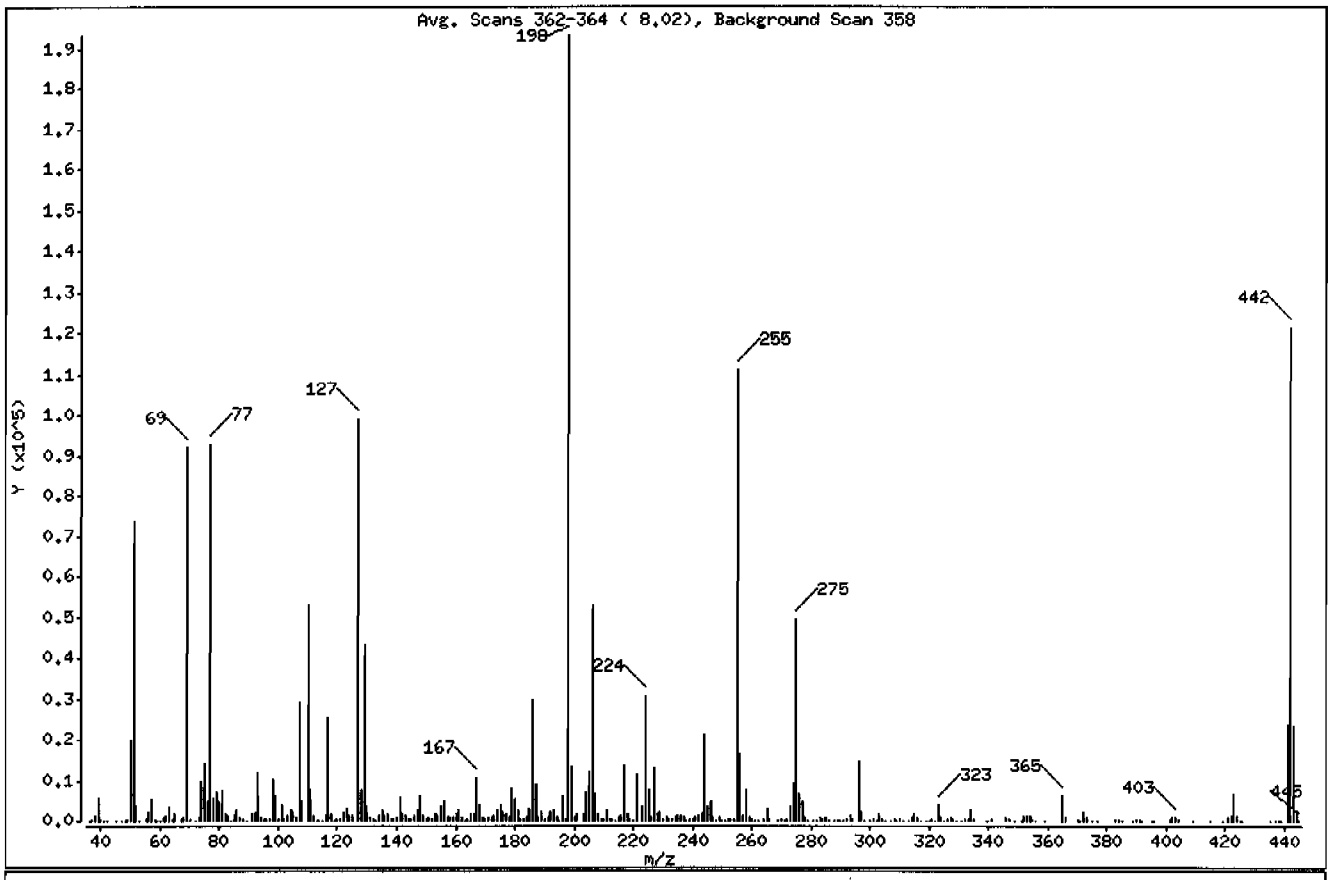

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.10
68	Less than 2.00% of mass 69	0.37 (0.77)
69	Mass 69 relative abundance	47.64
70	Less than 2.00% of mass 69	0.20 (0.43)
127	40.00 - 60.00% of mass 198	51.17
197	Less than 1.00% of mass 198	0.32
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	25.41
365	Greater than 1.00% of mass 198	3.20
441	Present, but less than mass 443	12.13
442	Greater than 40.00% of mass 198	62.85
443	17.00 - 23.00% of mass 442	12.28 (19.54)

Data File: /chem/MSD8.i/s120409.b/s810402.d

Date : 04-DEC-2009 08:24

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s810402.d

Spectrum: Avg. Scans 362-364 (8.02), Background Scan 358

Location of Maximum: 198.00

Number of points: 330

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	41	128.00	7344	212.00	228	303.00	1802
37.00	428	129.00	43168	213.00	320	304.00	368
38.00	1188	130.00	3625	214.00	34	305.00	127
39.00	5781	131.00	983	215.00	694	307.00	42
40.00	316	132.00	368	216.00	1514	308.00	255
41.00	193	133.00	201	217.00	13636	309.00	188
42.00	43	134.00	1389	218.00	1578	310.00	265
45.00	169	135.00	2887	219.00	245	311.00	86
47.00	49	136.00	1455	220.00	65	313.00	171
48.00	34	137.00	1780	221.00	11455	314.00	840
49.00	565	138.00	626	223.00	3574	315.00	1640
50.00	20160	139.00	278	224.00	30488	316.00	1049
51.00	73752	140.00	705	225.00	7497	317.00	154
52.00	4108	141.00	5663	226.00	775	319.00	52
53.00	179	142.00	1690	227.00	13015	320.00	220
55.00	467	143.00	1434	228.00	1702	321.00	447
56.00	2364	144.00	332	229.00	2374	322.00	219
57.00	5195	145.00	358	230.00	310	323.00	3997
58.00	299	146.00	1146	231.00	962	324.00	925
59.00	59	147.00	2716	232.00	273	325.00	104
60.00	125	148.00	6379	233.00	249	326.00	243
61.00	1079	149.00	1356	234.00	839	327.00	1007
62.00	1291	150.00	325	235.00	1135	328.00	251
63.00	3701	151.00	812	236.00	1152	329.00	53
64.00	558	152.00	437	237.00	689	331.00	47
65.00	1901	153.00	1584	238.00	186	332.00	262
67.00	285	154.00	1182	239.00	505	333.00	660
68.00	709	155.00	3451	240.00	509	334.00	2884
69.00	92224	156.00	4801	241.00	732	335.00	649
70.00	393	157.00	928	242.00	1454	339.00	102
72.00	79	158.00	1007	243.00	1980	340.00	45
73.00	915	159.00	794	244.00	21528	341.00	531
74.00	9588	160.00	1640	245.00	3386	346.00	838
75.00	14369	161.00	2566	246.00	4783	347.00	270
76.00	5041	162.00	1022	247.00	948	349.00	65

Data File: /chem/MSD8.i/s120409.b/s810402.d

Date : 04-DEC-2009 08:24

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVHF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nag1

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s810402.d
Spectrum: Avg. Scans 362-364 (8.02), Background Scan 358
Location of Maximum: 198.00
Number of points: 330

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	93064	163.00	115	248.00	40	351.00	83
78.00	5726	164.00	370	249.00	803	352.00	1382
79.00	7082	165.00	1992	250.00	206	353.00	1171
80.00	5105	166.00	1639	251.00	170	354.00	1360
81.00	7378	167.00	10459	252.00	273	355.00	297
82.00	1840	168.00	4222	253.00	666	356.00	53
83.00	1304	169.00	757	254.00	230	359.00	105
84.00	139	170.00	402	255.00	111112	365.00	6189
85.00	1277	171.00	680	256.00	16480	366.00	794
86.00	2564	172.00	754	257.00	1438	370.00	277
87.00	972	173.00	1314	258.00	7348	371.00	170
88.00	489	174.00	2458	259.00	1080	372.00	2341
89.00	135	175.00	4171	260.00	225	373.00	828
91.00	1859	176.00	2036	261.00	183	375.00	43
92.00	2203	177.00	1954	262.00	34	377.00	55
93.00	11925	178.00	744	264.00	241	383.00	662
94.00	893	179.00	8013	265.00	3024	384.00	245
95.00	225	180.00	5224	266.00	611	385.00	87
96.00	413	181.00	2752	269.00	72	389.00	53
97.00	269	182.00	497	270.00	232	390.00	370
98.00	10074	183.00	337	271.00	198	391.00	249
99.00	6163	184.00	691	272.00	427	392.00	161
100.00	630	185.00	3009	273.00	3553	395.00	36
101.00	3972	186.00	29792	274.00	9486	396.00	33
102.00	278	187.00	9064	275.00	49192	401.00	309
103.00	1354	188.00	993	276.00	6766	402.00	849
104.00	2777	189.00	2017	277.00	4883	403.00	1026
105.00	2394	190.00	480	278.00	765	404.00	504
106.00	843	191.00	972	279.00	156	409.00	37
107.00	29376	192.00	2354	281.00	161	415.00	33
108.00	4802	193.00	2606	282.00	173	419.00	37
110.00	53064	194.00	741	283.00	670	421.00	1035
111.00	7933	195.00	195	284.00	283	422.00	1199
112.00	1232	196.00	6299	285.00	835	423.00	6725
113.00	181	197.00	627	286.00	177	424.00	1192

Data File: /chem/MSD8.i/s120409.b/s810402.d

Date : 04-DEC-2009 08:24

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s810402.d
Spectrum: Avg. Scans 362-364 (8.02), Background Scan 358
Location of Maximum: 198.00
Number of points: 330

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	87	198.00	193536	288.00	109	425.00	131
115.00	149	199.00	13441	289.00	221	426.00	36
116.00	1557	200.00	1036	290.00	124	435.00	50
117.00	25432	201.00	1604	291.00	51	437.00	73
118.00	1838	203.00	1695	292.00	242	438.00	59
119.00	128	204.00	7226	293.00	1126	439.00	211
120.00	414	205.00	12179	294.00	368	441.00	23480
121.00	244	206.00	52976	296.00	14842	442.00	121672
122.00	2077	207.00	6864	297.00	2027	443.00	23768
123.00	3281	208.00	1959	298.00	165	444.00	2147
124.00	1317	209.00	569	300.00	34	445.00	159
125.00	1216	210.00	569	301.00	336		
127.00	99056	211.00	2535	302.00	155		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543			**Matrix:**	SOIL
Lab Sample ID:	1201978974				
Client Sample:	QC for batch 925632	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 925632	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 13:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s8l0309-1.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-543			**Matrix:**	SOIL
Lab Sample ID:	1201978974				
Client Sample:	QC for batch 925632	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 925632	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925637	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	12/03/2009 13:09	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:41	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s8l0309-1.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.2	253	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810309-1.d
Lab Smp Id: 1201978974 Client Smp ID: SBLK01
Inj Date : 03-DEC-2009 13:09
Operator : nagl Inst ID: MSD8.i
Smp Info : |1201978974|925637|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.582	4.587	(1.000)	245648	40.0000	
* 29 Naphthalene-d8	136	5.849	5.854	(1.000)	893535	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.720	(1.000)	525269	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	962963	40.0000	
* 91 Chrysene-d12	240	12.258	12.268	(1.000)	908655	40.0000	
* 98 Perylene-d12	264	14.454	14.458	(1.000)	735546	40.0000	
$ 3 2-Fluorophenol	112	3.434	3.420	(0.750)	496141	84.5488	2820
$ 5 Phenol-d5	99	4.196	4.201	(0.916)	565110	76.7166	2560
$ 20 Nitrobenzene-d5	82	5.111	5.120	(0.874)	285959	44.1020	1470
$ 39 2-Fluorobiphenyl	172	6.977	6.982	(0.904)	576769	39.7384	1320
$ 60 2,4,6-Tribromophenol	329	8.563	8.563	(1.110)	148517	61.2127	2040
$ 81 p-Terphenyl-d14	244	11.034	11.030	(0.900)	702559	41.5555	1380

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810309-1.d
Lab Smp Id: 1201978974 Client Smp ID: SBLK01
Inj Date : 03-DEC-2009 13:09
Operator : nagl Inst ID: MSD8.i
Smp Info : |1201978974|925637|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.582	1475834	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.201	279673	7.58005786	253	0		0	10

Data File: /chem/MSD8.i/s120309.b/s810309-1.d

Page 1

Date : 03-DEC-2009 13:09

Client ID: SBLK01

Instrument: MSD8.i

Sample Info: |1201978974|925637|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

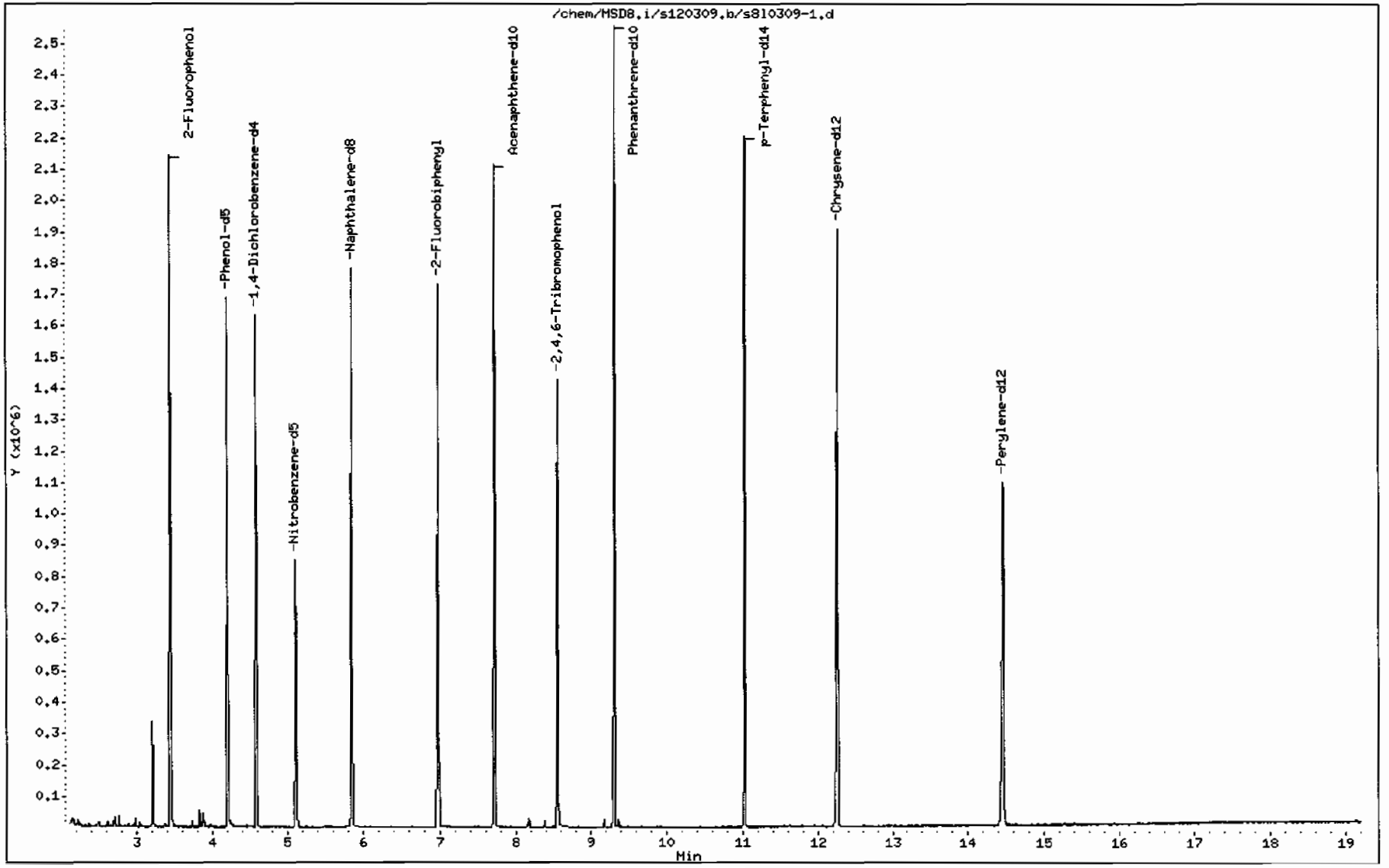

Data File: /chem/MSD8.i/s120309.b/s810309-1.d

Date : 03-DEC-2009 13:09

Client ID: SBLK01

Instrument: MSD8.i

Sample Info: |1201978974|925637|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3944	38	C4H7NO2	101
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	28	C6H12O2	116

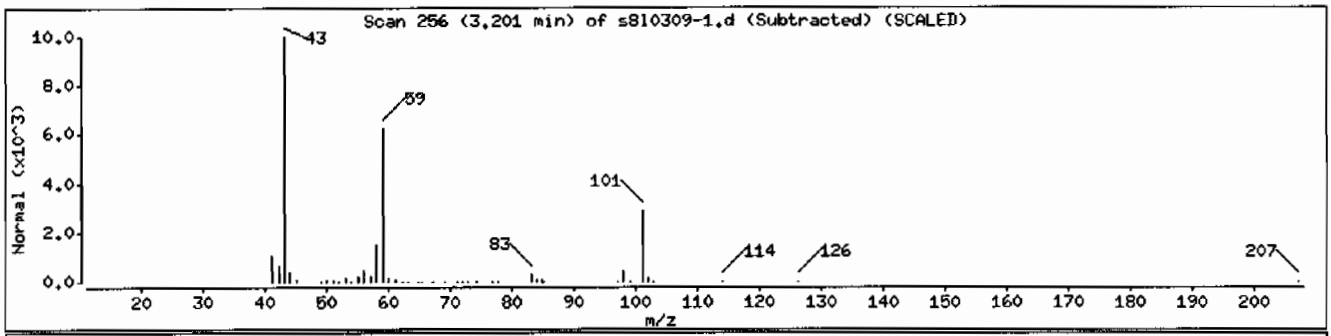

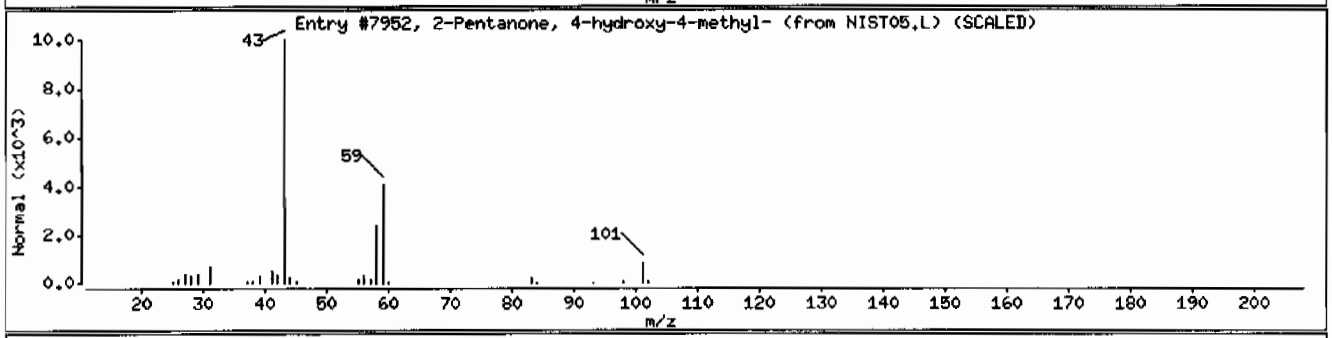

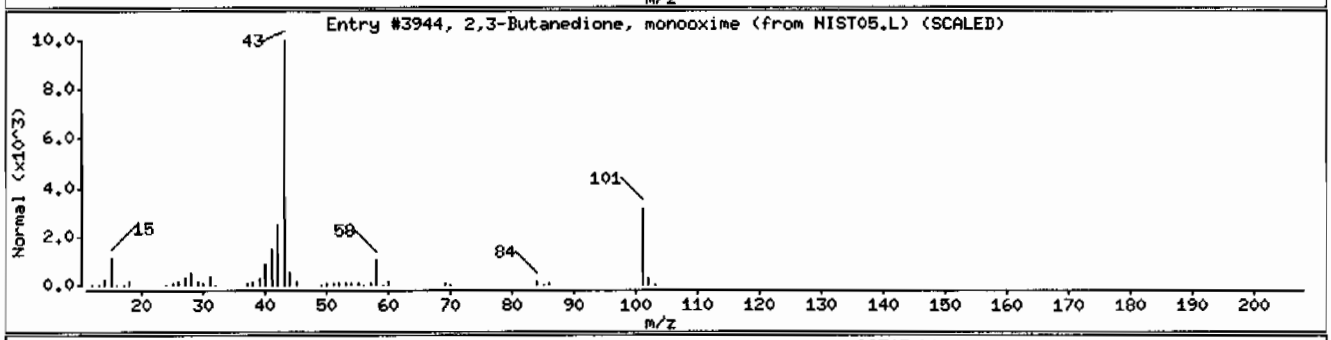

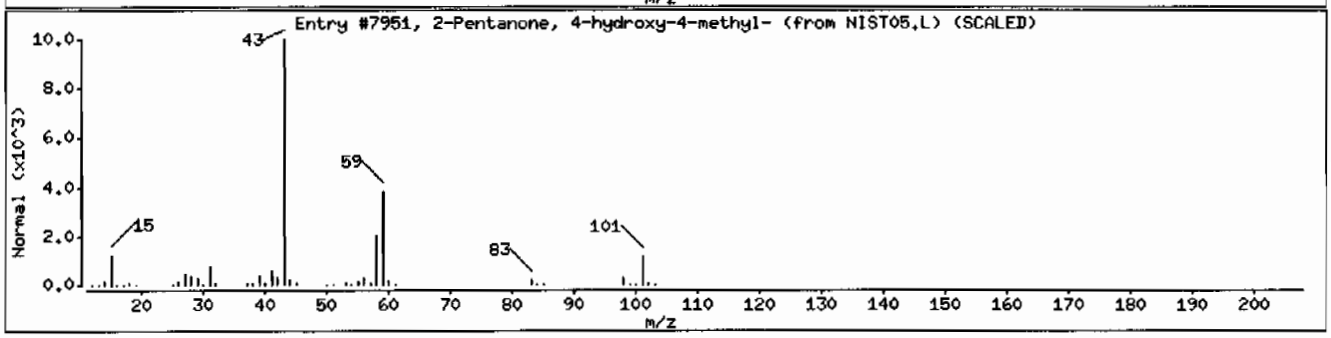

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978977**				
Client Sample:	**QC for batch 925632**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925632**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 13:39**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0310-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1450	ug/kg	66.7	333
108-95-2	Phenol		1200	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1220	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1170	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1220	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1170	ug/kg	66.7	333
83-32-9	Acenaphthene		1150	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1260	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1300	ug/kg	110	333
87-86-5	Pentachlorophenol		1070	ug/kg	83.3	333
129-00-0	Pyrene		1150	ug/kg	10.0	33.3
110-86-1	Pyridine		909	ug/kg	66.7	333
62-53-3	Aniline		962	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1090	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1130	ug/kg	66.7	333
100-51-6	Benzyl alcohol		922	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1150	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1100	ug/kg	66.7	333
95-48-7	o-Cresol		1270	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1390	ug/kg	100	333
67-72-1	Hexachloroethane		1050	ug/kg	66.7	333
98-95-3	Nitrobenzene		1210	ug/kg	66.7	333
78-59-1	Isophorone		1350	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1200	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1230	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1120	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1190	ug/kg	66.7	333
65-85-0	Benzoic acid		2530	ug/kg	167	667
91-20-3	Naphthalene		1190	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1100	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		932	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1250	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1310	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1040	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1200	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1120	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		985	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1180	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978977**				
Client Sample:	**QC for batch 925632**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925632**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 13:39**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0310-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1270	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1150	ug/kg	33.3	333
208-96-8	Acenaphthylene		1240	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		917	ug/kg	127	667
132-64-9	Dibenzofuran		1300	ug/kg	66.7	333
84-66-2	Diethylphthalate		1230	ug/kg	66.7	333
86-73-7	Fluorene		1130	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1060	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1080	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1340	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1170	ug/kg	66.7	333
122-66-7	Azobenzene		1210	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1230	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		982	ug/kg	66.7	333
85-01-8	Phenanthrene		1260	ug/kg	10.0	33.3
120-12-7	Anthracene		1280	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1320	ug/kg	66.7	333
206-44-0	Fluoranthene		1110	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1260	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1240	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1240	ug/kg	100	333
218-01-9	Chrysene		1310	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1360	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1260	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1160	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1240	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1270	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1240	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1380	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1360	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1100	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120309.b/s810310-1.d
Lab Smp Id: 1201978977 Client Smp ID: SBLK01LCS
Inj Date : 03-DEC-2009 13:39
Operator : nagl Inst ID: MSD8.i
Smp Info : |1201978977|925637|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120309.b/MSD8-8270C-112809.m
Meth Date : 03-Dec-2009 15:12 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.577	4.587	(1.000)	234172	40.0000	
* 29 Naphthalene-d8	136	5.853	5.854	(1.000)	893584	40.0000	
* 46 Acenaphthene-d10	164	7.715	7.720	(1.000)	527313	40.0000	
* 67 Phenanthrene-d10	188	9.320	9.320	(1.000)	983816	40.0000	
* 91 Chrysene-d12	240	12.268	12.268	(1.000)	914429	40.0000	
* 98 Perylene-d12	264	14.463	14.458	(1.000)	783074	40.0000	
$ 3 2-Fluorophenol	112	3.430	3.420	(0.749)	447195	79.9425	2660
$ 5 Phenol-d5	99	4.201	4.201	(0.918)	517383	73.6795	2460
$ 20 Nitrobenzene-d5	82	5.115	5.120	(0.874)	260419	40.1609	1340
$ 39 2-Fluorobiphenyl	172	6.982	6.982	(0.905)	549330	37.7012	1260
$ 60 2,4,6-Tribromophenol	329	8.568	8.563	(1.110)	152246	62.5064	2080
$ 81 p-Terphenyl-d14	244	11.034	11.030	(0.899)	659687	38.7733	1290

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.215	4.211	(0.921)	258494	36.1412	1200
8 2-Chlorophenol	128	4.382	4.387	(0.957)	228850	36.4995	1220
11 1,4-Dichlorobenzene	146	4.596	4.601	(1.004)	248318	34.9737	1160
17 N-Nitrosodipropylamine	70	4.953	4.958	(1.082)	166832	36.5743	1220(Q)
28 1,2,4-Trichlorobenzene	180	5.787	5.792	(0.989)	219509	33.0688	1100
33 4-Chloro-3-methylphenol	107	6.415	6.406	(1.096)	204842	34.9506	1160
47 Acenaphthene	154	7.754	7.754	(1.005)	473748	34.4121	1150
50 2,4-Dinitrotoluene	165	7.911	7.911	(1.025)	182805	37.9123	1260
52 4-Nitrophenol	139	7.830	7.825	(1.015)	77954	39.1265	1300
65 Pentachlorophenol	266	9.111	9.106	(0.978)	109041	32.1609	1070
79 Pyrene	202	10.882	10.882	(0.887)	914196	34.6252	1150
2 Pyridine	79	2.520	2.473	(0.551)	136908	27.2567	908
4 Aniline	66	4.273	4.273	(0.933)	92002	28.8504	962
7 bis(2-Chloroethyl) ether	63	4.311	4.315	(0.942)	132553	32.6208	1090
9 1,3-Dichlorobenzene	146	4.530	4.534	(0.990)	242176	33.9300	1130
12 Benzyl alcohol	108	4.696	4.696	(1.026)	101889	27.6699	922
13 1,2-Dichlorobenzene	146	4.744	4.749	(1.036)	239770	34.5927	1150
14 bis(2-Chloroisopropyl)ether	45	4.815	4.825	(1.052)	219470	32.8927	1100
15 o-Cresol	107	4.792	4.787	(1.047)	189704	38.0518	1270
18 m,p-Cresols	107	4.934	4.939	(1.078)	260052	41.7964	1390
19 Hexachloroethane	117	5.073	5.082	(1.108)	98440	31.5284	1050
21 Nitrobenzene	77	5.134	5.139	(0.877)	265359	36.2587	1210
22 Isophorone	82	5.373	5.377	(0.918)	478455	40.4451	1350
23 2-Nitrophenol	139	5.449	5.454	(0.931)	120295	36.0136	1200
24 2,4-Dimethylphenol	122	5.473	5.477	(0.935)	220151	36.7991	1230
25 bis(2-Chloroethoxy)methane	93	5.573	5.577	(0.952)	239756	33.6315	1120
26 2,4-Dichlorophenol	162	5.696	5.696	(0.973)	189287	35.7008	1190
27 Benzoic acid	105	5.601	5.577	(0.957)	303735	75.8211	2530
30 Naphthalene	128	5.873	5.877	(1.003)	677829	35.6875	1190
31 4-Chloroaniline	127	5.920	5.920	(1.011)	200502	33.0004	1100
32 Hexachlorobutadiene	225	5.992	5.992	(1.024)	141195	27.9670	932
34 2-Methylnaphthalene	142	6.596	6.601	(1.127)	486380	37.6102	1250
36 Hexachlorocyclopentadiene	237	6.758	6.758	(0.876)	106415	39.1509	1300
37 2,4,6-Trichlorophenol	196	6.892	6.892	(0.893)	151938	31.1501	1040
38 2,4,5-Trichlorophenol	196	6.934	6.925	(0.899)	170139	35.9689	1200
40 2-Chloronaphthalene	162	7.120	7.120	(0.923)	438795	33.6305	1120
42 o-Nitroaniline	65	7.220	7.220	(0.936)	133670	29.5375	984
41 m-Nitroaniline	138	7.658	7.663	(0.993)	100417	35.4996	1180
43 Dimethylphthalate	163	7.411	7.415	(0.960)	586305	38.2165	1270
44 2,6-Dinitrotoluene	165	7.477	7.482	(0.969)	125599	34.3550	1140
45 Acenaphthylene	152	7.563	7.568	(0.980)	766473	37.1017	1240
48 2,4-Dinitrophenol	184	7.768	7.773	(1.007)	52763	27.5016	917(Q)
49 Dibenzofuran	168	7.934	7.939	(1.028)	764844	38.8996	1300
51 Diethylphthalate	149	8.168	8.168	(1.059)	606841	37.0234	1230
53 Fluorene	166	8.306	8.306	(1.077)	560995	33.8153	1130
54 4-Chlorophenylphenylether	204	8.296	8.296	(1.075)	284282	31.8952	1060
55 2-Methyl-4,6-dinitrophenol	198	8.354	8.354	(0.896)	88763	32.2962	1080

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.320	8.320	(1.078)	104845	40.2833	1340
133 Diphenylamine	169	8.425	8.425	(0.904)	455278	35.2323	1170
58 1,2-Diphenylhydrazine	77	8.468	8.473	(0.909)	575118	36.3684	1210
61 4-Bromophenylphenylether	248	8.825	8.825	(0.947)	170033	37.0062	1230
63 Hexachlorobenzene	284	8.901	8.901	(0.955)	173922	29.4590	982
68 Phenanthrene	178	9.349	9.349	(1.003)	811392	37.6866	1260
69 Anthracene	178	9.406	9.401	(1.009)	831082	38.3339	1280
72 Di-n-butylphthalate	149	9.930	9.925	(1.065)	1058082	39.7490	1320
76 Fluoranthene	202	10.634	10.635	(1.141)	886008	33.4219	1110
85 Butylbenzylphthalate	149	11.554	11.554	(0.942)	466822	37.8869	1260
89 Benzo(a)anthracene	228	12.249	12.249	(0.998)	832267	37.3221	1240
90 3,3'-Dichlorobenzidine	252	12.201	12.201	(0.995)	235811	37.1953	1240
92 Chrysene	228	12.301	12.301	(1.003)	801239	39.2297	1310
93 bis(2-Ethylhexyl)phthalate	149	12.244	12.244	(0.998)	650574	40.6659	1360
94 Di-n-octylphthalate	149	13.168	13.168	(0.910)	1002323	37.6885	1260
95 Benzo(b)fluoranthene	252	13.820	13.820	(0.956)	728481	34.9014	1160
96 Benzo(k)fluoranthene	252	13.868	13.863	(0.959)	735283	37.2237	1240
97 Benzo(a)pyrene	252	14.363	14.358	(0.993)	663879	38.2020	1270
99 Indeno(1,2,3-cd)pyrene	276	16.349	16.349	(1.130)	537222	37.3091	1240
100 Dibenzo(a,h)anthracene	278	16.387	16.382	(1.133)	508731	41.4370	1380
101 Benzo(ghi)perylene	276	16.839	16.839	(1.164)	496209	40.9402	1360
1 N-Methyl-N-nitrosomethylamine	74	2.477	2.434	(0.541)	128570	43.6055	1450

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD8.i/s120309.b/s810310-1.d
Date : 03-DEC-2009 13:39
Client ID: SBLK01LCS
Sample Info: 1120197897719256371|1|SVMF|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20

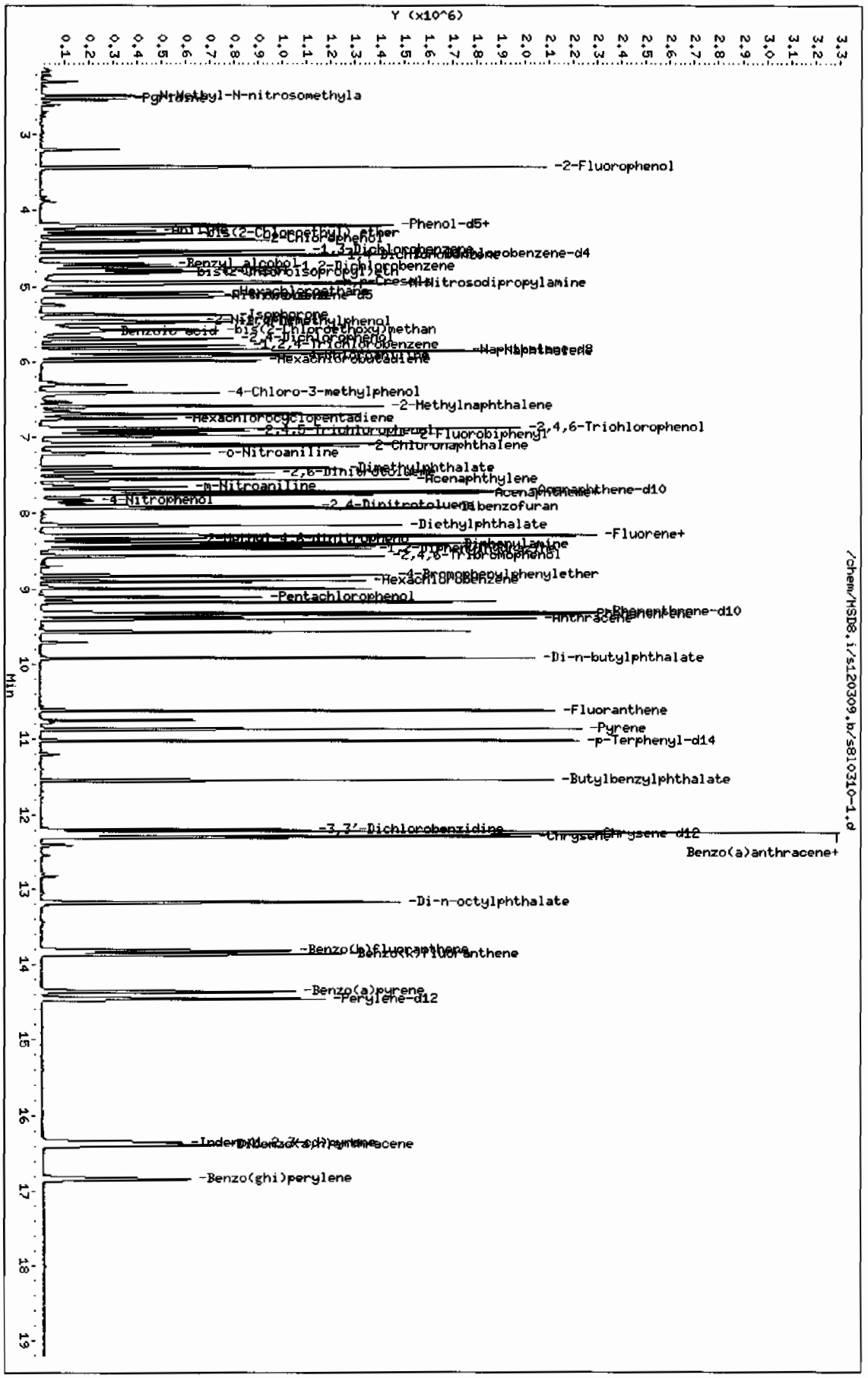

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978975**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
Client Sample:	**QC for batch 925632**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13627MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:14**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1050	ug/kg	71.3	357
108-95-2	Phenol		1000	ug/kg	71.3	357
95-57-8	2-Chlorophenol		941	ug/kg	71.3	357
106-46-7	1,4-Dichlorobenzene		922	ug/kg	71.3	357
621-64-7	N-Nitrosodipropylamine		1000	ug/kg	71.3	357
59-50-7	4-Chloro-3-methylphenol		952	ug/kg	71.3	357
83-32-9	Acenaphthene		932	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene		982	ug/kg	35.7	357
100-02-7	4-Nitrophenol		1040	ug/kg	118	357
87-86-5	Pentachlorophenol		870	ug/kg	89.1	357
129-00-0	Pyrene		924	ug/kg	10.7	35.7
110-86-1	Pyridine		688	ug/kg	71.3	357
62-53-3	Aniline		884	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether		850	ug/kg	71.3	357
541-73-1	1,3-Dichlorobenzene		872	ug/kg	71.3	357
100-51-6	Benzyl alcohol	J	293	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene		883	ug/kg	71.3	357
108-60-1	bis(2-Chloroisopropyl)ether		876	ug/kg	71.3	357
95-48-7	o-Cresol		989	ug/kg	71.3	357
65794-96-9	m,p-Cresols		1190	ug/kg	107	357
67-72-1	Hexachloroethane		762	ug/kg	71.3	357
98-95-3	Nitrobenzene		974	ug/kg	71.3	357
78-59-1	Isophorone		1120	ug/kg	71.3	357
88-75-5	2-Nitrophenol		974	ug/kg	71.3	357
105-67-9	2,4-Dimethylphenol		590	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane		924	ug/kg	71.3	357
120-83-2	2,4-Dichlorophenol		937	ug/kg	71.3	357
65-85-0	Benzoic acid		1930	ug/kg	178	713
91-20-3	Naphthalene		1000	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline		1070	ug/kg	71.3	357
87-68-3	Hexachlorobutadiene		724	ug/kg	71.3	357
91-57-6	2-Methylnaphthalene		1050	ug/kg	7.13	35.7
77-47-4	Hexachlorocyclopentadiene		1090	ug/kg	71.3	357
88-06-2	2,4,6-Trichlorophenol		804	ug/kg	71.3	357
95-95-4	2,4,5-Trichlorophenol		941	ug/kg	71.3	357
91-58-7	2-Chloronaphthalene		921	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline		782	ug/kg	71.3	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1060	ug/kg	71.3	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978975**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
Client Sample:	**QC for batch 925632**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13627MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:14**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1020	ug/kg	71.3	357
606-20-2	2,6-Dinitrotoluene		1010	ug/kg	35.7	357
208-96-8	Acenaphthylene		1020	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	J	642	ug/kg	136	713
132-64-9	Dibenzofuran		1070	ug/kg	71.3	357
84-66-2	Diethylphthalate		962	ug/kg	71.3	357
86-73-7	Fluorene		909	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether		851	ug/kg	71.3	357
534-52-1	2-Methyl-4,6-dinitrophenol		845	ug/kg	71.3	357
100-01-6	4-Nitroaniline		1120	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine		962	ug/kg	71.3	357
122-66-7	Azobenzene		980	ug/kg	71.3	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1010	ug/kg	71.3	357
118-74-1	Hexachlorobenzene		766	ug/kg	71.3	357
85-01-8	Phenanthrene		1010	ug/kg	10.7	35.7
120-12-7	Anthracene		1050	ug/kg	7.13	35.7
84-74-2	Di-n-butylphthalate		1020	ug/kg	71.3	357
206-44-0	Fluoranthene		894	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate		956	ug/kg	71.3	357
56-55-3	Benzo(a)anthracene		955	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine		928	ug/kg	107	357
218-01-9	Chrysene		1040	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate		1030	ug/kg	71.3	357
117-84-0	Di-n-octylphthalate		1000	ug/kg	71.3	357
205-99-2	Benzo(b)fluoranthene		901	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene		985	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene		997	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene		1090	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene		1100	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene		1050	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene		868	ug/kg	71.3	357

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810418.d
Lab Smp Id: 1201978975 Client Smp ID: RE03-09-13627MS
Inj Date : 04-DEC-2009 16:14
Operator : nagl Inst ID: MSD8.i
Smp Info : |1201978975|925637|1|SVMF|1|LANL009MS
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	7.04810	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.534	4.539	(1.000)	265615	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	999400	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	589813	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.273	(1.000)	1082606	40.0000	
* 91 Chrysene-d12	240	12.201	12.206	(1.000)	1019475	40.0000	
* 98 Perylene-d12	264	14.368	14.373	(1.000)	864064	40.0000	
$ 3 2-Fluorophenol	112	3.382	3.377	(0.746)	385088	60.6908	2160
$ 5 Phenol-d5	99	4.158	4.158	(0.917)	472134	59.2765	2110
$ 20 Nitrobenzene-d5	82	5.068	5.073	(0.873)	216289	29.8237	1060
$ 39 2-Fluorobiphenyl	172	6.934	6.935	(0.904)	465322	28.5515	1020
$ 60 2,4,6-Tribromophenol	329	8.515	8.516	(1.111)	122383	44.9214	1600
$ 81 p-Terphenyl-d14	244	10.977	10.982	(0.900)	542262	28.5876	1020

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.168	4.168	(0.919)	228490	28.1645	1000
8 2-Chlorophenol	128	4.339	4.339	(0.957)	187697	26.3922	941
11 1,4-Dichlorobenzene	146	4.549	4.558	(1.003)	208178	25.8494	922
17 N-Nitrosodipropylamine	70	4.906	4.911	(1.082)	145592	28.1395	1000(Q)
28 1,2,4-Trichlorobenzene	180	5.739	5.744	(0.989)	180814	24.3553	868
33 4-Chloro-3-methylphenol	107	6.368	6.363	(1.097)	175082	26.7099	952
47 Acenaphthene	154	7.701	7.706	(1.004)	402522	26.1401	932
50 2,4-Dinitrotoluene	165	7.858	7.863	(1.025)	148553	27.5440	982
52 4-Nitrophenol	139	7.782	7.778	(1.015)	64949	29.1447	1040
65 Pentachlorophenol	266	9.054	9.054	(0.977)	81773	24.4027	870
79 Pyrene	202	10.825	10.830	(0.887)	762526	25.9048	924
2 Pyridine	79	2.472	2.435	(0.545)	109942	19.2971	688
4 Aniline	66	4.225	4.230	(0.932)	89695	24.7974	884
7 bis(2-Chloroethyl) ether	63	4.263	4.273	(0.940)	109826	23.8283	850
9 1,3-Dichlorobenzene	146	4.482	4.487	(0.988)	197998	24.4566	872
12 Benzyl alcohol	108	4.653	4.654	(1.026)	34377	8.23057	293(aR)
13 1,2-Dichlorobenzene	146	4.696	4.701	(1.036)	194700	24.7650	883
14 bis(2-Chloroisopropyl)ether	45	4.773	4.777	(1.052)	185860	24.5580	876
15 o-Cresol	107	4.744	4.744	(1.046)	156899	27.7461	989
18 m,p-Cresols	107	4.892	4.897	(1.079)	235949	33.4333	1190(Q)
19 Hexachloroethane	117	5.030	5.035	(1.109)	75654	21.3621	762
21 Nitrobenzene	77	5.087	5.092	(0.876)	223675	27.3270	974
22 Isophorone	82	5.325	5.330	(0.917)	414456	31.3256	1120
23 2-Nitrophenol	139	5.406	5.406	(0.931)	102024	27.3097	974
24 2,4-Dimethylphenol	122	5.425	5.430	(0.934)	110701	16.5449	590
25 bis(2-Chloroethoxy)methane	93	5.530	5.530	(0.952)	206505	25.9002	924
26 2,4-Dichlorophenol	162	5.653	5.654	(0.974)	155777	26.2698	937
27 Benzoic acid	105	5.539	5.525	(0.954)	242643	54.1576	1930
30 Naphthalene	128	5.825	5.830	(1.003)	597240	28.1152	1000
31 4-Chloroaniline	127	5.873	5.873	(1.011)	204052	30.0287	1070
32 Hexachlorobutadiene	225	5.944	5.949	(1.024)	114613	20.2982	724
34 2-Methylnaphthalene	142	6.549	6.554	(1.128)	427441	29.5530	1050
36 Hexachlorocyclopentadiene	237	6.711	6.711	(0.875)	93129	30.6322	1090
37 2,4,6-Trichlorophenol	196	6.844	6.844	(0.893)	122949	22.5358	804
38 2,4,5-Trichlorophenol	196	6.882	6.878	(0.898)	139598	26.3849	941
40 2-Chloronaphthalene	162	7.068	7.073	(0.922)	376953	25.8293	921
42 o-Nitroaniline	65	7.168	7.173	(0.935)	110969	21.9228	782
41 m-Nitroaniline	138	7.611	7.616	(0.993)	92776	29.6393	1060
43 Dimethylphthalate	163	7.358	7.368	(0.960)	492127	28.6786	1020
44 2,6-Dinitrotoluene	165	7.430	7.435	(0.969)	116337	28.4496	1010
45 Acenaphthylene	152	7.515	7.520	(0.980)	660064	28.5652	1020
48 2,4-Dinitrophenol	184	7.720	7.720	(1.007)	38617	17.9954	642(aQ)
49 Dibenzofuran	168	7.887	7.887	(1.029)	660229	30.0207	1070
51 Diethylphthalate	149	8.120	8.120	(1.059)	494808	26.9893	962
53 Fluorene	166	8.254	8.258	(1.076)	472817	25.4801	908
54 4-Chlorophenylphenylether	204	8.249	8.249	(1.076)	238017	23.8747	851
55 2-Methyl-4,6-dinitrophenol	198	8.301	8.301	(0.896)	66640	23.7035	845

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.268	8.268	(1.078)	91031	31.2695	1120
133 Diphenylamine	169	8.373	8.378	(0.903)	383460	26.9667	962
58 1,2-Diphenylhydrazine	77	8.420	8.420	(0.909)	478185	27.4794	980
61 4-Bromophenylphenylether	248	8.777	8.778	(0.947)	143322	28.3464	1010
63 Hexachlorobenzene	284	8.849	8.849	(0.955)	139498	21.4721	766
68 Phenanthrene	178	9.296	9.297	(1.003)	672438	28.3826	1010
69 Anthracene	178	9.349	9.354	(1.009)	699435	29.3177	1040
72 Di-n-butylphthalate	149	9.877	9.878	(1.066)	837857	28.6036	1020
76 Fluoranthene	202	10.577	10.582	(1.141)	731294	25.0685	894
85 Butylbenzylphthalate	149	11.501	11.501	(0.943)	368222	26.8053	956
89 Benzo(a)anthracene	228	12.182	12.182	(0.998)	665718	26.7774	955
90 3,3'-Dichlorobenzidine	252	12.135	12.135	(0.995)	183910	26.0197	928
92 Chrysene	228	12.235	12.239	(1.003)	663280	29.1289	1040
93 bis(2-Ethylhexyl)phthalate	149	12.182	12.182	(0.998)	513748	28.8043	1030
94 Di-n-octylphthalate	149	13.096	13.101	(0.912)	824106	28.0829	1000
95 Benzo(b)fluoranthene	252	13.730	13.735	(0.956)	582203	25.2788	901
96 Benzo(k)fluoranthene	252	13.777	13.787	(0.959)	601842	27.6124	985
97 Benzo(a)pyrene	252	14.263	14.273	(0.993)	535919	27.9482	996
99 Indeno(1,2,3-cd)pyrene	276	16.235	16.244	(1.130)	483874	30.4544	1080
100 Dibenzo(a,h)anthracene	278	16.268	16.287	(1.132)	418038	30.8583	1100
101 Benzo(ghi)perylene	276	16.716	16.735	(1.163)	392890	29.3774	1050
1 N-Methyl-N-nitrosomethylamine	74	2.430	2.392	(0.536)	98922	29.5785	1050

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD8.i/s120409.b/s810418.d
Date : 04-DEC-2009 16:14
Client ID: RE03-09-13627MS
Sample Info: !120197897519256371|SVMF1|LANL009MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20

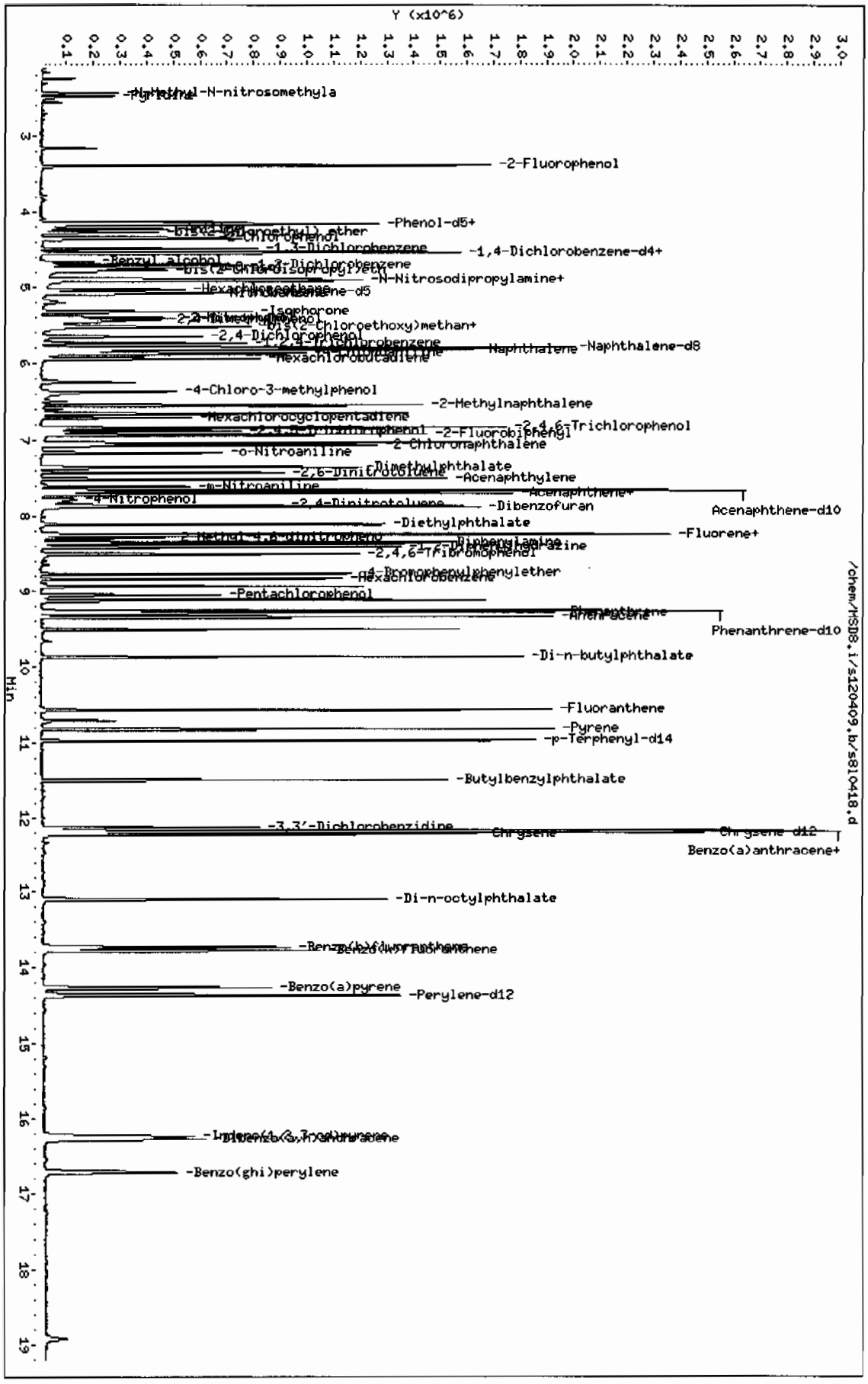

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978976**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
Client Sample:	**QC for batch 925632**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13627MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**s8l0416.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1180	ug/kg	71.3	356
108-95-2	Phenol		1040	ug/kg	71.3	356
95-57-8	2-Chlorophenol		1030	ug/kg	71.3	356
106-46-7	1,4-Dichlorobenzene		1040	ug/kg	71.3	356
621-64-7	N-Nitrosodipropylamine		1090	ug/kg	71.3	356
59-50-7	4-Chloro-3-methylphenol		1030	ug/kg	71.3	356
83-32-9	Acenaphthene		1010	ug/kg	11.8	35.6
121-14-2	2,4-Dinitrotoluene		1180	ug/kg	35.6	356
100-02-7	4-Nitrophenol		1330	ug/kg	118	356
87-86-5	Pentachlorophenol		1010	ug/kg	89.1	356
129-00-0	Pyrene		1130	ug/kg	10.7	35.6
110-86-1	Pyridine		736	ug/kg	71.3	356
62-53-3	Aniline		972	ug/kg	107	356
111-44-4	bis(2-Chloroethyl) ether		949	ug/kg	71.3	356
541-73-1	1,3-Dichlorobenzene		1000	ug/kg	71.3	356
100-51-6	Benzyl alcohol		378	ug/kg	107	356
95-50-1	1,2-Dichlorobenzene		1010	ug/kg	71.3	356
108-60-1	bis(2-Chloroisopropyl)ether		960	ug/kg	71.3	356
95-48-7	o-Cresol		1070	ug/kg	71.3	356
65794-96-9	m,p-Cresols		1340	ug/kg	107	356
67-72-1	Hexachloroethane		858	ug/kg	71.3	356
98-95-3	Nitrobenzene		1100	ug/kg	71.3	356
78-59-1	Isophorone		1230	ug/kg	71.3	356
88-75-5	2-Nitrophenol		1090	ug/kg	71.3	356
105-67-9	2,4-Dimethylphenol		1180	ug/kg	125	356
111-91-1	bis(2-Chloroethoxy)methane		1040	ug/kg	71.3	356
120-83-2	2,4-Dichlorophenol		1100	ug/kg	71.3	356
65-85-0	Benzoic acid		2390	ug/kg	178	713
91-20-3	Naphthalene		1110	ug/kg	10.7	35.6
106-47-8	4-Chloroaniline		978	ug/kg	71.3	356
87-68-3	Hexachlorobutadiene		827	ug/kg	71.3	356
91-57-6	2-Methylnaphthalene		1170	ug/kg	7.13	35.6
77-47-4	Hexachlorocyclopentadiene		1320	ug/kg	71.3	356
88-06-2	2,4,6-Trichlorophenol		936	ug/kg	71.3	356
95-95-4	2,4,5-Trichlorophenol		989	ug/kg	71.3	356
91-58-7	2-Chloronaphthalene		1030	ug/kg	11.8	35.6
88-74-4	2-Nitroaniline		902	ug/kg	71.3	356
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1220	ug/kg	71.3	356

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978976**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
Client Sample:	**QC for batch 925632**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13627MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925637**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**s8I0416.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1130	ug/kg	71.3	356
606-20-2	2,6-Dinitrotoluene		1120	ug/kg	35.6	356
208-96-8	Acenaphthylene		1110	ug/kg	10.7	35.6
51-28-5	2,4-Dinitrophenol		959	ug/kg	135	713
132-64-9	Dibenzofuran		1190	ug/kg	71.3	356
84-66-2	Diethylphthalate		1110	ug/kg	71.3	356
86-73-7	Fluorene		1020	ug/kg	10.7	35.6
7005-72-3	4-Chlorophenylphenylether		971	ug/kg	71.3	356
534-52-1	2-Methyl-4,6-dinitrophenol		1080	ug/kg	71.3	356
100-01-6	4-Nitroaniline		1330	ug/kg	107	356
	p-Nitroaniline					
122-39-4	Diphenylamine		1120	ug/kg	71.3	356
122-66-7	Azobenzene		1100	ug/kg	71.3	356
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1170	ug/kg	71.3	356
118-74-1	Hexachlorobenzene		924	ug/kg	71.3	356
85-01-8	Phenanthrene		1190	ug/kg	10.7	35.6
120-12-7	Anthracene		1230	ug/kg	7.13	35.6
84-74-2	Di-n-butylphthalate		1230	ug/kg	71.3	356
206-44-0	Fluoranthene		1070	ug/kg	10.7	35.6
85-68-7	Butylbenzylphthalate		1210	ug/kg	71.3	356
56-55-3	Benzo(a)anthracene		1210	ug/kg	10.7	35.6
91-94-1	3,3'-Dichlorobenzidine		1010	ug/kg	107	356
218-01-9	Chrysene		1250	ug/kg	10.7	35.6
117-81-7	bis(2-Ethylhexyl)phthalate		1290	ug/kg	71.3	356
117-84-0	Di-n-octylphthalate		1560	ug/kg	71.3	356
205-99-2	Benzo(b)fluoranthene		1220	ug/kg	10.7	35.6
207-08-9	Benzo(k)fluoranthene		1320	ug/kg	10.7	35.6
50-32-8	Benzo(a)pyrene		1250	ug/kg	10.7	35.6
193-39-5	Indeno(1,2,3-cd)pyrene		1010	ug/kg	10.7	35.6
53-70-3	Dibenzo(a,h)anthracene		1010	ug/kg	10.7	35.6
191-24-2	Benzo(ghi)perylene		899	ug/kg	10.7	35.6
120-82-1	1,2,4-Trichlorobenzene		1030	ug/kg	71.3	356

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810416.d
Lab Smp Id: 1201978976 Client Smp ID: RE03-09-13627MSD
Inj Date : 04-DEC-2009 15:13
Operator : nagl Inst ID: MSD8.i
Smp Info : |1201978976|925637|1|SVMF|1|LANL009MSD
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	7.04810	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.539	4.539	(1.000)	315112	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	1174988	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	691477	40.0000	
* 67 Phenanthrene-d10	188	9.273	9.273	(1.000)	1276857	40.0000	
* 91 Chrysene-d12	240	12.206	12.206	(1.000)	1171438	40.0000	
* 98 Perylene-d12	264	14.363	14.373	(1.000)	780462	40.0000	
$ 3 2-Fluorophenol	112	3.387	3.377	(0.746)	511945	68.0102	2420
$ 5 Phenol-d5	99	4.163	4.158	(0.917)	599159	63.4084	2260
$ 20 Nitrobenzene-d5	82	5.072	5.073	(0.874)	282986	33.1893	1180
$ 39 2-Fluorobiphenyl	172	6.934	6.935	(0.904)	611306	31.9942	1140
$ 60 2,4,6-Tribromophenol	329	8.520	8.516	(1.111)	180120	56.3938	2010
$ 81 p-Terphenyl-d14	244	10.982	10.982	(0.900)	789560	36.2252	1290

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.172	4.168	(0.919)	281629	29.2617	1040
8 2-Chlorophenol	128	4.339	4.339	(0.956)	243557	28.8673	1030
11 1,4-Dichlorobenzene	146	4.553	4.558	(1.003)	278175	29.1154	1040
17 N-Nitrosodipropylamine	70	4.911	4.911	(1.082)	188222	30.6646	1090(Q)
28 1,2,4-Trichlorobenzene	180	5.744	5.744	(0.989)	251389	28.8014	1030
33 4-Chloro-3-methylphenol	107	6.372	6.363	(1.098)	221821	28.7833	1030
47 Acenaphthene	154	7.706	7.706	(1.005)	512749	28.4027	1010
50 2,4-Dinitrotoluene	165	7.863	7.863	(1.025)	209201	33.0862	1180
52 4-Nitrophenol	139	7.782	7.778	(1.015)	97435	37.2939	1330
65 Pentachlorophenol	266	9.058	9.054	(0.977)	120088	28.4720	1010
79 Pyrene	202	10.830	10.830	(0.887)	1073425	31.7362	1130
2 Pyridine	79	2.472	2.435	(0.545)	139559	20.6478	736
4 Aniline	66	4.225	4.230	(0.931)	116951	27.2539	972
7 bis(2-Chloroethyl) ether	63	4.272	4.273	(0.941)	145630	26.6333	949
9 1,3-Dichlorobenzene	146	4.487	4.487	(0.988)	270041	28.1159	1000
12 Benzyl alcohol	108	4.653	4.654	(1.025)	52492	10.5936	378
13 1,2-Dichlorobenzene	146	4.701	4.701	(1.036)	264161	28.3223	1010
14 bis(2-Chloroisopropyl)ether	45	4.777	4.777	(1.052)	241900	26.9420	960
15 o-Cresol	107	4.749	4.744	(1.046)	200437	29.8777	1060
18 m,p-Cresols	107	4.896	4.897	(1.079)	313888	37.4907	1340
19 Hexachloroethane	117	5.034	5.035	(1.109)	101086	24.0598	858
21 Nitrobenzene	77	5.092	5.092	(0.877)	296750	30.8369	1100
22 Isophorone	82	5.325	5.330	(0.917)	538426	34.6141	1230
23 2-Nitrophenol	139	5.406	5.406	(0.931)	134873	30.7076	1090
24 2,4-Dimethylphenol	122	5.430	5.430	(0.935)	260229	33.0806	1180
25 bis(2-Chloroethoxy)methane	93	5.530	5.530	(0.952)	273426	29.1688	1040
26 2,4-Dichlorophenol	162	5.653	5.654	(0.974)	214467	30.7624	1100
27 Benzoic acid	105	5.563	5.525	(0.958)	353669	67.1420	2390
30 Naphthalene	128	5.830	5.830	(1.004)	781030	31.2727	1110
31 4-Chloroaniline	127	5.872	5.873	(1.011)	219252	27.4439	978
32 Hexachlorobutadiene	225	5.944	5.949	(1.024)	154057	23.2065	827
34 2-Methylnaphthalene	142	6.549	6.554	(1.128)	559127	32.8808	1170
36 Hexachlorocyclopentadiene	237	6.711	6.711	(0.875)	131851	36.9925	1320
37 2,4,6-Trichlorophenol	196	6.844	6.844	(0.893)	167983	26.2633	936
38 2,4,5-Trichlorophenol	196	6.887	6.878	(0.898)	172124	27.7495	989
40 2-Chloronaphthalene	162	7.072	7.073	(0.922)	496698	29.0305	1030
42 o-Nitroaniline	65	7.173	7.173	(0.935)	150108	25.2950	902
41 m-Nitroaniline	138	7.611	7.616	(0.993)	126527	34.1819	1220
43 Dimethylphthalate	163	7.363	7.368	(0.960)	635969	31.6121	1130
44 2,6-Dinitrotoluene	165	7.434	7.435	(0.970)	150435	31.3793	1120
45 Acenaphthylene	152	7.515	7.520	(0.980)	843315	31.1299	1110
48 2,4-Dinitrophenol	184	7.720	7.720	(1.007)	67684	26.9033	959(Q)
49 Dibenzofuran	168	7.887	7.887	(1.029)	857495	33.2579	1180
51 Diethylphthalate	149	8.120	8.120	(1.059)	669044	31.1277	1110
53 Fluorene	166	8.258	8.258	(1.077)	620034	28.5011	1020
54 4-Chlorophenylphenylether	204	8.249	8.249	(1.076)	318529	27.2531	971
55 2-Methyl-4,6-dinitrophenol	198	8.301	8.301	(0.895)	106498	30.2530	1080

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.273	8.268	(1.079)	127070	37.2316	1330
133 Diphenylamine	169	8.377	8.378	(0.903)	527901	31.4766	1120
58 1,2-Diphenylhydrazine	77	8.420	8.420	(0.908)	635599	30.9687	1100
61 4-Bromophenylphenylether	248	8.777	8.778	(0.947)	195224	32.7376	1170
63 Hexachlorobenzene	284	8.849	8.849	(0.954)	198671	25.9280	924
68 Phenanthrene	178	9.296	9.297	(1.003)	930465	33.2988	1190
69 Anthracene	178	9.353	9.354	(1.009)	969872	34.4687	1230
72 Di-n-butylphthalate	149	9.877	9.878	(1.065)	1189505	34.4306	1230
76 Fluoranthene	202	10.582	10.582	(1.141)	1035814	30.1056	1070
85 Butylbenzylphthalate	149	11.501	11.501	(0.942)	536083	33.9626	1210
89 Benzo(a)anthracene	228	12.182	12.182	(0.998)	973058	34.0623	1210
90 3,3'-Dichlorobenzidine	252	12.139	12.135	(0.995)	230000	28.3193	1010
92 Chrysene	228	12.239	12.239	(1.003)	918952	35.1218	1250
93 bis(2-Ethylhexyl)phthalate	149	12.182	12.182	(0.998)	742822	36.2451	1290
94 Di-n-octylphthalate	149	13.101	13.101	(0.912)	1156519	43.6320	1560
95 Benzo(b)fluoranthene	252	13.735	13.735	(0.956)	714512	34.3467	1220
96 Benzo(k)fluoranthene	252	13.777	13.787	(0.959)	727972	36.9769	1320
97 Benzo(a)pyrene	252	14.268	14.273	(0.993)	606278	35.0042	1250
99 Indeno(1,2,3-cd)pyrene	276	16.230	16.244	(1.130)	405312	28.2424	1010
100 Dibenzo(a,h)anthracene	278	16.268	16.287	(1.133)	347647	28.4112	1010
101 Benzo(ghi)perylene	276	16.711	16.735	(1.163)	304638	25.2186	899
1 N-Methyl-N-nitrosomethylamine	74	2.430	2.392	(0.535)	131258	33.0824	1180

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD8.i/s120409.b/s810416.d
Date : 04-DEC-2009 15:13
Client ID: RE03-09-13627MSD
Sample Info: 1120197897619256371|1|SVMF|1|LANL009MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20

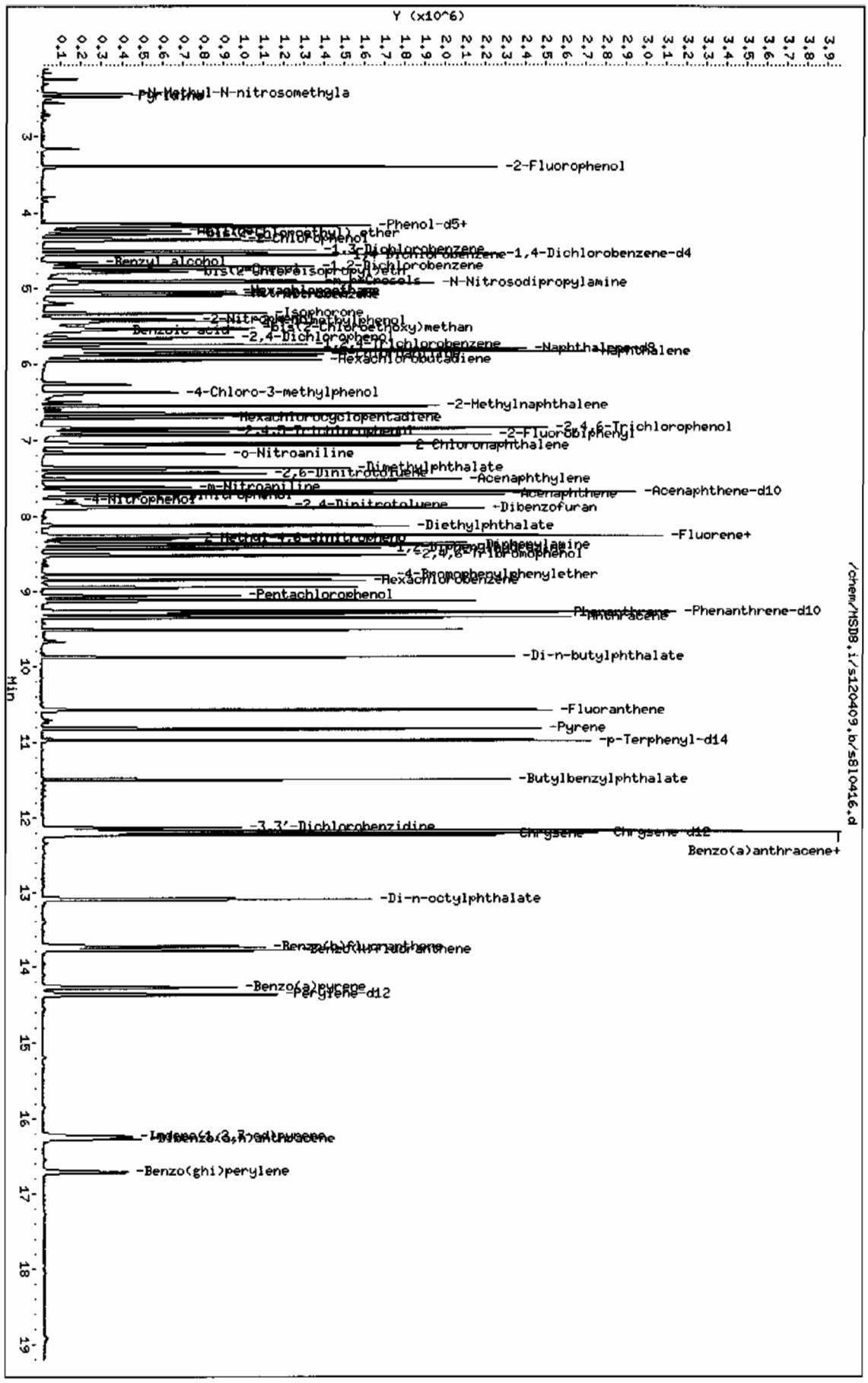

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 925632 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201978974 MB	24-NOV-2009 21:41:33	30	1	0.03333
1201978977 LCS	24-NOV-2009 21:41:33	30	1	0.03333
241183002	24-NOV-2009 21:41:33	30.19	1	0.03312
241183003	24-NOV-2009 21:41:33	30.06	1	0.03327
241183004	24-NOV-2009 21:41:33	30.02	1	0.03331
241318001	24-NOV-2009 21:41:33	30.06	1	0.03327
241318002	24-NOV-2009 21:41:33	30.04	1	0.03329
241318003	24-NOV-2009 21:41:33	30.01	1	0.03332
241318004	24-NOV-2009 21:41:33	30.15	1	0.03317
241318005	24-NOV-2009 21:41:33	30.05	1	0.03328
241318006	24-NOV-2009 21:41:33	30.02	1	0.03331
241318007	24-NOV-2009 21:41:33	30.08	1	0.03324
241318008	24-NOV-2009 21:41:33	30.12	1	0.0332
241318009	24-NOV-2009 21:41:33	30.19	1	0.03312
1201978975 MS (241318009)	24-NOV-2009 21:41:33	30.17	1	0.03315
1201978976 MSD (241318009)	24-NOV-2009 21:41:33	30.18	1	0.03313
241318010	24-NOV-2009 21:41:33	30.02	1	0.03331
241318013	24-NOV-2009 21:41:33	30.02	1	0.03331
241318014	24-NOV-2009 21:41:33	30.08	1	0.03324

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201978977	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201978977	BENZIDINE LCS	UE091117-20	1	mL
MS	1201978975	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201978975	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201978976	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201978976	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD8

DATE: 12/03/2009 METHOD:See raw data OPERATOR:NAG REVIEWED BY:_____ DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT 1185503-D
Multiplier Voltage: 1859mv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
SOP: GL-OA-E-009 Rev. 22

Sequence Number: /chem/MSD8.i/s120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s810301.d	WBN091128-01	nagl	03-DEC-2009 08:00	50 PPM	s120309	1.0	DFTPP	DUSE
s810302.d	WBN091128-01	nagl	03-DEC-2009 08:25	50 PPM	s120309	1.0	DFTPP	DUSE
s810303.d	WBN091128-01	nagl	03-DEC-2009 08:57	50 PPM	s120309	1.0	DFTPP	DUSE
s810304.d	WBN091111-13.2	nagl	03-DEC-2009 09:12	40 PPM	s120309	1.0	MEGACVS	DUSE
s810305.d	WBN091128-01	nagl	03-DEC-2009 11:17	50 PPM	s120309	1.0	DFTPP	
s810306.d	WBN091111-13.2	nagl	03-DEC-2009 11:34	40 PPM	s120309	1.0	MEGACVS	219219
s810307.d	WBN091201-03.3	nagl	03-DEC-2009 12:08	40 PPM	s120309	1.0	AP12CVS	
s810308.d	WBN091202-23.4	nagl	03-DEC-2009 12:38	40 PPM	s120309	1.0	PESTCVS	
s810309.d	1201978974	nagl	03-DEC-2009 13:09	925637	10-519	1.0	SBLK01	
s810310.d	1201978977	nagl	03-DEC-2009 13:39	925637	10-519	1.0	SBLK01LCS	
s810311.d	241183002	nagl	03-DEC-2009 14:09	925637	10-519	10.0	LANL	DUSE - see s810328
s810312.d	241183003	nagl	03-DEC-2009 14:39	925637	10-519	1.0	LANL	
s810313.d	241183004	nagl	03-DEC-2009 15:10	925637	10-519	1.0	LANL	
s810314.d	241318001	nagl	03-DEC-2009 15:40	925637	10-543	10.0	LANL	DUSE - see s810329
s810315.d	241318002	nagl	03-DEC-2009 16:11	925637	10-543	1.0	LANL	
s810316.d	241318003	nagl	03-DEC-2009 16:39	925637	10-543	10.0	LANL	DUSE - see s810330
s810317.d	241318004	nagl	03-DEC-2009 17:09	925637	10-543	1.0	LANL	
s810318.d	241318006	nagl	03-DEC-2009 17:39	925637	10-543	1.0	LANL	
s810319.d	241318007	nagl	03-DEC-2009 18:10	925637	10-543	1.0	LANL	

s810320.d	241318008	nag1	03-DEC-2009 18:39	925637	10-543	1.0	LANL	
s810321.d	241318009	nag1	03-DEC-2009 19:09	925637	10-543	1.0	LANL	
s810322.d	1201978975	nag1	03-DEC-2009 19:39	925637	10-543	1.0	MS	DUSE - failed C12 - see s810418
s810323.d	1201978976	nag1	03-DEC-2009 20:10	925637	10-543	1.0	MSD	DUSE - failed C12, C65 - rr- see s810416
s810324.d	241318010	nag1	03-DEC-2009 20:39	925637	10-543	1.0	LANL	DUSE - failed surr - rr - see s810417
s810325.d	241318013	nag1	03-DEC-2009 21:09	925637	10-543	1.0	LANL	DUSE - failed surr - rr- see s810419
s810326.d	241318014	nag1	03-DEC-2009 21:38	925637	10-543	1.0	LANL	DUSE - failed surr - rr - see s810420
s810327.d	241318005	nag1	03-DEC-2009 22:08	925637	10-543	1.0	LANL	failed IS - rr - s810423 confirmed
s810328.d	241183002	nag1	03-DEC-2009 22:38	925637	10-519	1.0	LANL	DUSE - failed IS/surr- rr - see s810424
s810329.d	241318001	nag1	03-DEC-2009 23:08	925637	10-543	1.0	LANL	DUSE - failed IS - rr - see s810422
s810330.d	241318003	nag1	03-DEC-2009 23:38	925637	10-543	1.0	LANL	DUSE - outside tune window - rr - see s810421

(s10HInstrument Batch: /chem/MSD8.i/s120309.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD8

DATE: 12/04/2009 METHOD:See raw data OPERATOR:NAG REVIEWED BY:_____ DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT 1185503-D
Multiplier Voltage: 1859mv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
SOP: GL-OA-E-009 Rev. 22

Sequence Number: /chem/MSD8.i/s120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s810401.d	WBN091128-01	nagl	04-DEC-2009 08:01	50 PPM	s120409	1.0	DFTPP	DUSE
s810402.d	WBN091128-01	nagl	04-DEC-2009 08:24	50 PPM	s120409	1.0	DFTPP	
s810403.d	WBN091111-13.2	nagl	04-DEC-2009 08:40	40 PPM	s120409	1.0	MEGACVS	215717
s810404.d	WBN091201-03.2	nagl	04-DEC-2009 09:12	40 PPM	s120409	1.0	AP12CVS	
s810405.d	WBN091202-23.3	nagl	04-DEC-2009 09:43	40 PPM	s120409	1.0	PESTCVS	
s810406-1.d	1201983837	nagl	04-DEC-2009 10:13	928549	10-692-1	1.0	TBLK01	
s810406-2.d	1201983837	nagl	04-DEC-2009 10:13	928549	10-694-1	1.0	TBLK01	
s810406.d	1201983837	nagl	04-DEC-2009 10:13	928549	10-690-1	1.0	TBLK01	
s810407-1.d	1201985547	nagl	04-DEC-2009 10:43	928549	10-692-1	1.0	SBLK01	
s810407-2.d	1201985547	nagl	04-DEC-2009 10:43	928549	10-694-1	1.0	SBLK01	
s810407.d	1201985547	nagl	04-DEC-2009 10:43	928549	10-690-1	1.0	SBLK01	
s810408-1.d	1201985548	nagl	04-DEC-2009 11:12	928549	10-692-1	1.0	SBLK01LCS	
s810408-2.d	1201985548	nagl	04-DEC-2009 11:12	928549	10-694-1	1.0	SBLK01LCS	
s810408.d	1201985548	nagl	04-DEC-2009 11:12	928549	10-690-1	1.0	SBLK01LCS	
s810409.d	241904001	nagl	04-DEC-2009 11:41	928549	10-690-1	1.0	LANL	
s810410.d	241908001	nagl	04-DEC-2009 12:11	928549	10-692-1	1.0	LANL	
s810411.d	1201985549	nagl	04-DEC-2009 12:42	928549	10-692-1	1.0	LANL001MS	
s810412.d	1201985550	nagl	04-DEC-2009 13:12	928549	10-692-1	1.0	LANL001MSD	
s810413.d	241908002	nagl	04-DEC-2009 13:42	928549	10-692-1	1.0	LANL	

s810414.d	241912001	nagl	04-DEC-2009 14:12	928549	10-694-1	1.0	LANL	
s810415.d	241912002	nagl	04-DEC-2009 14:43	928549	10-694-1	1.0	LANL	
s810416.d	1201978976	nagl	04-DEC-2009 15:13	925637	10-543	1.0	LANL009MSD	USE - rr of s810323
s810417.d	241318010	nagl	04-DEC-2009 15:44	925637	10-543	1.0	LANL	USE - rr of s810324
s810418.d	1201978975	nagl	04-DEC-2009 16:14	925637	10-543	1.0	LANL009MS	USE - rr of s810322
s810419.d	241318013	nagl	04-DEC-2009 16:45	925637	10-543	1.0	LANL	USE - rr of s810325
s810420.d	241318014	nagl	04-DEC-2009 17:15	925637	10-543	1.0	LANL	USE - rr of s810326
s810421.d	241318003	nagl	04-DEC-2009 17:45	925637	10-543	1.0	LANL	USE - rr of s810330
s810422.d	241318001	nagl	04-DEC-2009 18:15	925637	10-543	1.0	LANL	USE - rr of s810329
s810423.d	241318005	nagl	04-DEC-2009 18:45	925637	10-543	1.0	LANL	DUSE - failed IS - rr of s810327
s810424.d	241183002	nagl	04-DEC-2009 19:15	925637	10-519	1.0	LANL	failed IS/passes surr - rr of s810328

(s10HInstrument Batch: /chem/MSD8.i/s120409.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD8

DATE: 11/28/2009 METHOD:See raw data OPERATOR:NAG REVIEWED BY:_____ DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT 1185503-D
Multiplier Voltage: 1929mv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091128-01
Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
SOP: GL-OA-E-009 Rev. 22

Sequence Number: /chem/MSD8.i/s112809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s8k2601.d	WBN091128-01	nagl	28-NOV-2009 17:41	50 PPM	s112809	1.0	DFTPP	DUSE
s8k2602.d	WBN091128-01	nagl	28-NOV-2009 19:09	50 PPM	s112809	1.0	DFTPP	DUSE
s8k2603-D.d	WBN091128-01	nagl	28-NOV-2009 19:39	50 PPM	s112809	1.0	DFTPP	
s8k2603.d	WBN091128-01	nagl	28-NOV-2009 19:39	50 PPM	s112809	1.0	DFTPP	
s8k2604.d	INST BLK	nagl	28-NOV-2009 19:55	-----	s112809	1.0	INST BLK	
s8k2605.d	WBN091111-16	nagl	28-NOV-2009 20:24	1 PPM	s112809	1.0	MEGA001	
s8k2606-d.d	WBN091111-15	nagl	28-NOV-2009 20:58	10 PPM	s112809	1.0	MEGA010	
s8k2606.d	WBN091111-15	nagl	28-NOV-2009 20:58	10 PPM	s112809	1.0	MEGA010	
s8k2607.d	WBN091111-14	nagl	28-NOV-2009 21:32	20 PPM	s112809	1.0	MEGA020	
s8k2608.d	WBN091111-13.1	nagl	28-NOV-2009 22:05	40 PPM	s112809	1.0	MEGA040	
s8k2609.d	WBN091111-12	nagl	28-NOV-2009 22:39	50 PPM	s112509	1.0	MEGA050	
s8k2610.d	WBN091111-11	nagl	28-NOV-2009 23:13	80 PPM	s112509	1.0	MEGA080	
s8k2611.d	WBN091111-10	nagl	28-NOV-2009 23:46	100 PPM	s112509	1.0	MEGA100	
s8k2612.d	WBN091111-09	nagl	29-NOV-2009 00:20	120 PPM	s112509	1.0	MEGA120	
s8k2613-d.d	WBN091111-01	nagl	29-NOV-2009 00:54	10 PPM	s112809	1.0	AP010	
s8k2613.d	WBN091111-01	nagl	29-NOV-2009 00:54	10 PPM	s112809	1.0	AP010	
s8k2614.d	WBN091111-02	nagl	29-NOV-2009 01:24	20 PPM	s112809	1.0	AP020	
s8k2615.d	WBN091111-03.1	nagl	29-NOV-2009 01:55	40 PPM	s112809	1.0	AP040	
s8k2616.d	WBN091111-04	nagl	29-NOV-2009 02:25	50 PPM	s112809	1.0	AP050	

s8k2617.d	WBN091111-05	nag1	29-NOV-2009 02:54	80 PPM	s112809	1.0	AP080	
s8k2618.d	WBN091111-06	nag1	29-NOV-2009 03:24	100 PPM	s112809	1.0	AP100	
s8k2619.d	WBN091111-07	nag1	29-NOV-2009 03:54	120 PPM	s112809	1.0	AP120	
s8k2620.d	WBN091111-17.1	nag1	29-NOV-2009 04:24	40 PPM	s112809	1.0	MEGAICV	DUSE
s8k2621-625.d	WBN091111-08.1	nag1	29-NOV-2009 04:57	40 PPM	s112809	1.0	APICV	
s8k2621-D.d	WBN091111-08.1	nag1	29-NOV-2009 04:57	40 PPM	s112809	1.0	APICV	
s8k2621.d	WBN091111-08.1	nag1	29-NOV-2009 04:57	40 PPM	s112809	1.0	APICV	
s8k2622.d	WBN091128-01	nag1	29-NOV-2009 10:50	50 PPM	s112809	1.0	DFTPP	DUSE
s8k2623.d	WBN091128-01	nag1	29-NOV-2009 11:07	50 PPM	s112809	1.0	DFTPP	DUSE
s8k2624-D.d	WBN091128-01	nag1	29-NOV-2009 11:33	50 PPM	s112809	1.0	DFTPP	
s8k2624.d	WBN091128-01	nag1	29-NOV-2009 11:33	50 PPM	s112809	1.0	DFTPP	
s8k2625.d	INST BLK	nag1	29-NOV-2009 11:50	-----	s112809	1.0	INST BLK	
s8k2626.d	WBN091029-25	nag1	29-NOV-2009 12:20	10 PPM	s112809	1.0	PEST010	
s8k2627.d	WBN091029-24	nag1	29-NOV-2009 12:49	20 PPM	s112809	1.0	PEST020	
s8k2628.d	WBN091029-23.1	nag1	29-NOV-2009 13:19	40 PPM	s112809	1.0	PEST040	
s8k2629.d	WBN091029-22	nag1	29-NOV-2009 13:50	50 PPM	s112809	1.0	PEST050	
s8k2630.d	WBN091029-21	nag1	29-NOV-2009 14:20	80 PPM	s112809	1.0	PEST080	
s8k2631.d	WBN091029-20	nag1	29-NOV-2009 14:51	100 PPM	s112809	1.0	PEST100	
s8k2632.d	WBN091029-19	nag1	29-NOV-2009 15:21	120 PPM	s112809	1.0	PEST120	
s8k2633-d.d	WBN091016-16	nag1	29-NOV-2009 15:51	500 PPM	s112809	1.0	HEX500	
s8k2633.d	WBN091016-16	nag1	29-NOV-2009 15:51	500 PPM	s112809	1.0	HEX500	
s8k2634.d	WBN091016-15	nag1	29-NOV-2009 16:21	1000 PPM	s112809	1.0	HEX1000	
s8k2635.d	WBN091016-14	nag1	29-NOV-2009 16:51	1250 PPM	s112809	1.0	HEX1250	
s8k2636.d	WBN091016-13	nag1	29-NOV-2009 17:22	1500 PPM	s112809	1.0	HEX1500	
s8k2637.d	WBN091016-12	nag1	29-NOV-2009 17:52	1750 PPM	s112809	1.0	HEX1750	
s8k2638.d	UBN090828-02	nag1	29-NOV-2009 18:22	2000 PPM	s112809	1.0	HEX2000	
s8k2639-625.d	WBN091106-05.2	nag1	29-NOV-2009 18:53	40 PPM	s112809	1.0	MEGAICV	

s8k2639-BOE.d	WBN091106-05.2	nag1	29-NOV-2009 18:53	40 PPM	s112809		1.0	MEGAICV	
s8k2639-D.d	WBN091106-05.2	nag1	29-NOV-2009 18:53	40 PPM	s112809		1.0	MEGAICV	
s8k2639.d	WBN091106-05.2	nag1	29-NOV-2009 18:53	40 PPM	s112809		1.0	MEGAICV	
s8k2640-D.d	WBN091029-26.1	nag1	29-NOV-2009 19:26	40 PPM	s112809		1.0	PESTICV	
s8k2640.d	WBN091029-26.1	nag1	29-NOV-2009 19:26	40 PPM	s112809		1.0	PESTICV	
s8k2641.d	WBN091016-10.1	nag1	29-NOV-2009 19:57	1250 PPM	s112809		1.0	HEXICV	DUSE
s8k2642-D.d	WBN091128-01	nag1	30-NOV-2009 07:25	50 PPM	s112809		1.0	DFTPP	
s8k2642.d	WBN091128-01	nag1	30-NOV-2009 07:25	50 PPM	s112809		1.0	DFTPP	
s8k2643.d	INST BLK	nag1	30-NOV-2009 07:40	-----	s112809		1.0	INST BLK	
s8k2644.d	WBN091117-01	nag1	30-NOV-2009 08:10	10 PPM	s112809		1.0	NEV010	
s8k2645.d	WBN091117-02	nag1	30-NOV-2009 08:40	20 PPM	s112809		1.0	NEV020	
s8k2646.d	WBN091117-03	nag1	30-NOV-2009 09:10	40 PPM	s112809		1.0	NEV040	
s8k2647.d	WBN091117-04	nag1	30-NOV-2009 09:39	50 PPM	s112809		1.0	NEV050	
s8k2648.d	WBN091117-05	nag1	30-NOV-2009 10:09	80 PPM	s112809		1.0	NEV080	
s8k2649.d	WBN091117-06	nag1	30-NOV-2009 10:38	100 PPM	s112809		1.0	NEV100	
s8k2650.d	WBN091117-07	nag1	30-NOV-2009 11:07	120 PPM	s112809		1.0	NEV120	
s8k2651-D.d	WBN090827-10.4	nag1	30-NOV-2009 11:36	1250 PPM	s112809		1.0	HEXICV	
s8k2651.d	WBN090827-10.4	nag1	30-NOV-2009 11:36	1250 PPM	s112809		1.0	HEXICV	

NCR Report No.: 766333
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
05-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
925637	See Below		

Potentially affected work order(s)(SDG): 241183(10-519),241318(10-543)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Nonconformance Description:

1. The MS failed recovery for Benzyl alcohol. Please see the spike recovery report for the specific failure.

2. The MS/MSD RPD values failed for multiple target analtyes. Please see the spike recovery report for the specific failures.

NRG Disposition:

1. The MSD displayed a passing but biased low recovery for that analyte. Therefore, failure was attributed to matrix interference.

2. The analytes associated with failing RPD values displayed acceptable MS and MSD recoveries individually. Therefore, the data were reported un-qualified for the RPD value failures.

Originator's Name:

Nathan Greene 05-DEC-09

Data Validator/Group Leader:

Daniel Beacham 11-DEC-09

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810423.d
Lab Smp Id: 241318005 Client Smp ID: RE03-09-13624
Inj Date : 04-DEC-2009 18:45
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318005|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	22.67890	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.539	4.539	(1.000)	280579	40.0000	
* 29 Naphthalene-d8	136	5.806	5.806	(1.000)	1028470	40.0000	
* 46 Acenaphthene-d10	164	7.668	7.668	(1.000)	601691	40.0000	
* 67 Phenanthrene-d10	188	9.268	9.273	(1.000)	1050091	40.0000	
* 91 Chrysene-d12	240	12.192	12.206	(1.000)	684832	40.0000	
* 98 Perylene-d12	264	14.354	14.373	(1.000)	323210	40.0000	
$ 3 2-Fluorophenol	112	3.387	3.377	(0.746)	472279	70.4627	3030
$ 5 Phenol-d5	99	4.158	4.158	(0.916)	598866	71.1777	3060
$ 20 Nitrobenzene-d5	82	5.068	5.073	(0.873)	256704	34.3959	1480
$ 39 2-Fluorobiphenyl	172	6.935	6.935	(0.904)	586256	35.2617	1520
$ 60 2,4,6-Tribromophenol	329	8.511	8.516	(1.110)	144695	52.0627	2240
$ 81 p-Terphenyl-d14	244	10.978	10.982	(0.900)	595970	46.7719	2010

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	10.820	10.830	(0.888)	13852	0.70054	30.2(a)
68 Phenanthrene	178	9.292	9.297	(1.003)	7401	0.32206	13.9(a)
76 Fluoranthene	202	10.573	10.582	(1.141)	15358	0.54277	23.4(a)
95 Benzo(b)fluoranthene	252	13.730	13.735	(0.957)	4117	0.47789	20.6(a)
97 Benzo(a)pyrene	252	14.249	14.273	(0.993)	2531	0.35286	15.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s810423.d
Report Date: 12/05/2009 08:48
Lab. ID: 241318005 SampleType: SAMPLE
Injection Date: 04-DEC-2009 18:45
Operator: nagl Instrument: MSD8.i
Sample Info: |241318005|925637|1|SVMF|1|LANL
Miscellaneous Info: |MSD8207_SF|WBN091128-02
Comment:
Method used: /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-543
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	31692	4.16	4.23	80-120	100	(T)
93	1272	4.21	4.23	214-274	4	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	38955	5.07	4.91	80-120	100	(T)
42	19133	5.07	4.91	24- 84	49	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	82054	7.67	7.43	80-120	100	(T)
63	1005	7.67	7.43	31- 91	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	82054	7.67	7.86	80-120	100	(T)
89	1330	7.66	7.86	47-107	2	(QT)
63	1005	7.67	7.86	21- 81	1	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	224	8.52	8.30	80-120	100	(T)
105	1403	8.51	8.30	11- 71	624	(QT)
51	1101	8.51	8.30	15- 75	490	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	7401	9.29	9.30	80-120	100	( )
179	1202	9.29	9.30	0- 46	16	( )
176	1352	9.29	9.30	0- 49	18	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
69 Anthracene			CAS#: 120-12-7			
178	7401	9.29	9.35	80-120	100	(T)
179	1202	9.29	9.35	0- 46	16	(T)
176	1352	9.29	9.35	0- 48	18	(T)
76 Fluoranthene			CAS#: 206-44-0			
202	15358	10.57	10.58	80-120	100	( )
203	2938	10.58	10.58	0- 48	19	( )
101	2260	10.57	10.58	0- 42	15	( )
79 Pyrene			CAS#: 129-00-0			
202	13852	10.82	10.83	80-120	100	( )
200	2922	10.83	10.83	0- 50	21	( )
101	2882	10.82	10.83	0- 44	21	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	9078	12.18	12.18	80-120	100	( )
226	1455	12.18	12.18	0- 56	16	( )
229	2906	12.18	12.18	0- 50	32	( )
92 Chrysene			CAS#: 218-01-9			
228	6327	12.18	12.24	80-120	100	( )
229	1799	12.18	12.24	0- 51	28	( )
226	843	12.18	12.24	0- 59	13	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	4117	13.73	13.73	80-120	100	( )
253	790	13.73	13.73	0- 52	19	( )
125	451	13.73	13.73	0- 42	11	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	4117	13.73	13.79	80-120	100	( )
253	481	13.73	13.78	0- 52	12	( )
125	437	13.76	13.79	0- 43	11	( )
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	2531	14.25	14.27	80-120	100	( )
253	972	14.25	14.27	0- 52	38	( )
125	794	14.25	14.27	0- 39	31	( )

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

Data file : /chem/MSD8.i/s120409.b/s810423.d
Lab Smp Id: 241318005 Client Smp ID: RE03-09-13624
Inj Date : 04-DEC-2009 18:45
Operator : nagl Inst ID: MSD8.i
Smp Info : |241318005|925637|1|SVMF|1|LANL
Misc Info : |MSD8207_SF|WBN091128-02
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s120409.b/MSD8-8270C-112809.m
Meth Date : 04-Dec-2009 13:41 nat00999 Quant Type: ISTD
Cal Date : 30-NOV-2009 09:10 Cal File: s8k2646.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-543.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	22.67890	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.539	1611092	40.000
* 98 Perylene-d12	14.354	899853	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.149	216519	5.37569995	231	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Eicosane				CAS #: 112-95-8			
13.959	119710	5.32130794	229	95	NIST05.L	113492	98
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur				CAS #: 300574-36-1			
18.925	597658	26.5668688	1140	90	NIST05.L	68738	98

Data File: /chem/MSD8.i/s120409.b/s810423.d
Date : 04-DEC-2009 18:45
Client ID: RE03-09-13624
Sample Info: 1241318005192563711ISVMF11ILANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20

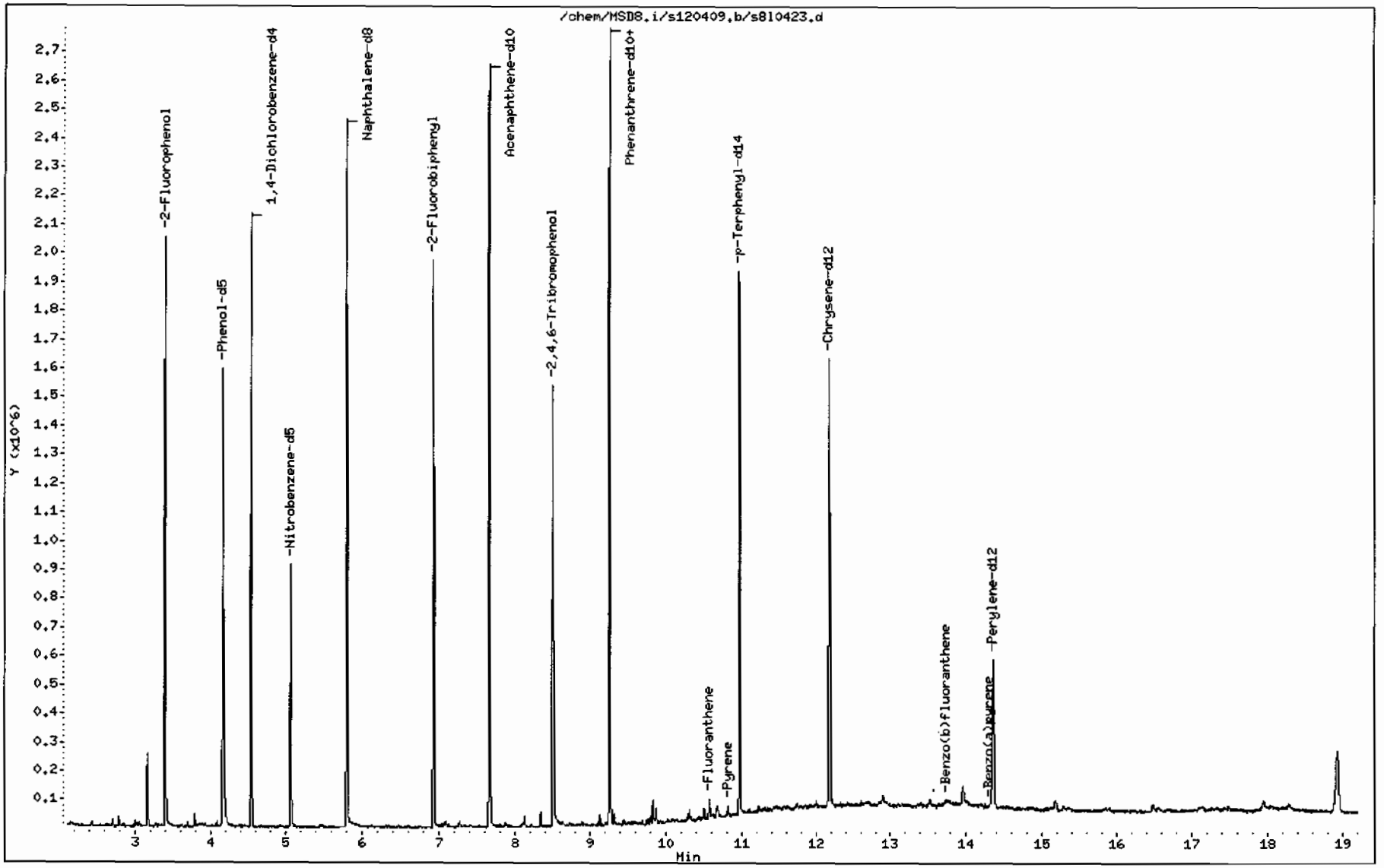

Data File: /chem/MSD8.i/s120409.b/s810423.d

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |24131800519256371|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 30.2 ug/Kg

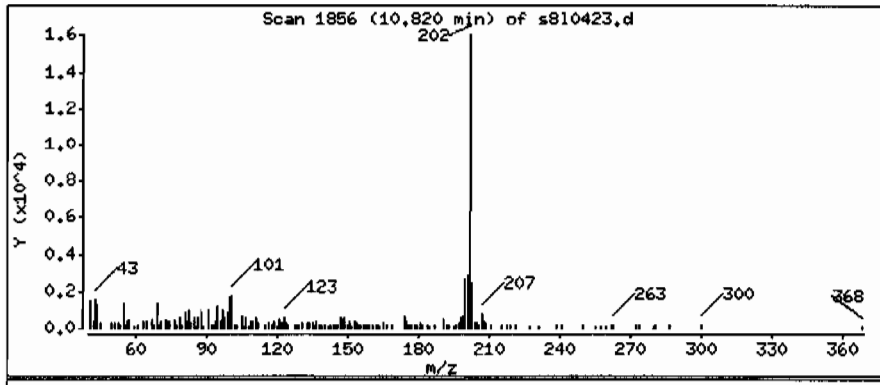

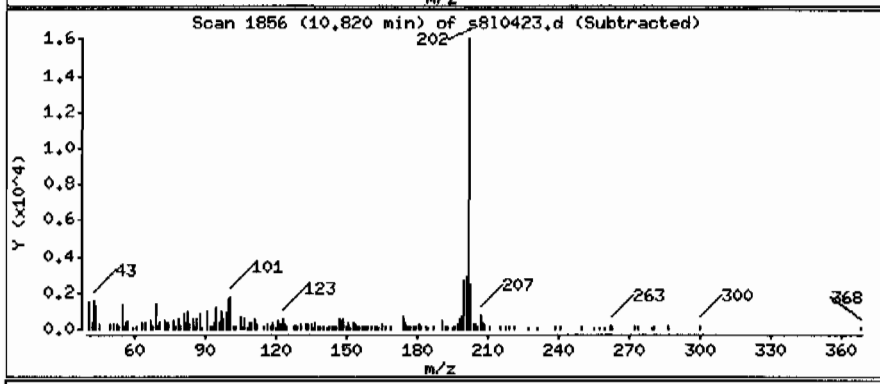

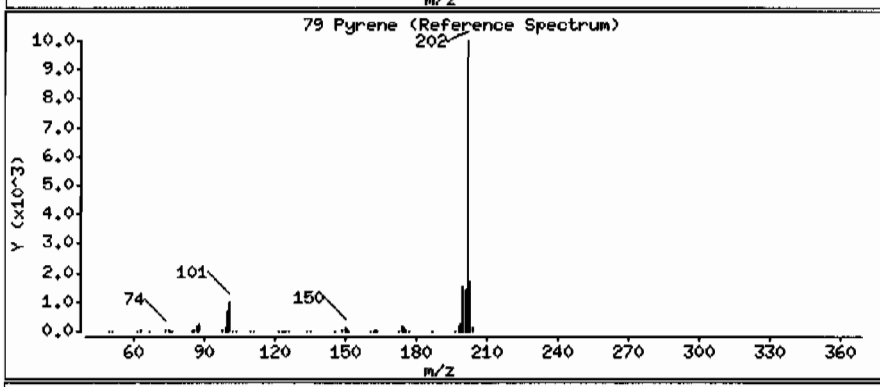

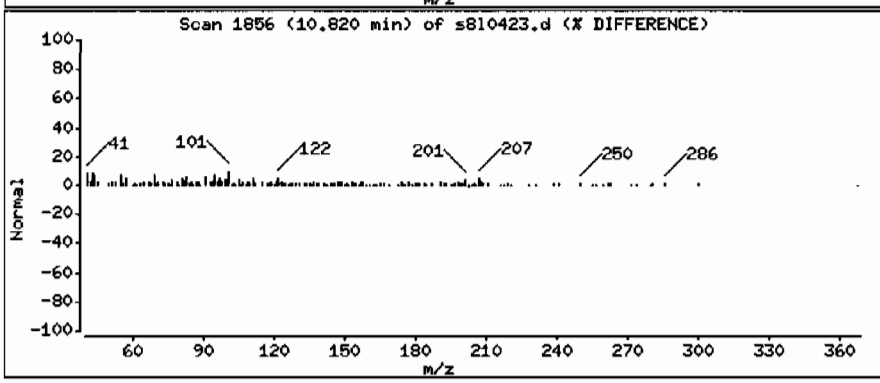

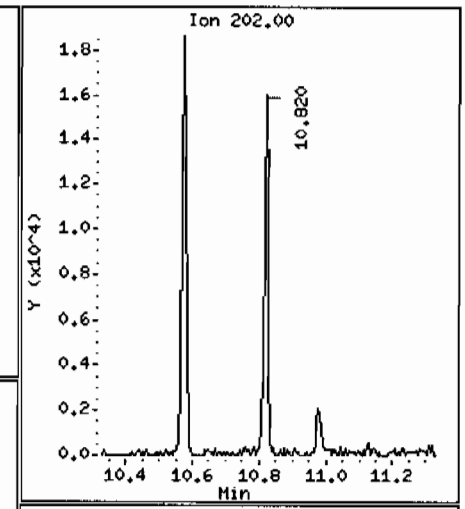

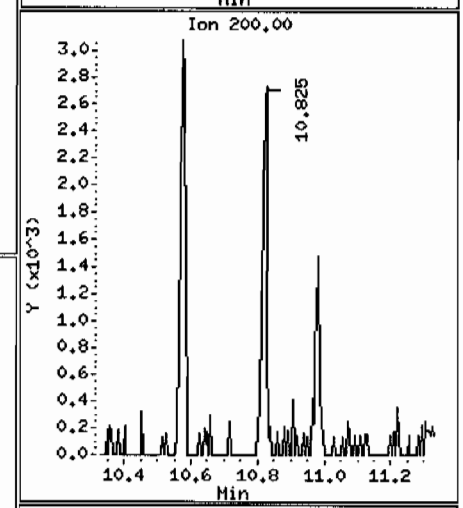

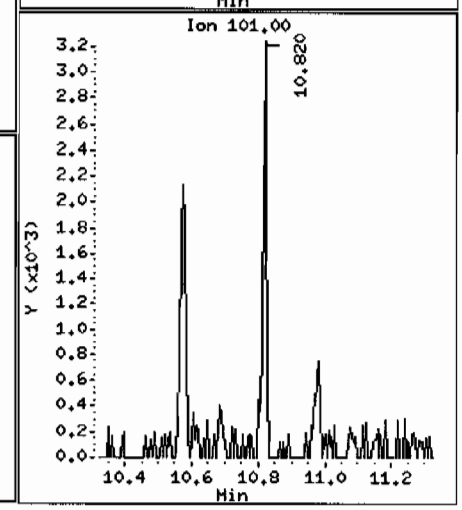

Data File: /chem/MSD8.i/s120409.b/s810423.d

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |2413180051925637111SVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 13.9 ug/Kg

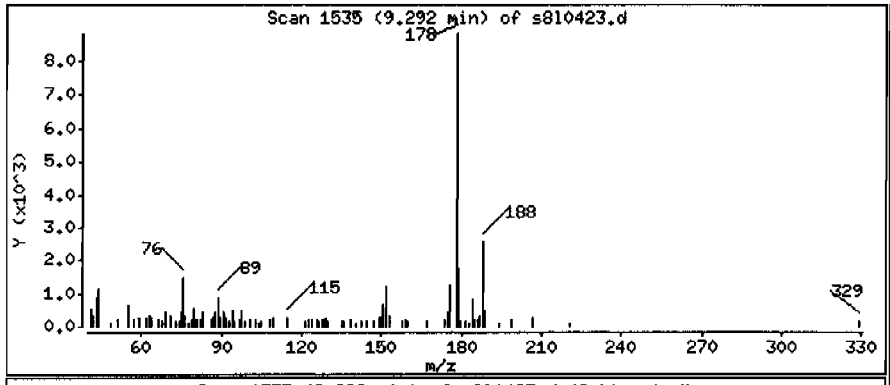

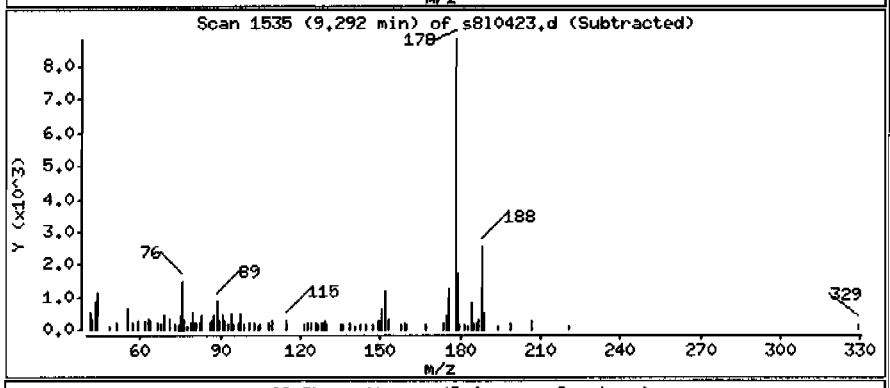

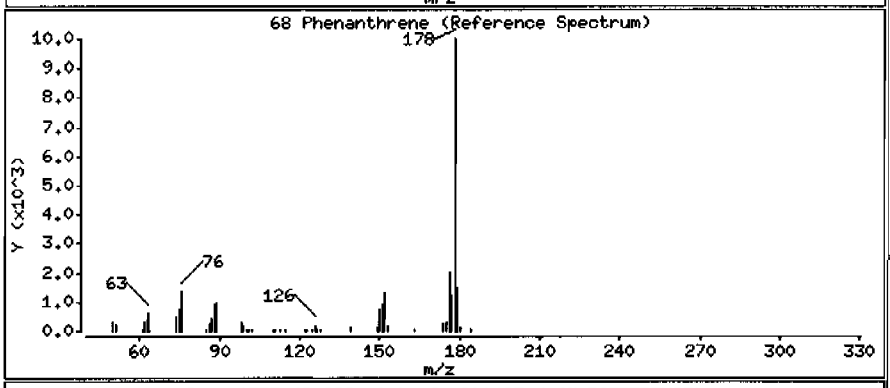

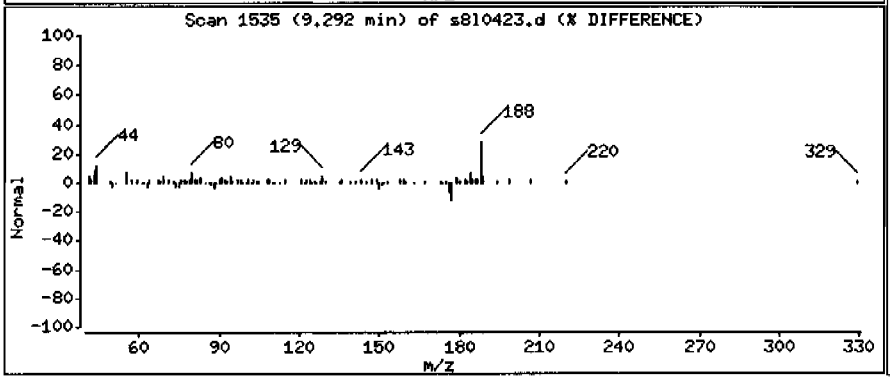

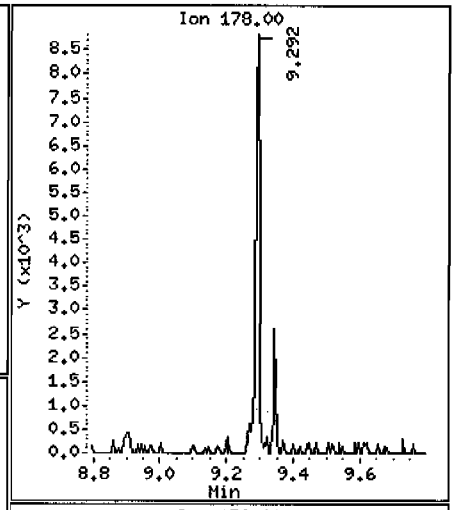

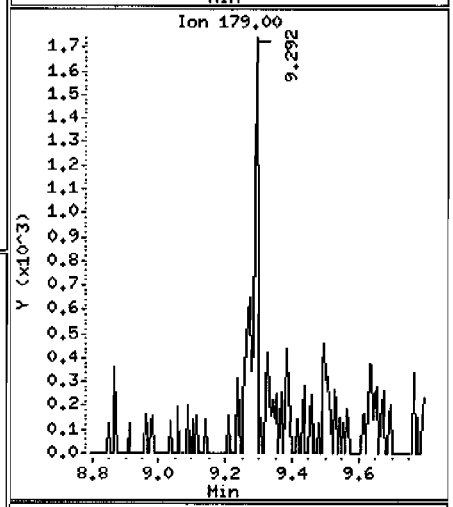

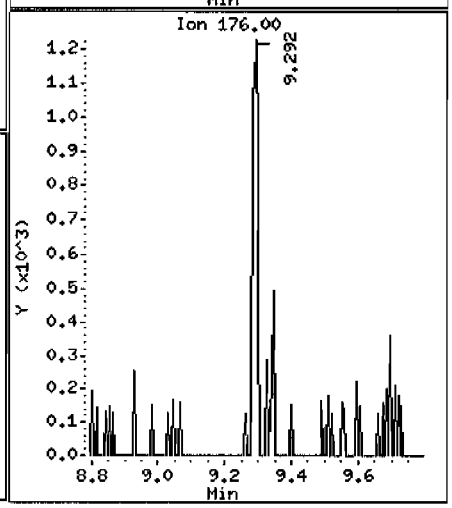

Data File: /chem/MSD8.i/s120409.b/s810423.d

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: 1241318005|925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 23.4 ug/Kg

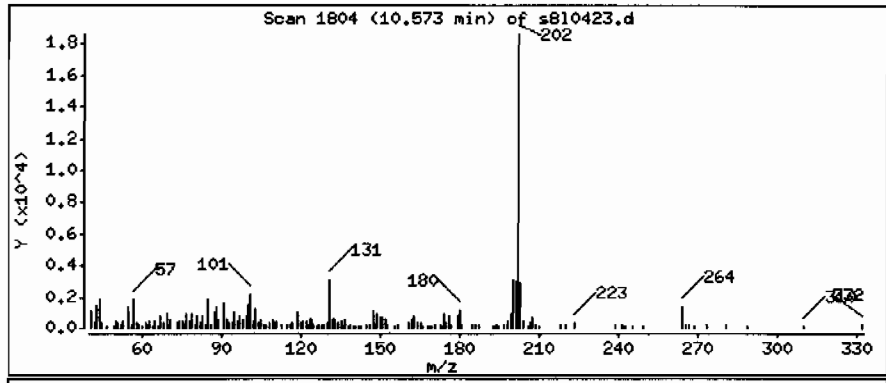

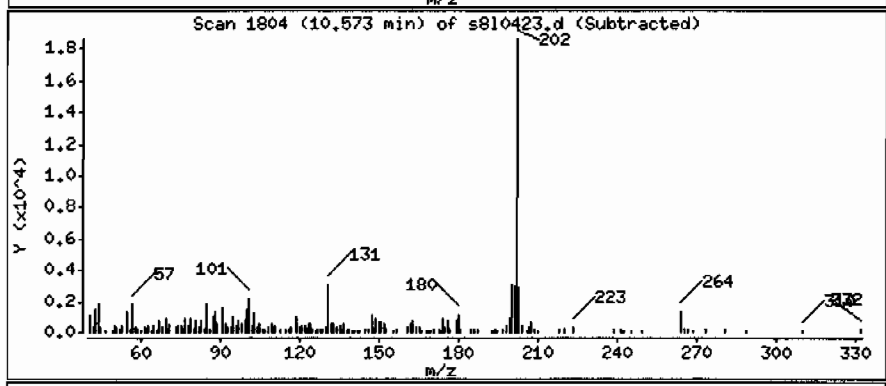

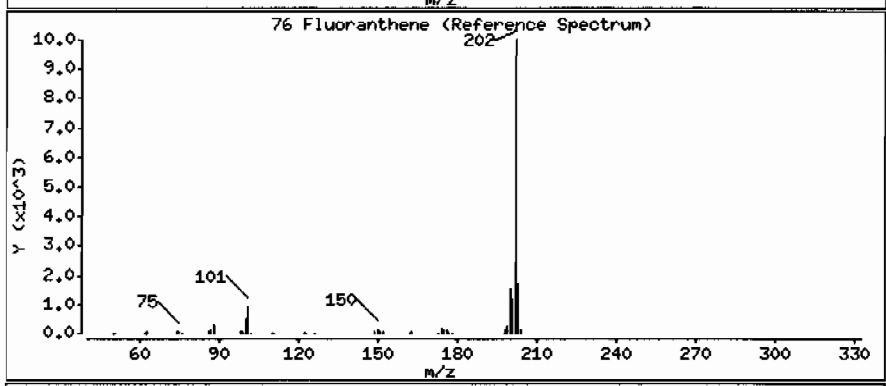

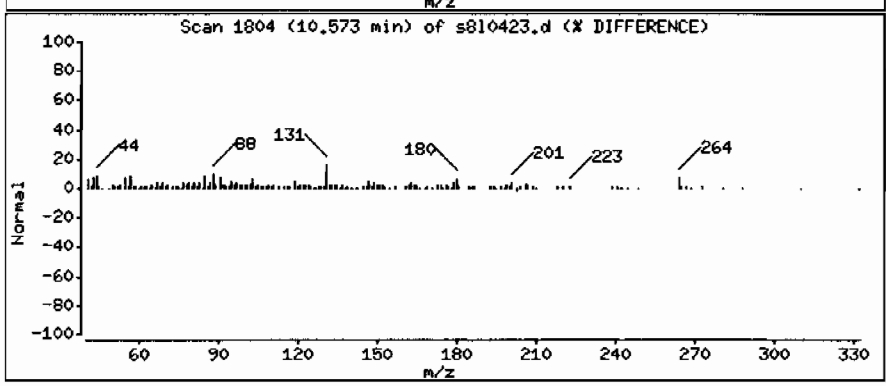

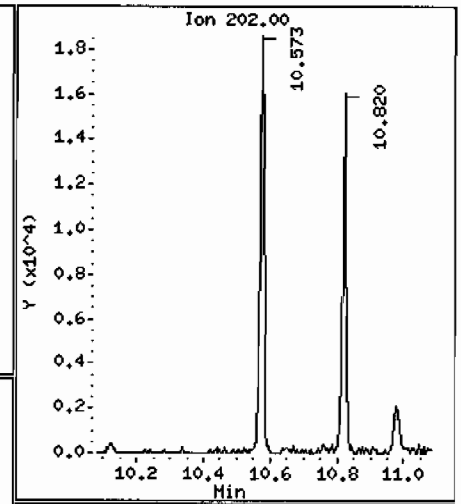

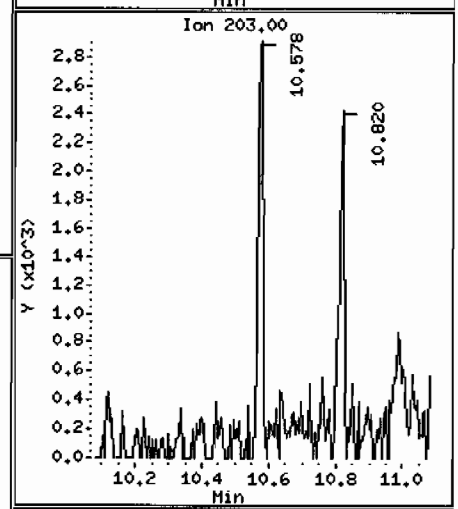

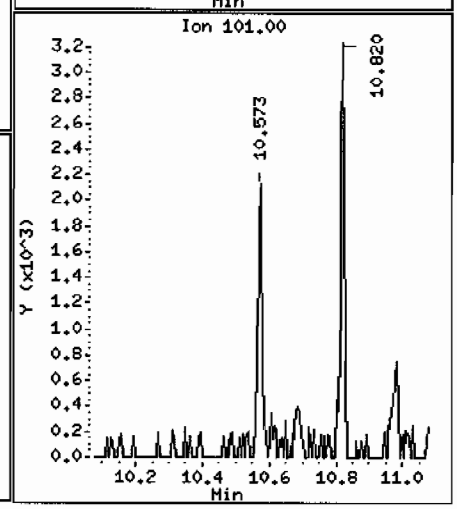

Data File: /chem/MSD8.i/s120409.b/s810423.d

Page 5

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 20.6 ug/Kg

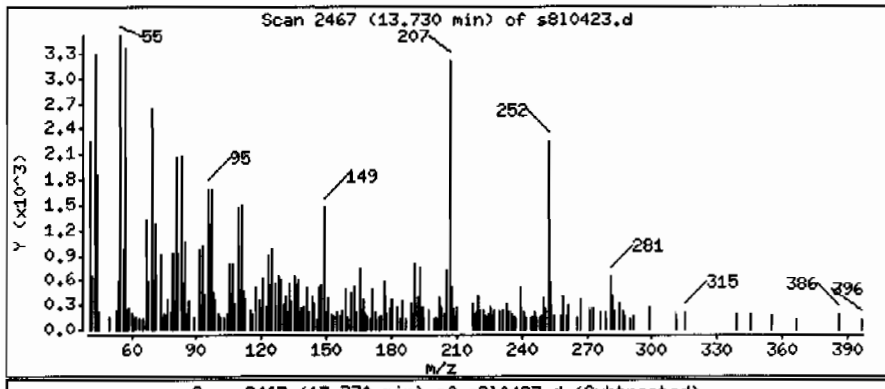

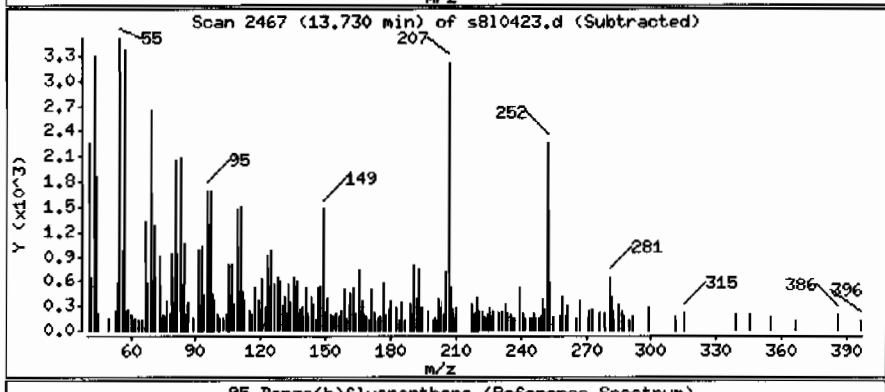

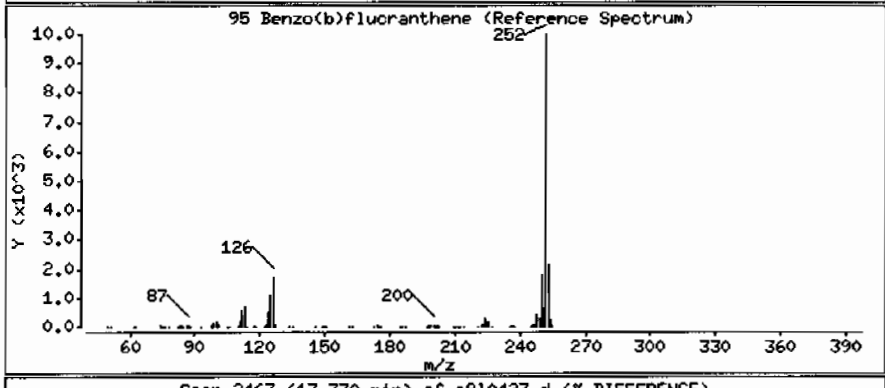

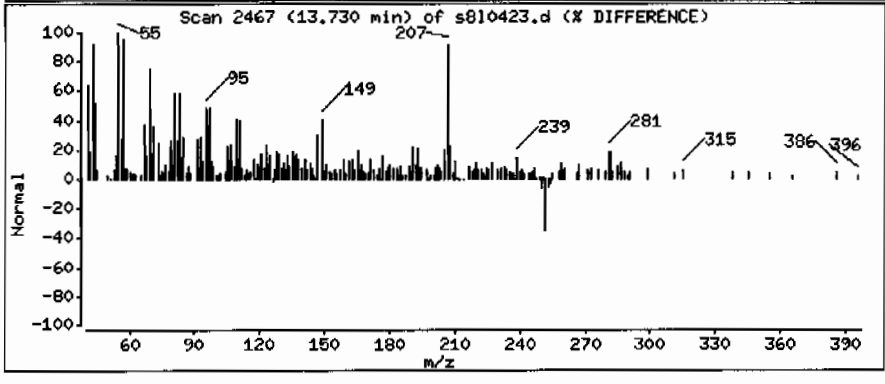

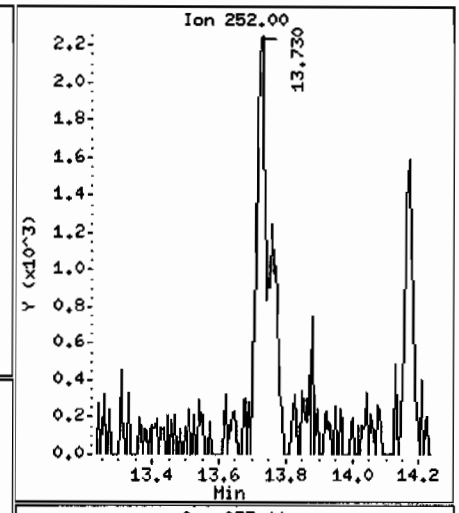

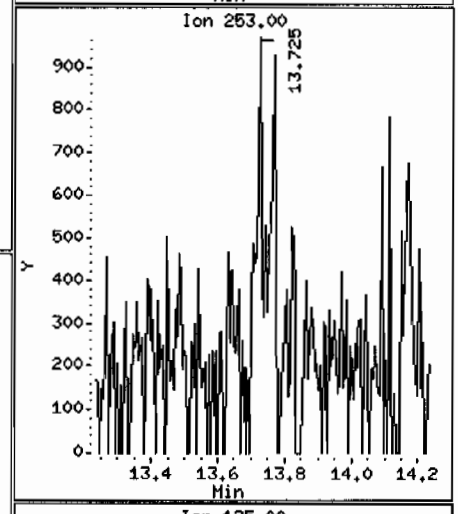

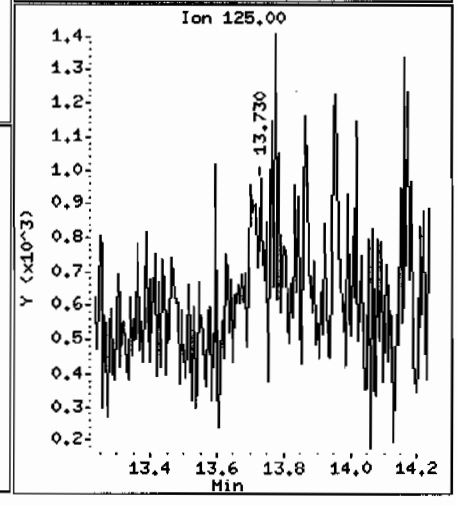

Data File: /chem/MSD8.i/s120409.b/s810423.d

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: 1241318005192563711ISVHF11ILANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 15.2 ug/Kg

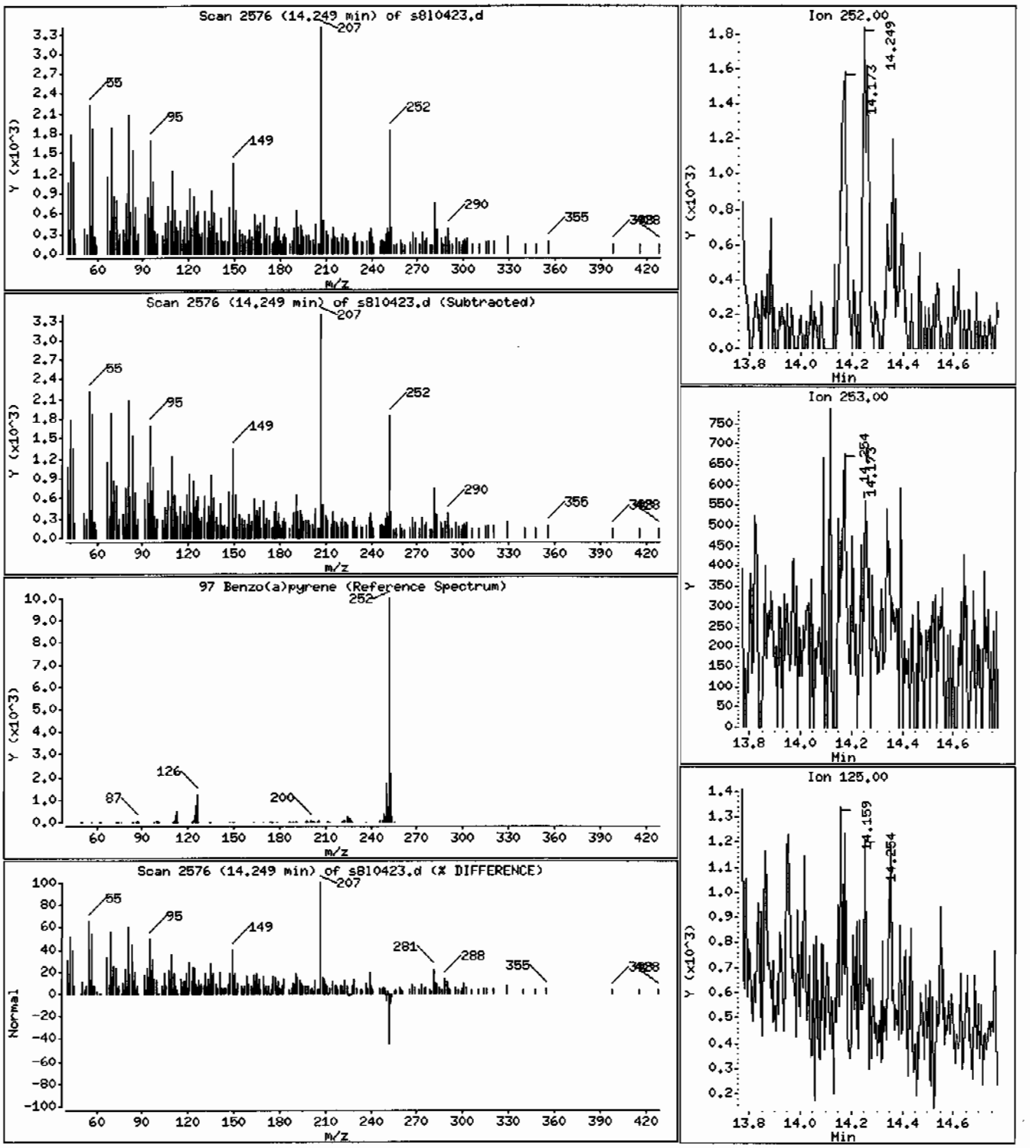

Data File: /chem/MSD8.i/s120409.b/s810423.d

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624

Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	64	C6H12O2	116
Hydrazine, 1,1-bis(1-methylethyl)-	921-14-2	NIST05.L	8044	50	C6H16N2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	47	C6H12O2	116

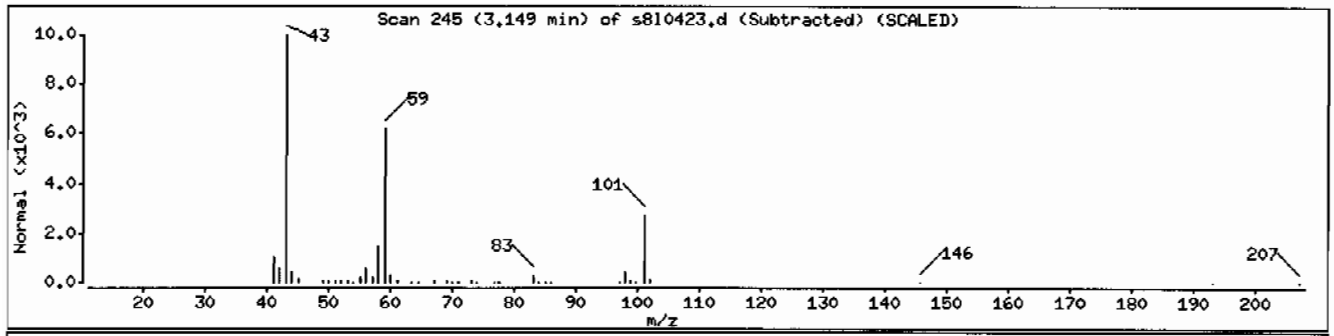

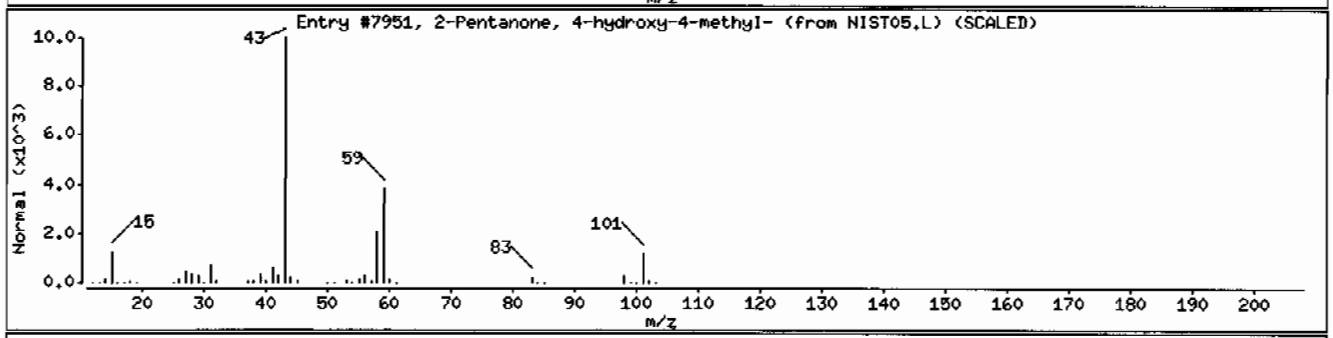

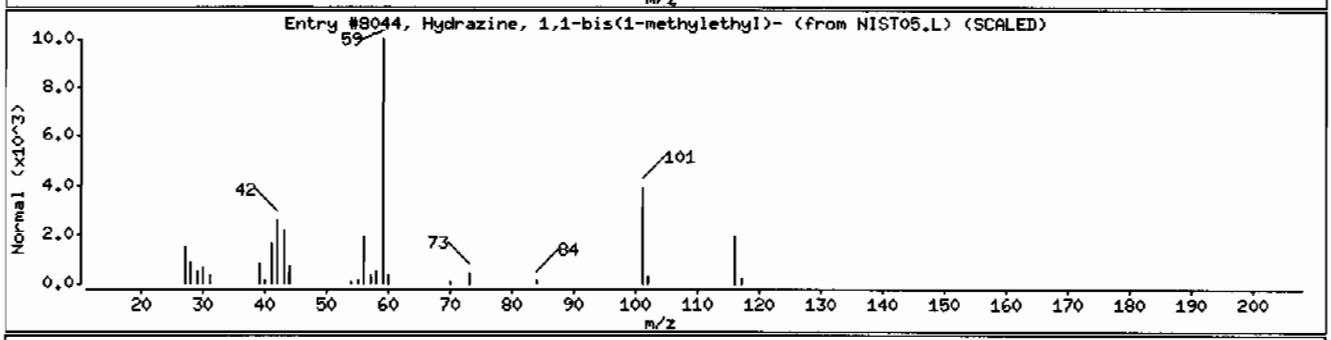

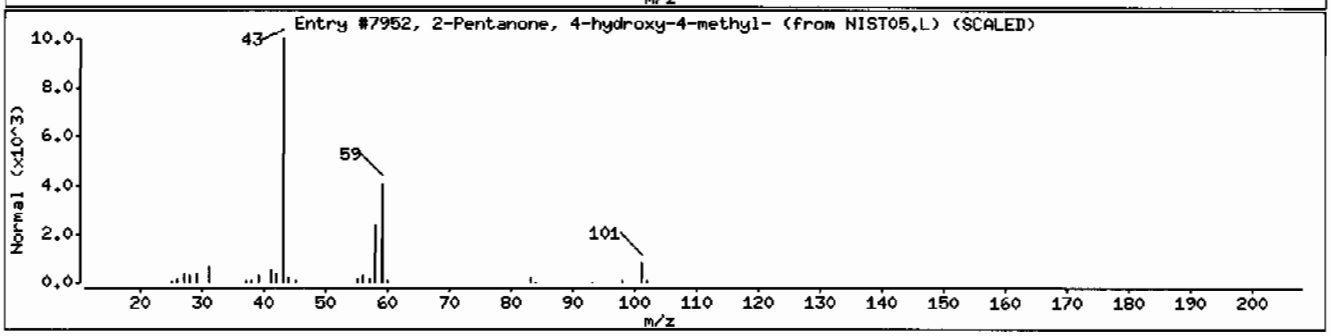

Data File: /chem/MSD8.i/s120409.b/s810423.d

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624 Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282
Nonadecane	629-92-5	NIST05.L	104271	91	C19H40	268
Eicosane	112-95-8	NIST05.L	113489	91	C20H42	282

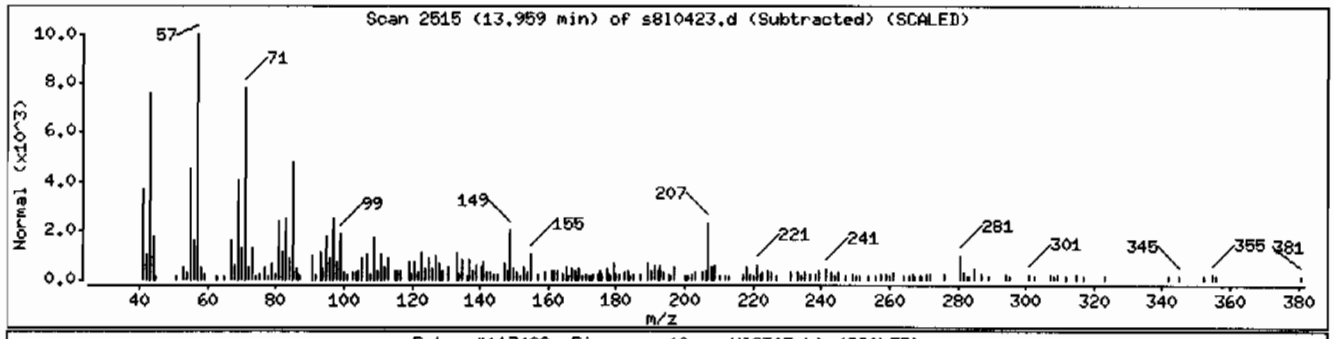

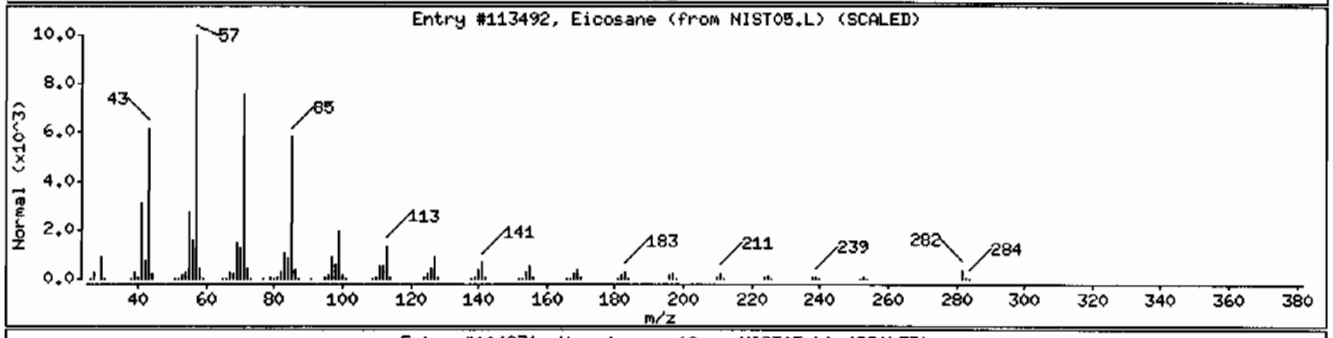

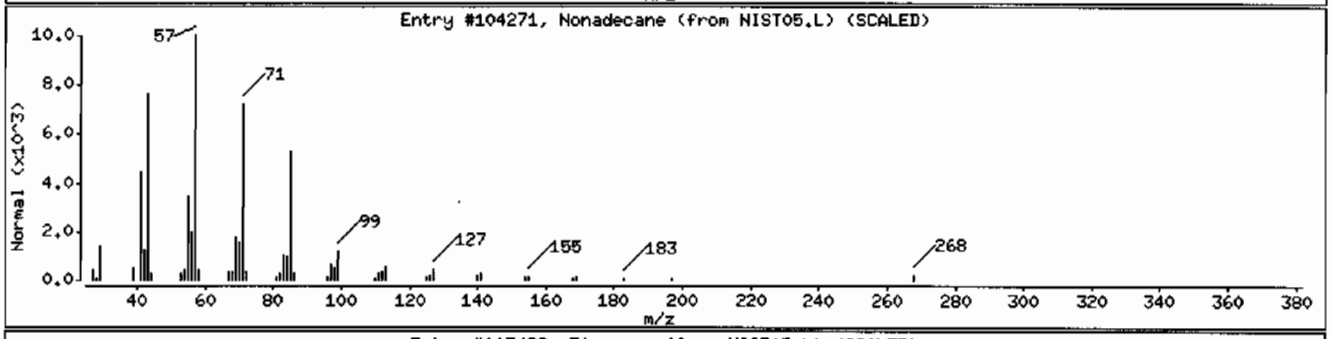

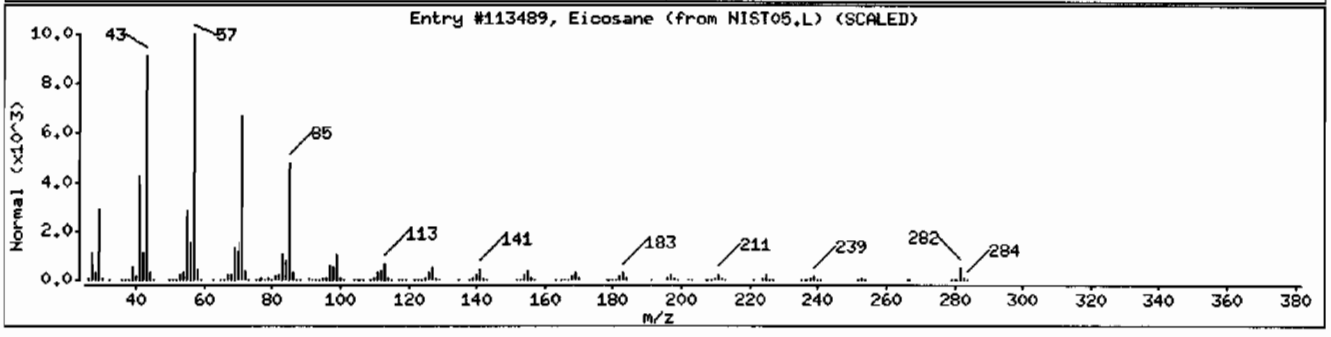

Data File: /chem/MSD8.i/s120409.b/s810423.d

Date : 04-DEC-2009 18:45

Client ID: RE03-09-13624 Instrument: MSD8.i

Sample Info: |2413180051925637|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	300574-36-1	NIST05.L	68738	90	C6H5BrN2O2	216
Friedelan-3-one	559-74-0	NIST05.L	176566	60	C30H50O	426
3(4H)-Phenanthrenone, 4a,4b,5,6,7,8,8a,9	57684-12-5	NIST05.L	89397	46	C17H26O	246

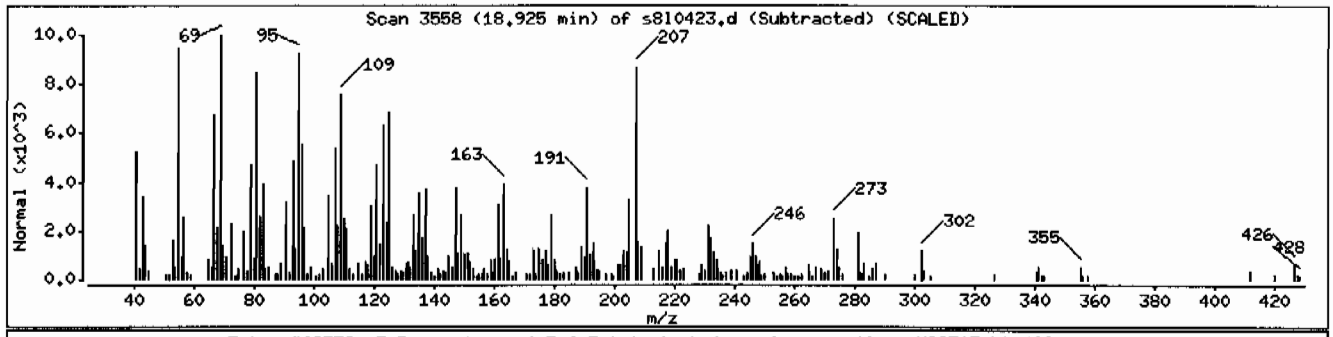

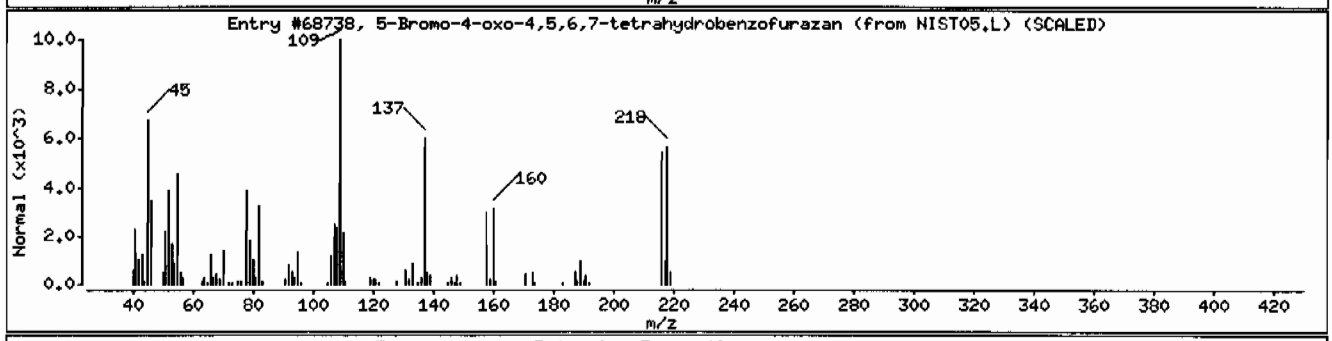

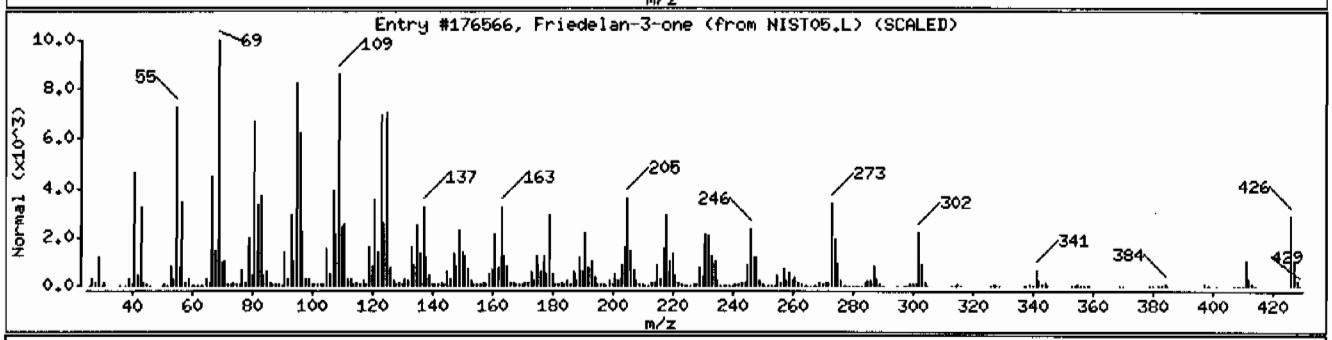

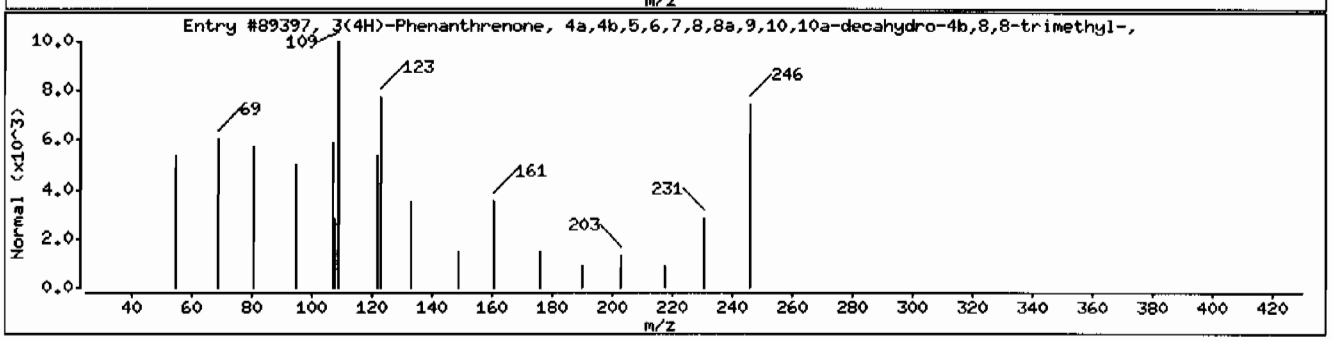

GC SEMIVOLATILE DRO ANALYSIS

DRO Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-543

Method/Analysis Information

Procedure:	**Analysis of Diesel Range Organics by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	925774
Prep Batch Number:	925769

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241318001	RE03-09-13618
241318002	RE03-09-13622
241318003	RE03-09-13620
241318004	RE03-09-13619
241318005	RE03-09-13624
241318006	RE03-09-13623
241318007	RE03-09-13626
241318008	RE03-09-13621
241318009	RE03-09-13627
241318010	RE03-09-13625
241318013	RE03-10-6084
241318014	RE03-10-6085
1201979310	Method Blank (MB)
1201979313	Laboratory Control Sample (LCS)
1201979311	241318008(RE03-09-13621) Matrix Spike (MS)
1201979312	241318008(RE03-09-13621) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241318008 (RE03-09-13621) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241318005 (RE03-09-13624) was diluted at 1:10 due to thick and oily matrix of the extract.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction..

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao **Date:** 12/14/09

Roadmap for LANL 10-543 DRO

This roadmap was analyzed by KEV01577 on 11-30-2009, 11:36.
This roadmap was reviewed by jcb on 11-30-2009, 15:08.
This roadmap was packaged by yml on 12-12-2009, 07:23.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/112509dr/010f1001.d	241318001	26-NOV-2009	01:27	10-543.sub	RE03-09-13618	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/011f1101.d	241318002	26-NOV-2009	02:06	10-543.sub	RE03-09-13622	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/012f1201.d	241318003	26-NOV-2009	02:44	10-543.sub	RE03-09-13620	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/013f1301.d	241318004	26-NOV-2009	03:22	10-543.sub	RE03-09-13619	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/014f1401.d	241318005	26-NOV-2009	04:00	10-543.sub	RE03-09-13624	10.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/015f1501.d	241318006	26-NOV-2009	04:38	10-543.sub	RE03-09-13623	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/018f1801.d	241318007	26-NOV-2009	06:33	10-543.sub	RE03-09-13626	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/019f1901.d	241318008	26-NOV-2009	07:11	10-543.sub	RE03-09-13621	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/022f2201.d	241318009	26-NOV-2009	09:05	10-543.sub	RE03-09-13627	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/023f2301.d	241318010	26-NOV-2009	09:44	10-543.sub	RE03-09-13625	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/024f2401.d	241318013	26-NOV-2009	10:22	10-543.sub	RE03-10-6084	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/025f2501.d	241318014	26-NOV-2009	11:01	10-543.sub	RE03-10-6085	1.00000	925774	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/112509dr/005f0501a.d	1201979310	mb	25-NOV-2009	22:16	10-543.sub	DBLK01	1.00000	925774	
☐	N	/chem/fid5.i/112509dr/006f0601a.d	1201979313	lcs	25-NOV-2009	22:54	10-543.sub	DBLK01LCS	1.00000	925774	
☐	N	/chem/fid5.i/112509dr/020f2001.d	1201979311	ms	26-NOV-2009	07:49	10-543.sub	RE03-09-13621MS	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/021f2101.d	1201979312	msd	26-NOV-2009	08:27	10-543.sub	RE03-09-13621MSD	1.00000	925774	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13618	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 01:27	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.91	mg/kg	2.52	7.75

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318002	Date Received:	11/18/2009 08:50	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13622	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 02:06	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		17.2	mg/kg	2.30	7.08

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318003	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13620	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 02:44	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		32.1	mg/kg	2.30	7.07

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13619	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 03:22	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	013f1301.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.09	mg/kg	2.53	7.80

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318005	Date Received:	11/18/2009 08:50	%Moisture:	22.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13624	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	10
Run Date:	11/26/2009 04:00	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	014f1401.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	31.6	mg/kg	27.9	85.9

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13623	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 04:38	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	015f1501.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.69	mg/kg	2.24	6.89

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318007	Date Received:	11/18/2009 08:50	%Moisture:	15.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13626	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 06:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	018f1801.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.55	mg/kg	2.56	7.87

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5J	**Dilution:**	1
Run Date:	11/26/2009 07:11	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	019f1901.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		7.52	mg/kg	2.26	6.95

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13627	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 09:05	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	022f2201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.94	mg/kg	2.32	7.14

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 09:44	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	023f2301.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.02	mg/kg	2.60	8.01

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318013	Date Received:	11/18/2009 08:50	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–6084	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 10:22	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	024f2401.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.37	mg/kg	2.48	7.64

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 11:01	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	025f2501.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.40	mg/kg	2.25	6.94

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10-543

Matrix Type: SOLID

CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC	
1201979310	MB for batch 925769	60	
1201979313	LCS for batch 925769	83	
241318001	RE03-09-13618	56	
241318002	RE03-09-13622	61	
241318003	RE03-09-13620	68	
241318004	RE03-09-13619	58	
241318005	RE03-09-13624	54	D
241318006	RE03-09-13623	58	
241318007	RE03-09-13626	58	
241318008	RE03-09-13621	62	
1201979311	RE03-09-13621MS	78	
1201979312	RE03-09-13621MSD	80	
241318009	RE03-09-13627	53	
241318010	RE03-09-13625	42	
241318013	RE03-10-6084	63	
241318014	RE03-10-6085	61	

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number: 10-543 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 925769 **Matrix:** SOIL

Lab Sample ID: 1201979313

Instrument: FID5.I **Analysis Date:** 11/25/2009 22:54 **Dilution:** 1

Analyst: KXR2 **Prep Batch ID** 925769

Inj. Vol: 1 uL **Batch ID:** 925774

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	28.0	84	53-114

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10–543**	**Sample Type:**	**Matrix Spike**	
Client ID:	**RE03–09–13621MS**	**Matrix:**	**S**	
Lab Sample ID:	**1201979311**	**%Moisture:**	**4.6**	
Instrument:	**FID5.I**	**Analysis Date:**	**11/26/2009 07:49**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID**	**925769**	
Inj. Vol:	**1 uL**	**Batch ID:**	**925774**	

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	34.8	7.52	35.4	80	21–122

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10–543**	**Sample Type:**	**Matrix Spike Duplicate**	
Client ID:	**RE03–09–13621MSD**	**Matrix:**	**S**	
Lab Sample ID:	**1201979312**	**%Moisture:**	**4.6**	
Instrument:	**FID5.I**	**Analysis Date:**	**11/26/2009 08:27**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID**	**925769**	
Inj. Vol:	**1 uL**	**Batch ID:**	**925774**	

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	34.9	7.52	39.1	91	21–122	10	0–30

Method Blank Summary

SDG Number:	10–543	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925769	Instrument ID:	FID5.I	Data File:	005f0501.d
Lab Sample ID:	1201979310	Prep Date:	11/24/2009 21:12	Analyzed:	11/25/09 22:16
Column:	DB–5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 925769	1201979313	006f0601.d	11/25/09	2254
02	RE03–09–13618	241318001	010f1001.d	11/26/09	0127
03	RE03–09–13622	241318002	011f1101.d	11/26/09	0206
04	RE03–09–13620	241318003	012f1201.d	11/26/09	0244
05	RE03–09–13619	241318004	013f1301.d	11/26/09	0322
06	RE03–09–13624	241318005	014f1401.d	11/26/09	0400
07	RE03–09–13623	241318006	015f1501.d	11/26/09	0438
08	RE03–09–13626	241318007	018f1801.d	11/26/09	0633
09	RE03–09–13621	241318008	019f1901.d	11/26/09	0711
10	RE03–09–13621MS	1201979311	020f2001.d	11/26/09	0749
11	RE03–09–13621MSD	1201979312	021f2101.d	11/26/09	0827
12	RE03–09–13627	241318009	022f2201.d	11/26/09	0905
13	RE03–09–13625	241318010	023f2301.d	11/26/09	0944
14	RE03–10–6084	241318013	024f2401.d	11/26/09	1022
15	RE03–10–6085	241318014	025f2501.d	11/26/09	1101

SAMPLE DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318001	Date Received:	11/18/2009 08:50	%Moisture:	14.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13618	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 01:27	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.91	mg/kg	2.52	7.75

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/010f1001.d
Lab Smp Id: 241318001 Client Smp ID: RE03-09-13618
Inj Date : 26-NOV-2009 01:27
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318001|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weigth of sample extracted (g)
M	14.25500	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008~ 18.916			13603429	101.040	3.9	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.144	14.148	-0.004	2401359	11.2965	0.44	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/010f1001.d
Date : 26-NOV-2009 01:27
Client ID: RE03-09-13618
Sample Info: |241318001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

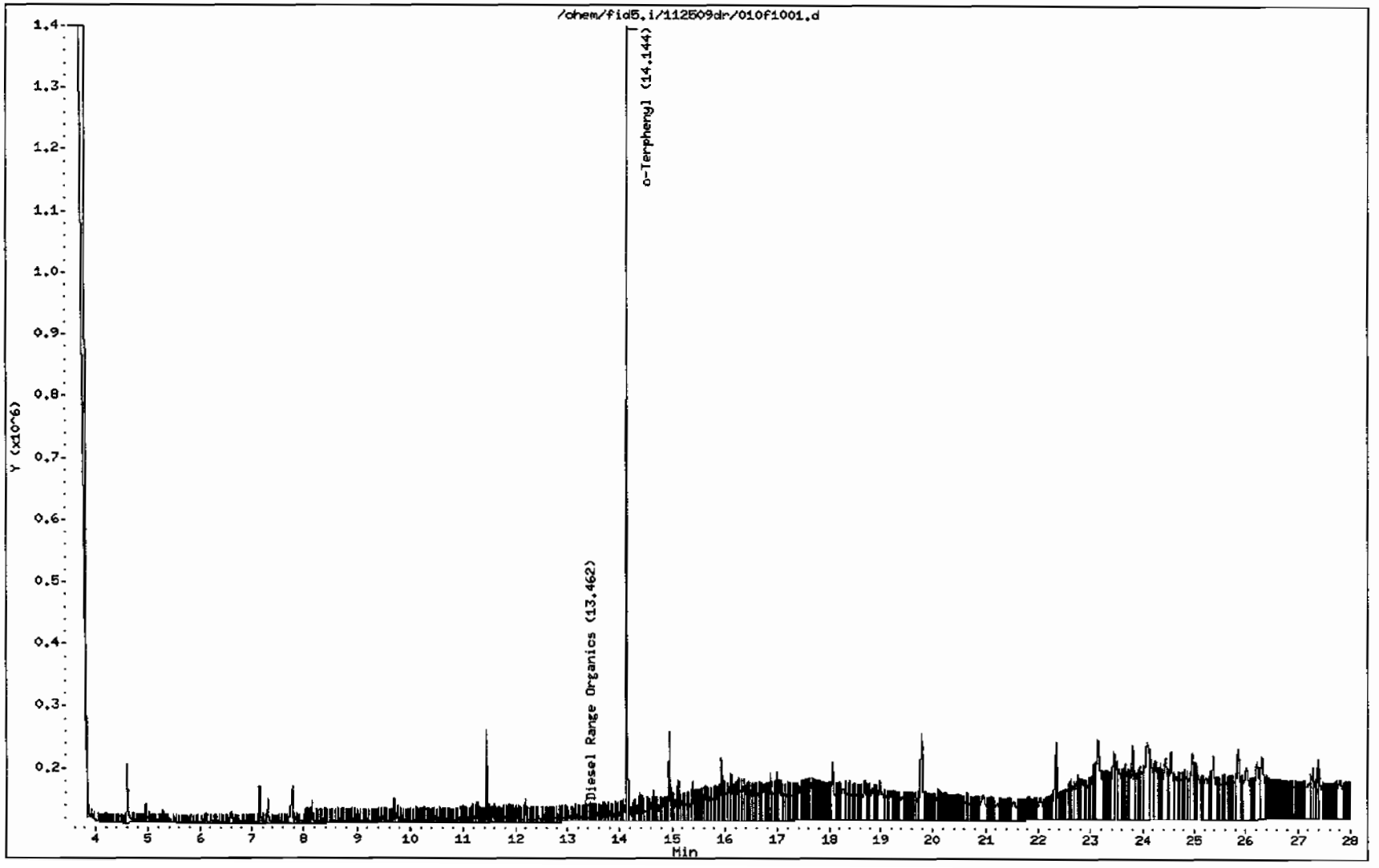

Data File: /chem/fid5.i/112509dr/010f1001.d
Injection Date: 26-NOV-2009 01:27
Instrument: fid5.i
Client Sample ID: RE03-09-13618

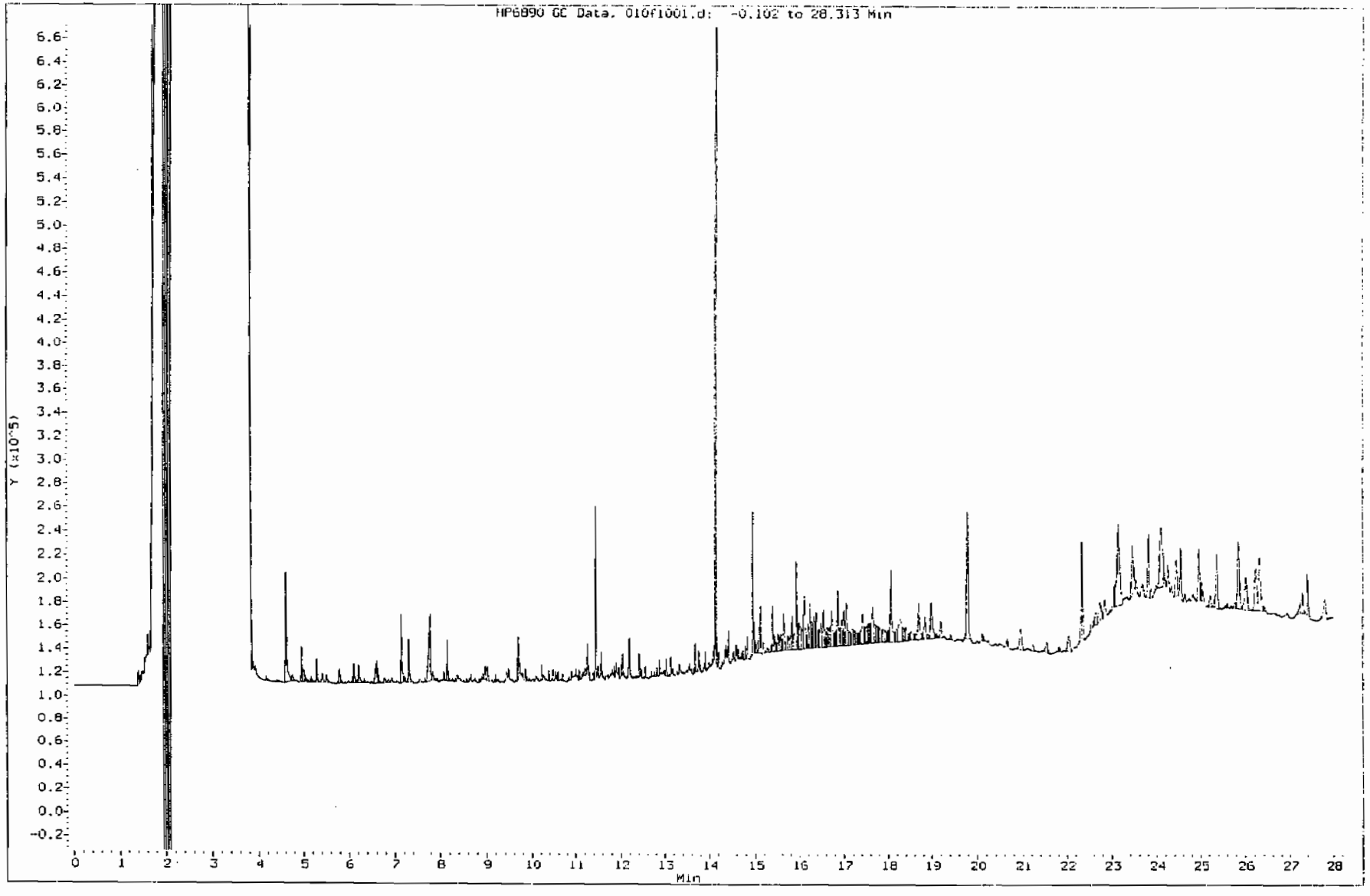

Data File: /chem/fid5.i/112509dr/010f1001.d
Injection Date: 26-NOV-2009 01:27
Instrument: fid5.i
Client Sample ID: RE03-09-13618

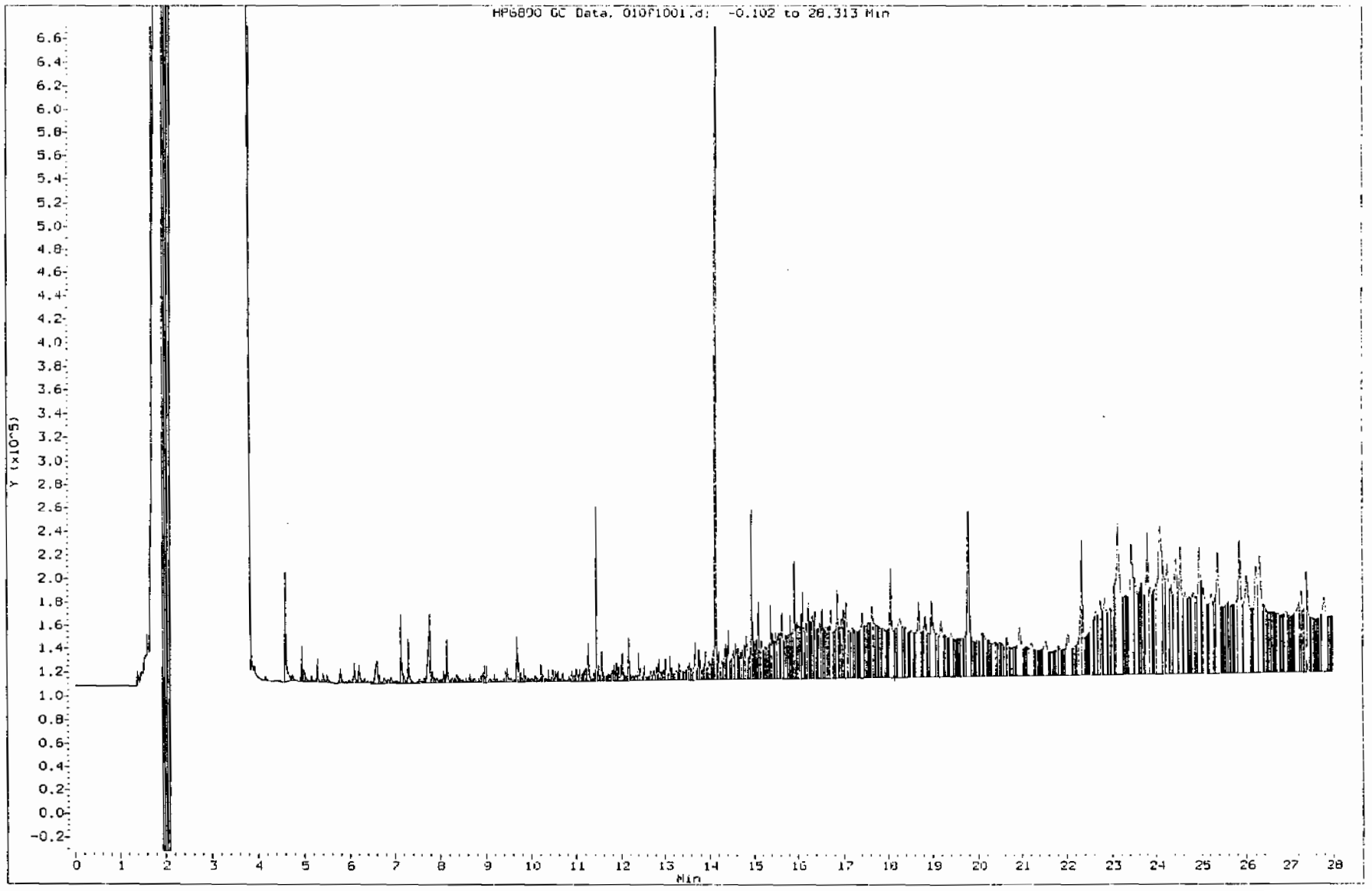

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 02:06	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	011f1101.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		17.2	mg/kg	2.30	7.08

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/011f1101.d
Lab Smp Id: 241318002 Client Smp ID: RE03-09-13622
Inj Date : 26-NOV-2009 02:06
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318002|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weigth of sample extracted (g)
M	6.11800	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	8.008- 18.916			65356062	485.435	17.2	
$	2 o-Terphenyl					CAS #: 84-15-1	
	14.145	14.148	-0.003	2580141	12.1375	0.43	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/011f1101.d
Date : 26-NOV-2009 02:06
Client ID: RE03-09-13622
Sample Info: |241318002|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i
Operator: KXR2
Column diameter: 0.25

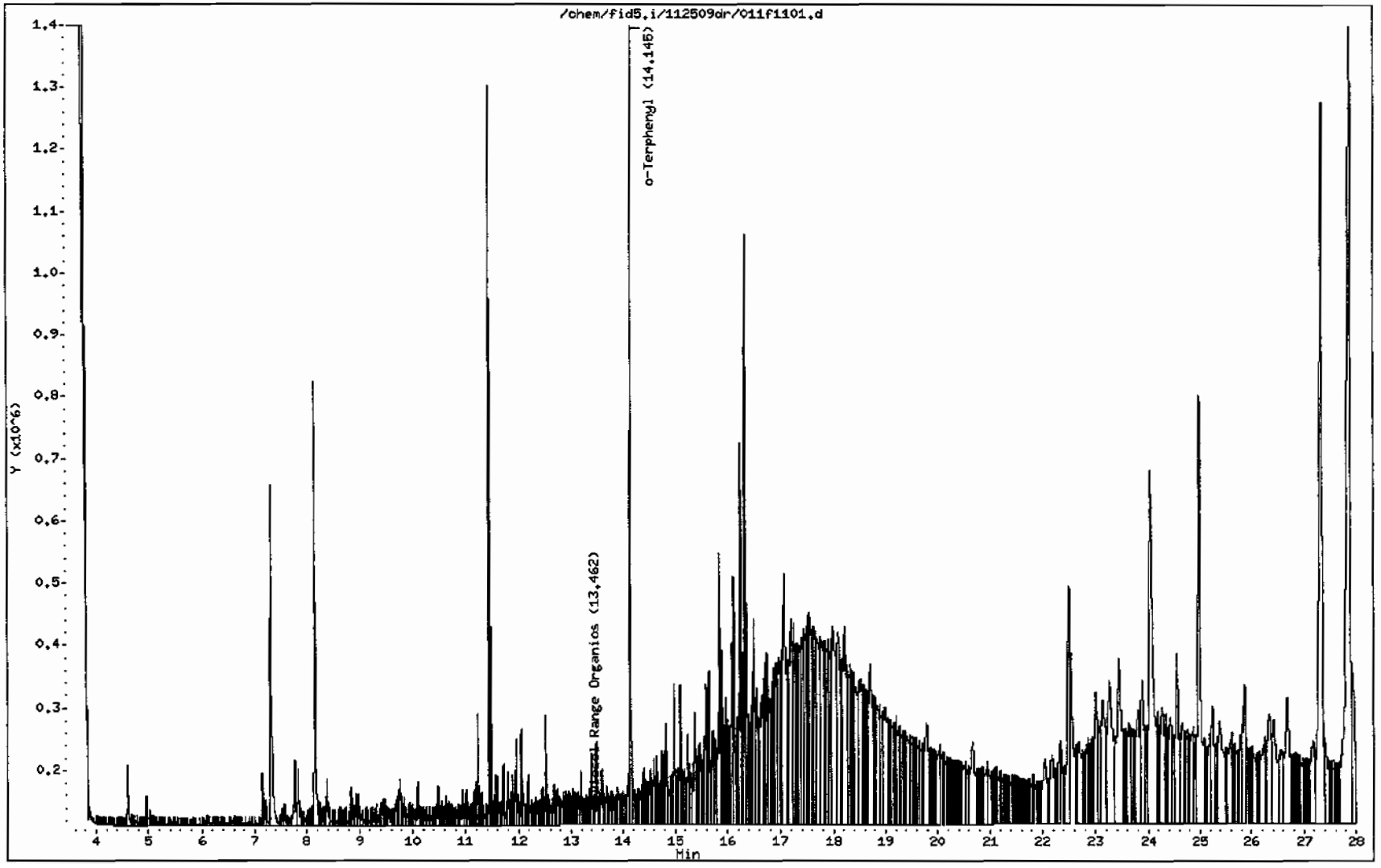

Data File: /chem/fid5.i/112509dr/011f1101.d
Injection Date: 26-NOV-2009 02:06
Instrument: fid5.i
Client Sample ID: RE03-09-13622

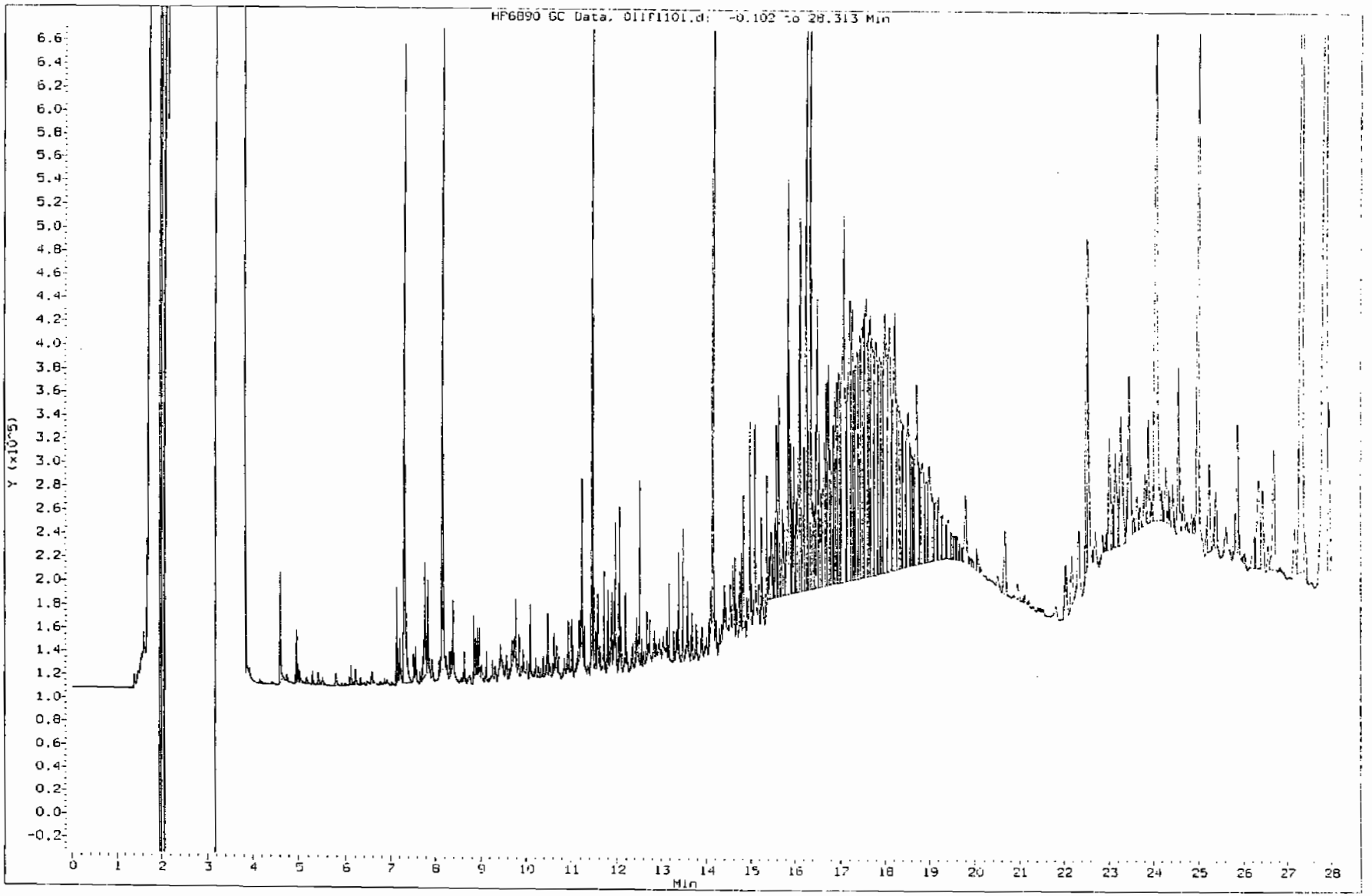

Data File: /chem/fid5.i/112509dr/011f1101.d
Injection Date: 26-NOV-2009 02:06
Instrument: fid5.i
Client Sample ID: RE03-09-13622

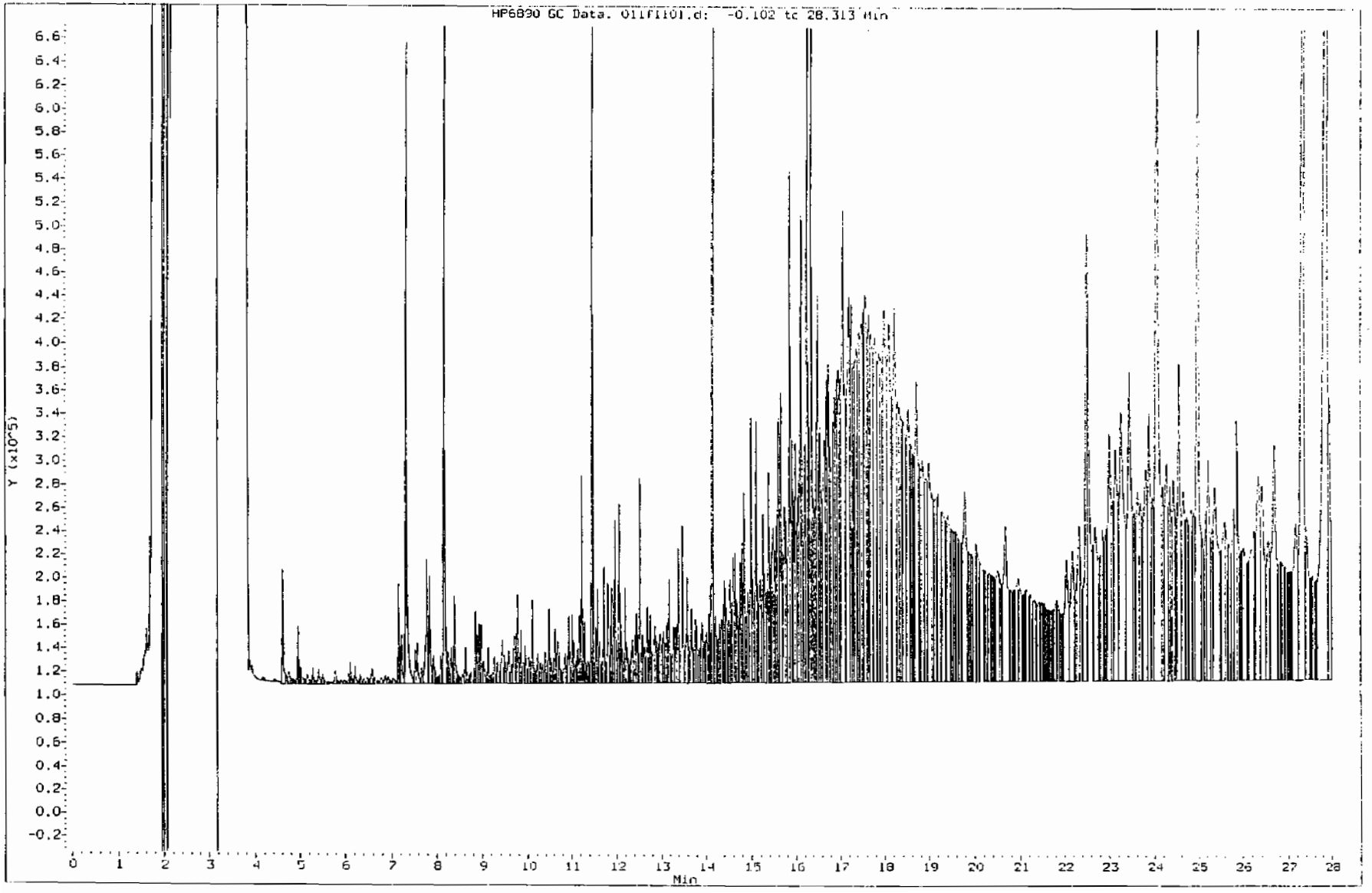

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318003	Date Received:	11/18/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13620	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 02:44	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		32.1	mg/kg	2.30	7.07

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/012f1201.d
Lab Smp Id: 241318003 Client Smp ID: RE03-09-13620
Inj Date : 26-NOV-2009 02:44
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318003|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weigth of sample extracted (g)
M	6.18070	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	8.008- 18.916			122286637	908.289	32.1	
$	2 o-Terphenyl					CAS #: 84-15-1	
	14.146	14.148	-0.002	2884046	13.5671	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /ohem/fid5.i/112509dr/012f1201.d
Date : 26-NOV-2009 02:44
Client ID: RE03-09-13620
Sample Info: |241318003|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

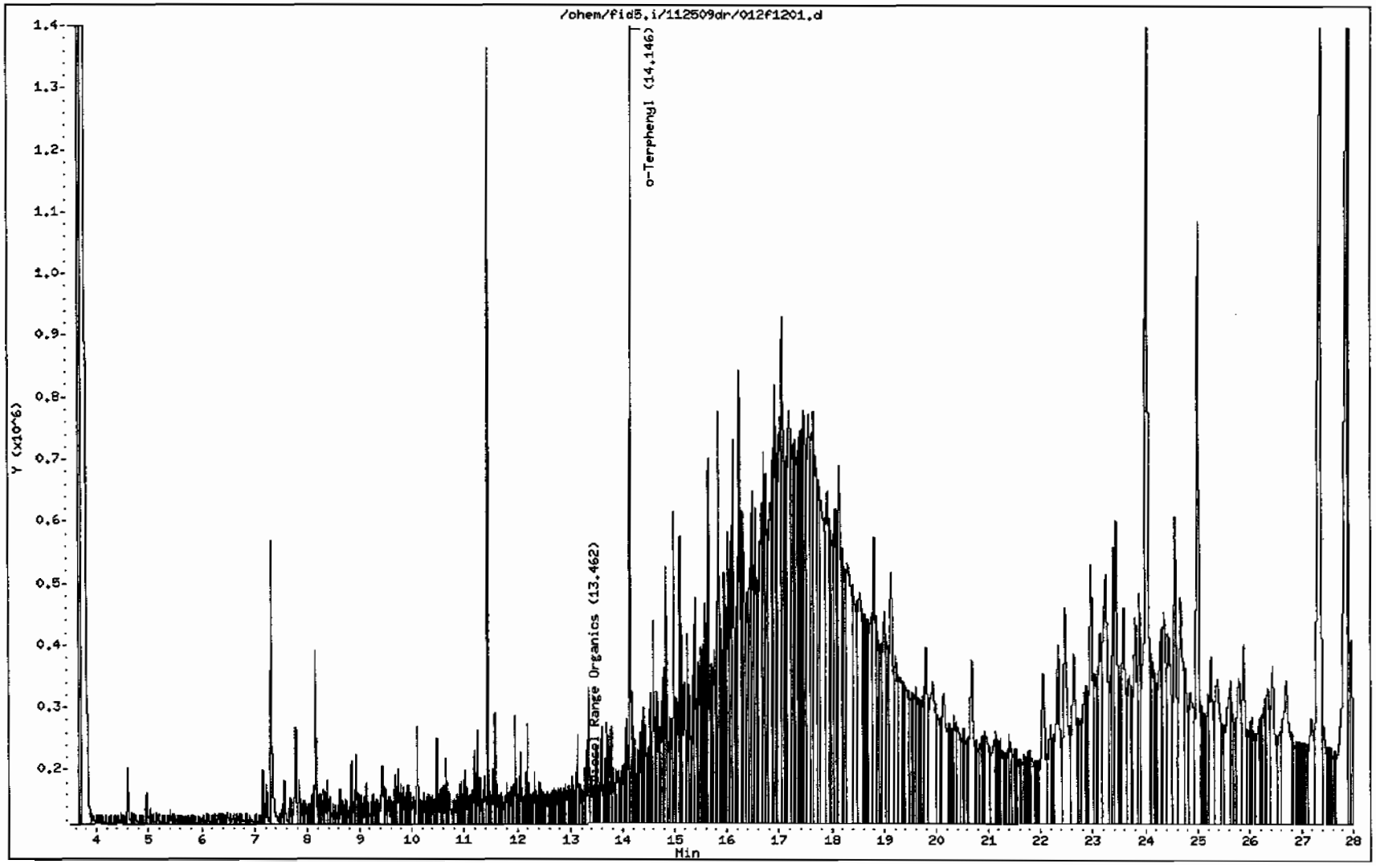

Data File: /chem/fid5.i/112509dc/012f1201.d
Injection Date: 26-NOV-2009 02:44
Instrument: fid5.i
Client Sample ID: RE03-09-13620

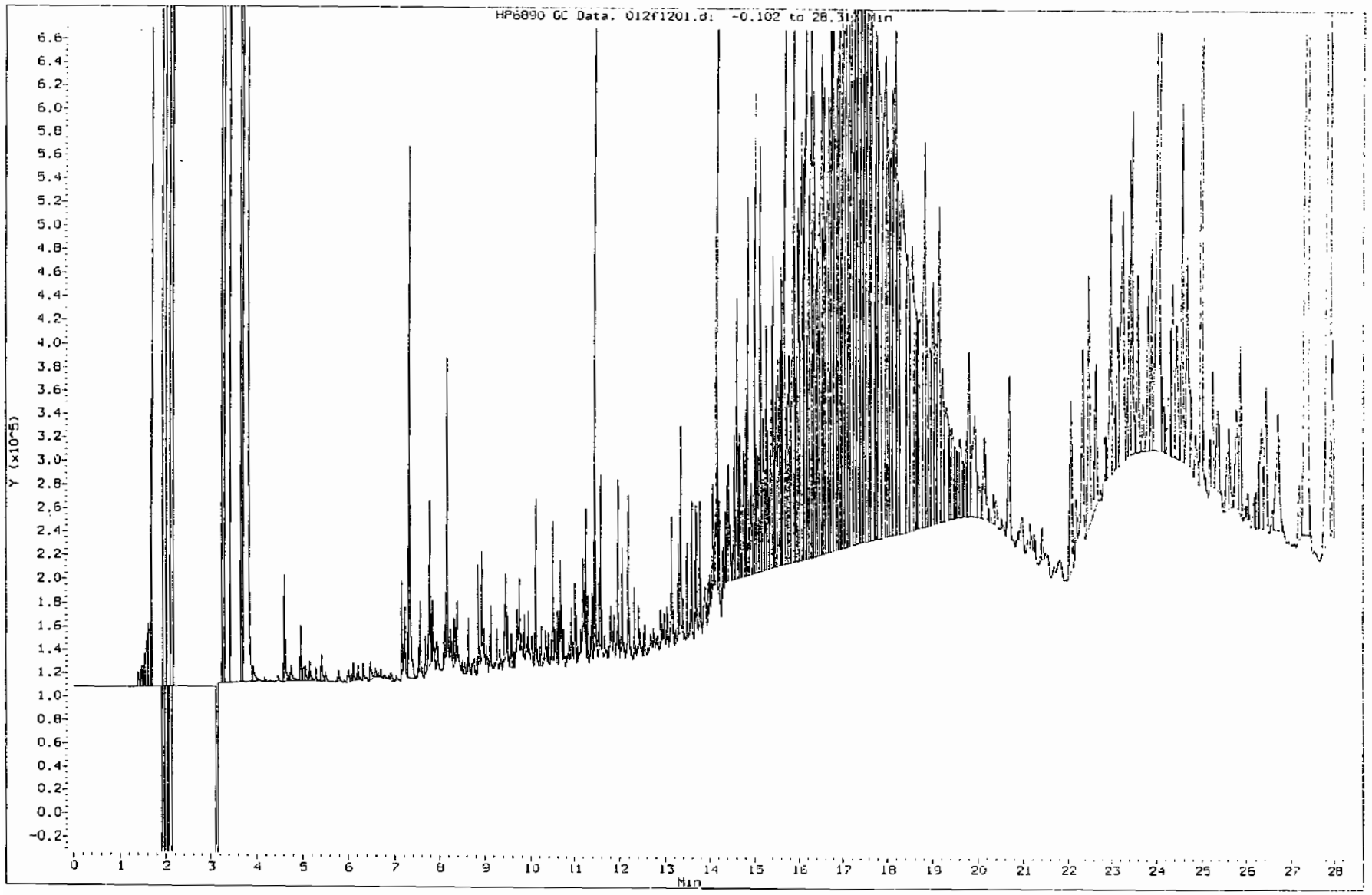

Data File: /chem/fid5.i/112509dp/012f1201.d
Injection Date: 26-NOV-2009 02:44
Instrument: fid5.i
Client Sample ID: RE03-09-13620

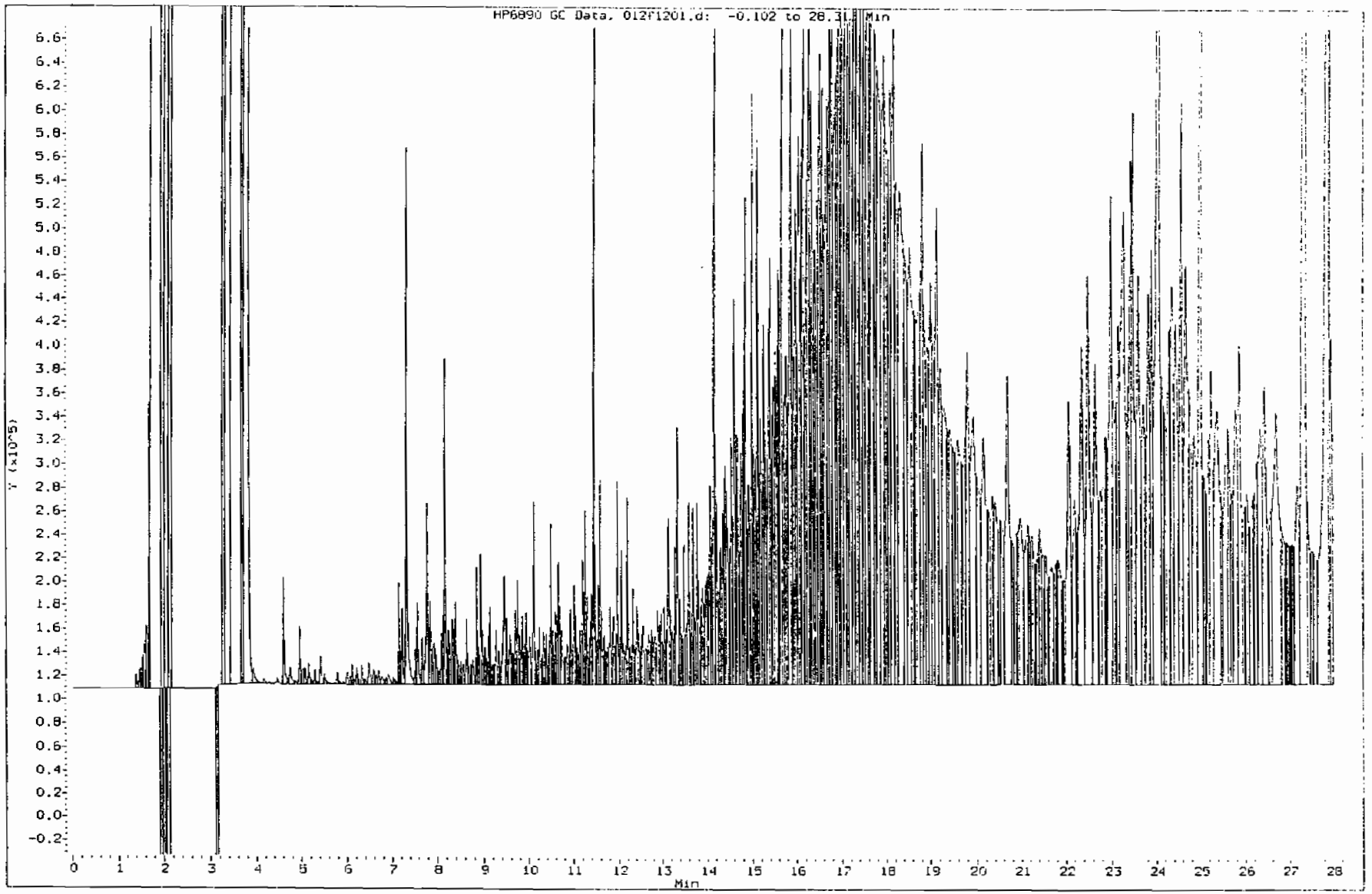

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318004	Date Received:	11/18/2009 08:50	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13619	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 03:22	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	013f1301.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.09	mg/kg	2.53	7.80

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/013f1301.d
Lab Smp Id: 241318004 Client Smp ID: RE03-09-13619
Inj Date : 26-NOV-2009 03:22
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318004|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	14.56180	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
$ 1 Diesel Range Organics					CAS #:	
8.008- 18.916			21024872	156.163	6.1	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.145	14.148	-0.003	2486644	11.6977	0.46	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/013f1301.d
Date : 26-NOV-2009 03:22
Client ID: RE03-09-13619
Sample Info: [241318004|1]
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

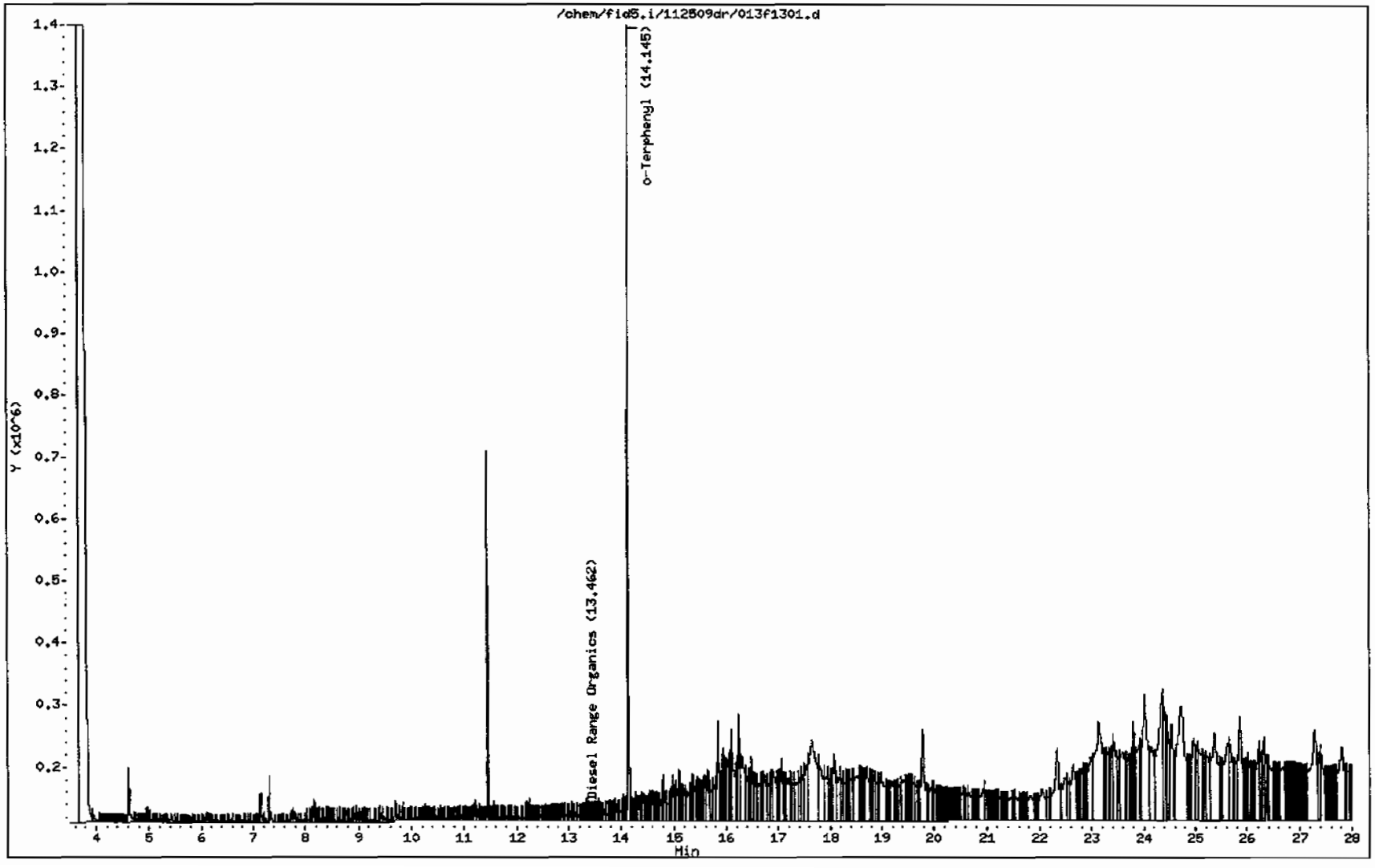

Data File: /chem/fid5.i/112509dr/013f1301.d
Injection Date: 26-NOV-2009 03:22
Instrument: fid5.i
Client Sample ID: RE03-09-13619

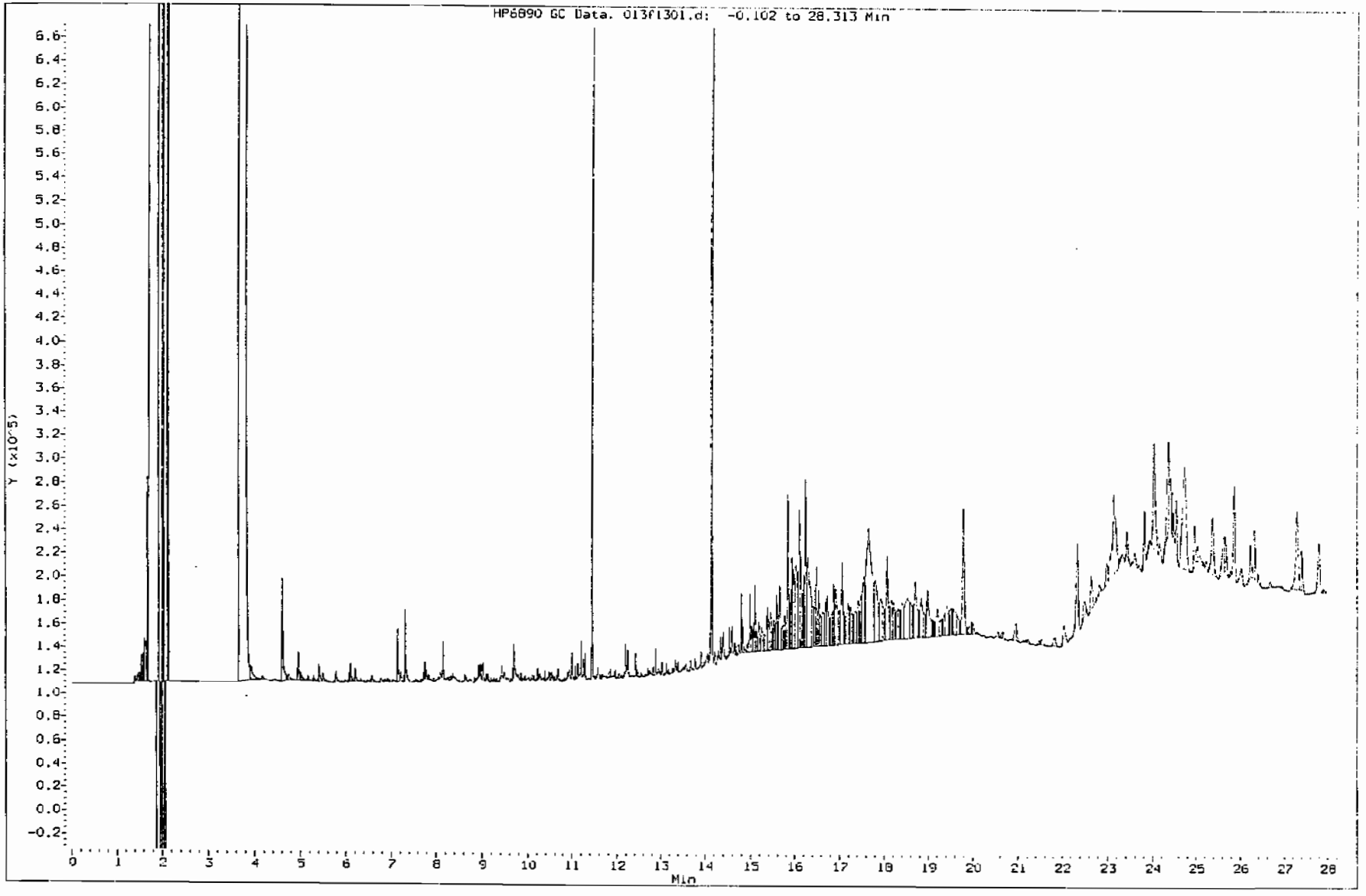

Alkanes

Data File: /chem/fid5.i/112509dr/013f1301.d
Injection Date: 26-NOV-2009 03:22
Instrument: fid5.i
Client Sample ID: RE03-09-13619

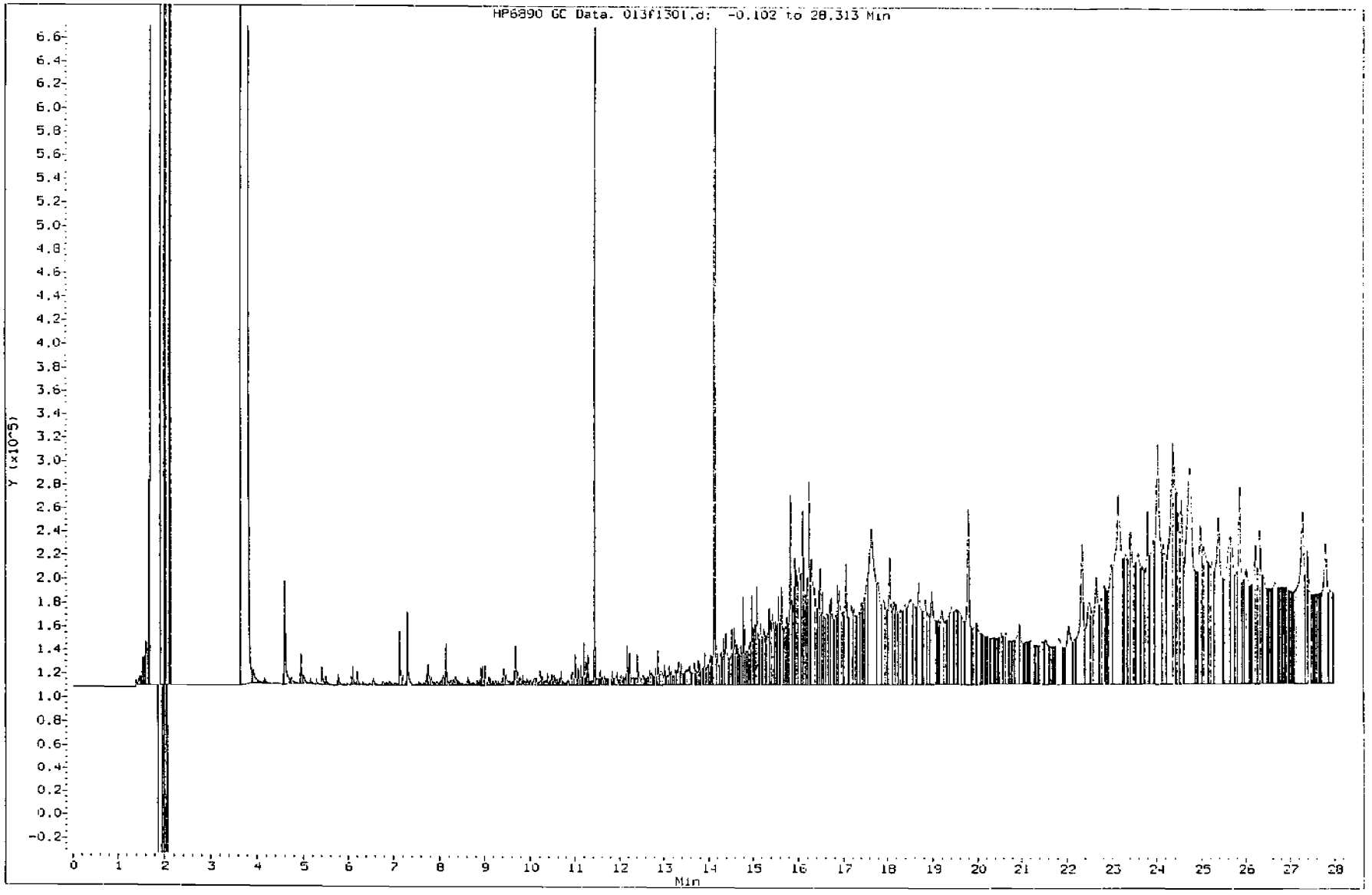

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13624	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	10
Run Date:	11/26/2009 04:00	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	014f1401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	31.6	mg/kg	27.9	85.9

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/014f1401.d
Lab Smp Id: 241318005 Client Smp ID: RE03-09-13624
Inj Date : 26-NOV-2009 04:00
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318005|10|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 14
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weigth of sample extracted (g)
M	22.67890	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			9912125	73.6227	31.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.140	14.148	-0.008	230400	1.08385	0.46	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/014f1401.d

Date : 26-NOV-2009 04:00

Client ID: RE03-09-13624

Sample Info: |2413180051|01|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2

Column diameter: 0.25

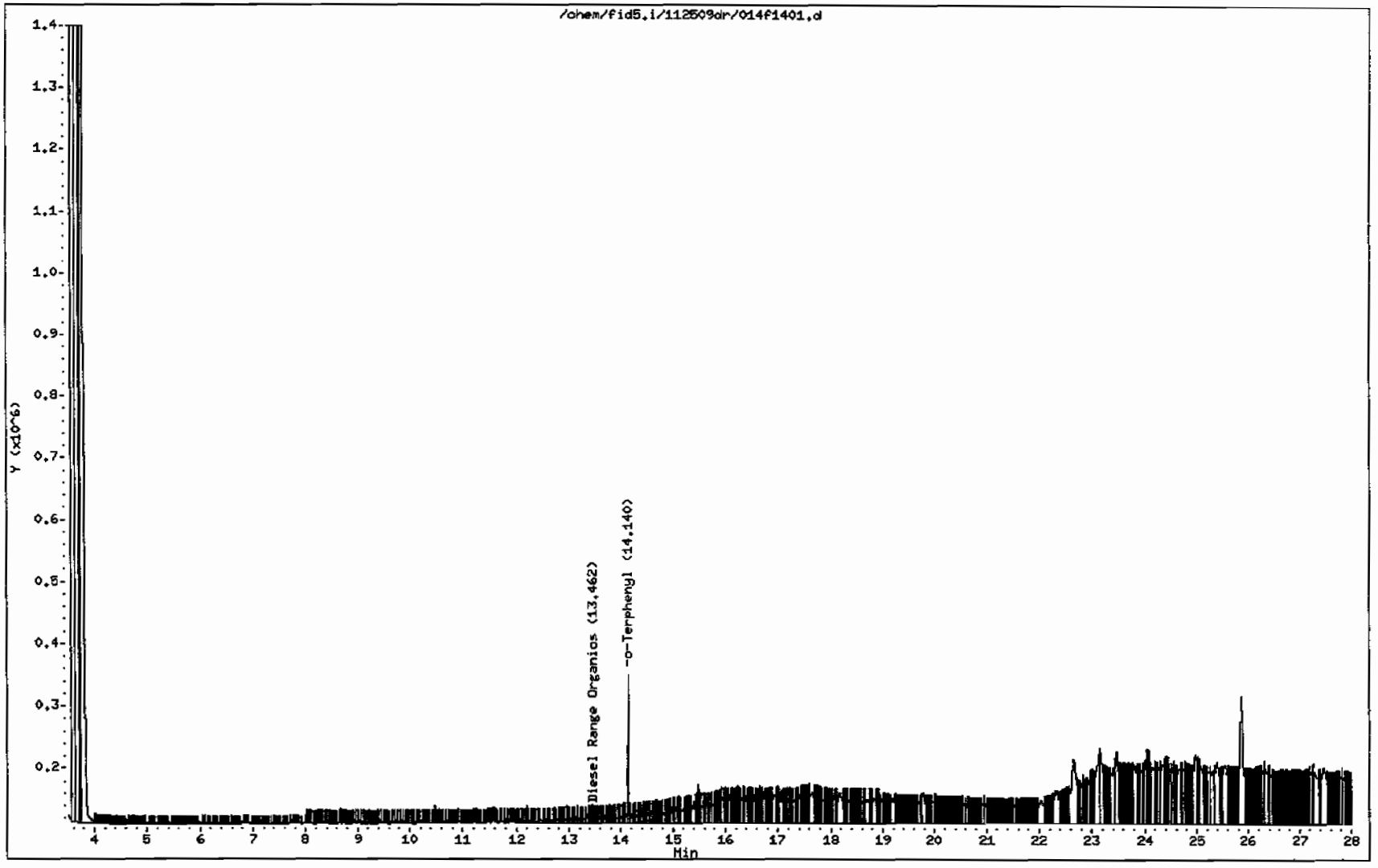

Data File: /chem/fid5.i/112509dr/014f1401.d
Injection Date: 26-NOV-2009 04:00
Instrument: fid5.i
Client Sample ID: RE03-09-13624

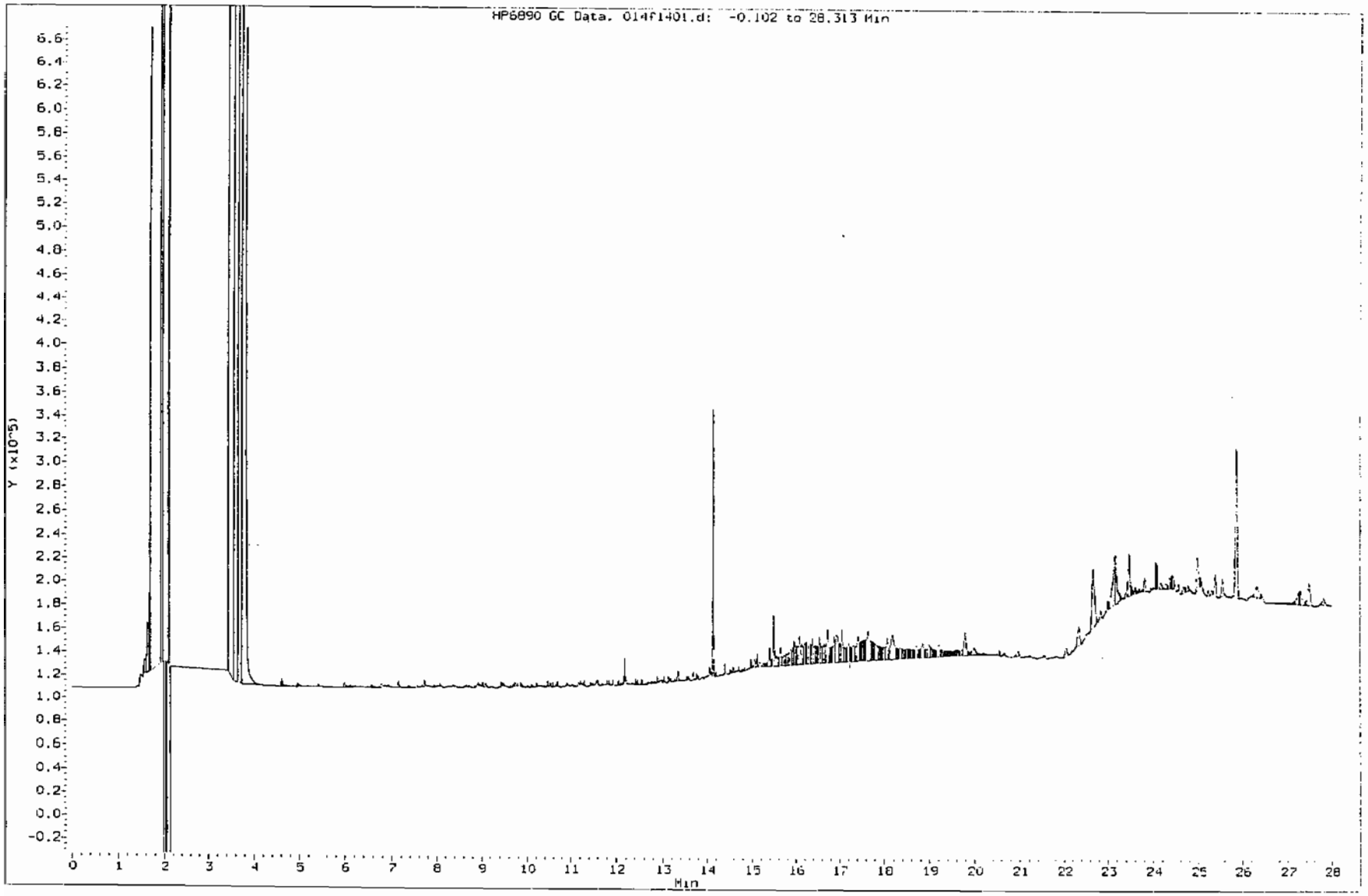

Data File: /chem/fid5.1/112509dr/014f1401.d
Injection Date: 26-NOV-2009 04:00
Instrument: fid5.1
Client Sample ID: RE03-09-13624

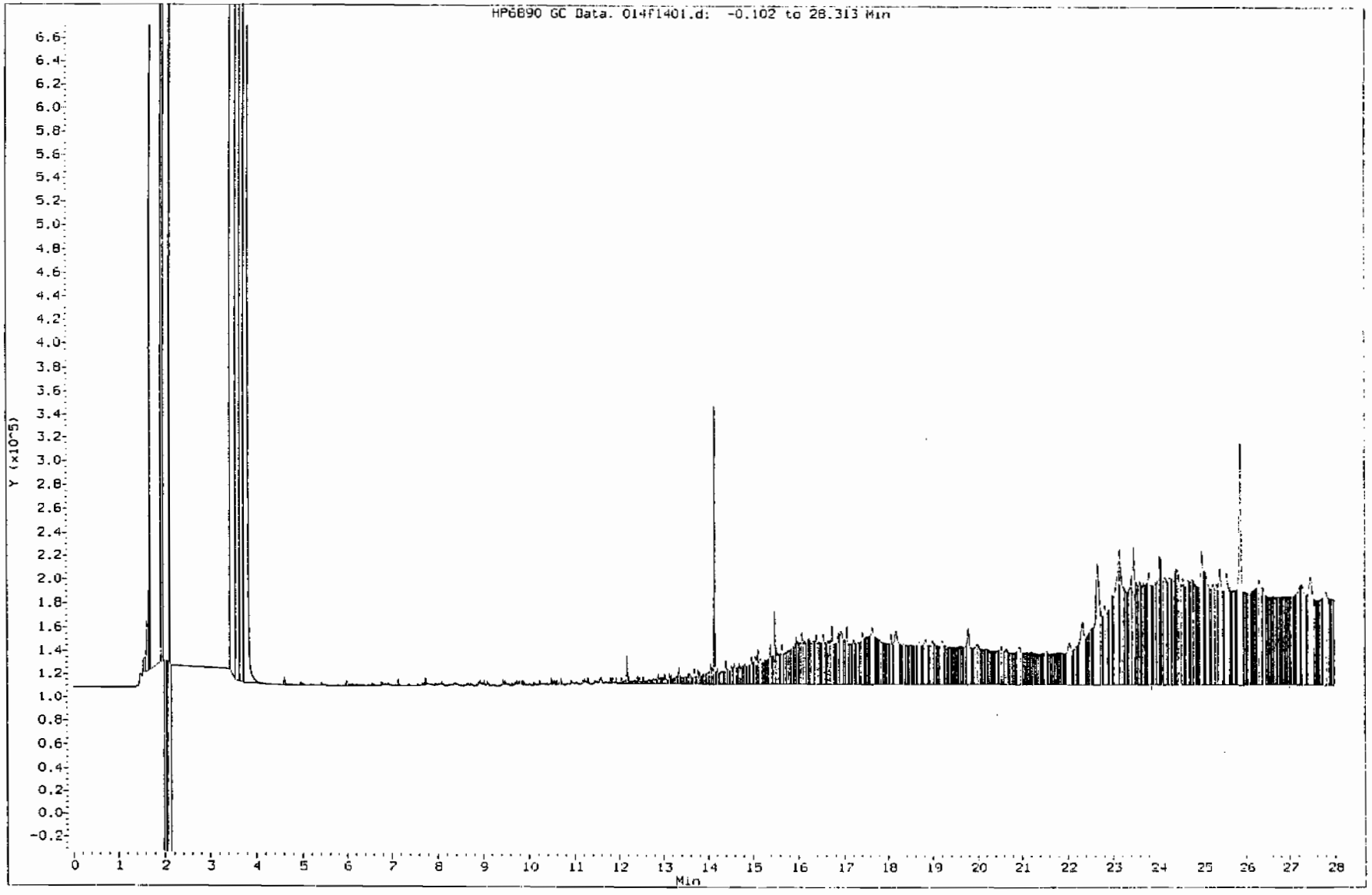

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241318006	Date Received:	11/18/2009 08:50	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13623	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 04:38	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	015f1501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.69	mg/kg	2.24	6.89

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/015f1501.d
Lab Smp Id: 241318006 Client Smp ID: RE03-09-13623
Inj Date : 26-NOV-2009 04:38
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318006|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weigth of sample extracted (g)
M	3.63840	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			18308474	135.987	4.7	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.145	14.148	-0.003	2468061	11.6102	0.40	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/015f1501.d
Date : 26-NOV-2009 04:38
Client ID: RE03-09-13623
Sample Info: |2413180061|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

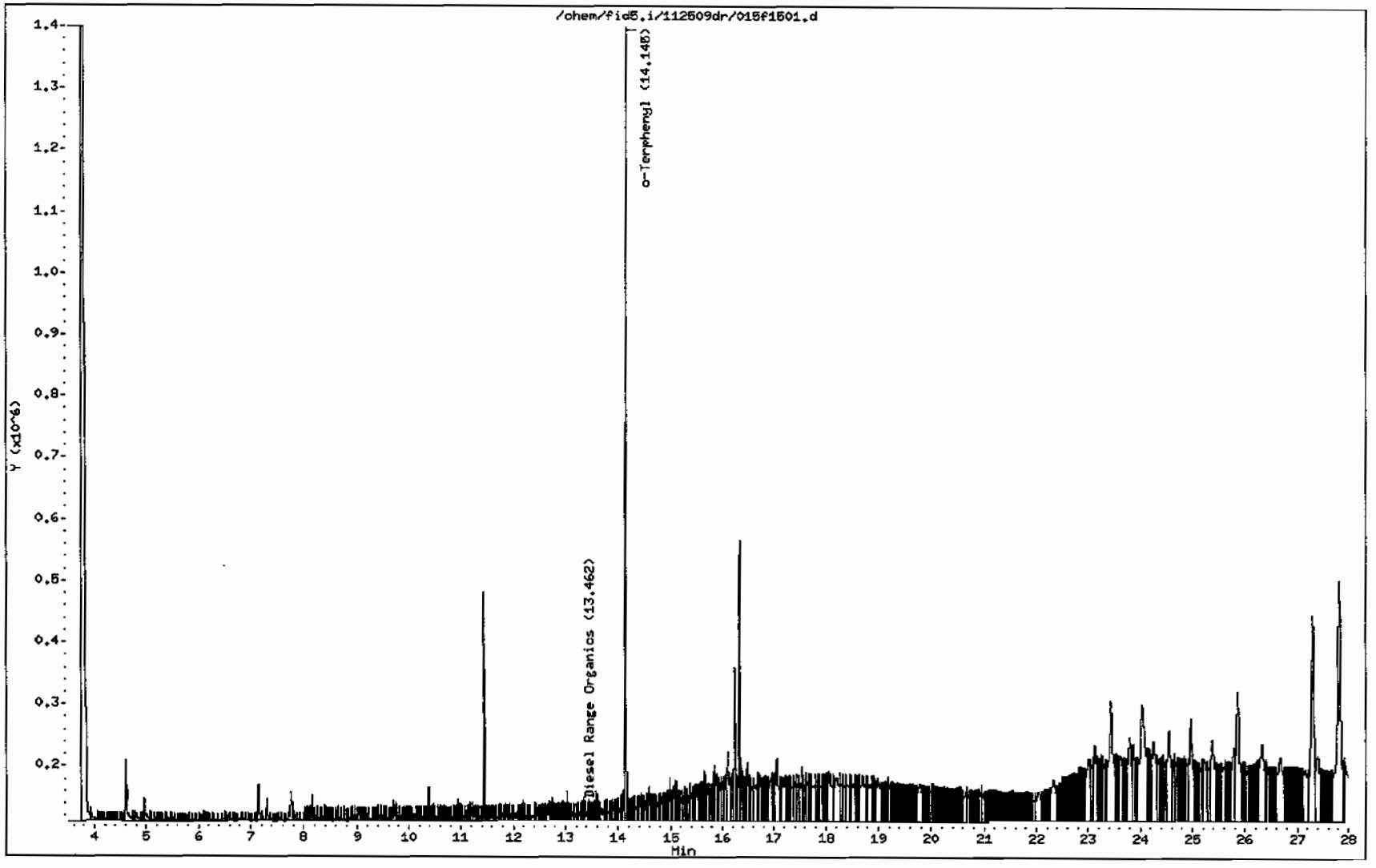

Data File: /chem/fid5.i/112509dr/015f1501.d
Injection Date: 26-NOV-2009 04:38
Instrument: fid5.i
Client Sample ID: RE03-09-13623

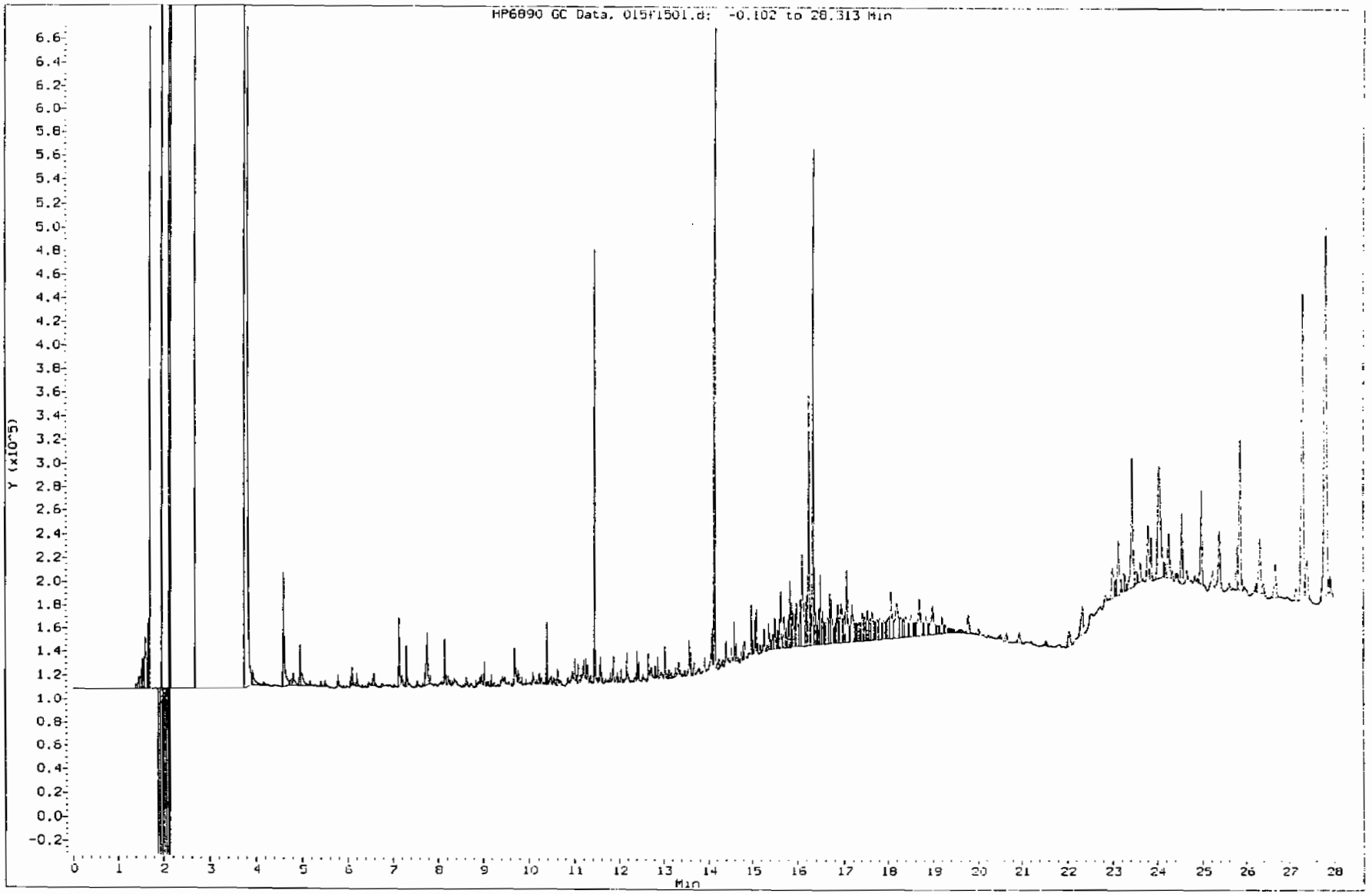

Data File: /chem/fid5.i/112509dr/015f1501.d
Injection Date: 26-NOV-2009 04:38
Instrument: fid5.i
Client Sample ID: RE03-09-13623

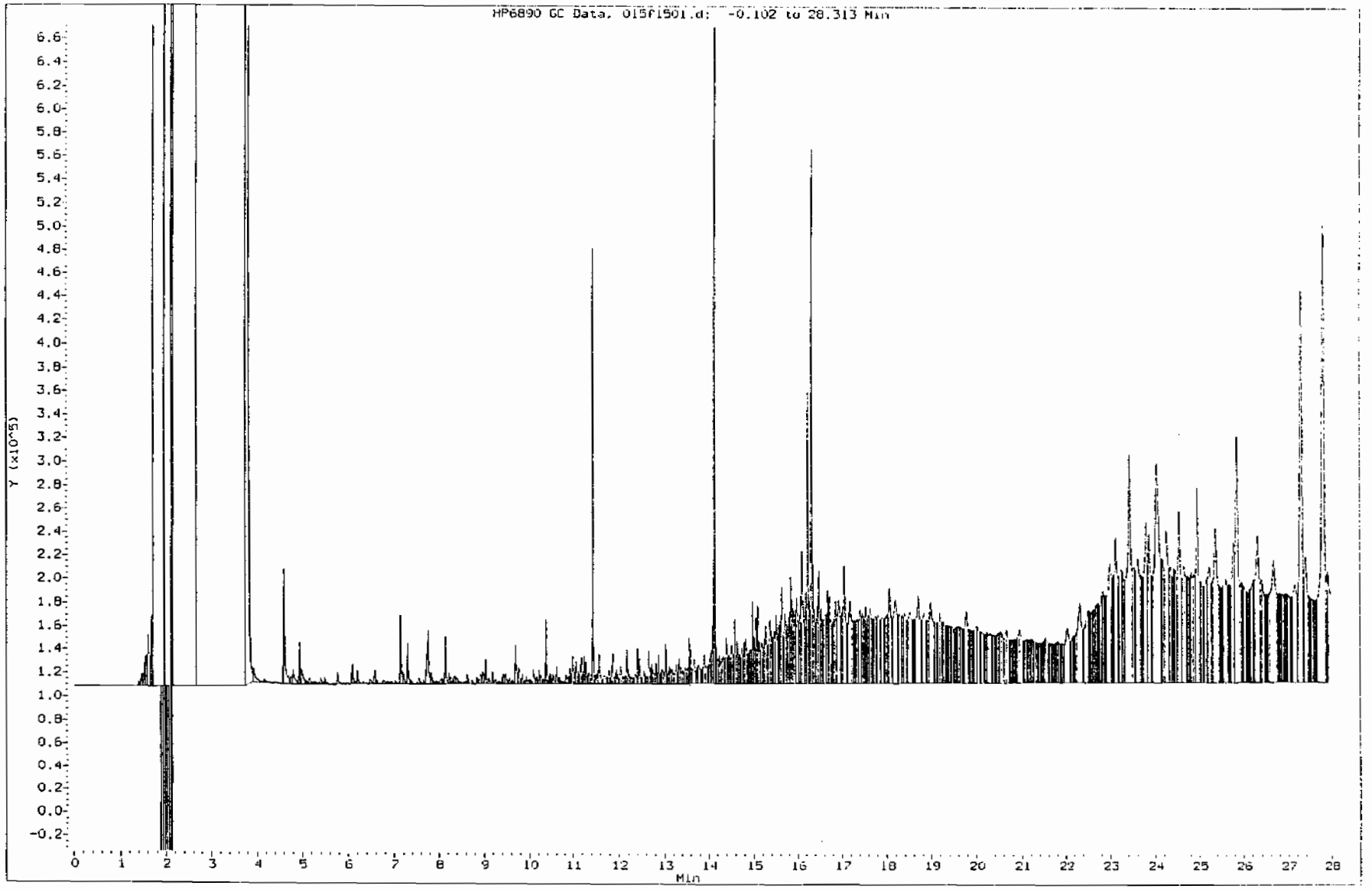

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 06:33	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	018f1801.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.55	mg/kg	2.56	7.87

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/018f1801.d
Lab Smp Id: 241318007 Client Smp ID: RE03-09-13626
Inj Date : 26-NOV-2009 06:33
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318007|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weigth of sample extracted (g)
M	15.51040	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	CONCENTRATIONS FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			19005606	141.165	5.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.143	14.148	-0.005	2452924	11.5390	0.45	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/018f1801.d
Date : 26-NOV-2009 06:33
Client ID: RE03-09-13626
Sample Info: 1241318007111
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

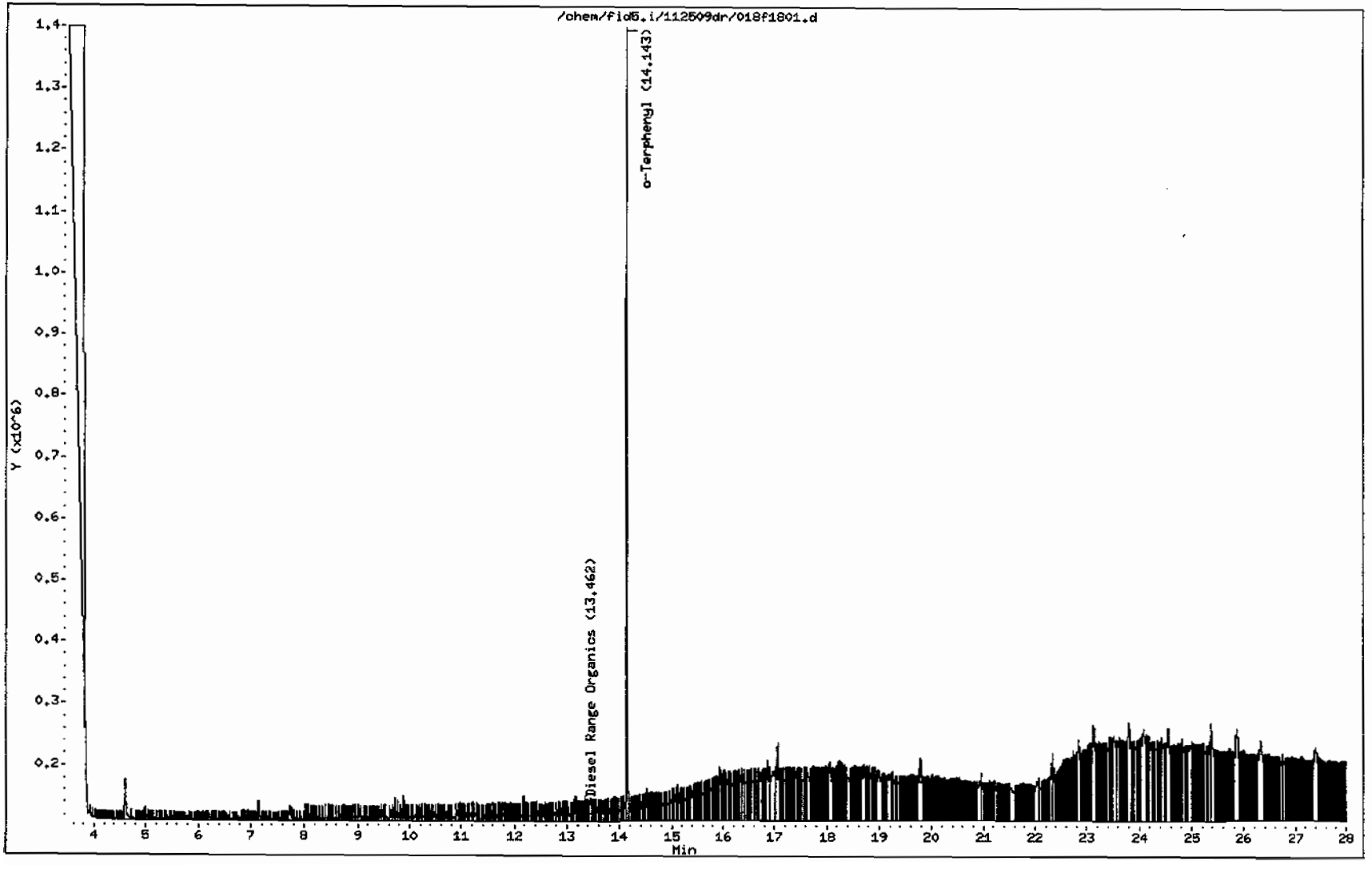

Data File: /chem/fid5.i/112509dr/018f1801.d
Injection Date: 26-NOV-2009 06:33
Instrument: fid5.i
Client Sample ID: RE03-09-13626

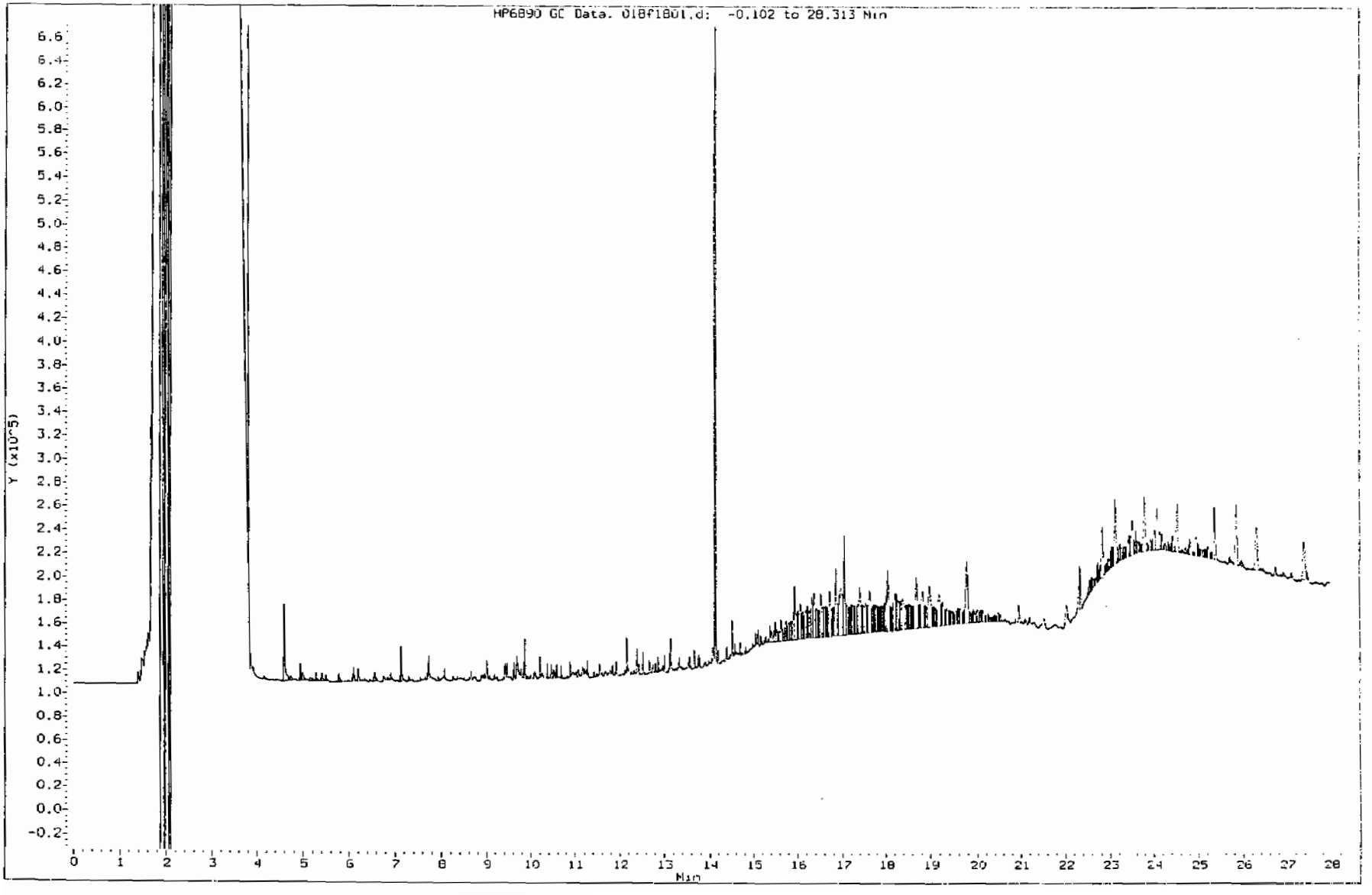

Data File: /chem/fid5.i/112509dc/018f1801.d
Injection Date: 26-NOV-2009 06:33
Instrument: fid5.i
Client Sample ID: RE03-09-13626

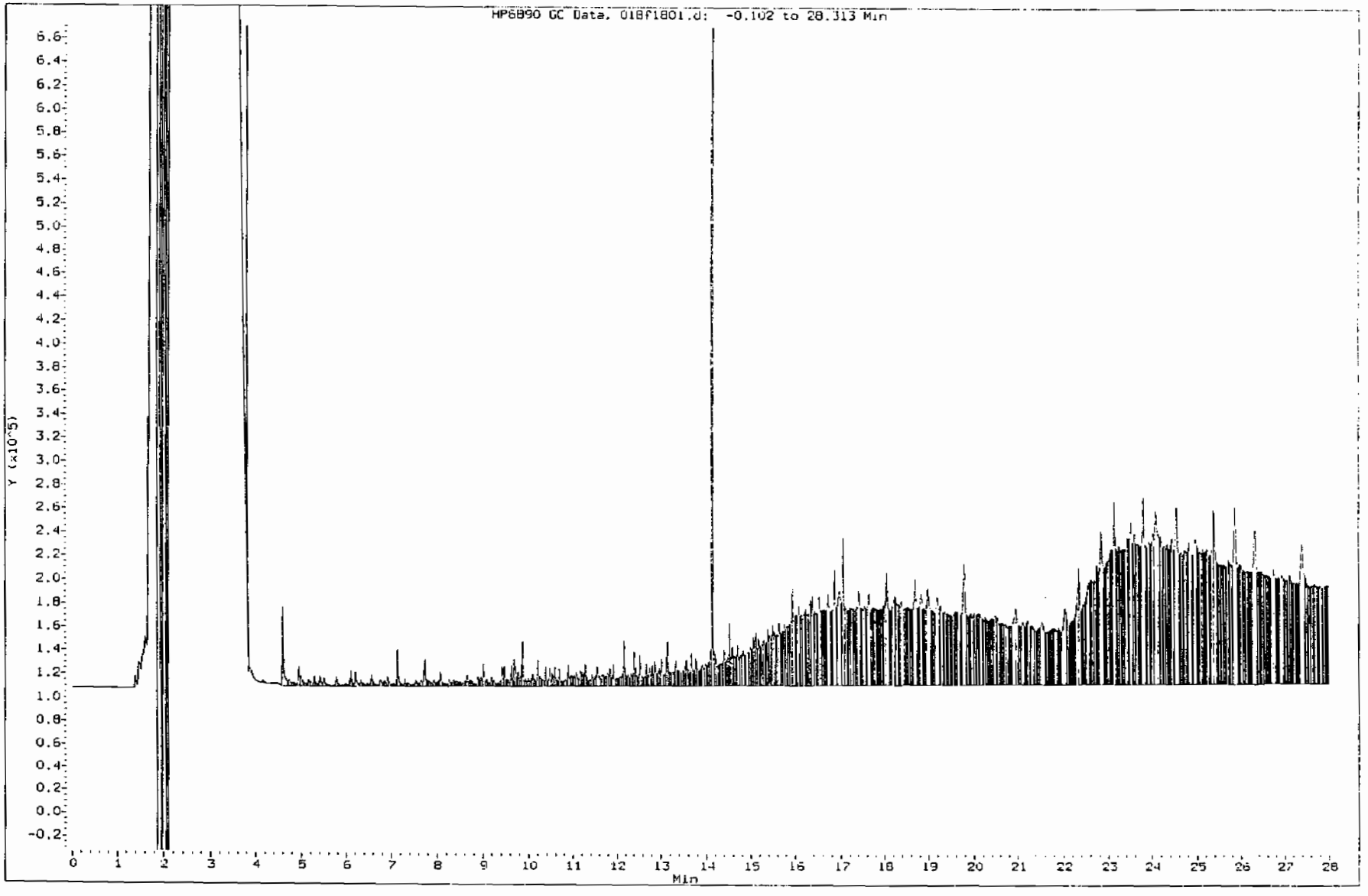

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13621	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 07:11	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	019f1901.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		7.52	mg/kg	2.26	6.95

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/019f1901.d
Lab Smp Id: 241318008 Client Smp ID: RE03-09-13621
Inj Date : 26-NOV-2009 07:11
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318008|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	4.64490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			29143869	216.467	7.5	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.144	14.148	-0.004	2641795	12.4275	0.43	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/019f1901.d
Date : 26-NOV-2009 07:11
Client ID: RE03-09-13621
Sample Info: |241318008|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

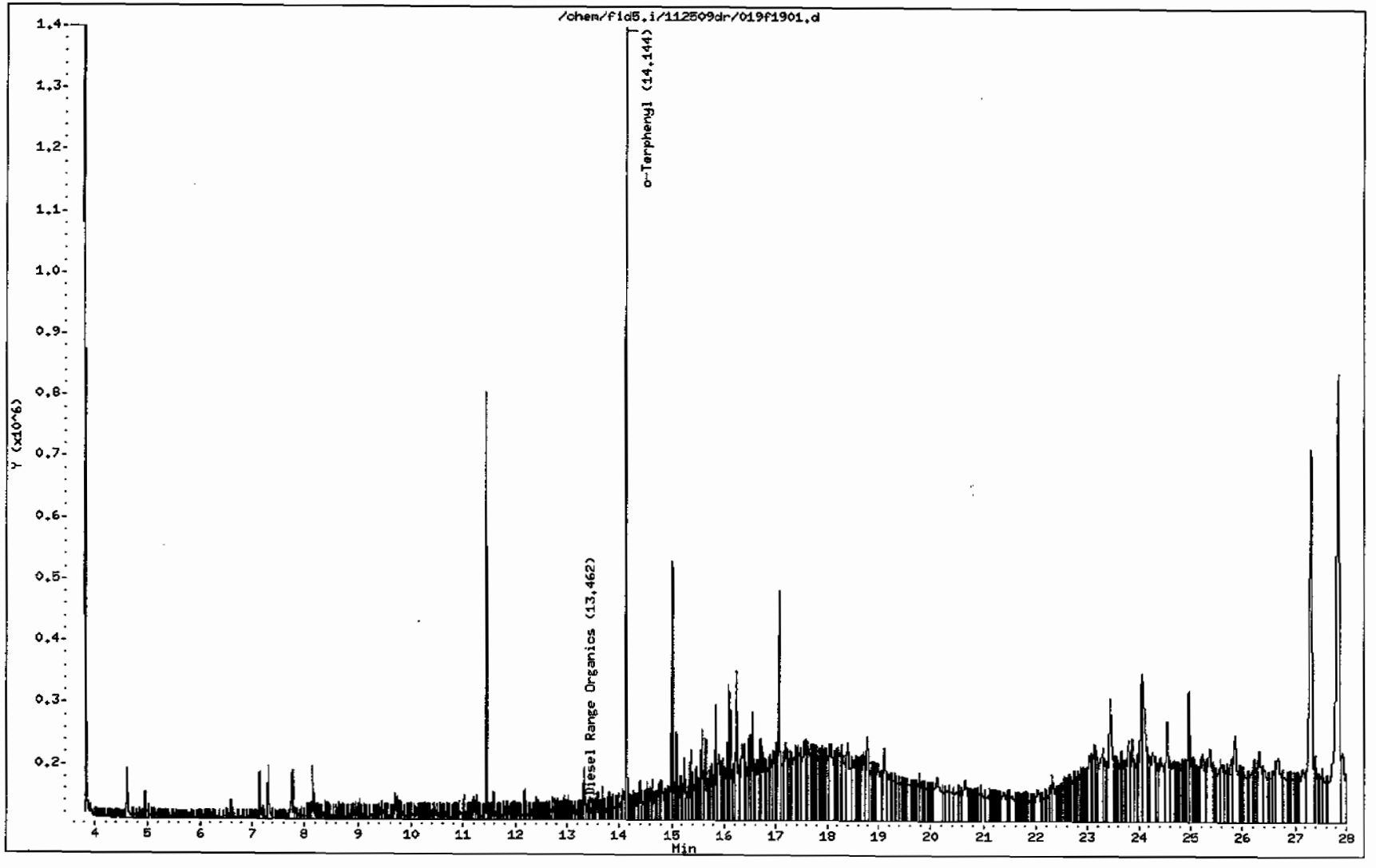

Data File: /chem/fid5.i/112509dr/019f1901.d
Injection Date: 26-NOV-2009 07:11
Instrument: fid5.i
Client Sample ID: RE03-09-13621

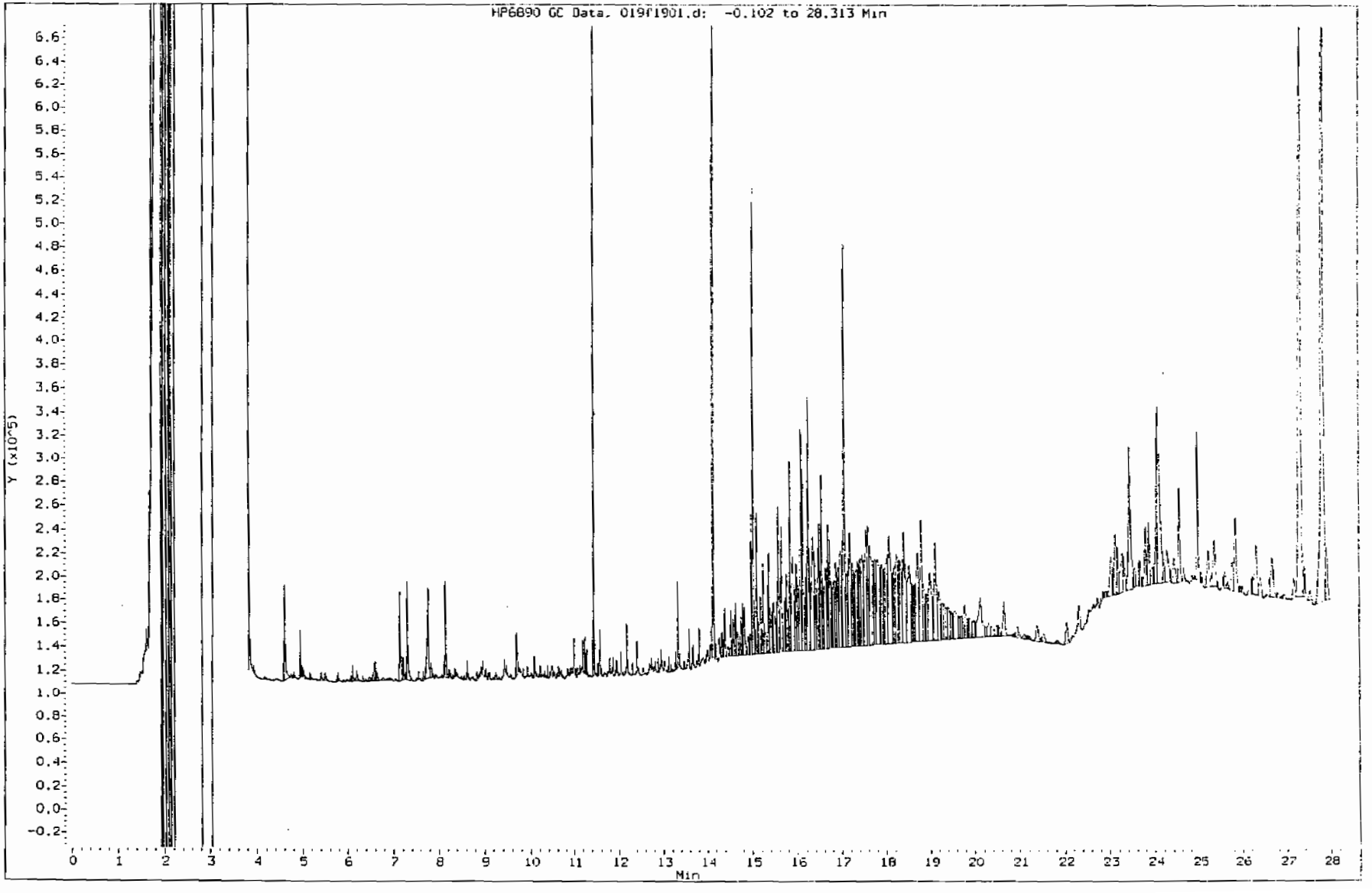

Data File: /chem/fid5.i/112509dr/019f1901.d
Injection Date: 26-NOV-2009 07:11
Instrument: fid5.i
Client Sample ID: RE03-09-13621

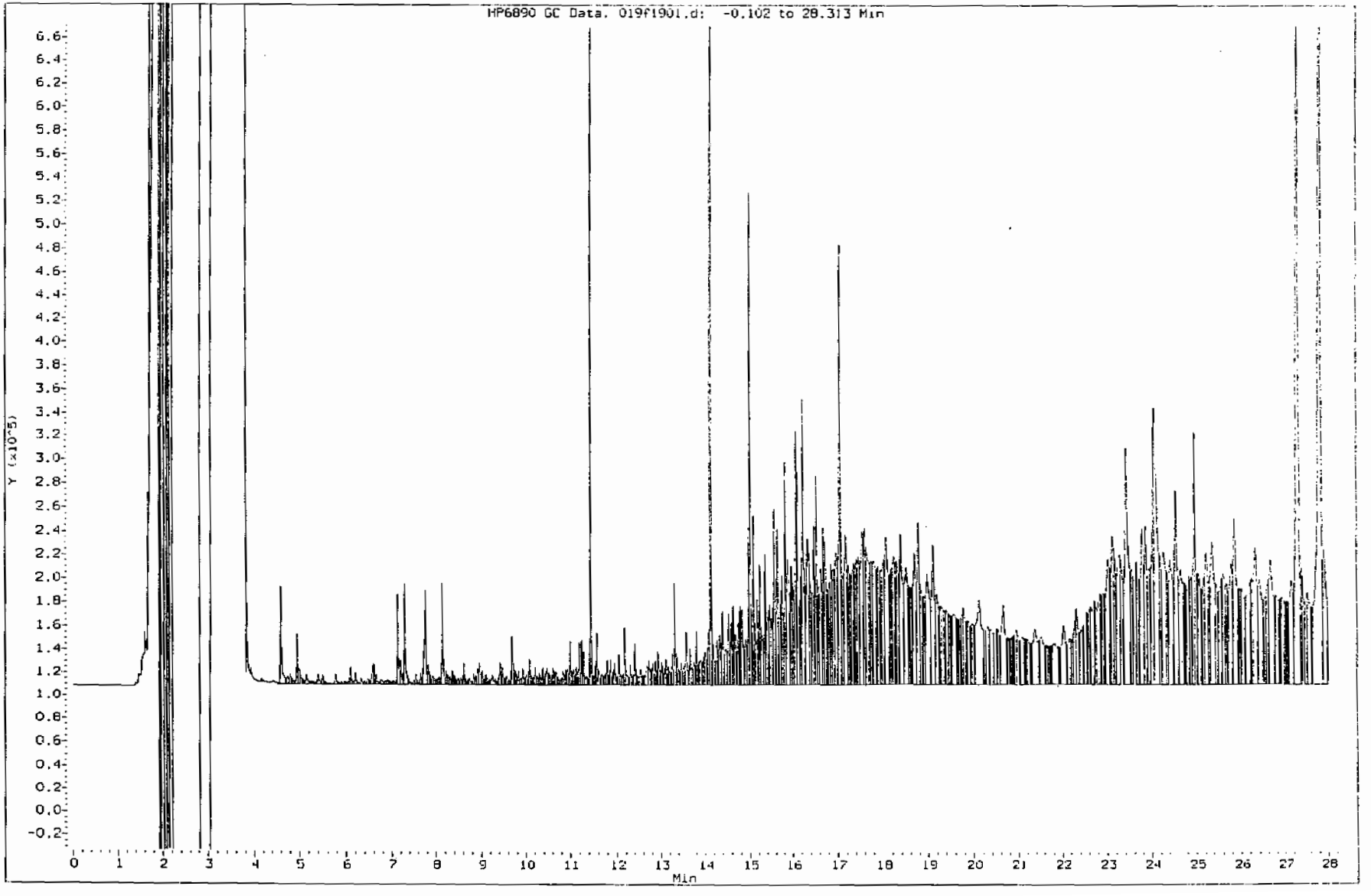

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13627	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 09:05	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	022f2201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.94	mg/kg	2.32	7.14

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/022f2201.d
Lab Smp Id: 241318009 Client Smp ID: RE03-09-13627
Inj Date : 26-NOV-2009 09:05
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318009|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weigth of sample extracted (g)
M	7.04810	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			11066739	82.1987	2.9	(a)
S 2 o-Terphenyl					CAS #: 84-15-1	
14.144	14.148	-0.004	2244807	10.5600	0.38	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/022f2201.d
Date : 26-NOV-2009 09:05
Client ID: RE03-09-13627
Sample Info: |241318009|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

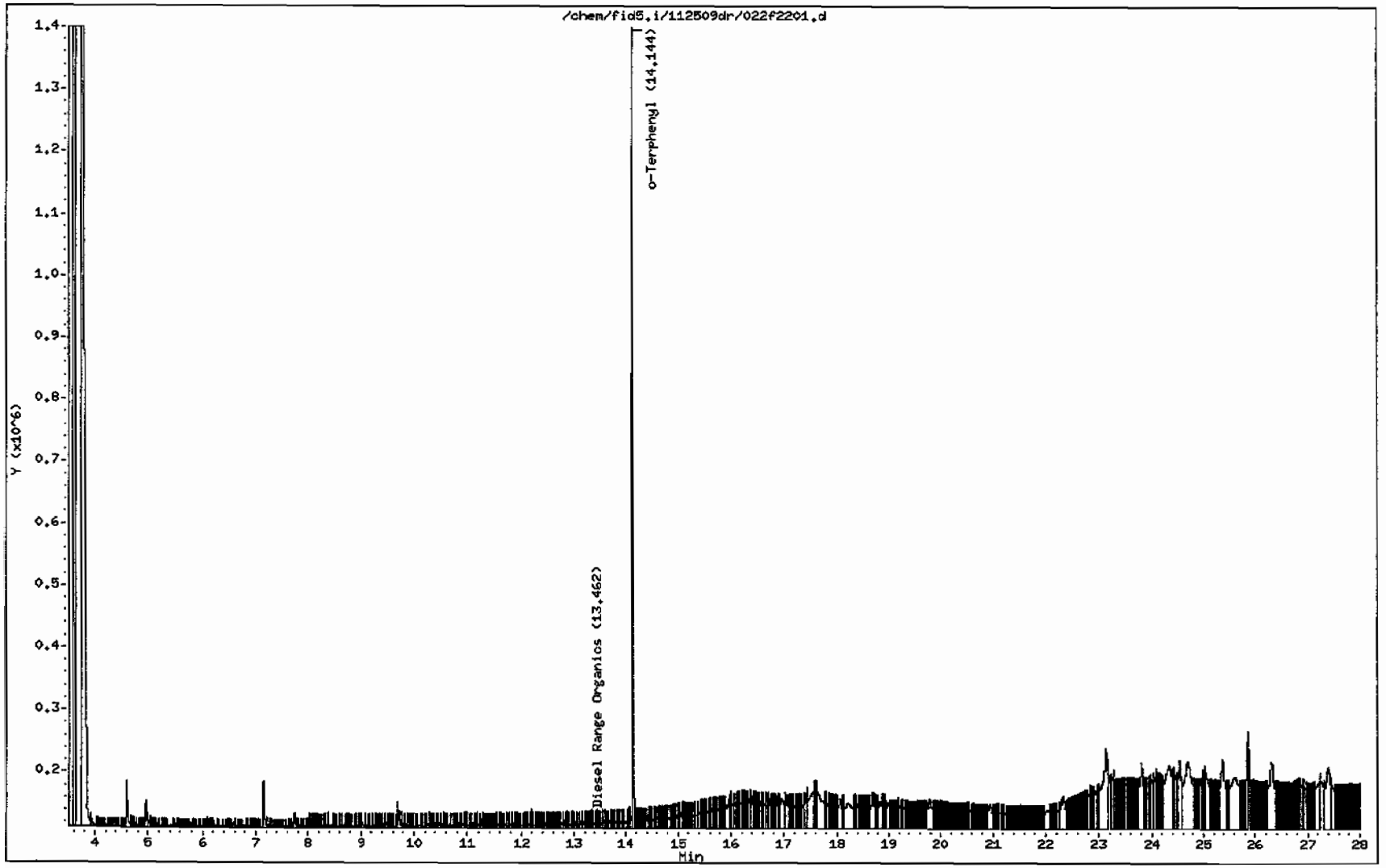

Data File: /chem/fid5.i/112509dc/022f2201.d
Injection Date: 26-NOV-2009 09:05
Instrument: fid5.i
Client Sample ID: RE03-09-13627

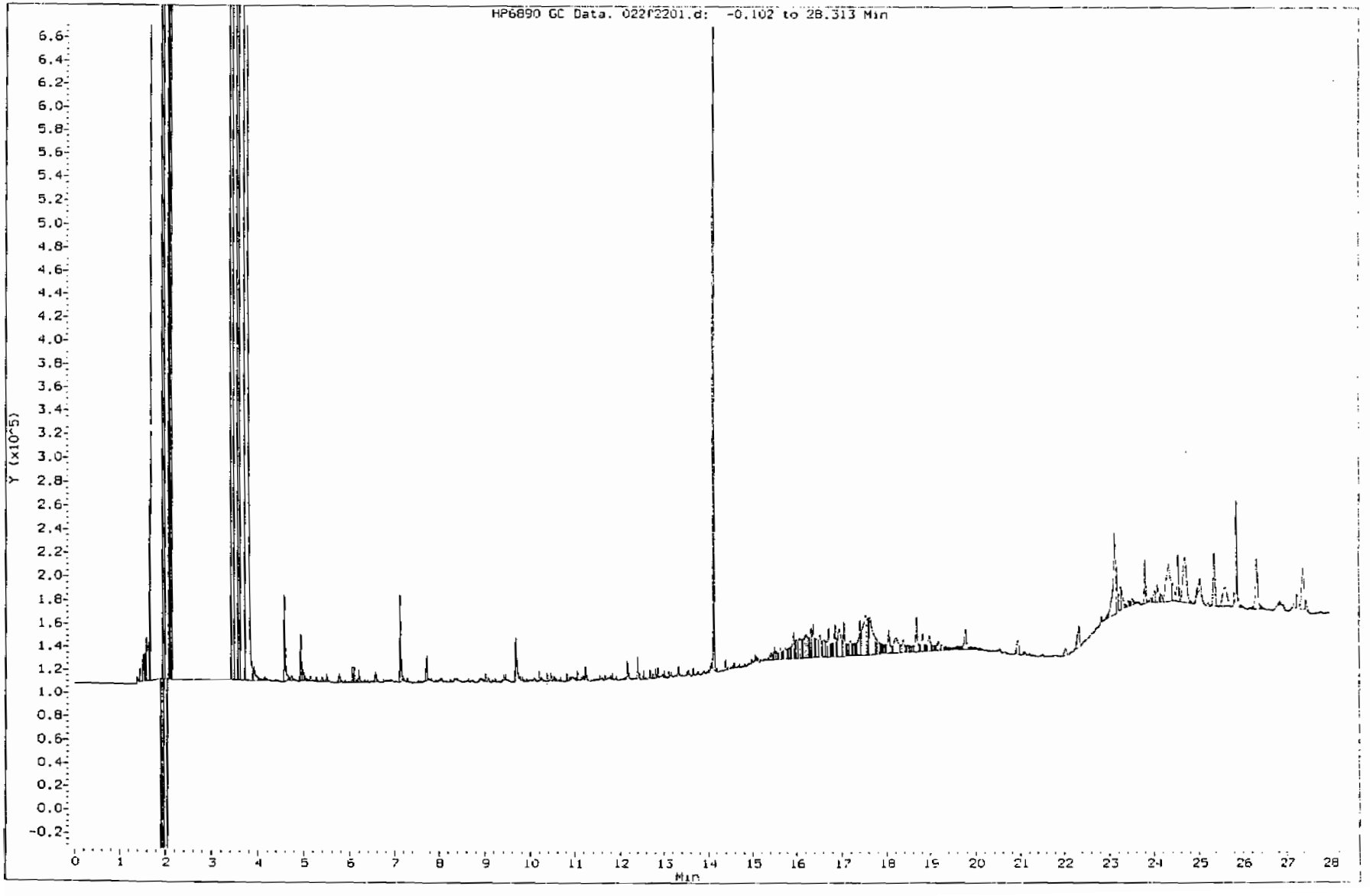

Data File: /chem/fid5.1/112509dr/022f2201.d
Injection Date: 26-NOV-2009 09:05
Instrument: fid5.1
Client Sample ID: RE03-09-13627

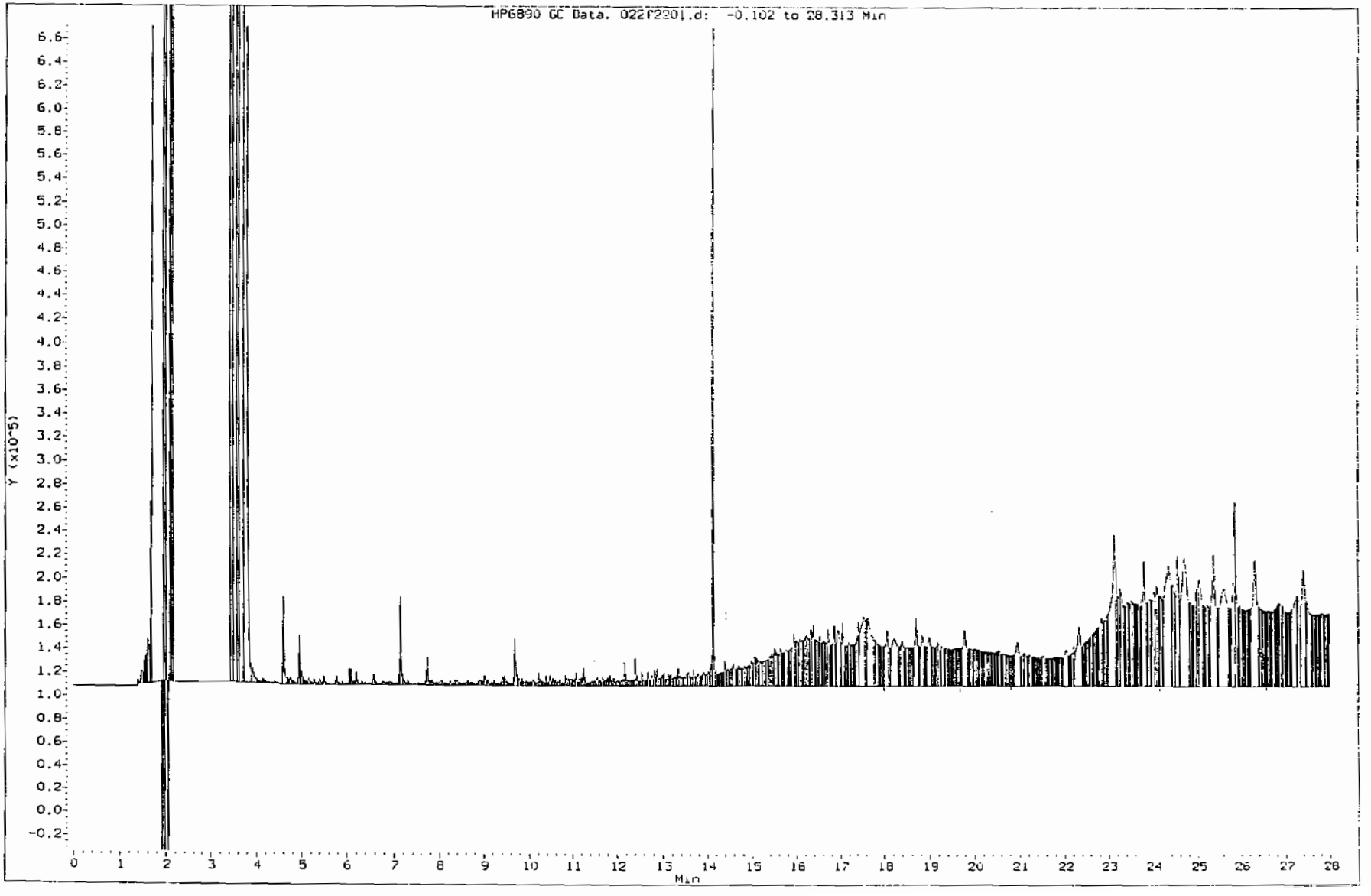

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 09:44	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	023f2301.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.02	mg/kg	2.60	8.01

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/023f2301.d
Lab Smp Id: 241318010 Client Smp ID: RE03-09-13625
Inj Date : 26-NOV-2009 09:44
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318010|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weigth of sample extracted (g)
M	16.91440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			10149116	75.3830	3.0	(a)
S 2 o-Terphenyl					CAS #: 84-15-1	
14.142	14.148	-0.006	1797362	8.45514	0.34	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/023f2301.d
Date : 26-NOV-2009 09:44
Client ID: RE03-09-13625
Sample Info: 1241318010111
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

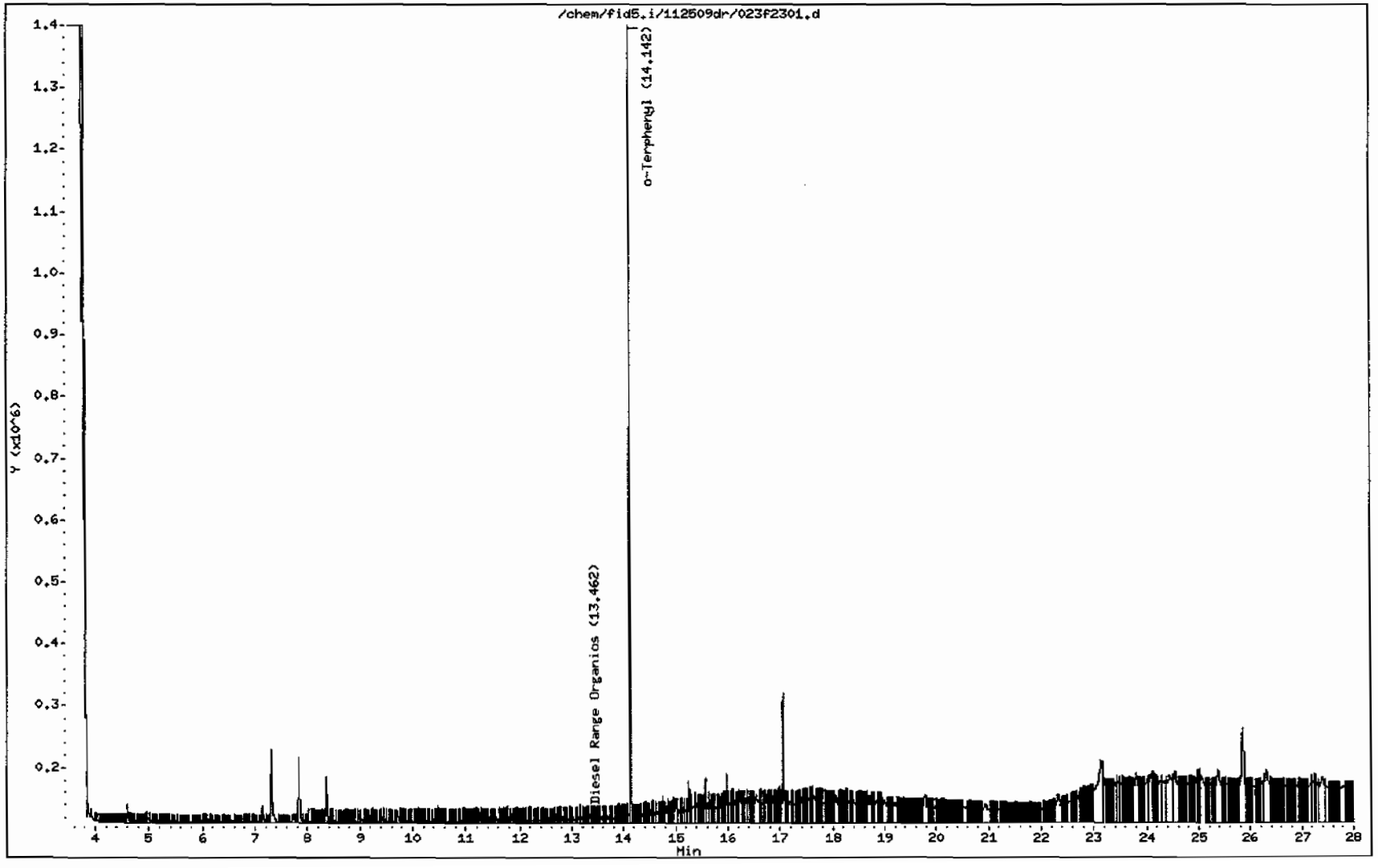

Data File: /chem/fid5.i/112509dr/023f2301.d
Injection Date: 26-NOV-2009 09:44
Instrument: fid5.i
Client Sample ID: RE03-09-13625

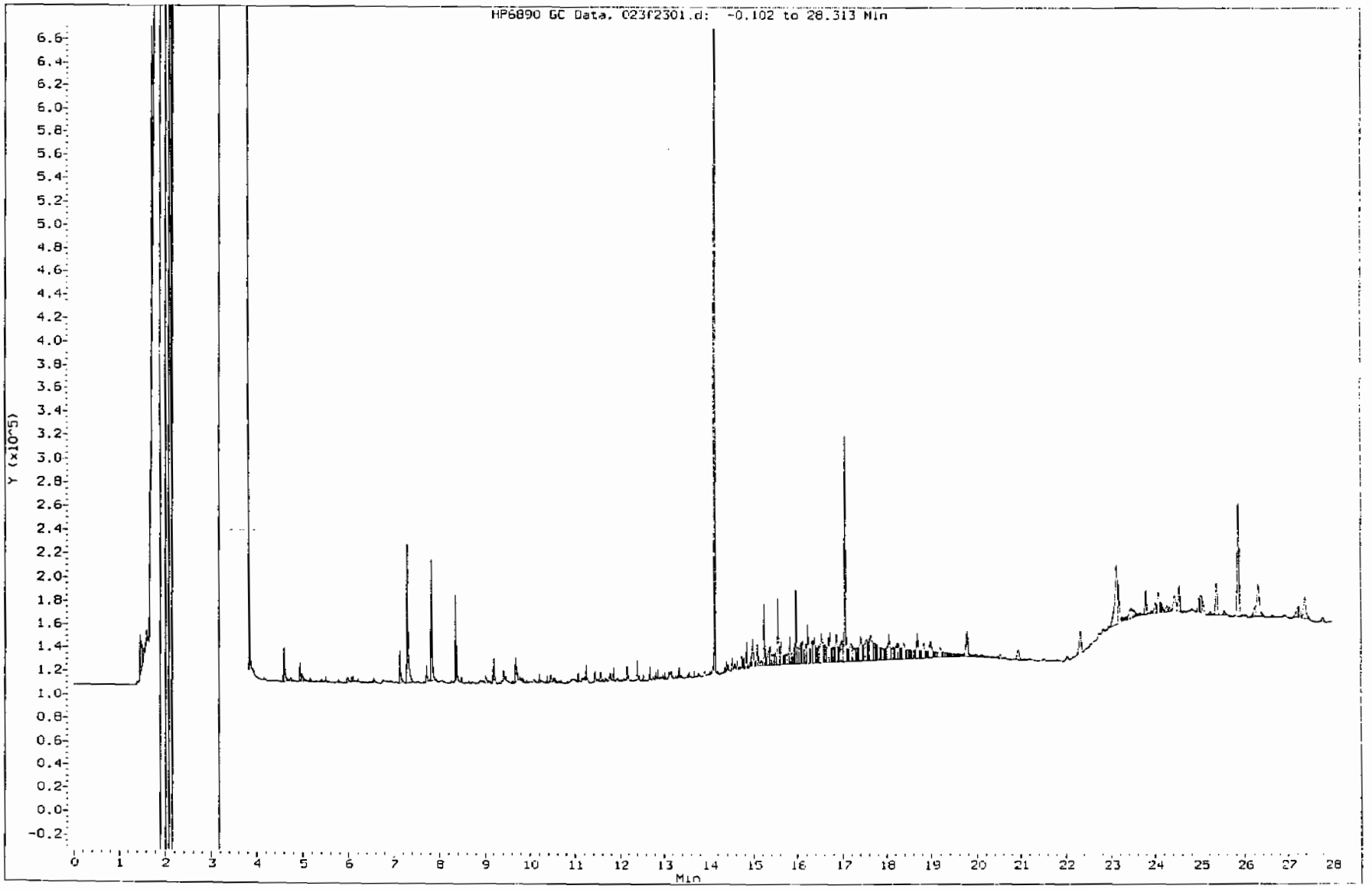

Data File: /chem/fid5.i/112509dr/023f2301.d
Injection Date: 26-NOV-2009 09:44
Instrument: fid5.i
Client Sample ID: RE03-09-13625

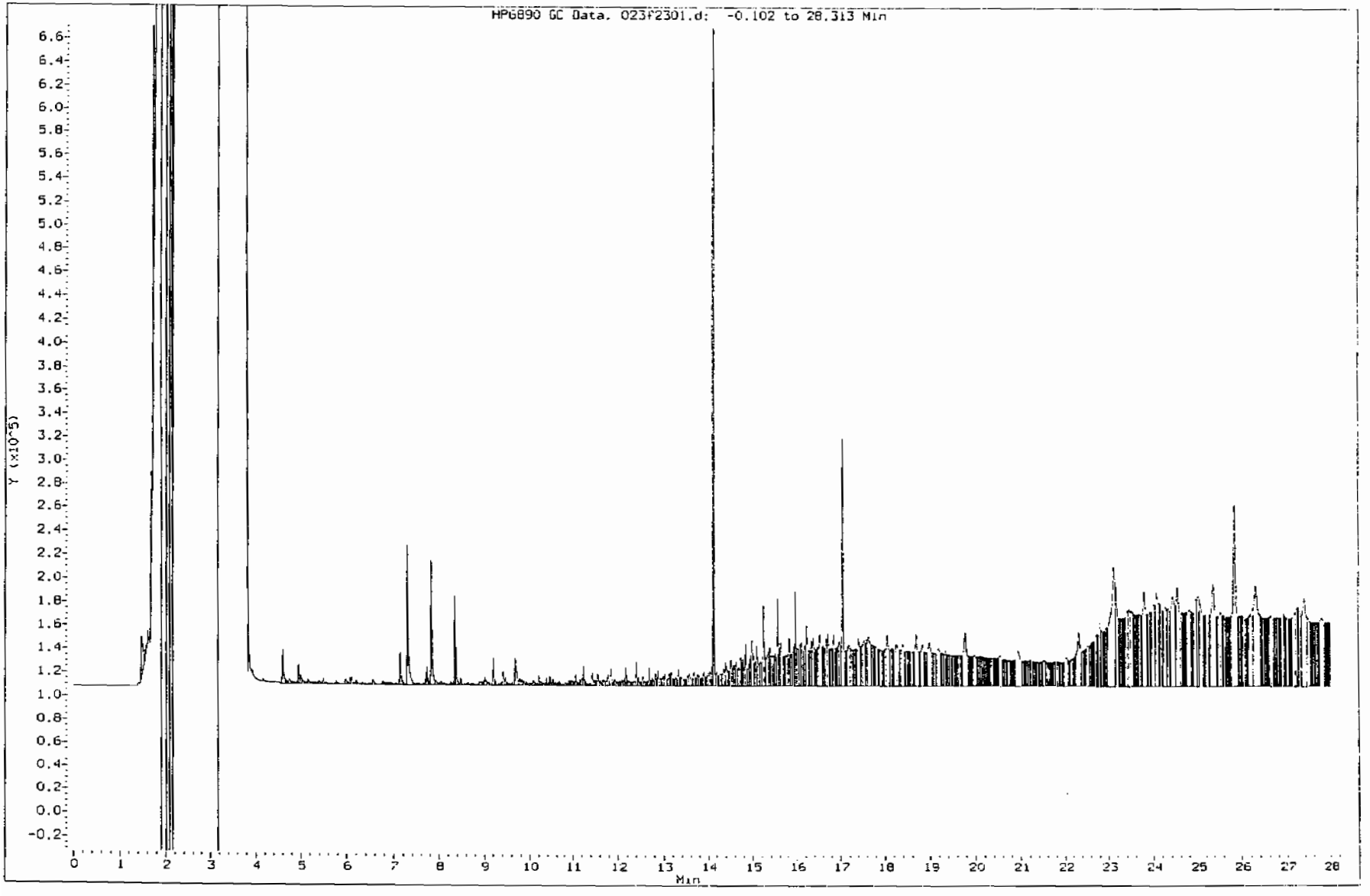

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6084	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 10:22	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	024f2401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.37	mg/kg	2.48	7.64

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/024f2401.d
Lab Smp Id: 241318013 Client Smp ID: RE03-10-6084
Inj Date : 26-NOV-2009 10:22
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318013|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	12.80070	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			15391618	114.322	4.4	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.144	14.148	-0.004	2697357	12.6889	0.48	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/024f2401.d
Date : 26-NOV-2009 10:22
Client ID: RE03-10-6084
Sample Info: |241318013|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

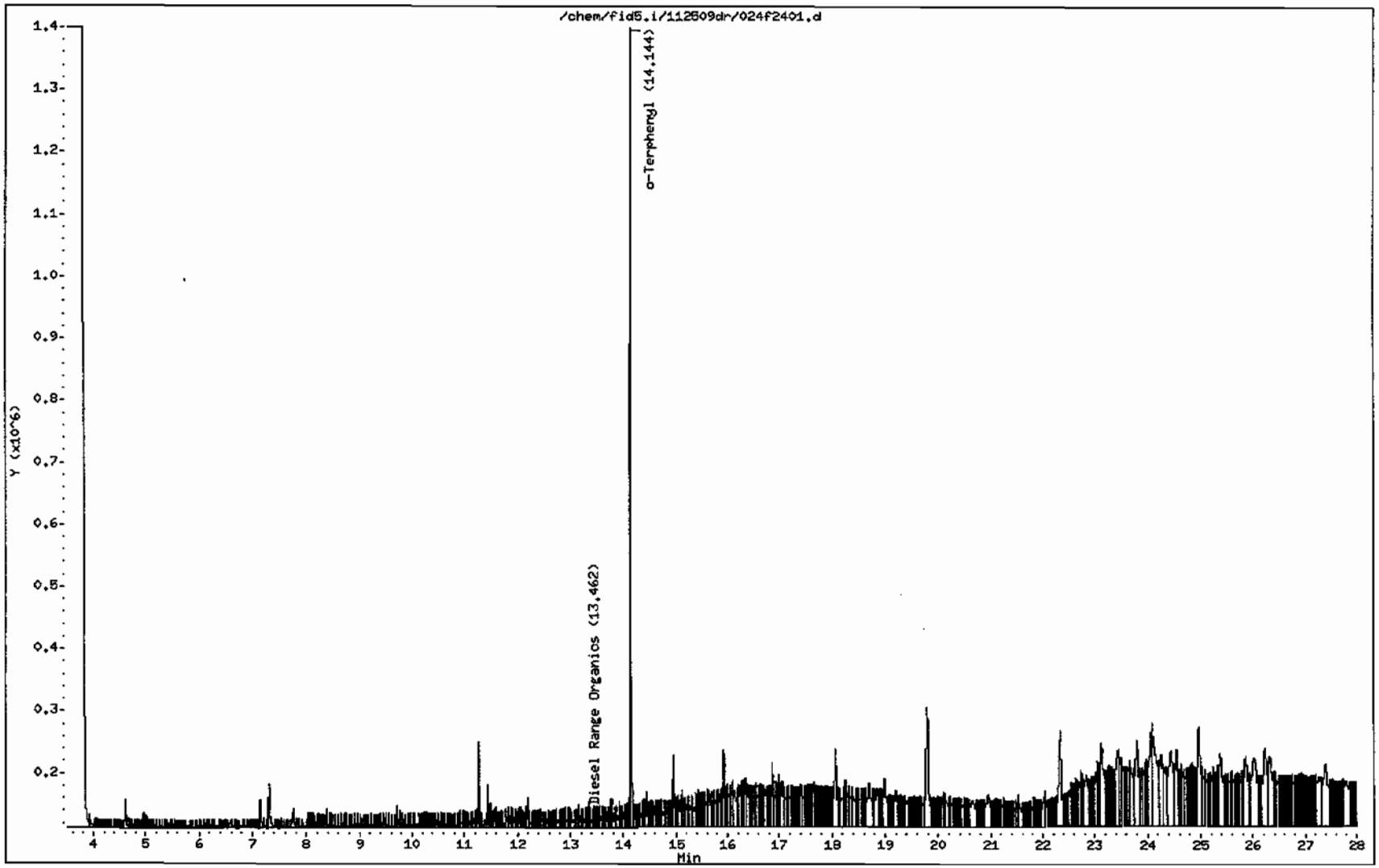

Data File: /chem/fid5.i/112509dr/024f2401.d
Injection Date: 26-NOV-2009 10:22
Instrument: fid5.i
Client Sample ID: RE03-10-6084

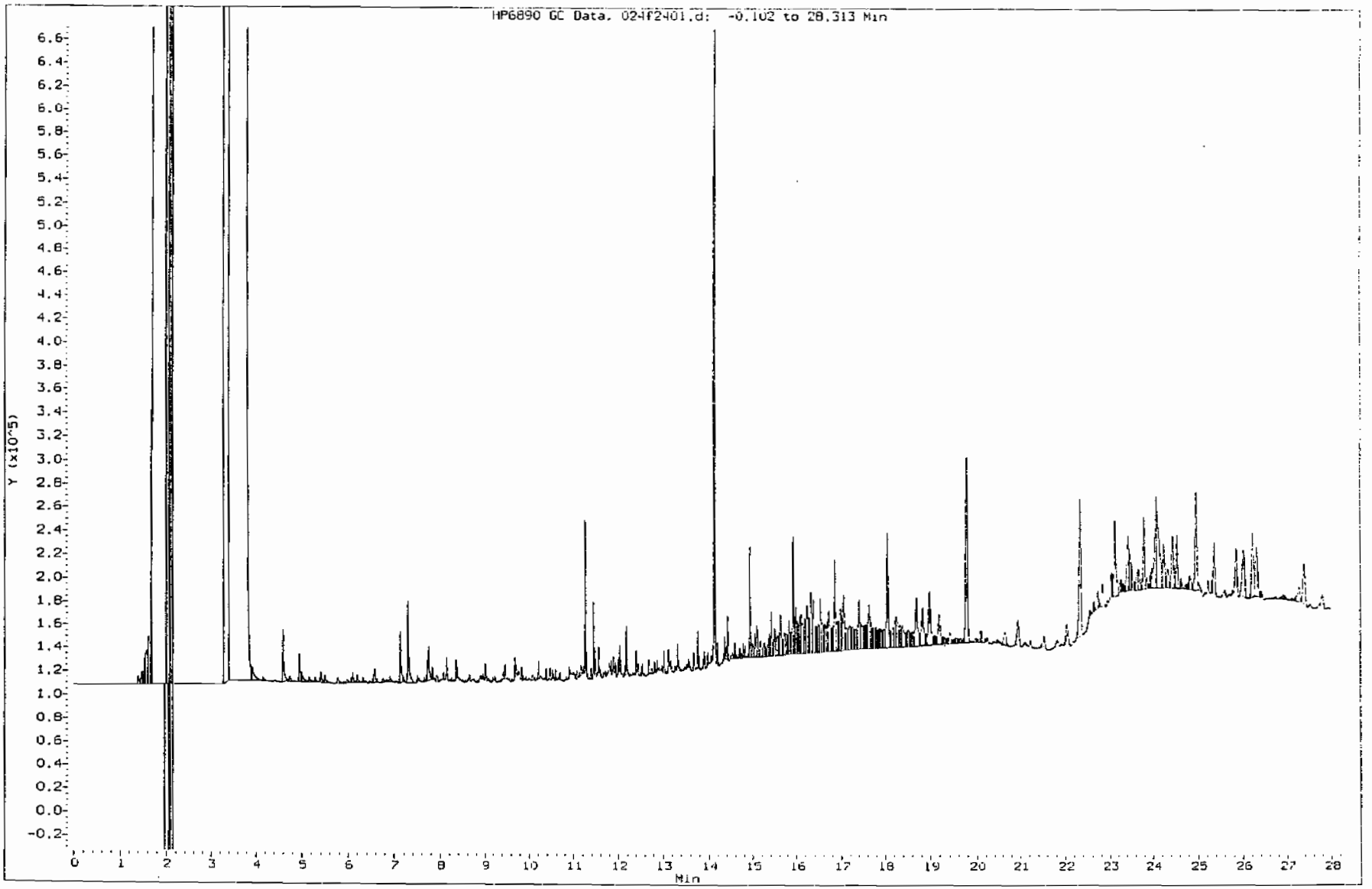

Data File: /chem/fid5.i/112509dr/024f2401.d
Injection Date: 26-NOV-2009 10:22
Instrument: fid5.i
Client Sample ID: RE03-10-6084

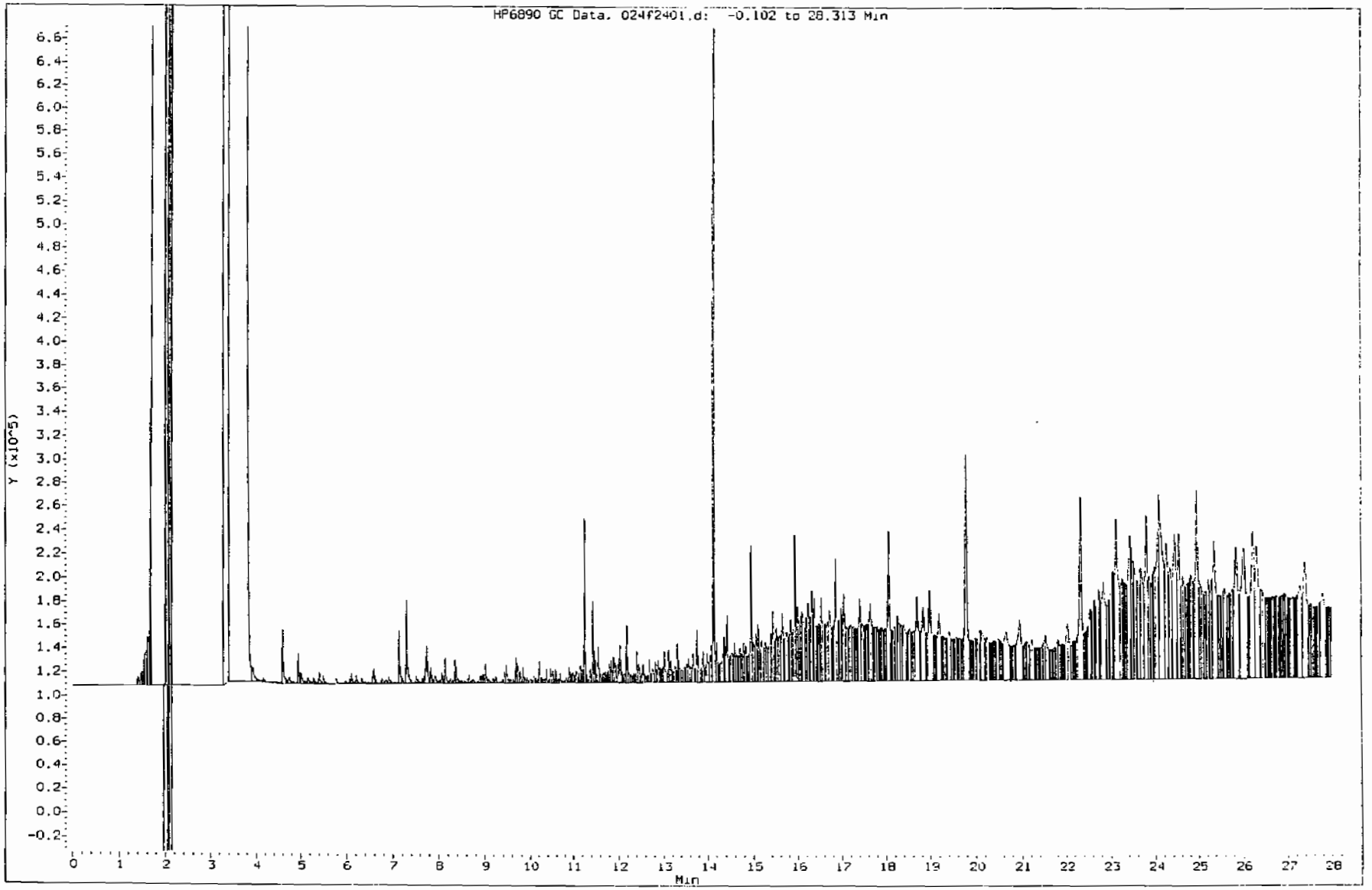

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6085	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 11:01	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	025f2501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.40	mg/kg	2.25	6.94

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/025f2501.d
Lab Smp Id: 241318014 Client Smp ID: RE03-10-6085
Inj Date : 26-NOV-2009 11:01
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241318014|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	4.42560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			24827382	184.406	6.4	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.144	14.148	-0.004	2608531	12.2710	0.42	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/025f2501.d
Date : 26-NOV-2009 11:01
Client ID: RE03-10-6085
Sample Info: |2413180141|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

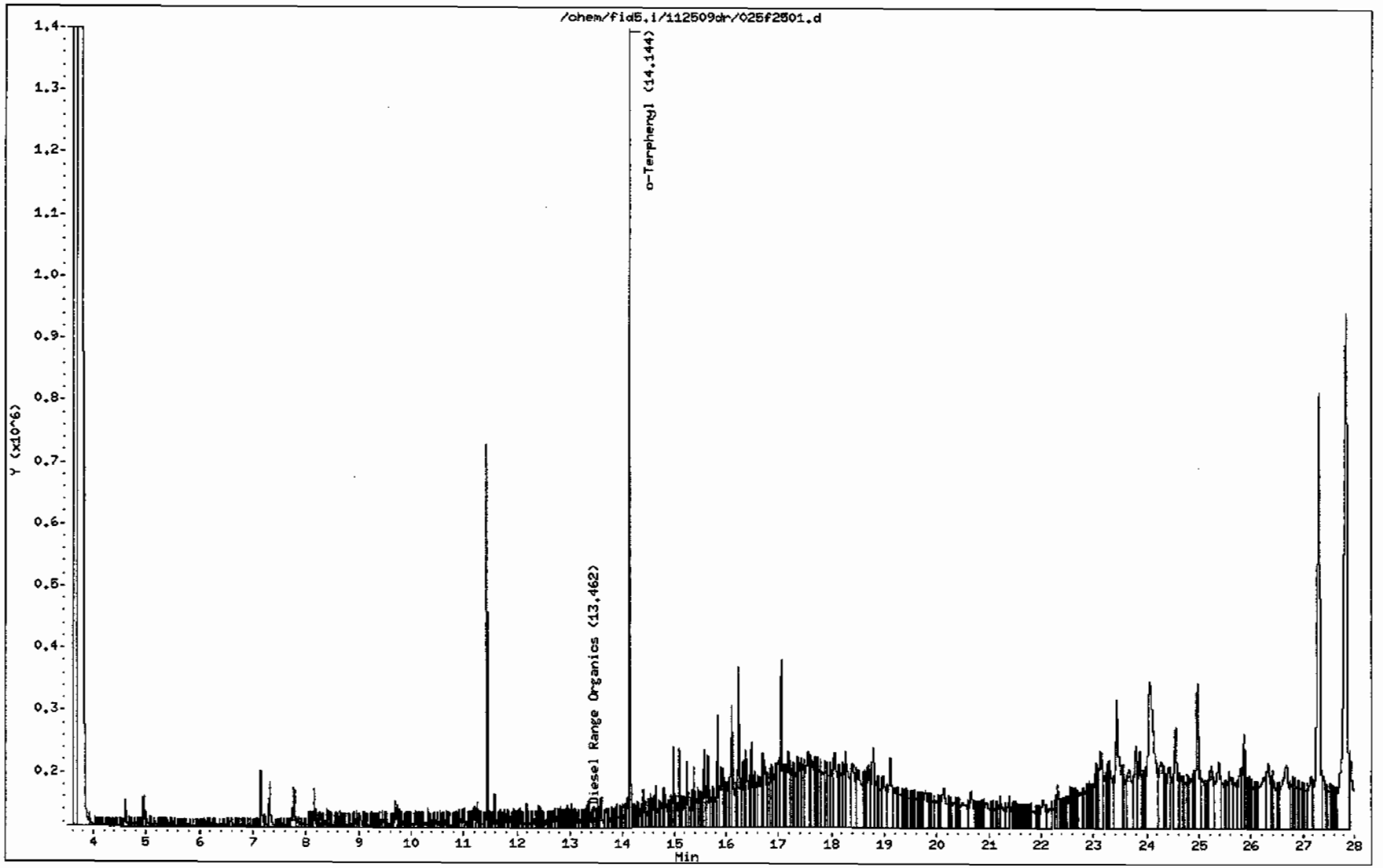

Data File: /chem/fid5.i/112509dr/025f2501.d
Injection Date: 26-NOV-2009 11:01
Instrument: fid5.i
Client Sample ID: RE03-10-6085

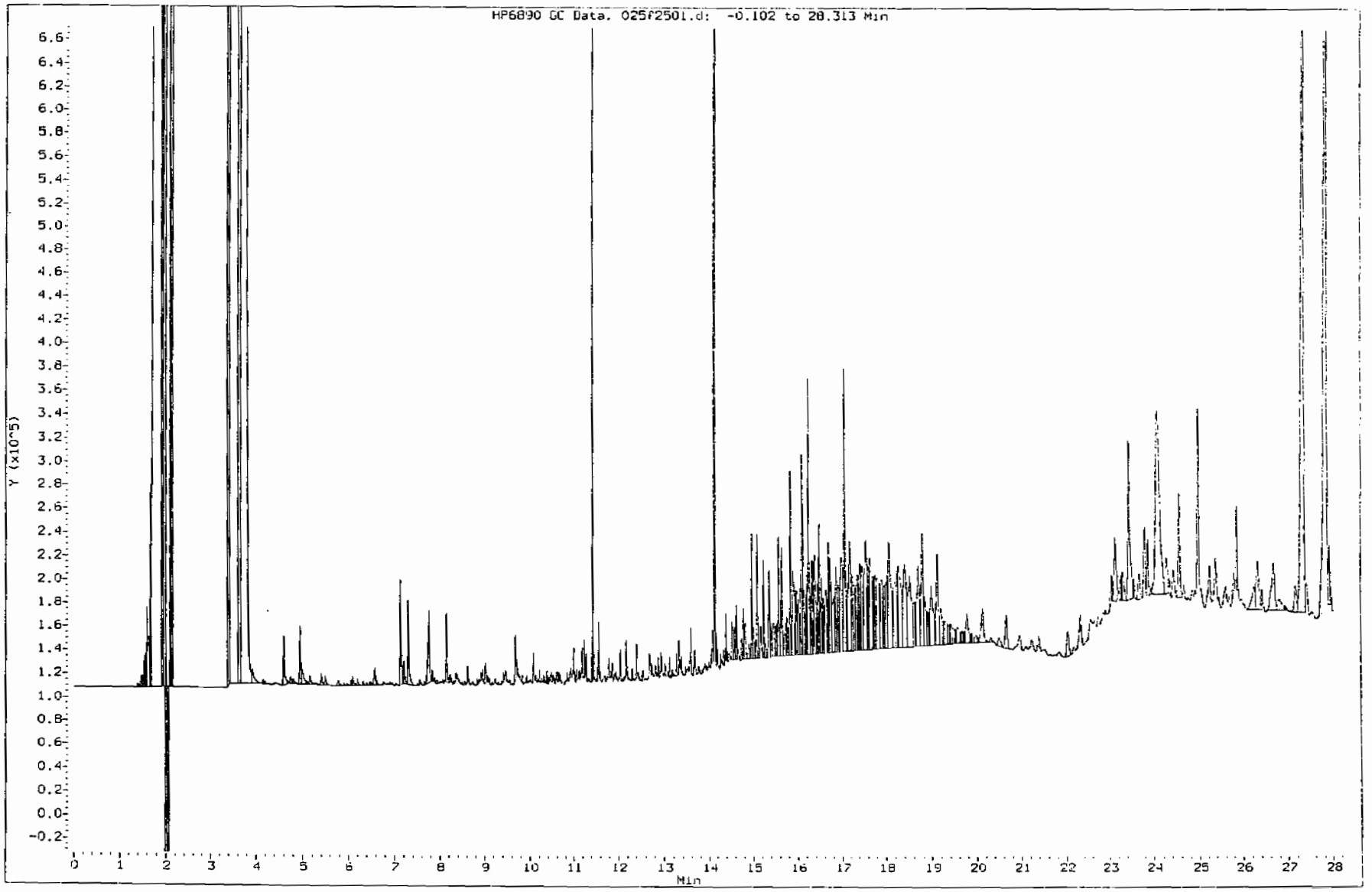

Data File: /chem/fid5.i/112509dr/025f2501.d
Injection Date: 26-NOV-2009 11:01
Instrument: fid5.i
Client Sample ID: RE03-10-6085

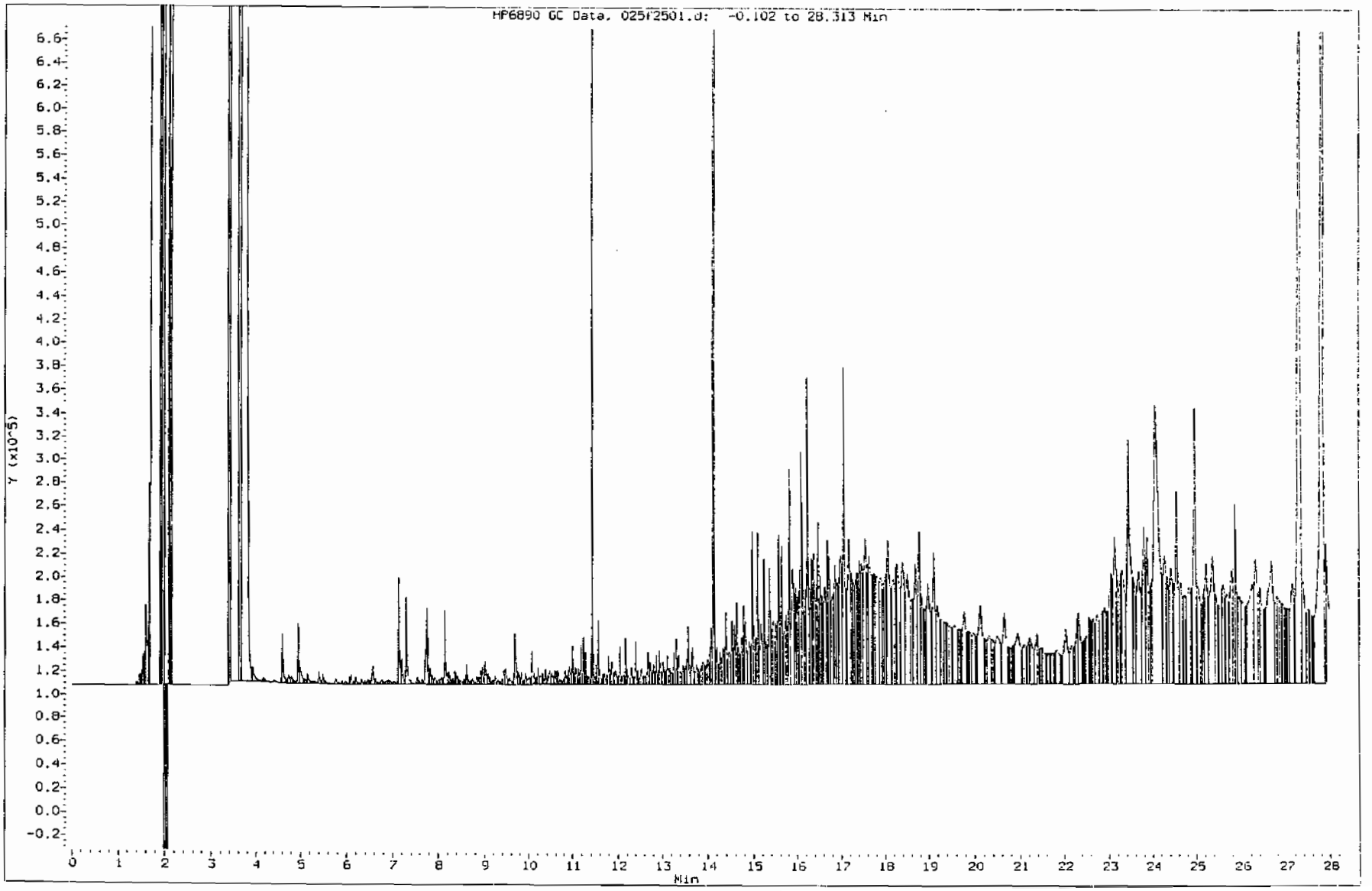

STANDARDS DATA

Report Date: 30-Nov-2009 10:03

Calibration History

Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
26-NOV-2009 12:55	dro	/chem/fid5.i/112509dr/028f2801.d
Ccal Level: 5 , Ccal Amount: 1000		
26-NOV-2009 05:16	dro	/chem/fid5.i/112509dr/016f1601.d
Ccal Level: 5 , Ccal Amount: 1000		
25-NOV-2009 21:00	dro	/chem/fid5.i/112509dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 27-Nov-2009 06:37 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

	Compound	RT	RT Window	RF
	3 Decane (C10)	8.038	8.008-8.068	
S	1 Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2 o-Terphenyl	14.148	14.118-14.178	2.126e+05
	4 Octacosane (C28)	18.892	18.862-18.922	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

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INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Cal Date : 27-Nov-2009 06:37 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: FID5 Calibration Date: 11/25/09 Time: 2100

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	134530.47	0.01	-0.1	15.0
o-Terphenyl	212576.33	196195.57	0.01	-7.7	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: FID5 Calibration Date: 11/26/09 Time: 0516

Lab File ID: 016F1601 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	139350.91	0.01	3.5	15.0
o-Terphenyl	212576.33	203491.74	0.01	-4.3	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: FID5 Calibration Date: 11/26/09 Time: 1255

Lab File ID: 028F2801 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	133096.18	0.01	1.1	15.0
o-Terphenyl	212576.33	202932.18	0.01	-4.5	15.0

FORM VII SV

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 25-NOV-2009 21:00
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			134530467	1000.00	999
$ 2 o-Terphenyl					CAS #: 84-15-1
14.148	14.148	0.000	4904889	25.0000	23.1

Data File: /chem/fid5.i/112509dr/003f0301.d
Date : 25-NOV-2009 21:00
Client ID: DSTD01
Sample Info: IUFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

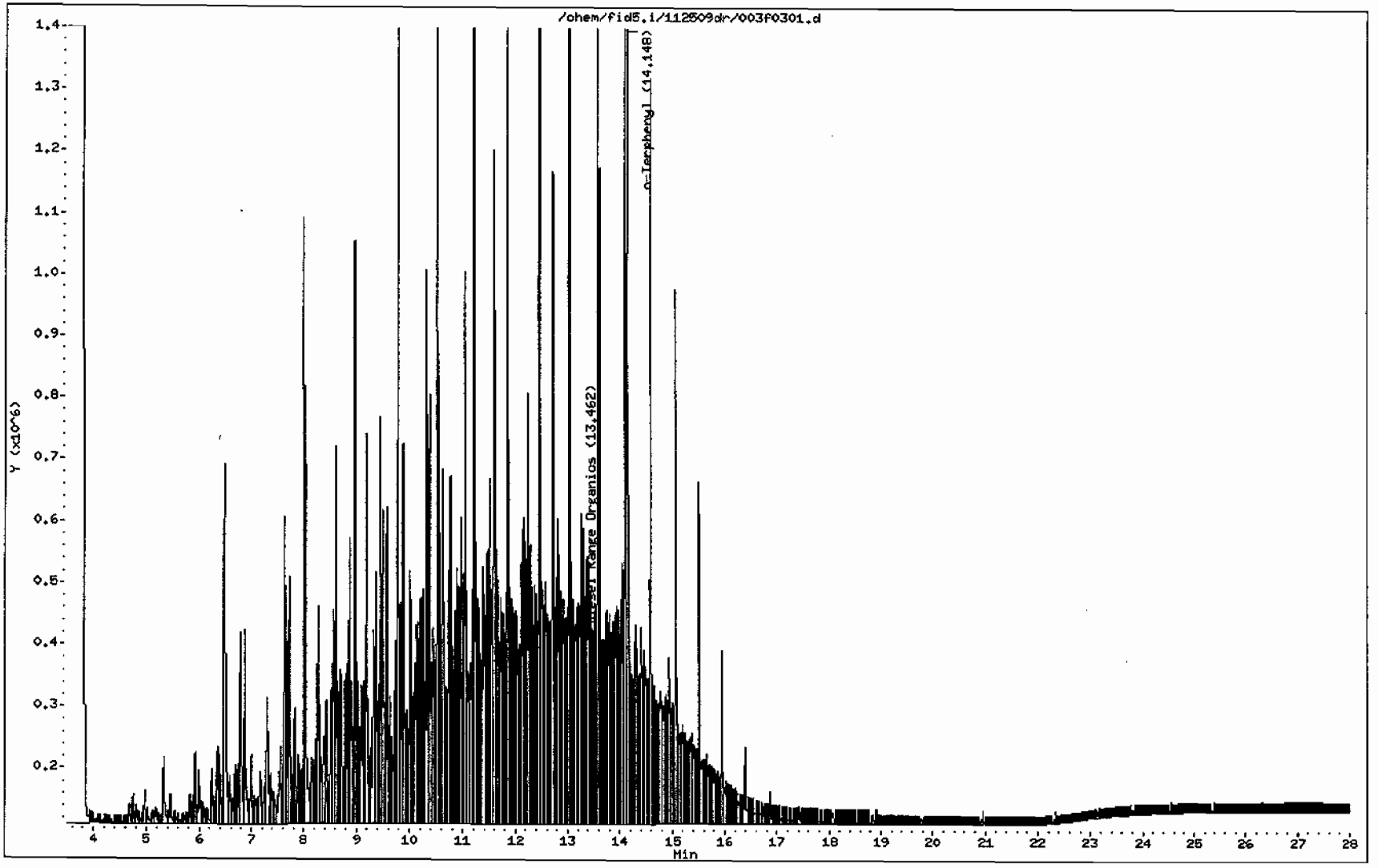

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/016f1601.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 26-NOV-2009 05:16
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
$ 1 Diesel Range Organics					CAS #:
8.008- 18.916			139350908	1000.00	1040
$ 2 o-Terphenyl					CAS #: 84-15-1
14.150	14.148	0.002	5087293	25.0000	23.9

Data File: /chem/fid5.i/112509dr/016f1601.d
Date : 26-NOV-2009 05:16
Client ID: DSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5HS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

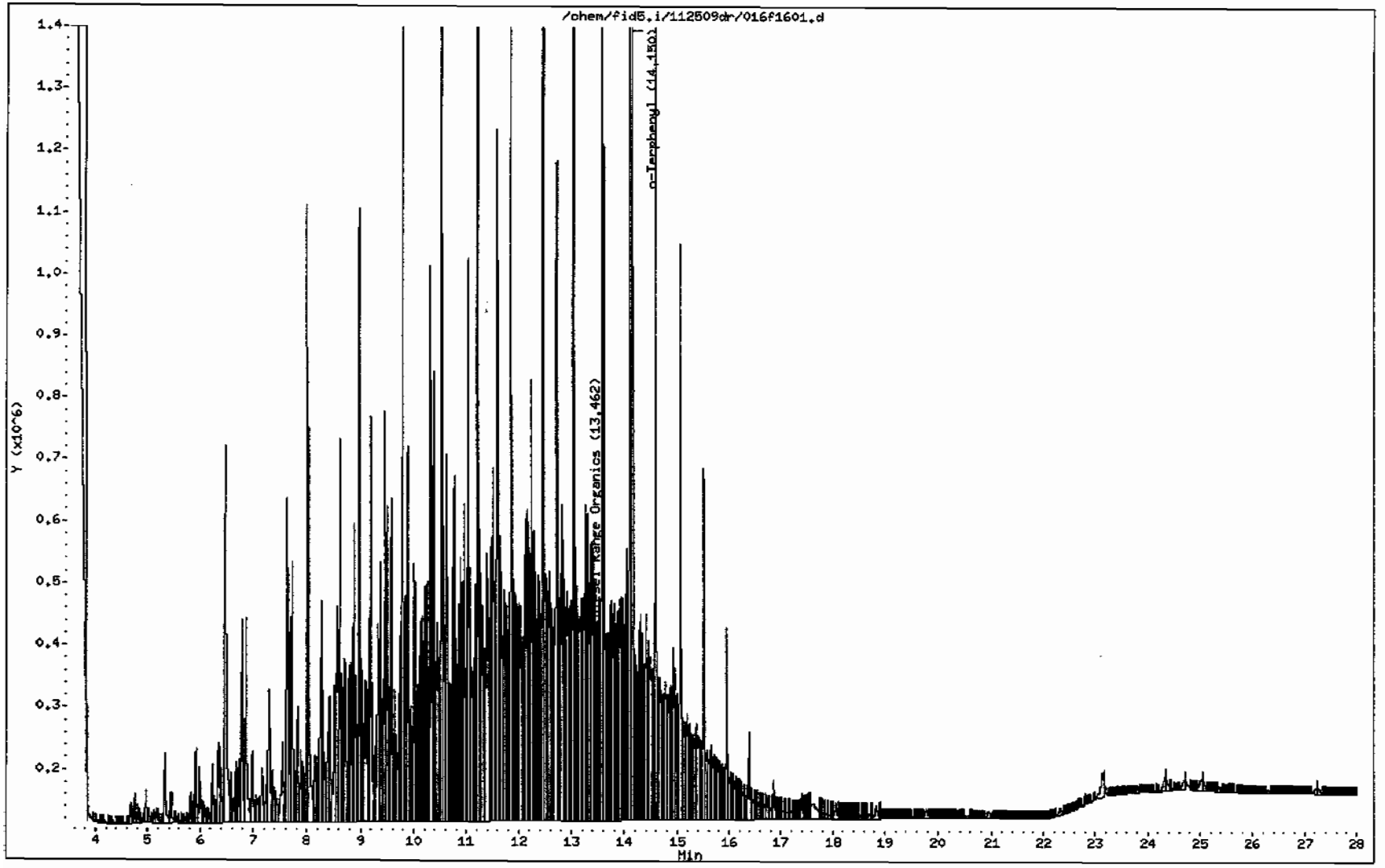

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/028f2801.d
Lab Smp Id: UFI091118-01 D3 Client Smp ID: DSTD03
Inj Date : 26-NOV-2009 12:55
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D3
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			133096178	1000.00	988
$ 2 o-Terphenyl					CAS #: 84-15-1
14.149	14.148	0.001	5073304	25.0000	23.9

Data File: /chem/fid5.i/112509dr/028f2801.d
Date : 26-NOV-2009 12:55
Client ID: DSTD03
Sample Info: IUFI091118-01 D3

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

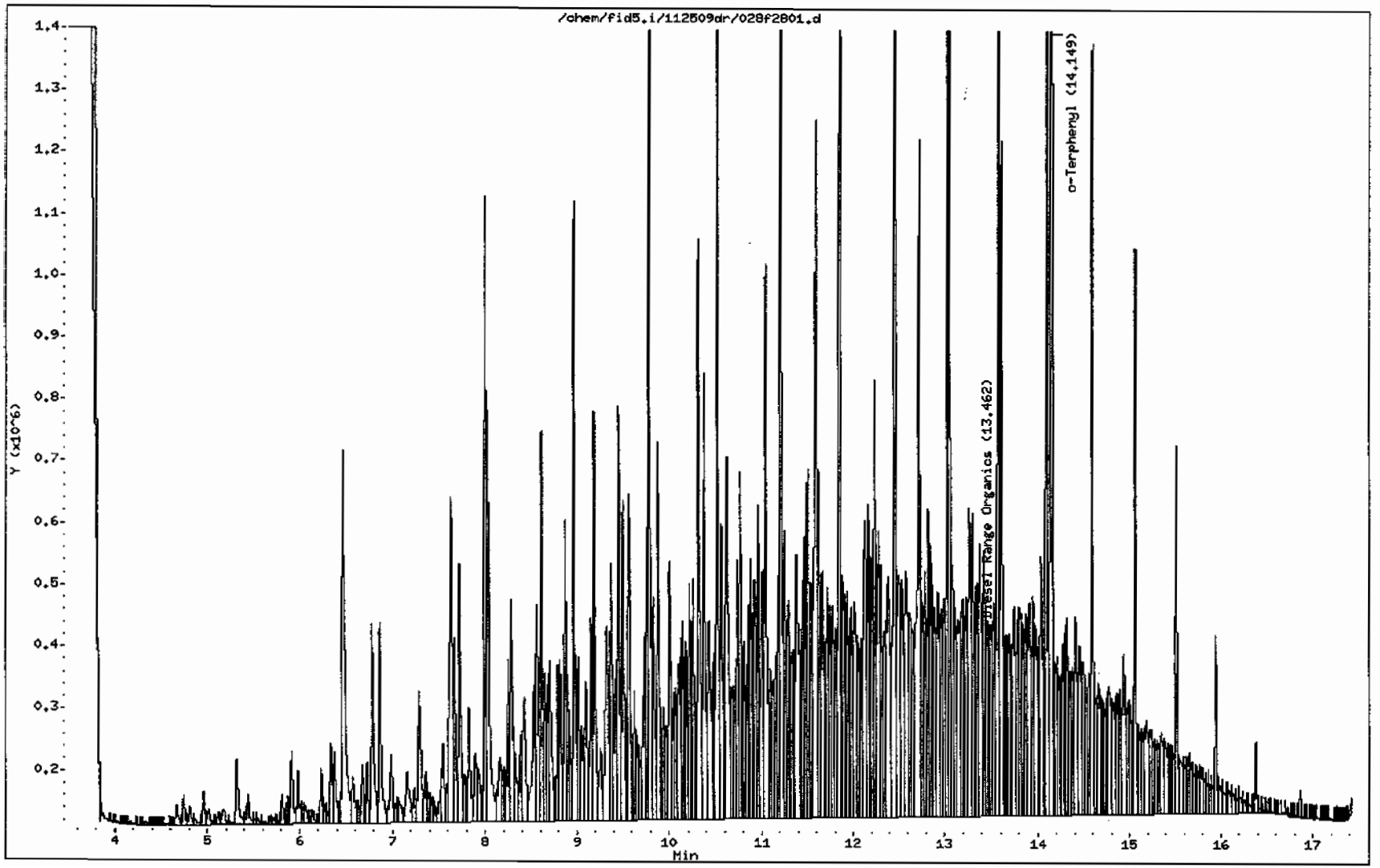

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/25/09	1945	14.15	
02	RTMARKER	UFI091013-03	11/25/09	2022		
03	DSTD01	UFI091118-01	11/25/09	2100	14.15	
04	DIBLK02	WFI090723-06	11/25/09	2139	14.14	
05	DBLK01	1201979310	11/25/09	2216	14.14	
06	DBLK01LCS	1201979313	11/25/09	2254	14.14	
07	ZZZZZ	ZZZZZ	11/25/09	2333	14.14	
08	ZZZZZ	ZZZZZ	11/26/09	0011	14.14	
09	ZZZZZ	ZZZZZ	11/26/09	0049	14.14	
10	RE03-09-13618	241318001	11/26/09	0127	14.14	
11	RE03-09-13622	241318002	11/26/09	0206	14.14	
12	RE03-09-13620	241318003	11/26/09	0244	14.15	
13	RE03-09-13619	241318004	11/26/09	0322	14.14	
14	RE03-09-13624	241318005	11/26/09	0400	14.14	
15	RE03-09-13623	241318006	11/26/09	0438	14.14	
16	DSTD02	UFI091118-01	11/26/09	0516	14.15	
17	DIBLK03	WFI090723-06	11/26/09	0555	14.15	
18	RE03-09-13626	241318007	11/26/09	0633	14.14	
19	RE03-09-13621	241318008	11/26/09	0711	14.14	
20	RE03-09-13621MS	1201979311	11/26/09	0749	14.15	
21	RE03-09-13621MSD	1201979312	11/26/09	0827	14.15	
22	RE03-09-13627	241318009	11/26/09	0905	14.14	
23	RE03-09-13625	241318010	11/26/09	0944	14.14	
24	RE03-10-6084	241318013	11/26/09	1022	14.14	
25	RE03-10-6085	241318014	11/26/09	1101	14.14	
26	ZZZZZ	ZZZZZ	11/26/09	1139	14.14	
27	ZZZZZ	ZZZZZ	11/26/09	1217	14.14	
28	DSTD03	UFI091118-01	11/26/09	1255	14.15	
29						
30						
31						
32						

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543			Matrix:	SOIL
Lab Sample ID:	1201979310				
Client Sample:	QC for batch 925769	Client:	LANL010	Project:	QC
Client ID:	MB for batch 925769	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/25/2009 22:16	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30 g	Final Volume:	1 mL
Data File:	005f0501.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/005f0501a.d
Lab Smp Id: 1201979310 Client Smp ID: DBLK01
Inj Date : 25-NOV-2009 22:16
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979310|1|
Misc Info : |FIDDRO_SF|925774|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.143	14.148	-0.005	2539206	11.9449	0.40

Data File: /chem/fid5.i/112509dr/005f0501a.d
Date : 25-NOV-2009 22:16
Client ID: DBLK01
Sample Info: |120197931011|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

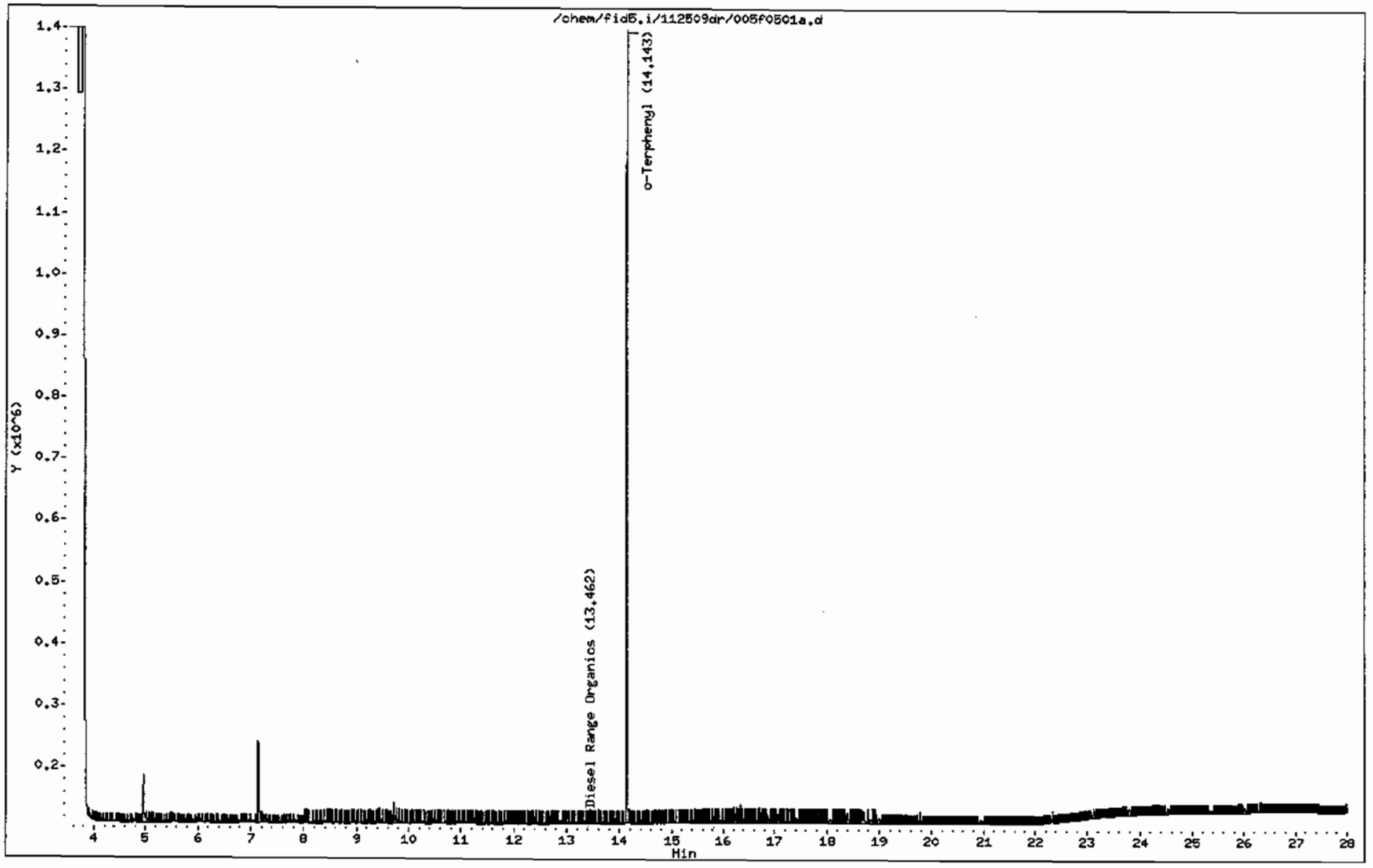

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543			**Matrix:**	SOIL
Lab Sample ID:	1201979313				
Client Sample:	QC for batch 925769	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 925769	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/25/2009 22:54	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	006f0601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		28.0	mg/kg	2.17	6.67

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/006f0601a.d
Lab Smp Id: 1201979313 Client Smp ID: DBLK01LCS
Inj Date : 25-NOV-2009 22:54
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979313|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			113039315	839.604	28.0
$ 2 o-Terphenyl					CAS #: 84-15-1
14.145	14.148	-0.003	3515400	16.5371	0.55

Data File: /chem/fid5.i/112509dr/006f0601a.d
Date : 25-NOV-2009 22:54
Client ID: DBLK01LCS
Sample Info: |1201979313|1|
Volume Injected (uL): 1.0
Column phase: DB-5HS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

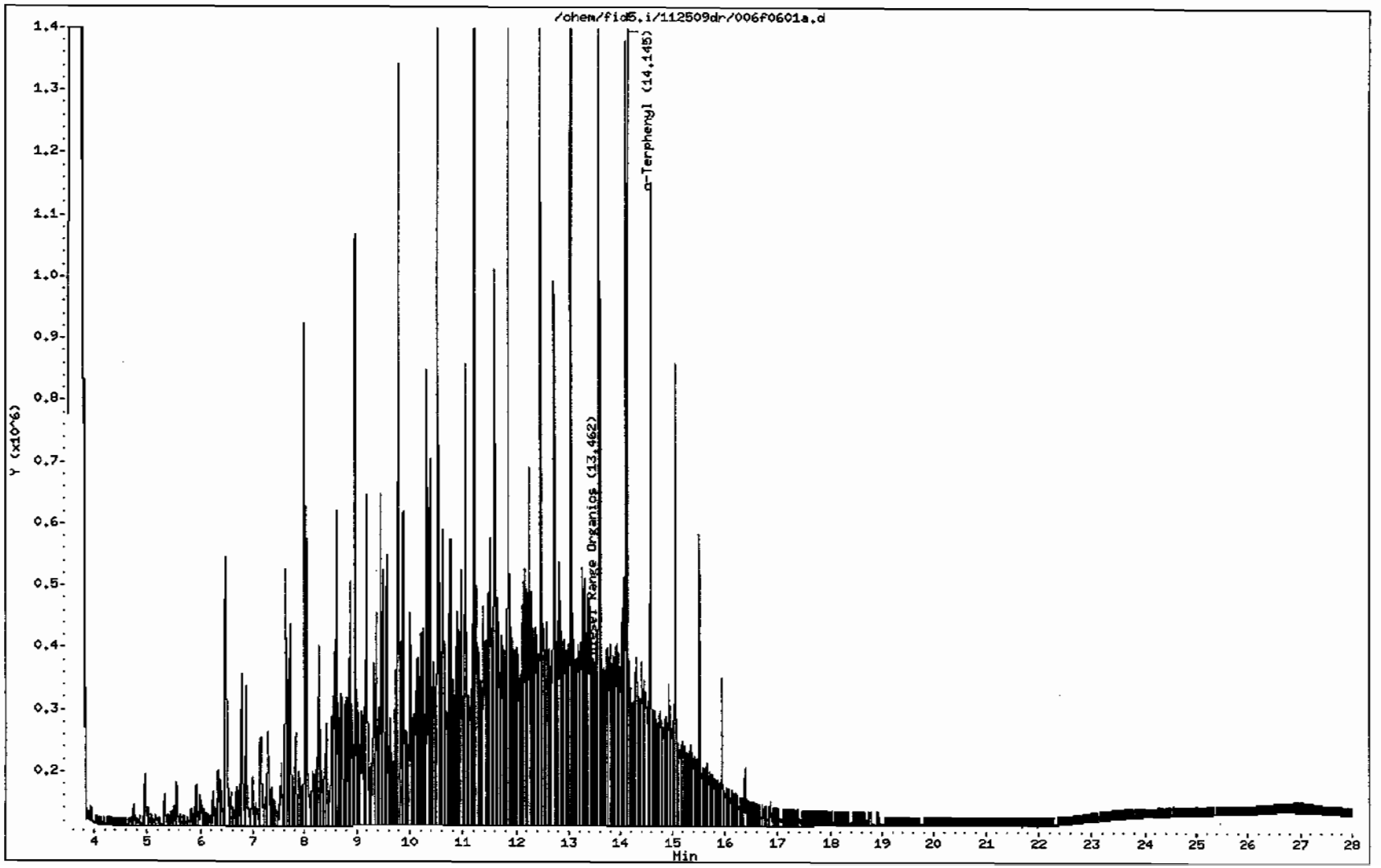

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201979311	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
Client Sample:	QC for batch 925769	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13621MS	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 07:49	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	020f2001.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		35.4	mg/kg	2.26	6.96

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/020f2001.d
Lab Smp Id: 1201979311 Client Smp ID: RE03-09-13621MS
Inj Date : 26-NOV-2009 07:49
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979311|1|
Misc Info : |FIDDRO_SF|925774|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weigth of sample extracted (g)
M	4.64490	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	8.008- 18.916			137030255	1017.80	35.4	
$	2 o-Terphenyl					CAS #: 84-15-1	
	14.146	14.148	-0.002	3336659	15.6963	0.54	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/020f2001.d
Date : 26-NOV-2009 07:49
Client ID: RE03-09-13621MS
Sample Info: (120197931)(1)
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

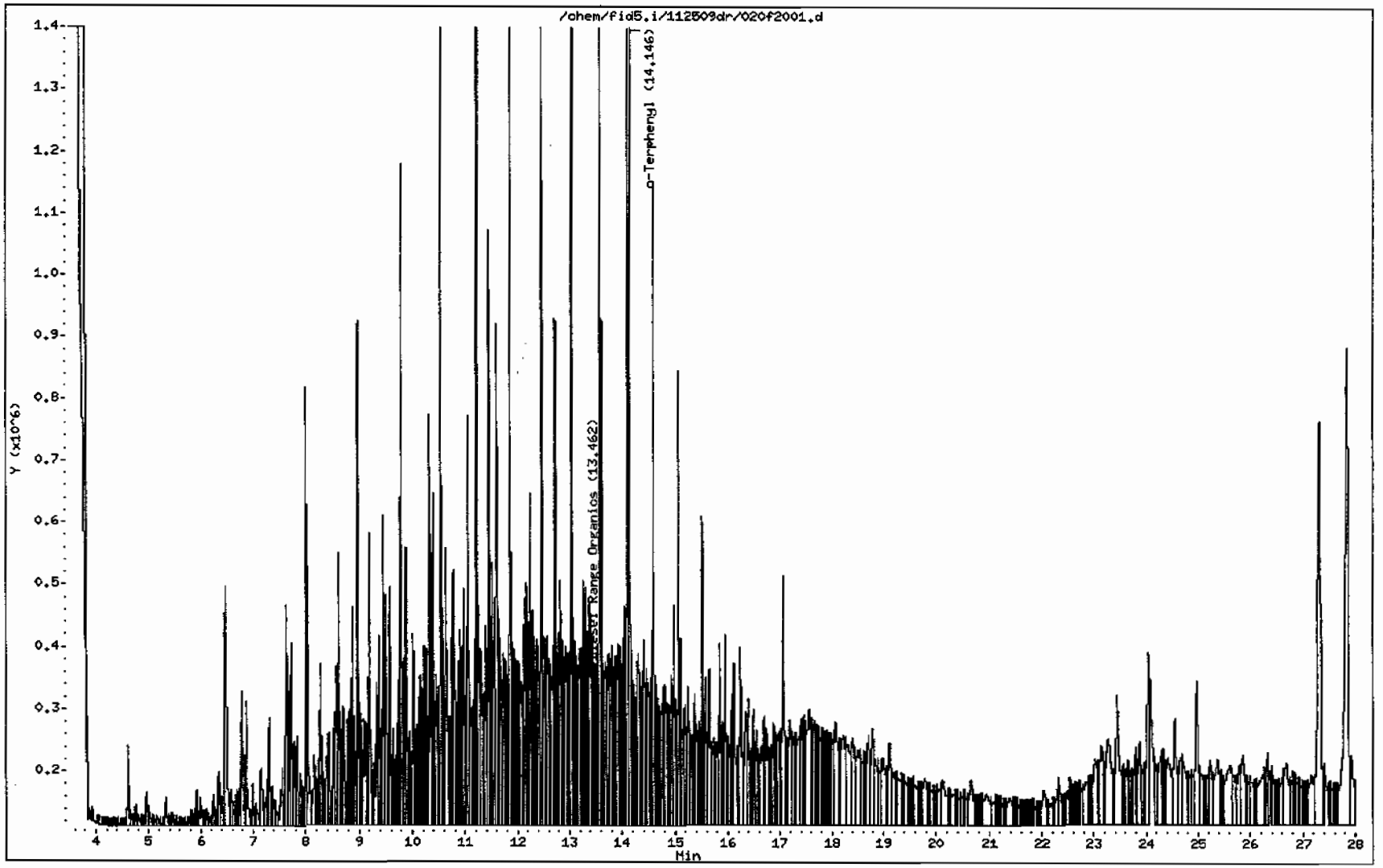

Data File: /chem/fid5.i/112509dr/020f2001.d
Injection Date: 26-NOV-2009 07:49
Instrument: fid5.i
Client Sample ID: RE03-09-13621MS

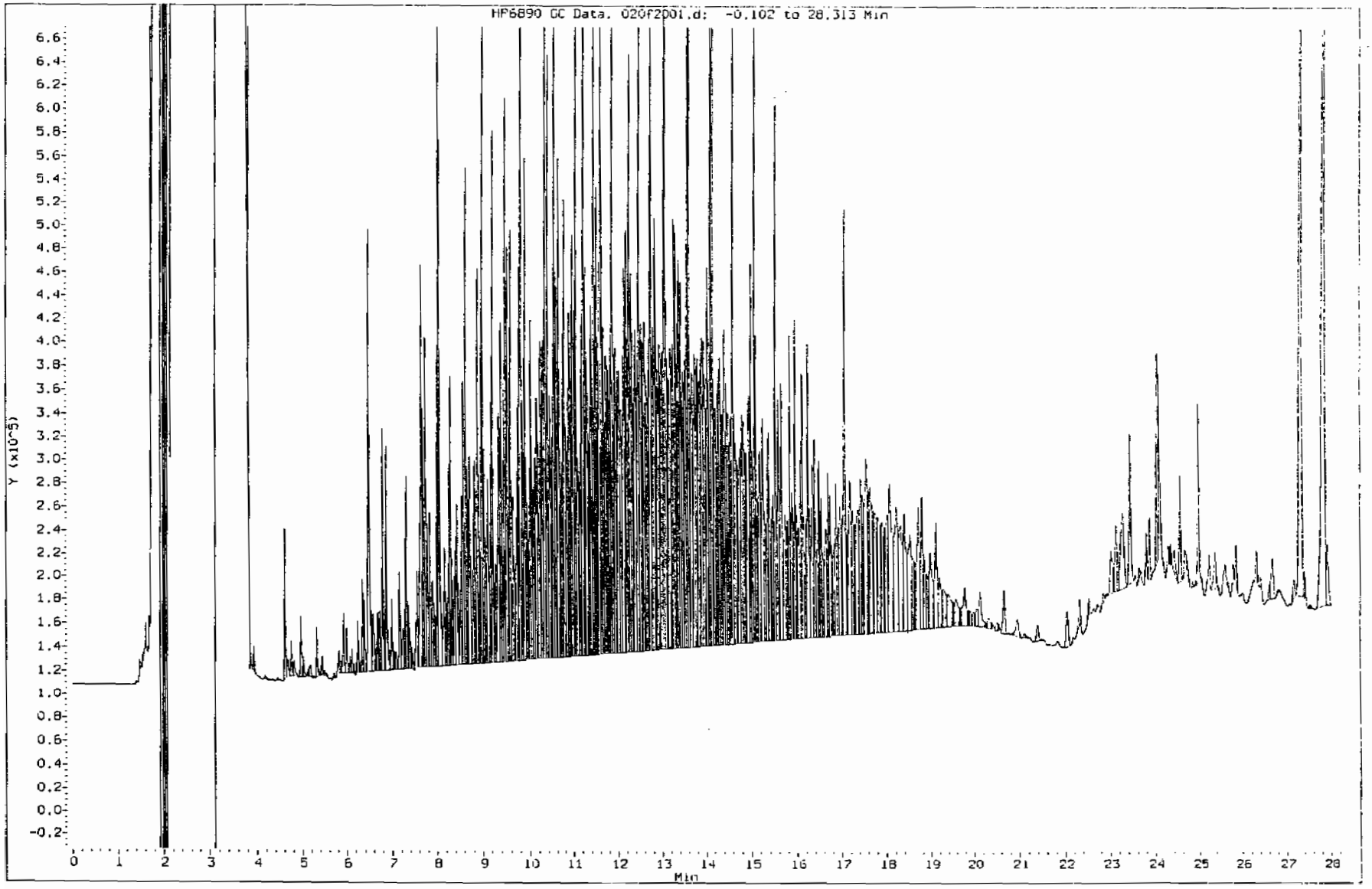

Data File: /chem/fid5.i/112509dr/020f2001.d
Injection Date: 26-NOV-2009 07:49
Instrument: fid5.i
Client Sample ID: RE03-09-13621MS

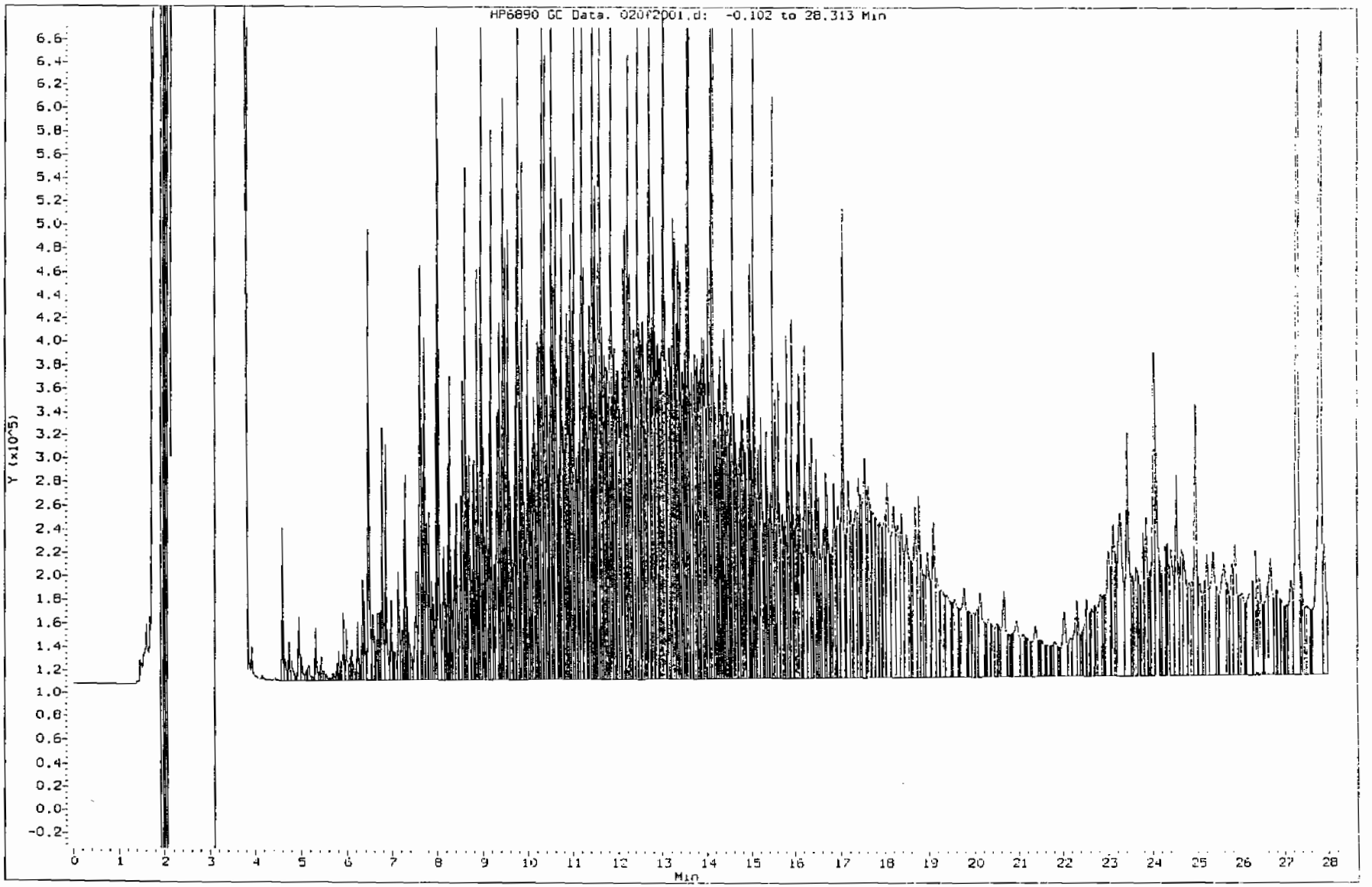

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201979312	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
Client Sample:	QC for batch 925769	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13621MSD	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	925774	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/26/2009 08:27	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/24/2009 21:12	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	021f2101.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		39.1	mg/kg	2.27	6.98

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DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/021f2101.d
Lab Smp Id: 1201979312 Client Smp ID: RE03-09-13621MSD
Inj Date : 26-NOV-2009 08:27
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979312|1|
Misc Info : |FIDDRO_SF|925774|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weigth of sample extracted (g)
M	4.64490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	CONCENTRATIONS FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			150965650	1121.30	39.1	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.145	14.148	-0.003	3415097	16.0653	0.56	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/021f2101.d
Date : 26-NOV-2009 08:27
Client ID: RE03-09-13621MSD
Sample Info: |120197931211|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

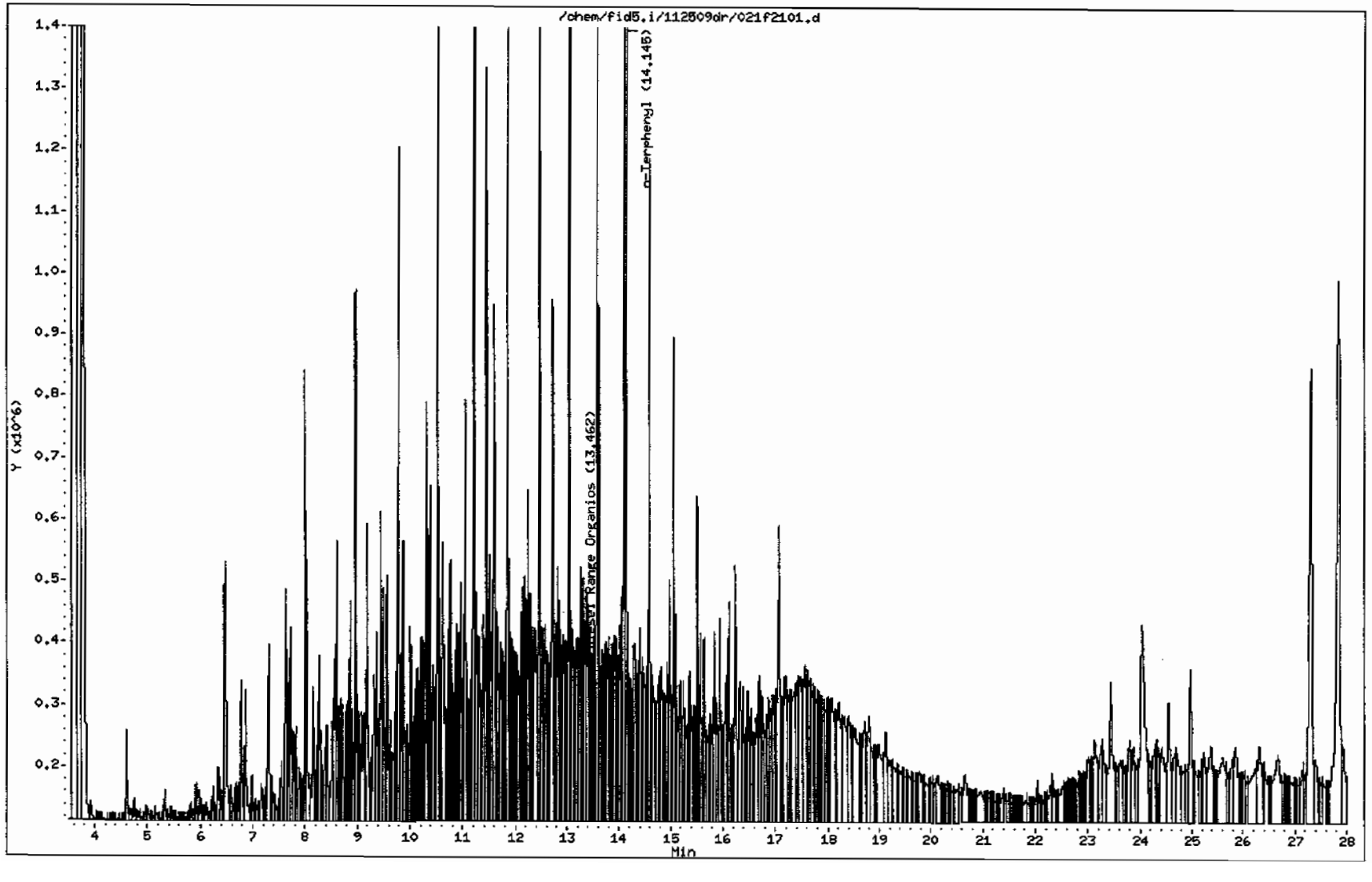

Data File: /chem/fid5.1/112509dr/021f2101.d
Injection Date: 26-NOV-2009 08:27
Instrument: fid5.1
Client Sample ID: RE03-09-13621MSD

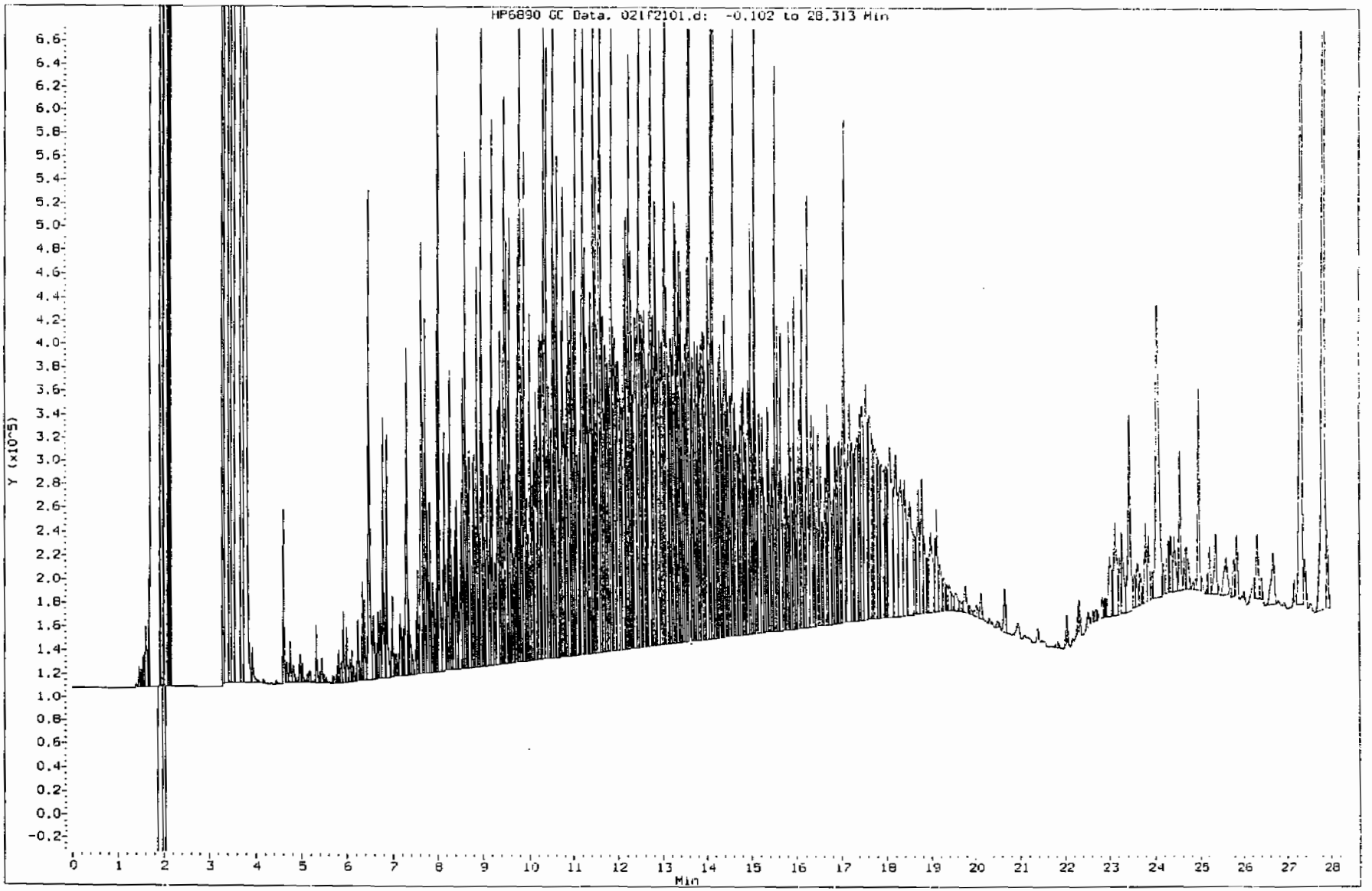

Data File: /chem/fid5.i/112509dr/021f2101.d
Injection Date: 25-NOV-2009 08:27
Instrument: fid5.i
Client Sample ID: RE03-09-13621MSD

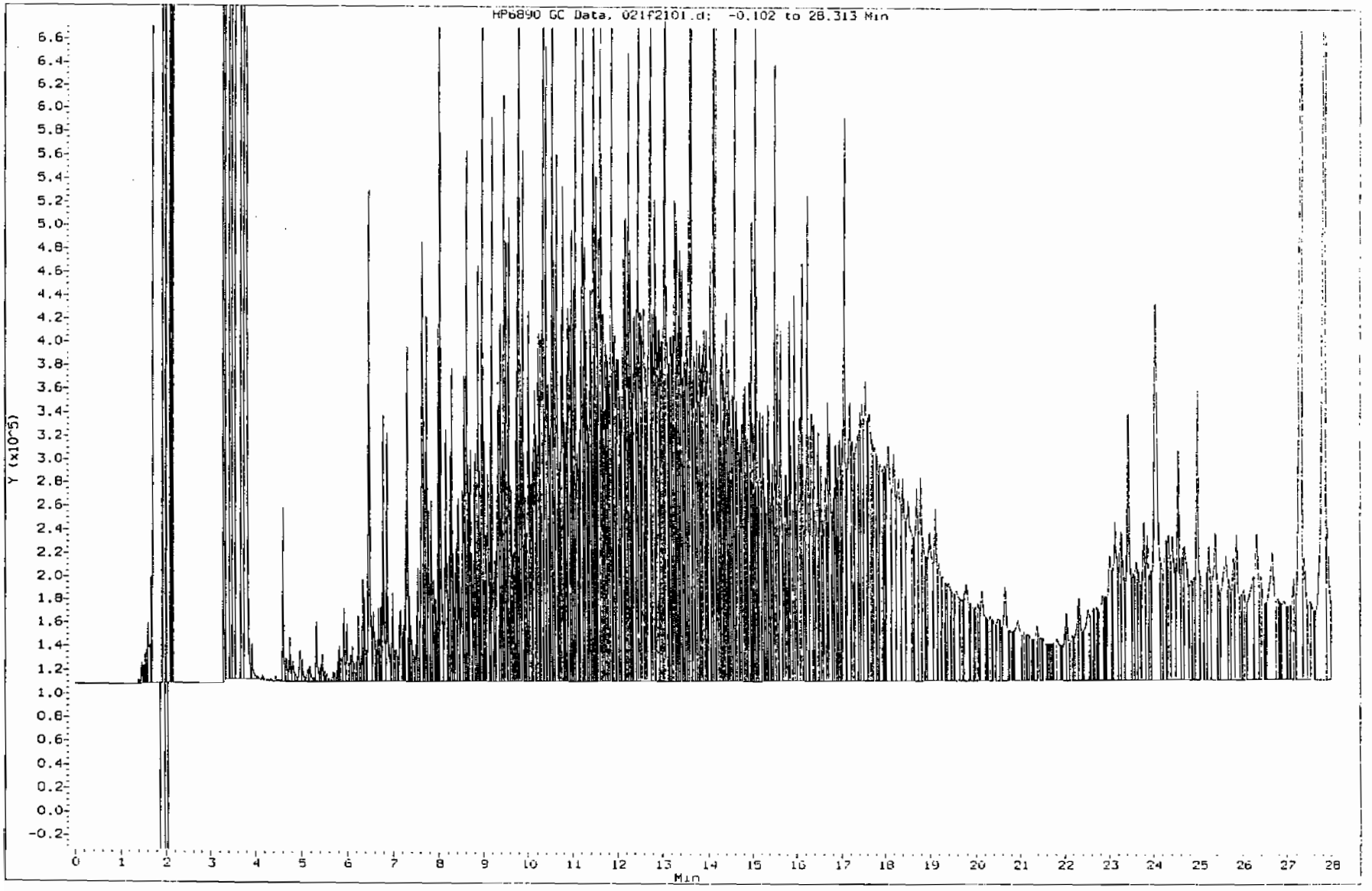

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORM	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MSSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359		1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359		1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359		1.0	LANL	USE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359		1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359		1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359		1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359		1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359		1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08		SDGa26875		1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46		SDGa26875		1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359		1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359		1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359		1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359		1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359		1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359		1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875		1.0	CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359		1.0	LANL USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359		1.0	LANL USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359		1.0	LANL USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359		1.0	LANL USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406		1.0	LANL USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406	1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406	1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875	1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875	1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875	1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385	1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385	1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385	1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385	1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385	1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385	1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385	1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385	1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385	1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42		SDGa26875		1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20		SDGa26875		1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58		SDGa26875		1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35		SDGa26875		1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 11/27/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:112509DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	25-NOV-2009 19:45		SDGa14715	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	25-NOV-2009 20:22		SDGa14715	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	25-NOV-2009 21:00		SDGa14715	1.0		PASSES
004f0401.d	WFI090723-06 B2	KXR2	25-NOV-2009 21:39		SDGa14715	1.0		CLEAN
005f0501.d	1201979310	KXR2	25-NOV-2009 22:16	925774	10-519	1.0	MB	USE
006f0601.d	1201979313	KXR2	25-NOV-2009 22:54	925774	10-519	1.0	LCS	USE
007f0701.d	241183002	KXR2	25-NOV-2009 23:33	925774	10-519	1.0	LANL	USE
008f0801.d	241183003	KXR2	26-NOV-2009 00:11	925774	10-519	1.0	LANL	USE
009f0901.d	241183004	KXR2	26-NOV-2009 00:49	925774	10-519	1.0	LANL	USE
010f1001.d	241318001	KXR2	26-NOV-2009 01:27	925774	10-543	1.0	LANL	USE
011f1101.d	241318002	KXR2	26-NOV-2009 02:06	925774	10-543	1.0	LANL	USE
012f1201.d	241318003	KXR2	26-NOV-2009 02:44	925774	10-543	1.0	LANL	USE
013f1301.d	241318004	KXR2	26-NOV-2009 03:22	925774	10-543	1.0	LANL	USE
014f1401.d	241318005	KXR2	26-NOV-2009 04:00	925774	10-543	10.0	LANL	USE
015f1501.d	241318006	KXR2	26-NOV-2009 04:38	925774	10-543	1.0	LANL	USE

Instrument Batch: /chem/fid5.i/112509dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	UFI091118-01 D2	KXR2	26-NOV-2009 05:16		SDGa14715	1.0		PASSES

017f1701.d	WFI090723-06 B3	KXR2	26-NOV-2009 05:55			SDGa14715		1.0	CLEAN
018f1801.d	241318007	KXR2	26-NOV-2009 06:33	925774	10-543			1.0	LANL	USE
019f1901.d	241318008	KXR2	26-NOV-2009 07:11	925774	10-543			1.0	LANL	USE
020f2001.d	1201979311	KXR2	26-NOV-2009 07:49	925774	10-543			1.0	MS	USE
021f2101.d	1201979312	KXR2	26-NOV-2009 08:27	925774	10-543			1.0	MSD	USE
022f2201.d	241318009	KXR2	26-NOV-2009 09:05	925774	10-543			1.0	LANL	USE
023f2301.d	241318010	KXR2	26-NOV-2009 09:44	925774	10-543			1.0	LANL	USE
024f2401.d	241318013	KXR2	26-NOV-2009 10:22	925774	10-543			1.0	LANL	USE
025f2501.d	241318014	KXR2	26-NOV-2009 11:01	925774	10-543			1.0	LANL	USE
026f2601.d	241336001	KXR2	26-NOV-2009 11:39	925774	10-546			1.0	LANL	USE
027f2701.d	241336002	KXR2	26-NOV-2009 12:17	925774	10-546			1.0	LANL	USE
028f2801.d	UFI091118-01 D3	KXR2	26-NOV-2009 12:55			SDGa14715		1.0	PASSES

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 925769 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201979310 MB	24-NOV-2009 21:12:13	30	1	0.03333
1201979313 LCS	24-NOV-2009 21:12:13	30	1	0.03333
241183002	24-NOV-2009 21:12:13	30.14	1	0.03318
241183003	24-NOV-2009 21:12:13	30.13	1	0.03319
241183004	24-NOV-2009 21:12:13	30.15	1	0.03317
241318001	24-NOV-2009 21:12:13	30.11	1	0.03321
241318002	24-NOV-2009 21:12:13	30.08	1	0.03324
241318003	24-NOV-2009 21:12:13	30.14	1	0.03318
241318004	24-NOV-2009 21:12:13	30.03	1	0.0333
241318005	24-NOV-2009 21:12:13	30.12	1	0.0332
241318006	24-NOV-2009 21:12:13	30.12	1	0.0332
241318007	24-NOV-2009 21:12:13	30.08	1	0.03324
241318008	24-NOV-2009 21:12:13	30.17	1	0.03315
1201979311 MS (241318008)	24-NOV-2009 21:12:13	30.15	1	0.03317
1201979312 MSD (241318008)	24-NOV-2009 21:12:13	30.07	1	0.03326
241318009	24-NOV-2009 21:12:13	30.12	1	0.0332
241318010	24-NOV-2009 21:12:13	30.06	1	0.03327
241318013	24-NOV-2009 21:12:13	30.03	1	0.0333
241318014	24-NOV-2009 21:12:13	30.17	1	0.03315
241336001	24-NOV-2009 21:12:13	30.1	1	0.03322
241336002	24-NOV-2009 21:12:13	30.17	1	0.03315

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201979313	TPH DRO LCS	UE091030-08	1	mL
MS	1201979311	TPH DRO LCS	UE091030-08	1	mL
MSD	1201979312	TPH DRO LCS	UE091030-08	1	mL
SURR	All	20 ppm surrogate	WE091121-04	1	mL
REGNT	All	Methylene Chloride	1233148-D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-543

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	926712
Prep Batch Number:	926709

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241318001	RE03-09-13618
241318002	RE03-09-13622
241318003	RE03-09-13620
241318004	RE03-09-13619
241318005	RE03-09-13624
241318006	RE03-09-13623
241318007	RE03-09-13626
241318008	RE03-09-13621
241318009	RE03-09-13627
241318010	RE03-09-13625
241318013	RE03-10-6084
241318014	RE03-10-6085
1201981383	Method Blank (MB)
1201981386	Laboratory Control Sample (LCS)
1201981384	241417001(RE03-09-13812) Matrix Spike (MS)
1201981385	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria for the Aroclors.

Surrogate recovery did not meet the acceptance criteria in Aroclor-1254 standard analyzed for this SDG; however this had no adverse effects on the data as all other standards associated with this SDG and all samples in this SDG met surrogate recovery acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-575) was selected for the matrix spike and matrix spike duplicate analysis for this batch.

Matrix Spike (MS) Recovery Statement
The MS recoveries were not within the established acceptance limits due to dilution and sample matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the established acceptance limits due to dilution and sample matrix interference.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD did not meet the acceptance limits due to dilution and sample matrix interference.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 241318001 (RE03-09-13618) (1:10), 241318002 (RE03-09-13622) (1:5), 241318003 (RE03-09-13620) (1:5), 241318004 (RE03-09-13619) (1:5), 241318005 (RE03-09-13624) (1:5), 241318007 (RE03-09-13626) (1:5), 241318010 (RE03-09-13625) (1:5) and 241318013 (RE03-10-6084) (1:5) were diluted prior to analysis due to the oily matrix of the extracts.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve

of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimi Cao Date: 12/14/09

Roadmap for LANL 10-543 PCB

This roadmap was analyzed by jen01212 on 12-02-2009, 14:16.
This roadmap was reviewed by jcb on 12-03-2009, 09:26.
This roadmap was packaged by sha01289 on 12-14-2009, 09:15.
This roadmap was validated by jim01140 on 12-14-2009, 12:35.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/068f6801.d	241318001	sample	30-NOV-2009	21:11	10-543.sub	RE03-09-13618	10.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/069f6901.d	241318002	sample	30-NOV-2009	21:22	10-543.sub	RE03-09-13622	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/070f7001.d	241318003	sample	30-NOV-2009	21:33	10-543.sub	RE03-09-13620	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/071f7101.d	241318004	sample	30-NOV-2009	21:44	10-543.sub	RE03-09-13619	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/074f7401.d	241318005	sample	30-NOV-2009	22:18	10-543.sub	RE03-09-13624	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/075f7501.d	241318006	sample	30-NOV-2009	22:29	10-543.sub	RE03-09-13623	1.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/076f7601.d	241318007	sample	30-NOV-2009	22:40	10-543.sub	RE03-09-13626	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/077f7701.d	241318008	sample	30-NOV-2009	22:51	10-543.sub	RE03-09-13621	1.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/078f7801.d	241318009	sample	30-NOV-2009	23:02	10-543.sub	RE03-09-13627	1.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/079f7901.d	241318010	sample	30-NOV-2009	23:13	10-543.sub	RE03-09-13625	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/080f8001.d	241318013	sample	30-NOV-2009	23:24	10-543.sub	RE03-10-6084	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/081f8101.d	241318014	sample	30-NOV-2009	23:36	10-543.sub	RE03-10-6085	1.00000	926712	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/068b6801.d	241318001	sample	30-NOV-2009	21:11	10-543.sub	RE03-09-13618	10.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/069b6901.d	241318002	sample	30-NOV-2009	21:22	10-543.sub	RE03-09-13622	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/070b7001.d	241318003	sample	30-NOV-2009	21:33	10-543.sub	RE03-09-13620	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/071b7101.d	241318004	sample	30-NOV-2009	21:44	10-543.sub	RE03-09-13619	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/074b7401.d	241318005	sample	30-NOV-2009	22:18	10-543.sub	RE03-09-13624	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/075b7501.d	241318006	sample	30-NOV-2009	22:29	10-543.sub	RE03-09-13623	1.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/076b7601.d	241318007	sample	30-NOV-2009	22:40	10-543.sub	RE03-09-13626	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/077b7701.d	241318008	sample	30-NOV-2009	22:51	10-543.sub	RE03-09-13621	1.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/078b7801.d	241318009	sample	30-NOV-2009	23:02	10-543.sub	RE03-09-13627	1.00000	926712	UPLOAD BOTH, USE HIGHER

☐	N	/chem/ecd2a.i/113009a.b/079b7901.d	241318010	sample	30-NOV-2009	23:13	10-543.sub	RE03-09-13625	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/080b8001.d	241318013	sample	30-NOV-2009	23:24	10-543.sub	RE03-10-6084	5.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/081b8101.d	241318014	sample	30-NOV-2009	23:36	10-543.sub	RE03-10-6085	1.00000	926712	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/062f6201-2.d	1201981383	mb	30-NOV-2009	20:05	10-543.sub	PBLK01	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/063f6301-2.d	1201981386	lcs	30-NOV-2009	20:16	10-543.sub	PBLK01LCS	1.00000	926712	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/062b6201-2.d	1201981383	mb	30-NOV-2009	20:05	10-543.sub	PBLK01	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/063b6301-2.d	1201981386	lcs	30-NOV-2009	20:16	10-543.sub	PBLK01LCS	1.00000	926712	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13618**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**10**
Run Date:	**11/30/2009 21:11**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**068f6801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	068b6801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	38.8	ug/kg	12.9	38.8	1
11104-28-2	Aroclor-1221	U	38.8	ug/kg	12.9	38.8	1
11141-16-5	Aroclor-1232	U	38.8	ug/kg	12.9	38.8	1
53469-21-9	Aroclor-1242	U	38.8	ug/kg	12.9	38.8	1
12672-29-6	Aroclor-1248	U	38.8	ug/kg	12.9	38.8	1
11097-69-1	Aroclor-1254	U	38.8	ug/kg	12.9	38.8	1
11096-82-5	Aroclor-1260	U	38.8	ug/kg	12.9	38.8	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318004**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13619**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**11/30/2009 21:44**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.16 g**	**Final Volume:**	**1 mL**
Data File:	**071f7101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	071b7101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.4	ug/kg	6.46	19.4	1
11104-28-2	Aroclor-1221	U	19.4	ug/kg	6.46	19.4	1
11141-16-5	Aroclor-1232	U	19.4	ug/kg	6.46	19.4	1
53469-21-9	Aroclor-1242	U	19.4	ug/kg	6.46	19.4	1
12672-29-6	Aroclor-1248	U	19.4	ug/kg	6.46	19.4	1
11097-69-1	Aroclor-1254	U	19.4	ug/kg	6.46	19.4	1
11096-82-5	Aroclor-1260	U	19.4	ug/kg	6.46	19.4	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318003	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13620	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 21:33	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.7	ug/kg	5.89	17.7	1
11104-28-2	Aroclor-1221	U	17.7	ug/kg	5.89	17.7	1
11141-16-5	Aroclor-1232	U	17.7	ug/kg	5.89	17.7	1
53469-21-9	Aroclor-1242	U	17.7	ug/kg	5.89	17.7	1
12672-29-6	Aroclor-1248	U	17.7	ug/kg	5.89	17.7	1
11097-69-1	Aroclor-1254	JP	14.9	ug/kg	5.89	17.7	1
11096-82-5	Aroclor-1260		18.4	ug/kg	5.89	17.7	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.1	**Dilution:**	1
Run Date:	11/30/2009 22:51	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.49	ug/kg	1.16	3.49	1
11104-28-2	Aroclor-1221	U	3.49	ug/kg	1.16	3.49	1
11141-16-5	Aroclor-1232	U	3.49	ug/kg	1.16	3.49	1
53469-21-9	Aroclor-1242	U	3.49	ug/kg	1.16	3.49	1
12672-29-6	Aroclor-1248	U	3.49	ug/kg	1.16	3.49	1
11097-69-1	Aroclor-1254	JP	2.60	ug/kg	1.16	3.49	1
11096-82-5	Aroclor-1260	J	3.30	ug/kg	1.16	3.49	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13622	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 21:22	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	069f6901.d	**Column:**	1 CLP1	**Level:**	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.7	ug/kg	5.89	17.7	1
11104-28-2	Aroclor-1221	U	17.7	ug/kg	5.89	17.7	1
11141-16-5	Aroclor-1232	U	17.7	ug/kg	5.89	17.7	1
53469-21-9	Aroclor-1242	U	17.7	ug/kg	5.89	17.7	1
12672-29-6	Aroclor-1248	U	17.7	ug/kg	5.89	17.7	1
11097-69-1	Aroclor-1254		21.0	ug/kg	5.89	17.7	1
11096-82-5	Aroclor-1260	P	17.7	ug/kg	5.89	17.7	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13623	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 22:29	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	075f7501.d	**Column:**	1 CLP1	**Level:**	LOW
	075b7501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.46	ug/kg	1.15	3.46	1
11104-28-2	Aroclor-1221	U	3.46	ug/kg	1.15	3.46	1
11141-16-5	Aroclor-1232	U	3.46	ug/kg	1.15	3.46	1
53469-21-9	Aroclor-1242	U	3.46	ug/kg	1.15	3.46	1
12672-29-6	Aroclor-1248	U	3.46	ug/kg	1.15	3.46	1
11097-69-1	Aroclor-1254		69.3	ug/kg	1.15	3.46	1
11096-82-5	Aroclor-1260	P	51.4	ug/kg	1.15	3.46	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318005	**Date Received:**	11/18/2009 08:50	**%Moisture:**	22.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13624	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 22:18	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	074f7401.d	**Column:**	1 CLP1	**Level:**	LOW
	074b7401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	21.4	ug/kg	7.14	21.4	1
11104-28-2	Aroclor-1221	U	21.4	ug/kg	7.14	21.4	1
11141-16-5	Aroclor-1232	U	21.4	ug/kg	7.14	21.4	1
53469-21-9	Aroclor-1242	U	21.4	ug/kg	7.14	21.4	1
12672-29-6	Aroclor-1248	U	21.4	ug/kg	7.14	21.4	1
11097-69-1	Aroclor-1254	J	19.5	ug/kg	7.14	21.4	1
11096-82-5	Aroclor-1260	J	21.4	ug/kg	7.14	21.4	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318010**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**16.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13625**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**11/30/2009 23:13**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**079f7901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	079b7901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	20.0	ug/kg	6.65	20.0	1
11104-28-2	Aroclor-1221	U	20.0	ug/kg	6.65	20.0	1
11141-16-5	Aroclor-1232	U	20.0	ug/kg	6.65	20.0	1
53469-21-9	Aroclor-1242	U	20.0	ug/kg	6.65	20.0	1
12672-29-6	Aroclor-1248	U	20.0	ug/kg	6.65	20.0	1
11097-69-1	Aroclor-1254	U	20.0	ug/kg	6.65	20.0	1
11096-82-5	Aroclor-1260	U	20.0	ug/kg	6.65	20.0	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 22:40	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.6	ug/kg	6.53	19.6	1
11104-28-2	Aroclor-1221	U	19.6	ug/kg	6.53	19.6	1
11141-16-5	Aroclor-1232	U	19.6	ug/kg	6.53	19.6	1
53469-21-9	Aroclor-1242	U	19.6	ug/kg	6.53	19.6	1
12672-29-6	Aroclor-1248	U	19.6	ug/kg	6.53	19.6	1
11097-69-1	Aroclor-1254	U	19.6	ug/kg	6.53	19.6	1
11096-82-5	Aroclor-1260	U	19.6	ug/kg	6.53	19.6	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318009	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13627	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 23:02	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	078f7801.d	**Column:**	1 CLP1	**Level:**	LOW
	078b7801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.57	ug/kg	1.19	3.57	1
11104–28–2	Aroclor–1221	U	3.57	ug/kg	1.19	3.57	1
11141–16–5	Aroclor–1232	U	3.57	ug/kg	1.19	3.57	1
53469–21–9	Aroclor–1242	U	3.57	ug/kg	1.19	3.57	1
12672–29–6	Aroclor–1248	U	3.57	ug/kg	1.19	3.57	1
11097–69–1	Aroclor–1254	U	3.57	ug/kg	1.19	3.57	1
11096–82–5	Aroclor–1260	U	3.57	ug/kg	1.19	3.57	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318013	**Date Received:**	11/18/2009 08:50	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6084	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 23:24	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	19.1	ug/kg	6.36	19.1	1
11104–28–2	Aroclor–1221	U	19.1	ug/kg	6.36	19.1	1
11141–16–5	Aroclor–1232	U	19.1	ug/kg	6.36	19.1	1
53469–21–9	Aroclor–1242	U	19.1	ug/kg	6.36	19.1	1
12672–29–6	Aroclor–1248	U	19.1	ug/kg	6.36	19.1	1
11097–69–1	Aroclor–1254	U	19.1	ug/kg	6.36	19.1	1
11096–82–5	Aroclor–1260	U	19.1	ug/kg	6.36	19.1	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6085	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 23:36	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.49	ug/kg	1.16	3.49	1
11104–28–2	Aroclor–1221	U	3.49	ug/kg	1.16	3.49	1
11141–16–5	Aroclor–1232	U	3.49	ug/kg	1.16	3.49	1
53469–21–9	Aroclor–1242	U	3.49	ug/kg	1.16	3.49	1
12672–29–6	Aroclor–1248	U	3.49	ug/kg	1.16	3.49	1
11097–69–1	Aroclor–1254	JP	2.90	ug/kg	1.16	3.49	1
11096–82–5	Aroclor–1260		3.60	ug/kg	1.16	3.49	2

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-543

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201981383	MB for batch 926709	94		99		88		99	
1201981386	LCS for batch 926709	88		92		83		93	
241318001	RE03-09-13618	81	D	79	D	80	D	83	D
241318002	RE03-09-13622	89	D	90	D	83	D	87	D
241318003	RE03-09-13620	93	D	94	D	85	D	90	D
241318004	RE03-09-13619	90	D	92	D	87	D	88	D
241318005	RE03-09-13624	84	D	85	D	69	D	83	D
241318006	RE03-09-13623	82		86		73		79	
241318007	RE03-09-13626	68	D	69	D	62	D	62	D
241318008	RE03-09-13621	83		87		79		85	
241318009	RE03-09-13627	84		88		74		84	
241318010	RE03-09-13625	97	D	100	D	90	D	92	D
241318013	RE03-10-6084	46	D	46	D	45	D	44	D
241318014	RE03-10-6085	78		82		79		84	

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-543
Client ID: LCS for batch 926709
Lab Sample ID: 1201981386
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 20:16
Dilution: 1
Prep Batch ID: 926709
Batch ID: 926712

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	26.5	80	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	30.8	92	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**	
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**	
Lab Sample ID:	**1201981384**	**%Moisture:**	**7.1**	
Instrument:	**ECD2A.I**	**Analysis Date:**	**12/01/2009 00:42**	**Dilution: 10**
Analyst:	**JAOC**	**Prep Batch ID:**	**926709**	
Inj. Vol:	**1 uL**	**Batch ID:**	**926712**	

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	35.7	0.00	U	35.3	99	23-117
11096-82-5	MS	Aroclor-1260	35.7	76.9		76.4	-1 *	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–575
Client ID: RE03–09–13812MSD
Lab Sample ID: 1201981385
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/01/2009 00:53
Prep Batch ID: 926709
Batch ID: 926712
Dilution: 10

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	35.7	0.00	U	44.3	124 *	23–117	23	0–30
11096–82–5	MSD Aroclor–1260	35.7	76.9		109	90	27–116	35 *	0–30

Method Blank Summary

SDG Number:	10–543	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926709	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	062b6201–1.d 062f6201–1.d
Lab Sample ID:	1201981383				
Column:	CLP2 CLP1	Prep Date:	11/27/2009 22:34	Analyzed:	11/30/09 20:05
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926709	1201981386	063f6301–1.d 063b6301–1.d	11/30/09	2016
02	RE03–09–13618	241318001	068f6801.d 068b6801.d	11/30/09	2111
03	RE03–09–13622	241318002	069f6901.d 069b6901.d	11/30/09	2122
04	RE03–09–13620	241318003	070f7001.d 070b7001.d	11/30/09	2133
05	RE03–09–13619	241318004	071f7101.d 071b7101.d	11/30/09	2144
06	RE03–09–13624	241318005	074f7401.d 074b7401.d	11/30/09	2218
07	RE03–09–13623	241318006	075f7501.d 075b7501.d	11/30/09	2229
08	RE03–09–13626	241318007	076f7601.d 076b7601.d	11/30/09	2240
09	RE03–09–13621	241318008	077f7701.d 077b7701.d	11/30/09	2251
10	RE03–09–13627	241318009	078f7801.d 078b7801.d	11/30/09	2302
11	RE03–09–13625	241318010	079f7901.d 079b7901.d	11/30/09	2313
12	RE03–10–6084	241318013	080f8001.d 080b8001.d	11/30/09	2324
13	RE03–10–6085	241318014	081f8101.d 081b8101.d	11/30/09	2336

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**14.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13618**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**10**
Run Date:	**11/30/2009 21:11**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**068f6801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	068b6801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	38.8	ug/kg	12.9	38.8	1
11104-28-2	Aroclor-1221	U	38.8	ug/kg	12.9	38.8	1
11141-16-5	Aroclor-1232	U	38.8	ug/kg	12.9	38.8	1
53469-21-9	Aroclor-1242	U	38.8	ug/kg	12.9	38.8	1
12672-29-6	Aroclor-1248	U	38.8	ug/kg	12.9	38.8	1
11097-69-1	Aroclor-1254	U	38.8	ug/kg	12.9	38.8	1
11096-82-5	Aroclor-1260	U	38.8	ug/kg	12.9	38.8	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/068f6801.d
Lab Smp Id: 241318001 Client Smp ID: RE03-09-13618
Inj Date : 30-NOV-2009 21:11
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318001|10|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13618|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 68
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	14.25500	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	938474	16.2616	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	872727	15.9172	6.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/068f6801.d

Page 1

Date : 30-NOV-2009 21:11

Client ID: RE03-09-13618

Instrument: ecd2a.i

Sample Info: |2413180011|10|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

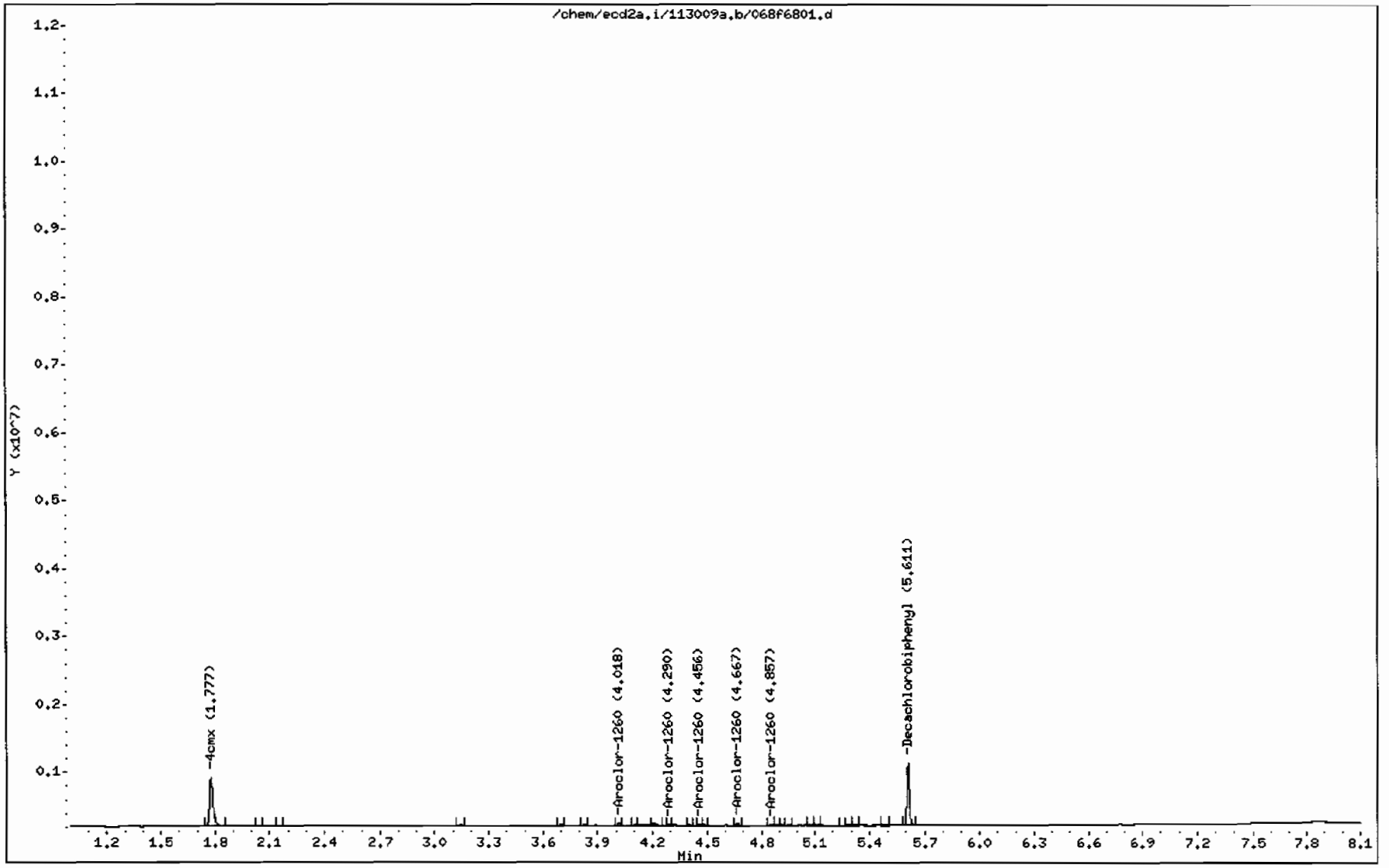

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/068b6801.d
Lab Smp Id: 241318001 Client Smp ID: RE03-09-13618
Inj Date : 30-NOV-2009 21:11
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318001|10|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13618|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 68
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	14.25500	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	1878672	15.8940	6.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	1800582	16.5736	6.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/068b6801.d

Date : 30-NOV-2009 21:11

Client ID: RE03-09-13618

Sample Info: 1241318001|10|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

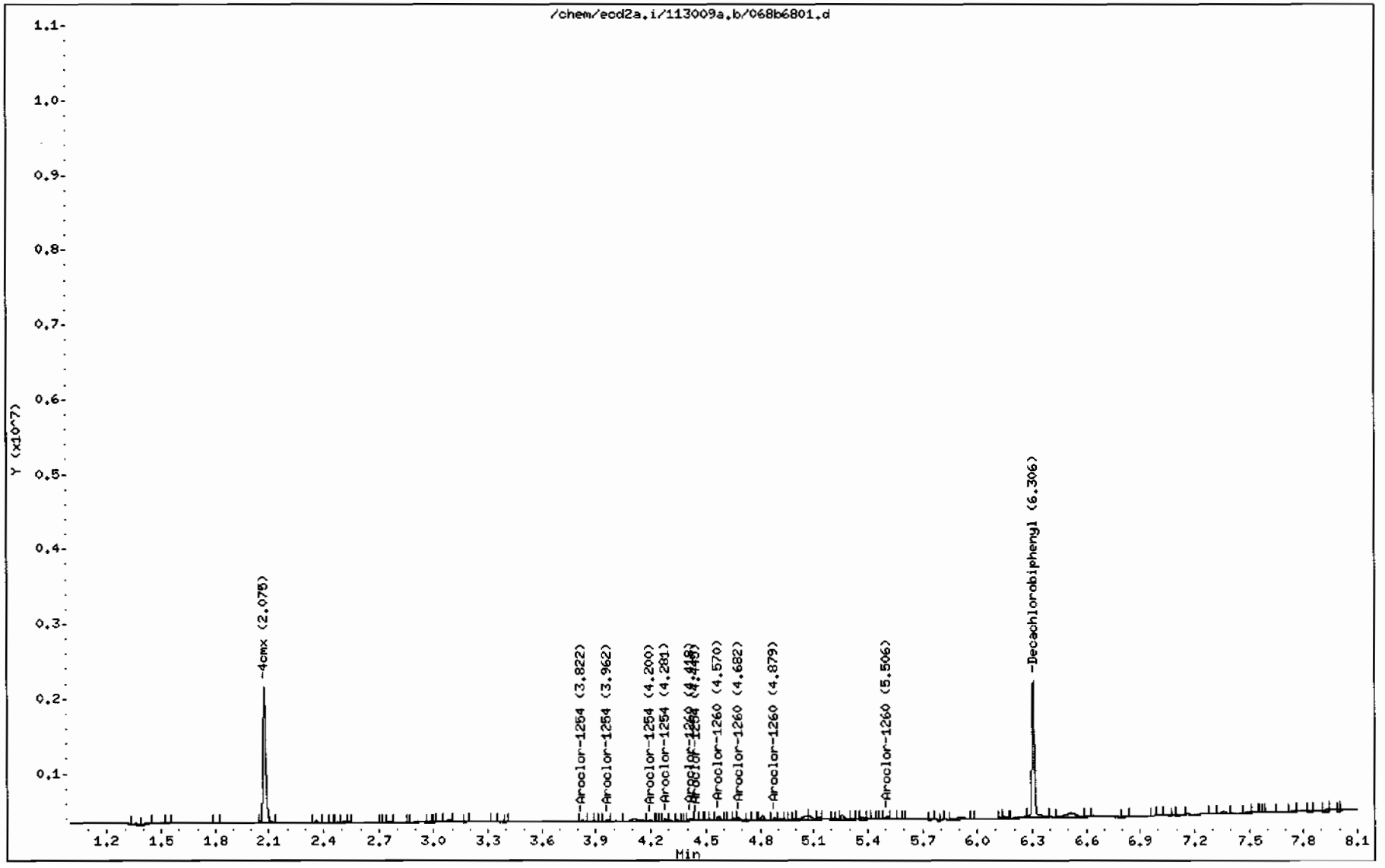

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318004	**Date Received:**	11/18/2009 08:50	**%Moisture:**	14.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13619	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 21:44	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	19.4	ug/kg	6.46	19.4	1
11104–28–2	Aroclor–1221	U	19.4	ug/kg	6.46	19.4	1
11141–16–5	Aroclor–1232	U	19.4	ug/kg	6.46	19.4	1
53469–21–9	Aroclor–1242	U	19.4	ug/kg	6.46	19.4	1
12672–29–6	Aroclor–1248	U	19.4	ug/kg	6.46	19.4	1
11097–69–1	Aroclor–1254	U	19.4	ug/kg	6.46	19.4	1
11096–82–5	Aroclor–1260	U	19.4	ug/kg	6.46	19.4	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/071f7101.d
Lab Smp Id: 241318004 Client Smp ID: RE03-09-13619
Inj Date : 30-NOV-2009 21:44
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318004|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13619|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 71
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	14.56180	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	2083790	36.1072	7.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1911657	34.8657	6.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/071f7101.d
Date : 30-NOV-2009 21:44
Client ID: RE03-09-13619
Sample Info: |241318004|5|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

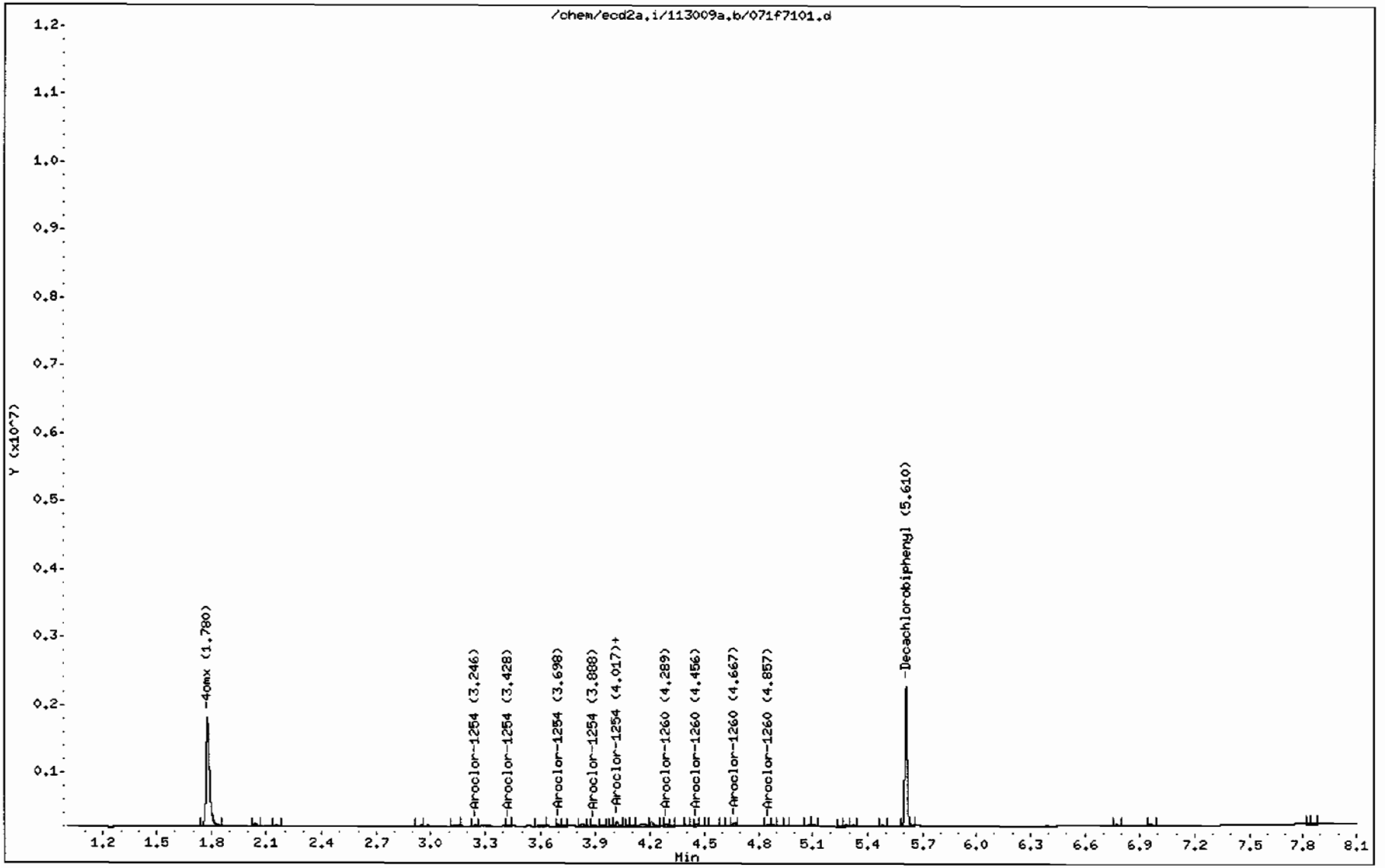

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/071b7101.d
Lab Smp Id: 241318004 Client Smp ID: RE03-09-13619
Inj Date : 30-NOV-2009 21:44
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318004|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13619|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 71
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	14.56180	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.076	0.001	4362647	36.9091	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	3836171	35.3104	6.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/071b7101.d
Date : 30-NOV-2009 21:44
Client ID: RE03-09-13619
Sample Info: |241318004|5|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

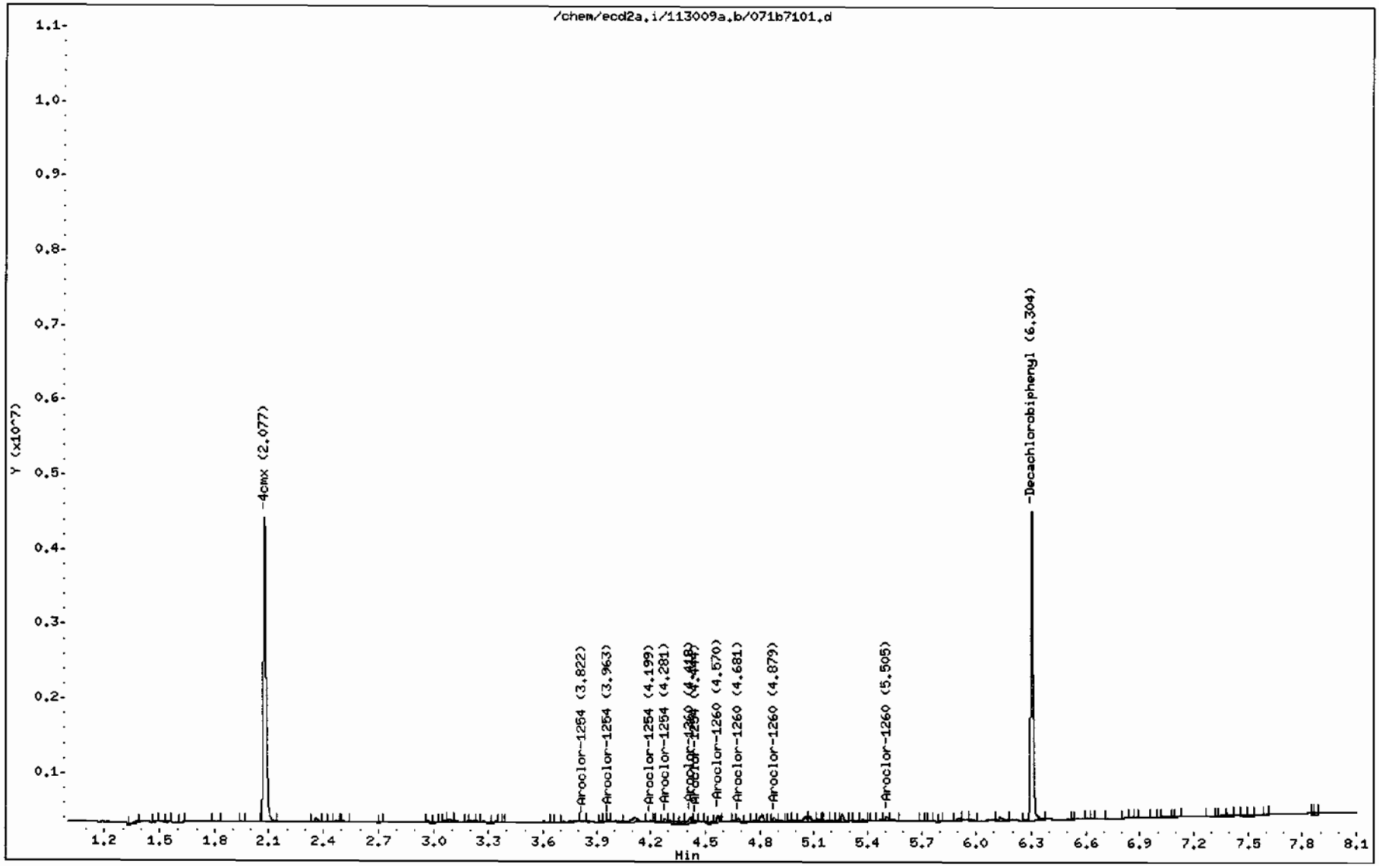

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318003**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13620**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**11/30/2009 21:33**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**070f7001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	070b7001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.7	ug/kg	5.89	17.7	1
11104-28-2	Aroclor-1221	U	17.7	ug/kg	5.89	17.7	1
11141-16-5	Aroclor-1232	U	17.7	ug/kg	5.89	17.7	1
53469-21-9	Aroclor-1242	U	17.7	ug/kg	5.89	17.7	1
12672-29-6	Aroclor-1248	U	17.7	ug/kg	5.89	17.7	1
11097-69-1	Aroclor-1254	JP	14.9	ug/kg	5.89	17.7	1
11096-82-5	Aroclor-1260		18.4	ug/kg	5.89	17.7	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/070f7001.d
Lab Smp Id: 241318003 Client Smp ID: RE03-09-13620
Inj Date : 30-NOV-2009 21:33
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318003|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13620|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 70
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	6.18070	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	2135903	37.0102	6.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	1864888	34.0127	6.0	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.244	3.245	-0.001	101570	48.8306	8.6	80.00- 120.00	100.00(a)
3.427	3.427	0.000	121107	43.6875	7.7	115.68- 155.68	119.24
3.697	3.697	0.000	260847	69.7005	12.3	166.12- 206.12	256.81
3.889	3.889	0.000	118572	42.6105	7.5	117.34- 157.34	116.74
4.016	4.018	-0.002	598209	216.739	38.3	114.59- 154.59	588.96

Average of Peak Concentrations = 14.9

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.018	-0.002	598209	147.096	26.0	80.00- 120.00	100.00(a)
4.289	4.290	-0.001	168059	66.4709	11.8	41.58- 81.58	28.09
4.455	4.455	0.000	212292	82.1819	14.5	43.08- 83.08	35.49
4.667	4.667	0.000	423358	70.1378	12.4	129.99- 169.99	70.77
4.856	4.856	0.000	331266	113.761	20.1	51.44- 91.44	55.38
Average of Peak Concentrations =					17.0		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/070f7001.d

Page 1

Date : 30-NOV-2009 21:33

Client ID: RE03-09-13620

Instrument: ecd2a.i

Sample Info: |241318003151

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

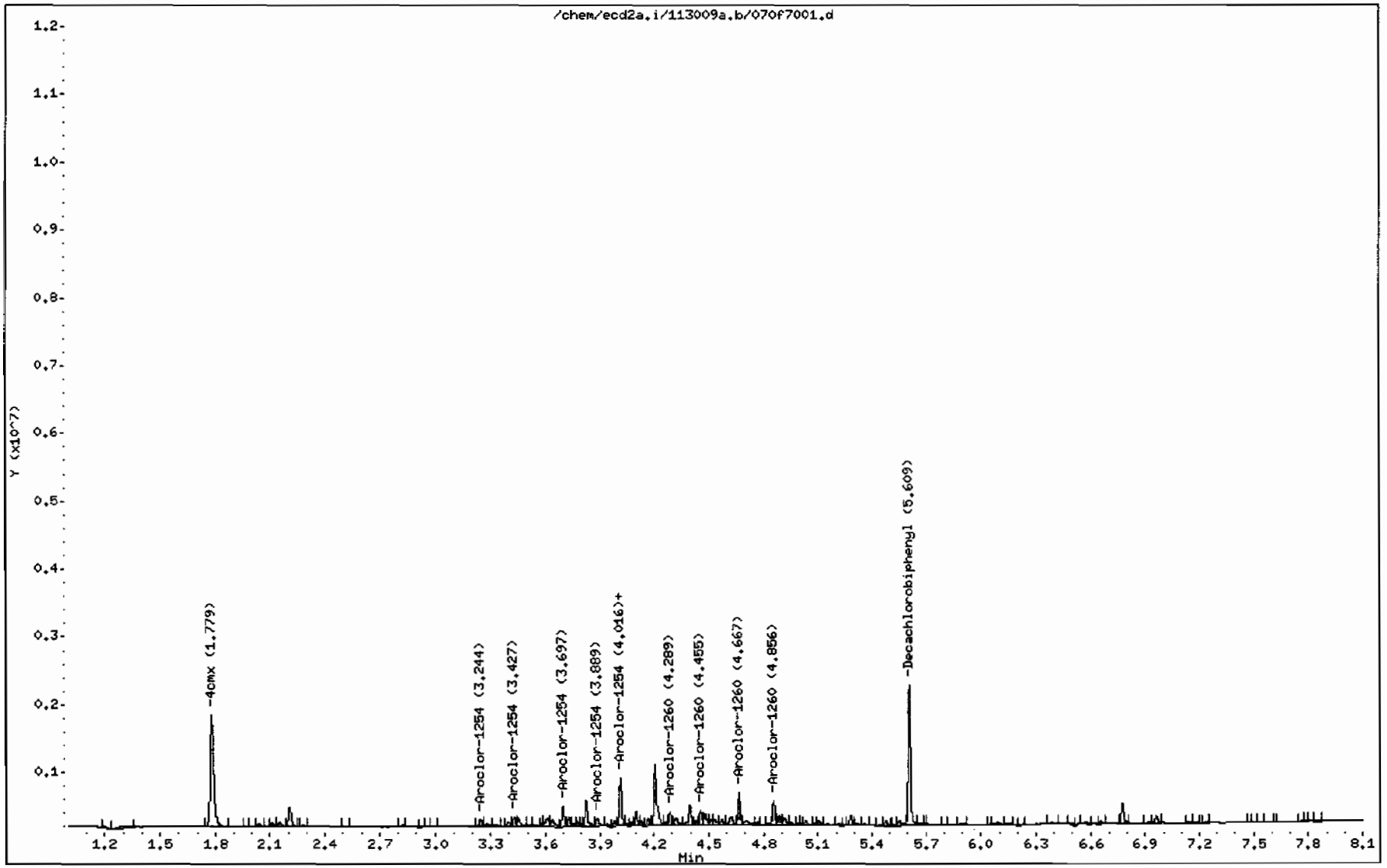

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/070b7001.d
Lab Smp Id: 241318003 Client Smp ID: RE03-09-13620
Inj Date : 30-NOV-2009 21:33
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318003|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13620|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 70
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	6.18070	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	4438702	37.5525	6.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	3921801	36.0985	6.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	207969	41.7167	7.4	80.00- 120.00	100.00(aM)
3.964	3.964	0.000	376728	64.9649	11.5	97.16- 137.16	181.15
4.199	4.201	-0.002	271732	67.5448	11.9	61.89- 101.89	130.66
4.280	4.282	-0.002	489682	63.3370	11.2	138.47- 178.47	235.46
4.444	4.445	-0.001	201025	35.8442	6.3	96.59- 136.59	96.66
Average of Peak Concentrations =					9.7		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	634220	115.048	20.3	80.00- 120.00	100.00(M)
4.569	4.570	-0.001	1038188	145.568	25.7	108.85- 148.85	163.70
4.680	4.682	-0.002	469558	99.2438	17.6	65.38- 105.38	74.04
4.879	4.880	-0.001	419750	72.3626	12.8	82.89- 122.89	66.18
5.505	5.505	0.000	797866	88.2529	15.6	145.10- 185.10	125.80
			Average of Peak Concentrations =		18.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/070b7001.d

Date : 30-NOV-2009 21:33

Client ID: RE03-09-13620

Sample Info: 1241318003151

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

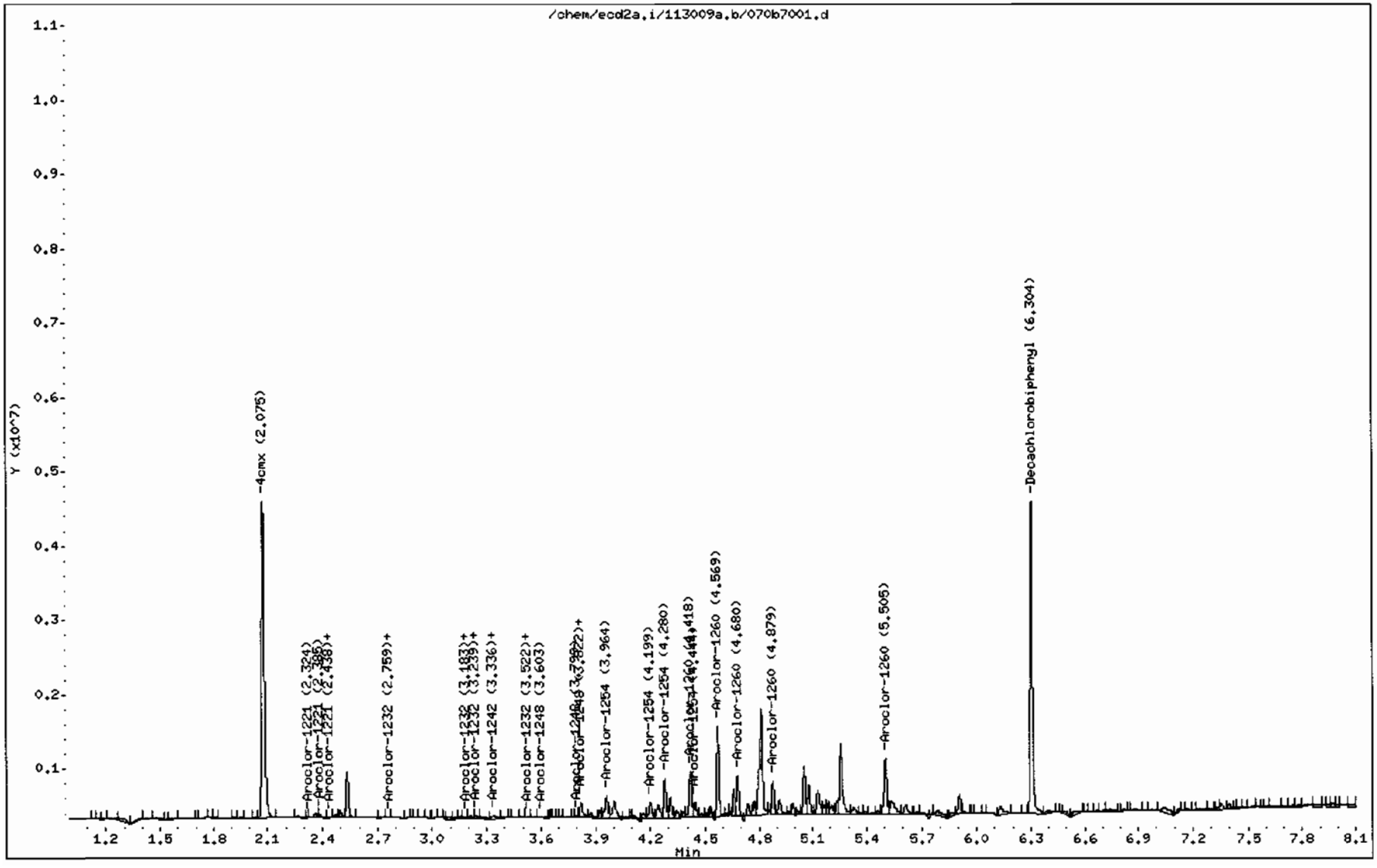

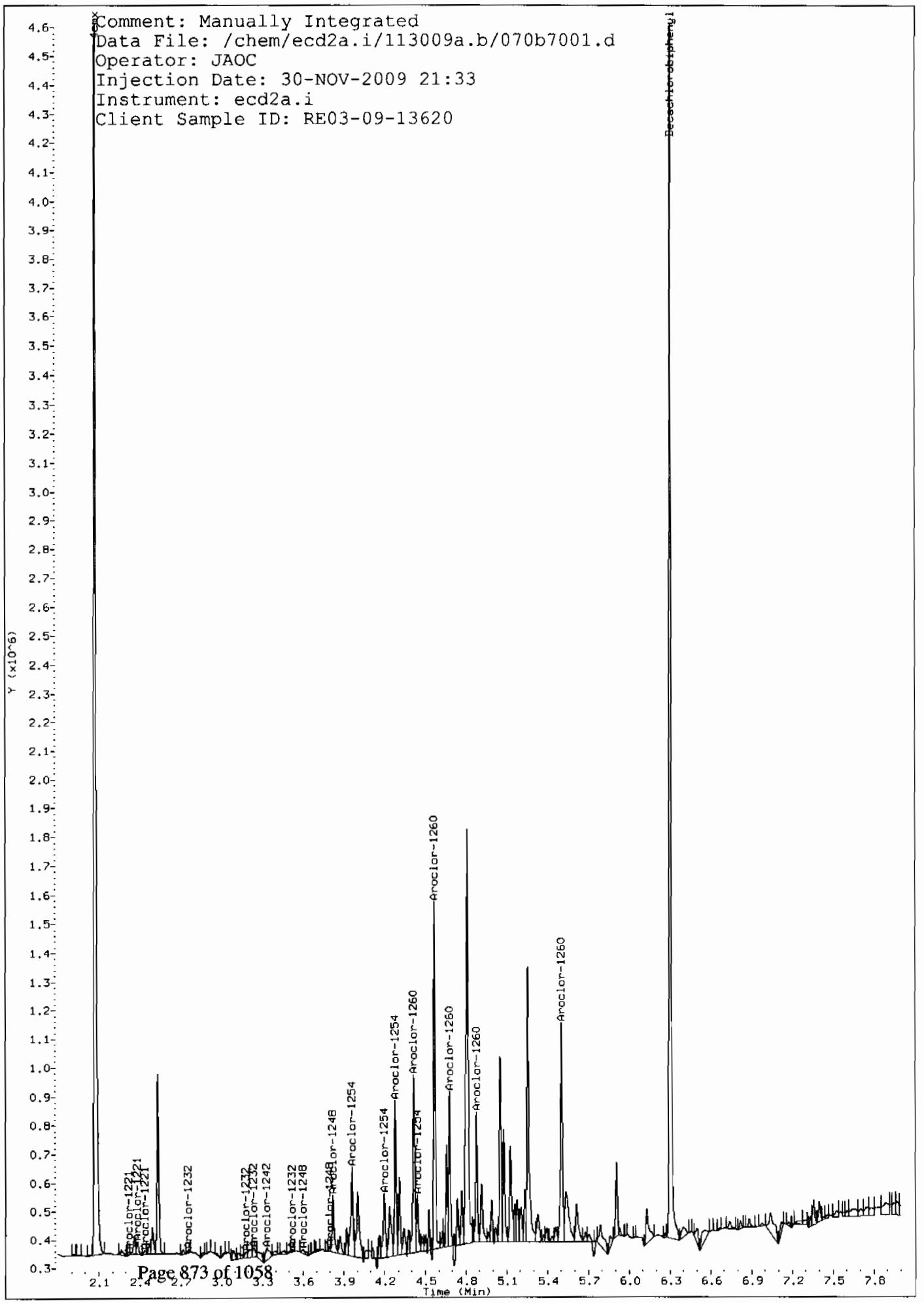
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/070b7001.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:33
Instrument: ecd2a.i
Client Sample ID: RE03-09-13620
Decachlorobiphenyl
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1232
Aroclor-1232
Aroclor-1232
Aroclor-1242
Aroclor-1232
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1254
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Aroclor-1260
Y (x10^6)
Time (Min)

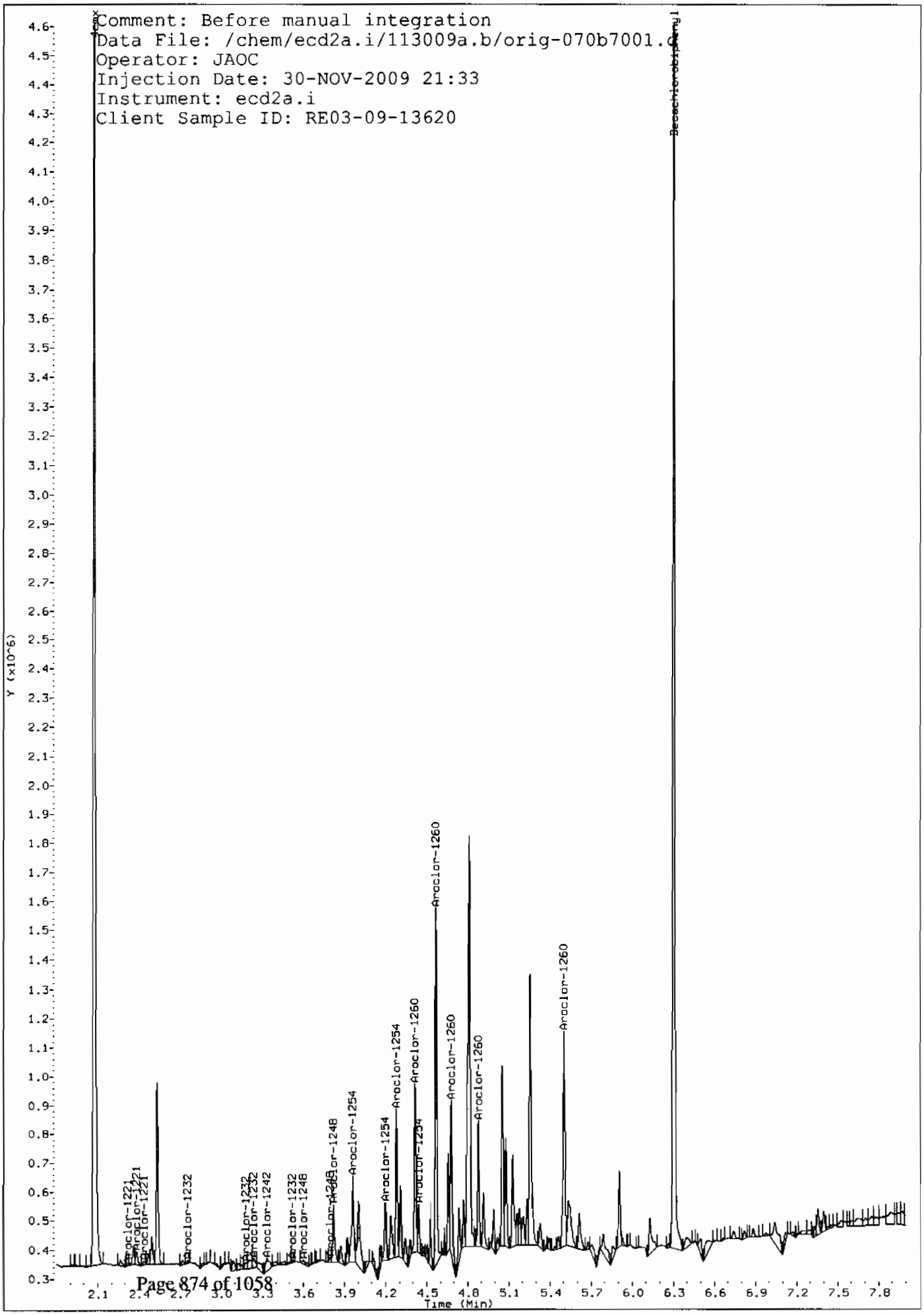
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-070b7001.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:33
Instrument: ecd2a.i
Client Sample ID: RE03-09-13620
Decachlorobiphenyl
Aroclor-1221
Aroclor-1232
Aroclor-1242
Aroclor-1248
Aroclor-1254
Aroclor-1260
Y (x10^6)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318008	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13621	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 22:51	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.49	ug/kg	1.16	3.49	1
11104-28-2	Aroclor-1221	U	3.49	ug/kg	1.16	3.49	1
11141-16-5	Aroclor-1232	U	3.49	ug/kg	1.16	3.49	1
53469-21-9	Aroclor-1242	U	3.49	ug/kg	1.16	3.49	1
12672-29-6	Aroclor-1248	U	3.49	ug/kg	1.16	3.49	1
11097-69-1	Aroclor-1254	JP	2.60	ug/kg	1.16	3.49	1
11096-82-5	Aroclor-1260	J	3.30	ug/kg	1.16	3.49	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/077f7701.d
Lab Smp Id: 241318008 Client Smp ID: RE03-09-13621
Inj Date : 30-NOV-2009 22:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318008|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13621|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	4.64490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.780	-0.002	9574882	165.910	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	8713308	158.917	5.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.244	3.245	-0.001	80132	38.5243	1.3	80.00- 120.00	100.00(a)
3.427	3.427	0.000	103233	37.2396	1.3	115.68- 155.68	128.83
3.696	3.697	-0.001	211610	56.5440	2.0	166.12- 206.12	264.07
3.889	3.889	0.000	91760	32.9752	1.2	117.34- 157.34	114.51
4.017	4.018	-0.001	584875	211.908	7.4	114.59- 154.59	729.88
Average of Peak Concentrations =					2.6		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	584875	143.817	5.0	80.00- 120.00	100.00(a)
4.289	4.290	-0.001	172109	68.0729	2.4	41.58- 81.58	29.43
4.454	4.455	-0.001	156231	60.4798	2.1	43.08- 83.08	26.71
4.666	4.667	-0.001	371420	61.5331	2.1	129.99- 169.99	63.50
4.856	4.856	0.000	250615	86.0646	3.0	51.44- 91.44	42.85
			Average of Peak Concentrations =		2.9		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/077f7701.d

Date : 30-NOV-2009 22:51

Client ID: RE03-09-13621

Sample Info: 1241318008111

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

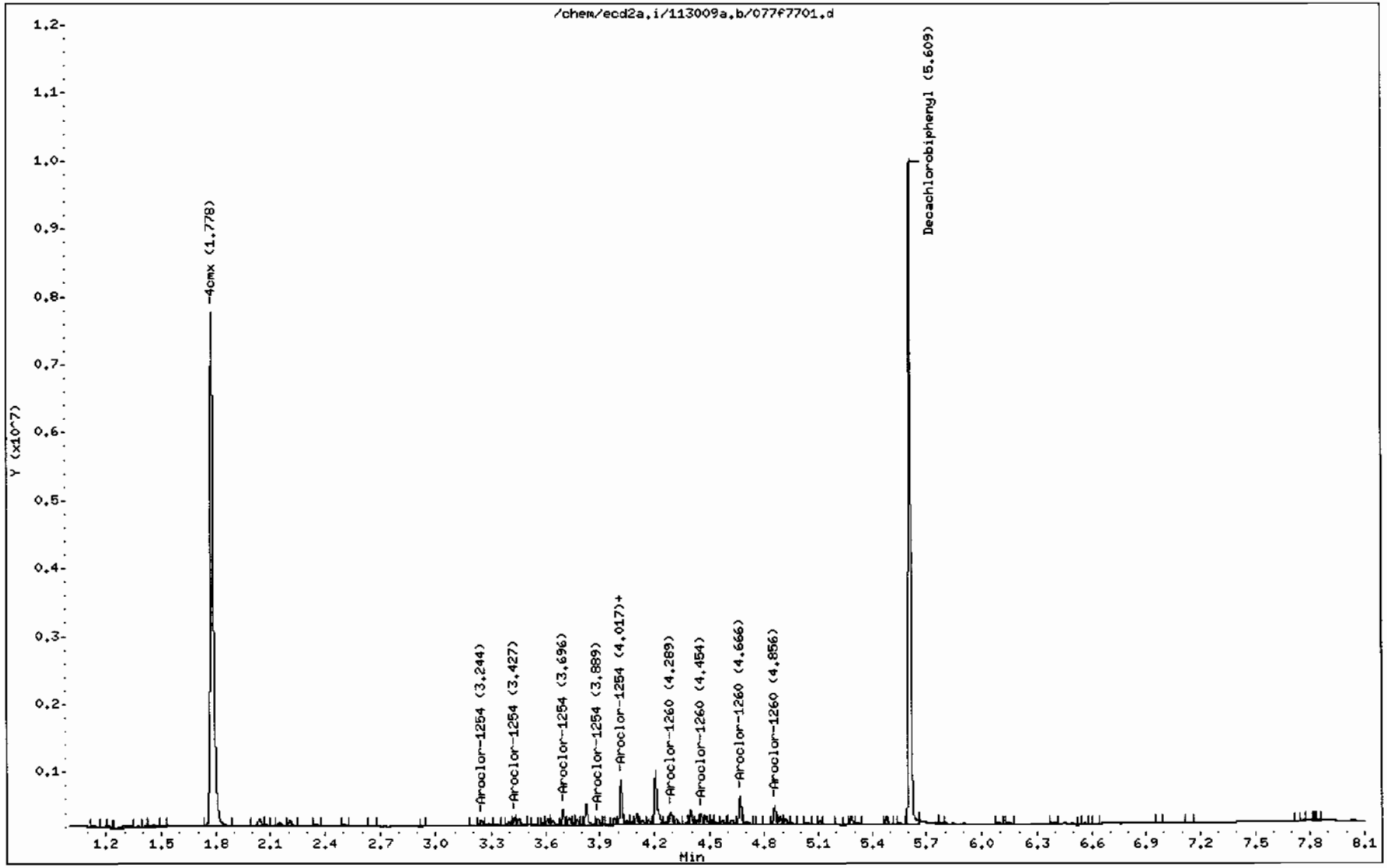

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/077b7701.d
Lab Smp Id: 241318008 Client Smp ID: RE03-09-13621
Inj Date : 30-NOV-2009 22:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318008|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13621|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	4.64490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	20508913	173.511	6.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	18482271	170.122	5.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	144112	28.9074	1.0	80.00- 120.00	100.00(a)
3.964	3.964	0.000	216305	37.3008	1.3	97.16- 137.16	150.10
4.199	4.201	-0.002	169426	42.1146	1.5	61.89- 101.89	117.57
4.280	4.282	-0.002	385339	49.8410	1.7	138.47- 178.47	267.39
4.444	4.445	-0.001	144737	25.8077	0.90	96.59- 136.59	100.43

Average of Peak Concentrations = 1.3

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	570456	103.482	3.6	80.00- 120.00	100.00(a)
4.569	4.570	-0.001	972310	136.331	4.8	108.85- 148.85	170.44
4.680	4.682	-0.002	409837	86.6214	3.0	65.38- 105.38	71.84
4.879	4.880	-0.001	425183	73.2992	2.6	82.89- 122.89	74.53
5.505	5.505	0.000	623515	68.9678	2.4	145.10- 185.10	109.30
Average of Peak Concentrations =					3.3		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/077b7701.d
Date : 30-NOV-2009 22:51
Client ID: RE03-09-13621
Sample Info: |241318008|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

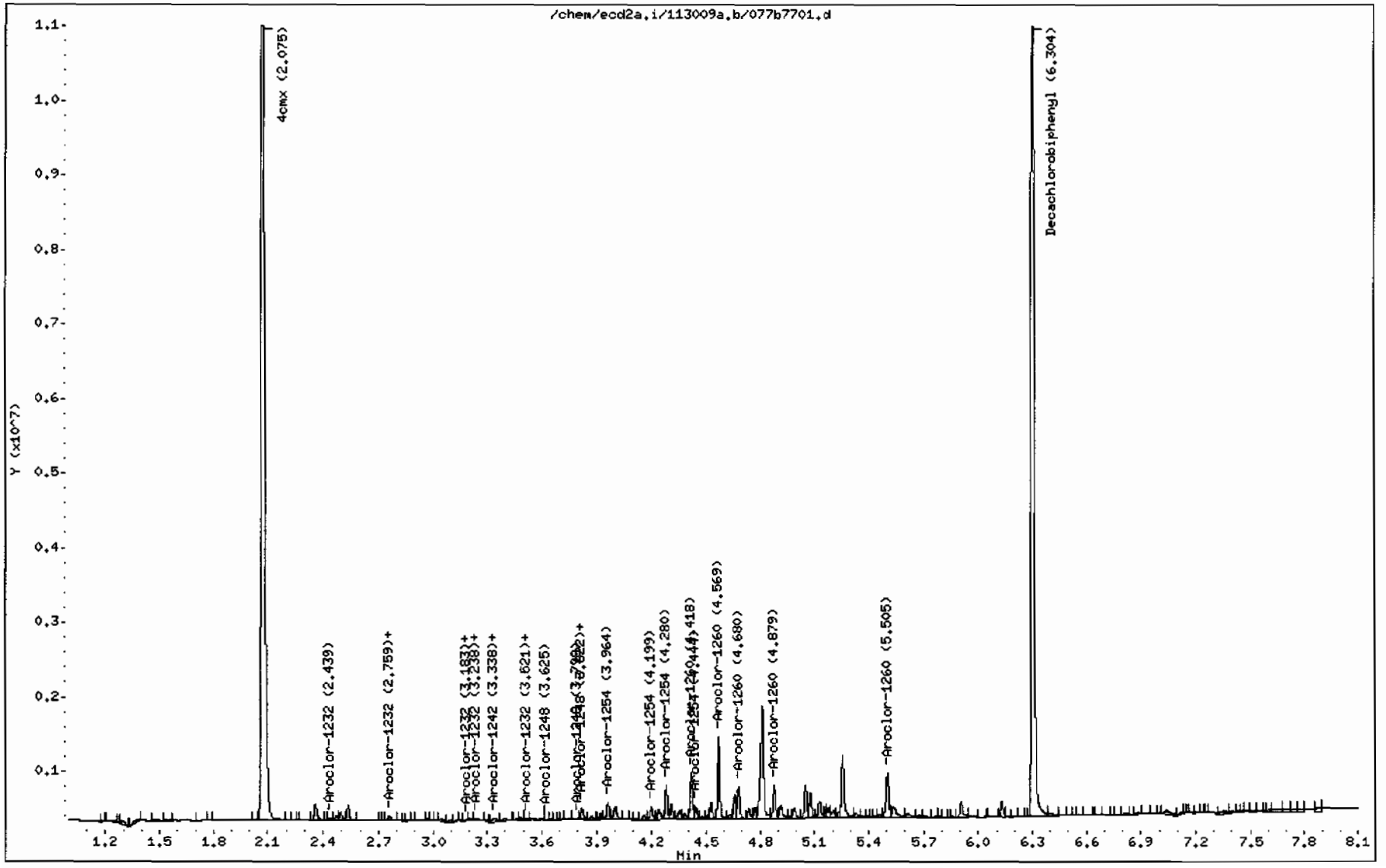

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13622**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**11/30/2009 21:22**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**069f6901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	069b6901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.7	ug/kg	5.89	17.7	1
11104–28–2	Aroclor–1221	U	17.7	ug/kg	5.89	17.7	1
11141–16–5	Aroclor–1232	U	17.7	ug/kg	5.89	17.7	1
53469–21–9	Aroclor–1242	U	17.7	ug/kg	5.89	17.7	1
12672–29–6	Aroclor–1248	U	17.7	ug/kg	5.89	17.7	1
11097–69–1	Aroclor–1254		21.0	ug/kg	5.89	17.7	1
11096–82–5	Aroclor–1260	P	17.7	ug/kg	5.89	17.7	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/069f6901.d
Lab Smp Id: 241318002 Client Smp ID: RE03-09-13622
Inj Date : 30-NOV-2009 21:22
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318002|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13622|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 69
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	6.11800	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.780	-0.002	2057966	35.6597	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1829745	33.3717	5.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	192041	92.3251	16.3	80.00- 120.00	100.00
3.427	3.427	0.000	282588	101.939	18.0	115.68- 155.68	147.15
3.696	3.697	-0.001	450309	120.326	21.3	166.12- 206.12	234.49
3.888	3.889	-0.001	192339	69.1197	12.2	117.34- 157.34	100.16
4.016	4.018	-0.002	581556	210.706	37.2	114.59- 154.59	302.83
Average of Peak Concentrations =					21.0		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.018	-0.002	581556	143.001	25.3	80.00- 120.00	100.00(a)
4.288	4.290	-0.002	85684	33.8898	6.0	41.58- 81.58	14.73
4.455	4.455	0.000	89509	34.6507	6.1	43.08- 83.08	15.39
4.666	4.667	-0.001	223874	37.0893	6.6	129.99- 169.99	38.50
4.856	4.856	0.000	172625	59.2817	10.5	51.44- 91.44	29.68
Average of Peak Concentrations =					10.9		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/069f6901.d

Date : 30-NOV-2009 21:22

Client ID: RE03-09-13622

Sample Info: 1241318002151

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

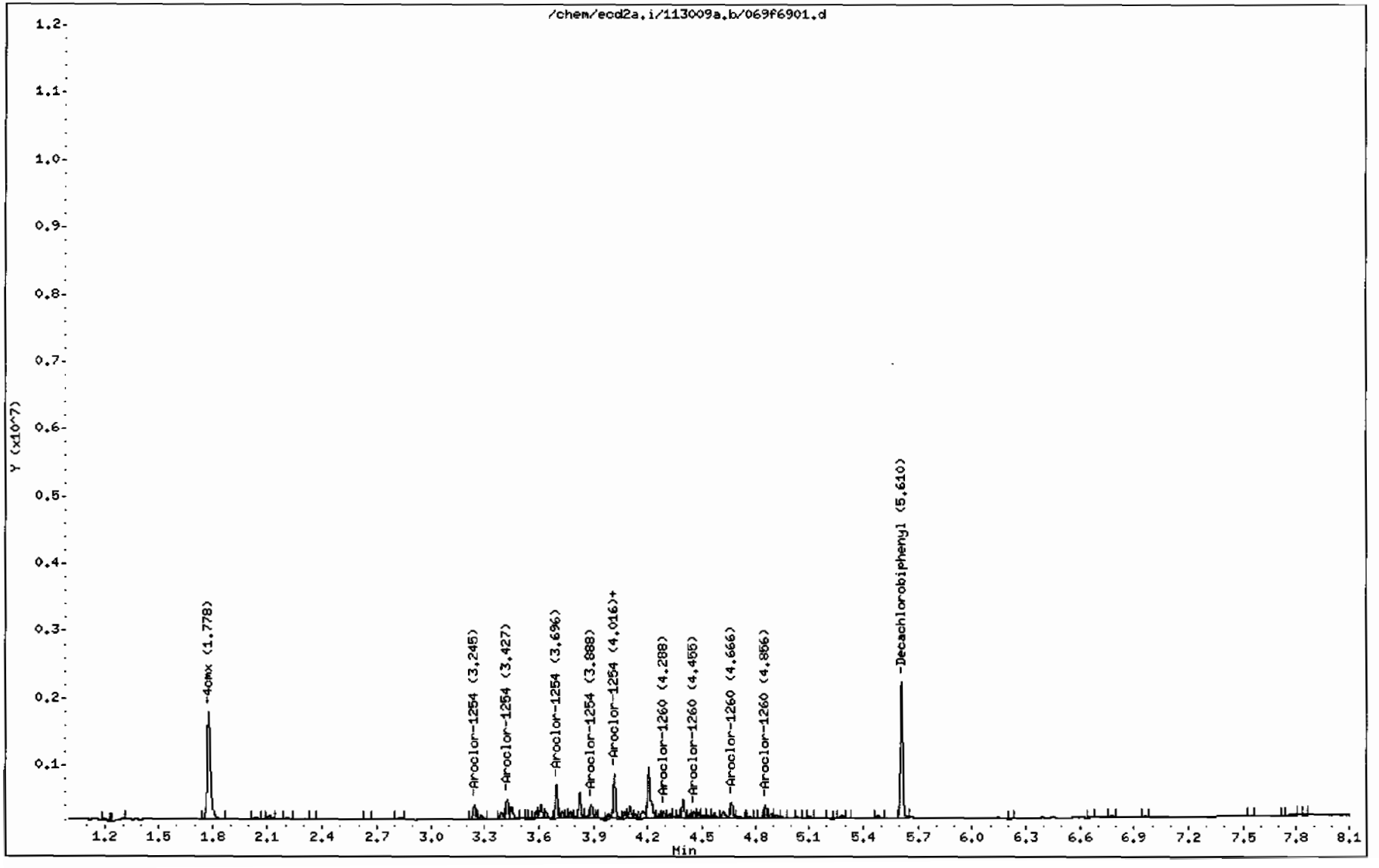

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/069b6901.d
Lab Smp Id: 241318002 Client Smp ID: RE03-09-13622
Inj Date : 30-NOV-2009 21:22
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318002|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13622|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 69
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	6.11800	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	4267192	36.1015	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	3772174	34.7213	6.1	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.821	3.823	-0.002	376394	75.5009	13.4	80.00- 120.00	100.00(aM)
3.963	3.964	-0.001	662342	114.218	20.2	97.16- 137.16	175.97
4.200	4.201	-0.001	378304	94.0356	16.6	61.89- 101.89	100.51
4.281	4.282	-0.001	923740	119.480	21.1	138.47- 178.47	245.42
4.443	4.445	-0.002	391750	69.8519	12.4	96.59- 136.59	104.08

Average of Peak Concentrations = 16.7

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.417	4.419	-0.002	670425	121.616	21.5	80.00- 120.00	100.00(M)
4.569	4.570	-0.001	970541	136.083	24.1	108.85- 148.85	144.77
4.680	4.682	-0.002	677462	143.185	25.3	65.38- 105.38	101.05
4.879	4.880	-0.001	308266	53.1433	9.4	82.89- 122.89	45.98
5.506	5.505	0.001	409561	45.3021	8.0	145.10- 185.10	61.09
Average of Peak Concentrations =					17.7		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/069b6901.d

Date : 30-NOV-2009 21:22

Client ID: RE03-09-13622

Sample Info: 124131800215

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

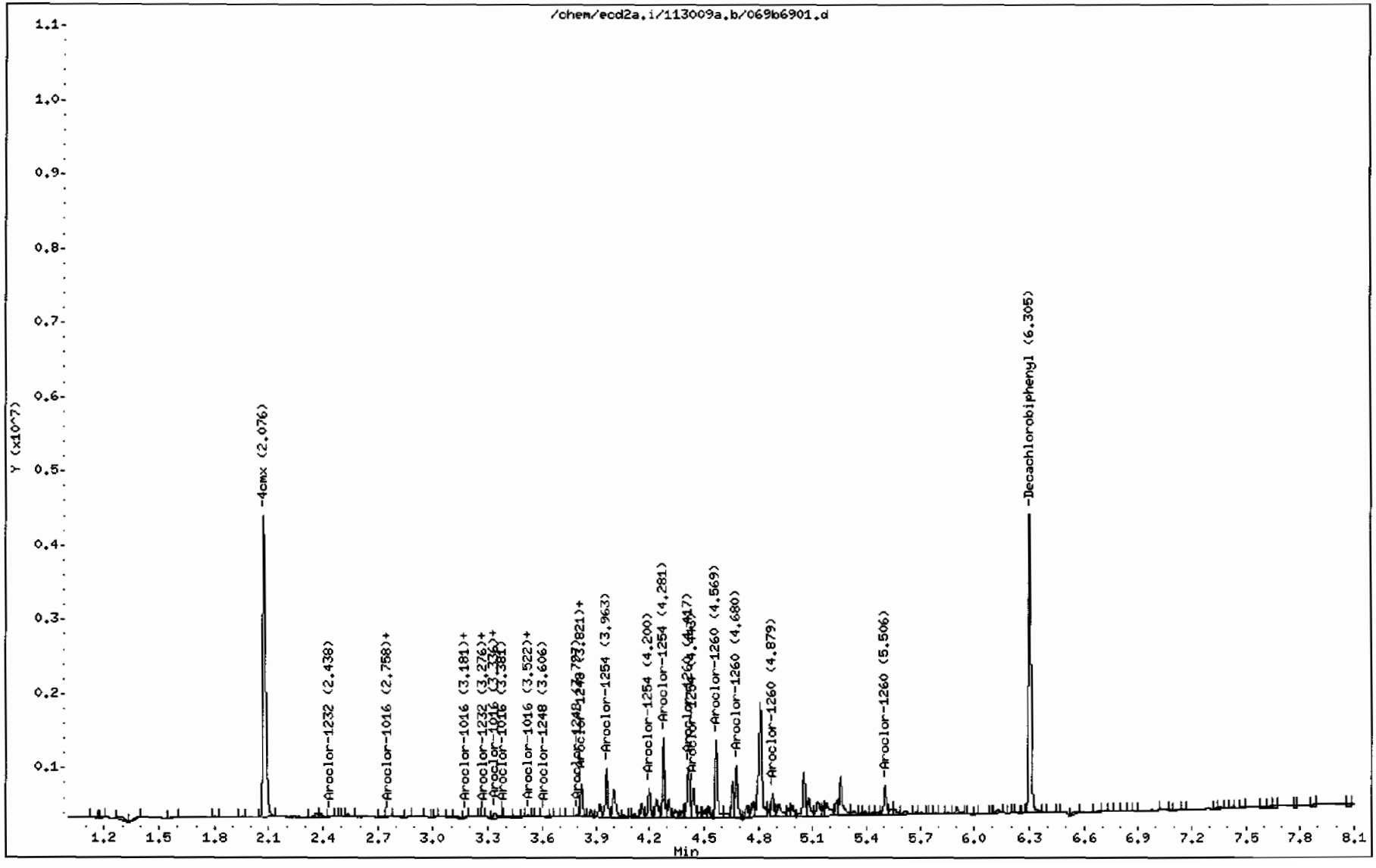

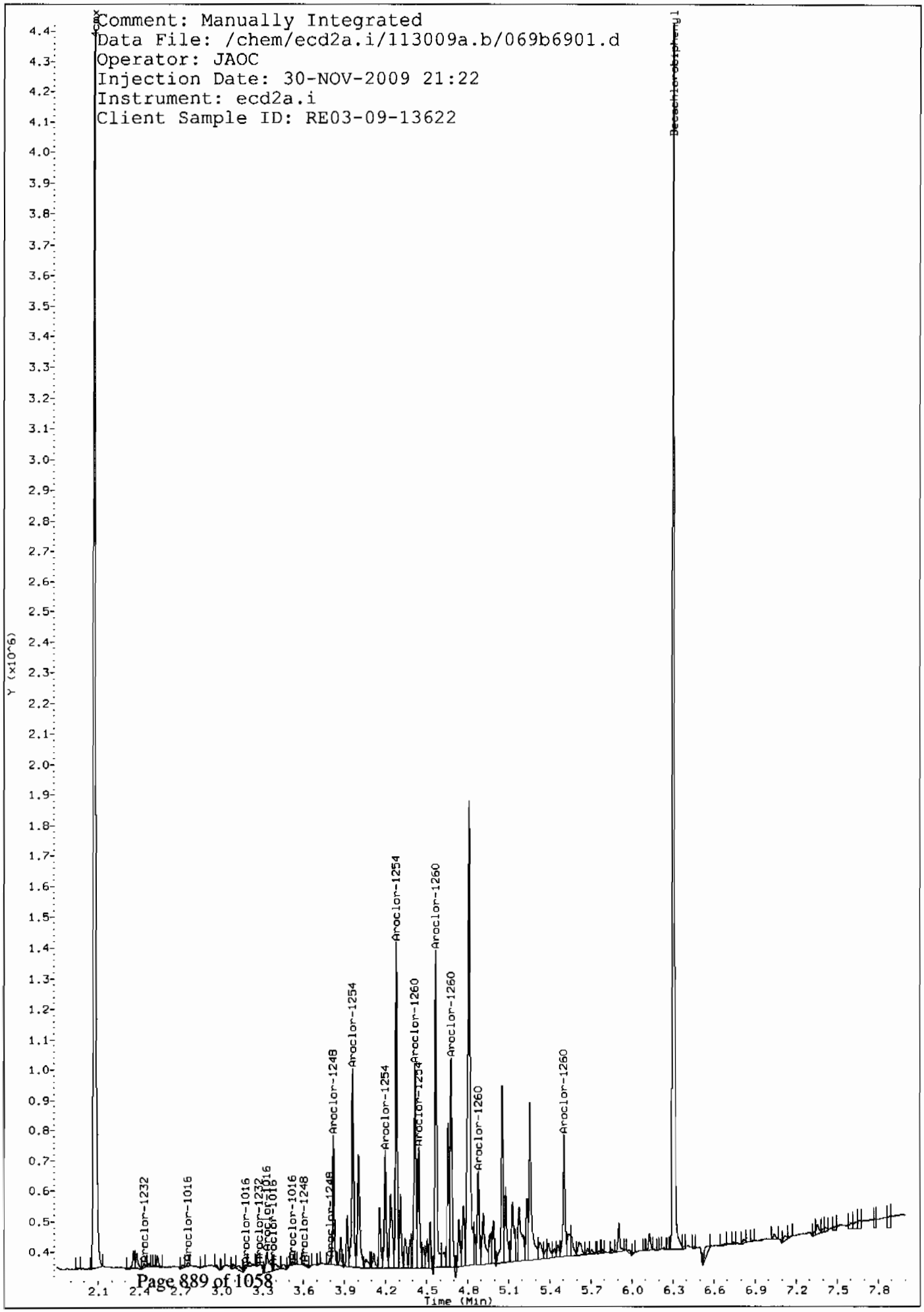
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/069b6901.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:22
Instrument: ecd2a.i
Client Sample ID: RE03-09-13622
Decachlorobiphenyl
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^6)
Time (Min)

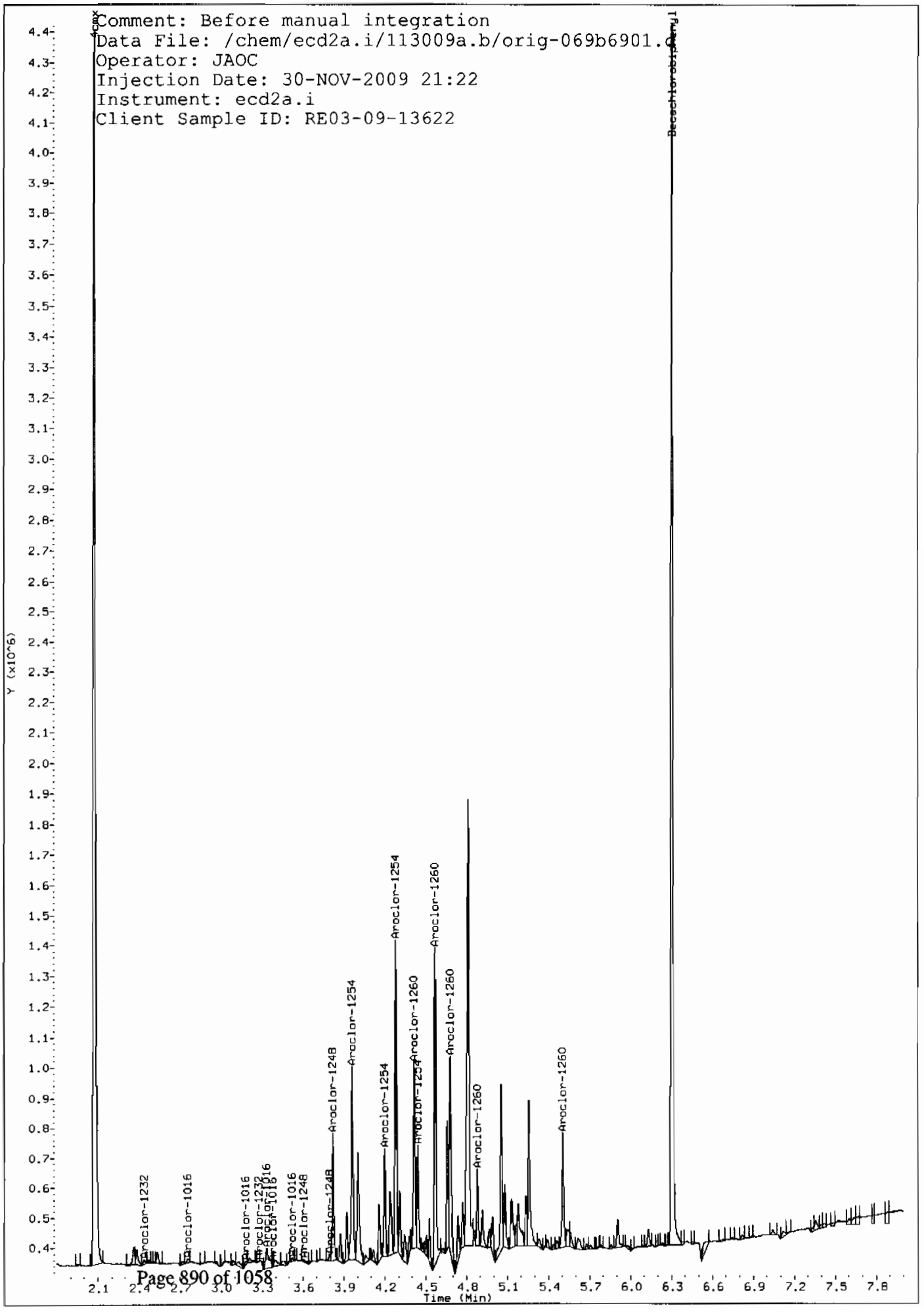
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-069b6901.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:22
Instrument: ecd2a.i
Client Sample ID: RE03-09-13622
Decachlorobiphenyl
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^6)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318006	**Date Received:**	11/18/2009 08:50	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13623	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 22:29	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	075f7501.d	**Column:**	1 CLP1	**Level:**	LOW
	075b7501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.46	ug/kg	1.15	3.46	1
11104–28–2	Aroclor–1221	U	3.46	ug/kg	1.15	3.46	1
11141–16–5	Aroclor–1232	U	3.46	ug/kg	1.15	3.46	1
53469–21–9	Aroclor–1242	U	3.46	ug/kg	1.15	3.46	1
12672–29–6	Aroclor–1248	U	3.46	ug/kg	1.15	3.46	1
11097–69–1	Aroclor–1254		69.3	ug/kg	1.15	3.46	1
11096–82–5	Aroclor–1260	P	51.4	ug/kg	1.15	3.46	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/075f7501.d
Lab Smp Id: 241318006 Client Smp ID: RE03-09-13623
Inj Date : 30-NOV-2009 22:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318006|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13623|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	3.63840	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	9508458	164.759	5.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7985524	145.644	5.0	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	2837549	1364.17	47.2	80.00- 120.00	100.00
3.427	3.427	0.000	4598997	1659.01	57.4	115.68- 155.68	162.08
3.696	3.697	-0.001	7787818	2080.97	71.9	166.12- 206.12	274.46
3.887	3.889	-0.002	3798041	1364.87	47.2	117.34- 157.34	133.85
4.017	4.018	-0.001	9804045	3552.13	123	114.59- 154.59	345.51

Average of Peak Concentrations = 69.3

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	9804045	2410.75	83.3	80.00- 120.00	100.00
4.288	4.290	-0.002	1293184	511.480	17.7	41.58- 81.58	13.19
4.454	4.455	-0.001	1231880	476.881	16.5	43.08- 83.08	12.57
4.666	4.667	-0.001	2950764	488.852	16.9	129.99- 169.99	30.10
4.856	4.856	0.000	2288078	785.755	27.2	51.44- 91.44	23.34
Average of Peak Concentrations =					32.3		

Data File: /chem/ecd2a.i/113009a.b/075f7501.d
Date : 30-NOV-2009 22:29
Client ID: RE03-09-13623
Sample Info: |241318006|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

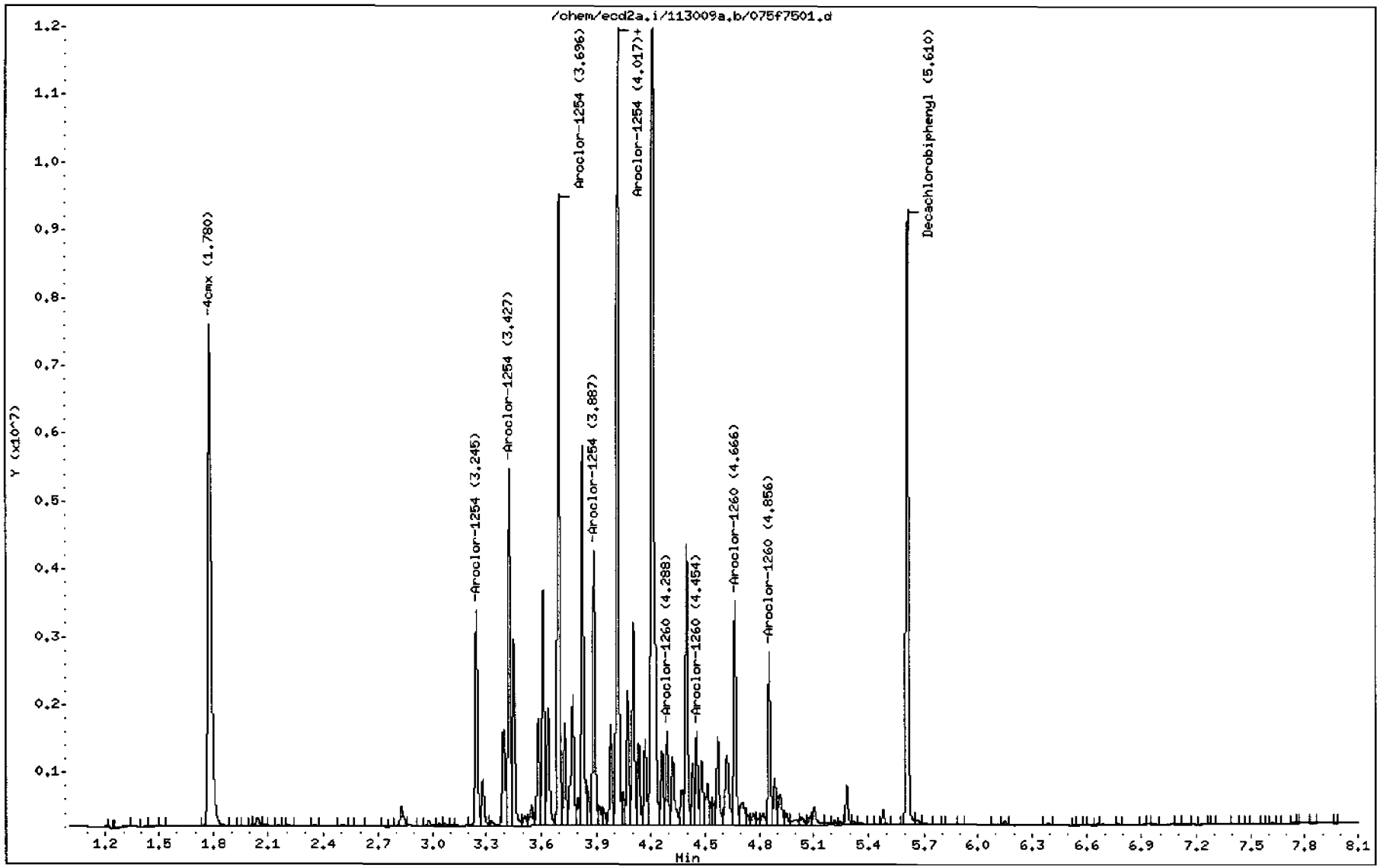

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/075b7501.d
Lab Smp Id: 241318006 Client Smp ID: RE03-09-13623
Inj Date : 30-NOV-2009 22:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318006|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13623|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	3.63840	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.076	0.001	20274993	171.531	5.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17059026	157.021	5.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	6124452	1228.50	42.5	80.00- 120.00	100.00
3.963	3.964	-0.001	10389236	1791.57	61.9	97.16- 137.16	169.64
4.200	4.201	-0.001	5895745	1465.51	50.7	61.89- 101.89	96.27
4.281	4.282	-0.001	15824394	2046.78	70.8	138.47- 178.47	258.38
4.443	4.445	-0.002	6656056	1186.82	41.0	96.59- 136.59	108.68
Average of Peak Concentrations =					53.4		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	11079996	2009.92	69.5	80.00- 120.00	100.00
4.570	4.570	0.000	15439107	2164.78	74.8	108.85- 148.85	139.34
4.680	4.682	-0.002	9244879	1953.96	67.5	65.38- 105.38	83.44
4.879	4.880	-0.001	4245539	731.907	25.3	82.89- 122.89	38.32
5.506	5.505	0.001	5203839	575.603	19.9	145.10- 185.10	46.97
			Average of Peak Concentrations =		51.4		

Data File: /chem/ecd2a.i/113009a.b/075b7501.d
Date : 30-NOV-2009 22:29
Client ID: RE03-09-13623
Sample Info: I241318006111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

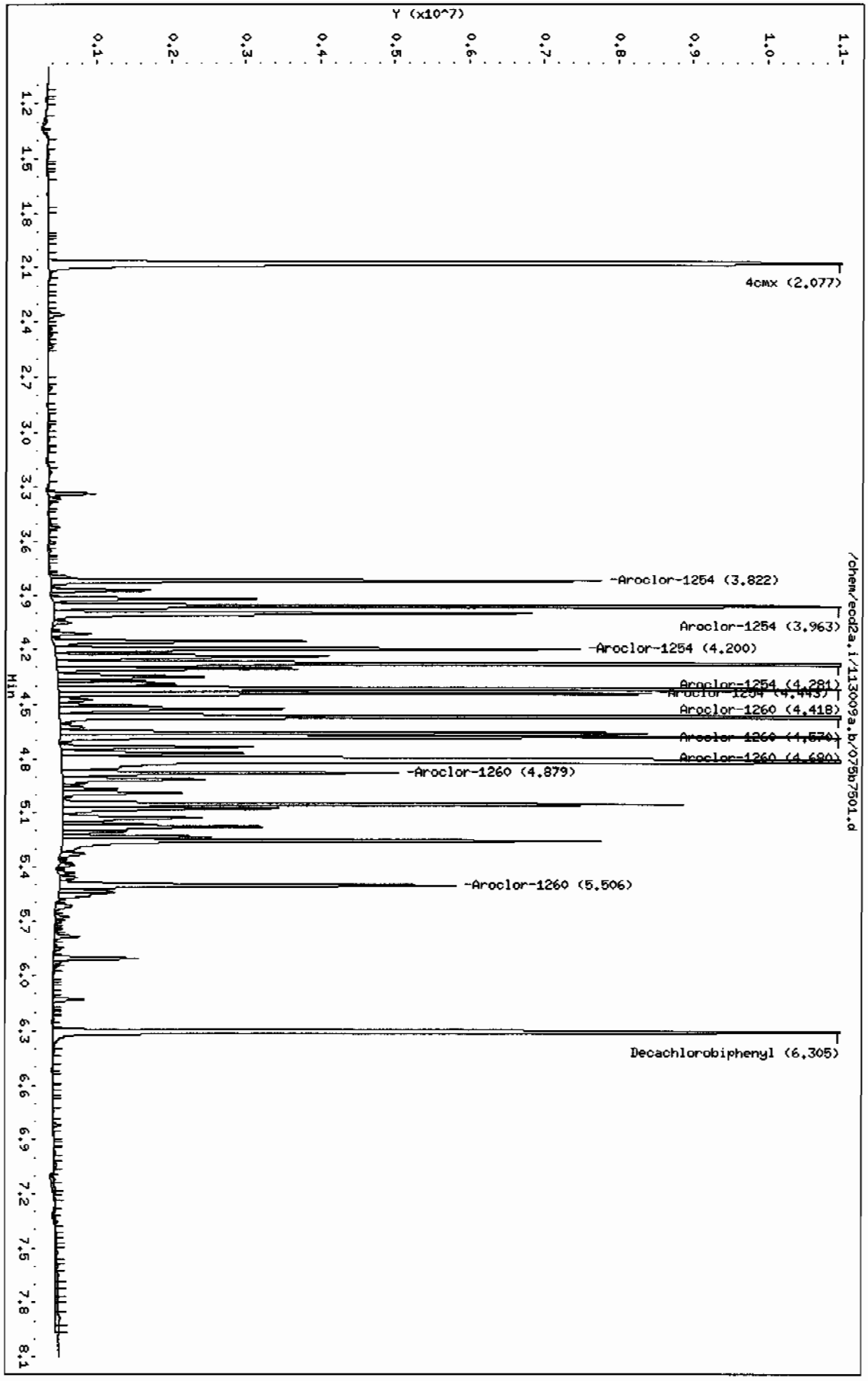

Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318005**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**22.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13624**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**11/30/2009 22:18**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**074f7401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	074b7401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	21.4	ug/kg	7.14	21.4	1
11104-28-2	Aroclor-1221	U	21.4	ug/kg	7.14	21.4	1
11141-16-5	Aroclor-1232	U	21.4	ug/kg	7.14	21.4	1
53469-21-9	Aroclor-1242	U	21.4	ug/kg	7.14	21.4	1
12672-29-6	Aroclor-1248	U	21.4	ug/kg	7.14	21.4	1
11097-69-1	Aroclor-1254	J	19.5	ug/kg	7.14	21.4	1
11096-82-5	Aroclor-1260	J	21.4	ug/kg	7.14	21.4	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/074f7401.d
Lab Smp Id: 241318005 Client Smp ID: RE03-09-13624
Inj Date : 30-NOV-2009 22:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318005|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13624|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 74
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	22.67890	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	1931192	33.4630	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1512218	27.5805	5.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	151728	72.9443	15.6	80.00- 120.00	100.00(a)
3.428	3.427	0.001	147634	53.2564	11.4	115.68- 155.68	97.30
3.697	3.697	0.000	322055	86.0558	18.4	166.12- 206.12	212.26
3.889	3.889	0.000	144861	52.0576	11.2	117.34- 157.34	95.47
4.017	4.018	-0.001	528150	191.356	41.0	114.59- 154.59	348.09

Average of Peak Concentrations = 19.5

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	528150	129.869	27.8	80.00- 120.00	100.00(a)
4.289	4.290	-0.001	183621	72.6258	15.6	41.58- 81.58	34.77
4.455	4.455	0.000	207476	80.3174	17.2	43.08- 83.08	39.28
4.666	4.667	-0.001	353401	58.5478	12.5	129.99- 169.99	66.91
4.855	4.856	-0.001	249883	85.8130	18.4	51.44- 91.44	47.31
Average of Peak Concentrations =					18.3		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/074f7401.d
Date : 30-NOV-2009 22:18
Client ID: RE03-09-13624
Sample Info: 1241318005151
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

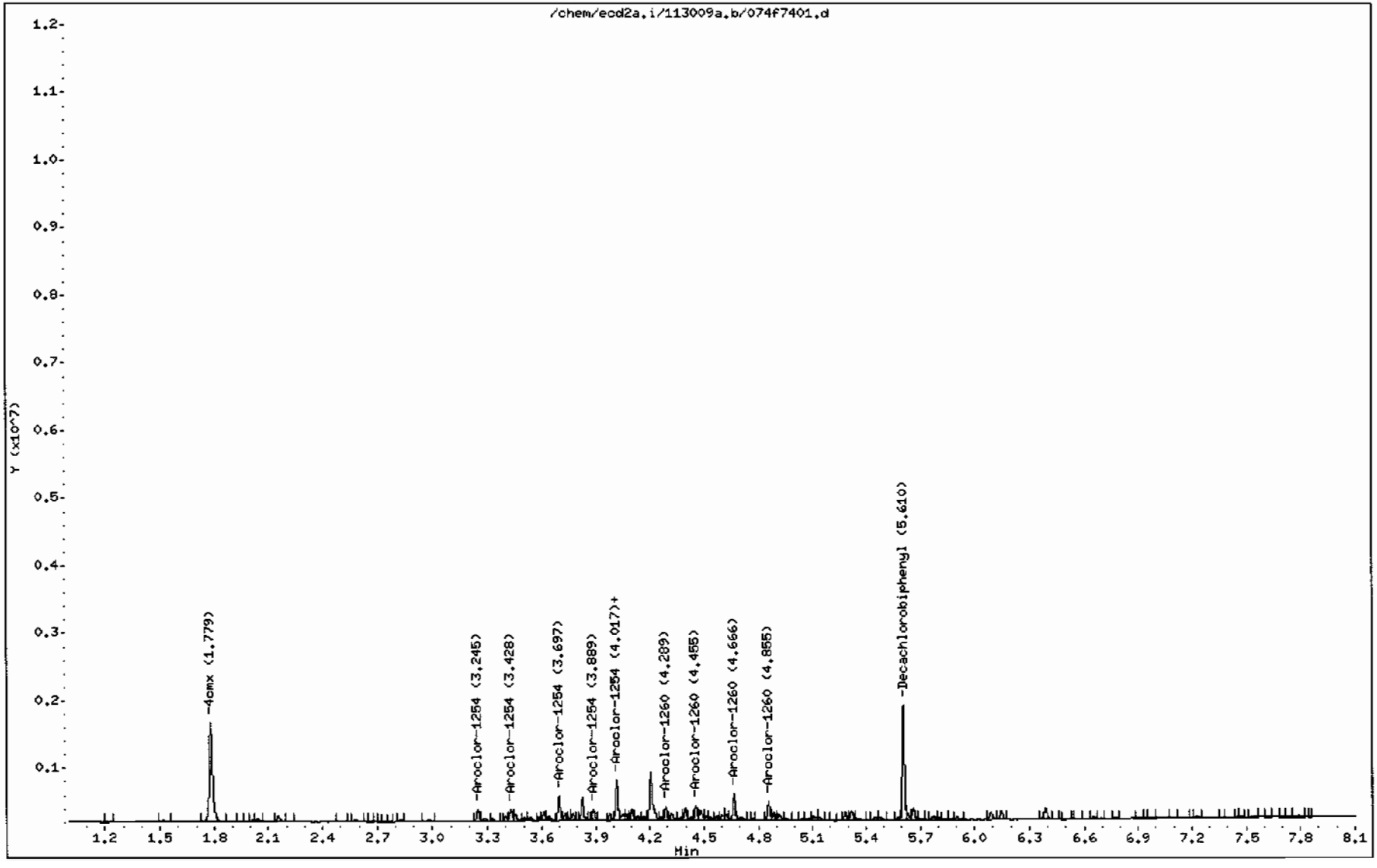

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/074b7401.d
Lab Smp Id: 241318005 Client Smp ID: RE03-09-13624
Inj Date : 30-NOV-2009 22:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318005|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13624|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 74
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	22.67890	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	4012942	33.9505	7.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	3602078	33.1556	7.1	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	412490	82.7413	17.7	80.00- 120.00	100.00(a)
3.964	3.964	0.000	367223	63.3259	13.6	97.16- 137.16	89.03
4.200	4.201	-0.001	270971	67.3557	14.4	61.89- 101.89	65.69
4.281	4.282	-0.001	675431	87.3625	18.7	138.47- 178.47	163.75
4.445	4.445	0.000	272885	48.6575	10.4	96.59- 136.59	66.16
Average of Peak Concentrations =					15.0		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	658322	119.420	25.6	80.00- 120.00	100.00(a)
4.570	4.570	0.000	840243	117.814	25.2	108.85- 148.85	127.63
4.681	4.682	-0.001	544085	114.995	24.6	65.38- 105.38	82.65
4.879	4.880	-0.001	471728	81.3233	17.4	82.89- 122.89	71.66
5.505	5.505	0.000	605517	66.9770	14.4	145.10- 185.10	91.98
Average of Peak Concentrations =					21.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/074b7401.d

Date : 30-NOV-2009 22:18

Client ID: RE03-09-13624

Sample Info: |241318005151

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

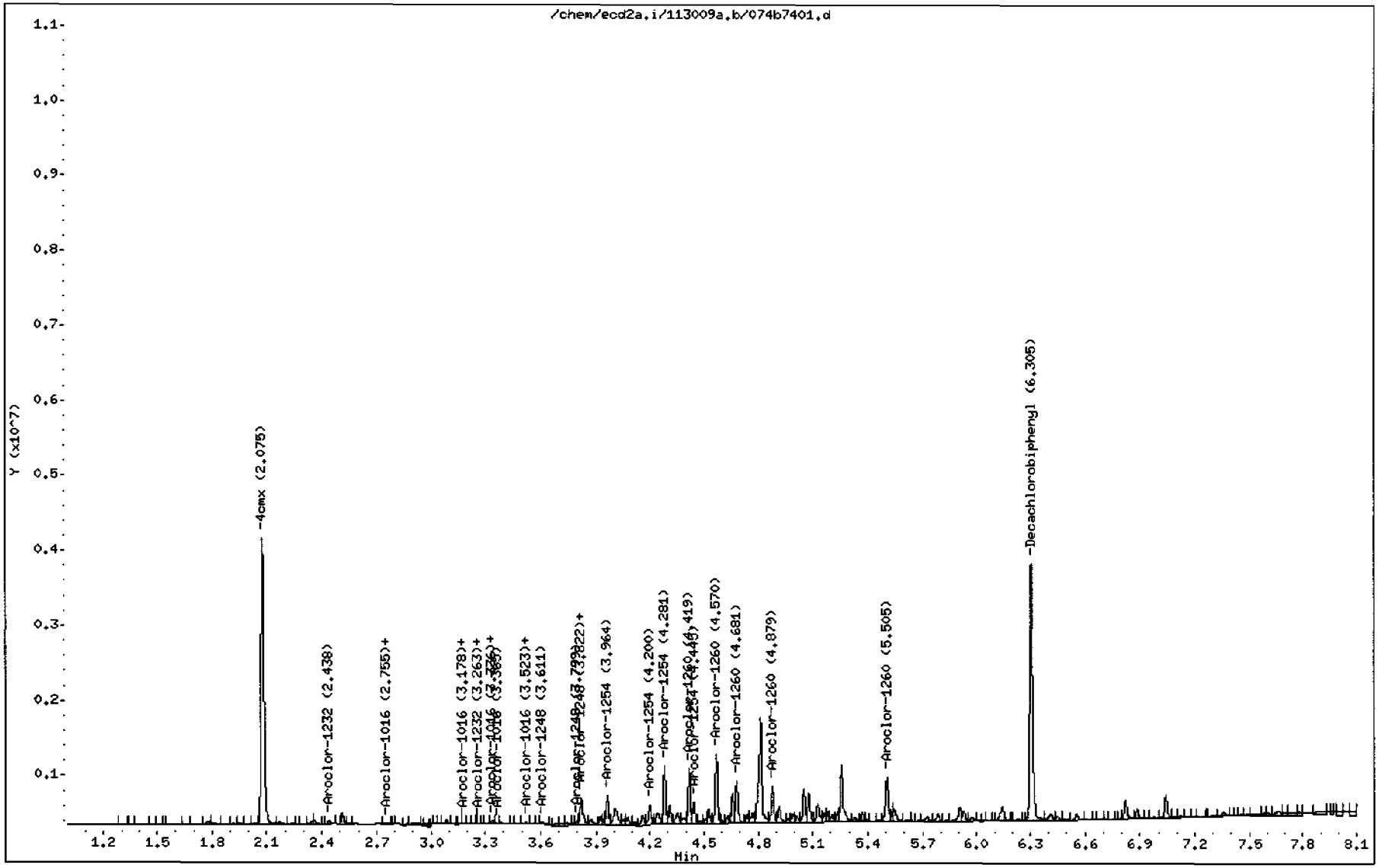

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318010	**Date Received:**	11/18/2009 08:50	**%Moisture:**	16.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13625	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 23:13	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	20.0	ug/kg	6.65	20.0	1
11104-28-2	Aroclor-1221	U	20.0	ug/kg	6.65	20.0	1
11141-16-5	Aroclor-1232	U	20.0	ug/kg	6.65	20.0	1
53469-21-9	Aroclor-1242	U	20.0	ug/kg	6.65	20.0	1
12672-29-6	Aroclor-1248	U	20.0	ug/kg	6.65	20.0	1
11097-69-1	Aroclor-1254	U	20.0	ug/kg	6.65	20.0	1
11096-82-5	Aroclor-1260	U	20.0	ug/kg	6.65	20.0	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/079f7901.d
Lab Smp Id: 241318010 Client Smp ID: RE03-09-13625
Inj Date : 30-NOV-2009 23:13
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318010|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13625|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 79
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	16.91440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	2247741	38.9481	7.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	1972593	35.9770	7.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/079f7901.d

Date : 30-NOV-2009 23:13

Client ID: RE03-09-13625

Sample Info: I241318010151

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

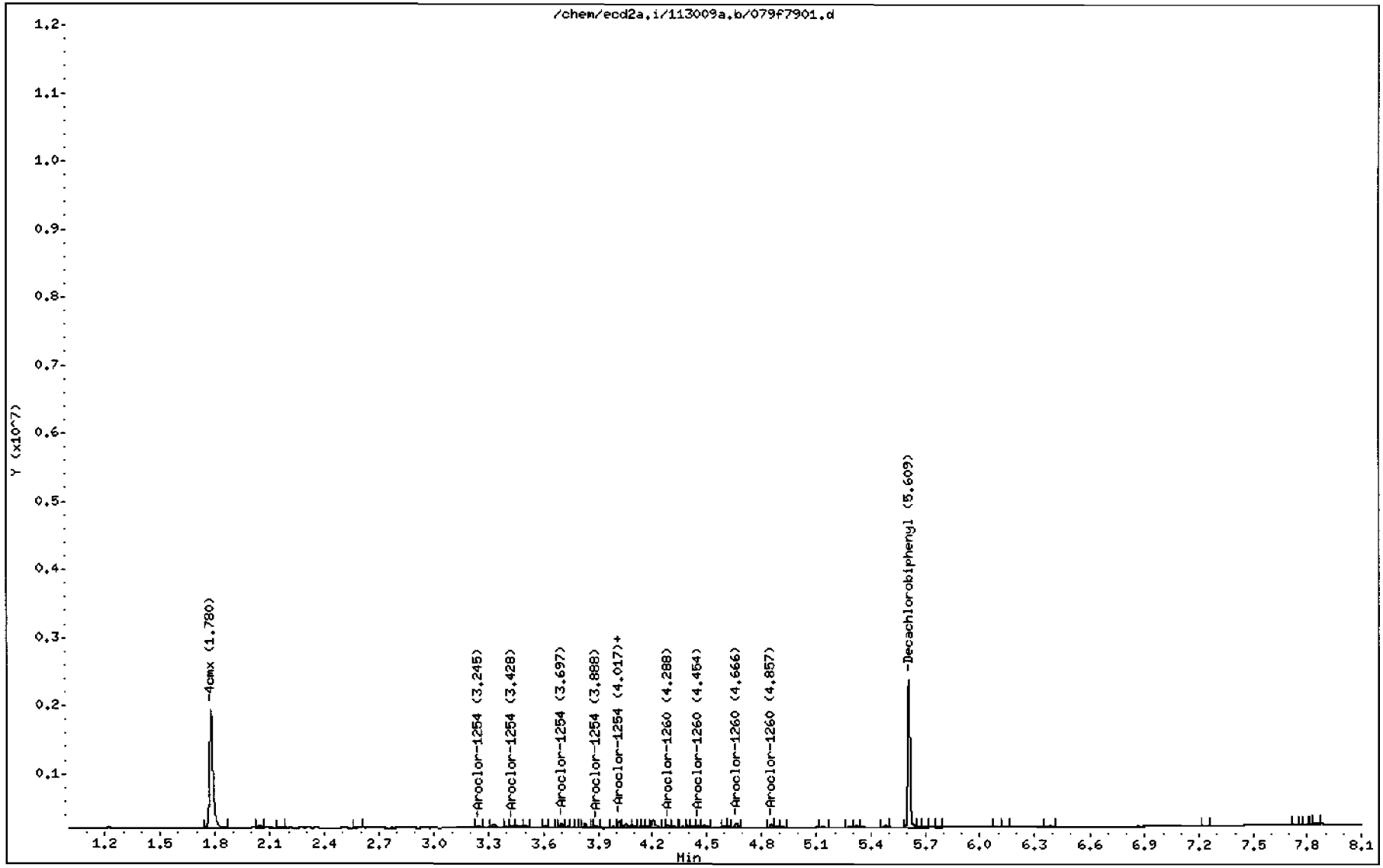

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/079b7901.d
Lab Smp Id: 241318010 Client Smp ID: RE03-09-13625
Inj Date : 30-NOV-2009 23:13
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318010|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13625|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 79
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	16.91440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.076	0.001	4721368	39.9440	8.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	4004419	36.8590	7.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/079b7901.d

Date : 30-NOV-2009 23:13

Client ID: RE03-09-13625

Sample Info: |241318010|5|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

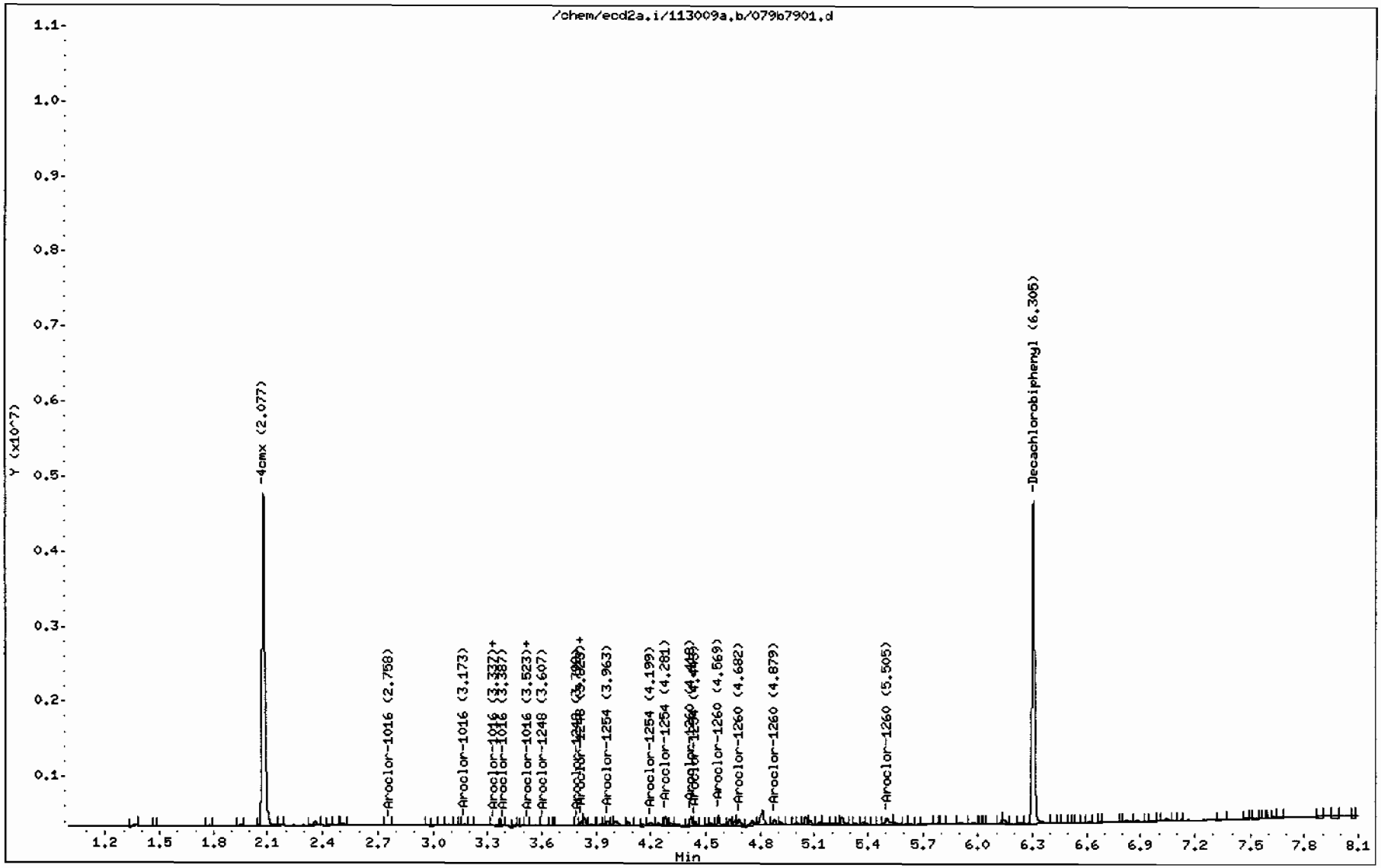

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318007	**Date Received:**	11/18/2009 08:50	**%Moisture:**	15.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13626	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 22:40	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.6	ug/kg	6.53	19.6	1
11104-28-2	Aroclor-1221	U	19.6	ug/kg	6.53	19.6	1
11141-16-5	Aroclor-1232	U	19.6	ug/kg	6.53	19.6	1
53469-21-9	Aroclor-1242	U	19.6	ug/kg	6.53	19.6	1
12672-29-6	Aroclor-1248	U	19.6	ug/kg	6.53	19.6	1
11097-69-1	Aroclor-1254	U	19.6	ug/kg	6.53	19.6	1
11096-82-5	Aroclor-1260	U	19.6	ug/kg	6.53	19.6	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/076f7601.d
Lab Smp Id: 241318007 Client Smp ID: RE03-09-13626
Inj Date : 30-NOV-2009 22:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318007|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13626|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 76
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	15.51040	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	1576231	27.3124	5.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1366166	24.9168	4.9	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/076f7601.d
Date : 30-NOV-2009 22:40
Client ID: RE03-09-13626
Sample Info: 1241318007151
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

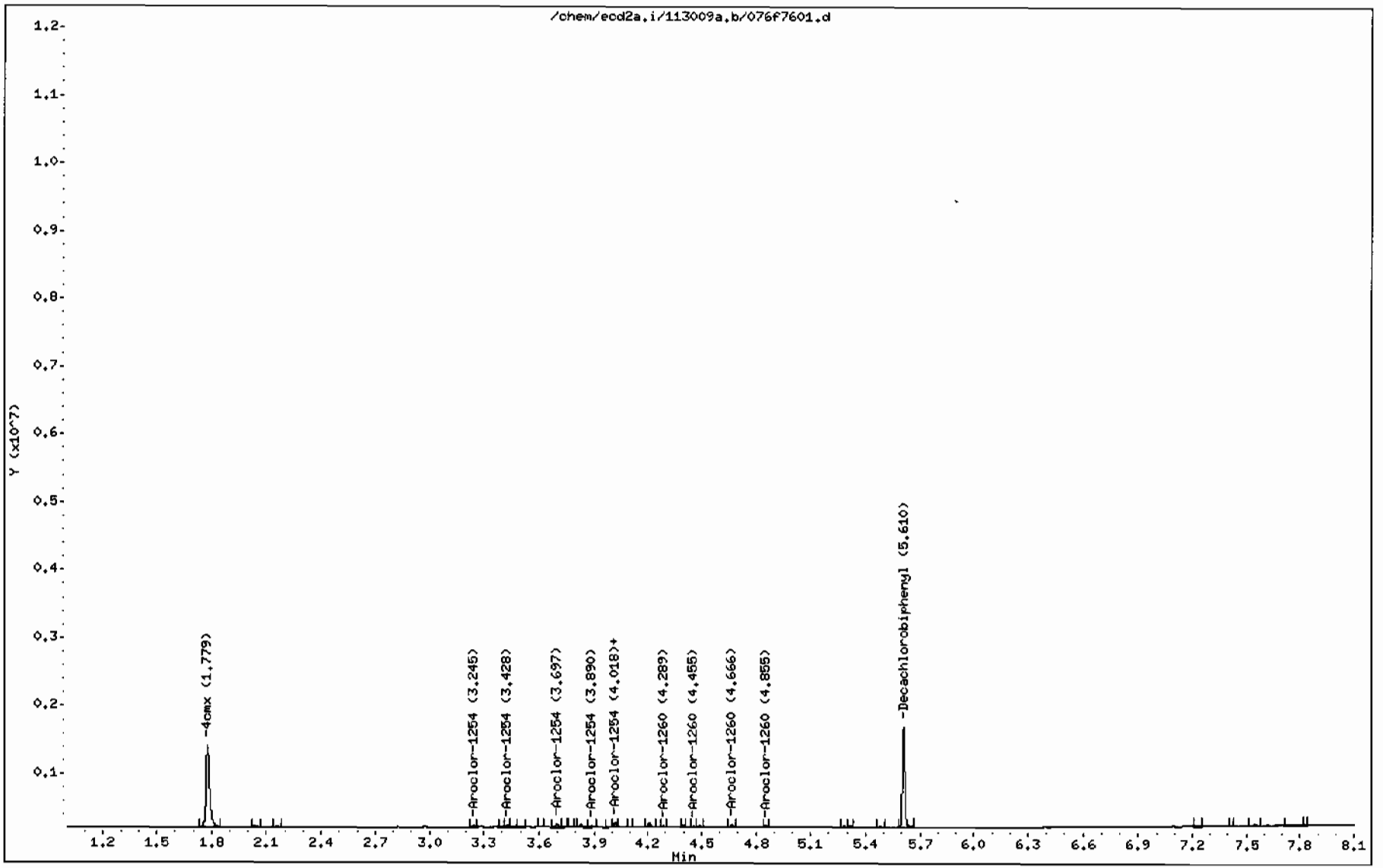

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/076b7601.d
Lab Smp Id: 241318007 Client Smp ID: RE03-09-13626
Inj Date : 30-NOV-2009 22:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318007|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13626|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 76
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	15.51040	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	3268447	27.6519	5.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	2705033	24.8987	4.9	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/076b7601.d
Date : 30-NOV-2009 22:40
Client ID: RE03-09-13626
Sample Info: 1241318007151
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

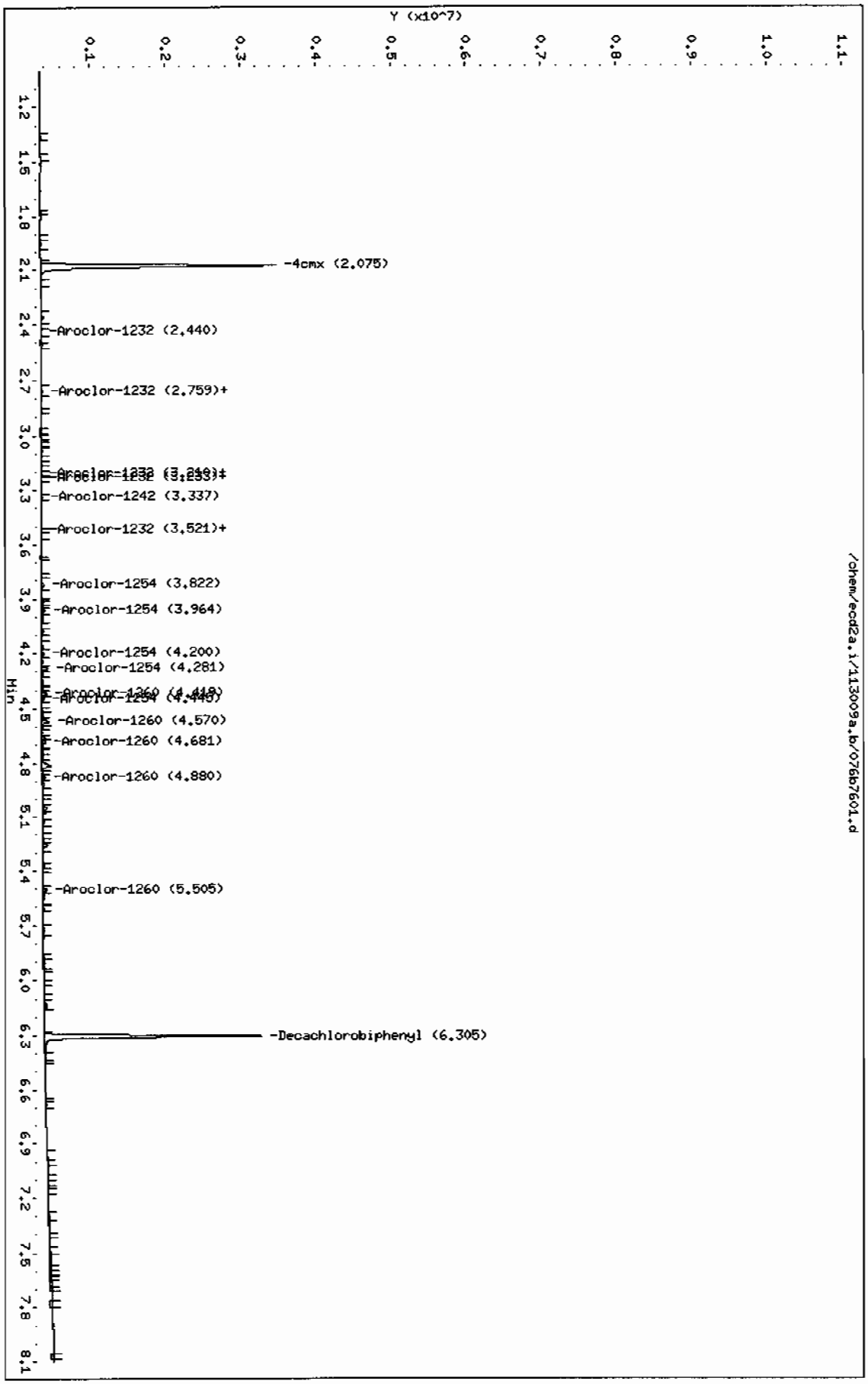

Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318009**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13627**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 23:02**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**078f7801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	078b7801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.57	ug/kg	1.19	3.57	1
11104–28–2	Aroclor–1221	U	3.57	ug/kg	1.19	3.57	1
11141–16–5	Aroclor–1232	U	3.57	ug/kg	1.19	3.57	1
53469–21–9	Aroclor–1242	U	3.57	ug/kg	1.19	3.57	1
12672–29–6	Aroclor–1248	U	3.57	ug/kg	1.19	3.57	1
11097–69–1	Aroclor–1254	U	3.57	ug/kg	1.19	3.57	1
11096–82–5	Aroclor–1260	U	3.57	ug/kg	1.19	3.57	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/078f7801.d
Lab Smp Id: 241318009 Client Smp ID: RE03-09-13627
Inj Date : 30-NOV-2009 23:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318009|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13627|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	7.04810	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	9708756	168.230	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	8075243	147.280	5.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/078f7801.d

Date : 30-NOV-2009 23:02

Client ID: RE03-09-13627

Sample Info: |241318009|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

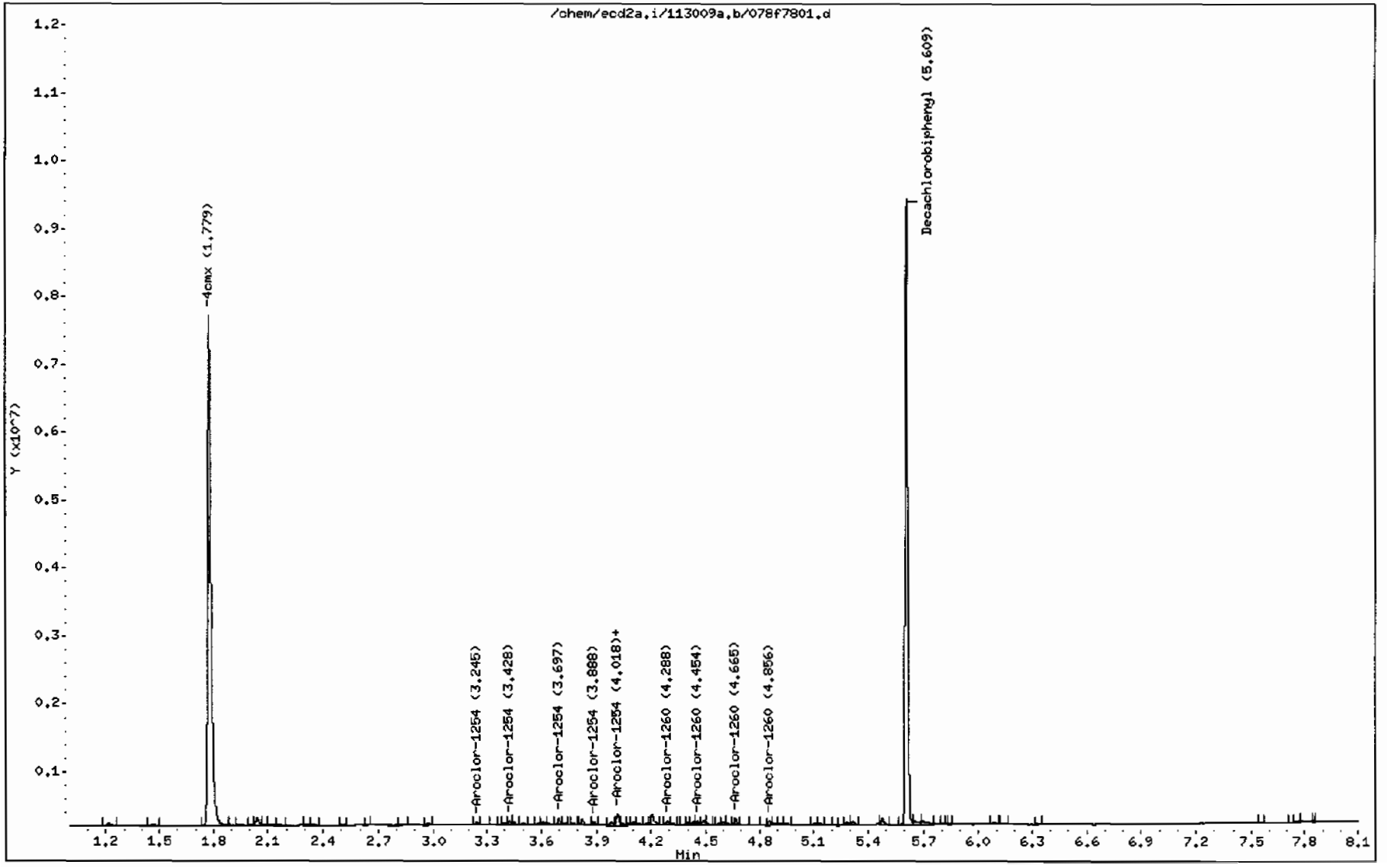

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/078b7801.d
Lab Smp Id: 241318009 Client Smp ID: RE03-09-13627
Inj Date : 30-NOV-2009 23:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318009|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13627|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	7.04810	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	20755310	175.595	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	18217873	167.688	6.0	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/078b7801.d

Date : 30-NOV-2009 23:02

Client ID: RE03-09-13627

Sample Info: |241318009|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

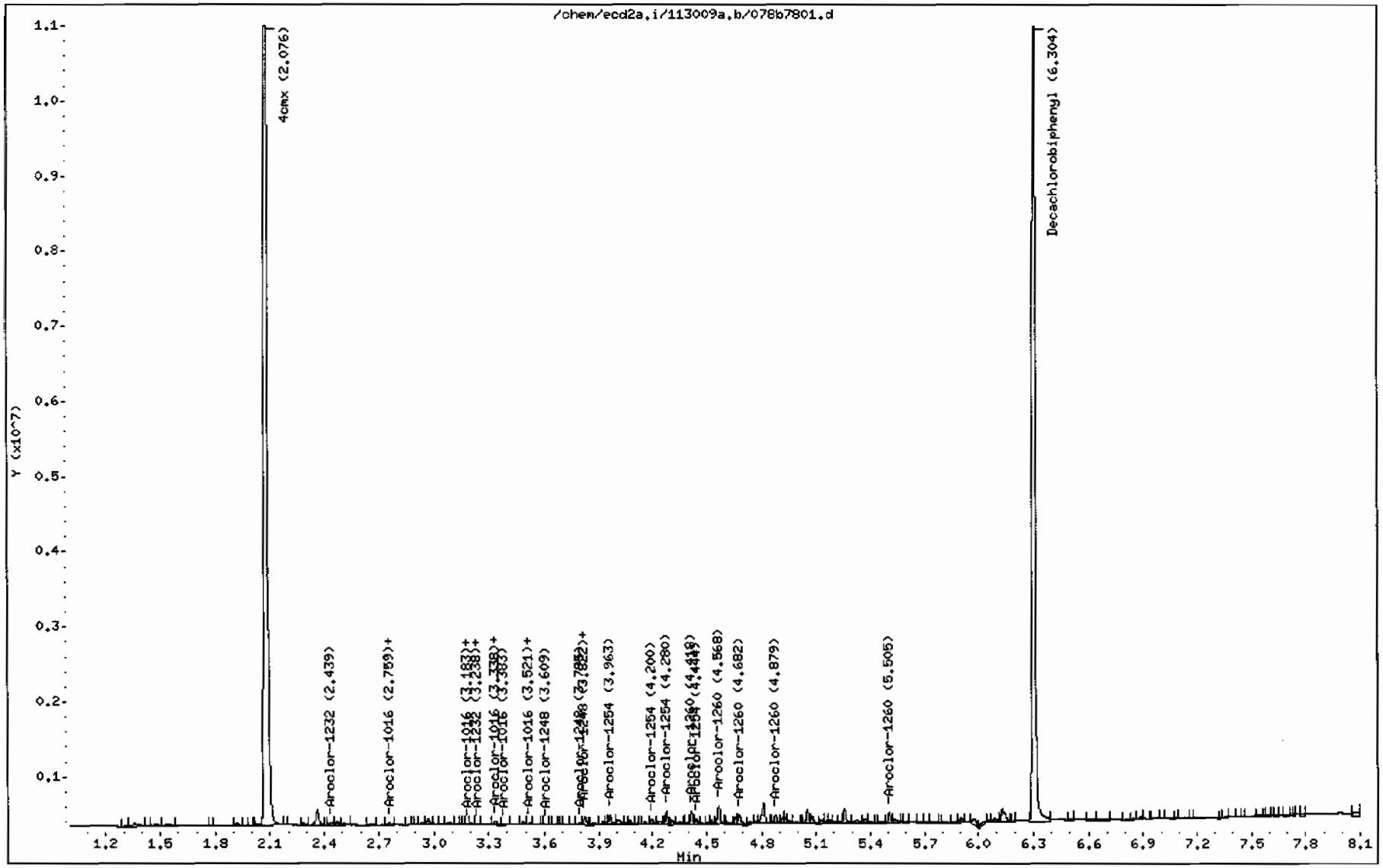

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241318013**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6084**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**11/30/2009 23:24**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**080f8001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	080b8001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.1	ug/kg	6.36	19.1	1
11104-28-2	Aroclor-1221	U	19.1	ug/kg	6.36	19.1	1
11141-16-5	Aroclor-1232	U	19.1	ug/kg	6.36	19.1	1
53469-21-9	Aroclor-1242	U	19.1	ug/kg	6.36	19.1	1
12672-29-6	Aroclor-1248	U	19.1	ug/kg	6.36	19.1	1
11097-69-1	Aroclor-1254	U	19.1	ug/kg	6.36	19.1	1
11096-82-5	Aroclor-1260	U	19.1	ug/kg	6.36	19.1	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/080f8001.d
Lab Smp Id: 241318013 Client Smp ID: RE03-10-6084
Inj Date : 30-NOV-2009 23:24
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318013|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-10-6084|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 80
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.80070	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	1065439	18.4616	3.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	995602	18.1582	3.5	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/080f8001.d
Date : 30-NOV-2009 23:24
Client ID: RE03-10-6084
Sample Info: |2413180131|51
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

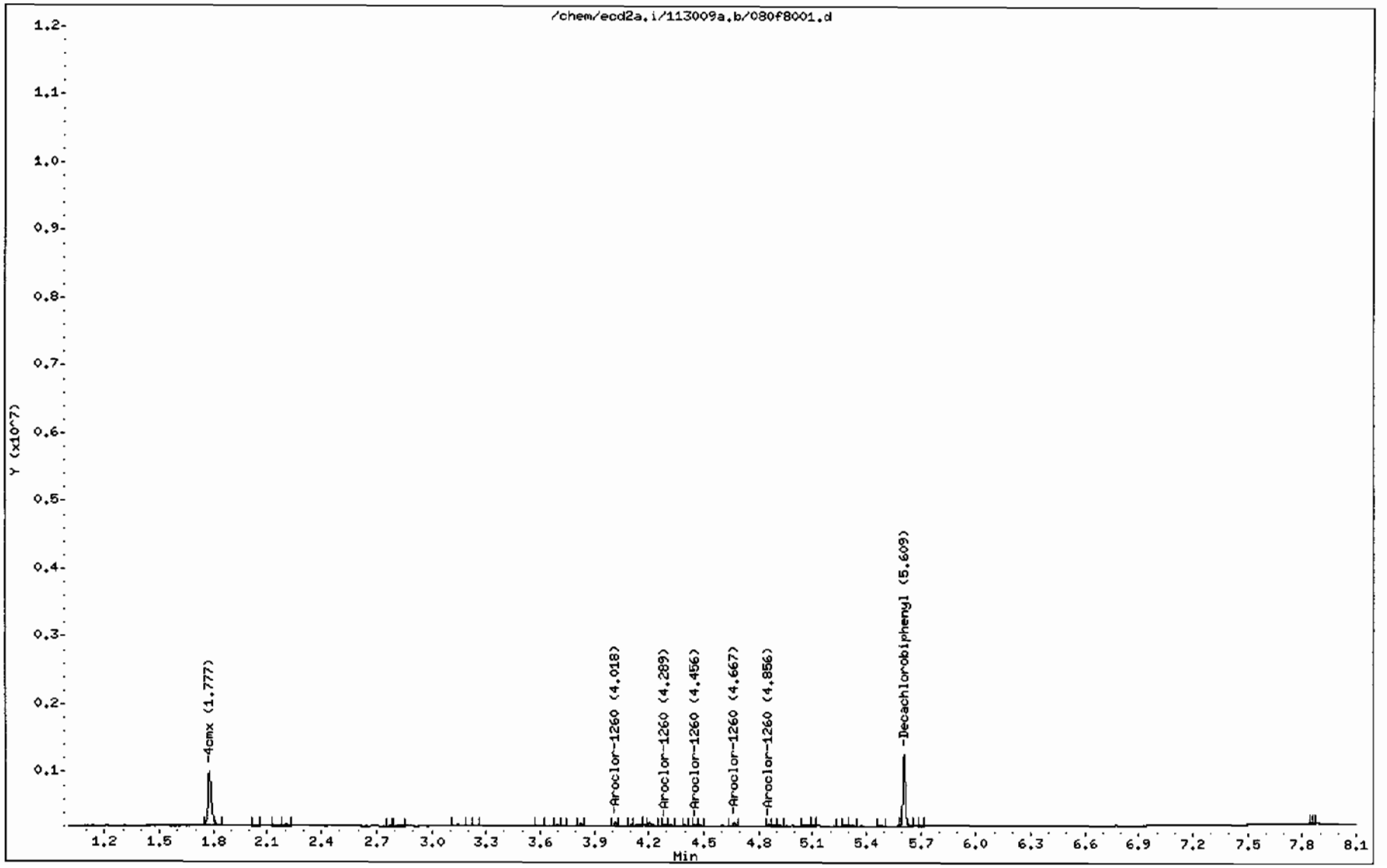

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/080b8001.d
Lab Smp Id: 241318013 Client Smp ID: RE03-10-6084
Inj Date : 30-NOV-2009 23:24
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318013|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-10-6084|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 80
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.80070	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.074	2.076	-0.002	2164087	18.3087	3.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	1924622	17.7154	3.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/080b8001.d

Date : 30-NOV-2009 23:24

Client ID: RE03-10-6084

Sample Info: |2413180131|5|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

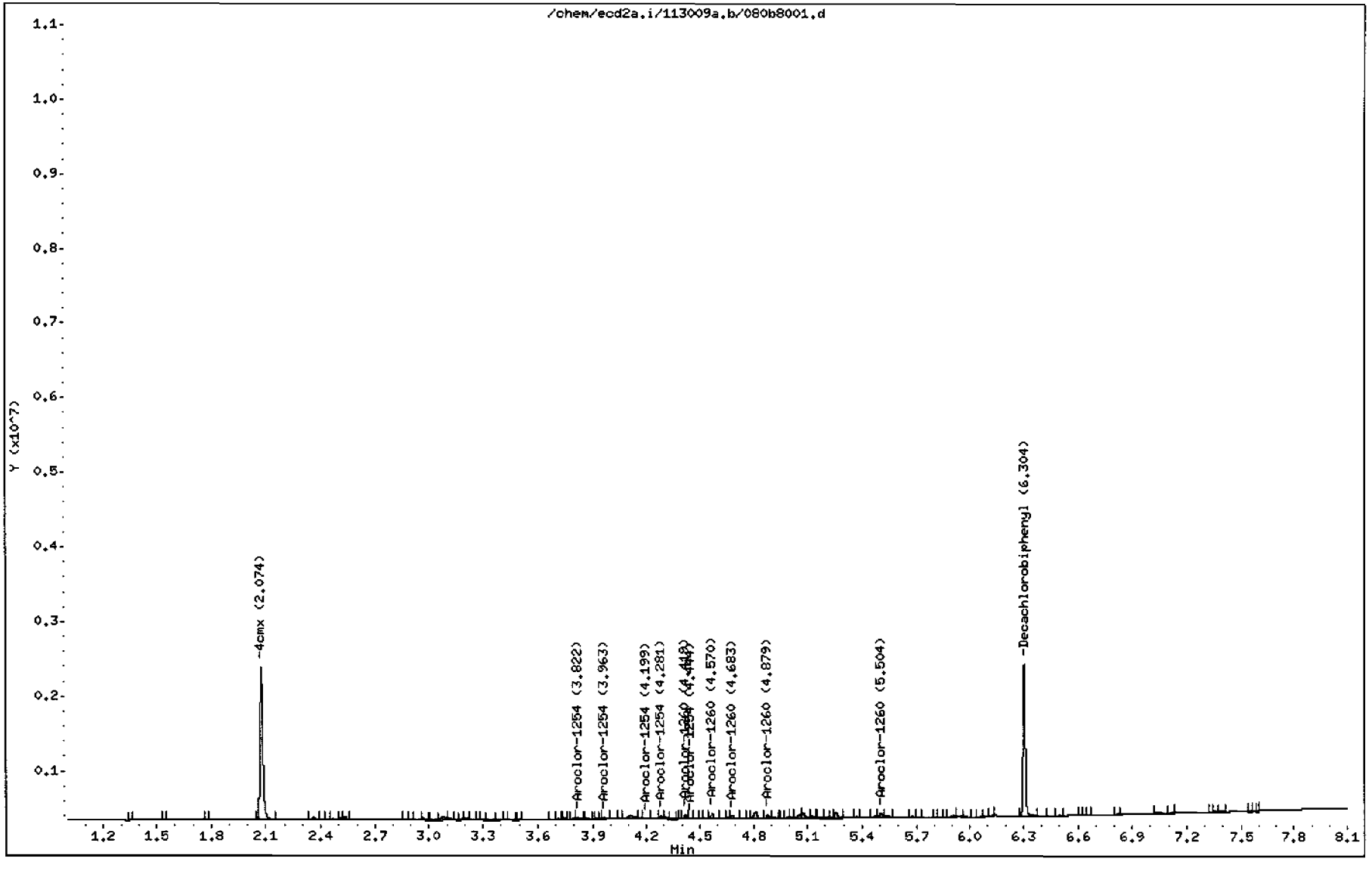

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-543	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241318014	**Date Received:**	11/18/2009 08:50	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6085	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 23:36	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.49	ug/kg	1.16	3.49	1
11104-28-2	Aroclor-1221	U	3.49	ug/kg	1.16	3.49	1
11141-16-5	Aroclor-1232	U	3.49	ug/kg	1.16	3.49	1
53469-21-9	Aroclor-1242	U	3.49	ug/kg	1.16	3.49	1
12672-29-6	Aroclor-1248	U	3.49	ug/kg	1.16	3.49	1
11097-69-1	Aroclor-1254	JP	2.90	ug/kg	1.16	3.49	1
11096-82-5	Aroclor-1260		3.60	ug/kg	1.16	3.49	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/081f8101.d
Lab Smp Id: 241318014 Client Smp ID: RE03-10-6085
Inj Date : 30-NOV-2009 23:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318014|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-10-6085|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	4.42560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.780	-0.002	9058865	156.969	5.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	8621951	157.251	5.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	83954	40.3619	1.4	80.00- 120.00	100.00(a)
3.426	3.427	-0.001	122619	44.2327	1.5	115.68- 155.68	146.05
3.696	3.697	-0.001	240478	64.2578	2.2	166.12- 206.12	286.44
3.888	3.889	-0.001	101084	36.3261	1.3	117.34- 157.34	120.40
4.017	4.018	-0.001	631042	228.635	8.0	114.59- 154.59	751.65

Average of Peak Concentrations = 2.9

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	631042	155.170	5.4	80.00- 120.00	100.00(a)
4.289	4.290	-0.001	179539	71.0116	2.5	41.58- 81.58	28.45
4.454	4.455	-0.001	164324	63.6128	2.2	43.08- 83.08	26.04
4.666	4.667	-0.001	395686	65.5532	2.3	129.99- 169.99	62.70
4.856	4.856	0.000	267219	91.7665	3.2	51.44- 91.44	42.35
			Average of Peak Concentrations =		3.1		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/081f8101.d

Page 1

Date : 30-NOV-2009 23:36

Client ID: RE03-10-6085

Instrument: ecd2a.i

Sample Info: |241318014|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

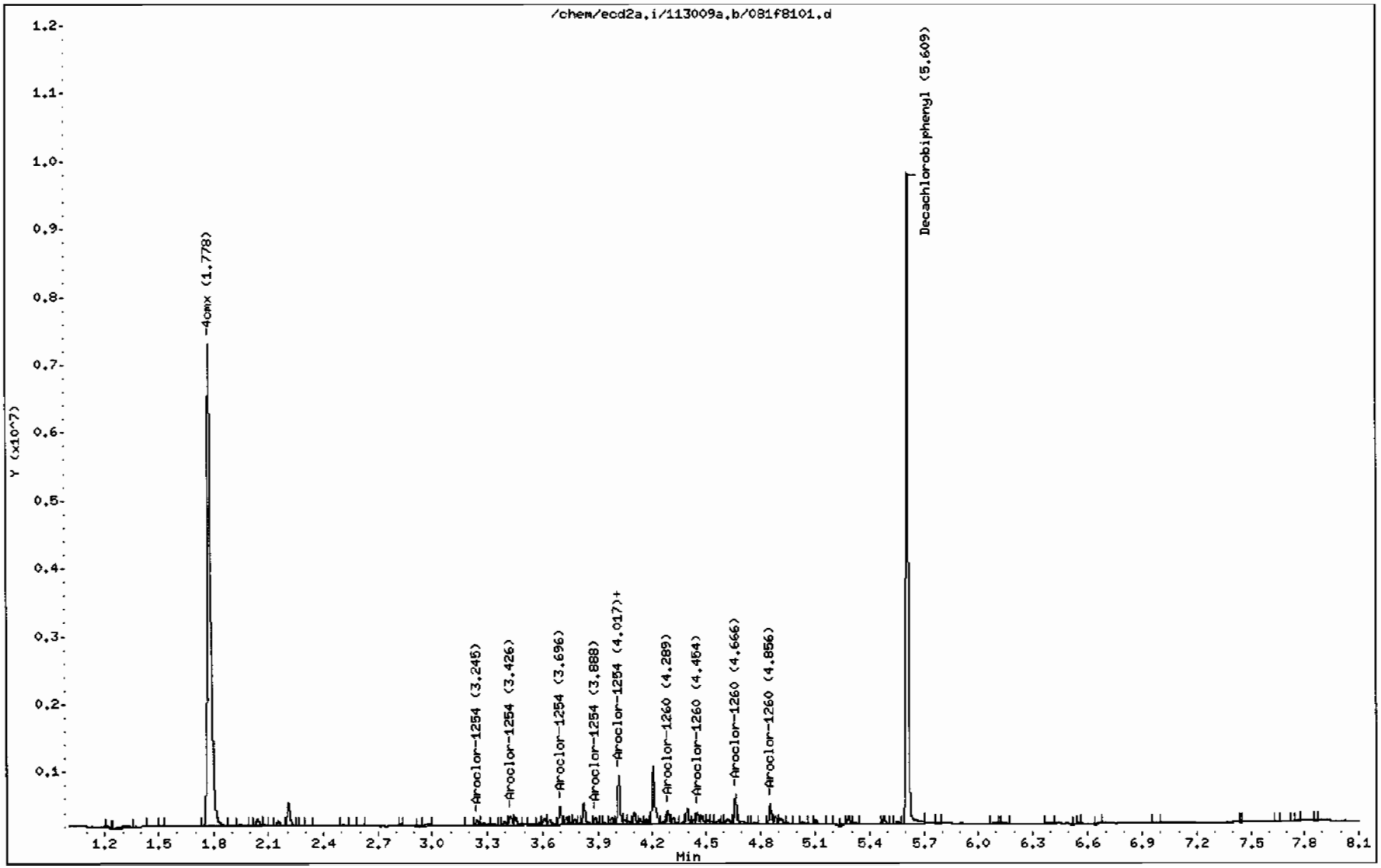

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/081b8101.d
Lab Smp Id: 241318014 Client Smp ID: RE03-10-6085
Inj Date : 30-NOV-2009 23:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241318014|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-10-6085|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	4.42560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	19383851	163.992	5.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	18339614	168.809	5.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.821	3.823	-0.002	165518	33.2013	1.2	80.00- 120.00	100.00(a)
3.963	3.964	-0.001	271048	46.7409	1.6	97.16- 137.16	163.76
4.199	4.201	-0.002	212046	52.7087	1.8	61.89- 101.89	128.11
4.281	4.282	-0.001	456705	59.0717	2.0	138.47- 178.47	275.92
4.444	4.445	-0.001	184593	32.9143	1.1	96.59- 136.59	111.52
			Average of Peak Concentrations ►		1.6		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	625632	113.490	4.0	80.00- 120.00	100.00
4.570	4.570	0.000	1086997	152.412	5.3	108.85- 148.85	173.74
4.681	4.682	-0.001	460597	97.3498	3.4	65.38- 105.38	73.62
4.879	4.880	-0.001	461491	79.5585	2.8	82.89- 122.89	73.76
5.505	5.505	0.000	643482	71.1764	2.5	145.10- 185.10	102.85
Average of Peak Concentrations =					3.6		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/081b8101.d

Date : 30-NOV-2009 23:36

Client ID: RE03-10-6085

Sample Info: |241318014|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

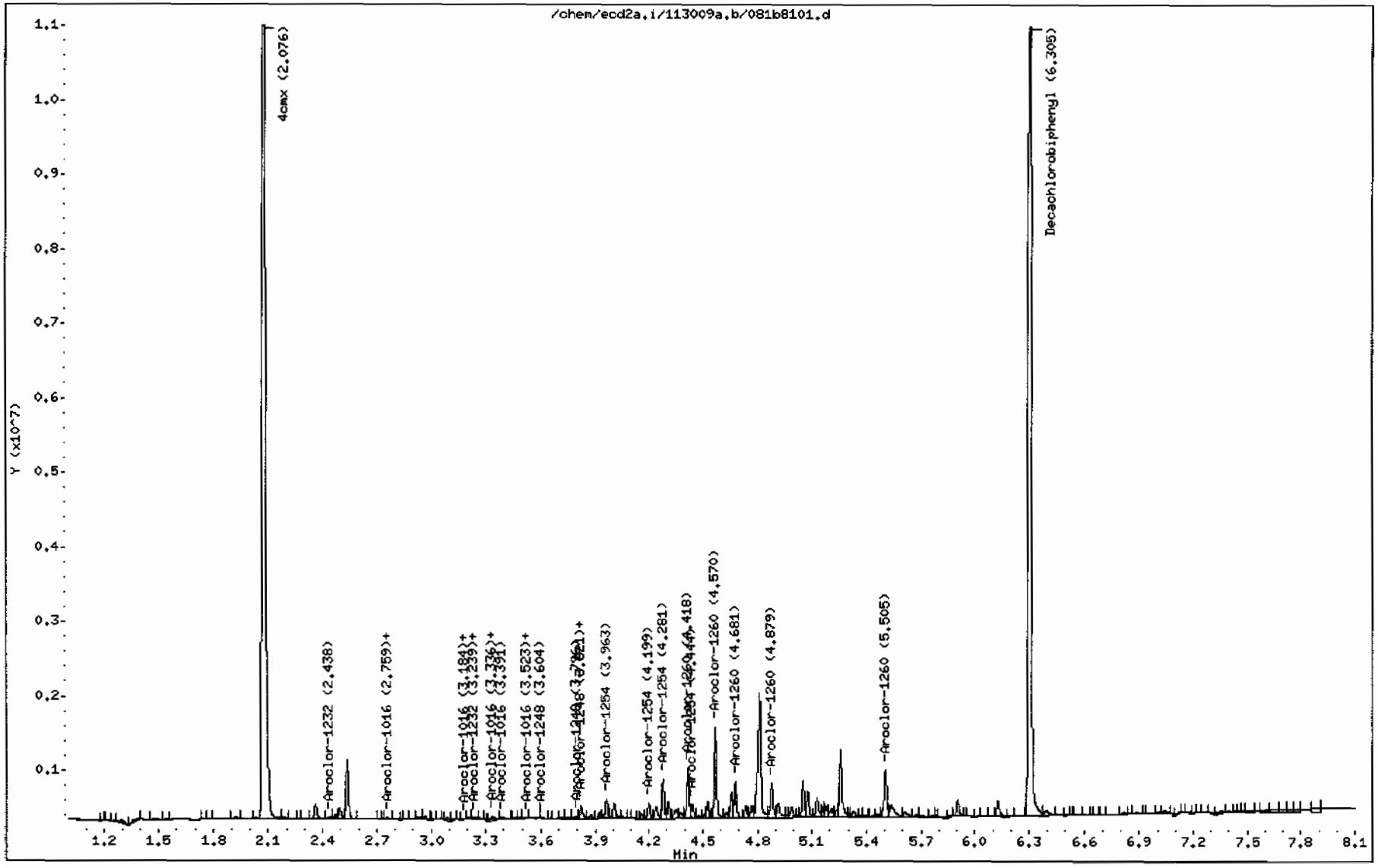

STANDARDS DATA

Report Date: 30-Nov-2009 14:29

Calibration History

Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008f0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 13:36	AR1660	/chem/ecd2a.i/113009a.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 12:02	AR1268	/chem/ecd2a.i/113009a.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:51	AR1262	/chem/ecd2a.i/113009a.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:40	AR1221	/chem/ecd2a.i/113009a.b/019f1901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:29	AR1248	/chem/ecd2a.i/113009a.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:18	AR1232	/chem/ecd2a.i/113009a.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:07	AR1248	/chem/ecd2a.i/113009a.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:01	AR1660	/chem/ecd2a.i/113009a.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:50	AR1242	/chem/ecd2a.i/113009a.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:38	AR1254	/chem/ecd2a.i/113009a.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 08:32	AR1660	/chem/ecd2a.i/113009a.b/002f0201.d

Report Date: 03-Dec-2009 08:04

Calibration History

Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008b0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000 |

01-DEC-2009 01:16	AR1660	/chem/ecd2a.i/113009a.b/090b9001.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 00:09	AR1660	/chem/ecd2a.i/113009a.b/084b8401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 21:55	AR1660	/chem/ecd2a.i/113009a.b/072b7201.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 19:42	AR1660	/chem/ecd2a.i/113009a.b/060b6001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 18:31	AR1660	/chem/ecd2a.i/113009a.b/054b5401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 16:51	AR1660	/chem/ecd2a.i/113009a.b/045b4501.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 15:12	AR1660	/chem/ecd2a.i/113009a.b/036b3601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 13:36	AR1660	/chem/ecd2a.i/113009a.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:38	AR1254	/chem/ecd2a.i/113009a.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 12:02	AR1268	/chem/ecd2a.i/113009a.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:51	AR1262	/chem/ecd2a.i/113009a.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:40	AR1221	/chem/ecd2a.i/113009a.b/019b1901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:29	AR1248	/chem/ecd2a.i/113009a.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:18	AR1232	/chem/ecd2a.i/113009a.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:07	AR1248	/chem/ecd2a.i/113009a.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:01	AR1660	/chem/ecd2a.i/113009a.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:50	AR1242	/chem/ecd2a.i/113009a.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		

30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 08:32	AR1660	/chem/ecd2a.i/113009a.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 13:52 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.281	2.251-2.311	2.100e+03
	2.603	2.573-2.633	4.505e+03
	2.694	2.664-2.724	1.820e+03
	2.829	2.799-2.859	9.329e+02
	2.980	2.950-3.010	1.378e+03
2 Aroclor-1221	1.445	1.415-1.475	4.641e+02
	1.905	1.875-1.935	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.033	2.003-2.063	1.165e+03
	2.281	2.251-2.311	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.736	2.706-2.766	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.979	2.949-3.009	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
		3.427	3.397-3.457	2.772e+03
		3.697	3.667-3.727	3.742e+03
		3.889	3.859-3.919	2.783e+03
		4.018	3.988-4.048	2.760e+03
	7 Aroclor-1260	4.018	3.988-4.048	4.067e+03
		4.290	4.260-4.320	2.528e+03
		4.455	4.425-4.485	2.583e+03
		4.667	4.637-4.697	6.036e+03
		4.856	4.826-4.886	2.912e+03
	8 Aroclor-1262	3.826	3.796-3.856	1.983e+03
		4.018	3.988-4.048	2.689e+03
		4.290	4.260-4.320	3.536e+03
		4.455	4.425-4.485	3.145e+03
		4.856	4.825-4.886	2.254e+03
	9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
		4.912	4.882-4.942	9.361e+03
		5.045	5.015-5.075	7.073e+03
		5.284	5.254-5.314	3.056e+03
		5.479	5.449-5.509	2.201e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.780	1.750-1.810	5.771e+04
$	12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
	13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
	14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
	15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 13:47 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.752	2.722-2.782	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.336	3.306-3.366	1.979e+03
	3.365	3.335-3.395	2.061e+03
	3.523	3.493-3.553	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.403	2.373-2.433	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.449	2.419-2.479	2.061e+03
	2.752	2.722-2.782	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.257	3.227-3.287	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.751	2.721-2.781	3.445e+03
	3.185	3.155-3.215	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.336	3.306-3.366	1.508e+03
	3.523	3.493-3.553	2.145e+03
5 Aroclor-1248	3.336	3.306-3.366	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.798	3.768-3.828	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.823	3.793-3.853	4.863e+03
		3.964	3.934-3.994	5.652e+03
		4.201	4.171-4.231	3.906e+03
		4.282	4.252-4.312	7.490e+03
		4.445	4.415-4.475	5.479e+03
	7 Aroclor-1260	4.419	4.389-4.449	5.513e+03
		4.570	4.540-4.600	7.132e+03
		4.682	4.652-4.712	4.731e+03
		4.880	4.850-4.910	5.801e+03
		5.505	5.475-5.535	9.041e+03
	8 Aroclor-1262	4.418	4.388-4.448	3.827e+03
		4.570	4.540-4.600	5.052e+03
		4.879	4.849-4.909	7.695e+03
		5.079	5.049-5.109	6.486e+03
		5.257	5.227-5.287	1.455e+04
	9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
		5.535	5.505-5.565	2.018e+04
		5.707	5.677-5.737	1.496e+04
		5.906	5.876-5.936	6.438e+03
		6.130	6.100-6.160	4.409e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.076	2.046-2.106	1.182e+05
$	12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
	13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
	14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
	15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Cal Date : 30-Nov-2009 13:52 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035f3501.d
Level 2: /chem/ecd2a.i/111209a.b/036f3601.d
Level 3: /chem/ecd2a.i/111209a.b/037f3701.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/111209a.b/039f3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Cal Date : 30-Nov-2009 13:52 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
	(2)	2598	2539	2501	2535	2469	2528	1.903
	(3)	2625	2577	2548	2609	2557	2583	1.287
	(4)	5914	5894	5999	6196	6179	6036	2.381
	(5)	2944	2846	2851	2940	2978	2912	2.044
	8 Aroclor-1262(1)	+++++	+++++	+++++	1983	+++++	1983	0.000
	(2)	+++++	+++++	+++++	2689	+++++	2689	0.000
	(3)	+++++	+++++	+++++	3536	+++++	3536	0.000
	(4)	+++++	+++++	+++++	3145	+++++	3145	0.000
	(5)	+++++	+++++	+++++	2254	+++++	2254	0.000
	9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
	(2)	9332	9272	9238	9197	9765	9361	2.470
	(3)	6985	6923	6953	6984	7523	7073	3.568
	(4)	3112	3015	2984	2964	3207	3056	3.331
	(5)	21397	21592	21760	21851	23464	22013	3.767
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
	14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
	15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$	11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$	12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Cal Date : 30-Nov-2009 16:02 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035b3501.d
Level 2: /chem/ecd2a.i/111209a.b/036b3601.d
Level 3: /chem/ecd2a.i/111209a.b/037b3701.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/111209a.b/039b3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Cal Date : 30-Nov-2009 16:02 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
	(2)	6898	6848	7135	7508	7271	7132	3.815
	(3)	4626	4556	4689	4954	4832	4731	3.396
	(4)	5662	5630	5786	6052	5873	5801	2.951
	(5)	8536	8630	8927	9561	9550	9041	5.437
	8 Aroclor-1262(1)	+++++	+++++	+++++	3827	+++++	3827	0.000
	(2)	+++++	+++++	+++++	5052	+++++	5052	0.000
	(3)	+++++	+++++	+++++	7695	+++++	7695	0.000
	(4)	+++++	+++++	+++++	6486	+++++	6486	0.000
	(5)	+++++	+++++	+++++	14548	+++++	14548	0.000
	9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
	(2)	18822	19343	20333	20389	22025	20182	6.077
	(3)	13874	14365	14864	15141	16565	14962	6.808
	(4)	5734	6115	6404	6840	7097	6438	8.497
	(5)	40707	42777	43856	44408	48724	44094	6.689
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
	14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
	15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$	11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$	12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 0938

Lab File ID: 008F0801 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1989.434	0.01	-4.4	15.0
(2)	2772.138	2699.271	0.01	-2.6	15.0
(3)	3742.400	3702.763	0.01	-1.0	15.0
(4)	2782.705	2732.349	0.01	-1.8	15.0
(5)	2760.043	2677.493	0.01	-3.0	15.0
4cmx	57711.247	66194.820	0.01	14.7	15.0
Decachlorobiphenyl	54829.246	56393.900	0.01	2.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 0938

Lab File ID: 008B0801 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4974.047	0.01	-0.2	15.0	
(2)	5798.946	5827.527	0.01	0.5	15.0	
(3)	4022.990	4073.257	0.01	1.2	15.0	
(4)	7731.372	7882.366	0.01	2.0	15.0	
(5)	5608.308	5799.096	0.01	3.4	15.0	
4cmx	118199.83	140299.55	0.01	18.7	15.0	<-
Decachlorobiphenyl	108641.52	117729.78	0.01	8.4	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1001

Lab File ID: 010F1001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1978.468	0.01	-5.8	15.0
(2)	4504.513	4261.729	0.01	-5.4	15.0
(3)	1820.211	1682.401	0.01	-7.6	15.0
(4)	932.883	838.621	0.01	-10.1	15.0
(5)	1378.125	1291.604	0.01	-6.3	15.0
Aroclor-1260	4066.794	4068.904	0.01	0.0	15.0
(2)	2528.317	2483.392	0.01	-1.8	15.0
(3)	2583.202	2543.166	0.01	-1.5	15.0
(4)	6036.106	6041.869	0.01	0.1	15.0
(5)	2911.947	2868.024	0.01	-1.5	15.0
4cmx	57711.247	61965.910	0.01	7.4	15.0
Decachlorobiphenyl	54829.246	50777.650	0.01	-7.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1001

Lab File ID: 010B1001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4173.489	0.01	-2.0	15.0
(2)	3444.681	3357.058	0.01	-2.5	15.0
(3)	1979.487	1945.702	0.01	-1.7	15.0
(4)	2061.253	2043.240	0.01	-0.9	15.0
(5)	2754.170	2757.838	0.01	0.1	15.0
Aroclor-1260	5512.644	5766.118	0.01	4.6	15.0
(2)	7131.968	7438.440	0.01	4.3	15.0
(3)	4731.365	4933.515	0.01	4.3	15.0
(4)	5800.657	5948.704	0.01	2.6	15.0
(5)	9040.681	9441.654	0.01	4.4	15.0
4cmx	118199.83	131769.63	0.01	11.5	15.0
Decachlorobiphenyl	108641.52	106858.72	0.01	-1.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1942

Lab File ID: 060F6001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1933.010	0.01	-7.9	15.0
(2)	4504.513	4217.365	0.01	-6.4	15.0
(3)	1820.211	1668.882	0.01	-8.3	15.0
(4)	932.883	842.674	0.01	-9.7	15.0
(5)	1378.125	1280.903	0.01	-7.0	15.0
Aroclor-1260	4066.794	4041.106	0.01	-0.6	15.0
(2)	2528.317	2494.289	0.01	-1.3	15.0
(3)	2583.202	2559.863	0.01	-0.9	15.0
(4)	6036.106	6076.875	0.01	0.7	15.0
(5)	2911.947	2890.332	0.01	-0.7	15.0
4cmx	57711.247	60978.950	0.01	5.7	15.0
Decachlorobiphenyl	54829.246	53638.350	0.01	-2.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1942

Lab File ID: 060B6001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4147.516	0.01	-2.6	15.0
(2)	3444.681	3338.194	0.01	-3.1	15.0
(3)	1979.487	1931.223	0.01	-2.4	15.0
(4)	2061.253	2026.640	0.01	-1.7	15.0
(5)	2754.170	2736.734	0.01	-0.6	15.0
Aroclor-1260	5512.644	5707.094	0.01	3.5	15.0
(2)	7131.968	7325.451	0.01	2.7	15.0
(3)	4731.365	4866.123	0.01	2.8	15.0
(4)	5800.657	5882.184	0.01	1.4	15.0
(5)	9040.681	9343.503	0.01	3.3	15.0
4cmx	118199.83	130229.09	0.01	10.2	15.0
Decachlorobiphenyl	108641.52	109824.65	0.01	1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 2155

Lab File ID: 072F7201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1930.672	0.01	-8.0	15.0
(2)	4504.513	4222.979	0.01	-6.2	15.0
(3)	1820.211	1665.504	0.01	-8.5	15.0
(4)	932.883	831.367	0.01	-10.9	15.0
(5)	1378.125	1279.233	0.01	-7.2	15.0
Aroclor-1260	4066.794	4070.896	0.01	0.1	15.0
(2)	2528.317	2513.820	0.01	-0.6	15.0
(3)	2583.202	2576.179	0.01	-0.3	15.0
(4)	6036.106	6093.310	0.01	0.9	15.0
(5)	2911.947	2912.572	0.01	0.0	15.0
4cmx	57711.247	60799.280	0.01	5.4	15.0
Decachlorobiphenyl	54829.246	52497.030	0.01	-4.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 2155

Lab File ID: 072B7201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4110.584	0.01	-3.5	15.0
(2)	3444.681	3321.649	0.01	-3.6	15.0
(3)	1979.487	1920.571	0.01	-3.0	15.0
(4)	2061.253	1996.450	0.01	-3.1	15.0
(5)	2754.170	2724.972	0.01	-1.1	15.0
Aroclor-1260	5512.644	5674.547	0.01	2.9	15.0
(2)	7131.968	7298.534	0.01	2.3	15.0
(3)	4731.365	4828.748	0.01	2.0	15.0
(4)	5800.657	5817.967	0.01	0.3	15.0
(5)	9040.681	9235.477	0.01	2.2	15.0
4cmx	118199.83	129374.12	0.01	9.4	15.0
Decachlorobiphenyl	108641.52	108070.87	0.01	-0.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0009

Lab File ID: 084F8401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1952.367	0.01	-7.0	15.0
(2)	4504.513	4266.269	0.01	-5.3	15.0
(3)	1820.211	1683.812	0.01	-7.5	15.0
(4)	932.883	836.486	0.01	-10.3	15.0
(5)	1378.125	1291.869	0.01	-6.2	15.0
Aroclor-1260	4066.794	4074.980	0.01	0.2	15.0
(2)	2528.317	2503.389	0.01	-1.0	15.0
(3)	2583.202	2559.185	0.01	-0.9	15.0
(4)	6036.106	6100.779	0.01	1.1	15.0
(5)	2911.947	2920.454	0.01	0.3	15.0
4cmx	57711.247	61356.690	0.01	6.3	15.0
Decachlorobiphenyl	54829.246	52557.370	0.01	-4.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0009

Lab File ID: 084B8401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4158.775	0.01	-2.3	15.0
(2)	3444.681	3350.373	0.01	-2.7	15.0
(3)	1979.487	1931.547	0.01	-2.4	15.0
(4)	2061.253	2010.024	0.01	-2.5	15.0
(5)	2754.170	2746.844	0.01	-0.3	15.0
Aroclor-1260	5512.644	5760.526	0.01	4.5	15.0
(2)	7131.968	7410.662	0.01	3.9	15.0
(3)	4731.365	4897.495	0.01	3.5	15.0
(4)	5800.657	5899.028	0.01	1.7	15.0
(5)	9040.681	9366.909	0.01	3.6	15.0
4cmx	118199.83	130933.89	0.01	10.8	15.0
Decachlorobiphenyl	108641.52	108655.55	0.01	0.0	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/008f0801.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 30-NOV-2009 09:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	6619482	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5639390	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1989434	1000.00	956	80.00- 120.00	100.00
3.427	3.427	0.000	2699270	1000.00	974	115.68- 155.68	135.68
3.697	3.697	0.000	3702762	1000.00	989	166.12- 206.12	186.12
3.889	3.889	0.000	2732348	1000.00	982	117.34- 157.34	137.34
4.018	4.018	0.000	2677492	1000.00	970	114.59- 154.59	134.59
		Average of Peak Amounts =			974		

Data File: /chem/ecd2a.i/113009a.b/008f0801.d

Date : 30-NOV-2009 09:38

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

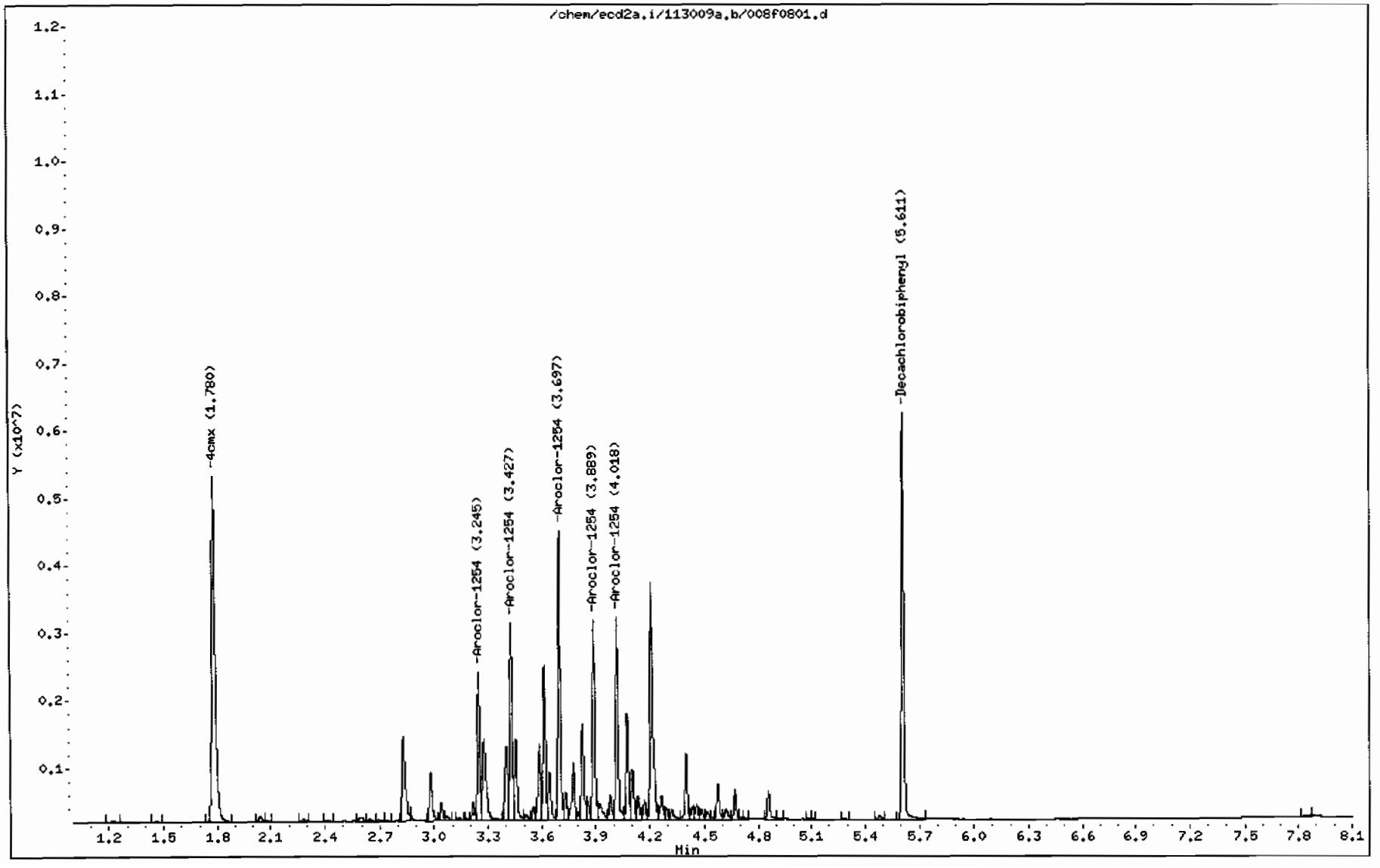

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/008b0801.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 30-NOV-2009 09:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 16:02 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	14029955	100.000	119	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11772978	100.000	108	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	4974047	1000.00	998	80.00- 120.00	100.00
3.964	3.964	0.000	5827527	1000.00	1000	97.16- 137.16	117.16
4.201	4.201	0.000	4073257	1000.00	1010	61.89- 101.89	81.89
4.282	4.282	0.000	7882366	1000.00	1020	138.47- 178.47	158.47
4.445	4.445	0.000	5799096	1000.00	1030	96.59- 136.59	116.59

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/113009a.b/008b0801.d

Date : 30-NOV-2009 09:38

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP2

Page 1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

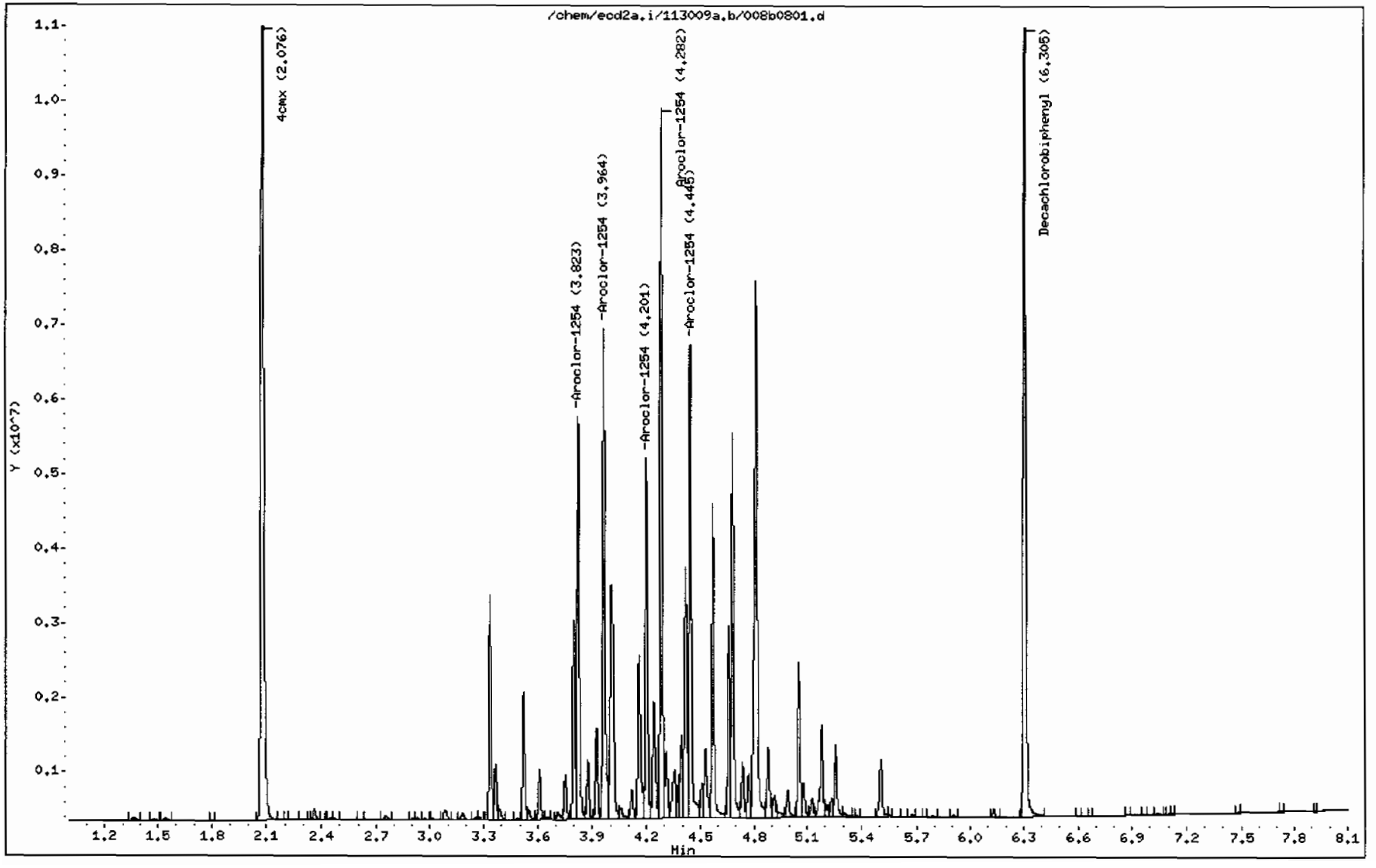

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/009f0901.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 30-NOV-2009 09:50
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6570476	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5634570	100.000	103	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1755483	1000.00	1010	80.00- 120.00	100.00(M)
2.693	2.693	0.000	1468918	1000.00	990	63.68- 103.68	83.68
2.736	2.736	0.000	908042	1000.00	1000	31.73- 71.73	51.73
2.828	2.828	0.000	700038	1000.00	963	19.88- 59.88	39.88
2.979	2.979	0.000	1112656	1000.00	994	43.38- 83.38	63.38
Average of Peak Amounts =					992		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/009f0901.d

Date : 30-NOV-2009 09:50

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

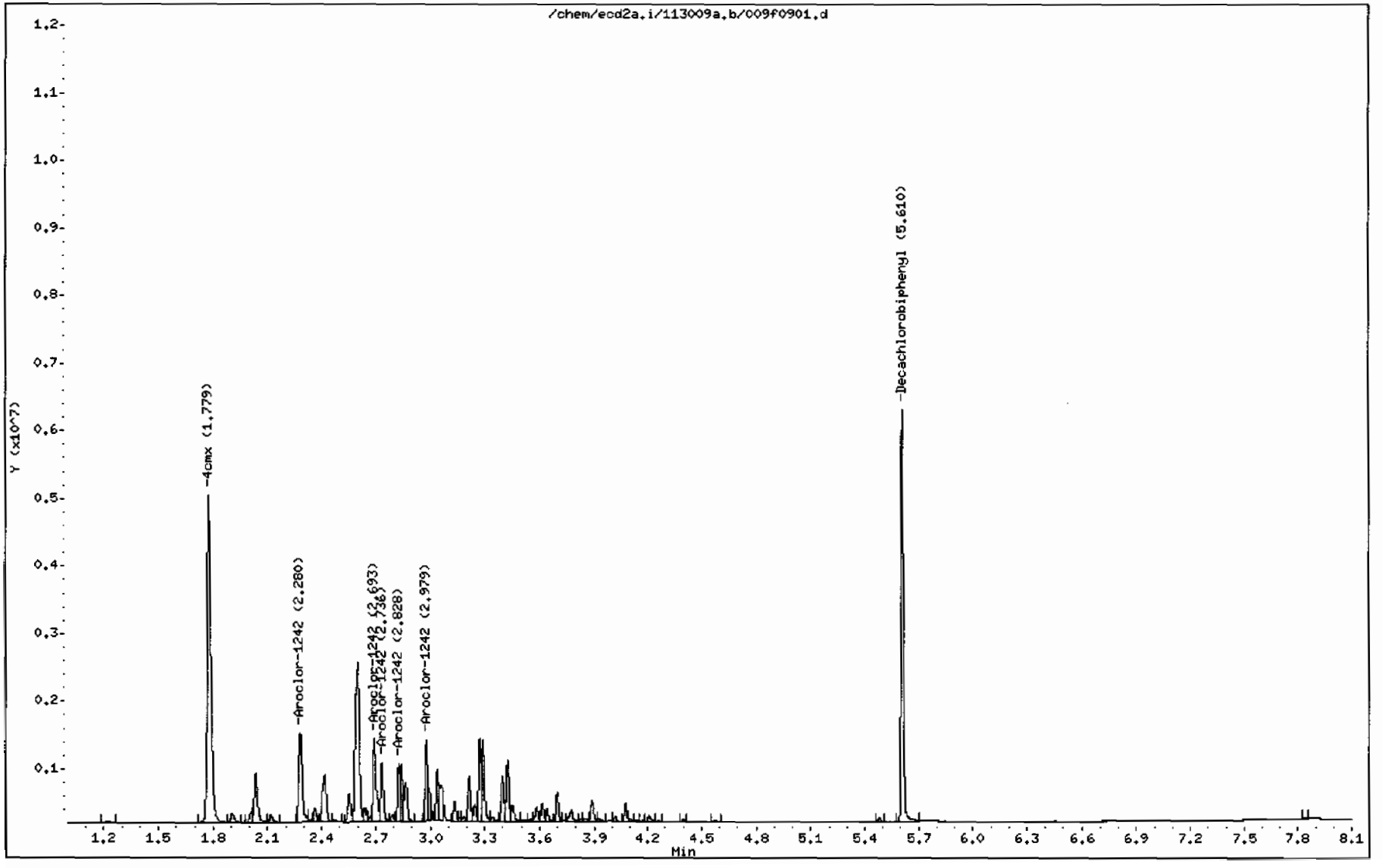

Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/009f0901.d
Operator: JAOC
Injection Date: 30-NOV-2009 09:50
Instrument: ecd2a.i
Client Sample ID: AR124201

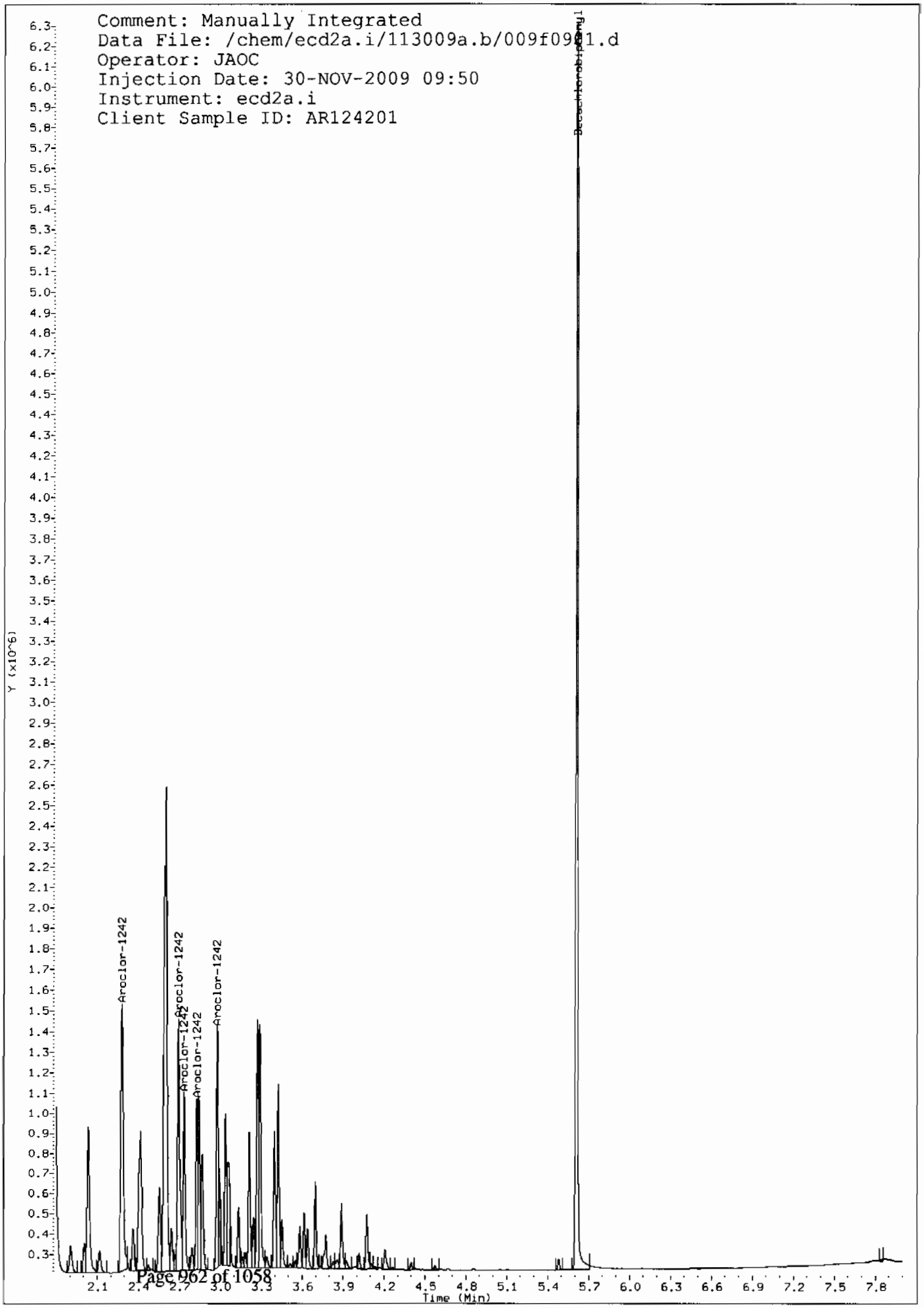

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-0019f0901.d
Operator: JAOC
Injection Date: 30-NOV-2009 09:50
Instrument: ecd2a.i
Client Sample ID: AR124201

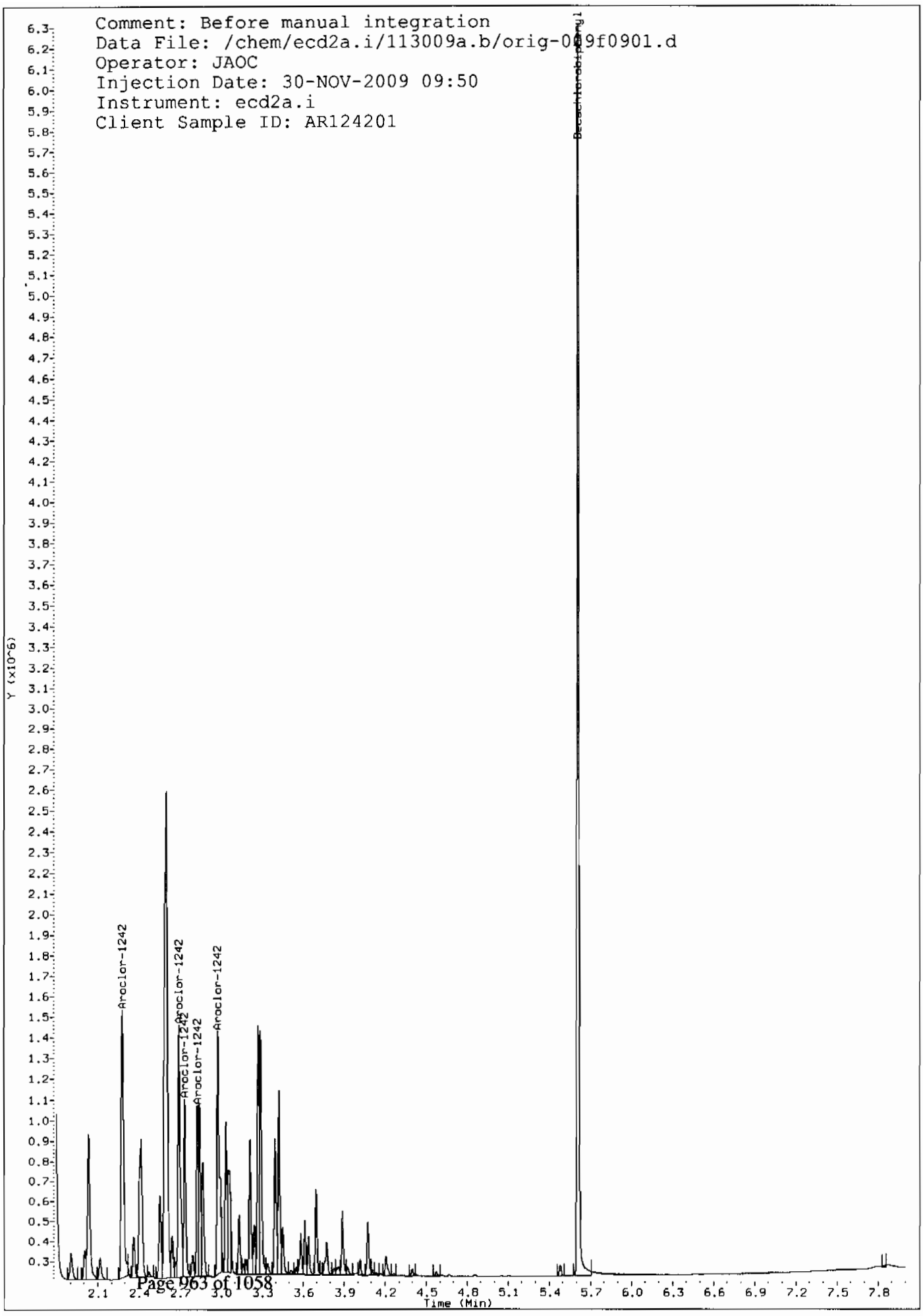

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/009b0901.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 30-NOV-2009 09:50
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 15:49 Cal File: 032b3201.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	13959492	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11817209	100.000	109	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.751	2.751	0.000	3684803	1000.00	1070	80.00- 120.00	100.00
3.185	3.185	0.000	2896136	1000.00	1080	58.60- 98.60	78.60
3.257	3.257	0.000	1750227	1000.00	1070	27.50- 67.50	47.50
3.336	3.336	0.000	1638839	1000.00	1090	24.48- 64.48	44.48
3.523	3.523	0.000	2366567	1000.00	1100	44.23- 84.23	64.23

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd2a.i/113009a.b/009b0901.d

Date : 30-NOV-2009 09:50

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

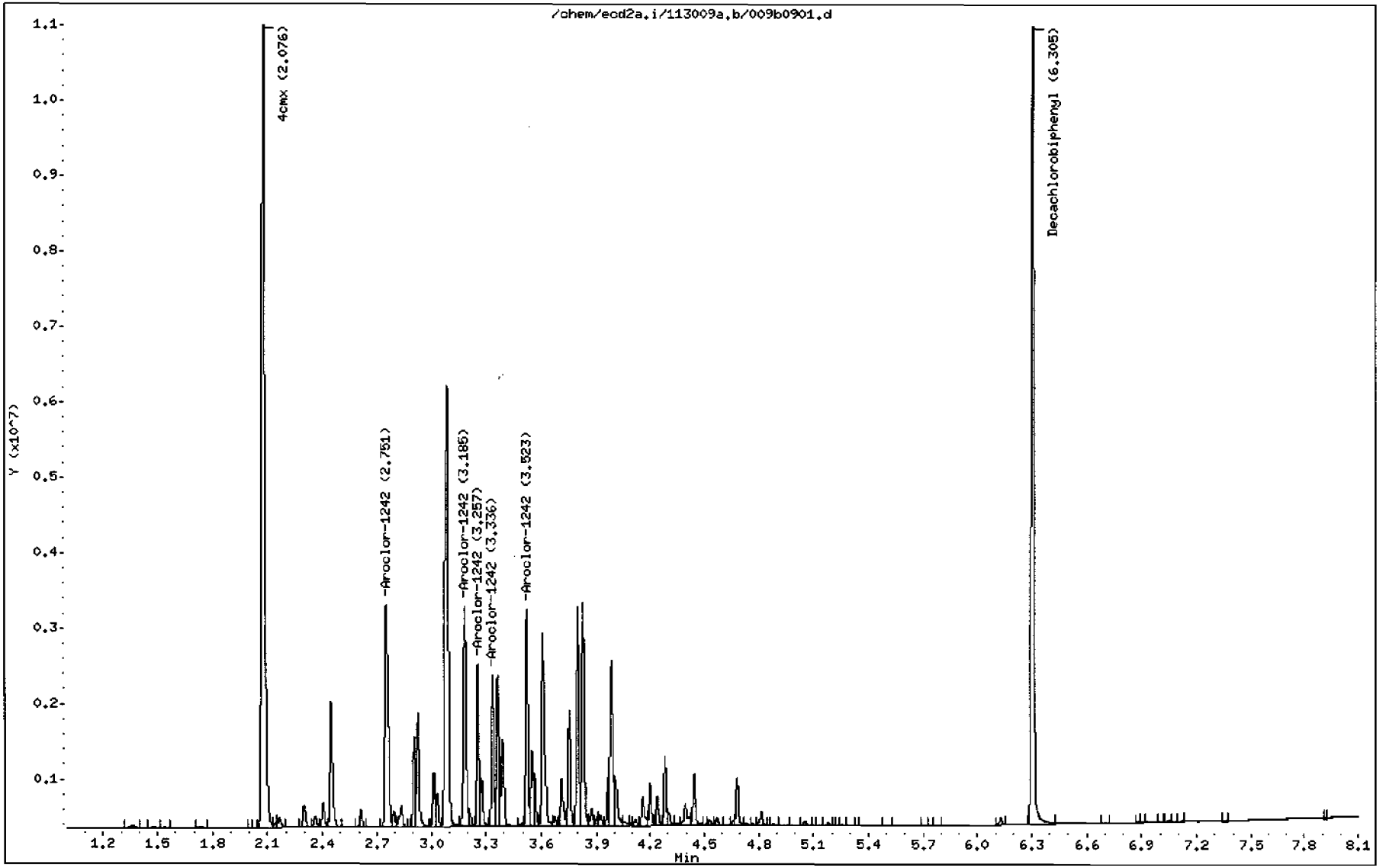

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/010f1001.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 30-NOV-2009 10:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	6196591	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5077765	100.000	92.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.281	0.000	1978468	1000.00	942	80.00- 120.00	100.00(M)
2.603	2.603	0.000	4261729	1000.00	946	200.70- 240.70	215.41
2.694	2.694	0.000	1682401	1000.00	924	66.33- 106.33	85.04
2.829	2.829	0.000	838621	1000.00	899	23.94- 63.94	42.39
2.980	2.980	0.000	1291604	1000.00	937	46.48- 86.48	65.28
Average of Peak Amounts =					930		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4068904	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2483392	1000.00	982	41.40- 81.40	61.03
4.455	4.455	0.000	2543166	1000.00	984	42.98- 82.98	62.50
4.667	4.667	0.000	6041869	1000.00	1000	129.48- 169.48	148.49
4.856	4.856	0.000	2868024	1000.00	985	51.53- 91.53	70.49
Average of Peak Amounts =					991		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/010f1001.d
Date : 30-NOV-2009 10:01
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

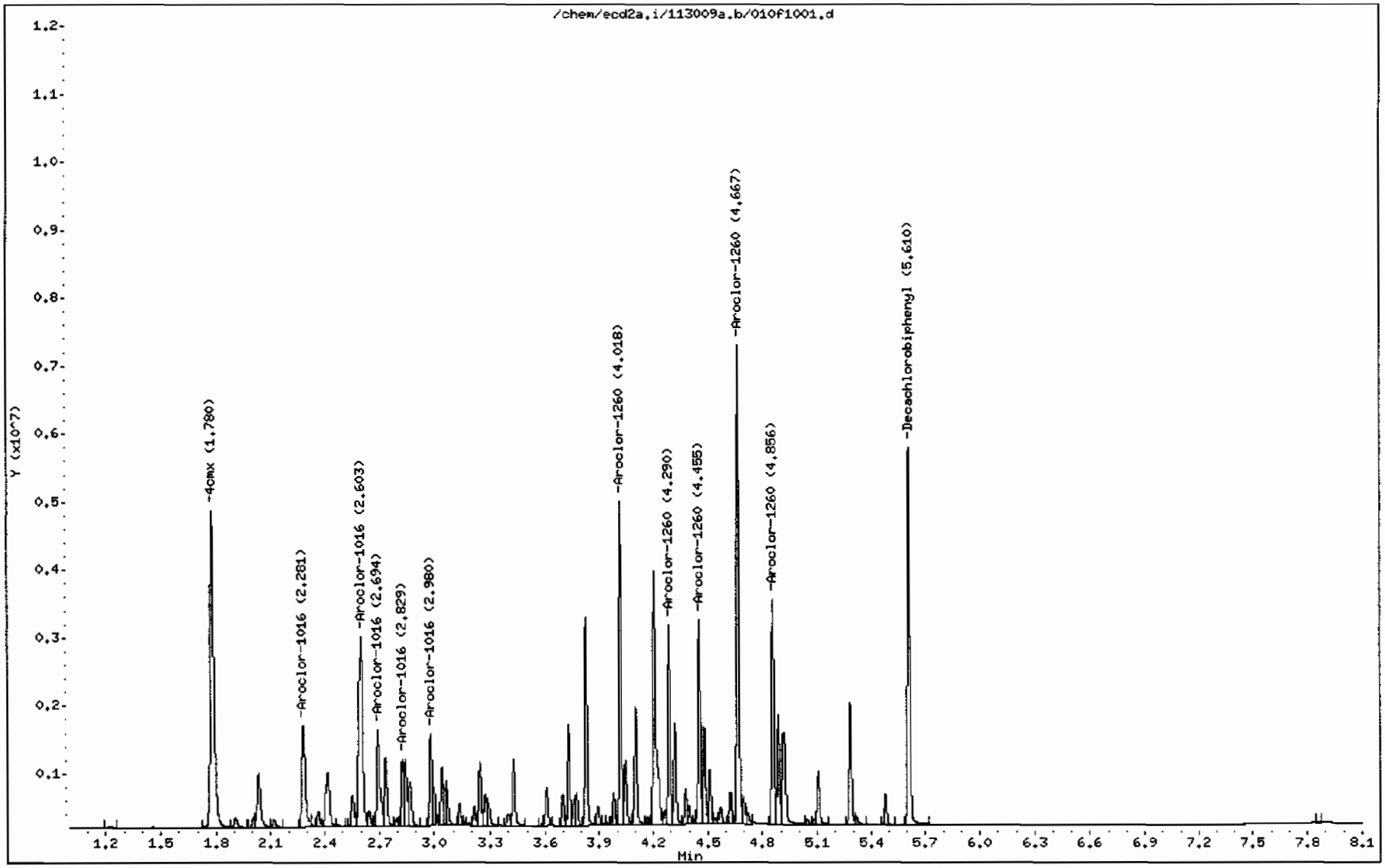

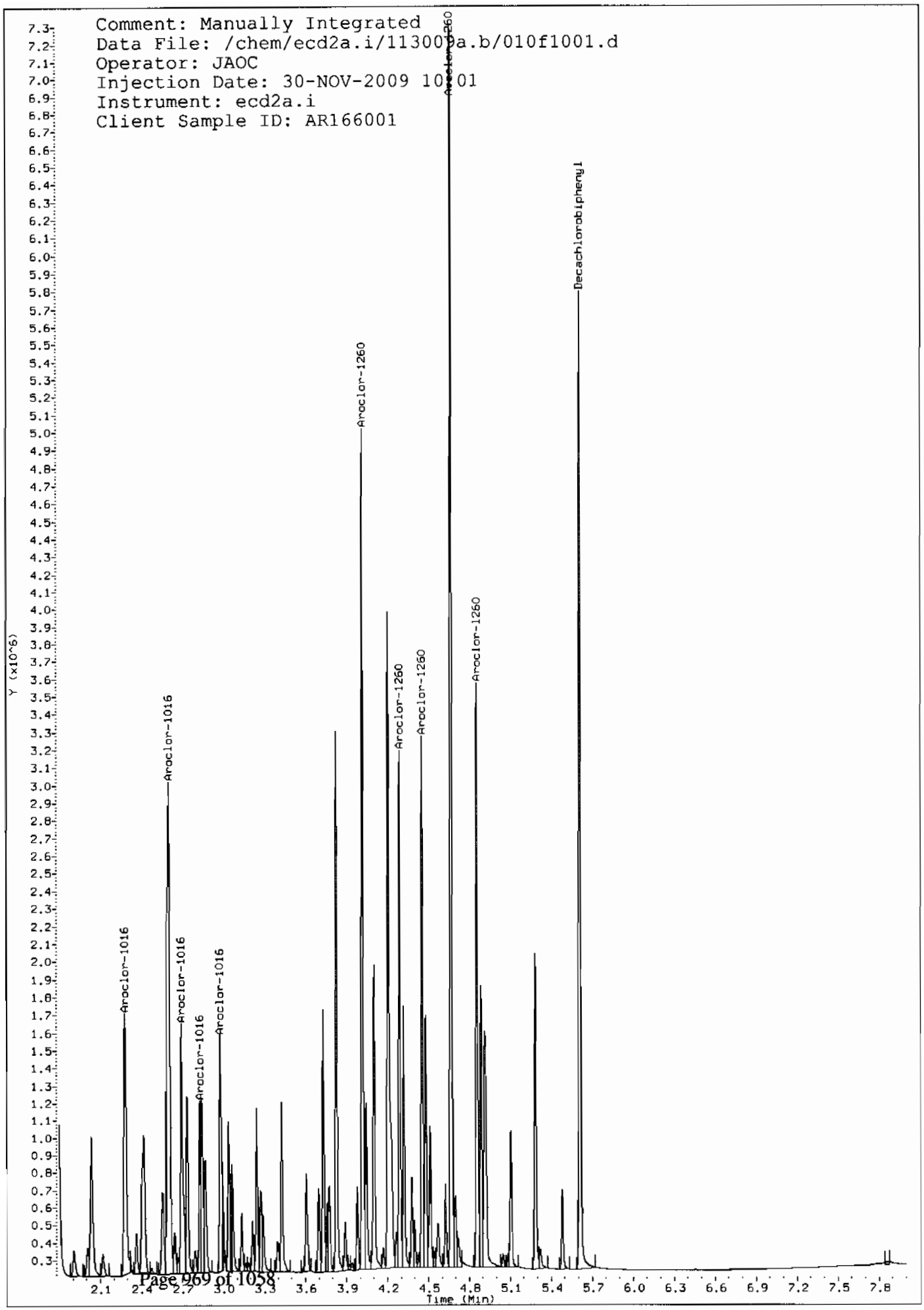
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/010f1001.d
Operator: JAOC
Injection Date: 30-NOV-2009 10:01
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

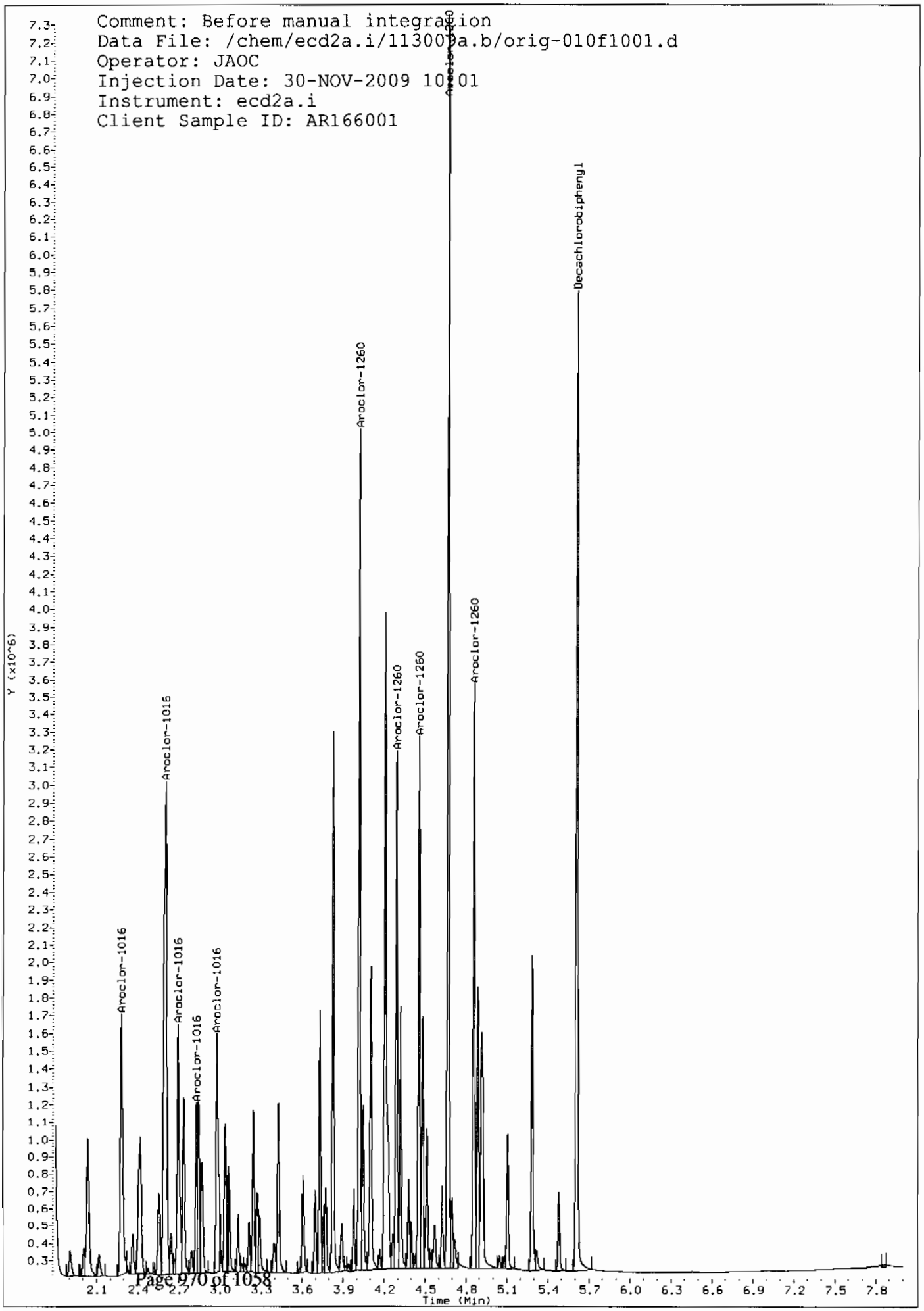
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-010f1001.d
Operator: JAOC
Injection Date: 30-NOV-2009 10:01
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
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Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/010b1001.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 30-NOV-2009 10:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 15:49 Cal File: 032b3201.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	13176963	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10685872	100.000	98.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	4173488	1000.00	980	80.00- 120.00	100.00
3.185	3.185	0.000	3357057	1000.00	974	60.34- 100.34	80.44
3.336	3.336	0.000	1945702	1000.00	983	26.76- 66.76	46.62
3.365	3.365	0.000	2043240	1000.00	991	28.59- 68.59	48.96
3.523	3.523	0.000	2757838	1000.00	1000	45.90- 85.90	66.08
Average of Peak Amounts =					986		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5766117	1000.00	1040	80.00- 120.00	100.00
4.570	4.570	0.000	7438440	1000.00	1040	109.55- 149.55	129.00
4.682	4.682	0.000	4933514	1000.00	1040	66.53- 106.53	85.56
4.880	4.880	0.000	5948703	1000.00	1020	83.52- 123.52	103.17
5.505	5.505	0.000	9441654	1000.00	1040	145.03- 185.03	163.74
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/113009a.b/010b1001.d
Date : 30-NOV-2009 10:01
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

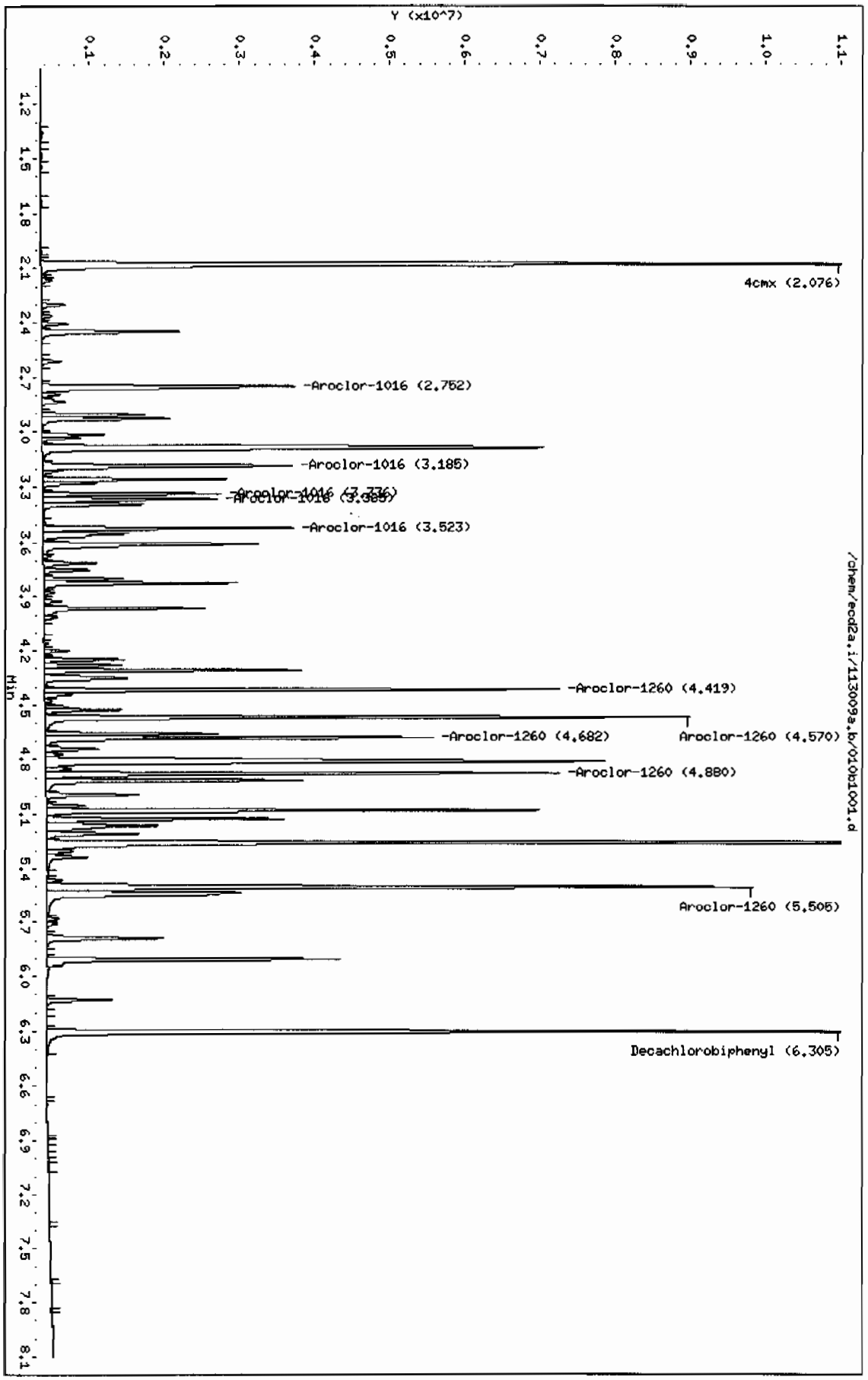

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/017f1701.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 30-NOV-2009 11:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	8531635	100.000	148	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7379390	100.000	134	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.033	2.033	0.000	1313610	1000.00	1130	80.00- 120.00	100.00
2.281	2.281	0.000	1065304	1000.00	1140	61.10- 101.10	81.10
2.694	2.694	0.000	914957	1000.00	1140	49.65- 89.65	69.65
2.736	2.736	0.000	586250	1000.00	1150	24.63- 64.63	44.63
2.979	2.979	0.000	850224	1000.00	1460	44.72- 84.72	64.72

Average of Peak Amounts = 1.2e+03

Data File: /chem/ecd2a.i/113009a.b/017f1701.d

Date : 30-NOV-2009 11:18

Client ID: AR123201

Sample Info: !WAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

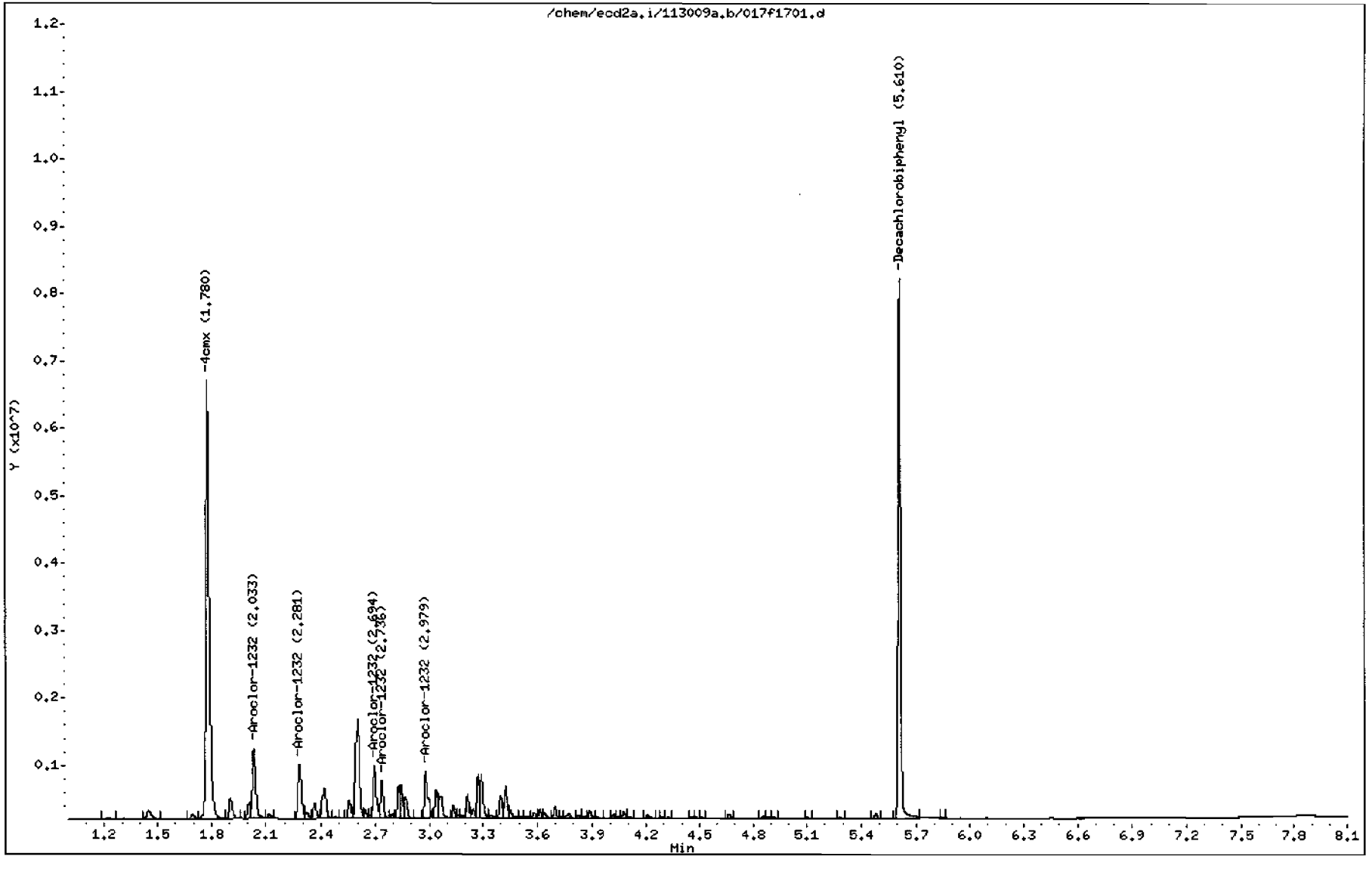

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/017b1701.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 30-NOV-2009 11:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	18108908	100.000	153	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15551881	100.000	143	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.449	2.449	0.000	2396862	1000.00	1160	80.00- 120.00	100.00
2.752	2.752	0.000	2305145	1000.00	1180	76.17- 116.17	96.17
3.185	3.185	0.000	1903054	1000.00	1270	59.40- 99.40	79.40
3.257	3.257	0.000	1112987	1000.00	1200	26.44- 66.44	46.44
3.523	3.523	0.000	1384932	1000.00	1250	37.78- 77.78	57.78

Average of Peak Amounts = 1.21e+03

Data File: /chem/ecd2a.i/113009a.b/017b1701.d

Date : 30-NOV-2009 11:18

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

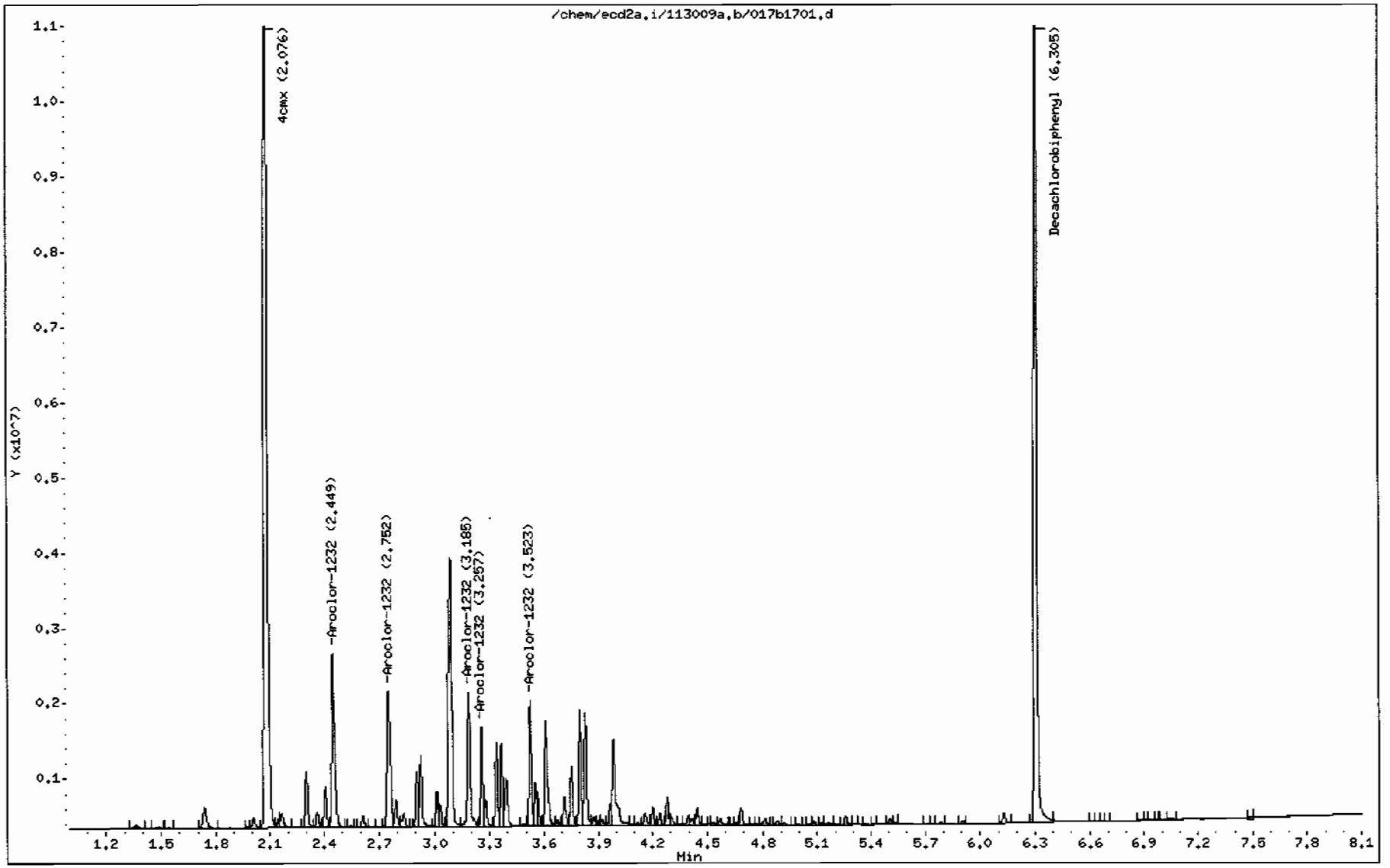

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/018f1801.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 30-NOV-2009 11:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.780	-0.002	7109031	100.000	123	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6272632	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.827	2.827	0.000	1446897	1000.00	948	80.00- 120.00	100.00(M)
2.979	2.979	0.000	1934737	1000.00	954	113.72- 153.72	133.72
3.038	3.038	0.000	1530041	1000.00	974	85.75- 125.75	105.75
3.272	3.272	0.000	2181149	1000.00	983	130.75- 170.75	150.75
3.425	3.425	0.000	1839367	1000.00	962	107.12- 147.12	127.12
Average of Peak Amounts =					964		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/018f1801.d

Date : 30-NOV-2009 11:29

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

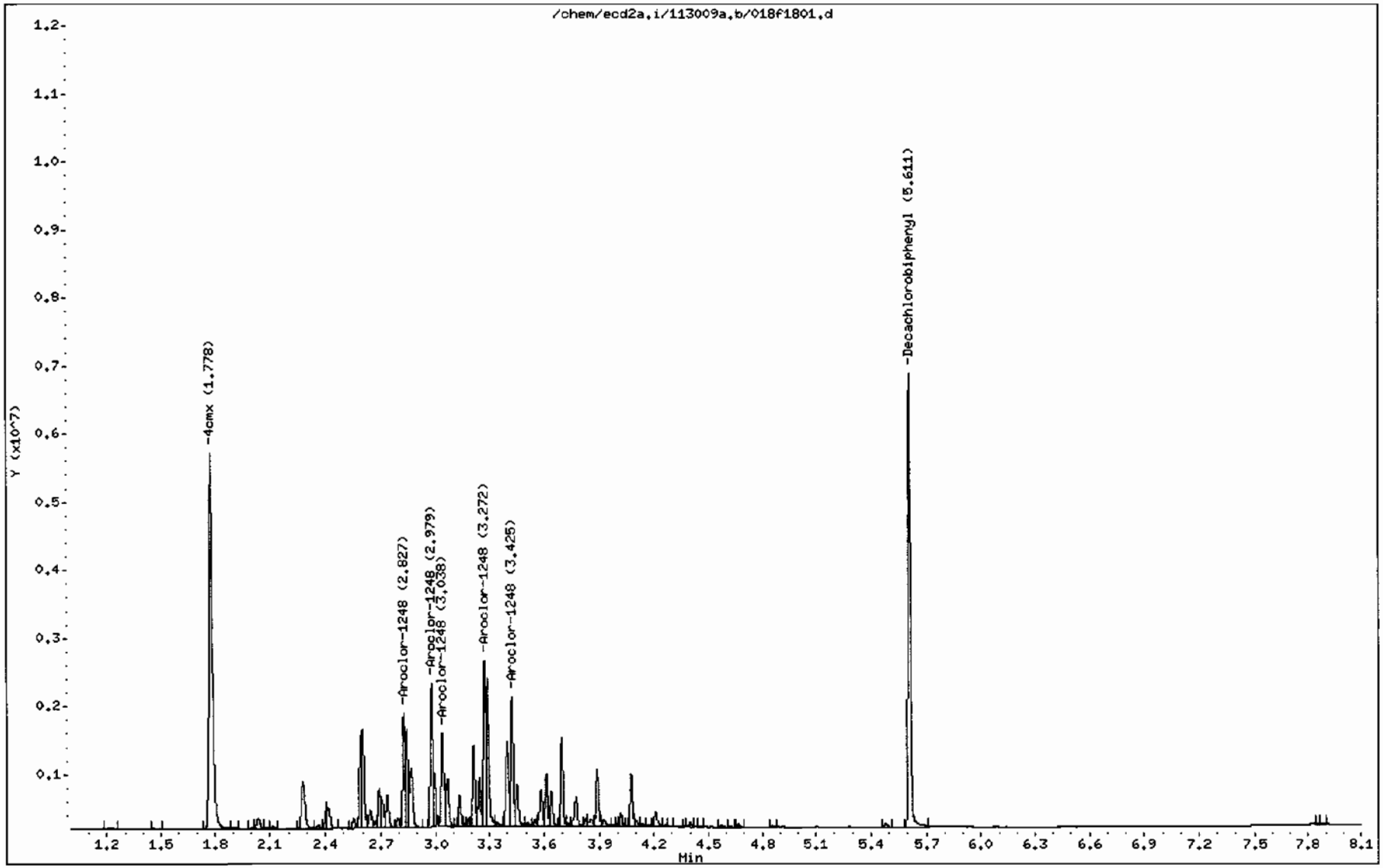

Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/018f1801.d
Operator: JAOC
Injection Date: 30-NOV-2009 11:29
Instrument: ecd2a.i
Client Sample ID: AR124801

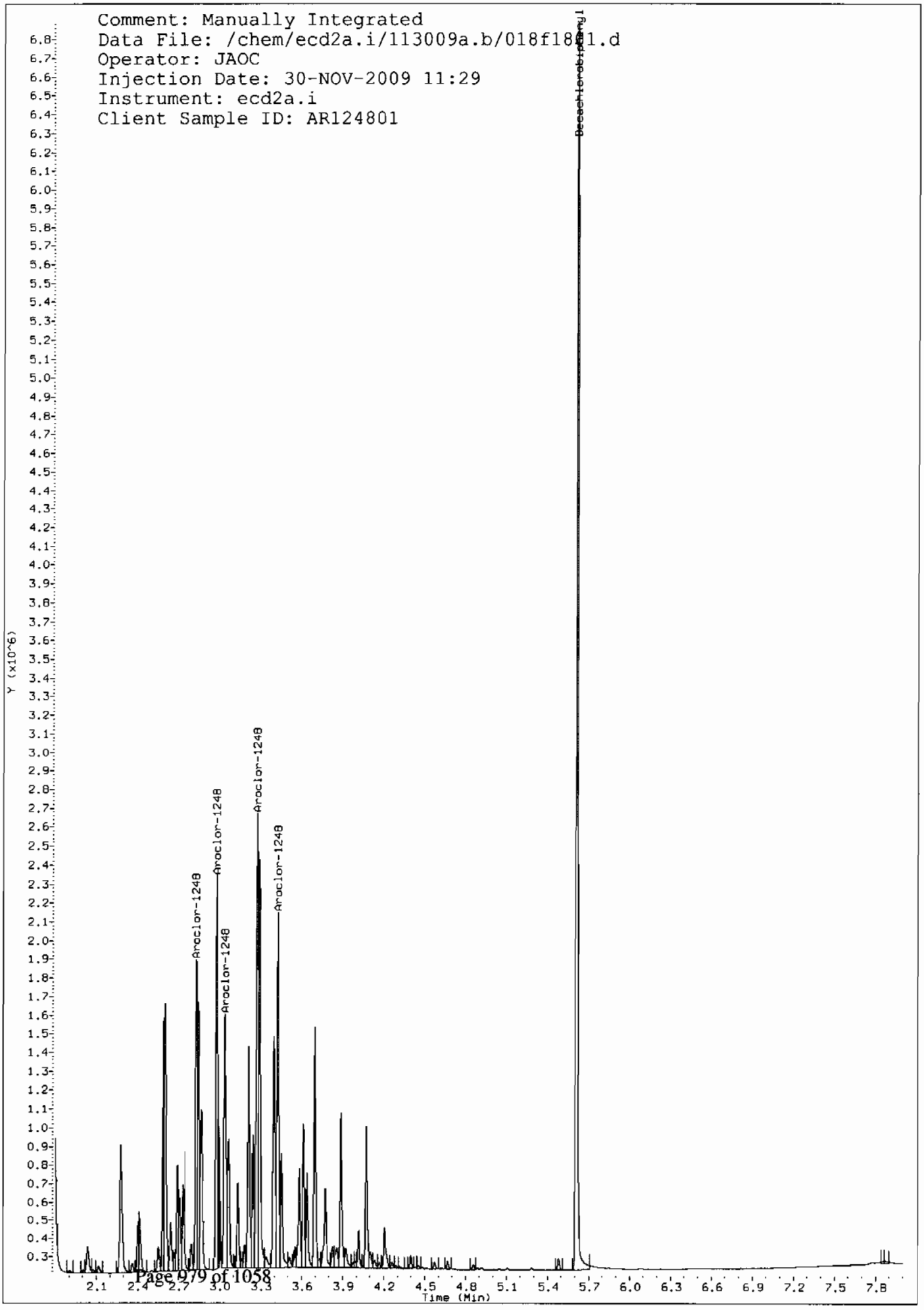

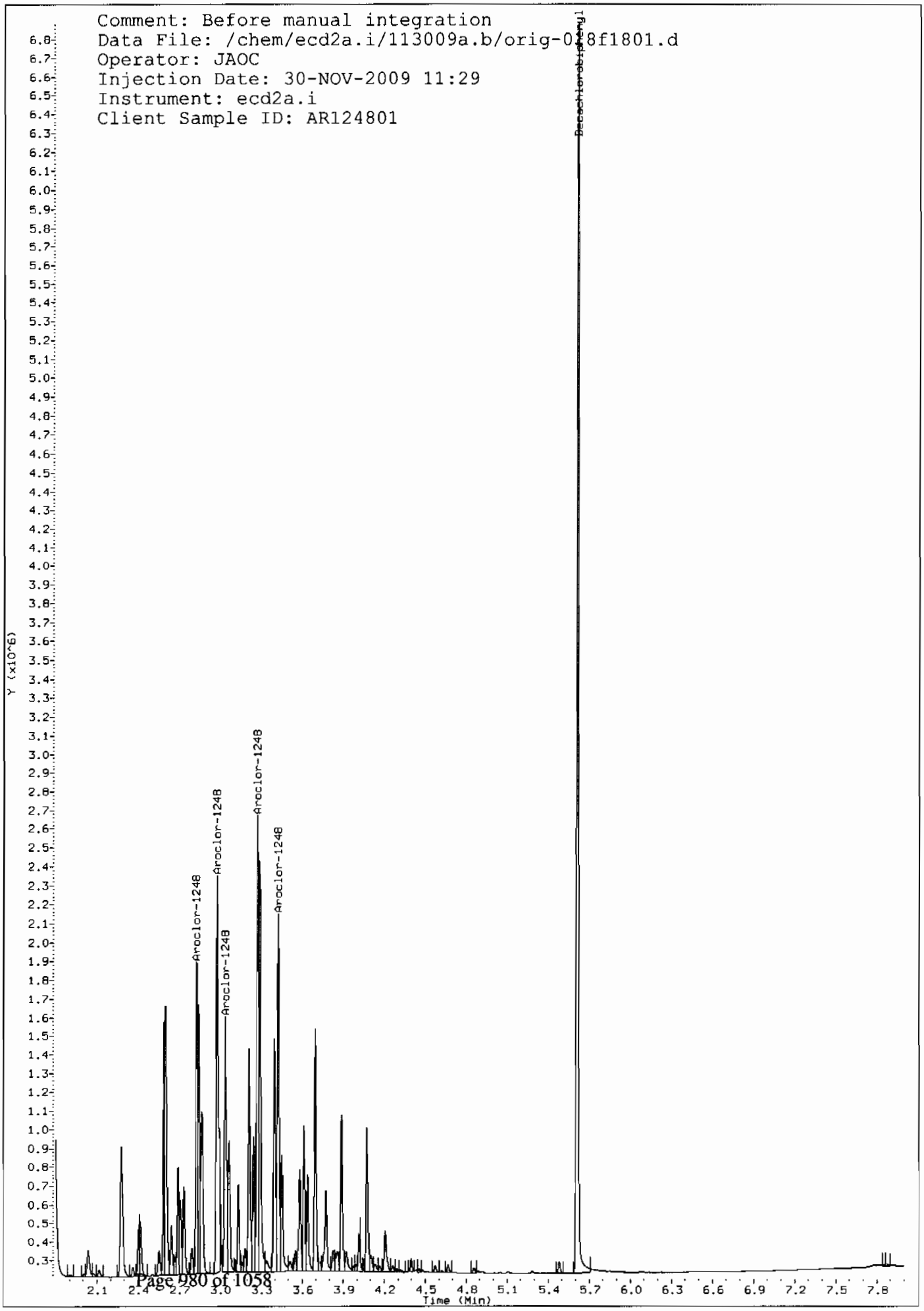
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-028f1801.d
Operator: JAOC
Injection Date: 30-NOV-2009 11:29
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/018b1801.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 30-NOV-2009 11:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	15148730	100.000	128	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	13300825	100.000	122	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	3317920	1000.00	1010	80.00- 120.00	100.00
3.522	3.522	0.000	4246080	1000.00	1010	107.97- 147.97	127.97
3.609	3.609	0.000	4509127	1000.00	1010	115.90- 155.90	135.90
3.798	3.798	0.000	4787444	1000.00	1020	124.29- 164.29	144.29
3.827	3.827	0.000	5425831	1000.00	1010	143.53- 183.53	163.53

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/113009a.b/018b1801.d

Date : 30-NOV-2009 11:29

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

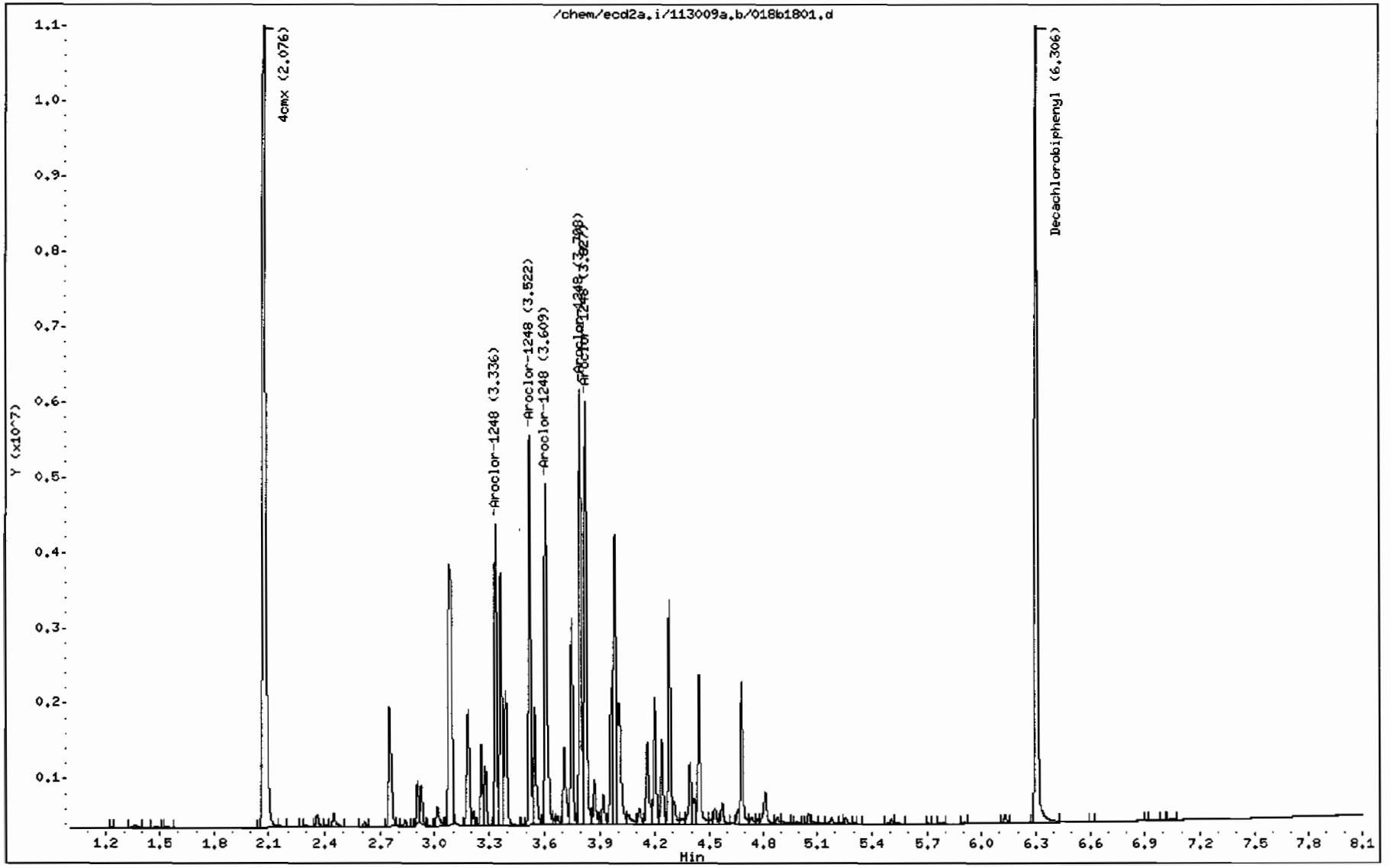

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/019f1901.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 30-NOV-2009 11:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6593393	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	5710697	100.000	104	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	503780	1000.00	1080	80.00- 120.00	100.00
1.905	1.905	0.000	730976	1000.00	1110	125.10- 165.10	145.10
2.005	2.005	0.000	393878	1000.00	1140	58.18- 98.18	78.18

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd2a.i/113009a.b/019f1901.d

Date : 30-NOV-2009 11:40

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

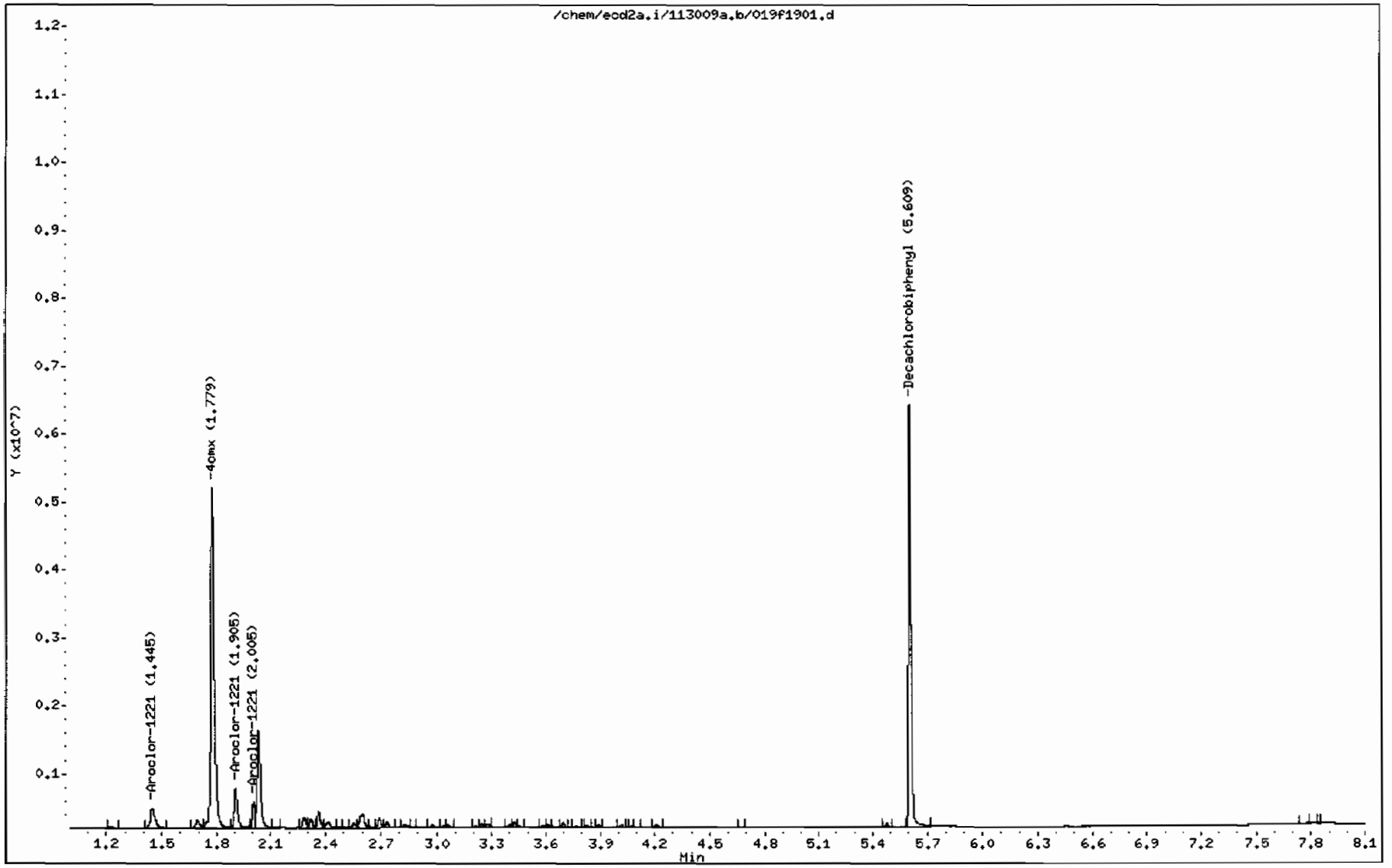

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/019b1901.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 30-NOV-2009 11:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13835551	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.303	6.305	-0.002	11993777	100.000	110	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1394076	1000.00	1100	80.00- 120.00	100.00
2.403	2.403	0.000	852399	1000.00	1100	41.14- 81.14	61.14
2.448	2.448	0.000	3385211	1000.00	1110	222.83- 262.83	242.83

Average of Peak Amounts = 1.1e+03

Data File: /chem/ecd2a.i/113009a.b/019b1901.d
Date : 30-NOV-2009 11:40
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

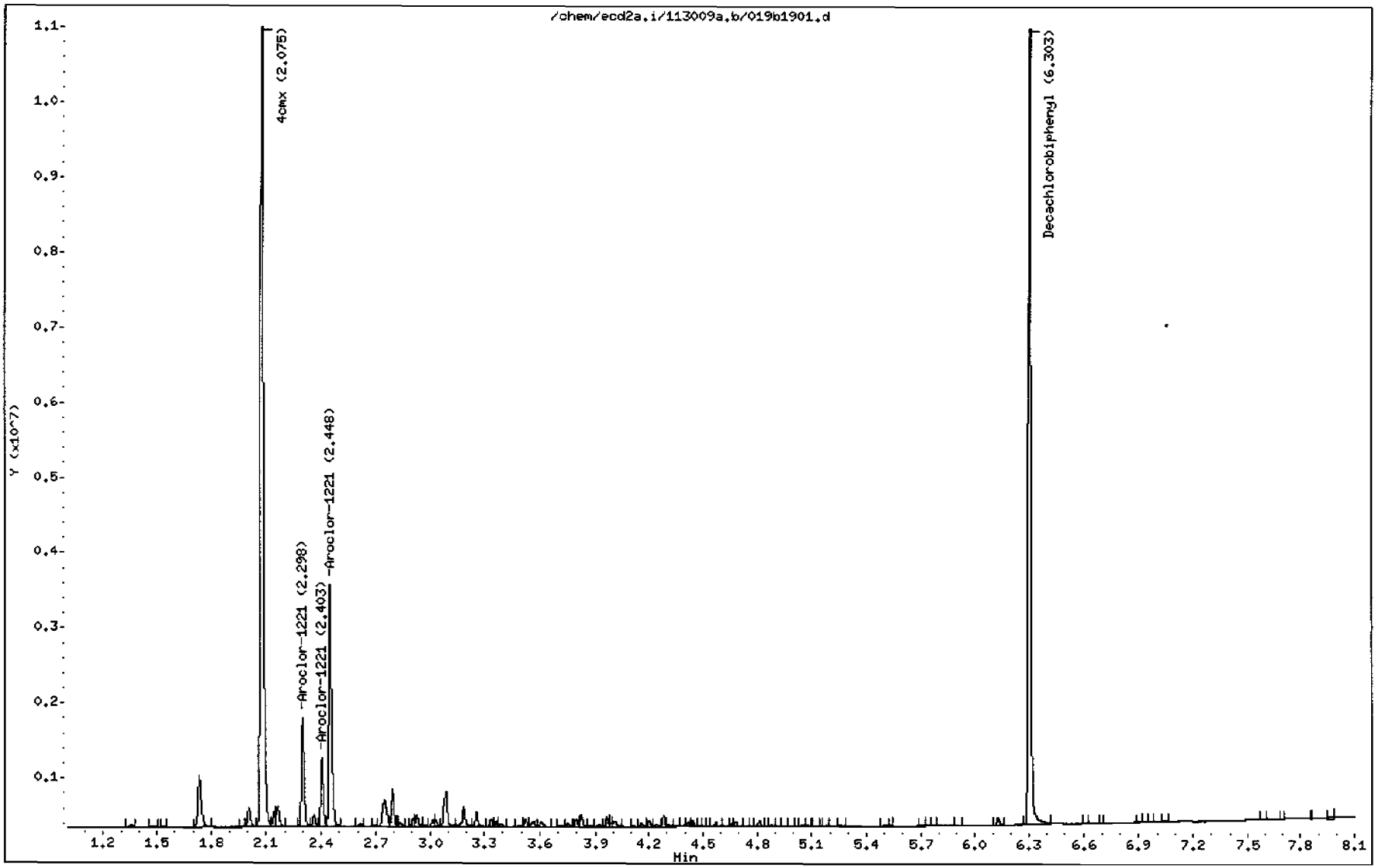

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/060f6001.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 30-NOV-2009 19:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	6097895	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.607	5.610	-0.003	5363835	100.000	97.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.278	2.281	-0.003	1933010	1000.00	920	80.00- 120.00	100.00(M)
2.600	2.603	-0.003	4217365	1000.00	936	198.19- 238.19	218.18
2.691	2.694	-0.003	1668882	1000.00	917	66.30- 106.30	86.34
2.825	2.829	-0.004	842674	1000.00	903	23.34- 63.34	43.59
2.976	2.980	-0.004	1280903	1000.00	929	44.93- 84.93	66.26
Average of Peak Amounts =					921		
7 Aroclor-1260					CAS #: 11096-82-5		
4.015	4.018	-0.003	4041106	1000.00	994	80.00- 120.00	100.00
4.285	4.290	-0.005	2494289	1000.00	986	41.58- 81.58	61.72
4.451	4.455	-0.004	2559863	1000.00	991	43.08- 83.08	63.35
4.664	4.667	-0.003	6076875	1000.00	1010	129.99- 169.99	150.38
4.853	4.856	-0.003	2890332	1000.00	992	51.44- 91.44	71.52
Average of Peak Amounts =					994		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/060f6001.d

Date : 30-NOV-2009 19:42

Client ID: AR166006

Sample Info: IWAR091119-60 06

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

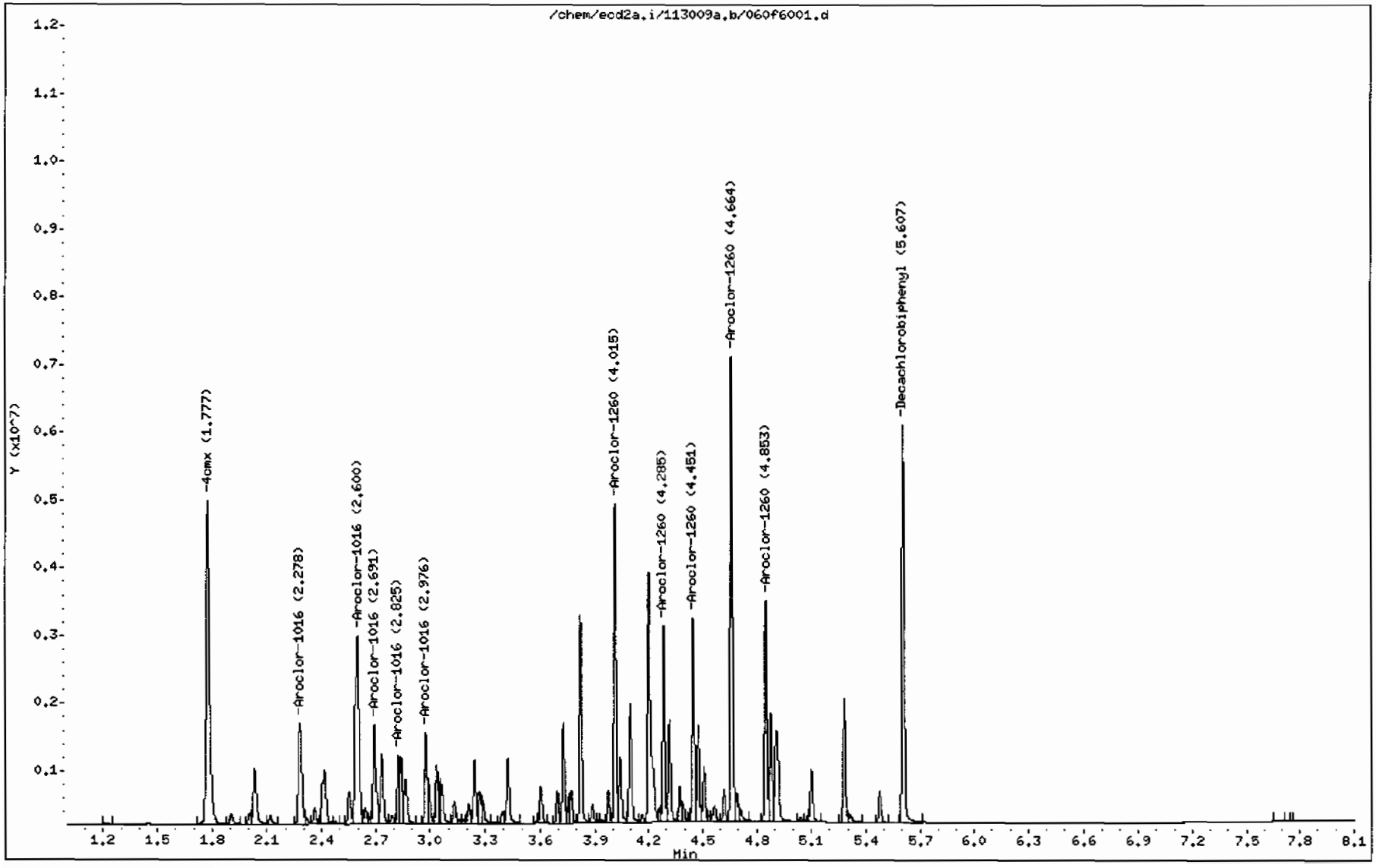

Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/060f6001.d
Operator: JAOC
Injection Date: 30-NOV-2009 19:42
Instrument: ecd2a.i
Client Sample ID: AR166006

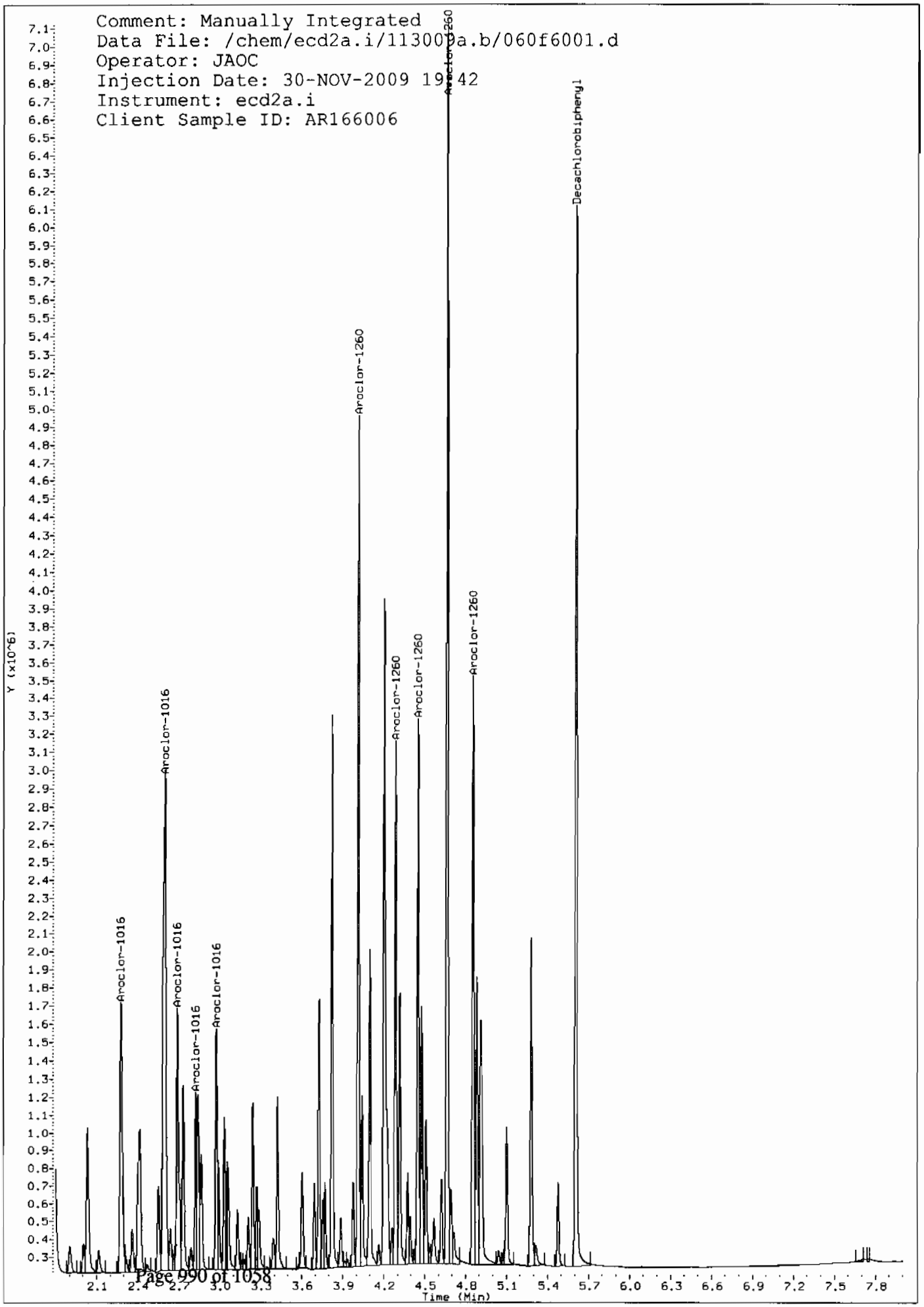

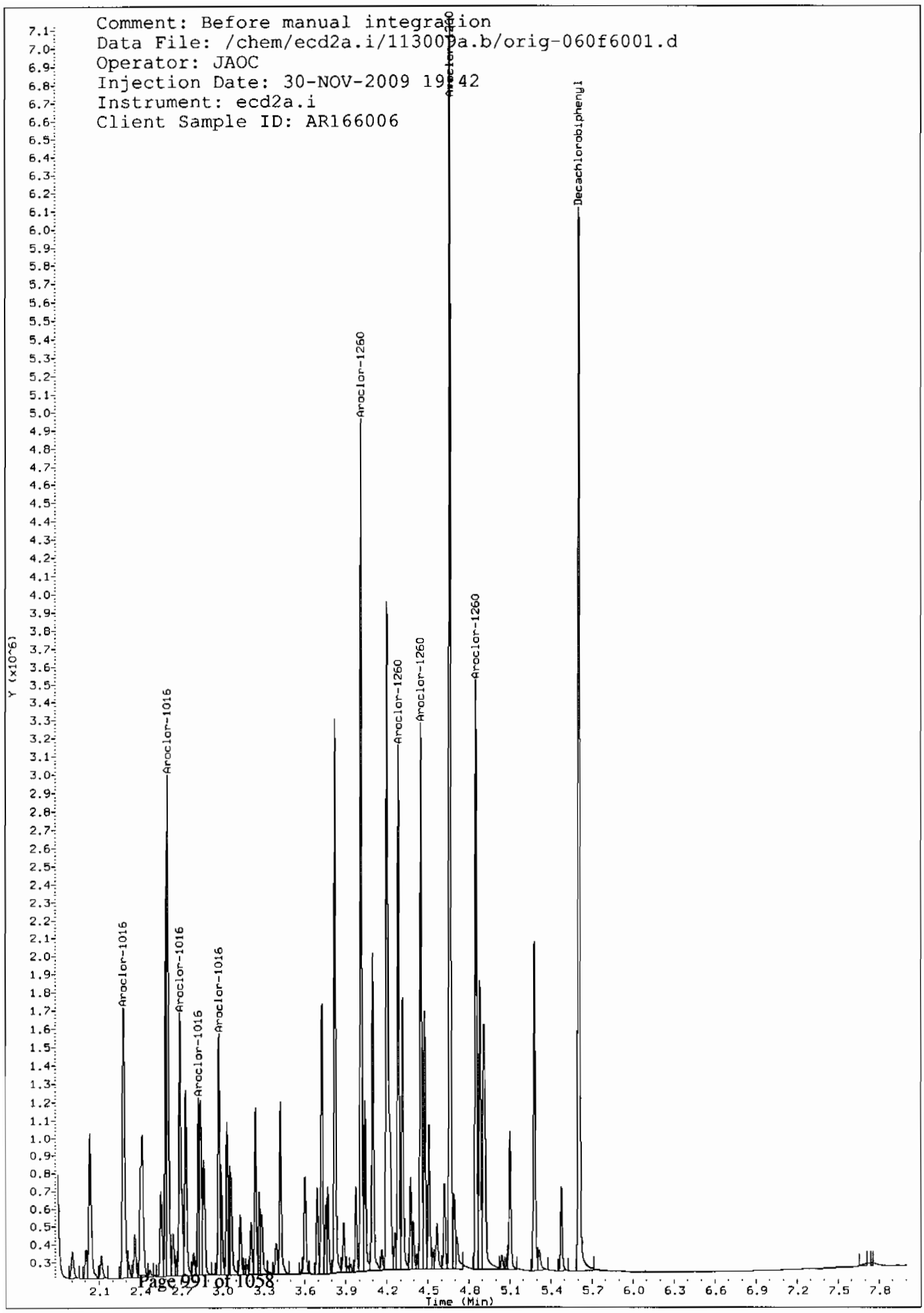
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Data File: /chem/ecd2a.i/113009a.b/orig-060f6001.d
Operator: JAOC
Injection Date: 30-NOV-2009 19:42
Instrument: ecd2a.i
Client Sample ID: AR166006
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/060b6001.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 30-NOV-2009 19:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13022909	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.303	6.305	-0.002	10982465	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.752	-0.002	4147515	1000.00	974	80.00- 120.00	100.00
3.183	3.185	-0.002	3338194	1000.00	969	60.91- 100.91	80.49
3.334	3.336	-0.002	1931223	1000.00	976	26.69- 66.69	46.56
3.362	3.365	-0.003	2026640	1000.00	983	29.14- 69.14	48.86
3.521	3.523	-0.002	2736733	1000.00	994	46.31- 86.31	65.98
Average of Peak Amounts =					979		
7 Aroclor-1260					CAS #: 11096-82-5		
4.416	4.419	-0.003	5707093	1000.00	1040	80.00- 120.00	100.00
4.568	4.570	-0.002	7325450	1000.00	1030	108.85- 148.85	128.36
4.680	4.682	-0.002	4866123	1000.00	1030	65.38- 105.38	85.26
4.876	4.880	-0.004	5882183	1000.00	1010	82.89- 122.89	103.07
5.502	5.505	-0.003	9343503	1000.00	1030	145.10- 185.10	163.72
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/113009a.b/060b6001.d
Date : 30-NOV-2009 19:42
Client ID: AR166006
Sample Info: |WAR091119-60 06
Column phase: CLP2

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

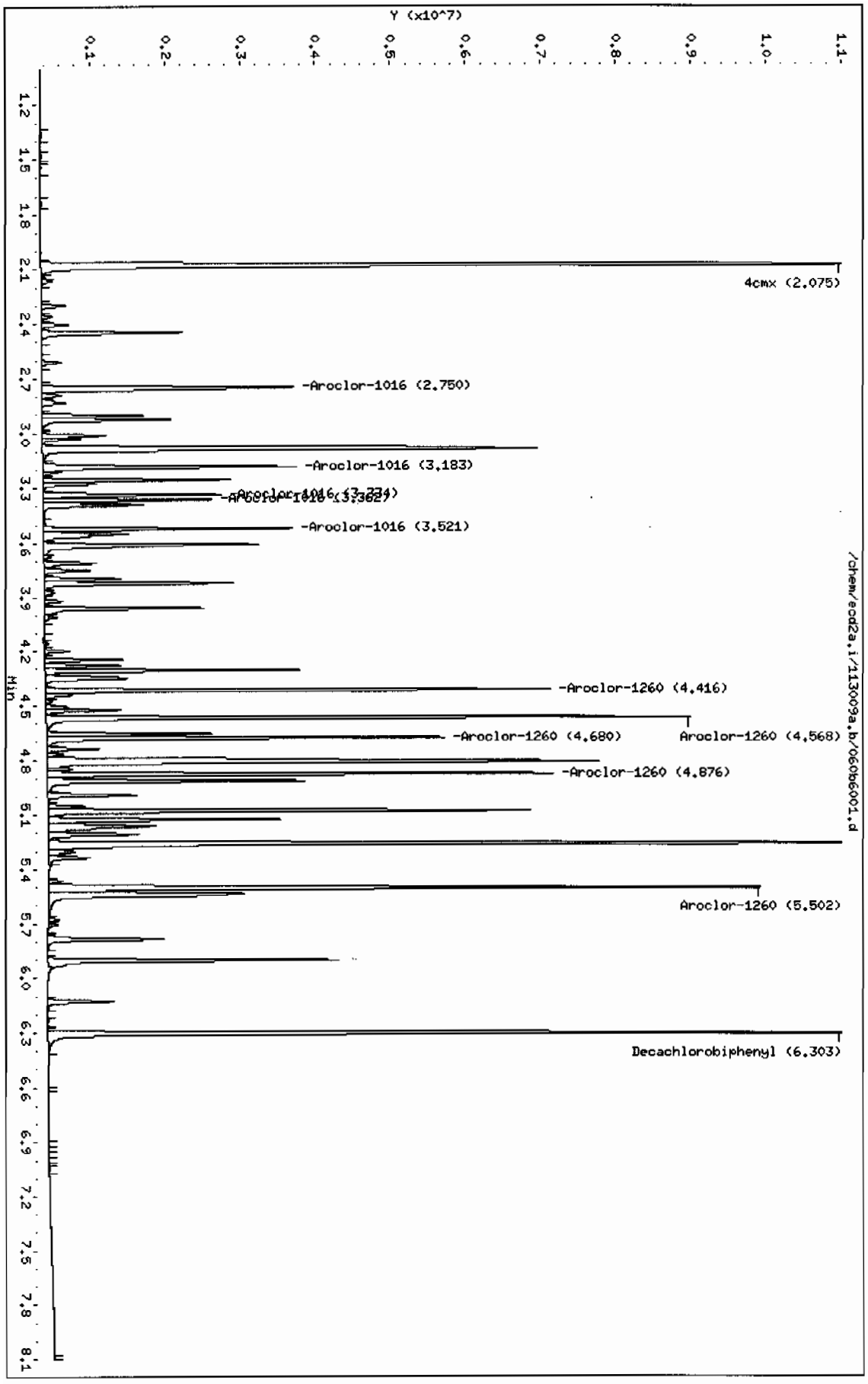

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/072f7201.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 30-NOV-2009 21:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6079928	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5249703	100.000	95.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1930672	1000.00	919	80.00- 120.00	100.00(M)
2.602	2.603	-0.001	4222979	1000.00	937	198.19- 238.19	218.73
2.693	2.694	-0.001	1665504	1000.00	915	66.30- 106.30	86.27
2.828	2.829	-0.001	831367	1000.00	891	23.34- 63.34	43.06
2.979	2.980	-0.001	1279233	1000.00	928	44.93- 84.93	66.26
Average of Peak Amounts =					918		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4070896	1000.00	1000	80.00- 120.00	100.00
4.289	4.290	-0.001	2513820	1000.00	994	41.58- 81.58	61.75
4.455	4.455	0.000	2576179	1000.00	997	43.08- 83.08	63.28
4.667	4.667	0.000	6093310	1000.00	1010	129.99- 169.99	149.68
4.856	4.856	0.000	2912572	1000.00	1000	51.44- 91.44	71.55
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/072f7201.d
Date : 30-NOV-2009 21:55
Client ID: AR166007
Sample Info: IWAR091119-60 07
Column phase: CLP1

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

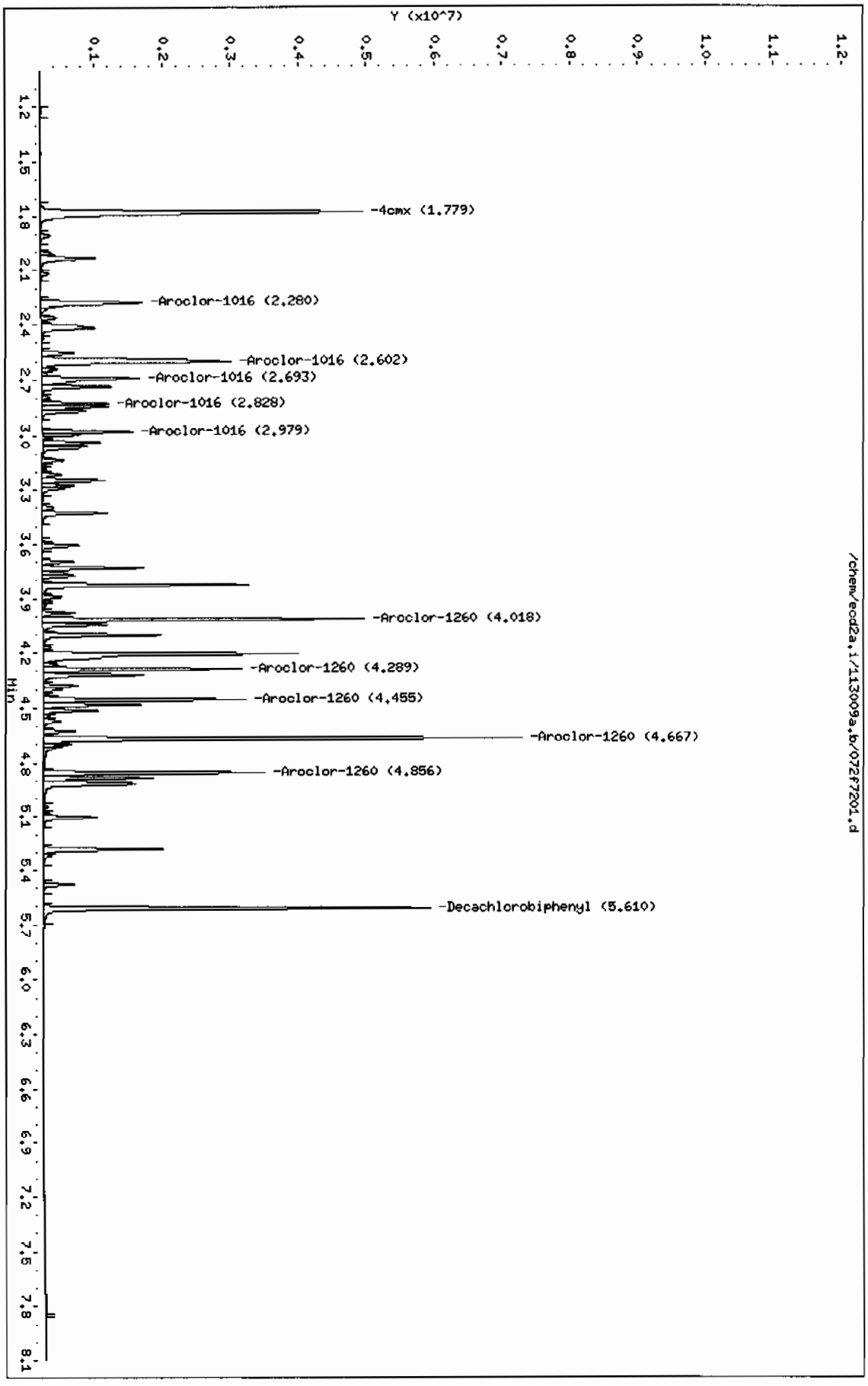

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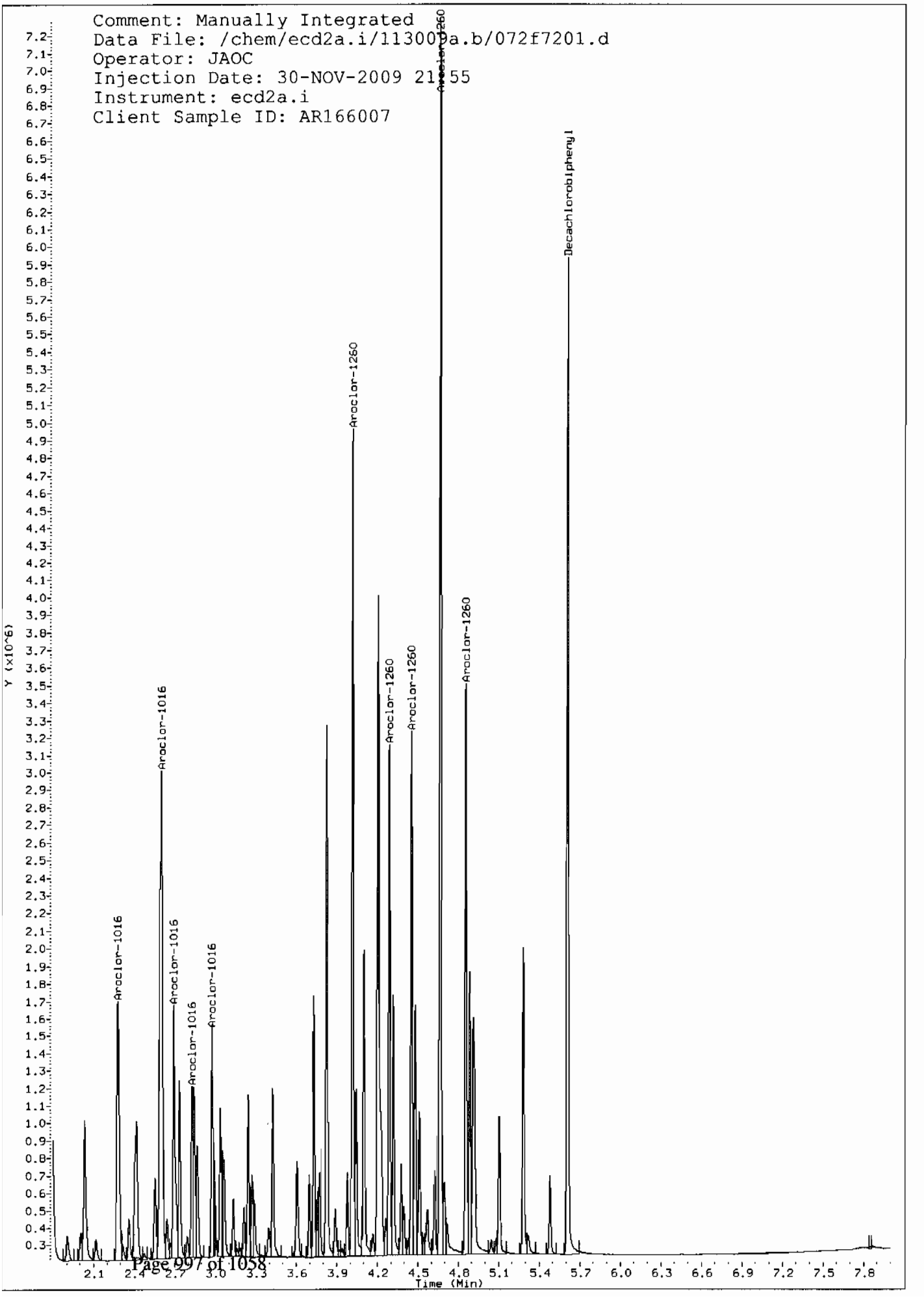
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/072f7201.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:55
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

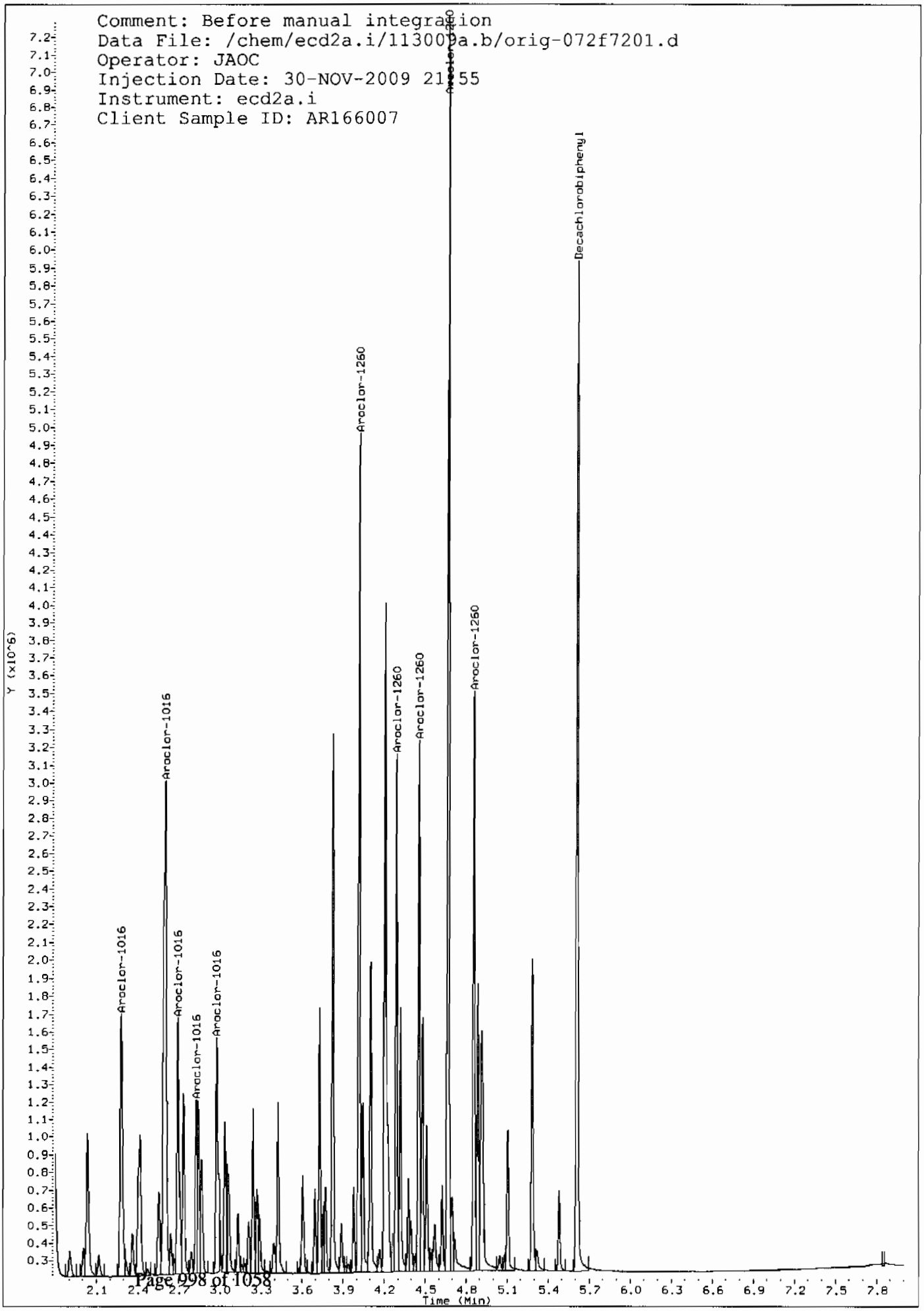
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Operator: JAOC
Injection Date: 30-NOV-2009 21:55
Instrument: ecd2a.i
Client Sample ID: AR166007
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/072b7201.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 30-NOV-2009 21:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	12937412	100.000	109	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	10807087	100.000	99.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	4110584	1000.00	965	80.00- 120.00	100.00
3.184	3.185	-0.001	3321649	1000.00	964	60.91- 100.91	80.81
3.335	3.336	-0.001	1920571	1000.00	970	26.69- 66.69	46.72
3.364	3.365	-0.001	1996449	1000.00	968	29.14- 69.14	48.57
3.522	3.523	-0.001	2724972	1000.00	989	46.31- 86.31	66.29
Average of Peak Amounts =					972		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5674547	1000.00	1030	80.00- 120.00	100.00
4.570	4.570	0.000	7298534	1000.00	1020	108.85- 148.85	128.62
4.681	4.682	-0.001	4828747	1000.00	1020	65.38- 105.38	85.09
4.879	4.880	-0.001	5817967	1000.00	1000	82.89- 122.89	102.53
5.505	5.505	0.000	9235476	1000.00	1020	145.10- 185.10	162.75
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd2a.i/113009a.b/072b7201.d
Date : 30-NOV-2009 21:55
Client ID: AR166007
Sample Info: IWAR091119-60 07
Column phase: CLP2

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

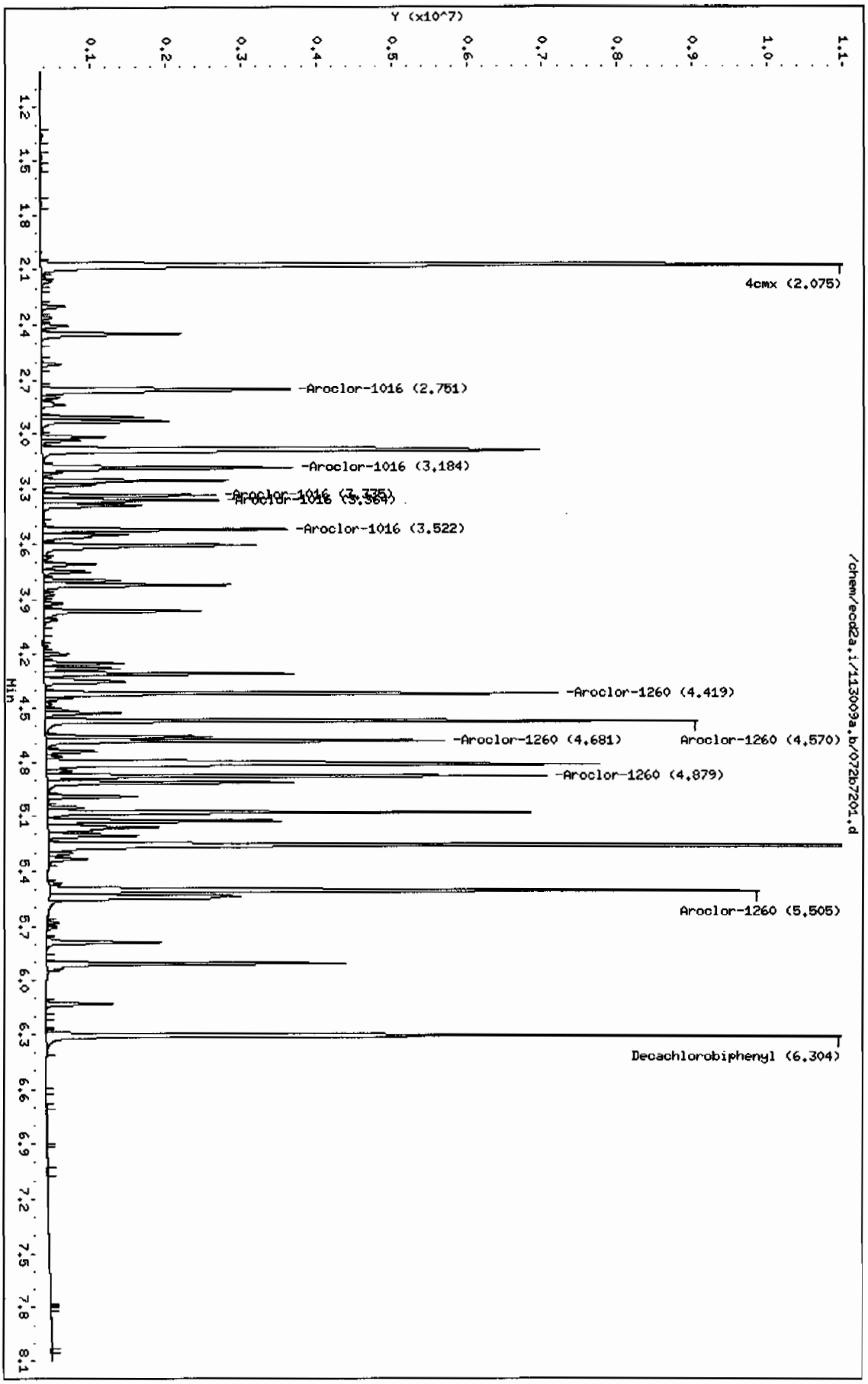

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/084f8401.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 01-DEC-2009 00:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 84 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6135669	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5255737	100.000	95.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1952367	1000.00	930	80.00- 120.00	100.00(M)
2.602	2.603	-0.001	4266269	1000.00	947	198.19- 238.19	218.52
2.693	2.694	-0.001	1683812	1000.00	925	66.30- 106.30	86.24
2.827	2.829	-0.002	836486	1000.00	897	23.34- 63.34	42.84
2.979	2.980	-0.001	1291869	1000.00	937	44.93- 84.93	66.17
Average of Peak Amounts =					927		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4074980	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2503389	1000.00	990	41.58- 81.58	61.43
4.455	4.455	0.000	2559185	1000.00	991	43.08- 83.08	62.80
4.667	4.667	0.000	6100779	1000.00	1010	129.99- 169.99	149.71
4.856	4.856	0.000	2920454	1000.00	1000	51.44- 91.44	71.67
Average of Peak Amounts =					999		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/084f8401.d

Page 1

Date : 01-DEC-2009 00:09

Client ID: AR166008

Instrument: ecd2a.i

Sample Info: IWAR091119-60 08

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

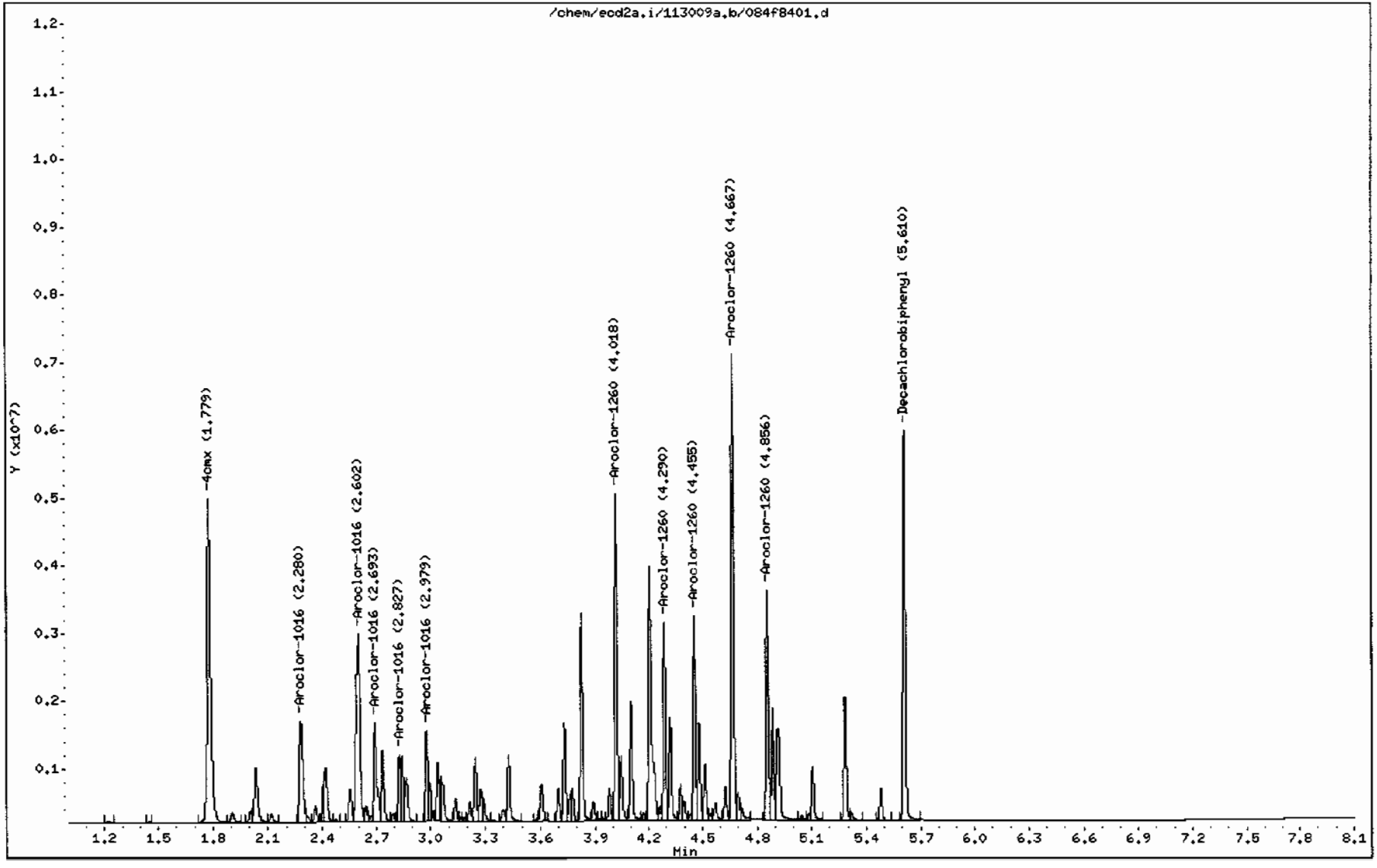

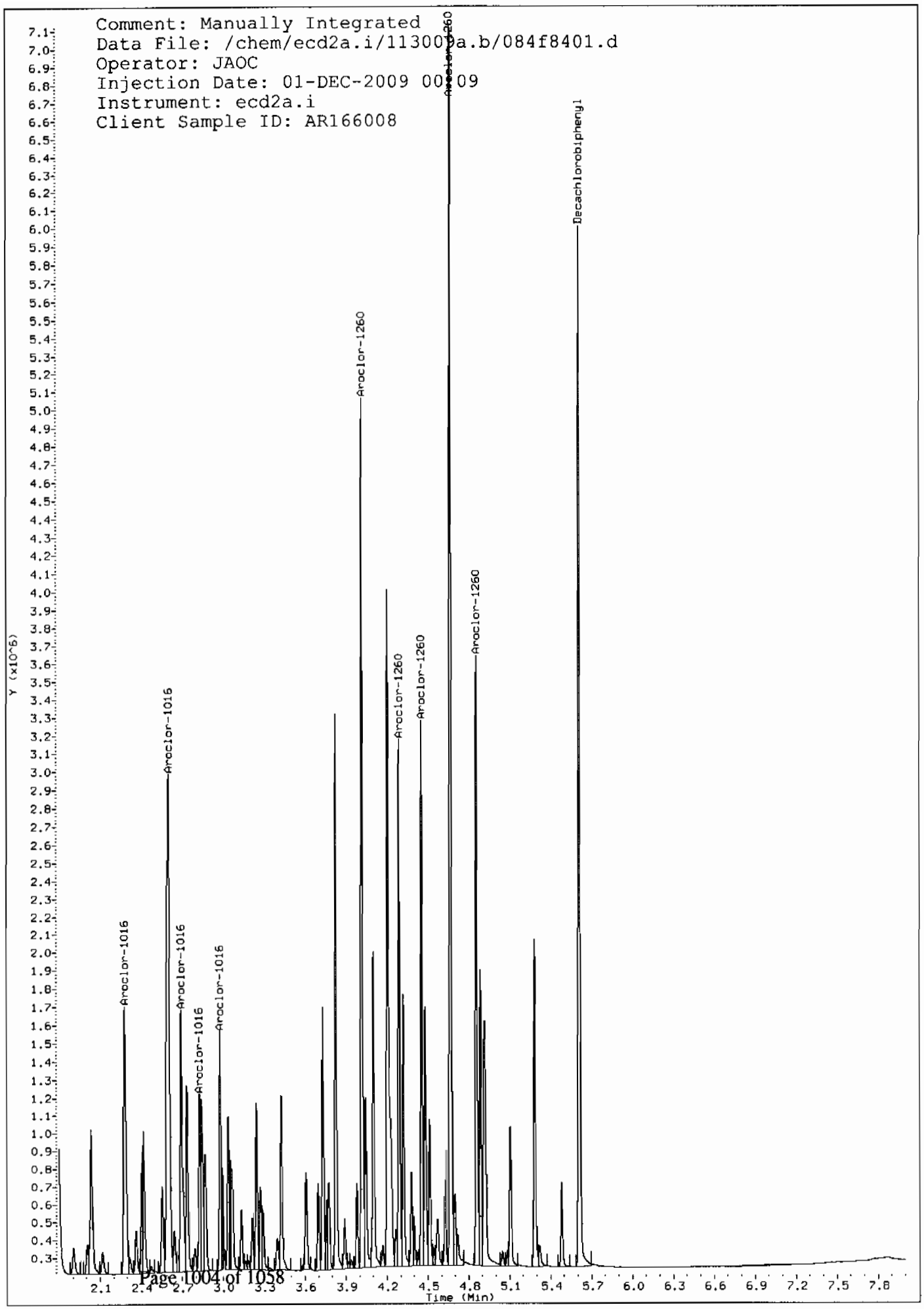
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Data File: /chem/ecd2a.i/113009a.b/084f8401.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:09
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
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Decachlorobiphenyl
Y (x10^6)
Time (Min)

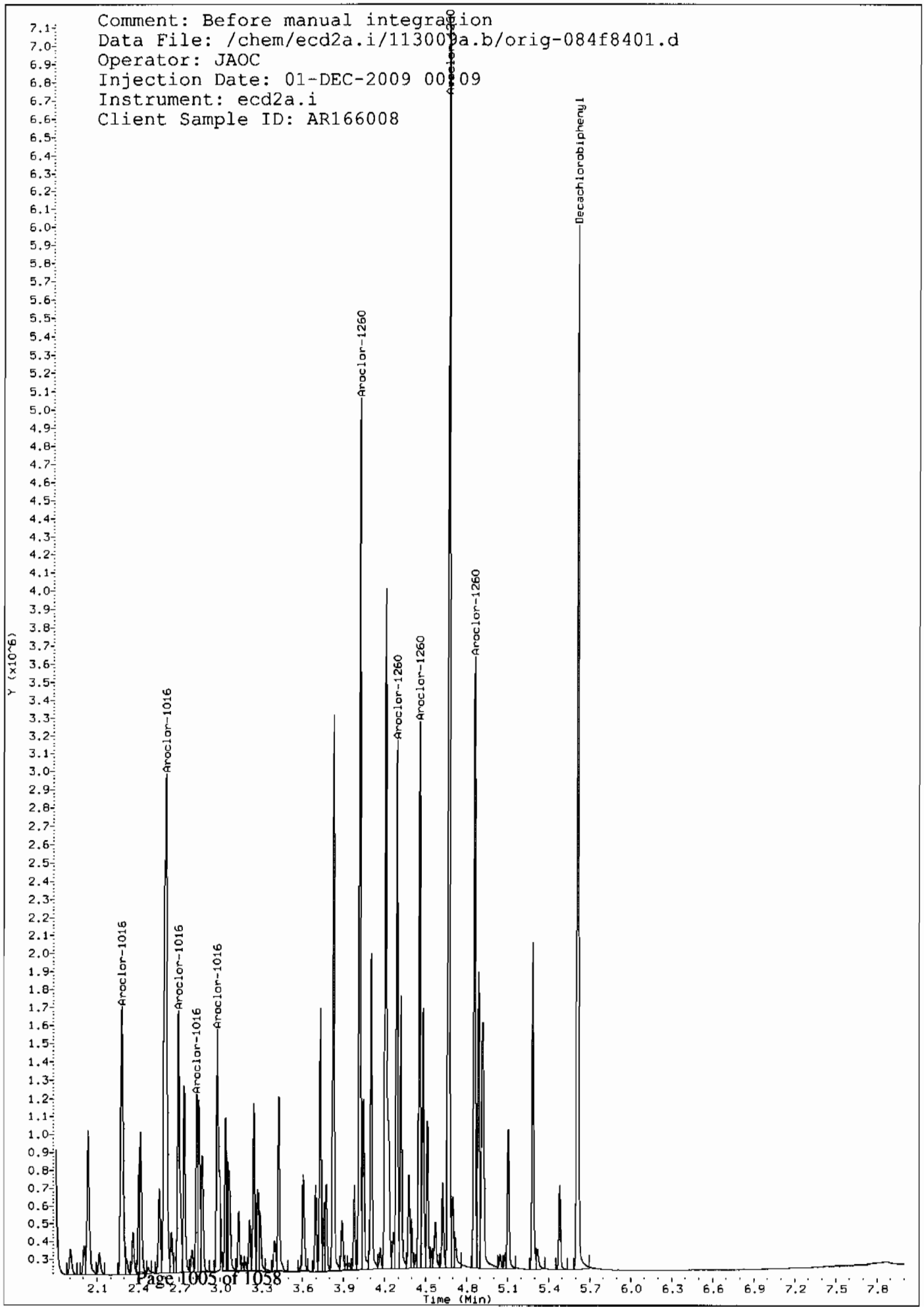
Comment: Before manual integration
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Operator: JAOC
Injection Date: 01-DEC-2009 00:09
Instrument: ecd2a.i
Client Sample ID: AR166008
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Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/084b8401.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 01-DEC-2009 00:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 84 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13093389	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10865555	100.000	100	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	4158774	1000.00	977	80.00- 120.00	100.00
3.185	3.185	0.000	3350372	1000.00	973	60.91- 100.91	80.56
3.335	3.336	-0.001	1931546	1000.00	976	26.69- 66.69	46.45
3.365	3.365	0.000	2010024	1000.00	975	29.14- 69.14	48.33
3.523	3.523	0.000	2746843	1000.00	997	46.31- 86.31	66.05
Average of Peak Amounts =					980		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5760526	1000.00	1040	80.00- 120.00	100.00
4.570	4.570	0.000	7410661	1000.00	1040	108.85- 148.85	128.65
4.682	4.682	0.000	4897495	1000.00	1040	65.38- 105.38	85.02
4.879	4.880	-0.001	5899028	1000.00	1020	82.89- 122.89	102.40
5.505	5.505	0.000	9366908	1000.00	1040	145.10- 185.10	162.61
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/113009a.b/084b8401.d
Date : 01-DEC-2009 00:09
Client ID: AR166008
Sample Info: IWAR091119-60 08

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

Column phase: CLP2

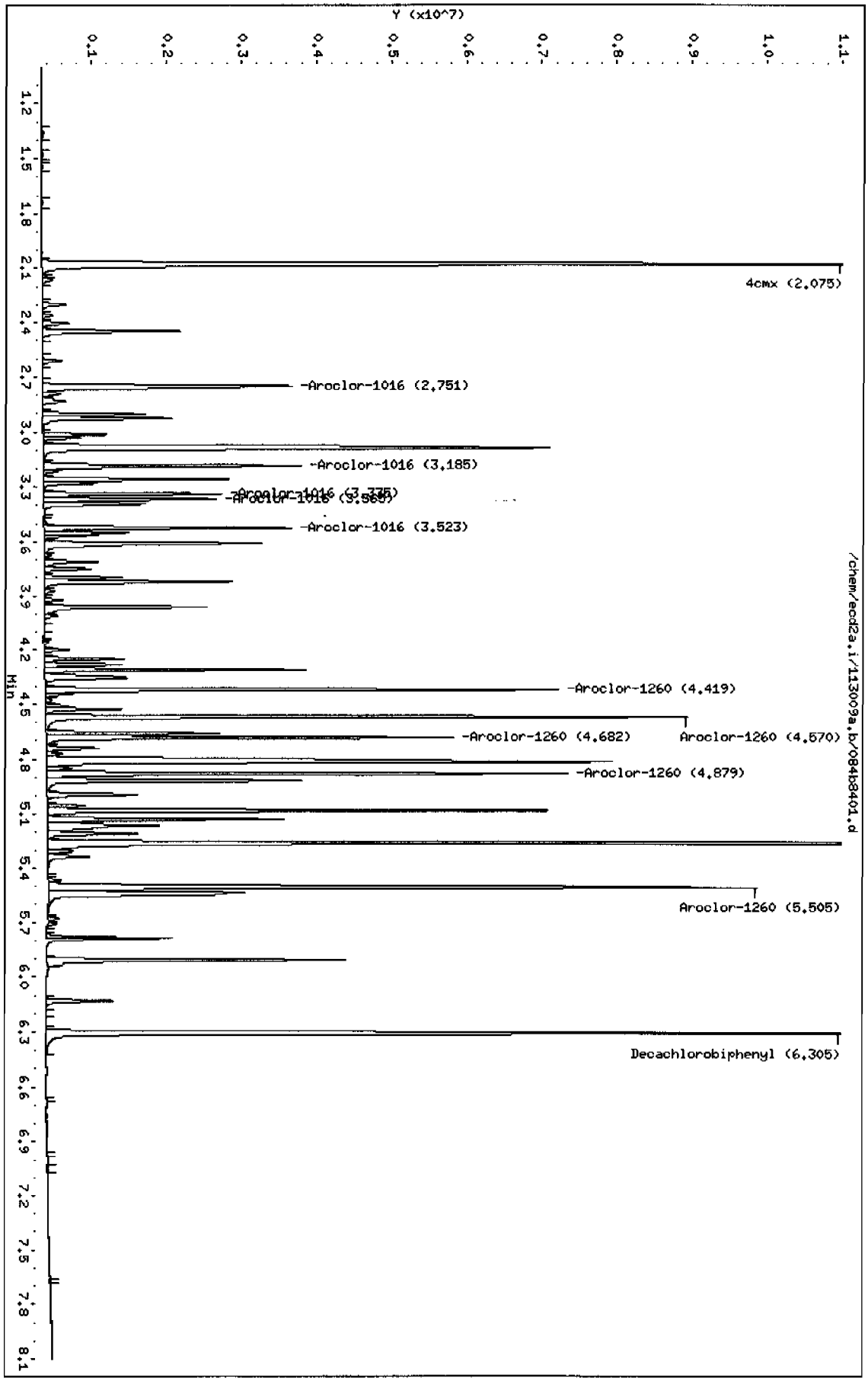

Page 1

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	ZZZZZ	ZZZZZ	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	1434	1.78	5.62
02	ZZZZZ	ZZZZZ	11/30/09	1445		
03	ZZZZZ	ZZZZZ	11/30/09	1456		
04	AR166003	WAR091119-60	11/30/09	1512	1.78	5.61
05	PIBLK04	WAR090916-99	11/30/09	1523	1.78	5.61
06	ZZZZZ	ZZZZZ	11/30/09	1534	1.78	5.61
07	ZZZZZ	ZZZZZ	11/30/09	1545	1.78	5.61
08	ZZZZZ	ZZZZZ	11/30/09	1556	1.78	5.61
09	ZZZZZ	ZZZZZ	11/30/09	1607	1.78	5.61
10	ZZZZZ	ZZZZZ	11/30/09	1618	1.78	5.61
11	ZZZZZ	ZZZZZ	11/30/09	1629	1.78	5.61
12	ZZZZZ	ZZZZZ	11/30/09	1640	1.78	5.61
13	AR166004	WAR091119-60	11/30/09	1651	1.78	5.61
14	PIBLK05	WAR090916-99	11/30/09	1702	1.78	5.61
15	ZZZZZ	ZZZZZ	11/30/09	1713	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	1724	1.78	5.61
17	ZZZZZ	ZZZZZ	11/30/09	1736	1.78	5.61
18	ZZZZZ	ZZZZZ	11/30/09	1747	1.78	5.61
19	ZZZZZ	ZZZZZ	11/30/09	1758	1.78	5.61
20	ZZZZZ	ZZZZZ	11/30/09	1809	1.78	5.61
21	ZZZZZ	ZZZZZ	11/30/09	1820	1.78	5.61
22	AR166005	WAR091119-60	11/30/09	1831	1.78	5.61
23	PIBLK06	WAR090916-99	11/30/09	1842	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1853	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1904	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1915	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1926		5.61
28	AR166006	WAR091119-60	11/30/09	1942	1.78	5.61
29	PIBLK07	WAR090916-99	11/30/09	1953	1.78	5.61
30	PBLK01	1201981383	11/30/09	2005	1.78	5.61
31	PBLK01LCS	1201981386	11/30/09	2016	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	2027	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	2038	1.78	5.61
02	ZZZZZ	ZZZZZ	11/30/09	2049	1.78	5.61
03	ZZZZZ	ZZZZZ	11/30/09	2100	1.78	5.61
04	RE03-09-13618	241318001	11/30/09	2111	1.78	5.61
05	RE03-09-13622	241318002	11/30/09	2122	1.78	5.61
06	RE03-09-13620	241318003	11/30/09	2133	1.78	5.61
07	RE03-09-13619	241318004	11/30/09	2144	1.78	5.61
08	AR166007	WAR091119-60	11/30/09	2155	1.78	5.61
09	PIBLK08	WAR090916-99	11/30/09	2207	1.78	5.61
10	RE03-09-13624	241318005	11/30/09	2218	1.78	5.61
11	RE03-09-13623	241318006	11/30/09	2229	1.78	5.61
12	RE03-09-13626	241318007	11/30/09	2240	1.78	5.61
13	RE03-09-13621	241318008	11/30/09	2251	1.78	5.61
14	RE03-09-13627	241318009	11/30/09	2302	1.78	5.61
15	RE03-09-13625	241318010	11/30/09	2313	1.78	5.61
16	RE03-10-6084	241318013	11/30/09	2324	1.78	5.61
17	RE03-10-6085	241318014	11/30/09	2336	1.78	5.61
18	ZZZZZ	ZZZZZ	11/30/09	2347	1.78	5.61
19	ZZZZZ	ZZZZZ	11/30/09	2358	1.78	5.61
20	AR166008	WAR091119-60	12/01/09	0009	1.78	5.61
21	PIBLK09	WAR090916-99	12/01/09	0020	1.78	5.61
22	ZZZZZ	ZZZZZ	12/01/09	0031	1.78	5.61
23	ZZZZZ	ZZZZZ	12/01/09	0042	1.78	5.61
24	ZZZZZ	ZZZZZ	12/01/09	0053	1.78	5.61
25	ZZZZZ	ZZZZZ	12/01/09	0105	1.78	5.61
26	AR166009	WAR091119-60	12/01/09	0116	1.78	5.61
27	PIBLK10	WAR090916-99	12/01/09	0127	1.78	5.61
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	ZZZZZ	ZZZZZ	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	ZZZZZ	ZZZZZ	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	1434	2.08	6.31
02	ZZZZZ	ZZZZZ	11/30/09	1445		
03	ZZZZZ	ZZZZZ	11/30/09	1456		
04	AR166003	WAR091119-60	11/30/09	1512	2.07	6.30
05	PIBLK04	WAR090916-99	11/30/09	1523	2.08	6.31
06	ZZZZZ	ZZZZZ	11/30/09	1534	2.07	6.30
07	ZZZZZ	ZZZZZ	11/30/09	1545	2.08	6.30
08	ZZZZZ	ZZZZZ	11/30/09	1556	2.08	6.30
09	ZZZZZ	ZZZZZ	11/30/09	1607	2.07	6.30
10	ZZZZZ	ZZZZZ	11/30/09	1618	2.08	6.30
11	ZZZZZ	ZZZZZ	11/30/09	1629	2.08	6.30
12	ZZZZZ	ZZZZZ	11/30/09	1640	2.07	6.30
13	AR166004	WAR091119-60	11/30/09	1651	2.07	6.31
14	PIBLK05	WAR090916-99	11/30/09	1702	2.08	6.30
15	ZZZZZ	ZZZZZ	11/30/09	1713	2.08	6.30
16	ZZZZZ	ZZZZZ	11/30/09	1724	2.08	6.30
17	ZZZZZ	ZZZZZ	11/30/09	1736	2.08	6.30
18	ZZZZZ	ZZZZZ	11/30/09	1747	2.08	6.31
19	ZZZZZ	ZZZZZ	11/30/09	1758	2.07	6.31
20	ZZZZZ	ZZZZZ	11/30/09	1809	2.08	6.31
21	ZZZZZ	ZZZZZ	11/30/09	1820	2.08	6.31
22	AR166005	WAR091119-60	11/30/09	1831	2.08	6.30
23	PIBLK06	WAR090916-99	11/30/09	1842	2.08	6.30
24	ZZZZZ	ZZZZZ	11/30/09	1853	2.08	6.31
25	ZZZZZ	ZZZZZ	11/30/09	1904	2.07	6.31
26	ZZZZZ	ZZZZZ	11/30/09	1915	2.08	6.31
27	ZZZZZ	ZZZZZ	11/30/09	1926	2.08	6.31
28	AR166006	WAR091119-60	11/30/09	1942	2.07	6.30
29	PIBLK07	WAR090916-99	11/30/09	1953	2.08	6.30
30	PBLK01	1201981383	11/30/09	2005	2.07	6.31
31	PBLK01LCS	1201981386	11/30/09	2016	2.08	6.31
32	ZZZZZ	ZZZZZ	11/30/09	2027	2.08	6.31

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-543

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	2038	2.08	6.30
02	ZZZZZ	ZZZZZ	11/30/09	2049	2.08	6.30
03	ZZZZZ	ZZZZZ	11/30/09	2100	2.08	6.30
04	RE03-09-13618	241318001	11/30/09	2111	2.07	6.31
05	RE03-09-13622	241318002	11/30/09	2122	2.08	6.30
06	RE03-09-13620	241318003	11/30/09	2133	2.08	6.30
07	RE03-09-13619	241318004	11/30/09	2144	2.08	6.30
08	AR166007	WAR091119-60	11/30/09	2155	2.08	6.30
09	PIBLK08	WAR090916-99	11/30/09	2207	2.08	6.30
10	RE03-09-13624	241318005	11/30/09	2218	2.08	6.30
11	RE03-09-13623	241318006	11/30/09	2229	2.08	6.30
12	RE03-09-13626	241318007	11/30/09	2240	2.08	6.30
13	RE03-09-13621	241318008	11/30/09	2251	2.08	6.30
14	RE03-09-13627	241318009	11/30/09	2302	2.08	6.30
15	RE03-09-13625	241318010	11/30/09	2313	2.08	6.31
16	RE03-10-6084	241318013	11/30/09	2324	2.07	6.30
17	RE03-10-6085	241318014	11/30/09	2336	2.08	6.30
18	ZZZZZ	ZZZZZ	11/30/09	2347	2.08	6.30
19	ZZZZZ	ZZZZZ	11/30/09	2358	2.08	6.30
20	AR166008	WAR091119-60	12/01/09	0009	2.08	6.30
21	PIBLK09	WAR090916-99	12/01/09	0020	2.08	6.30
22	ZZZZZ	ZZZZZ	12/01/09	0031	2.08	6.30
23	ZZZZZ	ZZZZZ	12/01/09	0042	2.08	6.30
24	ZZZZZ	ZZZZZ	12/01/09	0053	2.08	6.30
25	ZZZZZ	ZZZZZ	12/01/09	0105	2.08	6.30
26	AR166009	WAR091119-60	12/01/09	0116	2.08	6.30
27	PIBLK10	WAR090916-99	12/01/09	0127	2.08	6.30
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10–543 **Client ID:** LCS for batch 926709

Lab Sample ID: 1201981386

Data File: 063f6301.d **Data File:** 063b6301.d

Inst: ECD2A.I_1 **Inst:** ECD2A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 30–NOV–09 20:16 **Analyzed:** 30–NOV–09 20:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							3.53
Column 1	1	2.28	2.25 – 2.31	25.7		ug/kg	
	2	2.6	2.57 – 2.63	26		ug/kg	
	3	2.69	2.66 – 2.72	24.9		ug/kg	
	4	2.83	2.8 – 2.86	24.8		ug/kg	
	5	2.98	2.95 – 3.01	26.3		ug/kg	
					25.5		
Column 2	1	2.75	2.72 – 2.78	26.3		ug/kg	
	2	3.19	3.16 – 3.22	26.3		ug/kg	
	3	3.34	3.31 – 3.37	27.4		ug/kg	
	4	3.36	3.33 – 3.39	25.1		ug/kg	
	5	3.52	3.49 – 3.55	27.2		ug/kg	
					26.5		
Aroclor–1260							1.08
Column 1	1	4.02	3.99 – 4.05	30.3		ug/kg	
	2	4.29	4.26 – 4.32	30.2		ug/kg	
	3	4.45	4.42 – 4.48	29.9		ug/kg	
	4	4.67	4.64 – 4.7	31.6		ug/kg	
	5	4.86	4.83 – 4.89	30.1		ug/kg	
					30.4		
Column 2	1	4.42	4.39 – 4.45	30.5		ug/kg	
	2	4.57	4.54 – 4.6	31.7		ug/kg	
	3	4.68	4.65 – 4.71	30.9		ug/kg	
	4	4.88	4.85 – 4.91	31.1		ug/kg	
	5	5.5	5.48 – 5.54	29.6		ug/kg	
					30.8		

Identification Summary

SDG Number: 10-543 **Client ID:** RE03-09-13620

Lab Sample ID: 241318003

Data File:	070f7001.d	**Data File:**	070b7001.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30-NOV-09 21:33	**Analyzed:**	30-NOV-09 21:33

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							42.6
Column 1	1	3.24	3.21 – 3.27	8.64		ug/kg	
	2	3.43	3.4 – 3.46	7.73		ug/kg	
	3	3.7	3.67 – 3.73	12.3		ug/kg	
	4	3.89	3.86 – 3.92	7.54		ug/kg	
	5	4.02	3.99 – 4.05	38.3		ug/kg	
					14.9		
Column 2	1	3.82	3.79 – 3.85	7.38		ug/kg	
	2	3.96	3.93 – 3.99	11.5		ug/kg	
	3	4.2	4.17 – 4.23	11.9		ug/kg	
	4	4.28	4.25 – 4.31	11.2		ug/kg	
	5	4.44	4.41 – 4.47	6.34		ug/kg	
					9.67		
Aroclor-1260							8.16
Column 1	1	4.02	3.99 – 4.05	26		ug/kg	
	2	4.29	4.26 – 4.32	11.8		ug/kg	
	3	4.46	4.42 – 4.48	14.5		ug/kg	
	4	4.67	4.64 – 4.7	12.4		ug/kg	
	5	4.86	4.83 – 4.89	20.1		ug/kg	
					17		
Column 2	1	4.42	4.39 – 4.45	20.4		ug/kg	
	2	4.57	4.54 – 4.6	25.7		ug/kg	
	3	4.68	4.65 – 4.71	17.6		ug/kg	
	4	4.88	4.85 – 4.91	12.8		ug/kg	
	5	5.51	5.48 – 5.54	15.6		ug/kg	
					18.4		

Identification Summary

SDG Number: 10–543 **Client ID:** RE03–09–13621

Lab Sample ID: 241318008

Data File:	077f7701.d	**Data File:**	077b7701.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30–NOV–09 22:51	**Analyzed:**	30–NOV–09 22:51

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							68.9
Column 1	1	3.24	3.21 – 3.27	1.35		ug/kg	
	2	3.43	3.4 – 3.46	1.3		ug/kg	
	3	3.7	3.67 – 3.73	1.98		ug/kg	
	4	3.89	3.86 – 3.92	1.15		ug/kg	
	5	4.02	3.99 – 4.05	7.4		ug/kg	
					2.64		
Column 2	1	3.82	3.79 – 3.85	1.01		ug/kg	
	2	3.96	3.93 – 3.99	1.3		ug/kg	
	3	4.2	4.17 – 4.23	1.47		ug/kg	
	4	4.28	4.25 – 4.31	1.74		ug/kg	
	5	4.44	4.41 – 4.47	.902		ug/kg	
					1.29		
Aroclor–1260							11
Column 1	1	4.02	3.99 – 4.05	5.02		ug/kg	
	2	4.29	4.26 – 4.32	2.38		ug/kg	
	3	4.45	4.42 – 4.48	2.11		ug/kg	
	4	4.67	4.64 – 4.7	2.15		ug/kg	
	5	4.86	4.83 – 4.89	3.01		ug/kg	
					2.93		
Column 2	1	4.42	4.39 – 4.45	3.61		ug/kg	
	2	4.57	4.54 – 4.6	4.76		ug/kg	
	3	4.68	4.65 – 4.71	3.03		ug/kg	
	4	4.88	4.85 – 4.91	2.56		ug/kg	
	5	5.51	5.48 – 5.54	2.41		ug/kg	
					3.27		

Identification Summary

SDG Number: 10–543 **Client ID:** RE03–09–13622

Lab Sample ID: 241318002

Data File:	069f6901.d	**Data File:**	069b6901.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30–NOV–09 21:22	**Analyzed:**	30–NOV–09 21:22

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							22.7
Column 1	1	3.24	3.21 – 3.27	16.3		ug/kg	
	2	3.43	3.4 – 3.46	18		ug/kg	
	3	3.7	3.67 – 3.73	21.3		ug/kg	
	4	3.89	3.86 – 3.92	12.2		ug/kg	
	5	4.02	3.99 – 4.05	37.3		ug/kg	
					21		
Column 2	1	3.82	3.79 – 3.85	13.3		ug/kg	
	2	3.96	3.93 – 3.99	20.2		ug/kg	
	3	4.2	4.17 – 4.23	16.6		ug/kg	
	4	4.28	4.25 – 4.31	21.1		ug/kg	
	5	4.44	4.41 – 4.47	12.4		ug/kg	
					16.7		
Aroclor–1260							47.4
Column 1	1	4.02	3.99 – 4.05	25.3		ug/kg	
	2	4.29	4.26 – 4.32	5.99		ug/kg	
	3	4.45	4.42 – 4.48	6.13		ug/kg	
	4	4.67	4.64 – 4.7	6.56		ug/kg	
	5	4.86	4.83 – 4.89	10.5		ug/kg	
					10.9		
Column 2	1	4.42	4.39 – 4.45	21.5		ug/kg	
	2	4.57	4.54 – 4.6	24.1		ug/kg	
	3	4.68	4.65 – 4.71	25.3		ug/kg	
	4	4.88	4.85 – 4.91	9.4		ug/kg	
	5	5.51	5.48 – 5.54	8.01		ug/kg	
					17.7		

Identification Summary

SDG Number: 10–543 **Client ID:** RE03–09–13623

Lab Sample ID: 241318006

Data File:	075f7501.d	**Data File:**	075b7501.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30–NOV–09 22:29	**Analyzed:**	30–NOV–09 22:29

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							26
Column 1	1	3.24	3.21 – 3.27	47.2		ug/kg	
	2	3.43	3.4 – 3.46	57.3		ug/kg	
	3	3.7	3.67 – 3.73	71.9		ug/kg	
	4	3.89	3.86 – 3.92	47.2		ug/kg	
	5	4.02	3.99 – 4.05	123		ug/kg	
					69.3		
Column 2	1	3.82	3.79 – 3.85	42.5		ug/kg	
	2	3.96	3.93 – 3.99	61.9		ug/kg	
	3	4.2	4.17 – 4.23	50.7		ug/kg	
	4	4.28	4.25 – 4.31	70.8		ug/kg	
	5	4.44	4.41 – 4.47	41		ug/kg	
					53.4		
Aroclor–1260							45.6
Column 1	1	4.02	3.99 – 4.05	83.3		ug/kg	
	2	4.29	4.26 – 4.32	17.7		ug/kg	
	3	4.45	4.42 – 4.48	16.5		ug/kg	
	4	4.67	4.64 – 4.7	16.9		ug/kg	
	5	4.86	4.83 – 4.89	27.2		ug/kg	
					32.3		
Column 2	1	4.42	4.39 – 4.45	69.5		ug/kg	
	2	4.57	4.54 – 4.6	74.8		ug/kg	
	3	4.68	4.65 – 4.71	67.5		ug/kg	
	4	4.88	4.85 – 4.91	25.3		ug/kg	
	5	5.51	5.48 – 5.54	19.9		ug/kg	
					51.4		

Identification Summary

SDG Number: 10-543 **Client ID:** RE03-09-13624

Lab Sample ID: 241318005

Data File:	074f7401.d	**Data File:**	074b7401.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30-NOV-09 22:18	**Analyzed:**	30-NOV-09 22:18

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254								26.4
	Column 1	1	3.25	3.21 – 3.27	15.6		ug/kg	
		2	3.43	3.4 – 3.46	11.4		ug/kg	
		3	3.7	3.67 – 3.73	18.4		ug/kg	
		4	3.89	3.86 – 3.92	11.2		ug/kg	
		5	4.02	3.99 – 4.05	41		ug/kg	
						19.5		
	Column 2	1	3.82	3.79 – 3.85	17.7		ug/kg	
		2	3.96	3.93 – 3.99	13.6		ug/kg	
		3	4.2	4.17 – 4.23	14.4		ug/kg	
		4	4.28	4.25 – 4.31	18.7		ug/kg	
		5	4.44	4.41 – 4.47	10.4		ug/kg	
						15		
Aroclor-1260								15.8
	Column 1	1	4.02	3.99 – 4.05	27.8		ug/kg	
		2	4.29	4.26 – 4.32	15.6		ug/kg	
		3	4.46	4.42 – 4.48	17.2		ug/kg	
		4	4.67	4.64 – 4.7	12.6		ug/kg	
		5	4.86	4.83 – 4.89	18.4		ug/kg	
						18.3		
	Column 2	1	4.42	4.39 – 4.45	25.6		ug/kg	
		2	4.57	4.54 – 4.6	25.3		ug/kg	
		3	4.68	4.65 – 4.71	24.7		ug/kg	
		4	4.88	4.85 – 4.91	17.4		ug/kg	
		5	5.51	5.48 – 5.54	14.4		ug/kg	
						21.5		

Identification Summary

SDG Number: 10–543 **Client ID:** RE03–10–6085

Lab Sample ID: 241318014

Data File: 081f8101.d **Data File:** 081b8101.d

Inst: ECD2A.I_1 **Inst:** ECD2A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 30–NOV–09 23:36 **Analyzed:** 30–NOV–09 23:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							59.3
Column 1	1	3.24	3.21 – 3.27	1.41		ug/kg	
	2	3.43	3.4 – 3.46	1.54		ug/kg	
	3	3.7	3.67 – 3.73	2.24		ug/kg	
	4	3.89	3.86 – 3.92	1.27		ug/kg	
	5	4.02	3.99 – 4.05	7.97		ug/kg	
					2.88		
Column 2	1	3.82	3.79 – 3.85	1.16		ug/kg	
	2	3.96	3.93 – 3.99	1.63		ug/kg	
	3	4.2	4.17 – 4.23	1.84		ug/kg	
	4	4.28	4.25 – 4.31	2.06		ug/kg	
	5	4.44	4.41 – 4.47	1.15		ug/kg	
					1.57		
Aroclor–1260							13.9
Column 1	1	4.02	3.99 – 4.05	5.41		ug/kg	
	2	4.29	4.26 – 4.32	2.47		ug/kg	
	3	4.45	4.42 – 4.48	2.22		ug/kg	
	4	4.67	4.64 – 4.7	2.28		ug/kg	
	5	4.86	4.83 – 4.89	3.2		ug/kg	
					3.12		
Column 2	1	4.42	4.39 – 4.45	3.96		ug/kg	
	2	4.57	4.54 – 4.6	5.31		ug/kg	
	3	4.68	4.65 – 4.71	3.39		ug/kg	
	4	4.88	4.85 – 4.91	2.77		ug/kg	
	5	5.5	5.48 – 5.54	2.48		ug/kg	
					3.58		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981383**				
Client Sample:	**QC for batch 926709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926709**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 20:05**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**062f6201–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	062b6201–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/062f6201-2.d
Lab Smp Id: 1201981383 Client Smp ID: PBLK01
Inj Date : 30-NOV-2009 20:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981383|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 62 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	10895979	188.802	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	9597879	175.050	5.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/062f6201-2.d

Date : 30-NOV-2009 20:05

Client ID: PBLK01

Sample Info: |1201981383|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

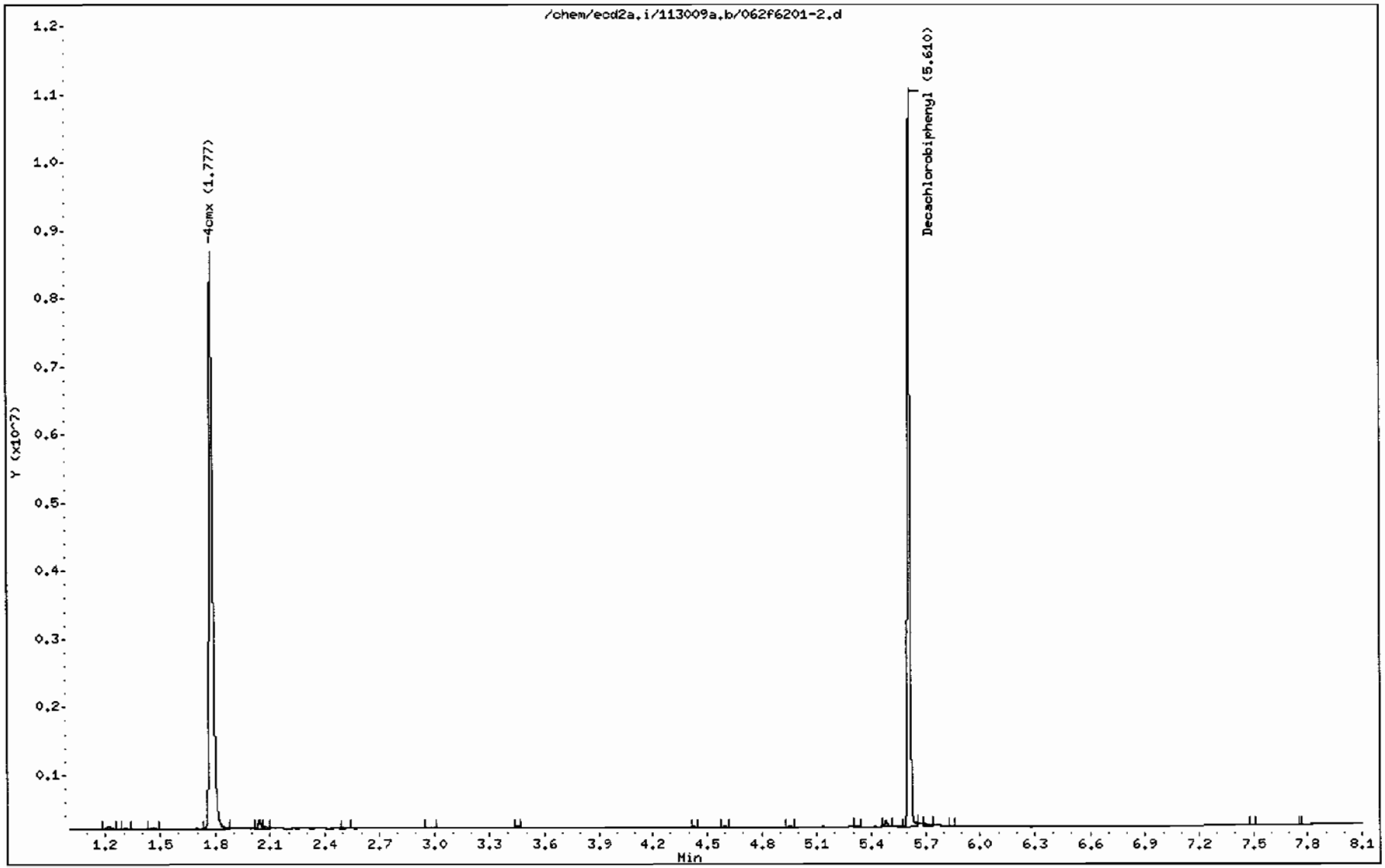

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/062b6201-2.d
Lab Smp Id: 1201981383 Client Smp ID: PBLK01
Inj Date : 30-NOV-2009 20:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981383|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 62 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	23422973	198.164	6.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	21469886	197.621	6.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/062b6201-2.d

Page 1

Date : 30-NOV-2009 20:05

Client ID: PBLK01

Instrument: ecd2a.i

Sample Info: |120198138311|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP2

Column diameter: 0.25

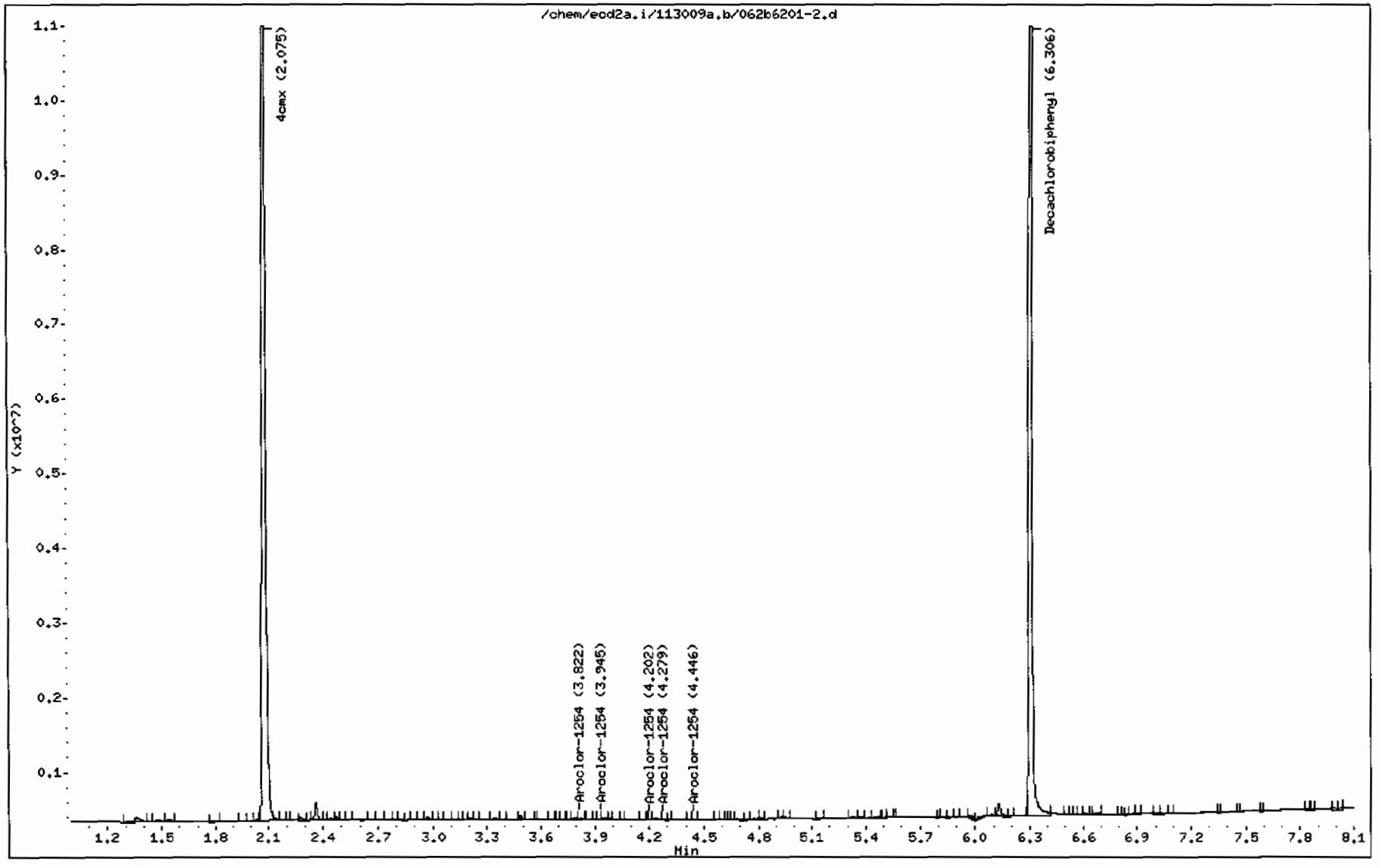

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-543**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981386**				
Client Sample:	**QC for batch 926709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926709**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 20:16**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**063f6301-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	063b6301-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		26.5	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		30.8	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/063f6301-2.d
Lab Smp Id: 1201981386 Client Smp ID: PBLK01LCS
Inj Date : 30-NOV-2009 20:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981386|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 63 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	10115527	175.278	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	9156412	166.999	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1621507	772.218	25.7	80.00- 120.00	100.00(M)
2.603	2.603	0.000	3512511	779.776	26.0	198.19- 238.19	216.62
2.693	2.694	-0.001	1360284	747.322	24.9	66.30- 106.30	83.89
2.828	2.829	-0.001	694592	744.565	24.8	23.34- 63.34	42.84

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.979	2.980	-0.001	1087022	788.769	26.3	44.93- 84.93	67.04
Average of Peak Concentrations =					25.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	3702340	910.383	30.3	80.00- 120.00	100.00
4.289	4.290	-0.001	2289506	905.545	30.2	41.58- 81.58	61.84
4.454	4.455	-0.001	2321235	898.588	30.0	43.08- 83.08	62.70
4.666	4.667	-0.001	5727314	948.843	31.6	129.99- 169.99	154.69
4.855	4.856	-0.001	2629528	903.014	30.1	51.44- 91.44	71.02
Average of Peak Concentrations =					30.4		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/063f6301-2.d
Date : 30-NOV-2009 20:16
Client ID: PBLK01LCS
Sample Info: |1201981386|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

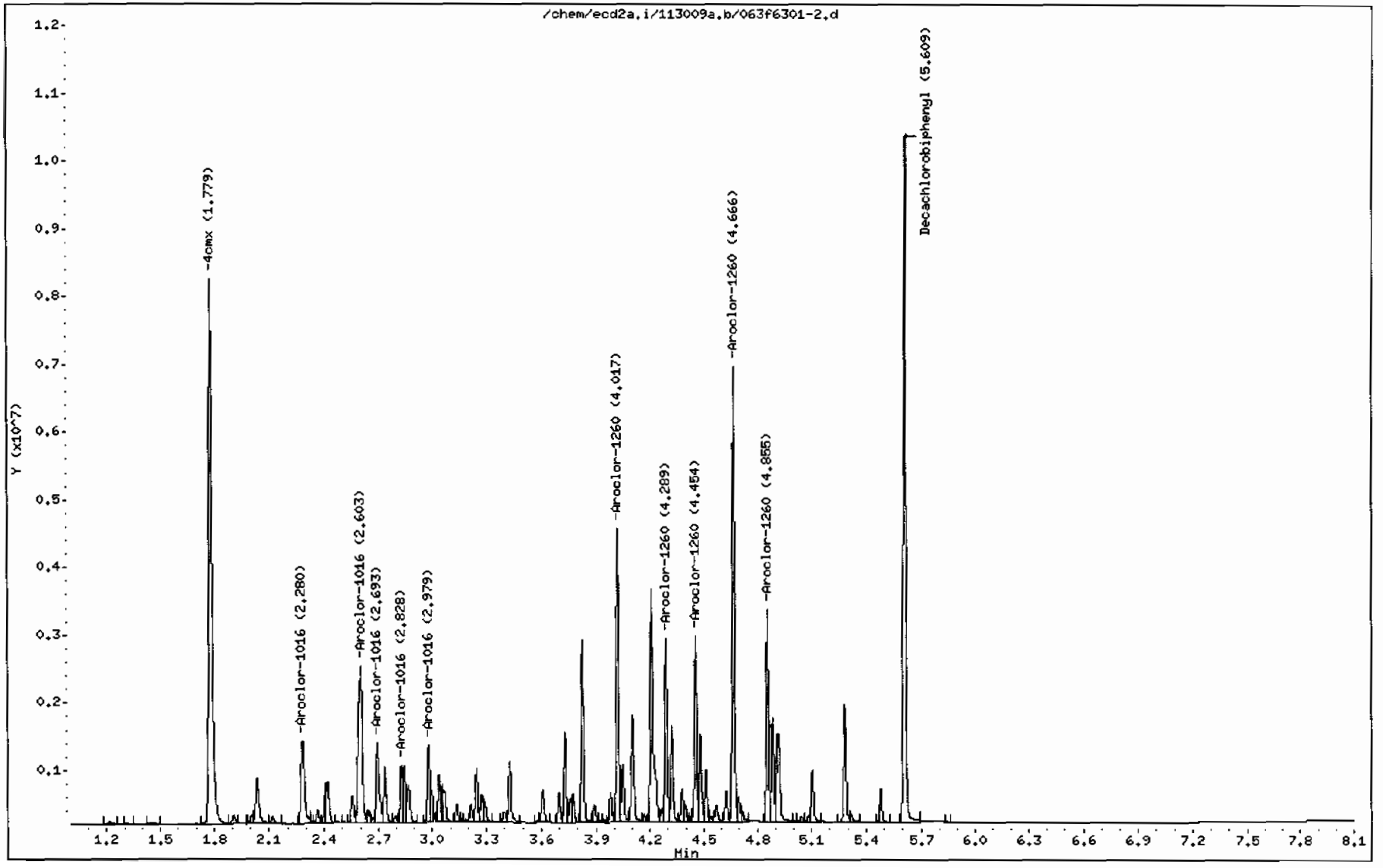

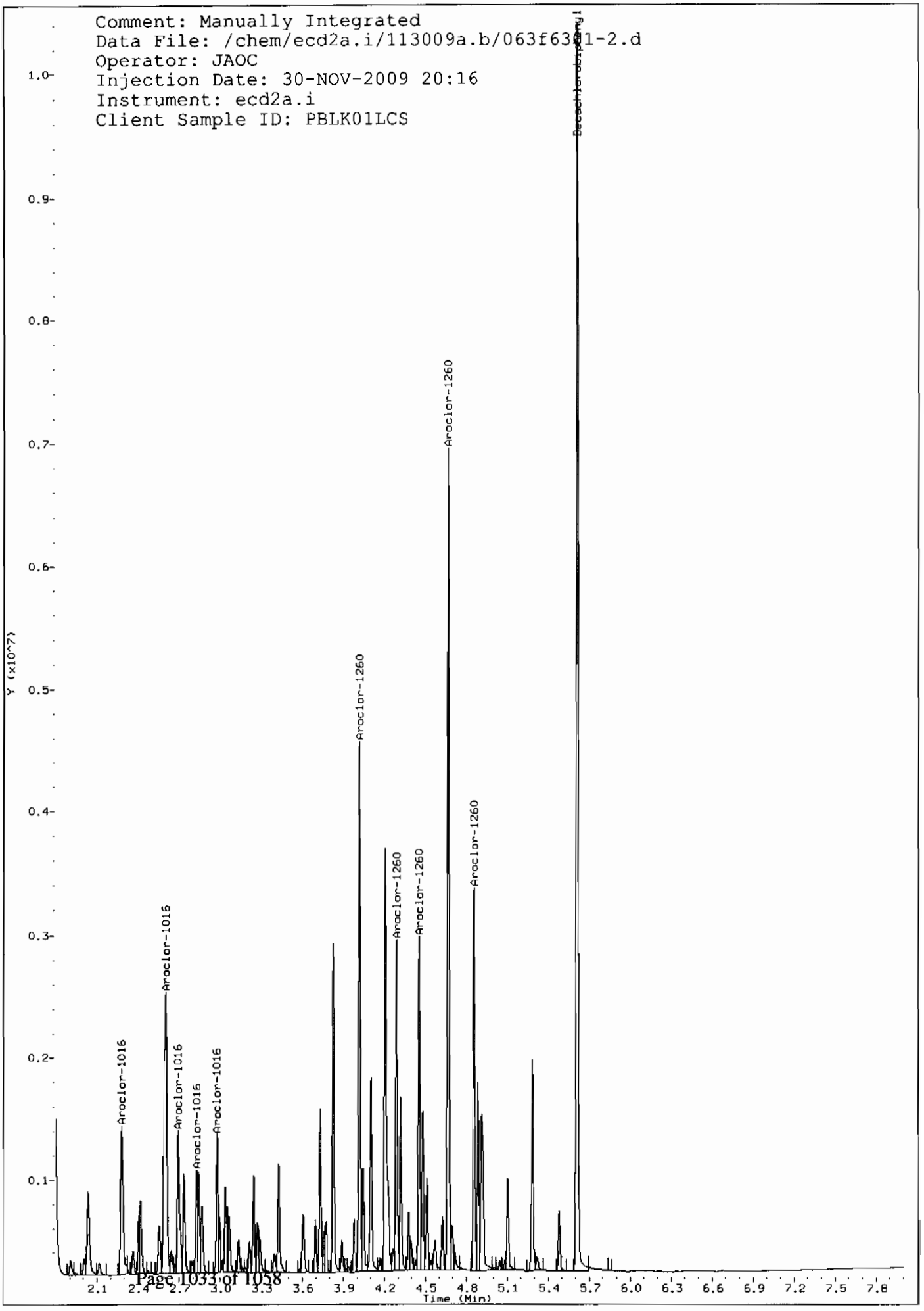
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/063f6301-2.d
Operator: JAOC
Injection Date: 30-NOV-2009 20:16
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^7)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1
5.4
5.7
6.0
6.3
6.6
6.9
7.2
7.5
7.8
Time (Min)

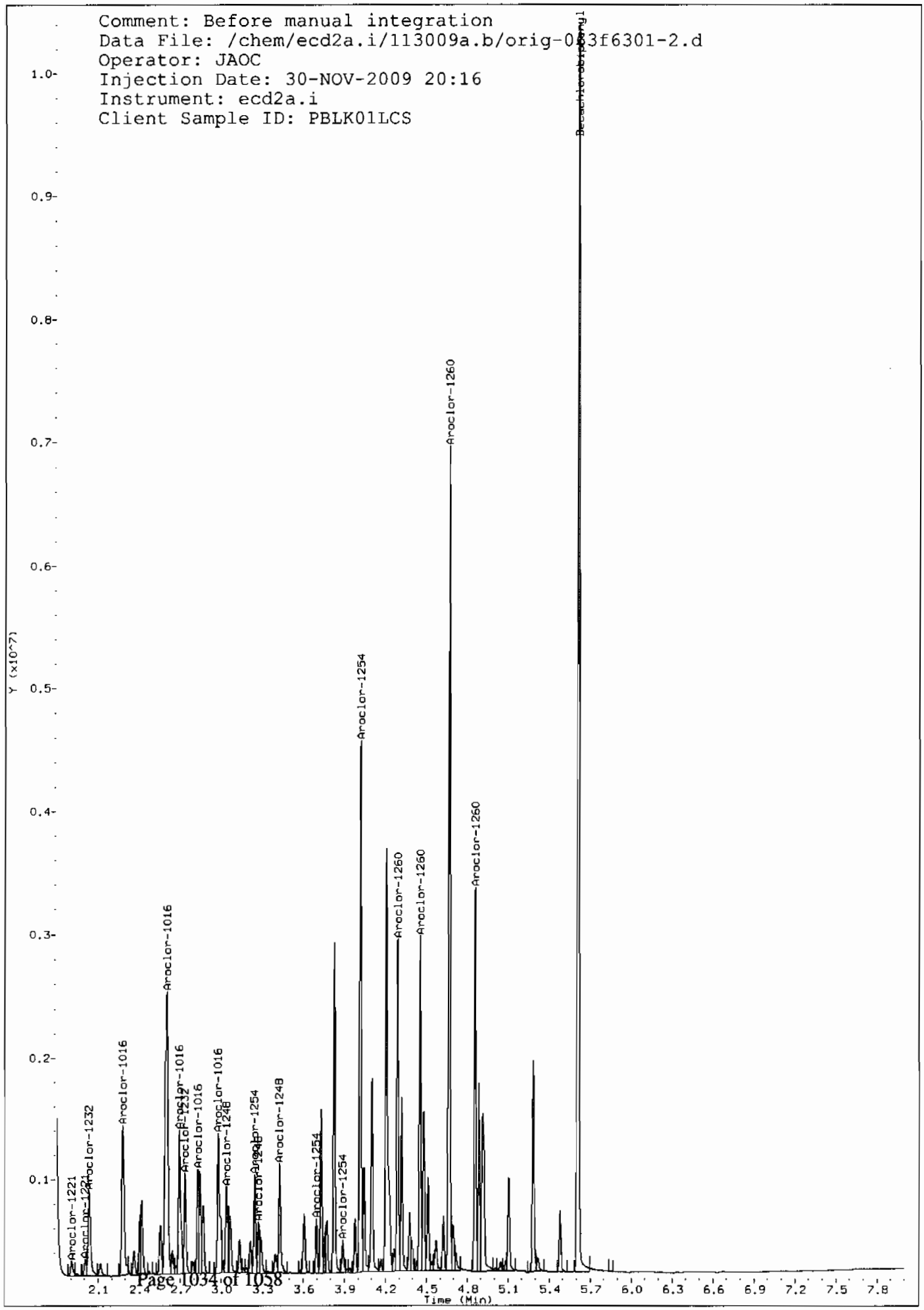
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-083f6301-2.d
Operator: JAOC
Injection Date: 30-NOV-2009 20:16
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1016
Aroclor-1248
Aroclor-1232
Aroclor-1221
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/063b6301-2.d
Lab Smp Id: 1201981386 Client Smp ID: PBLK01LCS
Inj Date : 30-NOV-2009 20:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981386|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 63 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	21700397	183.591	6.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	20147515	185.449	6.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	3361403	789.423	26.3	80.00- 120.00	100.00
3.185	3.185	0.000	2715289	788.255	26.3	60.91- 100.91	80.78
3.336	3.336	0.000	1625894	821.371	27.4	26.69- 66.69	48.37
3.364	3.365	-0.001	1554186	754.001	25.1	29.14- 69.14	46.24

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.523	0.000	2251036	817.319	27.2	46.31- 86.31	66.97
Average of Peak Concentrations =					26.5		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5047570	915.635	30.5	80.00- 120.00	100.00
4.569	4.570	-0.001	6783885	951.194	31.7	108.85- 148.85	134.40
4.681	4.682	-0.001	4392993	928.483	30.9	65.38- 105.38	87.03
4.879	4.880	-0.001	5416528	933.778	31.1	82.89- 122.89	107.31
5.504	5.505	-0.001	8016416	886.705	29.6	145.10- 185.10	158.82
Average of Peak Concentrations =					30.8		

Data File: /chem/ecd2a.i/113009a.b/06306301-2.d
Date : 30-NOV-2009 20:16
Client ID: PBLK01LCS
Sample Info: 1120198138611
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

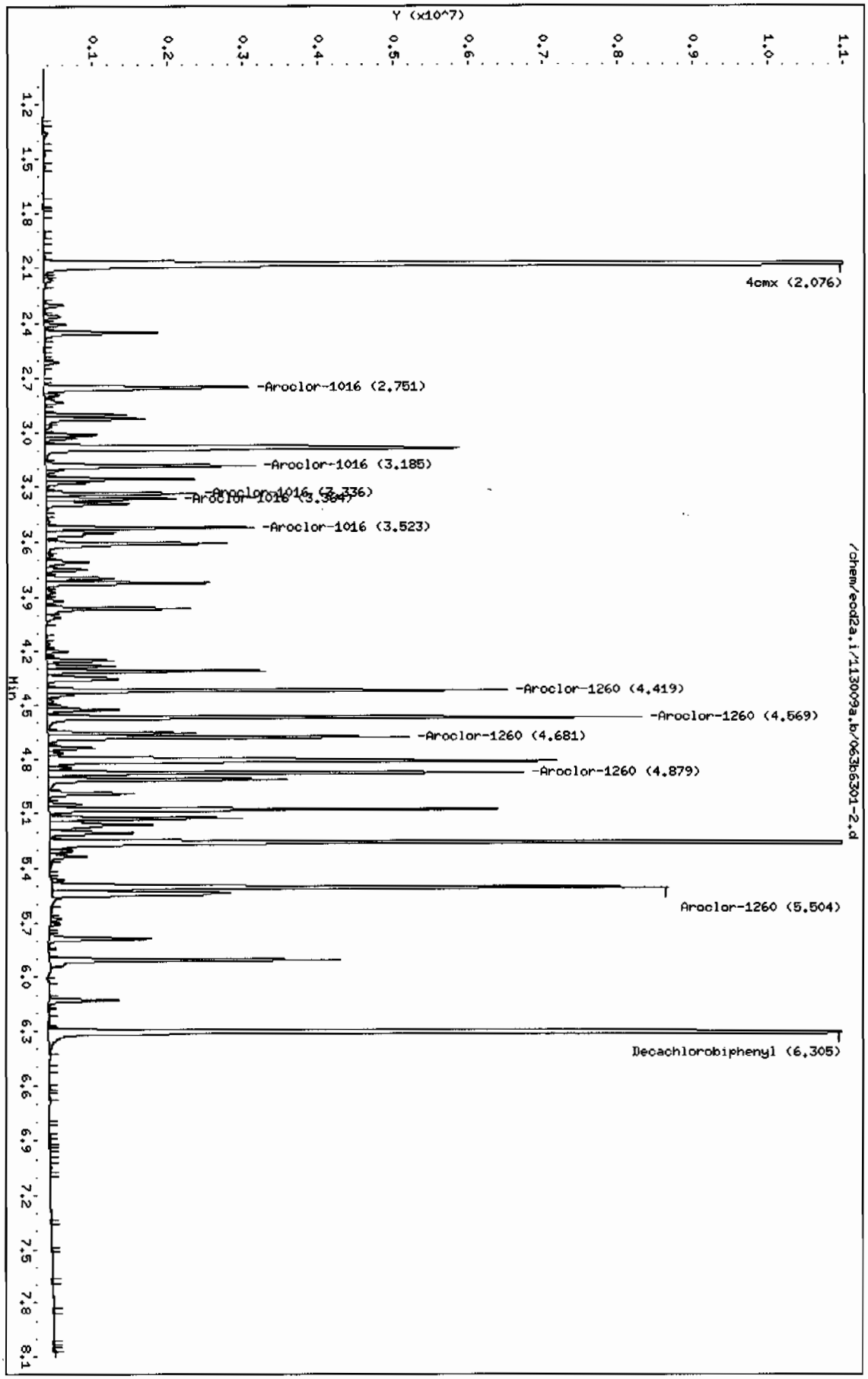

Page 1

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0	DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 12:59		111809		1.0	CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0	PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0	CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809	1.0		PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0	CLEAN	
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0	DUSE	
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0	1254 LEVEL 1	
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0	1254 LEVEL 2	
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0	1254 LEVEL 3	
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0	1254 LEVEL 4	
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0	1254 LEVEL 5	
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0	PASSES BOTH COLUMNS	
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0	PASSES BOTH COLUMNS	
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0	PASSES BOTH COLUMNS	
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0	1248 LEVEL 1	
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0	1248 LEVEL 2	
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0	1248 LEVEL 3	
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0	1248 LEVEL 4	
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0	1248 LEVEL 5	

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0	DUSE	

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18		113009a	1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29		113009a	1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40		113009a	1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51		113009a	1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02		113009a	1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13		113009a	1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25		113009a	1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399	1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399	1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399	200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399	200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399	200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36		113009a	1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47		113009a	1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688	1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688	1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688	1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688	1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688	1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12		113009a	1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23		113009a	1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463	1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463	5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463	20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462	10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a	1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a	1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390	1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407	1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407	5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a	1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a	1.0		CLEAN

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a	1.0	CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/087b8701.d
Lab Smp Id: 1201981384 Client Smp ID: RE03-09-13812MS
Inj Date : 01-DEC-2009 00:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981384|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 87 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	1884697	15.9450	5.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	1713211	15.7694	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	366924	86.1718	30.8	80.00- 120.00	100.00(a)
3.185	3.185	0.000	329596	95.6826	34.2	60.91- 100.91	89.83
3.336	3.336	0.000	197962	100.007	35.7	26.69- 66.69	53.95
3.365	3.365	0.000	183712	89.1264	31.8	29.14- 69.14	50.07
3.523	3.523	0.000	243175	88.2934	31.5	46.31- 86.31	66.27

Average of Peak Concentrations = 32.8

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	349250	70.0560	25.0	80.00- 120.00	100.00(a)
3.964	3.964	0.000	478068	82.4405	29.4	97.16- 137.16	136.88
4.200	4.201	-0.001	144817	35.9974	12.8	61.89- 101.89	41.47
4.280	4.282	-0.002	533417	68.9938	24.6	138.47- 178.47	152.73
4.444	4.445	-0.001	237464	42.3415	15.1	96.59- 136.59	67.99
Average of Peak Concentrations =					21.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	1156007	209.701	74.9	80.00- 120.00	100.00(R)
4.570	4.570	0.000	1748193	245.121	87.5	108.85- 148.85	151.23
4.681	4.682	-0.001	998920	211.127	75.4	65.38- 105.38	86.41
4.879	4.880	-0.001	1178256	203.125	72.5	82.89- 122.89	101.92
5.505	5.505	0.000	1820006	201.313	71.9	145.10- 185.10	157.44
Average of Peak Concentrations =					76.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd2a.i/113009a.b/087b8701.d

Date : 01-DEC-2009 00:42

Client ID: RE03-09-13812MS

Sample Info: |12019813841101

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

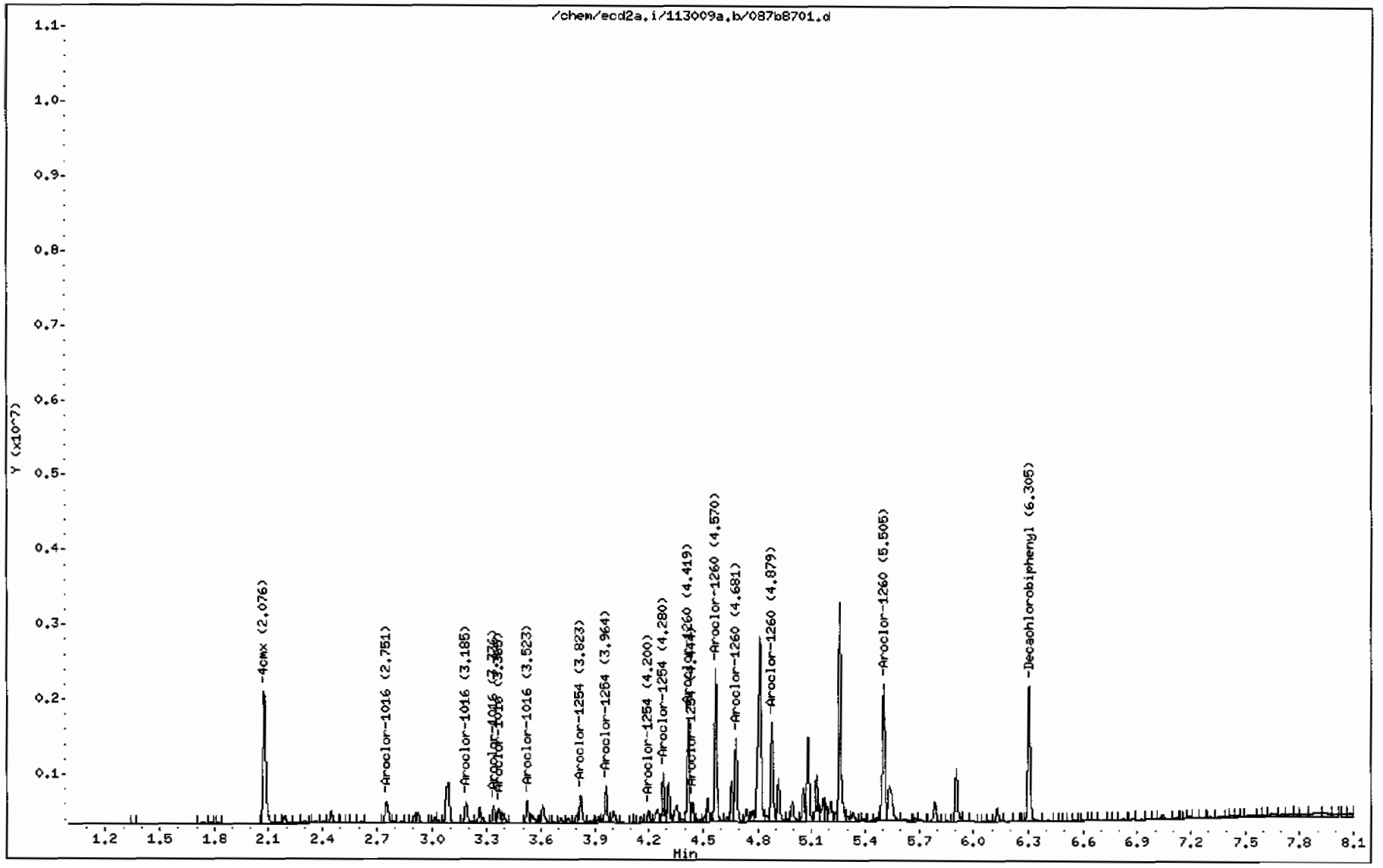

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/087f8701.d
Lab Smp Id: 1201981384 Client Smp ID: RE03-09-13812MS
Inj Date : 01-DEC-2009 00:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981384|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 87 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	945449	16.3824	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	865486	15.7851	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	210831	100.405	35.8	80.00- 120.00	100.00(aM)
2.603	2.603	0.000	403736	89.6292	32.0	198.19- 238.19	191.50
2.694	2.694	0.000	170449	93.6424	33.4	66.30- 106.30	80.85
2.828	2.829	-0.001	103638	111.094	39.7	23.34- 63.34	49.16
2.980	2.980	0.000	138292	100.348	35.8	44.93- 84.93	89.35

Average of Peak Concentrations = 35.3

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	157543	75.7399	27.0	80.00- 120.00	100.00
3.427	3.427	0.000	227743	82.1543	29.3	115.68- 155.68	144.56
3.697	3.697	0.000	290842	77.7154	27.8	166.12- 206.12	184.61
3.890	3.889	0.001	165190	59.3631	21.2	117.34- 157.34	104.85
4.017	4.018	-0.001	1030103	373.220	133	114.59- 154.59	653.85
Average of Peak Concentrations =					47.7		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1030103	253.296	90.5	80.00- 120.00	100.00(R)
4.289	4.290	-0.001	521982	206.454	73.7	41.58- 81.58	50.67
4.455	4.455	0.000	500949	193.926	69.2	43.08- 83.08	48.63
4.667	4.667	0.000	1166980	193.333	69.0	129.99- 169.99	113.29
4.856	4.856	0.000	654902	224.902	80.3	51.44- 91.44	63.58
Average of Peak Concentrations =					76.5		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/087f8701.d

Date : 01-DEC-2009 00:42

Client ID: RE03-09-13812MS

Sample Info: |1201981384|10|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

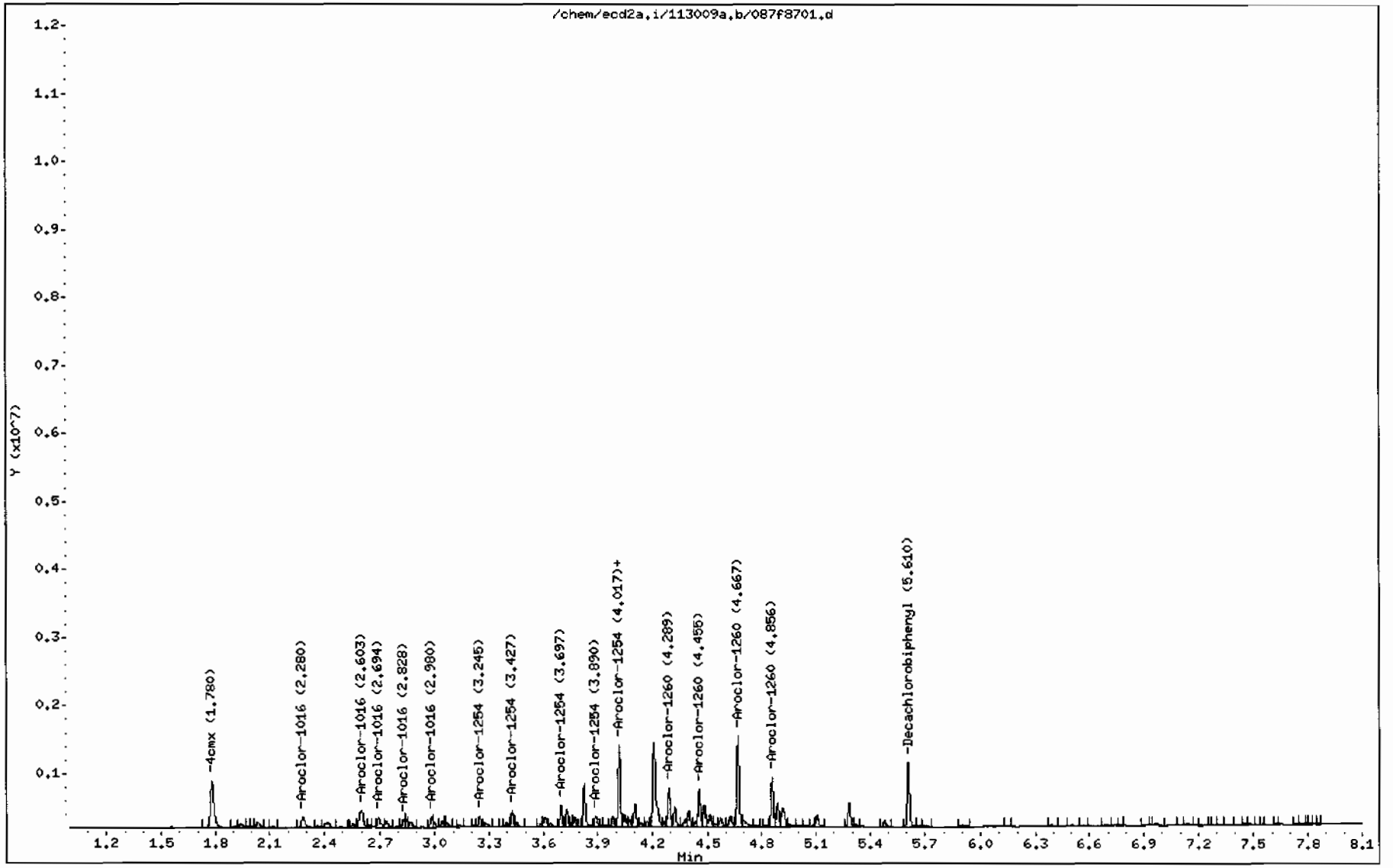

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/088b8801.d
Lab Smp Id: 1201981385 Client Smp ID: RE03-09-13812MSD
Inj Date : 01-DEC-2009 00:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981385|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 88 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	2365836	20.0156	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	2102573	19.3533	6.9	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	459752	107.972	38.6	80.00- 120.00	100.00(RM)
3.185	3.185	0.000	392218	113.862	40.7	60.91- 100.91	85.31
3.336	3.336	0.000	282077	142.500	50.9	26.69- 66.69	61.35
3.364	3.365	-0.001	252001	122.256	43.7	29.14- 69.14	54.81
3.523	3.523	0.000	330798	120.108	42.9	46.31- 86.31	71.95

Average of Peak Concentrations = 43.4

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	549454	110.215	39.4	80.00- 120.00	100.00(M)
3.964	3.964	0.000	750432	129.408	46.2	97.16- 137.16	136.58
4.200	4.201	-0.001	278012	69.1058	24.7	61.89- 101.89	50.60
4.280	4.282	-0.002	911879	117.945	42.1	138.47- 178.47	165.96
4.444	4.445	-0.001	430951	76.8415	27.4	96.59- 136.59	78.43
Average of Peak Concentrations =					36.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	1673278	303.535	108	80.00- 120.00	100.00(R)
4.569	4.570	-0.001	2530905	354.868	127	108.85- 148.85	151.25
4.681	4.682	-0.001	1467844	310.237	111	65.38- 105.38	87.72
4.879	4.880	-0.001	1629259	280.875	100	82.89- 122.89	97.37
5.505	5.505	0.000	2526002	279.404	99.8	145.10- 185.10	150.96
Average of Peak Concentrations =					109		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/088b8801.d

Date : 01-DEC-2009 00:53

Client ID: RE03-09-13812MSD

Sample Info: |12019813851101

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

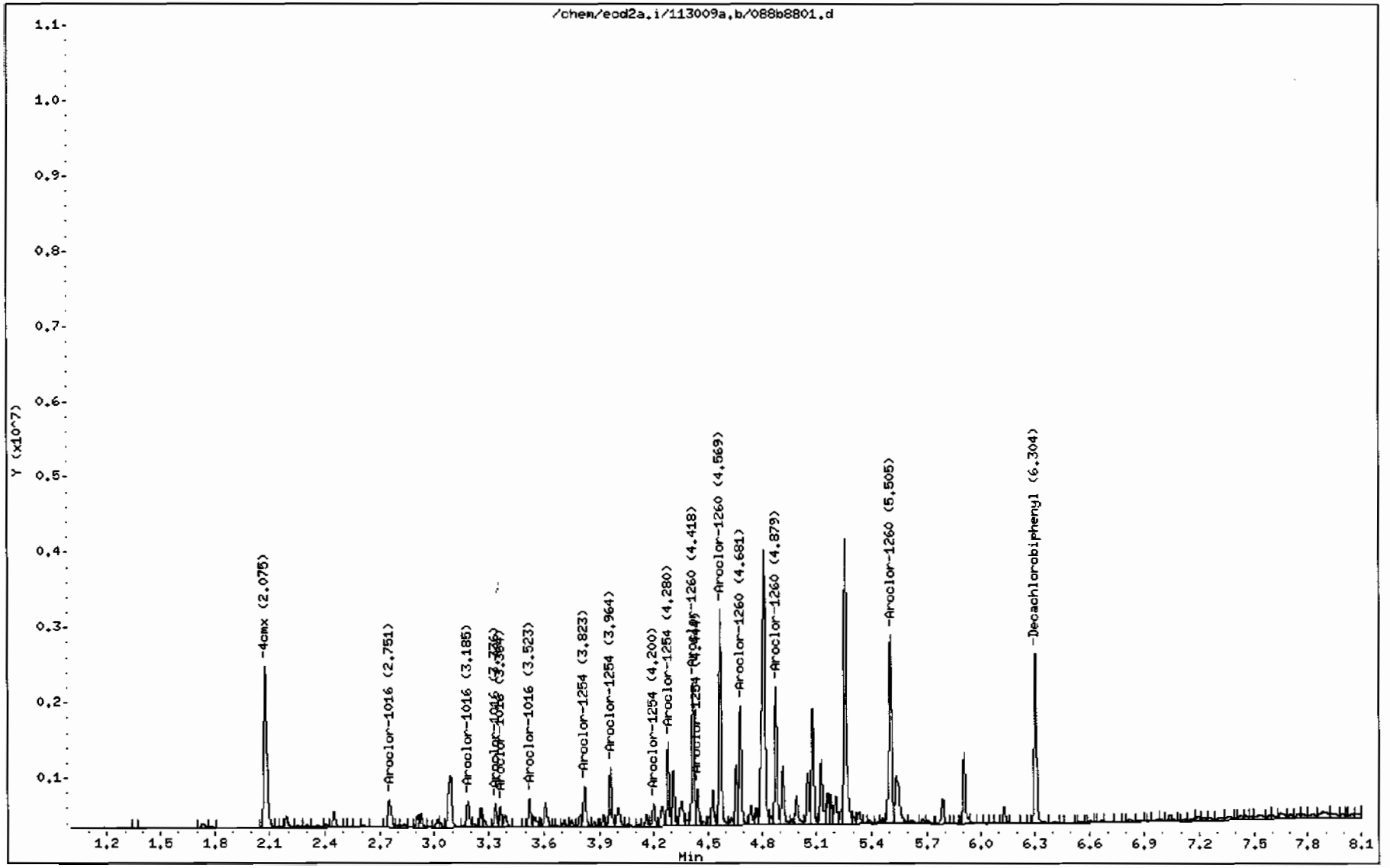

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/088f8801.d
Lab Smp Id: 1201981385 Client Smp ID: RE03-09-13812MSD
Inj Date : 01-DEC-2009 00:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981385|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 88 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	1165201	20.1902	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1046084	19.0789	6.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	253152	120.560	43.0	80.00- 120.00	100.00(RM)
2.602	2.603	-0.001	496456	110.213	39.4	198.19- 238.19	196.11
2.694	2.694	0.000	209188	114.925	41.0	66.30- 106.30	82.63
2.828	2.829	-0.001	142339	152.580	54.5	23.34- 63.34	56.23
2.979	2.980	-0.001	168563	122.313	43.7	44.93- 84.93	91.96
Average of Peak Concentrations -					44.3		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	223667	107.530	38.4	80.00- 120.00	100.00
3.427	3.427	0.000	326718	117.858	42.1	115.68- 155.68	146.07
3.697	3.697	0.000	444356	118.736	42.4	166.12- 206.12	198.67
3.889	3.889	0.000	255422	91.7891	32.8	117.34- 157.34	114.20
4.017	4.018	-0.001	1438348	521.132	186	114.59- 154.59	643.07
Average of Peak Concentrations =					68.3		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1438348	353.681	126	80.00- 120.00	100.00(R)
4.289	4.290	-0.001	683561	270.362	96.6	41.58- 81.58	47.52
4.454	4.455	-0.001	653446	252.960	90.3	43.08- 83.08	45.43
4.666	4.667	-0.001	1538492	254.882	91.0	129.99- 169.99	106.96
4.855	4.856	-0.001	878884	301.820	108	51.44- 91.44	61.10
Average of Peak Concentrations =					102		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/088f8801.d

Date : 01-DEC-2009 00:53

Client ID: RE03-09-13812MSD

Sample Info: !1201981385!10!

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

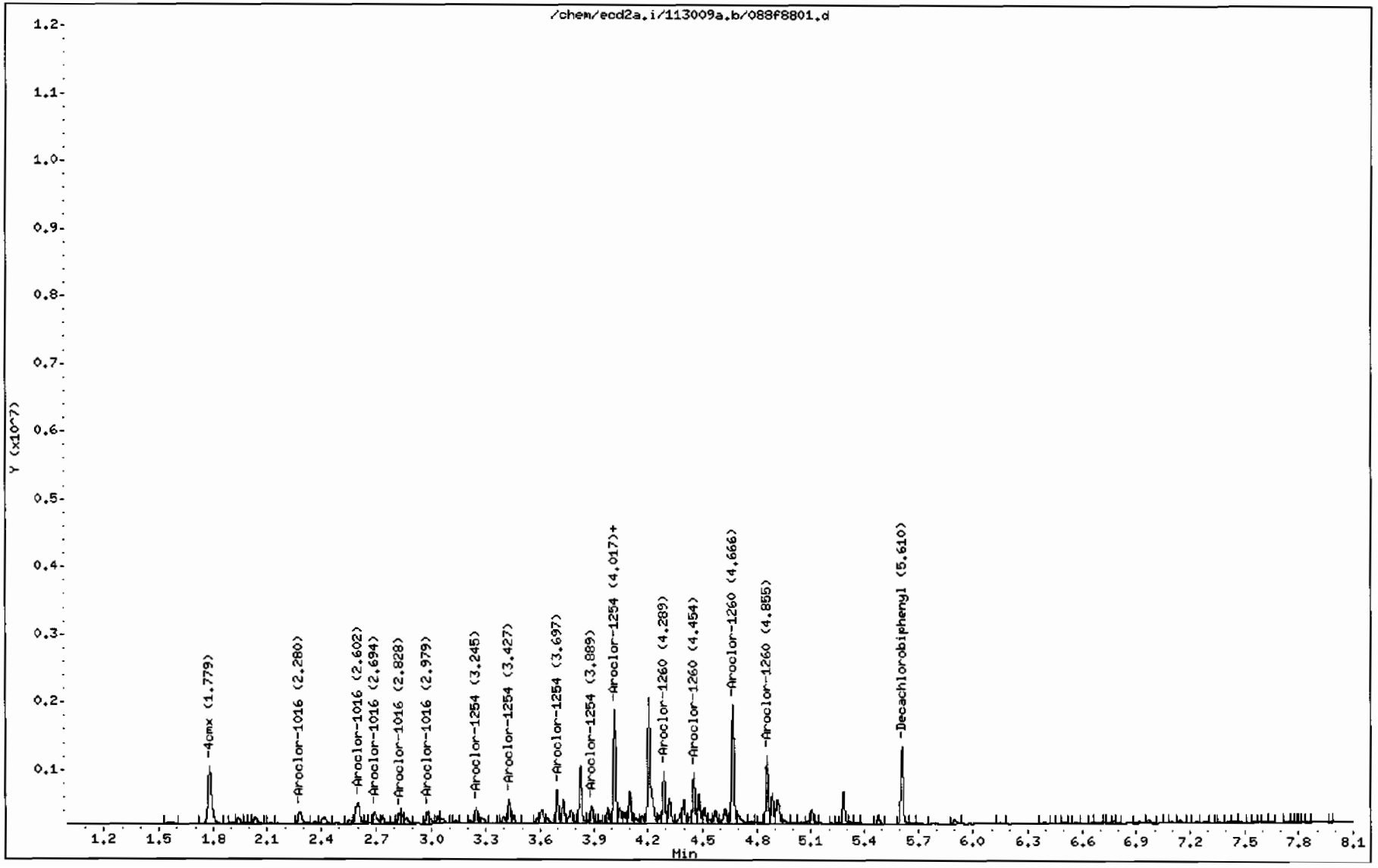

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926709 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981383 MB	27-NOV-2009 22:34:22	30	H2SO4/KMi2		2	9	1	0.03333
1201981386 LCS	27-NOV-2009 22:34:22	30	H2SO4/KMi2		2	9	1	0.03333
241033012 - 2	27-NOV-2009 22:34:22	30.02	H2SO4/KMi2		2	9	1	0.03331
241183002	27-NOV-2009 22:34:22	30.13	H2SO4/KMi2		2	9	1	0.03319
241183003	27-NOV-2009 22:34:22	30.07	H2SO4/KMi2		2	9	1	0.03326
241183004	27-NOV-2009 22:34:22	30.14	H2SO4/KMi2		2	9	1	0.03318
241318001	27-NOV-2009 22:34:22	30.08	H2SO4/KMi2		2	9	1	0.03324
241318002	27-NOV-2009 22:34:22	30.12	H2SO4/KMi2		2	9	1	0.0332
241318003	27-NOV-2009 22:34:22	30.13	H2SO4/KMi2		2	9	1	0.03319
241318004	27-NOV-2009 22:34:22	30.16	H2SO4/KMi2		2	9	1	0.03316
241318005	27-NOV-2009 22:34:22	30.17	H2SO4/KMi2		2	9	1	0.03315
241318006	27-NOV-2009 22:34:22	30.02	H2SO4/KMi2		2	9	1	0.03331
241318007	27-NOV-2009 22:34:22	30.16	H2SO4/KMi2		2	9	1	0.03316
241318008	27-NOV-2009 22:34:22	30.02	H2SO4/KMi2		2	9	1	0.03331
241318009	27-NOV-2009 22:34:22	30.17	H2SO4/KMi2		2	9	1	0.03315
241318010	27-NOV-2009 22:34:22	30.14	H2SO4/KMi2		2	9	1	0.03318
241318013	27-NOV-2009 22:34:22	30.01	H2SO4/KMi2		2	9	1	0.03332
241318014	27-NOV-2009 22:34:22	30.02	H2SO4/KMi2		2	9	1	0.03331
241336001	27-NOV-2009 22:34:22	30.15	H2SO4/KMi2		2	9	1	0.03317
241336002	27-NOV-2009 22:34:22	30.02	H2SO4/KMi2		2	9	1	0.03331
241417001	27-NOV-2009 22:34:22	30.04	H2SO4/KMi2		2	9	1	0.03329
1201981384 MS (241417001)	27-NOV-2009 22:34:22	30.14	H2SO4/KMi2		2	9	1	0.03318
1201981385 MSD (241417001)	27-NOV-2009 22:34:22	30.14	H2SO4/KMi2		2	9	1	0.03318
241417002	27-NOV-2009 22:34:22	30.02	H2SO4/KMi2		2	9	1	0.03331

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981386	PCB Laboratory Control	WE091113-07	1	mL
MS	1201981384	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201981385	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

Thursday, November 19, 2009

REQUEST NUMBER: 10-603

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-603

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13461	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13462	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13463	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13464	S	11/18/2009	Plus, B, Li, Si, Ti, U
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-603

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8082	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:9012A	1	RE03-09-13461	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13462	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13463	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13464	S	11/18/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-603

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-603

REQUEST NUMBER: 10-603

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13462	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13462	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13464	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13464	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13463	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13463	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13461	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13461	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13464	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13461	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13462	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13463	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2263 **EVENT NAME:** Soil Sampling at CU 03-009(a)-00

SAMPLE ID: RE03-09-13461 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1351	SUB-MEDIA:	OTHER	NA
PRS ID:	03-009(i)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608190	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: SAND & GRAVEL FILL w/ plant roots. Reddish brown (5YR 5/4)

SAMPLE COMMENTS: ~~Samples to be collected from 4 test pits.~~ JLJ 11-18-09

LOCATION DESC: 03-009(i)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID : 0.0 ppm SAMPLES <MDA
BACKGROUND
α: 16 dpm
β: 1352 dpm

COLLECTED BY (PRINT) L. Horne, M. Nauck REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2263 **EVENT NAME:** Soil Sampling at CU 03-009(a)-00

SAMPLE ID: RE03-09-13462 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1353	SUB-MEDIA:	OTHER	NA
PRS ID:	03-009(i)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608190	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: SAND & GRAVEL FILL. BROWN (7.5 YR 5/4)

SAMPLE COMMENTS: ~~Samples to be collected from 4 test pits.~~ JLJ 11-18-09

LOCATION DESC: 03-009(i)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND α: 16 dpm β: 1352 dpm SAMPLES <MDA

COLLECTED BY (PRINT) L. Horne, M. Nauck **REVIEWED BY (PRINT)** J. Jud

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2263 **EVENT NAME:** Soil Sampling at CU 03-009(a)-00

SAMPLE ID: RE03-09-13463 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/2009	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1406	SUB-MEDIA:	OTHER	NA
PRS ID:	03-009(i)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608191	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: SAND & GRAVEL FILL. BROWN (7.5 YR 5/3)

SAMPLE COMMENTS: ~~Samples to be collected from 4 test pits.~~ HIT TUFF @ 1'
11-18-09

LOCATION DESC: 03-009i-6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
BACKGROUND
α: 16 dpm
β: ~~1432~~ 1352 dpm
11-18-09
SAMPLES <MDA

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) M. Marck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Marck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2263 **EVENT NAME:** Soil Sampling at CU 03-009(a)-00

SAMPLE ID: RE03-09-13464 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	QTB3
TIME COLLECTED (HH:MM)		1412	SUB-MEDIA:	OTHER	NA
PRS ID:	03-009(i)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608191	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ R mr 11/19/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: BROWN TUFF (7.5 YR 5/3)

SAMPLE COMMENTS: ~~Samples to be collected from 4 test pits.~~ LLW 11-18-09

LOCATION DESC: 03-009(i)-6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
BACKGROUND
α: 16 dpm
β: 1352 dpm
SAMPLES <MDA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Lauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Lauck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-603 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV and CCV %Ds for dichlorodifluoromethane, trichlorofluoromethane, tetrachloroethylene, 2-hexanone and 2-butanone were >20%. The associated sample results were NDs and, thus, were qualified UJ,V7c.
2. It should be noted that the MS/MSD was performed on a sample from another LANL RN and was not spiked with trichlorotrifluoroethane. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/27/10

VALIDATOR'S SIGNATURE: L Thal DATE: 01/25/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☐	☒	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☐	☒	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13461**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 19:04**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n319.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.372	1.10	UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10	UJ,V7c
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48	
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48	
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48	
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.361	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.361	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10	UJ,V7c
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10	

LT 01/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13461**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 19:04**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n319.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.48	ug/kg	1.75	5.48
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13462**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 13:51**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 13:20**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o109.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07	UJ,V7c
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07	UJ,V7c
67-64-1	Acetone	U	5.36	ug/kg	1.78	5.36	
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
74-88-4	Iodomethane	U	5.36	ug/kg	1.72	5.36	
75-09-2	Methylene chloride	U	5.36	ug/kg	2.15	5.36	
75-15-0	Carbon disulfide	U	5.36	ug/kg	1.34	5.36	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
78-93-3	2-Butanone	U	5.36	ug/kg	1.61	5.36	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.36	ug/kg	1.34	5.36	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
591-78-6	2-Hexanone	U	5.36	ug/kg	1.61	5.36	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07	UJ,V7c
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07	

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13462	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/30/2009 13:51	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 13:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7o109.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.36	ug/kg	1.72	5.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

LT 01/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13463	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 18:29	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n318.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05	UJ,V7c
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05	
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05	
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05	
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05	
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05	UJ,V7c
67-64-1	Acetone	U	5.25	ug/kg	1.74	5.25	
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
74-88-4	Iodomethane	U	5.25	ug/kg	1.68	5.25	
75-09-2	Methylene chloride	U	5.25	ug/kg	2.10	5.25	
75-15-0	Carbon disulfide	U	5.25	ug/kg	1.31	5.25	
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05	
78-93-3	2-Butanone	U	5.25	ug/kg	1.58	5.25	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05	
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05	
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05	
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05	
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05	
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05	
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05	
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05	
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05	
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05	
108-10-1	4-Methyl-2-pentanone	U	5.25	ug/kg	1.31	5.25	
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05	
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05	
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05	
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05	
591-78-6	2-Hexanone	U	5.25	ug/kg	1.58	5.25	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05	UJ,V7c
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05	
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05	
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05	

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13463**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 18:29**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:58**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n318.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.25	ug/kg	1.68	5.25
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**3.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13464**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 14:26**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 13:21**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o110.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.351	1.03	UJ,V7c
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03	
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03	
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03	
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03	
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03	UJ,V7c
67-64-1	Acetone	U	5.17	ug/kg	1.71	5.17	
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03	
74-88-4	Iodomethane	U	5.17	ug/kg	1.65	5.17	
75-09-2	Methylene chloride	U	5.17	ug/kg	2.07	5.17	
75-15-0	Carbon disulfide	U	5.17	ug/kg	1.29	5.17	
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03	
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03	
78-93-3	2-Butanone	U	5.17	ug/kg	1.55	5.17	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03	
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03	
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03	
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03	
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03	
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03	
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03	
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03	
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03	
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03	
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03	
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03	
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03	
108-10-1	4-Methyl-2-pentanone	U	5.17	ug/kg	1.29	5.17	
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03	
108-88-3	Toluene	U	1.03	ug/kg	0.310	1.03	
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03	
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03	
591-78-6	2-Hexanone	U	5.17	ug/kg	1.55	5.17	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03	
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03	UJ,V7c
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03	
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03	
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03	

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13464	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/30/2009 14:26	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 13:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7o110.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.17	ug/kg	1.65	5.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	No Tentatively Identified Compounds Found			ug/kg		

LT 01/25/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-603 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV or CCV %Ds for pyridine, bis(2-chloroisopropyl)ether, hexachlorocyclopentadiene, 3-nitroaniline and 4-nitroaniline were >20%. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The MS/MSD was performed on a sample from another LANL RN and the raw data for the parent sample were not present in the data package. The MSD %R for 2,4-dinitrophenol and the MS/MSD RPDs for several target analytes did not meet laboratory acceptance criteria. Since the analysis of an MS or an MSD was not a client requirement, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/27/10

VALIDATOR'S SIGNATURE: L Thal DATE: 01/25/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13461	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	4
Run Date:	11/30/2009 00:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s1k2932.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	1460	ug/kg	292	1460	
108-95-2	Phenol	U	1460	ug/kg	292	1460	
95-57-8	2-Chlorophenol	U	1460	ug/kg	292	1460	
106-46-7	1,4-Dichlorobenzene	U	1460	ug/kg	292	1460	
621-64-7	N-Nitrosodipropylamine	U	1460	ug/kg	292	1460	
59-50-7	4-Chloro-3-methylphenol	U	1460	ug/kg	292	1460	
83-32-9	Acenaphthene	U	146	ug/kg	48.1	146	
121-14-2	2,4-Dinitrotoluene	U	1460	ug/kg	146	1460	
100-02-7	4-Nitrophenol	U	1460	ug/kg	481	1460	
87-86-5	Pentachlorophenol	U	1460	ug/kg	365	1460	
129-00-0	Pyrene	J	53.6	ug/kg	43.8	146	
110-86-1	Pyridine	U	1460	ug/kg	292	1460	UJ,SV7c
62-53-3	Aniline	U	1460	ug/kg	438	1460	
111-44-4	bis(2-Chloroethyl) ether	U	1460	ug/kg	292	1460	
541-73-1	1,3-Dichlorobenzene	U	1460	ug/kg	292	1460	
100-51-6	Benzyl alcohol	U	1460	ug/kg	438	1460	
95-50-1	1,2-Dichlorobenzene	U	1460	ug/kg	292	1460	
108-60-1	bis(2-Chloroisopropyl)ether	U	1460	ug/kg	292	1460	UJ,SV7c
95-48-7	o-Cresol	U	1460	ug/kg	292	1460	
65794-96-9	m,p-Cresols	U	1460	ug/kg	438	1460	
67-72-1	Hexachloroethane	U	1460	ug/kg	292	1460	
98-95-3	Nitrobenzene	U	1460	ug/kg	292	1460	
78-59-1	Isophorone	U	1460	ug/kg	292	1460	
88-75-5	2-Nitrophenol	U	1460	ug/kg	292	1460	
105-67-9	2,4-Dimethylphenol	U	1460	ug/kg	510	1460	
111-91-1	bis(2-Chloroethoxy)methane	U	1460	ug/kg	292	1460	
120-83-2	2,4-Dichlorophenol	U	1460	ug/kg	292	1460	
65-85-0	Benzoic acid	U	2920	ug/kg	729	2920	
91-20-3	Naphthalene	U	146	ug/kg	43.8	146	
106-47-8	4-Chloroaniline	U	1460	ug/kg	292	1460	
87-68-3	Hexachlorobutadiene	U	1460	ug/kg	292	1460	
91-57-6	2-Methylnaphthalene	U	146	ug/kg	29.2	146	
77-47-4	Hexachlorocyclopentadiene	U	1460	ug/kg	292	1460	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	1460	ug/kg	292	1460	
95-95-4	2,4,5-Trichlorophenol	U	1460	ug/kg	292	1460	
91-58-7	2-Chloronaphthalene	U	146	ug/kg	48.1	146	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	1460	ug/kg	292	1460	
99-09-2	3-Nitroaniline	U	1460	ug/kg	292	1460	UJ,SV7c

LT 01/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539004	Date Received:	11/20/2009 08:50	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13461	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	4
Run Date:	11/30/2009 00:39	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s1k2932.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	1460	ug/kg	292	1460	
606-20-2	2,6-Dinitrotoluene	U	1460	ug/kg	146	1460	
208-96-8	Acenaphthylene	U	146	ug/kg	43.8	146	
51-28-5	2,4-Dinitrophenol	U	2920	ug/kg	554	2920	
132-64-9	Dibenzofuran	U	1460	ug/kg	292	1460	
84-66-2	Diethylphthalate	U	1460	ug/kg	292	1460	
86-73-7	Fluorene	U	146	ug/kg	43.8	146	
7005-72-3	4-Chlorophenylphenylether	U	1460	ug/kg	292	1460	
534-52-1	2-Methyl-4,6-dinitrophenol	U	1460	ug/kg	292	1460	
100-01-6	4-Nitroaniline	U	1460	ug/kg	438	1460	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	1460	ug/kg	292	1460	
122-66-7	Azobenzene	U	1460	ug/kg	292	1460	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	1460	ug/kg	292	1460	
118-74-1	Hexachlorobenzene	U	1460	ug/kg	292	1460	
85-01-8	Phenanthrene	U	146	ug/kg	43.8	146	
120-12-7	Anthracene	J	36.4	ug/kg	29.2	146	
84-74-2	Di-n-butylphthalate	U	1460	ug/kg	292	1460	
206-44-0	Fluoranthene	J	52.6	ug/kg	43.8	146	
85-68-7	Butylbenzylphthalate	U	1460	ug/kg	292	1460	
56-55-3	Benzo(a)anthracene	U	146	ug/kg	43.8	146	
91-94-1	3,3'-Dichlorobenzidine	U	1460	ug/kg	438	1460	
218-01-9	Chrysene	U	146	ug/kg	43.8	146	
117-81-7	bis(2-Ethylhexyl)phthalate	U	1460	ug/kg	292	1460	
117-84-0	Di-n-octylphthalate	U	1460	ug/kg	292	1460	
205-99-2	Benzo(b)fluoranthene	U	146	ug/kg	43.8	146	
207-08-9	Benzo(k)fluoranthene	U	146	ug/kg	43.8	146	
50-32-8	Benzo(a)pyrene	U	146	ug/kg	43.8	146	
193-39-5	Indeno(1,2,3-cd)pyrene	U	146	ug/kg	43.8	146	
53-70-3	Dibenzo(a,h)anthracene	U	146	ug/kg	43.8	146	
191-24-2	Benzo(ghi)perylene	U	146	ug/kg	43.8	146	
120-82-1	1,2,4-Trichlorobenzene	U	1460	ug/kg	292	1460	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	749	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13462**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**4**
Run Date:	**11/29/2009 23:29**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2929.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	1430	ug/kg	286	1430	
108-95-2	Phenol	U	1430	ug/kg	286	1430	
95-57-8	2-Chlorophenol	U	1430	ug/kg	286	1430	
106-46-7	1,4-Dichlorobenzene	U	1430	ug/kg	286	1430	
621-64-7	N-Nitrosodipropylamine	U	1430	ug/kg	286	1430	
59-50-7	4-Chloro-3-methylphenol	U	1430	ug/kg	286	1430	
83-32-9	Acenaphthene	U	143	ug/kg	47.2	143	
121-14-2	2,4-Dinitrotoluene	U	1430	ug/kg	143	1430	
100-02-7	4-Nitrophenol	U	1430	ug/kg	472	1430	
87-86-5	Pentachlorophenol	U	1430	ug/kg	358	1430	
129-00-0	Pyrene	U	143	ug/kg	42.9	143	
110-86-1	Pyridine	U	1430	ug/kg	286	1430	UJ,SV7c
62-53-3	Aniline	U	1430	ug/kg	429	1430	
111-44-4	bis(2-Chloroethyl) ether	U	1430	ug/kg	286	1430	
541-73-1	1,3-Dichlorobenzene	U	1430	ug/kg	286	1430	
100-51-6	Benzyl alcohol	U	1430	ug/kg	429	1430	
95-50-1	1,2-Dichlorobenzene	U	1430	ug/kg	286	1430	
108-60-1	bis(2-Chloroisopropyl)ether	U	1430	ug/kg	286	1430	UJ,SV7c
95-48-7	o-Cresol	U	1430	ug/kg	286	1430	
65794-96-9	m,p-Cresols	U	1430	ug/kg	429	1430	
67-72-1	Hexachloroethane	U	1430	ug/kg	286	1430	
98-95-3	Nitrobenzene	U	1430	ug/kg	286	1430	
78-59-1	Isophorone	U	1430	ug/kg	286	1430	
88-75-5	2-Nitrophenol	U	1430	ug/kg	286	1430	
105-67-9	2,4-Dimethylphenol	U	1430	ug/kg	501	1430	
111-91-1	bis(2-Chloroethoxy)methane	U	1430	ug/kg	286	1430	
120-83-2	2,4-Dichlorophenol	U	1430	ug/kg	286	1430	
65-85-0	Benzoic acid	U	2860	ug/kg	715	2860	
91-20-3	Naphthalene	U	143	ug/kg	42.9	143	
106-47-8	4-Chloroaniline	U	1430	ug/kg	286	1430	
87-68-3	Hexachlorobutadiene	U	1430	ug/kg	286	1430	
91-57-6	2-Methylnaphthalene	U	143	ug/kg	28.6	143	
77-47-4	Hexachlorocyclopentadiene	U	1430	ug/kg	286	1430	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	1430	ug/kg	286	1430	
95-95-4	2,4,5-Trichlorophenol	U	1430	ug/kg	286	1430	
91-58-7	2-Chloronaphthalene	U	143	ug/kg	47.2	143	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	1430	ug/kg	286	1430	
99-09-2	3-Nitroaniline	U	1430	ug/kg	286	1430	UJ,SV7c

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539001	Date Received:	11/20/2009 08:50	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13462	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	4
Run Date:	11/29/2009 23:29	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s1k2929.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	1430	ug/kg	286	1430	
606-20-2	2,6-Dinitrotoluene	U	1430	ug/kg	143	1430	
208-96-8	Acenaphthylene	U	143	ug/kg	42.9	143	
51-28-5	2,4-Dinitrophenol	U	2860	ug/kg	543	2860	
132-64-9	Dibenzofuran	U	1430	ug/kg	286	1430	
84-66-2	Diethylphthalate	U	1430	ug/kg	286	1430	
86-73-7	Fluorene	U	143	ug/kg	42.9	143	
7005-72-3	4-Chlorophenylphenylether	U	1430	ug/kg	286	1430	
534-52-1	2-Methyl-4,6-dinitrophenol	U	1430	ug/kg	286	1430	
100-01-6	4-Nitroaniline	U	1430	ug/kg	429	1430	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	1430	ug/kg	286	1430	
122-66-7	Azobenzene	U	1430	ug/kg	286	1430	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	1430	ug/kg	286	1430	
118-74-1	Hexachlorobenzene	U	1430	ug/kg	286	1430	
85-01-8	Phenanthrene	U	143	ug/kg	42.9	143	
120-12-7	Anthracene	J	36.7	ug/kg	28.6	143	
84-74-2	Di-n-butylphthalate	U	1430	ug/kg	286	1430	
206-44-0	Fluoranthene	J	46.8	ug/kg	42.9	143	
85-68-7	Butylbenzylphthalate	U	1430	ug/kg	286	1430	
56-55-3	Benzo(a)anthracene	U	143	ug/kg	42.9	143	
91-94-1	3,3'-Dichlorobenzidine	U	1430	ug/kg	429	1430	
218-01-9	Chrysene	U	143	ug/kg	42.9	143	
117-81-7	bis(2-Ethylhexyl)phthalate	U	1430	ug/kg	286	1430	
117-84-0	Di-n-octylphthalate	U	1430	ug/kg	286	1430	
205-99-2	Benzo(b)fluoranthene	U	143	ug/kg	42.9	143	
207-08-9	Benzo(k)fluoranthene	U	143	ug/kg	42.9	143	
50-32-8	Benzo(a)pyrene	U	143	ug/kg	42.9	143	
193-39-5	Indeno(1,2,3-cd)pyrene	U	143	ug/kg	42.9	143	
53-70-3	Dibenzo(a,h)anthracene	U	143	ug/kg	42.9	143	
191-24-2	Benzo(ghi)perylene	U	143	ug/kg	42.9	143	
120-82-1	1,2,4-Trichlorobenzene	U	1430	ug/kg	286	1430	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
96-37-7	Cyclopentane, methyl-	1.83	824	ug/kg	81	NJ

LT 01/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539003	Date Received:	11/20/2009 08:50	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13463	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	4
Run Date:	11/30/2009 00:15	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2931.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	1390	ug/kg	279	1390	
108-95-2	Phenol	U	1390	ug/kg	279	1390	
95-57-8	2-Chlorophenol	U	1390	ug/kg	279	1390	
106-46-7	1,4-Dichlorobenzene	U	1390	ug/kg	279	1390	
621-64-7	N-Nitrosodipropylamine	U	1390	ug/kg	279	1390	
59-50-7	4-Chloro-3-methylphenol	U	1390	ug/kg	279	1390	
83-32-9	Acenaphthene	U	139	ug/kg	46.0	139	
121-14-2	2,4-Dinitrotoluene	U	1390	ug/kg	139	1390	
100-02-7	4-Nitrophenol	U	1390	ug/kg	460	1390	
87-86-5	Pentachlorophenol	U	1390	ug/kg	349	1390	
129-00-0	Pyrene	U	139	ug/kg	41.8	139	
110-86-1	Pyridine	U	1390	ug/kg	279	1390	UJ,SV7c
62-53-3	Aniline	U	1390	ug/kg	418	1390	
111-44-4	bis(2-Chloroethyl) ether	U	1390	ug/kg	279	1390	
541-73-1	1,3-Dichlorobenzene	U	1390	ug/kg	279	1390	
100-51-6	Benzyl alcohol	U	1390	ug/kg	418	1390	
95-50-1	1,2-Dichlorobenzene	U	1390	ug/kg	279	1390	
108-60-1	bis(2-Chloroisopropyl)ether	U	1390	ug/kg	279	1390	UJ,SV7c
95-48-7	o-Cresol	U	1390	ug/kg	279	1390	
65794-96-9	m,p-Cresols	U	1390	ug/kg	418	1390	
67-72-1	Hexachloroethane	U	1390	ug/kg	279	1390	
98-95-3	Nitrobenzene	U	1390	ug/kg	279	1390	
78-59-1	Isophorone	U	1390	ug/kg	279	1390	
88-75-5	2-Nitrophenol	U	1390	ug/kg	279	1390	
105-67-9	2,4-Dimethylphenol	U	1390	ug/kg	488	1390	
111-91-1	bis(2-Chloroethoxy)methane	U	1390	ug/kg	279	1390	
120-83-2	2,4-Dichlorophenol	U	1390	ug/kg	279	1390	
65-85-0	Benzoic acid	U	2790	ug/kg	697	2790	
91-20-3	Naphthalene	U	139	ug/kg	41.8	139	
106-47-8	4-Chloroaniline	U	1390	ug/kg	279	1390	
87-68-3	Hexachlorobutadiene	U	1390	ug/kg	279	1390	
91-57-6	2-Methylnaphthalene	U	139	ug/kg	27.9	139	
77-47-4	Hexachlorocyclopentadiene	U	1390	ug/kg	279	1390	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	1390	ug/kg	279	1390	
95-95-4	2,4,5-Trichlorophenol	U	1390	ug/kg	279	1390	
91-58-7	2-Chloronaphthalene	U	139	ug/kg	46.0	139	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	1390	ug/kg	279	1390	
99-09-2	3-Nitroaniline	U	1390	ug/kg	279	1390	UJ,SV7c

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13463	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	4
Run Date:	11/30/2009 00:15	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2931.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	1390	ug/kg	279	1390	
606-20-2	2,6-Dinitrotoluene	U	1390	ug/kg	139	1390	
208-96-8	Acenaphthylene	U	139	ug/kg	41.8	139	
51-28-5	2,4-Dinitrophenol	U	2790	ug/kg	530	2790	
132-64-9	Dibenzofuran	U	1390	ug/kg	279	1390	
84-66-2	Diethylphthalate	U	1390	ug/kg	279	1390	
86-73-7	Fluorene	U	139	ug/kg	41.8	139	
7005-72-3	4-Chlorophenylphenylether	U	1390	ug/kg	279	1390	
534-52-1	2-Methyl-4,6-dinitrophenol	U	1390	ug/kg	279	1390	
100-01-6	4-Nitroaniline	U	1390	ug/kg	418	1390	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	1390	ug/kg	279	1390	
122-66-7	Azobenzene	U	1390	ug/kg	279	1390	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	1390	ug/kg	279	1390	
118-74-1	Hexachlorobenzene	U	1390	ug/kg	279	1390	
85-01-8	Phenanthrene	U	139	ug/kg	41.8	139	
120-12-7	Anthracene	U	139	ug/kg	27.9	139	
84-74-2	Di-n-butylphthalate	U	1390	ug/kg	279	1390	
206-44-0	Fluoranthene	U	139	ug/kg	41.8	139	
85-68-7	Butylbenzylphthalate	U	1390	ug/kg	279	1390	
56-55-3	Benzo(a)anthracene	U	139	ug/kg	41.8	139	
91-94-1	3,3'-Dichlorobenzidine	U	1390	ug/kg	418	1390	
218-01-9	Chrysene	U	139	ug/kg	41.8	139	
117-81-7	bis(2-Ethylhexyl)phthalate	U	1390	ug/kg	279	1390	
117-84-0	Di-n-octylphthalate	U	1390	ug/kg	279	1390	
205-99-2	Benzo(b)fluoranthene	U	139	ug/kg	41.8	139	
207-08-9	Benzo(k)fluoranthene	U	139	ug/kg	41.8	139	
50-32-8	Benzo(a)pyrene	U	139	ug/kg	41.8	139	
193-39-5	Indeno(1,2,3-cd)pyrene	U	139	ug/kg	41.8	139	
53-70-3	Dibenzo(a,h)anthracene	U	139	ug/kg	41.8	139	
191-24-2	Benzo(ghi)perylene	U	139	ug/kg	41.8	139	
120-82-1	1,2,4-Trichlorobenzene	U	1390	ug/kg	279	1390	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.83	703	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539002	Date Received:	11/20/2009 08:50	%Moisture:	3.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13464	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:52	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2930.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	343	ug/kg	68.6	343	
108-95-2	Phenol	U	343	ug/kg	68.6	343	
95-57-8	2-Chlorophenol	U	343	ug/kg	68.6	343	
106-46-7	1,4-Dichlorobenzene	U	343	ug/kg	68.6	343	
621-64-7	N-Nitrosodipropylamine	U	343	ug/kg	68.6	343	
59-50-7	4-Chloro-3-methylphenol	U	343	ug/kg	68.6	343	
83-32-9	Acenaphthene	U	34.3	ug/kg	11.3	34.3	
121-14-2	2,4-Dinitrotoluene	U	343	ug/kg	34.3	343	
100-02-7	4-Nitrophenol	U	343	ug/kg	113	343	
87-86-5	Pentachlorophenol	U	343	ug/kg	85.7	343	
129-00-0	Pyrene	U	34.3	ug/kg	10.3	34.3	
110-86-1	Pyridine	U	343	ug/kg	68.6	343	UJ,SV7c
62-53-3	Aniline	U	343	ug/kg	103	343	
111-44-4	bis(2-Chloroethyl) ether	U	343	ug/kg	68.6	343	
541-73-1	1,3-Dichlorobenzene	U	343	ug/kg	68.6	343	
100-51-6	Benzyl alcohol	U	343	ug/kg	103	343	
95-50-1	1,2-Dichlorobenzene	U	343	ug/kg	68.6	343	
108-60-1	bis(2-Chloroisopropyl)ether	U	343	ug/kg	68.6	343	UJ,SV7c
95-48-7	o-Cresol	U	343	ug/kg	68.6	343	
65794-96-9	m,p-Cresols	U	343	ug/kg	103	343	
67-72-1	Hexachloroethane	U	343	ug/kg	68.6	343	
98-95-3	Nitrobenzene	U	343	ug/kg	68.6	343	
78-59-1	Isophorone	U	343	ug/kg	68.6	343	
88-75-5	2-Nitrophenol	U	343	ug/kg	68.6	343	
105-67-9	2,4-Dimethylphenol	U	343	ug/kg	120	343	
111-91-1	bis(2-Chloroethoxy)methane	U	343	ug/kg	68.6	343	
120-83-2	2,4-Dichlorophenol	U	343	ug/kg	68.6	343	
65-85-0	Benzoic acid	U	686	ug/kg	171	686	
91-20-3	Naphthalene	U	34.3	ug/kg	10.3	34.3	
106-47-8	4-Chloroaniline	U	343	ug/kg	68.6	343	
87-68-3	Hexachlorobutadiene	U	343	ug/kg	68.6	343	
91-57-6	2-Methylnaphthalene	U	34.3	ug/kg	6.86	34.3	
77-47-4	Hexachlorocyclopentadiene	U	343	ug/kg	68.6	343	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	343	ug/kg	68.6	343	
95-95-4	2,4,5-Trichlorophenol	U	343	ug/kg	68.6	343	
91-58-7	2-Chloronaphthalene	U	34.3	ug/kg	11.3	34.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	343	ug/kg	68.6	343	
99-09-2	3-Nitroaniline	U	343	ug/kg	68.6	343	UJ,SV7c

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539002	Date Received:	11/20/2009 08:50	%Moisture:	3.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13464	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:52	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2930.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	343	ug/kg	68.6	343	
606-20-2	2,6-Dinitrotoluene	U	343	ug/kg	34.3	343	
208-96-8	Acenaphthylene	U	34.3	ug/kg	10.3	34.3	
51-28-5	2,4-Dinitrophenol	U	686	ug/kg	130	686	
132-64-9	Dibenzofuran	U	343	ug/kg	68.6	343	
84-66-2	Diethylphthalate	U	343	ug/kg	68.6	343	
86-73-7	Fluorene	U	34.3	ug/kg	10.3	34.3	
7005-72-3	4-Chlorophenylphenylether	U	343	ug/kg	68.6	343	
534-52-1	2-Methyl-4,6-dinitrophenol	U	343	ug/kg	68.6	343	
100-01-6	4-Nitroaniline	U	343	ug/kg	103	343	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	343	ug/kg	68.6	343	
122-66-7	Azobenzene	U	343	ug/kg	68.6	343	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	343	ug/kg	68.6	343	
118-74-1	Hexachlorobenzene	U	343	ug/kg	68.6	343	
85-01-8	Phenanthrene	U	34.3	ug/kg	10.3	34.3	
120-12-7	Anthracene	U	34.3	ug/kg	6.86	34.3	
84-74-2	Di-n-butylphthalate	U	343	ug/kg	68.6	343	
206-44-0	Fluoranthene	U	34.3	ug/kg	10.3	34.3	
85-68-7	Butylbenzylphthalate	U	343	ug/kg	68.6	343	
56-55-3	Benzo(a)anthracene	U	34.3	ug/kg	10.3	34.3	
91-94-1	3,3'-Dichlorobenzidine	U	343	ug/kg	103	343	
218-01-9	Chrysene	U	34.3	ug/kg	10.3	34.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	343	ug/kg	68.6	343	
117-84-0	Di-n-octylphthalate	U	343	ug/kg	68.6	343	
205-99-2	Benzo(b)fluoranthene	U	34.3	ug/kg	10.3	34.3	
207-08-9	Benzo(k)fluoranthene	U	34.3	ug/kg	10.3	34.3	
50-32-8	Benzo(a)pyrene	U	34.3	ug/kg	10.3	34.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.3	ug/kg	10.3	34.3	
53-70-3	Dibenzo(a,h)anthracene	U	34.3	ug/kg	10.3	34.3	
191-24-2	Benzo(ghi)perylene	U	34.3	ug/kg	10.3	34.3	
120-82-1	1,2,4-Trichlorobenzene	U	343	ug/kg	68.6	343	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	243	ug/kg		JA

LT 01/25/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-603 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The MS/MSD was performed on a sample from another LANL RN and the raw data for the parent sample were not present in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/27/10

VALIDATOR'S SIGNATURE: L Thal DATE: 01/25/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 **TPH GRO and DRO Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539001	Date Received:	11/20/2009 08:50	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13462	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	12/01/2009 17:40	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.3	mg/kg	2.32	7.15

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539002	Date Received:	11/20/2009 08:50	%Moisture:	3.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13464	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	12/01/2009 18:19	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.7	mg/kg	2.23	6.88

LT 01/25/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539003	Date Received:	11/20/2009 08:50	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13463	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 18:57	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	36.4	mg/kg	22.7	69.9

LT 01/25/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539004	Date Received:	11/20/2009 08:50	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13461	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 19:35	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	28.6	mg/kg	23.7	72.9

LT 01/25/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-603 VALIDATION DATE: 01/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Polychlorinated Biphenyls

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The MS/MSD was performed on a sample from another LANL RN and the raw data for the parent sample were not present in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/27/10

VALIDATOR'S SIGNATURE: L Thal DATE: 01/26/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13461	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/02/2009 01:18	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	090f9001.d	**Column:**	1 CLP1	**Level:**	LOW
	090b9001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.1	ug/kg	6.04	18.1	1
11104–28–2	Aroclor–1221	U	18.1	ug/kg	6.04	18.1	1
11141–16–5	Aroclor–1232	U	18.1	ug/kg	6.04	18.1	1
53469–21–9	Aroclor–1242	U	18.1	ug/kg	6.04	18.1	1
12672–29–6	Aroclor–1248	U	18.1	ug/kg	6.04	18.1	1
11097–69–1	Aroclor–1254		29.7	ug/kg	6.04	18.1	1
11096–82–5	Aroclor–1260		58.9	ug/kg	6.04	18.1	1

LT 01/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13462	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/02/2009 00:45	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	087f8701.d	**Column:**	1 CLP1	**Level:**	LOW
	087b8701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.8	ug/kg	5.92	17.8	1
11104–28–2	Aroclor–1221	U	17.8	ug/kg	5.92	17.8	1
11141–16–5	Aroclor–1232	U	17.8	ug/kg	5.92	17.8	1
53469–21–9	Aroclor–1242	U	17.8	ug/kg	5.92	17.8	1
12672–29–6	Aroclor–1248	U	17.8	ug/kg	5.92	17.8	1
11097–69–1	Aroclor–1254	U	17.8	ug/kg	5.92	17.8	1
11096–82–5	Aroclor–1260		43.4	ug/kg	5.92	17.8	2

LT 01/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13463	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	25
Run Date:	12/02/2009 01:07	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	089f8901.d	**Column:**	1 CLP1	**Level:**	LOW
	089b8901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	87.0	ug/kg	29.0	87.0	1
11104–28–2	Aroclor–1221	U	87.0	ug/kg	29.0	87.0	1
11141–16–5	Aroclor–1232	U	87.0	ug/kg	29.0	87.0	1
53469–21–9	Aroclor–1242	U	87.0	ug/kg	29.0	87.0	1
12672–29–6	Aroclor–1248	U	87.0	ug/kg	29.0	87.0	1
11097–69–1	Aroclor–1254	U	87.0	ug/kg	29.0	87.0	1
11096–82–5	Aroclor–1260	U	87.0	ug/kg	29.0	87.0	1

LT 01/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13464	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/02/2009 00:56	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	088f8801.d	**Column:**	1 CLP1	**Level:**	LOW
	088b8801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.2	ug/kg	5.72	17.2	1
11104–28–2	Aroclor–1221	U	17.2	ug/kg	5.72	17.2	1
11141–16–5	Aroclor–1232	U	17.2	ug/kg	5.72	17.2	1
53469–21–9	Aroclor–1242	U	17.2	ug/kg	5.72	17.2	1
12672–29–6	Aroclor–1248	U	17.2	ug/kg	5.72	17.2	1
11097–69–1	Aroclor–1254	U	17.2	ug/kg	5.72	17.2	1
11096–82–5	Aroclor–1260	U	17.2	ug/kg	5.72	17.2	1

LT 01/26/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-603 VALIDATION DATE: 01/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The MS %R for Si was <10%. The associated sample results were qualified R,I6. The MS %Rs for Al, Fe, Ti, Mg, K, Ni and Hg were > the laboratory's UALs. The MS %R for Se was < the laboratory's LAL but ≥10%. The Mg, K, Ni and Hg sample results were detects and, thus, were qualified J+,I6b. The Se sample results were NDs and, thus, were qualified UJ,I6a. The associated parent sample results for Al, Fe and Ti were detects >4X the spike amounts and, thus, no sample results were qualified based on professional judgment.
2. In the MB, Ca and Si were detected. The associated sample results were detects >50X the MB concentrations and, thus, were not qualified based on professional judgment.
3. In the ICB or CCBs, Sb, Al, Ca and Mg were detected. The Sb results for samples RE03-09-13462, -13464 and -13463 were detects ≤5X the ICB concentration and, thus, were qualified U,I4b. The remaining associated sample results were detects >5X the highest blank concentrations and, thus, were not qualified.
4. It should be noted that the matrix QC for Hg were performed on a sample from another LANL RN. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/27/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

VALIDATOR'S SIGNATURE: K Neal

DATE: 01/26/10

Form 5118-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539001 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13462 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9320000	ug/Kg		6730	19800	19800	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-36-0	Antimony U,I4b	1330	ug/Kg		327	990	990	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-38-2	Arsenic	1.75	mg/kg		0.212	1.06	1.06	2	MS	BAJ	11/28/09 20:31	091128-3	925476
7440-39-3	Barium	107000	ug/Kg		99	495	495	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-41-7	Beryllium	0.881	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	11/28/09 20:31	091128-3	925476
7440-42-8	Boron	3310	ug/Kg	J	990	4950	4950	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-43-9	Cadmium	239	ug/Kg	J	99	495	495	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-70-2	Calcium	2860000	ug/Kg	*	7920	24700	24700	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-47-3	Chromium	9300	ug/Kg		148	495	495	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-48-4	Cobalt	3180	ug/Kg		148	495	495	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-50-8	Copper	7010	ug/Kg		297	990	990	1	P	HSC	12/07/09 12:32	120709-1	925474
7439-89-6	Iron	12000000	ug/Kg		7920	24700	24700	1	P	HSC	12/07/09 12:32	120709-1	925474
7439-92-1	Lead	12800	ug/Kg		247	990	990	1	P	HSC	12/07/09 12:32	120709-1	925474
7439-93-2	Lithium	13.6	mg/kg		0.423	2.12	2.12	2	MS	BAJ	11/28/09 20:31	091128-3	925476
7439-95-4	Magnesium J+,I6b	1690000	ug/Kg	N	8410	29700	29700	1	P	HSC	12/07/09 12:32	120709-1	925474
7439-96-5	Manganese	296000	ug/Kg		198	990	990	1	P	HSC	12/07/09 12:32	120709-1	925474
7439-97-6	Mercury J+,I6b	23.2	ug/kg		4.11	12.1	12.1	1	AV	JXL1	12/07/09 11:44	120709S1-7	925629
7440-02-0	Nickel J+,I6b	7.17	mg/kg	*N	0.106	0.423	0.423	2	MS	BAJ	11/28/09 20:31	091128-3	925476
7440-09-7	Potassium J+,I6b	1120000	ug/Kg	N	6330	24700	24700	1	P	HSC	12/07/09 12:32	120709-1	925474
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.529	1.06	1.06	2	MS	BAJ	11/28/09 20:31	091128-3	925476
7440-21-3	Silicon R,I6	1910000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/14/09 11:36	121409A-2	931881
7440-22-4	Silver	495	ug/Kg	U	99	495	495	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-23-5	Sodium	334000	ug/Kg		6930	24700	24700	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-28-0	Thallium	0.234	mg/kg		0.0635	0.212	0.212	2	MS	BAJ	11/28/09 20:31	091128-3	925476
7440-32-6	Titanium	334000	ug/Kg		99	495	495	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-61-1	Uranium	0.712	mg/kg		0.014	0.0423	0.0423	2	MS	BAJ	11/29/09 06:36	091128-6	925476
7440-62-2	Vanadium	16700	ug/Kg		99	495	495	1	P	HSC	12/07/09 12:32	120709-1	925474
7440-66-6	Zinc	37600	ug/Kg		327	990	990	1	P	HSC	12/07/09 12:32	120709-1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.542	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.507	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.532	g	30	mL	12/04/09	TXB3

LT 01/26/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13464 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 96.8

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum		5450000	ug/Kg		6690	19700	19700	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-36-0	Antimony	U,I4b	1900	ug/Kg		325	984	984	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-38-2	Arsenic		1.38	mg/kg		0.201	1	1	2	MS	BAJ	11/28/09 21:14	091128-3	925476
7440-39-3	Barium		74400	ug/Kg		98.4	492	492	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-41-7	Beryllium		0.539	mg/kg		0.0201	0.1	0.1	2	MS	BAJ	11/28/09 21:14	091128-3	925476
7440-42-8	Boron		3670	ug/Kg	J	984	4920	4920	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-43-9	Cadmium		344	ug/Kg	J	98.4	492	492	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-70-2	Calcium		3460000	ug/Kg	*	7870	24600	24600	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-47-3	Chromium		14000	ug/Kg		148	492	492	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-48-4	Cobalt		6060	ug/Kg		148	492	492	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-50-8	Copper		10200	ug/Kg		295	984	984	1	P	HSC	12/07/09 12:48	120709-1	925474
7439-89-6	Iron		18500000	ug/Kg		7870	24600	24600	1	P	HSC	12/07/09 12:48	120709-1	925474
7439-92-1	Lead		8750	ug/Kg		246	984	984	1	P	HSC	12/07/09 12:48	120709-1	925474
7439-93-2	Lithium		8.44	mg/kg		0.402	2.01	2.01	2	MS	BAJ	11/28/09 21:14	091128-3	925476
7439-95-4	Magnesium	J+,I6b	1270000	ug/Kg	N	8360	29500	29500	1	P	HSC	12/07/09 12:48	120709-1	925474
7439-96-5	Manganese		565000	ug/Kg		197	984	984	1	P	HSC	12/07/09 12:48	120709-1	925474
7439-97-6	Mercury	J+,I6b	7.6	ug/kg	J	3.92	11.5	11.5	1	AV	JXL1	12/07/09 11:46	120709S1-7	925629
7440-02-0	Nickel	J+,I6b	9.55	mg/kg	*N	0.1	0.402	0.402	2	MS	BAJ	11/28/09 21:14	091128-3	925476
7440-09-7	Potassium	J+,I6b	821000	ug/Kg	N	6300	24600	24600	1	P	HSC	12/07/09 12:48	120709-1	925474
7782-49-2	Selenium	UJ,I6a	1	mg/kg	UN	0.502	1	1	2	MS	BAJ	11/28/09 21:14	091128-3	925476
7440-21-3	Silicon	R,I6	1370000	ug/Kg	N	1380	9220	9220	1	P	HSC	12/14/09 11:52	121409A-2	931881
7440-22-4	Silver		126	ug/Kg	J	98.4	492	492	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-23-5	Sodium		169000	ug/Kg		6890	24600	24600	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-28-0	Thallium		0.107	mg/kg	J	0.0603	0.201	0.201	2	MS	BAJ	11/28/09 21:14	091128-3	925476
7440-32-6	Titanium		333000	ug/Kg		98.4	492	492	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-61-1	Uranium		0.642	mg/kg		0.0133	0.0402	0.0402	2	MS	BAJ	11/29/09 06:48	091128-6	925476
7440-62-2	Vanadium		24600	ug/Kg		98.4	492	492	1	P	HSC	12/07/09 12:48	120709-1	925474
7440-66-6	Zinc		33600	ug/Kg		325	984	984	1	P	HSC	12/07/09 12:48	120709-1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.525	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.514	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.538	g	30	mL	12/04/09	TXB3

LT 01/26/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539003 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13463 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6370000	ug/Kg		6370	18700	18700	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-36-0	Antimony U,I4b	2070	ug/Kg		309	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-38-2	Arsenic	1.6	mg/kg		0.206	1.03	1.03	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-39-3	Barium	78200	ug/Kg		93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-41-7	Beryllium	0.604	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-42-8	Boron	2290	ug/Kg	J	936	4680	4680	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-43-9	Cadmium	310	ug/Kg	J	93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-70-2	Calcium	9350000	ug/Kg	*	7490	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-47-3	Chromium	7230	ug/Kg		140	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-48-4	Cobalt	3260	ug/Kg		140	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-50-8	Copper	6190	ug/Kg		281	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-89-6	Iron	11600000	ug/Kg		7490	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-92-1	Lead	9370	ug/Kg		234	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-93-2	Lithium	13.8	mg/kg		0.412	2.06	2.06	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7439-95-4	Magnesium J+,I6b	1370000	ug/Kg	N	7960	28100	28100	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-96-5	Manganese	345000	ug/Kg		187	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-97-6	Mercury J+,I6b	5.05	ug/kg	J	4.04	11.9	11.9	1	AV	JXL1	12/07/09 11:52	120709S1-7	925629
7440-02-0	Nickel J+,I6b	6.37	mg/kg	*N	0.103	0.412	0.412	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-09-7	Potassium J+,I6b	849000	ug/Kg	N	5990	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7782-49-2	Selenium UJ,I6a	1.03	mg/kg	UN	0.515	1.03	1.03	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-21-3	Silicon R,I6	1440000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/14/09 11:56	121409A-2	931881
7440-22-4	Silver	468	ug/Kg	U	93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-23-5	Sodium	89200	ug/Kg		6550	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-28-0	Thallium	0.122	mg/kg	J	0.0618	0.206	0.206	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-32-6	Titanium	358000	ug/Kg		93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-61-1	Uranium	0.639	mg/kg		0.0136	0.0412	0.0412	2	MS	BAJ	11/29/09 06:49	091128-6	925476
7440-62-2	Vanadium	16700	ug/Kg		93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-66-6	Zinc	33100	ug/Kg		309	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.561	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.51	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.53	g	30	mL	12/04/09	TXB3

LT 01/26/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539004 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13461 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8630000	ug/Kg		6640	19500	19500	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-36-0	Antimony	2440	ug/Kg		322	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-38-2	Arsenic	1.53	mg/kg		0.204	1.02	1.02	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-39-3	Barium	85700	ug/Kg		97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-41-7	Beryllium	0.745	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-42-8	Boron	2640	ug/Kg	J	976	4880	4880	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-43-9	Cadmium	234	ug/Kg	J	97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-70-2	Calcium	4670000	ug/Kg	*	7810	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-47-3	Chromium	6980	ug/Kg		146	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-48-4	Cobalt	2710	ug/Kg		146	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-50-8	Copper	7070	ug/Kg		293	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-89-6	Iron	11700000	ug/Kg		7810	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-92-1	Lead	10800	ug/Kg		244	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-93-2	Lithium	15.2	mg/kg		0.409	2.04	2.04	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7439-95-4	Magnesium J+,I6b	1580000	ug/Kg	N	8300	29300	29300	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-96-5	Manganese	231000	ug/Kg		195	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-97-6	Mercury J+,I6b	12.8	ug/kg		4.03	11.9	11.9	1	AV	JXL1	12/07/09 11:54	120709S1-7	925629
7440-02-0	Nickel J+,I6b	6.11	mg/kg	*N	0.102	0.409	0.409	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-09-7	Potassium J+,I6b	1020000	ug/Kg	N	6250	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7782-49-2	Selenium UJ,I6a	1.02	mg/kg	UN	0.511	1.02	1.02	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-21-3	Silicon R,I6	1370000	ug/Kg	N	1620	10800	10800	1	P	HSC	12/14/09 12:00	121409A-2	931881
7440-22-4	Silver	488	ug/Kg	U	97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-23-5	Sodium	153000	ug/Kg		6830	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-28-0	Thallium	0.174	mg/kg	J	0.0613	0.204	0.204	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-32-6	Titanium	344000	ug/Kg		97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-61-1	Uranium	0.561	mg/kg		0.0135	0.0409	0.0409	2	MS	BAJ	11/29/09 06:51	091128-6	925476
7440-62-2	Vanadium	15300	ug/Kg		97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-66-6	Zinc	39900	ug/Kg		322	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.561	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.536	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.554	g	30	mL	12/04/09	TXB3

LT 01/26/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-603 VALIDATION DATE: 01/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): total cyanide only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Total cyanide was detected in the ICB. The associated result for sample RE03-09-13464 was a detect >5X the ICB concentration and, thus, was not qualified. The remaining associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the matrix QC analyses were performed on a sample from another LANL RN. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/27/10

VALIDATOR'S SIGNATURE: L Thal DATE: 01/26/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 **General Chemistry Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.'	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13462	Project:	LANL01004
Sample ID:	241539001	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	66.3	244	ug/kg	1	AXC2 12/02/09	1346	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 01/26/10

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13464	Project:	LANL01004
Sample ID:	241539002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	3.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		631	65.0	239	ug/kg	1	AXC2 12/02/09	1347	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 01/26/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13463	Project:	LANL01004
Sample ID:	241539003	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	4.79%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.7	252	ug/kg	1	AXC2 12/02/09	1347	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 01/26/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13461	Project:	LANL01004
Sample ID:	241539004	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.7	249	ug/kg	1	AXC2 12/02/09	1348	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 01/26/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-603

REQUEST NUMBER: 10-603

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241539'/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13462	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13462	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13464	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13464	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13463	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13463	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13461	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13461	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13464	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13461	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13462	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13463	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	[illegible]	[illegible]	Patricia Dover-Dart	P. Dover-Dart	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-603

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-603

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13461	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13462	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13463	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13464	S	11/18/2009	Plus, B, Li, Si, Ti, U
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-603

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8082	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:9012A	1	RE03-09-13461	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13462	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13463	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13464	S	11/18/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-603

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241539
SDG: 10-603

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-603
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241539
SDG: 10-603

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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241539
SDG # : 10-603

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241539001	RE03-09-13462
241539002	RE03-09-13464
241539003	RE03-09-13463
241539004	RE03-09-13461

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis

Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-603

REQUEST NUMBER: 10-603

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 241539'1.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13462	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13462	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13464	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13464	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13463	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13463	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13461	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13461	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13464	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13461	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13462	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13463	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/19/09	1500	Patricia Doyle-Dept. P.C. [illegible]		11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-603

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-603

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13461	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13462	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13463	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13464	S	11/18/2009	Plus, B, Li, Si, Ti, U
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-603

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8082	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13461	S	11/18/2009	
		1	RE03-09-13462	S	11/18/2009	
		1	RE03-09-13463	S	11/18/2009	
		1	RE03-09-13464	S	11/18/2009	
	SW-846:9012A	1	RE03-09-13461	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13462	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13463	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13464	S	11/18/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-603

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-603**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **1-5,15**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 4C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PM4) review: Initials _____ Date 11/23/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
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(843)556-8171
REF: 6B010AMR2A054196D0

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2 of 2
MPS# 0263 7209 7848 9855
Mstr# 7209 7848 9844 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

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1 of 3
TRK# 0201 7209 7848 9796
MM MASTER MM

FRI - 20NOV A1
PRIORITY OVERNIGHT

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29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

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2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419GD0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9844
*** MASTER ***

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AWEPR1315N200

2c

FedEx Express

RadioActive Samples

TRK# 0201 7209 7848 9877

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419GD0

3c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9822
*** MASTER ***

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4c

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TRK# 0201 7209 7848 9752

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 40.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

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3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 69.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

5c

FedEx Express

TRK# 0201 7209 7848 9866

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

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2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

09

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-603

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	926830
Prep Batch Number:	926827

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241539001	RE03-09-13462
241539002	RE03-09-13464
241539003	RE03-09-13463
241539004	RE03-09-13461
1201981617	Method Blank (MB)
1201981620	Laboratory Control Sample (LCS)
1201981621	Laboratory Control Sample (LCS)
1201984324	Method Blank (MB)
1201984325	Laboratory Control Sample (LCS)
1201984326	Laboratory Control Sample (LCS)
1201981618	241534001(RE03-09-13975) Post Spike (PS)
1201981619	241534001(RE03-09-13975) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241534001 (RE03-09-13975) was designated for spike analysis.

Matrix Spike (PS) Recovery Statement
The spike recoveries were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
In sample 241539002 (RE03-09-13464), internal standard responses were outside the required acceptance criteria. Sample re-analysis confirmed matrix interference. See NCR 764544.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 764544 was generated for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA7.I	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5973N	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-603 GEL Work Order: 241539

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 12 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-603 VOA

This roadmap was analyzed by alc01592 on 12-02-2009, 11:03.
This roadmap was reviewed by ale01592 on 12-02-2009, 11:04.
This roadmap was reviewed by sar00518 on 12-08-2009, 20:53.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
■	N	/chem/VOA7.i/112509v7/7n316.d	241539001	RE03-09-13462	25-NOV-2009	17:21	10-603.sub	1	926830	
■	N	/chem/VOA7.i/112509v7/7n317.d	241539002	RE03-09-13464	25-NOV-2009	17:55	10-603.sub	1	926830	
□	N	/chem/VOA7.i/112509v7/7n318.d	241539003	RE03-09-13463	25-NOV-2009	18:29	10-603.sub	1	926830	
□	N	/chem/VOA7.i/112509v7/7n319.d	241539004	RE03-09-13461	25-NOV-2009	19:04	10-603.sub	1	926830	
□	N	/chem/VOA7.i/113009v7/7o109.d	241539001	RE03-09-13462	30-NOV-2009	13:51	10-603.sub	1	926830	
□	N	/chem/VOA7.i/113009v7/7o110.d	241539002	RE03-09-13464	30-NOV-2009	14:26	10-603.sub	1	926830	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
□	N	/chem/VOA7.i/112509v7/7n303LL.d	1201981620	LCS	lcs	25-NOV-2009	09:45	all.sub	1	926830	
□	N	/chem/VOA7.i/112509v7/7n305LL.d	1201981621	SLCS	lcs	25-NOV-2009	10:53	all.sub	1	926830	
□	N	/chem/VOA7.i/112509v7/7n307BL.d	1201981617	BLANK	mb	25-NOV-2009	12:00	all.sub	1	926830	
■	N	/chem/VOA7.i/112509v7/7n320.d	1201981618	RE03-09-13975MS	ms	25-NOV-2009	19:38	10-601.sub	1	926830	
■	N	/chem/VOA7.i/112509v7/7n321.d	1201981619	RE03-09-13975MSD	msd	25-NOV-2009	20:12	10-601.sub	1	926830	
□	N	/chem/VOA7.i/113009v7/7o104LL.d	1201984325	LCS	lcs	30-NOV-2009	11:00	all.sub	1	926830	
□	N	/chem/VOA7.i/113009v7/7o106LL.d	1201984326	SLCS	lcs	30-NOV-2009	12:09	all.sub	1	926830	
□	N	/chem/VOA7.i/113009v7/7o108BL.d	1201984324	BLANK	mb	30-NOV-2009	13:16	all.sub	1	926830	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539004	Date Received:	11/20/2009 08:50	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13461	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 19:04	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 13:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n319.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.372	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.361	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.361	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13461**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 19:04**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n319.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.48	ug/kg	1.75	5.48
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13462	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/30/2009 13:51	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 13:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7o109.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	U	5.36	ug/kg	1.78	5.36
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.36	ug/kg	1.72	5.36
75-09-2	Methylene chloride	U	5.36	ug/kg	2.15	5.36
75-15-0	Carbon disulfide	U	5.36	ug/kg	1.34	5.36
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.36	ug/kg	1.61	5.36
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.36	ug/kg	1.34	5.36
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.36	ug/kg	1.61	5.36
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539001	Date Received:	11/20/2009 08:50	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13462	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/30/2009 13:51	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/30/2009 13:20	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7o109.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.36	ug/kg	1.72	5.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13463**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 18:29**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:58**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n318.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.25	ug/kg	1.74	5.25
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.25	ug/kg	1.68	5.25
75-09-2	Methylene chloride	U	5.25	ug/kg	2.10	5.25
75-15-0	Carbon disulfide	U	5.25	ug/kg	1.31	5.25
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.25	ug/kg	1.58	5.25
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.25	ug/kg	1.31	5.25
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.25	ug/kg	1.58	5.25
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13463	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 18:29	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n318.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.25	ug/kg	1.68	5.25
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13464	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.1	**Dilution:**	1
Run Date:	11/30/2009 14:26	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 13:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7o110.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.351	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone	U	5.17	ug/kg	1.71	5.17
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.17	ug/kg	1.65	5.17
75-09-2	Methylene chloride	U	5.17	ug/kg	2.07	5.17
75-15-0	Carbon disulfide	U	5.17	ug/kg	1.29	5.17
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.17	ug/kg	1.55	5.17
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.17	ug/kg	1.29	5.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.17	ug/kg	1.55	5.17
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**3.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13464**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 14:26**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 13:21**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o110.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.17	ug/kg	1.65	5.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-603

Matrix Type: SOLID

CAP Column (1) : DB-624

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201981620	LCS for batch 926827	108	93	94
1201981621	LCS for batch 926827	107	93	90
1201981617	MB for batch 926827	107	95	93
241539003	RE03-09-13463	101	95	104
241539004	RE03-09-13461	103	92	95
1201984325	LCS for batch 926827	105	89	92
1201984326	LCS for batch 926827	102	90	92
1201984324	MB for batch 926827	129	107	108
241539001	RE03-09-13462	100	90	97
241539002	RE03-09-13464	95	89	93

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: RE03-09-13975PS
Lab Sample ID: 1201981618
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 19:38
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	44.3	89	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	39.5	79	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	39.8	80	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	46.4	93	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	43.2	86	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	53.5	107	51-151
67-64-1	PS	Acetone	250	1.86	J	118	47	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	50.2	100	61-125
74-88-4	PS	Iodomethane	250	0.00	U	233	93	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	46.9	94	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	242	97	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	43.0	86	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	44.2	88	62-125
78-93-3	PS	2-Butanone	250	0.00	U	119	48	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	41.9	84	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	41.1	82	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	45.4	91	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	41.2	82	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	50.1	100	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	45.5	91	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	50.1	100	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	41.8	84	58-126

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: RE03-09-13975PS
Lab Sample ID: 1201981618
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 19:38
Prep Batch ID 926827
Batch ID: 926830
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	43.2	86	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	45.3	91	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	38.9	78	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	45.6	91	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	43.9	88	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	162	65	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	39.8	80	54-133
108-88-3	PS	Toluene	50.0	0.00	U	40.5	81	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	38.6	77	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	39.3	79	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	104	42	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	38.4	77	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	51.4	103	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	44.7	89	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	42.0	84	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	40.9	82	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	39.7	79	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	78.5	78	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	39.9	80	52-127
100-42-5	PS	Styrene	50.0	0.00	U	36.5	73	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	48.8	98	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	41.2	82	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: RE03-09-13975PS
Lab Sample ID: 1201981618
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 19:38
Prep Batch ID: 926827
Batch ID: 926830
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	42.4	85	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	41.3	83	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	40.4	81	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	39.0	78	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	41.5	83	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	39.5	79	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	40.2	80	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	42.3	85	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	39.9	80	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	41.7	83	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	40.8	82	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	40.4	81	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	40.3	81	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	40.3	81	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	45.3	91	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	42.2	84	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	41.2	82	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: RE03-09-13975PSD
Lab Sample ID: 1201981619
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 20:12
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	43.1	86	25-149	3	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	40.2	80	39-140	2	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	40.6	81	47-129	2	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	45.1	90	31-135	3	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	42.7	85	53-128	1	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	55.1	110	51-151	3	0-25
67-64-1	PSD	Acetone	250	1.86	J	113	44	21-153	5	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	49.7	99	61-125	1	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	235	94	53-142	1	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	46.5	93	59-136	1	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	241	96	46-129	1	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	44.9	90	56-126	4	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	46.3	93	62-125	5	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	113	45	26-152	5	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	43.3	87	60-130	3	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	42.7	85	55-135	4	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	47.2	94	60-127	4	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	42.5	85	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	52.0	104	59-131	4	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	46.6	93	57-128	2	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	52.0	104	58-136	4	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	42.7	85	58-126	2	0-25

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: RE03-09-13975PSD
Lab Sample ID: 1201981619
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 20:12 **Dilution:** 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	44.0	88	56-123	2	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	45.8	92	51-137	1	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	40.2	80	60-126	3	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	47.0	94	55-138	3	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	44.1	88	60-132	1	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	158	63	58-136	3	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	40.5	81	54-133	2	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	41.8	84	52-128	3	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	40.1	80	53-137	4	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	41.4	83	59-130	5	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	98.9	40	31-148	5	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	38.8	78	57-127	1	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	52.3	105	51-128	2	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	45.6	91	59-139	2	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	41.6	83	57-133	1	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	42.0	84	53-122	3	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	41.1	82	51-125	3	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	81.9	82	50-126	4	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	40.8	82	52-127	2	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	37.7	75	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	48.5	97	57-149	1	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	40.0	80	63-127	3	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: RE03-09-13975PSD
Lab Sample ID: 1201981619
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 20:12
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	40.4	81	57-149	5	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	41.7	83	49-131	1	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	40.8	82	40-136	1	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	39.4	79	44-135	1	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	42.3	85	44-140	2	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	39.8	80	42-140	1	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	40.2	80	44-132	0	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	42.4	85	42-142	0	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	40.0	80	43-137	0	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	42.2	84	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	40.8	82	38-145	0	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	40.9	82	43-129	1	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	39.9	80	44-125	1	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	40.3	81	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	43.4	87	47-151	4	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	43.4	87	59-131	3	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	40.2	80	43-129	2	0-25

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-603 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926827 **Matrix:** SOIL

Lab Sample ID: 1201981620

Instrument: VOA7.I **Analysis Date:** 11/25/2009 09:45 **Dilution:** 1

Analyst: AXO1 **Prep Batch ID:** 926827

Purge Vol: 5 mL **Batch ID:** 926830

CAS No	Parmname		Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	52.7	105	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	45.6	91	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	48.6	97	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	50.1	100	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	46.7	93	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	61.9	124	67-151
67-64-1	LCS	Acetone	250	0.0	208	83	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	55.0	110	70-125
74-88-4	LCS	Iodomethane	250	0.0	251	101	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	47.4	95	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	264	106	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	49.3	99	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	49.1	98	75-120
78-93-3	LCS	2-Butanone	250	0.0	186	74	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	46.9	94	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	51.2	102	74-135
67-66-3	LCS	Chloroform	50.0	0.0	50.1	100	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	45.4	91	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	57.2	114	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	52.5	105	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	57.9	116	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	48.3	97	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926827
Lab Sample ID: 1201981620
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:45
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	46.8	94	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	51.6	103	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	42.6	85	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	51.0	102	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	48.7	97	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	207	83	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	45.8	92	80-125
108-88-3	LCS	Toluene	50.0	0.0	44.4	89	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	46.0	92	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	43.6	87	76-120
591-78-6	LCS	2-Hexanone	250	0.0	159	64	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	41.6	83	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	56.6	113	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	49.7	99	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	47.7	95	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	44.8	90	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	44.7	89	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	89.4	89	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	43.7	87	74-120
100-42-5	LCS	Styrene	50.0	0.0	41.5	83	76-125
75-25-2	LCS	Bromoform	50.0	0.0	54.8	110	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	43.9	88	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926827
Lab Sample ID: 1201981620
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:45
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	47.1	94	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	42.7	85	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	43.4	87	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	41.5	83	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	43.9	88	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	42.3	85	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	43.5	87	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	44.4	89	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	42.6	85	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	45.3	91	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	45.1	90	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	43.1	86	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	43.6	87	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	44.4	89	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	52.6	105	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	46.1	92	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	43.5	87	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926827
Lab Sample ID: 1201981621
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 10:53
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	304	122	52-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926827
Lab Sample ID: 1201984325
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 11:00
Dilution: 1
Prep Batch ID 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	49.8	100	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	44.9	90	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	47.2	94	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	50.2	100	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	47.0	94	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	62.0	124	67-151
67-64-1	LCS	Acetone	250	0.0	213	85	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	56.0	112	70-125
74-88-4	LCS	Iodomethane	250	0.0	261	104	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	51.0	102	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	272	109	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	48.9	98	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	49.2	98	75-120
78-93-3	LCS	2-Butanone	250	0.0	192	77	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	46.6	93	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	49.3	99	74-135
67-66-3	LCS	Chloroform	50.0	0.0	49.9	100	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	46.7	93	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	55.6	111	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	52.4	105	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	56.6	113	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	49.2	98	72-120

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 926827 **Matrix:** SOIL
Lab Sample ID: 1201984325
Instrument: VOA7.I **Analysis Date:** 11/30/2009 11:00 **Dilution:** 1
Analyst: AXO1 **Prep Batch ID** 926827
Purge Vol: 5 mL **Batch ID:** 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	47.5	95	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	51.9	104	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	43.7	87	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	51.3	103	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	49.6	99	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	204	82	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	46.4	93	80-125
108-88-3	LCS	Toluene	50.0	0.0	43.6	87	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	44.5	89	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	44.1	88	76-120
591-78-6	LCS	2-Hexanone	250	0.0	157	63	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	41.2	82	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	55.9	112	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	49.4	99	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	46.5	93	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	43.8	88	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	42.9	86	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	87.0	87	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	42.9	86	74-120
100-42-5	LCS	Styrene	50.0	0.0	40.7	81	76-125
75-25-2	LCS	Bromoform	50.0	0.0	53.4	107	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	44.3	89	72-122

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926827
Lab Sample ID: 1201984325
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 11:00
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No	Parmname		Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	47.4	95	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	42.6	85	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	42.1	84	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	40.6	81	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	43.0	86	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	40.8	82	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	42.1	84	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	43.4	87	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	41.4	83	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	43.5	87	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	43.1	86	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	42.5	85	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	42.6	85	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	43.1	86	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	55.0	110	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	45.3	91	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	42.7	85	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926827
Lab Sample ID: 1201984326
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 12:09
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	262	105	52-139

Method Blank Summary

SDG Number:	10-603	**Client:**	LANL010	**Matrix:**	SOIL
Client ID:	MB for batch 926827	**Instrument ID:**	VOA7.I	**Data File:**	7n307BL.d
Lab Sample ID:	1201981617	**Prep Date:**	11/25/2009 08:00	**Analyzed:**	11/25/09 12:00
Column:	DB-624	**Heated Purge:**	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926827	1201981620	7n303LL.d	11/25/09	0945
02 LCS for batch 926827	1201981621	7n305LL.d	11/25/09	1053
03 RE03-09-13463	241539003	7n318.d	11/25/09	1829
04 RE03-09-13461	241539004	7n319.d	11/25/09	1904

Method Blank Summary

SDG Number:	10-603	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926827	Instrument ID:	VOA7.1	Data File:	7o108BL.d
Lab Sample ID:	1201984324	Prep Date:	11/30/2009 08:00	Analyzed:	11/30/09 13:16
Column:	DB-624	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926827	1201984325	7o104LL.d	11/30/09	1100
02 LCS for batch 926827	1201984326	7o106LL.d	11/30/09	1209
03 RE03-09-13462	241539001	7o109.d	11/30/09	1351
04 RE03-09-13464	241539002	7o110.d	11/30/09	1426

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: VOA7.I **Injection Date/Time:** 15-NOV-09 23:14

Column Description: db624 **Lab File ID** /111509v7/71702.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	29.2
75	30.0 - 60.0% of mass 95	51.2
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1
174	50.0 - 100.0% of mass 95	71
175	5.0 -9.0% of mass 174	7.7
176	95.0 - 101.0% of mass 174	97.8
177	5.0 - 9.0% of mass 176	6.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD002	W7VM0911115-02	/111509v7/71704.d	16-NOV-09 00:20
VSTD005	W7VM0911115-03	/111509v7/71705.d	16-NOV-09 00:55
VSTD010	W7VM0911115-04	/111509v7/71706.d	16-NOV-09 01:29
VSTD020	W7VM0911115-05	/111509v7/71707.d	16-NOV-09 02:03
VSTD050	W7VM0911115-06	/111509v7/71708.d	16-NOV-09 02:36
VSTD100	W7VM0911115-07	/111509v7/71709.d	16-NOV-09 03:10
VSTD0005	W7VM0911115-08	/111509v7/71711.d	16-NOV-09 04:18
VSTD005S	W7VM0911115-09	/111509v7/71712.d	16-NOV-09 04:51
VSTD010S	W7VM0911115-10	/111509v7/71713.d	16-NOV-09 05:25
VSTD025S	W7VM0911115-11	/111509v7/71714.d	16-NOV-09 05:58
VSTD050S	W7VM0911115-12	/111509v7/71715.d	16-NOV-09 06:32
VSTD100S	W7VM0911115-13	/111509v7/71716.d	16-NOV-09 07:05
VSTD500S	W7VM0911115-15	/111509v7/71718.d	16-NOV-09 08:11
VSTD001	W7VM0911115-18	/111509v7/71723.d	16-NOV-09 10:57

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: VOA7.I **Injection Date/Time:** 16-NOV-09 13:54

Column Description: db624 **Lab File ID** /111509v7/7m102BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	31.4
75	30.0 - 60.0% of mass 95	53.7
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	1.1
174	50.0 - 100.0% of mass 95	72.9
175	5.0 -9.0% of mass 174	7.6
176	95.0 - 101.0% of mass 174	97.7
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W7VM0911116-01	/111509v7/7m102.d	16-NOV-09 13:54
VSTD250S	W7VM0911116-03	/111509v7/7m104.d	16-NOV-09 15:02

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: VOA7.I **Injection Date/Time:** 25-NOV-09 09:45

Column Description: db624 **Lab File ID** /112509v7/7n303BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	31.1
75	30.0 - 60.0% of mass 95	54.1
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	1
174	50.0 - 100.0% of mass 95	74.6
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.5
177	5.0 - 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W7VM091125-02	/112509v7/7n303.d	25-NOV-09 09:45
LCS	1201981620	/112509v7/7n303LL.d	25-NOV-09 09:45
VSTD250S	W7VM091125-03	/112509v7/7n304.d	25-NOV-09 10:19
SLCS	1201981621	/112509v7/7n305LL.d	25-NOV-09 10:53
BLANK	1201981617	/112509v7/7n307BL.d	25-NOV-09 12:00
RE03-09-13463	241539003	/112509v7/7n318.d	25-NOV-09 18:29
RE03-09-13461	241539004	/112509v7/7n319.d	25-NOV-09 19:04

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: VOA7.I **Injection Date/Time:** 30-NOV-09 10:27

Column Description: db624 **Lab File ID** /113009v7/7o103BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	30.6
75	30.0 - 60.0% of mass 95	53.4
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	98.4
177	5.0 - 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W7VM091130-01	/113009v7/7o103.d	30-NOV-09 10:27
LCS	1201984325	/113009v7/7o104LL.d	30-NOV-09 11:00
VSTD250S	W7VM091130-03	/113009v7/7o105.d	30-NOV-09 11:34
SLCS	1201984326	/113009v7/7o106LL.d	30-NOV-09 12:09
BLANK	1201984324	/113009v7/7o108BL.d	30-NOV-09 13:16
RE03-09-13462	241539001	/113009v7/7o109.d	30-NOV-09 13:51
RE03-09-13464	241539002	/113009v7/7o110.d	30-NOV-09 14:26

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA7.I

GC Column: DB-624

Client SDG: 10-603

STD Analysis Time: 25-NOV-09 09:45

Data File: 7n303.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1179357		15.3		938749		18.7		568823		21.0	
Upper Limit	2358714		15.8		1877498		19.2		1137646		21.5	
Lower Limit	589679		14.8		469375		18.2		284412		20.5	
Sample ID												
BLK01LCS	1179357		15.3		938749		18.7		568823		21.0	
BLK01SLCS	1174785		15.3		934821		18.7		582436		21.0	
BLK01	1179768		15.3		921229		18.7		552530		21.0	
RE03-09-13463	1052484		15.3		810818		18.7		410561		21.0	
RE03-09-13461	1189187		15.3		957240		18.7		537835		21.0	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA7.I

GC Column: DB-624

Client SDG: 10-603

STD Analysis Time: 30-NOV-09 10:27

Data File: 7o103.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1213904		15.3		982875		18.7		586220		21.0	
Upper Limit	2427808		15.8		1965750		19.2		1172440		21.5	
Lower Limit	606952		14.8		491438		18.2		293110		20.5	
Sample ID												
BLK02LCS	1170277		15.3		955493		18.7		575856		21.0	
BLK02SLCS	1190717		15.3		959552		18.7		587068		21.0	
BLK02	1003294		15.3		809879		18.7		472595		21.0	
RE03-09-13462	786370		15.3		641152		18.7		332774		21.0	
RE03-09-13464	329851	*	15.3		270630	*	18.7		147121	*	21.0	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13461	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 19:04	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 13:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n319.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.372	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.361	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.361	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539004	Date Received:	11/20/2009 08:50	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13461	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 19:04	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 13:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n319.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.48	ug/kg	1.75	5.48
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n319.d
Lab Smp Id: 241539004 Client Smp ID: RE03-09-13461
Inj Date : 25-NOV-2009 19:04
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539004|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.70320	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1189187	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	957240	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	537835	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	531657	51.2749	56.2
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1316438	46.0681	50.4
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	602434	47.5921	52.1

ION RATIO REPORT

VOA REPORT

Data file: 7n319.d
Report Date: 11/30/2009 07:52
Lab. ID: 241539004 SampleType: SAMPLE
Injection Date: 25-NOV-2009 19:04
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241539004|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	15365	17.14	16.94	80-120	100	(T)
43	10618	17.14	16.94	247-307	69	(QT)
100	929515	17.14	16.94	0- 56	6049	(QT)
82 Bromoform				CAS#: 75-25-2		
173	2951	19.82	19.54	80-120	100	(T)
175	33039	19.82	19.54	18- 78	1119	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n319.d
Lab Smp Id: 241539004 Client Smp ID: RE03-09-13461
Inj Date : 25-NOV-2009 19:04
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539004|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n319.d
Date : 25-NOV-2009 19:04
Client ID: RE03-09-13461
Sample Info: |2415390041926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

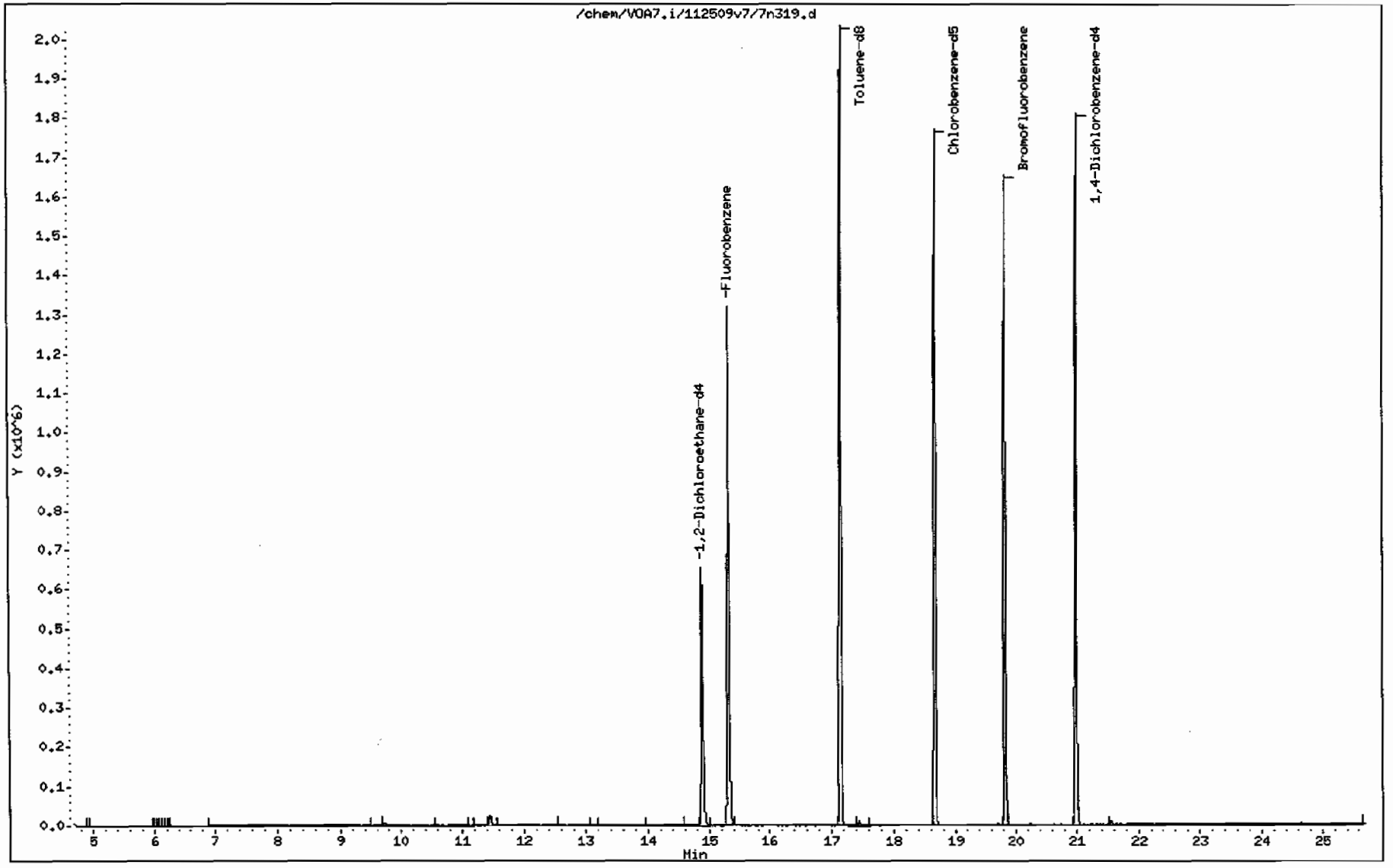

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13462	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.1	**Dilution:**	1
Run Date:	11/30/2009 13:51	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 13:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7o109.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	U	5.36	ug/kg	1.78	5.36
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.36	ug/kg	1.72	5.36
75-09-2	Methylene chloride	U	5.36	ug/kg	2.15	5.36
75-15-0	Carbon disulfide	U	5.36	ug/kg	1.34	5.36
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.36	ug/kg	1.61	5.36
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.36	ug/kg	1.34	5.36
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.36	ug/kg	1.61	5.36
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13462	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/30/2009 13:51	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 13:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7o109.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.36	ug/kg	1.72	5.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o109.d
Lab Smp Id: 241539001 Client Smp ID: RE03-09-13462
Inj Date : 30-NOV-2009 13:51
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539001|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.79600	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	786370	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	641152	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	332774	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	343669	50.1229	53.8
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	861406	45.0057	48.3
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	381207	48.6727	52.2

ION RATIO REPORT

VOA REPORT

Data file: 7o109.d
Report Date: 12/01/2009 08:13
Lab. ID: 241539001 SampleType: SAMPLE
Injection Date: 30-NOV-2009 13:51
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241539001|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	10513	17.14	16.94	80-120	100	(T)
43	6660	17.13	16.94	246-306	63	(QT)
100	594053	17.14	16.94	0- 56	5651	(QT)
82 Bromoform				CAS#: 75-25-2		
173	2166	19.82	19.54	80-120	100	(T)
175	22571	19.81	19.54	19- 79	1042	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o109.d
Lab Smp Id: 241539001 Client Smp ID: RE03-09-13462
Inj Date : 30-NOV-2009 13:51
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539001|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/113009v7/7o109.d
Date : 30-NOV-2009 13:51
Client ID: RE03-09-13462
Sample Info: !241539001!926830!1!VOAF!1!

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

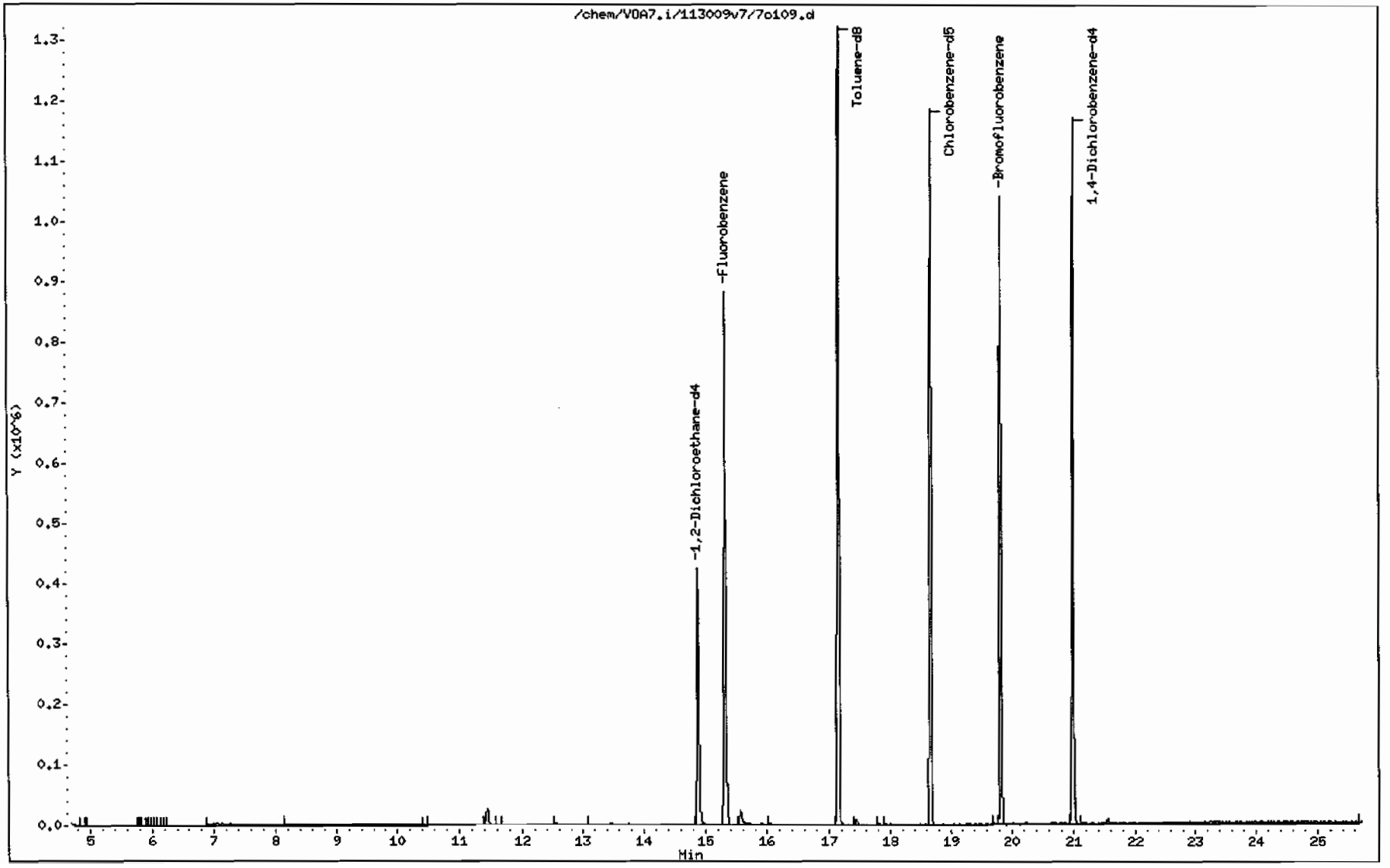

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13463	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 18:29	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n318.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.25	ug/kg	1.74	5.25
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.25	ug/kg	1.68	5.25
75-09-2	Methylene chloride	U	5.25	ug/kg	2.10	5.25
75-15-0	Carbon disulfide	U	5.25	ug/kg	1.31	5.25
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.25	ug/kg	1.58	5.25
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.25	ug/kg	1.31	5.25
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.25	ug/kg	1.58	5.25
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13463	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 18:29	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n318.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.25	ug/kg	1.68	5.25
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n318.d
Lab Smp Id: 241539003 Client Smp ID: RE03-09-13463
Inj Date : 25-NOV-2009 18:29
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539003|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.78600	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1052484	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	810818	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	410561	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	462364	50.3839	52.9
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1146287	47.3577	49.7
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	501199	51.8689	54.5

ION RATIO REPORT

VOA REPORT

Data file: 7n318.d
Report Date: 11/30/2009 07:52
Lab. ID: 241539003 SampleType: SAMPLE
Injection Date: 25-NOV-2009 18:29
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241539003|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	14005	17.14	16.94	80-120	100	(T)
43	8962	17.13	16.94	247-307	64	(QT)
100	799626	17.14	16.94	0- 56	5709	(QT)
82 Bromoform				CAS#: 75-25-2		
173	2144	19.82	19.54	80-120	100	(T)
175	26637	19.81	19.54	18- 78	1242	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n318.d
Lab Smp Id: 241539003 Client Smp ID: RE03-09-13463
Inj Date : 25-NOV-2009 18:29
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539003|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n318.d
Date : 25-NOV-2009 18:29
Client ID: RE03-09-13463
Sample Info: |2415390031926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AXD1
Column diameter: 0.25

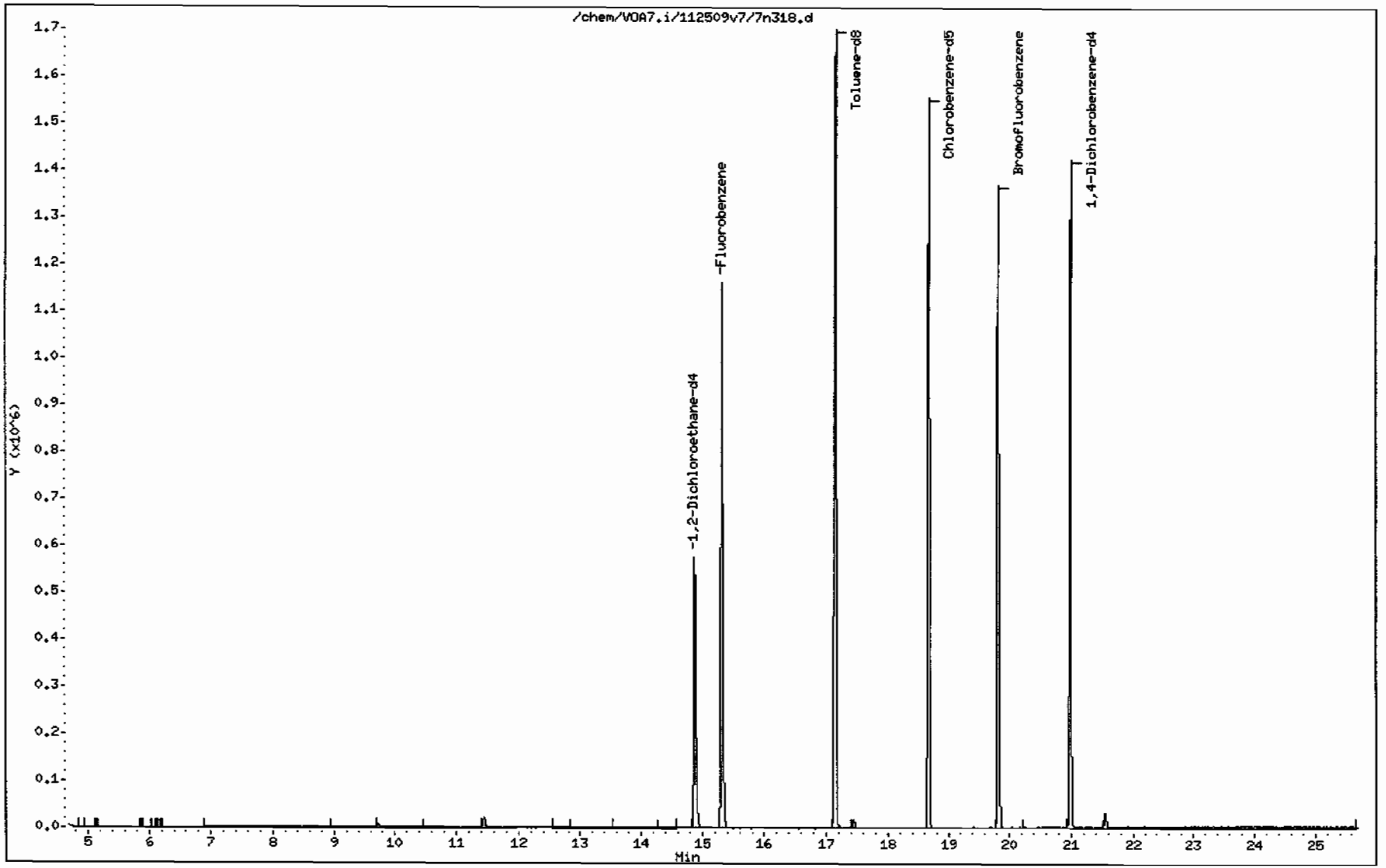

Volatile
Certificate of Analysis
` Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13464	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/30/2009 14:26	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 13:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7o110.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.351	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone	U	5.17	ug/kg	1.71	5.17
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.17	ug/kg	1.65	5.17
75-09-2	Methylene chloride	U	5.17	ug/kg	2.07	5.17
75-15-0	Carbon disulfide	U	5.17	ug/kg	1.29	5.17
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.17	ug/kg	1.55	5.17
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.17	ug/kg	1.29	5.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.17	ug/kg	1.55	5.17
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**3.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13464**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 14:26**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 13:21**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o110.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.17	ug/kg	1.65	5.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o110.d
Lab Smp Id: 241539002 Client Smp ID: RE03-09-13464
Inj Date : 30-NOV-2009 14:26
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539002|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.19930	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	329851	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	270630	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	147121	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	136788	47.5613	49.1
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	360032	44.5642	46.0
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	160162	46.2550	47.8

ION RATIO REPORT

VOA REPORT

Data file: 7o110.d
Report Date: 12/01/2009 08:13
Lab. ID: 241539002 SampleType: SAMPLE
Injection Date: 30-NOV-2009 14:26
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241539002|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	4103	17.14	16.94	80-120	100	(T)
43	3162	17.13	16.94	246-306	77	(QT)
100	245928	17.14	16.94	0- 56	5992	(QT)
82	Bromoform			CAS#: 75-25-2		
173	744	19.82	19.54	80-120	100	(T)
175	9433	19.82	19.54	19- 79	1267	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o110.d
Lab Smp Id: 241539002 Client Smp ID: RE03-09-13464
Inj Date : 30-NOV-2009 14:26
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241539002|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/113009v7/7o110.d
Date : 30-NOV-2009 14:26
Client ID: RE03-09-13464
Sample Info: |2415390021926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AXO1
Column diameter: 0.25

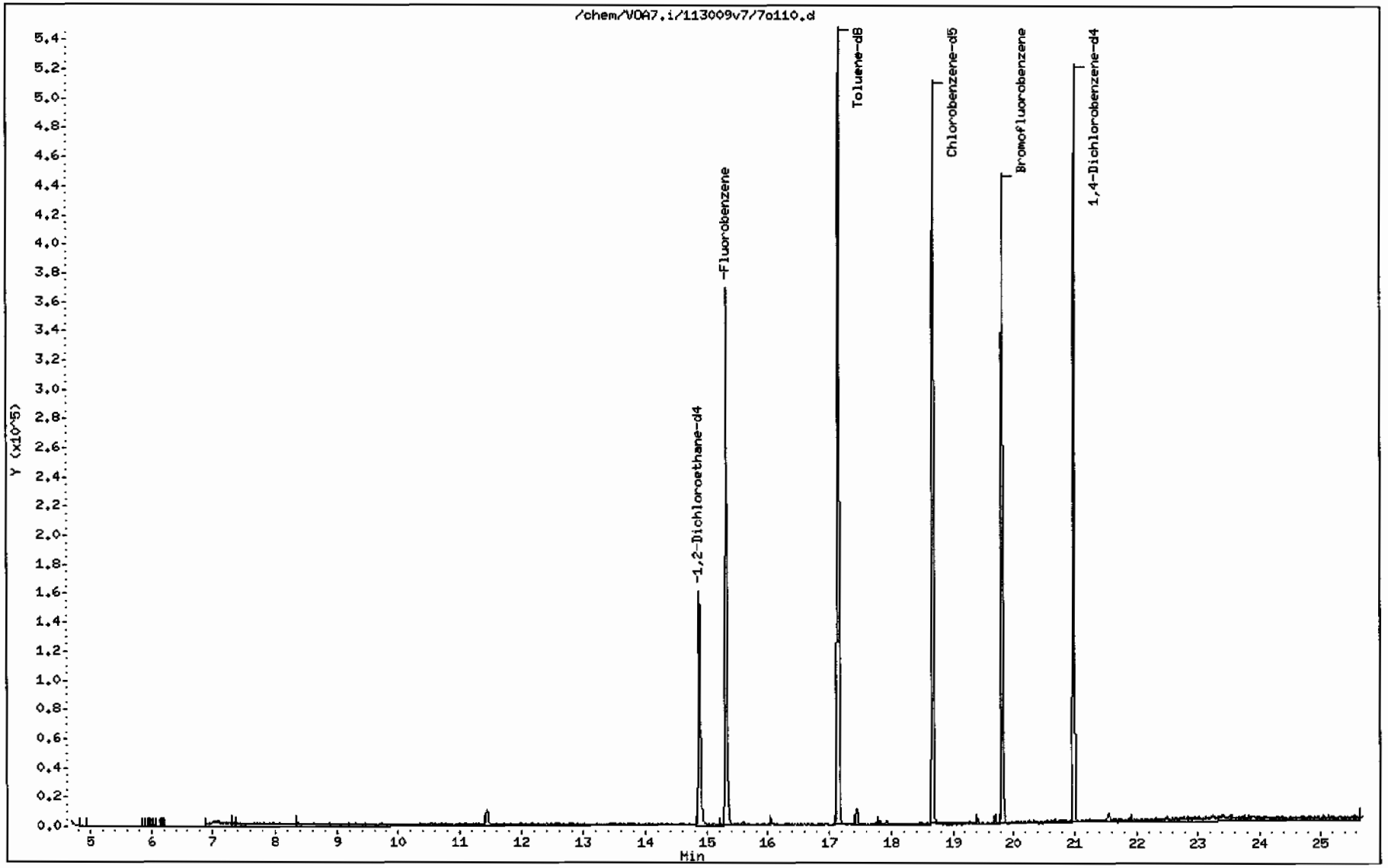

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 30-Nov-2009 08:08

Calibration History

Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Start Cal Date: 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
16-NOV-2009 10:57	ICALsubL+	/chem/VOA7.i/111509v7/71723.d
16-NOV-2009 04:51	ICALsubS	/chem/VOA7.i/111509v7/71712.d
Cal Level: 2 , Cal Amount: 2.00000		
16-NOV-2009 05:25	ICALsubS	/chem/VOA7.i/111509v7/71713.d
16-NOV-2009 00:20	ICALsubL+	/chem/VOA7.i/111509v7/71704.d
Cal Level: 3 , Cal Amount: 5.00000		
16-NOV-2009 05:58	ICALsubS	/chem/VOA7.i/111509v7/71714.d
16-NOV-2009 00:55	ICALsubL+	/chem/VOA7.i/111509v7/71705.d
Cal Level: 4 , Cal Amount: 10.00000		
16-NOV-2009 06:32	ICALsubS	/chem/VOA7.i/111509v7/71715.d
16-NOV-2009 01:29	ICALsubL+	/chem/VOA7.i/111509v7/71706.d
Cal Level: 5 , Cal Amount: 20.00000		
16-NOV-2009 07:05	ICALsubS	/chem/VOA7.i/111509v7/71716.d
16-NOV-2009 02:03	ICALsubL+	/chem/VOA7.i/111509v7/71707.d
Cal Level: 6 , Cal Amount: 50.00000		
16-NOV-2009 02:36	ICALsubL+	/chem/VOA7.i/111509v7/71708.d
Cal Level: 7 , Cal Amount: 100.00000		
16-NOV-2009 08:11	ICALsubS	/chem/VOA7.i/111509v7/71718.d
16-NOV-2009 03:10	ICALsubL+	/chem/VOA7.i/111509v7/71709.d
Cal Level: 8 , Cal Amount: 200.00000		
16-NOV-2009 04:18	BENZENE+	/chem/VOA7.i/111509v7/71711.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0

25-NOV-2009 09:45	CALsubL+	/chem/VOA7.i/112509v7/7n303.d
Ccal Level: 6 , Ccal Amount: 50.0		
25-NOV-2009 10:19	CALsubS+SS	/chem/VOA7.i/112509v7/7n304.d
Ccal Level: 6 , Ccal Amount: 50.0		
25-NOV-2009 09:11	CALsubL+	/chem/VOA7.i/112509v7/7n302.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Calibration File Names:
Level 1: /chem/VOA7.i/111509v7/71723.d
Level 2: /chem/VOA7.i/111509v7/71713.d
Level 3: /chem/VOA7.i/111509v7/71714.d
Level 4: /chem/VOA7.i/111509v7/71715.d
Level 5: /chem/VOA7.i/111509v7/71716.d
Level 6: /chem/VOA7.i/111509v7/71708.d
Level 7: /chem/VOA7.i/111509v7/71718.d
Level 8: /chem/VOA7.i/111509v7/71711.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
M 1 1,3-Dichloropropylene	0.48162	0.51141	0.48991	0.49506	0.47915	0.45634						
	0.45814	+++++					AVRG		0.48166		4.09435	
M 2 Xylenes (total)	0.70187	0.71107	0.68541	0.65468	0.62432	0.58624						
	0.54217	+++++					AVRG		0.64368		9.77778	
M 3 1,2-Dichloroethylene (total)	0.50335	0.51390	0.49246	0.48613	0.47127	0.44528						
	0.43027	+++++					AVRG		0.47752		6.39683	
147 Chlorotrifluoroethylene	+++++	0.11567	0.12629	0.13006	0.15103	+++++						
	0.12864	+++++					AVRG		0.13034		9.87423	<-
148 2-Chloro-1,1,1-trifluoroethan	+++++	0.29483	0.28977	0.28633	0.28136	+++++						
	0.26145	+++++					AVRG		0.28275		4.55528	<-

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Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
4 Dichlorodifluoromethane	9878	9249	23150	48278	92822	212089						
	442243	+++++					LINR	-0.00674	0.19647		0.99903	
5 Chloromethane	17787	25991	62744	120715	235311	545414						
	+++++	+++++					LINR	-0.01618	0.48059		0.99934	
6 Vinyl chloride	0.45101	0.32267	0.32843	0.32002	0.31485	0.31553						
	0.32064	+++++					AVRG		0.33902		14.62820	
7 Bromomethane	0.27284	0.23477	0.21739	0.23189	0.22221	0.22062						
	0.22663	+++++					AVRG		0.23234		8.13362	
8 Chloroethane	0.26449	0.29143	0.26656	0.24776	0.24161	0.22593						
	0.23650	+++++					AVRG		0.25347		8.75362	
9 Trichlorofluoromethane	0.36936	0.32081	0.34380	0.33088	0.34454	0.33922						
	0.34228	+++++					AVRG		0.34155		4.37091	
10 Ethyl Ether	0.32395	0.40505	0.37935	0.37257	0.35783	0.33864						
	0.33947	+++++					AVRG		0.35955		7.81915	
11 Acrolein	0.10338	0.08120	0.07335	0.07632	0.07973	+++++						
	0.08321	+++++					AVRG		0.08287		12.84791	<-
12 Trichlorotrifluoroethane	0.10801	0.09022	0.09121	0.09389	0.09152	+++++						
	0.08403	+++++					AVRG		0.09315		8.58517	<-

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
13 Acetone	0.41356	0.45387	0.41433	0.43007	0.40244	0.39042						
	0.35449	+++++					AVRG		0.40846		7.65356	
14 1,1-Dichloroethylene	0.22088	0.21532	0.20364	0.20899	0.20024	0.20565						
	0.19213	+++++					AVRG		0.20669		4.61138	
15 Isopropyl Alcohol	0.03168	0.03567	0.03718	0.03843	0.04149	+++++						
	0.03561	+++++					AVRG		0.03668		8.93039	<-
16 Iodomethane	0.40955	0.39246	0.38281	0.39460	0.37262	0.36662						
	0.32402	+++++					AVRG		0.37752		7.31342	
17 Acetonitrile	0.06684	0.07498	0.06894	0.07076	0.06571	0.07505						
	0.05949	+++++					AVRG		0.06882		7.98603	
18 Methyl acetate	0.46706	0.48972	0.42740	0.44391	0.40101	0.34961						
	0.32566	+++++					AVRG		0.41491		14.50657	
19 Carbon disulfide	0.81399	0.71905	0.65613	0.72387	0.66367	0.64827						
	0.51116	+++++					AVRG		0.67659		13.71592	
20 Allyl chloride	0.73189	0.65846	0.65047	0.64089	0.62129	+++++						
	0.50912	+++++					AVRG		0.63535		11.40310	<-
21 tert-Butyl Alcohol	0.05404	0.05110	0.05011	0.05014	0.05625	+++++						
	0.04447	+++++					AVRG		0.05102		7.88694	<-

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
22 Methylene chloride	+++++	18349	33412	50196	94022	216889						
	400402	+++++					LINR	-0.06474	0.17592		0.99946	
23 Acrylonitrile	0.17475	0.15791	0.16794	0.16478	0.17200	+++++						
	0.15900	+++++					AVRG		0.16606		4.10463	<-
24 tert-Butyl methyl ether	0.83012	0.96761	0.88767	0.95137	0.84252	0.79052						
	0.79091	+++++					AVRG		0.86582		8.33600	
25 trans-1,2-Dichloroethylene	0.46674	0.47157	0.45561	0.44548	0.43475	0.41412						
	0.39387	+++++					AVRG		0.44031		6.43042	
26 Vinyl acetate	0.93699	1.00832	0.91797	0.90197	0.90475	0.80868						
	0.69472	+++++					AVRG		0.88192		11.49269	
27 Isopropyl ether	+++++	1.67983	1.73405	1.73947	1.73231	+++++						
	1.56232	+++++					AVRG		1.68959		4.44716	<-
28 1,1-Dichloroethane	0.55908	0.56733	0.55912	0.55824	0.54325	0.53477						
	0.52674	+++++					AVRG		0.54979		2.73004	
29 2-Chloro-1,3-butadiene	0.60061	0.54347	0.55048	0.54911	0.52692	+++++						
	0.50165	+++++					AVRG		0.54538		5.99603	<-
30 Ethyl tert-butyl ether	+++++	1.15038	1.14159	1.15815	1.16883	+++++						
	1.11754	+++++					AVRG		1.14730		1.69286	<-

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
31 2-Butanone	0.50656	0.55953	0.46507	0.47110	0.45593	0.42908						
	0.37852	+++++					AVRG		0.46654		12.23007	
32 Ethyl acetate	0.61522	0.48944	0.49792	0.47694	0.49442	+++++						
	0.38738	+++++					AVRG		0.49355		14.71943	<-
33 cis-1,2-Dichloroethylene	0.53996	0.55622	0.52930	0.52679	0.50779	0.47645						
	0.46666	+++++					AVRG		0.51474		6.41363	
34 2,2-Dichloropropane	0.30573	0.33532	0.29995	0.28909	0.27942	0.25411						
	0.26495	+++++					AVRG		0.28980		9.37472	
35 Propionitrile	0.07599	0.06418	0.06422	0.06603	0.07037	+++++						
	0.06037	+++++					AVRG		0.06686		8.26398	<-
36 Methacrylonitrile	0.34622	0.29982	0.30977	0.29213	0.30586	+++++						
	0.25040	+++++					AVRG		0.30070		10.28807	<-
37 Bromochloromethane	0.44336	0.47430	0.45054	0.46944	0.44692	0.42910						
	0.41925	+++++					AVRG		0.44756		4.43402	
38 Chloroform	0.50752	0.53598	0.51019	0.49879	0.48385	0.47123						
	0.46937	+++++					AVRG		0.49671		4.79790	
39 Tetrahydrofuran	0.46962	0.36550	0.36733	0.34702	0.36837	+++++						
	0.30065	+++++					AVRG		0.36975		14.95593	<-

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41 1,1,1-Trichloroethane	0.39389	0.39912	0.37452	0.36015	0.36051	0.35090						
	0.35034	+++++					AVRG		0.36992		5.38140	
42 Isobutyl alcohol	0.01894	0.01539	0.01791	0.01817	0.02004	+++++						
	0.01579	+++++					AVRG		0.01771		10.19142	<-
43 Cyclohexane	0.73385	0.76995	0.62800	0.60896	0.58507	0.55714						
	0.51772	+++++					AVRG		0.62867		14.62772	
44 1,1-Dichloropropene	0.36948	0.35436	0.34505	0.33268	0.32380	0.31448						
	0.30567	+++++					AVRG		0.33508		6.75846	
45 Carbon tetrachloride	0.30515	0.31489	0.29276	0.29301	0.28324	0.27677						
	0.28441	+++++					AVRG		0.29289		4.53638	
47 1,2-Dichloroethane	0.50646	0.55371	0.53797	0.54777	0.52405	0.49015						
	0.47757	+++++					AVRG		0.51967		5.62217	
48 Benzene	1.08245	1.13296	1.06418	1.03887	0.99466	0.94896						
	0.90668	+++++					AVRG		1.02411		7.70711	
49 Methyl tert-amyl ether	+++++	0.79368	0.79088	0.81205	0.81522	+++++						
	0.76488	+++++					AVRG		0.79534		2.53396	<-
50 Cyclohexene	0.53525	0.54627	0.49088	0.47223	0.46857	0.44496						
	0.42837	+++++					AVRG		0.48379		9.06743	

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
52 n-Butyl alcohol	0.01414	0.01540	0.01465	0.01549	0.01195	0.01360						
	0.01298	0.01589					AVRG		0.01426		9.55415	
53 Trichloroethylene	0.29668	0.27864	0.26410	0.26925	0.25379	0.24558						
	0.24343	+++++					AVRG		0.26450		7.19813	
54 Methyl methacrylate	0.23403	0.21190	0.21903	0.20630	0.21130	+++++						
	0.17483	+++++					AVRG		0.20956		9.33602	<-
55 Methylcyclohexane	0.48623	0.45049	0.41633	0.40547	0.39190	0.36154						
	0.34719	+++++					AVRG		0.40845		11.87464	
56 1,2-Dichloropropane	0.34729	0.36852	0.34844	0.34238	0.32116	0.30810						
	0.29588	+++++					AVRG		0.33311		7.68307	
57 1,4-Dioxane	0.00311	0.00342	0.00301	0.00321	0.00334	+++++						
	0.00291	+++++					AVRG		0.00316		6.09053	<-
58 Dibromomethane	0.17530	0.21136	0.18851	0.19605	0.18940	0.17505						
	0.17768	+++++					AVRG		0.18762		7.04018	
59 Bromodichloromethane	0.40306	0.39688	0.39882	0.39409	0.39111	0.38250						
	0.38772	+++++					AVRG		0.39346		1.77175	
60 2-Nitropropane	0.14779	0.11222	0.12974	0.11925	0.13313	+++++						
	0.13745	+++++					AVRG		0.12993		9.81668	<-

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
61 2-Chloroethylvinyl ether	0.13440	0.14994	0.14076	0.14163	0.13735	0.12335					
	0.12792	+++++					AVRG		0.13648		6.53115
62 cis-1,3-Dichloropropylene	0.51907	0.52113	0.50923	0.50627	0.49050	0.46742					
	0.46560	+++++					AVRG		0.49703		4.65191
63 4-Methyl-2-pentanone	0.26289	0.29681	0.26991	0.26674	0.25619	0.24532					
	0.21162	+++++					AVRG		0.25850		10.06509
65 Toluene	1.06152	0.94181	0.92209	0.85591	0.83869	0.81855					
	0.77591	+++++					AVRG		0.88778		10.78602
66 Ethyl methacrylate	0.60106	0.55204	0.56173	0.54685	0.53056	+++++					
	0.39826	+++++					AVRG		0.53175		13.07283 <-
67 trans-1,3-Dichloropropylene	0.59340	0.66097	0.62140	0.63870	0.61596	0.60172					
	0.59157	+++++					AVRG		0.61767		4.10553
68 1,1,2-Trichloroethane	0.28152	0.34176	0.31919	0.31408	0.30560	0.28919					
	0.27725	+++++					AVRG		0.30409		7.59572
69 2-Hexanone	0.87481	0.97568	0.87145	0.82622	0.78128	0.70076					
	+++++	+++++					AVRG		0.83837		11.14091
70 1,3-Dichloropropane	0.62125	0.70580	0.63473	0.62515	0.59521	0.54769					
	0.50020	+++++					AVRG		0.60429		10.90903

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71 Tetrachloroethylene	5992	9474	21832	39767	78891	181061					
	337900	+++++					LINR	-0.03372	0.19968		0.99822
72 Dibromochloromethane	0.36374	0.35126	0.34534	0.35045	0.34793	0.36389					
	0.36418	+++++					AVRG		0.35526		2.34746
73 1,2-Dibromoethane	0.36352	0.39368	0.36505	0.37797	0.37853	0.35728					
	0.34784	+++++					AVRG		0.36913		4.15400
74 1-Chlorohexane	0.43766	0.42600	0.40282	0.39261	0.39261	+++++					
	0.36131	+++++					AVRG		0.40217		6.74585 <-
76 Chlorobenzene	1.07372	1.00204	1.00902	0.96396	0.93337	0.90160					
	0.86204	+++++					AVRG		0.96368		7.42752
77 1,1,1,2-Tetrachloroethane	0.36216	0.35620	0.34804	0.35642	0.33854	0.33649					
	0.32622	+++++					AVRG		0.34629		3.75530
78 Ethylbenzene	1.95324	1.84797	1.75084	1.66559	1.62080	1.50242					
	1.36911	+++++					AVRG		1.67285		11.94152
79 m,p-Xylenes	0.69767	0.70455	0.67501	0.64826	0.61794	0.58065					
	0.53207	+++++					AVRG		0.63659		10.00955
80 o-Xylene	0.71025	0.72410	0.70621	0.66754	0.63709	0.59741					
	0.56236	+++++					AVRG		0.65785		9.36415

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	100 Level 7	200 Level 8										
81 Styrene	1.33560	1.30153	1.23519	1.21219	1.13822	1.07539						
	0.97845	+++++					AVRG		1.18237		10.71682	
82 Bromoform	0.44442	0.39902	0.41763	0.44297	0.44404	0.44186						
	0.46661	+++++					AVRG		0.43665		4.99810	
83 Isopropylbenzene	3.19302	3.18561	3.07411	2.86686	2.75667	2.54796						
	2.34976	+++++					AVRG		2.85343		11.36410	
84 cis-1,4-Dichloro-2-butene	0.40887	0.38461	0.41067	0.39342	0.41002	+++++						
	0.34203	+++++					AVRG		0.39160		6.76684	<-
85 Cyclohexanone	27609	47983	120128	244566	605155	+++++						
	4411964	+++++					LINR	1.47957	0.10625		0.99599	
87 1,1,2,2-Tetrachloroethane	0.96106	0.97912	0.93144	0.92496	0.89645	0.82377						
	0.80765	+++++					AVRG		0.90349		7.26714	
88 trans-1,4-Dichloro-2-butene	0.37041	0.36328	0.36660	0.35482	0.37473	+++++						
	0.31675	+++++					AVRG		0.35776		5.92605	<-
89 1,2,3-Trichloropropane	0.23019	0.25194	0.24061	0.23026	0.22741	0.20232						
	0.21092	+++++					AVRG		0.22766		7.37759	
90 Bromobenzene	0.92906	0.82900	0.85652	0.80922	0.76616	0.73191						
	0.69906	+++++					AVRG		0.80299		9.73768	

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	100 Level 7	200 Level 8									
91 n-Propylbenzene	4.25249	3.88792	3.79288	3.45018	3.34064	3.08225					
	2.76462	+++++					AVRG		3.51014		14.45630
92 1,3,5-Trimethylbenzene	3.01475	2.80798	2.70222	2.54197	2.39987	2.22252					
	2.01642	+++++					AVRG		2.52939		13.66966
93 2-Chlorotoluene	3.08010	2.87993	2.74165	2.51611	2.36428	2.20489					
	2.03238	+++++					AVRG		2.54562		14.77810
94 4-Chlorotoluene	2.91904	2.51920	2.55214	2.40451	2.27488	2.19788					
	2.06680	+++++					AVRG		2.41921		11.59035
95 tert-Butylbenzene	2.67976	2.70138	2.45161	2.29001	2.24015	2.11655					
	2.00828	+++++					AVRG		2.35539		11.35607
96 1,2,4-Trimethylbenzene	3.16701	2.84657	2.89890	2.74678	2.59171	2.41019					
	2.24517	+++++					AVRG		2.70091		11.55019
97 Pentachloroethane	0.25571	0.26641	0.25616	0.27985	0.26289	+++++					
	0.23937	+++++					AVRG		0.26007		5.16533 <-
98 sec-Butylbenzene	3.82934	3.45485	3.46206	3.15695	3.07500	2.85836					
	2.63727	+++++					AVRG		3.21055		12.58655
99 4-Isopropyltoluene	2.98217	2.73304	2.65706	2.51190	2.48606	2.31346					
	2.17912	+++++					AVRG		2.55183		10.50000

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
100 1,3-Dichlorobenzene	1.62812	1.57179	1.47014	1.45207	1.39072	1.30402						
	1.25519	+++++					AVRG		1.43886		9.36211	
102 1,4-Dichlorobenzene	1.63344	1.50373	1.46244	1.41694	1.36741	1.28628						
	1.25795	+++++					AVRG		1.41831		9.15964	
103 Benzyl chloride	1.52159	1.39923	1.36711	1.35007	1.35827	+++++						
	1.00071	+++++					AVRG		1.33283		13.10142	<-
104 n-Butylbenzene	3.30748	3.01305	2.86173	2.59921	2.52845	2.34730						
	2.22372	+++++					AVRG		2.69728		14.23037	
105 1,2-Dichlorobenzene	1.58423	1.53813	1.49742	1.43620	1.40103	1.30168						
	1.26719	+++++					AVRG		1.43227		8.25322	
106 bis(2-Chloroisopropyl)ether	0.83054	0.76699	0.77671	0.70559	0.76759	+++++						
	0.58050	+++++					AVRG		0.73799		11.75584	<-
107 1,2-Dibromo-3-chloropropane	0.12210	0.19215	0.18173	0.19639	0.18470	0.16898						
	0.18479	+++++					AVRG		0.17584		14.34396	
108 1,2,4-Trichlorobenzene	1.10365	1.08552	1.04867	1.04578	1.02857	0.91854						
	0.95721	+++++					AVRG		1.02685		6.50341	
109 Hexachlorobutadiene	0.63352	0.54241	0.57883	0.54434	0.54151	0.49744						
	0.50824	+++++					AVRG		0.54947		8.29752	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
110 Naphthalene	2.54277	2.49253	2.33228	2.33148	2.24296	1.96980					
	2.06384	+++++					AVRG		2.28224		9.18916
111 1,2,3-Trichlorobenzene	0.97923	0.94023	0.91669	0.92850	0.93014	0.82251					
	0.86694	+++++					AVRG		0.91204		5.65838
$ 46 1,2-Dichloroethane-d4	0.42117	0.44272	0.43099	0.44388	0.44038	0.43427					
	0.43830	+++++					AVRG		0.43596		1.82484
$ 64 Toluene-d8	1.44558	1.50527	1.50116	1.49559	1.48833	1.50905					
	1.50335	+++++					AVRG		1.49262		1.46212
$ 86 Bromofluorobenzene	1.15699	1.19361	1.18690	1.18005	1.16824	1.17494					
	1.17673	+++++					AVRG		1.17678		1.01982

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 16-NOV-2009 13:54
Lab File ID: 7m102.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM0911116-01 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	2 Xylenes (total)	0.64368	0.61838	0.61838	0.050	-3.93101	30.00000	Averaged	
M	3 1,2-Dichloroethylene (total	0.47752	0.48210	0.48210	0.050	0.95860	30.00000	Averaged	
M	1 1,3-Dichloropropylene	0.48166	0.47100	0.47100	0.050	-2.21429	30.00000	Averaged	
	4 Dichlorodifluoromethane	65.27028	50.00000	0.25780	0.050	30.54056	30.00000	Linear	<-
	5 Chloromethane	52.40285	50.00000	0.51146	0.100	4.80570	30.00000	Linear	spcc
	6 Vinyl chloride	0.33902	0.36244	0.36244	0.050	6.90732	20.00000	Averaged	ccc
	7 Bromomethane	0.23234	0.22930	0.22930	0.050	-1.30821	30.00000	Averaged	
	8 Chloroethane	0.25347	0.24541	0.24541	0.010	-3.17791	30.00000	Averaged	
	9 Trichlorofluoromethane	0.34155	0.41490	0.41490	0.050	21.47309	30.00000	Averaged	
	10 Ethyl Ether	0.35955	0.32619	0.32619	0.001	-9.27739	30.00000	Averaged	
	13 Acetone	0.40846	0.34477	0.34477	0.050	-15.59171	40.00000	Averaged	
	17 Acetonitrile	0.06882	0.08302	0.08302	0.010	20.62908	30.00000	Averaged	
	14 1,1-Dichloroethylene	0.20669	0.22529	0.22529	0.050	8.99624	20.00000	Averaged	ccc
	18 Methyl acetate	0.41491	0.36212	0.36212	0.010	-12.72228	40.00000	Averaged	
	16 Iodomethane	0.37752	0.36997	0.36997	0.050	-2.00102	30.00000	Averaged	
	22 Methylene chloride	50.50060	50.00000	0.18907	0.050	1.00119	30.00000	Linear	
	19 Carbon disulfide	0.67659	0.74146	0.74146	0.050	9.58807	30.00000	Averaged	
	24 tert-Butyl methyl ether	0.86582	0.81699	0.81699	0.050	-5.63917	30.00000	Averaged	
	25 trans-1,2-Dichloroethylene	0.44031	0.45584	0.45584	0.050	3.52742	30.00000	Averaged	
	26 Vinyl acetate	0.88192	0.90935	0.90935	0.010	3.11086	40.00000	Averaged	
	28 1,1-Dichloroethane	0.54979	0.56486	0.56486	0.100	2.74140	30.00000	Averaged	spcc
	31 2-Butanone	0.46654	0.36247	0.36247	0.030	-22.30657	40.00000	Averaged	
	33 cis-1,2-Dichloroethylene	0.51474	0.50836	0.50836	0.050	-1.23876	30.00000	Averaged	
	34 2,2-Dichloropropane	0.28980	0.33154	0.33154	0.050	14.40365	30.00000	Averaged	
	38 Chloroform	0.49671	0.49767	0.49767	0.010	0.19521	20.00000	Averaged	ccc
	37 Bromochloromethane	0.44756	0.43371	0.43371	0.010	-3.09319	30.00000	Averaged	
	41 1,1,1-Trichloroethane	0.36992	0.42264	0.42264	0.010	14.25119	30.00000	Averaged	
	43 Cyclohexane	0.62867	0.68433	0.68433	0.010	8.85406	30.00000	Averaged	
	44 1,1-Dichloropropene	0.33508	0.36362	0.36362	0.010	8.51916	30.00000	Averaged	
	52 n-Butyl alcohol	0.01426	0.01523	0.01523	0.001	6.79075	40.00000	Averaged	
	45 Carbon tetrachloride	0.29289	0.33705	0.33705	0.010	15.07531	30.00000	Averaged	
$	46 1,2-Dichloroethane-d4	0.43596	0.42203	0.42203	0.010	-3.19455	30.00000	Averaged	
	47 1,2-Dichloroethane	0.51967	0.49347	0.49347	0.010	-5.04145	30.00000	Averaged	
	48 Benzene	1.02411	0.99220	0.99220	0.010	-3.11562	30.00000	Averaged	
	50 Cyclohexene	0.48379	0.51528	0.51528	0.010	6.50957	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 16-NOV-2009 13:54
Lab File ID: 7m102.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM0911116-01 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	53 Trichloroethylene	0.26450	0.26775	0.26775	0.010	1.23195	30.00000	Averaged	
	56 1,2-Dichloropropane	0.33311	0.30902	0.30902	0.010	-7.23364	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.40845	0.44750	0.44750	0.010	9.55994	30.00000	Averaged	
	59 Bromodichloromethane	0.39346	0.39039	0.39039	0.010	-0.77802	30.00000	Averaged	
	58 Dibromomethane	0.18762	0.18134	0.18134	0.010	-3.34917	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	0.13648	0.10225	0.10225	0.010	-25.07832	30.00000	Averaged	
	63 4-Methyl-2-pentanone	0.25850	0.23312	0.23312	0.010	-9.81605	40.00000	Averaged	
	62 cis-1,3-Dichloropropylene	0.49703	0.47715	0.47715	0.010	-4.00062	30.00000	Averaged	
$	64 Toluene-d8	1.49262	1.42409	1.42409	0.010	-4.59148	30.00000	Averaged	
	65 Toluene	0.88778	0.86384	0.86384	0.010	-2.69700	20.00000	Averaged	ccc
	67 trans-1,3-Dichloropropylene	0.61767	0.61917	0.61917	0.010	0.24200	30.00000	Averaged	
	68 1,1,2-Trichloroethane	0.30409	0.28713	0.28713	0.010	-5.57532	30.00000	Averaged	
	69 2-Hexanone	0.83837	0.58839	0.58839	0.010	-29.81693	40.00000	Averaged	
	70 1,3-Dichloropropane	0.60429	0.55350	0.55350	0.010	-8.40404	30.00000	Averaged	
	71 Tetrachloroethylene	61.33392	50.00000	0.25168	0.010	22.66783	30.00000	Linear	
	72 Dibromochloromethane	0.35526	0.36420	0.36420	0.010	2.51615	30.00000	Averaged	
	73 1,2-Dibromoethane	0.36913	0.36068	0.36068	0.010	-2.28673	30.00000	Averaged	
	76 Chlorobenzene	0.96368	0.93968	0.93968	0.300	-2.49061	30.00000	Averaged	spcc
	77 1,1,1,2-Tetrachloroethane	0.34629	0.33927	0.33927	0.010	-2.02963	30.00000	Averaged	
	78 Ethylbenzene	1.67285	1.61310	1.61310	0.010	-3.57170	20.00000	Averaged	ccc
	79 m,p-Xylenes	0.63659	0.61295	0.61295	0.010	-3.71431	30.00000	Averaged	
	80 o-Xylene	0.65785	0.62923	0.62923	0.010	-4.35042	30.00000	Averaged	
	81 Styrene	1.18237	1.06949	1.06949	0.010	-9.54661	30.00000	Averaged	
	82 Bromoform	0.43665	0.48550	0.48550	0.100	11.18812	30.00000	Averaged	spcc
	83 Isopropylbenzene	2.85343	2.85798	2.85798	0.010	0.15935	30.00000	Averaged	
	87 1,1,2,2-Tetrachloroethane	0.90349	0.88621	0.88621	0.300	-1.91337	30.00000	Averaged	spcc
$	86 Bromofluorobenzene	1.17678	1.15082	1.15082	0.010	-2.20576	30.00000	Averaged	
	89 1,2,3-Trichloropropane	0.22766	0.22998	0.22998	0.010	1.01599	30.00000	Averaged	
	90 Bromobenzene	0.80299	0.77041	0.77041	0.010	-4.05731	30.00000	Averaged	
	91 n-Propylbenzene	3.51014	3.45563	3.45563	0.010	-1.55306	30.00000	Averaged	
	93 2-Chlorotoluene	2.54562	2.39286	2.39286	0.010	-6.00103	30.00000	Averaged	
	92 1,3,5-Trimethylbenzene	2.52939	2.42878	2.42878	0.010	-3.97768	30.00000	Averaged	
	94 4-Chlorotoluene	2.41921	2.36505	2.36505	0.010	-2.23841	30.00000	Averaged	
	95 tert-Butylbenzene	2.35539	2.37838	2.37838	0.010	0.97575	30.00000	Averaged	
	96 1,2,4-Trimethylbenzene	2.70091	2.61045	2.61045	0.010	-3.34902	30.00000	Averaged	
	98 sec-Butylbenzene	3.21055	3.25000	3.25000	0.010	1.22884	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7m102.d
Analysis Type: WATER
Lab Sample ID: W7VM0911116-01 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

Injection Date: 16-NOV-2009 13:54
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.55183	2.60229	2.60229	0.010	1.97753	30.00000	Averaged
100 1,3-Dichlorobenzene	1.43886	1.40699	1.40699	0.010	-2.21503	30.00000	Averaged
102 1,4-Dichlorobenzene	1.41831	1.37830	1.37830	0.010	-2.82098	30.00000	Averaged
104 n-Butylbenzene	2.69728	2.72809	2.72809	0.010	1.14238	30.00000	Averaged
105 1,2-Dichlorobenzene	1.43227	1.37461	1.37461	0.010	-4.02547	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	0.17584	0.19973	0.19973	0.010	13.58816	30.00000	Averaged
108 1,2,4-Trichlorobenzene	1.02685	1.05297	1.05297	0.010	2.54314	30.00000	Averaged
109 Hexachlorobutadiene	0.54947	0.60933	0.60933	0.010	10.89290	30.00000	Averaged
110 Naphthalene	2.28224	2.22128	2.22128	0.010	-2.67074	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.91204	0.95052	0.95052	0.010	4.21953	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.59555
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/111509v7/7m102.d
Lab Smp Id: W7VM0911116-01 Client Smp ID: VSTD050
Inj Date : 16-NOV-2009 13:54
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091111-01B/IVM091111-01
Comment :
Method : /chem/VOA7.i/111509v7/VOA7-8260B-111509.m
Meth Date : 19-Nov-2009 09:38 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 08:11 Cal File: 71718.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				1674996	150.000	144
M 3 1,2-Dichloroethylene (total)	96				1159591	100.000	101
M 1 1,3-Dichloropropylene	75				1132889	100.000	97.8
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	310040	50.0000	65.3
5 Chloromethane	50	5.757	5.757	(0.376)	615104	50.0000	52.4
6 Vinyl chloride	62	6.188	6.188	(0.404)	435887	50.0000	53.4
7 Bromomethane	94	7.429	7.429	(0.485)	275765	50.0000	49.3
8 Chloroethane	64	7.835	7.835	(0.512)	295146	50.0000	48.4
9 Trichlorofluoromethane	101	8.789	8.789	(0.574)	498975	50.0000	60.7
10 Ethyl Ether	59	9.703	9.703	(0.633)	392296	50.0000	45.4
13 Acetone	43	10.423	10.423	(0.681)	2073184	250.000	211
17 Acetonitrile	41	11.073	11.073	(0.723)	1996927	1000.00	1210
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	270942	50.0000	54.5
18 Methyl acetate	43	11.225	11.225	(0.733)	2177529	250.000	218
16 Iodomethane	142	10.667	10.667	(0.696)	2224717	250.000	245

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
22 Methylene chloride	86	11.449	11.449	(0.747)	227387	50.0000	50.5
19 Carbon disulfide	76	10.840	10.840	(0.708)	4458593	250.000	274
24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	982555	50.0000	47.2
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	548211	50.0000	51.8
26 Vinyl acetate	43	12.860	12.860	(0.840)	5468142	250.000	258
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	679329	50.0000	51.4
31 2-Butanone	43	13.723	13.723	(0.896)	2179625	250.000	194
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	611380	50.0000	49.4
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	398722	50.0000	57.2
38 Chloroform	83	14.190	14.190	(0.926)	598527	50.0000	50.1
37 Bromochloromethane	49	14.088	14.088	(0.920)	521603	50.0000	48.4
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	508283	50.0000	57.1
43 Cyclohexane	56	14.586	14.586	(0.952)	823011	50.0000	54.4
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	437308	50.0000	54.2
52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1831848	5000.00	5340
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	405347	50.0000	57.5
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	507557	50.0000	48.4
47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	593470	50.0000	47.5
48 Benzene	78	14.992	14.992	(0.979)	1193269	50.0000	48.4
50 Cyclohexene	67	15.124	15.124	(0.987)	619701	50.0000	53.2
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1202647	50.0000	
53 Trichloroethylene	95	15.773	15.773	(1.030)	322013	50.0000	50.6
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	371636	50.0000	46.4
55 Methylcyclohexane	83	16.037	16.037	(1.047)	538183	50.0000	54.8
59 Bromodichloromethane	83	16.332	16.332	(1.066)	469506	50.0000	49.6
58 Dibromomethane	93	16.190	16.190	(1.057)	218086	50.0000	48.3
61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	614859	250.000	187
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1052433	250.000	225
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	573841	50.0000	48.0
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1285807	50.0000	47.7
65 Toluene	92	17.215	17.215	(0.922)	779961	50.0000	48.6
67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	559048	50.0000	50.1
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	259252	50.0000	47.2
69 2-Hexanone	43	17.804	17.804	(0.954)	2656294	250.000	175
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	499758	50.0000	45.8
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	227238	50.0000	61.3
72 Dibromochloromethane	129	18.068	18.068	(0.968)	328832	50.0000	51.2
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	325662	50.0000	48.8
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	902900	50.0000	
76 Chlorobenzene	112	18.697	18.697	(1.002)	848435	50.0000	48.8
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	306323	50.0000	49.0
78 Ethylbenzene	91	18.768	18.768	(1.005)	1456471	50.0000	48.2
79 m,p-Xylenes	106	18.870	18.870	(1.011)	1106860	100.000	96.3
80 o-Xylene	106	19.286	19.286	(1.033)	568136	50.0000	47.8
81 Styrene	104	19.286	19.286	(1.033)	965645	50.0000	45.2
82 Bromoform	173	19.540	19.540	(0.931)	252479	50.0000	55.6
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1486250	50.0000	50.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	460859	50.0000	49.0
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	598470	50.0000	48.9
89 1,2,3-Trichloropropane	110	19.976	19.976	(0.952)	119596	50.0000	50.5
90 Bromobenzene	156	20.017	20.017	(0.954)	400641	50.0000	48.0
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1797050	50.0000	49.2
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1244371	50.0000	47.0
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1263052	50.0000	48.0
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1229913	50.0000	48.9
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1236841	50.0000	50.5
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1357529	50.0000	48.3
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1690117	50.0000	50.6
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1353286	50.0000	51.0
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	731687	50.0000	48.9
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	520036	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	716767	50.0000	48.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1418705	50.0000	50.6
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	714849	50.0000	48.0
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	103866	50.0000	56.8
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	547580	50.0000	51.3
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	316871	50.0000	55.4
110 Naphthalene	128	23.753	23.753	(1.132)	1155148	50.0000	48.7
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	494304	50.0000	52.1

Data File: /chem/VOA7.i/111509v7/7m102.d
Date : 16-NOV-2009 13:54
Client ID: VSTD050
Sample Info: IW7VH091116-01|BFB/CCV/ICV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

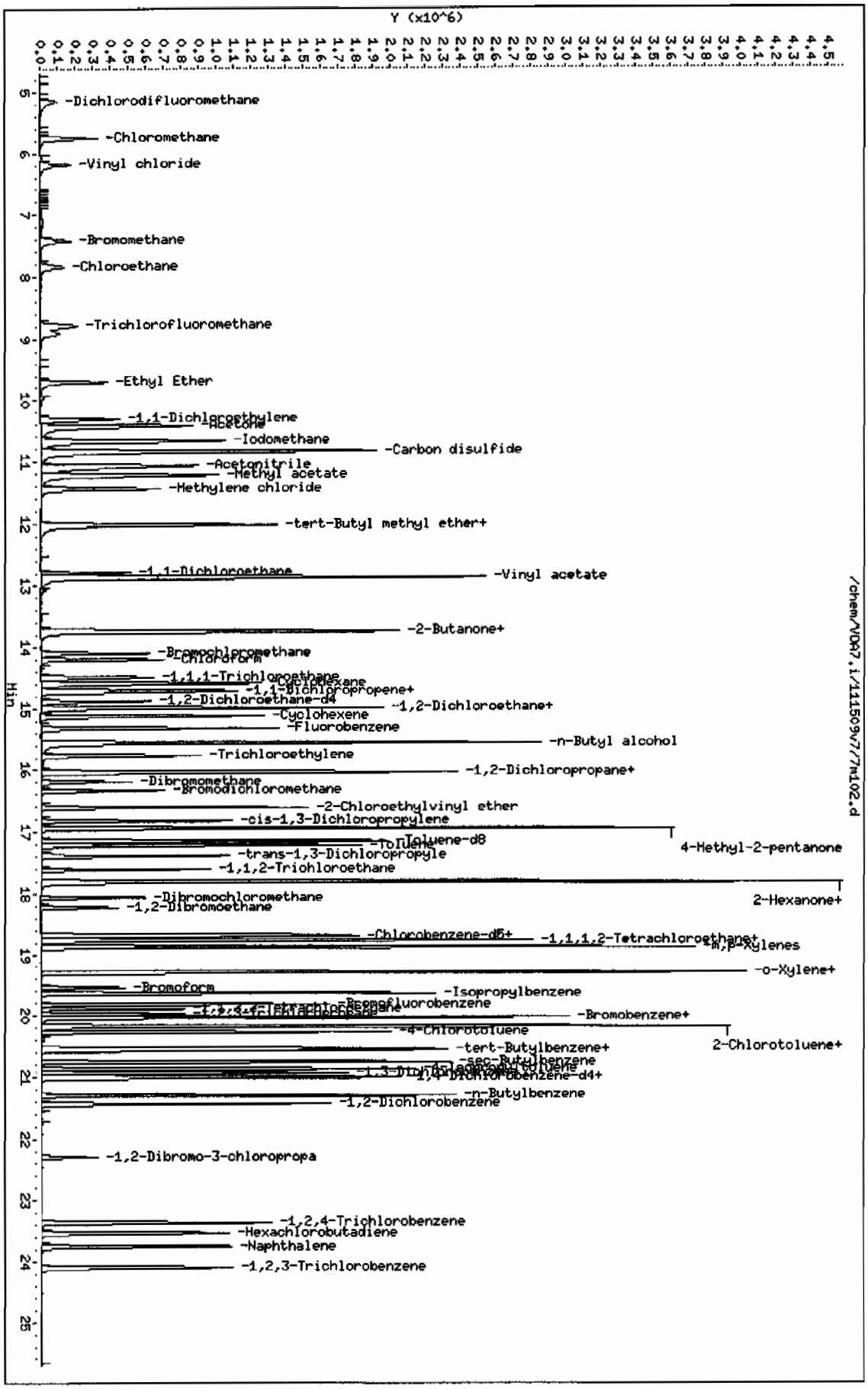

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Data File: /chem/VOA7.i/111509v7/7m104.d
Report Date: 19-Nov-2009 09:39

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7m104.d
Analysis Type: WATER
Lab Sample ID: W7VM0911116-03 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

Injection Date: 16-NOV-2009 15:02
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	147 Chlorotrifluoroethylene	0.13034	0.11386	0.11386	0.010	-12.64237	30.00000	Averaged	
	148 2-Chloro-1,1,1-trifluoroeth	0.28275	0.28071	0.28071	0.010	-0.72093	30.00000	Averaged	
	11 Acrolein	0.08287	0.06941	0.06941	0.001	-16.23448	30.00000	Averaged	
	12 Trichlorotrifluoroethane	0.09315	0.10191	0.10191	0.010	9.40527	30.00000	Averaged	
	15 Isopropyl Alcohol	0.03668	0.03613	0.03613	0.010	-1.49040	40.00000	Averaged	
	20 Allyl chloride	0.63535	0.56685	0.56685	0.010	-10.78282	30.00000	Averaged	
	21 tert-Butyl Alcohol	0.05102	0.04422	0.04422	0.001	-13.33240	40.00000	Averaged	
	23 Acrylonitrile	0.16606	0.14706	0.14706	0.010	-11.44411	30.00000	Averaged	
	27 Isopropyl ether	1.68959	1.55881	1.55881	0.010	-7.74051	30.00000	Averaged	
	29 2-Chloro-1,3-butadiene	0.54538	0.56770	0.56770	0.010	4.09436	30.00000	Averaged	
	30 Ethyl tert-butyl ether	1.14730	1.05285	1.05285	0.010	-8.23203	30.00000	Averaged	
	35 Propionitrile	0.06686	0.05447	0.05447	0.010	-18.53670	30.00000	Averaged	
	32 Ethyl acetate	0.49355	0.37954	0.37954	0.010	-23.10090	40.00000	Averaged	
	36 Methacrylonitrile	0.30070	0.24588	0.24588	0.010	-18.22985	30.00000	Averaged	
	39 Tetrahydrofuran	0.36975	0.29563	0.29563	0.010	-20.04589	30.00000	Averaged	
	42 Isobutyl alcohol	0.01771	0.01567	0.01567	0.005	-11.47778	40.00000	Averaged	
	49 Methyl tert-amyl ether	0.79534	0.71876	0.71876	0.010	-9.62869	30.00000	Averaged	
	54 Methyl methacrylate	0.20956	0.17138	0.17138	0.010	-18.22289	30.00000	Averaged	
	66 Ethyl methacrylate	0.53175	0.42289	0.42289	0.010	-20.47197	30.00000	Averaged	
	74 1-Chlorohexane	0.40217	0.39655	0.39655	0.010	-1.39670	30.00000	Averaged	
	57 1,4-Dioxane	0.00316	0.00300	0.00300	0.001	-5.35019	40.00000	Averaged	
	60 2-Nitropropane	0.12993	0.12531	0.12531	0.010	-3.55739	30.00000	Averaged	
	84 cis-1,4-Dichloro-2-butene	0.39160	0.38169	0.38169	0.010	-2.53006	30.00000	Averaged	
	85 Cyclohexanone	447	1250	0.03173	0.010	-64.21353	40.00000	Linear	<-
	88 trans-1,4-Dichloro-2-butene	0.35776	0.35074	0.35074	0.010	-1.96337	30.00000	Averaged	
	97 Pentachloroethane	0.26007	0.33861	0.33861	0.010	30.20065	30.00000	Averaged	<-
	103 Benzyl chloride	1.33283	1.27530	1.27530	0.010	-4.31636	30.00000	Averaged	
	106 bis(2-Chloroisopropyl)ether	0.73799	0.58864	0.58864	0.010	-20.23679	30.00000	Averaged	
$	46 1,2-Dichloroethane-d4	0.43596	0.41806	0.41806	0.010	-4.10492	30.00000	Averaged	
$	64 Toluene-d8	1.49262	1.44877	1.44877	0.010	-2.93779	30.00000	Averaged	
$	86 Bromofluorobenzene	1.17678	1.13072	1.13072	0.010	-3.91437	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 16-NOV-2009 15:02
Lab File ID: 7m104.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM0911116-03 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	12.27602
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/111509v7/7m104.d
Lab Smp Id: W7VM0911116-03 Client Smp ID: VSTD250S
Inj Date : 16-NOV-2009 15:02
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM0911116-03|SHORT/ICV/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091023-08A/UVM091105-02A
Comment :
Method : /chem/VOA7.i/111509v7/VOA7-8260B-111509.m
Meth Date : 19-Nov-2009 09:39 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 08:11 Cal File: 71718.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
147 Chlorotrifluoroethylene	116	5.043	5.043	(0.329)	406483	150.000	131
148 2-Chloro-1,1,1-trifluoroethane	118	6.604	6.604	(0.431)	1002157	150.000	149
11 Acrolein	56	10.027	10.027	(0.655)	413012	250.000	209
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	606354	250.000	274
15 Isopropyl Alcohol	45	10.789	10.789	(0.704)	2149853	2500.00	2460
20 Allyl chloride	41	11.185	11.185	(0.730)	3372788	250.000	223
21 tert-Butyl Alcohol	59	11.672	11.672	(0.762)	2630900	2500.00	2170
23 Acrylonitrile	53	11.926	11.926	(0.779)	875009	250.000	221
27 Isopropyl ether	45	12.911	12.911	(0.843)	1855017	50.0000	46.1
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	675580	50.0000	52.0
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1252915	50.0000	45.9
35 Propionitrile	54	13.804	13.804	(0.901)	324075	250.000	204
32 Ethyl acetate	43	13.804	13.804	(0.901)	2258287	250.000	192
36 Methacrylonitrile	41	14.048	14.048	(0.917)	1463037	250.000	204
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	787178	250.000	200

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	932613	2500.00	2210
49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	855341	50.0000	45.2
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1019700	250.000	204
66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1906825	250.000	199
74 1-Chlorohexane	55	18.575	18.575	(1.213)	471906	50.0000	49.3
57 1,4-Dioxane	88	16.159	16.159	(1.055)	178240	2500.00	2370
60 2-Nitropropane	43	16.555	16.555	(1.081)	745593	250.000	241
84 cis-1,4-Dichloro-2-butene	53	19.662	19.662	(0.937)	1016347	250.000	244
85 Cyclohexanone	55	19.773	19.773	(1.059)	715444	1250.00	447
88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	933923	250.000	245
97 Pentachloroethane	167	20.606	20.606	(0.982)	901619	250.000	326(A)
103 Benzyl chloride	91	21.123	21.123	(1.006)	3395776	250.000	239
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1567396	250.000	199
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1190020	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	901807	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	532545	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	497505	50.0000	47.9
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1306510	50.0000	48.5
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	602158	50.0000	48.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA7.i/111509v7/7m104.d
Date : 16-NOV-2009 15:02
Client ID: VSTD250S
Sample Info: IW7VH091116-03|SHORT/ICV/LCS|4|VOAF1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

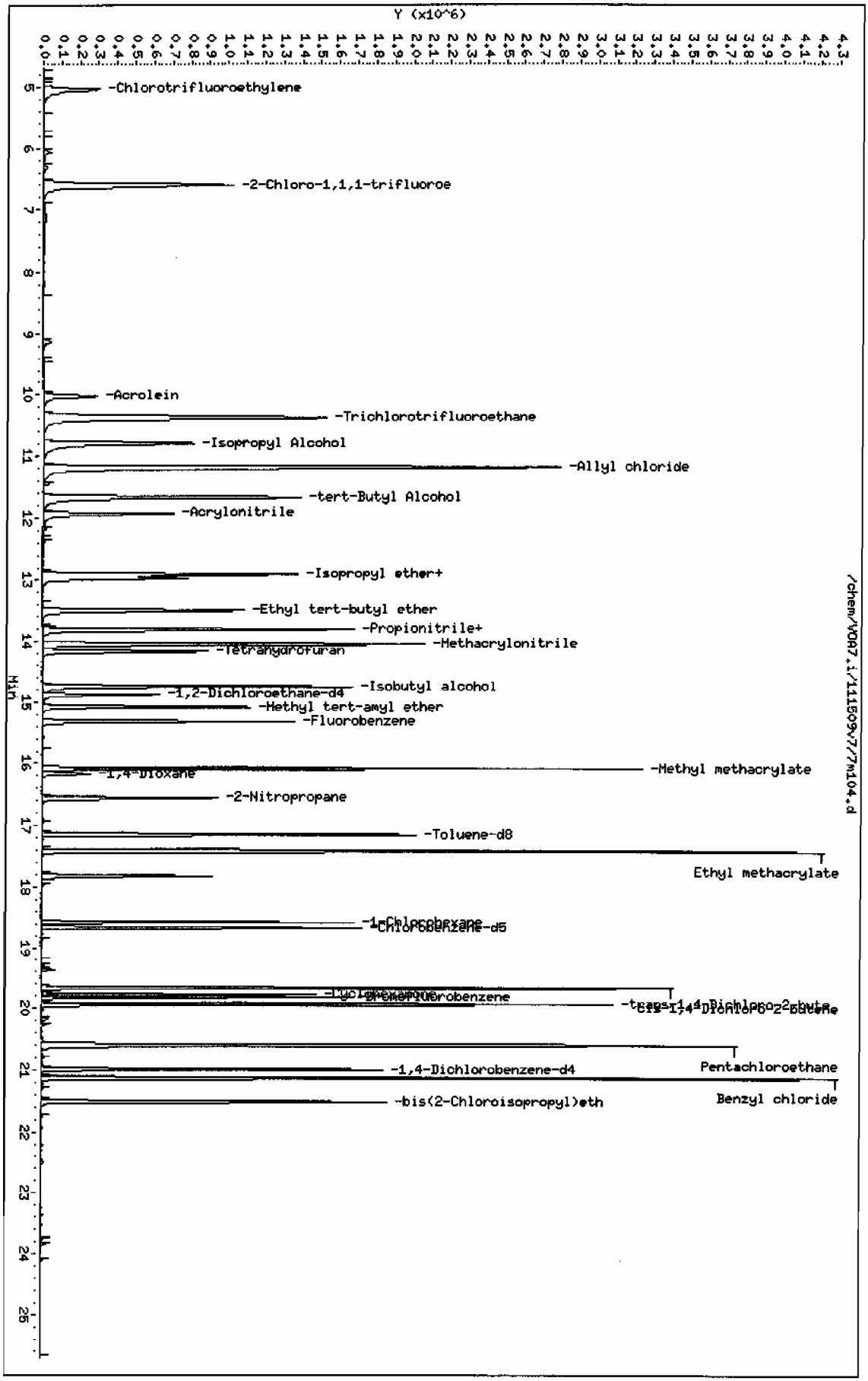

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 09:45
Lab File ID: 7n303.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-02 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 2 Xylenes (total)	0.64368	0.57096	0.57096	0.050	-11.29782	30.00000	Averaged	
M 3 1,2-Dichloroethylene (total	0.47752	0.45838	0.45838	0.050	-4.00801	30.00000	Averaged	
M 1 1,3-Dichloropropylene	0.48166	0.45399	0.45399	0.050	-5.74520	30.00000	Averaged	
4 Dichlorodifluoromethane	52.70480	50.00000	0.20842	0.050	5.40960	30.00000	Linear	
5 Chloromethane	45.60804	50.00000	0.44615	0.100	-8.78393	30.00000	Linear	spcc
6 Vinyl chloride	0.33902	0.32933	0.32933	0.050	-2.85982	20.00000	Averaged	ccc
7 Bromomethane	0.23234	0.23287	0.23287	0.050	0.23019	30.00000	Averaged	
8 Chloroethane	0.25347	0.23681	0.23681	0.010	-6.57313	30.00000	Averaged	
9 Trichlorofluoromethane	0.34155	0.42260	0.42260	0.050	23.72945	30.00000	Averaged	
10 Ethyl Ether	0.35955	0.31033	0.31033	0.001	-13.68924	30.00000	Averaged	
13 Acetone	0.40846	0.33980	0.33980	0.050	-16.80901	40.00000	Averaged	
17 Acetonitrile	0.06882	0.07972	0.07972	0.010	15.82831	30.00000	Averaged	
14 1,1-Dichloroethylene	0.20669	0.22749	0.22749	0.050	10.05954	20.00000	Averaged	ccc
18 Methyl acetate	0.41491	0.34809	0.34809	0.010	-16.10358	40.00000	Averaged	
16 Iodomethane	0.37752	0.37966	0.37966	0.050	0.56495	30.00000	Averaged	
22 Methylene chloride	47.40540	50.00000	0.17818	0.050	-5.18920	30.00000	Linear	
19 Carbon disulfide	0.67659	0.71522	0.71522	0.050	5.70866	30.00000	Averaged	
24 tert-Butyl methyl ether	0.86582	0.77968	0.77968	0.050	-9.94921	30.00000	Averaged	
25 trans-1,2-Dichloroethylene	0.44031	0.43386	0.43386	0.050	-1.46386	30.00000	Averaged	
26 Vinyl acetate	0.88192	0.84041	0.84041	0.010	-4.70666	40.00000	Averaged	
28 1,1-Dichloroethane	0.54979	0.53966	0.53966	0.100	-1.84165	30.00000	Averaged	spcc
31 2-Butanone	0.46654	0.34650	0.34650	0.030	-25.72962	40.00000	Averaged	
33 cis-1,2-Dichloroethylene	0.51474	0.48291	0.48291	0.050	-6.18427	30.00000	Averaged	
34 2,2-Dichloropropane	0.28980	0.29671	0.29671	0.050	2.38733	30.00000	Averaged	
38 Chloroform	0.49671	0.49763	0.49763	0.010	0.18699	20.00000	Averaged	ccc
37 Bromochloromethane	0.44756	0.40647	0.40647	0.010	-9.18018	30.00000	Averaged	
41 1,1,1-Trichloroethane	0.36992	0.42320	0.42320	0.010	14.40344	30.00000	Averaged	
43 Cyclohexane	0.62867	0.62540	0.62540	0.010	-0.52015	30.00000	Averaged	
44 1,1-Dichloropropene	0.33508	0.35176	0.35176	0.010	4.97786	30.00000	Averaged	
52 n-Butyl alcohol	0.01426	0.01466	0.01466	0.001	2.76891	40.00000	Averaged	
45 Carbon tetrachloride	0.29289	0.33911	0.33911	0.010	15.78134	30.00000	Averaged	
$ 46 1,2-Dichloroethane-d4	0.43596	0.47253	0.47253	0.010	8.38919	30.00000	Averaged	
47 1,2-Dichloroethane	0.51967	0.50206	0.50206	0.010	-3.38893	30.00000	Averaged	
48 Benzene	1.02411	0.95904	0.95904	0.010	-6.35382	30.00000	Averaged	
50 Cyclohexene	0.48379	0.48645	0.48645	0.010	0.55048	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7n303.d
Analysis Type: SOIL
Lab Sample ID: W7VM091125-02 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

Injection Date: 25-NOV-2009 09:45
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	53 Trichloroethylene	0.26450	0.27293	0.27293	0.010	3.18781	30.00000	Averaged	
	56 1,2-Dichloropropane	0.33311	0.28404	0.28404	0.010	-14.73205	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.40845	0.42450	0.42450	0.010	3.92838	30.00000	Averaged	
	59 Bromodichloromethane	0.39346	0.40104	0.40104	0.010	1.92707	30.00000	Averaged	
	58 Dibromomethane	0.18762	0.18292	0.18292	0.010	-2.50525	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	0.13648	0.11214	0.11214	0.010	-17.82946	30.00000	Averaged	
	63 4-Methyl-2-pentanone	0.25850	0.21358	0.21358	0.010	-17.37713	40.00000	Averaged	
	62 cis-1,3-Dichloropropylene	0.49703	0.45562	0.45562	0.010	-8.33261	30.00000	Averaged	
$	64 Toluene-d8	1.49262	1.38909	1.38909	0.010	-6.93584	30.00000	Averaged	
	65 Toluene	0.88778	0.78869	0.78869	0.010	-11.16164	20.00000	Averaged	ccc
	67 trans-1,3-Dichloropropylene	0.61767	0.56831	0.56831	0.010	-7.99208	30.00000	Averaged	
	68 1,1,2-Trichloroethane	0.30409	0.26537	0.26537	0.010	-12.73302	30.00000	Averaged	
	69 2-Hexanone	0.83837	0.53363	0.53363	0.010	-36.34860	40.00000	Averaged	
	70 1,3-Dichloropropane	0.60429	0.50288	0.50288	0.010	-16.78085	30.00000	Averaged	
	71 Tetrachloroethylene	56.56852	50.00000	0.23264	0.010	13.13703	30.00000	Linear	
	72 Dibromochloromethane	0.35526	0.35335	0.35335	0.010	-0.53666	30.00000	Averaged	
	73 1,2-Dibromoethane	0.36913	0.35209	0.35209	0.010	-4.61539	30.00000	Averaged	
	76 Chlorobenzene	0.96368	0.86435	0.86435	0.300	-10.30770	30.00000	Averaged	spcc
	77 1,1,1,2-Tetrachloroethane	0.34629	0.31963	0.31963	0.010	-7.70028	30.00000	Averaged	
	78 Ethylbenzene	1.67285	1.49589	1.49589	0.010	-10.57870	20.00000	Averaged	ccc
	79 m,p-Xylenes	0.63659	0.56920	0.56920	0.010	-10.58630	30.00000	Averaged	
	80 o-Xylene	0.65785	0.57447	0.57447	0.010	-12.67486	30.00000	Averaged	
	81 Styrene	1.18237	0.98040	0.98040	0.010	-17.08131	30.00000	Averaged	
	82 Bromoform	0.43665	0.47840	0.47840	0.100	9.56187	30.00000	Averaged	spcc
	83 Isopropylbenzene	2.85343	2.50622	2.50622	0.010	-12.16796	30.00000	Averaged	
	87 1,1,2,2-Tetrachloroethane	0.90349	0.79373	0.79373	0.300	-12.14834	30.00000	Averaged	spcc
$	86 Bromofluorobenzene	1.17678	1.10789	1.10789	0.010	-5.85380	30.00000	Averaged	
	89 1,2,3-Trichloropropane	0.22766	0.21448	0.21448	0.010	-5.78930	30.00000	Averaged	
	90 Bromobenzene	0.80299	0.68621	0.68621	0.010	-14.54358	30.00000	Averaged	
	91 n-Propylbenzene	3.51014	3.04358	3.04358	0.010	-13.29186	30.00000	Averaged	
	93 2-Chlorotoluene	2.54562	2.11092	2.11092	0.010	-17.07627	30.00000	Averaged	
	92 1,3,5-Trimethylbenzene	2.52939	2.13799	2.13799	0.010	-15.47391	30.00000	Averaged	
	94 4-Chlorotoluene	2.41921	2.10471	2.10471	0.010	-12.99998	30.00000	Averaged	
	95 tert-Butylbenzene	2.35539	2.09215	2.09215	0.010	-11.17603	30.00000	Averaged	
	96 1,2,4-Trimethylbenzene	2.70091	2.30024	2.30024	0.010	-14.83440	30.00000	Averaged	
	98 sec-Butylbenzene	3.21055	2.90992	2.90992	0.010	-9.36360	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 09:45
Lab File ID: 7n303.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-02 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.55183	2.30283	2.30283	0.010	-9.75760	30.00000	Averaged
100 1,3-Dichlorobenzene	1.43886	1.24131	1.24131	0.010	-13.72984	30.00000	Averaged
102 1,4-Dichlorobenzene	1.41831	1.23767	1.23767	0.010	-12.73611	30.00000	Averaged
104 n-Butylbenzene	2.69728	2.39629	2.39629	0.010	-11.15891	30.00000	Averaged
105 1,2-Dichlorobenzene	1.43227	1.24522	1.24522	0.010	-13.05966	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	0.17584	0.18490	0.18490	0.010	5.15764	30.00000	Averaged
108 1,2,4-Trichlorobenzene	1.02685	0.92448	0.92448	0.010	-9.96935	30.00000	Averaged
109 Hexachlorobutadiene	0.54947	0.52981	0.52981	0.010	-3.57865	30.00000	Averaged
110 Naphthalene	2.28224	1.98230	1.98230	0.010	-13.14239	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.91204	0.85298	0.85298	0.010	-6.47465	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.54802
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n303.d
Lab Smp Id: W7VM091125-02 Client Smp ID: VSTD050
Inj Date : 25-NOV-2009 09:45
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM091125-02|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 2 Xylenes (total)	106				1607958	150.000	133
M 3 1,2-Dichloroethylene (total)	96				1081194	100.000	96.2
M 1 1,3-Dichloropropylene	75				1070835	100.000	94.2
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	245805	50.0000	52.7
5 Chloromethane	50	5.757	5.757	(0.376)	526168	50.0000	45.6
6 Vinyl chloride	62	6.188	6.188	(0.404)	388394	50.0000	48.6
7 Bromomethane	94	7.429	7.429	(0.485)	274640	50.0000	50.1
8 Chloroethane	64	7.845	7.845	(0.512)	279281	50.0000	46.7
9 Trichlorofluoromethane	101	8.799	8.799	(0.574)	498401	50.0000	61.9
10 Ethyl Ether	59	9.703	9.703	(0.633)	365991	50.0000	43.2
13 Acetone	43	10.423	10.423	(0.681)	2003716	250.000	208
17 Acetonitrile	41	11.073	11.073	(0.723)	1880321	1000.00	1160
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	268287	50.0000	55.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
18 Methyl acetate	43	11.225	11.225	(0.733)	2052632	250.000	210
16 Iodomethane	142	10.667	10.667	(0.696)	2238757	250.000	251
22 Methylene chloride	86	11.449	11.449	(0.747)	210140	50.0000	47.4
19 Carbon disulfide	76	10.840	10.840	(0.708)	4217472	250.000	264
24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	919517	50.0000	45.0
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	511676	50.0000	49.3
26 Vinyl acetate	43	12.860	12.860	(0.840)	4955700	250.000	238
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	636457	50.0000	49.1
31 2-Butanone	43	13.723	13.723	(0.896)	2043244	250.000	186
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	569518	50.0000	46.9
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	349932	50.0000	51.2
38 Chloroform	83	14.190	14.190	(0.926)	586888	50.0000	50.1
37 Bromochloromethane	49	14.088	14.088	(0.920)	479373	50.0000	45.4
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	499104	50.0000	57.2
43 Cyclohexane	56	14.586	14.586	(0.952)	737570	50.0000	49.7
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	414845	50.0000	52.5
52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1728720	5000.00	5140
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	399936	50.0000	57.9
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	557286	50.0000	54.2
47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	592105	50.0000	48.3
48 Benzene	78	14.982	14.982	(0.978)	1131050	50.0000	46.8
50 Cyclohexene	67	15.124	15.124	(0.987)	573700	50.0000	50.3
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1179357	50.0000	
53 Trichloroethylene	95	15.773	15.773	(1.030)	321878	50.0000	51.6
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	334981	50.0000	42.6
55 Methylcyclohexane	83	16.037	16.037	(1.047)	500633	50.0000	52.0
59 Bromodichloromethane	83	16.332	16.332	(1.066)	472966	50.0000	51.0
58 Dibromomethane	93	16.180	16.180	(1.056)	215730	50.0000	48.7
61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	661289	250.000	205
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1002479	250.000	206
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	537335	50.0000	45.8
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1304010	50.0000	46.5
65 Toluene	92	17.215	17.215	(0.922)	740384	50.0000	44.4
67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	533500	50.0000	46.0
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	249113	50.0000	43.6
69 2-Hexanone	43	17.804	17.804	(0.954)	2504734	250.000	159
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	472081	50.0000	41.6
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	218395	50.0000	56.6
72 Dibromochloromethane	129	18.068	18.068	(0.968)	331707	50.0000	49.7
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	330523	50.0000	47.7
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	938749	50.0000	
76 Chlorobenzene	112	18.697	18.697	(1.002)	811404	50.0000	44.8
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	300051	50.0000	46.1
78 Ethylbenzene	91	18.768	18.768	(1.005)	1404262	50.0000	44.7
79 m,p-Xylenes	106	18.870	18.870	(1.011)	1068673	100.000	89.4
80 o-Xylene	106	19.286	19.286	(1.033)	539285	50.0000	43.7
81 Styrene	104	19.286	19.286	(1.033)	920354	50.0000	41.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
82 Bromoform	173	19.540	19.540	(0.931)	272126	50.0000	54.8
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1425598	50.0000	43.9
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	451494	50.0000	43.9
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	630196	50.0000	47.1
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	122003	50.0000	47.1
90 Bromobenzene	156	20.017	20.017	(0.954)	390330	50.0000	42.7
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1731257	50.0000	43.4
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1200741	50.0000	41.5
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1216140	50.0000	42.3
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1197207	50.0000	43.5
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1190065	50.0000	44.4
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1308431	50.0000	42.6
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1655232	50.0000	45.3
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1309904	50.0000	45.1
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	706086	50.0000	43.1
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	568823	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	704018	50.0000	43.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1363065	50.0000	44.4
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	708310	50.0000	43.5
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	105178	50.0000	52.6
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	525866	50.0000	45.0
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	301367	50.0000	48.2
110 Naphthalene	128	23.753	23.753	(1.132)	1127576	50.0000	43.4
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	485197	50.0000	46.8

Data File: /chem/VOA7.i/112509v7/7n303.d
Date : 25-NOV-2009 09:45
Client ID: VSTD050
Sample Info: IW7VH091125-02|CCV/LCS|4|VOAF|4|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXD1
Column diameter: 0.25

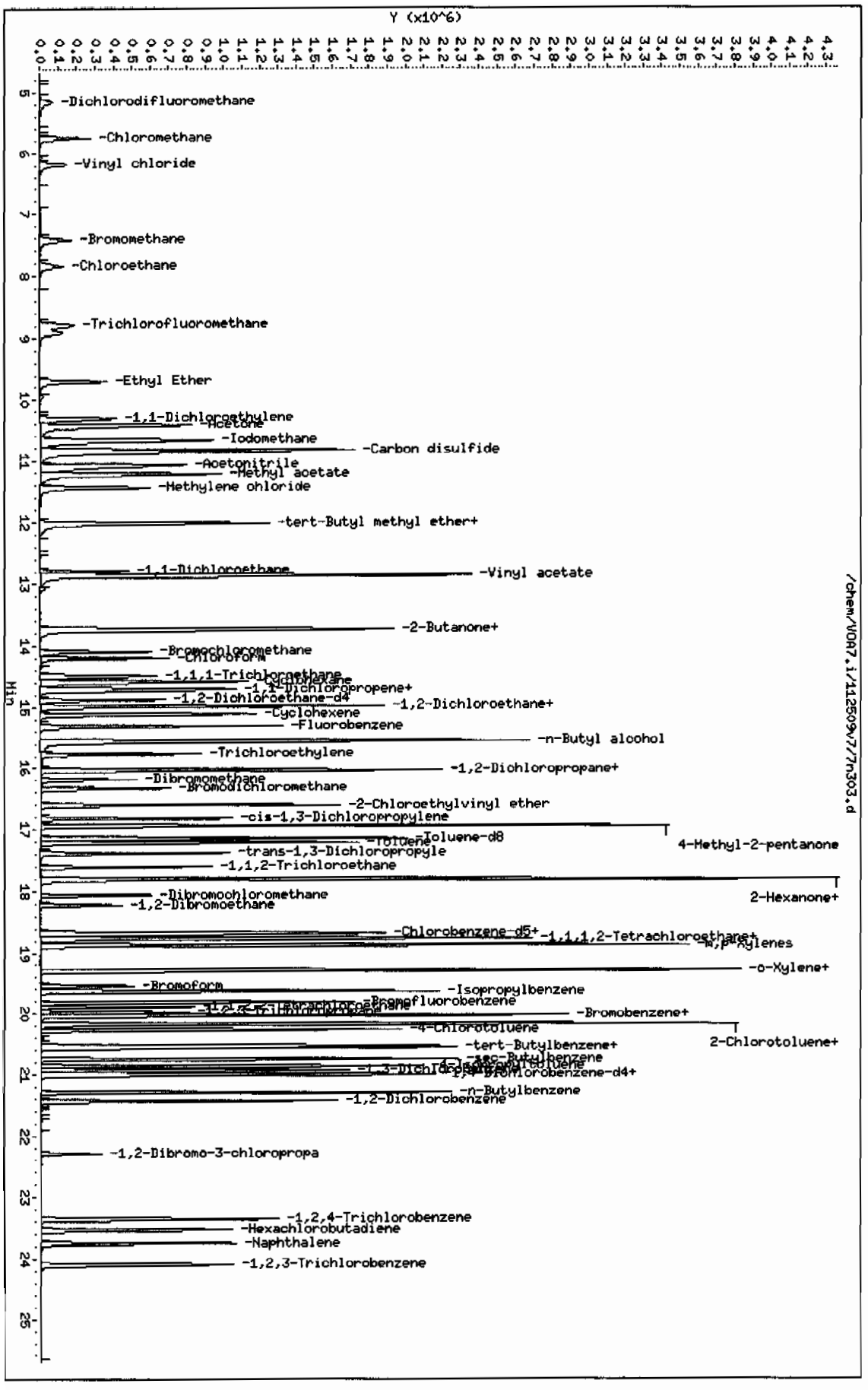

/chem/VOA7.i/112509v7/7n303.d

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 10:19
Lab File ID: 7n304.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-03 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
147 Chlorotrifluoroethylene	0.13034	0.14878	0.14878	0.010	14.14868	30.00000	Averaged
148 2-Chloro-1,1,1-trifluoroeth	0.28275	0.30617	0.30617	0.010	8.28361	30.00000	Averaged
11 Acrolein	0.08287	0.07875	0.07875	0.001	-4.96294	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09315	0.11158	0.11158	0.010	19.79114	30.00000	Averaged
15 Isopropyl Alcohol	0.03668	0.03766	0.03766	0.010	2.66684	40.00000	Averaged
20 Allyl chloride	0.63535	0.56328	0.56328	0.010	-11.34467	30.00000	Averaged
21 tert-Butyl Alcohol	0.05102	0.04786	0.04786	0.001	-6.19687	40.00000	Averaged
23 Acrylonitrile	0.16606	0.15025	0.15025	0.010	-9.52468	30.00000	Averaged
27 Isopropyl ether	1.68959	1.61053	1.61053	0.010	-4.67923	30.00000	Averaged
29 2-Chloro-1,3-butadiene	0.54538	0.59273	0.59273	0.010	8.68319	30.00000	Averaged
30 Ethyl tert-butyl ether	1.14730	1.08778	1.08778	0.010	-5.18788	30.00000	Averaged
35 Propionitrile	0.06686	0.05657	0.05657	0.010	-15.38642	30.00000	Averaged
32 Ethyl acetate	0.49355	0.38527	0.38527	0.010	-21.93858	40.00000	Averaged
36 Methacrylonitrile	0.30070	0.24819	0.24819	0.010	-17.46291	30.00000	Averaged
39 Tetrahydrofuran	0.36975	0.27281	0.27281	0.010	-26.21782	30.00000	Averaged
42 Isobutyl alcohol	0.01771	0.01575	0.01575	0.005	-11.05717	40.00000	Averaged
49 Methyl tert-amyl ether	0.79534	0.74989	0.74989	0.010	-5.71452	30.00000	Averaged
54 Methyl methacrylate	0.20956	0.17607	0.17607	0.010	-15.98045	30.00000	Averaged
66 Ethyl methacrylate	0.53175	0.40749	0.40749	0.010	-23.36822	30.00000	Averaged
74 1-Chlorohexane	0.40217	0.41295	0.41295	0.010	2.68130	30.00000	Averaged
57 1,4-Dioxane	0.00316	0.00298	0.00298	0.001	-5.77397	40.00000	Averaged
60 2-Nitropropane	0.12993	0.12873	0.12873	0.010	-0.92646	30.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.39160	0.36566	0.36566	0.010	-6.62424	30.00000	Averaged
85 Cyclohexanone	539	1250	0.03949	0.010	-56.90884	40.00000	Linear <-
88 trans-1,4-Dichloro-2-butene	0.35776	0.33561	0.33561	0.010	-6.19200	30.00000	Averaged
97 Pentachloroethane	0.26007	0.31436	0.31436	0.010	20.87890	30.00000	Averaged
103 Benzyl chloride	1.33283	1.19823	1.19823	0.010	-10.09859	30.00000	Averaged
106 bis(2-Chloroisopropyl)ether	0.73799	0.55360	0.55360	0.010	-24.98579	30.00000	Averaged
$ 46 1,2-Dichloroethane-d4	0.43596	0.46284	0.46284	0.010	6.16616	30.00000	Averaged
$ 64 Toluene-d8	1.49262	1.44550	1.44550	0.010	-3.15681	30.00000	Averaged
$ 86 Bromofluorobenzene	1.17678	1.08666	1.08666	0.010	-7.65837	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 10:19
Lab File ID: 7n304.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-03 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	9.54802
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n304.d
Lab Smp Id: W7VM091125-03 Client Smp ID: VSTD250S
Inj Date : 25-NOV-2009 10:19
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM091125-03|SHORT/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091118-08A/UVM091105-02C
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
147 Chlorotrifluoroethylene	116	5.043	5.043	(0.329)	522106	150.000	171
148 2-Chloro-1,1,1-trifluoroethane	118	6.603	6.603	(0.431)	1074452	150.000	162
11 Acrolein	56	10.027	10.027	(0.655)	460613	250.000	238
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	652618	250.000	299
15 Isopropyl Alcohol	45	10.789	10.789	(0.704)	2202454	2500.00	2570
20 Allyl chloride	41	11.185	11.185	(0.730)	3294519	250.000	222
21 tert-Butyl Alcohol	59	11.672	11.672	(0.762)	2799055	2500.00	2340
23 Acrylonitrile	53	11.936	11.936	(0.779)	878763	250.000	226
27 Isopropyl ether	45	12.911	12.911	(0.843)	1883957	50.0000	47.7
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	693359	50.0000	54.3
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1272450	50.0000	47.4
35 Propionitrile	54	13.804	13.804	(0.901)	330879	250.000	212
32 Ethyl acetate	43	13.804	13.804	(0.901)	2253414	250.000	195
36 Methacrylonitrile	41	14.048	14.048	(0.917)	1451631	250.000	206
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	785223	250.000	184
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	921099	2500.00	2220

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	877203	50.0000	47.1
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1029834	250.000	210
66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1899490	250.000	192
74 1-Chlorohexane	55	18.575	18.575	(1.213)	483061	50.0000	51.3
57 1,4-Dioxane	88	16.159	16.159	(1.055)	174422	2500.00	2360
60 2-Nitropropane	43	16.555	16.555	(1.081)	752899	250.000	248
84 cis-1,4-Dichloro-2-butene	53	19.661	19.661	(0.937)	1052483	250.000	233
85 Cyclohexanone	55	19.773	19.773	(1.059)	920514	1250.00	539
88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	965989	250.000	234
97 Pentachloroethane	167	20.606	20.606	(0.982)	904836	250.000	302(A)
103 Benzyl chloride	91	21.123	21.123	(1.006)	3448876	250.000	225
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1593417	250.000	188
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1169771	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	932290	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	575660	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	541419	50.0000	53.1
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1347625	50.0000	48.4
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	625546	50.0000	46.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA7.i/112509v7/7h304.d
Date : 25-NOV-2009 10:19
Client ID: VSTD250S
Sample Info: IW7VN091125-031SHORT/LCS111VOAF111
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: AX01
Column diameter: 0.25

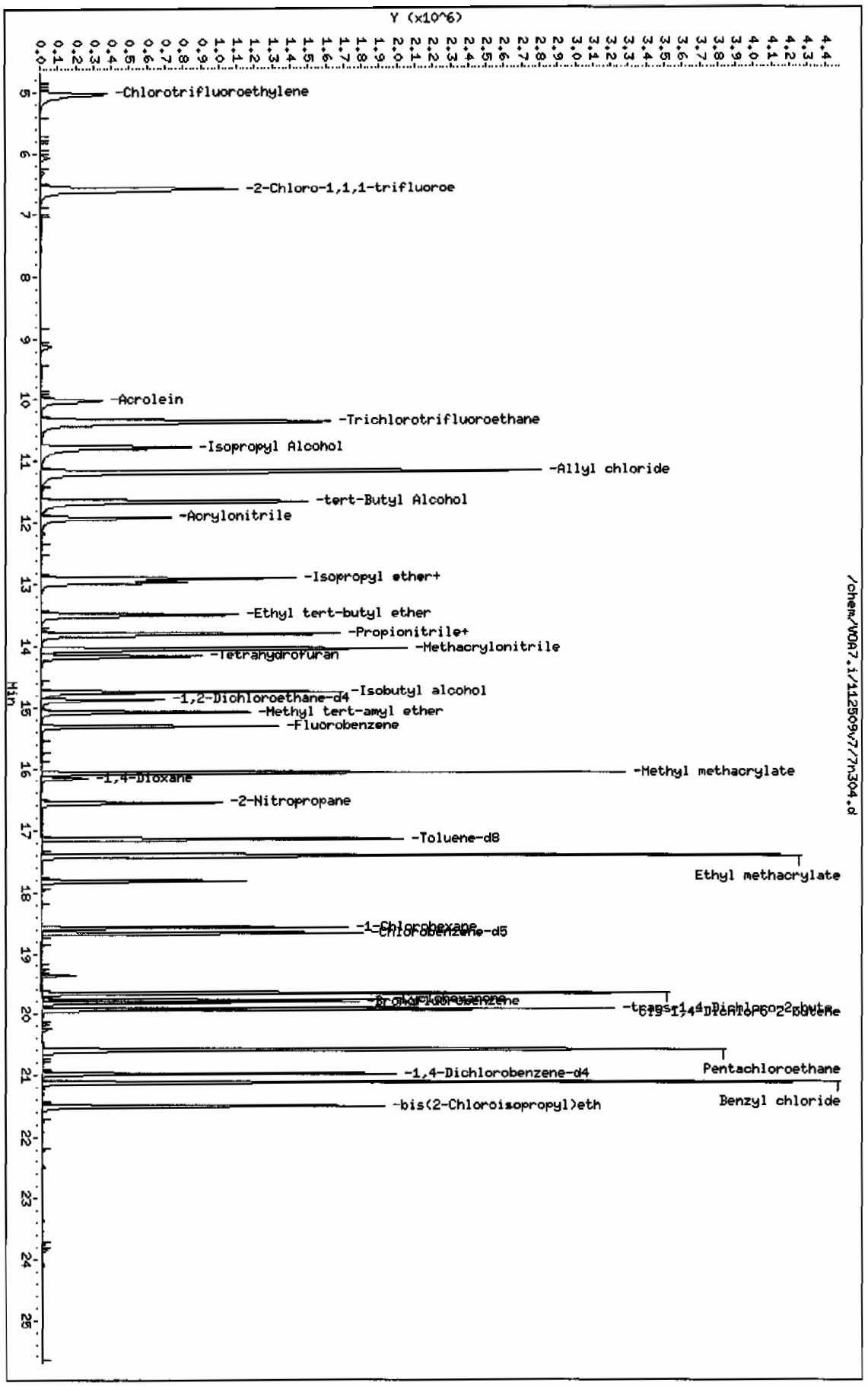

Page 1

Data File: /chem/VOA7.i/113009v7/7o103.d
Report Date: 04-Dec-2009 08:47

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7o103.d
Analysis Type: WATER
Lab Sample ID: W7VM091130-01 Quant Type: ISTD
Method: /chem/VOA7.i/113009v7/VOA7-8260B-111509.m

Injection Date: 30-NOV-2009 10:27
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	2 Xylenes (total)	0.64368	0.54730	0.54730	0.050	-14.97292	30.00000	Averaged	
M	3 1,2-Dichloroethylene (total	0.47752	0.44764	0.44764	0.050	-6.25866	30.00000	Averaged	
M	1 1,3-Dichloropropylene	0.48166	0.46005	0.46005	0.050	-4.48651	30.00000	Averaged	
	4 Dichlorodifluoromethane	48.57239	50.00000	0.19218	0.050	-2.85523	30.00000	Linear	
	5 Chloromethane	43.45046	50.00000	0.42541	0.100	-13.09907	30.00000	Linear	spcc
	6 Vinyl chloride	0.33902	0.30244	0.30244	0.050	-10.79008	20.00000	Averaged	ccc
	7 Bromomethane	0.23234	0.23143	0.23143	0.050	-0.39032	30.00000	Averaged	
	8 Chloroethane	0.25347	0.23575	0.23575	0.010	-6.99239	30.00000	Averaged	
	9 Trichlorofluoromethane	0.34155	0.40715	0.40715	0.050	19.20532	30.00000	Averaged	
	10 Ethyl Ether	0.35955	0.31843	0.31843	0.001	-11.43657	30.00000	Averaged	
	13 Acetone	0.40846	0.33625	0.33625	0.050	-17.67670	40.00000	Averaged	
	17 Acetonitrile	0.06882	0.07819	0.07819	0.010	13.60909	30.00000	Averaged	
	14 1,1-Dichloroethylene	0.20669	0.22408	0.22408	0.050	8.41352	20.00000	Averaged	ccc
	18 Methyl acetate	0.41491	0.34349	0.34349	0.010	-17.21298	40.00000	Averaged	
	16 Iodomethane	0.37752	0.38964	0.38964	0.050	3.20858	30.00000	Averaged	
	22 Methylene chloride	50.91141	50.00000	0.19052	0.050	1.82283	30.00000	Linear	
	19 Carbon disulfide	0.67659	0.71041	0.71041	0.050	4.99861	30.00000	Averaged	
	24 tert-Butyl methyl ether	0.86582	0.78756	0.78756	0.050	-9.03919	30.00000	Averaged	
	25 trans-1,2-Dichloroethylene	0.44031	0.42249	0.42249	0.050	-4.04587	30.00000	Averaged	
	26 Vinyl acetate	0.88192	0.84151	0.84151	0.010	-4.58194	40.00000	Averaged	
	28 1,1-Dichloroethane	0.54979	0.53215	0.53215	0.100	-3.20888	30.00000	Averaged	spcc
	31 2-Butanone	0.46654	0.34434	0.34434	0.030	-26.19383	40.00000	Averaged	
	33 cis-1,2-Dichloroethylene	0.51474	0.47278	0.47278	0.050	-8.15147	30.00000	Averaged	
	34 2,2-Dichloropropane	0.28980	0.27275	0.27275	0.050	-5.88154	30.00000	Averaged	
	38 Chloroform	0.49671	0.49488	0.49488	0.010	-0.36658	20.00000	Averaged	ccc
	37 Bromochloromethane	0.44756	0.42108	0.42108	0.010	-5.91623	30.00000	Averaged	
	41 1,1,1-Trichloroethane	0.36992	0.39388	0.39388	0.010	6.47814	30.00000	Averaged	
	43 Cyclohexane	0.62867	0.58590	0.58590	0.010	-6.80306	30.00000	Averaged	
	44 1,1-Dichloropropene	0.33508	0.33928	0.33928	0.010	1.25565	30.00000	Averaged	
	52 n-Butyl alcohol	0.01426	0.01411	0.01411	0.001	-1.05874	40.00000	Averaged	
	45 Carbon tetrachloride	0.29289	0.31839	0.31839	0.010	8.70472	30.00000	Averaged	
$	46 1,2-Dichloroethane-d4	0.43596	0.43652	0.43652	0.010	0.12909	30.00000	Averaged	
	47 1,2-Dichloroethane	0.51967	0.50758	0.50758	0.010	-2.32629	30.00000	Averaged	
	48 Benzene	1.02411	0.96138	0.96138	0.010	-6.12552	30.00000	Averaged	
	50 Cyclohexene	0.48379	0.46157	0.46157	0.010	-4.59286	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7o103.d
Analysis Type: WATER
Lab Sample ID: W7VM091130-01
Method: /chem/VOA7.i/113009v7/VOA7-8260B-111509.m

Injection Date: 30-NOV-2009 10:27
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	53 Trichloroethylene	0.26450	0.26332	0.26332	0.010	-0.44372	30.00000	Averaged	
	56 1,2-Dichloropropane	0.33311	0.29709	0.29709	0.010	-10.81248	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.40845	0.40572	0.40572	0.010	-0.66906	30.00000	Averaged	
	59 Bromodichloromethane	0.39346	0.40848	0.40848	0.010	3.81779	30.00000	Averaged	
	58 Dibromomethane	0.18762	0.18815	0.18815	0.010	0.28002	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	0.13648	0.11566	0.11566	0.010	-15.25618	30.00000	Averaged	
	63 4-Methyl-2-pentanone	0.25850	0.20581	0.20581	0.010	-20.38218	40.00000	Averaged	
	62 cis-1,3-Dichloropropylene	0.49703	0.46257	0.46257	0.010	-6.93346	30.00000	Averaged	
$	64 Toluene-d8	1.49262	1.35460	1.35460	0.010	-9.24653	30.00000	Averaged	
	65 Toluene	0.88778	0.77294	0.77294	0.010	-12.93647	20.00000	Averaged	ccc
	67 trans-1,3-Dichloropropylene	0.61767	0.56508	0.56508	0.010	-8.51460	30.00000	Averaged	
	68 1,1,2-Trichloroethane	0.30409	0.27012	0.27012	0.010	-11.16837	30.00000	Averaged	
	69 2-Hexanone	0.83837	0.51389	0.51389	0.010	-38.70314	40.00000	Averaged	
	70 1,3-Dichloropropane	0.60429	0.50288	0.50288	0.010	-16.78139	30.00000	Averaged	
	71 Tetrachloroethylene	54.03649	50.00000	0.22253	0.010	8.07298	30.00000	Linear	
	72 Dibromochloromethane	0.35526	0.35889	0.35889	0.010	1.02305	30.00000	Averaged	
	73 1,2-Dibromoethane	0.36913	0.34831	0.34831	0.010	-5.63943	30.00000	Averaged	
	76 Chlorobenzene	0.96368	0.85928	0.85928	0.300	-10.83338	30.00000	Averaged	spcc
	77 1,1,1,2-Tetrachloroethane	0.34629	0.31215	0.31215	0.010	-9.86059	30.00000	Averaged	
	78 Ethylbenzene	1.67285	1.41885	1.41885	0.010	-15.18357	20.00000	Averaged	ccc
	79 m,p-Xylenes	0.63659	0.54177	0.54177	0.010	-14.89539	30.00000	Averaged	
	80 o-Xylene	0.65785	0.55837	0.55837	0.010	-15.12296	30.00000	Averaged	
	81 Styrene	1.18237	0.95813	0.95813	0.010	-18.96497	30.00000	Averaged	
	82 Bromoform	0.43665	0.46633	0.46633	0.100	6.79683	30.00000	Averaged	spcc
	83 Isopropylbenzene	2.85343	2.42367	2.42367	0.010	-15.06123	30.00000	Averaged	
	87 1,1,2,2-Tetrachloroethane	0.90349	0.81735	0.81735	0.300	-9.53444	30.00000	Averaged	spcc
$	86 Bromofluorobenzene	1.17678	1.10343	1.10343	0.010	-6.23316	30.00000	Averaged	
	89 1,2,3-Trichloropropane	0.22766	0.21462	0.21462	0.010	-5.72813	30.00000	Averaged	
	90 Bromobenzene	0.80299	0.69579	0.69579	0.010	-13.34968	30.00000	Averaged	
	91 n-Propylbenzene	3.51014	2.91036	2.91036	0.010	-17.08719	30.00000	Averaged	
	93 2-Chlorotoluene	2.54562	2.05013	2.05013	0.010	-19.46439	30.00000	Averaged	
	92 1,3,5-Trimethylbenzene	2.52939	2.04403	2.04403	0.010	-19.18860	30.00000	Averaged	
	94 4-Chlorotoluene	2.41921	2.05577	2.05577	0.010	-15.02282	30.00000	Averaged	
	95 tert-Butylbenzene	2.35539	2.02980	2.02980	0.010	-13.82325	30.00000	Averaged	
	96 1,2,4-Trimethylbenzene	2.70091	2.25631	2.25631	0.010	-16.46112	30.00000	Averaged	
	98 sec-Butylbenzene	3.21055	2.77352	2.77352	0.010	-13.61234	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7o103.d
Analysis Type: WATER
Lab Sample ID: W7VM091130-01 Quant Type: ISTD
Method: /chem/VOA7.i/113009v7/VOA7-8260B-111509.m

Injection Date: 30-NOV-2009 10:27
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.55183	2.22307	2.22307	0.010	-12.88337	30.00000	Averaged
100 1,3-Dichlorobenzene	1.43886	1.24382	1.24382	0.010	-13.55533	30.00000	Averaged
102 1,4-Dichlorobenzene	1.41831	1.24887	1.24887	0.010	-11.94650	30.00000	Averaged
104 n-Butylbenzene	2.69728	2.33669	2.33669	0.010	-13.36839	30.00000	Averaged
105 1,2-Dichlorobenzene	1.43227	1.26190	1.26190	0.010	-11.89499	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	0.17584	0.18934	0.18934	0.010	7.68214	30.00000	Averaged
108 1,2,4-Trichlorobenzene	1.02685	0.95838	0.95838	0.010	-6.66784	30.00000	Averaged
109 Hexachlorobutadiene	0.54947	0.53602	0.53602	0.010	-2.44770	30.00000	Averaged
110 Naphthalene	2.28224	2.04427	2.04427	0.010	-10.42708	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.91204	0.89124	0.89124	0.010	-2.28041	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.65861
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o103.d
Lab Smp Id: W7VM091130-01 Client Smp ID: VSTD050
Inj Date : 30-NOV-2009 10:27
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM091130-01|BFB/CCV/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 04-Dec-2009 08:47 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				1613788	150.000	128
M 3 1,2-Dichloroethylene (total)	96				1086773	100.000	93.9
M 1 1,3-Dichloropropylene	75				1116922	100.000	95.5
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	233294	50.0000	48.6
5 Chloromethane	50	5.757	5.757	(0.376)	516407	50.0000	43.4
6 Vinyl chloride	62	6.187	6.187	(0.404)	367135	50.0000	44.6
7 Bromomethane	94	7.429	7.429	(0.485)	280935	50.0000	49.8
8 Chloroethane	64	7.845	7.845	(0.512)	286172	50.0000	46.5
9 Trichlorofluoromethane	101	8.789	8.789	(0.574)	494243	50.0000	59.6
10 Ethyl Ether	59	9.703	9.703	(0.633)	386544	50.0000	44.3
13 Acetone	43	10.423	10.423	(0.681)	2040900	250.000	206
17 Acetonitrile	41	11.073	11.073	(0.723)	1898320	1000.00	1140
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	272016	50.0000	54.2
18 Methyl acetate	43	11.225	11.225	(0.733)	2084822	250.000	207
16 Iodomethane	142	10.677	10.677	(0.697)	2364913	250.000	258

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
22 Methylene chloride	86	11.449	11.449	(0.747)	231270	50.0000	50.9
19 Carbon disulfide	76	10.840	10.840	(0.708)	4311856	250.000	262
24 tert-Butyl methyl ether	73	12.027	12.027	(0.785)	956017	50.0000	45.5
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	512864	50.0000	48.0
26 Vinyl acetate	43	12.860	12.860	(0.840)	5107544	250.000	238
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	645976	50.0000	48.4
31 2-Butanone	43	13.723	13.723	(0.896)	2089952	250.000	184
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	573909	50.0000	45.9
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	331094	50.0000	47.0
38 Chloroform	83	14.190	14.190	(0.926)	600742	50.0000	49.8
37 Bromochloromethane	49	14.088	14.088	(0.920)	511148	50.0000	47.0
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	478136	50.0000	53.2
43 Cyclohexane	56	14.586	14.586	(0.952)	711228	50.0000	46.6
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	411857	50.0000	50.6
52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1713087	5000.00	4950
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	386491	50.0000	54.4
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	529897	50.0000	50.1
47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	616153	50.0000	48.8
48 Benzene	78	14.992	14.992	(0.979)	1167020	50.0000	46.9
50 Cyclohexene	67	15.124	15.124	(0.987)	560300	50.0000	47.7
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1213904	50.0000	
53 Trichloroethylene	95	15.773	15.773	(1.030)	319647	50.0000	49.8
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	360643	50.0000	44.6
55 Methylcyclohexane	83	16.037	16.037	(1.047)	492503	50.0000	49.7
59 Bromodichloromethane	83	16.332	16.332	(1.066)	495851	50.0000	51.9
58 Dibromomethane	93	16.190	16.190	(1.057)	228393	50.0000	50.1
61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	701976	250.000	212
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1011426	250.000	199
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	561517	50.0000	46.5
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1331406	50.0000	45.4
65 Toluene	92	17.215	17.215	(0.922)	759699	50.0000	43.5
67 trans-1,3-Dichloropropylene	75	17.387	17.387	(0.931)	555405	50.0000	45.7
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	265499	50.0000	44.4
69 2-Hexanone	43	17.804	17.804	(0.954)	2525461	250.000	153
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	494268	50.0000	41.6
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	218722	50.0000	54.0
72 Dibromochloromethane	129	18.068	18.068	(0.968)	352745	50.0000	50.5
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	342344	50.0000	47.2
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	982875	50.0000	
76 Chlorobenzene	112	18.697	18.697	(1.002)	844565	50.0000	44.6
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	306802	50.0000	45.1
78 Ethylbenzene	91	18.768	18.768	(1.005)	1394556	50.0000	42.4
79 m,p-Xylenes	106	18.870	18.870	(1.011)	1064983	100.000	85.1
80 o-Xylene	106	19.286	19.286	(1.033)	548805	50.0000	42.4
81 Styrene	104	19.286	19.286	(1.033)	941725	50.0000	40.5
82 Bromoform	173	19.540	19.540	(0.931)	273371	50.0000	53.4
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1420802	50.0000	42.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	479147	50.0000	45.2
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	646853	50.0000	46.9
89 1,2,3-Trichloropropane	110	19.976	19.976	(0.952)	125816	50.0000	47.1
90 Bromobenzene	156	20.017	20.017	(0.954)	407888	50.0000	43.3
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1706109	50.0000	41.4
93 2-Chlorotoluene	91	20.179	20.179	(0.961)	1201827	50.0000	40.3
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1198254	50.0000	40.4
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1205135	50.0000	42.5
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1189910	50.0000	43.1
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1322692	50.0000	41.8
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1625891	50.0000	43.2
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1303207	50.0000	43.6
100 1,3-Dichlorobenzene	146	20.930	20.930	(0.997)	729153	50.0000	43.2
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	586220	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	732115	50.0000	44.0
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1369817	50.0000	43.3
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	739752	50.0000	44.0
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	110997	50.0000	53.8
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	561823	50.0000	46.7
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	314227	50.0000	48.8
110 Naphthalene	128	23.753	23.753	(1.132)	1198390	50.0000	44.8
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	522461	50.0000	48.8

Data File: /chem/VOA7.i/113009v7/7o103.d
Date : 30-NOV-2009 10:27
Client ID: VSTD050
Sample Info: IW7VK091130-01|BFB/CCV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

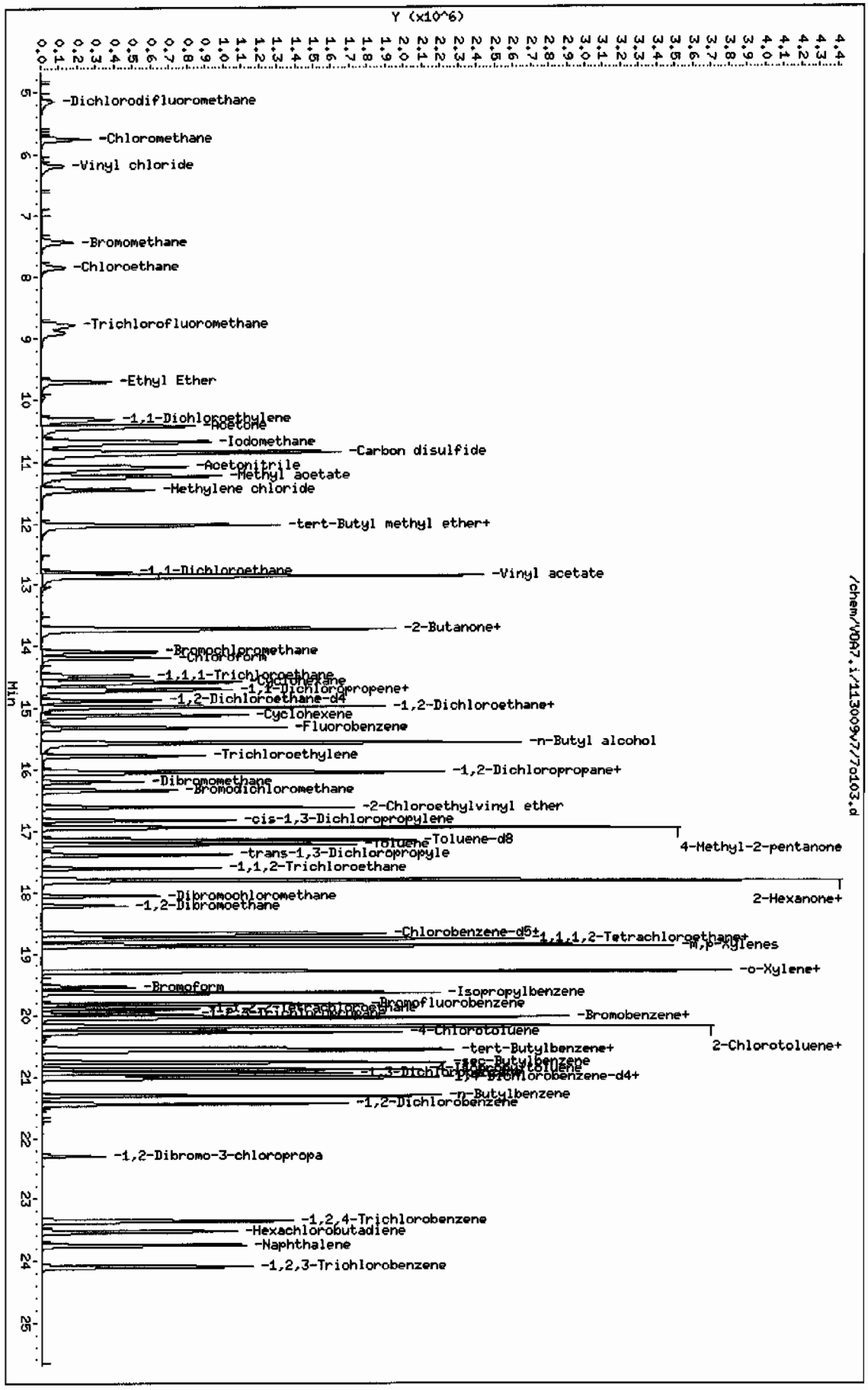

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 30-NOV-2009 11:34
Lab File ID: 7o105.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091130-03 Quant Type: ISTD
Method: /chem/VOA7.i/113009v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
147 Chlorotrifluoroethylene	0.13034	0.10866	0.10866	0.010	-16.63196	30.00000	Averaged
148 2-Chloro-1,1,1-trifluoroeth	0.28275	0.28232	0.28232	0.010	-0.15144	30.00000	Averaged
11 Acrolein	0.08287	0.07103	0.07103	0.001	-14.27899	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09315	0.09399	0.09399	0.010	0.91148	30.00000	Averaged
15 Isopropyl Alcohol	0.03668	0.03648	0.03648	0.010	-0.53142	40.00000	Averaged
20 Allyl chloride	0.63535	0.50174	0.50174	0.010	-21.03057	30.00000	Averaged
21 tert-Butyl Alcohol	0.05102	0.04596	0.04596	0.001	-9.92190	40.00000	Averaged
23 Acrylonitrile	0.16606	0.14009	0.14009	0.010	-15.64005	30.00000	Averaged
27 Isopropyl ether	1.68959	1.46612	1.46612	0.010	-13.22653	30.00000	Averaged
29 2-Chloro-1,3-butadiene	0.54538	0.51315	0.51315	0.010	-5.90816	30.00000	Averaged
30 Ethyl tert-butyl ether	1.14730	0.99551	0.99551	0.010	-13.23042	30.00000	Averaged
35 Propionitrile	0.06686	0.05392	0.05392	0.010	-19.35684	30.00000	Averaged
32 Ethyl acetate	0.49355	0.36241	0.36241	0.010	-26.57050	40.00000	Averaged
36 Methacrylonitrile	0.30070	0.23194	0.23194	0.010	-22.86778	30.00000	Averaged
39 Tetrahydrofuran	0.36975	0.25468	0.25468	0.010	-31.12049	30.00000	Averaged <-
42 Isobutyl alcohol	0.01771	0.01516	0.01516	0.005	-14.35346	40.00000	Averaged
49 Methyl tert-amyl ether	0.79534	0.69308	0.69308	0.010	-12.85780	30.00000	Averaged
54 Methyl methacrylate	0.20956	0.16400	0.16400	0.010	-21.74051	30.00000	Averaged
66 Ethyl methacrylate	0.53175	0.37458	0.37458	0.010	-29.55741	30.00000	Averaged
74 1-Chlorohexane	0.40217	0.36775	0.36775	0.010	-8.55738	30.00000	Averaged
57 1,4-Dioxane	0.00316	0.00296	0.00296	0.001	-6.42904	40.00000	Averaged
60 2-Nitropropane	0.12993	0.12153	0.12153	0.010	-6.46710	30.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.39160	0.33692	0.33692	0.010	-13.96294	30.00000	Averaged
85 Cyclohexanone	505	1250	0.03665	0.010	-59.59023	40.00000	Linear <-
88 trans-1,4-Dichloro-2-butene	0.35776	0.31028	0.31028	0.010	-13.27322	30.00000	Averaged
97 Pentachloroethane	0.26007	0.26519	0.26519	0.010	1.96937	30.00000	Averaged
103 Benzyl chloride	1.33283	1.09234	1.09234	0.010	-18.04376	30.00000	Averaged
106 bis(2-Chloroisopropyl)ether	0.73799	0.51880	0.51880	0.010	-29.70055	30.00000	Averaged
$ 46 1,2-Dichloroethane-d4	0.43596	0.43344	0.43344	0.010	-0.57722	30.00000	Averaged
$ 64 Toluene-d8	1.49262	1.36347	1.36347	0.010	-8.65251	30.00000	Averaged
$ 86 Bromofluorobenzene	1.17678	1.08075	1.08075	0.010	-8.16073	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7o105.d
Analysis Type: WATER
Lab Sample ID: W7VM091130-03
Method: /chem/VOA7.i/113009v7/VOA7-8260B-111509.m

Injection Date: 30-NOV-2009 11:34
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57
Quant Type: ISTD

Average %D / Drift Results.	
Calculated Average %D/Drift =	9.65861
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o105.d
Lab Smp Id: W7VM091130-03 Client Smp ID: VSTD250S
Inj Date : 30-NOV-2009 11:34
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM091130-03|SHORT/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091118-08A/UVM091105-02C
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
147 Chlorotrifluoroethylene	116	5.029	5.029	(0.328)	398966	150.000	125
148 2-Chloro-1,1,1-trifluoroethane	118	6.604	6.604	(0.431)	1036610	150.000	150
11 Acrolein	56	10.017	10.017	(0.654)	434690	250.000	214
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	575207	250.000	252
15 Isopropyl Alcohol	45	10.789	10.789	(0.704)	2232604	2500.00	2490
20 Allyl chloride	41	11.185	11.185	(0.730)	3070401	250.000	197
21 tert-Butyl Alcohol	59	11.672	11.672	(0.762)	2812305	2500.00	2250
23 Acrylonitrile	53	11.936	11.936	(0.779)	857288	250.000	211
27 Isopropyl ether	45	12.911	12.911	(0.843)	1794400	50.0000	43.4
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	628054	50.0000	47.0
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1218410	50.0000	43.4
35 Propionitrile	54	13.804	13.804	(0.901)	329948	250.000	202
32 Ethyl acetate	43	13.804	13.804	(0.901)	2217808	250.000	184
36 Methacrylonitrile	41	14.048	14.048	(0.917)	1419358	250.000	193
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	766828	250.000	172
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	928014	2500.00	2140

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	848267	50.0000	43.6
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1003629	250.000	196
66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1857849	250.000	176
74 1-Chlorohexane	55	18.575	18.575	(1.213)	450099	50.0000	45.7
57 1,4-Dioxane	88	16.159	16.159	(1.055)	181226	2500.00	2340
60 2-Nitropropane	43	16.555	16.555	(1.081)	743691	250.000	234
84 cis-1,4-Dichloro-2-butene	53	19.662	19.662	(0.937)	1014455	250.000	215
85 Cyclohexanone	55	19.773	19.773	(1.059)	908789	1250.00	505
88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	934225	250.000	217
97 Pentachloroethane	167	20.606	20.606	(0.982)	798464	250.000	255(A)
103 Benzyl chloride	91	21.124	21.124	(1.006)	3288965	250.000	205
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1562082	250.000	176
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1223911	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	991969	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	602188	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	530496	50.0000	49.7
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1352520	50.0000	45.7
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	650813	50.0000	45.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA7.i/113009v7/7o105.d

Date : 30-NOV-2009 11:34

Client ID: VSTD250S

Sample Info: |W7VM091130-03|SHORT/LCS|1|VOAF|1|

Purge Volume: 5.0

Column phase: DB-624

Instrument: VOA7.i

Operator: AXO1

Column diameter: 0.25

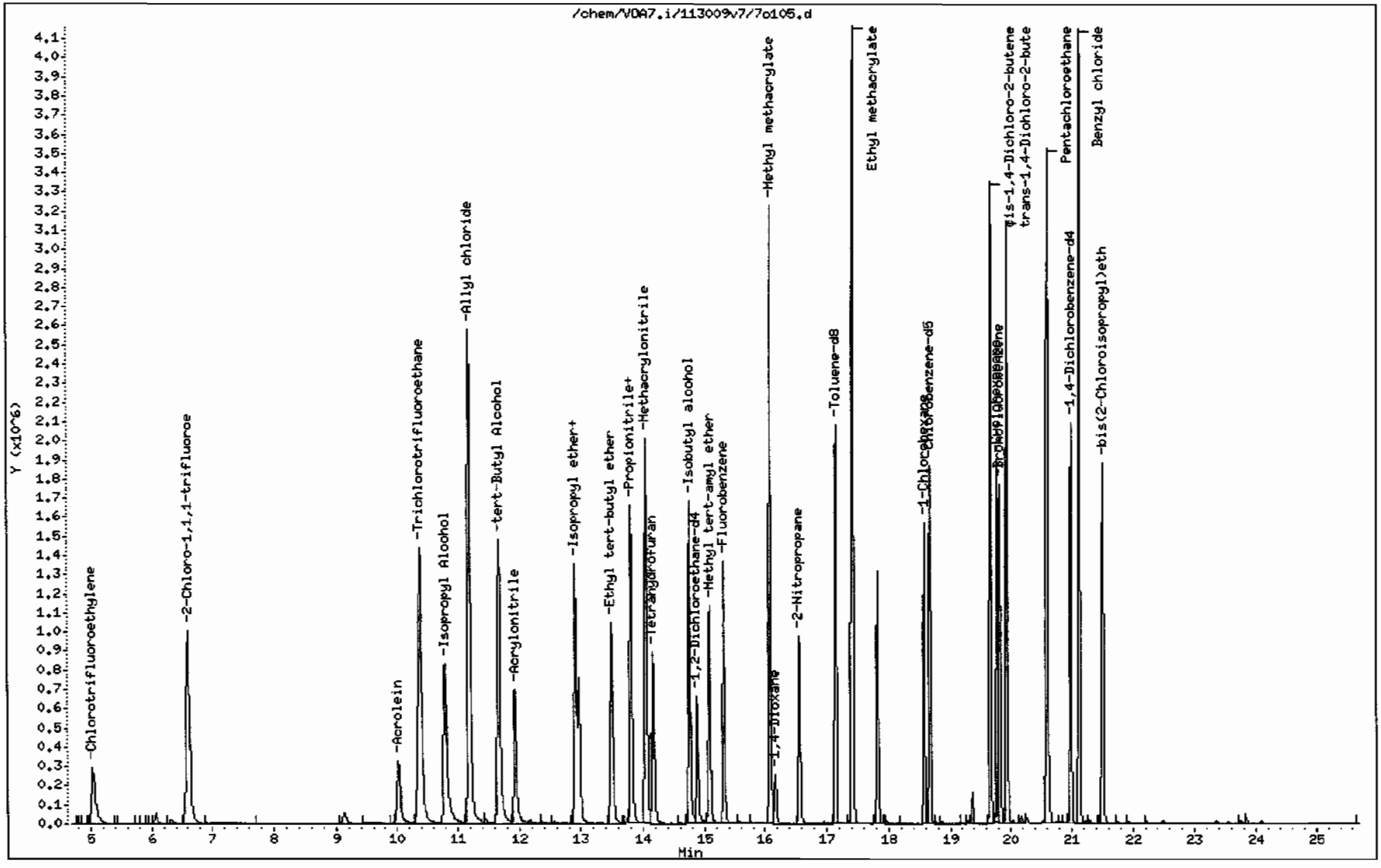

QC Data

Data File: /chem/VOA7.i/111509v7/71702.d

Page 1

Date : 15-NOV-2009 23:14

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |12019-----|BFB01|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

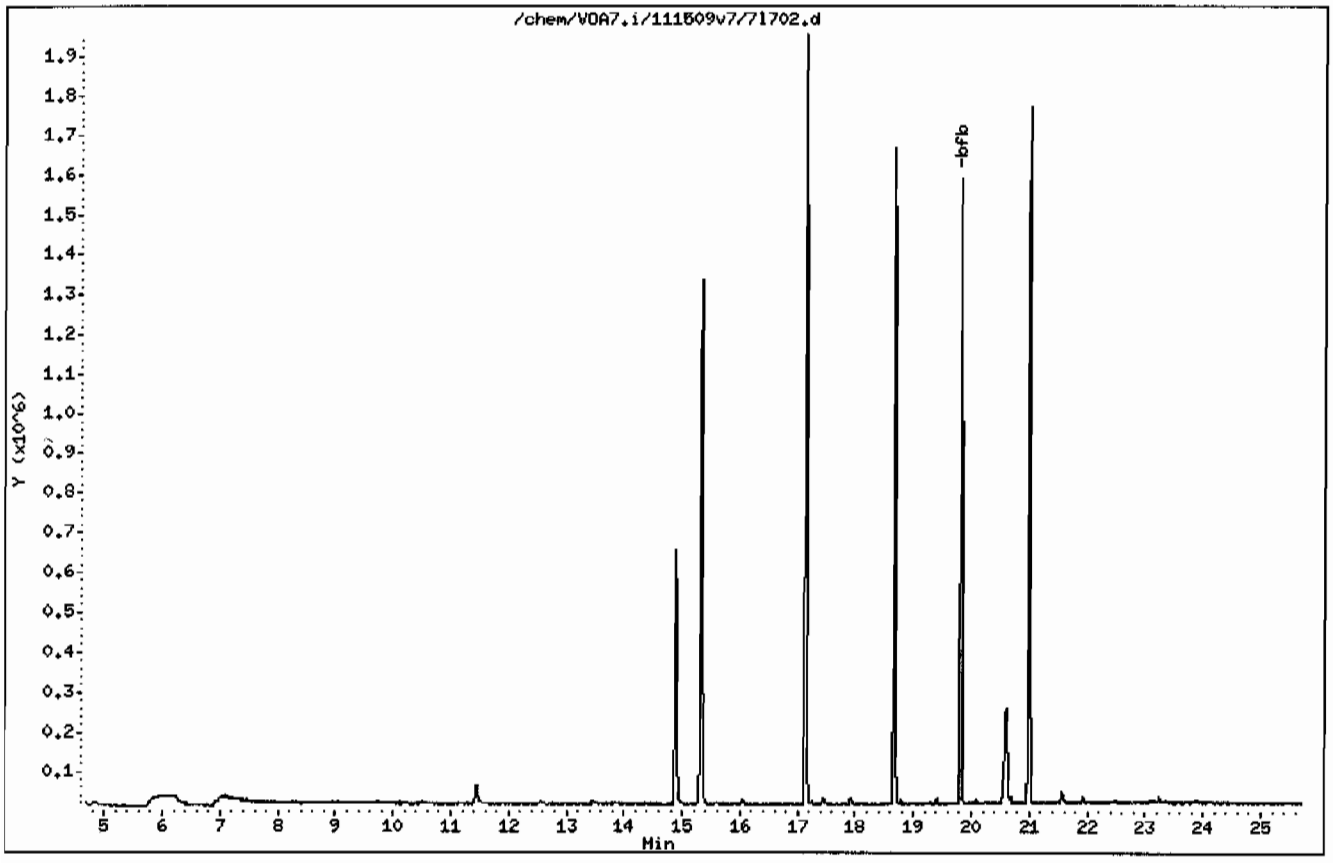

Data File: /chem/VOA7.i/111509v7/71702.d

Date : 15-NOV-2009 23:14

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |12019-----|BFB01|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb

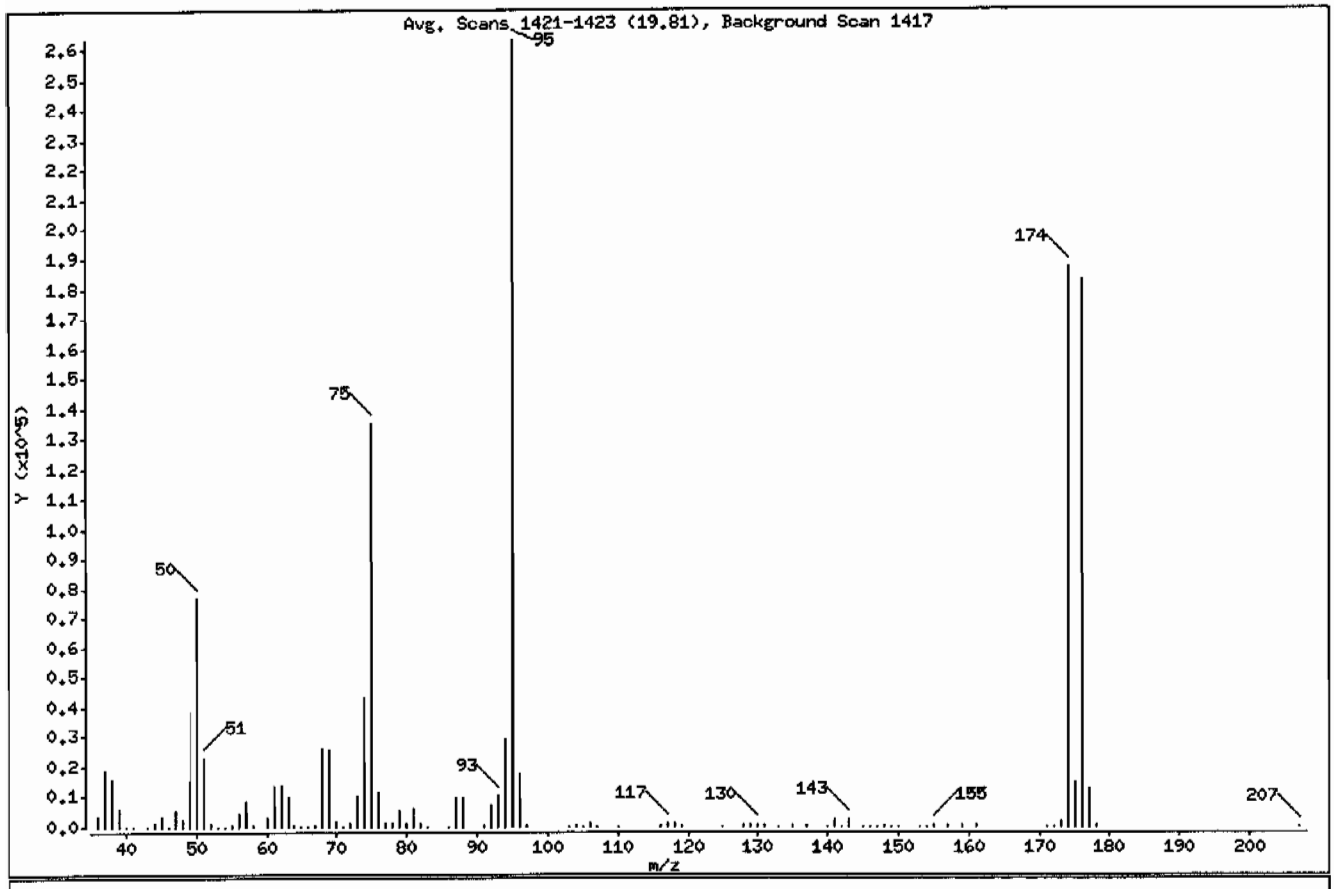

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	29.18
75	30.00 - 60.00% of mass 95	51.18
96	5.00 - 9.00% of mass 95	6.73
173	Less than 2.00% of mass 174	0.67 (0.95)
174	50.00 - 100.00% of mass 95	70.97
175	5.00 - 9.00% of mass 174	5.45 (7.68)
176	95.00 - 101.00% of mass 174	69.44 (97.84)
177	5.00 - 9.00% of mass 176	4.78 (6.88)

Data File: /chem/VOA7.i/111509v7/71702.d

Date : 15-NOV-2009 23:14

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |12019-----|BFB01|1|VOAF|1|

Operator: AX01

Column phase: db624 Column diameter: 0.25

Data File: 71702.d
Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3333	63.00	9564	92.00	7156	141.00	2201
37.00	18888	64.00	721	93.00	10047	142.00	209
38.00	15641	65.00	130	94.00	28776	143.00	2553
39.00	5866	66.00	83	95.00	263232	145.00	241
40.00	248	67.00	433	96.00	17712	146.00	257
41.00	54	68.00	26144	97.00	558	147.00	85
43.00	67	69.00	25688	103.00	86	148.00	460
44.00	1305	70.00	1759	104.00	779	149.00	205
45.00	3541	71.00	254	105.00	214	150.00	236
46.00	266	72.00	1385	106.00	1126	153.00	182
47.00	5342	73.00	10068	107.00	293	154.00	90
48.00	2413	74.00	42920	110.00	85	155.00	665
49.00	14979	75.00	134720	116.00	817	157.00	311
50.00	76824	76.00	11733	117.00	1329	159.00	346
51.00	22800	77.00	1457	118.00	973	161.00	315
52.00	1184	78.00	980	119.00	879	171.00	166
53.00	233	79.00	5165	125.00	91	172.00	281
54.00	87	80.00	1473	128.00	746	173.00	1775
55.00	866	81.00	6044	129.00	436	174.00	186816
56.00	4408	82.00	1176	130.00	778	175.00	14343
57.00	8581	83.00	113	131.00	464	176.00	182784
58.00	419	86.00	95	133.00	110	177.00	12570
60.00	3198	87.00	9814	135.00	565	178.00	360
61.00	13497	88.00	9439	137.00	434	207.00	200
62.00	13813	91.00	612	140.00	192		

Data File: /chem/VOA7.i/111509v7/7m102BFB.d

Page 1

Date : 16-NOV-2009 13:54

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |W7VH0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

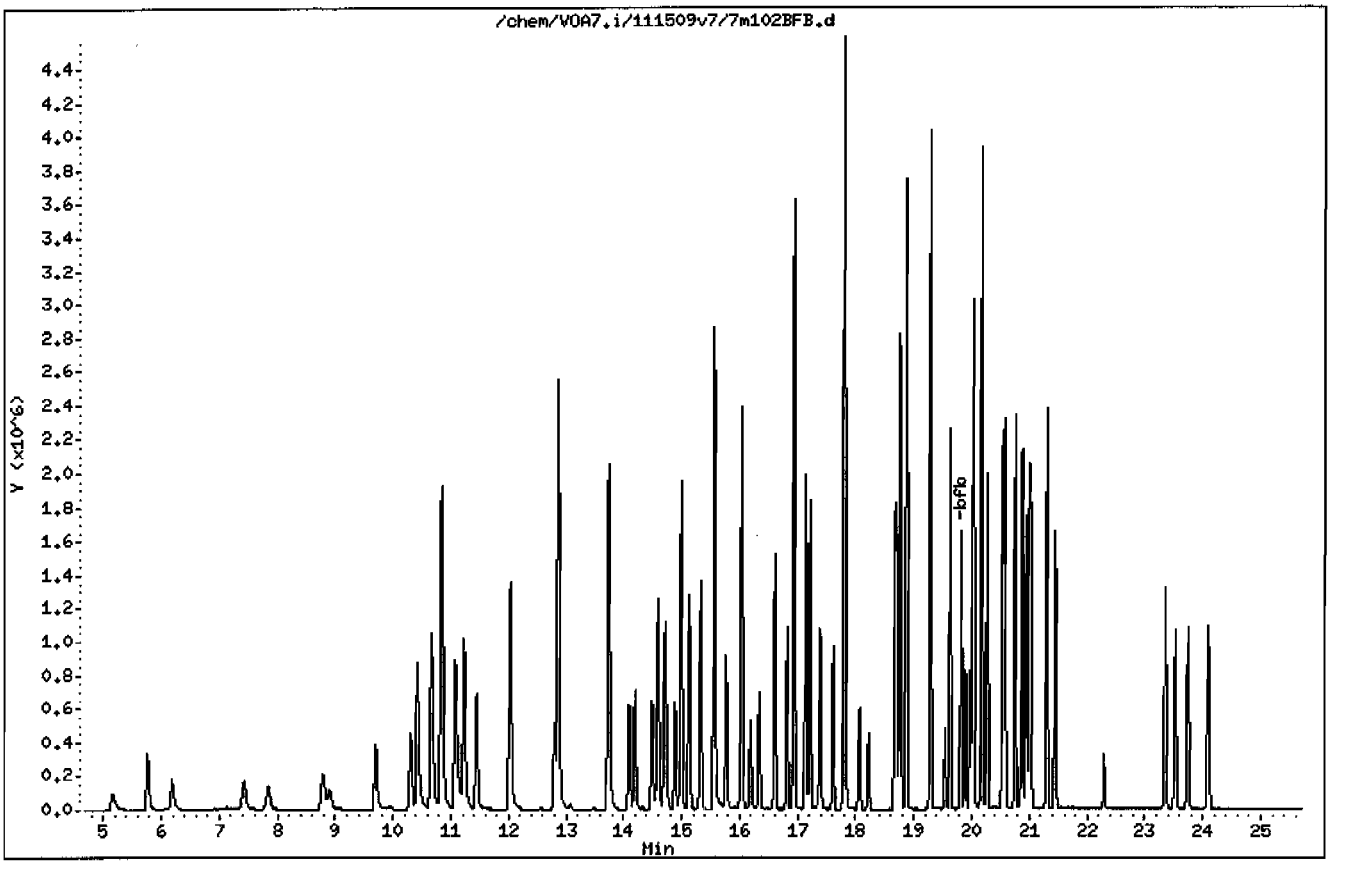

Data File: /chem/VOA7.i/111509v7/7m102BFB.d

Date : 16-NOV-2009 13:54

Client ID: BFB01

Instrument: VOA7.i

Sample Info: IW7VM0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb

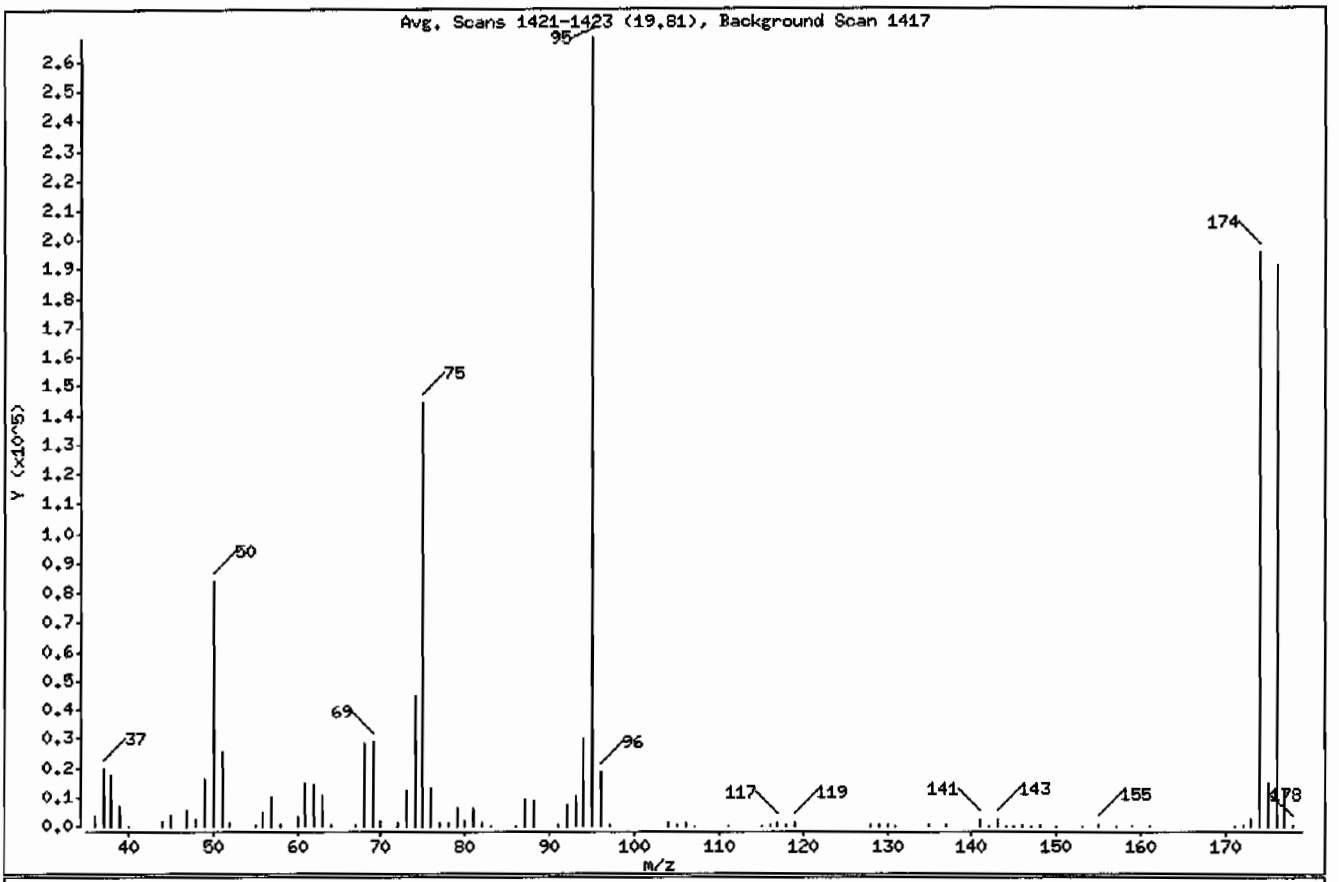

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	31.35
75	30.00 - 60.00% of mass 95	53.68
96	5.00 - 9.00% of mass 95	6.95
173	Less than 2.00% of mass 174	0.83 (1.14)
174	50.00 - 100.00% of mass 95	72.93
175	5.00 - 9.00% of mass 174	5.57 (7.63)
176	95.00 - 101.00% of mass 174	71.26 (97.71)
177	5.00 - 9.00% of mass 176	4.79 (6.72)

Data File: /chem/VOA7.i/111509v7/7m102BFB.d

Date : 16-NOV-2009 13:54

Client ID: BFB01 Instrument: VOA7.i

Sample Info: IW7VM0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624 Column diameter: 0.25

Data File: 7m102BFB.d
Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417
Location of Maximum: 95.00
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3492	67.00	802	94.00	30088	143.00	2290
37.00	19896	68.00	28072	95.00	267904	144.00	182
38.00	17176	69.00	28720	96.00	18608	145.00	246
39.00	6767	70.00	2115	97.00	689	146.00	368
40.00	56	72.00	1438	104.00	940	147.00	197
44.00	1726	73.00	12133	105.00	456	148.00	524
45.00	3498	74.00	45264	106.00	1256	150.00	86
47.00	5334	75.00	143808	107.00	86	153.00	91
48.00	2508	76.00	12687	111.00	230	155.00	646
49.00	16192	77.00	1415	115.00	163	157.00	282
50.00	84000	78.00	1061	116.00	809	159.00	241
51.00	25096	79.00	6247	117.00	1378	161.00	85
52.00	1004	80.00	1703	118.00	830	171.00	107
55.00	720	81.00	6177	119.00	1140	172.00	463
56.00	5221	82.00	1168	128.00	870	173.00	2233
57.00	9634	83.00	94	129.00	344	174.00	195392
58.00	407	86.00	268	130.00	747	175.00	14910
60.00	2957	87.00	9327	131.00	236	176.00	190912
61.00	14580	88.00	8928	135.00	321	177.00	12835
62.00	14245	91.00	654	137.00	514	178.00	367
63.00	10431	92.00	7178	141.00	2289		
64.00	865	93.00	10518	142.00	239		

Data File: /chem/VOA7.i/112509v7/7n303BFB.d

Page 1

Date : 25-NOV-2009 09:45

Client ID: BFB01

Instrument: VOA7.i

Sample Info: IW7VH091125-02|CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

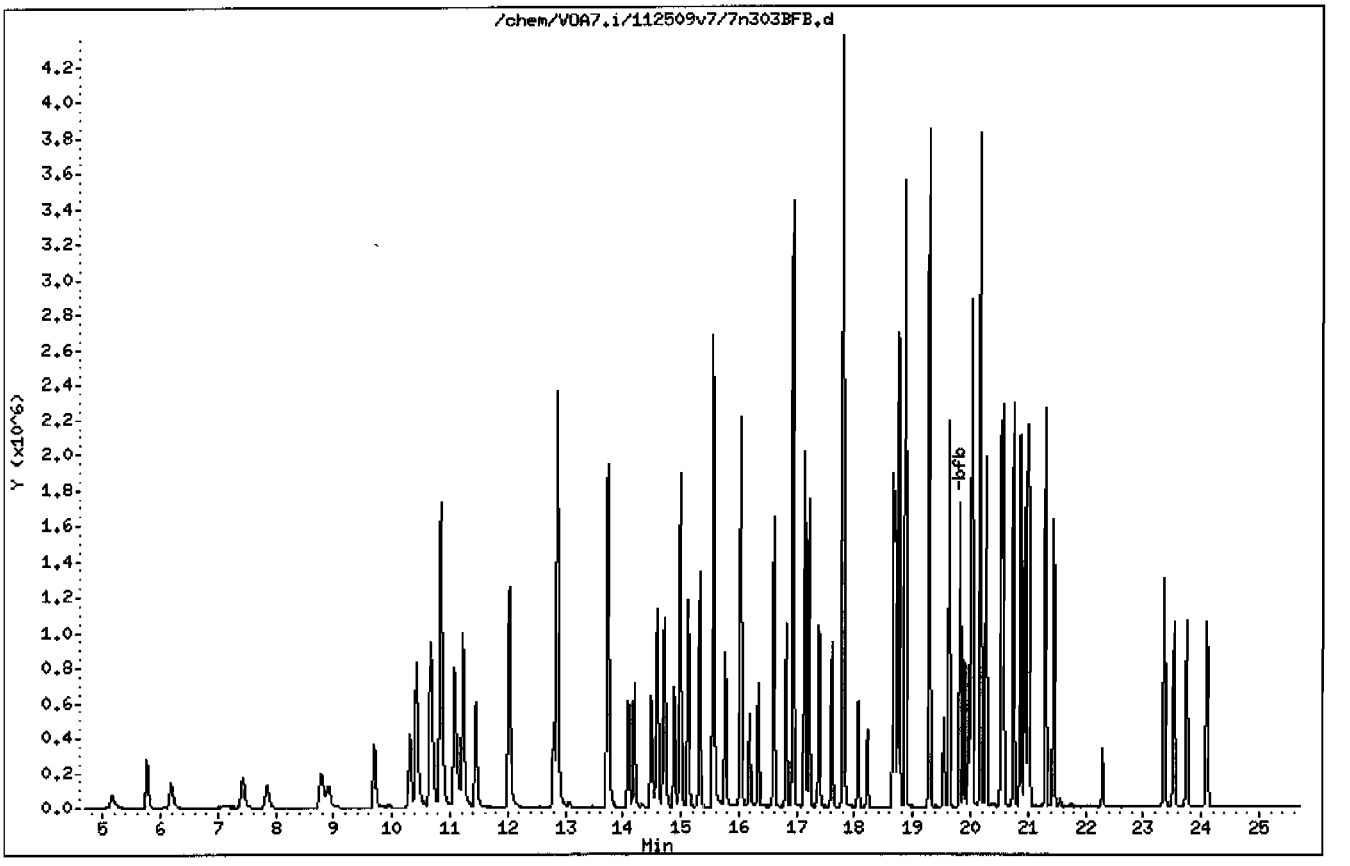

Data File: /chem/VOA7.i/112509v7/7n303BFB.d

Date : 25-NOV-2009 09:45

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |W7VH091125-02|CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb

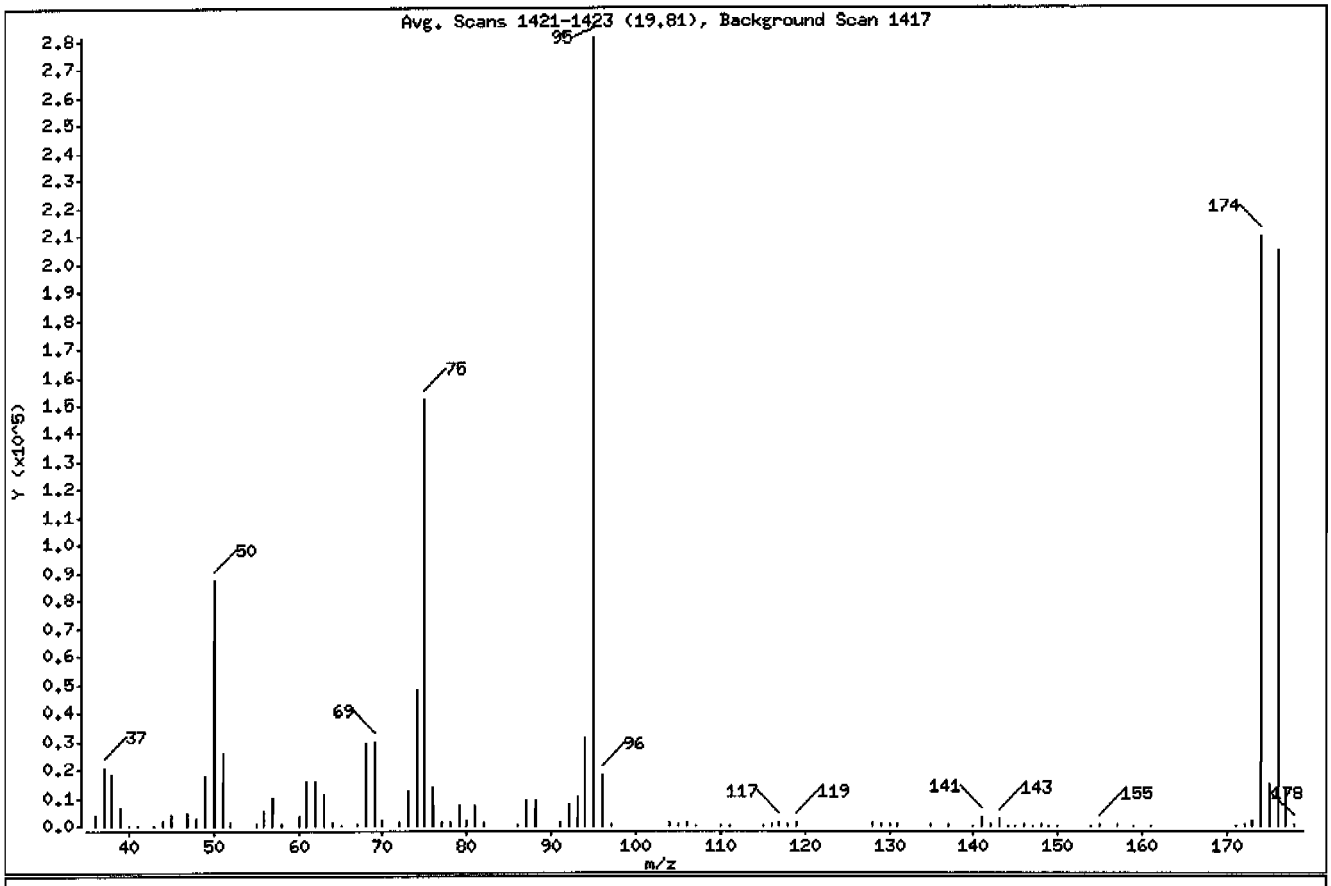

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	31.06
75	30.00 - 60.00% of mass 95	54.10
96	5.00 - 9.00% of mass 95	6.63
173	Less than 2.00% of mass 174	0.71 (0.96)
174	50.00 - 100.00% of mass 95	74.56
175	5.00 - 9.00% of mass 174	5.36 (7.19)
176	95.00 - 101.00% of mass 174	72.69 (97.50)
177	5.00 - 9.00% of mass 176	4.82 (6.62)

Data File: /chem/VOA7.i/112509v7/7n303BFB.d

Date : 25-NOV-2009 09:45

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |W7VM091125-02|CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624 Column diameter: 0.25

Data File: 7n303BFB.d
Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417
Location of Maximum: 95.00
Number of points: 91

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3661	64.00	1025	94.00	31088	142.00	357
37.00	20456	65.00	83	95.00	281216	143.00	2858
38.00	18424	67.00	693	96.00	18376	144.00	92
39.00	6781	68.00	29162	97.00	622	145.00	283
40.00	162	69.00	29960	104.00	1112	146.00	367
41.00	177	70.00	2116	105.00	489	147.00	95
43.00	126	72.00	1568	106.00	1109	148.00	564
44.00	1676	73.00	12220	107.00	186	149.00	94
45.00	3819	74.00	47848	110.00	89	150.00	214
47.00	4783	75.00	152128	111.00	266	154.00	112
48.00	2476	76.00	13300	115.00	250	155.00	575
49.00	17496	77.00	1316	116.00	857	157.00	346
50.00	87352	78.00	1036	117.00	1541	159.00	317
51.00	25792	79.00	6886	118.00	800	161.00	321
52.00	1292	80.00	1955	119.00	1414	171.00	114
55.00	828	81.00	7133	128.00	1065	172.00	326
56.00	5483	82.00	1446	129.00	358	173.00	2007
57.00	9736	86.00	416	130.00	858	174.00	209664
58.00	520	87.00	9329	131.00	399	175.00	15068
60.00	3208	88.00	9276	135.00	384	176.00	204416
61.00	15750	91.00	1130	137.00	550	177.00	13542
62.00	15666	92.00	7694	140.00	103	178.00	326
63.00	11099	93.00	10471	141.00	3039		

Data File: /chem/VOA7.i/113009v7/7o103BFB.d

Page 1

Date : 30-NOV-2009 10:27

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |W7VM091130-01|BFB/CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

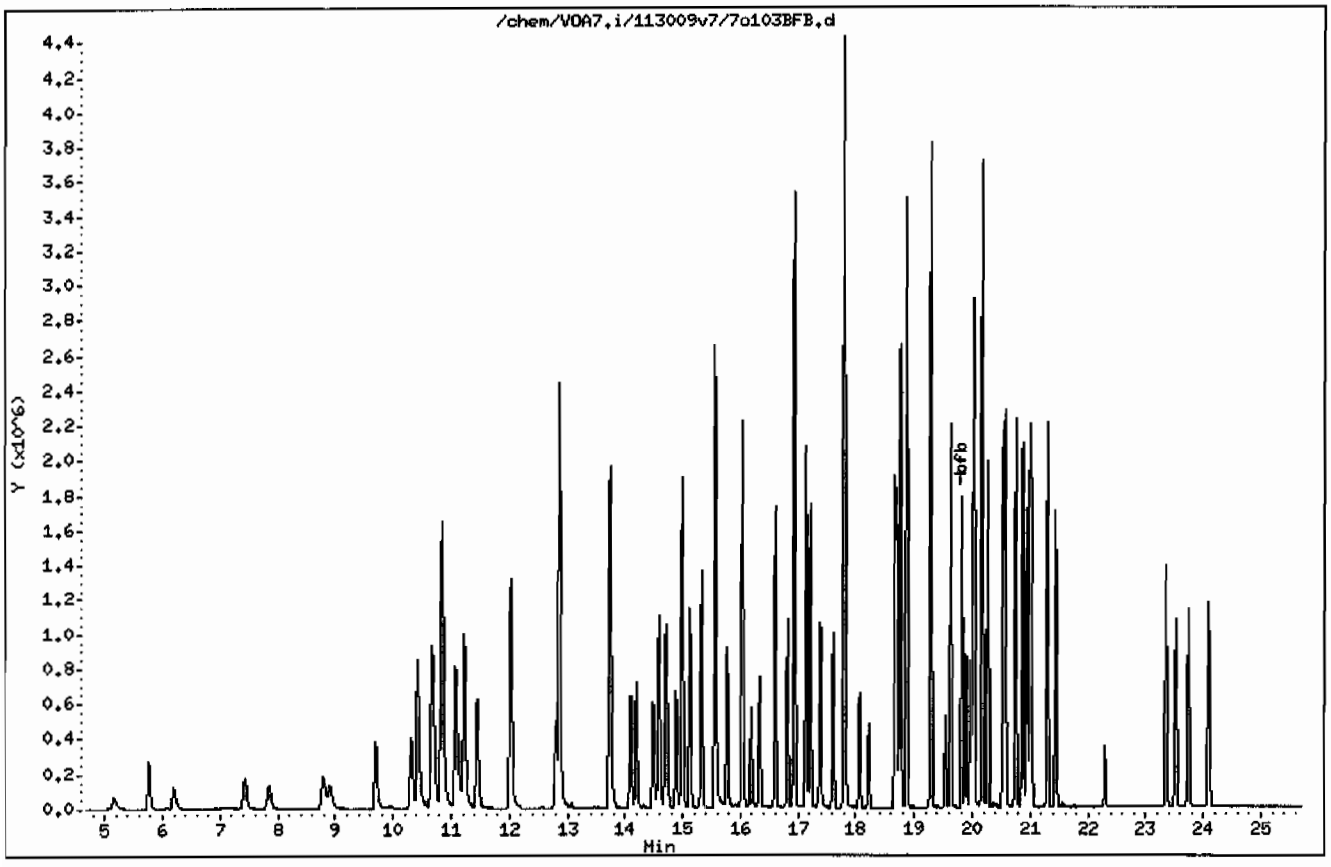

Data File: /chem/VOA7.i/113009v7/7o103BFB.d

Date : 30-NOV-2009 10:27

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |W7VM091130-01|BFB/CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb

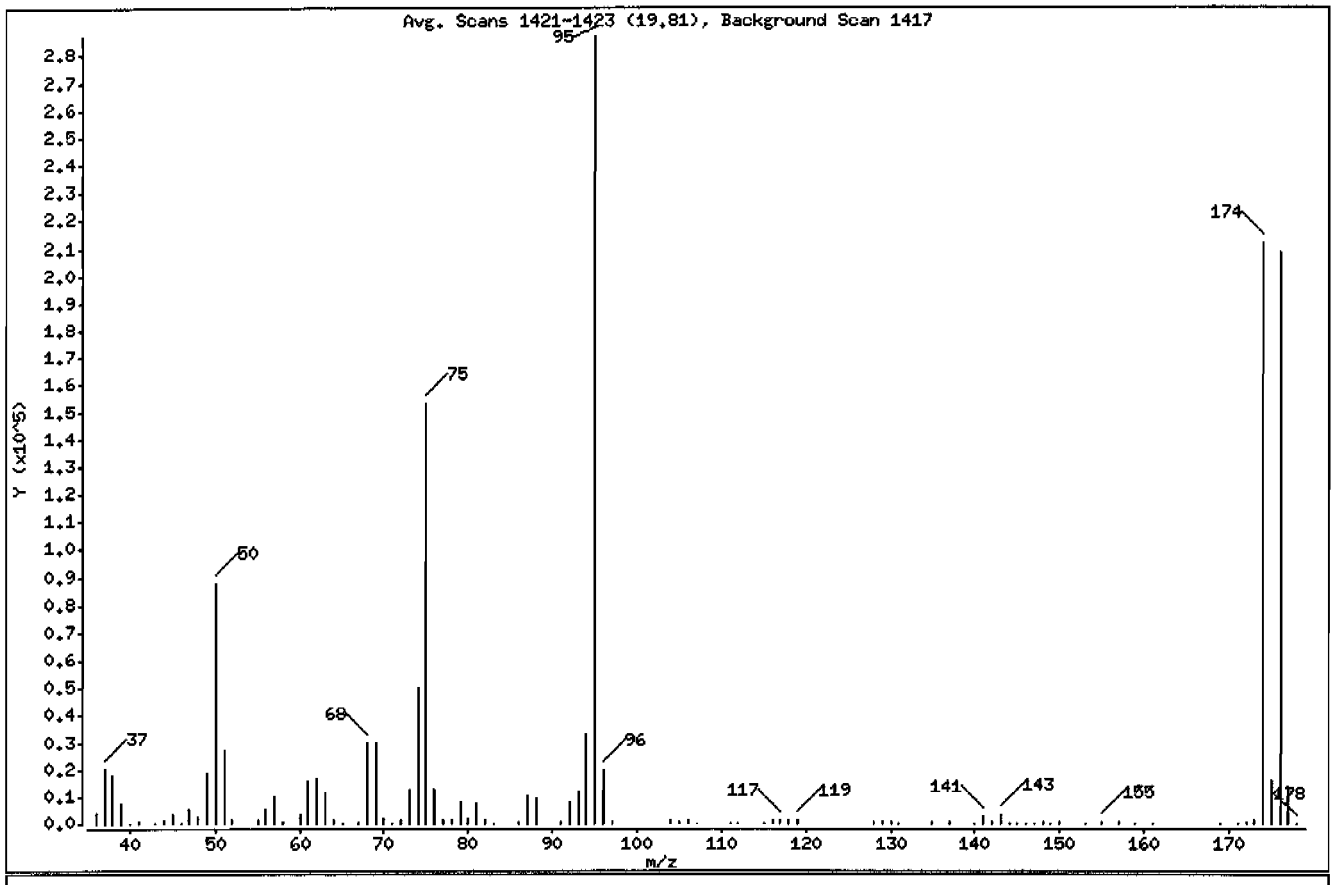

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	30.63
75	30.00 - 60.00% of mass 95	53.44
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.55 (0.75)
174	50.00 - 100.00% of mass 95	73.81
175	5.00 - 9.00% of mass 174	5.51 (7.46)
176	95.00 - 101.00% of mass 174	72.60 (98.37)
177	5.00 - 9.00% of mass 176	4.76 (6.56)

Data File: /chem/VOA7.i/113009v7/7o103BFB.d

Date : 30-NOV-2009 10:27

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |W7VM091130-01|BFB/CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624 Column diameter: 0.25

Data File: 7o103BFB.d
Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417
Location of Maximum: 95.00
Number of points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3750	64.00	1197	93.00	11561	142.00	372
37.00	20328	65.00	83	94.00	32968	143.00	2973
38.00	18040	67.00	841	95.00	286848	144.00	90
39.00	7187	68.00	29872	96.00	19672	145.00	98
40.00	143	69.00	29648	97.00	673	146.00	272
41.00	431	70.00	2166	104.00	1357	147.00	220
43.00	85	71.00	85	105.00	350	148.00	549
44.00	1455	72.00	1286	106.00	1232	149.00	189
45.00	3566	73.00	12820	107.00	283	150.00	363
46.00	182	74.00	49816	111.00	96	153.00	90
47.00	5251	75.00	153280	112.00	85	155.00	641
48.00	2417	76.00	12787	115.00	305	157.00	337
49.00	18744	77.00	1364	116.00	1047	159.00	121
50.00	87856	78.00	1206	117.00	1421	161.00	131
51.00	27208	79.00	7631	118.00	1113	169.00	93
52.00	1275	80.00	2215	119.00	1162	171.00	113
55.00	1315	81.00	7477	128.00	833	172.00	493
56.00	5512	82.00	1240	129.00	409	173.00	1587
57.00	9712	83.00	155	130.00	820	174.00	211712
58.00	505	86.00	459	131.00	319	175.00	15801
60.00	3298	87.00	10544	135.00	435	176.00	208256
61.00	15777	88.00	9517	137.00	428	177.00	13652
62.00	16208	91.00	891	140.00	125	178.00	274
63.00	11384	92.00	7760	141.00	2530		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603			**Matrix:**	SOIL
Lab Sample ID:	1201981617				
Client Sample:	QC for batch 926827	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926827	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 12:00	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 08:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n307BL.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981617**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 12:00**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n307BL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	21.56	6.37	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n307BL.d
Lab Smp Id: 1201981617 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 12:00
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981617|926830|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	552281	53.6892	53.7
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1179768	50.0000	
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1299923	47.2684	47.3
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	921229	50.0000	
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	606883	46.6685	46.7
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	552530	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n307BL.d
Lab Smp Id: 1201981617 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 12:00
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981617|926830|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 101 1,4-Dichlorobenzene-d4	20.991	3532919	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
21.560	450018	6.36891923	6.4	0		0	101

Data File: /chem/VOA7.i/112509v7/7n307BL.d

Date : 25-NOV-2009 12:00

Client ID: BLANK

Sample Info: |120198161719268301|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01

Column diameter: 0.25

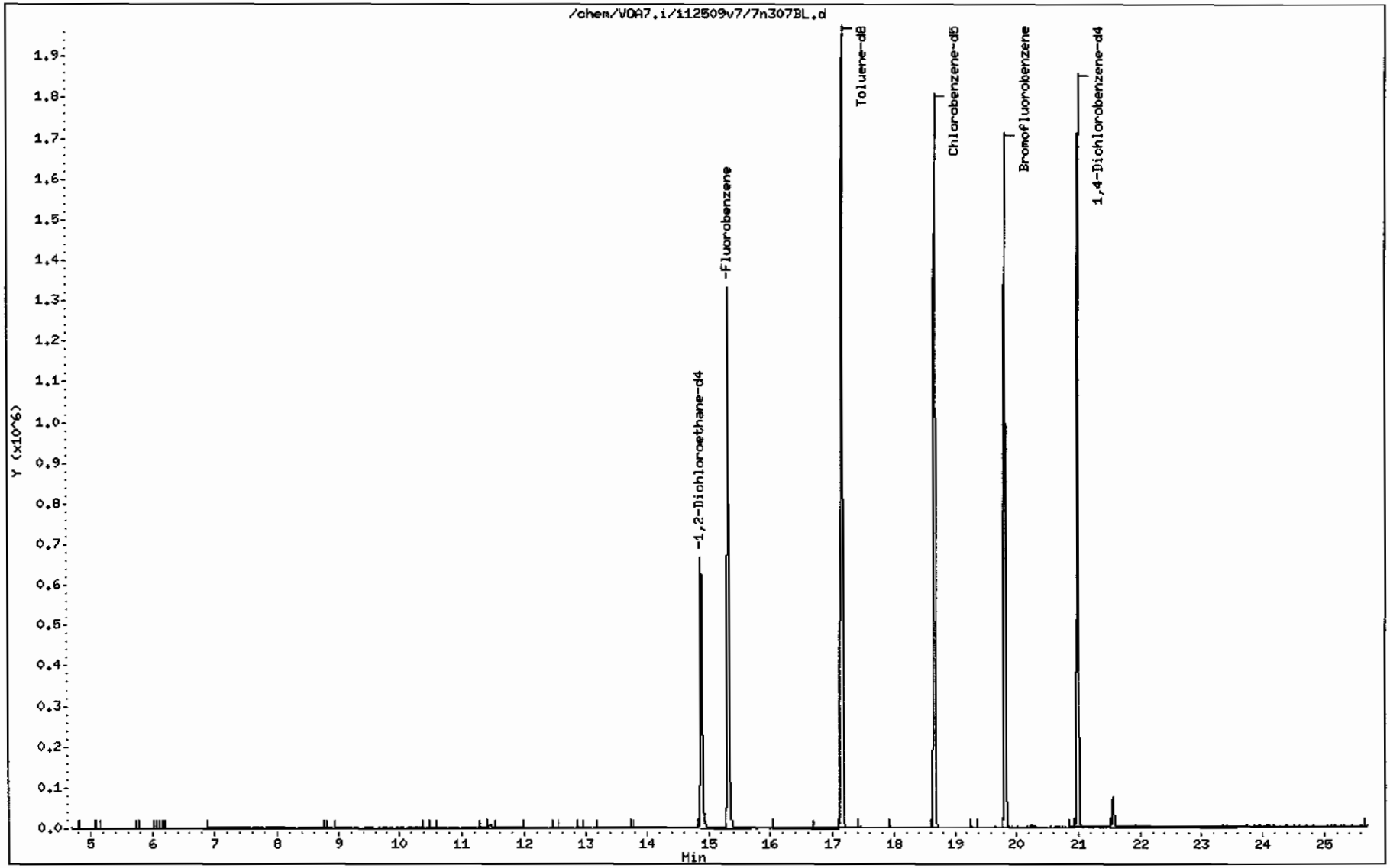

Data File: /chem/VOA7.i/112509v7/7n307BL.d

Date : 25-NOV-2009 12:00

Client ID: BLANK

Instrument: VOA7.i

Sample Info: |120198161719268301|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Bicyclo[5.3.0]decan-2-one, 9-methylene-1	1000153-97-3	NIST05.L	82418	36	C14H24OSi	236
Silane, 9H-fluoren-9-yltrimethyl-	7385-10-6	NIST05.L	83985	12	C16H18Si	238

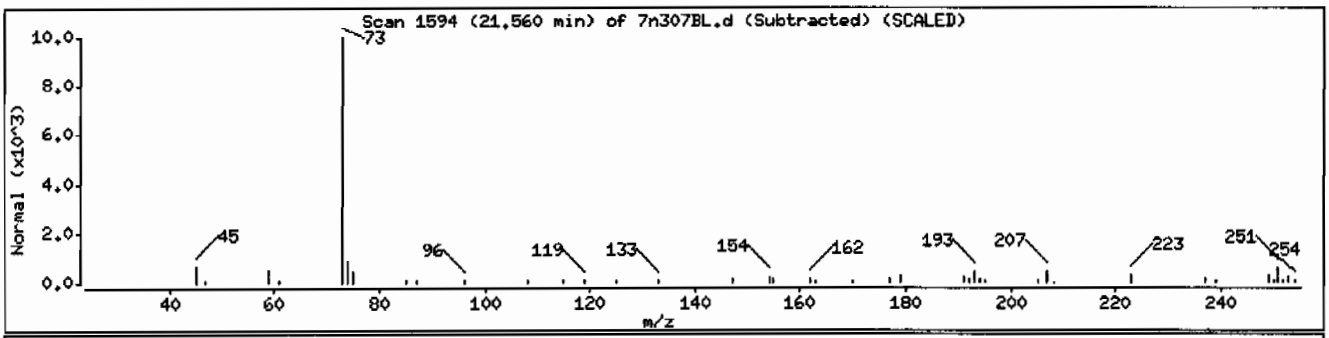

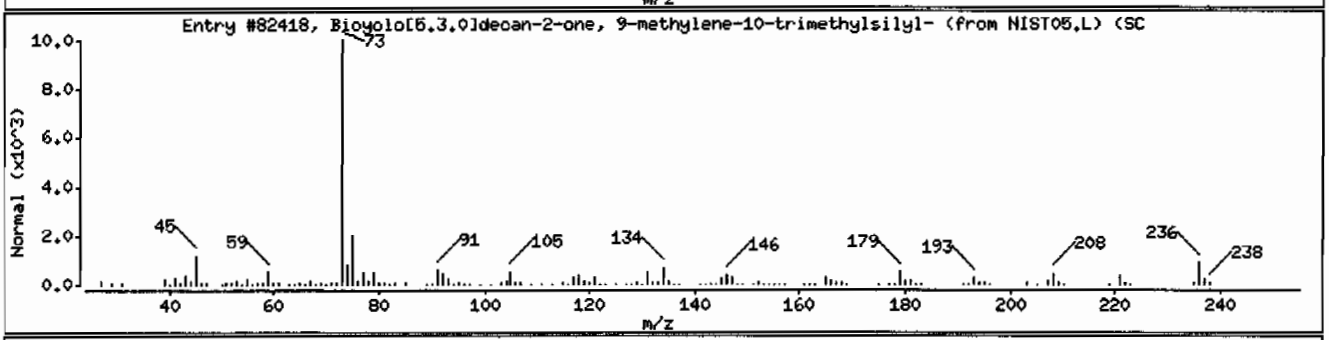

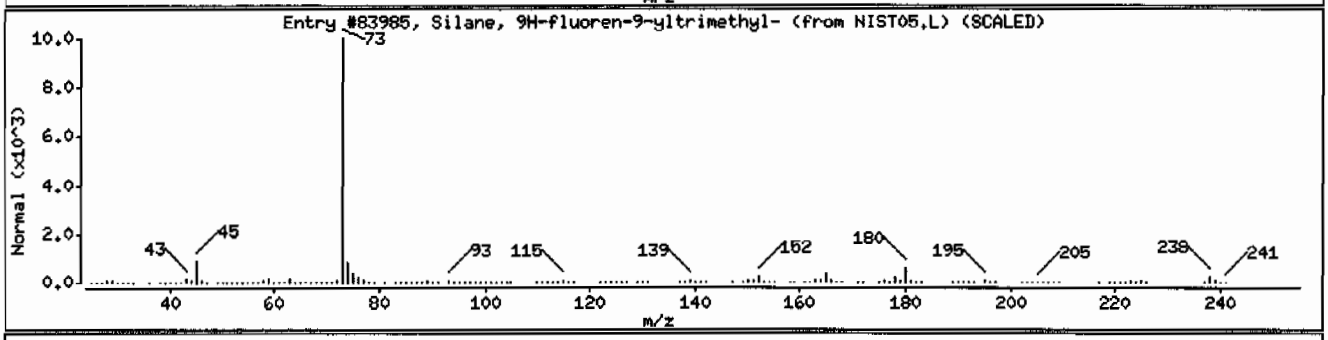

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984324**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 13:16**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o108BL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984324**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 13:16**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o108BL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o108BL.d
Lab Smp Id: 1201984324 Client Smp ID: BLANK
Inj Date : 30-NOV-2009 13:16
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201984324|926830|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	564082	64.4818	64.5
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1003294	50.0000	
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1288579	53.2981	53.3
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	809879	50.0000	
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	600332	53.9730	54.0
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	472595	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o108BL.d
Lab Smp Id: 1201984324 Client Smp ID: BLANK
Inj Date : 30-NOV-2009 13:16
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201984324|926830|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/113009v7/7o10SBL.d
Date : 30-NOV-2009 13:16
Client ID: BLANK
Sample Info: ||20|984324|926830||1|VOAF|1|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

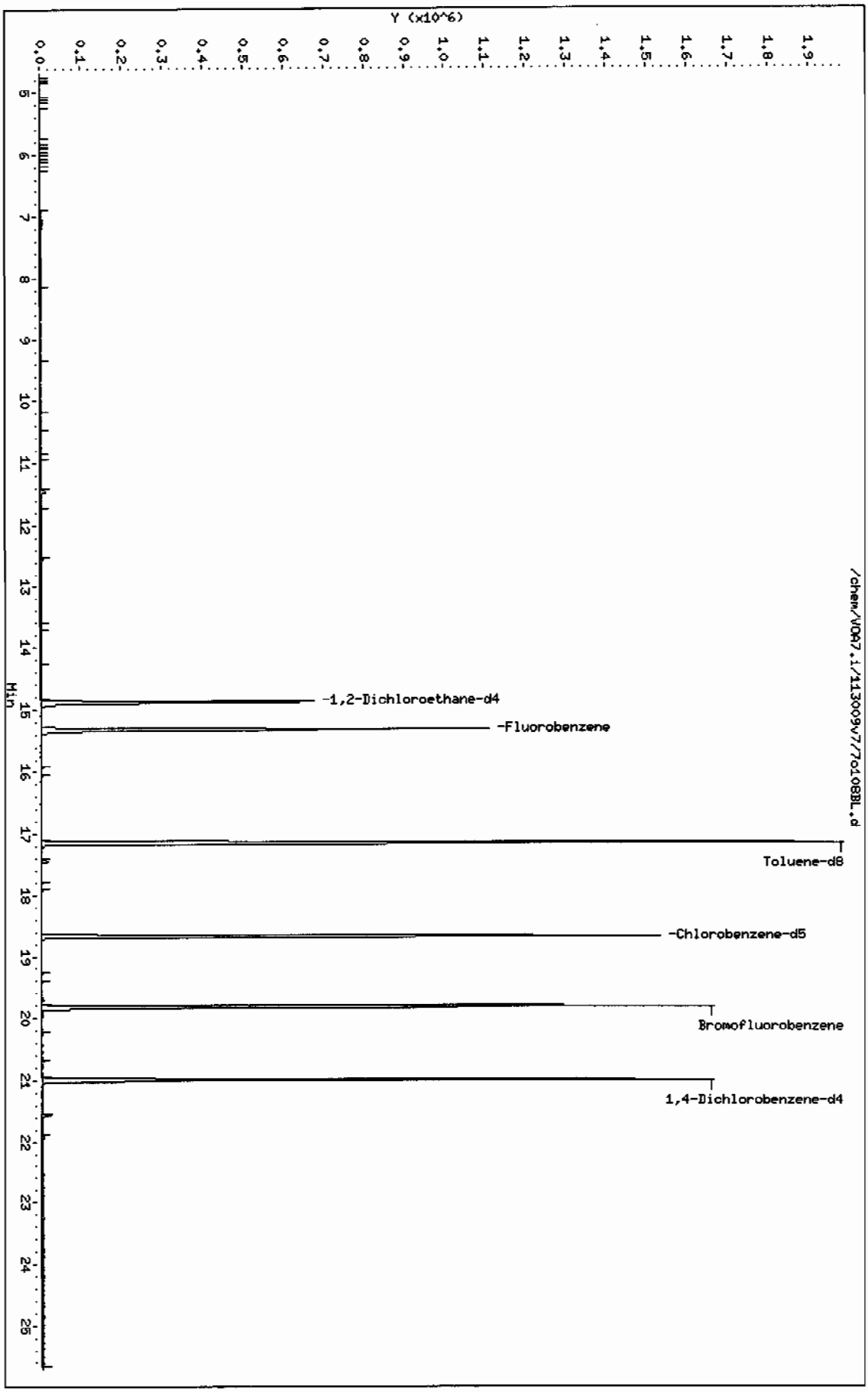

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603			**Matrix:**	SOIL
Lab Sample ID:	1201981620				
Client Sample:	QC for batch 926827	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926827	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 09:45	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 08:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n303LL.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		52.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.6	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		48.6	ug/kg	0.300	1.00
74-83-9	Bromomethane		50.1	ug/kg	0.300	1.00
75-00-3	Chloroethane		46.7	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		61.9	ug/kg	0.300	1.00
67-64-1	Acetone		208	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		55.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		251	ug/kg	1.60	5.00
75-09-2	Methylene chloride		47.4	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		264	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		49.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		49.1	ug/kg	0.300	1.00
78-93-3	2-Butanone		186	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.9	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		51.2	ug/kg	0.300	1.00
67-66-3	Chloroform		50.1	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		45.4	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		57.2	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		52.5	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		57.9	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		48.3	ug/kg	0.300	1.00
71-43-2	Benzene		46.8	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		51.6	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		42.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		48.7	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		207	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		45.8	ug/kg	0.300	1.00
108-88-3	Toluene		44.4	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		43.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		159	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		41.6	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		56.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		47.7	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		44.8	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981620**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 09:45**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n303LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		44.7	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		89.4	ug/kg	0.300	2.00
95-47-6	o-Xylene		43.7	ug/kg	0.300	1.00
100-42-5	Styrene		41.5	ug/kg	0.300	1.00
75-25-2	Bromoform		54.8	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		43.9	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		42.7	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		43.4	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		41.5	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		43.9	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		42.3	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		43.5	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		44.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		42.6	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		45.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		43.1	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		43.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		44.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		46.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		43.5	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n303LL.d
Lab Smp Id: 1201981620 Client Smp ID: LCS
Inj Date : 25-NOV-2009 09:45
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981620|926830|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 1,3-Dichloropropylene	75				1070835	94.2548	94.2
M 2 Xylenes (total)	106				1607958	133.076	133
M 3 1,2-Dichloroethylene (total)	96				1081194	96.1759	96.2
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	245805	52.7048	52.7
5 Chloromethane	50	5.757	5.757	(0.376)	526168	45.6080	45.6
6 Vinyl chloride	62	6.188	6.188	(0.404)	388394	48.5701	48.6
7 Bromomethane	94	7.429	7.429	(0.485)	274640	50.1151	50.1
8 Chloroethane	64	7.845	7.845	(0.512)	279281	46.7134	46.7
9 Trichlorofluoromethane	101	8.799	8.799	(0.574)	498401	61.8647	61.9
10 Ethyl Ether	59	9.703	9.703	(0.633)	365991	43.1554	43.2
13 Acetone	43	10.423	10.423	(0.681)	2003716	207.977	208
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	268287	55.0298	55.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	16 Iodomethane	142	10.667	10.667	(0.696)	2238757	251.412	251
	17 Acetonitrile	41	11.073	11.073	(0.723)	1880321	1158.28	1160
	18 Methyl acetate	43	11.225	11.225	(0.733)	2052632	209.741	210
	19 Carbon disulfide	76	10.840	10.840	(0.708)	4217472	264.272	264
	22 Methylene chloride	86	11.449	11.449	(0.747)	210140	47.4054	47.4
	24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	919517	45.0254	45.0
	25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	511676	49.2681	49.3
	26 Vinyl acetate	43	12.860	12.860	(0.840)	4955700	238.233	238
	28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	636457	49.0792	49.1
	31 2-Butanone	43	13.723	13.723	(0.896)	2043244	185.676	186
	33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	569518	46.9079	46.9
	34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	349932	51.1937	51.2
	37 Bromochloromethane	49	14.088	14.088	(0.920)	479373	45.4099	45.4
	38 Chloroform	83	14.190	14.190	(0.926)	586888	50.0935	50.1
	41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	499104	57.2017	57.2
	43 Cyclohexane	56	14.586	14.586	(0.952)	737570	49.7399	49.7
	44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	414845	52.4889	52.5
	45 Carbon tetrachloride	117	14.728	14.728	(0.962)	399936	57.8907	57.9
$	46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	557286	54.1946	54.2
	47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	592105	48.3055	48.3
	48 Benzene	78	14.982	14.982	(0.978)	1131050	46.8231	46.8
	50 Cyclohexene	67	15.124	15.124	(0.987)	573700	50.2752	50.3
*	51 Fluorobenzene	96	15.317	15.317	(1.000)	1179357	50.0000	
	52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1728720	5138.45	5140
	53 Trichloroethylene	95	15.773	15.773	(1.030)	321878	51.5939	51.6
	55 Methylcyclohexane	83	16.037	16.037	(1.047)	500633	51.9642	52.0
	56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	334981	42.6340	42.6
	58 Dibromomethane	93	16.180	16.180	(1.056)	215730	48.7474	48.7
	59 Bromodichloromethane	83	16.332	16.332	(1.066)	472966	50.9635	51.0
	61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	661289	205.426	205
	62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	537335	45.8337	45.8
	63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1002479	206.557	206
$	64 Toluene-d8	98	17.144	17.144	(0.918)	1304010	46.5321	46.5
	65 Toluene	92	17.215	17.215	(0.922)	740384	44.4192	44.4
	67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	533500	46.0040	46.0
	68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	249113	43.6335	43.6
	69 2-Hexanone	43	17.804	17.804	(0.954)	2504734	159.129	159
	70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	472081	41.6096	41.6
	71 Tetrachloroethylene	164	17.824	17.824	(0.955)	218395	56.5685	56.6
	72 Dibromochloromethane	129	18.068	18.068	(0.968)	331707	49.7317	49.7
	73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	330523	47.6923	47.7
*	75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	938749	50.0000	
	76 Chlorobenzene	112	18.697	18.697	(1.002)	811404	44.8462	44.8
	77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	300051	46.1499	46.1
	78 Ethylbenzene	91	18.768	18.768	(1.005)	1404262	44.7106	44.7
	79 m,p-Xylenes	106	18.870	18.870	(1.011)	1068673	89.4137	89.4
	80 o-Xylene	106	19.286	19.286	(1.033)	539285	43.6626	43.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
81 Styrene	104	19.286	19.286	(1.033)	920354	41.4593	41.4
82 Bromoform	173	19.540	19.540	(0.931)	272126	54.7809	54.8
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1425598	43.9160	43.9
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	630196	47.0731	47.1
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	451494	43.9258	43.9
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	122003	47.1054	47.1
90 Bromobenzene	156	20.017	20.017	(0.954)	390330	42.7282	42.7
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1731257	43.3541	43.4
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1216140	42.2630	42.3
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1200741	41.4619	41.5
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1197207	43.5000	43.5
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1190065	44.4120	44.4
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1308431	42.5828	42.6
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1655232	45.3182	45.3
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1309904	45.1212	45.1
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	706086	43.1351	43.1
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	568823	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	704018	43.6319	43.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1363065	44.4205	44.4
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	708310	43.4702	43.5
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	105178	52.5788	52.6
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	525866	45.0153	45.0
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	301367	48.2107	48.2
110 Naphthalene	128	23.753	23.753	(1.132)	1127576	43.4288	43.4
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	485197	46.7627	46.8

Data File: /chem/VOA7.i/112509v7/7h303LL.d
Date : 25-NOV-2009 09:45
Client ID: LCS
Sample Info: 1120198162019268301 1|VOAF1 1|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

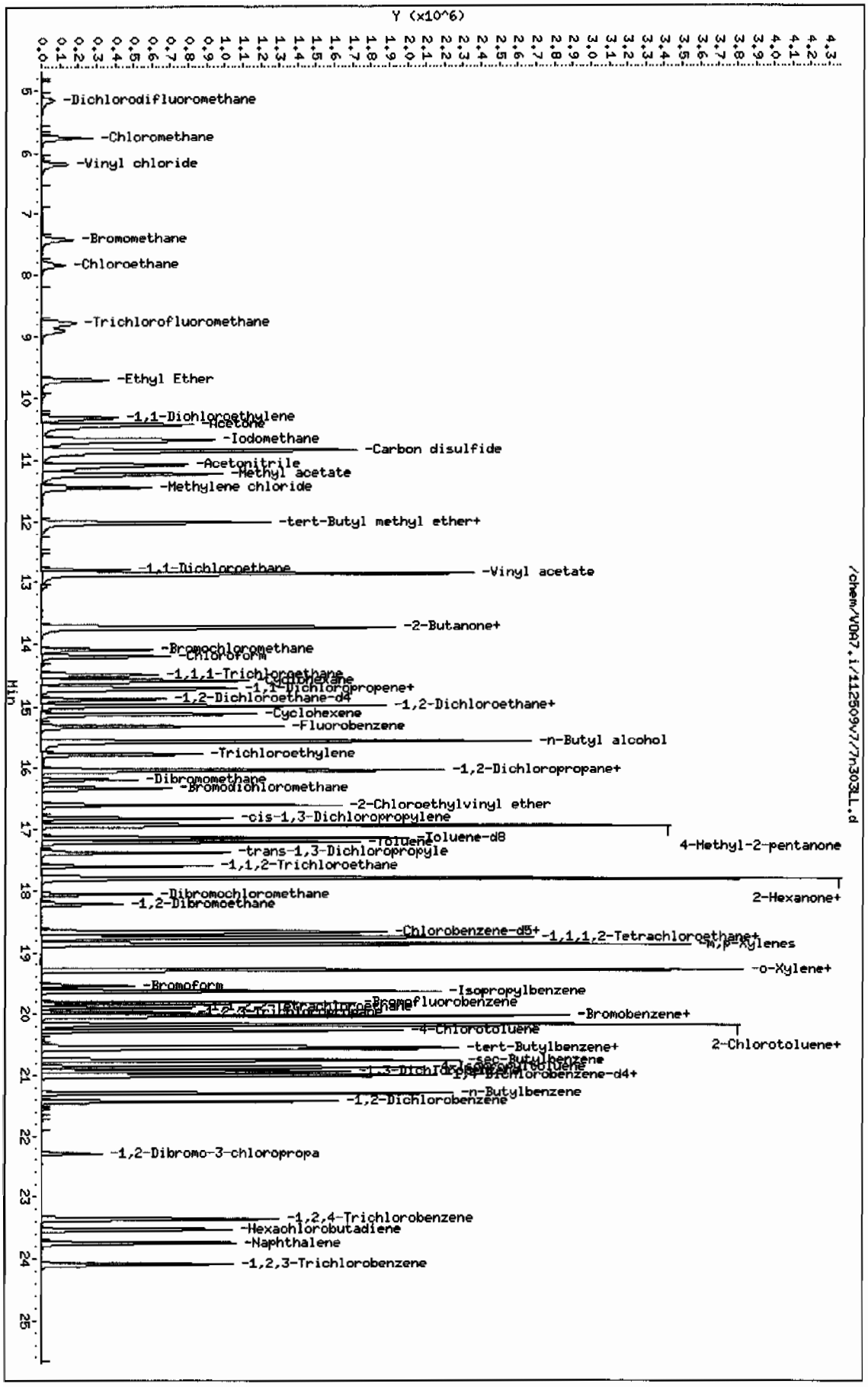

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984325**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 11:00**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o104LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		49.8	ug/kg	0.340	1.00
74-87-3	Chloromethane		44.9	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		47.2	ug/kg	0.300	1.00
74-83-9	Bromomethane		50.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		47.0	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		62.0	ug/kg	0.300	1.00
67-64-1	Acetone		213	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		56.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		261	ug/kg	1.60	5.00
75-09-2	Methylene chloride		51.0	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		272	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		48.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		49.2	ug/kg	0.300	1.00
78-93-3	2-Butanone		192	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.6	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		49.3	ug/kg	0.300	1.00
67-66-3	Chloroform		49.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		46.7	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		55.6	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		52.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		56.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		49.2	ug/kg	0.300	1.00
71-43-2	Benzene		47.5	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		51.9	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		43.7	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.3	ug/kg	0.300	1.00
74-95-3	Dibromomethane		49.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		204	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		46.4	ug/kg	0.300	1.00
108-88-3	Toluene		43.6	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		44.5	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		44.1	ug/kg	0.300	1.00
591-78-6	2-Hexanone		157	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		41.2	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		55.9	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		46.5	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		43.8	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984325**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 11:00**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o104LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		42.9	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		87.0	ug/kg	0.300	2.00
95-47-6	o-Xylene		42.9	ug/kg	0.300	1.00
100-42-5	Styrene		40.7	ug/kg	0.300	1.00
75-25-2	Bromoform		53.4	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		44.3	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.4	ug/kg	0.300	1.00
108-86-1	Bromobenzene		42.6	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		42.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		40.6	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		43.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		40.8	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		42.1	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		43.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		41.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		43.5	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		43.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		42.5	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		42.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		43.1	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		55.0	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		45.3	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		42.7	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o104LL.d
Lab Smp Id: 1201984325 Client Smp ID: LCS
Inj Date : 30-NOV-2009 11:00
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201984325|926830|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 1,3-Dichloropropylene	75				1065098	94.4772	94.5
M 2 Xylenes (total)	106				1597936	129.921	130
M 3 1,2-Dichloroethylene (total)	96				1066188	95.5736	95.6
4 Dichlorodifluoromethane	85	5.148	5.147	(0.336)	230550	49.7990	49.8
5 Chloromethane	50	5.757	5.757	(0.376)	513943	44.8814	44.9
6 Vinyl chloride	62	6.188	6.187	(0.404)	374410	47.1846	47.2
7 Bromomethane	94	7.429	7.429	(0.485)	273145	50.2290	50.2
8 Chloroethane	64	7.845	7.845	(0.512)	279056	47.0380	47.0
9 Trichlorofluoromethane	101	8.789	8.789	(0.574)	495563	61.9897	62.0
10 Ethyl Ether	59	9.703	9.703	(0.633)	368642	43.8052	43.8
13 Acetone	43	10.424	10.423	(0.681)	2031945	212.544	212
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	271050	56.0279	56.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	16 Iodomethane	142	10.677	10.677	(0.697)	2302260	260.550	260
	17 Acetonitrile	41	11.073	11.073	(0.723)	1928124	1196.95	1200
	18 Methyl acetate	43	11.226	11.225	(0.733)	2115122	217.803	218
	19 Carbon disulfide	76	10.840	10.840	(0.708)	4305888	271.905	272
	22 Methylene chloride	86	11.449	11.449	(0.747)	223378	51.0133	51.0
	24 tert-Butyl methyl ether	73	12.028	12.027	(0.785)	925357	45.6629	45.7
	25 trans-1,2-Dichloroethylene	61	12.028	12.027	(0.785)	504333	48.9378	48.9
	26 Vinyl acetate	43	12.860	12.860	(0.840)	4917450	238.229	238
	28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	633201	49.2069	49.2
	31 2-Butanone	43	13.723	13.723	(0.896)	2100151	192.328	192
	33 cis-1,2-Dichloroethylene	61	13.743	13.733	(0.897)	561855	46.6358	46.6
	34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	334335	49.2914	49.3
	37 Bromochloromethane	49	14.088	14.088	(0.920)	489493	46.7283	46.7
	38 Chloroform	83	14.190	14.190	(0.926)	580428	49.9265	49.9
	41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	481415	55.6025	55.6
	43 Cyclohexane	56	14.586	14.586	(0.952)	719858	48.9221	48.9
	44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	411170	52.4276	52.4
	45 Carbon tetrachloride	117	14.728	14.728	(0.962)	387753	56.5627	56.6
$	46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	536260	52.5545	52.6
	47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	597850	49.1527	49.2
	48 Benzene	78	14.992	14.992	(0.979)	1138487	47.4967	47.5
	50 Cyclohexene	67	15.124	15.124	(0.987)	565505	49.9416	49.9
*	51 Fluorobenzene	96	15.317	15.317	(1.000)	1170277	50.0000	
	52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1800166	5392.33	5390
	53 Trichloroethylene	95	15.774	15.773	(1.030)	321328	51.9054	51.9
	55 Methylcyclohexane	83	16.038	16.037	(1.047)	486383	50.8768	50.9
	56 1,2-Dichloropropane	63	16.038	16.037	(1.047)	340343	43.6525	43.6
	58 Dibromomethane	93	16.180	16.190	(1.056)	218006	49.6439	49.6
	59 Bromodichloromethane	83	16.332	16.332	(1.066)	472459	51.3039	51.3
	61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	668782	209.366	209
	62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	540184	46.4342	46.4
	63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1009827	204.425	204
$	64 Toluene-d8	98	17.144	17.144	(0.918)	1275143	44.7046	44.7
	65 Toluene	92	17.215	17.215	(0.922)	739607	43.5950	43.6
	67 trans-1,3-Dichloropropylene	75	17.398	17.387	(0.932)	524914	44.4704	44.5
	68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	256094	44.0702	44.1
	69 2-Hexanone	43	17.804	17.804	(0.954)	2516401	157.068	157
	70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	475309	41.1599	41.2
	71 Tetrachloroethylene	164	17.824	17.824	(0.955)	219822	55.9216	55.9
	72 Dibromochloromethane	129	18.068	18.068	(0.968)	335650	49.4410	49.4
	73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	327983	46.4965	46.5
*	75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	955493	50.0000	
	76 Chlorobenzene	112	18.697	18.697	(1.002)	807039	43.8232	43.8
	77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	299916	45.3207	45.3
	78 Ethylbenzene	91	18.768	18.768	(1.005)	1369889	42.8519	42.8
	79 m,p-Xylenes	106	18.870	18.870	(1.011)	1058865	87.0406	87.0
	80 o-Xylene	106	19.286	19.286	(1.033)	539071	42.8804	42.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
81 Styrene	104	19.286	19.286	(1.033)	920132	40.7230	40.7
82 Bromoform	173	19.540	19.540	(0.931)	268621	53.4149	53.4
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1414481	43.0414	43.0
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	624950	46.1111	46.1
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	461110	44.3135	44.3
89 1,2,3-Trichloropropane	110	19.966	19.976	(0.951)	124359	47.4286	47.4
90 Bromobenzene	156	20.017	20.017	(0.954)	393972	42.6002	42.6
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1700921	42.0742	42.1
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1187816	40.7746	40.8
93 2-Chlorotoluene	91	20.169	20.179	(0.961)	1191383	40.6363	40.6
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1173576	42.1206	42.1
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1176213	43.3589	43.4
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1287434	41.3877	41.4
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1607421	43.4717	43.5
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1265972	43.0753	43.1
100 1,3-Dichlorobenzene	146	20.931	20.930	(0.997)	704775	42.5292	42.5
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	575856	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	695266	42.5633	42.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1339447	43.1178	43.1
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	705167	42.7487	42.7
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	111401	55.0096	55.0
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	523434	44.2599	44.2
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	292119	46.1605	46.2
110 Naphthalene	128	23.753	23.753	(1.132)	1129523	42.9725	43.0
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	479889	45.6862	45.7

Data File: /chem/VOA7.i/113009v7/7o104LL.d
Date : 30-NOV-2009 11:00
Client ID: LCS
Sample Info: 1120198432519268301|VOAF|1|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

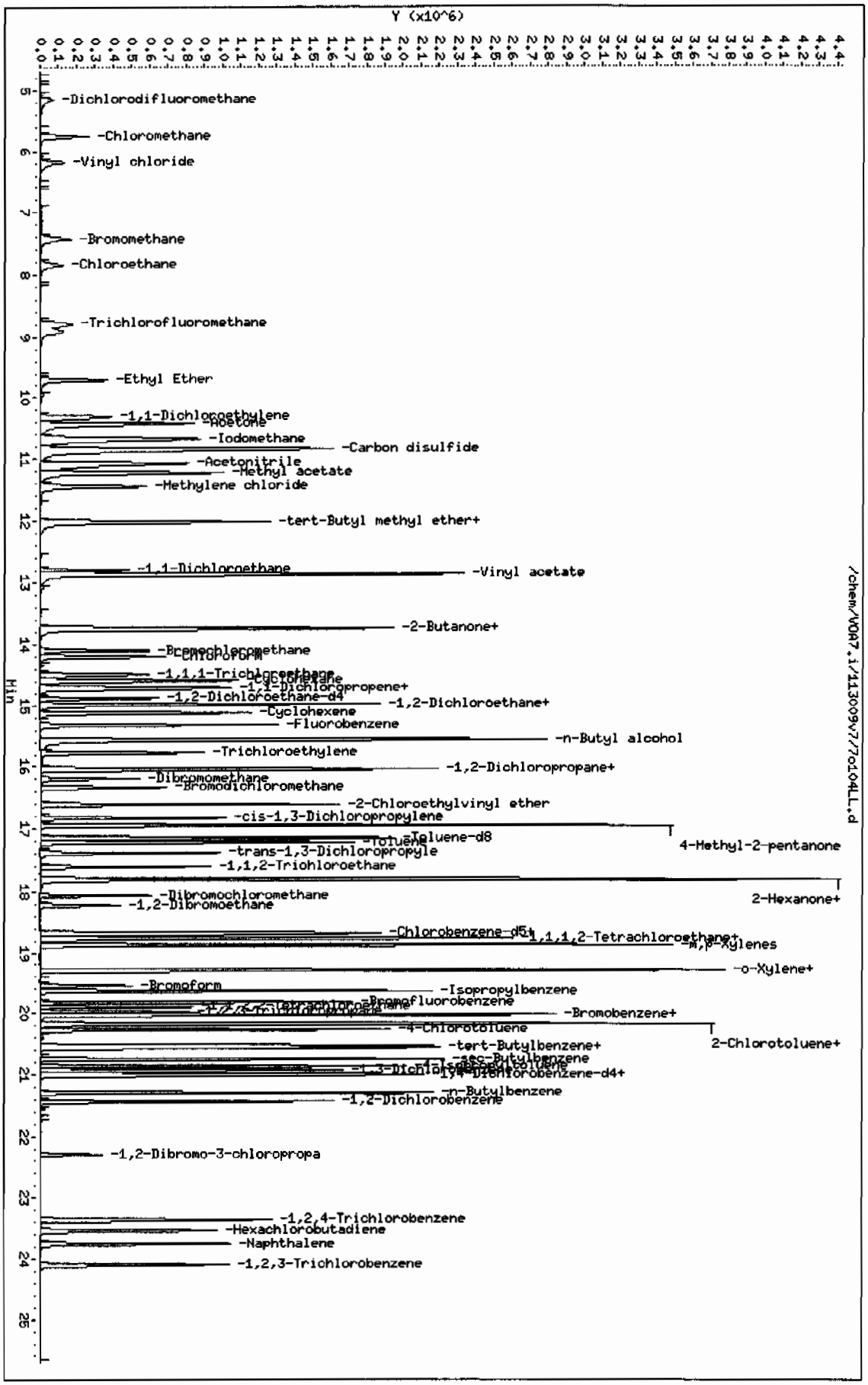

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603			**Matrix:**	SOIL
Lab Sample ID:	1201981621				
Client Sample:	QC for batch 926827	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926827	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 10:53	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 08:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n305LL.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603			**Matrix:**	SOIL
Lab Sample ID:	1201981621				
Client Sample:	QC for batch 926827	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926827	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 10:53	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 08:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n305LL.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		304	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n305LL.d
Lab Smp Id: 1201981621 Client Smp ID: SLCS
Inj Date : 25-NOV-2009 10:53
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981621|926830|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091118-08A/UVM091105-02C
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
147 Chlorotrifluoroethylene	116	5.029	5.043	(0.328)	495941	161.948	162
148 2-Chloro-1,1,1-trifluoroethane	118	6.603	6.603	(0.431)	1058202	159.286	159
11 Acrolein	56	10.027	10.027	(0.655)	495634	254.566	254
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	664872	303.799	304
15 Isopropyl Alcohol	45	10.779	10.789	(0.704)	2338267	2713.31	2710
20 Allyl chloride	41	11.185	11.185	(0.730)	3298440	220.955	221
21 tert-Butyl Alcohol	59	11.672	11.672	(0.762)	2995588	2499.02	2500
23 Acrylonitrile	53	11.936	11.936	(0.779)	925509	237.204	237
27 Isopropyl ether	45	12.911	12.911	(0.843)	1730244	43.5849	43.6
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	715614	55.8464	55.8
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1164661	43.2051	43.2
32 Ethyl acetate	43	13.804	13.804	(0.901)	2379222	205.170	205

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
35 Propionitrile	54	13.804	13.804	(0.901)	359341	228.749	229
36 Methacrylonitrile	41	14.047	14.048	(0.917)	1514159	214.312	214
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	847558	196.782	197
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	1034200	2485.94	2480
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	545983	53.3020	53.3
49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	807057	43.1878	43.2
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1174785	50.0000	
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1062611	215.809	216
57 1,4-Dioxane	88	16.159	16.159	(1.055)	201542	2710.29	2710
60 2-Nitropropane	43	16.555	16.555	(1.081)	794924	260.393	260
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1301570	46.6402	46.6
66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1919782	193.102	193
74 1-Chlorohexane	55	18.575	18.575	(1.213)	457840	48.4524	48.4
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	934821	50.0000	
84 cis-1,4-Dichloro-2-butene	53	19.661	19.661	(0.937)	1068124	234.152	234
85 Cyclohexanone	55	19.773	19.773	(1.059)	1026305	590.638	591
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	616229	44.9540	45.0
88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	997866	239.441	239
97 Pentachloroethane	167	20.606	20.606	(0.982)	790992	261.102	261
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	582436	50.0000	
103 Benzyl chloride	91	21.123	21.123	(1.006)	3447384	222.043	222
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1738018	202.174	202

Data File: /chem/VOA7.i/112509v7/7n305LL.d
Date : 25-NOV-2009 10:53
Client ID: SLCS
Sample Info: |120198162|926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

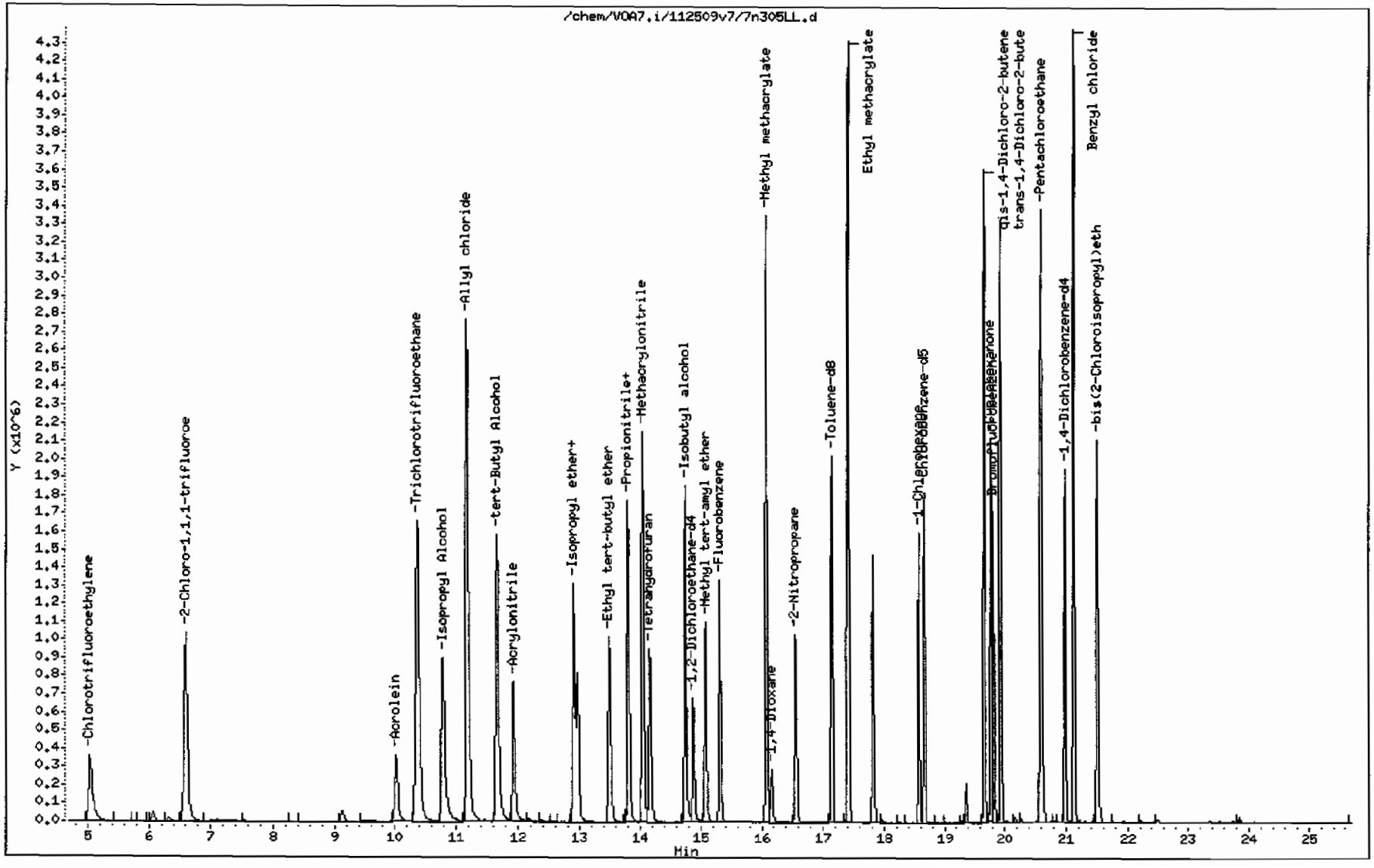

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984326**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.1**	**Dilution:**	**1**
Run Date:	**11/30/2009 12:09**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o106LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984326**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 12:09**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7o106LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		262	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/113009v7/7o106LL.d
Lab Smp Id: 1201984326 Client Smp ID: SLCS
Inj Date : 30-NOV-2009 12:09
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201984326|926830|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091118-08A/UVM091105-02C
Comment :
Method : /chem/VOA7.i/113009v7/VOA7-8260B-111509.m
Meth Date : 01-Dec-2009 09:20 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
147 Chlorotrifluoroethylene	116	5.029	5.029	(0.328)	395465	127.410	127
148 2-Chloro-1,1,1-trifluoroethane	118	6.604	6.604	(0.431)	988220	146.762	147
11 Acrolein	56	10.027	10.017	(0.655)	436113	220.998	221
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	581767	262.269	262
15 Isopropyl Alcohol	45	10.779	10.789	(0.704)	2344080	2683.66	2680
20 Allyl chloride	41	11.185	11.185	(0.730)	2999103	198.215	198
21 tert-Butyl Alcohol	59	11.662	11.672	(0.761)	2969692	2444.27	2440
23 Acrylonitrile	53	11.926	11.936	(0.779)	884337	223.619	224
27 Isopropyl ether	45	12.900	12.911	(0.842)	1652334	41.0655	41.1
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	624751	48.1031	48.1
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1101234	40.3055	40.3
32 Ethyl acetate	43	13.804	13.804	(0.901)	2249309	191.371	191

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
35 Propionitrile	54	13.804	13.804	(0.901)	337423	211.922	212
36 Methacrylonitrile	41	14.048	14.048	(0.917)	1421009	198.437	198
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	800370	184.360	184
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	971978	2305.12	2300
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	527143	50.7742	50.8
49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	780687	41.2177	41.2
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1190717	50.0000	
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1005490	201.476	201
57 1,4-Dioxane	88	16.159	16.159	(1.055)	186269	2471.39	2470
60 2-Nitropropane	43	16.555	16.555	(1.081)	753910	243.653	244
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1291613	45.0905	45.1
66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1812707	177.632	178
74 1-Chlorohexane	55	18.575	18.575	(1.213)	425639	44.4419	44.4
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	959552	50.0000	
84 cis-1,4-Dichloro-2-butene	53	19.662	19.662	(0.937)	994384	216.267	216
85 Cyclohexanone	55	19.773	19.773	(1.059)	959458	544.538	544
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	635076	45.9633	46.0
88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	925074	220.223	220
97 Pentachloroethane	167	20.606	20.606	(0.982)	697053	228.278	228
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	587068	50.0000	
103 Benzyl chloride	91	21.123	21.124	(1.006)	3153834	201.533	202
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1651071	190.545	190

Data File: /chem/VOA7.i/113009v7/7o106LL.d
Date : 30-NOV-2009 12:09
Client ID: SLCS
Sample Info: 1120198432619268301|1|VOAF|1|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

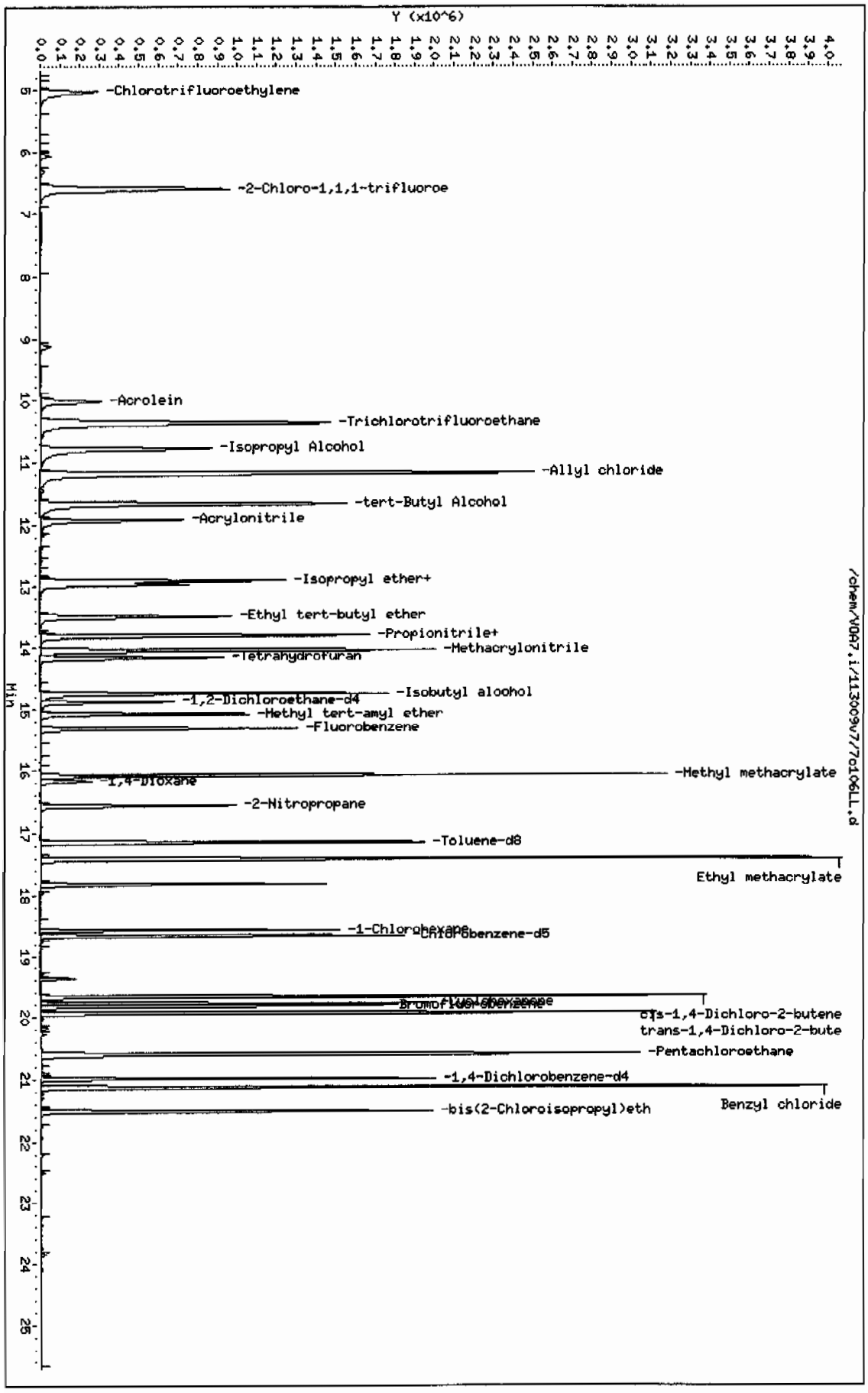

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926827** Verified by: _____

Analyst: Alex Olson
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201981617 MB	25-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201981620 LCS	25-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201981621 LCS	25-NOV-2009 08:00:00	Soil	5	5	1	N/A
241534007	25-NOV-2009 12:35:00	Soil	5	5	1	N/A
241534001	25-NOV-2009 12:38:00	Soil	5	5	1	N/A
1201981618 PS (241534001)	25-NOV-2009 12:40:00	Soil	5	5	1	N/A
1201981619 PSD (241534001)	25-NOV-2009 12:41:00	Soil	5	5	1	N/A
241534002	25-NOV-2009 12:42:00	Soil	5	5	1	N/A
241534003	25-NOV-2009 12:44:00	Soil	5	5	1	N/A
241534004	25-NOV-2009 12:46:00	Soil	5	5	1	N/A
241534005	25-NOV-2009 12:48:00	Soil	5	5	1	N/A
241534006	25-NOV-2009 12:50:00	Soil	5	5	1	N/A
241534008	25-NOV-2009 12:52:00	Soil	5	5	1	N/A
241539003	25-NOV-2009 12:58:00	Soil	5	5	1	N/A
241539004	25-NOV-2009 13:00:00	Soil	5	5	1	N/A
1201984324 MB	30-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201984325 LCS	30-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201984326 LCS	30-NOV-2009 08:00:00	Soil	5	5	1	N/A
241539001	30-NOV-2009 13:20:00	Soil	5	5	1	N/A
241539002	30-NOV-2009 13:21:00	Soil	5	5	1	N/A

Reagent/Solvent Lot ID	Description	Amount

Comments:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-DEC-09	Federal		Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
926830	241539002		

Potentially affected work order(s)(SDG): 241534(10-601),241539(10-603)

Application Issues:

Other

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Sample 241539002 did not have acceptable internal standard responses.	1. Sample re-analyis confirmed the results.

Originator's Name:

Alex Olson 02-DEC-09

Data Validator/Group Leader:

Erin Haubert 12-DEC-09

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n309.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 25-NOV-2009 13:23
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534001|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.83110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1242172	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	981070	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	569506	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	549430	50.7287	61.7
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1346481	45.9750	56.0
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	625403	46.6591	56.8
13 Acetone	43	10.484	10.423	(0.684)	18885	1.86106	2.3(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 7n309.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534001 SampleType: SAMPLE
Injection Date: 25-NOV-2009 13:23
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241534001|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
13 Acetone			CAS#: 67-64-1			
43	18885	10.48	10.42	80-120	100	(T)
58	3057	10.48	10.42	0- 56	16	(T)
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	16787	17.13	16.94	80-120	100	(T)
43	10386	17.13	16.94	247-307	62	(QT)
100	943332	17.14	16.94	0- 56	5619	(QT)
82 Bromoform			CAS#: 75-25-2			
173	3862	19.82	19.54	80-120	100	(T)
175	35292	19.81	19.54	18- 78	914	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n309.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 25-NOV-2009 13:23
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534001|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n309.d
Date : 25-NOV-2009 13:23
Client ID: RE03-09-13975
Sample Info: |241534001|926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

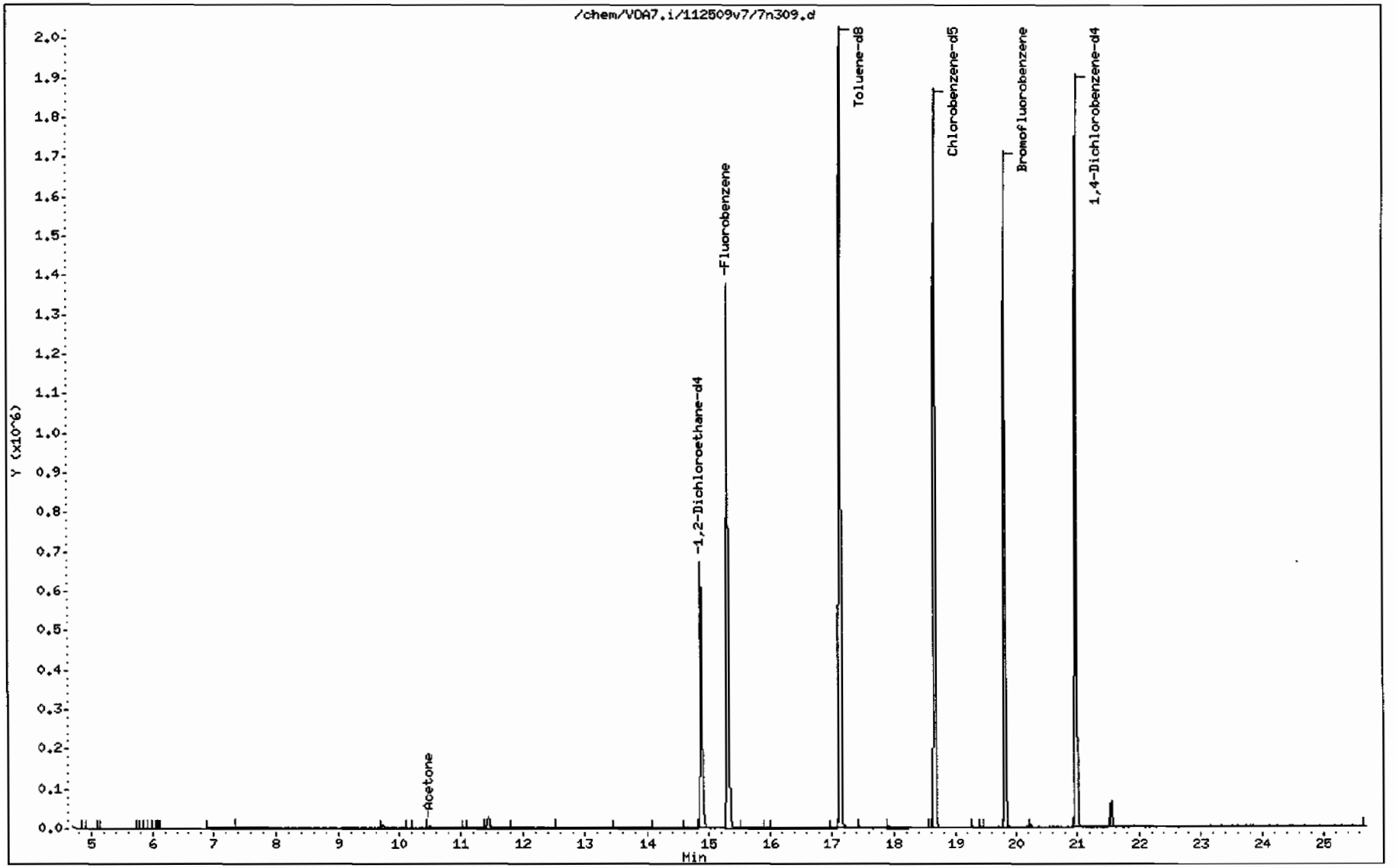

Data File: /chem/VOA7.i/112509v7/7n309.d

Date : 25-NOV-2009 13:23

Client ID: RE03-09-13975

Instrument: VOA7.i

Sample Info: |241534001|926830|1|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 2.3 ug/Kg

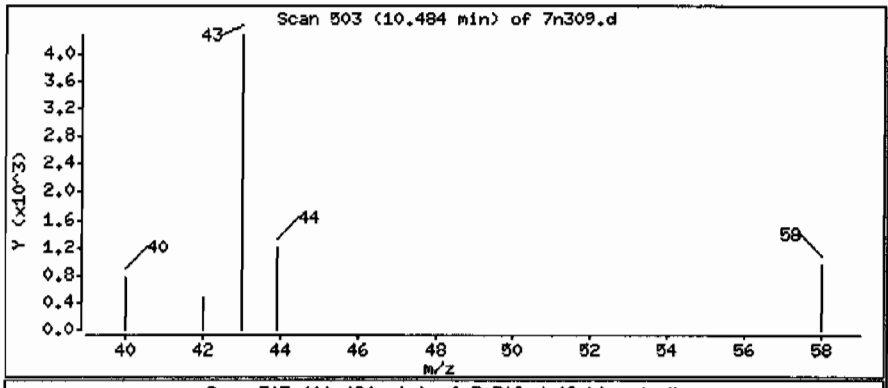

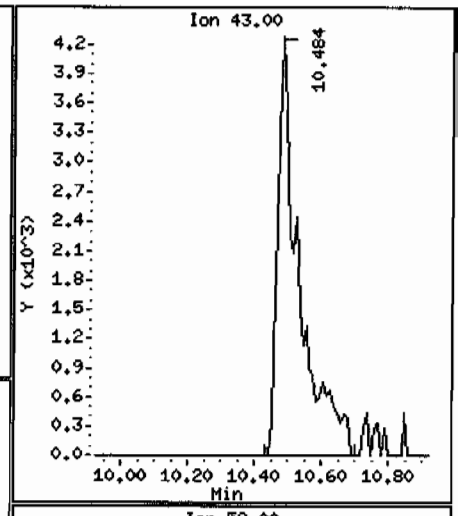

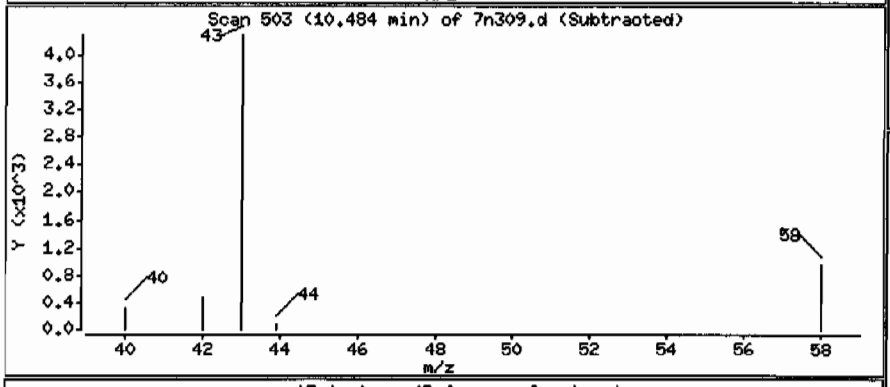

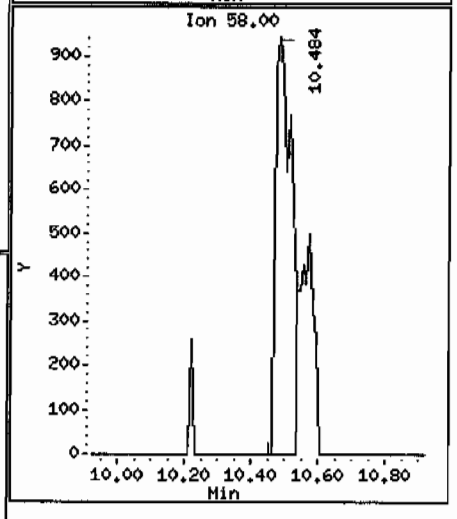

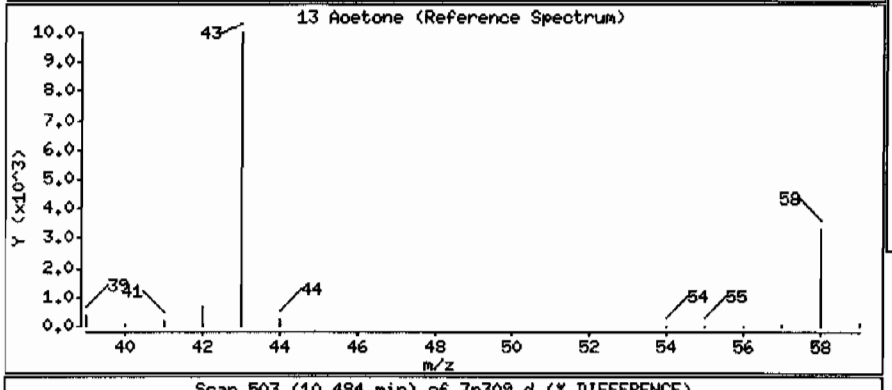

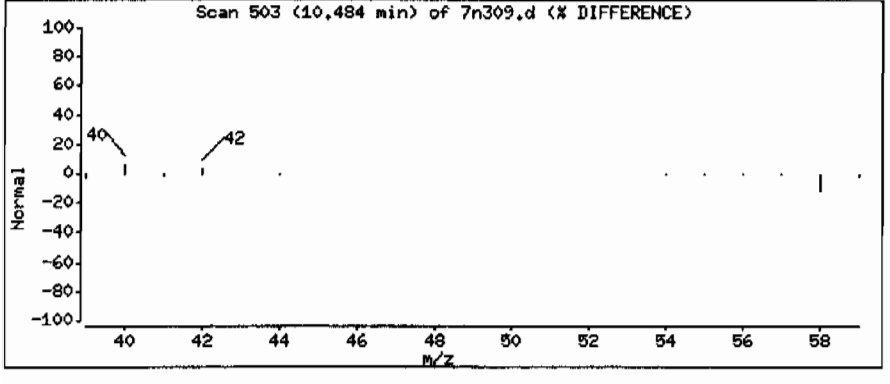

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n320.d
Lab Smp Id: 1201981618 Client Smp ID: RE03-09-13975MS
Inj Date : 25-NOV-2009 19:38
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981618|926830|1|VOAF|1|
Misc Info : LANL 5g N/A MS 241534001
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.83110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1154055	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	907062	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	516976	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	495059	49.1987	59.9
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1244549	45.9617	55.9
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	576298	47.3643	57.6
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	202210	44.2542	53.8
5 Chloromethane	50	5.757	5.757	(0.376)	447050	39.4931	48.1
6 Vinyl chloride	62	6.187	6.188	(0.404)	311221	39.7726	48.4
7 Bromomethane	94	7.428	7.429	(0.485)	248890	46.4121	56.5
8 Chloroethane	64	7.845	7.845	(0.512)	252510	43.1616	52.5
9 Trichlorofluoromethane	101	8.789	8.799	(0.574)	422097	53.5421	65.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Acetone	43	10.423	10.423	(0.681)	1116988	118.481	144
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	239353	50.1713	61.0
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	590527	40.2687	49.0
16 Iodomethane	142	10.677	10.667	(0.697)	2028396	232.783	283
22 Methylene chloride	86	11.449	11.449	(0.747)	203477	46.8748	57.0
19 Carbon disulfide	76	10.839	10.840	(0.708)	3781509	242.149	295
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	437346	43.0343	52.4
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	561507	44.2489	53.8
31 2-Butanone	43	13.723	13.723	(0.896)	1279481	118.820	145
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	497950	41.9124	51.0
100 1,3-Dichlorobenzene	146	20.930	20.931	(0.997)	601371	40.4224	49.2
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	274778	41.0803	50.0
38 Chloroform	83	14.190	14.190	(0.926)	519984	45.3560	55.2
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	609773	41.1759	50.1
37 Bromochloromethane	49	14.088	14.088	(0.920)	426012	41.2399	50.2
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	428155	50.1462	61.0
44 1,1-Dichloropropene	75	14.707	14.697	(0.960)	351720	45.4776	55.3
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	338438	50.0629	60.9
47 1,2-Dichloroethane	62	14.981	14.982	(0.978)	500850	41.7566	50.8
48 Benzene	78	14.981	14.982	(0.978)	1020082	43.1551	52.5
53 Trichloroethylene	95	15.773	15.773	(1.030)	276665	45.3190	55.2
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	299463	38.9491	47.4
59 Bromodichloromethane	83	16.332	16.332	(1.066)	414168	45.6063	55.5
58 Dibromomethane	93	16.179	16.180	(1.056)	189972	43.8681	53.4
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	761905	162.472	198
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	456461	39.7889	48.4
65 Toluene	92	17.215	17.215	(0.922)	652728	40.5283	49.3
67 trans-1,3-Dichloropropylene	75	17.387	17.388	(0.931)	432710	38.6163	47.0
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	217074	39.3499	47.9
69 2-Hexanone	43	17.804	17.804	(0.954)	1587069	104.351	127
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	420520	38.3598	46.7
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	192216	51.3766	62.5
72 Dibromochloromethane	129	18.068	18.068	(0.968)	287830	44.6608	54.4
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	281255	42.0010	51.1
76 Chlorobenzene	112	18.697	18.697	(1.002)	715119	40.9052	49.8
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	265284	42.2278	51.4
78 Ethylbenzene	91	18.768	18.768	(1.005)	1204079	39.6762	48.3
79 m,p-Xylenes	106	18.870	18.870	(1.011)	906373	78.4836	95.5
80 o-Xylene	106	19.286	19.286	(1.033)	475808	39.8690	48.5
81 Styrene	104	19.286	19.286	(1.033)	782274	36.4703	44.4
82 Bromoform	173	19.540	19.540	(0.931)	220344	48.8053	59.4
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	385136	41.2277	50.2
89 1,2,3-Trichloropropane	110	19.976	19.966	(0.952)	99751	42.3764	51.6
90 Bromobenzene	156	20.017	20.017	(0.954)	342626	41.2677	50.2
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1467877	40.4450	49.2
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1027125	39.0238	47.5
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1224538	41.5054	50.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1034113	39.5414	48.1
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1004314	40.1510	48.9
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1029051	42.2545	51.4
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1114047	39.8927	48.5
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1385419	41.7351	50.8
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1075541	40.7638	49.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1124878	40.3348	49.1
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	82298	45.2670	55.1

Data File: /chem/VOA7.i/112509v7/7n320.d
Date : 25-NOV-2009 19:38
Client ID: REQ3-09-13978MS
Sample Info: 1120196161819268301|1|VOAF|1|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

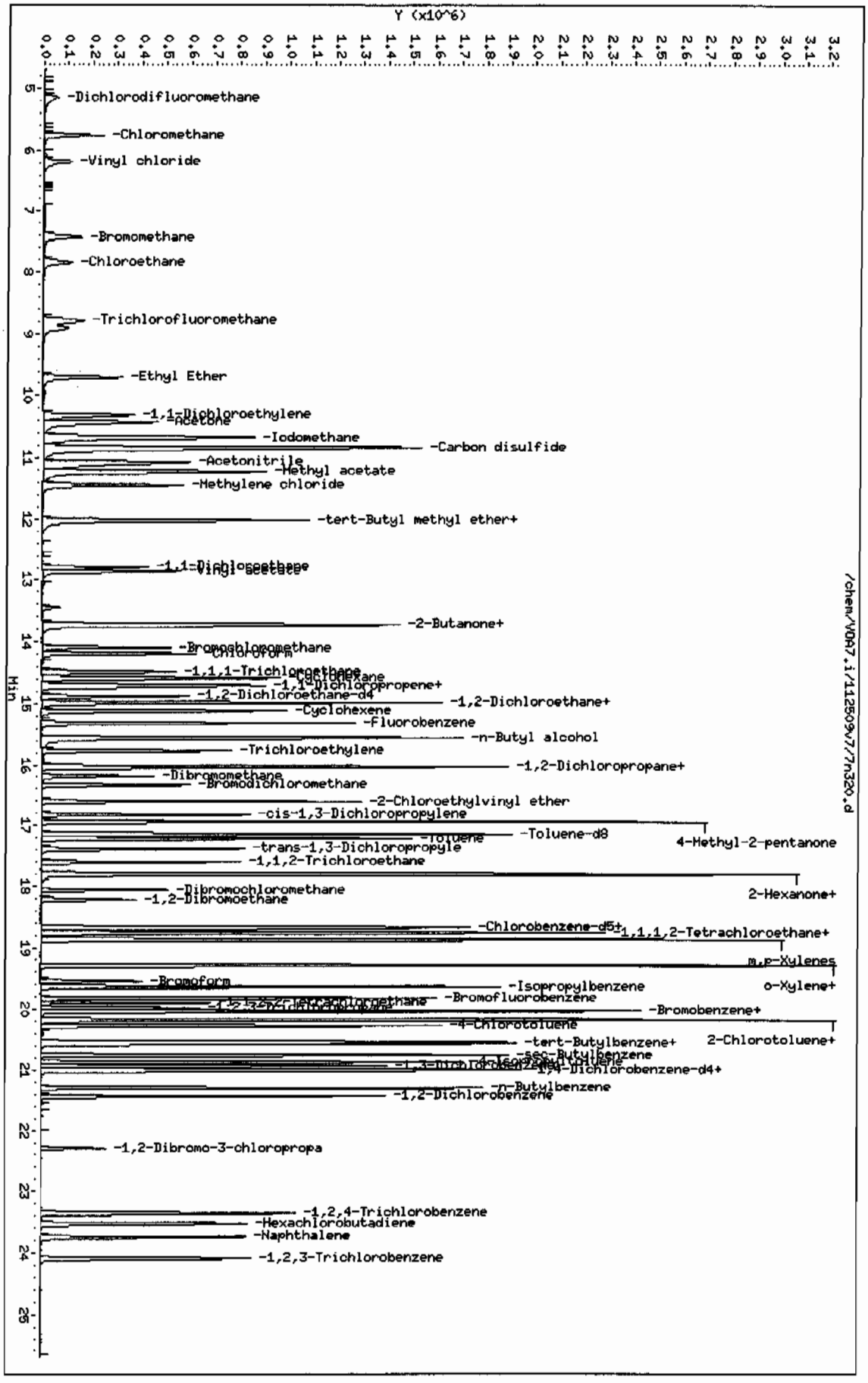

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n321.d
Lab Smp Id: 1201981619 Client Smp ID: RE03-09-13975MSD
Inj Date : 25-NOV-2009 20:12
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981619|926830|1|VOAF|1|
Misc Info : LANL 5g N/A MSD 241534001
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.83110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1150589	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	900930	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	521339	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	493356	49.1771	59.8
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1251253	46.5238	56.6
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	576669	46.9981	57.2
4 Dichlorodifluoromethane	85	5.148	5.147	(0.336)	196498	43.1251	52.5
5 Chloromethane	50	5.757	5.757	(0.376)	453136	40.1649	48.9
6 Vinyl chloride	62	6.188	6.188	(0.404)	316805	40.6082	49.4
7 Bromomethane	94	7.429	7.429	(0.485)	240930	45.0631	54.8
8 Chloroethane	64	7.845	7.845	(0.512)	249054	42.6991	52.0
9 Trichlorofluoromethane	101	8.789	8.799	(0.574)	433292	55.1277	67.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Acetone	43	10.423	10.423	(0.681)	1058969	112.665	137
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	236308	49.6823	60.5
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	589521	39.8636	48.5
16 Iodomethane	142	10.667	10.667	(0.696)	2041271	234.966	286
22 Methylene chloride	86	11.449	11.449	(0.747)	201197	46.4625	56.5
19 Carbon disulfide	76	10.840	10.840	(0.708)	3745730	240.580	293
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	454833	44.8898	54.6
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	585954	46.3145	56.4
31 2-Butanone	43	13.723	13.723	(0.896)	1211532	112.848	137
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	513042	43.3128	52.7
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	613426	40.8876	49.8
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	285026	42.7407	52.0
38 Chloroform	83	14.190	14.190	(0.926)	539688	47.2165	57.5
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	600604	40.2173	48.9
37 Bromochloromethane	49	14.088	14.088	(0.920)	437849	42.5135	51.7
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	442256	51.9537	63.2
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	359203	46.5851	56.7
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	350714	52.0351	63.3
47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	511044	42.7348	52.0
48 Benzene	78	14.982	14.982	(0.978)	1037525	44.0253	53.6
53 Trichloroethylene	95	15.773	15.773	(1.030)	278744	45.7971	55.7
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	308306	40.2201	48.9
59 Bromodichloromethane	83	16.332	16.332	(1.066)	425647	47.0115	57.2
58 Dibromomethane	93	16.180	16.180	(1.056)	190515	44.1260	53.7
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	736172	158.053	192
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	463656	40.5378	49.3
65 Toluene	92	17.215	17.215	(0.922)	668081	41.7639	50.8
67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	446465	40.1150	48.8
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	226724	41.3790	50.4
69 2-Hexanone	43	17.804	17.804	(0.954)	1493628	98.8752	120
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	421943	38.7515	47.2
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	194159	52.2778	63.6
72 Dibromochloromethane	129	18.068	18.068	(0.968)	291707	45.5705	55.4
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	276887	41.6301	50.7
76 Chlorobenzene	112	18.697	18.697	(1.002)	729362	42.0039	51.1
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	271100	43.4473	52.9
78 Ethylbenzene	91	18.768	18.768	(1.005)	1237679	41.0610	50.0
79 m,p-Xylenes	106	18.870	18.870	(1.011)	939577	81.9125	99.7
80 o-Xylene	106	19.286	19.286	(1.033)	483250	40.7682	49.6
81 Styrene	104	19.286	19.286	(1.033)	804211	37.7482	45.9
82 Bromoform	173	19.540	19.540	(0.931)	220927	48.5250	59.0
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	376408	39.9562	48.6
89 1,2,3-Trichloropropane	110	19.976	19.966	(0.952)	95873	40.3881	49.2
90 Bromobenzene	156	20.017	20.017	(0.954)	348850	41.6657	50.7
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1493461	40.8055	49.7
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1046347	39.4214	48.0
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1258389	42.2958	51.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1050554	39.8339	48.5
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1013501	40.1792	48.9
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1041528	42.4089	51.6
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1127221	40.0267	48.7
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1412785	42.2033	51.4
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1086479	40.8338	49.7
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1133576	40.3065	49.0
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	79652	43.4450	52.9

Data File: /chem/VOA7.i/112509v7/7n321.d
Date : 25-NOV-2009 20:12
Client ID: RE03-09-13975MSD
Sample Info: |120198161919268301|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

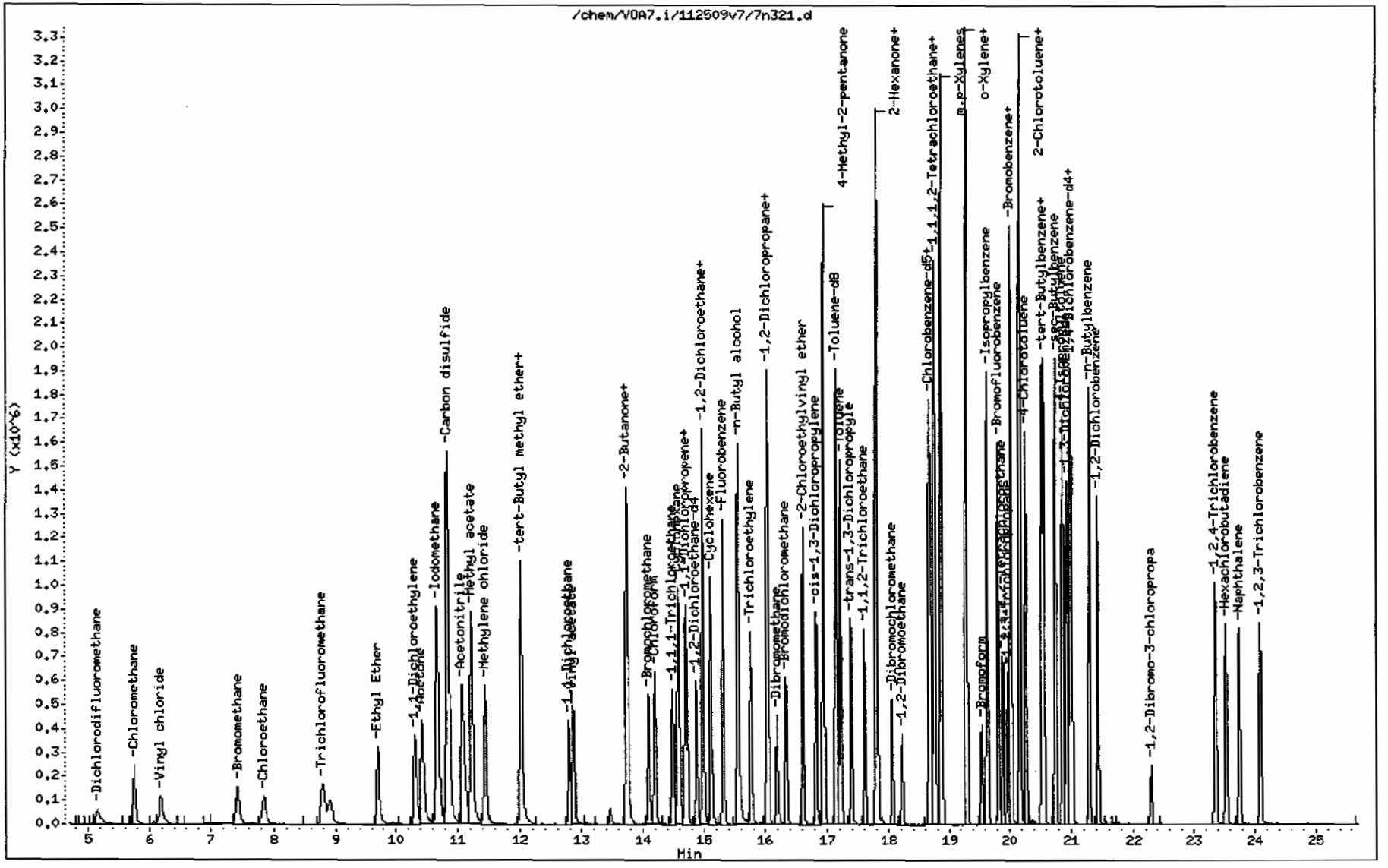

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 11/15/2009 Method 8260B/624 Operator: AXO1

REVIEWED BY: SKC
DATE: 11/17/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1918

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/14/2009

(See pg. 217 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111509V7

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
LONG ICV	W7VM091115-16/17		5+5		
IS	UVM090910-01	1	1	1	
SS	UVM090921-02	1	1	1	
BFB	UVM090921-02				1
SHORT ICV	See 111609v7 Seq		5+5	5+5	

Purge Amount	
5	Water Purge Vol:
N/A	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

AD. 11/17/09

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/15/2009 22:41	7L701.D	12019----	GEL	BLANK	1uL	1	N/A	1	w	AXO1	N/A	X	BFB TEST
11/15/2009 23:14	7L702.D	UVM090921-02	GEL	BFB01	5mL	1	N/A	28	w	AXO1	N/A	O	
11/15/2009 23:47	7L703.D	W7VM0911115-01	GEL	VSTD001	5mL	1	N/A	29	w	AXO1	N/A	X	UVM090911-02B/UVM091012-02D Chloromethane variance see 7L723
11/16/2009 0:20	7L704.D	W7VM0911115-02	GEL	VSTD002	5mL	1	N/A	30	w	AXO1	N/A	O	UVM090911-03B/UVM091012-03D
11/16/2009 0:55	7L705.D	W7VM0911115-03	GEL	VSTD005	5mL	1	N/A	31	w	AXO1	N/A	O	UVM090911-04B/UVM091012-04D
11/16/2009 1:29	7L706.D	W7VM0911115-04	GEL	VSTD010	5mL	1	N/A	32	w	AXO1	N/A	O	UVM090911-05B/UVM091012-05D
11/16/2009 2:03	7L707.D	W7VM0911115-05	GEL	VSTD020	5mL	1	N/A	33	w	AXO1	N/A	O	UVM090911-06B/UVM091012-06D
11/16/2009 2:36	7L708.D	W7VM0911115-06	GEL	VSTD050	5mL	1	N/A	34	w	AXO1	N/A	O	UVM090911-07B/UVM091012-07D
11/16/2009 3:10	7L709.D	W7VM0911115-07	GEL	VSTD100	5mL	1	N/A	35	w	AXO1	N/A	O	UVM090911-08B/UVM091012-08D
11/16/2009 3:43	7L710.D	12019----	GEL	RINSE	5mL	1	N/A	36	w	AXO1	N/A	X	
11/16/2009 4:18	7L711.D	W7VM0911115-08	GEL	VSTD005	5mL	1	N/A	37	w	AXO1	N/A	O	UVM090911-01B/UVM091012-01D
11/16/2009 4:51	7L712.D	W7VM0911115-09	GEL	VSTD005S	5mL	1	N/A	38	w	AXO1	N/A	O	UVM091023-01/UVM091110-01E
11/16/2009 5:25	7L713.D	W7VM0911115-10	GEL	VSTD010S	5mL	1	N/A	39	w	AXO1	N/A	O	UVM091023-02/UVM091110-02E
11/16/2009 5:58	7L714.D	W7VM0911115-11	GEL	VSTD025S	5mL	1	N/A	40	w	AXO1	N/A	O	UVM091023-03/UVM091110-03E
11/16/2009 6:32	7L715.D	W7VM0911115-12	GEL	VSTD050S	5mL	1	N/A	41	w	AXO1	N/A	O	UVM091023-04/UVM091110-04E
11/16/2009 7:05	7L716.D	W7VM0911115-13	GEL	VSTD100S	5mL	1	N/A	42	w	AXO1	N/A	O	UVM091023-05/UVM091110-05E
11/16/2009 7:38	7L717.D	W7VM0911115-14	GEL	VSTD250S	5mL	1	N/A	43	w	AXO1	N/A	O	UVM091023-06/UVM091110-06E
11/16/2009 8:11	7L718.D	W7VM0911115-15	GEL	VSTD500S	5mL	1	N/A	44	w	AXO1	N/A	O	UVM091023-07/UVM091110-07E
11/16/2009 8:45	7L719.D	12019----	GEL	RINSE	5mL	1	N/A	45	w	AXO1	N/A	X	
11/16/2009 9:18	7L720.D	W7VM091115-16	GEL	ICV	5mL	1	N/A	46	w	AXO1	N/A	X	UVM091105-01A/IVM091111-01 See 111609v7 seq
11/16/2009 9:51	7L721.D	W7VM091115-17	GEL	ICV	5mL	1	N/A	47	w	AXO1	N/A	X	UVM091111-01A/IVM091111-01 See 111609v7 seq
11/16/2009 10:24	7L722.D	12019----	GEL	RINSE	5mL	1	N/A	48	w	AXO1	N/A	X	
11/16/2009 10:57	7L723.D	W7VM0911115-18	GEL	VSTD001	5mL	1	N/A	49	w	AXO1	N/A	O	UVM090911-02B/UVM091012-02D

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 11/16/2009 Method 8260B/624 Operator: AXO1

REVIEWED BY: SK
DATE: 11/17/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1918

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/14/2009

(See pg. 217 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 111609V7

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7VM091116-01		5+5		
IS	UVM090910-01	1	1	1	
SS	UVM090921-02	1	1	1	
LCS/MS	W7VM091116-01/02			5+5	
BFB	UVM090921-02				1
SHORT	W7VM091116-03/04		5+5	5+5	
DHEC	N/A				

Purge Amount	
5	Water Purge Vol:
5g	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

A.D. 11/17/09

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/16/2009 13:20	7M101.D	12019----	GEL	BLANK	5mL	1	N/A	1	w	AXO1	N/A	X	
11/16/2009 13:54	7M102.D	W7VM091116-01	GEL	BFB/CCV/ICV/LCS	5mL	1	N/A	2	w	AXO1	N/A	O	UVM091111-01B/IVM091111-01 Dichlorodiflourmethane high
11/16/2009 14:28	7M103.D	W7VM091116-02	GEL	LCS	5g	1	N/A	3	s	AXO1	N/A	O	UVM091111-01B/IVM091111-01
11/16/2009 15:02	7M104.D	W7VM091116-03	GEL	SHORT/ICV/LCS	5mL	1	N/A	4	w	AXO1	N/A	O	UVM091023-08A/UVM091105-02A Cyclohexanone, Pentachloroethane low
11/16/2009 15:35	7M105.D	W7VM091116-04	GEL	SLCS	5g	1	N/A	5	s	AXO1	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:08	7M106.D	12019----	GEL	BLANK	5mL	1	N/A	6	w	AXO1	N/A	O	
11/16/2009 16:41	7M107.D	12019----	GEL	BLANK	5g	1	N/A	7	s	AXO1	N/A	O	
11/16/2009 17:13	7M108.D	240587001	LANL	923260	5g	1	N/A	8	s	AXO1	N/A	O	
11/16/2009 17:46	7M109.D	240587002	LANL	923260	5g	1	N/A	9	s	AXO1	N/A	O	
11/16/2009 18:19	7M110.D	240589001	LANL	923260	5g	1	N/A	10	s	AXO1	N/A	O	
11/16/2009 18:52	7M111.D	240592001	LANL	923260	5g	1	N/A	11	s	AXO1	N/A	O	
11/16/2009 19:25	7M112.D	240579001	LANL	923260	5g	1	N/A	12	s	AXO1	N/A	O	
11/16/2009 19:59	7M113.D	240579002	LANL	923260	5g	1	N/A	13	s	AXO1	N/A	O	
11/16/2009 20:33	7M114.D	240579003	LANL	923260	5g	1	N/A	14	s	AXO1	N/A	O	
11/16/2009 21:07	7M115.D	240587003	LANL	923260	5g	1	N/A	15	s	AXO1	N/A	O	
11/16/2009 21:40	7M116.D	240587004	LANL	923260	5g	1	N/A	16	s	AXO1	N/A	O	
11/16/2009 22:13	7M117.D	240636005	LANL	923260	5g	1	N/A	17	s	AXO1	N/A	O	
11/16/2009 22:46	7M118.D	240504002	KAPL	922073	1mL	5	pH2	18	w	AXO1	N	X	Not Required
11/16/2009 23:18	7M119.D	240504002	KAPL	922073	2.5mL	2	pH2	19	w	AXO1	N	X	Not Required
11/16/2009 23:51	7M120.D	240504002	KAPL	922073	5mL	1	pH2	20	w	AXO1	N	X	Not Required
11/17/2009 0:24	7M121.D	12019----	GEL	BLANK	5mL	1	N/A	21	w	AXO1	N	X	
11/17/2009 0:57	7M122.D	1201973553	LANL	923260	5g	1	N/A	22	s	AXO1	N/A	O	MS 240579001
11/17/2009 1:31	7M123.D	1201973554	LANL	923260	5g	1	N/A	23	s	AXO1	N/A	O	MSD 240579001

GEL L/ ratories, LLC
Revisi .1/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 11/25/2009 Method 8260B/624 Operator: AXO1

REVIEWED BY: DBM
DATE: 12/21/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1918

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/14/2009

(See pg. 217 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 112509v7

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7VM091125-02		5+5		
IS	UVM090910-01	1	1	1	
SS	UVM090921-02	1	1	1	
LCS/MS	W7VM091125-02			5+5	
BFB	UVM090921-02				1
SHORT	W7VM091125-03/04		5+5	5+5	
DHEC	N/A				

Purge Amount

5	Water Purge Vol:
5g	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

AD. 11/30/09

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/25/2009 8:38	7N301.D	12019—	GEL	BLANK	5mL	1	N/A	1	w	AXO1	N/A	X	
11/25/2009 9:11	7N302.D	W7VM091125-01	GEL	CCV	5mL	1	N/A	2	w	AXO1	N/A	X	UVM091111-01D/IVM091122-01
11/25/2009 9:45	7N303.D	W7VM091125-02	GEL	BFB/CCV/LCS	5g	1	N/A	3	s	AXO1	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 10:19	7N304.D	W7VM091125-03	GEL	SHORT/LCS	5mL	1	N/A	4	w	AXO1	N/A	O	UVM091118-08A/UVM091105-02C
11/25/2009 10:53	7N305.D	W7VM091125-04	GEL	SLCS	5g	1	N/A	5	s	AXO1	N/A	O	UVM091118-08A/UVM091105-02C
11/25/2009 11:27	7N306.D	12019—	GEL	BLANK	5mL	1	N/A	6	w	AXO1	N/A	X	
11/25/2009 12:00	7N307.D	12019—	GEL	BLANK	5g	1	N/A	7	s	AXO1	N/A	O	
11/25/2009 12:49	7N308.D	241534007	LANL	926830	5g	1	N/A	8	s	AXO1	N/A	O	
11/25/2009 13:23	7N309.D	241534001	LANL	926830	5g	1	N/A	9	s	AXO1	N/A	O	
11/25/2009 13:56	7N310.D	241534002	LANL	926830	5g	1	N/A	10	s	AXO1	N/A	O	
11/25/2009 14:30	7N311.D	241534003	LANL	926830	5g	1	N/A	11	s	AXO1	N/A	O	
11/25/2009 15:04	7N312.D	241534004	LANL	926830	5g	1	N/A	12	s	AXO1	N/A	O	
11/25/2009 15:39	7N313.D	241534005	LANL	926830	5g	1	N/A	13	s	AXO1	N/A	O	
11/25/2009 16:13	7N314.D	241534006	LANL	926830	5g	1	N/A	14	s	AXO1	N/A	O	
11/25/2009 16:47	7N315.D	241534008	LANL	926830	5g	1	N/A	15	s	AXO1	N/A	O	
11/25/2009 17:21	7N316.D	241539001	LANL	926830	5g	1	N/A	16	s	AXO1	N/A	X	RR IS Failure See file 7O109
11/25/2009 17:55	7N317.D	241539002	LANL	926830	5g	1	N/A	17	s	AXO1	N/A	X	RR IS Failure See file 7O110
11/25/2009 18:29	7N318.D	241539003	LANL	926830	5g	1	N/A	18	s	AXO1	N/A	O	
11/25/2009 19:04	7N319.D	241539004	LANL	926830	5g	1	N/A	19	s	AXO1	N/A	O	
11/25/2009 19:38	7N320.D	1201981618	LANL	926830	5g	1	N/A	20	s	AXO1	N/A	O	MS 241534001
11/25/2009 20:12	7N321.D	1201981619	LANL	926830	5g	1	N/A	21	s	AXO1	N/A	O	MSD 241534001

GEL La' 'atories, LLC
Revisio. .1/22/04

ORGANIC RUN LOG - ''STRUMENT ID#VOA7

Date: 11/30/2009 Method 8260B/624 Operator: AXO1

REVIEWED BY: [illegible]
DATE: 12/2/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1918

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/14/2009

(See pg. 217 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 113009V7

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7VM091130-01		5+5		
IS	UVM090910-01	1	1	1	
SS	UVM090910-02	1	1	1	
LCS/MS	W7VM091130-01/02			5+5	
BFB	UVM090910-02				1
SHORT	W7VM091130-03/04		5+5	5+5	
DHEC	N/A				

Purge Amount

5	Water Purge Vol:
5g	Soil Purge Wt.
Y	Mid level ext. MeOH Vol:
100	ul
CY840	Methanol Lot #
x	Heated Purge

A.D. 12/1/09

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/30/2009	9:20	7O101.D	12019——	GEL	BLANK	5mL	1	N/A	1	w	AXO1	N/A	X	
11/30/2009	9:53	7O102.D	12019——	GEL	BLANK	5mL	1	N/A	2	w	AXO1	N/A	X	
11/30/2009	10:27	7O103.D	W7VM091130-01	GEL	BFB/CCV/LCS	5mL	1	N/A	3	w	AXO1	N/A	O	UVM091111-01E/IVM091130-01
11/30/2009	11:00	7O104.D	W7VM091130-02	GEL	LCS	5g	1	N/A	4	s	AXO1	N/A	O	UVM091111-01E/IVM091130-01
11/30/2009	11:34	7O105.D	W7VM091130-03	GEL	SHORT/LCS	5mL	1	N/A	5	w	AXO1	N/A	O	UVM091118-08A/UVM091105-02C THF fails SC CCV
11/30/2009	12:09	7O106.D	W7VM091130-04	GEL	SLCS	5g	1	N/A	6	s	AXO1	N/A	O	UVM091118-08A/UVM091105-02C
11/30/2009	12:43	7O107.D	12019——	GEL	BLANK	5mL	1	N/A	7	w	AXO1	N/A	O	
11/30/2009	13:16	7O108.D	12019——	GEL	BLANK	5g	1	N/A	8	s	AXO1	N/A	O	
11/30/2009	13:51	7O109.D	241539001	LANL	926830	5g	1	N/A	9	s	AXO1	N/A	O	
11/30/2009	14:26	7O110.D	241539002	LANL	926830	5g	1	N/A	10	s	AXO1	N/A	O X	IS failure confirmed
11/30/2009	15:00	7O111.D	240850004	LBNL	927598	5mL	1	pH2	11	w	AXO1	N	O	12/8/09
11/30/2009	15:56	7O112.D	240850003	LBNL	927598	5uL	1E+06	pH2	12	w	AXO1	N	X	From 1000x RR 200,000X
11/30/2009	16:30	7O113.D	240850002	LBNL	927598	5uL	1E+06	pH2	13	w	AXO1	N	X	From 1000x RR 200,000X
11/30/2009	17:03	7O114.D	240850001	LBNL	927598	5uL	1E+06	pH2	14	w	AXO1	N	O	From 1000x RR 2,500,000X
11/30/2009	17:38	7O115.D	12019——	GEL	BLANK	5mL	50	N/A	15	w	AXO1	N/A	O	
11/30/2009	18:10	7O116.D	241509001	WSMS	927591	5g	1	N/A	16	s	AXO1	N/A	O	
11/30/2009	18:45	7O117.D	241773001	DSSI	927591	100uL	50	N/A	17	w	AXO1	N/A	O	
11/30/2009	19:20	7O118.D	1201983335	LBNL	927598	5uL	1E+06	N/A	18	w	AXO1	N	O	MS 240850001 FROM 1000X
11/30/2009	19:55	7O119.D	1201983336	LBNL	927598	5uL	1E+06	N/A	19	w	AXO1	N	O	MSD 240850001 FROM 1000X
11/30/2009	20:29	7O120.D	1201983299	WSMS	927591	5g	1	N/A	20	s	AXO1	N/A	X	MS 241509001
11/30/2009	21:03	7O121.D	1201983300	WSMS	927591	5g	1	N/A	21	s	AXO1	N/A	X	MSD 241509001 Double Spiked
11/30/2009	21:36	7O122.D	1201983584	DSSI	927591	5uL	50	N/A	22	w	AXO1	N/A	O	MS 241773001
11/30/2009	22:09	7O123.D	1201983585	DSSI	927591	5uL	50	N/A	23	w	AXO1	N/A	O	MSD 241773001

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-603

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	926126
Prep Batch Number:	926121

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241539001	RE03-09-13462
241539002	RE03-09-13464
241539003	RE03-09-13463
241539004	RE03-09-13461
1201980154	Method Blank (MB)
1201980155	241524002(WST03-10-2132) Matrix Spike (MS)
1201980156	241524002(WST03-10-2132) Matrix Spike Duplicate (MSD)
1201980157	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the

second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
The non-SDG sample 241524002 (WST03-10-2132) was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD(1201980156) recovered 2,4-Dinitrophenol at 21%. The limits are 25%-104%. Since the MS displayed a similar low (but passing) recovery to the MSD, the failure was attributed to matrix interference and the data results have been reported.

MS/MSD Relative Percent Difference (RPD) Statement
Multiple MS(1201980155)/MSD(1201980156) RPD values were outside of the established acceptance limits. Please see the QC Summary Report for specific failures. Since the analytes were all individually

within the acceptance limits for the MS and MSD (with the exception of 2,4-Dinitrophenol), the data results have been reported. The 2,4-Dinitrophenol RPD failure was attributed to matrix interference and the data results have been reported (see MSD recovery statement above).

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Parmname	241539		
	001	**003**	**004**
All	4X	4X	4X

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
A non-conformance report was not required for the samples reported in this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID

designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD1.I	HP 5973 Mass Spectrometer	HP6890/HP5973	ZB-5ms	25m x 0.2mm, 0.33um (5% Polysilarylene-95% Polydimethylsiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: _____ **Date:** 12-14-09

Roadmap for LANL 10-603 SVOA

This roadmap was analyzed by amy01291 on 12-01-2009, 12:15.
This roadmap was reviewed by bar00895 on 12-01-2009, 14:35.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2929.d	241539001	29-NOV-2009	23:29	10-603.sub	RE03-09-13462	4	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2930.d	241539002	29-NOV-2009	23:52	10-603.sub	RE03-09-13464	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2931.d	241539003	30-NOV-2009	00:15	10-603.sub	RE03-09-13463	4	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2932.d	241539004	30-NOV-2009	00:39	10-603.sub	RE03-09-13461	4	926126	REPORT

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2912-4.d	1201980154	mb	29-NOV-2009	16:50	10-603.sub	SBLK01	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2913-4.d	1201980157	lcs	29-NOV-2009	17:14	10-603.sub	SBLK01LCS	1	926126	REPORT

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13461	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	4
Run Date:	11/30/2009 00:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s1k2932.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1460	ug/kg	292	1460
108-95-2	Phenol	U	1460	ug/kg	292	1460
95-57-8	2-Chlorophenol	U	1460	ug/kg	292	1460
106-46-7	1,4-Dichlorobenzene	U	1460	ug/kg	292	1460
621-64-7	N-Nitrosodipropylamine	U	1460	ug/kg	292	1460
59-50-7	4-Chloro-3-methylphenol	U	1460	ug/kg	292	1460
83-32-9	Acenaphthene	U	146	ug/kg	48.1	146
121-14-2	2,4-Dinitrotoluene	U	1460	ug/kg	146	1460
100-02-7	4-Nitrophenol	U	1460	ug/kg	481	1460
87-86-5	Pentachlorophenol	U	1460	ug/kg	365	1460
129-00-0	Pyrene	J	53.6	ug/kg	43.8	146
110-86-1	Pyridine	U	1460	ug/kg	292	1460
62-53-3	Aniline	U	1460	ug/kg	438	1460
111-44-4	bis(2-Chloroethyl) ether	U	1460	ug/kg	292	1460
541-73-1	1,3-Dichlorobenzene	U	1460	ug/kg	292	1460
100-51-6	Benzyl alcohol	U	1460	ug/kg	438	1460
95-50-1	1,2-Dichlorobenzene	U	1460	ug/kg	292	1460
108-60-1	bis(2-Chloroisopropyl)ether	U	1460	ug/kg	292	1460
95-48-7	o-Cresol	U	1460	ug/kg	292	1460
65794-96-9	m,p-Cresols	U	1460	ug/kg	438	1460
67-72-1	Hexachloroethane	U	1460	ug/kg	292	1460
98-95-3	Nitrobenzene	U	1460	ug/kg	292	1460
78-59-1	Isophorone	U	1460	ug/kg	292	1460
88-75-5	2-Nitrophenol	U	1460	ug/kg	292	1460
105-67-9	2,4-Dimethylphenol	U	1460	ug/kg	510	1460
111-91-1	bis(2-Chloroethoxy)methane	U	1460	ug/kg	292	1460
120-83-2	2,4-Dichlorophenol	U	1460	ug/kg	292	1460
65-85-0	Benzoic acid	U	2920	ug/kg	729	2920
91-20-3	Naphthalene	U	146	ug/kg	43.8	146
106-47-8	4-Chloroaniline	U	1460	ug/kg	292	1460
87-68-3	Hexachlorobutadiene	U	1460	ug/kg	292	1460
91-57-6	2-Methylnaphthalene	U	146	ug/kg	29.2	146
77-47-4	Hexachlorocyclopentadiene	U	1460	ug/kg	292	1460
88-06-2	2,4,6-Trichlorophenol	U	1460	ug/kg	292	1460
95-95-4	2,4,5-Trichlorophenol	U	1460	ug/kg	292	1460
91-58-7	2-Chloronaphthalene	U	146	ug/kg	48.1	146
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	1460	ug/kg	292	1460
99-09-2	3-Nitroaniline	U	1460	ug/kg	292	1460

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13461**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**4**
Run Date:	**11/30/2009 00:39**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2932.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	1460	ug/kg	292	1460
606-20-2	2,6-Dinitrotoluene	U	1460	ug/kg	146	1460
208-96-8	Acenaphthylene	U	146	ug/kg	43.8	146
51-28-5	2,4-Dinitrophenol	U	2920	ug/kg	554	2920
132-64-9	Dibenzofuran	U	1460	ug/kg	292	1460
84-66-2	Diethylphthalate	U	1460	ug/kg	292	1460
86-73-7	Fluorene	U	146	ug/kg	43.8	146
7005-72-3	4-Chlorophenylphenylether	U	1460	ug/kg	292	1460
534-52-1	2-Methyl-4,6-dinitrophenol	U	1460	ug/kg	292	1460
100-01-6	4-Nitroaniline	U	1460	ug/kg	438	1460
	p-Nitroaniline					
122-39-4	Diphenylamine	U	1460	ug/kg	292	1460
122-66-7	Azobenzene	U	1460	ug/kg	292	1460
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1460	ug/kg	292	1460
118-74-1	Hexachlorobenzene	U	1460	ug/kg	292	1460
85-01-8	Phenanthrene	U	146	ug/kg	43.8	146
120-12-7	Anthracene	J	36.4	ug/kg	29.2	146
84-74-2	Di-n-butylphthalate	U	1460	ug/kg	292	1460
206-44-0	Fluoranthene	J	52.6	ug/kg	43.8	146
85-68-7	Butylbenzylphthalate	U	1460	ug/kg	292	1460
56-55-3	Benzo(a)anthracene	U	146	ug/kg	43.8	146
91-94-1	3,3'-Dichlorobenzidine	U	1460	ug/kg	438	1460
218-01-9	Chrysene	U	146	ug/kg	43.8	146
117-81-7	bis(2-Ethylhexyl)phthalate	U	1460	ug/kg	292	1460
117-84-0	Di-n-octylphthalate	U	1460	ug/kg	292	1460
205-99-2	Benzo(b)fluoranthene	U	146	ug/kg	43.8	146
207-08-9	Benzo(k)fluoranthene	U	146	ug/kg	43.8	146
50-32-8	Benzo(a)pyrene	U	146	ug/kg	43.8	146
193-39-5	Indeno(1,2,3-cd)pyrene	U	146	ug/kg	43.8	146
53-70-3	Dibenzo(a,h)anthracene	U	146	ug/kg	43.8	146
191-24-2	Benzo(ghi)perylene	U	146	ug/kg	43.8	146
120-82-1	1,2,4-Trichlorobenzene	U	1460	ug/kg	292	1460

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	749	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539001	Date Received:	11/20/2009 08:50	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13462	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	4
Run Date:	11/29/2009 23:29	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s1k2929.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1430	ug/kg	286	1430
108-95-2	Phenol	U	1430	ug/kg	286	1430
95-57-8	2-Chlorophenol	U	1430	ug/kg	286	1430
106-46-7	1,4-Dichlorobenzene	U	1430	ug/kg	286	1430
621-64-7	N-Nitrosodipropylamine	U	1430	ug/kg	286	1430
59-50-7	4-Chloro-3-methylphenol	U	1430	ug/kg	286	1430
83-32-9	Acenaphthene	U	143	ug/kg	47.2	143
121-14-2	2,4-Dinitrotoluene	U	1430	ug/kg	143	1430
100-02-7	4-Nitrophenol	U	1430	ug/kg	472	1430
87-86-5	Pentachlorophenol	U	1430	ug/kg	358	1430
129-00-0	Pyrene	U	143	ug/kg	42.9	143
110-86-1	Pyridine	U	1430	ug/kg	286	1430
62-53-3	Aniline	U	1430	ug/kg	429	1430
111-44-4	bis(2-Chloroethyl) ether	U	1430	ug/kg	286	1430
541-73-1	1,3-Dichlorobenzene	U	1430	ug/kg	286	1430
100-51-6	Benzyl alcohol	U	1430	ug/kg	429	1430
95-50-1	1,2-Dichlorobenzene	U	1430	ug/kg	286	1430
108-60-1	bis(2-Chloroisopropyl)ether	U	1430	ug/kg	286	1430
95-48-7	o-Cresol	U	1430	ug/kg	286	1430
65794-96-9	m,p-Cresols	U	1430	ug/kg	429	1430
67-72-1	Hexachloroethane	U	1430	ug/kg	286	1430
98-95-3	Nitrobenzene	U	1430	ug/kg	286	1430
78-59-1	Isophorone	U	1430	ug/kg	286	1430
88-75-5	2-Nitrophenol	U	1430	ug/kg	286	1430
105-67-9	2,4-Dimethylphenol	U	1430	ug/kg	501	1430
111-91-1	bis(2-Chloroethoxy)methane	U	1430	ug/kg	286	1430
120-83-2	2,4-Dichlorophenol	U	1430	ug/kg	286	1430
65-85-0	Benzoic acid	U	2860	ug/kg	715	2860
91-20-3	Naphthalene	U	143	ug/kg	42.9	143
106-47-8	4-Chloroaniline	U	1430	ug/kg	286	1430
87-68-3	Hexachlorobutadiene	U	1430	ug/kg	286	1430
91-57-6	2-Methylnaphthalene	U	143	ug/kg	28.6	143
77-47-4	Hexachlorocyclopentadiene	U	1430	ug/kg	286	1430
88-06-2	2,4,6-Trichlorophenol	U	1430	ug/kg	286	1430
95-95-4	2,4,5-Trichlorophenol	U	1430	ug/kg	286	1430
91-58-7	2-Chloronaphthalene	U	143	ug/kg	47.2	143
88-74-4	2-Nitroaniline	U	1430	ug/kg	286	1430
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	1430	ug/kg	286	1430

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13462**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**4**
Run Date:	**11/29/2009 23:29**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2929.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	1430	ug/kg	286	1430
606-20-2	2,6-Dinitrotoluene	U	1430	ug/kg	143	1430
208-96-8	Acenaphthylene	U	143	ug/kg	42.9	143
51-28-5	2,4-Dinitrophenol	U	2860	ug/kg	543	2860
132-64-9	Dibenzofuran	U	1430	ug/kg	286	1430
84-66-2	Diethylphthalate	U	1430	ug/kg	286	1430
86-73-7	Fluorene	U	143	ug/kg	42.9	143
7005-72-3	4-Chlorophenylphenylether	U	1430	ug/kg	286	1430
534-52-1	2-Methyl-4,6-dinitrophenol	U	1430	ug/kg	286	1430
100-01-6	4-Nitroaniline	U	1430	ug/kg	429	1430
	p-Nitroaniline					
122-39-4	Diphenylamine	U	1430	ug/kg	286	1430
122-66-7	Azobenzene	U	1430	ug/kg	286	1430
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1430	ug/kg	286	1430
118-74-1	Hexachlorobenzene	U	1430	ug/kg	286	1430
85-01-8	Phenanthrene	U	143	ug/kg	42.9	143
120-12-7	Anthracene	J	36.7	ug/kg	28.6	143
84-74-2	Di-n-butylphthalate	U	1430	ug/kg	286	1430
206-44-0	Fluoranthene	J	46.8	ug/kg	42.9	143
85-68-7	Butylbenzylphthalate	U	1430	ug/kg	286	1430
56-55-3	Benzo(a)anthracene	U	143	ug/kg	42.9	143
91-94-1	3,3'-Dichlorobenzidine	U	1430	ug/kg	429	1430
218-01-9	Chrysene	U	143	ug/kg	42.9	143
117-81-7	bis(2-Ethylhexyl)phthalate	U	1430	ug/kg	286	1430
117-84-0	Di-n-octylphthalate	U	1430	ug/kg	286	1430
205-99-2	Benzo(b)fluoranthene	U	143	ug/kg	42.9	143
207-08-9	Benzo(k)fluoranthene	U	143	ug/kg	42.9	143
50-32-8	Benzo(a)pyrene	U	143	ug/kg	42.9	143
193-39-5	Indeno(1,2,3-cd)pyrene	U	143	ug/kg	42.9	143
53-70-3	Dibenzo(a,h)anthracene	U	143	ug/kg	42.9	143
191-24-2	Benzo(ghi)perylene	U	143	ug/kg	42.9	143
120-82-1	1,2,4-Trichlorobenzene	U	1430	ug/kg	286	1430

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
96-37-7	Cyclopentane, methyl-	1.83	824	ug/kg	81	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13463	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	4
Run Date:	11/30/2009 00:15	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2931.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1390	ug/kg	279	1390
108-95-2	Phenol	U	1390	ug/kg	279	1390
95-57-8	2-Chlorophenol	U	1390	ug/kg	279	1390
106-46-7	1,4-Dichlorobenzene	U	1390	ug/kg	279	1390
621-64-7	N-Nitrosodipropylamine	U	1390	ug/kg	279	1390
59-50-7	4-Chloro-3-methylphenol	U	1390	ug/kg	279	1390
83-32-9	Acenaphthene	U	139	ug/kg	46.0	139
121-14-2	2,4-Dinitrotoluene	U	1390	ug/kg	139	1390
100-02-7	4-Nitrophenol	U	1390	ug/kg	460	1390
87-86-5	Pentachlorophenol	U	1390	ug/kg	349	1390
129-00-0	Pyrene	U	139	ug/kg	41.8	139
110-86-1	Pyridine	U	1390	ug/kg	279	1390
62-53-3	Aniline	U	1390	ug/kg	418	1390
111-44-4	bis(2-Chloroethyl) ether	U	1390	ug/kg	279	1390
541-73-1	1,3-Dichlorobenzene	U	1390	ug/kg	279	1390
100-51-6	Benzyl alcohol	U	1390	ug/kg	418	1390
95-50-1	1,2-Dichlorobenzene	U	1390	ug/kg	279	1390
108-60-1	bis(2-Chloroisopropyl)ether	U	1390	ug/kg	279	1390
95-48-7	o-Cresol	U	1390	ug/kg	279	1390
65794-96-9	m,p-Cresols	U	1390	ug/kg	418	1390
67-72-1	Hexachloroethane	U	1390	ug/kg	279	1390
98-95-3	Nitrobenzene	U	1390	ug/kg	279	1390
78-59-1	Isophorone	U	1390	ug/kg	279	1390
88-75-5	2-Nitrophenol	U	1390	ug/kg	279	1390
105-67-9	2,4-Dimethylphenol	U	1390	ug/kg	488	1390
111-91-1	bis(2-Chloroethoxy)methane	U	1390	ug/kg	279	1390
120-83-2	2,4-Dichlorophenol	U	1390	ug/kg	279	1390
65-85-0	Benzoic acid	U	2790	ug/kg	697	2790
91-20-3	Naphthalene	U	139	ug/kg	41.8	139
106-47-8	4-Chloroaniline	U	1390	ug/kg	279	1390
87-68-3	Hexachlorobutadiene	U	1390	ug/kg	279	1390
91-57-6	2-Methylnaphthalene	U	139	ug/kg	27.9	139
77-47-4	Hexachlorocyclopentadiene	U	1390	ug/kg	279	1390
88-06-2	2,4,6-Trichlorophenol	U	1390	ug/kg	279	1390
95-95-4	2,4,5-Trichlorophenol	U	1390	ug/kg	279	1390
91-58-7	2-Chloronaphthalene	U	139	ug/kg	46.0	139
88-74-4	2-Nitroaniline	U	1390	ug/kg	279	1390
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	1390	ug/kg	279	1390

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539003	Date Received:	11/20/2009 08:50	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13463	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	4
Run Date:	11/30/2009 00:15	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2931.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	1390	ug/kg	279	1390
606-20-2	2,6-Dinitrotoluene	U	1390	ug/kg	139	1390
208-96-8	Acenaphthylene	U	139	ug/kg	41.8	139
51-28-5	2,4-Dinitrophenol	U	2790	ug/kg	530	2790
132-64-9	Dibenzofuran	U	1390	ug/kg	279	1390
84-66-2	Diethylphthalate	U	1390	ug/kg	279	1390
86-73-7	Fluorene	U	139	ug/kg	41.8	139
7005-72-3	4-Chlorophenylphenylether	U	1390	ug/kg	279	1390
534-52-1	2-Methyl-4,6-dinitrophenol	U	1390	ug/kg	279	1390
100-01-6	4-Nitroaniline	U	1390	ug/kg	418	1390
	p-Nitroaniline					
122-39-4	Diphenylamine	U	1390	ug/kg	279	1390
122-66-7	Azobenzene	U	1390	ug/kg	279	1390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1390	ug/kg	279	1390
118-74-1	Hexachlorobenzene	U	1390	ug/kg	279	1390
85-01-8	Phenanthrene	U	139	ug/kg	41.8	139
120-12-7	Anthracene	U	139	ug/kg	27.9	139
84-74-2	Di-n-butylphthalate	U	1390	ug/kg	279	1390
206-44-0	Fluoranthene	U	139	ug/kg	41.8	139
85-68-7	Butylbenzylphthalate	U	1390	ug/kg	279	1390
56-55-3	Benzo(a)anthracene	U	139	ug/kg	41.8	139
91-94-1	3,3'-Dichlorobenzidine	U	1390	ug/kg	418	1390
218-01-9	Chrysene	U	139	ug/kg	41.8	139
117-81-7	bis(2-Ethylhexyl)phthalate	U	1390	ug/kg	279	1390
117-84-0	Di-n-octylphthalate	U	1390	ug/kg	279	1390
205-99-2	Benzo(b)fluoranthene	U	139	ug/kg	41.8	139
207-08-9	Benzo(k)fluoranthene	U	139	ug/kg	41.8	139
50-32-8	Benzo(a)pyrene	U	139	ug/kg	41.8	139
193-39-5	Indeno(1,2,3-cd)pyrene	U	139	ug/kg	41.8	139
53-70-3	Dibenzo(a,h)anthracene	U	139	ug/kg	41.8	139
191-24-2	Benzo(ghi)perylene	U	139	ug/kg	41.8	139
120-82-1	1,2,4-Trichlorobenzene	U	1390	ug/kg	279	1390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.83	703	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13464	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 23:52	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2930.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	343	ug/kg	68.6	343
108-95-2	Phenol	U	343	ug/kg	68.6	343
95-57-8	2-Chlorophenol	U	343	ug/kg	68.6	343
106-46-7	1,4-Dichlorobenzene	U	343	ug/kg	68.6	343
621-64-7	N-Nitrosodipropylamine	U	343	ug/kg	68.6	343
59-50-7	4-Chloro-3-methylphenol	U	343	ug/kg	68.6	343
83-32-9	Acenaphthene	U	34.3	ug/kg	11.3	34.3
121-14-2	2,4-Dinitrotoluene	U	343	ug/kg	34.3	343
100-02-7	4-Nitrophenol	U	343	ug/kg	113	343
87-86-5	Pentachlorophenol	U	343	ug/kg	85.7	343
129-00-0	Pyrene	U	34.3	ug/kg	10.3	34.3
110-86-1	Pyridine	U	343	ug/kg	68.6	343
62-53-3	Aniline	U	343	ug/kg	103	343
111-44-4	bis(2-Chloroethyl) ether	U	343	ug/kg	68.6	343
541-73-1	1,3-Dichlorobenzene	U	343	ug/kg	68.6	343
100-51-6	Benzyl alcohol	U	343	ug/kg	103	343
95-50-1	1,2-Dichlorobenzene	U	343	ug/kg	68.6	343
108-60-1	bis(2-Chloroisopropyl)ether	U	343	ug/kg	68.6	343
95-48-7	o-Cresol	U	343	ug/kg	68.6	343
65794-96-9	m,p-Cresols	U	343	ug/kg	103	343
67-72-1	Hexachloroethane	U	343	ug/kg	68.6	343
98-95-3	Nitrobenzene	U	343	ug/kg	68.6	343
78-59-1	Isophorone	U	343	ug/kg	68.6	343
88-75-5	2-Nitrophenol	U	343	ug/kg	68.6	343
105-67-9	2,4-Dimethylphenol	U	343	ug/kg	120	343
111-91-1	bis(2-Chloroethoxy)methane	U	343	ug/kg	68.6	343
120-83-2	2,4-Dichlorophenol	U	343	ug/kg	68.6	343
65-85-0	Benzoic acid	U	686	ug/kg	171	686
91-20-3	Naphthalene	U	34.3	ug/kg	10.3	34.3
106-47-8	4-Chloroaniline	U	343	ug/kg	68.6	343
87-68-3	Hexachlorobutadiene	U	343	ug/kg	68.6	343
91-57-6	2-Methylnaphthalene	U	34.3	ug/kg	6.86	34.3
77-47-4	Hexachlorocyclopentadiene	U	343	ug/kg	68.6	343
88-06-2	2,4,6-Trichlorophenol	U	343	ug/kg	68.6	343
95-95-4	2,4,5-Trichlorophenol	U	343	ug/kg	68.6	343
91-58-7	2-Chloronaphthalene	U	34.3	ug/kg	11.3	34.3
88-74-4	2-Nitroaniline	U	343	ug/kg	68.6	343
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	343	ug/kg	68.6	343

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13464	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 23:52	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2930.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	343	ug/kg	68.6	343
606-20-2	2,6-Dinitrotoluene	U	343	ug/kg	34.3	343
208-96-8	Acenaphthylene	U	34.3	ug/kg	10.3	34.3
51-28-5	2,4-Dinitrophenol	U	686	ug/kg	130	686
132-64-9	Dibenzofuran	U	343	ug/kg	68.6	343
84-66-2	Diethylphthalate	U	343	ug/kg	68.6	343
86-73-7	Fluorene	U	34.3	ug/kg	10.3	34.3
7005-72-3	4-Chlorophenylphenylether	U	343	ug/kg	68.6	343
534-52-1	2-Methyl-4,6-dinitrophenol	U	343	ug/kg	68.6	343
100-01-6	4-Nitroaniline	U	343	ug/kg	103	343
	p-Nitroaniline					
122-39-4	Diphenylamine	U	343	ug/kg	68.6	343
122-66-7	Azobenzene	U	343	ug/kg	68.6	343
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	343	ug/kg	68.6	343
118-74-1	Hexachlorobenzene	U	343	ug/kg	68.6	343
85-01-8	Phenanthrene	U	34.3	ug/kg	10.3	34.3
120-12-7	Anthracene	U	34.3	ug/kg	6.86	34.3
84-74-2	Di-n-butylphthalate	U	343	ug/kg	68.6	343
206-44-0	Fluoranthene	U	34.3	ug/kg	10.3	34.3
85-68-7	Butylbenzylphthalate	U	343	ug/kg	68.6	343
56-55-3	Benzo(a)anthracene	U	34.3	ug/kg	10.3	34.3
91-94-1	3,3'-Dichlorobenzidine	U	343	ug/kg	103	343
218-01-9	Chrysene	U	34.3	ug/kg	10.3	34.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	343	ug/kg	68.6	343
117-84-0	Di-n-octylphthalate	U	343	ug/kg	68.6	343
205-99-2	Benzo(b)fluoranthene	U	34.3	ug/kg	10.3	34.3
207-08-9	Benzo(k)fluoranthene	U	34.3	ug/kg	10.3	34.3
50-32-8	Benzo(a)pyrene	U	34.3	ug/kg	10.3	34.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.3	ug/kg	10.3	34.3
53-70-3	Dibenzo(a,h)anthracene	U	34.3	ug/kg	10.3	34.3
191-24-2	Benzo(ghi)perylene	U	34.3	ug/kg	10.3	34.3
120-82-1	1,2,4-Trichlorobenzene	U	343	ug/kg	68.6	343

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	243	ug/kg		JA

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-603

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC		PHL %REC		NBZ %REC		FBP %REC		TBP %REC		TPH %REC	
1201980154	MB for batch 926121	80		76		85		91		92		97	
1201980157	LCS for batch 926121	79		75		79		89		100		97	
241539001	RE03-09-13462	58	D	61	D	60	D	78	D	78	D	96	D
241539002	RE03-09-13464	72		72		75		88		96		106	
241539003	RE03-09-13463	60	D	63	D	57	D	81	D	82	D	106	D
241539004	RE03-09-13461	68	D	66	D	75	D	89	D	88	D	102	D

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(35%-96%)
PHL	=	Phenol-d5	(36%-96%)
NBZ	=	Nitrobenzene-d5	(34%-104%)
FBP	=	2-Fluorobiphenyl	(36%-100%)
TBP	=	2,4,6-Tribromophenol	(37%-106%)
TPH	=	p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1770	0.00	U	1150	65	32-90
108-95-2	MS	Phenol	1770	0.00	U	1200	68	32-105
95-57-8	MS	2-Chlorophenol	1770	0.00	U	1170	66	33-106
106-46-7	MS	1,4-Dichlorobenzene	1770	0.00	U	1060	60	33-95
621-64-7	MS	N-Nitrosodipropylamine	1770	0.00	U	1120	63	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1770	0.00	U	1230	70	38-119
83-32-9	MS	Acenaphthene	1770	0.00	U	1210	68	39-100
121-14-2	MS	2,4-Dinitrotoluene	1770	0.00	U	1140	64	42-107
100-02-7	MS	4-Nitrophenol	1770	0.00	U	1160	65	24-120
87-86-5	MS	Pentachlorophenol	1770	0.00	U	1250	70	26-121
129-00-0	MS	Pyrene	1770	59.8		1460	79	34-120
110-86-1	MS	Pyridine	1770	0.00	U	786	44	30-95
62-53-3	MS	Aniline	1770	0.00	U	949	54	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1770	0.00	U	1110	63	34-101
541-73-1	MS	1,3-Dichlorobenzene	1770	0.00	U	1010	57	31-97
100-51-6	MS	Benzyl alcohol	1770	0.00	U	908	51	17-120
95-50-1	MS	1,2-Dichlorobenzene	1770	0.00	U	1090	62	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1770	0.00	U	1100	62	32-113
95-48-7	MS	o-Cresol	1770	0.00	U	1630	92	31-119
65794-96-9	MS	m,p-Cresols	1770	0.00	U	1360	77	35-125
67-72-1	MS	Hexachloroethane	1770	0.00	U	996	56	30-100
98-95-3	MS	Nitrobenzene	1770	0.00	U	1220	69	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1770	0.00	U	1310	74	34-110
88-75-5	MS	2-Nitrophenol	1770	0.00	U	1120	63	32-108
105-67-9	MS	2,4-Dimethylphenol	1770	0.00	U	1230	69	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1770	0.00	U	1120	63	35-108
120-83-2	MS	2,4-Dichlorophenol	1770	0.00	U	1160	65	38-110
65-85-0	MS	Benzoic acid	3540	0.00	U	1170	33	18-134
91-20-3	MS	Naphthalene	1770	0.00	U	1140	64	31-105
106-47-8	MS	4-Chloroaniline	1770	0.00	U	1010	57	29-123
87-68-3	MS	Hexachlorobutadiene	1770	0.00	U	1150	65	31-109
91-57-6	MS	2-Methylnaphthalene	1770	0.00	U	1190	67	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1770	0.00	U	1580	89	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1770	0.00	U	1390	78	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1770	0.00	U	1440	81	37-116
91-58-7	MS	2-Chloronaphthalene	1770	0.00	U	1190	67	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1110	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	980	55	39-117
131-11-3	MS	Dimethylphthalate	1770	0.00	U	1330	75	41-105
606-20-2	MS	2,6-Dinitrotoluene	1770	0.00	U	1230	69	41-103
208-96-8	MS	Acenaphthylene	1770	0.00	U	1240	70	41-103
51-28-5	MS	2,4-Dinitrophenol	1770	0.00	U	513	29	25-104
132-64-9	MS	Dibenzofuran	1770	0.00	U	1450	82	40-114
84-66-2	MS	Diethylphthalate	1770	0.00	U	1410	80	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1770	0.00	U	1280	72	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1770	0.00	U	1380	78	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1770	0.00	U	647	37	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	1040	59	35-139
122-39-4	MS	Diphenylamine	1770	0.00	U	1290	73	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1310	74	37-118
101-55-3	MS	4-Bromophenylphenylether	1770	0.00	U	1540	87	39-112
118-74-1	MS	Hexachlorobenzene	1770	0.00	U	1230	70	38-113
85-01-8	MS	Phenanthrene	1770	61.1		1300	70	38-110
120-12-7	MS	Anthracene	1770	14.7	J	1240	69	38-112
84-74-2	MS	Di-n-butylphthalate	1770	0.00	U	1480	84	42-119
206-44-0	MS	Fluoranthene	1770	64.8		1270	68	38-119
85-68-7	MS	Butylbenzylphthalate	1770	0.00	U	1710	97	39-126
56-55-3	MS	Benzo(a)anthracene	1770	29.5	J	1290	71	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1770	0.00	U	1070	61	35-106
218-01-9	MS	Chrysene	1770	26.2	J	1160	64	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1770	0.00	U	1560	88	40-125
117-84-0	MS	Di-n-octylphthalate	1770	0.00	U	1850	104	30-147
205-99-2	MS	Benzo(b)fluoranthene	1770	0.00	U	1530	86	38-117
207-08-9	MS	Benzo(k)fluoranthene	1770	0.00	U	1220	69	39-120
50-32-8	MS	Benzo(a)pyrene	1770	16.9	J	1280	71	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1770	0.00	U	1000	57	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1770	0.00	U	1030	58	32-124
191-24-2	MS	Benzo(ghi)perylene	1770	0.00	U	942	53	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1770	0.00	U	1130	64	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1770	0.00	U	1120	63	32-90	3	0-30
108-95-2	MSD Phenol	1770	0.00	U	1120	63	32-105	7	0-30
95-57-8	MSD 2-Chlorophenol	1770	0.00	U	1120	63	33-106	4	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1770	0.00	U	1020	58	33-95	4	0-30
621-64-7	MSD N-Nitrosodipropylamine	1770	0.00	U	1010	57	31-109	10	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1770	0.00	U	1150	65	38-119	7	0-30
83-32-9	MSD Acenaphthene	1770	0.00	U	1130	64	39-100	6	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1770	0.00	U	1030	59	42-107	9	0-30
100-02-7	MSD 4-Nitrophenol	1770	0.00	U	1090	62	24-120	6	0-30
87-86-5	MSD Pentachlorophenol	1770	0.00	U	1030	58	26-121	19	0-30
129-00-0	MSD Pyrene	1770	59.8		1410	76	34-120	4	0-30
110-86-1	MSD Pyridine	1770	0.00	U	826	47	30-95	5	0-30
62-53-3	MSD Aniline	1770	0.00	U	944	53	34-111	1	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1770	0.00	U	1080	61	34-101	3	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1770	0.00	U	981	55	31-97	3	0-30
100-51-6	MSD Benzyl alcohol	1770	0.00	U	723	41	17-120	23	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1770	0.00	U	1050	60	32-102	4	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1770	0.00	U	1070	60	32-113	3	0-30
95-48-7	MSD o-Cresol	1770	0.00	U	1530	87	31-119	6	0-30
65794-96-9	MSD m,p-Cresols	1770	0.00	U	1280	72	35-125	6	0-30
67-72-1	MSD Hexachloroethane	1770	0.00	U	914	52	30-100	9	0-30
98-95-3	MSD Nitrobenzene	1770	0.00	U	1160	66	33-108	5	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1770	0.00	U	1230	70	34-110	6	0-30
88-75-5	MSD 2-Nitrophenol	1770	0.00	U	1010	57	32-108	11	0-30
105-67-9	MSD 2,4-Dimethylphenol	1770	0.00	U	1140	65	32-115	7	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1770	0.00	U	1070	60	35-108	4	0-30
120-83-2	MSD 2,4-Dichlorophenol	1770	0.00	U	1090	62	38-110	6	0-30
65-85-0	MSD Benzoic acid	3540	0.00	U	1310	37	18-134	11	0-30
91-20-3	MSD Naphthalene	1770	0.00	U	1070	61	31-105	6	0-30
106-47-8	MSD 4-Chloroaniline	1770	0.00	U	973	55	29-123	4	0-30
87-68-3	MSD Hexachlorobutadiene	1770	0.00	U	1090	62	31-109	5	0-30
91-57-6	MSD 2-Methylnaphthalene	1770	0.00	U	1120	64	32-110	6	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1770	0.00	U	1040	59	21-122	41 *	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1770	0.00	U	1250	71	37-108	11	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1770	0.00	U	1330	75	37-116	8	0-30
91-58-7	MSD 2-Chloronaphthalene	1770	0.00	U	1090	62	37-103	8	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1010	57	36-115	9	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	920	52	39-117	6	0-30
131-11-3	MSD Dimethylphthalate	1770	0.00	U	1230	70	41-105	8	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1770	0.00	U	1100	62	41-103	11	0-30
208-96-8	MSD Acenaphthylene	1770	0.00	U	1140	64	41-103	8	0-30
51-28-5	MSD 2,4-Dinitrophenol	1770	0.00	U	364	21 *	25-104	34 *	0-30
132-64-9	MSD Dibenzofuran	1770	0.00	U	1350	76	40-114	7	0-30
84-66-2	MSD Diethylphthalate	1770	0.00	U	1320	75	43-110	7	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-603

Client ID: WST03-10-2132MSD

Lab Sample ID: 1201980156

Instrument: MSD1.I

Analyst: AMY

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 6.2

Analysis Date: 11/29/2009 20:22

Dilution: 1

Prep Batch ID: 926121

Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1770	0.00	U	1190	68	48-99	7	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1770	0.00	U	1300	74	42-111	6	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1770	0.00	U	433	25	19-118	40 *	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	948	54	35-139	9	0-30
122-39-4	MSD	Diphenylamine	1770	0.00	U	1170	66	41-112	9	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1200	68	37-118	9	0-30
101-55-3	MSD	4-Bromophenylphenylether	1770	0.00	U	1430	81	39-112	8	0-30
118-74-1	MSD	Hexachlorobenzene	1770	0.00	U	1130	64	38-113	9	0-30
85-01-8	MSD	Phenanthrene	1770	61.1		1190	64	38-110	9	0-30
120-12-7	MSD	Anthracene	1770	14.7	J	1150	64	38-112	7	0-30
84-74-2	MSD	Di-n-butylphthalate	1770	0.00	U	1360	77	42-119	9	0-30
206-44-0	MSD	Fluoranthene	1770	64.8		1130	60	38-119	11	0-30
85-68-7	MSD	Butylbenzylphthalate	1770	0.00	U	1600	90	39-126	7	0-30
56-55-3	MSD	Benzo(a)anthracene	1770	29.5	J	1140	63	39-110	13	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1770	0.00	U	1030	58	35-106	4	0-30
218-01-9	MSD	Chrysene	1770	26.2	J	1080	60	39-109	7	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1770	0.00	U	1460	82	40-125	7	0-30
117-84-0	MSD	Di-n-octylphthalate	1770	0.00	U	2020	114	30-147	9	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1770	0.00	U	1270	72	38-117	19	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1770	0.00	U	1370	77	39-120	12	0-30
50-32-8	MSD	Benzo(a)pyrene	1770	16.9	J	1160	65	40-115	10	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1770	0.00	U	742	42	32-120	30	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **10-603**
Client ID: **WST03-10-2132MSD**
Lab Sample ID: **1201980156**
Instrument: **MSD1.I**
Analyst: **AMY**
Inj. Vol: **.5 uL**

Sample Type: **Matrix Spike Duplicate**
Matrix: **R**
%Moisture: **6.2**
Analysis Date: **11/29/2009 20:22**
Dilution: **1**
Prep Batch ID: **926121**
Batch ID: **926126**

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1770	0.00	U	790	45	32-124	26	0-30
191-24-2	MSD Benzo(ghi)perylene	1770	0.00	U	686	39	28-119	31 *	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1770	0.00	U	1070	61	31-105	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1230	74	31-95
108-95-2	LCS	Phenol	1670	0.0	1220	73	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1210	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1180	71	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1130	68	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1230	74	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1280	77	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1230	74	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1170	70	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1390	84	38-116
129-00-0	LCS	Pyrene	1670	0.0	1370	82	43-108
110-86-1	LCS	Pyridine	1670	0.0	927	56	13-129
62-53-3	LCS	Aniline	1670	0.0	1020	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1180	71	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1130	68	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1220	73	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1200	72	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1160	70	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1360	82	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1350	81	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1140	68	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1280	77	37-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1330	80	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1190	71	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1210	73	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1140	68	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1160	70	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	2170	65	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1190	71	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1020	61	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1230	74	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1250	75	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	2090	126	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1340	81	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1430	86	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1210	73	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1130	68	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	986	59	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1340	81	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1250	75	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1280	77	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1350	81	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1470	88	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1410	85	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1300	78	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1390	83	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1200	72	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1110	67	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1240	75	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1290	77	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1520	91	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1330	80	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1290	78	45-107
120-12-7	LCS	Anthracene	1670	0.0	1280	77	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1510	91	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1360	82	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1510	91	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1220	73	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1190	71	45-98
218-01-9	LCS	Chrysene	1670	0.0	1230	74	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1450	87	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1490	89	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1240	74	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1380	83	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1290	77	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1180	71	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1160	70	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1220	73	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1220	73	36-109

Method Blank Summary

SDG Number:	10-603	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926121	Instrument ID:	MSD1.I	Data File:	s1k2912-1.d
Lab Sample ID:	1201980154	Prep Date:	11/25/2009 21:20	Analyzed:	11/29/09 16:50
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926121	1201980157	s1k2913-1.d	11/29/09	1714
04 RE03-09-13462	241539001	s1k2929.d	11/29/09	2329
05 RE03-09-13464	241539002	s1k2930.d	11/29/09	2352
06 RE03-09-13463	241539003	s1k2931.d	11/30/09	0015
07 RE03-09-13461	241539004	s1k2932.d	11/30/09	0039

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: MSD1.I **Injection Date/Time:** 14-NOV-09 17:38

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.3
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	36.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	77.4
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091111-16	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:22
MEGA010	WBN091111-15	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:51
MEGA020	WBN091111-14	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:21
MEGA040	WBN091111-13.1	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:50
MEGA050	WBN091111-12	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:19
MEGA080	WBN091111-11	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:47
MEGA100	WBN091111-10	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 21:16
MEGA120	WBN091111-09	/chem/MSD1.i/s111409.b/s1k121	14-NOV-09 21:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: MSD1.I **Injection Date/Time:** 15-NOV-09 14:50

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1213.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	39.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.2
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	72.7
442	Greater than 40% of mass 198	70.7
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP010	WBN091111-01	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:28
AP020	WBN091111-02	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:51
AP040	WBN091111-03.1	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:14
AP050	WBN091111-04	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:38
AP080	WBN091111-05	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 17:01
AP100	WBN091111-06	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:24
AP120	WBN091111-07	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:47
APICV	WBN091111-08.1	/chem/MSD1.i/s111409.b/s1k123	15-NOV-09 23:17

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: MSD1.I **Injection Date/Time:** 17-NOV-09 15:48

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1259.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.2
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.5
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	72.4
442	Greater than 40% of mass 198	78.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091027-09.3	/chem/MSD1.i/s111409.b/s1k126	17-NOV-09 16:27

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-603

Instrument ID: MSD1.I **Injection Date/Time:** 29-NOV-09 15:00

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s112909.b/s1k2907.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.7
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	42.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	52.9
197	0 - 1% of mass 198	1
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	74.6
442	Greater than 40% of mass 198	69.8
443	17 - 23% of mass 442	18.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-03.5	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:16
APCVS	WBN091111-03.3	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:40
SBLK01	1201980154	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 16:50
SBLK01LCS	1201980157	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 17:14
RE03-09-13462	241539001	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 23:29
RE03-09-13464	241539002	/chem/MSD1.i/s112909.b/s1k293	29-NOV-09 23:52
RE03-09-13463	241539003	/chem/MSD1.i/s112909.b/s1k293	30-NOV-09 00:15
RE03-09-13461	241539004	/chem/MSD1.i/s112909.b/s1k293	30-NOV-09 00:39

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-603

Instrument: MSD1.I

STD Analysis Time: 29-NOV-09 15:16

GC Column: J&W DB-5MS

Data File: s1k2908.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	531725		3.83	2194392		4.69	1110069		5.94	1851790		6.92	1672748		8.56	1414560		9.95
Upper Limit	1063450		4.33	4388784		5.19	2220138		6.44	3703580		7.42	3345496		9.06	2829120		10.5
Lower Limit	265863		3.33	1097196		4.19	555035		5.44	925895		6.42	836374		8.06	707280		9.45
Sample ID																		
BLK01	582567		3.83	2290441		4.69	1227579		5.93	2026415		6.92	1690866		8.55	1420003		9.94
BLK01LCS	617030		3.83	2615814		4.69	1327800		5.93	2222627		6.92	1876046		8.56	1522701		9.95
RE03-09-13462	725941		3.83	2895962		4.69	1507558		5.93	2519095		6.92	1892107		8.56	1238667		9.95
RE03-09-13464	705724		3.83	2798485		4.69	1459751		5.93	2427770		6.92	1831803		8.56	1191694		9.95
RE03-09-13463	673692		3.83	2665214		4.69	1394684		5.93	2259361		6.92	1455099		8.56	1004032		9.95
RE03-09-13461	658630		3.83	2583396		4.69	1350086		5.93	2267046		6.92	1723671		8.56	1108568		9.95

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13461	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	4
Run Date:	11/30/2009 00:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s1k2932.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1460	ug/kg	292	1460
108-95-2	Phenol	U	1460	ug/kg	292	1460
95-57-8	2-Chlorophenol	U	1460	ug/kg	292	1460
106-46-7	1,4-Dichlorobenzene	U	1460	ug/kg	292	1460
621-64-7	N-Nitrosodipropylamine	U	1460	ug/kg	292	1460
59-50-7	4-Chloro-3-methylphenol	U	1460	ug/kg	292	1460
83-32-9	Acenaphthene	U	146	ug/kg	48.1	146
121-14-2	2,4-Dinitrotoluene	U	1460	ug/kg	146	1460
100-02-7	4-Nitrophenol	U	1460	ug/kg	481	1460
87-86-5	Pentachlorophenol	U	1460	ug/kg	365	1460
129-00-0	Pyrene	J	53.6	ug/kg	43.8	146
110-86-1	Pyridine	U	1460	ug/kg	292	1460
62-53-3	Aniline	U	1460	ug/kg	438	1460
111-44-4	bis(2-Chloroethyl) ether	U	1460	ug/kg	292	1460
541-73-1	1,3-Dichlorobenzene	U	1460	ug/kg	292	1460
100-51-6	Benzyl alcohol	U	1460	ug/kg	438	1460
95-50-1	1,2-Dichlorobenzene	U	1460	ug/kg	292	1460
108-60-1	bis(2-Chloroisopropyl)ether	U	1460	ug/kg	292	1460
95-48-7	o-Cresol	U	1460	ug/kg	292	1460
65794-96-9	m,p-Cresols	U	1460	ug/kg	438	1460
67-72-1	Hexachloroethane	U	1460	ug/kg	292	1460
98-95-3	Nitrobenzene	U	1460	ug/kg	292	1460
78-59-1	Isophorone	U	1460	ug/kg	292	1460
88-75-5	2-Nitrophenol	U	1460	ug/kg	292	1460
105-67-9	2,4-Dimethylphenol	U	1460	ug/kg	510	1460
111-91-1	bis(2-Chloroethoxy)methane	U	1460	ug/kg	292	1460
120-83-2	2,4-Dichlorophenol	U	1460	ug/kg	292	1460
65-85-0	Benzoic acid	U	2920	ug/kg	729	2920
91-20-3	Naphthalene	U	146	ug/kg	43.8	146
106-47-8	4-Chloroaniline	U	1460	ug/kg	292	1460
87-68-3	Hexachlorobutadiene	U	1460	ug/kg	292	1460
91-57-6	2-Methylnaphthalene	U	146	ug/kg	29.2	146
77-47-4	Hexachlorocyclopentadiene	U	1460	ug/kg	292	1460
88-06-2	2,4,6-Trichlorophenol	U	1460	ug/kg	292	1460
95-95-4	2,4,5-Trichlorophenol	U	1460	ug/kg	292	1460
91-58-7	2-Chloronaphthalene	U	146	ug/kg	48.1	146
88-74-4	2-Nitroaniline	U	1460	ug/kg	292	1460
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	1460	ug/kg	292	1460

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13461	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	4
Run Date:	11/30/2009 00:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s1k2932.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	1460	ug/kg	292	1460
606-20-2	2,6-Dinitrotoluene	U	1460	ug/kg	146	1460
208-96-8	Acenaphthylene	U	146	ug/kg	43.8	146
51-28-5	2,4-Dinitrophenol	U	2920	ug/kg	554	2920
132-64-9	Dibenzofuran	U	1460	ug/kg	292	1460
84-66-2	Diethylphthalate	U	1460	ug/kg	292	1460
86-73-7	Fluorene	U	146	ug/kg	43.8	146
7005-72-3	4-Chlorophenylphenylether	U	1460	ug/kg	292	1460
534-52-1	2-Methyl-4,6-dinitrophenol	U	1460	ug/kg	292	1460
100-01-6	4-Nitroaniline	U	1460	ug/kg	438	1460
	p-Nitroaniline					
122-39-4	Diphenylamine	U	1460	ug/kg	292	1460
122-66-7	Azobenzene	U	1460	ug/kg	292	1460
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1460	ug/kg	292	1460
118-74-1	Hexachlorobenzene	U	1460	ug/kg	292	1460
85-01-8	Phenanthrene	U	146	ug/kg	43.8	146
120-12-7	Anthracene	J	36.4	ug/kg	29.2	146
84-74-2	Di-n-butylphthalate	U	1460	ug/kg	292	1460
206-44-0	Fluoranthene	J	52.6	ug/kg	43.8	146
85-68-7	Butylbenzylphthalate	U	1460	ug/kg	292	1460
56-55-3	Benzo(a)anthracene	U	146	ug/kg	43.8	146
91-94-1	3,3'-Dichlorobenzidine	U	1460	ug/kg	438	1460
218-01-9	Chrysene	U	146	ug/kg	43.8	146
117-81-7	bis(2-Ethylhexyl)phthalate	U	1460	ug/kg	292	1460
117-84-0	Di-n-octylphthalate	U	1460	ug/kg	292	1460
205-99-2	Benzo(b)fluoranthene	U	146	ug/kg	43.8	146
207-08-9	Benzo(k)fluoranthene	U	146	ug/kg	43.8	146
50-32-8	Benzo(a)pyrene	U	146	ug/kg	43.8	146
193-39-5	Indeno(1,2,3-cd)pyrene	U	146	ug/kg	43.8	146
53-70-3	Dibenzo(a,h)anthracene	U	146	ug/kg	43.8	146
191-24-2	Benzo(ghi)perylene	U	146	ug/kg	43.8	146
120-82-1	1,2,4-Trichlorobenzene	U	1460	ug/kg	292	1460

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	749	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2932.d
Lab Smp Id: 241539004 Client Smp ID: RE03-09-13461
Inj Date : 30-NOV-2009 00:39
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539004|926126|4|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 26
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	8.70320	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	658630	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2583396	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1350086	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2267046	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1723671	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1108568	40.0000	
$ 3 2-Fluorophenol	112	3.034	3.040	(0.793)	292876	17.0245	2480
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	346622	16.5778	2420
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	160283	9.41467	1370
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	361462	11.1788	1630
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	83176	22.0631	3220
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	343614	12.7000	1850

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.781	7.787	(0.909)	16831	0.36746	53.6(a)
69 Anthracene	178	6.934	6.969	(1.002)	13081	0.24966	36.4(aH)
76 Fluoranthene	202	7.645	7.645	(1.105)	17938	0.36070	52.6(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s1k2932.d
Report Date: 11/30/2009 08:49
Lab. ID: 241539004 SampleType: SAMPLE
Injection Date: 30-NOV-2009 00:39
Operator: AMY Instrument: MSD1.i
Sample Info: |241539004|926126|4|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 4.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
43 Dimethylphthalate			CAS#: 131-11-3			
163	239272	5.93	5.72	80-120	100	(T)
164	1350086	5.93	5.72	0- 40	564	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	174388	5.93	5.76	80-120	100	(T)
63	2294	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	174388	5.93	6.05	80-120	100	(T)
89	2096	5.93	6.05	40-100	1	(QT)
63	2199	5.93	6.05	19- 79	1	(QT)
69 Anthracene			CAS#: 120-12-7			
178	13081	6.93	6.97	80-120	100	( )
179	2933	6.93	6.97	0- 45	22	( )
176	2606	6.93	6.97	0- 48	20	( )
76 Fluoranthene			CAS#: 206-44-0			
202	17938	7.65	7.65	80-120	100	( )
203	3543	7.65	7.65	0- 47	20	( )
101	2973	7.65	7.65	0- 43	17	( )
79 Pyrene			CAS#: 129-00-0			
202	16831	7.78	7.79	80-120	100	( )
200	4238	7.79	7.79	0- 51	25	( )
101	3379	7.78	7.79	0- 45	20	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
95	Benzo(b)fluoranthene			CAS#: 205-99-2		
252	6782	9.50	9.51	80-120	100	( )
253	1758	9.50	9.51	0- 51	26	( )
125	852	9.50	9.50	0- 44	13	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2932.d
Lab Smp Id: 241539004 Client Smp ID: RE03-09-13461
Inj Date : 30-NOV-2009 00:39
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539004|926126|4|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 26
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	8.70320	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3939301	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.822	506024	5.13820772	749	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2932.d
Date : 30-NOV-2009 00:39
Client ID: RE03-09-13461
Sample Info: |24153900419261261 4|SVMF11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

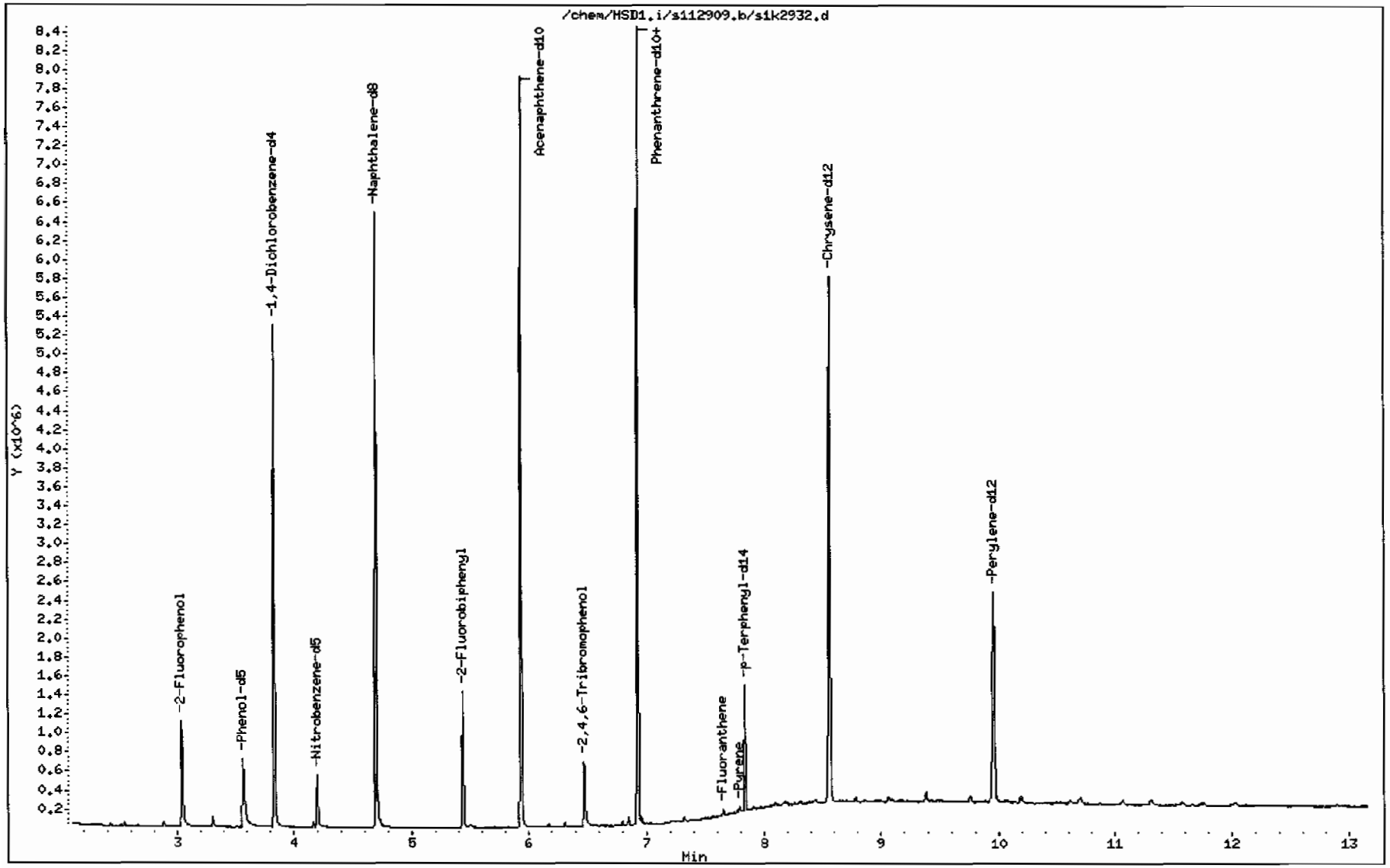

Data File: /chem/MSD1.i/s112909.b/s1k2932.d

Date : 30-NOV-2009 00:39

Client ID: RE03-09-13461

Instrument: MSD1.i

Sample Info: 1241539004|926126141SVMF11|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 53.6 ug/Kg

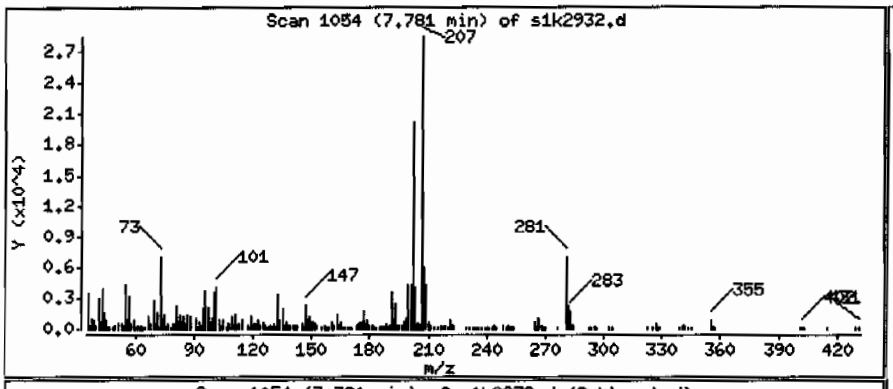

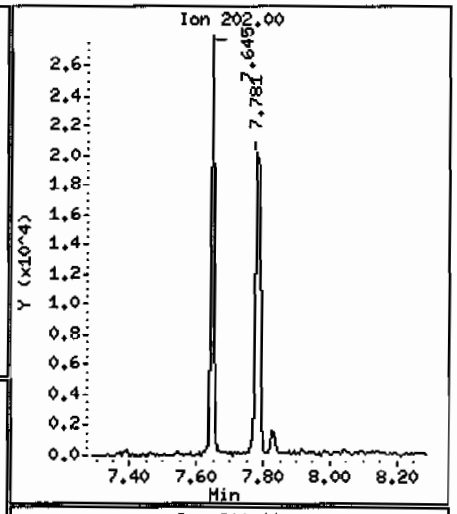

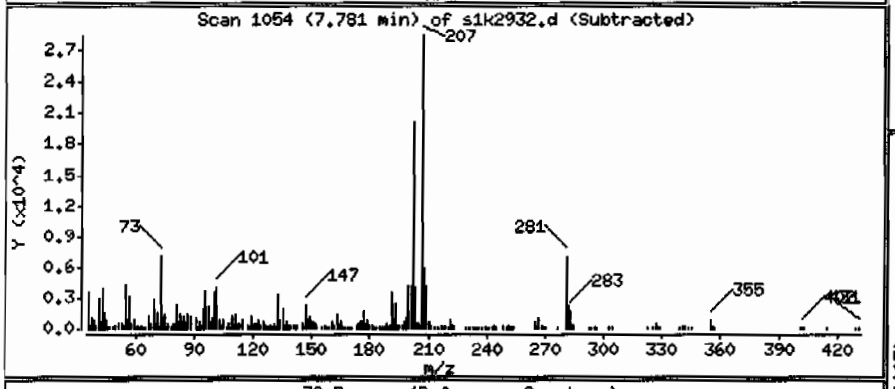

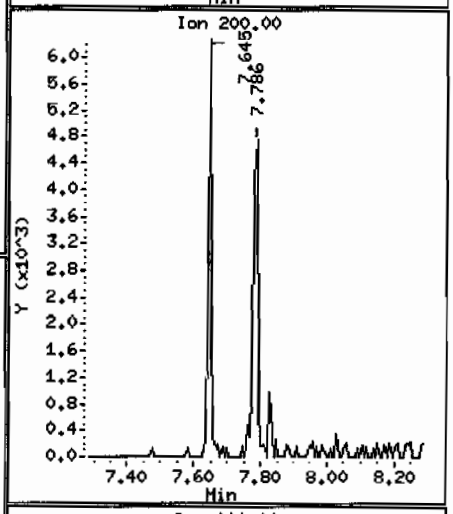

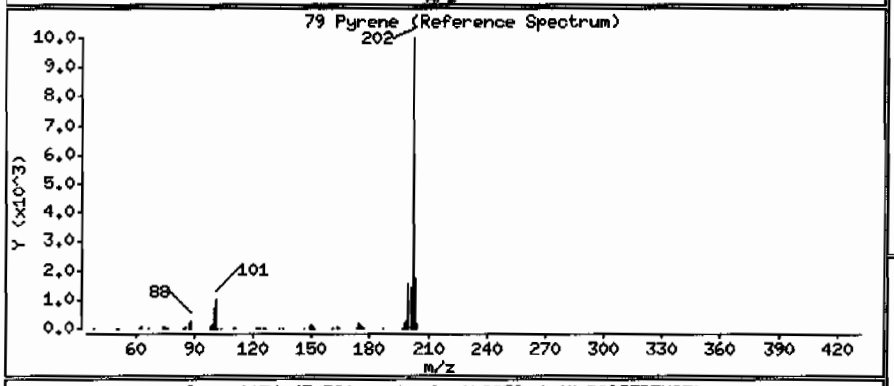

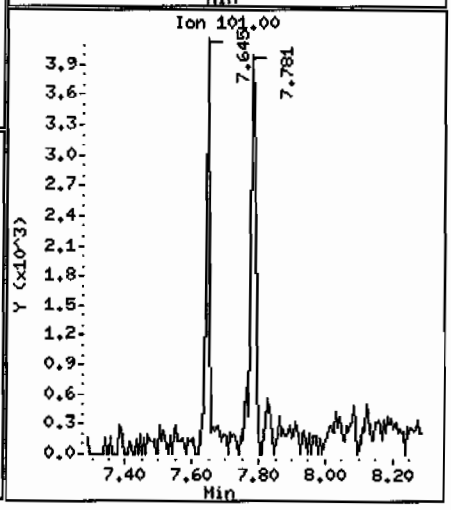

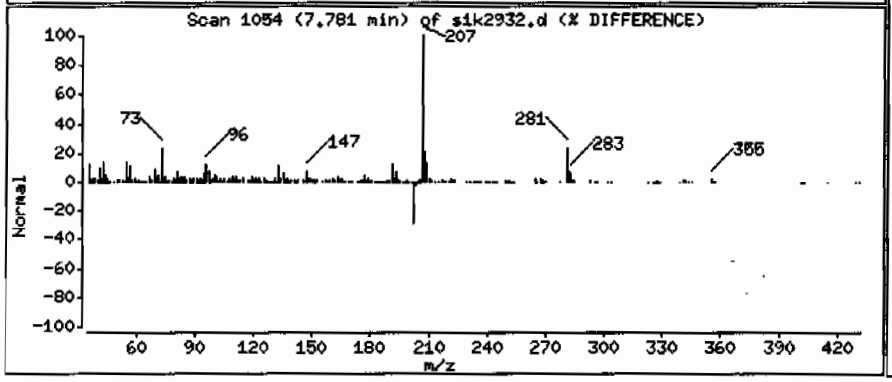

Data File: /chem/MSD1.i/s112909.b/s1k2932.d

Date : 30-NOV-2009 00:39

Client ID: RE03-09-13461

Instrument: MSD1.i

Sample Info: |241539004|926126|4|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 36.4 ug/Kg

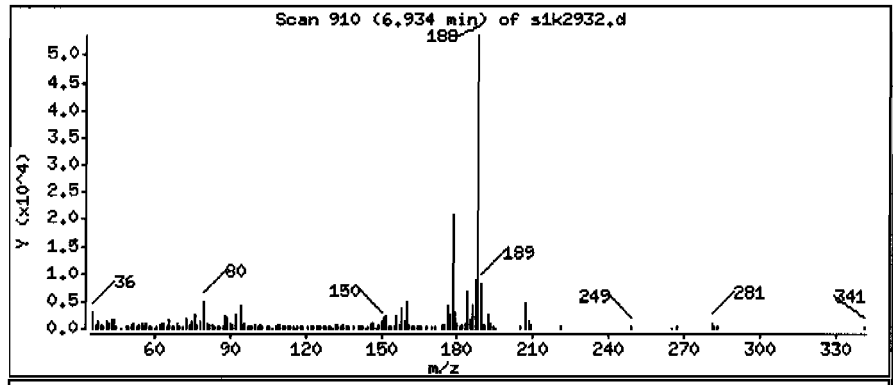

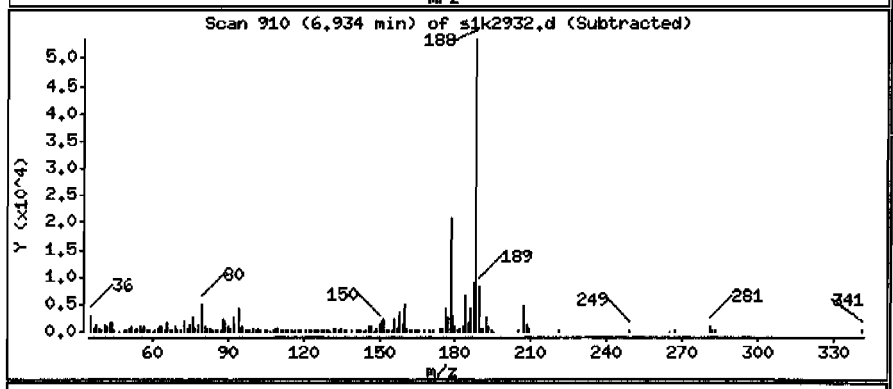

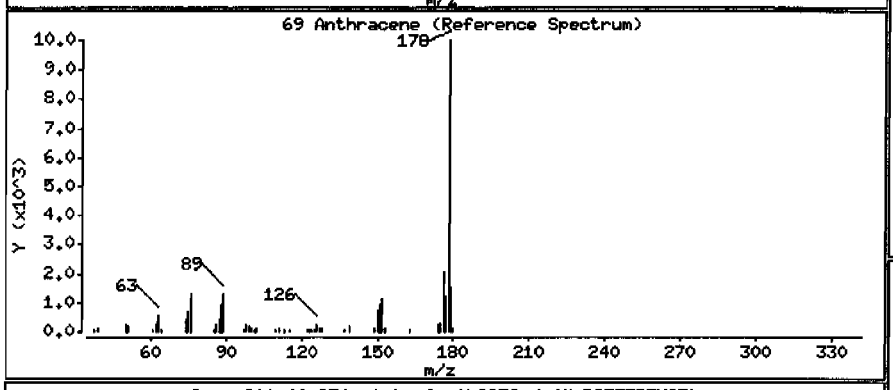

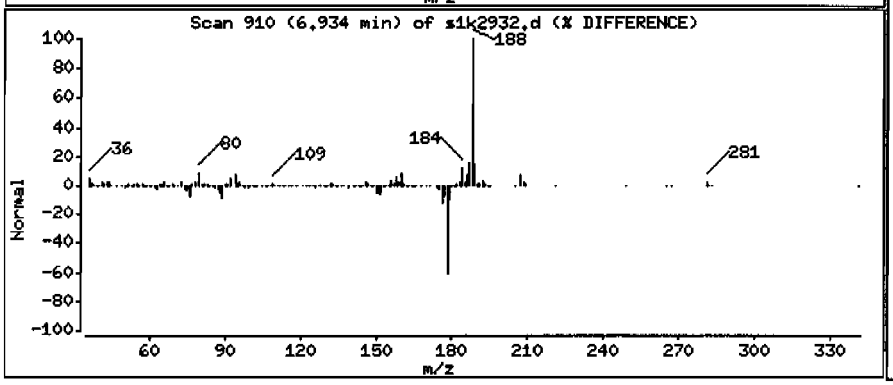

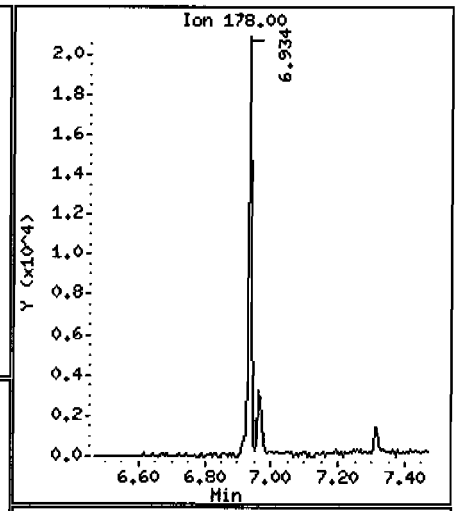

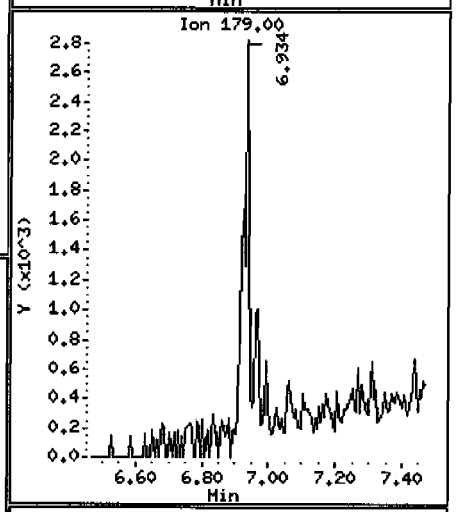

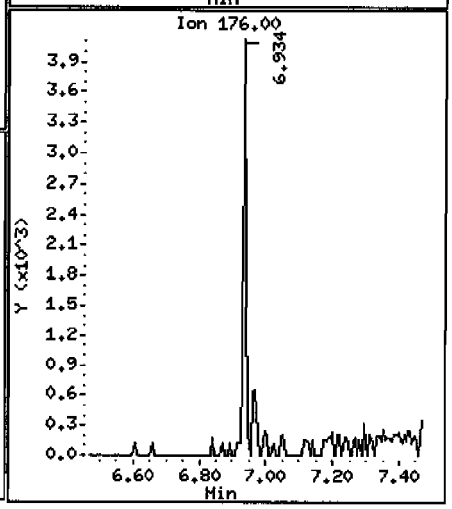

Data File: /chem/MSD1.i/s112909.b/s1k2932.d

Date : 30-NOV-2009 00:39

Client ID: RE03-09-13461

Instrument: MSD1.i

Sample Info: |2415390041926126141SVHF11|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 52.6 ug/Kg

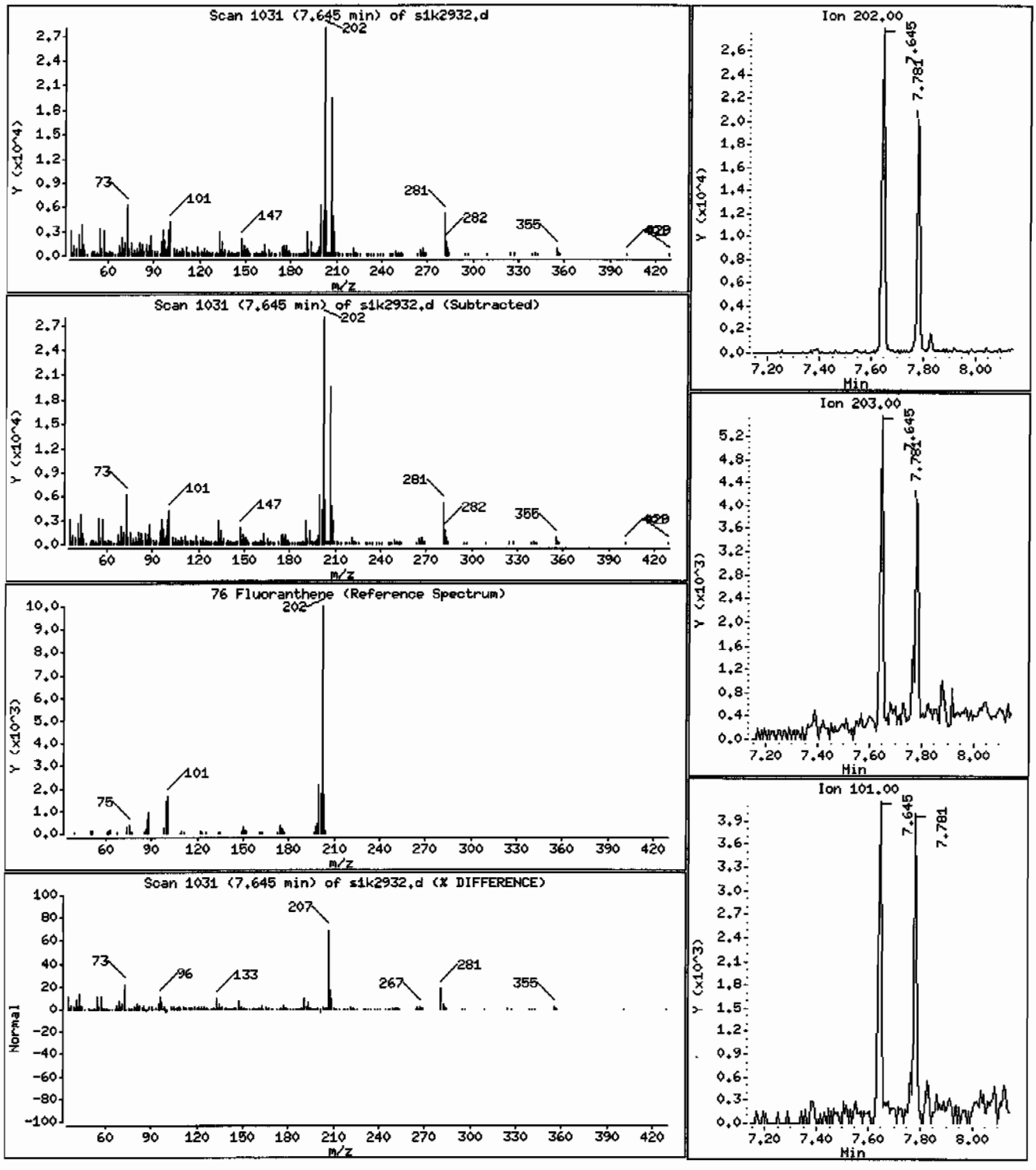

Data File: /chem/MSD1.i/s112909.b/s1k2932.d

Date : 30-NOV-2009 00:39

Client ID: RE03-09-13461

Instrument: MSD1.i

Sample Info: |2415390041926126|4|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopentane, methyl-	96-37-7	NIST05.L	1465	76	C6H12	84
Cyclopentane, methyl-	96-37-7	NIST05.L	1467	76	C6H12	84
1H-Tetrazole, 5-methyl-	4076-36-2	NIST05.L	1304	64	C2H4N4	84

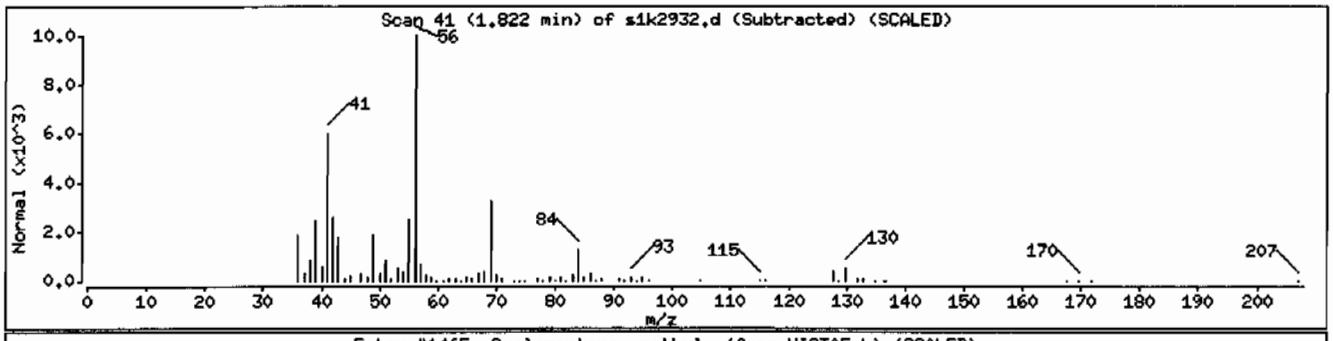

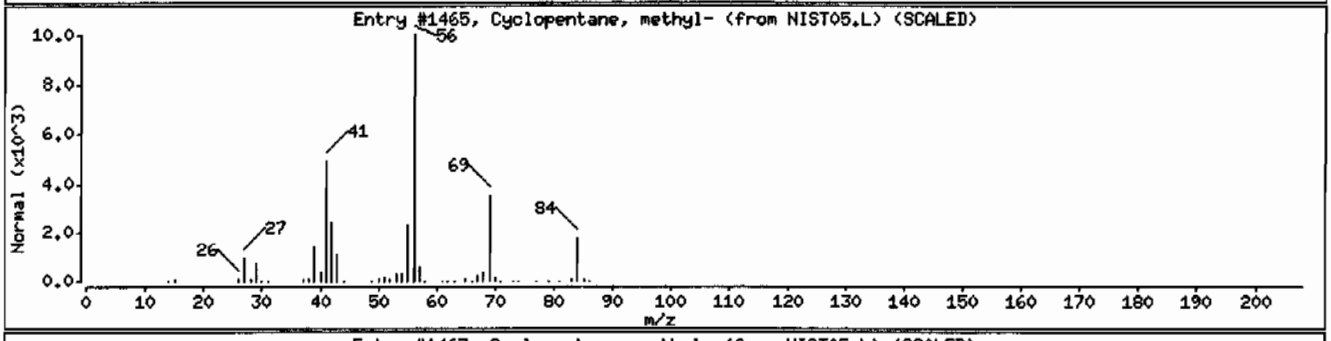

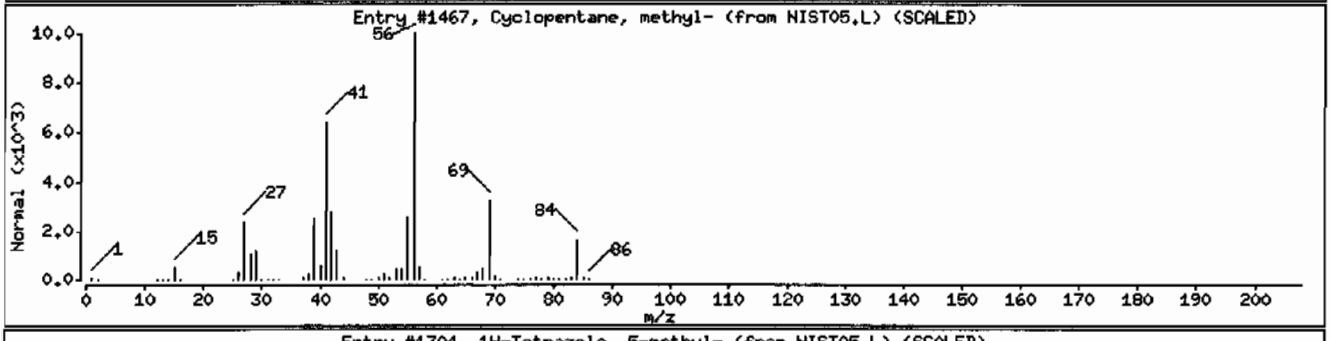

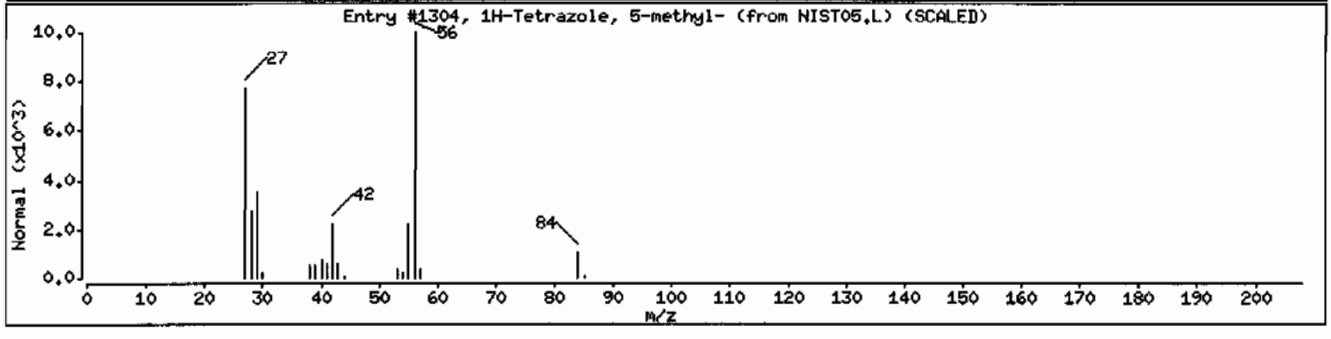

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13462**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**4**
Run Date:	**11/29/2009 23:29**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2929.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1430	ug/kg	286	1430
108-95-2	Phenol	U	1430	ug/kg	286	1430
95-57-8	2-Chlorophenol	U	1430	ug/kg	286	1430
106-46-7	1,4-Dichlorobenzene	U	1430	ug/kg	286	1430
621-64-7	N-Nitrosodipropylamine	U	1430	ug/kg	286	1430
59-50-7	4-Chloro-3-methylphenol	U	1430	ug/kg	286	1430
83-32-9	Acenaphthene	U	143	ug/kg	47.2	143
121-14-2	2,4-Dinitrotoluene	U	1430	ug/kg	143	1430
100-02-7	4-Nitrophenol	U	1430	ug/kg	472	1430
87-86-5	Pentachlorophenol	U	1430	ug/kg	358	1430
129-00-0	Pyrene	U	143	ug/kg	42.9	143
110-86-1	Pyridine	U	1430	ug/kg	286	1430
62-53-3	Aniline	U	1430	ug/kg	429	1430
111-44-4	bis(2-Chloroethyl) ether	U	1430	ug/kg	286	1430
541-73-1	1,3-Dichlorobenzene	U	1430	ug/kg	286	1430
100-51-6	Benzyl alcohol	U	1430	ug/kg	429	1430
95-50-1	1,2-Dichlorobenzene	U	1430	ug/kg	286	1430
108-60-1	bis(2-Chloroisopropyl)ether	U	1430	ug/kg	286	1430
95-48-7	o-Cresol	U	1430	ug/kg	286	1430
65794-96-9	m,p-Cresols	U	1430	ug/kg	429	1430
67-72-1	Hexachloroethane	U	1430	ug/kg	286	1430
98-95-3	Nitrobenzene	U	1430	ug/kg	286	1430
78-59-1	Isophorone	U	1430	ug/kg	286	1430
88-75-5	2-Nitrophenol	U	1430	ug/kg	286	1430
105-67-9	2,4-Dimethylphenol	U	1430	ug/kg	501	1430
111-91-1	bis(2-Chloroethoxy)methane	U	1430	ug/kg	286	1430
120-83-2	2,4-Dichlorophenol	U	1430	ug/kg	286	1430
65-85-0	Benzoic acid	U	2860	ug/kg	715	2860
91-20-3	Naphthalene	U	143	ug/kg	42.9	143
106-47-8	4-Chloroaniline	U	1430	ug/kg	286	1430
87-68-3	Hexachlorobutadiene	U	1430	ug/kg	286	1430
91-57-6	2-Methylnaphthalene	U	143	ug/kg	28.6	143
77-47-4	Hexachlorocyclopentadiene	U	1430	ug/kg	286	1430
88-06-2	2,4,6-Trichlorophenol	U	1430	ug/kg	286	1430
95-95-4	2,4,5-Trichlorophenol	U	1430	ug/kg	286	1430
91-58-7	2-Chloronaphthalene	U	143	ug/kg	47.2	143
88-74-4	2-Nitroaniline	U	1430	ug/kg	286	1430
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	1430	ug/kg	286	1430

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539001	Date Received:	11/20/2009 08:50	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13462	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	4
Run Date:	11/29/2009 23:29	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s1k2929.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	1430	ug/kg	286	1430
606-20-2	2,6-Dinitrotoluene	U	1430	ug/kg	143	1430
208-96-8	Acenaphthylene	U	143	ug/kg	42.9	143
51-28-5	2,4-Dinitrophenol	U	2860	ug/kg	543	2860
132-64-9	Dibenzofuran	U	1430	ug/kg	286	1430
84-66-2	Diethylphthalate	U	1430	ug/kg	286	1430
86-73-7	Fluorene	U	143	ug/kg	42.9	143
7005-72-3	4-Chlorophenylphenylether	U	1430	ug/kg	286	1430
534-52-1	2-Methyl-4,6-dinitrophenol	U	1430	ug/kg	286	1430
100-01-6	4-Nitroaniline	U	1430	ug/kg	429	1430
	p-Nitroaniline					
122-39-4	Diphenylamine	U	1430	ug/kg	286	1430
122-66-7	Azobenzene	U	1430	ug/kg	286	1430
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1430	ug/kg	286	1430
118-74-1	Hexachlorobenzene	U	1430	ug/kg	286	1430
85-01-8	Phenanthrene	U	143	ug/kg	42.9	143
120-12-7	Anthracene	J	36.7	ug/kg	28.6	143
84-74-2	Di-n-butylphthalate	U	1430	ug/kg	286	1430
206-44-0	Fluoranthene	J	46.8	ug/kg	42.9	143
85-68-7	Butylbenzylphthalate	U	1430	ug/kg	286	1430
56-55-3	Benzo(a)anthracene	U	143	ug/kg	42.9	143
91-94-1	3,3'-Dichlorobenzidine	U	1430	ug/kg	429	1430
218-01-9	Chrysene	U	143	ug/kg	42.9	143
117-81-7	bis(2-Ethylhexyl)phthalate	U	1430	ug/kg	286	1430
117-84-0	Di-n-octylphthalate	U	1430	ug/kg	286	1430
205-99-2	Benzo(b)fluoranthene	U	143	ug/kg	42.9	143
207-08-9	Benzo(k)fluoranthene	U	143	ug/kg	42.9	143
50-32-8	Benzo(a)pyrene	U	143	ug/kg	42.9	143
193-39-5	Indeno(1,2,3-cd)pyrene	U	143	ug/kg	42.9	143
53-70-3	Dibenzo(a,h)anthracene	U	143	ug/kg	42.9	143
191-24-2	Benzo(ghi)perylene	U	143	ug/kg	42.9	143
120-82-1	1,2,4-Trichlorobenzene	U	1430	ug/kg	286	1430

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
96-37-7	Cyclopentane, methyl-	1.83	824	ug/kg	81	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2929.d
Lab Smp Id: 241539001 Client Smp ID: RE03-09-13462
Inj Date : 29-NOV-2009 23:29
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539001|926126|4|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 23
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	6.79600	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	725941	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2895962	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1507558	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2519095	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1892107	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1238667	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	275608	14.5353	2080
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	351575	15.2556	2180
$ 20 Nitrobenzene-d5	82	4.192	4.199	(0.893)	142288	7.45562	1070
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	351211	9.72723	1390
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	81571	19.3772	2770
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	357430	12.0346	1720

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
69 Anthracene	178	6.933	6.969	(1.002)	14925	0.25635	36.7(aH)
76 Fluoranthene	202	7.645	7.645	(1.105)	18103	0.32760	46.8(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s1k2929.d
Report Date: 11/30/2009 08:49
Lab. ID: 241539001 SampleType: SAMPLE
Injection Date: 29-NOV-2009 23:29
Operator: AMY Instrument: MSD1.i
Sample Info: |241539001|926126|4|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 4.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
43 Dimethylphthalate			CAS#: 131-11-3			
163	267424	5.93	5.72	80-120	100	(T)
164	1507558	5.93	5.72	0- 40	564	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	194772	5.93	5.76	80-120	100	(T)
63	2676	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	194772	5.93	6.05	80-120	100	(T)
89	2565	5.93	6.05	40-100	1	(QT)
63	2676	5.93	6.05	19- 79	1	(QT)
69 Anthracene			CAS#: 120-12-7			
178	14925	6.93	6.97	80-120	100	( )
179	3398	6.93	6.97	0- 45	23	( )
176	2606	6.93	6.97	0- 48	17	( )
76 Fluoranthene			CAS#: 206-44-0			
202	18103	7.65	7.65	80-120	100	( )
203	2995	7.65	7.65	0- 47	17	( )
101	3245	7.65	7.65	0- 43	18	( )
79 Pyrene			CAS#: 129-00-0			
202	16557	7.79	7.79	80-120	100	( )
200	3622	7.79	7.79	0- 51	22	( )
101	3049	7.78	7.79	0- 45	18	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
95	Benzo(b)fluoranthene			CAS#: 205-99-2		
252	5832	9.50	9.51	80-120	100	( )
253	870	9.50	9.51	0- 51	15	( )
125	437	9.50	9.50	0- 44	8	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2929.d
Lab Smp Id: 241539001 Client Smp ID: RE03-09-13462
Inj Date : 29-NOV-2009 23:29
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539001|926126|4|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 23
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	6.79600	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	4332061	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclopentane, methyl-				CAS #: 96-37-7			
1.834	624309	5.76454498	824	81	NIST05.L	1467	10

Data File: /chem/MSD1.i/s112909.b/s1k2929.d
Date : 29-NOV-2009 23:29
Client ID: REQ3-09-13462
Sample Info: 1241539001|9261261 4|SVMF11|LANL
Volume Injected (ul): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

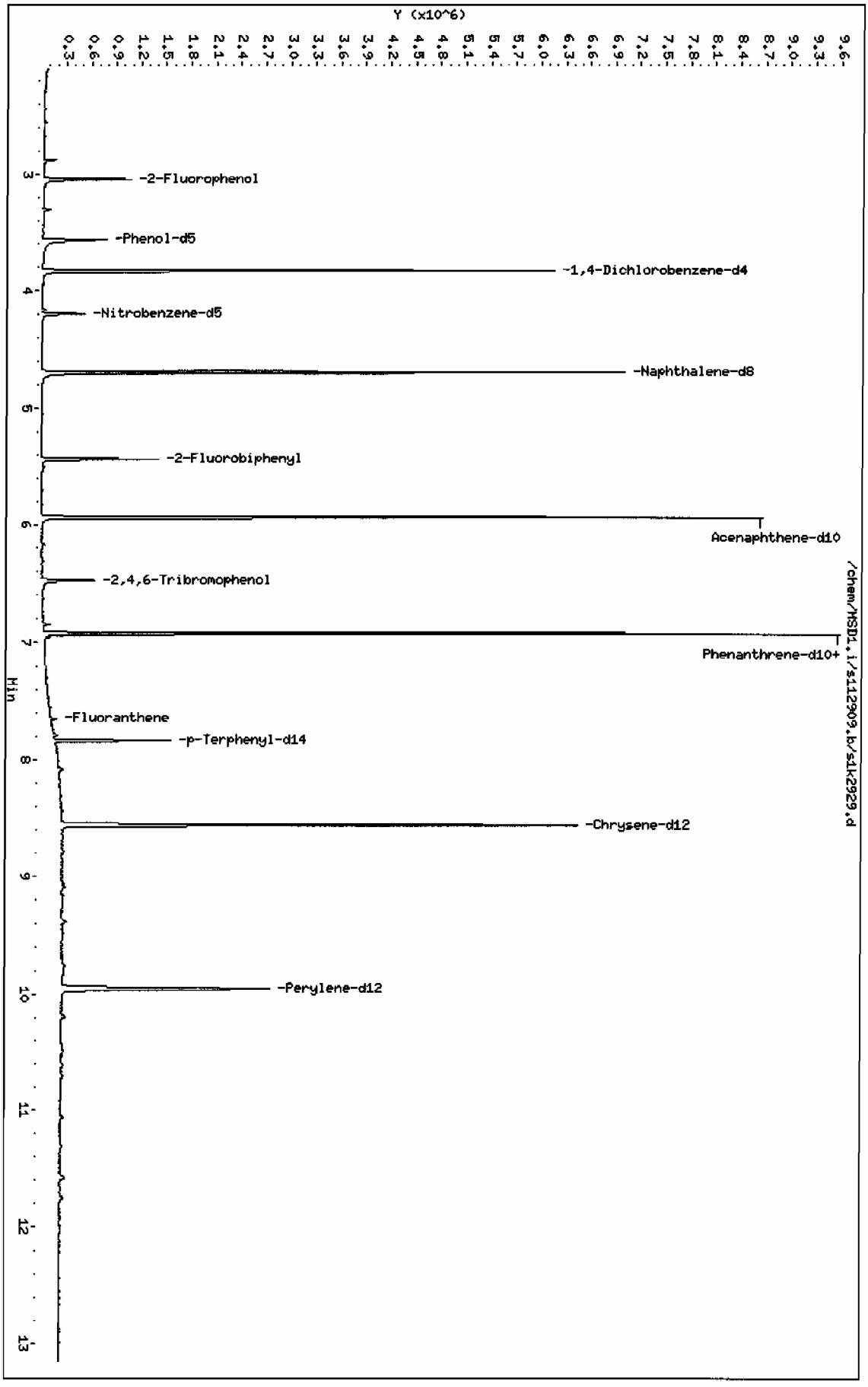

Page 1

Data File: /chem/MSD1.i/s112909.b/s1k2929.d

Date : 29-NOV-2009 23:29

Client ID: RE03-09-13462

Instrument: MSD1.i

Sample Info: |241539001|926126|4|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 36.7 ug/Kg

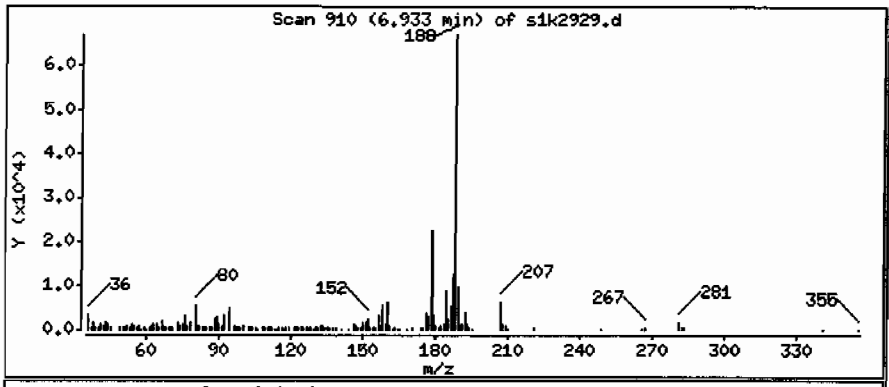

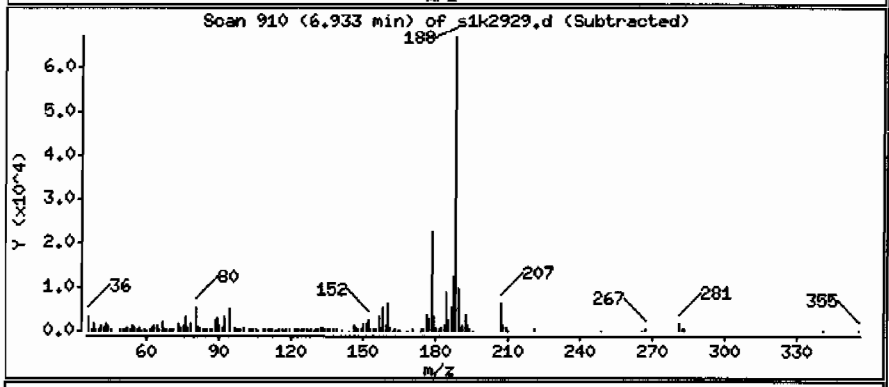

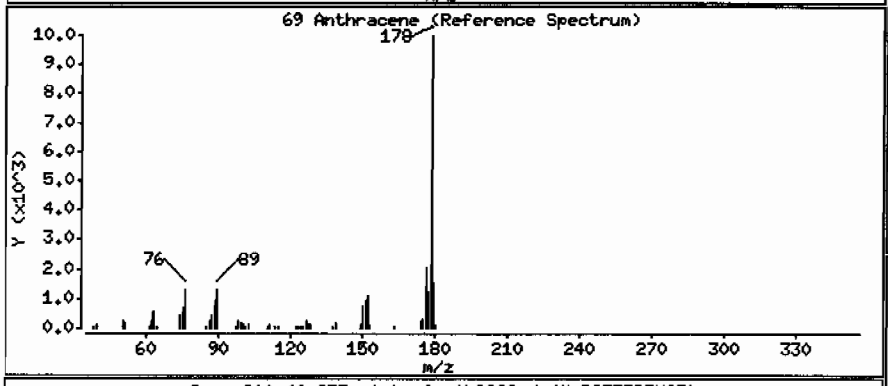

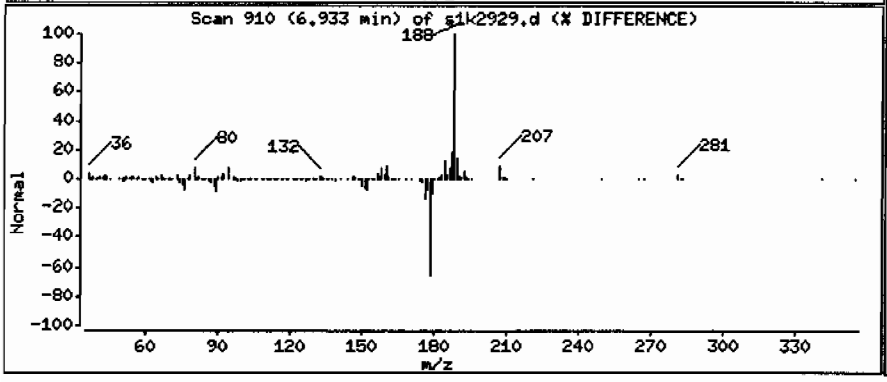

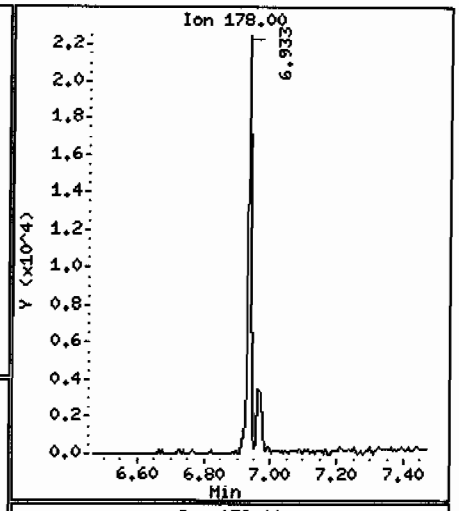

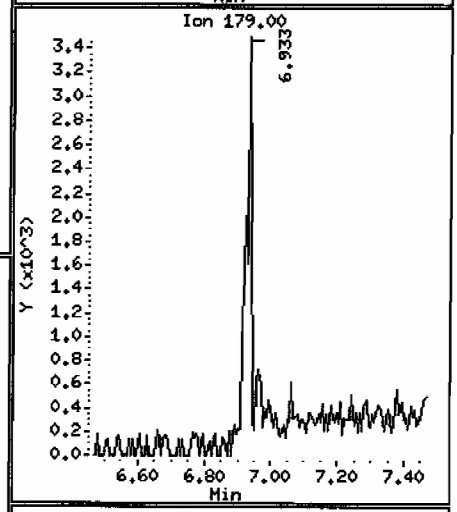

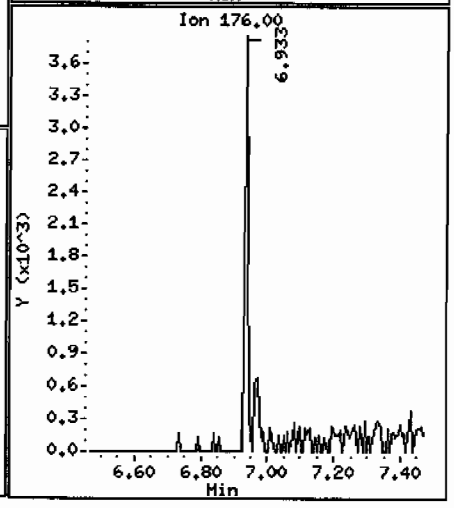

Data File: /chem/MSD1.i/s112909.b/s1k2929.d

Date : 29-NOV-2009 23:29

Client ID: RE03-09-13462

Instrument: MSD1.i

Sample Info: 1241539001192612614|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 46.8 ug/Kg

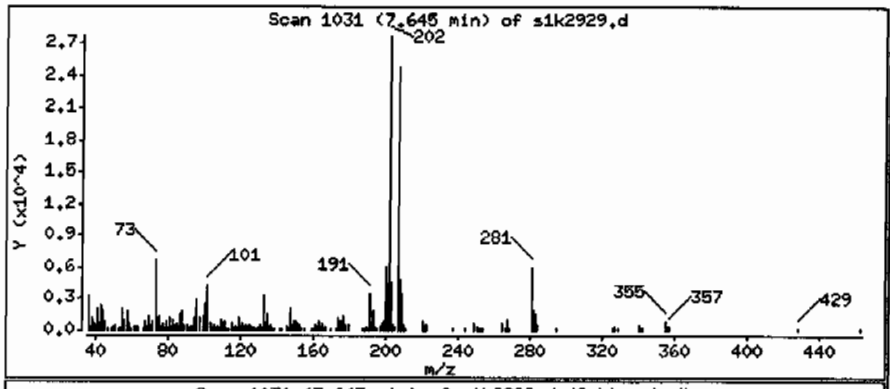

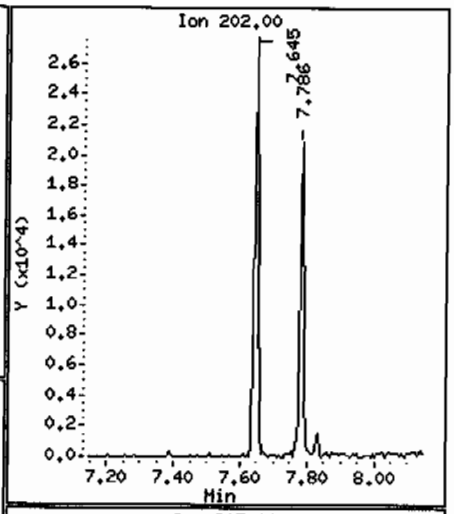

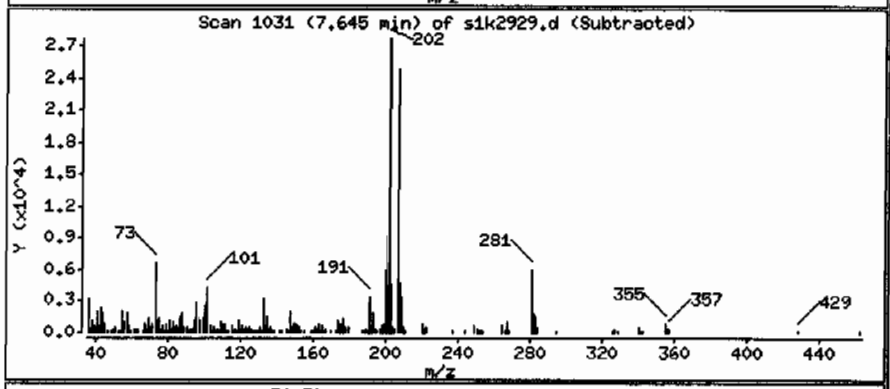

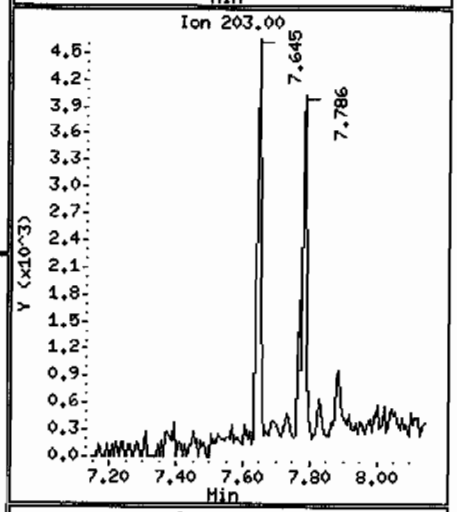

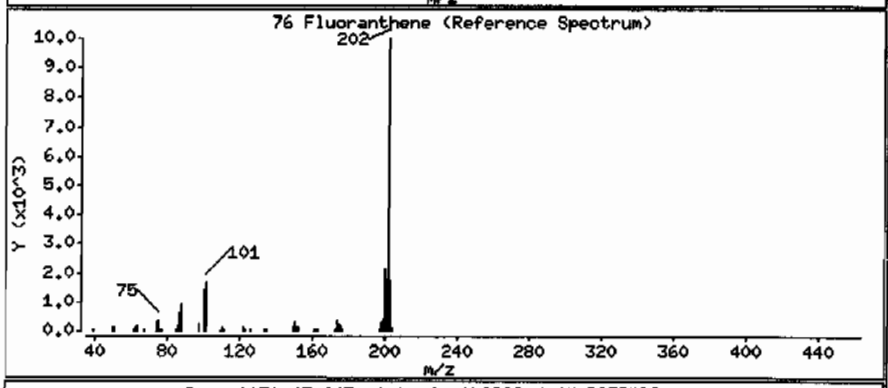

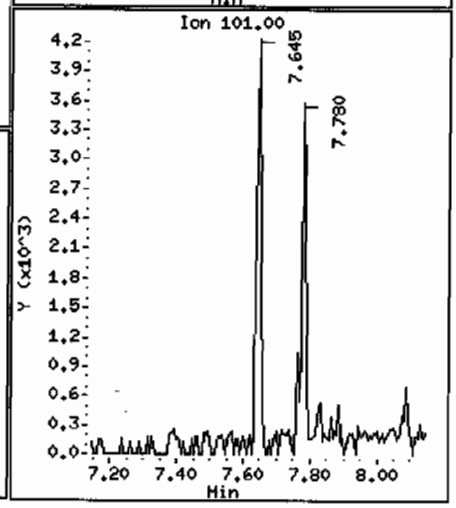

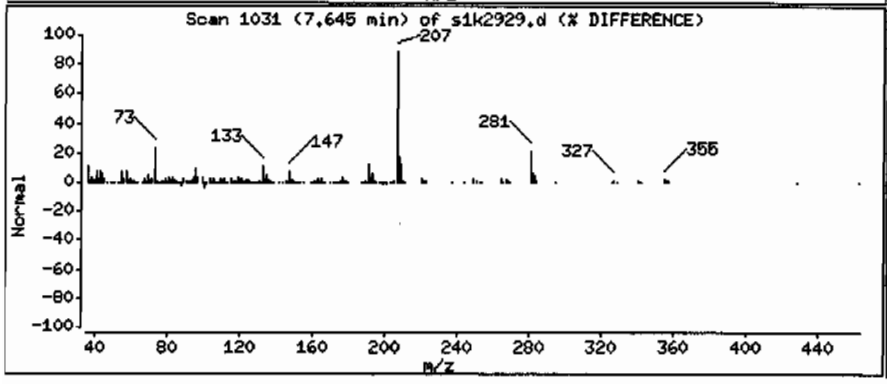

Data File: /chem/MSD1.i/s112909.b/s1k2929.d

Page 1

Date : 29-NOV-2009 23:29

Client ID: RE03-09-13462

Instrument: MSD1.i

Sample Info: |2415390011926126|4|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentane, methyl-	96-37-7	NIST05.L	1467	81	C6H12	84
Cyclopentane, methyl-	96-37-7	NIST05.L	1468	76	C6H12	84
Cyclohexane	110-82-7	NIST05.L	1432	72	C6H12	84

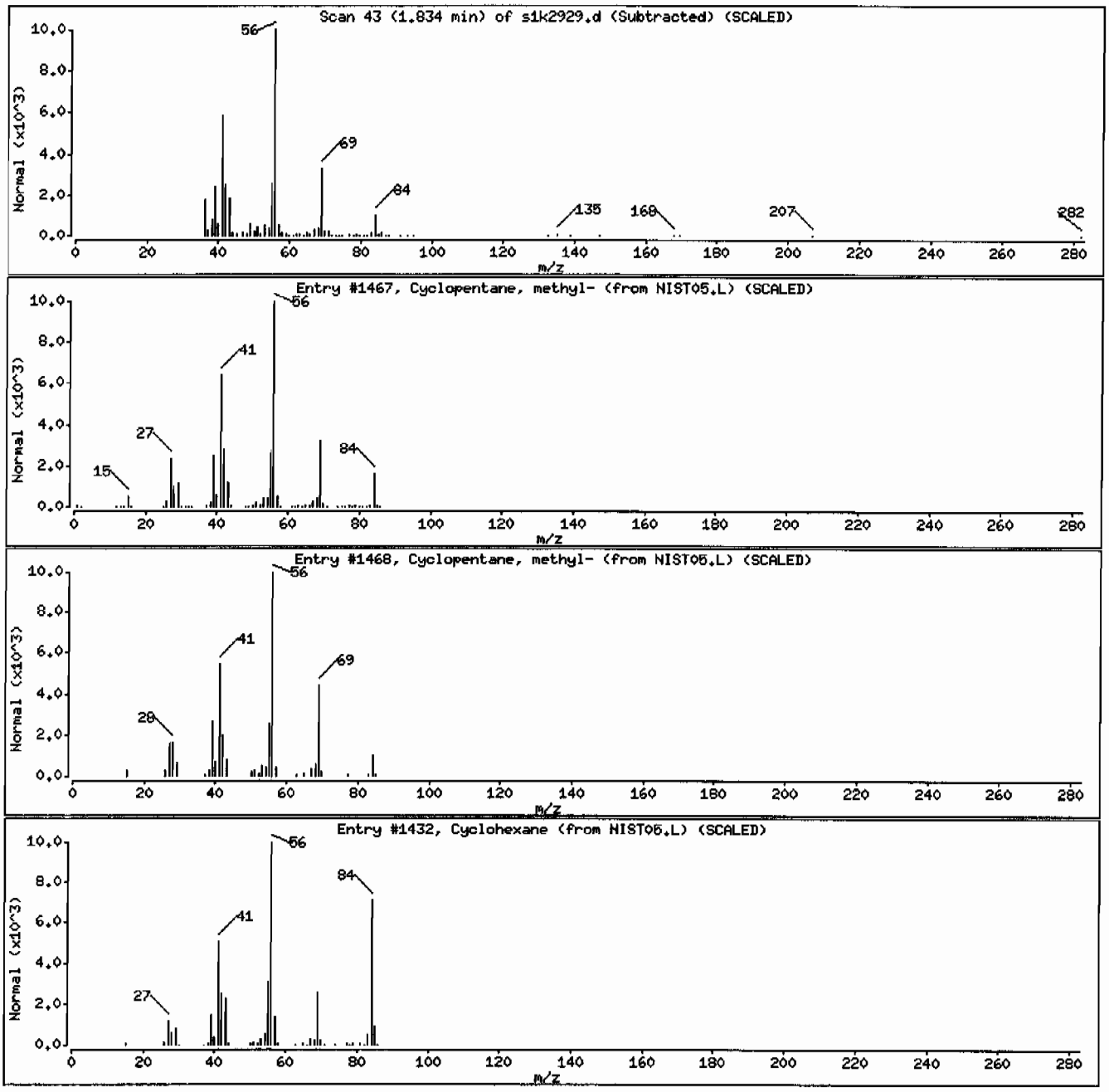

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13463	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	4
Run Date:	11/30/2009 00:15	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2931.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1390	ug/kg	279	1390
108-95-2	Phenol	U	1390	ug/kg	279	1390
95-57-8	2-Chlorophenol	U	1390	ug/kg	279	1390
106-46-7	1,4-Dichlorobenzene	U	1390	ug/kg	279	1390
621-64-7	N-Nitrosodipropylamine	U	1390	ug/kg	279	1390
59-50-7	4-Chloro-3-methylphenol	U	1390	ug/kg	279	1390
83-32-9	Acenaphthene	U	139	ug/kg	46.0	139
121-14-2	2,4-Dinitrotoluene	U	1390	ug/kg	139	1390
100-02-7	4-Nitrophenol	U	1390	ug/kg	460	1390
87-86-5	Pentachlorophenol	U	1390	ug/kg	349	1390
129-00-0	Pyrene	U	139	ug/kg	41.8	139
110-86-1	Pyridine	U	1390	ug/kg	279	1390
62-53-3	Aniline	U	1390	ug/kg	418	1390
111-44-4	bis(2-Chloroethyl) ether	U	1390	ug/kg	279	1390
541-73-1	1,3-Dichlorobenzene	U	1390	ug/kg	279	1390
100-51-6	Benzyl alcohol	U	1390	ug/kg	418	1390
95-50-1	1,2-Dichlorobenzene	U	1390	ug/kg	279	1390
108-60-1	bis(2-Chloroisopropyl)ether	U	1390	ug/kg	279	1390
95-48-7	o-Cresol	U	1390	ug/kg	279	1390
65794-96-9	m,p-Cresols	U	1390	ug/kg	418	1390
67-72-1	Hexachloroethane	U	1390	ug/kg	279	1390
98-95-3	Nitrobenzene	U	1390	ug/kg	279	1390
78-59-1	Isophorone	U	1390	ug/kg	279	1390
88-75-5	2-Nitrophenol	U	1390	ug/kg	279	1390
105-67-9	2,4-Dimethylphenol	U	1390	ug/kg	488	1390
111-91-1	bis(2-Chloroethoxy)methane	U	1390	ug/kg	279	1390
120-83-2	2,4-Dichlorophenol	U	1390	ug/kg	279	1390
65-85-0	Benzoic acid	U	2790	ug/kg	697	2790
91-20-3	Naphthalene	U	139	ug/kg	41.8	139
106-47-8	4-Chloroaniline	U	1390	ug/kg	279	1390
87-68-3	Hexachlorobutadiene	U	1390	ug/kg	279	1390
91-57-6	2-Methylnaphthalene	U	139	ug/kg	27.9	139
77-47-4	Hexachlorocyclopentadiene	U	1390	ug/kg	279	1390
88-06-2	2,4,6-Trichlorophenol	U	1390	ug/kg	279	1390
95-95-4	2,4,5-Trichlorophenol	U	1390	ug/kg	279	1390
91-58-7	2-Chloronaphthalene	U	139	ug/kg	46.0	139
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	1390	ug/kg	279	1390
99-09-2	3-Nitroaniline	U	1390	ug/kg	279	1390

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539003	Date Received:	11/20/2009 08:50	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13463	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	4
Run Date:	11/30/2009 00:15	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2931.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	1390	ug/kg	279	1390
606-20-2	2,6-Dinitrotoluene	U	1390	ug/kg	139	1390
208-96-8	Acenaphthylene	U	139	ug/kg	41.8	139
51-28-5	2,4-Dinitrophenol	U	2790	ug/kg	530	2790
132-64-9	Dibenzofuran	U	1390	ug/kg	279	1390
84-66-2	Diethylphthalate	U	1390	ug/kg	279	1390
86-73-7	Fluorene	U	139	ug/kg	41.8	139
7005-72-3	4-Chlorophenylphenylether	U	1390	ug/kg	279	1390
534-52-1	2-Methyl-4,6-dinitrophenol	U	1390	ug/kg	279	1390
100-01-6	4-Nitroaniline	U	1390	ug/kg	418	1390
	p-Nitroaniline					
122-39-4	Diphenylamine	U	1390	ug/kg	279	1390
122-66-7	Azobenzene	U	1390	ug/kg	279	1390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1390	ug/kg	279	1390
118-74-1	Hexachlorobenzene	U	1390	ug/kg	279	1390
85-01-8	Phenanthrene	U	139	ug/kg	41.8	139
120-12-7	Anthracene	U	139	ug/kg	27.9	139
84-74-2	Di-n-butylphthalate	U	1390	ug/kg	279	1390
206-44-0	Fluoranthene	U	139	ug/kg	41.8	139
85-68-7	Butylbenzylphthalate	U	1390	ug/kg	279	1390
56-55-3	Benzo(a)anthracene	U	139	ug/kg	41.8	139
91-94-1	3,3'-Dichlorobenzidine	U	1390	ug/kg	418	1390
218-01-9	Chrysene	U	139	ug/kg	41.8	139
117-81-7	bis(2-Ethylhexyl)phthalate	U	1390	ug/kg	279	1390
117-84-0	Di-n-octylphthalate	U	1390	ug/kg	279	1390
205-99-2	Benzo(b)fluoranthene	U	139	ug/kg	41.8	139
207-08-9	Benzo(k)fluoranthene	U	139	ug/kg	41.8	139
50-32-8	Benzo(a)pyrene	U	139	ug/kg	41.8	139
193-39-5	Indeno(1,2,3-cd)pyrene	U	139	ug/kg	41.8	139
53-70-3	Dibenzo(a,h)anthracene	U	139	ug/kg	41.8	139
191-24-2	Benzo(ghi)perylene	U	139	ug/kg	41.8	139
120-82-1	1,2,4-Trichlorobenzene	U	1390	ug/kg	279	1390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.83	703	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2931.d
Lab Smp Id: 241539003 Client Smp ID: RE03-09-13463
Inj Date : 30-NOV-2009 00:15
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539003|926126|4|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 25
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	4.78600	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	673692	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2665214	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1394684	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2259361	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1455099	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1004032	40.0000	
$ 3 2-Fluorophenol	112	3.034	3.040	(0.793)	263800	14.9916	2090
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	336062	15.7134	2190
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	124761	7.10322	990
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	336565	10.0760	1400
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	79366	20.3792	2840
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	301766	13.2119	1840

ION RATIO REPORT

SV REPORT

Data file: s1k2931.d
Report Date: 11/30/2009 08:49
Lab. ID: 241539003 SampleType: SAMPLE
Injection Date: 30-NOV-2009 00:15
Operator: AMY Instrument: MSD1.i
Sample Info: |241539003|926126|4|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 4.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
43 Dimethylphthalate			CAS#: 131-11-3			
163	246634	5.93	5.72	80-120	100	(T)
164	1394684	5.93	5.72	0- 40	565	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	179664	5.93	5.76	80-120	100	(T)
63	2331	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	179664	5.93	6.05	80-120	100	(T)
89	2068	5.93	6.05	40-100	1	(QT)
63	2331	5.93	6.05	19- 79	1	(QT)
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	1461	9.51	9.51	80-120	100	( )
253	520	9.50	9.51	0- 51	36	( )
125	896	9.50	9.50	0- 44	61	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2931.d
Lab Smp Id: 241539003 Client Smp ID: RE03-09-13463
Inj Date : 30-NOV-2009 00:15
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539003|926126|4|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 25
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	4.78600	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3993632	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.828	503340	5.04142084	703	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2931.d
Date : 30-NOV-2009 00:15
Client ID: RE03-09-13463
Sample Info: |2415390031926126|4|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

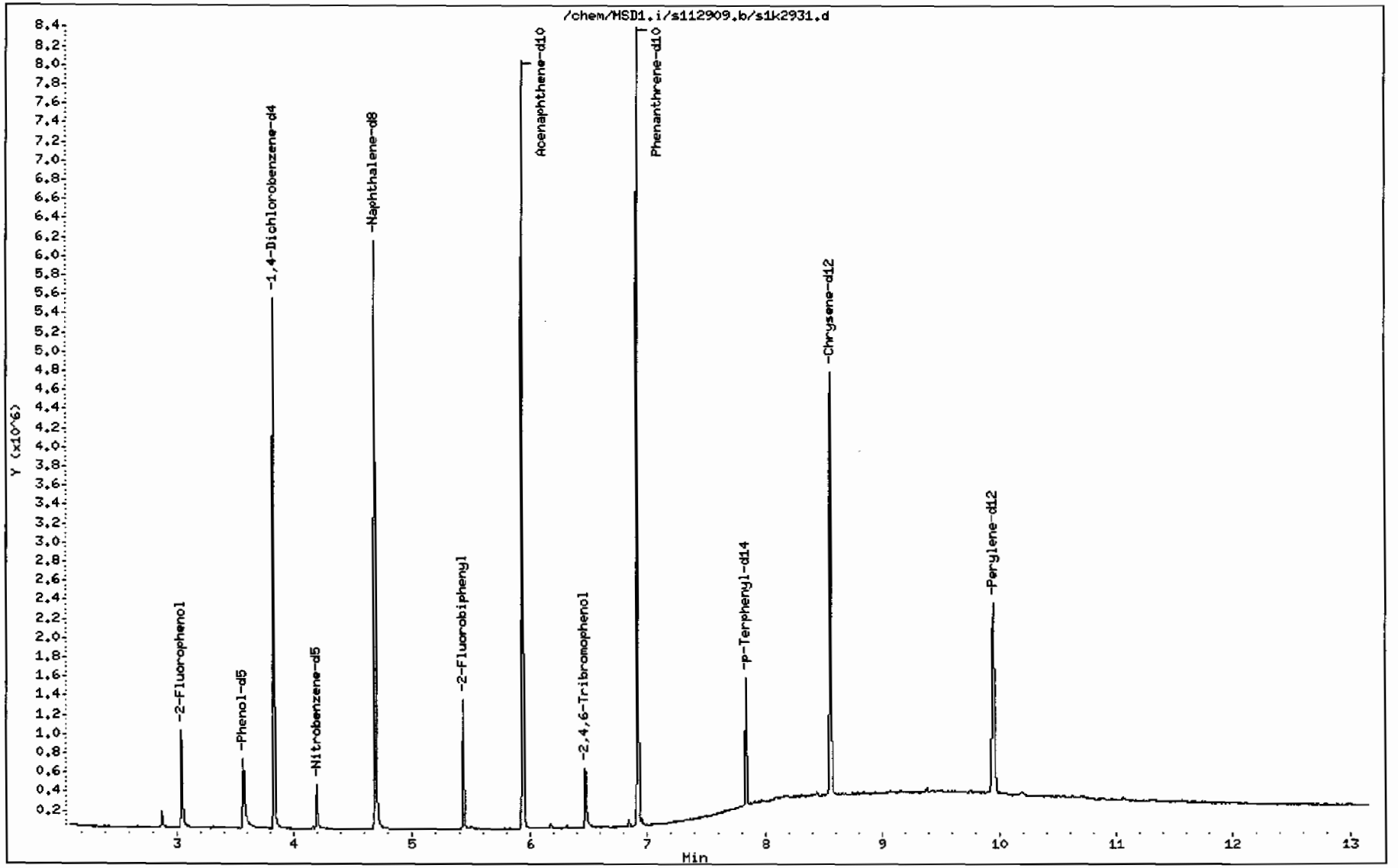

Data File: /chem/MSD1.i/s112909.b/s1k2931.d

Page 1

Date : 30-NOV-2009 00:15

Client ID: RE03-09-13463

Instrument: MSD1.i

Sample Info: 1241539003|926126|4|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Tetrazole, 5-methyl-	4076-36-2	NIST05.L	1304	72	C2H4N4	84
Cyclopentane, methyl-	96-37-7	NIST05.L	1467	70	C6H12	84
Cyclopentane, methyl-	96-37-7	NIST05.L	1465	62	C6H12	84

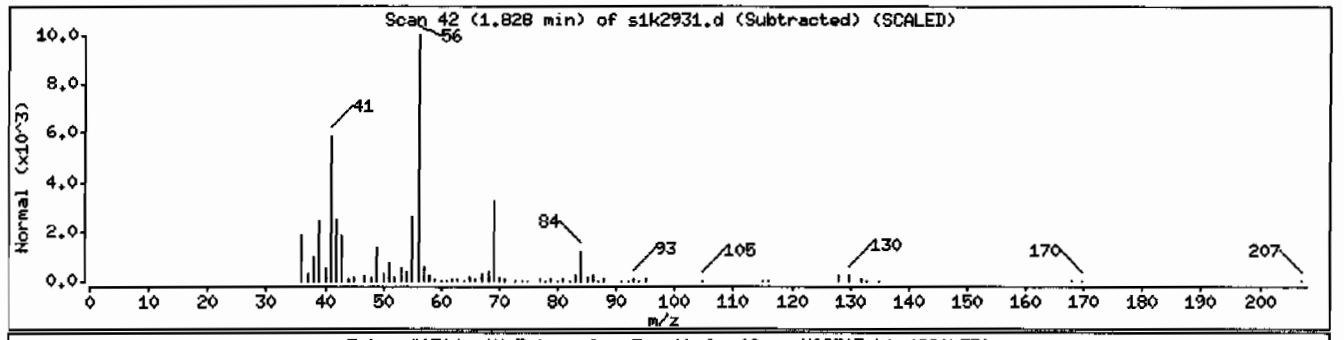

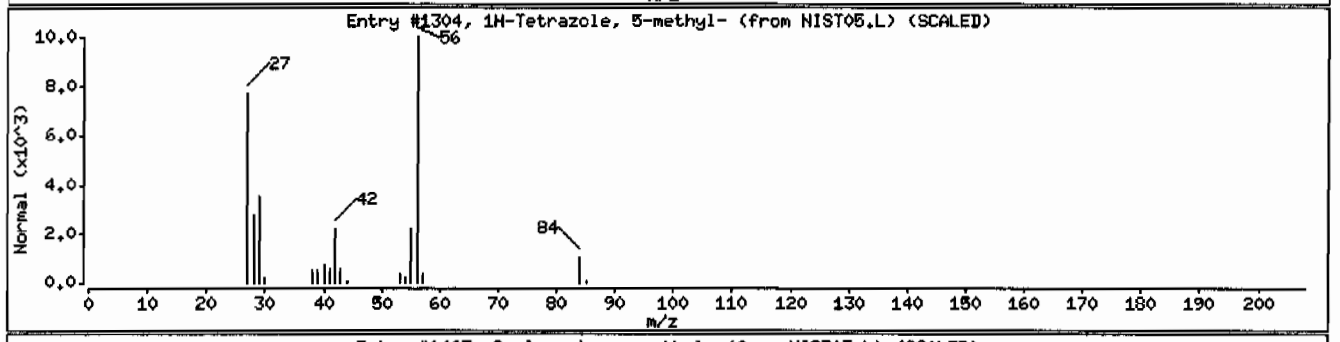

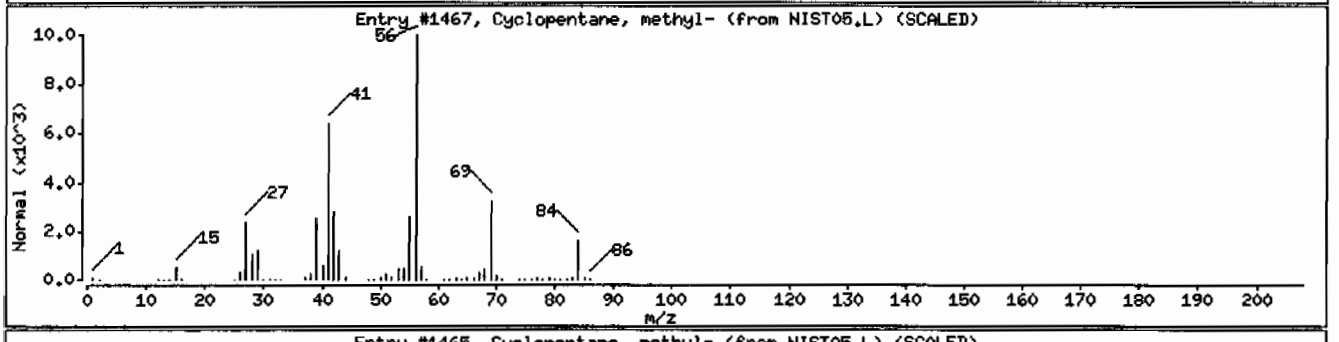

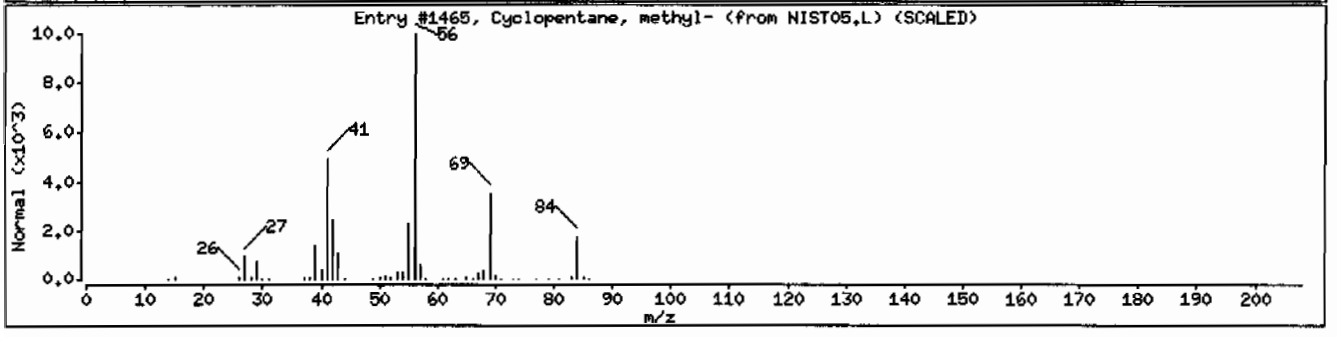

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539002	Date Received:	11/20/2009 08:50	%Moisture:	3.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13464	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:52	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2930.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	343	ug/kg	68.6	343
108-95-2	Phenol	U	343	ug/kg	68.6	343
95-57-8	2-Chlorophenol	U	343	ug/kg	68.6	343
106-46-7	1,4-Dichlorobenzene	U	343	ug/kg	68.6	343
621-64-7	N-Nitrosodipropylamine	U	343	ug/kg	68.6	343
59-50-7	4-Chloro-3-methylphenol	U	343	ug/kg	68.6	343
83-32-9	Acenaphthene	U	34.3	ug/kg	11.3	34.3
121-14-2	2,4-Dinitrotoluene	U	343	ug/kg	34.3	343
100-02-7	4-Nitrophenol	U	343	ug/kg	113	343
87-86-5	Pentachlorophenol	U	343	ug/kg	85.7	343
129-00-0	Pyrene	U	34.3	ug/kg	10.3	34.3
110-86-1	Pyridine	U	343	ug/kg	68.6	343
62-53-3	Aniline	U	343	ug/kg	103	343
111-44-4	bis(2-Chloroethyl) ether	U	343	ug/kg	68.6	343
541-73-1	1,3-Dichlorobenzene	U	343	ug/kg	68.6	343
100-51-6	Benzyl alcohol	U	343	ug/kg	103	343
95-50-1	1,2-Dichlorobenzene	U	343	ug/kg	68.6	343
108-60-1	bis(2-Chloroisopropyl)ether	U	343	ug/kg	68.6	343
95-48-7	o-Cresol	U	343	ug/kg	68.6	343
65794-96-9	m,p-Cresols	U	343	ug/kg	103	343
67-72-1	Hexachloroethane	U	343	ug/kg	68.6	343
98-95-3	Nitrobenzene	U	343	ug/kg	68.6	343
78-59-1	Isophorone	U	343	ug/kg	68.6	343
88-75-5	2-Nitrophenol	U	343	ug/kg	68.6	343
105-67-9	2,4-Dimethylphenol	U	343	ug/kg	120	343
111-91-1	bis(2-Chloroethoxy)methane	U	343	ug/kg	68.6	343
120-83-2	2,4-Dichlorophenol	U	343	ug/kg	68.6	343
65-85-0	Benzoic acid	U	686	ug/kg	171	686
91-20-3	Naphthalene	U	34.3	ug/kg	10.3	34.3
106-47-8	4-Chloroaniline	U	343	ug/kg	68.6	343
87-68-3	Hexachlorobutadiene	U	343	ug/kg	68.6	343
91-57-6	2-Methylnaphthalene	U	34.3	ug/kg	6.86	34.3
77-47-4	Hexachlorocyclopentadiene	U	343	ug/kg	68.6	343
88-06-2	2,4,6-Trichlorophenol	U	343	ug/kg	68.6	343
95-95-4	2,4,5-Trichlorophenol	U	343	ug/kg	68.6	343
91-58-7	2-Chloronaphthalene	U	34.3	ug/kg	11.3	34.3
88-74-4	2-Nitroaniline	U	343	ug/kg	68.6	343
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	343	ug/kg	68.6	343

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539002	Date Received:	11/20/2009 08:50	%Moisture:	3.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13464	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:52	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2930.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	343	ug/kg	68.6	343
606-20-2	2,6-Dinitrotoluene	U	343	ug/kg	34.3	343
208-96-8	Acenaphthylene	U	34.3	ug/kg	10.3	34.3
51-28-5	2,4-Dinitrophenol	U	686	ug/kg	130	686
132-64-9	Dibenzofuran	U	343	ug/kg	68.6	343
84-66-2	Diethylphthalate	U	343	ug/kg	68.6	343
86-73-7	Fluorene	U	34.3	ug/kg	10.3	34.3
7005-72-3	4-Chlorophenylphenylether	U	343	ug/kg	68.6	343
534-52-1	2-Methyl-4,6-dinitrophenol	U	343	ug/kg	68.6	343
100-01-6	4-Nitroaniline	U	343	ug/kg	103	343
	p-Nitroaniline					
122-39-4	Diphenylamine	U	343	ug/kg	68.6	343
122-66-7	Azobenzene	U	343	ug/kg	68.6	343
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	343	ug/kg	68.6	343
118-74-1	Hexachlorobenzene	U	343	ug/kg	68.6	343
85-01-8	Phenanthrene	U	34.3	ug/kg	10.3	34.3
120-12-7	Anthracene	U	34.3	ug/kg	6.86	34.3
84-74-2	Di-n-butylphthalate	U	343	ug/kg	68.6	343
206-44-0	Fluoranthene	U	34.3	ug/kg	10.3	34.3
85-68-7	Butylbenzylphthalate	U	343	ug/kg	68.6	343
56-55-3	Benzo(a)anthracene	U	34.3	ug/kg	10.3	34.3
91-94-1	3,3'-Dichlorobenzidine	U	343	ug/kg	103	343
218-01-9	Chrysene	U	34.3	ug/kg	10.3	34.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	343	ug/kg	68.6	343
117-84-0	Di-n-octylphthalate	U	343	ug/kg	68.6	343
205-99-2	Benzo(b)fluoranthene	U	34.3	ug/kg	10.3	34.3
207-08-9	Benzo(k)fluoranthene	U	34.3	ug/kg	10.3	34.3
50-32-8	Benzo(a)pyrene	U	34.3	ug/kg	10.3	34.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.3	ug/kg	10.3	34.3
53-70-3	Dibenzo(a,h)anthracene	U	34.3	ug/kg	10.3	34.3
191-24-2	Benzo(ghi)perylene	U	34.3	ug/kg	10.3	34.3
120-82-1	1,2,4-Trichlorobenzene	U	343	ug/kg	68.6	343

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	243	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2930.d
Lab Smp Id: 241539002 Client Smp ID: RE03-09-13464
Inj Date : 29-NOV-2009 23:52
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539002|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	3.19930	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	705724	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2798485	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1459751	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2427770	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1831803	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1191694	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1324336	71.8450	2460
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1608542	71.7976	2460
$ 20 Nitrobenzene-d5	82	4.187	4.199	(0.893)	692401	37.5442	1290
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1537948	43.9904	1510
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	391699	96.0954	3290
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1518178	52.7997	1810

ION RATIO REPORT

SV REPORT

Data file: s1k2930.d
Report Date: 11/30/2009 08:49
Lab. ID: 241539002 SampleType: SAMPLE
Injection Date: 29-NOV-2009 23:52
Operator: AMY Instrument: MSD1.i
Sample Info: |241539002|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-603
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	76717	3.56	3.63	80-120	100	(T)
93	792	3.60	3.63	408-468	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	91443	4.19	4.08	80-120	100	(T)
42	60806	4.19	4.08	48-108	66	(T)
22 Isophorone			CAS#: 78-59-1			
82	692401	4.19	4.37	80-120	100	(T)
138	110	4.26	4.37	0- 50	0	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	256655	5.93	5.72	80-120	100	(T)
164	1459751	5.93	5.72	0- 40	569	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	186012	5.93	5.76	80-120	100	(T)
63	2558	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	186012	5.93	6.05	80-120	100	(T)
89	2128	5.93	6.05	40-100	1	(QT)
63	2558	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	25122	6.47	6.31	80-120	100	(T)
165	23837	6.47	6.31	65-125	95	(T)
167	8115	6.47	6.31	0- 43	32	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	22848	6.47	6.62	80-120	100	(T)
141	147128	6.47	6.62	62-122	644	(QT)
250	45869	6.47	6.62	66-126	201	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	3014	9.50	9.51	80-120	100	( )
253	894	9.50	9.51	0- 51	30	( )
125	792	9.49	9.50	0- 44	26	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2930.d
Lab Smp Id: 241539002 Client Smp ID: RE03-09-13464
Inj Date : 29-NOV-2009 23:52
Operator : AMY Inst ID: MSD1.i
Smp Info : |241539002|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	3.19930	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	4212237	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.875	746501	7.08888225	243	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2930.d
Date : 29-NOV-2009 23:52
Client ID: RE03-09-13464
Sample Info: |2415390021926126|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

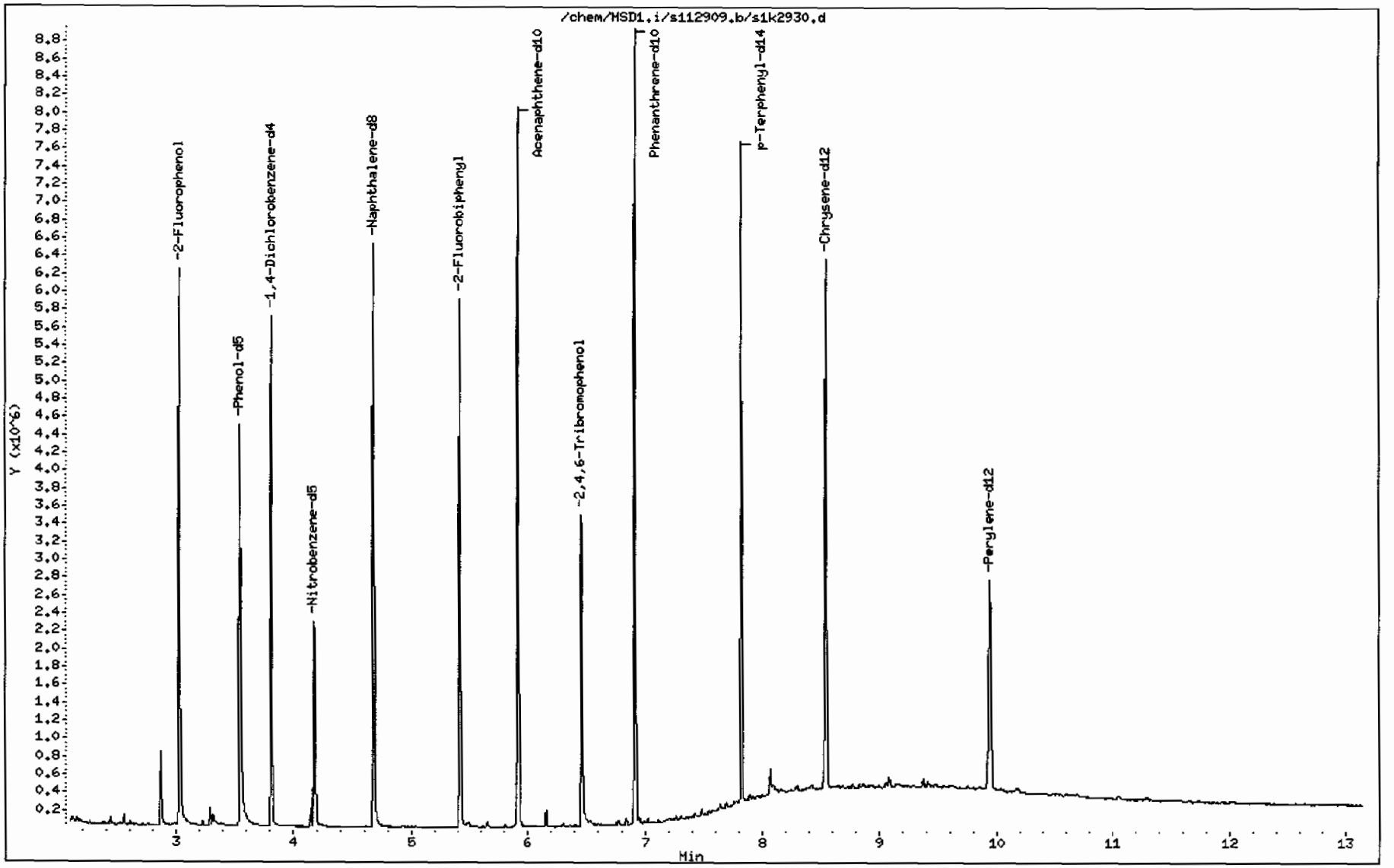

Data File: /chem/MSD1.i/s112909.b/s1k2930.d

Date : 29-NOV-2009 23:52

Client ID: RE03-09-13464

Instrument: MSD1.i

Sample Info: |2415390021926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116

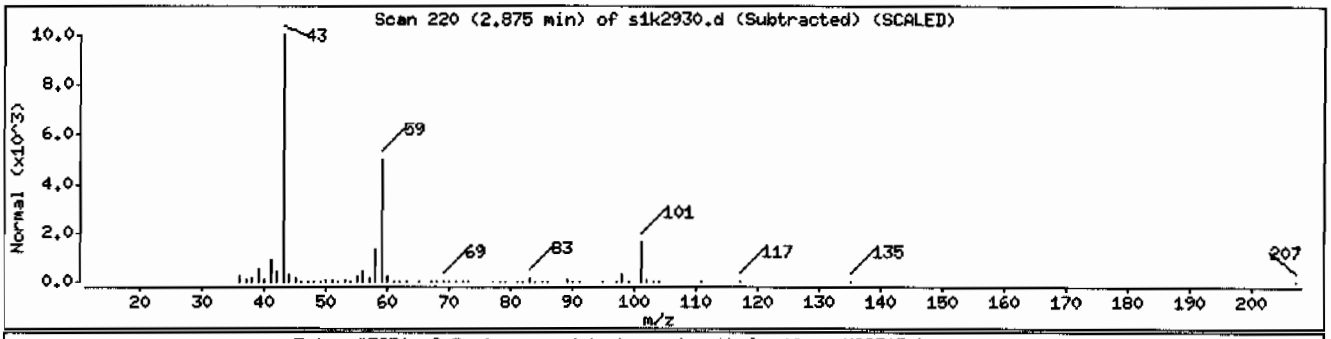

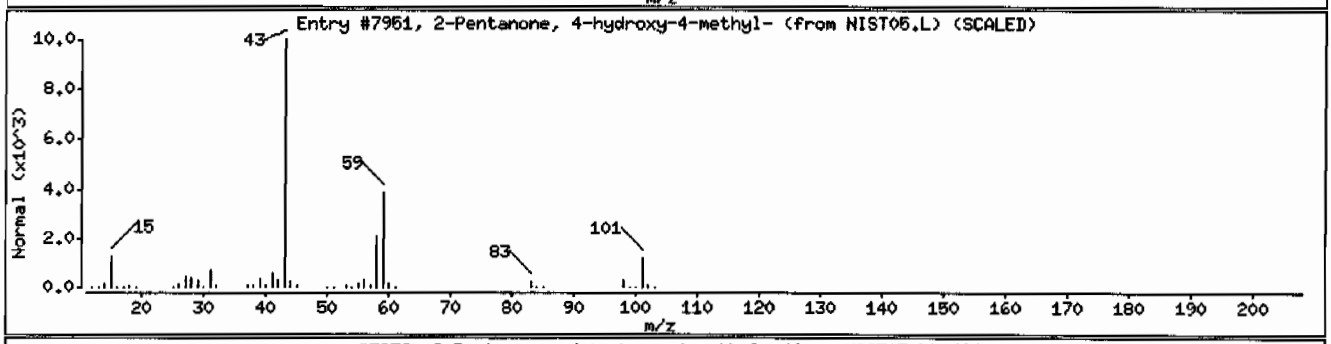

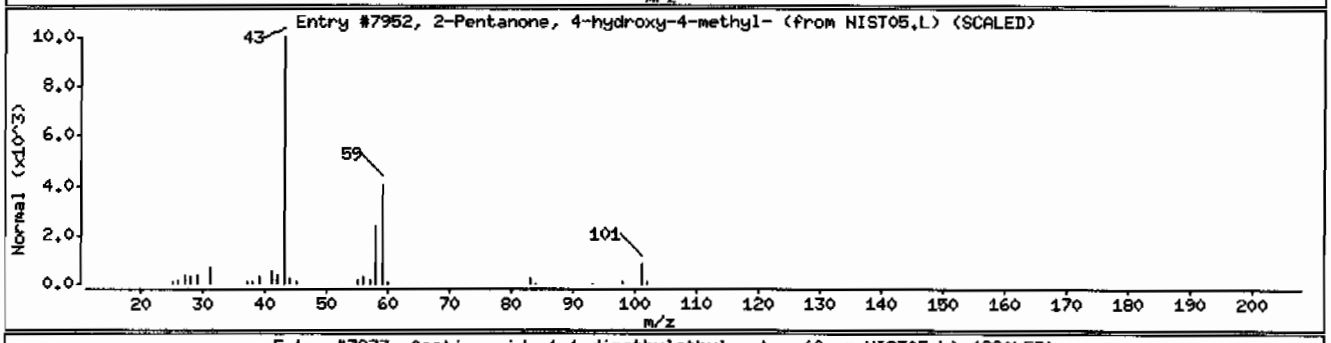

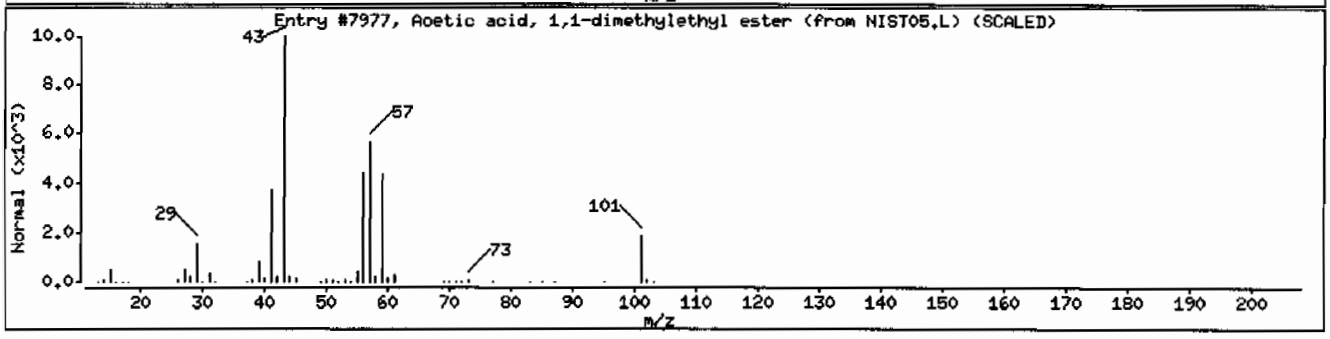

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 30-Nov-2009 09:10

Calibration History

Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Start Cal Date: 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 18:22	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1203.d
Cal Level: 2 , Cal Amount: 10.00000		
17-NOV-2009 16:56	nev	/chem/MSD1.i/s111409.b/s1k1262.d
15-NOV-2009 20:55	hex	/chem/MSD1.i/s111409.b/s1k1229.d
15-NOV-2009 18:11	pest	/chem/MSD1.i/s111409.b/s1k1222.d
15-NOV-2009 15:28	ap12	/chem/MSD1.i/s111409.b/s1k1215.d
14-NOV-2009 18:51	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1204.d
Cal Level: 3 , Cal Amount: 20.00000		
17-NOV-2009 17:19	nev	/chem/MSD1.i/s111409.b/s1k1263.d
15-NOV-2009 21:18	hex	/chem/MSD1.i/s111409.b/s1k1230.d
15-NOV-2009 18:35	pest	/chem/MSD1.i/s111409.b/s1k1223.d
15-NOV-2009 15:51	ap12	/chem/MSD1.i/s111409.b/s1k1216.d
14-NOV-2009 19:21	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1205.d
Cal Level: 4 , Cal Amount: 40.00000		
17-NOV-2009 17:42	nev	/chem/MSD1.i/s111409.b/s1k1264.d
15-NOV-2009 21:42	hex	/chem/MSD1.i/s111409.b/s1k1231.d
15-NOV-2009 18:58	pest	/chem/MSD1.i/s111409.b/s1k1224.d
15-NOV-2009 16:14	ap12	/chem/MSD1.i/s111409.b/s1k1217.d
14-NOV-2009 19:50	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1206.d
Cal Level: 5 , Cal Amount: 50.00000		
17-NOV-2009 18:05	nev	/chem/MSD1.i/s111409.b/s1k1265.d
15-NOV-2009 22:06	hex	/chem/MSD1.i/s111409.b/s1k1232.d
15-NOV-2009 19:21	pest	/chem/MSD1.i/s111409.b/s1k1225.d
15-NOV-2009 16:38	ap12	/chem/MSD1.i/s111409.b/s1k1218.d
14-NOV-2009 20:19	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1207.d
Cal Level: 6 , Cal Amount: 80.00000		
17-NOV-2009 18:28	nev	/chem/MSD1.i/s111409.b/s1k1266.d
15-NOV-2009 22:30	hex	/chem/MSD1.i/s111409.b/s1k1233.d
15-NOV-2009 19:45	pest	/chem/MSD1.i/s111409.b/s1k1226.d
15-NOV-2009 17:01	ap12	/chem/MSD1.i/s111409.b/s1k1219.d
14-NOV-2009 20:47	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1208.d
Cal Level: 7 , Cal Amount: 100.00000		

17-NOV-2009 18:52	nev	/chem/MSD1.i/s111409.b/s1k1267.d
15-NOV-2009 22:53	hex	/chem/MSD1.i/s111409.b/s1k1234.d
15-NOV-2009 20:09	pest	/chem/MSD1.i/s111409.b/s1k1227.d
15-NOV-2009 17:24	ap12	/chem/MSD1.i/s111409.b/s1k1220.d
14-NOV-2009 21:16	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1209.d

Cal Level: 8 , Cal Amount: 120.00000		
17-NOV-2009 19:15	nev	/chem/MSD1.i/s111409.b/s1k1268.d
15-NOV-2009 20:31	pest	/chem/MSD1.i/s111409.b/s1k1228.d
15-NOV-2009 17:47	ap12	/chem/MSD1.i/s111409.b/s1k1221.d
14-NOV-2009 21:45	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1210.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 15:16	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2908.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 16:27	pest	/chem/MSD1.i/s112909.b/s1k2911.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 16:04	nev	/chem/MSD1.i/s112909.b/s1k2910.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 15:40	ap12	/chem/MSD1.i/s112909.b/s1k2909.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 13:43	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2906.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 11:23	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2904.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 10:50	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2903.d

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Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Calibration File Names:
Level 1: /chem/MSD1.i/s111409.b/s1k1203.d
Level 2: /chem/MSD1.i/s111409.b/s1k1262.d
Level 3: /chem/MSD1.i/s111409.b/s1k1263.d
Level 4: /chem/MSD1.i/s111409.b/s1k1264.d
Level 5: /chem/MSD1.i/s111409.b/s1k1265.d
Level 6: /chem/MSD1.i/s111409.b/s1k1266.d
Level 7: /chem/MSD1.i/s111409.b/s1k1267.d
Level 8: /chem/MSD1.i/s111409.b/s1k1268.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.54039	0.59425	0.56483	0.56773	0.57115					
	0.58358	0.54985					AVRG		0.56740		3.25055
2 Pyridine	+++++	0.93895	1.06231	1.03607	0.88870	0.86312					
	1.01434	0.86615					AVRG		0.95281		8.83991
4 Aniline	+++++	0.52437	0.56877	0.55954	0.56752	0.56439					
	0.57920	0.54312					AVRG		0.55813		3.31324
209 Benzaldehyde	+++++	0.85863	0.89515	0.82459	0.84178	+++++					
	0.78498	0.73887					AVRG		0.82400		6.72378
6 Phenol	+++++	1.30044	1.37922	1.37450	1.34330	1.33206					
	1.36293	1.27353					AVRG		1.33800		2.93989

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.97066	0.92013	0.97374	0.95071	0.94120	0.92474					
	0.92138	0.84393					AVRG		0.93081		4.39644
8 2-Chlorophenol	+++++	1.10018	1.18374	1.15316	1.14675	1.13425					
	1.15576	1.08633					AVRG		1.13717		2.96542
203 n-Decane	+++++	1.60577	1.68138	1.52755	1.45137	1.35767					
	1.27260	1.12485					AVRG		1.43160		13.59167
9 1,3-Dichlorobenzene	+++++	1.34153	1.44138	1.36782	1.35778	1.32788					
	1.29449	1.20929					AVRG		1.33431		5.33878
11 1,4-Dichlorobenzene	+++++	1.33212	1.41388	1.35420	1.32607	1.29299					
	1.26993	1.16675					AVRG		1.30799		5.91221
12 Benzyl alcohol	+++++	0.65002	0.69243	0.70051	0.67929	0.68651					
	0.73179	0.69932					AVRG		0.69141		3.57264
13 1,2-Dichlorobenzene	+++++	1.29605	1.34639	1.26381	1.21944	1.15866					
	1.13607	1.03545					AVRG		1.20798		8.78247
14 bis(2-Chloroisopropyl)ether	+++++	2.32509	2.42028	2.31148	2.26329	2.15456					
	2.11135	1.93355					AVRG		2.21709		7.35350
15 o-Cresol	+++++	0.90774	0.91911	0.87727	0.85502	0.81471					
	0.80779	0.74384					AVRG		0.84650		7.32849

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.16435	1.20208	1.12556	1.15316	+++++					
	1.08411	1.04352					AVRG		1.12880		5.09017
17 N-Nitrosodipropylamine	0.81293	0.75653	0.80116	0.77693	0.78822	0.71050					
	0.77452	0.67823					AVRG		0.76238		6.05014
18 m,p-Cresols	+++++	1.13181	1.16963	1.17353	1.13669	1.14618					
	1.18516	1.11948					AVRG		1.15179		2.12873
19 Hexachloroethane	+++++	0.47556	0.50281	0.48245	0.48088	0.46955					
	0.46206	0.42193					AVRG		0.47075		5.31168
21 Nitrobenzene	+++++	0.28437	0.30442	0.28298	0.28351	0.27052					
	0.25822	0.23858					AVRG		0.27466		7.74785
22 Isophorone	+++++	0.49709	0.51707	0.49540	0.49196	0.47802					
	0.46730	0.41658					AVRG		0.48049		6.70733
23 2-Nitrophenol	+++++	0.14839	0.15989	0.15609	0.15578	0.14421					
	0.13558	0.12065					AVRG		0.14580		9.49803
24 2,4-Dimethylphenol	+++++	0.25377	0.24260	0.23030	0.24361	0.23323					
	0.21824	0.21248					AVRG		0.23346		6.25831
25 bis(2-Chloroethoxy)methane	+++++	0.32659	0.33857	0.32017	0.31630	0.30271					
	0.29085	0.27012					AVRG		0.30933		7.51487

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.21991	0.23451	0.22671	0.22578	0.22138					
	0.21025	0.19507					AVRG		0.21909		5.89795
27 Benzoic acid	+++++	+++++	0.12652	0.15647	0.17043	0.17939					
	0.17420	0.15820					AVRG		0.16087		11.85426
28 1,2,4-Trichlorobenzene	+++++	0.25324	0.26639	0.25283	0.25336	0.23817					
	0.22476	0.20597					AVRG		0.24210		8.56147
30 Naphthalene	1.00192	0.89427	0.93446	0.86563	0.83102	0.76369					
	0.73215	0.65539					AVRG		0.83482		13.59329
204 alpha-Terpineol	+++++	0.21791	0.22387	0.20802	0.18690	0.18694					
	0.18377	0.16707					AVRG		0.19635		10.50339
31 4-Chloroaniline	+++++	0.39677	0.40757	0.39487	0.39324	0.37614					
	0.36195	0.33806					AVRG		0.38123		6.35973
189 Caprolactam	+++++	0.06846	0.07656	0.07363	0.07653	+++++					
	0.06782	0.06711					AVRG		0.07169		6.15581
32 Hexachlorobutadiene	+++++	0.13511	0.14100	0.13045	0.12864	0.12021					
	0.11205	0.10277					AVRG		0.12432		10.80535
33 4-Chloro-3-methylphenol	+++++	0.21530	0.22699	0.22627	0.22610	0.21202					
	0.21204	0.17967					AVRG		0.21406		7.75567

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.63189	0.59091	0.61031	0.56805	0.55492	0.51261					
	0.47801	0.44368					AVRG		0.54880		11.97650
35 1-Methylnaphthalene	0.57039	0.52594	0.54774	0.50754	0.49716	0.46294					
	0.43668	0.39804					AVRG		0.49330		11.71827
36 Hexachlorocyclopentadiene	+++++	0.10604	0.13033	0.13014	0.13942	0.12687					
	0.11688	0.10523					AVRG		0.12213		10.70285
208 1,1'-Biphenyl	+++++	1.17951	1.24377	1.14549	1.13585	+++++					
	1.04839	0.97002					AVRG		1.12050		8.68804
205 2,3-Dichloroaniline	+++++	0.46645	0.48933	0.47427	0.46997	0.44649					
	0.43405	0.39749					AVRG		0.45401		6.79831
37 2,4,6-Trichlorophenol	+++++	0.26977	0.29094	0.27785	0.27904	0.25743					
	0.25024	0.23713					AVRG		0.26606		7.03474
38 2,4,5-Trichlorophenol	+++++	0.26905	0.31036	0.32159	0.23043	0.31171					
	0.26900	0.26816					AVRG		0.28290		11.57703
40 2-Chloronaphthalene	1.06866	1.01017	1.06218	1.02382	1.00740	0.95458					
	0.92971	0.84336					AVRG		0.98748		7.61587
42 o-Nitroaniline	+++++	0.29397	0.31274	0.31408	0.31185	0.30784					
	0.31350	0.28932					AVRG		0.30619		3.33957

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.27156	0.28234	0.28082	0.27143	0.25979					
	0.28219	0.24573					AVRG		0.27055		5.03620
43 Dimethylphthalate	+++++	1.09522	1.14427	1.12702	1.11254	1.08188					
	1.07235	0.99634					AVRG		1.08995		4.43176
44 2,6-Dinitrotoluene	+++++	0.26660	0.28518	0.28098	0.27933	0.27123					
	0.26992	0.24768					AVRG		0.27156		4.59036
45 Acenaphthylene	1.62784	1.60004	1.67564	1.59865	1.57380	1.47905					
	1.44269	1.32968					AVRG		1.54092		7.42836
47 Acenaphthene	1.00456	0.99034	1.02942	0.97302	0.94853	0.86787					
	0.82882	0.73816					AVRG		0.92259		10.97291
48 2,4-Dinitrophenol	+++++	+++++	0.08843	0.11349	0.11534	0.11082					
	0.11305	0.10198					AVRG		0.10718		9.63049
49 Dibenzofuran	+++++	1.40383	1.45777	1.40759	1.36431	1.30285					
	1.24923	1.15395					AVRG		1.33422		7.92638
50 2,4-Dinitrotoluene	+++++	0.34056	0.36497	0.37079	0.37131	0.36633					
	0.36565	0.33990					AVRG		0.35993		3.80091
51 Diethylphthalate	+++++	1.04278	1.09197	1.06193	1.04018	0.99480					
	0.99307	0.88837					AVRG		1.01616		6.53371

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	0.13809	0.17287	0.18777	0.19477	0.20369					
	0.21665	0.20716					AVRG		0.18871		14.01343
53 Fluorene	1.22796	1.15355	1.19493	1.10753	1.06188	0.99894					
	0.97721	0.88428					AVRG		1.07578		10.93658
54 4-Chlorophenylphenylether	+++++	0.47537	0.49720	0.47503	0.46785	0.44264					
	0.43218	0.38915					AVRG		0.45420		7.92169
55 2-Methyl-4,6-dinitrophenol	+++++	0.08375	0.09608	0.10582	0.10320	0.10771					
	0.10908	0.10272					AVRG		0.10120		8.67983
56 p-Nitroaniline	+++++	0.24392	0.26348	0.26430	0.28144	0.26774					
	0.27465	0.25651					AVRG		0.26458		4.60021
133 Diphenylamine	+++++	0.55588	0.57977	0.55886	0.54789	0.52659					
	0.50269	0.46310					AVRG		0.53354		7.43632
58 1,2-Diphenylhydrazine	+++++	0.69850	0.71486	0.68099	0.66427	0.63670					
	0.61324	0.54832					AVRG		0.65098		8.77582
59 Tributylphosphate	+++++	1.22698	1.16066	1.10479	1.12684	1.06119					
	1.01440	0.96114					AVRG		1.09371		8.21068
61 4-Bromophenylphenylether	+++++	0.13960	0.14381	0.14105	0.13893	0.13903					
	0.13474	0.12486					AVRG		0.13743		4.49074

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	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.18056	0.18610	0.17775	0.16888	0.16686					
	0.15868	0.14199					AVRG		0.16869		8.86819
207 Atrazine	+++++	0.04275	0.04402	0.04191	0.04036	+++++					
	0.03698	0.03447					AVRG		0.04008		9.14364
65 Pentachlorophenol	+++++	0.08713	0.10123	0.10564	0.10198	0.10716					
	0.10688	0.09814					AVRG		0.10117		6.93558
206 n-Octadecane	+++++	0.49445	0.50531	0.45683	0.42873	0.36788					
	0.34975	+++++					AVRG		0.43383		14.85243
68 Phenanthrene	1.08140	0.97577	0.96718	0.91676	0.90684	0.85016					
	0.82329	0.75087					AVRG		0.90903		11.26824
69 Anthracene	1.05572	0.98071	1.00934	0.97561	0.92329	0.88140					
	0.83261	0.73707					AVRG		0.92447		11.24280
72 Di-n-butylphthalate	+++++	1.06714	1.12314	1.06117	1.02135	0.94081					
	0.88726	0.80148					AVRG		0.98605		11.57265
76 Fluoranthene	0.94603	0.94387	0.96313	0.92832	0.88364	0.83514					
	0.79976	0.71979					AVRG		0.87746		9.80038
77 Benzidine	+++++	0.28582	0.36970	0.35152	0.36897	+++++					
	0.43187	0.36504					AVRG		0.36215		12.90005

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	100 Level 7	120 Level 8									
79 Pyrene	1.12921	1.08043	1.13184	1.09423	1.03887	1.05677					
	1.02924	0.94284					AVRG		1.06293		5.79953
85 Butylbenzylphthalate	+++++	0.53253	0.56219	0.50335	0.46569	0.43331					
	0.40529	+++++					AVRG		0.48372		12.38419
89 Benzo(a)anthracene	1.00602	0.91134	0.98073	0.96992	0.98002	0.96903					
	0.95763	0.89850					AVRG		0.95915		3.79585
90 3,3'-Dichlorobenzidine	+++++	0.24634	0.28908	0.28847	0.28710	+++++					
	0.28231	0.25909					AVRG		0.27540		6.60230
92 Chrysene	0.98731	0.93210	0.94599	0.88032	0.86729	0.85456					
	0.87955	0.82465					AVRG		0.89647		6.00506
93 bis(2-Ethylhexyl)phthalate	0.57061	0.72394	0.78180	0.75934	0.74451	0.72196					
	0.68855	0.63132					AVRG		0.70275		10.02985
94 Di-n-octylphthalate	+++++	1.17035	1.39716	1.40560	1.36840	1.34274					
	1.30766	1.16752					AVRG		1.30849		7.70640
95 Benzo(b)fluoranthene	21625	340509	730849	1739197	2305837	3304287					
	3978698	5127789					LINR	0.06661	1.08695		0.99870
96 Benzo(k)fluoranthene	1.03711	1.06722	1.12263	1.01575	1.02623	1.00211					
	0.97020	0.78256					AVRG		1.00298		9.96839

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Start Cal Date : 14-NOV-2009 18:22
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Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	20918	319721	688146	1504125	2094282	2912657					
	3398226	3934490					LINR	-0.00385	0.87033		0.99612
99 Indeno(1,2,3-cd)pyrene	21578	336515	700258	1580353	2201480	3025334					
	3523403	4020592					LINR	-0.01092	0.89653		0.99431
100 Dibenzo(a,h)anthracene	16162	268427	581631	1325626	1846286	2532762					
	2946699	3397425					LINR	-0.00445	0.75511		0.99519
101 Benzo(ghi)perylene	0.56462	0.70452	0.77602	0.81299	0.83023	0.80394					
	0.79303	0.72783					AVRG		0.75165		11.54879
102 1,4-Dioxane	+++++	0.32550	0.33716	0.30934	0.31455	+++++					
	0.30805	0.28861					AVRG		0.31387		5.27573
103 Methyl methacrylate	+++++	0.17774	0.19107	0.17805	0.17495	+++++					
	0.17326	0.16336					AVRG		0.17640		5.08144
104 Ethyl methacrylate	+++++	0.73346	0.76622	0.70794	0.70643	+++++					
	0.69714	0.66675					AVRG		0.71299		4.73943
105 2-Picoline	+++++	1.18802	1.23130	1.15065	1.15312	+++++					
	1.12223	1.07774					AVRG		1.15384		4.58113
106 N-Nitrosomethylethylamine	+++++	0.42951	0.48460	0.44623	0.45222	+++++					
	0.46395	0.44906					AVRG		0.45426		4.08577

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.43204	0.45674	0.42468	0.43227	+++++					
	0.41648	0.39202					AVRG		0.42570		5.00242
108 N-Nitrosodiethylamine	+++++	0.47915	0.50719	0.47065	0.48068	+++++					
	0.47830	0.46128					AVRG		0.47954		3.20356
109 Ethyl Methanesulfonate	+++++	0.59343	0.63202	0.58286	0.59990	+++++					
	0.59568	0.57362					AVRG		0.59625		3.34808
110 Pentachloroethane	+++++	0.30094	0.30775	0.28811	0.28717	+++++					
	0.28774	0.27522					AVRG		0.29115		3.95122
111 N-Nitrosopyrrolidine	+++++	0.47773	0.52978	0.49561	0.51566	+++++					
	0.41369	0.41806					AVRG		0.47509		10.34926
113 N-Nitrosomorpholine	+++++	0.63587	0.69755	0.63481	0.65791	+++++					
	0.54487	0.53392					AVRG		0.61749		10.47980
114 o-Toluidine	+++++	1.64551	1.76888	1.61850	1.65178	+++++					
	1.65679	1.57817					AVRG		1.65327		3.85302
115 N-Nitrosopiperidine	+++++	0.12931	0.13922	0.12850	0.13280	+++++					
	0.13244	0.12709					AVRG		0.13156		3.32124
116 a,a-Dimethylphenethylamine	+++++	0.70597	0.78545	0.76293	0.79408	+++++					
	0.79335	0.76628					AVRG		0.76801		4.32000

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	100 Level 7	120 Level 8										
117 Triethylphosphorothioate	+++++	0.12812	0.12428	0.12751	0.12901	0.12488						
	0.12021	0.11633					AVRG		0.12433		3.70966	
118 2,6-Dichlorophenol	+++++	0.18796	0.20530	0.19528	0.20193	+++++						
	0.20014	0.19147					AVRG		0.19701		3.35416	
119 Hexachloropropene	+++++	0.07891	0.09539	0.09133	0.09091	+++++						
	0.09225	0.08492					AVRG		0.08895		6.72708	
120 p-Phenylenediamine	+++++	0.17417	0.23091	0.21919	0.22009	+++++						
	0.19257	0.17231					AVRG		0.20154		12.55674	
121 N-Nitrosodi-n-butylamine	+++++	0.16926	0.19309	0.16843	0.17454	+++++						
	0.16640	0.15862					AVRG		0.17172		6.79719	
122 Safrole	+++++	0.18021	0.18852	0.17847	0.18253	+++++						
	0.17443	0.16766					AVRG		0.17864		3.98501	
123 1,2,4,5-Tetrachlorobenzene	+++++	0.38048	0.40351	0.37295	0.37017	+++++						
	0.35065	0.32500					AVRG		0.36713		7.29953	
124 Isosafrole	+++++	0.32136	0.34935	0.32718	0.32927	+++++						
	0.32898	0.30952					AVRG		0.32761		3.96520	
125 1,4-Naphthoquinone	+++++	0.37346	0.38046	0.31457	0.30180	+++++						
	0.18844	0.22186					AVRG		0.29676		26.34996	<-

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.17349	0.18721	0.19120	0.19440	0.19057					
	0.19238	0.17644					AVRG		0.18653		4.41251
127 Pentachlorobenzene	+++++	0.32992	0.34557	0.31675	0.31835	+++++					
	0.29677	0.27972					AVRG		0.31451		7.45207
128 1-Naphthylamine	+++++	0.82636	0.98891	0.93384	0.93443	+++++					
	0.87178	0.80990					AVRG		0.89420		7.80762
129 2-Naphthylamine	+++++	0.96588	1.05556	1.00159	1.00599	+++++					
	0.94403	0.87535					AVRG		0.97473		6.34557
130 2,3,4,6-Tetrachlorophenol	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
131 5-Nitro-o-toluidine	+++++	0.25535	0.29363	0.28574	0.29496	+++++					
	0.29982	0.28219					AVRG		0.28528		5.60973
132 Thionazin	+++++	0.16358	0.16364	0.16630	0.16880	0.16339					
	0.15554	0.14821					AVRG		0.16135		4.38820
134 Sulfotepp	+++++	0.08562	0.08304	0.08303	0.08467	0.07953					
	0.07427	0.07214					AVRG		0.08033		6.54838
135 Phorate	+++++	0.36567	0.35586	0.35721	0.36683	0.34385					
	0.32742	0.31541					AVRG		0.34747		5.65187

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	0.10196	0.12348	0.12395	0.12006	+++++					
	0.11894	0.10898					AVRG		0.11623		7.60291
137 Phenacetin	+++++	0.22684	0.26317	0.26291	0.26441	+++++					
	0.26599	0.25918					AVRG		0.25708		5.83046
138 Diallate	+++++	0.24760	0.24927	0.23322	0.23010	+++++					
	0.21802	0.20853					AVRG		0.23112		6.94549
139 Dimethoate	+++++	0.21461	0.21994	0.23007	0.23724	0.23858					
	0.23513	0.22967					AVRG		0.22932		3.92960
140 4-Aminobiphenyl	+++++	0.53696	0.55369	0.57677	0.59426	+++++					
	0.49840	0.45674					AVRG		0.53614		9.53476
141 Pentachloronitrobenzene	+++++	0.05720	0.06067	0.05490	0.05533	+++++					
	0.04673	0.04463					AVRG		0.05324		11.71339
142 Pronamide	+++++	0.24822	0.26125	0.24154	0.23765	+++++					
	0.17973	+++++					AVRG		0.23368		13.46482
143 Dinoseb	+++++	0.10297	0.12216	0.13126	0.12950	0.13024					
	0.13017	0.12500					AVRG		0.12447		8.06727
144 Disulfoton	+++++	0.32280	0.31415	0.31231	0.32231	0.30214					
	0.27306	0.26345					AVRG		0.30146		7.92046

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	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.18413	0.18908	0.19611	0.20206	0.20472					
	0.19613	0.19053					AVRG		0.19468		3.74715
146 4-Nitroquinoline-1-oxide	+++++	0.00831	0.00998	0.00800	0.01074	+++++					
	0.01133	0.01046					AVRG		0.00980		13.77700
147 Methapyrilene	+++++	0.36466	0.38869	0.39386	0.38311	+++++					
	0.36077	0.31821					AVRG		0.36822		7.55340
148 Isodrin	+++++	0.09085	0.09372	0.08925	0.08743	+++++					
	0.07960	0.07570					AVRG		0.08609		8.09255
149 Aramite	+++++	0.04141	0.04570	0.04371	0.04272	+++++					
	0.04204	0.03972					AVRG		0.04255		4.79399
150 Kepone	+++++	0.06055	0.06732	0.06349	0.06380	+++++					
	0.06458	0.05876					AVRG		0.06308		4.80408
151 p-(Dimethylamino)azobenzene	+++++	0.28782	0.31583	0.29702	0.29097	+++++					
	0.26535	0.24656					AVRG		0.28392		8.62091
152 Chlorobenzilate	+++++	0.21991	0.23787	0.22800	0.23044	+++++					
	0.20814	0.19524					AVRG		0.21994		7.17760
153 3,3'-Dimethylbenzidine	+++++	0.45675	0.51768	0.48413	0.48879	+++++					
	0.49372	0.43564					AVRG		0.47945		6.05117

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	100 Level 7	120 Level 8									
154 Famphur	+++++	0.29819	0.30032	0.31780	0.33430	0.32440					
	0.30595	0.30061					AVRG		0.31165		4.49495
155 2-Acetylaminofluorene	+++++	0.23107	0.30345	0.31881	0.32045	+++++					
	0.34822	0.32608					AVRG		0.30801		13.11206
157 7,12Dimethylbenz(a)anthracene	+++++	0.41118	0.44192	0.42666	0.43253	+++++					
	0.40970	0.40537					AVRG		0.42123		3.47443
158 3-Methylcholanthrene	+++++	0.29680	0.36865	0.37932	0.38459	+++++					
	0.39125	0.38204					AVRG		0.36711		9.59696
26 Phthalic anhydride	+++++	30283	90214	245905	320454	497228					
	555160	687649					LINR	0.08413	0.10332		0.99692
173 Carbazole	0.90246	0.82255	0.80875	0.81414	0.83946	0.78812					
	0.78058	0.70109					AVRG		0.80714		7.06036
174 Hexachlorophene	+++++	0.03640	0.04820	0.05180	0.05353	0.05136					
	0.04905	+++++					AVRG		0.04839		12.77621
179 Dibenzo(a,e)pyrene	+++++	117900	312429	817402	1225621	1557621					
	1812574	+++++					LINR	0.07449	0.50549		0.99368
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

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	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	2462	14132	46568	48315	83536					
	96111	113764					LINR	0.17192	0.08067		0.99223
191 Parathion	+++++	0.06169	0.06089	0.06449	0.06621	0.06308					
	0.06173	0.06112					AVRG		0.06274		3.14637
192 Methoxychlor	+++++	0.32535	0.36631	0.33959	0.33867	0.27894					
	0.25594	+++++					AVRG		0.31747		13.10686
210 m-Toluidine	+++++	0.77272	0.88703	0.90355	0.94226	1.01524					
	0.94351	+++++					AVRG		0.91072		8.87324
211 p-Toluidine	+++++	0.69169	0.70617	0.72166	0.71562	0.68688					
	+++++	+++++					AVRG		0.70440		2.12367
212 Cis Diallate	+++++	0.23437	0.24880	0.23465	0.23944	+++++					
	0.24434	0.23833					AVRG		0.23999		2.35508
213 Trans Diallate	+++++	0.29129	0.29326	0.27438	0.27070	+++++					
	0.25649	0.24533					AVRG		0.27191		6.94549
214 1,4-Dinitrobenzene	+++++	0.16000	0.17119	0.17754	0.17866	0.17639					
	0.17966	0.16860					AVRG		0.17315		4.08379
215 2-Ethoxyethanol	+++++	0.57555	0.62918	0.65385	0.56961	0.58718					
	0.62071	0.58595					AVRG		0.60315		5.24047

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	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.11447	0.12909	0.13171	0.13536	0.13420					
	0.13376	0.12587					AVRG		0.12921		5.63660
229 2,2'-Dichlorobenzil	+++++	0.67948	0.77608	0.71487	+++++	0.73565					
	+++++	0.63422					AVRG		0.70806		7.63914
230 4-Chlorothioanisole	+++++	0.23155	0.23520	0.23685	+++++	0.23140					
	+++++	0.22159					AVRG		0.23132		2.56050
231 4-Chlorothiophenol	+++++	0.15409	0.17482	0.19368	+++++	0.19893					
	+++++	0.19703					AVRG		0.18371		10.41669
232 bis(p-Chlorophenyl)sulfone	+++++	0.39430	0.43698	0.38579	+++++	0.39600					
	+++++	0.34721					AVRG		0.39206		8.15529
233 bis(p-Chlorophenyl)disulfide	+++++	0.10045	0.11150	0.11707	+++++	0.12020					
	+++++	0.10635					AVRG		0.11111		7.18003
234 Diphenyl disulfide	+++++	0.17804	0.18209	0.18631	+++++	0.17491					
	+++++	0.16341					AVRG		0.17695		4.91531
235 Diphenyl sulfide	+++++	0.71955	0.73103	0.70874	+++++	0.65333					
	+++++	0.61709					AVRG		0.68595		7.09988
236 Phenyl sulfone	+++++	0.43275	0.44078	0.42799	+++++	0.41905					
	+++++	0.39177					AVRG		0.42247		4.46830

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	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.12384	0.15720	0.10384	+++++	0.13032						
	+++++	0.12669					AVRG		0.12838		14.88299	
238 Phthalic acid	+++++	24604	70600	163991	+++++	411903						
	+++++	634014					LINR	0.25540	0.11087		0.99102	
239 Thiophenol	+++++	0.94048	1.03561	1.08365	+++++	1.12900						
	+++++	1.09332					AVRG		1.05641		6.89893	
240 bis(Chloromethyl)ether	+++++	0.78790	0.79417	0.76917	+++++	0.75455						
	+++++	0.73576					AVRG		0.76831		3.12263	
241 Octachlorostyrene	+++++	0.06103	0.06315	0.05827	+++++	0.05420						
	+++++	0.04861					AVRG		0.05705		10.14342	
M 225 Trichlorophenols	+++++	0.26941	0.30065	0.29972	0.25473	0.28457						
	0.25962	0.25265					AVRG		0.27448		7.49129	
M 226 Tetrachlorophenols	+++++	0.20567	0.22518	0.22987	0.20102	0.22712						
	0.21818	0.20523					AVRG		0.21604		5.51582	
M 227 Benzo(b,k)fluoranthene	0.78278	0.93887	1.02131	1.01324	1.00976	1.01479						
	1.00963	0.93381					AVRG		0.96552		8.47131	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.97776	1.06271	1.06423	1.06306	1.07281						
	1.07136	1.00157					AVRG		1.04478		3.68308	
$ 5 Phenol-d5	+++++	1.21974	1.33050	1.28249	1.27680	1.26954						
	1.29216	1.21764					AVRG		1.26984		3.15351	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27426	0.28571	0.27066	0.27231	0.25884						
	0.24945	0.23400					AVRG		0.26360		6.62019	
$ 39 2-Fluorobiphenyl	+++++	0.99823	1.04801	1.00239	0.98618	0.93991						
	0.91199	0.81928					AVRG		0.95800		7.87748	
$ 60 2,4,6-Tribromophenol	+++++	0.10924	0.11530	0.11503	0.10898	0.11186						
	0.11271	0.10874					AVRG		0.11169		2.51418	
$ 81 p-Terphenyl-d14	+++++	0.64452	0.67675	0.65301	0.63863	0.61256						
	0.60853	0.56112					AVRG		0.62787		5.98666	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 15-NOV-2009 23:17
Lab File ID: s1k1235.d Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 22:53
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.71239	0.71239	0.000	-13.54468	60.00000	Averaged
16 Acetophenone	1.12880	1.15012	1.15012	0.000	1.88924	60.00000	Averaged
189 Caprolactam	0.07169	0.08295	0.08295	0.000	15.71078	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.24126	1.24126	0.000	10.77724	60.00000	Averaged
207 Atrazine	0.04008	0.04737	0.04737	0.000	18.18184	60.00000	Averaged
77 Benzidine	0.36215	0.33951	0.33951	0.000	-6.25196	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.29917	0.29917	0.000	8.63115	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.37981	0.37981	0.000	21.00923	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.20821	0.20821	0.000	18.03005	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.86659	0.86659	0.000	21.54329	60.00000	Averaged
105 2-Picoline	1.15384	1.13306	1.13306	0.000	-1.80140	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.46463	0.46463	0.000	2.28123	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48978	0.48978	0.000	15.05276	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.49102	0.49102	0.000	2.39384	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.74183	0.74183	0.000	24.41607	60.00000	Averaged
110 Pentachloroethane	0.29115	0.40985	0.40985	0.000	40.76840	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.50932	0.50932	0.000	7.20593	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.67896	0.67896	0.000	9.95518	60.00000	Averaged
114 o-Toluidine	1.65327	1.64031	1.64031	0.000	-0.78415	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.13273	0.13273	0.000	0.88789	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.79273	0.79273	0.000	3.21891	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.21797	0.21797	0.000	10.63653	60.00000	Averaged
119 Hexachloropropene	0.08895	0.13367	0.13367	0.000	50.27176	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.18980	0.18980	0.000	-5.82557	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.17829	0.17829	0.000	3.82057	60.00000	Averaged
122 Safrole	0.17864	0.21665	0.21665	0.000	21.27785	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.42376	0.42376	0.000	15.42574	60.00000	Averaged
124 Isosafrole	0.32761	0.46202	0.46202	0.000	41.02664	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.32067	0.32067	0.000	8.05637	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.35074	0.35074	0.000	11.51805	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.98926	0.98926	0.000	10.62991	60.00000	Averaged
129 2-Naphthylamine	0.97473	1.09077	1.09077	0.000	11.90459	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.30775	0.30775	0.000	7.87638	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.15168	0.15168	0.000	30.50015	60.00000	Averaged
137 Phenacetin	0.25708	0.29576	0.29576	0.000	15.04579	60.00000	Averaged
138 Diallate	0.23112	0.23284	0.23284	0.000	0.74457	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 15-NOV-2009 23:17
Lab File ID: s1k1235.d Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 22:53
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.31739	0.31739	0.000	32.25095	60.00000	Averaged
213 Trans Diallate	0.27191	0.27393	0.27393	0.000	0.74457	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.62569	0.62569	0.000	16.70322	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06215	0.06215	0.000	16.73283	60.00000	Averaged
142 Pronamide	0.23368	0.26726	0.26726	0.000	14.37225	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.00923	0.00923	0.000	-5.86960	60.00000	Averaged
147 Methapyrilene	0.36822	0.29090	0.29090	0.000	-20.99905	60.00000	Averaged
148 Isodrin	0.08609	0.08812	0.08812	0.000	2.35297	60.00000	Averaged
149 Aramite	0.04255	0.04327	0.04327	0.000	1.67534	60.00000	Averaged
150 Kepone	0.06308	0.07178	0.07178	0.000	13.77677	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.29411	0.29411	0.000	3.58893	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.24578	0.24578	0.000	11.75217	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.47257	0.47257	0.000	-1.43591	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.33042	0.33042	0.000	7.27461	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.42978	0.42978	0.000	2.03140	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40048	0.40048	0.000	9.08958	60.00000	Averaged

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Data file : /chem/MSD1.i/s111409.b/s1k1235.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: APICV
Inj Date : 15-NOV-2009 23:17
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091111-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 10:44 nat00999 Quant Type: ISTD
Cal Date : 15-NOV-2009 21:42 Cal File: s1k1231.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.957	3.940	(1.000)	601939	40.0000	
* 29 Naphthalene-d8	136	4.828	4.810	(1.000)	2374945	40.0000	
* 46 Acenaphthene-d10	164	6.075	6.057	(1.000)	1270499	40.0000	
* 67 Phenanthrene-d10	188	7.057	7.040	(1.000)	2114263	40.0000	
* 91 Chrysene-d12	240	8.739	8.722	(1.000)	1927170	40.0000	
* 98 Perylene-d12	264	10.251	10.222	(1.000)	1696025	40.0000	(H)
209 Benzaldehyde	77	3.681	3.681	(0.930)	428816	40.0000	34.6
16 Acetophenone	105	4.210	4.210	(1.064)	692304	40.0000	40.8
189 Caprolactam	113	5.104	5.122	(1.057)	197001	40.0000	46.3
208 1,1'-Biphenyl	154	5.646	5.651	(0.929)	1577025	40.0000	44.3
207 Atrazine	173	6.822	6.834	(0.967)	100151	40.0000	47.3
77 Benzidine	184	7.828	7.834	(0.896)	654298	40.0000	37.5
90 3,3'-Dichlorobenzidine	252	8.663	8.669	(0.991)	576557	40.0000	43.4
102 1,4-Dioxane	88	2.281	2.287	(0.576)	228622	40.0000	48.4
103 Methyl methacrylate	100	2.275	2.275	(0.575)	125330	40.0000	47.2
104 Ethyl methacrylate	69	2.652	2.652	(0.670)	521635	40.0000	48.6
105 2-Picoline	93	2.846	2.846	(0.719)	682032	40.0000	39.3
106 N-Nitrosomethylethylamine	88	2.887	2.893	(0.729)	279676	40.0000	40.9
107 Methyl methanesulfonate	80	3.046	3.052	(0.770)	294820	40.0000	46.0
108 N-Nitrosodiethylamine	102	3.281	3.287	(0.829)	295564	40.0000	41.0
109 Ethyl Methanesulfonate	79	3.440	3.446	(0.869)	446538	40.0000	49.8
110 Pentachloroethane	167	3.781	3.781	(0.955)	246707	40.0000	56.3
111 N-Nitrosopyrrolidine	100	4.199	4.216	(1.061)	306582	40.0000	42.9
113 N-Nitrosomorpholine	56	4.216	4.228	(1.065)	408692	40.0000	44.0
114 o-Toluidine	106	4.234	4.246	(1.070)	987365	40.0000	39.7
115 N-Nitrosopiperidine	114	4.434	4.446	(0.918)	315224	40.0000	40.4
116 a,a-Dimethylphenethylamine	58	4.681	4.681	(0.970)	1882697	40.0000	41.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.869	4.875	(1.009)	517655	40.0000	44.2
119 Hexachloropropene	213	4.899	4.898	(1.015)	317465	40.0000	60.1
120 p-Phenylenediamine	108	5.104	5.116	(1.057)	450756	40.0000	37.7
121 N-Nitrosodi-n-butylamine	84	5.069	5.075	(1.050)	423419	40.0000	41.5(T)
122 Safrole	162	5.234	5.240	(1.084)	514526	40.0000	48.5
123 1,2,4,5-Tetrachlorobenzene	216	5.440	5.446	(0.895)	538386	40.0000	46.2
124 Isosafrole	162	5.604	5.610	(0.923)	586994	40.0000	56.4
125 1,4-Naphthoquinone	158	5.793	5.793	(0.954)	407413	40.0000	43.2
127 Pentachlorobenzene	250	6.181	6.187	(1.017)	445615	40.0000	44.6
128 1-Naphthylamine	143	6.263	6.269	(1.031)	1256848	40.0000	44.2
129 2-Naphthylamine	143	6.316	6.322	(1.040)	1385825	40.0000	44.8
131 5-Nitro-o-toluidine	152	6.434	6.445	(1.059)	390998	40.0000	43.2
136 1,3,5-Trinitrobenzene	75	6.645	6.651	(0.942)	320686	40.0000	52.2
137 Phenacetin	108	6.687	6.698	(0.947)	625324	40.0000	46.0
138 Diallate	86	6.669	6.675	(0.945)	492291	40.0000	40.3
212 Cis Diallate	86	6.734	6.734	(0.954)	100656	6.00000	7.9
213 Trans Diallate	86	6.669	6.675	(0.945)	492291	34.0000	34.2
140 4-Aminobiphenyl	169	6.910	6.916	(0.979)	1322873	40.0000	46.7
141 Pentachloronitrobenzene	237	6.934	6.940	(0.982)	131405	40.0000	46.7
142 Pronamide	173	6.922	6.928	(0.981)	565063	40.0000	45.7
146 4-Nitroquinoline-1-oxide	101	7.516	7.522	(1.065)	19512	40.0000	37.6
147 Methapyrilene	58	7.534	7.539	(1.067)	615031	40.0000	31.6
148 Isodrin	193	7.692	7.692	(1.090)	186303	40.0000	40.9
149 Aramite	185	7.916	7.916	(1.122)	91474	40.0000	40.7
150 Kepone	272	8.351	8.363	(1.183)	151752	40.0000	45.5
151 p-(Dimethylamino)azobenzene	120	8.045	8.051	(0.921)	566806	40.0000	41.4
152 Chlorobenzilate	251	8.057	8.063	(0.922)	473667	40.0000	44.7
153 3,3'-Dimethylbenzidine	212	8.257	8.263	(0.945)	910722	40.0000	39.4
155 2-Acetylaminofluorene	181	8.445	8.457	(0.966)	636774	40.0000	42.9
157 7,12Dimethylbenz(a)anthracene	256	9.733	9.745	(0.945)	728922	40.0000	40.8
158 3-Methylcholanthrene	268	10.622	10.639	(1.031)	679223	40.0000	43.6

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1235.d
Date : 15-NOV-2009 23:17
Client ID: APICV
Sample Info: IWBN091111-08.1|40 PPM|1|SVMF11|APICV

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: amy
Column diameter: 0.20

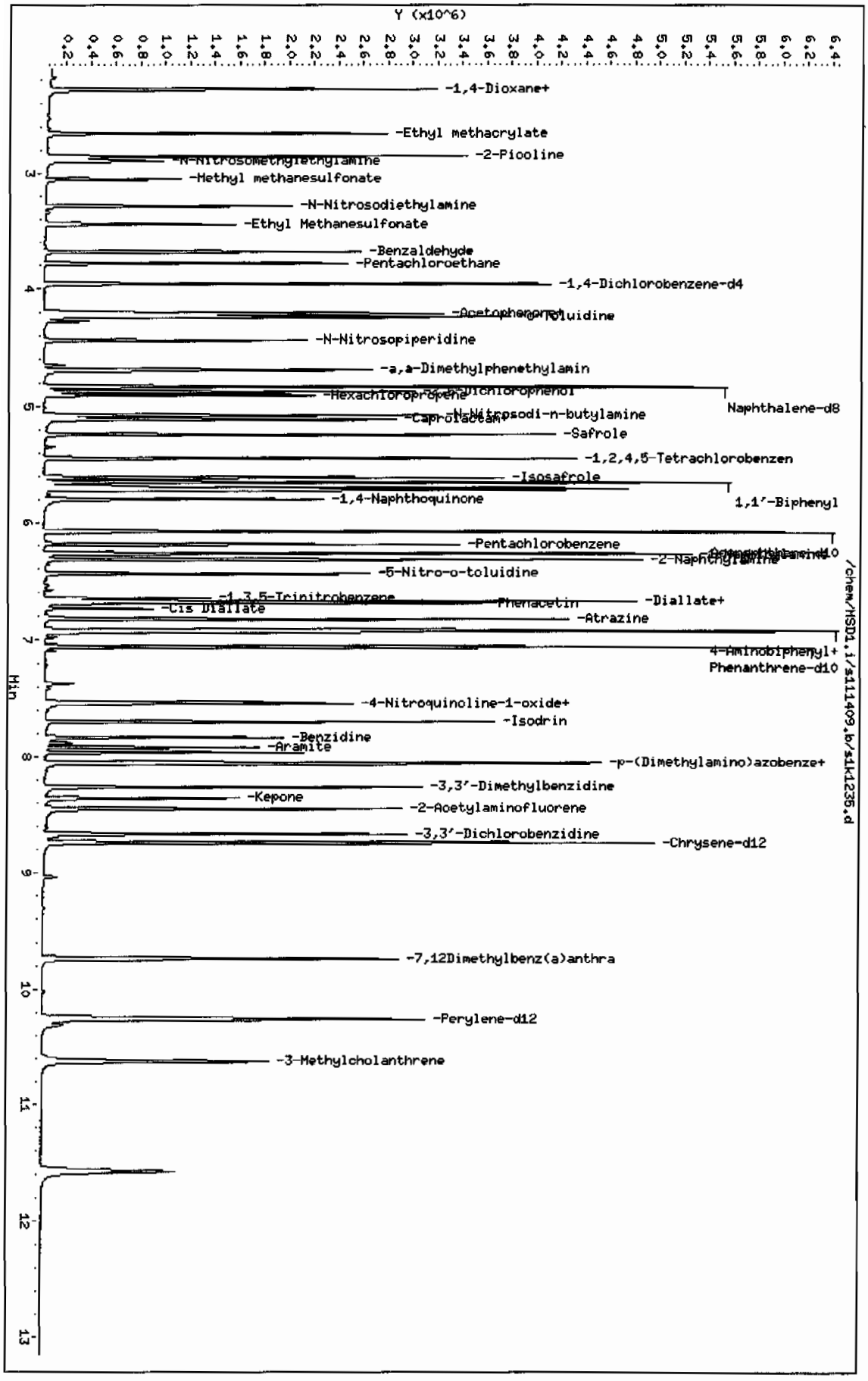

Page 1

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.04478	0.92701	0.92701	0.000	-11.27306	60.00000	Averaged
$ 5 Phenol-d5	1.26984	1.11829	1.11829	0.000	-11.93416	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.26360	0.25882	0.25882	0.000	-1.81289	60.00000	Averaged
$ 39 2-Fluorobiphenyl	0.95800	0.95545	0.95545	0.000	-0.26619	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11169	0.11397	0.11397	0.000	2.04032	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.62787	0.61091	0.61091	0.000	-2.70233	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.56740	0.52259	0.52259	0.000	-7.89719	60.00000	Averaged
2 Pyridine	0.95281	0.72054	0.72054	0.000	-24.37721	60.00000	Averaged
4 Aniline	0.55813	0.46069	0.46069	0.000	-17.45935	60.00000	Averaged
6 Phenol	1.33800	1.13102	1.13102	0.001	-15.46941	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.93081	0.78725	0.78725	0.000	-15.42323	60.00000	Averaged
8 2-Chlorophenol	1.13717	0.96631	0.96631	0.000	-15.02517	60.00000	Averaged
203 n-Decane	1.43160	1.33489	1.33489	0.000	-6.75532	60.00000	Averaged
9 1,3-Dichlorobenzene	1.33431	1.14485	1.14485	0.000	-14.19930	60.00000	Averaged
11 1,4-Dichlorobenzene	1.30799	1.12905	1.12905	0.001	-13.68038	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.20798	1.02631	1.02631	0.000	-15.03923	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.21709	1.93928	1.93928	0.000	-12.53006	60.00000	Averaged
12 Benzyl alcohol	0.69141	0.59629	0.59629	0.000	-13.75808	60.00000	Averaged
15 o-Cresol	0.84650	0.72216	0.72216	0.000	-14.68816	60.00000	Averaged
18 m,p-Cresols	1.15179	1.00178	1.00178	0.000	-13.02332	60.00000	Averaged
17 N-Nitrosodipropylamine	0.76238	0.61385	0.61385	0.050	-19.48192	60.00000	Averaged spcc
19 Hexachloroethane	0.47075	0.38923	0.38923	0.000	-17.31682	60.00000	Averaged
21 Nitrobenzene	0.27466	0.23975	0.23975	0.000	-12.70858	60.00000	Averaged
22 Isophorone	0.48049	0.42824	0.42824	0.000	-10.87384	60.00000	Averaged
23 2-Nitrophenol	0.14580	0.12443	0.12443	0.001	-14.65471	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.23346	0.23407	0.23407	0.000	0.25935	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30933	0.25445	0.25445	0.000	-17.74126	60.00000	Averaged
26 2,4-Dichlorophenol	0.21909	0.18847	0.18847	0.001	-13.97781	20.00000	Averaged ccc
27 Benzoic acid	0.16087	0.16553	0.16553	0.000	2.89975	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24210	0.21218	0.21218	0.000	-12.36169	60.00000	Averaged
30 Naphthalene	0.83482	0.76679	0.76679	0.000	-8.14910	60.00000	Averaged
204 alpha-Terpineol	0.19635	0.19249	0.19249	0.000	-1.96852	60.00000	Averaged
31 4-Chloroaniline	0.38123	0.34324	0.34324	0.000	-9.96471	60.00000	Averaged
32 Hexachlorobutadiene	0.12432	0.10582	0.10582	0.001	-14.87841	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.21406	0.17276	0.17276	0.001	-19.29025	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.54880	0.51972	0.51972	0.000	-5.29812	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.47920	0.47920	0.000	-2.85884	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.12462	0.12462	0.050	2.03810	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.44519	0.44519	0.000	-1.94238	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.24935	0.24935	0.001	-6.28041	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.25595	0.25595	0.000	-9.52679	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.82050	0.82050	0.000	-16.91018	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.24946	0.24946	0.000	-18.52571	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.22438	0.22438	0.000	-17.06469	60.00000	Averaged
43 Dimethylphthalate	1.08995	0.95932	0.95932	0.000	-11.98438	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.22271	0.22271	0.000	-17.99006	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.29440	0.29440	0.000	-18.20706	60.00000	Averaged
45 Acenaphthylene	1.54092	1.46812	1.46812	0.000	-4.72441	60.00000	Averaged
47 Acenaphthene	0.92259	0.85781	0.85781	0.001	-7.02192	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.09229	0.09229	0.050	-13.89853	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.12564	1.12564	0.000	-15.63294	60.00000	Averaged
51 Diethylphthalate	1.01616	0.93320	0.93320	0.000	-8.16403	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.18660	0.18660	0.050	-1.12202	60.00000	Averaged spcc
53 Fluorene	1.07578	0.99783	0.99783	0.000	-7.24582	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.42578	0.42578	0.000	-6.25867	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.09844	0.09844	0.000	-2.71965	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.21819	0.21819	0.000	-17.53206	60.00000	Averaged
133 Diphenylamine	0.53354	0.46493	0.46493	0.001	-12.85961	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.55777	0.55777	0.000	-14.31896	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.14126	0.14126	0.000	2.79050	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.14433	0.14433	0.000	-14.43782	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.09042	0.09042	0.001	-10.61921	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.42570	0.42570	0.000	-1.87309	60.00000	Averaged
68 Phenanthrene	0.90903	0.83581	0.83581	0.000	-8.05558	60.00000	Averaged
69 Anthracene	0.92447	0.85110	0.85110	0.000	-7.93592	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	0.95396	0.95396	0.000	-3.25457	60.00000	Averaged
76 Fluoranthene	0.87746	0.81704	0.81704	0.001	-6.88555	20.00000	Averaged ccc
79 Pyrene	1.06293	0.98267	0.98267	0.000	-7.55079	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.46739	0.46739	0.000	-3.37649	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.87571	0.87571	0.000	-8.69930	60.00000	Averaged
92 Chrysene	0.89647	0.82199	0.82199	0.000	-8.30767	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.65271	0.65271	0.000	-7.12169	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.19375	1.19375	0.001	-8.76858	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	34.69168	40.00000	0.87030	0.000	-13.27080	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	0.95633	0.95633	0.000	-4.65112	60.00000	Averaged	
	97 Benzo(a)pyrene	37.92700	40.00000	0.82858	0.001	-5.18249	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	35.83759	40.00000	0.81303	0.000	-10.40601	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	35.09981	40.00000	0.66597	0.000	-12.25048	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.69836	0.69836	0.000	-7.08991	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15696	0.15696	0.000	-15.84920	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
	143 Dinoseb	0.12447	0.10965	0.10965	0.000	-11.90708	60.00000	Averaged	
	173 Carbazole	0.80714	0.69773	0.69773	0.000	-13.55506	60.00000	Averaged	
	184 p-Benzoquinone	40.49777	40.00000	0.06781	0.000	1.24442	60.00000	Linear	
	192 Methoxychlor	0.31747	0.36177	0.36177	0.000	13.95477	60.00000	Averaged	
	211 p-Toluidine	0.70440	0.95402	0.95402	0.000	35.43664	60.00000	Averaged	
	210 m-Toluidine	0.91072	0.95200	0.95200	0.000	4.53333	60.00000	Averaged	
	26 Phthalic anhydride	42.71723	40.00000	0.10164	0.000	6.79306	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	24.88814	40.00000	0.27687	0.000	-37.77964	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14504	0.14504	0.000	-16.23762	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.59707	0.59707	0.000	-1.00765	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.12373	0.12373	0.000	-4.23543	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.25265	0.25265	0.000	-7.95340	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	0.91331	0.91331	0.000	-5.40733	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1261.d
Lab Smp Id: WBN091027-09.3 Client Smp ID: MEGAICV
Inj Date : 17-NOV-2009 16:27
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091027-09.3|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 16:47 llo00884 Quant Type: ISTD
Cal Date : 17-NOV-2009 12:38 Cal File: s1k1256.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.928	3.928	(1.000)	530038	40.0000		
* 29 Naphthalene-d8	136	4.793	4.793	(1.000)	2205306	40.0000		
* 46 Acenaphthene-d10	164	6.040	6.040	(1.000)	1135267	40.0000		
* 67 Phenanthrene-d10	188	7.022	7.022	(1.000)	1874551	40.0000		(H)
* 91 Chrysene-d12	240	8.704	8.704	(1.000)	1621760	40.0000		
* 98 Perylene-d12	264	10.198	10.198	(1.000)	1481649	40.0000		
$ 3 2-Fluorophenol	112	3.104	3.104	(0.790)	491348	40.0000	35.5	
$ 5 Phenol-d5	99	3.640	3.640	(0.927)	592737	40.0000	35.2	
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	570788	40.0000	39.3	
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.916)	1084689	40.0000	39.9	
$ 60 2,4,6-Tribromophenol	329	6.575	6.575	(1.089)	129390	40.0000	40.8	
$ 81 p-Terphenyl-d14	244	7.939	7.939	(0.912)	990744	40.0000	38.9	
1 N-Methyl-N-nitrosomethylamine	74	2.410	2.410	(0.614)	276992	40.0000	36.8	
2 Pyridine	79	2.446	2.446	(0.623)	381913	40.0000	30.2	
4 Aniline	66	3.710	3.710	(0.945)	244181	40.0000	33.0	
6 Phenol	94	3.646	3.646	(0.928)	599483	40.0000	33.8	
7 bis(2-Chloroethyl) ether	63	3.722	3.722	(0.948)	417273	40.0000	33.8	
8 2-Chlorophenol	128	3.787	3.787	(0.964)	512179	40.0000	34.0	
203 n-Decane	43	3.775	3.775	(0.961)	707542	40.0000	37.3	
9 1,3-Dichlorobenzene	146	3.893	3.893	(0.991)	606813	40.0000	34.3	
11 1,4-Dichlorobenzene	146	3.934	3.934	(1.001)	598440	40.0000	34.5	
13 1,2-Dichlorobenzene	146	4.040	4.040	(1.028)	543984	40.0000	34.0	
14 bis(2-Chloroisopropyl)ether	45	4.069	4.069	(1.036)	1027894	40.0000	35.0	
12 Benzyl alcohol	108	3.993	3.993	(1.016)	316054	40.0000	34.5	
15 o-Cresol	107	4.040	4.040	(1.028)	382773	40.0000	34.1	
18 m,p-Cresols	107	4.146	4.146	(1.055)	530984	40.0000	34.8	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.163	4.163	(1.060)	325364	40.0000	32.2
19 Hexachloroethane	117	4.269	4.269	(1.087)	206306	40.0000	33.1
21 Nitrobenzene	77	4.304	4.304	(0.898)	528723	40.0000	34.9
22 Isophorone	82	4.457	4.457	(0.930)	944401	40.0000	35.6
23 2-Nitrophenol	139	4.516	4.516	(0.942)	274410	40.0000	34.1
24 2,4-Dimethylphenol	122	4.504	4.504	(0.940)	516190	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.575	4.575	(0.955)	561140	40.0000	32.9
26 2,4-Dichlorophenol	162	4.681	4.681	(0.977)	415624	40.0000	34.4
27 Benzoic acid	105	4.575	4.575	(0.955)	365053	40.0000	41.2
28 1,2,4-Trichlorobenzene	180	4.745	4.745	(0.990)	467914	40.0000	35.0
30 Naphthalene	128	4.810	4.810	(1.004)	1690998	40.0000	36.7
204 alpha-Terpineol	59	4.787	4.787	(0.999)	424496	40.0000	39.2
31 4-Chloroaniline	127	4.822	4.822	(1.006)	756952	40.0000	36.0
32 Hexachlorobutadiene	225	4.875	4.875	(1.017)	233369	40.0000	34.0
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	380998	40.0000	32.3
34 2-Methylnaphthalene	142	5.293	5.293	(1.104)	1146146	40.0000	37.9
35 1-Methylnaphthalene	142	5.363	5.363	(1.119)	1056787	40.0000	38.8
36 Hexachlorocyclopentadiene	237	5.393	5.393	(0.893)	141475	40.0000	40.8
205 2,3-Dichloroaniline	161	5.487	5.487	(0.908)	505408	40.0000	39.2
37 2,4,6-Trichlorophenol	196	5.475	5.475	(0.906)	283075	40.0000	37.5(H)
38 2,4,5-Trichlorophenol	196	5.504	5.504	(0.911)	290570	40.0000	36.2
40 2-Chloronaphthalene	162	5.645	5.645	(0.935)	931485	40.0000	33.2
42 o-Nitroaniline	65	5.698	5.698	(0.944)	283207	40.0000	32.6
41 m-Nitroaniline	138	5.992	5.992	(0.992)	254734	40.0000	33.2
43 Dimethylphthalate	163	5.810	5.810	(0.962)	1089088	40.0000	35.2
44 2,6-Dinitrotoluene	165	5.863	5.863	(0.971)	252831	40.0000	32.8
50 2,4-Dinitrotoluene	165	6.145	6.145	(1.018)	334220	40.0000	32.7
45 Acenaphthylene	152	5.945	5.945	(0.984)	1666713	40.0000	38.1
47 Acenaphthene	154	6.063	6.063	(1.004)	973838	40.0000	37.2
48 2,4-Dinitrophenol	184	6.057	6.057	(1.003)	104771	40.0000	34.4(Q)
49 Dibenzofuran	168	6.181	6.181	(1.023)	1277902	40.0000	33.7
51 Diethylphthalate	149	6.287	6.287	(1.041)	1059428	40.0000	36.7
52 4-Nitrophenol	139	6.075	6.075	(1.006)	211838	40.0000	39.6
53 Fluorene	166	6.416	6.416	(1.062)	1132809	40.0000	37.1
54 4-Chlorophenylphenylether	204	6.392	6.392	(1.058)	483371	40.0000	37.5
55 2-Methyl-4,6-dinitrophenol	198	6.428	6.428	(0.911)	184539	40.0000	38.9
56 p-Nitroaniline	138	6.410	6.410	(1.061)	247705	40.0000	33.0
133 Diphenylamine	169	6.469	6.469	(0.917)	871532	40.0000	34.8
58 1,2-Diphenylhydrazine	77	6.498	6.498	(0.921)	1045567	40.0000	34.3
61 4-Bromophenylphenylether	248	6.716	6.716	(0.952)	264808	40.0000	41.1(H)
63 Hexachlorobenzene	284	6.775	6.775	(0.960)	270561	40.0000	34.2
65 Pentachlorophenol	266	6.892	6.892	(0.977)	169503	40.0000	35.8
206 n-Octadecane	57	6.869	6.869	(0.973)	797995	40.0000	39.2
68 Phenanthrene	178	7.039	7.039	(0.997)	1566761	40.0000	36.8
69 Anthracene	178	7.069	7.069	(1.002)	1595437	40.0000	36.8
72 Di-n-butylphthalate	149	7.310	7.310	(1.036)	1788243	40.0000	38.7
76 Fluoranthene	202	7.751	7.751	(1.098)	1531590	40.0000	37.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.892	7.892	(0.907)	1593654	40.0000	37.0
85 Butylbenzylphthalate	149	8.204	8.204	(0.943)	757996	40.0000	38.6
89 Benzo(a)anthracene	228	8.692	8.692	(0.999)	1420191	40.0000	36.5(H)
92 Chrysene	228	8.728	8.728	(1.003)	1333078	40.0000	36.7
93 bis(2-Ethylhexyl)phthalate	149	8.569	8.569	(0.984)	1058534	40.0000	37.2(H)
94 Di-n-octylphthalate	149	9.110	9.110	(0.893)	1768724	40.0000	36.5
95 Benzo(b)fluoranthene	252	9.716	9.716	(0.953)	1289484	40.0000	34.7(H)
96 Benzo(k)fluoranthene	252	9.745	9.745	(0.956)	1416940	40.0000	38.1
97 Benzo(a)pyrene	252	10.122	10.122	(0.992)	1227658	40.0000	37.9
99 Indeno(1,2,3-cd)pyrene	276	11.863	11.863	(1.163)	1204623	40.0000	35.8(H)
100 Dibenzo(a,h)anthracene	278	11.863	11.863	(1.163)	986733	40.0000	35.1
101 Benzo(ghi)perylene	276	12.380	12.380	(1.214)	1034720	40.0000	37.2
126 m-Dinitrobenzene	168	5.845	5.845	(0.968)	178196	40.0000	33.7
130 2,3,4,6-Tetrachlorophenol	232	6.251	6.251	(1.035)	223733	40.0000	36.5
143 Dinoseb	211	6.981	6.981	(0.989)	205546	40.0000	35.2
173 Carbazole	167	7.151	7.151	(1.013)	1307938	40.0000	34.6
184 p-Benzoquinone	54	3.404	3.404	(0.867)	35940	40.0000	40.5
192 Methoxychlor	227	8.557	8.557	(0.983)	586700	40.0000	45.6
211 p-Toluidine	106	4.204	4.204	(1.070)	505668	40.0000	54.2(H)
210 m-Toluidine	106	4.228	4.228	(1.076)	504598	40.0000	41.8
26 Phthalic anhydride	104	5.322	5.322	(1.110)	224154	40.0000	42.7
179 Dibenzo(a,e)pyrene	302	16.327	16.327	(1.601)	410219	40.0000	24.9(H)
214 1,4-Dinitrobenzene	168	5.787	5.787	(0.958)	164654	40.0000	33.5
215 2-Ethoxyethanol	59	2.257	2.257	(0.575)	316469	40.0000	39.6
216 Methylenebis(2-chloroaniline)	231	8.622	8.622	(0.991)	200666	40.0000	38.3
M 225 Trichlorophenols	196				573645	80.0000	73.6
M 226 Tetrachlorophenols	232				223733	40.0000	36.5
M 227 Benzo(b,k)fluoranthene	252				2706424	80.0000	75.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1261.d
Date : 17-NOV-2009 16:27
Client ID: MEGAICV
Sample Info: IWBN091027-09,3140 PPM11ISVHF11MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

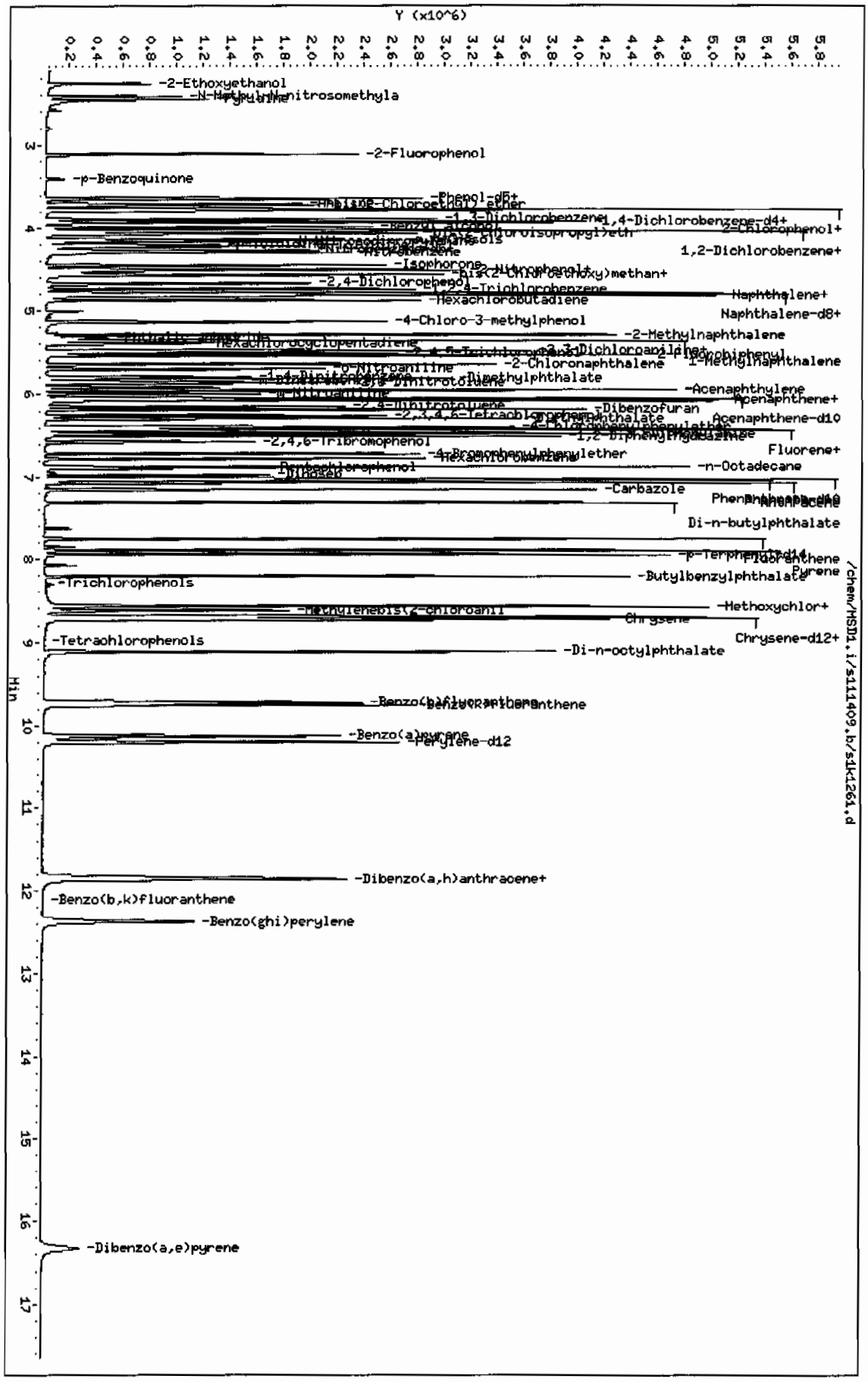

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:16
Lab File ID: s1k2908.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.04478	0.93534	0.93534	0.000	-10.47542	60.00000	Averaged	
$ 5 Phenol-d5	1.26984	1.10416	1.10416	0.000	-13.04738	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.26360	0.25055	0.25055	0.000	-4.95183	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	0.95800	1.05400	1.05400	0.000	10.02136	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.11169	0.12797	0.12797	0.000	14.57528	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.62787	0.69462	0.69462	0.000	10.62981	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.56740	0.49062	0.49062	0.000	-13.53082	60.00000	Averaged	
2 Pyridine	0.95281	0.62500	0.62500	0.000	-34.40414	60.00000	Averaged	
4 Aniline	0.55813	0.45585	0.45585	0.000	-18.32607	60.00000	Averaged	
6 Phenol	1.33800	1.14177	1.14177	0.001	-14.66627	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	0.93081	0.79196	0.79196	0.000	-14.91692	60.00000	Averaged	
8 2-Chlorophenol	1.13717	1.01207	1.01207	0.000	-11.00062	60.00000	Averaged	
203 n-Decane	1.43160	1.34530	1.34530	0.000	-6.02780	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.33431	1.17510	1.17510	0.000	-11.93236	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.30799	1.17800	1.17800	0.001	-9.93823	20.00000	Averaged	ccc
13 1,2-Dichlorobenzene	1.20798	1.11925	1.11925	0.000	-7.34571	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	2.21709	1.72913	1.72913	0.000	-22.00911	60.00000	Averaged	
12 Benzyl alcohol	0.69141	0.59324	0.59324	0.000	-14.19871	60.00000	Averaged	
15 o-Cresol	0.84650	0.74615	0.74615	0.000	-11.85443	60.00000	Averaged	
18 m,p-Cresols	1.15179	1.01215	1.01215	0.000	-12.12379	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.76238	0.62107	0.62107	0.050	-18.53430	60.00000	Averaged	spcc
19 Hexachloroethane	0.47075	0.42894	0.42894	0.000	-8.88187	60.00000	Averaged	
21 Nitrobenzene	0.27466	0.26056	0.26056	0.000	-5.13308	60.00000	Averaged	
22 Isophorone	0.48049	0.43538	0.43538	0.000	-9.38891	60.00000	Averaged	
23 2-Nitrophenol	0.14580	0.12807	0.12807	0.001	-12.15608	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	0.23346	0.21295	0.21295	0.000	-8.78609	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.30933	0.25463	0.25463	0.000	-17.68395	60.00000	Averaged	
26 2,4-Dichlorophenol	0.21909	0.19606	0.19606	0.001	-10.51358	20.00000	Averaged	ccc
27 Benzoic acid	0.16087	0.14918	0.14918	0.000	-7.26607	60.00000	Averaged	
28 1,2,4-Trichlorobenzene	0.24210	0.22426	0.22426	0.000	-7.36864	60.00000	Averaged	
30 Naphthalene	0.83482	0.79378	0.79378	0.000	-4.91550	60.00000	Averaged	
204 alpha-Terpineol	0.19635	0.19582	0.19582	0.000	-0.27040	60.00000	Averaged	
31 4-Chloroaniline	0.38123	0.33848	0.33848	0.000	-11.21420	60.00000	Averaged	
32 Hexachlorobutadiene	0.12432	0.12097	0.12097	0.001	-2.68941	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.21406	0.20208	0.20208	0.001	-5.59590	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.54880	0.55002	0.55002	0.000	0.22355	60.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:16
Lab File ID: s1k2908.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.49330	0.50931	0.50931	0.000	3.24506	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.12213	0.17063	0.17063	0.050	39.71345	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.45401	0.47182	0.47182	0.000	3.92390	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.26606	0.26941	0.26941	0.001	1.26039	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.28290	0.29203	0.29203	0.000	3.22560	60.00000	Averaged	
40 2-Chloronaphthalene	0.98748	0.89344	0.89344	0.000	-9.52396	60.00000	Averaged	
42 o-Nitroaniline	0.30619	0.25914	0.25914	0.000	-15.36408	60.00000	Averaged	
41 m-Nitroaniline	0.27055	0.21032	0.21032	0.000	-22.26231	60.00000	Averaged	
43 Dimethylphthalate	1.08995	1.05973	1.05973	0.000	-2.77241	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.27156	0.23667	0.23667	0.000	-12.84701	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.35993	0.30949	0.30949	0.000	-14.01501	60.00000	Averaged	
45 Acenaphthylene	1.54092	1.53763	1.53763	0.000	-0.21389	60.00000	Averaged	
47 Acenaphthene	0.92259	0.95527	0.95527	0.001	3.54259	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	0.10718	0.12010	0.12010	0.050	12.05024	60.00000	Averaged	spcc
49 Dibenzofuran	1.33422	1.18008	1.18008	0.000	-11.55280	60.00000	Averaged	
51 Diethylphthalate	1.01616	1.07013	1.07013	0.000	5.31178	60.00000	Averaged	
52 4-Nitrophenol	0.18871	0.17717	0.17717	0.050	-6.11858	60.00000	Averaged	spcc
53 Fluorene	1.07578	1.10537	1.10537	0.000	2.75033	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.45420	0.45002	0.45002	0.000	-0.92213	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	0.10120	0.12048	0.12048	0.000	19.05454	60.00000	Averaged	
56 p-Nitroaniline	0.26458	0.18690	0.18690	0.000	-29.36053	60.00000	Averaged	
133 Diphenylamine	0.53354	0.47781	0.47781	0.001	-10.44542	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.65098	0.58501	0.58501	0.000	-10.13455	60.00000	Averaged	
61 4-Bromophenylphenylether	0.13743	0.14843	0.14843	0.000	8.00692	60.00000	Averaged	
63 Hexachlorobenzene	0.16869	0.15850	0.15850	0.000	-6.03827	60.00000	Averaged	
65 Pentachlorophenol	0.10117	0.10563	0.10563	0.001	4.40818	20.00000	Averaged	ccc
206 n-Octadecane	0.43383	0.43789	0.43789	0.000	0.93605	60.00000	Averaged	
68 Phenanthrene	0.90903	0.92186	0.92186	0.000	1.41141	60.00000	Averaged	
69 Anthracene	0.92447	0.92361	0.92361	0.000	-0.09333	60.00000	Averaged	
72 Di-n-butylphthalate	0.98605	1.13002	1.13002	0.000	14.60116	60.00000	Averaged	
76 Fluoranthene	0.87746	0.96605	0.96605	0.001	10.09605	20.00000	Averaged	ccc
79 Pyrene	1.06293	1.12001	1.12001	0.000	5.37036	60.00000	Averaged	
85 Butylbenzylphthalate	0.48372	0.55218	0.55218	0.000	14.15240	60.00000	Averaged	
89 Benzo(a)anthracene	0.95915	0.91088	0.91088	0.000	-5.03296	60.00000	Averaged	
92 Chrysene	0.89647	0.84644	0.84644	0.000	-5.58054	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	0.70275	0.78551	0.78551	0.000	11.77612	60.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:16
Lab File ID: s1k2908.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	1.30849	1.50858	1.50858	0.001	15.29192	20.00000	Averaged	ccc
95 Benzo(b)fluoranthene	40.03695	40.00000	1.01555	0.000	0.09238	60.00000	Linear	
96 Benzo(k)fluoranthene	1.00298	1.01457	1.01457	0.000	1.15574	60.00000	Averaged	
97 Benzo(a)pyrene	39.54204	40.00000	0.86372	0.001	-1.14489	20.00000	Linear	ccc
99 Indeno(1,2,3-cd)pyrene	36.77191	40.00000	0.83397	0.000	-8.07024	60.00000	Linear	
100 Dibenzo(a,h)anthracene	36.10091	40.00000	0.68487	0.000	-9.74773	60.00000	Linear	
101 Benzo(ghi)perylene	0.75165	0.72206	0.72206	0.000	-3.93684	60.00000	Averaged	
126 m-Dinitrobenzene	0.18653	0.15928	0.15928	0.000	-14.60839	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
143 Dinoseb	0.12447	0.13803	0.13803	0.000	10.88892	60.00000	Averaged	
173 Carbazole	0.80714	0.65601	0.65601	0.000	-18.72500	60.00000	Averaged	
184 p-Benzoquinone	47.43522	40.00000	0.08180	0.000	18.58805	60.00000	Linear	
192 Methoxychlor	0.31747	0.50861	0.50861	0.000	60.20967	60.00000	Averaged	<-
211 p-Toluidine	0.70440	0.85962	0.85962	0.000	22.03509	60.00000	Averaged	
210 m-Toluidine	0.91072	1.22068	1.22068	0.000	34.03536	60.00000	Averaged	
26 Phthalic anhydride	52.14166	40.00000	0.12599	0.000	30.35416	60.00000	Linear	
214 1,4-Dinitrobenzene	0.17315	0.14690	0.14690	0.000	-15.16088	60.00000	Averaged	
215 2-Ethoxyethanol	0.60315	0.51251	0.51251	0.000	-15.02672	60.00000	Averaged	
216 Methylenebis(2-chloroanilin	0.12921	0.11982	0.11982	0.000	-7.26553	60.00000	Averaged	
M 225 Trichlorophenols	0.27448	0.28072	0.28072	0.000	2.27314	60.00000	Averaged	
M 226 Tetrachlorophenols	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
M 227 Benzo(b,k)fluoranthene	0.96552	1.01506	1.01506	0.000	5.13058	60.00000	Averaged	

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Data file : /chem/MSD1.i/s112909.b/s1k2908.d
Lab Smp Id: WBN091111-03.5 Client Smp ID: MEGACVS
Inj Date : 29-NOV-2009 15:16
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.5|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	531725	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2194392	40.0000	
* 46 Acenaphthene-d10	164	5.940	5.940	(1.000)	1110069	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	1851790	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1672748	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1414560	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	497343	40.0000	35.8
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	587107	40.0000	34.8
$ 20 Nitrobenzene-d5	82	4.199	4.199	(0.895)	549806	40.0000	38.0
$ 39 2-Fluorobiphenyl	172	5.434	5.434	(0.915)	1170016	40.0000	44.0
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.090)	142060	40.0000	45.8
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1161917	40.0000	44.2
1 N-Methyl-N-nitrosomethylamine	74	2.352	2.352	(0.614)	260877	40.0000	34.6
2 Pyridine	79	2.410	2.410	(0.630)	332329	40.0000	26.2
4 Aniline	66	3.628	3.628	(0.948)	242386	40.0000	32.7
6 Phenol	94	3.575	3.575	(0.934)	607105	40.0000	34.1
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	421107	40.0000	34.0
8 2-Chlorophenol	128	3.704	3.704	(0.968)	538144	40.0000	35.6
203 n-Decane	43	3.675	3.675	(0.960)	715332	40.0000	37.6
9 1,3-Dichlorobenzene	146	3.799	3.799	(0.992)	624828	40.0000	35.2
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	626371	40.0000	36.0
13 1,2-Dichlorobenzene	146	3.946	3.946	(1.031)	595132	40.0000	37.1
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	919419	40.0000	31.2
12 Benzyl alcohol	108	3.910	3.910	(1.022)	315440	40.0000	34.3
15 o-Cresol	107	3.963	3.963	(1.035)	396746	40.0000	35.2
18 m,p-Cresols	107	4.063	4.063	(1.061)	538183	40.0000	35.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	330241	40.0000	32.6
19 Hexachloroethane	117	4.169	4.169	(1.089)	228076	40.0000	36.4
21 Nitrobenzene	77	4.210	4.210	(0.897)	571764	40.0000	37.9
22 Isophorone	82	4.369	4.369	(0.931)	955384	40.0000	36.2
23 2-Nitrophenol	139	4.422	4.422	(0.942)	281046	40.0000	35.1
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	467295	40.0000	36.5
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	558752	40.0000	32.9
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	430222	40.0000	35.8
27 Benzoic acid	105	4.499	4.499	(0.959)	327360	40.0000	37.1
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	492125	40.0000	37.0
30 Naphthalene	128	4.710	4.710	(1.004)	1741866	40.0000	38.0(Q)
204 alpha-Terpineol	59	4.687	4.687	(0.999)	429712	40.0000	39.9
31 4-Chloroaniline	127	4.734	4.734	(1.009)	742753	40.0000	35.5
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	265466	40.0000	38.9
33 4-Chloro-3-methylphenol	107	5.051	5.051	(1.076)	443438	40.0000	37.8
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1206970	40.0000	40.1
35 1-Methylnaphthalene	142	5.257	5.257	(1.120)	1117632	40.0000	41.3
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.890)	189412	40.0000	55.9
205 2,3-Dichloroaniline	161	5.387	5.387	(0.907)	523755	40.0000	41.6
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.906)	299063	40.0000	40.5
38 2,4,5-Trichlorophenol	196	5.410	5.410	(0.911)	324168	40.0000	41.3
40 2-Chloronaphthalene	162	5.540	5.540	(0.933)	991776	40.0000	36.2
42 o-Nitroaniline	65	5.604	5.604	(0.944)	287667	40.0000	33.8
41 m-Nitroaniline	138	5.898	5.898	(0.993)	233470	40.0000	31.1
43 Dimethylphthalate	163	5.716	5.716	(0.962)	1176372	40.0000	38.9
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.970)	262723	40.0000	34.9
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.019)	343551	40.0000	34.4
45 Acenaphthylene	152	5.840	5.840	(0.983)	1706873	40.0000	39.9
47 Acenaphthene	154	5.957	5.957	(1.003)	1060418	40.0000	41.4
48 2,4-Dinitrophenol	184	5.963	5.963	(1.004)	133320	40.0000	44.8(Q)
49 Dibenzofuran	168	6.075	6.075	(1.023)	1309968	40.0000	35.4
51 Diethylphthalate	149	6.198	6.198	(1.044)	1187921	40.0000	42.1
52 4-Nitrophenol	139	6.004	6.004	(1.011)	196669	40.0000	37.6
53 Fluorene	166	6.310	6.310	(1.062)	1227039	40.0000	41.1
54 4-Chlorophenylphenylether	204	6.293	6.293	(1.059)	499549	40.0000	39.6
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	223102	40.0000	47.6
56 p-Nitroaniline	138	6.328	6.328	(1.065)	207467	40.0000	28.2
133 Diphenylamine	169	6.369	6.369	(0.920)	884802	40.0000	35.8
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1083314	40.0000	35.9
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	274868	40.0000	43.2
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	293514	40.0000	37.6
65 Pentachlorophenol	266	6.792	6.792	(0.981)	195597	40.0000	41.8
206 n-Octadecane	57	6.769	6.769	(0.978)	810873	40.0000	40.4
68 Phenanthrene	178	6.940	6.940	(1.003)	1707099	40.0000	40.6
69 Anthracene	178	6.969	6.969	(1.007)	1710324	40.0000	40.0
72 Di-n-butylphthalate	149	7.216	7.216	(1.042)	2092568	40.0000	45.8
76 Fluoranthene	202	7.645	7.645	(1.105)	1788923	40.0000	44.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.787	7.787	(0.910)	1873498	40.0000	42.1
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	923662	40.0000	45.7
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1523665	40.0000	38.0
92 Chrysene	228	8.581	8.581	(1.003)	1415885	40.0000	37.8
93 bis(2-Ethylhexyl)phthalate	149	8.434	8.434	(0.986)	1313964	40.0000	44.7
94 Di-n-octylphthalate	149	8.939	8.939	(0.898)	2133981	40.0000	46.1
95 Benzo(b)fluoranthene	252	9.510	9.510	(0.956)	1436562	40.0000	40.0
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	1435167	40.0000	40.5
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	1221778	40.0000	39.5
99 Indeno(1,2,3-cd)pyrene	276	11.504	11.504	(1.156)	1179700	40.0000	36.8
100 Dibenzo(a,h)anthracene	278	11.498	11.498	(1.155)	968787	40.0000	36.1
101 Benzo(ghi)perylene	276	11.980	11.980	(1.204)	1021393	40.0000	38.4
126 m-Dinitrobenzene	168	5.751	5.751	(0.968)	176810	40.0000	34.2
130 2,3,4,6-Tetrachlorophenol	232	6.157	6.157	(1.037)	249214	40.0000	41.6
143 Dinoseb	211	6.881	6.881	(0.994)	255594	40.0000	44.4
173 Carbazole	167	7.057	7.057	(1.020)	1214784	40.0000	32.5
184 p-Benzoquinone	54	3.334	3.334	(0.871)	43494	40.0000	47.4
192 Methoxychlor	227	8.428	8.428	(0.985)	850778	40.0000	64.1
211 p-Toluidine	106	4.116	4.116	(1.075)	457082	40.0000	48.8
210 m-Toluidine	106	4.140	4.140	(1.081)	649068	40.0000	53.6
26 Phthalic anhydride	104	5.240	5.240	(1.117)	276462	40.0000	52.1
214 1,4-Dinitrobenzene	168	5.693	5.693	(0.958)	163069	40.0000	33.9
215 2-Ethoxyethanol	59	2.205	2.205	(0.576)	272516	40.0000	34.0
216 Methylenebis(2-chloroaniline)	231	8.486	8.486	(0.992)	200426	40.0000	37.1
M 225 Trichlorophenols	196				623231	80.0000	81.8
M 226 Tetrachlorophenols	232				249214	40.0000	41.6
M 227 Benzo(b,k)fluoranthene	252				2871729	80.0000	84.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2908.d
Date : 29-NOV-2009 15:16
Client ID: MEGACVS
Sample Info: IWBN091111-03,5140 PPM11ISVHF11INEGACVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AHY
Column diameter: 0.20

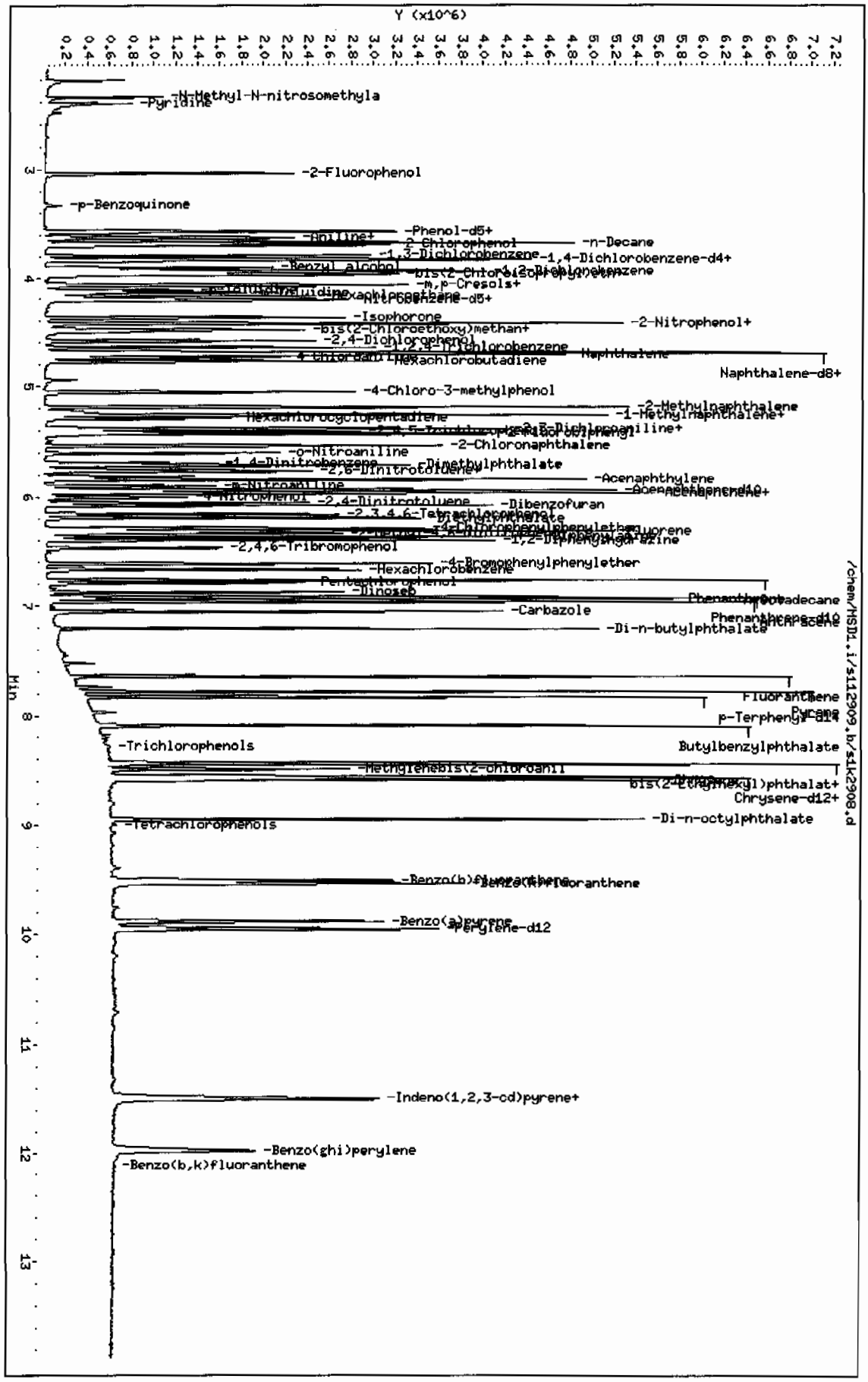

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:40
Lab File ID: s1k2909.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.3 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.83285	0.83285	0.000	1.07424	60.00000	Averaged
16 Acetophenone	1.12880	1.17413	1.17413	0.000	4.01561	60.00000	Averaged
189 Caprolactam	0.07169	0.06992	0.06992	0.000	-2.46899	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.19952	1.19952	0.000	7.05141	60.00000	Averaged
207 Atrazine	0.04008	0.03858	0.03858	0.000	-3.74021	60.00000	Averaged
77 Benzidine	0.36215	0.28557	0.28557	0.000	-21.14800	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.26579	0.26579	0.000	-3.49092	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.32551	0.32551	0.000	3.71012	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.18209	0.18209	0.000	3.22239	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.73877	0.73877	0.000	3.61556	60.00000	Averaged
105 2-Picoline	1.15384	1.17090	1.17090	0.000	1.47854	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.43981	0.43981	0.000	-3.18151	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48596	0.48596	0.000	14.15516	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.45100	0.45100	0.000	-5.95154	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.58421	0.58421	0.000	-2.01938	60.00000	Averaged
110 Pentachloroethane	0.29115	0.32136	0.32136	0.000	10.37514	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.46474	0.46474	0.000	-2.17748	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.66176	0.66176	0.000	7.16931	60.00000	Averaged
114 o-Toluidine	1.65327	1.66011	1.66011	0.000	0.41384	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.12196	0.12196	0.000	-7.29855	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.67623	0.67623	0.000	-11.95066	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.19074	0.19074	0.000	-3.18439	60.00000	Averaged
119 Hexachloropropene	0.08895	0.10078	0.10078	0.000	13.29710	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.16507	0.16507	0.000	-18.09275	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.15467	0.15467	0.000	-9.93437	60.00000	Averaged
122 Safrole	0.17864	0.18418	0.18418	0.000	3.10262	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.40592	0.40592	0.000	10.56556	60.00000	Averaged
124 Isosafrole	0.32761	0.32754	0.32754	0.000	-0.02086	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.27300	0.27300	0.000	-8.00801	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.33822	0.33822	0.000	7.53761	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.87935	0.87935	0.000	-1.66142	60.00000	Averaged
129 2-Naphthylamine	0.97473	0.86505	0.86505	0.000	-11.25277	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.26430	0.26430	0.000	-7.35350	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.13606	0.13606	0.000	17.06678	60.00000	Averaged
137 Phenacetin	0.25708	0.25386	0.25386	0.000	-1.25486	60.00000	Averaged
138 Diallate	0.23112	0.21973	0.21973	0.000	-4.92775	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:40
Lab File ID: s1k2909.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.3 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.21402	0.21402	0.000	-10.82059	60.00000	Averaged
213 Trans Diallate	0.27191	0.25851	0.25851	0.000	-4.92775	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.50169	0.50169	0.000	-6.42545	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06382	0.06382	0.000	19.86535	60.00000	Averaged
142 Pronamide	0.23368	0.26093	0.26093	0.000	11.66162	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.01142	0.01142	0.000	16.48447	60.00000	Averaged
147 Methapyrilene	0.36822	0.41116	0.41116	0.000	11.66210	60.00000	Averaged
148 Isodrin	0.08609	0.09797	0.09797	0.000	13.79210	60.00000	Averaged
149 Aramite	0.04255	0.04739	0.04739	0.000	11.36229	60.00000	Averaged
150 Kepone	0.06308	0.06796	0.06796	0.000	7.73416	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.31425	0.31425	0.000	10.68260	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.30459	0.30459	0.000	38.48914	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.46482	0.46482	0.000	-3.05232	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.34018	0.34018	0.000	10.44468	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.47473	0.47473	0.000	12.70311	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40587	0.40587	0.000	10.55824	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2909.d
Lab Smp Id: WBN091111-03.3 Client Smp ID: APCVS
Inj Date : 29-NOV-2009 15:40
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.3|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:21 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	598729	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2366758	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.934	(1.000)	1267857	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2141696	40.0000	
* 91 Chrysene-d12	240	8.551	8.551	(1.000)	1838470	40.0000	
* 98 Perylene-d12	264	9.939	9.939	(1.000)	1489902	40.0000	
209 Benzaldehyde	77	3.563	3.563	(0.931)	498652	40.0000	40.4
16 Acetophenone	105	4.087	4.087	(1.068)	702983	40.0000	41.6(H)
189 Caprolactam	113	5.004	5.004	(1.066)	165477	40.0000	39.0
208 1,1'-Biphenyl	154	5.510	5.510	(0.929)	1520815	40.0000	42.8(H)
207 Atrazine	173	6.698	6.698	(0.968)	82632	40.0000	38.5
77 Benzidine	184	7.704	7.704	(0.901)	525004	40.0000	31.5
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.993)	488644	40.0000	38.6(H)
102 1,4-Dioxane	88	2.199	2.199	(0.574)	194894	40.0000	41.5
103 Methyl methacrylate	100	2.187	2.187	(0.571)	109022	40.0000	41.3
104 Ethyl methacrylate	69	2.552	2.552	(0.667)	442322	40.0000	41.4
105 2-Picoline	93	2.769	2.769	(0.723)	701054	40.0000	40.6
106 N-Nitrosomethylethylamine	88	2.793	2.793	(0.730)	263327	40.0000	38.7
107 Methyl methanesulfonate	80	2.952	2.952	(0.771)	290960	40.0000	45.7
108 N-Nitrosodiethylamine	102	3.175	3.175	(0.829)	270027	40.0000	37.6
109 Ethyl Methanesulfonate	79	3.334	3.334	(0.871)	349784	40.0000	39.2
110 Pentachloroethane	167	3.657	3.657	(0.955)	192409	40.0000	44.2
111 N-Nitrosopyrrolidine	100	4.087	4.087	(1.068)	278256	40.0000	39.1
113 N-Nitrosomorpholine	56	4.099	4.099	(1.071)	396213	40.0000	42.9(H)
114 o-Toluidine	106	4.110	4.110	(1.074)	993958	40.0000	40.2
115 N-Nitrosopiperidine	114	4.316	4.316	(0.920)	288647	40.0000	37.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.557	4.557	(0.971)	1600470	40.0000	35.2(H)
118 2,6-Dichlorophenol	162	4.740	4.740	(1.010)	451427	40.0000	38.7
119 Hexachloropropene	213	4.757	4.757	(1.014)	238527	40.0000	45.3(H)
120 p-Phenylenediamine	108	4.987	4.987	(1.063)	390689	40.0000	32.8(H)
121 N-Nitrosodi-n-butylamine	84	4.940	4.940	(1.053)	366055	40.0000	36.0(TH)
122 Safrole	162	5.104	5.104	(1.088)	435909	40.0000	41.2
123 1,2,4,5-Tetrachlorobenzene	216	5.304	5.304	(0.894)	514644	40.0000	44.2(H)
124 Isosafrole	162	5.469	5.469	(0.922)	415277	40.0000	40.0(H)
125 1,4-Naphthoquinone	158	5.663	5.663	(0.954)	346123	40.0000	36.8
127 Pentachlorobenzene	250	6.046	6.046	(1.019)	428816	40.0000	43.0(H)
128 1-Naphthylamine	143	6.134	6.134	(1.034)	1114885	40.0000	39.3(H)
129 2-Naphthylamine	143	6.187	6.187	(1.043)	1096759	40.0000	35.5
131 5-Nitro-o-toluidine	152	6.310	6.310	(1.063)	335099	40.0000	37.0(H)
136 1,3,5-Trinitrobenzene	75	6.528	6.528	(0.943)	291408	40.0000	46.8(H)
137 Phenacetin	108	6.569	6.569	(0.949)	543687	40.0000	39.5
138 Diallate	86	6.540	6.540	(0.945)	470601	40.0000	38.0(H)
212 Cis Diallate	86	6.604	6.604	(0.954)	68755	6.00000	5.4
213 Trans Diallate	86	6.540	6.540	(0.945)	470601	34.0000	32.3(H)
140 4-Aminobiphenyl	169	6.787	6.787	(0.980)	1074464	40.0000	37.4(H)
141 Pentachloronitrobenzene	237	6.798	6.798	(0.982)	136682	40.0000	47.9
142 Pronamide	173	6.798	6.798	(0.982)	558829	40.0000	44.7(H)
146 4-Nitroquinoline-1-oxide	101	7.392	7.392	(1.068)	24459	40.0000	46.6
147 Methapyrilene	58	7.404	7.404	(1.070)	880581	40.0000	44.7(H)
148 Isodrin	193	7.557	7.557	(1.092)	209812	40.0000	45.5
149 Aramite	185	7.787	7.787	(1.125)	101489	40.0000	44.5(H)
150 Kepone	272	8.192	8.192	(1.184)	145557	40.0000	43.1(H)
151 p-(Dimethylamino)azobenzene	120	7.904	7.904	(0.924)	577746	40.0000	44.3
152 Chlorobenzilate	251	7.922	7.922	(0.926)	559976	40.0000	55.4(H)
153 3,3'-Dimethylbenzidine	212	8.110	8.110	(0.948)	854557	40.0000	38.8(H)
155 2-Acetylaminofluorene	181	8.292	8.292	(0.970)	625417	40.0000	44.2
157 7,12Dimethylbenz(a)anthracene	256	9.469	9.469	(0.953)	707308	40.0000	45.1(H)
158 3-Methylcholanthrene	268	10.281	10.281	(1.034)	604708	40.0000	44.2(H)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s112909.b/s1k2909.d
Date : 29-NOV-2009 15:40
Client ID: APCVS
Sample Info: WBN091111-03,3140 PPM|1|SVHF1|1|APCVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

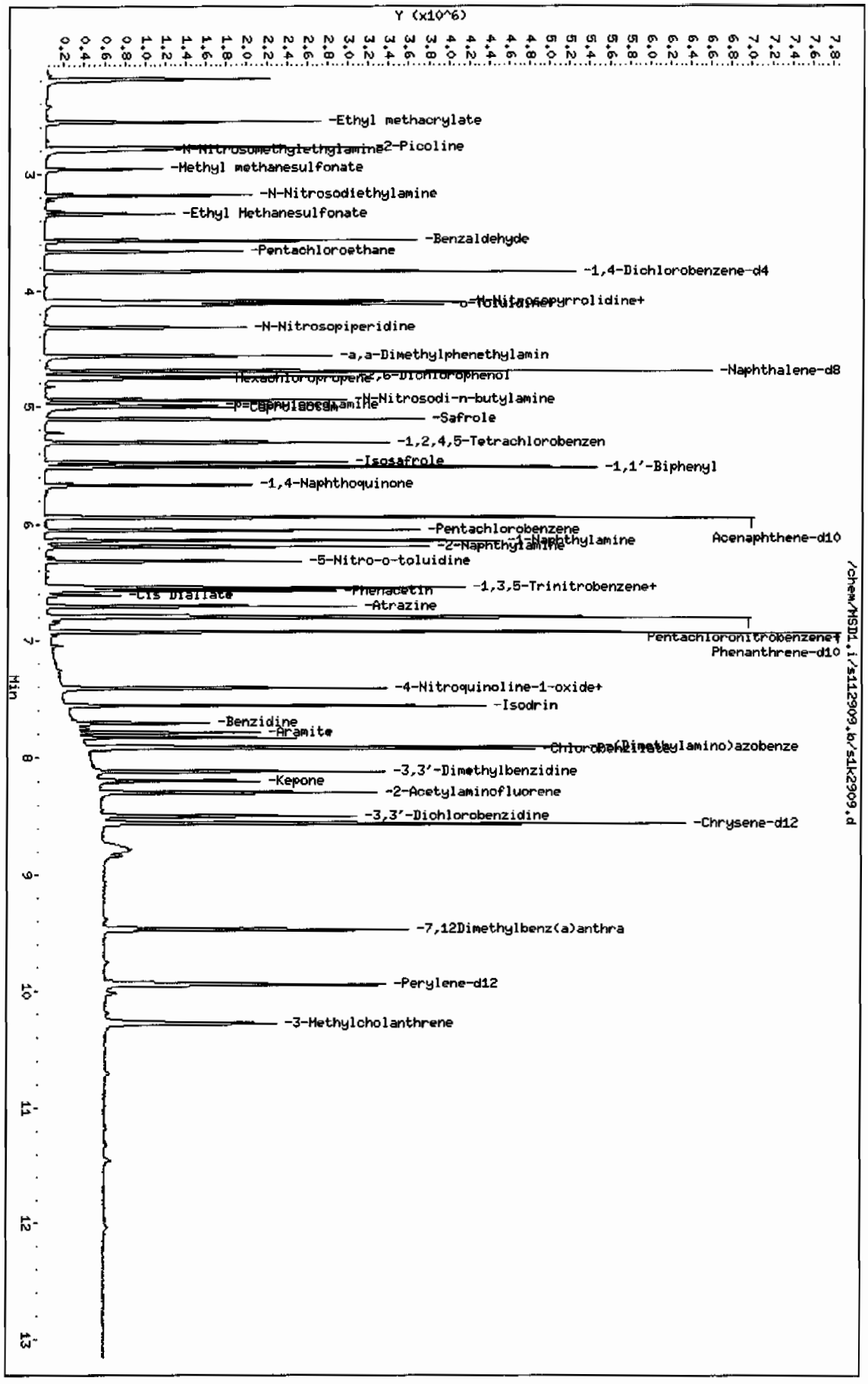

Page 1

QC Data

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Page 1

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

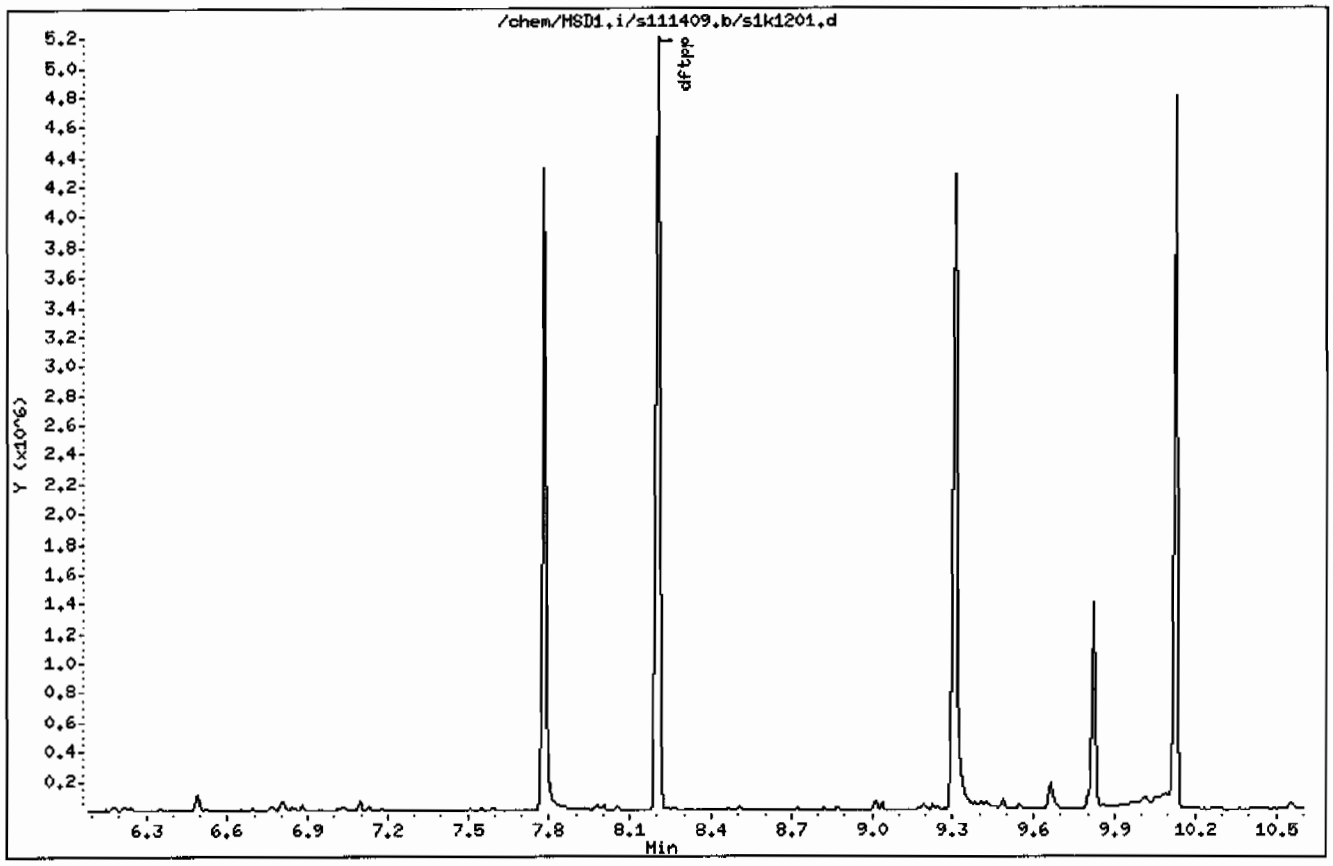

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

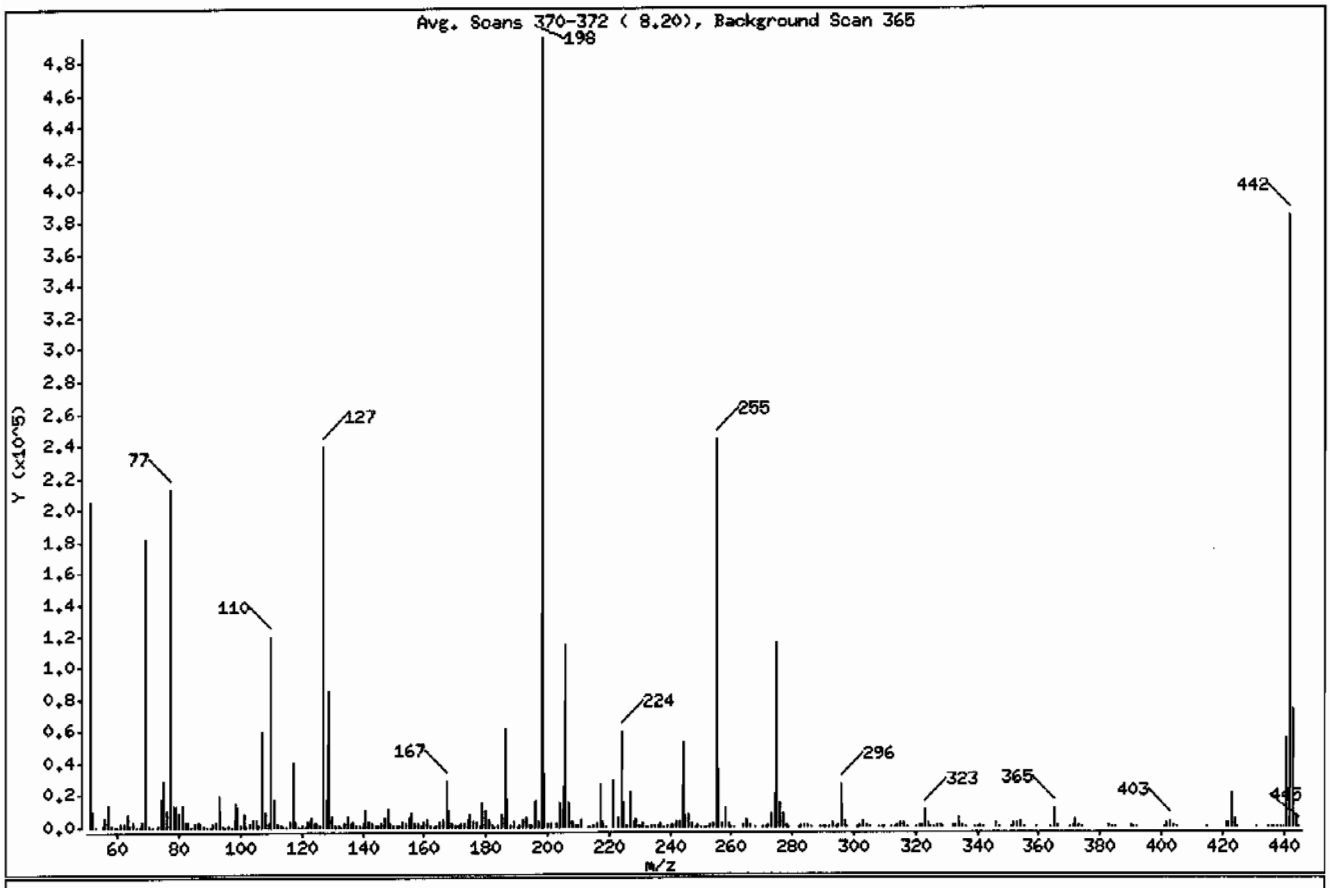

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.33
68	Less than 2.00% of mass 69	0.66 (1.81)
69	Mass 69 relative abundance	36.68
70	Less than 2.00% of mass 69	0.20 (0.55)
127	40.00 - 60.00% of mass 198	48.32
197	Less than 1.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.23
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	77.37
443	17.00 - 23.00% of mass 442	14.83 (19.16)

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	204544	132.00	849	213.00	322	304.00	857
52.00	10058	133.00	398	214.00	81	305.00	126
53.00	476	134.00	2213	215.00	1065	308.00	339
55.00	808	135.00	6445	216.00	2209	309.00	249
56.00	5675	136.00	2682	217.00	25976	310.00	361
57.00	13163	137.00	3409	218.00	3600	312.00	52
58.00	676	138.00	864	219.00	390	313.00	288
59.00	142	139.00	1285	221.00	28416	314.00	1372
60.00	58	140.00	1711	223.00	5970	315.00	2833
61.00	2414	141.00	10495	224.00	59288	316.00	1731
62.00	2627	142.00	3783	225.00	15318	317.00	279
63.00	7561	143.00	2378	226.00	1533	320.00	54
64.00	1048	144.00	706	227.00	21184	321.00	903
65.00	3902	145.00	666	228.00	3165	322.00	596
66.00	253	146.00	1908	229.00	4804	323.00	9908
67.00	264	147.00	5356	230.00	759	324.00	1942
68.00	3280	148.00	10849	231.00	2133	325.00	119
69.00	181568	149.00	2326	232.00	408	326.00	93
70.00	999	150.00	640	233.00	450	327.00	1701
71.00	119	151.00	1554	234.00	1483	328.00	891
73.00	1219	152.00	808	235.00	1658	329.00	88
74.00	17536	153.00	3187	236.00	1183	332.00	578
75.00	28056	154.00	2701	237.00	1728	333.00	855
76.00	9746	155.00	5991	238.00	324	334.00	5817
77.00	212736	156.00	9066	239.00	813	335.00	1475
78.00	13840	157.00	1942	240.00	775	336.00	75
79.00	12099	158.00	1971	241.00	1214	339.00	62
80.00	9416	159.00	1574	242.00	3186	340.00	77
81.00	13432	160.00	3233	243.00	3508	341.00	1027
82.00	3448	161.00	4832	244.00	51832	342.00	243
83.00	3440	162.00	1519	245.00	6691	346.00	2015
84.00	276	163.00	414	246.00	8221	347.00	283
85.00	2469	164.00	763	247.00	1725	351.00	182
86.00	3499	165.00	3823	248.00	403	352.00	2745
87.00	1914	166.00	4542	249.00	1698	353.00	2043

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	945	167.00	28056	250.00	338	354.00	3347
89.00	408	168.00	9882	251.00	378	355.00	568
90.00	81	169.00	1949	252.00	461	359.00	68
91.00	2811	170.00	666	253.00	965	364.00	82
92.00	3305	171.00	868	254.00	2194	365.00	11049
93.00	19392	172.00	1736	255.00	243712	366.00	1525
94.00	1530	173.00	2151	256.00	34792	370.00	312
95.00	401	174.00	4365	257.00	2654	371.00	749
96.00	1021	175.00	8331	258.00	11699	372.00	5103
97.00	481	176.00	2950	259.00	1976	373.00	1317
98.00	14829	177.00	3734	260.00	354	374.00	211
99.00	12143	178.00	1429	261.00	488	383.00	1475
100.00	1081	179.00	14903	264.00	588	384.00	413
101.00	7582	180.00	10676	265.00	4651	385.00	112
102.00	501	181.00	5074	266.00	630	390.00	664
103.00	2806	182.00	848	268.00	97	391.00	481
104.00	4764	183.00	484	270.00	316	392.00	349
105.00	4470	184.00	1118	271.00	565	401.00	323
106.00	1531	185.00	7578	272.00	574	402.00	2059
107.00	58720	186.00	61632	273.00	7763	403.00	3027
108.00	9198	187.00	16824	274.00	20360	404.00	981
109.00	1983	188.00	1678	275.00	115400	405.00	157
110.00	119360	189.00	3368	276.00	14998	415.00	61
111.00	17336	190.00	542	277.00	8371	421.00	2728
112.00	2224	191.00	1652	278.00	1328	422.00	2498
113.00	793	192.00	4637	279.00	337	423.00	19928
114.00	277	193.00	5425	282.00	172	424.00	3991
115.00	405	194.00	1196	283.00	908	425.00	403
116.00	3276	195.00	960	284.00	671	431.00	50
117.00	39312	196.00	15938	285.00	1513	435.00	182
118.00	2868	197.00	3428	286.00	245	436.00	64
119.00	376	198.00	494976	289.00	275	437.00	123
120.00	724	199.00	32528	290.00	365	438.00	300
121.00	279	200.00	2387	291.00	237	439.00	370
122.00	3763	201.00	2747	292.00	481	440.00	354

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	6008	203.00	2693	293.00	2054	441.00	54440
124.00	2602	204.00	14604	294.00	532	442.00	382976
125.00	2647	205.00	25208	295.00	657	443.00	73384
126.00	904	206.00	113680	296.00	26240	444.00	6543
127.00	239168	207.00	14454	297.00	3789	445.00	363
128.00	17576	208.00	3160	298.00	253		
129.00	85072	209.00	1021	301.00	417		
130.00	7156	210.00	801	302.00	580		
131.00	1445	211.00	4362	303.00	3041		

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Page 1

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

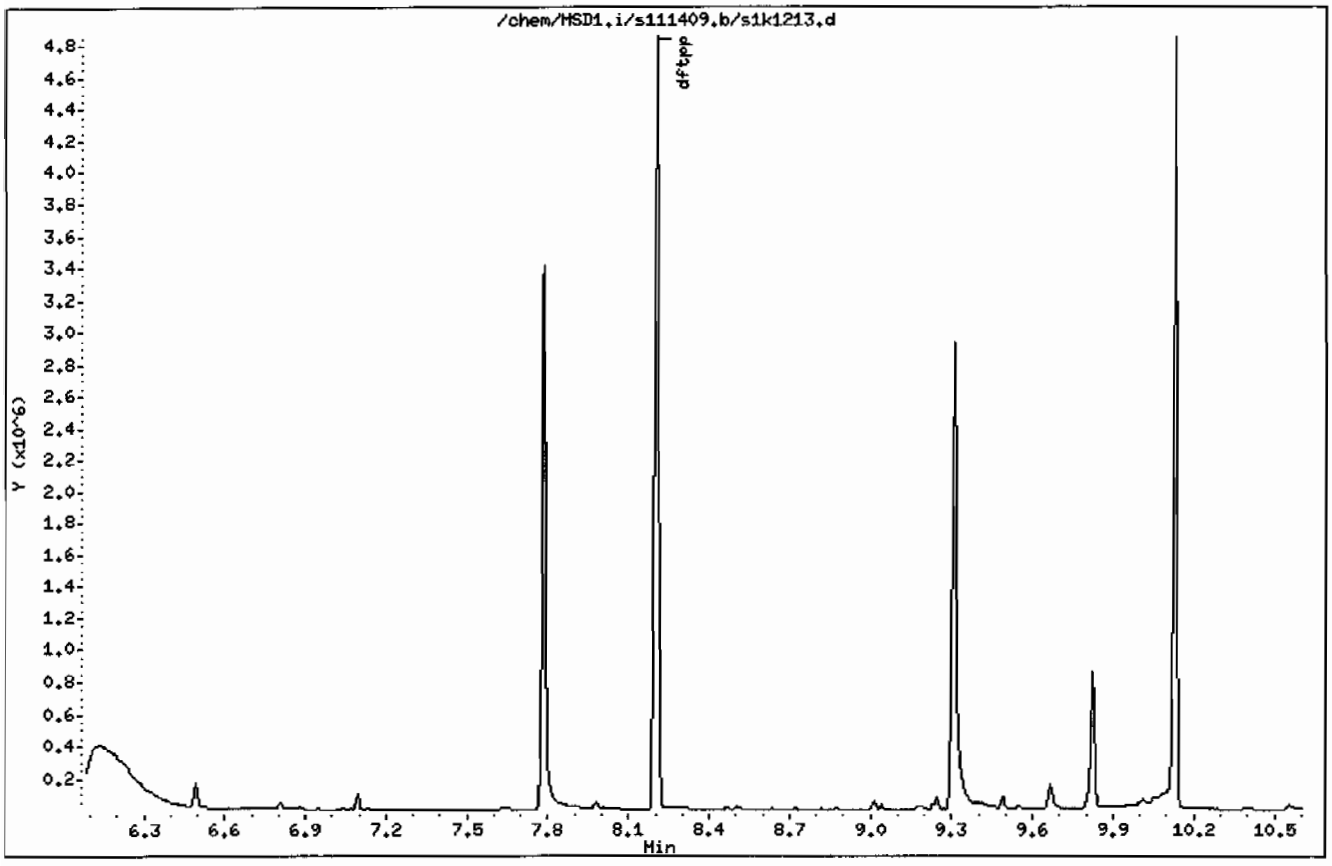

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

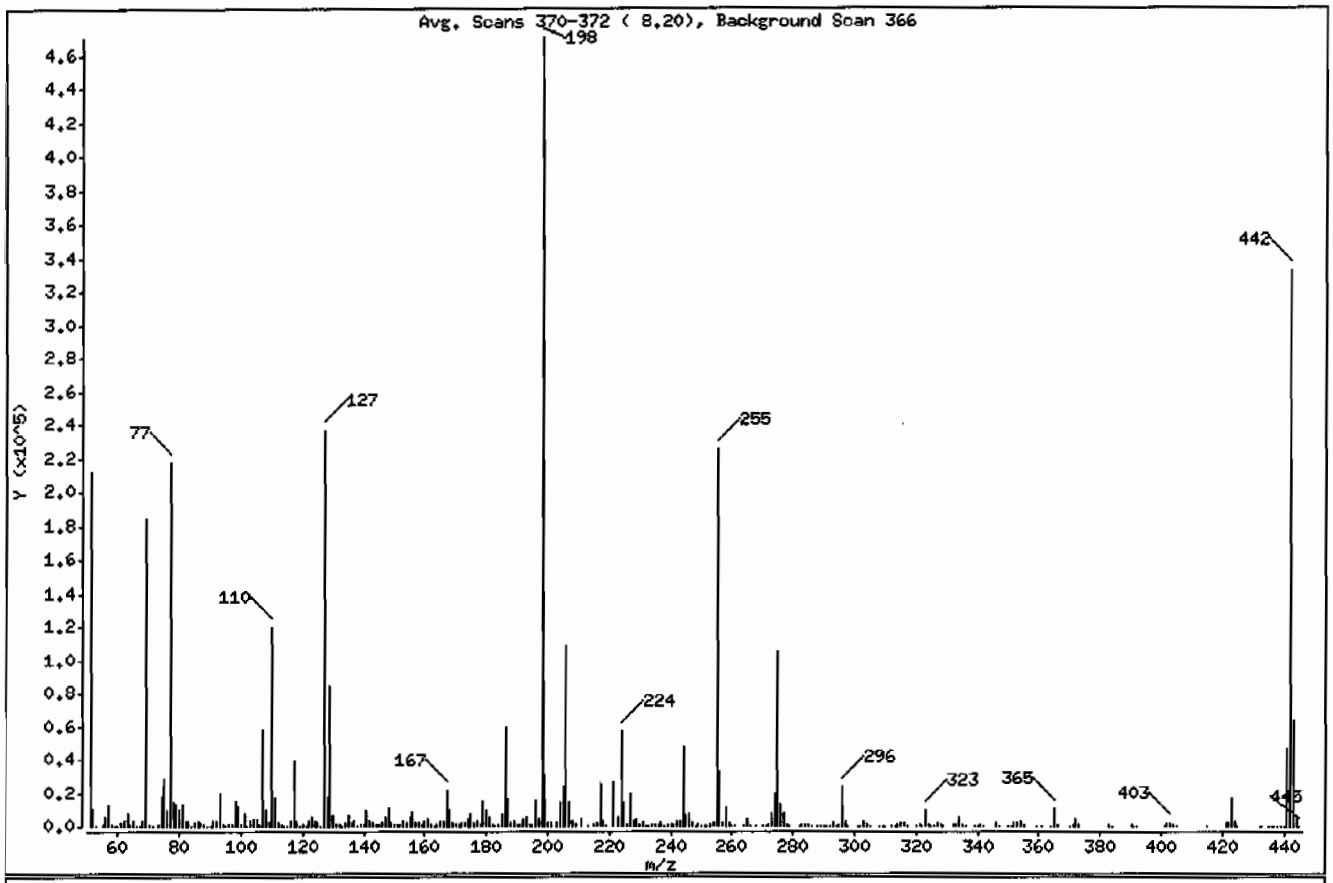

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	46.07
68	Less than 2.00% of mass 69	0.69 (1.77)
69	Mass 69 relative abundance	39.06
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	50.24
197	Less than 1.00% of mass 198	0.94
199	5.00 - 9.00% of mass 198	6.64
275	10.00 - 30.00% of mass 198	22.36
365	Greater than 1.00% of mass 198	2.27
441	Present, but less than mass 443	9.91
442	Greater than 40.00% of mass 198	70.70
443	17.00 - 23.00% of mass 442	13.63 (19.28)

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	212096	132.00	898	215.00	1069	305.00	54
52.00	10563	133.00	158	216.00	2175	308.00	369
53.00	539	134.00	2246	217.00	25096	309.00	234
55.00	827	135.00	6673	218.00	3427	310.00	330
56.00	5710	136.00	2589	219.00	310	312.00	53
57.00	13040	137.00	3388	221.00	26264	313.00	225
58.00	622	138.00	481	223.00	5732	314.00	1148
59.00	197	139.00	738	224.00	57128	315.00	2673
60.00	264	140.00	1183	225.00	14268	316.00	1636
61.00	2458	141.00	10022	226.00	1583	317.00	257
62.00	2719	142.00	3500	227.00	19912	320.00	120
63.00	7568	143.00	2527	228.00	3016	321.00	868
64.00	1100	144.00	604	229.00	4436	322.00	443
65.00	3684	145.00	642	230.00	645	323.00	9345
66.00	306	146.00	1966	231.00	2162	324.00	1574
67.00	172	147.00	5499	232.00	373	325.00	117
68.00	3245	148.00	10590	233.00	410	326.00	63
69.00	183808	149.00	2267	234.00	1277	327.00	1667
70.00	937	150.00	711	235.00	1617	328.00	859
71.00	201	151.00	1389	236.00	1067	329.00	66
73.00	1312	152.00	1009	237.00	1713	332.00	666
74.00	16976	153.00	3123	238.00	252	333.00	761
75.00	27896	154.00	2582	239.00	815	334.00	5270
76.00	9904	155.00	5732	240.00	635	335.00	1342
77.00	217344	156.00	8806	241.00	1337	336.00	127
78.00	14484	157.00	1860	242.00	2922	339.00	65
79.00	12543	158.00	1872	243.00	3255	340.00	61
80.00	9582	159.00	1459	244.00	47840	341.00	1023
81.00	13483	160.00	3146	245.00	6361	342.00	289
82.00	3494	161.00	4861	246.00	7662	346.00	1844
83.00	3404	162.00	1440	247.00	1632	347.00	399
84.00	268	163.00	441	248.00	425	350.00	54
85.00	2429	164.00	756	249.00	1557	351.00	146
86.00	3717	165.00	3644	250.00	323	352.00	2683
87.00	1777	166.00	3330	251.00	376	353.00	1903

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	858	167.00	21384	252.00	497	354.00	2848
89.00	353	168.00	9329	253.00	1026	355.00	645
90.00	52	169.00	1925	254.00	2307	359.00	128
91.00	2960	170.00	698	255.00	224896	361.00	54
92.00	3280	171.00	771	256.00	32856	364.00	139
93.00	19472	172.00	1741	257.00	2457	365.00	10703
94.00	1413	173.00	2444	258.00	11321	366.00	1552
95.00	284	174.00	4219	259.00	1877	370.00	274
96.00	1152	175.00	8099	260.00	305	371.00	720
97.00	591	176.00	2630	261.00	356	372.00	4645
98.00	14679	177.00	3711	264.00	230	373.00	1151
99.00	12313	178.00	1199	265.00	4470	383.00	1268
100.00	1108	179.00	14622	266.00	429	384.00	380
101.00	7679	180.00	10168	268.00	129	390.00	651
102.00	505	181.00	5015	270.00	325	391.00	487
103.00	2879	182.00	784	271.00	443	392.00	279
104.00	4625	183.00	540	272.00	688	401.00	276
105.00	4311	184.00	1176	273.00	7045	402.00	1862
106.00	1512	185.00	7084	274.00	19240	403.00	2656
107.00	58544	186.00	59904	275.00	105256	404.00	848
108.00	9265	187.00	16158	276.00	13094	405.00	140
109.00	1897	188.00	1716	277.00	7627	415.00	133
110.00	119952	189.00	3108	278.00	1312	421.00	2323
111.00	16904	190.00	572	279.00	308	422.00	2190
112.00	2240	191.00	1592	282.00	136	423.00	16944
113.00	758	192.00	4599	283.00	867	424.00	3191
114.00	126	193.00	5084	284.00	734	425.00	414
115.00	267	194.00	1198	285.00	1299	432.00	51
116.00	3229	195.00	880	286.00	172	433.00	63
117.00	38800	196.00	15085	288.00	53	435.00	138
118.00	2837	197.00	4415	289.00	263	436.00	193
119.00	448	198.00	470656	290.00	271	437.00	144
120.00	769	199.00	31248	291.00	161	438.00	208
121.00	319	200.00	2323	292.00	403	439.00	422
122.00	3761	201.00	2603	293.00	1958	440.00	420

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	5880	203.00	2606	294.00	491	441.00	46632
124.00	2783	204.00	13871	295.00	593	442.00	332736
125.00	2563	205.00	24136	296.00	24248	443.00	64136
126.00	365	206.00	107936	297.00	3568	444.00	5493
127.00	236480	207.00	13718	298.00	201	445.00	305
128.00	17448	208.00	3264	301.00	372		
129.00	84656	209.00	932	302.00	462		
130.00	6942	211.00	4014	303.00	2821		
131.00	1354	213.00	308	304.00	785		

Data File: /chem/MSD1.i/s111409.b/s1k1259-D.d

Page 1

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

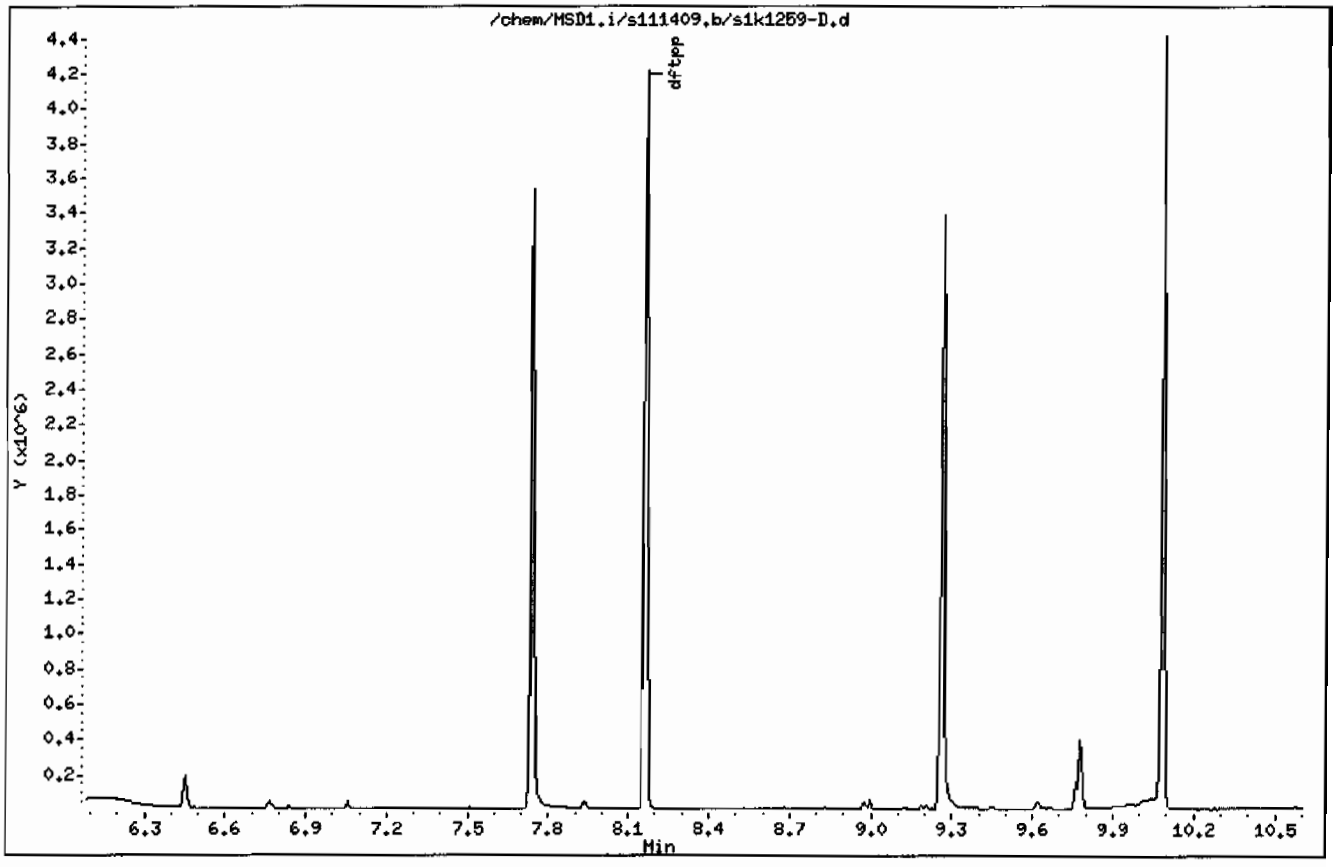

Data File: /chem/MSD1.i/s111409.b/s1k1259-D.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

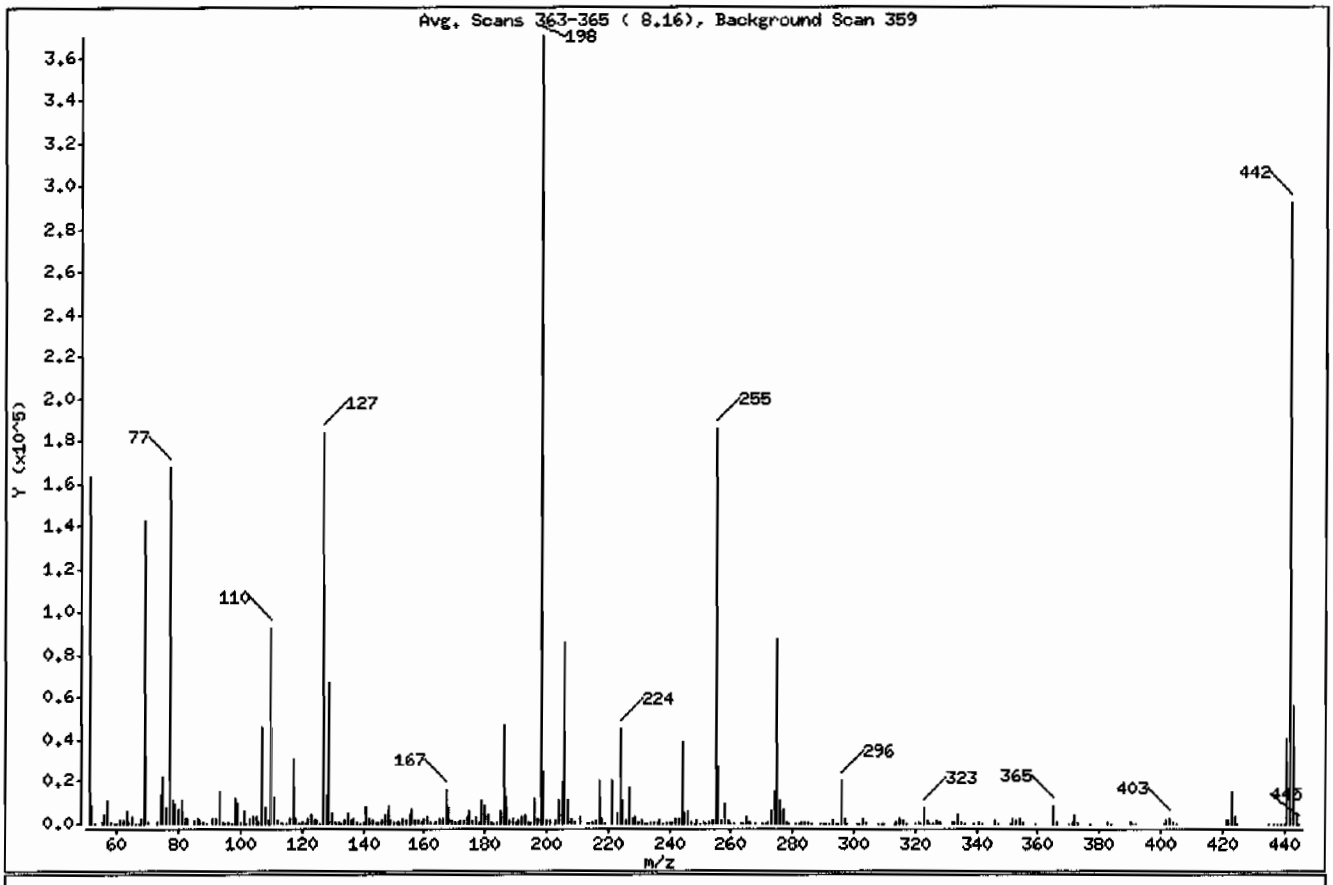

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	44.19
68	Less than 2.00% of mass 69	0.70 (1.82)
69	Mass 69 relative abundance	38.52
70	Less than 2.00% of mass 69	0.22 (0.58)
127	10.00 - 80.00% of mass 198	49.61
197	Less than 2.00% of mass 198	0.73
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 60.00% of mass 198	23.76
365	Greater than 1.00% of mass 198	2.39
441	Less than 24.00% of mass 442	10.94 (13.86)
442	Greater than 50.00% of mass 198	78.91
443	15.00 - 24.00% of mass 442	15.11 (19.15)

Data File: /chem/MSD1.i/s111409.b/s1k1259-D.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259-D.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	163520	132.00	696	209.00	894	295.00	409
52.00	8218	133.00	165	211.00	3176	296.00	20504
53.00	278	134.00	1736	213.00	157	297.00	2961
55.00	768	135.00	5284	214.00	60	298.00	242
56.00	4517	136.00	1990	215.00	896	301.00	228
57.00	10646	137.00	2882	216.00	1633	302.00	377
58.00	485	138.00	608	217.00	20280	303.00	2440
59.00	173	139.00	322	218.00	2791	304.00	779
60.00	130	140.00	728	219.00	287	308.00	333
61.00	1880	141.00	8017	221.00	20640	309.00	180
62.00	1926	142.00	2864	223.00	4752	310.00	288
63.00	5930	143.00	1765	224.00	45496	313.00	172
64.00	771	144.00	446	225.00	11459	314.00	1000
65.00	3009	145.00	462	226.00	1320	315.00	2189
66.00	190	146.00	1638	227.00	16640	316.00	1304
67.00	147	147.00	4131	228.00	2433	317.00	255
68.00	2590	148.00	8419	229.00	3696	320.00	58
69.00	142592	149.00	1752	230.00	541	321.00	701
70.00	823	150.00	512	231.00	1631	322.00	395
73.00	1236	151.00	1272	232.00	323	323.00	7827
74.00	13875	152.00	886	233.00	236	324.00	1465
75.00	21824	153.00	2474	234.00	1059	325.00	55
76.00	7905	154.00	2034	235.00	1215	326.00	117
77.00	167296	155.00	4599	236.00	846	327.00	1319
78.00	11034	156.00	6876	237.00	1279	328.00	683
79.00	9492	157.00	1450	238.00	168	332.00	545
80.00	7131	158.00	1509	239.00	670	333.00	652
81.00	10804	159.00	1113	240.00	518	334.00	4627
82.00	2610	160.00	2655	241.00	1019	335.00	1148
83.00	2719	161.00	3658	242.00	2369	336.00	50
85.00	1896	162.00	1109	243.00	2744	339.00	57
86.00	2616	163.00	339	244.00	39256	341.00	855
87.00	1519	164.00	493	245.00	4982	342.00	192
88.00	684	165.00	2904	246.00	6349	346.00	1554
89.00	219	166.00	2427	247.00	1255	347.00	356

Data File: /chem/HSD1.i/s111409.b/s1k1259-D.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: HSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259-D.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	2379	167.00	16175	248.00	341	351.00	56
92.00	2447	168.00	7387	249.00	1305	352.00	2339
93.00	14969	169.00	1311	250.00	210	353.00	1624
94.00	1153	170.00	539	251.00	450	354.00	2500
95.00	287	171.00	706	252.00	278	355.00	434
96.00	810	172.00	1473	253.00	769	359.00	83
97.00	388	173.00	1748	254.00	1972	365.00	8863
98.00	11810	174.00	3414	255.00	185216	366.00	1195
99.00	9686	175.00	6350	256.00	27176	370.00	215
100.00	914	176.00	2063	257.00	2039	371.00	581
101.00	5933	177.00	3047	258.00	9022	372.00	4002
102.00	375	178.00	995	259.00	1444	373.00	996
103.00	2163	179.00	11274	260.00	214	377.00	51
104.00	3736	180.00	8159	261.00	279	383.00	974
105.00	3394	181.00	4009	263.00	55	384.00	323
106.00	1190	182.00	670	264.00	157	390.00	592
107.00	46232	183.00	413	265.00	3712	391.00	375
108.00	7538	184.00	909	266.00	481	392.00	323
109.00	1503	185.00	5852	268.00	53	401.00	231
110.00	92872	186.00	47008	270.00	282	402.00	1478
111.00	12963	187.00	12615	271.00	380	403.00	2390
112.00	1503	188.00	1316	272.00	540	404.00	821
113.00	406	189.00	2602	273.00	5676	405.00	134
114.00	121	190.00	427	274.00	15599	421.00	2054
115.00	133	191.00	1281	275.00	87936	422.00	1867
116.00	2637	192.00	3712	276.00	11240	423.00	15373
117.00	30336	193.00	4225	277.00	6439	424.00	3047
118.00	2397	194.00	901	278.00	950	425.00	291
119.00	332	195.00	603	279.00	182	435.00	71
120.00	620	196.00	12028	281.00	60	437.00	71
121.00	175	197.00	2717	282.00	68	438.00	134
122.00	2801	198.00	370176	283.00	713	439.00	238
123.00	4622	199.00	24728	284.00	493	440.00	191
124.00	2083	200.00	1826	285.00	1250	441.00	40480
125.00	1949	201.00	2072	286.00	254	442.00	292096

Data File: /chem/MSD1.i/s111409.b/s1k1259-D.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259-D.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	136	203.00	2082	289.00	243	443.00	55944
127.00	183616	204.00	10956	290.00	235	444.00	5034
128.00	13544	205.00	19552	291.00	131	445.00	311
129.00	66872	206.00	85904	292.00	339		
130.00	5516	207.00	10725	293.00	1482		
131.00	1048	208.00	2576	294.00	389		

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Page 1

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

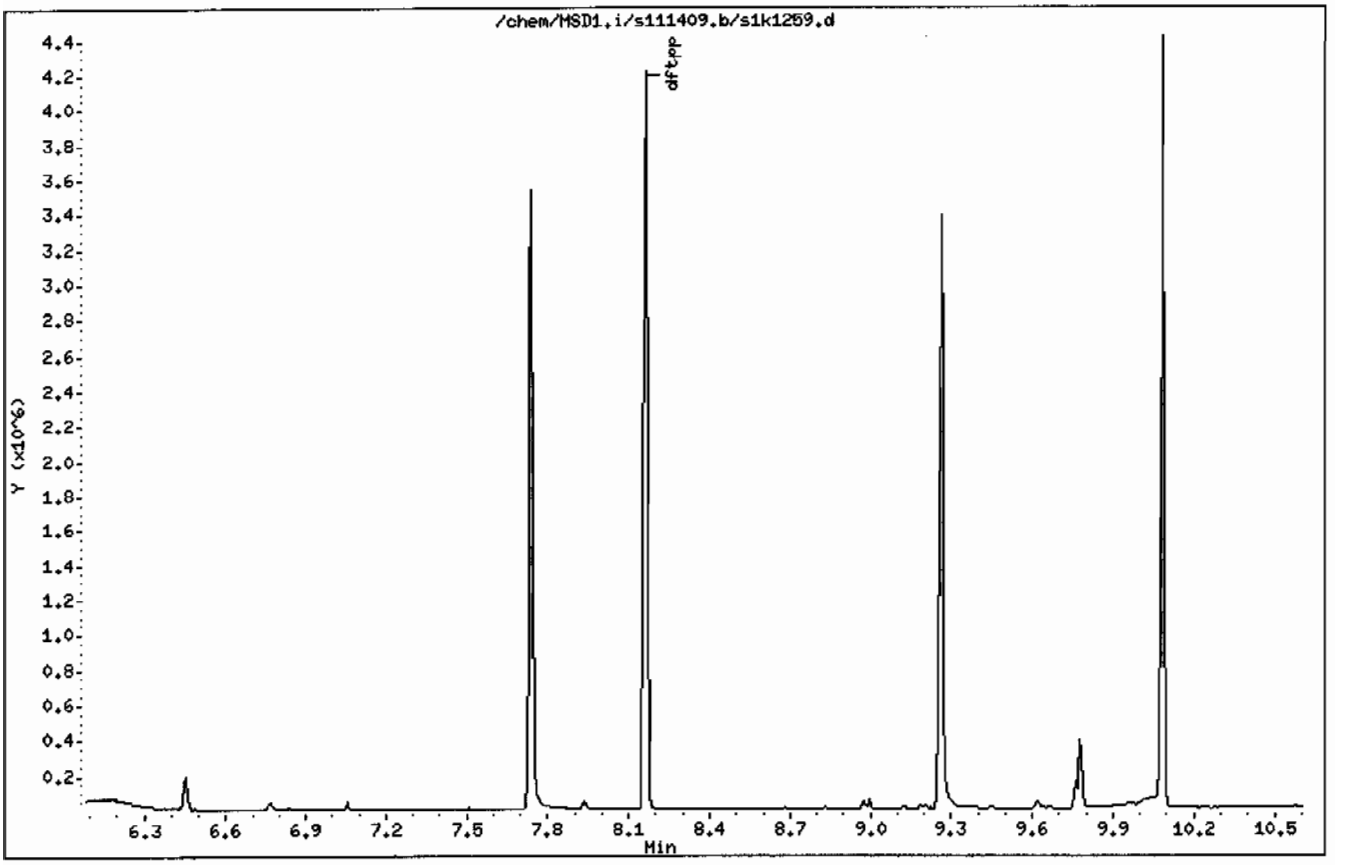

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

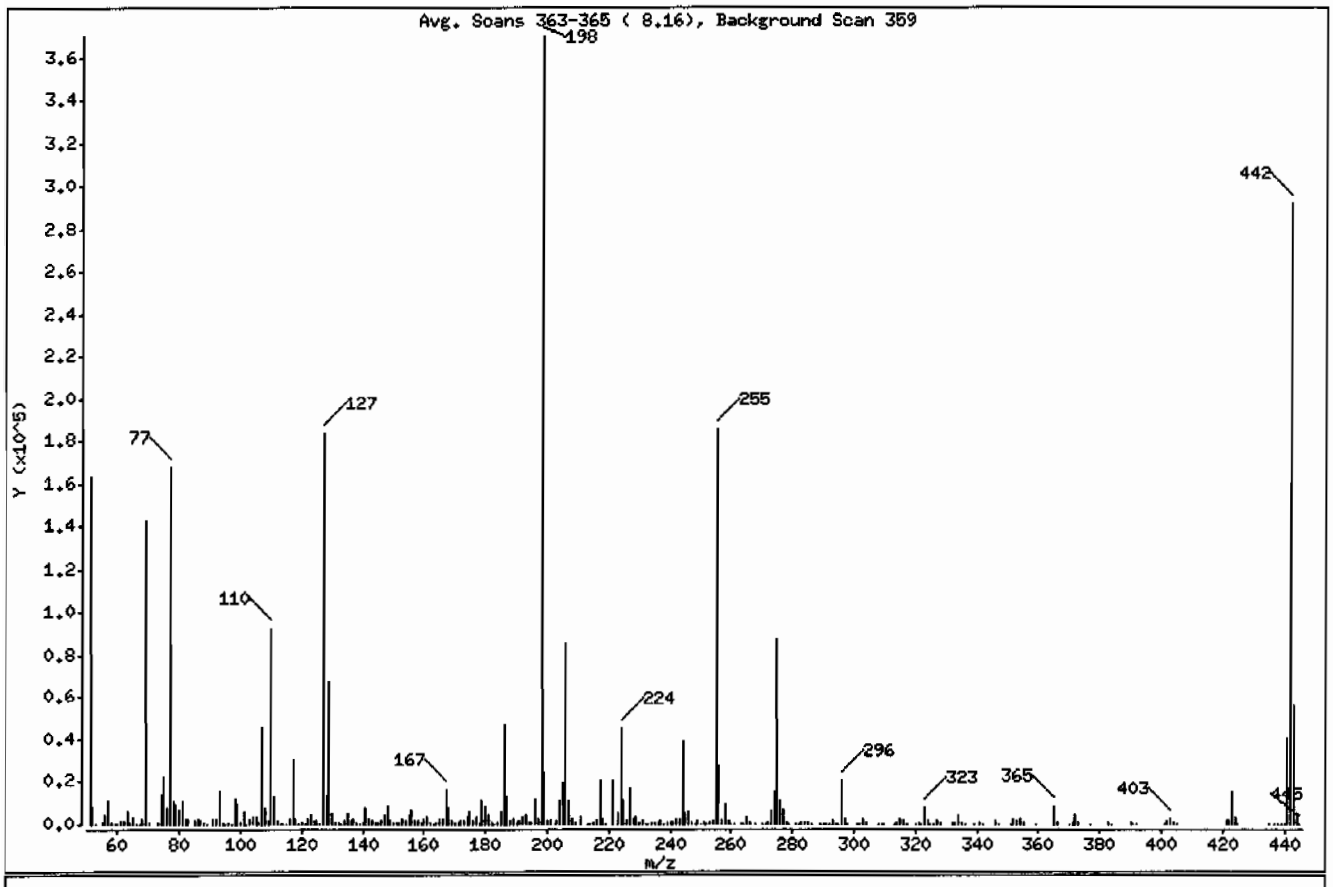

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.19
68	Less than 2.00% of mass 69	0.70 (1.82)
69	Mass 69 relative abundance	38.52
70	Less than 2.00% of mass 69	0.22 (0.58)
127	40.00 - 60.00% of mass 198	49.61
197	Less than 1.00% of mass 198	0.73
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	23.76
365	Greater than 1.00% of mass 198	2.39
441	Present, but less than mass 443	10.94
442	Greater than 40.00% of mass 198	78.91
443	17.00 - 23.00% of mass 442	15.11 (19.15)

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVHF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	163520	132.00	696	209.00	894	295.00	409
52.00	8218	133.00	165	211.00	3176	296.00	20504
53.00	278	134.00	1736	213.00	157	297.00	2961
55.00	768	135.00	5284	214.00	60	298.00	242
56.00	4517	136.00	1990	215.00	896	301.00	228
57.00	10646	137.00	2882	216.00	1633	302.00	377
58.00	485	138.00	608	217.00	20280	303.00	2440
59.00	173	139.00	322	218.00	2791	304.00	779
60.00	130	140.00	728	219.00	287	308.00	333
61.00	1880	141.00	8017	221.00	20640	309.00	180
62.00	1926	142.00	2864	223.00	4752	310.00	288
63.00	5930	143.00	1765	224.00	45496	313.00	172
64.00	771	144.00	446	225.00	11459	314.00	1000
65.00	3009	145.00	462	226.00	1320	315.00	2189
66.00	190	146.00	1638	227.00	16640	316.00	1304
67.00	147	147.00	4131	228.00	2433	317.00	255
68.00	2590	148.00	8419	229.00	3596	320.00	58
69.00	142592	149.00	1752	230.00	541	321.00	701
70.00	823	150.00	512	231.00	1631	322.00	395
73.00	1236	151.00	1272	232.00	323	323.00	7827
74.00	13875	152.00	886	233.00	236	324.00	1465
75.00	21824	153.00	2474	234.00	1059	325.00	55
76.00	7905	154.00	2034	235.00	1215	326.00	117
77.00	167296	155.00	4599	236.00	846	327.00	1319
78.00	11034	156.00	6876	237.00	1279	328.00	683
79.00	9492	157.00	1450	238.00	168	332.00	545
80.00	7131	158.00	1509	239.00	670	333.00	652
81.00	10804	159.00	1113	240.00	518	334.00	4627
82.00	2610	160.00	2655	241.00	1019	335.00	1148
83.00	2719	161.00	3658	242.00	2369	336.00	50
85.00	1896	162.00	1109	243.00	2744	339.00	57
86.00	2616	163.00	339	244.00	39256	341.00	855
87.00	1519	164.00	493	245.00	4982	342.00	192
88.00	684	165.00	2904	246.00	6349	346.00	1554
89.00	219	166.00	2427	247.00	1255	347.00	356

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	2379	167.00	16175	248.00	341	351.00	56
92.00	2447	168.00	7387	249.00	1305	352.00	2339
93.00	14969	169.00	1311	250.00	210	353.00	1624
94.00	1153	170.00	539	251.00	450	354.00	2500
95.00	287	171.00	706	252.00	278	355.00	434
96.00	810	172.00	1473	253.00	769	359.00	83
97.00	388	173.00	1748	254.00	1972	365.00	8863
98.00	11810	174.00	3414	255.00	185216	366.00	1195
99.00	9686	175.00	6350	256.00	27176	370.00	215
100.00	914	176.00	2063	257.00	2039	371.00	581
101.00	5933	177.00	3047	258.00	9022	372.00	4002
102.00	375	178.00	995	259.00	1444	373.00	996
103.00	2163	179.00	11274	260.00	214	377.00	51
104.00	3736	180.00	8159	261.00	279	383.00	974
105.00	3394	181.00	4009	263.00	55	384.00	323
106.00	1190	182.00	670	264.00	157	390.00	592
107.00	46232	183.00	413	265.00	3712	391.00	375
108.00	7538	184.00	909	266.00	481	392.00	323
109.00	1503	185.00	5852	268.00	53	401.00	231
110.00	92872	186.00	47008	270.00	282	402.00	1478
111.00	12963	187.00	12615	271.00	380	403.00	2390
112.00	1503	188.00	1316	272.00	540	404.00	821
113.00	406	189.00	2602	273.00	5676	405.00	134
114.00	121	190.00	427	274.00	15599	421.00	2054
115.00	133	191.00	1281	275.00	87936	422.00	1867
116.00	2637	192.00	3712	276.00	11240	423.00	15373
117.00	30336	193.00	4225	277.00	6439	424.00	3047
118.00	2397	194.00	901	278.00	950	425.00	291
119.00	332	195.00	603	279.00	182	435.00	71
120.00	620	196.00	12028	281.00	60	437.00	71
121.00	175	197.00	2717	282.00	68	438.00	134
122.00	2801	198.00	370176	283.00	713	439.00	238
123.00	4622	199.00	24728	284.00	493	440.00	191
124.00	2083	200.00	1826	285.00	1250	441.00	40480
125.00	1949	201.00	2072	286.00	254	442.00	292096

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	135	203.00	2082	289.00	243	443.00	55944
127.00	183616	204.00	10956	290.00	235	444.00	5034
128.00	13544	205.00	19552	291.00	131	445.00	311
129.00	66872	206.00	85904	292.00	339		
130.00	5516	207.00	10725	293.00	1482		
131.00	1048	208.00	2576	294.00	389		

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Page 1

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

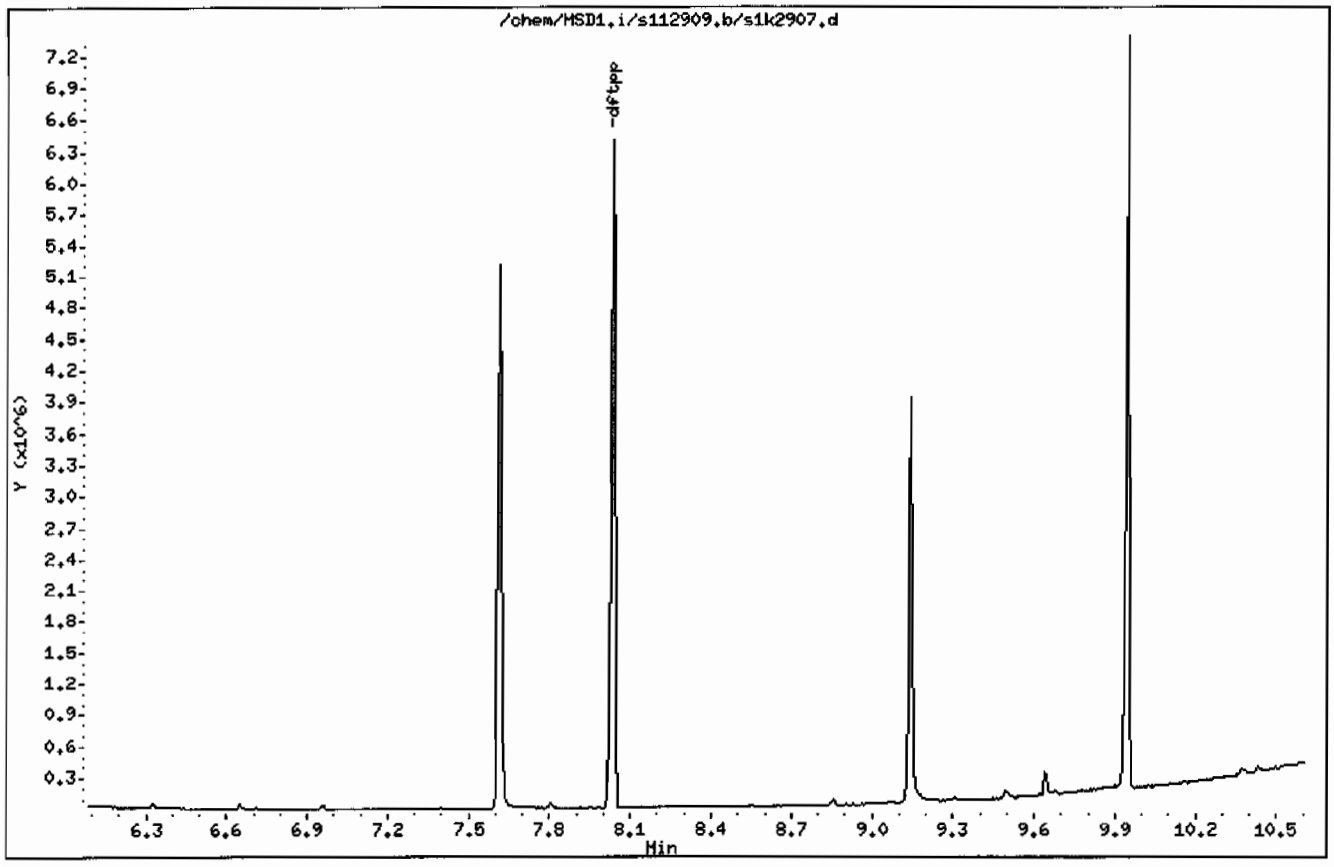

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

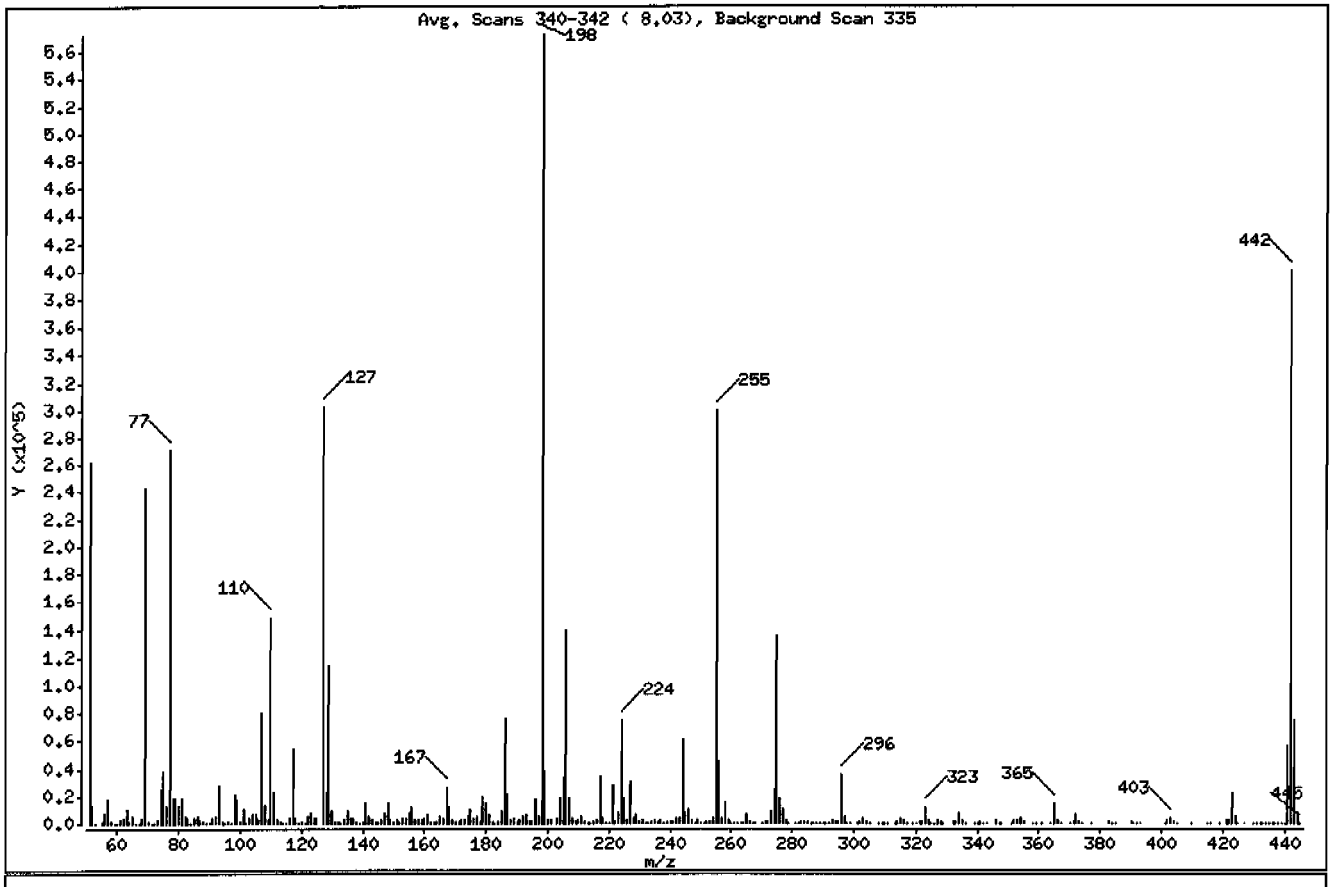

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.73
68	Less than 2.00% of mass 69	0.80 (1.89)
69	Mass 69 relative abundance	42.62
70	Less than 2.00% of mass 69	0.22 (0.51)
127	40.00 - 60.00% of mass 198	52.85
197	Less than 1.00% of mass 198	0.97
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.78
365	Greater than 1.00% of mass 198	2.52
441	Present, but less than mass 443	9.80
442	Greater than 40.00% of mass 198	69.82
443	17.00 - 23.00% of mass 442	13.14 (18.81)

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d

Spectrum: Avg, Scans 340-342 (8.03), Background Scan 335

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	261568	138.00	1011	224.00	74344	315.00	3766
52.00	13053	139.00	525	225.00	18856	316.00	2257
53.00	546	140.00	1213	226.00	2157	317.00	486
55.00	1276	141.00	13910	227.00	29936	319.00	124
56.00	7361	142.00	4991	228.00	4406	320.00	122
57.00	17608	143.00	3037	229.00	6070	321.00	1364
58.00	859	144.00	875	230.00	793	322.00	724
59.00	186	145.00	933	231.00	2539	323.00	12258
60.00	263	146.00	2317	232.00	343	324.00	2267
61.00	3281	147.00	7337	233.00	584	325.00	276
62.00	3450	148.00	14197	234.00	1971	326.00	277
63.00	9977	149.00	3063	235.00	2107	327.00	2299
64.00	1410	150.00	959	236.00	1359	328.00	1374
65.00	4855	151.00	1996	237.00	2622	329.00	176
66.00	354	152.00	1456	238.00	390	332.00	714
67.00	343	153.00	4354	239.00	1056	333.00	1069
68.00	4596	154.00	3352	240.00	998	334.00	7531
69.00	243776	155.00	7645	241.00	1606	335.00	2168
70.00	1241	156.00	11790	242.00	3920	336.00	184
71.00	129	157.00	2594	243.00	4517	339.00	161
72.00	199	158.00	2349	244.00	59896	340.00	194
73.00	2063	159.00	2070	245.00	7845	341.00	1320
74.00	24384	160.00	4131	246.00	10789	342.00	355
75.00	38152	161.00	6758	247.00	2026	343.00	153
76.00	12974	162.00	1653	248.00	636	346.00	2491
77.00	271360	163.00	701	249.00	2240	347.00	542
78.00	18368	164.00	926	250.00	436	348.00	50
79.00	17928	165.00	5065	251.00	641	351.00	193
80.00	13399	166.00	4101	252.00	720	352.00	3193
81.00	18440	167.00	25808	253.00	1512	353.00	2434
82.00	4915	168.00	12341	254.00	3754	354.00	3882
83.00	4046	169.00	2508	255.00	299840	355.00	737
84.00	487	170.00	906	256.00	44336	358.00	63
85.00	3384	171.00	1170	257.00	3929	359.00	186
86.00	5076	172.00	2281	258.00	15933	361.00	56

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	2450	173.00	2934	259.00	2669	364.00	187
88.00	896	174.00	5759	260.00	449	365.00	14431
89.00	560	175.00	10393	261.00	575	366.00	2213
90.00	52	176.00	3562	262.00	64	367.00	258
91.00	4069	177.00	4928	263.00	78	370.00	280
92.00	4877	178.00	1696	264.00	532	371.00	909
93.00	27096	179.00	19400	265.00	6513	372.00	6291
94.00	1944	180.00	14536	266.00	1163	373.00	1495
95.00	588	181.00	6593	267.00	245	374.00	151
96.00	1550	182.00	1216	268.00	277	377.00	175
97.00	606	183.00	567	270.00	481	383.00	1569
98.00	20592	184.00	1573	271.00	711	384.00	388
99.00	17440	185.00	9262	272.00	1001	385.00	151
100.00	1594	186.00	76128	273.00	9247	390.00	761
101.00	10170	187.00	21496	274.00	24496	391.00	516
102.00	520	188.00	2625	275.00	136000	392.00	400
103.00	3750	189.00	4538	276.00	18096	393.00	62
104.00	6276	190.00	825	277.00	10425	401.00	375
105.00	6355	191.00	2089	278.00	2137	402.00	2479
106.00	2176	192.00	5816	279.00	353	403.00	3482
107.00	79800	193.00	6494	281.00	500	404.00	1163
108.00	12799	194.00	1326	282.00	275	405.00	207
109.00	2573	195.00	1041	283.00	1191	410.00	170
110.00	148544	196.00	17744	284.00	981	415.00	200
111.00	22320	197.00	5562	285.00	1943	416.00	51
112.00	2828	198.00	571968	286.00	288	419.00	51
113.00	1025	199.00	37560	287.00	61	421.00	3008
114.00	180	200.00	2980	288.00	103	422.00	2724
115.00	250	201.00	2509	289.00	376	423.00	22240
116.00	4436	203.00	3664	290.00	418	424.00	5666
117.00	54352	204.00	18912	291.00	326	425.00	618
118.00	4423	205.00	32640	292.00	471	427.00	128
119.00	380	206.00	138880	293.00	2634	430.00	90
120.00	1253	207.00	17984	294.00	732	431.00	144
121.00	446	208.00	4448	295.00	933	432.00	114

Date : 29-NOV-2009 15:00

Client ID: DFTPP Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	5609	209.00	1626	296.00	35128	433.00	194
123.00	7700	210.00	1988	297.00	4998	434.00	130
124.00	3542	211.00	4936	298.00	403	435.00	213
125.00	3500	212.00	675	299.00	96	436.00	289
127.00	302272	213.00	424	301.00	479	437.00	282
128.00	22824	214.00	214	302.00	742	438.00	198
129.00	114216	215.00	1361	303.00	4244	439.00	300
130.00	9428	216.00	2918	304.00	1082	440.00	326
131.00	1699	217.00	34040	305.00	158	441.00	56056
132.00	1008	218.00	4578	308.00	544	442.00	399360
133.00	415	219.00	558	309.00	411	443.00	75136
134.00	3137	220.00	130	310.00	539	444.00	6738
135.00	8896	221.00	27264	311.00	71	445.00	344
136.00	3689	222.00	1274	313.00	282		
137.00	4693	223.00	8318	314.00	1642		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980154**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 16:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2912-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980154**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 16:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2912-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	316	ug/kg		JA

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Data file : /chem/MSD1.i/s112909.b/s1k2912-4.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	582567	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2290441	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1227579	40.0000	
* 67 Phenanthrene-d10	188	6.916	6.922	(1.000)	2026415	40.0000	
* 91 Chrysene-d12	240	8.551	8.557	(1.000)	1690866	40.0000	
* 98 Perylene-d12	264	9.939	9.951	(1.000)	1420003	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1213962	79.7797	2660
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1404929	75.9663	2530
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	640323	42.4217	1410
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1337726	45.5002	1520
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	315669	92.0898	3070
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1290910	48.6378	1620

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Data file : /chem/MSD1.i/s112909.b/s1k2912-4.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3529801	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.881	836229	9.47621609	316	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2912-4.d
Date : 29-NOV-2009 16:50
Client ID: SBLK01
Sample Info: |120198015419261261|1|SVHF|1|SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

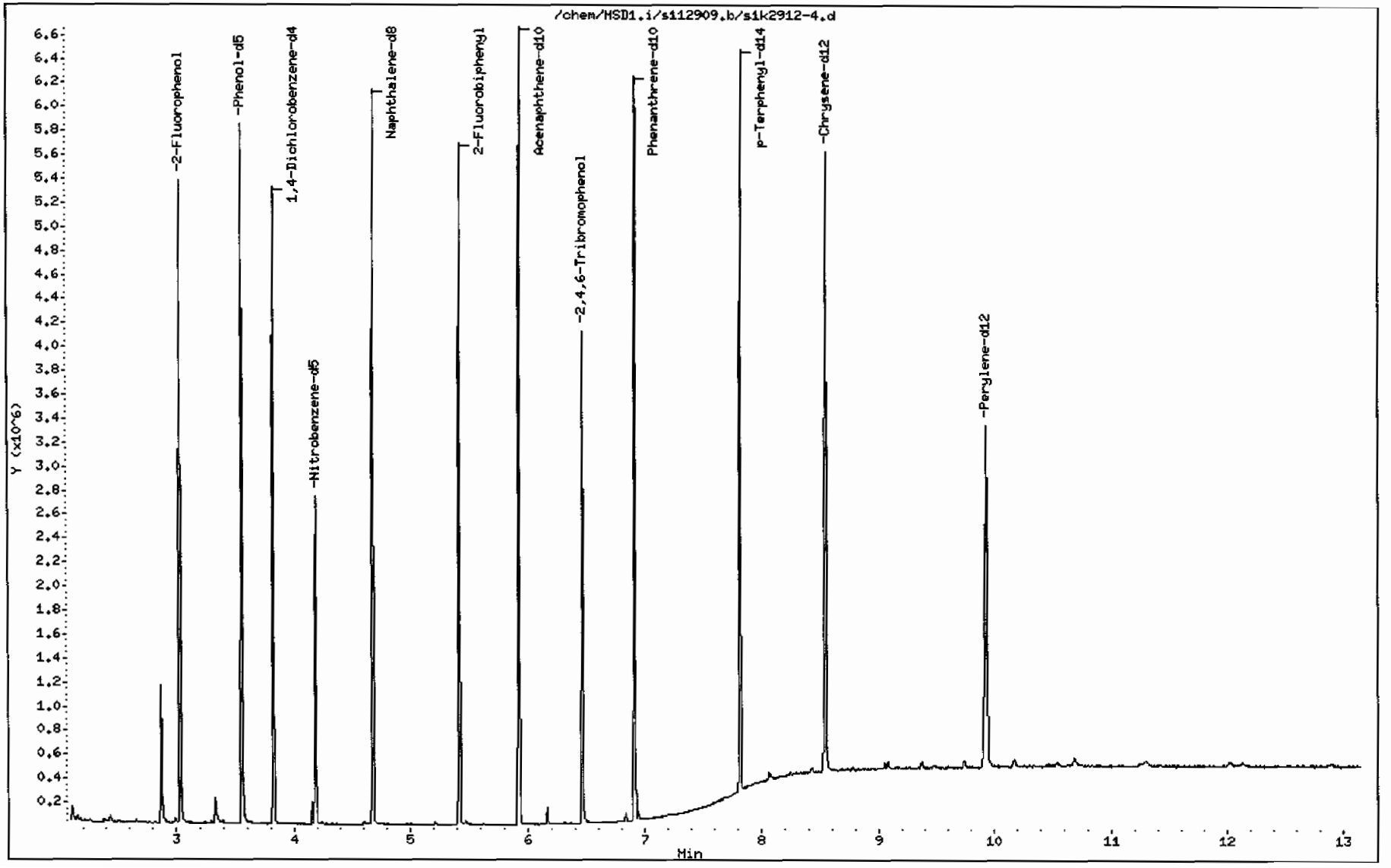

Data File: /chem/MSD1.i/s112909.b/s1k2912-4.d

Date : 29-NOV-2009 16:50

Client ID: SBLK01 Instrument: MSD1.i

Sample Info: |120198015419261261|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1,3,5-Pentanetriol, 3-methyl-	7564-64-9	NIST05.L	14621	39	C6H14O3	134

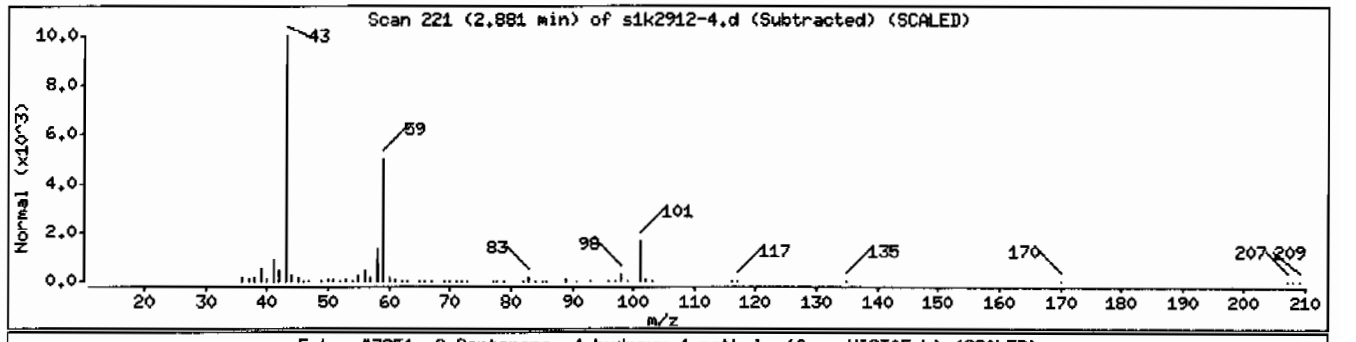

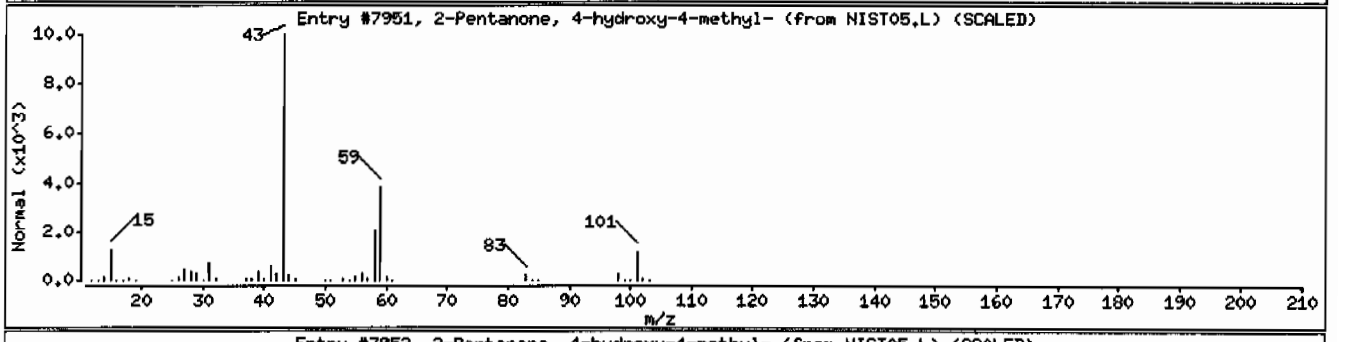

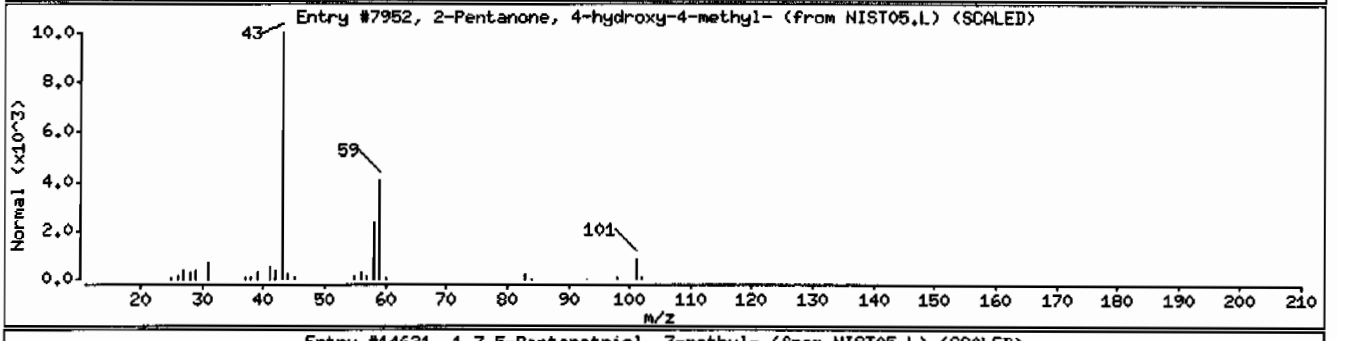

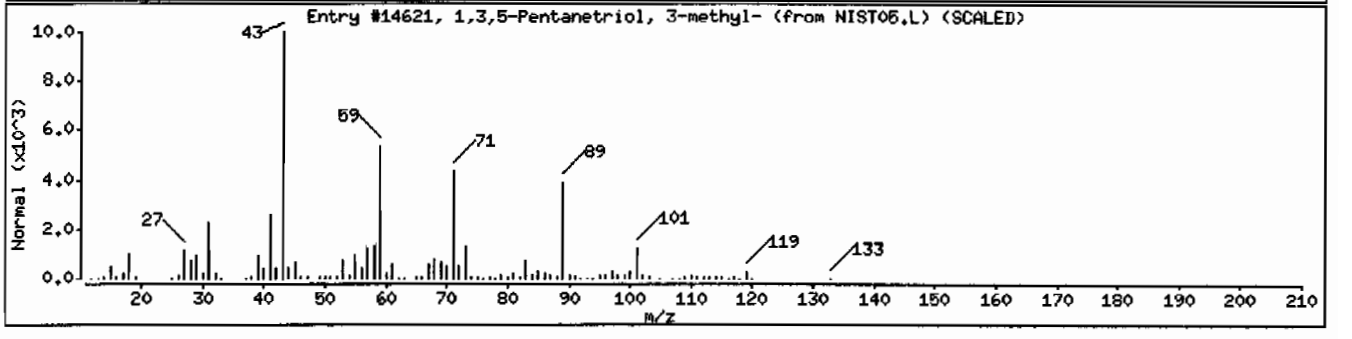

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603			Matrix:	SOIL
Lab Sample ID:	1201980157				
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926121	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:14	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1k2913-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1230	ug/kg	66.7	333
108-95-2	Phenol		1220	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1210	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1180	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1130	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1230	ug/kg	66.7	333
83-32-9	Acenaphthene		1280	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1230	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1170	ug/kg	110	333
87-86-5	Pentachlorophenol		1390	ug/kg	83.3	333
129-00-0	Pyrene		1370	ug/kg	10.0	33.3
110-86-1	Pyridine		927	ug/kg	66.7	333
62-53-3	Aniline		1020	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1180	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1130	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1220	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1200	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1160	ug/kg	66.7	333
95-48-7	o-Cresol		1360	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1350	ug/kg	100	333
67-72-1	Hexachloroethane		1140	ug/kg	66.7	333
98-95-3	Nitrobenzene		1280	ug/kg	66.7	333
78-59-1	Isophorone		1330	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1190	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1210	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1140	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1160	ug/kg	66.7	333
65-85-0	Benzoic acid		2170	ug/kg	167	667
91-20-3	Naphthalene		1190	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1020	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1230	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1250	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		2090	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1340	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1430	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1210	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1130	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		986	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-603			Matrix:	SOIL
Lab Sample ID:	1201980157				
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926121	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:14	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1k2913-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1340	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1250	ug/kg	33.3	333
208-96-8	Acenaphthylene		1280	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1350	ug/kg	127	667
132-64-9	Dibenzofuran		1470	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1300	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1390	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1200	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1110	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1240	ug/kg	66.7	333
122-66-7	Azobenzene		1290	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1520	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1330	ug/kg	66.7	333
85-01-8	Phenanthrene		1290	ug/kg	10.0	33.3
120-12-7	Anthracene		1280	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1510	ug/kg	66.7	333
206-44-0	Fluoranthene		1360	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1510	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1220	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1190	ug/kg	100	333
218-01-9	Chrysene		1230	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1450	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1490	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1240	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1380	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1290	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1180	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1160	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1220	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1220	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2913-4.d
Lab Smp Id: 1201980157 Client Smp ID: SBLK01LCS
Inj Date : 29-NOV-2009 17:14
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980157|926126|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-603.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	617030	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2615814	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1327800	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2222627	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1876046	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1522701	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1271871	78.9169	2630
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1461421	74.6073	2490
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	684430	39.7037	1320
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1416944	44.5569	1480
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	371535	100.207	3340
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1434844	48.7247	1620

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	752654	36.4664	1220
8 2-Chlorophenol	128	3.704	3.704	(0.968)	639061	36.4310	1210
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	713236	35.3495	1180
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	399043	33.9316	1130(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	577162	36.4542	1220
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	516096	36.8685	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1174835	38.3615	1280
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	440376	36.8581	1230
52 4-Nitrophenol	139	6.010	6.004	(1.013)	220683	35.2282	1170
65 Pentachlorophenol	266	6.798	6.792	(0.982)	235029	41.8099	1390
79 Pyrene	202	7.781	7.787	(0.909)	2047657	41.0742	1370
2 Pyridine	79	2.428	2.410	(0.634)	408899	27.8205	927
4 Aniline	66	3.622	3.628	(0.946)	263031	30.5509	1020
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510398	35.5468	1180
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	696923	33.8596	1130
12 Benzyl alcohol	108	3.910	3.910	(1.022)	390042	36.5704	1220
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	672531	36.0915	1200
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1191956	34.8523	1160
15 o-Cresol	107	3.963	3.963	(1.035)	534295	40.9176	1360
18 m,p-Cresols	107	4.063	4.063	(1.061)	719000	40.4679	1350
19 Hexachloroethane	117	4.169	4.169	(1.089)	248216	34.1819	1140
21 Nitrobenzene	77	4.210	4.210	(0.897)	691613	38.5060	1280
22 Isophorone	82	4.363	4.369	(0.930)	1252978	39.8762	1330
23 2-Nitrophenol	139	4.422	4.422	(0.942)	340801	35.7439	1190
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	554549	36.3226	1210
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	691571	34.1877	1140
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	497973	34.7566	1160
27 Benzoic acid	105	4.516	4.499	(0.962)	683711	64.9910	2170
30 Naphthalene	128	4.704	4.710	(1.002)	1951439	35.7452	1190(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	763147	30.6108	1020
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	299492	36.8387	1230
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349146	37.5924	1250
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	254671	62.8185	2090
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	356012	40.3106	1340
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	403669	42.9853	1430
40 2-Chloronaphthalene	162	5.540	5.540	(0.934)	1190080	36.3056	1210
42 o-Nitroaniline	65	5.604	5.604	(0.944)	343985	33.8440	1130
41 m-Nitroaniline	138	5.898	5.898	(0.994)	265638	29.5780	986
43 Dimethylphthalate	163	5.710	5.716	(0.962)	1456615	40.2594	1340
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	338062	37.5023	1250
45 Acenaphthylene	152	5.840	5.840	(0.984)	1959446	38.3071	1280
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	144123	40.5068	1350(Q)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1952785	44.0915	1470
51 Diethylphthalate	149	6.192	6.198	(1.044)	1428178	42.3398	1410
53 Fluorene	166	6.310	6.310	(1.063)	1390645	38.9420	1300
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	628903	41.7119	1390
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	202018	35.9267	1200

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	292736	33.3313	1110
133 Diphenylamine	169	6.369	6.369	(0.920)	1105073	37.2750	1240
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1396329	38.6021	1290
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	348687	45.6613	1520
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	375137	40.0219	1330
68 Phenanthrene	178	6.939	6.940	(1.003)	1960363	38.8105	1290
69 Anthracene	178	6.969	6.969	(1.007)	1974619	38.4401	1280
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2486060	45.3739	1510
76 Fluoranthene	202	7.645	7.645	(1.105)	1989736	40.8094	1360
85 Butylbenzylphthalate	149	8.086	8.092	(0.945)	1030539	45.4238	1510
89 Benzo(a)anthracene	228	8.539	8.545	(0.998)	1649744	36.6730	1220
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	461604	35.7370	1190
92 Chrysene	228	8.575	8.581	(1.002)	1554454	36.9708	1230
93 bis(2-Ethylhexyl)phthalate	149	8.428	8.434	(0.985)	1434232	43.5143	1450
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	2221573	44.6001	1490
95 Benzo(b)fluoranthene	252	9.498	9.510	(0.955)	1426222	37.1329	1240
96 Benzo(k)fluoranthene	252	9.528	9.533	(0.958)	1583032	41.4615	1380
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	1285249	38.6386	1290
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	1223235	35.4050	1180
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	1008016	34.8891	1160
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	1046013	36.5568	1220
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	323215	36.9282	1230

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2913-4.d
Date : 29-NOV-2009 17:14
Client ID: SBLK01LCS
Sample Info: 1120190157192612611|SVHF11|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: ANY
Column diameter: 0.20

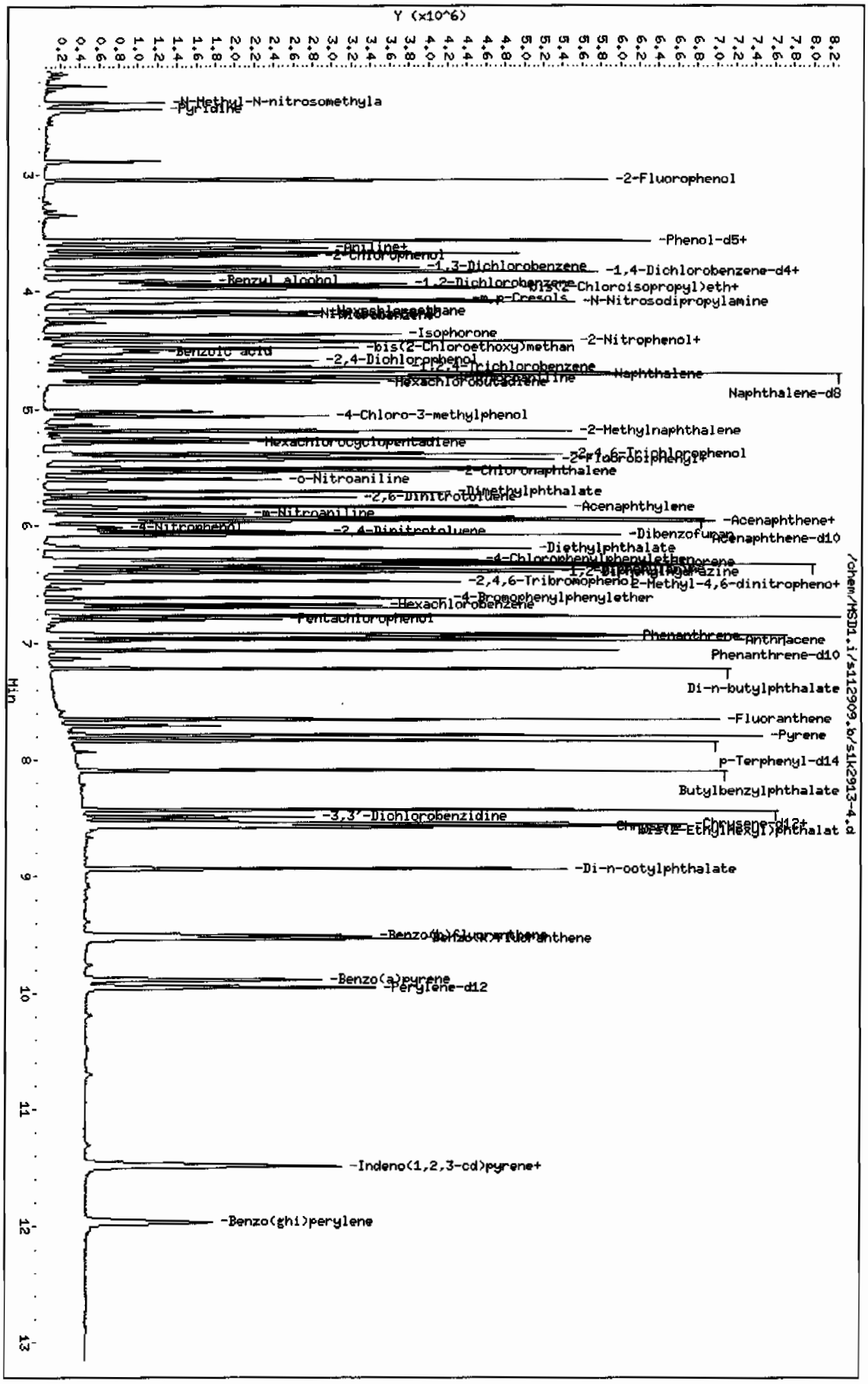

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926121 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201980154 MB	25-NOV-2009 21:20:56	30	1	0.03333
1201980157 LCS	25-NOV-2009 21:20:56	30	1	0.03333
241423004	25-NOV-2009 21:20:56	30.13	1	0.03319
241423005	25-NOV-2009 21:20:56	30.13	1	0.03319
241503002	25-NOV-2009 21:20:56	30.13	1	0.03319
241503003	25-NOV-2009 21:20:56	30.12	1	0.0332
241503004	25-NOV-2009 21:20:56	30.06	1	0.03327
241524002	25-NOV-2009 21:20:56	30.13	1	0.03319
1201980155 MS (241524002)	25-NOV-2009 21:20:56	30.12	1	0.0332
1201980156 MSD (241524002)	25-NOV-2009 21:20:56	30.16	1	0.03316
241534001	25-NOV-2009 21:20:56	30.17	1	0.03315
241534002	25-NOV-2009 21:20:56	30.13	1	0.03319
241534003	25-NOV-2009 21:20:56	30.04	1	0.03329
241534004	25-NOV-2009 21:20:56	30.13	1	0.03319
241534005	25-NOV-2009 21:20:56	30.13	1	0.03319
241534006	25-NOV-2009 21:20:56	30.13	1	0.03319
241534008	25-NOV-2009 21:20:56	30.07	1	0.03326
241539001	25-NOV-2009 21:20:56	30.01	1	0.03332
241539002	25-NOV-2009 21:20:56	30.13	1	0.03319
241539003	25-NOV-2009 21:20:56	30.13	1	0.03319
241539004	25-NOV-2009 21:20:56	30.04	1	0.03329

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201980157	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201980157	BENZIDINE LCS	UE091117-20	1	mL
MS	1201980155	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201980155	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201980156	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201980156	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/14/2009 METHOD: See raw data OPERATOR: AMY REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:116462-D
Multiplier Voltage: 1400 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091006-01 Internal Std ID: WBN091024-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s111409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k1201-D.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1201.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1202.d	INST BLK	amy	14-NOV-2009 17:53	-----	s111409	1.0	INST BLK	
s1k1203.d	WBN091111-16	amy	14-NOV-2009 18:22	1 PPM	s111409	1.0	MEGA001	
s1k1204.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	
s1k1204MRQ.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	pass linearity for c26 and c184
s1k1205.d	WBN091111-14	amy	14-NOV-2009 19:21	20 PPM	s111409	1.0	MEGA020	
s1k1206.d	WBN091111-13.1	amy	14-NOV-2009 19:50	40 PPM	s111409	1.0	MEGA040	
s1k1207.d	WBN091111-12	amy	14-NOV-2009 20:19	50 PPM	s111409	1.0	MEGA050	
s1k1208.d	WBN091111-11	amy	14-NOV-2009 20:47	80 PPM	s111409	1.0	MEGA080	
s1k1209.d	WBN091111-10	amy	14-NOV-2009 21:16	100 PPM	s111409	1.0	MEGA100	
s1k1210.d	WBN091111-09	amy	14-NOV-2009 21:45	120 PPM	s111409	1.0	MEGA120	
s1k1211.d	INST BLK	amy	14-NOV-2009 22:14	-----	s111409	1.0	INST BLK	
s1k1212-BOE.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212-D.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE: fails c65
s1k1213-D.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1213.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1214.d	INST BLK	amy	15-NOV-2009 15:05	-----	s111409	1.0	INST BLK	

s1k1215.d	WBN091111-01	amy	15-NOV-2009 15:28	10 PPM	s111409	1.0	AP010	
s1k1216.d	WBN091111-02	amy	15-NOV-2009 15:51	20 PPM	s111409	1.0	AP020	
s1k1217.d	WBN091111-03.1	amy	15-NOV-2009 16:14	40 PPM	s111409	1.0	AP040	
s1k1218.d	WBN091111-04	amy	15-NOV-2009 16:38	50 PPM	s111409	1.0	AP050	
s1k1219.d	WBN091111-05	amy	15-NOV-2009 17:01	80 PPM	s111409	1.0	AP080	
s1k1220.d	WBN091111-06	amy	15-NOV-2009 17:24	100 PPM	s111409	1.0	AP100	
s1k1221.d	WBN091111-07	amy	15-NOV-2009 17:47	120 PPM	s111409	1.0	AP120	
s1k1222.d	WBN091029-25	amy	15-NOV-2009 18:11	10 PPM	s111409	1.0	PEST010	
s1k1223.d	WBN091029-24	amy	15-NOV-2009 18:35	20 PPM	s111409	1.0	PEST020	
s1k1224.d	WBN091029-23.1	amy	15-NOV-2009 18:58	40 PPM	s111409	1.0	PEST040	
s1k1225.d	WBN091029-22	amy	15-NOV-2009 19:21	50 PPM	s111409	1.0	PEST050	
s1k1226.d	WBN091029-21	amy	15-NOV-2009 19:45	80 PPM	s111409	1.0	PEST080	
s1k1227.d	WBN091029-20	amy	15-NOV-2009 20:09	100 PPM	s111409	1.0	PEST100	
s1k1228.d	WBN091029-19	amy	15-NOV-2009 20:31	120 PPM	s111409	1.0	PEST120	
s1k1229.d	WBN091016-16	amy	15-NOV-2009 20:55	500 PPM	s111409	1.0	HEX500	
s1k1230.d	WBN091016-15	amy	15-NOV-2009 21:18	1000 PPM	s111409	1.0	HEX1000	
s1k1231.d	WBN091016-14	amy	15-NOV-2009 21:42	1250 PPM	s111409	1.0	HEX1250	
s1k1232.d	WBN091016-13	amy	15-NOV-2009 22:06	1500 PPM	s111409	1.0	HEX503	
s1k1233.d	WBN091016-12	amy	15-NOV-2009 22:30	1750 PPM	s111409	1.0	HEX504	
s1k1234.d	UBN090825-02.4	amy	15-NOV-2009 22:53	2000 PPM	s111409	1.0	HEX2000	
s1k1235-D.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1235.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1236-D.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1236.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1237-D.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1237.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1238-D.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown

s1k1238.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown
s1k1239.d	INST BLK	amy	16-NOV-2009 00:43	-----	s111409	1.0	INST BLK	
s1k1240.d	UBN090924-01	amy	16-NOV-2009 01:05	10 PPM	s111409	1.0	NEV010	DUSE
s1k1241.d	UBN090924-02	amy	16-NOV-2009 01:28	20 PPM	s111409	1.0	NEV020	DUSE
s1k1242.d	UBN090924-03	amy	16-NOV-2009 01:51	40 PPM	s111409	1.0	NEV040	DUSE
s1k1243.d	UBN090924-04	amy	16-NOV-2009 02:14	50 PPM	s111409	1.0	NEV050	DUSE
s1k1244.d	UBN090924-05	amy	16-NOV-2009 02:38	80 PPM	s111409	1.0	NEV080	DUSE
s1k1245.d	UBN090924-06	amy	16-NOV-2009 03:01	100 PPM	s111409	1.0	NEV100	DUSE
s1k1246.d	UBN090924-07	amy	16-NOV-2009 03:23	120 PPM	s111409	1.0	NEV120	DUSE
s1k1247-D.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1247.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1248.d	INST BLK	amy	17-NOV-2009 09:20	-----	s111409	1.0	INST BLK	
s1k1249.d	WBN091027-09.2	amy	17-NOV-2009 09:48	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails
s1k1250.d	UBN090924-01	amy	17-NOV-2009 10:17	10 PPM	s111409	1.0	NEV010	DUSE
s1k1251.d	UBN090924-02	amy	17-NOV-2009 10:41	20 PPM	s111409	1.0	NEV020	DUSE
s1k1252.d	UBN090924-03	amy	17-NOV-2009 11:04	40 PPM	s111409	1.0	NEV040	DUSE
s1k1253.d	UBN090924-04	amy	17-NOV-2009 11:27	50 PPM	s111409	1.0	NEV050	DUSE
s1k1254.d	UBN090924-05	amy	17-NOV-2009 11:50	80 PPM	s111409	1.0	NEV080	DUSE
s1k1255.d	UBN090924-06	amy	17-NOV-2009 12:14	100 PPM	s111409	1.0	NEV100	DUSE
s1k1256.d	UBN090924-07	amy	17-NOV-2009 12:38	120 PPM	s111409	1.0	NEV120	DUSE
s1k1257.d	WBN091027-09.1	amy	17-NOV-2009 13:02	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails /clean inj port
s1k1259-D.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1259.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1260.d	INST BLK	amy	17-NOV-2009 16:04	-----	s111409	1.0	INST BLK	
s1k1261-BOE.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261-D.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	pass 530038

s1k1262.d	UBN091117-01	amy	17-NOV-2009 16:56	10 PPM	s111409	1.0	NEV010	
s1k1263.d	UBN091117-02	amy	17-NOV-2009 17:19	20 PPM	s111409	1.0	NEV020	
s1k1264.d	UBN091117-03	amy	17-NOV-2009 17:42	40 PPM	s111409	1.0	NEV040	
s1k1265.d	UBN091117-04	amy	17-NOV-2009 18:05	50 PPM	s111409	1.0	NEV050	DUSE
s1k1266.d	UBN091117-05	amy	17-NOV-2009 18:28	80 PPM	s111409	1.0	NEV080	
s1k1267.d	UBN091117-06	amy	17-NOV-2009 18:52	100 PPM	s111409	1.0	NEV100	DUSE
s1k1268.d	UBN091117-07	amy	17-NOV-2009 19:15	120 PPM	s111409	1.0	NEV120	

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/29/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1318 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k2901.d	WBN091101-01	AMY	29-NOV-2009 10:14	50 PPM	s112909	1.0	DFTPP	DUSE-tune failed
s1k2902.d	WBN091101-01	AMY	29-NOV-2009 10:34	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2903.d	WBN091106-05.5	AMY	29-NOV-2009 10:50	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2904.d	WBN091106-05.5	AMY	29-NOV-2009 11:23	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2905.d	WBN091101-01	AMY	29-NOV-2009 13:27	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2906.d	WBN091111-03.5	AMY	29-NOV-2009 13:43	40 PPM	s112909	1.0	MEGACVS	DUSE-megacheck failed
s1k2907.d	WBN091101-01	AMY	29-NOV-2009 15:00	50 PPM	s112909	1.0	DFTPP	PASSING
s1k2908.d	WBN091111-03.5	AMY	29-NOV-2009 15:16	40 PPM	MEGAIICARE	1.0	MEGACVS	PASSING
s1k2909.d	WBN091111-03.3	AMY	29-NOV-2009 15:40	40 PPM	ap12	1.0	APCVS	PASSING
s1k2910.d	WBN091117-08.1	AMY	29-NOV-2009 16:04	40 PPM	nev	1.0	NEVCVS	DUSE-not needed
s1k2911.d	WBN091029-23.3	AMY	29-NOV-2009 16:27	40 PPM	pest	1.0	PESTCVS	DUSE-not needed
s1k2912-1.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-589	1.0	SBLK01	REPORT
s1k2912-2.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-600	1.0	SBLK01	REPORT
s1k2912-3.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-601	1.0	SBLK01	REPORT
s1k2912-4.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-603	1.0	SBLK01	REPORT
s1k2912.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-578	1.0	SBLK01	REPORT
s1k2913-1.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-589	1.0	SBLK01LCS	REPORT
s1k2913-2.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-600	1.0	SBLK01LCS	REPORT
s1k2913-3.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-601	1.0	SBLK01LCS	REPORT

s1k2913-4.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-603		1.0	SBLK01LCS	REPORT
s1k2913.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-578		1.0	SBLK01LCS	REPORT
s1k2914.d	241423004	AMY	29-NOV-2009 17:37	926126	10-578		1.0	LANL	REPORT
s1k2915.d	241423005	AMY	29-NOV-2009 18:01	926126	10-578		1.0	LANL	REPORT
s1k2916.d	241503002	AMY	29-NOV-2009 18:24	926126	10-589		1.0	LANL	REPORT
s1k2917.d	241503003	AMY	29-NOV-2009 18:48	926126	10-589		1.0	LANL	REPORT
s1k2918.d	241503004	AMY	29-NOV-2009 19:11	926126	10-589		1.0	LANL	REPORT
s1k2919.d	241524002	AMY	29-NOV-2009 19:35	926126	10-600		1.0	LANL	REPORT
s1k2920.d	1201980155	AMY	29-NOV-2009 19:59	926126	10-600		1.0	MS	REPORT
s1k2921.d	1201980156	AMY	29-NOV-2009 20:22	926126	10-600		1.0	MSD	REPORT
s1k2922.d	241534001	AMY	29-NOV-2009 20:46	926126	10-601		1.0	LANL	REPORT
s1k2923.d	241534002	AMY	29-NOV-2009 21:09	926126	10-601		1.0	LANL	REPORT
s1k2924.d	241534003	AMY	29-NOV-2009 21:32	926126	10-601		1.0	LANL	REPORT
s1k2925.d	241534004	AMY	29-NOV-2009 21:56	926126	10-601		1.0	LANL	REPORT
s1k2926.d	241534005	AMY	29-NOV-2009 22:19	926126	10-601		1.0	LANL	REPORT
s1k2927.d	241534006	AMY	29-NOV-2009 22:42	926126	10-601		1.0	LANL	REPORT
s1k2928.d	241534008	AMY	29-NOV-2009 23:06	926126	10-601		1.0	LANL	REPORT
s1k2929.d	241539001	AMY	29-NOV-2009 23:29	926126	10-603		4.0	LANL	REPORT
s1k2930.d	241539002	AMY	29-NOV-2009 23:52	926126	10-603		1.0	LANL	REPORT
s1k2931.d	241539003	AMY	30-NOV-2009 00:15	926126	10-603		4.0	LANL	REPORT
s1k2932.d	241539004	AMY	30-NOV-2009 00:39	926126	10-603		4.0	LANL	REPORT

Instrument Batch: /chem/MSD1.i/s112909.b

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GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2920.d
Lab Smp Id: 1201980155 Client Smp ID: WST03-10-2132MS
Inj Date : 29-NOV-2009 19:59
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980155|926126|1|SVMF|1|MS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	699947	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2934133	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1463731	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2363993	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1684742	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1120190	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1289380	70.5260	2500
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1547686	69.6514	2470
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	673013	34.8059	1230
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1433542	40.8925	1450
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	370034	90.5336	3200
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1328013	50.2177	1780

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	796747	34.0298	1200
8 2-Chlorophenol	128	3.704	3.704	(0.968)	656662	32.9999	1170
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	685652	29.9567	1060
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	420390	31.5122	1120(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	566160	31.8799	1130
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	545668	34.7521	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1149404	34.0458	1200
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	422299	32.0627	1140
52 4-Nitrophenol	139	6.016	6.004	(1.014)	225669	32.6788	1160(Q)
65 Pentachlorophenol	266	6.798	6.792	(0.982)	210344	35.1811	1240
79 Pyrene	202	7.786	7.787	(0.910)	1850873	41.3427	1460
2 Pyridine	79	2.422	2.410	(0.633)	370227	22.2054	786
4 Aniline	66	3.622	3.628	(0.946)	261857	26.8116	949
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510651	31.3514	1110
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	668790	28.6436	1010
12 Benzyl alcohol	108	3.916	3.910	(1.023)	310221	25.6408	908
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	652552	30.8709	1090
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1201535	30.9706	1100
15 o-Cresol	107	3.969	3.963	(1.037)	683532	46.1455	1630
18 m,p-Cresols	107	4.063	4.063	(1.061)	772494	38.3282	1360
19 Hexachloroethane	117	4.169	4.169	(1.089)	231829	28.1433	996
21 Nitrobenzene	77	4.204	4.210	(0.896)	695598	34.5264	1220
22 Isophorone	82	4.363	4.369	(0.930)	1299945	36.8827	1300
23 2-Nitrophenol	139	4.422	4.422	(0.942)	337453	31.5531	1120
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	592642	34.6064	1220
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	715403	31.5291	1120
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	524523	32.6380	1160
27 Benzoic acid	105	4.498	4.499	(0.959)	390090	33.0577	1170
30 Naphthalene	128	4.704	4.710	(1.002)	1963373	32.0621	1140(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	797874	28.5317	1010
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	297235	32.5947	1150
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349639	33.5263	1190
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	199168	44.5657	1580
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	381472	39.1822	1390
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	421700	40.7352	1440
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	1212305	33.5491	1190
42 o-Nitroaniline	65	5.604	5.604	(0.944)	350257	31.2609	1110
41 m-Nitroaniline	138	5.898	5.898	(0.994)	274130	27.6889	980
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1500237	37.6143	1330
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	344190	34.6363	1230
45 Acenaphthylene	152	5.839	5.840	(0.984)	1966987	34.8834	1240
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	56861	14.4972	513(aQ)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1996093	40.8839	1450
51 Diethylphthalate	149	6.192	6.198	(1.044)	1481999	39.8553	1410
53 Fluorene	166	6.310	6.310	(1.063)	1421709	36.1147	1280
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	646361	38.8886	1380
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	109209	18.2603	646

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	284762	29.4123	1040
133 Diphenylamine	169	6.369	6.369	(0.920)	1145372	36.3240	1290
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1426823	37.0863	1310
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	354319	43.6242	1540
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	346909	34.7972	1230
68 Phenanthrene	178	6.939	6.940	(1.003)	1975120	36.7644	1300
69 Anthracene	178	6.969	6.969	(1.007)	1913297	35.0190	1240
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2440805	41.8840	1480
76 Fluoranthene	202	7.645	7.645	(1.105)	1854236	35.7562	1270
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	984368	48.3155	1710
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1477404	36.5712	1290
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	350925	30.2533	1070
92 Chrysene	228	8.575	8.581	(1.002)	1231772	32.6228	1160
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1306621	44.1441	1560
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1909554	52.1111	1840
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.955)	1234751	43.2281	1530
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	964822	34.3499	1220
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	883640	36.1004	1280
99 Indeno(1,2,3-cd)pyrene	276	11.492	11.504	(1.155)	722470	28.3387	1000
100 Dibenzo(a,h)anthracene	278	11.492	11.498	(1.155)	615954	28.9496	1020
101 Benzo(ghi)perylene	276	11.974	11.980	(1.203)	559720	26.5904	942
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	321743	32.4054	1150

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2920.d
Date : 29-NOV-2009 19:59
Client ID: WSTO3-10-2132MS
Sample Info: 1120190155192612611SVMF11MS
Volume Injected (ul): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AHV
Column diameter: 0.20

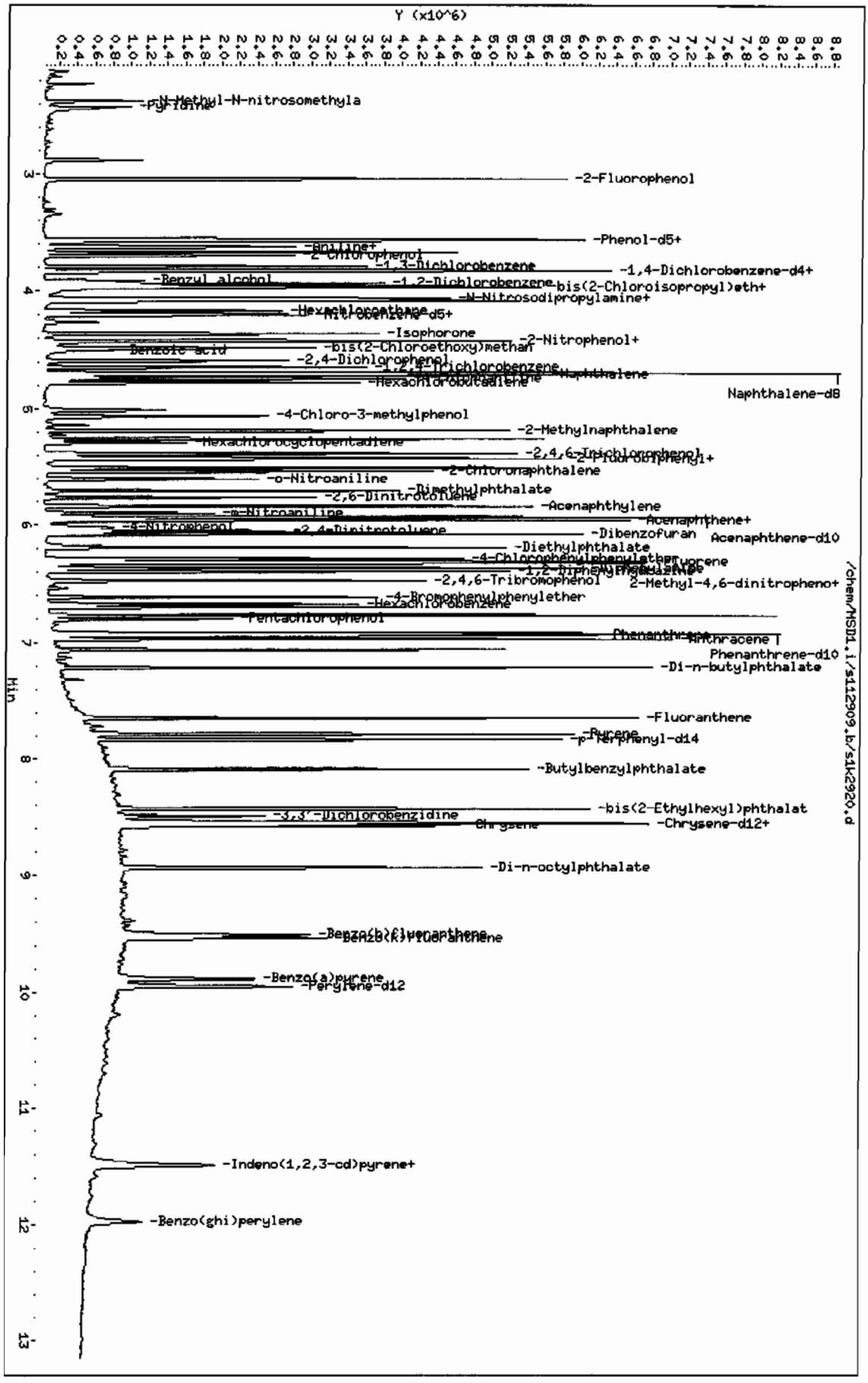

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GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2921.d
Lab Smp Id: 1201980156 Client Smp ID: WST03-10-2132MSD
Inj Date : 29-NOV-2009 20:22
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980156|926126|1|SVMF|1|MSD
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.16000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	615056	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2554313	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1300161	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2151794	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1447390	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	806048	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1069314	66.5616	2350
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1262977	64.6835	2290
$ 20 Nitrobenzene-d5	82	4.192	4.199	(0.893)	552216	32.8053	1160
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1174801	37.7279	1330
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	298226	82.1443	2900
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1075352	47.3318	1670

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	651465	31.6651	1120
8 2-Chlorophenol	128	3.704	3.704	(0.968)	553085	31.6310	1120
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	582464	28.9608	1020
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	333817	28.4764	1010(Q)
28 1,2,4-Trichlorobenzene	180	4.639	4.640	(0.989)	469632	30.3767	1070
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	442703	32.3870	1140
47 Acenaphthene	154	5.957	5.957	(1.004)	961549	32.0646	1130
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	342426	29.2692	1030
52 4-Nitrophenol	139	6.016	6.004	(1.014)	189174	30.8403	1090
65 Pentachlorophenol	266	6.798	6.792	(0.982)	158486	29.1215	1030
79 Pyrene	202	7.786	7.787	(0.910)	1531042	39.8068	1410
2 Pyridine	79	2.416	2.410	(0.631)	342320	23.3654	826
4 Aniline	66	3.622	3.628	(0.946)	229123	26.6979	944
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	435483	30.4267	1080
9 1,3-Dichlorobenzene	146	3.792	3.799	(0.991)	569061	27.7362	981
12 Benzyl alcohol	108	3.916	3.910	(1.023)	217397	20.4486	723
13 1,2-Dichlorobenzene	146	3.945	3.946	(1.031)	553673	29.8084	1050
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1027417	30.1377	1060
15 o-Cresol	107	3.963	3.963	(1.035)	564636	43.3800	1530
18 m,p-Cresols	107	4.063	4.063	(1.061)	640140	36.1451	1280
19 Hexachloroethane	117	4.169	4.169	(1.089)	187184	25.8600	914
21 Nitrobenzene	77	4.204	4.210	(0.896)	575076	32.7886	1160
22 Isophorone	82	4.363	4.369	(0.930)	1071543	34.9231	1230
23 2-Nitrophenol	139	4.422	4.422	(0.942)	264819	28.4435	1000
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	481800	32.3175	1140
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	596951	30.2207	1070
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	431087	30.8127	1090
27 Benzoic acid	105	4.492	4.499	(0.957)	380487	37.0385	1310
30 Naphthalene	128	4.704	4.710	(1.002)	1617437	30.3405	1070(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	670092	27.5254	973
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	245534	30.9288	1090
34 2-Methylnaphthalene	142	5.186	5.187	(1.105)	1113411	31.7709	1120
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	116360	29.3123	1040
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	305116	35.2822	1250
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	345638	37.5882	1330
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	992781	30.9305	1090
42 o-Nitroaniline	65	5.604	5.604	(0.944)	284051	28.5413	1010
41 m-Nitroaniline	138	5.898	5.898	(0.994)	228764	26.0137	920
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1233662	34.8220	1230
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	273916	31.0324	1100
45 Acenaphthylene	152	5.839	5.840	(0.984)	1610084	32.1462	1140
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	35859	10.2927	364(aQR)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1650486	38.0582	1340
51 Diethylphthalate	149	6.192	6.198	(1.044)	1231486	37.2848	1320
53 Fluorene	166	6.310	6.310	(1.063)	1181344	33.7842	1190
54 4-Chlorophenylphenylether	204	6.292	6.293	(1.060)	542687	36.7587	1300
55 2-Methyl-4,6-dinitrophenol	198	6.333	6.334	(0.915)	66699	12.2522	433

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.322	6.328	(1.065)	230458	26.7980	948
133 Diphenylamine	169	6.369	6.369	(0.920)	953629	33.2255	1170
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1185255	33.8455	1200
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	299469	40.5070	1430
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	288959	31.8427	1120
68 Phenanthrene	178	6.939	6.940	(1.003)	1651328	33.7686	1190
69 Anthracene	178	6.969	6.969	(1.007)	1620434	32.5836	1150
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2043329	38.5211	1360
76 Fluoranthene	202	7.645	7.645	(1.105)	1511208	32.0151	1130
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	791858	45.2402	1600
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1120091	32.2732	1140
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	289961	29.0969	1030
92 Chrysene	228	8.575	8.581	(1.002)	992111	30.5843	1080
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1048714	41.2409	1460
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1507003	57.1534	2020
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.956)	727997	35.9011	1270
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.959)	781492	38.6663	1370
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	578752	32.8455	1160
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	387228	20.9970	742
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	342583	22.3360	790
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	293979	19.4089	686
1 N-Methyl-N-nitrosomethylamine	74	2.363	2.352	(0.617)	275353	31.5608	1120

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD1.i/s112909.b/s1k2921.d
Date : 29-NOV-2009 20:22
Client ID: WST03-10-2132MSD
Sample Info: 1120198015619261261|1|SVHF|1|MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

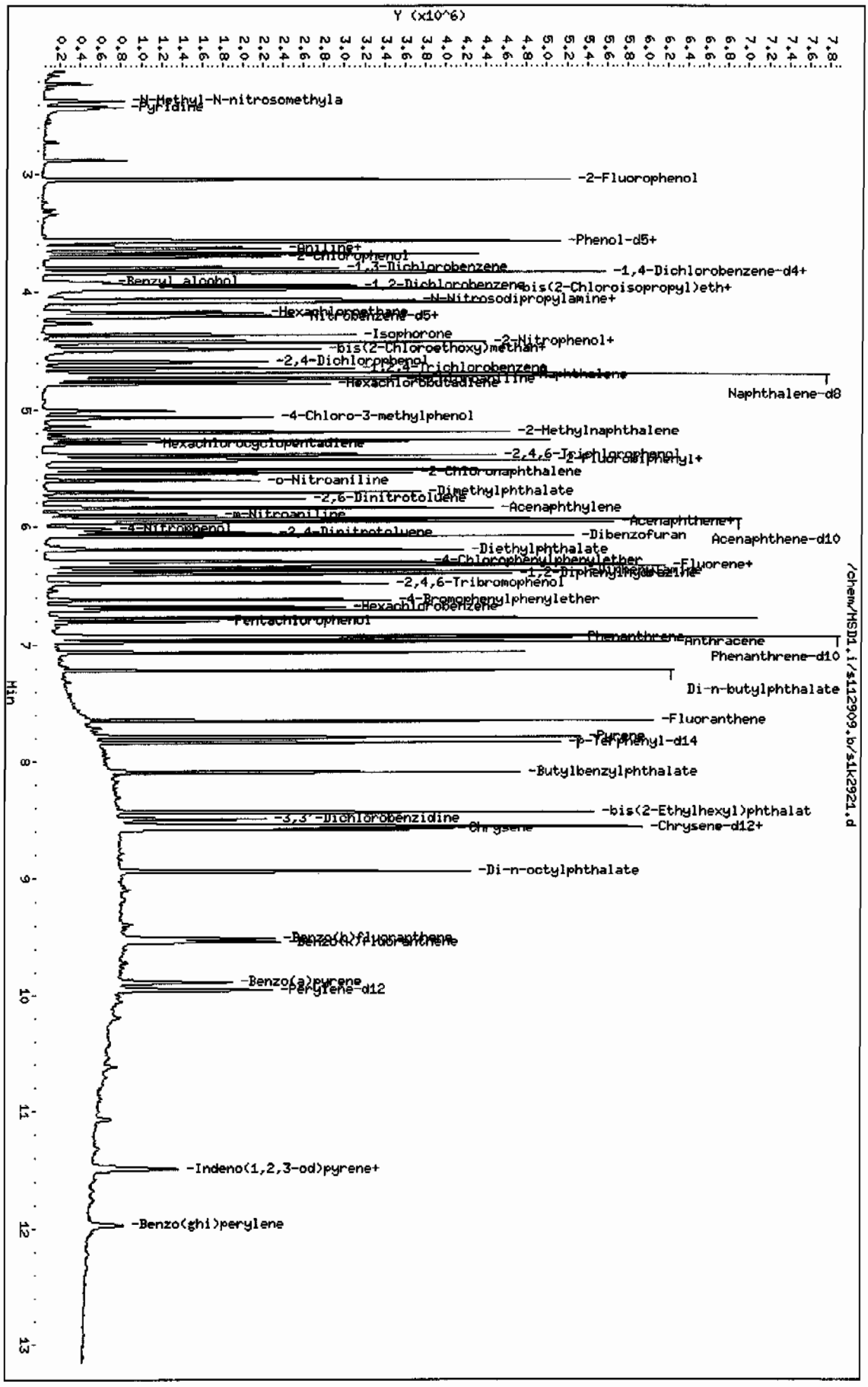

Page 1

GC SEMIVOLATILE DRO ANALYSIS

DRO Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-603

Method/Analysis Information

Procedure:	**Analysis of Diesel Range Organics by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	926871
Prep Batch Number:	926870

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241539001	RE03-09-13462
241539002	RE03-09-13464
241539003	RE03-09-13463
241539004	RE03-09-13461
1201981721	Method Blank (MB)
1201981724	Laboratory Control Sample (LCS)
1201981722	241417001(RE03-09-13812) Matrix Spike (MS)
1201981723	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y

axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-575) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 241539003 (RE03-09-13463) and 241539004 (RE03-09-13461) were diluted at 1:10 due to the extracts being thick and oily.

Sample Re-extraction/Re-analysis
Re-extractions were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

All LANL samples in this SDG contained atypical Diesel pattern and hydrocarbons heavier than Diesel.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimi Cao **Date:** 12/14/09

Roadmap for LANL 10-603 DRO

This roadmap was analyzed by kev01577 on 12-02-2009, 01:56.
This roadmap was reviewed by jim01140 on 12-02-2009, 08:50.
This roadmap was packaged by yml on 12-12-2009, 08:00.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/fid5.i/113009dr/019f1901.d	241539001	01-DEC-2009	03:41	10-603.sub	RE03-09-13462	1.00000	926871	DDSE, INSTRUMENT SHUTDOWN
□	N	/chem/fid5.i/120109dr/009f0901.d	241539001	01-DEC-2009	17:40	10-603.sub	RE03-09-13462	1.00000	926871	USE
□	N	/chem/fid5.i/120109dr/010f1001.d	241539002	01-DEC-2009	18:19	10-603.sub	RE03-09-13464	1.00000	926871	USE
□	N	/chem/fid5.i/120109dr/011f1101.d	241539003	01-DEC-2009	18:57	10-603.sub	RE03-09-13463	10.00000	926871	USE
□	N	/chem/fid5.i/120109dr/012f1201.d	241539004	01-DEC-2009	19:35	10-603.sub	RE03-09-13461	10.00000	926871	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/fid5.i/113009dr/005f0501.d	1201981721	mb	30-NOV-2009	18:43	all.sub	DBLK01	1.00000	926871	USE
□	N	/chem/fid5.i/113009dr/006f0601.d	1201981724	lcs	30-NOV-2009	19:21	all.sub	DBLK01LCS	1.00000	926871	USE
■	N	/chem/fid5.i/113009dr/008f0801.d	1201981722	ms	30-NOV-2009	20:38	10-575.sub	RE03-09-13812MS	1.00000	926871	USE
■	N	/chem/fid5.i/113009dr/009f0901.d	1201981723	msd	30-NOV-2009	21:17	10-575.sub	RE03-09-13812MSD	1.00000	926871	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539001	Date Received:	11/20/2009 08:50	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13462	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	12/01/2009 17:40	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.3	mg/kg	2.32	7.15

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13464	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/01/2009 18:19	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	010f1001.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.7	mg/kg	2.23	6.88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13463	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	10
Run Date:	12/01/2009 18:57	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	011f1101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	36.4	mg/kg	22.7	69.9

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539004	Date Received:	11/20/2009 08:50	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13461	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 19:35	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	28.6	mg/kg	23.7	72.9

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10–603

Matrix Type: SOLID

CAP Column (1) : DB–5MS

Sample ID	Client ID	OTP %REC	
1201981721	MB for batch 926870	59	
1201981724	LCS for batch 926870	83	
241539001	RE03–09–13462	54	
241539002	RE03–09–13464	62	
241539003	RE03–09–13463	59	D
241539004	RE03–09–13461	73	D

Surrogate	Acceptance Limits
OTP = o–Terphenyl	(24%–124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10-603
Client ID: LCS for batch 926870
Lab Sample ID: 1201981724
Instrument: FID5.I
Analyst: KXR2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 19:21
Dilution: 1
Prep Batch ID: 926870
Batch ID: 926871

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	27.7	83	53-114

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**	
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**	
Lab Sample ID:	**1201981722**	**%Moisture:**	**7.1**	
Instrument:	**FID5.I**	**Analysis Date:**	**11/30/2009 20:38**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID:**	**926870**	
Inj. Vol:	**1 uL**	**Batch ID:**	**926871**	

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	35.7	3.19	J	28.1	70	21-122

Flame Ionization Detector

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–575**	**Sample Type:**	**Matrix Spike Duplicate**		
Client ID:	**RE03–09–13812MSD**	**Matrix:**	**SOIL**		
Lab Sample ID:	**1201981723**	**%Moisture:**	**7.1**		
Instrument:	**FID5.I**	**Analysis Date:**	**11/30/2009 21:17**	**Dilution: 1**	
Analyst:	**KXR2**	**Prep Batch ID:**	**926870**		
Inj. Vol:	**1 uL**	**Batch ID:**	**926871**		

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	35.7	3.19	J	28.0	70	21–122	0	0–30

Method Blank Summary

SDG Number:	10–603	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926870	Instrument ID:	FID5.I	Data File:	005f0501.d
Lab Sample ID:	1201981721	Prep Date:	11/29/2009 20:04	Analyzed:	11/30/09 18:43
Column:	DB–5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926870	1201981724	006f0601.d	11/30/09	1921
04	RE03–09–13462	241539001	009f0901.d	12/01/09	1740
05	RE03–09–13464	241539002	010f1001.d	12/01/09	1819
06	RE03–09–13463	241539003	011f1101.d	12/01/09	1857
07	RE03–09–13461	241539004	012f1201.d	12/01/09	1935

SAMPLE
DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539001	Date Received:	11/20/2009 08:50	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13462	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	12/01/2009 17:40	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.3	mg/kg	2.32	7.15

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/009f0901.d
Lab Smp Id: 241539001 Client Smp ID: RE03-09-13462
Inj Date : 01-DEC-2009 17:40
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241539001|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	6.79600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
$ 1 Diesel Range Organics					CAS #:	
8.008- 18.916			42605459	316.454	11.3	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.137	14.143	-0.006	2302701	10.8323	0.39	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/120109dr/009f0901.d
Date : 01-DEC-2009 17:40
Client ID: RE03-09-13462
Sample Info: |241539001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

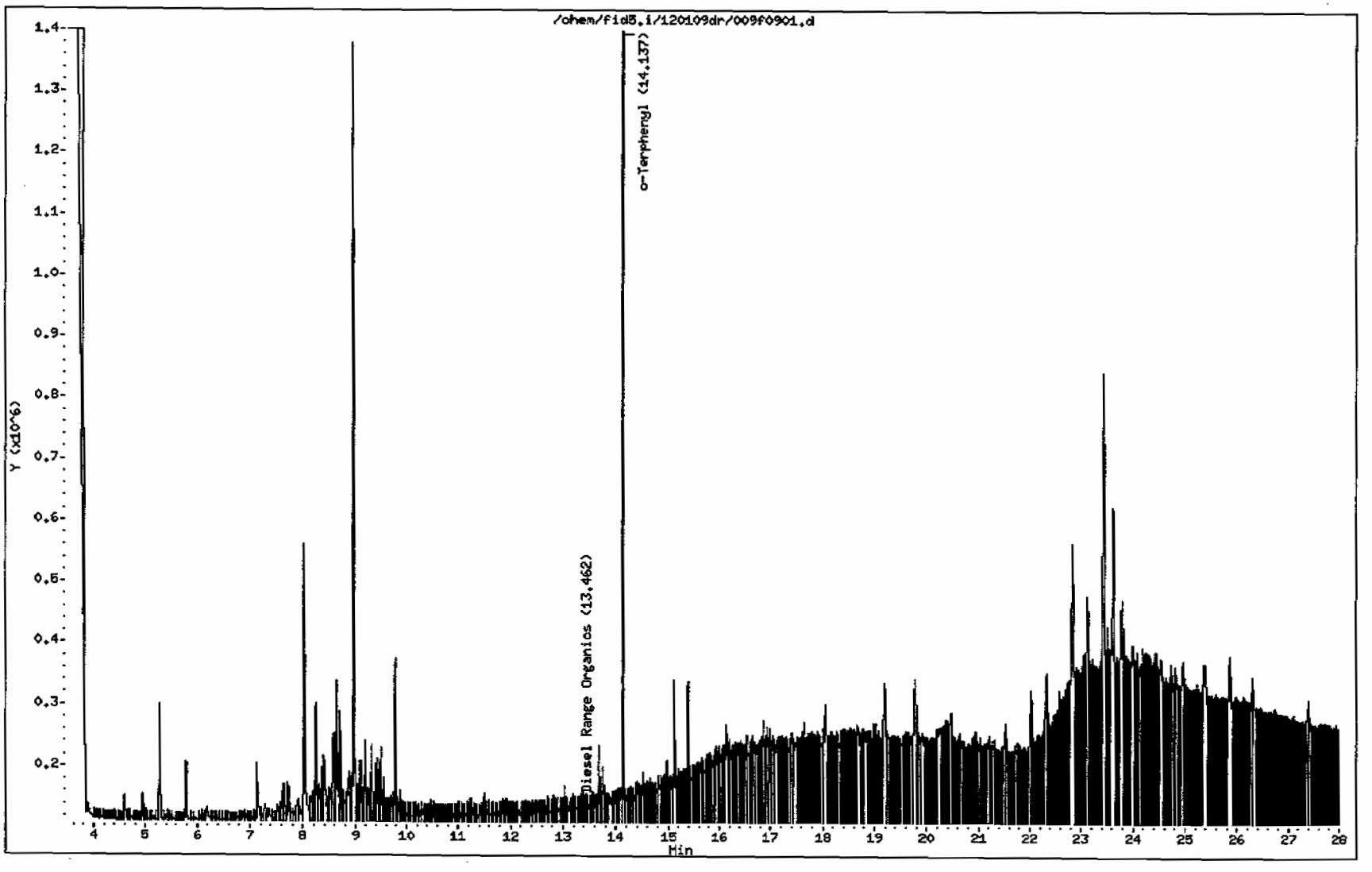

Data File: /chem/fid5.i/120109dr/009f0901.d
Injection Date: 01-DEC-2009 17:40
Instrument: fid5.i
Client Sample ID: RE03-09-13462

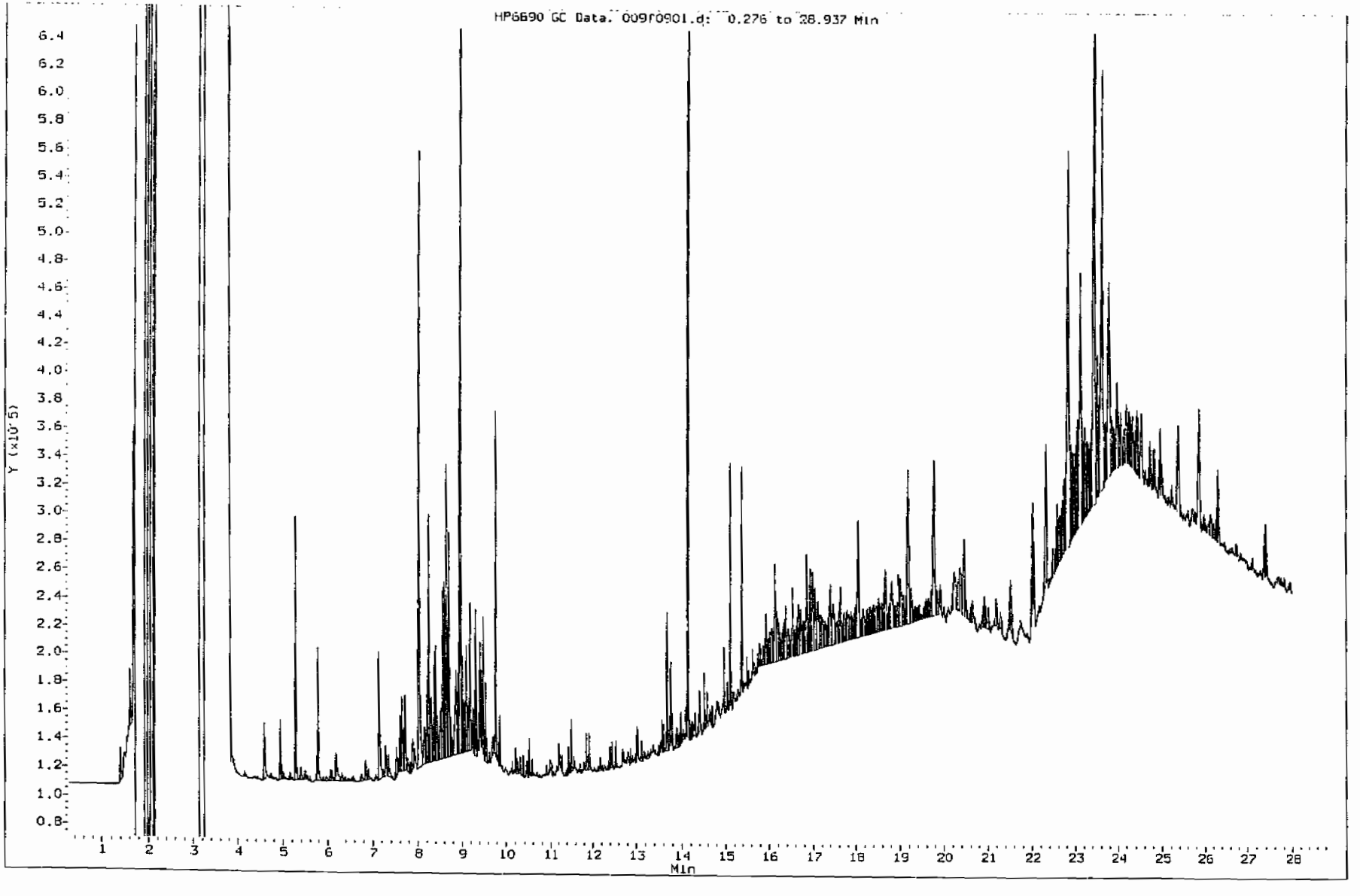

Data File: /chem/fid5.i/120109dr/009f0901.d
Injection Date: 01-DEC-2009 17:40
Instrument: fid5.i
Client Sample ID: RE03-09-13462

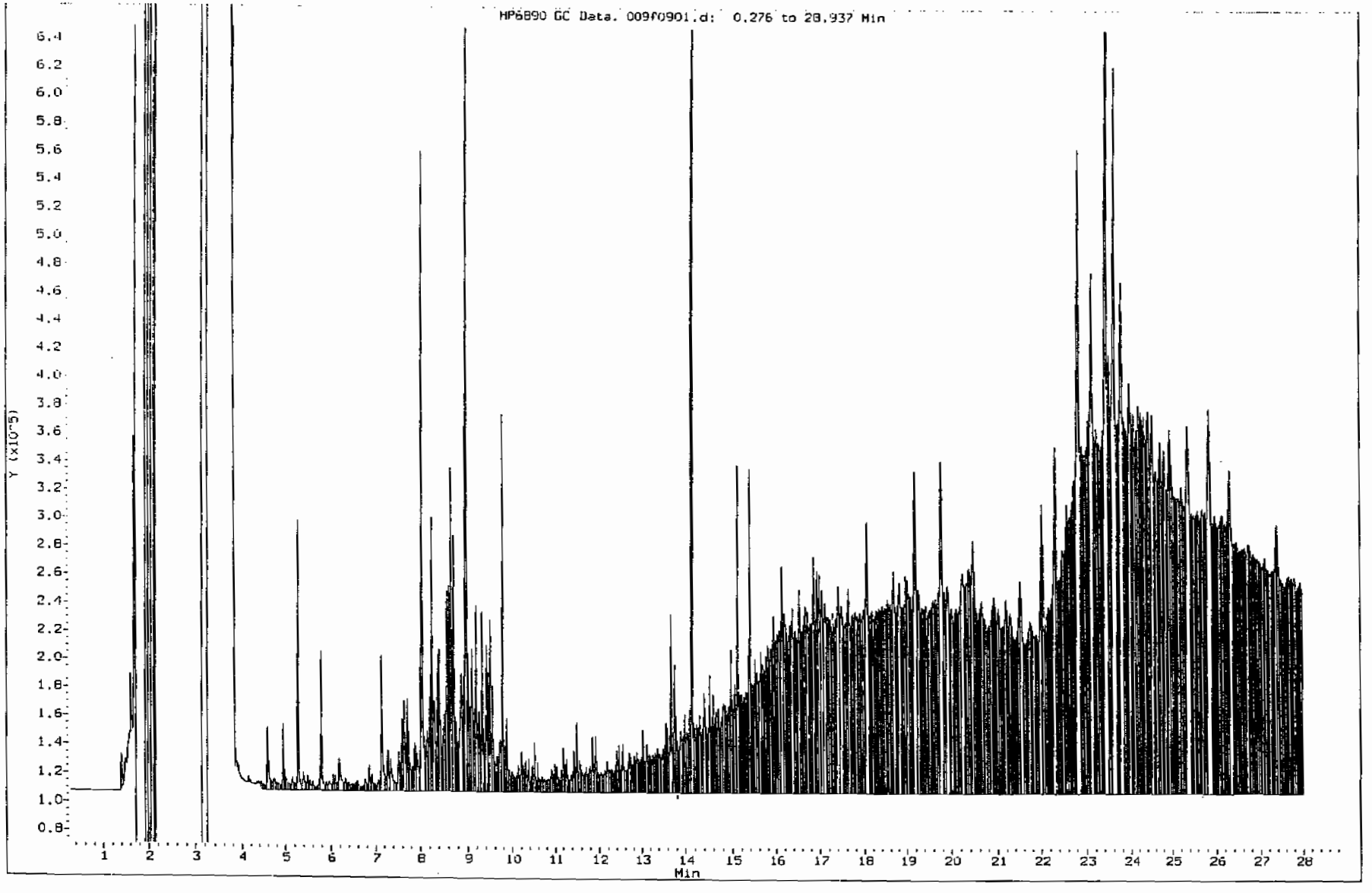

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539002	Date Received:	11/20/2009 08:50	%Moisture:	3.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13464	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	12/01/2009 18:19	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.7	mg/kg	2.23	6.88

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/010f1001.d
Lab Smp Id: 241539002 Client Smp ID: RE03-09-13464
Inj Date : 01-DEC-2009 18:19
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241539002|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weigth of sample extracted (g)
M	3.19930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			45972281	341.461	11.7	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.138	14.143	-0.005	2621355	12.3314	0.42	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/120109dr/010f1001.d
Date : 01-DEC-2009 18:19
Client ID: RE03-09-13464
Sample Info: 1241539002|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

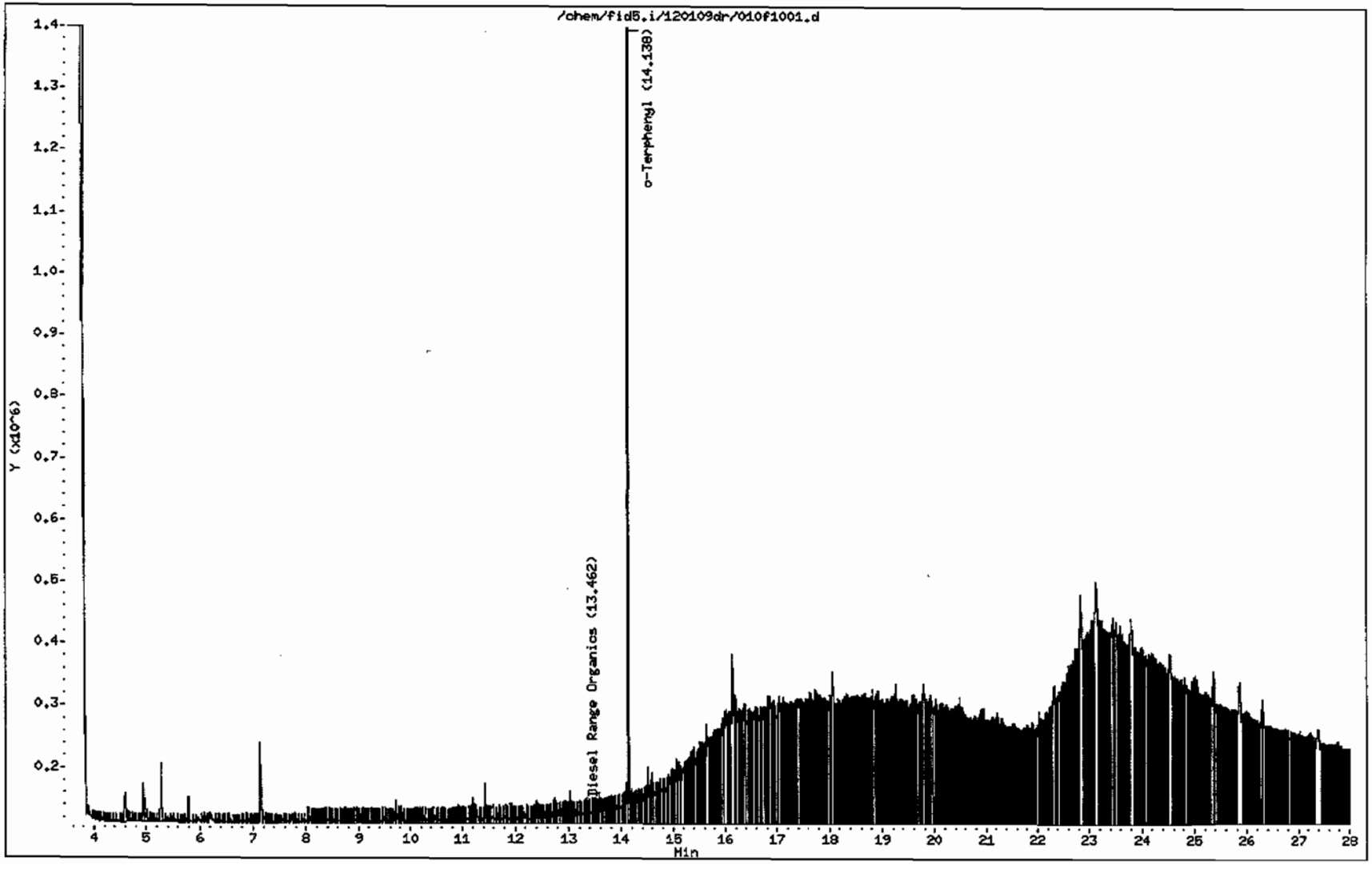

Data File: /chem/Fid5.i/120109dr/010f1001.d
Injection Date: 01-DEC-2009 18:19
Instrument: Fid5.i
Client Sample ID: RE03-09-13464

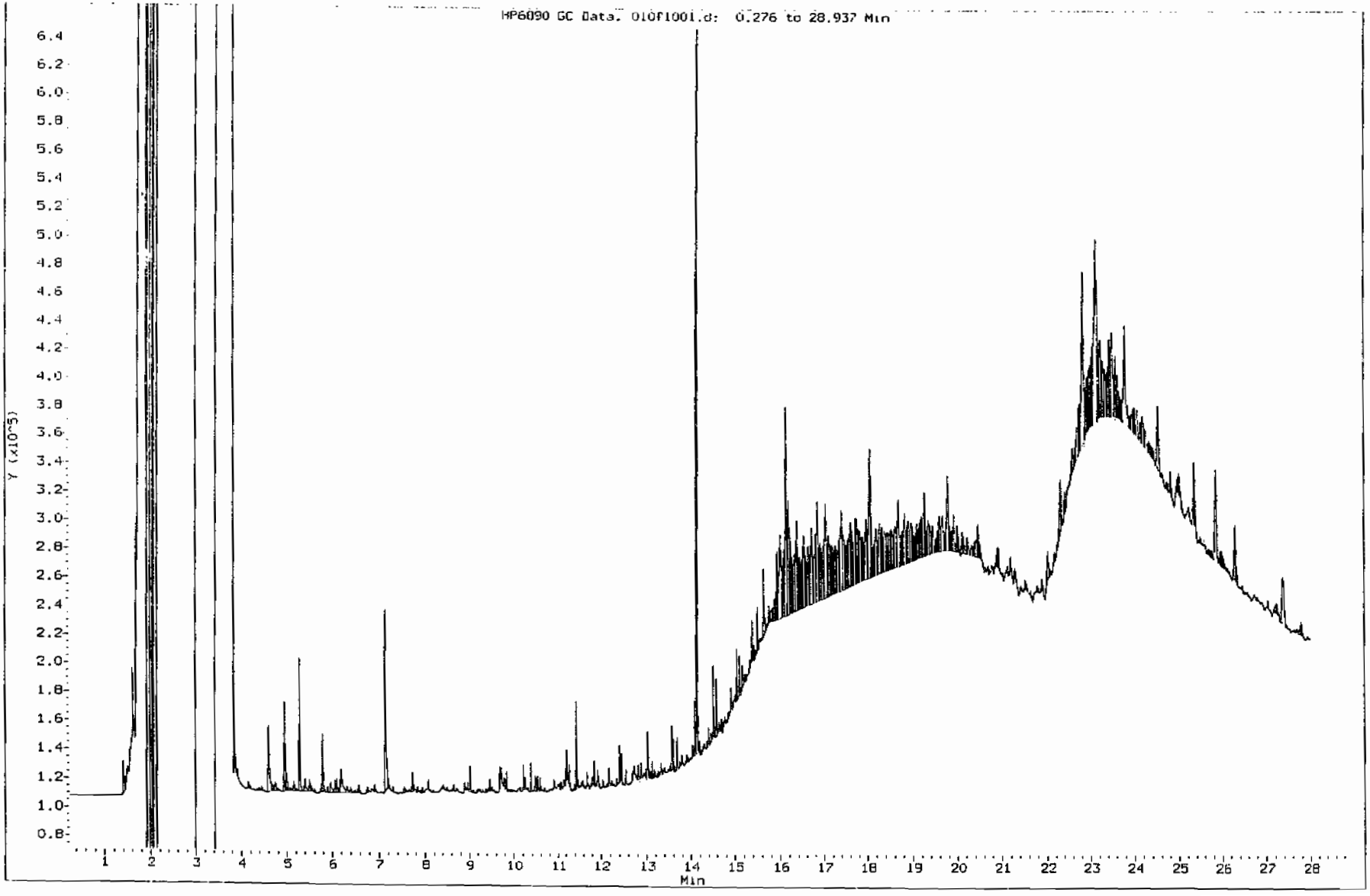

Data File: /chem/fid5.i/120109dr/010f1001.d
Injection Date: 01-DEC-2009 18:19
Instrument: fid5.i
Client Sample ID: RE03-09-13464

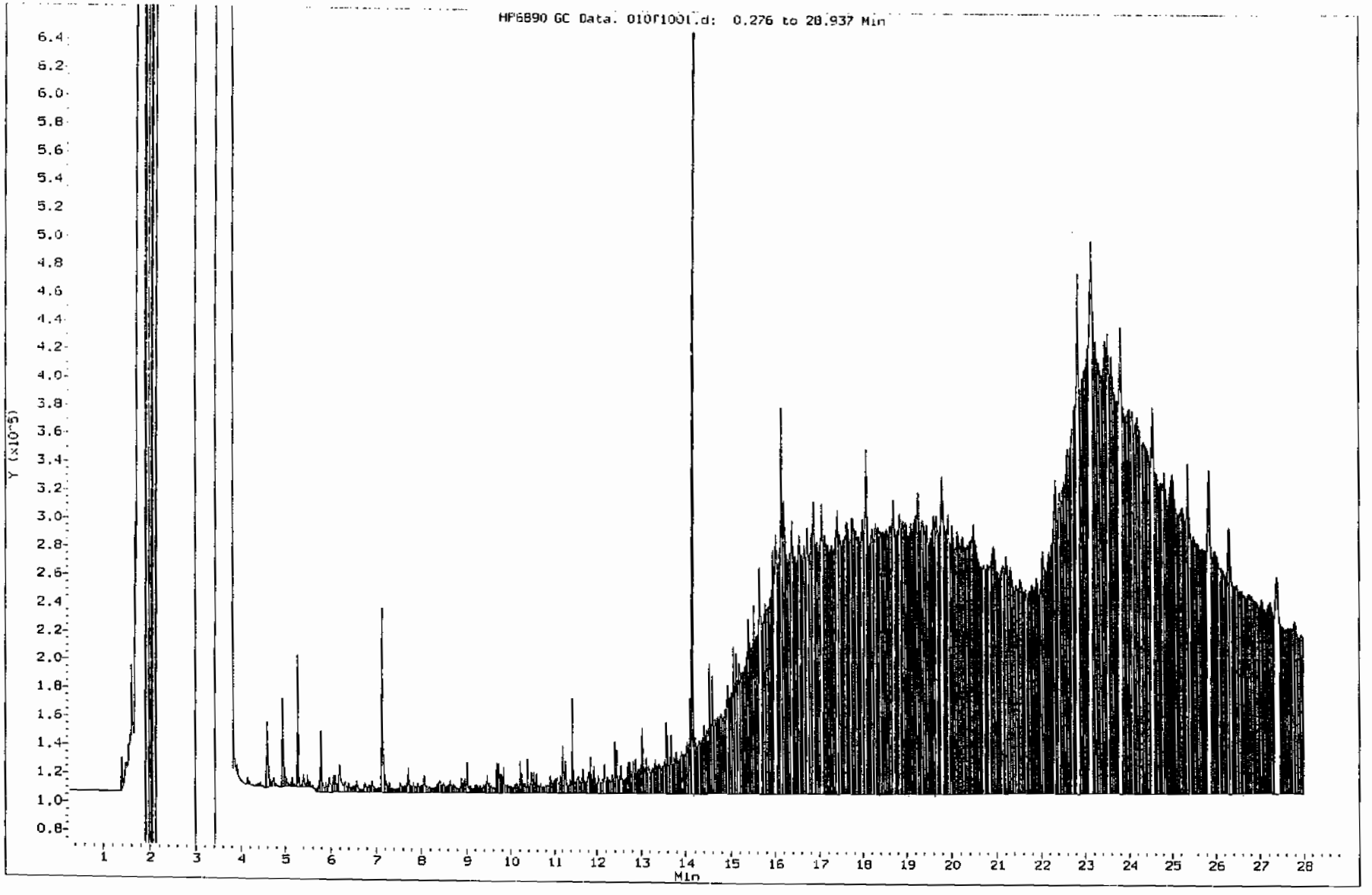

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539003	Date Received:	11/20/2009 08:50	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13463	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 18:57	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	36.4	mg/kg	22.7	69.9

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/011f1101.d
Lab Smp Id: 241539003 Client Smp ID: RE03-09-13463
Inj Date : 01-DEC-2009 18:57
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241539003|10|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 11
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	4.78600	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics						CAS #:	
	8.008- 18.916			14022949	104.156	36.4	(a)
$ 2 o-Terphenyl						CAS #: 84-15-1	
	14.134	14.143	-0.009	250936	1.18046	0.41	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/120109dr/011f1101.d
Date : 01-DEC-2009 18:57
Client ID: RE03-09-13463
Sample Info: |2415390031101|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

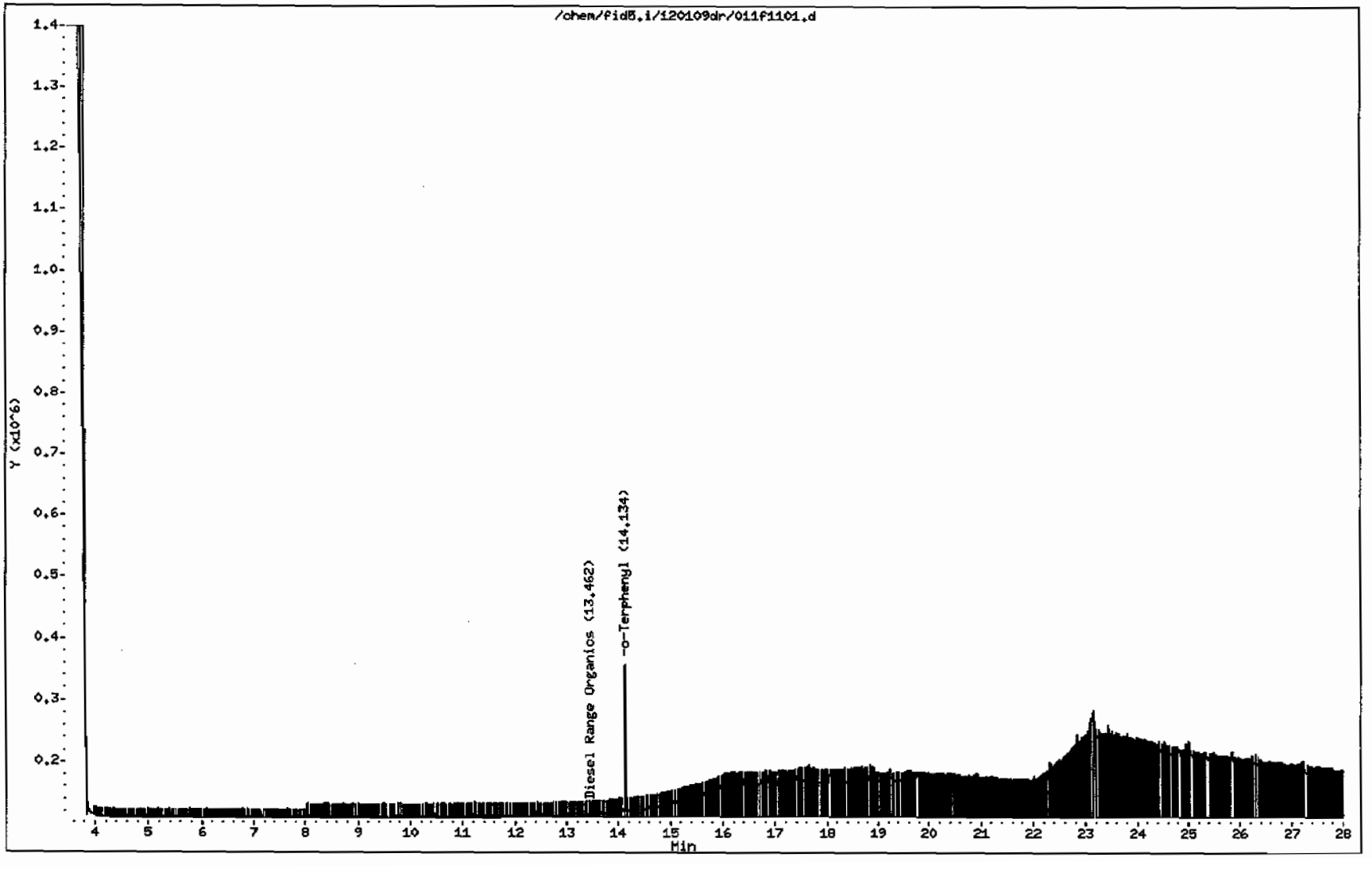

Data File: /chem/fid5.i/120109dr/011f1101.d
Injection Date: 01-DEC-2009 18:57
Instrument: fid5.i
Client Sample ID: RE03-09-13463

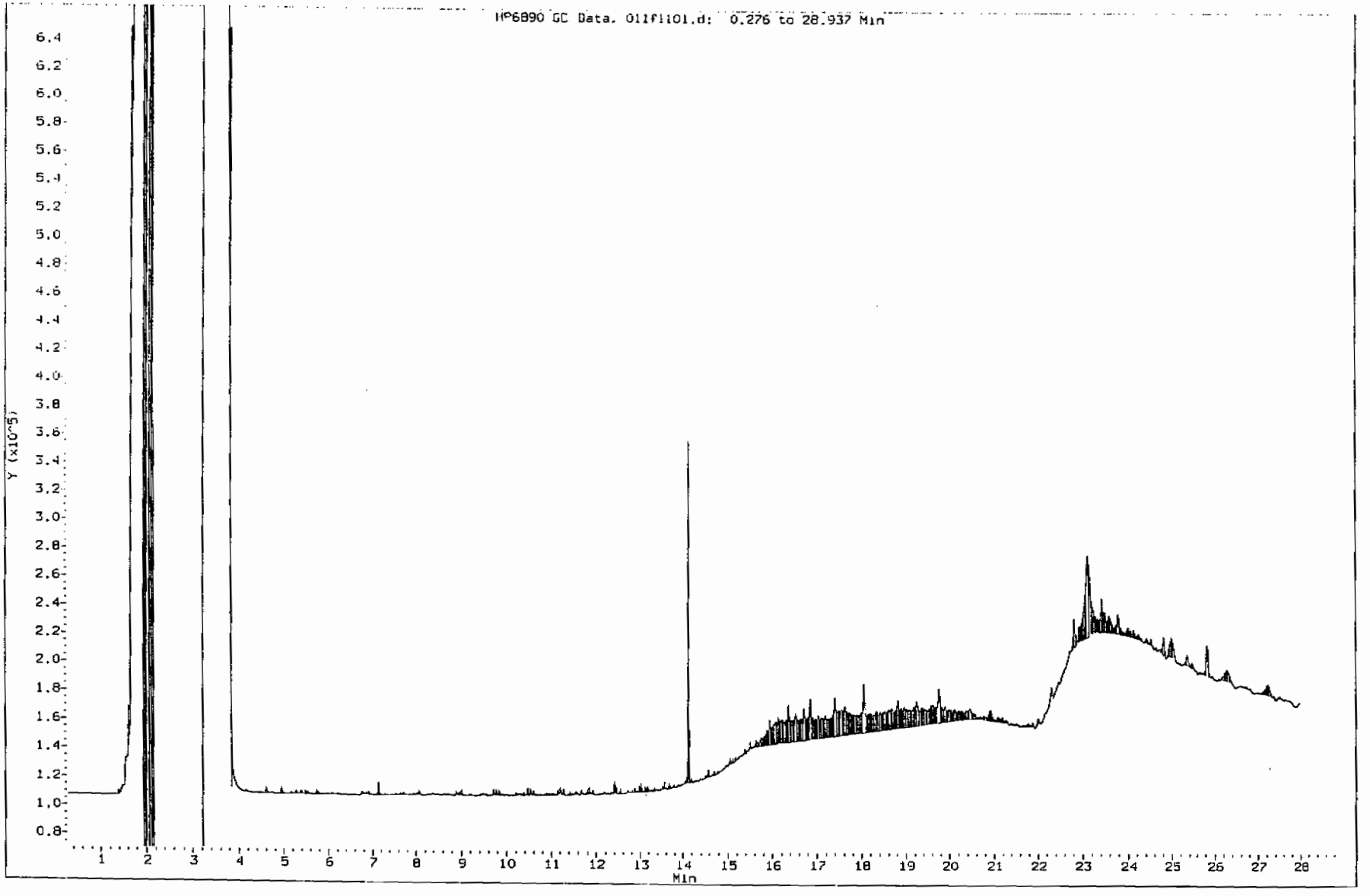

Data File: /chem/fid5.i/120109dr/011F1101.d
Injection Date: 01-DEC-2000 18:57
Instrument: fid5.i
Client Sample ID: RE03-09-13-163

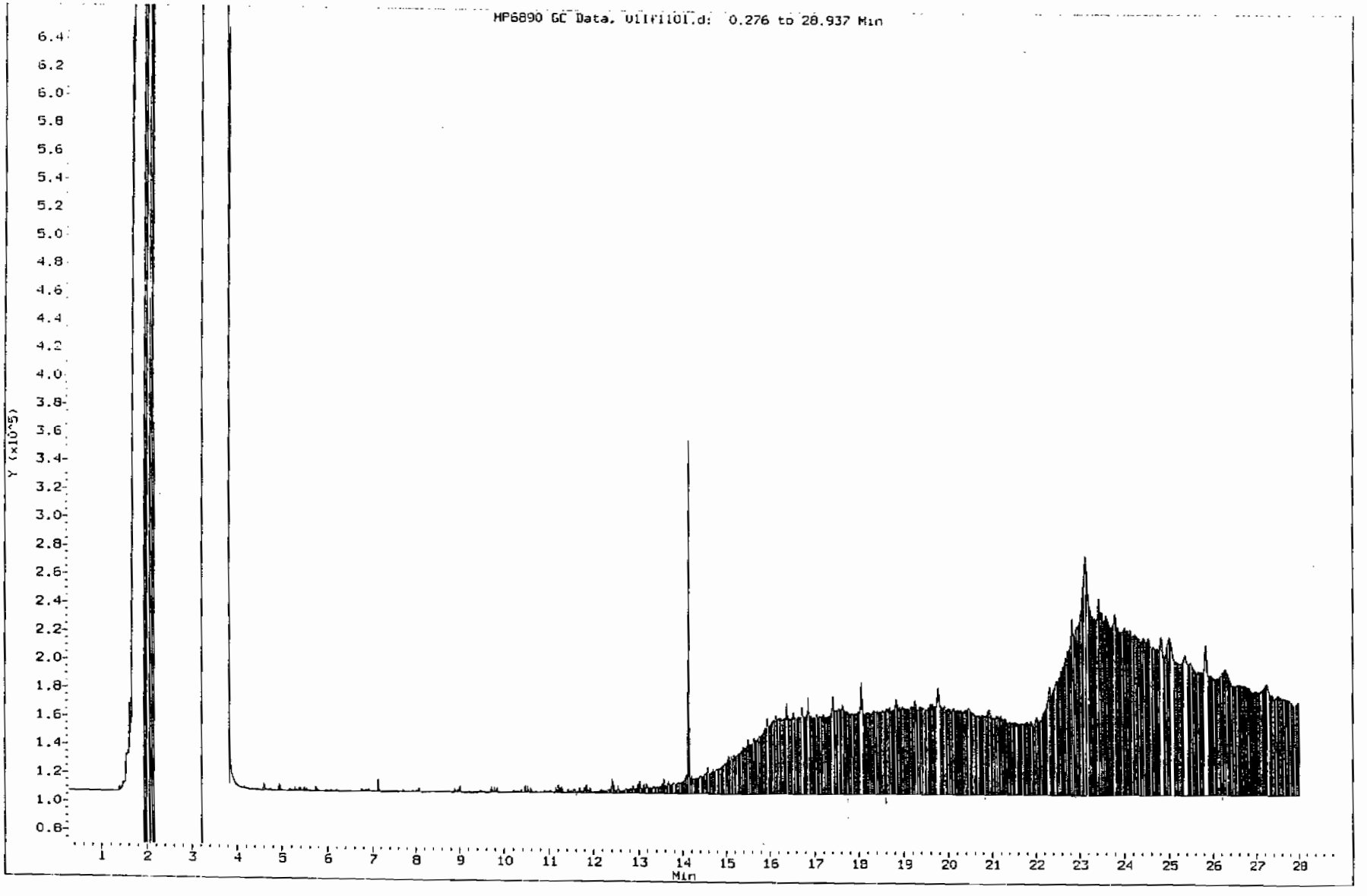

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–603	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241539004	Date Received:	11/20/2009 08:50	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13461	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 19:35	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	28.6	mg/kg	23.7	72.9

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DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/012f1201.d
Lab Smp Id: 241539004 Client Smp ID: RE03-09-13461
Inj Date : 01-DEC-2009 19:35
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241539004|10|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 12
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	8.70320	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			10566522	78.4833	28.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.134	14.143	-0.009	311165	1.46378	0.53	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /ohem/fid5.i/120109dr/012f1201.d
Date : 01-DEC-2009 19:35
Client ID: RE03-09-13461
Sample Info: |241539004|10|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

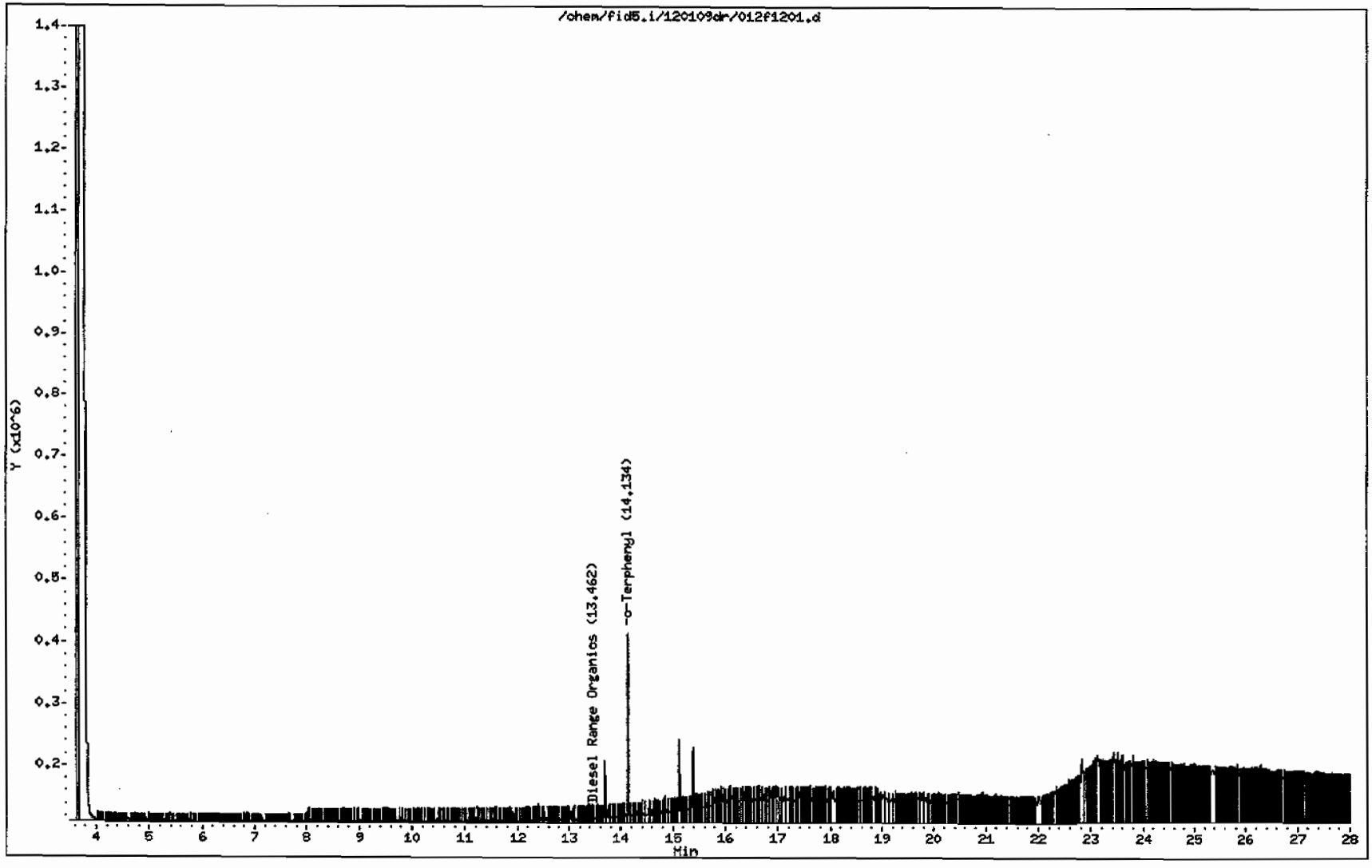

Data File: /chem/fid5.i/120109dr/012f1201.d
Injection Date: 01-DEC-2009 19:35
Instrument: fid5.i
Client Sample ID: RE03-09-13461

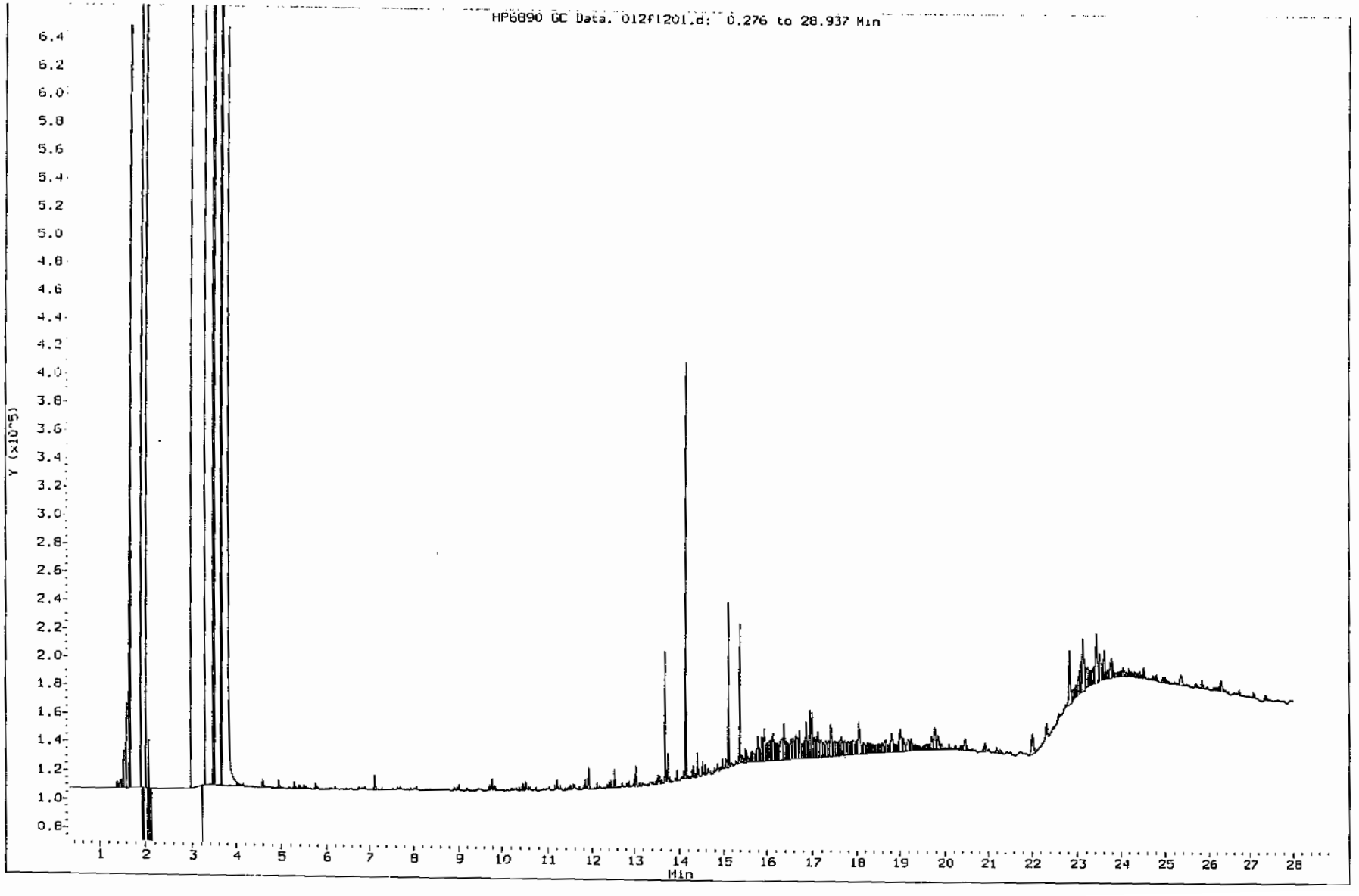

Data File: /chem/fid5.i/120109dr/012f1201.d
Injection Date: 01-DEC-2009 19:35
Instrument: fid5.i
Client Sample ID: RE03-09-13461

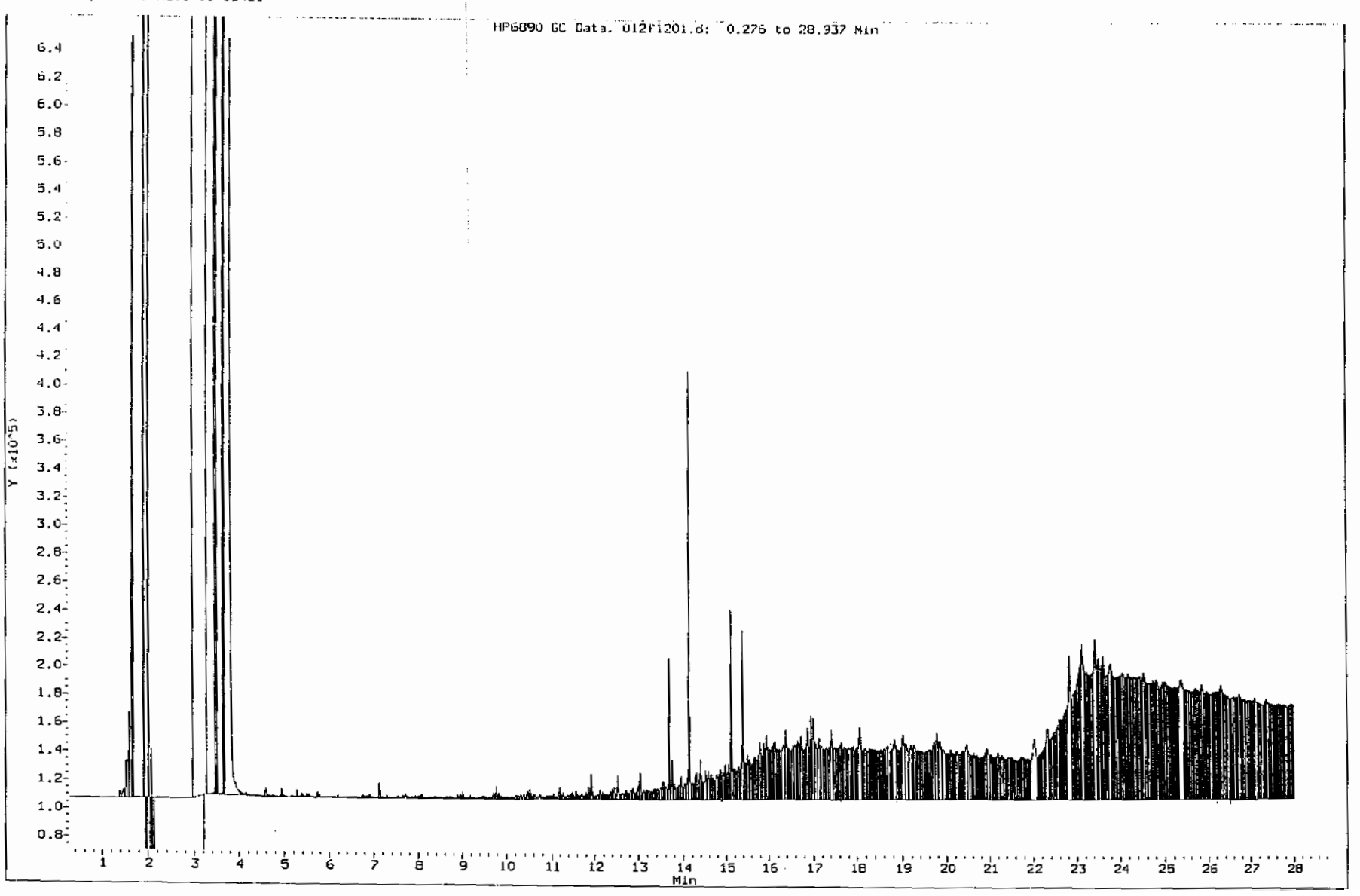

STANDARDS DATA

Report Date: 02-Dec-2009 01:12

Calibration History

Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 23:51	dro	/chem/fid5.i/113009dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 17:28	dro	/chem/fid5.i/113009dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 01-Dec-2009 09:57 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

	Compound	RT	RT Window	RF
	3 Decane (C10)	8.032	8.002-8.062	
S	1 Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2 o-Terphenyl	14.145	14.115-14.175	2.126e+05
	4 Octacosane (C28)	18.867	18.837-18.897	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Cal Date : 01-Dec-2009 09:57 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

Report Date: 02-Dec-2009 01:25

Calibration History

Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 20:14	dro	/chem/fid5.i/120109dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 13:52	dro	/chem/fid5.i/120109dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 02-Dec-2009 00:58 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

		Compound	RT	RT Window	RF
	3	Decane (C10)	8.030	8.000-8.060	
S	1	Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2	o-Terphenyl	14.143	14.113-14.173	2.126e+05
	4	Octacosane (C28)	18.876	18.846-18.906	
S	75	JP-4	6.750	3.500-10.000	
S	76	Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Cal Date : 02-Dec-2009 00:58 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 1728

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	141780.20	0.01	5.3	15.0
o-Terphenyl	212576.33	208247.31	0.01	-2.0	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 2351

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	152520.07	0.01	13.3	15.0
o-Terphenyl	212576.33	223357.08	0.01	5.1	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: FID5 Calibration Date: 12/01/09 Time: 1352

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	125736.25	0.01	-6.6	15.0
o-Terphenyl	212576.33	183804.11	0.01	-13.5	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: FID5 Calibration Date: 12/01/09 Time: 2014

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	130427.81	0.01	-3.1	15.0
o-Terphenyl	212576.33	190301.73	0.01	-10.5	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 30-NOV-2009 17:28
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			141780197	1000.00	1050
$ 2 o-Terphenyl					CAS #: 84-15-1
14.145	14.145	0.000	5206182	25.0000	24.5

Data File: /chem/fid5.i/113009dr/003f0301.d
Date : 30-NOV-2009 17:28
Client ID: BSTD01
Sample Info: !UFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

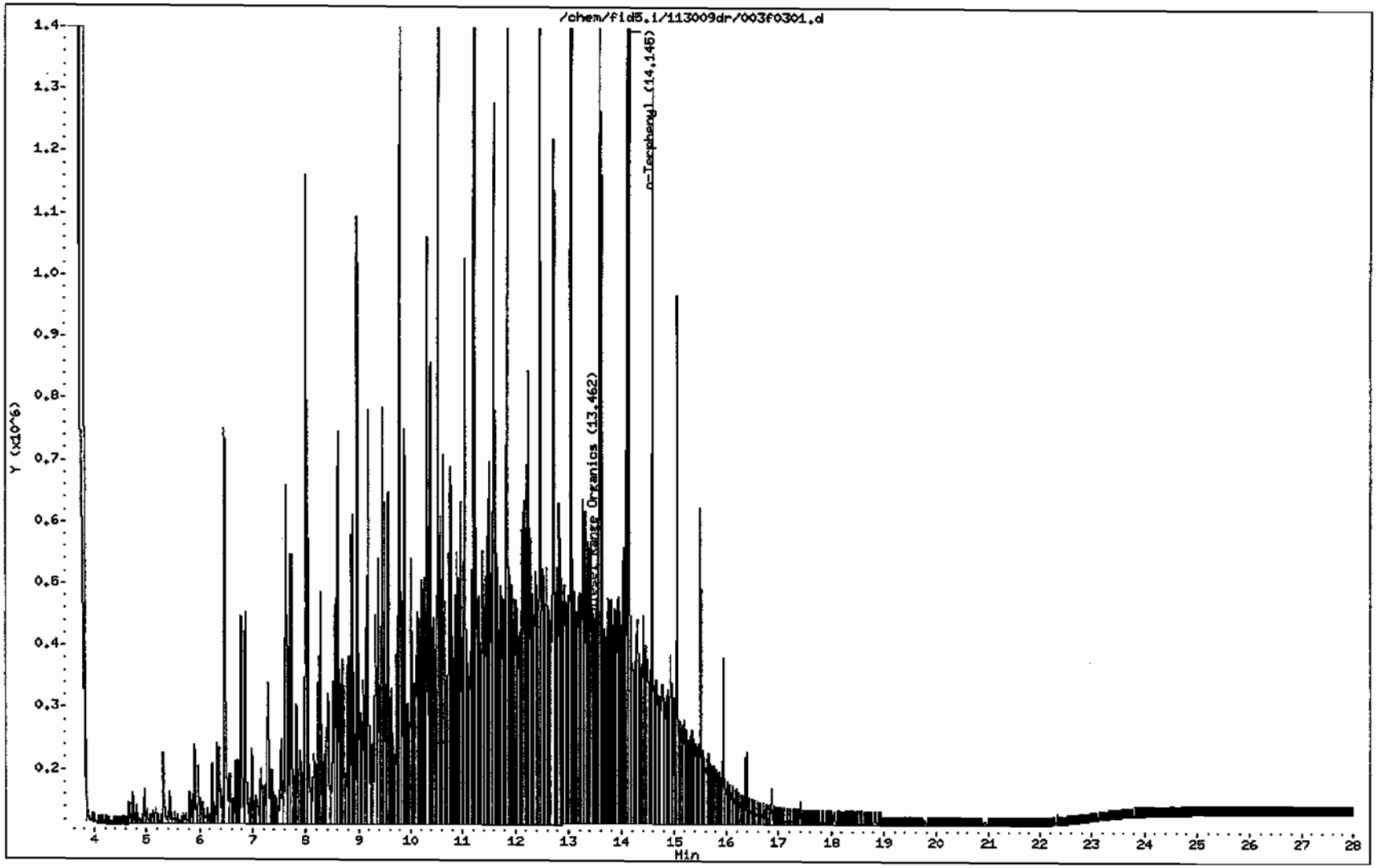

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 30-NOV-2009 23:51
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			152520070	1000.00	1130
$	2 o-Terphenyl					CAS #: 84-15-1
	14.146	14.145	0.001	5583926	25.0000	26.3

Data File: /chem/fid5.i/113009dr/013f1301.d
Date : 30-NOV-2009 23:51
Client ID: DSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

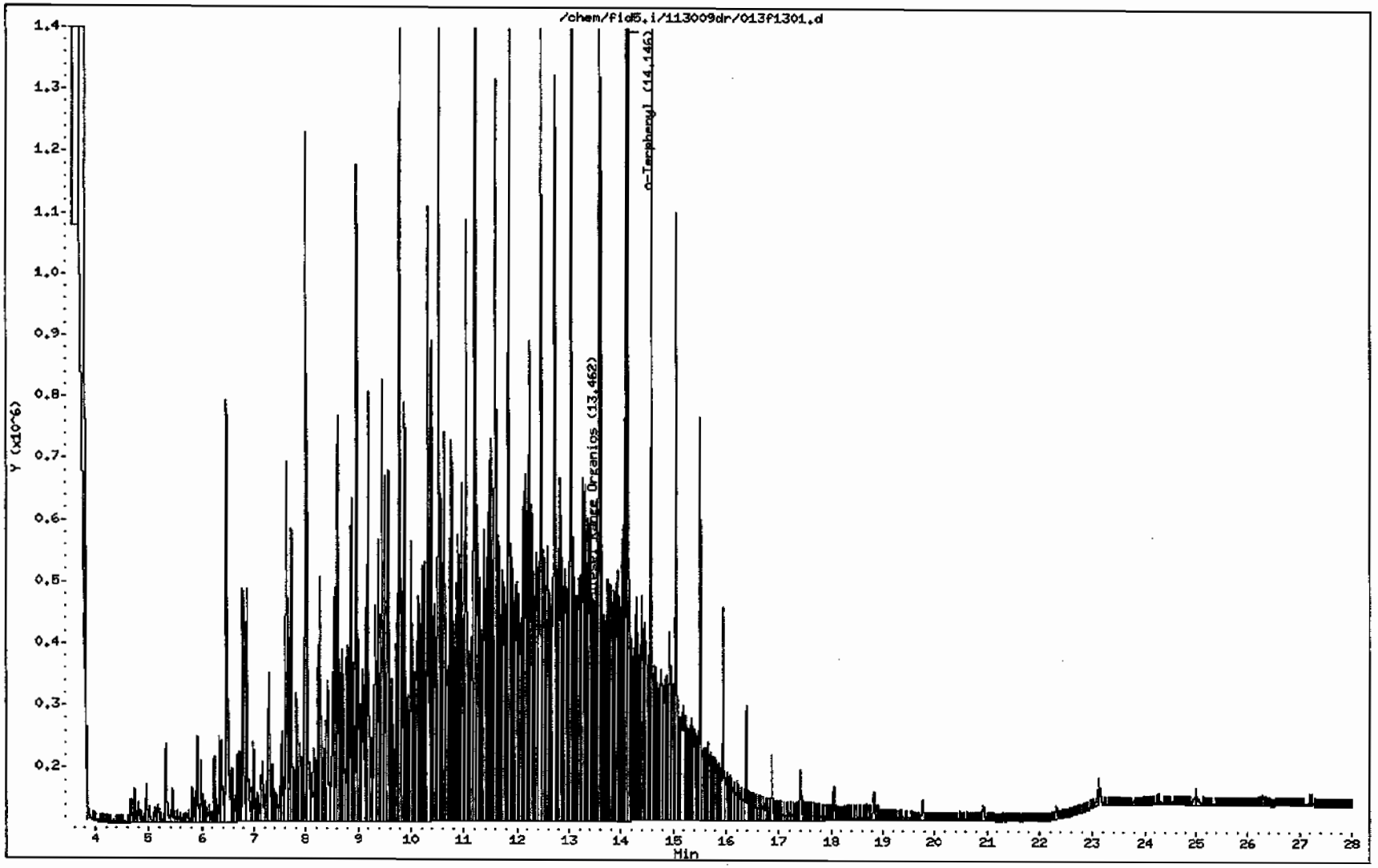

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 01-DEC-2009 13:52
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	8.008- 18.916			125736252	1000.00		934
$	2 o-Terphenyl						CAS #: 84-15-1
	14.143	14.143	0.000	4595102	25.0000		21.6

Data File: /chem/fid5.i/120109dr/003f0301.d
Date : 01-DEC-2009 13:52
Client ID: DSTD01
Sample Info: IUFI091118-01 D1

Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

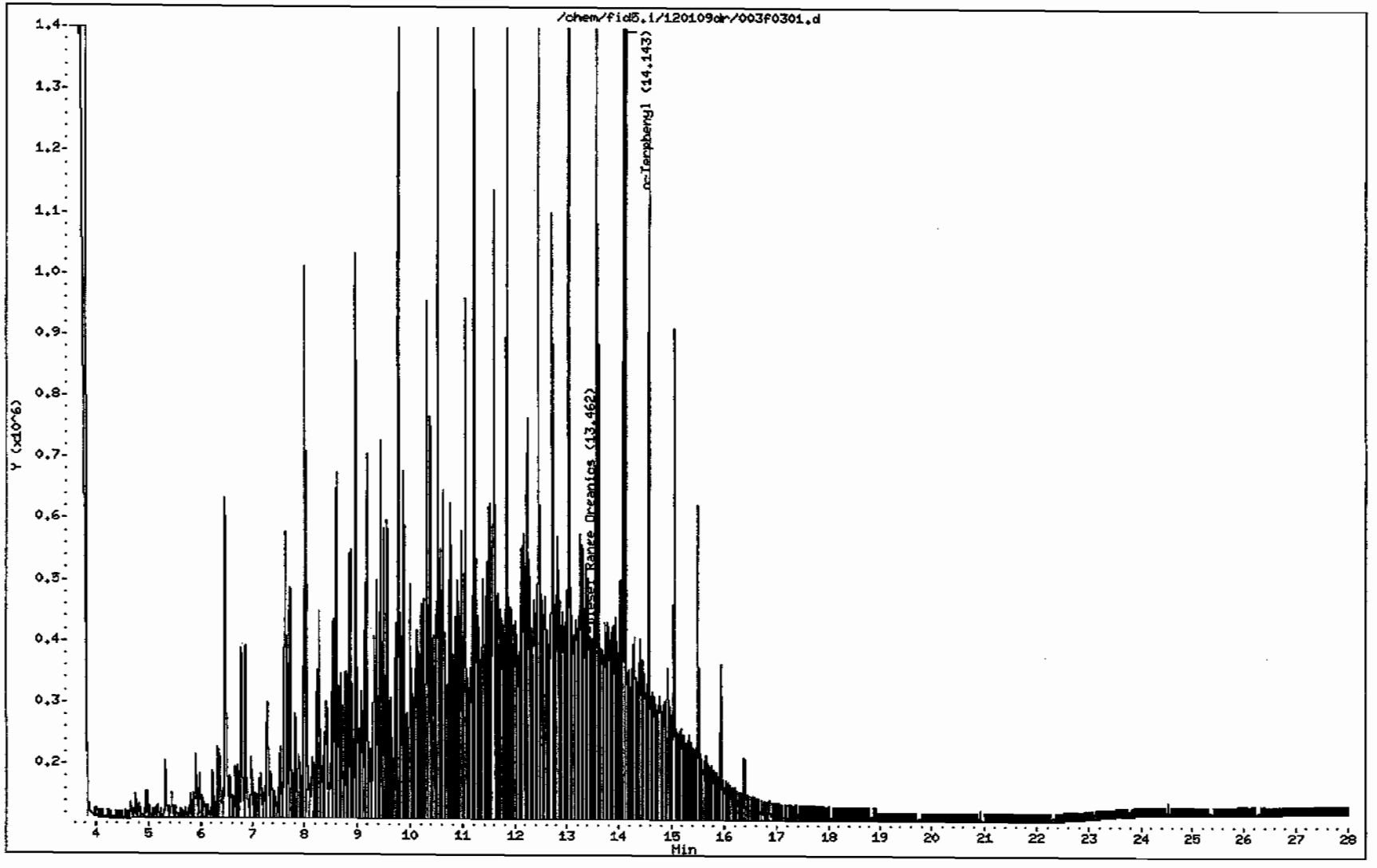

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 01-DEC-2009 20:14
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			130427807	1000.00	969
$	2 o-Terphenyl					CAS #: 84-15-1
	14.143	14.143	0.000	4757543	25.0000	22.4

Data File: /chem/fid5.i/120109dr/013f1301.d
Date : 01-DEC-2009 20:14
Client ID: BSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

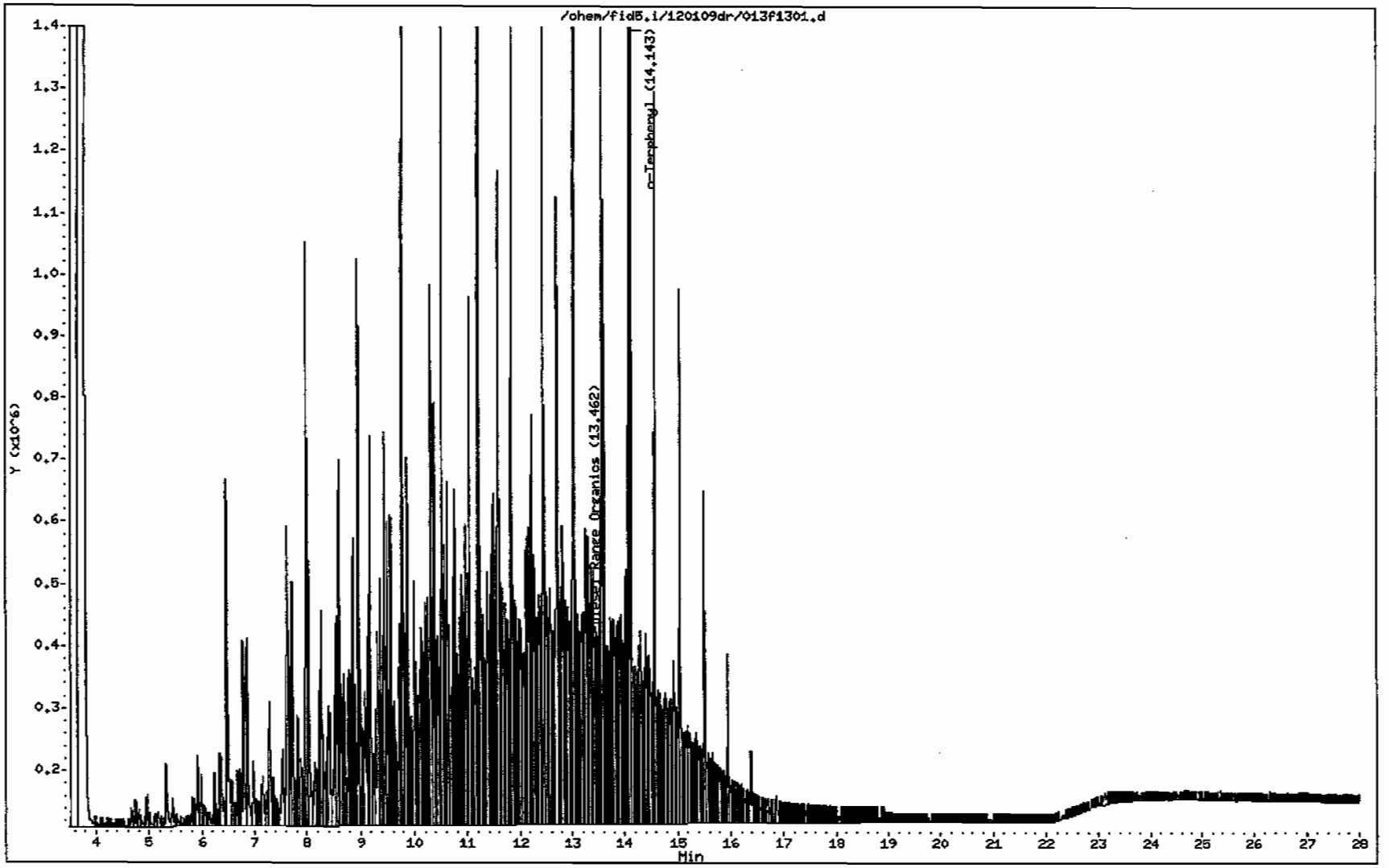

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	11/30/09	1612	14.14	
02	RTMARKER	UFI091013-03	11/30/09	1649		
03	DSTD01	UFI091118-01	11/30/09	1728	14.15	
04	DIBLK02	WFI091130-06	11/30/09	1805	14.14	
05	DBLK01	1201981721	11/30/09	1843	14.14	
06	DBLK01LCS	1201981724	11/30/09	1921	14.14	
07	ZZZZZ	ZZZZZ	11/30/09	2000	14.14	
08	ZZZZZ	ZZZZZ	11/30/09	2038	14.14	
09	ZZZZZ	ZZZZZ	11/30/09	2117	14.14	
10	ZZZZZ	ZZZZZ	11/30/09	2155	14.14	
11	ZZZZZ	ZZZZZ	11/30/09	2234	14.14	
12	ZZZZZ	ZZZZZ	11/30/09	2313	14.14	
13	DSTD02	UFI091118-01	11/30/09	2351	14.15	
14	DIBLK03	WFI091130-06	12/01/09	0029	14.14	
15	ZZZZZ	ZZZZZ	12/01/09	0107	14.14	
16	ZZZZZ	ZZZZZ	12/01/09	0145	14.14	
17	ZZZZZ	ZZZZZ	12/01/09	0224	14.14	
18	ZZZZZ	ZZZZZ	12/01/09	0303	14.13	
19	ZZZZZ	ZZZZZ	12/01/09	0341		
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.14

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	12/01/09	1236	14.14	
02	RTMARKER	UFI091013-03	12/01/09	1314		
03	DSTD01	UFI091118-01	12/01/09	1352	14.14	
04	DIBLK02	WFI091130-06	12/01/09	1430	14.14	
05	ZZZZZ	ZZZZZ	12/01/09	1508	14.14	
06	ZZZZZ	ZZZZZ	12/01/09	1545	14.14	
07	ZZZZZ	ZZZZZ	12/01/09	1623	14.14	
08	ZZZZZ	ZZZZZ	12/01/09	1702	14.13	
09	RE03-09-13462	241539001	12/01/09	1740	14.14	
10	RE03-09-13464	241539002	12/01/09	1819	14.14	
11	RE03-09-13463	241539003	12/01/09	1857	14.13	
12	RE03-09-13461	241539004	12/01/09	1935	14.13	
13	DSTD02	UFI091118-01	12/01/09	2014	14.14	
14	DIBLK03	WFI091130-06	12/01/09	2052	14.14	
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603			**Matrix:**	SOIL
Lab Sample ID:	1201981721				
Client Sample:	QC for batch 926870	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926870	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 18:43	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/005f0501.d
Lab Smp Id: 1201981721 Client Smp ID: DBLK01
Inj Date : 30-NOV-2009 18:43
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981721|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2500731	11.7639	0.39

Data File: /ohem/fid5.i/113009dr/005f0501.d
Date : 30-NOV-2009 18:43
Client ID: DBLK01
Sample Info: |1201981721|1|
Volume Injected (uL): 1.0
Column phase: DB-5HS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

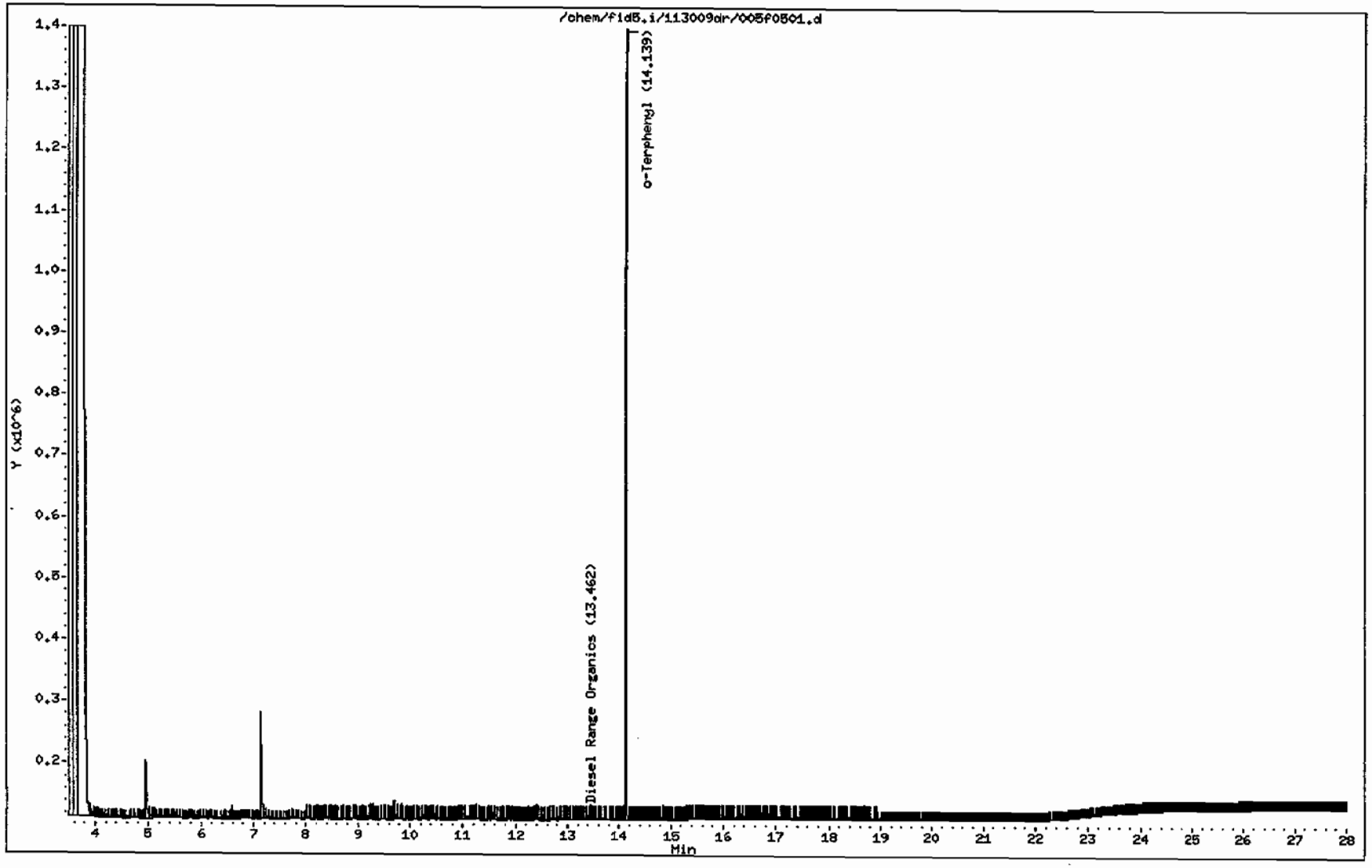

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-603			Matrix:	SOIL
Lab Sample ID:	1201981724				
Client Sample:	QC for batch 926870	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926870	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 19:21	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		27.7	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/006f0601.d
Lab Smp Id: 1201981724 Client Smp ID: DBLK01LCS
Inj Date : 30-NOV-2009 19:21
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981724|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			112073366	832.429	27.7
$	2 o-Terphenyl					CAS #: 84-15-1
	14.143	14.145	-0.002	3523785	16.5766	0.55

Data File: /chem/fid5.i/113009dr/006f0601.d
Date : 30-NOV-2009 19:21
Client ID: DBLK01LCS
Sample Info: |120198172411|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

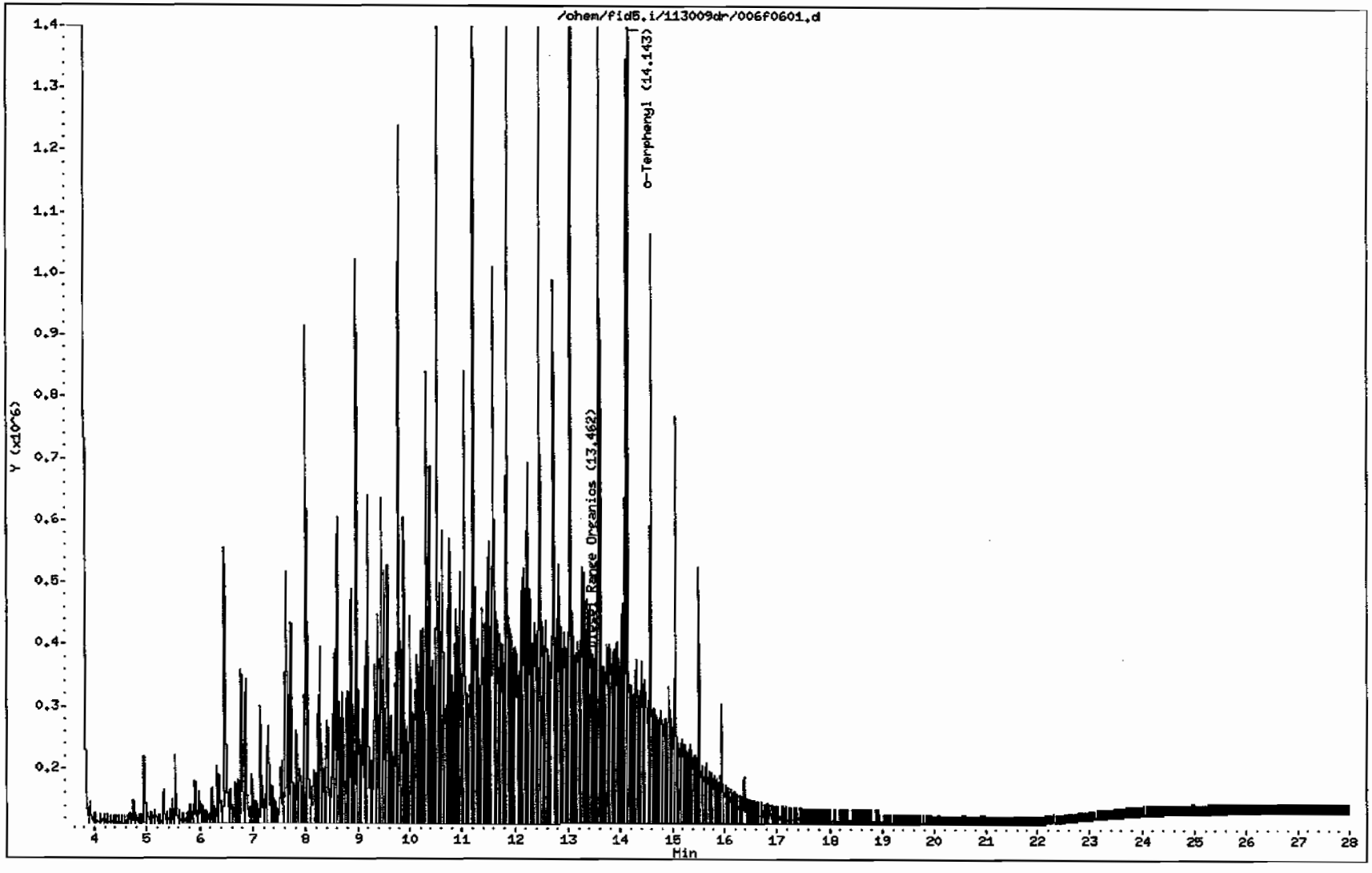

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.1

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORH	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MBSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359		1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359		1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359		1.0	LANL	USE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359		1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359		1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359		1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359		1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359		1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08		SDGa26875		1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46		SDGa26875		1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359		1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359		1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359		1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359		1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359		1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359		1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875	1.0		CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359	1.0	LANL	USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359	1.0	LANL	USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359	1.0	LANL	USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359	1.0	LANL	USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406	1.0	LANL	USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406		1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406		1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875		1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875		1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875		1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385		1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385		1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385		1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385		1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385		1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385		1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385		1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385		1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385		1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42		SDGa26875		1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20		SDGa26875		1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58		SDGa26875		1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35		SDGa26875		1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 12/01/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:113009DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	30-NOV-2009 16:12		SDGa01714	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	30-NOV-2009 16:49		SDGa01714	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	30-NOV-2009 17:28		SDGa01714	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	30-NOV-2009 18:05		SDGa01714	1.0		CLEAN
005f0501.d	1201981721	KXR2	30-NOV-2009 18:43	926871	SDGa01714	1.0	MB	USE
006f0601.d	1201981724	KXR2	30-NOV-2009 19:21	926871		1.0	LCS	USE
007f0701.d	241417001	KXR2	30-NOV-2009 20:00	926871	10-575	1.0	LANL	USE
008f0801.d	1201981722	KXR2	30-NOV-2009 20:38	926871	10-575	1.0	MS	USE
009f0901.d	1201981723	KXR2	30-NOV-2009 21:17	926871	10-575	1.0	MSD	USE
010f1001.d	241417002	KXR2	30-NOV-2009 21:55	926871	10-575	1.0	LANL	USE
011f1101.d	241423004	KXR2	30-NOV-2009 22:34	926871	10-578	1.0	LANL	USE
012f1201.d	241423005	KXR2	30-NOV-2009 23:13	926871	10-578	1.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	30-NOV-2009 23:51		SDGa01714	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	01-DEC-2009 00:29		SDGa01714	1.0		CLEAN
015f1501.d	241503002	KXR2	01-DEC-2009 01:07	926871	10-589	1.0	LANL	USE, INSTRUMENT SHUTDOWN

Instrument Batch: /chem/fid5.i/113009dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241503003	KXR2	01-DEC-2009 01:45	926871	10-589	1.0	LANL	USE, INSTRUMENT SHUTDOWN

017f1701.d	241503004	KXR2	01-DEC-2009 02:24	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN
018f1801.d	241524002	KXR2	01-DEC-2009 03:03	926871	10-600	10.0	LANL	DUSE,INSTRUMENT SHUTDOWN
019f1901.d	241539001	KXR2	01-DEC-2009 03:41	926871	10-603	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.1

DATE: 12/02/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:120109DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	01-DEC-2009 12:36		SDGa19497	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	01-DEC-2009 13:14		SDGa19497	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	01-DEC-2009 13:52		SDGa19497	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	01-DEC-2009 14:30		SDGa19497	1.0		CLEAN
005f0501.d	241503002	KXR2	01-DEC-2009 15:08	926871	10-589	1.0	LANL	USE
006f0601.d	241503003	KXR2	01-DEC-2009 15:45	926871	10-589	1.0	LANL	USE
007f0701.d	241503004	KXR2	01-DEC-2009 16:23	926871	10-589	1.0	LANL	USE
008f0801.d	241524002	KXR2	01-DEC-2009 17:02	926871	10-600	10.0	LANL	USE
009f0901.d	241539001	KXR2	01-DEC-2009 17:40	926871	10-603	1.0	LANL	USE
010f1001.d	241539002	KXR2	01-DEC-2009 18:19	926871	10-603	1.0	LANL	USE
011f1101.d	241539003	KXR2	01-DEC-2009 18:57	926871	10-603	10.0	LANL	USE
012f1201.d	241539004	KXR2	01-DEC-2009 19:35	926871	10-603	10.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	01-DEC-2009 20:14		SDGa19497	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	01-DEC-2009 20:52		SDGa19497	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926870 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981721 MB	29-NOV-2009 20:04:50	30	1	0.03333
1201981724 LCS	29-NOV-2009 20:04:50	30	1	0.03333
241417001	29-NOV-2009 20:04:50	30.17	1	0.03315
1201981722 MS (241417001)	29-NOV-2009 20:04:50	30.13	1	0.03319
1201981723 MSD (241417001)	29-NOV-2009 20:04:50	30.17	1	0.03315
241417002	29-NOV-2009 20:04:50	30.18	1	0.03313
241423004	29-NOV-2009 20:04:50	30.18	1	0.03313
241423005	29-NOV-2009 20:04:50	30.04	1	0.03329
241503002	29-NOV-2009 20:04:50	30.11	1	0.03321
241503003	29-NOV-2009 20:04:50	30.1	1	0.03322
241503004	29-NOV-2009 20:04:50	30.19	1	0.03312
241524002	29-NOV-2009 20:04:50	30.09	1	0.03323
241539001	29-NOV-2009 20:04:50	30.02	1	0.03331
241539002	29-NOV-2009 20:04:50	30.05	1	0.03328
241539003	29-NOV-2009 20:04:50	30.03	1	0.0333
241539004	29-NOV-2009 20:04:50	30.03	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981724	TPH DRO LCS	UE091030-08	1	mL
MS	1201981722	TPH DRO LCS	UE091030-08	1	mL
MSD	1201981723	TPH DRO LCS	UE091030-08	1	mL
SURR	All	20 ppm surrogate	WE091121-04	1	mL
REGNT	All	Methylene Chloride	1234878-D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/008f0801.d
Lab Smp Id: 1201981722 Client Smp ID: RE03-09-13812MS
Inj Date : 30-NOV-2009 20:38
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981722|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	8.008- 18.916			105879710	786.426	28.1	
$	2 o-Terphenyl					CAS #: 84-15-1	
	14.142	14.145	-0.003	2871765	13.5093	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/008f0801.d
Date : 30-NOV-2009 20:38
Client ID: RE03-09-13812MS
Sample Info: |1201981722|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

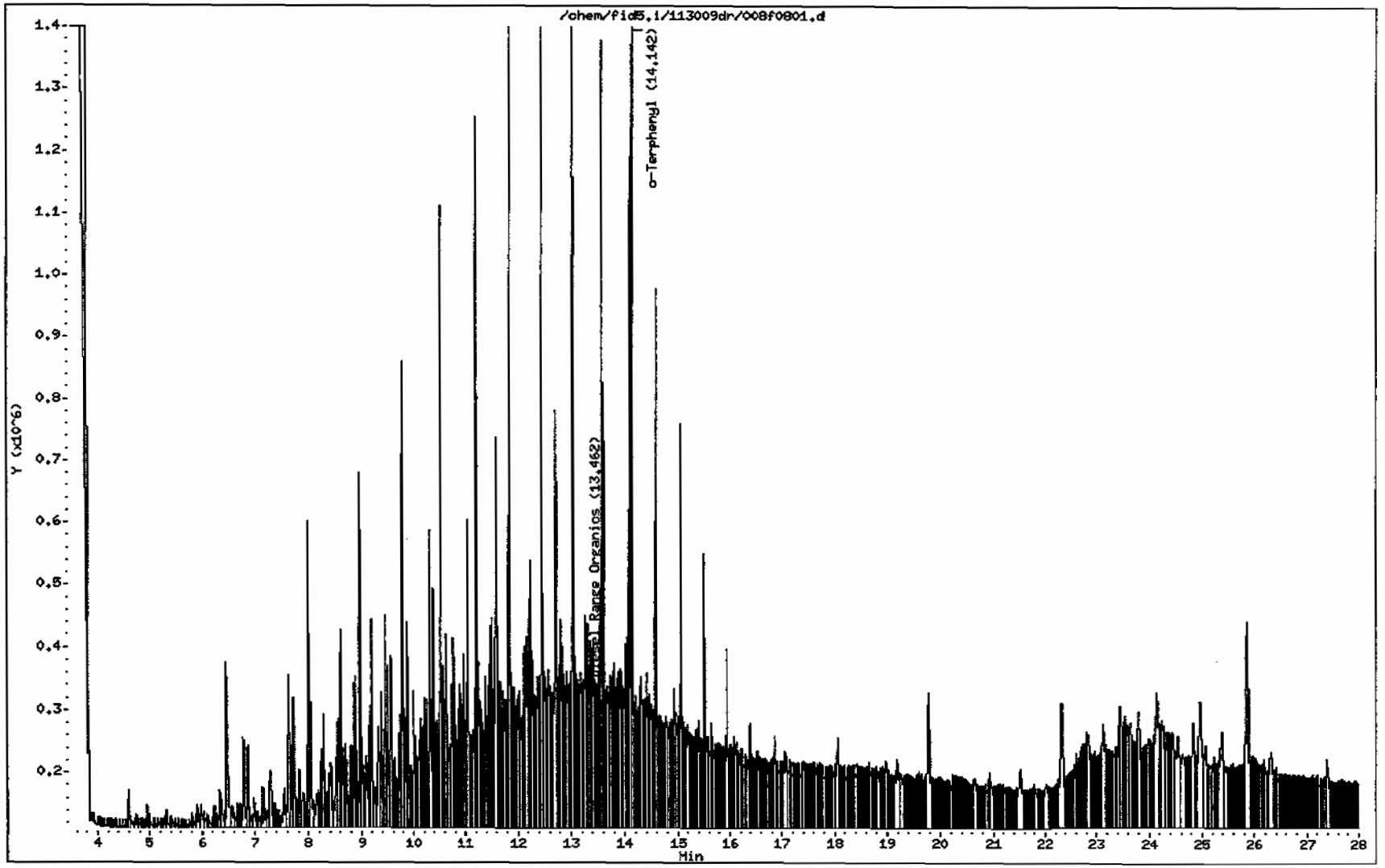

Data File: /chem/fid5.i/113009dr/008f0801.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

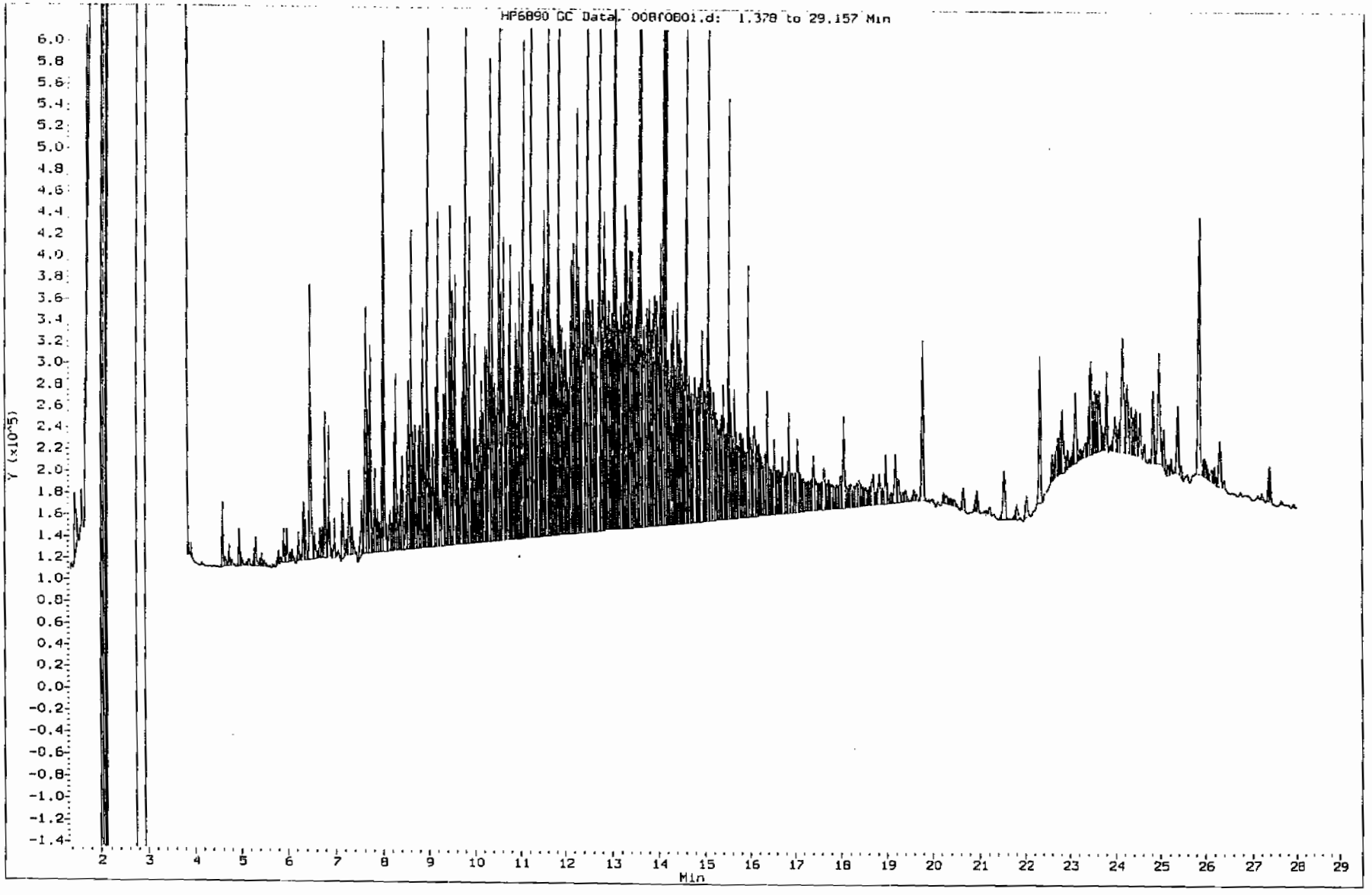

Data File: /chem/fid5.i/113009dr/008f0801.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

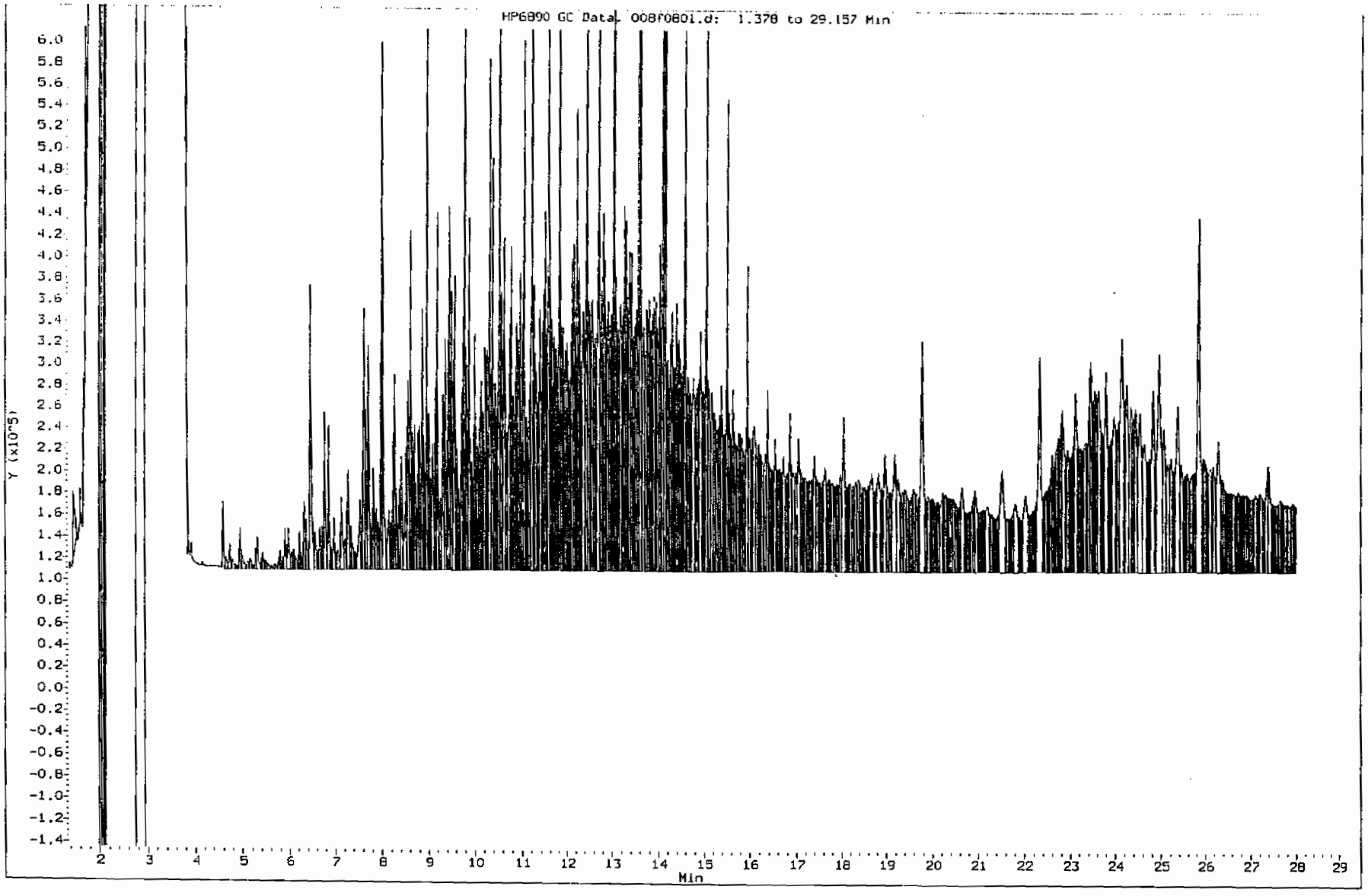

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/009f0901.d
Lab Smp Id: 1201981723 Client Smp ID: RE03-09-13812MSD
Inj Date : 30-NOV-2009 21:17
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981723|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			105621807	784.510	28.0	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.141	14.145	-0.004	2830842	13.3168	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/009f0901.d
Date : 30-NOV-2009 21:17
Client ID: RE03-09-13812MSD
Sample Info: !120198172311!
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

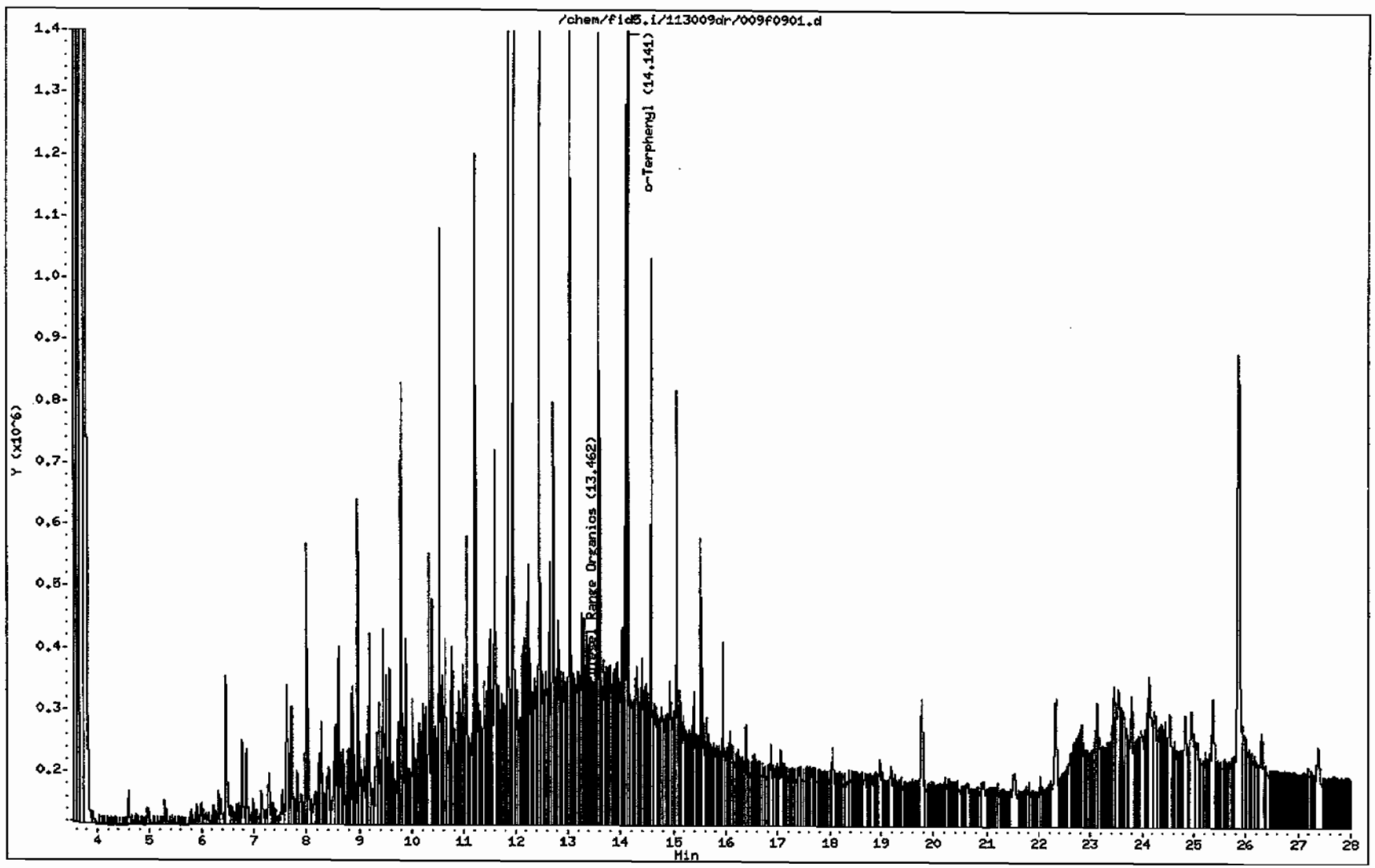

Data File: /chem/fid5.i/113009dr/0090f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

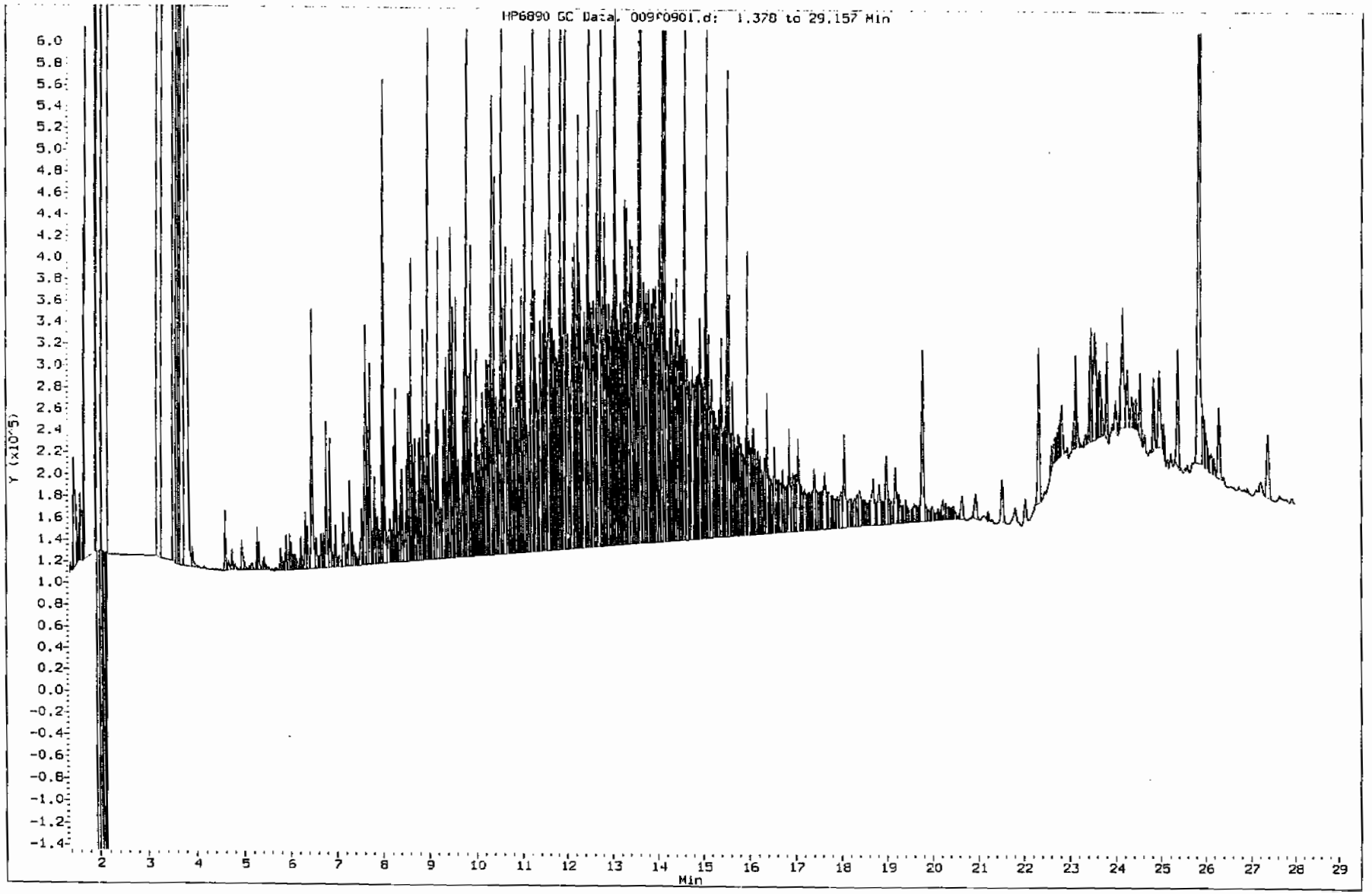

Data File: /chem/fid5.i/113009dr/0090f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

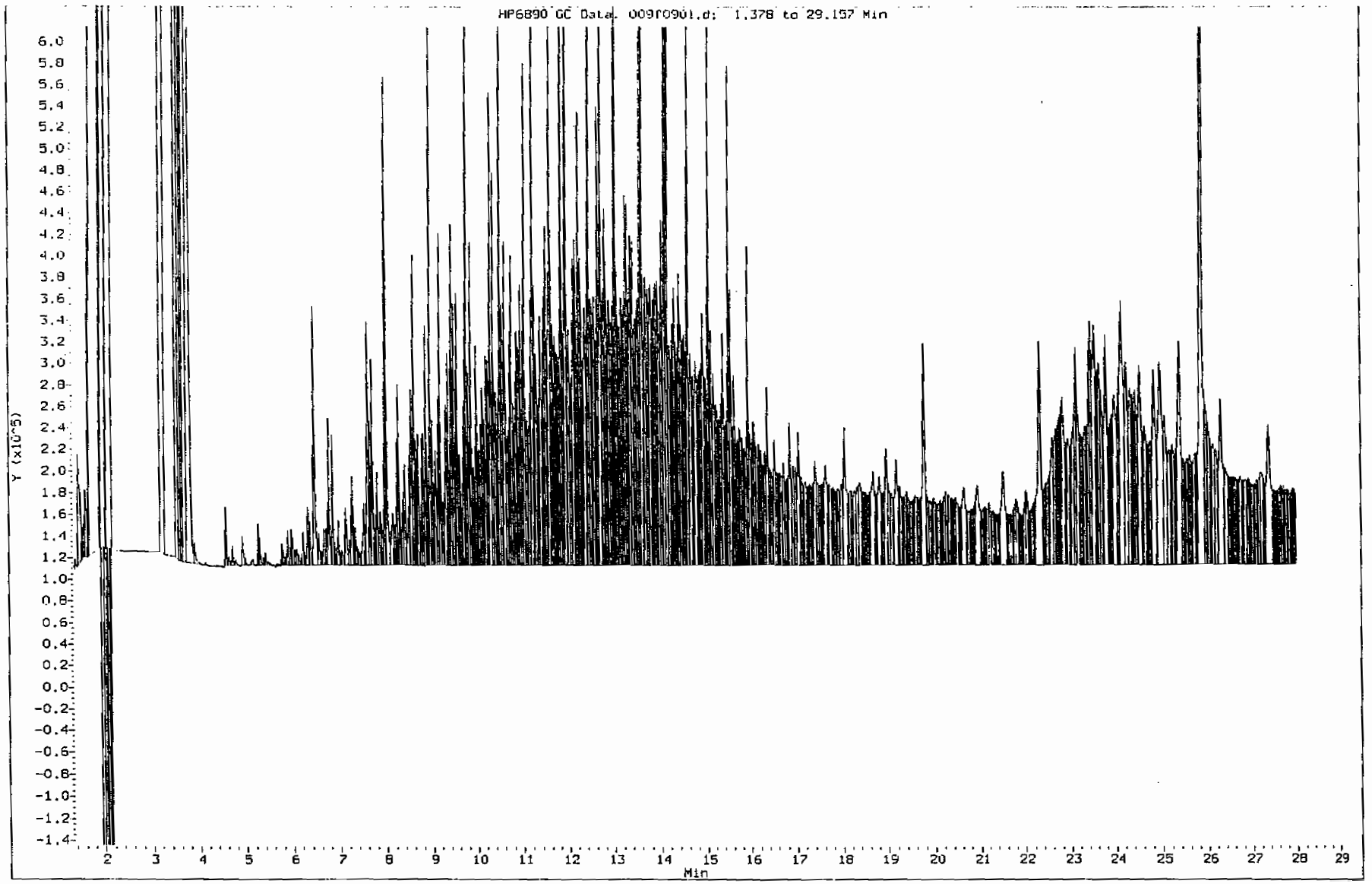

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-603

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927078
Prep Batch Number:	927077

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241539001	RE03-09-13462
241539002	RE03-09-13464
241539003	RE03-09-13463
241539004	RE03-09-13461
1201982132	Method Blank (MB)
1201982135	Laboratory Control Sample (LCS)
1201982133	241534001(RE03-09-13975) Matrix Spike (MS)
1201982134	241534001(RE03-09-13975) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Surrogate recovery did not meet the acceptance criteria in the standards analyzed for this SDG; however this had no adverse effects on the data as all samples in this SDG met surrogate recovery acceptance criteria very well.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-601) was selected for the matrix spike and matrix spike duplicate analysis for this batch.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
Samples 241539001 (RE03-09-13462) (1:5), 241539002 (RE03-09-13464) (1:5), 241539003 (RE03-09-13463) (1:25) and 241539004 (RE03-09-13461) (1:5) were diluted prior to analysis due to the oily matrix of the extracts.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to

eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimi Cao Date: 12/17/09

Roadmap for LANL 10-603 PCB

This roadmap was analyzed by jen01212 on 12-02-2009, 15:10.
This roadmap was reviewed by rob01090 on 12-08-2009, 17:09.
This roadmap was packaged by sha01289 on 12-15-2009, 18:37.
This roadmap was validated by jim01140 on 12-17-2009, 11:57.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120109.b/087f8701.d	241539001	sample	02-DEC-2009	00:45	10-603.sub	RE03-09-13462	5.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/088f8801.d	241539002	sample	02-DEC-2009	00:56	10-603.sub	RE03-09-13464	5.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/089f8901.d	241539003	sample	02-DEC-2009	01:07	10-603.sub	RE03-09-13463	25.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/090f9001.d	241539004	sample	02-DEC-2009	01:18	10-603.sub	RE03-09-13461	5.00000	927078	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120109.b/087b8701.d	241539001	sample	02-DEC-2009	00:45	10-603.sub	RE03-09-13462	5.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/088b8801.d	241539002	sample	02-DEC-2009	00:56	10-603.sub	RE03-09-13464	5.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/089b8901.d	241539003	sample	02-DEC-2009	01:07	10-603.sub	RE03-09-13463	25.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/090b9001.d	241539004	sample	02-DEC-2009	01:18	10-603.sub	RE03-09-13461	5.00000	927078	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120109.b/074f7401-1.d	1201982132	mb	01-DEC-2009	22:20	10-603.sub	PBLK01	1.00000	927078	
☐	N	/chem/ecd2a.i/120109.b/075f7501-1.d	1201982135	lcs	01-DEC-2009	22:31	10-603.sub	PBLK01LCS	1.00000	927078	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120109.b/074b7401-1.d	1201982132	mb	01-DEC-2009	22:20	10-603.sub	PBLK01	1.00000	927078	
☐	N	/chem/ecd2a.i/120109.b/075b7501-1.d	1201982135	lcs	01-DEC-2009	22:31	10-603.sub	PBLK01LCS	1.00000	927078	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13461	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/02/2009 01:18	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	090f9001.d	**Column:**	1 CLP1	**Level:**	LOW
	090b9001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.1	ug/kg	6.04	18.1	1
11104–28–2	Aroclor–1221	U	18.1	ug/kg	6.04	18.1	1
11141–16–5	Aroclor–1232	U	18.1	ug/kg	6.04	18.1	1
53469–21–9	Aroclor–1242	U	18.1	ug/kg	6.04	18.1	1
12672–29–6	Aroclor–1248	U	18.1	ug/kg	6.04	18.1	1
11097–69–1	Aroclor–1254		29.7	ug/kg	6.04	18.1	1
11096–82–5	Aroclor–1260		58.9	ug/kg	6.04	18.1	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13462**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**12/02/2009 00:45**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.19 g**	**Final Volume:**	**1 mL**
Data File:	**087f8701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	087b8701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.8	ug/kg	5.92	17.8	1
11104–28–2	Aroclor–1221	U	17.8	ug/kg	5.92	17.8	1
11141–16–5	Aroclor–1232	U	17.8	ug/kg	5.92	17.8	1
53469–21–9	Aroclor–1242	U	17.8	ug/kg	5.92	17.8	1
12672–29–6	Aroclor–1248	U	17.8	ug/kg	5.92	17.8	1
11097–69–1	Aroclor–1254	U	17.8	ug/kg	5.92	17.8	1
11096–82–5	Aroclor–1260		43.4	ug/kg	5.92	17.8	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13463**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**25**
Run Date:	**12/02/2009 01:07**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**089f8901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	089b8901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	87.0	ug/kg	29.0	87.0	1
11104–28–2	Aroclor–1221	U	87.0	ug/kg	29.0	87.0	1
11141–16–5	Aroclor–1232	U	87.0	ug/kg	29.0	87.0	1
53469–21–9	Aroclor–1242	U	87.0	ug/kg	29.0	87.0	1
12672–29–6	Aroclor–1248	U	87.0	ug/kg	29.0	87.0	1
11097–69–1	Aroclor–1254	U	87.0	ug/kg	29.0	87.0	1
11096–82–5	Aroclor–1260	U	87.0	ug/kg	29.0	87.0	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	3.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13464	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/02/2009 00:56	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	088f8801.d	**Column:**	1 CLP1	**Level:**	LOW
	088b8801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.2	ug/kg	5.72	17.2	1
11104–28–2	Aroclor–1221	U	17.2	ug/kg	5.72	17.2	1
11141–16–5	Aroclor–1232	U	17.2	ug/kg	5.72	17.2	1
53469–21–9	Aroclor–1242	U	17.2	ug/kg	5.72	17.2	1
12672–29–6	Aroclor–1248	U	17.2	ug/kg	5.72	17.2	1
11097–69–1	Aroclor–1254	U	17.2	ug/kg	5.72	17.2	1
11096–82–5	Aroclor–1260	U	17.2	ug/kg	5.72	17.2	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-603

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201982132	MB for batch 927077	90		96		78		80	
1201982135	LCS for batch 927077	89		95		79		81	
241539001	RE03-09-13462	65	D	67	D	48	D	47	D
241539002	RE03-09-13464	64	D	65	D	47	D	45	D
241539003	RE03-09-13463	73	D	68	D	60	D	52	D
241539004	RE03-09-13461	54	D	55	D	38	D	35	D

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–603
Client ID: LCS for batch 927077
Lab Sample ID: 1201982135
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 22:31
Dilution: 1
Prep Batch ID: 927077
Batch ID: 927078

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	LCS	Aroclor–1016	33.3	0.0	29.1	87	41–110
11096–82–5	LCS	Aroclor–1260	33.3	0.0	31.4	94	48–110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–601**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03–09–13975MS**	**Matrix:**	**S**
Lab Sample ID:	**1201982133**	**%Moisture:**	**17.8**
Instrument:	**ECD2A.I**	**Analysis Date:**	**12/01/2009 22:53**
Analyst:	**JAOC**	**Prep Batch ID:**	**927077**
Inj. Vol:	**1 uL**	**Batch ID:**	**927078**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	MS	Aroclor–1016	40.5	0.00	U	34.4	85	23–117
11096–82–5	MS	Aroclor–1260	40.5	0.00	U	40.0	99	27–116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–601
Client ID: RE03–09–13975MSD
Lab Sample ID: 1201982134
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 17.8
Analysis Date: 12/01/2009 23:04
Dilution: 1
Prep Batch ID: 927077
Batch ID: 927078

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	40.3	0.00	U	35.3	88	23–117	3	0–30
11096–82–5	MSD Aroclor–1260	40.3	0.00	U	40.8	101	27–116	2	0–30

Method Blank Summary

SDG Number:	10-603	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927077	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	074b7401-1.d 074f7401-1.d
Lab Sample ID:	1201982132			Analyzed:	12/01/09 22:20
Column:	CLP2 CLP1	Prep Date:	11/29/2009 15:56		
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927077	1201982135	075f7501-1.d 075b7501-1.d	12/01/09	2231
04 RE03-09-13462	241539001	087f8701.d 087b8701.d	12/02/09	0045
05 RE03-09-13464	241539002	088f8801.d 088b8801.d	12/02/09	0056
06 RE03-09-13463	241539003	089f8901.d 089b8901.d	12/02/09	0107
07 RE03-09-13461	241539004	090f9001.d 090b9001.d	12/02/09	0118

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13461**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**12/02/2009 01:18**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.19 g**	**Final Volume:**	**1 mL**
Data File:	**090f9001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	090b9001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.1	ug/kg	6.04	18.1	1
11104–28–2	Aroclor–1221	U	18.1	ug/kg	6.04	18.1	1
11141–16–5	Aroclor–1232	U	18.1	ug/kg	6.04	18.1	1
53469–21–9	Aroclor–1242	U	18.1	ug/kg	6.04	18.1	1
12672–29–6	Aroclor–1248	U	18.1	ug/kg	6.04	18.1	1
11097–69–1	Aroclor–1254		29.7	ug/kg	6.04	18.1	1
11096–82–5	Aroclor–1260		58.9	ug/kg	6.04	18.1	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/090f9001.d
Lab Smp Id: 241539004 Client Smp ID: RE03-09-13461
Inj Date : 02-DEC-2009 01:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539004|5|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13461|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 90
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	8.70320	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	1245586	21.5831	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	840486	15.3292	2.8	80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1		
3.246	3.245	0.001	250232	120.301	21.8	80.00- 120.00	100.00(M)
3.428	3.427	0.001	159566	57.5606	10.4	115.38- 155.38	63.77
3.697	3.696	0.001	534961	142.946	25.9	165.59- 205.59	213.79
3.890	3.887	0.003	105584	37.9429	6.9	116.99- 156.99	42.19

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.017	4.017	0.000	1267098	459.086	83.3	114.90- 154.90	506.37
Average of Peak Concentrations =					29.7		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	1267098	311.572	56.5	80.00- 120.00	100.00(M)
4.289	4.288	0.001	833048	329.487	59.8	39.98- 79.98	65.74
4.454	4.454	0.000	867411	335.789	60.9	41.33- 81.33	68.46
4.667	4.666	0.001	1924022	318.752	57.8	123.75- 163.75	151.84
4.856	4.855	0.001	956574	328.500	59.6	48.23- 88.23	75.49
Average of Peak Concentrations =					58.9		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/090f9001.d
Date : 02-DEC-2009 01:18
Client ID: RE03-09-13461
Sample Info: |241539004|5|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

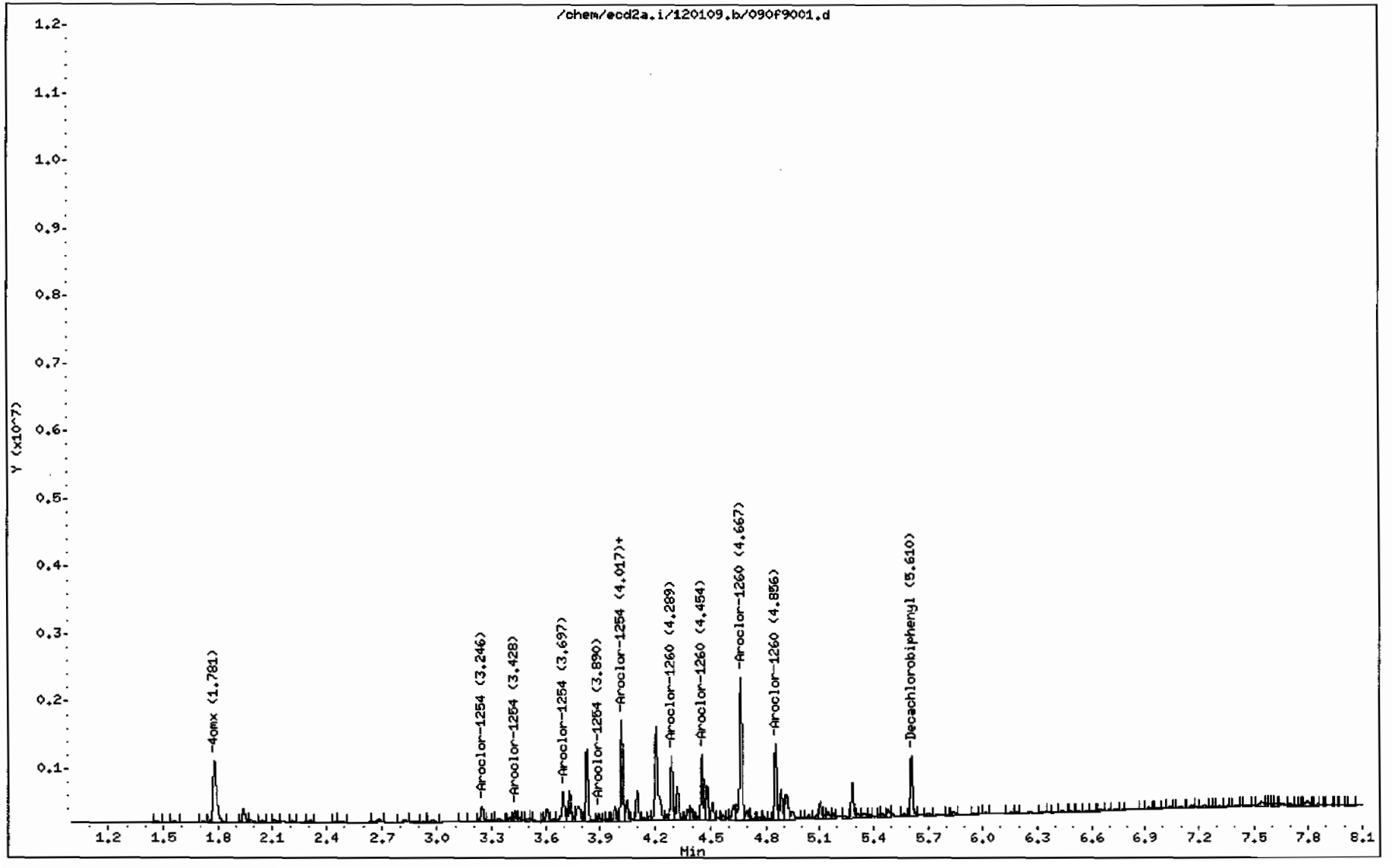

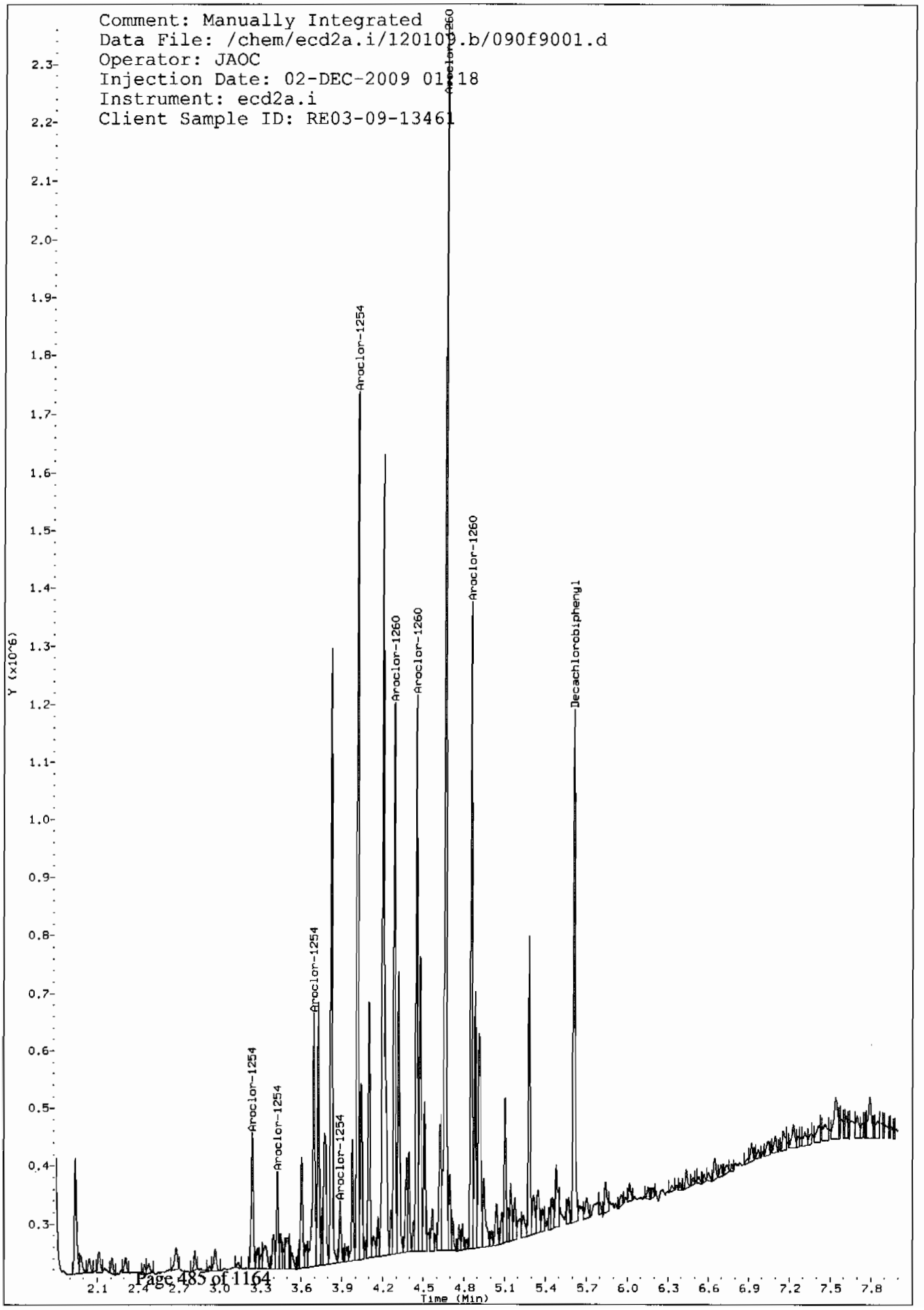
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/090f9001.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:18
Instrument: ecd2a.i
Client Sample ID: RE03-09-13461
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Y (x10^6)
Time (Min)

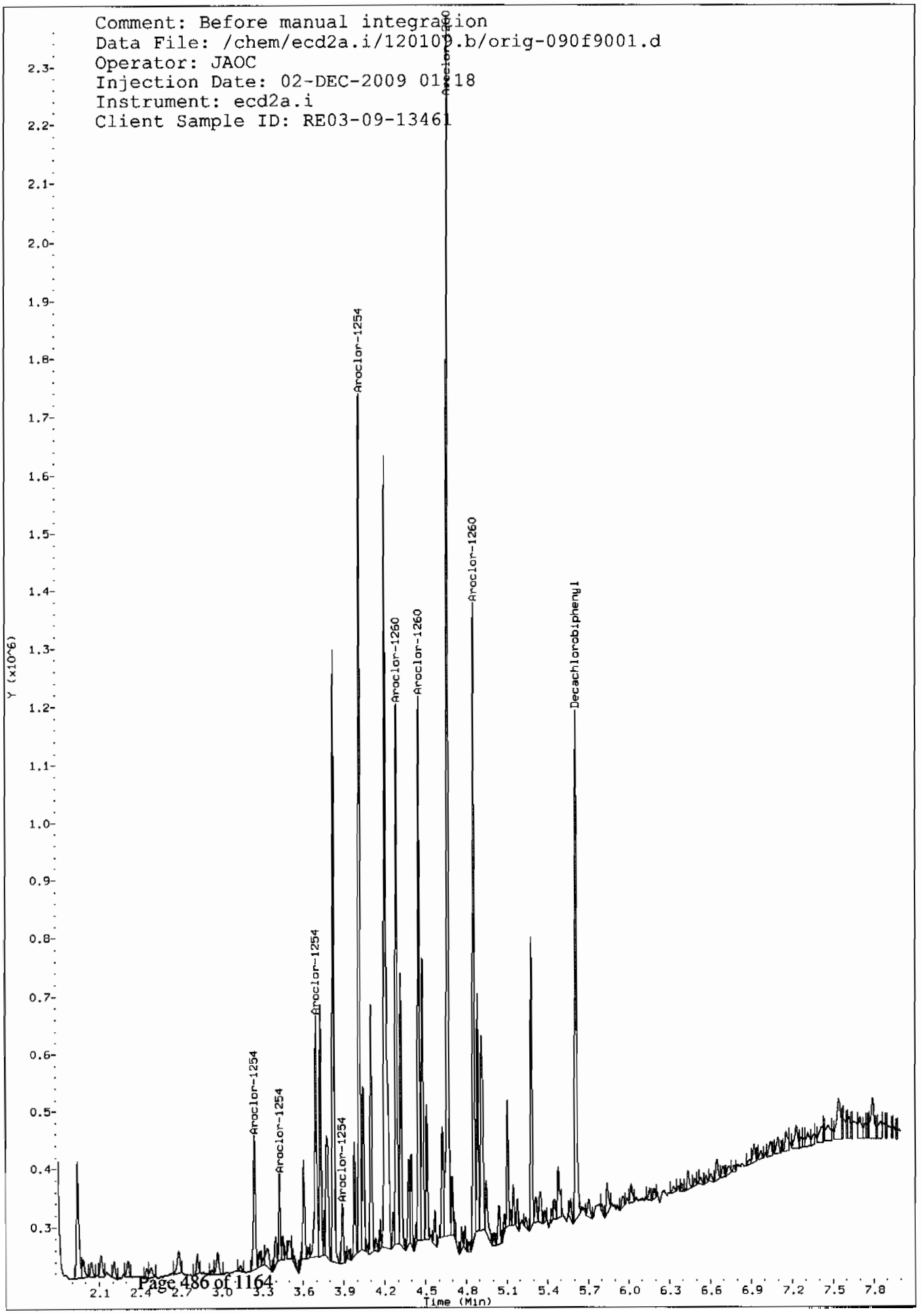
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-090f9001.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:18
Instrument: ecd2a.i
Client Sample ID: RE03-09-13461
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/090b9001.d
Lab Smp Id: 241539004 Client Smp ID: RE03-09-13461
Inj Date : 02-DEC-2009 01:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539004|5|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13461|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 90
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	8.70320	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	2577372	21.8052	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	1509338	13.8928	2.5	80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	403229	80.8836	14.7	80.00- 120.00	100.00(M)
3.965	3.963	0.002	421426	72.6729	13.2	96.76- 136.76	104.51
4.199	4.200	-0.001	311937	77.5386	14.1	61.64- 101.64	77.36
4.279	4.280	-0.001	908233	117.474	21.3	137.47- 177.47	225.24

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.418	4.444	-0.026	2490412	444.058	80.6	91.37- 131.37	617.62
Average of Peak Concentrations =					28.8		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	2490412	451.764	82.0	80.00- 120.00	100.00(M)
4.570	4.569	0.001	2066489	289.750	52.6	107.33- 147.33	82.98
4.682	4.681	0.001	1265641	267.500	48.5	63.39- 103.39	50.82
4.879	4.879	0.000	1773863	305.804	55.5	78.36- 118.36	71.23
5.504	5.505	-0.001	2675125	295.899	53.7	131.09- 171.09	107.42
Average of Peak Concentrations =					58.5		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/090b9001.d
Date : 02-DEC-2009 01:18
Client ID: RE03-09-13461
Sample Info: |241539004|5|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

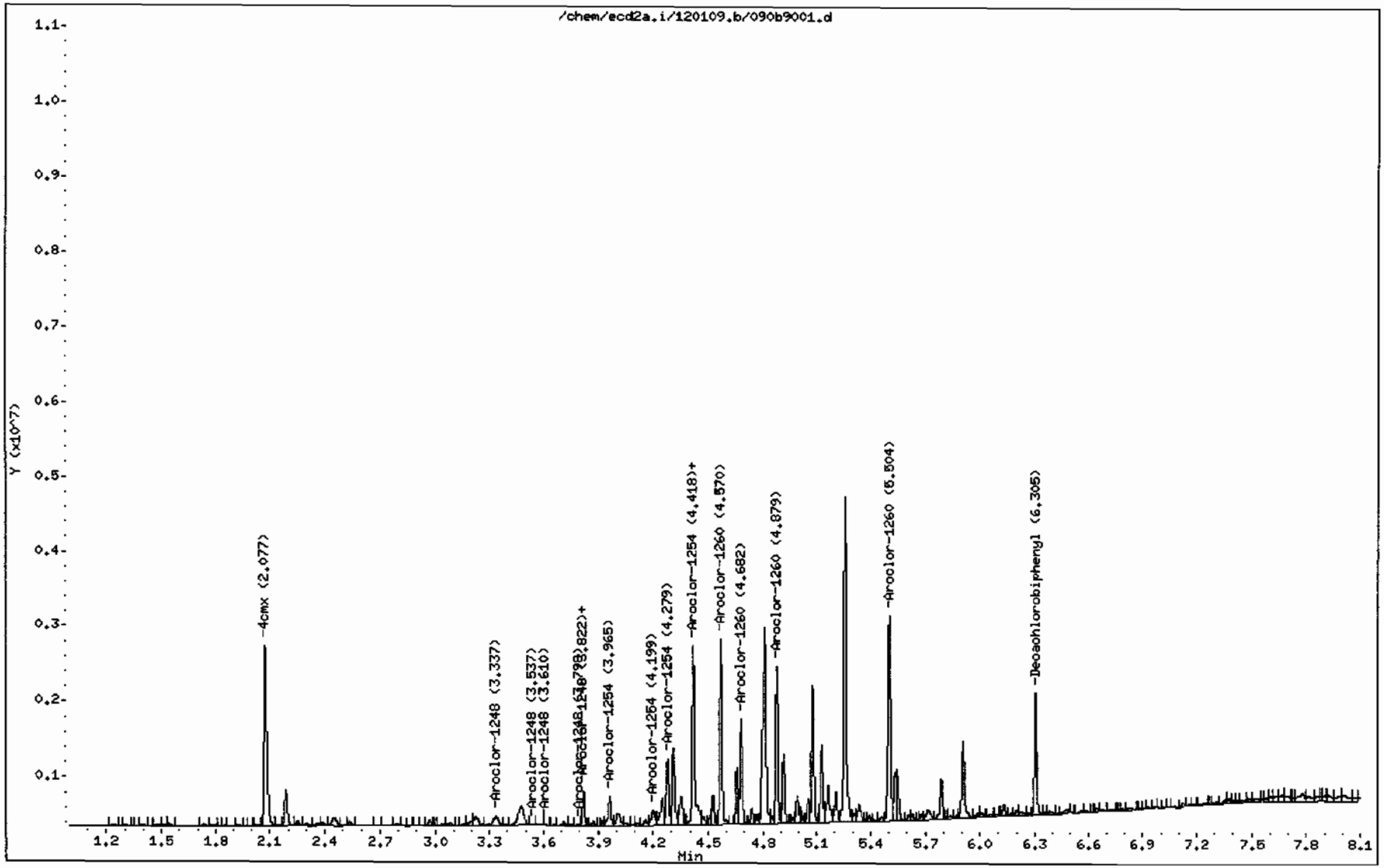

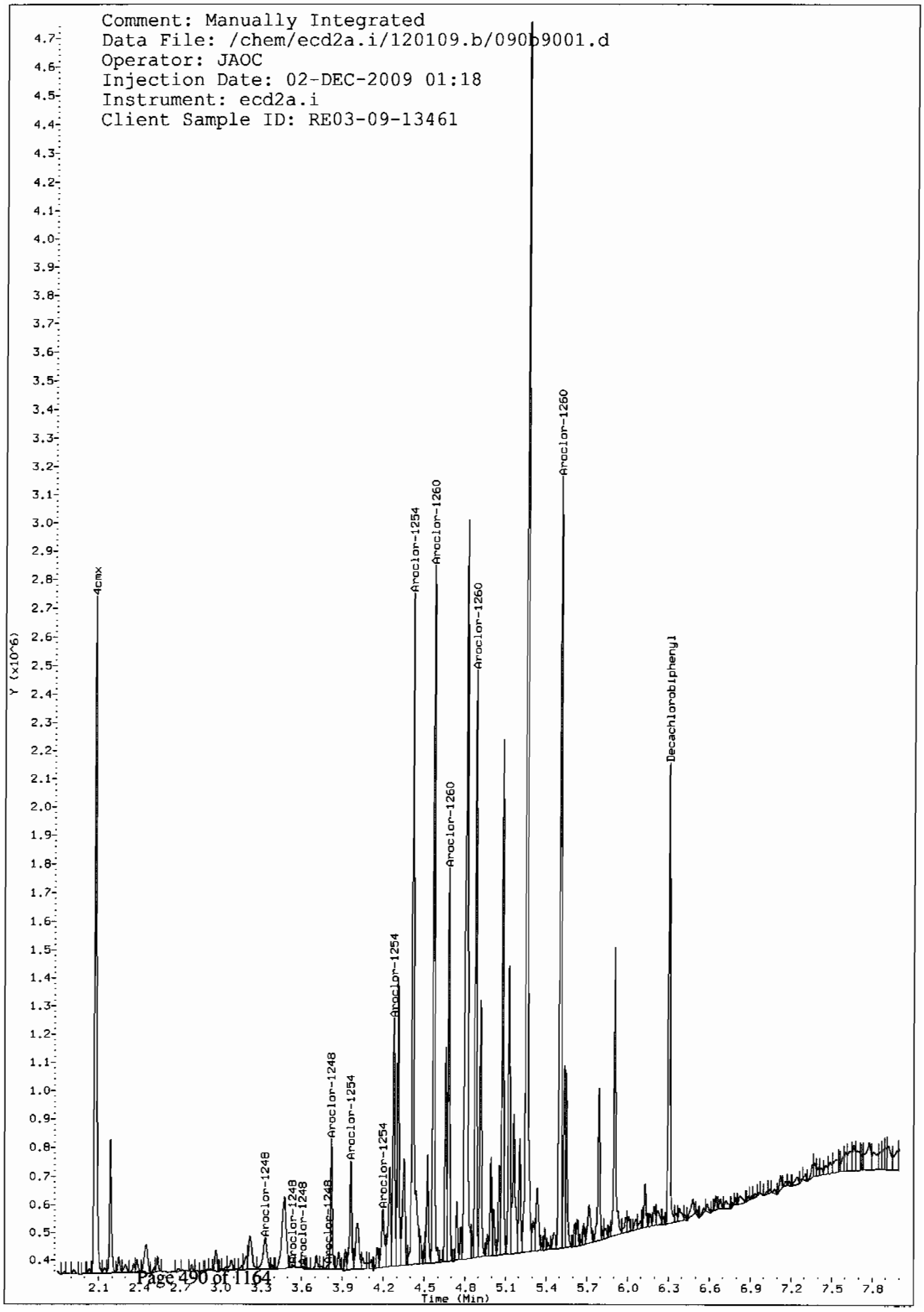
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/090b9001.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:18
Instrument: ecd2a.i
Client Sample ID: RE03-09-13461
Y (x10^6)
Time (Min)
4cmx
Aroclor-1248
Aroclor-1254
Aroclor-1260
Decachlorobiphenyl

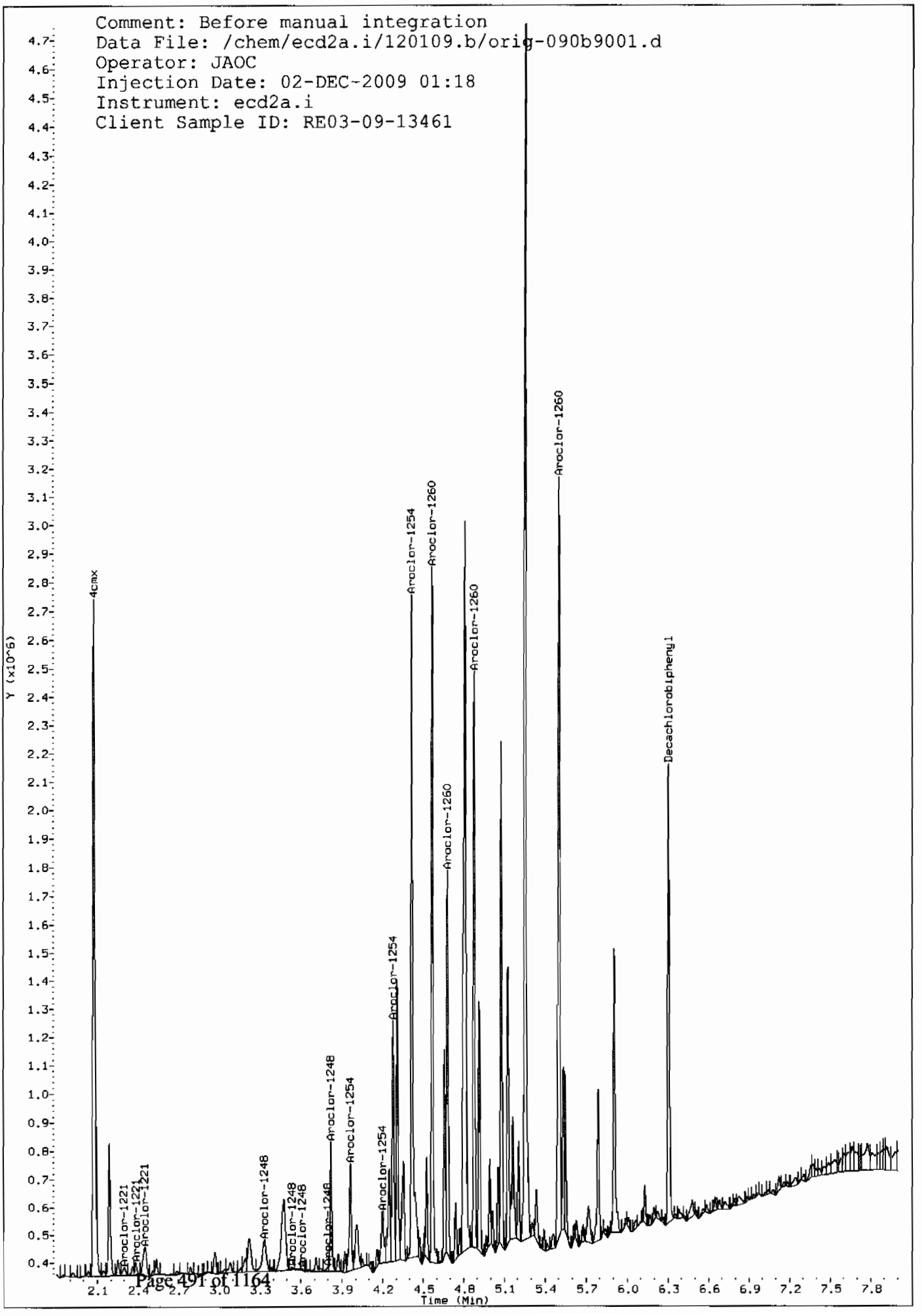
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-090b9001.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:18
Instrument: ecd2a.i
Client Sample ID: RE03-09-13461
Y (x10^6)
Time (Min)
4cmx
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13462**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**12/02/2009 00:45**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.19 g**	**Final Volume:**	**1 mL**
Data File:	**087f8701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	087b8701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.8	ug/kg	5.92	17.8	1
11104–28–2	Aroclor–1221	U	17.8	ug/kg	5.92	17.8	1
11141–16–5	Aroclor–1232	U	17.8	ug/kg	5.92	17.8	1
53469–21–9	Aroclor–1242	U	17.8	ug/kg	5.92	17.8	1
12672–29–6	Aroclor–1248	U	17.8	ug/kg	5.92	17.8	1
11097–69–1	Aroclor–1254	U	17.8	ug/kg	5.92	17.8	1
11096–82–5	Aroclor–1260		43.4	ug/kg	5.92	17.8	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/087f8701.d
Lab Smp Id: 241539001 Client Smp ID: RE03-09-13462
Inj Date : 02-DEC-2009 00:45
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539001|5|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13462|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 87
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	6.79600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	1507673	26.1244	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	1060117	19.3349	3.4	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	930405	228.781	40.6	80.00- 120.00	100.00
4.289	4.288	0.001	611594	241.898	43.0	39.98- 79.98	65.73
4.454	4.454	0.000	714739	276.687	49.2	41.33- 81.33	76.82
4.666	4.666	0.000	1192354	197.537	35.1	123.75- 163.75	128.15

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
4.855	4.855	0.000	695473	238.834	42.4	48.23- 88.23	74.75
			Average of Peak Concentrations =		42.1		

Data File: /chem/ecd2a.i/120109.b/087f8701.d
Date : 02-DEC-2009 00:45
Client ID: RE03-09-13462
Sample Info: |241539001|5|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

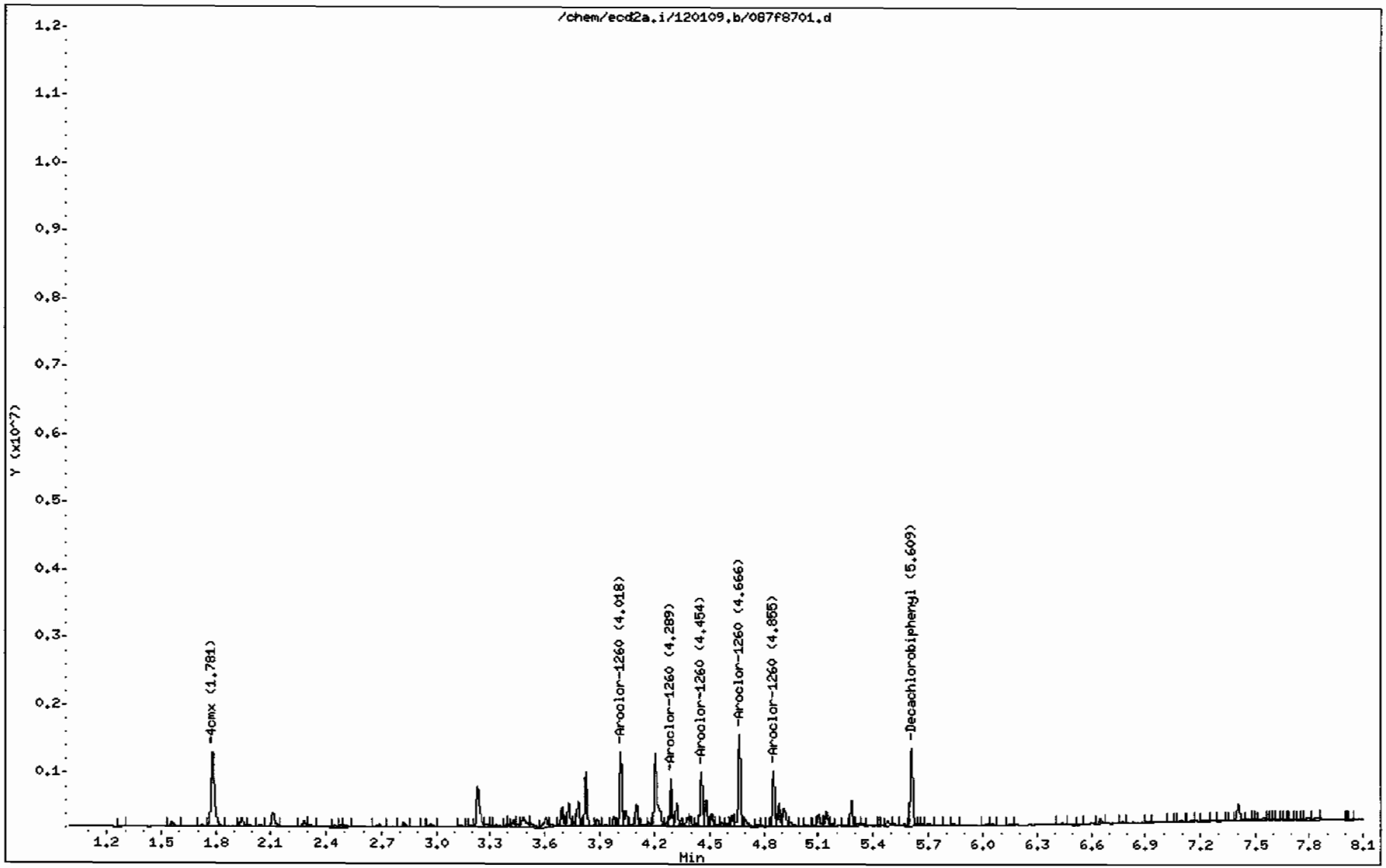

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/087b8701.d
Lab Smp Id: 241539001 Client Smp ID: RE03-09-13462
Inj Date : 02-DEC-2009 00:45
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539001|5|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13462|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 87
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	6.79600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	3153902	26.6828	4.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.304	0.000	2023128	18.6221	3.3	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	1883325	341.637	60.7	80.00- 120.00	100.00
4.570	4.569	0.001	1554279	217.931	38.7	107.33- 147.33	82.53
4.682	4.681	0.001	983913	207.955	37.0	63.39- 103.39	52.24
4.879	4.879	0.000	1378064	237.570	42.2	78.36- 118.36	73.17

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
5.505	5.505	0.000	1941070	214.704	38.2	131.09- 171.09	103.07
Average of Peak Concentrations =					43.4		

Data File: /chem/ecd2a.i/120109.b/087b8701.d
Date : 02-DEC-2009 00:45
Client ID: RE03-09-13462
Sample Info: |241539001|5|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

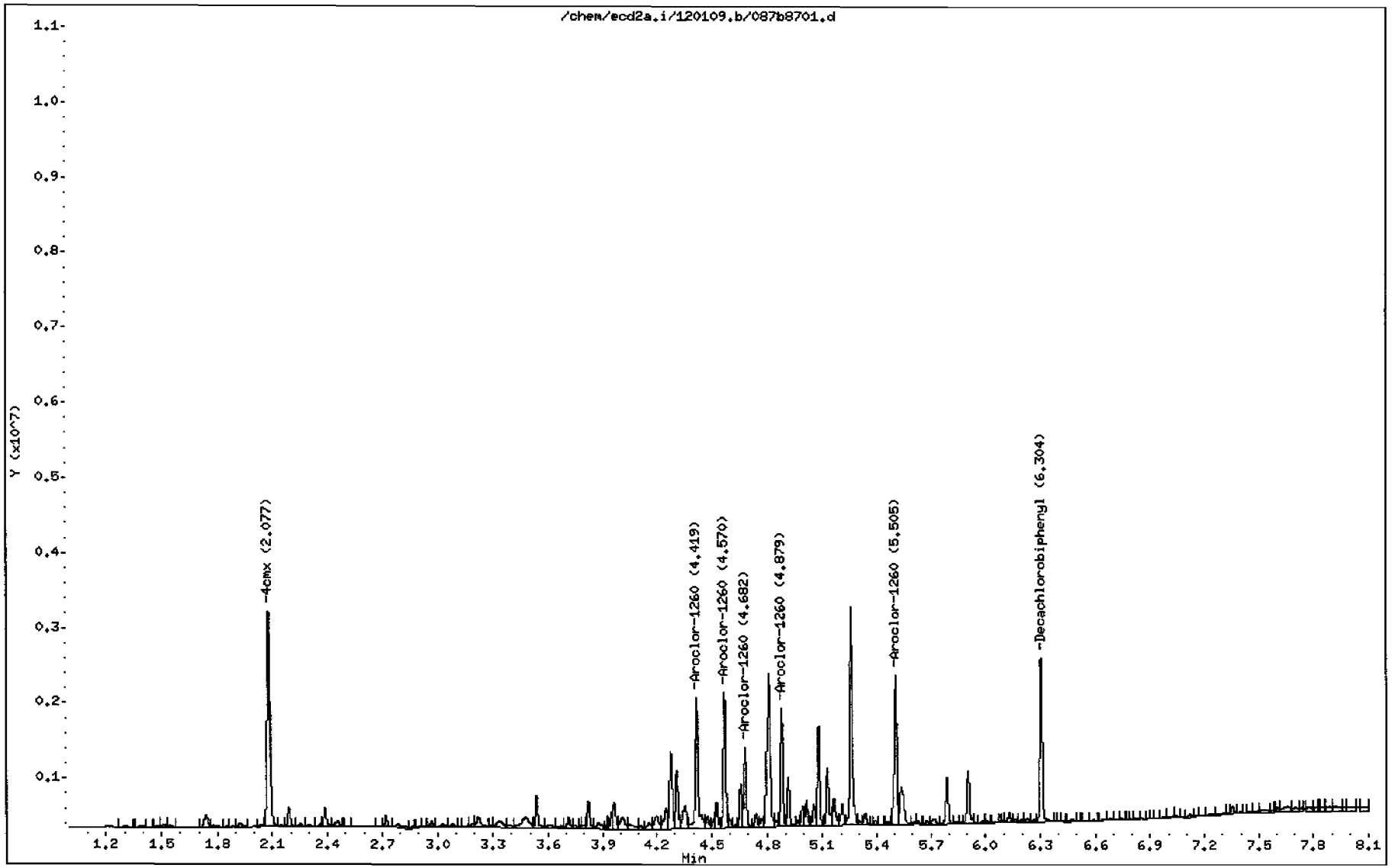

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–603	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241539003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13463	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	25
Run Date:	12/02/2009 01:07	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	089f8901.d	**Column:**	1 CLP1	**Level:**	LOW
	089b8901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	87.0	ug/kg	29.0	87.0	1
11104–28–2	Aroclor–1221	U	87.0	ug/kg	29.0	87.0	1
11141–16–5	Aroclor–1232	U	87.0	ug/kg	29.0	87.0	1
53469–21–9	Aroclor–1242	U	87.0	ug/kg	29.0	87.0	1
12672–29–6	Aroclor–1248	U	87.0	ug/kg	29.0	87.0	1
11097–69–1	Aroclor–1254	U	87.0	ug/kg	29.0	87.0	1
11096–82–5	Aroclor–1260	U	87.0	ug/kg	29.0	87.0	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/089f8901.d
Lab Smp Id: 241539003 Client Smp ID: RE03-09-13463
Inj Date : 02-DEC-2009 01:07
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539003|25|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13463|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 89
Dil Factor: 25.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	25.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	4.78600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	338863	5.87170	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	264464	4.82341	4.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/089f8901.d
Date : 02-DEC-2009 01:07
Client ID: RE03-09-13463
Sample Info: |2415390031251|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

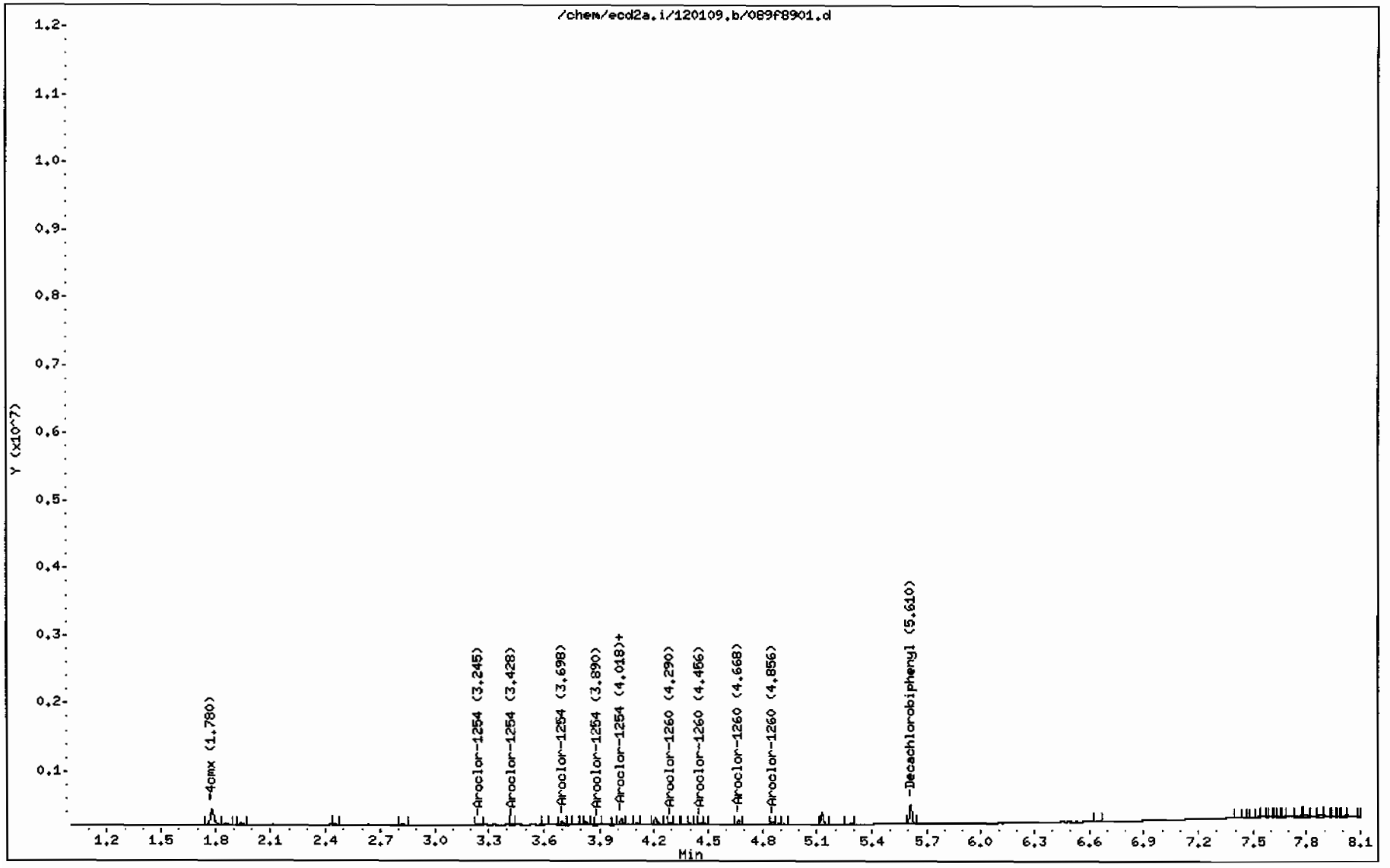

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/089b8901.d
Lab Smp Id: 241539003 Client Smp ID: RE03-09-13463
Inj Date : 02-DEC-2009 01:07
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539003|25|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13463|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 89
Dil Factor: 25.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	25.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	4.78600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	645724	5.46299	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	449274	4.13538	3.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/089b8901.d
Date : 02-DEC-2009 01:07
Client ID: RE03-09-13463
Sample Info: |2415390031251|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

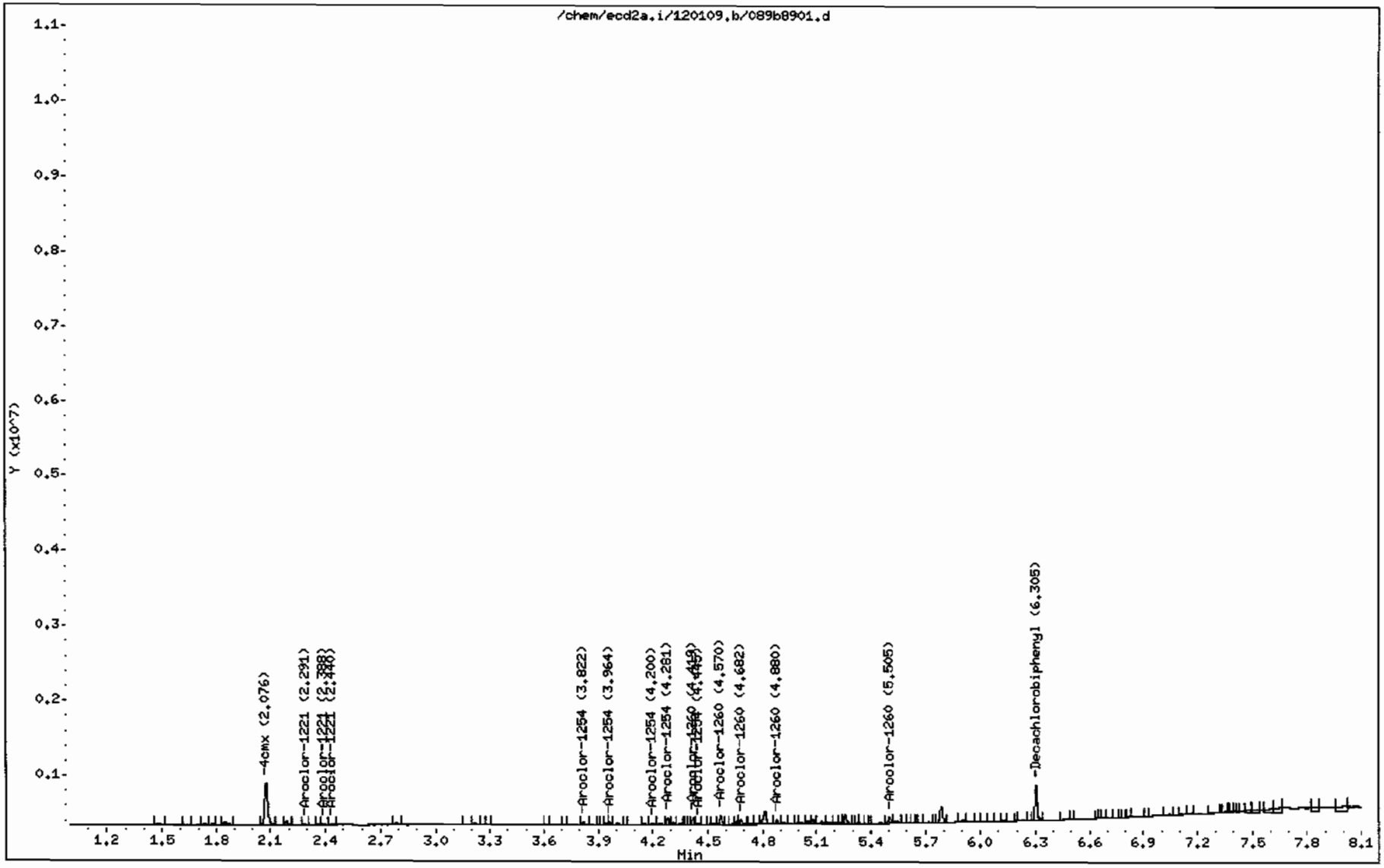

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241539002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**3.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13464**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**12/02/2009 00:56**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**088f8801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	088b8801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.2	ug/kg	5.72	17.2	1
11104-28-2	Aroclor-1221	U	17.2	ug/kg	5.72	17.2	1
11141-16-5	Aroclor-1232	U	17.2	ug/kg	5.72	17.2	1
53469-21-9	Aroclor-1242	U	17.2	ug/kg	5.72	17.2	1
12672-29-6	Aroclor-1248	U	17.2	ug/kg	5.72	17.2	1
11097-69-1	Aroclor-1254	U	17.2	ug/kg	5.72	17.2	1
11096-82-5	Aroclor-1260	U	17.2	ug/kg	5.72	17.2	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/088f8801.d
Lab Smp Id: 241539002 Client Smp ID: RE03-09-13464
Inj Date : 02-DEC-2009 00:56
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539002|5|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13464|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 88
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	3.19930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	1469384	25.4610	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1034551	18.8686	3.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/088f8801.d
Date : 02-DEC-2009 00:56
Client ID: RE03-09-13464
Sample Info: |241539002151
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

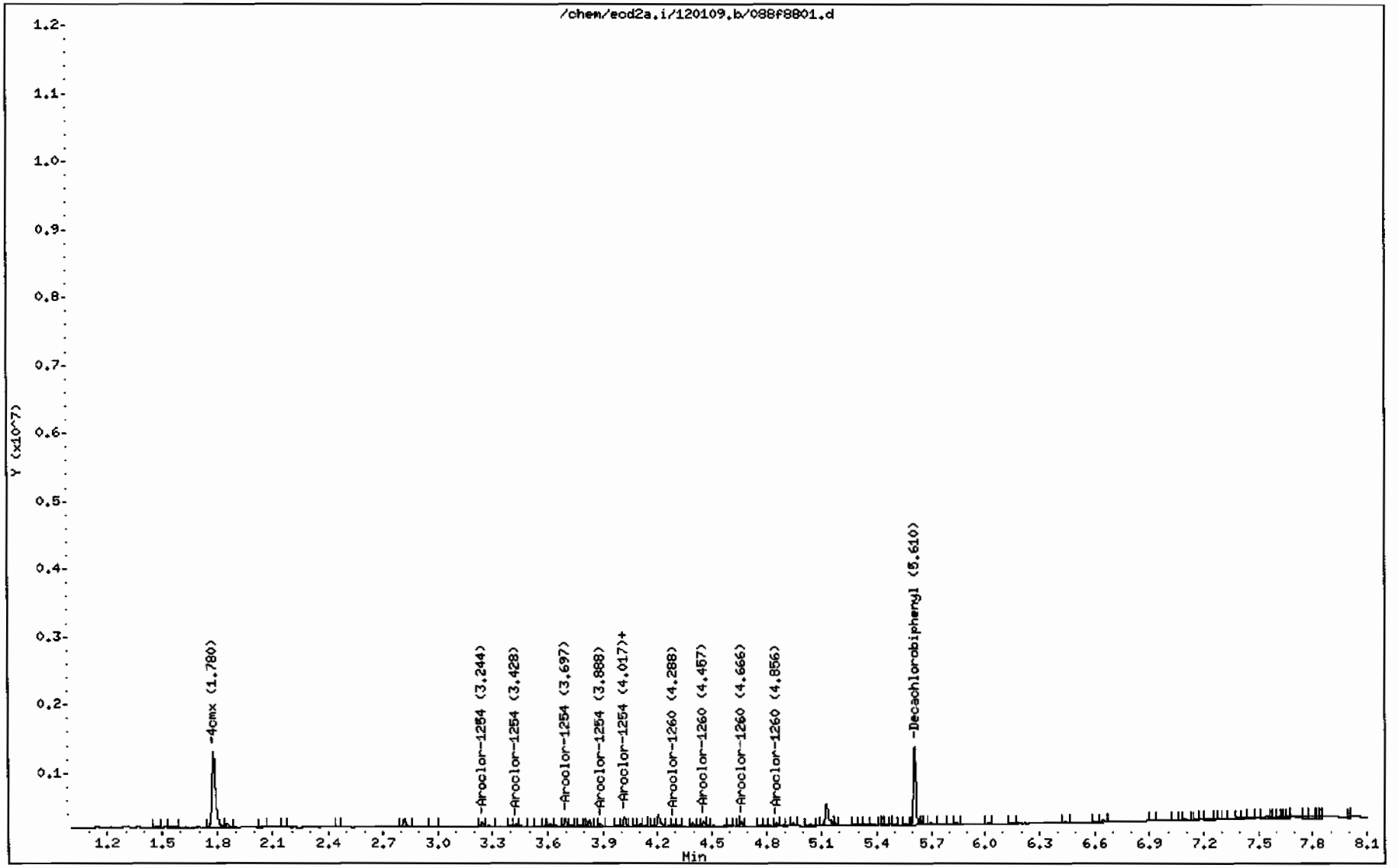

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/088b8801.d
Lab Smp Id: 241539002 Client Smp ID: RE03-09-13464
Inj Date : 02-DEC-2009 00:56
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241539002|5|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13464|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 88
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	3.19930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	3084329	26.0942	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	1965389	18.0906	3.1	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/088b8801.d
Date : 02-DEC-2009 00:56
Client ID: RE03-09-13464
Sample Info: 1241539002151
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

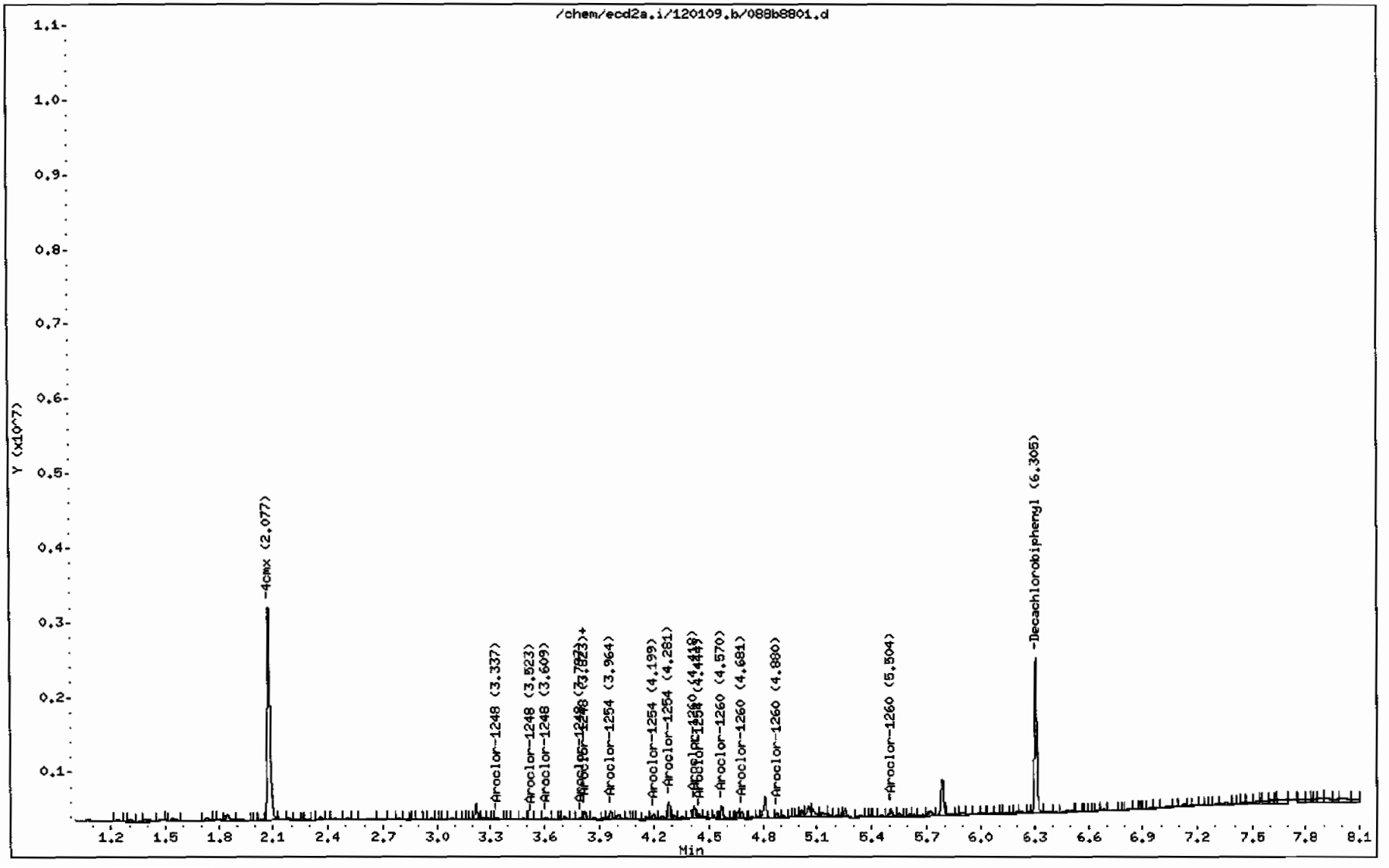

STANDARDS DATA

Report Date: 02-Dec-2009 07:31

Calibration History

Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008f0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 01:29	AR1660	/chem/ecd2a.i/120109.b/091f9101.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 00:00	AR1660	/chem/ecd2a.i/120109.b/083f8301.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 19:33	AR1660	/chem/ecd2a.i/120109.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 21:47	AR1660	/chem/ecd2a.i/120109.b/071f7101.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 17:20	AR1660	/chem/ecd2a.i/120109.b/047f4701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 15:14	AR1660	/chem/ecd2a.i/120109.b/036f3601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 11:14	AR1660	/chem/ecd2a.i/120109.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 12:56	AR1660	/chem/ecd2a.i/120109.b/024f2401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:48	AR1248	/chem/ecd2a.i/120109.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:37	AR1268	/chem/ecd2a.i/120109.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:26	AR1262	/chem/ecd2a.i/120109.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:15	AR1221	/chem/ecd2a.i/120109.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:04	AR1232	/chem/ecd2a.i/120109.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:53	AR1248	/chem/ecd2a.i/120109.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:41	AR1242	/chem/ecd2a.i/120109.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:30	AR1254	/chem/ecd2a.i/120109.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:19	AR1660	/chem/ecd2a.i/120109.b/002f0201.d

Report Date: 02-Dec-2009 07:31

Calibration History

Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008b0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 01:29	AR1660	/chem/ecd2a.i/120109.b/091b9101.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 00:00	AR1660	/chem/ecd2a.i/120109.b/083b8301.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 21:47	AR1660	/chem/ecd2a.i/120109.b/071b7101.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 19:33	AR1660	/chem/ecd2a.i/120109.b/059b5901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 17:20	AR1660	/chem/ecd2a.i/120109.b/047b4701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 15:14	AR1660	/chem/ecd2a.i/120109.b/036b3601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 12:56	AR1660	/chem/ecd2a.i/120109.b/024b2401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 11:14	AR1660	/chem/ecd2a.i/120109.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 11:14	AR1660	/chem/ecd2a.i/120109.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:48	AR1248	/chem/ecd2a.i/120109.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:37	AR1268	/chem/ecd2a.i/120109.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:26	AR1262	/chem/ecd2a.i/120109.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:15	AR1221	/chem/ecd2a.i/120109.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:04	AR1232	/chem/ecd2a.i/120109.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:53	AR1248	/chem/ecd2a.i/120109.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:41	AR1242	/chem/ecd2a.i/120109.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:30	AR1254	/chem/ecd2a.i/120109.b/003b0301.d

| Ccal Level: 4 , Ccal Amount: 1000 |

01-DEC-2009 08:19	AR1660	/chem/ecd2a.i/120109.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 02-Dec-2009 06:31 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.279	2.249-2.309	2.100e+03
	2.602	2.572-2.632	4.505e+03
	2.692	2.662-2.722	1.820e+03
	2.827	2.797-2.857	9.329e+02
	2.978	2.948-3.008	1.378e+03
2 Aroclor-1221	1.445	1.415-1.475	4.641e+02
	1.904	1.874-1.934	6.570e+02
	2.004	1.974-2.034	3.467e+02
3 Aroclor-1232	2.032	2.002-2.062	1.165e+03
	2.280	2.250-2.310	9.314e+02
	2.693	2.663-2.723	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.735	2.705-2.765	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.978	2.948-3.008	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
	3.427	3.397-3.457	2.772e+03
	3.696	3.666-3.726	3.742e+03
	3.887	3.857-3.917	2.783e+03
	4.017	3.987-4.047	2.760e+03
7 Aroclor-1260	4.016	3.986-4.046	4.067e+03
	4.288	4.258-4.318	2.528e+03
	4.454	4.424-4.484	2.583e+03
	4.666	4.636-4.696	6.036e+03
	4.855	4.825-4.885	2.912e+03
8 Aroclor-1262	3.826	3.796-3.856	1.983e+03
	4.018	3.988-4.048	2.689e+03
	4.289	4.259-4.319	3.536e+03
	4.455	4.425-4.485	3.145e+03
	4.856	4.826-4.886	2.254e+03
9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
	4.912	4.882-4.942	9.361e+03
	5.045	5.015-5.075	7.073e+03
	5.283	5.253-5.313	3.056e+03
	5.479	5.449-5.509	2.201e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.779	1.749-1.809	5.771e+04
$ 12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 02-Dec-2009 05:55 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.750	2.720-2.780	4.258e+03
	3.184	3.154-3.214	3.445e+03
	3.335	3.305-3.365	1.979e+03
	3.364	3.334-3.394	2.061e+03
	3.522	3.492-3.552	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.403	2.373-2.433	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.448	2.418-2.478	2.061e+03
	2.751	2.721-2.781	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.256	3.226-3.286	9.309e+02
	3.522	3.492-3.552	1.107e+03
4 Aroclor-1242	2.750	2.720-2.780	3.445e+03
	3.184	3.154-3.214	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.335	3.305-3.365	1.508e+03
	3.523	3.493-3.553	2.145e+03
5 Aroclor-1248	3.335	3.305-3.365	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.797	3.767-3.827	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.822	3.792-3.852	4.985e+03
		3.963	3.933-3.993	5.799e+03
		4.200	4.170-4.230	4.023e+03
		4.280	4.250-4.310	7.731e+03
		4.444	4.414-4.474	5.608e+03
	7 Aroclor-1260	4.418	4.388-4.448	5.513e+03
		4.569	4.539-4.599	7.132e+03
		4.681	4.651-4.711	4.731e+03
		4.879	4.849-4.909	5.801e+03
		5.505	5.475-5.535	9.041e+03
	8 Aroclor-1262	4.419	4.389-4.449	3.827e+03
		4.570	4.540-4.600	5.052e+03
		4.879	4.849-4.909	7.695e+03
		5.080	5.050-5.110	6.486e+03
		5.257	5.227-5.287	1.455e+04
	9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
		5.535	5.505-5.565	2.018e+04
		5.707	5.677-5.737	1.496e+04
		5.907	5.877-5.937	6.438e+03
		6.130	6.100-6.160	4.409e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.075	2.045-2.105	1.182e+05
$	12 Decachlorobiphenyl	6.304	6.274-6.334	1.086e+05
	13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
	14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
	15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Cal Date : 02-Dec-2009 06:31 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035f3501.d
Level 2: /chem/ecd2a.i/111209a.b/036f3601.d
Level 3: /chem/ecd2a.i/111209a.b/037f3701.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/111209a.b/039f3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Cal Date : 02-Dec-2009 06:31 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
	(2)	2598	2539	2501	2535	2469	2528	1.903
	(3)	2625	2577	2548	2609	2557	2583	1.287
	(4)	5914	5894	5999	6196	6179	6036	2.381
	(5)	2944	2846	2851	2940	2978	2912	2.044
	8 Aroclor-1262(1)	+++++	+++++	+++++	1983	+++++	1983	0.000
	(2)	+++++	+++++	+++++	2689	+++++	2689	0.000
	(3)	+++++	+++++	+++++	3536	+++++	3536	0.000
	(4)	+++++	+++++	+++++	3145	+++++	3145	0.000
	(5)	+++++	+++++	+++++	2254	+++++	2254	0.000
	9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
	(2)	9332	9272	9238	9197	9765	9361	2.470
	(3)	6985	6923	6953	6984	7523	7073	3.568
	(4)	3112	3015	2984	2964	3207	3056	3.331
	(5)	21397	21592	21760	21851	23464	22013	3.767
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
	14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
	15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$	11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$	12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Cal Date : 02-Dec-2009 05:55 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035b3501.d
Level 2: /chem/ecd2a.i/111209a.b/036b3601.d
Level 3: /chem/ecd2a.i/111209a.b/037b3701.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/111209a.b/039b3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Cal Date : 02-Dec-2009 05:55 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
	(2)	6898	6848	7135	7508	7271	7132	3.815
	(3)	4626	4556	4689	4954	4832	4731	3.396
	(4)	5662	5630	5786	6052	5873	5801	2.951
	(5)	8536	8630	8927	9561	9550	9041	5.437
	8 Aroclor-1262(1)	+++++	+++++	+++++	3827	+++++	3827	0.000
	(2)	+++++	+++++	+++++	5052	+++++	5052	0.000
	(3)	+++++	+++++	+++++	7695	+++++	7695	0.000
	(4)	+++++	+++++	+++++	6486	+++++	6486	0.000
	(5)	+++++	+++++	+++++	14548	+++++	14548	0.000
	9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
	(2)	18822	19343	20333	20389	22025	20182	6.077
	(3)	13874	14365	14864	15141	16565	14962	6.808
	(4)	5734	6115	6404	6840	7097	6438	8.497
	(5)	40707	42777	43856	44408	48724	44094	6.689
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
	14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
	15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$	11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$	12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0819

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1929.050	0.01	-8.1	15.0
(2)	4504.513	4228.004	0.01	-6.1	15.0
(3)	1820.211	1663.316	0.01	-8.6	15.0
(4)	932.883	812.926	0.01	-12.8	15.0
(5)	1378.125	1257.961	0.01	-8.7	15.0
Aroclor-1260	4066.794	4006.816	0.01	-1.5	15.0
(2)	2528.317	2462.617	0.01	-2.6	15.0
(3)	2583.202	2523.605	0.01	-2.3	15.0
(4)	6036.106	6011.590	0.01	-0.4	15.0
(5)	2911.947	2857.590	0.01	-1.9	15.0
4cmx	57711.247	61068.410	0.01	5.8	15.0
Decachlorobiphenyl	54829.246	52393.690	0.01	-4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0819

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4116.757	0.01	-3.3	15.0
(2)	3444.681	3313.702	0.01	-3.8	15.0
(3)	1979.487	1917.398	0.01	-3.1	15.0
(4)	2061.253	1995.940	0.01	-3.2	15.0
(5)	2754.170	2721.253	0.01	-1.2	15.0
Aroclor-1260	5512.644	5703.714	0.01	3.5	15.0
(2)	7131.968	7371.959	0.01	3.4	15.0
(3)	4731.365	4928.364	0.01	4.2	15.0
(4)	5800.657	5891.557	0.01	1.6	15.0
(5)	9040.681	9394.194	0.01	3.9	15.0
4cmx	118199.83	130134.90	0.01	10.1	15.0
Decachlorobiphenyl	108641.52	109657.99	0.01	0.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0830

Lab File ID: 003F0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1933.570	0.01	-7.0	15.0
(2)	2772.138	2617.595	0.01	-5.6	15.0
(3)	3742.400	3588.524	0.01	-4.1	15.0
(4)	2782.705	2648.810	0.01	-4.8	15.0
(5)	2760.043	2608.380	0.01	-5.5	15.0
4cmx	57711.247	64276.360	0.01	11.4	15.0
Decachlorobiphenyl	54829.246	56627.600	0.01	3.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0830

Lab File ID: 003B0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4886.308	0.01	-2.0	15.0	
(2)	5798.946	5705.323	0.01	-1.6	15.0	
(3)	4022.990	3988.969	0.01	-0.8	15.0	
(4)	7731.372	7694.603	0.01	-0.5	15.0	
(5)	5608.308	5441.758	0.01	-3.0	15.0	
4cmx	118199.83	138872.22	0.01	17.5	15.0	<-
Decachlorobiphenyl	108641.52	118915.50	0.01	9.4	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 2147

Lab File ID: 071F7101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2004.622	0.01	-4.5	15.0
(2)	4504.513	4377.481	0.01	-2.8	15.0
(3)	1820.211	1722.126	0.01	-5.4	15.0
(4)	932.883	845.038	0.01	-9.4	15.0
(5)	1378.125	1303.128	0.01	-5.4	15.0
Aroclor-1260	4066.794	4171.397	0.01	2.6	15.0
(2)	2528.317	2535.539	0.01	0.3	15.0
(3)	2583.202	2584.355	0.01	0.0	15.0
(4)	6036.106	6146.696	0.01	1.8	15.0
(5)	2911.947	2915.592	0.01	0.1	15.0
4cmx	57711.247	62640.270	0.01	8.5	15.0
Decachlorobiphenyl	54829.246	50363.350	0.01	-8.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 2147

Lab File ID: 071B7101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4271.054	0.01	0.3	15.0
(2)	3444.681	3427.215	0.01	-0.5	15.0
(3)	1979.487	1967.846	0.01	-0.6	15.0
(4)	2061.253	2071.726	0.01	0.5	15.0
(5)	2754.170	2821.385	0.01	2.4	15.0
Aroclor-1260	5512.644	5816.856	0.01	5.5	15.0
(2)	7131.968	7476.776	0.01	4.8	15.0
(3)	4731.365	4924.199	0.01	4.1	15.0
(4)	5800.657	5797.610	0.01	-0.0	15.0
(5)	9040.681	9037.267	0.01	-0.0	15.0
4cmx	118199.83	134790.75	0.01	14.0	15.0
Decachlorobiphenyl	108641.52	94300.730	0.01	-13.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0000

Lab File ID: 083F8301 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2060.686	0.01	-1.9	15.0
(2)	4504.513	4331.233	0.01	-3.8	15.0
(3)	1820.211	1707.251	0.01	-6.2	15.0
(4)	932.883	844.470	0.01	-9.5	15.0
(5)	1378.125	1303.696	0.01	-5.4	15.0
Aroclor-1260	4066.794	4124.206	0.01	1.4	15.0
(2)	2528.317	2523.819	0.01	-0.2	15.0
(3)	2583.202	2574.281	0.01	-0.3	15.0
(4)	6036.106	6158.896	0.01	2.0	15.0
(5)	2911.947	2940.128	0.01	1.0	15.0
4cmx	57711.247	61718.590	0.01	6.9	15.0
Decachlorobiphenyl	54829.246	50228.940	0.01	-8.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0000

Lab File ID: 083B8301 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4214.187	0.01	-1.0	15.0
(2)	3444.681	3421.530	0.01	-0.7	15.0
(3)	1979.487	1976.972	0.01	-0.1	15.0
(4)	2061.253	2050.457	0.01	-0.5	15.0
(5)	2754.170	2816.403	0.01	2.2	15.0
Aroclor-1260	5512.644	5869.240	0.01	6.5	15.0
(2)	7131.968	7550.346	0.01	5.9	15.0
(3)	4731.365	4985.085	0.01	5.4	15.0
(4)	5800.657	5967.206	0.01	2.9	15.0
(5)	9040.681	9455.932	0.01	4.6	15.0
4cmx	118199.83	132583.55	0.01	12.2	15.0
Decachlorobiphenyl	108641.52	101381.39	0.01	-6.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0129

Lab File ID: 091F9101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2055.766	0.01	-2.1	15.0	
(2)	4504.513	4395.401	0.01	-2.4	15.0	
(3)	1820.211	1732.171	0.01	-4.8	15.0	
(4)	932.883	845.021	0.01	-9.4	15.0	
(5)	1378.125	1325.481	0.01	-3.8	15.0	
Aroclor-1260	4066.794	4125.814	0.01	1.4	15.0	
(2)	2528.317	2474.822	0.01	-2.1	15.0	
(3)	2583.202	2530.567	0.01	-2.0	15.0	
(4)	6036.106	5930.901	0.01	-1.7	15.0	
(5)	2911.947	2815.158	0.01	-3.3	15.0	
4cmx	57711.247	63027.630	0.01	9.2	15.0	
Decachlorobiphenyl	54829.246	43686.400	0.01	-20.3	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0129

Lab File ID: 091B9101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4275.247	0.01	0.4	15.0	
(2)	3444.681	3463.872	0.01	0.6	15.0	
(3)	1979.487	1997.302	0.01	0.9	15.0	
(4)	2061.253	2077.488	0.01	0.8	15.0	
(5)	2754.170	2825.676	0.01	2.6	15.0	
Aroclor-1260	5512.644	5722.496	0.01	3.8	15.0	
(2)	7131.968	7286.723	0.01	2.2	15.0	
(3)	4731.365	4771.910	0.01	0.8	15.0	
(4)	5800.657	5628.643	0.01	-3.0	15.0	
(5)	9040.681	8645.843	0.01	-4.4	15.0	
4cmx	118199.83	134778.39	0.01	14.0	15.0	
Decachlorobiphenyl	108641.52	85654.780	0.01	-21.2	15.0	<-

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 01-DEC-2009 08:19
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6106841	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5239369	100.000	95.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.279	2.279	0.000	1929050	1000.00	919	80.00- 120.00	100.00(M)
2.602	2.602	0.000	4228004	1000.00	939	198.60- 238.60	219.18
2.692	2.692	0.000	1663316	1000.00	914	66.35- 106.35	86.22
2.827	2.827	0.000	812926	1000.00	871	22.88- 62.88	42.14
2.978	2.978	0.000	1257961	1000.00	913	44.54- 84.54	65.21
Average of Peak Amounts =					911		
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.016	0.000	4006816	1000.00	985	80.00- 120.00	100.00
4.288	4.288	0.000	2462617	1000.00	974	41.68- 81.68	61.46
4.454	4.454	0.000	2523605	1000.00	977	43.14- 83.14	62.98
4.666	4.666	0.000	6011590	1000.00	996	130.34- 170.34	150.03
4.855	4.855	0.000	2857590	1000.00	981	51.33- 91.33	71.32
Average of Peak Amounts =					983		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/002f0201.d
Date : 01-DEC-2009 08:19
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

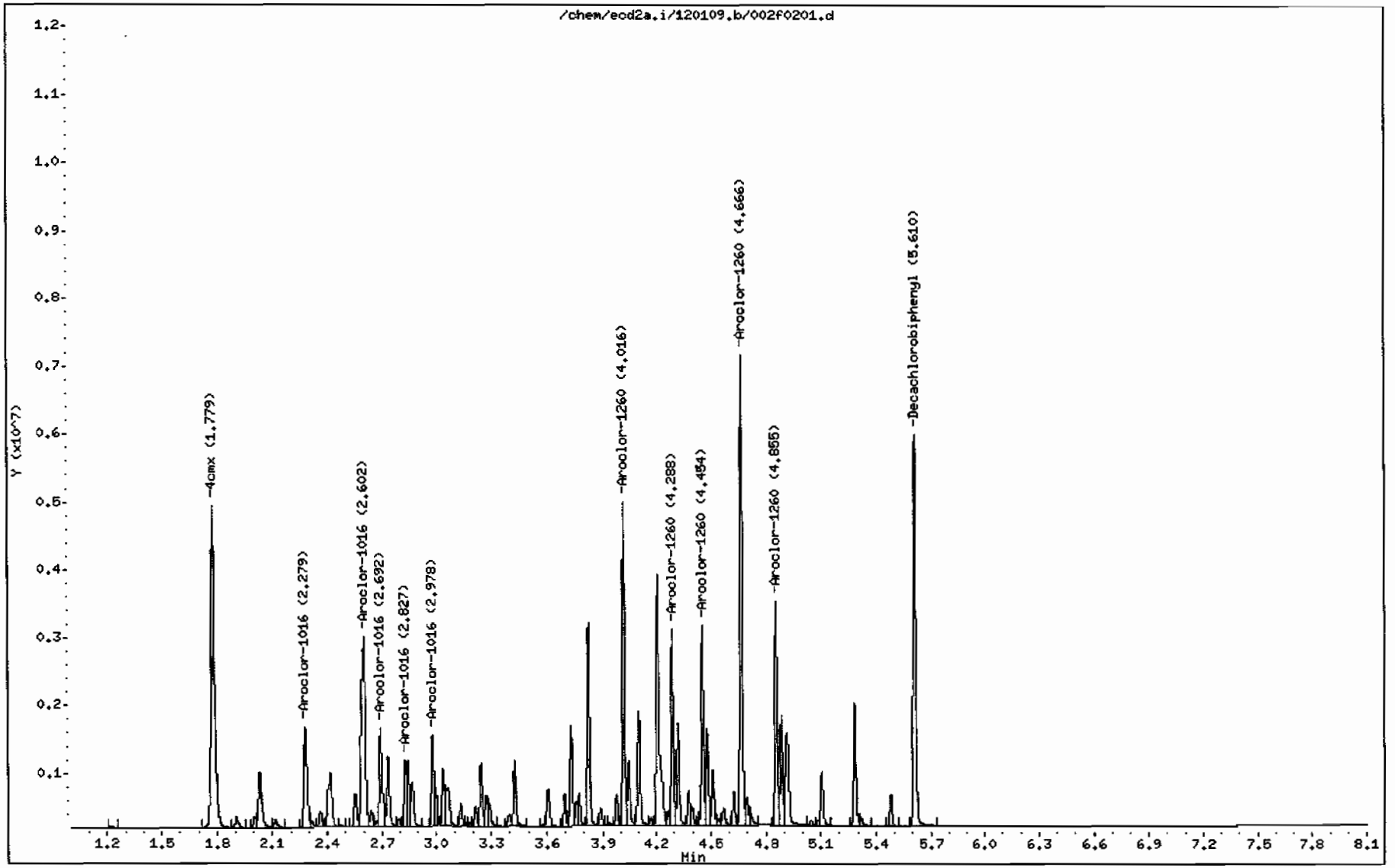

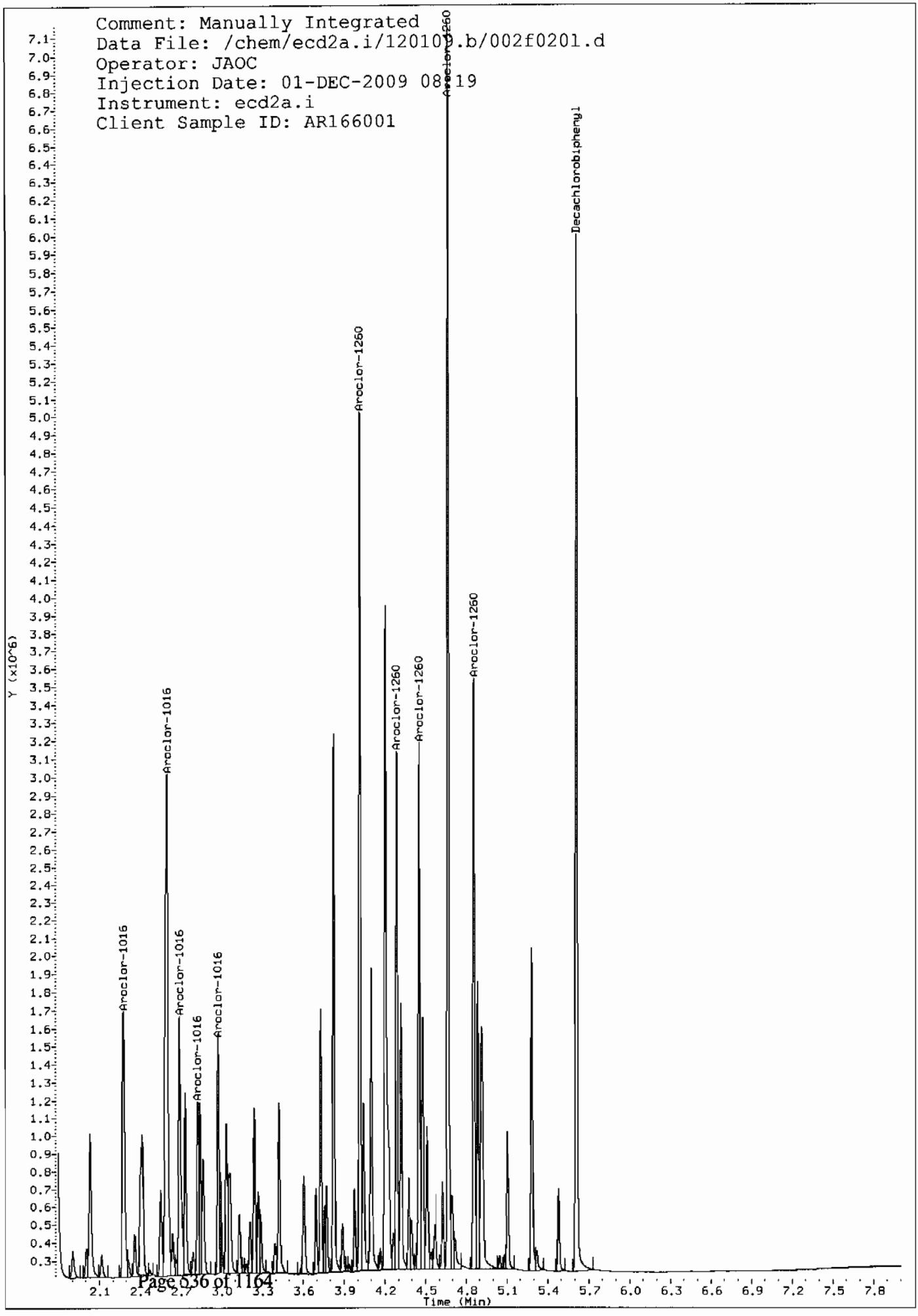
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/002f0201.d
Operator: JAOC
Injection Date: 01-DEC-2009 08:19
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-002f0201.d
Operator: JAOC
Injection Date: 01-DEC-2009 08:19
Instrument: ecd2a.i
Client Sample ID: AR166001

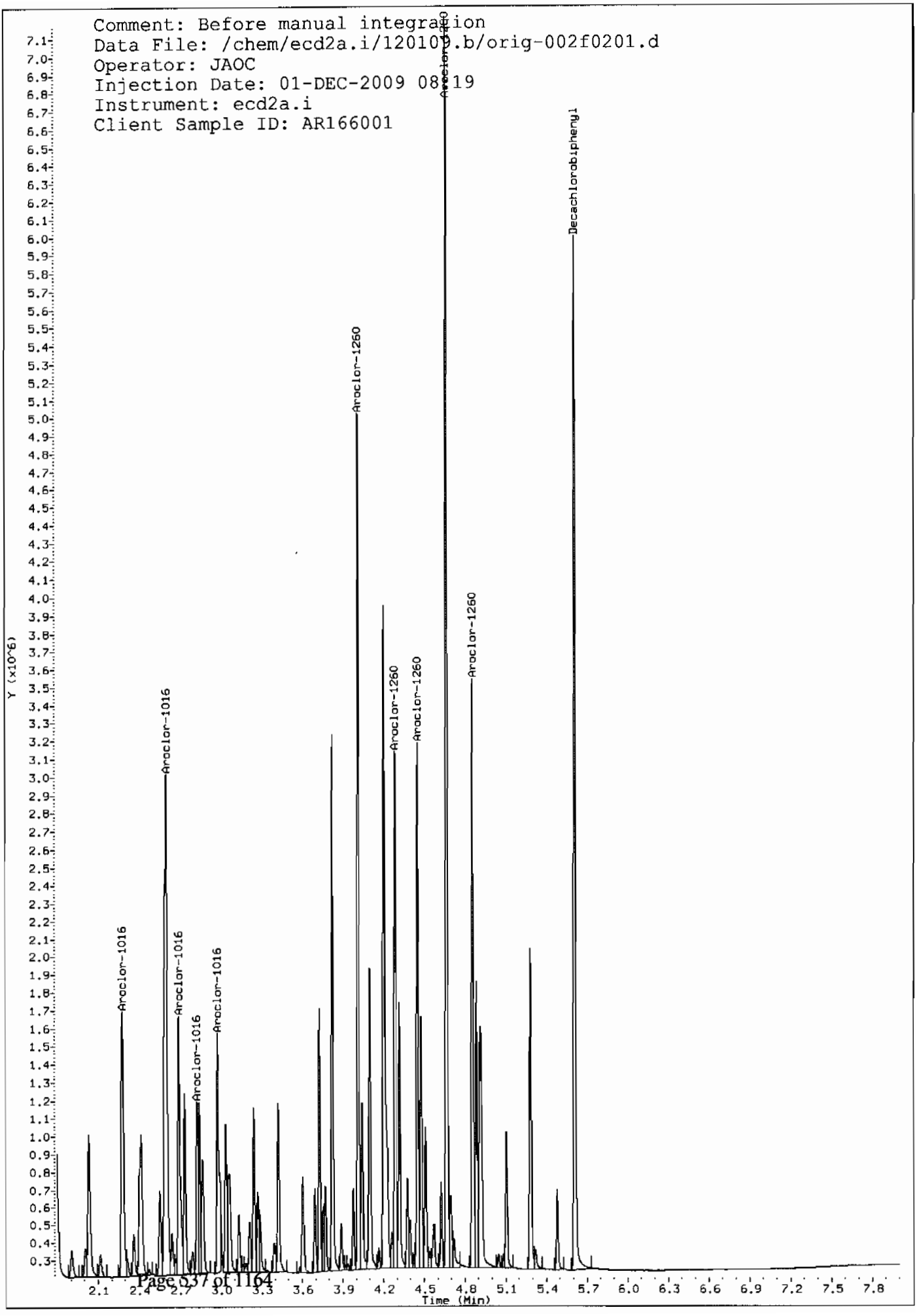

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 01-DEC-2009 08:19
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13013490	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.304	0.000	10965799	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.750	0.000	4116757	1000.00	967	80.00- 120.00	100.00
3.184	3.184	0.000	3313702	1000.00	962	60.64- 100.64	80.49
3.335	3.335	0.000	1917398	1000.00	969	26.90- 66.90	46.58
3.364	3.364	0.000	1995940	1000.00	968	29.03- 69.03	48.48
3.522	3.522	0.000	2721253	1000.00	988	46.26- 86.26	66.10
Average of Peak Amounts =					971		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5703714	1000.00	1030	80.00- 120.00	100.00
4.569	4.569	0.000	7371959	1000.00	1030	109.12- 149.12	129.25
4.681	4.681	0.000	4928363	1000.00	1040	66.63- 106.63	86.41
4.879	4.879	0.000	5891556	1000.00	1020	83.49- 123.49	103.29
5.505	5.505	0.000	9394193	1000.00	1040	143.68- 183.68	164.70
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/120109.b/002b0201.d
Date : 01-DEC-2009 08:19
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

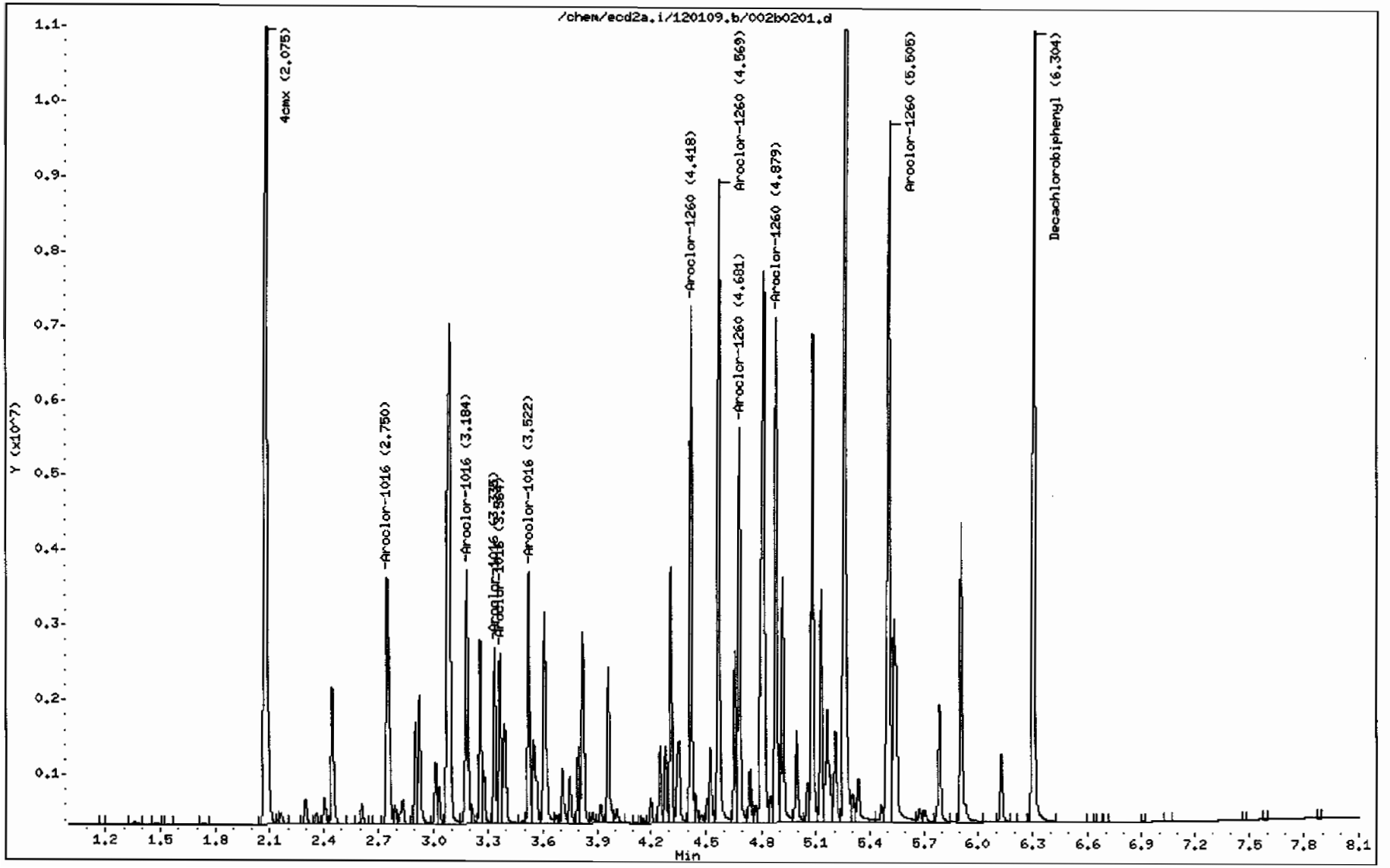

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 01-DEC-2009 08:30
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6427636	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5662760	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1933570	1000.00	930	80.00- 120.00	100.00
3.427	3.427	0.000	2617595	1000.00	944	115.38- 155.38	135.38
3.696	3.696	0.000	3588523	1000.00	959	165.59- 205.59	185.59
3.887	3.887	0.000	2648809	1000.00	952	116.99- 156.99	136.99
4.017	4.017	0.000	2608380	1000.00	945	114.90- 154.90	134.90
Average of Peak Amounts =					946		

Data File: /chem/ecd2a.i/120109.b/003f0301.d

Date : 01-DEC-2009 08:30

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

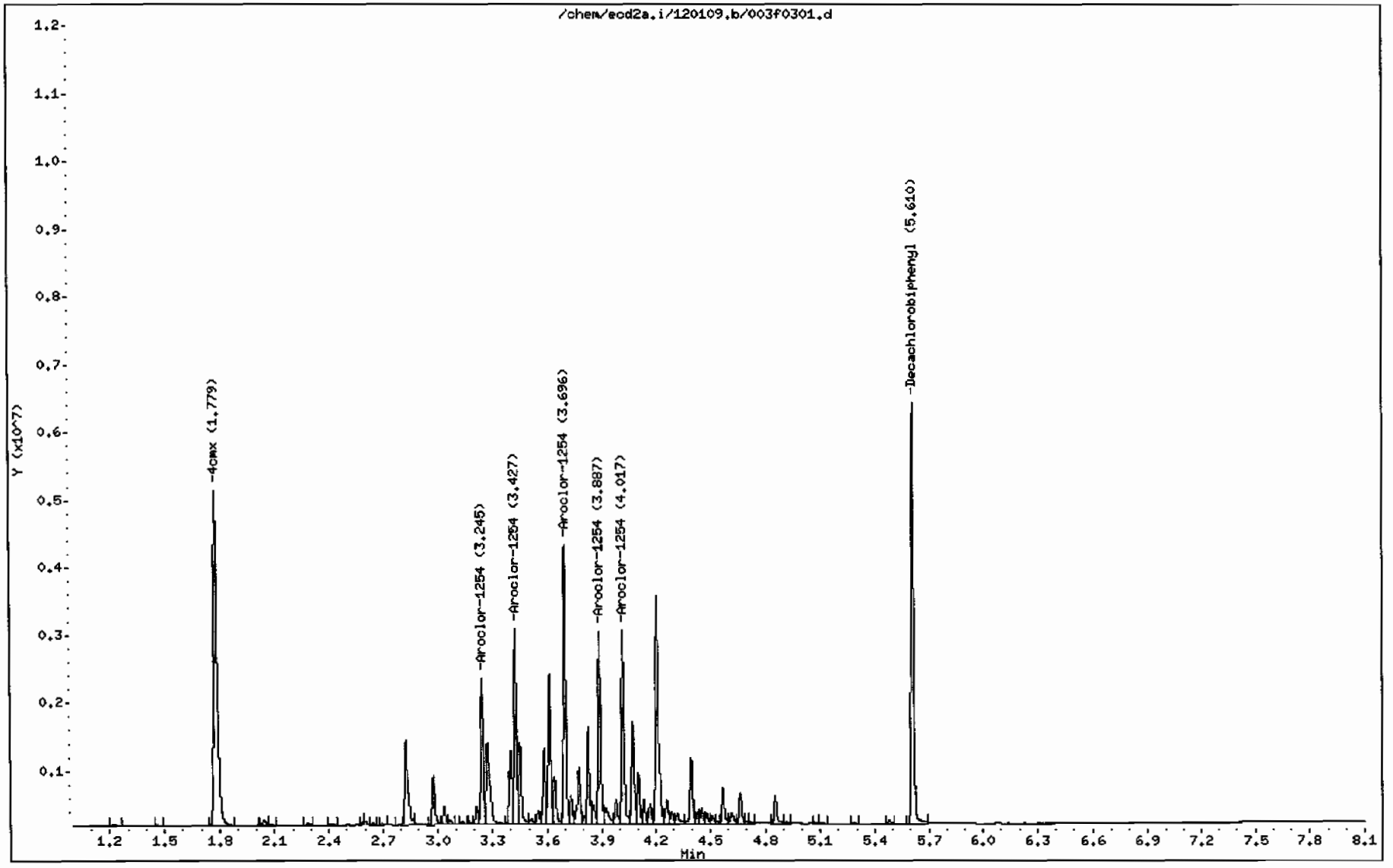

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 01-DEC-2009 08:30
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13887222	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.304	0.000	11891550	100.000	109	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	4886308	1000.00	980	80.00- 120.00	100.00
3.963	3.963	0.000	5705323	1000.00	984	96.76- 136.76	116.76
4.200	4.200	0.000	3988968	1000.00	992	61.64- 101.64	81.64
4.280	4.280	0.000	7694603	1000.00	995	137.47- 177.47	157.47
4.444	4.444	0.000	5441758	1000.00	970	91.37- 131.37	111.37
Average of Peak Amounts =					984		

Data File: /chem/ecd2a.i/120109.b/003b0301.d
Date : 01-DEC-2009 08:30
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

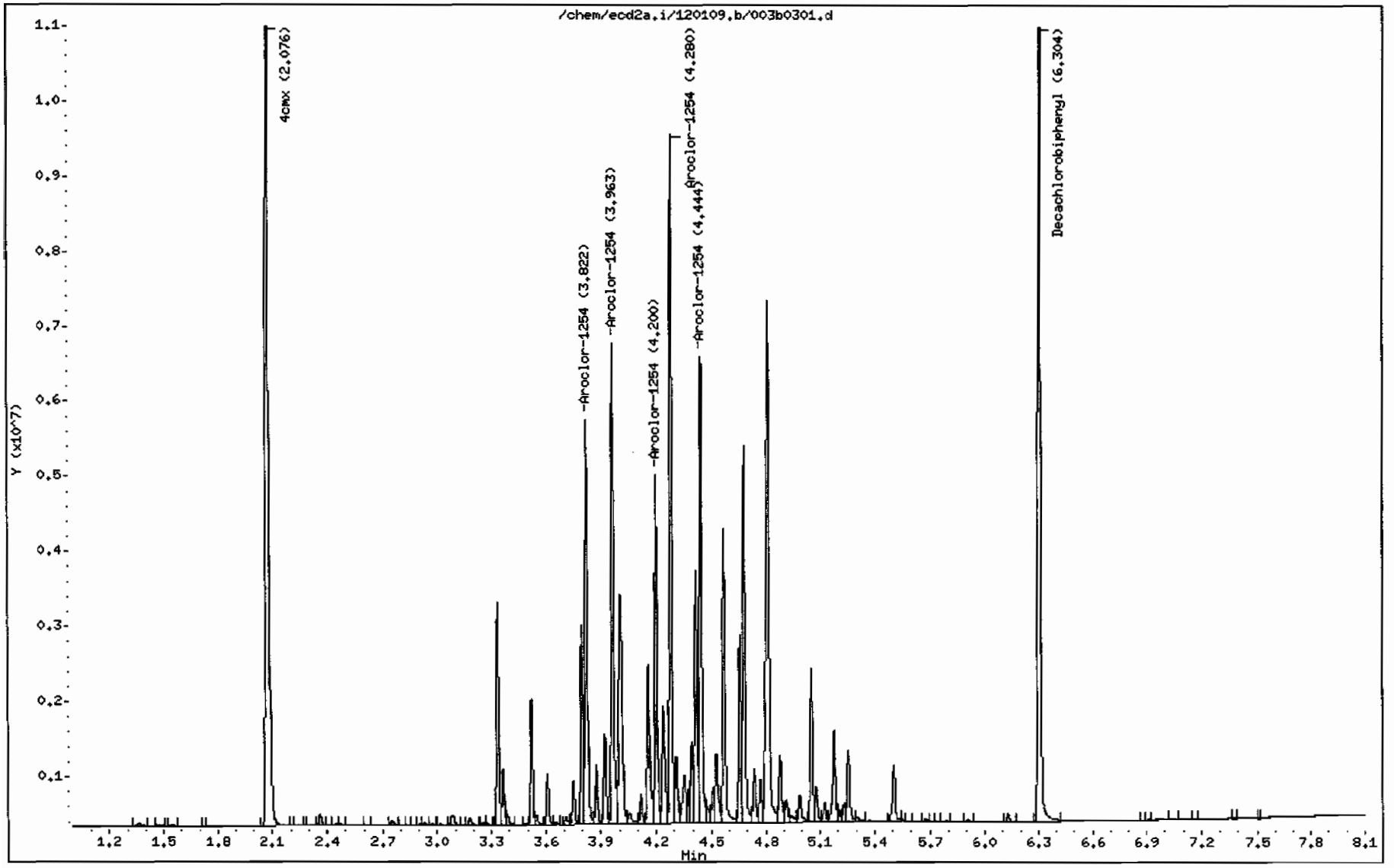

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 01-DEC-2009 08:41
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6465532	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5713678	100.000	104	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1714315	1000.00	989	80.00- 120.00	100.00
2.693	2.693	0.000	1461296	1000.00	984	65.24- 105.24	85.24
2.735	2.735	0.000	901114	1000.00	995	32.56- 72.56	52.56
2.828	2.828	0.000	728625	1000.00	1000	22.50- 62.50	42.50
2.979	2.979	0.000	1137467	1000.00	1020	46.35- 86.35	66.35
			Average of Peak Amounts =		997		

Data File: /chem/ecd2a.i/120109.b/004f0401.d
Date : 01-DEC-2009 08:41
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

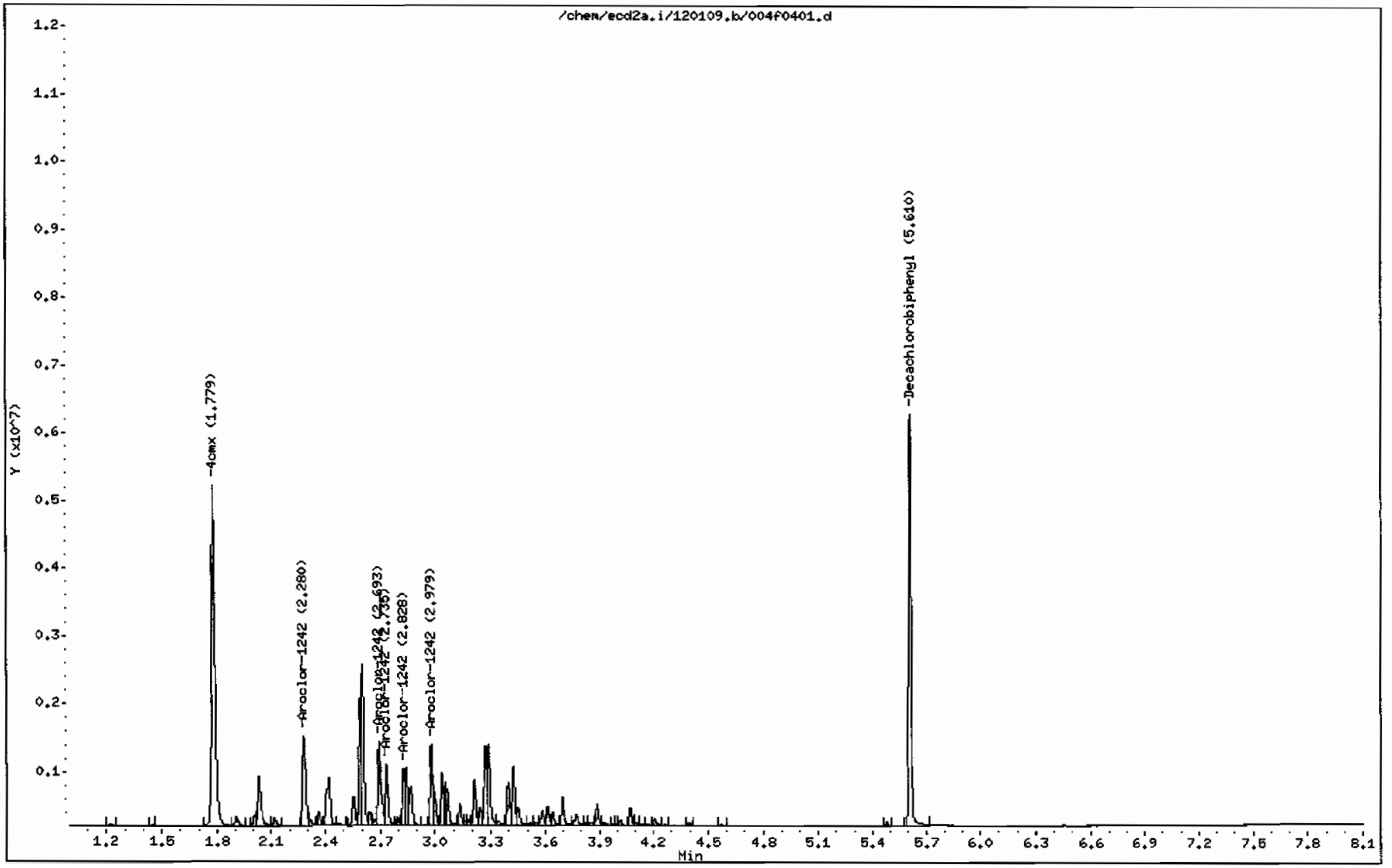

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 01-DEC-2009 08:41
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13904293	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	11928642	100.000	110	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.750	2.750	0.000	3660078	1000.00	1060	80.00- 120.00	100.00
3.184	3.184	0.000	2873696	1000.00	1070	58.51- 98.51	78.51
3.257	3.257	0.000	1750928	1000.00	1070	27.84- 67.84	47.84
3.335	3.335	0.000	1620153	1000.00	1070	24.27- 64.27	44.27
3.523	3.523	0.000	2380463	1000.00	1110	45.04- 85.04	65.04

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd2a.i/120109.b/004b0401.d
Date : 01-DEC-2009 08:41
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

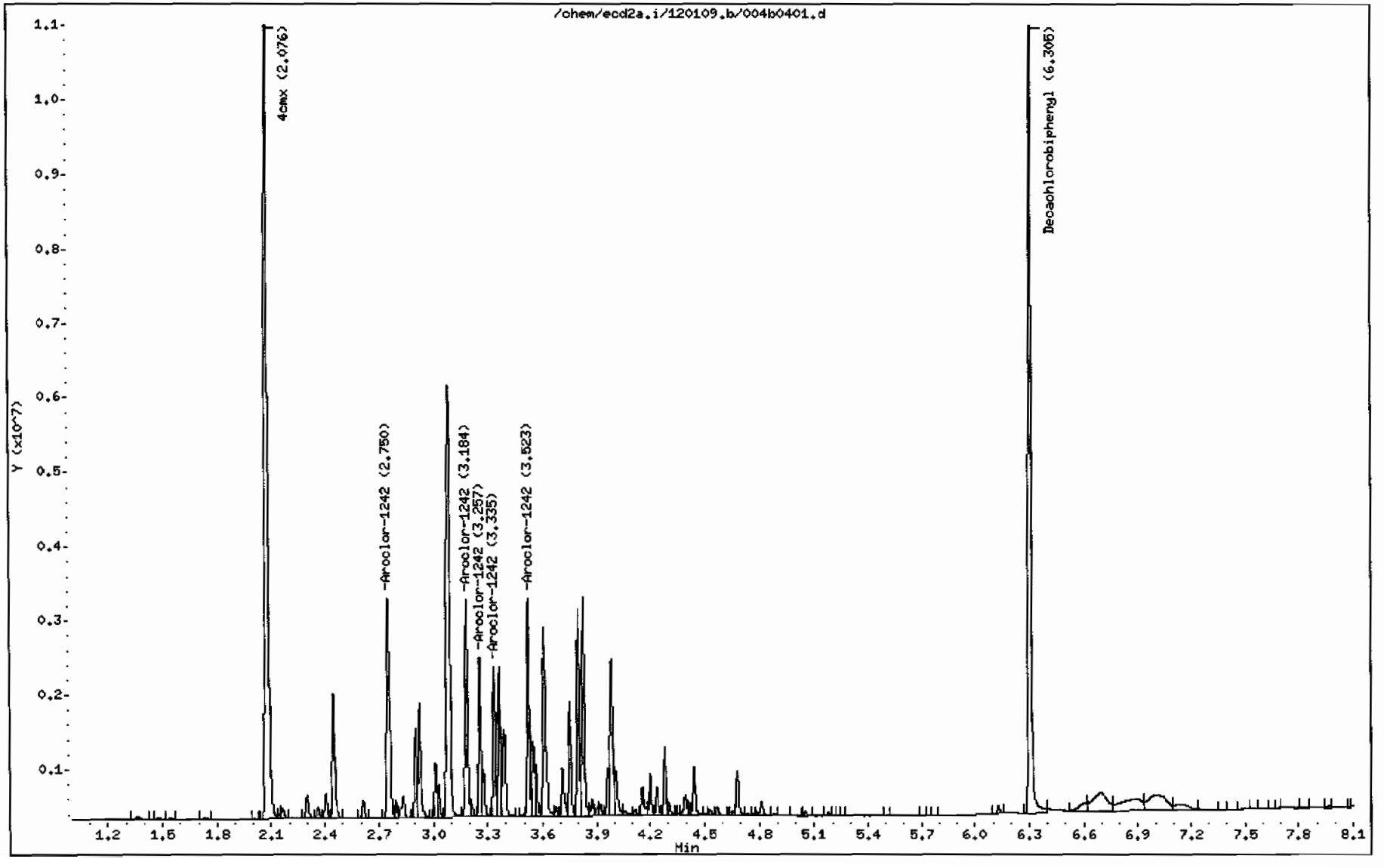

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 01-DEC-2009 09:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	8259719	100.000	143	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7293948	100.000	133	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.032	2.032	0.000	1291685	1000.00	1110	80.00- 120.00	100.00
2.280	2.280	0.000	1039247	1000.00	1120	60.46- 100.46	80.46
2.693	2.693	0.000	899024	1000.00	1120	49.60- 89.60	69.60
2.736	2.736	0.000	574056	1000.00	1120	24.44- 64.44	44.44
2.979	2.979	0.000	674245	1000.00	1150	32.20- 72.20	52.20

Average of Peak Amounts = 1.13e+03

Data File: /chem/ecd2a.i/120109.b/006f0601.d

Page 1

Date : 01-DEC-2009 09:04

Client ID: AR123201

Instrument: ecd2a.i

Sample Info: IWAR090930-32

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

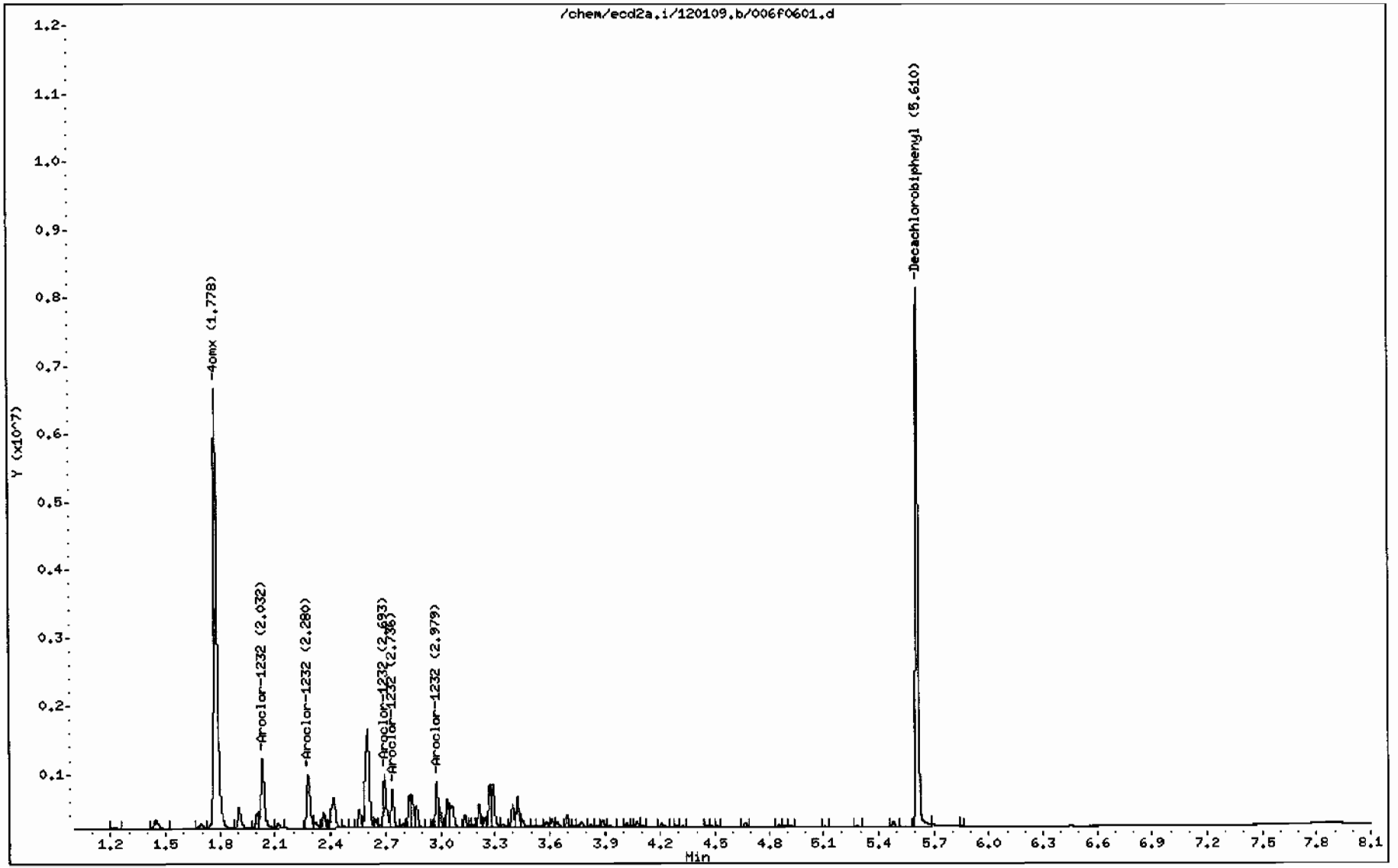

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 01-DEC-2009 09:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	17770300	100.000	150	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	15609769	100.000	144	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.448	2.448	0.000	2349950	1000.00	1140	80.00- 120.00	100.00
2.751	2.751	0.000	2264563	1000.00	1160	76.37- 116.37	96.37
3.185	3.185	0.000	1747497	1000.00	1170	54.36- 94.36	74.36
3.256	3.256	0.000	1078419	1000.00	1160	25.89- 65.89	45.89
3.522	3.522	0.000	1319563	1000.00	1190	36.15- 76.15	56.15

Average of Peak Amounts = 1.16e+03

Data File: /chem/ecd2a.i/120109.b/006b0601.d
Date : 01-DEC-2009 09:04
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

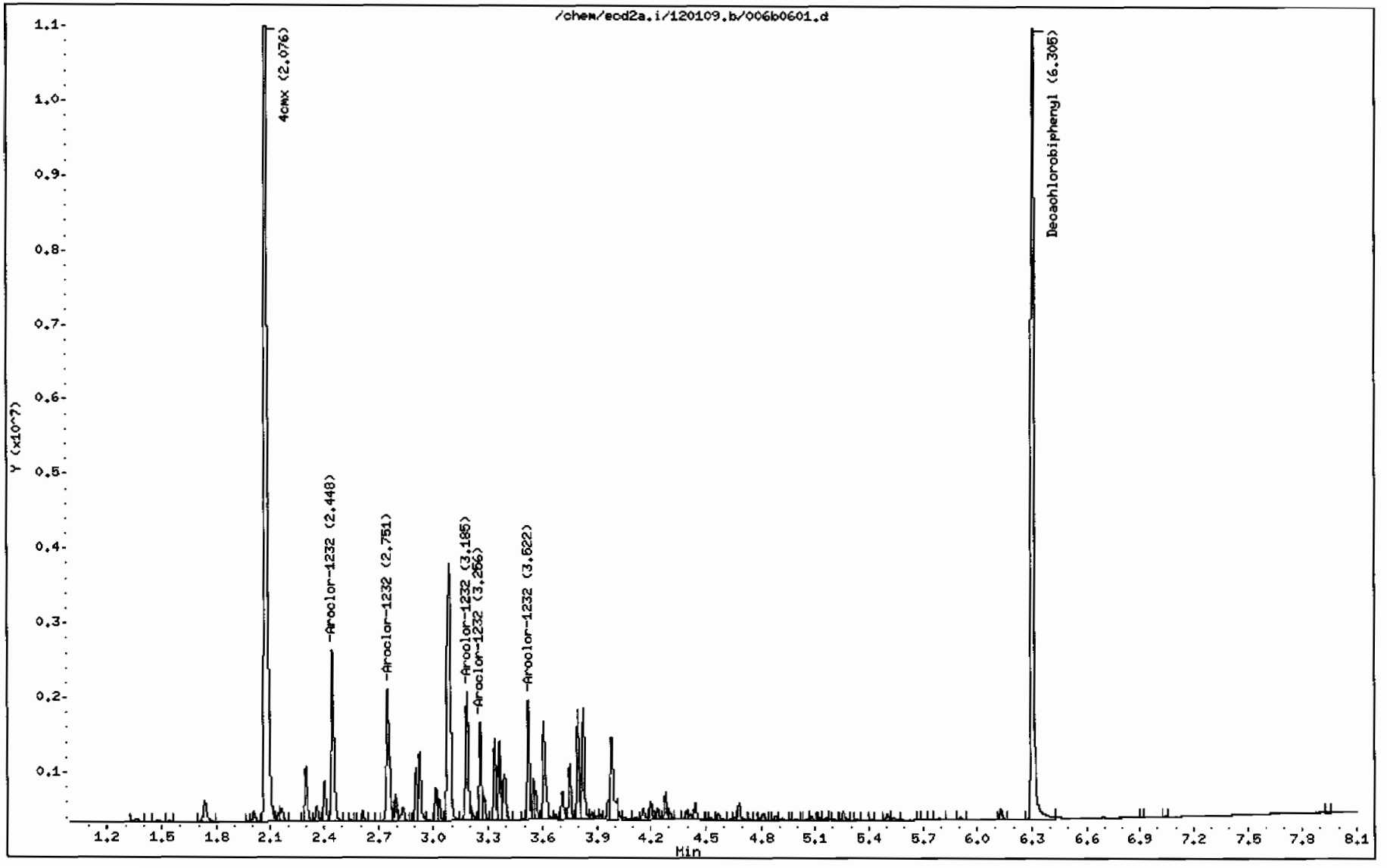

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 01-DEC-2009 09:15
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6413106	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5691170	100.000	104	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	500150	1000.00	1080	80.00- 120.00	100.00
1.904	1.904	0.000	708310	1000.00	1080	121.62- 161.62	141.62
2.004	2.004	0.000	379032	1000.00	1090	55.78- 95.78	75.78

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd2a.i/120109.b/007f0701.d
Date : 01-DEC-2009 09:15
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

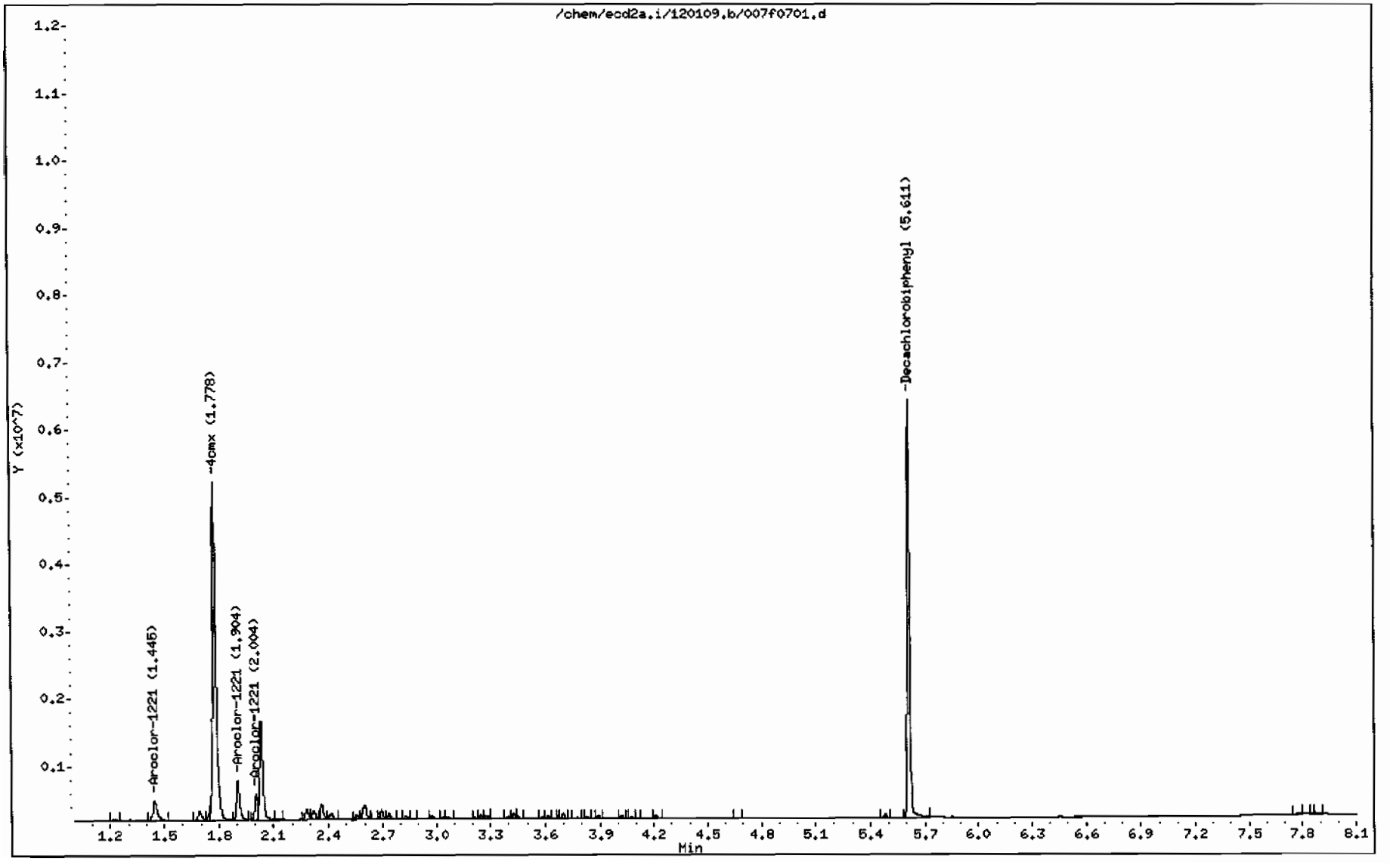

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 01-DEC-2009 09:15
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13763840	100.000	116	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	11955705	100.000	110	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1387240	1000.00	1100	80.00- 120.00	100.00
2.403	2.403	0.000	847927	1000.00	1100	41.12- 81.12	61.12
2.448	2.448	0.000	3361902	1000.00	1100	222.34- 262.34	242.34

Average of Peak Amounts = 1.1e+03

Data File: /chem/ecd2a.i/120109.b/007b0701.d
Date : 01-DEC-2009 09:15
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

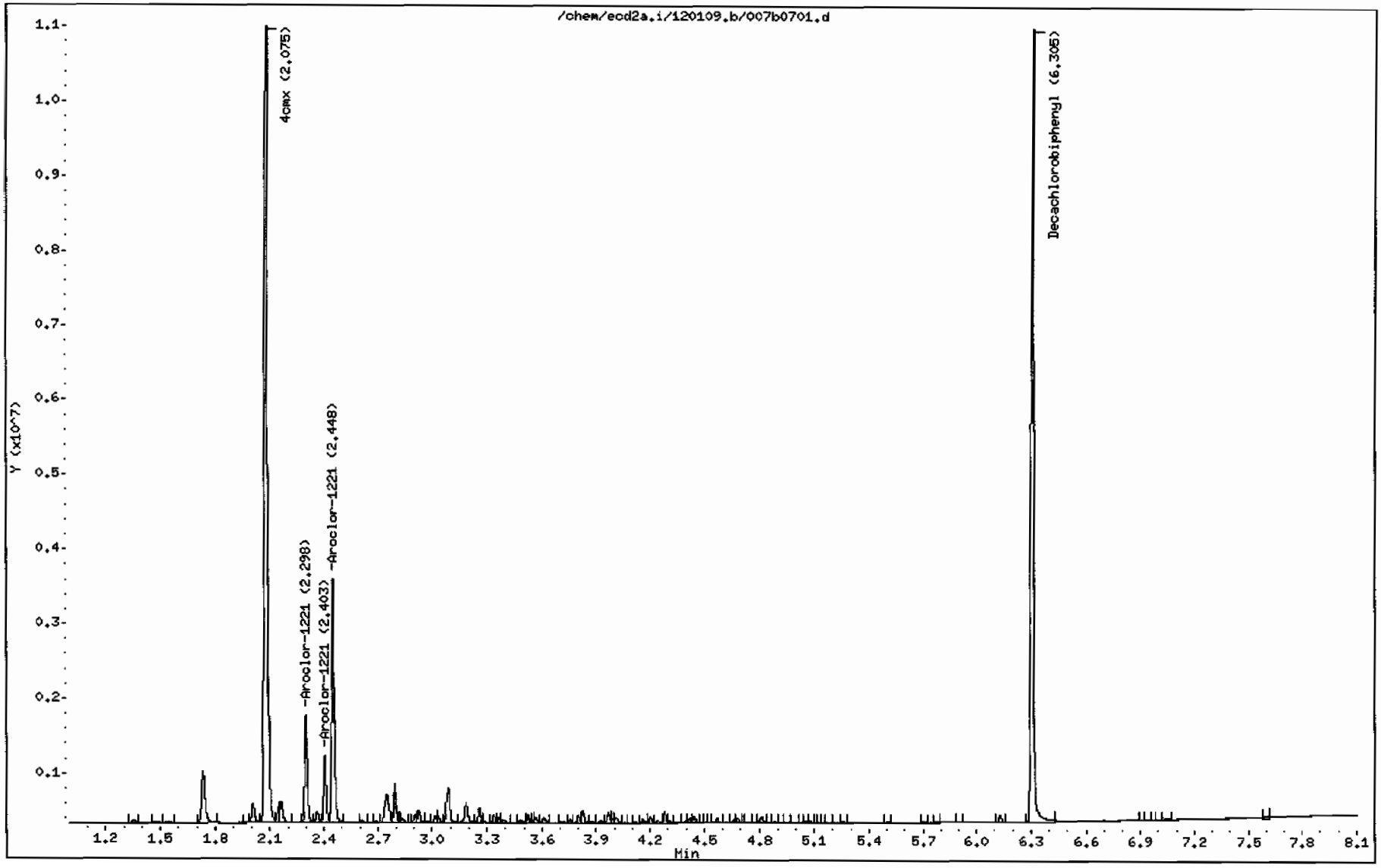

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/010f1001.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 01-DEC-2009 09:48
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6993402	100.000	121	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	6249593	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.827	2.827	0.000	1422470	1000.00	932	80.00- 120.00	100.00(M)
2.978	2.978	0.000	1962250	1000.00	968	117.95- 157.95	137.95
3.038	3.038	0.000	1533368	1000.00	976	87.80- 127.80	107.80
3.272	3.272	0.000	2150295	1000.00	970	131.17- 171.17	151.17
3.425	3.425	0.000	1832165	1000.00	958	108.80- 148.80	128.80
Average of Peak Amounts =					961		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/010f1001.d
Date : 01-DEC-2009 09:48
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

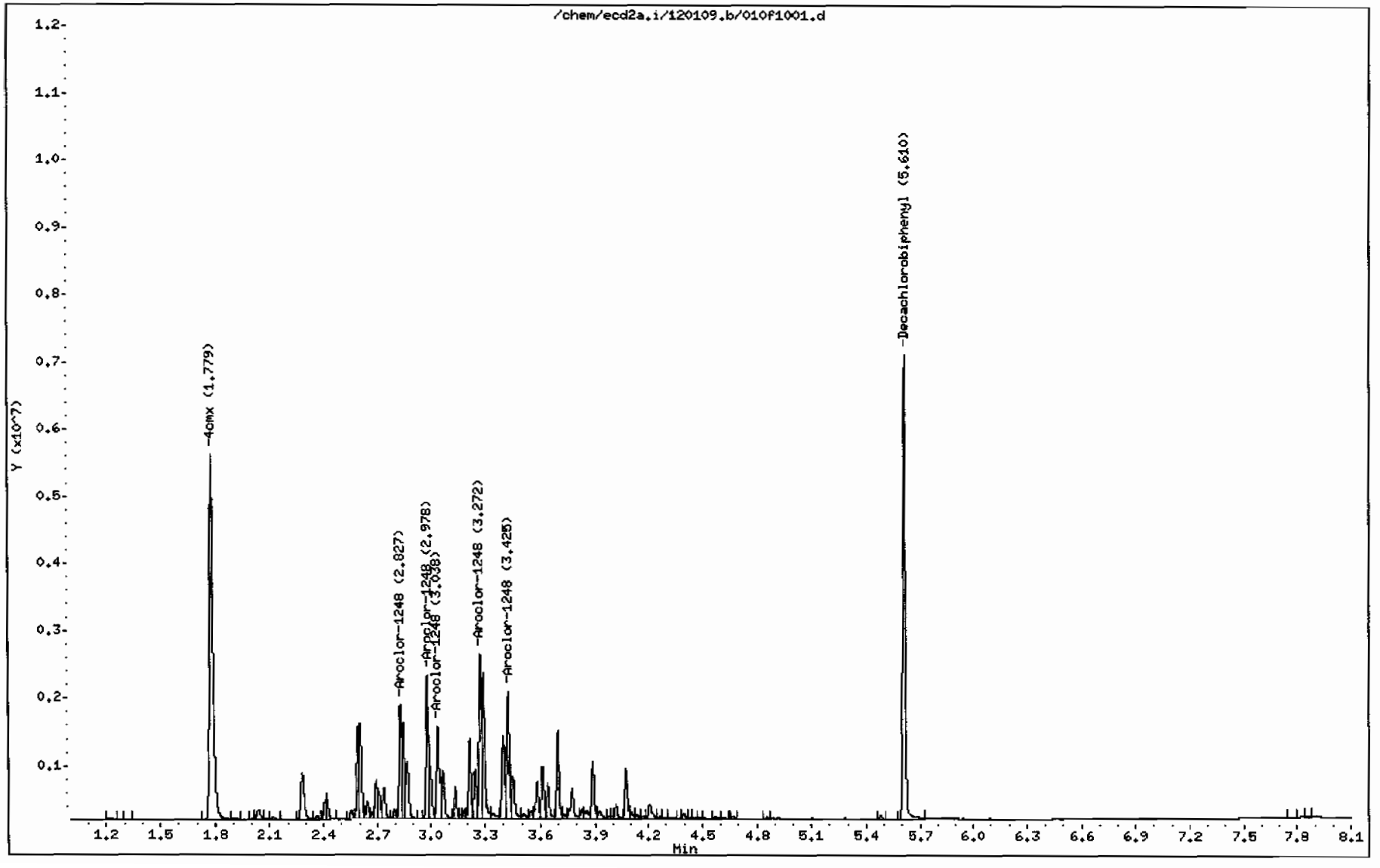

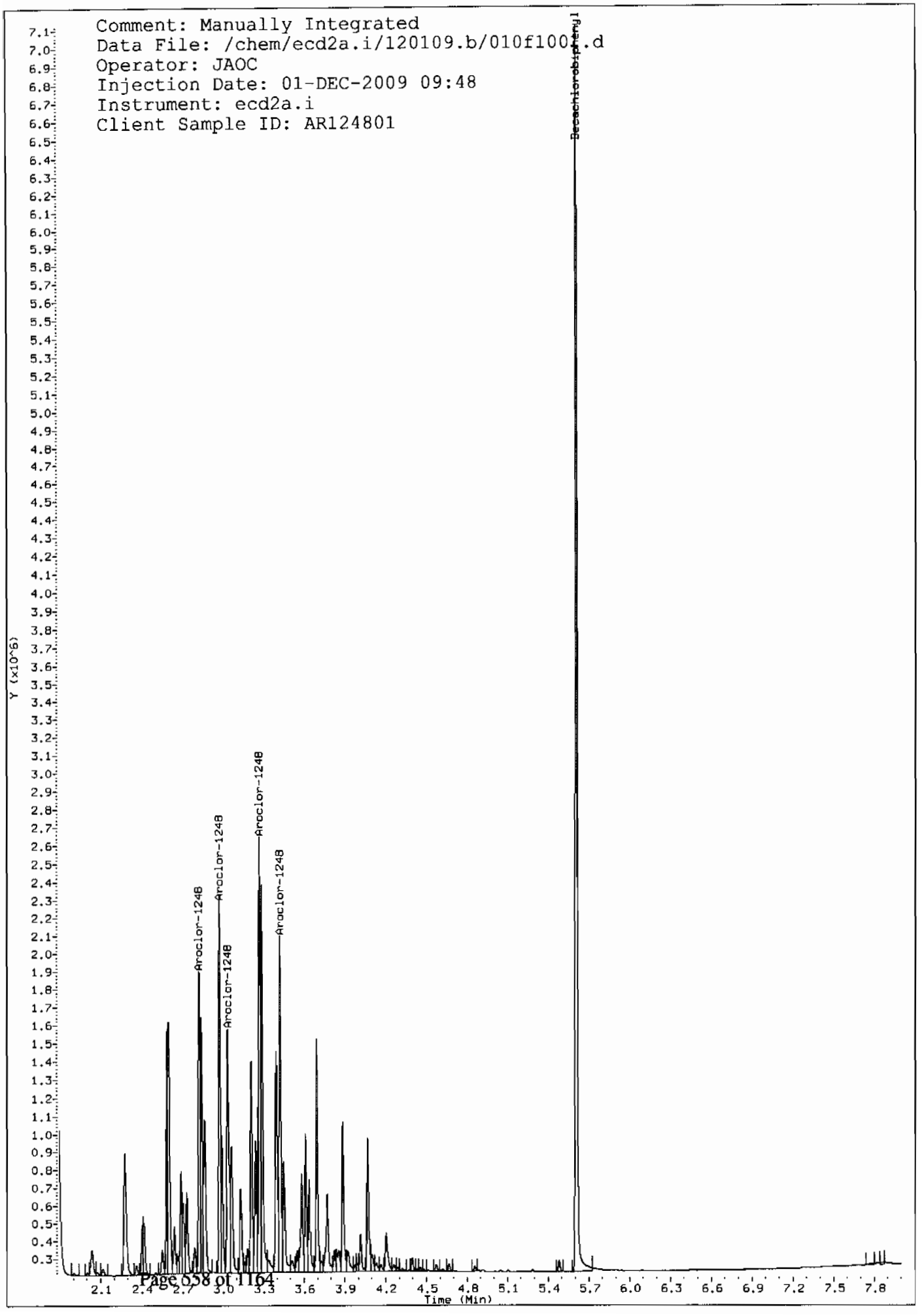
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/010f1001.d
Operator: JAOC
Injection Date: 01-DEC-2009 09:48
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

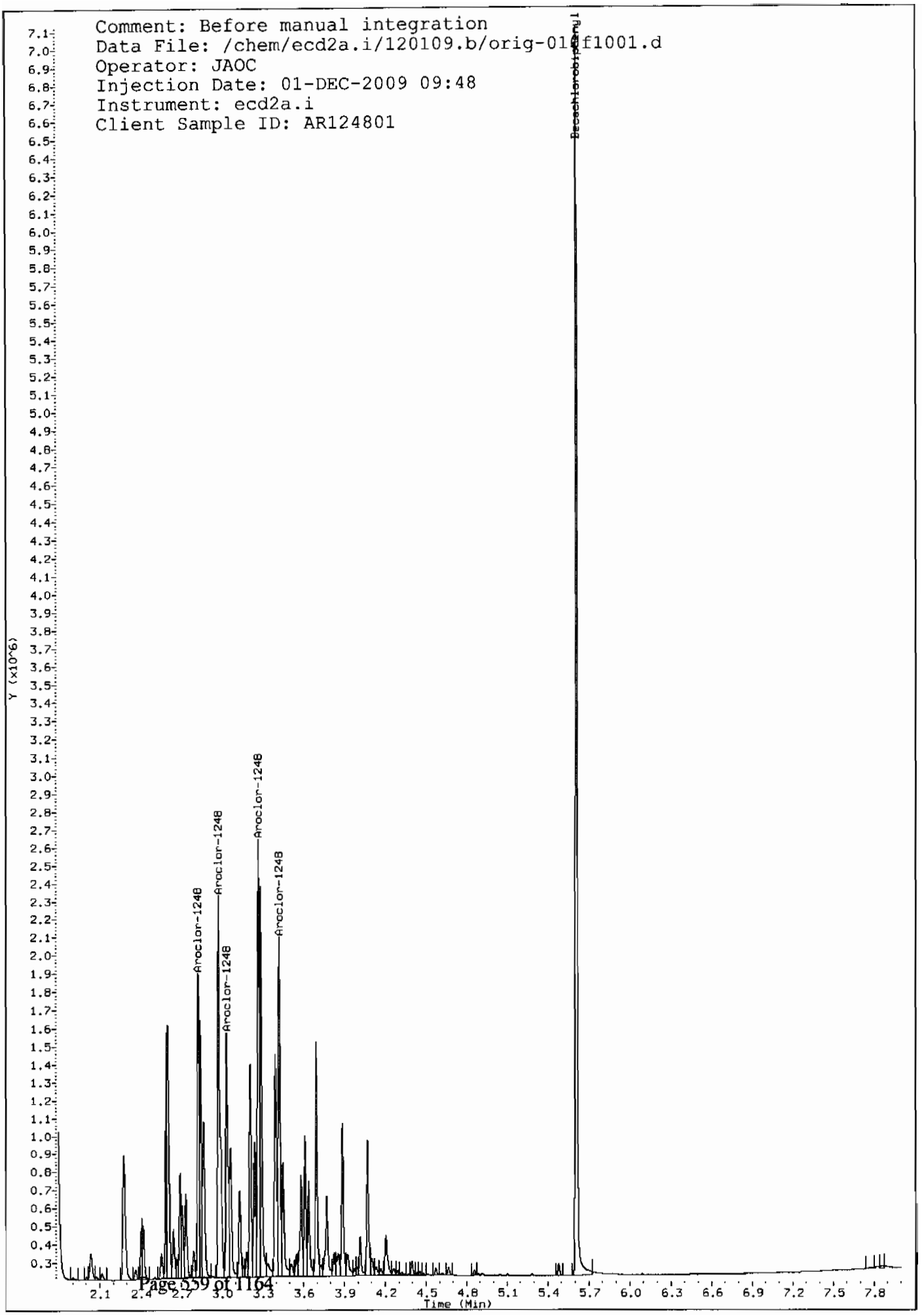
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-01f1001.d
Operator: JAOC
Injection Date: 01-DEC-2009 09:48
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/010b1001.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 01-DEC-2009 09:48
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	15124441	100.000	128	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.304	0.000	13151897	100.000	121	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.335	3.335	0.000	3303928	1000.00	1010	80.00- 120.00	100.00
3.522	3.522	0.000	4229721	1000.00	1010	108.02- 148.02	128.02
3.609	3.609	0.000	4482498	1000.00	1010	115.67- 155.67	135.67
3.797	3.797	0.000	4734457	1000.00	1010	123.30- 163.30	143.30
3.827	3.827	0.000	5413128	1000.00	1000	143.84- 183.84	163.84

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/120109.b/010b1001.d
Date : 01-DEC-2009 09:48
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

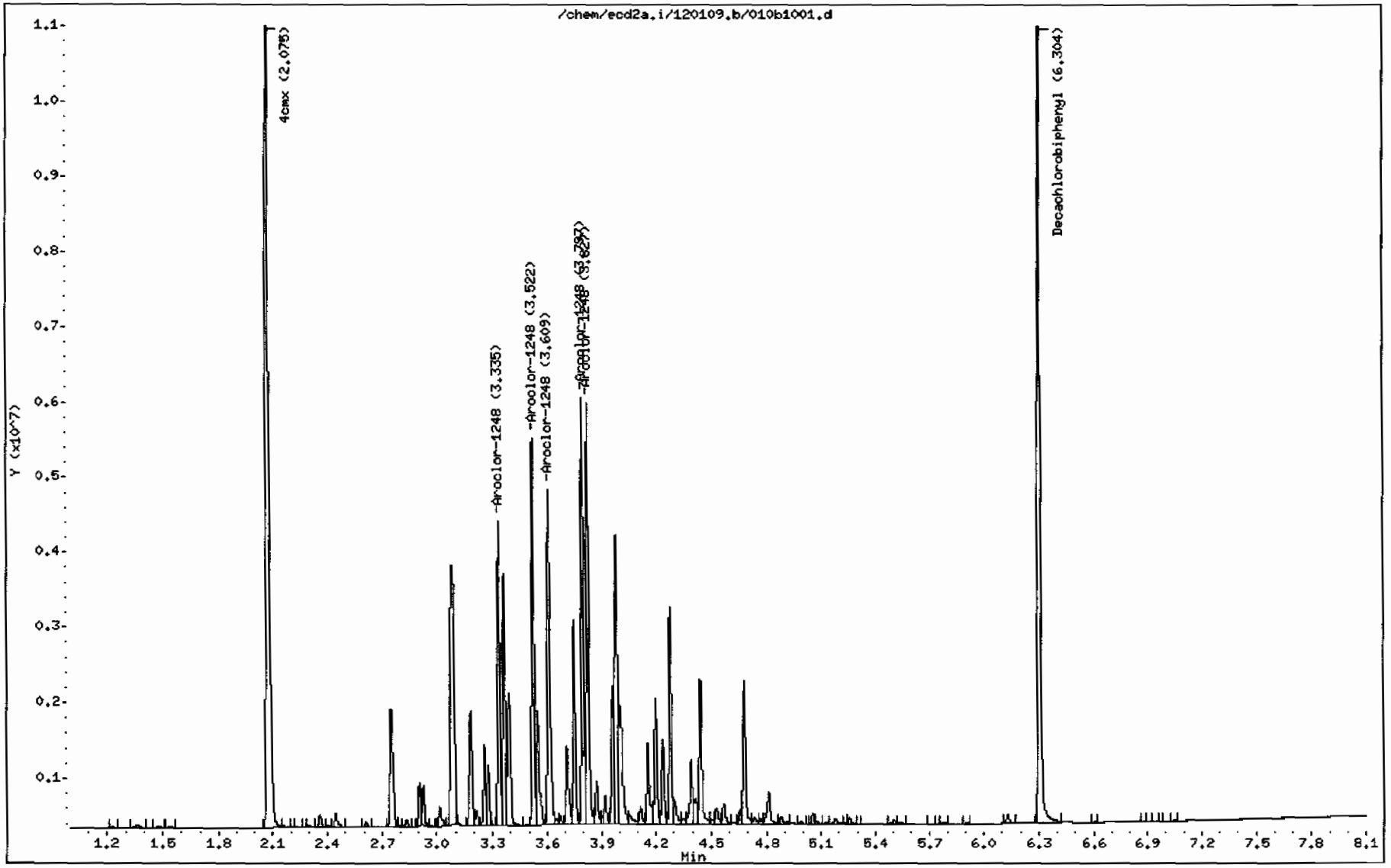

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/071f7101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 01-DEC-2009 21:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6264027	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5036335	100.000	91.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	2004622	1000.00	955	80.00- 120.00	100.00
2.603	2.602	0.001	4377480	1000.00	972	193.81- 233.81	218.37
2.693	2.692	0.001	1722125	1000.00	946	64.26- 104.26	85.91
2.828	2.827	0.001	845038	1000.00	906	21.10- 61.10	42.15
2.979	2.978	0.001	1303127	1000.00	946	44.48- 84.48	65.01
Average of Peak Amounts =					945		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4171396	1000.00	1020	80.00- 120.00	100.00
4.290	4.288	0.002	2535539	1000.00	1000	39.98- 79.98	60.78
4.455	4.454	0.001	2584354	1000.00	1000	41.33- 81.33	61.95
4.667	4.666	0.001	6146696	1000.00	1020	123.75- 163.75	147.35
4.856	4.855	0.001	2915591	1000.00	1000	48.23- 88.23	69.89
Average of Peak Amounts =					1.01e+03		

Data File: /chem/ecd2a.i/120109.b/071f7101.d
Date : 01-DEC-2009 21:47
Client ID: AR166007
Sample Info: IWAR091119-60 07
Column phase: CLP1

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

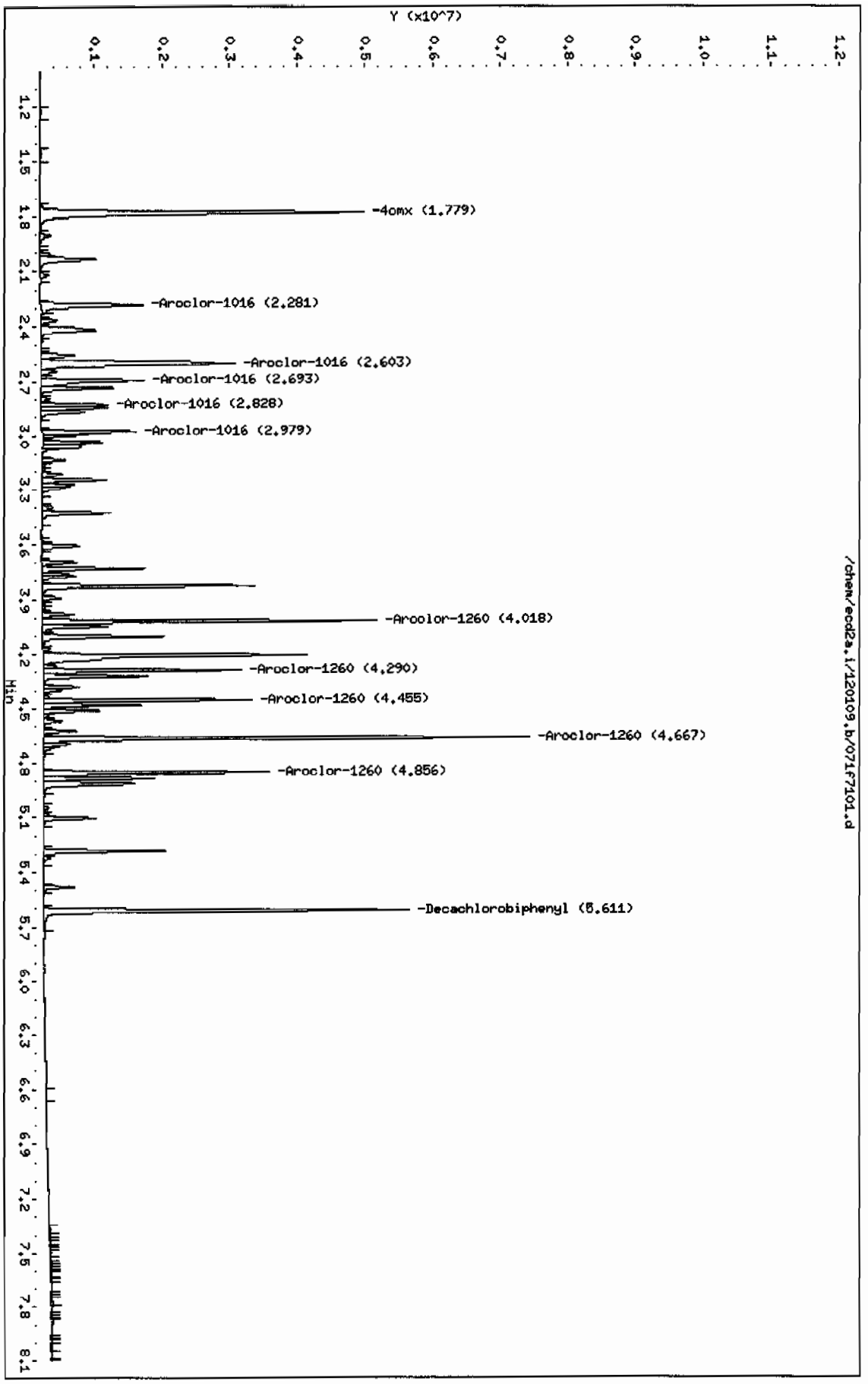

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/071b7101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR160007
Inj Date : 01-DEC-2009 21:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13479075	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	9430073	100.000	86.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4271054	1000.00	1000	80.00- 120.00	100.00
3.185	3.184	0.001	3427214	1000.00	995	61.02- 101.02	80.24
3.336	3.335	0.001	1967846	1000.00	994	26.72- 66.72	46.07
3.364	3.364	0.000	2071726	1000.00	1000	28.59- 68.59	48.51
3.523	3.522	0.001	2821385	1000.00	1020	46.09- 86.09	66.06
Average of Peak Amounts =					1e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5816855	1000.00	1060	80.00- 120.00	100.00
4.570	4.569	0.001	7476776	1000.00	1050	107.33- 147.33	128.54
4.682	4.681	0.001	4924199	1000.00	1040	63.39- 103.39	84.65
4.878	4.879	-0.001	5797610	1000.00	999	78.36- 118.36	99.67
5.505	5.505	0.000	9037267	1000.00	1000	131.09- 171.09	155.36
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/120109.b/071b7101.d
Date : 01-DEC-2009 21:47
Client ID: AR160007
Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

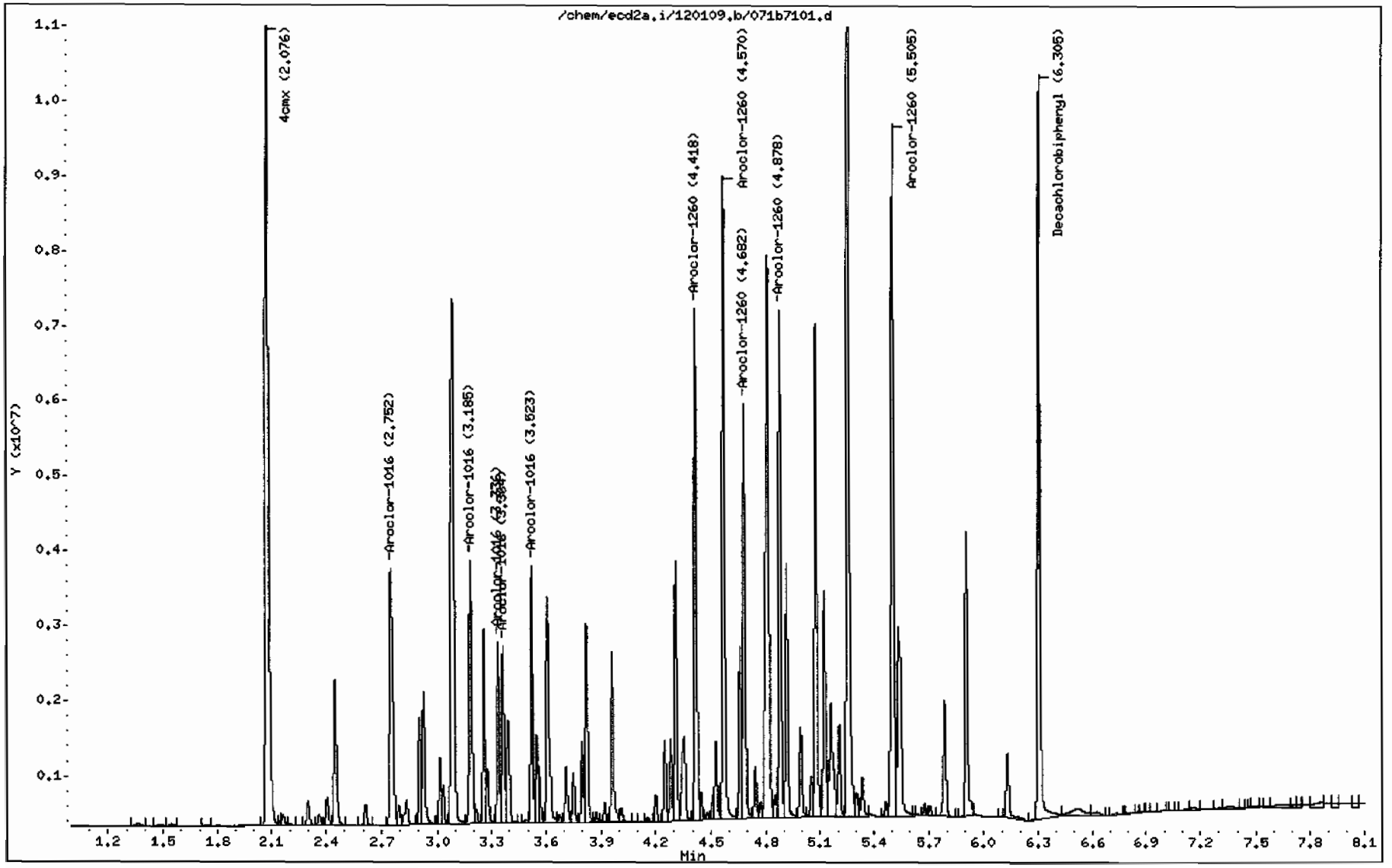

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/083f8301.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 02-DEC-2009 00:00
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 83 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	6171859	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5022894	100.000	91.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	2060686	1000.00	981	80.00- 120.00	100.00(M)
2.603	2.602	0.001	4331233	1000.00	962	193.81- 233.81	210.18
2.693	2.692	0.001	1707251	1000.00	938	64.26- 104.26	82.85
2.828	2.827	0.001	844470	1000.00	905	21.10- 61.10	40.98
2.979	2.978	0.001	1303696	1000.00	946	44.48- 84.48	63.27
Average of Peak Amounts =					946		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4124206	1000.00	1010	80.00- 120.00	100.00
4.289	4.288	0.001	2523819	1000.00	998	39.98- 79.98	61.20
4.455	4.454	0.001	2574281	1000.00	996	41.33- 81.33	62.42
4.668	4.666	0.002	6158896	1000.00	1020	123.75- 163.75	149.34
4.857	4.855	0.002	2940128	1000.00	1010	48.23- 88.23	71.29
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/083f8301.d
Date : 02-DEC-2009 00:00
Client ID: AR166008
Sample Info: IWAR091119-60 08

Column phase: CLP1

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

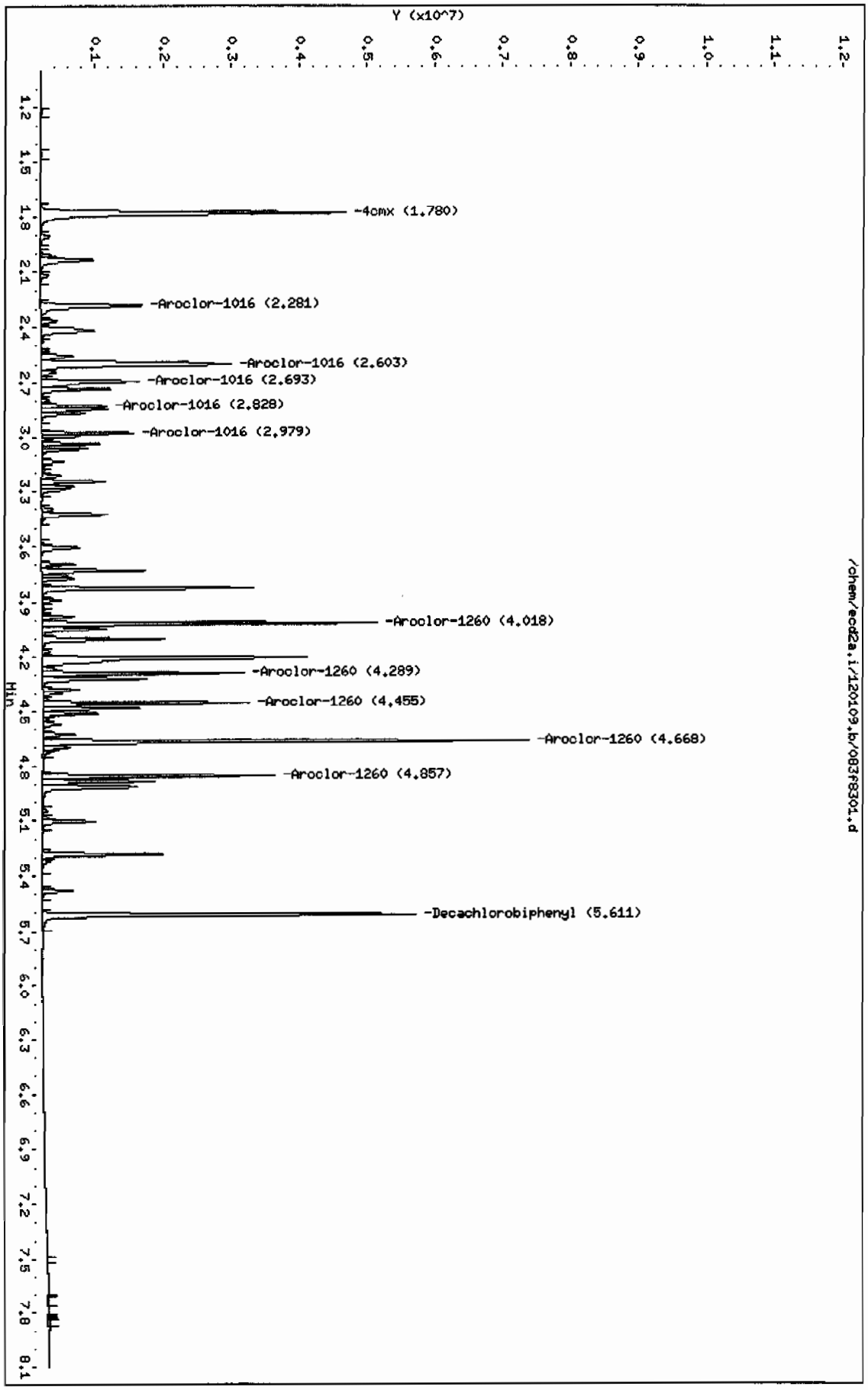

Page 1

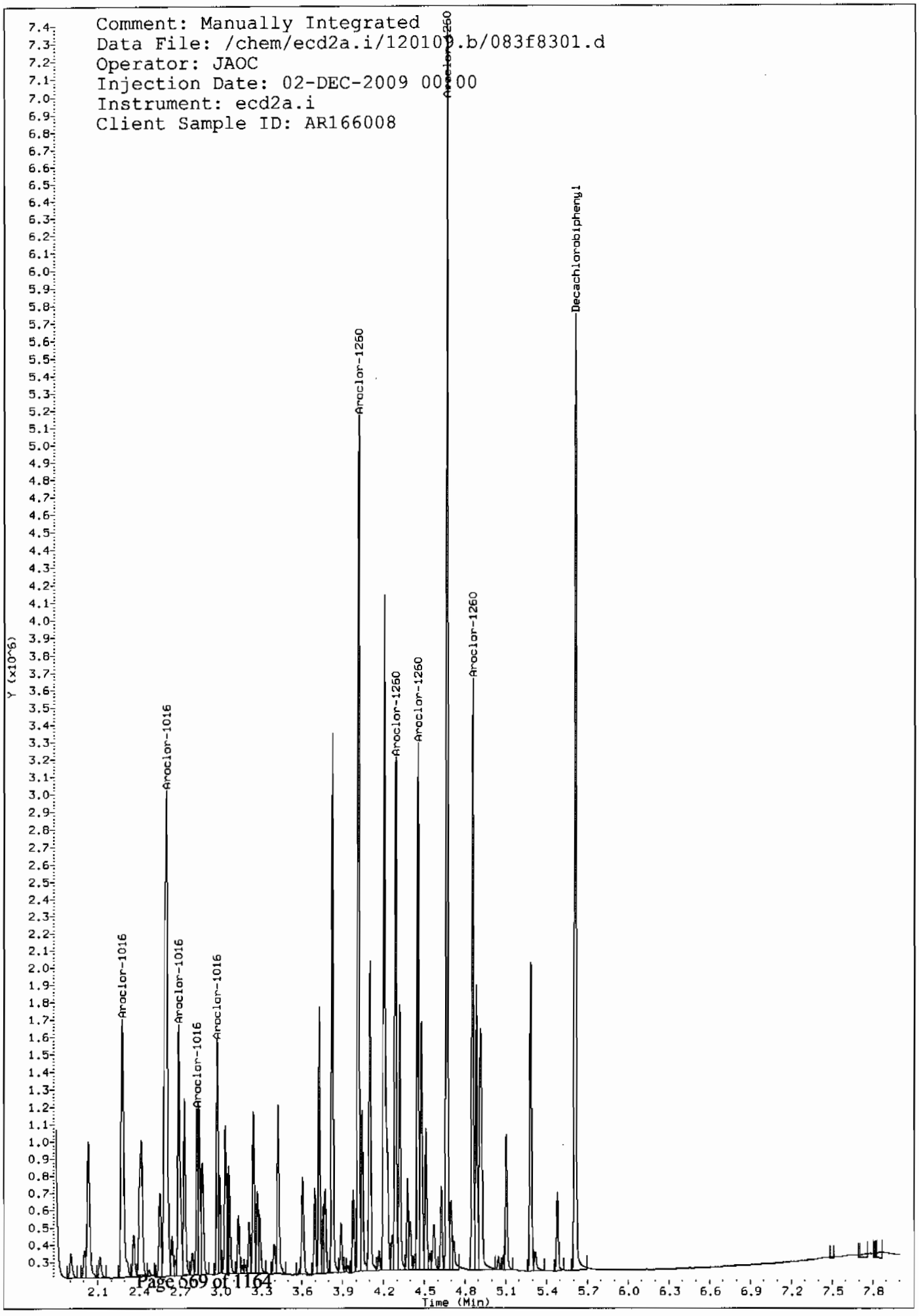
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/083f8301.d
Operator: JAOC
Injection Date: 02-DEC-2009 00:00
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1260
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

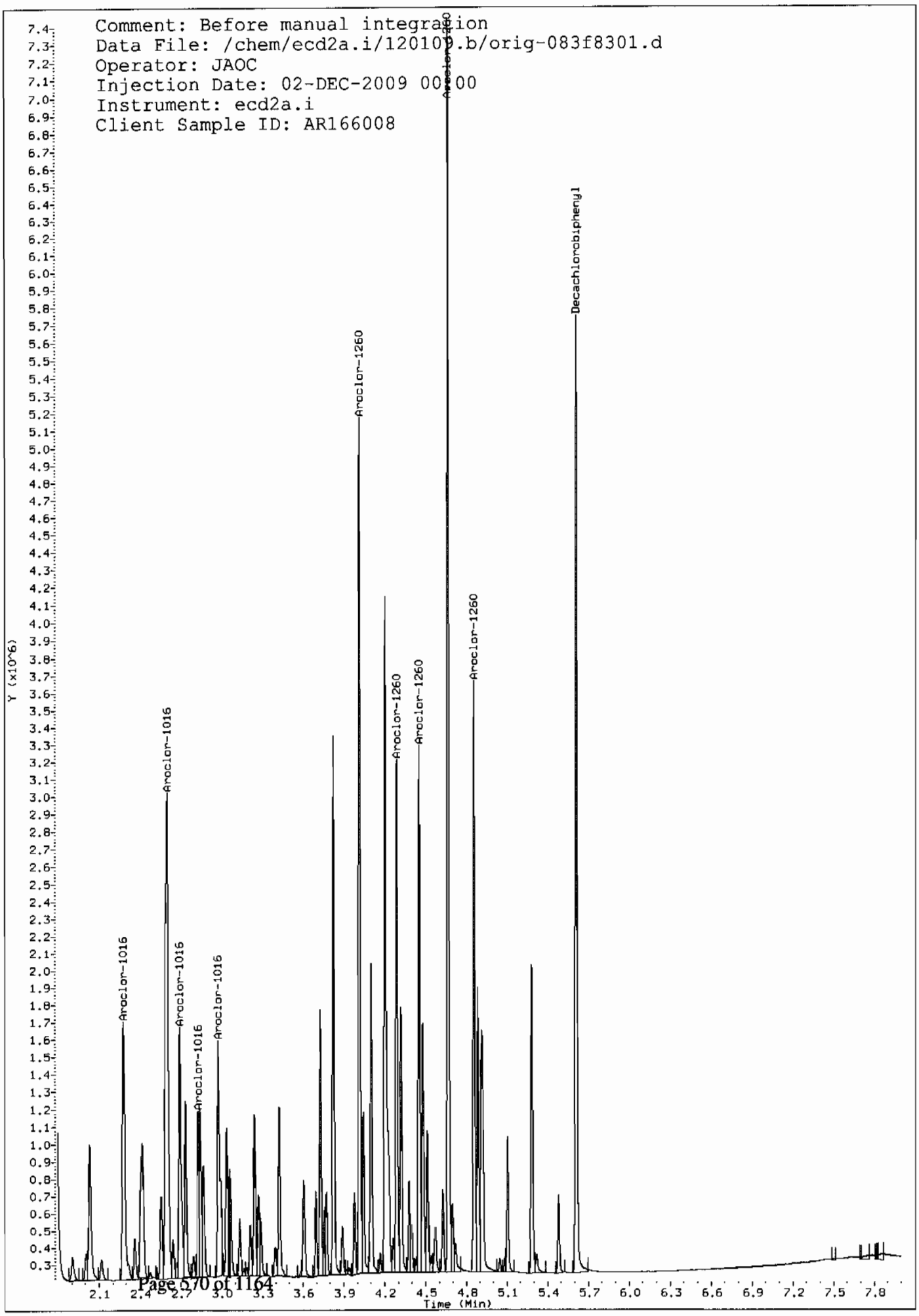
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-083f8301.d
Operator: JAOC
Injection Date: 02-DEC-2009 00:00
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/083b8301.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 02-DEC-2009 00:00
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 83 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13258355	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	10138139	100.000	93.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.750	0.001	4214186	1000.00	990	80.00- 120.00	100.00
3.185	3.184	0.001	3421530	1000.00	993	61.02- 101.02	81.19
3.336	3.335	0.001	1976971	1000.00	999	26.72- 66.72	46.91
3.364	3.364	0.000	2050457	1000.00	995	28.59- 68.59	48.66
3.523	3.522	0.001	2816402	1000.00	1020	46.09- 86.09	66.83
Average of Peak Amounts =					1e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5869239	1000.00	1060	80.00- 120.00	100.00
4.570	4.569	0.001	7550345	1000.00	1060	107.33- 147.33	128.64
4.682	4.681	0.001	4985084	1000.00	1050	63.39- 103.39	84.94
4.878	4.879	-0.001	5967205	1000.00	1030	78.36- 118.36	101.67
5.505	5.505	0.000	9455932	1000.00	1040	131.09- 171.09	161.11
Average of Peak Amounts =					1.05e+03		

Data File: /chem/ecd2a.i/120109.b/083b8301.d
Date : 02-DEC-2009 00:00
Client ID: AR166008
Sample Info: IWAR091119-60 08

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

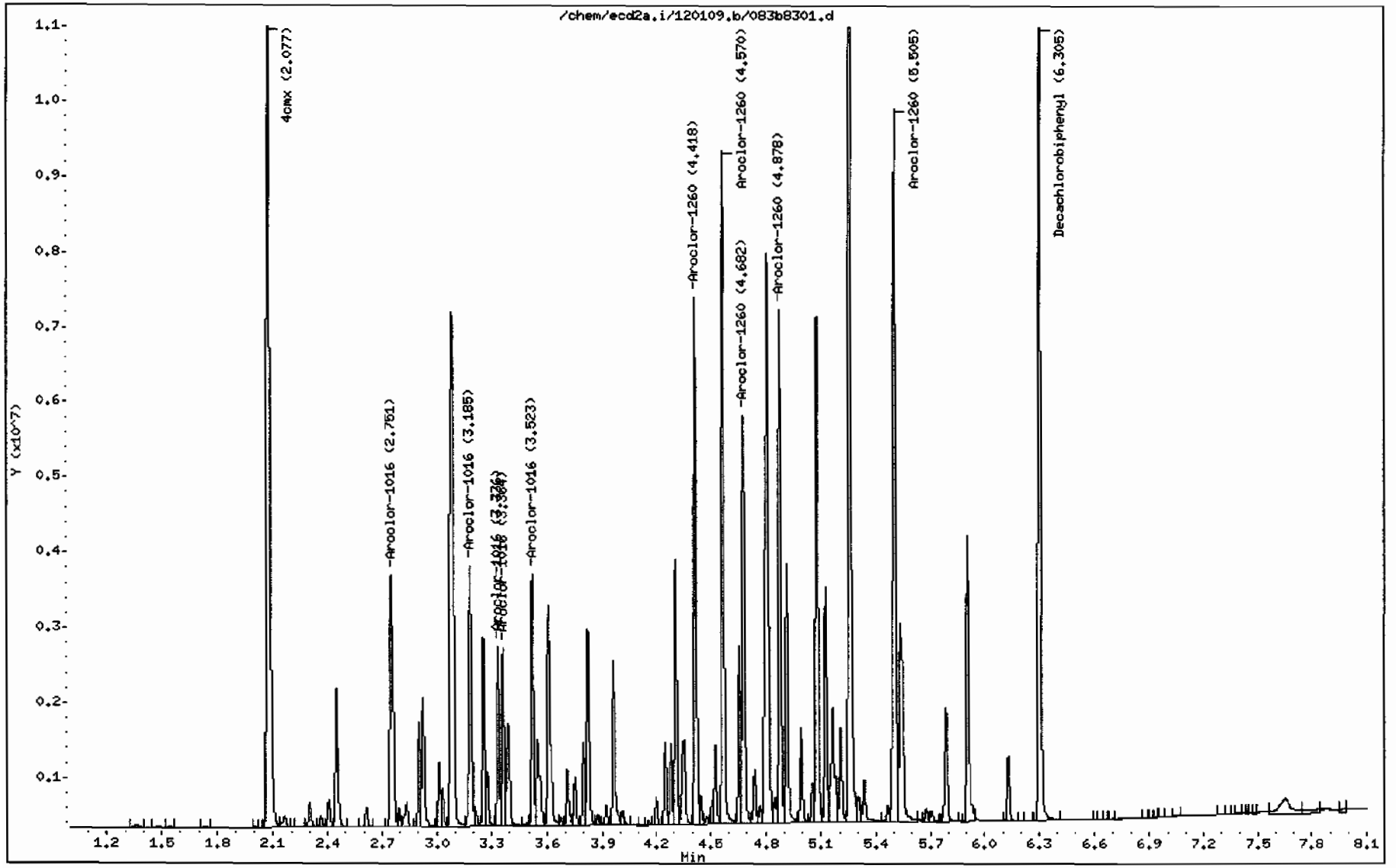

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/091f9101.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 02-DEC-2009 01:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 09
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 91 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	6302763	100.000	109	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4368640	100.000	79.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	2055766	1000.00	979	80.00- 120.00	100.00(M)
2.602	2.602	0.000	4395401	1000.00	976	193.81- 233.81	213.81
2.694	2.692	0.002	1732171	1000.00	952	64.26- 104.26	84.26
2.828	2.827	0.001	845021	1000.00	906	21.10- 61.10	41.10
2.979	2.978	0.001	1325481	1000.00	962	44.48- 84.48	64.48
Average of Peak Amounts =					955		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4125814	1000.00	1010	80.00- 120.00	100.00
4.289	4.288	0.001	2474822	1000.00	979	39.98- 79.98	59.98
4.455	4.454	0.001	2530567	1000.00	980	41.33- 81.33	61.33
4.667	4.666	0.001	5930901	1000.00	982	123.75- 163.75	143.75
4.857	4.855	0.002	2815158	1000.00	967	48.23- 88.23	68.23
Average of Peak Amounts =					984		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/091f9101.d

Date : 02-DEC-2009 01:29

Client ID: AR166009

Sample Info: IWAR091119-60 09

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

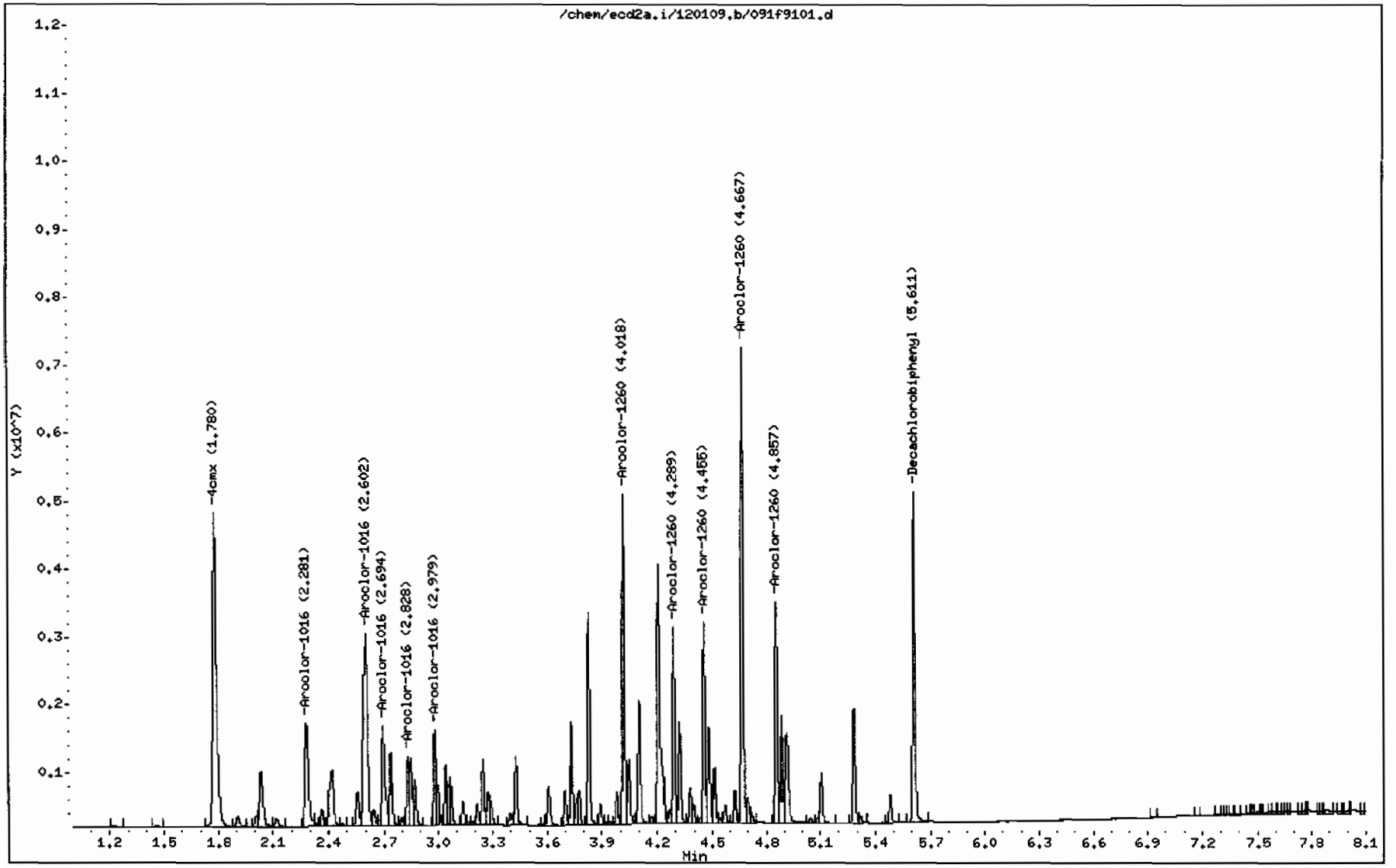

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/091f9101.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:29
Instrument: ecd2a.i
Client Sample ID: AR166009

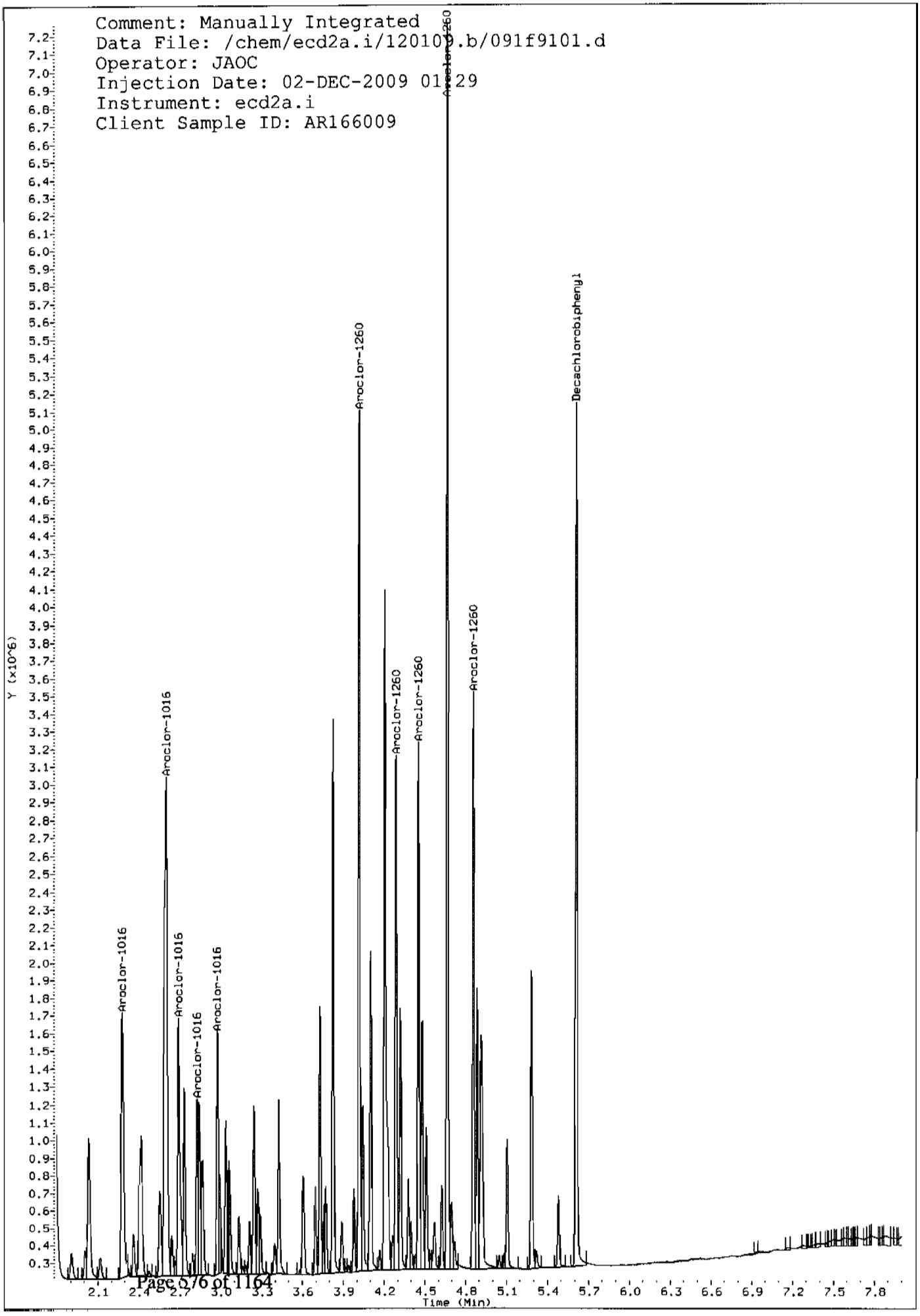

Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-091f9101.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:29
Instrument: ecd2a.i
Client Sample ID: AR166009

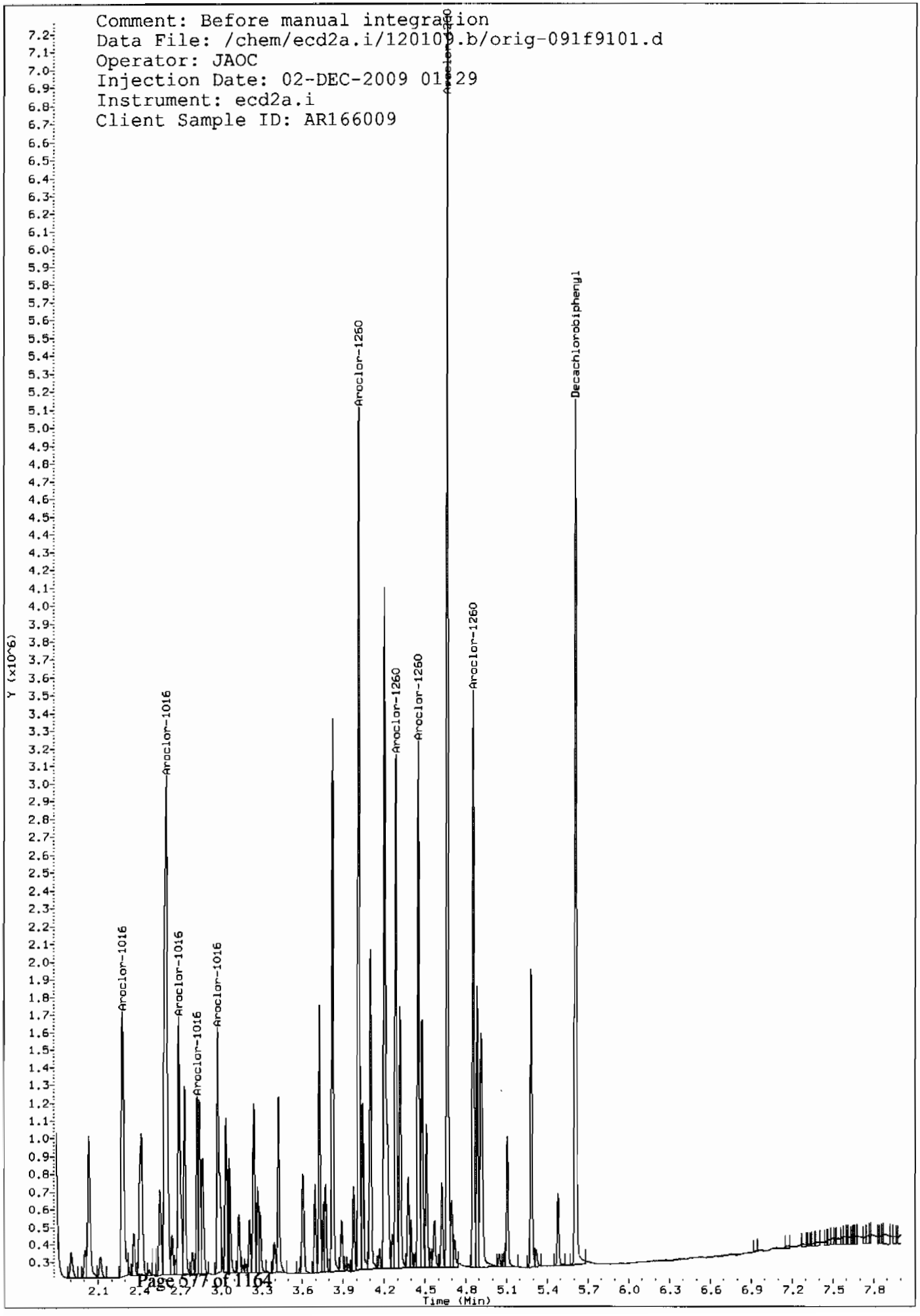

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/091b9101.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 02-DEC-2009 01:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 09
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 91 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13477839	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.304	0.002	8565478	100.000	78.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4275247	1000.00	1000	80.00- 120.00	100.00
3.186	3.184	0.002	3463872	1000.00	1000	61.02- 101.02	81.02
3.337	3.335	0.002	1997302	1000.00	1010	26.72- 66.72	46.72
3.365	3.364	0.001	2077487	1000.00	1010	28.59- 68.59	48.59
3.523	3.522	0.001	2825675	1000.00	1020	46.09- 86.09	66.09
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5722496	1000.00	1040	80.00- 120.00	100.00
4.571	4.569	0.002	7286722	1000.00	1020	107.33- 147.33	127.33
4.682	4.681	0.001	4771909	1000.00	1010	63.39- 103.39	83.39
4.880	4.879	0.001	5628643	1000.00	970	78.36- 118.36	98.36
5.506	5.505	0.001	8645842	1000.00	956	131.09- 171.09	151.09
Average of Peak Amounts =					999		

Data File: /chem/ecd2a.i/120109.b/091b9101.d
Date : 02-DEC-2009 01:29
Client ID: AR166009
Sample Info: IWAR091119-60 09

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

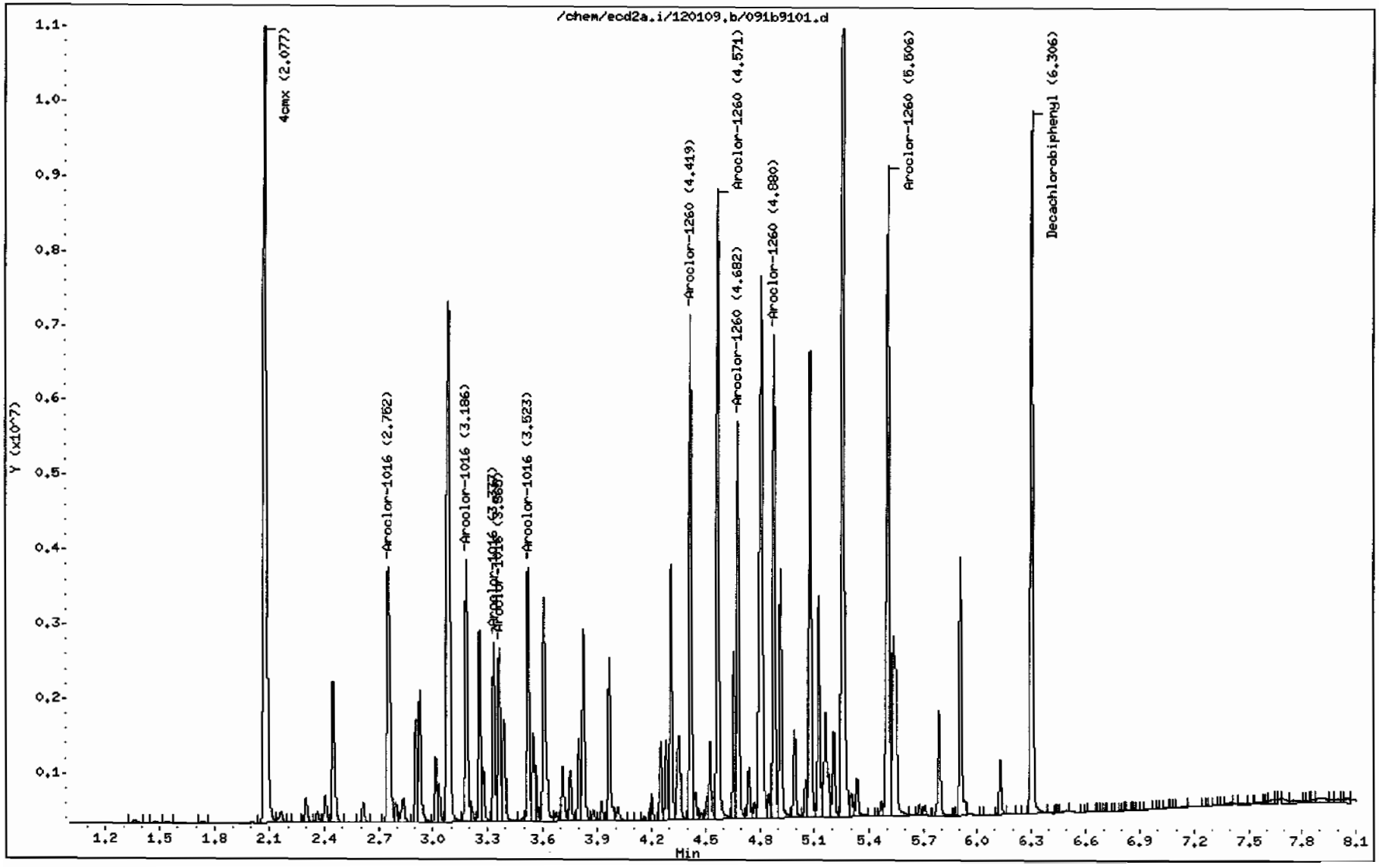

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	AR166001	WAR091119-60	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	AR124801	WAR091027-48	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	AR166001	WAR091119-60	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	AR124801	WAR091027-48	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/01/09	0808	1.78	5.61
02	AR166001	WAR091119-60	12/01/09	0819	1.78	5.61
03	AR125401	WAR091102-54	12/01/09	0830	1.78	5.61
04	AR124201	WAR091102-42	12/01/09	0841	1.78	5.61
05	ZZZZZ	ZZZZZ	12/01/09	0853	1.78	5.61
06	AR123201	WAR090930-32	12/01/09	0904	1.78	5.61
07	AR122101	WAR091111-21	12/01/09	0915	1.78	5.61
08	AR126201	WAR091111-62	12/01/09	0926	1.78	5.61
09	AR126801	WAR091106-68	12/01/09	0937	1.78	5.61
10	AR124801	WAR091027-48	12/01/09	0948	1.78	5.61
11	DDTANALOGSTD	WAR091020-DD	12/01/09	0959		
12	PIBLK02	WAR090916-99	12/01/09	1015	1.78	5.62
13	ZZZZZ	ZZZZZ	12/01/09	1026	1.78	5.61
14	ZZZZZ	ZZZZZ	12/01/09	1037	1.78	5.61
15	ZZZZZ	ZZZZZ	12/01/09	1048	1.78	5.61
16	ZZZZZ	ZZZZZ	12/01/09	1059	1.78	5.61
17	AR166002	WAR091119-60	12/01/09	1114	1.78	5.61
18	PIBLK03	WAR090916-99	12/01/09	1136	1.78	5.62
19	ZZZZZ	ZZZZZ	12/01/09	1147	1.78	5.61
20	ZZZZZ	ZZZZZ	12/01/09	1158	1.78	5.61
21	ZZZZZ	ZZZZZ	12/01/09	1209	1.78	5.61
22	ZZZZZ	ZZZZZ	12/01/09	1225	1.78	5.61
23	ZZZZZ	ZZZZZ	12/01/09	1240	1.78	5.61
24	AR166003	WAR091119-60	12/01/09	1256	1.78	5.61
25	PIBLK04	WAR090916-99	12/01/09	1307	1.78	5.61
26	ZZZZZ	ZZZZZ	12/01/09	1318	1.78	5.61
27	ZZZZZ	ZZZZZ	12/01/09	1329	1.78	5.61
28	ZZZZZ	ZZZZZ	12/01/09	1340	1.78	5.61
29	ZZZZZ	ZZZZZ	12/01/09	1352	1.78	5.61
30	ZZZZZ	ZZZZZ	12/01/09	1403	1.78	5.61
31	ZZZZZ	ZZZZZ	12/01/09	1414	1.78	5.61
32	ZZZZZ	ZZZZZ	12/01/09	1425	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	1436	1.78	5.61
02	ZZZZZ	ZZZZZ	12/01/09	1447	1.78	5.61
03	ZZZZZ	ZZZZZ	12/01/09	1458	1.78	5.61
04	AR166004	WAR091119-60	12/01/09	1514	1.78	5.61
05	PIBLK05	WAR090916-99	12/01/09	1525	1.78	5.61
06	ZZZZZ	ZZZZZ	12/01/09	1536	1.78	5.61
07	ZZZZZ	ZZZZZ	12/01/09	1547	1.78	5.61
08	ZZZZZ	ZZZZZ	12/01/09	1558	1.78	5.61
09	ZZZZZ	ZZZZZ	12/01/09	1609	1.78	5.61
10	ZZZZZ	ZZZZZ	12/01/09	1620	1.78	5.61
11	ZZZZZ	ZZZZZ	12/01/09	1631	1.78	5.61
12	ZZZZZ	ZZZZZ	12/01/09	1642	1.78	5.61
13	ZZZZZ	ZZZZZ	12/01/09	1654	1.78	5.61
14	ZZZZZ	ZZZZZ	12/01/09	1705	1.78	5.61
15	AR166005	WAR091119-60	12/01/09	1720	1.78	5.61
16	PIBLK06	WAR090916-99	12/01/09	1731	1.78	5.61
17	ZZZZZ	ZZZZZ	12/01/09	1742	1.78	5.61
18	ZZZZZ	ZZZZZ	12/01/09	1754	1.78	5.61
19	ZZZZZ	ZZZZZ	12/01/09	1805	1.78	5.61
20	ZZZZZ	ZZZZZ	12/01/09	1816	1.78	5.61
21	ZZZZZ	ZZZZZ	12/01/09	1827	1.78	5.61
22	ZZZZZ	ZZZZZ	12/01/09	1838	1.78	5.61
23	ZZZZZ	ZZZZZ	12/01/09	1849	1.78	5.61
24	ZZZZZ	ZZZZZ	12/01/09	1900	1.78	5.61
25	ZZZZZ	ZZZZZ	12/01/09	1911	1.78	5.61
26	ZZZZZ	ZZZZZ	12/01/09	1922	1.78	5.61
27	AR166006	WAR091119-60	12/01/09	1933	1.78	5.61
28	PIBLK07	WAR090916-99	12/01/09	1944	1.78	5.61
29	ZZZZZ	ZZZZZ	12/01/09	1956	1.78	5.61
30	ZZZZZ	ZZZZZ	12/01/09	2007	1.78	5.61
31	ZZZZZ	ZZZZZ	12/01/09	2018	1.78	5.61
32	ZZZZZ	ZZZZZ	12/01/09	2029	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	2040	1.78	5.61
02	ZZZZZ	ZZZZZ	12/01/09	2051	1.78	5.61
03	ZZZZZ	ZZZZZ	12/01/09	2102	1.78	5.61
04	ZZZZZ	ZZZZZ	12/01/09	2113	1.78	5.61
05	ZZZZZ	ZZZZZ	12/01/09	2124	1.78	5.61
06	ZZZZZ	ZZZZZ	12/01/09	2135	1.78	5.61
07	AR166007	WAR091119-60	12/01/09	2147	1.78	5.61
08	PIBLK08	WAR090916-99	12/01/09	2158	1.78	5.61
09	ZZZZZ	ZZZZZ	12/01/09	2209	1.78	5.62
10	PBLK01	1201982132	12/01/09	2220	1.78	5.62
11	PBLK01LCS	1201982135	12/01/09	2231	1.78	5.61
12	ZZZZZ	ZZZZZ	12/01/09	2242	1.78	5.61
13	ZZZZZ	ZZZZZ	12/01/09	2253	1.78	5.61
14	ZZZZZ	ZZZZZ	12/01/09	2304	1.78	5.61
15	ZZZZZ	ZZZZZ	12/01/09	2316	1.78	5.61
16	ZZZZZ	ZZZZZ	12/01/09	2327	1.78	5.61
17	ZZZZZ	ZZZZZ	12/01/09	2338	1.78	5.61
18	ZZZZZ	ZZZZZ	12/01/09	2349	1.78	5.61
19	AR166008	WAR091119-60	12/02/09	0000	1.78	5.61
20	PIBLK09	WAR090916-99	12/02/09	0011	1.78	5.61
21	ZZZZZ	ZZZZZ	12/02/09	0023	1.78	5.61
22	ZZZZZ	ZZZZZ	12/02/09	0034	1.78	5.61
23	RE03-09-13462	241539001	12/02/09	0045	1.78	5.61
24	RE03-09-13464	241539002	12/02/09	0056	1.78	5.61
25	RE03-09-13463	241539003	12/02/09	0107	1.78	5.61
26	RE03-09-13461	241539004	12/02/09	0118	1.78	5.61
27	AR166009	WAR091119-60	12/02/09	0129	1.78	5.61
28	PIBLK10	WAR090916-99	12/02/09	0140	1.78	5.61
29						
30						
31						
32						

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/01/09	0808	2.07	6.30
02	AR166001	WAR091119-60	12/01/09	0819	2.08	6.30
03	AR125401	WAR091102-54	12/01/09	0830	2.08	6.30
04	AR124201	WAR091102-42	12/01/09	0841	2.08	6.31
05	ZZZZZ	ZZZZZ	12/01/09	0853	2.08	6.30
06	AR123201	WAR090930-32	12/01/09	0904	2.08	6.30
07	AR122101	WAR091111-21	12/01/09	0915	2.07	6.30
08	AR126201	WAR091111-62	12/01/09	0926	2.07	6.30
09	AR126801	WAR091106-68	12/01/09	0937	2.08	6.30
10	AR124801	WAR091027-48	12/01/09	0948	2.08	6.30
11	DDTANALOGSTD	WAR091020-DD	12/01/09	0959		
12	PIBLK02	WAR090916-99	12/01/09	1015	2.08	6.31
13	ZZZZZ	ZZZZZ	12/01/09	1026	2.08	6.31
14	ZZZZZ	ZZZZZ	12/01/09	1037	2.07	6.31
15	ZZZZZ	ZZZZZ	12/01/09	1048	2.08	6.31
16	ZZZZZ	ZZZZZ	12/01/09	1059	2.08	6.31
17	AR166002	WAR091119-60	12/01/09	1114	2.07	6.30
18	PIBLK03	WAR090916-99	12/01/09	1136	2.08	6.31
19	ZZZZZ	ZZZZZ	12/01/09	1147	2.08	6.31
20	ZZZZZ	ZZZZZ	12/01/09	1158	2.07	6.30
21	ZZZZZ	ZZZZZ	12/01/09	1209	2.08	6.30
22	ZZZZZ	ZZZZZ	12/01/09	1225	2.07	6.30
23	ZZZZZ	ZZZZZ	12/01/09	1240	2.08	6.30
24	AR166003	WAR091119-60	12/01/09	1256	2.07	6.30
25	PIBLK04	WAR090916-99	12/01/09	1307	2.08	6.30
26	ZZZZZ	ZZZZZ	12/01/09	1318	2.08	6.30
27	ZZZZZ	ZZZZZ	12/01/09	1329	2.07	6.30
28	ZZZZZ	ZZZZZ	12/01/09	1340	2.08	6.30
29	ZZZZZ	ZZZZZ	12/01/09	1352	2.08	6.30
30	ZZZZZ	ZZZZZ	12/01/09	1403	2.08	6.31
31	ZZZZZ	ZZZZZ	12/01/09	1414	2.08	6.31
32	ZZZZZ	ZZZZZ	12/01/09	1425	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	1436	2.08	6.30
02	ZZZZZ	ZZZZZ	12/01/09	1447	2.08	6.30
03	ZZZZZ	ZZZZZ	12/01/09	1458	2.08	6.31
04	AR166004	WAR091119-60	12/01/09	1514	2.07	6.30
05	PIBLK05	WAR090916-99	12/01/09	1525	2.08	6.30
06	ZZZZZ	ZZZZZ	12/01/09	1536	2.08	6.30
07	ZZZZZ	ZZZZZ	12/01/09	1547	2.08	6.30
08	ZZZZZ	ZZZZZ	12/01/09	1558	2.08	6.30
09	ZZZZZ	ZZZZZ	12/01/09	1609	2.08	6.30
10	ZZZZZ	ZZZZZ	12/01/09	1620	2.08	6.30
11	ZZZZZ	ZZZZZ	12/01/09	1631	2.08	6.31
12	ZZZZZ	ZZZZZ	12/01/09	1642	2.07	6.31
13	ZZZZZ	ZZZZZ	12/01/09	1654	2.08	6.30
14	ZZZZZ	ZZZZZ	12/01/09	1705	2.08	6.30
15	AR166005	WAR091119-60	12/01/09	1720	2.08	6.30
16	PIBLK06	WAR090916-99	12/01/09	1731	2.08	6.30
17	ZZZZZ	ZZZZZ	12/01/09	1742	2.08	6.30
18	ZZZZZ	ZZZZZ	12/01/09	1754	2.08	6.30
19	ZZZZZ	ZZZZZ	12/01/09	1805	2.08	6.30
20	ZZZZZ	ZZZZZ	12/01/09	1816	2.08	6.31
21	ZZZZZ	ZZZZZ	12/01/09	1827	2.08	6.31
22	ZZZZZ	ZZZZZ	12/01/09	1838	2.08	6.31
23	ZZZZZ	ZZZZZ	12/01/09	1849	2.08	6.31
24	ZZZZZ	ZZZZZ	12/01/09	1900	2.08	6.30
25	ZZZZZ	ZZZZZ	12/01/09	1911	2.08	6.31
26	ZZZZZ	ZZZZZ	12/01/09	1922	2.08	6.31
27	AR166006	WAR091119-60	12/01/09	1933	2.08	6.30
28	PIBLK07	WAR090916-99	12/01/09	1944	2.08	6.31
29	ZZZZZ	ZZZZZ	12/01/09	1956	2.07	6.31
30	ZZZZZ	ZZZZZ	12/01/09	2007	2.08	6.31
31	ZZZZZ	ZZZZZ	12/01/09	2018	2.08	6.31
32	ZZZZZ	ZZZZZ	12/01/09	2029	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-603

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	2040	2.08	6.30
02	ZZZZZ	ZZZZZ	12/01/09	2051	2.08	6.31
03	ZZZZZ	ZZZZZ	12/01/09	2102	2.08	6.31
04	ZZZZZ	ZZZZZ	12/01/09	2113	2.08	6.30
05	ZZZZZ	ZZZZZ	12/01/09	2124	2.08	6.30
06	ZZZZZ	ZZZZZ	12/01/09	2135	2.08	6.31
07	AR160007	WAR091119-60	12/01/09	2147	2.08	6.31
08	PIBLK08	WAR090916-99	12/01/09	2158	2.08	6.31
09	ZZZZZ	ZZZZZ	12/01/09	2209	2.08	6.31
10	PBLK01	1201982132	12/01/09	2220	2.08	6.31
11	PBLK01LCS	1201982135	12/01/09	2231	2.08	6.31
12	ZZZZZ	ZZZZZ	12/01/09	2242	2.08	6.31
13	ZZZZZ	ZZZZZ	12/01/09	2253	2.08	6.30
14	ZZZZZ	ZZZZZ	12/01/09	2304	2.08	6.30
15	ZZZZZ	ZZZZZ	12/01/09	2316	2.08	6.31
16	ZZZZZ	ZZZZZ	12/01/09	2327	2.08	6.31
17	ZZZZZ	ZZZZZ	12/01/09	2338	2.08	6.31
18	ZZZZZ	ZZZZZ	12/01/09	2349	2.08	6.31
19	AR166008	WAR091119-60	12/02/09	0000	2.08	6.31
20	PIBLK09	WAR090916-99	12/02/09	0011	2.08	6.31
21	ZZZZZ	ZZZZZ	12/02/09	0023	2.07	6.31
22	ZZZZZ	ZZZZZ	12/02/09	0034	2.08	6.31
23	RE03-09-13462	241539001	12/02/09	0045	2.08	6.30
24	RE03-09-13464	241539002	12/02/09	0056	2.08	6.31
25	RE03-09-13463	241539003	12/02/09	0107	2.08	6.31
26	RE03-09-13461	241539004	12/02/09	0118	2.08	6.30
27	AR166009	WAR091119-60	12/02/09	0129	2.08	6.31
28	PIBLK10	WAR090916-99	12/02/09	0140	2.08	6.30
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10–603 **Client ID:** LCS for batch 927077

Lab Sample ID: 1201982135

Data File:	075f7501.d	**Data File:**	075b7501.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 22:31	**Analyzed:**	01–DEC–09 22:31

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							4.19
Column 1	1	2.28	2.25 – 2.31	28.4		ug/kg	
	2	2.6	2.57 – 2.63	28.2		ug/kg	
	3	2.69	2.66 – 2.72	27.5		ug/kg	
	4	2.83	2.8 – 2.86	26.8		ug/kg	
	5	2.98	2.95 – 3.01	28.7		ug/kg	
					27.9		
Column 2	1	2.75	2.72 – 2.78	29.2		ug/kg	
	2	3.19	3.15 – 3.21	31		ug/kg	
	3	3.34	3.31 – 3.37	30.1		ug/kg	
	4	3.37	3.33 – 3.39	25.2		ug/kg	
	5	3.52	3.49 – 3.55	30		ug/kg	
					29.1		
Aroclor–1260							.594
Column 1	1	4.02	3.99 – 4.05	31.2		ug/kg	
	2	4.29	4.26 – 4.32	30.7		ug/kg	
	3	4.46	4.42 – 4.48	30.9		ug/kg	
	4	4.67	4.64 – 4.7	31.9		ug/kg	
	5	4.86	4.83 – 4.89	31.2		ug/kg	
					31.2		
Column 2	1	4.42	4.39 – 4.45	32		ug/kg	
	2	4.57	4.54 – 4.6	31.9		ug/kg	
	3	4.68	4.65 – 4.71	31.5		ug/kg	
	4	4.88	4.85 – 4.91	30.9		ug/kg	
	5	5.51	5.48 – 5.54	30.5		ug/kg	
					31.4		

Identification Summary

SDG Number: 10–603 **Client ID:** RE03–09–13461

Lab Sample ID: 241539004

Data File:	090f9001.d	**Data File:**	090b9001.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	02–DEC–09 01:18	**Analyzed:**	02–DEC–09 01:18

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							3.13
Column 1	1	3.25	3.21 – 3.27	21.8		ug/kg	
	2	3.43	3.4 – 3.46	10.4		ug/kg	
	3	3.7	3.67 – 3.73	25.9		ug/kg	
	4	3.89	3.86 – 3.92	6.88		ug/kg	
	5	4.02	3.99 – 4.05	83.3		ug/kg	
					29.7		
Column 2	1	3.82	3.79 – 3.85	14.7		ug/kg	
	2	3.96	3.93 – 3.99	13.2		ug/kg	
	3	4.2	4.17 – 4.23	14.1		ug/kg	
	4	4.28	4.25 – 4.31	21.3		ug/kg	
	5	4.42	4.41 – 4.47	80.5		ug/kg	
					28.8		
Aroclor–1260							.827
Column 1	1	4.02	3.99 – 4.05	56.5		ug/kg	
	2	4.29	4.26 – 4.32	59.8		ug/kg	
	3	4.45	4.42 – 4.48	60.9		ug/kg	
	4	4.67	4.64 – 4.7	57.8		ug/kg	
	5	4.86	4.83 – 4.89	59.6		ug/kg	
					58.9		
Column 2	1	4.42	4.39 – 4.45	81.9		ug/kg	
	2	4.57	4.54 – 4.6	52.6		ug/kg	
	3	4.68	4.65 – 4.71	48.5		ug/kg	
	4	4.88	4.85 – 4.91	55.5		ug/kg	
	5	5.5	5.48 – 5.54	53.7		ug/kg	
					58.4		

Identification Summary

SDG Number: 10–603 **Client ID:** RE03–09–13462

Lab Sample ID: 241539001

Data File:	087f8701.d	**Data File:**	087b8701.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	02–DEC–09 00:45	**Analyzed:**	02–DEC–09 00:45

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							3
Column 1	1	4.02	3.99 – 4.05	40.6		ug/kg	
	2	4.29	4.26 – 4.32	43		ug/kg	
	3	4.45	4.42 – 4.48	49.2		ug/kg	
	4	4.67	4.64 – 4.7	35.1		ug/kg	
	5	4.86	4.83 – 4.89	42.4		ug/kg	
					42.1		
Column 2	1	4.42	4.39 – 4.45	60.7		ug/kg	
	2	4.57	4.54 – 4.6	38.7		ug/kg	
	3	4.68	4.65 – 4.71	36.9		ug/kg	
	4	4.88	4.85 – 4.91	42.2		ug/kg	
	5	5.51	5.48 – 5.54	38.1		ug/kg	
					43.3		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982132**				
Client Sample:	**QC for batch 927077**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927077**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:20**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**074f7401-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	074b7401-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/074f7401-1.d
Lab Smp Id: 1201982132 Client Smp ID: PBLK01
Inj Date : 01-DEC-2009 22:20
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982132|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 74 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10402157	180.245	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8541076	155.776	5.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/074f7401-1.d
Date : 01-DEC-2009 22:20
Client ID: PBLK01
Sample Info: |120198213211|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

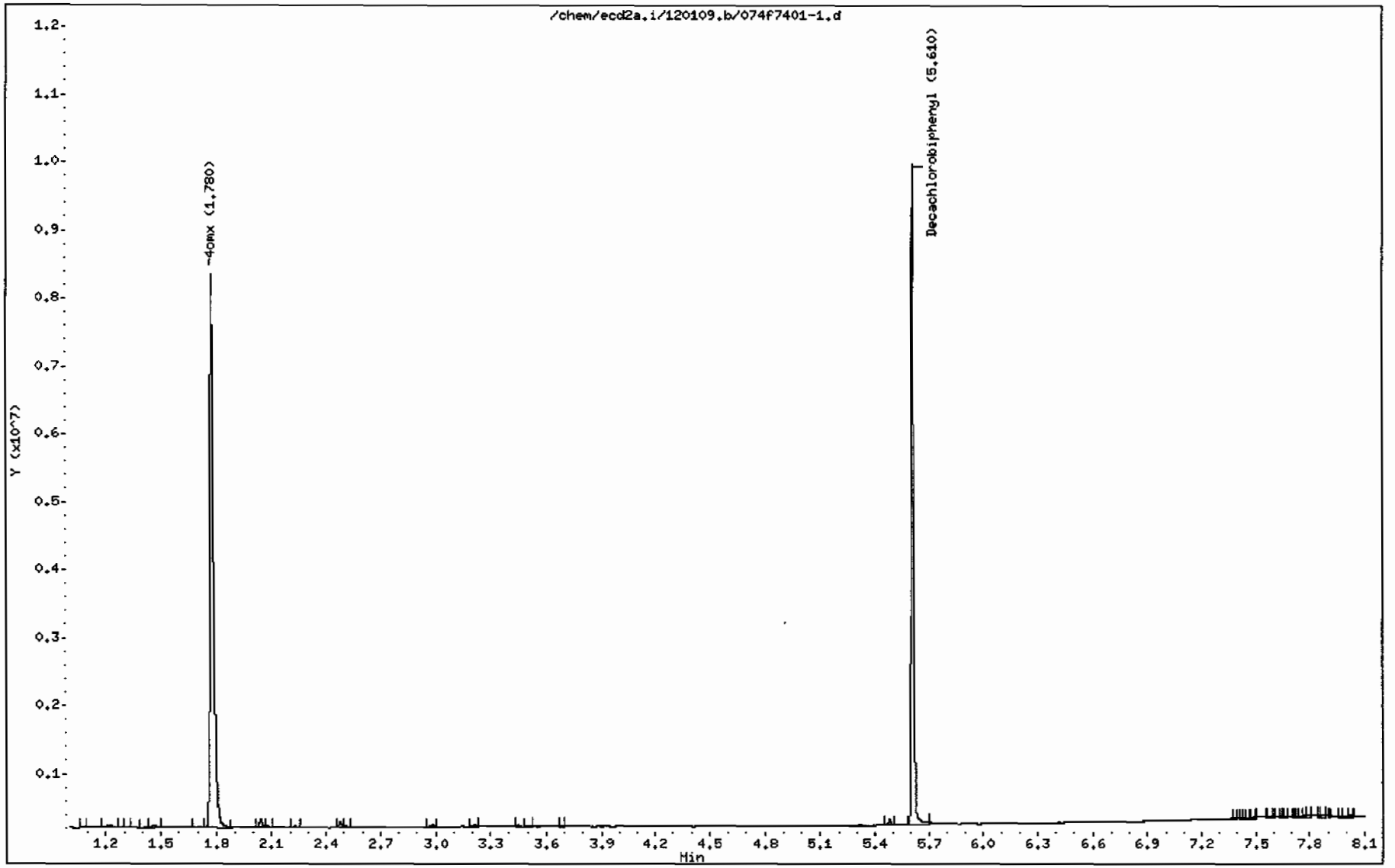

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/074b7401-1.d
Lab Smp Id: 1201982132 Client Smp ID: PBLK01
Inj Date : 01-DEC-2009 22:20
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982132|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 74 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	22578997	191.024	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	17472575	160.828	5.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/074b7401-1.d
Date : 01-DEC-2009 22:20
Client ID: PBLK01
Sample Info: |120198213211|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

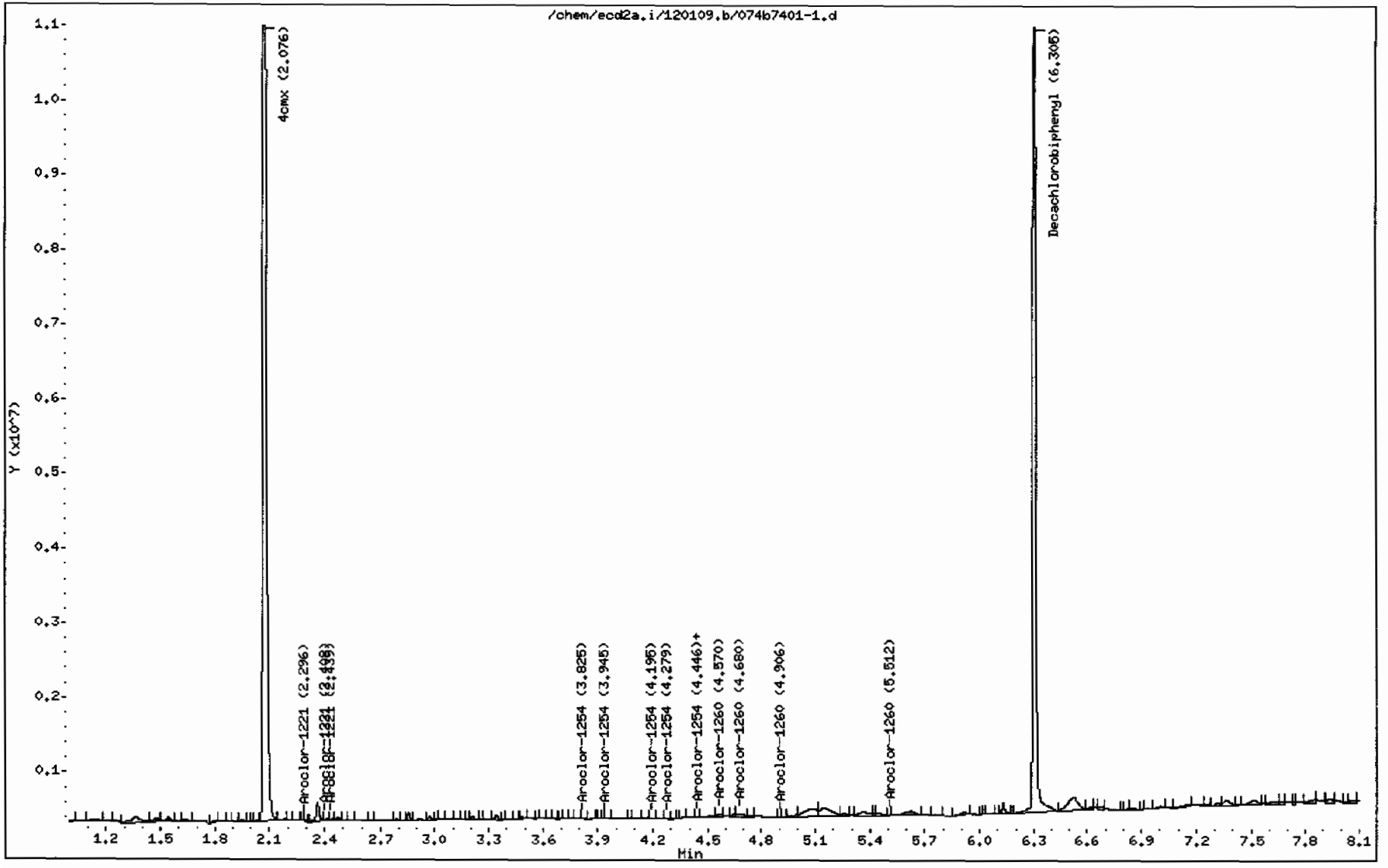

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–603**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982135**				
Client Sample:	**QC for batch 927077**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927077**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:31**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**075f7501–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	075b7501–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		29.1	ug/kg	1.11	3.33	2
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		31.4	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/075f7501-1.d
Lab Smp Id: 1201982135 Client Smp ID: PBLK01LCS
Inj Date : 01-DEC-2009 22:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982135|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 75 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10298600	178.450	5.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8714618	158.941	5.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	1791375	853.115	28.4	80.00- 120.00	100.00(M)
2.603	2.602	0.001	3806664	845.078	28.2	193.81- 233.81	212.50
2.693	2.692	0.001	1504176	826.375	27.5	64.26- 104.26	83.97
2.828	2.827	0.001	750963	804.992	26.8	21.10- 61.10	41.92

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.979	2.978	0.001	1185502	860.228	28.7	44.48- 84.48	66.18
Average of Peak Concentrations =					27.9		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	3805103	935.652	31.2	80.00- 120.00	100.00
4.289	4.288	0.001	2329093	921.203	30.7	39.98- 79.98	61.21
4.455	4.454	0.001	2398614	928.543	31.0	41.33- 81.33	63.04
4.667	4.666	0.001	5777506	957.158	31.9	123.75- 163.75	151.84
4.857	4.855	0.002	2723635	935.331	31.2	48.23- 88.23	71.58
Average of Peak Concentrations =					31.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/075f7501-1.d

Date : 01-DEC-2009 22:31

Client ID: PBLK01LCS

Sample Info: |120198213511|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

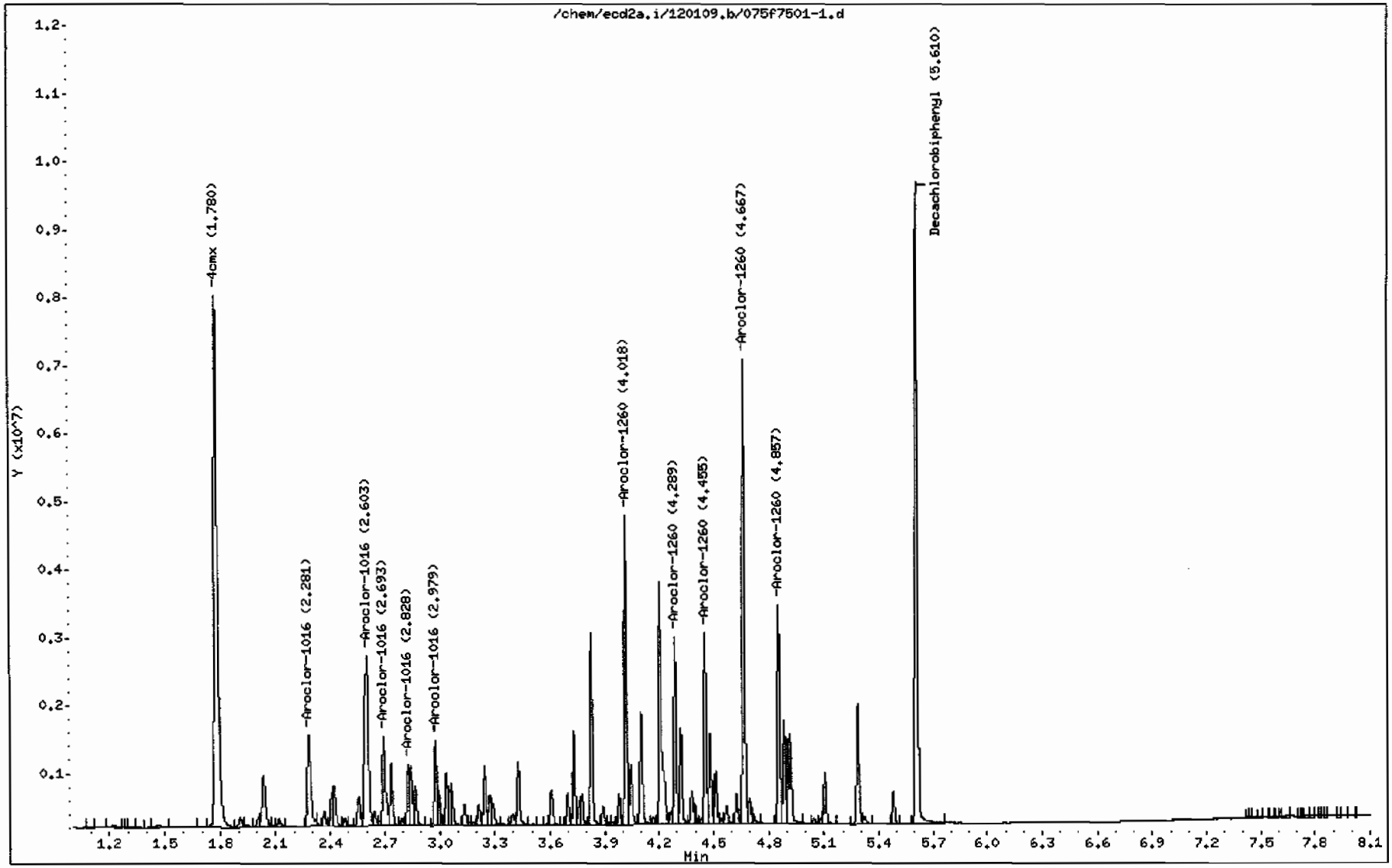

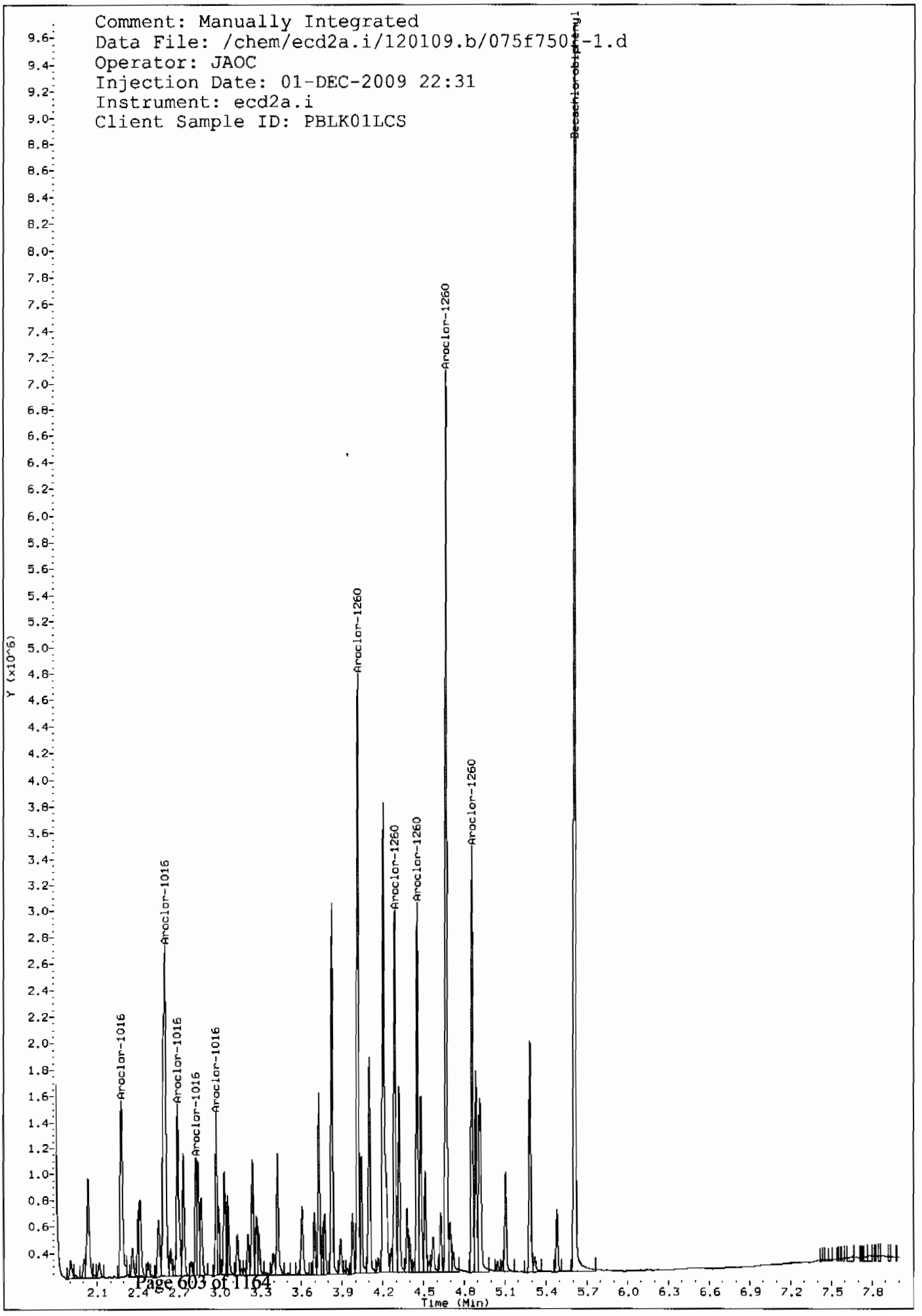
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/075f750-1.d
Operator: JAOC
Injection Date: 01-DEC-2009 22:31
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

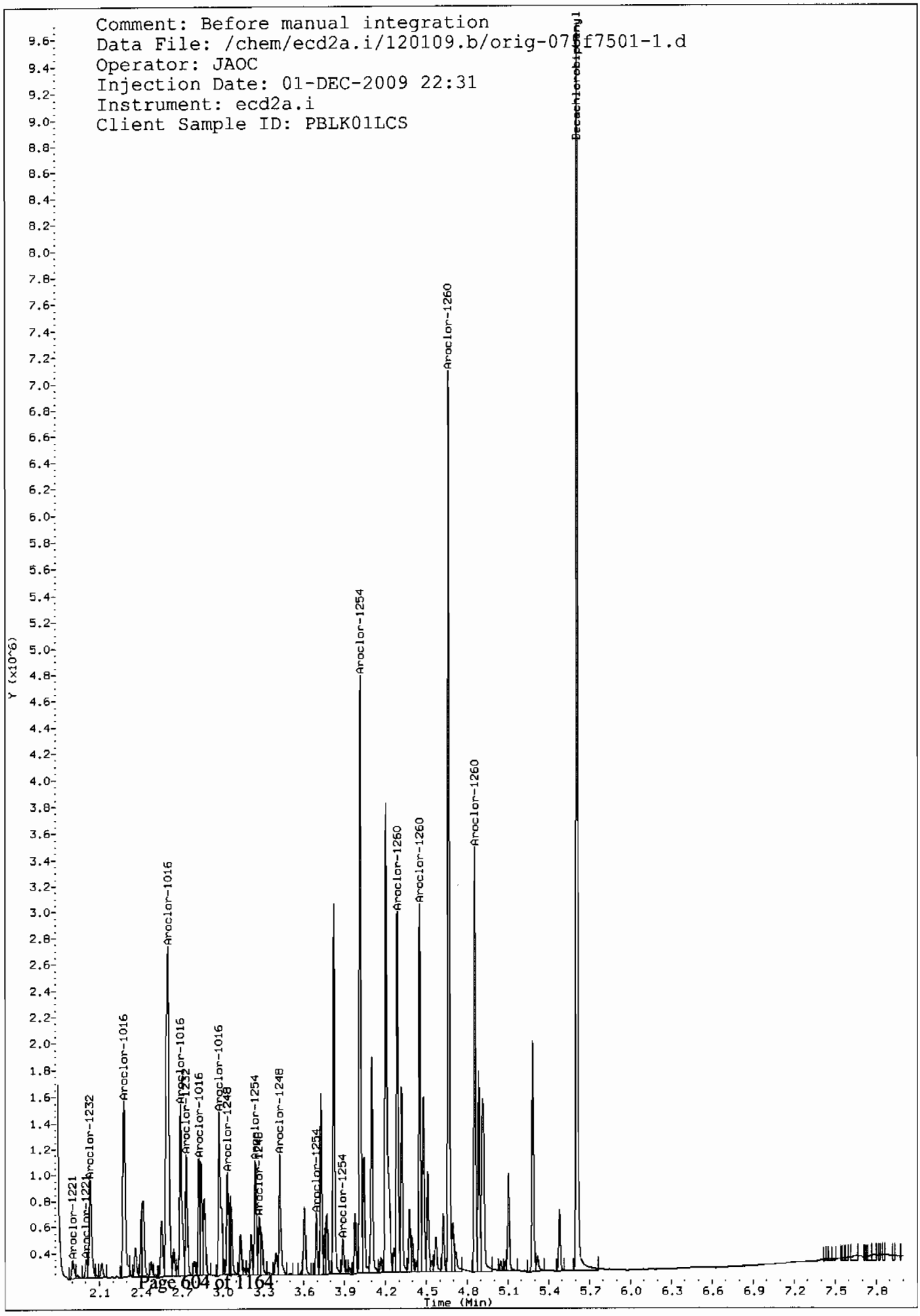
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-075f7501-1.d
Operator: JAOC
Injection Date: 01-DEC-2009 22:31
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1232
Aroclor-1221
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/075b7501-1.d
Lab Smp Id: 1201982135 Client Smp ID: PBLK01LCS
Inj Date : 01-DEC-2009 22:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982135|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 75 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-603.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22466128	190.069	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	17690124	162.830	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3734638	877.077	29.2	80.00- 120.00	100.00
3.185	3.184	0.001	3204853	930.377	31.0	61.02- 101.02	85.81
3.337	3.335	0.002	1789429	903.986	30.1	26.72- 66.72	47.91
3.365	3.364	0.001	1560066	756.853	25.2	28.59- 68.59	41.77

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.522	0.001	2480465	900.622	30.0	46.09- 86.09	66.42
Average of Peak Concentrations =					29.1		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5287948	959.240	32.0	80.00- 120.00	100.00
4.571	4.569	0.002	6825399	957.015	31.9	107.33- 147.33	129.07
4.682	4.681	0.001	4474742	945.761	31.5	63.39- 103.39	84.62
4.879	4.879	0.000	5380066	927.492	30.9	78.36- 118.36	101.74
5.506	5.505	0.001	8283456	916.243	30.5	131.09- 171.09	156.65
Average of Peak Concentrations =					31.4		

Data File: /chem/ecd2a.i/120109.b/075b7501-1.d
Date : 01-DEC-2009 22:31
Client ID: PBLK01LCS
Sample Info: |120198213511|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

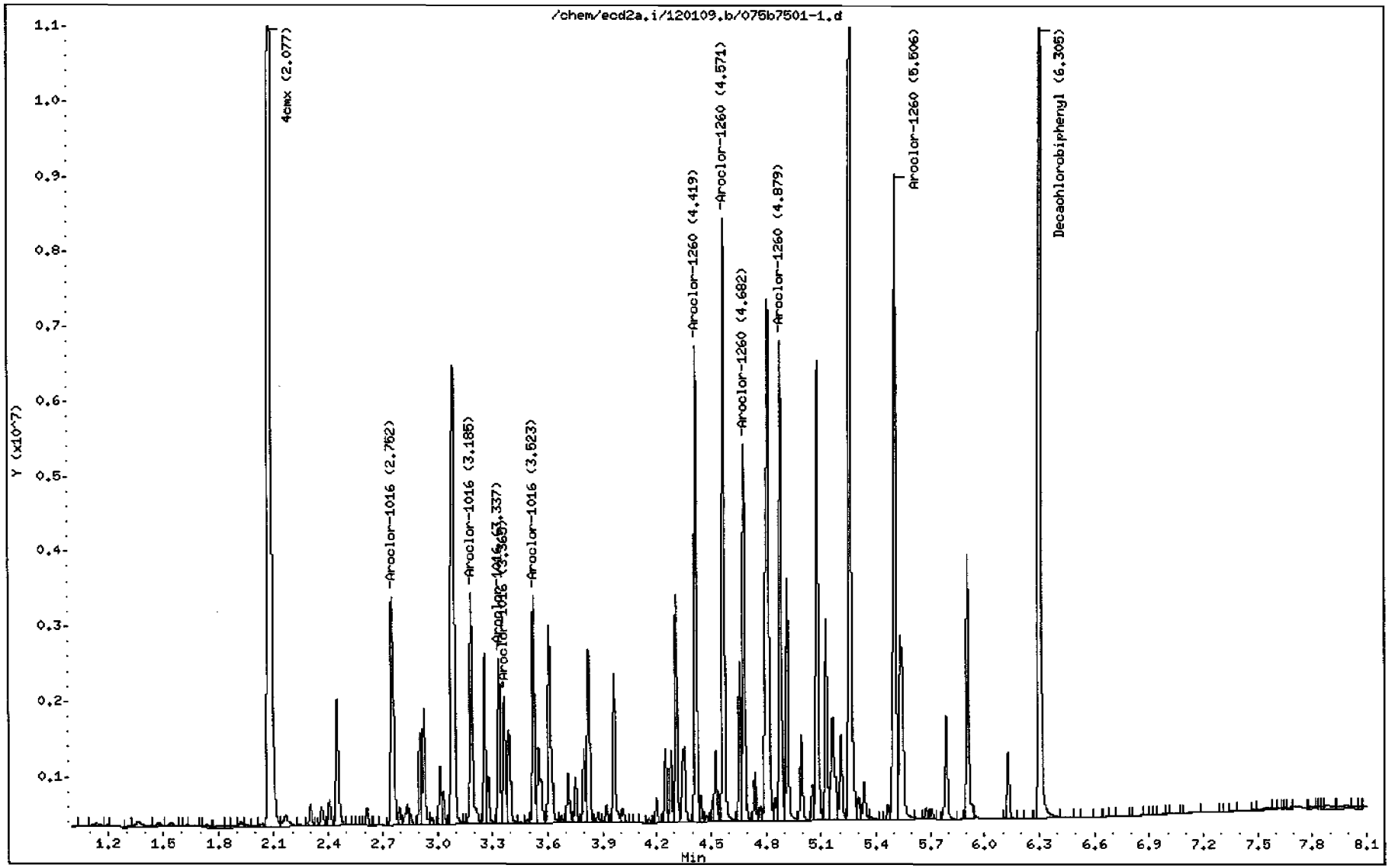

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0		DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0		CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0		CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362		1.0	QC A	UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362		1.0	QC A	UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362		1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809		1.0		PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809		1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0		DUSE
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0		1254 LEVEL 1
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0		1254 LEVEL 2
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0		1254 LEVEL 3
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0		1254 LEVEL 4
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0		1254 LEVEL 5
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0		1248 LEVEL 1
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0		1248 LEVEL 2
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0		1248 LEVEL 3
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0		1248 LEVEL 4
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0		1248 LEVEL 5

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0		DUSE

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18		113009a		1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29		113009a		1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40		113009a		1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51		113009a		1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02		113009a		1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13		113009a		1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25		113009a		1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399		200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36		113009a		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47		113009a		1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12		113009a		1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23		113009a		1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463		1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463		5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463		20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462		10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a		1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a		1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390		1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407		1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407		5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a		1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a		1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a	1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/02/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:120109 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	01-DEC-2009 08:08		120109	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	01-DEC-2009 08:19		120109	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	01-DEC-2009 08:30		120109	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	01-DEC-2009 08:41		120109	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	01-DEC-2009 08:53		120109	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	01-DEC-2009 09:04		120109	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	01-DEC-2009 09:15		120109	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	01-DEC-2009 09:26		120109	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	01-DEC-2009 09:37		120109	1.0		PATTERN ONLY
010f1001.d	WAR091027-48	JAOC	01-DEC-2009 09:48		120109	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091020-DDT	JAOC	01-DEC-2009 09:59		120109	1.0		DDT
012f1201.d	WAR090916-99 02	JAOC	01-DEC-2009 10:15		120109	1.0		CLEAN
013f1301.d	1201981445	JAOC	01-DEC-2009 10:26	926744	241365	1.0	QC A	UPLOAD BOTH, USE HIGHER
014f1401.d	1201981446	JAOC	01-DEC-2009 10:37	926744	241365	1.0	QC A	UPLOAD BOTH, USE HIGHER
015f1501.d	1201981447	JAOC	01-DEC-2009 10:48	926744	241365	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120109.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241365001	JAOC	01-DEC-2009 10:59	926744	241365	1.0	GELC	UPLOAD BOTH, USE HIGHER

017f1701.d	WAR091119-60 02	JAOC	01-DEC-2009 11:14			120109		1.0		PASSES BOTH COLUMNS
018f1801.d	WAR090916-99 03	JAOC	01-DEC-2009 11:36			120109		1.0		CLEAN
019f1901.d	1201982177	JAOC	01-DEC-2009 11:47	927102	236731			1.0	QC A	DUSE
020f2001.d	1201982180	JAOC	01-DEC-2009 11:58	927102	236731			1.0	QC A	DUSE
021f2101.d	236731002	JAOC	01-DEC-2009 12:09	927102	236731			5.0	SLAC	DUSE
022f2201.d	1201982178	JAOC	01-DEC-2009 12:25	927102	236731			5.0	QC A	DUSE
023f2301.d	1201982179	JAOC	01-DEC-2009 12:40	927102	236731			5.0	QC A	DUSE
024f2401.d	WAR091119-60 03	JAOC	01-DEC-2009 12:56			120109		1.0		PASSES BOTH COLUMNS
025f2501.d	WAR090916-99 04	JAOC	01-DEC-2009 13:07			120109		1.0		CLEAN
026f2601.d	1201980544	JAOC	01-DEC-2009 13:18	926313	241238			1.0	QC A	UPLOAD BOTH, USE HIGHER
027f2701.d	1201980547	JAOC	01-DEC-2009 13:29	926313	241238			1.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	241238004	JAOC	01-DEC-2009 13:40	926313	241238			1.0	GEEL	UPLOAD BOTH, USE HIGHER
029f2901.d	1201980545	JAOC	01-DEC-2009 13:52	926313	241238			1.0	QC A	UPLOAD BOTH, USE HIGHER
030f3001.d	1201980546	JAOC	01-DEC-2009 14:03	926313	241238			1.0	QC A	UPLOAD BOTH, USE HIGHER
031f3101.d	241238005	JAOC	01-DEC-2009 14:14	926313	241238			1.0	GEEL	UPLOAD BOTH, USE HIGHER
032f3201.d	241238006	JAOC	01-DEC-2009 14:25	926313	241238			1.0	GEEL	UPLOAD BOTH, USE HIGHER
033f3301.d	241240005	JAOC	01-DEC-2009 14:36	926313	241240			1.0	GEEL	UPLOAD BOTH, USE HIGHER
034f3401.d	241240006	JAOC	01-DEC-2009 14:47	926313	241240			1.0	GEEL	UPLOAD BOTH, USE HIGHER
035f3501.d	241240007	JAOC	01-DEC-2009 14:58	926313	241240			1.0	GEEL	UPLOAD BOTH, USE HIGHER

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 04	JAOC	01-DEC-2009 15:14			120109		1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 05	JAOC	01-DEC-2009 15:25			120109		1.0		CLEAN
038f3801.d	241367003	JAOC	01-DEC-2009 15:36	926313	241367			1.0	GEEL	UPLOAD BOTH, USE HIGHER
039f3901.d	241367004	JAOC	01-DEC-2009 15:47	926313	241367			1.0	GEEL	UPLOAD BOTH, USE HIGHER
040f4001.d	1201980420	JAOC	01-DEC-2009 15:58	926251	10-589			1.0	QC A	UPLOAD BOTH, USE HIGHER
041f4101.d	1201980423	JAOC	01-DEC-2009 16:09	926251	10-589			1.0	QC A	UPLOAD BOTH, USE HIGHER

042f4201.d	241503002	JAOC	01-DEC-2009 16:20	926251	10-589	1.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	1201980421	JAOC	01-DEC-2009 16:31	926251	10-589	1.0	QC A	UPLOAD BOTH, USE HIGHER
044f4401.d	1201980422	JAOC	01-DEC-2009 16:42	926251	10-589	1.0	QC A	UPLOAD BOTH, USE HIGHER
045f4501.d	241503003	JAOC	01-DEC-2009 16:54	926251	10-589	1.0	LANL	UPLOAD BOTH, USE HIGHER
046f4601.d	241503004	JAOC	01-DEC-2009 17:05	926251	10-589	1.0	LANL	UPLOAD BOTH, USE HIGHER
047f4701.d	WAR091119-60 05	JAOC	01-DEC-2009 17:20		120109	1.0		PASSES BOTH COLUMNS
048f4801.d	WAR090916-99 06	JAOC	01-DEC-2009 17:31		120109	1.0		CLEAN
049f4901.d	1201980309	JAOC	01-DEC-2009 17:42	926197	10-466	1.0	QC A	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980312	JAOC	01-DEC-2009 17:54	926197	10-466	1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	241051001	JAOC	01-DEC-2009 18:05	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
052f5201.d	241051002	JAOC	01-DEC-2009 18:16	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
053f5301.d	241051003	JAOC	01-DEC-2009 18:27	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
054f5401.d	241051004	JAOC	01-DEC-2009 18:38	926197	10-466	5.0	LANL	DUSE, AFTER OVERRANGE
055f5501.d	241051005	JAOC	01-DEC-2009 18:49	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X

Instrument Batch: /chem/ecd2a.i/120109.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241051006	JAOC	01-DEC-2009 19:00	926197	10-466	1.0	LANL	DUSE, AFTER OVERRANGE
057f5701.d	241051007	JAOC	01-DEC-2009 19:11	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
058f5801.d	241051008	JAOC	01-DEC-2009 19:22	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
059f5901.d	WAR091119-60 06	JAOC	01-DEC-2009 19:33		120109	1.0		PASSES BOTH COLUMNS, DCB LOW
060f6001.d	WAR090916-99 07	JAOC	01-DEC-2009 19:44		120109	1.0		CLEAN
061f6101.d	241051009	JAOC	01-DEC-2009 19:56	926197	10-466	1.0	LANL	UPLOAD BOTH, USE HIGHER
062f6201.d	241051010	JAOC	01-DEC-2009 20:07	926197	10-466	1.0	LANL	UPLOAD BOTH, USE HIGHER
063f6301.d	241051011	JAOC	01-DEC-2009 20:18	926197	10-466	1.0	LANL	UPLOAD BOTH, USE HIGHER
064f6401.d	1201980310	JAOC	01-DEC-2009 20:29	926197	10-466	1.0	QC A	UPLOAD BOTH, USE HIGHER
065f6501.d	1201980311	JAOC	01-DEC-2009 20:40	926197	10-466	1.0	QC A	UPLOAD BOTH, USE HIGHER

066f6601.d	241051012	JAOC	01-DEC-2009 20:51	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
067f6701.d	241051013	JAOC	01-DEC-2009 21:02	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
068f6801.d	241051014	JAOC	01-DEC-2009 21:13	926197	10-466	1.0	LANL	DUSE, AFTER OVERRANGE
069f6901.d	241059004	JAOC	01-DEC-2009 21:24	926197	10-469	1.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241059005	JAOC	01-DEC-2009 21:35	926197	10-469	1.0	LANL	DUSE, RE-RUN AT 10X
071f7101.d	WAR091119-60 07	JAOC	01-DEC-2009 21:47		120109	1.0		PASSES BOTH COLUMNS
072f7201.d	WAR090916-99 08	JAOC	01-DEC-2009 21:58		120109	1.0		CLEAN
073f7301.d	241059006	JAOC	01-DEC-2009 22:09	926197	10-469	1.0	LANL	DUSE, RE-RUN AT 10X
074f7401.d	1201982132	JAOC	01-DEC-2009 22:20	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER
075f7501.d	1201982135	JAOC	01-DEC-2009 22:31	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241534001	JAOC	01-DEC-2009 22:42	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	1201982133	JAOC	01-DEC-2009 22:53	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER
078f7801.d	1201982134	JAOC	01-DEC-2009 23:04	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER
079f7901.d	241534002	JAOC	01-DEC-2009 23:16	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241534003	JAOC	01-DEC-2009 23:27	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241534004	JAOC	01-DEC-2009 23:38	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241534005	JAOC	01-DEC-2009 23:49	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	WAR091119-60 08	JAOC	02-DEC-2009 00:00		120109	1.0		PASSES BOTH COLUMNS
084f8401.d	WAR090916-99 09	JAOC	02-DEC-2009 00:11		120109	1.0		CLEAN
085f8501.d	241534006	JAOC	02-DEC-2009 00:23	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
086f8601.d	241534008	JAOC	02-DEC-2009 00:34	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	241539001	JAOC	02-DEC-2009 00:45	927078	10-603	5.0	LANL	UPLOAD BOTH, USE HIGHER
088f8801.d	241539002	JAOC	02-DEC-2009 00:56	927078	10-603	5.0	LANL	UPLOAD BOTH, USE HIGHER
089f8901.d	241539003	JAOC	02-DEC-2009 01:07	927078	10-603	25.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	241539004	JAOC	02-DEC-2009 01:18	927078	10-603	5.0	LANL	UPLOAD BOTH, USE HIGHER

091f9101.d	WAR091119-60 09	JAOC	02-DEC-2009 01:29		120109	1.0	PASSES BOTH COLUMNS
092f9201.d	WAR090916-99 10	JAOC	02-DEC-2009 01:40		120109	1.0	CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/077b7701.d
Lab Smp Id: 1201982133 Client Smp ID: RE03-09-13975MS
Inj Date : 01-DEC-2009 22:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982133|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 77 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	22001377	186.137	7.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	18313296	168.566	6.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.750	0.001	3729262	875.814	35.4	80.00- 120.00	100.00
3.185	3.184	0.001	3087046	896.178	36.2	61.02- 101.02	82.78
3.336	3.335	0.001	1793938	906.264	36.7	26.72- 66.72	48.10
3.365	3.364	0.001	1538593	746.436	30.2	28.59- 68.59	41.26

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.522	0.001	2551634	926.462	37.5	46.09- 86.09	68.42
Average of Peak Concentrations =					35.2		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5621044	1019.66	41.2	80.00- 120.00	100.00
4.570	4.569	0.001	7384206	1035.37	41.9	107.33- 147.33	131.37
4.682	4.681	0.001	4791286	1012.66	41.0	63.39- 103.39	85.24
4.879	4.879	0.000	5788785	997.953	40.4	78.36- 118.36	102.98
5.505	5.505	0.000	8672245	959.247	38.8	131.09- 171.09	154.28
Average of Peak Concentrations =					40.7		

Data File: /chem/ecd2a.i/120109.b/077b7701.d
Date : 01-DEC-2009 22:53
Client ID: RE03-09-13975MS
Sample Info: |120198213311|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

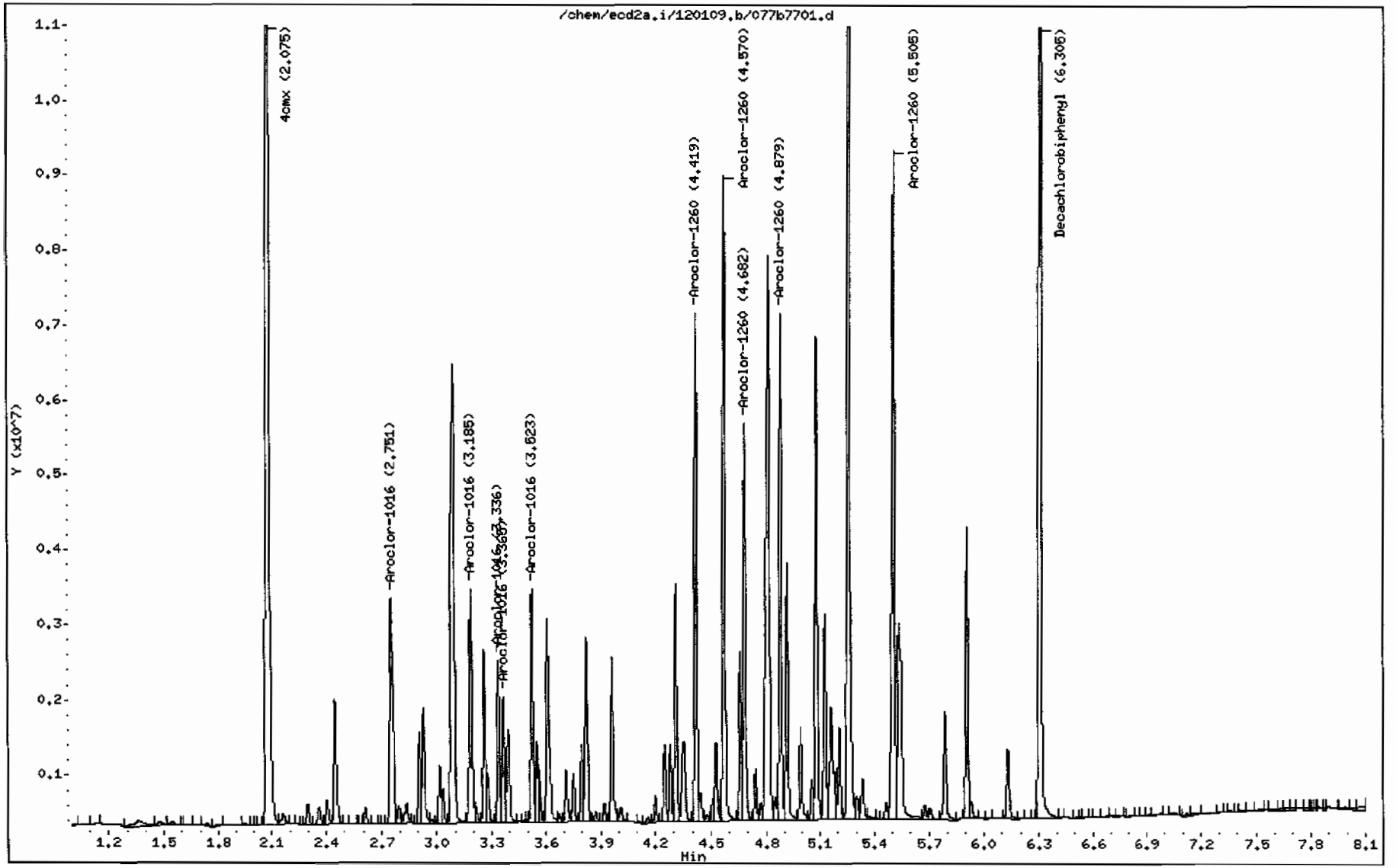

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/077f7701.d
Lab Smp Id: 1201982133 Client Smp ID: RE03-09-13975MS
Inj Date : 01-DEC-2009 22:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982133|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 77 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	10161567	176.076	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8528568	155.548	6.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.279	0.001	1762419	839.325	34.0	80.00- 120.00	100.00(M)
2.602	2.602	0.000	3899805	865.755	35.0	193.81- 233.81	221.28
2.693	2.692	0.001	1533364	842.410	34.1	64.26- 104.26	87.00
2.829	2.827	0.002	763675	818.618	33.1	21.10- 61.10	43.33

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.979	2.978	0.001	1221283	886.192	35.8	44.48- 84.48	69.30
Average of Peak Concentrations =					34.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4070946	1001.02	40.5	80.00- 120.00	100.00
4.290	4.288	0.002	2480936	981.260	39.7	39.98- 79.98	60.94
4.455	4.454	0.001	2561586	991.632	40.1	41.33- 81.33	62.92
4.667	4.666	0.001	5984012	991.370	40.1	123.75- 163.75	146.99
4.856	4.855	0.001	2851569	979.265	39.6	48.23- 88.23	70.05
Average of Peak Concentrations =					40.0		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/077f7701.d
Date : 01-DEC-2009 22:53
Client ID: RE03-09-13975MS
Sample Info: |120198213311|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

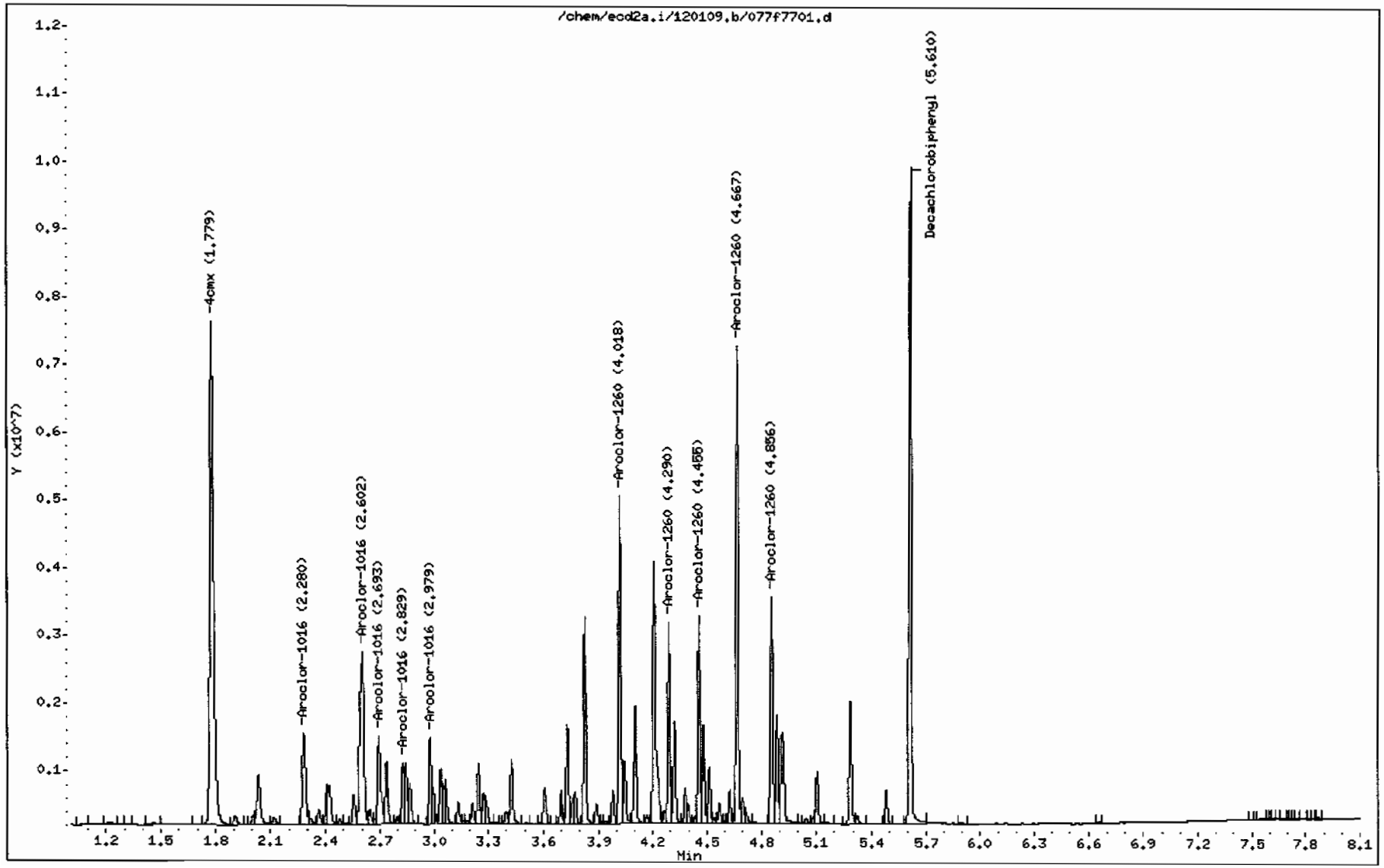

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/078b7801.d
Lab Smp Id: 1201982134 Client Smp ID: RE03-09-13975MSD
Inj Date : 01-DEC-2009 23:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982134|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 78 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	22204632	187.857	7.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	18424554	169.590	6.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3844236	902.816	36.4	80.00- 120.00	100.00
3.185	3.184	0.001	3138812	911.205	36.7	61.02- 101.02	81.65
3.337	3.335	0.002	1840162	929.616	37.5	26.72- 66.72	47.87
3.364	3.364	0.000	1741627	844.936	34.1	28.59- 68.59	45.30

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.522	3.522	0.000	2603131	945.160	38.1	46.09- 86.09	67.72
Average of Peak Concentrations =					36.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5751973	1043.41	42.1	80.00- 120.00	100.00
4.570	4.569	0.001	7494629	1050.85	42.4	107.33- 147.33	130.30
4.682	4.681	0.001	4944566	1045.06	42.1	63.39- 103.39	85.96
4.879	4.879	0.000	5855493	1009.45	40.7	78.36- 118.36	101.80
5.505	5.505	0.000	9330833	1032.09	41.6	131.09- 171.09	162.22
Average of Peak Concentrations =					41.8		

Data File: /chem/ecd2a.i/120109.b/078b7801.d
Date : 01-DEC-2009 23:04
Client ID: RE03-09-13975MSD
Sample Info: |120198213411|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

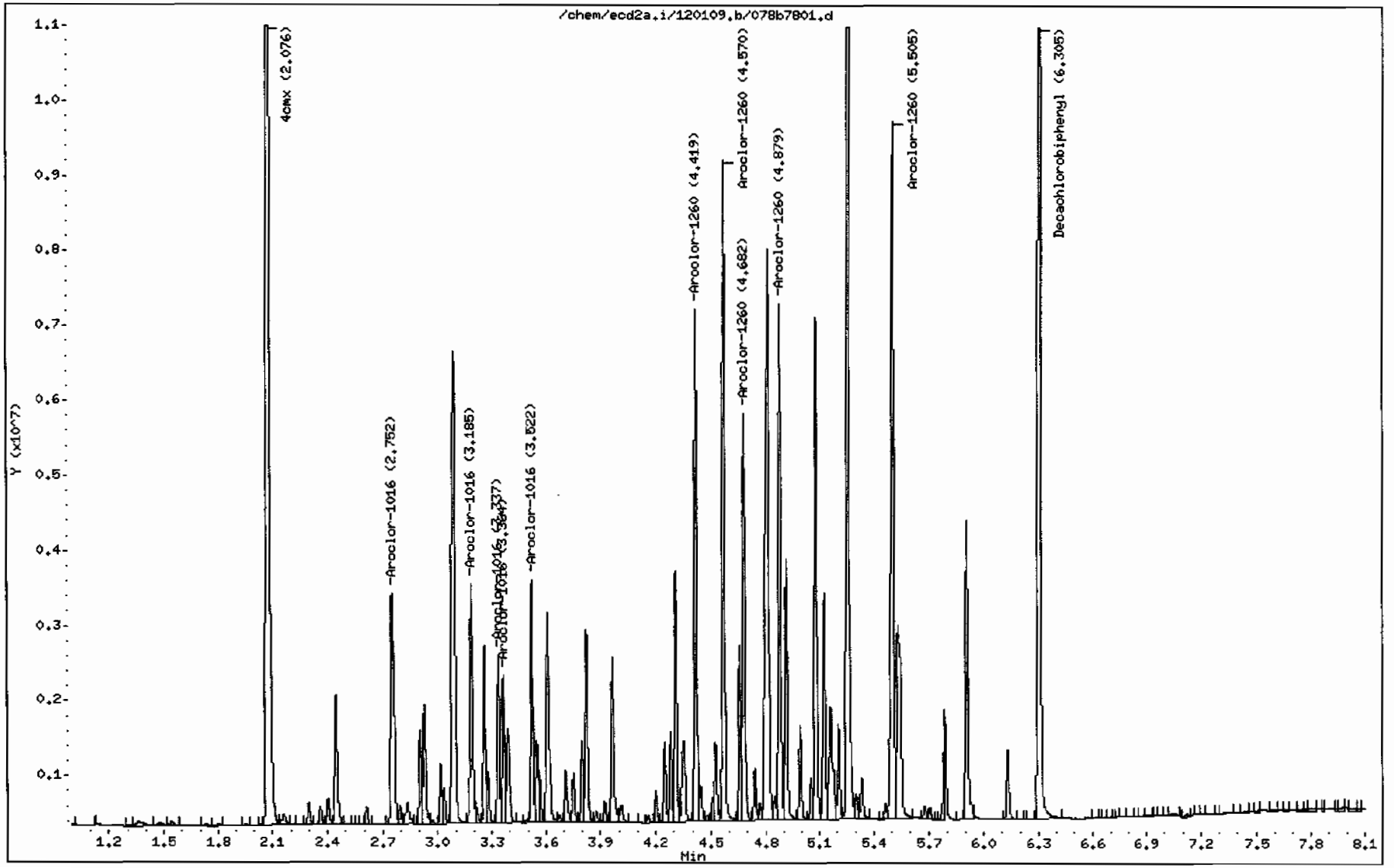

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/078f7801.d
Lab Smp Id: 1201982134 Client Smp ID: RE03-09-13975MSD
Inj Date : 01-DEC-2009 23:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982134|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 78 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	10206197	176.849	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8977440	163.735	6.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	1797194	855.886	34.5	80.00- 120.00	100.00(M)
2.602	2.602	0.000	3966158	880.485	35.5	193.81- 233.81	220.69
2.693	2.692	0.001	1556924	855.354	34.5	64.26- 104.26	86.63
2.828	2.827	0.001	829169	888.824	35.8	21.10- 61.10	46.14

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.980	2.978	0.002	1240961	900.471	36.3	44.48- 84.48	69.05
Average of Peak Concentrations =					35.3		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	4141038	1018.26	41.0	80.00- 120.00	100.00
4.289	4.288	0.001	2519008	996.318	40.2	39.98- 79.98	60.83
4.455	4.454	0.001	2576861	997.545	40.2	41.33- 81.33	62.23
4.667	4.666	0.001	6226960	1031.62	41.6	123.75- 163.75	150.37
4.856	4.855	0.001	2967836	1019.19	41.1	48.23- 88.23	71.67
Average of Peak Concentrations =					40.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/078f7801.d
Date : 01-DEC-2009 23:04
Client ID: RE03-09-13975MSD
Sample Info: |120198213411|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

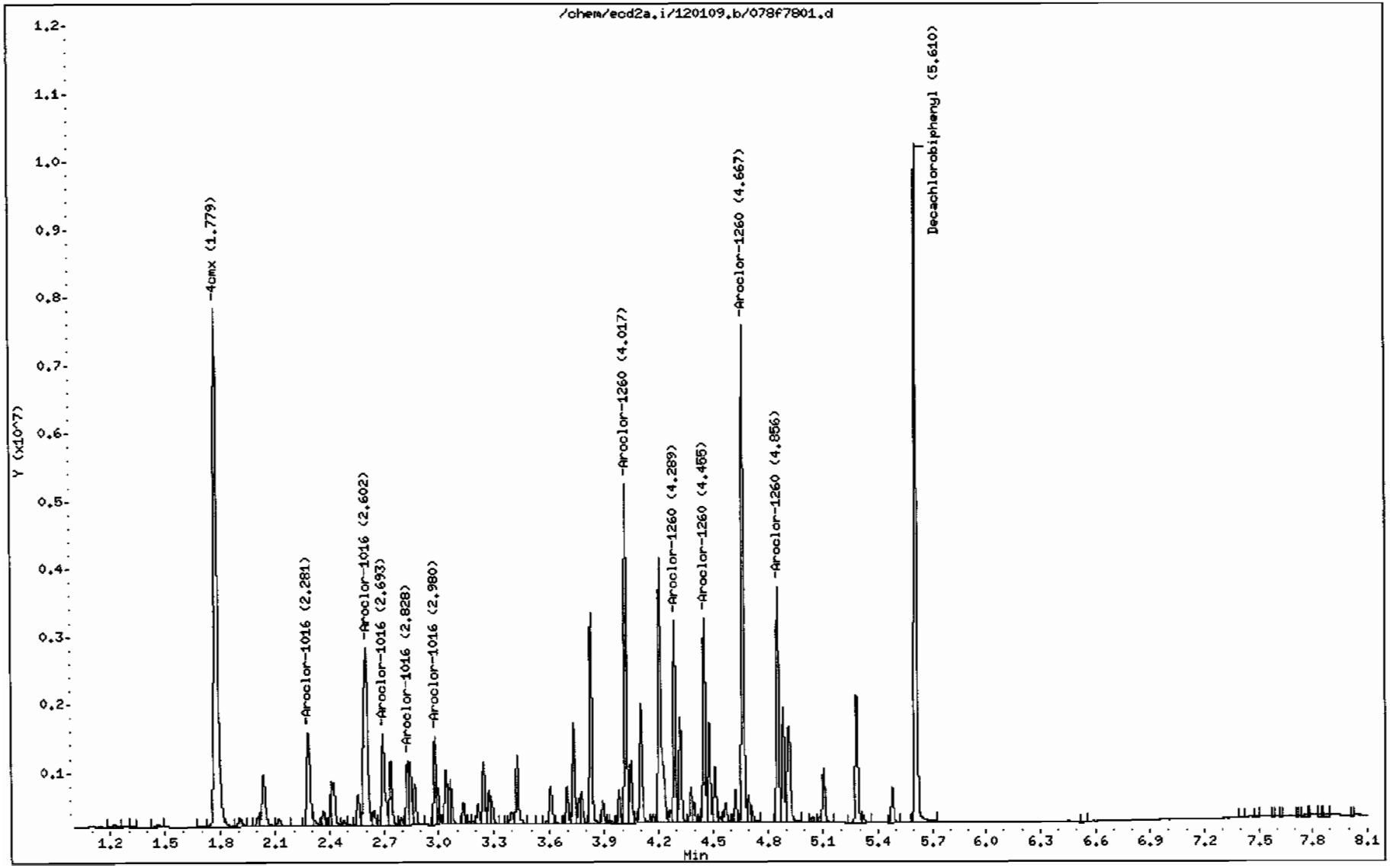

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927077 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982132 MB	29–NOV–2009 15:56:52	30	H2SO4/KMn2		2	9	1	0.03333
1201982135 LCS	29–NOV–2009 15:56:52	30	H2SO4/KMn2		2	9	1	0.03333
241534001	29–NOV–2009 15:56:52	30.04	H2SO4/KMn2		2	9	1	0.03329
1201982133 MS (241534001)	29–NOV–2009 15:56:52	30.08	H2SO4/KMn2		2	9	1	0.03324
1201982134 MSD (241534001)	29–NOV–2009 15:56:52	30.19	H2SO4/KMn2		2	9	1	0.03312
241534002	29–NOV–2009 15:56:52	30.17	H2SO4/KMn2		2	9	1	0.03315
241534003	29–NOV–2009 15:56:52	30.18	H2SO4/KMn2		2	9	1	0.03313
241534004	29–NOV–2009 15:56:52	30.11	H2SO4/KMn2		2	9	1	0.03321
241534005	29–NOV–2009 15:56:52	30.05	H2SO4/KMn2		2	9	1	0.03328
241534006	29–NOV–2009 15:56:52	30.08	H2SO4/KMn2		2	9	1	0.03324
241534008	29–NOV–2009 15:56:52	30.13	H2SO4/KMn2		2	9	1	0.03319
241539001	29–NOV–2009 15:56:52	30.19	H2SO4/KMn2		2	9	1	0.03312
241539002	29–NOV–2009 15:56:52	30.08	H2SO4/KMn2		2	9	1	0.03324
241539003	29–NOV–2009 15:56:52	30.18	H2SO4/KMn2		2	9	1	0.03313
241539004	29–NOV–2009 15:56:52	30.19	H2SO4/KMn2		2	9	1	0.03312

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982135	PCB Laboratory Control	WE091113–07	1	mL
MS	1201982133	PCB Laboratory Control	WE091113–07	1	mL
MSD	1201982134	PCB Laboratory Control	WE091113–07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114–15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925–B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457–F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/29/09

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–037

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-603

Sample Analysis

Sample ID	Client ID
241539001	RE03-09-13462
241539002	RE03-09-13464
241539003	RE03-09-13463
241539004	RE03-09-13461
1201978583	Method Blank (MB) **ICP**
1201993406	Method Blank (MB) **ICP**
1201978588	Laboratory Control Sample (LCS)
1201993407	Laboratory Control Sample (LCS)
1201978585	241539001(RE03-09-13462L) Serial Dilution (SD)
1201978584	241539001(RE03-09-13462D) Sample Duplicate (DUP)
1201978586	241539001(RE03-09-13462S) Matrix Spike (MS)
1201978587	241539001(RE03-09-13462SD) Matrix Spike Duplicate (MSD)
1201978589	Method Blank (MB) **ICP-MS**
1201978594	Laboratory Control Sample (LCS)
1201978591	241539001(RE03-09-13462L) Serial Dilution (SD)
1201978590	241539001(RE03-09-13462D) Sample Duplicate (DUP)
1201978592	241539001(RE03-09-13462S) Matrix Spike (MS)
1201978593	241539001(RE03-09-13462SD) Matrix Spike Duplicate (MSD)
1201978947	Method Blank (MB) **CVAA**
1201978948	Laboratory Control Sample (LCS)

1201978951	241541001(RE03-09-13875L) Serial Dilution (SD)
1201978949	241541001(RE03-09-13875D) Sample Duplicate (DUP)
1201978950	241541001(RE03-09-13875S) Matrix Spike (MS)
1201978952	241541001(RE03-09-13875SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925474, 931881, 925476 and 925629
Prep Batch :	925473, 931880, 925475 and 925628
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The laboratory control sample (LCS) results met the acceptance requirements.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241539001 and 241541001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of magnesium, potassium, silicon, nickel, selenium and mercury, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of magnesium, potassium, silicon and mercury, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of calcium, as indicated by the "*" qualifier.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of nickel, as indicated by the "*" qualifier.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 763228, 766705, 767862 and 769972. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Brown **Date:** 12/16/09

Sample Data Summary

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539001 **BASIS:** Dry Weight **DATE COLLECTED** 18–NOV–09

CLIENT ID: RE03–09–13462 **LEVEL:** Low **DATE RECEIVED** 20–NOV–09

MATRIX: SOIL **%SOLIDS:** 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	9320000	ug/Kg		6730	19800	19800	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–36–0	Antimony	1330	ug/Kg		327	990	990	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–38–2	Arsenic	1.75	mg/kg		0.212	1.06	1.06	2	MS	BAJ	11/28/09 20:31	091128–3	925476
7440–39–3	Barium	107000	ug/Kg		99	495	495	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–41–7	Beryllium	0.881	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	11/28/09 20:31	091128–3	925476
7440–42–8	Boron	3310	ug/Kg	J	990	4950	4950	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–43–9	Cadmium	239	ug/Kg	J	99	495	495	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–70–2	Calcium	2860000	ug/Kg	*	7920	24700	24700	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–47–3	Chromium	9300	ug/Kg		148	495	495	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–48–4	Cobalt	3180	ug/Kg		148	495	495	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–50–8	Copper	7010	ug/Kg		297	990	990	1	P	HSC	12/07/09 12:32	120709–1	925474
7439–89–6	Iron	12000000	ug/Kg		7920	24700	24700	1	P	HSC	12/07/09 12:32	120709–1	925474
7439–92–1	Lead	12800	ug/Kg		247	990	990	1	P	HSC	12/07/09 12:32	120709–1	925474
7439–93–2	Lithium	13.6	mg/kg		0.423	2.12	2.12	2	MS	BAJ	11/28/09 20:31	091128–3	925476
7439–95–4	Magnesium	1690000	ug/Kg	N	8410	29700	29700	1	P	HSC	12/07/09 12:32	120709–1	925474
7439–96–5	Manganese	296000	ug/Kg		198	990	990	1	P	HSC	12/07/09 12:32	120709–1	925474
7439–97–6	Mercury	23.2	ug/kg		4.11	12.1	12.1	1	AV	JXL1	12/07/09 11:44	120709S1–7	925629
7440–02–0	Nickel	7.17	mg/kg	*N	0.106	0.423	0.423	2	MS	BAJ	11/28/09 20:31	091128–3	925476
7440–09–7	Potassium	1120000	ug/Kg	N	6330	24700	24700	1	P	HSC	12/07/09 12:32	120709–1	925474
7782–49–2	Selenium	1.06	mg/kg	UN	0.529	1.06	1.06	2	MS	BAJ	11/28/09 20:31	091128–3	925476
7440–21–3	Silicon	1910000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/14/09 11:36	121409A–2	931881
7440–22–4	Silver	495	ug/Kg	U	99	495	495	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–23–5	Sodium	334000	ug/Kg		6930	24700	24700	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–28–0	Thallium	0.234	mg/kg		0.0635	0.212	0.212	2	MS	BAJ	11/28/09 20:31	091128–3	925476
7440–32–6	Titanium	334000	ug/Kg		99	495	495	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–61–1	Uranium	0.712	mg/kg		0.014	0.0423	0.0423	2	MS	BAJ	11/29/09 06:36	091128–6	925476
7440–62–2	Vanadium	16700	ug/Kg		99	495	495	1	P	HSC	12/07/09 12:32	120709–1	925474
7440–66–6	Zinc	37600	ug/Kg		327	990	990	1	P	HSC	12/07/09 12:32	120709–1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.542	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.507	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.532	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931881	931880	SW846 3050B	0.5	g	50	mL	12/12/09	BCD1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539002 **BASIS:** Dry Weight **DATE COLLECTED** 18–NOV–09

CLIENT ID: RE03–09–13464 **LEVEL:** Low **DATE RECEIVED** 20–NOV–09

MATRIX: SOIL **%SOLIDS:** 96.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	5450000	ug/Kg		6690	19700	19700	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–36–0	Antimony	1900	ug/Kg		325	984	984	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–38–2	Arsenic	1.38	mg/kg		0.201	1	1	2	MS	BAJ	11/28/09 21:14	091128–3	925476
7440–39–3	Barium	74400	ug/Kg		98.4	492	492	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–41–7	Beryllium	0.539	mg/kg		0.0201	0.1	0.1	2	MS	BAJ	11/28/09 21:14	091128–3	925476
7440–42–8	Boron	3670	ug/Kg	J	984	4920	4920	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–43–9	Cadmium	344	ug/Kg	J	98.4	492	492	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–70–2	Calcium	3460000	ug/Kg	*	7870	24600	24600	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–47–3	Chromium	14000	ug/Kg		148	492	492	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–48–4	Cobalt	6060	ug/Kg		148	492	492	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–50–8	Copper	10200	ug/Kg		295	984	984	1	P	HSC	12/07/09 12:48	120709–1	925474
7439–89–6	Iron	18500000	ug/Kg		7870	24600	24600	1	P	HSC	12/07/09 12:48	120709–1	925474
7439–92–1	Lead	8750	ug/Kg		246	984	984	1	P	HSC	12/07/09 12:48	120709–1	925474
7439–93–2	Lithium	8.44	mg/kg		0.402	2.01	2.01	2	MS	BAJ	11/28/09 21:14	091128–3	925476
7439–95–4	Magnesium	1270000	ug/Kg	N	8360	29500	29500	1	P	HSC	12/07/09 12:48	120709–1	925474
7439–96–5	Manganese	565000	ug/Kg		197	984	984	1	P	HSC	12/07/09 12:48	120709–1	925474
7439–97–6	Mercury	7.6	ug/kg	J	3.92	11.5	11.5	1	AV	JXL1	12/07/09 11:46	120709S1–7	925629
7440–02–0	Nickel	9.55	mg/kg	*N	0.1	0.402	0.402	2	MS	BAJ	11/28/09 21:14	091128–3	925476
7440–09–7	Potassium	821000	ug/Kg	N	6300	24600	24600	1	P	HSC	12/07/09 12:48	120709–1	925474
7782–49–2	Selenium	1	mg/kg	UN	0.502	1	1	2	MS	BAJ	11/28/09 21:14	091128–3	925476
7440–21–3	Silicon	1370000	ug/Kg	N	1380	9220	9220	1	P	HSC	12/14/09 11:52	121409A–2	931881
7440–22–4	Silver	126	ug/Kg	J	98.4	492	492	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–23–5	Sodium	169000	ug/Kg		6890	24600	24600	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–28–0	Thallium	0.107	mg/kg	J	0.0603	0.201	0.201	2	MS	BAJ	11/28/09 21:14	091128–3	925476
7440–32–6	Titanium	333000	ug/Kg		98.4	492	492	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–61–1	Uranium	0.642	mg/kg		0.0133	0.0402	0.0402	2	MS	BAJ	11/29/09 06:48	091128–6	925476
7440–62–2	Vanadium	24600	ug/Kg		98.4	492	492	1	P	HSC	12/07/09 12:48	120709–1	925474
7440–66–6	Zinc	33600	ug/Kg		325	984	984	1	P	HSC	12/07/09 12:48	120709–1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.525	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.514	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.538	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931881	931880	SW846 3050B	0.56	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539003 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13463 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6370000	ug/Kg		6370	18700	18700	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-36-0	Antimony	2070	ug/Kg		309	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-38-2	Arsenic	1.6	mg/kg		0.206	1.03	1.03	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-39-3	Barium	78200	ug/Kg		93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-41-7	Beryllium	0.604	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-42-8	Boron	2290	ug/Kg	J	936	4680	4680	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-43-9	Cadmium	310	ug/Kg	J	93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-70-2	Calcium	9350000	ug/Kg	*	7490	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-47-3	Chromium	7230	ug/Kg		140	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-48-4	Cobalt	3260	ug/Kg		140	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-50-8	Copper	6190	ug/Kg		281	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-89-6	Iron	11600000	ug/Kg		7490	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-92-1	Lead	9370	ug/Kg		234	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-93-2	Lithium	13.8	mg/kg		0.412	2.06	2.06	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7439-95-4	Magnesium	1370000	ug/Kg	N	7960	28100	28100	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-96-5	Manganese	345000	ug/Kg		187	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474
7439-97-6	Mercury	5.05	ug/kg	J	4.04	11.9	11.9	1	AV	JXL1	12/07/09 11:52	120709S1-7	925629
7440-02-0	Nickel	6.37	mg/kg	*N	0.103	0.412	0.412	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-09-7	Potassium	849000	ug/Kg	N	5990	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7782-49-2	Selenium	1.03	mg/kg	UN	0.515	1.03	1.03	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-21-3	Silicon	1440000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/14/09 11:56	121409A-2	931881
7440-22-4	Silver	468	ug/Kg	U	93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-23-5	Sodium	89200	ug/Kg		6550	23400	23400	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-28-0	Thallium	0.122	mg/kg	J	0.0618	0.206	0.206	2	MS	BAJ	11/28/09 21:20	091128-3	925476
7440-32-6	Titanium	358000	ug/Kg		93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-61-1	Uranium	0.639	mg/kg		0.0136	0.0412	0.0412	2	MS	BAJ	11/29/09 06:49	091128-6	925476
7440-62-2	Vanadium	16700	ug/Kg		93.6	468	468	1	P	HSC	12/07/09 12:52	120709-1	925474
7440-66-6	Zinc	33100	ug/Kg		309	936	936	1	P	HSC	12/07/09 12:52	120709-1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.561	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.51	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.53	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931881	931880	SW846 3050B	0.514	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-603 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241539004 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13461 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8630000	ug/Kg		6640	19500	19500	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-36-0	Antimony	2440	ug/Kg		322	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-38-2	Arsenic	1.53	mg/kg		0.204	1.02	1.02	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-39-3	Barium	85700	ug/Kg		97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-41-7	Beryllium	0.745	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-42-8	Boron	2640	ug/Kg	J	976	4880	4880	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-43-9	Cadmium	234	ug/Kg	J	97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-70-2	Calcium	4670000	ug/Kg	*	7810	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-47-3	Chromium	6980	ug/Kg		146	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-48-4	Cobalt	2710	ug/Kg		146	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-50-8	Copper	7070	ug/Kg		293	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-89-6	Iron	11700000	ug/Kg		7810	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-92-1	Lead	10800	ug/Kg		244	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-93-2	Lithium	15.2	mg/kg		0.409	2.04	2.04	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7439-95-4	Magnesium	1580000	ug/Kg	N	8300	29300	29300	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-96-5	Manganese	231000	ug/Kg		195	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474
7439-97-6	Mercury	12.8	ug/kg		4.03	11.9	11.9	1	AV	JXL1	12/07/09 11:54	120709S1-7	925629
7440-02-0	Nickel	6.11	mg/kg	*N	0.102	0.409	0.409	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-09-7	Potassium	1020000	ug/Kg	N	6250	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7782-49-2	Selenium	1.02	mg/kg	UN	0.511	1.02	1.02	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-21-3	Silicon	1370000	ug/Kg	N	1620	10800	10800	1	P	HSC	12/14/09 12:00	121409A-2	931881
7440-22-4	Silver	488	ug/Kg	U	97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-23-5	Sodium	153000	ug/Kg		6830	24400	24400	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-28-0	Thallium	0.174	mg/kg	J	0.0613	0.204	0.204	2	MS	BAJ	11/28/09 21:26	091128-3	925476
7440-32-6	Titanium	344000	ug/Kg		97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-61-1	Uranium	0.561	mg/kg		0.0135	0.0409	0.0409	2	MS	BAJ	11/29/09 06:51	091128-6	925476
7440-62-2	Vanadium	15300	ug/Kg		97.6	488	488	1	P	HSC	12/07/09 12:56	120709-1	925474
7440-66-6	Zinc	39900	ug/Kg		322	976	976	1	P	HSC	12/07/09 12:56	120709-1	925474

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925474	925473	SW846 3050B	0.561	g	50	mL	11/24/09	BXA1
925476	925475	SW846 3050B	0.536	g	50	mL	11/24/09	BXA1
925629	925628	SW846 7471A Prep	0.554	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931881	931880	SW846 3050B	0.508	g	50	mL	12/12/09	BCD1

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	48.2	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	28-NOV-09 16:32	091128-3
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	28-NOV-09 16:32	091128-3
	Lithium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	28-NOV-09 16:32	091128-3
	Nickel	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	28-NOV-09 16:32	091128-3
	Selenium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	28-NOV-09 16:32	091128-3
	Thallium	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	28-NOV-09 16:32	091128-3
	Uranium	53.4	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	29-NOV-09 06:19	091128-6
	Aluminum	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Antimony	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Barium	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Boron	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Cadmium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Calcium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Cobalt	515	ug/L	500	ug/L	103	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Iron	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Lead	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Magnesium	5310	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Potassium	2430	ug/L	2500	ug/L	97	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Silver	270	ug/L	250	ug/L	107.9	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Sodium	2560	ug/L	2500	ug/L	102.5	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Titanium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Vanadium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Zinc	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	07-DEC-09 07:17	120709-1
	Mercury	5.19	ug/L	5	ug/L	103.8	90.0 – 110.0	AV	07-DEC-09 10:07	120709S1-7
	Silicon	4800	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	14-DEC-09 09:44	121409A-2
CCV01										
	Arsenic	48	ug/L	50	ug/L	96	90.0 – 110.0	MS	28-NOV-09 17:02	091128-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Beryllium	50.2	ug/L	50	ug/L	100.4	90.0 - 110.0	MS	28-NOV-09 17:02	091128-3
	Lithium	48.8	ug/L	50	ug/L	97.7	90.0 - 110.0	MS	28-NOV-09 17:02	091128-3
	Nickel	51.1	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	28-NOV-09 17:02	091128-3
	Selenium	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	28-NOV-09 17:02	091128-3
	Thallium	53.5	ug/L	50	ug/L	107.1	90.0 - 110.0	MS	28-NOV-09 17:02	091128-3
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	29-NOV-09 06:27	091128-6
	Aluminum	5350	ug/L	5000	ug/L	107	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Antimony	525	ug/L	500	ug/L	105.1	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Barium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Boron	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Cadmium	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Calcium	5430	ug/L	5000	ug/L	108.6	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Chromium	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Cobalt	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Copper	505	ug/L	500	ug/L	101	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Lead	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Magnesium	5440	ug/L	5000	ug/L	108.7	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Manganese	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Potassium	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Silver	525	ug/L	500	ug/L	104.9	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Sodium	10600	ug/L	10000	ug/L	106	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Titanium	526	ug/L	500	ug/L	105.2	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Vanadium	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Zinc	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	07-DEC-09 07:40	120709-1
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 - 120.0	AV	07-DEC-09 10:13	120709S1-7
	Silicon	2610	ug/L	2500	ug/L	104.3	90.0 - 110.0	P	14-DEC-09 10:07	121409A-2
CCV02										
	Arsenic	48.5	ug/L	50	ug/L	96.9	90.0 - 110.0	MS	28-NOV-09 17:20	091128-3
	Beryllium	50.5	ug/L	50	ug/L	101.1	90.0 - 110.0	MS	28-NOV-09 17:20	091128-3

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lithium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	28–NOV–09 17:20	091128–3
	Nickel	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	28–NOV–09 17:20	091128–3
	Selenium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	28–NOV–09 17:20	091128–3
	Thallium	52.6	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	28–NOV–09 17:20	091128–3
	Uranium	53.4	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	29–NOV–09 06:44	091128–6
	Aluminum	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Antimony	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Barium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Boron	500	ug/L	500	ug/L	100	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Cadmium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Calcium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Cobalt	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Iron	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Lead	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Magnesium	5220	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Potassium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Silver	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Sodium	10500	ug/L	10000	ug/L	105	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Titanium	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Zinc	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	07–DEC–09 08:16	120709–1
	Mercury	5.38	ug/L	5	ug/L	107.7	80.0 – 120.0	AV	07–DEC–09 10:37	120709S1–7
	Silicon	2570	ug/L	2500	ug/L	103	90.0 – 110.0	P	14–DEC–09 10:27	121409A–2
CCV03										
	Arsenic	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	28–NOV–09 18:22	091128–3
	Beryllium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	28–NOV–09 18:22	091128–3
	Lithium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	28–NOV–09 18:22	091128–3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	28-NOV-09 18:22	091128-3
	Selenium	51.7	ug/L	50	ug/L	103.4	90.0 - 110.0	MS	28-NOV-09 18:22	091128-3
	Thallium	52.8	ug/L	50	ug/L	105.6	90.0 - 110.0	MS	28-NOV-09 18:22	091128-3
	Uranium	53.5	ug/L	50	ug/L	106.9	90.0 - 110.0	MS	29-NOV-09 06:53	091128-6
	Aluminum	5220	ug/L	5000	ug/L	104.5	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Antimony	520	ug/L	500	ug/L	103.9	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Boron	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Cadmium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Calcium	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Chromium	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Cobalt	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Copper	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Iron	5240	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Lead	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Magnesium	5320	ug/L	5000	ug/L	106.3	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Manganese	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Potassium	5090	ug/L	5000	ug/L	101.8	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Silver	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Titanium	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Zinc	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	07-DEC-09 09:01	120709-1
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 - 120.0	AV	07-DEC-09 11:01	120709S1-7
	Silicon	2630	ug/L	2500	ug/L	105.2	90.0 - 110.0	P	14-DEC-09 10:56	121409A-2
CCV04										
	Arsenic	47.7	ug/L	50	ug/L	95.4	90.0 - 110.0	MS	28-NOV-09 19:17	091128-3
	Beryllium	50.5	ug/L	50	ug/L	101.1	90.0 - 110.0	MS	28-NOV-09 19:17	091128-3
	Lithium	49.2	ug/L	50	ug/L	98.4	90.0 - 110.0	MS	28-NOV-09 19:17	091128-3
	Nickel	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	28-NOV-09 19:17	091128-3

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Selenium	50.8	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	28–NOV–09 19:17	091128–3
	Thallium	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	28–NOV–09 19:17	091128–3
	Aluminum	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Antimony	520	ug/L	500	ug/L	104	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Barium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Cadmium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Calcium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Chromium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Cobalt	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Copper	505	ug/L	500	ug/L	101	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Lead	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Manganese	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Silver	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Sodium	10200	ug/L	10000	ug/L	102.4	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Titanium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Zinc	510	ug/L	500	ug/L	102	90.0 – 110.0	P	07–DEC–09 09:45	120709–1
	Mercury	5.79	ug/L	5	ug/L	115.9	80.0 – 120.0	AV	07–DEC–09 11:24	120709S1–7
	Silicon	2630	ug/L	2500	ug/L	105.2	90.0 – 110.0	P	14–DEC–09 11:23	121409A–2
CCV05										
	Arsenic	48.1	ug/L	50	ug/L	96.2	90.0 – 110.0	MS	28–NOV–09 20:00	091128–3
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	28–NOV–09 20:00	091128–3
	Lithium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	28–NOV–09 20:00	091128–3
	Nickel	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	28–NOV–09 20:00	091128–3
	Selenium	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	28–NOV–09 20:00	091128–3
	Thallium	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	28–NOV–09 20:00	091128–3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5680	ug/L	5000	ug/L	113.5	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Antimony	525	ug/L	500	ug/L	105	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Boron	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Cadmium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Calcium	5670	ug/L	5000	ug/L	113.4	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Chromium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Cobalt	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Copper	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Iron	5220	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Lead	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Magnesium	5390	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Potassium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Silver	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Sodium	10300	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Titanium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Vanadium	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Zinc	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	07-DEC-09 10:24	120709-1
	Mercury	5.49	ug/L	5	ug/L	109.7	80.0 – 120.0	AV	07-DEC-09 11:48	120709S1-7
	Silicon	2620	ug/L	2500	ug/L	105	90.0 – 110.0	P	14-DEC-09 12:03	121409A-2
CCV06										
	Arsenic	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	28-NOV-09 21:02	091128-3
	Beryllium	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	28-NOV-09 21:02	091128-3
	Lithium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	28-NOV-09 21:02	091128-3
	Nickel	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	28-NOV-09 21:02	091128-3
	Selenium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	28-NOV-09 21:02	091128-3
	Thallium	53.7	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	28-NOV-09 21:02	091128-3
	Aluminum	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	07-DEC-09 11:01	120709-1
	Antimony	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	07-DEC-09 11:01	120709-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Boron	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Calcium	5300	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Chromium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Cobalt	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Copper	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Iron	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Magnesium	5240	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Manganese	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Potassium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Silver	526	ug/L	500	ug/L	105.1	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Sodium	10400	ug/L	10000	ug/L	103.6	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Titanium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Vanadium	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Zinc	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	07–DEC–09 11:01	120709–1
	Mercury	5.57	ug/L	5	ug/L	111.4	80.0 – 120.0	AV	07–DEC–09 12:12	120709S1–7
CCV07										
	Arsenic	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	28–NOV–09 21:33	091128–3
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	28–NOV–09 21:33	091128–3
	Lithium	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	28–NOV–09 21:33	091128–3
	Nickel	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	28–NOV–09 21:33	091128–3
	Selenium	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	28–NOV–09 21:33	091128–3
	Thallium	54	ug/L	50	ug/L	108.1	90.0 – 110.0	MS	28–NOV–09 21:33	091128–3
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	07–DEC–09 11:39	120709–1
	Antimony	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	07–DEC–09 11:39	120709–1
	Barium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	07–DEC–09 11:39	120709–1
	Boron	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	07–DEC–09 11:39	120709–1
	Cadmium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	07–DEC–09 11:39	120709–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Chromium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Copper	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Iron	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Lead	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Manganese	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Potassium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Silver	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Sodium	10200	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Titanium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Vanadium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
	Zinc	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	07-DEC-09 11:39	120709-1
CCV08										
	Aluminum	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Antimony	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Boron	505	ug/L	500	ug/L	101	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Cadmium	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Calcium	5400	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Chromium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Cobalt	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Copper	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Iron	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Lead	515	ug/L	500	ug/L	103.1	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Magnesium	5310	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Manganese	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	07-DEC-09 12:17	120709-1
	Silver	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	07-DEC-09 12:17	120709-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	10200	ug/L	10000	ug/L	102.3	90.0 – 110.0	P	07–DEC–09 12:17	120709–1
	Titanium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	07–DEC–09 12:17	120709–1
	Vanadium	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	07–DEC–09 12:17	120709–1
	Zinc	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	07–DEC–09 12:17	120709–1
CCV09										
	Aluminum	5340	ug/L	5000	ug/L	106.8	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Antimony	520	ug/L	500	ug/L	104	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Barium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Boron	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Cadmium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Calcium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Chromium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Cobalt	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Copper	505	ug/L	500	ug/L	101	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Iron	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Lead	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Magnesium	5290	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Silver	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Sodium	10600	ug/L	10000	ug/L	105.5	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Titanium	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Vanadium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	07–DEC–09 13:00	120709–1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	07–DEC–09 13:00	120709–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.16	ug/L	2	ug/L	108.1	70.0 – 130.0	MS	28–NOV–09 16:44	091128–3
	Thallium	1.17	ug/L	1	ug/L	117.3	70.0 – 130.0	MS	28–NOV–09 16:44	091128–3
	Arsenic	5.26	ug/L	5	ug/L	105.3	70.0 – 130.0	MS	28–NOV–09 16:44	091128–3
	Beryllium	.506	ug/L	.5	ug/L	101.2	70.0 – 130.0	MS	28–NOV–09 16:44	091128–3
	Selenium	5.92	ug/L	5	ug/L	118.3	70.0 – 130.0	MS	28–NOV–09 16:44	091128–3
	Lithium	10.8	ug/L	10	ug/L	107.7	70.0 – 130.0	MS	28–NOV–09 16:44	091128–3
	Uranium	.248	ug/L	.2	ug/L	124	70.0 – 130.0	MS	29–NOV–09 06:22	091128–6
	Mercury	.155	ug/L	.2	ug/L	77.4	70.0 – 130.0	AV	07–DEC–09 10:11	120709S1–7
PQL01										
	Aluminum	212	ug/L	200	ug/L	105.8	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Iron	119	ug/L	100	ug/L	118.8	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Lead	10.5	ug/L	10	ug/L	105.1	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Magnesium	320	ug/L	300	ug/L	106.6	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Manganese	10.3	ug/L	10	ug/L	102.7	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Potassium	149	ug/L	150	ug/L	99.3	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Silver	4.78	ug/L	5	ug/L	95.7	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Sodium	324	ug/L	300	ug/L	107.9	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Antimony	11.4	ug/L	10	ug/L	113.6	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Cobalt	4.71	ug/L	5	ug/L	94.1	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Barium	4.93	ug/L	5	ug/L	98.6	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Cadmium	4.91	ug/L	5	ug/L	98.3	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Chromium	4.68	ug/L	5	ug/L	93.7	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Copper	10.6	ug/L	10	ug/L	106.2	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Vanadium	5.2	ug/L	5	ug/L	103.9	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Zinc	10.3	ug/L	10	ug/L	102.8	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Calcium	210	ug/L	200	ug/L	104.9	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Boron	48.7	ug/L	50	ug/L	97.4	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Titanium	5.03	ug/L	5	ug/L	100.6	70.0 – 130.0	P	07–DEC–09 07:24	120709–1
	Silicon	101	ug/L	100	ug/L	101.5	70.0 – 130.0	P	14–DEC–09 09:51	121409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 16:38	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 16:38	091128–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 16:38	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 16:38	091128–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 16:38	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 16:38	091128–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	29–NOV–09 06:20	091128–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 07:20	120709–1
	Antimony	4.58	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 07:20	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:20	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 07:20	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:20	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:20	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:20	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:20	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 07:20	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:20	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 07:20	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 07:20	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 07:20	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 07:20	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:20	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 07:20	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:20	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:20	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 07:20	120709–1
	Mercury	–0.096	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:09	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 09:48	121409A–2
CCB01										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 17:08	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 17:08	091128–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 17:08	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 17:08	091128–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 17:08	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 17:08	091128–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	29–NOV–09 06:29	091128–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 07:44	120709–1
	Antimony	3.89	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 07:44	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:44	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 07:44	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:44	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:44	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:44	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:44	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 07:44	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:44	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 07:44	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 07:44	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 07:44	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 07:44	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:44	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 07:44	120709–1
	Titanium	2.44	+/–5	J	1.0	5.0	SOL	P	07–DEC–09 07:44	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:44	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 07:44	120709–1
	Mercury	–0.098	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:15	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 10:11	121409A–2
CCB02										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 17:27	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 17:27	091128–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 17:27	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 17:27	091128–3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 17:27	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 17:27	091128–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	29–NOV–09 06:46	091128–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 08:20	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 08:20	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 08:20	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 08:20	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 08:20	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 08:20	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 08:20	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 08:20	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 08:20	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 08:20	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 08:20	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 08:20	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 08:20	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 08:20	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 08:20	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 08:20	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 08:20	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 08:20	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 08:20	120709–1
	Mercury	–0.091	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:39	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 10:30	121409A–2
CCB03										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 18:28	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 18:28	091128–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 18:28	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 18:28	091128–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 18:28	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 18:28	091128–3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	29–NOV–09 06:55	091128–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 09:05	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 09:05	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:05	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 09:05	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:05	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 09:05	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 09:05	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 09:05	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 09:05	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 09:05	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 09:05	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 09:05	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 09:05	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 09:05	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:05	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 09:05	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:05	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:05	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 09:05	120709–1
	Mercury	–0.117	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:03	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 11:00	121409A–2
CCB04										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 19:23	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 19:23	091128–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 19:23	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 19:23	091128–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 19:23	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 19:23	091128–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 09:49	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 09:49	120709–1

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Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:49	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 09:49	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:49	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 09:49	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 09:49	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 09:49	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 09:49	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 09:49	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 09:49	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 09:49	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 09:49	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 09:49	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:49	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 09:49	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:49	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:49	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 09:49	120709–1
	Mercury	–0.136	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:26	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 11:26	121409A–2
CCB05										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 20:06	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 20:06	091128–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 20:06	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 20:06	091128–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 20:06	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 20:06	091128–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 10:28	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 10:28	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:28	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 10:28	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:28	120709–1

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Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 10:28	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 10:28	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 10:28	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 10:28	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 10:28	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 10:28	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 10:28	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 10:28	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 10:28	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:28	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 10:28	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:28	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:28	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 10:28	120709–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 11:50	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 12:06	121409A–2
CCB06										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 21:08	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 21:08	091128–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 21:08	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 21:08	091128–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 21:08	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 21:08	091128–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 11:05	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 11:05	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:05	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 11:05	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:05	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 11:05	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 11:05	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 11:05	120709–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 11:05	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 11:05	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 11:05	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 11:05	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 11:05	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 11:05	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:05	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 11:05	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:05	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:05	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 11:05	120709–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:14	120709S1–7
CCB07										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	28–NOV–09 21:39	091128–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	28–NOV–09 21:39	091128–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	28–NOV–09 21:39	091128–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	28–NOV–09 21:39	091128–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	28–NOV–09 21:39	091128–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	28–NOV–09 21:39	091128–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 11:42	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 11:42	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:42	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 11:42	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:42	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 11:42	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 11:42	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 11:42	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 11:42	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 11:42	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 11:42	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 11:42	120709–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 11:42	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 11:42	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:42	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 11:42	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:42	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 11:42	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 11:42	120709–1
CCB08										
	Aluminum	102	+/–200	J	68.0	200	SOL	P	07–DEC–09 12:21	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 12:21	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 12:21	120709–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 12:21	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 12:21	120709–1
	Calcium	103.77	+/–250	J	80.0	250	SOL	P	07–DEC–09 12:21	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 12:21	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 12:21	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 12:21	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 12:21	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 12:21	120709–1
	Magnesium	122.27	+/–300	J	85.0	300	SOL	P	07–DEC–09 12:21	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 12:21	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 12:21	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 12:21	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 12:21	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 12:21	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 12:21	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 12:21	120709–1
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 13:03	120709–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 13:03	120709–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:03	120709–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–603

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 13:03	120709–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:03	120709–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 13:03	120709–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 13:03	120709–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 13:03	120709–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 13:03	120709–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 13:03	120709–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 13:03	120709–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 13:03	120709–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 13:03	120709–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 13:03	120709–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:03	120709–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 13:03	120709–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:03	120709–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:03	120709–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 13:03	120709–1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–603

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978583								
	Aluminum	6610	ug/Kg	+/–19455.253	U	P	6610	19500
	Antimony	321	ug/Kg	+/–972.763	U	P	321	973
	Barium	97.3	ug/Kg	+/–486.381	U	P	97.3	486
	Boron	973	ug/Kg	+/–4863.813	U	P	973	4860
	Cadmium	97.3	ug/Kg	+/–486.381	U	P	97.3	486
	Calcium	10200	ug/Kg	+/–24319.066	J	P	7780	24300
	Chromium	146	ug/Kg	+/–486.381	U	P	146	486
	Cobalt	146	ug/Kg	+/–486.381	U	P	146	486
	Copper	292	ug/Kg	+/–972.763	U	P	292	973
	Iron	7780	ug/Kg	+/–24319.066	U	P	7780	24300
	Lead	243	ug/Kg	+/–972.763	U	P	243	973
	Magnesium	8270	ug/Kg	+/–29182.879	U	P	8270	29200
	Manganese	195	ug/Kg	+/–972.763	U	P	195	973
	Potassium	6230	ug/Kg	+/–24319.066	U	P	6230	24300
	Silver	97.3	ug/Kg	+/–486.381	U	P	97.3	486
	Sodium	6810	ug/Kg	+/–24319.066	U	P	6810	24300
	Titanium	97.3	ug/Kg	+/–486.381	U	P	97.3	486
	Vanadium	97.3	ug/Kg	+/–486.381	U	P	97.3	486
	Zinc	321	ug/Kg	+/–972.763	U	P	321	973
1201978589								
	Arsenic	0.198	mg/kg	+/–0.992	U	MS	0.198	0.992
	Beryllium	0.0198	mg/kg	+/–0.099	U	MS	0.0198	0.0992
	Lithium	0.397	mg/kg	+/–1.984	U	MS	0.397	1.98
	Nickel	0.0992	mg/kg	+/–0.397	U	MS	0.0992	0.397
	Selenium	0.496	mg/kg	+/–0.992	U	MS	0.496	0.992
	Thallium	0.0595	mg/kg	+/–0.198	U	MS	0.0595	0.198
	Uranium	0.0131	mg/kg	+/–0.04	U	MS	0.0131	0.0397
1201978947								
	Mercury	–6.34	ug/kg	+/–11.858	J	AV	4.03	11.9
1201993406								
	Silicon	2670	ug/Kg	+/–9940.358	J	P	1490	9940

METALS
–4–
Interference Check Sample

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	531000	ug/L	500000	ug/L	106	80.0 – 120.0	07–DEC–09 07:27	120709–1
	Antimony	–6.12	ug/L					07–DEC–09 07:27	120709–1
	Barium	5.09	ug/L					07–DEC–09 07:27	120709–1
	Boron	15.2	ug/L					07–DEC–09 07:27	120709–1
	Cadmium	3.55	ug/L					07–DEC–09 07:27	120709–1
	Calcium	510000	ug/L	500000	ug/L	102	80.0 – 120.0	07–DEC–09 07:27	120709–1
	Chromium	–2.98	ug/L					07–DEC–09 07:27	120709–1
	Cobalt	–1.98	ug/L					07–DEC–09 07:27	120709–1
	Copper	10.7	ug/L					07–DEC–09 07:27	120709–1
	Iron	194000	ug/L	200000	ug/L	97.2	80.0 – 120.0	07–DEC–09 07:27	120709–1
	Lead	8.69	ug/L					07–DEC–09 07:27	120709–1
	Magnesium	500000	ug/L	500000	ug/L	100	80.0 – 120.0	07–DEC–09 07:27	120709–1
	Manganese	17.3	ug/L					07–DEC–09 07:27	120709–1
	Potassium	6.68	ug/L					07–DEC–09 07:27	120709–1
	Silver	–4.02	ug/L					07–DEC–09 07:27	120709–1
	Sodium	37.5	ug/L					07–DEC–09 07:27	120709–1
	Titanium	–3.01	ug/L					07–DEC–09 07:27	120709–1
	Vanadium	–3.23	ug/L					07–DEC–09 07:27	120709–1
	Zinc	3.75	ug/L					07–DEC–09 07:27	120709–1
ICSAB01									
	Aluminum	529000	ug/L	500000	ug/L	106	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Antimony	514	ug/L	500	ug/L	103	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Barium	502	ug/L	500	ug/L	100	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Boron	539	ug/L	500	ug/L	108	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Cadmium	476	ug/L	500	ug/L	95.2	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Calcium	507000	ug/L	500000	ug/L	101	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Chromium	482	ug/L	500	ug/L	96.4	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Cobalt	436	ug/L	500	ug/L	87.2	80.0 – 120.0	07–DEC–09 07:30	120709–1
	Copper	561	ug/L	500	ug/L	112	80.0 – 120.0	07–DEC–09 07:30	120709–1

METALS
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Interference Check Sample

SDG No: 10-603

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Iron	193000	ug/L	200000	ug/L	96.7	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Lead	487	ug/L	500	ug/L	97.3	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Magnesium	502000	ug/L	500000	ug/L	100	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Manganese	491	ug/L	500	ug/L	98.3	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Potassium	5230	ug/L	5000	ug/L	105	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Silver	271	ug/L	250	ug/L	108	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Sodium	5340	ug/L	5000	ug/L	107	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Titanium	511	ug/L	500	ug/L	102	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Vanadium	515	ug/L	500	ug/L	103	80.0 – 120.0	07-DEC-09 07:30	120709-1
	Zinc	485	ug/L	500	ug/L	96.9	80.0 – 120.0	07-DEC-09 07:30	120709-1

METALS
–4–
Interference Check Sample

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Silicon	19.3	ug/L					14–DEC–09 09:55	121409A–2
ICSAB01									
	Silicon	5270	ug/L	5000	ug/L	105	80.0 – 120.0	14–DEC–09 09:57	121409A–2

METALS
–4–
Interference Check Sample

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.323	ug/L					28–NOV–09 16:50	091128–3
	Beryllium	0.059	ug/L					28–NOV–09 16:50	091128–3
	Lithium	0.093	ug/L					28–NOV–09 16:50	091128–3
	Nickel	3.54	ug/L					28–NOV–09 16:50	091128–3
	Selenium	–0.758	ug/L					28–NOV–09 16:50	091128–3
	Thallium	–0.015	ug/L					28–NOV–09 16:50	091128–3
ICSAB01									
	Arsenic	21.9	ug/L	20	ug/L	110	80.0 – 120.0	28–NOV–09 16:56	091128–3
	Beryllium	19.0	ug/L	20	ug/L	94.9	80.0 – 120.0	28–NOV–09 16:56	091128–3
	Lithium	19.4	ug/L	20	ug/L	97	80.0 – 120.0	28–NOV–09 16:56	091128–3
	Nickel	23.1	ug/L	22.7	ug/L	102	80.0 – 120.0	28–NOV–09 16:56	091128–3
	Selenium	19.7	ug/L	20	ug/L	98.6	80.0 – 120.0	28–NOV–09 16:56	091128–3
	Thallium	22.5	ug/L	20	ug/L	112	80.0 – 120.0	28–NOV–09 16:56	091128–3

METALS
–4–
Interference Check Sample

SDG No: 10–603

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	–0.012	ug/L					29–NOV–09 06:24	091128–6
ICSAB01									
	Uranium	22.8	ug/L	20	ug/L	114	80.0 – 120.0	29–NOV–09 06:25	091128–6

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–603 **Client ID** RE03–09–13462S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241539001 **Spike ID:** 1201978586

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		14100000		9320000		528000	902	N/A	P
Antimony	ug/Kg	75–125	48600		1330		52800	89.5		P
Barium	ug/Kg	75–125	150000		107000		52800	81.5		P
Boron	ug/Kg	75–125	58500		3310	J	52800	104		P
Cadmium	ug/Kg	75–125	54000		239	J	52800	102		P
Calcium	ug/Kg		3320000		2860000		528000	87.1	N/A	P
Chromium	ug/Kg	75–125	63100		9300		52800	102		P
Cobalt	ug/Kg	75–125	55600		3180		52800	99.3		P
Copper	ug/Kg	75–125	63700		7010		52800	107		P
Iron	ug/Kg		14000000		12000000		528000	368	N/A	P
Lead	ug/Kg	75–125	67800		12800		52800	104		P
Magnesium	ug/Kg	75–125	2530000		1690000		528000	158	N	P
Manganese	ug/Kg		353000		296000		52800	107	N/A	P
Potassium	ug/Kg	75–125	1910000		1120000		528000	150	N	P
Silicon	ug/Kg	75–125	1790000		1910000		495000	–24.3	N	P
Silver	ug/Kg	75–125	57700		99	U	52800	109		P
Sodium	ug/Kg	75–125	873000		334000		528000	102		P
Titanium	ug/Kg		458000		334000		52800	234	N/A	P
Vanadium	ug/Kg	75–125	73600		16700		52800	108		P
Zinc	ug/Kg	75–125	96700		37600		52800	112		P

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-603 **Client ID** RE03-09-13462SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241539001 **Spike ID:** 1201978587

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		14500000		9320000		471000	1100	N/A	P
Antimony	ug/Kg	75-125	44400		1330		47100	91.3		P
Barium	ug/Kg	75-125	154000		107000		47100	101		P
Boron	ug/Kg	75-125	53900		3310	J	47100	107		P
Cadmium	ug/Kg	75-125	48900		239	J	47100	103		P
Calcium	ug/Kg		4880000		2860000		471000	430	N/A	P
Chromium	ug/Kg	75-125	58200		9300		47100	104		P
Cobalt	ug/Kg	75-125	51400		3180		47100	102		P
Copper	ug/Kg	75-125	60300		7010		47100	113		P
Iron	ug/Kg		13800000		12000000		471000	368	N/A	P
Lead	ug/Kg	75-125	62500		12800		47100	105		P
Magnesium	ug/Kg	75-125	2730000		1690000		471000	221	N	P
Manganese	ug/Kg		315000		296000		47100	39.6	N/A	P
Potassium	ug/Kg	75-125	1960000		1120000		471000	179	N	P
Silicon	ug/Kg	75-125	1820000		1910000		511000	-18.4	N	P
Silver	ug/Kg	75-125	52600		99	U	47100	112		P
Sodium	ug/Kg	75-125	876000		334000		471000	115		P
Titanium	ug/Kg		445000		334000		47100	235	N/A	P
Vanadium	ug/Kg	75-125	68300		16700		47100	109		P
Zinc	ug/Kg	75-125	88800		37600		47100	109		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–603 **Client ID** RE03–09–13462S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241539001 **Spike ID:** 1201978592

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	9.8		1.75		8.11	99.2		MS
Beryllium	mg/kg	75–125	5.86		0.881		5.07	98.3		MS
Lithium	mg/kg	75–125	18.7		13.6		5.07	102		MS
Nickel	mg/kg	75–125	14.8		7.17		5.07	150	N	MS
Selenium	mg/kg	75–125	1.5		0.529	U	2.03	73.8	N	MS
Thallium	mg/kg	75–125	11.4		0.234		10.1	110		MS
Uranium	mg/kg	75–125	6.32		0.712		5.07	111		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–603 **Client ID** RE03–09–13462SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241539001 **Spike ID:** 1201978593

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	9.96		1.75		8.33	98.5		MS
Beryllium	mg/kg	75–125	6.28		0.881		5.21	104		MS
Lithium	mg/kg	75–125	19.4		13.6		5.21	111		MS
Nickel	mg/kg	75–125	13		7.17		5.21	112		MS
Selenium	mg/kg	75–125	1.7		0.529	U	2.08	81.4		MS
Thallium	mg/kg	75–125	12.2		0.234		10.4	115		MS
Uranium	mg/kg	75–125	6.61		0.712		5.21	113		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–603 **Client ID** RE03–09–13875S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978950

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	203		33.3		125	135	N	AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–603 **Client ID:** RE03–09–13875SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978952

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	196		33.3		124	131	N	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–603

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13462D

Sample ID: 241539001 **Duplicate ID:** 1201978584 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	9320000		9250000		.816		P
Antimony	ug/Kg	+/–995	1330		1510		12.4		P
Barium	ug/Kg	+/–20%	107000		91900		15.1		P
Boron	ug/Kg	+/–4980	3310	J	3130	J	5.42		P
Cadmium	ug/Kg	+/–498	239	J	252	J	5.54		P
Calcium	ug/Kg	+/–20%	2860000		2700000		5.73		P
Chromium	ug/Kg	+/–20%	9300		7690		18.9		P
Cobalt	ug/Kg	+/–20%	3180		2670		17.6		P
Copper	ug/Kg	+/–20%	7010		6230		11.8		P
Iron	ug/Kg	+/–20%	12000000		12000000		.587		P
Lead	ug/Kg	+/–20%	12800		11600		9.85		P
Magnesium	ug/Kg	+/–20%	1690000		1740000		2.83		P
Manganese	ug/Kg	+/–20%	296000		264000		11.6		P
Potassium	ug/Kg	+/–20%	1120000		1180000		6.04		P
Silicon	ug/Kg	+/–20%	1910000		1920000		.351		P
Silver	ug/Kg		99	U	99.5	U			P
Sodium	ug/Kg	+/–20%	334000		337000		.886		P
Titanium	ug/Kg	+/–20%	334000		333000		.224		P
Vanadium	ug/Kg	+/–20%	16700		15200		9.7		P
Zinc	ug/Kg	+/–20%	37600		40900		8.27		P

Metals
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Duplicate Sample Summary

SDG No.: 10–603

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13462SD

Sample ID: 1201978586 **Duplicate ID:** 1201978587 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	14100000		14500000		3.09		P
Antimony	ug/Kg	+/–20	48600		44400		9.12		P
Barium	ug/Kg	+/–20	150000		154000		2.87		P
Boron	ug/Kg	+/–20	58500		53900		8.1		P
Cadmium	ug/Kg	+/–20	54000		48900		9.9		P
Calcium	ug/Kg	+/–20	3320000		4880000		38.2	*	P
Chromium	ug/Kg	+/–20	63100		58200		8.06		P
Cobalt	ug/Kg	+/–20	55600		51400		7.94		P
Copper	ug/Kg	+/–20	63700		60300		5.4		P
Iron	ug/Kg	+/–20	14000000		13800000		1.5		P
Lead	ug/Kg	+/–20	67800		62500		8.15		P
Magnesium	ug/Kg	+/–20	2530000		2730000		7.8		P
Manganese	ug/Kg	+/–20	353000		315000		11.3		P
Potassium	ug/Kg	+/–20	1910000		1960000		2.69		P
Silicon	ug/Kg	+/–20	1790000		1820000		1.46		P
Silver	ug/Kg	+/–20	57700		52600		9.13		P
Sodium	ug/Kg	+/–20	873000		876000		.296		P
Titanium	ug/Kg	+/–20	458000		445000		2.85		P
Vanadium	ug/Kg	+/–20	73600		68300		7.41		P
Zinc	ug/Kg	+/–20	96700		88800		8.48		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–603

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13462D

Sample ID: 241539001 **Duplicate ID:** 1201978590 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–.965	1.75		1.72		1.64		MS
Beryllium	mg/kg	+/–20%	0.881		0.806		8.86		MS
Lithium	mg/kg	+/–20%	13.6		12		12		MS
Nickel	mg/kg	+/–20%	7.17		9.47		27.7	*	MS
Selenium	mg/kg		0.529	U	0.482	U			MS
Thallium	mg/kg	+/–.193	0.234		0.195		18.1		MS
Uranium	mg/kg	+/–20%	0.712		0.663		7.08		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–603

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13462SD

Sample ID: 1201978592 **Duplicate ID:** 1201978593 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	9.8		9.96		1.6		MS
Beryllium	mg/kg	+/–20	5.86		6.28		6.88		MS
Lithium	mg/kg	+/–20	18.7		19.4		3.36		MS
Nickel	mg/kg	+/–20	14.8		13		12.6		MS
Selenium	mg/kg	+/–20	1.5		1.7		12.4		MS
Thallium	mg/kg	+/–20	11.4		12.2		6.66		MS
Uranium	mg/kg	+/–20	6.32		6.61		4.46		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10–603

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875D

Sample ID: 241541001 **Duplicate ID:** 1201978949 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–12	33.3		29.1		13.4		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–603

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875SD

Sample ID: 1201978950 **Duplicate ID:** 1201978952 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	203		196		3.07		AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–603

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978588								
	Antimony	ug/Kg	121000	108000		88.9	39.1–132.1	P
	Barium	ug/Kg	475000	485000		102	82–110.6	P
	Boron	ug/Kg	139000	143000		103	74.9–113.6	P
	Cadmium	ug/Kg	116000	121000		104	77.9–115.2	P
	Calcium	ug/Kg	3720000	3780000		102	77.4–111.7	P
	Chromium	ug/Kg	84000	80500		95.9	66.6–116.5	P
	Cobalt	ug/Kg	83000	85200		103	79–113.9	P
	Copper	ug/Kg	105000	104000		98.7	77.6–112	P
	Iron	ug/Kg	20000000	19300000		96.7	51.5–145.5	P
	Lead	ug/Kg	161000	172000		107	83.1–114.7	P
	Magnesium	ug/Kg	2980000	3050000		102	81–114.3	P
	Manganese	ug/Kg	398000	381000		95.8	76.6–106.6	P
	Potassium	ug/Kg	2390000	2300000		96.4	72.2–111.1	P
	Aluminum	ug/Kg	7290000	7490000		103	63.5–118	P
	Silver	ug/Kg	133000	137000		103	81.7–115.7	P
	Sodium	ug/Kg	614000	586000		95.4	71.5–109.3	P
	Titanium	ug/Kg	382000	382000		99.9	41.7–148.3	P
	Vanadium	ug/Kg	166000	156000		93.9	65–118.6	P
	Zinc	ug/Kg	195000	201000		103	82.8–111.9	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–603

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978594								
	Arsenic	mg/kg	255	266		104	83–120	MS
	Beryllium	mg/kg	86.4	95.9		111	81.2–126.8	MS
	Lithium	mg/kg	8.01	8.63	J	108	66.7–133.7	MS
	Nickel	mg/kg	101	111		110	83.3–121.4	MS
	Selenium	mg/kg	171	191		112	80.2–125.9	MS
	Thallium	mg/kg	203	226		111	78–123.2	MS
	Uranium	mg/kg	2.12	2.02		95.1	61.9–130.7	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–603

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978948								
	Mercury	ug/kg	5150	6090		118	71.6–128.3	AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–603

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201993407								
	Silicon	ug/Kg	1210000	1590000		131	10–190	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-603 **Client ID** RE03-09-13462L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241539001 **Serial Dilution ID:** 1201978585

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	94200		96000		1.91		10	P
Antimony	13.5		16.5	U	100			P
Barium	1080		1080		0		10	P
Boron	33.4	J	50	U	100			P
Cadmium	2.41	J	5	U	100			P
Calcium	28900		28600		1.04		10	P
Chromium	94		94		0		10	P
Cobalt	32.1		33.3		3.74			P
Copper	70.9		69.5		1.97			P
Iron	121000		124000		2.07		10	P
Lead	130		128		1.54		10	P
Magnesium	17100		17500		2.05		10	P
Manganese	2990		3040		1.67		10	P
Potassium	11300		11400		.442		10	P
Silicon	17800		17700		.562		10	P
Silver	1	U	5	U				P
Sodium	3380		3520		3.99			P
Titanium	3380		3400		.444		10	P
Vanadium	169		169		0		10	P
Zinc	380		380		.132		10	P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–603 **Client ID** RE03–09–13462L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241539001 **Serial Dilution ID:** 1201978591

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	8.28		8.6	J	3.86			MS
Beryllium	4.16		4.42		6.13			MS
Lithium	64.1		64		.156			MS
Nickel	33.9		35.1		3.54			MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.11		1.5	U	100			MS
Uranium	3.36		3.39		.893			MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–603 **Client ID** RE03–09–13875L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241541001 **Serial Dilution ID:** 1201978951

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.546		.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-603 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925473							
1201978583	MB for batch 925473	MB	S	24-NOV-09	.514g	50mL	
1201978588	LCS for batch 925473	LCS	S	24-NOV-09	.505g	50mL	
1201978586	RE03-09-13462S	MS	S	24-NOV-09	.508g	50mL	
1201978587	RE03-09-13462SD	MSD	S	24-NOV-09	.569g	50mL	
1201978584	RE03-09-13462D	DUP	S	24-NOV-09	.539g	50mL	
241539001	RE03-09-13462	SAMPLE	S	24-NOV-09	.542g	50mL	
241539002	RE03-09-13464	SAMPLE	S	24-NOV-09	.525g	50mL	
241539003	RE03-09-13463	SAMPLE	S	24-NOV-09	.561g	50mL	
241539004	RE03-09-13461	SAMPLE	S	24-NOV-09	.561g	50mL	
Batch Number 931880							
1201993406	MB for batch 931880	MB	S	12-DEC-09	.503g	50mL	
1201993407	LCS for batch 931880	LCS	S	12-DEC-09	.524g	50mL	
1201978586	RE03-09-13462S	MS	S	12-DEC-09	.542g	50mL	
1201978587	RE03-09-13462SD	MSD	S	12-DEC-09	.525g	50mL	
1201978584	RE03-09-13462D	DUP	S	12-DEC-09	.511g	50mL	
241539001	RE03-09-13462	SAMPLE	S	12-DEC-09	.5g	50mL	
241539002	RE03-09-13464	SAMPLE	S	12-DEC-09	.56g	50mL	
241539003	RE03-09-13463	SAMPLE	S	12-DEC-09	.514g	50mL	
241539004	RE03-09-13461	SAMPLE	S	12-DEC-09	.508g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10–603 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925475						
1201978589	MB for batch 925475	MB	S	24–NOV–09	.504g	50mL	
1201978594	LCS for batch 925475	LCS	S	24–NOV–09	.521g	50mL	
1201978592	RE03–09–13462S	MS	S	24–NOV–09	.529g	50mL	
1201978593	RE03–09–13462SD	MSD	S	24–NOV–09	.515g	50mL	
1201978590	RE03–09–13462D	DUP	S	24–NOV–09	.556g	50mL	
241539001	RE03–09–13462	SAMPLE	S	24–NOV–09	.507g	50mL	
241539002	RE03–09–13464	SAMPLE	S	24–NOV–09	.514g	50mL	
241539003	RE03–09–13463	SAMPLE	S	24–NOV–09	.51g	50mL	
241539004	RE03–09–13461	SAMPLE	S	24–NOV–09	.536g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–603 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925628						
1201978947	MB for batch 925628	MB	S	04–DEC–09	.506g	30mL	
1201978948	LCS for batch 925628	LCS	S	04–DEC–09	.2g	30mL	
1201978950	RE03–09–13875S	MS	S	04–DEC–09	.536g	30mL	
1201978952	RE03–09–13875SD	MSD	S	04–DEC–09	.539g	30mL	
1201978949	RE03–09–13875D	DUP	S	04–DEC–09	.558g	30mL	
241539001	RE03–09–13462	SAMPLE	S	04–DEC–09	.532g	30mL	
241539002	RE03–09–13464	SAMPLE	S	04–DEC–09	.538g	30mL	
241539003	RE03–09–13463	SAMPLE	S	04–DEC–09	.53g	30mL	
241539004	RE03–09–13461	SAMPLE	S	04–DEC–09	.554g	30mL	

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 28-NOV-09 **End Date:** 29-NOV-09

Client Sdg: 10-603
Method MS
Data File: 091128-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	16:13			X		X									X				X		X				X				
S10	1	16:19			X		X									X				X		X				X				
S100	1	16:25			X		X									X				X		X				X				
ICV01	1	16:32			X		X									X				X		X				X				
ICB01	1	16:38			X		X									X				X		X				X				
CRDL01	1	16:44			X		X									X				X		X				X				
ICSA01	1	16:50			X		X									X				X		X				X				
ICSAB01	1	16:56			X		X									X				X		X				X				
CCV01	1	17:02			X		X									X				X		X				X				
CCB01	1	17:08			X		X									X				X		X				X				
LR01	1	17:14			X		X									X				X		X				X				
CCV02	1	17:20			X		X									X				X		X				X				
CCB02	1	17:27			X		X									X				X		X				X				
ZZZZZZ	2	17:33																												
ZZZZZZ	20	17:39																												
ZZZZZZ	40	17:45																												
ZZZZZZ	2	17:51																												
ZZZZZZ	2	17:57																												
ZZZZZZ	2	18:03																												
ZZZZZZ	2	18:10																												
ZZZZZZ	10	18:16																												
CCV03	1	18:22			X		X									X				X		X				X				
CCB03	1	18:28			X		X									X				X		X				X				
ZZZZZZ	2	18:34																												
ZZZZZZ	2	18:40																												
ZZZZZZ	2	18:46																												
ZZZZZZ	2	18:52																												
ZZZZZZ	2	18:59																												
ZZZZZZ	2	19:05																												
ZZZZZZ	2	19:11																												
CCV04	1	19:17			X		X									X				X		X				X				
CCB04	1	19:23			X		X									X				X		X				X				
ZZZZZZ	2	19:29																												
ZZZZZZ	2	19:35																												
ZZZZZZ	2	19:41																												
ZZZZZZ	2	19:48																												
ZZZZZZ	2	19:54																												
CCV05	1	20:00			X		X									X				X		X				X				
CCB05	1	20:06			X		X									X				X		X				X				
1201978589	2	20:12			X		X									X				X		X				X				

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
1201978594	20	20:18													X															
1201978594	40	20:24			X		X												X		X				X					
241539001	2	20:31			X		X								X				X		X				X					
1201978590	2	20:37			X		X								X				X		X				X					
1201978592	2	20:43			X		X								X				X		X				X					
1201978593	2	20:49			X		X								X				X		X				X					
1201978591	10	20:56			X		X								X				X		X				X					
CCV06	1	21:02			X		X								X				X		X				X					
CCB06	1	21:08			X		X								X				X		X				X					
241539002	2	21:14			X		X								X				X		X				X					
241539003	2	21:20			X		X								X				X		X				X					
241539004	2	21:26			X		X								X				X		X				X					
CCV07	1	21:33			X		X								X				X		X				X					
CCB07	1	21:39			X		X								X				X		X				X					

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 28–NOV–09 **End Date:** 29–NOV–09

Client Sdg: 10–603
Method MS
Data File: 091128–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:13																										X		
S10	1	06:15																										X		
S100	1	06:17																										X		
ICV01	1	06:19																										X		
ICB01	1	06:20																										X		
CRDL01	1	06:22																										X		
ICSA01	1	06:24																										X		
ICSAB01	1	06:25																										X		
CCV01	1	06:27																										X		
CCB01	1	06:29																										X		
1201978589	2	06:30																										X		
ZZZZZZ	20	06:32																												
1201978594	40	06:34																										X		
241539001	2	06:36																										X		
1201978590	2	06:37																										X		
1201978592	2	06:39																										X		
1201978593	2	06:41																										X		
1201978591	10	06:43																										X		
CCV02	1	06:44																										X		
CCB02	1	06:46																										X		
241539002	2	06:48																										X		
241539003	2	06:49																										X		
241539004	2	06:51																										X		
CCV03	1	06:53																										X		
CCB03	1	06:55																										X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–603
Method AV
Data File: 120709S1–7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:55																	X											
S0.2	1	09:57																	X											
S0.5	1	09:59																	X											
S2.0	1	10:01																	X											
S5.0	1	10:03																	X											
S10	1	10:05																	X											
ICV01	1	10:07																	X											
ICB01	1	10:09																	X											
CRDL01	1	10:11																	X											
CCV01	1	10:13																	X											
CCB01	1	10:15																	X											
ZZZZZZ	1	10:17																												
ZZZZZZ	10	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
ZZZZZZ	1	10:35																												
CCV02	1	10:37																	X											
CCB02	1	10:39																	X											
ZZZZZZ	1	10:41																												
ZZZZZZ	10	10:43																												
ZZZZZZ	1	10:45																												
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	1	10:55																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	10:59																												
CCV03	1	11:01																	X											
CCB03	1	11:03																	X											
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:10																												
ZZZZZZ	1	11:12																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:14																											
ZZZZZZ	1	11:16																											
ZZZZZZ	1	11:18																											
ZZZZZZ	1	11:20																											
ZZZZZZ	1	11:22																											
CCV04	1	11:24																X											
CCB04	1	11:26																X											
ZZZZZZ	1	11:28																											
ZZZZZZ	1	11:30																											
ZZZZZZ	1	11:32																											
ZZZZZZ	1	11:34																											
ZZZZZZ	5	11:36																											
ZZZZZZ	1	11:38																											
1201978947	1	11:40																X											
1201978948	10	11:42																X											
241539001	1	11:44																X											
241539002	1	11:46																X											
CCV05	1	11:48																X											
CCB05	1	11:50																X											
241539003	1	11:52																X											
241539004	1	11:54																X											
ZZZZZZ	1	11:56																											
1201978949	1	11:58																X											
1201978950	1	12:00																X											
1201978952	1	12:02																X											
1201978951	5	12:04																X											
ZZZZZZ	1	12:06																											
ZZZZZZ	1	12:08																											
ZZZZZZ	1	12:10																											
CCV06	1	12:12																X											
CCB06	1	12:14																X											

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–603
Method P
Data File: 120709–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	07:04		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	07:07	X	X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	07:11	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	07:14	X							X				X			X								X					
ICV01	1	07:17	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	07:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	07:24	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	07:27	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	07:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	07:33	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	07:36	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV01	1	07:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	07:44	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	08:16	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	08:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	08:23																												
ZZZZZZ	1	08:27																												
ZZZZZZ	1	08:31																												
ZZZZZZ	1	08:35																												
ZZZZZZ	1	08:39																												
ZZZZZZ	5	08:43																												
ZZZZZZ	1	08:46																												
ZZZZZZ	1	08:50																												
ZZZZZZ	1	08:54																												
ZZZZZZ	1	08:58																												
CCV03	1	09:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	09:05	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	09:09																												
ZZZZZZ	1	09:13																												
ZZZZZZ	1	09:16																												
ZZZZZZ	1	09:20																												
ZZZZZZ	1	09:24																												
ZZZZZZ	1	09:27																												
ZZZZZZ	1	09:31																												
ZZZZZZ	1	09:34																												
ZZZZZZ	1	09:38																												
ZZZZZZ	5	09:42																												
CCV04	1	09:45	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	09:49	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	09:53																											
ZZZZZZ	1	09:57																											
ZZZZZZ	1	10:00																											
ZZZZZZ	5	10:04																											
ZZZZZZ	5	10:07																											
ZZZZZZ	5	10:11																											
ZZZZZZ	25	10:15																											
ZZZZZZ	1	10:18																											
ZZZZZZ	1	10:21																											
CCV05	1	10:24	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB05	1	10:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:31																											
ZZZZZZ	1	10:35																											
ZZZZZZ	1	10:39																											
ZZZZZZ	1	10:42																											
ZZZZZZ	1	10:46																											
ZZZZZZ	1	10:50																											
ZZZZZZ	1	10:53																											
ZZZZZZ	1	10:57																											
CCV06	1	11:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	11:05	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:08																											
ZZZZZZ	1	11:12																											
ZZZZZZ	1	11:16																											
ZZZZZZ	1	11:20																											
ZZZZZZ	1	11:24																											
ZZZZZZ	1	11:28																											
ZZZZZZ	1	11:31																											
ZZZZZZ	1	11:35																											
CCV07	1	11:39	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	11:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:46																											
ZZZZZZ	5	11:50																											
ZZZZZZ	1	11:53																											
ZZZZZZ	1	11:57																											
ZZZZZZ	1	12:00																											
ZZZZZZ	1	12:04																											
ZZZZZZ	5	12:08																											
ZZZZZZ	1	12:11																											
ZZZZZZ	1	12:14																											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
CCV08	1	12:17	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	12:21	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978583	1	12:24	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978588	2	12:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241539001	1	12:32	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978584	1	12:35	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978586	1	12:39	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978587	1	12:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978585	5	12:45	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241539002	1	12:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241539003	1	12:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241539004	1	12:56	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV09	1	13:00	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	13:03	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 14–DEC–09 **End Date:** 14–DEC–09

Client Sdg: 10–603
Method P
Data File: 121409A–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:28																					X							
S0.1	1	09:32																					X							
S0.5	1	09:34																					X							
SCAL	1	09:38																					X							
S10	1	09:42																												
ICV01	1	09:44																					X							
ICB01	1	09:48																					X							
PQL01	1	09:51																					X							
ICSA01	1	09:55																					X							
ICSAB01	1	09:57																					X							
LR01	1	10:00																					X							
LR02	1	10:03																					X							
CCV01	1	10:07																					X							
CCB01	1	10:11																					X							
LR03	1	10:23																					X							
CCV02	1	10:27																					X							
CCB02	1	10:30																					X							
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:38																												
ZZZZZZ	1	10:41																												
ZZZZZZ	1	10:44																												
ZZZZZZ	1	10:46																												
ZZZZZZ	1	10:49																												
ZZZZZZ	5	10:52																												
CCV03	1	10:56																					X							
CCB03	1	11:00																					X							
ZZZZZZ	1	11:03																												
ZZZZZZ	1	11:06																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:12																												
ZZZZZZ	1	11:15																												
ZZZZZZ	1	11:19																												
CCV04	1	11:23																					X							
CCB04	1	11:26																					X							
1201993406	1	11:30																					X							
1201993407	1	11:33																					X							
241539001	1	11:36																					X							
1201978584	1	11:40																					X							
1201978586	1	11:43																					X							
1201978587	1	11:46																					X							

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
1201978585	5	11:49																				X								
241539002	1	11:52																				X								
241539003	1	11:56																				X								
241539004	1	12:00																				X								
CCV05	1	12:03																				X								
CCB05	1	12:06																				X								

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–603

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	2
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–603

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-603

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-603
Contract: LANL01004
Instrument: OPTIMA1 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-603
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-603
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-603
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-603
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-603
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-603

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–603

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09

Raw Data

Method: Hg_ReAlign
Result: 121409A

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

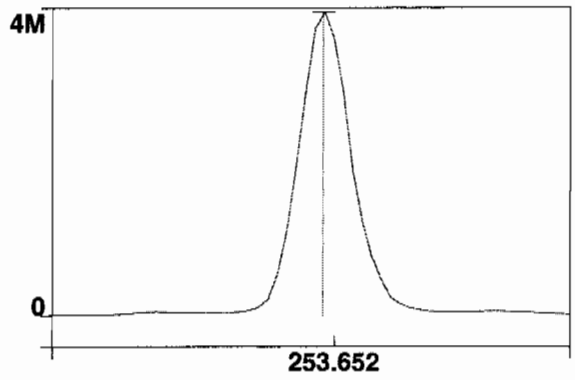

Intensity: 4037389.7 cps
Conc:

1

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Analysis Begun

Start Time: 12/7/2009 07:01:18 **Plasma On Time: 12/6/2009 23:29:48**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\120709.sif
Batch ID:
Results Data Set: 120709
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/7/2009 07:01:18**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112482.0	112482.0	99.0	%	07:01:53
1	Al 396.153Radial†	135.3	136.7	[0.00]	µg/L	07:01:53
1	Ca 317.933Radial†	435.7	440.2	[0.00]	µg/L	07:02:13
1	Fe 238.204 Radial†	14.9	15.1	[0.00]	µg/L	07:02:13
1	K 766.490 Radial†	759.5	767.4	[0.00]	µg/L	07:01:53
1	Mg 279.077 IEC†	17.9	18.1	[0.00]	µg/L	07:02:13
1	Na 589.592 Radial†	-709.0	-716.4	[0.00]	µg/L	07:01:53
1	Sr 421.552†	4.2	4.2	[0.00]	µg/L	07:01:53
1	Sc 361.383	2071655.0	2071655.0	100.04	%	07:03:15
1	Y 371.029	1310514.9	1310514.9	100.13	%	07:03:15
1	Ag 328.068†	178.8	178.7	[0.00]	µg/L	07:03:21
1	As 188.979†	-1.0	-1.0	[0.00]	µg/L	07:03:42
1	B 249.677†	175.9	175.8	[0.00]	µg/L	07:03:21
1	Ba 233.527†	-45.6	-45.6	[0.00]	µg/L	07:03:42
1	Be 313.107†	3694.6	3692.9	[0.00]	µg/L	07:03:21
1	Cd 226.502†	-92.3	-92.2	[0.00]	µg/L	07:03:42
1	Co 228.616†	-63.5	-63.4	[0.00]	µg/L	07:03:42
1	Cr 267.716†	-137.4	-137.4	[0.00]	µg/L	07:03:21
1	Cu 324.752†	4280.2	4278.3	[0.00]	µg/L	07:03:21
1	Mn 257.610†	-252.5	-252.4	[0.00]	µg/L	07:03:21
1	Mo 202.031†	4.5	4.5	[0.00]	µg/L	07:03:42
1	Ni 231.604†	318.7	318.5	[0.00]	µg/L	07:03:42
1	P 214.914†	168.2	168.1	[0.00]	µg/L	07:03:42
1	Pb 220.353†	53.6	53.6	[0.00]	µg/L	07:03:42
1	S 181.975 Axial†	29.2	29.2	[0.00]	µg/L	07:03:42
1	Sb 206.836†	17.9	17.9	[0.00]	µg/L	07:03:42
1	Se 196.026†	11.5	11.5	[0.00]	µg/L	07:03:42
1	SiO2†	2748.5	2747.3	[0.00]	µg/L	07:03:21
1	Si 251.611†	391.8	391.7	[0.00]	µg/L	07:03:42
1	Sn 189.927†	24.5	24.5	[0.00]	µg/L	07:03:42
1	Ti 334.940†	967.5	967.1	[0.00]	µg/L	07:03:21
1	Tl 190.801†	-17.5	-17.5	[0.00]	µg/L	07:03:42
1	U 409.014†	614.7	614.5	[0.00]	µg/L	07:03:21
1	V 292.402†	-181.3	-181.2	[0.00]	µg/L	07:03:21
1	Zn 213.857†	567.2	566.9	[0.00]	µg/L	07:03:42
2	Sc RADIAL	114624.4	114624.4	101	%	07:02:19
2	Al 396.153Radial†	122.1	121.0	[0.00]	µg/L	07:02:19
2	Ca 317.933Radial†	415.7	412.2	[0.00]	µg/L	07:02:39
2	Fe 238.204 Radial†	13.2	13.1	[0.00]	µg/L	07:02:39
2	K 766.490 Radial†	721.9	715.7	[0.00]	µg/L	07:02:19
2	Mg 279.077 IEC†	10.5	10.4	[0.00]	µg/L	07:02:39
2	Na 589.592 Radial†	-626.0	-620.6	[0.00]	µg/L	07:02:19
2	Sr 421.552†	-46.0	-45.6	[0.00]	µg/L	07:02:19
2	Sc 361.383	2052935.1	2052935.1	99.140	%	07:03:48
2	Y 371.029	1295489.7	1295489.7	98.985	%	07:03:48
2	Ag 328.068†	215.2	217.1	[0.00]	µg/L	07:03:53
2	As 188.979†	6.1	6.2	[0.00]	µg/L	07:04:14

2	B 249.677†	190.0	191.6	[0.00]	µg/L	07:03:53
2	Ba 233.527†	-65.3	-65.9	[0.00]	µg/L	07:04:14
2	Be 313.107†	3760.0	3792.6	[0.00]	µg/L	07:03:53
2	Cd 226.502†	-101.3	-102.2	[0.00]	µg/L	07:04:14
2	Co 228.616†	-60.5	-61.0	[0.00]	µg/L	07:04:14
2	Cr 267.716†	-132.5	-133.7	[0.00]	µg/L	07:03:53
2	Cu 324.752†	4241.0	4277.8	[0.00]	µg/L	07:03:53
2	Mn 257.610†	-239.7	-241.7	[0.00]	µg/L	07:03:53
2	Mo 202.031†	-4.8	-4.8	[0.00]	µg/L	07:04:14
2	Ni 231.604†	322.5	325.2	[0.00]	µg/L	07:04:14
2	P 214.914†	177.2	178.7	[0.00]	µg/L	07:04:14
2	Pb 220.353†	33.3	33.6	[0.00]	µg/L	07:04:14
2	S 181.975 Axial†	26.4	26.7	[0.00]	µg/L	07:04:14
2	Sb 206.836†	20.1	20.3	[0.00]	µg/L	07:04:14
2	Se 196.026†	15.5	15.7	[0.00]	µg/L	07:04:14
2	SiO2†	2747.0	2770.8	[0.00]	µg/L	07:03:53
2	Si 251.611†	356.7	359.8	[0.00]	µg/L	07:04:14
2	Sn 189.927†	22.8	23.0	[0.00]	µg/L	07:04:14
2	Ti 334.940†	1027.3	1036.2	[0.00]	µg/L	07:03:53
2	Tl 190.801†	-17.9	-18.0	[0.00]	µg/L	07:04:14
2	U 409.014†	703.6	709.7	[0.00]	µg/L	07:03:53
2	V 292.402†	-145.7	-146.9	[0.00]	µg/L	07:03:53
2	Zn 213.857†	579.3	584.3	[0.00]	µg/L	07:04:14
3	Sc RADIAL	113827.8	113827.8	100	%	07:02:45
3	Al 396.153Radial†	121.4	121.2	[0.00]	µg/L	07:02:45
3	Ca 317.933Radial†	420.5	419.8	[0.00]	µg/L	07:03:05
3	Fe 238.204 Radial†	13.0	13.0	[0.00]	µg/L	07:03:05
3	K 766.490 Radial†	803.2	801.9	[0.00]	µg/L	07:02:45
3	Mg 279.077 IEC†	11.7	11.7	[0.00]	µg/L	07:03:05
3	Na 589.592 Radial†	-701.9	-700.7	[0.00]	µg/L	07:02:45
3	Sr 421.552†	-35.2	-35.1	[0.00]	µg/L	07:02:45
3	Sc 361.383	2087625.1	2087625.1	100.82	%	07:04:20
3	Y 371.029	1320305.7	1320305.7	100.88	%	07:04:20
3	Ag 328.068†	225.0	223.2	[0.00]	µg/L	07:04:25
3	As 188.979†	2.2	2.2	[0.00]	µg/L	07:04:46
3	B 249.677†	219.3	217.6	[0.00]	µg/L	07:04:25
3	Ba 233.527†	-65.5	-65.0	[0.00]	µg/L	07:04:46
3	Be 313.107†	3840.0	3808.9	[0.00]	µg/L	07:04:25
3	Cd 226.502†	-100.9	-100.0	[0.00]	µg/L	07:04:46
3	Co 228.616†	-68.0	-67.5	[0.00]	µg/L	07:04:46
3	Cr 267.716†	-108.5	-107.6	[0.00]	µg/L	07:04:25
3	Cu 324.752†	4254.0	4219.5	[0.00]	µg/L	07:04:25
3	Mn 257.610†	-236.9	-235.0	[0.00]	µg/L	07:04:25
3	Mo 202.031†	0.8	0.8	[0.00]	µg/L	07:04:46
3	Ni 231.604†	321.6	319.0	[0.00]	µg/L	07:04:46
3	P 214.914†	172.9	171.5	[0.00]	µg/L	07:04:46
3	Pb 220.353†	46.5	46.2	[0.00]	µg/L	07:04:46
3	S 181.975 Axial†	27.0	26.7	[0.00]	µg/L	07:04:46
3	Sb 206.836†	15.7	15.6	[0.00]	µg/L	07:04:46
3	Se 196.026†	20.8	20.7	[0.00]	µg/L	07:04:46
3	SiO2†	2756.9	2734.6	[0.00]	µg/L	07:04:25
3	Si 251.611†	373.0	370.0	[0.00]	µg/L	07:04:46
3	Sn 189.927†	18.1	18.0	[0.00]	µg/L	07:04:46
3	Ti 334.940†	999.1	991.0	[0.00]	µg/L	07:04:25
3	Tl 190.801†	-15.2	-15.1	[0.00]	µg/L	07:04:46
3	U 409.014†	623.6	618.6	[0.00]	µg/L	07:04:25
3	V 292.402†	-163.0	-161.7	[0.00]	µg/L	07:04:25
3	Zn 213.857†	570.2	565.6	[0.00]	µg/L	07:04:46

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2070738.4	17363.15	0.84%	100.00	%
Sc RADIAL	113644.7	1082.90	0.95%	100	%
Y 371.029	1308770.1	12499.67	0.96%	100.00	%
Ag 328.068†	206.3	24.10	11.68%	[0.00]	µg/L
Al 396.153Radial†	126.3	9.00	7.12%	[0.00]	µg/L
As 188.979†	2.5	3.60	146.77%	[0.00]	µg/L
B 249.677†	195.0	21.09	10.81%	[0.00]	µg/L
Ba 233.527†	-58.8	11.45	19.47%	[0.00]	µg/L

Be 313.107†	3764.8	62.77	1.67%	[0.00]	µg/L
Ca 317.933Radial†	424.1	14.48	3.42%	[0.00]	µg/L
Cd 226.502†	-98.2	5.23	5.33%	[0.00]	µg/L
Co 228.616†	-64.0	3.26	5.10%	[0.00]	µg/L
Cr 267.716†	-126.2	16.23	12.86%	[0.00]	µg/L
Cu 324.752†	4258.5	33.77	0.79%	[0.00]	µg/L
Fe 238.204 Radial†	13.7	1.17	8.52%	[0.00]	µg/L
K 766.490 Radial†	761.6	43.38	5.70%	[0.00]	µg/L
Mg 279.077 IEC†	13.4	4.10	30.57%	[0.00]	µg/L
Mn 257.610†	-243.1	8.79	3.62%	[0.00]	µg/L
Mo 202.031†	0.2	4.68	>999.9%	[0.00]	µg/L
Na 589.592 Radial†	-679.2	51.36	7.56%	[0.00]	µg/L
Ni 231.604†	320.9	3.74	1.16%	[0.00]	µg/L
P 214.914†	172.8	5.42	3.14%	[0.00]	µg/L
Pb 220.353†	44.4	10.10	22.73%	[0.00]	µg/L
S 181.975 Axial†	27.5	1.43	5.19%	[0.00]	µg/L
Sb 206.836†	17.9	2.34	13.05%	[0.00]	µg/L
Se 196.026†	16.0	4.59	28.77%	[0.00]	µg/L
SiO2†	2750.9	18.37	0.67%	[0.00]	µg/L
Si 251.611†	373.8	16.29	4.36%	[0.00]	µg/L
Sn 189.927†	21.9	3.43	15.71%	[0.00]	µg/L
Sr 421.552†	-25.5	26.26	103.03%	[0.00]	µg/L
Ti 334.940†	998.1	35.10	3.52%	[0.00]	µg/L
Tl 190.801†	-16.9	1.56	9.26%	[0.00]	µg/L
U 409.014†	647.6	53.83	8.31%	[0.00]	µg/L
V 292.402†	-163.3	17.21	10.54%	[0.00]	µg/L
Zn 213.857†	572.3	10.43	1.82%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/7/2009 07:04:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114851.2	114851.2	101	%	07:05:30
1	K 766.490 Radial†	2735.4	1945.0	[1000]	µg/L	07:05:30
1	Sr 421.552†	19531.4	19351.7	[100]	µg/L	07:05:30
1	Sc 361.383	2065821.5	2065821.5	99.763	%	07:05:52
1	Y 371.029	1305410.4	1305410.4	99.743	%	07:05:52
1	Ag 328.068†	10215.9	10033.8	[100]	µg/L	07:05:58
1	As 188.979†	55.4	53.1	[100]	µg/L	07:06:18
1	B 249.677†	2264.6	2075.0	[100]	µg/L	07:05:58
1	Ba 233.527†	3498.9	3566.0	[100]	µg/L	07:05:58
1	Be 313.107†	164119.7	160745.5	[100]	µg/L	07:05:52
1	Cd 226.502†	3463.7	3570.1	[100]	µg/L	07:05:58
1	Co 228.616†	2003.2	2071.9	[100]	µg/L	07:06:18
1	Cr 267.716†	4273.9	4410.2	[100]	µg/L	07:05:58
1	Cu 324.752†	17649.9	13433.4	[100]	µg/L	07:05:58
1	Mn 257.610†	28521.2	28832.2	[100]	µg/L	07:05:58
1	Mo 202.031†	844.9	846.7	[100]	µg/L	07:06:18
1	Ni 231.604†	2171.5	1855.8	[100]	µg/L	07:06:18
1	P 214.914†	424.6	252.8	[500]	µg/L	07:06:18
1	Pb 220.353†	430.9	387.5	[100]	µg/L	07:06:18
1	S 181.975 Axial†	62.8	35.4	[200]	µg/L	07:06:18
1	Sb 206.836†	118.8	101.2	[100]	µg/L	07:06:18
1	Se 196.026†	91.9	76.1	[100]	µg/L	07:06:18
1	SiO2†	7984.4	5252.6	[1069.5]	µg/L	07:05:58
1	Si 251.611†	6477.6	6119.2	[500]	µg/L	07:05:58
1	Sn 189.927†	218.1	196.8	[100]	µg/L	07:06:18
1	Ti 334.940†	40079.6	39176.9	[100]	µg/L	07:05:58
1	Tl 190.801†	43.6	60.6	[100]	µg/L	07:06:18
1	U 409.014†	1632.4	988.7	[100]	µg/L	07:05:58
1	V 292.402†	7995.3	8177.6	[100]	µg/L	07:05:58
1	Zn 213.857†	4030.5	3467.8	[100]	µg/L	07:05:58
2	Sc RADIAL	115249.3	115249.3	101	%	07:05:36
2	K 766.490 Radial†	2671.8	1873.0	[1000]	µg/L	07:05:36
2	Sr 421.552†	19483.8	19238.0	[100]	µg/L	07:05:36
2	Sc 361.383	2047634.8	2047634.8	98.884	%	07:06:24
2	Y 371.029	1299867.7	1299867.7	99.320	%	07:06:24
2	Ag 328.068†	11259.1	11179.7	[100]	µg/L	07:06:30
2	As 188.979†	60.3	58.6	[100]	µg/L	07:06:50
2	B 249.677†	2528.5	2362.1	[100]	µg/L	07:06:30
2	Ba 233.527†	3908.1	4011.0	[100]	µg/L	07:06:30
2	Be 313.107†	164857.3	162952.6	[100]	µg/L	07:06:24
2	Cd 226.502†	3835.7	3977.1	[100]	µg/L	07:06:30
2	Co 228.616†	2015.2	2101.9	[100]	µg/L	07:06:50
2	Cr 267.716†	4689.3	4868.4	[100]	µg/L	07:06:30
2	Cu 324.752†	18959.1	14914.5	[100]	µg/L	07:06:30
2	Mn 257.610†	31439.9	32037.7	[100]	µg/L	07:06:30
2	Mo 202.031†	849.7	859.2	[100]	µg/L	07:06:50
2	Ni 231.604†	2168.2	1871.7	[100]	µg/L	07:06:50
2	P 214.914†	428.9	261.0	[500]	µg/L	07:06:50
2	Pb 220.353†	436.5	396.9	[100]	µg/L	07:06:50
2	S 181.975 Axial†	68.1	41.3	[200]	µg/L	07:06:50
2	Sb 206.836†	120.1	103.6	[100]	µg/L	07:06:50
2	Se 196.026†	102.5	87.7	[100]	µg/L	07:06:50
2	SiO2†	8613.6	5959.9	[1069.5]	µg/L	07:06:30
2	Si 251.611†	7101.3	6807.6	[500]	µg/L	07:06:30
2	Sn 189.927†	225.3	206.0	[100]	µg/L	07:06:50
2	Ti 334.940†	43936.5	43434.2	[100]	µg/L	07:06:30
2	Tl 190.801†	44.9	62.3	[100]	µg/L	07:06:50
2	U 409.014†	1649.4	1020.5	[100]	µg/L	07:06:30
2	V 292.402†	8824.3	9087.2	[100]	µg/L	07:06:30

2	Zn 213.857†	4450.1	3928.0	[100]	µg/L	07:06:30
3	Sc RADIAL	114649.3	114649.3	101	%	07:05:41
3	K 766.490 Radial†	2702.0	1916.7	[1000]	µg/L	07:05:41
3	Sr 421.552†	19295.3	19151.7	[100]	µg/L	07:05:41
3	Sc 361.383	2061241.6	2061241.6	99.541	%	07:06:57
3	Y 371.029	1301300.1	1301300.1	99.429	%	07:06:57
3	Ag 328.068†	11100.3	10945.1	[100]	µg/L	07:07:02
3	As 188.979†	57.8	55.6	[100]	µg/L	07:07:23
3	B 249.677†	2458.1	2274.4	[100]	µg/L	07:07:02
3	Ba 233.527†	3867.2	3943.9	[100]	µg/L	07:07:02
3	Be 313.107†	166153.8	163154.5	[100]	µg/L	07:06:57
3	Cd 226.502†	3807.1	3922.8	[100]	µg/L	07:07:02
3	Co 228.616†	2029.6	2102.9	[100]	µg/L	07:07:23
3	Cr 267.716†	4689.2	4837.1	[100]	µg/L	07:07:02
3	Cu 324.752†	18837.6	14665.8	[100]	µg/L	07:07:02
3	Mn 257.610†	31203.4	31590.2	[100]	µg/L	07:07:02
3	Mo 202.031†	850.9	854.7	[100]	µg/L	07:07:23
3	Ni 231.604†	2177.3	1866.3	[100]	µg/L	07:07:23
3	P 214.914†	422.9	252.1	[500]	µg/L	07:07:23
3	Pb 220.353†	441.1	398.7	[100]	µg/L	07:07:23
3	S 181.975 Axial†	67.9	40.6	[200]	µg/L	07:07:23
3	Sb 206.836†	121.5	104.1	[100]	µg/L	07:07:23
3	Se 196.026†	100.8	85.3	[100]	µg/L	07:07:23
3	SiO2†	8524.8	5813.2	[1069.5]	µg/L	07:07:02
3	Si 251.611†	7028.3	6686.8	[500]	µg/L	07:07:02
3	Sn 189.927†	222.2	201.4	[100]	µg/L	07:07:23
3	Ti 334.940†	43474.9	42677.2	[100]	µg/L	07:07:02
3	Tl 190.801†	45.8	62.9	[100]	µg/L	07:07:23
3	U 409.014†	1710.4	1070.7	[100]	µg/L	07:07:02
3	V 292.402†	8773.0	8976.7	[100]	µg/L	07:07:02
3	Zn 213.857†	4402.2	3850.2	[100]	µg/L	07:07:02

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2058232.6	9459.35	0.46%	99.396	%
Sc RADIAL	114916.6	305.29	0.27%	101	%
Y 371.029	1302192.7	2877.15	0.22%	99.497	%
Ag 328.068†	10719.6	605.33	5.65%	[100]	µg/L
As 188.979†	55.7	2.75	4.93%	[100]	µg/L
B 249.677†	2237.2	147.15	6.58%	[100]	µg/L
Ba 233.527†	3840.3	239.91	6.25%	[100]	µg/L
Be 313.107†	162284.2	1336.37	0.82%	[100]	µg/L
Cd 226.502†	3823.4	220.98	5.78%	[100]	µg/L
Co 228.616†	2092.2	17.59	0.84%	[100]	µg/L
Cr 267.716†	4705.2	255.96	5.44%	[100]	µg/L
Cu 324.752†	14337.9	793.14	5.53%	[100]	µg/L
K 766.490 Radial†	1911.5	36.28	1.90%	[1000]	µg/L
Mn 257.610†	30820.0	1736.01	5.63%	[100]	µg/L
Mo 202.031†	853.5	6.30	0.74%	[100]	µg/L
Ni 231.604†	1864.6	8.10	0.43%	[100]	µg/L
P 214.914†	255.3	4.96	1.94%	[500]	µg/L
Pb 220.353†	394.4	6.00	1.52%	[100]	µg/L
S 181.975 Axial†	39.1	3.24	8.27%	[200]	µg/L
Sb 206.836†	103.0	1.57	1.52%	[100]	µg/L
Se 196.026†	83.1	6.13	7.39%	[100]	µg/L
SiO2†	5675.2	373.31	6.58%	[1069.5]	µg/L
Si 251.611†	6537.9	367.56	5.62%	[500]	µg/L
Sn 189.927†	201.4	4.61	2.29%	[100]	µg/L
Sr 421.552†	19247.1	100.32	0.52%	[100]	µg/L
Ti 334.940†	41762.7	2271.18	5.44%	[100]	µg/L
Tl 190.801†	61.9	1.16	1.88%	[100]	µg/L
U 409.014†	1026.6	41.33	4.03%	[100]	µg/L
V 292.402†	8747.2	496.30	5.67%	[100]	µg/L
Zn 213.857†	3748.7	246.31	6.57%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/7/2009 07:07:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	116784.0	116784.0	103	%	07:08:04
1	Al 396.153Radial†	10232.7	9831.3	[5000]	µg/L	07:08:04
1	Ca 317.933Radial†	13347.7	12564.9	[5000]	µg/L	07:08:25
1	K 766.490 Radial†	10445.3	9402.9	[5000]	µg/L	07:08:04
1	Mg 279.077 IEC†	860.1	823.6	[5000]	µg/L	07:08:25
1	Sr 421.552†	98486.7	95864.8	[500]	µg/L	07:08:04
1	Sc 361.383	2070729.7	2070729.7	100.000	%	07:09:28
1	Y 371.029	1301153.4	1301153.4	99.418	%	07:09:28
1	Ag 328.068†	55432.9	55226.8	[500]	µg/L	07:09:34
1	As 188.979†	284.5	282.1	[500]	µg/L	07:09:54
1	B 249.677†	11745.5	11550.5	[500]	µg/L	07:09:34
1	Ba 233.527†	19420.9	19479.8	[500]	µg/L	07:09:34
1	Be 313.107†	817704.3	813942.9	[500]	µg/L	07:09:28
1	Cd 226.502†	19093.1	19191.3	[500]	µg/L	07:09:34
1	Co 228.616†	10388.4	10452.4	[500]	µg/L	07:09:34
1	Cr 267.716†	23786.7	23913.0	[500]	µg/L	07:09:34
1	Cu 324.752†	77190.5	72932.3	[500]	µg/L	07:09:34
1	Mn 257.610†	157732.6	157976.3	[500]	µg/L	07:09:28
1	Mo 202.031†	4385.0	4384.9	[500]	µg/L	07:09:54
1	Ni 231.604†	9620.0	9299.1	[500]	µg/L	07:09:34
1	P 214.914†	1444.7	1272.0	[2500]	µg/L	07:09:54
1	Pb 220.353†	2045.1	2000.7	[500]	µg/L	07:09:54
1	S 181.975 Axial†	236.8	209.2	[1000]	µg/L	07:09:54
1	Sb 206.836†	544.7	526.8	[500]	µg/L	07:09:54
1	Se 196.026†	421.9	406.0	[500]	µg/L	07:09:54
1	SiO2†	31807.2	29056.5	[5347.5]	µg/L	07:09:34
1	Si 251.611†	34059.6	33686.0	[2500]	µg/L	07:09:34
1	Sn 189.927†	1053.5	1031.6	[500]	µg/L	07:09:54
1	Ti 334.940†	224981.5	223984.3	[500]	µg/L	07:09:28
1	Tl 190.801†	321.6	338.5	[500]	µg/L	07:09:54
1	U 409.014†	6096.0	5448.5	[500]	µg/L	07:09:34
1	V 292.402†	44063.1	44226.5	[500]	µg/L	07:09:34
1	Zn 213.857†	19621.9	19049.8	[500]	µg/L	07:09:34
2	Sc RADIAL	116622.3	116622.3	103	%	07:08:30
2	Al 396.153Radial†	10267.0	9878.5	[5000]	µg/L	07:08:30
2	Ca 317.933Radial†	13351.6	12586.7	[5000]	µg/L	07:08:51
2	K 766.490 Radial†	10400.3	9373.1	[5000]	µg/L	07:08:30
2	Mg 279.077 IEC†	863.4	828.0	[5000]	µg/L	07:08:51
2	Sr 421.552†	98612.3	96120.1	[500]	µg/L	07:08:30
2	Sc 361.383	2045382.2	2045382.2	98.776	%	07:10:02
2	Y 371.029	1289118.5	1289118.5	98.498	%	07:10:02
2	Ag 328.068†	56521.6	57015.9	[500]	µg/L	07:10:07
2	As 188.979†	282.4	283.4	[500]	µg/L	07:10:28
2	B 249.677†	11994.4	11948.1	[500]	µg/L	07:10:07
2	Ba 233.527†	19868.5	20173.6	[500]	µg/L	07:10:07
2	Be 313.107†	818959.5	825347.1	[500]	µg/L	07:10:02
2	Cd 226.502†	19561.3	19901.9	[500]	µg/L	07:10:07
2	Co 228.616†	10641.2	10837.1	[500]	µg/L	07:10:07
2	Cr 267.716†	24270.8	24697.9	[500]	µg/L	07:10:07
2	Cu 324.752†	78586.8	75302.5	[500]	µg/L	07:10:07
2	Mn 257.610†	158182.1	160386.1	[500]	µg/L	07:10:02
2	Mo 202.031†	4426.8	4481.5	[500]	µg/L	07:10:28
2	Ni 231.604†	9777.0	9577.3	[500]	µg/L	07:10:07
2	P 214.914†	1449.3	1294.5	[2500]	µg/L	07:10:28
2	Pb 220.353†	2062.1	2043.3	[500]	µg/L	07:10:28
2	S 181.975 Axial†	236.2	211.6	[1000]	µg/L	07:10:28
2	Sb 206.836†	548.3	537.1	[500]	µg/L	07:10:28
2	Se 196.026†	416.5	405.7	[500]	µg/L	07:10:28
2	SiO2†	32451.0	30102.4	[5347.5]	µg/L	07:10:07

2	Si 251.611†	34789.9	34847.4	[2500]	µg/L	07:10:07
2	Sn 189.927†	1063.1	1054.5	[500]	µg/L	07:10:28
2	Ti 334.940†	225460.6	227257.5	[500]	µg/L	07:10:02
2	Tl 190.801†	317.4	338.2	[500]	µg/L	07:10:28
2	U 409.014†	6158.2	5586.9	[500]	µg/L	07:10:07
2	V 292.402†	44981.1	45702.0	[500]	µg/L	07:10:07
2	Zn 213.857†	20037.2	19713.3	[500]	µg/L	07:10:07
3	Sc RADIAL	114875.8	114875.8	101	%	07:08:56
3	Al 396.153Radial†	10210.1	9974.4	[5000]	µg/L	07:08:56
3	Ca 317.933Radial†	13277.5	12711.2	[5000]	µg/L	07:09:17
3	K 766.490 Radial†	10389.6	9516.6	[5000]	µg/L	07:08:56
3	Mg 279.077 IEC†	856.4	833.8	[5000]	µg/L	07:09:17
3	Sr 421.552†	97985.3	96960.7	[500]	µg/L	07:08:56
3	Sc 361.383	2049623.8	2049623.8	98.980	%	07:10:35
3	Y 371.029	1294973.9	1294973.9	98.946	%	07:10:35
3	Ag 328.068†	55851.0	56220.0	[500]	µg/L	07:10:40
3	As 188.979†	278.1	278.5	[500]	µg/L	07:11:01
3	B 249.677†	11829.0	11755.9	[500]	µg/L	07:10:40
3	Ba 233.527†	19642.9	19904.0	[500]	µg/L	07:10:40
3	Be 313.107†	814942.6	819573.1	[500]	µg/L	07:10:35
3	Cd 226.502†	19179.0	19474.7	[500]	µg/L	07:10:40
3	Co 228.616†	10484.8	10656.8	[500]	µg/L	07:10:40
3	Cr 267.716†	23945.9	24318.8	[500]	µg/L	07:10:40
3	Cu 324.752†	77734.9	74277.2	[500]	µg/L	07:10:40
3	Mn 257.610†	157314.6	159178.2	[500]	µg/L	07:10:35
3	Mo 202.031†	4270.7	4314.6	[500]	µg/L	07:11:01
3	Ni 231.604†	9650.6	9429.0	[500]	µg/L	07:10:40
3	P 214.914†	1406.1	1247.8	[2500]	µg/L	07:11:01
3	Pb 220.353†	2015.8	1992.1	[500]	µg/L	07:11:01
3	S 181.975 Axial†	233.3	208.2	[1000]	µg/L	07:11:01
3	Sb 206.836†	538.7	526.4	[500]	µg/L	07:11:01
3	Se 196.026†	417.3	405.6	[500]	µg/L	07:11:01
3	SiO2†	32055.9	29635.2	[5347.5]	µg/L	07:10:40
3	Si 251.611†	34259.9	34239.0	[2500]	µg/L	07:10:40
3	Sn 189.927†	1021.3	1009.9	[500]	µg/L	07:11:01
3	Ti 334.940†	224414.4	225728.2	[500]	µg/L	07:10:35
3	Tl 190.801†	317.0	337.2	[500]	µg/L	07:11:01
3	U 409.014†	6151.1	5566.9	[500]	µg/L	07:10:40
3	V 292.402†	44437.2	45058.3	[500]	µg/L	07:10:40
3	Zn 213.857†	19748.7	19379.8	[500]	µg/L	07:10:40

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2055245.2	13576.61	0.66%	99.252	%
Sc RADIAL	116094.0	1058.12	0.91%	102	%
Y 371.029	1295081.9	6018.15	0.46%	98.954	%
Ag 328.068†	56154.3	896.34	1.60%	[500]	µg/L
Al 396.153Radial†	9894.7	72.90	0.74%	[5000]	µg/L
As 188.979†	281.3	2.53	0.90%	[500]	µg/L
B 249.677†	11751.5	198.81	1.69%	[500]	µg/L
Ba 233.527†	19852.5	349.77	1.76%	[500]	µg/L
Be 313.107†	819621.0	5702.27	0.70%	[500]	µg/L
Ca 317.933Radial†	12620.9	78.93	0.63%	[5000]	µg/L
Cd 226.502†	19522.7	357.73	1.83%	[500]	µg/L
Co 228.616†	10648.8	192.46	1.81%	[500]	µg/L
Cr 267.716†	24309.9	392.51	1.61%	[500]	µg/L
Cu 324.752†	74170.7	1188.68	1.60%	[500]	µg/L
K 766.490 Radial†	9430.9	75.75	0.80%	[5000]	µg/L
Mg 279.077 IEC†	828.5	5.12	0.62%	[5000]	µg/L
Mn 257.610†	159180.2	1204.92	0.76%	[500]	µg/L
Mo 202.031†	4393.6	83.80	1.91%	[500]	µg/L
Ni 231.604†	9435.1	139.21	1.48%	[500]	µg/L
P 214.914†	1271.4	23.32	1.83%	[2500]	µg/L
Pb 220.353†	2012.0	27.39	1.36%	[500]	µg/L
S 181.975 Axial†	209.7	1.73	0.83%	[1000]	µg/L
Sb 206.836†	530.1	6.10	1.15%	[500]	µg/L
Se 196.026†	405.8	0.17	0.04%	[500]	µg/L
SiO2†	29598.0	523.97	1.77%	[5347.5]	µg/L
Si 251.611†	34257.4	580.94	1.70%	[2500]	µg/L

Sn 189.927†	1032.0	22.28	2.16%	[500] µg/L
Sr 421.552†	96315.2	573.43	0.60%	[500] µg/L
Ti 334.940†	225656.7	1637.78	0.73%	[500] µg/L
Tl 190.801†	337.9	0.70	0.21%	[500] µg/L
U 409.014†	5534.1	74.82	1.35%	[500] µg/L
V 292.402†	44995.6	739.71	1.64%	[500] µg/L
Zn 213.857†	19381.0	331.77	1.71%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/7/2009 07:11:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115550.9	115550.9	102	%	07:11:43
1	Al 396.153Radial†	20010.5	19554.0	[10000]	µg/L	07:11:43
1	Ca 317.933Radial†	26479.5	25618.6	[10000]	µg/L	07:11:43
1	Fe 238.204 Radial†	1613.4	1573.1	[10000]	µg/L	07:12:04
1	K 766.490 Radial†	19776.5	18688.6	[10000]	µg/L	07:11:43
1	Mg 279.077 IEC†	1693.9	1652.5	[10000]	µg/L	07:12:04
1	Na 589.592 Radial†	39662.6	39687.5	[10000]	µg/L	07:11:43
1	Sr 421.552†	192739.3	189585.2	[1000]	µg/L	07:11:43
1	Sc 361.383	2078993.6	2078993.6	100.40	%	07:13:08
1	Y 371.029	1287712.3	1287712.3	98.391	%	07:13:08
1	Ag 328.068†	108967.1	108328.0	[1000]	µg/L	07:13:14
1	As 188.979†	569.0	564.3	[1000]	µg/L	07:13:34
1	B 249.677†	23761.2	23471.8	[1000]	µg/L	07:13:14
1	Ba 233.527†	39500.6	39402.5	[1000]	µg/L	07:13:14
1	Be 313.107†	1619663.2	1609467.1	[1000]	µg/L	07:13:08
1	Cd 226.502†	38638.9	38583.6	[1000]	µg/L	07:13:14
1	Co 228.616†	21028.1	21008.6	[1000]	µg/L	07:13:14
1	Cr 267.716†	48458.8	48392.6	[1000]	µg/L	07:13:14
1	Cu 324.752†	150356.4	145500.9	[1000]	µg/L	07:13:08
1	Mn 257.610†	312837.0	311837.8	[1000]	µg/L	07:13:08
1	Mo 202.031†	8641.1	8606.6	[1000]	µg/L	07:13:14
1	Ni 231.604†	18861.5	18465.6	[1000]	µg/L	07:13:14
1	P 214.914†	2707.6	2524.1	[5000]	µg/L	07:13:34
1	Pb 220.353†	4011.2	3950.8	[1000]	µg/L	07:13:34
1	S 181.975 Axial†	436.9	407.7	[2000]	µg/L	07:13:34
1	Sb 206.836†	1044.9	1022.9	[1000]	µg/L	07:13:34
1	Se 196.026†	825.4	806.1	[1000]	µg/L	07:13:34
1	SiO2†	61071.3	58077.9	[10695]	µg/L	07:13:14
1	Si 251.611†	68003.2	67359.3	[5000]	µg/L	07:13:14
1	Sn 189.927†	2038.9	2009.0	[1000]	µg/L	07:13:34
1	Ti 334.940†	436119.3	433389.5	[1000]	µg/L	07:13:08
1	Tl 190.801†	654.3	668.6	[1000]	µg/L	07:13:34
1	U 409.014†	11561.9	10868.5	[1000]	µg/L	07:13:14
1	V 292.402†	89479.6	89287.6	[1000]	µg/L	07:13:14
1	Zn 213.857†	38750.6	38024.4	[1000]	µg/L	07:13:14
2	Sc RADIAL	114388.6	114388.6	101	%	07:12:09
2	Al 396.153Radial†	19712.8	19458.3	[10000]	µg/L	07:12:09
2	Ca 317.933Radial†	25925.1	25332.5	[10000]	µg/L	07:12:09
2	Fe 238.204 Radial†	1612.4	1588.2	[10000]	µg/L	07:12:30
2	K 766.490 Radial†	19557.8	18668.9	[10000]	µg/L	07:12:09
2	Mg 279.077 IEC†	1681.5	1657.2	[10000]	µg/L	07:12:30
2	Na 589.592 Radial†	39171.3	39595.8	[10000]	µg/L	07:12:09
2	Sr 421.552†	189837.4	188628.4	[1000]	µg/L	07:12:09
2	Sc 361.383	2059944.0	2059944.0	99.479	%	07:13:41
2	Y 371.029	1289995.2	1289995.2	98.565	%	07:13:41
2	Ag 328.068†	108679.1	109042.3	[1000]	µg/L	07:13:47
2	As 188.979†	560.6	561.1	[1000]	µg/L	07:14:07
2	B 249.677†	23639.6	23568.5	[1000]	µg/L	07:13:47
2	Ba 233.527†	39235.9	39500.3	[1000]	µg/L	07:13:47
2	Be 313.107†	1620819.3	1625547.8	[1000]	µg/L	07:13:41
2	Cd 226.502†	38346.0	38645.1	[1000]	µg/L	07:13:47
2	Co 228.616†	20933.0	21106.6	[1000]	µg/L	07:13:47
2	Cr 267.716†	48175.0	48553.7	[1000]	µg/L	07:13:47
2	Cu 324.752†	150558.0	147088.4	[1000]	µg/L	07:13:41
2	Mn 257.610†	313176.9	315061.1	[1000]	µg/L	07:13:41
2	Mo 202.031†	8627.7	8672.8	[1000]	µg/L	07:13:47
2	Ni 231.604†	18772.7	18550.2	[1000]	µg/L	07:13:47
2	P 214.914†	2684.2	2525.5	[5000]	µg/L	07:14:07
2	Pb 220.353†	3992.0	3968.5	[1000]	µg/L	07:14:07

2	S 181.975 Axial†	431.5	406.3	[2000]	µg/L	07:14:07
2	Sb 206.836†	1042.0	1029.6	[1000]	µg/L	07:14:07
2	Se 196.026†	807.3	795.6	[1000]	µg/L	07:14:07
2	SiO2†	60898.6	58466.9	[10695]	µg/L	07:13:47
2	Si 251.611†	67729.0	67710.1	[5000]	µg/L	07:13:47
2	Sn 189.927†	2017.6	2006.3	[1000]	µg/L	07:14:07
2	Ti 334.940†	437495.4	438789.8	[1000]	µg/L	07:13:41
2	Tl 190.801†	646.7	666.9	[1000]	µg/L	07:14:07
2	U 409.014†	11590.2	11003.3	[1000]	µg/L	07:13:47
2	V 292.402†	88975.3	89604.9	[1000]	µg/L	07:13:47
2	Zn 213.857†	38568.5	38198.3	[1000]	µg/L	07:13:47
3	Sc RADIAL	115665.6	115665.6	102	%	07:12:35
3	Al 396.153Radial†	20404.2	19921.4	[10000]	µg/L	07:12:35
3	Ca 317.933Radial†	27052.6	26155.9	[10000]	µg/L	07:12:35
3	Fe 238.204 Radial†	1607.5	1565.7	[10000]	µg/L	07:12:56
3	K 766.490 Radial†	20173.7	19059.6	[10000]	µg/L	07:12:35
3	Mg 279.077 IEC†	1688.3	1645.4	[10000]	µg/L	07:12:56
3	Na 589.592 Radial†	40344.1	40318.5	[10000]	µg/L	07:12:35
3	Sr 421.552†	196816.4	193403.3	[1000]	µg/L	07:12:35
3	Sc 361.383	2062452.8	2062452.8	99.600	%	07:14:15
3	Y 371.029	1282101.9	1282101.9	97.962	%	07:14:15
3	Ag 328.068†	108004.9	108232.5	[1000]	µg/L	07:14:21
3	As 188.979†	542.7	542.4	[1000]	µg/L	07:14:41
3	B 249.677†	23564.4	23464.1	[1000]	µg/L	07:14:21
3	Ba 233.527†	38953.9	39169.2	[1000]	µg/L	07:14:21
3	Be 313.107†	1623335.6	1626092.2	[1000]	µg/L	07:14:15
3	Cd 226.502†	38058.4	38309.4	[1000]	µg/L	07:14:21
3	Co 228.616†	20719.9	20867.1	[1000]	µg/L	07:14:21
3	Cr 267.716†	47788.9	48107.1	[1000]	µg/L	07:14:21
3	Cu 324.752†	150900.0	147247.6	[1000]	µg/L	07:14:15
3	Mn 257.610†	313661.7	315164.9	[1000]	µg/L	07:14:15
3	Mo 202.031†	8532.4	8566.5	[1000]	µg/L	07:14:21
3	Ni 231.604†	18588.7	18342.4	[1000]	µg/L	07:14:21
3	P 214.914†	2604.3	2442.0	[5000]	µg/L	07:14:41
3	Pb 220.353†	3849.8	3820.8	[1000]	µg/L	07:14:41
3	S 181.975 Axial†	421.0	395.2	[2000]	µg/L	07:14:41
3	Sb 206.836†	1000.3	986.4	[1000]	µg/L	07:14:41
3	Se 196.026†	784.2	771.4	[1000]	µg/L	07:14:41
3	SiO2†	60531.7	58024.0	[10695]	µg/L	07:14:21
3	Si 251.611†	67237.0	67133.3	[5000]	µg/L	07:14:21
3	Sn 189.927†	1932.7	1918.6	[1000]	µg/L	07:14:41
3	Ti 334.940†	437759.5	438520.1	[1000]	µg/L	07:14:15
3	Tl 190.801†	636.4	655.8	[1000]	µg/L	07:14:41
3	U 409.014†	11453.1	10851.5	[1000]	µg/L	07:14:21
3	V 292.402†	88382.0	88900.4	[1000]	µg/L	07:14:21
3	Zn 213.857†	38243.0	37824.4	[1000]	µg/L	07:14:21

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2067130.2	10350.36	0.50%	99.826	%
Sc RADIAL	115201.7	706.50	0.61%	101	%
Y 371.029	1286603.2	4061.88	0.32%	98.306	%
Ag 328.068†	108534.3	442.55	0.41%	[1000]	µg/L
Al 396.153Radial†	19644.6	244.45	1.24%	[10000]	µg/L
As 188.979†	555.9	11.83	2.13%	[1000]	µg/L
B 249.677†	23501.5	58.18	0.25%	[1000]	µg/L
Ba 233.527†	39357.3	170.12	0.43%	[1000]	µg/L
Be 313.107†	1620369.0	9445.30	0.58%	[1000]	µg/L
Ca 317.933Radial†	25702.3	418.03	1.63%	[10000]	µg/L
Cd 226.502†	38512.7	178.72	0.46%	[1000]	µg/L
Co 228.616†	20994.1	120.40	0.57%	[1000]	µg/L
Cr 267.716†	48351.1	226.14	0.47%	[1000]	µg/L
Cu 324.752†	146612.3	965.82	0.66%	[1000]	µg/L
Fe 238.204 Radial†	1575.6	11.48	0.73%	[10000]	µg/L
K 766.490 Radial†	18805.7	220.07	1.17%	[10000]	µg/L
Mg 279.077 IEC†	1651.7	5.92	0.36%	[10000]	µg/L
Mn 257.610†	314021.3	1891.61	0.60%	[1000]	µg/L
Mo 202.031†	8615.3	53.67	0.62%	[1000]	µg/L
Na 589.592 Radial†	39867.3	393.44	0.99%	[10000]	µg/L

Ni 231.604†	18452.7	104.48	0.57%	[1000]	µg/L
P 214.914†	2497.2	47.82	1.91%	[5000]	µg/L
Pb 220.353†	3913.4	80.63	2.06%	[1000]	µg/L
S 181.975 Axial†	403.1	6.84	1.70%	[2000]	µg/L
Sb 206.836†	1012.9	23.24	2.29%	[1000]	µg/L
Se 196.026†	791.0	17.84	2.26%	[1000]	µg/L
SiO2†	58189.6	241.64	0.42%	[10695]	µg/L
Si 251.611†	67400.9	290.68	0.43%	[5000]	µg/L
Sn 189.927†	1978.0	51.43	2.60%	[1000]	µg/L
Sr 421.552†	190539.0	2526.28	1.33%	[1000]	µg/L
Ti 334.940†	436899.8	3042.98	0.70%	[1000]	µg/L
Tl 190.801†	663.8	6.94	1.05%	[1000]	µg/L
U 409.014†	10907.7	83.19	0.76%	[1000]	µg/L
V 292.402†	89264.3	352.83	0.40%	[1000]	µg/L
Zn 213.857†	38015.7	187.11	0.49%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/7/2009 07:14:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113208.9	113208.9	99.6	%	07:15:23
1	Al 396.153Radial†	97081.9	97329.4	[50000]	µg/L	07:15:23
1	Ca 317.933Radial†	125938.2	125999.0	[50000]	µg/L	07:15:23
1	Fe 238.204 Radial†	3158.9	3157.3	[20000]	µg/L	07:15:43
1	Mg 279.077 IEC†	8109.6	8127.4	[50000]	µg/L	07:15:43
1	Na 589.592 Radial†	77873.9	78853.0	[20000]	µg/L	07:15:23
1	Sc 361.383	2064264.5	2064264.5	99.687	%	07:16:47
1	Y 371.029	1287713.0	1287713.0	98.391	%	07:16:47
2	Sc RADIAL	114582.5	114582.5	101	%	07:15:49
2	Al 396.153Radial†	98817.1	97882.0	[50000]	µg/L	07:15:49
2	Ca 317.933Radial†	128907.0	127427.9	[50000]	µg/L	07:15:49
2	Fe 238.204 Radial†	3095.5	3056.4	[20000]	µg/L	07:16:09
2	Mg 279.077 IEC†	7971.6	7893.0	[50000]	µg/L	07:16:09
2	Na 589.592 Radial†	79085.6	79117.5	[20000]	µg/L	07:15:49
2	Sc 361.383	2057122.5	2057122.5	99.342	%	07:16:55
2	Y 371.029	1278356.4	1278356.4	97.676	%	07:16:55
3	Sc RADIAL	115951.6	115951.6	102	%	07:16:15
3	Al 396.153Radial†	93058.7	91081.0	[50000]	µg/L	07:16:15
3	Ca 317.933Radial†	120555.6	117733.1	[50000]	µg/L	07:16:15
3	Fe 238.204 Radial†	3169.3	3092.5	[20000]	µg/L	07:16:35
3	Mg 279.077 IEC†	8149.7	7974.1	[50000]	µg/L	07:16:35
3	Na 589.592 Radial†	74471.3	73668.9	[20000]	µg/L	07:16:15
3	Sc 361.383	2072623.5	2072623.5	100.09	%	07:17:02
3	Y 371.029	1287367.1	1287367.1	98.365	%	07:17:02

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2064670.2	7758.43	0.38%	99.707	%
Sc RADIAL	114581.0	1371.35	1.20%	101	%
Y 371.029	1284478.8	5304.98	0.41%	98.144	%
Al 396.153Radial†	95430.8	3777.13	3.96%	[50000]	µg/L
Ca 317.933Radial†	123720.0	5233.81	4.23%	[50000]	µg/L
Fe 238.204 Radial†	3102.1	51.11	1.65%	[20000]	µg/L
Mg 279.077 IEC†	7998.2	119.07	1.49%	[50000]	µg/L
Na 589.592 Radial†	77213.2	3072.23	3.98%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	109.3	0.00000	0.999904	
Al 396.153Radial	3	Lin Thru 0	0.0	1.911	0.00000	0.999978	
As 188.979	3	Lin Thru 0	0.0	0.5573	0.00000	0.999988	
B 249.677	3	Lin Thru 0	0.0	23.49	0.00000	0.999991	
Ba 233.527	3	Lin Thru 0	0.0	39.42	0.00000	0.999991	
Be 313.107	3	Lin Thru 0	0.0	1624	0.00000	0.999989	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.479	0.00000	0.999971	
Cd 226.502	3	Lin Thru 0	0.0	38.62	0.00000	0.999985	
Co 228.616	3	Lin Thru 0	0.0	21.05	0.00000	0.999983	
Cr 267.716	3	Lin Thru 0	0.0	48.39	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	146.9	0.00000	0.999987	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1556	0.00000	0.999980	
K 766.490 Radial	3	Lin Thru 0	0.0	1.882	0.00000	0.999998	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1602	0.00000	0.999975	
Mn 257.610	3	Lin Thru 0	0.0	314.8	0.00000	0.999983	
Mo 202.031	3	Lin Thru 0	0.0	8.649	0.00000	0.999968	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.886	0.00000	0.999916	

Ni 231.604	3	Lin Thru 0	0.0	18.54	0.00000	0.999960
P 214.914	3	Lin Thru 0	0.0	0.5013	0.00000	0.999972
Pb 220.353	3	Lin Thru 0	0.0	3.936	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.2031	0.00000	0.999867
Sb 206.836	3	Lin Thru 0	0.0	1.022	0.00000	0.999830
Se 196.026	3	Lin Thru 0	0.0	0.7954	0.00000	0.999939
SiO2	3	Lin Thru 0	0.0	5.458	0.00000	0.999973
Si 251.611	3	Lin Thru 0	0.0	13.52	0.00000	0.999974
Sn 189.927	3	Lin Thru 0	0.0	1.995	0.00000	0.999852
Sr 421.552	3	Lin Thru 0	0.0	191.0	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	439.6	0.00000	0.999905
Tl 190.801	3	Lin Thru 0	0.0	0.6658	0.00000	0.999954
U 409.014	3	Lin Thru 0	0.0	10.93	0.00000	0.999968
V 292.402	3	Lin Thru 0	0.0	89.39	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	38.16	0.00000	0.999968

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/7/2009 07:17:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116413.3	116413.3	102	%			07:17:45
1	Al 396.153Radial†	10271.4	9900.8	5159.0	µg/L	5159.0	ppb	07:17:45
1	Ca 317.933Radial†	13355.5	12613.8	5089.2	µg/L	5089.2	ppb	07:18:05
1	Fe 238.204 Radial†	833.4	799.9	5157.6	µg/L	5157.6	ppb	07:18:05
1	K 766.490 Radial†	5410.5	4520.1	2401.9	µg/L	2401.9	ppb	07:17:45
1	Mg 279.077 IEC†	888.7	854.1	5337.1	µg/L	5337.1	ppb	07:18:05
1	Na 589.592 Radial†	9411.3	9866.7	2539.1	µg/L	2539.1	ppb	07:17:45
1	Sr 421.552†	102348.1	99939.5	523.33	µg/L	523.33	ppb	07:17:45
1	Sc 361.383	2081883.8	2081883.8	100.54	%			07:19:08
1	Y 371.029	1304055.3	1304055.3	99.640	%			07:19:08
1	Ag 328.068†	29066.2	28704.3	266.60	µg/L	266.60	ppb	07:19:14
1	As 188.979†	267.2	263.4	471.44	µg/L	471.44	ppb	07:19:35
1	B 249.677†	12342.2	12081.1	512.63	µg/L	512.63	ppb	07:19:14
1	Ba 233.527†	20109.4	20060.5	509.98	µg/L	509.98	ppb	07:19:14
1	Be 313.107†	430320.5	424252.0	261.03	µg/L	261.03	ppb	07:19:08
1	Cd 226.502†	19348.6	19343.2	501.40	µg/L	501.40	ppb	07:19:14
1	Co 228.616†	10742.4	10748.8	510.77	µg/L	510.77	ppb	07:19:14
1	Cr 267.716†	23783.7	23782.6	492.64	µg/L	492.64	ppb	07:19:14
1	Cu 324.752†	77342.6	72670.0	495.69	µg/L	495.69	ppb	07:19:14
1	Mn 257.610†	161634.0	161011.7	512.06	µg/L	512.06	ppb	07:19:08
1	Mo 202.031†	4770.3	4744.6	548.79	µg/L	548.79	ppb	07:19:35
1	Ni 231.604†	9634.9	9262.4	499.65	µg/L	499.65	ppb	07:19:14
1	P 214.914†	1465.8	1285.2	2510.8	µg/L	2510.8	ppb	07:19:35
1	Pb 220.353†	2048.6	1993.2	507.38	µg/L	507.38	ppb	07:19:35
1	S 181.975 Axial†	555.7	525.2	2584.5	µg/L	2584.5	ppb	07:19:35
1	Sb 206.836†	547.6	526.7	513.71	µg/L	513.71	ppb	07:19:35
1	Se 196.026†	2054.5	2027.5	2551.1	µg/L	2551.1	ppb	07:19:35
1	SiO2†	59872.2	56800.8	10406	µg/L	10406	ppb	07:19:14
1	Si 251.611†	66348.7	65619.7	4802.9	µg/L	4802.9	ppb	07:19:14
1	Sn 189.927†	1149.2	1121.2	565.22	µg/L	565.22	ppb	07:19:35
1	Ti 334.940†	224240.9	222042.4	504.81	µg/L	504.81	ppb	07:19:08
1	Tl 190.801†	336.5	351.6	530.05	µg/L	530.05	ppb	07:19:35
1	U 409.014†	5972.0	5292.4	483.17	µg/L	483.17	ppb	07:19:14
1	V 292.402†	45803.2	45721.3	516.48	µg/L	516.48	ppb	07:19:14
1	Zn 213.857†	20097.1	19417.2	504.84	µg/L	504.84	ppb	07:19:14
2	Sc RADIAL	114347.0	114347.0	101	%			07:18:10
2	Al 396.153Radial†	10281.3	10091.8	5258.9	µg/L	5258.9	ppb	07:18:10
2	Ca 317.933Radial†	13219.7	12714.4	5129.8	µg/L	5129.8	ppb	07:18:31
2	Fe 238.204 Radial†	823.3	804.6	5187.9	µg/L	5187.9	ppb	07:18:31
2	K 766.490 Radial†	5432.3	4637.3	2464.1	µg/L	2464.1	ppb	07:18:10
2	Mg 279.077 IEC†	867.0	848.3	5300.8	µg/L	5300.8	ppb	07:18:31
2	Na 589.592 Radial†	9442.6	10063.9	2589.9	µg/L	2589.9	ppb	07:18:10
2	Sr 421.552†	102601.5	101996.9	534.10	µg/L	534.10	ppb	07:18:10
2	Sc 361.383	2074361.0	2074361.0	100.17	%			07:19:42
2	Y 371.029	1308791.2	1308791.2	100.00	%			07:19:42
2	Ag 328.068†	29327.3	29069.8	269.98	µg/L	269.98	ppb	07:19:47
2	As 188.979†	271.5	268.5	480.74	µg/L	480.74	ppb	07:20:08
2	B 249.677†	12438.0	12221.3	518.59	µg/L	518.59	ppb	07:19:47
2	Ba 233.527†	20240.3	20263.7	515.15	µg/L	515.15	ppb	07:19:47
2	Be 313.107†	435275.7	430750.7	265.03	µg/L	265.03	ppb	07:19:42
2	Cd 226.502†	19416.7	19481.0	504.98	µg/L	504.98	ppb	07:19:47
2	Co 228.616†	10770.3	10815.4	513.91	µg/L	513.91	ppb	07:19:47
2	Cr 267.716†	23898.8	23983.3	496.79	µg/L	496.79	ppb	07:19:47
2	Cu 324.752†	77918.8	73524.2	501.51	µg/L	501.51	ppb	07:19:47
2	Mn 257.610†	163494.7	163452.2	519.82	µg/L	519.82	ppb	07:19:42
2	Mo 202.031†	4759.0	4750.5	549.47	µg/L	549.47	ppb	07:20:08
2	Ni 231.604†	9709.3	9371.4	505.53	µg/L	505.53	ppb	07:19:47
2	P 214.914†	1464.6	1289.3	2518.3	µg/L	2518.3	ppb	07:20:08
2	Pb 220.353†	2056.1	2008.1	511.16	µg/L	511.16	ppb	07:20:08

2	S 181.975 Axial†	554.4	525.9	2587.8 µg/L	2587.8 ppb	07:20:08
2	Sb 206.836†	552.1	533.2	520.07 µg/L	520.07 ppb	07:20:08
2	Se 196.026†	2053.3	2033.8	2559.0 µg/L	2559.0 ppb	07:20:08
2	SiO2†	60179.7	57323.7	10502 µg/L	10502 ppb	07:19:47
2	Si 251.611†	66731.2	66240.8	4848.4 µg/L	4848.4 ppb	07:19:47
2	Sn 189.927†	1150.9	1127.0	568.14 µg/L	568.14 ppb	07:20:08
2	Ti 334.940†	226990.1	225595.6	512.89 µg/L	512.89 ppb	07:19:42
2	Tl 190.801†	336.4	352.7	531.78 µg/L	531.78 ppb	07:20:08
2	U 409.014†	6056.3	5398.2	492.84 µg/L	492.84 ppb	07:19:47
2	V 292.402†	46073.5	46156.3	521.37 µg/L	521.37 ppb	07:19:47
2	Zn 213.857†	20239.6	19632.0	510.43 µg/L	510.43 ppb	07:19:47
3	Sc RADIAL	115687.1	115687.1	102 %		07:18:36
3	Al 396.153Radial†	10251.5	9944.2	5182.0 µg/L	5182.0 ppb	07:18:36
3	Ca 317.933Radial†	13337.3	12677.8	5115.1 µg/L	5115.1 ppb	07:18:57
3	Fe 238.204 Radial†	831.9	803.5	5181.2 µg/L	5181.2 ppb	07:18:57
3	K 766.490 Radial†	5391.4	4534.5	2409.5 µg/L	2409.5 ppb	07:18:36
3	Mg 279.077 IEC†	877.9	849.0	5304.9 µg/L	5304.9 ppb	07:18:57
3	Na 589.592 Radial†	9430.4	9943.2	2558.8 µg/L	2558.8 ppb	07:18:36
3	Sr 421.552†	102189.3	100410.8	525.80 µg/L	525.80 ppb	07:18:36
3	Sc 361.383	2044990.0	2044990.0	98.757 %		07:20:15
3	Y 371.029	1291100.1	1291100.1	98.650 %		07:20:15
3	Ag 328.068†	29229.4	29391.1	272.95 µg/L	272.95 ppb	07:20:21
3	As 188.979†	263.5	264.4	473.33 µg/L	473.33 ppb	07:20:41
3	B 249.677†	12421.2	12382.6	525.46 µg/L	525.46 ppb	07:20:21
3	Ba 233.527†	20209.9	20523.2	521.74 µg/L	521.74 ppb	07:20:21
3	Be 313.107†	428847.4	430482.2	264.86 µg/L	264.86 ppb	07:20:15
3	Cd 226.502†	19419.0	19761.6	512.26 µg/L	512.26 ppb	07:20:21
3	Co 228.616†	10743.9	10943.1	519.96 µg/L	519.96 ppb	07:20:21
3	Cr 267.716†	23860.0	24286.6	503.07 µg/L	503.07 ppb	07:20:21
3	Cu 324.752†	77590.7	74309.1	506.86 µg/L	506.86 ppb	07:20:21
3	Mn 257.610†	160897.6	163166.5	518.91 µg/L	518.91 ppb	07:20:15
3	Mo 202.031†	4621.0	4679.0	541.20 µg/L	541.20 ppb	07:20:41
3	Ni 231.604†	9700.6	9501.8	512.56 µg/L	512.56 ppb	07:20:21
3	P 214.914†	1427.0	1272.2	2483.3 µg/L	2483.3 ppb	07:20:41
3	Pb 220.353†	1999.7	1980.4	504.09 µg/L	504.09 ppb	07:20:41
3	S 181.975 Axial†	536.9	516.1	2539.6 µg/L	2539.6 ppb	07:20:41
3	Sb 206.836†	537.4	526.2	513.21 µg/L	513.21 ppb	07:20:41
3	Se 196.026†	2007.4	2016.8	2537.6 µg/L	2537.6 ppb	07:20:41
3	SiO2†	60041.8	58046.9	10634 µg/L	10634 ppb	07:20:21
3	Si 251.611†	66681.7	67147.5	4916.2 µg/L	4916.2 ppb	07:20:21
3	Sn 189.927†	1105.8	1097.8	553.50 µg/L	553.50 ppb	07:20:41
3	Ti 334.940†	223767.9	225587.3	512.87 µg/L	512.87 ppb	07:20:15
3	Tl 190.801†	331.9	353.0	532.26 µg/L	532.26 ppb	07:20:41
3	U 409.014†	6032.9	5461.3	498.61 µg/L	498.61 ppb	07:20:21
3	V 292.402†	45880.3	46621.2	526.52 µg/L	526.52 ppb	07:20:21
3	Zn 213.857†	20164.1	19845.7	515.98 µg/L	515.98 ppb	07:20:21

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2067078.3	99.823	%	0.9415				0.94%
Sc RADIAL	115482.4	102	%	0.9				0.91%
Y 371.029	1301315.5	99.430	%	0.6998				0.70%
Ag 328.068†	29055.0	269.84	µg/L	3.180	269.84	ppb	3.180	1.18%
QC value within limits for Ag 328.068 Recovery = 107.94%								
Al 396.153Radial†	9979.0	5199.9	µg/L	52.32	5199.9	ppb	52.32	1.01%
QC value within limits for Al 396.153Radial Recovery = 104.00%								
As 188.979†	265.4	475.17	µg/L	4.916	475.17	ppb	4.916	1.03%
QC value within limits for As 188.979 Recovery = 95.03%								
B 249.677†	12228.3	518.89	µg/L	6.418	518.89	ppb	6.418	1.24%
QC value within limits for B 249.677 Recovery = 103.78%								
Ba 233.527†	20282.5	515.62	µg/L	5.893	515.62	ppb	5.893	1.14%
QC value within limits for Ba 233.527 Recovery = 103.12%								
Be 313.107†	428495.0	263.64	µg/L	2.262	263.64	ppb	2.262	0.86%
QC value within limits for Be 313.107 Recovery = 105.46%								
Ca 317.933Radial†	12668.7	5111.4	µg/L	20.55	5111.4	ppb	20.55	0.40%
QC value within limits for Ca 317.933Radial Recovery = 102.23%								
Cd 226.502†	19528.6	506.21	µg/L	5.534	506.21	ppb	5.534	1.09%
QC value within limits for Cd 226.502 Recovery = 101.24%								
Co 228.616†	10835.8	514.88	µg/L	4.673	514.88	ppb	4.673	0.91%

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   QC value within limits for Co 228.616  Recovery = 102.98%
Cr 267.716†          24017.5      497.50 µg/L        5.254      497.50 ppb        5.254   1.06%
   QC value within limits for Cr 267.716  Recovery = 99.50%
Cu 324.752†          73501.1      501.35 µg/L        5.582      501.35 ppb        5.582   1.11%
   QC value within limits for Cu 324.752  Recovery = 100.27%
Fe 238.204 Radial†     802.6      5175.5 µg/L       15.89      5175.5 ppb        15.89   0.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.51%
K 766.490 Radial†     4564.0      2425.2 µg/L       33.93      2425.2 ppb        33.93   1.40%
   QC value within limits for K 766.490 Radial  Recovery = 97.01%
Mg 279.077 IEC†        850.5      5314.3 µg/L       19.90      5314.3 ppb        19.90   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.29%
Mn 257.610†         162543.5      516.93 µg/L        4.240      516.93 ppb        4.240   0.82%
   QC value within limits for Mn 257.610  Recovery = 103.39%
Mo 202.031†          4724.7      546.49 µg/L        4.588      546.49 ppb        4.588   0.84%
   QC value within limits for Mo 202.031  Recovery = 109.30%
Na 589.592 Radial†    9957.9      2562.6 µg/L       25.58      2562.6 ppb        25.58   1.00%
   QC value within limits for Na 589.592 Radial  Recovery = 102.50%
Ni 231.604†          9378.5      505.91 µg/L        6.466      505.91 ppb        6.466   1.28%
   QC value within limits for Ni 231.604  Recovery = 101.18%
P 214.914†           1282.2      2504.1 µg/L       18.47      2504.1 ppb        18.47   0.74%
   QC value within limits for P 214.914  Recovery = 100.17%
Pb 220.353†          1993.9      507.54 µg/L        3.540      507.54 ppb        3.540   0.70%
   QC value within limits for Pb 220.353  Recovery = 101.51%
S 181.975 Axial†      522.4      2570.6 µg/L       26.91      2570.6 ppb        26.91   1.05%
   QC value within limits for S 181.975 Axial  Recovery = 102.82%
Sb 206.836†           528.7      515.66 µg/L        3.825      515.66 ppb        3.825   0.74%
   QC value within limits for Sb 206.836  Recovery = 103.13%
Se 196.026†          2026.0      2549.2 µg/L       10.82      2549.2 ppb        10.82   0.42%
   QC value within limits for Se 196.026  Recovery = 101.97%
SiO2†               57390.4       10514 µg/L       114.6       10514 ppb        114.6   1.09%
   QC value within limits for SiO2  Recovery = 98.31%
Si 251.611†         66336.0      4855.9 µg/L       57.01      4855.9 ppb        57.01   1.17%
   QC value within limits for Si 251.611  Recovery = 97.12%
Sn 189.927†          1115.4      562.28 µg/L        7.750      562.28 ppb        7.750   1.38%
   QC value greater than the upper limit for Sn 189.927  Recovery = 112.46%
Sr 421.552†        100782.4      527.74 µg/L        5.644      527.74 ppb        5.644   1.07%
   QC value within limits for Sr 421.552  Recovery = 105.55%
Ti 334.940†        224408.4      510.19 µg/L        4.660      510.19 ppb        4.660   0.91%
   QC value within limits for Ti 334.940  Recovery = 102.04%
Tl 190.801†           352.4      531.36 µg/L        1.162      531.36 ppb        1.162   0.22%
   QC value within limits for Tl 190.801  Recovery = 106.27%
U 409.014†           5384.0      491.54 µg/L        7.801      491.54 ppb        7.801   1.59%
   QC value within limits for U 409.014  Recovery = 98.31%
V 292.402†          46166.3      521.46 µg/L        5.021      521.46 ppb        5.021   0.96%
   QC value within limits for V 292.402  Recovery = 104.29%
Zn 213.857†         19631.6      510.42 µg/L        5.572      510.42 ppb        5.572   1.09%
   QC value within limits for Zn 213.857  Recovery = 102.08%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/7/2009 07:20:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112540.0	112540.0	99.0	%			07:21:23
1	Al 396.153Radial†	156.0	31.2	16.300	µg/L	16.300	ppb	07:21:23
1	Ca 317.933Radial†	423.6	3.7	1.5118	µg/L	1.5118	ppb	07:21:44
1	Fe 238.204 Radial†	16.7	3.2	20.327	µg/L	20.327	ppb	07:21:44
1	K 766.490 Radial†	698.9	-55.9	-29.706	µg/L	-29.706	ppb	07:21:23
1	Mg 279.077 IEC†	22.9	9.7	60.516	µg/L	60.516	ppb	07:21:44
1	Na 589.592 Radial†	-617.6	55.6	14.315	µg/L	14.315	ppb	07:21:23
1	Sr 421.552†	-24.0	1.3	0.0067	µg/L	0.0067	ppb	07:21:23
1	Sc 361.383	2044993.3	2044993.3	98.757	%			07:22:46
1	Y 371.029	1294797.6	1294797.6	98.932	%			07:22:46
1	Ag 328.068†	187.9	-16.1	-0.1460	µg/L	-0.1460	ppb	07:22:51
1	As 188.979†	1.3	-1.1	-2.0132	µg/L	-2.0132	ppb	07:23:12
1	B 249.677†	197.4	4.9	0.2040	µg/L	0.2040	ppb	07:22:51
1	Ba 233.527†	-58.2	-0.2	-0.0042	µg/L	-0.0042	ppb	07:23:12
1	Be 313.107†	3781.1	63.9	0.0393	µg/L	0.0393	ppb	07:22:51
1	Cd 226.502†	-88.9	8.1	0.2114	µg/L	0.2114	ppb	07:23:12
1	Co 228.616†	-63.5	-0.4	-0.0165	µg/L	-0.0165	ppb	07:23:12
1	Cr 267.716†	-161.6	-37.4	-0.7735	µg/L	-0.7735	ppb	07:22:51
1	Cu 324.752†	4240.0	34.8	0.2414	µg/L	0.2414	ppb	07:22:51
1	Mn 257.610†	-249.1	-9.2	-0.0267	µg/L	-0.0267	ppb	07:22:51
1	Mo 202.031†	3.5	3.4	0.3967	µg/L	0.3967	ppb	07:23:12
1	Ni 231.604†	311.6	-5.4	-0.2929	µg/L	-0.2929	ppb	07:23:12
1	P 214.914†	172.0	1.5	2.8645	µg/L	2.8645	ppb	07:23:12
1	Pb 220.353†	34.9	-9.1	-2.3254	µg/L	-2.3254	ppb	07:23:12
1	S 181.975 Axial†	30.2	3.1	15.113	µg/L	15.113	ppb	07:23:12
1	Sb 206.836†	23.8	6.2	6.0871	µg/L	6.0871	ppb	07:23:12
1	Se 196.026†	3.9	-12.0	-15.041	µg/L	-15.041	ppb	07:23:12
1	SiO2†	2778.4	62.5	11.443	µg/L	11.443	ppb	07:22:51
1	Si 251.611†	385.0	16.1	1.1699	µg/L	1.1699	ppb	07:23:12
1	Sn 189.927†	22.4	0.8	0.4307	µg/L	0.4307	ppb	07:23:12
1	Ti 334.940†	1079.5	95.1	0.2162	µg/L	0.2162	ppb	07:22:51
1	Tl 190.801†	-23.9	-7.3	-10.916	µg/L	-10.916	ppb	07:23:12
1	U 409.014†	696.5	57.7	5.2688	µg/L	5.2688	ppb	07:22:51
1	V 292.402†	-168.6	-7.5	-0.0706	µg/L	-0.0706	ppb	07:22:51
1	Zn 213.857†	574.4	9.3	0.2420	µg/L	0.2420	ppb	07:23:12
2	Sc RADIAL	111806.7	111806.7	98.4	%			07:21:49
2	Al 396.153Radial†	102.8	-21.8	-11.432	µg/L	-11.432	ppb	07:21:49
2	Ca 317.933Radial†	431.7	14.8	5.9622	µg/L	5.9622	ppb	07:22:10
2	Fe 238.204 Radial†	16.6	3.1	20.087	µg/L	20.087	ppb	07:22:10
2	K 766.490 Radial†	693.3	-57.0	-30.276	µg/L	-30.276	ppb	07:21:49
2	Mg 279.077 IEC†	15.4	2.3	14.037	µg/L	14.037	ppb	07:22:10
2	Na 589.592 Radial†	-678.3	-10.2	-2.6326	µg/L	-2.6326	ppb	07:21:49
2	Sr 421.552†	-11.9	13.4	0.0700	µg/L	0.0700	ppb	07:21:49
2	Sc 361.383	2059916.9	2059916.9	99.477	%			07:23:18
2	Y 371.029	1297381.2	1297381.2	99.130	%			07:23:18
2	Ag 328.068†	169.1	-36.3	-0.3292	µg/L	-0.3292	ppb	07:23:23
2	As 188.979†	-0.5	-3.0	-5.3628	µg/L	-5.3628	ppb	07:23:44
2	B 249.677†	239.4	45.6	1.9368	µg/L	1.9368	ppb	07:23:23
2	Ba 233.527†	-60.3	-1.8	-0.0445	µg/L	-0.0445	ppb	07:23:44
2	Be 313.107†	3750.1	5.0	0.0031	µg/L	0.0031	ppb	07:23:23
2	Cd 226.502†	-89.3	8.3	0.2146	µg/L	0.2146	ppb	07:23:44
2	Co 228.616†	-60.7	2.9	0.1386	µg/L	0.1386	ppb	07:23:44
2	Cr 267.716†	-163.8	-38.4	-0.7936	µg/L	-0.7936	ppb	07:23:23
2	Cu 324.752†	4199.0	-37.4	-0.2506	µg/L	-0.2506	ppb	07:23:23
2	Mn 257.610†	-267.9	-26.3	-0.0810	µg/L	-0.0810	ppb	07:23:23
2	Mo 202.031†	0.5	0.4	0.0454	µg/L	0.0454	ppb	07:23:44
2	Ni 231.604†	322.2	2.9	0.1574	µg/L	0.1574	ppb	07:23:44
2	P 214.914†	173.4	1.5	3.0015	µg/L	3.0015	ppb	07:23:44
2	Pb 220.353†	38.8	-5.5	-1.3865	µg/L	-1.3865	ppb	07:23:44

2	S 181.975 Axial†	25.0	-2.4	-11.603 µg/L	-11.603 ppb	07:23:44
2	Sb 206.836†	23.5	5.7	5.5425 µg/L	5.5425 ppb	07:23:44
2	Se 196.026†	9.0	-6.9	-8.6985 µg/L	-8.6985 ppb	07:23:44
2	SiO2†	2696.7	-40.0	-7.3240 µg/L	-7.3240 ppb	07:23:23
2	Si 251.611†	369.6	-2.2	-0.1436 µg/L	-0.1436 ppb	07:23:44
2	Sn 189.927†	21.2	-0.6	-0.2887 µg/L	-0.2887 ppb	07:23:44
2	Ti 334.940†	1003.0	10.2	0.0229 µg/L	0.0229 ppb	07:23:23
2	Tl 190.801†	-19.4	-2.6	-3.9562 µg/L	-3.9562 ppb	07:23:44
2	U 409.014†	643.1	-1.1	-0.1012 µg/L	-0.1012 ppb	07:23:23
2	V 292.402†	-140.9	21.6	0.2436 µg/L	0.2436 ppb	07:23:23
2	Zn 213.857†	577.2	8.0	0.2065 µg/L	0.2065 ppb	07:23:44
3	Sc RADIAL	112775.4	112775.4	99.2 %		07:22:15
3	Al 396.153Radial†	131.8	6.5	3.4003 µg/L	3.4003 ppb	07:22:15
3	Ca 317.933Radial†	417.0	-3.9	-1.5553 µg/L	-1.5553 ppb	07:22:36
3	Fe 238.204 Radial†	16.7	3.1	19.989 µg/L	19.989 ppb	07:22:36
3	K 766.490 Radial†	754.6	-1.3	-0.6680 µg/L	-0.6680 ppb	07:22:15
3	Mg 279.077 IEC†	16.2	2.9	18.169 µg/L	18.169 ppb	07:22:36
3	Na 589.592 Radial†	-686.3	-12.4	-3.1893 µg/L	-3.1893 ppb	07:22:15
3	Sr 421.552†	-28.5	-3.3	-0.0170 µg/L	-0.0170 ppb	07:22:15
3	Sc 361.383	2057035.4	2057035.4	99.338 %		07:23:50
3	Y 371.029	1298192.4	1298192.4	99.192 %		07:23:50
3	Ag 328.068†	207.1	2.2	0.0227 µg/L	0.0227 ppb	07:23:56
3	As 188.979†	8.5	6.1	10.927 µg/L	10.927 ppb	07:24:16
3	B 249.677†	224.1	30.6	1.2972 µg/L	1.2972 ppb	07:23:56
3	Ba 233.527†	-66.3	-7.9	-0.2006 µg/L	-0.2006 ppb	07:24:16
3	Be 313.107†	3738.4	-1.5	-0.0010 µg/L	-0.0010 ppb	07:23:56
3	Cd 226.502†	-103.0	-5.5	-0.1401 µg/L	-0.1401 ppb	07:24:16
3	Co 228.616†	-69.6	-6.1	-0.2926 µg/L	-0.2926 ppb	07:24:16
3	Cr 267.716†	-151.3	-26.1	-0.5384 µg/L	-0.5384 ppb	07:23:56
3	Cu 324.752†	4225.9	-4.4	-0.0260 µg/L	-0.0260 ppb	07:23:56
3	Mn 257.610†	-274.7	-33.4	-0.1037 µg/L	-0.1037 ppb	07:23:56
3	Mo 202.031†	-1.5	-1.6	-0.1888 µg/L	-0.1888 ppb	07:24:16
3	Ni 231.604†	306.3	-12.6	-0.6785 µg/L	-0.6785 ppb	07:24:16
3	P 214.914†	175.6	4.0	7.8739 µg/L	7.8739 ppb	07:24:16
3	Pb 220.353†	51.2	7.1	1.8004 µg/L	1.8004 ppb	07:24:16
3	S 181.975 Axial†	32.6	5.2	25.794 µg/L	25.794 ppb	07:24:16
3	Sb 206.836†	19.9	2.2	2.1172 µg/L	2.1172 ppb	07:24:16
3	Se 196.026†	12.8	-3.1	-3.8415 µg/L	-3.8415 ppb	07:24:16
3	SiO2†	2753.5	20.9	3.8335 µg/L	3.8335 ppb	07:23:56
3	Si 251.611†	365.7	-5.6	-0.3204 µg/L	-0.3204 ppb	07:24:16
3	Sn 189.927†	16.8	-5.0	-2.4814 µg/L	-2.4814 ppb	07:24:16
3	Ti 334.940†	1020.8	29.5	0.0672 µg/L	0.0672 ppb	07:23:56
3	Tl 190.801†	-14.4	2.3	3.5282 µg/L	3.5282 ppb	07:24:16
3	U 409.014†	715.4	72.6	6.6332 µg/L	6.6332 ppb	07:23:56
3	V 292.402†	-144.6	17.7	0.2087 µg/L	0.2087 ppb	07:23:56
3	Zn 213.857†	564.7	-3.8	-0.0985 µg/L	-0.0985 ppb	07:24:16

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2053981.9	99.191	%	0.3823				0.39%
Sc RADIAL	112374.0	98.9	%	0.44				0.45%
Y 371.029	1296790.4	99.085	%	0.1355				0.14%
Ag 328.068†	-16.7	-0.1508	µg/L	0.17596	-0.1508	ppb	0.17596	116.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.3	2.7562	µg/L	13.87709	2.7562	ppb	13.87709	503.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.7	1.1837	µg/L	8.60268	1.1837	ppb	8.60268	726.76%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	27.1	1.1460	µg/L	0.87623	1.1460	ppb	0.87623	76.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.3	-0.0831	µg/L	0.10377	-0.0831	ppb	0.10377	124.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.4	0.0138	µg/L	0.02215	0.0138	ppb	0.02215	160.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.9	1.9729	µg/L	3.77993	1.9729	ppb	3.77993	191.59%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	3.6	0.0953	µg/L	0.20385	0.0953	ppb	0.20385	213.86%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.2	-0.0568	µg/L	0.21840	-0.0568	ppb	0.21840	384.33%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -34.0     -0.7018 µg/L       0.14186     -0.7018 ppb        0.14186  20.21%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -2.4     -0.0117 µg/L       0.24627     -0.0117 ppb        0.24627 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.1      20.134 µg/L        0.1742      20.134 ppb         0.1742   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -38.0     -20.217 µg/L       16.9319     -20.217 ppb        16.9319  83.75%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            5.0      30.907 µg/L       25.7249      30.907 ppb        25.7249  83.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -23.0     -0.0705 µg/L       0.03958     -0.0705 ppb        0.03958  56.16%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.7      0.0844 µg/L       0.29473      0.0844 ppb        0.29473 349.14%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        11.0      2.8311 µg/L       9.94947      2.8311 ppb        9.94947 351.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -5.0     -0.2713 µg/L       0.41841     -0.2713 ppb        0.41841 154.20%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 2.3      4.5800 µg/L       2.85345      4.5800 ppb        2.85345  62.30%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.5     -0.6372 µg/L       2.16257     -0.6372 ppb        2.16257 339.38%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.0      9.7679 µg/L      19.26306      9.7679 ppb       19.26306 197.21%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                4.7      4.5823 µg/L       2.15215      4.5823 ppb        2.15215  46.97%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -7.3     -9.1937 µg/L       5.61616     -9.1937 ppb        5.61616  61.09%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     14.5      2.6508 µg/L       9.43927      2.6508 ppb        9.43927 356.08%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                2.7      0.2353 µg/L       0.81417      0.2353 ppb        0.81417 346.01%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.6     -0.7798 µg/L       1.51686     -0.7798 ppb        1.51686 194.52%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.8      0.0199 µg/L       0.04498      0.0199 ppb        0.04498 226.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               44.9      0.1021 µg/L       0.10125      0.1021 ppb        0.10125  99.19%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.5     -3.7812 µg/L       7.22354     -3.7812 ppb        7.22354 191.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                43.1      3.9336 µg/L       3.56023      3.9336 ppb        3.56023  90.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                10.6      0.1272 µg/L       0.17225      0.1272 ppb        0.17225 135.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                4.5      0.1167 µg/L       0.18717      0.1167 ppb        0.18717 160.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/7/2009 07:24:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113751.4	113751.4	100	%			07:24:58
1	Al 396.153Radial†	559.4	432.6	225.91	µg/L	225.91	ppb	07:24:58
1	Ca 317.933Radial†	938.3	513.4	207.14	µg/L	207.14	ppb	07:25:18
1	Fe 238.204 Radial†	32.2	18.5	119.04	µg/L	119.04	ppb	07:25:18
1	K 766.490 Radial†	1113.1	350.4	186.20	µg/L	186.20	ppb	07:24:58
1	Mg 279.077 IEC†	61.6	48.1	300.38	µg/L	300.38	ppb	07:25:18
1	Na 589.592 Radial†	622.2	1300.8	334.76	µg/L	334.76	ppb	07:24:58
1	Sr 421.552†	1040.6	1065.1	5.5772	µg/L	5.5772	ppb	07:24:58
1	Sc 361.383	2036327.9	2036327.9	98.338	%			07:26:20
1	Y 371.029	1288293.4	1288293.4	98.435	%			07:26:20
1	Ag 328.068†	745.7	551.9	5.0977	µg/L	5.0977	ppb	07:26:26
1	As 188.979†	16.1	13.9	24.878	µg/L	24.878	ppb	07:26:46
1	B 249.677†	1340.7	1168.4	49.698	µg/L	49.698	ppb	07:26:26
1	Ba 233.527†	130.3	191.3	4.8640	µg/L	4.8640	ppb	07:26:46
1	Be 313.107†	11761.4	8195.3	5.0440	µg/L	5.0440	ppb	07:26:26
1	Cd 226.502†	87.5	187.1	4.8802	µg/L	4.8802	ppb	07:26:46
1	Co 228.616†	29.9	94.3	4.4945	µg/L	4.4945	ppb	07:26:46
1	Cr 267.716†	96.8	224.7	4.6558	µg/L	4.6558	ppb	07:26:26
1	Cu 324.752†	5738.7	1577.1	10.759	µg/L	10.759	ppb	07:26:26
1	Mn 257.610†	2940.2	3232.9	10.284	µg/L	10.284	ppb	07:26:26
1	Mo 202.031†	88.9	90.2	10.437	µg/L	10.437	ppb	07:26:46
1	Ni 231.604†	408.2	94.1	5.0782	µg/L	5.0782	ppb	07:26:46
1	P 214.914†	249.8	81.2	160.89	µg/L	160.89	ppb	07:26:46
1	Pb 220.353†	91.4	48.5	12.319	µg/L	12.319	ppb	07:26:46
1	S 181.975 Axial†	47.6	20.9	102.66	µg/L	102.66	ppb	07:26:46
1	Sb 206.836†	30.4	13.0	12.667	µg/L	12.667	ppb	07:26:46
1	Se 196.026†	44.0	28.8	36.222	µg/L	36.222	ppb	07:26:46
1	SiO2†	3929.8	1245.3	228.15	µg/L	228.15	ppb	07:26:26
1	Si 251.611†	1722.4	1377.7	101.05	µg/L	101.05	ppb	07:26:46
1	Sn 189.927†	42.4	21.3	10.802	µg/L	10.802	ppb	07:26:46
1	Ti 334.940†	3240.4	2297.1	5.2137	µg/L	5.2137	ppb	07:26:26
1	Tl 190.801†	-5.5	11.3	16.923	µg/L	16.923	ppb	07:26:46
1	U 409.014†	1205.6	578.4	52.876	µg/L	52.876	ppb	07:26:26
1	V 292.402†	317.1	485.7	5.6011	µg/L	5.6011	ppb	07:26:26
1	Zn 213.857†	957.9	401.8	10.467	µg/L	10.467	ppb	07:26:46
2	Sc RADIAL	113518.8	113518.8	99.9	%			07:25:24
2	Al 396.153Radial†	517.4	391.7	204.54	µg/L	204.54	ppb	07:25:24
2	Ca 317.933Radial†	941.7	518.7	209.27	µg/L	209.27	ppb	07:25:44
2	Fe 238.204 Radial†	32.4	18.7	120.28	µg/L	120.28	ppb	07:25:44
2	K 766.490 Radial†	1028.3	267.8	142.31	µg/L	142.31	ppb	07:25:24
2	Mg 279.077 IEC†	65.2	51.9	323.82	µg/L	323.82	ppb	07:25:44
2	Na 589.592 Radial†	551.9	1231.8	316.98	µg/L	316.98	ppb	07:25:24
2	Sr 421.552†	931.5	958.0	5.0166	µg/L	5.0166	ppb	07:25:24
2	Sc 361.383	2044398.7	2044398.7	98.728	%			07:26:52
2	Y 371.029	1291848.0	1291848.0	98.707	%			07:26:52
2	Ag 328.068†	701.3	504.0	4.6551	µg/L	4.6551	ppb	07:26:58
2	As 188.979†	16.7	14.5	25.884	µg/L	25.884	ppb	07:27:18
2	B 249.677†	1328.3	1150.4	48.931	µg/L	48.931	ppb	07:26:58
2	Ba 233.527†	134.6	195.2	4.9611	µg/L	4.9611	ppb	07:27:18
2	Be 313.107†	11707.2	8093.3	4.9813	µg/L	4.9813	ppb	07:26:58
2	Cd 226.502†	95.4	194.8	5.0759	µg/L	5.0759	ppb	07:27:18
2	Co 228.616†	41.2	105.7	5.0321	µg/L	5.0321	ppb	07:27:18
2	Cr 267.716†	114.3	242.0	5.0120	µg/L	5.0120	ppb	07:26:58
2	Cu 324.752†	5742.3	1557.7	10.627	µg/L	10.627	ppb	07:26:58
2	Mn 257.610†	2972.2	3253.5	10.349	µg/L	10.349	ppb	07:26:58
2	Mo 202.031†	85.1	86.1	9.9556	µg/L	9.9556	ppb	07:27:18
2	Ni 231.604†	406.3	90.6	4.8862	µg/L	4.8862	ppb	07:27:18
2	P 214.914†	247.9	78.3	155.03	µg/L	155.03	ppb	07:27:18
2	Pb 220.353†	81.9	38.5	9.7700	µg/L	9.7700	ppb	07:27:18

2	S 181.975 Axial†	46.3	19.3	95.080 µg/L	95.080 ppb	07:27:18
2	Sb 206.836†	25.7	8.1	7.9473 µg/L	7.9473 ppb	07:27:18
2	Se 196.026†	39.2	23.8	29.877 µg/L	29.877 ppb	07:27:18
2	SiO2†	3932.8	1232.6	225.82 µg/L	225.82 ppb	07:26:58
2	Si 251.611†	1732.5	1381.0	101.35 µg/L	101.35 ppb	07:27:18
2	Sn 189.927†	41.0	19.6	9.9915 µg/L	9.9915 ppb	07:27:18
2	Ti 334.940†	3153.9	2196.5	4.9848 µg/L	4.9848 ppb	07:26:58
2	Tl 190.801†	-9.5	7.3	10.909 µg/L	10.909 ppb	07:27:18
2	U 409.014†	1163.0	530.4	48.488 µg/L	48.488 ppb	07:26:58
2	V 292.402†	268.3	435.0	5.0238 µg/L	5.0238 ppb	07:26:58
2	Zn 213.857†	955.2	395.3	10.296 µg/L	10.296 ppb	07:27:18
3	Sc RADIAL	112783.8	112783.8	99.2 %		07:25:50
3	Al 396.153Radial†	513.8	391.4	204.40 µg/L	204.40 ppb	07:25:50
3	Ca 317.933Radial†	944.4	527.6	212.85 µg/L	212.85 ppb	07:26:10
3	Fe 238.204 Radial†	31.7	18.2	117.03 µg/L	117.03 ppb	07:26:10
3	K 766.490 Radial†	976.7	222.5	118.21 µg/L	118.21 ppb	07:25:50
3	Mg 279.077 IEC†	66.6	53.7	335.35 µg/L	335.35 ppb	07:26:10
3	Na 589.592 Radial†	556.0	1239.5	318.98 µg/L	318.98 ppb	07:25:50
3	Sr 421.552†	913.9	946.4	4.9557 µg/L	4.9557 ppb	07:25:50
3	Sc 361.383	2043029.4	2043029.4	98.662 %		07:27:24
3	Y 371.029	1285788.8	1285788.8	98.244 %		07:27:24
3	Ag 328.068†	695.1	498.2	4.6010 µg/L	4.6010 ppb	07:27:30
3	As 188.979†	13.4	11.2	20.004 µg/L	20.004 ppb	07:27:51
3	B 249.677†	1295.0	1117.5	47.533 µg/L	47.533 ppb	07:27:30
3	Ba 233.527†	134.5	195.2	4.9614 µg/L	4.9614 ppb	07:27:51
3	Be 313.107†	11578.8	7971.1	4.9061 µg/L	4.9061 ppb	07:27:30
3	Cd 226.502†	84.2	183.5	4.7844 µg/L	4.7844 ppb	07:27:51
3	Co 228.616†	32.0	96.4	4.5900 µg/L	4.5900 ppb	07:27:51
3	Cr 267.716†	84.1	211.5	4.3809 µg/L	4.3809 ppb	07:27:30
3	Cu 324.752†	5714.6	1533.6	10.462 µg/L	10.462 ppb	07:27:30
3	Mn 257.610†	2913.6	3196.2	10.167 µg/L	10.167 ppb	07:27:30
3	Mo 202.031†	85.5	86.5	10.002 µg/L	10.002 ppb	07:27:51
3	Ni 231.604†	402.0	86.5	4.6678 µg/L	4.6678 ppb	07:27:51
3	P 214.914†	247.3	77.9	154.19 µg/L	154.19 ppb	07:27:51
3	Pb 220.353†	80.6	37.2	9.4533 µg/L	9.4533 ppb	07:27:51
3	S 181.975 Axial†	49.5	22.6	111.21 µg/L	111.21 ppb	07:27:51
3	Sb 206.836†	31.3	13.8	13.456 µg/L	13.456 ppb	07:27:51
3	Se 196.026†	36.6	21.1	26.555 µg/L	26.555 ppb	07:27:51
3	SiO2†	3911.4	1213.5	222.32 µg/L	222.32 ppb	07:27:30
3	Si 251.611†	1680.8	1329.8	97.606 µg/L	97.606 ppb	07:27:51
3	Sn 189.927†	39.4	18.1	9.2158 µg/L	9.2158 ppb	07:27:51
3	Ti 334.940†	3112.4	2156.5	4.8936 µg/L	4.8936 ppb	07:27:30
3	Tl 190.801†	-5.3	11.5	17.319 µg/L	17.319 ppb	07:27:51
3	U 409.014†	1184.8	553.3	50.584 µg/L	50.584 ppb	07:27:30
3	V 292.402†	262.7	429.6	4.9663 µg/L	4.9663 ppb	07:27:30
3	Zn 213.857†	946.6	387.2	10.085 µg/L	10.085 ppb	07:27:51

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2041252.0	98.576	%	0.2086				0.21%
Sc RADIAL	113351.3	99.7	%	0.44				0.45%
Y 371.029	1288643.4	98.462	%	0.2326				0.24%
Ag 328.068†	518.0	4.7846	µg/L	0.27245	4.7846	ppb	0.27245	5.69%
QC value within limits for Ag 328.068 Recovery = 95.69%								
Al 396.153Radial†	405.2	211.62	µg/L	12.377	211.62	ppb	12.377	5.85%
QC value within limits for Al 396.153Radial Recovery = 105.81%								
As 188.979†	13.2	23.589	µg/L	3.1451	23.589	ppb	3.1451	13.33%
QC value within limits for As 188.979 Recovery = 78.63%								
B 249.677†	1145.5	48.721	µg/L	1.0975	48.721	ppb	1.0975	2.25%
QC value within limits for B 249.677 Recovery = 97.44%								
Ba 233.527†	193.9	4.9288	µg/L	0.05617	4.9288	ppb	0.05617	1.14%
QC value within limits for Ba 233.527 Recovery = 98.58%								
Be 313.107†	8086.6	4.9771	µg/L	0.06907	4.9771	ppb	0.06907	1.39%
QC value within limits for Be 313.107 Recovery = 99.54%								
Ca 317.933Radial†	519.9	209.75	µg/L	2.887	209.75	ppb	2.887	1.38%
QC value within limits for Ca 317.933Radial Recovery = 104.88%								
Cd 226.502†	188.5	4.9135	µg/L	0.14861	4.9135	ppb	0.14861	3.02%
QC value within limits for Cd 226.502 Recovery = 98.27%								
Co 228.616†	98.8	4.7055	µg/L	0.28686	4.7055	ppb	0.28686	6.10%

```
   QC value within limits for Co 228.616  Recovery = 94.11%
Cr 267.716†              226.1      4.6829 µg/L       0.31642      4.6829 ppb        0.31642   6.76%
   QC value within limits for Cr 267.716  Recovery = 93.66%
Cu 324.752†             1556.1      10.616 µg/L        0.1488      10.616 ppb         0.1488   1.40%
   QC value within limits for Cu 324.752  Recovery = 106.16%
Fe 238.204 Radial†        18.5      118.78 µg/L         1.642      118.78 ppb          1.642   1.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 118.78%
K 766.490 Radial†        280.2      148.91 µg/L        34.470      148.91 ppb         34.470  23.15%
   QC value within limits for K 766.490 Radial  Recovery = 99.27%
Mg 279.077 IEC†           51.2      319.85 µg/L        17.821      319.85 ppb         17.821   5.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.62%
Mn 257.610†             3227.5      10.266 µg/L        0.0924      10.266 ppb         0.0924   0.90%
   QC value within limits for Mn 257.610  Recovery = 102.66%
Mo 202.031†               87.6      10.132 µg/L        0.2656      10.132 ppb         0.2656   2.62%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†      1257.4      323.57 µg/L         9.738      323.57 ppb          9.738   3.01%
   QC value within limits for Na 589.592 Radial  Recovery = 107.86%
Ni 231.604†               90.4      4.8774 µg/L       0.20531      4.8774 ppb        0.20531   4.21%
   QC value within limits for Ni 231.604  Recovery = 97.55%
P 214.914†                79.1      156.70 µg/L         3.651      156.70 ppb          3.651   2.33%
   QC value within limits for P 214.914  Recovery = 104.47%
Pb 220.353†               41.4      10.514 µg/L        1.5711      10.514 ppb         1.5711  14.94%
   QC value within limits for Pb 220.353  Recovery = 105.14%
S 181.975 Axial†          20.9      102.98 µg/L         8.069      102.98 ppb          8.069   7.84%
   QC value within limits for S 181.975 Axial  Recovery = 102.98%
Sb 206.836†               11.6      11.357 µg/L        2.9788      11.357 ppb         2.9788  26.23%
   QC value within limits for Sb 206.836  Recovery = 113.57%
Se 196.026†               24.6      30.885 µg/L        4.9114      30.885 ppb         4.9114  15.90%
   QC value within limits for Se 196.026  Recovery = 102.95%
SiO2†                   1230.5      225.43 µg/L         2.932      225.43 ppb          2.932   1.30%
   QC value within limits for SiO2  Recovery = 105.84%
Si 251.611†             1362.8      100.00 µg/L         2.080      100.00 ppb          2.080   2.08%
   QC value within limits for Si 251.611  Recovery = 100.00%
Sn 189.927†               19.7      10.003 µg/L        0.7934      10.003 ppb         0.7934   7.93%
   QC value within limits for Sn 189.927  Recovery = 100.03%
Sr 421.552†              989.8      5.1832 µg/L       0.34258      5.1832 ppb        0.34258   6.61%
   QC value within limits for Sr 421.552  Recovery = 103.66%
Ti 334.940†             2216.7      5.0307 µg/L       0.16492      5.0307 ppb        0.16492   3.28%
   QC value within limits for Ti 334.940  Recovery = 100.61%
Tl 190.801†               10.0      15.050 µg/L        3.5919      15.050 ppb         3.5919  23.87%
   QC value within limits for Tl 190.801  Recovery = 75.25%
U 409.014†               554.0      50.649 µg/L        2.1951      50.649 ppb         2.1951   4.33%
   QC value within limits for U 409.014  Recovery = 101.30%
V 292.402†               450.1      5.1971 µg/L       0.35111      5.1971 ppb        0.35111   6.76%
   QC value within limits for V 292.402  Recovery = 103.94%
Zn 213.857†              394.7      10.283 µg/L        0.1909      10.283 ppb         0.1909   1.86%
   QC value within limits for Zn 213.857  Recovery = 102.83%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/7/2009 07:27:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109433.9	109433.9	96.3	%			07:28:41
1	Al 396.153Radial†	978337.6	1015855.8	531470	µg/L	531470	ppb	07:28:36
1	Ca 317.933Radial†	1220290.1	1266820.3	511120	µg/L	511120	ppb	07:28:36
1	Fe 238.204 Radial†	29197.0	30306.7	194780	µg/L	194780	ppb	07:28:41
1	K 766.490 Radial†	761.1	28.7	15.254	µg/L	15.254	ppb	07:28:41
1	Mg 279.077 IEC†	77241.7	80200.4	500290	µg/L	500290	ppb	07:28:41
1	Na 589.592 Radial†	-502.2	157.7	40.585	µg/L	40.585	ppb	07:28:41
1	Sr 421.552†	588.9	637.1	3.3361	µg/L	3.3361	ppb	07:28:41
1	Sc 361.383	1893416.2	1893416.2	91.437	%			07:29:14
1	Y 371.029	1169669.5	1169669.5	89.372	%			07:29:14
1	Ag 328.068†	-1764.1	-2135.6	-4.3065	µg/L	-4.3065	ppb	07:29:20
1	As 188.979†	27.0	27.1	-57.238	µg/L	-57.238	ppb	07:29:41
1	B 249.677†	1818.9	1794.3	15.125	µg/L	15.125	ppb	07:29:20
1	Ba 233.527†	135.0	206.5	5.1978	µg/L	5.1978	ppb	07:29:41
1	Be 313.107†	2660.0	-855.7	-0.5365	µg/L	-0.5365	ppb	07:29:20
1	Cd 226.502†	570.2	721.7	3.5962	µg/L	3.5962	ppb	07:29:41
1	Co 228.616†	-98.3	-43.5	-2.1531	µg/L	-2.1531	ppb	07:29:41
1	Cr 267.716†	-231.9	-127.4	-2.6775	µg/L	-2.6775	ppb	07:29:41
1	Cu 324.752†	-255.1	-4537.5	10.956	µg/L	10.956	ppb	07:29:20
1	Mn 257.610†	-2316.7	-2290.7	17.208	µg/L	17.208	ppb	07:29:20
1	Mo 202.031†	-107.9	-118.2	-6.0074	µg/L	-6.0074	ppb	07:29:41
1	Ni 231.604†	279.1	-15.7	-0.8491	µg/L	-0.8491	ppb	07:29:41
1	P 214.914†	197.4	43.2	51.618	µg/L	51.618	ppb	07:29:41
1	Pb 220.353†	-89.0	-141.8	7.8551	µg/L	7.8551	ppb	07:29:41
1	S 181.975 Axial†	59.3	37.3	83.496	µg/L	83.496	ppb	07:29:41
1	Sb 206.836†	65.0	53.2	4.1689	µg/L	4.1689	ppb	07:29:41
1	Se 196.026†	18.3	4.1	6.8240	µg/L	6.8240	ppb	07:29:41
1	SiO2†	2473.8	-45.4	-8.3218	µg/L	-8.3218	ppb	07:29:41
1	Si 251.611†	448.6	116.8	17.434	µg/L	17.434	ppb	07:29:41
1	Sn 189.927†	-429.4	-491.4	22.464	µg/L	22.464	ppb	07:29:41
1	Ti 334.940†	11320.0	11382.1	-2.8487	µg/L	-2.8487	ppb	07:29:20
1	Tl 190.801†	17.8	36.3	-46.716	µg/L	-46.716	ppb	07:29:41
1	U 409.014†	610.3	19.9	-22.436	µg/L	-22.436	ppb	07:29:20
1	V 292.402†	-1708.4	-1705.1	-3.2763	µg/L	-3.2763	ppb	07:29:20
1	Zn 213.857†	1852.5	1453.8	3.7552	µg/L	3.7552	ppb	07:29:41
2	Sc RADIAL	110265.5	110265.5	97.0	%			07:28:53
2	Al 396.153Radial†	971627.6	1001277.9	523840	µg/L	523840	ppb	07:28:47
2	Ca 317.933Radial†	1206243.0	1242785.7	501420	µg/L	501420	ppb	07:28:47
2	Fe 238.204 Radial†	29247.4	30130.0	193640	µg/L	193640	ppb	07:28:53
2	K 766.490 Radial†	746.5	7.7	4.0857	µg/L	4.0857	ppb	07:28:53
2	Mg 279.077 IEC†	77571.2	79935.0	498630	µg/L	498630	ppb	07:28:53
2	Na 589.592 Radial†	-505.3	158.4	40.773	µg/L	40.773	ppb	07:28:53
2	Sr 421.552†	620.6	665.1	3.4829	µg/L	3.4829	ppb	07:28:53
2	Sc 361.383	1917348.3	1917348.3	92.592	%			07:29:47
2	Y 371.029	1188859.5	1188859.5	90.838	%			07:29:47
2	Ag 328.068†	-1834.4	-2187.5	-4.8690	µg/L	-4.8690	ppb	07:29:53
2	As 188.979†	37.4	37.9	-36.142	µg/L	-36.142	ppb	07:30:13
2	B 249.677†	1823.9	1774.8	14.655	µg/L	14.655	ppb	07:29:53
2	Ba 233.527†	123.2	191.9	4.8285	µg/L	4.8285	ppb	07:30:13
2	Be 313.107†	2599.1	-957.8	-0.5991	µg/L	-0.5991	ppb	07:29:53
2	Cd 226.502†	564.8	708.1	3.3385	µg/L	3.3385	ppb	07:30:13
2	Co 228.616†	-93.2	-36.6	-1.8263	µg/L	-1.8263	ppb	07:30:13
2	Cr 267.716†	-264.6	-159.5	-3.3400	µg/L	-3.3400	ppb	07:30:13
2	Cu 324.752†	-291.5	-4573.3	10.468	µg/L	10.468	ppb	07:29:53
2	Mn 257.610†	-2352.7	-2297.9	17.042	µg/L	17.042	ppb	07:29:53
2	Mo 202.031†	-110.8	-119.8	-6.2432	µg/L	-6.2432	ppb	07:30:13
2	Ni 231.604†	270.5	-28.8	-1.5517	µg/L	-1.5517	ppb	07:30:13
2	P 214.914†	180.2	21.9	7.8751	µg/L	7.8751	ppb	07:30:13
2	Pb 220.353†	-84.0	-135.1	8.8903	µg/L	8.8903	ppb	07:30:13

2	S 181.975 Axial†	63.4	40.9	101.58	µg/L	101.58 ppb	07:30:13
2	Sb 206.836†	48.1	34.0	-13.692	µg/L	-13.692 ppb	07:30:13
2	Se 196.026†	16.9	2.3	3.1535	µg/L	3.1535 ppb	07:30:13
2	SiO2†	2490.8	-60.8	-11.138	µg/L	-11.138 ppb	07:30:13
2	Si 251.611†	424.2	84.3	14.778	µg/L	14.778 ppb	07:30:13
2	Sn 189.927†	-421.6	-477.2	26.729	µg/L	26.729 ppb	07:30:13
2	Ti 334.940†	11299.7	11205.6	-2.7048	µg/L	-2.7048 ppb	07:29:53
2	Tl 190.801†	10.7	28.4	-56.712	µg/L	-56.712 ppb	07:30:13
2	U 409.014†	707.5	116.6	-13.615	µg/L	-13.615 ppb	07:29:53
2	V 292.402†	-1698.8	-1671.5	-2.9796	µg/L	-2.9796 ppb	07:29:53
2	Zn 213.857†	1858.9	1435.4	3.4434	µg/L	3.4434 ppb	07:30:13
3	Sc RADIAL	109126.9	109126.9	96.0	%		07:29:04
3	Al 396.153Radial†	985816.5	1026502.4	537040	µg/L	537040 ppb	07:28:59
3	Ca 317.933Radial†	1228698.4	1279141.7	516090	µg/L	516090 ppb	07:28:59
3	Fe 238.204 Radial†	29133.4	30325.8	194900	µg/L	194900 ppb	07:29:04
3	K 766.490 Radial†	732.7	1.3	0.7131	µg/L	0.7131 ppb	07:29:04
3	Mg 279.077 IEC†	77311.8	80499.0	502150	µg/L	502150 ppb	07:29:04
3	Na 589.592 Radial†	-535.7	121.4	31.245	µg/L	31.245 ppb	07:29:04
3	Sr 421.552†	634.2	685.9	3.5917	µg/L	3.5917 ppb	07:29:04
3	Sc 361.383	1909376.4	1909376.4	92.208	%		07:30:19
3	Y 371.029	1180884.2	1180884.2	90.229	%		07:30:19
3	Ag 328.068†	-1636.7	-1981.3	-2.8864	µg/L	-2.8864 ppb	07:30:25
3	As 188.979†	27.1	27.0	-58.206	µg/L	-58.206 ppb	07:30:45
3	B 249.677†	1848.0	1809.1	15.720	µg/L	15.720 ppb	07:30:25
3	Ba 233.527†	137.4	207.9	5.2328	µg/L	5.2328 ppb	07:30:45
3	Be 313.107†	2571.8	-975.7	-0.6102	µg/L	-0.6102 ppb	07:30:25
3	Cd 226.502†	579.1	726.2	3.7035	µg/L	3.7035 ppb	07:30:45
3	Co 228.616†	-95.7	-39.8	-1.9736	µg/L	-1.9736 ppb	07:30:45
3	Cr 267.716†	-244.5	-139.0	-2.9172	µg/L	-2.9172 ppb	07:30:45
3	Cu 324.752†	-299.7	-4583.6	10.669	µg/L	10.669 ppb	07:30:25
3	Mn 257.610†	-2257.3	-2205.0	17.495	µg/L	17.495 ppb	07:30:25
3	Mo 202.031†	-106.4	-115.6	-5.7047	µg/L	-5.7047 ppb	07:30:45
3	Ni 231.604†	274.3	-23.4	-1.2637	µg/L	-1.2637 ppb	07:30:45
3	P 214.914†	195.2	38.9	45.126	µg/L	45.126 ppb	07:30:45
3	Pb 220.353†	-86.2	-137.9	9.3272	µg/L	9.3272 ppb	07:30:45
3	S 181.975 Axial†	62.5	40.3	97.699	µg/L	97.699 ppb	07:30:45
3	Sb 206.836†	53.7	40.4	-8.8361	µg/L	-8.8361 ppb	07:30:45
3	Se 196.026†	28.1	14.5	19.943	µg/L	19.943 ppb	07:30:45
3	SiO2†	2500.8	-38.8	-7.1050	µg/L	-7.1050 ppb	07:30:45
3	Si 251.611†	463.6	129.0	18.191	µg/L	18.191 ppb	07:30:45
3	Sn 189.927†	-425.3	-483.1	28.300	µg/L	28.300 ppb	07:30:45
3	Ti 334.940†	11278.5	11233.5	-3.4661	µg/L	-3.4661 ppb	07:30:25
3	Tl 190.801†	14.4	32.5	-53.466	µg/L	-53.466 ppb	07:30:45
3	U 409.014†	634.8	40.9	-20.423	µg/L	-20.423 ppb	07:30:25
3	V 292.402†	-1736.3	-1719.8	-3.4252	µg/L	-3.4252 ppb	07:30:25
3	Zn 213.857†	1881.2	1468.0	4.0661	µg/L	4.0661 ppb	07:30:45

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1906713.6	92.079	%	0.5885				0.64%
Sc RADIAL	109608.8	96.4	%	0.52				0.54%
Y 371.029	1179804.4	90.146	%	0.7366				0.82%
Ag 328.068†	-2101.5	-4.0206	µg/L	1.02176	-4.0206	ppb	1.02176	25.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1014545.4	530780	µg/L	6625.0	530780	ppb	6625.0	1.25%
QC value within limits for Al 396.153Radial Recovery = 106.16%								
As 188.979†	30.7	-50.528	µg/L	12.4687	-50.528	ppb	12.4687	24.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1792.7	15.167	µg/L	0.5334	15.167	ppb	0.5334	3.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	202.1	5.0864	µg/L	0.22401	5.0864	ppb	0.22401	4.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-929.7	-0.5819	µg/L	0.03976	-0.5819	ppb	0.03976	6.83%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1262915.9	509540	µg/L	7460.0	509540	ppb	7460.0	1.46%
QC value within limits for Ca 317.933Radial Recovery = 101.91%								
Cd 226.502†	718.7	3.5461	µg/L	0.18759	3.5461	ppb	0.18759	5.29%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-40.0	-1.9843	µg/L	0.16367	-1.9843	ppb	0.16367	8.25%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -142.0     -2.9782 µg/L      0.33543     -2.9782 ppb       0.33543  11.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4564.8     10.698 µg/L       0.2452      10.698 ppb        0.2452   2.29%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    30254.2     194440 µg/L        693.9      194440 ppb         693.9   0.36%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.22%
K 766.490 Radial†        12.6     6.6843 µg/L      7.61088      6.6843 ppb      7.61088 113.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       80211.5     500360 µg/L       1760.2      500360 ppb        1760.2   0.35%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.07%
Mn 257.610†           -2264.5     17.248 µg/L       0.2293      17.248 ppb        0.2293   1.33%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -117.9    -5.9851 µg/L      0.26996     -5.9851 ppb       0.26996   4.51%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      145.9     37.534 µg/L       5.4473      37.534 ppb        5.4473  14.51%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -22.6    -1.2215 µg/L      0.35319     -1.2215 ppb       0.35319  28.92%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               34.7     34.873 µg/L      23.6053      34.873 ppb       23.6053  67.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -138.3     8.6908 µg/L      0.75603      8.6908 ppb       0.75603   8.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         39.5     94.258 µg/L       9.5201      94.258 ppb        9.5201  10.10%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              42.5    -6.1196 µg/L      9.23502     -6.1196 ppb       9.23502 150.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.9     9.9736 µg/L      8.82690      9.9736 ppb       8.82690  88.50%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -48.3    -8.8550 µg/L      2.06880     -8.8550 ppb       2.06880  23.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             110.0     16.801 µg/L       1.7922      16.801 ppb        1.7922  10.67%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -483.9     25.831 µg/L       3.0197      25.831 ppb        3.0197  11.69%
   QC value greater than the upper limit for Sn 189.927  Recovery = Not calculated
Sr 421.552†             662.7     3.4703 µg/L      0.12827      3.4703 ppb       0.12827   3.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11273.7    -3.0065 µg/L      0.40447     -3.0065 ppb       0.40447  13.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              32.4    -52.298 µg/L       5.0992     -52.298 ppb        5.0992   9.75%
   QC value less than the lower limit for Tl 190.801  Recovery = Not calculated
U 409.014†               59.1    -18.825 µg/L       4.6224     -18.825 ppb        4.6224  24.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1698.8    -3.2270 µg/L      0.22686     -3.2270 ppb       0.22686   7.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1452.4     3.7549 µg/L      0.31136      3.7549 ppb       0.31136   8.29%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/7/2009 07:30:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111105.0	111105.0	97.8	%			07:31:34
1	Al 396.153Radial†	973972.0	996109.4	521120	µg/L	521120	ppb	07:31:28
1	Ca 317.933Radial†	1208689.2	1235894.1	498640	µg/L	498640	ppb	07:31:28
1	Fe 238.204 Radial†	29273.3	29928.7	192360	µg/L	192360	ppb	07:31:34
1	K 766.490 Radial†	10273.6	9746.8	5179.2	µg/L	5179.2	ppb	07:31:34
1	Mg 279.077 IEC†	78117.3	79889.6	498360	µg/L	498360	ppb	07:31:34
1	Na 589.592 Radial†	19477.6	20602.1	5301.8	µg/L	5301.8	ppb	07:31:34
1	Sr 421.552†	95390.2	97596.2	511.06	µg/L	511.06	ppb	07:31:34
1	Sc 361.383	1878841.9	1878841.9	90.733	%			07:32:08
1	Y 371.029	1164956.6	1164956.6	89.012	%			07:32:08
1	Ag 328.068†	25264.1	27638.1	271.51	µg/L	271.51	ppb	07:32:14
1	As 188.979†	279.2	305.3	444.66	µg/L	444.66	ppb	07:32:35
1	B 249.677†	13014.6	14148.9	541.78	µg/L	541.78	ppb	07:32:14
1	Ba 233.527†	17974.5	19869.2	505.10	µg/L	505.10	ppb	07:32:14
1	Be 313.107†	360463.3	393514.6	242.09	µg/L	242.09	ppb	07:32:08
1	Cd 226.502†	17225.9	19083.4	480.11	µg/L	480.11	ppb	07:32:14
1	Co 228.616†	8303.8	9215.8	437.73	µg/L	437.73	ppb	07:32:35
1	Cr 267.716†	21168.5	23456.8	485.87	µg/L	485.87	ppb	07:32:14
1	Cu 324.752†	73264.1	76488.4	561.89	µg/L	561.89	ppb	07:32:14
1	Mn 257.610†	134002.1	147931.5	494.05	µg/L	494.05	ppb	07:32:14
1	Mo 202.031†	3830.8	4221.9	495.71	µg/L	495.71	ppb	07:32:35
1	Ni 231.604†	7671.9	8134.6	438.81	µg/L	438.81	ppb	07:32:35
1	P 214.914†	1368.1	1335.1	2571.1	µg/L	2571.1	ppb	07:32:35
1	Pb 220.353†	1617.8	1738.6	485.09	µg/L	485.09	ppb	07:32:35
1	S 181.975 Axial†	559.5	589.2	2801.3	µg/L	2801.3	ppb	07:32:35
1	Sb 206.836†	544.4	582.1	521.80	µg/L	521.80	ppb	07:32:35
1	Se 196.026†	1733.6	1894.7	2381.1	µg/L	2381.1	ppb	07:32:35
1	SiO2†	58504.9	61729.5	11309	µg/L	11309	ppb	07:32:14
1	Si 251.611†	65048.2	71318.1	5234.1	µg/L	5234.1	ppb	07:32:14
1	Sn 189.927†	521.1	552.5	541.84	µg/L	541.84	ppb	07:32:35
1	Ti 334.940†	217073.5	238246.4	513.91	µg/L	513.91	ppb	07:32:14
1	Tl 190.801†	301.0	348.6	428.12	µg/L	428.12	ppb	07:32:35
1	U 409.014†	5523.6	5440.1	473.42	µg/L	473.42	ppb	07:32:14
1	V 292.402†	40174.8	44441.4	517.04	µg/L	517.04	ppb	07:32:14
1	Zn 213.857†	18740.8	20082.6	489.17	µg/L	489.17	ppb	07:32:14
2	Sc RADIAL	108821.6	108821.6	95.8	%			07:31:46
2	Al 396.153Radial†	971610.1	1014546.5	530770	µg/L	530770	ppb	07:31:40
2	Ca 317.933Radial†	1206930.0	1259998.2	508370	µg/L	508370	ppb	07:31:40
2	Fe 238.204 Radial†	29060.7	30335.0	194970	µg/L	194970	ppb	07:31:46
2	K 766.490 Radial†	10320.2	10015.9	5322.2	µg/L	5322.2	ppb	07:31:46
2	Mg 279.077 IEC†	77663.5	81092.2	505870	µg/L	505870	ppb	07:31:46
2	Na 589.592 Radial†	19357.5	20894.7	5377.1	µg/L	5377.1	ppb	07:31:46
2	Sr 421.552†	94743.5	98968.1	518.24	µg/L	518.24	ppb	07:31:46
2	Sc 361.383	1885887.6	1885887.6	91.073	%			07:32:41
2	Y 371.029	1170366.2	1170366.2	89.425	%			07:32:41
2	Ag 328.068†	25452.2	27740.7	272.66	µg/L	272.66	ppb	07:32:47
2	As 188.979†	289.2	315.1	460.41	µg/L	460.41	ppb	07:33:07
2	B 249.677†	13093.2	14181.5	542.35	µg/L	542.35	ppb	07:32:47
2	Ba 233.527†	18033.2	19859.6	504.85	µg/L	504.85	ppb	07:32:47
2	Be 313.107†	362669.6	394452.9	242.67	µg/L	242.67	ppb	07:32:41
2	Cd 226.502†	17269.0	19059.8	479.29	µg/L	479.29	ppb	07:32:47
2	Co 228.616†	8285.1	9161.2	435.13	µg/L	435.13	ppb	07:33:07
2	Cr 267.716†	21241.3	23449.5	485.72	µg/L	485.72	ppb	07:32:47
2	Cu 324.752†	73814.7	76791.3	564.52	µg/L	564.52	ppb	07:32:47
2	Mn 257.610†	134451.1	147872.8	494.19	µg/L	494.19	ppb	07:32:47
2	Mo 202.031†	3824.1	4198.8	493.14	µg/L	493.14	ppb	07:33:07
2	Ni 231.604†	7649.3	8078.2	435.77	µg/L	435.77	ppb	07:33:07
2	P 214.914†	1357.2	1317.4	2536.2	µg/L	2536.2	ppb	07:33:07
2	Pb 220.353†	1625.8	1740.8	486.44	µg/L	486.44	ppb	07:33:07

2	S 181.975 Axial†	557.6	584.7	2778.0 µg/L	2778.0 ppb	07:33:07
2	Sb 206.836†	538.5	573.4	512.37 µg/L	512.37 ppb	07:33:07
2	Se 196.026†	1740.6	1895.3	2381.9 µg/L	2381.9 ppb	07:33:07
2	SiO2†	58656.7	61655.2	11295 µg/L	11295 ppb	07:32:47
2	Si 251.611†	65315.7	71344.0	5235.9 µg/L	5235.9 ppb	07:32:47
2	Sn 189.927†	524.6	554.2	547.14 µg/L	547.14 ppb	07:33:07
2	Ti 334.940†	218168.5	238554.9	514.07 µg/L	514.07 ppb	07:32:47
2	Tl 190.801†	294.3	340.1	413.37 µg/L	413.37 ppb	07:33:07
2	U 409.014†	5504.8	5396.8	469.21 µg/L	469.21 ppb	07:32:47
2	V 292.402†	40321.7	44437.3	517.18 µg/L	517.18 ppb	07:32:47
2	Zn 213.857†	18728.3	19991.7	486.32 µg/L	486.32 ppb	07:32:47
3	Sc RADIAL	108974.3	108974.3	95.9 %		07:31:57
3	Al 396.153Radial†	980756.6	1022663.3	535010 µg/L	535010 ppb	07:31:52
3	Ca 317.933Radial†	1221358.7	1273279.3	513720 µg/L	513720 ppb	07:31:52
3	Fe 238.204 Radial†	28780.5	30000.3	192820 µg/L	192820 ppb	07:31:57
3	K 766.490 Radial†	10087.3	9758.0	5185.1 µg/L	5185.1 ppb	07:31:57
3	Mg 279.077 IEC†	77053.6	80342.5	501190 µg/L	501190 ppb	07:31:57
3	Na 589.592 Radial†	19271.7	20776.9	5346.8 µg/L	5346.8 ppb	07:31:57
3	Sr 421.552†	93849.1	97896.8	512.63 µg/L	512.63 ppb	07:31:57
3	Sc 361.383	1897657.8	1897657.8	91.642 %		07:33:14
3	Y 371.029	1173225.9	1173225.9	89.643 %		07:33:14
3	Ag 328.068†	25143.4	27230.3	267.76 µg/L	267.76 ppb	07:33:20
3	As 188.979†	290.8	314.9	459.60 µg/L	459.60 ppb	07:33:40
3	B 249.677†	12947.4	13933.3	532.46 µg/L	532.46 ppb	07:33:20
3	Ba 233.527†	17820.5	19504.7	495.84 µg/L	495.84 ppb	07:33:20
3	Be 313.107†	362175.8	391444.1	240.82 µg/L	240.82 ppb	07:33:14
3	Cd 226.502†	16964.7	18610.2	467.81 µg/L	467.81 ppb	07:33:20
3	Co 228.616†	8332.0	9155.9	434.90 µg/L	434.90 ppb	07:33:40
3	Cr 267.716†	20848.1	22875.8	473.85 µg/L	473.85 ppb	07:33:20
3	Cu 324.752†	73117.0	75527.3	555.45 µg/L	555.45 ppb	07:33:20
3	Mn 257.610†	132933.4	145301.0	485.75 µg/L	485.75 ppb	07:33:20
3	Mo 202.031†	3849.9	4200.9	493.30 µg/L	493.30 ppb	07:33:40
3	Ni 231.604†	7681.0	8060.6	434.82 µg/L	434.82 ppb	07:33:40
3	P 214.914†	1369.4	1321.5	2549.6 µg/L	2549.6 ppb	07:33:40
3	Pb 220.353†	1640.3	1745.5	488.05 µg/L	488.05 ppb	07:33:40
3	S 181.975 Axial†	555.4	578.5	2748.5 µg/L	2748.5 ppb	07:33:40
3	Sb 206.836†	537.1	568.2	506.77 µg/L	506.77 ppb	07:33:40
3	Se 196.026†	1741.1	1884.0	2368.8 µg/L	2368.8 ppb	07:33:40
3	SiO2†	57954.5	60489.5	11082 µg/L	11082 ppb	07:33:20
3	Si 251.611†	64647.4	70170.0	5149.2 µg/L	5149.2 ppb	07:33:20
3	Sn 189.927†	538.1	565.3	552.60 µg/L	552.60 ppb	07:33:40
3	Ti 334.940†	215949.5	234647.7	504.88 µg/L	504.88 ppb	07:33:20
3	Tl 190.801†	306.0	350.8	428.40 µg/L	428.40 ppb	07:33:40
3	U 409.014†	5520.1	5376.0	467.83 µg/L	467.83 ppb	07:33:20
3	V 292.402†	39942.0	43748.3	509.30 µg/L	509.30 ppb	07:33:20
3	Zn 213.857†	18561.4	19682.1	478.58 µg/L	478.58 ppb	07:33:20

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1887462.4	91.149	%	0.4591				0.50%
Sc RADIAL	109633.7	96.5	%	1.12				1.16%
Y 371.029	1169516.2	89.360	%	0.3209				0.36%
Ag 328.068†	27536.4	270.64	µg/L	2.560	270.64	ppb	2.560	0.95%
QC value within limits for Ag 328.068 Recovery = 108.26%								
Al 396.153Radial†	1011106.4	528970	µg/L	7118.9	528970	ppb	7118.9	1.35%
QC value within limits for Al 396.153Radial Recovery = 105.79%								
As 188.979†	311.7	454.89	µg/L	8.870	454.89	ppb	8.870	1.95%
QC value within limits for As 188.979 Recovery = 90.98%								
B 249.677†	14087.9	538.86	µg/L	5.554	538.86	ppb	5.554	1.03%
QC value within limits for B 249.677 Recovery = 107.77%								
Ba 233.527†	19744.5	501.93	µg/L	5.279	501.93	ppb	5.279	1.05%
QC value within limits for Ba 233.527 Recovery = 100.39%								
Be 313.107†	393137.2	241.86	µg/L	0.946	241.86	ppb	0.946	0.39%
QC value within limits for Be 313.107 Recovery = 96.74%								
Ca 317.933Radial†	1256390.6	506910	µg/L	7646.5	506910	ppb	7646.5	1.51%
QC value within limits for Ca 317.933Radial Recovery = 101.38%								
Cd 226.502†	18917.8	475.74	µg/L	6.877	475.74	ppb	6.877	1.45%
QC value within limits for Cd 226.502 Recovery = 95.15%								
Co 228.616†	9177.6	435.92	µg/L	1.575	435.92	ppb	1.575	0.36%

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   QC value within limits for Co 228.616  Recovery = 87.18%
Cr 267.716†            23260.7      481.81 µg/L        6.899      481.81 ppb          6.899   1.43%
   QC value within limits for Cr 267.716  Recovery = 96.36%
Cu 324.752†            76269.0      560.62 µg/L        4.665      560.62 ppb          4.665   0.83%
   QC value within limits for Cu 324.752  Recovery = 112.12%
Fe 238.204 Radial†     30088.0      193390 µg/L       1393.8      193390 ppb         1393.8   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.69%
K 766.490 Radial†       9840.2      5228.8 µg/L        80.90      5228.8 ppb          80.90   1.55%
   QC value within limits for K 766.490 Radial  Recovery = 104.58%
Mg 279.077 IEC†        80441.4      501810 µg/L       3789.1      501810 ppb         3789.1   0.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.36%
Mn 257.610†           147035.1      491.33 µg/L        4.832      491.33 ppb          4.832   0.98%
   QC value within limits for Mn 257.610  Recovery = 98.27%
Mo 202.031†             4207.2      494.05 µg/L        1.445      494.05 ppb          1.445   0.29%
   QC value within limits for Mo 202.031  Recovery = 98.81%
Na 589.592 Radial†     20757.9      5341.9 µg/L        37.89      5341.9 ppb          37.89   0.71%
   QC value within limits for Na 589.592 Radial  Recovery = 106.84%
Ni 231.604†             8091.1      436.46 µg/L        2.085      436.46 ppb          2.085   0.48%
   QC value within limits for Ni 231.604  Recovery = 87.29%
P 214.914†              1324.7      2552.3 µg/L        17.60      2552.3 ppb          17.60   0.69%
   QC value within limits for P 214.914  Recovery = 102.09%
Pb 220.353†             1741.6      486.53 µg/L        1.482      486.53 ppb          1.482   0.30%
   QC value within limits for Pb 220.353  Recovery = 97.31%
S 181.975 Axial†         584.1      2776.0 µg/L        26.44      2776.0 ppb          26.44   0.95%
   QC value within limits for S 181.975 Axial  Recovery = 111.04%
Sb 206.836†              574.6      513.65 µg/L        7.595      513.65 ppb          7.595   1.48%
   QC value within limits for Sb 206.836  Recovery = 102.73%
Se 196.026†             1891.3      2377.3 µg/L         7.33      2377.3 ppb           7.33   0.31%
   QC value within limits for Se 196.026  Recovery = 95.09%
SiO2†                  61291.4       11229 µg/L        127.4       11229 ppb          127.4   1.13%
   QC value within limits for SiO2  Recovery = 104.99%
Si 251.611†            70944.0      5206.4 µg/L        49.52      5206.4 ppb          49.52   0.95%
   QC value within limits for Si 251.611  Recovery = 104.13%
Sn 189.927†              557.3      547.19 µg/L        5.380      547.19 ppb          5.380   0.98%
   QC value within limits for Sn 189.927  Recovery = 109.44%
Sr 421.552†            98153.7      513.98 µg/L        3.776      513.98 ppb          3.776   0.73%
   QC value within limits for Sr 421.552  Recovery = 102.80%
Ti 334.940†           237149.6      510.96 µg/L        5.261      510.96 ppb          5.261   1.03%
   QC value within limits for Ti 334.940  Recovery = 102.19%
Tl 190.801†              346.5      423.30 µg/L        8.600      423.30 ppb          8.600   2.03%
   QC value within limits for Tl 190.801  Recovery = 84.66%
U 409.014†              5404.3      470.15 µg/L        2.915      470.15 ppb          2.915   0.62%
   QC value within limits for U 409.014  Recovery = 94.03%
V 292.402†             44209.0      514.50 µg/L        4.512      514.50 ppb          4.512   0.88%
   QC value within limits for V 292.402  Recovery = 102.90%
Zn 213.857†            19918.8      484.69 µg/L        5.481      484.69 ppb          5.481   1.13%
   QC value within limits for Zn 213.857  Recovery = 96.94%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/7/2009 07:33:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109531.2	109531.2	96.4	%			07:34:30
1	Al 396.153Radial†	949259.9	984784.0	515210	µg/L	515210	ppb	07:34:25
1	Ca 317.933Radial†	1185797.6	1229907.4	496230	µg/L	496230	ppb	07:34:25
1	Fe 238.204 Radial†	69880.3	72491.0	465890	µg/L	465890	ppb	07:34:30
1	K 766.490 Radial†	768.8	36.0	19.148	µg/L	19.148	ppb	07:34:30
1	Mg 279.077 IEC†	76096.2	78940.7	492020	µg/L	492020	ppb	07:34:30
1	Na 589.592 Radial†	1850653.1	1920835.6	494310	µg/L	494310	ppb	07:34:25
1	Sr 421.552†	974.1	1036.2	5.4260	µg/L	5.4260	ppb	07:34:30
1	Sc 361.383	1874995.9	1874995.9	90.547	%			07:35:06
1	Y 371.029	1148496.8	1148496.8	87.754	%			07:35:06
1	Ag 328.068†	-3349.4	-3905.4	0.5851	µg/L	0.5851	ppb	07:35:12
1	As 188.979†	15.8	15.0	-116.09	µg/L	-116.09	ppb	07:35:33
1	B 249.677†	4089.7	4321.7	37.453	µg/L	37.453	ppb	07:35:12
1	Ba 233.527†	262.9	349.1	8.7240	µg/L	8.7240	ppb	07:35:33
1	Be 313.107†	-1858.1	-5816.8	-3.5967	µg/L	-3.5967	ppb	07:35:12
1	Cd 226.502†	1479.3	1731.9	18.844	µg/L	18.844	ppb	07:35:12
1	Co 228.616†	25.6	92.3	4.2401	µg/L	4.2401	ppb	07:35:33
1	Cr 267.716†	-345.0	-254.8	-5.4140	µg/L	-5.4140	ppb	07:35:33
1	Cu 324.752†	-7480.2	-12519.7	14.865	µg/L	14.865	ppb	07:35:12
1	Mn 257.610†	-13120.4	-14247.1	13.310	µg/L	13.310	ppb	07:35:12
1	Mo 202.031†	-191.2	-211.3	-6.1260	µg/L	-6.1260	ppb	07:35:33
1	Ni 231.604†	236.6	-59.6	-3.2155	µg/L	-3.2155	ppb	07:35:33
1	P 214.914†	361.0	225.9	96.905	µg/L	96.905	ppb	07:35:33
1	Pb 220.353†	-37.5	-85.9	5.3811	µg/L	5.3811	ppb	07:35:33
1	S 181.975 Axial†	63.5	42.6	70.199	µg/L	70.199	ppb	07:35:33
1	Sb 206.836†	52.8	40.4	1.0467	µg/L	1.0467	ppb	07:35:33
1	Se 196.026†	-126.8	-156.0	-3.2785	µg/L	-3.2785	ppb	07:35:33
1	SiO2†	2189.1	-333.3	-61.053	µg/L	-61.053	ppb	07:35:33
1	Si 251.611†	-264.4	-665.8	-39.972	µg/L	-39.972	ppb	07:35:33
1	Sn 189.927†	-464.4	-534.8	40.730	µg/L	40.730	ppb	07:35:33
1	Ti 334.940†	17252.7	18055.7	13.170	µg/L	13.170	ppb	07:35:12
1	Tl 190.801†	9.1	26.9	-57.905	µg/L	-57.905	ppb	07:35:33
1	U 409.014†	140850.8	154907.5	14092	µg/L	14092	ppb	07:35:12
1	V 292.402†	-5273.5	-5660.7	-2.5685	µg/L	-2.5685	ppb	07:35:12
1	Zn 213.857†	3093.4	2844.0	11.626	µg/L	11.626	ppb	07:35:33
2	Sc RADIAL	110129.5	110129.5	96.9	%			07:34:43
2	Al 396.153Radial†	951587.4	981835.2	513670	µg/L	513670	ppb	07:34:38
2	Ca 317.933Radial†	1191935.6	1229557.3	496080	µg/L	496080	ppb	07:34:38
2	Fe 238.204 Radial†	69819.2	72034.1	462960	µg/L	462960	ppb	07:34:43
2	K 766.490 Radial†	668.1	-72.2	-38.390	µg/L	-38.390	ppb	07:34:43
2	Mg 279.077 IEC†	76034.6	78448.1	488950	µg/L	488950	ppb	07:34:43
2	Na 589.592 Radial†	1856588.9	1916529.2	493200	µg/L	493200	ppb	07:34:38
2	Sr 421.552†	933.3	988.6	5.1767	µg/L	5.1767	ppb	07:34:43
2	Sc 361.383	1873515.4	1873515.4	90.476	%			07:35:39
2	Y 371.029	1146927.0	1146927.0	87.634	%			07:35:39
2	Ag 328.068†	-3344.1	-3902.5	0.3719	µg/L	0.3719	ppb	07:35:44
2	As 188.979†	17.2	16.6	-112.82	µg/L	-112.82	ppb	07:36:05
2	B 249.677†	4063.5	4296.3	37.297	µg/L	37.297	ppb	07:35:44
2	Ba 233.527†	242.1	326.4	8.1438	µg/L	8.1438	ppb	07:36:05
2	Be 313.107†	-1848.6	-5808.0	-3.5913	µg/L	-3.5913	ppb	07:35:44
2	Cd 226.502†	1460.9	1712.9	18.612	µg/L	18.612	ppb	07:35:44
2	Co 228.616†	21.9	88.2	4.0461	µg/L	4.0461	ppb	07:36:05
2	Cr 267.716†	-366.0	-278.3	-5.9026	µg/L	-5.9026	ppb	07:36:05
2	Cu 324.752†	-7561.7	-12616.2	13.577	µg/L	13.577	ppb	07:35:44
2	Mn 257.610†	-13038.2	-14167.6	13.193	µg/L	13.193	ppb	07:35:44
2	Mo 202.031†	-190.4	-210.5	-6.1495	µg/L	-6.1495	ppb	07:36:05
2	Ni 231.604†	262.8	-30.5	-1.6428	µg/L	-1.6428	ppb	07:36:05
2	P 214.914†	370.8	237.1	122.05	µg/L	122.05	ppb	07:36:05
2	Pb 220.353†	-41.2	-89.9	4.2219	µg/L	4.2219	ppb	07:36:05

2	S 181.975 Axial†	66.1	45.5	85.590 µg/L	85.590 ppb	07:36:05
2	Sb 206.836†	44.8	31.6	-7.4985 µg/L	-7.4985 ppb	07:36:05
2	Se 196.026†	-112.9	-140.7	15.108 µg/L	15.108 ppb	07:36:05
2	SiO2†	2157.5	-366.2	-67.097 µg/L	-67.097 ppb	07:36:05
2	Si 251.611†	-269.9	-672.1	-40.221 µg/L	-40.221 ppb	07:36:05
2	Sn 189.927†	-473.3	-544.9	34.415 µg/L	34.415 ppb	07:36:05
2	Ti 334.940†	17267.7	18087.4	13.250 µg/L	13.250 ppb	07:35:44
2	Tl 190.801†	8.0	25.7	-59.679 µg/L	-59.679 ppb	07:36:05
2	U 409.014†	141185.2	155400.0	14137 µg/L	14137 ppb	07:35:44
2	V 292.402†	-5360.2	-5761.2	-3.8586 µg/L	-3.8586 ppb	07:35:44
2	Zn 213.857†	3087.5	2840.2	11.915 µg/L	11.915 ppb	07:36:05
3	Sc RADIAL	108885.6	108885.6	95.8 %		07:34:56
3	Al 396.153Radial†	951492.6	992953.8	519490 µg/L	519490 ppb	07:34:50
3	Ca 317.933Radial†	1190084.1	1241675.8	500970 µg/L	500970 ppb	07:34:50
3	Fe 238.204 Radial†	70481.8	73548.7	472690 µg/L	472690 ppb	07:34:56
3	K 766.490 Radial†	729.4	-0.3	-0.1733 µg/L	-0.1733 ppb	07:34:56
3	Mg 279.077 IEC†	76823.3	80167.7	499670 µg/L	499670 ppb	07:34:56
3	Na 589.592 Radial†	1855435.2	1937211.1	498530 µg/L	498530 ppb	07:34:50
3	Sr 421.552†	936.5	1002.9	5.2515 µg/L	5.2515 ppb	07:34:56
3	Sc 361.383	1863384.9	1863384.9	89.986 %		07:36:11
3	Y 371.029	1143011.6	1143011.6	87.335 %		07:36:11
3	Ag 328.068†	-3418.0	-4004.7	0.2071 µg/L	0.2071 ppb	07:36:17
3	As 188.979†	26.6	27.1	-95.981 µg/L	-95.981 ppb	07:36:37
3	B 249.677†	4010.2	4261.4	32.751 µg/L	32.751 ppb	07:36:17
3	Ba 233.527†	276.4	366.0	9.1505 µg/L	9.1505 ppb	07:36:37
3	Be 313.107†	-1850.8	-5821.6	-3.5996 µg/L	-3.5996 ppb	07:36:17
3	Cd 226.502†	1458.0	1718.4	18.052 µg/L	18.052 ppb	07:36:17
3	Co 228.616†	32.8	100.4	4.6214 µg/L	4.6214 ppb	07:36:37
3	Cr 267.716†	-362.3	-276.4	-5.8620 µg/L	-5.8620 ppb	07:36:37
3	Cu 324.752†	-7523.0	-12618.7	15.651 µg/L	15.651 ppb	07:36:17
3	Mn 257.610†	-13196.8	-14422.2	13.608 µg/L	13.608 ppb	07:36:17
3	Mo 202.031†	-212.7	-236.5	-8.7706 µg/L	-8.7706 ppb	07:36:37
3	Ni 231.604†	237.0	-57.6	-3.1084 µg/L	-3.1084 ppb	07:36:37
3	P 214.914†	377.3	246.5	131.57 µg/L	131.57 ppb	07:36:37
3	Pb 220.353†	-32.1	-80.1	7.0390 µg/L	7.0390 ppb	07:36:37
3	S 181.975 Axial†	64.4	44.1	75.529 µg/L	75.529 ppb	07:36:37
3	Sb 206.836†	69.9	59.8	19.652 µg/L	19.652 ppb	07:36:37
3	Se 196.026†	-125.7	-155.7	-0.6106 µg/L	-0.6106 ppb	07:36:37
3	SiO2†	2192.5	-314.4	-57.600 µg/L	-57.600 ppb	07:36:37
3	Si 251.611†	-233.9	-633.8	-37.519 µg/L	-37.519 ppb	07:36:37
3	Sn 189.927†	-462.6	-536.0	44.155 µg/L	44.155 ppb	07:36:37
3	Ti 334.940†	17125.6	18033.2	12.852 µg/L	12.852 ppb	07:36:17
3	Tl 190.801†	-0.2	16.6	-74.284 µg/L	-74.284 ppb	07:36:37
3	U 409.014†	141174.3	156236.3	14212 µg/L	14212 ppb	07:36:17
3	V 292.402†	-5302.8	-5729.6	-2.6081 µg/L	-2.6081 ppb	07:36:17
3	Zn 213.857†	3096.1	2868.3	11.331 µg/L	11.331 ppb	07:36:37

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1870632.1	90.336	%	0.3052				0.34%
Sc RADIAL	109515.4	96.4	%	0.55				0.57%
Y 371.029	1146145.1	87.574	%	0.2158				0.25%
Ag 328.068†	-3937.5	0.3880	µg/L	0.18952	0.3880	ppb	0.18952	48.84%
Al 396.153Radial†	986524.3	516120	µg/L	3013.5	516120	ppb	3013.5	0.58%
QC value within limits for Al 396.153Radial Recovery = 103.22%								
As 188.979†	19.6	-108.29	µg/L	10.790	-108.29	ppb	10.790	9.96%
B 249.677†	4293.1	35.834	µg/L	2.6707	35.834	ppb	2.6707	7.45%
Ba 233.527†	347.2	8.6728	µg/L	0.50530	8.6728	ppb	0.50530	5.83%
Be 313.107†	-5815.5	-3.5959	µg/L	0.00422	-3.5959	ppb	0.00422	0.12%
Ca 317.933Radial†	1233713.5	497760	µg/L	2783.0	497760	ppb	2783.0	0.56%
QC value within limits for Ca 317.933Radial Recovery = 99.55%								
Cd 226.502†	1721.1	18.503	µg/L	0.4069	18.503	ppb	0.4069	2.20%
Co 228.616†	93.6	4.3025	µg/L	0.29267	4.3025	ppb	0.29267	6.80%
Cr 267.716†	-269.9	-5.7262	µg/L	0.27116	-5.7262	ppb	0.27116	4.74%
Cu 324.752†	-12584.9	14.698	µg/L	1.0472	14.698	ppb	1.0472	7.12%
Fe 238.204 Radial†	72691.3	467180	µg/L	4993.0	467180	ppb	4993.0	1.07%
QC value within limits for Fe 238.204 Radial Recovery = 93.44%								
K 766.490 Radial†	-12.2	-6.4721	µg/L	29.28157	-6.4721	ppb	29.28157	452.43%
Mg 279.077 IEC†	79185.5	493550	µg/L	5519.6	493550	ppb	5519.6	1.12%

QC value within limits for Mg 279.077 IEC Recovery = 98.71%

Mn 257.610†	-14279.0	13.371	µg/L	0.2140	13.371	ppb	0.2140	1.60%
Mo 202.031†	-219.5	-7.0154	µg/L	1.52014	-7.0154	ppb	1.52014	21.67%
Na 589.592 Radial†	1924858.6	495350	µg/L	2808.1	495350	ppb	2808.1	0.57%

QC value within limits for Na 589.592 Radial Recovery = 99.07%

Ni 231.604†	-49.2	-2.6556	µg/L	0.87869	-2.6556	ppb	0.87869	33.09%
P 214.914†	236.5	116.84	µg/L	17.910	116.84	ppb	17.910	15.33%
Pb 220.353†	-85.3	5.5473	µg/L	1.41588	5.5473	ppb	1.41588	25.52%
S 181.975 Axial†	44.0	77.106	µg/L	7.8158	77.106	ppb	7.8158	10.14%
Sb 206.836†	43.9	4.4001	µg/L	13.88237	4.4001	ppb	13.88237	315.50%
Se 196.026†	-150.8	3.7395	µg/L	9.93499	3.7395	ppb	9.93499	265.68%
SiO2†	-338.0	-61.917	µg/L	4.8073	-61.917	ppb	4.8073	7.76%
Si 251.611†	-657.2	-39.238	µg/L	1.4932	-39.238	ppb	1.4932	3.81%
Sn 189.927†	-538.6	39.766	µg/L	4.9408	39.766	ppb	4.9408	12.42%
Sr 421.552†	1009.2	5.2848	µg/L	0.12793	5.2848	ppb	0.12793	2.42%
Ti 334.940†	18058.8	13.090	µg/L	0.2106	13.090	ppb	0.2106	1.61%
Tl 190.801†	23.1	-63.956	µg/L	8.9883	-63.956	ppb	8.9883	14.05%
U 409.014†	155514.6	14147	µg/L	60.8	14147	ppb	60.8	0.43%

QC value within limits for U 409.014 Recovery = 94.31%

V 292.402†	-5717.2	-3.0117	µg/L	0.73366	-3.0117	ppb	0.73366	24.36%
Zn 213.857†	2850.9	11.624	µg/L	0.2922	11.624	ppb	0.2922	2.51%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/7/2009 07:36:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116882.2	116882.2	103	%			07:37:29
1	Al 396.153Radial†	1116.7	959.4	110.50	µg/L	110.50	ppb	07:37:29
1	Ca 317.933Radial†	883.6	435.1	175.56	µg/L	175.56	ppb	07:37:49
1	Fe 238.204 Radial†	22.5	8.1	382.11	µg/L	382.11	ppb	07:37:49
1	K 766.490 Radial†	579259.1	562452.8	298870	µg/L	298870	ppb	07:37:23
1	Mg 279.077 IEC†	-19.6	-32.4	54.406	µg/L	54.406	ppb	07:37:49
1	Na 589.592 Radial†	-43.8	636.7	163.84	µg/L	163.84	ppb	07:37:29
1	Sr 421.552†	1927394.4	1874034.0	9813.3	µg/L	9813.3	ppb	07:37:23
1	Sc 361.383	2007621.9	2007621.9	96.952	%			07:39:21
1	Y 371.029	1238730.8	1238730.8	94.648	%			07:39:21
1	Ag 328.068†	-7005.4	-7432.0	3.3696	µg/L	3.3696	ppb	07:39:21
1	As 188.979†	5508.8	5679.6	10201	µg/L	10201	ppb	07:39:26
1	B 249.677†	116640.5	120112.5	5112.7	µg/L	5112.7	ppb	07:39:21
1	Ba 233.527†	534374.0	551232.6	14006	µg/L	14006	ppb	07:39:21
1	Be 313.107†	4766520.6	4912607.7	3020.9	µg/L	3020.9	ppb	07:39:10
1	Cd 226.502†	376935.6	388884.1	10082	µg/L	10082	ppb	07:39:21
1	Co 228.616†	203297.6	209752.9	9964.9	µg/L	9964.9	ppb	07:39:21
1	Cr 267.716†	1178200.1	1215367.0	25138	µg/L	25138	ppb	07:39:21
1	Cu 324.752†	2998058.6	3088054.3	21017	µg/L	21017	ppb	07:39:21
1	Mn 257.610†	2979603.3	3073520.4	9762.3	µg/L	9762.3	ppb	07:39:21
1	Mo 202.031†	86310.4	89023.7	10293	µg/L	10293	ppb	07:39:21
1	Ni 231.604†	181445.4	186828.8	10078	µg/L	10078	ppb	07:39:21
1	P 214.914†	8802.9	8906.9	15428	µg/L	15428	ppb	07:39:26
1	Pb 220.353†	98741.5	101801.3	25869	µg/L	25869	ppb	07:39:21
1	S 181.975 Axial†	10668.8	10976.7	54047	µg/L	54047	ppb	07:39:26
1	Sb 206.836†	10768.3	11088.9	10750	µg/L	10750	ppb	07:39:26
1	Se 196.026†	7805.9	8035.4	10102	µg/L	10102	ppb	07:39:26
1	SiO2†	548835.1	563338.7	103210	µg/L	103210	ppb	07:39:21
1	Si 251.611†	630229.1	649668.7	46949	µg/L	46949	ppb	07:39:21
1	Sn 189.927†	21813.6	22477.5	11265	µg/L	11265	ppb	07:39:26
1	Ti 334.940†	4460314.9	4599542.1	10463	µg/L	10463	ppb	07:39:10
1	Tl 190.801†	6501.4	6722.7	10160	µg/L	10160	ppb	07:39:26
1	U 409.014†	1705.7	1111.7	101.67	µg/L	101.67	ppb	07:39:21
1	V 292.402†	902697.7	931240.4	10489	µg/L	10489	ppb	07:39:21
1	Zn 213.857†	567626.6	584899.6	15245	µg/L	15245	ppb	07:39:21
2	Sc RADIAL	113295.4	113295.4	99.7	%			07:38:00
2	Al 396.153Radial†	916.8	793.3	24.389	µg/L	24.389	ppb	07:38:00
2	Ca 317.933Radial†	776.2	354.6	143.05	µg/L	143.05	ppb	07:38:21
2	Fe 238.204 Radial†	13.3	-0.4	326.15	µg/L	326.15	ppb	07:38:21
2	K 766.490 Radial†	574441.5	575451.2	305780	µg/L	305780	ppb	07:37:55
2	Mg 279.077 IEC†	-26.9	-40.4	4.1360	µg/L	4.1360	ppb	07:38:21
2	Na 589.592 Radial†	-130.1	548.7	141.21	µg/L	141.21	ppb	07:38:00
2	Sr 421.552†	1909445.4	1915358.8	10030	µg/L	10030	ppb	07:37:55
2	Sc 361.383	2021886.8	2021886.8	97.641	%			07:39:45
2	Y 371.029	1252035.6	1252035.6	95.665	%			07:39:45
2	Ag 328.068†	-7058.3	-7435.2	3.1513	µg/L	3.1513	ppb	07:39:45
2	As 188.979†	5467.9	5597.5	10054	µg/L	10054	ppb	07:39:51
2	B 249.677†	117283.6	119922.4	5104.6	µg/L	5104.6	ppb	07:39:45
2	Ba 233.527†	537031.5	550065.7	13976	µg/L	13976	ppb	07:39:45
2	Be 313.107†	4737371.3	4848067.9	2981.2	µg/L	2981.2	ppb	07:39:35
2	Cd 226.502†	378919.7	388173.1	10063	µg/L	10063	ppb	07:39:45
2	Co 228.616†	203935.6	208926.9	9925.8	µg/L	9925.8	ppb	07:39:45
2	Cr 267.716†	1183362.8	1212080.6	25070	µg/L	25070	ppb	07:39:45
2	Cu 324.752†	3012028.6	3080544.8	20966	µg/L	20966	ppb	07:39:45
2	Mn 257.610†	2993016.2	3065574.6	9737.1	µg/L	9737.1	ppb	07:39:45
2	Mo 202.031†	86743.5	88839.2	10272	µg/L	10272	ppb	07:39:45
2	Ni 231.604†	182153.1	186233.3	10046	µg/L	10046	ppb	07:39:45
2	P 214.914†	8757.5	8796.4	15211	µg/L	15211	ppb	07:39:51
2	Pb 220.353†	99324.0	101679.3	25838	µg/L	25838	ppb	07:39:45

2	S 181.975 Axial†	10604.3	10833.0	53340 µg/L	53340 ppb	07:39:51
2	Sb 206.836†	10654.6	10894.1	10560 µg/L	10560 ppb	07:39:51
2	Se 196.026†	7776.2	7948.1	9992.4 µg/L	9992.4 ppb	07:39:51
2	SiO2†	551979.4	562565.1	103060 µg/L	103060 ppb	07:39:45
2	Si 251.611†	633699.7	648636.9	46879 µg/L	46879 ppb	07:39:45
2	Sn 189.927†	21751.1	22254.8	11154 µg/L	11154 ppb	07:39:51
2	Ti 334.940†	4438771.4	4545020.1	10339 µg/L	10339 ppb	07:39:35
2	Tl 190.801†	6475.4	6648.7	10048 µg/L	10048 ppb	07:39:51
2	U 409.014†	1746.2	1140.9	104.34 µg/L	104.34 ppb	07:39:45
2	V 292.402†	906754.2	928825.9	10462 µg/L	10462 ppb	07:39:45
2	Zn 213.857†	570258.0	583463.9	15208 µg/L	15208 ppb	07:39:45
3	Sc RADIAL	113522.1	113522.1	99.9 %		07:38:32
3	Al 396.153Radial†	921.6	796.3	30.281 µg/L	30.281 ppb	07:38:32
3	Ca 317.933Radial†	704.6	281.3	113.50 µg/L	113.50 ppb	07:38:53
3	Fe 238.204 Radial†	10.0	-3.7	301.50 µg/L	301.50 ppb	07:38:53
3	K 766.490 Radial†	585158.5	585029.0	310870 µg/L	310870 ppb	07:38:27
3	Mg 279.077 IEC†	-40.7	-54.2	-84.423 µg/L	-84.423 ppb	07:38:53
3	Na 589.592 Radial†	-251.1	427.9	110.11 µg/L	110.11 ppb	07:38:32
3	Sr 421.552†	1951208.7	1953342.0	10229 µg/L	10229 ppb	07:38:27
3	Sc 361.383	2022376.2	2022376.2	97.664 %		07:40:11
3	Y 371.029	1250760.3	1250760.3	95.568 %		07:40:11
3	Ag 328.068†	-6885.8	-7256.8	4.0306 µg/L	4.0306 ppb	07:40:11
3	As 188.979†	5361.3	5487.0	9855.7 µg/L	9855.7 ppb	07:40:16
3	B 249.677†	116726.6	119323.0	5079.1 µg/L	5079.1 ppb	07:40:11
3	Ba 233.527†	531817.9	544594.3	13837 µg/L	13837 ppb	07:40:11
3	Be 313.107†	4757723.7	4867732.9	2993.3 µg/L	2993.3 ppb	07:40:00
3	Cd 226.502†	375334.0	384407.8	9965.5 µg/L	9965.5 ppb	07:40:11
3	Co 228.616†	201925.8	206818.5	9825.4 µg/L	9825.4 ppb	07:40:11
3	Cr 267.716†	1167104.2	1195140.0	24720 µg/L	24720 ppb	07:40:11
3	Cu 324.752†	2985506.0	3052641.5	20776 µg/L	20776 ppb	07:40:11
3	Mn 257.610†	2960374.1	3031410.2	9628.5 µg/L	9628.5 ppb	07:40:11
3	Mo 202.031†	85809.2	87861.0	10159 µg/L	10159 ppb	07:40:11
3	Ni 231.604†	180171.7	184159.3	9934.2 µg/L	9934.2 ppb	07:40:11
3	P 214.914†	8501.6	8532.1	14700 µg/L	14700 ppb	07:40:16
3	Pb 220.353†	98510.5	100821.8	25620 µg/L	25620 ppb	07:40:11
3	S 181.975 Axial†	10413.1	10634.5	52363 µg/L	52363 ppb	07:40:16
3	Sb 206.836†	10487.5	10720.3	10392 µg/L	10392 ppb	07:40:16
3	Se 196.026†	7634.1	7800.7	9807.0 µg/L	9807.0 ppb	07:40:16
3	SiO2†	548007.9	558361.8	102290 µg/L	102290 ppb	07:40:11
3	Si 251.611†	629059.5	643728.8	46529 µg/L	46529 ppb	07:40:11
3	Sn 189.927†	21040.4	21521.7	10786 µg/L	10786 ppb	07:40:16
3	Ti 334.940†	4456011.3	4561572.2	10376 µg/L	10376 ppb	07:40:00
3	Tl 190.801†	6400.8	6570.7	9931.6 µg/L	9931.6 ppb	07:40:16
3	U 409.014†	1776.1	1171.0	107.10 µg/L	107.10 ppb	07:40:11
3	V 292.402†	897406.9	919030.4	10352 µg/L	10352 ppb	07:40:11
3	Zn 213.857†	564349.6	577272.9	15046 µg/L	15046 ppb	07:40:11

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017295.0	97.419	%	0.4047				0.42%
Sc RADIAL	114566.6	101	%	1.8				1.75%
Y 371.029	1247175.6	95.294	%	0.5609				0.59%
Ag 328.068†	-7374.7	3.5172	µg/L	0.45786	3.5172	ppb	0.45786	13.02%
Al 396.153Radial†	849.7	55.056	µg/L	48.1037	55.056	ppb	48.1037	87.37%
As 188.979†	5588.0	10037	µg/L	173.3	10037	ppb	173.3	1.73%
QC value within limits for As 188.979 Recovery = 100.37%								
B 249.677†	119786.0	5098.8	µg/L	17.53	5098.8	ppb	17.53	0.34%
QC value within limits for B 249.677 Recovery = 101.98%								
Ba 233.527†	548630.9	13940	µg/L	90.1	13940	ppb	90.1	0.65%
QC value within limits for Ba 233.527 Recovery = 92.93%								
Be 313.107†	4876136.2	2998.5	µg/L	20.34	2998.5	ppb	20.34	0.68%
QC value within limits for Be 313.107 Recovery = 99.95%								
Ca 317.933Radial†	357.0	144.04	µg/L	31.041	144.04	ppb	31.041	21.55%
Cd 226.502†	387155.0	10037	µg/L	62.4	10037	ppb	62.4	0.62%
QC value within limits for Cd 226.502 Recovery = 100.37%								
Co 228.616†	208499.4	9905.4	µg/L	71.98	9905.4	ppb	71.98	0.73%
QC value within limits for Co 228.616 Recovery = 99.05%								
Cr 267.716†	1207529.2	24976	µg/L	224.5	24976	ppb	224.5	0.90%
QC value within limits for Cr 267.716 Recovery = 99.91%								

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Cu 324.752†          3073746.8       20920 µg/L        127.0       20920 ppb          127.0   0.61%
   QC value within limits for Cu 324.752  Recovery = 104.60%
Fe 238.204 Radial†         1.4      336.59 µg/L       41.304      336.59 ppb        41.304  12.27%
K 766.490 Radial†     574311.0      305170 µg/L       6021.0      305170 ppb        6021.0   1.97%
   QC value within limits for K 766.490 Radial  Recovery = 101.72%
Mg 279.077 IEC†          -42.3     -8.6273 µg/L     70.28904     -8.6273 ppb      70.28904 814.73%
Mn 257.610†          3056835.0      9709.3 µg/L        71.07      9709.3 ppb         71.07   0.73%
   QC value within limits for Mn 257.610  Recovery = 97.09%
Mo 202.031†            88574.6       10241 µg/L         72.2       10241 ppb          72.2   0.71%
   QC value within limits for Mo 202.031  Recovery = 102.41%
Na 589.592 Radial†       537.8      138.39 µg/L       26.975      138.39 ppb        26.975  19.49%
Ni 231.604†           185740.4       10020 µg/L         75.6       10020 ppb          75.6   0.75%
   QC value within limits for Ni 231.604  Recovery = 100.20%
P 214.914†              8745.1       15113 µg/L        374.0       15113 ppb         374.0   2.47%
   QC value within limits for P 214.914  Recovery = 100.75%
Pb 220.353†           101434.1       25775 µg/L        135.7       25775 ppb         135.7   0.53%
   QC value within limits for Pb 220.353  Recovery = 103.10%
S 181.975 Axial†       10814.7       53250 µg/L        845.9       53250 ppb         845.9   1.59%
   QC value within limits for S 181.975 Axial  Recovery = 106.50%
Sb 206.836†            10901.1       10567 µg/L        179.4       10567 ppb         179.4   1.70%
   QC value within limits for Sb 206.836  Recovery = 105.67%
Se 196.026†             7928.1      9967.2 µg/L       149.15      9967.2 ppb        149.15   1.50%
   QC value within limits for Se 196.026  Recovery = 99.67%
SiO2†                 561421.9      102850 µg/L        490.7      102850 ppb         490.7   0.48%
   QC value within limits for SiO2  Recovery = 96.13%
Si 251.611†           647344.8       46786 µg/L        225.0       46786 ppb         225.0   0.48%
   QC value within limits for Si 251.611  Recovery = 93.57%
Sn 189.927†            22084.7       11068 µg/L        250.7       11068 ppb         250.7   2.26%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.68%
Sr 421.552†          1914244.9       10024 µg/L        207.7       10024 ppb         207.7   2.07%
   QC value within limits for Sr 421.552  Recovery = 100.24%
Ti 334.940†          4568711.5       10393 µg/L         63.6       10393 ppb          63.6   0.61%
   QC value within limits for Ti 334.940  Recovery = 103.93%
Tl 190.801†             6647.4       10047 µg/L        114.4       10047 ppb         114.4   1.14%
   QC value within limits for Tl 190.801  Recovery = 100.47%
U 409.014†              1141.2      104.37 µg/L        2.715      104.37 ppb         2.715   2.60%
V 292.402†            926365.6       10434 µg/L         72.8       10434 ppb          72.8   0.70%
   QC value within limits for V 292.402  Recovery = 104.34%
Zn 213.857†           581878.8       15166 µg/L        105.6       15166 ppb         105.6   0.70%
   QC value within limits for Zn 213.857  Recovery = 101.11%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 07:40:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113963.1	113963.1	100	%			07:41:03
1	Al 396.153Radial†	10544.2	10388.5	5415.3	µg/L	5415.3	ppb	07:41:03
1	Ca 317.933Radial†	14114.8	13651.4	5507.9	µg/L	5507.9	ppb	07:41:03
1	Fe 238.204 Radial†	851.1	835.0	5383.5	µg/L	5383.5	ppb	07:41:23
1	K 766.490 Radial†	10697.1	9905.6	5263.5	µg/L	5263.5	ppb	07:41:03
1	Mg 279.077 IEC†	890.7	874.8	5465.0	µg/L	5465.0	ppb	07:41:23
1	Na 589.592 Radial†	40999.1	41563.8	10696	µg/L	10696	ppb	07:41:03
1	Sr 421.552†	99921.1	99667.5	521.90	µg/L	521.90	ppb	07:41:03
1	Sc 361.383	2057760.9	2057760.9	99.373	%			07:42:27
1	Y 371.029	1298678.4	1298678.4	99.229	%			07:42:27
1	Ag 328.068†	56900.8	57053.3	526.06	µg/L	526.06	ppb	07:42:33
1	As 188.979†	286.2	285.5	511.21	µg/L	511.21	ppb	07:42:53
1	B 249.677†	12241.3	12123.5	514.36	µg/L	514.36	ppb	07:42:33
1	Ba 233.527†	20093.0	20278.5	515.52	µg/L	515.52	ppb	07:42:33
1	Be 313.107†	820004.4	821411.0	505.56	µg/L	505.56	ppb	07:42:27
1	Cd 226.502†	19687.4	19909.7	516.09	µg/L	516.09	ppb	07:42:33
1	Co 228.616†	10710.4	10841.9	515.07	µg/L	515.07	ppb	07:42:33
1	Cr 267.716†	24529.1	24810.0	513.87	µg/L	513.87	ppb	07:42:33
1	Cu 324.752†	77960.9	74194.0	506.12	µg/L	506.12	ppb	07:42:33
1	Mn 257.610†	158597.7	159841.0	508.37	µg/L	508.37	ppb	07:42:27
1	Mo 202.031†	4447.9	4475.8	517.72	µg/L	517.72	ppb	07:42:53
1	Ni 231.604†	9806.4	9547.3	515.02	µg/L	515.02	ppb	07:42:33
1	P 214.914†	1447.7	1284.1	2506.4	µg/L	2506.4	ppb	07:42:53
1	Pb 220.353†	2076.5	2045.2	520.48	µg/L	520.48	ppb	07:42:53
1	S 181.975 Axial†	241.0	214.9	1056.7	µg/L	1056.7	ppb	07:42:53
1	Sb 206.836†	548.8	534.4	521.19	µg/L	521.19	ppb	07:42:53
1	Se 196.026†	424.0	410.7	518.64	µg/L	518.64	ppb	07:42:53
1	SiO2†	32756.1	30211.8	5534.9	µg/L	5534.9	ppb	07:42:33
1	Si 251.611†	35074.5	34921.9	2532.7	µg/L	2532.7	ppb	07:42:33
1	Sn 189.927†	1067.8	1052.7	531.05	µg/L	531.05	ppb	07:42:53
1	Ti 334.940†	230222.5	230676.3	524.42	µg/L	524.42	ppb	07:42:27
1	Tl 190.801†	317.5	336.3	507.26	µg/L	507.26	ppb	07:42:53
1	U 409.014†	6152.6	5543.9	506.14	µg/L	506.14	ppb	07:42:33
1	V 292.402†	45391.2	45840.8	517.66	µg/L	517.66	ppb	07:42:33
1	Zn 213.857†	20303.6	19859.4	516.30	µg/L	516.30	ppb	07:42:33
2	Sc RADIAL	114643.8	114643.8	101	%			07:41:29
2	Al 396.153Radial†	10358.7	10142.2	5286.3	µg/L	5286.3	ppb	07:41:29
2	Ca 317.933Radial†	13839.1	13294.4	5363.8	µg/L	5363.8	ppb	07:41:29
2	Fe 238.204 Radial†	840.4	819.4	5283.0	µg/L	5283.0	ppb	07:41:50
2	K 766.490 Radial†	10557.3	9703.7	5156.2	µg/L	5156.2	ppb	07:41:29
2	Mg 279.077 IEC†	892.5	871.3	5443.3	µg/L	5443.3	ppb	07:41:50
2	Na 589.592 Radial†	40588.4	40913.9	10529	µg/L	10529	ppb	07:41:29
2	Sr 421.552†	99023.6	98186.1	514.15	µg/L	514.15	ppb	07:41:29
2	Sc 361.383	2047410.0	2047410.0	98.873	%			07:43:01
2	Y 371.029	1299457.9	1299457.9	99.288	%			07:43:01
2	Ag 328.068†	56309.2	56744.4	523.20	µg/L	523.20	ppb	07:43:06
2	As 188.979†	286.3	287.1	514.10	µg/L	514.10	ppb	07:43:27
2	B 249.677†	12066.8	12009.3	509.53	µg/L	509.53	ppb	07:43:06
2	Ba 233.527†	19850.6	20135.5	511.88	µg/L	511.88	ppb	07:43:06
2	Be 313.107†	825749.0	831392.8	511.70	µg/L	511.70	ppb	07:43:01
2	Cd 226.502†	19473.1	19793.2	513.08	µg/L	513.08	ppb	07:43:06
2	Co 228.616†	10593.4	10778.0	512.04	µg/L	512.04	ppb	07:43:06
2	Cr 267.716†	24296.3	24699.4	511.58	µg/L	511.58	ppb	07:43:06
2	Cu 324.752†	77252.0	73873.7	503.91	µg/L	503.91	ppb	07:43:06
2	Mn 257.610†	159564.4	161625.5	514.03	µg/L	514.03	ppb	07:43:01
2	Mo 202.031†	4460.0	4510.7	521.75	µg/L	521.75	ppb	07:43:27
2	Ni 231.604†	9664.7	9453.9	509.98	µg/L	509.98	ppb	07:43:06
2	P 214.914†	1455.7	1299.6	2537.6	µg/L	2537.6	ppb	07:43:27
2	Pb 220.353†	2090.6	2070.0	526.79	µg/L	526.79	ppb	07:43:27

2	S 181.975 Axial†	239.9	215.1	1057.6 µg/L	1057.6 ppb	07:43:27
2	Sb 206.836†	560.3	548.8	535.30 µg/L	535.30 ppb	07:43:27
2	Se 196.026†	417.7	406.5	513.26 µg/L	513.26 ppb	07:43:27
2	SiO2†	32367.5	29985.5	5493.4 µg/L	5493.4 ppb	07:43:06
2	Si 251.611†	34744.8	34766.9	2521.0 µg/L	2521.0 ppb	07:43:06
2	Sn 189.927†	1062.8	1053.0	531.16 µg/L	531.16 ppb	07:43:27
2	Ti 334.940†	230897.4	232530.2	528.65 µg/L	528.65 ppb	07:43:01
2	Tl 190.801†	324.2	344.8	520.02 µg/L	520.02 ppb	07:43:27
2	U 409.014†	6164.4	5587.1	510.10 µg/L	510.10 ppb	07:43:06
2	V 292.402†	44932.6	45607.9	515.08 µg/L	515.08 ppb	07:43:06
2	Zn 213.857†	20040.2	19696.3	512.07 µg/L	512.07 ppb	07:43:06
3	Sc RADIAL	114173.0	114173.0	100 %		07:41:55
3	Al 396.153Radial†	10432.8	10258.2	5347.5 µg/L	5347.5 ppb	07:41:55
3	Ca 317.933Radial†	13900.8	13412.4	5411.5 µg/L	5411.5 ppb	07:41:55
3	Fe 238.204 Radial†	837.5	819.9	5286.3 µg/L	5286.3 ppb	07:42:16
3	K 766.490 Radial†	10455.8	9645.7	5125.5 µg/L	5125.5 ppb	07:41:55
3	Mg 279.077 IEC†	882.2	864.7	5402.2 µg/L	5402.2 ppb	07:42:16
3	Na 589.592 Radial†	40566.0	41057.6	10566 µg/L	10566 ppb	07:41:55
3	Sr 421.552†	98943.6	98511.3	515.85 µg/L	515.85 ppb	07:41:55
3	Sc 361.383	2048547.9	2048547.9	98.928 %		07:43:34
3	Y 371.029	1288338.4	1288338.4	98.439 %		07:43:34
3	Ag 328.068†	56499.2	56904.8	524.67 µg/L	524.67 ppb	07:43:40
3	As 188.979†	284.5	285.1	510.49 µg/L	510.49 ppb	07:44:00
3	B 249.677†	12047.1	11982.7	508.40 µg/L	508.40 ppb	07:43:40
3	Ba 233.527†	19856.6	20130.5	511.76 µg/L	511.76 ppb	07:43:40
3	Be 313.107†	821549.5	826683.9	508.81 µg/L	508.81 ppb	07:43:34
3	Cd 226.502†	19412.6	19721.0	511.21 µg/L	511.21 ppb	07:43:40
3	Co 228.616†	10614.3	10793.2	512.73 µg/L	512.73 ppb	07:43:40
3	Cr 267.716†	24349.1	24739.0	512.40 µg/L	512.40 ppb	07:43:40
3	Cu 324.752†	77376.5	73956.1	504.48 µg/L	504.48 ppb	07:43:40
3	Mn 257.610†	158812.0	160775.4	511.33 µg/L	511.33 ppb	07:43:34
3	Mo 202.031†	4337.1	4383.9	507.09 µg/L	507.09 ppb	07:44:00
3	Ni 231.604†	9706.1	9490.3	511.94 µg/L	511.94 ppb	07:43:40
3	P 214.914†	1424.2	1266.8	2472.1 µg/L	2472.1 ppb	07:44:00
3	Pb 220.353†	2025.9	2003.4	509.84 µg/L	509.84 ppb	07:44:00
3	S 181.975 Axial†	234.2	209.2	1028.3 µg/L	1028.3 ppb	07:44:00
3	Sb 206.836†	545.0	533.0	519.89 µg/L	519.89 ppb	07:44:00
3	Se 196.026†	421.4	410.0	517.67 µg/L	517.67 ppb	07:44:00
3	SiO2†	32389.9	29989.9	5494.2 µg/L	5494.2 ppb	07:43:40
3	Si 251.611†	34762.9	34765.7	2521.6 µg/L	2521.6 ppb	07:43:40
3	Sn 189.927†	1047.3	1036.8	523.00 µg/L	523.00 ppb	07:44:00
3	Ti 334.940†	229385.2	230871.9	524.87 µg/L	524.87 ppb	07:43:34
3	Tl 190.801†	318.0	338.3	510.27 µg/L	510.27 ppb	07:44:00
3	U 409.014†	6137.8	5556.7	507.32 µg/L	507.32 ppb	07:43:40
3	V 292.402†	44973.1	45623.6	515.15 µg/L	515.15 ppb	07:43:40
3	Zn 213.857†	20049.3	19694.2	512.00 µg/L	512.00 ppb	07:43:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2051239.6	99.058	%	0.2741				0.28%
Sc RADIAL	114259.9	101	%	0.3				0.31%
Y 371.029	1295491.6	98.985	%	0.4743				0.48%
Ag 328.068†	56900.8	524.64	µg/L	1.426	524.64	ppb	1.426	0.27%
QC value within limits for Ag 328.068 Recovery = 104.93%								
Al 396.153Radial†	10262.9	5349.7	µg/L	64.54	5349.7	ppb	64.54	1.21%
QC value within limits for Al 396.153Radial Recovery = 106.99%								
As 188.979†	285.9	511.93	µg/L	1.910	511.93	ppb	1.910	0.37%
QC value within limits for As 188.979 Recovery = 102.39%								
B 249.677†	12038.5	510.76	µg/L	3.167	510.76	ppb	3.167	0.62%
QC value within limits for B 249.677 Recovery = 102.15%								
Ba 233.527†	20181.5	513.05	µg/L	2.135	513.05	ppb	2.135	0.42%
QC value within limits for Ba 233.527 Recovery = 102.61%								
Be 313.107†	826495.9	508.69	µg/L	3.074	508.69	ppb	3.074	0.60%
QC value within limits for Be 313.107 Recovery = 101.74%								
Ca 317.933Radial†	13452.7	5427.7	µg/L	73.37	5427.7	ppb	73.37	1.35%
QC value within limits for Ca 317.933Radial Recovery = 108.55%								
Cd 226.502†	19808.0	513.46	µg/L	2.462	513.46	ppb	2.462	0.48%
QC value within limits for Cd 226.502 Recovery = 102.69%								
Co 228.616†	10804.4	513.28	µg/L	1.589	513.28	ppb	1.589	0.31%

```
   QC value within limits for Co 228.616  Recovery = 102.66%
Cr 267.716†            24749.5      512.61 µg/L        1.162      512.61 ppb          1.162   0.23%
   QC value within limits for Cr 267.716  Recovery = 102.52%
Cu 324.752†            74008.0      504.83 µg/L        1.144      504.83 ppb          1.144   0.23%
   QC value within limits for Cu 324.752  Recovery = 100.97%
Fe 238.204 Radial†       824.8      5317.6 µg/L       57.13      5317.6 ppb          57.13   1.07%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.35%
K 766.490 Radial†       9751.7      5181.7 µg/L       72.49      5181.7 ppb          72.49   1.40%
   QC value within limits for K 766.490 Radial  Recovery = 103.63%
Mg 279.077 IEC†          870.3      5436.8 µg/L       31.89      5436.8 ppb          31.89   0.59%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.74%
Mn 257.610†           160747.3      511.24 µg/L       2.829      511.24 ppb          2.829   0.55%
   QC value within limits for Mn 257.610  Recovery = 102.25%
Mo 202.031†             4456.8      515.52 µg/L       7.572      515.52 ppb          7.572   1.47%
   QC value within limits for Mo 202.031  Recovery = 103.10%
Na 589.592 Radial†     41178.4       10597 µg/L        87.9       10597 ppb           87.9   0.83%
   QC value within limits for Na 589.592 Radial  Recovery = 105.97%
Ni 231.604†             9497.1      512.31 µg/L       2.540      512.31 ppb          2.540   0.50%
   QC value within limits for Ni 231.604  Recovery = 102.46%
P 214.914†              1283.5      2505.4 µg/L       32.77      2505.4 ppb          32.77   1.31%
   QC value within limits for P 214.914  Recovery = 100.21%
Pb 220.353†             2039.5      519.04 µg/L       8.566      519.04 ppb          8.566   1.65%
   QC value within limits for Pb 220.353  Recovery = 103.81%
S 181.975 Axial†         213.1      1047.6 µg/L       16.68      1047.6 ppb          16.68   1.59%
   QC value within limits for S 181.975 Axial  Recovery = 104.76%
Sb 206.836†              538.7      525.46 µg/L       8.548      525.46 ppb          8.548   1.63%
   QC value within limits for Sb 206.836  Recovery = 105.09%
Se 196.026†              409.1      516.52 µg/L       2.872      516.52 ppb          2.872   0.56%
   QC value within limits for Se 196.026  Recovery = 103.30%
SiO2†                   30062.4      5507.5 µg/L       23.71      5507.5 ppb          23.71   0.43%
   QC value within limits for SiO2  Recovery = 102.99%
Si 251.611†             34818.1      2525.1 µg/L        6.56      2525.1 ppb           6.56   0.26%
   QC value within limits for Si 251.611  Recovery = 101.00%
Sn 189.927†             1047.5      528.40 µg/L       4.678      528.40 ppb          4.678   0.89%
   QC value within limits for Sn 189.927  Recovery = 105.68%
Sr 421.552†            98788.3      517.30 µg/L       4.077      517.30 ppb          4.077   0.79%
   QC value within limits for Sr 421.552  Recovery = 103.46%
Ti 334.940†           231359.5      525.98 µg/L       2.320      525.98 ppb          2.320   0.44%
   QC value within limits for Ti 334.940  Recovery = 105.20%
Tl 190.801†              339.8      512.51 µg/L       6.670      512.51 ppb          6.670   1.30%
   QC value within limits for Tl 190.801  Recovery = 102.50%
U 409.014†              5562.5      507.85 µg/L       2.037      507.85 ppb          2.037   0.40%
   QC value within limits for U 409.014  Recovery = 101.57%
V 292.402†             45690.7      515.96 µg/L       1.469      515.96 ppb          1.469   0.28%
   QC value within limits for V 292.402  Recovery = 103.19%
Zn 213.857†            19749.9      513.46 µg/L       2.463      513.46 ppb          2.463   0.48%
   QC value within limits for Zn 213.857  Recovery = 102.69%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 07:44:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112469.1	112469.1	99.0	%			07:44:42
1	Al 396.153Radial†	129.2	4.3	2.2134	µg/L	2.2134	ppb	07:44:42
1	Ca 317.933Radial†	513.1	94.4	38.086	µg/L	38.086	ppb	07:45:02
1	Fe 238.204 Radial†	18.9	5.4	34.781	µg/L	34.781	ppb	07:45:02
1	K 766.490 Radial†	717.5	-36.6	-19.454	µg/L	-19.454	ppb	07:44:42
1	Mg 279.077 IEC†	28.1	15.0	93.468	µg/L	93.468	ppb	07:45:02
1	Na 589.592 Radial†	-595.1	78.0	20.065	µg/L	20.065	ppb	07:44:42
1	Sr 421.552†	-24.4	0.8	0.0042	µg/L	0.0042	ppb	07:44:42
1	Sc 361.383	2063598.4	2063598.4	99.655	%			07:46:04
1	Y 371.029	1303289.7	1303289.7	99.581	%			07:46:04
1	Ag 328.068†	203.0	-2.6	-0.0144	µg/L	-0.0144	ppb	07:46:10
1	As 188.979†	6.3	3.8	6.8764	µg/L	6.8764	ppb	07:46:30
1	B 249.677†	282.7	88.6	3.7622	µg/L	3.7622	ppb	07:46:10
1	Ba 233.527†	-55.0	3.6	0.0938	µg/L	0.0938	ppb	07:46:30
1	Be 313.107†	4049.3	298.5	0.1827	µg/L	0.1827	ppb	07:46:10
1	Cd 226.502†	-73.3	24.6	0.6366	µg/L	0.6366	ppb	07:46:30
1	Co 228.616†	-57.7	6.1	0.2841	µg/L	0.2841	ppb	07:46:30
1	Cr 267.716†	-68.8	57.2	1.1843	µg/L	1.1843	ppb	07:46:10
1	Cu 324.752†	4444.6	201.4	1.3782	µg/L	1.3782	ppb	07:46:10
1	Mn 257.610†	-14.5	228.5	0.7301	µg/L	0.7301	ppb	07:46:10
1	Mo 202.031†	3.9	3.8	0.4404	µg/L	0.4404	ppb	07:46:30
1	Ni 231.604†	297.8	-22.1	-1.1924	µg/L	-1.1924	ppb	07:46:30
1	P 214.914†	184.2	12.0	23.843	µg/L	23.843	ppb	07:46:30
1	Pb 220.353†	56.2	11.9	3.0274	µg/L	3.0274	ppb	07:46:30
1	S 181.975 Axial†	30.1	2.7	13.076	µg/L	13.076	ppb	07:46:30
1	Sb 206.836†	18.0	0.2	0.1763	µg/L	0.1763	ppb	07:46:30
1	Se 196.026†	20.2	4.3	5.4573	µg/L	5.4573	ppb	07:46:30
1	SiO2†	2800.9	59.7	10.938	µg/L	10.938	ppb	07:46:10
1	Si 251.611†	413.1	40.8	2.8188	µg/L	2.8188	ppb	07:46:30
1	Sn 189.927†	26.6	4.8	2.4520	µg/L	2.4520	ppb	07:46:30
1	Ti 334.940†	2240.9	1250.5	2.8425	µg/L	2.8425	ppb	07:46:10
1	Tl 190.801†	-21.9	-5.0	-7.5609	µg/L	-7.5609	ppb	07:46:30
1	U 409.014†	702.0	56.8	5.1893	µg/L	5.1893	ppb	07:46:10
1	V 292.402†	-76.5	86.5	0.9816	µg/L	0.9816	ppb	07:46:10
1	Zn 213.857†	621.7	51.6	1.3491	µg/L	1.3491	ppb	07:46:30
2	Sc RADIAL	113193.8	113193.8	99.6	%			07:45:08
2	Al 396.153Radial†	186.7	61.2	31.975	µg/L	31.975	ppb	07:45:08
2	Ca 317.933Radial†	514.7	92.7	37.414	µg/L	37.414	ppb	07:45:28
2	Fe 238.204 Radial†	18.5	4.8	31.098	µg/L	31.098	ppb	07:45:28
2	K 766.490 Radial†	798.0	39.5	20.982	µg/L	20.982	ppb	07:45:08
2	Mg 279.077 IEC†	20.1	6.8	42.354	µg/L	42.354	ppb	07:45:28
2	Na 589.592 Radial†	-533.1	144.0	37.052	µg/L	37.052	ppb	07:45:08
2	Sr 421.552†	-17.3	8.1	0.0424	µg/L	0.0424	ppb	07:45:08
2	Sc 361.383	2066027.9	2066027.9	99.773	%			07:46:36
2	Y 371.029	1306748.6	1306748.6	99.846	%			07:46:36
2	Ag 328.068†	227.3	21.4	0.2019	µg/L	0.2019	ppb	07:46:42
2	As 188.979†	-3.1	-5.5	-9.9081	µg/L	-9.9081	ppb	07:47:02
2	B 249.677†	293.5	99.2	4.2119	µg/L	4.2119	ppb	07:46:42
2	Ba 233.527†	-40.1	18.6	0.4729	µg/L	0.4729	ppb	07:47:02
2	Be 313.107†	3913.0	157.1	0.0959	µg/L	0.0959	ppb	07:46:42
2	Cd 226.502†	-60.7	37.3	0.9575	µg/L	0.9575	ppb	07:47:02
2	Co 228.616†	-53.3	10.6	0.4994	µg/L	0.4994	ppb	07:47:02
2	Cr 267.716†	-121.6	4.3	0.0906	µg/L	0.0906	ppb	07:46:42
2	Cu 324.752†	4330.5	81.8	0.5637	µg/L	0.5637	ppb	07:46:42
2	Mn 257.610†	-134.7	108.0	0.3471	µg/L	0.3471	ppb	07:46:42
2	Mo 202.031†	7.7	7.5	0.8700	µg/L	0.8700	ppb	07:47:02
2	Ni 231.604†	309.1	-11.1	-0.5988	µg/L	-0.5988	ppb	07:47:02
2	P 214.914†	179.1	6.7	13.384	µg/L	13.384	ppb	07:47:02
2	Pb 220.353†	54.7	10.3	2.6352	µg/L	2.6352	ppb	07:47:02

2	S 181.975 Axial†	25.5	-2.0	-9.7847 µg/L	-9.7847 ppb	07:47:02
2	Sb 206.836†	24.8	6.9	6.7792 µg/L	6.7792 ppb	07:47:02
2	Se 196.026†	11.1	-4.8	-6.0499 µg/L	-6.0499 ppb	07:47:02
2	SiO2†	2763.9	19.4	3.5473 µg/L	3.5473 ppb	07:46:42
2	Si 251.611†	415.0	42.2	2.9659 µg/L	2.9659 ppb	07:47:02
2	Sn 189.927†	24.5	2.7	1.4007 µg/L	1.4007 ppb	07:47:02
2	Ti 334.940†	1929.9	936.2	2.1275 µg/L	2.1275 ppb	07:46:42
2	Tl 190.801†	-21.2	-4.4	-6.6012 µg/L	-6.6012 ppb	07:47:02
2	U 409.014†	569.4	-76.9	-7.0400 µg/L	-7.0400 ppb	07:46:42
2	V 292.402†	-121.9	41.1	0.4570 µg/L	0.4570 ppb	07:46:42
2	Zn 213.857†	626.7	55.9	1.4621 µg/L	1.4621 ppb	07:47:02
3	Sc RADIAL	113368.8	113368.8	99.8 %		07:45:34
3	Al 396.153Radial†	192.7	66.9	34.956 µg/L	34.956 ppb	07:45:34
3	Ca 317.933Radial†	495.3	72.5	29.235 µg/L	29.235 ppb	07:45:54
3	Fe 238.204 Radial†	20.9	7.2	46.569 µg/L	46.569 ppb	07:45:54
3	K 766.490 Radial†	794.6	34.8	18.512 µg/L	18.512 ppb	07:45:34
3	Mg 279.077 IEC†	19.7	6.3	39.405 µg/L	39.405 ppb	07:45:54
3	Na 589.592 Radial†	-580.2	97.6	25.121 µg/L	25.121 ppb	07:45:34
3	Sr 421.552†	50.4	76.0	0.3978 µg/L	0.3978 ppb	07:45:34
3	Sc 361.383	2058005.0	2058005.0	99.385 %		07:47:08
3	Y 371.029	1304780.3	1304780.3	99.695 %		07:47:08
3	Ag 328.068†	154.3	-51.1	-0.4589 µg/L	-0.4589 ppb	07:47:14
3	As 188.979†	2.2	-0.2	-0.3686 µg/L	-0.3686 ppb	07:47:35
3	B 249.677†	281.5	88.2	3.7401 µg/L	3.7401 ppb	07:47:14
3	Ba 233.527†	-43.6	14.9	0.3798 µg/L	0.3798 ppb	07:47:35
3	Be 313.107†	3974.8	234.6	0.1436 µg/L	0.1436 ppb	07:47:14
3	Cd 226.502†	-74.5	23.2	0.5979 µg/L	0.5979 ppb	07:47:35
3	Co 228.616†	-58.8	4.8	0.2267 µg/L	0.2267 ppb	07:47:35
3	Cr 267.716†	-104.7	20.9	0.4330 µg/L	0.4330 ppb	07:47:14
3	Cu 324.752†	4326.6	94.8	0.6553 µg/L	0.6553 ppb	07:47:14
3	Mn 257.610†	-80.8	161.7	0.5195 µg/L	0.5195 ppb	07:47:14
3	Mo 202.031†	9.4	9.3	1.0749 µg/L	1.0749 ppb	07:47:35
3	Ni 231.604†	315.2	-3.7	-0.2019 µg/L	-0.2019 ppb	07:47:35
3	P 214.914†	164.7	-7.0	-14.148 µg/L	-14.148 ppb	07:47:35
3	Pb 220.353†	51.0	6.9	1.7465 µg/L	1.7465 ppb	07:47:35
3	S 181.975 Axial†	28.9	1.6	7.6977 µg/L	7.6977 ppb	07:47:35
3	Sb 206.836†	22.6	4.8	4.7086 µg/L	4.7086 ppb	07:47:35
3	Se 196.026†	9.7	-6.2	-7.7588 µg/L	-7.7588 ppb	07:47:35
3	SiO2†	2767.3	33.5	6.1401 µg/L	6.1401 ppb	07:47:14
3	Si 251.611†	409.2	37.9	2.6758 µg/L	2.6758 ppb	07:47:35
3	Sn 189.927†	22.6	0.8	0.4442 µg/L	0.4442 ppb	07:47:35
3	Ti 334.940†	2025.5	1039.9	2.3639 µg/L	2.3639 ppb	07:47:14
3	Tl 190.801†	-11.4	5.4	8.1602 µg/L	8.1602 ppb	07:47:35
3	U 409.014†	659.6	16.1	1.4671 µg/L	1.4671 ppb	07:47:14
3	V 292.402†	-91.7	71.0	0.8083 µg/L	0.8083 ppb	07:47:14
3	Zn 213.857†	621.8	53.4	1.3939 µg/L	1.3939 ppb	07:47:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2062543.8	99.604	%	0.1987				0.20%
Sc RADIAL	113010.6	99.4	%	0.42				0.42%
Y 371.029	1304939.6	99.707	%	0.1326				0.13%
Ag 328.068†	-10.8	-0.0905	µg/L	0.33687	-0.0905	ppb	0.33687	372.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	44.1	23.048	µg/L	18.1047	23.048	ppb	18.1047	78.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-1.1335	µg/L	8.41835	-1.1335	ppb	8.41835	742.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	92.0	3.9047	µg/L	0.26623	3.9047	ppb	0.26623	6.82%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.4	0.3155	µg/L	0.19757	0.3155	ppb	0.19757	62.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	230.1	0.1407	µg/L	0.04345	0.1407	ppb	0.04345	30.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	86.5	34.911	µg/L	4.9275	34.911	ppb	4.9275	14.11%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	28.4	0.7306	µg/L	0.19744	0.7306	ppb	0.19744	27.02%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	7.2	0.3367	µg/L	0.14380	0.3367	ppb	0.14380	42.70%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              27.5      0.5693 µg/L       0.55948      0.5693 ppb        0.55948  98.27%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             126.0      0.8657 µg/L       0.44614      0.8657 ppb        0.44614  51.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       5.8      37.483 µg/L        8.0818     37.483 ppb         8.0818  21.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       12.6      6.6801 µg/L      22.66606      6.6801 ppb       22.66606 339.31%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          9.4      58.409 µg/L       30.3978     58.409 ppb        30.3978  52.04%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             166.1      0.5323 µg/L       0.19184      0.5323 ppb        0.19184  36.04%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              6.9      0.7951 µg/L       0.32381      0.7951 ppb        0.32381  40.72%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      106.5      27.413 µg/L        8.7223     27.413 ppb         8.7223  31.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -12.3     -0.6644 µg/L       0.49852     -0.6644 ppb        0.49852  75.03%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               3.9      7.6932 µg/L      19.62467      7.6932 ppb       19.62467 255.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              9.7      2.4697 µg/L       0.65629      2.4697 ppb        0.65629  26.57%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         0.7      3.6629 µg/L      11.95236      3.6629 ppb       11.95236 326.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              4.0      3.8880 µg/L       3.37708      3.8880 ppb        3.37708  86.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -2.2     -2.7838 µg/L       7.18796     -2.7838 ppb        7.18796 258.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   37.5      6.8751 µg/L       3.74982      6.8751 ppb        3.74982  54.54%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             40.3      2.8202 µg/L       0.14506      2.8202 ppb        0.14506   5.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              2.8      1.4323 µg/L       1.00428      1.4323 ppb        1.00428  70.12%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             28.3      0.1481 µg/L       0.21709      0.1481 ppb        0.21709 146.57%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            1075.5      2.4446 µg/L       0.36429      2.4446 ppb        0.36429  14.90%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -1.3     -2.0006 µg/L       8.81262     -2.0006 ppb        8.81262 440.49%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -1.3     -0.1279 µg/L       6.26873     -0.1279 ppb        6.26873 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              66.2      0.7490 µg/L       0.26729      0.7490 ppb        0.26729  35.69%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             53.6      1.4017 µg/L       0.05690      1.4017 ppb        0.05690   4.06%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/7/2009 08:16:39 **Plasma On Time: 12/6/2009 23:29:48**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\120709.sif
Batch ID:
Results Data Set: 120709
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/7/2009 06:41:35**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 08:16:42**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114585.9	114585.9	101	%			08:17:16
1	Al 396.153Radial†	10398.1	10186.4	5309.6	µg/L	5309.6	ppb	08:17:16
1	Ca 317.933Radial†	13514.4	12979.3	5236.7	µg/L	5236.7	ppb	08:17:16
1	Fe 238.204 Radial†	806.4	786.1	5068.7	µg/L	5068.7	ppb	08:17:36

1	K 766.490 Radial†	10503.5	9655.6	5130.7 µg/L	5130.7 ppb	08:17:16
1	Mg 279.077 IEC†	853.1	832.7	5202.8 µg/L	5202.8 ppb	08:17:36
1	Na 589.592 Radial†	40514.3	40860.7	10515 µg/L	10515 ppb	08:17:16
1	Sr 421.552†	98610.2	97825.8	512.26 µg/L	512.26 ppb	08:17:16
1	Sc 361.383	2016383.4	2016383.4	97.375 %		08:18:39
1	Y 371.029	1265970.0	1265970.0	96.730 %		08:18:39
1	Ag 328.068†	55928.3	57229.6	527.63 µg/L	527.63 ppb	08:18:45
1	As 188.979†	281.8	286.9	513.77 µg/L	513.77 ppb	08:19:06
1	B 249.677†	11723.4	11844.4	502.58 µg/L	502.58 ppb	08:18:45
1	Ba 233.527†	19392.9	19974.5	507.80 µg/L	507.80 ppb	08:18:45
1	Be 313.107†	800300.7	818109.4	503.53 µg/L	503.53 ppb	08:18:39
1	Cd 226.502†	18881.3	19488.4	505.20 µg/L	505.20 ppb	08:18:45
1	Co 228.616†	10358.8	10702.0	508.44 µg/L	508.44 ppb	08:18:45
1	Cr 267.716†	23767.3	24534.2	508.16 µg/L	508.16 ppb	08:18:45
1	Cu 324.752†	76893.1	74707.4	509.54 µg/L	509.54 ppb	08:18:45
1	Mn 257.610†	153912.8	158304.8	503.45 µg/L	503.45 ppb	08:18:45
1	Mo 202.031†	4344.6	4461.5	516.05 µg/L	516.05 ppb	08:19:06
1	Ni 231.604†	9461.9	9396.0	506.86 µg/L	506.86 ppb	08:18:45
1	P 214.914†	1422.1	1287.6	2513.2 µg/L	2513.2 ppb	08:19:06
1	Pb 220.353†	1998.4	2007.8	510.96 µg/L	510.96 ppb	08:19:06
1	S 181.975 Axial†	231.0	209.7	1030.9 µg/L	1030.9 ppb	08:19:06
1	Sb 206.836†	540.8	537.5	524.23 µg/L	524.23 ppb	08:19:06
1	Se 196.026†	417.1	412.4	520.55 µg/L	520.55 ppb	08:19:06
1	SiO2†	31724.4	29828.7	5464.7 µg/L	5464.7 ppb	08:18:45
1	Si 251.611†	34103.5	34649.0	2513.1 µg/L	2513.1 ppb	08:18:45
1	Sn 189.927†	1031.6	1037.5	523.27 µg/L	523.27 ppb	08:19:06
1	Ti 334.940†	222540.5	227541.4	517.31 µg/L	517.31 ppb	08:18:39
1	Tl 190.801†	310.4	335.6	506.18 µg/L	506.18 ppb	08:19:06
1	U 409.014†	6100.7	5617.6	512.93 µg/L	512.93 ppb	08:18:45
1	V 292.402†	44227.6	45583.2	514.75 µg/L	514.75 ppb	08:18:45
1	Zn 213.857†	19560.0	19515.0	507.36 µg/L	507.36 ppb	08:18:45
2	Sc RADIAL	112514.4	112514.4	99.0 %		08:17:42
2	Al 396.153Radial†	10211.4	10187.6	5310.4 µg/L	5310.4 ppb	08:17:42
2	Ca 317.933Radial†	13270.0	12979.3	5236.7 µg/L	5236.7 ppb	08:17:42
2	Fe 238.204 Radial†	806.0	800.4	5160.9 µg/L	5160.9 ppb	08:18:02
2	K 766.490 Radial†	10377.2	9719.8	5164.8 µg/L	5164.8 ppb	08:17:42
2	Mg 279.077 IEC†	855.7	850.9	5316.2 µg/L	5316.2 ppb	08:18:02
2	Na 589.592 Radial†	39976.7	41057.5	10566 µg/L	10566 ppb	08:17:42
2	Sr 421.552†	96916.3	97915.5	512.73 µg/L	512.73 ppb	08:17:42
2	Sc 361.383	2028982.6	2028982.6	97.984 %		08:19:13
2	Y 371.029	1276410.3	1276410.3	97.527 %		08:19:13
2	Ag 328.068†	55897.1	56841.1	524.06 µg/L	524.06 ppb	08:19:18
2	As 188.979†	270.6	273.7	490.08 µg/L	490.08 ppb	08:19:39
2	B 249.677†	11712.2	11758.2	498.89 µg/L	498.89 ppb	08:19:18
2	Ba 233.527†	19429.6	19888.3	505.60 µg/L	505.60 ppb	08:19:18
2	Be 313.107†	806441.8	819273.3	504.25 µg/L	504.25 ppb	08:19:13
2	Cd 226.502†	18859.2	19345.5	501.49 µg/L	501.49 ppb	08:19:18
2	Co 228.616†	10367.1	10644.4	505.69 µg/L	505.69 ppb	08:19:18
2	Cr 267.716†	23764.1	24379.3	504.96 µg/L	504.96 ppb	08:19:18
2	Cu 324.752†	76944.0	74269.0	506.58 µg/L	506.58 ppb	08:19:18
2	Mn 257.610†	154035.5	157448.6	500.74 µg/L	500.74 ppb	08:19:18
2	Mo 202.031†	4352.1	4441.5	513.75 µg/L	513.75 ppb	08:19:39
2	Ni 231.604†	9492.4	9366.8	505.28 µg/L	505.28 ppb	08:19:18
2	P 214.914†	1416.0	1272.4	2483.0 µg/L	2483.0 ppb	08:19:39
2	Pb 220.353†	2013.2	2010.2	511.57 µg/L	511.57 ppb	08:19:39
2	S 181.975 Axial†	229.1	206.3	1014.2 µg/L	1014.2 ppb	08:19:39
2	Sb 206.836†	542.1	535.3	522.16 µg/L	522.16 ppb	08:19:39
2	Se 196.026†	409.9	402.4	508.08 µg/L	508.08 ppb	08:19:39
2	SiO2†	31739.3	29641.6	5430.4 µg/L	5430.4 ppb	08:19:18
2	Si 251.611†	34088.0	34415.7	2495.9 µg/L	2495.9 ppb	08:19:18
2	Sn 189.927†	1033.8	1033.2	521.16 µg/L	521.16 ppb	08:19:39
2	Ti 334.940†	224607.1	228231.4	518.88 µg/L	518.88 ppb	08:19:13
2	Tl 190.801†	317.1	340.5	513.58 µg/L	513.58 ppb	08:19:39
2	U 409.014†	6163.9	5643.2	515.26 µg/L	515.26 ppb	08:19:18
2	V 292.402†	44239.7	45313.4	511.73 µg/L	511.73 ppb	08:19:18
2	Zn 213.857†	19472.9	19301.3	501.76 µg/L	501.76 ppb	08:19:18
3	Sc RADIAL	114836.5	114836.5	101 %		08:18:08
3	Al 396.153Radial†	10288.7	10055.7	5241.9 µg/L	5241.9 ppb	08:18:08
3	Ca 317.933Radial†	13428.9	12865.5	5190.8 µg/L	5190.8 ppb	08:18:08
3	Fe 238.204 Radial†	799.0	777.0	5010.2 µg/L	5010.2 ppb	08:18:28
3	K 766.490 Radial†	10492.5	9621.9	5112.8 µg/L	5112.8 ppb	08:18:08

3	Mg 279.077 IEC†	846.7	824.5	5151.3 µg/L	5151.3 ppb	08:18:28
3	Na 589.592 Radial†	40265.1	40526.5	10429 µg/L	10429 ppb	08:18:08
3	Sr 421.552†	97760.3	96771.2	506.74 µg/L	506.74 ppb	08:18:08
3	Sc 361.383	2037119.3	2037119.3	98.376 %		08:19:45
3	Y 371.029	1279548.3	1279548.3	97.767 %		08:19:45
3	Ag 328.068†	55943.7	56660.6	522.38 µg/L	522.38 ppb	08:19:51
3	As 188.979†	274.5	276.6	495.29 µg/L	495.29 ppb	08:20:12
3	B 249.677†	11764.0	11763.2	499.14 µg/L	499.14 ppb	08:19:51
3	Ba 233.527†	19405.5	19784.6	502.97 µg/L	502.97 ppb	08:19:51
3	Be 313.107†	802217.3	811691.6	499.58 µg/L	499.58 ppb	08:19:45
3	Cd 226.502†	18926.2	19336.7	501.26 µg/L	501.26 ppb	08:19:51
3	Co 228.616†	10367.8	10602.8	503.70 µg/L	503.70 ppb	08:19:51
3	Cr 267.716†	23745.4	24263.5	502.56 µg/L	502.56 ppb	08:19:51
3	Cu 324.752†	76774.0	73782.5	503.23 µg/L	503.23 ppb	08:19:51
3	Mn 257.610†	154035.5	156820.6	498.73 µg/L	498.73 ppb	08:19:51
3	Mo 202.031†	4246.6	4316.5	499.28 µg/L	499.28 ppb	08:20:12
3	Ni 231.604†	9437.4	9272.2	500.18 µg/L	500.18 ppb	08:19:51
3	P 214.914†	1388.3	1238.5	2415.6 µg/L	2415.6 ppb	08:20:12
3	Pb 220.353†	1969.4	1957.4	498.13 µg/L	498.13 ppb	08:20:12
3	S 181.975 Axial†	224.3	200.4	985.38 µg/L	985.38 ppb	08:20:12
3	Sb 206.836†	533.3	524.2	511.32 µg/L	511.32 ppb	08:20:12
3	Se 196.026†	405.1	395.9	499.80 µg/L	499.80 ppb	08:20:12
3	SiO2†	31768.0	29541.4	5412.1 µg/L	5412.1 ppb	08:19:51
3	Si 251.611†	34034.7	34222.6	2482.7 µg/L	2482.7 ppb	08:19:51
3	Sn 189.927†	1007.9	1002.7	505.75 µg/L	505.75 ppb	08:20:12
3	Ti 334.940†	223235.1	225921.1	513.62 µg/L	513.62 ppb	08:19:45
3	Tl 190.801†	310.6	332.7	501.72 µg/L	501.72 ppb	08:20:12
3	U 409.014†	6058.7	5511.1	503.20 µg/L	503.20 ppb	08:19:51
3	V 292.402†	44254.6	45148.3	509.75 µg/L	509.75 ppb	08:19:51
3	Zn 213.857†	19517.3	19267.2	500.91 µg/L	500.91 ppb	08:19:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027495.1	97.912	%	0.5045				0.52%
Sc RADIAL	113978.9	100	%	1.1				1.12%
Y 371.029	1273976.2	97.341	%	0.5432				0.56%
Ag 328.068†	56910.5	524.69	µg/L	2.679	524.69	ppb	2.679	0.51%
QC value within limits for Ag 328.068 Recovery = 104.94%								
Al 396.153Radial†	10143.2	5287.3	µg/L	39.34	5287.3	ppb	39.34	0.74%
QC value within limits for Al 396.153Radial Recovery = 105.75%								
As 188.979†	279.1	499.71	µg/L	12.445	499.71	ppb	12.445	2.49%
QC value within limits for As 188.979 Recovery = 99.94%								
B 249.677†	11788.6	500.20	µg/L	2.065	500.20	ppb	2.065	0.41%
QC value within limits for B 249.677 Recovery = 100.04%								
Ba 233.527†	19882.5	505.46	µg/L	2.417	505.46	ppb	2.417	0.48%
QC value within limits for Ba 233.527 Recovery = 101.09%								
Be 313.107†	816358.1	502.45	µg/L	2.513	502.45	ppb	2.513	0.50%
QC value within limits for Be 313.107 Recovery = 100.49%								
Ca 317.933Radial†	12941.4	5221.4	µg/L	26.51	5221.4	ppb	26.51	0.51%
QC value within limits for Ca 317.933Radial Recovery = 104.43%								
Cd 226.502†	19390.2	502.65	µg/L	2.210	502.65	ppb	2.210	0.44%
QC value within limits for Cd 226.502 Recovery = 100.53%								
Co 228.616†	10649.7	505.94	µg/L	2.380	505.94	ppb	2.380	0.47%
QC value within limits for Co 228.616 Recovery = 101.19%								
Cr 267.716†	24392.3	505.22	µg/L	2.812	505.22	ppb	2.812	0.56%
QC value within limits for Cr 267.716 Recovery = 101.04%								
Cu 324.752†	74252.9	506.45	µg/L	3.155	506.45	ppb	3.155	0.62%
QC value within limits for Cu 324.752 Recovery = 101.29%								
Fe 238.204 Radial†	787.8	5079.9	µg/L	75.97	5079.9	ppb	75.97	1.50%
QC value within limits for Fe 238.204 Radial Recovery = 101.60%								
K 766.490 Radial†	9665.8	5136.1	µg/L	26.41	5136.1	ppb	26.41	0.51%
QC value within limits for K 766.490 Radial Recovery = 102.72%								
Mg 279.077 IEC†	836.0	5223.4	µg/L	84.35	5223.4	ppb	84.35	1.61%
QC value within limits for Mg 279.077 IEC Recovery = 104.47%								
Mn 257.610†	157524.7	500.98	µg/L	2.369	500.98	ppb	2.369	0.47%
QC value within limits for Mn 257.610 Recovery = 100.20%								
Mo 202.031†	4406.5	509.69	µg/L	9.091	509.69	ppb	9.091	1.78%
QC value within limits for Mo 202.031 Recovery = 101.94%								
Na 589.592 Radial†	40814.9	10503	µg/L	69.1	10503	ppb	69.1	0.66%

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   QC value within limits for Na 589.592 Radial  Recovery = 105.03%
Ni 231.604†            9345.0      504.10 µg/L        3.493      504.10 ppb        3.493   0.69%
   QC value within limits for Ni 231.604  Recovery = 100.82%
P 214.914†             1266.2      2470.6 µg/L       49.99      2470.6 ppb        49.99   2.02%
   QC value within limits for P 214.914  Recovery = 98.82%
Pb 220.353†            1991.8      506.89 µg/L        7.589      506.89 ppb        7.589   1.50%
   QC value within limits for Pb 220.353  Recovery = 101.38%
S 181.975 Axial†        205.5      1010.2 µg/L       23.04      1010.2 ppb        23.04   2.28%
   QC value within limits for S 181.975 Axial  Recovery = 101.02%
Sb 206.836†             532.3      519.24 µg/L        6.932      519.24 ppb        6.932   1.34%
   QC value within limits for Sb 206.836  Recovery = 103.85%
Se 196.026†             403.6      509.48 µg/L       10.443      509.48 ppb       10.443   2.05%
   QC value within limits for Se 196.026  Recovery = 101.90%
SiO2†                  29670.6     5435.7 µg/L       26.72      5435.7 ppb        26.72   0.49%
   QC value within limits for SiO2  Recovery = 101.65%
Si 251.611†            34429.1     2497.2 µg/L       15.26      2497.2 ppb        15.26   0.61%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†            1024.5      516.73 µg/L        9.562      516.73 ppb        9.562   1.85%
   QC value within limits for Sn 189.927  Recovery = 103.35%
Sr 421.552†            97504.2     510.58 µg/L        3.332      510.58 ppb        3.332   0.65%
   QC value within limits for Sr 421.552  Recovery = 102.12%
Ti 334.940†           227231.3     516.60 µg/L        2.696      516.60 ppb        2.696   0.52%
   QC value within limits for Ti 334.940  Recovery = 103.32%
Tl 190.801†             336.3      507.16 µg/L        5.993      507.16 ppb        5.993   1.18%
   QC value within limits for Tl 190.801  Recovery = 101.43%
U 409.014†             5590.7      510.46 µg/L        6.395      510.46 ppb        6.395   1.25%
   QC value within limits for U 409.014  Recovery = 102.09%
V 292.402†            45348.3      512.08 µg/L        2.519      512.08 ppb        2.519   0.49%
   QC value within limits for V 292.402  Recovery = 102.42%
Zn 213.857†           19361.2      503.34 µg/L        3.503      503.34 ppb        3.503   0.70%
   QC value within limits for Zn 213.857  Recovery = 100.67%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 08:20:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112793.2	112793.2	99.3	%			08:20:54
1	Al 396.153Radial†	147.2	22.0	11.526	µg/L	11.526	ppb	08:20:54
1	Ca 317.933Radial†	422.6	1.7	0.7020	µg/L	0.7020	ppb	08:21:15
1	Fe 238.204 Radial†	15.8	2.2	14.040	µg/L	14.040	ppb	08:21:15
1	K 766.490 Radial†	676.8	-79.8	-42.382	µg/L	-42.382	ppb	08:20:54
1	Mg 279.077 IEC†	18.4	5.1	31.857	µg/L	31.857	ppb	08:21:15
1	Na 589.592 Radial†	-603.1	71.6	18.414	µg/L	18.414	ppb	08:20:54
1	Sr 421.552†	-33.4	-8.2	-0.0428	µg/L	-0.0428	ppb	08:20:54
1	Sc 361.383	2041497.8	2041497.8	98.588	%			08:22:17
1	Y 371.029	1288555.2	1288555.2	98.455	%			08:22:17
1	Ag 328.068†	236.3	33.3	0.3073	µg/L	0.3073	ppb	08:22:22
1	As 188.979†	-1.7	-4.2	-7.5617	µg/L	-7.5617	ppb	08:22:43
1	B 249.677†	192.8	0.6	0.0209	µg/L	0.0209	ppb	08:22:43
1	Ba 233.527†	-58.7	-0.7	-0.0186	µg/L	-0.0186	ppb	08:22:43
1	Be 313.107†	3674.4	-37.8	-0.0234	µg/L	-0.0234	ppb	08:22:22
1	Cd 226.502†	-89.0	7.9	0.1997	µg/L	0.1997	ppb	08:22:43
1	Co 228.616†	-68.6	-5.6	-0.2663	µg/L	-0.2663	ppb	08:22:43
1	Cr 267.716†	-150.0	-25.9	-0.5347	µg/L	-0.5347	ppb	08:22:22
1	Cu 324.752†	4190.5	-8.0	-0.0515	µg/L	-0.0515	ppb	08:22:22
1	Mn 257.610†	-235.9	3.8	0.0138	µg/L	0.0138	ppb	08:22:43
1	Mo 202.031†	-2.3	-2.4	-0.2827	µg/L	-0.2827	ppb	08:22:43
1	Ni 231.604†	299.0	-17.6	-0.9508	µg/L	-0.9508	ppb	08:22:43
1	P 214.914†	170.6	0.2	0.4603	µg/L	0.4603	ppb	08:22:43
1	Pb 220.353†	40.2	-3.6	-0.9224	µg/L	-0.9224	ppb	08:22:43
1	S 181.975 Axial†	27.4	0.2	1.0964	µg/L	1.0964	ppb	08:22:43
1	Sb 206.836†	16.9	-0.8	-0.7859	µg/L	-0.7859	ppb	08:22:43
1	Se 196.026†	7.4	-8.5	-10.629	µg/L	-10.629	ppb	08:22:43
1	SiO2†	2698.1	-14.1	-2.5871	µg/L	-2.5871	ppb	08:22:22
1	Si 251.611†	357.2	-11.5	-0.8388	µg/L	-0.8388	ppb	08:22:43
1	Sn 189.927†	21.5	-0.0	0.0045	µg/L	0.0045	ppb	08:22:43
1	Ti 334.940†	1106.8	124.6	0.2833	µg/L	0.2833	ppb	08:22:22
1	Tl 190.801†	-17.2	-0.5	-0.7719	µg/L	-0.7719	ppb	08:22:43
1	U 409.014†	591.2	-47.9	-4.3878	µg/L	-4.3878	ppb	08:22:22
1	V 292.402†	-146.2	15.0	0.1597	µg/L	0.1597	ppb	08:22:22
1	Zn 213.857†	564.3	0.1	0.0044	µg/L	0.0044	ppb	08:22:43
2	Sc RADIAL	111823.4	111823.4	98.4	%			08:21:20
2	Al 396.153Radial†	136.2	12.1	6.3471	µg/L	6.3471	ppb	08:21:20
2	Ca 317.933Radial†	409.2	-8.2	-3.3006	µg/L	-3.3006	ppb	08:21:41
2	Fe 238.204 Radial†	14.0	0.6	3.5611	µg/L	3.5611	ppb	08:21:41
2	K 766.490 Radial†	691.3	-59.1	-31.394	µg/L	-31.394	ppb	08:21:20
2	Mg 279.077 IEC†	15.2	2.1	13.069	µg/L	13.069	ppb	08:21:41
2	Na 589.592 Radial†	-587.4	82.3	21.173	µg/L	21.173	ppb	08:21:20
2	Sr 421.552†	-53.7	-29.1	-0.1524	µg/L	-0.1524	ppb	08:21:20
2	Sc 361.383	2039630.5	2039630.5	98.498	%			08:22:49
2	Y 371.029	1289798.9	1289798.9	98.550	%			08:22:49
2	Ag 328.068†	222.6	19.6	0.1798	µg/L	0.1798	ppb	08:22:54
2	As 188.979†	-3.7	-6.2	-11.062	µg/L	-11.062	ppb	08:23:15
2	B 249.677†	184.0	-8.2	-0.3486	µg/L	-0.3486	ppb	08:23:15
2	Ba 233.527†	-64.0	-6.1	-0.1559	µg/L	-0.1559	ppb	08:23:15
2	Be 313.107†	3687.9	-20.7	-0.0128	µg/L	-0.0128	ppb	08:22:54
2	Cd 226.502†	-94.4	2.3	0.0584	µg/L	0.0584	ppb	08:23:15
2	Co 228.616†	-60.9	2.1	0.0996	µg/L	0.0996	ppb	08:23:15
2	Cr 267.716†	-135.1	-10.9	-0.2254	µg/L	-0.2254	ppb	08:22:54
2	Cu 324.752†	4178.0	-16.9	-0.1139	µg/L	-0.1139	ppb	08:22:54
2	Mn 257.610†	-231.1	8.5	0.0273	µg/L	0.0273	ppb	08:23:15
2	Mo 202.031†	0.1	-0.1	-0.0107	µg/L	-0.0107	ppb	08:23:15
2	Ni 231.604†	307.6	-8.7	-0.4678	µg/L	-0.4678	ppb	08:23:15
2	P 214.914†	178.0	8.0	15.947	µg/L	15.947	ppb	08:23:15
2	Pb 220.353†	44.9	1.2	0.2930	µg/L	0.2930	ppb	08:23:15

2	S 181.975 Axial†	25.0	-2.2	-10.764 µg/L	-10.764 ppb	08:23:15
2	Sb 206.836†	19.4	1.7	1.7027 µg/L	1.7027 ppb	08:23:15
2	Se 196.026†	10.6	-5.2	-6.5420 µg/L	-6.5420 ppb	08:23:15
2	SiO2†	2676.7	-33.4	-6.1154 µg/L	-6.1154 ppb	08:22:54
2	Si 251.611†	370.4	2.3	0.1867 µg/L	0.1867 ppb	08:23:15
2	Sn 189.927†	20.8	-0.7	-0.3444 µg/L	-0.3444 ppb	08:23:15
2	Ti 334.940†	1077.4	95.7	0.2180 µg/L	0.2180 ppb	08:22:54
2	Tl 190.801†	-20.3	-3.7	-5.5123 µg/L	-5.5123 ppb	08:23:15
2	U 409.014†	644.9	7.2	0.6574 µg/L	0.6574 ppb	08:22:54
2	V 292.402†	-163.6	-2.8	-0.0304 µg/L	-0.0304 ppb	08:22:54
2	Zn 213.857†	562.0	-1.7	-0.0427 µg/L	-0.0427 ppb	08:23:15
3	Sc RADIAL	119096.9	119096.9	105 %		08:21:46
3	Al 396.153Radial†	140.8	8.1	4.2499 µg/L	4.2499 ppb	08:21:46
3	Ca 317.933Radial†	429.1	-14.6	-5.8855 µg/L	-5.8855 ppb	08:22:07
3	Fe 238.204 Radial†	14.6	0.2	1.1098 µg/L	1.1098 ppb	08:22:07
3	K 766.490 Radial†	793.6	-4.4	-2.3255 µg/L	-2.3255 ppb	08:21:46
3	Mg 279.077 IEC†	16.1	2.0	12.218 µg/L	12.218 ppb	08:22:07
3	Na 589.592 Radial†	-599.9	106.8	27.494 µg/L	27.494 ppb	08:21:46
3	Sr 421.552†	-35.1	-8.0	-0.0416 µg/L	-0.0416 ppb	08:21:46
3	Sc 361.383	2026722.6	2026722.6	97.874 %		08:23:21
3	Y 371.029	1280310.2	1280310.2	97.825 %		08:23:21
3	Ag 328.068†	174.5	-28.0	-0.2534 µg/L	-0.2534 ppb	08:23:27
3	As 188.979†	3.5	1.1	2.0110 µg/L	2.0110 ppb	08:23:47
3	B 249.677†	184.4	-6.6	-0.2792 µg/L	-0.2792 ppb	08:23:47
3	Ba 233.527†	-60.6	-3.2	-0.0793 µg/L	-0.0793 ppb	08:23:47
3	Be 313.107†	3702.2	17.8	0.0109 µg/L	0.0109 ppb	08:23:27
3	Cd 226.502†	-91.1	5.1	0.1266 µg/L	0.1266 ppb	08:23:47
3	Co 228.616†	-66.1	-3.6	-0.1734 µg/L	-0.1734 ppb	08:23:47
3	Cr 267.716†	-114.2	9.5	0.1970 µg/L	0.1970 ppb	08:23:27
3	Cu 324.752†	4151.0	-17.4	-0.1184 µg/L	-0.1184 ppb	08:23:27
3	Mn 257.610†	-237.5	0.4	0.0015 µg/L	0.0015 ppb	08:23:47
3	Mo 202.031†	-4.2	-4.4	-0.5097 µg/L	-0.5097 ppb	08:23:47
3	Ni 231.604†	298.3	-16.1	-0.8705 µg/L	-0.8705 ppb	08:23:47
3	P 214.914†	166.8	-2.3	-4.6518 µg/L	-4.6518 ppb	08:23:47
3	Pb 220.353†	41.1	-2.5	-0.6235 µg/L	-0.6235 ppb	08:23:47
3	S 181.975 Axial†	23.9	-3.2	-15.562 µg/L	-15.562 ppb	08:23:47
3	Sb 206.836†	15.4	-2.2	-2.1495 µg/L	-2.1495 ppb	08:23:47
3	Se 196.026†	10.0	-5.7	-7.2067 µg/L	-7.2067 ppb	08:23:47
3	SiO2†	2675.8	-17.0	-3.1153 µg/L	-3.1153 ppb	08:23:27
3	Si 251.611†	348.8	-17.4	-1.2810 µg/L	-1.2810 ppb	08:23:47
3	Sn 189.927†	21.1	-0.2	-0.1223 µg/L	-0.1223 ppb	08:23:47
3	Ti 334.940†	1098.3	124.1	0.2826 µg/L	0.2826 ppb	08:23:27
3	Tl 190.801†	-24.8	-8.4	-12.646 µg/L	-12.646 ppb	08:23:47
3	U 409.014†	561.2	-74.2	-6.7821 µg/L	-6.7821 ppb	08:23:27
3	V 292.402†	-121.9	38.7	0.4188 µg/L	0.4188 ppb	08:23:27
3	Zn 213.857†	558.6	-1.5	-0.0358 µg/L	-0.0358 ppb	08:23:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2035950.3	98.320	%	0.3885				0.40%
Sc RADIAL	114571.2	101	%	3.5				3.45%
Y 371.029	1286221.5	98.277	%	0.3940				0.40%
Ag 328.068†	8.3	0.0779	µg/L	0.29393	0.0779	ppb	0.29393	377.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.1	7.3742	µg/L	3.74504	7.3742	ppb	3.74504	50.79%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.1	-5.5376	µg/L	6.76748	-5.5376	ppb	6.76748	122.21%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-4.7	-0.2023	µg/L	0.19638	-0.2023	ppb	0.19638	97.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.4	-0.0846	µg/L	0.06882	-0.0846	ppb	0.06882	81.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-13.5	-0.0084	µg/L	0.01753	-0.0084	ppb	0.01753	207.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-7.0	-2.8280	µg/L	3.31910	-2.8280	ppb	3.31910	117.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.1	0.1282	µg/L	0.07067	0.1282	ppb	0.07067	55.11%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.4	-0.1134	µg/L	0.19014	-0.1134	ppb	0.19014	167.74%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -9.1     -0.1877 µg/L       0.36730     -0.1877 ppb        0.36730 195.70%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -14.1     -0.0946 µg/L       0.03739     -0.0946 ppb        0.03739  39.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       1.0      6.2369 µg/L       6.86776      6.2369 ppb        6.86776 110.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -47.7     -25.367 µg/L       20.6973     -25.367 ppb        20.6973  81.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          3.1      19.048 µg/L       11.1011      19.048 ppb        11.1011  58.28%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              4.2      0.0142 µg/L       0.01291      0.0142 ppb        0.01291  91.04%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -2.3     -0.2677 µg/L       0.24984     -0.2677 ppb        0.24984  93.32%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      86.9      22.360 µg/L        4.6551      22.360 ppb         4.6551  20.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -14.1     -0.7630 µg/L       0.25880     -0.7630 ppb        0.25880  33.92%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               2.0      3.9186 µg/L      10.72615      3.9186 ppb       10.72615 273.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -1.7     -0.4177 µg/L       0.63332     -0.4177 ppb        0.63332 151.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -1.7     -8.4101 µg/L       8.57516     -8.4101 ppb        8.57516 101.96%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             -0.4     -0.4109 µg/L       1.95330     -0.4109 ppb        1.95330 475.38%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -6.5     -8.1259 µg/L       2.19293     -8.1259 ppb        2.19293  26.99%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -21.5     -3.9393 µg/L       1.90300     -3.9393 ppb        1.90300  48.31%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             -8.9     -0.6444 µg/L       0.75294     -0.6444 ppb        0.75294 116.85%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -0.3     -0.1541 µg/L       0.17660     -0.1541 ppb        0.17660 114.60%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†            -15.1     -0.0790 µg/L       0.06363     -0.0790 ppb        0.06363  80.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            114.8      0.2613 µg/L       0.03752      0.2613 ppb        0.03752  14.36%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -4.2     -6.3099 µg/L       5.97693     -6.3099 ppb        5.97693  94.72%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -38.3     -3.5042 µg/L       3.79767     -3.5042 ppb        3.79767 108.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              17.0      0.1827 µg/L       0.22549      0.1827 ppb        0.22549 123.43%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -1.1     -0.0247 µg/L       0.02548     -0.0247 ppb        0.02548 103.17%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 09:01:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116211.5	116211.5	102	%			09:02:29
1	Al 396.153Radial†	10161.8	9811.0	5113.2	µg/L	5113.2	ppb	09:02:29
1	Ca 317.933Radial†	13497.2	12775.1	5154.3	µg/L	5154.3	ppb	09:02:50
1	Fe 238.204 Radial†	837.0	804.8	5189.2	µg/L	5189.2	ppb	09:02:50
1	K 766.490 Radial†	10347.7	9357.5	4972.3	µg/L	4972.3	ppb	09:02:29
1	Mg 279.077 IEC†	864.4	831.9	5197.5	µg/L	5197.5	ppb	09:02:50
1	Na 589.592 Radial†	39635.1	39438.9	10149	µg/L	10149	ppb	09:02:29
1	Sr 421.552†	97103.7	94984.5	497.38	µg/L	497.38	ppb	09:02:29
1	Sc 361.383	2059498.7	2059498.7	99.457	%			09:03:54
1	Y 371.029	1286936.4	1286936.4	98.332	%			09:03:54
1	Ag 328.068†	56463.7	56565.5	521.55	µg/L	521.55	ppb	09:03:59
1	As 188.979†	293.4	292.6	523.93	µg/L	523.93	ppb	09:04:20
1	B 249.677†	11920.9	11791.0	500.27	µg/L	500.27	ppb	09:03:59
1	Ba 233.527†	19940.7	20108.3	511.19	µg/L	511.19	ppb	09:03:59
1	Be 313.107†	828434.4	829190.8	510.35	µg/L	510.35	ppb	09:03:54
1	Cd 226.502†	19532.5	19737.2	511.63	µg/L	511.63	ppb	09:03:59
1	Co 228.616†	10633.0	10755.0	510.95	µg/L	510.95	ppb	09:03:59
1	Cr 267.716†	24346.7	24605.8	509.64	µg/L	509.64	ppb	09:03:59
1	Cu 324.752†	77384.0	73547.8	501.68	µg/L	501.68	ppb	09:03:59
1	Mn 257.610†	159957.7	161073.7	512.26	µg/L	512.26	ppb	09:03:54
1	Mo 202.031†	4441.8	4465.8	516.56	µg/L	516.56	ppb	09:04:20
1	Ni 231.604†	9736.0	9468.2	510.75	µg/L	510.75	ppb	09:03:59
1	P 214.914†	1455.6	1290.7	2520.4	µg/L	2520.4	ppb	09:04:20
1	Pb 220.353†	2074.8	2041.7	519.58	µg/L	519.58	ppb	09:04:20
1	S 181.975 Axial†	236.5	210.3	1034.0	µg/L	1034.0	ppb	09:04:20
1	Sb 206.836†	552.6	537.7	524.45	µg/L	524.45	ppb	09:04:20
1	Se 196.026†	436.8	423.3	534.33	µg/L	534.33	ppb	09:04:20
1	SiO2†	32451.8	29878.0	5473.7	µg/L	5473.7	ppb	09:03:59
1	Si 251.611†	34754.1	34570.0	2507.0	µg/L	2507.0	ppb	09:03:59
1	Sn 189.927†	1069.5	1053.5	531.28	µg/L	531.28	ppb	09:04:20
1	Ti 334.940†	227709.5	227954.2	518.25	µg/L	518.25	ppb	09:03:54
1	Tl 190.801†	325.8	344.5	519.57	µg/L	519.57	ppb	09:04:20
1	U 409.014†	6169.0	5555.0	507.19	µg/L	507.19	ppb	09:03:59
1	V 292.402†	45065.6	45474.9	513.54	µg/L	513.54	ppb	09:03:59
1	Zn 213.857†	19969.7	19506.4	507.11	µg/L	507.11	ppb	09:03:59
2	Sc RADIAL	113669.0	113669.0	100	%			09:02:55
2	Al 396.153Radial†	10174.6	10046.1	5236.0	µg/L	5236.0	ppb	09:02:55
2	Ca 317.933Radial†	13436.2	13009.2	5248.8	µg/L	5248.8	ppb	09:03:16
2	Fe 238.204 Radial†	829.0	815.1	5255.8	µg/L	5255.8	ppb	09:03:16
2	K 766.490 Radial†	10409.3	9645.4	5125.3	µg/L	5125.3	ppb	09:02:55
2	Mg 279.077 IEC†	874.8	861.3	5380.9	µg/L	5380.9	ppb	09:03:16
2	Na 589.592 Radial†	39898.4	40569.1	10440	µg/L	10440	ppb	09:02:55
2	Sr 421.552†	97659.3	97663.9	511.41	µg/L	511.41	ppb	09:02:55
2	Sc 361.383	2049792.2	2049792.2	98.988	%			09:04:27
2	Y 371.029	1292134.1	1292134.1	98.729	%			09:04:27
2	Ag 328.068†	56273.2	56641.9	522.26	µg/L	522.26	ppb	09:04:33
2	As 188.979†	288.3	288.8	517.15	µg/L	517.15	ppb	09:04:53
2	B 249.677†	11934.1	11861.1	503.23	µg/L	503.23	ppb	09:04:33
2	Ba 233.527†	19840.5	20102.0	511.03	µg/L	511.03	ppb	09:04:33
2	Be 313.107†	829857.7	834573.0	513.66	µg/L	513.66	ppb	09:04:27
2	Cd 226.502†	19478.6	19775.8	512.63	µg/L	512.63	ppb	09:04:33
2	Co 228.616†	10593.0	10765.2	511.44	µg/L	511.44	ppb	09:04:33
2	Cr 267.716†	24223.9	24597.6	509.47	µg/L	509.47	ppb	09:04:33
2	Cu 324.752†	77244.2	73775.0	503.24	µg/L	503.24	ppb	09:04:33
2	Mn 257.610†	160247.4	162127.9	515.62	µg/L	515.62	ppb	09:04:27
2	Mo 202.031†	4465.7	4511.2	521.80	µg/L	521.80	ppb	09:04:53
2	Ni 231.604†	9691.1	9469.2	510.80	µg/L	510.80	ppb	09:04:33
2	P 214.914†	1461.2	1303.4	2545.4	µg/L	2545.4	ppb	09:04:53
2	Pb 220.353†	2067.7	2044.4	520.29	µg/L	520.29	ppb	09:04:53

2	S 181.975 Axial†	242.7	217.7	1070.3 µg/L	1070.3 ppb	09:04:53
2	Sb 206.836†	551.7	539.4	526.10 µg/L	526.10 ppb	09:04:53
2	Se 196.026†	419.8	408.2	515.32 µg/L	515.32 ppb	09:04:53
2	SiO2†	32361.4	29941.2	5485.3 µg/L	5485.3 ppb	09:04:33
2	Si 251.611†	34670.2	34650.7	2512.6 µg/L	2512.6 ppb	09:04:33
2	Sn 189.927†	1068.7	1057.8	533.50 µg/L	533.50 ppb	09:04:53
2	Ti 334.940†	228372.9	229708.5	522.24 µg/L	522.24 ppb	09:04:27
2	Tl 190.801†	320.5	340.7	513.85 µg/L	513.85 ppb	09:04:53
2	U 409.014†	6166.6	5582.0	509.64 µg/L	509.64 ppb	09:04:33
2	V 292.402†	44965.5	45588.3	514.86 µg/L	514.86 ppb	09:04:33
2	Zn 213.857†	19944.0	19575.5	508.91 µg/L	508.91 ppb	09:04:33
3	Sc RADIAL	113073.1	113073.1	99.5 %		09:03:21
3	Al 396.153Radial†	10285.9	10211.6	5323.4 µg/L	5323.4 ppb	09:03:21
3	Ca 317.933Radial†	13445.5	13089.4	5281.1 µg/L	5281.1 ppb	09:03:42
3	Fe 238.204 Radial†	825.4	815.9	5260.4 µg/L	5260.4 ppb	09:03:42
3	K 766.490 Radial†	10430.4	9721.4	5165.7 µg/L	5165.7 ppb	09:03:21
3	Mg 279.077 IEC†	868.6	859.6	5370.0 µg/L	5370.0 ppb	09:03:42
3	Na 589.592 Radial†	40197.3	41079.8	10572 µg/L	10572 ppb	09:03:21
3	Sr 421.552†	98012.9	98533.9	515.97 µg/L	515.97 ppb	09:03:21
3	Sc 361.383	2053166.0	2053166.0	99.151 %		09:05:00
3	Y 371.029	1289478.1	1289478.1	98.526 %		09:05:00
3	Ag 328.068†	55809.2	56080.5	517.07 µg/L	517.07 ppb	09:05:06
3	As 188.979†	269.4	269.2	482.01 µg/L	482.01 ppb	09:05:26
3	B 249.677†	11764.0	11669.7	495.09 µg/L	495.09 ppb	09:05:06
3	Ba 233.527†	19638.4	19865.3	505.01 µg/L	505.01 ppb	09:05:06
3	Be 313.107†	821846.0	825115.1	507.84 µg/L	507.84 ppb	09:05:00
3	Cd 226.502†	19234.0	19496.7	505.39 µg/L	505.39 ppb	09:05:06
3	Co 228.616†	10431.4	10584.6	502.83 µg/L	502.83 ppb	09:05:06
3	Cr 267.716†	23976.8	24308.2	503.47 µg/L	503.47 ppb	09:05:06
3	Cu 324.752†	76422.3	72817.9	496.72 µg/L	496.72 ppb	09:05:06
3	Mn 257.610†	158797.6	160399.8	510.13 µg/L	510.13 ppb	09:05:00
3	Mo 202.031†	4295.0	4331.6	501.03 µg/L	501.03 ppb	09:05:26
3	Ni 231.604†	9612.0	9373.3	505.63 µg/L	505.63 ppb	09:05:06
3	P 214.914†	1419.0	1258.4	2456.1 µg/L	2456.1 ppb	09:05:26
3	Pb 220.353†	2000.6	1973.3	502.18 µg/L	502.18 ppb	09:05:26
3	S 181.975 Axial†	234.9	209.3	1029.2 µg/L	1029.2 ppb	09:05:26
3	Sb 206.836†	534.7	521.4	508.55 µg/L	508.55 ppb	09:05:26
3	Se 196.026†	410.3	397.9	502.42 µg/L	502.42 ppb	09:05:26
3	SiO2†	32032.4	29555.7	5414.7 µg/L	5414.7 ppb	09:05:06
3	Si 251.611†	34268.3	34187.7	2479.7 µg/L	2479.7 ppb	09:05:06
3	Sn 189.927†	1031.0	1018.0	513.54 µg/L	513.54 ppb	09:05:26
3	Ti 334.940†	226227.8	227165.9	516.45 µg/L	516.45 ppb	09:05:00
3	Tl 190.801†	319.2	338.8	510.97 µg/L	510.97 ppb	09:05:26
3	U 409.014†	6050.6	5454.8	498.00 µg/L	498.00 ppb	09:05:06
3	V 292.402†	44375.8	44918.9	507.21 µg/L	507.21 ppb	09:05:06
3	Zn 213.857†	19697.6	19293.9	501.56 µg/L	501.56 ppb	09:05:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2054152.3	99.199	%	0.2380				0.24%
Sc RADIAL	114317.9	101	%	1.5				1.46%
Y 371.029	1289516.2	98.529	%	0.1986				0.20%
Ag 328.068†	56429.3	520.29	µg/L	2.812	520.29	ppb	2.812	0.54%
QC value within limits for Ag 328.068 Recovery = 104.06%								
Al 396.153Radial†	10022.9	5224.2	µg/L	105.58	5224.2	ppb	105.58	2.02%
QC value within limits for Al 396.153Radial Recovery = 104.48%								
As 188.979†	283.5	507.70	µg/L	22.504	507.70	ppb	22.504	4.43%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	11773.9	499.53	µg/L	4.123	499.53	ppb	4.123	0.83%
QC value within limits for B 249.677 Recovery = 99.91%								
Ba 233.527†	20025.2	509.08	µg/L	3.522	509.08	ppb	3.522	0.69%
QC value within limits for Ba 233.527 Recovery = 101.82%								
Be 313.107†	829626.3	510.62	µg/L	2.920	510.62	ppb	2.920	0.57%
QC value within limits for Be 313.107 Recovery = 102.12%								
Ca 317.933Radial†	12957.9	5228.1	µg/L	65.90	5228.1	ppb	65.90	1.26%
QC value within limits for Ca 317.933Radial Recovery = 104.56%								
Cd 226.502†	19669.9	509.88	µg/L	3.925	509.88	ppb	3.925	0.77%
QC value within limits for Cd 226.502 Recovery = 101.98%								
Co 228.616†	10701.6	508.41	µg/L	4.839	508.41	ppb	4.839	0.95%

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   QC value within limits for Co 228.616  Recovery = 101.68%
Cr 267.716†          24503.9      507.53 µg/L        3.512      507.53 ppb        3.512   0.69%
   QC value within limits for Cr 267.716  Recovery = 101.51%
Cu 324.752†          73380.2      500.54 µg/L        3.401      500.54 ppb        3.401   0.68%
   QC value within limits for Cu 324.752  Recovery = 100.11%
Fe 238.204 Radial†     811.9      5235.1 µg/L       39.85      5235.1 ppb       39.85   0.76%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.70%
K 766.490 Radial†     9574.8      5087.8 µg/L      102.01      5087.8 ppb      102.01   2.01%
   QC value within limits for K 766.490 Radial  Recovery = 101.76%
Mg 279.077 IEC†        850.9      5316.1 µg/L      102.87      5316.1 ppb      102.87   1.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.32%
Mn 257.610†         161200.5      512.67 µg/L        2.767      512.67 ppb        2.767   0.54%
   QC value within limits for Mn 257.610  Recovery = 102.53%
Mo 202.031†          4436.2      513.13 µg/L       10.801      513.13 ppb       10.801   2.10%
   QC value within limits for Mo 202.031  Recovery = 102.63%
Na 589.592 Radial†   40362.6       10387 µg/L      216.1       10387 ppb        216.1   2.08%
   QC value within limits for Na 589.592 Radial  Recovery = 103.87%
Ni 231.604†          9436.9      509.06 µg/L        2.971      509.06 ppb        2.971   0.58%
   QC value within limits for Ni 231.604  Recovery = 101.81%
P 214.914†           1284.2      2507.3 µg/L       46.08      2507.3 ppb       46.08   1.84%
   QC value within limits for P 214.914  Recovery = 100.29%
Pb 220.353†          2019.8      514.02 µg/L       10.261      514.02 ppb       10.261   2.00%
   QC value within limits for Pb 220.353  Recovery = 102.80%
S 181.975 Axial†      212.4      1044.5 µg/L       22.45      1044.5 ppb       22.45   2.15%
   QC value within limits for S 181.975 Axial  Recovery = 104.45%
Sb 206.836†           532.8      519.70 µg/L        9.691      519.70 ppb        9.691   1.86%
   QC value within limits for Sb 206.836  Recovery = 103.94%
Se 196.026†           409.8      517.36 µg/L       16.050      517.36 ppb       16.050   3.10%
   QC value within limits for Se 196.026  Recovery = 103.47%
SiO2†               29791.6      5457.9 µg/L       37.88      5457.9 ppb       37.88   0.69%
   QC value within limits for SiO2  Recovery = 102.06%
Si 251.611†         34469.5      2499.7 µg/L       17.62      2499.7 ppb       17.62   0.70%
   QC value within limits for Si 251.611  Recovery = 99.99%
Sn 189.927†          1043.1      526.11 µg/L       10.936      526.11 ppb       10.936   2.08%
   QC value within limits for Sn 189.927  Recovery = 105.22%
Sr 421.552†         97060.8      508.25 µg/L        9.687      508.25 ppb        9.687   1.91%
   QC value within limits for Sr 421.552  Recovery = 101.65%
Ti 334.940†        228276.2      518.98 µg/L        2.961      518.98 ppb        2.961   0.57%
   QC value within limits for Ti 334.940  Recovery = 103.80%
Tl 190.801†           341.3      514.80 µg/L        4.377      514.80 ppb        4.377   0.85%
   QC value within limits for Tl 190.801  Recovery = 102.96%
U 409.014†           5530.6      504.94 µg/L        6.134      504.94 ppb        6.134   1.21%
   QC value within limits for U 409.014  Recovery = 100.99%
V 292.402†          45327.4      511.87 µg/L        4.091      511.87 ppb        4.091   0.80%
   QC value within limits for V 292.402  Recovery = 102.37%
Zn 213.857†         19458.6      505.86 µg/L        3.828      505.86 ppb        3.828   0.76%
   QC value within limits for Zn 213.857  Recovery = 101.17%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 09:05:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113749.5	113749.5	100	%			09:06:09
1	Al 396.153Radial†	137.9	11.5	6.0073	µg/L	6.0073	ppb	09:06:09
1	Ca 317.933Radial†	442.7	18.3	7.3674	µg/L	7.3674	ppb	09:06:29
1	Fe 238.204 Radial†	12.0	-1.8	-11.332	µg/L	-11.332	ppb	09:06:29
1	K 766.490 Radial†	749.0	-13.3	-7.0630	µg/L	-7.0630	ppb	09:06:09
1	Mg 279.077 IEC†	17.1	3.7	22.871	µg/L	22.871	ppb	09:06:29
1	Na 589.592 Radial†	-551.7	128.1	32.955	µg/L	32.955	ppb	09:06:09
1	Sr 421.552†	-67.2	-41.6	-0.2180	µg/L	-0.2180	ppb	09:06:09
1	Sc 361.383	2046390.5	2046390.5	98.824	%			09:07:31
1	Y 371.029	1291162.7	1291162.7	98.655	%			09:07:31
1	Ag 328.068†	252.5	49.2	0.4503	µg/L	0.4503	ppb	09:07:37
1	As 188.979†	-1.7	-4.2	-7.5096	µg/L	-7.5096	ppb	09:07:57
1	B 249.677†	215.7	23.3	0.9963	µg/L	0.9963	ppb	09:07:37
1	Ba 233.527†	-64.8	-6.8	-0.1723	µg/L	-0.1723	ppb	09:07:57
1	Be 313.107†	3770.4	50.4	0.0310	µg/L	0.0310	ppb	09:07:37
1	Cd 226.502†	-99.2	-2.2	-0.0577	µg/L	-0.0577	ppb	09:07:57
1	Co 228.616†	-65.6	-2.4	-0.1136	µg/L	-0.1136	ppb	09:07:57
1	Cr 267.716†	-121.7	3.1	0.0647	µg/L	0.0647	ppb	09:07:37
1	Cu 324.752†	4258.7	50.8	0.3436	µg/L	0.3436	ppb	09:07:37
1	Mn 257.610†	-224.6	15.8	0.0487	µg/L	0.0487	ppb	09:07:37
1	Mo 202.031†	3.7	3.5	0.4089	µg/L	0.4089	ppb	09:07:57
1	Ni 231.604†	326.0	8.9	0.4809	µg/L	0.4809	ppb	09:07:57
1	P 214.914†	169.3	-1.4	-2.8889	µg/L	-2.8889	ppb	09:07:57
1	Pb 220.353†	45.6	1.7	0.4421	µg/L	0.4421	ppb	09:07:57
1	S 181.975 Axial†	27.3	0.1	0.2980	µg/L	0.2980	ppb	09:07:57
1	Sb 206.836†	26.0	8.4	8.2178	µg/L	8.2178	ppb	09:07:57
1	Se 196.026†	19.7	4.0	4.9670	µg/L	4.9670	ppb	09:07:57
1	SiO2†	2761.8	43.8	8.0202	µg/L	8.0202	ppb	09:07:37
1	Si 251.611†	409.6	40.7	2.9577	µg/L	2.9577	ppb	09:07:57
1	Sn 189.927†	23.8	2.2	1.1266	µg/L	1.1266	ppb	09:07:57
1	Ti 334.940†	1046.6	61.0	0.1383	µg/L	0.1383	ppb	09:07:37
1	Tl 190.801†	-18.6	-2.0	-2.9775	µg/L	-2.9775	ppb	09:07:57
1	U 409.014†	626.1	-14.0	-1.2759	µg/L	-1.2759	ppb	09:07:37
1	V 292.402†	-145.5	16.1	0.1799	µg/L	0.1799	ppb	09:07:37
1	Zn 213.857†	567.7	2.2	0.0543	µg/L	0.0543	ppb	09:07:57
2	Sc RADIAL	114359.5	114359.5	101	%			09:06:34
2	Al 396.153Radial†	124.5	-2.6	-1.3779	µg/L	-1.3779	ppb	09:06:34
2	Ca 317.933Radial†	445.4	18.6	7.4954	µg/L	7.4954	ppb	09:06:55
2	Fe 238.204 Radial†	14.8	1.0	6.2039	µg/L	6.2039	ppb	09:06:55
2	K 766.490 Radial†	762.3	-4.1	-2.1873	µg/L	-2.1873	ppb	09:06:34
2	Mg 279.077 IEC†	16.2	2.7	16.955	µg/L	16.955	ppb	09:06:55
2	Na 589.592 Radial†	-579.5	103.4	26.596	µg/L	26.596	ppb	09:06:34
2	Sr 421.552†	-56.6	-30.8	-0.1611	µg/L	-0.1611	ppb	09:06:34
2	Sc 361.383	2054602.1	2054602.1	99.221	%			09:08:03
2	Y 371.029	1299821.9	1299821.9	99.316	%			09:08:03
2	Ag 328.068†	228.9	24.4	0.2262	µg/L	0.2262	ppb	09:08:09
2	As 188.979†	2.0	-0.4	-0.8077	µg/L	-0.8077	ppb	09:08:29
2	B 249.677†	189.4	-4.1	-0.1779	µg/L	-0.1779	ppb	09:08:09
2	Ba 233.527†	-62.0	-3.7	-0.0932	µg/L	-0.0932	ppb	09:08:29
2	Be 313.107†	3713.7	-22.0	-0.0135	µg/L	-0.0135	ppb	09:08:09
2	Cd 226.502†	-97.4	-0.0	-0.0023	µg/L	-0.0023	ppb	09:08:29
2	Co 228.616†	-60.4	3.1	0.1468	µg/L	0.1468	ppb	09:08:29
2	Cr 267.716†	-169.0	-44.1	-0.9104	µg/L	-0.9104	ppb	09:08:09
2	Cu 324.752†	4241.5	16.3	0.1120	µg/L	0.1120	ppb	09:08:09
2	Mn 257.610†	-240.4	0.8	0.0033	µg/L	0.0033	ppb	09:08:09
2	Mo 202.031†	6.3	6.2	0.7126	µg/L	0.7126	ppb	09:08:29
2	Ni 231.604†	315.2	-3.2	-0.1751	µg/L	-0.1751	ppb	09:08:29
2	P 214.914†	178.5	7.2	14.264	µg/L	14.264	ppb	09:08:29
2	Pb 220.353†	49.2	5.1	1.2999	µg/L	1.2999	ppb	09:08:29

2	S 181.975 Axial†	32.0	4.7	23.200 µg/L	23.200 ppb		09:08:29
2	Sb 206.836†	16.5	-1.3	-1.3008 µg/L	-1.3008 ppb		09:08:29
2	Se 196.026†	15.3	-0.5	-0.6249 µg/L	-0.6249 ppb		09:08:29
2	SiO2†	2752.0	22.8	4.1700 µg/L	4.1700 ppb		09:08:09
2	Si 251.611†	413.1	42.5	3.1881 µg/L	3.1881 ppb		09:08:29
2	Sn 189.927†	18.7	-3.0	-1.4991 µg/L	-1.4991 ppb		09:08:29
2	Ti 334.940†	1008.0	17.9	0.0403 µg/L	0.0403 ppb		09:08:09
2	Tl 190.801†	-21.9	-5.2	-7.7387 µg/L	-7.7387 ppb		09:08:29
2	U 409.014†	618.3	-24.4	-2.2353 µg/L	-2.2353 ppb		09:08:09
2	V 292.402†	-128.3	34.0	0.3821 µg/L	0.3821 ppb		09:08:09
2	Zn 213.857†	578.4	10.6	0.2787 µg/L	0.2787 ppb		09:08:29
3	Sc RADIAL	112647.0	112647.0	99.1 %			09:07:00
3	Al 396.153Radial†	152.6	27.7	14.460 µg/L	14.460 ppb		09:07:00
3	Ca 317.933Radial†	443.1	23.0	9.2833 µg/L	9.2833 ppb		09:07:21
3	Fe 238.204 Radial†	14.9	1.3	8.5577 µg/L	8.5577 ppb		09:07:21
3	K 766.490 Radial†	839.2	85.0	45.159 µg/L	45.159 ppb		09:07:00
3	Mg 279.077 IEC†	19.7	6.4	40.089 µg/L	40.089 ppb		09:07:21
3	Na 589.592 Radial†	-394.8	280.9	72.296 µg/L	72.296 ppb		09:07:00
3	Sr 421.552†	-20.6	4.7	0.0247 µg/L	0.0247 ppb		09:07:00
3	Sc 361.383	2050767.3	2050767.3	99.036 %			09:08:35
3	Y 371.029	1293314.7	1293314.7	98.819 %			09:08:35
3	Ag 328.068†	271.2	67.5	0.6222 µg/L	0.6222 ppb		09:08:41
3	As 188.979†	1.9	-0.5	-0.9480 µg/L	-0.9480 ppb		09:09:02
3	B 249.677†	173.2	-20.2	-0.8604 µg/L	-0.8604 ppb		09:08:41
3	Ba 233.527†	-63.7	-5.5	-0.1387 µg/L	-0.1387 ppb		09:09:02
3	Be 313.107†	3624.5	-105.1	-0.0647 µg/L	-0.0647 ppb		09:08:41
3	Cd 226.502†	-106.0	-8.9	-0.2282 µg/L	-0.2282 ppb		09:09:02
3	Co 228.616†	-68.4	-5.1	-0.2425 µg/L	-0.2425 ppb		09:09:02
3	Cr 267.716†	-137.9	-13.0	-0.2675 µg/L	-0.2675 ppb		09:08:41
3	Cu 324.752†	4270.1	53.1	0.3633 µg/L	0.3633 ppb		09:08:41
3	Mn 257.610†	-277.3	-36.9	-0.1163 µg/L	-0.1163 ppb		09:08:41
3	Mo 202.031†	4.9	4.8	0.5543 µg/L	0.5543 ppb		09:09:02
3	Ni 231.604†	318.1	0.2	0.0121 µg/L	0.0121 ppb		09:09:02
3	P 214.914†	174.8	3.7	7.3002 µg/L	7.3002 ppb		09:09:02
3	Pb 220.353†	51.6	7.7	1.9498 µg/L	1.9498 ppb		09:09:02
3	S 181.975 Axial†	28.4	1.1	5.5848 µg/L	5.5848 ppb		09:09:02
3	Sb 206.836†	18.6	0.9	0.8973 µg/L	0.8973 ppb		09:09:02
3	Se 196.026†	16.1	0.3	0.4262 µg/L	0.4262 ppb		09:09:02
3	SiO2†	2790.0	66.3	12.143 µg/L	12.143 ppb		09:08:41
3	Si 251.611†	418.1	48.4	3.5828 µg/L	3.5828 ppb		09:09:02
3	Sn 189.927†	20.3	-1.4	-0.6889 µg/L	-0.6889 ppb		09:09:02
3	Ti 334.940†	958.8	-29.9	-0.0686 µg/L	-0.0686 ppb		09:08:41
3	Tl 190.801†	-18.1	-1.3	-2.0215 µg/L	-2.0215 ppb		09:09:02
3	U 409.014†	687.7	46.8	4.2786 µg/L	4.2786 ppb		09:08:41
3	V 292.402†	-118.3	43.8	0.5020 µg/L	0.5020 ppb		09:08:41
3	Zn 213.857†	576.7	10.0	0.2593 µg/L	0.2593 ppb		09:09:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2050586.6	99.027	%	0.1984				0.20%
Sc RADIAL	113585.3	99.9	%	0.76				0.76%
Y 371.029	1294766.4	98.930	%	0.3445				0.35%
Ag 328.068†	47.0	0.4329	µg/L	0.19857	0.4329	ppb	0.19857	45.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.2	6.3630	µg/L	7.92469	6.3630	ppb	7.92469	124.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.7	-3.0884	µg/L	3.82952	-3.0884	ppb	3.82952	124.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-0.3	-0.0140	µg/L	0.93916	-0.0140	ppb	0.93916	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.3	-0.1347	µg/L	0.03967	-0.1347	ppb	0.03967	29.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-25.5	-0.0157	µg/L	0.04786	-0.0157	ppb	0.04786	304.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	19.9	8.0487	µg/L	1.07111	8.0487	ppb	1.07111	13.31%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-3.7	-0.0961	µg/L	0.11774	-0.0961	ppb	0.11774	122.57%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.5	-0.0698	µg/L	0.19832	-0.0698	ppb	0.19832	284.23%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -18.0     -0.3711 µg/L       0.49570     -0.3711 ppb        0.49570 133.59%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               40.1      0.2730 µg/L       0.13972      0.2730 ppb        0.13972  51.18%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.2      1.1433 µg/L      10.86756      1.1433 ppb       10.86756 950.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         22.5     11.970 µg/L       28.8461     11.970 ppb        28.8461 240.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            4.3     26.639 µg/L       12.0184     26.639 ppb        12.0184  45.12%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -6.8     -0.0214 µg/L       0.08522     -0.0214 ppb        0.08522 397.87%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.8      0.5586 µg/L       0.15191      0.5586 ppb        0.15191  27.19%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       170.8     43.949 µg/L       24.7543     43.949 ppb        24.7543  56.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.0      0.1060 µg/L       0.33791      0.1060 ppb        0.33791 318.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 3.1      6.2252 µg/L       8.62696      6.2252 ppb        8.62696 138.58%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                4.8      1.2306 µg/L       0.75620      1.2306 ppb        0.75620  61.45%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.0      9.6942 µg/L      11.99118      9.6942 ppb       11.99118 123.69%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.7      2.6048 µg/L       4.98368      2.6048 ppb        4.98368 191.33%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                1.3      1.5894 µg/L       2.97191      1.5894 ppb        2.97191 186.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     44.3      8.1111 µg/L       3.98731      8.1111 ppb        3.98731  49.16%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               43.9      3.2429 µg/L       0.31613      3.2429 ppb        0.31613   9.75%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.7     -0.3538 µg/L       1.34455     -0.3538 ppb        1.34455 380.03%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -22.6     -0.1181 µg/L       0.12691     -0.1181 ppb        0.12691 107.44%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               16.3      0.0367 µg/L       0.10350      0.0367 ppb        0.10350 282.23%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.8     -4.2459 µg/L       3.06238     -4.2459 ppb        3.06238  72.13%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 2.8      0.2558 µg/L       3.51670      0.2558 ppb        3.51670 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                31.3      0.3547 µg/L       0.16277      0.3547 ppb        0.16277  45.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                7.6      0.1974 µg/L       0.12436      0.1974 ppb        0.12436  62.99%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 09:45:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116740.2	116740.2	103	%			09:46:25
1	Al 396.153Radial†	10246.3	9848.3	5132.9	µg/L	5132.9	ppb	09:46:25
1	Ca 317.933Radial†	13700.8	12913.4	5210.1	µg/L	5210.1	ppb	09:46:25
1	Fe 238.204 Radial†	825.1	789.5	5091.1	µg/L	5091.1	ppb	09:46:45
1	K 766.490 Radial†	10508.9	9468.6	5031.3	µg/L	5031.3	ppb	09:46:25
1	Mg 279.077 IEC†	867.9	831.5	5195.3	µg/L	5195.3	ppb	09:46:45
1	Na 589.592 Radial†	40068.7	39685.5	10213	µg/L	10213	ppb	09:46:25
1	Sr 421.552†	97946.1	95374.5	499.42	µg/L	499.42	ppb	09:46:25
1	Sc 361.383	2061305.5	2061305.5	99.544	%			09:47:49
1	Y 371.029	1294438.6	1294438.6	98.905	%			09:47:49
1	Ag 328.068†	56951.2	57005.5	525.59	µg/L	525.59	ppb	09:47:55
1	As 188.979†	288.5	287.4	514.57	µg/L	514.57	ppb	09:48:15
1	B 249.677†	12019.1	11879.1	504.05	µg/L	504.05	ppb	09:47:55
1	Ba 233.527†	20022.5	20172.9	512.83	µg/L	512.83	ppb	09:47:55
1	Be 313.107†	817943.4	817921.6	503.42	µg/L	503.42	ppb	09:47:49
1	Cd 226.502†	19644.8	19832.9	514.12	µg/L	514.12	ppb	09:47:55
1	Co 228.616†	10708.4	10821.3	514.11	µg/L	514.11	ppb	09:47:55
1	Cr 267.716†	24415.5	24653.4	510.63	µg/L	510.63	ppb	09:47:55
1	Cu 324.752†	78201.4	74300.8	506.78	µg/L	506.78	ppb	09:47:55
1	Mn 257.610†	158110.8	159077.4	505.91	µg/L	505.91	ppb	09:47:49
1	Mo 202.031†	4410.8	4430.9	512.51	µg/L	512.51	ppb	09:48:15
1	Ni 231.604†	9827.4	9551.4	515.24	µg/L	515.24	ppb	09:47:55
1	P 214.914†	1444.4	1278.2	2494.7	µg/L	2494.7	ppb	09:48:15
1	Pb 220.353†	2050.2	2015.2	512.82	µg/L	512.82	ppb	09:48:15
1	S 181.975 Axial†	234.9	208.5	1024.9	µg/L	1024.9	ppb	09:48:15
1	Sb 206.836†	553.7	538.3	525.02	µg/L	525.02	ppb	09:48:15
1	Se 196.026†	431.7	417.7	527.33	µg/L	527.33	ppb	09:48:15
1	SiO2†	32673.7	30072.3	5509.3	µg/L	5509.3	ppb	09:47:55
1	Si 251.611†	34990.1	34776.4	2522.8	µg/L	2522.8	ppb	09:47:55
1	Sn 189.927†	1052.3	1035.2	522.11	µg/L	522.11	ppb	09:48:15
1	Ti 334.940†	225537.3	225571.3	512.83	µg/L	512.83	ppb	09:47:49
1	Tl 190.801†	327.1	345.4	520.90	µg/L	520.90	ppb	09:48:15
1	U 409.014†	6145.2	5525.7	504.53	µg/L	504.53	ppb	09:47:55
1	V 292.402†	45347.2	45718.0	516.22	µg/L	516.22	ppb	09:47:55
1	Zn 213.857†	20150.3	19670.3	511.38	µg/L	511.38	ppb	09:47:55
2	Sc RADIAL	116177.4	116177.4	102	%			09:46:51
2	Al 396.153Radial†	10171.5	9823.4	5119.8	µg/L	5119.8	ppb	09:46:51
2	Ca 317.933Radial†	13630.0	12908.8	5208.3	µg/L	5208.3	ppb	09:46:51
2	Fe 238.204 Radial†	829.4	797.6	5143.2	µg/L	5143.2	ppb	09:47:11
2	K 766.490 Radial†	10375.5	9387.7	4988.3	µg/L	4988.3	ppb	09:46:51
2	Mg 279.077 IEC†	860.7	828.5	5176.6	µg/L	5176.6	ppb	09:47:11
2	Na 589.592 Radial†	39891.0	39700.7	10217	µg/L	10217	ppb	09:46:51
2	Sr 421.552†	97302.1	95206.3	498.54	µg/L	498.54	ppb	09:46:51
2	Sc 361.383	2070799.2	2070799.2	100.00	%			09:48:22
2	Y 371.029	1294935.5	1294935.5	98.943	%			09:48:22
2	Ag 328.068†	56854.2	56646.2	522.28	µg/L	522.28	ppb	09:48:28
2	As 188.979†	283.4	280.9	503.00	µg/L	503.00	ppb	09:48:48
2	B 249.677†	11986.3	11791.0	500.29	µg/L	500.29	ppb	09:48:28
2	Ba 233.527†	19916.1	19974.3	507.79	µg/L	507.79	ppb	09:48:28
2	Be 313.107†	806622.2	802833.8	494.13	µg/L	494.13	ppb	09:48:22
2	Cd 226.502†	19516.0	19613.5	508.43	µg/L	508.43	ppb	09:48:28
2	Co 228.616†	10655.3	10719.0	509.27	µg/L	509.27	ppb	09:48:28
2	Cr 267.716†	24376.9	24502.4	507.50	µg/L	507.50	ppb	09:48:28
2	Cu 324.752†	78094.2	73833.4	503.61	µg/L	503.61	ppb	09:48:28
2	Mn 257.610†	155866.9	156105.3	496.48	µg/L	496.48	ppb	09:48:22
2	Mo 202.031†	4436.3	4436.0	513.11	µg/L	513.11	ppb	09:48:48
2	Ni 231.604†	9737.8	9416.6	507.96	µg/L	507.96	ppb	09:48:28
2	P 214.914†	1463.4	1290.6	2519.7	µg/L	2519.7	ppb	09:48:48
2	Pb 220.353†	2068.8	2024.3	515.15	µg/L	515.15	ppb	09:48:48

2	S 181.975 Axial†	246.0	218.5	1074.3 µg/L	1074.3 ppb	09:48:48
2	Sb 206.836†	549.9	532.0	518.84 µg/L	518.84 ppb	09:48:48
2	Se 196.026†	429.0	413.1	521.50 µg/L	521.50 ppb	09:48:48
2	SiO2†	32704.1	29952.3	5487.3 µg/L	5487.3 ppb	09:48:28
2	Si 251.611†	34932.7	34557.9	2507.0 µg/L	2507.0 ppb	09:48:28
2	Sn 189.927†	1062.2	1040.3	524.66 µg/L	524.66 ppb	09:48:48
2	Ti 334.940†	222169.6	221165.0	502.80 µg/L	502.80 ppb	09:48:22
2	Tl 190.801†	318.9	335.8	506.25 µg/L	506.25 ppb	09:48:48
2	U 409.014†	6190.0	5542.2	506.02 µg/L	506.02 ppb	09:48:28
2	V 292.402†	45230.2	45392.2	512.59 µg/L	512.59 ppb	09:48:28
2	Zn 213.857†	20097.8	19525.0	507.61 µg/L	507.61 ppb	09:48:28
3	Sc RADIAL	115771.1	115771.1	102 %		09:47:17
3	Al 396.153Radial†	10219.8	9905.8	5163.5 µg/L	5163.5 ppb	09:47:17
3	Ca 317.933Radial†	13651.3	12976.5	5235.6 µg/L	5235.6 ppb	09:47:17
3	Fe 238.204 Radial†	820.0	791.3	5102.3 µg/L	5102.3 ppb	09:47:37
3	K 766.490 Radial†	10438.1	9484.7	5039.9 µg/L	5039.9 ppb	09:47:17
3	Mg 279.077 IEC†	861.4	832.2	5199.2 µg/L	5199.2 ppb	09:47:37
3	Na 589.592 Radial†	40032.6	39976.5	10288 µg/L	10288 ppb	09:47:17
3	Sr 421.552†	97456.7	95692.2	501.09 µg/L	501.09 ppb	09:47:17
3	Sc 361.383	2065134.2	2065134.2	99.729 %		09:48:55
3	Y 371.029	1294668.8	1294668.8	98.923 %		09:48:55
3	Ag 328.068†	56901.7	56849.7	524.15 µg/L	524.15 ppb	09:49:01
3	As 188.979†	281.7	280.0	501.34 µg/L	501.34 ppb	09:49:22
3	B 249.677†	11985.4	11822.9	501.66 µg/L	501.66 ppb	09:49:01
3	Ba 233.527†	19951.3	20064.2	510.07 µg/L	510.07 ppb	09:49:01
3	Be 313.107†	823822.8	822293.7	506.11 µg/L	506.11 ppb	09:48:55
3	Cd 226.502†	19543.3	19694.5	510.53 µg/L	510.53 ppb	09:49:01
3	Co 228.616†	10663.6	10756.5	510.99 µg/L	510.99 ppb	09:49:01
3	Cr 267.716†	24419.8	24612.3	509.77 µg/L	509.77 ppb	09:49:01
3	Cu 324.752†	78113.3	74066.7	505.19 µg/L	505.19 ppb	09:49:01
3	Mn 257.610†	159146.7	159821.7	508.27 µg/L	508.27 ppb	09:48:55
3	Mo 202.031†	4290.9	4302.4	497.65 µg/L	497.65 ppb	09:49:22
3	Ni 231.604†	9735.3	9440.8	509.27 µg/L	509.27 ppb	09:49:01
3	P 214.914†	1426.2	1257.3	2452.8 µg/L	2452.8 ppb	09:49:22
3	Pb 220.353†	2002.2	1963.2	499.57 µg/L	499.57 ppb	09:49:22
3	S 181.975 Axial†	234.7	207.8	1021.7 µg/L	1021.7 ppb	09:49:22
3	Sb 206.836†	545.0	528.6	515.56 µg/L	515.56 ppb	09:49:22
3	Se 196.026†	416.7	401.8	507.35 µg/L	507.35 ppb	09:49:22
3	SiO2†	32675.6	30013.4	5498.5 µg/L	5498.5 ppb	09:49:01
3	Si 251.611†	34986.0	34707.2	2518.4 µg/L	2518.4 ppb	09:49:01
3	Sn 189.927†	1026.6	1007.6	508.26 µg/L	508.26 ppb	09:49:22
3	Ti 334.940†	226869.5	226487.1	514.91 µg/L	514.91 ppb	09:48:55
3	Tl 190.801†	319.4	337.2	508.52 µg/L	508.52 ppb	09:49:22
3	U 409.014†	6153.1	5522.2	504.20 µg/L	504.20 ppb	09:49:01
3	V 292.402†	45265.9	45552.1	514.26 µg/L	514.26 ppb	09:49:01
3	Zn 213.857†	20172.9	19655.4	511.03 µg/L	511.03 ppb	09:49:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2065746.3	99.759	%	0.2307				0.23%
Sc RADIAL	116229.6	102	%	0.4				0.42%
Y 371.029	1294681.0	98.923	%	0.0190				0.02%
Ag 328.068†	56833.8	524.00	µg/L	1.659	524.00	ppb	1.659	0.32%
QC value within limits for Ag 328.068 Recovery = 104.80%								
Al 396.153Radial†	9859.2	5138.8	µg/L	22.42	5138.8	ppb	22.42	0.44%
QC value within limits for Al 396.153Radial Recovery = 102.78%								
As 188.979†	282.8	506.30	µg/L	7.207	506.30	ppb	7.207	1.42%
QC value within limits for As 188.979 Recovery = 101.26%								
B 249.677†	11831.0	502.00	µg/L	1.906	502.00	ppb	1.906	0.38%
QC value within limits for B 249.677 Recovery = 100.40%								
Ba 233.527†	20070.5	510.23	µg/L	2.527	510.23	ppb	2.527	0.50%
QC value within limits for Ba 233.527 Recovery = 102.05%								
Be 313.107†	814349.7	501.22	µg/L	6.284	501.22	ppb	6.284	1.25%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	12932.9	5218.0	µg/L	15.27	5218.0	ppb	15.27	0.29%
QC value within limits for Ca 317.933Radial Recovery = 104.36%								
Cd 226.502†	19713.6	511.03	µg/L	2.877	511.03	ppb	2.877	0.56%
QC value within limits for Cd 226.502 Recovery = 102.21%								
Co 228.616†	10765.6	511.46	µg/L	2.453	511.46	ppb	2.453	0.48%

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   QC value within limits for Co 228.616  Recovery = 102.29%
Cr 267.716†            24589.4      509.30 µg/L        1.618      509.30 ppb          1.618   0.32%
   QC value within limits for Cr 267.716  Recovery = 101.86%
Cu 324.752†            74066.9      505.19 µg/L        1.585      505.19 ppb          1.585   0.31%
   QC value within limits for Cu 324.752  Recovery = 101.04%
Fe 238.204 Radial†       792.8      5112.2 µg/L       27.44      5112.2 ppb         27.44   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.24%
K 766.490 Radial†       9447.0      5019.8 µg/L       27.63      5019.8 ppb         27.63   0.55%
   QC value within limits for K 766.490 Radial  Recovery = 100.40%
Mg 279.077 IEC†          830.8      5190.4 µg/L       12.11      5190.4 ppb         12.11   0.23%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.81%
Mn 257.610†           158334.8      503.55 µg/L        6.242      503.55 ppb          6.242   1.24%
   QC value within limits for Mn 257.610  Recovery = 100.71%
Mo 202.031†            4389.8      507.76 µg/L        8.755      507.76 ppb          8.755   1.72%
   QC value within limits for Mo 202.031  Recovery = 101.55%
Na 589.592 Radial†    39787.6       10239 µg/L         42.2       10239 ppb           42.2   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 102.39%
Ni 231.604†            9469.6      510.83 µg/L        3.878      510.83 ppb          3.878   0.76%
   QC value within limits for Ni 231.604  Recovery = 102.17%
P 214.914†             1275.4      2489.1 µg/L       33.76      2489.1 ppb         33.76   1.36%
   QC value within limits for P 214.914  Recovery = 99.56%
Pb 220.353†            2000.9      509.18 µg/L        8.404      509.18 ppb          8.404   1.65%
   QC value within limits for Pb 220.353  Recovery = 101.84%
S 181.975 Axial†        211.6      1040.3 µg/L       29.45      1040.3 ppb         29.45   2.83%
   QC value within limits for S 181.975 Axial  Recovery = 104.03%
Sb 206.836†             533.0      519.81 µg/L        4.805      519.81 ppb          4.805   0.92%
   QC value within limits for Sb 206.836  Recovery = 103.96%
Se 196.026†             410.9      518.73 µg/L       10.279      518.73 ppb         10.279   1.98%
   QC value within limits for Se 196.026  Recovery = 103.75%
SiO2†                  30012.7      5498.4 µg/L       11.00      5498.4 ppb         11.00   0.20%
   QC value within limits for SiO2  Recovery = 102.82%
Si 251.611†            34680.5      2516.1 µg/L        8.20      2516.1 ppb          8.20   0.33%
   QC value within limits for Si 251.611  Recovery = 100.64%
Sn 189.927†            1027.7      518.34 µg/L        8.827      518.34 ppb          8.827   1.70%
   QC value within limits for Sn 189.927  Recovery = 103.67%
Sr 421.552†            95424.3      499.68 µg/L        1.292      499.68 ppb          1.292   0.26%
   QC value within limits for Sr 421.552  Recovery = 99.94%
Ti 334.940†           224407.8      510.18 µg/L        6.472      510.18 ppb          6.472   1.27%
   QC value within limits for Ti 334.940  Recovery = 102.04%
Tl 190.801†             339.5      511.89 µg/L        7.887      511.89 ppb          7.887   1.54%
   QC value within limits for Tl 190.801  Recovery = 102.38%
U 409.014†             5530.1      504.92 µg/L        0.971      504.92 ppb          0.971   0.19%
   QC value within limits for U 409.014  Recovery = 100.98%
V 292.402†            45554.1      514.36 µg/L        1.819      514.36 ppb          1.819   0.35%
   QC value within limits for V 292.402  Recovery = 102.87%
Zn 213.857†           19616.9      510.01 µg/L        2.081      510.01 ppb          2.081   0.41%
   QC value within limits for Zn 213.857  Recovery = 102.00%
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 09:49:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112785.6	112785.6	99.2	%			09:50:03
1	Al 396.153Radial†	126.5	1.2	0.6181	µg/L	0.6181	ppb	09:50:03
1	Ca 317.933Radial†	433.4	12.6	5.0957	µg/L	5.0957	ppb	09:50:24
1	Fe 238.204 Radial†	15.1	1.5	9.7206	µg/L	9.7206	ppb	09:50:24
1	K 766.490 Radial†	770.3	14.6	7.7383	µg/L	7.7383	ppb	09:50:03
1	Mg 279.077 IEC†	16.2	2.9	18.344	µg/L	18.344	ppb	09:50:24
1	Na 589.592 Radial†	-588.2	86.5	22.268	µg/L	22.268	ppb	09:50:03
1	Sr 421.552†	-92.2	-67.4	-0.3532	µg/L	-0.3532	ppb	09:50:03
1	Sc 361.383	2045335.9	2045335.9	98.773	%			09:51:26
1	Y 371.029	1293221.2	1293221.2	98.812	%			09:51:26
1	Ag 328.068†	232.3	28.9	0.2667	µg/L	0.2667	ppb	09:51:31
1	As 188.979†	2.0	-0.5	-0.8202	µg/L	-0.8202	ppb	09:51:52
1	B 249.677†	184.6	-8.0	-0.3455	µg/L	-0.3455	ppb	09:51:31
1	Ba 233.527†	-68.7	-10.8	-0.2727	µg/L	-0.2727	ppb	09:51:52
1	Be 313.107†	3627.0	-92.8	-0.0572	µg/L	-0.0572	ppb	09:51:31
1	Cd 226.502†	-88.1	9.0	0.2290	µg/L	0.2290	ppb	09:51:52
1	Co 228.616†	-56.9	6.3	0.2994	µg/L	0.2994	ppb	09:51:52
1	Cr 267.716†	-153.1	-28.8	-0.5953	µg/L	-0.5953	ppb	09:51:31
1	Cu 324.752†	4185.5	-21.1	-0.1413	µg/L	-0.1413	ppb	09:51:31
1	Mn 257.610†	-236.9	3.3	0.0116	µg/L	0.0116	ppb	09:51:31
1	Mo 202.031†	-3.0	-3.2	-0.3652	µg/L	-0.3652	ppb	09:51:52
1	Ni 231.604†	306.1	-11.0	-0.5929	µg/L	-0.5929	ppb	09:51:52
1	P 214.914†	175.8	5.3	10.520	µg/L	10.520	ppb	09:51:52
1	Pb 220.353†	39.0	-4.9	-1.2528	µg/L	-1.2528	ppb	09:51:52
1	S 181.975 Axial†	32.4	5.3	26.119	µg/L	26.119	ppb	09:51:52
1	Sb 206.836†	22.6	5.0	4.8941	µg/L	4.8941	ppb	09:51:52
1	Se 196.026†	18.6	2.8	3.5661	µg/L	3.5661	ppb	09:51:52
1	SiO2†	2769.8	53.3	9.7708	µg/L	9.7708	ppb	09:51:31
1	Si 251.611†	376.8	7.7	0.5337	µg/L	0.5337	ppb	09:51:52
1	Sn 189.927†	23.0	1.5	0.7373	µg/L	0.7373	ppb	09:51:52
1	Ti 334.940†	1076.5	91.8	0.2085	µg/L	0.2085	ppb	09:51:31
1	Tl 190.801†	-21.3	-4.7	-7.0949	µg/L	-7.0949	ppb	09:51:52
1	U 409.014†	594.8	-45.4	-4.1539	µg/L	-4.1539	ppb	09:51:31
1	V 292.402†	-138.2	23.4	0.2529	µg/L	0.2529	ppb	09:51:31
1	Zn 213.857†	585.7	20.7	0.5434	µg/L	0.5434	ppb	09:51:52
2	Sc RADIAL	112255.9	112255.9	98.8	%			09:50:29
2	Al 396.153Radial†	118.8	-6.0	-3.1930	µg/L	-3.1930	ppb	09:50:29
2	Ca 317.933Radial†	428.1	9.4	3.7873	µg/L	3.7873	ppb	09:50:49
2	Fe 238.204 Radial†	14.1	0.6	3.6490	µg/L	3.6490	ppb	09:50:49
2	K 766.490 Radial†	811.5	59.9	31.819	µg/L	31.819	ppb	09:50:29
2	Mg 279.077 IEC†	12.8	-0.4	-2.5524	µg/L	-2.5524	ppb	09:50:49
2	Na 589.592 Radial†	-520.0	152.8	39.334	µg/L	39.334	ppb	09:50:29
2	Sr 421.552†	-60.8	-36.1	-0.1888	µg/L	-0.1888	ppb	09:50:29
2	Sc 361.383	2046239.0	2046239.0	98.817	%			09:51:58
2	Y 371.029	1291079.9	1291079.9	98.648	%			09:51:58
2	Ag 328.068†	247.4	44.0	0.4045	µg/L	0.4045	ppb	09:52:04
2	As 188.979†	2.6	0.2	0.2733	µg/L	0.2733	ppb	09:52:24
2	B 249.677†	181.4	-11.4	-0.4874	µg/L	-0.4874	ppb	09:52:04
2	Ba 233.527†	-68.2	-10.2	-0.2593	µg/L	-0.2593	ppb	09:52:24
2	Be 313.107†	3690.7	-30.0	-0.0185	µg/L	-0.0185	ppb	09:52:04
2	Cd 226.502†	-97.5	-0.5	-0.0182	µg/L	-0.0182	ppb	09:52:24
2	Co 228.616†	-69.3	-6.2	-0.2912	µg/L	-0.2912	ppb	09:52:24
2	Cr 267.716†	-124.4	0.3	0.0065	µg/L	0.0065	ppb	09:52:04
2	Cu 324.752†	4283.5	76.2	0.5195	µg/L	0.5195	ppb	09:52:04
2	Mn 257.610†	-222.9	17.5	0.0561	µg/L	0.0561	ppb	09:52:04
2	Mo 202.031†	7.5	7.4	0.8606	µg/L	0.8606	ppb	09:52:24
2	Ni 231.604†	303.4	-13.9	-0.7495	µg/L	-0.7495	ppb	09:52:24
2	P 214.914†	165.9	-4.9	-9.8609	µg/L	-9.8609	ppb	09:52:24
2	Pb 220.353†	41.0	-2.9	-0.7331	µg/L	-0.7331	ppb	09:52:24

2	S 181.975 Axial†	27.5	0.3	1.2905 µg/L	1.2905 ppb	09:52:24
2	Sb 206.836†	13.7	-4.0	-3.9410 µg/L	-3.9410 ppb	09:52:24
2	Se 196.026†	14.2	-1.5	-1.9259 µg/L	-1.9259 ppb	09:52:24
2	SiO2†	2792.5	75.1	13.750 µg/L	13.750 ppb	09:52:04
2	Si 251.611†	366.3	-3.1	-0.2343 µg/L	-0.2343 ppb	09:52:24
2	Sn 189.927†	20.3	-1.3	-0.6659 µg/L	-0.6659 ppb	09:52:24
2	Ti 334.940†	1058.7	73.3	0.1665 µg/L	0.1665 ppb	09:52:04
2	Tl 190.801†	-21.9	-5.2	-7.8444 µg/L	-7.8444 ppb	09:52:24
2	U 409.014†	585.3	-55.3	-5.0567 µg/L	-5.0567 ppb	09:52:04
2	V 292.402†	-147.4	14.1	0.1560 µg/L	0.1560 ppb	09:52:04
2	Zn 213.857†	590.4	25.2	0.6642 µg/L	0.6642 ppb	09:52:24
3	Sc RADIAL	112560.4	112560.4	99.0 %		09:50:55
3	Al 396.153Radial†	142.6	17.6	9.2183 µg/L	9.2183 ppb	09:50:55
3	Ca 317.933Radial†	418.1	-1.9	-0.7582 µg/L	-0.7582 ppb	09:51:15
3	Fe 238.204 Radial†	12.1	-1.5	-9.5543 µg/L	-9.5543 ppb	09:51:15
3	K 766.490 Radial†	795.5	41.6	22.079 µg/L	22.079 ppb	09:50:55
3	Mg 279.077 IEC†	17.2	3.9	24.478 µg/L	24.478 ppb	09:51:15
3	Na 589.592 Radial†	-550.5	123.5	31.779 µg/L	31.779 ppb	09:50:55
3	Sr 421.552†	-74.3	-49.5	-0.2593 µg/L	-0.2593 ppb	09:50:55
3	Sc 361.383	2045692.9	2045692.9	98.791 %		09:52:30
3	Y 371.029	1292250.6	1292250.6	98.738 %		09:52:30
3	Ag 328.068†	228.3	24.7	0.2294 µg/L	0.2294 ppb	09:52:36
3	As 188.979†	-3.6	-6.1	-11.004 µg/L	-11.004 ppb	09:52:56
3	B 249.677†	200.3	7.8	0.3355 µg/L	0.3355 ppb	09:52:36
3	Ba 233.527†	-64.1	-6.0	-0.1520 µg/L	-0.1520 ppb	09:52:56
3	Be 313.107†	3689.7	-29.9	-0.0185 µg/L	-0.0185 ppb	09:52:36
3	Cd 226.502†	-96.2	0.7	0.0144 µg/L	0.0144 ppb	09:52:56
3	Co 228.616†	-62.6	0.6	0.0276 µg/L	0.0276 ppb	09:52:56
3	Cr 267.716†	-139.3	-14.8	-0.3042 µg/L	-0.3042 ppb	09:52:36
3	Cu 324.752†	4213.1	6.2	0.0401 µg/L	0.0401 ppb	09:52:36
3	Mn 257.610†	-233.3	6.9	0.0207 µg/L	0.0207 ppb	09:52:36
3	Mo 202.031†	3.4	3.2	0.3749 µg/L	0.3749 ppb	09:52:56
3	Ni 231.604†	307.3	-9.9	-0.5349 µg/L	-0.5349 ppb	09:52:56
3	P 214.914†	169.0	-1.7	-3.4557 µg/L	-3.4557 ppb	09:52:56
3	Pb 220.353†	39.9	-4.0	-1.0129 µg/L	-1.0129 ppb	09:52:56
3	S 181.975 Axial†	30.9	3.8	18.502 µg/L	18.502 ppb	09:52:56
3	Sb 206.836†	17.1	-0.6	-0.6301 µg/L	-0.6301 ppb	09:52:56
3	Se 196.026†	10.0	-5.8	-7.2838 µg/L	-7.2838 ppb	09:52:56
3	SiO2†	2756.1	39.0	7.1460 µg/L	7.1460 ppb	09:52:36
3	Si 251.611†	410.6	41.9	3.0768 µg/L	3.0768 ppb	09:52:56
3	Sn 189.927†	21.6	0.0	0.0237 µg/L	0.0237 ppb	09:52:56
3	Ti 334.940†	1030.1	44.7	0.1016 µg/L	0.1016 ppb	09:52:36
3	Tl 190.801†	-19.5	-2.9	-4.2852 µg/L	-4.2852 ppb	09:52:56
3	U 409.014†	563.2	-77.5	-7.0838 µg/L	-7.0838 ppb	09:52:36
3	V 292.402†	-110.2	51.7	0.5689 µg/L	0.5689 ppb	09:52:36
3	Zn 213.857†	589.0	24.0	0.6311 µg/L	0.6311 ppb	09:52:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2045756.0	98.794	%	0.0220				0.02%
Sc RADIAL	112534.0	99.0	%	0.23				0.24%
Y 371.029	1292183.9	98.733	%	0.0819				0.08%
Ag 328.068†	32.5	0.3002	µg/L	0.09222	0.3002	ppb	0.09222	30.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.3	2.2144	µg/L	6.35778	2.2144	ppb	6.35778	287.10%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.1	-3.8505	µg/L	6.21963	-3.8505	ppb	6.21963	161.53%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.9	-0.1658	µg/L	0.43993	-0.1658	ppb	0.43993	265.29%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-9.0	-0.2280	µg/L	0.06618	-0.2280	ppb	0.06618	29.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-50.9	-0.0314	µg/L	0.02235	-0.0314	ppb	0.02235	71.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.7	2.7083	µg/L	3.07252	2.7083	ppb	3.07252	113.45%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	3.1	0.0750	µg/L	0.13430	0.0750	ppb	0.13430	178.97%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.2	0.0119	µg/L	0.29561	0.0119	ppb	0.29561	>999.9%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -14.4     -0.2977 µg/L       0.30098     -0.2977 ppb        0.30098 101.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               20.4      0.1394 µg/L       0.34143      0.1394 ppb        0.34143 244.90%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.2      1.2718 µg/L       9.85485      1.2718 ppb        9.85485 774.90%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         38.7     20.546 µg/L       12.1134     20.546 ppb        12.1134  58.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.1     13.423 µg/L       14.1712     13.423 ppb        14.1712 105.57%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                9.2      0.0295 µg/L       0.02355      0.0295 ppb        0.02355  79.94%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.5      0.2901 µg/L       0.61731      0.2901 ppb        0.61731 212.79%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       121.0     31.127 µg/L        8.5513     31.127 ppb         8.5513  27.47%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -11.6     -0.6258 µg/L       0.11098     -0.6258 ppb        0.11098  17.74%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.5     -0.9323 µg/L      10.42207     -0.9323 ppb       10.42207 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.0     -0.9996 µg/L       0.26013     -0.9996 ppb        0.26013  26.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           3.1     15.304 µg/L       12.7194     15.304 ppb        12.7194  83.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.1      0.1076 µg/L       4.46352      0.1076 ppb        4.46352 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.5     -1.8812 µg/L       5.42511     -1.8812 ppb        5.42511 288.39%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     55.8     10.222 µg/L        3.3252     10.222 ppb         3.3252  32.53%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               15.5      1.1254 µg/L       1.73305      1.1254 ppb        1.73305 153.99%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.1      0.0317 µg/L       0.70162      0.0317 ppb        0.70162 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -51.0     -0.2671 µg/L       0.08247     -0.2671 ppb        0.08247  30.87%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               69.9      0.1589 µg/L       0.05381      0.1589 ppb        0.05381  33.87%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -4.3     -6.4082 µg/L       1.87634     -6.4082 ppb        1.87634  29.28%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -59.4     -5.4315 µg/L       1.50050     -5.4315 ppb        1.50050  27.63%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                29.7      0.3259 µg/L       0.21589      0.3259 ppb        0.21589  66.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               23.3      0.6129 µg/L       0.06240      0.6129 ppb        0.06240  10.18%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 36
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 10:24:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116019.7	116019.7	102	%			10:25:05
1	Al 396.153Radial†	12730.3	12343.4	6437.9	µg/L	6437.9	ppb	10:25:05
1	Ca 317.933Radial†	16347.3	15588.6	6289.5	µg/L	6289.5	ppb	10:25:05
1	Fe 238.204 Radial†	832.5	801.7	5169.5	µg/L	5169.5	ppb	10:25:25
1	K 766.490 Radial†	10362.7	9389.0	4989.0	µg/L	4989.0	ppb	10:25:05
1	Mg 279.077 IEC†	889.3	857.7	5358.9	µg/L	5358.9	ppb	10:25:25
1	Na 589.592 Radial†	39845.5	39709.1	10219	µg/L	10219	ppb	10:25:05
1	Sr 421.552†	96970.8	95011.3	497.52	µg/L	497.52	ppb	10:25:05
1	Sc 361.383	2028419.6	2028419.6	97.956	%			10:26:29
1	Y 371.029	1274363.8	1274363.8	97.371	%			10:26:29
1	Ag 328.068†	56242.3	57209.3	527.48	µg/L	527.48	ppb	10:26:34
1	As 188.979†	283.4	286.9	513.58	µg/L	513.58	ppb	10:26:55
1	B 249.677†	11883.1	11936.1	506.45	µg/L	506.45	ppb	10:26:34
1	Ba 233.527†	19782.9	20254.4	514.91	µg/L	514.91	ppb	10:26:34
1	Be 313.107†	812721.4	825912.3	508.33	µg/L	508.33	ppb	10:26:29
1	Cd 226.502†	19389.4	19892.0	515.65	µg/L	515.65	ppb	10:26:34
1	Co 228.616†	10579.2	10863.9	516.14	µg/L	516.14	ppb	10:26:34
1	Cr 267.716†	24182.5	24813.2	513.94	µg/L	513.94	ppb	10:26:34
1	Cu 324.752†	77566.4	74926.1	511.05	µg/L	511.05	ppb	10:26:34
1	Mn 257.610†	157057.2	160576.9	510.68	µg/L	510.68	ppb	10:26:29
1	Mo 202.031†	4412.6	4504.5	521.02	µg/L	521.02	ppb	10:26:55
1	Ni 231.604†	9679.7	9560.7	515.74	µg/L	515.74	ppb	10:26:34
1	P 214.914†	1439.0	1296.2	2530.7	µg/L	2530.7	ppb	10:26:55
1	Pb 220.353†	2056.1	2054.5	522.94	µg/L	522.94	ppb	10:26:55
1	S 181.975 Axial†	234.7	212.0	1042.5	µg/L	1042.5	ppb	10:26:55
1	Sb 206.836†	551.2	544.8	531.31	µg/L	531.31	ppb	10:26:55
1	Se 196.026†	414.2	406.9	513.81	µg/L	513.81	ppb	10:26:55
1	SiO2†	32257.1	30179.2	5528.9	µg/L	5528.9	ppb	10:26:34
1	Si 251.611†	34574.7	34922.3	2532.9	µg/L	2532.9	ppb	10:26:34
1	Sn 189.927†	1053.7	1053.8	531.74	µg/L	531.74	ppb	10:26:55
1	Ti 334.940†	224338.2	228020.5	518.34	µg/L	518.34	ppb	10:26:29
1	Tl 190.801†	325.2	348.8	525.81	µg/L	525.81	ppb	10:26:55
1	U 409.014†	6154.5	5635.3	514.56	µg/L	514.56	ppb	10:26:34
1	V 292.402†	44887.8	45987.5	519.32	µg/L	519.32	ppb	10:26:34
1	Zn 213.857†	19930.2	19773.7	514.07	µg/L	514.07	ppb	10:26:34
2	Sc RADIAL	114278.2	114278.2	101	%			10:25:31
2	Al 396.153Radial†	10361.1	10177.3	5304.8	µg/L	5304.8	ppb	10:25:31
2	Ca 317.933Radial†	13765.3	13264.9	5351.9	µg/L	5351.9	ppb	10:25:31
2	Fe 238.204 Radial†	830.9	812.6	5239.1	µg/L	5239.1	ppb	10:25:51
2	K 766.490 Radial†	10331.5	9512.6	5054.7	µg/L	5054.7	ppb	10:25:31
2	Mg 279.077 IEC†	882.3	864.0	5398.2	µg/L	5398.2	ppb	10:25:51
2	Na 589.592 Radial†	39709.4	40168.5	10337	µg/L	10337	ppb	10:25:31
2	Sr 421.552†	96506.6	95997.1	502.68	µg/L	502.68	ppb	10:25:31
2	Sc 361.383	2045261.5	2045261.5	98.770	%			10:27:02
2	Y 371.029	1284767.2	1284767.2	98.166	%			10:27:02
2	Ag 328.068†	56363.5	56859.2	524.25	µg/L	524.25	ppb	10:27:08
2	As 188.979†	282.9	284.0	508.51	µg/L	508.51	ppb	10:27:28
2	B 249.677†	11899.4	11852.6	502.88	µg/L	502.88	ppb	10:27:08
2	Ba 233.527†	19743.9	20048.7	509.68	µg/L	509.68	ppb	10:27:08
2	Be 313.107†	820703.3	827161.6	509.10	µg/L	509.10	ppb	10:27:02
2	Cd 226.502†	19343.9	19683.0	510.22	µg/L	510.22	ppb	10:27:08
2	Co 228.616†	10529.8	10724.9	509.53	µg/L	509.53	ppb	10:27:08
2	Cr 267.716†	24145.1	24572.1	508.95	µg/L	508.95	ppb	10:27:08
2	Cu 324.752†	77577.8	74285.6	506.71	µg/L	506.71	ppb	10:27:08
2	Mn 257.610†	158780.9	161001.9	512.04	µg/L	512.04	ppb	10:27:02
2	Mo 202.031†	4424.9	4479.8	518.18	µg/L	518.18	ppb	10:27:28
2	Ni 231.604†	9654.4	9453.7	509.97	µg/L	509.97	ppb	10:27:08
2	P 214.914†	1435.9	1281.0	2500.3	µg/L	2500.3	ppb	10:27:28
2	Pb 220.353†	2058.1	2039.3	518.97	µg/L	518.97	ppb	10:27:28

2	S 181.975 Axial†	232.5	207.9	1022.0	µg/L	1022.0 ppb	10:27:28
2	Sb 206.836†	546.4	535.2	522.04	µg/L	522.04 ppb	10:27:28
2	Se 196.026†	417.3	406.6	513.32	µg/L	513.32 ppb	10:27:28
2	SiO2†	32325.8	29977.5	5492.0	µg/L	5492.0 ppb	10:27:08
2	Si 251.611†	34542.6	34599.0	2509.1	µg/L	2509.1 ppb	10:27:08
2	Sn 189.927†	1058.3	1049.6	529.43	µg/L	529.43 ppb	10:27:28
2	Ti 334.940†	226342.4	228163.7	518.72	µg/L	518.72 ppb	10:27:02
2	Tl 190.801†	321.9	342.8	516.94	µg/L	516.94 ppb	10:27:28
2	U 409.014†	6131.2	5560.0	507.63	µg/L	507.63 ppb	10:27:08
2	V 292.402†	44829.1	45550.8	514.41	µg/L	514.41 ppb	10:27:08
2	Zn 213.857†	19953.1	19629.3	510.32	µg/L	510.32 ppb	10:27:08
3	Sc RADIAL	114691.6	114691.6	101	%		10:25:57
3	Al 396.153Radial†	10359.3	10138.4	5285.0	µg/L	5285.0 ppb	10:25:57
3	Ca 317.933Radial†	13864.5	13313.9	5371.7	µg/L	5371.7 ppb	10:25:57
3	Fe 238.204 Radial†	836.9	815.5	5258.3	µg/L	5258.3 ppb	10:26:17
3	K 766.490 Radial†	10435.0	9578.1	5089.5	µg/L	5089.5 ppb	10:25:57
3	Mg 279.077 IEC†	885.8	864.3	5399.5	µg/L	5399.5 ppb	10:26:17
3	Na 589.592 Radial†	40059.3	40372.8	10390	µg/L	10390 ppb	10:25:57
3	Sr 421.552†	97570.9	96705.7	506.39	µg/L	506.39 ppb	10:25:57
3	Sc 361.383	2033767.2	2033767.2	98.215	%		10:27:35
3	Y 371.029	1278388.0	1278388.0	97.679	%		10:27:35
3	Ag 328.068†	56211.7	57027.2	525.80	µg/L	525.80 ppb	10:27:41
3	As 188.979†	280.7	283.3	507.29	µg/L	507.29 ppb	10:28:02
3	B 249.677†	11848.9	11869.3	503.58	µg/L	503.58 ppb	10:27:41
3	Ba 233.527†	19719.2	20136.5	511.91	µg/L	511.91 ppb	10:27:41
3	Be 313.107†	819432.8	830564.2	511.20	µg/L	511.20 ppb	10:27:35
3	Cd 226.502†	19376.9	19827.3	513.96	µg/L	513.96 ppb	10:27:41
3	Co 228.616†	10517.4	10772.5	511.75	µg/L	511.75 ppb	10:27:41
3	Cr 267.716†	24198.7	24764.8	512.93	µg/L	512.93 ppb	10:27:41
3	Cu 324.752†	77542.4	74693.5	509.49	µg/L	509.49 ppb	10:27:41
3	Mn 257.610†	158424.5	161547.5	513.78	µg/L	513.78 ppb	10:27:35
3	Mo 202.031†	4278.3	4355.9	503.85	µg/L	503.85 ppb	10:28:02
3	Ni 231.604†	9630.7	9484.8	511.64	µg/L	511.64 ppb	10:27:41
3	P 214.914†	1409.2	1262.0	2461.7	µg/L	2461.7 ppb	10:28:02
3	Pb 220.353†	1993.9	1985.7	505.32	µg/L	505.32 ppb	10:28:02
3	S 181.975 Axial†	230.9	207.5	1020.3	µg/L	1020.3 ppb	10:28:02
3	Sb 206.836†	542.2	534.1	520.94	µg/L	520.94 ppb	10:28:02
3	Se 196.026†	401.2	392.5	495.63	µg/L	495.63 ppb	10:28:02
3	SiO2†	32274.1	30109.9	5516.2	µg/L	5516.2 ppb	10:27:41
3	Si 251.611†	34568.3	34822.9	2526.4	µg/L	2526.4 ppb	10:27:41
3	Sn 189.927†	1021.9	1018.6	513.89	µg/L	513.89 ppb	10:28:02
3	Ti 334.940†	225992.5	229102.6	520.85	µg/L	520.85 ppb	10:27:35
3	Tl 190.801†	315.8	338.4	510.43	µg/L	510.43 ppb	10:28:02
3	U 409.014†	6154.0	5618.3	512.96	µg/L	512.96 ppb	10:27:41
3	V 292.402†	44753.9	45730.7	516.33	µg/L	516.33 ppb	10:27:41
3	Zn 213.857†	19884.5	19673.7	511.46	µg/L	511.46 ppb	10:27:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2035816.1	98.314	%	0.4156				0.42%
Sc RADIAL	114996.5	101	%	0.8				0.79%
Y 371.029	1279173.0	97.739	%	0.4008				0.41%
Ag 328.068†	57031.9	525.84	µg/L	1.616	525.84	ppb	1.616	0.31%
QC value within limits for Ag 328.068 Recovery = 105.17%								
Al 396.153Radial†	10886.4	5675.9	µg/L	660.01	5675.9	ppb	660.01	11.63%
QC value greater than the upper limit for Al 396.153Radial Recovery = 113.52%								
As 188.979†	284.7	509.79	µg/L	3.335	509.79	ppb	3.335	0.65%
QC value within limits for As 188.979 Recovery = 101.96%								
B 249.677†	11886.0	504.30	µg/L	1.893	504.30	ppb	1.893	0.38%
QC value within limits for B 249.677 Recovery = 100.86%								
Ba 233.527†	20146.5	512.17	µg/L	2.625	512.17	ppb	2.625	0.51%
QC value within limits for Ba 233.527 Recovery = 102.43%								
Be 313.107†	827879.4	509.54	µg/L	1.482	509.54	ppb	1.482	0.29%
QC value within limits for Be 313.107 Recovery = 101.91%								
Ca 317.933Radial†	14055.8	5671.0	µg/L	535.68	5671.0	ppb	535.68	9.45%
QC value greater than the upper limit for Ca 317.933Radial Recovery = 113.42%								
Cd 226.502†	19800.8	513.28	µg/L	2.779	513.28	ppb	2.779	0.54%
QC value within limits for Cd 226.502 Recovery = 102.66%								
Co 228.616†	10787.1	512.47	µg/L	3.362	512.47	ppb	3.362	0.66%

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   QC value within limits for Co 228.616  Recovery = 102.49%
Cr 267.716†            24716.7      511.94 µg/L        2.641      511.94 ppb          2.641   0.52%
   QC value within limits for Cr 267.716  Recovery = 102.39%
Cu 324.752†            74635.1      509.08 µg/L        2.200      509.08 ppb          2.200   0.43%
   QC value within limits for Cu 324.752  Recovery = 101.82%
Fe 238.204 Radial†       809.9      5222.3 µg/L       46.74      5222.3 ppb          46.74   0.90%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.45%
K 766.490 Radial†       9493.2      5044.4 µg/L       51.04      5044.4 ppb          51.04   1.01%
   QC value within limits for K 766.490 Radial  Recovery = 100.89%
Mg 279.077 IEC†          862.0      5385.5 µg/L       23.05      5385.5 ppb          23.05   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.71%
Mn 257.610†           161042.1      512.17 µg/L       1.551      512.17 ppb          1.551   0.30%
   QC value within limits for Mn 257.610  Recovery = 102.43%
Mo 202.031†             4446.7      514.35 µg/L       9.204      514.35 ppb          9.204   1.79%
   QC value within limits for Mo 202.031  Recovery = 102.87%
Na 589.592 Radial†     40083.5       10315 µg/L        87.5       10315 ppb           87.5   0.85%
   QC value within limits for Na 589.592 Radial  Recovery = 103.15%
Ni 231.604†             9499.7      512.45 µg/L       2.968      512.45 ppb          2.968   0.58%
   QC value within limits for Ni 231.604  Recovery = 102.49%
P 214.914†              1279.8      2497.6 µg/L       34.57      2497.6 ppb          34.57   1.38%
   QC value within limits for P 214.914  Recovery = 99.90%
Pb 220.353†             2026.5      515.75 µg/L       9.244      515.75 ppb          9.244   1.79%
   QC value within limits for Pb 220.353  Recovery = 103.15%
S 181.975 Axial†         209.1      1028.3 µg/L       12.34      1028.3 ppb          12.34   1.20%
   QC value within limits for S 181.975 Axial  Recovery = 102.83%
Sb 206.836†              538.1      524.76 µg/L       5.694      524.76 ppb          5.694   1.09%
   QC value within limits for Sb 206.836  Recovery = 104.95%
Se 196.026†              402.0      507.59 µg/L      10.353      507.59 ppb         10.353   2.04%
   QC value within limits for Se 196.026  Recovery = 101.52%
SiO2†                  30088.9      5512.4 µg/L       18.77      5512.4 ppb          18.77   0.34%
   QC value within limits for SiO2  Recovery = 103.08%
Si 251.611†            34781.4      2522.8 µg/L       12.31      2522.8 ppb          12.31   0.49%
   QC value within limits for Si 251.611  Recovery = 100.91%
Sn 189.927†             1040.7      525.02 µg/L       9.705      525.02 ppb          9.705   1.85%
   QC value within limits for Sn 189.927  Recovery = 105.00%
Sr 421.552†            95904.7      502.20 µg/L       4.456      502.20 ppb          4.456   0.89%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           228428.9      519.30 µg/L       1.355      519.30 ppb          1.355   0.26%
   QC value within limits for Ti 334.940  Recovery = 103.86%
Tl 190.801†              343.3      517.73 µg/L       7.720      517.73 ppb          7.720   1.49%
   QC value within limits for Tl 190.801  Recovery = 103.55%
U 409.014†              5604.5      511.72 µg/L       3.628      511.72 ppb          3.628   0.71%
   QC value within limits for U 409.014  Recovery = 102.34%
V 292.402†             45756.4      516.69 µg/L       2.475      516.69 ppb          2.475   0.48%
   QC value within limits for V 292.402  Recovery = 103.34%
Zn 213.857†            19692.2      511.95 µg/L       1.925      511.95 ppb          1.925   0.38%
   QC value within limits for Zn 213.857  Recovery = 102.39%
QC Failed.  Continue with analysis.
```

Sequence No.: 37
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 10:28:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110316.2	110316.2	97.1	%			10:28:43
1	Al 396.153Radial†	221.5	101.9	53.293	µg/L	53.293	ppb	10:28:43
1	Ca 317.933Radial†	488.3	79.0	31.876	µg/L	31.876	ppb	10:29:03
1	Fe 238.204 Radial†	17.7	4.5	28.990	µg/L	28.990	ppb	10:29:03
1	K 766.490 Radial†	806.3	69.0	36.657	µg/L	36.657	ppb	10:28:43
1	Mg 279.077 IEC†	18.6	5.8	35.949	µg/L	35.949	ppb	10:29:03
1	Na 589.592 Radial†	-600.0	61.1	15.723	µg/L	15.723	ppb	10:28:43
1	Sr 421.552†	-23.0	1.8	0.0092	µg/L	0.0092	ppb	10:28:43
1	Sc 361.383	2040076.6	2040076.6	98.519	%			10:30:05
1	Y 371.029	1287893.8	1287893.8	98.405	%			10:30:05
1	Ag 328.068†	190.8	-12.7	-0.1102	µg/L	-0.1102	ppb	10:30:11
1	As 188.979†	0.9	-1.5	-2.7712	µg/L	-2.7712	ppb	10:30:32
1	B 249.677†	164.9	-27.6	-1.1848	µg/L	-1.1848	ppb	10:30:11
1	Ba 233.527†	-52.5	5.5	0.1398	µg/L	0.1398	ppb	10:30:32
1	Be 313.107†	3789.6	81.8	0.0503	µg/L	0.0503	ppb	10:30:11
1	Cd 226.502†	-90.9	5.9	0.1485	µg/L	0.1485	ppb	10:30:32
1	Co 228.616†	-60.3	2.8	0.1322	µg/L	0.1322	ppb	10:30:32
1	Cr 267.716†	-146.2	-22.1	-0.4562	µg/L	-0.4562	ppb	10:30:11
1	Cu 324.752†	4289.4	95.3	0.6549	µg/L	0.6549	ppb	10:30:11
1	Mn 257.610†	-242.5	-3.1	-0.0063	µg/L	-0.0063	ppb	10:30:32
1	Mo 202.031†	2.3	2.2	0.2575	µg/L	0.2575	ppb	10:30:32
1	Ni 231.604†	304.3	-12.0	-0.6492	µg/L	-0.6492	ppb	10:30:32
1	P 214.914†	166.0	-4.2	-8.5145	µg/L	-8.5145	ppb	10:30:32
1	Pb 220.353†	36.6	-7.3	-1.8502	µg/L	-1.8502	ppb	10:30:32
1	S 181.975 Axial†	26.8	-0.4	-1.7993	µg/L	-1.7993	ppb	10:30:32
1	Sb 206.836†	21.9	4.3	4.1830	µg/L	4.1830	ppb	10:30:32
1	Se 196.026†	17.7	2.0	2.4783	µg/L	2.4783	ppb	10:30:32
1	SiO2†	2758.6	49.2	9.0073	µg/L	9.0073	ppb	10:30:11
1	Si 251.611†	367.6	-0.7	-0.1027	µg/L	-0.1027	ppb	10:30:32
1	Sn 189.927†	23.1	1.6	0.8286	µg/L	0.8286	ppb	10:30:32
1	Ti 334.940†	991.0	7.9	0.0161	µg/L	0.0161	ppb	10:30:11
1	Tl 190.801†	-24.1	-7.6	-11.377	µg/L	-11.377	ppb	10:30:32
1	U 409.014†	625.3	-12.9	-1.1868	µg/L	-1.1868	ppb	10:30:11
1	V 292.402†	-111.8	49.8	0.5598	µg/L	0.5598	ppb	10:30:11
1	Zn 213.857†	597.5	34.2	0.8948	µg/L	0.8948	ppb	10:30:32
2	Sc RADIAL	110985.4	110985.4	97.7	%			10:29:09
2	Al 396.153Radial†	164.2	41.9	21.906	µg/L	21.906	ppb	10:29:09
2	Ca 317.933Radial†	526.2	114.7	46.287	µg/L	46.287	ppb	10:29:29
2	Fe 238.204 Radial†	19.9	6.7	43.030	µg/L	43.030	ppb	10:29:29
2	K 766.490 Radial†	804.2	61.8	32.841	µg/L	32.841	ppb	10:29:09
2	Mg 279.077 IEC†	27.7	14.9	93.046	µg/L	93.046	ppb	10:29:29
2	Na 589.592 Radial†	-596.3	68.7	17.674	µg/L	17.674	ppb	10:29:09
2	Sr 421.552†	-55.5	-31.3	-0.1639	µg/L	-0.1639	ppb	10:29:09
2	Sc 361.383	2028429.1	2028429.1	97.957	%			10:30:38
2	Y 371.029	1283322.3	1283322.3	98.056	%			10:30:38
2	Ag 328.068†	184.5	-17.9	-0.1618	µg/L	-0.1618	ppb	10:30:43
2	As 188.979†	6.1	3.8	6.8206	µg/L	6.8206	ppb	10:31:04
2	B 249.677†	184.6	-6.5	-0.2907	µg/L	-0.2907	ppb	10:30:43
2	Ba 233.527†	-60.2	-2.7	-0.0684	µg/L	-0.0684	ppb	10:31:04
2	Be 313.107†	3733.2	46.2	0.0285	µg/L	0.0285	ppb	10:30:43
2	Cd 226.502†	-96.7	-0.5	-0.0148	µg/L	-0.0148	ppb	10:31:04
2	Co 228.616†	-60.6	2.1	0.0981	µg/L	0.0981	ppb	10:31:04
2	Cr 267.716†	-184.4	-62.1	-1.2828	µg/L	-1.2828	ppb	10:30:43
2	Cu 324.752†	4170.8	-0.8	0.0040	µg/L	0.0040	ppb	10:30:43
2	Mn 257.610†	-233.2	5.0	0.0214	µg/L	0.0214	ppb	10:31:04
2	Mo 202.031†	0.8	0.7	0.0824	µg/L	0.0824	ppb	10:31:04
2	Ni 231.604†	320.3	6.1	0.3278	µg/L	0.3278	ppb	10:31:04
2	P 214.914†	172.4	3.2	6.4170	µg/L	6.4170	ppb	10:31:04
2	Pb 220.353†	33.9	-9.8	-2.4996	µg/L	-2.4996	ppb	10:31:04

2	S 181.975 Axial†	31.8	4.9	24.132 µg/L	24.132 ppb	10:31:04
2	Sb 206.836†	18.6	1.0	1.0116 µg/L	1.0116 ppb	10:31:04
2	Se 196.026†	17.0	1.4	1.7275 µg/L	1.7275 ppb	10:31:04
2	SiO2†	2729.7	35.7	6.5489 µg/L	6.5489 ppb	10:30:43
2	Si 251.611†	371.5	5.4	0.3604 µg/L	0.3604 ppb	10:31:04
2	Sn 189.927†	22.8	1.4	0.7634 µg/L	0.7634 ppb	10:31:04
2	Ti 334.940†	973.0	-4.8	-0.0135 µg/L	-0.0135 ppb	10:30:43
2	Tl 190.801†	-19.9	-3.4	-5.0836 µg/L	-5.0836 ppb	10:31:04
2	U 409.014†	664.7	31.0	2.8255 µg/L	2.8255 ppb	10:30:43
2	V 292.402†	-171.7	-12.0	-0.1260 µg/L	-0.1260 ppb	10:30:43
2	Zn 213.857†	590.8	30.8	0.7991 µg/L	0.7991 ppb	10:31:04
3	Sc RADIAL	111359.2	111359.2	98.0 %		10:29:35
3	Al 396.153Radial†	242.8	121.5	63.509 µg/L	63.509 ppb	10:29:35
3	Ca 317.933Radial†	520.9	107.5	43.382 µg/L	43.382 ppb	10:29:55
3	Fe 238.204 Radial†	17.8	4.5	28.881 µg/L	28.881 ppb	10:29:55
3	K 766.490 Radial†	765.7	19.8	10.513 µg/L	10.513 ppb	10:29:35
3	Mg 279.077 IEC†	16.7	3.6	22.417 µg/L	22.417 ppb	10:29:55
3	Na 589.592 Radial†	-626.4	40.0	10.289 µg/L	10.289 ppb	10:29:35
3	Sr 421.552†	-28.4	-3.5	-0.0183 µg/L	-0.0183 ppb	10:29:35
3	Sc 361.383	2021442.8	2021442.8	97.619 %		10:31:10
3	Y 371.029	1276998.4	1276998.4	97.572 %		10:31:10
3	Ag 328.068†	190.8	-10.9	-0.0989 µg/L	-0.0989 ppb	10:31:15
3	As 188.979†	2.2	-0.2	-0.4452 µg/L	-0.4452 ppb	10:31:36
3	B 249.677†	212.2	22.4	0.9426 µg/L	0.9426 ppb	10:31:15
3	Ba 233.527†	-59.2	-1.9	-0.0481 µg/L	-0.0481 ppb	10:31:36
3	Be 313.107†	3759.9	86.8	0.0534 µg/L	0.0534 ppb	10:31:15
3	Cd 226.502†	-101.0	-5.3	-0.1433 µg/L	-0.1433 ppb	10:31:36
3	Co 228.616†	-68.3	-6.0	-0.2834 µg/L	-0.2834 ppb	10:31:36
3	Cr 267.716†	-112.2	11.2	0.2315 µg/L	0.2315 ppb	10:31:15
3	Cu 324.752†	4167.7	10.8	0.0799 µg/L	0.0799 ppb	10:31:15
3	Mn 257.610†	-249.1	-12.1	-0.0349 µg/L	-0.0349 ppb	10:31:36
3	Mo 202.031†	11.0	11.1	1.2845 µg/L	1.2845 ppb	10:31:36
3	Ni 231.604†	318.1	4.9	0.2662 µg/L	0.2662 ppb	10:31:36
3	P 214.914†	177.7	9.3	18.500 µg/L	18.500 ppb	10:31:36
3	Pb 220.353†	34.9	-8.7	-2.2068 µg/L	-2.2068 ppb	10:31:36
3	S 181.975 Axial†	25.8	-1.1	-5.2587 µg/L	-5.2587 ppb	10:31:36
3	Sb 206.836†	18.5	1.0	1.0082 µg/L	1.0082 ppb	10:31:36
3	Se 196.026†	13.5	-2.1	-2.6371 µg/L	-2.6371 ppb	10:31:36
3	SiO2†	2712.3	27.6	5.0582 µg/L	5.0582 ppb	10:31:15
3	Si 251.611†	364.5	-0.4	0.0294 µg/L	0.0294 ppb	10:31:36
3	Sn 189.927†	16.8	-4.7	-2.3225 µg/L	-2.3225 ppb	10:31:36
3	Ti 334.940†	1003.7	30.1	0.0660 µg/L	0.0660 ppb	10:31:15
3	Tl 190.801†	-17.2	-0.8	-1.1779 µg/L	-1.1779 ppb	10:31:36
3	U 409.014†	578.8	-54.6	-4.9998 µg/L	-4.9998 ppb	10:31:15
3	V 292.402†	-177.3	-18.4	-0.2021 µg/L	-0.2021 ppb	10:31:15
3	Zn 213.857†	587.3	29.4	0.7646 µg/L	0.7646 ppb	10:31:36

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2029982.8	98.032	%	0.4546				0.46%
Sc RADIAL	110886.9	97.6	%	0.46				0.48%
Y 371.029	1282738.2	98.011	%	0.4180				0.43%
Ag 328.068†	-13.9	-0.1236	µg/L	0.03351	-0.1236	ppb	0.03351	27.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	88.4	46.236	µg/L	21.6808	46.236	ppb	21.6808	46.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.7	1.2014	µg/L	5.00341	1.2014	ppb	5.00341	416.46%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.9	-0.1777	µg/L	1.06819	-0.1777	ppb	1.06819	601.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.3	0.0078	µg/L	0.11476	0.0078	ppb	0.11476	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	71.6	0.0441	µg/L	0.01361	0.0441	ppb	0.01361	30.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	100.4	40.515	µg/L	7.6217	40.515	ppb	7.6217	18.81%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	0.0	-0.0032	µg/L	0.14628	-0.0032	ppb	0.14628	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.4	-0.0177	µg/L	0.23073	-0.0177	ppb	0.23073	>999.9%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -24.3     -0.5025 µg/L       0.75821     -0.5025 ppb        0.75821 150.88%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               35.1      0.2463 µg/L       0.35587      0.2463 ppb        0.35587 144.50%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         5.2     33.634 µg/L        8.1377     33.634 ppb         8.1377  24.20%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         50.2     26.670 µg/L       14.1218     26.670 ppb        14.1218  52.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            8.1     50.470 µg/L       37.4870     50.470 ppb        37.4870  74.28%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -3.4     -0.0066 µg/L       0.02813     -0.0066 ppb        0.02813 426.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.7      0.5415 µg/L       0.64940      0.5415 ppb        0.64940 119.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        56.6     14.562 µg/L        3.8272     14.562 ppb         3.8272  26.28%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -0.3     -0.0184 µg/L       0.54714     -0.0184 ppb        0.54714 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 2.8      5.4674 µg/L      13.53218      5.4674 ppb       13.53218 247.50%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -8.6     -2.1856 µg/L       0.32523     -2.1856 ppb        0.32523  14.88%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           1.2      5.6913 µg/L      16.06343      5.6913 ppb       16.06343 282.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.1      2.0676 µg/L       1.83201      2.0676 ppb        1.83201  88.61%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.4      0.5229 µg/L       2.76226      0.5229 ppb        2.76226 528.27%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     37.5      6.8715 µg/L       1.99418      6.8715 ppb        1.99418  29.02%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                1.4      0.0957 µg/L       0.23854      0.0957 ppb        0.23854 249.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.5     -0.2435 µg/L       1.80076     -0.2435 ppb        1.80076 739.56%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -11.0     -0.0577 µg/L       0.09301     -0.0577 ppb        0.09301 161.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               11.1      0.0229 µg/L       0.04014      0.0229 ppb        0.04014 175.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -3.9     -5.8796 µg/L       5.14607     -5.8796 ppb        5.14607  87.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -12.2     -1.1204 µg/L       3.91304     -1.1204 ppb        3.91304 349.27%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 6.5      0.0772 µg/L       0.41965      0.0772 ppb        0.41965 543.42%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.5      0.8195 µg/L       0.06748      0.8195 ppb        0.06748   8.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 11:01:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115159.3	115159.3	101	%			11:02:19
1	Al 396.153Radial†	10250.2	9989.1	5206.5	µg/L	5206.5	ppb	11:02:19
1	Ca 317.933Radial†	13719.2	13114.7	5291.4	µg/L	5291.4	ppb	11:02:19
1	Fe 238.204 Radial†	830.3	805.7	5195.0	µg/L	5195.0	ppb	11:02:39
1	K 766.490 Radial†	10493.8	9594.1	5098.0	µg/L	5098.0	ppb	11:02:19
1	Mg 279.077 IEC†	869.3	844.4	5275.8	µg/L	5275.8	ppb	11:02:39
1	Na 589.592 Radial†	40135.4	40286.7	10367	µg/L	10367	ppb	11:02:19
1	Sr 421.552†	97570.7	96312.9	504.34	µg/L	504.34	ppb	11:02:19
1	Sc 361.383	2032645.5	2032645.5	98.160	%			11:03:43
1	Y 371.029	1272874.2	1272874.2	97.257	%			11:03:43
1	Ag 328.068†	56180.4	57026.9	525.79	µg/L	525.79	ppb	11:03:48
1	As 188.979†	274.2	276.9	495.76	µg/L	495.76	ppb	11:04:09
1	B 249.677†	11868.1	11895.5	504.72	µg/L	504.72	ppb	11:03:48
1	Ba 233.527†	19687.6	20115.4	511.37	µg/L	511.37	ppb	11:03:48
1	Be 313.107†	811244.6	822682.9	506.35	µg/L	506.35	ppb	11:03:43
1	Cd 226.502†	19242.2	19701.0	510.70	µg/L	510.70	ppb	11:03:48
1	Co 228.616†	10536.1	10797.5	512.97	µg/L	512.97	ppb	11:03:48
1	Cr 267.716†	24097.2	24675.1	511.08	µg/L	511.08	ppb	11:03:48
1	Cu 324.752†	77438.7	74631.5	509.05	µg/L	509.05	ppb	11:03:48
1	Mn 257.610†	156799.1	159980.6	508.79	µg/L	508.79	ppb	11:03:43
1	Mo 202.031†	4363.2	4444.8	514.12	µg/L	514.12	ppb	11:04:09
1	Ni 231.604†	9627.1	9486.6	511.74	µg/L	511.74	ppb	11:03:48
1	P 214.914†	1427.6	1281.6	2501.0	µg/L	2501.0	ppb	11:04:09
1	Pb 220.353†	2010.4	2003.7	509.90	µg/L	509.90	ppb	11:04:09
1	S 181.975 Axial†	239.5	216.5	1064.4	µg/L	1064.4	ppb	11:04:09
1	Sb 206.836†	532.9	525.0	511.98	µg/L	511.98	ppb	11:04:09
1	Se 196.026†	411.2	403.0	508.80	µg/L	508.80	ppb	11:04:09
1	SiO2†	32210.8	30063.6	5507.7	µg/L	5507.7	ppb	11:03:48
1	Si 251.611†	34529.2	34802.5	2524.6	µg/L	2524.6	ppb	11:03:48
1	Sn 189.927†	1037.7	1035.2	522.17	µg/L	522.17	ppb	11:04:09
1	Ti 334.940†	224050.2	227251.0	516.64	µg/L	516.64	ppb	11:03:43
1	Tl 190.801†	314.9	337.7	509.23	µg/L	509.23	ppb	11:04:09
1	U 409.014†	6175.3	5643.5	515.28	µg/L	515.28	ppb	11:03:48
1	V 292.402†	44674.8	45675.3	515.78	µg/L	515.78	ppb	11:03:48
1	Zn 213.857†	19897.3	19697.9	512.11	µg/L	512.11	ppb	11:03:48
2	Sc RADIAL	116374.1	116374.1	102	%			11:02:45
2	Al 396.153Radial†	10313.3	9945.1	5183.4	µg/L	5183.4	ppb	11:02:45
2	Ca 317.933Radial†	13843.0	13094.3	5283.1	µg/L	5283.1	ppb	11:02:45
2	Fe 238.204 Radial†	829.2	796.0	5133.0	µg/L	5133.0	ppb	11:03:05
2	K 766.490 Radial†	10556.6	9547.4	5073.2	µg/L	5073.2	ppb	11:02:45
2	Mg 279.077 IEC†	868.2	834.4	5213.2	µg/L	5213.2	ppb	11:03:05
2	Na 589.592 Radial†	40356.6	40089.3	10317	µg/L	10317	ppb	11:02:45
2	Sr 421.552†	98445.4	96162.0	503.55	µg/L	503.55	ppb	11:02:45
2	Sc 361.383	2032912.5	2032912.5	98.173	%			11:04:16
2	Y 371.029	1273810.6	1273810.6	97.329	%			11:04:16
2	Ag 328.068†	56215.5	57055.1	526.05	µg/L	526.05	ppb	11:04:22
2	As 188.979†	279.9	282.7	506.17	µg/L	506.17	ppb	11:04:42
2	B 249.677†	11848.0	11873.5	503.80	µg/L	503.80	ppb	11:04:22
2	Ba 233.527†	19665.1	20089.8	510.73	µg/L	510.73	ppb	11:04:22
2	Be 313.107†	810581.6	821899.1	505.86	µg/L	505.86	ppb	11:04:16
2	Cd 226.502†	19238.6	19694.7	510.54	µg/L	510.54	ppb	11:04:22
2	Co 228.616†	10539.9	10800.0	513.10	µg/L	513.10	ppb	11:04:22
2	Cr 267.716†	24144.3	24719.7	512.00	µg/L	512.00	ppb	11:04:22
2	Cu 324.752†	77459.8	74642.5	509.11	µg/L	509.11	ppb	11:04:22
2	Mn 257.610†	156747.2	159906.8	508.55	µg/L	508.55	ppb	11:04:16
2	Mo 202.031†	4386.4	4467.9	516.79	µg/L	516.79	ppb	11:04:42
2	Ni 231.604†	9659.8	9518.6	513.47	µg/L	513.47	ppb	11:04:22
2	P 214.914†	1432.0	1285.9	2509.7	µg/L	2509.7	ppb	11:04:42
2	Pb 220.353†	2025.7	2018.9	513.79	µg/L	513.79	ppb	11:04:42

2	S 181.975 Axial†	235.0	211.8	1041.4 µg/L	1041.4 ppb	11:04:42
2	Sb 206.836†	537.2	529.3	516.19 µg/L	516.19 ppb	11:04:42
2	Se 196.026†	417.9	409.7	517.28 µg/L	517.28 ppb	11:04:42
2	SiO2†	32186.1	30034.1	5502.3 µg/L	5502.3 ppb	11:04:22
2	Si 251.611†	34464.9	34732.4	2519.3 µg/L	2519.3 ppb	11:04:22
2	Sn 189.927†	1043.7	1041.2	525.14 µg/L	525.14 ppb	11:04:42
2	Ti 334.940†	223725.9	226890.6	515.82 µg/L	515.82 ppb	11:04:16
2	Tl 190.801†	313.4	336.1	506.91 µg/L	506.91 ppb	11:04:42
2	U 409.014†	6090.4	5556.1	507.30 µg/L	507.30 ppb	11:04:22
2	V 292.402†	44737.7	45733.4	516.43 µg/L	516.43 ppb	11:04:22
2	Zn 213.857†	19835.6	19632.4	510.39 µg/L	510.39 ppb	11:04:22
3	Sc RADIAL	115413.7	115413.7	102 %		11:03:11
3	Al 396.153Radial†	10296.1	10012.0	5219.0 µg/L	5219.0 ppb	11:03:11
3	Ca 317.933Radial†	13808.5	13172.8	5314.8 µg/L	5314.8 ppb	11:03:11
3	Fe 238.204 Radial†	821.6	795.3	5127.9 µg/L	5127.9 ppb	11:03:31
3	K 766.490 Radial†	10550.3	9627.0	5115.5 µg/L	5115.5 ppb	11:03:11
3	Mg 279.077 IEC†	862.2	835.6	5220.5 µg/L	5220.5 ppb	11:03:31
3	Na 589.592 Radial†	40324.4	40385.5	10393 µg/L	10393 ppb	11:03:11
3	Sr 421.552†	98242.4	96762.1	506.69 µg/L	506.69 ppb	11:03:11
3	Sc 361.383	2032753.4	2032753.4	98.166 %		11:04:49
3	Y 371.029	1273631.6	1273631.6	97.315 %		11:04:49
3	Ag 328.068†	56099.3	56941.3	524.99 µg/L	524.99 ppb	11:04:55
3	As 188.979†	272.1	274.7	491.94 µg/L	491.94 ppb	11:05:15
3	B 249.677†	11840.9	11867.2	503.53 µg/L	503.53 ppb	11:04:55
3	Ba 233.527†	19642.8	20068.7	510.19 µg/L	510.19 ppb	11:04:55
3	Be 313.107†	811593.8	822994.8	506.54 µg/L	506.54 ppb	11:04:49
3	Cd 226.502†	19147.0	19602.9	508.17 µg/L	508.17 ppb	11:04:55
3	Co 228.616†	10467.4	10726.9	509.59 µg/L	509.59 ppb	11:04:55
3	Cr 267.716†	24043.9	24619.4	509.92 µg/L	509.92 ppb	11:04:55
3	Cu 324.752†	77313.8	74500.0	508.14 µg/L	508.14 ppb	11:04:55
3	Mn 257.610†	156916.8	160092.1	509.14 µg/L	509.14 ppb	11:04:49
3	Mo 202.031†	4241.4	4320.5	499.75 µg/L	499.75 ppb	11:05:15
3	Ni 231.604†	9619.6	9478.4	511.30 µg/L	511.30 ppb	11:04:55
3	P 214.914†	1401.0	1254.4	2446.6 µg/L	2446.6 ppb	11:05:15
3	Pb 220.353†	1991.7	1984.5	504.99 µg/L	504.99 ppb	11:05:15
3	S 181.975 Axial†	231.8	208.6	1025.4 µg/L	1025.4 ppb	11:05:15
3	Sb 206.836†	527.4	519.3	506.50 µg/L	506.50 ppb	11:05:15
3	Se 196.026†	398.5	390.0	492.51 µg/L	492.51 ppb	11:05:15
3	SiO2†	32194.4	30045.1	5504.3 µg/L	5504.3 ppb	11:04:55
3	Si 251.611†	34340.5	34608.4	2511.1 µg/L	2511.1 ppb	11:04:55
3	Sn 189.927†	1003.8	1000.7	504.83 µg/L	504.83 ppb	11:05:15
3	Ti 334.940†	224172.9	227363.8	516.90 µg/L	516.90 ppb	11:04:49
3	Tl 190.801†	318.1	340.9	514.20 µg/L	514.20 ppb	11:05:15
3	U 409.014†	6198.7	5667.0	517.44 µg/L	517.44 ppb	11:04:55
3	V 292.402†	44582.7	45579.0	514.60 µg/L	514.60 ppb	11:04:55
3	Zn 213.857†	19806.9	19604.7	509.68 µg/L	509.68 ppb	11:04:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032770.5	98.166	%	0.0065				0.01%
Sc RADIAL	115649.0	102	%	0.6				0.55%
Y 371.029	1273438.8	97.300	%	0.0380				0.04%
Ag 328.068†	57007.8	525.61	µg/L	0.549	525.61	ppb	0.549	0.10%
QC value within limits for Ag 328.068 Recovery = 105.12%								
Al 396.153Radial†	9982.1	5203.0	µg/L	18.08	5203.0	ppb	18.08	0.35%
QC value within limits for Al 396.153Radial Recovery = 104.06%								
As 188.979†	278.1	497.96	µg/L	7.363	497.96	ppb	7.363	1.48%
QC value within limits for As 188.979 Recovery = 99.59%								
B 249.677†	11878.7	504.02	µg/L	0.622	504.02	ppb	0.622	0.12%
QC value within limits for B 249.677 Recovery = 100.80%								
Ba 233.527†	20091.3	510.76	µg/L	0.594	510.76	ppb	0.594	0.12%
QC value within limits for Ba 233.527 Recovery = 102.15%								
Be 313.107†	822525.6	506.25	µg/L	0.347	506.25	ppb	0.347	0.07%
QC value within limits for Be 313.107 Recovery = 101.25%								
Ca 317.933Radial†	13127.3	5296.4	µg/L	16.43	5296.4	ppb	16.43	0.31%
QC value within limits for Ca 317.933Radial Recovery = 105.93%								
Cd 226.502†	19666.2	509.80	µg/L	1.418	509.80	ppb	1.418	0.28%
QC value within limits for Cd 226.502 Recovery = 101.96%								
Co 228.616†	10774.8	511.89	µg/L	1.993	511.89	ppb	1.993	0.39%

```
   QC value within limits for Co 228.616  Recovery = 102.38%
Cr 267.716†            24671.4      511.00 µg/L        1.040      511.00 ppb          1.040   0.20%
   QC value within limits for Cr 267.716  Recovery = 102.20%
Cu 324.752†            74591.3      508.77 µg/L        0.544      508.77 ppb          0.544   0.11%
   QC value within limits for Cu 324.752  Recovery = 101.75%
Fe 238.204 Radial†       799.0      5152.0 µg/L       37.35      5152.0 ppb          37.35   0.73%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.04%
K 766.490 Radial†       9589.5      5095.6 µg/L       21.25      5095.6 ppb          21.25   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 101.91%
Mg 279.077 IEC†          838.1      5236.5 µg/L       34.22      5236.5 ppb          34.22   0.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.73%
Mn 257.610†           159993.2      508.82 µg/L       0.296      508.82 ppb          0.296   0.06%
   QC value within limits for Mn 257.610  Recovery = 101.76%
Mo 202.031†             4411.0      510.22 µg/L       9.167      510.22 ppb          9.167   1.80%
   QC value within limits for Mo 202.031  Recovery = 102.04%
Na 589.592 Radial†     40253.9       10359 µg/L        38.8       10359 ppb           38.8   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 103.59%
Ni 231.604†             9494.5      512.17 µg/L       1.146      512.17 ppb          1.146   0.22%
   QC value within limits for Ni 231.604  Recovery = 102.43%
P 214.914†              1274.0      2485.8 µg/L       34.23      2485.8 ppb          34.23   1.38%
   QC value within limits for P 214.914  Recovery = 99.43%
Pb 220.353†             2002.4      509.56 µg/L       4.408      509.56 ppb          4.408   0.87%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         212.3      1043.7 µg/L       19.58      1043.7 ppb          19.58   1.88%
   QC value within limits for S 181.975 Axial  Recovery = 104.37%
Sb 206.836†              524.5      511.56 µg/L       4.856      511.56 ppb          4.856   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.31%
Se 196.026†              400.9      506.20 µg/L      12.589      506.20 ppb         12.589   2.49%
   QC value within limits for Se 196.026  Recovery = 101.24%
SiO2†                   30047.6      5504.8 µg/L        2.73      5504.8 ppb           2.73   0.05%
   QC value within limits for SiO2  Recovery = 102.94%
Si 251.611†             34714.4      2518.3 µg/L        6.78      2518.3 ppb           6.78   0.27%
   QC value within limits for Si 251.611  Recovery = 100.73%
Sn 189.927†             1025.7      517.38 µg/L      10.968      517.38 ppb         10.968   2.12%
   QC value within limits for Sn 189.927  Recovery = 103.48%
Sr 421.552†             96412.3      504.86 µg/L       1.635      504.86 ppb          1.635   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.97%
Ti 334.940†            227168.5      516.46 µg/L       0.561      516.46 ppb          0.561   0.11%
   QC value within limits for Ti 334.940  Recovery = 103.29%
Tl 190.801†              338.2      510.11 µg/L       3.722      510.11 ppb          3.722   0.73%
   QC value within limits for Tl 190.801  Recovery = 102.02%
U 409.014†              5622.2      513.34 µg/L       5.340      513.34 ppb          5.340   1.04%
   QC value within limits for U 409.014  Recovery = 102.67%
V 292.402†              45662.6      515.61 µg/L       0.927      515.61 ppb          0.927   0.18%
   QC value within limits for V 292.402  Recovery = 103.12%
Zn 213.857†             19645.0      510.73 µg/L       1.249      510.73 ppb          1.249   0.24%
   QC value within limits for Zn 213.857  Recovery = 102.15%
All analyte(s) passed QC.
```

Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 11:05:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110459.5	110459.5	97.2	%			11:05:57
1	Al 396.153Radial†	137.7	15.4	8.0262	µg/L	8.0262	ppb	11:05:57
1	Ca 317.933Radial†	417.6	5.5	2.2375	µg/L	2.2375	ppb	11:06:17
1	Fe 238.204 Radial†	14.2	0.9	5.5116	µg/L	5.5116	ppb	11:06:17
1	K 766.490 Radial†	731.8	-8.8	-4.6692	µg/L	-4.6692	ppb	11:05:57
1	Mg 279.077 IEC†	12.4	-0.6	-3.8594	µg/L	-3.8594	ppb	11:06:17
1	Na 589.592 Radial†	-565.7	97.2	25.024	µg/L	25.024	ppb	11:05:57
1	Sr 421.552†	-49.4	-25.3	-0.1325	µg/L	-0.1325	ppb	11:05:57
1	Sc 361.383	2021943.1	2021943.1	97.644	%			11:07:19
1	Y 371.029	1275225.4	1275225.4	97.437	%			11:07:19
1	Ag 328.068†	175.7	-26.4	-0.2380	µg/L	-0.2380	ppb	11:07:25
1	As 188.979†	4.2	1.9	3.3907	µg/L	3.3907	ppb	11:07:45
1	B 249.677†	200.5	10.3	0.4379	µg/L	0.4379	ppb	11:07:25
1	Ba 233.527†	-53.1	4.4	0.1136	µg/L	0.1136	ppb	11:07:45
1	Be 313.107†	3674.4	-1.7	-0.0011	µg/L	-0.0011	ppb	11:07:25
1	Cd 226.502†	-91.2	4.7	0.1189	µg/L	0.1189	ppb	11:07:45
1	Co 228.616†	-64.8	-2.4	-0.1109	µg/L	-0.1109	ppb	11:07:45
1	Cr 267.716†	-160.1	-37.7	-0.7786	µg/L	-0.7786	ppb	11:07:25
1	Cu 324.752†	4207.9	50.9	0.3475	µg/L	0.3475	ppb	11:07:25
1	Mn 257.610†	-244.8	-7.6	-0.0235	µg/L	-0.0235	ppb	11:07:45
1	Mo 202.031†	2.5	2.4	0.2731	µg/L	0.2731	ppb	11:07:45
1	Ni 231.604†	295.3	-18.5	-0.9979	µg/L	-0.9979	ppb	11:07:45
1	P 214.914†	168.7	0.1	0.0527	µg/L	0.0527	ppb	11:07:45
1	Pb 220.353†	35.8	-7.8	-1.9804	µg/L	-1.9804	ppb	11:07:45
1	S 181.975 Axial†	29.0	2.2	10.640	µg/L	10.640	ppb	11:07:45
1	Sb 206.836†	25.0	7.6	7.4807	µg/L	7.4807	ppb	11:07:45
1	Se 196.026†	20.3	4.9	6.1210	µg/L	6.1210	ppb	11:07:45
1	SiO2†	2722.5	37.3	6.8282	µg/L	6.8282	ppb	11:07:25
1	Si 251.611†	373.8	9.0	0.6792	µg/L	0.6792	ppb	11:07:45
1	Sn 189.927†	20.7	-0.6	-0.3168	µg/L	-0.3168	ppb	11:07:45
1	Ti 334.940†	948.3	-26.9	-0.0613	µg/L	-0.0613	ppb	11:07:25
1	Tl 190.801†	-18.8	-2.3	-3.4783	µg/L	-3.4783	ppb	11:07:45
1	U 409.014†	601.9	-31.1	-2.8482	µg/L	-2.8482	ppb	11:07:25
1	V 292.402†	-119.3	41.1	0.4580	µg/L	0.4580	ppb	11:07:25
1	Zn 213.857†	572.9	14.5	0.3832	µg/L	0.3832	ppb	11:07:45
2	Sc RADIAL	111715.6	111715.6	98.3	%			11:06:23
2	Al 396.153Radial†	132.0	8.0	4.1814	µg/L	4.1814	ppb	11:06:23
2	Ca 317.933Radial†	413.3	-3.7	-1.4764	µg/L	-1.4764	ppb	11:06:43
2	Fe 238.204 Radial†	16.3	2.8	18.136	µg/L	18.136	ppb	11:06:43
2	K 766.490 Radial†	782.4	34.3	18.226	µg/L	18.226	ppb	11:06:23
2	Mg 279.077 IEC†	18.6	5.5	34.375	µg/L	34.375	ppb	11:06:43
2	Na 589.592 Radial†	-574.5	94.8	24.401	µg/L	24.401	ppb	11:06:23
2	Sr 421.552†	-11.8	13.5	0.0707	µg/L	0.0707	ppb	11:06:23
2	Sc 361.383	2051634.0	2051634.0	99.077	%			11:07:51
2	Y 371.029	1287796.6	1287796.6	98.397	%			11:07:51
2	Ag 328.068†	236.1	31.9	0.2931	µg/L	0.2931	ppb	11:07:57
2	As 188.979†	-2.8	-5.3	-9.5472	µg/L	-9.5472	ppb	11:08:17
2	B 249.677†	171.9	-21.5	-0.9192	µg/L	-0.9192	ppb	11:07:57
2	Ba 233.527†	-58.6	-0.4	-0.0091	µg/L	-0.0091	ppb	11:08:17
2	Be 313.107†	3716.0	-14.2	-0.0087	µg/L	-0.0087	ppb	11:07:57
2	Cd 226.502†	-96.9	0.3	0.0038	µg/L	0.0038	ppb	11:08:17
2	Co 228.616†	-59.9	3.5	0.1679	µg/L	0.1679	ppb	11:08:17
2	Cr 267.716†	-156.6	-31.9	-0.6586	µg/L	-0.6586	ppb	11:07:57
2	Cu 324.752†	4140.2	-79.8	-0.5395	µg/L	-0.5395	ppb	11:07:57
2	Mn 257.610†	-229.2	11.7	0.0395	µg/L	0.0395	ppb	11:08:17
2	Mo 202.031†	2.9	2.8	0.3262	µg/L	0.3262	ppb	11:08:17
2	Ni 231.604†	304.0	-14.1	-0.7616	µg/L	-0.7616	ppb	11:08:17
2	P 214.914†	176.8	5.7	11.373	µg/L	11.373	ppb	11:08:17
2	Pb 220.353†	48.1	4.1	1.0434	µg/L	1.0434	ppb	11:08:17

2	S 181.975 Axial†	27.5	0.2	0.8645 µg/L	0.8645 ppb	11:08:17
2	Sb 206.836†	20.3	2.6	2.5093 µg/L	2.5093 ppb	11:08:17
2	Se 196.026†	17.1	1.3	1.6348 µg/L	1.6348 ppb	11:08:17
2	SiO2†	2700.3	-25.5	-4.6628 µg/L	-4.6628 ppb	11:07:57
2	Si 251.611†	364.5	-5.9	-0.3720 µg/L	-0.3720 ppb	11:08:17
2	Sn 189.927†	18.0	-3.7	-1.8560 µg/L	-1.8560 ppb	11:08:17
2	Ti 334.940†	911.7	-77.9	-0.1770 µg/L	-0.1770 ppb	11:07:57
2	Tl 190.801†	-14.8	1.9	2.8590 µg/L	2.8590 ppb	11:08:17
2	U 409.014†	598.0	-44.0	-4.0297 µg/L	-4.0297 ppb	11:07:57
2	V 292.402†	-166.3	-4.5	-0.0533 µg/L	-0.0533 ppb	11:07:57
2	Zn 213.857†	590.2	23.4	0.6162 µg/L	0.6162 ppb	11:08:17
3	Sc RADIAL	111357.3	111357.3	98.0 %		11:06:48
3	Al 396.153Radial†	103.1	-21.1	-10.990 µg/L	-10.990 ppb	11:06:48
3	Ca 317.933Radial†	420.6	5.2	2.0902 µg/L	2.0902 ppb	11:07:09
3	Fe 238.204 Radial†	15.6	2.2	14.076 µg/L	14.076 ppb	11:07:09
3	K 766.490 Radial†	767.2	21.3	11.315 µg/L	11.315 ppb	11:06:48
3	Mg 279.077 IEC†	18.4	5.4	33.451 µg/L	33.451 ppb	11:07:09
3	Na 589.592 Radial†	-510.6	158.2	40.700 µg/L	40.700 ppb	11:06:48
3	Sr 421.552†	-84.2	-60.4	-0.3163 µg/L	-0.3163 ppb	11:06:48
3	Sc 361.383	2029236.9	2029236.9	97.996 %		11:08:23
3	Y 371.029	1280308.4	1280308.4	97.825 %		11:08:23
3	Ag 328.068†	204.2	2.0	0.0185 µg/L	0.0185 ppb	11:08:29
3	As 188.979†	3.2	0.8	1.5036 µg/L	1.5036 ppb	11:08:50
3	B 249.677†	218.5	28.0	1.1881 µg/L	1.1881 ppb	11:08:29
3	Ba 233.527†	-61.3	-3.8	-0.0956 µg/L	-0.0956 ppb	11:08:50
3	Be 313.107†	3609.1	-81.9	-0.0504 µg/L	-0.0504 ppb	11:08:29
3	Cd 226.502†	-100.6	-4.5	-0.1221 µg/L	-0.1221 ppb	11:08:50
3	Co 228.616†	-54.8	8.1	0.3823 µg/L	0.3823 ppb	11:08:50
3	Cr 267.716†	-133.2	-9.7	-0.2014 µg/L	-0.2014 ppb	11:08:29
3	Cu 324.752†	4241.6	69.8	0.4778 µg/L	0.4778 ppb	11:08:29
3	Mn 257.610†	-242.0	-3.9	-0.0107 µg/L	-0.0107 ppb	11:08:50
3	Mo 202.031†	-6.6	-6.9	-0.7937 µg/L	-0.7937 ppb	11:08:50
3	Ni 231.604†	314.4	-0.2	-0.0083 µg/L	-0.0083 ppb	11:08:50
3	P 214.914†	173.1	3.9	7.6946 µg/L	7.6946 ppb	11:08:50
3	Pb 220.353†	38.1	-5.5	-1.4004 µg/L	-1.4004 ppb	11:08:50
3	S 181.975 Axial†	28.9	1.9	9.4417 µg/L	9.4417 ppb	11:08:50
3	Sb 206.836†	17.1	-0.4	-0.4159 µg/L	-0.4159 ppb	11:08:50
3	Se 196.026†	19.2	3.6	4.5723 µg/L	4.5723 ppb	11:08:50
3	SiO2†	2752.2	57.6	10.547 µg/L	10.547 ppb	11:08:29
3	Si 251.611†	354.7	-11.9	-0.7900 µg/L	-0.7900 ppb	11:08:50
3	Sn 189.927†	17.5	-4.0	-2.0109 µg/L	-2.0109 ppb	11:08:50
3	Ti 334.940†	976.1	-2.0	-0.0046 µg/L	-0.0046 ppb	11:08:29
3	Tl 190.801†	-19.3	-2.8	-4.1895 µg/L	-4.1895 ppb	11:08:50
3	U 409.014†	557.8	-78.3	-7.1670 µg/L	-7.1670 ppb	11:08:29
3	V 292.402†	-177.2	-17.6	-0.2123 µg/L	-0.2123 ppb	11:08:29
3	Zn 213.857†	579.4	18.9	0.4935 µg/L	0.4935 ppb	11:08:50

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2034271.3	98.239	%	0.7472				0.76%
Sc RADIAL	111177.4	97.8	%	0.57				0.58%
Y 371.029	1281110.1	97.887	%	0.4832				0.49%
Ag 328.068†	2.5	0.0245	µg/L	0.26557	0.0245	ppb	0.26557	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.8	0.4057	µg/L	10.05477	0.4057	ppb	10.05477	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.9	-1.5510	µg/L	6.98891	-1.5510	ppb	6.98891	450.62%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	5.6	0.2356	µg/L	1.06811	0.2356	ppb	1.06811	453.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.1	0.0030	µg/L	0.10511	0.0030	ppb	0.10511	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-32.6	-0.0200	µg/L	0.02658	-0.0200	ppb	0.02658	132.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.4	0.9504	µg/L	2.10299	0.9504	ppb	2.10299	221.27%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	0.2	0.0002	µg/L	0.12054	0.0002	ppb	0.12054	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.1	0.1464	µg/L	0.24732	0.1464	ppb	0.24732	168.90%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -26.4     -0.5462 µg/L       0.30458     -0.5462 ppb        0.30458  55.76%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               13.6      0.0953 µg/L       0.55356      0.0953 ppb        0.55356 580.98%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.0      12.575 µg/L        6.4449      12.575 ppb         6.4449  51.25%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         15.6      8.2907 µg/L      11.74338      8.2907 ppb       11.74338 141.65%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            3.4      21.322 µg/L       21.8127      21.322 ppb        21.8127 102.30%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                0.0      0.0017 µg/L       0.03331      0.0017 ppb        0.03331 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.6     -0.0648 µg/L       0.63179     -0.0648 ppb        0.63179 975.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       116.7      30.041 µg/L        9.2357      30.041 ppb         9.2357  30.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -10.9     -0.5893 µg/L       0.51684     -0.5893 ppb        0.51684  87.71%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 3.2      6.3735 µg/L       5.77476      6.3735 ppb        5.77476  90.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -3.1     -0.7791 µg/L       1.60478     -0.7791 ppb        1.60478 205.97%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           1.4      6.9819 µg/L       5.33156      6.9819 ppb        5.33156  76.36%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                3.3      3.1914 µg/L       3.99225      3.1914 ppb        3.99225 125.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.3      4.1094 µg/L       2.27861      4.1094 ppb        2.27861  55.45%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     23.1      4.2375 µg/L       7.92892      4.2375 ppb        7.92892 187.12%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               -2.9     -0.1609 µg/L       0.75699     -0.1609 ppb        0.75699 470.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.8     -1.3946 µg/L       0.93657     -1.3946 ppb        0.93657  67.16%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -24.1     -0.1260 µg/L       0.19360     -0.1260 ppb        0.19360 153.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -35.6     -0.0810 µg/L       0.08787     -0.0810 ppb        0.08787 108.51%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.1     -1.6029 µg/L       3.88047     -1.6029 ppb        3.88047 242.09%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -51.2     -4.6817 µg/L       2.23199     -4.6817 ppb        2.23199  47.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 6.4      0.0641 µg/L       0.35024      0.0641 ppb        0.35024 546.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               19.0      0.4977 µg/L       0.11656      0.4977 ppb        0.11656  23.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 56
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 11:39:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117750.9	117750.9	104	%			11:39:44
1	Al 396.153Radial†	10187.4	9705.8	5058.5	µg/L	5058.5	ppb	11:39:44
1	Ca 317.933Radial†	13702.0	12800.1	5164.4	µg/L	5164.4	ppb	11:39:44
1	Fe 238.204 Radial†	824.4	782.0	5042.3	µg/L	5042.3	ppb	11:40:04
1	K 766.490 Radial†	10418.8	9293.8	4938.5	µg/L	4938.5	ppb	11:39:44
1	Mg 279.077 IEC†	864.0	820.4	5126.1	µg/L	5126.1	ppb	11:40:04
1	Na 589.592 Radial†	40019.3	39303.0	10114	µg/L	10114	ppb	11:39:44
1	Sr 421.552†	97626.5	94247.5	493.52	µg/L	493.52	ppb	11:39:44
1	Sc 361.383	2069076.2	2069076.2	99.920	%			11:41:08
1	Y 371.029	1293154.8	1293154.8	98.807	%			11:41:08
1	Ag 328.068†	56091.6	55930.3	515.67	µg/L	515.67	ppb	11:41:14
1	As 188.979†	281.3	279.1	499.72	µg/L	499.72	ppb	11:41:34
1	B 249.677†	11807.2	11621.7	493.11	µg/L	493.11	ppb	11:41:14
1	Ba 233.527†	19630.6	19705.1	500.94	µg/L	500.94	ppb	11:41:14
1	Be 313.107†	820976.8	817871.6	503.38	µg/L	503.38	ppb	11:41:08
1	Cd 226.502†	19232.9	19346.5	501.51	µg/L	501.51	ppb	11:41:14
1	Co 228.616†	10515.6	10588.0	503.02	µg/L	503.02	ppb	11:41:14
1	Cr 267.716†	24040.1	24185.6	500.94	µg/L	500.94	ppb	11:41:14
1	Cu 324.752†	77285.8	73089.3	498.52	µg/L	498.52	ppb	11:41:14
1	Mn 257.610†	158667.7	159038.2	505.78	µg/L	505.78	ppb	11:41:08
1	Mo 202.031†	4393.1	4396.5	508.53	µg/L	508.53	ppb	11:41:34
1	Ni 231.604†	9606.3	9293.1	501.31	µg/L	501.31	ppb	11:41:14
1	P 214.914†	1441.6	1270.0	2479.3	µg/L	2479.3	ppb	11:41:34
1	Pb 220.353†	2045.2	2002.3	509.56	µg/L	509.56	ppb	11:41:34
1	S 181.975 Axial†	233.1	205.8	1011.8	µg/L	1011.8	ppb	11:41:34
1	Sb 206.836†	553.6	536.1	522.91	µg/L	522.91	ppb	11:41:34
1	Se 196.026†	410.3	394.6	498.28	µg/L	498.28	ppb	11:41:34
1	SiO2†	32130.0	29405.0	5387.1	µg/L	5387.1	ppb	11:41:14
1	Si 251.611†	34474.3	34128.2	2475.0	µg/L	2475.0	ppb	11:41:14
1	Sn 189.927†	1058.3	1037.3	523.10	µg/L	523.10	ppb	11:41:34
1	Ti 334.940†	226356.3	225540.1	512.76	µg/L	512.76	ppb	11:41:08
1	Tl 190.801†	322.1	339.3	511.68	µg/L	511.68	ppb	11:41:34
1	U 409.014†	6172.4	5529.8	504.91	µg/L	504.91	ppb	11:41:14
1	V 292.402†	44584.0	44783.1	505.73	µg/L	505.73	ppb	11:41:14
1	Zn 213.857†	19852.3	19296.0	501.67	µg/L	501.67	ppb	11:41:14
2	Sc RADIAL	116152.7	116152.7	102	%			11:40:10
2	Al 396.153Radial†	10233.7	9886.5	5152.9	µg/L	5152.9	ppb	11:40:10
2	Ca 317.933Radial†	13683.0	12963.5	5230.3	µg/L	5230.3	ppb	11:40:10
2	Fe 238.204 Radial†	823.2	791.7	5105.0	µg/L	5105.0	ppb	11:40:30
2	K 766.490 Radial†	10435.2	9448.2	5020.5	µg/L	5020.5	ppb	11:40:10
2	Mg 279.077 IEC†	864.9	832.9	5203.6	µg/L	5203.6	ppb	11:40:30
2	Na 589.592 Radial†	40139.7	39952.3	10281	µg/L	10281	ppb	11:40:10
2	Sr 421.552†	97904.5	95816.0	501.74	µg/L	501.74	ppb	11:40:10
2	Sc 361.383	2061589.6	2061589.6	99.558	%			11:41:41
2	Y 371.029	1289285.1	1289285.1	98.511	%			11:41:41
2	Ag 328.068†	56084.4	56127.0	517.49	µg/L	517.49	ppb	11:41:47
2	As 188.979†	283.0	281.8	504.67	µg/L	504.67	ppb	11:42:08
2	B 249.677†	11877.3	11735.0	497.91	µg/L	497.91	ppb	11:41:47
2	Ba 233.527†	19659.1	19805.1	503.49	µg/L	503.49	ppb	11:41:47
2	Be 313.107†	816623.1	816482.3	502.53	µg/L	502.53	ppb	11:41:41
2	Cd 226.502†	19227.6	19411.1	503.18	µg/L	503.18	ppb	11:41:47
2	Co 228.616†	10506.7	10617.3	504.42	µg/L	504.42	ppb	11:41:47
2	Cr 267.716†	24055.6	24288.6	503.07	µg/L	503.07	ppb	11:41:47
2	Cu 324.752†	77384.0	73468.9	501.12	µg/L	501.12	ppb	11:41:47
2	Mn 257.610†	157820.7	158764.1	504.92	µg/L	504.92	ppb	11:41:41
2	Mo 202.031†	4409.5	4428.9	512.29	µg/L	512.29	ppb	11:42:08
2	Ni 231.604†	9603.8	9325.5	503.05	µg/L	503.05	ppb	11:41:47
2	P 214.914†	1441.2	1274.8	2488.6	µg/L	2488.6	ppb	11:42:08
2	Pb 220.353†	2036.7	2001.3	509.30	µg/L	509.30	ppb	11:42:08

2	S 181.975 Axial†	234.3	207.8	1021.5 µg/L	1021.5 ppb	11:42:08
2	Sb 206.836†	549.1	533.6	520.47 µg/L	520.47 ppb	11:42:08
2	Se 196.026†	419.3	405.2	511.58 µg/L	511.58 ppb	11:42:08
2	SiO2†	32211.5	29603.5	5423.5 µg/L	5423.5 ppb	11:41:47
2	Si 251.611†	34454.9	34234.0	2482.6 µg/L	2482.6 ppb	11:41:47
2	Sn 189.927†	1058.7	1041.5	525.26 µg/L	525.26 ppb	11:42:08
2	Ti 334.940†	225228.4	225229.9	512.05 µg/L	512.05 ppb	11:41:41
2	Tl 190.801†	318.8	337.1	508.39 µg/L	508.39 ppb	11:42:08
2	U 409.014†	6104.5	5484.1	500.71 µg/L	500.71 ppb	11:41:47
2	V 292.402†	44658.1	45019.6	508.40 µg/L	508.40 ppb	11:41:47
2	Zn 213.857†	19821.4	19337.1	502.72 µg/L	502.72 ppb	11:41:47
3	Sc RADIAL	116414.7	116414.7	102 %		11:40:36
3	Al 396.153Radial†	10295.6	9924.4	5173.2 µg/L	5173.2 ppb	11:40:36
3	Ca 317.933Radial†	13771.3	13019.5	5252.9 µg/L	5252.9 ppb	11:40:36
3	Fe 238.204 Radial†	829.9	796.5	5135.7 µg/L	5135.7 ppb	11:40:56
3	K 766.490 Radial†	10510.0	9498.3	5047.1 µg/L	5047.1 ppb	11:40:36
3	Mg 279.077 IEC†	864.6	830.6	5189.0 µg/L	5189.0 ppb	11:40:56
3	Na 589.592 Radial†	40116.6	39841.3	10253 µg/L	10253 ppb	11:40:36
3	Sr 421.552†	97915.4	95611.1	500.66 µg/L	500.66 ppb	11:40:36
3	Sc 361.383	2068397.1	2068397.1	99.887 %		11:42:15
3	Y 371.029	1293294.4	1293294.4	98.818 %		11:42:15
3	Ag 328.068†	56399.0	56256.5	518.68 µg/L	518.68 ppb	11:42:20
3	As 188.979†	283.5	281.4	503.83 µg/L	503.83 ppb	11:42:41
3	B 249.677†	11913.1	11731.6	497.76 µg/L	497.76 ppb	11:42:20
3	Ba 233.527†	19713.4	19794.5	503.22 µg/L	503.22 ppb	11:42:20
3	Be 313.107†	823595.9	820763.3	505.16 µg/L	505.16 ppb	11:42:15
3	Cd 226.502†	19392.8	19512.9	505.82 µg/L	505.82 ppb	11:42:20
3	Co 228.616†	10589.5	10665.5	506.67 µg/L	506.67 ppb	11:42:20
3	Cr 267.716†	24151.1	24304.6	503.40 µg/L	503.40 ppb	11:42:20
3	Cu 324.752†	77655.3	73484.7	501.23 µg/L	501.23 ppb	11:42:20
3	Mn 257.610†	159223.1	159646.4	507.72 µg/L	507.72 ppb	11:42:15
3	Mo 202.031†	4300.5	4305.2	497.98 µg/L	497.98 ppb	11:42:41
3	Ni 231.604†	9690.4	9380.4	506.02 µg/L	506.02 ppb	11:42:20
3	P 214.914†	1420.7	1249.6	2437.9 µg/L	2437.9 ppb	11:42:41
3	Pb 220.353†	2011.7	1969.5	501.20 µg/L	501.20 ppb	11:42:41
3	S 181.975 Axial†	227.4	200.2	984.05 µg/L	984.05 ppb	11:42:41
3	Sb 206.836†	540.4	523.1	510.23 µg/L	510.23 ppb	11:42:41
3	Se 196.026†	410.9	395.4	499.28 µg/L	499.28 ppb	11:42:41
3	SiO2†	32280.0	29565.6	5416.5 µg/L	5416.5 ppb	11:42:20
3	Si 251.611†	34617.8	34283.2	2487.1 µg/L	2487.1 ppb	11:42:20
3	Sn 189.927†	1028.8	1008.1	508.51 µg/L	508.51 ppb	11:42:41
3	Ti 334.940†	226994.6	226253.5	514.38 µg/L	514.38 ppb	11:42:15
3	Tl 190.801†	316.5	333.7	503.38 µg/L	503.38 ppb	11:42:41
3	U 409.014†	6158.8	5518.2	503.82 µg/L	503.82 ppb	11:42:20
3	V 292.402†	44736.0	44950.0	507.53 µg/L	507.53 ppb	11:42:20
3	Zn 213.857†	19923.9	19374.2	503.68 µg/L	503.68 ppb	11:42:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2066354.3	99.788	%	0.1999				0.20%
Sc RADIAL	116772.8	103	%	0.8				0.73%
Y 371.029	1291911.4	98.712	%	0.1739				0.18%
Ag 328.068†	56104.6	517.28	µg/L	1.514	517.28	ppb	1.514	0.29%
QC value within limits for Ag 328.068 Recovery = 103.46%								
Al 396.153Radial†	9838.9	5128.2	µg/L	61.22	5128.2	ppb	61.22	1.19%
QC value within limits for Al 396.153Radial Recovery = 102.56%								
As 188.979†	280.8	502.74	µg/L	2.650	502.74	ppb	2.650	0.53%
QC value within limits for As 188.979 Recovery = 100.55%								
B 249.677†	11696.1	496.26	µg/L	2.730	496.26	ppb	2.730	0.55%
QC value within limits for B 249.677 Recovery = 99.25%								
Ba 233.527†	19768.2	502.55	µg/L	1.396	502.55	ppb	1.396	0.28%
QC value within limits for Ba 233.527 Recovery = 100.51%								
Be 313.107†	818372.4	503.69	µg/L	1.344	503.69	ppb	1.344	0.27%
QC value within limits for Be 313.107 Recovery = 100.74%								
Ca 317.933Radial†	12927.7	5215.9	µg/L	45.99	5215.9	ppb	45.99	0.88%
QC value within limits for Ca 317.933Radial Recovery = 104.32%								
Cd 226.502†	19423.5	503.51	µg/L	2.172	503.51	ppb	2.172	0.43%
QC value within limits for Cd 226.502 Recovery = 100.70%								
Co 228.616†	10623.6	504.70	µg/L	1.841	504.70	ppb	1.841	0.36%

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   QC value within limits for Co 228.616  Recovery = 100.94%
Cr 267.716†            24259.6      502.47 µg/L        1.337      502.47 ppb          1.337   0.27%
   QC value within limits for Cr 267.716  Recovery = 100.49%
Cu 324.752†            73347.6      500.29 µg/L        1.533      500.29 ppb          1.533   0.31%
   QC value within limits for Cu 324.752  Recovery = 100.06%
Fe 238.204 Radial†       790.1      5094.3 µg/L       47.60      5094.3 ppb          47.60   0.93%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.89%
K 766.490 Radial†       9413.4      5002.0 µg/L       56.62      5002.0 ppb          56.62   1.13%
   QC value within limits for K 766.490 Radial  Recovery = 100.04%
Mg 279.077 IEC†          828.0      5172.9 µg/L       41.16      5172.9 ppb          41.16   0.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.46%
Mn 257.610†           159149.6      506.14 µg/L        1.437      506.14 ppb          1.437   0.28%
   QC value within limits for Mn 257.610  Recovery = 101.23%
Mo 202.031†             4376.9      506.27 µg/L        7.418      506.27 ppb          7.418   1.47%
   QC value within limits for Mo 202.031  Recovery = 101.25%
Na 589.592 Radial†     39698.9       10216 µg/L         89.4       10216 ppb           89.4   0.87%
   QC value within limits for Na 589.592 Radial  Recovery = 102.16%
Ni 231.604†             9333.0      503.46 µg/L        2.381      503.46 ppb          2.381   0.47%
   QC value within limits for Ni 231.604  Recovery = 100.69%
P 214.914†              1264.8      2468.6 µg/L       26.98      2468.6 ppb          26.98   1.09%
   QC value within limits for P 214.914  Recovery = 98.74%
Pb 220.353†             1991.0      506.69 µg/L        4.757      506.69 ppb          4.757   0.94%
   QC value within limits for Pb 220.353  Recovery = 101.34%
S 181.975 Axial†         204.6      1005.8 µg/L       19.42      1005.8 ppb          19.42   1.93%
   QC value within limits for S 181.975 Axial  Recovery = 100.58%
Sb 206.836†              530.9      517.87 µg/L        6.726      517.87 ppb          6.726   1.30%
   QC value within limits for Sb 206.836  Recovery = 103.57%
Se 196.026†              398.4      503.05 µg/L        7.408      503.05 ppb          7.408   1.47%
   QC value within limits for Se 196.026  Recovery = 100.61%
SiO2†                   29524.7      5409.0 µg/L       19.31      5409.0 ppb          19.31   0.36%
   QC value within limits for SiO2  Recovery = 101.15%
Si 251.611†             34215.1      2481.6 µg/L        6.13      2481.6 ppb           6.13   0.25%
   QC value within limits for Si 251.611  Recovery = 99.26%
Sn 189.927†             1029.0      518.96 µg/L        9.111      518.96 ppb          9.111   1.76%
   QC value within limits for Sn 189.927  Recovery = 103.79%
Sr 421.552†             95224.9      498.64 µg/L        4.465      498.64 ppb          4.465   0.90%
   QC value within limits for Sr 421.552  Recovery = 99.73%
Ti 334.940†            225674.5      513.06 µg/L        1.193      513.06 ppb          1.193   0.23%
   QC value within limits for Ti 334.940  Recovery = 102.61%
Tl 190.801†              336.7      507.82 µg/L        4.178      507.82 ppb          4.178   0.82%
   QC value within limits for Tl 190.801  Recovery = 101.56%
U 409.014†              5510.7      503.15 µg/L        2.178      503.15 ppb          2.178   0.43%
   QC value within limits for U 409.014  Recovery = 100.63%
V 292.402†             44917.6      507.22 µg/L        1.361      507.22 ppb          1.361   0.27%
   QC value within limits for V 292.402  Recovery = 101.44%
Zn 213.857†            19335.8      502.69 µg/L        1.005      502.69 ppb          1.005   0.20%
   QC value within limits for Zn 213.857  Recovery = 100.54%
All analyte(s) passed QC.
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Sequence No.: 57
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 11:42:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112897.8	112897.8	99.3	%			11:43:22
1	Al 396.153Radial†	113.3	-12.2	-6.3971	µg/L	-6.3971	ppb	11:43:22
1	Ca 317.933Radial†	424.0	2.7	1.0920	µg/L	1.0920	ppb	11:43:42
1	Fe 238.204 Radial†	18.5	4.9	31.403	µg/L	31.403	ppb	11:43:42
1	K 766.490 Radial†	830.1	73.9	39.276	µg/L	39.276	ppb	11:43:22
1	Mg 279.077 IEC†	14.4	1.1	7.0581	µg/L	7.0581	ppb	11:43:42
1	Na 589.592 Radial†	-637.3	37.7	9.7082	µg/L	9.7082	ppb	11:43:22
1	Sr 421.552†	-1.1	24.4	0.1279	µg/L	0.1279	ppb	11:43:22
1	Sc 361.383	2056778.6	2056778.6	99.326	%			11:44:44
1	Y 371.029	1298219.9	1298219.9	99.194	%			11:44:44
1	Ag 328.068†	180.7	-24.4	-0.2184	µg/L	-0.2184	ppb	11:44:50
1	As 188.979†	3.2	0.8	1.3843	µg/L	1.3843	ppb	11:45:10
1	B 249.677†	194.6	1.0	0.0318	µg/L	0.0318	ppb	11:44:50
1	Ba 233.527†	-59.1	-0.7	-0.0171	µg/L	-0.0171	ppb	11:45:10
1	Be 313.107†	3834.6	95.8	0.0589	µg/L	0.0589	ppb	11:44:50
1	Cd 226.502†	-97.5	0.0	0.0002	µg/L	0.0002	ppb	11:45:10
1	Co 228.616†	-56.8	6.8	0.3240	µg/L	0.3240	ppb	11:45:10
1	Cr 267.716†	-123.0	2.4	0.0504	µg/L	0.0504	ppb	11:44:50
1	Cu 324.752†	4296.7	67.3	0.4647	µg/L	0.4647	ppb	11:44:50
1	Mn 257.610†	-238.0	3.4	0.0149	µg/L	0.0149	ppb	11:45:10
1	Mo 202.031†	1.4	1.3	0.1509	µg/L	0.1509	ppb	11:45:10
1	Ni 231.604†	302.4	-16.5	-0.8893	µg/L	-0.8893	ppb	11:45:10
1	P 214.914†	170.1	-1.6	-3.2050	µg/L	-3.2050	ppb	11:45:10
1	Pb 220.353†	40.5	-3.6	-0.9276	µg/L	-0.9276	ppb	11:45:10
1	S 181.975 Axial†	29.6	2.3	11.168	µg/L	11.168	ppb	11:45:10
1	Sb 206.836†	18.9	1.1	1.0979	µg/L	1.0979	ppb	11:45:10
1	Se 196.026†	9.9	-6.0	-7.4921	µg/L	-7.4921	ppb	11:45:10
1	SiO2†	2795.3	63.4	11.608	µg/L	11.608	ppb	11:44:50
1	Si 251.611†	388.6	17.4	1.2953	µg/L	1.2953	ppb	11:45:10
1	Sn 189.927†	20.2	-1.5	-0.7659	µg/L	-0.7659	ppb	11:45:10
1	Ti 334.940†	1054.3	63.4	0.1441	µg/L	0.1441	ppb	11:44:50
1	Tl 190.801†	-20.9	-4.2	-6.3007	µg/L	-6.3007	ppb	11:45:10
1	U 409.014†	692.6	49.7	4.5399	µg/L	4.5399	ppb	11:44:50
1	V 292.402†	-127.1	35.4	0.4065	µg/L	0.4065	ppb	11:44:50
1	Zn 213.857†	578.0	9.7	0.2543	µg/L	0.2543	ppb	11:45:10
2	Sc RADIAL	113099.1	113099.1	99.5	%			11:43:48
2	Al 396.153Radial†	119.9	-5.8	-3.0188	µg/L	-3.0188	ppb	11:43:48
2	Ca 317.933Radial†	422.0	0.0	0.0129	µg/L	0.0129	ppb	11:44:08
2	Fe 238.204 Radial†	13.1	-0.5	-3.3538	µg/L	-3.3538	ppb	11:44:08
2	K 766.490 Radial†	726.4	-31.7	-16.863	µg/L	-16.863	ppb	11:43:48
2	Mg 279.077 IEC†	15.5	2.2	13.488	µg/L	13.488	ppb	11:44:08
2	Na 589.592 Radial†	-593.8	82.6	21.246	µg/L	21.246	ppb	11:43:48
2	Sr 421.552†	-49.9	-24.6	-0.1290	µg/L	-0.1290	ppb	11:43:48
2	Sc 361.383	2055913.0	2055913.0	99.284	%			11:45:16
2	Y 371.029	1297112.1	1297112.1	99.109	%			11:45:16
2	Ag 328.068†	209.2	4.3	0.0417	µg/L	0.0417	ppb	11:45:22
2	As 188.979†	-4.4	-6.9	-12.408	µg/L	-12.408	ppb	11:45:42
2	B 249.677†	170.9	-22.9	-0.9726	µg/L	-0.9726	ppb	11:45:22
2	Ba 233.527†	-68.5	-10.2	-0.2583	µg/L	-0.2583	ppb	11:45:42
2	Be 313.107†	3777.3	39.7	0.0244	µg/L	0.0244	ppb	11:45:22
2	Cd 226.502†	-93.1	4.4	0.1076	µg/L	0.1076	ppb	11:45:42
2	Co 228.616†	-64.2	-0.7	-0.0363	µg/L	-0.0363	ppb	11:45:42
2	Cr 267.716†	-111.3	14.1	0.2928	µg/L	0.2928	ppb	11:45:22
2	Cu 324.752†	4282.7	55.0	0.3738	µg/L	0.3738	ppb	11:45:22
2	Mn 257.610†	-247.2	-5.9	-0.0191	µg/L	-0.0191	ppb	11:45:42
2	Mo 202.031†	-6.6	-6.8	-0.7849	µg/L	-0.7849	ppb	11:45:42
2	Ni 231.604†	300.1	-18.7	-1.0096	µg/L	-1.0096	ppb	11:45:42
2	P 214.914†	175.9	4.4	8.7443	µg/L	8.7443	ppb	11:45:42
2	Pb 220.353†	44.8	0.7	0.1858	µg/L	0.1858	ppb	11:45:42

2	S 181.975 Axial†	22.4	-5.0	-24.608 µg/L	-24.608 ppb	11:45:42
2	Sb 206.836†	21.1	3.4	3.2946 µg/L	3.2946 ppb	11:45:42
2	Se 196.026†	8.8	-7.1	-8.9831 µg/L	-8.9831 ppb	11:45:42
2	SiO2†	2788.0	57.2	10.485 µg/L	10.485 ppb	11:45:22
2	Si 251.611†	372.3	1.2	0.1404 µg/L	0.1404 ppb	11:45:42
2	Sn 189.927†	19.7	-2.0	-0.9862 µg/L	-0.9862 ppb	11:45:42
2	Ti 334.940†	1027.8	37.2	0.0845 µg/L	0.0845 ppb	11:45:22
2	Tl 190.801†	-23.7	-6.9	-10.410 µg/L	-10.410 ppb	11:45:42
2	U 409.014†	578.1	-65.3	-5.9699 µg/L	-5.9699 ppb	11:45:22
2	V 292.402†	-133.5	28.9	0.3075 µg/L	0.3075 ppb	11:45:22
2	Zn 213.857†	583.3	15.2	0.4034 µg/L	0.4034 ppb	11:45:42
3	Sc RADIAL	114057.7	114057.7	100 %		11:44:14
3	Al 396.153Radial†	145.8	18.9	9.9355 µg/L	9.9355 ppb	11:44:14
3	Ca 317.933Radial†	415.5	-10.1	-4.0586 µg/L	-4.0586 ppb	11:44:34
3	Fe 238.204 Radial†	16.2	2.4	15.693 µg/L	15.693 ppb	11:44:34
3	K 766.490 Radial†	792.0	27.5	14.597 µg/L	14.597 ppb	11:44:14
3	Mg 279.077 IEC†	13.3	-0.2	-1.1105 µg/L	-1.1105 ppb	11:44:34
3	Na 589.592 Radial†	-576.4	104.9	27.001 µg/L	27.001 ppb	11:44:14
3	Sr 421.552†	-34.2	-8.6	-0.0448 µg/L	-0.0448 ppb	11:44:14
3	Sc 361.383	2066541.8	2066541.8	99.797 %		11:45:48
3	Y 371.029	1303752.7	1303752.7	99.617 %		11:45:48
3	Ag 328.068†	212.7	6.7	0.0641 µg/L	0.0641 ppb	11:45:54
3	As 188.979†	0.7	-1.7	-3.1248 µg/L	-3.1248 ppb	11:46:14
3	B 249.677†	194.6	-0.0	-0.0054 µg/L	-0.0054 ppb	11:45:54
3	Ba 233.527†	-57.3	1.4	0.0347 µg/L	0.0347 ppb	11:46:14
3	Be 313.107†	3629.0	-128.4	-0.0790 µg/L	-0.0790 ppb	11:45:54
3	Cd 226.502†	-92.6	5.4	0.1406 µg/L	0.1406 ppb	11:46:14
3	Co 228.616†	-66.3	-2.4	-0.1168 µg/L	-0.1168 ppb	11:46:14
3	Cr 267.716†	-197.7	-71.9	-1.4845 µg/L	-1.4845 ppb	11:45:54
3	Cu 324.752†	4301.5	51.7	0.3553 µg/L	0.3553 ppb	11:45:54
3	Mn 257.610†	-262.8	-20.2	-0.0623 µg/L	-0.0623 ppb	11:46:14
3	Mo 202.031†	-5.4	-5.5	-0.6390 µg/L	-0.6390 ppb	11:46:14
3	Ni 231.604†	300.4	-19.9	-1.0740 µg/L	-1.0740 ppb	11:46:14
3	P 214.914†	169.8	-2.7	-5.4256 µg/L	-5.4256 ppb	11:46:14
3	Pb 220.353†	50.0	5.6	1.4253 µg/L	1.4253 ppb	11:46:14
3	S 181.975 Axial†	28.1	0.6	2.9861 µg/L	2.9861 ppb	11:46:14
3	Sb 206.836†	21.9	4.1	3.9996 µg/L	3.9996 ppb	11:46:14
3	Se 196.026†	17.5	1.6	1.9871 µg/L	1.9871 ppb	11:46:14
3	SiO2†	2806.3	61.1	11.191 µg/L	11.191 ppb	11:45:54
3	Si 251.611†	391.2	18.2	1.4606 µg/L	1.4606 ppb	11:46:14
3	Sn 189.927†	16.4	-5.5	-2.7395 µg/L	-2.7395 ppb	11:46:14
3	Ti 334.940†	914.7	-81.5	-0.1851 µg/L	-0.1851 ppb	11:45:54
3	Tl 190.801†	-19.8	-3.0	-4.4310 µg/L	-4.4310 ppb	11:46:14
3	U 409.014†	693.2	47.0	4.2979 µg/L	4.2979 ppb	11:45:54
3	V 292.402†	-148.1	14.9	0.1706 µg/L	0.1706 ppb	11:45:54
3	Zn 213.857†	576.6	5.4	0.1461 µg/L	0.1461 ppb	11:46:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2059744.4	99.469	%	0.2850				0.29%
Sc RADIAL	113351.6	99.7	%	0.55				0.55%
Y 371.029	1299694.9	99.307	%	0.2718				0.27%
Ag 328.068†	-4.4	-0.0375	µg/L	0.15702	-0.0375	ppb	0.15702	418.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.3	0.1732	µg/L	8.62151	0.1732	ppb	8.62151	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.6	-4.7162	µg/L	7.03258	-4.7162	ppb	7.03258	149.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-7.3	-0.3154	µg/L	0.56943	-0.3154	ppb	0.56943	180.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.2	-0.0802	µg/L	0.15636	-0.0802	ppb	0.15636	194.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	2.4	0.0015	µg/L	0.07178	0.0015	ppb	0.07178	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-0.9846	µg/L	2.71631	-0.9846	ppb	2.71631	275.89%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	3.3	0.0828	µg/L	0.07340	0.0828	ppb	0.07340	88.63%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.2	0.0570	µg/L	0.23474	0.0570	ppb	0.23474	412.02%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -18.4     -0.3804 µg/L       0.96381     -0.3804 ppb        0.96381 253.35%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               58.0      0.3980 µg/L       0.05854      0.3980 ppb        0.05854  14.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.3      14.581 µg/L       17.4050      14.581 ppb        17.4050 119.37%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         23.2      12.337 µg/L       28.1376      12.337 ppb        28.1376 228.07%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.0       6.4785 µg/L       7.31644      6.4785 ppb        7.31644 112.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -7.6      -0.0222 µg/L       0.03870     -0.0222 ppb        0.03870 174.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -3.7      -0.4243 µg/L       0.50350     -0.4243 ppb        0.50350 118.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        75.1      19.318 µg/L        8.8060      19.318 ppb         8.8060  45.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -18.4      -0.9910 µg/L       0.09375     -0.9910 ppb        0.09375   9.46%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 0.1       0.0379 µg/L       7.62130      0.0379 ppb        7.62130 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                0.9       0.2278 µg/L       1.17700      0.2278 ppb        1.17700 516.61%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.7      -3.4846 µg/L      18.74530     -3.4846 ppb       18.74530 537.95%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.9       2.7974 µg/L       1.51337      2.7974 ppb        1.51337  54.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.8      -4.8293 µg/L       5.95012     -4.8293 ppb        5.95012 123.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     60.6      11.094 µg/L        0.5677      11.094 ppb         0.5677   5.12%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               12.2       0.9655 µg/L       0.71926      0.9655 ppb        0.71926  74.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.0      -1.4972 µg/L       1.08148     -1.4972 ppb        1.08148  72.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -2.9      -0.0153 µg/L       0.13097     -0.0153 ppb        0.13097 856.63%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                6.4       0.0145 µg/L       0.17544      0.0145 ppb        0.17544 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -4.7      -7.0474 µg/L       3.05885     -7.0474 ppb        3.05885  43.40%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                10.5       0.9559 µg/L       5.99918      0.9559 ppb        5.99918 627.57%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                26.4       0.2949 µg/L       0.11846      0.2949 ppb        0.11846  40.17%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               10.1       0.2679 µg/L       0.12921      0.2679 ppb        0.12921  48.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 67
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 12:17:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117993.8	117993.8	104	%			12:18:02
1	Al 396.153Radial†	10805.2	10280.6	5358.8	µg/L	5358.8	ppb	12:18:02
1	Ca 317.933Radial†	14546.7	13586.5	5481.7	µg/L	5481.7	ppb	12:18:02
1	Fe 238.204 Radial†	847.8	802.8	5176.5	µg/L	5176.5	ppb	12:18:22
1	K 766.490 Radial†	10495.4	9346.9	4966.7	µg/L	4966.7	ppb	12:18:02
1	Mg 279.077 IEC†	890.9	844.7	5277.3	µg/L	5277.3	ppb	12:18:22
1	Na 589.592 Radial†	40157.0	39356.1	10128	µg/L	10128	ppb	12:18:02
1	Sr 421.552†	98335.3	94736.3	496.08	µg/L	496.08	ppb	12:18:02
1	Sc 361.383	2061215.4	2061215.4	99.540	%			12:19:26
1	Y 371.029	1291593.1	1291593.1	98.688	%			12:19:26
1	Ag 328.068†	56515.3	56570.0	521.59	µg/L	521.59	ppb	12:19:31
1	As 188.979†	290.2	289.1	517.59	µg/L	517.59	ppb	12:19:52
1	B 249.677†	11952.3	11812.6	501.19	µg/L	501.19	ppb	12:19:31
1	Ba 233.527†	19902.7	20053.4	509.80	µg/L	509.80	ppb	12:19:31
1	Be 313.107†	829815.0	829884.1	510.78	µg/L	510.78	ppb	12:19:26
1	Cd 226.502†	19498.1	19686.3	510.32	µg/L	510.32	ppb	12:19:31
1	Co 228.616†	10655.8	10769.0	511.62	µg/L	511.62	ppb	12:19:31
1	Cr 267.716†	24311.2	24549.8	508.48	µg/L	508.48	ppb	12:19:31
1	Cu 324.752†	77833.6	73934.7	504.31	µg/L	504.31	ppb	12:19:31
1	Mn 257.610†	160410.3	161394.4	513.28	µg/L	513.28	ppb	12:19:26
1	Mo 202.031†	4461.7	4482.1	518.44	µg/L	518.44	ppb	12:19:52
1	Ni 231.604†	9752.7	9476.8	511.21	µg/L	511.21	ppb	12:19:31
1	P 214.914†	1471.8	1305.8	2550.2	µg/L	2550.2	ppb	12:19:52
1	Pb 220.353†	2079.2	2044.3	520.27	µg/L	520.27	ppb	12:19:52
1	S 181.975 Axial†	236.4	210.0	1032.3	µg/L	1032.3	ppb	12:19:52
1	Sb 206.836†	557.3	542.0	528.62	µg/L	528.62	ppb	12:19:52
1	Se 196.026†	420.8	406.8	513.61	µg/L	513.61	ppb	12:19:52
1	SiO2†	32474.2	29873.3	5472.9	µg/L	5472.9	ppb	12:19:31
1	Si 251.611†	34795.7	34582.7	2507.8	µg/L	2507.8	ppb	12:19:31
1	Sn 189.927†	1071.4	1054.5	531.85	µg/L	531.85	ppb	12:19:52
1	Ti 334.940†	228592.2	228650.3	519.82	µg/L	519.82	ppb	12:19:26
1	Tl 190.801†	325.1	343.5	518.01	µg/L	518.01	ppb	12:19:52
1	U 409.014†	6179.6	5560.6	507.70	µg/L	507.70	ppb	12:19:31
1	V 292.402†	45079.5	45451.1	513.29	µg/L	513.29	ppb	12:19:31
1	Zn 213.857†	20077.9	19598.4	509.51	µg/L	509.51	ppb	12:19:31
2	Sc RADIAL	116158.7	116158.7	102	%			12:18:28
2	Al 396.153Radial†	10458.7	10106.0	5267.6	µg/L	5267.6	ppb	12:18:28
2	Ca 317.933Radial†	14049.2	13321.1	5374.6	µg/L	5374.6	ppb	12:18:28
2	Fe 238.204 Radial†	837.2	805.4	5192.8	µg/L	5192.8	ppb	12:18:48
2	K 766.490 Radial†	10489.5	9500.8	5048.4	µg/L	5048.4	ppb	12:18:28
2	Mg 279.077 IEC†	880.5	848.0	5298.3	µg/L	5298.3	ppb	12:18:48
2	Na 589.592 Radial†	40145.1	39955.5	10282	µg/L	10282	ppb	12:18:28
2	Sr 421.552†	98044.2	95947.8	502.43	µg/L	502.43	ppb	12:18:28
2	Sc 361.383	2065366.1	2065366.1	99.741	%			12:19:59
2	Y 371.029	1292970.4	1292970.4	98.793	%			12:19:59
2	Ag 328.068†	56682.6	56623.7	522.08	µg/L	522.08	ppb	12:20:05
2	As 188.979†	292.5	290.9	520.82	µg/L	520.82	ppb	12:20:25
2	B 249.677†	12004.8	11841.0	502.40	µg/L	502.40	ppb	12:20:05
2	Ba 233.527†	19955.7	20066.5	510.13	µg/L	510.13	ppb	12:20:05
2	Be 313.107†	832722.1	831123.3	511.54	µg/L	511.54	ppb	12:19:59
2	Cd 226.502†	19526.1	19675.0	510.02	µg/L	510.02	ppb	12:20:05
2	Co 228.616†	10637.9	10729.5	509.74	µg/L	509.74	ppb	12:20:05
2	Cr 267.716†	24343.0	24532.5	508.13	µg/L	508.13	ppb	12:20:05
2	Cu 324.752†	78041.8	73986.2	504.66	µg/L	504.66	ppb	12:20:05
2	Mn 257.610†	161001.7	161663.6	514.14	µg/L	514.14	ppb	12:19:59
2	Mo 202.031†	4443.1	4454.5	515.24	µg/L	515.24	ppb	12:20:25
2	Ni 231.604†	9752.3	9456.7	510.13	µg/L	510.13	ppb	12:20:05
2	P 214.914†	1465.3	1296.4	2531.1	µg/L	2531.1	ppb	12:20:25
2	Pb 220.353†	2053.7	2014.6	512.71	µg/L	512.71	ppb	12:20:25

2	S 181.975 Axial†	235.0	208.1	1023.1 µg/L	1023.1 ppb	12:20:25
2	Sb 206.836†	560.2	543.7	530.37 µg/L	530.37 ppb	12:20:25
2	Se 196.026†	421.3	406.5	513.21 µg/L	513.21 ppb	12:20:25
2	SiO2†	32588.9	29922.7	5481.9 µg/L	5481.9 ppb	12:20:05
2	Si 251.611†	34891.4	34608.4	2509.9 µg/L	2509.9 ppb	12:20:05
2	Sn 189.927†	1061.8	1042.7	525.95 µg/L	525.95 ppb	12:20:25
2	Ti 334.940†	229338.2	228936.7	520.47 µg/L	520.47 ppb	12:19:59
2	Tl 190.801†	317.3	335.0	505.34 µg/L	505.34 ppb	12:20:25
2	U 409.014†	6178.7	5547.2	506.48 µg/L	506.48 ppb	12:20:05
2	V 292.402†	45229.7	45510.6	513.93 µg/L	513.93 ppb	12:20:05
2	Zn 213.857†	20064.3	19544.2	508.10 µg/L	508.10 ppb	12:20:05
3	Sc RADIAL	115535.2	115535.2	102 %		12:18:54
3	Al 396.153Radial†	10360.6	10064.7	5246.2 µg/L	5246.2 ppb	12:18:54
3	Ca 317.933Radial†	13914.5	13262.8	5351.1 µg/L	5351.1 ppb	12:18:54
3	Fe 238.204 Radial†	843.5	816.0	5261.7 µg/L	5261.7 ppb	12:19:14
3	K 766.490 Radial†	10428.3	9496.0	5045.9 µg/L	5045.9 ppb	12:18:54
3	Mg 279.077 IEC†	886.4	858.5	5363.5 µg/L	5363.5 ppb	12:19:14
3	Na 589.592 Radial†	39864.7	39891.6	10266 µg/L	10266 ppb	12:18:54
3	Sr 421.552†	97214.0	95648.8	500.86 µg/L	500.86 ppb	12:18:54
3	Sc 361.383	2039073.4	2039073.4	98.471 %		12:20:32
3	Y 371.029	1276651.9	1276651.9	97.546 %		12:20:32
3	Ag 328.068†	56759.4	57434.5	529.56 µg/L	529.56 ppb	12:20:38
3	As 188.979†	281.5	283.4	507.39 µg/L	507.39 ppb	12:20:58
3	B 249.677†	12071.6	12064.0	511.87 µg/L	511.87 ppb	12:20:38
3	Ba 233.527†	19953.2	20321.8	516.62 µg/L	516.62 ppb	12:20:38
3	Be 313.107†	821930.6	830929.7	511.42 µg/L	511.42 ppb	12:20:32
3	Cd 226.502†	19563.3	19965.2	517.54 µg/L	517.54 ppb	12:20:38
3	Co 228.616†	10692.0	10922.0	518.87 µg/L	518.87 ppb	12:20:38
3	Cr 267.716†	24420.8	24926.3	516.28 µg/L	516.28 ppb	12:20:38
3	Cu 324.752†	78065.3	75019.0	511.70 µg/L	511.70 ppb	12:20:38
3	Mn 257.610†	159055.6	161768.7	514.48 µg/L	514.48 ppb	12:20:32
3	Mo 202.031†	4355.7	4423.2	511.63 µg/L	511.63 ppb	12:20:58
3	Ni 231.604†	9776.6	9607.5	518.27 µg/L	518.27 ppb	12:20:38
3	P 214.914†	1434.7	1284.2	2505.8 µg/L	2505.8 ppb	12:20:58
3	Pb 220.353†	2029.5	2016.6	513.17 µg/L	513.17 ppb	12:20:58
3	S 181.975 Axial†	236.1	212.3	1043.7 µg/L	1043.7 ppb	12:20:58
3	Sb 206.836†	542.0	532.5	519.32 µg/L	519.32 ppb	12:20:58
3	Se 196.026†	420.3	410.9	518.77 µg/L	518.77 ppb	12:20:58
3	SiO2†	32543.5	30298.0	5550.7 µg/L	5550.7 ppb	12:20:38
3	Si 251.611†	34900.7	35068.9	2544.2 µg/L	2544.2 ppb	12:20:38
3	Sn 189.927†	1041.4	1035.7	522.44 µg/L	522.44 ppb	12:20:58
3	Ti 334.940†	226530.9	229050.6	520.73 µg/L	520.73 ppb	12:20:32
3	Tl 190.801†	320.1	341.9	515.69 µg/L	515.69 ppb	12:20:58
3	U 409.014†	6188.2	5636.7	514.64 µg/L	514.64 ppb	12:20:38
3	V 292.402†	45272.3	46138.7	520.95 µg/L	520.95 ppb	12:20:38
3	Zn 213.857†	20158.5	19899.2	517.34 µg/L	517.34 ppb	12:20:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2055218.3	99.251	%	0.6826				0.69%
Sc RADIAL	116562.5	103	%	1.1				1.10%
Y 371.029	1287071.8	98.342	%	0.6915				0.70%
Ag 328.068†	56876.1	524.41	µg/L	4.465	524.41	ppb	4.465	0.85%
QC value within limits for Ag 328.068 Recovery = 104.88%								
Al 396.153Radial†	10150.5	5290.9	µg/L	59.83	5290.9	ppb	59.83	1.13%
QC value within limits for Al 396.153Radial Recovery = 105.82%								
As 188.979†	287.8	515.27	µg/L	7.007	515.27	ppb	7.007	1.36%
QC value within limits for As 188.979 Recovery = 103.05%								
B 249.677†	11905.9	505.15	µg/L	5.848	505.15	ppb	5.848	1.16%
QC value within limits for B 249.677 Recovery = 101.03%								
Ba 233.527†	20147.2	512.18	µg/L	3.848	512.18	ppb	3.848	0.75%
QC value within limits for Ba 233.527 Recovery = 102.44%								
Be 313.107†	830645.7	511.25	µg/L	0.410	511.25	ppb	0.410	0.08%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	13390.1	5402.5	µg/L	69.63	5402.5	ppb	69.63	1.29%
QC value within limits for Ca 317.933Radial Recovery = 108.05%								
Cd 226.502†	19775.5	512.63	µg/L	4.261	512.63	ppb	4.261	0.83%
QC value within limits for Cd 226.502 Recovery = 102.53%								
Co 228.616†	10806.8	513.41	µg/L	4.821	513.41	ppb	4.821	0.94%

QC value within limits for Co 228.616 Recovery = 102.68%

Cr 267.716†	24669.5	510.96 µg/L	4.608	510.96 ppb	4.608	0.90%

QC value within limits for Cr 267.716 Recovery = 102.19%

Cu 324.752†	74313.3	506.89 µg/L	4.173	506.89 ppb	4.173	0.82%

QC value within limits for Cu 324.752 Recovery = 101.38%

Fe 238.204 Radial†	808.1	5210.3 µg/L	45.23	5210.3 ppb	45.23	0.87%

QC value within limits for Fe 238.204 Radial Recovery = 104.21%

K 766.490 Radial†	9447.9	5020.3 µg/L	46.49	5020.3 ppb	46.49	0.93%

QC value within limits for K 766.490 Radial Recovery = 100.41%

Mg 279.077 IEC†	850.4	5313.0 µg/L	44.97	5313.0 ppb	44.97	0.85%

QC value within limits for Mg 279.077 IEC Recovery = 106.26%

Mn 257.610†	161608.9	513.96 µg/L	0.618	513.96 ppb	0.618	0.12%

QC value within limits for Mn 257.610 Recovery = 102.79%

Mo 202.031†	4453.3	515.10 µg/L	3.409	515.10 ppb	3.409	0.66%

QC value within limits for Mo 202.031 Recovery = 103.02%

Na 589.592 Radial†	39734.4	10225 µg/L	84.7	10225 ppb	84.7	0.83%

QC value within limits for Na 589.592 Radial Recovery = 102.25%

Ni 231.604†	9513.7	513.20 µg/L	4.417	513.20 ppb	4.417	0.86%

QC value within limits for Ni 231.604 Recovery = 102.64%

P 214.914†	1295.4	2529.0 µg/L	22.24	2529.0 ppb	22.24	0.88%

QC value within limits for P 214.914 Recovery = 101.16%

Pb 220.353†	2025.2	515.38 µg/L	4.240	515.38 ppb	4.240	0.82%

QC value within limits for Pb 220.353 Recovery = 103.08%

S 181.975 Axial†	210.1	1033.0 µg/L	10.33	1033.0 ppb	10.33	1.00%

QC value within limits for S 181.975 Axial Recovery = 103.30%

Sb 206.836†	539.4	526.10 µg/L	5.937	526.10 ppb	5.937	1.13%

QC value within limits for Sb 206.836 Recovery = 105.22%

Se 196.026†	408.0	515.20 µg/L	3.100	515.20 ppb	3.100	0.60%

QC value within limits for Se 196.026 Recovery = 103.04%

SiO2†	30031.4	5501.8 µg/L	42.55	5501.8 ppb	42.55	0.77%

QC value within limits for SiO2 Recovery = 102.89%

Si 251.611†	34753.3	2520.6 µg/L	20.42	2520.6 ppb	20.42	0.81%

QC value within limits for Si 251.611 Recovery = 100.83%

Sn 189.927†	1044.3	526.75 µg/L	4.752	526.75 ppb	4.752	0.90%

QC value within limits for Sn 189.927 Recovery = 105.35%

Sr 421.552†	95444.3	499.79 µg/L	3.305	499.79 ppb	3.305	0.66%

QC value within limits for Sr 421.552 Recovery = 99.96%

Ti 334.940†	228879.2	520.34 µg/L	0.473	520.34 ppb	0.473	0.09%

QC value within limits for Ti 334.940 Recovery = 104.07%

Tl 190.801†	340.2	513.01 µg/L	6.744	513.01 ppb	6.744	1.31%

QC value within limits for Tl 190.801 Recovery = 102.60%

U 409.014†	5581.5	509.61 µg/L	4.404	509.61 ppb	4.404	0.86%

QC value within limits for U 409.014 Recovery = 101.92%

V 292.402†	45700.1	516.06 µg/L	4.250	516.06 ppb	4.250	0.82%

QC value within limits for V 292.402 Recovery = 103.21%

Zn 213.857†	19680.6	511.65 µg/L	4.977	511.65 ppb	4.977	0.97%

QC value within limits for Zn 213.857 Recovery = 102.33%

All analyte(s) passed QC.

Sequence No.: 68
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 12:21:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113839.7	113839.7	100	%			12:21:41
1	Al 396.153Radial†	241.3	114.5	59.934	µg/L	59.934	ppb	12:21:41
1	Ca 317.933Radial†	522.0	97.1	39.172	µg/L	39.172	ppb	12:22:01
1	Fe 238.204 Radial†	22.5	8.8	56.410	µg/L	56.410	ppb	12:22:01
1	K 766.490 Radial†	726.6	-36.3	-19.294	µg/L	-19.294	ppb	12:21:41
1	Mg 279.077 IEC†	24.1	10.7	66.657	µg/L	66.657	ppb	12:22:01
1	Na 589.592 Radial†	-579.2	101.0	25.997	µg/L	25.997	ppb	12:21:41
1	Sr 421.552†	-83.6	-58.0	-0.3037	µg/L	-0.3037	ppb	12:21:41
1	Sc 361.383	2066017.9	2066017.9	99.772	%			12:23:03
1	Y 371.029	1303549.8	1303549.8	99.601	%			12:23:03
1	Ag 328.068†	157.7	-48.3	-0.4366	µg/L	-0.4366	ppb	12:23:08
1	As 188.979†	-0.1	-2.5	-4.5782	µg/L	-4.5782	ppb	12:23:29
1	B 249.677†	181.9	-12.6	-0.5561	µg/L	-0.5561	ppb	12:23:08
1	Ba 233.527†	-61.6	-2.9	-0.0738	µg/L	-0.0738	ppb	12:23:29
1	Be 313.107†	3810.7	54.6	0.0336	µg/L	0.0336	ppb	12:23:08
1	Cd 226.502†	-82.0	16.0	0.4056	µg/L	0.4056	ppb	12:23:29
1	Co 228.616†	-68.7	-4.9	-0.2319	µg/L	-0.2319	ppb	12:23:29
1	Cr 267.716†	-151.1	-25.3	-0.5214	µg/L	-0.5214	ppb	12:23:08
1	Cu 324.752†	4279.2	30.4	0.2189	µg/L	0.2189	ppb	12:23:08
1	Mn 257.610†	-238.9	3.6	0.0186	µg/L	0.0186	ppb	12:23:29
1	Mo 202.031†	-1.7	-1.9	-0.2154	µg/L	-0.2154	ppb	12:23:29
1	Ni 231.604†	313.8	-6.4	-0.3457	µg/L	-0.3457	ppb	12:23:29
1	P 214.914†	176.2	3.8	7.5501	µg/L	7.5501	ppb	12:23:29
1	Pb 220.353†	48.3	3.9	1.0032	µg/L	1.0032	ppb	12:23:29
1	S 181.975 Axial†	26.6	-0.9	-4.2668	µg/L	-4.2668	ppb	12:23:29
1	Sb 206.836†	19.0	1.1	1.1166	µg/L	1.1166	ppb	12:23:29
1	Se 196.026†	11.7	-4.2	-5.2743	µg/L	-5.2743	ppb	12:23:29
1	SiO2†	2793.3	48.8	8.9330	µg/L	8.9330	ppb	12:23:08
1	Si 251.611†	370.4	-2.5	-0.2462	µg/L	-0.2462	ppb	12:23:29
1	Sn 189.927†	25.4	3.6	1.8366	µg/L	1.8366	ppb	12:23:29
1	Ti 334.940†	1012.1	16.3	0.0350	µg/L	0.0350	ppb	12:23:08
1	Tl 190.801†	-18.8	-2.0	-2.9554	µg/L	-2.9554	ppb	12:23:29
1	U 409.014†	600.1	-46.1	-4.2265	µg/L	-4.2265	ppb	12:23:08
1	V 292.402†	-149.8	13.1	0.1433	µg/L	0.1433	ppb	12:23:08
1	Zn 213.857†	578.6	7.7	0.1947	µg/L	0.1947	ppb	12:23:29
2	Sc RADIAL	112542.5	112542.5	99.0	%			12:22:07
2	Al 396.153Radial†	171.1	46.5	24.297	µg/L	24.297	ppb	12:22:07
2	Ca 317.933Radial†	813.7	397.7	160.44	µg/L	160.44	ppb	12:22:27
2	Fe 238.204 Radial†	25.8	12.4	79.581	µg/L	79.581	ppb	12:22:27
2	K 766.490 Radial†	702.1	-52.6	-27.976	µg/L	-27.976	ppb	12:22:07
2	Mg 279.077 IEC†	40.9	27.9	174.22	µg/L	174.22	ppb	12:22:27
2	Na 589.592 Radial†	-616.8	56.4	14.524	µg/L	14.524	ppb	12:22:07
2	Sr 421.552†	-71.0	-46.2	-0.2418	µg/L	-0.2418	ppb	12:22:07
2	Sc 361.383	2038137.6	2038137.6	98.426	%			12:23:35
2	Y 371.029	1286078.0	1286078.0	98.266	%			12:23:35
2	Ag 328.068†	210.1	7.2	0.0731	µg/L	0.0731	ppb	12:23:40
2	As 188.979†	2.5	0.1	0.1859	µg/L	0.1859	ppb	12:24:01
2	B 249.677†	168.6	-23.7	-1.0348	µg/L	-1.0348	ppb	12:23:40
2	Ba 233.527†	-63.4	-5.6	-0.1429	µg/L	-0.1429	ppb	12:24:01
2	Be 313.107†	3636.9	-69.7	-0.0430	µg/L	-0.0430	ppb	12:23:40
2	Cd 226.502†	-89.7	7.0	0.1757	µg/L	0.1757	ppb	12:24:01
2	Co 228.616†	-68.0	-5.1	-0.2422	µg/L	-0.2422	ppb	12:24:01
2	Cr 267.716†	-127.1	-2.9	-0.0594	µg/L	-0.0594	ppb	12:23:40
2	Cu 324.752†	4287.8	97.8	0.6828	µg/L	0.6828	ppb	12:23:40
2	Mn 257.610†	-247.9	-8.8	-0.0179	µg/L	-0.0179	ppb	12:24:01
2	Mo 202.031†	6.4	6.3	0.7342	µg/L	0.7342	ppb	12:24:01
2	Ni 231.604†	317.9	2.1	0.1123	µg/L	0.1123	ppb	12:24:01
2	P 214.914†	179.3	9.4	18.594	µg/L	18.594	ppb	12:24:01
2	Pb 220.353†	32.4	-11.6	-2.9382	µg/L	-2.9382	ppb	12:24:01

2	S 181.975 Axial†	26.1	-1.0	-4.9808 µg/L	-4.9808 ppb	12:24:01
2	Sb 206.836†	19.8	2.2	2.1155 µg/L	2.1155 ppb	12:24:01
2	Se 196.026†	9.5	-6.3	-7.9744 µg/L	-7.9744 ppb	12:24:01
2	SiO2†	2754.2	47.4	8.6875 µg/L	8.6875 ppb	12:23:40
2	Si 251.611†	370.8	2.9	0.2648 µg/L	0.2648 ppb	12:24:01
2	Sn 189.927†	18.6	-3.0	-1.3948 µg/L	-1.3948 ppb	12:24:01
2	Ti 334.940†	1036.9	55.4	0.1170 µg/L	0.1170 ppb	12:23:40
2	Tl 190.801†	-22.5	-6.0	-9.0497 µg/L	-9.0497 ppb	12:24:01
2	U 409.014†	648.0	10.8	0.9729 µg/L	0.9729 ppb	12:23:40
2	V 292.402†	-144.6	16.4	0.1963 µg/L	0.1963 ppb	12:23:40
2	Zn 213.857†	583.1	20.2	0.5139 µg/L	0.5139 ppb	12:24:01
3	Sc RADIAL	114203.9	114203.9	100 %		12:22:32
3	Al 396.153Radial†	552.8	423.8	221.77 µg/L	221.77 ppb	12:22:32
3	Ca 317.933Radial†	704.4	276.9	111.70 µg/L	111.70 ppb	12:22:53
3	Fe 238.204 Radial†	24.8	11.0	70.570 µg/L	70.570 ppb	12:22:53
3	K 766.490 Radial†	789.2	23.7	12.608 µg/L	12.608 ppb	12:22:32
3	Mg 279.077 IEC†	33.8	20.2	125.94 µg/L	125.94 ppb	12:22:53
3	Na 589.592 Radial†	-584.9	97.2	25.022 µg/L	25.022 ppb	12:22:32
3	Sr 421.552†	-11.1	14.4	0.0754 µg/L	0.0754 ppb	12:22:32
3	Sc 361.383	2049258.6	2049258.6	98.963 %		12:24:07
3	Y 371.029	1293302.8	1293302.8	98.818 %		12:24:07
3	Ag 328.068†	175.7	-28.8	-0.2550 µg/L	-0.2550 ppb	12:24:13
3	As 188.979†	2.4	-0.1	-0.1225 µg/L	-0.1225 ppb	12:24:33
3	B 249.677†	176.4	-16.7	-0.7333 µg/L	-0.7333 ppb	12:24:13
3	Ba 233.527†	-57.3	0.9	0.0230 µg/L	0.0230 ppb	12:24:33
3	Be 313.107†	3652.8	-73.7	-0.0454 µg/L	-0.0454 ppb	12:24:13
3	Cd 226.502†	-99.9	-2.8	-0.0760 µg/L	-0.0760 ppb	12:24:33
3	Co 228.616†	-51.8	11.7	0.5508 µg/L	0.5508 ppb	12:24:33
3	Cr 267.716†	-126.1	-1.2	-0.0238 µg/L	-0.0238 ppb	12:24:13
3	Cu 324.752†	4257.9	44.0	0.3144 µg/L	0.3144 ppb	12:24:13
3	Mn 257.610†	-230.5	10.2	0.0411 µg/L	0.0411 ppb	12:24:33
3	Mo 202.031†	-10.6	-10.9	-1.2586 µg/L	-1.2586 ppb	12:24:33
3	Ni 231.604†	298.7	-19.1	-1.0293 µg/L	-1.0293 ppb	12:24:33
3	P 214.914†	177.1	6.2	12.196 µg/L	12.196 ppb	12:24:33
3	Pb 220.353†	39.4	-4.6	-1.1551 µg/L	-1.1551 ppb	12:24:33
3	S 181.975 Axial†	27.8	0.5	2.6543 µg/L	2.6543 ppb	12:24:33
3	Sb 206.836†	22.1	4.5	4.3557 µg/L	4.3557 ppb	12:24:33
3	Se 196.026†	11.4	-4.4	-5.5747 µg/L	-5.5747 ppb	12:24:33
3	SiO2†	2753.9	31.9	5.8495 µg/L	5.8495 ppb	12:24:13
3	Si 251.611†	362.5	-7.5	-0.4660 µg/L	-0.4660 ppb	12:24:33
3	Sn 189.927†	17.6	-4.1	-1.9944 µg/L	-1.9944 ppb	12:24:33
3	Ti 334.940†	1055.0	68.0	0.1485 µg/L	0.1485 ppb	12:24:13
3	Tl 190.801†	-19.3	-2.6	-3.9671 µg/L	-3.9671 ppb	12:24:33
3	U 409.014†	686.9	46.5	4.2405 µg/L	4.2405 ppb	12:24:13
3	V 292.402†	-127.7	34.2	0.3868 µg/L	0.3868 ppb	12:24:13
3	Zn 213.857†	579.3	13.1	0.3364 µg/L	0.3364 ppb	12:24:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2051138.0	99.053	%	0.6778				0.68%
Sc RADIAL	113528.7	99.9	%	0.77				0.77%
Y 371.029	1294310.2	98.895	%	0.6708				0.68%
Ag 328.068†	-23.3	-0.2062	µg/L	0.25836	-0.2062	ppb	0.25836	125.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	194.9	102.00	µg/L	105.241	102.00	ppb	105.241	103.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-1.5049	µg/L	2.66598	-1.5049	ppb	2.66598	177.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-17.7	-0.7747	µg/L	0.24202	-0.7747	ppb	0.24202	31.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.6	-0.0645	µg/L	0.08334	-0.0645	ppb	0.08334	129.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-29.6	-0.0183	µg/L	0.04493	-0.0183	ppb	0.04493	245.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	257.2	103.77	µg/L	61.022	103.77	ppb	61.022	58.80%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.7	0.1684	µg/L	0.24089	0.1684	ppb	0.24089	143.02%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.6	0.0256	µg/L	0.45490	0.0256	ppb	0.45490	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -9.8     -0.2016 µg/L       0.27759     -0.2016 ppb        0.27759 137.72%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                57.4      0.4054 µg/L       0.24492      0.4054 ppb        0.24492  60.42%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         10.7      68.854 µg/L       11.6804      68.854 ppb        11.6804  16.96%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -21.7     -11.554 µg/L       21.3703     -11.554 ppb        21.3703 184.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            19.6      122.27 µg/L        53.876      122.27 ppb         53.876  44.06%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 1.7      0.0140 µg/L       0.02976      0.0140 ppb        0.02976 213.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.2     -0.2466 µg/L       0.99673     -0.2466 ppb        0.99673 404.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         84.9      21.848 µg/L        6.3612      21.848 ppb         6.3612  29.12%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.8     -0.4209 µg/L       0.57452     -0.4209 ppb        0.57452 136.50%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  6.5      12.780 µg/L        5.5450      12.780 ppb         5.5450  43.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -4.1     -1.0300 µg/L       1.97369     -1.0300 ppb        1.97369 191.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.4     -2.1977 µg/L       4.21718     -2.1977 ppb        4.21718 191.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.6      2.5293 µg/L       1.65869      2.5293 ppb        1.65869  65.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.0     -6.2745 µg/L       1.47985     -6.2745 ppb        1.47985  23.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      42.7      7.8233 µg/L       1.71377      7.8233 ppb        1.71377  21.91%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                -2.4     -0.1491 µg/L       0.37493     -0.1491 ppb        0.37493 251.43%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.2     -0.5175 µg/L       2.06069     -0.5175 ppb        2.06069 398.19%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -29.9     -0.1567 µg/L       0.20342     -0.1567 ppb        0.20342 129.81%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                46.6      0.1002 µg/L       0.05859      0.1002 ppb        0.05859  58.50%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.5     -5.3240 µg/L       3.26592     -5.3240 ppb        3.26592  61.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  3.7      0.3290 µg/L       4.27009      0.3290 ppb        4.27009 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 21.2      0.2421 µg/L       0.12803      0.2421 ppb        0.12803  52.87%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                13.6      0.3484 µg/L       0.15995      0.3484 ppb        0.15995  45.91%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 69
Sample ID: 1201978583|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 351
Date Collected: 12/7/2009 12:24:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978583|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112177.0	112177.0	98.7	%			12:25:18
1	Al 396.153Radial†	256.2	133.3	69.713	µg/L	69.713	ppb	12:25:18
1	Ca 317.933Radial†	668.8	253.5	102.28	µg/L	102.28	ppb	12:25:38
1	Fe 238.204 Radial†	26.9	13.6	87.115	µg/L	87.115	ppb	12:25:38
1	K 766.490 Radial†	814.8	63.8	33.908	µg/L	33.908	ppb	12:25:18
1	Mg 279.077 IEC†	16.8	3.7	22.767	µg/L	22.767	ppb	12:25:38
1	Na 589.592 Radial†	-588.4	83.2	21.398	µg/L	21.398	ppb	12:25:18
1	Sr 421.552†	58.2	84.4	0.4421	µg/L	0.4421	ppb	12:25:18
1	Sc 361.383	2013224.7	2013224.7	97.223	%			12:26:40
1	Y 371.029	1257547.8	1257547.8	96.086	%			12:26:40
1	Ag 328.068†	218.0	17.9	0.1732	µg/L	0.1732	ppb	12:26:46
1	As 188.979†	-0.7	-3.2	-5.7431	µg/L	-5.7431	ppb	12:27:07
1	B 249.677†	256.1	68.5	2.8873	µg/L	2.8873	ppb	12:26:46
1	Ba 233.527†	-61.4	-4.3	-0.1085	µg/L	-0.1085	ppb	12:27:07
1	Be 313.107†	3631.9	-29.2	-0.0182	µg/L	-0.0182	ppb	12:26:46
1	Cd 226.502†	-93.9	1.6	0.0371	µg/L	0.0371	ppb	12:27:07
1	Co 228.616†	-65.6	-3.5	-0.1650	µg/L	-0.1650	ppb	12:27:07
1	Cr 267.716†	-106.6	16.6	0.3441	µg/L	0.3441	ppb	12:26:46
1	Cu 324.752†	4186.3	47.3	0.3407	µg/L	0.3407	ppb	12:26:46
1	Mn 257.610†	-156.3	82.3	0.2725	µg/L	0.2725	ppb	12:27:07
1	Mo 202.031†	5.0	5.0	0.5789	µg/L	0.5789	ppb	12:27:07
1	Ni 231.604†	320.3	8.5	0.4603	µg/L	0.4603	ppb	12:27:07
1	P 214.914†	186.4	18.9	37.664	µg/L	37.664	ppb	12:27:07
1	Pb 220.353†	50.8	7.8	1.9806	µg/L	1.9806	ppb	12:27:07
1	S 181.975 Axial†	29.4	2.7	13.200	µg/L	13.200	ppb	12:27:07
1	Sb 206.836†	20.3	3.0	2.9122	µg/L	2.9122	ppb	12:27:07
1	Se 196.026†	17.5	2.0	2.5954	µg/L	2.5954	ppb	12:27:07
1	SiO2†	2793.0	121.9	22.336	µg/L	22.336	ppb	12:26:46
1	Si 251.611†	456.0	95.2	6.9946	µg/L	6.9946	ppb	12:27:07
1	Sn 189.927†	21.3	0.1	0.0734	µg/L	0.0734	ppb	12:27:07
1	Ti 334.940†	1225.4	262.3	0.5909	µg/L	0.5909	ppb	12:26:46
1	Tl 190.801†	-20.5	-4.2	-6.3469	µg/L	-6.3469	ppb	12:27:07
1	U 409.014†	649.9	20.8	1.8929	µg/L	1.8929	ppb	12:26:46
1	V 292.402†	-126.3	33.4	0.3873	µg/L	0.3873	ppb	12:26:46
1	Zn 213.857†	601.4	46.3	1.1999	µg/L	1.1999	ppb	12:27:07
2	Sc RADIAL	113159.6	113159.6	99.6	%			12:25:44
2	Al 396.153Radial†	276.8	151.7	79.375	µg/L	79.375	ppb	12:25:44
2	Ca 317.933Radial†	670.7	249.6	100.69	µg/L	100.69	ppb	12:26:04
2	Fe 238.204 Radial†	22.8	9.2	59.167	µg/L	59.167	ppb	12:26:04
2	K 766.490 Radial†	757.8	-0.6	-0.3414	µg/L	-0.3414	ppb	12:25:44
2	Mg 279.077 IEC†	26.3	13.0	80.931	µg/L	80.931	ppb	12:26:04
2	Na 589.592 Radial†	-579.3	97.5	25.087	µg/L	25.087	ppb	12:25:44
2	Sr 421.552†	38.5	64.1	0.3358	µg/L	0.3358	ppb	12:25:44
2	Sc 361.383	2019548.6	2019548.6	97.528	%			12:27:12
2	Y 371.029	1259679.5	1259679.5	96.249	%			12:27:12
2	Ag 328.068†	177.3	-24.5	-0.2205	µg/L	-0.2205	ppb	12:27:18
2	As 188.979†	-2.4	-4.9	-8.9010	µg/L	-8.9010	ppb	12:27:39
2	B 249.677†	252.1	63.5	2.6827	µg/L	2.6827	ppb	12:27:18
2	Ba 233.527†	-62.0	-4.8	-0.1213	µg/L	-0.1213	ppb	12:27:39
2	Be 313.107†	3637.4	-35.3	-0.0219	µg/L	-0.0219	ppb	12:27:18
2	Cd 226.502†	-97.1	-1.4	-0.0417	µg/L	-0.0417	ppb	12:27:39
2	Co 228.616†	-64.4	-2.1	-0.0995	µg/L	-0.0995	ppb	12:27:39
2	Cr 267.716†	-109.2	14.2	0.2934	µg/L	0.2934	ppb	12:27:18
2	Cu 324.752†	4193.9	41.7	0.2965	µg/L	0.2965	ppb	12:27:18
2	Mn 257.610†	-158.0	81.0	0.2647	µg/L	0.2647	ppb	12:27:39
2	Mo 202.031†	0.2	0.0	0.0061	µg/L	0.0061	ppb	12:27:39
2	Ni 231.604†	311.8	-1.2	-0.0671	µg/L	-0.0671	ppb	12:27:39
2	P 214.914†	172.8	4.4	8.7448	µg/L	8.7448	ppb	12:27:39
2	Pb 220.353†	49.6	6.4	1.6263	µg/L	1.6263	ppb	12:27:39

2	S 181.975 Axial†	28.7	1.9	9.3991 µg/L	9.3991 ppb	12:27:39
2	Sb 206.836†	21.5	4.1	4.0208 µg/L	4.0208 ppb	12:27:39
2	Se 196.026†	8.5	-7.2	-9.0230 µg/L	-9.0230 ppb	12:27:39
2	SiO2†	2793.9	113.8	20.849 µg/L	20.849 ppb	12:27:18
2	Si 251.611†	462.2	100.1	7.3328 µg/L	7.3328 ppb	12:27:39
2	Sn 189.927†	23.9	2.7	1.3944 µg/L	1.3944 ppb	12:27:39
2	Ti 334.940†	1189.7	221.8	0.4989 µg/L	0.4989 ppb	12:27:18
2	Tl 190.801†	-20.5	-4.1	-6.1961 µg/L	-6.1961 ppb	12:27:39
2	U 409.014†	606.6	-25.6	-2.3459 µg/L	-2.3459 ppb	12:27:18
2	V 292.402†	-165.8	-6.7	-0.0741 µg/L	-0.0741 ppb	12:27:18
2	Zn 213.857†	600.9	43.8	1.1397 µg/L	1.1397 ppb	12:27:39
3	Sc RADIAL	112107.9	112107.9	98.6 %		12:26:10
3	Al 396.153Radial†	216.0	92.7	48.479 µg/L	48.479 ppb	12:26:10
3	Ca 317.933Radial†	688.3	273.7	110.42 µg/L	110.42 ppb	12:26:30
3	Fe 238.204 Radial†	24.4	11.1	71.083 µg/L	71.083 ppb	12:26:30
3	K 766.490 Radial†	725.7	-26.0	-13.821 µg/L	-13.821 ppb	12:26:10
3	Mg 279.077 IEC†	24.7	11.6	72.524 µg/L	72.524 ppb	12:26:30
3	Na 589.592 Radial†	-574.7	96.7	24.889 µg/L	24.889 ppb	12:26:10
3	Sr 421.552†	75.4	101.9	0.5335 µg/L	0.5335 ppb	12:26:10
3	Sc 361.383	2018212.0	2018212.0	97.463 %		12:27:45
3	Y 371.029	1259616.2	1259616.2	96.244 %		12:27:45
3	Ag 328.068†	175.4	-26.3	-0.2346 µg/L	-0.2346 ppb	12:27:50
3	As 188.979†	4.9	2.6	4.6615 µg/L	4.6615 ppb	12:28:11
3	B 249.677†	251.5	63.0	2.6604 µg/L	2.6604 ppb	12:27:50
3	Ba 233.527†	-57.0	0.3	0.0079 µg/L	0.0079 ppb	12:28:11
3	Be 313.107†	3655.8	-13.8	-0.0087 µg/L	-0.0087 ppb	12:27:50
3	Cd 226.502†	-93.2	2.5	0.0613 µg/L	0.0613 ppb	12:28:11
3	Co 228.616†	-66.9	-4.7	-0.2218 µg/L	-0.2218 ppb	12:28:11
3	Cr 267.716†	-124.6	-1.6	-0.0338 µg/L	-0.0338 ppb	12:27:50
3	Cu 324.752†	4081.2	-71.1	-0.4687 µg/L	-0.4687 ppb	12:27:50
3	Mn 257.610†	-139.5	99.9	0.3262 µg/L	0.3262 ppb	12:28:11
3	Mo 202.031†	1.8	1.7	0.2038 µg/L	0.2038 ppb	12:28:11
3	Ni 231.604†	315.9	3.2	0.1712 µg/L	0.1712 ppb	12:28:11
3	P 214.914†	186.9	19.0	37.863 µg/L	37.863 ppb	12:28:11
3	Pb 220.353†	49.3	6.1	1.5625 µg/L	1.5625 ppb	12:28:11
3	S 181.975 Axial†	26.8	-0.0	-0.0272 µg/L	-0.0272 ppb	12:28:11
3	Sb 206.836†	15.7	-1.8	-1.7630 µg/L	-1.7630 ppb	12:28:11
3	Se 196.026†	20.3	4.9	6.2180 µg/L	6.2180 ppb	12:28:11
3	SiO2†	2731.0	51.2	9.3813 µg/L	9.3813 ppb	12:27:50
3	Si 251.611†	465.0	103.3	7.6772 µg/L	7.6772 ppb	12:28:11
3	Sn 189.927†	18.7	-2.7	-1.2943 µg/L	-1.2943 ppb	12:28:11
3	Ti 334.940†	1156.2	188.2	0.4219 µg/L	0.4219 ppb	12:27:50
3	Tl 190.801†	-17.7	-1.3	-1.9068 µg/L	-1.9068 ppb	12:28:11
3	U 409.014†	659.4	29.0	2.6407 µg/L	2.6407 ppb	12:27:50
3	V 292.402†	-148.9	10.5	0.1288 µg/L	0.1288 ppb	12:27:50
3	Zn 213.857†	602.4	45.9	1.1918 µg/L	1.1918 ppb	12:28:11

Mean Data: 1201978583|925474|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2016995.1	97.405	%	0.1610				0.17%
Sc RADIAL	112481.5	99.0	%	0.52				0.52%
Y 371.029	1258947.8	96.193	%	0.0927				0.10%
Ag 328.068†	-11.0	-0.0940	µg/L	0.23148	-0.0940	ppb	0.23148	246.35%
Al 396.153Radial†	125.9	65.856	µg/L	15.8054	65.856	ppb	15.8054	24.00%
As 188.979†	-1.8	-3.3276	µg/L	7.09657	-3.3276	ppb	7.09657	213.27%
B 249.677†	65.0	2.7435	µg/L	0.12504	2.7435	ppb	0.12504	4.56%
Ba 233.527†	-2.9	-0.0739	µg/L	0.07119	-0.0739	ppb	0.07119	96.27%
Be 313.107†	-26.1	-0.0163	µg/L	0.00681	-0.0163	ppb	0.00681	41.91%
Ca 317.933Radial†	258.9	104.47	µg/L	5.218	104.47	ppb	5.218	4.99%
Cd 226.502†	0.9	0.0189	µg/L	0.05382	0.0189	ppb	0.05382	284.83%
Co 228.616†	-3.4	-0.1621	µg/L	0.06117	-0.1621	ppb	0.06117	37.74%
Cr 267.716†	9.7	0.2012	µg/L	0.20512	0.2012	ppb	0.20512	101.93%
Cu 324.752†	6.0	0.0562	µg/L	0.45512	0.0562	ppb	0.45512	810.28%
Fe 238.204 Radial†	11.3	72.455	µg/L	14.0243	72.455	ppb	14.0243	19.36%
K 766.490 Radial†	12.4	6.5818	µg/L	24.60596	6.5818	ppb	24.60596	373.85%
Mg 279.077 IEC†	9.4	58.741	µg/L	31.4367	58.741	ppb	31.4367	53.52%
Mn 257.610†	87.7	0.2878	µg/L	0.03351	0.2878	ppb	0.03351	11.64%
Mo 202.031†	2.2	0.2629	µg/L	0.29094	0.2629	ppb	0.29094	110.65%
Na 589.592 Radial†	92.5	23.791	µg/L	2.0751	23.791	ppb	2.0751	8.72%

Ni 231.604†	3.5	0.1882	µg/L	0.26411	0.1882	ppb	0.26411 140.37%
P 214.914†	14.1	28.091	µg/L	16.7542	28.091	ppb	16.7542 59.64%
Pb 220.353†	6.8	1.7231	µg/L	0.22523	1.7231	ppb	0.22523 13.07%
S 181.975 Axial†	1.5	7.5238	µg/L	6.80983	7.5238	ppb	6.80983 90.51%
Sb 206.836†	1.8	1.7233	µg/L	3.06969	1.7233	ppb	3.06969 178.12%
Se 196.026†	-0.1	-0.0698	µg/L	7.96238	-0.0698	ppb	7.96238 >999.9%
SiO2†	95.6	17.522	µg/L	7.0895	17.522	ppb	7.0895 40.46%
Si 251.611†	99.5	7.3348	µg/L	0.34130	7.3348	ppb	0.34130 4.65%
Sn 189.927†	0.0	0.0578	µg/L	1.34442	0.0578	ppb	1.34442 >999.9%
Sr 421.552†	83.5	0.4371	µg/L	0.09897	0.4371	ppb	0.09897 22.64%
Ti 334.940†	224.1	0.5039	µg/L	0.08460	0.5039	ppb	0.08460 16.79%
Tl 190.801†	-3.2	-4.8166	µg/L	2.52108	-4.8166	ppb	2.52108 52.34%
U 409.014†	8.1	0.7292	µg/L	2.68927	0.7292	ppb	2.68927 368.78%
V 292.402†	12.4	0.1473	µg/L	0.23125	0.1473	ppb	0.23125 156.96%
Zn 213.857†	45.3	1.1771	µg/L	0.03268	1.1771	ppb	0.03268 2.78%

Sequence No.: 70
Sample ID: 1201978588|925474|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 352
Date Collected: 12/7/2009 12:28:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978588|925474|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	118171.8	118171.8	104	%			12:28:53
1	Al 396.153Radial†	74767.2	71776.6	37535	µg/L	37535	ppb	12:28:53
1	Ca 317.933Radial†	49442.9	47124.7	19013	µg/L	19013	ppb	12:28:53
1	Fe 238.204 Radial†	15666.0	15052.2	96753	µg/L	96753	ppb	12:29:13
1	K 766.490 Radial†	23374.8	21717.7	11540	µg/L	11540	ppb	12:28:53
1	Mg 279.077 IEC†	2585.6	2473.2	15305	µg/L	15305	ppb	12:29:13
1	Na 589.592 Radial†	11177.1	11428.1	2940.9	µg/L	2940.9	ppb	12:28:53
1	Sr 421.552†	161487.0	155326.1	813.36	µg/L	813.36	ppb	12:28:53
1	Sc 361.383	2064711.9	2064711.9	99.709	%			12:30:18
1	Y 371.029	1305873.5	1305873.5	99.779	%			12:30:18
1	Ag 328.068†	73836.9	73846.0	688.70	µg/L	688.70	ppb	12:30:24
1	As 188.979†	733.9	733.6	1303.8	µg/L	1303.8	ppb	12:30:45
1	B 249.677†	17649.1	17505.7	714.73	µg/L	714.73	ppb	12:30:24
1	Ba 233.527†	95259.8	95596.6	2426.8	µg/L	2426.8	ppb	12:30:24
1	Be 313.107†	749969.9	748394.1	460.09	µg/L	460.09	ppb	12:30:18
1	Cd 226.502†	23375.3	23541.7	602.68	µg/L	602.68	ppb	12:30:24
1	Co 228.616†	8946.3	9036.4	426.22	µg/L	426.22	ppb	12:30:24
1	Cr 267.716†	19239.1	19421.5	403.12	µg/L	403.12	ppb	12:30:24
1	Cu 324.752†	77175.8	73142.5	518.59	µg/L	518.59	ppb	12:30:24
1	Mn 257.610†	595532.8	597514.0	1910.0	µg/L	1910.0	ppb	12:30:18
1	Mo 202.031†	3728.8	3739.5	436.18	µg/L	436.18	ppb	12:30:45
1	Ni 231.604†	9925.9	9633.9	519.69	µg/L	519.69	ppb	12:30:24
1	P 214.914†	2174.2	2007.8	3855.5	µg/L	3855.5	ppb	12:30:45
1	Pb 220.353†	3429.4	3395.0	865.34	µg/L	865.34	ppb	12:30:45
1	S 181.975 Axial†	249.3	222.5	1078.9	µg/L	1078.9	ppb	12:30:45
1	Sb 206.836†	567.6	551.3	542.02	µg/L	542.02	ppb	12:30:45
1	Se 196.026†	698.0	684.1	924.16	µg/L	924.16	ppb	12:30:45
1	SiO2†	168469.4	166210.3	30450	µg/L	30450	ppb	12:30:18
1	Si 251.611†	190785.3	190968.3	14022	µg/L	14022	ppb	12:30:18
1	Sn 189.927†	1108.4	1089.8	570.40	µg/L	570.40	ppb	12:30:45
1	Ti 334.940†	839397.8	840849.8	1911.7	µg/L	1911.7	ppb	12:30:18
1	Tl 190.801†	660.1	678.9	1034.8	µg/L	1034.8	ppb	12:30:45
1	U 409.014†	225.0	-421.9	-56.194	µg/L	-56.194	ppb	12:30:24
1	V 292.402†	68424.1	68787.1	780.32	µg/L	780.32	ppb	12:30:24
1	Zn 213.857†	39494.0	39037.0	1008.9	µg/L	1008.9	ppb	12:30:24
2	Sc RADIAL	118033.9	118033.9	104	%			12:29:19
2	Al 396.153Radial†	75244.6	72320.3	37819	µg/L	37819	ppb	12:29:19
2	Ca 317.933Radial†	49693.0	47421.0	19133	µg/L	19133	ppb	12:29:19
2	Fe 238.204 Radial†	15709.0	15111.2	97132	µg/L	97132	ppb	12:29:40
2	K 766.490 Radial†	23500.6	21865.1	11618	µg/L	11618	ppb	12:29:19
2	Mg 279.077 IEC†	2592.6	2482.7	15364	µg/L	15364	ppb	12:29:40
2	Na 589.592 Radial†	11209.3	11471.7	2952.2	µg/L	2952.2	ppb	12:29:19
2	Sr 421.552†	162408.0	156394.2	818.95	µg/L	818.95	ppb	12:29:19
2	Sc 361.383	2052299.4	2052299.4	99.110	%			12:30:52
2	Y 371.029	1299454.5	1299454.5	99.288	%			12:30:52
2	Ag 328.068†	74425.4	74887.8	698.35	µg/L	698.35	ppb	12:30:58
2	As 188.979†	743.4	747.6	1329.0	µg/L	1329.0	ppb	12:31:18
2	B 249.677†	17804.7	17769.7	725.85	µg/L	725.85	ppb	12:30:58
2	Ba 233.527†	96270.2	97194.0	2467.3	µg/L	2467.3	ppb	12:30:58
2	Be 313.107†	754240.6	757252.3	465.53	µg/L	465.53	ppb	12:30:52
2	Cd 226.502†	23616.8	23927.1	612.64	µg/L	612.64	ppb	12:30:58
2	Co 228.616†	9017.5	9162.5	432.17	µg/L	432.17	ppb	12:30:58
2	Cr 267.716†	19389.6	19690.0	408.70	µg/L	408.70	ppb	12:30:58
2	Cu 324.752†	77807.4	74248.0	526.19	µg/L	526.19	ppb	12:30:58
2	Mn 257.610†	599000.4	604625.2	1932.7	µg/L	1932.7	ppb	12:30:52
2	Mo 202.031†	3750.6	3784.1	441.35	µg/L	441.35	ppb	12:31:18
2	Ni 231.604†	10044.4	9813.8	529.39	µg/L	529.39	ppb	12:30:58
2	P 214.914†	2189.0	2035.9	3910.4	µg/L	3910.4	ppb	12:31:18
2	Pb 220.353†	3449.0	3435.6	875.67	µg/L	875.67	ppb	12:31:18

2	S 181.975 Axial†	246.5	221.2	1072.3	µg/L	1072.3 ppb	12:31:18
2	Sb 206.836†	565.7	552.9	543.58	µg/L	543.58 ppb	12:31:18
2	Se 196.026†	696.5	686.8	927.82	µg/L	927.82 ppb	12:31:18
2	SiO2†	169352.7	168123.4	30801	µg/L	30801 ppb	12:30:52
2	Si 251.611†	191678.8	193027.1	14173	µg/L	14173 ppb	12:30:52
2	Sn 189.927†	1107.5	1095.6	573.43	µg/L	573.43 ppb	12:31:18
2	Ti 334.940†	844559.4	851149.3	1935.1	µg/L	1935.1 ppb	12:30:52
2	Tl 190.801†	671.8	694.7	1058.7	µg/L	1058.7 ppb	12:31:18
2	U 409.014†	242.8	-402.6	-54.494	µg/L	-54.494 ppb	12:30:58
2	V 292.402†	69081.7	69865.7	792.46	µg/L	792.46 ppb	12:30:58
2	Zn 213.857†	39796.8	39582.0	1023.0	µg/L	1023.0 ppb	12:30:58
3	Sc RADIAL	116984.0	116984.0	103	%		12:29:45
3	Al 396.153Radial†	75064.4	72795.4	38068	µg/L	38068 ppb	12:29:45
3	Ca 317.933Radial†	49408.1	47573.7	19194	µg/L	19194 ppb	12:29:45
3	Fe 238.204 Radial†	15764.4	15300.7	98350	µg/L	98350 ppb	12:30:06
3	K 766.490 Radial†	23469.4	22037.8	11710	µg/L	11710 ppb	12:29:45
3	Mg 279.077 IEC†	2597.2	2509.7	15530	µg/L	15530 ppb	12:30:06
3	Na 589.592 Radial†	11222.8	11581.7	2980.5	µg/L	2980.5 ppb	12:29:45
3	Sr 421.552†	161784.9	157192.3	823.13	µg/L	823.13 ppb	12:29:45
3	Sc 361.383	2061200.6	2061200.6	99.539	%		12:31:26
3	Y 371.029	1306315.0	1306315.0	99.812	%		12:31:26
3	Ag 328.068†	74450.4	74588.6	695.69	µg/L	695.69 ppb	12:31:32
3	As 188.979†	746.4	747.4	1328.4	µg/L	1328.4 ppb	12:31:52
3	B 249.677†	17785.9	17673.2	721.36	µg/L	721.36 ppb	12:31:32
3	Ba 233.527†	96276.9	96781.2	2456.8	µg/L	2456.8 ppb	12:31:32
3	Be 313.107†	758153.5	757896.9	465.93	µg/L	465.93 ppb	12:31:26
3	Cd 226.502†	23682.7	23890.5	611.59	µg/L	611.59 ppb	12:31:32
3	Co 228.616†	9046.9	9152.7	431.70	µg/L	431.70 ppb	12:31:32
3	Cr 267.716†	19444.2	19660.4	408.08	µg/L	408.08 ppb	12:31:32
3	Cu 324.752†	77890.4	73992.2	524.71	µg/L	524.71 ppb	12:31:32
3	Mn 257.610†	601940.9	604969.4	1933.9	µg/L	1933.9 ppb	12:31:26
3	Mo 202.031†	3741.3	3758.5	438.43	µg/L	438.43 ppb	12:31:52
3	Ni 231.604†	10063.1	9788.7	528.04	µg/L	528.04 ppb	12:31:32
3	P 214.914†	2188.7	2026.0	3889.5	µg/L	3889.5 ppb	12:31:52
3	Pb 220.353†	3437.8	3409.3	869.00	µg/L	869.00 ppb	12:31:52
3	S 181.975 Axial†	250.8	224.5	1088.4	µg/L	1088.4 ppb	12:31:52
3	Sb 206.836†	568.5	553.2	543.95	µg/L	543.95 ppb	12:31:52
3	Se 196.026†	690.7	677.9	917.44	µg/L	917.44 ppb	12:31:52
3	SiO2†	170276.4	168313.4	30836	µg/L	30836 ppb	12:31:26
3	Si 251.611†	192654.4	193172.1	14184	µg/L	14184 ppb	12:31:26
3	Sn 189.927†	1109.7	1093.0	572.40	µg/L	572.40 ppb	12:31:52
3	Ti 334.940†	848226.2	851153.2	1935.1	µg/L	1935.1 ppb	12:31:26
3	Tl 190.801†	663.0	682.9	1041.0	µg/L	1041.0 ppb	12:31:52
3	U 409.014†	204.1	-442.5	-58.373	µg/L	-58.373 ppb	12:31:32
3	V 292.402†	69119.9	69603.0	789.59	µg/L	789.59 ppb	12:31:32
3	Zn 213.857†	39884.8	39497.0	1020.7	µg/L	1020.7 ppb	12:31:32

Mean Data: 1201978588|925474|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2059404.0	99.453	%	0.3090				0.31%
Sc RADIAL	117729.9	104	%	0.6				0.55%
Y 371.029	1303881.0	99.626	%	0.2934				0.29%
Ag 328.068†	74440.8	694.25	µg/L	4.982	694.25	ppb	4.982	0.72%
Al 396.153Radial†	72297.5	37808	µg/L	266.6	37808	ppb	266.6	0.71%
As 188.979†	742.9	1320.4	µg/L	14.41	1320.4	ppb	14.41	1.09%
B 249.677†	17649.5	720.65	µg/L	5.595	720.65	ppb	5.595	0.78%
Ba 233.527†	96524.0	2450.3	µg/L	21.05	2450.3	ppb	21.05	0.86%
Be 313.107†	754514.4	463.85	µg/L	3.265	463.85	ppb	3.265	0.70%
Ca 317.933Radial†	47373.2	19113	µg/L	92.1	19113	ppb	92.1	0.48%
Cd 226.502†	23786.4	608.97	µg/L	5.475	608.97	ppb	5.475	0.90%
Co 228.616†	9117.2	430.03	µg/L	3.308	430.03	ppb	3.308	0.77%
Cr 267.716†	19590.6	406.64	µg/L	3.057	406.64	ppb	3.057	0.75%
Cu 324.752†	73794.2	523.16	µg/L	4.032	523.16	ppb	4.032	0.77%
Fe 238.204 Radial†	15154.7	97412	µg/L	834.7	97412	ppb	834.7	0.86%
K 766.490 Radial†	21873.5	11623	µg/L	85.1	11623	ppb	85.1	0.73%
Mg 279.077 IEC†	2488.5	15400	µg/L	117.0	15400	ppb	117.0	0.76%
Mn 257.610†	602369.5	1925.5	µg/L	13.44	1925.5	ppb	13.44	0.70%
Mo 202.031†	3760.7	438.65	µg/L	2.595	438.65	ppb	2.595	0.59%
Na 589.592 Radial†	11493.8	2957.9	µg/L	20.36	2957.9	ppb	20.36	0.69%

Ni 231.604†	9745.4	525.71	µg/L	5.255	525.71	ppb	5.255	1.00%
P 214.914†	2023.3	3885.1	µg/L	27.72	3885.1	ppb	27.72	0.71%
Pb 220.353†	3413.3	870.01	µg/L	5.238	870.01	ppb	5.238	0.60%
S 181.975 Axial†	222.7	1079.9	µg/L	8.09	1079.9	ppb	8.09	0.75%
Sb 206.836†	552.5	543.18	µg/L	1.022	543.18	ppb	1.022	0.19%
Se 196.026†	683.0	923.14	µg/L	5.268	923.14	ppb	5.268	0.57%
SiO2†	167549.0	30695	µg/L	213.1	30695	ppb	213.1	0.69%
Si 251.611†	192389.2	14126	µg/L	90.6	14126	ppb	90.6	0.64%
Sn 189.927†	1092.8	572.07	µg/L	1.542	572.07	ppb	1.542	0.27%
Sr 421.552†	156304.2	818.48	µg/L	4.903	818.48	ppb	4.903	0.60%
Ti 334.940†	847717.4	1927.3	µg/L	13.52	1927.3	ppb	13.52	0.70%
Tl 190.801†	685.5	1044.8	µg/L	12.39	1044.8	ppb	12.39	1.19%
U 409.014†	-422.3	-56.353	µg/L	1.9445	-56.353	ppb	1.9445	3.45%
V 292.402†	69418.6	787.46	µg/L	6.343	787.46	ppb	6.343	0.81%
Zn 213.857†	39372.0	1017.5	µg/L	7.60	1017.5	ppb	7.60	0.75%

Sequence No.: 71
Sample ID: 241539001|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 353
Date Collected: 12/7/2009 12:32:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539001|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116962.2	116962.2	103	%			12:32:34
1	Al 396.153Radial†	184133.7	178784.6	93535	µg/L	93535	ppb	12:32:34
1	Ca 317.933Radial†	74024.6	71500.9	28848	µg/L	28848	ppb	12:32:34
1	Fe 238.204 Radial†	19419.9	18855.4	121180	µg/L	121180	ppb	12:32:54
1	K 766.490 Radial†	22419.8	21022.2	11171	µg/L	11171	ppb	12:32:34
1	Mg 279.077 IEC†	2840.5	2746.5	16964	µg/L	16964	ppb	12:32:54
1	Na 589.592 Radial†	12725.7	13044.0	3356.8	µg/L	3356.8	ppb	12:32:34
1	Sr 421.552†	44170.1	42942.8	224.87	µg/L	224.87	ppb	12:32:34
1	Sc 361.383	2048194.8	2048194.8	98.911	%			12:34:00
1	Y 371.029	1340791.9	1340791.9	102.45	%			12:34:00
1	Ag 328.068†	-980.9	-1198.0	-0.3142	µg/L	-0.3142	ppb	12:34:06
1	As 188.979†	17.9	15.7	15.240	µg/L	15.240	ppb	12:34:26
1	B 249.677†	1834.5	1659.7	32.542	µg/L	32.542	ppb	12:34:06
1	Ba 233.527†	41862.9	42382.5	1075.5	µg/L	1075.5	ppb	12:34:06
1	Be 313.107†	19600.3	16051.2	8.6367	µg/L	8.6367	ppb	12:34:06
1	Cd 226.502†	347.9	449.9	2.2798	µg/L	2.2798	ppb	12:34:26
1	Co 228.616†	755.9	828.2	32.314	µg/L	32.314	ppb	12:34:26
1	Cr 267.716†	4361.4	4535.6	94.094	µg/L	94.094	ppb	12:34:06
1	Cu 324.752†	10669.6	6528.5	70.462	µg/L	70.462	ppb	12:34:06
1	Mn 257.610†	924226.1	934641.7	2983.9	µg/L	2983.9	ppb	12:34:00
1	Mo 202.031†	37.5	37.8	9.1276	µg/L	9.1276	ppb	12:34:26
1	Ni 231.604†	1565.4	1261.7	68.064	µg/L	68.064	ppb	12:34:26
1	P 214.914†	919.1	756.5	1394.1	µg/L	1394.1	ppb	12:34:26
1	Pb 220.353†	513.7	474.9	127.32	µg/L	127.32	ppb	12:34:26
1	S 181.975 Axial†	212.2	187.0	900.21	µg/L	900.21	ppb	12:34:26
1	Sb 206.836†	19.3	1.6	10.966	µg/L	10.966	ppb	12:34:26
1	Se 196.026†	-39.3	-55.6	11.920	µg/L	11.920	ppb	12:34:26
1	SiO2†	403985.3	405680.9	74322	µg/L	74322	ppb	12:34:00
1	Si 251.611†	460906.7	465605.9	34312	µg/L	34312	ppb	12:34:00
1	Sn 189.927†	-84.5	-107.3	-22.715	µg/L	-22.715	ppb	12:34:26
1	Ti 334.940†	1464525.4	1479646.8	3364.2	µg/L	3364.2	ppb	12:34:00
1	Tl 190.801†	-37.2	-20.7	-1.7982	µg/L	-1.7982	ppb	12:34:26
1	U 409.014†	-181.2	-830.7	-97.916	µg/L	-97.916	ppb	12:34:00
1	V 292.402†	13882.9	14199.0	168.63	µg/L	168.63	ppb	12:34:06
1	Zn 213.857†	15328.3	14924.7	377.33	µg/L	377.33	ppb	12:34:06
2	Sc RADIAL	115440.6	115440.6	102	%			12:33:00
2	Al 396.153Radial†	184512.9	181516.2	94964	µg/L	94964	ppb	12:33:00
2	Ca 317.933Radial†	73519.8	71952.0	29030	µg/L	29030	ppb	12:33:00
2	Fe 238.204 Radial†	19321.7	19007.4	122160	µg/L	122160	ppb	12:33:20
2	K 766.490 Radial†	22510.5	21398.7	11371	µg/L	11371	ppb	12:33:00
2	Mg 279.077 IEC†	2831.8	2774.4	17136	µg/L	17136	ppb	12:33:20
2	Na 589.592 Radial†	12731.6	13212.8	3400.2	µg/L	3400.2	ppb	12:33:00
2	Sr 421.552†	44050.0	43390.3	227.21	µg/L	227.21	ppb	12:33:00
2	Sc 361.383	2058093.5	2058093.5	99.389	%			12:34:34
2	Y 371.029	1346082.1	1346082.1	102.85	%			12:34:34
2	Ag 328.068†	-971.0	-1183.4	-0.0898	µg/L	-0.0898	ppb	12:34:40
2	As 188.979†	17.7	15.4	14.599	µg/L	14.599	ppb	12:35:00
2	B 249.677†	1865.3	1681.8	33.175	µg/L	33.175	ppb	12:34:40
2	Ba 233.527†	42619.6	42940.3	1089.7	µg/L	1089.7	ppb	12:34:40
2	Be 313.107†	19893.8	16251.2	8.7516	µg/L	8.7516	ppb	12:34:40
2	Cd 226.502†	359.1	459.5	2.4524	µg/L	2.4524	ppb	12:35:00
2	Co 228.616†	752.1	820.6	31.915	µg/L	31.915	ppb	12:35:00
2	Cr 267.716†	4419.7	4573.1	94.874	µg/L	94.874	ppb	12:34:40
2	Cu 324.752†	10827.2	6635.2	71.398	µg/L	71.398	ppb	12:34:40
2	Mn 257.610†	935088.8	941077.0	3004.5	µg/L	3004.5	ppb	12:34:34
2	Mo 202.031†	54.7	54.9	11.152	µg/L	11.152	ppb	12:35:00
2	Ni 231.604†	1555.1	1243.7	67.092	µg/L	67.092	ppb	12:35:00
2	P 214.914†	914.3	747.1	1374.7	µg/L	1374.7	ppb	12:35:00
2	Pb 220.353†	522.4	481.2	129.04	µg/L	129.04	ppb	12:35:00

2	S 181.975 Axial†	222.4	196.2	945.54 µg/L	945.54 ppb	12:35:00
2	Sb 206.836†	22.2	4.4	13.751 µg/L	13.751 ppb	12:35:00
2	Se 196.026†	-48.6	-64.9	0.9280 µg/L	0.9280 ppb	12:35:00
2	SiO2†	408973.5	408735.3	74882 µg/L	74882 ppb	12:34:34
2	Si 251.611†	466067.8	468557.5	34529 µg/L	34529 ppb	12:34:34
2	Sn 189.927†	-84.6	-107.0	-22.311 µg/L	-22.311 ppb	12:35:00
2	Ti 334.940†	1481399.8	1489503.4	3386.6 µg/L	3386.6 ppb	12:34:34
2	Tl 190.801†	-40.2	-23.5	-5.8473 µg/L	-5.8473 ppb	12:35:00
2	U 409.014†	-179.5	-828.1	-97.856 µg/L	-97.856 ppb	12:34:34
2	V 292.402†	14117.6	14367.6	170.61 µg/L	170.61 ppb	12:34:40
2	Zn 213.857†	15664.8	15188.8	384.14 µg/L	384.14 ppb	12:34:40
3	Sc RADIAL	116399.9	116399.9	102 %		12:33:26
3	Al 396.153Radial†	184307.7	179818.9	94076 µg/L	94076 ppb	12:33:26
3	Ca 317.933Radial†	73247.5	71089.7	28682 µg/L	28682 ppb	12:33:26
3	Fe 238.204 Radial†	19316.1	18845.2	121120 µg/L	121120 ppb	12:33:46
3	K 766.490 Radial†	22491.2	21197.2	11264 µg/L	11264 ppb	12:33:26
3	Mg 279.077 IEC†	2848.6	2767.7	17096 µg/L	17096 ppb	12:33:46
3	Na 589.592 Radial†	12721.8	13099.9	3371.2 µg/L	3371.2 ppb	12:33:26
3	Sr 421.552†	44045.8	43028.7	225.32 µg/L	225.32 ppb	12:33:26
3	Sc 361.383	2051886.4	2051886.4	99.090 %		12:35:08
3	Y 371.029	1344449.7	1344449.7	102.73 %		12:35:08
3	Ag 328.068†	-924.5	-1139.3	0.2154 µg/L	0.2154 ppb	12:35:13
3	As 188.979†	24.0	21.7	26.177 µg/L	26.177 ppb	12:35:34
3	B 249.677†	1883.8	1706.1	34.536 µg/L	34.536 ppb	12:35:13
3	Ba 233.527†	41968.1	42412.5	1076.3 µg/L	1076.3 ppb	12:35:13
3	Be 313.107†	19612.5	16027.9	8.6180 µg/L	8.6180 ppb	12:35:13
3	Cd 226.502†	356.7	458.1	2.4972 µg/L	2.4972 ppb	12:35:34
3	Co 228.616†	755.6	826.5	32.210 µg/L	32.210 ppb	12:35:34
3	Cr 267.716†	4314.1	4479.9	92.944 µg/L	92.944 ppb	12:35:13
3	Cu 324.752†	10731.4	6571.5	70.741 µg/L	70.741 ppb	12:35:13
3	Mn 257.610†	929540.9	938324.2	2995.6 µg/L	2995.6 ppb	12:35:08
3	Mo 202.031†	41.5	41.7	9.5826 µg/L	9.5826 ppb	12:35:34
3	Ni 231.604†	1552.1	1245.5	67.186 µg/L	67.186 ppb	12:35:34
3	P 214.914†	913.9	749.6	1380.6 µg/L	1380.6 ppb	12:35:34
3	Pb 220.353†	535.3	495.8	132.67 µg/L	132.67 ppb	12:35:34
3	S 181.975 Axial†	226.2	200.8	968.17 µg/L	968.17 ppb	12:35:34
3	Sb 206.836†	24.1	6.4	15.736 µg/L	15.736 ppb	12:35:34
3	Se 196.026†	-48.7	-65.1	-0.1209 µg/L	-0.1209 ppb	12:35:34
3	SiO2†	406189.5	407170.5	74595 µg/L	74595 ppb	12:35:08
3	Si 251.611†	462941.9	466821.4	34401 µg/L	34401 ppb	12:35:08
3	Sn 189.927†	-85.3	-107.9	-23.041 µg/L	-23.041 ppb	12:35:34
3	Ti 334.940†	1472376.0	1484905.6	3376.2 µg/L	3376.2 ppb	12:35:08
3	Tl 190.801†	-34.3	-17.7	2.8336 µg/L	2.8336 ppb	12:35:34
3	U 409.014†	-175.1	-824.3	-97.314 µg/L	-97.314 ppb	12:35:08
3	V 292.402†	13872.1	14162.8	168.22 µg/L	168.22 ppb	12:35:13
3	Zn 213.857†	15402.5	14971.8	378.57 µg/L	378.57 ppb	12:35:13

Mean Data: 241539001|925474|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2052724.9	99.130	%	0.2416				0.24%
Sc RADIAL	116267.6	102	%	0.7				0.66%
Y 371.029	1343774.6	102.67	%	0.207				0.20%
Ag 328.068†	-1173.6	-0.0629	µg/L	0.26580	-0.0629	ppb	0.26580	422.72%
Al 396.153Radial†	180039.9	94192	µg/L	721.5	94192	ppb	721.5	0.77%
As 188.979†	17.6	18.672	µg/L	6.5075	18.672	ppb	6.5075	34.85%
B 249.677†	1682.5	33.417	µg/L	1.0187	33.417	ppb	1.0187	3.05%
Ba 233.527†	42578.4	1080.5	µg/L	7.96	1080.5	ppb	7.96	0.74%
Be 313.107†	16110.1	8.6688	µg/L	0.07235	8.6688	ppb	0.07235	0.83%
Ca 317.933Radial†	71514.2	28854	µg/L	174.0	28854	ppb	174.0	0.60%
Cd 226.502†	455.8	2.4098	µg/L	0.11483	2.4098	ppb	0.11483	4.77%
Co 228.616†	825.1	32.146	µg/L	0.2071	32.146	ppb	0.2071	0.64%
Cr 267.716†	4529.5	93.970	µg/L	0.9710	93.970	ppb	0.9710	1.03%
Cu 324.752†	6578.4	70.867	µg/L	0.4807	70.867	ppb	0.4807	0.68%
Fe 238.204 Radial†	18902.7	121490	µg/L	584.0	121490	ppb	584.0	0.48%
K 766.490 Radial†	21206.0	11268	µg/L	100.1	11268	ppb	100.1	0.89%
Mg 279.077 IEC†	2762.9	17066	µg/L	90.2	17066	ppb	90.2	0.53%
Mn 257.610†	938014.3	2994.6	µg/L	10.31	2994.6	ppb	10.31	0.34%
Mo 202.031†	44.8	9.9541	µg/L	1.06214	9.9541	ppb	1.06214	10.67%
Na 589.592 Radial†	13118.9	3376.1	µg/L	22.13	3376.1	ppb	22.13	0.66%

Ni 231.604†	1250.3	67.447	µg/L	0.5360	67.447	ppb	0.5360	0.79%
P 214.914†	751.1	1383.1	µg/L	9.96	1383.1	ppb	9.96	0.72%
Pb 220.353†	484.0	129.68	µg/L	2.730	129.68	ppb	2.730	2.11%
S 181.975 Axial†	194.7	937.97	µg/L	34.603	937.97	ppb	34.603	3.69%
Sb 206.836†	4.1	13.484	µg/L	2.3961	13.484	ppb	2.3961	17.77%
Se 196.026†	-61.9	4.2424	µg/L	6.66965	4.2424	ppb	6.66965	157.22%
SiO2†	407195.6	74599	µg/L	279.8	74599	ppb	279.8	0.38%
Si 251.611†	466994.9	34414	µg/L	109.3	34414	ppb	109.3	0.32%
Sn 189.927†	-107.4	-22.689	µg/L	0.3656	-22.689	ppb	0.3656	1.61%
Sr 421.552†	43120.6	225.80	µg/L	1.243	225.80	ppb	1.243	0.55%
Ti 334.940†	1484685.3	3375.7	µg/L	11.21	3375.7	ppb	11.21	0.33%
Tl 190.801†	-20.7	-1.6040	µg/L	4.34372	-1.6040	ppb	4.34372	270.81%
U 409.014†	-827.7	-97.695	µg/L	0.3313	-97.695	ppb	0.3313	0.34%
V 292.402†	14243.1	169.15	µg/L	1.277	169.15	ppb	1.277	0.75%
Zn 213.857†	15028.4	380.01	µg/L	3.630	380.01	ppb	3.630	0.96%

Sequence No.: 72
Sample ID: 1201978584|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 354
Date Collected: 12/7/2009 12:35:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978584|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116265.8	116265.8	102	%			12:36:16
1	Al 396.153Radial†	180975.4	176769.2	92481	µg/L	92481	ppb	12:36:16
1	Ca 317.933Radial†	69173.3	67189.9	27109	µg/L	27109	ppb	12:36:16
1	Fe 238.204 Radial†	19097.5	18653.3	119880	µg/L	119880	ppb	12:36:36
1	K 766.490 Radial†	23644.2	22349.5	11876	µg/L	11876	ppb	12:36:16
1	Mg 279.077 IEC†	2897.1	2818.4	17414	µg/L	17414	ppb	12:36:36
1	Na 589.592 Radial†	12700.4	13093.3	3369.5	µg/L	3369.5	ppb	12:36:16
1	Sr 421.552†	43050.4	42105.4	220.48	µg/L	220.48	ppb	12:36:16
1	Sc 361.383	2066949.7	2066949.7	99.817	%			12:37:42
1	Y 371.029	1371600.6	1371600.6	104.80	%			12:37:42
1	Ag 328.068†	-959.1	-1167.2	-0.2444	µg/L	-0.2444	ppb	12:37:48
1	As 188.979†	18.8	16.4	16.886	µg/L	16.886	ppb	12:38:08
1	B 249.677†	1848.5	1656.9	32.829	µg/L	32.829	ppb	12:37:48
1	Ba 233.527†	36152.8	36277.8	920.62	µg/L	920.62	ppb	12:37:48
1	Be 313.107†	19925.8	16197.5	8.7302	µg/L	8.7302	ppb	12:37:48
1	Cd 226.502†	362.5	461.4	2.6515	µg/L	2.6515	ppb	12:38:08
1	Co 228.616†	649.7	714.9	26.948	µg/L	26.948	ppb	12:38:08
1	Cr 267.716†	3583.5	3716.3	77.126	µg/L	77.126	ppb	12:37:48
1	Cu 324.752†	9616.6	5375.6	62.337	µg/L	62.337	ppb	12:37:48
1	Mn 257.610†	829578.3	831342.0	2655.6	µg/L	2655.6	ppb	12:37:42
1	Mo 202.031†	25.4	25.3	7.6372	µg/L	7.6372	ppb	12:38:08
1	Ni 231.604†	1268.1	949.5	51.221	µg/L	51.221	ppb	12:38:08
1	P 214.914†	857.6	686.4	1256.4	µg/L	1256.4	ppb	12:38:08
1	Pb 220.353†	484.5	440.9	118.62	µg/L	118.62	ppb	12:38:08
1	S 181.975 Axial†	226.4	199.3	961.14	µg/L	961.14	ppb	12:38:08
1	Sb 206.836†	28.5	10.7	20.042	µg/L	20.042	ppb	12:38:08
1	Se 196.026†	-42.1	-58.2	7.4233	µg/L	7.4233	ppb	12:38:08
1	SiO2†	396574.3	394550.4	72283	µg/L	72283	ppb	12:37:42
1	Si 251.611†	451879.1	452333.6	33330	µg/L	33330	ppb	12:37:42
1	Sn 189.927†	-84.6	-106.7	-22.912	µg/L	-22.912	ppb	12:38:08
1	Ti 334.940†	1473922.5	1475626.1	3355.2	µg/L	3355.2	ppb	12:37:42
1	Tl 190.801†	-38.1	-21.3	-3.6356	µg/L	-3.6356	ppb	12:38:08
1	U 409.014†	-307.6	-955.8	-109.15	µg/L	-109.15	ppb	12:37:42
1	V 292.402†	12578.3	12764.7	152.45	µg/L	152.45	ppb	12:37:48
1	Zn 213.857†	16709.4	16167.8	410.13	µg/L	410.13	ppb	12:37:48
2	Sc RADIAL	115029.4	115029.4	101	%			12:36:42
2	Al 396.153Radial†	180357.2	178059.8	93156	µg/L	93156	ppb	12:36:42
2	Ca 317.933Radial†	68457.1	67208.9	27117	µg/L	27117	ppb	12:36:42
2	Fe 238.204 Radial†	19027.8	18785.1	120730	µg/L	120730	ppb	12:37:02
2	K 766.490 Radial†	23470.1	22426.0	11916	µg/L	11916	ppb	12:36:42
2	Mg 279.077 IEC†	2884.3	2836.2	17524	µg/L	17524	ppb	12:37:02
2	Na 589.592 Radial†	12664.9	13191.7	3394.8	µg/L	3394.8	ppb	12:36:42
2	Sr 421.552†	42730.3	42241.4	221.19	µg/L	221.19	ppb	12:36:42
2	Sc 361.383	2053499.0	2053499.0	99.167	%			12:38:16
2	Y 371.029	1362209.2	1362209.2	104.08	%			12:38:16
2	Ag 328.068†	-957.1	-1171.4	-0.2033	µg/L	-0.2033	ppb	12:38:22
2	As 188.979†	21.5	19.2	21.922	µg/L	21.922	ppb	12:38:42
2	B 249.677†	1821.7	1642.0	31.931	µg/L	31.931	ppb	12:38:22
2	Ba 233.527†	36421.7	36786.3	933.52	µg/L	933.52	ppb	12:38:22
2	Be 313.107†	19960.3	16363.1	8.8266	µg/L	8.8266	ppb	12:38:22
2	Cd 226.502†	355.0	456.2	2.4502	µg/L	2.4502	ppb	12:38:42
2	Co 228.616†	643.7	713.1	26.832	µg/L	26.832	ppb	12:38:42
2	Cr 267.716†	3616.1	3772.7	78.297	µg/L	78.297	ppb	12:38:22
2	Cu 324.752†	9712.6	5535.6	63.608	µg/L	63.608	ppb	12:38:22
2	Mn 257.610†	828031.8	835226.3	2668.1	µg/L	2668.1	ppb	12:38:16
2	Mo 202.031†	24.7	24.7	7.6048	µg/L	7.6048	ppb	12:38:42
2	Ni 231.604†	1260.2	949.8	51.239	µg/L	51.239	ppb	12:38:42
2	P 214.914†	862.8	697.3	1277.1	µg/L	1277.1	ppb	12:38:42
2	Pb 220.353†	478.7	438.3	118.00	µg/L	118.00	ppb	12:38:42

2	S 181.975 Axial†	219.7	194.0	934.84 µg/L	934.84 ppb	12:38:42
2	Sb 206.836†	26.3	8.6	18.068 µg/L	18.068 ppb	12:38:42
2	Se 196.026†	-31.6	-47.9	20.915 µg/L	20.915 ppb	12:38:42
2	SiO2†	396034.3	396608.2	72660 µg/L	72660 ppb	12:38:16
2	Si 251.611†	451284.5	454699.3	33505 µg/L	33505 ppb	12:38:16
2	Sn 189.927†	-87.8	-110.4	-24.613 µg/L	-24.613 ppb	12:38:42
2	Ti 334.940†	1470893.6	1482243.9	3370.2 µg/L	3370.2 ppb	12:38:16
2	Tl 190.801†	-40.4	-23.8	-7.3102 µg/L	-7.3102 ppb	12:38:42
2	U 409.014†	-323.7	-974.0	-110.98 µg/L	-110.98 ppb	12:38:16
2	V 292.402†	12664.4	12934.0	154.41 µg/L	154.41 ppb	12:38:22
2	Zn 213.857†	16789.2	16357.9	415.01 µg/L	415.01 ppb	12:38:22
3	Sc RADIAL	115187.7	115187.7	101 %		12:37:08
3	Al 396.153Radial†	180477.1	177933.3	93090 µg/L	93090 ppb	12:37:08
3	Ca 317.933Radial†	68420.9	67080.4	27065 µg/L	27065 ppb	12:37:08
3	Fe 238.204 Radial†	18895.7	18628.9	119730 µg/L	119730 ppb	12:37:28
3	K 766.490 Radial†	23504.6	22428.1	11918 µg/L	11918 ppb	12:37:08
3	Mg 279.077 IEC†	2874.3	2822.4	17440 µg/L	17440 ppb	12:37:28
3	Na 589.592 Radial†	12693.6	13202.8	3397.6 µg/L	3397.6 ppb	12:37:08
3	Sr 421.552†	42824.2	42276.1	221.38 µg/L	221.38 ppb	12:37:08
3	Sc 361.383	2086215.1	2086215.1	100.75 %		12:38:50
3	Y 371.029	1379146.0	1379146.0	105.38 %		12:38:50
3	Ag 328.068†	-948.2	-1147.5	-0.0860 µg/L	-0.0860 ppb	12:38:55
3	As 188.979†	15.8	13.2	11.135 µg/L	11.135 ppb	12:39:16
3	B 249.677†	1789.8	1581.6	29.672 µg/L	29.672 ppb	12:38:55
3	Ba 233.527†	36286.9	36076.5	915.51 µg/L	915.51 ppb	12:38:55
3	Be 313.107†	19974.2	16061.3	8.6582 µg/L	8.6582 ppb	12:38:55
3	Cd 226.502†	359.7	455.2	2.4971 µg/L	2.4971 ppb	12:39:16
3	Co 228.616†	647.5	706.7	26.630 µg/L	26.630 ppb	12:39:16
3	Cr 267.716†	3586.5	3686.1	76.501 µg/L	76.501 ppb	12:38:55
3	Cu 324.752†	9635.8	5305.7	61.828 µg/L	61.828 ppb	12:38:55
3	Mn 257.610†	829094.5	823186.9	2629.7 µg/L	2629.7 ppb	12:38:50
3	Mo 202.031†	38.3	37.8	9.0805 µg/L	9.0805 ppb	12:39:16
3	Ni 231.604†	1253.6	923.3	49.809 µg/L	49.809 ppb	12:39:16
3	P 214.914†	848.1	669.1	1222.3 µg/L	1222.3 ppb	12:39:16
3	Pb 220.353†	470.1	422.2	113.94 µg/L	113.94 ppb	12:39:16
3	S 181.975 Axial†	222.9	193.7	933.34 µg/L	933.34 ppb	12:39:16
3	Sb 206.836†	15.9	-2.1	7.4165 µg/L	7.4165 ppb	12:39:16
3	Se 196.026†	-37.5	-53.2	13.512 µg/L	13.512 ppb	12:39:16
3	SiO2†	396540.5	390847.9	71604 µg/L	71604 ppb	12:38:50
3	Si 251.611†	451970.9	448244.1	33029 µg/L	33029 ppb	12:38:50
3	Sn 189.927†	-86.3	-107.5	-23.356 µg/L	-23.356 ppb	12:39:16
3	Ti 334.940†	1473441.4	1461512.5	3323.1 µg/L	3323.1 ppb	12:38:50
3	Tl 190.801†	-31.6	-14.4	6.2667 µg/L	6.2667 ppb	12:39:16
3	U 409.014†	-405.4	-1050.0	-117.74 µg/L	-117.74 ppb	12:38:50
3	V 292.402†	12575.1	12645.1	151.10 µg/L	151.10 ppb	12:38:55
3	Zn 213.857†	16722.4	16026.1	406.44 µg/L	406.44 ppb	12:38:55

Mean Data: 1201978584|925474|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2068887.9	99.911	%	0.7941				0.79%
Sc RADIAL	115494.3	102	%	0.6				0.58%
Y 371.029	1370985.3	104.75	%	0.648				0.62%
Ag 328.068†	-1162.1	-0.1779	µg/L	0.08222	-0.1779	ppb	0.08222	46.21%
Al 396.153Radial†	177587.4	92909	µg/L	372.2	92909	ppb	372.2	0.40%
As 188.979†	16.3	16.648	µg/L	5.3973	16.648	ppb	5.3973	32.42%
B 249.677†	1626.8	31.477	µg/L	1.6269	31.477	ppb	1.6269	5.17%
Ba 233.527†	36380.2	923.22	µg/L	9.283	923.22	ppb	9.283	1.01%
Be 313.107†	16207.3	8.7384	µg/L	0.08449	8.7384	ppb	0.08449	0.97%
Ca 317.933Radial†	67159.7	27097	µg/L	28.0	27097	ppb	28.0	0.10%
Cd 226.502†	457.6	2.5329	µg/L	0.10536	2.5329	ppb	0.10536	4.16%
Co 228.616†	711.5	26.803	µg/L	0.1608	26.803	ppb	0.1608	0.60%
Cr 267.716†	3725.0	77.308	µg/L	0.9118	77.308	ppb	0.9118	1.18%
Cu 324.752†	5405.6	62.591	µg/L	0.9167	62.591	ppb	0.9167	1.46%
Fe 238.204 Radial†	18689.1	120110	µg/L	539.9	120110	ppb	539.9	0.45%
K 766.490 Radial†	22401.2	11903	µg/L	23.8	11903	ppb	23.8	0.20%
Mg 279.077 IEC†	2825.7	17459	µg/L	57.5	17459	ppb	57.5	0.33%
Mn 257.610†	829918.4	2651.1	µg/L	19.57	2651.1	ppb	19.57	0.74%
Mo 202.031†	29.3	8.1075	µg/L	0.84279	8.1075	ppb	0.84279	10.40%
Na 589.592 Radial†	13162.6	3387.3	µg/L	15.50	3387.3	ppb	15.50	0.46%

Ni 231.604†	940.9	50.756	µg/L	0.8202	50.756	ppb	0.8202	1.62%
P 214.914†	684.2	1252.0	µg/L	27.71	1252.0	ppb	27.71	2.21%
Pb 220.353†	433.8	116.86	µg/L	2.544	116.86	ppb	2.544	2.18%
S 181.975 Axial†	195.7	943.11	µg/L	15.635	943.11	ppb	15.635	1.66%
Sb 206.836†	5.7	15.175	µg/L	6.7915	15.175	ppb	6.7915	44.75%
Se 196.026†	-53.1	13.950	µg/L	6.7565	13.950	ppb	6.7565	48.43%
SiO2†	394002.1	72182	µg/L	534.8	72182	ppb	534.8	0.74%
Si 251.611†	451759.0	33288	µg/L	240.7	33288	ppb	240.7	0.72%
Sn 189.927†	-108.2	-23.627	µg/L	0.8825	-23.627	ppb	0.8825	3.74%
Sr 421.552†	42207.6	221.02	µg/L	0.472	221.02	ppb	0.472	0.21%
Ti 334.940†	1473127.5	3349.5	µg/L	24.09	3349.5	ppb	24.09	0.72%
Tl 190.801†	-19.8	-1.5597	µg/L	7.02245	-1.5597	ppb	7.02245	450.25%
U 409.014†	-993.3	-112.62	µg/L	4.525	-112.62	ppb	4.525	4.02%
V 292.402†	12781.2	152.65	µg/L	1.666	152.65	ppb	1.666	1.09%
Zn 213.857†	16183.9	410.52	µg/L	4.302	410.52	ppb	4.302	1.05%

Sequence No.: 73
Sample ID: 1201978586|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 355
Date Collected: 12/7/2009 12:39:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978586|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117359.0	117359.0	103	%			12:39:58
1	Al 396.153Radial†	262450.8	254018.2	132880	µg/L	132880	ppb	12:39:58
1	Ca 317.933Radial†	80165.6	77204.3	31149	µg/L	31149	ppb	12:40:04
1	Fe 238.204 Radial†	21062.4	20382.1	131010	µg/L	131010	ppb	12:40:04
1	K 766.490 Radial†	35771.3	33877.6	18002	µg/L	18002	ppb	12:39:58
1	Mg 279.077 IEC†	3973.0	3833.9	23748	µg/L	23748	ppb	12:40:04
1	Na 589.592 Radial†	32301.8	31958.7	8224.3	µg/L	8224.3	ppb	12:39:58
1	Sr 421.552†	140508.9	136087.4	712.61	µg/L	712.61	ppb	12:39:58
1	Sc 361.383	2050163.4	2050163.4	99.006	%			12:40:40
1	Y 371.029	1344115.8	1344115.8	102.70	%			12:40:40
1	Ag 328.068†	57487.7	57858.3	544.49	µg/L	544.49	ppb	12:40:46
1	As 188.979†	302.8	303.4	531.42	µg/L	531.42	ppb	12:41:06
1	B 249.677†	13972.8	13918.1	551.25	µg/L	551.25	ppb	12:40:46
1	Ba 233.527†	55281.7	55895.3	1419.4	µg/L	1419.4	ppb	12:40:46
1	Be 313.107†	876257.4	881286.5	541.01	µg/L	541.01	ppb	12:40:40
1	Cd 226.502†	19790.5	20087.3	510.89	µg/L	510.89	ppb	12:40:46
1	Co 228.616†	11052.9	11227.7	525.38	µg/L	525.38	ppb	12:41:06
1	Cr 267.716†	28400.7	28811.9	596.96	µg/L	596.96	ppb	12:40:46
1	Cu 324.752†	87575.8	84196.2	601.17	µg/L	601.17	ppb	12:40:46
1	Mn 257.610†	1036917.5	1047566.8	3343.8	µg/L	3343.8	ppb	12:40:40
1	Mo 202.031†	4253.1	4295.7	501.83	µg/L	501.83	ppb	12:41:06
1	Ni 231.604†	10280.1	10062.4	542.80	µg/L	542.80	ppb	12:41:06
1	P 214.914†	1116.8	955.2	1740.0	µg/L	1740.0	ppb	12:41:06
1	Pb 220.353†	2502.5	2483.1	641.26	µg/L	641.26	ppb	12:41:06
1	S 181.975 Axial†	1246.5	1231.4	6040.6	µg/L	6040.6	ppb	12:41:06
1	Sb 206.836†	469.6	456.4	456.35	µg/L	456.35	ppb	12:41:06
1	Se 196.026†	347.4	335.0	507.40	µg/L	507.40	ppb	12:41:06
1	SiO2†	415653.8	417074.3	76409	µg/L	76409	ppb	12:40:40
1	Si 251.611†	474006.2	478389.4	35191	µg/L	35191	ppb	12:40:40
1	Sn 189.927†	959.0	946.8	509.32	µg/L	509.32	ppb	12:41:06
1	Ti 334.940†	1889622.8	1907588.6	4337.6	µg/L	4337.6	ppb	12:40:40
1	Tl 190.801†	298.1	318.0	511.90	µg/L	511.90	ppb	12:41:06
1	U 409.014†	4653.7	4052.8	346.93	µg/L	346.93	ppb	12:40:46
1	V 292.402†	60112.6	60879.1	695.77	µg/L	695.77	ppb	12:40:46
1	Zn 213.857†	35823.1	35610.3	914.95	µg/L	914.95	ppb	12:40:46
2	Sc RADIAL	116552.0	116552.0	103	%			12:40:09
2	Al 396.153Radial†	261393.3	254746.9	133260	µg/L	133260	ppb	12:40:09
2	Ca 317.933Radial†	80656.0	78220.1	31559	µg/L	31559	ppb	12:40:15
2	Fe 238.204 Radial†	21244.9	20701.3	133060	µg/L	133060	ppb	12:40:15
2	K 766.490 Radial†	35621.2	33971.0	18051	µg/L	18051	ppb	12:40:09
2	Mg 279.077 IEC†	3993.8	3880.8	24038	µg/L	24038	ppb	12:40:15
2	Na 589.592 Radial†	32190.4	32066.7	8252.1	µg/L	8252.1	ppb	12:40:09
2	Sr 421.552†	139698.5	136239.4	713.41	µg/L	713.41	ppb	12:40:09
2	Sc 361.383	2055249.0	2055249.0	99.252	%			12:41:14
2	Y 371.029	1350034.2	1350034.2	103.15	%			12:41:14
2	Ag 328.068†	57749.0	57977.8	545.74	µg/L	545.74	ppb	12:41:19
2	As 188.979†	309.8	309.7	542.44	µg/L	542.44	ppb	12:41:40
2	B 249.677†	14081.4	13992.5	553.77	µg/L	553.77	ppb	12:41:19
2	Ba 233.527†	55275.0	55750.4	1415.7	µg/L	1415.7	ppb	12:41:19
2	Be 313.107†	876080.0	878917.8	539.56	µg/L	539.56	ppb	12:41:14
2	Cd 226.502†	19831.6	20079.2	510.52	µg/L	510.52	ppb	12:41:19
2	Co 228.616†	11063.6	11211.0	524.60	µg/L	524.60	ppb	12:41:40
2	Cr 267.716†	28410.7	28751.0	595.70	µg/L	595.70	ppb	12:41:19
2	Cu 324.752†	87916.9	84321.0	602.46	µg/L	602.46	ppb	12:41:19
2	Mn 257.610†	1036837.7	1044894.9	3335.6	µg/L	3335.6	ppb	12:41:14
2	Mo 202.031†	4257.6	4289.5	501.19	µg/L	501.19	ppb	12:41:40
2	Ni 231.604†	10289.1	10045.7	541.90	µg/L	541.90	ppb	12:41:40
2	P 214.914†	1130.1	965.9	1758.8	µg/L	1758.8	ppb	12:41:40
2	Pb 220.353†	2501.6	2476.0	639.45	µg/L	639.45	ppb	12:41:40

2	S 181.975 Axial†	1251.0	1232.9	6047.3 µg/L	6047.3 ppb	12:41:40
2	Sb 206.836†	475.8	461.4	461.20 µg/L	461.20 ppb	12:41:40
2	Se 196.026†	337.5	324.1	495.12 µg/L	495.12 ppb	12:41:40
2	SiO2†	415527.5	415908.2	76196 µg/L	76196 ppb	12:41:14
2	Si 251.611†	474110.3	477309.7	35111 µg/L	35111 ppb	12:41:14
2	Sn 189.927†	948.5	933.8	503.30 µg/L	503.30 ppb	12:41:40
2	Ti 334.940†	1890620.1	1903870.7	4329.1 µg/L	4329.1 ppb	12:41:14
2	Tl 190.801†	293.6	312.7	503.76 µg/L	503.76 ppb	12:41:40
2	U 409.014†	4694.1	4081.9	349.22 µg/L	349.22 ppb	12:41:19
2	V 292.402†	60239.4	60856.7	695.68 µg/L	695.68 ppb	12:41:19
2	Zn 213.857†	35898.4	35596.7	914.36 µg/L	914.36 ppb	12:41:19
3	Sc RADIAL	117174.1	117174.1	103 %		12:40:21
3	Al 396.153Radial†	264222.1	256137.2	133990 µg/L	133990 ppb	12:40:21
3	Ca 317.933Radial†	80912.6	78051.4	31491 µg/L	31491 ppb	12:40:26
3	Fe 238.204 Radial†	21303.9	20648.5	132720 µg/L	132720 ppb	12:40:26
3	K 766.490 Radial†	36014.7	34168.3	18156 µg/L	18156 ppb	12:40:21
3	Mg 279.077 IEC†	4004.5	3870.5	23974 µg/L	23974 ppb	12:40:26
3	Na 589.592 Radial†	32667.7	32362.9	8328.4 µg/L	8328.4 ppb	12:40:21
3	Sr 421.552†	141325.5	137094.2	717.89 µg/L	717.89 ppb	12:40:21
3	Sc 361.383	2033611.7	2033611.7	98.207 %		12:41:47
3	Y 371.029	1333994.3	1333994.3	101.93 %		12:41:47
3	Ag 328.068†	57408.7	58250.5	548.23 µg/L	548.23 ppb	12:41:53
3	As 188.979†	302.9	306.0	535.81 µg/L	535.81 ppb	12:42:14
3	B 249.677†	13984.7	14045.0	556.11 µg/L	556.11 ppb	12:41:53
3	Ba 233.527†	55051.1	56114.9	1425.0 µg/L	1425.0 ppb	12:41:53
3	Be 313.107†	867805.2	879883.5	540.15 µg/L	540.15 ppb	12:41:47
3	Cd 226.502†	19697.3	20155.1	512.52 µg/L	512.52 ppb	12:41:53
3	Co 228.616†	11048.4	11314.0	529.49 µg/L	529.49 ppb	12:42:14
3	Cr 267.716†	28263.6	28905.9	598.91 µg/L	598.91 ppb	12:41:53
3	Cu 324.752†	87320.8	84656.4	604.67 µg/L	604.67 ppb	12:41:53
3	Mn 257.610†	1027940.8	1046950.4	3342.1 µg/L	3342.1 ppb	12:41:47
3	Mo 202.031†	4246.9	4324.3	505.21 µg/L	505.21 ppb	12:42:14
3	Ni 231.604†	10303.5	10170.6	548.64 µg/L	548.64 ppb	12:42:14
3	P 214.914†	1129.9	977.8	1783.1 µg/L	1783.1 ppb	12:42:14
3	Pb 220.353†	2501.5	2502.8	646.33 µg/L	646.33 ppb	12:42:14
3	S 181.975 Axial†	1249.7	1245.0	6107.0 µg/L	6107.0 ppb	12:42:14
3	Sb 206.836†	472.8	463.6	463.31 µg/L	463.31 ppb	12:42:14
3	Se 196.026†	353.9	344.4	520.38 µg/L	520.38 ppb	12:42:14
3	SiO2†	412091.7	416864.2	76371 µg/L	76371 ppb	12:41:47
3	Si 251.611†	470150.5	478360.0	35188 µg/L	35188 ppb	12:41:47
3	Sn 189.927†	955.8	951.3	512.02 µg/L	512.02 ppb	12:42:14
3	Ti 334.940†	1874911.7	1908143.0	4338.8 µg/L	4338.8 ppb	12:41:47
3	Tl 190.801†	298.4	320.7	515.90 µg/L	515.90 ppb	12:42:14
3	U 409.014†	4636.9	4074.0	348.55 µg/L	348.55 ppb	12:41:53
3	V 292.402†	59910.8	61167.8	699.16 µg/L	699.16 ppb	12:41:53
3	Zn 213.857†	35657.9	35736.6	918.03 µg/L	918.03 ppb	12:41:53

Mean Data: 1201978586|925474|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2046341.4	98.822	%	0.5464				0.55%
Sc RADIAL	117028.4	103	%	0.4				0.36%
Y 371.029	1342714.8	102.59	%	0.620				0.60%
Ag 328.068†	58028.9	546.15	µg/L	1.907	546.15	ppb	1.907	0.35%
Al 396.153Radial†	254967.4	133370	µg/L	563.2	133370	ppb	563.2	0.42%
As 188.979†	306.3	536.56	µg/L	5.550	536.56	ppb	5.550	1.03%
B 249.677†	13985.2	553.71	µg/L	2.433	553.71	ppb	2.433	0.44%
Ba 233.527†	55920.2	1420.1	µg/L	4.66	1420.1	ppb	4.66	0.33%
Be 313.107†	880029.3	540.24	µg/L	0.732	540.24	ppb	0.732	0.14%
Ca 317.933Radial†	77825.3	31400	µg/L	219.6	31400	ppb	219.6	0.70%
Cd 226.502†	20107.2	511.31	µg/L	1.063	511.31	ppb	1.063	0.21%
Co 228.616†	11250.9	526.49	µg/L	2.624	526.49	ppb	2.624	0.50%
Cr 267.716†	28822.9	597.19	µg/L	1.616	597.19	ppb	1.616	0.27%
Cu 324.752†	84391.2	602.77	µg/L	1.770	602.77	ppb	1.770	0.29%
Fe 238.204 Radial†	20577.3	132270	µg/L	1099.6	132270	ppb	1099.6	0.83%
K 766.490 Radial†	34005.6	18070	µg/L	78.9	18070	ppb	78.9	0.44%
Mg 279.077 IEC†	3861.7	23920	µg/L	152.3	23920	ppb	152.3	0.64%
Mn 257.610†	1046470.7	3340.5	µg/L	4.34	3340.5	ppb	4.34	0.13%
Mo 202.031†	4303.2	502.74	µg/L	2.158	502.74	ppb	2.158	0.43%
Na 589.592 Radial†	32129.4	8268.3	µg/L	53.86	8268.3	ppb	53.86	0.65%

Ni 231.604†	10092.9	544.45 µg/L	3.659	544.45 ppb	3.659	0.67%
P 214.914†	966.3	1760.6 µg/L	21.60	1760.6 ppb	21.60	1.23%
Pb 220.353†	2487.3	642.35 µg/L	3.567	642.35 ppb	3.567	0.56%
S 181.975 Axial†	1236.4	6065.0 µg/L	36.58	6065.0 ppb	36.58	0.60%
Sb 206.836†	460.5	460.29 µg/L	3.570	460.29 ppb	3.570	0.78%
Se 196.026†	334.5	507.63 µg/L	12.629	507.63 ppb	12.629	2.49%
SiO2†	416615.6	76325 µg/L	113.9	76325 ppb	113.9	0.15%
Si 251.611†	478019.7	35163 µg/L	45.1	35163 ppb	45.1	0.13%
Sn 189.927†	944.0	508.21 µg/L	4.464	508.21 ppb	4.464	0.88%
Sr 421.552†	136473.7	714.64 µg/L	2.842	714.64 ppb	2.842	0.40%
Ti 334.940†	1906534.1	4335.1 µg/L	5.29	4335.1 ppb	5.29	0.12%
Tl 190.801†	317.1	510.52 µg/L	6.186	510.52 ppb	6.186	1.21%
U 409.014†	4069.6	348.23 µg/L	1.179	348.23 ppb	1.179	0.34%
V 292.402†	60967.9	696.87 µg/L	1.985	696.87 ppb	1.985	0.28%
Zn 213.857†	35647.9	915.78 µg/L	1.971	915.78 ppb	1.971	0.22%

Sequence No.: 74
Sample ID: 1201978587|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 356
Date Collected: 12/7/2009 12:42:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978587|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116017.7	116017.7	102	%			12:42:56
1	Al 396.153Radial†	298420.1	292190.0	152850	µg/L	152850	ppb	12:42:56
1	Ca 317.933Radial†	130738.6	127640.5	51499	µg/L	51499	ppb	12:42:56
1	Fe 238.204 Radial†	23270.7	22781.0	146430	µg/L	146430	ppb	12:43:01
1	K 766.490 Radial†	40448.6	38859.7	20649	µg/L	20649	ppb	12:42:56
1	Mg 279.077 IEC†	4793.8	4682.4	29022	µg/L	29022	ppb	12:43:01
1	Na 589.592 Radial†	35867.1	35812.7	9216.1	µg/L	9216.1	ppb	12:42:56
1	Sr 421.552†	159118.4	155889.3	816.31	µg/L	816.31	ppb	12:42:56
1	Sc 361.383	2039140.6	2039140.6	98.474	%			12:43:37
1	Y 371.029	1334607.9	1334607.9	101.97	%			12:43:37
1	Ag 328.068†	58574.2	59275.5	558.87	µg/L	558.87	ppb	12:43:43
1	As 188.979†	314.1	316.5	550.76	µg/L	550.76	ppb	12:44:03
1	B 249.677†	14455.3	14484.3	570.50	µg/L	570.50	ppb	12:43:43
1	Ba 233.527†	63554.1	64597.7	1640.2	µg/L	1640.2	ppb	12:43:43
1	Be 313.107†	894683.3	904782.2	555.34	µg/L	555.34	ppb	12:43:37
1	Cd 226.502†	20072.5	20481.7	519.94	µg/L	519.94	ppb	12:43:43
1	Co 228.616†	11320.7	11560.1	540.39	µg/L	540.39	ppb	12:44:03
1	Cr 267.716†	29217.0	29795.9	617.36	µg/L	617.36	ppb	12:43:43
1	Cu 324.752†	92192.2	89362.2	639.65	µg/L	639.65	ppb	12:43:43
1	Mn 257.610†	1031540.9	1047768.3	3346.4	µg/L	3346.4	ppb	12:43:37
1	Mo 202.031†	4323.5	4390.3	513.38	µg/L	513.38	ppb	12:44:03
1	Ni 231.604†	10626.7	10470.4	564.82	µg/L	564.82	ppb	12:44:03
1	P 214.914†	1730.6	1584.6	2980.1	µg/L	2980.1	ppb	12:44:03
1	Pb 220.353†	2554.4	2549.5	659.64	µg/L	659.64	ppb	12:44:03
1	S 181.975 Axial†	1327.5	1320.5	6476.1	µg/L	6476.1	ppb	12:44:03
1	Sb 206.836†	472.3	461.7	460.95	µg/L	460.95	ppb	12:44:03
1	Se 196.026†	344.0	333.4	516.89	µg/L	516.89	ppb	12:44:03
1	SiO2†	390722.1	394025.7	72187	µg/L	72187	ppb	12:43:37
1	Si 251.611†	445684.7	452217.0	33240	µg/L	33240	ppb	12:43:37
1	Sn 189.927†	925.1	917.5	503.31	µg/L	503.31	ppb	12:44:03
1	Ti 334.940†	2046977.3	2077698.4	4723.4	µg/L	4723.4	ppb	12:43:37
1	Tl 190.801†	304.3	325.9	522.50	µg/L	522.50	ppb	12:44:03
1	U 409.014†	4835.2	4262.6	363.71	µg/L	363.71	ppb	12:43:43
1	V 292.402†	62349.0	63478.5	726.21	µg/L	726.21	ppb	12:43:43
1	Zn 213.857†	36788.6	36786.4	943.81	µg/L	943.81	ppb	12:43:43
2	Sc RADIAL	116362.1	116362.1	102	%			12:43:07
2	Al 396.153Radial†	302816.4	295618.6	154640	µg/L	154640	ppb	12:43:07
2	Ca 317.933Radial†	132455.7	128938.5	52022	µg/L	52022	ppb	12:43:07
2	Fe 238.204 Radial†	23014.0	22462.8	144380	µg/L	144380	ppb	12:43:12
2	K 766.490 Radial†	40982.4	39263.7	20864	µg/L	20864	ppb	12:43:07
2	Mg 279.077 IEC†	4757.8	4633.3	28719	µg/L	28719	ppb	12:43:12
2	Na 589.592 Radial†	36435.4	36263.7	9332.2	µg/L	9332.2	ppb	12:43:07
2	Sr 421.552†	161529.7	157783.0	826.22	µg/L	826.22	ppb	12:43:07
2	Sc 361.383	2037471.6	2037471.6	98.393	%			12:44:11
2	Y 371.029	1336146.7	1336146.7	102.09	%			12:44:11
2	Ag 328.068†	58371.8	59118.5	557.25	µg/L	557.25	ppb	12:44:17
2	As 188.979†	312.7	315.4	548.85	µg/L	548.85	ppb	12:44:37
2	B 249.677†	14474.6	14515.9	572.49	µg/L	572.49	ppb	12:44:17
2	Ba 233.527†	63221.0	64312.1	1633.0	µg/L	1633.0	ppb	12:44:17
2	Be 313.107†	891435.5	902225.6	553.77	µg/L	553.77	ppb	12:44:11
2	Cd 226.502†	19954.8	20378.8	517.45	µg/L	517.45	ppb	12:44:17
2	Co 228.616†	11411.7	11662.0	545.26	µg/L	545.26	ppb	12:44:37
2	Cr 267.716†	29063.8	29664.5	614.63	µg/L	614.63	ppb	12:44:17
2	Cu 324.752†	91952.7	89195.5	638.07	µg/L	638.07	ppb	12:44:17
2	Mn 257.610†	1028052.9	1045081.5	3337.6	µg/L	3337.6	ppb	12:44:11
2	Mo 202.031†	4351.9	4422.8	517.05	µg/L	517.05	ppb	12:44:37
2	Ni 231.604†	10722.2	10576.4	570.53	µg/L	570.53	ppb	12:44:37
2	P 214.914†	1752.8	1608.6	3031.4	µg/L	3031.4	ppb	12:44:37
2	Pb 220.353†	2557.7	2555.0	661.24	µg/L	661.24	ppb	12:44:37

2	S 181.975 Axial†	1342.5	1336.9	6557.0 µg/L	6557.0 ppb	12:44:37
2	Sb 206.836†	489.1	479.2	478.00 µg/L	478.00 ppb	12:44:37
2	Se 196.026†	333.8	323.3	503.01 µg/L	503.01 ppb	12:44:37
2	SiO2†	389171.9	392775.2	71958 µg/L	71958 ppb	12:44:11
2	Si 251.611†	443934.0	450808.5	33136 µg/L	33136 ppb	12:44:11
2	Sn 189.927†	948.0	941.6	515.10 µg/L	515.10 ppb	12:44:37
2	Ti 334.940†	2040608.6	2072928.5	4712.5 µg/L	4712.5 ppb	12:44:11
2	Tl 190.801†	307.2	329.1	527.06 µg/L	527.06 ppb	12:44:37
2	U 409.014†	4941.1	4374.2	374.31 µg/L	374.31 ppb	12:44:17
2	V 292.402†	61992.9	63168.4	722.62 µg/L	722.62 ppb	12:44:17
2	Zn 213.857†	36572.3	36597.1	939.05 µg/L	939.05 ppb	12:44:17
3	Sc RADIAL	116142.8	116142.8	102 %		12:43:18
3	Al 396.153Radial†	302462.4	295830.5	154750 µg/L	154750 ppb	12:43:18
3	Ca 317.933Radial†	131785.8	128527.2	51856 µg/L	51856 ppb	12:43:18
3	Fe 238.204 Radial†	23389.5	22872.7	147020 µg/L	147020 ppb	12:43:23
3	K 766.490 Radial†	40898.7	39257.4	20860 µg/L	20860 ppb	12:43:18
3	Mg 279.077 IEC†	4822.1	4705.0	29162 µg/L	29162 ppb	12:43:23
3	Na 589.592 Radial†	36307.8	36206.1	9317.4 µg/L	9317.4 ppb	12:43:18
3	Sr 421.552†	161030.6	157592.5	825.22 µg/L	825.22 ppb	12:43:18
3	Sc 361.383	2026921.3	2026921.3	97.884 %		12:44:45
3	Y 371.029	1328289.6	1328289.6	101.49 %		12:44:45
3	Ag 328.068†	58208.8	59260.8	558.78 µg/L	558.78 ppb	12:44:51
3	As 188.979†	305.0	309.1	537.33 µg/L	537.33 ppb	12:45:11
3	B 249.677†	14424.1	14541.0	572.73 µg/L	572.73 ppb	12:44:51
3	Ba 233.527†	63060.9	64482.9	1637.3 µg/L	1637.3 ppb	12:44:51
3	Be 313.107†	887548.0	902969.9	554.22 µg/L	554.22 ppb	12:44:45
3	Cd 226.502†	19905.6	20434.0	518.68 µg/L	518.68 ppb	12:44:51
3	Co 228.616†	11415.7	11726.5	548.30 µg/L	548.30 ppb	12:45:11
3	Cr 267.716†	29132.3	29888.3	619.27 µg/L	619.27 ppb	12:44:51
3	Cu 324.752†	91842.8	89569.6	641.18 µg/L	641.18 ppb	12:44:51
3	Mn 257.610†	1023746.5	1046120.4	3341.2 µg/L	3341.2 ppb	12:44:45
3	Mo 202.031†	4349.7	4443.6	519.56 µg/L	519.56 ppb	12:45:11
3	Ni 231.604†	10740.0	10651.2	574.57 µg/L	574.57 ppb	12:45:11
3	P 214.914†	1749.2	1614.2	3039.2 µg/L	3039.2 ppb	12:45:11
3	Pb 220.353†	2572.6	2583.8	668.52 µg/L	668.52 ppb	12:45:11
3	S 181.975 Axial†	1339.7	1341.2	6577.7 µg/L	6577.7 ppb	12:45:11
3	Sb 206.836†	481.3	473.8	472.75 µg/L	472.75 ppb	12:45:11
3	Se 196.026†	346.7	338.2	523.37 µg/L	523.37 ppb	12:45:11
3	SiO2†	388153.8	393793.8	72144 µg/L	72144 ppb	12:44:45
3	Si 251.611†	442642.6	451837.7	33212 µg/L	33212 ppb	12:44:45
3	Sn 189.927†	941.8	940.3	514.93 µg/L	514.93 ppb	12:45:11
3	Ti 334.940†	2034338.4	2077317.8	4722.5 µg/L	4722.5 ppb	12:44:45
3	Tl 190.801†	304.1	327.5	524.78 µg/L	524.78 ppb	12:45:11
3	U 409.014†	4862.5	4320.0	368.87 µg/L	368.87 ppb	12:44:51
3	V 292.402†	61912.2	63413.9	725.59 µg/L	725.59 ppb	12:44:51
3	Zn 213.857†	36585.7	36804.3	944.16 µg/L	944.16 ppb	12:44:51

Mean Data: 1201978587|925474|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2034511.2	98.251	%	0.3200				0.33%
Sc RADIAL	116174.2	102	%	0.2				0.15%
Y 371.029	1333014.7	101.85	%	0.318				0.31%
Ag 328.068†	59218.3	558.30	µg/L	0.910	558.30	ppb	0.910	0.16%
Al 396.153Radial†	294546.4	154080	µg/L	1069.0	154080	ppb	1069.0	0.69%
As 188.979†	313.7	545.65	µg/L	7.268	545.65	ppb	7.268	1.33%
B 249.677†	14513.7	571.91	µg/L	1.223	571.91	ppb	1.223	0.21%
Ba 233.527†	64464.2	1636.9	µg/L	3.65	1636.9	ppb	3.65	0.22%
Be 313.107†	903325.9	554.44	µg/L	0.808	554.44	ppb	0.808	0.15%
Ca 317.933Radial†	128368.7	51792	µg/L	267.6	51792	ppb	267.6	0.52%
Cd 226.502†	20431.5	518.69	µg/L	1.246	518.69	ppb	1.246	0.24%
Co 228.616†	11649.5	544.65	µg/L	3.994	544.65	ppb	3.994	0.73%
Cr 267.716†	29782.9	617.09	µg/L	2.327	617.09	ppb	2.327	0.38%
Cu 324.752†	89375.8	639.63	µg/L	1.556	639.63	ppb	1.556	0.24%
Fe 238.204 Radial†	22705.5	145940	µg/L	1382.5	145940	ppb	1382.5	0.95%
K 766.490 Radial†	39126.9	20791	µg/L	123.0	20791	ppb	123.0	0.59%
Mg 279.077 IEC†	4673.6	28968	µg/L	226.6	28968	ppb	226.6	0.78%
Mn 257.610†	1046323.4	3341.7	µg/L	4.42	3341.7	ppb	4.42	0.13%
Mo 202.031†	4418.9	516.66	µg/L	3.109	516.66	ppb	3.109	0.60%
Na 589.592 Radial†	36094.2	9288.6	µg/L	63.17	9288.6	ppb	63.17	0.68%

Ni 231.604†	10566.0	569.97 µg/L	4.900	569.97 ppb	4.900	0.86%
P 214.914†	1602.5	3016.9 µg/L	32.12	3016.9 ppb	32.12	1.06%
Pb 220.353†	2562.8	663.13 µg/L	4.734	663.13 ppb	4.734	0.71%
S 181.975 Axial†	1332.9	6537.0 µg/L	53.68	6537.0 ppb	53.68	0.82%
Sb 206.836†	471.6	470.57 µg/L	8.732	470.57 ppb	8.732	1.86%
Se 196.026†	331.7	514.42 µg/L	10.404	514.42 ppb	10.404	2.02%
SiO2†	393531.6	72096 µg/L	121.9	72096 ppb	121.9	0.17%
Si 251.611†	451621.1	33196 µg/L	53.9	33196 ppb	53.9	0.16%
Sn 189.927†	933.2	511.11 µg/L	6.761	511.11 ppb	6.761	1.32%
Sr 421.552†	157088.3	822.58 µg/L	5.460	822.58 ppb	5.460	0.66%
Ti 334.940†	2075981.6	4719.4 µg/L	6.04	4719.4 ppb	6.04	0.13%
Tl 190.801†	327.5	524.78 µg/L	2.280	524.78 ppb	2.280	0.43%
U 409.014†	4318.9	368.96 µg/L	5.300	368.96 ppb	5.300	1.44%
V 292.402†	63353.6	724.80 µg/L	1.920	724.80 ppb	1.920	0.26%
Zn 213.857†	36729.3	942.34 µg/L	2.856	942.34 ppb	2.856	0.30%

Sequence No.: 75
Sample ID: 1201978585|925474|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 357
Date Collected: 12/7/2009 12:45:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978585|925474|5

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114635.0	114635.0	101	%			12:45:53
1	Al 396.153Radial†	36854.6	36409.9	19049	µg/L	19049	ppb	12:45:53
1	Ca 317.933Radial†	14658.6	14108.0	5692.1	µg/L	5692.1	ppb	12:46:13
1	Fe 238.204 Radial†	3876.0	3828.8	24608	µg/L	24608	ppb	12:46:13
1	K 766.490 Radial†	4973.3	4168.7	2215.1	µg/L	2215.1	ppb	12:45:53
1	Mg 279.077 IEC†	579.3	560.9	3464.5	µg/L	3464.5	ppb	12:46:13
1	Na 589.592 Radial†	2017.2	2679.0	689.42	µg/L	689.42	ppb	12:45:53
1	Sr 421.552†	8669.8	8620.4	45.140	µg/L	45.140	ppb	12:45:53
1	Sc 361.383	2052488.1	2052488.1	99.119	%			12:47:16
1	Y 371.029	1302870.4	1302870.4	99.549	%			12:47:16
1	Ag 328.068†	-55.6	-262.4	-0.2419	µg/L	-0.2419	ppb	12:47:22
1	As 188.979†	1.8	-0.6	-3.7244	µg/L	-3.7244	ppb	12:47:42
1	B 249.677†	523.7	333.4	6.4535	µg/L	6.4535	ppb	12:47:22
1	Ba 233.527†	8365.3	8498.5	215.66	µg/L	215.66	ppb	12:47:22
1	Be 313.107†	7254.1	3553.8	1.9365	µg/L	1.9365	ppb	12:47:22
1	Cd 226.502†	0.5	98.6	0.6438	µg/L	0.6438	ppb	12:47:42
1	Co 228.616†	110.5	175.5	6.9182	µg/L	6.9182	ppb	12:47:42
1	Cr 267.716†	767.5	900.6	18.684	µg/L	18.684	ppb	12:47:22
1	Cu 324.752†	5463.1	1253.1	13.815	µg/L	13.815	ppb	12:47:22
1	Mn 257.610†	188482.6	190401.6	607.86	µg/L	607.86	ppb	12:47:16
1	Mo 202.031†	12.0	11.9	2.3440	µg/L	2.3440	ppb	12:47:42
1	Ni 231.604†	547.2	231.1	12.469	µg/L	12.469	ppb	12:47:42
1	P 214.914†	313.6	143.6	263.15	µg/L	263.15	ppb	12:47:42
1	Pb 220.353†	142.9	99.7	26.698	µg/L	26.698	ppb	12:47:42
1	S 181.975 Axial†	64.6	37.7	181.44	µg/L	181.44	ppb	12:47:42
1	Sb 206.836†	15.9	-1.8	0.1198	µg/L	0.1198	ppb	12:47:42
1	Se 196.026†	-8.5	-24.5	-14.244	µg/L	-14.244	ppb	12:47:42
1	SiO2†	82218.8	80199.0	14693	µg/L	14693	ppb	12:47:22
1	Si 251.611†	91907.1	92350.5	6805.2	µg/L	6805.2	ppb	12:47:22
1	Sn 189.927†	-3.0	-24.9	-6.2096	µg/L	-6.2096	ppb	12:47:42
1	Ti 334.940†	297154.0	298798.2	679.37	µg/L	679.37	ppb	12:47:16
1	Tl 190.801†	-16.5	0.2	6.3122	µg/L	6.3122	ppb	12:47:42
1	U 409.014†	386.0	-258.2	-28.070	µg/L	-28.070	ppb	12:47:22
1	V 292.402†	2658.5	2845.4	33.809	µg/L	33.809	ppb	12:47:22
1	Zn 213.857†	3561.4	3020.8	76.370	µg/L	76.370	ppb	12:47:22
2	Sc RADIAL	114182.8	114182.8	100	%			12:46:19
2	Al 396.153Radial†	37372.6	37070.2	19394	µg/L	19394	ppb	12:46:19
2	Ca 317.933Radial†	14752.0	14258.4	5752.8	µg/L	5752.8	ppb	12:46:39
2	Fe 238.204 Radial†	3897.0	3864.9	24840	µg/L	24840	ppb	12:46:39
2	K 766.490 Radial†	5141.2	4355.3	2314.3	µg/L	2314.3	ppb	12:46:19
2	Mg 279.077 IEC†	589.1	572.9	3539.1	µg/L	3539.1	ppb	12:46:39
2	Na 589.592 Radial†	2107.0	2776.3	714.47	µg/L	714.47	ppb	12:46:19
2	Sr 421.552†	8857.8	8841.6	46.298	µg/L	46.298	ppb	12:46:19
2	Sc 361.383	2043655.2	2043655.2	98.692	%			12:47:49
2	Y 371.029	1298251.6	1298251.6	99.196	%			12:47:49
2	Ag 328.068†	-57.2	-264.3	-0.2387	µg/L	-0.2387	ppb	12:47:55
2	As 188.979†	8.1	5.7	7.6458	µg/L	7.6458	ppb	12:48:15
2	B 249.677†	547.6	359.9	7.5071	µg/L	7.5071	ppb	12:47:55
2	Ba 233.527†	8395.9	8565.9	217.37	µg/L	217.37	ppb	12:47:55
2	Be 313.107†	7069.4	3398.3	1.8418	µg/L	1.8418	ppb	12:47:55
2	Cd 226.502†	12.1	110.4	0.9348	µg/L	0.9348	ppb	12:48:15
2	Co 228.616†	100.7	166.0	6.4725	µg/L	6.4725	ppb	12:48:15
2	Cr 267.716†	793.5	930.3	19.298	µg/L	19.298	ppb	12:47:55
2	Cu 324.752†	5452.1	1265.8	13.950	µg/L	13.950	ppb	12:47:55
2	Mn 257.610†	187171.0	189894.5	606.28	µg/L	606.28	ppb	12:47:49
2	Mo 202.031†	7.2	7.1	1.7962	µg/L	1.7962	ppb	12:48:15
2	Ni 231.604†	556.0	242.5	13.079	µg/L	13.079	ppb	12:48:15
2	P 214.914†	324.8	156.3	288.33	µg/L	288.33	ppb	12:48:15
2	Pb 220.353†	135.3	92.7	24.937	µg/L	24.937	ppb	12:48:15

2	S 181.975 Axial†	63.5	36.8	176.93 µg/L	176.93 ppb	12:48:15
2	Sb 206.836†	16.4	-1.3	0.6305 µg/L	0.6305 ppb	12:48:15
2	Se 196.026†	2.5	-13.4	-0.0891 µg/L	-0.0891 ppb	12:48:15
2	SiO2†	82251.4	80590.5	14764 µg/L	14764 ppb	12:47:55
2	Si 251.611†	91984.8	92830.0	6840.7 µg/L	6840.7 ppb	12:47:55
2	Sn 189.927†	-3.5	-25.4	-6.3641 µg/L	-6.3641 ppb	12:48:15
2	Ti 334.940†	294625.8	297532.2	676.49 µg/L	676.49 ppb	12:47:49
2	Tl 190.801†	-24.3	-7.7	-5.6924 µg/L	-5.6924 ppb	12:48:15
2	U 409.014†	444.8	-196.9	-22.508 µg/L	-22.508 ppb	12:47:55
2	V 292.402†	2672.6	2871.3	34.122 µg/L	34.122 ppb	12:47:55
2	Zn 213.857†	3532.6	3007.2	75.983 µg/L	75.983 ppb	12:47:55
3	Sc RADIAL	114556.6	114556.6	101 %		12:46:45
3	Al 396.153Radial†	37089.7	36668.2	19184 µg/L	19184 ppb	12:46:45
3	Ca 317.933Radial†	14702.7	14161.7	5713.7 µg/L	5713.7 ppb	12:47:05
3	Fe 238.204 Radial†	3901.5	3856.7	24787 µg/L	24787 ppb	12:47:05
3	K 766.490 Radial†	5118.7	4316.3	2293.5 µg/L	2293.5 ppb	12:46:45
3	Mg 279.077 IEC†	578.5	560.5	3462.0 µg/L	3462.0 ppb	12:47:05
3	Na 589.592 Radial†	2082.4	2745.1	706.43 µg/L	706.43 ppb	12:46:45
3	Sr 421.552†	8717.1	8673.2	45.417 µg/L	45.417 ppb	12:46:45
3	Sc 361.383	2047664.8	2047664.8	98.886 %		12:48:22
3	Y 371.029	1299714.0	1299714.0	99.308 %		12:48:22
3	Ag 328.068†	-74.0	-281.2	-0.4014 µg/L	-0.4014 ppb	12:48:27
3	As 188.979†	4.8	2.4	1.7573 µg/L	1.7573 ppb	12:48:48
3	B 249.677†	505.6	316.3	5.6704 µg/L	5.6704 ppb	12:48:27
3	Ba 233.527†	8294.4	8446.6	214.35 µg/L	214.35 ppb	12:48:27
3	Be 313.107†	6835.8	3148.0	1.6864 µg/L	1.6864 ppb	12:48:27
3	Cd 226.502†	-3.1	95.1	0.5312 µg/L	0.5312 ppb	12:48:48
3	Co 228.616†	103.8	168.9	6.6035 µg/L	6.6035 ppb	12:48:48
3	Cr 267.716†	756.4	891.1	18.488 µg/L	18.488 ppb	12:48:27
3	Cu 324.752†	5441.4	1244.2	13.792 µg/L	13.792 ppb	12:48:27
3	Mn 257.610†	188593.0	190961.2	609.66 µg/L	609.66 ppb	12:48:22
3	Mo 202.031†	3.8	3.7	1.3970 µg/L	1.3970 ppb	12:48:48
3	Ni 231.604†	547.0	232.3	12.529 µg/L	12.529 ppb	12:48:48
3	P 214.914†	316.8	147.7	271.00 µg/L	271.00 ppb	12:48:48
3	Pb 220.353†	136.6	93.7	25.187 µg/L	25.187 ppb	12:48:48
3	S 181.975 Axial†	63.8	37.0	177.77 µg/L	177.77 ppb	12:48:48
3	Sb 206.836†	21.5	3.8	5.6067 µg/L	5.6067 ppb	12:48:48
3	Se 196.026†	-3.5	-19.5	-7.7305 µg/L	-7.7305 ppb	12:48:48
3	SiO2†	81536.1	79704.0	14602 µg/L	14602 ppb	12:48:27
3	Si 251.611†	91147.3	91800.5	6764.6 µg/L	6764.6 ppb	12:48:27
3	Sn 189.927†	-11.7	-33.7	-10.558 µg/L	-10.558 ppb	12:48:48
3	Ti 334.940†	296750.3	299096.1	680.05 µg/L	680.05 ppb	12:48:22
3	Tl 190.801†	-19.7	-3.0	1.4396 µg/L	1.4396 ppb	12:48:48
3	U 409.014†	282.0	-362.4	-37.634 µg/L	-37.634 ppb	12:48:27
3	V 292.402†	2628.3	2821.2	33.531 µg/L	33.531 ppb	12:48:27
3	Zn 213.857†	3519.6	2987.0	75.464 µg/L	75.464 ppb	12:48:27

Mean Data: 1201978585|925474|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2047936.0	98.899	%	0.2136				0.22%
Sc RADIAL	114458.1	101	%	0.2				0.21%
Y 371.029	1300278.7	99.351	%	0.1804				0.18%
Ag 328.068†	-269.3	-0.2940	µg/L	0.09300	-0.2940	ppb	0.09300	31.63%
Al 396.153Radial†	36716.1	19209	µg/L	174.1	19209	ppb	174.1	0.91%
As 188.979†	2.5	1.8929	µg/L	5.68631	1.8929	ppb	5.68631	300.40%
B 249.677†	336.5	6.5436	µg/L	0.92167	6.5436	ppb	0.92167	14.08%
Ba 233.527†	8503.7	215.79	µg/L	1.518	215.79	ppb	1.518	0.70%
Be 313.107†	3366.7	1.8215	µg/L	0.12628	1.8215	ppb	0.12628	6.93%
Ca 317.933Radial†	14176.0	5719.5	µg/L	30.76	5719.5	ppb	30.76	0.54%
Cd 226.502†	101.4	0.7033	µg/L	0.20827	0.7033	ppb	0.20827	29.61%
Co 228.616†	170.1	6.6647	µg/L	0.22905	6.6647	ppb	0.22905	3.44%
Cr 267.716†	907.3	18.823	µg/L	0.4227	18.823	ppb	0.4227	2.25%
Cu 324.752†	1254.4	13.852	µg/L	0.0856	13.852	ppb	0.0856	0.62%
Fe 238.204 Radial†	3850.1	24745	µg/L	121.5	24745	ppb	121.5	0.49%
K 766.490 Radial†	4280.1	2274.3	µg/L	52.31	2274.3	ppb	52.31	2.30%
Mg 279.077 IEC†	564.8	3488.5	µg/L	43.80	3488.5	ppb	43.80	1.26%
Mn 257.610†	190419.1	607.93	µg/L	1.692	607.93	ppb	1.692	0.28%
Mo 202.031†	7.6	1.8457	µg/L	0.47548	1.8457	ppb	0.47548	25.76%
Na 589.592 Radial†	2733.5	703.44	µg/L	12.792	703.44	ppb	12.792	1.82%

Ni 231.604†	235.3	12.692	µg/L	0.3362	12.692	ppb	0.3362	2.65%
P 214.914†	149.2	274.16	µg/L	12.881	274.16	ppb	12.881	4.70%
Pb 220.353†	95.4	25.608	µg/L	0.9530	25.608	ppb	0.9530	3.72%
S 181.975 Axial†	37.1	178.71	µg/L	2.398	178.71	ppb	2.398	1.34%
Sb 206.836†	0.2	2.1190	µg/L	3.03121	2.1190	ppb	3.03121	143.05%
Se 196.026†	-19.1	-7.3547	µg/L	7.08516	-7.3547	ppb	7.08516	96.34%
SiO2†	80164.5	14686	µg/L	81.4	14686	ppb	81.4	0.55%
Si 251.611†	92327.0	6803.5	µg/L	38.07	6803.5	ppb	38.07	0.56%
Sn 189.927†	-28.0	-7.7105	µg/L	2.46710	-7.7105	ppb	2.46710	32.00%
Sr 421.552†	8711.7	45.618	µg/L	0.6049	45.618	ppb	0.6049	1.33%
Ti 334.940†	298475.5	678.64	µg/L	1.890	678.64	ppb	1.890	0.28%
Tl 190.801†	-3.5	0.6865	µg/L	6.03761	0.6865	ppb	6.03761	879.53%
U 409.014†	-272.5	-29.404	µg/L	7.6508	-29.404	ppb	7.6508	26.02%
V 292.402†	2846.0	33.821	µg/L	0.2960	33.821	ppb	0.2960	0.88%
Zn 213.857†	3005.0	75.939	µg/L	0.4544	75.939	ppb	0.4544	0.60%

Sequence No.: 76
Sample ID: 241539002|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 358
Date Collected: 12/7/2009 12:48:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539002|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116403.6	116403.6	102	%			12:49:30
1	Al 396.153Radial†	106692.8	104037.8	54430	µg/L	54430	ppb	12:49:30
1	Ca 317.933Radial†	88838.9	86309.3	34823	µg/L	34823	ppb	12:49:30
1	Fe 238.204 Radial†	29613.8	28898.2	185730	µg/L	185730	ppb	12:49:50
1	K 766.490 Radial†	16655.7	15499.3	8235.8	µg/L	8235.8	ppb	12:49:30
1	Mg 279.077 IEC†	2143.6	2079.4	12705	µg/L	12705	ppb	12:49:50
1	Na 589.592 Radial†	6050.9	6586.8	1695.1	µg/L	1695.1	ppb	12:49:50
1	Sr 421.552†	43357.6	42355.5	221.79	µg/L	221.79	ppb	12:49:30
1	Sc 361.383	2030058.0	2030058.0	98.035	%			12:50:55
1	Y 371.029	1331266.5	1331266.5	101.72	%			12:50:55
1	Ag 328.068†	-1404.0	-1638.5	1.2745	µg/L	1.2745	ppb	12:51:01
1	As 188.979†	12.9	10.7	-3.9483	µg/L	-3.9483	ppb	12:51:21
1	B 249.677†	2431.1	2284.8	38.852	µg/L	38.852	ppb	12:51:01
1	Ba 233.527†	29133.9	29776.5	755.88	µg/L	755.88	ppb	12:51:01
1	Be 313.107†	14555.2	11082.1	5.5695	µg/L	5.5695	ppb	12:51:01
1	Cd 226.502†	598.3	708.4	4.0566	µg/L	4.0566	ppb	12:51:01
1	Co 228.616†	1364.4	1455.7	62.078	µg/L	62.078	ppb	12:51:21
1	Cr 267.716†	6595.2	6853.6	142.17	µg/L	142.17	ppb	12:51:01
1	Cu 324.752†	13211.1	9217.3	102.63	µg/L	102.63	ppb	12:51:01
1	Mn 257.610†	1767109.1	1802763.3	5749.4	µg/L	5749.4	ppb	12:50:55
1	Mo 202.031†	47.3	48.1	12.858	µg/L	12.858	ppb	12:51:21
1	Ni 231.604†	2171.8	1894.4	102.19	µg/L	102.19	ppb	12:51:21
1	P 214.914†	16732.2	16894.8	33491	µg/L	33491	ppb	12:51:01
1	Pb 220.353†	373.9	336.9	87.972	µg/L	87.972	ppb	12:51:21
1	S 181.975 Axial†	88.6	62.8	279.81	µg/L	279.81	ppb	12:51:21
1	Sb 206.836†	28.7	11.4	19.869	µg/L	19.869	ppb	12:51:21
1	Se 196.026†	-78.6	-96.2	8.7561	µg/L	8.7561	ppb	12:51:21
1	SiO2†	328411.1	332241.2	60868	µg/L	60868	ppb	12:50:55
1	Si 251.611†	373947.4	381067.1	28060	µg/L	28060	ppb	12:50:55
1	Sn 189.927†	-119.3	-143.5	-29.573	µg/L	-29.573	ppb	12:51:21
1	Ti 334.940†	1460507.1	1488776.1	3384.7	µg/L	3384.7	ppb	12:50:55
1	Tl 190.801†	-41.2	-25.2	1.7879	µg/L	1.7879	ppb	12:51:21
1	U 409.014†	510.9	-126.4	-45.413	µg/L	-45.413	ppb	12:50:55
1	V 292.402†	20496.7	21070.7	250.88	µg/L	250.88	ppb	12:51:01
1	Zn 213.857†	14142.9	13854.1	342.30	µg/L	342.30	ppb	12:51:01
2	Sc RADIAL	114107.0	114107.0	100	%			12:49:56
2	Al 396.153Radial†	107199.0	106638.4	55790	µg/L	55790	ppb	12:49:56
2	Ca 317.933Radial†	88218.1	87436.7	35278	µg/L	35278	ppb	12:49:56
2	Fe 238.204 Radial†	29795.8	29661.4	190630	µg/L	190630	ppb	12:50:16
2	K 766.490 Radial†	16620.9	15791.9	8391.3	µg/L	8391.3	ppb	12:49:56
2	Mg 279.077 IEC†	2173.6	2151.4	13147	µg/L	13147	ppb	12:50:16
2	Na 589.592 Radial†	6078.4	6733.1	1732.7	µg/L	1732.7	ppb	12:50:16
2	Sr 421.552†	43464.9	43314.3	226.81	µg/L	226.81	ppb	12:49:56
2	Sc 361.383	2023669.4	2023669.4	97.727	%			12:51:29
2	Y 371.029	1328512.3	1328512.3	101.51	%			12:51:29
2	Ag 328.068†	-1431.7	-1671.4	1.3668	µg/L	1.3668	ppb	12:51:35
2	As 188.979†	11.7	9.5	-6.9175	µg/L	-6.9175	ppb	12:51:55
2	B 249.677†	2421.9	2283.3	37.245	µg/L	37.245	ppb	12:51:35
2	Ba 233.527†	29296.3	30036.6	762.48	µg/L	762.48	ppb	12:51:35
2	Be 313.107†	14561.5	11135.4	5.6018	µg/L	5.6018	ppb	12:51:35
2	Cd 226.502†	605.4	717.6	3.9120	µg/L	3.9120	ppb	12:51:35
2	Co 228.616†	1354.0	1449.4	61.780	µg/L	61.780	ppb	12:51:55
2	Cr 267.716†	6623.0	6903.2	143.20	µg/L	143.20	ppb	12:51:35
2	Cu 324.752†	13303.6	9354.5	104.61	µg/L	104.61	ppb	12:51:35
2	Mn 257.610†	1761836.1	1803058.1	5750.9	µg/L	5750.9	ppb	12:51:29
2	Mo 202.031†	52.6	53.7	13.695	µg/L	13.695	ppb	12:51:55
2	Ni 231.604†	2181.1	1910.9	103.08	µg/L	103.08	ppb	12:51:55
2	P 214.914†	16825.9	17044.5	33784	µg/L	33784	ppb	12:51:35
2	Pb 220.353†	377.0	341.3	89.155	µg/L	89.155	ppb	12:51:55

2	S 181.975 Axial†	87.6	62.1	275.81 µg/L	275.81 ppb	12:51:55
2	Sb 206.836†	25.3	8.0	16.486 µg/L	16.486 ppb	12:51:55
2	Se 196.026†	-81.8	-99.7	7.6770 µg/L	7.6770 ppb	12:51:55
2	SiO2†	327637.1	332506.9	60916 µg/L	60916 ppb	12:51:29
2	Si 251.611†	372930.6	381230.9	28072 µg/L	28072 ppb	12:51:29
2	Sn 189.927†	-107.9	-132.2	-22.894 µg/L	-22.894 ppb	12:51:55
2	Ti 334.940†	1456575.7	1489456.5	3386.2 µg/L	3386.2 ppb	12:51:29
2	Tl 190.801†	-46.5	-30.7	-6.5979 µg/L	-6.5979 ppb	12:51:55
2	U 409.014†	444.1	-193.2	-52.422 µg/L	-52.422 ppb	12:51:29
2	V 292.402†	20515.1	21155.6	252.22 µg/L	252.22 ppb	12:51:35
2	Zn 213.857†	14187.6	13945.3	344.15 µg/L	344.15 ppb	12:51:35
3	Sc RADIAL	115078.5	115078.5	101 %		12:50:22
3	Al 396.153Radial†	108657.8	107177.7	56072 µg/L	56072 ppb	12:50:22
3	Ca 317.933Radial†	89430.4	87892.1	35461 µg/L	35461 ppb	12:50:22
3	Fe 238.204 Radial†	29772.9	29388.2	188880 µg/L	188880 ppb	12:50:42
3	K 766.490 Radial†	16812.7	15841.6	8417.7 µg/L	8417.7 ppb	12:50:22
3	Mg 279.077 IEC†	2165.1	2124.7	12983 µg/L	12983 ppb	12:50:42
3	Na 589.592 Radial†	6117.0	6720.1	1729.4 µg/L	1729.4 ppb	12:50:42
3	Sr 421.552†	43999.2	43476.5	227.66 µg/L	227.66 ppb	12:50:22
3	Sc 361.383	2030583.7	2030583.7	98.061 %		12:52:03
3	Y 371.029	1333669.0	1333669.0	101.90 %		12:52:03
3	Ag 328.068†	-1436.6	-1671.3	1.1981 µg/L	1.1981 ppb	12:52:09
3	As 188.979†	7.6	5.3	-14.122 µg/L	-14.122 ppb	12:52:29
3	B 249.677†	2387.7	2240.0	35.954 µg/L	35.954 ppb	12:52:09
3	Ba 233.527†	28898.9	29529.2	749.60 µg/L	749.60 ppb	12:52:09
3	Be 313.107†	14468.4	10989.7	5.5133 µg/L	5.5133 ppb	12:52:09
3	Cd 226.502†	549.9	658.9	2.5237 µg/L	2.5237 ppb	12:52:09
3	Co 228.616†	1343.2	1433.8	61.044 µg/L	61.044 ppb	12:52:29
3	Cr 267.716†	6569.1	6825.3	141.58 µg/L	141.58 ppb	12:52:09
3	Cu 324.752†	13158.2	9159.9	102.91 µg/L	102.91 ppb	12:52:09
3	Mn 257.610†	1765166.1	1800315.2	5742.0 µg/L	5742.0 ppb	12:52:03
3	Mo 202.031†	52.3	53.2	13.569 µg/L	13.569 ppb	12:52:29
3	Ni 231.604†	2163.6	1885.4	101.71 µg/L	101.71 ppb	12:52:29
3	P 214.914†	16509.7	16663.4	33027 µg/L	33027 ppb	12:52:09
3	Pb 220.353†	380.6	343.7	89.810 µg/L	89.810 ppb	12:52:29
3	S 181.975 Axial†	91.9	66.1	295.77 µg/L	295.77 ppb	12:52:29
3	Sb 206.836†	30.6	13.3	21.645 µg/L	21.645 ppb	12:52:29
3	Se 196.026†	-79.1	-96.6	10.354 µg/L	10.354 ppb	12:52:29
3	SiO2†	328192.6	331931.7	60811 µg/L	60811 ppb	12:52:03
3	Si 251.611†	373778.9	380796.5	28040 µg/L	28040 ppb	12:52:03
3	Sn 189.927†	-113.8	-137.9	-26.041 µg/L	-26.041 ppb	12:52:29
3	Ti 334.940†	1460075.3	1487950.1	3382.7 µg/L	3382.7 ppb	12:52:03
3	Tl 190.801†	-36.3	-20.1	9.2138 µg/L	9.2138 ppb	12:52:29
3	U 409.014†	403.7	-235.9	-55.998 µg/L	-55.998 ppb	12:52:03
3	V 292.402†	20191.7	20754.2	247.58 µg/L	247.58 ppb	12:52:09
3	Zn 213.857†	13991.9	13696.3	337.83 µg/L	337.83 ppb	12:52:09

Mean Data: 241539002|925474|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2028103.7	97.941	%	0.1859				0.19%
Sc RADIAL	115196.3	101	%	1.0				1.00%
Y 371.029	1331149.3	101.71	%	0.197				0.19%
Ag 328.068†	-1660.4	1.2798	µg/L	0.08449	1.2798	ppb	0.08449	6.60%
Al 396.153Radial†	105951.3	55431	µg/L	878.4	55431	ppb	878.4	1.58%
As 188.979†	8.5	-8.3292	µg/L	5.23153	-8.3292	ppb	5.23153	62.81%
B 249.677†	2269.4	37.350	µg/L	1.4520	37.350	ppb	1.4520	3.89%
Ba 233.527†	29780.7	755.99	µg/L	6.441	755.99	ppb	6.441	0.85%
Be 313.107†	11069.1	5.5615	µg/L	0.04477	5.5615	ppb	0.04477	0.80%
Ca 317.933Radial†	87212.7	35187	µg/L	328.7	35187	ppb	328.7	0.93%
Cd 226.502†	695.0	3.4974	µg/L	0.84641	3.4974	ppb	0.84641	24.20%
Co 228.616†	1446.3	61.634	µg/L	0.5324	61.634	ppb	0.5324	0.86%
Cr 267.716†	6860.7	142.32	µg/L	0.820	142.32	ppb	0.820	0.58%
Cu 324.752†	9243.9	103.38	µg/L	1.074	103.38	ppb	1.074	1.04%
Fe 238.204 Radial†	29315.9	188410	µg/L	2485.3	188410	ppb	2485.3	1.32%
K 766.490 Radial†	15710.9	8348.3	µg/L	98.28	8348.3	ppb	98.28	1.18%
Mg 279.077 IEC†	2118.5	12945	µg/L	223.6	12945	ppb	223.6	1.73%
Mn 257.610†	1802045.5	5747.4	µg/L	4.77	5747.4	ppb	4.77	0.08%
Mo 202.031†	51.6	13.374	µg/L	0.4512	13.374	ppb	0.4512	3.37%
Na 589.592 Radial†	6680.0	1719.0	µg/L	20.84	1719.0	ppb	20.84	1.21%

Ni 231.604†	1896.9	102.33	µg/L	0.697	102.33	ppb	0.697	0.68%
P 214.914†	16867.6	33434	µg/L	382.2	33434	ppb	382.2	1.14%
Pb 220.353†	340.6	88.979	µg/L	0.9316	88.979	ppb	0.9316	1.05%
S 181.975 Axial†	63.7	283.80	µg/L	10.562	283.80	ppb	10.562	3.72%
Sb 206.836†	10.9	19.333	µg/L	2.6208	19.333	ppb	2.6208	13.56%
Se 196.026†	-97.5	8.9291	µg/L	1.34686	8.9291	ppb	1.34686	15.08%
SiO2†	332226.6	60865	µg/L	52.7	60865	ppb	52.7	0.09%
Si 251.611†	381031.5	28058	µg/L	16.1	28058	ppb	16.1	0.06%
Sn 189.927†	-137.9	-26.169	µg/L	3.3417	-26.169	ppb	3.3417	12.77%
Sr 421.552†	43048.8	225.42	µg/L	3.172	225.42	ppb	3.172	1.41%
Ti 334.940†	1488727.6	3384.5	µg/L	1.72	3384.5	ppb	1.72	0.05%
Tl 190.801†	-25.3	1.4679	µg/L	7.91069	1.4679	ppb	7.91069	538.90%
U 409.014†	-185.2	-51.278	µg/L	5.3847	-51.278	ppb	5.3847	10.50%
V 292.402†	20993.5	250.23	µg/L	2.387	250.23	ppb	2.387	0.95%
Zn 213.857†	13831.9	341.43	µg/L	3.251	341.43	ppb	3.251	0.95%

Sequence No.: 77
Sample ID: 241539003|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 359
Date Collected: 12/7/2009 12:52:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539003|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114062.9	114062.9	100	%			12:53:11
1	Al 396.153Radial†	129678.7	129076.9	67529	µg/L	67529	ppb	12:53:11
1	Ca 317.933Radial†	247576.7	246244.9	99351	µg/L	99351	ppb	12:53:11
1	Fe 238.204 Radial†	19486.7	19401.6	124690	µg/L	124690	ppb	12:53:31
1	K 766.490 Radial†	17792.2	16965.3	9014.9	µg/L	9014.9	ppb	12:53:11
1	Mg 279.077 IEC†	2407.7	2385.5	14705	µg/L	14705	ppb	12:53:31
1	Na 589.592 Radial†	3029.3	3697.4	951.50	µg/L	951.50	ppb	12:53:31
1	Sr 421.552†	101869.7	101521.7	531.61	µg/L	531.61	ppb	12:53:11
1	Sc 361.383	2030062.6	2030062.6	98.036	%			12:54:36
1	Y 371.029	1329597.1	1329597.1	101.59	%			12:54:36
1	Ag 328.068†	-1051.9	-1279.3	-0.7167	µg/L	-0.7167	ppb	12:54:41
1	As 188.979†	19.9	17.9	9.1590	µg/L	9.1590	ppb	12:55:02
1	B 249.677†	1670.7	1509.1	25.028	µg/L	25.028	ppb	12:54:41
1	Ba 233.527†	32297.6	33003.5	837.61	µg/L	837.61	ppb	12:54:41
1	Be 313.107†	16574.5	13141.8	6.6760	µg/L	6.6760	ppb	12:54:41
1	Cd 226.502†	396.7	502.8	3.3777	µg/L	3.3777	ppb	12:55:02
1	Co 228.616†	813.0	893.2	34.452	µg/L	34.452	ppb	12:55:02
1	Cr 267.716†	3518.5	3715.3	77.165	µg/L	77.165	ppb	12:54:41
1	Cu 324.752†	9898.4	5838.2	66.518	µg/L	66.518	ppb	12:54:41
1	Mn 257.610†	1131140.3	1154047.7	3681.2	µg/L	3681.2	ppb	12:54:36
1	Mo 202.031†	47.6	48.4	10.496	µg/L	10.496	ppb	12:55:02
1	Ni 231.604†	1295.2	1000.2	53.956	µg/L	53.956	ppb	12:55:02
1	P 214.914†	2748.0	2630.3	5117.6	µg/L	5117.6	ppb	12:55:02
1	Pb 220.353†	412.8	376.7	100.04	µg/L	100.04	ppb	12:55:02
1	S 181.975 Axial†	125.9	100.9	476.23	µg/L	476.23	ppb	12:55:02
1	Sb 206.836†	35.4	18.2	22.390	µg/L	22.390	ppb	12:55:02
1	Se 196.026†	-70.9	-88.3	-15.873	µg/L	-15.873	ppb	12:55:02
1	SiO2†	293211.3	296335.4	54290	µg/L	54290	ppb	12:54:36
1	Si 251.611†	334247.7	340571.1	25050	µg/L	25050	ppb	12:54:36
1	Sn 189.927†	-163.4	-188.5	-46.434	µg/L	-46.434	ppb	12:55:02
1	Ti 334.940†	1648729.9	1680766.9	3817.8	µg/L	3817.8	ppb	12:54:36
1	Tl 190.801†	-11.3	5.4	30.791	µg/L	30.791	ppb	12:55:02
1	U 409.014†	37.3	-609.5	-76.666	µg/L	-76.666	ppb	12:54:36
1	V 292.402†	14580.3	15035.7	178.32	µg/L	178.32	ppb	12:54:41
1	Zn 213.857†	14361.5	14076.9	354.88	µg/L	354.88	ppb	12:54:41
2	Sc RADIAL	115262.7	115262.7	101	%			12:53:37
2	Al 396.153Radial†	131671.2	129696.7	67854	µg/L	67854	ppb	12:53:37
2	Ca 317.933Radial†	250606.3	246664.5	99521	µg/L	99521	ppb	12:53:37
2	Fe 238.204 Radial†	19516.5	19228.9	123580	µg/L	123580	ppb	12:53:57
2	K 766.490 Radial†	18012.1	16997.6	9032.0	µg/L	9032.0	ppb	12:53:37
2	Mg 279.077 IEC†	2405.8	2358.7	14540	µg/L	14540	ppb	12:53:57
2	Na 589.592 Radial†	3064.5	3700.7	952.35	µg/L	952.35	ppb	12:53:57
2	Sr 421.552†	103381.2	101955.5	533.88	µg/L	533.88	ppb	12:53:37
2	Sc 361.383	2022310.5	2022310.5	97.661	%			12:55:10
2	Y 371.029	1325148.4	1325148.4	101.25	%			12:55:10
2	Ag 328.068†	-1058.2	-1289.9	-0.9065	µg/L	-0.9065	ppb	12:55:15
2	As 188.979†	28.1	26.4	24.580	µg/L	24.580	ppb	12:55:36
2	B 249.677†	1652.4	1497.0	24.859	µg/L	24.859	ppb	12:55:15
2	Ba 233.527†	32021.2	32846.8	833.63	µg/L	833.63	ppb	12:55:15
2	Be 313.107†	16526.8	13157.8	6.6830	µg/L	6.6830	ppb	12:55:15
2	Cd 226.502†	392.2	499.8	3.3861	µg/L	3.3861	ppb	12:55:36
2	Co 228.616†	819.5	903.1	34.906	µg/L	34.906	ppb	12:55:36
2	Cr 267.716†	3495.5	3705.4	76.961	µg/L	76.961	ppb	12:55:15
2	Cu 324.752†	9763.9	5739.2	65.606	µg/L	65.606	ppb	12:55:15
2	Mn 257.610†	1129197.4	1156481.1	3688.8	µg/L	3688.8	ppb	12:55:10
2	Mo 202.031†	48.7	49.8	10.609	µg/L	10.609	ppb	12:55:36
2	Ni 231.604†	1292.0	1002.0	54.054	µg/L	54.054	ppb	12:55:36
2	P 214.914†	2738.4	2631.3	5121.0	µg/L	5121.0	ppb	12:55:36
2	Pb 220.353†	404.4	369.6	98.289	µg/L	98.289	ppb	12:55:36

2	S 181.975 Axial†	119.4	94.8	446.21 µg/L	446.21 ppb	12:55:36
2	Sb 206.836†	33.4	16.3	20.543 µg/L	20.543 ppb	12:55:36
2	Se 196.026†	-64.0	-81.5	-8.0174 µg/L	-8.0174 ppb	12:55:36
2	SiO2†	293034.5	297300.9	54466 µg/L	54466 ppb	12:55:10
2	Si 251.611†	333587.3	341201.8	25097 µg/L	25097 ppb	12:55:10
2	Sn 189.927†	-162.1	-187.8	-46.266 µg/L	-46.266 ppb	12:55:36
2	Ti 334.940†	1645705.5	1684116.8	3825.4 µg/L	3825.4 ppb	12:55:10
2	Tl 190.801†	-20.5	-4.1	16.545 µg/L	16.545 ppb	12:55:36
2	U 409.014†	50.9	-595.4	-75.169 µg/L	-75.169 ppb	12:55:10
2	V 292.402†	14461.3	14970.9	177.50 µg/L	177.50 ppb	12:55:15
2	Zn 213.857†	14244.3	14013.2	353.33 µg/L	353.33 ppb	12:55:15
3	Sc RADIAL	114745.6	114745.6	101 %		12:54:03
3	Al 396.153Radial†	133016.8	131614.4	68857 µg/L	68857 ppb	12:54:03
3	Ca 317.933Radial†	252575.9	249728.7	100760 µg/L	100760 ppb	12:54:03
3	Fe 238.204 Radial†	19598.3	19396.6	124660 µg/L	124660 ppb	12:54:23
3	K 766.490 Radial†	18149.9	17214.1	9147.0 µg/L	9147.0 ppb	12:54:03
3	Mg 279.077 IEC†	2414.3	2377.8	14657 µg/L	14657 ppb	12:54:23
3	Na 589.592 Radial†	3061.0	3710.9	954.98 µg/L	954.98 ppb	12:54:23
3	Sr 421.552†	104363.5	103387.7	541.38 µg/L	541.38 ppb	12:54:03
3	Sc 361.383	2013700.4	2013700.4	97.246 %		12:55:44
3	Y 371.029	1318379.5	1318379.5	100.73 %		12:55:44
3	Ag 328.068†	-1104.8	-1342.5	-1.2975 µg/L	-1.2975 ppb	12:55:49
3	As 188.979†	24.7	23.0	18.177 µg/L	18.177 ppb	12:56:10
3	B 249.677†	1622.7	1473.7	23.528 µg/L	23.528 ppb	12:55:49
3	Ba 233.527†	31902.9	32865.3	834.10 µg/L	834.10 ppb	12:55:49
3	Be 313.107†	16427.3	13127.8	6.6670 µg/L	6.6670 ppb	12:55:49
3	Cd 226.502†	385.2	494.3	3.1597 µg/L	3.1597 ppb	12:56:10
3	Co 228.616†	819.8	907.0	35.105 µg/L	35.105 ppb	12:56:10
3	Cr 267.716†	3506.4	3732.0	77.510 µg/L	77.510 ppb	12:55:49
3	Cu 324.752†	9769.0	5787.2	66.164 µg/L	66.164 ppb	12:55:49
3	Mn 257.610†	1122010.1	1154034.1	3681.2 µg/L	3681.2 ppb	12:55:44
3	Mo 202.031†	50.6	51.9	10.901 µg/L	10.901 ppb	12:56:10
3	Ni 231.604†	1297.9	1013.7	54.684 µg/L	54.684 ppb	12:56:10
3	P 214.914†	2749.8	2654.9	5167.3 µg/L	5167.3 ppb	12:56:10
3	Pb 220.353†	416.4	383.7	101.95 µg/L	101.95 ppb	12:56:10
3	S 181.975 Axial†	119.8	95.7	450.64 µg/L	450.64 ppb	12:56:10
3	Sb 206.836†	36.4	19.5	23.557 µg/L	23.557 ppb	12:56:10
3	Se 196.026†	-60.2	-77.9	-2.6136 µg/L	-2.6136 ppb	12:56:10
3	SiO2†	291216.4	296714.2	54359 µg/L	54359 ppb	12:55:44
3	Si 251.611†	331618.3	340637.6	25055 µg/L	25055 ppb	12:55:44
3	Sn 189.927†	-154.7	-181.0	-42.353 µg/L	-42.353 ppb	12:56:10
3	Ti 334.940†	1635889.7	1681228.2	3818.7 µg/L	3818.7 ppb	12:55:44
3	Tl 190.801†	-22.3	-6.0	13.394 µg/L	13.394 ppb	12:56:10
3	U 409.014†	30.4	-616.3	-77.251 µg/L	-77.251 ppb	12:55:44
3	V 292.402†	14459.7	15032.6	178.28 µg/L	178.28 ppb	12:55:49
3	Zn 213.857†	14219.0	14049.5	354.16 µg/L	354.16 ppb	12:55:49

Mean Data: 241539003|925474|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2022024.5	97.648	%	0.3953				0.40%
Sc RADIAL	114690.4	101	%	0.5				0.52%
Y 371.029	1324375.0	101.19	%	0.432				0.43%
Ag 328.068†	-1303.9	-0.9736	µg/L	0.29616	-0.9736	ppb	0.29616	30.42%
Al 396.153Radial†	130129.3	68080	µg/L	692.1	68080	ppb	692.1	1.02%
As 188.979†	22.4	17.305	µg/L	7.7472	17.305	ppb	7.7472	44.77%
B 249.677†	1493.3	24.472	µg/L	0.8217	24.472	ppb	0.8217	3.36%
Ba 233.527†	32905.2	835.11	µg/L	2.173	835.11	ppb	2.173	0.26%
Be 313.107†	13142.5	6.6754	µg/L	0.00803	6.6754	ppb	0.00803	0.12%
Ca 317.933Radial†	247546.0	99876	µg/L	767.3	99876	ppb	767.3	0.77%
Cd 226.502†	499.0	3.3078	µg/L	0.12833	3.3078	ppb	0.12833	3.88%
Co 228.616†	901.1	34.821	µg/L	0.3345	34.821	ppb	0.3345	0.96%
Cr 267.716†	3717.5	77.212	µg/L	0.2779	77.212	ppb	0.2779	0.36%
Cu 324.752†	5788.2	66.096	µg/L	0.4597	66.096	ppb	0.4597	0.70%
Fe 238.204 Radial†	19342.3	124310	µg/L	631.8	124310	ppb	631.8	0.51%
K 766.490 Radial†	17059.0	9064.6	µg/L	71.88	9064.6	ppb	71.88	0.79%
Mg 279.077 IEC†	2374.0	14634	µg/L	85.2	14634	ppb	85.2	0.58%
Mn 257.610†	1154854.3	3683.7	µg/L	4.40	3683.7	ppb	4.40	0.12%
Mo 202.031†	50.0	10.669	µg/L	0.2094	10.669	ppb	0.2094	1.96%
Na 589.592 Radial†	3703.0	952.94	µg/L	1.812	952.94	ppb	1.812	0.19%

Ni 231.604†	1005.3	54.231	µg/L	0.3947	54.231	ppb	0.3947	0.73%
P 214.914†	2638.8	5135.3	µg/L	27.77	5135.3	ppb	27.77	0.54%
Pb 220.353†	376.7	100.10	µg/L	1.833	100.10	ppb	1.833	1.83%
S 181.975 Axial†	97.1	457.69	µg/L	16.205	457.69	ppb	16.205	3.54%
Sb 206.836†	18.0	22.163	µg/L	1.5202	22.163	ppb	1.5202	6.86%
Se 196.026†	-82.5	-8.8348	µg/L	6.66758	-8.8348	ppb	6.66758	75.47%
SiO2†	296783.5	54372	µg/L	89.1	54372	ppb	89.1	0.16%
Si 251.611†	340803.5	25067	µg/L	25.5	25067	ppb	25.5	0.10%
Sn 189.927†	-185.8	-45.018	µg/L	2.3091	-45.018	ppb	2.3091	5.13%
Sr 421.552†	102288.3	535.63	µg/L	5.113	535.63	ppb	5.113	0.95%
Ti 334.940†	1682037.3	3820.6	µg/L	4.14	3820.6	ppb	4.14	0.11%
Tl 190.801†	-1.6	20.243	µg/L	9.2693	20.243	ppb	9.2693	45.79%
U 409.014†	-607.1	-76.362	µg/L	1.0738	-76.362	ppb	1.0738	1.41%
V 292.402†	15013.1	178.03	µg/L	0.459	178.03	ppb	0.459	0.26%
Zn 213.857†	14046.5	354.12	µg/L	0.775	354.12	ppb	0.775	0.22%

Sequence No.: 78
Sample ID: 241539004|925474|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 360
Date Collected: 12/7/2009 12:56:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539004|925474|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116134.0	116134.0	102	%			12:56:52
1	Al 396.153Radial†	170252.8	166477.2	87096	µg/L	87096	ppb	12:56:52
1	Ca 317.933Radial†	120488.0	117481.3	47400	µg/L	47400	ppb	12:56:52
1	Fe 238.204 Radial†	18816.7	18399.7	118250	µg/L	118250	ppb	12:57:12
1	K 766.490 Radial†	20583.6	19380.8	10298	µg/L	10298	ppb	12:56:52
1	Mg 279.077 IEC†	2663.7	2593.2	16011	µg/L	16011	ppb	12:57:12
1	Na 589.592 Radial†	5463.0	6025.2	1550.5	µg/L	1550.5	ppb	12:57:12
1	Sr 421.552†	45872.9	44915.1	235.20	µg/L	235.20	ppb	12:56:52
1	Sc 361.383	2046878.9	2046878.9	98.848	%			12:58:17
1	Y 371.029	1343564.5	1343564.5	102.66	%			12:58:17
1	Ag 328.068†	-963.3	-1180.8	-0.4624	µg/L	-0.4624	ppb	12:58:23
1	As 188.979†	18.2	16.0	13.796	µg/L	13.796	ppb	12:58:43
1	B 249.677†	1699.0	1523.8	27.677	µg/L	27.677	ppb	12:58:23
1	Ba 233.527†	34286.9	34745.4	881.75	µg/L	881.75	ppb	12:58:23
1	Be 313.107†	18878.9	15334.2	8.1372	µg/L	8.1372	ppb	12:58:23
1	Cd 226.502†	349.7	451.9	2.5464	µg/L	2.5464	ppb	12:58:43
1	Co 228.616†	670.3	742.1	27.897	µg/L	27.897	ppb	12:58:43
1	Cr 267.716†	3264.7	3428.9	71.201	µg/L	71.201	ppb	12:58:23
1	Cu 324.752†	10984.4	6853.9	72.048	µg/L	72.048	ppb	12:58:23
1	Mn 257.610†	733245.8	742036.0	2371.8	µg/L	2371.8	ppb	12:58:17
1	Mo 202.031†	37.2	37.5	8.9838	µg/L	8.9838	ppb	12:58:43
1	Ni 231.604†	1279.0	972.9	52.484	µg/L	52.484	ppb	12:58:43
1	P 214.914†	1381.3	1224.7	2328.5	µg/L	2328.5	ppb	12:58:43
1	Pb 220.353†	459.2	420.1	112.87	µg/L	112.87	ppb	12:58:43
1	S 181.975 Axial†	181.4	156.0	748.13	µg/L	748.13	ppb	12:58:43
1	Sb 206.836†	34.1	16.6	24.584	µg/L	24.584	ppb	12:58:43
1	Se 196.026†	-51.8	-68.4	-3.1207	µg/L	-3.1207	ppb	12:58:43
1	SiO2†	349139.2	350458.0	64205	µg/L	64205	ppb	12:58:17
1	Si 251.611†	397701.9	401963.9	29600	µg/L	29600	ppb	12:58:17
1	Sn 189.927†	-107.2	-130.3	-30.477	µg/L	-30.477	ppb	12:58:43
1	Ti 334.940†	1531814.3	1548671.8	3520.2	µg/L	3520.2	ppb	12:58:17
1	Tl 190.801†	-21.8	-5.1	17.038	µg/L	17.038	ppb	12:58:43
1	U 409.014†	-121.2	-770.2	-91.389	µg/L	-91.389	ppb	12:58:17
1	V 292.402†	12913.1	13226.9	157.52	µg/L	157.52	ppb	12:58:23
1	Zn 213.857†	16540.0	16160.5	410.13	µg/L	410.13	ppb	12:58:23
2	Sc RADIAL	115367.6	115367.6	102	%			12:57:18
2	Al 396.153Radial†	171876.4	169183.4	88512	µg/L	88512	ppb	12:57:18
2	Ca 317.933Radial†	120958.2	118727.9	47903	µg/L	47903	ppb	12:57:18
2	Fe 238.204 Radial†	18848.5	18553.3	119240	µg/L	119240	ppb	12:57:38
2	K 766.490 Radial†	20783.1	19711.0	10474	µg/L	10474	ppb	12:57:18
2	Mg 279.077 IEC†	2678.4	2625.0	16208	µg/L	16208	ppb	12:57:38
2	Na 589.592 Radial†	5508.8	6105.8	1571.3	µg/L	1571.3	ppb	12:57:38
2	Sr 421.552†	46242.8	45577.7	238.67	µg/L	238.67	ppb	12:57:18
2	Sc 361.383	2055193.4	2055193.4	99.249	%			12:58:51
2	Y 371.029	1348583.8	1348583.8	103.04	%			12:58:51
2	Ag 328.068†	-938.5	-1151.9	-0.1282	µg/L	-0.1282	ppb	12:58:57
2	As 188.979†	18.7	16.4	14.391	µg/L	14.391	ppb	12:59:17
2	B 249.677†	1694.0	1511.9	26.858	µg/L	26.858	ppb	12:58:57
2	Ba 233.527†	34116.2	34433.1	873.83	µg/L	873.83	ppb	12:58:57
2	Be 313.107†	18896.0	15274.1	8.0996	µg/L	8.0996	ppb	12:58:57
2	Cd 226.502†	354.6	455.5	2.5637	µg/L	2.5637	ppb	12:59:17
2	Co 228.616†	661.8	730.8	27.360	µg/L	27.360	ppb	12:59:17
2	Cr 267.716†	3295.8	3446.9	71.570	µg/L	71.570	ppb	12:58:57
2	Cu 324.752†	11024.0	6848.8	72.226	µg/L	72.226	ppb	12:58:57
2	Mn 257.610†	736148.3	741959.4	2371.6	µg/L	2371.6	ppb	12:58:51
2	Mo 202.031†	39.8	40.0	9.3088	µg/L	9.3088	ppb	12:59:17
2	Ni 231.604†	1259.1	947.7	51.125	µg/L	51.125	ppb	12:59:17
2	P 214.914†	1363.4	1201.0	2280.6	µg/L	2280.6	ppb	12:59:17
2	Pb 220.353†	455.2	414.1	111.46	µg/L	111.46	ppb	12:59:17

2	S 181.975 Axial†	190.5	164.5	789.71 µg/L	789.71 ppb	12:59:17
2	Sb 206.836†	30.6	12.9	20.933 µg/L	20.933 ppb	12:59:17
2	Se 196.026†	-41.3	-57.6	11.120 µg/L	11.120 ppb	12:59:17
2	SiO2†	350755.4	350657.5	64241 µg/L	64241 ppb	12:58:51
2	Si 251.611†	399827.5	402477.9	29638 µg/L	29638 ppb	12:58:51
2	Sn 189.927†	-113.7	-136.4	-33.213 µg/L	-33.213 ppb	12:59:17
2	Ti 334.940†	1538647.6	1549287.5	3521.6 µg/L	3521.6 ppb	12:58:51
2	Tl 190.801†	-28.4	-11.7	7.0817 µg/L	7.0817 ppb	12:59:17
2	U 409.014†	-80.5	-728.6	-87.765 µg/L	-87.765 ppb	12:58:51
2	V 292.402†	12857.4	13117.9	156.39 µg/L	156.39 ppb	12:58:57
2	Zn 213.857†	16460.4	16012.6	406.15 µg/L	406.15 ppb	12:58:57
3	Sc RADIAL	114346.6	114346.6	101 %		12:57:44
3	Al 396.153Radial†	172170.6	170987.6	89456 µg/L	89456 ppb	12:57:44
3	Ca 317.933Radial†	121031.9	119865.0	48361 µg/L	48361 ppb	12:57:44
3	Fe 238.204 Radial†	18935.8	18805.8	120860 µg/L	120860 ppb	12:58:04
3	K 766.490 Radial†	20920.8	20030.7	10644 µg/L	10644 ppb	12:57:44
3	Mg 279.077 IEC†	2689.3	2659.4	16421 µg/L	16421 ppb	12:58:04
3	Na 589.592 Radial†	5533.2	6178.4	1590.0 µg/L	1590.0 ppb	12:58:04
3	Sr 421.552†	46165.7	45907.8	240.39 µg/L	240.39 ppb	12:57:44
3	Sc 361.383	2035247.6	2035247.6	98.286 %		12:59:25
3	Y 371.029	1335543.1	1335543.1	102.05 %		12:59:25
3	Ag 328.068†	-960.8	-1183.9	-0.2889 µg/L	-0.2889 ppb	12:59:30
3	As 188.979†	20.5	18.4	17.668 µg/L	17.668 ppb	12:59:51
3	B 249.677†	1682.9	1517.3	26.579 µg/L	26.579 ppb	12:59:30
3	Ba 233.527†	33984.1	34635.5	878.97 µg/L	878.97 ppb	12:59:30
3	Be 313.107†	18832.5	15396.1	8.1770 µg/L	8.1770 ppb	12:59:30
3	Cd 226.502†	338.7	442.7	2.0942 µg/L	2.0942 ppb	12:59:51
3	Co 228.616†	666.9	742.5	27.931 µg/L	27.931 ppb	12:59:51
3	Cr 267.716†	3268.3	3451.5	71.667 µg/L	71.667 ppb	12:59:30
3	Cu 324.752†	10981.8	6914.7	73.023 µg/L	73.023 ppb	12:59:30
3	Mn 257.610†	727930.0	740866.7	2368.4 µg/L	2368.4 ppb	12:59:25
3	Mo 202.031†	42.7	43.3	9.7591 µg/L	9.7591 ppb	12:59:51
3	Ni 231.604†	1267.7	968.9	52.267 µg/L	52.267 ppb	12:59:51
3	P 214.914†	1361.8	1212.8	2302.5 µg/L	2302.5 ppb	12:59:51
3	Pb 220.353†	437.1	400.2	108.01 µg/L	108.01 ppb	12:59:51
3	S 181.975 Axial†	182.8	158.4	759.86 µg/L	759.86 ppb	12:59:51
3	Sb 206.836†	38.9	21.6	29.393 µg/L	29.393 ppb	12:59:51
3	Se 196.026†	-45.8	-62.6	5.9628 µg/L	5.9628 ppb	12:59:51
3	SiO2†	346760.2	350056.1	64131 µg/L	64131 ppb	12:59:25
3	Si 251.611†	394948.6	401461.9	29563 µg/L	29563 ppb	12:59:25
3	Sn 189.927†	-113.8	-137.6	-33.409 µg/L	-33.409 ppb	12:59:51
3	Ti 334.940†	1521153.1	1546681.0	3515.6 µg/L	3515.6 ppb	12:59:25
3	Tl 190.801†	-27.9	-11.5	7.2107 µg/L	7.2107 ppb	12:59:51
3	U 409.014†	-302.8	-955.7	-108.82 µg/L	-108.82 ppb	12:59:25
3	V 292.402†	12778.4	13164.5	157.02 µg/L	157.02 ppb	12:59:30
3	Zn 213.857†	16440.6	16155.0	409.69 µg/L	409.69 ppb	12:59:30

Mean Data: 241539004|925474|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2045773.3	98.794	%	0.4838				0.49%
Sc RADIAL	115282.7	101	%	0.8				0.78%
Y 371.029	1342563.8	102.58	%	0.503				0.49%
Ag 328.068†	-1172.2	-0.2931	µg/L	0.16715	-0.2931	ppb	0.16715	57.02%
Al 396.153Radial†	168882.7	88355	µg/L	1187.7	88355	ppb	1187.7	1.34%
As 188.979†	16.9	15.285	µg/L	2.0853	15.285	ppb	2.0853	13.64%
B 249.677†	1517.7	27.038	µg/L	0.5711	27.038	ppb	0.5711	2.11%
Ba 233.527†	34604.7	878.18	µg/L	4.020	878.18	ppb	4.020	0.46%
Be 313.107†	15334.8	8.1379	µg/L	0.03867	8.1379	ppb	0.03867	0.48%
Ca 317.933Radial†	118691.4	47888	µg/L	481.0	47888	ppb	481.0	1.00%
Cd 226.502†	450.0	2.4015	µg/L	0.26626	2.4015	ppb	0.26626	11.09%
Co 228.616†	738.5	27.729	µg/L	0.3201	27.729	ppb	0.3201	1.15%
Cr 267.716†	3442.5	71.479	µg/L	0.2458	71.479	ppb	0.2458	0.34%
Cu 324.752†	6872.5	72.432	µg/L	0.5192	72.432	ppb	0.5192	0.72%
Fe 238.204 Radial†	18586.3	119450	µg/L	1318.0	119450	ppb	1318.0	1.10%
K 766.490 Radial†	19707.5	10472	µg/L	172.7	10472	ppb	172.7	1.65%
Mg 279.077 IEC†	2625.9	16213	µg/L	204.9	16213	ppb	204.9	1.26%
Mn 257.610†	741620.7	2370.6	µg/L	1.92	2370.6	ppb	1.92	0.08%
Mo 202.031†	40.3	9.3506	µg/L	0.38932	9.3506	ppb	0.38932	4.16%
Na 589.592 Radial†	6103.1	1570.6	µg/L	19.73	1570.6	ppb	19.73	1.26%

Ni 231.604†	963.2	51.959	µg/L	0.7303	51.959	ppb	0.7303	1.41%
P 214.914†	1212.8	2303.9	µg/L	23.99	2303.9	ppb	23.99	1.04%
Pb 220.353†	411.5	110.78	µg/L	2.505	110.78	ppb	2.505	2.26%
S 181.975 Axial†	159.6	765.90	µg/L	21.437	765.90	ppb	21.437	2.80%
Sb 206.836†	17.0	24.970	µg/L	4.2434	24.970	ppb	4.2434	16.99%
Se 196.026†	-62.8	4.6539	µg/L	7.20988	4.6539	ppb	7.20988	154.92%
SiO2†	350390.6	64193	µg/L	56.1	64193	ppb	56.1	0.09%
Si 251.611†	401967.9	29600	µg/L	37.5	29600	ppb	37.5	0.13%
Sn 189.927†	-134.8	-32.366	µg/L	1.6394	-32.366	ppb	1.6394	5.07%
Sr 421.552†	45466.9	238.08	µg/L	2.647	238.08	ppb	2.647	1.11%
Ti 334.940†	1548213.4	3519.1	µg/L	3.12	3519.1	ppb	3.12	0.09%
Tl 190.801†	-9.4	10.443	µg/L	5.7113	10.443	ppb	5.7113	54.69%
U 409.014†	-818.2	-95.990	µg/L	11.2555	-95.990	ppb	11.2555	11.73%
V 292.402†	13169.8	156.98	µg/L	0.566	156.98	ppb	0.566	0.36%
Zn 213.857†	16109.4	408.65	µg/L	2.183	408.65	ppb	2.183	0.53%

Sequence No.: 79
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 13:00:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114316.1	114316.1	101	%			13:00:38
1	Al 396.153Radial†	10433.0	10245.4	5340.4	µg/L	5340.4	ppb	13:00:38
1	Ca 317.933Radial†	13344.6	12842.2	5181.4	µg/L	5181.4	ppb	13:00:58
1	Fe 238.204 Radial†	834.9	816.3	5263.2	µg/L	5263.2	ppb	13:00:58
1	K 766.490 Radial†	10529.4	9706.0	5157.4	µg/L	5157.4	ppb	13:00:38
1	Mg 279.077 IEC†	860.5	842.0	5260.7	µg/L	5260.7	ppb	13:00:58
1	Na 589.592 Radial†	40532.6	40973.8	10544	µg/L	10544	ppb	13:00:38
1	Sr 421.552†	97979.4	97429.4	510.18	µg/L	510.18	ppb	13:00:38
1	Sc 361.383	2016783.0	2016783.0	97.394	%			13:02:01
1	Y 371.029	1274374.5	1274374.5	97.372	%			13:02:01
1	Ag 328.068†	56379.0	57680.9	531.81	µg/L	531.81	ppb	13:02:07
1	As 188.979†	283.6	288.8	517.09	µg/L	517.09	ppb	13:02:28
1	B 249.677†	11825.1	11946.4	506.86	µg/L	506.86	ppb	13:02:07
1	Ba 233.527†	19637.6	20221.7	514.08	µg/L	514.08	ppb	13:02:07
1	Be 313.107†	805986.9	823784.8	507.02	µg/L	507.02	ppb	13:02:01
1	Cd 226.502†	19102.7	19711.9	510.99	µg/L	510.99	ppb	13:02:07
1	Co 228.616†	10496.8	10841.6	515.06	µg/L	515.06	ppb	13:02:07
1	Cr 267.716†	23987.1	24755.1	512.74	µg/L	512.74	ppb	13:02:07
1	Cu 324.752†	77740.1	75561.4	515.40	µg/L	515.40	ppb	13:02:07
1	Mn 257.610†	156443.6	160872.0	511.63	µg/L	511.63	ppb	13:02:07
1	Mo 202.031†	4374.4	4491.3	519.51	µg/L	519.51	ppb	13:02:28
1	Ni 231.604†	9590.0	9525.6	513.84	µg/L	513.84	ppb	13:02:07
1	P 214.914†	1423.6	1288.9	2514.8	µg/L	2514.8	ppb	13:02:28
1	Pb 220.353†	2023.0	2032.7	517.28	µg/L	517.28	ppb	13:02:28
1	S 181.975 Axial†	234.0	212.7	1045.9	µg/L	1045.9	ppb	13:02:28
1	Sb 206.836†	550.2	547.0	533.58	µg/L	533.58	ppb	13:02:28
1	Se 196.026†	418.0	413.2	521.71	µg/L	521.71	ppb	13:02:28
1	SiO2†	32454.2	30571.6	5600.8	µg/L	5600.8	ppb	13:02:07
1	Si 251.611†	34846.6	35405.1	2568.6	µg/L	2568.6	ppb	13:02:07
1	Sn 189.927†	1037.7	1043.7	526.37	µg/L	526.37	ppb	13:02:28
1	Ti 334.940†	225209.1	230236.1	523.44	µg/L	523.44	ppb	13:02:01
1	Tl 190.801†	317.1	342.4	516.47	µg/L	516.47	ppb	13:02:28
1	U 409.014†	6187.1	5705.0	520.89	µg/L	520.89	ppb	13:02:07
1	V 292.402†	44668.4	46026.7	519.77	µg/L	519.77	ppb	13:02:07
1	Zn 213.857†	19772.0	19728.6	512.89	µg/L	512.89	ppb	13:02:07
2	Sc RADIAL	114820.2	114820.2	101	%			13:01:04
2	Al 396.153Radial†	10437.0	10203.9	5318.6	µg/L	5318.6	ppb	13:01:04
2	Ca 317.933Radial†	13366.0	12805.1	5166.4	µg/L	5166.4	ppb	13:01:24
2	Fe 238.204 Radial†	830.4	808.2	5211.1	µg/L	5211.1	ppb	13:01:24
2	K 766.490 Radial†	10510.4	9641.2	5123.0	µg/L	5123.0	ppb	13:01:04
2	Mg 279.077 IEC†	864.8	842.6	5264.3	µg/L	5264.3	ppb	13:01:24
2	Na 589.592 Radial†	40535.7	40800.0	10500	µg/L	10500	ppb	13:01:04
2	Sr 421.552†	98343.8	97362.5	509.83	µg/L	509.83	ppb	13:01:04
2	Sc 361.383	2023030.0	2023030.0	97.696	%			13:02:34
2	Y 371.029	1275988.7	1275988.7	97.495	%			13:02:34
2	Ag 328.068†	55979.2	57093.0	526.39	µg/L	526.39	ppb	13:02:40
2	As 188.979†	282.0	286.2	512.52	µg/L	512.52	ppb	13:03:00
2	B 249.677†	11689.3	11769.9	499.37	µg/L	499.37	ppb	13:02:40
2	Ba 233.527†	19462.6	19980.4	507.95	µg/L	507.95	ppb	13:02:40
2	Be 313.107†	806331.4	821582.0	505.67	µg/L	505.67	ppb	13:02:34
2	Cd 226.502†	18926.8	19471.3	504.74	µg/L	504.74	ppb	13:02:40
2	Co 228.616†	10377.7	10686.4	507.70	µg/L	507.70	ppb	13:02:40
2	Cr 267.716†	23812.8	24500.6	507.47	µg/L	507.47	ppb	13:02:40
2	Cu 324.752†	77076.4	74635.5	509.08	µg/L	509.08	ppb	13:02:40
2	Mn 257.610†	154940.7	158837.7	505.16	µg/L	505.16	ppb	13:02:40
2	Mo 202.031†	4397.7	4501.3	520.66	µg/L	520.66	ppb	13:03:00
2	Ni 231.604†	9471.3	9373.7	505.65	µg/L	505.65	ppb	13:02:40
2	P 214.914†	1432.1	1293.1	2524.1	µg/L	2524.1	ppb	13:03:00
2	Pb 220.353†	2033.7	2037.2	518.46	µg/L	518.46	ppb	13:03:00

2	S 181.975 Axial†	226.9	204.7	1006.5 µg/L	1006.5 ppb	13:03:00
2	Sb 206.836†	548.2	543.2	529.82 µg/L	529.82 ppb	13:03:00
2	Se 196.026†	422.2	416.2	525.42 µg/L	525.42 ppb	13:03:00
2	SiO2†	32141.5	30148.6	5523.3 µg/L	5523.3 ppb	13:02:40
2	Si 251.611†	34429.8	34867.9	2528.9 µg/L	2528.9 ppb	13:02:40
2	Sn 189.927†	1041.7	1044.5	526.76 µg/L	526.76 ppb	13:03:00
2	Ti 334.940†	225114.8	229425.5	521.60 µg/L	521.60 ppb	13:02:34
2	Tl 190.801†	319.7	344.1	519.04 µg/L	519.04 ppb	13:03:00
2	U 409.014†	6122.2	5619.0	513.03 µg/L	513.03 ppb	13:02:40
2	V 292.402†	44360.2	45569.6	514.64 µg/L	514.64 ppb	13:02:40
2	Zn 213.857†	19582.5	19472.0	506.22 µg/L	506.22 ppb	13:02:40
3	Sc RADIAL	113267.2	113267.2	99.7 %		13:01:30
3	Al 396.153Radial†	10381.1	10289.4	5364.6 µg/L	5364.6 ppb	13:01:30
3	Ca 317.933Radial†	13411.6	13032.2	5258.1 µg/L	5258.1 ppb	13:01:50
3	Fe 238.204 Radial†	834.5	823.5	5308.9 µg/L	5308.9 ppb	13:01:50
3	K 766.490 Radial†	10443.5	9716.7	5163.1 µg/L	5163.1 ppb	13:01:30
3	Mg 279.077 IEC†	867.4	856.9	5352.7 µg/L	5352.7 ppb	13:01:50
3	Na 589.592 Radial†	40423.6	41237.5	10612 µg/L	10612 ppb	13:01:30
3	Sr 421.552†	98019.2	98371.4	515.12 µg/L	515.12 ppb	13:01:30
3	Sc 361.383	2083187.9	2083187.9	100.60 %		13:03:07
3	Y 371.029	1299091.6	1299091.6	99.260 %		13:03:07
3	Ag 328.068†	55623.4	55084.6	507.89 µg/L	507.89 ppb	13:03:13
3	As 188.979†	273.3	269.2	481.99 µg/L	481.99 ppb	13:03:33
3	B 249.677†	11612.5	11348.1	481.38 µg/L	481.38 ppb	13:03:13
3	Ba 233.527†	19369.0	19312.0	490.95 µg/L	490.95 ppb	13:03:13
3	Be 313.107†	800926.8	792375.5	487.69 µg/L	487.69 ppb	13:03:07
3	Cd 226.502†	18812.4	18798.2	487.27 µg/L	487.27 ppb	13:03:13
3	Co 228.616†	10320.0	10322.3	490.37 µg/L	490.37 ppb	13:03:13
3	Cr 267.716†	23630.8	23615.8	489.14 µg/L	489.14 ppb	13:03:13
3	Cu 324.752†	76626.0	71909.5	490.55 µg/L	490.55 ppb	13:03:13
3	Mn 257.610†	153704.6	153029.0	486.72 µg/L	486.72 ppb	13:03:13
3	Mo 202.031†	4240.4	4214.9	487.55 µg/L	487.55 ppb	13:03:33
3	Ni 231.604†	9445.1	9067.8	489.15 µg/L	489.15 ppb	13:03:13
3	P 214.914†	1395.6	1214.5	2368.8 µg/L	2368.8 ppb	13:03:33
3	Pb 220.353†	1970.6	1914.4	487.19 µg/L	487.19 ppb	13:03:33
3	S 181.975 Axial†	224.0	195.1	959.33 µg/L	959.33 ppb	13:03:33
3	Sb 206.836†	529.9	508.9	496.30 µg/L	496.30 ppb	13:03:33
3	Se 196.026†	403.1	384.8	485.94 µg/L	485.94 ppb	13:03:33
3	SiO2†	31897.4	28955.9	5304.8 µg/L	5304.8 ppb	13:03:13
3	Si 251.611†	34185.2	33607.1	2438.4 µg/L	2438.4 ppb	13:03:13
3	Sn 189.927†	1000.0	972.1	490.57 µg/L	490.57 ppb	13:03:33
3	Ti 334.940†	223103.2	220771.9	501.91 µg/L	501.91 ppb	13:03:07
3	Tl 190.801†	310.2	325.3	490.55 µg/L	490.55 ppb	13:03:33
3	U 409.014†	6058.9	5375.1	490.71 µg/L	490.71 ppb	13:03:13
3	V 292.402†	44036.0	43936.1	496.11 µg/L	496.11 ppb	13:03:13
3	Zn 213.857†	19401.1	18712.9	486.43 µg/L	486.43 ppb	13:03:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2041000.3	98.564	%	1.7708				1.80%
Sc RADIAL	114134.5	100	%	0.7				0.69%
Y 371.029	1283151.6	98.043	%	1.0566				1.08%
Ag 328.068†	56619.5	522.03	µg/L	12.540	522.03	ppb	12.540	2.40%
QC value within limits for Ag 328.068 Recovery = 104.41%								
Al 396.153Radial†	10246.2	5341.2	µg/L	23.02	5341.2	ppb	23.02	0.43%
QC value within limits for Al 396.153Radial Recovery = 106.82%								
As 188.979†	281.4	503.87	µg/L	19.082	503.87	ppb	19.082	3.79%
QC value within limits for As 188.979 Recovery = 100.77%								
B 249.677†	11688.2	495.87	µg/L	13.097	495.87	ppb	13.097	2.64%
QC value within limits for B 249.677 Recovery = 99.17%								
Ba 233.527†	19838.0	504.33	µg/L	11.981	504.33	ppb	11.981	2.38%
QC value within limits for Ba 233.527 Recovery = 100.87%								
Be 313.107†	812580.8	500.13	µg/L	10.791	500.13	ppb	10.791	2.16%
QC value within limits for Be 313.107 Recovery = 100.03%								
Ca 317.933Radial†	12893.2	5202.0	µg/L	49.16	5202.0	ppb	49.16	0.95%
QC value within limits for Ca 317.933Radial Recovery = 104.04%								
Cd 226.502†	19327.1	501.00	µg/L	12.293	501.00	ppb	12.293	2.45%
QC value within limits for Cd 226.502 Recovery = 100.20%								
Co 228.616†	10616.8	504.38	µg/L	12.676	504.38	ppb	12.676	2.51%

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   QC value within limits for Co 228.616  Recovery = 100.88%
Cr 267.716†            24290.5      503.12 µg/L        12.385      503.12 ppb         12.385   2.46%
   QC value within limits for Cr 267.716  Recovery = 100.62%
Cu 324.752†            74035.5      505.01 µg/L        12.913      505.01 ppb         12.913   2.56%
   QC value within limits for Cu 324.752  Recovery = 101.00%
Fe 238.204 Radial†       816.0      5261.1 µg/L         48.96      5261.1 ppb          48.96   0.93%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.22%
K 766.490 Radial†       9687.9      5147.9 µg/L         21.70      5147.9 ppb          21.70   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 102.96%
Mg 279.077 IEC†          847.2      5292.6 µg/L         52.10      5292.6 ppb          52.10   0.98%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.85%
Mn 257.610†           157579.6      501.17 µg/L        12.923      501.17 ppb         12.923   2.58%
   QC value within limits for Mn 257.610  Recovery = 100.23%
Mo 202.031†             4402.5      509.24 µg/L        18.793      509.24 ppb         18.793   3.69%
   QC value within limits for Mo 202.031  Recovery = 101.85%
Na 589.592 Radial†     41003.8       10552 µg/L          56.7       10552 ppb          56.7   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 105.52%
Ni 231.604†             9322.3      502.88 µg/L        12.579      502.88 ppb         12.579   2.50%
   QC value within limits for Ni 231.604  Recovery = 100.58%
P 214.914†              1265.5      2469.2 µg/L         87.13      2469.2 ppb          87.13   3.53%
   QC value within limits for P 214.914  Recovery = 98.77%
Pb 220.353†             1994.8      507.64 µg/L        17.723      507.64 ppb         17.723   3.49%
   QC value within limits for Pb 220.353  Recovery = 101.53%
S 181.975 Axial†         204.2      1003.9 µg/L         43.36      1003.9 ppb          43.36   4.32%
   QC value within limits for S 181.975 Axial  Recovery = 100.39%
Sb 206.836†              533.0      519.90 µg/L        20.524      519.90 ppb         20.524   3.95%
   QC value within limits for Sb 206.836  Recovery = 103.98%
Se 196.026†              404.7      511.03 µg/L        21.801      511.03 ppb         21.801   4.27%
   QC value within limits for Se 196.026  Recovery = 102.21%
SiO2†                  29892.0      5476.3 µg/L        153.49      5476.3 ppb         153.49   2.80%
   QC value within limits for SiO2  Recovery = 102.41%
Si 251.611†            34626.7      2512.0 µg/L         66.77      2512.0 ppb          66.77   2.66%
   QC value within limits for Si 251.611  Recovery = 100.48%
Sn 189.927†             1020.1      514.56 µg/L        20.783      514.56 ppb         20.783   4.04%
   QC value within limits for Sn 189.927  Recovery = 102.91%
Sr 421.552†            97721.1      511.71 µg/L         2.954      511.71 ppb          2.954   0.58%
   QC value within limits for Sr 421.552  Recovery = 102.34%
Ti 334.940†           226811.2      515.65 µg/L        11.936      515.65 ppb         11.936   2.31%
   QC value within limits for Ti 334.940  Recovery = 103.13%
Tl 190.801†              337.3      508.68 µg/L        15.758      508.68 ppb         15.758   3.10%
   QC value within limits for Tl 190.801  Recovery = 101.74%
U 409.014†              5566.4      508.21 µg/L        15.658      508.21 ppb         15.658   3.08%
   QC value within limits for U 409.014  Recovery = 101.64%
V 292.402†             45177.5      510.17 µg/L        12.444      510.17 ppb         12.444   2.44%
   QC value within limits for V 292.402  Recovery = 102.03%
Zn 213.857†            19304.5      501.85 µg/L        13.763      501.85 ppb         13.763   2.74%
   QC value within limits for Zn 213.857  Recovery = 100.37%
All analyte(s) passed QC.
```

Sequence No.: 80
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 13:03:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114998.8	114998.8	101	%			13:04:15
1	Al 396.153Radial†	169.9	41.6	21.790	µg/L	21.790	ppb	13:04:15
1	Ca 317.933Radial†	452.2	22.8	9.2134	µg/L	9.2134	ppb	13:04:35
1	Fe 238.204 Radial†	24.7	10.7	68.689	µg/L	68.689	ppb	13:04:35
1	K 766.490 Radial†	714.9	-55.1	-29.303	µg/L	-29.303	ppb	13:04:15
1	Mg 279.077 IEC†	16.6	3.0	18.482	µg/L	18.482	ppb	13:04:35
1	Na 589.592 Radial†	-603.4	82.9	21.345	µg/L	21.345	ppb	13:04:15
1	Sr 421.552†	-32.6	-6.7	-0.0351	µg/L	-0.0351	ppb	13:04:15
1	Sc 361.383	2026089.4	2026089.4	97.844	%			13:05:37
1	Y 371.029	1280206.8	1280206.8	97.818	%			13:05:37
1	Ag 328.068†	169.9	-32.7	-0.2948	µg/L	-0.2948	ppb	13:05:43
1	As 188.979†	4.1	1.8	3.1557	µg/L	3.1557	ppb	13:06:03
1	B 249.677†	169.6	-21.7	-0.9438	µg/L	-0.9438	ppb	13:06:03
1	Ba 233.527†	-58.2	-0.7	-0.0185	µg/L	-0.0185	ppb	13:06:03
1	Be 313.107†	3609.0	-76.3	-0.0473	µg/L	-0.0473	ppb	13:05:43
1	Cd 226.502†	-93.0	3.1	0.0739	µg/L	0.0739	ppb	13:06:03
1	Co 228.616†	-61.7	0.9	0.0400	µg/L	0.0400	ppb	13:06:03
1	Cr 267.716†	-176.5	-54.2	-1.1197	µg/L	-1.1197	ppb	13:05:43
1	Cu 324.752†	4183.3	17.0	0.1303	µg/L	0.1303	ppb	13:05:43
1	Mn 257.610†	-75.2	166.2	0.5366	µg/L	0.5366	ppb	13:06:03
1	Mo 202.031†	-6.4	-6.7	-0.7663	µg/L	-0.7663	ppb	13:06:03
1	Ni 231.604†	292.9	-21.6	-1.1650	µg/L	-1.1650	ppb	13:06:03
1	P 214.914†	180.4	11.6	23.171	µg/L	23.171	ppb	13:06:03
1	Pb 220.353†	48.0	4.7	1.1817	µg/L	1.1817	ppb	13:06:03
1	S 181.975 Axial†	23.6	-3.4	-16.849	µg/L	-16.849	ppb	13:06:03
1	Sb 206.836†	14.0	-3.6	-3.5049	µg/L	-3.5049	ppb	13:06:03
1	Se 196.026†	14.6	-1.0	-1.2340	µg/L	-1.2340	ppb	13:06:03
1	SiO2†	2866.6	178.9	32.772	µg/L	32.772	ppb	13:05:43
1	Si 251.611†	487.6	124.5	9.1326	µg/L	9.1326	ppb	13:06:03
1	Sn 189.927†	24.9	3.6	1.8072	µg/L	1.8072	ppb	13:06:03
1	Ti 334.940†	1354.4	386.2	0.8780	µg/L	0.8780	ppb	13:05:43
1	Tl 190.801†	-16.3	0.2	0.2998	µg/L	0.2998	ppb	13:06:03
1	U 409.014†	628.2	-5.5	-0.5171	µg/L	-0.5171	ppb	13:05:43
1	V 292.402†	-170.9	-11.4	-0.1281	µg/L	-0.1281	ppb	13:05:43
1	Zn 213.857†	549.8	-10.4	-0.2742	µg/L	-0.2742	ppb	13:06:03
2	Sc RADIAL	113746.5	113746.5	100	%			13:04:41
2	Al 396.153Radial†	179.2	52.8	27.625	µg/L	27.625	ppb	13:04:41
2	Ca 317.933Radial†	458.1	33.7	13.579	µg/L	13.579	ppb	13:05:01
2	Fe 238.204 Radial†	23.0	9.3	59.581	µg/L	59.581	ppb	13:05:01
2	K 766.490 Radial†	777.1	14.8	7.8475	µg/L	7.8475	ppb	13:04:41
2	Mg 279.077 IEC†	14.5	1.1	6.6244	µg/L	6.6244	ppb	13:05:01
2	Na 589.592 Radial†	-626.7	53.1	13.657	µg/L	13.657	ppb	13:04:41
2	Sr 421.552†	-42.5	-17.0	-0.0888	µg/L	-0.0888	ppb	13:04:41
2	Sc 361.383	2015788.6	2015788.6	97.346	%			13:06:09
2	Y 371.029	1273577.5	1273577.5	97.311	%			13:06:09
2	Ag 328.068†	174.9	-26.7	-0.2401	µg/L	-0.2401	ppb	13:06:15
2	As 188.979†	-0.5	-3.0	-5.3182	µg/L	-5.3182	ppb	13:06:35
2	B 249.677†	181.2	-8.9	-0.3965	µg/L	-0.3965	ppb	13:06:35
2	Ba 233.527†	-61.8	-4.7	-0.1189	µg/L	-0.1189	ppb	13:06:35
2	Be 313.107†	3734.2	71.2	0.0435	µg/L	0.0435	ppb	13:06:15
2	Cd 226.502†	-91.7	4.0	0.1009	µg/L	0.1009	ppb	13:06:35
2	Co 228.616†	-58.3	4.0	0.1884	µg/L	0.1884	ppb	13:06:35
2	Cr 267.716†	-143.3	-21.0	-0.4342	µg/L	-0.4342	ppb	13:06:15
2	Cu 324.752†	4193.7	49.4	0.3493	µg/L	0.3493	ppb	13:06:15
2	Mn 257.610†	-78.8	162.1	0.5224	µg/L	0.5224	ppb	13:06:35
2	Mo 202.031†	-3.2	-3.5	-0.3997	µg/L	-0.3997	ppb	13:06:35
2	Ni 231.604†	304.1	-8.6	-0.4638	µg/L	-0.4638	ppb	13:06:35
2	P 214.914†	174.2	6.2	12.260	µg/L	12.260	ppb	13:06:35
2	Pb 220.353†	45.9	2.7	0.6733	µg/L	0.6733	ppb	13:06:35

2	S 181.975 Axial†	23.1	-3.8	-18.924 µg/L	-18.924 ppb	13:06:35
2	Sb 206.836†	15.6	-1.8	-1.7891 µg/L	-1.7891 ppb	13:06:35
2	Se 196.026†	20.2	4.8	6.0525 µg/L	6.0525 ppb	13:06:35
2	SiO2†	2855.6	182.6	33.446 µg/L	33.446 ppb	13:06:15
2	Si 251.611†	477.3	116.5	8.5292 µg/L	8.5292 ppb	13:06:35
2	Sn 189.927†	24.2	3.0	1.5417 µg/L	1.5417 ppb	13:06:35
2	Ti 334.940†	1359.9	398.9	0.9067 µg/L	0.9067 ppb	13:06:15
2	Tl 190.801†	-16.1	0.4	0.6022 µg/L	0.6022 ppb	13:06:35
2	U 409.014†	673.4	44.2	4.0310 µg/L	4.0310 ppb	13:06:15
2	V 292.402†	-164.3	-5.5	-0.0528 µg/L	-0.0528 ppb	13:06:15
2	Zn 213.857†	550.5	-6.7	-0.1809 µg/L	-0.1809 ppb	13:06:35
3	Sc RADIAL	113055.9	113055.9	99.5 %		13:05:07
3	Al 396.153Radial†	159.4	34.0	17.785 µg/L	17.785 ppb	13:05:07
3	Ca 317.933Radial†	445.7	24.0	9.6903 µg/L	9.6903 ppb	13:05:27
3	Fe 238.204 Radial†	19.9	6.3	40.558 µg/L	40.558 ppb	13:05:27
3	K 766.490 Radial†	766.9	9.2	4.8923 µg/L	4.8923 ppb	13:05:07
3	Mg 279.077 IEC†	11.9	-1.5	-9.3288 µg/L	-9.3288 ppb	13:05:27
3	Na 589.592 Radial†	-635.6	40.4	10.388 µg/L	10.388 ppb	13:05:07
3	Sr 421.552†	-16.5	8.9	0.0466 µg/L	0.0466 ppb	13:05:07
3	Sc 361.383	2031756.4	2031756.4	98.117 %		13:06:41
3	Y 371.029	1282905.1	1282905.1	98.024 %		13:06:41
3	Ag 328.068†	215.6	13.3	0.1295 µg/L	0.1295 ppb	13:06:47
3	As 188.979†	2.1	-0.3	-0.4820 µg/L	-0.4820 ppb	13:07:07
3	B 249.677†	167.3	-24.5	-1.0544 µg/L	-1.0544 ppb	13:07:07
3	Ba 233.527†	-71.2	-13.8	-0.3480 µg/L	-0.3480 ppb	13:07:07
3	Be 313.107†	3660.3	-34.3	-0.0214 µg/L	-0.0214 ppb	13:06:47
3	Cd 226.502†	-98.6	-2.4	-0.0641 µg/L	-0.0641 ppb	13:07:07
3	Co 228.616†	-64.3	-1.6	-0.0786 µg/L	-0.0786 ppb	13:07:07
3	Cr 267.716†	-109.2	15.0	0.3106 µg/L	0.3106 ppb	13:06:47
3	Cu 324.752†	4159.2	-19.5	-0.1240 µg/L	-0.1240 ppb	13:06:47
3	Mn 257.610†	-56.4	185.6	0.5945 µg/L	0.5945 ppb	13:07:07
3	Mo 202.031†	-3.1	-3.3	-0.3777 µg/L	-0.3777 ppb	13:07:07
3	Ni 231.604†	305.1	-10.0	-0.5399 µg/L	-0.5399 ppb	13:07:07
3	P 214.914†	174.0	4.6	9.2581 µg/L	9.2581 ppb	13:07:07
3	Pb 220.353†	48.1	4.6	1.1653 µg/L	1.1653 ppb	13:07:07
3	S 181.975 Axial†	27.6	0.6	2.7811 µg/L	2.7811 ppb	13:07:07
3	Sb 206.836†	17.8	0.3	0.2500 µg/L	0.2500 ppb	13:07:07
3	Se 196.026†	10.2	-5.6	-6.9618 µg/L	-6.9618 ppb	13:07:07
3	SiO2†	2848.5	152.2	27.890 µg/L	27.890 ppb	13:06:47
3	Si 251.611†	475.2	110.5	8.0378 µg/L	8.0378 ppb	13:07:07
3	Sn 189.927†	26.9	5.6	2.7981 µg/L	2.7981 ppb	13:07:07
3	Ti 334.940†	1326.7	354.1	0.8049 µg/L	0.8049 ppb	13:06:47
3	Tl 190.801†	-19.2	-2.6	-3.9499 µg/L	-3.9499 ppb	13:07:07
3	U 409.014†	654.0	19.0	1.7292 µg/L	1.7292 ppb	13:06:47
3	V 292.402†	-106.5	54.7	0.6155 µg/L	0.6155 ppb	13:06:47
3	Zn 213.857†	545.8	-16.0	-0.4195 µg/L	-0.4195 ppb	13:07:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024544.8	97.769	%	0.3909				0.40%
Sc RADIAL	113933.7	100	%	0.9				0.86%
Y 371.029	1278896.4	97.717	%	0.3667				0.38%
Ag 328.068†	-15.4	-0.1351	µg/L	0.23082	-0.1351	ppb	0.23082	170.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	42.8	22.400	µg/L	4.9486	22.400	ppb	4.9486	22.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.8815	µg/L	4.25108	-0.8815	ppb	4.25108	482.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-18.3	-0.7983	µg/L	0.35230	-0.7983	ppb	0.35230	44.13%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.4	-0.1618	µg/L	0.16890	-0.1618	ppb	0.16890	104.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-13.1	-0.0084	µg/L	0.04677	-0.0084	ppb	0.04677	556.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	26.8	10.828	µg/L	2.3949	10.828	ppb	2.3949	22.12%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.6	0.0369	µg/L	0.08848	0.0369	ppb	0.08848	239.72%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.1	0.0499	µg/L	0.13377	0.0499	ppb	0.13377	267.92%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -20.1     -0.4144 µg/L       0.71539     -0.4144 ppb        0.71539 172.62%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               15.6      0.1185 µg/L       0.23689      0.1185 ppb        0.23689 199.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         8.8      56.276 µg/L       14.3538      56.276 ppb        14.3538  25.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -10.4     -5.5209 µg/L      20.64847     -5.5209 ppb       20.64847 374.00%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9      5.2592 µg/L      13.95568      5.2592 ppb       13.95568 265.36%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              171.3      0.5512 µg/L       0.03820      0.5512 ppb        0.03820   6.93%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -4.5     -0.5145 µg/L       0.21826     -0.5145 ppb        0.21826  42.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        58.8      15.130 µg/L        5.6248      15.130 ppb         5.6248  37.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -13.4     -0.7229 µg/L       0.38475     -0.7229 ppb        0.38475  53.23%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 7.5      14.896 µg/L        7.3216      14.896 ppb         7.3216  49.15%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                4.0      1.0068 µg/L       0.28891      1.0068 ppb        0.28891  28.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -2.2     -10.997 µg/L       11.9773     -10.997 ppb       11.9773 108.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -1.7     -1.6813 µg/L       1.87975     -1.6813 ppb        1.87975 111.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.6     -0.7145 µg/L       6.52268     -0.7145 ppb        6.52268 912.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    171.2      31.370 µg/L        3.0322      31.370 ppb         3.0322   9.67%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              117.2      8.5666 µg/L       0.54835      8.5666 ppb        0.54835   6.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                4.1      2.0490 µg/L       0.66219      2.0490 ppb        0.66219  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -4.9     -0.0258 µg/L       0.06816     -0.0258 ppb        0.06816 264.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              379.8      0.8632 µg/L       0.05248      0.8632 ppb        0.05248   6.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.7     -1.0160 µg/L       2.54537     -1.0160 ppb        2.54537 250.53%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                19.2      1.7477 µg/L       2.27412      1.7477 ppb        2.27412 130.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                12.6      0.1449 µg/L       0.40929      0.1449 ppb        0.40929 282.55%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -11.0     -0.2916 µg/L       0.12023     -0.2916 ppb        0.12023  41.24%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

12/14/2009 09:28:02 Hg ReAlign... Actual peak offset (nm): 0.005
Drift (nm): 0.000 Slit adjustment: -3

Analysis Begun

Start Time: 12/14/2009 09:28:27 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409.SIF
Batch ID:
Results Data Set: 121409A
Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/14/2009 09:28:27**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	111545.1	111545.1	99.6	%	09:29:08
1	Al 396.153Radial†	170.6	171.3	[0.00]	µg/L	09:29:08
1	Ca 317.933Radial†	407.2	408.8	[0.00]	µg/L	09:29:28
1	Fe 238.204 Radial†	8.9	9.0	[0.00]	µg/L	09:29:28
1	K 766.490 Radial†	726.0	728.8	[0.00]	µg/L	09:29:08
1	Mg 279.077 IEC†	15.9	16.0	[0.00]	µg/L	09:29:28
1	Na 589.592 Radial†	-394.3	-395.8	[0.00]	µg/L	09:29:08
1	Sr 421.552†	-62.4	-62.7	[0.00]	µg/L	09:29:08
1	Sc 361.383	2008280.5	2008280.5	100.02	%	09:30:30
1	Y 371.029	1224064.9	1224064.9	100.06	%	09:30:30
1	Ag 328.068†	-20.7	-20.6	[0.00]	µg/L	09:30:36
1	As 188.979†	5.7	5.7	[0.00]	µg/L	09:30:56
1	B 249.677†	142.8	142.8	[0.00]	µg/L	09:30:36
1	Ba 233.527†	-72.7	-72.6	[0.00]	µg/L	09:30:56
1	Be 313.107†	3630.2	3629.4	[0.00]	µg/L	09:30:36
1	Cd 226.502†	-91.7	-91.7	[0.00]	µg/L	09:30:56
1	Co 228.616†	-71.2	-71.1	[0.00]	µg/L	09:30:56
1	Cr 267.716†	-100.1	-100.1	[0.00]	µg/L	09:30:36
1	Cu 324.752†	3303.4	3302.6	[0.00]	µg/L	09:30:36
1	Mn 257.610†	-250.3	-250.2	[0.00]	µg/L	09:30:56
1	Mo 202.031†	-3.0	-3.0	[0.00]	µg/L	09:30:56
1	Ni 231.604†	289.7	289.7	[0.00]	µg/L	09:30:56
1	P 214.914†	190.0	189.9	[0.00]	µg/L	09:30:56
1	Pb 220.353†	55.6	55.6	[0.00]	µg/L	09:30:56
1	S 181.975 Axial†	24.4	24.4	[0.00]	µg/L	09:30:56
1	Sb 206.836†	20.5	20.5	[0.00]	µg/L	09:30:56
1	Se 196.026†	10.0	10.0	[0.00]	µg/L	09:30:56
1	SiO2†	2068.0	2067.5	[0.00]	µg/L	09:30:36
1	Si 251.611†	374.9	374.8	[0.00]	µg/L	09:30:56
1	Sn 189.927†	24.1	24.1	[0.00]	µg/L	09:30:56
1	Ti 334.940†	790.6	790.4	[0.00]	µg/L	09:30:36
1	Tl 190.801†	-18.0	-18.0	[0.00]	µg/L	09:30:56
1	U 409.014†	707.6	707.4	[0.00]	µg/L	09:30:36
1	V 292.402†	-92.7	-92.7	[0.00]	µg/L	09:30:36
1	Zn 213.857†	530.0	529.8	[0.00]	µg/L	09:30:56
2	Sc RADIAL	111872.1	111872.1	99.9	%	09:29:34
2	Al 396.153Radial†	164.6	164.8	[0.00]	µg/L	09:29:34
2	Ca 317.933Radial†	414.7	415.1	[0.00]	µg/L	09:29:54
2	Fe 238.204 Radial†	9.0	9.0	[0.00]	µg/L	09:29:54
2	K 766.490 Radial†	751.5	752.2	[0.00]	µg/L	09:29:34
2	Mg 279.077 IEC†	17.2	17.3	[0.00]	µg/L	09:29:54
2	Na 589.592 Radial†	-412.4	-412.8	[0.00]	µg/L	09:29:34
2	Sr 421.552†	-105.5	-105.6	[0.00]	µg/L	09:29:34

2	Sc 361.383	2010268.9	2010268.9	100.12 %	09:31:02
2	Y 371.029	1224527.4	1224527.4	100.09 %	09:31:02
2	Ag 328.068†	-8.5	-8.5	[0.00] µg/L	09:31:08
2	As 188.979†	2.1	2.1	[0.00] µg/L	09:31:29
2	B 249.677†	153.3	153.1	[0.00] µg/L	09:31:08
2	Ba 233.527†	-70.6	-70.5	[0.00] µg/L	09:31:29
2	Be 313.107†	3625.4	3621.0	[0.00] µg/L	09:31:08
2	Cd 226.502†	-105.2	-105.0	[0.00] µg/L	09:31:29
2	Co 228.616†	-68.3	-68.2	[0.00] µg/L	09:31:29
2	Cr 267.716†	-134.1	-133.9	[0.00] µg/L	09:31:08
2	Cu 324.752†	3310.3	3306.3	[0.00] µg/L	09:31:08
2	Mn 257.610†	-250.5	-250.2	[0.00] µg/L	09:31:29
2	Mo 202.031†	-4.5	-4.5	[0.00] µg/L	09:31:29
2	Ni 231.604†	287.0	286.7	[0.00] µg/L	09:31:29
2	P 214.914†	188.0	187.8	[0.00] µg/L	09:31:29
2	Pb 220.353†	43.8	43.8	[0.00] µg/L	09:31:29
2	S 181.975 Axial†	29.2	29.2	[0.00] µg/L	09:31:29
2	Sb 206.836†	30.6	30.5	[0.00] µg/L	09:31:29
2	Se 196.026†	10.5	10.5	[0.00] µg/L	09:31:29
2	SiO2†	2020.1	2017.6	[0.00] µg/L	09:31:08
2	Si 251.611†	353.8	353.4	[0.00] µg/L	09:31:29
2	Sn 189.927†	24.1	24.1	[0.00] µg/L	09:31:29
2	Ti 334.940†	826.7	825.7	[0.00] µg/L	09:31:08
2	Tl 190.801†	-19.7	-19.7	[0.00] µg/L	09:31:29
2	U 409.014†	668.5	667.7	[0.00] µg/L	09:31:08
2	V 292.402†	-62.2	-62.1	[0.00] µg/L	09:31:08
2	Zn 213.857†	530.4	529.8	[0.00] µg/L	09:31:29
3	Sc RADIAL	112522.8	112522.8	100 %	09:30:00
3	Al 396.153Radial†	158.0	157.2	[0.00] µg/L	09:30:00
3	Ca 317.933Radial†	415.9	413.9	[0.00] µg/L	09:30:20
3	Fe 238.204 Radial†	17.9	17.9	[0.00] µg/L	09:30:20
3	K 766.490 Radial†	762.5	758.9	[0.00] µg/L	09:30:00
3	Mg 279.077 IEC†	14.9	14.8	[0.00] µg/L	09:30:20
3	Na 589.592 Radial†	-398.2	-396.3	[0.00] µg/L	09:30:00
3	Sr 421.552†	-106.2	-105.7	[0.00] µg/L	09:30:00
3	Sc 361.383	2004968.5	2004968.5	99.857 %	09:31:35
3	Y 371.029	1221511.7	1221511.7	99.848 %	09:31:35
3	Ag 328.068†	-19.6	-19.6	[0.00] µg/L	09:31:40
3	As 188.979†	1.6	1.6	[0.00] µg/L	09:32:01
3	B 249.677†	189.1	189.4	[0.00] µg/L	09:31:40
3	Ba 233.527†	-74.1	-74.2	[0.00] µg/L	09:32:01
3	Be 313.107†	3600.9	3606.1	[0.00] µg/L	09:31:40
3	Cd 226.502†	-95.9	-96.0	[0.00] µg/L	09:32:01
3	Co 228.616†	-70.0	-70.1	[0.00] µg/L	09:32:01
3	Cr 267.716†	-138.5	-138.7	[0.00] µg/L	09:31:40
3	Cu 324.752†	3313.1	3317.9	[0.00] µg/L	09:31:40
3	Mn 257.610†	-242.8	-243.1	[0.00] µg/L	09:32:01
3	Mo 202.031†	-6.8	-6.8	[0.00] µg/L	09:32:01
3	Ni 231.604†	296.3	296.8	[0.00] µg/L	09:32:01
3	P 214.914†	192.0	192.3	[0.00] µg/L	09:32:01
3	Pb 220.353†	53.5	53.6	[0.00] µg/L	09:32:01
3	S 181.975 Axial†	23.5	23.5	[0.00] µg/L	09:32:01
3	Sb 206.836†	21.3	21.4	[0.00] µg/L	09:32:01
3	Se 196.026†	11.8	11.8	[0.00] µg/L	09:32:01
3	SiO2†	2012.8	2015.7	[0.00] µg/L	09:31:40
3	Si 251.611†	341.7	342.1	[0.00] µg/L	09:32:01
3	Sn 189.927†	18.9	18.9	[0.00] µg/L	09:32:01
3	Ti 334.940†	778.4	779.5	[0.00] µg/L	09:31:40
3	Tl 190.801†	-22.6	-22.6	[0.00] µg/L	09:32:01
3	U 409.014†	728.7	729.7	[0.00] µg/L	09:31:40
3	V 292.402†	-116.6	-116.8	[0.00] µg/L	09:31:40
3	Zn 213.857†	523.1	523.9	[0.00] µg/L	09:32:01

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2007839.3	2677.64	0.13%	100.00	%
Sc RADIAL	111980.0	497.72	0.44%	100	%
Y 371.029	1223368.0	1624.14	0.13%	100.000	%
Ag 328.068†	-16.3	6.73	41.37%	[0.00]	µg/L

Al 396.153Radial†	164.4	7.05	4.28%	[0.00] µg/L
As 188.979†	3.1	2.25	71.49%	[0.00] µg/L
B 249.677†	161.7	24.46	15.13%	[0.00] µg/L
Ba 233.527†	-72.4	1.87	2.57%	[0.00] µg/L
Be 313.107†	3618.8	11.81	0.33%	[0.00] µg/L
Ca 317.933Radial†	412.6	3.31	0.80%	[0.00] µg/L
Cd 226.502†	-97.6	6.80	6.97%	[0.00] µg/L
Co 228.616†	-69.8	1.50	2.15%	[0.00] µg/L
Cr 267.716†	-124.2	21.04	16.93%	[0.00] µg/L
Cu 324.752†	3308.9	7.95	0.24%	[0.00] µg/L
Fe 238.204 Radial†	12.0	5.11	42.73%	[0.00] µg/L
K 766.490 Radial†	746.6	15.77	2.11%	[0.00] µg/L
Mg 279.077 IEC†	16.0	1.21	7.54%	[0.00] µg/L
Mn 257.610†	-247.8	4.09	1.65%	[0.00] µg/L
Mo 202.031†	-4.8	1.93	40.56%	[0.00] µg/L
Na 589.592 Radial†	-401.6	9.66	2.41%	[0.00] µg/L
Ni 231.604†	291.0	5.19	1.78%	[0.00] µg/L
P 214.914†	190.0	2.25	1.19%	[0.00] µg/L
Pb 220.353†	51.0	6.32	12.39%	[0.00] µg/L
S 181.975 Axial†	25.7	3.07	11.93%	[0.00] µg/L
Sb 206.836†	24.2	5.54	22.94%	[0.00] µg/L
Se 196.026†	10.8	0.89	8.28%	[0.00] µg/L
SiO2†	2033.6	29.36	1.44%	[0.00] µg/L
Si 251.611†	356.8	16.61	4.65%	[0.00] µg/L
Sn 189.927†	22.4	2.98	13.34%	[0.00] µg/L
Sr 421.552†	-91.3	24.82	27.18%	[0.00] µg/L
Ti 334.940†	798.5	24.15	3.02%	[0.00] µg/L
Tl 190.801†	-20.1	2.33	11.62%	[0.00] µg/L
U 409.014†	701.6	31.40	4.47%	[0.00] µg/L
V 292.402†	-90.5	27.39	30.26%	[0.00] µg/L
Zn 213.857†	527.8	3.44	0.65%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/14/2009 09:32:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114674.2	114674.2	102	%	09:32:45
1	K 766.490 Radial†	2514.9	1709.2	[1000]	µg/L	09:32:45
1	Sr 421.552†	17626.6	17303.8	[100]	µg/L	09:32:45
1	Sc 361.383	1995045.9	1995045.9	99.363	%	09:33:07
1	Y 371.029	1215141.2	1215141.2	99.328	%	09:33:07
1	Ag 328.068†	10637.6	10722.1	[100]	µg/L	09:33:13
1	As 188.979†	53.2	50.4	[100]	µg/L	09:33:33
1	B 249.677†	2240.5	2093.1	[100]	µg/L	09:33:13
1	Ba 233.527†	3709.0	3805.3	[100]	µg/L	09:33:13
1	Be 313.107†	154634.4	152007.2	[100]	µg/L	09:33:07
1	Cd 226.502†	3536.8	3657.0	[100]	µg/L	09:33:13
1	Co 228.616†	1904.5	1986.5	[100]	µg/L	09:33:33
1	Cr 267.716†	4397.1	4549.5	[100]	µg/L	09:33:13
1	Cu 324.752†	17016.3	13816.5	[100]	µg/L	09:33:13
1	Mn 257.610†	29887.6	30327.1	[100]	µg/L	09:33:13
1	Mo 202.031†	838.5	848.6	[100]	µg/L	09:33:33
1	Ni 231.604†	2078.3	1800.6	[100]	µg/L	09:33:13
1	P 214.914†	423.3	236.0	[500]	µg/L	09:33:33
1	Pb 220.353†	438.8	390.6	[100]	µg/L	09:33:33
1	S 181.975 Axial†	63.6	38.3	[200]	µg/L	09:33:33
1	Sb 206.836†	117.0	93.6	[100]	µg/L	09:33:33
1	Se 196.026†	72.9	62.6	[100]	µg/L	09:33:33
1	SiO2†	7322.1	5335.5	[1069.5]	µg/L	09:33:13
1	Si 251.611†	6494.5	6179.3	[500]	µg/L	09:33:13
1	Sn 189.927†	211.6	190.5	[100]	µg/L	09:33:33
1	Ti 334.940†	42513.3	41987.4	[100]	µg/L	09:33:13
1	Tl 190.801†	44.1	64.5	[100]	µg/L	09:33:33
1	U 409.014†	1667.3	976.3	[100]	µg/L	09:33:13
1	V 292.402†	8210.0	8353.1	[100]	µg/L	09:33:13
1	Zn 213.857†	4128.6	3627.3	[100]	µg/L	09:33:13
2	Sc RADIAL	114272.6	114272.6	102	%	09:32:51
2	K 766.490 Radial†	2568.9	1770.7	[1000]	µg/L	09:32:51
2	Sr 421.552†	17703.8	17440.0	[100]	µg/L	09:32:51
2	Sc 361.383	1989026.5	1989026.5	99.063	%	09:33:40
2	Y 371.029	1211566.5	1211566.5	99.035	%	09:33:40
2	Ag 328.068†	10847.2	10966.0	[100]	µg/L	09:33:45
2	As 188.979†	50.0	47.4	[100]	µg/L	09:34:06
2	B 249.677†	2305.6	2165.6	[100]	µg/L	09:33:45
2	Ba 233.527†	3796.2	3904.6	[100]	µg/L	09:33:45
2	Be 313.107†	155823.8	153678.8	[100]	µg/L	09:33:40
2	Cd 226.502†	3657.2	3789.4	[100]	µg/L	09:33:45
2	Co 228.616†	1907.9	1995.8	[100]	µg/L	09:34:06
2	Cr 267.716†	4511.6	4678.5	[100]	µg/L	09:33:45
2	Cu 324.752†	17399.9	14255.5	[100]	µg/L	09:33:45
2	Mn 257.610†	30605.5	31142.8	[100]	µg/L	09:33:45
2	Mo 202.031†	837.1	849.7	[100]	µg/L	09:34:06
2	Ni 231.604†	2139.7	1868.9	[100]	µg/L	09:33:45
2	P 214.914†	412.2	226.1	[500]	µg/L	09:34:06
2	Pb 220.353†	431.8	384.9	[100]	µg/L	09:34:06
2	S 181.975 Axial†	61.0	35.9	[200]	µg/L	09:34:06
2	Sb 206.836†	116.8	93.7	[100]	µg/L	09:34:06
2	Se 196.026†	75.9	65.8	[100]	µg/L	09:34:06
2	SiO2†	7454.9	5491.8	[1069.5]	µg/L	09:33:45
2	Si 251.611†	6644.3	6350.4	[500]	µg/L	09:33:45
2	Sn 189.927†	218.1	197.8	[100]	µg/L	09:34:06
2	Ti 334.940†	43641.9	43256.1	[100]	µg/L	09:33:45
2	Tl 190.801†	45.4	66.0	[100]	µg/L	09:34:06
2	U 409.014†	1705.7	1020.2	[100]	µg/L	09:33:45
2	V 292.402†	8474.6	8645.3	[100]	µg/L	09:33:45

2	Zn 213.857†	4236.7	3749.0	[100]	µg/L	09:33:45
3	Sc RADIAL	114577.0	114577.0	102	%	09:32:56
3	K 766.490 Radial†	2538.9	1734.7	[1000]	µg/L	09:32:56
3	Sr 421.552†	17657.8	17348.8	[100]	µg/L	09:32:56
3	Sc 361.383	1996562.3	1996562.3	99.438	%	09:34:12
3	Y 371.029	1216394.8	1216394.8	99.430	%	09:34:12
3	Ag 328.068†	10776.4	10853.6	[100]	µg/L	09:34:18
3	As 188.979†	55.2	52.3	[100]	µg/L	09:34:38
3	B 249.677†	2313.4	2164.7	[100]	µg/L	09:34:18
3	Ba 233.527†	3723.9	3817.3	[100]	µg/L	09:34:18
3	Be 313.107†	154900.8	152156.9	[100]	µg/L	09:34:12
3	Cd 226.502†	3617.4	3735.4	[100]	µg/L	09:34:18
3	Co 228.616†	1910.9	1991.5	[100]	µg/L	09:34:38
3	Cr 267.716†	4513.9	4663.6	[100]	µg/L	09:34:18
3	Cu 324.752†	17389.0	14178.3	[100]	µg/L	09:34:18
3	Mn 257.610†	30427.4	30847.1	[100]	µg/L	09:34:18
3	Mo 202.031†	835.5	844.9	[100]	µg/L	09:34:38
3	Ni 231.604†	2099.1	1819.9	[100]	µg/L	09:34:18
3	P 214.914†	416.2	228.5	[500]	µg/L	09:34:38
3	Pb 220.353†	431.2	382.7	[100]	µg/L	09:34:38
3	S 181.975 Axial†	63.2	37.9	[200]	µg/L	09:34:38
3	Sb 206.836†	113.5	90.0	[100]	µg/L	09:34:38
3	Se 196.026†	77.9	67.5	[100]	µg/L	09:34:38
3	SiO2†	7396.9	5405.1	[1069.5]	µg/L	09:34:18
3	Si 251.611†	6597.2	6277.7	[500]	µg/L	09:34:18
3	Sn 189.927†	213.9	192.8	[100]	µg/L	09:34:38
3	Ti 334.940†	43333.9	42780.1	[100]	µg/L	09:34:18
3	Tl 190.801†	43.4	63.7	[100]	µg/L	09:34:38
3	U 409.014†	1710.7	1018.7	[100]	µg/L	09:34:18
3	V 292.402†	8365.7	8503.5	[100]	µg/L	09:34:18
3	Zn 213.857†	4227.6	3723.6	[100]	µg/L	09:34:18

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1993544.9	3985.84	0.20%	99.288	%
Sc RADIAL	114508.0	209.52	0.18%	102	%
Y 371.029	1214367.5	2505.44	0.21%	99.264	%
Ag 328.068†	10847.2	122.08	1.13%	[100]	µg/L
As 188.979†	50.0	2.51	5.01%	[100]	µg/L
B 249.677†	2141.2	41.61	1.94%	[100]	µg/L
Ba 233.527†	3842.4	54.20	1.41%	[100]	µg/L
Be 313.107†	152614.3	924.91	0.61%	[100]	µg/L
Cd 226.502†	3727.3	66.55	1.79%	[100]	µg/L
Co 228.616†	1991.2	4.64	0.23%	[100]	µg/L
Cr 267.716†	4630.6	70.57	1.52%	[100]	µg/L
Cu 324.752†	14083.4	234.38	1.66%	[100]	µg/L
K 766.490 Radial†	1738.2	30.93	1.78%	[1000]	µg/L
Mn 257.610†	30772.3	412.94	1.34%	[100]	µg/L
Mo 202.031†	847.8	2.51	0.30%	[100]	µg/L
Ni 231.604†	1829.8	35.22	1.92%	[100]	µg/L
P 214.914†	230.2	5.15	2.24%	[500]	µg/L
Pb 220.353†	386.0	4.10	1.06%	[100]	µg/L
S 181.975 Axial†	37.4	1.26	3.38%	[200]	µg/L
Sb 206.836†	92.4	2.10	2.27%	[100]	µg/L
Se 196.026†	65.3	2.53	3.87%	[100]	µg/L
SiO2†	5410.8	78.30	1.45%	[1069.5]	µg/L
Si 251.611†	6269.1	85.85	1.37%	[500]	µg/L
Sn 189.927†	193.7	3.70	1.91%	[100]	µg/L
Sr 421.552†	17364.2	69.39	0.40%	[100]	µg/L
Ti 334.940†	42674.5	640.91	1.50%	[100]	µg/L
Tl 190.801†	64.7	1.13	1.74%	[100]	µg/L
U 409.014†	1005.1	24.91	2.48%	[100]	µg/L
V 292.402†	8500.6	146.12	1.72%	[100]	µg/L
Zn 213.857†	3700.0	64.22	1.74%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/14/2009 09:34:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112237.8	112237.8	100	%	09:35:20
1	Al 396.153Radial†	9918.7	9731.5	[5000]	µg/L	09:35:20
1	Ca 317.933Radial†	13180.5	12737.6	[5000]	µg/L	09:35:41
1	K 766.490 Radial†	9753.4	8984.3	[5000]	µg/L	09:35:20
1	Mg 279.077 IEC†	950.8	932.6	[5000]	µg/L	09:35:41
1	Sr 421.552†	87800.2	87689.9	[500]	µg/L	09:35:20
1	Sc 361.383	2013987.2	2013987.2	100.31	%	09:36:45
1	Y 371.029	1221278.2	1221278.2	99.829	%	09:36:45
1	Ag 328.068†	53873.3	53725.2	[500]	µg/L	09:36:50
1	As 188.979†	264.2	260.3	[500]	µg/L	09:37:11
1	B 249.677†	11068.1	10872.6	[500]	µg/L	09:36:50
1	Ba 233.527†	19052.4	19066.7	[500]	µg/L	09:36:50
1	Be 313.107†	765739.3	759783.0	[500]	µg/L	09:36:45
1	Cd 226.502†	18291.9	18333.6	[500]	µg/L	09:36:50
1	Co 228.616†	10032.7	10071.9	[500]	µg/L	09:36:50
1	Cr 267.716†	22860.2	22914.7	[500]	µg/L	09:36:50
1	Cu 324.752†	72237.4	68708.0	[500]	µg/L	09:36:50
1	Mn 257.610†	150528.0	150316.3	[500]	µg/L	09:36:45
1	Mo 202.031†	4228.4	4220.3	[500]	µg/L	09:37:11
1	Ni 231.604†	9231.6	8912.4	[500]	µg/L	09:36:50
1	P 214.914†	1326.7	1132.7	[2500]	µg/L	09:37:11
1	Pb 220.353†	1960.4	1903.4	[500]	µg/L	09:37:11
1	S 181.975 Axial†	210.5	184.2	[1000]	µg/L	09:37:11
1	Sb 206.836†	497.4	471.7	[500]	µg/L	09:37:11
1	Se 196.026†	361.5	349.6	[500]	µg/L	09:37:11
1	SiO2†	28747.2	26625.9	[5347.5]	µg/L	09:36:50
1	Si 251.611†	31541.2	31088.1	[2500]	µg/L	09:36:50
1	Sn 189.927†	1005.0	979.6	[500]	µg/L	09:37:11
1	Ti 334.940†	214795.4	213341.1	[500]	µg/L	09:36:45
1	Tl 190.801†	302.8	322.0	[500]	µg/L	09:37:11
1	U 409.014†	5753.3	5034.1	[500]	µg/L	09:36:50
1	V 292.402†	42380.2	42341.3	[500]	µg/L	09:36:50
1	Zn 213.857†	18873.4	18288.0	[500]	µg/L	09:36:50
2	Sc RADIAL	112643.0	112643.0	101	%	09:35:46
2	Al 396.153Radial†	9969.1	9746.0	[5000]	µg/L	09:35:46
2	Ca 317.933Radial†	13211.3	12720.9	[5000]	µg/L	09:36:07
2	K 766.490 Radial†	9847.3	9042.7	[5000]	µg/L	09:35:46
2	Mg 279.077 IEC†	944.4	922.8	[5000]	µg/L	09:36:07
2	Sr 421.552†	88009.3	87582.6	[500]	µg/L	09:35:46
2	Sc 361.383	2010361.0	2010361.0	100.13	%	09:37:18
2	Y 371.029	1218778.4	1218778.4	99.625	%	09:37:18
2	Ag 328.068†	53747.7	53696.5	[500]	µg/L	09:37:23
2	As 188.979†	256.0	252.5	[500]	µg/L	09:37:44
2	B 249.677†	11056.3	10880.7	[500]	µg/L	09:37:23
2	Ba 233.527†	18953.0	19001.7	[500]	µg/L	09:37:23
2	Be 313.107†	770076.7	765491.9	[500]	µg/L	09:37:18
2	Cd 226.502†	18210.0	18284.7	[500]	µg/L	09:37:23
2	Co 228.616†	10010.0	10067.2	[500]	µg/L	09:37:23
2	Cr 267.716†	22790.2	22885.8	[500]	µg/L	09:37:23
2	Cu 324.752†	72127.1	68727.7	[500]	µg/L	09:37:23
2	Mn 257.610†	151289.0	151347.1	[500]	µg/L	09:37:18
2	Mo 202.031†	4179.1	4178.6	[500]	µg/L	09:37:44
2	Ni 231.604†	9173.4	8870.8	[500]	µg/L	09:37:23
2	P 214.914†	1303.0	1111.4	[2500]	µg/L	09:37:44
2	Pb 220.353†	1929.5	1876.0	[500]	µg/L	09:37:44
2	S 181.975 Axial†	213.4	187.5	[1000]	µg/L	09:37:44
2	Sb 206.836†	499.0	474.2	[500]	µg/L	09:37:44
2	Se 196.026†	346.7	335.5	[500]	µg/L	09:37:44
2	SiO2†	28676.5	26606.9	[5347.5]	µg/L	09:37:23

2	Si 251.611†	31472.3	31076.1	[2500]	µg/L	09:37:23
2	Sn 189.927†	988.6	965.0	[500]	µg/L	09:37:44
2	Ti 334.940†	216332.4	215262.5	[500]	µg/L	09:37:18
2	Tl 190.801†	300.9	320.6	[500]	µg/L	09:37:44
2	U 409.014†	5810.1	5101.2	[500]	µg/L	09:37:23
2	V 292.402†	42213.0	42250.6	[500]	µg/L	09:37:23
2	Zn 213.857†	18811.6	18260.2	[500]	µg/L	09:37:23
3	Sc RADIAL	113546.1	113546.1	101	%	09:36:12
3	Al 396.153Radial†	9973.2	9671.2	[5000]	µg/L	09:36:12
3	Ca 317.933Radial†	13134.9	12541.2	[5000]	µg/L	09:36:33
3	K 766.490 Radial†	9807.1	8925.2	[5000]	µg/L	09:36:12
3	Mg 279.077 IEC†	948.2	919.1	[5000]	µg/L	09:36:33
3	Sr 421.552†	88049.0	86925.9	[500]	µg/L	09:36:12
3	Sc 361.383	1993495.2	1993495.2	99.286	%	09:37:51
3	Y 371.029	1208472.8	1208472.8	98.782	%	09:37:51
3	Ag 328.068†	53975.6	54380.3	[500]	µg/L	09:37:57
3	As 188.979†	264.7	263.5	[500]	µg/L	09:38:17
3	B 249.677†	11123.1	11041.4	[500]	µg/L	09:37:57
3	Ba 233.527†	19061.0	19270.6	[500]	µg/L	09:37:57
3	Be 313.107†	782131.8	784140.7	[500]	µg/L	09:37:51
3	Cd 226.502†	18270.0	18499.0	[500]	µg/L	09:37:57
3	Co 228.616†	10046.7	10188.8	[500]	µg/L	09:37:57
3	Cr 267.716†	22903.4	23192.4	[500]	µg/L	09:37:57
3	Cu 324.752†	72460.4	69672.9	[500]	µg/L	09:37:57
3	Mn 257.610†	153640.0	154993.3	[500]	µg/L	09:37:51
3	Mo 202.031†	4244.5	4279.8	[500]	µg/L	09:38:17
3	Ni 231.604†	9210.2	8985.4	[500]	µg/L	09:37:57
3	P 214.914†	1330.2	1149.7	[2500]	µg/L	09:38:17
3	Pb 220.353†	1971.8	1935.0	[500]	µg/L	09:38:17
3	S 181.975 Axial†	216.5	192.4	[1000]	µg/L	09:38:17
3	Sb 206.836†	503.4	482.9	[500]	µg/L	09:38:17
3	Se 196.026†	357.4	349.2	[500]	µg/L	09:38:17
3	SiO2†	28866.4	27040.5	[5347.5]	µg/L	09:37:57
3	Si 251.611†	31569.1	31439.4	[2500]	µg/L	09:37:57
3	Sn 189.927†	1006.0	990.9	[500]	µg/L	09:38:17
3	Ti 334.940†	219430.6	220210.9	[500]	µg/L	09:37:51
3	Tl 190.801†	301.2	323.5	[500]	µg/L	09:38:17
3	U 409.014†	5728.6	5068.2	[500]	µg/L	09:37:57
3	V 292.402†	42459.2	42855.2	[500]	µg/L	09:37:57
3	Zn 213.857†	18922.1	18530.4	[500]	µg/L	09:37:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2005947.8	10935.62	0.55%	99.906	%
Sc RADIAL	112809.0	669.75	0.59%	101	%
Y 371.029	1216176.5	6787.63	0.56%	99.412	%
Ag 328.068†	53934.0	386.75	0.72%	[500]	µg/L
Al 396.153Radial†	9716.2	39.63	0.41%	[5000]	µg/L
As 188.979†	258.7	5.64	2.18%	[500]	µg/L
B 249.677†	10931.6	95.20	0.87%	[500]	µg/L
Ba 233.527†	19113.0	140.31	0.73%	[500]	µg/L
Be 313.107†	769805.2	12738.86	1.65%	[500]	µg/L
Ca 317.933Radial†	12666.6	108.92	0.86%	[5000]	µg/L
Cd 226.502†	18372.5	112.32	0.61%	[500]	µg/L
Co 228.616†	10109.3	68.89	0.68%	[500]	µg/L
Cr 267.716†	22997.6	169.29	0.74%	[500]	µg/L
Cu 324.752†	69036.2	551.46	0.80%	[500]	µg/L
K 766.490 Radial†	8984.1	58.77	0.65%	[5000]	µg/L
Mg 279.077 IEC†	924.8	6.97	0.75%	[5000]	µg/L
Mn 257.610†	152218.9	2457.39	1.61%	[500]	µg/L
Mo 202.031†	4226.2	50.85	1.20%	[500]	µg/L
Ni 231.604†	8922.9	58.02	0.65%	[500]	µg/L
P 214.914†	1131.3	19.20	1.70%	[2500]	µg/L
Pb 220.353†	1904.8	29.50	1.55%	[500]	µg/L
S 181.975 Axial†	188.0	4.12	2.19%	[1000]	µg/L
Sb 206.836†	476.3	5.86	1.23%	[500]	µg/L
Se 196.026†	344.8	8.04	2.33%	[500]	µg/L
SiO2†	26757.8	245.06	0.92%	[5347.5]	µg/L
Si 251.611†	31201.2	206.39	0.66%	[2500]	µg/L

Sn 189.927†	978.5	12.98	1.33%	[500] µg/L
Sr 421.552†	87399.5	413.57	0.47%	[500] µg/L
Ti 334.940†	216271.5	3544.31	1.64%	[500] µg/L
Tl 190.801†	322.0	1.42	0.44%	[500] µg/L
U 409.014†	5067.8	33.54	0.66%	[500] µg/L
V 292.402†	42482.4	326.05	0.77%	[500] µg/L
Zn 213.857†	18359.5	148.65	0.81%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/14/2009 09:38:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113984.2	113984.2	102	%	09:38:59
1	Al 396.153Radial†	19633.5	19123.8	[10000]	µg/L	09:38:59
1	Ca 317.933Radial†	25941.3	25072.6	[10000]	µg/L	09:39:20
1	Fe 238.204 Radial†	1941.5	1895.4	[10000]	µg/L	09:39:20
1	K 766.490 Radial†	18702.5	17627.0	[10000]	µg/L	09:38:59
1	Mg 279.077 IEC†	1873.6	1824.7	[10000]	µg/L	09:39:20
1	Na 589.592 Radial†	36184.2	35949.6	[10000]	µg/L	09:38:59
1	Sr 421.552†	175317.1	172325.9	[1000]	µg/L	09:38:59
1	Sc 361.383	2002622.8	2002622.8	99.740	%	09:40:24
1	Y 371.029	1211370.5	1211370.5	99.019	%	09:40:24
1	Ag 328.068†	97950.1	98221.5	[1000]	µg/L	09:40:29
1	As 188.979†	516.3	514.5	[1000]	µg/L	09:40:50
1	B 249.677†	20088.4	19978.9	[1000]	µg/L	09:40:29
1	Ba 233.527†	34606.7	34769.2	[1000]	µg/L	09:40:29
1	Be 313.107†	1521377.2	1521721.3	[1000]	µg/L	09:40:24
1	Cd 226.502†	32736.7	32919.5	[1000]	µg/L	09:40:29
1	Co 228.616†	18130.4	18247.5	[1000]	µg/L	09:40:29
1	Cr 267.716†	41721.4	41954.3	[1000]	µg/L	09:40:29
1	Cu 324.752†	142345.0	139406.9	[1000]	µg/L	09:40:24
1	Mn 257.610†	300545.4	301576.1	[1000]	µg/L	09:40:24
1	Mo 202.031†	7796.8	7821.9	[1000]	µg/L	09:40:29
1	Ni 231.604†	16335.8	16087.3	[1000]	µg/L	09:40:29
1	P 214.914†	2434.2	2250.6	[5000]	µg/L	09:40:50
1	Pb 220.353†	3825.9	3784.9	[1000]	µg/L	09:40:50
1	S 181.975 Axial†	399.4	374.7	[2000]	µg/L	09:40:50
1	Sb 206.836†	978.4	956.8	[1000]	µg/L	09:40:50
1	Se 196.026†	687.9	678.9	[1000]	µg/L	09:40:50
1	SiO2†	51027.7	49127.0	[10695]	µg/L	09:40:29
1	Si 251.611†	57470.9	57263.8	[5000]	µg/L	09:40:29
1	Sn 189.927†	1985.2	1968.0	[1000]	µg/L	09:40:50
1	Ti 334.940†	431310.9	431635.8	[1000]	µg/L	09:40:24
1	Tl 190.801†	616.0	637.7	[1000]	µg/L	09:40:50
1	U 409.014†	10037.0	9361.6	[1000]	µg/L	09:40:29
1	V 292.402†	77375.4	77667.4	[1000]	µg/L	09:40:29
1	Zn 213.857†	33125.2	32683.7	[1000]	µg/L	09:40:29
2	Sc RADIAL	115022.4	115022.4	103	%	09:39:25
2	Al 396.153Radial†	19978.9	19286.0	[10000]	µg/L	09:39:25
2	Ca 317.933Radial†	25982.6	24882.7	[10000]	µg/L	09:39:46
2	Fe 238.204 Radial†	1947.5	1884.1	[10000]	µg/L	09:39:46
2	K 766.490 Radial†	18885.4	17639.2	[10000]	µg/L	09:39:25
2	Mg 279.077 IEC†	1872.0	1806.5	[10000]	µg/L	09:39:46
2	Na 589.592 Radial†	36634.6	36067.2	[10000]	µg/L	09:39:25
2	Sr 421.552†	177897.5	173283.4	[1000]	µg/L	09:39:25
2	Sc 361.383	1987476.1	1987476.1	98.986	%	09:40:57
2	Y 371.029	1202627.3	1202627.3	98.305	%	09:40:57
2	Ag 328.068†	106954.6	108066.7	[1000]	µg/L	09:41:03
2	As 188.979†	509.0	511.0	[1000]	µg/L	09:41:23
2	B 249.677†	22072.5	22136.9	[1000]	µg/L	09:41:03
2	Ba 233.527†	37878.1	38338.6	[1000]	µg/L	09:41:03
2	Be 313.107†	1522406.9	1534386.3	[1000]	µg/L	09:40:57
2	Cd 226.502†	35984.5	36450.8	[1000]	µg/L	09:41:03
2	Co 228.616†	19904.3	20178.1	[1000]	µg/L	09:41:03
2	Cr 267.716†	45601.7	46193.1	[1000]	µg/L	09:41:03
2	Cu 324.752†	142429.9	140580.3	[1000]	µg/L	09:40:57
2	Mn 257.610†	300479.8	303806.3	[1000]	µg/L	09:40:57
2	Mo 202.031†	8534.0	8626.2	[1000]	µg/L	09:41:03
2	Ni 231.604†	17835.8	17727.5	[1000]	µg/L	09:41:03
2	P 214.914†	2364.1	2198.3	[5000]	µg/L	09:41:23
2	Pb 220.353†	3727.1	3714.3	[1000]	µg/L	09:41:23

2	S 181.975 Axial†	386.7	365.0	[2000]	µg/L	09:41:23
2	Sb 206.836†	957.7	943.3	[1000]	µg/L	09:41:23
2	Se 196.026†	659.8	655.8	[1000]	µg/L	09:41:23
2	SiO2†	55658.8	54195.5	[10695]	µg/L	09:41:03
2	Si 251.611†	62839.4	63126.4	[5000]	µg/L	09:41:03
2	Sn 189.927†	1932.7	1930.2	[1000]	µg/L	09:41:23
2	Ti 334.940†	431769.8	435395.0	[1000]	µg/L	09:40:57
2	Tl 190.801†	595.3	621.5	[1000]	µg/L	09:41:23
2	U 409.014†	10924.6	10334.9	[1000]	µg/L	09:41:03
2	V 292.402†	84519.4	85475.9	[1000]	µg/L	09:41:03
2	Zn 213.857†	36348.0	36192.6	[1000]	µg/L	09:41:03
3	Sc RADIAL	114576.2	114576.2	102	%	09:39:51
3	Al 396.153Radial†	19865.3	19250.8	[10000]	µg/L	09:39:51
3	Ca 317.933Radial†	26072.4	25069.0	[10000]	µg/L	09:40:11
3	Fe 238.204 Radial†	1950.8	1894.7	[10000]	µg/L	09:40:11
3	K 766.490 Radial†	18915.9	17740.7	[10000]	µg/L	09:39:51
3	Mg 279.077 IEC†	1874.0	1815.5	[10000]	µg/L	09:40:11
3	Na 589.592 Radial†	36541.3	36115.0	[10000]	µg/L	09:39:51
3	Sr 421.552†	176983.3	173064.3	[1000]	µg/L	09:39:51
3	Sc 361.383	1973630.6	1973630.6	98.296	%	09:41:31
3	Y 371.029	1193662.4	1193662.4	97.572	%	09:41:31
3	Ag 328.068†	106378.5	108238.7	[1000]	µg/L	09:41:36
3	As 188.979†	511.6	517.3	[1000]	µg/L	09:41:57
3	B 249.677†	21914.7	22132.8	[1000]	µg/L	09:41:36
3	Ba 233.527†	37652.3	38377.3	[1000]	µg/L	09:41:36
3	Be 313.107†	1520544.2	1543280.7	[1000]	µg/L	09:41:31
3	Cd 226.502†	35759.5	36476.9	[1000]	µg/L	09:41:36
3	Co 228.616†	19791.9	20204.8	[1000]	µg/L	09:41:36
3	Cr 267.716†	45351.7	46262.0	[1000]	µg/L	09:41:36
3	Cu 324.752†	142170.4	141325.6	[1000]	µg/L	09:41:31
3	Mn 257.610†	300447.6	305903.0	[1000]	µg/L	09:41:31
3	Mo 202.031†	8463.9	8615.4	[1000]	µg/L	09:41:36
3	Ni 231.604†	17731.0	17747.3	[1000]	µg/L	09:41:36
3	P 214.914†	2425.6	2277.7	[5000]	µg/L	09:41:57
3	Pb 220.353†	3821.9	3837.2	[1000]	µg/L	09:41:57
3	S 181.975 Axial†	398.7	379.9	[2000]	µg/L	09:41:57
3	Sb 206.836†	983.6	976.5	[1000]	µg/L	09:41:57
3	Se 196.026†	687.6	688.8	[1000]	µg/L	09:41:57
3	SiO2†	55281.5	54206.1	[10695]	µg/L	09:41:36
3	Si 251.611†	62523.2	63250.1	[5000]	µg/L	09:41:36
3	Sn 189.927†	1984.8	1996.8	[1000]	µg/L	09:41:57
3	Ti 334.940†	431265.9	437942.4	[1000]	µg/L	09:41:31
3	Tl 190.801†	611.3	642.0	[1000]	µg/L	09:41:57
3	U 409.014†	10814.2	10300.0	[1000]	µg/L	09:41:36
3	V 292.402†	83984.0	85530.2	[1000]	µg/L	09:41:36
3	Zn 213.857†	36147.7	36246.4	[1000]	µg/L	09:41:36

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1987909.9	14500.97	0.73%	99.007	%
Sc RADIAL	114527.6	520.84	0.45%	102	%
Y 371.029	1202553.4	8854.29	0.74%	98.299	%
Ag 328.068†	104842.3	5734.40	5.47%	[1000]	µg/L
Al 396.153Radial†	19220.2	85.29	0.44%	[10000]	µg/L
As 188.979†	514.3	3.16	0.61%	[1000]	µg/L
B 249.677†	21416.2	1244.71	5.81%	[1000]	µg/L
Ba 233.527†	37161.7	2072.05	5.58%	[1000]	µg/L
Be 313.107†	1533129.4	10834.53	0.71%	[1000]	µg/L
Ca 317.933Radial†	25008.1	108.58	0.43%	[10000]	µg/L
Cd 226.502†	35282.4	2046.37	5.80%	[1000]	µg/L
Co 228.616†	19543.4	1122.41	5.74%	[1000]	µg/L
Cr 267.716†	44803.2	2467.41	5.51%	[1000]	µg/L
Cu 324.752†	140437.6	967.31	0.69%	[1000]	µg/L
Fe 238.204 Radial†	1891.4	6.35	0.34%	[10000]	µg/L
K 766.490 Radial†	17669.0	62.38	0.35%	[10000]	µg/L
Mg 279.077 IEC†	1815.6	9.09	0.50%	[10000]	µg/L
Mn 257.610†	303761.8	2163.82	0.71%	[1000]	µg/L
Mo 202.031†	8354.5	461.30	5.52%	[1000]	µg/L
Na 589.592 Radial†	36043.9	85.10	0.24%	[10000]	µg/L

Ni 231.604†	17187.4	952.75	5.54%	[1000]	µg/L
P 214.914†	2242.2	40.35	1.80%	[5000]	µg/L
Pb 220.353†	3778.8	61.65	1.63%	[1000]	µg/L
S 181.975 Axial†	373.2	7.59	2.03%	[2000]	µg/L
Sb 206.836†	958.9	16.70	1.74%	[1000]	µg/L
Se 196.026†	674.5	16.91	2.51%	[1000]	µg/L
SiO2†	52509.5	2929.33	5.58%	[10695]	µg/L
Si 251.611†	61213.4	3421.05	5.59%	[5000]	µg/L
Sn 189.927†	1965.0	33.43	1.70%	[1000]	µg/L
Sr 421.552†	172891.2	501.67	0.29%	[1000]	µg/L
Ti 334.940†	434991.1	3172.65	0.73%	[1000]	µg/L
Tl 190.801†	633.7	10.80	1.70%	[1000]	µg/L
U 409.014†	9998.8	552.16	5.52%	[1000]	µg/L
V 292.402†	82891.2	4523.96	5.46%	[1000]	µg/L
Zn 213.857†	35040.9	2041.60	5.83%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/14/2009 09:42:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113332.7	113332.7	101	%	09:42:39
1	Al 396.153Radial†	95459.3	94155.5	[50000]	µg/L	09:42:39
1	Ca 317.933Radial†	125338.2	123429.6	[50000]	µg/L	09:42:39
1	Fe 238.204 Radial†	3838.1	3780.3	[20000]	µg/L	09:42:59
1	Mg 279.077 IEC†	9002.2	8878.8	[50000]	µg/L	09:42:59
1	Na 589.592 Radial†	70741.8	70299.1	[20000]	µg/L	09:42:39
1	Sc 361.383	2011704.5	2011704.5	100.19	%	09:44:03
1	Y 371.029	1207873.5	1207873.5	98.733	%	09:44:03
2	Sc RADIAL	113612.7	113612.7	101	%	09:43:05
2	Al 396.153Radial†	96073.6	94528.5	[50000]	µg/L	09:43:05
2	Ca 317.933Radial†	125946.7	123724.2	[50000]	µg/L	09:43:05
2	Fe 238.204 Radial†	3833.2	3766.2	[20000]	µg/L	09:43:25
2	Mg 279.077 IEC†	8997.8	8852.4	[50000]	µg/L	09:43:25
2	Na 589.592 Radial†	71222.2	70600.4	[20000]	µg/L	09:43:05
2	Sc 361.383	1998934.0	1998934.0	99.556	%	09:44:11
2	Y 371.029	1200091.9	1200091.9	98.097	%	09:44:11
3	Sc RADIAL	113863.0	113863.0	102	%	09:43:31
3	Al 396.153Radial†	96638.5	94876.0	[50000]	µg/L	09:43:31
3	Ca 317.933Radial†	126940.8	124429.0	[50000]	µg/L	09:43:31
3	Fe 238.204 Radial†	3816.9	3741.8	[20000]	µg/L	09:43:51
3	Mg 279.077 IEC†	8983.4	8818.8	[50000]	µg/L	09:43:51
3	Na 589.592 Radial†	71729.6	70945.1	[20000]	µg/L	09:43:31
3	Sc 361.383	1997184.4	1997184.4	99.469	%	09:44:19
3	Y 371.029	1199432.9	1199432.9	98.044	%	09:44:19

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2002607.6	7926.56	0.40%	99.739	%
Sc RADIAL	113602.8	265.26	0.23%	101	%
Y 371.029	1202466.1	4694.53	0.39%	98.291	%
Al 396.153Radial†	94520.0	360.33	0.38%	[50000]	µg/L
Ca 317.933Radial†	123860.9	513.55	0.41%	[50000]	µg/L
Fe 238.204 Radial†	3762.8	19.50	0.52%	[20000]	µg/L
Mg 279.077 IEC†	8850.0	30.05	0.34%	[50000]	µg/L
Na 589.592 Radial†	70614.8	323.23	0.46%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	105.5	0.00000	0.999931	
Al 396.153Radial	3	Lin Thru 0	0.0	1.892	0.00000	0.999991	
As 188.979	3	Lin Thru 0	0.0	0.5148	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	21.50	0.00000	0.999966	
Ba 233.527	3	Lin Thru 0	0.0	37.38	0.00000	0.999933	
Be 313.107	3	Lin Thru 0	0.0	1534	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.479	0.00000	0.999996	
Cd 226.502	3	Lin Thru 0	0.0	35.59	0.00000	0.999857	
Co 228.616	3	Lin Thru 0	0.0	19.68	0.00000	0.999906	
Cr 267.716	3	Lin Thru 0	0.0	45.05	0.00000	0.999941	
Cu 324.752	3	Lin Thru 0	0.0	140.0	0.00000	0.999977	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1883	0.00000	0.999998	
K 766.490 Radial	3	Lin Thru 0	0.0	1.773	0.00000	0.999976	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1772	0.00000	0.999979	
Mn 257.610	3	Lin Thru 0	0.0	303.9	0.00000	0.999999	
Mo 202.031	3	Lin Thru 0	0.0	8.375	0.00000	0.999989	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.545	0.00000	0.999965	

Ni 231.604	3	Lin Thru 0	0.0	17.33	0.00000	0.999873
P 214.914	3	Lin Thru 0	0.0	0.4493	0.00000	0.999991
Pb 220.353	3	Lin Thru 0	0.0	3.786	0.00000	0.999993
S 181.975 Axial	3	Lin Thru 0	0.0	0.1869	0.00000	0.999995
Sb 206.836	3	Lin Thru 0	0.0	0.9573	0.00000	0.999992
Se 196.026	3	Lin Thru 0	0.0	0.6773	0.00000	0.999956
SiO2	3	Lin Thru 0	0.0	4.930	0.00000	0.999968
Si 251.611	3	Lin Thru 0	0.0	12.29	0.00000	0.999969
Sn 189.927	3	Lin Thru 0	0.0	1.963	0.00000	0.999998
Sr 421.552	3	Lin Thru 0	0.0	173.3	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	434.4	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	0.6359	0.00000	0.999978
U 409.014	3	Lin Thru 0	0.0	10.03	0.00000	0.999985
V 292.402	3	Lin Thru 0	0.0	83.32	0.00000	0.999949
Zn 213.857	3	Lin Thru 0	0.0	35.39	0.00000	0.999813

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/14/2009 09:44:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113953.0	113953.0	102	%			09:45:01
1	Al 396.153Radial†	10437.3	10092.2	5313.0	µg/L	5313.0	ppb	09:45:01
1	Ca 317.933Radial†	13606.0	12957.8	5227.8	µg/L	5227.8	ppb	09:45:21
1	Fe 238.204 Radial†	1030.3	1000.5	5330.3	µg/L	5330.3	ppb	09:45:21
1	K 766.490 Radial†	5264.3	4426.5	2497.2	µg/L	2497.2	ppb	09:45:01
1	Mg 279.077 IEC†	979.6	946.6	5346.3	µg/L	5346.3	ppb	09:45:21
1	Na 589.592 Radial†	9003.0	9248.8	2608.6	µg/L	2608.6	ppb	09:45:01
1	Sr 421.552†	96077.4	94505.2	545.40	µg/L	545.40	ppb	09:45:01
1	Sc 361.383	1997243.5	1997243.5	99.472	%			09:46:25
1	Y 371.029	1210136.5	1210136.5	98.918	%			09:46:25
1	Ag 328.068†	28000.3	28165.1	271.08	µg/L	271.08	ppb	09:46:31
1	As 188.979†	256.4	254.6	493.26	µg/L	493.26	ppb	09:46:51
1	B 249.677†	11982.4	11884.3	550.96	µg/L	550.96	ppb	09:46:31
1	Ba 233.527†	20016.3	20195.0	541.33	µg/L	541.33	ppb	09:46:31
1	Be 313.107†	408975.7	407526.5	265.42	µg/L	265.42	ppb	09:46:25
1	Cd 226.502†	18823.0	19020.5	534.98	µg/L	534.98	ppb	09:46:31
1	Co 228.616†	10534.7	10660.4	541.91	µg/L	541.91	ppb	09:46:31
1	Cr 267.716†	23139.8	23386.8	520.35	µg/L	520.35	ppb	09:46:31
1	Cu 324.752†	75513.2	72604.9	519.85	µg/L	519.85	ppb	09:46:31
1	Mn 257.610†	156485.3	157563.4	519.09	µg/L	519.09	ppb	09:46:25
1	Mo 202.031†	4557.6	4586.6	547.86	µg/L	547.86	ppb	09:46:51
1	Ni 231.604†	9292.9	9051.1	522.36	µg/L	522.36	ppb	09:46:31
1	P 214.914†	1361.2	1178.4	2566.5	µg/L	2566.5	ppb	09:46:51
1	Pb 220.353†	1990.0	1949.5	515.88	µg/L	515.88	ppb	09:46:51
1	S 181.975 Axial†	496.7	473.6	2532.8	µg/L	2532.8	ppb	09:46:51
1	Sb 206.836†	510.2	488.8	508.95	µg/L	508.95	ppb	09:46:51
1	Se 196.026†	1823.8	1822.7	2693.4	µg/L	2693.4	ppb	09:46:51
1	SiO2†	56741.8	55009.2	11159	µg/L	11159	ppb	09:46:31
1	Si 251.611†	63941.4	63923.8	5151.0	µg/L	5151.0	ppb	09:46:31
1	Sn 189.927†	1088.2	1071.6	548.68	µg/L	548.68	ppb	09:46:51
1	Ti 334.940†	217136.9	217490.3	500.33	µg/L	500.33	ppb	09:46:25
1	Tl 190.801†	316.6	338.4	534.37	µg/L	534.37	ppb	09:46:51
1	U 409.014†	5756.3	5085.2	506.31	µg/L	506.31	ppb	09:46:31
1	V 292.402†	43683.0	44005.2	533.22	µg/L	533.22	ppb	09:46:31
1	Zn 213.857†	19397.5	18972.6	531.93	µg/L	531.93	ppb	09:46:31
2	Sc RADIAL	114478.8	114478.8	102	%			09:45:27
2	Al 396.153Radial†	10422.5	10030.5	5280.7	µg/L	5280.7	ppb	09:45:27
2	Ca 317.933Radial†	13567.2	12858.5	5187.7	µg/L	5187.7	ppb	09:45:47
2	Fe 238.204 Radial†	1021.9	987.6	5260.1	µg/L	5260.1	ppb	09:45:47
2	K 766.490 Radial†	5323.2	4460.3	2516.3	µg/L	2516.3	ppb	09:45:27
2	Mg 279.077 IEC†	986.8	949.2	5361.0	µg/L	5361.0	ppb	09:45:47
2	Na 589.592 Radial†	8928.8	9135.5	2576.7	µg/L	2576.7	ppb	09:45:27
2	Sr 421.552†	95504.7	93511.4	539.67	µg/L	539.67	ppb	09:45:27
2	Sc 361.383	2011772.2	2011772.2	100.20	%			09:46:58
2	Y 371.029	1219654.8	1219654.8	99.696	%			09:46:58
2	Ag 328.068†	25871.1	25836.8	248.69	µg/L	248.69	ppb	09:47:04
2	As 188.979†	254.3	250.7	485.69	µg/L	485.69	ppb	09:47:25
2	B 249.677†	10985.7	10802.4	500.68	µg/L	500.68	ppb	09:47:04
2	Ba 233.527†	18364.2	18400.7	493.24	µg/L	493.24	ppb	09:47:04
2	Be 313.107†	406654.6	402240.7	261.97	µg/L	261.97	ppb	09:46:58
2	Cd 226.502†	17194.9	17258.9	485.41	µg/L	485.41	ppb	09:47:04
2	Co 228.616†	9653.8	9704.7	493.34	µg/L	493.34	ppb	09:47:04
2	Cr 267.716†	21324.3	21406.9	476.30	µg/L	476.30	ppb	09:47:04
2	Cu 324.752†	70041.9	66596.0	476.91	µg/L	476.91	ppb	09:47:04
2	Mn 257.610†	155329.0	155273.2	511.55	µg/L	511.55	ppb	09:46:58
2	Mo 202.031†	4526.6	4522.5	540.21	µg/L	540.21	ppb	09:47:25
2	Ni 231.604†	8546.3	8238.5	475.46	µg/L	475.46	ppb	09:47:04
2	P 214.914†	1367.6	1175.0	2563.9	µg/L	2563.9	ppb	09:47:25
2	Pb 220.353†	1995.1	1940.2	513.49	µg/L	513.49	ppb	09:47:25

2	S 181.975 Axial†	497.3	470.6	2516.6 µg/L	2516.6 ppb	09:47:25
2	Sb 206.836†	510.5	485.3	505.54 µg/L	505.54 ppb	09:47:25
2	Se 196.026†	1809.2	1794.9	2652.2 µg/L	2652.2 ppb	09:47:25
2	SiO2†	52371.5	50235.5	10191 µg/L	10191 ppb	09:47:04
2	Si 251.611†	59001.6	58529.5	4712.8 µg/L	4712.8 ppb	09:47:04
2	Sn 189.927†	1079.2	1054.7	540.08 µg/L	540.08 ppb	09:47:25
2	Ti 334.940†	216043.6	214822.7	494.19 µg/L	494.19 ppb	09:46:58
2	Tl 190.801†	318.6	338.0	533.95 µg/L	533.95 ppb	09:47:25
2	U 409.014†	5398.6	4686.5	466.56 µg/L	466.56 ppb	09:47:04
2	V 292.402†	40246.6	40258.4	488.13 µg/L	488.13 ppb	09:47:04
2	Zn 213.857†	17749.0	17186.5	481.78 µg/L	481.78 ppb	09:47:04
3	Sc RADIAL	114490.4	114490.4	102 %		09:45:53
3	Al 396.153Radial†	10514.5	10119.5	5327.6 µg/L	5327.6 ppb	09:45:53
3	Ca 317.933Radial†	13556.9	12847.0	5183.1 µg/L	5183.1 ppb	09:46:13
3	Fe 238.204 Radial†	1022.7	988.3	5263.1 µg/L	5263.1 ppb	09:46:13
3	K 766.490 Radial†	5409.2	4544.0	2563.5 µg/L	2563.5 ppb	09:45:53
3	Mg 279.077 IEC†	979.9	942.4	5322.9 µg/L	5322.9 ppb	09:46:13
3	Na 589.592 Radial†	8965.4	9170.5	2586.5 µg/L	2586.5 ppb	09:45:53
3	Sr 421.552†	96754.2	94724.0	546.67 µg/L	546.67 ppb	09:45:53
3	Sc 361.383	2013467.6	2013467.6	100.28 %		09:47:32
3	Y 371.029	1220558.6	1220558.6	99.770 %		09:47:32
3	Ag 328.068†	25011.4	24957.8	240.24 µg/L	240.24 ppb	09:47:38
3	As 188.979†	255.4	251.5	487.29 µg/L	487.29 ppb	09:47:58
3	B 249.677†	10636.2	10444.7	484.04 µg/L	484.04 ppb	09:47:38
3	Ba 233.527†	17784.4	17807.1	477.32 µg/L	477.32 ppb	09:47:38
3	Be 313.107†	405320.6	400568.7	260.88 µg/L	260.88 ppb	09:47:32
3	Cd 226.502†	16607.1	16658.3	468.49 µg/L	468.49 ppb	09:47:38
3	Co 228.616†	9338.6	9382.4	476.98 µg/L	476.98 ppb	09:47:38
3	Cr 267.716†	20633.8	20700.4	460.58 µg/L	460.58 ppb	09:47:38
3	Cu 324.752†	67797.9	64299.5	460.50 µg/L	460.50 ppb	09:47:38
3	Mn 257.610†	155067.7	154882.1	510.26 µg/L	510.26 ppb	09:47:32
3	Mo 202.031†	4564.9	4556.9	544.32 µg/L	544.32 ppb	09:47:58
3	Ni 231.604†	8287.9	7973.7	460.17 µg/L	460.17 ppb	09:47:38
3	P 214.914†	1359.7	1165.9	2545.7 µg/L	2545.7 ppb	09:47:58
3	Pb 220.353†	2002.7	1946.1	515.09 µg/L	515.09 ppb	09:47:58
3	S 181.975 Axial†	496.4	469.3	2509.9 µg/L	2509.9 ppb	09:47:58
3	Sb 206.836†	509.2	483.6	503.78 µg/L	503.78 ppb	09:47:58
3	Se 196.026†	1812.1	1796.2	2654.3 µg/L	2654.3 ppb	09:47:58
3	SiO2†	50700.9	48525.6	9843.8 µg/L	9843.8 ppb	09:47:38
3	Si 251.611†	56994.0	56477.9	4545.8 µg/L	4545.8 ppb	09:47:38
3	Sn 189.927†	1085.5	1060.1	542.82 µg/L	542.82 ppb	09:47:58
3	Ti 334.940†	215417.1	214016.4	492.33 µg/L	492.33 ppb	09:47:32
3	Tl 190.801†	323.1	342.3	540.67 µg/L	540.67 ppb	09:47:58
3	U 409.014†	5156.4	4440.4	442.02 µg/L	442.02 ppb	09:47:38
3	V 292.402†	38865.9	38847.8	471.19 µg/L	471.19 ppb	09:47:38
3	Zn 213.857†	17222.3	16646.3	466.62 µg/L	466.62 ppb	09:47:38

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2007494.4	99.983	%	0.4442				0.44%
Sc RADIAL	114307.4	102	%	0.3				0.27%
Y 371.029	1216783.3	99.462	%	0.4720				0.47%
Ag 328.068†	26319.9	253.34	µg/L	15.936	253.34	ppb	15.936	6.29%
QC value within limits for Ag 328.068 Recovery = 101.33%								
Al 396.153Radial†	10080.7	5307.1	µg/L	23.99	5307.1	ppb	23.99	0.45%
QC value within limits for Al 396.153Radial Recovery = 106.14%								
As 188.979†	252.2	488.75	µg/L	3.987	488.75	ppb	3.987	0.82%
QC value within limits for As 188.979 Recovery = 97.75%								
B 249.677†	11043.8	511.89	µg/L	34.842	511.89	ppb	34.842	6.81%
QC value within limits for B 249.677 Recovery = 102.38%								
Ba 233.527†	18800.9	503.96	µg/L	33.324	503.96	ppb	33.324	6.61%
QC value within limits for Ba 233.527 Recovery = 100.79%								
Be 313.107†	403445.3	262.76	µg/L	2.366	262.76	ppb	2.366	0.90%
QC value within limits for Be 313.107 Recovery = 105.10%								
Ca 317.933Radial†	12887.8	5199.5	µg/L	24.58	5199.5	ppb	24.58	0.47%
QC value within limits for Ca 317.933Radial Recovery = 103.99%								
Cd 226.502†	17645.9	496.29	µg/L	34.553	496.29	ppb	34.553	6.96%
QC value within limits for Cd 226.502 Recovery = 99.26%								
Co 228.616†	9915.8	504.08	µg/L	33.771	504.08	ppb	33.771	6.70%

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   QC value within limits for Co 228.616  Recovery = 100.82%
Cr 267.716†            21831.3      485.74 µg/L        30.986      485.74 ppb        30.986   6.38%
   QC value within limits for Cr 267.716  Recovery = 97.15%
Cu 324.752†            67833.5      485.76 µg/L        30.648      485.76 ppb        30.648   6.31%
   QC value within limits for Cu 324.752  Recovery = 97.15%
Fe 238.204 Radial†       992.1      5284.5 µg/L         39.72      5284.5 ppb         39.72   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.69%
K 766.490 Radial†       4476.9      2525.6 µg/L         34.13      2525.6 ppb         34.13   1.35%
   QC value within limits for K 766.490 Radial  Recovery = 101.02%
Mg 279.077 IEC†          946.1      5343.4 µg/L         19.26      5343.4 ppb         19.26   0.36%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.87%
Mn 257.610†           155906.2      513.63 µg/L         4.770      513.63 ppb         4.770   0.93%
   QC value within limits for Mn 257.610  Recovery = 102.73%
Mo 202.031†             4555.3      544.13 µg/L         3.830      544.13 ppb         3.830   0.70%
   QC value within limits for Mo 202.031  Recovery = 108.83%
Na 589.592 Radial†      9184.9      2590.6 µg/L         16.35      2590.6 ppb         16.35   0.63%
   QC value within limits for Na 589.592 Radial  Recovery = 103.62%
Ni 231.604†             8421.1      486.00 µg/L        32.403      486.00 ppb        32.403   6.67%
   QC value within limits for Ni 231.604  Recovery = 97.20%
P 214.914†              1173.1      2558.7 µg/L         11.31      2558.7 ppb         11.31   0.44%
   QC value within limits for P 214.914  Recovery = 102.35%
Pb 220.353†             1945.3      514.82 µg/L         1.219      514.82 ppb         1.219   0.24%
   QC value within limits for Pb 220.353  Recovery = 102.96%
S 181.975 Axial†         471.2      2519.8 µg/L         11.77      2519.8 ppb         11.77   0.47%
   QC value within limits for S 181.975 Axial  Recovery = 100.79%
Sb 206.836†              485.9      506.09 µg/L         2.628      506.09 ppb         2.628   0.52%
   QC value within limits for Sb 206.836  Recovery = 101.22%
Se 196.026†             1804.6      2666.6 µg/L         23.22      2666.6 ppb         23.22   0.87%
   QC value within limits for Se 196.026  Recovery = 106.67%
SiO2†                  51256.8       10398 µg/L         681.7       10398 ppb         681.7   6.56%
   QC value within limits for SiO2  Recovery = 97.22%
Si 251.611†            59643.7      4803.2 µg/L        312.56      4803.2 ppb        312.56   6.51%
   QC value within limits for Si 251.611  Recovery = 96.06%
Sn 189.927†             1062.1      543.86 µg/L         4.395      543.86 ppb         4.395   0.81%
   QC value within limits for Sn 189.927  Recovery = 108.77%
Sr 421.552†            94246.9      543.91 µg/L         3.730      543.91 ppb         3.730   0.69%
   QC value within limits for Sr 421.552  Recovery = 108.78%
Ti 334.940†           215443.1      495.62 µg/L         4.184      495.62 ppb         4.184   0.84%
   QC value within limits for Ti 334.940  Recovery = 99.12%
Tl 190.801†              339.6      536.33 µg/L         3.765      536.33 ppb         3.765   0.70%
   QC value within limits for Tl 190.801  Recovery = 107.27%
U 409.014†              4737.4      471.63 µg/L        32.447      471.63 ppb        32.447   6.88%
   QC value within limits for U 409.014  Recovery = 94.33%
V 292.402†             41037.1      497.51 µg/L        32.064      497.51 ppb        32.064   6.44%
   QC value within limits for V 292.402  Recovery = 99.50%
Zn 213.857†            17601.8      493.44 µg/L        34.185      493.44 ppb        34.185   6.93%
   QC value within limits for Zn 213.857  Recovery = 98.69%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/14/2009 09:48:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112827.5	112827.5	101	%			09:48:40
1	Al 396.153Radial†	170.8	5.1	2.6478	µg/L	2.6478	ppb	09:48:40
1	Ca 317.933Radial†	433.8	18.0	7.2533	µg/L	7.2533	ppb	09:49:01
1	Fe 238.204 Radial†	11.6	-0.5	-2.6026	µg/L	-2.6026	ppb	09:49:01
1	K 766.490 Radial†	737.0	-15.2	-8.5554	µg/L	-8.5554	ppb	09:48:40
1	Mg 279.077 IEC†	17.4	1.3	7.2632	µg/L	7.2632	ppb	09:49:01
1	Na 589.592 Radial†	-531.1	-125.5	-35.386	µg/L	-35.386	ppb	09:48:40
1	Sr 421.552†	-71.1	20.8	0.1199	µg/L	0.1199	ppb	09:48:40
1	Sc 361.383	2007680.3	2007680.3	99.992	%			09:50:03
1	Y 371.029	1222869.6	1222869.6	99.959	%			09:50:03
1	Ag 328.068†	29.5	45.8	0.4301	µg/L	0.4301	ppb	09:50:09
1	As 188.979†	4.4	1.2	2.3614	µg/L	2.3614	ppb	09:50:29
1	B 249.677†	202.4	40.6	1.8910	µg/L	1.8910	ppb	09:50:09
1	Ba 233.527†	-69.8	2.7	0.0706	µg/L	0.0706	ppb	09:50:29
1	Be 313.107†	3752.1	133.5	0.0870	µg/L	0.0870	ppb	09:50:09
1	Cd 226.502†	-95.0	2.6	0.0713	µg/L	0.0713	ppb	09:50:29
1	Co 228.616†	-70.4	-0.6	-0.0265	µg/L	-0.0265	ppb	09:50:29
1	Cr 267.716†	-131.8	-7.5	-0.1688	µg/L	-0.1688	ppb	09:50:09
1	Cu 324.752†	3259.5	-49.2	-0.3518	µg/L	-0.3518	ppb	09:50:09
1	Mn 257.610†	-214.4	33.4	0.1097	µg/L	0.1097	ppb	09:50:29
1	Mo 202.031†	2.7	7.4	0.8864	µg/L	0.8864	ppb	09:50:29
1	Ni 231.604†	304.7	13.7	0.7918	µg/L	0.7918	ppb	09:50:29
1	P 214.914†	193.1	3.1	7.0654	µg/L	7.0654	ppb	09:50:29
1	Pb 220.353†	52.5	1.5	0.4133	µg/L	0.4133	ppb	09:50:29
1	S 181.975 Axial†	24.0	-1.7	-9.2132	µg/L	-9.2132	ppb	09:50:29
1	Sb 206.836†	20.1	-4.0	-4.2298	µg/L	-4.2298	ppb	09:50:29
1	Se 196.026†	7.9	-2.9	-4.3184	µg/L	-4.3184	ppb	09:50:29
1	SiO2†	2022.8	-10.7	-2.1606	µg/L	-2.1606	ppb	09:50:09
1	Si 251.611†	385.6	28.8	2.2529	µg/L	2.2529	ppb	09:50:29
1	Sn 189.927†	26.2	3.8	1.9388	µg/L	1.9388	ppb	09:50:29
1	Ti 334.940†	866.7	68.2	0.1567	µg/L	0.1567	ppb	09:50:09
1	Tl 190.801†	-15.5	4.5	7.1541	µg/L	7.1541	ppb	09:50:29
1	U 409.014†	674.1	-27.4	-2.7356	µg/L	-2.7356	ppb	09:50:09
1	V 292.402†	-137.4	-46.9	-0.5618	µg/L	-0.5618	ppb	09:50:09
1	Zn 213.857†	531.3	3.5	0.0964	µg/L	0.0964	ppb	09:50:29
2	Sc RADIAL	111831.2	111831.2	99.9	%			09:49:06
2	Al 396.153Radial†	149.7	-14.5	-7.6887	µg/L	-7.6887	ppb	09:49:06
2	Ca 317.933Radial†	408.8	-3.3	-1.3308	µg/L	-1.3308	ppb	09:49:27
2	Fe 238.204 Radial†	8.7	-3.3	-17.476	µg/L	-17.476	ppb	09:49:27
2	K 766.490 Radial†	746.7	1.1	0.5925	µg/L	0.5925	ppb	09:49:06
2	Mg 279.077 IEC†	23.7	7.7	43.308	µg/L	43.308	ppb	09:49:27
2	Na 589.592 Radial†	-479.3	-78.3	-22.071	µg/L	-22.071	ppb	09:49:06
2	Sr 421.552†	-73.9	17.3	0.1000	µg/L	0.1000	ppb	09:49:06
2	Sc 361.383	2016824.5	2016824.5	100.45	%			09:50:35
2	Y 371.029	1227442.3	1227442.3	100.33	%			09:50:35
2	Ag 328.068†	50.5	66.6	0.6317	µg/L	0.6317	ppb	09:50:41
2	As 188.979†	-1.4	-4.5	-8.7854	µg/L	-8.7854	ppb	09:51:01
2	B 249.677†	148.1	-14.3	-0.6592	µg/L	-0.6592	ppb	09:50:41
2	Ba 233.527†	-65.8	6.9	0.1848	µg/L	0.1848	ppb	09:51:01
2	Be 313.107†	3741.9	106.4	0.0694	µg/L	0.0694	ppb	09:50:41
2	Cd 226.502†	-79.8	18.1	0.5105	µg/L	0.5105	ppb	09:51:01
2	Co 228.616†	-63.8	6.3	0.3223	µg/L	0.3223	ppb	09:51:01
2	Cr 267.716†	-135.8	-10.9	-0.2423	µg/L	-0.2423	ppb	09:50:41
2	Cu 324.752†	3278.8	-44.8	-0.3237	µg/L	-0.3237	ppb	09:50:41
2	Mn 257.610†	-198.7	50.0	0.1623	µg/L	0.1623	ppb	09:51:01
2	Mo 202.031†	2.0	6.8	0.8074	µg/L	0.8074	ppb	09:51:01
2	Ni 231.604†	309.2	16.8	0.9711	µg/L	0.9711	ppb	09:51:01
2	P 214.914†	187.8	-3.1	-6.7341	µg/L	-6.7341	ppb	09:51:01
2	Pb 220.353†	52.0	0.8	0.2156	µg/L	0.2156	ppb	09:51:01

2	S 181.975 Axial†	23.9	-1.9	-10.262 µg/L	-10.262 ppb	09:51:01
2	Sb 206.836†	21.7	-2.6	-2.6723 µg/L	-2.6723 ppb	09:51:01
2	Se 196.026†	9.8	-1.0	-1.5735 µg/L	-1.5735 ppb	09:51:01
2	SiO2†	2033.4	-9.2	-1.8760 µg/L	-1.8760 ppb	09:50:41
2	Si 251.611†	384.8	26.2	2.0802 µg/L	2.0802 ppb	09:51:01
2	Sn 189.927†	24.7	2.2	1.1237 µg/L	1.1237 ppb	09:51:01
2	Ti 334.940†	770.2	-31.7	-0.0730 µg/L	-0.0730 ppb	09:50:41
2	Tl 190.801†	-20.2	-0.1	-0.0898 µg/L	-0.0898 ppb	09:51:01
2	U 409.014†	696.3	-8.4	-0.8325 µg/L	-0.8325 ppb	09:50:41
2	V 292.402†	-67.1	23.8	0.2880 µg/L	0.2880 ppb	09:50:41
2	Zn 213.857†	528.9	-1.2	-0.0392 µg/L	-0.0392 ppb	09:51:01
3	Sc RADIAL	113675.2	113675.2	102 %		09:49:32
3	Al 396.153Radial†	184.3	17.1	9.0554 µg/L	9.0554 ppb	09:49:32
3	Ca 317.933Radial†	423.2	4.3	1.7306 µg/L	1.7306 ppb	09:49:53
3	Fe 238.204 Radial†	6.5	-5.6	-29.583 µg/L	-29.583 ppb	09:49:53
3	K 766.490 Radial†	707.8	-49.4	-27.854 µg/L	-27.854 ppb	09:49:32
3	Mg 279.077 IEC†	14.6	-1.7	-9.3890 µg/L	-9.3890 ppb	09:49:53
3	Na 589.592 Radial†	-505.5	-96.4	-27.179 µg/L	-27.179 ppb	09:49:32
3	Sr 421.552†	-35.6	56.2	0.3245 µg/L	0.3245 ppb	09:49:32
3	Sc 361.383	2009779.9	2009779.9	100.10 %		09:51:07
3	Y 371.029	1223681.0	1223681.0	100.03 %		09:51:07
3	Ag 328.068†	69.1	85.3	0.8041 µg/L	0.8041 ppb	09:51:13
3	As 188.979†	4.8	1.7	3.2341 µg/L	3.2341 ppb	09:51:33
3	B 249.677†	191.6	29.6	1.3875 µg/L	1.3875 ppb	09:51:13
3	Ba 233.527†	-70.4	2.1	0.0544 µg/L	0.0544 ppb	09:51:33
3	Be 313.107†	3745.1	122.7	0.0799 µg/L	0.0799 ppb	09:51:13
3	Cd 226.502†	-85.6	12.1	0.3444 µg/L	0.3444 ppb	09:51:33
3	Co 228.616†	-69.7	0.2	0.0087 µg/L	0.0087 ppb	09:51:33
3	Cr 267.716†	-135.1	-10.7	-0.2383 µg/L	-0.2383 ppb	09:51:13
3	Cu 324.752†	3281.0	-31.1	-0.2286 µg/L	-0.2286 ppb	09:51:13
3	Mn 257.610†	-208.9	39.1	0.1250 µg/L	0.1250 ppb	09:51:33
3	Mo 202.031†	-10.4	-5.7	-0.6762 µg/L	-0.6762 ppb	09:51:33
3	Ni 231.604†	307.3	15.9	0.9193 µg/L	0.9193 ppb	09:51:33
3	P 214.914†	190.3	0.1	0.4058 µg/L	0.4058 ppb	09:51:33
3	Pb 220.353†	60.4	9.4	2.4672 µg/L	2.4672 ppb	09:51:33
3	S 181.975 Axial†	22.7	-3.0	-16.196 µg/L	-16.196 ppb	09:51:33
3	Sb 206.836†	24.1	-0.1	-0.0889 µg/L	-0.0889 ppb	09:51:33
3	Se 196.026†	12.2	1.4	2.0630 µg/L	2.0630 ppb	09:51:33
3	SiO2†	2030.3	-5.3	-1.0727 µg/L	-1.0727 ppb	09:51:13
3	Si 251.611†	373.3	16.2	1.3025 µg/L	1.3025 ppb	09:51:33
3	Sn 189.927†	23.8	1.4	0.6883 µg/L	0.6883 ppb	09:51:33
3	Ti 334.940†	890.2	90.8	0.2089 µg/L	0.2089 ppb	09:51:13
3	Tl 190.801†	-22.0	-1.9	-3.0047 µg/L	-3.0047 ppb	09:51:33
3	U 409.014†	732.6	30.3	3.0253 µg/L	3.0253 ppb	09:51:13
3	V 292.402†	-120.2	-29.6	-0.3577 µg/L	-0.3577 ppb	09:51:13
3	Zn 213.857†	528.1	-0.2	-0.0077 µg/L	-0.0077 ppb	09:51:33

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2011428.2	100.18	%	0.239				0.24%
Sc RADIAL	112778.0	101	%	0.8				0.82%
Y 371.029	1224664.3	100.11	%	0.199				0.20%
Ag 328.068†	65.9	0.6220	µg/L	0.18722	0.6220	ppb	0.18722	30.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.6	1.3382	µg/L	8.44854	1.3382	ppb	8.44854	631.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-1.0633	µg/L	6.70173	-1.0633	ppb	6.70173	630.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	18.7	0.8731	µg/L	1.35067	0.8731	ppb	1.35067	154.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.9	0.1033	µg/L	0.07108	0.1033	ppb	0.07108	68.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.9	0.0787	µg/L	0.00886	0.0787	ppb	0.00886	11.25%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	2.5510	µg/L	4.35044	2.5510	ppb	4.35044	170.54%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.9	0.3087	µg/L	0.22172	0.3087	ppb	0.22172	71.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.0	0.1015	µg/L	0.19201	0.1015	ppb	0.19201	189.21%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -9.7     -0.2165 µg/L      0.04135     -0.2165 ppb       0.04135  19.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -41.7     -0.3014 µg/L      0.06457     -0.3014 ppb       0.06457  21.43%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -3.1     -16.554 µg/L      13.5140     -16.554 ppb       13.5140  81.64%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -21.2     -11.939 µg/L      14.5219     -11.939 ppb       14.5219 121.63%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          2.4      13.727 µg/L      26.9367      13.727 ppb       26.9367 196.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             40.8      0.1323 µg/L      0.02705      0.1323 ppb       0.02705  20.45%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              2.8      0.3392 µg/L      0.88027      0.3392 ppb       0.88027 259.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†    -100.0     -28.212 µg/L       6.7172     -28.212 ppb        6.7172  23.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             15.5      0.8940 µg/L      0.09227      0.8940 ppb       0.09227  10.32%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               0.1      0.2457 µg/L      6.90113      0.2457 ppb       6.90113 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              3.9      1.0321 µg/L      1.24680      1.0321 ppb       1.24680 120.81%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.2     -11.891 µg/L       3.7653     -11.891 ppb        3.7653  31.67%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.2     -2.3303 µg/L      2.09152     -2.3303 ppb       2.09152  89.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.9     -1.2763 µg/L      3.20106     -1.2763 ppb       3.20106 250.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -8.4     -1.7031 µg/L      0.56417     -1.7031 ppb       0.56417  33.13%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             23.7      1.8785 µg/L      0.50628      1.8785 ppb       0.50628  26.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              2.5      1.2502 µg/L      0.63477      1.2502 ppb       0.63477  50.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             31.4      0.1815 µg/L      0.12427      0.1815 ppb       0.12427  68.48%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             42.4      0.0975 µg/L      0.14994      0.0975 ppb       0.14994 153.74%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              0.9      1.3532 µg/L      5.23089      1.3532 ppb       5.23089 386.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -1.8     -0.1810 µg/L      2.93522     -0.1810 ppb       2.93522 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -17.6     -0.2105 µg/L      0.44359     -0.2105 ppb       0.44359 210.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              0.7      0.0165 µg/L      0.07095      0.0165 ppb       0.07095 429.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/14/2009 09:51:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111486.8	111486.8	99.6	%			09:52:15
1	Al 396.153Radial†	599.4	437.6	230.90	µg/L	230.90	ppb	09:52:15
1	Ca 317.933Radial†	919.7	511.2	206.25	µg/L	206.25	ppb	09:52:36
1	Fe 238.204 Radial†	28.0	16.1	85.843	µg/L	85.843	ppb	09:52:36
1	K 766.490 Radial†	1025.5	283.4	159.85	µg/L	159.85	ppb	09:52:15
1	Mg 279.077 IEC†	71.4	55.7	314.52	µg/L	314.52	ppb	09:52:36
1	Na 589.592 Radial†	591.7	995.9	280.90	µg/L	280.90	ppb	09:52:15
1	Sr 421.552†	801.6	896.4	5.1735	µg/L	5.1735	ppb	09:52:15
1	Sc 361.383	2008736.7	2008736.7	100.04	%			09:53:38
1	Y 371.029	1223315.6	1223315.6	99.996	%			09:53:38
1	Ag 328.068†	640.7	656.7	6.2665	µg/L	6.2665	ppb	09:53:43
1	As 188.979†	17.2	14.0	27.151	µg/L	27.151	ppb	09:54:04
1	B 249.677†	1240.2	1077.9	50.095	µg/L	50.095	ppb	09:53:43
1	Ba 233.527†	113.6	186.0	4.9848	µg/L	4.9848	ppb	09:54:04
1	Be 313.107†	11049.1	7425.4	4.8375	µg/L	4.8375	ppb	09:53:43
1	Cd 226.502†	86.5	184.1	5.2076	µg/L	5.2076	ppb	09:54:04
1	Co 228.616†	32.7	102.5	5.2187	µg/L	5.2187	ppb	09:54:04
1	Cr 267.716†	99.5	223.7	4.9768	µg/L	4.9768	ppb	09:53:43
1	Cu 324.752†	4605.0	1294.0	9.2634	µg/L	9.2634	ppb	09:53:43
1	Mn 257.610†	2778.1	3024.6	9.9626	µg/L	9.9626	ppb	09:53:43
1	Mo 202.031†	76.6	81.3	9.7157	µg/L	9.7157	ppb	09:54:04
1	Ni 231.604†	389.9	98.7	5.6944	µg/L	5.6944	ppb	09:54:04
1	P 214.914†	262.5	72.4	160.07	µg/L	160.07	ppb	09:54:04
1	Pb 220.353†	92.1	41.0	10.833	µg/L	10.833	ppb	09:54:04
1	S 181.975 Axial†	47.1	21.4	114.63	µg/L	114.63	ppb	09:54:04
1	Sb 206.836†	26.9	2.8	2.8637	µg/L	2.8637	ppb	09:54:04
1	Se 196.026†	29.5	18.7	27.510	µg/L	27.510	ppb	09:54:04
1	SiO2†	3112.7	1077.7	218.61	µg/L	218.61	ppb	09:53:43
1	Si 251.611†	1624.2	1266.6	102.29	µg/L	102.29	ppb	09:54:04
1	Sn 189.927†	40.0	17.6	9.0750	µg/L	9.0750	ppb	09:54:04
1	Ti 334.940†	2954.0	2154.1	4.9468	µg/L	4.9468	ppb	09:53:43
1	Tl 190.801†	-5.1	15.0	23.672	µg/L	23.672	ppb	09:54:04
1	U 409.014†	1205.7	503.6	50.215	µg/L	50.215	ppb	09:53:43
1	V 292.402†	312.4	402.7	4.9896	µg/L	4.9896	ppb	09:53:43
1	Zn 213.857†	893.4	365.2	10.258	µg/L	10.258	ppb	09:54:04
2	Sc RADIAL	112464.9	112464.9	100	%			09:52:41
2	Al 396.153Radial†	566.1	399.2	210.59	µg/L	210.59	ppb	09:52:41
2	Ca 317.933Radial†	922.0	505.4	203.91	µg/L	203.91	ppb	09:53:02
2	Fe 238.204 Radial†	28.8	16.7	88.678	µg/L	88.678	ppb	09:53:02
2	K 766.490 Radial†	1058.2	307.0	173.18	µg/L	173.18	ppb	09:52:41
2	Mg 279.077 IEC†	69.6	53.3	300.77	µg/L	300.77	ppb	09:53:02
2	Na 589.592 Radial†	622.1	1021.1	287.99	µg/L	287.99	ppb	09:52:41
2	Sr 421.552†	810.5	898.3	5.1844	µg/L	5.1844	ppb	09:52:41
2	Sc 361.383	2002532.7	2002532.7	99.736	%			09:54:10
2	Y 371.029	1219424.4	1219424.4	99.678	%			09:54:10
2	Ag 328.068†	572.3	590.0	5.6360	µg/L	5.6360	ppb	09:54:16
2	As 188.979†	17.2	14.1	27.410	µg/L	27.410	ppb	09:54:36
2	B 249.677†	1271.5	1113.1	51.732	µg/L	51.732	ppb	09:54:16
2	Ba 233.527†	117.1	189.8	5.0889	µg/L	5.0889	ppb	09:54:36
2	Be 313.107†	11489.0	7900.6	5.1472	µg/L	5.1472	ppb	09:54:16
2	Cd 226.502†	89.8	187.6	5.3096	µg/L	5.3096	ppb	09:54:36
2	Co 228.616†	36.9	106.8	5.4394	µg/L	5.4394	ppb	09:54:36
2	Cr 267.716†	95.7	220.2	4.8996	µg/L	4.8996	ppb	09:54:16
2	Cu 324.752†	4746.6	1450.3	10.380	µg/L	10.380	ppb	09:54:16
2	Mn 257.610†	2948.0	3203.7	10.552	µg/L	10.552	ppb	09:54:16
2	Mo 202.031†	80.8	85.8	10.250	µg/L	10.250	ppb	09:54:36
2	Ni 231.604†	394.8	104.8	6.0490	µg/L	6.0490	ppb	09:54:36
2	P 214.914†	259.9	70.6	155.92	µg/L	155.92	ppb	09:54:36
2	Pb 220.353†	91.5	40.8	10.766	µg/L	10.766	ppb	09:54:36

2	S 181.975 Axial†	44.7	19.2	102.56 µg/L	102.56 ppb	09:54:36
2	Sb 206.836†	29.4	5.3	5.5299 µg/L	5.5299 ppb	09:54:36
2	Se 196.026†	23.9	13.2	19.409 µg/L	19.409 ppb	09:54:36
2	SiO2†	3171.0	1145.8	232.43 µg/L	232.43 ppb	09:54:16
2	Si 251.611†	1611.6	1259.1	101.65 µg/L	101.65 ppb	09:54:36
2	Sn 189.927†	40.1	17.8	9.1795 µg/L	9.1795 ppb	09:54:36
2	Ti 334.940†	3034.5	2244.0	5.1539 µg/L	5.1539 ppb	09:54:16
2	Tl 190.801†	-4.8	15.3	24.087 µg/L	24.087 ppb	09:54:36
2	U 409.014†	1231.6	533.3	53.174 µg/L	53.174 ppb	09:54:16
2	V 292.402†	330.6	422.0	5.2291 µg/L	5.2291 ppb	09:54:16
2	Zn 213.857†	891.0	365.6	10.266 µg/L	10.266 ppb	09:54:36
3	Sc RADIAL	111864.6	111864.6	99.9 %		09:53:07
3	Al 396.153Radial†	546.3	382.5	201.74 µg/L	201.74 ppb	09:53:07
3	Ca 317.933Radial†	922.9	511.3	206.26 µg/L	206.26 ppb	09:53:28
3	Fe 238.204 Radial†	27.5	15.6	83.017 µg/L	83.017 ppb	09:53:28
3	K 766.490 Radial†	1044.4	298.8	168.59 µg/L	168.59 ppb	09:53:07
3	Mg 279.077 IEC†	71.1	55.1	311.19 µg/L	311.19 ppb	09:53:28
3	Na 589.592 Radial†	627.2	1029.5	290.38 µg/L	290.38 ppb	09:53:07
3	Sr 421.552†	818.8	911.0	5.2574 µg/L	5.2574 ppb	09:53:07
3	Sc 361.383	2029392.3	2029392.3	101.07 %		09:54:42
3	Y 371.029	1235996.0	1235996.0	101.03 %		09:54:42
3	Ag 328.068†	606.9	616.7	5.8885 µg/L	5.8885 ppb	09:54:48
3	As 188.979†	15.9	12.6	24.359 µg/L	24.359 ppb	09:55:08
3	B 249.677†	1258.3	1083.2	50.344 µg/L	50.344 ppb	09:54:48
3	Ba 233.527†	123.6	194.8	5.2204 µg/L	5.2204 ppb	09:55:08
3	Be 313.107†	11368.5	7628.9	4.9702 µg/L	4.9702 ppb	09:54:48
3	Cd 226.502†	83.0	179.7	5.0838 µg/L	5.0838 ppb	09:55:08
3	Co 228.616†	35.3	104.8	5.3376 µg/L	5.3376 ppb	09:55:08
3	Cr 267.716†	131.0	253.8	5.6458 µg/L	5.6458 ppb	09:54:48
3	Cu 324.752†	4649.0	1290.7	9.2387 µg/L	9.2387 ppb	09:54:48
3	Mn 257.610†	2949.7	3166.2	10.428 µg/L	10.428 ppb	09:54:48
3	Mo 202.031†	85.4	89.2	10.656 µg/L	10.656 ppb	09:55:08
3	Ni 231.604†	378.3	83.3	4.8069 µg/L	4.8069 ppb	09:55:08
3	P 214.914†	256.0	63.3	139.87 µg/L	139.87 ppb	09:55:08
3	Pb 220.353†	98.7	46.7	12.319 µg/L	12.319 ppb	09:55:08
3	S 181.975 Axial†	45.6	19.4	103.73 µg/L	103.73 ppb	09:55:08
3	Sb 206.836†	29.6	5.1	5.3356 µg/L	5.3356 ppb	09:55:08
3	Se 196.026†	29.2	18.1	26.645 µg/L	26.645 ppb	09:55:08
3	SiO2†	3091.9	1025.4	208.01 µg/L	208.01 ppb	09:54:48
3	Si 251.611†	1618.0	1244.0	100.42 µg/L	100.42 ppb	09:55:08
3	Sn 189.927†	41.4	18.6	9.5783 µg/L	9.5783 ppb	09:55:08
3	Ti 334.940†	2963.3	2133.3	4.8989 µg/L	4.8989 ppb	09:54:48
3	Tl 190.801†	-12.4	7.9	12.389 µg/L	12.389 ppb	09:55:08
3	U 409.014†	1219.8	505.2	50.380 µg/L	50.380 ppb	09:54:48
3	V 292.402†	337.6	424.5	5.2576 µg/L	5.2576 ppb	09:54:48
3	Zn 213.857†	911.2	373.7	10.503 µg/L	10.503 ppb	09:55:08

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2013553.9	100.28	%	0.700				0.70%
Sc RADIAL	111938.8	100.0	%	0.44				0.44%
Y 371.029	1226245.3	100.24	%	0.708				0.71%
Ag 328.068†	621.2	5.9303	µg/L	0.31731	5.9303	ppb	0.31731	5.35%
QC value within limits for Ag 328.068 Recovery = 118.61%								
Al 396.153Radial†	406.4	214.41	µg/L	14.952	214.41	ppb	14.952	6.97%
QC value within limits for Al 396.153Radial Recovery = 107.20%								
As 188.979†	13.6	26.307	µg/L	1.6920	26.307	ppb	1.6920	6.43%
QC value within limits for As 188.979 Recovery = 87.69%								
B 249.677†	1091.4	50.724	µg/L	0.8822	50.724	ppb	0.8822	1.74%
QC value within limits for B 249.677 Recovery = 101.45%								
Ba 233.527†	190.2	5.0981	µg/L	0.11807	5.0981	ppb	0.11807	2.32%
QC value within limits for Ba 233.527 Recovery = 101.96%								
Be 313.107†	7651.6	4.9850	µg/L	0.15534	4.9850	ppb	0.15534	3.12%
QC value within limits for Be 313.107 Recovery = 99.70%								
Ca 317.933Radial†	509.3	205.47	µg/L	1.357	205.47	ppb	1.357	0.66%
QC value within limits for Ca 317.933Radial Recovery = 102.74%								
Cd 226.502†	183.8	5.2003	µg/L	0.11307	5.2003	ppb	0.11307	2.17%
QC value within limits for Cd 226.502 Recovery = 104.01%								
Co 228.616†	104.7	5.3319	µg/L	0.11045	5.3319	ppb	0.11045	2.07%

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   QC value within limits for Co 228.616  Recovery = 106.64%
Cr 267.716†              232.6      5.1741 µg/L       0.41034      5.1741 ppb        0.41034   7.93%
   QC value within limits for Cr 267.716  Recovery = 103.48%
Cu 324.752†             1345.0      9.6275 µg/L       0.65207      9.6275 ppb        0.65207   6.77%
   QC value within limits for Cu 324.752  Recovery = 96.27%
Fe 238.204 Radial†        16.1      85.846 µg/L        2.8308     85.846 ppb         2.8308   3.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 85.85%
K 766.490 Radial†        296.4      167.21 µg/L         6.772     167.21 ppb          6.772   4.05%
   QC value within limits for K 766.490 Radial  Recovery = 111.47%
Mg 279.077 IEC†           54.7      308.83 µg/L         7.177     308.83 ppb          7.177   2.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.94%
Mn 257.610†             3131.5      10.314 µg/L        0.3108     10.314 ppb         0.3108   3.01%
   QC value within limits for Mn 257.610  Recovery = 103.14%
Mo 202.031†               85.5      10.207 µg/L        0.4716     10.207 ppb         0.4716   4.62%
   QC value within limits for Mo 202.031  Recovery = 102.07%
Na 589.592 Radial†      1015.5      286.42 µg/L         4.930     286.42 ppb          4.930   1.72%
   QC value within limits for Na 589.592 Radial  Recovery = 95.47%
Ni 231.604†               95.6      5.5168 µg/L       0.63981      5.5168 ppb        0.63981  11.60%
   QC value within limits for Ni 231.604  Recovery = 110.34%
P 214.914†                68.7      151.95 µg/L        10.668     151.95 ppb         10.668   7.02%
   QC value within limits for P 214.914  Recovery = 101.30%
Pb 220.353†               42.8      11.306 µg/L        0.8781     11.306 ppb         0.8781   7.77%
   QC value within limits for Pb 220.353  Recovery = 113.06%
S 181.975 Axial†          20.0      106.97 µg/L         6.659     106.97 ppb          6.659   6.22%
   QC value within limits for S 181.975 Axial  Recovery = 106.97%
Sb 206.836†                4.4      4.5764 µg/L       1.48643      4.5764 ppb        1.48643  32.48%
   QC value less than the lower limit for Sb 206.836  Recovery = 45.76%
Se 196.026†               16.6      24.521 µg/L        4.4486     24.521 ppb         4.4486  18.14%
   QC value within limits for Se 196.026  Recovery = 81.74%
SiO2†                   1083.0      219.69 µg/L        12.246     219.69 ppb         12.246   5.57%
   QC value within limits for SiO2  Recovery = 103.14%
Si 251.611†             1256.6      101.45 µg/L         0.955     101.45 ppb          0.955   0.94%
   QC value within limits for Si 251.611  Recovery = 101.45%
Sn 189.927†               18.0      9.2776 µg/L       0.26565      9.2776 ppb        0.26565   2.86%
   QC value within limits for Sn 189.927  Recovery = 92.78%
Sr 421.552†              901.9      5.2051 µg/L       0.04562      5.2051 ppb        0.04562   0.88%
   QC value within limits for Sr 421.552  Recovery = 104.10%
Ti 334.940†             2177.2      4.9999 µg/L       0.13553      4.9999 ppb        0.13553   2.71%
   QC value within limits for Ti 334.940  Recovery = 100.00%
Tl 190.801†               12.7      20.049 µg/L        6.6372     20.049 ppb         6.6372  33.10%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†               514.0      51.257 µg/L        1.6629     51.257 ppb         1.6629   3.24%
   QC value within limits for U 409.014  Recovery = 102.51%
V 292.402†               416.4      5.1588 µg/L       0.14719      5.1588 ppb        0.14719   2.85%
   QC value within limits for V 292.402  Recovery = 103.18%
Zn 213.857†              368.1      10.342 µg/L        0.1390     10.342 ppb         0.1390   1.34%
   QC value within limits for Zn 213.857  Recovery = 103.42%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/14/2009 09:55:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107749.6	107749.6	96.2	%			09:55:59
1	Al 396.153Radial†	951514.8	988708.4	522540	µg/L	522540	ppb	09:55:54
1	Ca 317.933Radial†	1199950.4	1246649.8	502950	µg/L	502950	ppb	09:55:54
1	Fe 238.204 Radial†	35150.4	36518.5	193900	µg/L	193900	ppb	09:55:59
1	K 766.490 Radial†	763.0	46.3	26.115	µg/L	26.115	ppb	09:55:59
1	Mg 279.077 IEC†	84894.9	88212.0	497380	µg/L	497380	ppb	09:55:59
1	Na 589.592 Radial†	-471.5	-88.4	-24.935	µg/L	-24.935	ppb	09:55:59
1	Sr 421.552†	508.9	620.2	3.5790	µg/L	3.5790	ppb	09:55:59
1	Sc 361.383	1828500.5	1828500.5	91.068	%			09:56:33
1	Y 371.029	1097993.9	1097993.9	89.752	%			09:56:33
1	Ag 328.068†	-1787.4	-1946.4	-3.2667	µg/L	-3.2667	ppb	09:56:33
1	As 188.979†	39.6	40.4	-26.102	µg/L	-26.102	ppb	09:56:54
1	B 249.677†	1798.9	1813.6	23.363	µg/L	23.363	ppb	09:56:33
1	Ba 233.527†	124.7	209.4	5.5671	µg/L	5.5671	ppb	09:56:54
1	Be 313.107†	2707.3	-646.0	-0.4304	µg/L	-0.4304	ppb	09:56:33
1	Cd 226.502†	488.5	634.0	2.8159	µg/L	2.8159	ppb	09:56:54
1	Co 228.616†	-92.4	-31.7	-1.6957	µg/L	-1.6957	ppb	09:56:54
1	Cr 267.716†	-233.5	-132.2	-2.9723	µg/L	-2.9723	ppb	09:56:54
1	Cu 324.752†	-1091.0	-4506.9	9.4504	µg/L	9.4504	ppb	09:56:33
1	Mn 257.610†	-2119.7	-2079.8	17.530	µg/L	17.530	ppb	09:56:33
1	Mo 202.031†	-111.5	-117.7	-6.4343	µg/L	-6.4343	ppb	09:56:54
1	Ni 231.604†	263.1	-2.2	-0.1241	µg/L	-0.1241	ppb	09:56:54
1	P 214.914†	202.2	32.0	34.850	µg/L	34.850	ppb	09:56:54
1	Pb 220.353†	-54.6	-110.9	13.788	µg/L	13.788	ppb	09:56:54
1	S 181.975 Axial†	58.5	38.6	106.74	µg/L	106.74	ppb	09:56:54
1	Sb 206.836†	59.7	41.4	-3.8424	µg/L	-3.8424	ppb	09:56:54
1	Se 196.026†	27.4	19.3	29.607	µg/L	29.607	ppb	09:56:54
1	SiO2†	1797.0	-60.4	-12.250	µg/L	-12.250	ppb	09:56:54
1	Si 251.611†	444.4	131.1	19.093	µg/L	19.093	ppb	09:56:54
1	Sn 189.927†	-401.9	-463.7	-2.3477	µg/L	-2.3477	ppb	09:56:54
1	Ti 334.940†	10814.0	11076.1	-2.7861	µg/L	-2.7861	ppb	09:56:33
1	Tl 190.801†	22.5	44.8	3.2165	µg/L	3.2165	ppb	09:56:54
1	U 409.014†	970.5	364.1	12.027	µg/L	12.027	ppb	09:56:33
1	V 292.402†	-1306.8	-1344.5	-0.3577	µg/L	-0.3577	ppb	09:56:33
1	Zn 213.857†	1681.2	1318.3	3.0803	µg/L	3.0803	ppb	09:56:54
2	Sc RADIAL	109100.0	109100.0	97.4	%			09:56:11
2	Al 396.153Radial†	957494.0	982605.2	519320	µg/L	519320	ppb	09:56:05
2	Ca 317.933Radial†	1209166.1	1240672.7	500540	µg/L	500540	ppb	09:56:05
2	Fe 238.204 Radial†	35390.4	36312.7	192810	µg/L	192810	ppb	09:56:11
2	K 766.490 Radial†	744.5	17.5	9.8698	µg/L	9.8698	ppb	09:56:11
2	Mg 279.077 IEC†	85442.1	87681.5	494390	µg/L	494390	ppb	09:56:11
2	Na 589.592 Radial†	-421.3	-30.7	-8.6672	µg/L	-8.6672	ppb	09:56:11
2	Sr 421.552†	529.8	635.1	3.6652	µg/L	3.6652	ppb	09:56:11
2	Sc 361.383	1844902.6	1844902.6	91.885	%			09:57:01
2	Y 371.029	1108308.6	1108308.6	90.595	%			09:57:01
2	Ag 328.068†	-1816.3	-1960.4	-3.4856	µg/L	-3.4856	ppb	09:57:01
2	As 188.979†	34.3	34.2	-37.606	µg/L	-37.606	ppb	09:57:22
2	B 249.677†	1892.8	1898.2	27.640	µg/L	27.640	ppb	09:57:01
2	Ba 233.527†	120.0	203.1	5.3984	µg/L	5.3984	ppb	09:57:22
2	Be 313.107†	2712.6	-666.7	-0.4440	µg/L	-0.4440	ppb	09:57:01
2	Cd 226.502†	458.9	597.1	1.8622	µg/L	1.8622	ppb	09:57:22
2	Co 228.616†	-96.7	-35.4	-1.8855	µg/L	-1.8855	ppb	09:57:22
2	Cr 267.716†	-240.6	-137.6	-3.0915	µg/L	-3.0915	ppb	09:57:22
2	Cu 324.752†	-1168.1	-4580.2	8.6923	µg/L	8.6923	ppb	09:57:01
2	Mn 257.610†	-2145.8	-2087.5	17.367	µg/L	17.367	ppb	09:57:01
2	Mo 202.031†	-111.5	-116.6	-6.3424	µg/L	-6.3424	ppb	09:57:22
2	Ni 231.604†	272.4	5.4	0.3134	µg/L	0.3134	ppb	09:57:22
2	P 214.914†	196.5	23.9	17.004	µg/L	17.004	ppb	09:57:22
2	Pb 220.353†	-52.2	-107.8	14.341	µg/L	14.341	ppb	09:57:22

2	S 181.975 Axial†	58.9	38.5	106.64 µg/L	106.64 ppb	09:57:22
2	Sb 206.836†	66.2	47.9	3.2300 µg/L	3.2300 ppb	09:57:22
2	Se 196.026†	15.4	6.0	10.089 µg/L	10.089 ppb	09:57:22
2	SiO2†	1781.9	-94.3	-19.133 µg/L	-19.133 ppb	09:57:22
2	Si 251.611†	452.5	135.7	19.287 µg/L	19.287 ppb	09:57:22
2	Sn 189.927†	-397.2	-454.7	0.9797 µg/L	0.9797 ppb	09:57:22
2	Ti 334.940†	10966.6	11136.5	-2.5113 µg/L	-2.5113 ppb	09:57:01
2	Tl 190.801†	16.4	37.9	-7.3010 µg/L	-7.3010 ppb	09:57:22
2	U 409.014†	972.6	356.9	11.454 µg/L	11.454 ppb	09:57:01
2	V 292.402†	-1321.7	-1348.0	-0.4886 µg/L	-0.4886 ppb	09:57:01
2	Zn 213.857†	1670.2	1289.9	2.4755 µg/L	2.4755 ppb	09:57:22
3	Sc RADIAL	109206.8	109206.8	97.5 %		09:56:22
3	Al 396.153Radial†	949895.1	973852.8	514690 µg/L	514690 ppb	09:56:17
3	Ca 317.933Radial†	1197102.9	1227090.1	495060 µg/L	495060 ppb	09:56:17
3	Fe 238.204 Radial†	34977.8	35854.0	190370 µg/L	190370 ppb	09:56:22
3	K 766.490 Radial†	704.1	-24.7	-13.912 µg/L	-13.912 ppb	09:56:22
3	Mg 279.077 IEC†	84516.2	86646.4	488560 µg/L	488560 ppb	09:56:22
3	Na 589.592 Radial†	-459.9	-69.9	-19.728 µg/L	-19.728 ppb	09:56:22
3	Sr 421.552†	547.1	652.3	3.7644 µg/L	3.7644 ppb	09:56:22
3	Sc 361.383	1875439.1	1875439.1	93.406 %		09:57:28
3	Y 371.029	1126491.1	1126491.1	92.081 %		09:57:28
3	Ag 328.068†	-1755.8	-1863.4	-2.7599 µg/L	-2.7599 ppb	09:57:28
3	As 188.979†	34.0	33.3	-38.167 µg/L	-38.167 ppb	09:57:49
3	B 249.677†	1789.3	1753.9	21.695 µg/L	21.695 ppb	09:57:28
3	Ba 233.527†	116.9	197.6	5.2508 µg/L	5.2508 ppb	09:57:49
3	Be 313.107†	2687.1	-742.0	-0.4930 µg/L	-0.4930 ppb	09:57:28
3	Cd 226.502†	471.6	602.5	2.1917 µg/L	2.1917 ppb	09:57:49
3	Co 228.616†	-81.0	-16.9	-0.9448 µg/L	-0.9448 ppb	09:57:49
3	Cr 267.716†	-245.9	-139.0	-3.1238 µg/L	-3.1238 ppb	09:57:49
3	Cu 324.752†	-1142.6	-4532.2	8.5119 µg/L	8.5119 ppb	09:57:28
3	Mn 257.610†	-2117.2	-2018.8	17.287 µg/L	17.287 ppb	09:57:28
3	Mo 202.031†	-113.6	-116.9	-6.4732 µg/L	-6.4732 ppb	09:57:49
3	Ni 231.604†	267.8	-4.3	-0.2499 µg/L	-0.2499 ppb	09:57:49
3	P 214.914†	192.1	15.6	-0.0920 µg/L	-0.0920 ppb	09:57:49
3	Pb 220.353†	-71.9	-128.0	8.6429 µg/L	8.6429 ppb	09:57:49
3	S 181.975 Axial†	61.5	40.2	117.16 µg/L	117.16 ppb	09:57:49
3	Sb 206.836†	56.7	36.6	-8.1469 µg/L	-8.1469 ppb	09:57:49
3	Se 196.026†	13.0	3.1	5.8342 µg/L	5.8342 ppb	09:57:49
3	SiO2†	1768.2	-140.5	-28.511 µg/L	-28.511 ppb	09:57:49
3	Si 251.611†	465.0	141.1	19.566 µg/L	19.566 ppb	09:57:49
3	Sn 189.927†	-395.6	-446.0	2.7609 µg/L	2.7609 ppb	09:57:49
3	Ti 334.940†	11076.7	11060.1	-2.3790 µg/L	-2.3790 ppb	09:57:28
3	Tl 190.801†	19.7	41.2	-1.3970 µg/L	-1.3970 ppb	09:57:49
3	U 409.014†	848.0	206.3	-3.2413 µg/L	-3.2413 ppb	09:57:28
3	V 292.402†	-1360.7	-1366.2	-0.9312 µg/L	-0.9312 ppb	09:57:28
3	Zn 213.857†	1671.6	1261.8	2.1021 µg/L	2.1021 ppb	09:57:49

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1849614.1	92.120	%	1.1864				1.29%
Sc RADIAL	108685.5	97.1	%	0.73				0.75%
Y 371.029	1110931.2	90.809	%	1.1794				1.30%
Ag 328.068†	-1923.4	-3.1708	µg/L	0.37224	-3.1708	ppb	0.37224	11.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	981722.1	518850	µg/L	3946.4	518850	ppb	3946.4	0.76%
QC value within limits for Al 396.153Radial Recovery = 103.77%								
As 188.979†	35.9	-33.959	µg/L	6.8096	-33.959	ppb	6.8096	20.05%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1821.9	24.232	µg/L	3.0662	24.232	ppb	3.0662	12.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	203.3	5.4054	µg/L	0.15830	5.4054	ppb	0.15830	2.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-684.9	-0.4558	µg/L	0.03291	-0.4558	ppb	0.03291	7.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1238137.5	499520	µg/L	4043.8	499520	ppb	4043.8	0.81%
QC value within limits for Ca 317.933Radial Recovery = 99.90%								
Cd 226.502†	611.2	2.2900	µg/L	0.48439	2.2900	ppb	0.48439	21.15%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-28.0	-1.5087	µg/L	0.49744	-1.5087	ppb	0.49744	32.97%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -136.3     -3.0626 µg/L      0.07977     -3.0626 ppb       0.07977   2.60%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4539.8      8.8849 µg/L      0.49802      8.8849 ppb       0.49802   5.61%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    36228.4      192360 µg/L       1806.0      192360 ppb        1806.0   0.94%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.18%
K 766.490 Radial†        13.0      7.3577 µg/L     20.13120      7.3577 ppb      20.13120 273.61%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       87513.3      493440 µg/L       4489.6      493440 ppb        4489.6   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.69%
Mn 257.610†           -2062.0      17.395 µg/L       0.1237      17.395 ppb        0.1237   0.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -117.1     -6.4166 µg/L      0.06720     -6.4166 ppb       0.06720   1.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -63.0     -17.777 µg/L       8.3078     -17.777 ppb        8.3078  46.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -0.4     -0.0202 µg/L      0.29564     -0.0202 ppb       0.29564 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               23.8      17.254 µg/L      17.4722      17.254 ppb       17.4722 101.27%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -115.6      12.257 µg/L       3.1423      12.257 ppb        3.1423  25.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         39.1      110.18 µg/L        6.043      110.18 ppb         6.043   5.49%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              42.0     -2.9198 µg/L      5.74428     -2.9198 ppb       5.74428 196.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               9.4      15.177 µg/L      12.6770      15.177 ppb       12.6770  83.53%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -98.4     -19.965 µg/L       8.1622     -19.965 ppb        8.1622  40.88%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             136.0      19.315 µg/L       0.2377      19.315 ppb        0.2377   1.23%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -454.8      0.4643 µg/L      2.59300      0.4643 ppb       2.59300 558.44%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             635.8      3.6695 µg/L      0.09276      3.6695 ppb       0.09276   2.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11090.9     -2.5588 µg/L      0.20765     -2.5588 ppb       0.20765   8.12%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              41.3     -1.8271 µg/L      5.27193     -1.8271 ppb       5.27193 288.53%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              309.1      6.7466 µg/L      8.65451      6.7466 ppb       8.65451 128.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1352.9     -0.5925 µg/L      0.30051     -0.5925 ppb       0.30051  50.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1290.0      2.5526 µg/L      0.49365      2.5526 ppb       0.49365  19.34%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/14/2009 09:57:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108734.5	108734.5	97.1	%			09:58:38
1	Al 396.153Radial†	953843.1	982149.0	519060	µg/L	519060	ppb	09:58:32
1	Ca 317.933Radial†	1198857.6	1234228.5	497940	µg/L	497940	ppb	09:58:32
1	Fe 238.204 Radial†	35210.5	36249.5	192480	µg/L	192480	ppb	09:58:38
1	K 766.490 Radial†	9615.0	9155.3	5164.9	µg/L	5164.9	ppb	09:58:38
1	Mg 279.077 IEC†	85660.5	88201.3	497340	µg/L	497340	ppb	09:58:38
1	Na 589.592 Radial†	17537.3	18462.4	5207.3	µg/L	5207.3	ppb	09:58:38
1	Sr 421.552†	85229.8	87865.0	507.08	µg/L	507.08	ppb	09:58:38
1	Sc 361.383	1847746.6	1847746.6	92.027	%			09:59:12
1	Y 371.029	1111633.4	1111633.4	90.867	%			09:59:12
1	Ag 328.068†	24036.0	26134.8	266.40	µg/L	266.40	ppb	09:59:18
1	As 188.979†	274.4	295.1	470.07	µg/L	470.07	ppb	09:59:38
1	B 249.677†	12248.0	13147.4	550.85	µg/L	550.85	ppb	09:59:18
1	Ba 233.527†	17189.9	18751.7	502.66	µg/L	502.66	ppb	09:59:18
1	Be 313.107†	346135.1	372506.1	242.58	µg/L	242.58	ppb	09:59:12
1	Cd 226.502†	16128.8	17623.9	481.13	µg/L	481.13	ppb	09:59:18
1	Co 228.616†	7890.5	8644.0	439.26	µg/L	439.26	ppb	09:59:38
1	Cr 267.716†	19976.9	21832.0	485.77	µg/L	485.77	ppb	09:59:18
1	Cu 324.752†	67734.2	70293.9	543.54	µg/L	543.54	ppb	09:59:18
1	Mn 257.610†	127748.6	139064.9	481.75	µg/L	481.75	ppb	09:59:18
1	Mo 202.031†	3695.4	4020.4	487.61	µg/L	487.61	ppb	09:59:38
1	Ni 231.604†	7321.7	7665.0	442.36	µg/L	442.36	ppb	09:59:38
1	P 214.914†	1248.5	1166.7	2505.8	µg/L	2505.8	ppb	09:59:38
1	Pb 220.353†	1566.2	1651.0	479.28	µg/L	479.28	ppb	09:59:38
1	S 181.975 Axial†	502.8	520.6	2686.4	µg/L	2686.4	ppb	09:59:38
1	Sb 206.836†	507.5	527.4	503.31	µg/L	503.31	ppb	09:59:38
1	Se 196.026†	1477.0	1594.2	2353.3	µg/L	2353.3	ppb	09:59:38
1	SiO2†	52348.3	54850.2	11127	µg/L	11127	ppb	09:59:18
1	Si 251.611†	59420.6	64212.2	5184.6	µg/L	5184.6	ppb	09:59:18
1	Sn 189.927†	506.4	527.9	501.46	µg/L	501.46	ppb	09:59:38
1	Ti 334.940†	207738.3	224938.7	489.77	µg/L	489.77	ppb	09:59:18
1	Tl 190.801†	287.6	332.6	459.60	µg/L	459.60	ppb	09:59:38
1	U 409.014†	5105.3	4846.0	459.19	µg/L	459.19	ppb	09:59:18
1	V 292.402†	38195.9	41595.8	519.06	µg/L	519.06	ppb	09:59:18
1	Zn 213.857†	17469.5	18455.3	484.40	µg/L	484.40	ppb	09:59:18
2	Sc RADIAL	109658.8	109658.8	97.9	%			09:58:49
2	Al 396.153Radial†	956398.3	976478.4	516060	µg/L	516060	ppb	09:58:44
2	Ca 317.933Radial†	1202313.5	1227350.9	495170	µg/L	495170	ppb	09:58:44
2	Fe 238.204 Radial†	35384.1	36121.1	191800	µg/L	191800	ppb	09:58:49
2	K 766.490 Radial†	9680.0	9138.2	5155.3	µg/L	5155.3	ppb	09:58:49
2	Mg 279.077 IEC†	86074.2	87880.1	495530	µg/L	495530	ppb	09:58:49
2	Na 589.592 Radial†	17687.2	18463.2	5207.5	µg/L	5207.5	ppb	09:58:49
2	Sr 421.552†	85742.4	87648.6	505.83	µg/L	505.83	ppb	09:58:49
2	Sc 361.383	1845548.7	1845548.7	91.917	%			09:59:45
2	Y 371.029	1110407.0	1110407.0	90.766	%			09:59:45
2	Ag 328.068†	24184.6	26327.6	268.21	µg/L	268.21	ppb	09:59:51
2	As 188.979†	286.4	308.4	496.53	µg/L	496.53	ppb	10:00:11
2	B 249.677†	12380.8	13307.8	558.52	µg/L	558.52	ppb	09:59:51
2	Ba 233.527†	17360.6	18959.7	508.23	µg/L	508.23	ppb	09:59:51
2	Be 313.107†	346914.3	373801.8	243.43	µg/L	243.43	ppb	09:59:45
2	Cd 226.502†	16245.1	17771.2	485.33	µg/L	485.33	ppb	09:59:51
2	Co 228.616†	7927.1	8694.0	441.80	µg/L	441.80	ppb	10:00:11
2	Cr 267.716†	20165.8	22063.4	490.92	µg/L	490.92	ppb	09:59:51
2	Cu 324.752†	68218.7	70908.6	547.79	µg/L	547.79	ppb	09:59:51
2	Mn 257.610†	129027.8	140621.8	486.79	µg/L	486.79	ppb	09:59:51
2	Mo 202.031†	3727.8	4060.3	492.36	µg/L	492.36	ppb	10:00:11
2	Ni 231.604†	7370.4	7727.5	445.97	µg/L	445.97	ppb	10:00:11
2	P 214.914†	1240.0	1159.1	2488.0	µg/L	2488.0	ppb	10:00:11
2	Pb 220.353†	1584.0	1672.3	484.66	µg/L	484.66	ppb	10:00:11

2	S 181.975 Axial†	508.9	528.0	2726.0	µg/L	2726.0 ppb	10:00:11
2	Sb 206.836†	500.0	519.8	495.66	µg/L	495.66 ppb	10:00:11
2	Se 196.026†	1491.3	1611.7	2379.0	µg/L	2379.0 ppb	10:00:11
2	SiO2†	52864.7	55479.8	11254	µg/L	11254 ppb	09:59:51
2	Si 251.611†	60071.8	64997.5	5248.1	µg/L	5248.1 ppb	09:59:51
2	Sn 189.927†	514.0	536.8	504.97	µg/L	504.97 ppb	10:00:11
2	Ti 334.940†	209475.6	227097.5	494.89	µg/L	494.89 ppb	09:59:51
2	Tl 190.801†	290.4	336.0	465.40	µg/L	465.40 ppb	10:00:11
2	U 409.014†	5194.8	4950.0	469.62	µg/L	469.62 ppb	09:59:51
2	V 292.402†	38550.5	42031.0	524.28	µg/L	524.28 ppb	09:59:51
2	Zn 213.857†	17694.7	18722.9	492.06	µg/L	492.06 ppb	09:59:51
3	Sc RADIAL	109921.3	109921.3	98.2	%		09:59:01
3	Al 396.153Radial†	958907.4	976702.2	516180	µg/L	516180 ppb	09:58:55
3	Ca 317.933Radial†	1206793.8	1228983.0	495830	µg/L	495830 ppb	09:58:55
3	Fe 238.204 Radial†	35378.4	36029.1	191310	µg/L	191310 ppb	09:59:01
3	K 766.490 Radial†	9666.4	9100.7	5134.1	µg/L	5134.1 ppb	09:59:01
3	Mg 279.077 IEC†	85961.0	87555.0	493690	µg/L	493690 ppb	09:59:01
3	Na 589.592 Radial†	17626.2	18358.0	5177.9	µg/L	5177.9 ppb	09:59:01
3	Sr 421.552†	85517.6	87210.6	503.31	µg/L	503.31 ppb	09:59:01
3	Sc 361.383	1813219.7	1813219.7	90.307	%		10:00:17
3	Y 371.029	1091058.4	1091058.4	89.185	%		10:00:17
3	Ag 328.068†	24361.6	26992.7	274.55	µg/L	274.55 ppb	10:00:23
3	As 188.979†	272.9	299.0	478.22	µg/L	478.22 ppb	10:00:44
3	B 249.677†	12462.5	13638.4	574.04	µg/L	574.04 ppb	10:00:23
3	Ba 233.527†	17427.0	19369.9	519.23	µg/L	519.23 ppb	10:00:23
3	Be 313.107†	346543.4	380120.3	247.54	µg/L	247.54 ppb	10:00:17
3	Cd 226.502†	16373.1	18228.1	498.23	µg/L	498.23 ppb	10:00:23
3	Co 228.616†	7937.0	8858.7	450.16	µg/L	450.16 ppb	10:00:44
3	Cr 267.716†	20278.2	22579.0	502.39	µg/L	502.39 ppb	10:00:23
3	Cu 324.752†	68622.1	72678.7	560.33	µg/L	560.33 ppb	10:00:23
3	Mn 257.610†	129748.0	143922.1	497.59	µg/L	497.59 ppb	10:00:23
3	Mo 202.031†	3720.8	4124.9	500.05	µg/L	500.05 ppb	10:00:44
3	Ni 231.604†	7391.8	7894.2	455.59	µg/L	455.59 ppb	10:00:44
3	P 214.914†	1248.9	1192.9	2562.5	µg/L	2562.5 ppb	10:00:44
3	Pb 220.353†	1588.5	1708.0	494.10	µg/L	494.10 ppb	10:00:44
3	S 181.975 Axial†	498.5	526.4	2717.7	µg/L	2717.7 ppb	10:00:44
3	Sb 206.836†	513.8	544.8	521.66	µg/L	521.66 ppb	10:00:44
3	Se 196.026†	1492.0	1641.4	2423.3	µg/L	2423.3 ppb	10:00:44
3	SiO2†	53086.9	56751.3	11512	µg/L	11512 ppb	10:00:23
3	Si 251.611†	60348.9	66469.6	5367.3	µg/L	5367.3 ppb	10:00:23
3	Sn 189.927†	501.9	533.4	502.95	µg/L	502.95 ppb	10:00:44
3	Ti 334.940†	210933.5	232775.3	507.93	µg/L	507.93 ppb	10:00:23
3	Tl 190.801†	282.4	332.8	460.33	µg/L	460.33 ppb	10:00:44
3	U 409.014†	5223.4	5082.5	482.94	µg/L	482.94 ppb	10:00:23
3	V 292.402†	38725.4	42972.4	535.61	µg/L	535.61 ppb	10:00:23
3	Zn 213.857†	17755.4	19133.3	503.69	µg/L	503.69 ppb	10:00:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1835505.0	91.417	%	0.9628				1.05%
Sc RADIAL	109438.2	97.7	%	0.56				0.57%
Y 371.029	1104366.3	90.273	%	0.9434				1.05%
Ag 328.068†	26485.0	269.72	µg/L	4.282	269.72	ppb	4.282	1.59%
QC value within limits for Ag 328.068 Recovery = 107.89%								
Al 396.153Radial†	978443.2	517100	µg/L	1697.4	517100	ppb	1697.4	0.33%
QC value within limits for Al 396.153Radial Recovery = 103.42%								
As 188.979†	300.8	481.61	µg/L	13.553	481.61	ppb	13.553	2.81%
QC value within limits for As 188.979 Recovery = 96.32%								
B 249.677†	13364.5	561.14	µg/L	11.819	561.14	ppb	11.819	2.11%
QC value within limits for B 249.677 Recovery = 112.23%								
Ba 233.527†	19027.1	510.04	µg/L	8.433	510.04	ppb	8.433	1.65%
QC value within limits for Ba 233.527 Recovery = 102.01%								
Be 313.107†	375476.1	244.52	µg/L	2.652	244.52	ppb	2.652	1.08%
QC value within limits for Be 313.107 Recovery = 97.81%								
Ca 317.933Radial†	1230187.5	496310	µg/L	1449.8	496310	ppb	1449.8	0.29%
QC value within limits for Ca 317.933Radial Recovery = 99.26%								
Cd 226.502†	17874.4	488.23	µg/L	8.911	488.23	ppb	8.911	1.83%
QC value within limits for Cd 226.502 Recovery = 97.65%								
Co 228.616†	8732.2	443.74	µg/L	5.703	443.74	ppb	5.703	1.29%

```
   QC value within limits for Co 228.616  Recovery = 88.75%
Cr 267.716†            22158.1      493.03 µg/L        8.508      493.03 ppb        8.508   1.73%
   QC value within limits for Cr 267.716  Recovery = 98.61%
Cu 324.752†            71293.7      550.55 µg/L        8.728      550.55 ppb        8.728   1.59%
   QC value within limits for Cu 324.752  Recovery = 110.11%
Fe 238.204 Radial†     36133.2      191870 µg/L        587.5      191870 ppb        587.5   0.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.93%
K 766.490 Radial†       9131.4      5151.4 µg/L        15.76      5151.4 ppb        15.76   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 103.03%
Mg 279.077 IEC†        87878.8      495520 µg/L       1822.1      495520 ppb       1822.1   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.10%
Mn 257.610†           141202.9      488.71 µg/L        8.090      488.71 ppb        8.090   1.66%
   QC value within limits for Mn 257.610  Recovery = 97.74%
Mo 202.031†             4068.5      493.34 µg/L        6.274      493.34 ppb        6.274   1.27%
   QC value within limits for Mo 202.031  Recovery = 98.67%
Na 589.592 Radial†     18427.9      5197.6 µg/L        17.07      5197.6 ppb        17.07   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 103.95%
Ni 231.604†             7762.2      447.97 µg/L        6.837      447.97 ppb        6.837   1.53%
   QC value within limits for Ni 231.604  Recovery = 89.59%
P 214.914†              1172.9      2518.8 µg/L        38.88      2518.8 ppb        38.88   1.54%
   QC value within limits for P 214.914  Recovery = 100.75%
Pb 220.353†             1677.1      486.01 µg/L        7.504      486.01 ppb        7.504   1.54%
   QC value within limits for Pb 220.353  Recovery = 97.20%
S 181.975 Axial†         525.0      2710.0 µg/L        20.85      2710.0 ppb        20.85   0.77%
   QC value within limits for S 181.975 Axial  Recovery = 108.40%
Sb 206.836†              530.6      506.88 µg/L       13.364      506.88 ppb       13.364   2.64%
   QC value within limits for Sb 206.836  Recovery = 101.38%
Se 196.026†             1615.8      2385.2 µg/L        35.44      2385.2 ppb        35.44   1.49%
   QC value within limits for Se 196.026  Recovery = 95.41%
SiO2†                  55693.8       11298 µg/L        196.4       11298 ppb        196.4   1.74%
   QC value within limits for SiO2  Recovery = 105.64%
Si 251.611†            65226.4      5266.7 µg/L        92.75      5266.7 ppb        92.75   1.76%
   QC value within limits for Si 251.611  Recovery = 105.33%
Sn 189.927†              532.7      503.13 µg/L        1.764      503.13 ppb        1.764   0.35%
   QC value within limits for Sn 189.927  Recovery = 100.63%
Sr 421.552†            87574.7      505.41 µg/L        1.924      505.41 ppb        1.924   0.38%
   QC value within limits for Sr 421.552  Recovery = 101.08%
Ti 334.940†           228270.5      497.53 µg/L        9.361      497.53 ppb        9.361   1.88%
   QC value within limits for Ti 334.940  Recovery = 99.51%
Tl 190.801†              333.8      461.78 µg/L        3.161      461.78 ppb        3.161   0.68%
   QC value within limits for Tl 190.801  Recovery = 92.36%
U 409.014†              4959.5      470.58 µg/L       11.904      470.58 ppb       11.904   2.53%
   QC value within limits for U 409.014  Recovery = 94.12%
V 292.402†             42199.7      526.32 µg/L        8.462      526.32 ppb        8.462   1.61%
   QC value within limits for V 292.402  Recovery = 105.26%
Zn 213.857†            18770.5      493.39 µg/L        9.713      493.39 ppb        9.713   1.97%
   QC value within limits for Zn 213.857  Recovery = 98.68%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/14/2009 10:00:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105695.7	105695.7	94.4	%			10:01:35
1	Al 396.153Radial†	961081.0	1018059.2	538060	µg/L	538060	ppb	10:01:29
1	Ca 317.933Radial†	1215148.5	1286984.6	519230	µg/L	519230	ppb	10:01:29
1	Fe 238.204 Radial†	86797.7	91946.4	488200	µg/L	488200	ppb	10:01:35
1	K 766.490 Radial†	743.1	40.6	22.929	µg/L	22.929	ppb	10:01:35
1	Mg 279.077 IEC†	85994.1	91091.0	513190	µg/L	513190	ppb	10:01:35
1	Na 589.592 Radial†	1741308.2	1845242.2	520450	µg/L	520450	ppb	10:01:29
1	Sr 421.552†	832.7	973.5	5.6185	µg/L	5.6185	ppb	10:01:35
1	Sc 361.383	1799524.9	1799524.9	89.625	%			10:02:10
1	Y 371.029	1073809.0	1073809.0	87.775	%			10:02:10
1	Ag 328.068†	-3716.0	-4130.0	-1.0561	µg/L	-1.0561	ppb	10:02:16
1	As 188.979†	36.8	37.9	-76.061	µg/L	-76.061	ppb	10:02:37
1	B 249.677†	4442.0	4794.5	69.431	µg/L	69.431	ppb	10:02:16
1	Ba 233.527†	263.8	366.7	9.6819	µg/L	9.6819	ppb	10:02:37
1	Be 313.107†	-1964.1	-5810.3	-3.8022	µg/L	-3.8022	ppb	10:02:16
1	Cd 226.502†	1258.0	1501.2	15.186	µg/L	15.186	ppb	10:02:16
1	Co 228.616†	49.9	125.5	6.2274	µg/L	6.2274	ppb	10:02:37
1	Cr 267.716†	-253.1	-158.2	-3.6550	µg/L	-3.6550	ppb	10:02:37
1	Cu 324.752†	-8522.1	-12817.5	13.293	µg/L	13.293	ppb	10:02:16
1	Mn 257.610†	-13185.6	-14464.1	13.776	µg/L	13.776	ppb	10:02:16
1	Mo 202.031†	-200.0	-218.3	-6.8844	µg/L	-6.8844	ppb	10:02:37
1	Ni 231.604†	264.0	3.5	0.2014	µg/L	0.2014	ppb	10:02:37
1	P 214.914†	351.7	202.4	79.871	µg/L	79.871	ppb	10:02:37
1	Pb 220.353†	-0.8	-51.9	14.353	µg/L	14.353	ppb	10:02:37
1	S 181.975 Axial†	66.2	48.1	111.90	µg/L	111.90	ppb	10:02:37
1	Sb 206.836†	58.6	41.2	2.9994	µg/L	2.9994	ppb	10:02:37
1	Se 196.026†	-103.7	-126.4	16.300	µg/L	16.300	ppb	10:02:37
1	SiO2†	1586.7	-263.3	-53.406	µg/L	-53.406	ppb	10:02:37
1	Si 251.611†	-270.3	-658.4	-44.575	µg/L	-44.575	ppb	10:02:37
1	Sn 189.927†	-438.0	-511.1	14.854	µg/L	14.854	ppb	10:02:37
1	Ti 334.940†	16860.0	18013.2	12.267	µg/L	12.267	ppb	10:02:16
1	Tl 190.801†	9.7	30.9	-20.868	µg/L	-20.868	ppb	10:02:37
1	U 409.014†	137175.8	152353.8	15116	µg/L	15116	ppb	10:02:16
1	V 292.402†	-4635.4	-5081.5	3.2391	µg/L	3.2391	ppb	10:02:16
1	Zn 213.857†	2905.0	2713.5	10.809	µg/L	10.809	ppb	10:02:37
2	Sc RADIAL	106427.2	106427.2	95.0	%			10:01:47
2	Al 396.153Radial†	956805.4	1006562.4	531980	µg/L	531980	ppb	10:01:42
2	Ca 317.933Radial†	1208082.7	1270702.0	512660	µg/L	512660	ppb	10:01:42
2	Fe 238.204 Radial†	87256.2	91796.9	487400	µg/L	487400	ppb	10:01:47
2	K 766.490 Radial†	781.5	75.6	42.652	µg/L	42.652	ppb	10:01:47
2	Mg 279.077 IEC†	86445.1	90939.4	512340	µg/L	512340	ppb	10:01:47
2	Na 589.592 Radial†	1734652.7	1825560.1	514900	µg/L	514900	ppb	10:01:42
2	Sr 421.552†	860.1	996.3	5.7500	µg/L	5.7500	ppb	10:01:47
2	Sc 361.383	1801215.5	1801215.5	89.709	%			10:02:43
2	Y 371.029	1074936.4	1074936.4	87.867	%			10:02:43
2	Ag 328.068†	-3686.9	-4093.6	-0.7623	µg/L	-0.7623	ppb	10:02:48
2	As 188.979†	47.0	49.2	-52.988	µg/L	-52.988	ppb	10:03:09
2	B 249.677†	4395.3	4737.8	67.043	µg/L	67.043	ppb	10:02:48
2	Ba 233.527†	270.6	374.1	9.8827	µg/L	9.8827	ppb	10:03:09
2	Be 313.107†	-1872.5	-5706.1	-3.7341	µg/L	-3.7341	ppb	10:02:48
2	Cd 226.502†	1262.6	1505.0	15.270	µg/L	15.270	ppb	10:02:48
2	Co 228.616†	44.0	118.8	5.8893	µg/L	5.8893	ppb	10:03:09
2	Cr 267.716†	-232.1	-134.5	-3.1257	µg/L	-3.1257	ppb	10:03:09
2	Cu 324.752†	-8450.9	-12729.3	13.752	µg/L	13.752	ppb	10:02:48
2	Mn 257.610†	-13120.0	-14377.2	13.962	µg/L	13.962	ppb	10:02:48
2	Mo 202.031†	-203.9	-222.6	-7.4213	µg/L	-7.4213	ppb	10:03:09
2	Ni 231.604†	247.4	-15.2	-0.8783	µg/L	-0.8783	ppb	10:03:09
2	P 214.914†	360.1	211.4	98.488	µg/L	98.488	ppb	10:03:09
2	Pb 220.353†	3.9	-46.7	15.304	µg/L	15.304	ppb	10:03:09

2	S 181.975 Axial†	58.6	39.7	66.874	µg/L	66.874 ppb	10:03:09
2	Sb 206.836†	56.1	38.4	0.6063	µg/L	0.6063 ppb	10:03:09
2	Se 196.026†	-113.0	-136.8	-0.0953	µg/L	-0.0953 ppb	10:03:09
2	SiO2†	1560.9	-293.6	-59.561	µg/L	-59.561 ppb	10:03:09
2	Si 251.611†	-227.7	-610.6	-40.563	µg/L	-40.563 ppb	10:03:09
2	Sn 189.927†	-443.3	-516.6	10.370	µg/L	10.370 ppb	10:03:09
2	Ti 334.940†	16711.7	17830.3	12.215	µg/L	12.215 ppb	10:02:48
2	Tl 190.801†	4.2	24.8	-29.648	µg/L	-29.648 ppb	10:03:09
2	U 409.014†	136280.2	151211.8	15003	µg/L	15003 ppb	10:02:48
2	V 292.402†	-4516.7	-4944.3	4.6330	µg/L	4.6330 ppb	10:02:48
2	Zn 213.857†	2901.7	2706.7	10.731	µg/L	10.731 ppb	10:03:09
3	Sc RADIAL	107262.1	107262.1	95.8	%		10:02:00
3	Al 396.153Radial†	967820.2	1010225.8	533920	µg/L	533920 ppb	10:01:55
3	Ca 317.933Radial†	1224920.1	1278386.2	515760	µg/L	515760 ppb	10:01:55
3	Fe 238.204 Radial†	87873.8	91727.0	487030	µg/L	487030 ppb	10:02:00
3	K 766.490 Radial†	771.3	58.6	33.074	µg/L	33.074 ppb	10:02:00
3	Mg 279.077 IEC†	86875.7	90681.0	510880	µg/L	510880 ppb	10:02:00
3	Na 589.592 Radial†	1754275.6	1831839.8	516670	µg/L	516670 ppb	10:01:55
3	Sr 421.552†	854.9	983.8	5.6778	µg/L	5.6778 ppb	10:02:00
3	Sc 361.383	1801066.5	1801066.5	89.702	%		10:03:15
3	Y 371.029	1075069.5	1075069.5	87.878	%		10:03:15
3	Ag 328.068†	-3666.4	-4071.1	-0.5811	µg/L	-0.5811 ppb	10:03:21
3	As 188.979†	30.6	30.9	-88.948	µg/L	-88.948 ppb	10:03:41
3	B 249.677†	4371.8	4711.9	65.958	µg/L	65.958 ppb	10:03:21
3	Ba 233.527†	282.3	387.2	10.232	µg/L	10.232 ppb	10:03:41
3	Be 313.107†	-1890.3	-5726.2	-3.7471	µg/L	-3.7471 ppb	10:03:21
3	Cd 226.502†	1249.9	1491.0	14.922	µg/L	14.922 ppb	10:03:21
3	Co 228.616†	46.4	121.5	6.0313	µg/L	6.0313 ppb	10:03:41
3	Cr 267.716†	-228.9	-131.0	-3.0478	µg/L	-3.0478 ppb	10:03:41
3	Cu 324.752†	-8388.5	-12660.5	14.164	µg/L	14.164 ppb	10:03:21
3	Mn 257.610†	-13134.3	-14394.4	13.859	µg/L	13.859 ppb	10:03:21
3	Mo 202.031†	-196.4	-214.2	-6.4366	µg/L	-6.4366 ppb	10:03:41
3	Ni 231.604†	234.8	-29.3	-1.6903	µg/L	-1.6903 ppb	10:03:41
3	P 214.914†	357.7	208.8	93.502	µg/L	93.502 ppb	10:03:41
3	Pb 220.353†	-6.9	-58.7	12.278	µg/L	12.278 ppb	10:03:41
3	S 181.975 Axial†	60.4	41.6	77.532	µg/L	77.532 ppb	10:03:41
3	Sb 206.836†	53.9	35.9	-2.2906	µg/L	-2.2906 ppb	10:03:41
3	Se 196.026†	-97.9	-119.9	25.549	µg/L	25.549 ppb	10:03:41
3	SiO2†	1563.6	-290.4	-58.919	µg/L	-58.919 ppb	10:03:41
3	Si 251.611†	-272.6	-660.7	-44.385	µg/L	-44.385 ppb	10:03:41
3	Sn 189.927†	-455.2	-529.8	3.9573	µg/L	3.9573 ppb	10:03:41
3	Ti 334.940†	16599.4	17706.5	11.756	µg/L	11.756 ppb	10:03:21
3	Tl 190.801†	-1.0	19.0	-39.201	µg/L	-39.201 ppb	10:03:41
3	U 409.014†	136494.7	151463.5	15028	µg/L	15028 ppb	10:03:21
3	V 292.402†	-4542.8	-4973.9	4.2954	µg/L	4.2954 ppb	10:03:21
3	Zn 213.857†	2899.8	2704.9	10.763	µg/L	10.763 ppb	10:03:41

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1800602.3	89.679	%	0.0466				0.05%
Sc RADIAL	106461.6	95.1	%	0.70				0.74%
Y 371.029	1074605.0	87.840	%	0.0566				0.06%
Ag 328.068†	-4098.2	-0.7998	µg/L	0.23970	-0.7998	ppb	0.23970	29.97%
Al 396.153Radial†	1011615.8	534650	µg/L	3104.0	534650	ppb	3104.0	0.58%
QC value within limits for Al 396.153Radial Recovery = 106.93%								
As 188.979†	39.4	-72.666	µg/L	18.2192	-72.666	ppb	18.2192	25.07%
B 249.677†	4748.1	67.477	µg/L	1.7768	67.477	ppb	1.7768	2.63%
Ba 233.527†	376.0	9.9322	µg/L	0.27833	9.9322	ppb	0.27833	2.80%
Be 313.107†	-5747.6	-3.7611	µg/L	0.03615	-3.7611	ppb	0.03615	0.96%
Ca 317.933Radial†	1278690.9	515880	µg/L	3286.3	515880	ppb	3286.3	0.64%
QC value within limits for Ca 317.933Radial Recovery = 103.18%								
Cd 226.502†	1499.1	15.126	µg/L	0.1816	15.126	ppb	0.1816	1.20%
Co 228.616†	121.9	6.0493	µg/L	0.16977	6.0493	ppb	0.16977	2.81%
Cr 267.716†	-141.3	-3.2762	µg/L	0.33039	-3.2762	ppb	0.33039	10.08%
Cu 324.752†	-12735.8	13.736	µg/L	0.4359	13.736	ppb	0.4359	3.17%
Fe 238.204 Radial†	91823.4	487550	µg/L	595.2	487550	ppb	595.2	0.12%
QC value within limits for Fe 238.204 Radial Recovery = 97.51%								
K 766.490 Radial†	58.3	32.885	µg/L	9.8627	32.885	ppb	9.8627	29.99%
Mg 279.077 IEC†	90903.8	512140	µg/L	1168.7	512140	ppb	1168.7	0.23%

QC value within limits for Mg 279.077 IEC Recovery = 102.43%

Mn 257.610†	-14411.9	13.866	µg/L	0.0931	13.866	ppb	0.0931	0.67%
Mo 202.031†	-218.4	-6.9141	µg/L	0.49302	-6.9141	ppb	0.49302	7.13%
Na 589.592 Radial†	1834214.0	517340	µg/L	2835.6	517340	ppb	2835.6	0.55%

QC value within limits for Na 589.592 Radial Recovery = 103.47%

Ni 231.604†	-13.7	-0.7890	µg/L	0.94902	-0.7890	ppb	0.94902	120.28%
P 214.914†	207.5	90.620	µg/L	9.6371	90.620	ppb	9.6371	10.63%
Pb 220.353†	-52.4	13.979	µg/L	1.5470	13.979	ppb	1.5470	11.07%
S 181.975 Axial†	43.1	85.435	µg/L	23.5303	85.435	ppb	23.5303	27.54%
Sb 206.836†	38.5	0.4383	µg/L	2.64902	0.4383	ppb	2.64902	604.33%
Se 196.026†	-127.7	13.918	µg/L	12.9870	13.918	ppb	12.9870	93.31%
SiO2†	-282.4	-57.295	µg/L	3.3833	-57.295	ppb	3.3833	5.91%
Si 251.611†	-643.2	-43.174	µg/L	2.2635	-43.174	ppb	2.2635	5.24%
Sn 189.927†	-519.2	9.7273	µg/L	5.47682	9.7273	ppb	5.47682	56.30%
Sr 421.552†	984.6	5.6821	µg/L	0.06587	5.6821	ppb	0.06587	1.16%
Ti 334.940†	17850.0	12.079	µg/L	0.2812	12.079	ppb	0.2812	2.33%
Tl 190.801†	24.9	-29.906	µg/L	9.1689	-29.906	ppb	9.1689	30.66%
U 409.014†	151676.4	15049	µg/L	59.8	15049	ppb	59.8	0.40%

QC value within limits for U 409.014 Recovery = 100.33%

V 292.402†	-4999.9	4.0558	µg/L	0.72713	4.0558	ppb	0.72713	17.93%
Zn 213.857†	2708.4	10.767	µg/L	0.0395	10.767	ppb	0.0395	0.37%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/14/2009 10:03:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112000.3	112000.3	100	%			10:04:33
1	Al 396.153Radial†	1017.7	853.1	65.951	µg/L	65.951	ppb	10:04:33
1	Ca 317.933Radial†	829.1	416.4	167.98	µg/L	167.98	ppb	10:04:53
1	Fe 238.204 Radial†	5.9	-6.1	299.44	µg/L	299.44	ppb	10:04:53
1	K 766.490 Radial†	546245.2	545399.6	307680	µg/L	307680	ppb	10:04:27
1	Mg 279.077 IEC†	-28.9	-44.9	-0.5041	µg/L	-0.5041	ppb	10:04:53
1	Na 589.592 Radial†	92.6	494.3	139.41	µg/L	139.41	ppb	10:04:33
1	Sr 421.552†	1757694.5	1757467.5	10143	µg/L	10143	ppb	10:04:27
1	Sc 361.383	1992183.8	1992183.8	99.220	%			10:06:25
1	Y 371.029	1196389.6	1196389.6	97.795	%			10:06:25
1	Ag 328.068†	-7085.5	-7124.9	4.1279	µg/L	4.1279	ppb	10:06:25
1	As 188.979†	5185.1	5222.7	10153	µg/L	10153	ppb	10:06:30
1	B 249.677†	110421.0	111127.0	5167.5	µg/L	5167.5	ppb	10:06:25
1	Ba 233.527†	488566.3	492478.1	13196	µg/L	13196	ppb	10:06:25
1	Be 313.107†	4559739.4	4591953.0	2989.0	µg/L	2989.0	ppb	10:06:15
1	Cd 226.502†	362215.2	365159.3	10272	µg/L	10272	ppb	10:06:25
1	Co 228.616†	195547.5	197154.0	10020	µg/L	10020	ppb	10:06:25
1	Cr 267.716†	1130526.2	1139534.6	25319	µg/L	25319	ppb	10:06:25
1	Cu 324.752†	2859386.1	2878547.5	20565	µg/L	20565	ppb	10:06:25
1	Mn 257.610†	2904859.8	2927935.2	9633.7	µg/L	9633.7	ppb	10:06:25
1	Mo 202.031†	84104.8	84770.5	10122	µg/L	10122	ppb	10:06:25
1	Ni 231.604†	175160.3	176245.8	10171	µg/L	10171	ppb	10:06:25
1	P 214.914†	8360.3	8236.0	16038	µg/L	16038	ppb	10:06:30
1	Pb 220.353†	95142.4	95839.1	25319	µg/L	25319	ppb	10:06:25
1	S 181.975 Axial†	9748.4	9799.4	52436	µg/L	52436	ppb	10:06:30
1	Sb 206.836†	9960.0	10014.1	10363	µg/L	10363	ppb	10:06:30
1	Se 196.026†	6822.3	6865.1	10136	µg/L	10136	ppb	10:06:30
1	SiO2†	509044.2	511010.9	103660	µg/L	103660	ppb	10:06:25
1	Si 251.611†	589863.1	594141.7	47266	µg/L	47266	ppb	10:06:25
1	Sn 189.927†	21177.3	21321.4	10861	µg/L	10861	ppb	10:06:30
1	Ti 334.940†	4324125.1	4357307.4	10030	µg/L	10030	ppb	10:06:15
1	Tl 190.801†	6230.1	6299.1	9966.1	µg/L	9966.1	ppb	10:06:30
1	U 409.014†	1855.7	1168.7	116.57	µg/L	116.57	ppb	10:06:25
1	V 292.402†	864775.9	871662.2	10532	µg/L	10532	ppb	10:06:25
1	Zn 213.857†	545730.3	549491.0	15444	µg/L	15444	ppb	10:06:25
2	Sc RADIAL	113218.8	113218.8	101	%			10:05:05
2	Al 396.153Radial†	984.0	808.8	40.958	µg/L	40.958	ppb	10:05:05
2	Ca 317.933Radial†	831.4	409.8	165.31	µg/L	165.31	ppb	10:05:25
2	Fe 238.204 Radial†	5.6	-6.5	298.59	µg/L	298.59	ppb	10:05:25
2	K 766.490 Radial†	547114.8	540381.7	304850	µg/L	304850	ppb	10:04:59
2	Mg 279.077 IEC†	-31.5	-47.1	-12.162	µg/L	-12.162	ppb	10:05:25
2	Na 589.592 Radial†	58.1	459.1	129.50	µg/L	129.50	ppb	10:05:05
2	Sr 421.552†	1758402.3	1739253.4	10037	µg/L	10037	ppb	10:04:59
2	Sc 361.383	2012096.8	2012096.8	100.21	%			10:06:50
2	Y 371.029	1208323.8	1208323.8	98.770	%			10:06:50
2	Ag 328.068†	-7167.8	-7136.4	4.2882	µg/L	4.2882	ppb	10:06:50
2	As 188.979†	5206.8	5192.6	10095	µg/L	10095	ppb	10:06:55
2	B 249.677†	112037.5	111638.7	5191.3	µg/L	5191.3	ppb	10:06:50
2	Ba 233.527†	495240.0	494264.5	13244	µg/L	13244	ppb	10:06:50
2	Be 313.107†	4593424.3	4580085.9	2981.3	µg/L	2981.3	ppb	10:06:39
2	Cd 226.502†	367918.0	367237.1	10330	µg/L	10330	ppb	10:06:50
2	Co 228.616†	198290.2	197940.4	10061	µg/L	10061	ppb	10:06:50
2	Cr 267.716†	1146551.1	1144249.3	25423	µg/L	25423	ppb	10:06:50
2	Cu 324.752†	2898824.5	2889381.8	20643	µg/L	20643	ppb	10:06:50
2	Mn 257.610†	2946696.2	2940708.9	9675.7	µg/L	9675.7	ppb	10:06:50
2	Mo 202.031†	85291.1	85115.4	10163	µg/L	10163	ppb	10:06:50
2	Ni 231.604†	177776.2	177109.0	10221	µg/L	10221	ppb	10:06:50
2	P 214.914†	8349.5	8141.8	15817	µg/L	15817	ppb	10:06:55
2	Pb 220.353†	96561.0	96305.7	25442	µg/L	25442	ppb	10:06:50

2	S 181.975 Axial†	9796.9	9750.5	52175	µg/L	52175 ppb	10:06:55
2	Sb 206.836†	9989.7	9944.4	10289	µg/L	10289 ppb	10:06:55
2	Se 196.026†	6856.6	6831.3	10086	µg/L	10086 ppb	10:06:55
2	SiO2†	516470.2	513343.8	104140	µg/L	104140 ppb	10:06:50
2	Si 251.611†	598593.1	596969.7	47501	µg/L	47501 ppb	10:06:50
2	Sn 189.927†	21251.0	21183.7	10790	µg/L	10790 ppb	10:06:55
2	Ti 334.940†	4353240.2	4343230.4	9997.3	µg/L	9997.3 ppb	10:06:39
2	Tl 190.801†	6241.6	6248.5	9886.2	µg/L	9886.2 ppb	10:06:55
2	U 409.014†	1733.4	1028.1	102.55	µg/L	102.55 ppb	10:06:50
2	V 292.402†	876700.3	874935.7	10572	µg/L	10572 ppb	10:06:50
2	Zn 213.857†	553272.7	551574.2	15503	µg/L	15503 ppb	10:06:50
3	Sc RADIAL	114192.0	114192.0	102	%		10:05:37
3	Al 396.153Radial†	981.1	797.7	35.580	µg/L	35.580 ppb	10:05:37
3	Ca 317.933Radial†	853.2	424.1	171.09	µg/L	171.09 ppb	10:05:57
3	Fe 238.204 Radial†	13.6	1.4	340.15	µg/L	340.15 ppb	10:05:57
3	K 766.490 Radial†	544768.7	533469.7	300950	µg/L	300950 ppb	10:05:31
3	Mg 279.077 IEC†	-27.5	-43.0	10.972	µg/L	10.972 ppb	10:05:57
3	Na 589.592 Radial†	37.6	438.5	123.68	µg/L	123.68 ppb	10:05:37
3	Sr 421.552†	1749494.9	1715698.0	9901.6	µg/L	9901.6 ppb	10:05:31
3	Sc 361.383	1998752.1	1998752.1	99.547	%		10:07:15
3	Y 371.029	1199878.5	1199878.5	98.080	%		10:07:15
3	Ag 328.068†	-7107.6	-7123.7	4.3810	µg/L	4.3810 ppb	10:07:15
3	As 188.979†	5193.7	5214.2	10137	µg/L	10137 ppb	10:07:20
3	B 249.677†	111294.7	111639.0	5191.3	µg/L	5191.3 ppb	10:07:15
3	Ba 233.527†	491885.4	494194.2	13242	µg/L	13242 ppb	10:07:15
3	Be 313.107†	4625695.8	4643107.3	3022.3	µg/L	3022.3 ppb	10:07:04
3	Cd 226.502†	365035.4	366792.6	10318	µg/L	10318 ppb	10:07:15
3	Co 228.616†	196834.2	197798.9	10053	µg/L	10053 ppb	10:07:15
3	Cr 267.716†	1138480.2	1143780.4	25413	µg/L	25413 ppb	10:07:15
3	Cu 324.752†	2875936.7	2885703.0	20616	µg/L	20616 ppb	10:07:15
3	Mn 257.610†	2925566.4	2939115.1	9670.5	µg/L	9670.5 ppb	10:07:15
3	Mo 202.031†	84618.9	85008.3	10150	µg/L	10150 ppb	10:07:15
3	Ni 231.604†	176470.8	176982.1	10214	µg/L	10214 ppb	10:07:15
3	P 214.914†	8336.7	8184.6	15917	µg/L	15917 ppb	10:07:20
3	Pb 220.353†	95947.0	96332.2	25449	µg/L	25449 ppb	10:07:15
3	S 181.975 Axial†	9742.8	9761.4	52233	µg/L	52233 ppb	10:07:20
3	Sb 206.836†	10010.8	10032.1	10381	µg/L	10381 ppb	10:07:20
3	Se 196.026†	6834.4	6854.7	10121	µg/L	10121 ppb	10:07:20
3	SiO2†	512812.2	513110.0	104090	µg/L	104090 ppb	10:07:15
3	Si 251.611†	593993.0	596336.7	47443	µg/L	47443 ppb	10:07:15
3	Sn 189.927†	21253.0	21327.2	10864	µg/L	10864 ppb	10:07:20
3	Ti 334.940†	4382582.4	4401708.9	10132	µg/L	10132 ppb	10:07:04
3	Tl 190.801†	6229.5	6277.9	9933.5	µg/L	9933.5 ppb	10:07:20
3	U 409.014†	1811.1	1117.7	111.48	µg/L	111.48 ppb	10:07:15
3	V 292.402†	870510.7	874559.0	10567	µg/L	10567 ppb	10:07:15
3	Zn 213.857†	549214.1	551183.3	15492	µg/L	15492 ppb	10:07:15

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2001010.9	99.660	%	0.5054				0.51%
Sc RADIAL	113137.0	101	%	1.0				0.97%
Y 371.029	1201530.6	98.215	%	0.5016				0.51%
Ag 328.068†	-7128.3	4.2657	µg/L	0.12805	4.2657	ppb	0.12805	3.00%
Al 396.153Radial†	819.9	47.496	µg/L	16.2072	47.496	ppb	16.2072	34.12%
As 188.979†	5209.8	10128	µg/L	30.2	10128	ppb	30.2	0.30%
QC value within limits for As 188.979 Recovery = 101.28%								
B 249.677†	111468.2	5183.4	µg/L	13.74	5183.4	ppb	13.74	0.27%
QC value within limits for B 249.677 Recovery = 103.67%								
Ba 233.527†	493645.6	13227	µg/L	27.1	13227	ppb	27.1	0.20%
QC value less than the lower limit for Ba 233.527 Recovery = 88.18%								
Be 313.107†	4605048.7	2997.6	µg/L	21.80	2997.6	ppb	21.80	0.73%
QC value within limits for Be 313.107 Recovery = 99.92%								
Ca 317.933Radial†	416.7	168.13	µg/L	2.890	168.13	ppb	2.890	1.72%
Cd 226.502†	366396.3	10307	µg/L	30.8	10307	ppb	30.8	0.30%
QC value within limits for Cd 226.502 Recovery = 103.07%								
Co 228.616†	197631.1	10045	µg/L	21.3	10045	ppb	21.3	0.21%
QC value within limits for Co 228.616 Recovery = 100.45%								
Cr 267.716†	1142521.4	25385	µg/L	57.7	25385	ppb	57.7	0.23%
QC value within limits for Cr 267.716 Recovery = 101.54%								

Cu 324.752†	2884544.1	20608 µg/L	39.4	20608 ppb	39.4	0.19%
QC value within limits for Cu 324.752 Recovery = 103.04%						
Fe 238.204 Radial†	-3.7	312.73 µg/L	23.754	312.73 ppb	23.754	7.60%
K 766.490 Radial†	539750.4	304500 µg/L	3379.2	304500 ppb	3379.2	1.11%
QC value within limits for K 766.490 Radial Recovery = 101.50%						
Mg 279.077 IEC†	-45.0	-0.5649 µg/L	11.56723	-0.5649 ppb	11.56723	>999.9%
Mn 257.610†	2935919.7	9659.9 µg/L	22.90	9659.9 ppb	22.90	0.24%
QC value within limits for Mn 257.610 Recovery = 96.60%						
Mo 202.031†	84964.7	10145 µg/L	21.1	10145 ppb	21.1	0.21%
QC value within limits for Mo 202.031 Recovery = 101.45%						
Na 589.592 Radial†	464.0	130.86 µg/L	7.950	130.86 ppb	7.950	6.08%
Ni 231.604†	176778.9	10202 µg/L	26.9	10202 ppb	26.9	0.26%
QC value within limits for Ni 231.604 Recovery = 102.02%						
P 214.914†	8187.5	15924 µg/L	110.5	15924 ppb	110.5	0.69%
QC value within limits for P 214.914 Recovery = 106.16%						
Pb 220.353†	96159.0	25403 µg/L	73.3	25403 ppb	73.3	0.29%
QC value within limits for Pb 220.353 Recovery = 101.61%						
S 181.975 Axial†	9770.4	52281 µg/L	137.2	52281 ppb	137.2	0.26%
QC value within limits for S 181.975 Axial Recovery = 104.56%						
Sb 206.836†	9996.9	10345 µg/L	48.7	10345 ppb	48.7	0.47%
QC value within limits for Sb 206.836 Recovery = 103.45%						
Se 196.026†	6850.4	10114 µg/L	25.6	10114 ppb	25.6	0.25%
QC value within limits for Se 196.026 Recovery = 101.14%						
SiO2†	512488.2	103960 µg/L	260.6	103960 ppb	260.6	0.25%
QC value within limits for SiO2 Recovery = 97.16%						
Si 251.611†	595816.0	47403 µg/L	122.1	47403 ppb	122.1	0.26%
QC value within limits for Si 251.611 Recovery = 94.81%						
Sn 189.927†	21277.4	10838 µg/L	41.4	10838 ppb	41.4	0.38%
QC value within limits for Sn 189.927 Recovery = 108.38%						
Sr 421.552†	1737473.0	10027 µg/L	120.9	10027 ppb	120.9	1.21%
QC value within limits for Sr 421.552 Recovery = 100.27%						
Ti 334.940†	4367415.6	10053 µg/L	70.3	10053 ppb	70.3	0.70%
QC value within limits for Ti 334.940 Recovery = 100.53%						
Tl 190.801†	6275.2	9928.6 µg/L	40.17	9928.6 ppb	40.17	0.40%
QC value within limits for Tl 190.801 Recovery = 99.29%						
U 409.014†	1104.8	110.20 µg/L	7.098	110.20 ppb	7.098	6.44%
V 292.402†	873719.0	10557 µg/L	21.6	10557 ppb	21.6	0.20%
QC value within limits for V 292.402 Recovery = 105.57%						
Zn 213.857†	550749.5	15480 µg/L	31.1	15480 ppb	31.1	0.20%
QC value within limits for Zn 213.857 Recovery = 103.20%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:07:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113486.1	113486.1	101	%			10:08:07
1	Al 396.153Radial†	10393.3	10091.0	5313.3	µg/L	5313.3	ppb	10:08:07
1	Ca 317.933Radial†	13831.5	13235.4	5339.8	µg/L	5339.8	ppb	10:08:27
1	Fe 238.204 Radial†	1037.5	1011.8	5389.9	µg/L	5389.9	ppb	10:08:27
1	K 766.490 Radial†	10272.7	9389.7	5297.1	µg/L	5297.1	ppb	10:08:07
1	Mg 279.077 IEC†	996.3	967.1	5461.2	µg/L	5461.2	ppb	10:08:27
1	Na 589.592 Radial†	37489.7	37393.9	10547	µg/L	10547	ppb	10:08:07
1	Sr 421.552†	90533.1	89422.9	516.07	µg/L	516.07	ppb	10:08:07
1	Sc 361.383	2011456.8	2011456.8	100.18	%			10:09:31
1	Y 371.029	1217127.6	1217127.6	99.490	%			10:09:31
1	Ag 328.068†	55258.1	55175.0	527.16	µg/L	527.16	ppb	10:09:37
1	As 188.979†	272.4	268.7	520.82	µg/L	520.82	ppb	10:09:57
1	B 249.677†	11603.3	11420.7	529.38	µg/L	529.38	ppb	10:09:37
1	Ba 233.527†	19749.4	19786.3	530.39	µg/L	530.39	ppb	10:09:37
1	Be 313.107†	799813.8	794756.5	517.78	µg/L	517.78	ppb	10:09:31
1	Cd 226.502†	19001.6	19065.0	536.25	µg/L	536.25	ppb	10:09:37
1	Co 228.616†	10428.2	10479.3	532.63	µg/L	532.63	ppb	10:09:37
1	Cr 267.716†	23704.6	23786.2	529.21	µg/L	529.21	ppb	10:09:37
1	Cu 324.752†	74458.5	71015.6	508.51	µg/L	508.51	ppb	10:09:37
1	Mn 257.610†	156978.5	156944.0	517.06	µg/L	517.06	ppb	10:09:31
1	Mo 202.031†	4391.3	4388.2	524.18	µg/L	524.18	ppb	10:09:57
1	Ni 231.604†	9462.0	9153.9	528.29	µg/L	528.29	ppb	10:09:37
1	P 214.914†	1363.2	1170.8	2550.2	µg/L	2550.2	ppb	10:09:57
1	Pb 220.353†	2035.7	1981.0	524.12	µg/L	524.12	ppb	10:09:57
1	S 181.975 Axial†	222.1	196.0	1047.4	µg/L	1047.4	ppb	10:09:57
1	Sb 206.836†	521.1	496.0	516.54	µg/L	516.54	ppb	10:09:57
1	Se 196.026†	379.1	367.7	545.09	µg/L	545.09	ppb	10:09:57
1	SiO2†	30117.4	28029.6	5686.0	µg/L	5686.0	ppb	10:09:37
1	Si 251.611†	33165.9	32749.4	2614.8	µg/L	2614.8	ppb	10:09:37
1	Sn 189.927†	1045.1	1020.8	522.89	µg/L	522.89	ppb	10:09:57
1	Ti 334.940†	223556.8	222356.2	511.52	µg/L	511.52	ppb	10:09:31
1	Tl 190.801†	321.4	340.9	538.51	µg/L	538.51	ppb	10:09:57
1	U 409.014†	6000.9	5288.5	526.58	µg/L	526.58	ppb	10:09:37
1	V 292.402†	43865.9	43877.5	531.56	µg/L	531.56	ppb	10:09:37
1	Zn 213.857†	19580.9	19017.8	533.19	µg/L	533.19	ppb	10:09:37
2	Sc RADIAL	113841.8	113841.8	102	%			10:08:33
2	Al 396.153Radial†	10286.6	9953.9	5241.0	µg/L	5241.0	ppb	10:08:33
2	Ca 317.933Radial†	13764.9	13127.2	5296.1	µg/L	5296.1	ppb	10:08:53
2	Fe 238.204 Radial†	1029.2	1000.4	5329.4	µg/L	5329.4	ppb	10:08:53
2	K 766.490 Radial†	10234.5	9320.5	5258.1	µg/L	5258.1	ppb	10:08:33
2	Mg 279.077 IEC†	984.4	952.3	5377.8	µg/L	5377.8	ppb	10:08:53
2	Na 589.592 Radial†	37462.7	37251.7	10507	µg/L	10507	ppb	10:08:33
2	Sr 421.552†	90280.7	88895.5	513.03	µg/L	513.03	ppb	10:08:33
2	Sc 361.383	2030674.1	2030674.1	101.14	%			10:10:04
2	Y 371.029	1229184.0	1229184.0	100.48	%			10:10:04
2	Ag 328.068†	55563.1	54954.5	525.04	µg/L	525.04	ppb	10:10:10
2	As 188.979†	272.7	266.5	516.53	µg/L	516.53	ppb	10:10:30
2	B 249.677†	11648.3	11355.6	526.38	µg/L	526.38	ppb	10:10:10
2	Ba 233.527†	19836.5	19685.8	527.70	µg/L	527.70	ppb	10:10:10
2	Be 313.107†	805663.5	792985.0	516.63	µg/L	516.63	ppb	10:10:04
2	Cd 226.502†	19066.3	18949.5	533.00	µg/L	533.00	ppb	10:10:10
2	Co 228.616†	10450.3	10402.6	528.72	µg/L	528.72	ppb	10:10:10
2	Cr 267.716†	23829.6	23685.9	526.98	µg/L	526.98	ppb	10:10:10
2	Cu 324.752†	74722.2	70573.1	505.34	µg/L	505.34	ppb	10:10:10
2	Mn 257.610†	158256.3	156724.5	516.33	µg/L	516.33	ppb	10:10:04
2	Mo 202.031†	4397.4	4352.7	519.94	µg/L	519.94	ppb	10:10:30
2	Ni 231.604†	9531.8	9133.6	527.11	µg/L	527.11	ppb	10:10:10
2	P 214.914†	1370.4	1165.0	2537.6	µg/L	2537.6	ppb	10:10:30
2	Pb 220.353†	2054.1	1980.0	523.84	µg/L	523.84	ppb	10:10:30

2	S 181.975 Axial†	219.7	191.6	1023.6 µg/L	1023.6 ppb	10:10:30
2	Sb 206.836†	532.8	502.7	523.49 µg/L	523.49 ppb	10:10:30
2	Se 196.026†	377.9	362.9	538.00 µg/L	538.00 ppb	10:10:30
2	SiO2†	30276.7	27902.7	5660.3 µg/L	5660.3 ppb	10:10:10
2	Si 251.611†	33249.5	32518.8	2596.4 µg/L	2596.4 ppb	10:10:10
2	Sn 189.927†	1043.5	1009.4	517.02 µg/L	517.02 ppb	10:10:30
2	Ti 334.940†	225097.6	221767.8	510.17 µg/L	510.17 ppb	10:10:04
2	Tl 190.801†	314.4	331.0	522.84 µg/L	522.84 ppb	10:10:30
2	U 409.014†	6012.5	5243.3	522.08 µg/L	522.08 ppb	10:10:10
2	V 292.402†	44038.0	43633.3	528.59 µg/L	528.59 ppb	10:10:10
2	Zn 213.857†	19673.5	18924.4	530.57 µg/L	530.57 ppb	10:10:10
3	Sc RADIAL	113430.7	113430.7	101 %		10:08:59
3	Al 396.153Radial†	10331.9	10035.3	5284.2 µg/L	5284.2 ppb	10:08:59
3	Ca 317.933Radial†	13846.0	13256.3	5348.2 µg/L	5348.2 ppb	10:09:19
3	Fe 238.204 Radial†	1030.4	1005.3	5355.1 µg/L	5355.1 ppb	10:09:19
3	K 766.490 Radial†	10279.6	9401.5	5303.8 µg/L	5303.8 ppb	10:08:59
3	Mg 279.077 IEC†	992.4	963.7	5442.1 µg/L	5442.1 ppb	10:09:19
3	Na 589.592 Radial†	37636.8	37557.2	10593 µg/L	10593 ppb	10:08:59
3	Sr 421.552†	90882.5	89811.5	518.32 µg/L	518.32 ppb	10:08:59
3	Sc 361.383	2026788.4	2026788.4	100.94 %		10:10:37
3	Y 371.029	1226999.3	1226999.3	100.30 %		10:10:37
3	Ag 328.068†	55706.2	55201.7	527.40 µg/L	527.40 ppb	10:10:43
3	As 188.979†	269.9	264.2	512.12 µg/L	512.12 ppb	10:11:04
3	B 249.677†	11671.1	11400.3	528.45 µg/L	528.45 ppb	10:10:43
3	Ba 233.527†	19869.6	19756.3	529.59 µg/L	529.59 ppb	10:10:43
3	Be 313.107†	809784.7	798594.9	520.28 µg/L	520.28 ppb	10:10:37
3	Cd 226.502†	19092.3	19011.4	534.74 µg/L	534.74 ppb	10:10:43
3	Co 228.616†	10486.3	10458.1	531.53 µg/L	531.53 ppb	10:10:43
3	Cr 267.716†	23914.7	23815.3	529.86 µg/L	529.86 ppb	10:10:43
3	Cu 324.752†	74956.1	70946.4	508.01 µg/L	508.01 ppb	10:10:43
3	Mn 257.610†	159111.4	157871.6	520.11 µg/L	520.11 ppb	10:10:37
3	Mo 202.031†	4351.6	4315.6	515.52 µg/L	515.52 ppb	10:11:04
3	Ni 231.604†	9623.0	9242.0	533.37 µg/L	533.37 ppb	10:10:43
3	P 214.914†	1349.2	1146.6	2496.2 µg/L	2496.2 ppb	10:11:04
3	Pb 220.353†	2035.8	1965.7	520.07 µg/L	520.07 ppb	10:11:04
3	S 181.975 Axial†	219.5	191.8	1024.5 µg/L	1024.5 ppb	10:11:04
3	Sb 206.836†	524.8	495.7	516.26 µg/L	516.26 ppb	10:11:04
3	Se 196.026†	371.1	356.8	529.08 µg/L	529.08 ppb	10:11:04
3	SiO2†	30299.3	27982.4	5676.4 µg/L	5676.4 ppb	10:10:43
3	Si 251.611†	33320.7	32652.4	2607.3 µg/L	2607.3 ppb	10:10:43
3	Sn 189.927†	1034.7	1002.6	513.61 µg/L	513.61 ppb	10:11:04
3	Ti 334.940†	226327.5	223412.9	513.95 µg/L	513.95 ppb	10:10:37
3	Tl 190.801†	312.3	329.5	520.56 µg/L	520.56 ppb	10:11:04
3	U 409.014†	5934.6	5177.5	515.52 µg/L	515.52 ppb	10:10:43
3	V 292.402†	44126.8	43804.7	530.61 µg/L	530.61 ppb	10:10:43
3	Zn 213.857†	19672.5	18960.8	531.55 µg/L	531.55 ppb	10:10:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2022973.1	100.75	%	0.506				0.50%
Sc RADIAL	113586.2	101	%	0.2				0.20%
Y 371.029	1224437.0	100.09	%	0.525				0.52%
Ag 328.068†	55110.4	526.54	µg/L	1.297	526.54	ppb	1.297	0.25%
QC value within limits for Ag 328.068 Recovery = 105.31%								
Al 396.153Radial†	10026.7	5279.5	µg/L	36.37	5279.5	ppb	36.37	0.69%
QC value within limits for Al 396.153Radial Recovery = 105.59%								
As 188.979†	266.5	516.49	µg/L	4.353	516.49	ppb	4.353	0.84%
QC value within limits for As 188.979 Recovery = 103.30%								
B 249.677†	11392.2	528.07	µg/L	1.539	528.07	ppb	1.539	0.29%
QC value within limits for B 249.677 Recovery = 105.61%								
Ba 233.527†	19742.8	529.23	µg/L	1.382	529.23	ppb	1.382	0.26%
QC value within limits for Ba 233.527 Recovery = 105.85%								
Be 313.107†	795445.4	518.23	µg/L	1.868	518.23	ppb	1.868	0.36%
QC value within limits for Be 313.107 Recovery = 103.65%								
Ca 317.933Radial†	13206.3	5328.0	µg/L	27.96	5328.0	ppb	27.96	0.52%
QC value within limits for Ca 317.933Radial Recovery = 106.56%								
Cd 226.502†	19008.6	534.66	µg/L	1.624	534.66	ppb	1.624	0.30%
QC value within limits for Cd 226.502 Recovery = 106.93%								
Co 228.616†	10446.7	530.96	µg/L	2.012	530.96	ppb	2.012	0.38%

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   QC value within limits for Co 228.616  Recovery = 106.19%
Cr 267.716†            23762.5      528.68 µg/L        1.510      528.68 ppb        1.510   0.29%
   QC value within limits for Cr 267.716  Recovery = 105.74%
Cu 324.752†            70845.0      507.29 µg/L        1.707      507.29 ppb        1.707   0.34%
   QC value within limits for Cu 324.752  Recovery = 101.46%
Fe 238.204 Radial†      1005.8      5358.2 µg/L        30.37      5358.2 ppb        30.37   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.16%
K 766.490 Radial†       9370.6      5286.3 µg/L        24.69      5286.3 ppb        24.69   0.47%
   QC value within limits for K 766.490 Radial  Recovery = 105.73%
Mg 279.077 IEC†          961.0      5427.0 µg/L        43.69      5427.0 ppb        43.69   0.81%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.54%
Mn 257.610†           157180.0      517.83 µg/L        2.004      517.83 ppb        2.004   0.39%
   QC value within limits for Mn 257.610  Recovery = 103.57%
Mo 202.031†             4352.2      519.88 µg/L        4.331      519.88 ppb        4.331   0.83%
   QC value within limits for Mo 202.031  Recovery = 103.98%
Na 589.592 Radial†     37400.9       10549 µg/L         43.1       10549 ppb         43.1   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 105.49%
Ni 231.604†             9176.5      529.59 µg/L        3.326      529.59 ppb        3.326   0.63%
   QC value within limits for Ni 231.604  Recovery = 105.92%
P 214.914†              1160.8      2528.0 µg/L        28.21      2528.0 ppb        28.21   1.12%
   QC value within limits for P 214.914  Recovery = 101.12%
Pb 220.353†             1975.6      522.68 µg/L        2.264      522.68 ppb        2.264   0.43%
   QC value within limits for Pb 220.353  Recovery = 104.54%
S 181.975 Axial†         193.1      1031.8 µg/L        13.49      1031.8 ppb        13.49   1.31%
   QC value within limits for S 181.975 Axial  Recovery = 103.18%
Sb 206.836†              498.1      518.76 µg/L        4.098      518.76 ppb        4.098   0.79%
   QC value within limits for Sb 206.836  Recovery = 103.75%
Se 196.026†              362.4      537.39 µg/L        8.025      537.39 ppb        8.025   1.49%
   QC value within limits for Se 196.026  Recovery = 107.48%
SiO2†                   27971.6      5674.2 µg/L        13.02      5674.2 ppb        13.02   0.23%
   QC value within limits for SiO2  Recovery = 106.11%
Si 251.611†             32640.2      2606.2 µg/L         9.25      2606.2 ppb         9.25   0.36%
   QC value within limits for Si 251.611  Recovery = 104.25%
Sn 189.927†             1010.9      517.84 µg/L        4.695      517.84 ppb        4.695   0.91%
   QC value within limits for Sn 189.927  Recovery = 103.57%
Sr 421.552†            89376.6      515.81 µg/L        2.653      515.81 ppb        2.653   0.51%
   QC value within limits for Sr 421.552  Recovery = 103.16%
Ti 334.940†           222512.3      511.88 µg/L        1.917      511.88 ppb        1.917   0.37%
   QC value within limits for Ti 334.940  Recovery = 102.38%
Tl 190.801†              333.8      527.30 µg/L        9.773      527.30 ppb        9.773   1.85%
   QC value within limits for Tl 190.801  Recovery = 105.46%
U 409.014†              5236.4      521.39 µg/L        5.566      521.39 ppb        5.566   1.07%
   QC value within limits for U 409.014  Recovery = 104.28%
V 292.402†             43771.8      530.25 µg/L        1.518      530.25 ppb        1.518   0.29%
   QC value within limits for V 292.402  Recovery = 106.05%
Zn 213.857†            18967.7      531.77 µg/L        1.323      531.77 ppb        1.323   0.25%
   QC value within limits for Zn 213.857  Recovery = 106.35%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 10:11:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113537.7	113537.7	101	%			10:11:45
1	Al 396.153Radial†	252.2	84.4	44.553	µg/L	44.553	ppb	10:11:45
1	Ca 317.933Radial†	496.9	77.5	31.264	µg/L	31.264	ppb	10:12:06
1	Fe 238.204 Radial†	13.5	1.3	7.0047	µg/L	7.0047	ppb	10:12:06
1	K 766.490 Radial†	856.4	98.0	55.279	µg/L	55.279	ppb	10:11:45
1	Mg 279.077 IEC†	27.7	11.3	63.610	µg/L	63.610	ppb	10:12:06
1	Na 589.592 Radial†	-478.1	-69.9	-19.721	µg/L	-19.721	ppb	10:11:45
1	Sr 421.552†	-27.6	64.1	0.3697	µg/L	0.3697	ppb	10:11:45
1	Sc 361.383	2028385.1	2028385.1	101.02	%			10:13:08
1	Y 371.029	1233307.6	1233307.6	100.81	%			10:13:08
1	Ag 328.068†	81.2	96.7	0.9196	µg/L	0.9196	ppb	10:13:13
1	As 188.979†	0.9	-2.2	-4.3025	µg/L	-4.3025	ppb	10:13:34
1	B 249.677†	255.5	91.2	4.2393	µg/L	4.2393	ppb	10:13:13
1	Ba 233.527†	-49.8	23.1	0.6190	µg/L	0.6190	ppb	10:13:34
1	Be 313.107†	3801.8	144.4	0.0940	µg/L	0.0940	ppb	10:13:13
1	Cd 226.502†	-71.4	26.9	0.7557	µg/L	0.7557	ppb	10:13:34
1	Co 228.616†	-62.4	8.0	0.4090	µg/L	0.4090	ppb	10:13:34
1	Cr 267.716†	-64.0	60.8	1.3515	µg/L	1.3515	ppb	10:13:13
1	Cu 324.752†	3365.6	22.6	0.1627	µg/L	0.1627	ppb	10:13:13
1	Mn 257.610†	-67.0	181.6	0.5982	µg/L	0.5982	ppb	10:13:34
1	Mo 202.031†	1.7	6.4	0.7671	µg/L	0.7671	ppb	10:13:34
1	Ni 231.604†	306.3	12.2	0.7042	µg/L	0.7042	ppb	10:13:34
1	P 214.914†	191.5	-0.4	-0.9798	µg/L	-0.9798	ppb	10:13:34
1	Pb 220.353†	54.8	3.3	0.8747	µg/L	0.8747	ppb	10:13:34
1	S 181.975 Axial†	26.1	0.2	0.9982	µg/L	0.9982	ppb	10:13:34
1	Sb 206.836†	15.9	-8.4	-8.8231	µg/L	-8.8231	ppb	10:13:34
1	Se 196.026†	8.2	-2.6	-3.9028	µg/L	-3.9028	ppb	10:13:34
1	SiO2†	2099.2	44.4	8.9975	µg/L	8.9975	ppb	10:13:13
1	Si 251.611†	407.6	46.6	3.7329	µg/L	3.7329	ppb	10:13:34
1	Sn 189.927†	23.2	0.6	0.3192	µg/L	0.3192	ppb	10:13:34
1	Ti 334.940†	993.4	184.8	0.4237	µg/L	0.4237	ppb	10:13:13
1	Tl 190.801†	-16.5	3.8	5.9396	µg/L	5.9396	ppb	10:13:34
1	U 409.014†	707.1	-1.6	-0.1643	µg/L	-0.1643	ppb	10:13:13
1	V 292.402†	-60.1	31.1	0.3784	µg/L	0.3784	ppb	10:13:13
1	Zn 213.857†	563.1	29.6	0.8299	µg/L	0.8299	ppb	10:13:34
2	Sc RADIAL	114686.0	114686.0	102	%			10:12:11
2	Al 396.153Radial†	230.8	60.9	32.164	µg/L	32.164	ppb	10:12:11
2	Ca 317.933Radial†	518.6	93.7	37.818	µg/L	37.818	ppb	10:12:32
2	Fe 238.204 Radial†	12.1	-0.2	-0.9304	µg/L	-0.9304	ppb	10:12:32
2	K 766.490 Radial†	868.8	101.7	57.349	µg/L	57.349	ppb	10:12:11
2	Mg 279.077 IEC†	22.6	6.1	34.344	µg/L	34.344	ppb	10:12:32
2	Na 589.592 Radial†	-475.1	-62.2	-17.547	µg/L	-17.547	ppb	10:12:11
2	Sr 421.552†	47.8	138.0	0.7964	µg/L	0.7964	ppb	10:12:11
2	Sc 361.383	2030887.1	2030887.1	101.15	%			10:13:40
2	Y 371.029	1234961.1	1234961.1	100.95	%			10:13:40
2	Ag 328.068†	45.2	60.9	0.5860	µg/L	0.5860	ppb	10:13:46
2	As 188.979†	-2.9	-6.1	-11.784	µg/L	-11.784	ppb	10:14:06
2	B 249.677†	217.6	53.4	2.4843	µg/L	2.4843	ppb	10:13:46
2	Ba 233.527†	-32.2	40.6	1.0893	µg/L	1.0893	ppb	10:14:06
2	Be 313.107†	4126.5	460.8	0.3000	µg/L	0.3000	ppb	10:13:46
2	Cd 226.502†	-52.0	46.2	1.2997	µg/L	1.2997	ppb	10:14:06
2	Co 228.616†	-51.2	19.2	0.9750	µg/L	0.9750	ppb	10:14:06
2	Cr 267.716†	-5.7	118.6	2.6352	µg/L	2.6352	ppb	10:13:46
2	Cu 324.752†	3434.5	86.6	0.6183	µg/L	0.6183	ppb	10:13:46
2	Mn 257.610†	17.6	265.3	0.8726	µg/L	0.8726	ppb	10:14:06
2	Mo 202.031†	0.0	4.8	0.5698	µg/L	0.5698	ppb	10:14:06
2	Ni 231.604†	320.6	25.9	1.4943	µg/L	1.4943	ppb	10:14:06
2	P 214.914†	193.1	0.9	1.9459	µg/L	1.9459	ppb	10:14:06
2	Pb 220.353†	67.9	16.1	4.2626	µg/L	4.2626	ppb	10:14:06

2	S 181.975 Axial†	24.7	-1.3	-7.0642 µg/L	-7.0642 ppb	10:14:06
2	Sb 206.836†	28.0	3.5	3.6351 µg/L	3.6351 ppb	10:14:06
2	Se 196.026†	12.6	1.7	2.4587 µg/L	2.4587 ppb	10:14:06
2	SiO2†	2123.7	66.0	13.390 µg/L	13.390 ppb	10:13:46
2	Si 251.611†	433.4	71.7	5.8638 µg/L	5.8638 ppb	10:14:06
2	Sn 189.927†	17.7	-4.9	-2.4810 µg/L	-2.4810 ppb	10:14:06
2	Ti 334.940†	1220.3	407.9	0.9368 µg/L	0.9368 ppb	10:13:46
2	Tl 190.801†	-15.2	5.1	7.9832 µg/L	7.9832 ppb	10:14:06
2	U 409.014†	723.3	13.5	1.3466 µg/L	1.3466 ppb	10:13:46
2	V 292.402†	9.3	99.8	1.2033 µg/L	1.2033 ppb	10:13:46
2	Zn 213.857†	595.0	60.4	1.6966 µg/L	1.6966 ppb	10:14:06
3	Sc RADIAL	113545.2	113545.2	101 %		10:12:37
3	Al 396.153Radial†	211.9	44.5	23.507 µg/L	23.507 ppb	10:12:37
3	Ca 317.933Radial†	488.8	69.4	28.013 µg/L	28.013 ppb	10:12:57
3	Fe 238.204 Radial†	11.7	-0.4	-2.3299 µg/L	-2.3299 ppb	10:12:57
3	K 766.490 Radial†	850.1	91.8	51.765 µg/L	51.765 ppb	10:12:37
3	Mg 279.077 IEC†	16.7	0.4	2.3758 µg/L	2.3758 ppb	10:12:57
3	Na 589.592 Radial†	-455.9	-48.0	-13.533 µg/L	-13.533 ppb	10:12:37
3	Sr 421.552†	46.4	137.1	0.7913 µg/L	0.7913 ppb	10:12:37
3	Sc 361.383	2031816.9	2031816.9	101.19 %		10:14:12
3	Y 371.029	1235932.0	1235932.0	101.03 %		10:14:12
3	Ag 328.068†	77.8	93.2	0.8883 µg/L	0.8883 ppb	10:14:18
3	As 188.979†	0.5	-2.6	-5.0734 µg/L	-5.0734 ppb	10:14:38
3	B 249.677†	223.6	59.2	2.7528 µg/L	2.7528 ppb	10:14:18
3	Ba 233.527†	-24.0	48.7	1.3038 µg/L	1.3038 ppb	10:14:38
3	Be 313.107†	4143.3	475.5	0.3096 µg/L	0.3096 ppb	10:14:18
3	Cd 226.502†	-64.2	34.1	0.9605 µg/L	0.9605 ppb	10:14:38
3	Co 228.616†	-48.7	21.7	1.1042 µg/L	1.1042 ppb	10:14:38
3	Cr 267.716†	-30.9	93.7	2.0811 µg/L	2.0811 ppb	10:14:18
3	Cu 324.752†	3507.2	156.9	1.1202 µg/L	1.1202 ppb	10:14:18
3	Mn 257.610†	12.3	260.0	0.8551 µg/L	0.8551 ppb	10:14:38
3	Mo 202.031†	2.3	7.0	0.8362 µg/L	0.8362 ppb	10:14:38
3	Ni 231.604†	330.3	35.3	2.0391 µg/L	2.0391 ppb	10:14:38
3	P 214.914†	193.2	0.9	1.8677 µg/L	1.8677 ppb	10:14:38
3	Pb 220.353†	63.4	11.7	3.0837 µg/L	3.0837 ppb	10:14:38
3	S 181.975 Axial†	22.9	-3.1	-16.609 µg/L	-16.609 ppb	10:14:38
3	Sb 206.836†	19.9	-4.4	-4.6546 µg/L	-4.6546 ppb	10:14:38
3	Se 196.026†	12.3	1.4	2.0681 µg/L	2.0681 ppb	10:14:38
3	SiO2†	2107.7	49.2	9.9831 µg/L	9.9831 ppb	10:14:18
3	Si 251.611†	434.6	72.7	5.9087 µg/L	5.9087 ppb	10:14:38
3	Sn 189.927†	19.5	-3.1	-1.5781 µg/L	-1.5781 ppb	10:14:38
3	Ti 334.940†	1186.5	374.0	0.8592 µg/L	0.8592 ppb	10:14:18
3	Tl 190.801†	-14.7	5.6	8.7730 µg/L	8.7730 ppb	10:14:38
3	U 409.014†	691.2	-18.5	-1.8470 µg/L	-1.8470 ppb	10:14:18
3	V 292.402†	-26.5	64.4	0.7751 µg/L	0.7751 ppb	10:14:18
3	Zn 213.857†	587.1	52.3	1.4658 µg/L	1.4658 ppb	10:14:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030363.1	101.12	%	0.088				0.09%
Sc RADIAL	113923.0	102	%	0.6				0.58%
Y 371.029	1234733.6	100.93	%	0.108				0.11%
Ag 328.068†	83.6	0.7980	µg/L	0.18427	0.7980	ppb	0.18427	23.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	63.3	33.408	µg/L	10.5777	33.408	ppb	10.5777	31.66%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.0535	µg/L	4.11524	-7.0535	ppb	4.11524	58.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	67.9	3.1588	µg/L	0.94534	3.1588	ppb	0.94534	29.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	37.5	1.0040	µg/L	0.35031	1.0040	ppb	0.35031	34.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	360.2	0.2345	µg/L	0.12182	0.2345	ppb	0.12182	51.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	80.2	32.365	µg/L	4.9945	32.365	ppb	4.9945	15.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	35.7	1.0053	µg/L	0.27474	1.0053	ppb	0.27474	27.33%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	16.3	0.8294	µg/L	0.36973	0.8294	ppb	0.36973	44.58%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              91.0      2.0226 µg/L       0.64386      2.0226 ppb        0.64386  31.83%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              88.7      0.6337 µg/L       0.47893      0.6337 ppb        0.47893  75.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.2      1.2481 µg/L       5.03419      1.2481 ppb        5.03419 403.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        97.1      54.797 µg/L        2.8226      54.797 ppb         2.8226   5.15%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           5.9      33.443 µg/L       30.6272      33.443 ppb        30.6272  91.58%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             235.6      0.7753 µg/L       0.15360      0.7753 ppb        0.15360  19.81%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.1      0.7244 µg/L       0.13824      0.7244 ppb        0.13824  19.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -60.0     -16.934 µg/L        3.1389     -16.934 ppb         3.1389  18.54%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              24.5      1.4125 µg/L       0.67120      1.4125 ppb        0.67120  47.52%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                0.5      0.9446 µg/L       1.66706      0.9446 ppb        1.66706 176.48%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.4      2.7403 µg/L       1.71983      2.7403 ppb        1.71983  62.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.4     -7.5584 µg/L       8.81410     -7.5584 ppb        8.81410 116.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -3.1     -3.2809 µg/L       6.34170     -3.2809 ppb        6.34170 193.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.1      0.2080 µg/L       3.56541      0.2080 ppb        3.56541 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    53.2      10.790 µg/L        2.3050      10.790 ppb         2.3050  21.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              63.7      5.1685 µg/L       1.24347      5.1685 ppb        1.24347  24.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -2.5     -1.2467 µg/L       1.42922     -1.2467 ppb        1.42922 114.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             113.1      0.6525 µg/L       0.24489      0.6525 ppb        0.24489  37.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             322.2      0.7399 µg/L       0.27657      0.7399 ppb        0.27657  37.38%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.8      7.5653 µg/L       1.46220      7.5653 ppb        1.46220  19.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -2.2     -0.2216 µg/L       1.59758     -0.2216 ppb        1.59758 721.01%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               65.1      0.7856 µg/L       0.41257      0.7856 ppb        0.41257  52.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              47.4      1.3308 µg/L       0.44885      1.3308 ppb        0.44885  33.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/14/2009 10:23:37 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409A.sif
Batch ID:
Results Data Set: 121409A
Results Library: c:\pe\optima1\Results\Results.mdb

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Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/14/2009 09:32:02**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 113**
Sample ID: LR2 **Date Collected: 12/14/2009 10:23:39**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113428.7	113428.7	101	%			10:24:13
1	Al 396.153Radial†	198.7	31.7	16.714	µg/L	16.714	ppb	10:24:13
1	Ca 317.933Radial†	471.6	53.0	21.379	µg/L	21.379	ppb	10:24:34
1	Fe 238.204 Radial†	10.8	-1.3	-6.9400	µg/L	-6.9400	ppb	10:24:34

1	K 766.490 Radial†	846.6	89.1	50.266 µg/L	50.266 ppb	10:24:13
1	Mg 279.077 IEC†	17.3	1.1	6.0474 µg/L	6.0474 ppb	10:24:34
1	Na 589.592 Radial†	-556.2	-147.4	-41.575 µg/L	-41.575 ppb	10:24:13
1	Sr 421.552†	-49.1	42.8	0.2473 µg/L	0.2473 ppb	10:24:13
1	Sc 361.383	2015299.5	2015299.5	100.37 %		10:25:36
1	Y 371.029	1226931.4	1226931.4	100.29 %		10:25:36
1	Ag 328.068†	23.5	39.7	0.3769 µg/L	0.3769 ppb	10:25:42
1	As 188.979†	1.8	-1.4	-2.7052 µg/L	-2.7052 ppb	10:26:02
1	B 249.677†	169.6	7.2	0.3368 µg/L	0.3368 ppb	10:25:42
1	Ba 233.527†	403272.5	401852.1	10750 µg/L	10750 ppb	10:25:36
1	Be 313.107†	3753.9	121.1	0.0788 µg/L	0.0788 ppb	10:25:42
1	Cd 226.502†	-87.5	10.5	0.2946 µg/L	0.2946 ppb	10:26:02
1	Co 228.616†	13.1	82.9	4.2118 µg/L	4.2118 ppb	10:26:02
1	Cr 267.716†	-78.8	45.8	1.0161 µg/L	1.0161 ppb	10:25:42
1	Cu 324.752†	3294.3	-26.8	-0.1933 µg/L	-0.1933 ppb	10:25:42
1	Mn 257.610†	-183.3	65.2	0.2136 µg/L	0.2136 ppb	10:26:02
1	Mo 202.031†	3.7	8.4	1.0050 µg/L	1.0050 ppb	10:26:02
1	Ni 231.604†	345.9	53.6	3.0938 µg/L	3.0938 ppb	10:26:02
1	P 214.914†	190.0	-0.7	-1.5423 µg/L	-1.5423 ppb	10:26:02
1	Pb 220.353†	52.9	1.7	0.4647 µg/L	0.4647 ppb	10:26:02
1	S 181.975 Axial†	25.3	-0.5	-2.5643 µg/L	-2.5643 ppb	10:26:02
1	Sb 206.836†	20.1	-4.1	-4.2699 µg/L	-4.2699 ppb	10:26:02
1	Se 196.026†	15.6	4.7	6.9919 µg/L	6.9919 ppb	10:26:02
1	SiO2†	2026.9	-14.2	-2.8872 µg/L	-2.8872 ppb	10:25:42
1	Si 251.611†	364.6	6.4	0.5417 µg/L	0.5417 ppb	10:26:02
1	Sn 189.927†	19.1	-3.4	-1.7099 µg/L	-1.7099 ppb	10:26:02
1	Ti 334.940†	959.8	157.7	0.3618 µg/L	0.3618 ppb	10:25:42
1	Tl 190.801†	-22.2	-2.0	-3.1488 µg/L	-3.1488 ppb	10:26:02
1	U 409.014†	660.9	-43.2	-4.3028 µg/L	-4.3028 ppb	10:25:42
1	V 292.402†	-80.4	10.4	0.1241 µg/L	0.1241 ppb	10:25:42
1	Zn 213.857†	559.7	29.8	0.8262 µg/L	0.8262 ppb	10:26:02
2	Sc RADIAL	113221.8	113221.8	101 %		10:24:39
2	Al 396.153Radial†	217.3	50.5	26.726 µg/L	26.726 ppb	10:24:39
2	Ca 317.933Radial†	487.7	69.7	28.129 µg/L	28.129 ppb	10:25:00
2	Fe 238.204 Radial†	14.3	2.2	11.789 µg/L	11.789 ppb	10:25:00
2	K 766.490 Radial†	814.5	58.9	33.242 µg/L	33.242 ppb	10:24:39
2	Mg 279.077 IEC†	23.0	6.7	37.969 µg/L	37.969 ppb	10:25:00
2	Na 589.592 Radial†	-552.1	-144.3	-40.714 µg/L	-40.714 ppb	10:24:39
2	Sr 421.552†	-33.4	58.3	0.3364 µg/L	0.3364 ppb	10:24:39
2	Sc 361.383	2031897.6	2031897.6	101.20 %		10:26:09
2	Y 371.029	1237118.6	1237118.6	101.12 %		10:26:09
2	Ag 328.068†	24.2	40.2	0.3838 µg/L	0.3838 ppb	10:26:14
2	As 188.979†	-0.3	-3.5	-6.7764 µg/L	-6.7764 ppb	10:26:35
2	B 249.677†	189.9	25.9	1.1994 µg/L	1.1994 ppb	10:26:14
2	Ba 233.527†	406926.5	402180.8	10758 µg/L	10758 ppb	10:26:09
2	Be 313.107†	3695.0	32.4	0.0211 µg/L	0.0211 ppb	10:26:14
2	Cd 226.502†	-88.4	10.3	0.2879 µg/L	0.2879 ppb	10:26:35
2	Co 228.616†	20.6	90.2	4.5788 µg/L	4.5788 ppb	10:26:35
2	Cr 267.716†	-108.3	17.2	0.3832 µg/L	0.3832 ppb	10:26:14
2	Cu 324.752†	3299.8	-48.2	-0.3417 µg/L	-0.3417 ppb	10:26:14
2	Mn 257.610†	-174.1	75.8	0.2508 µg/L	0.2508 ppb	10:26:35
2	Mo 202.031†	-12.3	-7.4	-0.8790 µg/L	-0.8790 ppb	10:26:35
2	Ni 231.604†	346.9	51.8	2.9897 µg/L	2.9897 ppb	10:26:35
2	P 214.914†	192.9	0.6	1.4012 µg/L	1.4012 ppb	10:26:35
2	Pb 220.353†	49.9	-1.7	-0.4473 µg/L	-0.4473 ppb	10:26:35
2	S 181.975 Axial†	27.2	1.1	6.1384 µg/L	6.1384 ppb	10:26:35
2	Sb 206.836†	21.3	-3.1	-3.2586 µg/L	-3.2586 ppb	10:26:35
2	Se 196.026†	14.1	3.1	4.6114 µg/L	4.6114 ppb	10:26:35
2	SiO2†	2028.9	-28.7	-5.8213 µg/L	-5.8213 ppb	10:26:14
2	Si 251.611†	353.5	-7.4	-0.5958 µg/L	-0.5958 ppb	10:26:35
2	Sn 189.927†	22.1	-0.5	-0.2637 µg/L	-0.2637 ppb	10:26:35
2	Ti 334.940†	861.9	53.1	0.1207 µg/L	0.1207 ppb	10:26:14
2	Tl 190.801†	-22.1	-1.8	-2.7979 µg/L	-2.7979 ppb	10:26:35
2	U 409.014†	666.6	-42.9	-4.2818 µg/L	-4.2818 ppb	10:26:14
2	V 292.402†	-74.0	17.4	0.1962 µg/L	0.1962 ppb	10:26:14
2	Zn 213.857†	561.0	26.5	0.7328 µg/L	0.7328 ppb	10:26:35
3	Sc RADIAL	113206.0	113206.0	101 %		10:25:05
3	Al 396.153Radial†	226.1	59.2	31.278 µg/L	31.278 ppb	10:25:05
3	Ca 317.933Radial†	467.4	49.8	20.075 µg/L	20.075 ppb	10:25:26
3	Fe 238.204 Radial†	10.8	-1.2	-6.4720 µg/L	-6.4720 ppb	10:25:26
3	K 766.490 Radial†	753.2	-1.6	-0.9013 µg/L	-0.9013 ppb	10:25:05

3	Mg 279.077 IEC†	20.7	4.5	25.429 µg/L	25.429 ppb	10:25:26
3	Na 589.592 Radial†	-567.4	-159.6	-45.020 µg/L	-45.020 ppb	10:25:05
3	Sr 421.552†	-58.3	33.6	0.1941 µg/L	0.1941 ppb	10:25:05
3	Sc 361.383	2027780.3	2027780.3	100.99 %		10:26:41
3	Y 371.029	1235476.0	1235476.0	100.99 %		10:26:41
3	Ag 328.068†	-19.2	-2.8	-0.0241 µg/L	-0.0241 ppb	10:26:47
3	As 188.979†	-1.9	-5.1	-9.8574 µg/L	-9.8574 ppb	10:27:07
3	B 249.677†	180.9	17.4	0.8092 µg/L	0.8092 ppb	10:26:47
3	Ba 233.527†	404106.1	400204.6	10706 µg/L	10706 ppb	10:26:41
3	Be 313.107†	3785.8	129.8	0.0844 µg/L	0.0844 ppb	10:26:47
3	Cd 226.502†	-91.3	7.2	0.2049 µg/L	0.2049 ppb	10:27:07
3	Co 228.616†	15.7	85.3	4.3356 µg/L	4.3356 ppb	10:27:07
3	Cr 267.716†	-121.2	4.2	0.0937 µg/L	0.0937 ppb	10:26:47
3	Cu 324.752†	3308.6	-32.9	-0.2365 µg/L	-0.2365 ppb	10:26:47
3	Mn 257.610†	-165.1	84.4	0.2767 µg/L	0.2767 ppb	10:27:07
3	Mo 202.031†	-1.8	3.0	0.3600 µg/L	0.3600 ppb	10:27:07
3	Ni 231.604†	347.0	52.6	3.0349 µg/L	3.0349 ppb	10:27:07
3	P 214.914†	198.7	6.7	14.935 µg/L	14.935 ppb	10:27:07
3	Pb 220.353†	61.0	9.4	2.5000 µg/L	2.5000 ppb	10:27:07
3	S 181.975 Axial†	25.9	-0.0	-0.2542 µg/L	-0.2542 ppb	10:27:07
3	Sb 206.836†	23.7	-0.7	-0.7034 µg/L	-0.7034 ppb	10:27:07
3	Se 196.026†	6.8	-4.0	-5.9721 µg/L	-5.9721 ppb	10:27:07
3	SiO2†	2025.3	-28.2	-5.7180 µg/L	-5.7180 ppb	10:26:47
3	Si 251.611†	368.8	8.4	0.7746 µg/L	0.7746 ppb	10:27:07
3	Sn 189.927†	16.9	-5.6	-2.8491 µg/L	-2.8491 ppb	10:27:07
3	Ti 334.940†	953.9	146.0	0.3349 µg/L	0.3349 ppb	10:26:47
3	Tl 190.801†	-21.4	-1.1	-1.6806 µg/L	-1.6806 ppb	10:27:07
3	U 409.014†	691.7	-16.7	-1.6634 µg/L	-1.6634 ppb	10:26:47
3	V 292.402†	-58.2	32.9	0.3945 µg/L	0.3945 ppb	10:26:47
3	Zn 213.857†	561.2	27.9	0.7722 µg/L	0.7722 ppb	10:27:07

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024992.5	100.85	%	0.430				0.43%
Sc RADIAL	113285.5	101	%	0.1				0.11%
Y 371.029	1233175.3	100.80	%	0.447				0.44%
Ag 328.068†	25.7	0.2455	µg/L	0.23349	0.2455	ppb	0.23349	95.10%
Al 396.153Radial†	47.1	24.906	µg/L	7.4502	24.906	ppb	7.4502	29.91%
As 188.979†	-3.3	-6.4463	µg/L	3.58753	-6.4463	ppb	3.58753	55.65%
B 249.677†	16.8	0.7818	µg/L	0.43192	0.7818	ppb	0.43192	55.25%
Ba 233.527†	401412.5	10738	µg/L	28.3	10738	ppb	28.3	0.26%
Be 313.107†	94.4	0.0614	µg/L	0.03506	0.0614	ppb	0.03506	57.06%
Ca 317.933Radial†	57.5	23.194	µg/L	4.3229	23.194	ppb	4.3229	18.64%
Cd 226.502†	9.3	0.2625	µg/L	0.04995	0.2625	ppb	0.04995	19.03%
Co 228.616†	86.1	4.3754	µg/L	0.18671	4.3754	ppb	0.18671	4.27%
Cr 267.716†	22.4	0.4977	µg/L	0.47173	0.4977	ppb	0.47173	94.79%
Cu 324.752†	-36.0	-0.2572	µg/L	0.07632	-0.2572	ppb	0.07632	29.68%
Fe 238.204 Radial†	-0.1	-0.5410	µg/L	10.68076	-0.5410	ppb	10.68076	>999.9%
K 766.490 Radial†	48.8	27.535	µg/L	26.0564	27.535	ppb	26.0564	94.63%
Mg 279.077 IEC†	4.1	23.148	µg/L	16.0825	23.148	ppb	16.0825	69.48%
Mn 257.610†	75.1	0.2470	µg/L	0.03172	0.2470	ppb	0.03172	12.84%
Mo 202.031†	1.4	0.1620	µg/L	0.95748	0.1620	ppb	0.95748	590.88%
Na 589.592 Radial†	-150.5	-42.436	µg/L	2.2787	-42.436	ppb	2.2787	5.37%
Ni 231.604†	52.7	3.0395	µg/L	0.05222	3.0395	ppb	0.05222	1.72%
P 214.914†	2.2	4.9312	µg/L	8.78741	4.9312	ppb	8.78741	178.20%
Pb 220.353†	3.2	0.8392	µg/L	1.50889	0.8392	ppb	1.50889	179.81%
S 181.975 Axial†	0.2	1.1066	µg/L	4.50812	1.1066	ppb	4.50812	407.37%
Sb 206.836†	-2.6	-2.7439	µg/L	1.83810	-2.7439	ppb	1.83810	66.99%
Se 196.026†	1.3	1.8770	µg/L	6.90102	1.8770	ppb	6.90102	367.65%
SiO2†	-23.7	-4.8089	µg/L	1.66498	-4.8089	ppb	1.66498	34.62%
Si 251.611†	2.5	0.2402	µg/L	0.73329	0.2402	ppb	0.73329	305.33%
Sn 189.927†	-3.2	-1.6076	µg/L	1.29575	-1.6076	ppb	1.29575	80.60%
Sr 421.552†	44.9	0.2593	µg/L	0.07192	0.2593	ppb	0.07192	27.74%
Ti 334.940†	118.9	0.2725	µg/L	0.13213	0.2725	ppb	0.13213	48.49%
Tl 190.801†	-1.6	-2.5424	µg/L	0.76671	-2.5424	ppb	0.76671	30.16%
U 409.014†	-34.3	-3.4160	µg/L	1.51780	-3.4160	ppb	1.51780	44.43%
V 292.402†	20.2	0.2383	µg/L	0.14001	0.2383	ppb	0.14001	58.76%
Zn 213.857†	28.1	0.7771	µg/L	0.04688	0.7771	ppb	0.04688	6.03%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:27:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114311.6	114311.6	102	%			10:27:52
1	Al 396.153Radial†	10318.5	9943.6	5235.7	µg/L	5235.7	ppb	10:27:52
1	Ca 317.933Radial†	13687.7	12996.0	5243.2	µg/L	5243.2	ppb	10:28:12
1	Fe 238.204 Radial†	1023.7	990.9	5278.4	µg/L	5278.4	ppb	10:28:12
1	K 766.490 Radial†	10176.8	9222.6	5202.8	µg/L	5202.8	ppb	10:27:52
1	Mg 279.077 IEC†	979.6	943.6	5328.8	µg/L	5328.8	ppb	10:28:12
1	Na 589.592 Radial†	37293.4	36934.4	10417	µg/L	10417	ppb	10:27:52
1	Sr 421.552†	90560.7	88804.9	512.51	µg/L	512.51	ppb	10:27:52
1	Sc 361.383	2027504.8	2027504.8	100.98	%			10:29:15
1	Y 371.029	1226162.8	1226162.8	100.23	%			10:29:15
1	Ag 328.068†	54896.9	54380.7	519.54	µg/L	519.54	ppb	10:29:21
1	As 188.979†	269.5	263.7	511.18	µg/L	511.18	ppb	10:29:42
1	B 249.677†	11391.3	11119.0	515.39	µg/L	515.39	ppb	10:29:21
1	Ba 233.527†	19537.8	19420.8	520.59	µg/L	520.59	ppb	10:29:21
1	Be 313.107†	799974.3	788596.2	513.77	µg/L	513.77	ppb	10:29:15
1	Cd 226.502†	18705.3	18621.5	523.77	µg/L	523.77	ppb	10:29:21
1	Co 228.616†	10308.2	10278.0	522.39	µg/L	522.39	ppb	10:29:21
1	Cr 267.716†	23358.2	23255.9	517.41	µg/L	517.41	ppb	10:29:21
1	Cu 324.752†	73615.4	69592.4	498.32	µg/L	498.32	ppb	10:29:21
1	Mn 257.610†	157038.6	155763.3	513.16	µg/L	513.16	ppb	10:29:15
1	Mo 202.031†	4357.0	4319.5	515.98	µg/L	515.98	ppb	10:29:42
1	Ni 231.604†	9366.7	8984.8	518.53	µg/L	518.53	ppb	10:29:21
1	P 214.914†	1353.9	1150.7	2506.8	µg/L	2506.8	ppb	10:29:42
1	Pb 220.353†	2024.0	1953.4	516.82	µg/L	516.82	ppb	10:29:42
1	S 181.975 Axial†	214.1	186.3	995.42	µg/L	995.42	ppb	10:29:42
1	Sb 206.836†	519.5	490.3	510.66	µg/L	510.66	ppb	10:29:42
1	Se 196.026†	378.4	363.9	539.55	µg/L	539.55	ppb	10:29:42
1	SiO2†	29689.7	27368.1	5551.8	µg/L	5551.8	ppb	10:29:21
1	Si 251.611†	32685.9	32012.1	2555.4	µg/L	2555.4	ppb	10:29:21
1	Sn 189.927†	1038.5	1006.1	515.32	µg/L	515.32	ppb	10:29:42
1	Ti 334.940†	223415.3	220449.8	507.14	µg/L	507.14	ppb	10:29:15
1	Tl 190.801†	306.7	323.8	511.60	µg/L	511.60	ppb	10:29:42
1	U 409.014†	5856.4	5098.0	507.60	µg/L	507.60	ppb	10:29:21
1	V 292.402†	43273.2	42944.0	520.26	µg/L	520.26	ppb	10:29:21
1	Zn 213.857†	19231.6	18517.3	519.12	µg/L	519.12	ppb	10:29:21
2	Sc RADIAL	113831.2	113831.2	102	%			10:28:17
2	Al 396.153Radial†	10348.8	10016.0	5273.9	µg/L	5273.9	ppb	10:28:17
2	Ca 317.933Radial†	13670.0	13035.1	5258.9	µg/L	5258.9	ppb	10:28:38
2	Fe 238.204 Radial†	1023.4	994.8	5299.6	µg/L	5299.6	ppb	10:28:38
2	K 766.490 Radial†	10150.4	9238.7	5211.9	µg/L	5211.9	ppb	10:28:17
2	Mg 279.077 IEC†	984.1	952.1	5376.4	µg/L	5376.4	ppb	10:28:38
2	Na 589.592 Radial†	37493.5	37285.4	10516	µg/L	10516	ppb	10:28:17
2	Sr 421.552†	90666.1	89282.9	515.27	µg/L	515.27	ppb	10:28:17
2	Sc 361.383	2022656.1	2022656.1	100.74	%			10:29:49
2	Y 371.029	1223740.6	1223740.6	100.03	%			10:29:49
2	Ag 328.068†	55734.0	55342.0	528.73	µg/L	528.73	ppb	10:29:54
2	As 188.979†	272.0	266.8	517.19	µg/L	517.19	ppb	10:30:15
2	B 249.677†	11577.0	11330.4	525.22	µg/L	525.22	ppb	10:29:54
2	Ba 233.527†	19859.4	19786.4	530.39	µg/L	530.39	ppb	10:29:54
2	Be 313.107†	802638.6	793140.1	516.73	µg/L	516.73	ppb	10:29:49
2	Cd 226.502†	19051.0	19009.1	534.69	µg/L	534.69	ppb	10:29:54
2	Co 228.616†	10480.8	10473.8	532.34	µg/L	532.34	ppb	10:29:54
2	Cr 267.716†	23762.4	23712.5	527.58	µg/L	527.58	ppb	10:29:54
2	Cu 324.752†	74749.6	70893.1	507.62	µg/L	507.62	ppb	10:29:54
2	Mn 257.610†	157400.1	156494.9	515.57	µg/L	515.57	ppb	10:29:49
2	Mo 202.031†	4357.0	4329.8	517.21	µg/L	517.21	ppb	10:30:15
2	Ni 231.604†	9539.4	9178.5	529.71	µg/L	529.71	ppb	10:29:54
2	P 214.914†	1351.3	1151.4	2507.0	µg/L	2507.0	ppb	10:30:15
2	Pb 220.353†	2013.0	1947.2	515.17	µg/L	515.17	ppb	10:30:15

2	S 181.975 Axial†	220.9	193.6	1034.5 µg/L	1034.5 ppb	10:30:15
2	Sb 206.836†	517.4	489.5	509.72 µg/L	509.72 ppb	10:30:15
2	Se 196.026†	366.9	353.4	524.01 µg/L	524.01 ppb	10:30:15
2	SiO2†	30183.9	27929.2	5665.6 µg/L	5665.6 ppb	10:29:54
2	Si 251.611†	33136.8	32537.3	2598.0 µg/L	2598.0 ppb	10:29:54
2	Sn 189.927†	1035.5	1005.5	515.06 µg/L	515.06 ppb	10:30:15
2	Ti 334.940†	224174.2	221733.5	510.09 µg/L	510.09 ppb	10:29:49
2	Tl 190.801†	316.2	334.0	527.54 µg/L	527.54 ppb	10:30:15
2	U 409.014†	6064.7	5318.6	529.60 µg/L	529.60 ppb	10:29:54
2	V 292.402†	44059.2	43827.0	530.90 µg/L	530.90 ppb	10:29:54
2	Zn 213.857†	19624.4	18952.8	531.36 µg/L	531.36 ppb	10:29:54
3	Sc RADIAL	113536.1	113536.1	101 %		10:28:43
3	Al 396.153Radial†	10298.3	9992.7	5261.8 µg/L	5261.8 ppb	10:28:43
3	Ca 317.933Radial†	13718.9	13118.3	5292.5 µg/L	5292.5 ppb	10:29:04
3	Fe 238.204 Radial†	1021.7	995.7	5304.1 µg/L	5304.1 ppb	10:29:04
3	K 766.490 Radial†	10078.7	9193.9	5186.7 µg/L	5186.7 ppb	10:28:43
3	Mg 279.077 IEC†	975.1	945.7	5340.5 µg/L	5340.5 ppb	10:29:04
3	Na 589.592 Radial†	37231.0	37122.3	10470 µg/L	10470 ppb	10:28:43
3	Sr 421.552†	90098.5	88954.9	513.37 µg/L	513.37 ppb	10:28:43
3	Sc 361.383	2026929.4	2026929.4	100.95 %		10:30:22
3	Y 371.029	1226564.7	1226564.7	100.26 %		10:30:22
3	Ag 328.068†	55140.6	54637.5	522.00 µg/L	522.00 ppb	10:30:28
3	As 188.979†	270.1	264.4	512.48 µg/L	512.48 ppb	10:30:48
3	B 249.677†	11449.4	11179.8	518.21 µg/L	518.21 ppb	10:30:28
3	Ba 233.527†	19614.8	19502.5	522.79 µg/L	522.79 ppb	10:30:28
3	Be 313.107†	802973.7	791792.2	515.85 µg/L	515.85 ppb	10:30:22
3	Cd 226.502†	18873.2	18793.0	528.60 µg/L	528.60 ppb	10:30:28
3	Co 228.616†	10320.2	10292.8	523.13 µg/L	523.13 ppb	10:30:28
3	Cr 267.716†	23513.8	23416.6	520.99 µg/L	520.99 ppb	10:30:28
3	Cu 324.752†	73891.4	69886.5	500.43 µg/L	500.43 ppb	10:30:28
3	Mn 257.610†	157526.6	156290.8	514.90 µg/L	514.90 ppb	10:30:22
3	Mo 202.031†	4332.3	4296.3	513.20 µg/L	513.20 ppb	10:30:48
3	Ni 231.604†	9469.0	9088.8	524.53 µg/L	524.53 ppb	10:30:28
3	P 214.914†	1350.2	1147.4	2499.1 µg/L	2499.1 ppb	10:30:48
3	Pb 220.353†	2018.1	1948.1	515.40 µg/L	515.40 ppb	10:30:48
3	S 181.975 Axial†	218.1	190.3	1016.9 µg/L	1016.9 ppb	10:30:48
3	Sb 206.836†	520.0	490.9	511.29 µg/L	511.29 ppb	10:30:48
3	Se 196.026†	368.8	354.5	525.65 µg/L	525.65 ppb	10:30:48
3	SiO2†	29823.4	27508.9	5580.4 µg/L	5580.4 ppb	10:30:28
3	Si 251.611†	32829.6	32163.6	2567.8 µg/L	2567.8 ppb	10:30:28
3	Sn 189.927†	1033.9	1001.8	513.17 µg/L	513.17 ppb	10:30:48
3	Ti 334.940†	224374.4	221462.6	509.47 µg/L	509.47 ppb	10:30:22
3	Tl 190.801†	312.5	329.6	520.72 µg/L	520.72 ppb	10:30:48
3	U 409.014†	5995.0	5236.9	521.45 µg/L	521.45 ppb	10:30:28
3	V 292.402†	43543.9	43224.3	523.63 µg/L	523.63 ppb	10:30:28
3	Zn 213.857†	19413.7	18703.1	524.34 µg/L	524.34 ppb	10:30:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025696.8	100.89	%	0.132				0.13%
Sc RADIAL	113893.0	102	%	0.3				0.34%
Y 371.029	1225489.4	100.17	%	0.125				0.12%
Ag 328.068†	54786.8	523.43	µg/L	4.757	523.43	ppb	4.757	0.91%
QC value within limits for Ag 328.068 Recovery = 104.69%								
Al 396.153Radial†	9984.1	5257.1	µg/L	19.52	5257.1	ppb	19.52	0.37%
QC value within limits for Al 396.153Radial Recovery = 105.14%								
As 188.979†	265.0	513.62	µg/L	3.159	513.62	ppb	3.159	0.62%
QC value within limits for As 188.979 Recovery = 102.72%								
B 249.677†	11209.8	519.61	µg/L	5.059	519.61	ppb	5.059	0.97%
QC value within limits for B 249.677 Recovery = 103.92%								
Ba 233.527†	19569.9	524.59	µg/L	5.144	524.59	ppb	5.144	0.98%
QC value within limits for Ba 233.527 Recovery = 104.92%								
Be 313.107†	791176.2	515.45	µg/L	1.520	515.45	ppb	1.520	0.29%
QC value within limits for Be 313.107 Recovery = 103.09%								
Ca 317.933Radial†	13049.8	5264.9	µg/L	25.20	5264.9	ppb	25.20	0.48%
QC value within limits for Ca 317.933Radial Recovery = 105.30%								
Cd 226.502†	18807.9	529.02	µg/L	5.471	529.02	ppb	5.471	1.03%
QC value within limits for Cd 226.502 Recovery = 105.80%								
Co 228.616†	10348.2	525.95	µg/L	5.541	525.95	ppb	5.541	1.05%

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   QC value within limits for Co 228.616  Recovery = 105.19%
Cr 267.716†            23461.7      521.99 µg/L        5.154      521.99 ppb        5.154   0.99%
   QC value within limits for Cr 267.716  Recovery = 104.40%
Cu 324.752†            70124.0      502.12 µg/L        4.875      502.12 ppb        4.875   0.97%
   QC value within limits for Cu 324.752  Recovery = 100.42%
Fe 238.204 Radial†       993.8      5294.0 µg/L       13.72      5294.0 ppb        13.72   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.88%
K 766.490 Radial†       9218.4      5200.5 µg/L       12.79      5200.5 ppb        12.79   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 104.01%
Mg 279.077 IEC†          947.1      5348.5 µg/L       24.78      5348.5 ppb        24.78   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.97%
Mn 257.610†           156183.0      514.55 µg/L       1.244      514.55 ppb        1.244   0.24%
   QC value within limits for Mn 257.610  Recovery = 102.91%
Mo 202.031†            4315.2      515.46 µg/L       2.052      515.46 ppb        2.052   0.40%
   QC value within limits for Mo 202.031  Recovery = 103.09%
Na 589.592 Radial†    37114.1       10468 µg/L        49.5       10468 ppb         49.5   0.47%
   QC value within limits for Na 589.592 Radial  Recovery = 104.68%
Ni 231.604†            9084.0      524.25 µg/L       5.594      524.25 ppb        5.594   1.07%
   QC value within limits for Ni 231.604  Recovery = 104.85%
P 214.914†             1149.9      2504.3 µg/L        4.51      2504.3 ppb         4.51   0.18%
   QC value within limits for P 214.914  Recovery = 100.17%
Pb 220.353†            1949.6      515.80 µg/L       0.892      515.80 ppb       0.892   0.17%
   QC value within limits for Pb 220.353  Recovery = 103.16%
S 181.975 Axial†        190.1      1015.6 µg/L       19.57      1015.6 ppb        19.57   1.93%
   QC value within limits for S 181.975 Axial  Recovery = 101.56%
Sb 206.836†             490.2      510.56 µg/L       0.789      510.56 ppb       0.789   0.15%
   QC value within limits for Sb 206.836  Recovery = 102.11%
Se 196.026†             357.3      529.74 µg/L       8.539      529.74 ppb       8.539   1.61%
   QC value within limits for Se 196.026  Recovery = 105.95%
SiO2†                  27602.1      5599.3 µg/L       59.22      5599.3 ppb        59.22   1.06%
   QC value within limits for SiO2  Recovery = 104.71%
Si 251.611†            32237.7      2573.8 µg/L       21.92      2573.8 ppb        21.92   0.85%
   QC value within limits for Si 251.611  Recovery = 102.95%
Sn 189.927†            1004.5      514.52 µg/L       1.171      514.52 ppb       1.171   0.23%
   QC value within limits for Sn 189.927  Recovery = 102.90%
Sr 421.552†            89014.3      513.71 µg/L       1.411      513.71 ppb       1.411   0.27%
   QC value within limits for Sr 421.552  Recovery = 102.74%
Ti 334.940†           221215.3      508.90 µg/L       1.557      508.90 ppb       1.557   0.31%
   QC value within limits for Ti 334.940  Recovery = 101.78%
Tl 190.801†             329.1      519.95 µg/L       7.997      519.95 ppb       7.997   1.54%
   QC value within limits for Tl 190.801  Recovery = 103.99%
U 409.014†             5217.9      519.55 µg/L      11.123      519.55 ppb      11.123   2.14%
   QC value within limits for U 409.014  Recovery = 103.91%
V 292.402†             43331.8      524.93 µg/L       5.440      524.93 ppb       5.440   1.04%
   QC value within limits for V 292.402  Recovery = 104.99%
Zn 213.857†            18724.4      524.94 µg/L       6.138      524.94 ppb       6.138   1.17%
   QC value within limits for Zn 213.857  Recovery = 104.99%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 10:30:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114009.0	114009.0	102	%			10:31:31
1	Al 396.153Radial†	164.2	-3.1	-1.6921	µg/L	-1.6921	ppb	10:31:31
1	Ca 317.933Radial†	432.6	12.3	4.9750	µg/L	4.9750	ppb	10:31:51
1	Fe 238.204 Radial†	10.8	-1.3	-7.0626	µg/L	-7.0626	ppb	10:31:51
1	K 766.490 Radial†	759.8	-0.3	-0.1824	µg/L	-0.1824	ppb	10:31:31
1	Mg 279.077 IEC†	18.8	2.5	14.020	µg/L	14.020	ppb	10:31:51
1	Na 589.592 Radial†	-607.9	-195.4	-55.117	µg/L	-55.117	ppb	10:31:31
1	Sr 421.552†	-62.9	29.5	0.1703	µg/L	0.1703	ppb	10:31:31
1	Sc 361.383	2035762.9	2035762.9	101.39	%			10:32:53
1	Y 371.029	1239214.1	1239214.1	101.30	%			10:32:53
1	Ag 328.068†	95.8	110.7	1.0521	µg/L	1.0521	ppb	10:32:58
1	As 188.979†	2.1	-1.0	-2.0183	µg/L	-2.0183	ppb	10:33:19
1	B 249.677†	186.0	21.7	1.0097	µg/L	1.0097	ppb	10:32:58
1	Ba 233.527†	-42.9	30.2	0.8077	µg/L	0.8077	ppb	10:33:19
1	Be 313.107†	3699.6	30.0	0.0196	µg/L	0.0196	ppb	10:32:58
1	Cd 226.502†	-96.9	2.0	0.0534	µg/L	0.0534	ppb	10:33:19
1	Co 228.616†	-55.2	15.3	0.7824	µg/L	0.7824	ppb	10:33:19
1	Cr 267.716†	-134.5	-8.4	-0.1865	µg/L	-0.1865	ppb	10:32:58
1	Cu 324.752†	3311.9	-42.5	-0.3050	µg/L	-0.3050	ppb	10:32:58
1	Mn 257.610†	-193.4	57.1	0.1871	µg/L	0.1871	ppb	10:33:19
1	Mo 202.031†	6.1	10.8	1.2922	µg/L	1.2922	ppb	10:33:19
1	Ni 231.604†	306.8	11.6	0.6693	µg/L	0.6693	ppb	10:33:19
1	P 214.914†	191.7	-0.9	-2.0024	µg/L	-2.0024	ppb	10:33:19
1	Pb 220.353†	57.3	5.5	1.4592	µg/L	1.4592	ppb	10:33:19
1	S 181.975 Axial†	24.2	-1.8	-9.6608	µg/L	-9.6608	ppb	10:33:19
1	Sb 206.836†	18.9	-5.5	-5.7664	µg/L	-5.7664	ppb	10:33:19
1	Se 196.026†	15.2	4.2	6.2295	µg/L	6.2295	ppb	10:33:19
1	SiO2†	2026.0	-35.4	-7.1878	µg/L	-7.1878	ppb	10:32:58
1	Si 251.611†	348.9	-12.7	-1.0131	µg/L	-1.0131	ppb	10:33:19
1	Sn 189.927†	20.5	-2.2	-1.1071	µg/L	-1.1071	ppb	10:33:19
1	Ti 334.940†	812.5	2.9	0.0063	µg/L	0.0063	ppb	10:32:58
1	Tl 190.801†	-19.5	0.8	1.2980	µg/L	1.2980	ppb	10:33:19
1	U 409.014†	654.1	-56.5	-5.6317	µg/L	-5.6317	ppb	10:32:58
1	V 292.402†	-59.3	32.0	0.3835	µg/L	0.3835	ppb	10:32:58
1	Zn 213.857†	542.6	7.3	0.2044	µg/L	0.2044	ppb	10:33:19
2	Sc RADIAL	112391.7	112391.7	100	%			10:31:56
2	Al 396.153Radial†	160.1	-4.9	-2.5568	µg/L	-2.5568	ppb	10:31:56
2	Ca 317.933Radial†	424.3	10.2	4.1002	µg/L	4.1002	ppb	10:32:17
2	Fe 238.204 Radial†	8.1	-3.9	-20.661	µg/L	-20.661	ppb	10:32:17
2	K 766.490 Radial†	758.0	8.6	4.8419	µg/L	4.8419	ppb	10:31:56
2	Mg 279.077 IEC†	15.5	-0.5	-2.9562	µg/L	-2.9562	ppb	10:32:17
2	Na 589.592 Radial†	-575.3	-171.6	-48.392	µg/L	-48.392	ppb	10:31:56
2	Sr 421.552†	-54.7	36.8	0.2125	µg/L	0.2125	ppb	10:31:56
2	Sc 361.383	2045701.9	2045701.9	101.89	%			10:33:25
2	Y 371.029	1244707.3	1244707.3	101.74	%			10:33:25
2	Ag 328.068†	14.3	30.3	0.2856	µg/L	0.2856	ppb	10:33:30
2	As 188.979†	2.1	-1.1	-2.1551	µg/L	-2.1551	ppb	10:33:51
2	B 249.677†	184.6	19.4	0.9108	µg/L	0.9108	ppb	10:33:30
2	Ba 233.527†	-45.3	28.0	0.7492	µg/L	0.7492	ppb	10:33:51
2	Be 313.107†	3718.5	30.8	0.0200	µg/L	0.0200	ppb	10:33:30
2	Cd 226.502†	-98.5	0.9	0.0238	µg/L	0.0238	ppb	10:33:51
2	Co 228.616†	-66.3	4.8	0.2406	µg/L	0.2406	ppb	10:33:51
2	Cr 267.716†	-117.4	9.0	0.2008	µg/L	0.2008	ppb	10:33:30
2	Cu 324.752†	3286.1	-83.7	-0.6021	µg/L	-0.6021	ppb	10:33:30
2	Mn 257.610†	-208.5	43.1	0.1394	µg/L	0.1394	ppb	10:33:51
2	Mo 202.031†	-9.5	-4.6	-0.5492	µg/L	-0.5492	ppb	10:33:51
2	Ni 231.604†	304.2	7.5	0.4325	µg/L	0.4325	ppb	10:33:51
2	P 214.914†	189.3	-4.2	-9.1845	µg/L	-9.1845	ppb	10:33:51
2	Pb 220.353†	50.2	-1.7	-0.4427	µg/L	-0.4427	ppb	10:33:51

2	S 181.975 Axial†	24.6	-1.5	-8.2828 µg/L	-8.2828 ppb	10:33:51
2	Sb 206.836†	21.1	-3.4	-3.5749 µg/L	-3.5749 ppb	10:33:51
2	Se 196.026†	12.0	1.0	1.5223 µg/L	1.5223 ppb	10:33:51
2	SiO2†	2094.9	22.5	4.5641 µg/L	4.5641 ppb	10:33:30
2	Si 251.611†	366.2	2.6	0.2416 µg/L	0.2416 ppb	10:33:51
2	Sn 189.927†	21.5	-1.3	-0.6670 µg/L	-0.6670 ppb	10:33:51
2	Ti 334.940†	877.5	62.7	0.1441 µg/L	0.1441 ppb	10:33:30
2	Tl 190.801†	-16.0	4.4	6.9108 µg/L	6.9108 ppb	10:33:51
2	U 409.014†	659.5	-54.4	-5.4184 µg/L	-5.4184 ppb	10:33:30
2	V 292.402†	-89.9	2.2	0.0126 µg/L	0.0126 ppb	10:33:30
2	Zn 213.857†	536.5	-1.2	-0.0339 µg/L	-0.0339 ppb	10:33:51
3	Sc RADIAL	113653.3	113653.3	101 %		10:32:22
3	Al 396.153Radial†	180.4	13.3	7.0111 µg/L	7.0111 ppb	10:32:22
3	Ca 317.933Radial†	433.2	14.3	5.7553 µg/L	5.7553 ppb	10:32:43
3	Fe 238.204 Radial†	9.2	-2.9	-15.572 µg/L	-15.572 ppb	10:32:43
3	K 766.490 Radial†	748.6	-9.1	-5.1297 µg/L	-5.1297 ppb	10:32:22
3	Mg 279.077 IEC†	18.6	2.3	13.287 µg/L	13.287 ppb	10:32:43
3	Na 589.592 Radial†	-622.3	-211.5	-59.661 µg/L	-59.661 ppb	10:32:22
3	Sr 421.552†	-50.1	41.9	0.2419 µg/L	0.2419 ppb	10:32:22
3	Sc 361.383	2009444.2	2009444.2	100.08 %		10:33:57
3	Y 371.029	1222762.1	1222762.1	99.950 %		10:33:57
3	Ag 328.068†	80.4	96.6	0.9117 µg/L	0.9117 ppb	10:34:03
3	As 188.979†	3.7	0.5	1.0482 µg/L	1.0482 ppb	10:34:23
3	B 249.677†	169.1	7.3	0.3427 µg/L	0.3427 ppb	10:34:03
3	Ba 233.527†	-39.0	33.5	0.8943 µg/L	0.8943 ppb	10:34:23
3	Be 313.107†	3744.0	122.2	0.0795 µg/L	0.0795 ppb	10:34:03
3	Cd 226.502†	-81.4	16.2	0.4592 µg/L	0.4592 ppb	10:34:23
3	Co 228.616†	-63.1	6.8	0.3438 µg/L	0.3438 ppb	10:34:23
3	Cr 267.716†	-109.6	14.7	0.3263 µg/L	0.3263 ppb	10:34:03
3	Cu 324.752†	3284.1	-27.4	-0.1993 µg/L	-0.1993 ppb	10:34:03
3	Mn 257.610†	-191.6	56.4	0.1835 µg/L	0.1835 ppb	10:34:23
3	Mo 202.031†	-0.8	3.9	0.4680 µg/L	0.4680 ppb	10:34:23
3	Ni 231.604†	291.1	-0.2	-0.0100 µg/L	-0.0100 ppb	10:34:23
3	P 214.914†	193.1	3.0	6.6812 µg/L	6.6812 ppb	10:34:23
3	Pb 220.353†	49.7	-1.4	-0.3573 µg/L	-0.3573 ppb	10:34:23
3	S 181.975 Axial†	23.0	-2.7	-14.703 µg/L	-14.703 ppb	10:34:23
3	Sb 206.836†	20.3	-3.8	-4.0044 µg/L	-4.0044 ppb	10:34:23
3	Se 196.026†	13.6	2.8	4.1249 µg/L	4.1249 ppb	10:34:23
3	SiO2†	2012.5	-22.7	-4.6108 µg/L	-4.6108 ppb	10:34:03
3	Si 251.611†	339.6	-17.5	-1.5151 µg/L	-1.5151 ppb	10:34:23
3	Sn 189.927†	26.3	3.9	1.9812 µg/L	1.9812 ppb	10:34:23
3	Ti 334.940†	911.5	112.2	0.2580 µg/L	0.2580 ppb	10:34:03
3	Tl 190.801†	-21.9	-1.8	-2.7877 µg/L	-2.7877 ppb	10:34:23
3	U 409.014†	727.4	25.2	2.5186 µg/L	2.5186 ppb	10:34:03
3	V 292.402†	-127.9	-37.3	-0.4413 µg/L	-0.4413 ppb	10:34:03
3	Zn 213.857†	527.3	-1.0	-0.0259 µg/L	-0.0259 ppb	10:34:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030303.0	101.12	%	0.933				0.92%
Sc RADIAL	113351.3	101	%	0.8				0.75%
Y 371.029	1235561.2	101.00	%	0.933				0.92%
Ag 328.068†	79.2	0.7498	µg/L	0.40810	0.7498	ppb	0.40810	54.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.8	0.9207	µg/L	5.29210	0.9207	ppb	5.29210	574.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-1.0418	µg/L	1.81120	-1.0418	ppb	1.81120	173.86%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	16.1	0.7544	µg/L	0.35995	0.7544	ppb	0.35995	47.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	30.5	0.8170	µg/L	0.07300	0.8170	ppb	0.07300	8.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	61.0	0.0397	µg/L	0.03449	0.0397	ppb	0.03449	86.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.3	4.9435	µg/L	0.82796	4.9435	ppb	0.82796	16.75%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.4	0.1788	µg/L	0.24327	0.1788	ppb	0.24327	136.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	9.0	0.4556	µg/L	0.28767	0.4556	ppb	0.28767	63.14%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.1      0.1135 µg/L       0.26728      0.1135 ppb        0.26728 235.43%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -51.2     -0.3688 µg/L       0.20883     -0.3688 ppb        0.20883  56.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -2.7     -14.432 µg/L        6.8705     -14.432 ppb         6.8705  47.61%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -0.3     -0.1567 µg/L       4.98585     -0.1567 ppb        4.98585 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.4      8.1171 µg/L       9.59676      8.1171 ppb        9.59676 118.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                52.2      0.1700 µg/L       0.02656      0.1700 ppb        0.02656  15.63%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.4      0.4037 µg/L       0.92234      0.4037 ppb        0.92234 228.48%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -192.8     -54.390 µg/L        5.6698     -54.390 ppb         5.6698  10.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 6.3      0.3639 µg/L       0.34482      0.3639 ppb        0.34482  94.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -0.7     -1.5019 µg/L       7.94469     -1.5019 ppb        7.94469 528.97%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.8      0.2197 µg/L       1.07424      0.2197 ppb        1.07424 488.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.0     -10.882 µg/L        3.3799     -10.882 ppb         3.3799  31.06%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.3     -4.4486 µg/L       1.16128     -4.4486 ppb        1.16128  26.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.7      3.9589 µg/L       2.35801      3.9589 ppb        2.35801  59.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -11.9     -2.4115 µg/L       6.17695     -2.4115 ppb        6.17695 256.15%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                -9.2     -0.7622 µg/L       0.90481     -0.7622 ppb        0.90481 118.71%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.1      0.0690 µg/L       1.67054      0.0690 ppb        1.67054 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                36.1      0.2082 µg/L       0.03599      0.2082 ppb        0.03599  17.28%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                59.3      0.1361 µg/L       0.12603      0.1361 ppb        0.12603  92.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.1      1.8070 µg/L       4.86924      1.8070 ppb        4.86924 269.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -28.5     -2.8438 µg/L       4.64523     -2.8438 ppb        4.64523 163.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -1.0     -0.0151 µg/L       0.41308     -0.0151 ppb        0.41308 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 1.7      0.0482 µg/L       0.13535      0.0482 ppb        0.13535 280.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:56:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114455.6	114455.6	102	%			10:57:06
1	Al 396.153Radial†	10440.2	10050.0	5291.7	µg/L	5291.7	ppb	10:57:06
1	Ca 317.933Radial†	13677.5	12969.0	5232.3	µg/L	5232.3	ppb	10:57:26
1	Fe 238.204 Radial†	1034.0	999.7	5325.6	µg/L	5325.6	ppb	10:57:26
1	K 766.490 Radial†	10055.1	9091.0	5128.6	µg/L	5128.6	ppb	10:57:06
1	Mg 279.077 IEC†	990.0	952.6	5379.6	µg/L	5379.6	ppb	10:57:26
1	Na 589.592 Radial†	37542.5	37132.1	10473	µg/L	10473	ppb	10:57:06
1	Sr 421.552†	91022.1	89144.7	514.47	µg/L	514.47	ppb	10:57:06
1	Sc 361.383	2013074.5	2013074.5	100.26	%			10:58:30
1	Y 371.029	1218048.7	1218048.7	99.565	%			10:58:30
1	Ag 328.068†	55305.1	55177.5	527.16	µg/L	527.16	ppb	10:58:36
1	As 188.979†	269.9	266.1	515.74	µg/L	515.74	ppb	10:58:56
1	B 249.677†	11460.2	11268.7	522.34	µg/L	522.34	ppb	10:58:36
1	Ba 233.527†	19628.4	19649.8	526.74	µg/L	526.74	ppb	10:58:36
1	Be 313.107†	802197.7	796492.7	518.91	µg/L	518.91	ppb	10:58:30
1	Cd 226.502†	18828.2	18876.8	530.96	µg/L	530.96	ppb	10:58:36
1	Co 228.616†	10393.4	10436.2	530.43	µg/L	530.43	ppb	10:58:36
1	Cr 267.716†	23516.0	23579.1	524.61	µg/L	524.61	ppb	10:58:36
1	Cu 324.752†	74156.7	70654.9	505.92	µg/L	505.92	ppb	10:58:36
1	Mn 257.610†	157699.5	157537.2	519.01	µg/L	519.01	ppb	10:58:30
1	Mo 202.031†	4376.0	4369.4	521.93	µg/L	521.93	ppb	10:58:56
1	Ni 231.604†	9439.1	9123.5	526.53	µg/L	526.53	ppb	10:58:36
1	P 214.914†	1359.0	1165.4	2538.5	µg/L	2538.5	ppb	10:58:56
1	Pb 220.353†	2023.9	1967.6	520.57	µg/L	520.57	ppb	10:58:56
1	S 181.975 Axial†	221.1	194.8	1040.9	µg/L	1040.9	ppb	10:58:56
1	Sb 206.836†	521.9	496.4	517.00	µg/L	517.00	ppb	10:58:56
1	Se 196.026†	369.7	357.9	530.71	µg/L	530.71	ppb	10:58:56
1	SiO2†	30108.5	27996.5	5679.3	µg/L	5679.3	ppb	10:58:36
1	Si 251.611†	33108.7	32665.8	2608.1	µg/L	2608.1	ppb	10:58:36
1	Sn 189.927†	1040.0	1014.9	519.82	µg/L	519.82	ppb	10:58:56
1	Ti 334.940†	224710.5	223327.6	513.76	µg/L	513.76	ppb	10:58:30
1	Tl 190.801†	314.4	333.7	527.12	µg/L	527.12	ppb	10:58:56
1	U 409.014†	6002.3	5285.1	526.25	µg/L	526.25	ppb	10:58:36
1	V 292.402†	43647.1	43624.1	528.50	µg/L	528.50	ppb	10:58:36
1	Zn 213.857†	19470.1	18891.7	529.65	µg/L	529.65	ppb	10:58:36
2	Sc RADIAL	114452.1	114452.1	102	%			10:57:32
2	Al 396.153Radial†	10474.8	10084.2	5309.8	µg/L	5309.8	ppb	10:57:32
2	Ca 317.933Radial†	13654.5	12947.0	5223.4	µg/L	5223.4	ppb	10:57:52
2	Fe 238.204 Radial†	1040.3	1005.8	5358.3	µg/L	5358.3	ppb	10:57:52
2	K 766.490 Radial†	10065.8	9101.7	5134.7	µg/L	5134.7	ppb	10:57:32
2	Mg 279.077 IEC†	982.4	945.1	5337.4	µg/L	5337.4	ppb	10:57:52
2	Na 589.592 Radial†	37670.5	37258.5	10509	µg/L	10509	ppb	10:57:32
2	Sr 421.552†	91316.0	89435.0	516.14	µg/L	516.14	ppb	10:57:32
2	Sc 361.383	2007572.0	2007572.0	99.987	%			10:59:03
2	Y 371.029	1214163.2	1214163.2	99.248	%			10:59:03
2	Ag 328.068†	55812.5	55836.2	533.45	µg/L	533.45	ppb	10:59:09
2	As 188.979†	267.4	264.3	512.31	µg/L	512.31	ppb	10:59:29
2	B 249.677†	11574.8	11414.6	529.11	µg/L	529.11	ppb	10:59:09
2	Ba 233.527†	19857.9	19933.0	534.33	µg/L	534.33	ppb	10:59:09
2	Be 313.107†	806869.2	803357.8	523.39	µg/L	523.39	ppb	10:59:03
2	Cd 226.502†	19063.0	19163.1	539.01	µg/L	539.01	ppb	10:59:09
2	Co 228.616†	10434.3	10505.6	533.94	µg/L	533.94	ppb	10:59:09
2	Cr 267.716†	23820.9	23948.3	532.82	µg/L	532.82	ppb	10:59:09
2	Cu 324.752†	74848.7	71549.7	512.32	µg/L	512.32	ppb	10:59:09
2	Mn 257.610†	158504.7	158773.7	523.08	µg/L	523.08	ppb	10:59:03
2	Mo 202.031†	4363.3	4368.6	521.84	µg/L	521.84	ppb	10:59:29
2	Ni 231.604†	9565.9	9276.2	535.34	µg/L	535.34	ppb	10:59:09
2	P 214.914†	1355.8	1166.0	2539.0	µg/L	2539.0	ppb	10:59:29
2	Pb 220.353†	2042.3	1991.6	526.90	µg/L	526.90	ppb	10:59:29

2	S 181.975 Axial†	218.8	193.2	1032.2 µg/L	1032.2 ppb	10:59:29
2	Sb 206.836†	523.0	498.9	519.54 µg/L	519.54 ppb	10:59:29
2	Se 196.026†	374.5	363.7	539.32 µg/L	539.32 ppb	10:59:29
2	SiO2†	30395.6	28366.1	5754.3 µg/L	5754.3 ppb	10:59:09
2	Si 251.611†	33414.5	33062.2	2640.3 µg/L	2640.3 ppb	10:59:09
2	Sn 189.927†	1034.6	1012.4	518.54 µg/L	518.54 ppb	10:59:29
2	Ti 334.940†	225715.9	224947.4	517.49 µg/L	517.49 ppb	10:59:03
2	Tl 190.801†	316.2	336.3	531.35 µg/L	531.35 ppb	10:59:29
2	U 409.014†	6009.1	5308.3	528.56 µg/L	528.56 ppb	10:59:09
2	V 292.402†	44073.6	44170.0	535.06 µg/L	535.06 ppb	10:59:09
2	Zn 213.857†	19622.8	19097.5	535.40 µg/L	535.40 ppb	10:59:09
3	Sc RADIAL	113455.2	113455.2	101 %		10:57:58
3	Al 396.153Radial†	10390.7	10091.2	5313.3 µg/L	5313.3 ppb	10:57:58
3	Ca 317.933Radial†	13706.4	13115.6	5291.4 µg/L	5291.4 ppb	10:58:18
3	Fe 238.204 Radial†	1040.2	1014.7	5405.3 µg/L	5405.3 ppb	10:58:18
3	K 766.490 Radial†	10069.6	9192.1	5185.6 µg/L	5185.6 ppb	10:57:58
3	Mg 279.077 IEC†	991.1	962.2	5433.8 µg/L	5433.8 ppb	10:58:18
3	Na 589.592 Radial†	37451.6	37366.3	10539 µg/L	10539 ppb	10:57:58
3	Sr 421.552†	90487.9	89402.7	515.96 µg/L	515.96 ppb	10:57:58
3	Sc 361.383	2004204.5	2004204.5	99.819 %		10:59:37
3	Y 371.029	1212492.2	1212492.2	99.111 %		10:59:37
3	Ag 328.068†	55874.9	55992.5	534.94 µg/L	534.94 ppb	10:59:42
3	As 188.979†	272.6	270.0	523.26 µg/L	523.26 ppb	11:00:03
3	B 249.677†	11579.5	11438.7	530.22 µg/L	530.22 ppb	10:59:42
3	Ba 233.527†	19816.4	19924.8	534.11 µg/L	534.11 ppb	10:59:42
3	Be 313.107†	804639.2	802479.6	522.81 µg/L	522.81 ppb	10:59:37
3	Cd 226.502†	19009.0	19141.0	538.39 µg/L	538.39 ppb	10:59:42
3	Co 228.616†	10457.9	10546.7	536.04 µg/L	536.04 ppb	10:59:42
3	Cr 267.716†	23827.8	23995.2	533.86 µg/L	533.86 ppb	10:59:42
3	Cu 324.752†	74789.7	71616.4	512.81 µg/L	512.81 ppb	10:59:42
3	Mn 257.610†	158107.6	158642.2	522.65 µg/L	522.65 ppb	10:59:37
3	Mo 202.031†	4379.1	4391.8	524.62 µg/L	524.62 ppb	11:00:03
3	Ni 231.604†	9569.2	9295.5	536.46 µg/L	536.46 ppb	10:59:42
3	P 214.914†	1358.9	1171.4	2551.1 µg/L	2551.1 ppb	11:00:03
3	Pb 220.353†	2038.9	1991.7	526.92 µg/L	526.92 ppb	11:00:03
3	S 181.975 Axial†	226.3	201.0	1074.1 µg/L	1074.1 ppb	11:00:03
3	Sb 206.836†	530.7	507.5	528.51 µg/L	528.51 ppb	11:00:03
3	Se 196.026†	375.9	365.8	542.33 µg/L	542.33 ppb	11:00:03
3	SiO2†	30303.0	28324.4	5745.8 µg/L	5745.8 ppb	10:59:42
3	Si 251.611†	33388.8	33092.5	2642.3 µg/L	2642.3 ppb	10:59:42
3	Sn 189.927†	1053.4	1033.0	529.06 µg/L	529.06 ppb	11:00:03
3	Ti 334.940†	225020.2	224629.7	516.76 µg/L	516.76 ppb	10:59:37
3	Tl 190.801†	316.4	337.0	532.43 µg/L	532.43 ppb	11:00:03
3	U 409.014†	6004.9	5314.2	529.14 µg/L	529.14 ppb	10:59:42
3	V 292.402†	44000.3	44170.6	535.09 µg/L	535.09 ppb	10:59:42
3	Zn 213.857†	19621.8	19129.5	536.29 µg/L	536.29 ppb	10:59:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2008283.7	100.02	%	0.223				0.22%
Sc RADIAL	114120.9	102	%	0.5				0.51%
Y 371.029	1214901.4	99.308	%	0.2330				0.23%
Ag 328.068†	55668.7	531.85	µg/L	4.129	531.85	ppb	4.129	0.78%
QC value within limits for Ag 328.068 Recovery = 106.37%								
Al 396.153Radial†	10075.1	5304.9	µg/L	11.62	5304.9	ppb	11.62	0.22%
QC value within limits for Al 396.153Radial Recovery = 106.10%								
As 188.979†	266.8	517.11	µg/L	5.602	517.11	ppb	5.602	1.08%
QC value within limits for As 188.979 Recovery = 103.42%								
B 249.677†	11374.0	527.22	µg/L	4.267	527.22	ppb	4.267	0.81%
QC value within limits for B 249.677 Recovery = 105.44%								
Ba 233.527†	19835.9	531.72	µg/L	4.320	531.72	ppb	4.320	0.81%
QC value within limits for Ba 233.527 Recovery = 106.34%								
Be 313.107†	800776.7	521.71	µg/L	2.434	521.71	ppb	2.434	0.47%
QC value within limits for Be 313.107 Recovery = 104.34%								
Ca 317.933Radial†	13010.6	5249.0	µg/L	36.98	5249.0	ppb	36.98	0.70%
QC value within limits for Ca 317.933Radial Recovery = 104.98%								
Cd 226.502†	19060.3	536.12	µg/L	4.481	536.12	ppb	4.481	0.84%
QC value within limits for Cd 226.502 Recovery = 107.22%								
Co 228.616†	10496.1	533.47	µg/L	2.837	533.47	ppb	2.837	0.53%

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   QC value within limits for Co 228.616  Recovery = 106.69%
Cr 267.716†            23840.9      530.43 µg/L        5.068      530.43 ppb        5.068   0.96%
   QC value within limits for Cr 267.716  Recovery = 106.09%
Cu 324.752†            71273.7      510.35 µg/L        3.843      510.35 ppb        3.843   0.75%
   QC value within limits for Cu 324.752  Recovery = 102.07%
Fe 238.204 Radial†      1006.7      5363.0 µg/L       40.07      5363.0 ppb       40.07   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.26%
K 766.490 Radial†       9128.2      5149.6 µg/L       31.32      5149.6 ppb       31.32   0.61%
   QC value within limits for K 766.490 Radial  Recovery = 102.99%
Mg 279.077 IEC†          953.3      5383.6 µg/L       48.34      5383.6 ppb       48.34   0.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.67%
Mn 257.610†           158317.7      521.58 µg/L        2.238      521.58 ppb        2.238   0.43%
   QC value within limits for Mn 257.610  Recovery = 104.32%
Mo 202.031†             4376.6      522.80 µg/L        1.576      522.80 ppb        1.576   0.30%
   QC value within limits for Mo 202.031  Recovery = 104.56%
Na 589.592 Radial†     37252.3       10507 µg/L         33.1       10507 ppb         33.1   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 105.07%
Ni 231.604†             9231.7      532.78 µg/L        5.438      532.78 ppb        5.438   1.02%
   QC value within limits for Ni 231.604  Recovery = 106.56%
P 214.914†              1167.6      2542.9 µg/L        7.11      2542.9 ppb         7.11   0.28%
   QC value within limits for P 214.914  Recovery = 101.72%
Pb 220.353†             1983.6      524.80 µg/L        3.660      524.80 ppb        3.660   0.70%
   QC value within limits for Pb 220.353  Recovery = 104.96%
S 181.975 Axial†         196.3      1049.1 µg/L       22.12      1049.1 ppb       22.12   2.11%
   QC value within limits for S 181.975 Axial  Recovery = 104.91%
Sb 206.836†              500.9      521.68 µg/L        6.044      521.68 ppb        6.044   1.16%
   QC value within limits for Sb 206.836  Recovery = 104.34%
Se 196.026†              362.5      537.46 µg/L        6.030      537.46 ppb        6.030   1.12%
   QC value within limits for Se 196.026  Recovery = 107.49%
SiO2†                  28229.0      5726.5 µg/L       41.06      5726.5 ppb       41.06   0.72%
   QC value within limits for SiO2  Recovery = 107.09%
Si 251.611†            32940.2      2630.2 µg/L       19.18      2630.2 ppb       19.18   0.73%
   QC value within limits for Si 251.611  Recovery = 105.21%
Sn 189.927†             1020.1      522.47 µg/L        5.741      522.47 ppb        5.741   1.10%
   QC value within limits for Sn 189.927  Recovery = 104.49%
Sr 421.552†            89327.5      515.52 µg/L        0.918      515.52 ppb        0.918   0.18%
   QC value within limits for Sr 421.552  Recovery = 103.10%
Ti 334.940†           224301.6      516.01 µg/L        1.975      516.01 ppb        1.975   0.38%
   QC value within limits for Ti 334.940  Recovery = 103.20%
Tl 190.801†              335.7      530.30 µg/L        2.808      530.30 ppb        2.808   0.53%
   QC value within limits for Tl 190.801  Recovery = 106.06%
U 409.014†              5302.5      527.98 µg/L        1.528      527.98 ppb        1.528   0.29%
   QC value within limits for U 409.014  Recovery = 105.60%
V 292.402†             43988.2      532.88 µg/L        3.795      532.88 ppb        3.795   0.71%
   QC value within limits for V 292.402  Recovery = 106.58%
Zn 213.857†            19039.6      533.78 µg/L        3.610      533.78 ppb        3.610   0.68%
   QC value within limits for Zn 213.857  Recovery = 106.76%
All analyte(s) passed QC.
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Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 11:00:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111462.7	111462.7	99.5	%			11:00:45
1	Al 396.153Radial†	187.1	23.5	12.410	µg/L	12.410	ppb	11:00:45
1	Ca 317.933Radial†	416.9	6.2	2.4999	µg/L	2.4999	ppb	11:01:06
1	Fe 238.204 Radial†	12.3	0.4	2.3752	µg/L	2.3752	ppb	11:01:06
1	K 766.490 Radial†	741.2	-2.0	-1.1351	µg/L	-1.1351	ppb	11:00:45
1	Mg 279.077 IEC†	12.7	-3.3	-18.405	µg/L	-18.405	ppb	11:01:06
1	Na 589.592 Radial†	-653.9	-255.2	-71.992	µg/L	-71.992	ppb	11:00:45
1	Sr 421.552†	-19.5	71.7	0.4141	µg/L	0.4141	ppb	11:00:45
1	Sc 361.383	1998738.5	1998738.5	99.547	%			11:02:08
1	Y 371.029	1214838.3	1214838.3	99.303	%			11:02:08
1	Ag 328.068†	-2.8	13.5	0.1273	µg/L	0.1273	ppb	11:02:13
1	As 188.979†	0.1	-3.1	-5.9892	µg/L	-5.9892	ppb	11:02:34
1	B 249.677†	171.1	10.1	0.4687	µg/L	0.4687	ppb	11:02:13
1	Ba 233.527†	-65.2	6.9	0.1848	µg/L	0.1848	ppb	11:02:34
1	Be 313.107†	3804.8	203.2	0.1323	µg/L	0.1323	ppb	11:02:13
1	Cd 226.502†	-90.5	6.7	0.1793	µg/L	0.1793	ppb	11:02:34
1	Co 228.616†	-61.0	8.5	0.4320	µg/L	0.4320	ppb	11:02:34
1	Cr 267.716†	-107.6	16.1	0.3578	µg/L	0.3578	ppb	11:02:13
1	Cu 324.752†	3204.8	-89.5	-0.6389	µg/L	-0.6389	ppb	11:02:13
1	Mn 257.610†	-162.3	84.8	0.2793	µg/L	0.2793	ppb	11:02:34
1	Mo 202.031†	-3.7	1.1	0.1264	µg/L	0.1264	ppb	11:02:34
1	Ni 231.604†	292.5	2.8	0.1628	µg/L	0.1628	ppb	11:02:34
1	P 214.914†	187.1	-2.1	-4.5980	µg/L	-4.5980	ppb	11:02:34
1	Pb 220.353†	55.8	5.0	1.3473	µg/L	1.3473	ppb	11:02:34
1	S 181.975 Axial†	29.6	4.0	21.614	µg/L	21.614	ppb	11:02:34
1	Sb 206.836†	21.2	-2.9	-3.0329	µg/L	-3.0329	ppb	11:02:34
1	Se 196.026†	15.0	4.3	6.3064	µg/L	6.3064	ppb	11:02:34
1	SiO2†	2086.8	62.7	12.715	µg/L	12.715	ppb	11:02:13
1	Si 251.611†	433.9	79.1	6.4847	µg/L	6.4847	ppb	11:02:34
1	Sn 189.927†	19.0	-3.3	-1.6980	µg/L	-1.6980	ppb	11:02:34
1	Ti 334.940†	961.1	166.9	0.3840	µg/L	0.3840	ppb	11:02:13
1	Tl 190.801†	-19.7	0.3	0.5314	µg/L	0.5314	ppb	11:02:34
1	U 409.014†	567.1	-131.9	-13.160	µg/L	-13.160	ppb	11:02:13
1	V 292.402†	-99.7	-9.6	-0.1359	µg/L	-0.1359	ppb	11:02:13
1	Zn 213.857†	543.3	18.0	0.5085	µg/L	0.5085	ppb	11:02:34
2	Sc RADIAL	112604.0	112604.0	101	%			11:01:11
2	Al 396.153Radial†	210.7	45.1	23.800	µg/L	23.800	ppb	11:01:11
2	Ca 317.933Radial†	431.6	16.6	6.6842	µg/L	6.6842	ppb	11:01:32
2	Fe 238.204 Radial†	11.6	-0.5	-2.4769	µg/L	-2.4769	ppb	11:01:32
2	K 766.490 Radial†	721.8	-28.8	-16.261	µg/L	-16.261	ppb	11:01:11
2	Mg 279.077 IEC†	16.4	0.3	1.7206	µg/L	1.7206	ppb	11:01:32
2	Na 589.592 Radial†	-641.0	-235.8	-66.515	µg/L	-66.515	ppb	11:01:11
2	Sr 421.552†	-71.0	20.7	0.1193	µg/L	0.1193	ppb	11:01:11
2	Sc 361.383	2009001.7	2009001.7	100.06	%			11:02:40
2	Y 371.029	1221229.2	1221229.2	99.825	%			11:02:40
2	Ag 328.068†	-23.8	-7.5	-0.0710	µg/L	-0.0710	ppb	11:02:45
2	As 188.979†	4.2	1.0	1.9962	µg/L	1.9962	ppb	11:03:06
2	B 249.677†	187.3	25.4	1.1819	µg/L	1.1819	ppb	11:02:45
2	Ba 233.527†	-72.9	-0.4	-0.0097	µg/L	-0.0097	ppb	11:03:06
2	Be 313.107†	3731.7	110.7	0.0720	µg/L	0.0720	ppb	11:02:45
2	Cd 226.502†	-81.6	16.1	0.4538	µg/L	0.4538	ppb	11:03:06
2	Co 228.616†	-74.1	-4.3	-0.2178	µg/L	-0.2178	ppb	11:03:06
2	Cr 267.716†	-97.6	26.7	0.5931	µg/L	0.5931	ppb	11:02:45
2	Cu 324.752†	3260.3	-50.5	-0.3611	µg/L	-0.3611	ppb	11:02:45
2	Mn 257.610†	-146.3	101.6	0.3340	µg/L	0.3340	ppb	11:03:06
2	Mo 202.031†	-1.4	3.4	0.4066	µg/L	0.4066	ppb	11:03:06
2	Ni 231.604†	306.4	15.2	0.8781	µg/L	0.8781	ppb	11:03:06
2	P 214.914†	192.6	2.5	5.6781	µg/L	5.6781	ppb	11:03:06
2	Pb 220.353†	55.0	3.9	1.0444	µg/L	1.0444	ppb	11:03:06

2	S 181.975 Axial†	25.8	0.1	0.3574 µg/L	0.3574 ppb	11:03:06
2	Sb 206.836†	27.6	3.4	3.5503 µg/L	3.5503 ppb	11:03:06
2	Se 196.026†	25.1	14.3	21.077 µg/L	21.077 ppb	11:03:06
2	SiO2†	2060.2	25.4	5.1506 µg/L	5.1506 ppb	11:02:45
2	Si 251.611†	425.1	68.0	5.4730 µg/L	5.4730 ppb	11:03:06
2	Sn 189.927†	24.6	2.3	1.1502 µg/L	1.1502 ppb	11:03:06
2	Ti 334.940†	973.4	174.3	0.4008 µg/L	0.4008 ppb	11:02:45
2	Tl 190.801†	-21.6	-1.5	-2.3481 µg/L	-2.3481 ppb	11:03:06
2	U 409.014†	722.1	20.1	2.0024 µg/L	2.0024 ppb	11:02:45
2	V 292.402†	-81.5	9.1	0.1151 µg/L	0.1151 ppb	11:02:45
2	Zn 213.857†	530.7	2.5	0.0673 µg/L	0.0673 ppb	11:03:06
3	Sc RADIAL	111949.3	111949.3	100.0 %		11:01:37
3	Al 396.153Radial†	194.9	30.5	16.120 µg/L	16.120 ppb	11:01:37
3	Ca 317.933Radial†	420.0	7.5	3.0243 µg/L	3.0243 ppb	11:01:58
3	Fe 238.204 Radial†	12.0	0.1	0.4183 µg/L	0.4183 ppb	11:01:58
3	K 766.490 Radial†	751.4	5.0	2.7977 µg/L	2.7977 ppb	11:01:37
3	Mg 279.077 IEC†	19.3	3.3	18.533 µg/L	18.533 ppb	11:01:58
3	Na 589.592 Radial†	-706.6	-305.1	-86.053 µg/L	-86.053 ppb	11:01:37
3	Sr 421.552†	-77.5	13.8	0.0798 µg/L	0.0798 ppb	11:01:37
3	Sc 361.383	2009674.4	2009674.4	100.09 %		11:03:12
3	Y 371.029	1221393.1	1221393.1	99.839 %		11:03:12
3	Ag 328.068†	5.4	21.7	0.2064 µg/L	0.2064 ppb	11:03:18
3	As 188.979†	4.2	1.0	2.0327 µg/L	2.0327 ppb	11:03:38
3	B 249.677†	150.2	-11.7	-0.5428 µg/L	-0.5428 ppb	11:03:18
3	Ba 233.527†	-72.6	-0.1	-0.0035 µg/L	-0.0035 ppb	11:03:38
3	Be 313.107†	3730.6	108.4	0.0705 µg/L	0.0705 ppb	11:03:18
3	Cd 226.502†	-91.1	6.6	0.1857 µg/L	0.1857 ppb	11:03:38
3	Co 228.616†	-62.9	7.0	0.3526 µg/L	0.3526 ppb	11:03:38
3	Cr 267.716†	-131.9	-7.5	-0.1662 µg/L	-0.1662 ppb	11:03:18
3	Cu 324.752†	3206.0	-105.8	-0.7560 µg/L	-0.7560 ppb	11:03:18
3	Mn 257.610†	-165.4	82.6	0.2719 µg/L	0.2719 ppb	11:03:38
3	Mo 202.031†	-3.7	1.1	0.1285 µg/L	0.1285 ppb	11:03:38
3	Ni 231.604†	288.6	-2.7	-0.1562 µg/L	-0.1562 ppb	11:03:38
3	P 214.914†	197.2	7.1	15.826 µg/L	15.826 ppb	11:03:38
3	Pb 220.353†	55.2	4.2	1.1127 µg/L	1.1127 ppb	11:03:38
3	S 181.975 Axial†	23.0	-2.7	-14.615 µg/L	-14.615 ppb	11:03:38
3	Sb 206.836†	19.2	-5.0	-5.2008 µg/L	-5.2008 ppb	11:03:38
3	Se 196.026†	11.3	0.5	0.7005 µg/L	0.7005 ppb	11:03:38
3	SiO2†	2093.5	57.9	11.753 µg/L	11.753 ppb	11:03:18
3	Si 251.611†	407.4	50.2	4.0516 µg/L	4.0516 ppb	11:03:38
3	Sn 189.927†	23.1	0.7	0.3480 µg/L	0.3480 ppb	11:03:38
3	Ti 334.940†	987.4	187.9	0.4324 µg/L	0.4324 ppb	11:03:18
3	Tl 190.801†	-21.1	-1.0	-1.5574 µg/L	-1.5574 ppb	11:03:38
3	U 409.014†	707.1	4.8	0.4819 µg/L	0.4819 ppb	11:03:18
3	V 292.402†	-77.5	13.1	0.1587 µg/L	0.1587 ppb	11:03:18
3	Zn 213.857†	541.4	13.1	0.3707 µg/L	0.3707 ppb	11:03:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005804.8	99.899	%	0.3052				0.31%
Sc RADIAL	112005.3	100	%	0.5				0.51%
Y 371.029	1219153.5	99.656	%	0.3056				0.31%
Ag 328.068†	9.2	0.0876	µg/L	0.14289	0.0876	ppb	0.14289	163.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	33.0	17.443	µg/L	5.8094	17.443	ppb	5.8094	33.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.6535	µg/L	4.62095	-0.6535	ppb	4.62095	707.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	7.9	0.3693	µg/L	0.86666	0.3693	ppb	0.86666	234.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0572	µg/L	0.11054	0.0572	ppb	0.11054	193.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	140.8	0.0916	µg/L	0.03527	0.0916	ppb	0.03527	38.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.1	4.0695	µg/L	2.27954	4.0695	ppb	2.27954	56.02%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.8	0.2729	µg/L	0.15670	0.2729	ppb	0.15670	57.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.7	0.1889	µg/L	0.35449	0.1889	ppb	0.35449	187.64%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              11.8      0.2615 µg/L       0.38870      0.2615 ppb        0.38870 148.62%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -81.9     -0.5853 µg/L       0.20284     -0.5853 ppb        0.20284  34.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.0      0.1055 µg/L       2.44108      0.1055 ppb        2.44108 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -8.6     -4.8660 µg/L      10.06202     -4.8660 ppb       10.06202 206.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.1      0.6163 µg/L      18.49354      0.6163 ppb       18.49354 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              89.7      0.2951 µg/L       0.03393      0.2951 ppb        0.03393  11.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.8      0.2205 µg/L       0.16112      0.2205 ppb        0.16112  73.07%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -265.4     -74.853 µg/L      10.0783     -74.853 ppb        10.0783  13.46%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.1      0.2949 µg/L       0.52967      0.2949 ppb        0.52967 179.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                2.5      5.6353 µg/L      10.21202      5.6353 ppb       10.21202 181.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.4      1.1682 µg/L       0.15887      1.1682 ppb        0.15887  13.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.5      2.4522 µg/L      18.20481      2.4522 ppb       18.20481 742.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -1.5     -1.5611 µg/L       4.55741     -1.5611 ppb        4.55741 291.93%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.3      9.3612 µg/L      10.52608      9.3612 ppb       10.52608 112.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    48.7      9.8730 µg/L       4.11797      9.8730 ppb        4.11797  41.71%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              65.8      5.3364 µg/L       1.22231      5.3364 ppb        1.22231  22.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -0.1     -0.0666 µg/L       1.46864     -0.0666 ppb        1.46864 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              35.4      0.2044 µg/L       0.18267      0.2044 ppb        0.18267  89.38%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             176.4      0.4057 µg/L       0.02453      0.4057 ppb        0.02453   6.05%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.7     -1.1247 µg/L       1.48772     -1.1247 ppb        1.48772 132.28%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -35.7     -3.5586 µg/L       8.34979     -3.5586 ppb        8.34979 234.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                4.2      0.0460 µg/L       0.15900      0.0460 ppb        0.15900 345.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              11.2      0.3155 µg/L       0.22574      0.3155 ppb        0.22574  71.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 11:23:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113974.6	113974.6	102	%			11:23:37
1	Al 396.153Radial†	10411.8	10065.2	5299.7	µg/L	5299.7	ppb	11:23:37
1	Ca 317.933Radial†	13739.5	13086.5	5279.7	µg/L	5279.7	ppb	11:23:57
1	Fe 238.204 Radial†	1055.7	1025.3	5461.4	µg/L	5461.4	ppb	11:23:57
1	K 766.490 Radial†	10092.5	9169.2	5172.7	µg/L	5172.7	ppb	11:23:37
1	Mg 279.077 IEC†	995.2	961.8	5431.0	µg/L	5431.0	ppb	11:23:57
1	Na 589.592 Radial†	37264.9	37014.4	10440	µg/L	10440	ppb	11:23:37
1	Sr 421.552†	90140.8	88654.6	511.64	µg/L	511.64	ppb	11:23:37
1	Sc 361.383	2016329.9	2016329.9	100.42	%			11:25:01
1	Y 371.029	1220042.0	1220042.0	99.728	%			11:25:01
1	Ag 328.068†	56002.4	55782.9	532.95	µg/L	532.95	ppb	11:25:06
1	As 188.979†	273.6	269.3	521.89	µg/L	521.89	ppb	11:25:27
1	B 249.677†	11603.4	11392.8	528.06	µg/L	528.06	ppb	11:25:06
1	Ba 233.527†	19933.6	19922.1	534.03	µg/L	534.03	ppb	11:25:06
1	Be 313.107†	805453.8	798443.3	520.18	µg/L	520.18	ppb	11:25:01
1	Cd 226.502†	19059.8	19077.1	536.58	µg/L	536.58	ppb	11:25:06
1	Co 228.616†	10469.4	10495.1	533.42	µg/L	533.42	ppb	11:25:06
1	Cr 267.716†	23871.5	23895.2	531.64	µg/L	531.64	ppb	11:25:06
1	Cu 324.752†	75024.4	71399.6	511.27	µg/L	511.27	ppb	11:25:06
1	Mn 257.610†	158671.3	158250.9	521.37	µg/L	521.37	ppb	11:25:01
1	Mo 202.031†	4384.9	4371.1	522.15	µg/L	522.15	ppb	11:25:27
1	Ni 231.604†	9582.5	9251.1	533.90	µg/L	533.90	ppb	11:25:06
1	P 214.914†	1365.6	1169.9	2547.7	µg/L	2547.7	ppb	11:25:27
1	Pb 220.353†	2037.5	1977.9	523.29	µg/L	523.29	ppb	11:25:27
1	S 181.975 Axial†	222.5	195.9	1046.7	µg/L	1046.7	ppb	11:25:27
1	Sb 206.836†	528.5	502.2	522.98	µg/L	522.98	ppb	11:25:27
1	Se 196.026†	369.3	357.0	529.41	µg/L	529.41	ppb	11:25:27
1	SiO2†	30507.9	28345.8	5750.2	µg/L	5750.2	ppb	11:25:06
1	Si 251.611†	33508.7	33010.8	2636.0	µg/L	2636.0	ppb	11:25:06
1	Sn 189.927†	1046.7	1019.9	522.43	µg/L	522.43	ppb	11:25:27
1	Ti 334.940†	225988.9	224238.7	515.86	µg/L	515.86	ppb	11:25:01
1	Tl 190.801†	308.6	327.4	517.29	µg/L	517.29	ppb	11:25:27
1	U 409.014†	5942.2	5215.6	519.30	µg/L	519.30	ppb	11:25:06
1	V 292.402†	44239.4	44143.6	534.74	µg/L	534.74	ppb	11:25:06
1	Zn 213.857†	19725.7	19114.8	535.89	µg/L	535.89	ppb	11:25:06
2	Sc RADIAL	113133.0	113133.0	101	%			11:24:03
2	Al 396.153Radial†	10386.5	10116.2	5326.8	µg/L	5326.8	ppb	11:24:03
2	Ca 317.933Radial†	13808.3	13255.0	5347.7	µg/L	5347.7	ppb	11:24:23
2	Fe 238.204 Radial†	1059.3	1036.6	5521.4	µg/L	5521.4	ppb	11:24:23
2	K 766.490 Radial†	10105.0	9255.4	5221.4	µg/L	5221.4	ppb	11:24:03
2	Mg 279.077 IEC†	1008.1	981.9	5544.2	µg/L	5544.2	ppb	11:24:23
2	Na 589.592 Radial†	37238.8	37260.9	10509	µg/L	10509	ppb	11:24:03
2	Sr 421.552†	90060.1	89233.6	514.98	µg/L	514.98	ppb	11:24:03
2	Sc 361.383	2032103.4	2032103.4	101.21	%			11:25:34
2	Y 371.029	1229305.8	1229305.8	100.49	%			11:25:34
2	Ag 328.068†	56022.9	55370.3	529.01	µg/L	529.01	ppb	11:25:40
2	As 188.979†	272.3	265.9	515.29	µg/L	515.29	ppb	11:26:00
2	B 249.677†	11582.6	11282.6	522.92	µg/L	522.92	ppb	11:25:40
2	Ba 233.527†	19914.9	19749.5	529.41	µg/L	529.41	ppb	11:25:40
2	Be 313.107†	811300.1	797994.0	519.89	µg/L	519.89	ppb	11:25:34
2	Cd 226.502†	19182.8	19051.3	535.85	µg/L	535.85	ppb	11:25:40
2	Co 228.616†	10527.6	10471.7	532.22	µg/L	532.22	ppb	11:25:40
2	Cr 267.716†	23835.6	23675.3	526.75	µg/L	526.75	ppb	11:25:40
2	Cu 324.752†	75065.7	70860.5	507.43	µg/L	507.43	ppb	11:25:40
2	Mn 257.610†	159766.6	158106.8	520.90	µg/L	520.90	ppb	11:25:34
2	Mo 202.031†	4388.9	4341.2	518.58	µg/L	518.58	ppb	11:26:00
2	Ni 231.604†	9594.6	9189.0	530.31	µg/L	530.31	ppb	11:25:40
2	P 214.914†	1363.7	1157.4	2520.3	µg/L	2520.3	ppb	11:26:00
2	Pb 220.353†	2038.9	1963.6	519.52	µg/L	519.52	ppb	11:26:00

2	S 181.975 Axial†	218.9	190.6	1018.1 µg/L	1018.1 ppb	11:26:00
2	Sb 206.836†	525.0	494.6	515.09 µg/L	515.09 ppb	11:26:00
2	Se 196.026†	367.1	351.9	521.93 µg/L	521.93 ppb	11:26:00
2	SiO2†	30530.1	28131.9	5706.8 µg/L	5706.8 ppb	11:25:40
2	Si 251.611†	33626.8	32868.5	2624.7 µg/L	2624.7 ppb	11:25:40
2	Sn 189.927†	1043.5	1008.6	516.71 µg/L	516.71 ppb	11:26:00
2	Ti 334.940†	227168.0	223657.0	514.52 µg/L	514.52 ppb	11:25:34
2	Tl 190.801†	315.9	332.3	524.92 µg/L	524.92 ppb	11:26:00
2	U 409.014†	5958.2	5185.5	516.28 µg/L	516.28 ppb	11:25:40
2	V 292.402†	44226.3	43788.8	530.45 µg/L	530.45 ppb	11:25:40
2	Zn 213.857†	19631.4	18869.1	528.96 µg/L	528.96 ppb	11:25:40
3	Sc RADIAL	113196.4	113196.4	101 %		11:24:29
3	Al 396.153Radial†	10443.8	10167.1	5353.5 µg/L	5353.5 ppb	11:24:29
3	Ca 317.933Radial†	13779.7	13219.0	5333.1 µg/L	5333.1 ppb	11:24:49
3	Fe 238.204 Radial†	1055.6	1032.3	5499.0 µg/L	5499.0 ppb	11:24:49
3	K 766.490 Radial†	10201.7	9345.5	5272.2 µg/L	5272.2 ppb	11:24:29
3	Mg 279.077 IEC†	1009.4	982.6	5548.4 µg/L	5548.4 ppb	11:24:49
3	Na 589.592 Radial†	37300.7	37301.5	10521 µg/L	10521 ppb	11:24:29
3	Sr 421.552†	90448.7	89568.1	516.91 µg/L	516.91 ppb	11:24:29
3	Sc 361.383	2013250.2	2013250.2	100.27 %		11:26:07
3	Y 371.029	1217631.3	1217631.3	99.531 %		11:26:07
3	Ag 328.068†	55768.3	55634.7	531.54 µg/L	531.54 ppb	11:26:13
3	As 188.979†	268.2	264.3	512.29 µg/L	512.29 ppb	11:26:34
3	B 249.677†	11547.2	11354.4	526.27 µg/L	526.27 ppb	11:26:13
3	Ba 233.527†	19854.0	19873.1	532.72 µg/L	532.72 ppb	11:26:13
3	Be 313.107†	805968.2	800183.2	521.32 µg/L	521.32 ppb	11:26:07
3	Cd 226.502†	19009.4	19055.9	535.99 µg/L	535.99 ppb	11:26:13
3	Co 228.616†	10473.6	10515.3	534.45 µg/L	534.45 ppb	11:26:13
3	Cr 267.716†	23728.6	23789.1	529.28 µg/L	529.28 ppb	11:26:13
3	Cu 324.752†	74781.5	71271.6	510.36 µg/L	510.36 ppb	11:26:13
3	Mn 257.610†	158825.1	158646.1	522.68 µg/L	522.68 ppb	11:26:07
3	Mo 202.031†	4396.6	4389.6	524.35 µg/L	524.35 ppb	11:26:34
3	Ni 231.604†	9556.0	9239.2	533.21 µg/L	533.21 ppb	11:26:13
3	P 214.914†	1363.9	1170.2	2548.5 µg/L	2548.5 ppb	11:26:34
3	Pb 220.353†	2042.4	1985.9	525.41 µg/L	525.41 ppb	11:26:34
3	S 181.975 Axial†	221.8	195.5	1044.6 µg/L	1044.6 ppb	11:26:34
3	Sb 206.836†	530.6	505.0	525.99 µg/L	525.99 ppb	11:26:34
3	Se 196.026†	378.0	366.2	543.05 µg/L	543.05 ppb	11:26:34
3	SiO2†	30305.0	28189.9	5718.5 µg/L	5718.5 ppb	11:26:13
3	Si 251.611†	33394.3	32947.7	2630.9 µg/L	2630.9 ppb	11:26:13
3	Sn 189.927†	1037.4	1012.2	518.53 µg/L	518.53 ppb	11:26:34
3	Ti 334.940†	225697.5	224292.3	515.98 µg/L	515.98 ppb	11:26:07
3	Tl 190.801†	311.0	330.3	521.82 µg/L	521.82 ppb	11:26:34
3	U 409.014†	6034.2	5316.4	529.34 µg/L	529.34 ppb	11:26:13
3	V 292.402†	44065.2	44037.2	533.49 µg/L	533.49 ppb	11:26:13
3	Zn 213.857†	19593.5	19013.0	533.01 µg/L	533.01 ppb	11:26:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020561.1	100.63	%	0.504				0.50%
Sc RADIAL	113434.7	101	%	0.4				0.41%
Y 371.029	1222326.4	99.915	%	0.5038				0.50%
Ag 328.068†	55595.9	531.17	µg/L	1.995	531.17	ppb	1.995	0.38%
QC value within limits for Ag 328.068 Recovery = 106.23%								
Al 396.153Radial†	10116.2	5326.7	µg/L	26.90	5326.7	ppb	26.90	0.50%
QC value within limits for Al 396.153Radial Recovery = 106.53%								
As 188.979†	266.5	516.49	µg/L	4.910	516.49	ppb	4.910	0.95%
QC value within limits for As 188.979 Recovery = 103.30%								
B 249.677†	11343.3	525.75	µg/L	2.610	525.75	ppb	2.610	0.50%
QC value within limits for B 249.677 Recovery = 105.15%								
Ba 233.527†	19848.3	532.05	µg/L	2.384	532.05	ppb	2.384	0.45%
QC value within limits for Ba 233.527 Recovery = 106.41%								
Be 313.107†	798873.5	520.46	µg/L	0.753	520.46	ppb	0.753	0.14%
QC value within limits for Be 313.107 Recovery = 104.09%								
Ca 317.933Radial†	13186.8	5320.2	µg/L	35.81	5320.2	ppb	35.81	0.67%
QC value within limits for Ca 317.933Radial Recovery = 106.40%								
Cd 226.502†	19061.4	536.14	µg/L	0.390	536.14	ppb	0.390	0.07%
QC value within limits for Cd 226.502 Recovery = 107.23%								
Co 228.616†	10494.0	533.36	µg/L	1.113	533.36	ppb	1.113	0.21%

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   QC value within limits for Co 228.616  Recovery = 106.67%
Cr 267.716†            23786.5      529.22 µg/L        2.446      529.22 ppb          2.446   0.46%
   QC value within limits for Cr 267.716  Recovery = 105.84%
Cu 324.752†            71177.2      509.69 µg/L        2.007      509.69 ppb          2.007   0.39%
   QC value within limits for Cu 324.752  Recovery = 101.94%
Fe 238.204 Radial†      1031.4      5493.9 µg/L       30.33      5493.9 ppb         30.33   0.55%
   QC value within limits for Fe 238.204 Radial  Recovery = 109.88%
K 766.490 Radial†       9256.7      5222.1 µg/L       49.72      5222.1 ppb         49.72   0.95%
   QC value within limits for K 766.490 Radial  Recovery = 104.44%
Mg 279.077 IEC†          975.4      5507.9 µg/L       66.63      5507.9 ppb         66.63   1.21%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 110.16%
Mn 257.610†           158334.6      521.65 µg/L       0.918      521.65 ppb         0.918   0.18%
   QC value within limits for Mn 257.610  Recovery = 104.33%
Mo 202.031†             4367.3      521.69 µg/L       2.913      521.69 ppb         2.913   0.56%
   QC value within limits for Mo 202.031  Recovery = 104.34%
Na 589.592 Radial†     37192.3       10490 µg/L        43.8       10490 ppb          43.8   0.42%
   QC value within limits for Na 589.592 Radial  Recovery = 104.90%
Ni 231.604†             9226.4      532.47 µg/L       1.904      532.47 ppb         1.904   0.36%
   QC value within limits for Ni 231.604  Recovery = 106.49%
P 214.914†              1165.8      2538.8 µg/L       16.03      2538.8 ppb         16.03   0.63%
   QC value within limits for P 214.914  Recovery = 101.55%
Pb 220.353†             1975.8      522.74 µg/L       2.987      522.74 ppb         2.987   0.57%
   QC value within limits for Pb 220.353  Recovery = 104.55%
S 181.975 Axial†         194.0      1036.5 µg/L       15.95      1036.5 ppb         15.95   1.54%
   QC value within limits for S 181.975 Axial  Recovery = 103.65%
Sb 206.836†              500.6      521.36 µg/L       5.627      521.36 ppb         5.627   1.08%
   QC value within limits for Sb 206.836  Recovery = 104.27%
Se 196.026†              358.4      531.46 µg/L      10.709      531.46 ppb        10.709   2.01%
   QC value within limits for Se 196.026  Recovery = 106.29%
SiO2†                   28222.6      5725.1 µg/L       22.44      5725.1 ppb         22.44   0.39%
   QC value within limits for SiO2  Recovery = 107.06%
Si 251.611†             32942.3      2630.6 µg/L        5.64      2630.6 ppb          5.64   0.21%
   QC value within limits for Si 251.611  Recovery = 105.22%
Sn 189.927†             1013.6      519.23 µg/L       2.923      519.23 ppb         2.923   0.56%
   QC value within limits for Sn 189.927  Recovery = 103.85%
Sr 421.552†             89152.1      514.51 µg/L       2.667      514.51 ppb         2.667   0.52%
   QC value within limits for Sr 421.552  Recovery = 102.90%
Ti 334.940†            224062.7      515.45 µg/L       0.812      515.45 ppb         0.812   0.16%
   QC value within limits for Ti 334.940  Recovery = 103.09%
Tl 190.801†              330.0      521.34 µg/L       3.840      521.34 ppb         3.840   0.74%
   QC value within limits for Tl 190.801  Recovery = 104.27%
U 409.014†              5239.2      521.64 µg/L       6.840      521.64 ppb         6.840   1.31%
   QC value within limits for U 409.014  Recovery = 104.33%
V 292.402†             43989.9      532.89 µg/L       2.204      532.89 ppb         2.204   0.41%
   QC value within limits for V 292.402  Recovery = 106.58%
Zn 213.857†            18999.0      532.62 µg/L       3.480      532.62 ppb         3.480   0.65%
   QC value within limits for Zn 213.857  Recovery = 106.52%
QC Failed.  Continue with analysis.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 11:26:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113833.6	113833.6	102	%			11:27:15
1	Al 396.153Radial†	242.3	73.9	39.041	µg/L	39.041	ppb	11:27:15
1	Ca 317.933Radial†	434.4	14.8	5.9540	µg/L	5.9540	ppb	11:27:35
1	Fe 238.204 Radial†	20.5	8.2	43.385	µg/L	43.385	ppb	11:27:35
1	K 766.490 Radial†	732.8	-25.8	-14.554	µg/L	-14.554	ppb	11:27:15
1	Mg 279.077 IEC†	16.8	0.5	2.7910	µg/L	2.7910	ppb	11:27:35
1	Na 589.592 Radial†	-671.7	-259.1	-73.087	µg/L	-73.087	ppb	11:27:15
1	Sr 421.552†	-58.3	33.9	0.1957	µg/L	0.1957	ppb	11:27:15
1	Sc 361.383	2020205.0	2020205.0	100.62	%			11:28:37
1	Y 371.029	1227769.5	1227769.5	100.36	%			11:28:37
1	Ag 328.068†	0.2	16.5	0.1602	µg/L	0.1602	ppb	11:28:43
1	As 188.979†	2.1	-1.1	-2.1177	µg/L	-2.1177	ppb	11:29:03
1	B 249.677†	166.2	3.4	0.1466	µg/L	0.1466	ppb	11:28:43
1	Ba 233.527†	-51.1	21.6	0.5789	µg/L	0.5789	ppb	11:29:03
1	Be 313.107†	3780.3	138.3	0.0899	µg/L	0.0899	ppb	11:28:43
1	Cd 226.502†	-79.8	18.3	0.5217	µg/L	0.5217	ppb	11:29:03
1	Co 228.616†	-74.7	-4.4	-0.2249	µg/L	-0.2249	ppb	11:29:03
1	Cr 267.716†	-107.8	17.1	0.3799	µg/L	0.3799	ppb	11:28:43
1	Cu 324.752†	3258.9	-69.9	-0.4904	µg/L	-0.4904	ppb	11:28:43
1	Mn 257.610†	17.7	265.4	0.8786	µg/L	0.8786	ppb	11:29:03
1	Mo 202.031†	-2.9	1.9	0.2254	µg/L	0.2254	ppb	11:29:03
1	Ni 231.604†	294.8	2.0	0.1143	µg/L	0.1143	ppb	11:29:03
1	P 214.914†	190.8	-0.3	-0.7842	µg/L	-0.7842	ppb	11:29:03
1	Pb 220.353†	45.1	-6.1	-1.6233	µg/L	-1.6233	ppb	11:29:03
1	S 181.975 Axial†	27.1	1.2	6.4330	µg/L	6.4330	ppb	11:29:03
1	Sb 206.836†	23.4	-0.9	-0.9416	µg/L	-0.9416	ppb	11:29:03
1	Se 196.026†	7.1	-3.7	-5.4948	µg/L	-5.4948	ppb	11:29:03
1	SiO2†	2121.9	75.3	15.276	µg/L	15.276	ppb	11:28:43
1	Si 251.611†	446.6	87.1	7.1538	µg/L	7.1538	ppb	11:29:03
1	Sn 189.927†	17.7	-4.8	-2.4484	µg/L	-2.4484	ppb	11:29:03
1	Ti 334.940†	1147.8	342.2	0.7874	µg/L	0.7874	ppb	11:28:43
1	Tl 190.801†	-14.7	5.5	8.6697	µg/L	8.6697	ppb	11:29:03
1	U 409.014†	847.7	140.9	14.043	µg/L	14.043	ppb	11:28:43
1	V 292.402†	-81.9	9.1	0.1369	µg/L	0.1369	ppb	11:28:43
1	Zn 213.857†	538.9	7.7	0.2137	µg/L	0.2137	ppb	11:29:03
2	Sc RADIAL	113433.5	113433.5	101	%			11:27:41
2	Al 396.153Radial†	191.8	24.9	13.117	µg/L	13.117	ppb	11:27:41
2	Ca 317.933Radial†	447.2	28.9	11.651	µg/L	11.651	ppb	11:28:01
2	Fe 238.204 Radial†	13.3	1.2	6.2201	µg/L	6.2201	ppb	11:28:01
2	K 766.490 Radial†	826.0	68.8	38.798	µg/L	38.798	ppb	11:27:41
2	Mg 279.077 IEC†	17.1	0.8	4.8052	µg/L	4.8052	ppb	11:28:01
2	Na 589.592 Radial†	-671.7	-261.5	-73.752	µg/L	-73.752	ppb	11:27:41
2	Sr 421.552†	-66.3	25.8	0.1491	µg/L	0.1491	ppb	11:27:41
2	Sc 361.383	2008436.7	2008436.7	100.03	%			11:29:09
2	Y 371.029	1221310.2	1221310.2	99.832	%			11:29:09
2	Ag 328.068†	23.5	39.7	0.3761	µg/L	0.3761	ppb	11:29:15
2	As 188.979†	0.2	-2.9	-5.6888	µg/L	-5.6888	ppb	11:29:36
2	B 249.677†	154.5	-7.3	-0.3403	µg/L	-0.3403	ppb	11:29:15
2	Ba 233.527†	-58.2	14.3	0.3811	µg/L	0.3811	ppb	11:29:36
2	Be 313.107†	3727.5	107.6	0.0698	µg/L	0.0698	ppb	11:29:15
2	Cd 226.502†	-78.7	18.9	0.5303	µg/L	0.5303	ppb	11:29:36
2	Co 228.616†	-63.1	6.7	0.3434	µg/L	0.3434	ppb	11:29:36
2	Cr 267.716†	-96.5	27.8	0.6169	µg/L	0.6169	ppb	11:29:15
2	Cu 324.752†	3257.8	-52.1	-0.3708	µg/L	-0.3708	ppb	11:29:15
2	Mn 257.610†	1.4	249.3	0.8210	µg/L	0.8210	ppb	11:29:36
2	Mo 202.031†	3.2	8.0	0.9528	µg/L	0.9528	ppb	11:29:36
2	Ni 231.604†	292.5	1.4	0.0812	µg/L	0.0812	ppb	11:29:36
2	P 214.914†	193.6	3.5	7.8601	µg/L	7.8601	ppb	11:29:36
2	Pb 220.353†	57.5	6.4	1.7078	µg/L	1.7078	ppb	11:29:36

2	S 181.975 Axial†	23.4	-2.3	-12.189 µg/L	-12.189 ppb	11:29:36
2	Sb 206.836†	19.3	-4.8	-5.0363 µg/L	-5.0363 ppb	11:29:36
2	Se 196.026†	13.9	3.1	4.5995 µg/L	4.5995 ppb	11:29:36
2	SiO2†	2106.5	72.3	14.661 µg/L	14.661 ppb	11:29:15
2	Si 251.611†	441.2	84.3	6.7215 µg/L	6.7215 ppb	11:29:36
2	Sn 189.927†	26.2	3.9	1.9659 µg/L	1.9659 ppb	11:29:36
2	Ti 334.940†	1140.5	341.6	0.7857 µg/L	0.7857 ppb	11:29:15
2	Tl 190.801†	-18.5	1.6	2.4516 µg/L	2.4516 ppb	11:29:36
2	U 409.014†	704.2	2.4	0.2402 µg/L	0.2402 ppb	11:29:15
2	V 292.402†	-103.1	-12.5	-0.1428 µg/L	-0.1428 ppb	11:29:15
2	Zn 213.857†	540.5	12.5	0.3527 µg/L	0.3527 ppb	11:29:36
3	Sc RADIAL	113389.5	113389.5	101 %		11:28:07
3	Al 396.153Radial†	202.8	35.9	18.940 µg/L	18.940 ppb	11:28:07
3	Ca 317.933Radial†	435.0	17.0	6.8600 µg/L	6.8600 ppb	11:28:27
3	Fe 238.204 Radial†	12.1	-0.0	-0.1913 µg/L	-0.1913 ppb	11:28:27
3	K 766.490 Radial†	791.8	35.3	19.907 µg/L	19.907 ppb	11:28:07
3	Mg 279.077 IEC†	14.2	-2.0	-11.387 µg/L	-11.387 ppb	11:28:27
3	Na 589.592 Radial†	-708.8	-298.4	-84.151 µg/L	-84.151 ppb	11:28:07
3	Sr 421.552†	-30.5	61.2	0.3530 µg/L	0.3530 ppb	11:28:07
3	Sc 361.383	2023587.8	2023587.8	100.78 %		11:29:42
3	Y 371.029	1230114.7	1230114.7	100.55 %		11:29:42
3	Ag 328.068†	35.0	51.0	0.4866 µg/L	0.4866 ppb	11:29:47
3	As 188.979†	-3.7	-6.9	-13.319 µg/L	-13.319 ppb	11:30:08
3	B 249.677†	198.6	35.4	1.6439 µg/L	1.6439 ppb	11:29:47
3	Ba 233.527†	-58.2	14.7	0.3943 µg/L	0.3943 ppb	11:30:08
3	Be 313.107†	3764.8	116.6	0.0756 µg/L	0.0756 ppb	11:29:47
3	Cd 226.502†	-102.0	-3.6	-0.1009 µg/L	-0.1009 ppb	11:30:08
3	Co 228.616†	-65.9	4.4	0.2237 µg/L	0.2237 ppb	11:30:08
3	Cr 267.716†	-146.6	-21.2	-0.4705 µg/L	-0.4705 ppb	11:29:47
3	Cu 324.752†	3232.1	-102.0	-0.7284 µg/L	-0.7284 ppb	11:29:47
3	Mn 257.610†	39.6	287.1	0.9447 µg/L	0.9447 ppb	11:30:08
3	Mo 202.031†	-3.1	1.6	0.1959 µg/L	0.1959 ppb	11:30:08
3	Ni 231.604†	297.1	3.8	0.2185 µg/L	0.2185 ppb	11:30:08
3	P 214.914†	188.5	-3.0	-6.5980 µg/L	-6.5980 ppb	11:30:08
3	Pb 220.353†	53.9	2.5	0.6725 µg/L	0.6725 ppb	11:30:08
3	S 181.975 Axial†	25.6	-0.3	-1.7818 µg/L	-1.7818 ppb	11:30:08
3	Sb 206.836†	19.9	-4.4	-4.6338 µg/L	-4.6338 ppb	11:30:08
3	Se 196.026†	10.1	-0.7	-1.0610 µg/L	-1.0610 ppb	11:30:08
3	SiO2†	2121.7	71.5	14.513 µg/L	14.513 ppb	11:29:47
3	Si 251.611†	429.1	68.9	5.6235 µg/L	5.6235 ppb	11:30:08
3	Sn 189.927†	19.1	-3.4	-1.7497 µg/L	-1.7497 ppb	11:30:08
3	Ti 334.940†	1302.6	493.9	1.1366 µg/L	1.1366 ppb	11:29:47
3	Tl 190.801†	-18.2	2.1	3.2508 µg/L	3.2508 ppb	11:30:08
3	U 409.014†	713.8	6.7	0.6641 µg/L	0.6641 ppb	11:29:47
3	V 292.402†	-57.0	33.9	0.4095 µg/L	0.4095 ppb	11:29:47
3	Zn 213.857†	539.0	7.0	0.1978 µg/L	0.1978 ppb	11:30:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017409.8	100.48	%	0.396				0.39%
Sc RADIAL	113552.2	101	%	0.2				0.22%
Y 371.029	1226398.1	100.25	%	0.373				0.37%
Ag 328.068†	35.7	0.3409	µg/L	0.16603	0.3409	ppb	0.16603	48.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	44.9	23.699	µg/L	13.6014	23.699	ppb	13.6014	57.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.0419	µg/L	5.72202	-7.0419	ppb	5.72202	81.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	10.5	0.4834	µg/L	1.03409	0.4834	ppb	1.03409	213.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	16.9	0.4514	µg/L	0.11055	0.4514	ppb	0.11055	24.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.8	0.0784	µg/L	0.01033	0.0784	ppb	0.01033	13.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	20.2	8.1550	µg/L	3.06135	8.1550	ppb	3.06135	37.54%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.2	0.3170	µg/L	0.36196	0.3170	ppb	0.36196	114.17%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.3	0.1141	µg/L	0.29962	0.1141	ppb	0.29962	262.64%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                7.9      0.1754 µg/L       0.57179      0.1754 ppb        0.57179 325.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -74.7     -0.5299 µg/L       0.18206     -0.5299 ppb        0.18206  34.36%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.1      16.471 µg/L       23.5274      16.471 ppb        23.5274 142.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         26.1      14.717 µg/L       27.0519      14.717 ppb        27.0519 183.81%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.2      -1.2636 µg/L       8.82478     -1.2636 ppb        8.82478 698.40%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              267.3      0.8815 µg/L       0.06194      0.8815 ppb        0.06194   7.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.8      0.4580 µg/L       0.42873      0.4580 ppb        0.42873  93.60%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -273.0     -76.997 µg/L        6.2051     -76.997 ppb         6.2051   8.06%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.4      0.1380 µg/L       0.07167      0.1380 ppb        0.07167  51.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 0.1      0.1593 µg/L       7.27508      0.1593 ppb        7.27508 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.0      0.2524 µg/L       1.70484      0.2524 ppb        1.70484 675.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.5      -2.5125 µg/L       9.33222     -2.5125 ppb        9.33222 371.44%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.4      -3.5372 µg/L       2.25688     -3.5372 ppb        2.25688  63.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.5      -0.6521 µg/L       5.05957     -0.6521 ppb        5.05957 775.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     73.0      14.817 µg/L        0.4044      14.817 ppb         0.4044   2.73%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               80.1      6.4996 µg/L       0.78891      6.4996 ppb        0.78891  12.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.5      -0.7441 µg/L       2.37278     -0.7441 ppb        2.37278 318.90%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               40.3      0.2326 µg/L       0.10686      0.2326 ppb        0.10686  45.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              392.6      0.9032 µg/L       0.20210      0.9032 ppb        0.20210  22.38%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                3.0      4.7907 µg/L       3.38299      4.7907 ppb        3.38299  70.62%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                50.0      4.9825 µg/L       7.84962      4.9825 ppb        7.84962 157.54%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                10.2      0.1345 µg/L       0.27620      0.1345 ppb        0.27620 205.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                9.1      0.2548 µg/L       0.08518      0.2548 ppb        0.08518  33.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: 1201993406|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 314
Date Collected: 12/14/2009 11:30:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993406|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111436.9	111436.9	99.5	%			11:30:53
1	Al 396.153Radial†	215.7	52.3	27.648	µg/L	27.648	ppb	11:30:53
1	Ca 317.933Radial†	472.8	62.5	25.214	µg/L	25.214	ppb	11:31:13
1	Fe 238.204 Radial†	22.2	10.3	54.898	µg/L	54.898	ppb	11:31:13
1	K 766.490 Radial†	813.6	70.9	40.010	µg/L	40.010	ppb	11:30:53
1	Mg 279.077 IEC†	19.7	3.8	21.421	µg/L	21.421	ppb	11:31:13
1	Na 589.592 Radial†	-652.0	-253.5	-71.495	µg/L	-71.495	ppb	11:30:53
1	Sr 421.552†	-31.2	59.9	0.3458	µg/L	0.3458	ppb	11:30:53
1	Sc 361.383	2009088.7	2009088.7	100.06	%			11:32:15
1	Y 371.029	1219980.2	1219980.2	99.723	%			11:32:15
1	Ag 328.068†	70.2	86.5	0.8252	µg/L	0.8252	ppb	11:32:21
1	As 188.979†	-3.7	-6.8	-13.267	µg/L	-13.267	ppb	11:32:41
1	B 249.677†	196.0	34.1	1.5686	µg/L	1.5686	ppb	11:32:21
1	Ba 233.527†	-71.9	0.6	0.0169	µg/L	0.0169	ppb	11:32:41
1	Be 313.107†	3823.2	202.0	0.1311	µg/L	0.1311	ppb	11:32:21
1	Cd 226.502†	-93.5	4.2	0.1126	µg/L	0.1126	ppb	11:32:41
1	Co 228.616†	-70.6	-0.7	-0.0373	µg/L	-0.0373	ppb	11:32:41
1	Cr 267.716†	-133.0	-8.7	-0.1931	µg/L	-0.1931	ppb	11:32:21
1	Cu 324.752†	3277.8	-33.1	-0.2250	µg/L	-0.2250	ppb	11:32:21
1	Mn 257.610†	144.7	392.5	1.2982	µg/L	1.2982	ppb	11:32:21
1	Mo 202.031†	-1.5	3.2	0.3893	µg/L	0.3893	ppb	11:32:41
1	Ni 231.604†	309.4	18.1	1.0469	µg/L	1.0469	ppb	11:32:41
1	P 214.914†	193.9	3.8	8.3619	µg/L	8.3619	ppb	11:32:41
1	Pb 220.353†	61.9	10.9	2.8816	µg/L	2.8816	ppb	11:32:41
1	S 181.975 Axial†	24.0	-1.7	-9.1135	µg/L	-9.1135	ppb	11:32:41
1	Sb 206.836†	17.1	-7.0	-7.3623	µg/L	-7.3623	ppb	11:32:41
1	Se 196.026†	16.2	5.4	7.9999	µg/L	7.9999	ppb	11:32:41
1	SiO2†	2320.8	285.8	57.973	µg/L	57.973	ppb	11:32:21
1	Si 251.611†	699.5	342.2	27.783	µg/L	27.783	ppb	11:32:41
1	Sn 189.927†	21.7	-0.7	-0.3240	µg/L	-0.3240	ppb	11:32:41
1	Ti 334.940†	1394.8	595.4	1.3690	µg/L	1.3690	ppb	11:32:21
1	Tl 190.801†	-19.8	0.3	0.5558	µg/L	0.5558	ppb	11:32:41
1	U 409.014†	671.7	-30.4	-3.0395	µg/L	-3.0395	ppb	11:32:21
1	V 292.402†	-78.6	12.0	0.1461	µg/L	0.1461	ppb	11:32:21
1	Zn 213.857†	578.8	50.6	1.4180	µg/L	1.4180	ppb	11:32:41
2	Sc RADIAL	111843.8	111843.8	99.9	%			11:31:19
2	Al 396.153Radial†	211.5	47.4	25.029	µg/L	25.029	ppb	11:31:19
2	Ca 317.933Radial†	464.5	52.4	21.150	µg/L	21.150	ppb	11:31:39
2	Fe 238.204 Radial†	20.5	8.5	45.388	µg/L	45.388	ppb	11:31:39
2	K 766.490 Radial†	659.4	-86.4	-48.755	µg/L	-48.755	ppb	11:31:19
2	Mg 279.077 IEC†	21.1	5.1	28.651	µg/L	28.651	ppb	11:31:39
2	Na 589.592 Radial†	-667.4	-266.5	-75.179	µg/L	-75.179	ppb	11:31:19
2	Sr 421.552†	-25.5	65.8	0.3799	µg/L	0.3799	ppb	11:31:19
2	Sc 361.383	2018473.1	2018473.1	100.53	%			11:32:47
2	Y 371.029	1225596.2	1225596.2	100.18	%			11:32:47
2	Ag 328.068†	-4.4	11.9	0.1169	µg/L	0.1169	ppb	11:32:53
2	As 188.979†	-4.3	-7.5	-14.486	µg/L	-14.486	ppb	11:33:13
2	B 249.677†	158.8	-3.7	-0.1882	µg/L	-0.1882	ppb	11:32:53
2	Ba 233.527†	-60.1	12.7	0.3394	µg/L	0.3394	ppb	11:33:13
2	Be 313.107†	3805.6	166.7	0.1082	µg/L	0.1082	ppb	11:32:53
2	Cd 226.502†	-98.4	-0.3	-0.0151	µg/L	-0.0151	ppb	11:33:13
2	Co 228.616†	-60.5	9.6	0.4863	µg/L	0.4863	ppb	11:33:13
2	Cr 267.716†	-113.6	11.2	0.2483	µg/L	0.2483	ppb	11:32:53
2	Cu 324.752†	3265.6	-60.6	-0.4230	µg/L	-0.4230	ppb	11:32:53
2	Mn 257.610†	134.6	381.7	1.2617	µg/L	1.2617	ppb	11:32:53
2	Mo 202.031†	-3.9	0.9	0.1073	µg/L	0.1073	ppb	11:33:13
2	Ni 231.604†	291.2	-1.4	-0.0787	µg/L	-0.0787	ppb	11:33:13
2	P 214.914†	193.7	2.6	5.8973	µg/L	5.8973	ppb	11:33:13
2	Pb 220.353†	69.1	17.8	4.6965	µg/L	4.6965	ppb	11:33:13

2	S 181.975 Axial†	26.9	1.1	5.7693 µg/L	5.7693 ppb	11:33:13
2	Sb 206.836†	18.3	-5.9	-6.2118 µg/L	-6.2118 ppb	11:33:13
2	Se 196.026†	14.1	3.2	4.7576 µg/L	4.7576 ppb	11:33:13
2	SiO2†	2326.4	280.6	56.918 µg/L	56.918 ppb	11:32:53
2	Si 251.611†	685.6	325.1	26.372 µg/L	26.372 ppb	11:33:13
2	Sn 189.927†	25.2	2.7	1.3681 µg/L	1.3681 ppb	11:33:13
2	Ti 334.940†	1330.8	525.2	1.2078 µg/L	1.2078 ppb	11:32:53
2	Tl 190.801†	-21.2	-1.0	-1.4890 µg/L	-1.4890 ppb	11:33:13
2	U 409.014†	654.2	-50.9	-5.0798 µg/L	-5.0798 ppb	11:32:53
2	V 292.402†	-89.8	1.2	0.0101 µg/L	0.0101 ppb	11:32:53
2	Zn 213.857†	584.3	53.4	1.5051 µg/L	1.5051 ppb	11:33:13
3	Sc RADIAL	111858.6	111858.6	99.9 %		11:31:44
3	Al 396.153Radial†	174.7	10.5	5.5007 µg/L	5.5007 ppb	11:31:44
3	Ca 317.933Radial†	471.9	59.8	24.133 µg/L	24.133 ppb	11:32:05
3	Fe 238.204 Radial†	19.9	7.9	42.193 µg/L	42.193 ppb	11:32:05
3	K 766.490 Radial†	746.2	0.3	0.1913 µg/L	0.1913 ppb	11:31:44
3	Mg 279.077 IEC†	18.2	2.2	12.099 µg/L	12.099 ppb	11:32:05
3	Na 589.592 Radial†	-637.2	-236.3	-66.646 µg/L	-66.646 ppb	11:31:44
3	Sr 421.552†	-35.1	56.1	0.3239 µg/L	0.3239 ppb	11:31:44
3	Sc 361.383	2009193.2	2009193.2	100.07 %		11:33:19
3	Y 371.029	1219675.5	1219675.5	99.698 %		11:33:19
3	Ag 328.068†	-15.6	0.7	0.0107 µg/L	0.0107 ppb	11:33:25
3	As 188.979†	5.4	2.3	4.3985 µg/L	4.3985 ppb	11:33:45
3	B 249.677†	191.2	29.3	1.3494 µg/L	1.3494 ppb	11:33:25
3	Ba 233.527†	-62.7	9.8	0.2613 µg/L	0.2613 ppb	11:33:45
3	Be 313.107†	3807.0	185.6	0.1206 µg/L	0.1206 ppb	11:33:25
3	Cd 226.502†	-96.6	1.0	0.0215 µg/L	0.0215 ppb	11:33:45
3	Co 228.616†	-62.8	7.1	0.3602 µg/L	0.3602 ppb	11:33:45
3	Cr 267.716†	-122.1	2.2	0.0498 µg/L	0.0498 ppb	11:33:25
3	Cu 324.752†	3285.3	-25.8	-0.1753 µg/L	-0.1753 ppb	11:33:25
3	Mn 257.610†	127.9	375.7	1.2413 µg/L	1.2413 ppb	11:33:25
3	Mo 202.031†	0.8	5.5	0.6616 µg/L	0.6616 ppb	11:33:45
3	Ni 231.604†	308.5	17.2	0.9943 µg/L	0.9943 ppb	11:33:45
3	P 214.914†	197.7	7.5	16.699 µg/L	16.699 ppb	11:33:45
3	Pb 220.353†	51.5	0.5	0.1333 µg/L	0.1333 ppb	11:33:45
3	S 181.975 Axial†	26.0	0.3	1.5144 µg/L	1.5144 ppb	11:33:45
3	Sb 206.836†	20.5	-3.6	-3.7924 µg/L	-3.7924 ppb	11:33:45
3	Se 196.026†	19.3	8.5	12.574 µg/L	12.574 ppb	11:33:45
3	SiO2†	2304.8	269.6	54.692 µg/L	54.692 ppb	11:33:25
3	Si 251.611†	683.6	326.4	26.506 µg/L	26.506 ppb	11:33:45
3	Sn 189.927†	22.0	-0.4	-0.2062 µg/L	-0.2062 ppb	11:33:45
3	Ti 334.940†	1296.1	496.6	1.1418 µg/L	1.1418 ppb	11:33:25
3	Tl 190.801†	-24.8	-4.7	-7.3588 µg/L	-7.3588 ppb	11:33:45
3	U 409.014†	633.9	-68.2	-6.8056 µg/L	-6.8056 ppb	11:33:25
3	V 292.402†	-80.1	10.4	0.1224 µg/L	0.1224 ppb	11:33:25
3	Zn 213.857†	587.0	58.8	1.6508 µg/L	1.6508 ppb	11:33:45

Mean Data: 1201993406|931881|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2012251.7	100.22	%	0.268				0.27%
Sc RADIAL	111713.1	99.8	%	0.21				0.21%
Y 371.029	1221750.7	99.868	%	0.2725				0.27%
Ag 328.068†	33.0	0.3176	µg/L	0.44280	0.3176	ppb	0.44280	139.42%
Al 396.153Radial†	36.7	19.392	µg/L	12.1016	19.392	ppb	12.1016	62.40%
As 188.979†	-4.0	-7.7850	µg/L	10.56880	-7.7850	ppb	10.56880	135.76%
B 249.677†	19.9	0.9100	µg/L	0.95730	0.9100	ppb	0.95730	105.20%
Ba 233.527†	7.7	0.2059	µg/L	0.16822	0.2059	ppb	0.16822	81.71%
Be 313.107†	184.8	0.1200	µg/L	0.01147	0.1200	ppb	0.01147	9.56%
Ca 317.933Radial†	58.2	23.499	µg/L	2.1046	23.499	ppb	2.1046	8.96%
Cd 226.502†	1.6	0.0397	µg/L	0.06576	0.0397	ppb	0.06576	165.79%
Co 228.616†	5.3	0.2697	µg/L	0.27331	0.2697	ppb	0.27331	101.33%
Cr 267.716†	1.6	0.0350	µg/L	0.22107	0.0350	ppb	0.22107	631.48%
Cu 324.752†	-39.8	-0.2744	µg/L	0.13105	-0.2744	ppb	0.13105	47.75%
Fe 238.204 Radial†	8.9	47.493	µg/L	6.6091	47.493	ppb	6.6091	13.92%
K 766.490 Radial†	-5.1	-2.8511	µg/L	44.46076	-2.8511	ppb	44.46076	>999.9%
Mg 279.077 IEC†	3.7	20.724	µg/L	8.2980	20.724	ppb	8.2980	40.04%
Mn 257.610†	383.3	1.2671	µg/L	0.02884	1.2671	ppb	0.02884	2.28%
Mo 202.031†	3.2	0.3861	µg/L	0.27715	0.3861	ppb	0.27715	71.79%
Na 589.592 Radial†	-252.1	-71.106	µg/L	4.2800	-71.106	ppb	4.2800	6.02%

Ni 231.604†	11.3	0.6542	µg/L	0.63520	0.6542	ppb	0.63520 97.10%
P 214.914†	4.6	10.319	µg/L	5.6607	10.319	ppb	5.6607 54.85%
Pb 220.353†	9.7	2.5705	µg/L	2.29746	2.5705	ppb	2.29746 89.38%
S 181.975 Axial†	-0.1	-0.6099	µg/L	7.66546	-0.6099	ppb	7.66546 >999.9%
Sb 206.836†	-5.5	-5.7888	µg/L	1.82215	-5.7888	ppb	1.82215 31.48%
Se 196.026†	5.7	8.4437	µg/L	3.92686	8.4437	ppb	3.92686 46.51%
SiO2†	278.7	56.528	µg/L	1.6747	56.528	ppb	1.6747 2.96%
Si 251.611†	331.2	26.887	µg/L	0.7788	26.887	ppb	0.7788 2.90%
Sn 189.927†	0.5	0.2793	µg/L	0.94476	0.2793	ppb	0.94476 338.25%
Sr 421.552†	60.6	0.3499	µg/L	0.02821	0.3499	ppb	0.02821 8.06%
Ti 334.940†	539.1	1.2395	µg/L	0.11689	1.2395	ppb	0.11689 9.43%
Tl 190.801†	-1.8	-2.7640	µg/L	4.10845	-2.7640	ppb	4.10845 148.64%
U 409.014†	-49.8	-4.9750	µg/L	1.88525	-4.9750	ppb	1.88525 37.89%
V 292.402†	7.9	0.0929	µg/L	0.07265	0.0929	ppb	0.07265 78.24%
Zn 213.857†	54.3	1.5246	µg/L	0.11764	1.5246	ppb	0.11764 7.72%

Sequence No.: 22
Sample ID: 1201993407|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 315
Date Collected: 12/14/2009 11:33:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993407|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114677.4	114677.4	102	%			11:34:33
1	Al 396.153Radial†	202930.5	197992.8	104620	µg/L	104620	ppb	11:34:28
1	Ca 317.933Radial†	289962.0	282729.0	114070	µg/L	114070	ppb	11:34:28
1	Fe 238.204 Radial†	45503.1	44420.9	235890	µg/L	235890	ppb	11:34:33
1	K 766.490 Radial†	86356.3	83578.4	47150	µg/L	47150	ppb	11:34:28
1	Mg 279.077 IEC†	8272.1	8061.5	45147	µg/L	45147	ppb	11:34:33
1	Na 589.592 Radial†	40340.5	39793.3	11224	µg/L	11224	ppb	11:34:33
1	Sr 421.552†	447098.0	436672.8	2520.1	µg/L	2520.1	ppb	11:34:28
1	Sc 361.383	2011269.5	2011269.5	100.17	%			11:35:08
1	Y 371.029	1242468.7	1242468.7	101.56	%			11:35:08
1	Ag 328.068†	35422.0	35377.9	363.74	µg/L	363.74	ppb	11:35:14
1	As 188.979†	637.9	633.7	1196.8	µg/L	1196.8	ppb	11:35:34
1	B 249.677†	38285.4	38058.3	1695.6	µg/L	1695.6	ppb	11:35:14
1	Ba 233.527†	81870.3	81803.1	2191.2	µg/L	2191.2	ppb	11:35:14
1	Be 313.107†	1377505.1	1371536.9	891.35	µg/L	891.35	ppb	11:35:08
1	Cd 226.502†	24788.8	24844.1	681.41	µg/L	681.41	ppb	11:35:14
1	Co 228.616†	20748.9	20783.3	1043.0	µg/L	1043.0	ppb	11:35:14
1	Cr 267.716†	117782.9	117706.3	2616.0	µg/L	2616.0	ppb	11:35:14
1	Cu 324.752†	281995.7	278205.9	2038.3	µg/L	2038.3	ppb	11:35:14
1	Mn 257.610†	1854651.4	1851736.1	6122.3	µg/L	6122.3	ppb	11:35:08
1	Mo 202.031†	4717.1	4713.8	572.11	µg/L	572.11	ppb	11:35:34
1	Ni 231.604†	26206.7	25871.0	1493.1	µg/L	1493.1	ppb	11:35:14
1	P 214.914†	4441.6	4244.1	8986.0	µg/L	8986.0	ppb	11:35:34
1	Pb 220.353†	3863.8	3806.2	1010.6	µg/L	1010.6	ppb	11:35:34
1	S 181.975 Axial†	817.1	790.1	4186.1	µg/L	4186.1	ppb	11:35:34
1	Sb 206.836†	1714.1	1687.0	1763.8	µg/L	1763.8	ppb	11:35:34
1	Se 196.026†	2128.5	2114.1	3283.8	µg/L	3283.8	ppb	11:35:34
1	SiO2†	181651.8	179308.4	36374	µg/L	36374	ppb	11:35:14
1	Si 251.611†	209167.6	208454.1	16641	µg/L	16641	ppb	11:35:14
1	Sn 189.927†	2230.6	2204.4	1184.8	µg/L	1184.8	ppb	11:35:34
1	Ti 334.940†	2982257.8	2976373.0	6844.6	µg/L	6844.6	ppb	11:35:08
1	Tl 190.801†	842.4	861.1	1407.4	µg/L	1407.4	ppb	11:35:34
1	U 409.014†	121.2	-580.6	-99.242	µg/L	-99.242	ppb	11:35:14
1	V 292.402†	118126.0	118015.1	1439.5	µg/L	1439.5	ppb	11:35:14
1	Zn 213.857†	239372.0	238435.9	6700.5	µg/L	6700.5	ppb	11:35:14
2	Sc RADIAL	114714.3	114714.3	102	%			11:34:44
2	Al 396.153Radial†	203958.8	198932.8	105120	µg/L	105120	ppb	11:34:39
2	Ca 317.933Radial†	291369.1	284011.5	114580	µg/L	114580	ppb	11:34:39
2	Fe 238.204 Radial†	45595.5	44496.8	236290	µg/L	236290	ppb	11:34:44
2	K 766.490 Radial†	86888.9	84071.2	47428	µg/L	47428	ppb	11:34:39
2	Mg 279.077 IEC†	8277.3	8064.0	45161	µg/L	45161	ppb	11:34:44
2	Na 589.592 Radial†	40594.1	40028.2	11290	µg/L	11290	ppb	11:34:44
2	Sr 421.552†	449452.3	438830.7	2532.6	µg/L	2532.6	ppb	11:34:39
2	Sc 361.383	2020552.5	2020552.5	100.63	%			11:35:41
2	Y 371.029	1248529.4	1248529.4	102.06	%			11:35:41
2	Ag 328.068†	35447.1	35240.3	362.43	µg/L	362.43	ppb	11:35:47
2	As 188.979†	641.1	633.9	1197.1	µg/L	1197.1	ppb	11:36:08
2	B 249.677†	38362.1	37959.0	1690.8	µg/L	1690.8	ppb	11:35:47
2	Ba 233.527†	82004.2	81560.7	2184.7	µg/L	2184.7	ppb	11:35:47
2	Be 313.107†	1383908.7	1371582.4	891.38	µg/L	891.38	ppb	11:35:41
2	Cd 226.502†	24828.7	24770.1	679.30	µg/L	679.30	ppb	11:35:47
2	Co 228.616†	20794.5	20733.5	1040.5	µg/L	1040.5	ppb	11:35:47
2	Cr 267.716†	118004.5	117386.3	2608.9	µg/L	2608.9	ppb	11:35:47
2	Cu 324.752†	282216.6	277132.0	2030.7	µg/L	2030.7	ppb	11:35:47
2	Mn 257.610†	1863402.9	1851926.3	6123.0	µg/L	6123.0	ppb	11:35:41
2	Mo 202.031†	4738.0	4712.9	572.03	µg/L	572.03	ppb	11:36:08
2	Ni 231.604†	26310.1	25853.5	1492.1	µg/L	1492.1	ppb	11:35:47
2	P 214.914†	4443.1	4225.2	8944.8	µg/L	8944.8	ppb	11:36:08
2	Pb 220.353†	3873.4	3798.1	1008.5	µg/L	1008.5	ppb	11:36:08

2	S 181.975 Axial†	824.0	793.1	4202.5	µg/L	4202.5 ppb	11:36:08
2	Sb 206.836†	1724.6	1689.6	1766.5	µg/L	1766.5 ppb	11:36:08
2	Se 196.026†	2149.0	2124.7	3299.8	µg/L	3299.8 ppb	11:36:08
2	SiO2†	182107.8	178928.4	36297	µg/L	36297 ppb	11:35:47
2	Si 251.611†	209550.4	207875.1	16593	µg/L	16593 ppb	11:35:47
2	Sn 189.927†	2247.5	2211.0	1188.3	µg/L	1188.3 ppb	11:36:08
2	Ti 334.940†	2995755.7	2976108.1	6844.0	µg/L	6844.0 ppb	11:35:41
2	Tl 190.801†	838.6	853.5	1395.3	µg/L	1395.3 ppb	11:36:08
2	U 409.014†	170.1	-532.6	-94.513	µg/L	-94.513 ppb	11:35:47
2	V 292.402†	118214.7	117561.4	1434.1	µg/L	1434.1 ppb	11:35:47
2	Zn 213.857†	239751.7	237715.4	6680.1	µg/L	6680.1 ppb	11:35:47
3	Sc RADIAL	114812.2	114812.2	103	%		11:34:55
3	Al 396.153Radial†	206188.9	200938.1	106180	µg/L	106180 ppb	11:34:50
3	Ca 317.933Radial†	294782.0	287097.7	115830	µg/L	115830 ppb	11:34:50
3	Fe 238.204 Radial†	45717.8	44578.1	236730	µg/L	236730 ppb	11:34:55
3	K 766.490 Radial†	87601.3	84693.7	47779	µg/L	47779 ppb	11:34:50
3	Mg 279.077 IEC†	8312.4	8091.3	45314	µg/L	45314 ppb	11:34:55
3	Na 589.592 Radial†	40526.5	39928.4	11262	µg/L	11262 ppb	11:34:55
3	Sr 421.552†	454068.7	442959.0	2556.4	µg/L	2556.4 ppb	11:34:50
3	Sc 361.383	2008736.0	2008736.0	100.04	%		11:36:15
3	Y 371.029	1241198.1	1241198.1	101.46	%		11:36:15
3	Ag 328.068†	35380.6	35381.1	363.87	µg/L	363.87 ppb	11:36:21
3	As 188.979†	646.6	643.2	1214.9	µg/L	1214.9 ppb	11:36:42
3	B 249.677†	38431.5	38252.6	1704.4	µg/L	1704.4 ppb	11:36:21
3	Ba 233.527†	82057.6	82093.4	2199.0	µg/L	2199.0 ppb	11:36:21
3	Be 313.107†	1380675.7	1376440.5	894.53	µg/L	894.53 ppb	11:36:15
3	Cd 226.502†	24842.7	24929.2	683.75	µg/L	683.75 ppb	11:36:21
3	Co 228.616†	20839.2	20899.7	1048.9	µg/L	1048.9 ppb	11:36:21
3	Cr 267.716†	118108.1	118179.6	2626.5	µg/L	2626.5 ppb	11:36:21
3	Cu 324.752†	282539.1	279104.0	2044.8	µg/L	2044.8 ppb	11:36:21
3	Mn 257.610†	1858629.0	1858047.1	6143.2	µg/L	6143.2 ppb	11:36:15
3	Mo 202.031†	4708.9	4711.6	571.89	µg/L	571.89 ppb	11:36:42
3	Ni 231.604†	26341.1	26038.3	1502.7	µg/L	1502.7 ppb	11:36:21
3	P 214.914†	4421.3	4229.3	8952.0	µg/L	8952.0 ppb	11:36:42
3	Pb 220.353†	3858.2	3805.4	1010.6	µg/L	1010.6 ppb	11:36:42
3	S 181.975 Axial†	813.7	787.6	4172.9	µg/L	4172.9 ppb	11:36:42
3	Sb 206.836†	1716.6	1691.7	1768.6	µg/L	1768.6 ppb	11:36:42
3	Se 196.026†	2120.7	2109.0	3277.1	µg/L	3277.1 ppb	11:36:42
3	SiO2†	182079.4	179964.5	36507	µg/L	36507 ppb	11:36:21
3	Si 251.611†	209642.6	209192.2	16700	µg/L	16700 ppb	11:36:21
3	Sn 189.927†	2219.7	2196.4	1181.2	µg/L	1181.2 ppb	11:36:42
3	Ti 334.940†	2988332.8	2986200.2	6867.2	µg/L	6867.2 ppb	11:36:15
3	Tl 190.801†	840.2	859.9	1405.5	µg/L	1405.5 ppb	11:36:42
3	U 409.014†	111.8	-589.9	-100.28	µg/L	-100.28 ppb	11:36:21
3	V 292.402†	118373.1	118410.7	1444.3	µg/L	1444.3 ppb	11:36:21
3	Zn 213.857†	239997.6	239362.6	6726.5	µg/L	6726.5 ppb	11:36:21

Mean Data: 1201993407|931881|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2013519.3	100.28	%	0.310				0.31%
Sc RADIAL	114734.7	102	%	0.1				0.06%
Y 371.029	1244065.4	101.69	%	0.320				0.31%
Ag 328.068†	35333.1	363.35	µg/L	0.796	363.35	ppb	0.796	0.22%
Al 396.153Radial†	199287.9	105300	µg/L	795.1	105300	ppb	795.1	0.76%
As 188.979†	636.9	1203.0	µg/L	10.36	1203.0	ppb	10.36	0.86%
B 249.677†	38090.0	1696.9	µg/L	6.86	1696.9	ppb	6.86	0.40%
Ba 233.527†	81819.1	2191.7	µg/L	7.14	2191.7	ppb	7.14	0.33%
Be 313.107†	1373186.6	892.42	µg/L	1.832	892.42	ppb	1.832	0.21%
Ca 317.933Radial†	284612.8	114830	µg/L	906.0	114830	ppb	906.0	0.79%
Cd 226.502†	24847.8	681.49	µg/L	2.224	681.49	ppb	2.224	0.33%
Co 228.616†	20805.5	1044.2	µg/L	4.31	1044.2	ppb	4.31	0.41%
Cr 267.716†	117757.4	2617.2	µg/L	8.87	2617.2	ppb	8.87	0.34%
Cu 324.752†	278147.3	2037.9	µg/L	7.10	2037.9	ppb	7.10	0.35%
Fe 238.204 Radial†	44498.6	236300	µg/L	417.5	236300	ppb	417.5	0.18%
K 766.490 Radial†	84114.4	47452	µg/L	315.3	47452	ppb	315.3	0.66%
Mg 279.077 IEC†	8072.3	45207	µg/L	92.6	45207	ppb	92.6	0.20%
Mn 257.610†	1853903.2	6129.5	µg/L	11.86	6129.5	ppb	11.86	0.19%
Mo 202.031†	4712.8	572.01	µg/L	0.115	572.01	ppb	0.115	0.02%
Na 589.592 Radial†	39916.6	11258	µg/L	33.2	11258	ppb	33.2	0.30%

Ni 231.604†	25920.9	1496.0 µg/L	5.89	1496.0 ppb	5.89	0.39%
P 214.914†	4232.9	8960.9 µg/L	22.05	8960.9 ppb	22.05	0.25%
Pb 220.353†	3803.2	1009.9 µg/L	1.19	1009.9 ppb	1.19	0.12%
S 181.975 Axial†	790.3	4187.2 µg/L	14.83	4187.2 ppb	14.83	0.35%
Sb 206.836†	1689.4	1766.3 µg/L	2.38	1766.3 ppb	2.38	0.13%
Se 196.026†	2115.9	3286.9 µg/L	11.69	3286.9 ppb	11.69	0.36%
SiO2†	179400.4	36393 µg/L	106.3	36393 ppb	106.3	0.29%
Si 251.611†	208507.1	16644 µg/L	53.3	16644 ppb	53.3	0.32%
Sn 189.927†	2203.9	1184.8 µg/L	3.55	1184.8 ppb	3.55	0.30%
Sr 421.552†	439487.5	2536.3 µg/L	18.43	2536.3 ppb	18.43	0.73%
Ti 334.940†	2979560.4	6851.9 µg/L	13.19	6851.9 ppb	13.19	0.19%
Tl 190.801†	858.1	1402.8 µg/L	6.48	1402.8 ppb	6.48	0.46%
U 409.014†	-567.7	-98.011 µg/L	3.0741	-98.011 ppb	3.0741	3.14%
V 292.402†	117995.7	1439.3 µg/L	5.11	1439.3 ppb	5.11	0.36%
Zn 213.857†	238504.6	6702.4 µg/L	23.27	6702.4 ppb	23.27	0.35%

Sequence No.: 23
Sample ID: 241539001|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 316
Date Collected: 12/14/2009 11:36:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539001|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115949.3	115949.3	104	%			11:37:23
1	Al 396.153Radial†	158831.3	153229.6	80983	µg/L	80983	ppb	11:37:23
1	Ca 317.933Radial†	84499.0	81193.8	32757	µg/L	32757	ppb	11:37:23
1	Fe 238.204 Radial†	22695.7	21906.8	116320	µg/L	116320	ppb	11:37:44
1	K 766.490 Radial†	19548.0	18132.2	10229	µg/L	10229	ppb	11:37:23
1	Mg 279.077 IEC†	2955.3	2838.1	15841	µg/L	15841	ppb	11:37:44
1	Na 589.592 Radial†	11434.9	11445.1	3228.1	µg/L	3228.1	ppb	11:37:23
1	Sr 421.552†	41064.8	39750.4	229.41	µg/L	229.41	ppb	11:37:23
1	Sc 361.383	2033803.2	2033803.2	101.29	%			11:38:48
1	Y 371.029	1286039.9	1286039.9	105.12	%			11:38:48
1	Ag 328.068†	-1068.3	-1038.4	0.3792	µg/L	0.3792	ppb	11:38:54
1	As 188.979†	23.8	20.3	25.243	µg/L	25.243	ppb	11:39:14
1	B 249.677†	1687.5	1504.2	33.369	µg/L	33.369	ppb	11:38:54
1	Ba 233.527†	43047.4	42570.3	1139.1	µg/L	1139.1	ppb	11:38:54
1	Be 313.107†	18566.1	14710.2	8.5354	µg/L	8.5354	ppb	11:38:54
1	Cd 226.502†	279.0	373.0	1.5060	µg/L	1.5060	ppb	11:39:14
1	Co 228.616†	696.8	757.7	32.575	µg/L	32.575	ppb	11:39:14
1	Cr 267.716†	3367.1	3448.4	76.901	µg/L	76.901	ppb	11:38:54
1	Cu 324.752†	8649.0	5229.6	62.347	µg/L	62.347	ppb	11:38:54
1	Mn 257.610†	756563.0	747152.4	2472.9	µg/L	2472.9	ppb	11:38:48
1	Mo 202.031†	23.9	28.4	7.9594	µg/L	7.9594	ppb	11:39:14
1	Ni 231.604†	1411.4	1102.3	63.617	µg/L	63.617	ppb	11:39:14
1	P 214.914†	815.0	614.6	1254.9	µg/L	1254.9	ppb	11:39:14
1	Pb 220.353†	498.7	441.3	122.19	µg/L	122.19	ppb	11:39:14
1	S 181.975 Axial†	219.1	190.6	1000.5	µg/L	1000.5	ppb	11:39:14
1	Sb 206.836†	22.6	-1.8	5.2563	µg/L	5.2563	ppb	11:39:14
1	Se 196.026†	-41.1	-51.4	3.6456	µg/L	3.6456	ppb	11:39:14
1	SiO2†	195679.4	191147.7	38776	µg/L	38776	ppb	11:38:48
1	Si 251.611†	224562.2	221338.6	17902	µg/L	17902	ppb	11:38:48
1	Sn 189.927†	-84.9	-106.1	-29.996	µg/L	-29.996	ppb	11:39:14
1	Ti 334.940†	1250951.0	1234182.6	2839.0	µg/L	2839.0	ppb	11:38:48
1	Tl 190.801†	-27.4	-7.0	15.572	µg/L	15.572	ppb	11:39:14
1	U 409.014†	269.5	-435.6	-64.385	µg/L	-64.385	ppb	11:38:48
1	V 292.402†	12809.3	12736.2	162.30	µg/L	162.30	ppb	11:38:54
1	Zn 213.857†	14899.2	14181.2	387.51	µg/L	387.51	ppb	11:38:54
2	Sc RADIAL	115679.7	115679.7	103	%			11:37:49
2	Al 396.153Radial†	158772.4	153530.2	81142	µg/L	81142	ppb	11:37:49
2	Ca 317.933Radial†	83965.8	80867.9	32626	µg/L	32626	ppb	11:37:49
2	Fe 238.204 Radial†	22730.8	21991.8	116770	µg/L	116770	ppb	11:38:09
2	K 766.490 Radial†	19505.4	18134.9	10231	µg/L	10231	ppb	11:37:49
2	Mg 279.077 IEC†	2958.5	2847.8	15895	µg/L	15895	ppb	11:38:09
2	Na 589.592 Radial†	11434.8	11470.7	3235.3	µg/L	3235.3	ppb	11:37:49
2	Sr 421.552†	40968.8	39749.9	229.40	µg/L	229.40	ppb	11:37:49
2	Sc 361.383	2034819.8	2034819.8	101.34	%			11:39:22
2	Y 371.029	1286129.9	1286129.9	105.13	%			11:39:22
2	Ag 328.068†	-1156.5	-1124.9	-0.4094	µg/L	-0.4094	ppb	11:39:28
2	As 188.979†	23.7	20.2	24.985	µg/L	24.985	ppb	11:39:48
2	B 249.677†	1704.2	1519.8	33.956	µg/L	33.956	ppb	11:39:28
2	Ba 233.527†	42892.0	42395.7	1134.4	µg/L	1134.4	ppb	11:39:28
2	Be 313.107†	18521.0	14656.5	8.5115	µg/L	8.5115	ppb	11:39:28
2	Cd 226.502†	300.6	394.2	2.0711	µg/L	2.0711	ppb	11:39:48
2	Co 228.616†	685.9	746.6	32.074	µg/L	32.074	ppb	11:39:48
2	Cr 267.716†	3312.1	3392.4	75.657	µg/L	75.657	ppb	11:39:28
2	Cu 324.752†	8597.2	5174.3	62.048	µg/L	62.048	ppb	11:39:28
2	Mn 257.610†	748841.4	739160.0	2446.7	µg/L	2446.7	ppb	11:39:22
2	Mo 202.031†	27.5	31.9	8.4025	µg/L	8.4025	ppb	11:39:48
2	Ni 231.604†	1401.1	1091.5	62.991	µg/L	62.991	ppb	11:39:48
2	P 214.914†	810.4	609.7	1243.6	µg/L	1243.6	ppb	11:39:48
2	Pb 220.353†	488.4	430.9	119.44	µg/L	119.44	ppb	11:39:48

2	S 181.975 Axial†	210.9	182.4	956.40 µg/L	956.40 ppb		11:39:48
2	Sb 206.836†	22.2	-2.3	4.7132 µg/L	4.7132 ppb		11:39:48
2	Se 196.026†	-43.4	-53.6	0.5530 µg/L	0.5530 ppb		11:39:48
2	SiO2†	194018.3	189412.1	38424 µg/L	38424 ppb		11:39:22
2	Si 251.611†	222410.8	219105.0	17721 µg/L	17721 ppb		11:39:22
2	Sn 189.927†	-84.9	-106.1	-29.960 µg/L	-29.960 ppb		11:39:48
2	Ti 334.940†	1238430.1	1221210.6	2809.2 µg/L	2809.2 ppb		11:39:22
2	Tl 190.801†	-27.4	-7.0	15.277 µg/L	15.277 ppb		11:39:48
2	U 409.014†	324.8	-381.1	-59.042 µg/L	-59.042 ppb		11:39:22
2	V 292.402†	12758.7	12680.0	161.68 µg/L	161.68 ppb		11:39:28
2	Zn 213.857†	14788.6	14064.7	384.18 µg/L	384.18 ppb		11:39:28
3	Sc RADIAL	116257.1	116257.1	104 %			11:38:15
3	Al 396.153Radial†	159845.1	153799.9	81285 µg/L	81285 ppb		11:38:15
3	Ca 317.933Radial†	84584.9	81060.4	32703 µg/L	32703 ppb		11:38:15
3	Fe 238.204 Radial†	22689.2	21842.5	115980 µg/L	115980 ppb		11:38:36
3	K 766.490 Radial†	19764.7	18290.9	10319 µg/L	10319 ppb		11:38:15
3	Mg 279.077 IEC†	2964.0	2838.9	15846 µg/L	15846 ppb		11:38:36
3	Na 589.592 Radial†	11518.0	11495.9	3242.4 µg/L	3242.4 ppb		11:38:15
3	Sr 421.552†	41346.7	39916.9	230.37 µg/L	230.37 ppb		11:38:15
3	Sc 361.383	2025571.1	2025571.1	100.88 %			11:39:56
3	Y 371.029	1280958.9	1280958.9	104.71 %			11:39:56
3	Ag 328.068†	-1047.1	-1021.6	0.5004 µg/L	0.5004 ppb		11:40:02
3	As 188.979†	27.9	24.5	33.500 µg/L	33.500 ppb		11:40:22
3	B 249.677†	1666.3	1490.0	32.818 µg/L	32.818 ppb		11:40:02
3	Ba 233.527†	42333.6	42035.4	1124.8 µg/L	1124.8 ppb		11:40:02
3	Be 313.107†	18280.4	14501.5	8.4042 µg/L	8.4042 ppb		11:40:02
3	Cd 226.502†	287.4	382.5	1.8047 µg/L	1.8047 ppb		11:40:22
3	Co 228.616†	689.1	752.9	32.359 µg/L	32.359 ppb		11:40:22
3	Cr 267.716†	3318.0	3413.2	76.116 µg/L	76.116 ppb		11:40:02
3	Cu 324.752†	8532.0	5148.4	61.693 µg/L	61.693 ppb		11:40:02
3	Mn 257.610†	749735.8	743420.4	2460.6 µg/L	2460.6 ppb		11:39:56
3	Mo 202.031†	26.8	31.3	8.2922 µg/L	8.2922 ppb		11:40:22
3	Ni 231.604†	1392.1	1088.9	62.842 µg/L	62.842 ppb		11:40:22
3	P 214.914†	813.9	616.8	1260.4 µg/L	1260.4 ppb		11:40:22
3	Pb 220.353†	509.4	453.9	125.53 µg/L	125.53 ppb		11:40:22
3	S 181.975 Axial†	214.0	186.4	978.02 µg/L	978.02 ppb		11:40:22
3	Sb 206.836†	17.1	-7.2	-0.4070 µg/L	-0.4070 ppb		11:40:22
3	Se 196.026†	-28.9	-39.5	20.966 µg/L	20.966 ppb		11:40:22
3	SiO2†	194185.1	190451.6	38634 µg/L	38634 ppb		11:39:56
3	Si 251.611†	222708.0	220401.6	17826 µg/L	17826 ppb		11:39:56
3	Sn 189.927†	-79.3	-101.0	-27.407 µg/L	-27.407 ppb		11:40:22
3	Ti 334.940†	1240112.0	1228457.5	2825.8 µg/L	2825.8 ppb		11:39:56
3	Tl 190.801†	-30.4	-10.0	10.688 µg/L	10.688 ppb		11:40:22
3	U 409.014†	352.1	-352.6	-56.044 µg/L	-56.044 ppb		11:39:56
3	V 292.402†	12621.0	12601.0	160.67 µg/L	160.67 ppb		11:40:02
3	Zn 213.857†	14623.8	13968.0	381.53 µg/L	381.53 ppb		11:40:02

Mean Data: 241539001|931881|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2031398.1	101.17	%	0.253				0.25%
Sc RADIAL	115962.0	104	%	0.3				0.25%
Y 371.029	1284376.2	104.99	%	0.242				0.23%
Ag 328.068†	-1061.6	0.1568	µg/L	0.49399	0.1568	ppb	0.49399	315.14%
Al 396.153Radial†	153519.9	81137	µg/L	150.8	81137	ppb	150.8	0.19%
As 188.979†	21.7	27.909	µg/L	4.8433	27.909	ppb	4.8433	17.35%
B 249.677†	1504.7	33.381	µg/L	0.5691	33.381	ppb	0.5691	1.70%
Ba 233.527†	42333.8	1132.8	µg/L	7.30	1132.8	ppb	7.30	0.64%
Be 313.107†	14622.7	8.4837	µg/L	0.06986	8.4837	ppb	0.06986	0.82%
Ca 317.933Radial†	81040.7	32695	µg/L	66.1	32695	ppb	66.1	0.20%
Cd 226.502†	383.2	1.7939	µg/L	0.28270	1.7939	ppb	0.28270	15.76%
Co 228.616†	752.4	32.336	µg/L	0.2511	32.336	ppb	0.2511	0.78%
Cr 267.716†	3418.0	76.225	µg/L	0.6289	76.225	ppb	0.6289	0.83%
Cu 324.752†	5184.1	62.029	µg/L	0.3274	62.029	ppb	0.3274	0.53%
Fe 238.204 Radial†	21913.7	116350	µg/L	397.6	116350	ppb	397.6	0.34%
K 766.490 Radial†	18186.0	10259	µg/L	51.3	10259	ppb	51.3	0.50%
Mg 279.077 IEC†	2841.6	15860	µg/L	29.8	15860	ppb	29.8	0.19%
Mn 257.610†	743244.3	2460.1	µg/L	13.13	2460.1	ppb	13.13	0.53%
Mo 202.031†	30.5	8.2180	µg/L	0.23067	8.2180	ppb	0.23067	2.81%
Na 589.592 Radial†	11470.6	3235.3	µg/L	7.16	3235.3	ppb	7.16	0.22%

Ni 231.604†	1094.2	63.150	µg/L	0.4111	63.150	ppb	0.4111	0.65%
P 214.914†	613.7	1253.0	µg/L	8.56	1253.0	ppb	8.56	0.68%
Pb 220.353†	442.1	122.39	µg/L	3.050	122.39	ppb	3.050	2.49%
S 181.975 Axial†	186.5	978.29	µg/L	22.032	978.29	ppb	22.032	2.25%
Sb 206.836†	-3.8	3.1875	µg/L	3.12477	3.1875	ppb	3.12477	98.03%
Se 196.026†	-48.2	8.3883	µg/L	11.00204	8.3883	ppb	11.00204	131.16%
SiO2†	190337.1	38611	µg/L	177.2	38611	ppb	177.2	0.46%
Si 251.611†	220281.7	17817	µg/L	90.7	17817	ppb	90.7	0.51%
Sn 189.927†	-104.4	-29.121	µg/L	1.4843	-29.121	ppb	1.4843	5.10%
Sr 421.552†	39805.7	229.72	µg/L	0.556	229.72	ppb	0.556	0.24%
Ti 334.940†	1227950.3	2824.7	µg/L	14.96	2824.7	ppb	14.96	0.53%
Tl 190.801†	-8.0	13.846	µg/L	2.7382	13.846	ppb	2.7382	19.78%
U 409.014†	-389.8	-59.824	µg/L	4.2248	-59.824	ppb	4.2248	7.06%
V 292.402†	12672.4	161.55	µg/L	0.825	161.55	ppb	0.825	0.51%
Zn 213.857†	14071.3	384.40	µg/L	2.998	384.40	ppb	2.998	0.78%

Sequence No.: 24
Sample ID: 1201978584|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 317
Date Collected: 12/14/2009 11:40:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978584|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115282.9	115282.9	103	%			11:41:04
1	Al 396.153Radial†	198422.4	192573.1	101780	µg/L	101780	ppb	11:41:04
1	Ca 317.933Radial†	90659.4	87649.4	35362	µg/L	35362	ppb	11:41:04
1	Fe 238.204 Radial†	26199.2	25436.6	135060	µg/L	135060	ppb	11:41:09
1	K 766.490 Radial†	23930.5	22498.2	12692	µg/L	12692	ppb	11:41:09
1	Mg 279.077 IEC†	3771.0	3646.9	20376	µg/L	20376	ppb	11:41:09
1	Na 589.592 Radial†	14278.9	14271.4	4025.3	µg/L	4025.3	ppb	11:41:09
1	Sr 421.552†	49841.2	48504.5	279.93	µg/L	279.93	ppb	11:41:04
1	Sc 361.383	2026779.9	2026779.9	100.94	%			11:41:44
1	Y 371.029	1305086.7	1305086.7	106.68	%			11:41:44
1	Ag 328.068†	-1345.9	-1317.1	-0.4714	µg/L	-0.4714	ppb	11:41:50
1	As 188.979†	26.6	23.2	27.739	µg/L	27.739	ppb	11:42:10
1	B 249.677†	1890.1	1710.7	37.078	µg/L	37.078	ppb	11:41:50
1	Ba 233.527†	54729.4	54290.3	1452.7	µg/L	1452.7	ppb	11:41:50
1	Be 313.107†	22886.1	19053.3	11.365	µg/L	11.365	ppb	11:41:50
1	Cd 226.502†	339.2	433.6	1.7314	µg/L	1.7314	ppb	11:42:10
1	Co 228.616†	786.6	849.0	37.210	µg/L	37.210	ppb	11:42:10
1	Cr 267.716†	4193.6	4278.6	95.437	µg/L	95.437	ppb	11:41:50
1	Cu 324.752†	9604.6	6206.0	73.348	µg/L	73.348	ppb	11:41:50
1	Mn 257.610†	1422118.2	1409076.1	4653.2	µg/L	4653.2	ppb	11:41:44
1	Mo 202.031†	37.8	42.2	10.347	µg/L	10.347	ppb	11:42:10
1	Ni 231.604†	1529.4	1224.0	70.642	µg/L	70.642	ppb	11:42:10
1	P 214.914†	900.5	702.1	1434.3	µg/L	1434.3	ppb	11:42:10
1	Pb 220.353†	675.6	618.3	170.56	µg/L	170.56	ppb	11:42:10
1	S 181.975 Axial†	231.3	203.5	1065.9	µg/L	1065.9	ppb	11:42:10
1	Sb 206.836†	22.7	-1.6	5.1089	µg/L	5.1089	ppb	11:42:10
1	Se 196.026†	-41.5	-51.9	14.416	µg/L	14.416	ppb	11:42:10
1	SiO2†	198811.8	194920.2	39541	µg/L	39541	ppb	11:41:44
1	Si 251.611†	228052.6	225564.6	18245	µg/L	18245	ppb	11:41:44
1	Sn 189.927†	-88.6	-110.1	-28.332	µg/L	-28.332	ppb	11:42:10
1	Ti 334.940†	1248223.2	1235759.8	2842.5	µg/L	2842.5	ppb	11:41:44
1	Tl 190.801†	-36.0	-15.6	10.613	µg/L	10.613	ppb	11:42:10
1	U 409.014†	-215.4	-915.0	-115.63	µg/L	-115.63	ppb	11:41:44
1	V 292.402†	16603.7	16539.0	209.41	µg/L	209.41	ppb	11:41:50
1	Zn 213.857†	17901.2	17206.1	470.82	µg/L	470.82	ppb	11:41:50
2	Sc RADIAL	115905.2	115905.2	104	%			11:41:15
2	Al 396.153Radial†	198698.3	191804.9	101370	µg/L	101370	ppb	11:41:15
2	Ca 317.933Radial†	90545.9	87066.9	35127	µg/L	35127	ppb	11:41:15
2	Fe 238.204 Radial†	26420.8	25514.1	135470	µg/L	135470	ppb	11:41:20
2	K 766.490 Radial†	24184.9	22619.2	12760	µg/L	12760	ppb	11:41:20
2	Mg 279.077 IEC†	3779.5	3635.5	20311	µg/L	20311	ppb	11:41:20
2	Na 589.592 Radial†	14424.5	14337.7	4043.9	µg/L	4043.9	ppb	11:41:20
2	Sr 421.552†	49832.8	48236.5	278.38	µg/L	278.38	ppb	11:41:15
2	Sc 361.383	2037361.2	2037361.2	101.47	%			11:42:18
2	Y 371.029	1311568.9	1311568.9	107.21	%			11:42:18
2	Ag 328.068†	-1312.5	-1277.2	-0.0449	µg/L	-0.0449	ppb	11:42:24
2	As 188.979†	31.7	28.1	37.304	µg/L	37.304	ppb	11:42:44
2	B 249.677†	1861.9	1673.2	35.205	µg/L	35.205	ppb	11:42:24
2	Ba 233.527†	55269.3	54540.9	1459.4	µg/L	1459.4	ppb	11:42:24
2	Be 313.107†	23211.8	19256.6	11.493	µg/L	11.493	ppb	11:42:24
2	Cd 226.502†	348.0	440.6	1.8948	µg/L	1.8948	ppb	11:42:44
2	Co 228.616†	776.3	834.9	36.466	µg/L	36.466	ppb	11:42:44
2	Cr 267.716†	4222.3	4285.4	95.593	µg/L	95.593	ppb	11:42:24
2	Cu 324.752†	9730.3	6280.3	73.968	µg/L	73.968	ppb	11:42:24
2	Mn 257.610†	1435213.6	1414664.8	4671.6	µg/L	4671.6	ppb	11:42:18
2	Mo 202.031†	38.4	42.6	10.411	µg/L	10.411	ppb	11:42:44
2	Ni 231.604†	1525.3	1212.2	69.960	µg/L	69.960	ppb	11:42:44
2	P 214.914†	909.0	705.9	1442.0	µg/L	1442.0	ppb	11:42:44
2	Pb 220.353†	654.7	594.2	164.15	µg/L	164.15	ppb	11:42:44

2	S 181.975 Axial†	229.3	200.3	1048.7	µg/L	1048.7 ppb	11:42:44
2	Sb 206.836†	28.7	4.1	11.185	µg/L	11.185 ppb	11:42:44
2	Se 196.026†	-55.4	-65.4	-5.1336	µg/L	-5.1336 ppb	11:42:44
2	SiO2†	200524.2	195584.9	39676	µg/L	39676 ppb	11:42:18
2	Si 251.611†	230111.9	226420.7	18314	µg/L	18314 ppb	11:42:18
2	Sn 189.927†	-93.5	-114.6	-30.605	µg/L	-30.605 ppb	11:42:44
2	Ti 334.940†	1259925.0	1240869.7	2854.3	µg/L	2854.3 ppb	11:42:18
2	Tl 190.801†	-41.9	-21.2	1.9107	µg/L	1.9107 ppb	11:42:44
2	U 409.014†	-199.7	-898.4	-114.07	µg/L	-114.07 ppb	11:42:18
2	V 292.402†	16882.0	16727.9	211.71	µg/L	211.71 ppb	11:42:24
2	Zn 213.857†	18106.4	17316.2	473.89	µg/L	473.89 ppb	11:42:24
3	Sc RADIAL	115715.3	115715.3	103	%		11:41:26
3	Al 396.153Radial†	199425.0	192823.2	101910	µg/L	101910 ppb	11:41:26
3	Ca 317.933Radial†	91109.9	87756.3	35405	µg/L	35405 ppb	11:41:26
3	Fe 238.204 Radial†	26376.6	25513.2	135470	µg/L	135470 ppb	11:41:31
3	K 766.490 Radial†	24158.5	22632.0	12768	µg/L	12768 ppb	11:41:31
3	Mg 279.077 IEC†	3784.8	3646.6	20374	µg/L	20374 ppb	11:41:31
3	Na 589.592 Radial†	14424.6	14360.6	4050.4	µg/L	4050.4 ppb	11:41:31
3	Sr 421.552†	50045.6	48521.4	280.02	µg/L	280.02 ppb	11:41:26
3	Sc 361.383	2034945.3	2034945.3	101.35	%		11:42:52
3	Y 371.029	1310629.6	1310629.6	107.13	%		11:42:52
3	Ag 328.068†	-1284.7	-1251.3	0.1841	µg/L	0.1841 ppb	11:42:58
3	As 188.979†	27.7	24.2	29.686	µg/L	29.686 ppb	11:43:18
3	B 249.677†	1852.7	1666.2	34.884	µg/L	34.884 ppb	11:42:58
3	Ba 233.527†	54477.3	53824.1	1440.2	µg/L	1440.2 ppb	11:42:58
3	Be 313.107†	22939.2	19014.8	11.337	µg/L	11.337 ppb	11:42:58
3	Cd 226.502†	338.2	431.3	1.6316	µg/L	1.6316 ppb	11:43:18
3	Co 228.616†	784.5	843.8	36.932	µg/L	36.932 ppb	11:43:18
3	Cr 267.716†	4162.4	4231.2	94.385	µg/L	94.385 ppb	11:42:58
3	Cu 324.752†	9569.4	6133.0	72.914	µg/L	72.914 ppb	11:42:58
3	Mn 257.610†	1431101.6	1412286.8	4663.8	µg/L	4663.8 ppb	11:42:52
3	Mo 202.031†	42.5	46.7	10.902	µg/L	10.902 ppb	11:43:18
3	Ni 231.604†	1507.6	1196.5	69.051	µg/L	69.051 ppb	11:43:18
3	P 214.914†	901.4	699.4	1428.1	µg/L	1428.1 ppb	11:43:18
3	Pb 220.353†	676.7	616.7	170.13	µg/L	170.13 ppb	11:43:18
3	S 181.975 Axial†	234.2	205.4	1076.0	µg/L	1076.0 ppb	11:43:18
3	Sb 206.836†	27.2	2.7	9.6832	µg/L	9.6832 ppb	11:43:18
3	Se 196.026†	-42.9	-53.1	13.046	µg/L	13.046 ppb	11:43:18
3	SiO2†	199825.5	195130.1	39584	µg/L	39584 ppb	11:42:52
3	Si 251.611†	229162.8	225753.5	18260	µg/L	18260 ppb	11:42:52
3	Sn 189.927†	-85.9	-107.1	-26.740	µg/L	-26.740 ppb	11:43:18
3	Ti 334.940†	1256661.3	1239123.7	2850.2	µg/L	2850.2 ppb	11:42:52
3	Tl 190.801†	-37.1	-16.5	9.1755	µg/L	9.1755 ppb	11:43:18
3	U 409.014†	-226.7	-925.3	-116.74	µg/L	-116.74 ppb	11:42:52
3	V 292.402†	16663.2	16531.7	209.35	µg/L	209.35 ppb	11:42:58
3	Zn 213.857†	17821.4	17056.2	466.55	µg/L	466.55 ppb	11:42:58

Mean Data: 1201978584|931881|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2033028.8	101.25	%	0.276				0.27%
Sc RADIAL	115634.5	103	%	0.3				0.28%
Y 371.029	1309095.1	107.01	%	0.286				0.27%
Ag 328.068†	-1281.8	-0.1107	µg/L	0.33265	-0.1107	ppb	0.33265	300.43%
Al 396.153Radial†	192400.4	101690	µg/L	280.5	101690	ppb	280.5	0.28%
As 188.979†	25.2	31.576	µg/L	5.0550	31.576	ppb	5.0550	16.01%
B 249.677†	1683.4	35.722	µg/L	1.1849	35.722	ppb	1.1849	3.32%
Ba 233.527†	54218.4	1450.8	µg/L	9.73	1450.8	ppb	9.73	0.67%
Be 313.107†	19108.2	11.398	µg/L	0.0832	11.398	ppb	0.0832	0.73%
Ca 317.933Radial†	87490.9	35298	µg/L	149.7	35298	ppb	149.7	0.42%
Cd 226.502†	435.2	1.7526	µg/L	0.13290	1.7526	ppb	0.13290	7.58%
Co 228.616†	842.6	36.869	µg/L	0.3762	36.869	ppb	0.3762	1.02%
Cr 267.716†	4265.1	95.138	µg/L	0.6571	95.138	ppb	0.6571	0.69%
Cu 324.752†	6206.4	73.410	µg/L	0.5296	73.410	ppb	0.5296	0.72%
Fe 238.204 Radial†	25488.0	135330	µg/L	236.1	135330	ppb	236.1	0.17%
K 766.490 Radial†	22583.1	12740	µg/L	41.6	12740	ppb	41.6	0.33%
Mg 279.077 IEC†	3643.0	20354	µg/L	36.9	20354	ppb	36.9	0.18%
Mn 257.610†	1412009.2	4662.9	µg/L	9.26	4662.9	ppb	9.26	0.20%
Mo 202.031†	43.8	10.553	µg/L	0.3037	10.553	ppb	0.3037	2.88%
Na 589.592 Radial†	14323.3	4039.9	µg/L	13.06	4039.9	ppb	13.06	0.32%

Ni 231.604†	1210.9	69.884 µg/L	0.7979	69.884 ppb	0.7979	1.14%
P 214.914†	702.4	1434.8 µg/L	6.98	1434.8 ppb	6.98	0.49%
Pb 220.353†	609.8	168.28 µg/L	3.585	168.28 ppb	3.585	2.13%
S 181.975 Axial†	203.1	1063.5 µg/L	13.78	1063.5 ppb	13.78	1.30%
Sb 206.836†	1.7	8.6589 µg/L	3.16474	8.6589 ppb	3.16474	36.55%
Se 196.026†	-56.8	7.4427 µg/L	10.91293	7.4427 ppb	10.91293	146.63%
SiO2†	195211.8	39600 µg/L	68.9	39600 ppb	68.9	0.17%
Si 251.611†	225912.9	18273 µg/L	36.5	18273 ppb	36.5	0.20%
Sn 189.927†	-110.6	-28.559 µg/L	1.9425	-28.559 ppb	1.9425	6.80%
Sr 421.552†	48420.8	279.44 µg/L	0.922	279.44 ppb	0.922	0.33%
Ti 334.940†	1238584.4	2849.0 µg/L	5.98	2849.0 ppb	5.98	0.21%
Tl 190.801†	-17.8	7.2332 µg/L	4.66519	7.2332 ppb	4.66519	64.50%
U 409.014†	-912.9	-115.48 µg/L	1.345	-115.48 ppb	1.345	1.16%
V 292.402†	16599.5	210.16 µg/L	1.345	210.16 ppb	1.345	0.64%
Zn 213.857†	17192.8	470.42 µg/L	3.686	470.42 ppb	3.686	0.78%

Sequence No.: 25
Sample ID: 1201978586|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 318
Date Collected: 12/14/2009 11:43:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978586|931881|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116344.6	116344.6	104	%			11:44:00
1	Al 396.153Radial†	300568.0	289128.1	152790	µg/L	152790	ppb	11:44:00
1	Ca 317.933Radial†	108685.9	104196.1	42037	µg/L	42037	ppb	11:44:00
1	Fe 238.204 Radial†	29271.4	28161.4	149540	µg/L	149540	ppb	11:44:06
1	K 766.490 Radial†	38144.5	35966.9	20290	µg/L	20290	ppb	11:44:00
1	Mg 279.077 IEC†	5226.6	5014.5	28083	µg/L	28083	ppb	11:44:06
1	Na 589.592 Radial†	32384.5	31571.3	8904.7	µg/L	8904.7	ppb	11:44:00
1	Sr 421.552†	142112.8	136872.8	789.91	µg/L	789.91	ppb	11:44:00
1	Sc 361.383	2023818.9	2023818.9	100.80	%			11:44:41
1	Y 371.029	1283268.4	1283268.4	104.90	%			11:44:41
1	Ag 328.068†	56535.2	56105.0	548.64	µg/L	548.64	ppb	11:44:47
1	As 188.979†	296.6	291.1	547.83	µg/L	547.83	ppb	11:45:07
1	B 249.677†	13548.3	13279.5	570.49	µg/L	570.49	ppb	11:44:47
1	Ba 233.527†	60110.7	59708.5	1598.7	µg/L	1598.7	ppb	11:44:47
1	Be 313.107†	857365.1	846976.7	550.45	µg/L	550.45	ppb	11:44:41
1	Cd 226.502†	19377.9	19322.4	532.31	µg/L	532.31	ppb	11:44:47
1	Co 228.616†	11026.3	11009.0	551.81	µg/L	551.81	ppb	11:45:07
1	Cr 267.716†	28372.7	28272.9	629.24	µg/L	629.24	ppb	11:44:47
1	Cu 324.752†	86797.7	82803.5	623.69	µg/L	623.69	ppb	11:44:47
1	Mn 257.610†	875674.9	869008.6	2878.1	µg/L	2878.1	ppb	11:44:41
1	Mo 202.031†	4341.9	4312.4	520.79	µg/L	520.79	ppb	11:45:07
1	Ni 231.604†	10641.2	10266.2	592.48	µg/L	592.48	ppb	11:45:07
1	P 214.914†	1192.4	993.0	2027.8	µg/L	2027.8	ppb	11:45:07
1	Pb 220.353†	2587.6	2516.2	676.50	µg/L	676.50	ppb	11:45:07
1	S 181.975 Axial†	1279.9	1244.1	6631.0	µg/L	6631.0	ppb	11:45:07
1	Sb 206.836†	458.9	431.1	458.60	µg/L	458.60	ppb	11:45:07
1	Se 196.026†	316.9	303.7	547.34	µg/L	547.34	ppb	11:45:07
1	SiO2†	196121.8	192539.6	39058	µg/L	39058	ppb	11:44:47
1	Si 251.611†	225799.6	223659.9	18009	µg/L	18009	ppb	11:44:47
1	Sn 189.927†	959.4	929.5	505.93	µg/L	505.93	ppb	11:45:07
1	Ti 334.940†	1841883.5	1826541.8	4202.0	µg/L	4202.0	ppb	11:44:41
1	Tl 190.801†	298.1	315.9	531.99	µg/L	531.99	ppb	11:45:07
1	U 409.014†	4987.1	4246.1	396.58	µg/L	396.58	ppb	11:44:47
1	V 292.402†	59878.9	59496.6	730.55	µg/L	730.55	ppb	11:44:47
1	Zn 213.857†	43008.5	42141.1	1170.2	µg/L	1170.2	ppb	11:44:47
2	Sc RADIAL	115852.8	115852.8	103	%			11:44:12
2	Al 396.153Radial†	298213.0	288079.7	152230	µg/L	152230	ppb	11:44:12
2	Ca 317.933Radial†	107239.1	103241.6	41652	µg/L	41652	ppb	11:44:12
2	Fe 238.204 Radial†	29423.3	28427.7	150960	µg/L	150960	ppb	11:44:17
2	K 766.490 Radial†	37936.0	35921.2	20265	µg/L	20265	ppb	11:44:12
2	Mg 279.077 IEC†	5240.2	5049.1	28276	µg/L	28276	ppb	11:44:17
2	Na 589.592 Radial†	32141.3	31468.5	8875.7	µg/L	8875.7	ppb	11:44:12
2	Sr 421.552†	140786.2	136171.2	785.86	µg/L	785.86	ppb	11:44:12
2	Sc 361.383	2035010.3	2035010.3	101.35	%			11:45:14
2	Y 371.029	1290283.8	1290283.8	105.47	%			11:45:14
2	Ag 328.068†	56533.8	55795.3	545.79	µg/L	545.79	ppb	11:45:20
2	As 188.979†	297.0	289.9	545.32	µg/L	545.32	ppb	11:45:41
2	B 249.677†	13635.9	13292.1	570.63	µg/L	570.63	ppb	11:45:20
2	Ba 233.527†	60150.6	59419.9	1591.0	µg/L	1591.0	ppb	11:45:20
2	Be 313.107†	861881.5	846755.0	550.31	µg/L	550.31	ppb	11:45:14
2	Cd 226.502†	19400.4	19239.0	529.84	µg/L	529.84	ppb	11:45:20
2	Co 228.616†	10991.3	10914.4	546.99	µg/L	546.99	ppb	11:45:41
2	Cr 267.716†	28407.9	28152.8	626.57	µg/L	626.57	ppb	11:45:20
2	Cu 324.752†	86775.4	82307.9	620.45	µg/L	620.45	ppb	11:45:20
2	Mn 257.610†	880019.9	868517.9	2876.6	µg/L	2876.6	ppb	11:45:14
2	Mo 202.031†	4310.6	4257.8	514.33	µg/L	514.33	ppb	11:45:41
2	Ni 231.604†	10615.6	10182.8	587.67	µg/L	587.67	ppb	11:45:41
2	P 214.914†	1196.3	990.3	2020.5	µg/L	2020.5	ppb	11:45:41
2	Pb 220.353†	2565.7	2480.4	666.98	µg/L	666.98	ppb	11:45:41

2	S 181.975 Axial†	1276.2	1233.5	6573.9 µg/L	6573.9 ppb	11:45:41
2	Sb 206.836†	455.9	425.7	452.96 µg/L	452.96 ppb	11:45:41
2	Se 196.026†	309.0	294.1	534.12 µg/L	534.12 ppb	11:45:41
2	SiO2†	196670.9	192011.4	38951 µg/L	38951 ppb	11:45:20
2	Si 251.611†	226292.9	222914.6	17949 µg/L	17949 ppb	11:45:20
2	Sn 189.927†	964.1	928.8	505.74 µg/L	505.74 ppb	11:45:41
2	Ti 334.940†	1850116.8	1824615.9	4197.6 µg/L	4197.6 ppb	11:45:14
2	Tl 190.801†	292.9	309.1	521.40 µg/L	521.40 ppb	11:45:41
2	U 409.014†	4908.9	4141.7	385.89 µg/L	385.89 ppb	11:45:20
2	V 292.402†	59921.7	59212.2	727.19 µg/L	727.19 ppb	11:45:20
2	Zn 213.857†	43073.6	41970.7	1165.2 µg/L	1165.2 ppb	11:45:20
3	Sc RADIAL	116863.7	116863.7	104 %		11:44:23
3	Al 396.153Radial†	300823.5	288087.8	152240 µg/L	152240 ppb	11:44:23
3	Ca 317.933Radial†	108345.3	103405.0	41718 µg/L	41718 ppb	11:44:23
3	Fe 238.204 Radial†	29041.2	27815.6	147710 µg/L	147710 ppb	11:44:28
3	K 766.490 Radial†	38277.9	35931.7	20271 µg/L	20271 ppb	11:44:23
3	Mg 279.077 IEC†	5196.5	4963.3	27797 µg/L	27797 ppb	11:44:28
3	Na 589.592 Radial†	32451.8	31497.3	8883.8 µg/L	8883.8 ppb	11:44:23
3	Sr 421.552†	142256.0	136402.5	787.20 µg/L	787.20 ppb	11:44:23
3	Sc 361.383	2013108.6	2013108.6	100.26 %		11:45:48
3	Y 371.029	1277599.2	1277599.2	104.43 %		11:45:48
3	Ag 328.068†	57244.6	57111.0	558.12 µg/L	558.12 ppb	11:45:54
3	As 188.979†	295.8	291.9	549.60 µg/L	549.60 ppb	11:46:14
3	B 249.677†	13799.7	13601.8	586.06 µg/L	586.06 ppb	11:45:54
3	Ba 233.527†	60946.9	60859.8	1629.5 µg/L	1629.5 ppb	11:45:54
3	Be 313.107†	855842.1	849983.1	552.41 µg/L	552.41 ppb	11:45:48
3	Cd 226.502†	19650.4	19696.6	542.96 µg/L	542.96 ppb	11:45:54
3	Co 228.616†	11008.4	11049.4	553.84 µg/L	553.84 ppb	11:46:14
3	Cr 267.716†	28746.9	28795.9	640.88 µg/L	640.88 ppb	11:45:54
3	Cu 324.752†	87717.4	84178.8	633.12 µg/L	633.12 ppb	11:45:54
3	Mn 257.610†	874100.3	872060.2	2887.9 µg/L	2887.9 ppb	11:45:48
3	Mo 202.031†	4325.2	4318.7	521.47 µg/L	521.47 ppb	11:46:14
3	Ni 231.604†	10617.2	10298.3	594.34 µg/L	594.34 ppb	11:46:14
3	P 214.914†	1183.4	990.3	2022.8 µg/L	2022.8 ppb	11:46:14
3	Pb 220.353†	2570.4	2512.7	675.53 µg/L	675.53 ppb	11:46:14
3	S 181.975 Axial†	1280.6	1251.5	6671.0 µg/L	6671.0 ppb	11:46:14
3	Sb 206.836†	456.7	431.4	458.90 µg/L	458.90 ppb	11:46:14
3	Se 196.026†	303.3	291.7	528.48 µg/L	528.48 ppb	11:46:14
3	SiO2†	198624.5	196071.0	39774 µg/L	39774 ppb	11:45:54
3	Si 251.611†	228697.1	227741.7	18340 µg/L	18340 ppb	11:45:54
3	Sn 189.927†	965.6	940.7	511.32 µg/L	511.32 ppb	11:46:14
3	Ti 334.940†	1836919.9	1831313.3	4213.0 µg/L	4213.0 ppb	11:45:48
3	Tl 190.801†	294.6	313.9	529.00 µg/L	529.00 ppb	11:46:14
3	U 409.014†	4876.8	4162.5	388.57 µg/L	388.57 ppb	11:45:54
3	V 292.402†	60653.1	60584.8	743.45 µg/L	743.45 ppb	11:45:54
3	Zn 213.857†	43633.0	42991.0	1194.4 µg/L	1194.4 ppb	11:45:54

Mean Data: 1201978586|931881|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2023979.3	100.80	%	0.545				0.54%
Sc RADIAL	116353.7	104	%	0.5				0.43%
Y 371.029	1283717.1	104.93	%	0.519				0.49%
Ag 328.068†	56337.1	550.85	µg/L	6.456	550.85	ppb	6.456	1.17%
Al 396.153Radial†	288431.9	152420	µg/L	318.6	152420	ppb	318.6	0.21%
As 188.979†	291.0	547.59	µg/L	2.150	547.59	ppb	2.150	0.39%
B 249.677†	13391.2	575.73	µg/L	8.946	575.73	ppb	8.946	1.55%
Ba 233.527†	59996.1	1606.4	µg/L	20.40	1606.4	ppb	20.40	1.27%
Be 313.107†	847904.9	551.05	µg/L	1.172	551.05	ppb	1.172	0.21%
Ca 317.933Radial†	103614.2	41803	µg/L	205.9	41803	ppb	205.9	0.49%
Cd 226.502†	19419.3	535.03	µg/L	6.972	535.03	ppb	6.972	1.30%
Co 228.616†	10990.9	550.88	µg/L	3.517	550.88	ppb	3.517	0.64%
Cr 267.716†	28407.2	632.23	µg/L	7.610	632.23	ppb	7.610	1.20%
Cu 324.752†	83096.7	625.76	µg/L	6.582	625.76	ppb	6.582	1.05%
Fe 238.204 Radial†	28134.9	149400	µg/L	1629.4	149400	ppb	1629.4	1.09%
K 766.490 Radial†	35939.9	20275	µg/L	13.5	20275	ppb	13.5	0.07%
Mg 279.077 IEC†	5009.0	28052	µg/L	241.0	28052	ppb	241.0	0.86%
Mn 257.610†	869862.2	2880.9	µg/L	6.12	2880.9	ppb	6.12	0.21%
Mo 202.031†	4296.3	518.86	µg/L	3.943	518.86	ppb	3.943	0.76%
Na 589.592 Radial†	31512.3	8888.1	µg/L	14.95	8888.1	ppb	14.95	0.17%

Ni 231.604†	10249.1	591.49 µg/L	3.440	591.49 ppb	3.440	0.58%
P 214.914†	991.2	2023.7 µg/L	3.77	2023.7 ppb	3.77	0.19%
Pb 220.353†	2503.1	673.00 µg/L	5.240	673.00 ppb	5.240	0.78%
S 181.975 Axial†	1243.0	6625.3 µg/L	48.81	6625.3 ppb	48.81	0.74%
Sb 206.836†	429.4	456.82 µg/L	3.344	456.82 ppb	3.344	0.73%
Se 196.026†	296.5	536.65 µg/L	9.678	536.65 ppb	9.678	1.80%
SiO2†	193540.7	39261 µg/L	447.7	39261 ppb	447.7	1.14%
Si 251.611†	224772.1	18099 µg/L	210.9	18099 ppb	210.9	1.17%
Sn 189.927†	933.0	507.66 µg/L	3.169	507.66 ppb	3.169	0.62%
Sr 421.552†	136482.2	787.66 µg/L	2.063	787.66 ppb	2.063	0.26%
Ti 334.940†	1827490.3	4204.2 µg/L	7.94	4204.2 ppb	7.94	0.19%
Tl 190.801†	313.0	527.46 µg/L	5.458	527.46 ppb	5.458	1.03%
U 409.014†	4183.4	390.34 µg/L	5.561	390.34 ppb	5.561	1.42%
V 292.402†	59764.5	733.73 µg/L	8.586	733.73 ppb	8.586	1.17%
Zn 213.857†	42367.6	1176.6 µg/L	15.59	1176.6 ppb	15.59	1.33%

Sequence No.: 26
Sample ID: 1201978587|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 319
Date Collected: 12/14/2009 11:46:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978587|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116183.3	116183.3	104	%			11:46:57
1	Al 396.153Radial†	283136.5	272728.9	144120	µg/L	144120	ppb	11:46:57
1	Ca 317.933Radial†	91821.9	88087.4	35538	µg/L	35538	ppb	11:46:57
1	Fe 238.204 Radial†	27980.1	26955.9	143140	µg/L	143140	ppb	11:47:02
1	K 766.490 Radial†	35904.9	33859.3	19101	µg/L	19101	ppb	11:46:57
1	Mg 279.077 IEC†	4949.4	4754.3	26624	µg/L	26624	ppb	11:47:02
1	Na 589.592 Radial†	31024.3	30303.5	8547.1	µg/L	8547.1	ppb	11:46:57
1	Sr 421.552†	136229.3	131392.2	758.28	µg/L	758.28	ppb	11:46:57
1	Sc 361.383	2025548.8	2025548.8	100.88	%			11:47:38
1	Y 371.029	1280441.7	1280441.7	104.67	%			11:47:38
1	Ag 328.068†	57674.2	57186.2	558.43	µg/L	558.43	ppb	11:47:43
1	As 188.979†	303.6	297.8	562.86	µg/L	562.86	ppb	11:48:04
1	B 249.677†	13711.7	13430.1	579.51	µg/L	579.51	ppb	11:47:43
1	Ba 233.527†	62424.8	61951.4	1658.7	µg/L	1658.7	ppb	11:47:43
1	Be 313.107†	858062.2	846941.3	550.41	µg/L	550.41	ppb	11:47:38
1	Cd 226.502†	19858.9	19782.9	545.74	µg/L	545.74	ppb	11:47:43
1	Co 228.616†	11218.5	11190.3	560.94	µg/L	560.94	ppb	11:48:04
1	Cr 267.716†	28648.5	28522.3	634.80	µg/L	634.80	ppb	11:47:43
1	Cu 324.752†	86962.0	82892.7	622.95	µg/L	622.95	ppb	11:47:43
1	Mn 257.610†	945585.1	937565.6	3102.8	µg/L	3102.8	ppb	11:47:38
1	Mo 202.031†	4316.7	4283.8	517.12	µg/L	517.12	ppb	11:48:04
1	Ni 231.604†	10621.9	10238.0	590.85	µg/L	590.85	ppb	11:48:04
1	P 214.914†	1193.5	993.0	2032.3	µg/L	2032.3	ppb	11:48:04
1	Pb 220.353†	2554.5	2481.2	666.56	µg/L	666.56	ppb	11:48:04
1	S 181.975 Axial†	1235.7	1199.2	6391.7	µg/L	6391.7	ppb	11:48:04
1	Sb 206.836†	444.9	416.9	444.47	µg/L	444.47	ppb	11:48:04
1	Se 196.026†	303.7	290.3	522.80	µg/L	522.80	ppb	11:48:04
1	SiO2†	195339.7	191598.2	38867	µg/L	38867	ppb	11:47:43
1	Si 251.611†	224804.5	222482.2	17912	µg/L	17912	ppb	11:47:43
1	Sn 189.927†	968.5	937.6	507.62	µg/L	507.62	ppb	11:48:04
1	Ti 334.940†	1858618.2	1841569.7	4237.0	µg/L	4237.0	ppb	11:47:38
1	Tl 190.801†	297.3	314.8	532.24	µg/L	532.24	ppb	11:48:04
1	U 409.014†	4969.3	4224.2	395.43	µg/L	395.43	ppb	11:47:43
1	V 292.402†	60568.2	60129.2	737.59	µg/L	737.59	ppb	11:47:43
1	Zn 213.857†	36490.1	35643.3	987.28	µg/L	987.28	ppb	11:47:43
2	Sc RADIAL	116389.8	116389.8	104	%			11:47:08
2	Al 396.153Radial†	283106.1	272215.2	143850	µg/L	143850	ppb	11:47:08
2	Ca 317.933Radial†	91692.4	87805.8	35425	µg/L	35425	ppb	11:47:08
2	Fe 238.204 Radial†	27738.5	26675.5	141660	µg/L	141660	ppb	11:47:14
2	K 766.490 Radial†	35892.6	33786.0	19060	µg/L	19060	ppb	11:47:08
2	Mg 279.077 IEC†	4933.9	4730.9	26494	µg/L	26494	ppb	11:47:14
2	Na 589.592 Radial†	31156.5	30377.7	8568.0	µg/L	8568.0	ppb	11:47:08
2	Sr 421.552†	136139.4	131072.6	756.44	µg/L	756.44	ppb	11:47:08
2	Sc 361.383	2027815.3	2027815.3	100.99	%			11:48:11
2	Y 371.029	1282410.7	1282410.7	104.83	%			11:48:11
2	Ag 328.068†	57622.4	57071.0	557.21	µg/L	557.21	ppb	11:48:17
2	As 188.979†	292.8	286.7	541.54	µg/L	541.54	ppb	11:48:37
2	B 249.677†	13671.4	13375.0	577.41	µg/L	577.41	ppb	11:48:17
2	Ba 233.527†	62205.0	61664.7	1651.1	µg/L	1651.1	ppb	11:48:17
2	Be 313.107†	859749.7	847661.5	550.88	µg/L	550.88	ppb	11:48:11
2	Cd 226.502†	19845.1	19747.2	544.85	µg/L	544.85	ppb	11:48:17
2	Co 228.616†	11260.0	11218.9	562.39	µg/L	562.39	ppb	11:48:37
2	Cr 267.716†	28733.0	28574.2	635.94	µg/L	635.94	ppb	11:48:17
2	Cu 324.752†	86659.2	82496.6	619.81	µg/L	619.81	ppb	11:48:17
2	Mn 257.610†	947375.7	938290.9	3105.0	µg/L	3105.0	ppb	11:48:11
2	Mo 202.031†	4320.4	4282.6	516.93	µg/L	516.93	ppb	11:48:37
2	Ni 231.604†	10651.6	10255.6	591.87	µg/L	591.87	ppb	11:48:37
2	P 214.914†	1190.8	989.1	2025.4	µg/L	2025.4	ppb	11:48:37
2	Pb 220.353†	2545.0	2469.0	663.33	µg/L	663.33	ppb	11:48:37

2	S 181.975 Axial†	1239.0	1201.1	6402.1 µg/L	6402.1 ppb	11:48:37
2	Sb 206.836†	447.6	419.0	446.70 µg/L	446.70 ppb	11:48:37
2	Se 196.026†	318.4	304.5	542.82 µg/L	542.82 ppb	11:48:37
2	SiO2†	195259.9	191302.8	38807 µg/L	38807 ppb	11:48:17
2	Si 251.611†	224653.3	222083.4	17880 µg/L	17880 ppb	11:48:17
2	Sn 189.927†	963.5	931.7	504.35 µg/L	504.35 ppb	11:48:37
2	Ti 334.940†	1861657.5	1842519.8	4239.1 µg/L	4239.1 ppb	11:48:11
2	Tl 190.801†	290.7	307.9	521.42 µg/L	521.42 ppb	11:48:37
2	U 409.014†	4980.5	4229.8	396.27 µg/L	396.27 ppb	11:48:17
2	V 292.402†	60424.0	59919.3	734.95 µg/L	734.95 ppb	11:48:17
2	Zn 213.857†	36522.5	35634.9	987.20 µg/L	987.20 ppb	11:48:17
3	Sc RADIAL	117035.9	117035.9	105 %		11:47:19
3	Al 396.153Radial†	286260.6	273729.9	144650 µg/L	144650 ppb	11:47:19
3	Ca 317.933Radial†	92749.3	88330.0	35636 µg/L	35636 ppb	11:47:19
3	Fe 238.204 Radial†	27997.9	26776.5	142190 µg/L	142190 ppb	11:47:25
3	K 766.490 Radial†	36305.6	33990.6	19176 µg/L	19176 ppb	11:47:19
3	Mg 279.077 IEC†	4975.0	4744.0	26568 µg/L	26568 ppb	11:47:25
3	Na 589.592 Radial†	31384.2	30430.0	8582.8 µg/L	8582.8 ppb	11:47:19
3	Sr 421.552†	137748.2	131888.9	761.15 µg/L	761.15 ppb	11:47:19
3	Sc 361.383	2030565.8	2030565.8	101.13 %		11:48:44
3	Y 371.029	1283963.2	1283963.2	104.95 %		11:48:44
3	Ag 328.068†	56993.8	56372.2	550.54 µg/L	550.54 ppb	11:48:50
3	As 188.979†	303.2	296.7	560.71 µg/L	560.71 ppb	11:49:11
3	B 249.677†	13517.8	13204.7	569.33 µg/L	569.33 ppb	11:48:50
3	Ba 233.527†	61321.3	60707.4	1625.4 µg/L	1625.4 ppb	11:48:50
3	Be 313.107†	857377.1	844162.3	548.61 µg/L	548.61 ppb	11:48:44
3	Cd 226.502†	19497.4	19376.8	534.40 µg/L	534.40 ppb	11:48:50
3	Co 228.616†	11259.7	11203.5	561.63 µg/L	561.63 ppb	11:49:11
3	Cr 267.716†	28187.9	27996.7	623.09 µg/L	623.09 ppb	11:48:50
3	Cu 324.752†	85670.9	81403.1	612.11 µg/L	612.11 ppb	11:48:50
3	Mn 257.610†	944780.6	934454.2	3092.5 µg/L	3092.5 ppb	11:48:44
3	Mo 202.031†	4327.3	4283.6	517.07 µg/L	517.07 ppb	11:49:11
3	Ni 231.604†	10668.3	10257.8	592.00 µg/L	592.00 ppb	11:49:11
3	P 214.914†	1202.9	999.4	2049.2 µg/L	2049.2 ppb	11:49:11
3	Pb 220.353†	2549.6	2470.0	663.69 µg/L	663.69 ppb	11:49:11
3	S 181.975 Axial†	1240.6	1201.0	6401.6 µg/L	6401.6 ppb	11:49:11
3	Sb 206.836†	453.2	424.0	451.89 µg/L	451.89 ppb	11:49:11
3	Se 196.026†	306.3	292.1	524.82 µg/L	524.82 ppb	11:49:11
3	SiO2†	192268.4	188082.8	38154 µg/L	38154 ppb	11:48:50
3	Si 251.611†	221184.3	218351.9	17577 µg/L	17577 ppb	11:48:50
3	Sn 189.927†	974.3	941.0	509.24 µg/L	509.24 ppb	11:49:11
3	Ti 334.940†	1857881.0	1836288.6	4224.8 µg/L	4224.8 ppb	11:48:44
3	Tl 190.801†	294.1	310.9	526.01 µg/L	526.01 ppb	11:49:11
3	U 409.014†	4974.4	4217.1	394.90 µg/L	394.90 ppb	11:48:50
3	V 292.402†	59474.5	58899.4	722.76 µg/L	722.76 ppb	11:48:50
3	Zn 213.857†	35958.7	35028.4	970.01 µg/L	970.01 ppb	11:48:50

Mean Data: 1201978587|931881|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027976.6	101.00	%	0.125				0.12%
Sc RADIAL	116536.3	104	%	0.4				0.38%
Y 371.029	1282271.9	104.81	%	0.144				0.14%
Ag 328.068†	56876.5	555.39	µg/L	4.248	555.39	ppb	4.248	0.76%
Al 396.153Radial†	272891.3	144210	µg/L	407.1	144210	ppb	407.1	0.28%
As 188.979†	293.8	555.03	µg/L	11.740	555.03	ppb	11.740	2.12%
B 249.677†	13336.6	575.42	µg/L	5.375	575.42	ppb	5.375	0.93%
Ba 233.527†	61441.2	1645.1	µg/L	17.44	1645.1	ppb	17.44	1.06%
Be 313.107†	846255.0	549.97	µg/L	1.201	549.97	ppb	1.201	0.22%
Ca 317.933Radial†	88074.4	35533	µg/L	105.9	35533	ppb	105.9	0.30%
Cd 226.502†	19635.6	541.66	µg/L	6.305	541.66	ppb	6.305	1.16%
Co 228.616†	11204.2	561.65	µg/L	0.724	561.65	ppb	0.724	0.13%
Cr 267.716†	28364.4	631.28	µg/L	7.109	631.28	ppb	7.109	1.13%
Cu 324.752†	82264.2	618.29	µg/L	5.580	618.29	ppb	5.580	0.90%
Fe 238.204 Radial†	26802.6	142330	µg/L	753.8	142330	ppb	753.8	0.53%
K 766.490 Radial†	33878.6	19112	µg/L	58.5	19112	ppb	58.5	0.31%
Mg 279.077 IEC†	4743.1	26562	µg/L	65.2	26562	ppb	65.2	0.25%
Mn 257.610†	936770.2	3100.1	µg/L	6.71	3100.1	ppb	6.71	0.22%
Mo 202.031†	4283.3	517.04	µg/L	0.102	517.04	ppb	0.102	0.02%
Na 589.592 Radial†	30370.4	8566.0	µg/L	17.93	8566.0	ppb	17.93	0.21%

Ni 231.604†	10250.5	591.57	µg/L	0.627	591.57	ppb	0.627	0.11%
P 214.914†	993.8	2035.6	µg/L	12.28	2035.6	ppb	12.28	0.60%
Pb 220.353†	2473.4	664.52	µg/L	1.768	664.52	ppb	1.768	0.27%
S 181.975 Axial†	1200.4	6398.5	µg/L	5.83	6398.5	ppb	5.83	0.09%
Sb 206.836†	420.0	447.69	µg/L	3.804	447.69	ppb	3.804	0.85%
Se 196.026†	295.6	530.15	µg/L	11.025	530.15	ppb	11.025	2.08%
SiO2†	190328.0	38609	µg/L	395.6	38609	ppb	395.6	1.02%
Si 251.611†	220972.5	17790	µg/L	185.2	17790	ppb	185.2	1.04%
Sn 189.927†	936.8	507.07	µg/L	2.491	507.07	ppb	2.491	0.49%
Sr 421.552†	131451.2	758.62	µg/L	2.374	758.62	ppb	2.374	0.31%
Ti 334.940†	1840126.0	4233.6	µg/L	7.73	4233.6	ppb	7.73	0.18%
Tl 190.801†	311.2	526.56	µg/L	5.430	526.56	ppb	5.430	1.03%
U 409.014†	4223.7	395.53	µg/L	0.687	395.53	ppb	0.687	0.17%
V 292.402†	59649.3	731.77	µg/L	7.916	731.77	ppb	7.916	1.08%
Zn 213.857†	35435.5	981.50	µg/L	9.944	981.50	ppb	9.944	1.01%

Sequence No.: 27
Sample ID: 1201978585|931881|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 320
Date Collected: 12/14/2009 11:49:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978585|931881|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115210.5	115210.5	103	%			11:49:53
1	Al 396.153Radial†	32034.9	30972.2	16369	µg/L	16369	ppb	11:49:53
1	Ca 317.933Radial†	17196.4	16301.6	6576.8	µg/L	6576.8	ppb	11:49:53
1	Fe 238.204 Radial†	4611.8	4470.5	23737	µg/L	23737	ppb	11:50:14
1	K 766.490 Radial†	4630.6	3754.1	2117.8	µg/L	2117.8	ppb	11:49:53
1	Mg 279.077 IEC†	607.6	574.5	3206.2	µg/L	3206.2	ppb	11:50:14
1	Na 589.592 Radial†	1746.6	2099.3	592.09	µg/L	592.09	ppb	11:49:53
1	Sr 421.552†	8106.3	7970.3	45.998	µg/L	45.998	ppb	11:49:53
1	Sc 361.383	2041883.6	2041883.6	101.70	%			11:51:16
1	Y 371.029	1247921.4	1247921.4	102.01	%			11:51:16
1	Ag 328.068†	-208.1	-188.4	0.2922	µg/L	0.2922	ppb	11:51:22
1	As 188.979†	8.9	5.6	8.0095	µg/L	8.0095	ppb	11:51:43
1	B 249.677†	461.5	292.1	6.1177	µg/L	6.1177	ppb	11:51:22
1	Ba 233.527†	8635.9	8564.3	229.16	µg/L	229.16	ppb	11:51:22
1	Be 313.107†	6549.9	2821.9	1.6295	µg/L	1.6295	ppb	11:51:22
1	Cd 226.502†	-26.5	71.5	0.1703	µg/L	0.1703	ppb	11:51:43
1	Co 228.616†	88.2	156.6	6.7751	µg/L	6.7751	ppb	11:51:43
1	Cr 267.716†	585.9	700.4	15.616	µg/L	15.616	ppb	11:51:22
1	Cu 324.752†	4277.9	897.6	11.512	µg/L	11.512	ppb	11:51:22
1	Mn 257.610†	153603.8	151290.6	500.77	µg/L	500.77	ppb	11:51:16
1	Mo 202.031†	2.5	7.2	1.7902	µg/L	1.7902	ppb	11:51:43
1	Ni 231.604†	514.3	214.7	12.390	µg/L	12.390	ppb	11:51:43
1	P 214.914†	313.7	118.5	240.74	µg/L	240.74	ppb	11:51:43
1	Pb 220.353†	138.6	85.3	23.673	µg/L	23.673	ppb	11:51:43
1	S 181.975 Axial†	61.0	34.3	179.54	µg/L	179.54	ppb	11:51:43
1	Sb 206.836†	24.3	-0.3	1.1088	µg/L	1.1088	ppb	11:51:43
1	Se 196.026†	-0.8	-11.5	-0.8365	µg/L	-0.8365	ppb	11:51:43
1	SiO2†	40405.1	37697.8	7647.3	µg/L	7647.3	ppb	11:51:22
1	Si 251.611†	44953.8	43847.5	3546.4	µg/L	3546.4	ppb	11:51:22
1	Sn 189.927†	-2.9	-25.2	-7.9769	µg/L	-7.9769	ppb	11:51:43
1	Ti 334.940†	250973.5	245990.5	565.85	µg/L	565.85	ppb	11:51:16
1	Tl 190.801†	-22.1	-1.6	2.8050	µg/L	2.8050	ppb	11:51:43
1	U 409.014†	519.6	-190.7	-23.291	µg/L	-23.291	ppb	11:51:22
1	V 292.402†	2448.8	2498.5	31.899	µg/L	31.899	ppb	11:51:22
1	Zn 213.857†	3397.0	2812.5	76.784	µg/L	76.784	ppb	11:51:22
2	Sc RADIAL	114219.3	114219.3	102	%			11:50:19
2	Al 396.153Radial†	31910.3	31120.2	16447	µg/L	16447	ppb	11:50:19
2	Ca 317.933Radial†	17159.0	16410.0	6620.5	µg/L	6620.5	ppb	11:50:19
2	Fe 238.204 Radial†	4583.8	4482.0	23798	µg/L	23798	ppb	11:50:40
2	K 766.490 Radial†	4480.4	3645.9	2056.8	µg/L	2056.8	ppb	11:50:19
2	Mg 279.077 IEC†	604.6	576.7	3218.5	µg/L	3218.5	ppb	11:50:40
2	Na 589.592 Radial†	1719.7	2087.6	588.81	µg/L	588.81	ppb	11:50:19
2	Sr 421.552†	8089.7	8022.4	46.298	µg/L	46.298	ppb	11:50:19
2	Sc 361.383	2029345.5	2029345.5	101.07	%			11:51:49
2	Y 371.029	1239804.8	1239804.8	101.34	%			11:51:49
2	Ag 328.068†	-215.3	-196.8	0.2181	µg/L	0.2181	ppb	11:51:55
2	As 188.979†	10.7	7.4	11.470	µg/L	11.470	ppb	11:52:15
2	B 249.677†	455.3	288.7	5.9422	µg/L	5.9422	ppb	11:51:55
2	Ba 233.527†	8532.4	8514.4	227.83	µg/L	227.83	ppb	11:51:55
2	Be 313.107†	6624.4	2935.3	1.7035	µg/L	1.7035	ppb	11:51:55
2	Cd 226.502†	-18.5	79.3	0.3874	µg/L	0.3874	ppb	11:52:15
2	Co 228.616†	93.4	162.2	7.0603	µg/L	7.0603	ppb	11:52:15
2	Cr 267.716†	573.6	691.8	15.426	µg/L	15.426	ppb	11:51:55
2	Cu 324.752†	4184.6	831.4	11.051	µg/L	11.051	ppb	11:51:55
2	Mn 257.610†	152369.2	151002.3	499.83	µg/L	499.83	ppb	11:51:49
2	Mo 202.031†	-5.0	-0.1	0.9176	µg/L	0.9176	ppb	11:52:15
2	Ni 231.604†	522.3	225.7	13.026	µg/L	13.026	ppb	11:52:15
2	P 214.914†	317.8	124.4	253.96	µg/L	253.96	ppb	11:52:15
2	Pb 220.353†	142.6	90.1	24.952	µg/L	24.952	ppb	11:52:15

2	S 181.975 Axial†	59.2	32.9	171.83 µg/L	171.83 ppb		11:52:15
2	Sb 206.836†	23.7	-0.7	0.6609 µg/L	0.6609 ppb		11:52:15
2	Se 196.026†	-5.5	-16.3	-7.7379 µg/L	-7.7379 ppb		11:52:15
2	SiO2†	39995.5	37538.1	7614.9 µg/L	7614.9 ppb		11:51:55
2	Si 251.611†	44469.6	43641.5	3529.7 µg/L	3529.7 ppb		11:51:55
2	Sn 189.927†	-3.5	-25.8	-8.2521 µg/L	-8.2521 ppb		11:52:15
2	Ti 334.940†	249325.8	245885.0	565.61 µg/L	565.61 ppb		11:51:49
2	Tl 190.801†	-18.8	1.5	7.6458 µg/L	7.6458 ppb		11:52:15
2	U 409.014†	548.5	-158.9	-20.139 µg/L	-20.139 ppb		11:51:55
2	V 292.402†	2443.7	2508.3	32.021 µg/L	32.021 ppb		11:51:55
2	Zn 213.857†	3370.2	2806.6	76.608 µg/L	76.608 ppb		11:51:55
3	Sc RADIAL	113613.6	113613.6	101 %			11:50:45
3	Al 396.153Radial†	31808.1	31186.3	16482 µg/L	16482 ppb		11:50:45
3	Ca 317.933Radial†	17046.4	16388.7	6611.9 µg/L	6611.9 ppb		11:50:45
3	Fe 238.204 Radial†	4608.0	4529.8	24052 µg/L	24052 ppb		11:51:05
3	K 766.490 Radial†	4450.9	3640.2	2053.6 µg/L	2053.6 ppb		11:50:45
3	Mg 279.077 IEC†	604.6	579.8	3235.9 µg/L	3235.9 ppb		11:51:05
3	Na 589.592 Radial†	1727.8	2104.6	593.61 µg/L	593.61 ppb		11:50:45
3	Sr 421.552†	8002.2	7978.4	46.045 µg/L	46.045 ppb		11:50:45
3	Sc 361.383	2042975.0	2042975.0	101.75 %			11:52:22
3	Y 371.029	1248152.2	1248152.2	102.03 %			11:52:22
3	Ag 328.068†	-227.9	-207.7	0.1381 µg/L	0.1381 ppb		11:52:28
3	As 188.979†	5.2	2.0	0.8974 µg/L	0.8974 ppb		11:52:48
3	B 249.677†	464.6	294.8	6.1473 µg/L	6.1473 ppb		11:52:28
3	Ba 233.527†	8618.3	8542.6	228.58 µg/L	228.58 ppb		11:52:28
3	Be 313.107†	6695.2	2961.2	1.7205 µg/L	1.7205 ppb		11:52:28
3	Cd 226.502†	-19.9	78.1	0.3304 µg/L	0.3304 ppb		11:52:48
3	Co 228.616†	90.9	159.2	6.9085 µg/L	6.9085 ppb		11:52:48
3	Cr 267.716†	564.1	678.6	15.134 µg/L	15.134 ppb		11:52:28
3	Cu 324.752†	4223.0	841.4	11.178 µg/L	11.178 ppb		11:52:28
3	Mn 257.610†	153509.2	151117.0	500.24 µg/L	500.24 ppb		11:52:22
3	Mo 202.031†	0.5	5.3	1.5729 µg/L	1.5729 ppb		11:52:48
3	Ni 231.604†	512.4	212.6	12.269 µg/L	12.269 ppb		11:52:48
3	P 214.914†	317.5	122.0	248.34 µg/L	248.34 ppb		11:52:48
3	Pb 220.353†	144.1	90.7	25.099 µg/L	25.099 ppb		11:52:48
3	S 181.975 Axial†	59.1	32.4	169.40 µg/L	169.40 ppb		11:52:48
3	Sb 206.836†	18.1	-6.3	-5.1858 µg/L	-5.1858 ppb		11:52:48
3	Se 196.026†	4.4	-6.4	6.9643 µg/L	6.9643 ppb		11:52:48
3	SiO2†	40398.7	37670.3	7641.7 µg/L	7641.7 ppb		11:52:28
3	Si 251.611†	44939.9	43810.2	3543.3 µg/L	3543.3 ppb		11:52:28
3	Sn 189.927†	-0.6	-23.0	-6.7826 µg/L	-6.7826 ppb		11:52:48
3	Ti 334.940†	250838.2	245725.7	565.24 µg/L	565.24 ppb		11:52:22
3	Tl 190.801†	-21.8	-1.4	3.1713 µg/L	3.1713 ppb		11:52:48
3	U 409.014†	531.3	-179.5	-22.234 µg/L	-22.234 ppb		11:52:28
3	V 292.402†	2499.5	2547.1	32.507 µg/L	32.507 ppb		11:52:28
3	Zn 213.857†	3382.5	2796.5	76.297 µg/L	76.297 ppb		11:52:28

Mean Data: 1201978585|931881|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2038068.0	101.51	%	0.377				0.37%
Sc RADIAL	114347.8	102	%	0.7				0.71%
Y 371.029	1245292.8	101.79	%	0.389				0.38%
Ag 328.068†	-197.6	0.2161	µg/L	0.07704	0.2161	ppb	0.07704	35.65%
Al 396.153Radial†	31092.9	16433	µg/L	57.9	16433	ppb	57.9	0.35%
As 188.979†	5.0	6.7922	µg/L	5.39023	6.7922	ppb	5.39023	79.36%
B 249.677†	291.9	6.0690	µg/L	0.11088	6.0690	ppb	0.11088	1.83%
Ba 233.527†	8540.4	228.52	µg/L	0.669	228.52	ppb	0.669	0.29%
Be 313.107†	2906.1	1.6845	µg/L	0.04839	1.6845	ppb	0.04839	2.87%
Ca 317.933Radial†	16366.8	6603.1	µg/L	23.17	6603.1	ppb	23.17	0.35%
Cd 226.502†	76.3	0.2961	µg/L	0.11259	0.2961	ppb	0.11259	38.03%
Co 228.616†	159.3	6.9146	µg/L	0.14268	6.9146	ppb	0.14268	2.06%
Cr 267.716†	690.2	15.392	µg/L	0.2427	15.392	ppb	0.2427	1.58%
Cu 324.752†	856.8	11.247	µg/L	0.2379	11.247	ppb	0.2379	2.12%
Fe 238.204 Radial†	4494.1	23862	µg/L	167.0	23862	ppb	167.0	0.70%
K 766.490 Radial†	3680.1	2076.1	µg/L	36.19	2076.1	ppb	36.19	1.74%
Mg 279.077 IEC†	577.0	3220.2	µg/L	14.89	3220.2	ppb	14.89	0.46%
Mn 257.610†	151136.6	500.28	µg/L	0.472	500.28	ppb	0.472	0.09%
Mo 202.031†	4.1	1.4269	µg/L	0.45421	1.4269	ppb	0.45421	31.83%
Na 589.592 Radial†	2097.2	591.50	µg/L	2.454	591.50	ppb	2.454	0.41%

Ni 231.604†	217.7	12.562	µg/L	0.4065	12.562	ppb	0.4065	3.24%
P 214.914†	121.7	247.68	µg/L	6.632	247.68	ppb	6.632	2.68%
Pb 220.353†	88.7	24.575	µg/L	0.7840	24.575	ppb	0.7840	3.19%
S 181.975 Axial†	33.2	173.59	µg/L	5.295	173.59	ppb	5.295	3.05%
Sb 206.836†	-2.4	-1.1387	µg/L	3.51207	-1.1387	ppb	3.51207	308.44%
Se 196.026†	-11.4	-0.5367	µg/L	7.35572	-0.5367	ppb	7.35572	>999.9%
SiO2†	37635.4	7634.6	µg/L	17.32	7634.6	ppb	17.32	0.23%
Si 251.611†	43766.4	3539.8	µg/L	8.90	3539.8	ppb	8.90	0.25%
Sn 189.927†	-24.7	-7.6705	µg/L	0.78122	-7.6705	ppb	0.78122	10.18%
Sr 421.552†	7990.4	46.114	µg/L	0.1616	46.114	ppb	0.1616	0.35%
Ti 334.940†	245867.1	565.57	µg/L	0.308	565.57	ppb	0.308	0.05%
Tl 190.801†	-0.5	4.5407	µg/L	2.69534	4.5407	ppb	2.69534	59.36%
U 409.014†	-176.4	-21.888	µg/L	1.6042	-21.888	ppb	1.6042	7.33%
V 292.402†	2518.0	32.142	µg/L	0.3220	32.142	ppb	0.3220	1.00%
Zn 213.857†	2805.2	76.563	µg/L	0.2464	76.563	ppb	0.2464	0.32%

Sequence No.: 28
Sample ID: 241539002|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 321
Date Collected: 12/14/2009 11:52:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539002|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116174.0	116174.0	104	%			11:53:30
1	Al 396.153Radial†	94592.8	91013.5	48101	µg/L	48101	ppb	11:53:30
1	Ca 317.933Radial†	117661.9	113001.6	45590	µg/L	45590	ppb	11:53:30
1	Fe 238.204 Radial†	31326.4	30183.6	160260	µg/L	160260	ppb	11:53:50
1	K 766.490 Radial†	15538.3	14230.7	8028.1	µg/L	8028.1	ppb	11:53:30
1	Mg 279.077 IEC†	2532.6	2425.2	13446	µg/L	13446	ppb	11:53:50
1	Na 589.592 Radial†	3780.7	4045.9	1141.1	µg/L	1141.1	ppb	11:53:50
1	Sr 421.552†	40247.9	38886.3	224.42	µg/L	224.42	ppb	11:53:30
1	Sc 361.383	2026050.2	2026050.2	100.91	%			11:54:55
1	Y 371.029	1298800.3	1298800.3	106.17	%			11:54:55
1	Ag 328.068†	-1437.9	-1408.7	0.7635	µg/L	0.7635	ppb	11:55:01
1	As 188.979†	22.6	19.2	14.876	µg/L	14.876	ppb	11:55:21
1	B 249.677†	2060.6	1880.3	37.042	µg/L	37.042	ppb	11:55:01
1	Ba 233.527†	33575.4	33346.1	892.47	µg/L	892.47	ppb	11:55:01
1	Be 313.107†	15456.6	11698.8	6.5650	µg/L	6.5650	ppb	11:55:01
1	Cd 226.502†	419.8	513.6	2.1007	µg/L	2.1007	ppb	11:55:01
1	Co 228.616†	985.3	1046.3	47.199	µg/L	47.199	ppb	11:55:21
1	Cr 267.716†	4736.7	4818.3	107.46	µg/L	107.46	ppb	11:55:01
1	Cu 324.752†	11624.6	8211.2	93.088	µg/L	93.088	ppb	11:55:01
1	Mn 257.610†	1420493.0	1407972.9	4652.7	µg/L	4652.7	ppb	11:54:55
1	Mo 202.031†	42.5	46.8	11.891	µg/L	11.891	ppb	11:55:21
1	Ni 231.604†	1788.4	1481.3	85.490	µg/L	85.490	ppb	11:55:21
1	P 214.914†	7821.1	7560.8	16647	µg/L	16647	ppb	11:55:01
1	Pb 220.353†	406.1	351.5	94.982	µg/L	94.982	ppb	11:55:21
1	S 181.975 Axial†	118.3	91.6	464.18	µg/L	464.18	ppb	11:55:21
1	Sb 206.836†	30.6	6.2	12.354	µg/L	12.354	ppb	11:55:21
1	Se 196.026†	-75.3	-85.4	-13.021	µg/L	-13.021	ppb	11:55:21
1	SiO2†	161730.6	158243.3	32101	µg/L	32101	ppb	11:54:55
1	Si 251.611†	185120.0	183099.3	14792	µg/L	14792	ppb	11:54:55
1	Sn 189.927†	-120.1	-141.4	-40.467	µg/L	-40.467	ppb	11:55:21
1	Ti 334.940†	1255405.3	1243322.7	2859.3	µg/L	2859.3	ppb	11:54:55
1	Tl 190.801†	-33.8	-13.4	11.596	µg/L	11.596	ppb	11:55:21
1	U 409.014†	622.3	-84.9	-37.310	µg/L	-37.310	ppb	11:54:55
1	V 292.402†	18008.5	17937.1	228.38	µg/L	228.38	ppb	11:55:01
1	Zn 213.857†	13909.3	13256.4	356.62	µg/L	356.62	ppb	11:55:01
2	Sc RADIAL	116559.6	116559.6	104	%			11:53:56
2	Al 396.153Radial†	95493.2	91576.9	48399	µg/L	48399	ppb	11:53:56
2	Ca 317.933Radial†	118407.1	113342.3	45727	µg/L	45727	ppb	11:53:56
2	Fe 238.204 Radial†	31301.0	30059.3	159600	µg/L	159600	ppb	11:54:16
2	K 766.490 Radial†	15631.0	14270.3	8050.4	µg/L	8050.4	ppb	11:53:56
2	Mg 279.077 IEC†	2529.9	2414.5	13387	µg/L	13387	ppb	11:54:16
2	Na 589.592 Radial†	3795.7	4048.2	1141.8	µg/L	1141.8	ppb	11:54:16
2	Sr 421.552†	40645.8	39140.1	225.88	µg/L	225.88	ppb	11:53:56
2	Sc 361.383	2023391.7	2023391.7	100.77	%			11:55:29
2	Y 371.029	1297615.4	1297615.4	106.07	%			11:55:29
2	Ag 328.068†	-1459.1	-1431.6	0.4982	µg/L	0.4982	ppb	11:55:35
2	As 188.979†	17.5	14.2	5.2319	µg/L	5.2319	ppb	11:55:55
2	B 249.677†	2095.1	1917.2	38.964	µg/L	38.964	ppb	11:55:35
2	Ba 233.527†	33567.6	33382.0	893.43	µg/L	893.43	ppb	11:55:35
2	Be 313.107†	15524.0	11785.9	6.6146	µg/L	6.6146	ppb	11:55:35
2	Cd 226.502†	399.7	494.2	1.6120	µg/L	1.6120	ppb	11:55:35
2	Co 228.616†	992.7	1054.9	47.596	µg/L	47.596	ppb	11:55:55
2	Cr 267.716†	4734.5	4822.3	107.55	µg/L	107.55	ppb	11:55:35
2	Cu 324.752†	11685.7	8287.0	93.487	µg/L	93.487	ppb	11:55:35
2	Mn 257.610†	1429734.0	1418992.5	4688.9	µg/L	4688.9	ppb	11:55:29
2	Mo 202.031†	38.3	42.7	11.376	µg/L	11.376	ppb	11:55:55
2	Ni 231.604†	1777.5	1472.8	85.002	µg/L	85.002	ppb	11:55:55
2	P 214.914†	7809.6	7559.6	16645	µg/L	16645	ppb	11:55:35
2	Pb 220.353†	413.8	359.7	97.174	µg/L	97.174	ppb	11:55:55

2	S 181.975 Axial†	110.9	84.4	426.04 µg/L	426.04 ppb	11:55:55
2	Sb 206.836†	26.0	1.7	7.7401 µg/L	7.7401 ppb	11:55:55
2	Se 196.026†	-62.5	-72.8	5.1235 µg/L	5.1235 ppb	11:55:55
2	SiO2†	162388.5	159106.8	32276 µg/L	32276 ppb	11:55:29
2	Si 251.611†	186050.9	184264.1	14886 µg/L	14886 ppb	11:55:29
2	Sn 189.927†	-117.7	-139.2	-39.374 µg/L	-39.374 ppb	11:55:55
2	Ti 334.940†	1262154.0	1251654.2	2878.5 µg/L	2878.5 ppb	11:55:29
2	Tl 190.801†	-34.8	-14.4	10.250 µg/L	10.250 ppb	11:55:55
2	U 409.014†	688.4	-18.5	-30.557 µg/L	-30.557 ppb	11:55:29
2	V 292.402†	18034.0	17985.9	228.92 µg/L	228.92 ppb	11:55:35
2	Zn 213.857†	13924.5	13289.7	357.63 µg/L	357.63 ppb	11:55:35
3	Sc RADIAL	115626.1	115626.1	103 %		11:54:22
3	Al 396.153Radial†	95637.1	92456.9	48864 µg/L	48864 ppb	11:54:22
3	Ca 317.933Radial†	118417.1	114270.4	46102 µg/L	46102 ppb	11:54:22
3	Fe 238.204 Radial†	31286.2	30287.7	160820 µg/L	160820 ppb	11:54:42
3	K 766.490 Radial†	15729.1	14486.5	8172.4 µg/L	8172.4 ppb	11:54:22
3	Mg 279.077 IEC†	2524.0	2428.4	13463 µg/L	13463 ppb	11:54:42
3	Na 589.592 Radial†	3791.4	4073.5	1148.9 µg/L	1148.9 ppb	11:54:42
3	Sr 421.552†	40621.6	39431.9	227.57 µg/L	227.57 ppb	11:54:22
3	Sc 361.383	2030220.6	2030220.6	101.11 %		11:56:03
3	Y 371.029	1301100.5	1301100.5	106.35 %		11:56:03
3	Ag 328.068†	-1410.6	-1378.8	1.0758 µg/L	1.0758 ppb	11:56:09
3	As 188.979†	28.5	25.0	25.934 µg/L	25.934 ppb	11:56:29
3	B 249.677†	2080.4	1895.7	37.582 µg/L	37.582 ppb	11:56:09
3	Ba 233.527†	33295.0	33000.4	883.22 µg/L	883.22 ppb	11:56:09
3	Be 313.107†	15525.9	11735.9	6.5869 µg/L	6.5869 ppb	11:56:09
3	Cd 226.502†	450.9	543.5	2.8945 µg/L	2.8945 ppb	11:56:09
3	Co 228.616†	995.0	1053.9	47.574 µg/L	47.574 ppb	11:56:29
3	Cr 267.716†	4685.3	4757.9	106.11 µg/L	106.11 ppb	11:56:09
3	Cu 324.752†	11601.3	8164.5	92.873 µg/L	92.873 ppb	11:56:09
3	Mn 257.610†	1426602.5	1411123.3	4663.2 µg/L	4663.2 ppb	11:56:03
3	Mo 202.031†	48.2	52.5	12.586 µg/L	12.586 ppb	11:56:29
3	Ni 231.604†	1783.4	1472.7	84.995 µg/L	84.995 ppb	11:56:29
3	P 214.914†	7722.6	7447.4	16394 µg/L	16394 ppb	11:56:09
3	Pb 220.353†	401.7	346.3	93.687 µg/L	93.687 ppb	11:56:29
3	S 181.975 Axial†	111.0	84.1	424.28 µg/L	424.28 ppb	11:56:29
3	Sb 206.836†	30.5	6.0	12.143 µg/L	12.143 ppb	11:56:29
3	Se 196.026†	-72.6	-82.6	-8.4216 µg/L	-8.4216 ppb	11:56:29
3	SiO2†	162380.8	158557.1	32164 µg/L	32164 ppb	11:56:03
3	Si 251.611†	186052.5	183644.7	14836 µg/L	14836 ppb	11:56:03
3	Sn 189.927†	-114.5	-135.6	-37.338 µg/L	-37.338 ppb	11:56:29
3	Ti 334.940†	1260666.3	1245970.1	2865.4 µg/L	2865.4 ppb	11:56:03
3	Tl 190.801†	-28.8	-8.4	19.449 µg/L	19.449 ppb	11:56:29
3	U 409.014†	578.1	-129.9	-41.888 µg/L	-41.888 ppb	11:56:03
3	V 292.402†	17862.4	17756.0	226.25 µg/L	226.25 ppb	11:56:09
3	Zn 213.857†	13816.8	13136.6	353.18 µg/L	353.18 ppb	11:56:09

Mean Data: 241539002|931881|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026554.2	100.93	%	0.171				0.17%
Sc RADIAL	116119.9	104	%	0.4				0.40%
Y 371.029	1299172.1	106.20	%	0.145				0.14%
Ag 328.068†	-1406.4	0.7791	µg/L	0.28913	0.7791	ppb	0.28913	37.11%
Al 396.153Radial†	91682.4	48455	µg/L	384.5	48455	ppb	384.5	0.79%
As 188.979†	19.5	15.347	µg/L	10.3591	15.347	ppb	10.3591	67.50%
B 249.677†	1897.7	37.863	µg/L	0.9915	37.863	ppb	0.9915	2.62%
Ba 233.527†	33242.8	889.70	µg/L	5.639	889.70	ppb	5.639	0.63%
Be 313.107†	11740.2	6.5888	µg/L	0.02487	6.5888	ppb	0.02487	0.38%
Ca 317.933Radial†	113538.1	45806	µg/L	264.9	45806	ppb	264.9	0.58%
Cd 226.502†	517.1	2.2024	µg/L	0.64725	2.2024	ppb	0.64725	29.39%
Co 228.616†	1051.7	47.456	µg/L	0.2231	47.456	ppb	0.2231	0.47%
Cr 267.716†	4799.5	107.04	µg/L	0.805	107.04	ppb	0.805	0.75%
Cu 324.752†	8220.9	93.149	µg/L	0.3117	93.149	ppb	0.3117	0.33%
Fe 238.204 Radial†	30176.9	160230	µg/L	607.3	160230	ppb	607.3	0.38%
K 766.490 Radial†	14329.1	8083.7	µg/L	77.68	8083.7	ppb	77.68	0.96%
Mg 279.077 IEC†	2422.7	13432	µg/L	40.3	13432	ppb	40.3	0.30%
Mn 257.610†	1412696.2	4668.3	µg/L	18.62	4668.3	ppb	18.62	0.40%
Mo 202.031†	47.4	11.951	µg/L	0.6070	11.951	ppb	0.6070	5.08%
Na 589.592 Radial†	4055.8	1143.9	µg/L	4.32	1143.9	ppb	4.32	0.38%

Ni 231.604†	1475.6	85.162 µg/L	0.2841	85.162 ppb	0.2841	0.33%
P 214.914†	7522.6	16562 µg/L	145.3	16562 ppb	145.3	0.88%
Pb 220.353†	352.5	95.281 µg/L	1.7628	95.281 ppb	1.7628	1.85%
S 181.975 Axial†	86.7	438.16 µg/L	22.545	438.16 ppb	22.545	5.15%
Sb 206.836†	4.6	10.746 µg/L	2.6051	10.746 ppb	2.6051	24.24%
Se 196.026†	-80.2	-5.4398 µg/L	9.43284	-5.4398 ppb	9.43284	173.40%
SiO2†	158635.7	32180 µg/L	88.7	32180 ppb	88.7	0.28%
Si 251.611†	183669.3	14838 µg/L	47.0	14838 ppb	47.0	0.32%
Sn 189.927†	-138.8	-39.060 µg/L	1.5883	-39.060 ppb	1.5883	4.07%
Sr 421.552†	39152.8	225.96 µg/L	1.576	225.96 ppb	1.576	0.70%
Ti 334.940†	1246982.3	2867.7 µg/L	9.80	2867.7 ppb	9.80	0.34%
Tl 190.801†	-12.1	13.765 µg/L	4.9684	13.765 ppb	4.9684	36.09%
U 409.014†	-77.8	-36.585 µg/L	5.7002	-36.585 ppb	5.7002	15.58%
V 292.402†	17893.0	227.85 µg/L	1.412	227.85 ppb	1.412	0.62%
Zn 213.857†	13227.6	355.81 µg/L	2.335	355.81 ppb	2.335	0.66%

Sequence No.: 29
Sample ID: 241539003|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 322
Date Collected: 12/14/2009 11:56:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539003|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114512.1	114512.1	102	%			11:57:11
1	Al 396.153Radial†	105561.4	103062.8	54470	µg/L	54470	ppb	11:57:11
1	Ca 317.933Radial†	53863.3	52259.7	21084	µg/L	21084	ppb	11:57:11
1	Fe 238.204 Radial†	24274.9	23726.2	125980	µg/L	125980	ppb	11:57:32
1	K 766.490 Radial†	15259.9	14175.8	7997.2	µg/L	7997.2	ppb	11:57:11
1	Mg 279.077 IEC†	2382.7	2314.0	12869	µg/L	12869	ppb	11:57:32
1	Na 589.592 Radial†	2246.0	2598.0	732.77	µg/L	732.77	ppb	11:57:32
1	Sr 421.552†	27985.6	27458.1	158.46	µg/L	158.46	ppb	11:57:11
1	Sc 361.383	2061709.0	2061709.0	102.68	%			11:58:37
1	Y 371.029	1301790.8	1301790.8	106.41	%			11:58:37
1	Ag 328.068†	-1076.9	-1032.5	1.2492	µg/L	1.2492	ppb	11:58:42
1	As 188.979†	14.5	11.0	8.2639	µg/L	8.2639	ppb	11:59:03
1	B 249.677†	1635.1	1430.6	26.911	µg/L	26.911	ppb	11:58:42
1	Ba 233.527†	32637.0	31856.6	852.51	µg/L	852.51	ppb	11:58:42
1	Be 313.107†	15837.6	11804.9	6.5386	µg/L	6.5386	ppb	11:58:42
1	Cd 226.502†	305.1	394.7	1.3729	µg/L	1.3729	ppb	11:59:03
1	Co 228.616†	793.3	842.4	36.296	µg/L	36.296	ppb	11:59:03
1	Cr 267.716†	2930.0	2977.6	66.470	µg/L	66.470	ppb	11:59:03
1	Cu 324.752†	8616.7	5082.6	63.372	µg/L	63.372	ppb	11:58:42
1	Mn 257.610†	1049960.4	1022774.2	3381.0	µg/L	3381.0	ppb	11:58:37
1	Mo 202.031†	29.4	33.4	8.9427	µg/L	8.9427	ppb	11:59:03
1	Ni 231.604†	1272.7	948.4	54.737	µg/L	54.737	ppb	11:59:03
1	P 214.914†	1936.3	1695.7	3640.0	µg/L	3640.0	ppb	11:59:03
1	Pb 220.353†	462.3	399.2	108.61	µg/L	108.61	ppb	11:59:03
1	S 181.975 Axial†	99.8	71.5	362.08	µg/L	362.08	ppb	11:59:03
1	Sb 206.836†	20.5	-4.2	4.9833	µg/L	4.9833	ppb	11:59:03
1	Se 196.026†	-36.2	-46.0	17.941	µg/L	17.941	ppb	11:59:03
1	SiO2†	155451.6	149356.2	30298	µg/L	30298	ppb	11:58:37
1	Si 251.611†	177823.5	172820.4	13946	µg/L	13946	ppb	11:58:37
1	Sn 189.927†	-71.0	-91.6	-24.605	µg/L	-24.605	ppb	11:59:03
1	Ti 334.940†	1392570.5	1355385.9	3118.7	µg/L	3118.7	ppb	11:58:37
1	Tl 190.801†	-36.6	-15.6	8.9503	µg/L	8.9503	ppb	11:59:03
1	U 409.014†	502.9	-211.8	-44.149	µg/L	-44.149	ppb	11:58:37
1	V 292.402†	13632.4	13366.8	170.70	µg/L	170.70	ppb	11:58:42
1	Zn 213.857†	14337.0	13434.5	365.51	µg/L	365.51	ppb	11:58:42
2	Sc RADIAL	115708.7	115708.7	103	%			11:57:37
2	Al 396.153Radial†	107524.0	103894.6	54909	µg/L	54909	ppb	11:57:37
2	Ca 317.933Radial†	54869.4	52688.7	21257	µg/L	21257	ppb	11:57:37
2	Fe 238.204 Radial†	24242.2	23449.0	124510	µg/L	124510	ppb	11:57:58
2	K 766.490 Radial†	15477.4	14232.0	8028.9	µg/L	8028.9	ppb	11:57:37
2	Mg 279.077 IEC†	2384.9	2292.0	12747	µg/L	12747	ppb	11:57:58
2	Na 589.592 Radial†	2243.1	2572.5	725.58	µg/L	725.58	ppb	11:57:58
2	Sr 421.552†	28468.9	27642.8	159.53	µg/L	159.53	ppb	11:57:37
2	Sc 361.383	2042042.9	2042042.9	101.70	%			11:59:10
2	Y 371.029	1290350.1	1290350.1	105.48	%			11:59:10
2	Ag 328.068†	-1036.7	-1003.1	1.4220	µg/L	1.4220	ppb	11:59:16
2	As 188.979†	18.0	14.5	15.533	µg/L	15.533	ppb	11:59:36
2	B 249.677†	1621.1	1432.2	27.445	µg/L	27.445	ppb	11:59:16
2	Ba 233.527†	32487.8	32016.1	856.78	µg/L	856.78	ppb	11:59:16
2	Be 313.107†	15911.1	12025.8	6.6594	µg/L	6.6594	ppb	11:59:16
2	Cd 226.502†	310.6	403.0	1.7199	µg/L	1.7199	ppb	11:59:36
2	Co 228.616†	784.8	841.5	36.122	µg/L	36.122	ppb	11:59:36
2	Cr 267.716†	2920.1	2995.5	66.869	µg/L	66.869	ppb	11:59:36
2	Cu 324.752†	8662.8	5208.8	63.957	µg/L	63.957	ppb	11:59:16
2	Mn 257.610†	1061105.5	1043580.1	3449.3	µg/L	3449.3	ppb	11:59:10
2	Mo 202.031†	42.1	46.2	10.406	µg/L	10.406	ppb	11:59:36
2	Ni 231.604†	1263.5	951.3	54.903	µg/L	54.903	ppb	11:59:36
2	P 214.914†	1926.5	1704.3	3660.8	µg/L	3660.8	ppb	11:59:36
2	Pb 220.353†	460.6	401.9	109.39	µg/L	109.39	ppb	11:59:36

2	S 181.975 Axial†	99.9	72.5	367.73 µg/L	367.73 ppb	11:59:36
2	Sb 206.836†	19.6	-4.9	4.5081 µg/L	4.5081 ppb	11:59:36
2	Se 196.026†	-29.0	-39.3	26.809 µg/L	26.809 ppb	11:59:36
2	SiO2†	157040.6	152376.6	30911 µg/L	30911 ppb	11:59:10
2	Si 251.611†	179632.4	176266.8	14224 µg/L	14224 ppb	11:59:10
2	Sn 189.927†	-72.3	-93.5	-25.743 µg/L	-25.743 ppb	11:59:36
2	Ti 334.940†	1406886.7	1382523.2	3181.1 µg/L	3181.1 ppb	11:59:10
2	Tl 190.801†	-39.9	-19.2	3.9937 µg/L	3.9937 ppb	11:59:36
2	U 409.014†	480.2	-229.4	-45.626 µg/L	-45.626 ppb	11:59:10
2	V 292.402†	13622.0	13484.3	172.00 µg/L	172.00 ppb	11:59:16
2	Zn 213.857†	14334.8	13566.8	369.41 µg/L	369.41 ppb	11:59:16
3	Sc RADIAL	115846.2	115846.2	103 %		11:58:03
3	Al 396.153Radial†	107697.5	103938.8	54933 µg/L	54933 ppb	11:58:03
3	Ca 317.933Radial†	54930.0	52684.2	21255 µg/L	21255 ppb	11:58:03
3	Fe 238.204 Radial†	24123.5	23306.5	123750 µg/L	123750 ppb	11:58:24
3	K 766.490 Radial†	15358.2	14099.0	7953.9 µg/L	7953.9 ppb	11:58:03
3	Mg 279.077 IEC†	2384.3	2288.7	12730 µg/L	12730 ppb	11:58:24
3	Na 589.592 Radial†	2218.3	2545.9	718.08 µg/L	718.08 ppb	11:58:24
3	Sr 421.552†	28492.1	27632.6	159.47 µg/L	159.47 ppb	11:58:03
3	Sc 361.383	2034507.3	2034507.3	101.33 %		11:59:44
3	Y 371.029	1285462.2	1285462.2	105.08 %		11:59:44
3	Ag 328.068†	-1085.7	-1055.2	0.8714 µg/L	0.8714 ppb	11:59:50
3	As 188.979†	17.7	14.3	15.187 µg/L	15.187 ppb	12:00:10
3	B 249.677†	1598.1	1415.4	26.904 µg/L	26.904 ppb	11:59:50
3	Ba 233.527†	32367.2	32015.4	856.76 µg/L	856.76 ppb	11:59:50
3	Be 313.107†	15698.4	11873.8	6.5566 µg/L	6.5566 ppb	11:59:50
3	Cd 226.502†	301.5	395.1	1.5585 µg/L	1.5585 ppb	12:00:10
3	Co 228.616†	792.0	851.5	36.606 µg/L	36.606 ppb	12:00:10
3	Cr 267.716†	2921.4	3007.3	67.134 µg/L	67.134 ppb	12:00:10
3	Cu 324.752†	8516.5	5095.9	62.988 µg/L	62.988 ppb	11:59:50
3	Mn 257.610†	1059556.0	1045915.3	3456.9 µg/L	3456.9 ppb	11:59:44
3	Mo 202.031†	34.9	39.2	9.5447 µg/L	9.5447 ppb	12:00:10
3	Ni 231.604†	1255.0	947.5	54.684 µg/L	54.684 ppb	12:00:10
3	P 214.914†	1935.5	1720.1	3697.2 µg/L	3697.2 ppb	12:00:10
3	Pb 220.353†	452.5	395.6	107.72 µg/L	107.72 ppb	12:00:10
3	S 181.975 Axial†	100.4	73.4	372.36 µg/L	372.36 ppb	12:00:10
3	Sb 206.836†	25.7	1.2	10.840 µg/L	10.840 ppb	12:00:10
3	Se 196.026†	-41.8	-52.0	7.5540 µg/L	7.5540 ppb	12:00:10
3	SiO2†	156612.1	152525.7	30941 µg/L	30941 ppb	11:59:44
3	Si 251.611†	179368.3	176660.4	14255 µg/L	14255 ppb	11:59:44
3	Sn 189.927†	-64.3	-85.8	-21.917 µg/L	-21.917 ppb	12:00:10
3	Ti 334.940†	1406226.3	1386995.2	3191.4 µg/L	3191.4 ppb	11:59:44
3	Tl 190.801†	-31.0	-10.5	17.645 µg/L	17.645 ppb	12:00:10
3	U 409.014†	497.8	-210.3	-43.579 µg/L	-43.579 ppb	11:59:44
3	V 292.402†	13615.8	13527.8	172.45 µg/L	172.45 ppb	11:59:50
3	Zn 213.857†	14197.6	13483.7	367.14 µg/L	367.14 ppb	11:59:50

Mean Data: 241539003|931881|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2046086.4	101.90	%	0.699				0.69%
Sc RADIAL	115355.7	103	%	0.7				0.64%
Y 371.029	1292534.3	105.65	%	0.685				0.65%
Ag 328.068†	-1030.3	1.1808	µg/L	0.28161	1.1808	ppb	0.28161	23.85%
Al 396.153Radial†	103632.1	54771	µg/L	260.8	54771	ppb	260.8	0.48%
As 188.979†	13.3	12.994	µg/L	4.1004	12.994	ppb	4.1004	31.55%
B 249.677†	1426.1	27.087	µg/L	0.3105	27.087	ppb	0.3105	1.15%
Ba 233.527†	31962.7	855.35	µg/L	2.459	855.35	ppb	2.459	0.29%
Be 313.107†	11901.5	6.5849	µg/L	0.06519	6.5849	ppb	0.06519	0.99%
Ca 317.933Radial†	52544.2	21199	µg/L	99.4	21199	ppb	99.4	0.47%
Cd 226.502†	397.6	1.5504	µg/L	0.17360	1.5504	ppb	0.17360	11.20%
Co 228.616†	845.1	36.341	µg/L	0.2448	36.341	ppb	0.2448	0.67%
Cr 267.716†	2993.5	66.824	µg/L	0.3342	66.824	ppb	0.3342	0.50%
Cu 324.752†	5129.1	63.439	µg/L	0.4879	63.439	ppb	0.4879	0.77%
Fe 238.204 Radial†	23493.9	124740	µg/L	1133.2	124740	ppb	1133.2	0.91%
K 766.490 Radial†	14169.0	7993.3	µg/L	37.66	7993.3	ppb	37.66	0.47%
Mg 279.077 IEC†	2298.2	12782	µg/L	76.1	12782	ppb	76.1	0.60%
Mn 257.610†	1037423.2	3429.1	µg/L	41.78	3429.1	ppb	41.78	1.22%
Mo 202.031†	39.6	9.6311	µg/L	0.73545	9.6311	ppb	0.73545	7.64%
Na 589.592 Radial†	2572.2	725.48	µg/L	7.344	725.48	ppb	7.344	1.01%

Ni 231.604†	949.1	54.775	µg/L	0.1142	54.775	ppb	0.1142	0.21%
P 214.914†	1706.7	3666.0	µg/L	28.94	3666.0	ppb	28.94	0.79%
Pb 220.353†	398.9	108.57	µg/L	0.837	108.57	ppb	0.837	0.77%
S 181.975 Axial†	72.5	367.39	µg/L	5.152	367.39	ppb	5.152	1.40%
Sb 206.836†	-2.6	6.7770	µg/L	3.52634	6.7770	ppb	3.52634	52.03%
Se 196.026†	-45.8	17.434	µg/L	9.6375	17.434	ppb	9.6375	55.28%
SiO2†	151419.5	30717	µg/L	362.8	30717	ppb	362.8	1.18%
Si 251.611†	175249.2	14141	µg/L	170.4	14141	ppb	170.4	1.21%
Sn 189.927†	-90.3	-24.088	µg/L	1.9647	-24.088	ppb	1.9647	8.16%
Sr 421.552†	27577.8	159.16	µg/L	0.599	159.16	ppb	0.599	0.38%
Ti 334.940†	1374968.1	3163.7	µg/L	39.37	3163.7	ppb	39.37	1.24%
Tl 190.801†	-15.1	10.196	µg/L	6.9106	10.196	ppb	6.9106	67.77%
U 409.014†	-217.2	-44.451	µg/L	1.0564	-44.451	ppb	1.0564	2.38%
V 292.402†	13459.6	171.72	µg/L	0.911	171.72	ppb	0.911	0.53%
Zn 213.857†	13495.0	367.36	µg/L	1.957	367.36	ppb	1.957	0.53%

Sequence No.: 30
Sample ID: 241539004|931881|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 323
Date Collected: 12/14/2009 12:00:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241539004|931881|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115293.8	115293.8	103	%			12:00:52
1	Al 396.153Radial†	138235.3	134097.8	70872	µg/L	70872	ppb	12:00:52
1	Ca 317.933Radial†	253693.0	245988.9	99243	µg/L	99243	ppb	12:00:52
1	Fe 238.204 Radial†	21801.5	21162.9	112370	µg/L	112370	ppb	12:00:58
1	K 766.490 Radial†	16948.2	15714.4	8865.1	µg/L	8865.1	ppb	12:00:58
1	Mg 279.077 IEC†	3167.9	3060.9	17103	µg/L	17103	ppb	12:00:58
1	Na 589.592 Radial†	7274.7	7467.2	2106.1	µg/L	2106.1	ppb	12:00:58
1	Sr 421.552†	51088.5	49711.4	286.89	µg/L	286.89	ppb	12:00:52
1	Sc 361.383	2016630.0	2016630.0	100.44	%			12:01:32
1	Y 371.029	1275602.5	1275602.5	104.27	%			12:01:32
1	Ag 328.068†	-1076.0	-1055.0	-0.0199	µg/L	-0.0199	ppb	12:01:38
1	As 188.979†	34.0	30.7	35.741	µg/L	35.741	ppb	12:01:58
1	B 249.677†	1571.6	1403.0	29.906	µg/L	29.906	ppb	12:01:38
1	Ba 233.527†	50447.3	50299.9	1345.9	µg/L	1345.9	ppb	12:01:38
1	Be 313.107†	17323.7	13629.3	7.8529	µg/L	7.8529	ppb	12:01:38
1	Cd 226.502†	291.4	387.8	2.2317	µg/L	2.2317	ppb	12:01:58
1	Co 228.616†	1526.9	1590.0	74.996	µg/L	74.996	ppb	12:01:58
1	Cr 267.716†	3274.5	3384.5	75.507	µg/L	75.507	ppb	12:01:38
1	Cu 324.752†	10996.0	7639.1	78.713	µg/L	78.713	ppb	12:01:38
1	Mn 257.610†	1820862.1	1813172.6	5979.9	µg/L	5979.9	ppb	12:01:32
1	Mo 202.031†	46.2	50.8	10.478	µg/L	10.478	ppb	12:01:58
1	Ni 231.604†	1422.3	1125.1	64.929	µg/L	64.929	ppb	12:01:58
1	P 214.914†	909.6	715.6	1477.8	µg/L	1477.8	ppb	12:01:58
1	Pb 220.353†	733.8	679.6	184.27	µg/L	184.27	ppb	12:01:58
1	S 181.975 Axial†	146.3	119.9	622.69	µg/L	622.69	ppb	12:01:58
1	Sb 206.836†	39.7	15.4	16.772	µg/L	16.772	ppb	12:01:58
1	Se 196.026†	-60.0	-70.6	-18.703	µg/L	-18.703	ppb	12:01:58
1	SiO2†	138558.3	135920.7	27572	µg/L	27572	ppb	12:01:38
1	Si 251.611†	158925.3	157875.7	12743	µg/L	12743	ppb	12:01:38
1	Sn 189.927†	-155.3	-177.0	-51.640	µg/L	-51.640	ppb	12:01:58
1	Ti 334.940†	1214563.7	1208470.7	2776.1	µg/L	2776.1	ppb	12:01:32
1	Tl 190.801†	-21.1	-0.9	27.989	µg/L	27.989	ppb	12:01:58
1	U 409.014†	314.7	-388.3	-57.353	µg/L	-57.353	ppb	12:01:32
1	V 292.402†	13552.5	13583.9	172.18	µg/L	172.18	ppb	12:01:38
1	Zn 213.857†	16432.6	15833.1	434.54	µg/L	434.54	ppb	12:01:38
2	Sc RADIAL	116060.9	116060.9	104	%			12:01:03
2	Al 396.153Radial†	139139.7	134082.9	70864	µg/L	70864	ppb	12:01:03
2	Ca 317.933Radial†	255313.0	245923.2	99217	µg/L	99217	ppb	12:01:03
2	Fe 238.204 Radial†	21860.5	21079.9	111930	µg/L	111930	ppb	12:01:09
2	K 766.490 Radial†	16936.4	15594.2	8797.3	µg/L	8797.3	ppb	12:01:09
2	Mg 279.077 IEC†	3167.5	3040.1	16986	µg/L	16986	ppb	12:01:09
2	Na 589.592 Radial†	7224.5	7372.2	2079.3	µg/L	2079.3	ppb	12:01:09
2	Sr 421.552†	51376.1	49660.9	286.60	µg/L	286.60	ppb	12:01:03
2	Sc 361.383	2004150.5	2004150.5	99.816	%			12:02:06
2	Y 371.029	1267932.4	1267932.4	103.64	%			12:02:06
2	Ag 328.068†	-1053.0	-1038.6	0.1080	µg/L	0.1080	ppb	12:02:11
2	As 188.979†	31.0	27.9	30.314	µg/L	30.314	ppb	12:02:32
2	B 249.677†	1529.5	1370.5	28.535	µg/L	28.535	ppb	12:02:11
2	Ba 233.527†	50332.8	50497.9	1351.2	µg/L	1351.2	ppb	12:02:11
2	Be 313.107†	17286.7	13699.6	7.8967	µg/L	7.8967	ppb	12:02:11
2	Cd 226.502†	287.7	385.9	2.2084	µg/L	2.2084	ppb	12:02:32
2	Co 228.616†	1535.2	1607.8	75.888	µg/L	75.888	ppb	12:02:32
2	Cr 267.716†	3230.4	3360.6	74.979	µg/L	74.979	ppb	12:02:11
2	Cu 324.752†	11122.8	7834.4	80.013	µg/L	80.013	ppb	12:02:11
2	Mn 257.610†	1812146.1	1815729.3	5988.3	µg/L	5988.3	ppb	12:02:06
2	Mo 202.031†	46.8	51.7	10.571	µg/L	10.571	ppb	12:02:32
2	Ni 231.604†	1431.7	1143.3	65.983	µg/L	65.983	ppb	12:02:32
2	P 214.914†	908.0	719.6	1487.1	µg/L	1487.1	ppb	12:02:32
2	Pb 220.353†	736.4	686.8	186.17	µg/L	186.17	ppb	12:02:32

2	S 181.975 Axial†	138.2	112.8	584.35	µg/L	584.35 ppb	12:02:32
2	Sb 206.836†	29.9	5.8	6.8196	µg/L	6.8196 ppb	12:02:32
2	Se 196.026†	-62.8	-73.7	-23.620	µg/L	-23.620 ppb	12:02:32
2	SiO2†	138616.2	136837.8	27759	µg/L	27759 ppb	12:02:11
2	Si 251.611†	158926.2	158861.9	12823	µg/L	12823 ppb	12:02:11
2	Sn 189.927†	-150.0	-172.6	-49.520	µg/L	-49.520 ppb	12:02:32
2	Ti 334.940†	1209379.8	1210807.3	2781.5	µg/L	2781.5 ppb	12:02:06
2	Tl 190.801†	-16.9	3.2	34.524	µg/L	34.524 ppb	12:02:32
2	U 409.014†	235.2	-466.0	-65.019	µg/L	-65.019 ppb	12:02:06
2	V 292.402†	13560.6	13676.1	173.24	µg/L	173.24 ppb	12:02:11
2	Zn 213.857†	16401.3	15903.7	436.58	µg/L	436.58 ppb	12:02:11
3	Sc RADIAL	115409.8	115409.8	103	%		12:01:14
3	Al 396.153Radial†	138788.4	134499.4	71084	µg/L	71084 ppb	12:01:14
3	Ca 317.933Radial†	253716.3	245763.8	99152	µg/L	99152 ppb	12:01:14
3	Fe 238.204 Radial†	21915.9	21252.6	112850	µg/L	112850 ppb	12:01:19
3	K 766.490 Radial†	16997.2	15745.4	8882.6	µg/L	8882.6 ppb	12:01:19
3	Mg 279.077 IEC†	3193.7	3082.8	17226	µg/L	17226 ppb	12:01:19
3	Na 589.592 Radial†	7273.5	7459.0	2103.8	µg/L	2103.8 ppb	12:01:19
3	Sr 421.552†	51240.4	49809.0	287.46	µg/L	287.46 ppb	12:01:14
3	Sc 361.383	2010977.2	2010977.2	100.16	%		12:02:39
3	Y 371.029	1272171.9	1272171.9	103.99	%		12:02:39
3	Ag 328.068†	-1078.2	-1060.3	-0.0330	µg/L	-0.0330 ppb	12:02:45
3	As 188.979†	40.2	37.0	47.909	µg/L	47.909 ppb	12:03:05
3	B 249.677†	1511.5	1347.4	27.169	µg/L	27.169 ppb	12:02:45
3	Ba 233.527†	50031.9	50026.3	1338.6	µg/L	1338.6 ppb	12:02:45
3	Be 313.107†	17166.9	13521.3	7.7787	µg/L	7.7787 ppb	12:02:45
3	Cd 226.502†	289.5	386.7	2.1621	µg/L	2.1621 ppb	12:03:05
3	Co 228.616†	1507.9	1575.3	74.228	µg/L	74.228 ppb	12:03:05
3	Cr 267.716†	3216.7	3336.0	74.430	µg/L	74.430 ppb	12:02:45
3	Cu 324.752†	11051.3	7725.1	79.429	µg/L	79.429 ppb	12:02:45
3	Mn 257.610†	1821161.4	1818567.5	5997.7	µg/L	5997.7 ppb	12:02:39
3	Mo 202.031†	44.1	48.8	10.266	µg/L	10.266 ppb	12:03:05
3	Ni 231.604†	1421.5	1128.3	65.113	µg/L	65.113 ppb	12:03:05
3	P 214.914†	893.8	702.4	1447.9	µg/L	1447.9 ppb	12:03:05
3	Pb 220.353†	724.7	672.6	182.43	µg/L	182.43 ppb	12:03:05
3	S 181.975 Axial†	147.7	121.8	632.43	µg/L	632.43 ppb	12:03:05
3	Sb 206.836†	39.8	15.6	17.020	µg/L	17.020 ppb	12:03:05
3	Se 196.026†	-54.9	-65.6	-11.120	µg/L	-11.120 ppb	12:03:05
3	SiO2†	137729.2	135480.7	27483	µg/L	27483 ppb	12:02:45
3	Si 251.611†	157873.9	157270.8	12694	µg/L	12694 ppb	12:02:45
3	Sn 189.927†	-152.2	-174.3	-50.239	µg/L	-50.239 ppb	12:03:05
3	Ti 334.940†	1215600.5	1212905.1	2786.3	µg/L	2786.3 ppb	12:02:39
3	Tl 190.801†	-18.4	1.8	32.368	µg/L	32.368 ppb	12:03:05
3	U 409.014†	282.7	-419.4	-60.549	µg/L	-60.549 ppb	12:02:39
3	V 292.402†	13505.5	13575.0	172.11	µg/L	172.11 ppb	12:02:45
3	Zn 213.857†	16293.1	15739.8	431.85	µg/L	431.85 ppb	12:02:45

Mean Data: 241539004|931881|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2010585.9	100.14	%	0.311				0.31%
Sc RADIAL	115588.2	103	%	0.4				0.36%
Y 371.029	1271902.3	103.97	%	0.314				0.30%
Ag 328.068†	-1051.3	0.0184	µg/L	0.07790	0.0184	ppb	0.07790	423.10%
Al 396.153Radial†	134226.7	70940	µg/L	124.9	70940	ppb	124.9	0.18%
As 188.979†	31.8	37.988	µg/L	9.0103	37.988	ppb	9.0103	23.72%
B 249.677†	1373.6	28.537	µg/L	1.3685	28.537	ppb	1.3685	4.80%
Ba 233.527†	50274.7	1345.2	µg/L	6.34	1345.2	ppb	6.34	0.47%
Be 313.107†	13616.8	7.8427	µg/L	0.05965	7.8427	ppb	0.05965	0.76%
Ca 317.933Radial†	245891.9	99204	µg/L	46.7	99204	ppb	46.7	0.05%
Cd 226.502†	386.8	2.2007	µg/L	0.03541	2.2007	ppb	0.03541	1.61%
Co 228.616†	1591.1	75.037	µg/L	0.8310	75.037	ppb	0.8310	1.11%
Cr 267.716†	3360.3	74.972	µg/L	0.5388	74.972	ppb	0.5388	0.72%
Cu 324.752†	7732.9	79.385	µg/L	0.6512	79.385	ppb	0.6512	0.82%
Fe 238.204 Radial†	21165.1	112380	µg/L	458.7	112380	ppb	458.7	0.41%
K 766.490 Radial†	15684.7	8848.4	µg/L	45.05	8848.4	ppb	45.05	0.51%
Mg 279.077 IEC†	3061.2	17105	µg/L	119.7	17105	ppb	119.7	0.70%
Mn 257.610†	1815823.1	5988.7	µg/L	8.91	5988.7	ppb	8.91	0.15%
Mo 202.031†	50.4	10.438	µg/L	0.1564	10.438	ppb	0.1564	1.50%
Na 589.592 Radial†	7432.8	2096.4	µg/L	14.85	2096.4	ppb	14.85	0.71%

Ni 231.604†	1132.2	65.342	µg/L	0.5631	65.342	ppb	0.5631	0.86%
P 214.914†	712.6	1470.9	µg/L	20.49	1470.9	ppb	20.49	1.39%
Pb 220.353†	679.6	184.29	µg/L	1.871	184.29	ppb	1.871	1.02%
S 181.975 Axial†	118.2	613.16	µg/L	25.418	613.16	ppb	25.418	4.15%
Sb 206.836†	12.3	13.537	µg/L	5.8188	13.537	ppb	5.8188	42.98%
Se 196.026†	-70.0	-17.814	µg/L	6.2971	-17.814	ppb	6.2971	35.35%
SiO2†	136079.7	27605	µg/L	140.5	27605	ppb	140.5	0.51%
Si 251.611†	158002.8	12753	µg/L	65.4	12753	ppb	65.4	0.51%
Sn 189.927†	-174.6	-50.466	µg/L	1.0784	-50.466	ppb	1.0784	2.14%
Sr 421.552†	49727.1	286.98	µg/L	0.434	286.98	ppb	0.434	0.15%
Ti 334.940†	1210727.7	2781.3	µg/L	5.11	2781.3	ppb	5.11	0.18%
Tl 190.801†	1.4	31.627	µg/L	3.3299	31.627	ppb	3.3299	10.53%
U 409.014†	-424.5	-60.974	µg/L	3.8508	-60.974	ppb	3.8508	6.32%
V 292.402†	13611.7	172.51	µg/L	0.634	172.51	ppb	0.634	0.37%
Zn 213.857†	15825.5	434.33	µg/L	2.372	434.33	ppb	2.372	0.55%

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 12:03:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115688.4	115688.4	103	%			12:03:54
1	Al 396.153Radial†	10435.7	9936.8	5232.0	µg/L	5232.0	ppb	12:03:54
1	Ca 317.933Radial†	13760.7	12907.0	5207.3	µg/L	5207.3	ppb	12:04:14
1	Fe 238.204 Radial†	1051.4	1005.8	5357.9	µg/L	5357.9	ppb	12:04:14
1	K 766.490 Radial†	10075.5	9005.9	5080.6	µg/L	5080.6	ppb	12:03:54
1	Mg 279.077 IEC†	1004.2	955.9	5398.3	µg/L	5398.3	ppb	12:04:14
1	Na 589.592 Radial†	37658.9	36853.4	10394	µg/L	10394	ppb	12:03:54
1	Sr 421.552†	90646.8	87832.5	506.89	µg/L	506.89	ppb	12:03:54
1	Sc 361.383	2026117.2	2026117.2	100.91	%			12:05:18
1	Y 371.029	1225080.0	1225080.0	100.14	%			12:05:18
1	Ag 328.068†	56143.3	55653.1	531.71	µg/L	531.71	ppb	12:05:23
1	As 188.979†	266.0	260.5	504.83	µg/L	504.83	ppb	12:05:44
1	B 249.677†	11616.4	11349.8	526.10	µg/L	526.10	ppb	12:05:23
1	Ba 233.527†	20031.0	19922.8	534.05	µg/L	534.05	ppb	12:05:23
1	Be 313.107†	800593.7	789752.6	514.52	µg/L	514.52	ppb	12:05:18
1	Cd 226.502†	19239.7	19163.7	539.02	µg/L	539.02	ppb	12:05:23
1	Co 228.616†	10557.8	10532.4	535.32	µg/L	535.32	ppb	12:05:23
1	Cr 267.716†	23994.2	23901.9	531.79	µg/L	531.79	ppb	12:05:23
1	Cu 324.752†	75191.6	71204.4	509.85	µg/L	509.85	ppb	12:05:23
1	Mn 257.610†	157621.1	156447.0	515.42	µg/L	515.42	ppb	12:05:18
1	Mo 202.031†	4371.7	4337.0	518.07	µg/L	518.07	ppb	12:05:44
1	Ni 231.604†	9656.0	9277.8	535.44	µg/L	535.44	ppb	12:05:23
1	P 214.914†	1375.0	1172.6	2554.0	µg/L	2554.0	ppb	12:05:44
1	Pb 220.353†	2041.8	1972.4	521.83	µg/L	521.83	ppb	12:05:44
1	S 181.975 Axial†	219.5	191.8	1024.7	µg/L	1024.7	ppb	12:05:44
1	Sb 206.836†	527.7	498.8	519.48	µg/L	519.48	ppb	12:05:44
1	Se 196.026†	371.0	356.9	529.19	µg/L	529.19	ppb	12:05:44
1	SiO2†	30625.0	28315.1	5743.9	µg/L	5743.9	ppb	12:05:23
1	Si 251.611†	33675.5	33014.9	2636.7	µg/L	2636.7	ppb	12:05:23
1	Sn 189.927†	1049.7	1017.8	521.33	µg/L	521.33	ppb	12:05:44
1	Ti 334.940†	223902.0	221083.6	508.60	µg/L	508.60	ppb	12:05:18
1	Tl 190.801†	316.2	333.4	526.64	µg/L	526.64	ppb	12:05:44
1	U 409.014†	5936.1	5181.0	515.86	µg/L	515.86	ppb	12:05:23
1	V 292.402†	44367.7	44058.0	533.67	µg/L	533.67	ppb	12:05:23
1	Zn 213.857†	19784.2	19077.9	534.85	µg/L	534.85	ppb	12:05:23
2	Sc RADIAL	115059.1	115059.1	103	%			12:04:19
2	Al 396.153Radial†	10371.0	9929.0	5228.0	µg/L	5228.0	ppb	12:04:19
2	Ca 317.933Radial†	13730.4	12950.4	5224.8	µg/L	5224.8	ppb	12:04:40
2	Fe 238.204 Radial†	1045.4	1005.5	5356.4	µg/L	5356.4	ppb	12:04:40
2	K 766.490 Radial†	10037.4	9022.2	5089.8	µg/L	5089.8	ppb	12:04:19
2	Mg 279.077 IEC†	990.1	947.6	5351.0	µg/L	5351.0	ppb	12:04:40
2	Na 589.592 Radial†	37462.4	36861.5	10397	µg/L	10397	ppb	12:04:19
2	Sr 421.552†	90364.9	88038.0	508.08	µg/L	508.08	ppb	12:04:19
2	Sc 361.383	2036361.8	2036361.8	101.42	%			12:05:51
2	Y 371.029	1231181.7	1231181.7	100.64	%			12:05:51
2	Ag 328.068†	55963.6	55196.0	527.34	µg/L	527.34	ppb	12:05:57
2	As 188.979†	264.5	257.6	499.27	µg/L	499.27	ppb	12:06:17
2	B 249.677†	11602.2	11277.9	522.76	µg/L	522.76	ppb	12:05:57
2	Ba 233.527†	19915.1	19708.6	528.31	µg/L	528.31	ppb	12:05:57
2	Be 313.107†	801685.2	786837.5	512.62	µg/L	512.62	ppb	12:05:51
2	Cd 226.502†	19164.6	18993.7	534.24	µg/L	534.24	ppb	12:05:57
2	Co 228.616†	10579.2	10500.8	533.71	µg/L	533.71	ppb	12:05:57
2	Cr 267.716†	23887.5	23677.2	526.78	µg/L	526.78	ppb	12:05:57
2	Cu 324.752†	75083.5	70722.9	506.41	µg/L	506.41	ppb	12:05:57
2	Mn 257.610†	157706.8	155745.7	513.11	µg/L	513.11	ppb	12:05:51
2	Mo 202.031†	4361.2	4304.8	514.23	µg/L	514.23	ppb	12:06:17
2	Ni 231.604†	9576.5	9151.3	528.14	µg/L	528.14	ppb	12:05:57
2	P 214.914†	1370.0	1160.8	2528.0	µg/L	2528.0	ppb	12:06:17
2	Pb 220.353†	2032.4	1952.9	516.66	µg/L	516.66	ppb	12:06:17

2	S 181.975 Axial†	217.6	188.8	1008.9 µg/L	1008.9 ppb	12:06:17
2	Sb 206.836†	521.2	489.8	510.05 µg/L	510.05 ppb	12:06:17
2	Se 196.026†	380.4	364.3	540.07 µg/L	540.07 ppb	12:06:17
2	SiO2†	30441.1	27981.1	5676.2 µg/L	5676.2 ppb	12:05:57
2	Si 251.611†	33554.6	32727.8	2613.8 µg/L	2613.8 ppb	12:05:57
2	Sn 189.927†	1042.8	1005.8	515.20 µg/L	515.20 ppb	12:06:17
2	Ti 334.940†	224140.9	220202.9	506.57 µg/L	506.57 ppb	12:05:51
2	Tl 190.801†	314.2	329.8	521.04 µg/L	521.04 ppb	12:06:17
2	U 409.014†	6048.8	5262.4	523.99 µg/L	523.99 ppb	12:05:57
2	V 292.402†	44164.1	43636.0	528.59 µg/L	528.59 ppb	12:05:57
2	Zn 213.857†	19706.6	18902.8	529.95 µg/L	529.95 ppb	12:05:57
3	Sc RADIAL	116120.5	116120.5	104 %		12:04:45
3	Al 396.153Radial†	10488.8	9950.3	5239.3 µg/L	5239.3 ppb	12:04:45
3	Ca 317.933Radial†	13728.2	12826.1	5174.6 µg/L	5174.6 ppb	12:05:06
3	Fe 238.204 Radial†	1045.5	996.3	5307.4 µg/L	5307.4 ppb	12:05:06
3	K 766.490 Radial†	10127.6	9019.8	5088.5 µg/L	5088.5 ppb	12:04:45
3	Mg 279.077 IEC†	989.7	938.4	5299.5 µg/L	5299.5 ppb	12:05:06
3	Na 589.592 Radial†	37704.0	36761.2	10369 µg/L	10369 ppb	12:04:45
3	Sr 421.552†	91333.7	88168.3	508.83 µg/L	508.83 ppb	12:04:45
3	Sc 361.383	2016231.6	2016231.6	100.42 %		12:06:24
3	Y 371.029	1219340.2	1219340.2	99.671 %		12:06:24
3	Ag 328.068†	55659.7	55444.3	529.71 µg/L	529.71 ppb	12:06:30
3	As 188.979†	268.0	263.7	511.11 µg/L	511.11 ppb	12:06:50
3	B 249.677†	11584.7	11374.7	527.27 µg/L	527.27 ppb	12:06:30
3	Ba 233.527†	19837.3	19827.2	531.49 µg/L	531.49 ppb	12:06:30
3	Be 313.107†	800622.7	793671.4	517.08 µg/L	517.08 ppb	12:06:24
3	Cd 226.502†	19022.8	19041.2	535.59 µg/L	535.59 ppb	12:06:30
3	Co 228.616†	10479.8	10506.0	533.96 µg/L	533.96 ppb	12:06:30
3	Cr 267.716†	23713.3	23738.8	528.16 µg/L	528.16 ppb	12:06:30
3	Cu 324.752†	74692.7	71072.9	508.90 µg/L	508.90 ppb	12:06:30
3	Mn 257.610†	157575.0	157166.9	517.79 µg/L	517.79 ppb	12:06:24
3	Mo 202.031†	4330.6	4317.4	515.72 µg/L	515.72 ppb	12:06:50
3	Ni 231.604†	9548.5	9217.7	531.97 µg/L	531.97 ppb	12:06:30
3	P 214.914†	1343.0	1147.4	2498.1 µg/L	2498.1 ppb	12:06:50
3	Pb 220.353†	2011.7	1952.3	516.50 µg/L	516.50 ppb	12:06:50
3	S 181.975 Axial†	218.7	192.1	1026.4 µg/L	1026.4 ppb	12:06:50
3	Sb 206.836†	520.3	494.0	514.44 µg/L	514.44 ppb	12:06:50
3	Se 196.026†	367.0	354.6	525.87 µg/L	525.87 ppb	12:06:50
3	SiO2†	30257.1	28097.5	5699.8 µg/L	5699.8 ppb	12:06:30
3	Si 251.611†	33324.2	32828.7	2621.7 µg/L	2621.7 ppb	12:06:30
3	Sn 189.927†	1034.2	1007.5	516.04 µg/L	516.04 ppb	12:06:50
3	Ti 334.940†	223983.1	222252.3	511.29 µg/L	511.29 ppb	12:06:24
3	Tl 190.801†	314.1	332.9	525.89 µg/L	525.89 ppb	12:06:50
3	U 409.014†	5989.9	5263.3	524.08 µg/L	524.08 ppb	12:06:30
3	V 292.402†	43984.5	43892.0	531.67 µg/L	531.67 ppb	12:06:30
3	Zn 213.857†	19588.1	18978.8	532.08 µg/L	532.08 ppb	12:06:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026236.9	100.92	%	0.501				0.50%
Sc RADIAL	115622.6	103	%	0.5				0.46%
Y 371.029	1225200.6	100.15	%	0.484				0.48%
Ag 328.068†	55431.2	529.58	µg/L	2.187	529.58	ppb	2.187	0.41%
QC value within limits for Ag 328.068 Recovery = 105.92%								
Al 396.153Radial†	9938.7	5233.1	µg/L	5.69	5233.1	ppb	5.69	0.11%
QC value within limits for Al 396.153Radial Recovery = 104.66%								
As 188.979†	260.6	505.07	µg/L	5.924	505.07	ppb	5.924	1.17%
QC value within limits for As 188.979 Recovery = 101.01%								
B 249.677†	11334.2	525.38	µg/L	2.343	525.38	ppb	2.343	0.45%
QC value within limits for B 249.677 Recovery = 105.08%								
Ba 233.527†	19819.5	531.28	µg/L	2.875	531.28	ppb	2.875	0.54%
QC value within limits for Ba 233.527 Recovery = 106.26%								
Be 313.107†	790087.1	514.74	µg/L	2.234	514.74	ppb	2.234	0.43%
QC value within limits for Be 313.107 Recovery = 102.95%								
Ca 317.933Radial†	12894.5	5202.2	µg/L	25.46	5202.2	ppb	25.46	0.49%
QC value within limits for Ca 317.933Radial Recovery = 104.04%								
Cd 226.502†	19066.2	536.28	µg/L	2.464	536.28	ppb	2.464	0.46%
QC value within limits for Cd 226.502 Recovery = 107.26%								
Co 228.616†	10513.1	534.33	µg/L	0.864	534.33	ppb	0.864	0.16%

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   QC value within limits for Co 228.616  Recovery = 106.87%
Cr 267.716†            23772.6      528.91 µg/L        2.584      528.91 ppb        2.584   0.49%
   QC value within limits for Cr 267.716  Recovery = 105.78%
Cu 324.752†            71000.0      508.39 µg/L        1.777      508.39 ppb        1.777   0.35%
   QC value within limits for Cu 324.752  Recovery = 101.68%
Fe 238.204 Radial†      1002.5      5340.6 µg/L        28.77      5340.6 ppb        28.77   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.81%
K 766.490 Radial†       9016.0      5086.3 µg/L         4.96      5086.3 ppb         4.96   0.10%
   QC value within limits for K 766.490 Radial  Recovery = 101.73%
Mg 279.077 IEC†          947.3      5349.6 µg/L        49.39      5349.6 ppb        49.39   0.92%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.99%
Mn 257.610†           156453.2      515.44 µg/L        2.335      515.44 ppb        2.335   0.45%
   QC value within limits for Mn 257.610  Recovery = 103.09%
Mo 202.031†             4319.7      516.01 µg/L        1.938      516.01 ppb        1.938   0.38%
   QC value within limits for Mo 202.031  Recovery = 103.20%
Na 589.592 Radial†     36825.4       10387 µg/L         15.7       10387 ppb         15.7   0.15%
   QC value within limits for Na 589.592 Radial  Recovery = 103.87%
Ni 231.604†             9215.6      531.85 µg/L        3.652      531.85 ppb        3.652   0.69%
   QC value within limits for Ni 231.604  Recovery = 106.37%
P 214.914†              1160.3      2526.7 µg/L        28.00      2526.7 ppb        28.00   1.11%
   QC value within limits for P 214.914  Recovery = 101.07%
Pb 220.353†             1959.2      518.33 µg/L        3.029      518.33 ppb        3.029   0.58%
   QC value within limits for Pb 220.353  Recovery = 103.67%
S 181.975 Axial†         190.9      1020.0 µg/L         9.67      1020.0 ppb         9.67   0.95%
   QC value within limits for S 181.975 Axial  Recovery = 102.00%
Sb 206.836†              494.2      514.66 µg/L        4.716      514.66 ppb        4.716   0.92%
   QC value within limits for Sb 206.836  Recovery = 102.93%
Se 196.026†              358.6      531.71 µg/L        7.428      531.71 ppb        7.428   1.40%
   QC value within limits for Se 196.026  Recovery = 106.34%
SiO2†                   28131.2      5706.6 µg/L        34.40      5706.6 ppb        34.40   0.60%
   QC value within limits for SiO2  Recovery = 106.72%
Si 251.611†             32857.2      2624.1 µg/L        11.67      2624.1 ppb        11.67   0.44%
   QC value within limits for Si 251.611  Recovery = 104.96%
Sn 189.927†             1010.4      517.52 µg/L        3.322      517.52 ppb        3.322   0.64%
   QC value within limits for Sn 189.927  Recovery = 103.50%
Sr 421.552†            88012.9      507.94 µg/L        0.977      507.94 ppb        0.977   0.19%
   QC value within limits for Sr 421.552  Recovery = 101.59%
Ti 334.940†           221179.6      508.82 µg/L        2.368      508.82 ppb        2.368   0.47%
   QC value within limits for Ti 334.940  Recovery = 101.76%
Tl 190.801†              332.0      524.52 µg/L        3.044      524.52 ppb        3.044   0.58%
   QC value within limits for Tl 190.801  Recovery = 104.90%
U 409.014†              5235.6      521.31 µg/L        4.720      521.31 ppb        4.720   0.91%
   QC value within limits for U 409.014  Recovery = 104.26%
V 292.402†             43862.0      531.31 µg/L        2.558      531.31 ppb        2.558   0.48%
   QC value within limits for V 292.402  Recovery = 106.26%
Zn 213.857†            18986.5      532.29 µg/L        2.458      532.29 ppb        2.458   0.46%
   QC value within limits for Zn 213.857  Recovery = 106.46%
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 12:06:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113628.7	113628.7	101	%			12:07:32
1	Al 396.153Radial†	170.7	3.8	1.9760	µg/L	1.9760	ppb	12:07:32
1	Ca 317.933Radial†	427.6	8.8	3.5511	µg/L	3.5511	ppb	12:07:52
1	Fe 238.204 Radial†	6.8	-5.2	-27.828	µg/L	-27.828	ppb	12:07:52
1	K 766.490 Radial†	734.1	-23.2	-13.062	µg/L	-13.062	ppb	12:07:32
1	Mg 279.077 IEC†	13.2	-3.0	-17.101	µg/L	-17.101	ppb	12:07:52
1	Na 589.592 Radial†	-679.4	-267.9	-75.572	µg/L	-75.572	ppb	12:07:32
1	Sr 421.552†	-46.6	45.4	0.2617	µg/L	0.2617	ppb	12:07:32
1	Sc 361.383	2042751.5	2042751.5	101.74	%			12:08:54
1	Y 371.029	1241594.6	1241594.6	101.49	%			12:08:54
1	Ag 328.068†	15.0	31.0	0.2913	µg/L	0.2913	ppb	12:09:00
1	As 188.979†	3.2	-0.0	-0.0554	µg/L	-0.0554	ppb	12:09:20
1	B 249.677†	218.0	52.6	2.4534	µg/L	2.4534	ppb	12:09:00
1	Ba 233.527†	-73.9	-0.2	-0.0049	µg/L	-0.0049	ppb	12:09:20
1	Be 313.107†	3720.6	38.2	0.0248	µg/L	0.0248	ppb	12:09:00
1	Cd 226.502†	-98.5	0.8	0.0272	µg/L	0.0272	ppb	12:09:20
1	Co 228.616†	-54.3	16.4	0.8350	µg/L	0.8350	ppb	12:09:20
1	Cr 267.716†	-152.4	-25.5	-0.5672	µg/L	-0.5672	ppb	12:09:00
1	Cu 324.752†	3282.3	-82.7	-0.5969	µg/L	-0.5969	ppb	12:09:00
1	Mn 257.610†	-97.4	152.1	0.4969	µg/L	0.4969	ppb	12:09:20
1	Mo 202.031†	-2.8	2.0	0.2348	µg/L	0.2348	ppb	12:09:20
1	Ni 231.604†	303.7	7.5	0.4322	µg/L	0.4322	ppb	12:09:20
1	P 214.914†	189.1	-4.1	-9.1089	µg/L	-9.1089	ppb	12:09:20
1	Pb 220.353†	49.3	-2.5	-0.6737	µg/L	-0.6737	ppb	12:09:20
1	S 181.975 Axial†	27.5	1.4	7.3911	µg/L	7.3911	ppb	12:09:20
1	Sb 206.836†	23.8	-0.8	-0.8248	µg/L	-0.8248	ppb	12:09:20
1	Se 196.026†	16.9	5.8	8.5429	µg/L	8.5429	ppb	12:09:20
1	SiO2†	2059.2	-9.6	-1.9503	µg/L	-1.9503	ppb	12:09:00
1	Si 251.611†	439.5	75.2	6.1231	µg/L	6.1231	ppb	12:09:20
1	Sn 189.927†	22.0	-0.8	-0.3952	µg/L	-0.3952	ppb	12:09:20
1	Ti 334.940†	920.7	106.5	0.2449	µg/L	0.2449	ppb	12:09:00
1	Tl 190.801†	-17.6	2.8	4.4044	µg/L	4.4044	ppb	12:09:20
1	U 409.014†	744.5	30.1	3.0084	µg/L	3.0084	ppb	12:09:00
1	V 292.402†	-99.3	-7.1	-0.0813	µg/L	-0.0813	ppb	12:09:00
1	Zn 213.857†	527.5	-9.3	-0.2610	µg/L	-0.2610	ppb	12:09:20
2	Sc RADIAL	113856.8	113856.8	102	%			12:07:58
2	Al 396.153Radial†	161.6	-5.5	-2.8945	µg/L	-2.8945	ppb	12:07:58
2	Ca 317.933Radial†	427.0	7.4	2.9749	µg/L	2.9749	ppb	12:08:18
2	Fe 238.204 Radial†	10.5	-1.7	-8.8359	µg/L	-8.8359	ppb	12:08:18
2	K 766.490 Radial†	781.6	22.1	12.465	µg/L	12.465	ppb	12:07:58
2	Mg 279.077 IEC†	17.9	1.6	8.9857	µg/L	8.9857	ppb	12:08:18
2	Na 589.592 Radial†	-629.6	-217.5	-61.355	µg/L	-61.355	ppb	12:07:58
2	Sr 421.552†	-91.5	1.4	0.0079	µg/L	0.0079	ppb	12:07:58
2	Sc 361.383	2024953.7	2024953.7	100.85	%			12:09:26
2	Y 371.029	1230941.1	1230941.1	100.62	%			12:09:26
2	Ag 328.068†	27.7	43.7	0.4150	µg/L	0.4150	ppb	12:09:32
2	As 188.979†	-4.4	-7.5	-14.575	µg/L	-14.575	ppb	12:09:52
2	B 249.677†	164.4	1.2	0.0594	µg/L	0.0594	ppb	12:09:32
2	Ba 233.527†	-77.0	-3.9	-0.1052	µg/L	-0.1052	ppb	12:09:52
2	Be 313.107†	3728.8	78.4	0.0509	µg/L	0.0509	ppb	12:09:32
2	Cd 226.502†	-89.3	9.0	0.2515	µg/L	0.2515	ppb	12:09:52
2	Co 228.616†	-67.0	3.4	0.1720	µg/L	0.1720	ppb	12:09:52
2	Cr 267.716†	-131.3	-6.0	-0.1330	µg/L	-0.1330	ppb	12:09:32
2	Cu 324.752†	3237.3	-99.0	-0.7092	µg/L	-0.7092	ppb	12:09:32
2	Mn 257.610†	-57.7	190.6	0.6259	µg/L	0.6259	ppb	12:09:52
2	Mo 202.031†	-6.4	-1.6	-0.1951	µg/L	-0.1951	ppb	12:09:52
2	Ni 231.604†	286.9	-6.5	-0.3776	µg/L	-0.3776	ppb	12:09:52
2	P 214.914†	192.7	1.1	2.4667	µg/L	2.4667	ppb	12:09:52
2	Pb 220.353†	68.3	16.7	4.4119	µg/L	4.4119	ppb	12:09:52

2	S 181.975 Axial†	27.5	1.6	8.4040	µg/L	8.4040 ppb	12:09:52
2	Sb 206.836†	23.4	-1.0	-0.9913	µg/L	-0.9913 ppb	12:09:52
2	Se 196.026†	16.3	5.4	7.9328	µg/L	7.9328 ppb	12:09:52
2	SiO2†	2121.0	69.4	14.083	µg/L	14.083 ppb	12:09:32
2	Si 251.611†	428.8	68.4	5.5905	µg/L	5.5905 ppb	12:09:52
2	Sn 189.927†	20.2	-2.4	-1.2060	µg/L	-1.2060 ppb	12:09:52
2	Ti 334.940†	1038.8	231.5	0.5326	µg/L	0.5326 ppb	12:09:32
2	Tl 190.801†	-20.1	0.1	0.2026	µg/L	0.2026 ppb	12:09:52
2	U 409.014†	679.7	-27.7	-2.7590	µg/L	-2.7590 ppb	12:09:32
2	V 292.402†	-76.9	14.2	0.1642	µg/L	0.1642 ppb	12:09:32
2	Zn 213.857†	534.2	1.9	0.0575	µg/L	0.0575 ppb	12:09:52
3	Sc RADIAL	113661.7	113661.7	102	%		12:08:24
3	Al 396.153Radial†	207.8	40.3	21.292	µg/L	21.292 ppb	12:08:24
3	Ca 317.933Radial†	432.7	13.7	5.5197	µg/L	5.5197 ppb	12:08:44
3	Fe 238.204 Radial†	9.4	-2.7	-14.338	µg/L	-14.338 ppb	12:08:44
3	K 766.490 Radial†	795.0	36.6	20.656	µg/L	20.656 ppb	12:08:24
3	Mg 279.077 IEC†	20.3	4.0	22.509	µg/L	22.509 ppb	12:08:44
3	Na 589.592 Radial†	-676.7	-265.0	-74.748	µg/L	-74.748 ppb	12:08:24
3	Sr 421.552†	-58.1	34.1	0.1968	µg/L	0.1968 ppb	12:08:24
3	Sc 361.383	2034783.4	2034783.4	101.34	%		12:09:58
3	Y 371.029	1236956.9	1236956.9	101.11	%		12:09:58
3	Ag 328.068†	32.1	47.9	0.4540	µg/L	0.4540 ppb	12:10:04
3	As 188.979†	4.0	0.8	1.6300	µg/L	1.6300 ppb	12:10:24
3	B 249.677†	153.6	-10.1	-0.4669	µg/L	-0.4669 ppb	12:10:04
3	Ba 233.527†	-71.3	2.1	0.0570	µg/L	0.0570 ppb	12:10:24
3	Be 313.107†	3787.5	118.5	0.0770	µg/L	0.0770 ppb	12:10:04
3	Cd 226.502†	-88.6	10.1	0.2867	µg/L	0.2867 ppb	12:10:24
3	Co 228.616†	-66.9	3.8	0.1922	µg/L	0.1922 ppb	12:10:24
3	Cr 267.716†	-141.6	-15.5	-0.3430	µg/L	-0.3430 ppb	12:10:04
3	Cu 324.752†	3292.2	-60.3	-0.4339	µg/L	-0.4339 ppb	12:10:04
3	Mn 257.610†	-114.5	134.8	0.4418	µg/L	0.4418 ppb	12:10:24
3	Mo 202.031†	-4.3	0.5	0.0583	µg/L	0.0583 ppb	12:10:24
3	Ni 231.604†	290.3	-4.6	-0.2646	µg/L	-0.2646 ppb	12:10:24
3	P 214.914†	191.5	-1.1	-2.3569	µg/L	-2.3569 ppb	12:10:24
3	Pb 220.353†	48.6	-3.0	-0.7950	µg/L	-0.7950 ppb	12:10:24
3	S 181.975 Axial†	21.6	-4.4	-23.486	µg/L	-23.486 ppb	12:10:24
3	Sb 206.836†	16.3	-8.0	-8.3964	µg/L	-8.3964 ppb	12:10:24
3	Se 196.026†	9.1	-1.8	-2.6972	µg/L	-2.6972 ppb	12:10:24
3	SiO2†	2162.1	99.9	20.256	µg/L	20.256 ppb	12:10:04
3	Si 251.611†	427.1	64.6	5.3370	µg/L	5.3370 ppb	12:10:24
3	Sn 189.927†	17.0	-5.6	-2.8418	µg/L	-2.8418 ppb	12:10:24
3	Ti 334.940†	1046.6	234.2	0.5389	µg/L	0.5389 ppb	12:10:04
3	Tl 190.801†	-21.8	-1.5	-2.3051	µg/L	-2.3051 ppb	12:10:24
3	U 409.014†	720.9	9.7	0.9720	µg/L	0.9720 ppb	12:10:04
3	V 292.402†	-80.9	10.6	0.1285	µg/L	0.1285 ppb	12:10:04
3	Zn 213.857†	519.8	-14.9	-0.4190	µg/L	-0.4190 ppb	12:10:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2034162.9	101.31	%	0.444				0.44%
Sc RADIAL	113715.7	102	%	0.1				0.11%
Y 371.029	1236497.5	101.07	%	0.437				0.43%
Ag 328.068†	40.9	0.3867	µg/L	0.08494	0.3867	ppb	0.08494	21.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.9	6.7913	µg/L	12.79227	6.7913	ppb	12.79227	188.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.2	-4.3335	µg/L	8.90948	-4.3335	ppb	8.90948	205.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	14.6	0.6820	µg/L	1.55656	0.6820	ppb	1.55656	228.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.7	-0.0177	µg/L	0.08182	-0.0177	ppb	0.08182	462.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.4	0.0509	µg/L	0.02610	0.0509	ppb	0.02610	51.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.0	4.0153	µg/L	1.33438	4.0153	ppb	1.33438	33.23%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.7	0.1885	µg/L	0.14077	0.1885	ppb	0.14077	74.70%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	7.9	0.3997	µg/L	0.37706	0.3997	ppb	0.37706	94.33%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -15.7     -0.3477 µg/L       0.21713     -0.3477 ppb        0.21713  62.45%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -80.7     -0.5800 µg/L       0.13844     -0.5800 ppb        0.13844  23.87%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -3.2     -17.000 µg/L        9.7720     -17.000 ppb         9.7720  57.48%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         11.9      6.6863 µg/L      17.58585      6.6863 ppb       17.58585 263.01%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.8      4.7980 µg/L      20.13439      4.7980 ppb       20.13439 419.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              159.2      0.5215 µg/L       0.09453      0.5215 ppb        0.09453  18.12%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.3      0.0327 µg/L       0.21610      0.0327 ppb        0.21610 661.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -250.2     -70.558 µg/L        7.9806     -70.558 ppb         7.9806  11.31%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -1.2     -0.0700 µg/L       0.43858     -0.0700 ppb        0.43858 626.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -1.4     -2.9997 µg/L       5.81453     -2.9997 ppb        5.81453 193.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.7      0.9811 µg/L       2.97184      0.9811 ppb        2.97184 302.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.5     -2.5636 µg/L      18.12627     -2.5636 ppb       18.12627 707.07%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.3     -3.4042 µg/L       4.32418     -3.4042 ppb        4.32418 127.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.1      4.5928 µg/L       6.32069      4.5928 ppb        6.32069 137.62%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     53.2      10.796 µg/L       11.4621      10.796 ppb        11.4621 106.17%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               69.4      5.6835 µg/L       0.40121      5.6835 ppb        0.40121   7.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.9     -1.4810 µg/L       1.24630     -1.4810 ppb        1.24630  84.15%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               26.9      0.1555 µg/L       0.13190      0.1555 ppb        0.13190  84.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              190.7      0.4388 µg/L       0.16797      0.4388 ppb        0.16797  38.28%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.5      0.7673 µg/L       3.39023      0.7673 ppb        3.39023 441.85%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 4.0      0.4071 µg/L       2.92493      0.4071 ppb        2.92493 718.43%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 5.9      0.0705 µg/L       0.13264      0.0705 ppb        0.13264 188.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -7.4     -0.2075 µg/L       0.24274     -0.2075 ppb        0.24274 116.99%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, November 28, 2009 15:05:37
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1342
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6725.0	6724.983	154.209	2.3
	Mg	24.0	60914.6	60914.625	1054.668	1.7
	Co	58.9	110207.5	110207.513	1309.892	1.2
	Rh	102.9	197342.4	197342.435	2290.007	1.2
	In	114.9	269729.2	269729.189	837.475	0.3
	Pb	208.0	194258.5	194258.476	920.561	0.5
⌈>	Ba	137.9	248522.0	248522.038	1503.328	0.6
⌊	Ba++	69.0	4293.2	0.017	0.000	0.7
⌈>	Ce	139.9	300045.9	300045.870	1391.148	0.5
⌊	CeO	155.9	8420.6	0.028	0.001	2.3
	Bkgd	220.0	14.1	14.100	2.133	15.1

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	5.0	6871.0
Co	59	11	5.3	104858.1
In	115	11	5.5	266951.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	611	2060	0.627
Be	9.0	9.0	2046	2075	0.637
Mg	24.0	24.0	5689	2065	0.636
Mg	25.0	25.0	5953	2080	0.634
Mg	26.0	26.0	6172	2070	0.641
Co	58.9	59.0	14192	2100	0.626
Rh	102.9	102.9	24881	2155	0.635
In	114.9	114.9	27795	2180	0.618
Ce	139.9	139.9	33867	2200	0.626
Pb	206.0	206.0	49948	2285	0.612
Pb	207.0	207.0	50171	2255	0.642
Pb	208.0	208.0	50439	2275	0.661
U	238.1	238.0	57726	2280	0.701

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, November 28, 2009 16:13:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\Blank.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		155	
	Be	9		ug/L		19	
	B	11		ug/L		3030	
	Na	23		ug/L		28695	
	Mg	24		ug/L		8670	
	Al	27		ug/L		12339	
	P	31		ug/L		12805	
	K	39		ug/L		642820	
	Ca	43		ug/L		333	
>	Sc	45		ug/L		2988629	
	Ti	47		ug/L		552	
	V	51		ug/L		-844	
	Cr	52		ug/L		517	
	Cr	53		ug/L		118760	
	Mn	55		ug/L		1432	
	Fe	57		ug/L		6173	
	Co	59		ug/L		190	
	Ni	60		ug/L		103	
	Cu	63		ug/L		217	
	Cu	65		ug/L		131	
	Zn	66		ug/L		319	
	Zn	67		ug/L		15608	
	Zn	68		ug/L		1928	
>	Ge	74		ug/L		565716	
	As	75		ug/L		-164	
	Se	77		ug/L		6688	
	Se	82		ug/L		-69	
	Kr	83		ug/L		183	
	Sr	88		ug/L		350	
	Y	89		ug/L		76	
	Mo	98		ug/L		376	
	Ag	107		ug/L		100	
	Cd	111		ug/L		50	
	Cd	114		ug/L		82	
>	In	115		ug/L		366884	
	Sn	120		ug/L		2147	
	Sb	121		ug/L		7044	
	Sb	123		ug/L		5535	
	Ba	135		ug/L		48	
	Ba	137		ug/L		67	
	Ho	165		ug/L		43	
>	Lu	175		ug/L		528185	
	Tl	205		ug/L		1667	
	Pb	208		ug/L		1350	
	Bi	209		ug/L		358	
	Th	232		ug/L		11039	
	U	238		ug/L		1026	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
B	11	Linear Thru Zero	
Na	23	Linear Thru Zero	
Mg	24	Linear Thru Zero	
Al	27	Linear Thru Zero	
P	31	Linear Thru Zero	
K	39	Linear Thru Zero	
Ca	43	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	
Cr	52	Linear Thru Zero	
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	
Co	59	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	
Cd	111	Linear Thru Zero	
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, November 28, 2009 16:19:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\Standard 1.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.100	31828	0.011
	Be	9	10.000	ug/L	1.352	5842	0.002
	B	11	20.000	ug/L	2.298	14310	0.004
	Na	23	1000.000	ug/L	9.890	6609364	2.200
	Mg	24	1000.000	ug/L	3.474	4555089	1.520
	Al	27	1000.000	ug/L	11.497	5861720	1.956
	P	31	1000.000	ug/L	1.955	353430	0.114
	K	39	1000.000	ug/L	12.160	8277666	2.551
	Ca	43	1000.000	ug/L	2.855	19479	0.006
>	Sc	45		ug/L		2991492	2991491.685
	Ti	47	10.000	ug/L	2.953	9613	0.003
	V	51	10.000	ug/L	6.640	96401	0.033
	Cr	52	10.000	ug/L	1.822	74473	0.025
	Cr	53		ug/L		126078	0.002
	Mn	55	10.000	ug/L	2.024	126890	0.042
	Fe	57	1000.000	ug/L	0.671	260230	0.085
	Co	59	10.000	ug/L	2.802	96153	0.032
	Ni	60	10.000	ug/L	2.664	20297	0.007
	Cu	63		ug/L		49604	0.017
	Cu	65	10.000	ug/L	1.207	24151	0.008
	Zn	66	10.000	ug/L	2.210	16584	0.029
	Zn	67		ug/L		18174	0.005
	Zn	68		ug/L		13196	0.020
>	Ge	74		ug/L		563950	563950.278
	As	75	10.000	ug/L	1.422	15517	0.028
	Se	77		ug/L		7956	0.002
	Se	82	10.000	ug/L	2.762	1710	0.003
	Kr	83		ug/L		110	-0.000
	Sr	88	10.000	ug/L	2.487	201327	0.552
	Y	89		ug/L		96	0.000
	Mo	98	10.000	ug/L	2.586	43827	0.119
	Ag	107	10.000	ug/L	3.333	77829	0.213
	Cd	111	10.000	ug/L	3.341	19115	0.052
	Cd	114		ug/L		45151	0.124
>	In	115		ug/L		364364	364364.298
	Sn	120	10.000	ug/L	2.830	80225	0.214
	Sb	121	10.000	ug/L	10.442	59000	0.143
	Sb	123		ug/L		45740	0.110
	Ba	135		ug/L		19061	0.036
	Ba	137	10.000	ug/L	2.319	33392	0.063
	Ho	165		ug/L		45	0.000
>	Lu	175		ug/L		530472	530471.868
	Tl	205	10.000	ug/L	0.280	213625	0.400
	Pb	208	10.000	ug/L	1.829	322516	0.606
	Bi	209		ug/L		390	0.000
	Th	232	10.000	ug/L	3.351	369895	0.677
	U	238	10.000	ug/L	2.138	394180	0.741

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, November 28, 2009 16:25:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\Standard 2.100

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.989**	ug/L	0.952	311908	0.105
	Be	9	**100.002**	ug/L	0.802	58107	0.020
	B	11	**200.119**	ug/L	2.304	122418	0.040
	Na	23	**9991.386**	ug/L	6.857	60275102	20.233
	Mg	24	**9995.526**	ug/L	4.480	43289194	14.540
	Al	27	**9994.506**	ug/L	3.792	55194498	18.534
	P	31	**9994.229**	ug/L	1.583	3215719	1.076
	K	39	**9999.043**	ug/L	9.033	75832677	25.265
	Ca	43	**9995.033**	ug/L	2.373	181749	0.061
>	Sc	45		ug/L		2977024	2977024.424
	Ti	47	**100.013**	ug/L	2.490	91917	0.031
	V	51	**99.927**	ug/L	1.240	900460	0.303
	Cr	52	**99.953**	ug/L	0.376	702914	0.236
	Cr	53		ug/L		198595	0.027
	Mn	55	**99.916**	ug/L	0.512	1152755	0.387
	Fe	57	**9999.871**	ug/L	1.918	2531047	0.848
	Co	59	**99.904**	ug/L	2.222	871046	0.293
	Ni	60	**99.958**	ug/L	1.359	192859	0.065
	Cu	63		ug/L		460350	0.155
	Cu	65	**99.951**	ug/L	2.338	227878	0.076
	Zn	66	**99.993**	ug/L	1.996	158359	0.286
	Zn	67		ug/L		40953	0.047
	Zn	68		ug/L		112380	0.200
>	Ge	74		ug/L		551799	551798.870
	As	75	**100.002**	ug/L	0.339	153633	0.279
	Se	77		ug/L		18175	0.021
	Se	82	**99.950**	ug/L	1.559	16496	0.030
	Kr	83		ug/L		126	-0.000
	Sr	88	**99.894**	ug/L	0.556	1783870	4.984
	Y	89		ug/L		266	0.001
	Mo	98	**100.001**	ug/L	1.449	427769	1.194
	Ag	107	**99.933**	ug/L	0.262	715316	1.999
	Cd	111	**99.979**	ug/L	0.416	183423	0.512
	Cd	114		ug/L		428800	1.198
>	In	115		ug/L		357866	357866.131
	Sn	120	**99.962**	ug/L	1.566	740662	2.064
	Sb	121	**100.095**	ug/L	7.086	571453	1.578
	Sb	123		ug/L		443219	1.224
	Ba	135		ug/L		183751	0.359
	Ba	137	**99.992**	ug/L	1.334	319247	0.623
	Ho	165		ug/L		58	0.000
>	Lu	175		ug/L		512062	512061.532
	Tl	205	**99.850**	ug/L	0.680	1777583	3.468
	Pb	208	**99.922**	ug/L	1.088	2874617	5.611
	Bi	209		ug/L		603	0.001
	Th	232	**99.921**	ug/L	1.516	3219152	6.265
	U	238	**99.867**	ug/L	0.525	3347042	6.534

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, November 28, 2009 16:32:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 1.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.883**	ug/L	1.348	158682	0.053
	Be	9	**52.152**	ug/L	1.271	30291	0.010
	B	11	**107.559**	ug/L	2.670	67146	0.022
	Na	23	**5496.837**	ug/L	10.402	33128300	11.132
	Mg	24	**5319.723**	ug/L	8.514	23018522	7.738
	Al	27	**5970.814**	ug/L	6.881	32944216	11.072
	P	31	**4910.270**	ug/L	2.198	1585233	0.529
	K	39	**4933.808**	ug/L	6.164	37739983	12.466
	Ca	43	**5046.307**	ug/L	1.933	91867	0.031
>	Sc	45		ug/L		2975047	2975047.045
	Ti	47	**50.467**	ug/L	0.685	46621	0.015
	V	51	**52.111**	ug/L	1.915	468847	0.158
	Cr	52	**52.464**	ug/L	2.312	368902	0.124
	Cr	53		ug/L		157388	0.013
	Mn	55	**53.536**	ug/L	1.336	617878	0.207
	Fe	57	**4530.744**	ug/L	1.968	1149256	0.384
	Co	59	**51.486**	ug/L	1.569	448673	0.151
	Ni	60	**50.904**	ug/L	0.434	98201	0.033
	Cu	63		ug/L		244147	0.082
	Cu	65	**52.546**	ug/L	2.393	119787	0.040
	Zn	66	**50.469**	ug/L	2.265	81301	0.145
	Zn	67		ug/L		28371	0.023
	Zn	68		ug/L		59690	0.103
>	Ge	74		ug/L		560214	560213.701
	As	75	**48.158**	ug/L	2.178	75011	0.134
	Se	77		ug/L		12320	0.010
	Se	82	**50.804**	ug/L	1.487	8477	0.015
	Kr	83		ug/L		119	-0.000
	Sr	88	**52.590**	ug/L	1.657	940666	2.624
	Y	89		ug/L		122	0.000
	Mo	98	**50.160**	ug/L	0.631	215111	0.599
	Ag	107	**52.546**	ug/L	1.814	376713	1.051
	Cd	111	**50.436**	ug/L	2.342	92700	0.258
	Cd	114		ug/L		220236	0.614
>	In	115		ug/L		358440	358440.464
	Sn	120	**51.393**	ug/L	1.453	382435	1.061
	Sb	121	**50.898**	ug/L	6.311	294632	0.802
	Sb	123		ug/L		230384	0.627
	Ba	135		ug/L		93854	0.182
	Ba	137	**51.344**	ug/L	1.944	165212	0.320
	Ho	165		ug/L		101	0.000
>	Lu	175		ug/L		516055	516055.049
	Tl	205	**52.839**	ug/L	1.115	948739	1.835
	Pb	208	**53.414**	ug/L	1.589	1549088	3.000
	Bi	209		ug/L		448	0.000
	Th	232	**51.453**	ug/L	1.969	1675641	3.226
	U	238	**52.853**	ug/L	1.974	1785329	3.458

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.767				
	Be	9	104.305				
	B	11	107.559				
	Na	23	109.937				
	Mg	24	106.394				
	Al	27	118.234				
	P	31	98.205				
	K	39	98.676				
	Ca	43	100.926				
>	Sc	45		99.5			
	Ti	47	100.933				
	V	51	104.222				
	Cr	52	104.928				
	Cr	53					
	Mn	55	107.073				
	Fe	57	90.615				
	Co	59	102.972				
	Ni	60	101.808				
	Cu	63					
	Cu	65	105.093				
	Zn	66	100.939				
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75	96.316				
	Se	77					
	Se	82	101.607				
	Kr	83					
	Sr	88	105.179				
	Y	89					
	Mo	98	100.320				
	Ag	107	105.092				
	Cd	111	100.871				
	Cd	114					
>	In	115		97.7			
	Sn	120	102.785				
	Sb	121	101.796				
	Sb	123					
	Ba	135					
	Ba	137	102.687				
	Ho	165					
>	Lu	175		97.7			
	Tl	205	105.679				
	Pb	208	106.827				
	Bi	209					
	Th	232	102.906				
	U	238	105.707				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Al	27	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, November 28, 2009 16:38:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 2.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.002**	ug/L	228.413	161	0.000
	Be	9	**0.003**	ug/L	162.789	21	0.000
	B	11	**1.931**	ug/L	38.455	4196	0.000
	Na	23	**1.259**	ug/L	32.391	36380	0.003
	Mg	24	**0.460**	ug/L	128.840	10671	0.001
	Al	27	**0.590**	ug/L	191.290	15676	0.001
	P	31	**1.741**	ug/L	146.458	13372	0.000
	K	39	**4.666**	ug/L	161.989	678837	0.012
	Ca	43	**1.658**	ug/L	47.401	364	0.000
>	Sc	45		ug/L		2991154	2991153.743
	Ti	47	**0.010**	ug/L	323.944	561	0.000
	V	51	**0.500**	ug/L	98.838	3658	0.002
	Cr	52	**-0.044**	ug/L	72.999	212	-0.000
	Cr	53		ug/L		118319	-0.000
	Mn	55	**0.002**	ug/L	156.591	1459	0.000
	Fe	57	**0.550**	ug/L	169.285	6315	0.000
	Co	59	**0.002**	ug/L	213.676	205	0.000
	Ni	60	**-0.004**	ug/L	181.058	95	-0.000
	Cu	63		ug/L		262	0.000
	Cu	65	**0.003**	ug/L	140.347	137	0.000
	Zn	66	**0.007**	ug/L	203.776	324	0.000
	Zn	67		ug/L		15619	0.001
	Zn	68		ug/L		1992	0.000
>	Ge	74		ug/L		554632	554631.906
	As	75	**-0.101**	ug/L	104.577	-318	-0.000
	Se	77		ug/L		6612	0.000
	Se	82	**0.437**	ug/L	17.004	5	0.000
	Kr	83		ug/L		123	-0.000
	Sr	88	**0.003**	ug/L	52.587	389	0.000
	Y	89		ug/L		72	-0.000
	Mo	98	**0.031**	ug/L	72.201	500	0.000
	Ag	107	**0.004**	ug/L	4.222	126	0.000
	Cd	111	**0.007**	ug/L	166.506	61	0.000
	Cd	114		ug/L		94	0.000
>	In	115		ug/L		359784	359784.306
	Sn	120	**0.190**	ug/L	28.061	3519	0.004
	Sb	121	**0.646**	ug/L	42.338	10570	0.010
	Sb	123		ug/L		8172	0.008
	Ba	135		ug/L		46	-0.000
	Ba	137	**0.007**	ug/L	42.000	88	0.000
	Ho	165		ug/L		53	0.000
>	Lu	175		ug/L		518942	518941.722
	Tl	205	**0.069**	ug/L	40.102	2886	0.002
	Pb	208	**0.003**	ug/L	66.096	1418	0.000
	Bi	209		ug/L		379	0.000
	Th	232	**0.153**	ug/L	46.120	15842	0.010
	U	238	**0.009**	ug/L	17.893	1305	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, November 28, 2009 16:44:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 3.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.774**	ug/L	1.254	34079	0.011
	Be	9	**0.506**	ug/L	5.399	316	0.000
	B	11	**14.826**	ug/L	3.446	11982	0.003
	Na	23	**265.758**	ug/L	2.099	1646754	0.538
	Mg	24	**15.203**	ug/L	7.300	75198	0.022
	Al	27	**32.312**	ug/L	18.887	192652	0.060
	P	31	**53.235**	ug/L	0.997	30111	0.006
	K	39	**294.358**	ug/L	7.255	2882303	0.744
	Ca	43	**214.684**	ug/L	2.238	4271	0.001
>	Sc	45		ug/L		3006389	3006389.054
	Ti	47	**8.312**	ug/L	4.117	8222	0.003
	V	51	**11.195**	ug/L	2.335	101121	0.034
	Cr	52	**10.904**	ug/L	1.281	77900	0.026
	Cr	53		ug/L		129444	0.003
	Mn	55	**5.887**	ug/L	0.715	69939	0.023
	Fe	57	**103.347**	ug/L	2.914	32564	0.009
	Co	59	**1.116**	ug/L	1.400	10013	0.003
	Ni	60	**2.161**	ug/L	3.659	4311	0.001
	Cu	63		ug/L		5508	0.002
	Cu	65	**1.132**	ug/L	1.886	2736	0.001
	Zn	66	**11.302**	ug/L	2.206	18373	0.032
	Zn	67		ug/L		18665	0.006
	Zn	68		ug/L		14595	0.023
>	Ge	74		ug/L		557780	557779.566
	As	75	**5.264**	ug/L	5.506	8024	0.015
	Se	77		ug/L		7304	0.001
	Se	82	**5.917**	ug/L	0.536	923	0.002
	Kr	83		ug/L		94	-0.000
	Sr	88	**11.828**	ug/L	2.597	216149	0.590
	Y	89		ug/L		81	0.000
	Mo	98	**0.490**	ug/L	2.871	2514	0.006
	Ag	107	**1.070**	ug/L	1.390	7928	0.021
	Cd	111	**1.062**	ug/L	1.045	2040	0.005
	Cd	114		ug/L		4899	0.013
>	In	115		ug/L		365755	365754.699
	Sn	120	**5.279**	ug/L	3.065	42001	0.109
	Sb	121	**2.456**	ug/L	9.344	21181	0.039
	Sb	123		ug/L		16400	0.030
	Ba	135		ug/L		4022	0.008
	Ba	137	**2.121**	ug/L	1.571	6995	0.013
	Ho	165		ug/L		51	0.000
>	Lu	175		ug/L		524127	524127.054
	Tl	205	**1.173**	ug/L	1.010	23014	0.041
	Pb	208	**2.301**	ug/L	1.123	69049	0.129
	Bi	209		ug/L		394	0.000
	Th	232	**1.048**	ug/L	1.156	45407	0.066
	U	238	**0.239**	ug/L	2.924	9213	0.016

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	107.743				
	Be	9	101.103				
	B	11	98.843				
	Na	23	106.303				
	Mg	24	101.355				
	Al	27	107.708				
	P	31	106.470				
	K	39	98.119				
	Ca	43	107.342				
>	Sc	45		100.6			
	Ti	47	83.115				
	V	51	111.951				
	Cr	52	109.037				
	Cr	53					
	Mn	55	117.733				
	Fe	57	103.347				
	Co	59	111.574				
	Ni	60	108.030				
	Cu	63					
	Cu	65	113.171				
	Zn	66	113.018				
	Zn	67					
	Zn	68					
>	Ge	74		98.6			
	As	75	105.282				
	Se	77					
	Se	82	118.350				
	Kr	83					
	Sr	88	118.282				
	Y	89					
	Mo	98	97.922				
	Ag	107	107.031				
	Cd	111	106.199				
	Cd	114					
>	In	115		99.7			
	Sn	120	105.589				
	Sb	121	81.881				
	Sb	123					
	Ba	135					
	Ba	137	106.028				
	Ho	165					
>	Lu	175		99.2			
	Tl	205	117.338				
	Pb	208	115.026				
	Bi	209					
	Th	232	104.832				
	U	238	119.500				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, November 28, 2009 16:50:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 4.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.093**	**ug/L**	15.763	385	0.000
	Be	9	**0.059**	**ug/L**	9.884	46	0.000
	B	11	**-1.488**	**ug/L**	16.924	1846	-0.000
	Na	23	**105981.351**	**ug/L**	5.483	553825429	214.622
	Mg	24	**98904.287**	**ug/L**	5.282	371678315	143.870
	Al	27	**101184.514**	**ug/L**	0.874	484331718	187.634
	P	31	**95178.868**	**ug/L**	1.263	26460415	10.247
	K	39	**S**	**ug/L**	S	S	S
	Ca	43	**94095.054**	**ug/L**	0.852	1481484	0.574
>	Sc	45		**ug/L**		2581443	2581442.581
	Ti	47	**1412.458**	**ug/L**	2.125	1119032	0.433
	V	51	**0.538**	**ug/L**	62.402	3503	0.002
	Cr	52	**2.725**	**ug/L**	1.806	17046	0.006
	Cr	53		**ug/L**		93029	-0.004
	Mn	55	**6.550**	**ug/L**	3.806	66651	0.025
	Fe	57	**102945.413**	**ug/L**	3.294	22534315	8.731
	Co	59	**0.402**	**ug/L**	4.289	3201	0.001
	Ni	60	**3.538**	**ug/L**	1.589	6006	0.002
	Cu	63		**ug/L**		16703	0.006
	Cu	65	**5.496**	**ug/L**	4.218	10966	0.004
	Zn	66	**3.947**	**ug/L**	1.839	5969	0.011
	Zn	67		**ug/L**		14299	0.001
	Zn	68		**ug/L**		2628	0.002
>	Ge	74		**ug/L**		502792	502791.813
	As	75	**0.323**	**ug/L**	93.901	306	0.001
	Se	77		**ug/L**		7716	0.004
	Se	82	**-0.758**	**ug/L**	4.648	-176	-0.000
	Kr	83		**ug/L**		415	0.001
	Sr	88	**1.317**	**ug/L**	1.624	21956	0.066
	Y	89		**ug/L**		616	0.002
	Mo	98	**1989.929**	**ug/L**	1.683	7830820	23.767
	Ag	107	**0.077**	**ug/L**	14.746	595	0.002
	Cd	111	**0.509**	**ug/L**	19.928	905	0.003
	Cd	114		**ug/L**		12933	0.039
>	In	115		**ug/L**		329461	329460.935
	Sn	120	**0.135**	**ug/L**	13.735	2846	0.003
	Sb	121	**-0.420**	**ug/L**	31.834	4145	-0.007
	Sb	123		**ug/L**		3265	-0.005
	Ba	135		**ug/L**		1223	0.003
	Ba	137	**0.703**	**ug/L**	1.726	2105	0.004
	Ho	165		**ug/L**		1162	0.002
>	Lu	175		**ug/L**		466717	466717.137
	Tl	205	**-0.015**	**ug/L**	35.591	1231	-0.001
	Pb	208	**0.182**	**ug/L**	2.223	5975	0.010
	Bi	209		**ug/L**		1251	0.002
	Th	232	**0.396**	**ug/L**	45.434	21289	0.025
	U	238	**-0.015**	**ug/L**	4.711	450	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	105.981				
	Mg	24	98.904				
	Al	27	101.185				
	P	31	95.179				
	K	39	S				
	Ca	43	94.095				
>	Sc	45		86.4			
	Ti	47	70.623				
	V	51					
	Cr	52	73.643				
	Cr	53					
	Mn	55	112.939				
	Fe	57	102.945				
	Co	59	160.814				
	Ni	60	131.046				
	Cu	63					
	Cu	65	189.513				
	Zn	66	109.652				
	Zn	67					
	Zn	68					
>	Ge	74		88.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	109.725				
	Y	89					
	Mo	98	99.496				
	Ag	107					
	Cd	111	127.316				
	Cd	114					
>	In	115		89.8			
	Sn	120					
	Sb	121	-419.527				
	Sb	123					
	Ba	135					
	Ba	137	104.962				
	Ho	165					
>	Lu	175		88.4			
	Tl	205					
	Pb	208	91.247				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	K	39	ICSA is out of limits
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, November 28, 2009 16:56:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 5.105

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.392**	**ug/L**	1.098	53736	0.020
	Be	9	**18.986**	**ug/L**	0.920	9792	0.004
	B	11	**15.795**	**ug/L**	0.897	11030	0.003
	Na	23	**94359.230**	**ug/L**	8.814	504305522	191.086
	Mg	24	**95795.716**	**ug/L**	2.902	367789051	139.348
	Al	27	**102200.912**	**ug/L**	9.956	500372619	189.519
	P	31	**92437.147**	**ug/L**	1.564	26272200	9.951
	K	39	**93643.584**	**ug/L**	0.240	625002343	236.610
	Ca	43	**91853.151**	**ug/L**	2.160	1478321	0.560
>	Sc	45		**ug/L**		2639071	2639071.435
	Ti	47	**1388.670**	**ug/L**	2.805	1125008	0.426
	V	51	**22.387**	**ug/L**	3.297	178230	0.068
	Cr	52	**24.334**	**ug/L**	2.762	152030	0.057
	Cr	53		**ug/L**		108100	0.001
	Mn	55	**28.759**	**ug/L**	0.431	295027	0.111
	Fe	57	**100534.022**	**ug/L**	1.798	22506887	8.527
	Co	59	**21.495**	**ug/L**	1.889	166269	0.063
	Ni	60	**23.109**	**ug/L**	1.376	39594	0.015
	Cu	63		**ug/L**		96348	0.036
	Cu	65	**24.758**	**ug/L**	0.617	50122	0.019
	Zn	66	**22.902**	**ug/L**	1.880	33334	0.066
	Zn	67		**ug/L**		18528	0.009
	Zn	68		**ug/L**		21874	0.040
>	Ge	74		**ug/L**		503773	503773.114
	As	75	**21.932**	**ug/L**	1.037	30648	0.061
	Se	77		**ug/L**		10128	0.008
	Se	82	**19.728**	**ug/L**	0.688	2923	0.006
	Kr	83		**ug/L**		427	0.001
	Sr	88	**25.085**	**ug/L**	1.624	411574	1.252
	Y	89		**ug/L**		658	0.002
	Mo	98	**2005.693**	**ug/L**	0.338	7872683	23.955
	Ag	107	**19.569**	**ug/L**	0.651	128701	0.391
	Cd	111	**20.497**	**ug/L**	2.698	34570	0.105
	Cd	114		**ug/L**		91868	0.279
>	In	115		**ug/L**		328630	328630.451
	Sn	120	**21.084**	**ug/L**	0.778	144981	0.435
	Sb	121	**22.540**	**ug/L**	3.002	123079	0.355
	Sb	123		**ug/L**		95409	0.275
	Ba	135		**ug/L**		36714	0.078
	Ba	137	**22.029**	**ug/L**	0.361	64510	0.137
	Ho	165		**ug/L**		1135	0.002
>	Lu	175		**ug/L**		469334	469333.575
	Tl	205	**22.496**	**ug/L**	1.523	368185	0.781
	Pb	208	**21.963**	**ug/L**	1.280	580037	1.233
	Bi	209		**ug/L**		1682	0.003
	Th	232	**23.428**	**ug/L**	1.827	699216	1.469
	U	238	**24.188**	**ug/L**	0.833	743711	1.583

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	96.961				
	Be	9	94.928				
	B	11	78.973				
	Na	23	94.359				
	Mg	24	95.796				
	Al	27	102.201				
	P	31	92.437				
	K	39	93.644				
	Ca	43	91.853				
>	Sc	45		88.3			
	Ti	47	69.434				
	V	51	111.933				
	Cr	52	102.675				
	Cr	53					
	Mn	55	111.469				
	Fe	57	100.534				
	Co	59	106.151				
	Ni	60	101.803				
	Cu	63					
	Cu	65	108.112				
	Zn	66	97.043				
	Zn	67					
	Zn	68					
>	Ge	74		89.1			
	As	75	109.661				
	Se	77					
	Se	82	98.639				
	Kr	83					
	Sr	88	118.325				
	Y	89					
	Mo	98	100.285				
	Ag	107	97.846				
	Cd	111	100.475				
	Cd	114					
>	In	115		89.6			
	Sn	120	105.420				
	Sb	121	112.138				
	Sb	123					
	Ba	135					
	Ba	137	106.573				
	Ho	165					
>	Lu	175		88.9			
	Tl	205	112.479				
	Pb	208	108.726				
	Bi	209					
	Th	232	117.142				
	U	238	120.940				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	B	11	ICSAB is out of limits
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	U	238	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, November 28, 2009 17:02:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.825**	ug/L	1.385	146907	0.051
	Be	9	**50.186**	ug/L	3.608	28117	0.010
	B	11	**94.976**	ug/L	2.564	57538	0.019
	Na	23	**5093.066**	ug/L	10.313	29600750	10.314
	Mg	24	**5372.014**	ug/L	15.634	22408182	7.814
	Al	27	**5054.603**	ug/L	4.340	26907318	9.373
	P	31	**4702.911**	ug/L	1.366	1465372	0.506
	K	39	**5022.798**	ug/L	3.647	37034563	12.691
	Ca	43	**4984.018**	ug/L	0.840	87550	0.030
>	Sc	45		ug/L		2870408	2870407.970
	Ti	47	**53.716**	ug/L	0.840	47843	0.016
	V	51	**52.135**	ug/L	3.761	452430	0.158
	Cr	52	**52.566**	ug/L	2.853	356562	0.124
	Cr	53		ug/L		151267	0.013
	Mn	55	**54.249**	ug/L	1.505	603991	0.210
	Fe	57	**4675.666**	ug/L	1.966	1143996	0.397
	Co	59	**51.981**	ug/L	0.644	437059	0.152
	Ni	60	**51.063**	ug/L	0.195	95040	0.033
	Cu	63		ug/L		237437	0.083
	Cu	65	**53.425**	ug/L	2.536	117465	0.041
	Zn	66	**49.829**	ug/L	0.811	79300	0.143
	Zn	67		ug/L		27293	0.022
	Zn	68		ug/L		57065	0.100
>	Ge	74		ug/L		553315	553314.747
	As	75	**48.009**	ug/L	1.136	73873	0.134
	Se	77		ug/L		12120	0.010
	Se	82	**50.492**	ug/L	1.147	8323	0.015
	Kr	83		ug/L		109	-0.000
	Sr	88	**52.560**	ug/L	0.583	937934	2.622
	Y	89		ug/L		178	0.000
	Mo	98	**50.570**	ug/L	1.060	216310	0.604
	Ag	107	**52.033**	ug/L	0.502	372167	1.041
	Cd	111	**50.860**	ug/L	0.439	93247	0.261
	Cd	114		ug/L		218237	0.610
>	In	115		ug/L		357546	357545.804
	Sn	120	**51.265**	ug/L	1.015	380535	1.058
	Sb	121	**47.739**	ug/L	9.976	275931	0.753
	Sb	123		ug/L		216934	0.592
	Ba	135		ug/L		94722	0.181
	Ba	137	**50.454**	ug/L	1.664	164732	0.315
	Ho	165		ug/L		116	0.000
>	Lu	175		ug/L		523558	523557.621
	Tl	205	**53.541**	ug/L	2.189	975267	1.860
	Pb	208	**53.535**	ug/L	1.133	1575359	3.006
	Bi	209		ug/L		493	0.000
	Th	232	**52.224**	ug/L	2.608	1725307	3.275
	U	238	**54.050**	ug/L	1.113	1852543	3.537

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.649				
	Be	9	100.372				
	B	11	94.976				
	Na	23	101.861				
	Mg	24	107.440				
	Al	27	100.091				
	P	31	94.058				
	K	39	100.456				
	Ca	43	99.680				
>	Sc	45		96.0			
	Ti	47	107.432				
	V	51	104.269				
	Cr	52	105.133				
	Cr	53					
	Mn	55	108.498				
	Fe	57	93.513				
	Co	59	103.961				
	Ni	60	102.126				
	Cu	63					
	Cu	65	106.849				
	Zn	66	99.659				
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75	96.018				
	Se	77					
	Se	82	100.985				
	Kr	83					
	Sr	88	105.120				
	Y	89					
	Mo	98	101.140				
	Ag	107	104.067				
	Cd	111	101.719				
	Cd	114					
>	In	115		97.5			
	Sn	120	102.530				
	Sb	121	95.477				
	Sb	123					
	Ba	135					
	Ba	137	100.909				
	Ho	165					
>	Lu	175		99.1			
	Tl	205	107.083				
	Pb	208	107.071				
	Bi	209					
	Th	232	104.448				
	U	238	108.100				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, November 28, 2009 17:08:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.008**	**ug/L**	63.374	120	-0.000
	Be	9	**-0.003**	**ug/L**	77.272	16	-0.000
	B	11	**-0.505**	**ug/L**	116.454	2517	-0.000
	Na	23	**0.932**	**ug/L**	99.694	31703	0.002
	Mg	24	**0.414**	**ug/L**	190.570	9670	0.001
	Al	27	**0.188**	**ug/L**	395.553	12339	0.000
	P	31	**2.550**	**ug/L**	60.202	12569	0.000
	K	39	**0.163**	**ug/L**	2654.693	594131	0.000
	Ca	43	**2.612**	**ug/L**	65.337	351	0.000
>	Sc	45		**ug/L**		2756147	2756147.328
	Ti	47	**0.897**	**ug/L**	5.598	1268	0.000
	V	51	**0.007**	**ug/L**	7752.198	-730	0.000
	Cr	52	**-0.153**	**ug/L**	29.695	-514	-0.000
	Cr	53		**ug/L**		113771	0.002
	Mn	55	**0.005**	**ug/L**	65.137	1377	0.000
	Fe	57	**2.739**	**ug/L**	31.565	6335	0.000
	Co	59	**-0.001**	**ug/L**	55.568	169	-0.000
	Ni	60	**0.004**	**ug/L**	153.431	102	0.000
	Cu	63		**ug/L**		221	0.000
	Cu	65	**0.006**	**ug/L**	52.069	133	0.000
	Zn	66	**0.025**	**ug/L**	37.058	341	0.000
	Zn	67		**ug/L**		14917	0.000
	Zn	68		**ug/L**		1818	-0.000
>	Ge	74		**ug/L**		536617	536616.818
	As	75	**-0.151**	**ug/L**	202.277	-384	-0.000
	Se	77		**ug/L**		6146	-0.000
	Se	82	**0.434**	**ug/L**	24.838	4	0.000
	Kr	83		**ug/L**		111	-0.000
	Sr	88	**0.000**	**ug/L**	349.920	340	0.000
	Y	89		**ug/L**		66	-0.000
	Mo	98	**0.127**	**ug/L**	21.276	896	0.002
	Ag	107	**0.003**	**ug/L**	68.811	118	0.000
	Cd	111	**-0.001**	**ug/L**	1075.093	47	-0.000
	Cd	114		**ug/L**		78	-0.000
>	In	115		**ug/L**		351767	351766.809
	Sn	120	**0.076**	**ug/L**	67.218	2608	0.002
	Sb	121	**0.147**	**ug/L**	177.555	7568	0.002
	Sb	123		**ug/L**		5934	0.002
	Ba	135		**ug/L**		53	0.000
	Ba	137	**0.004**	**ug/L**	45.875	80	0.000
	Ho	165		**ug/L**		49	0.000
>	Lu	175		**ug/L**		522360	522360.386
	Tl	205	**0.039**	**ug/L**	53.346	2349	0.001
	Pb	208	**0.003**	**ug/L**	35.234	1435	0.000
	Bi	209		**ug/L**		356	0.000
	Th	232	**0.062**	**ug/L**	116.242	12923	0.004
	U	238	**0.006**	**ug/L**	67.330	1207	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Saturday, November 28, 2009 17:14:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 10.108

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**950.083**	ug/L	2.385	2651907	0.995
	Be	9	**913.603**	ug/L	3.851	474927	0.178
	B	11	**-2.330**	ug/L	6.511	1456	-0.000
	Na	23	**48550.527**	ug/L	7.771	262265711	98.319
	Mg	24	**50762.926**	ug/L	7.246	196830554	73.842
	Al	27	**52436.047**	ug/L	2.190	259241657	97.236
	P	31	**23622.120**	ug/L	0.416	6790484	2.543
	K	39	**50240.677**	ug/L	7.931	339130786	126.943
	Ca	43	**48305.772**	ug/L	1.333	785303	0.295
>	Sc	45		ug/L		2665797	2665796.768
	Ti	47	**48.825**	ug/L	7.563	40387	0.015
	V	51	**952.339**	ug/L	2.389	7688553	2.885
	Cr	52	**945.683**	ug/L	2.778	5948826	2.232
	Cr	53		ug/L		835138	0.274
	Mn	55	**995.695**	ug/L	3.883	10271186	3.854
	Fe	57	**50659.684**	ug/L	3.157	11455238	4.297
	Co	59	**863.307**	ug/L	1.967	6737010	2.528
	Ni	60	**848.635**	ug/L	1.820	1465071	0.550
	Cu	63		ug/L		3659486	1.373
	Cu	65	**836.502**	ug/L	2.883	1706078	0.640
	Zn	66	**2350.797**	ug/L	1.404	3408469	6.734
	Zn	67		ug/L		527163	1.014
	Zn	68		ug/L		2268601	4.479
>	Ge	74		ug/L		506123	506123.076
	As	75	**871.455**	ug/L	1.100	1229076	2.429
	Se	77		ug/L		60258	0.107
	Se	82	**473.751**	ug/L	1.570	71945	0.142
	Kr	83		ug/L		253	0.000
	Sr	88	**1081.815**	ug/L	1.714	17139265	53.973
	Y	89		ug/L		575	0.002
	Mo	98	**1075.346**	ug/L	2.673	4078477	12.843
	Ag	107	**242.382**	ug/L	0.929	1539376	4.847
	Cd	111	**897.132**	ug/L	0.404	1460126	4.598
	Cd	114		ug/L		3627643	11.424
>	In	115		ug/L		317556	317556.317
	Sn	120	**981.195**	ug/L	1.057	6434958	20.259
	Sb	121	**243.210**	ug/L	8.491	1223432	3.834
	Sb	123		ug/L		975438	3.057
	Ba	135		ug/L		1520148	3.123
	Ba	137	**945.234**	ug/L	1.081	2868032	5.893
	Ho	165		ug/L		371	0.001
>	Lu	175		ug/L		486751	486750.972
	Tl	205	**504.908**	ug/L	1.206	8538577	17.538
	Pb	208	**4748.172**	ug/L	0.773	129786412	266.651
	Bi	209		ug/L		3826	0.007
	Th	232	**2509.638**	ug/L	1.564	76599890	157.364
	U	238	**5195.074**	ug/L	1.663	165441550	339.918

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	95.008				
	Be	9	91.360				
	B	11					
	Na	23	97.101				
	Mg	24	101.526				
	Al	27	104.872				
	P	31	94.488				
	K	39	100.481				
	Ca	43	96.612				
>	Sc	45		89.2			
	Ti	47					
	V	51	95.234				
	Cr	52	94.568				
	Cr	53					
	Mn	55	99.570				
	Fe	57	101.319				
	Co	59	86.331				
	Ni	60	84.864				
	Cu	63					
	Cu	65	83.650				
	Zn	66	94.032				
	Zn	67					
	Zn	68					
>	Ge	74		89.5			
	As	75	87.145				
	Se	77					
	Se	82	94.750				
	Kr	83					
	Sr	88	108.182				
	Y	89					
	Mo	98	107.535				
	Ag	107	96.953				
	Cd	111	89.713				
	Cd	114					
>	In	115		86.6			
	Sn	120	98.120				
	Sb	121	97.284				
	Sb	123					
	Ba	135					
	Ba	137	94.523				
	Ho	165					
>	Lu	175		92.2			
	Tl	205	100.982				
	Pb	208	94.963				
	Bi	209					
	Th	232	100.386				
	U	238	103.901				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Cd	111	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Saturday, November 28, 2009 17:20:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 11.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.109**	**ug/L**	2.256	150647	0.051
	Be	9	**50.541**	**ug/L**	2.107	28872	0.010
	B	11	**95.462**	**ug/L**	2.456	58959	0.019
	Na	23	**4961.258**	**ug/L**	10.310	29447378	10.047
	Mg	24	**5494.771**	**ug/L**	5.721	23401635	7.993
	Al	27	**5399.023**	**ug/L**	7.910	29322077	10.012
	P	31	**4678.476**	**ug/L**	1.413	1486337	0.504
	K	39	**5095.331**	**ug/L**	14.319	38269049	12.874
	Ca	43	**4849.773**	**ug/L**	1.901	86849	0.030
>	Sc	45		**ug/L**		2926275	2926274.500
	Ti	47	**48.067**	**ug/L**	1.255	43700	0.015
	V	51	**51.037**	**ug/L**	3.158	451584	0.155
	Cr	52	**51.558**	**ug/L**	1.352	356622	0.122
	Cr	53		**ug/L**		151234	0.012
	Mn	55	**52.764**	**ug/L**	1.176	598975	0.204
	Fe	57	**4560.149**	**ug/L**	2.475	1137662	0.387
	Co	59	**51.373**	**ug/L**	1.756	440354	0.150
	Ni	60	**49.667**	**ug/L**	1.969	94235	0.032
	Cu	63		**ug/L**		234022	0.080
	Cu	65	**51.861**	**ug/L**	1.904	116265	0.040
	Zn	66	**50.136**	**ug/L**	2.148	78479	0.144
	Zn	67		**ug/L**		27483	0.023
	Zn	68		**ug/L**		56657	0.101
>	Ge	74		**ug/L**		544301	544300.599
	As	75	**48.464**	**ug/L**	1.267	73355	0.135
	Se	77		**ug/L**		11535	0.009
	Se	82	**51.417**	**ug/L**	3.253	8335	0.015
	Kr	83		**ug/L**		116	-0.000
	Sr	88	**52.309**	**ug/L**	1.365	926005	2.610
	Y	89		**ug/L**		108	0.000
	Mo	98	**49.492**	**ug/L**	1.143	210033	0.591
	Ag	107	**51.620**	**ug/L**	0.333	366275	1.032
	Cd	111	**50.672**	**ug/L**	0.678	92166	0.260
	Cd	114		**ug/L**		218054	0.615
>	In	115		**ug/L**		354704	354703.587
	Sn	120	**55.992**	**ug/L**	1.621	412129	1.156
	Sb	121	**54.149**	**ug/L**	5.713	309625	0.854
	Sb	123		**ug/L**		240450	0.663
	Ba	135		**ug/L**		92564	0.179
	Ba	137	**50.315**	**ug/L**	2.611	162592	0.314
	Ho	165		**ug/L**		90	0.000
>	Lu	175		**ug/L**		518221	518221.172
	Tl	205	**52.560**	**ug/L**	0.799	947744	1.826
	Pb	208	**52.956**	**ug/L**	0.554	1542424	2.974
	Bi	209		**ug/L**		450	0.000
	Th	232	**54.512**	**ug/L**	0.541	1782222	3.418
	U	238	**53.653**	**ug/L**	1.676	1820296	3.511

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.218				
	Be	9	101.083				
	B	11	95.462				
	Na	23	99.225				
	Mg	24	109.895				
	Al	27	106.911				
	P	31	93.570				
	K	39	101.907				
	Ca	43	96.995				
>	Sc	45		97.9			
	Ti	47	96.134				
	V	51	102.075				
	Cr	52	103.116				
	Cr	53					
	Mn	55	105.527				
	Fe	57	91.203				
	Co	59	102.746				
	Ni	60	99.335				
	Cu	63					
	Cu	65	103.723				
	Zn	66	100.273				
	Zn	67					
	Zn	68					
>	Ge	74		96.2			
	As	75	96.928				
	Se	77					
	Se	82	102.834				
	Kr	83					
	Sr	88	104.618				
	Y	89					
	Mo	98	98.985				
	Ag	107	103.240				
	Cd	111	101.345				
	Cd	114					
>	In	115		96.7			
	Sn	120	111.985				
	Sb	121	108.299				
	Sb	123					
	Ba	135					
	Ba	137	100.631				
	Ho	165					
>	Lu	175		98.1			
	Tl	205	105.119				
	Pb	208	105.911				
	Bi	209					
	Th	232	109.024				
	U	238	107.307				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Saturday, November 28, 2009 17:27:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 12.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.049**	**ug/L**	48.312	301	0.000
	Be	9	**0.021**	**ug/L**	114.584	30	0.000
	B	11	**-0.597**	**ug/L**	52.324	2638	-0.000
	Na	23	**1.808**	**ug/L**	139.599	38723	0.004
	Mg	24	**1.942**	**ug/L**	96.310	16678	0.003
	Al	27	**2.073**	**ug/L**	171.918	23026	0.004
	P	31	**1.813**	**ug/L**	197.397	13173	0.000
	K	39	**-1.416**	**ug/L**	536.526	621944	-0.004
	Ca	43	**1.260**	**ug/L**	116.688	351	0.000
>	Sc	45		**ug/L**		2946638	2946637.590
	Ti	47	**0.137**	**ug/L**	46.412	667	0.000
	V	51	**-0.043**	**ug/L**	1624.336	-1353	-0.000
	Cr	52	**-0.131**	**ug/L**	24.698	-405	-0.000
	Cr	53		**ug/L**		112019	-0.002
	Mn	55	**0.016**	**ug/L**	231.496	1581	0.000
	Fe	57	**0.731**	**ug/L**	245.477	6259	0.000
	Co	59	**0.021**	**ug/L**	106.145	364	0.000
	Ni	60	**0.017**	**ug/L**	129.617	133	0.000
	Cu	63		**ug/L**		397	0.000
	Cu	65	**0.042**	**ug/L**	64.582	223	0.000
	Zn	66	**0.043**	**ug/L**	96.874	373	0.000
	Zn	67		**ug/L**		15248	0.000
	Zn	68		**ug/L**		1936	0.000
>	Ge	74		**ug/L**		543763	543763.340
	As	75	**0.119**	**ug/L**	2.663	22	0.000
	Se	77		**ug/L**		5925	-0.001
	Se	82	**0.500**	**ug/L**	18.431	15	0.000
	Kr	83		**ug/L**		113	-0.000
	Sr	88	**0.020**	**ug/L**	117.985	695	0.001
	Y	89		**ug/L**		62	-0.000
	Mo	98	**0.191**	**ug/L**	4.135	1175	0.002
	Ag	107	**0.012**	**ug/L**	93.548	181	0.000
	Cd	111	**0.023**	**ug/L**	91.951	90	0.000
	Cd	114		**ug/L**		123	0.000
>	In	115		**ug/L**		355561	355561.162
	Sn	120	**1.523**	**ug/L**	6.704	13260	0.031
	Sb	121	**1.401**	**ug/L**	23.727	14677	0.022
	Sb	123		**ug/L**		11533	0.017
	Ba	135		**ug/L**		78	0.000
	Ba	137	**0.018**	**ug/L**	116.074	125	0.000
	Ho	165		**ug/L**		53	0.000
>	Lu	175		**ug/L**		520829	520829.034
	Tl	205	**0.141**	**ug/L**	14.111	4192	0.005
	Pb	208	**0.082**	**ug/L**	120.657	3715	0.005
	Bi	209		**ug/L**		362	0.000
	Th	232	**0.617**	**ug/L**	8.865	31060	0.039
	U	238	**0.155**	**ug/L**	54.108	6306	0.010

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, November 28, 2009 18:22:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.479**	**ug/L**	0.089	151337	0.052
	Be	9	**50.562**	**ug/L**	2.644	28797	0.010
	B	11	**97.232**	**ug/L**	1.434	59810	0.019
	Na	23	**5474.369**	**ug/L**	4.331	32361442	11.086
	Mg	24	**5224.610**	**ug/L**	16.438	22151892	7.600
	Al	27	**5453.928**	**ug/L**	11.723	29494560	10.114
	P	31	**4818.224**	**ug/L**	2.702	1525488	0.519
	K	39	**4987.285**	**ug/L**	6.052	37387273	12.601
	Ca	43	**5041.516**	**ug/L**	1.514	89998	0.031
>	Sc	45		**ug/L**		2917549	2917549.457
	Ti	47	**50.533**	**ug/L**	1.924	45777	0.016
	V	51	**51.860**	**ug/L**	3.358	457487	0.157
	Cr	52	**52.470**	**ug/L**	1.806	361804	0.124
	Cr	53		**ug/L**		149408	0.011
	Mn	55	**54.049**	**ug/L**	1.762	611665	0.209
	Fe	57	**4608.514**	**ug/L**	1.683	1146287	0.391
	Co	59	**51.506**	**ug/L**	2.742	440099	0.151
	Ni	60	**50.837**	**ug/L**	3.685	96141	0.033
	Cu	63		**ug/L**		239311	0.082
	Cu	65	**52.949**	**ug/L**	2.269	118339	0.041
	Zn	66	**50.969**	**ug/L**	2.106	79438	0.146
	Zn	67		**ug/L**		27264	0.023
	Zn	68		**ug/L**		57083	0.102
>	Ge	74		**ug/L**		542034	542033.635
	As	75	**48.914**	**ug/L**	1.507	73735	0.136
	Se	77		**ug/L**		11713	0.010
	Se	82	**51.696**	**ug/L**	1.307	8348	0.016
	Kr	83		**ug/L**		123	-0.000
	Sr	88	**52.957**	**ug/L**	1.545	930981	2.642
	Y	89		**ug/L**		216	0.000
	Mo	98	**49.956**	**ug/L**	2.048	210512	0.597
	Ag	107	**52.195**	**ug/L**	1.736	367782	1.044
	Cd	111	**51.166**	**ug/L**	1.784	92413	0.262
	Cd	114		**ug/L**		217599	0.618
>	In	115		**ug/L**		352254	352254.495
	Sn	120	**50.850**	**ug/L**	1.205	371872	1.050
	Sb	121	**47.902**	**ug/L**	11.849	272639	0.755
	Sb	123		**ug/L**		210726	0.583
	Ba	135		**ug/L**		92258	0.182
	Ba	137	**50.769**	**ug/L**	1.695	160828	0.316
	Ho	165		**ug/L**		98	0.000
>	Lu	175		**ug/L**		508005	508005.028
	Tl	205	**52.820**	**ug/L**	1.114	933568	1.835
	Pb	208	**53.221**	**ug/L**	0.500	1519576	2.989
	Bi	209		**ug/L**		583	0.000
	Th	232	**52.384**	**ug/L**	3.769	1678794	3.285
	U	238	**53.252**	**ug/L**	1.709	1770806	3.484

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.957				
	Be	9	101.125				
	B	11	97.232				
	Na	23	109.487				
	Mg	24	104.492				
	Al	27	107.999				
	P	31	96.364				
	K	39	99.746				
	Ca	43	100.830				
>	Sc	45		97.6			
	Ti	47	101.067				
	V	51	103.720				
	Cr	52	104.940				
	Cr	53					
	Mn	55	108.097				
	Fe	57	92.170				
	Co	59	103.012				
	Ni	60	101.673				
	Cu	63					
	Cu	65	105.898				
	Zn	66	101.938				
	Zn	67					
	Zn	68					
>	Ge	74		95.8			
	As	75	97.828				
	Se	77					
	Se	82	103.393				
	Kr	83					
	Sr	88	105.913				
	Y	89					
	Mo	98	99.912				
	Ag	107	104.389				
	Cd	111	102.331				
	Cd	114					
>	In	115		96.0			
	Sn	120	101.699				
	Sb	121	95.804				
	Sb	123					
	Ba	135					
	Ba	137	101.538				
	Ho	165					
>	Lu	175		96.2			
	Tl	205	105.641				
	Pb	208	106.442				
	Bi	209					
	Th	232	104.769				
	U	238	106.503				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, November 28, 2009 18:28:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	**ug/L**	32.814	228	0.000
	Be	9	**-0.006**	**ug/L**	23.684	15	-0.000
	B	11	**-0.367**	**ug/L**	86.442	2733	-0.000
	Na	23	**1.565**	**ug/L**	68.113	37049	0.003
	Mg	24	**-0.497**	**ug/L**	68.596	6335	-0.001
	Al	27	**-0.056**	**ug/L**	477.340	11671	-0.000
	P	31	**1.188**	**ug/L**	249.359	12805	0.000
	K	39	**-1.106**	**ug/L**	164.895	616709	-0.003
	Ca	43	**0.543**	**ug/L**	198.268	333	0.000
>	Sc	45		**ug/L**		2904607	2904607.123
	Ti	47	**0.330**	**ug/L**	6.801	831	0.000
	V	51	**0.245**	**ug/L**	226.017	1395	0.001
	Cr	52	**-0.028**	**ug/L**	162.964	304	-0.000
	Cr	53		**ug/L**		108195	-0.002
	Mn	55	**0.034**	**ug/L**	5.148	1778	0.000
	Fe	57	**-0.032**	**ug/L**	2982.055	5991	-0.000
	Co	59	**-0.001**	**ug/L**	61.600	172	-0.000
	Ni	60	**-0.004**	**ug/L**	83.564	93	-0.000
	Cu	63		**ug/L**		223	0.000
	Cu	65	**0.001**	**ug/L**	166.213	130	0.000
	Zn	66	**-0.034**	**ug/L**	17.745	249	-0.000
	Zn	67		**ug/L**		14467	-0.001
	Zn	68		**ug/L**		1794	-0.000
>	Ge	74		**ug/L**		535593	535592.570
	As	75	**-0.162**	**ug/L**	120.756	-398	-0.000
	Se	77		**ug/L**		5808	-0.001
	Se	82	**0.484**	**ug/L**	31.706	13	0.000
	Kr	83		**ug/L**		100	-0.000
	Sr	88	**0.001**	**ug/L**	57.933	346	0.000
	Y	89		**ug/L**		93	0.000
	Mo	98	**0.015**	**ug/L**	170.007	415	0.000
	Ag	107	**0.000**	**ug/L**	265.343	97	0.000
	Cd	111	**0.000**	**ug/L**	754.724	47	0.000
	Cd	114		**ug/L**		68	-0.000
>	In	115		**ug/L**		345358	345357.942
	Sn	120	**0.101**	**ug/L**	32.633	2746	0.002
	Sb	121	**0.172**	**ug/L**	159.136	7572	0.003
	Sb	123		**ug/L**		5902	0.002
	Ba	135		**ug/L**		42	-0.000
	Ba	137	**0.003**	**ug/L**	134.241	75	0.000
	Ho	165		**ug/L**		50	0.000
>	Lu	175		**ug/L**		509389	509388.594
	Tl	205	**0.019**	**ug/L**	70.371	1937	0.001
	Pb	208	**0.001**	**ug/L**	228.920	1338	0.000
	Bi	209		**ug/L**		456	0.000
	Th	232	**0.026**	**ug/L**	200.523	11472	0.002
	U	238	**0.010**	**ug/L**	21.696	1324	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, November 28, 2009 19:17:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 8.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.195**	ug/L	2.032	148453	0.052
	Be	9	**50.528**	ug/L	0.603	28397	0.010
	B	11	**95.123**	ug/L	6.010	57791	0.019
	Na	23	**5126.550**	ug/L	5.763	29907493	10.382
	Mg	24	**5061.126**	ug/L	6.839	21203356	7.362
	Al	27	**5297.036**	ug/L	4.593	28287180	9.823
	P	31	**4728.837**	ug/L	0.620	1477774	0.509
	K	39	**5006.316**	ug/L	4.763	37034563	12.649
	Ca	43	**4964.805**	ug/L	0.432	87462	0.030
>	Sc	45		ug/L		2878583	2878582.811
	Ti	47	**50.429**	ug/L	0.709	45078	0.015
	V	51	**51.770**	ug/L	3.705	450675	0.157
	Cr	52	**51.671**	ug/L	2.154	351584	0.122
	Cr	53		ug/L		139521	0.009
	Mn	55	**52.907**	ug/L	1.256	590858	0.205
	Fe	57	**4532.186**	ug/L	1.759	1112412	0.384
	Co	59	**50.077**	ug/L	2.189	422259	0.147
	Ni	60	**50.612**	ug/L	1.177	94468	0.033
	Cu	63		ug/L		232728	0.081
	Cu	65	**52.138**	ug/L	1.106	114996	0.040
	Zn	66	**50.969**	ug/L	0.707	77570	0.146
	Zn	67		ug/L		25348	0.020
	Zn	68		ug/L		55434	0.101
>	Ge	74		ug/L		529228	529227.882
	As	75	**47.712**	ug/L	2.504	70214	0.133
	Se	77		ug/L		11007	0.009
	Se	82	**50.827**	ug/L	0.711	8014	0.015
	Kr	83		ug/L		127	-0.000
	Sr	88	**52.524**	ug/L	1.376	897533	2.620
	Y	89		ug/L		240	0.000
	Mo	98	**49.540**	ug/L	1.466	202939	0.592
	Ag	107	**52.888**	ug/L	2.108	362229	1.058
	Cd	111	**50.823**	ug/L	0.595	89234	0.260
	Cd	114		ug/L		210624	0.615
>	In	115		ug/L		342399	342399.254
	Sn	120	**51.279**	ug/L	1.256	364528	1.059
	Sb	121	**48.141**	ug/L	10.311	266497	0.759
	Sb	123		ug/L		204736	0.583
	Ba	135		ug/L		89011	0.178
	Ba	137	**49.621**	ug/L	1.845	154667	0.309
	Ho	165		ug/L		89	0.000
>	Lu	175		ug/L		499871	499870.509
	Tl	205	**52.946**	ug/L	1.478	920763	1.839
	Pb	208	**53.178**	ug/L	1.064	1493961	2.986
	Bi	209		ug/L		584	0.000
	Th	232	**51.593**	ug/L	0.316	1627556	3.235
	U	238	**53.111**	ug/L	1.022	1737913	3.475

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.390				
	Be	9	101.056				
	B	11	95.123				
	Na	23	102.531				
	Mg	24	101.223				
	Al	27	104.892				
	P	31	94.577				
	K	39	100.126				
	Ca	43	99.296				
>	Sc	45		96.3			
	Ti	47	100.858				
	V	51	103.541				
	Cr	52	103.341				
	Cr	53					
	Mn	55	105.814				
	Fe	57	90.644				
	Co	59	100.153				
	Ni	60	101.223				
	Cu	63					
	Cu	65	104.275				
	Zn	66	101.938				
	Zn	67					
	Zn	68					
>	Ge	74		93.6			
	As	75	95.425				
	Se	77					
	Se	82	101.654				
	Kr	83					
	Sr	88	105.048				
	Y	89					
	Mo	98	99.080				
	Ag	107	105.775				
	Cd	111	101.646				
	Cd	114					
>	In	115		93.3			
	Sn	120	102.558				
	Sb	121	96.282				
	Sb	123					
	Ba	135					
	Ba	137	99.241				
	Ho	165					
>	Lu	175		94.6			
	Tl	205	105.892				
	Pb	208	106.356				
	Bi	209					
	Th	232	103.186				
	U	238	106.221				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, November 28, 2009 19:23:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 9.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.029	ug/L	24.315	229	0.000
	Be	9	0.000	ug/L	1929.963	18	0.000
	B	11	-0.751	ug/L	71.165	2422	-0.000
	Na	23	2.554	ug/L	107.677	41399	0.005
	Mg	24	-0.199	ug/L	179.078	7335	-0.000
	Al	27	0.721	ug/L	80.540	15342	0.001
	P	31	2.144	ug/L	163.904	12665	0.000
	K	39	2.157	ug/L	169.196	618804	0.005
	Ca	43	-0.634	ug/L	282.796	302	-0.000
>	Sc	45		ug/L		2805476	2805475.662
	Ti	47	0.394	ug/L	10.845	858	0.000
	V	51	0.201	ug/L	143.687	913	0.001
	Cr	52	0.058	ug/L	56.001	872	0.000
	Cr	53		ug/L		98713	-0.005
	Mn	55	0.054	ug/L	3.411	1929	0.000
	Fe	57	0.179	ug/L	146.858	5837	0.000
	Co	59	0.002	ug/L	204.797	191	0.000
	Ni	60	-0.002	ug/L	380.731	93	-0.000
	Cu	63		ug/L		272	0.000
	Cu	65	0.006	ug/L	90.381	135	0.000
	Zn	66	-0.036	ug/L	40.413	241	-0.000
	Zn	67		ug/L		13768	-0.001
	Zn	68		ug/L		1700	-0.000
>	Ge	74		ug/L		522709	522708.736
	As	75	-0.102	ug/L	138.685	-302	-0.000
	Se	77		ug/L		5199	-0.002
	Se	82	0.515	ug/L	9.125	17	0.000
	Kr	83		ug/L		97	-0.000
	Sr	88	0.004	ug/L	60.439	394	0.000
	Y	89		ug/L		90	0.000
	Mo	98	0.013	ug/L	149.021	398	0.000
	Ag	107	0.005	ug/L	46.046	124	0.000
	Cd	111	-0.001	ug/L	887.756	45	-0.000
	Cd	114		ug/L		86	0.000
>	In	115		ug/L		339098	339098.421
	Sn	120	0.063	ug/L	88.388	2425	0.001
	Sb	121	0.069	ug/L	481.615	6870	0.001
	Sb	123		ug/L		5305	0.001
	Ba	135		ug/L		54	0.000
	Ba	137	0.005	ug/L	84.617	80	0.000
	Ho	165		ug/L		46	0.000
>	Lu	175		ug/L		498760	498759.791
	Tl	205	0.011	ug/L	152.644	1765	0.000
	Pb	208	0.004	ug/L	51.437	1386	0.000
	Bi	209		ug/L		466	0.000
	Th	232	0.019	ug/L	253.309	11010	0.001
	U	238	0.010	ug/L	8.451	1281	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, November 28, 2009 20:00:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 8.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.894**	**ug/L**	1.292	151857	0.053
	Be	9	**52.171**	**ug/L**	2.344	28990	0.010
	B	11	**99.497**	**ug/L**	2.346	59643	0.020
	Na	23	**5423.641**	**ug/L**	2.067	31287839	10.983
	Mg	24	**5348.872**	**ug/L**	2.420	22151892	7.781
	Al	27	**5450.197**	**ug/L**	11.864	28804629	10.107
	P	31	**4850.141**	**ug/L**	1.600	1498357	0.522
	K	39	**4873.766**	**ug/L**	18.181	35623723	12.315
	Ca	43	**5056.376**	**ug/L**	1.408	88069	0.031
>	Sc	45		**ug/L**		2846490	2846489.510
	Ti	47	**51.176**	**ug/L**	1.188	45224	0.016
	V	51	**52.310**	**ug/L**	0.747	450331	0.158
	Cr	52	**52.582**	**ug/L**	0.877	353783	0.124
	Cr	53		**ug/L**		136134	0.008
	Mn	55	**53.804**	**ug/L**	0.803	594128	0.208
	Fe	57	**4601.817**	**ug/L**	0.566	1116863	0.390
	Co	59	**50.371**	**ug/L**	0.100	420029	0.147
	Ni	60	**50.203**	**ug/L**	3.513	92641	0.033
	Cu	63		**ug/L**		228659	0.080
	Cu	65	**51.961**	**ug/L**	0.403	113323	0.040
	Zn	66	**50.764**	**ug/L**	1.309	76475	0.145
	Zn	67		**ug/L**		25211	0.021
	Zn	68		**ug/L**		54794	0.101
>	Ge	74		**ug/L**		523853	523852.862
	As	75	**48.107**	**ug/L**	1.231	70082	0.134
	Se	77		**ug/L**		10677	0.009
	Se	82	**50.436**	**ug/L**	2.463	7870	0.015
	Kr	83		**ug/L**		147	-0.000
	Sr	88	**53.383**	**ug/L**	2.032	900227	2.663
	Y	89		**ug/L**		291	0.001
	Mo	98	**49.828**	**ug/L**	2.266	201436	0.595
	Ag	107	**52.716**	**ug/L**	2.400	356304	1.054
	Cd	111	**51.216**	**ug/L**	0.847	88751	0.262
	Cd	114		**ug/L**		207879	0.615
>	In	115		**ug/L**		337958	337958.360
	Sn	120	**51.672**	**ug/L**	2.304	362449	1.067
	Sb	121	**47.841**	**ug/L**	12.308	261121	0.754
	Sb	123		**ug/L**		203315	0.587
	Ba	135		**ug/L**		88496	0.182
	Ba	137	**51.331**	**ug/L**	1.352	155838	0.320
	Ho	165		**ug/L**		103	0.000
>	Lu	175		**ug/L**		486843	486842.963
	Tl	205	**53.779**	**ug/L**	1.297	910897	1.868
	Pb	208	**53.906**	**ug/L**	0.136	1475056	3.027
	Bi	209		**ug/L**		525	0.000
	Th	232	**52.582**	**ug/L**	1.057	1615263	3.297
	U	238	**53.753**	**ug/L**	0.881	1713173	3.517

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.787				
	Be	9	104.343				
	B	11	99.497				
	Na	23	108.473				
	Mg	24	106.977				
	Al	27	107.925				
	P	31	97.003				
	K	39	97.475				
	Ca	43	101.128				
>	Sc	45		95.2			
	Ti	47	102.351				
	V	51	104.620				
	Cr	52	105.164				
	Cr	53					
	Mn	55	107.608				
	Fe	57	92.036				
	Co	59	100.741				
	Ni	60	100.406				
	Cu	63					
	Cu	65	103.921				
	Zn	66	101.529				
	Zn	67					
	Zn	68					
>	Ge	74		92.6			
	As	75	96.214				
	Se	77					
	Se	82	100.872				
	Kr	83					
	Sr	88	106.766				
	Y	89					
	Mo	98	99.656				
	Ag	107	105.432				
	Cd	111	102.433				
	Cd	114					
>	In	115		92.1			
	Sn	120	103.344				
	Sb	121	95.682				
	Sb	123					
	Ba	135					
	Ba	137	102.661				
	Ho	165					
>	Lu	175		92.2			
	Tl	205	107.557				
	Pb	208	107.812				
	Bi	209					
	Th	232	105.163				
	U	238	107.507				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, November 28, 2009 20:06:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 9.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.031	ug/L	20.769	237	0.000
	Be	9	-0.005	ug/L	151.060	15	-0.000
	B	11	-0.681	ug/L	80.050	2471	-0.000
	Na	23	2.059	ug/L	73.554	38721	0.004
	Mg	24	-0.358	ug/L	382.059	6669	-0.001
	Al	27	1.295	ug/L	79.503	18346	0.002
	P	31	2.466	ug/L	50.739	12815	0.000
	K	39	2.168	ug/L	75.990	621224	0.005
	Ca	43	-1.643	ug/L	52.849	286	-0.000
>	Sc	45		ug/L		2816510	2816510.440
	Ti	47	0.488	ug/L	11.682	942	0.000
	V	51	-0.183	ug/L	204.862	-2391	-0.001
	Cr	52	0.109	ug/L	19.861	1210	0.000
	Cr	53		ug/L		97163	-0.005
	Mn	55	0.058	ug/L	17.581	1985	0.000
	Fe	57	0.760	ug/L	60.931	5999	0.000
	Co	59	-0.000	ug/L	1060245.710	179	-0.000
	Ni	60	-0.002	ug/L	346.426	93	-0.000
	Cu	63		ug/L		287	0.000
	Cu	65	0.003	ug/L	388.284	129	0.000
	Zn	66	-0.040	ug/L	35.844	229	-0.000
	Zn	67		ug/L		13762	-0.001
	Zn	68		ug/L		1685	-0.000
>	Ge	74		ug/L		509825	509825.469
	As	75	0.028	ug/L	473.705	-109	0.000
	Se	77		ug/L		5086	-0.002
	Se	82	0.411	ug/L	30.266	1	0.000
	Kr	83		ug/L		114	-0.000
	Sr	88	0.006	ug/L	26.744	415	0.000
	Y	89		ug/L		106	0.000
	Mo	98	0.002	ug/L	777.304	353	0.000
	Ag	107	0.007	ug/L	35.238	137	0.000
	Cd	111	0.003	ug/L	38.097	51	0.000
	Cd	114		ug/L		83	0.000
>	In	115		ug/L		336668	336667.584
	Sn	120	0.055	ug/L	97.826	2356	0.001
	Sb	121	0.015	ug/L	2129.137	6543	0.000
	Sb	123		ug/L		5070	-0.000
	Ba	135		ug/L		60	0.000
	Ba	137	0.011	ug/L	16.079	95	0.000
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		491450	491450.204
	Tl	205	0.001	ug/L	1503.700	1567	0.000
	Pb	208	0.001	ug/L	158.345	1296	0.000
	Bi	209		ug/L		412	0.000
	Th	232	0.007	ug/L	839.484	10482	0.000
	U	238	0.004	ug/L	105.364	1093	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978589
Sample Date/Time: Saturday, November 28, 2009 20:12:37
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978589.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	ug/L	49.889	171	0.000
	Be	9	**-0.015**	ug/L	25.353	10	-0.000
	B	11	**-2.437**	ug/L	7.152	1450	-0.000
	Na	23	**4.172**	ug/L	60.308	49757	0.008
	Mg	24	**-1.249**	ug/L	34.245	3000	-0.002
	Al	27	**1.292**	ug/L	16.325	18011	0.002
	P	31	**34.553**	ug/L	15.404	22096	0.004
	K	39	**1.558**	ug/L	245.654	604897	0.004
	Ca	43	**4.317**	ug/L	19.836	381	0.000
>	Sc	45		ug/L		2761052	2761051.674
	Ti	47	**0.624**	ug/L	5.086	1038	0.000
	V	51	**0.280**	ug/L	153.091	1570	0.001
	Cr	52	**0.528**	ug/L	7.395	3917	0.001
	Cr	53		ug/L		74255	-0.013
	Mn	55	**0.178**	ug/L	3.011	3231	0.001
	Fe	57	**10.222**	ug/L	9.207	8097	0.001
	Co	59	**-0.009**	ug/L	6.861	101	-0.000
	Ni	60	**0.018**	ug/L	22.334	127	0.000
	Cu	63		ug/L		668	0.000
	Cu	65	**0.093**	ug/L	20.478	317	0.000
	Zn	66	**0.920**	ug/L	0.424	1599	0.003
	Zn	67		ug/L		10432	-0.007
	Zn	68		ug/L		2403	0.001
>	Ge	74		ug/L		500030	500030.085
	As	75	**0.071**	ug/L	305.432	-48	0.000
	Se	77		ug/L		3393	-0.005
	Se	82	**-0.517**	ug/L	264.166	-140	-0.000
	Kr	83		ug/L		235	0.000
	Sr	88	**0.007**	ug/L	20.829	442	0.000
	Y	89		ug/L		127	0.000
	Mo	98	**-0.039**	ug/L	12.322	186	-0.000
	Ag	107	**0.008**	ug/L	13.417	147	0.000
	Cd	111	**0.000**	ug/L	1088.318	46	0.000
	Cd	114		ug/L		48	-0.000
>	In	115		ug/L		335753	335753.151
	Sn	120	**-0.043**	ug/L	5.690	1667	-0.001
	Sb	121	**-0.825**	ug/L	6.155	2078	-0.013
	Sb	123		ug/L		1600	-0.010
	Ba	135		ug/L		81	0.000
	Ba	137	**0.019**	ug/L	12.814	123	0.000
	Ho	165		ug/L		51	0.000
>	Lu	175		ug/L		496020	496020.488
	Tl	205	**-0.052**	ug/L	4.141	661	-0.002
	Pb	208	**0.010**	ug/L	79.171	1551	0.001
	Bi	209		ug/L		375	0.000
	Th	232	**-0.084**	ug/L	38.216	7753	-0.005
	U	238	**-0.022**	ug/L	5.193	247	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978594
Sample Date/Time: Saturday, November 28, 2009 20:18:47
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925476|20|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978594.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.497**	ug/L	2.071	13084	0.005
	Be	9	**49.858**	ug/L	3.181	26747	0.010
	B	11	**72.488**	ug/L	3.483	42705	0.015
	Na	23	**372.059**	ug/L	16.957	2097925	0.753
	Mg	24	**1749.449**	ug/L	7.671	6996447	2.545
	Al	27	**5274.586**	ug/L	10.903	26907318	9.781
	P	31	**388.492**	ug/L	1.999	126710	0.042
	K	39	**1428.683**	ug/L	11.864	10520682	3.610
	Ca	43	**1970.053**	ug/L	0.698	33323	0.012
>	Sc	45		ug/L		2748612	2748612.064
	Ti	47	**132.245**	ug/L	2.410	112025	0.041
	V	51	**69.544**	ug/L	2.094	578286	0.211
	Cr	52	**38.640**	ug/L	1.411	251187	0.091
	Cr	53		ug/L		121019	0.004
	Mn	55	**202.597**	ug/L	0.637	2156561	0.784
	Fe	57	**5468.159**	ug/L	2.288	1280375	0.464
	Co	59	**48.092**	ug/L	2.170	387208	0.141
	Ni	60	**57.479**	ug/L	2.570	102406	0.037
	Cu	63		ug/L		237644	0.086
	Cu	65	**56.077**	ug/L	0.997	118084	0.043
	Zn	66	**109.691**	ug/L	0.884	160527	0.314
	Zn	67		ug/L		39384	0.050
	Zn	68		ug/L		117745	0.227
>	Ge	74		ug/L		509938	509937.663
	As	75	**137.410**	ug/L	0.949	195152	0.383
	Se	77		ug/L		15343	0.018
	Se	82	**97.339**	ug/L	0.654	14843	0.029
	Kr	83		ug/L		144	-0.000
	Sr	88	**90.745**	ug/L	0.706	1499445	4.527
	Y	89		ug/L		142166	0.429
	Mo	98	**44.764**	ug/L	0.032	177375	0.535
	Ag	107	**11.131**	ug/L	0.971	73805	0.223
	Cd	111	**65.375**	ug/L	2.231	110988	0.335
	Cd	114		ug/L		264561	0.799
>	In	115		ug/L		331134	331134.069
	Sn	120	**25.549**	ug/L	1.614	176611	0.528
	Sb	121	**14.747**	ug/L	2.054	83343	0.232
	Sb	123		ug/L		64115	0.179
	Ba	135		ug/L		437343	0.878
	Ba	137	**242.748**	ug/L	2.211	753597	1.513
	Ho	165		ug/L		8791	0.018
>	Lu	175		ug/L		497988	497988.061
	Tl	205	**106.897**	ug/L	2.094	1850262	3.713
	Pb	208	**92.384**	ug/L	1.504	2584539	5.188
	Bi	209		ug/L		5072	0.010
	Th	232	**9.033**	ug/L	4.144	292368	0.566
	U	238	**1.213**	ug/L	2.914	40487	0.079

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978594
Sample Date/Time: Saturday, November 28, 2009 20:24:58
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925476|40|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978594.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.221**	ug/L	1.367	6454	0.002
	Be	9	**24.973**	ug/L	1.552	13239	0.005
	B	11	**36.596**	ug/L	3.608	22651	0.007
	Na	23	**164.692**	ug/L	14.097	929913	0.334
	Mg	24	**874.202**	ug/L	5.033	3458591	1.272
	Al	27	**2593.387**	ug/L	5.805	13057487	4.809
	P	31	**199.305**	ug/L	2.712	69844	0.021
	K	39	**732.337**	ug/L	9.345	5602029	1.850
	Ca	43	**1004.740**	ug/L	0.570	16928	0.006
>	Sc	45		ug/L		2713891	2713890.637
	Ti	47	**66.310**	ug/L	1.842	55717	0.020
	V	51	**35.999**	ug/L	4.020	295118	0.109
	Cr	52	**19.491**	ug/L	1.893	125313	0.046
	Cr	53		ug/L		108378	0.000
	Mn	55	**103.634**	ug/L	2.217	1089664	0.401
	Fe	57	**2868.882**	ug/L	3.556	665737	0.243
	Co	59	**24.375**	ug/L	2.274	193836	0.071
	Ni	60	**28.842**	ug/L	2.070	50791	0.019
	Cu	63		ug/L		117148	0.043
	Cu	65	**28.021**	ug/L	0.875	58318	0.021
	Zn	66	**56.076**	ug/L	2.354	81230	0.161
	Zn	67		ug/L		26373	0.025
	Zn	68		ug/L		59936	0.116
>	Ge	74		ug/L		503932	503932.263
	As	75	**69.362**	ug/L	0.336	97274	0.193
	Se	77		ug/L		10022	0.008
	Se	82	**49.722**	ug/L	1.395	7463	0.015
	Kr	83		ug/L		129	-0.000
	Sr	88	**47.812**	ug/L	1.184	789408	2.385
	Y	89		ug/L		69464	0.210
	Mo	98	**22.125**	ug/L	1.294	87749	0.264
	Ag	107	**5.521**	ug/L	1.363	36617	0.110
	Cd	111	**32.105**	ug/L	0.463	54477	0.165
	Cd	114		ug/L		130042	0.393
>	In	115		ug/L		330803	330803.499
	Sn	120	**12.760**	ug/L	1.932	89079	0.263
	Sb	121	**6.807**	ug/L	3.294	41842	0.107
	Sb	123		ug/L		32179	0.082
	Ba	135		ug/L		220345	0.445
	Ba	137	**122.341**	ug/L	2.328	377558	0.763
	Ho	165		ug/L		4329	0.009
>	Lu	175		ug/L		495068	495067.939
	Tl	205	**58.856**	ug/L	0.507	1013610	2.044
	Pb	208	**48.353**	ug/L	1.311	1345436	2.715
	Bi	209		ug/L		2730	0.005
	Th	232	**4.441**	ug/L	3.213	148179	0.278
	U	238	**0.599**	ug/L	4.013	20355	0.039

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		90.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241539001
Sample Date/Time: Saturday, November 28, 2009 20:31:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\241539001.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**64.144**	ug/L	2.711	188752	0.067
	Be	9	**4.162**	ug/L	0.187	2298	0.001
	B	11	**17.095**	ug/L	2.085	12468	0.003
	Na	23	**1917.966**	ug/L	6.375	10930134	3.884
	Mg	24	**11558.837**	ug/L	17.401	47178458	16.814
	Al	27	**82345.655**	ug/L	6.162	428619772	152.700
	P	31	**605.018**	ug/L	2.700	194893	0.065
	K	39	**8391.166**	ug/L	3.555	60137076	21.202
	Ca	43	**15049.579**	ug/L	1.107	257998	0.092
>	Sc	45		ug/L		2807925	2807925.042
	Ti	47	**898.220**	ug/L	1.375	774400	0.276
	V	51	**82.500**	ug/L	2.204	700992	0.250
	Cr	52	**49.682**	ug/L	2.163	329737	0.117
	Cr	53		ug/L		106887	-0.002
	Mn	55	**893.415**	ug/L	2.550	9709346	3.458
	Fe	57	**55770.053**	ug/L	0.615	13287076	4.730
	Co	59	**17.195**	ug/L	2.481	141533	0.050
	Ni	60	**33.894**	ug/L	1.059	61740	0.022
	Cu	63		ug/L		139446	0.050
	Cu	65	**32.734**	ug/L	0.955	70465	0.025
	Zn	66	**171.420**	ug/L	3.088	239701	0.491
	Zn	67		ug/L		50022	0.075
	Zn	68		ug/L		177135	0.360
>	Ge	74		ug/L		487745	487745.243
	As	75	**8.284**	ug/L	2.432	11117	0.023
	Se	77		ug/L		3597	-0.004
	Se	82	**-0.843**	ug/L	44.587	-183	-0.000
	Kr	83		ug/L		513	0.001
	Sr	88	**123.861**	ug/L	4.299	2018711	6.180
	Y	89		ug/L		1329228	4.069
	Mo	98	**2.529**	ug/L	3.438	10200	0.030
	Ag	107	**0.564**	ug/L	1.704	3772	0.011
	Cd	111	**1.869**	ug/L	7.856	3172	0.010
	Cd	114		ug/L		1272	0.004
>	In	115		ug/L		326728	326728.482
	Sn	120	**1.147**	ug/L	3.204	9648	0.024
	Sb	121	**-0.782**	ug/L	0.574	2244	-0.012
	Sb	123		ug/L		1760	-0.010
	Ba	135		ug/L		867249	1.796
	Ba	137	**476.498**	ug/L	2.530	1434498	2.970
	Ho	165		ug/L		82392	0.171
>	Lu	175		ug/L		483067	483066.686
	Tl	205	**1.105**	ug/L	3.987	20063	0.038
	Pb	208	**56.293**	ug/L	2.549	1527846	3.161
	Bi	209		ug/L		29037	0.059
	Th	232	**32.885**	ug/L	1.366	1006061	2.062
	U	238	**3.697**	ug/L	2.410	117750	0.242

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978590
Sample Date/Time: Saturday, November 28, 2009 20:37:22
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978590.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**62.410**	ug/L	1.381	186137	0.065
	Be	9	**4.177**	ug/L	1.522	2337	0.001
	B	11	**16.204**	ug/L	3.940	12127	0.003
	Na	23	**1934.842**	ug/L	5.412	11179364	3.918
	Mg	24	**10950.108**	ug/L	7.853	45318375	15.928
	Al	27	**74757.190**	ug/L	7.467	394295694	138.628
	P	31	**698.837**	ug/L	3.003	226263	0.075
	K	39	**8743.808**	ug/L	2.373	63487823	22.093
	Ca	43	**14794.110**	ug/L	2.734	256993	0.090
>	Sc	45		ug/L		2845825	2845824.798
	Ti	47	**981.239**	ug/L	0.471	857459	0.301
	V	51	**84.786**	ug/L	2.930	730237	0.257
	Cr	52	**66.829**	ug/L	2.374	449376	0.158
	Cr	53		ug/L		118475	0.002
	Mn	55	**1161.307**	ug/L	1.481	12791763	4.495
	Fe	57	**56634.648**	ug/L	3.402	13675110	4.803
	Co	59	**18.190**	ug/L	1.978	151747	0.053
	Ni	60	**49.100**	ug/L	2.810	90592	0.032
	Cu	63		ug/L		135570	0.048
	Cu	65	**31.614**	ug/L	1.312	68975	0.024
	Zn	66	**184.496**	ug/L	1.815	262595	0.529
	Zn	67		ug/L		53852	0.081
	Zn	68		ug/L		194655	0.389
>	Ge	74		ug/L		496316	496316.245
	As	75	**8.937**	ug/L	0.983	12219	0.025
	Se	77		ug/L		3568	-0.005
	Se	82	**-0.603**	ug/L	21.893	-150	-0.000
	Kr	83		ug/L		503	0.001
	Sr	88	**117.015**	ug/L	1.120	1938677	5.838
	Y	89		ug/L		1446721	4.357
	Mo	98	**3.459**	ug/L	1.981	14057	0.041
	Ag	107	**0.588**	ug/L	1.646	3993	0.012
	Cd	111	**2.055**	ug/L	5.846	3543	0.011
	Cd	114		ug/L		1444	0.004
>	In	115		ug/L		332050	332050.459
	Sn	120	**1.288**	ug/L	0.820	10770	0.027
	Sb	121	**-0.863**	ug/L	1.337	1857	-0.014
	Sb	123		ug/L		1507	-0.011
	Ba	135		ug/L		903907	1.873
	Ba	137	**495.689**	ug/L	1.596	1491462	3.090
	Ho	165		ug/L		89372	0.185
>	Lu	175		ug/L		482680	482679.666
	Tl	205	**1.011**	ug/L	1.181	18479	0.035
	Pb	208	**65.611**	ug/L	1.240	1779615	3.685
	Bi	209		ug/L		35269	0.072
	Th	232	**32.312**	ug/L	1.539	987949	2.026
	U	238	**3.689**	ug/L	2.128	117422	0.241

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978592
Sample Date/Time: Saturday, November 28, 2009 20:43:34
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978592.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**92.385**	**ug/L**	2.640	278689	0.097
	Be	9	**28.908**	**ug/L**	2.549	16256	0.006
	B	11	**68.524**	**ug/L**	2.736	42479	0.014
	Na	23	**3023.024**	**ug/L**	2.066	17654528	6.122
	Mg	24	**12544.298**	**ug/L**	3.603	52589607	18.247
	Al	27	**90295.244**	**ug/L**	4.841	482261925	167.441
	P	31	**1674.703**	**ug/L**	1.008	531539	0.180
	K	39	**10676.138**	**ug/L**	3.672	78301648	26.975
	Ca	43	**14955.687**	**ug/L**	1.124	262943	0.091
>	Sc	45		**ug/L**		2880111	2880110.531
	Ti	47	**1124.348**	**ug/L**	2.438	993817	0.345
	V	51	**120.281**	**ug/L**	2.070	1048484	0.364
	Cr	52	**74.624**	**ug/L**	1.821	507750	0.176
	Cr	53		**ug/L**		123554	0.003
	Mn	55	**2695.170**	**ug/L**	2.208	30034886	10.432
	Fe	57	**60193.971**	**ug/L**	1.828	14708847	5.105
	Co	59	**66.608**	**ug/L**	1.560	561794	0.195
	Ni	60	**72.771**	**ug/L**	0.577	135863	0.047
	Cu	63		**ug/L**		251417	0.087
	Cu	65	**57.147**	**ug/L**	2.508	126041	0.044
	Zn	66	**212.446**	**ug/L**	1.306	299187	0.609
	Zn	67		**ug/L**		61163	0.097
	Zn	68		**ug/L**		222636	0.450
>	Ge	74		**ug/L**		491206	491206.001
	As	75	**48.335**	**ug/L**	2.260	66016	0.135
	Se	77		**ug/L**		4396	-0.003
	Se	82	**7.380**	**ug/L**	4.370	1029	0.002
	Kr	83		**ug/L**		589	0.001
	Sr	88	**162.707**	**ug/L**	0.837	2633387	8.118
	Y	89		**ug/L**		1649328	5.085
	Mo	98	**27.047**	**ug/L**	2.105	105107	0.323
	Ag	107	**26.253**	**ug/L**	1.689	170385	0.525
	Cd	111	**8.292**	**ug/L**	2.988	13830	0.042
	Cd	114		**ug/L**		23325	0.072
>	In	115		**ug/L**		324382	324381.912
	Sn	120	**12.949**	**ug/L**	2.742	88615	0.267
	Sb	121	**24.523**	**ug/L**	1.754	131633	0.387
	Sb	123		**ug/L**		102063	0.300
	Ba	135		**ug/L**		1196269	2.488
	Ba	137	**642.922**	**ug/L**	1.576	1926768	4.008
	Ho	165		**ug/L**		105799	0.220
>	Lu	175		**ug/L**		480730	480730.228
	Tl	205	**56.380**	**ug/L**	1.440	942885	1.958
	Pb	208	**184.742**	**ug/L**	0.931	4988589	10.375
	Bi	209		**ug/L**		32802	0.068
	Th	232	**57.049**	**ug/L**	0.383	1729675	3.577
	U	238	**33.059**	**ug/L**	0.468	1040767	2.163

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978593
Sample Date/Time: Saturday, November 28, 2009 20:49:48
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978593.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**93.009**	ug/L	1.823	280505	0.097
	Be	9	**30.148**	ug/L	0.748	16951	0.006
	B	11	**69.176**	ug/L	1.769	42825	0.014
	Na	23	**3079.369**	ug/L	8.312	17985235	6.236
	Mg	24	**11996.504**	ug/L	6.209	50222229	17.451
	Al	27	**75804.854**	ug/L	3.879	404644662	140.571
	P	31	**2127.853**	ug/L	2.349	671634	0.229
	K	39	**9882.987**	ug/L	10.199	72481931	24.971
	Ca	43	**15565.948**	ug/L	1.457	273504	0.095
>	Sc	45		ug/L		2878639	2878638.669
	Ti	47	**1024.300**	ug/L	2.514	905281	0.314
	V	51	**100.562**	ug/L	3.347	876062	0.305
	Cr	52	**75.813**	ug/L	3.651	515508	0.179
	Cr	53		ug/L		125047	0.004
	Mn	55	**1133.294**	ug/L	1.789	12627582	4.386
	Fe	57	**51864.101**	ug/L	1.810	12669784	4.399
	Co	59	**42.036**	ug/L	0.932	354486	0.123
	Ni	60	**62.426**	ug/L	3.452	116467	0.040
	Cu	63		ug/L		244024	0.085
	Cu	65	**56.311**	ug/L	1.998	124167	0.043
	Zn	66	**199.975**	ug/L	1.693	285954	0.573
	Zn	67		ug/L		56777	0.086
	Zn	68		ug/L		207898	0.414
>	Ge	74		ug/L		498656	498655.632
	As	75	**47.817**	ug/L	2.586	66311	0.133
	Se	77		ug/L		4484	-0.003
	Se	82	**8.137**	ug/L	4.876	1158	0.002
	Kr	83		ug/L		507	0.001
	Sr	88	**151.491**	ug/L	0.977	2476617	7.558
	Y	89		ug/L		1549693	4.730
	Mo	98	**27.609**	ug/L	3.066	108357	0.330
	Ag	107	**27.759**	ug/L	1.100	181988	0.555
	Cd	111	**8.113**	ug/L	0.959	13667	0.042
	Cd	114		ug/L		23327	0.071
>	In	115		ug/L		327644	327644.209
	Sn	120	**14.365**	ug/L	1.748	99087	0.297
	Sb	121	**26.779**	ug/L	2.067	144592	0.422
	Sb	123		ug/L		112123	0.327
	Ba	135		ug/L		817779	1.696
	Ba	137	**453.203**	ug/L	0.534	1362484	2.825
	Ho	165		ug/L		95024	0.197
>	Lu	175		ug/L		482242	482241.748
	Tl	205	**58.670**	ug/L	1.927	984193	2.038
	Pb	208	**158.317**	ug/L	1.120	4288699	8.891
	Bi	209		ug/L		26384	0.054
	Th	232	**56.941**	ug/L	0.818	1731819	3.570
	U	238	**34.164**	ug/L	1.518	1078857	2.235

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978591
Sample Date/Time: Saturday, November 28, 2009 20:56:00
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925476|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978591.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**12.839**	ug/L	1.469	37760	0.013
	Be	9	**0.883**	ug/L	4.844	500	0.000
	B	11	**2.911**	ug/L	11.287	4467	0.001
	Na	23	**390.461**	ug/L	3.823	2238269	0.791
	Mg	24	**2397.138**	ug/L	7.471	9768076	3.487
	Al	27	**16675.278**	ug/L	5.775	86586368	30.922
	P	31	**131.995**	ug/L	3.413	51739	0.014
	K	39	**1648.000**	ug/L	3.815	12253921	4.164
	Ca	43	**3025.876**	ug/L	0.935	51929	0.018
>	Sc	45		ug/L		2797851	2797851.024
	Ti	47	**184.197**	ug/L	1.828	158630	0.057
	V	51	**16.543**	ug/L	3.884	139382	0.050
	Cr	52	**9.827**	ug/L	1.487	65379	0.023
	Cr	53		ug/L		90482	-0.007
	Mn	55	**172.665**	ug/L	2.770	1870567	0.668
	Fe	57	**11003.864**	ug/L	4.009	2615768	0.933
	Co	59	**3.428**	ug/L	3.083	28255	0.010
	Ni	60	**7.017**	ug/L	1.366	12812	0.005
	Cu	63		ug/L		29718	0.011
	Cu	65	**6.877**	ug/L	1.944	14846	0.005
	Zn	66	**35.981**	ug/L	2.574	52093	0.103
	Zn	67		ug/L		20114	0.012
	Zn	68		ug/L		38723	0.074
>	Ge	74		ug/L		502775	502774.624
	As	75	**1.715**	ug/L	7.850	2259	0.005
	Se	77		ug/L		4203	-0.003
	Se	82	**0.194**	ug/L	69.142	-32	0.000
	Kr	83		ug/L		181	0.000
	Sr	88	**27.107**	ug/L	3.025	446315	1.352
	Y	89		ug/L		283441	0.859
	Mo	98	**0.434**	ug/L	4.318	2049	0.005
	Ag	107	**0.095**	ug/L	2.347	718	0.002
	Cd	111	**0.342**	ug/L	7.257	623	0.002
	Cd	114		ug/L		272	0.001
>	In	115		ug/L		329897	329896.845
	Sn	120	**0.102**	ug/L	11.974	2628	0.002
	Sb	121	**-0.906**	ug/L	4.693	1621	-0.014
	Sb	123		ug/L		1234	-0.011
	Ba	135		ug/L		179276	0.373
	Ba	137	**103.814**	ug/L	1.247	310834	0.647
	Ho	165		ug/L		16662	0.035
>	Lu	175		ug/L		480233	480233.166
	Tl	205	**0.182**	ug/L	3.922	4558	0.006
	Pb	208	**11.688**	ug/L	1.889	316417	0.656
	Bi	209		ug/L		6215	0.012
	Th	232	**6.668**	ug/L	1.390	210844	0.418
	U	238	**0.707**	ug/L	1.146	23159	0.046

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, November 28, 2009 21:02:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 8.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.378**	ug/L	1.351	150852	0.054
	Be	9	**52.131**	ug/L	1.143	28506	0.010
	B	11	**99.551**	ug/L	3.250	58730	0.020
	Na	23	**5134.167**	ug/L	4.897	29140635	10.397
	Mg	24	**5072.807**	ug/L	3.959	20674923	7.379
	Al	27	**5279.194**	ug/L	4.654	27424766	9.790
	P	31	**4827.812**	ug/L	0.725	1467812	0.520
	K	39	**5319.491**	ug/L	8.485	38269049	13.441
	Ca	43	**5119.445**	ug/L	0.628	87744	0.031
>	Sc	45		ug/L		2801001	2801001.424
	Ti	47	**50.400**	ug/L	1.816	43833	0.015
	V	51	**51.465**	ug/L	3.184	435875	0.156
	Cr	52	**51.917**	ug/L	1.459	343737	0.123
	Cr	53		ug/L		135554	0.009
	Mn	55	**52.869**	ug/L	2.050	574450	0.205
	Fe	57	**4613.674**	ug/L	1.526	1101738	0.391
	Co	59	**51.291**	ug/L	1.532	420842	0.150
	Ni	60	**50.504**	ug/L	1.692	91720	0.033
	Cu	63		ug/L		224215	0.080
	Cu	65	**51.314**	ug/L	1.606	110118	0.039
	Zn	66	**50.705**	ug/L	0.864	74413	0.145
	Zn	67		ug/L		24820	0.021
	Zn	68		ug/L		53609	0.102
>	Ge	74		ug/L		510323	510322.580
	As	75	**48.294**	ug/L	1.964	68537	0.135
	Se	77		ug/L		10528	0.009
	Se	82	**51.545**	ug/L	0.889	7837	0.015
	Kr	83		ug/L		116	-0.000
	Sr	88	**52.661**	ug/L	0.746	872940	2.627
	Y	89		ug/L		261	0.001
	Mo	98	**49.946**	ug/L	0.897	198478	0.597
	Ag	107	**52.648**	ug/L	0.782	349807	1.053
	Cd	111	**50.742**	ug/L	0.147	86422	0.260
	Cd	114		ug/L		207189	0.624
>	In	115		ug/L		332147	332146.916
	Sn	120	**51.240**	ug/L	0.068	353340	1.058
	Sb	121	**47.410**	ug/L	10.634	254608	0.747
	Sb	123		ug/L		196224	0.576
	Ba	135		ug/L		87483	0.183
	Ba	137	**51.095**	ug/L	1.457	152064	0.319
	Ho	165		ug/L		93	0.000
>	Lu	175		ug/L		477251	477251.455
	Tl	205	**53.743**	ug/L	1.914	892312	1.867
	Pb	208	**54.424**	ug/L	1.624	1459727	3.056
	Bi	209		ug/L		488	0.000
	Th	232	**52.663**	ug/L	2.511	1585758	3.302
	U	238	**54.332**	ug/L	1.392	1697411	3.555

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.756				
	Be	9	104.262				
	B	11	99.551				
	Na	23	102.683				
	Mg	24	101.456				
	Al	27	104.539				
	P	31	96.556				
	K	39	106.390				
	Ca	43	102.389				
>	Sc	45		93.7			
	Ti	47	100.800				
	V	51	102.929				
	Cr	52	103.833				
	Cr	53					
	Mn	55	105.738				
	Fe	57	92.273				
	Co	59	102.582				
	Ni	60	101.007				
	Cu	63					
	Cu	65	102.629				
	Zn	66	101.410				
	Zn	67					
	Zn	68					
>	Ge	74		90.2			
	As	75	96.588				
	Se	77					
	Se	82	103.091				
	Kr	83					
	Sr	88	105.322				
	Y	89					
	Mo	98	99.892				
	Ag	107	105.297				
	Cd	111	101.483				
	Cd	114					
>	In	115		90.5			
	Sn	120	102.480				
	Sb	121	94.821				
	Sb	123					
	Ba	135					
	Ba	137	102.189				
	Ho	165					
>	Lu	175		90.4			
	Tl	205	107.487				
	Pb	208	108.847				
	Bi	209					
	Th	232	105.326				
	U	238	108.665				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, November 28, 2009 21:08:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 9.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.030**	**ug/L**	12.494	231	0.000
	Be	9	**0.009**	**ug/L**	102.423	23	0.000
	B	11	**-0.294**	**ug/L**	163.456	2653	-0.000
	Na	23	**0.169**	**ug/L**	437.331	27694	0.000
	Mg	24	**0.067**	**ug/L**	563.316	8336	0.000
	Al	27	**1.912**	**ug/L**	23.889	21349	0.004
	P	31	**1.816**	**ug/L**	65.342	12458	0.000
	K	39	**3.638**	**ug/L**	168.062	623702	0.009
	Ca	43	**-2.930**	**ug/L**	28.849	261	-0.000
>	Sc	45		**ug/L**		2781018	2781018.170
	Ti	47	**0.270**	**ug/L**	26.786	744	0.000
	V	51	**0.286**	**ug/L**	18.258	1622	0.001
	Cr	52	**0.138**	**ug/L**	36.957	1384	0.000
	Cr	53		**ug/L**		95484	-0.005
	Mn	55	**0.066**	**ug/L**	24.957	2039	0.000
	Fe	57	**0.444**	**ug/L**	113.841	5848	0.000
	Co	59	**0.006**	**ug/L**	125.822	228	0.000
	Ni	60	**-0.002**	**ug/L**	269.009	93	-0.000
	Cu	63		**ug/L**		292	0.000
	Cu	65	**0.014**	**ug/L**	100.313	152	0.000
	Zn	66	**-0.028**	**ug/L**	30.581	245	-0.000
	Zn	67		**ug/L**		13567	-0.001
	Zn	68		**ug/L**		1684	-0.000
>	Ge	74		**ug/L**		506927	506926.632
	As	75	**0.101**	**ug/L**	99.204	-3	0.000
	Se	77		**ug/L**		5060	-0.002
	Se	82	**0.444**	**ug/L**	37.781	6	0.000
	Kr	83		**ug/L**		106	-0.000
	Sr	88	**0.013**	**ug/L**	81.957	525	0.001
	Y	89		**ug/L**		116	0.000
	Mo	98	**0.018**	**ug/L**	102.104	408	0.000
	Ag	107	**0.013**	**ug/L**	67.477	179	0.000
	Cd	111	**0.013**	**ug/L**	79.421	66	0.000
	Cd	114		**ug/L**		114	0.000
>	In	115		**ug/L**		330265	330264.565
	Sn	120	**0.075**	**ug/L**	73.658	2441	0.002
	Sb	121	**0.101**	**ug/L**	326.329	6860	0.002
	Sb	123		**ug/L**		5301	0.001
	Ba	135		**ug/L**		62	0.000
	Ba	137	**0.014**	**ug/L**	61.034	105	0.000
	Ho	165		**ug/L**		50	0.000
>	Lu	175		**ug/L**		493479	493478.899
	Tl	205	**0.013**	**ug/L**	80.294	1784	0.000
	Pb	208	**0.009**	**ug/L**	92.951	1508	0.000
	Bi	209		**ug/L**		393	0.000
	Th	232	**0.030**	**ug/L**	156.541	11237	0.002
	U	238	**0.013**	**ug/L**	51.647	1375	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241539002
Sample Date/Time: Saturday, November 28, 2009 21:14:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\241539002.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.006**	ug/L	0.864	122422	0.044
	Be	9	**2.682**	ug/L	1.555	1472	0.001
	B	11	**9.315**	ug/L	4.159	8006	0.002
	Na	23	**811.465**	ug/L	1.404	4593964	1.643
	Mg	24	**7902.724**	ug/L	1.254	31959600	11.496
	Al	27	**42862.328**	ug/L	6.073	220950474	79.483
	P	31	**10694.205**	ug/L	0.604	3211851	1.151
	K	39	**6092.461**	ug/L	4.928	43383346	15.394
	Ca	43	**14908.923**	ug/L	2.707	252955	0.091
>	Sc	45		ug/L		2779379	2779378.733
	Ti	47	**958.644**	ug/L	0.778	818157	0.294
	V	51	**98.093**	ug/L	1.431	825245	0.297
	Cr	52	**68.736**	ug/L	1.801	451436	0.162
	Cr	53		ug/L		120674	0.004
	Mn	55	**2075.490**	ug/L	1.959	22329207	8.033
	Fe	57	**65711.225**	ug/L	2.884	15496072	5.573
	Co	59	**24.615**	ug/L	1.148	200509	0.072
	Ni	60	**47.519**	ug/L	0.191	85648	0.031
	Cu	63		ug/L		179234	0.064
	Cu	65	**42.595**	ug/L	1.175	90734	0.033
	Zn	66	**115.257**	ug/L	0.097	160517	0.330
	Zn	67		ug/L		37201	0.049
	Zn	68		ug/L		118175	0.240
>	Ge	74		ug/L		485316	485315.651
	As	75	**6.877**	ug/L	4.777	9162	0.019
	Se	77		ug/L		3503	-0.005
	Se	82	**0.173**	ug/L	27.252	-34	0.000
	Kr	83		ug/L		335	0.000
	Sr	88	**92.939**	ug/L	1.184	1517445	4.637
	Y	89		ug/L		1212431	3.705
	Mo	98	**4.148**	ug/L	1.108	16545	0.050
	Ag	107	**0.373**	ug/L	0.200	2529	0.007
	Cd	111	**1.424**	ug/L	6.292	2433	0.007
	Cd	114		ug/L		942	0.003
>	In	115		ug/L		327218	327218.310
	Sn	120	**0.963**	ug/L	1.552	8422	0.020
	Sb	121	**-0.575**	ug/L	9.915	3313	-0.009
	Sb	123		ug/L		2643	-0.007
	Ba	135		ug/L		679479	1.378
	Ba	137	**370.523**	ug/L	1.822	1138905	2.310
	Ho	165		ug/L		71193	0.144
>	Lu	175		ug/L		493008	493008.247
	Tl	205	**0.530**	ug/L	2.113	10639	0.018
	Pb	208	**37.643**	ug/L	0.424	1043457	2.114
	Bi	209		ug/L		18350	0.037
	Th	232	**25.945**	ug/L	1.886	812427	1.627
	U	238	**3.489**	ug/L	0.987	113519	0.228

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241539003
Sample Date/Time: Saturday, November 28, 2009 21:20:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\241539003.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**67.165**	ug/L	0.285	194922	0.070
	Be	9	**2.932**	ug/L	3.543	1601	0.001
	B	11	**9.811**	ug/L	4.596	8250	0.002
	Na	23	**710.299**	ug/L	8.889	4006837	1.438
	Mg	24	**9239.549**	ug/L	10.864	37201651	13.440
	Al	27	**50727.127**	ug/L	14.981	260104071	94.067
	P	31	**2500.571**	ug/L	2.168	757156	0.269
	K	39	**6247.277**	ug/L	9.979	44265121	15.785
	Ca	43	**11179.027**	ug/L	2.308	189015	0.068
>	Sc	45		ug/L		2769073	2769072.904
	Ti	47	**961.184**	ug/L	2.035	817139	0.295
	V	51	**71.808**	ug/L	3.723	601455	0.218
	Cr	52	**39.690**	ug/L	3.669	259839	0.094
	Cr	53		ug/L		94855	-0.005
	Mn	55	**1381.520**	ug/L	2.349	14804964	5.347
	Fe	57	**49274.793**	ug/L	3.625	11574553	4.179
	Co	59	**18.822**	ug/L	1.420	152772	0.055
	Ni	60	**30.950**	ug/L	1.703	55602	0.020
	Cu	63		ug/L		689862	0.249
	Cu	65	**164.700**	ug/L	1.472	349126	0.126
	Zn	66	**162.783**	ug/L	0.636	226766	0.466
	Zn	67		ug/L		46437	0.068
	Zn	68		ug/L		165150	0.337
>	Ge	74		ug/L		485693	485692.742
	As	75	**7.779**	ug/L	3.846	10388	0.022
	Se	77		ug/L		3361	-0.005
	Se	82	**-0.087**	ug/L	97.850	-72	-0.000
	Kr	83		ug/L		398	0.000
	Sr	88	**92.221**	ug/L	1.588	1489471	4.601
	Y	89		ug/L		1283222	3.964
	Mo	98	**3.430**	ug/L	2.064	13590	0.041
	Ag	107	**0.748**	ug/L	1.256	4932	0.015
	Cd	111	**1.639**	ug/L	6.365	2763	0.008
	Cd	114		ug/L		1342	0.004
>	In	115		ug/L		323718	323718.035
	Sn	120	**1.152**	ug/L	2.322	9591	0.024
	Sb	121	**-0.819**	ug/L	1.329	2036	-0.013
	Sb	123		ug/L		1576	-0.010
	Ba	135		ug/L		664384	1.364
	Ba	137	**368.576**	ug/L	0.585	1119474	2.298
	Ho	165		ug/L		78999	0.162
>	Lu	175		ug/L		487191	487191.343
	Tl	205	**0.594**	ug/L	1.266	11591	0.021
	Pb	208	**49.412**	ug/L	1.193	1353156	2.775
	Bi	209		ug/L		31627	0.064
	Th	232	**28.122**	ug/L	0.871	869260	1.763
	U	238	**3.396**	ug/L	1.861	109210	0.222

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		92.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241539004
Sample Date/Time: Saturday, November 28, 2009 21:26:51
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\241539004.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**74.227**	ug/L	0.628	219242	0.078
	Be	9	**3.644**	ug/L	4.385	2023	0.001
	B	11	**13.189**	ug/L	5.224	10308	0.003
	Na	23	**973.730**	ug/L	4.945	5581294	1.972
	Mg	24	**10060.451**	ug/L	7.471	41260013	14.634
	Al	27	**68328.130**	ug/L	7.647	357556856	126.706
	P	31	**580.523**	ug/L	1.584	188187	0.062
	K	39	**7985.186**	ug/L	4.213	57491751	20.176
	Ca	43	**18121.242**	ug/L	0.286	311732	0.110
>	Sc	45		ug/L		2818577	2818577.191
	Ti	47	**965.790**	ug/L	2.268	835709	0.296
	V	51	**69.486**	ug/L	2.160	592480	0.211
	Cr	52	**40.098**	ug/L	1.426	267268	0.095
	Cr	53		ug/L		94634	-0.006
	Mn	55	**938.586**	ug/L	2.013	10239867	3.633
	Fe	57	**50625.399**	ug/L	2.525	12106491	4.294
	Co	59	**13.709**	ug/L	2.595	113279	0.040
	Ni	60	**29.918**	ug/L	1.850	54710	0.019
	Cu	63		ug/L		128115	0.045
	Cu	65	**29.955**	ug/L	2.908	64725	0.023
	Zn	66	**173.624**	ug/L	1.803	243688	0.497
	Zn	67		ug/L		49227	0.073
	Zn	68		ug/L		179163	0.363
>	Ge	74		ug/L		489418	489417.940
	As	75	**7.498**	ug/L	1.614	10089	0.021
	Se	77		ug/L		3555	-0.005
	Se	82	**-0.314**	ug/L	53.899	-106	-0.000
	Kr	83		ug/L		425	0.001
	Sr	88	**109.951**	ug/L	1.205	1793852	5.486
	Y	89		ug/L		1341148	4.101
	Mo	98	**2.797**	ug/L	0.480	11259	0.033
	Ag	107	**0.544**	ug/L	1.223	3646	0.011
	Cd	111	**1.996**	ug/L	7.060	3391	0.010
	Cd	114		ug/L		1167	0.003
>	In	115		ug/L		326963	326963.213
	Sn	120	**1.410**	ug/L	2.585	11431	0.029
	Sb	121	**-0.866**	ug/L	1.027	1814	-0.014
	Sb	123		ug/L		1409	-0.011
	Ba	135		ug/L		697692	1.449
	Ba	137	**389.659**	ug/L	0.865	1169975	2.429
	Ho	165		ug/L		83018	0.172
>	Lu	175		ug/L		481617	481617.415
	Tl	205	**0.851**	ug/L	0.966	15759	0.030
	Pb	208	**51.328**	ug/L	0.357	1389514	2.883
	Bi	209		ug/L		28541	0.059
	Th	232	**30.140**	ug/L	1.269	920278	1.890
	U	238	**2.915**	ug/L	0.934	92783	0.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, November 28, 2009 21:33:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.159**	**ug/L**	1.913	150661	0.054
	Be	9	**52.489**	**ug/L**	2.208	28788	0.010
	B	11	**98.437**	**ug/L**	2.917	58273	0.020
	Na	23	**5228.850**	**ug/L**	10.208	29754122	10.589
	Mg	24	**5174.574**	**ug/L**	1.860	21158439	7.527
	Al	27	**5755.752**	**ug/L**	7.061	30012008	10.673
	P	31	**4725.723**	**ug/L**	2.060	1441227	0.509
	K	39	**5206.045**	**ug/L**	6.376	37563628	13.154
	Ca	43	**5014.220**	**ug/L**	1.732	86207	0.031
>	Sc	45		**ug/L**		2809682	2809681.781
	Ti	47	**49.985**	**ug/L**	1.128	43614	0.015
	V	51	**50.986**	**ug/L**	3.075	433131	0.154
	Cr	52	**51.494**	**ug/L**	1.910	341961	0.122
	Cr	53		**ug/L**		131956	0.007
	Mn	55	**53.107**	**ug/L**	1.596	578813	0.206
	Fe	57	**4567.575**	**ug/L**	2.964	1093996	0.387
	Co	59	**50.716**	**ug/L**	2.387	417361	0.149
	Ni	60	**50.197**	**ug/L**	3.432	91431	0.033
	Cu	63		**ug/L**		223806	0.080
	Cu	65	**51.936**	**ug/L**	1.376	111797	0.040
	Zn	66	**50.894**	**ug/L**	1.369	75446	0.146
	Zn	67		**ug/L**		24646	0.020
	Zn	68		**ug/L**		53788	0.101
>	Ge	74		**ug/L**		515472	515472.046
	As	75	**48.374**	**ug/L**	0.780	69347	0.135
	Se	77		**ug/L**		10604	0.009
	Se	82	**50.926**	**ug/L**	1.020	7821	0.015
	Kr	83		**ug/L**		119	-0.000
	Sr	88	**53.172**	**ug/L**	1.212	881476	2.653
	Y	89		**ug/L**		333	0.001
	Mo	98	**49.412**	**ug/L**	1.568	196353	0.590
	Ag	107	**52.323**	**ug/L**	1.089	347675	1.046
	Cd	111	**50.929**	**ug/L**	0.611	86751	0.261
	Cd	114		**ug/L**		207186	0.624
>	In	115		**ug/L**		332194	332194.415
	Sn	120	**51.153**	**ug/L**	1.918	352731	1.056
	Sb	121	**47.652**	**ug/L**	10.953	255739	0.751
	Sb	123		**ug/L**		198554	0.583
	Ba	135		**ug/L**		87411	0.181
	Ba	137	**50.719**	**ug/L**	1.120	152409	0.316
	Ho	165		**ug/L**		94	0.000
>	Lu	175		**ug/L**		481828	481828.328
	Tl	205	**54.023**	**ug/L**	1.658	905563	1.876
	Pb	208	**53.802**	**ug/L**	0.160	1457047	3.021
	Bi	209		**ug/L**		460	0.000
	Th	232	**52.458**	**ug/L**	2.473	1594758	3.289
	U	238	**54.034**	**ug/L**	0.188	1704438	3.535

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.317				
	Be	9	104.978				
	B	11	98.437				
	Na	23	104.577				
	Mg	24	103.491				
	Al	27	113.975				
	P	31	94.514				
	K	39	104.121				
	Ca	43	100.284				
>	Sc	45		94.0			
	Ti	47	99.971				
	V	51	101.973				
	Cr	52	102.989				
	Cr	53					
	Mn	55	106.214				
	Fe	57	91.352				
	Co	59	101.432				
	Ni	60	100.394				
	Cu	63					
	Cu	65	103.873				
	Zn	66	101.787				
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75	96.749				
	Se	77					
	Se	82	101.851				
	Kr	83					
	Sr	88	106.345				
	Y	89					
	Mo	98	98.823				
	Ag	107	104.646				
	Cd	111	101.857				
	Cd	114					
>	In	115		90.5			
	Sn	120	102.306				
	Sb	121	95.305				
	Sb	123					
	Ba	135					
	Ba	137	101.438				
	Ho	165					
>	Lu	175		91.2			
	Tl	205	108.046				
	Pb	208	107.605				
	Bi	209					
	Th	232	104.916				
	U	238	108.068				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, November 28, 2009 21:39:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.024**	**ug/L**	26.475	213	0.000
	Be	9	**0.002**	**ug/L**	221.352	19	0.000
	B	11	**-0.697**	**ug/L**	53.148	2434	-0.000
	Na	23	**2.086**	**ug/L**	45.559	38385	0.004
	Mg	24	**0.328**	**ug/L**	403.609	9337	0.000
	Al	27	**1.584**	**ug/L**	46.558	19681	0.003
	P	31	**2.346**	**ug/L**	152.019	12610	0.000
	K	39	**2.924**	**ug/L**	169.012	618813	0.007
	Ca	43	**-2.255**	**ug/L**	3.181	272	-0.000
>	Sc	45		**ug/L**		2781742	2781741.533
	Ti	47	**0.281**	**ug/L**	9.618	754	0.000
	V	51	**0.060**	**ug/L**	454.287	-316	0.000
	Cr	52	**0.196**	**ug/L**	32.829	1766	0.000
	Cr	53		**ug/L**		93716	-0.006
	Mn	55	**0.074**	**ug/L**	19.283	2126	0.000
	Fe	57	**1.231**	**ug/L**	99.288	6033	0.000
	Co	59	**0.004**	**ug/L**	101.687	208	0.000
	Ni	60	**0.005**	**ug/L**	221.689	104	0.000
	Cu	63		**ug/L**		270	0.000
	Cu	65	**0.007**	**ug/L**	225.212	136	0.000
	Zn	66	**-0.030**	**ug/L**	66.704	242	-0.000
	Zn	67		**ug/L**		13225	-0.002
	Zn	68		**ug/L**		1620	-0.000
>	Ge	74		**ug/L**		508175	508175.070
	As	75	**-0.121**	**ug/L**	267.567	-320	-0.000
	Se	77		**ug/L**		4789	-0.002
	Se	82	**0.327**	**ug/L**	32.377	-12	0.000
	Kr	83		**ug/L**		111	-0.000
	Sr	88	**0.009**	**ug/L**	79.633	468	0.000
	Y	89		**ug/L**		116	0.000
	Mo	98	**0.018**	**ug/L**	65.535	407	0.000
	Ag	107	**0.012**	**ug/L**	42.036	168	0.000
	Cd	111	**0.005**	**ug/L**	86.810	53	0.000
	Cd	114		**ug/L**		101	0.000
>	In	115		**ug/L**		328382	328382.403
	Sn	120	**0.054**	**ug/L**	49.799	2292	0.001
	Sb	121	**0.098**	**ug/L**	269.742	6822	0.002
	Sb	123		**ug/L**		5123	0.000
	Ba	135		**ug/L**		62	0.000
	Ba	137	**0.012**	**ug/L**	49.144	99	0.000
	Ho	165		**ug/L**		56	0.000
>	Lu	175		**ug/L**		493786	493786.232
	Tl	205	**0.007**	**ug/L**	145.074	1682	0.000
	Pb	208	**0.006**	**ug/L**	102.983	1435	0.000
	Bi	209		**ug/L**		369	0.000
	Th	232	**0.007**	**ug/L**	524.129	10542	0.000
	U	238	**0.010**	**ug/L**	42.190	1290	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, November 29, 2009 06:13:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\Blank.235

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418850	
	U	238		ug/L		945	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, November 29, 2009 06:15:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\Standard 1.236

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418530	418529.608
	U	238	10.000	ug/L	0.213	340792	0.812

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, November 29, 2009 06:17:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\Standard 2.237

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		426972	426971.591
⌊	U	238	99.835	ug/L	0.473	2970801	6.956

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, November 29, 2009 06:19:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 1.238

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		414284	414284.035
⌊	U	238	53.361	ug/L	0.148	1541123	3.718

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.9			
⌊	U	238	106.722				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, November 29, 2009 06:20:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 2.239

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418559	418558.653
	U	238	0.060	ug/L	2.289	2687	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.9			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, November 29, 2009 06:22:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 3.240

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418886	418885.941
	U	238	0.248	ug/L	2.016	8190	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.0			
	U	238	124.138				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, November 29, 2009 06:24:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 4.241

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		342434	342433.915
	U	238	-0.012	ug/L	7.771	493	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		81.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, November 29, 2009 06:25:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 5.242

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		423606	423605.757
	U	238	22.765	ug/L	2.397	672735	1.586

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		101.1			
	U	238	113.826				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, November 29, 2009 06:27:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.243

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418965	418965.261
	U	238	52.306	ug/L	0.668	1527721	3.644

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.0			
	U	238	104.611				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, November 29, 2009 06:29:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.244

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		424690	424690.396
	U	238	0.045	ug/L	3.022	2303	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		101.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978589
Sample Date/Time: Sunday, November 29, 2009 06:30:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978589.245

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		421002	421002.459
	U	238	-0.012	ug/L	4.316	592	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.5			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978594
Sample Date/Time: Sunday, November 29, 2009 06:34:24
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925476|40|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978594.247

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		429696	429696.190
	U	238	0.525	ug/L	0.645	16696	0.037

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		102.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241539001
Sample Date/Time: Sunday, November 29, 2009 06:36:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\241539001.248

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		405927	405926.948
⌊	U	238	3.363	ug/L	1.607	96022	0.234

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		96.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978590
Sample Date/Time: Sunday, November 29, 2009 06:37:53
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978590.249

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		408643	408642.954
⌊	U	238	3.436	ug/L	1.356	98750	0.239

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978592
Sample Date/Time: Sunday, November 29, 2009 06:39:38
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978592.250

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		407450	407449.613
	U	238	31.154	ug/L	0.962	885249	2.171

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978593
Sample Date/Time: Sunday, November 29, 2009 06:41:24
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978593.251

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		414002	414002.092
⌊	U	238	31.713	ug/L	1.711	915610	2.209

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978591
Sample Date/Time: Sunday, November 29, 2009 06:43:09
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925476|10|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978591.252

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		425778	425777.555
	U	238	0.678	ug/L	1.864	21072	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		101.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Sunday, November 29, 2009 06:44:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 8.253

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		416777	416776.695
⌊	U	238	53.443	ug/L	0.723	1552763	3.723

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		99.5			
⌊	U	238	106.885				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Sunday, November 29, 2009 06:46:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 9.254

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		429023	429023.066
	U	238	0.040	ug/L	4.437	2175	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		102.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241539002
Sample Date/Time: Sunday, November 29, 2009 06:48:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\241539002.255

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		419964	419963.691
⌊	U	238	3.192	ug/L	1.593	94340	0.222

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.3			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241539003
Sample Date/Time: Sunday, November 29, 2009 06:49:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\241539003.256

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		422209	422209.212
⌊	U	238	3.101	ug/L	1.092	92158	0.216

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241539004
Sample Date/Time: Sunday, November 29, 2009 06:51:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925476|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\241539004.257

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		413132	413132.479
⌊	U	238	2.746	ug/L	0.718	79966	0.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, November 29, 2009 06:53:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.258

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		421200	421200.320
	U	238	53.453	ug/L	0.623	1569533	3.724

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.6			
	U	238	106.905				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, November 29, 2009 06:55:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.259

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		426693	426693.213
⌊	U	238	0.043	ug/L	3.542	2231	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		101.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

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Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/07/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120709S1.SIF Results Data Set Name: 120709S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/07/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0043	09:54:40	No
2			0.0044	0.0044	09:55:15	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.5786			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/07/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0056	09:56:37	No
2			0.0017	0.0060	09:57:13	No
Mean:			0.0014			
SD :			0.0003			
%RSD:			21.7220			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00720
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/07/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0041	0.0085	09:58:35	No
2			0.0040	0.0084	09:59:11	No
Mean:			0.0041			
SD :			0.0001			
%RSD:			1.6133			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99849 Slope: 0.00824
Intercept : -0.00008

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/07/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0165	0.0209	10:00:35	No
2			0.0168	0.0211	10:01:10	No
Mean:			0.0166			
SD :			0.0002			
%RSD:			1.1765			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99992 Slope: 0.00837
Intercept : -0.00010

==========
Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/07/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0406	0.0449	10:02:36	No
2			0.0407	0.0451	10:03:10	No
Mean:			0.0406			
SD :			0.0001			
%RSD:			0.2535			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99993 Slope: 0.00815
Intercept : 0.00001

==========
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/07/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0801	0.0845	10:04:36	No
2			0.0817	0.0860	10:05:11	No
Mean:			0.0809			
SD :			0.0011			
%RSD:			1.3799			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00809
Intercept : 0.00008

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0014	0.200	0.168	0.0003	21.7
S0.5	0.0041	0.500	0.497	0.0001	1.6
S2.0	0.0166	2.000	2.047	0.0002	1.2
S5.0	0.0406	5.000	5.011	0.0001	0.3
S10	0.0809	10.000	9.986	0.0011	1.4
Calib Blank	0.0044	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00809 Intercept: 0.0001

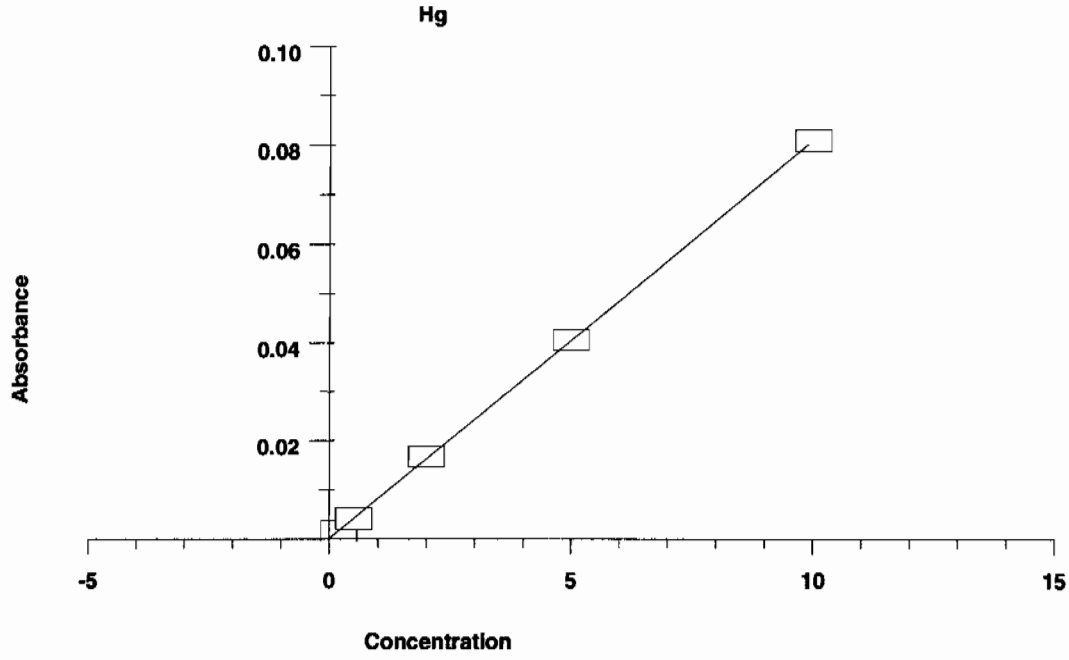

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/07/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0421	0.0465	10:06:40	No
2	5.181	5.181	0.0420	0.0464	10:07:15	No
Mean:	5.188	5.188	0.0421			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.2	0.2	0.2028			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/07/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:08:38	No
2	-0.104	-0.104	-0.0008	0.0036	10:09:13	No
Mean:	-0.096	-0.096	-0.0007			
SD :	0.0124	0.0124	0.0001			
%RSD:	13.0	13.0	14.4602			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/07/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0014	0.0057	10:10:35	No
2	0.148	0.148	0.0013	0.0056	10:11:10	No
Mean:	0.155	0.155	0.0013			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.9	5.9	5.5112			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0420	0.0463	10:12:35	No
2	5.181	5.181	0.0420	0.0464	10:13:09	No
Mean:	5.178	5.178	0.0420			
SD :	0.0040	0.0040	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0006	0.0037	10:14:37	No
2	-0.106	-0.106	-0.0008	0.0036	10:15:12	No
Mean:	-0.098	-0.098	-0.0007			
SD :	0.0123	0.0123	0.0001			
%RSD:	12.5	12.5	13.8998			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978905|i||925609|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0039	10:16:38	No
2	-0.093	-0.093	-0.0007	0.0037	10:17:13	No
Mean:	-0.077	-0.077	-0.0005			
SD :	0.0218	0.0218	0.0002			
%RSD:	28.2	28.2	32.1293			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978906|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.940	3.940	0.0320	0.0363	10:18:37	No
2	3.939	3.939	0.0319	0.0363	10:19:12	No
Mean:	3.939	3.939	0.0320			
SD :	0.0008	0.0008	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241604001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0057	10:20:38	No
2	0.157	0.157	0.0014	0.0057	10:21:14	No
Mean:	0.158	0.158	0.0014			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.5109			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241604002|i|||

```
%RSD:        7.6         7.6     8.0893

==========================================================================================
Element: Hg    Seq. No.: 21       AS Loc.: 21   Date: 12/07/2009
Sample ID: 241608002|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.151     0.151    0.0013     0.0057   10:34:28  No
 2        0.136     0.136    0.0012     0.0055   10:35:03  No
Mean:     0.143     0.143    0.0012
SD  :    0.0106    0.0106    0.0001
%RSD:       7.4         7.4    6.9743

==========================================================================================
Element: Hg    Seq. No.: 22       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.376     5.376    0.0436     0.0479   10:36:28  No
 2        5.389     5.389    0.0437     0.0481   10:37:02  No
Mean:     5.383     5.383    0.0436
SD  :    0.0096    0.0096    0.0001
%RSD:       0.2         0.2    0.1786
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 23       AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.087    -0.087   -0.0006     0.0037   10:38:30  No
 2       -0.095    -0.095   -0.0007     0.0037   10:39:04  No
Mean:    -0.091    -0.091   -0.0007
SD  :    0.0058    0.0058    0.0000
%RSD:       6.4         6.4    7.1360
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 24       AS Loc.: 22   Date: 12/07/2009
Sample ID: 1201977155|i||924862|MB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.084    -0.084   -0.0006     0.0038   10:40:29  No
 2       -0.083    -0.083   -0.0006     0.0038   10:41:04  No
Mean:    -0.083    -0.083   -0.0006
SD  :    0.0010    0.0010    0.0000
%RSD:       1.2         1.2    1.4027

==========================================================================================
Element: Hg    Seq. No.: 25       AS Loc.: 23   Date: 12/07/2009
Sample ID: 1201977156|i|10||LCS
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        3.825     3.825    0.0310     0.0354   10:42:28  No
 2        3.817     3.817    0.0310     0.0353   10:43:02  No
Mean:     3.821     3.821    0.0310
SD  :    0.0054    0.0054    0.0000
%RSD:       0.1         0.1    0.1420

==========================================================================================
Element: Hg    Seq. No.: 26       AS Loc.: 24   Date: 12/07/2009
Sample ID: 241417001|i|||
```

```
%RSD:        1.9        1.9    1.8136

==========================================================================================
Element: Hg    Seq. No.: 32       AS Loc.: 30   Date: 12/07/2009
Sample ID: 241419005|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.410     0.410    0.0034     0.0078   10:56:30  No
 2        0.392     0.392    0.0033     0.0076   10:57:05  No
Mean:     0.401     0.401    0.0033
SD  :    0.0126    0.0126    0.0001
%RSD:       3.1        3.1    3.0692

==========================================================================================
Element: Hg    Seq. No.: 33       AS Loc.: 31   Date: 12/07/2009
Sample ID: 241419006|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.446     0.446    0.0037     0.0080   10:58:33  No
 2        0.430     0.430    0.0036     0.0079   10:59:07  No
Mean:     0.438     0.438    0.0036
SD  :    0.0109    0.0109    0.0001
%RSD:       2.5        2.5    2.4393

==========================================================================================
Element: Hg    Seq. No.: 34       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.212     5.212    0.0423     0.0466   11:00:33  No
 2        5.240     5.240    0.0425     0.0468   11:01:08  No
Mean:     5.226     5.226    0.0424
SD  :    0.0193    0.0193    0.0002
%RSD:       0.4        0.4    0.3682
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 35       AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.122    -0.122   -0.0009     0.0035   11:02:36  No
 2       -0.111    -0.111   -0.0008     0.0035   11:03:10  No
Mean:    -0.116    -0.116   -0.0009
SD  :    0.0079    0.0079    0.0001
%RSD:       6.8        6.8    7.3534
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 36       AS Loc.: 32   Date: 12/07/2009
Sample ID: 241419007|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.387     0.387    0.0032     0.0076   11:04:34  No
 2        0.368     0.368    0.0031     0.0074   11:05:09  No
Mean:     0.377     0.377    0.0031
SD  :    0.0133    0.0133    0.0001
%RSD:       3.5        3.5    3.4418

==========================================================================================
Element: Hg    Seq. No.: 37       AS Loc.: 33   Date: 12/07/2009
Sample ID: 241419008|i|||
```

```
%RSD:        1.8        1.8    1.7307

==========================================================================================
Element: Hg    Seq. No.: 43       AS Loc.: 39   Date: 12/07/2009
Sample ID: 241419014|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.014    -0.014     0.0000     0.0043   11:18:08  No
 2       -0.016    -0.016    -0.0001     0.0043   11:18:43  No
Mean:    -0.015    -0.015     0.0000
SD  :    0.0014    0.0014     0.0000
%RSD:       9.3        9.3   24.9239

==========================================================================================
Element: Hg    Seq. No.: 44       AS Loc.: 40   Date: 12/07/2009
Sample ID: 241419015|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.432     0.432     0.0036     0.0079   11:20:06  No
 2        0.415     0.415     0.0034     0.0078   11:20:41  No
Mean:     0.423     0.423     0.0035
SD  :    0.0118    0.0118     0.0001
%RSD:       2.8        2.8    2.7227

==========================================================================================
Element: Hg    Seq. No.: 45       AS Loc.: 41   Date: 12/07/2009
Sample ID: 241419016|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.002     0.002     0.0001     0.0045   11:22:05  No
 2        0.006     0.006     0.0001     0.0045   11:22:40  No
Mean:     0.004     0.004     0.0001
SD  :    0.0027    0.0027     0.0000
%RSD:      70.3       70.3   20.4054

==========================================================================================
Element: Hg    Seq. No.: 46       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.803     5.803     0.0470     0.0514   11:24:05  No
 2        5.786     5.786     0.0469     0.0513   11:24:40  No
Mean:     5.795     5.795     0.0470
SD  :    0.0123    0.0123     0.0001
%RSD:       0.2        0.2    0.2123
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 47       AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.123    -0.123    -0.0009     0.0034   11:26:08  No
 2       -0.150    -0.150    -0.0011     0.0032   11:26:43  No
Mean:    -0.136    -0.136    -0.0010
SD  :    0.0186    0.0186     0.0002
%RSD:      13.6       13.6   14.6683
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 48       AS Loc.: 42   Date: 12/07/2009
Sample ID: 241425001|i|||
```

%RSD:	0.9	0.9	0.9205

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/07/2009
Sample ID: 1201978947|i||925629|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0007	0.0036	11:40:13	No
2	-0.115	-0.115	-0.0009	0.0035	11:40:47	No
Mean:	-0.107	-0.107	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	10.2	10.2	11.2501			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/07/2009
Sample ID: 1201978948|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.055	4.055	0.0329	0.0373	11:42:08	No
2	4.065	4.065	0.0330	0.0373	11:42:43	No
Mean:	4.060	4.060	0.0329			
SD :	0.0066	0.0066	0.0001			
%RSD:	0.2	0.2	0.1622			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/07/2009
Sample ID: 241539001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.375	0.375	0.0031	0.0075	11:44:03	No
2	0.392	0.392	0.0032	0.0076	11:44:38	No
Mean:	0.383	0.383	0.0032			
SD :	0.0119	0.0119	0.0001			
%RSD:	3.1	3.1	3.0346			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/07/2009
Sample ID: 241539002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0012	0.0056	11:45:59	No
2	0.120	0.120	0.0010	0.0054	11:46:34	No
Mean:	0.132	0.132	0.0011			
SD :	0.0167	0.0167	0.0001			
%RSD:	12.7	12.7	11.8118			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.520	5.520	0.0447	0.0491	11:47:58	No
2	5.454	5.454	0.0442	0.0486	11:48:33	No
Mean:	5.487	5.487	0.0445			
SD :	0.0470	0.0470	0.0004			
%RSD:	0.9	0.9	0.8544			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0043	11:50:01	No
2	-0.023	-0.023	-0.0001	0.0042	11:50:36	No
Mean:	-0.022	-0.022	-0.0001			
SD :	0.0019	0.0019	0.0000			
%RSD:	8.7	8.7	15.3097			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/07/2009
Sample ID: 241539003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.086	0.086	0.0008	0.0051	11:52:01	No
2	0.084	0.084	0.0008	0.0051	11:52:37	No
Mean:	0.085	0.085	0.0008			
SD :	0.0009	0.0009	0.0000			
%RSD:	1.1	1.1	0.9509			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/07/2009
Sample ID: 241539004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.221	0.221	0.0019	0.0062	11:53:59	No
2	0.209	0.209	0.0018	0.0061	11:54:34	No
Mean:	0.215	0.215	0.0018			
SD :	0.0083	0.0083	0.0001			
%RSD:	3.8	3.8	3.6864			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/07/2009
Sample ID: 241541001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.546	0.546	0.0045	0.0089	11:55:56	No
2	0.545	0.545	0.0045	0.0089	11:56:31	No
Mean:	0.546	0.546	0.0045			
SD :	0.0002	0.0002	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/07/2009
Sample ID: 1201978949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.487	0.487	0.0040	0.0084	11:57:54	No
2	0.483	0.483	0.0040	0.0083	11:58:29	No
Mean:	0.485	0.485	0.0040			
SD :	0.0026	0.0026	0.0000			
%RSD:	0.5	0.5	0.5236			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/07/2009
Sample ID: 1201978950|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	11:59:52	No
2	3.254	3.254	0.0264	0.0308	12:00:27	No
Mean:	3.240	3.240	0.0263			
SD :	0.0199	0.0199	0.0002			

%RSD:	0.6	0.6	0.6129

==========

Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 12/07/2009
Sample ID: 1201978952|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.158	3.158	0.0256	0.0300	12:01:51	No
2	3.162	3.162	0.0257	0.0300	12:02:27	No
Mean:	3.160	3.160	0.0256			
SD :	0.0032	0.0032	0.0000			
%RSD:	0.1	0.1	0.1021			

==========

Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 12/07/2009
Sample ID: 1201978951|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0003	0.0040	12:03:50	No
2	-0.044	-0.044	-0.0003	0.0041	12:04:26	No
Mean:	-0.046	-0.046	-0.0003			
SD :	0.0026	0.0026	0.0000			
%RSD:	5.6	5.6	7.1103			

==========

Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 12/07/2009
Sample ID: 241541002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.289	0.289	0.0024	0.0068	12:05:49	No
2	0.275	0.275	0.0023	0.0067	12:06:24	No
Mean:	0.282	0.282	0.0024			
SD :	0.0100	0.0100	0.0001			
%RSD:	3.6	3.6	3.4438			

==========

Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 12/07/2009
Sample ID: 241541003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.449	0.449	0.0037	0.0081	12:07:49	No
2	0.441	0.441	0.0036	0.0080	12:08:24	No
Mean:	0.445	0.445	0.0037			
SD :	0.0062	0.0062	0.0001			
%RSD:	1.4	1.4	1.3659			

==========

Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 12/07/2009
Sample ID: 241541004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.301	0.301	0.0025	0.0069	12:09:50	No
2	0.274	0.274	0.0023	0.0067	12:10:25	No
Mean:	0.287	0.287	0.0024			
SD :	0.0190	0.0190	0.0002			
%RSD:	6.6	6.6	6.4003			

==========

Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Time	Peak

#	µg/L	µg/L	Signal	Height		Stored
1	5.542	5.542	0.0449	0.0493	12:11:51	No
2	5.592	5.592	0.0453	0.0497	12:12:25	No
Mean:	5.567	5.567	0.0451			
SD :	0.0353	0.0353	0.0003			
%RSD:	0.6	0.6	0.6332			

QC value within specified limits.

==========

Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0045	12:13:53	No
2	-0.005	-0.005	0.0000	0.0044	12:14:27	No
Mean:	-0.001	-0.001	0.0001			
SD :	0.0060	0.0060	0.0000			
%RSD:	918.9	918.9	67.3940			

QC value within specified limits.

==========

Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 12/07/2009
Sample ID: 241541005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0046	12:15:55	No
2	0.006	0.006	0.0001	0.0045	12:16:29	No
Mean:	0.010	0.010	0.0002			
SD :	0.0064	0.0064	0.0001			
%RSD:	63.0	63.0	32.5458			

==========

Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 12/07/2009
Sample ID: 241541006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.373	2.373	0.0193	0.0236	12:17:52	No
2	2.365	2.365	0.0192	0.0236	12:18:27	No
Mean:	2.369	2.369	0.0192			
SD :	0.0056	0.0056	0.0000			
%RSD:	0.2	0.2	0.2355			

==========

Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 12/07/2009
Sample ID: 241541007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.314	0.314	0.0026	0.0070	12:19:46	No
2	0.309	0.309	0.0026	0.0069	12:20:21	No
Mean:	0.312	0.312	0.0026			
SD :	0.0032	0.0032	0.0000			
%RSD:	1.0	1.0	0.9999			

==========

Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 12/07/2009
Sample ID: 241541008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.619	0.619	0.0051	0.0094	12:21:41	No
2	0.621	0.621	0.0051	0.0095	12:22:16	No
Mean:	0.620	0.620	0.0051			
SD :	0.0014	0.0014	0.0000			

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925475

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978594	UI647733-01	.521	g
MS	1201978592	UI090611-A	.5	mL
MS	1201978592	UI090611-B	.5	mL
MSD	1201978593	UI090611-A	.5	mL
MSD	1201978593	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978589		SW846 3050B	24-NOV-2009 18:58	0.504 g	50 mL	99.20635	SOIL
LCS	1201978594		SW846 3050B	24-NOV-2009 18:58	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241539001		SW846 3050B	24-NOV-2009 18:58	0.507 g	50 mL	98.61933	SOIL
DUP	1201978590	241539001	SW846 3050B	24-NOV-2009 18:58	0.556 g	50 mL	89.92806	SOIL
SDILT	1201978591	241539001	SW846 3050B	24-NOV-2009 18:58	0.507 g	50 mL	98.61933	SOIL
MS	1201978592	241539001	SW846 3050B	24-NOV-2009 18:58	0.529 g	50 mL	94.51796	SOIL
MSD	1201978593	241539001	SW846 3050B	24-NOV-2009 18:58	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241539002		SW846 3050B	24-NOV-2009 18:58	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241539003		SW846 3050B	24-NOV-2009 18:58	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241539004		SW846 3050B	24-NOV-2009 18:58	0.536 g	50 mL	93.28358	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: sample#241539001 is a clumpy, brown soil with rocks.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925473

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978588	UI652380	.505	g
MS	1201978586	UI091119-01	.25	mL
MS	1201978586	UI091119-06	.25	mL
MSD	1201978587	UI091119-01	.25	mL
MSD	1201978587	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978583		SW846 3050B	24-NOV-2009 19:22	0.514 g	50 mL	97.27626	SOIL
LCS	1201978588		SW846 3050B	24-NOV-2009 19:22	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241539001		SW846 3050B	24-NOV-2009 19:22	0.542 g	50 mL	92.25092	SOIL
DUP	1201978584	241539001	SW846 3050B	24-NOV-2009 19:22	0.539 g	50 mL	92.76438	SOIL
SDILT	1201978585	241539001	SW846 3050B	24-NOV-2009 19:22	0.542 g	50 mL	92.25092	SOIL
MS	1201978586	241539001	SW846 3050B	24-NOV-2009 19:22	0.508 g	50 mL	98.4252	SOIL
MSD	1201978587	241539001	SW846 3050B	24-NOV-2009 19:22	0.569 g	50 mL	87.87346	SOIL
SAMPLE	241539002		SW846 3050B	24-NOV-2009 19:22	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241539003		SW846 3050B	24-NOV-2009 19:22	0.561 g	50 mL	89.12656	SOIL
SAMPLE	241539004		SW846 3050B	24-NOV-2009 19:22	0.561 g	50 mL	89.12656	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1100721TCLP	1.25 mL	Nitric Acid CONC.

Comments: sample#241539001 is a clumpy, brown soil with rocks.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 931880

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201993407	UI062540-I	.524	g
MS	1201978586	UI091124-01	.25	mL
MS	1201978586	UI091124-06	.25	mL
MSD	1201978587	UI091124-01	.25	mL
MSD	1201978587	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201993406		SW846 3050B	12-DEC-2009 08:06	0.503 g	50 mL	99.40358	SOIL
LCS	1201993407		SW846 3050B	12-DEC-2009 08:06	0.524 g	50 mL	95.41985	SOIL
SAMPLE	241539001		SW846 3050B	12-DEC-2009 08:06	0.5 g	50 mL	100	SOIL
DUP	1201978584	241539001	SW846 3050B	12-DEC-2009 08:06	0.511 g	50 mL	97.84736	SOIL
SDILT	1201978585	241539001	SW846 3050B	12-DEC-2009 08:06	0.5 g	50 mL	100	SOIL
MS	1201978586	241539001	SW846 3050B	12-DEC-2009 08:06	0.542 g	50 mL	92.25092	SOIL
MSD	1201978587	241539001	SW846 3050B	12-DEC-2009 08:06	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241539002		SW846 3050B	12-DEC-2009 08:06	0.56 g	50 mL	89.28571	SOIL
SAMPLE	241539003		SW846 3050B	12-DEC-2009 08:06	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241539004		SW846 3050B	12-DEC-2009 08:06	0.508 g	50 mL	98.4252	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238343	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments. The QC sample is a medium, brown soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925628

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978948	UI031809A	.2	g
MS	1201978950	WHG091204-14	.3	mL
MSD	1201978952	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978947		SW846 7471A Prep	04-DEC-2009 10:35	0.506 g	30 mL	59.28854	SOIL
LCS	1201978948		SW846 7471A Prep	04-DEC-2009 10:35	0.2 g	30 mL	150	SOIL
SAMPLE	241539001		SW846 7471A Prep	04-DEC-2009 10:35	0.532 g	30 mL	56.39098	SOIL
SAMPLE	241539002		SW846 7471A Prep	04-DEC-2009 10:35	0.538 g	30 mL	55.76208	SOIL
SAMPLE	241539003		SW846 7471A Prep	04-DEC-2009 10:35	0.53 g	30 mL	56.60377	SOIL
SAMPLE	241539004		SW846 7471A Prep	04-DEC-2009 10:35	0.554 g	30 mL	54.15162	SOIL
SAMPLE	241541001		SW846 7471A Prep	04-DEC-2009 10:35	0.549 g	30 mL	54.64481	SOIL
DUP	1201978949	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.558 g	30 mL	53.76344	SOIL
MS	1201978950	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.536 g	30 mL	55.97015	SOIL
MSD	1201978952	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.539 g	30 mL	55.65863	SOIL
SDILT	1201978951	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.549 g	30 mL	54.64481	SOIL
SAMPLE	241541002		SW846 7471A Prep	04-DEC-2009 10:35	0.502 g	30 mL	59.76096	SOIL
SAMPLE	241541003		SW846 7471A Prep	04-DEC-2009 10:35	0.586 g	30 mL	51.19454	SOIL
SAMPLE	241541004		SW846 7471A Prep	04-DEC-2009 10:35	0.526 g	30 mL	57.03422	SOIL
SAMPLE	241541005		SW846 7471A Prep	04-DEC-2009 10:35	0.557 g	30 mL	53.85996	SOIL
SAMPLE	241541006		SW846 7471A Prep	04-DEC-2009 10:35	0.505 g	30 mL	59.40594	SOIL
SAMPLE	241541007		SW846 7471A Prep	04-DEC-2009 10:35	0.54 g	30 mL	55.55556	SOIL
SAMPLE	241541008		SW846 7471A Prep	04-DEC-2009 10:35	0.527 g	30 mL	56.926	SOIL
SAMPLE	241541009		SW846 7471A Prep	04-DEC-2009 10:35	0.533 g	30 mL	56.28518	SOIL
SAMPLE	241541010		SW846 7471A Prep	04-DEC-2009 10:35	0.531 g	30 mL	56.49718	SOIL
SAMPLE	241541011		SW846 7471A Prep	04-DEC-2009 10:35	0.538 g	30 mL	55.76208	SOIL
SAMPLE	241541012		SW846 7471A Prep	04-DEC-2009 10:35	0.529 g	30 mL	56.71078	SOIL
SAMPLE	241541013		SW846 7471A Prep	04-DEC-2009 10:35	0.55 g	30 mL	54.54545	SOIL
SAMPLE	241541014		SW846 7471A Prep	04-DEC-2009 10:35	0.564 g	30 mL	53.19149	SOIL
SAMPLE	241541015		SW846 7471A Prep	04-DEC-2009 10:35	0.559 g	30 mL	53.66726	SOIL
SAMPLE	241541016		SW846 7471A Prep	04-DEC-2009 10:35	0.503 g	30 mL	59.64215	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution

Comments Sample 241541001 is a rocky tan soil.
Digestion Start Date: 04-DEC-09 10:35
Digestion End Date: 04-DEC-09 11:05

Prep LogBook

1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925476	See Below		

Potentially affected work order(s)(SDG): 241539(10-603)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978592MS 2. Failed RPD for DUP: QC 1201978590DUP	The matrix spike recovery failed outside of the control limits for Ni and Se due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. The sample and sample duplicate % RPD failed outside the control limits for Ni due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Elizabeth Janssen 03-DEC-09

Data Validator/Group Leader:

Paul Boyd 04-DEC-09

NCR Report No.: 766705
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7471A	Solid	LANL
Batch ID:	**Sample Numbers:**		
925629	See Below		

Potentially affected work order(s)(SDG): 241539(10-603),241541(10-605)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978950MS 2. Failed Recovery for MSD/PSD: QC 1201978952MSD	1. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Sample is a rocky, tan soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike dup recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Sample is a rocky, tan soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Jason Loy 07-DEC-09

Data Validator/Group Leader:
Eric Lawson 08-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925474	See Below		

Potentially affected work order(s)(SDG): 241539(10-603)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978586MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1201978587MSD 3. Failed Recovery for MSD/PSD: QC 1201978587MSD	1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for calcium due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 12-DEC-09

Data Validator/Group Leader:
Jamie Johnson 12-DEC-09

NCR Report No.: 769972
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
14-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
931881	See Below		

Potentially affected work order(s)(SDG): 241539(10-603)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978586MS 2. Failed Recovery for MSD/PSD: QC 1201978587MSD	1./2. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 14-DEC-09

Data Validator/Group Leader:

Louise Smith 15-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL

Analyte	Concentration	Analyte	Concentration
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091130-49.13 **Opened:** 14-DEC-09 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 01-DEC-09 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 15-DEC-09 **Lot Number :** 1018046
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Standard Logbook

Serial ID: UI091130-49.7 **Opened:** 07-DEC-09 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 01-DEC-09 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 08-DEC-09 **Lot Number :** 1018046
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Standard Logbook

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090929-01 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 29-SEP-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-31CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Standard Logbook

Serial ID: UMS090929-02 **Opened:** 29-SEP-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 29-SEP-09 **Lot Number :** 19-174JB
Type: Source Material **Expires:** 29-SEP-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090929-03 **Opened:** 29-SEP-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 29-SEP-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-30CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Type1 H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091207-42 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091207-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091207-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091207-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091207-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091207-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091207-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091207-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091207-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091207-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091207-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091207-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091207-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091207-43 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091207-44 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091207-45 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Standard Logbook

Serial ID: WI091207-46 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Standard Logbook

Serial ID: WI091207-47 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091214-42 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL

Standard Logbook

Description: TRACE ICP 0.1 PPM CALIBRATION STD.

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091214-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091214-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091214-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091214-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091214-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091214-43 **Opened:** 14-DEC-09 **Balance Id :** 216

Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667

Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318

Employee: Helen Camello

Supplier: GEL

Description: TRACE ICP O.5/CCV CALIBRATION STD.

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091214-44 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1242318
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091214-45 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Standard Logbook

Serial ID: WI091214-46 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1242318
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Standard Logbook

Serial ID: WI091214-47 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL &1%HNO3-1242318
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091128-04 **Opened:** 28-NOV-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 28-NOV-09 **Balance Id :** 4025216
Type: Working **Expires:** 29-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1232660
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091128-04A **Opened:** 28-NOV-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 28-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091128-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091128-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091128-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091128-05 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 28-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091128-06 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 28-NOV-09 **Pipet Id :** 3820544
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091128-07 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 28-NOV-09 **Lot Number :** 1010773
Type: Working **Expires:** 29-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1232660
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091128-08 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 28-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091128-70 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 28-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215798 **Opened:** 06-NOV-09 **Lot Number :** H14024 L
Name: I-HNO3 **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1232660 **Opened:** 23-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 23-NOV-09
Type: Reagent/Solvent **Expires:** 30-NOV-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A
1215798	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242318 **Opened:** 14-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 20-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-603

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	925669	**Method:**	SW846 9012A
Prep Batch :	925668	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241539001	RE03-09-13462
241539002	RE03-09-13464
241539003	RE03-09-13463
241539004	RE03-09-13461
1201979055	Method Blank (MB)
1201979056	241604001(RE16-10-2876) Sample Duplicate (DUP)
1201979057	241604002(RE16-10-2884) Sample Duplicate (DUP)
1201979058	241604001(RE16-10-2876) Matrix Spike (MS)
1201979059	241604002(RE16-10-2884) Matrix Spike (MS)
1201979060	241604001(RE16-10-2876) Matrix Spike Duplicate (MSD)
1201979061	241604002(RE16-10-2884) Matrix Spike Duplicate (MSD)
1201979062	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241604001 (RE16-10-2876) and 241604002 (RE16-10-2884).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1201979059 (RE16-10-2884).

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
One or more of the values for the sample and/or duplicate are less than 5 times the Practical Quantitation Limit (PQL), and the difference is within one PQL value; therefore, the RPD is not applicable. 1201979057 (RE16-10-2884).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201979062 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 764780 1201979059 (RE16-10-2884).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 16Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-603 GEL Work Order: 241539

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13462	Project:	LANL01004
Sample ID:	241539001	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	66.3	244	ug/kg	1	AXC2 12/02/09	1346	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13464	Project:	LANL01004
Sample ID:	241539002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	3.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		631	65.0	239	ug/kg	1	AXC2 12/02/09	1347	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13463	Project:	LANL01004
Sample ID:	241539003	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	4.79%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.7	252	ug/kg	1	AXC2 12/02/09	1347	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-603

Client Sample ID:	RE03-09-13461	Project:	LANL01004
Sample ID:	241539004	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.7	249	ug/kg	1	AXC2 12/02/09	1348	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 16, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241539

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 925669										
QC1201979056 241604001 DUP										
Cyanide, Total	J	132	J	145	ug/kg	9.26 ^		(+/-351)	AXC2	12/02/09 13:50
QC1201979057 241604002 DUP										
Cyanide, Total		446	J	181	ug/kg	84.7 ^		(+/-330)		12/02/09 13:57
QC1201979062 LCS										
Cyanide, Total	67900			69300	ug/kg		102	(46%-145%)		12/02/09 13:35
QC1201979055 MB										
Cyanide, Total			U	250	ug/kg					12/02/09 13:34
QC1201979058 241604001 MS										
Cyanide, Total	6630 J	132		5150	ug/kg		75.6	(50%-130%)		12/02/09 13:55
QC1201979059 241604002 MS										
Cyanide, Total	6980	446		5530	ug/kg		72.8	(50%-130%)		12/02/09 13:58
QC1201979060 241604001 MSD										
Cyanide, Total	6630 J	132		5450	ug/kg	5.76	80.2	(0%-30%)		12/02/09 13:56
QC1201979061 241604002 MSD										
Cyanide, Total	6470	446		5830	ug/kg	5.23	83.1	(0%-30%)		12/02/09 13:59

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor

QC Summary

Workorder: 241539

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 16-DEC-2009 14:23

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-603

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**02-DEC-2009 12:59:54**	**OM_12-2-2009_12-51-59**	**149**	**150**	**99**	**(90%-110%)**	**Yes**
CCV	02-DEC-2009 13:26:32	OM_12-2-2009_12-51-59	106	100	106	(90%-110%)	Yes
CCV	02-DEC-2009 13:39:04	OM_12-2-2009_12-51-59	106	100	106	(90%-110%)	Yes
CCV	02-DEC-2009 13:51:31	OM_12-2-2009_12-51-59	106	100	106	(90%-110%)	Yes
CCV	02-DEC-2009 14:03:58	OM_12-2-2009_12-51-59	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**02-DEC-2009 13:01:45**	**OM_12-2-2009_12-51-59**	**2.2**	**5**	**Yes**
CCB	02-DEC-2009 13:28:22	OM_12-2-2009_12-51-59	0.426	5	Yes
CCB	02-DEC-2009 13:40:54	OM_12-2-2009_12-51-59	0.889	5	Yes
CCB	02-DEC-2009 13:53:21	OM_12-2-2009_12-51-59	0.539	5	Yes
CCB	02-DEC-2009 14:05:48	OM_12-2-2009_12-51-59	0.892	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925668

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979062	URF1200957-01	.25	g
MS	1201979058	URF1184831-02	.025	mL
MS	1201979059	URF1184831-02	.025	mL
MSD	1201979060	URF1184831-02	.025	mL
MSD	1201979061	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201979055		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
LCS	1201979062		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241536001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241536002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241536003		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241536004		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241536005		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241536006		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241536007		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241539001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241539002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241539003		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241539004		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241604001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1201979056	241604001	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.52 g	25 mL	48.07692	SOIL
MS	1201979058	241604001	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1201979060	241604001	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241604002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201979057	241604002	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
MS	1201979059	241604002	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1201979061	241604002	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241611001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241611002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611003		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611004		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611005		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611006		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241611007		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091201-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments.

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/2/2009 12:52:45	OM_12-2-2009_12-51-59
150 ppb		1	axc2	12/2/2009 12:53:37	OM_12-2-2009_12-51-59
100 ppb		1	axc2	12/2/2009 12:54:29	OM_12-2-2009_12-51-59
50 ppb		1	axc2	12/2/2009 12:55:22	OM_12-2-2009_12-51-59
10 ppb		1	axc2	12/2/2009 12:56:15	OM_12-2-2009_12-51-59
CRDL 5.0 ppb		1	axc2	12/2/2009 12:57:09	OM_12-2-2009_12-51-59
ICAL-00		1	axc2	12/2/2009 12:58:03	OM_12-2-2009_12-51-59
ICV		1	axc2	12/2/2009 12:59:54	OM_12-2-2009_12-51-59
ICB		1	axc2	12/2/2009 13:01:45	OM_12-2-2009_12-51-59
CRDL		1	axc2	12/2/2009 13:03:34	OM_12-2-2009_12-51-59
1201982106	927059	1	axc2	12/2/2009 13:05:23	OM_12-2-2009_12-51-59
1201982110	927059	1	axc2	12/2/2009 13:06:15	OM_12-2-2009_12-51-59
1201982114	927059	1	axc2	12/2/2009 13:07:06	OM_12-2-2009_12-51-59
241793001	927059	2	axc2	12/2/2009 13:07:58	OM_12-2-2009_12-51-59
241813005	927059	1	axc2	12/2/2009 13:08:50	OM_12-2-2009_12-51-59
1201982103	927059	1	axc2	12/2/2009 13:09:44	OM_12-2-2009_12-51-59
1201982107	927059	1	axc2	12/2/2009 13:10:37	OM_12-2-2009_12-51-59
1201982111	927059	1	axc2	12/2/2009 13:11:30	OM_12-2-2009_12-51-59
241835005	927059	1	axc2	12/2/2009 13:12:24	OM_12-2-2009_12-51-59
1201982104	927059	1	axc2	12/2/2009 13:13:17	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:14:09	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:16:00	OM_12-2-2009_12-51-59
1201982108	927059	1	axc2	12/2/2009 13:17:48	OM_12-2-2009_12-51-59
1201982112	927059	1	axc2	12/2/2009 13:18:41	OM_12-2-2009_12-51-59
241835006	927059	1	axc2	12/2/2009 13:19:34	OM_12-2-2009_12-51-59
241848004*	927059	1	axc2	12/2/2009 13:20:26	OM_12-2-2009_12-51-59
241848005	927059	1	axc2	12/2/2009 13:21:19	OM_12-2-2009_12-51-59
241848006	927059	1	axc2	12/2/2009 13:22:11	OM_12-2-2009_12-51-59
241898001	927059	1	axc2	12/2/2009 13:23:03	OM_12-2-2009_12-51-59
241898002	927059	1	axc2	12/2/2009 13:23:55	OM_12-2-2009_12-51-59
241898003	927059	1	axc2	12/2/2009 13:24:47	OM_12-2-2009_12-51-59
241898004	927059	1	axc2	12/2/2009 13:25:39	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:26:32	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:28:22	OM_12-2-2009_12-51-59
241848004	927059	1	axc2	12/2/2009 13:30:11	OM_12-2-2009_12-51-59
241902001	927059	1	axc2	12/2/2009 13:31:05	OM_12-2-2009_12-51-59
241902002	927059	1	axc2	12/2/2009 13:31:59	OM_12-2-2009_12-51-59
241917001	927059	1	axc2	12/2/2009 13:32:52	OM_12-2-2009_12-51-59
241919001	927059	1	axc2	12/2/2009 13:33:46	OM_12-2-2009_12-51-59
1201979055	925669	1	axc2	12/2/2009 13:34:39	OM_12-2-2009_12-51-59
1201979062	925669	25	axc2	12/2/2009 13:35:32	OM_12-2-2009_12-51-59
241536001	925669	1	axc2	12/2/2009 13:36:25	OM_12-2-2009_12-51-59
241536002	925669	1	axc2	12/2/2009 13:37:18	OM_12-2-2009_12-51-59
241536003	925669	1	axc2	12/2/2009 13:38:11	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:39:04	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:40:54	OM_12-2-2009_12-51-59
241536004	925669	1	axc2	12/2/2009 13:42:42	OM_12-2-2009_12-51-59
241536005	925669	1	axc2	12/2/2009 13:43:34	OM_12-2-2009_12-51-59
241536006	925669	1	axc2	12/2/2009 13:44:27	OM_12-2-2009_12-51-59
241536007	925669	1	axc2	12/2/2009 13:45:19	OM_12-2-2009_12-51-59
241539001	925669	1	axc2	12/2/2009 13:46:11	OM_12-2-2009_12-51-59
241539002	925669	1	axc2	12/2/2009 13:47:03	OM_12-2-2009_12-51-59
241539003	925669	1	axc2	12/2/2009 13:47:57	OM_12-2-2009_12-51-59
241539004	925669	1	axc2	12/2/2009 13:48:51	OM_12-2-2009_12-51-59
241604001	925669	1	axc2	12/2/2009 13:49:45	OM_12-2-2009_12-51-59
1201979056	925669	1	axc2	12/2/2009 13:50:38	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:51:31	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:53:21	OM_12-2-2009_12-51-59

1201979058	925669	1	axc2	12/2/2009	13:55:11	OM_12-2-2009_12-51-59
1201979060	925669	1	axc2	12/2/2009	13:56:04	OM_12-2-2009_12-51-59
241604002	925669	1	axc2	12/2/2009	13:56:57	OM_12-2-2009_12-51-59
1201979057	925669	1	axc2	12/2/2009	13:57:50	OM_12-2-2009_12-51-59
1201979059	925669	1	axc2	12/2/2009	13:58:43	OM_12-2-2009_12-51-59
1201979061	925669	1	axc2	12/2/2009	13:59:36	OM_12-2-2009_12-51-59
241611001	925669	1	axc2	12/2/2009	14:00:29	OM_12-2-2009_12-51-59
241611002	925669	1	axc2	12/2/2009	14:01:21	OM_12-2-2009_12-51-59
241611003	925669	1	axc2	12/2/2009	14:02:13	OM_12-2-2009_12-51-59
241611004	925669	1	axc2	12/2/2009	14:03:06	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009	14:03:58	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009	14:05:48	OM_12-2-2009_12-51-59
241611005	925669	1	axc2	12/2/2009	14:07:36	OM_12-2-2009_12-51-59
241611006	925669	1	axc2	12/2/2009	14:08:32	OM_12-2-2009_12-51-59
241611007	925669	1	axc2	12/2/2009	14:09:25	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009	14:10:18	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009	14:12:08	OM_12-2-2009_12-51-59

Author: axc2 Date : 12/2/2009

Original Run Filename: OM_12-2-2009_12-51-59.OMN created 12/2/2009 12:51:59
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-2-2009_12-51-59.OMN last modified 12/2/2009 14:13:13
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091202-01	1	S1	200	7.81	12/2/2009@12:52:45			200 ppb
WCN091202-02	1	S2	150	6.05	12/2/2009@12:53:37			150 ppb
WCN091202-03	1	S3	100	4.16	12/2/2009@12:54:29			100 ppb
WCN091202-04	1	S4	50.0	2.05	12/2/2009@12:55:22			50 ppb
WCN091202-05	1	S5	10.0	0.566	12/2/2009@12:56:15			10 ppb
WCN091202-06	1	S6	5.00	0.251	12/2/2009@12:57:09			CRDL 5.0 ppb
WCN091202-08	1	S7	0.00	0.0222	12/2/2009@12:58:03			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99952 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091202-07	1	S8	149	5.96	12/2/2009@12:59:54			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-0.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091202-08	1	S7	2.20	0.194	12/2/2009@13:01:45			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091201-06	1	S6	3.76	0.255	12/2/2009@13:03:34			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.76 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.76 > 2.50					
		Message	Pass					
		Action	None					
1201982106|927059|DUP	1	11	6.20	0.350	12/2/2009@13:05:23			
1201982110||MS	1	12	111	4.45	12/2/2009@13:06:15			
1201982114||MSD	1	13	115	4.60	12/2/2009@13:07:06			
241793001	1	14	122	4.89	12/2/2009@13:07:58		2.00	
241813005	1	15	2.58	0.208	12/2/2009@13:08:50			
1201982103||DUP	1	16	5.05	0.305	12/2/2009@13:09:44			
1201982107||MS	1	17	102	4.10	12/2/2009@13:10:37			
1201982111||MSD	1	18	102	4.10	12/2/2009@13:11:30			
241835005	1	19	0.611	0.132	12/2/2009@13:12:24			
1201982104||DUP	1	20	-1.89	0.0336	12/2/2009@13:13:17			
WCN091202-03	1	S3	104	4.19	12/2/2009@13:14:09			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.3 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.768	0.138	12/2/2009@13:16:00			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.768 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.768 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982108||MS	1	21	101	4.08	12/2/2009@13:17:48			
1201982112||MSD	1	22	104	4.16	12/2/2009@13:18:41			
241835006	1	23	0.772	0.138	12/2/2009@13:19:34			
241848004	1	24	4.46	0.282	12/2/2009@13:20:26			
241848005	1	25	-2.26	0.0193	12/2/2009@13:21:19			
241848006	1	26	-1.84	0.0355	12/2/2009@13:22:11			
241898001	1	27	-0.883	0.0731	12/2/2009@13:23:03			
241898002	1	28	-1.73	0.0398	12/2/2009@13:23:55			
241898003	1	29	-1.54	0.0474	12/2/2009@13:24:47			
241898004	1	30	-1.81	0.0369	12/2/2009@13:25:39			
WCN091202-03	1	S3	106	4.26	12/2/2009@13:26:32			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.426	0.124	12/2/2009@13:28:22			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.426 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.426 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241848004	1	24	-1.80	0.0372	12/2/2009@13:30:11			
241902001	1	31	-2.74	2.27e-4	12/2/2009@13:31:05			
241902002	1	32	-2.72	0.00102	12/2/2009@13:31:59			
241917001	1	33	-2.22	0.0206	12/2/2009@13:32:52			
241919001	1	34	-1.27	0.0579	12/2/2009@13:33:46			
1201979055|925669|MB	1	35	-1.80	0.0374	12/2/2009@13:34:39			
1201979062||LCS	1	36	27.7	1.19	12/2/2009@13:35:32		25.00	
241536001	1	37	-0.723	0.0793	12/2/2009@13:36:25			
241536002	1	38	-0.102	0.104	12/2/2009@13:37:18			
241536003	1	39	-1.64	0.0435	12/2/2009@13:38:11			
WCN091202-03	1	S3	106	4.24	12/2/2009@13:39:04			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.889	0.142	12/2/2009@13:40:54			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	0.889 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.889 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241536004	1	40	-1.71	0.0405	12/2/2009@13:42:42			
241536005	1	41	-0.186	0.100	12/2/2009@13:43:34			
241536006	1	42	-0.694	0.0804	12/2/2009@13:44:27			
241536007	1	43	-1.72	0.0404	12/2/2009@13:45:19			
241539001	1	44	-0.788	0.0767	12/2/2009@13:46:11			
241539002	1	45	13.2	0.626	12/2/2009@13:47:03			
241539003	1	46	-1.39	0.0533	12/2/2009@13:47:57			
241539004	1	47	-1.39	0.0532	12/2/2009@13:48:51			
241604001	1	48	1.95	0.184	12/2/2009@13:49:45			
1201979056||DUP	1	49	2.06	0.188	12/2/2009@13:50:38			
WCN091202-03	1	S3	106	4.26	12/2/2009@13:51:31			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.539	0.129	12/2/2009@13:53:21			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.539 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.539 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979058||MS	1	50	77.6	3.14	12/2/2009@13:55:11			
1201979060||MSD	1	51	82.2	3.32	12/2/2009@13:56:04			
241604002	1	52	6.39	0.358	12/2/2009@13:56:57			
1201979057||DUP	1	53	2.74	0.215	12/2/2009@13:57:50			
1201979059||MS	1	54	79.2	3.21	12/2/2009@13:58:43			
1201979061||MSD	1	55	90.0	3.63	12/2/2009@13:59:36			
241611001	1	56	-0.369	0.0931	12/2/2009@14:00:29			
241611002	1	57	-1.63	0.0437	12/2/2009@14:01:21			
241611003	1	58	0.396	0.123	12/2/2009@14:02:13			
241611004	1	59	-1.17	0.0617	12/2/2009@14:03:06			
WCN091202-03	1	S3	105	4.22	12/2/2009@14:03:58			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.892	0.143	12/2/2009@14:05:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.892 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.892 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241611005	1	60	-0.730	0.0790	12/2/2009@14:07:36			
241611006	1	61	-1.35	0.0547	12/2/2009@14:08:32			
241611007	1	62	-0.492	0.0884	12/2/2009@14:09:25			
WCN091202-03	1	S3	106	4.26	12/2/2009@14:10:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091202-08	1	S7	1.35	0.161	12/2/2009@14:12:08			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.35 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.35 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_12-2-2009_12-51-59.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 12/2/2009

Channel 1: Current View

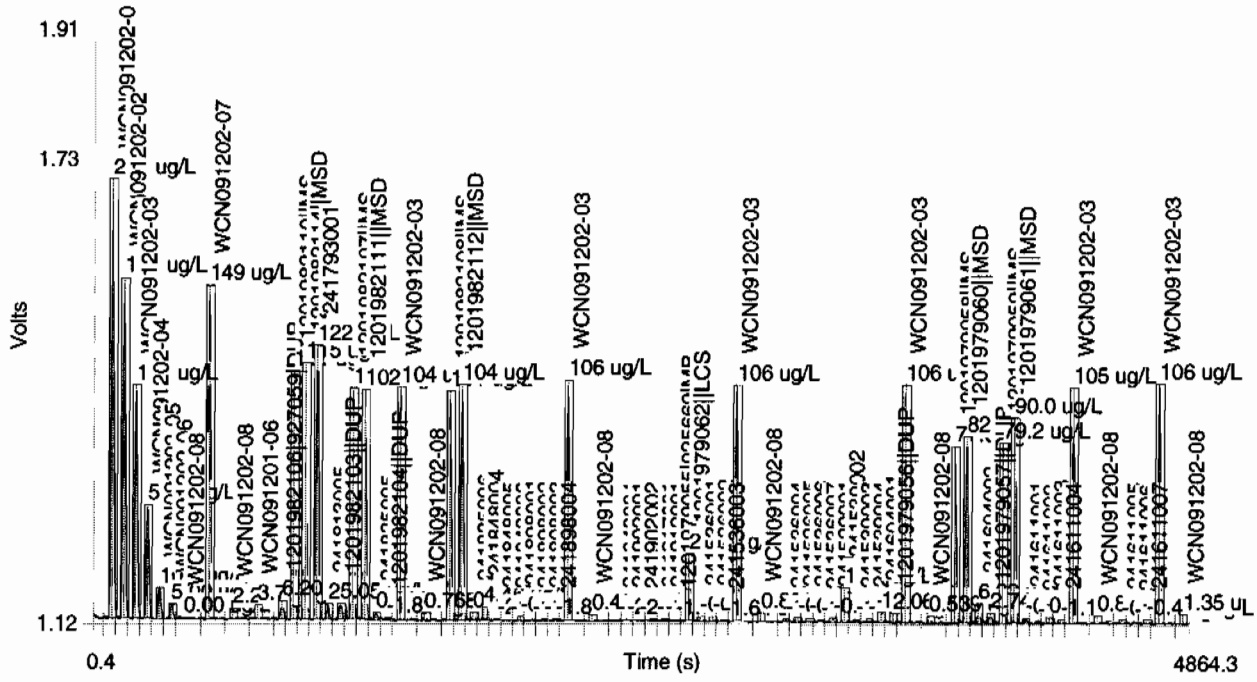

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.81	0.576	1.5	12/2/2009	12:53:48
2	150	1	6.05	0.447	-1.2	12/2/2009	12:54:40
3	100	1	4.16	0.308	-3.5	12/2/2009	12:55:32
4	50.0	1	2.05	0.151	0.5	12/2/2009	12:56:25
5	10.0	1	0.566	0.0404	-12.9	12/2/2009	12:57:19
6	5.00	1	0.251	0.0189	17.8	12/2/2009	12:58:12
7	0.00	1	0.0222	0.00155		12/2/2009	12:59:06

Figure 1: TCYANIDE

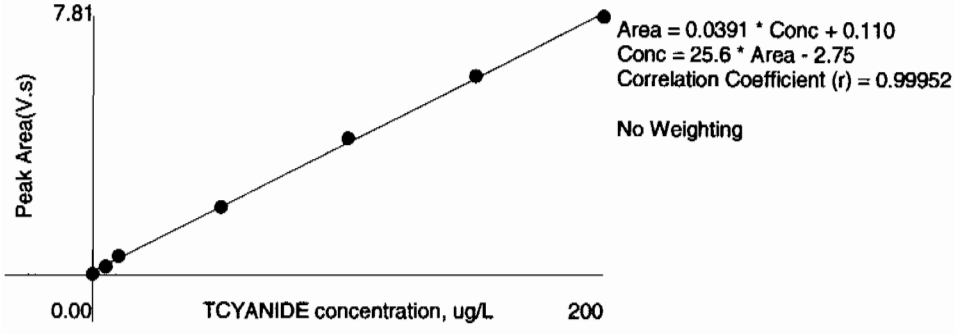

Miscellaneous

GEL Laboratories LLC
Form GEL-NCR

NCR Report No.: 764780
Revision No.: 2

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-DEC-09			
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
		%Null%	
Batch ID:	**Sample Numbers:**		
925669	See Below		

Potentially affected work order(s)(SDG): 241536(10-602),241539(10-603),241604(10-638),241611(10-642)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed recovery for : QC 1201979059MS	1. The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported

Originator's Name:

Ashley Earl 02-DEC-09

Data Validator/Group Leader:

Elzbieta Szulc 08-DEC-09

Thursday, November 19, 2009

REQUEST NUMBER: 10-602

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-602

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13972	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13973	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13974	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13975	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13976	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13977	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3915	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3925	W	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3935	W	11/18/2009	Plus, B, Li, Si, Ti, U

Thursday, November 19, 2009

REQUEST NUMBER: 10-602

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-10-3925	W	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3935	W	11/18/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-13972	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13973	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13974	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13975	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13976	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13977	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3915	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3925	W	11/18/2009	
		1	RE03-10-3935	W	11/18/2009	

Final Page of REQUEST NUMBER 10-602

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-602

REQUEST NUMBER: 10-602

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13975	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13976	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13977	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13973	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13972	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13974	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3915	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3935	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3935	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3925	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3925	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:	Date	Time	Received By:	Date	Time
[illegible]	11/19/09	1800			
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By:	Date	Time	Remarks:
Printed Name / Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13972 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	
TIME COLLECTED (HH:MM)		0810	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608337	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY, SAND CLAY w/ plant roots. BROWN (7.5 YR 5/3)

SAMPLE COMMENTS: ma 11/17/09 ~~HIT TUFF @ 4'~~

LOCATION DESC: 03-052(b)-6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 21.7 ppm
BACKGROUND
α: 16 dpm
β: 1352 ↓

SAMPLES MDA

COLLECTED BY (PRINT) D. Thomas, M. Shendo **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13973 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	mk 11/19/09 ~~0153~~ All H
TIME COLLECTED (HH:MM)		0822	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608337	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ ~~RC~~ mk 11/18/09 S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY, SAND w/ tuff. Reddish yellow (7.5 YR 8/6)

SAMPLE COMMENTS: hit tuff @ 4.5'

LOCATION DESC: 03-052(b)

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8 ppm

BACKGROUND SAMPLES MDA

α: 16 dpm

β: 1350 ↓

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan (Signature)	11-19-09 1630	(Printed Name) (Signature)	11-19-09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13974 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		844	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608338	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1' ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2' ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ~~NA~~ COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is clay with sand and s.H. Plant roots present. Brown (7.5YR 4/3) Location was moved 6' East

SAMPLE COMMENTS:

LOCATION DESC: 03-526-5

FIELD SCREENING/MEASUREMENT RESULTS:

PID: 0.8 ppm

Background samples MDA
α: 16 dpm
β: 1352 ↓

COLLECTED BY (PRINT) Micah Nauck

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13975 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		0857	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608338	↓	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is clay with sand. Brown (7.5YR 4/3)
Location was moved 6' East

SAMPLE COMMENTS:

LOCATION DESC: 03-526-5

FIELD SCREENING/MEASUREMENT RESULTS:

PID: 0ppm

Background
α: 16 dpm
β: 1352 dpm

Samples MDA

COLLECTED BY (PRINT) Micah Deck

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13976 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		0905	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608339		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is silty clay. Moist. Brown - dark brown. (7.5YR 3/2)

SAMPLE COMMENTS:

LOCATION DESC: 03-526-2

FIELD SCREENING/MEASUREMENT RESULTS:

PID: 0.0 ppm

Background: α: 16 dpm, β 1352 ↓ Sample MDA

COLLECTED BY (PRINT) Connie Horne **REVIEWED BY (PRINT)** J. Joder

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Joder	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13977 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		0923	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608339	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is silty sand with clay. Brown. (7.5 YR 4/3)

SAMPLE COMMENTS:

LOCATION DESC: 03-526-2

FIELD SCREENING/MEASUREMENT RESULTS:

PID 00 ppm

BACKGROUND SAMPLE MDA
α: 16 dpm
β: 1350 ↓

COLLECTED BY (PRINT) Lonnie Horne **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-14033 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-18-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		0810	SUB-MEDIA:	OTHER	OK
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK	03-608337	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 11-18-09 JLS 11-18-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13972

SAMPLE COMMENTS: NA

LOCATION DESC: ~~03-0~~ JLS 11-18-09 03-526-6

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sherwood REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Sherwood (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3915 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		0822	SUB-MEDIA:	SOIL	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608337	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: QC Sample of RE03-09-13973

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Vaick

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vaick (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3925 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0920	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608339	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13977

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-18-09	(Printed Name)	11-18-09
(Signature)	1635	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3935 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	~~NA~~ OK
TIME COLLECTED (HH:MM)		0935	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-60839	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC		FIELD PREP:	UF	
TOP DEPTH:	0	4'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13977

SAMPLE COMMENTS: NA

LOCATION DESC: ~~03-5~~ PT 11/18/09

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Megan Rains **REVIEWED BY (PRINT)** M. Marck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Marck (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-602 VALIDATION DATE: 01/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Susan Ball ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The soil MS %R for Si was <10% and, thus, the associated sample results were qualified R,I6. The soil MS %Rs for Al, Ca, Mg, K, Li, Na, and Ni were > the laboratory UAL. The Na result for sample RE03-09-13976 was a qualified ND due to FB contamination and, thus, was qualified UJ,I6b. The remaining associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %R for Fe was < the laboratory LAL but ≥10%. However, the parent sample concentration was >4X the spike concentration and, thus, the associated Fe sample results were not qualified, based on professional judgment.
2. In the soil MB, Sb and Si were detected. The Sb result for sample -09-13976 was a detect ≤5X the MB concentration and, thus, was qualified U,I4. The remaining associated sample results were either NDs or detects >50X the MB concentrations and, thus, were not qualified, based on professional judgment.
3. In the soil CCB associated with sample -09-13977, K was detected. The associated sample result was a detect >5X the CCB concentration and, thus, was not qualified. In the aqueous CCBs, Tl was detected. The associated sample results were NDs and, thus, were not qualified.
4. In the FR blank, sample -10-3935, associated with all the samples, Ni was detected. The associated sample results were >5X the FR blank concentration and, thus, were not qualified.
5. In the FB, sample -10-3925, associated with samples -09-13976 and -09-13977, Al, Ba, Ca, Cr, Fe, K, Mn, Na, Ni, Si, Ti, and Zn were detected. The Na result for sample -09-13976 was a detect ≤5X the FB concentration and, thus, was qualified U,I4d. The remaining associated sample results were detects >5X the FB concentrations and, thus, were not qualified.
6. The soil duplicate RPD for Ba was >35% and both the parent sample and the duplicate sample results were ≥5X the

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

PQL. The associated sample results were detects and, thus, were qualified J,110a.

7. It should be noted that the parent QC samples for all ICP and ICP-MS analyses, except Si in the soil samples, were from other LANL RNs. In addition, the raw data for the ICP and the ICP-MS parent QC samples were not included in the data package. It should also be noted that the aqueous parent QC sample for Hg, -10-3935, was the FR blank. No sample results were qualified.

Reviewed by: ETM Level: 1 Date: 1/27/10

VALIDATOR'S SIGNATURE: DATE: 01/27/10

Form 5118-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2 **Metals Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536001 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13975 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J+,I6b	13100000	ug/Kg		7930	23300	23300	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-36-0	Antimony		1170	ug/Kg	U	385	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-38-2	Arsenic		2.17	mg/kg		0.233	1.16	1.16	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-39-3	Barium	J,I10a	811000	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-41-7	Beryllium		1.47	mg/kg		0.0233	0.116	0.116	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-42-8	Boron		1730	ug/Kg	J	1170	5830	5830	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-43-9	Cadmium		583	ug/Kg	U	117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-70-2	Calcium	J+,I6b	2450000	ug/Kg		9330	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-47-3	Chromium		8720	ug/Kg		175	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-48-4	Cobalt		2910	ug/Kg		175	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-50-8	Copper		6720	ug/Kg		350	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-89-6	Iron		14900000	ug/Kg		9330	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-92-1	Lead		9960	ug/Kg		291	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-93-2	Lithium	J+,I6b	19.5	mg/kg		0.465	2.33	2.33	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7439-95-4	Magnesium	J+,I6b	2330000	ug/Kg		9910	35000	35000	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-96-5	Manganese		214000	ug/Kg		233	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-97-6	Mercury		43.9	ug/kg	*	4.28	12.6	12.6	1	AV	JXL1	12/07/09 13:45	120709S1-14	925623
7440-02-0	Nickel	J+,I6b	14.9	mg/kg		0.116	0.465	0.465	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-09-7	Potassium	J+,I6b	1600000	ug/Kg		7460	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7782-49-2	Selenium		1.16	mg/kg	U	0.582	1.16	1.16	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-21-3	Silicon	R,I6	2240000	ug/Kg	*N	1830	12200	12200	1	P	HSC	12/14/09 11:03	121409A-1	931873
7440-22-4	Silver		631	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-23-5	Sodium	J+,I6b	361000	ug/Kg		8160	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-28-0	Thallium		0.384	mg/kg		0.0698	0.233	0.233	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-32-6	Titanium		405000	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-61-1	Uranium		0.702	mg/kg		0.0154	0.0465	0.0465	2	MS	BAJ	12/01/09 08:51	091130-13	925472
7440-62-2	Vanadium		15600	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-66-6	Zinc		35500	ug/Kg		385	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.522	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.523	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.58	g	30	mL	12/04/09	TXB3

SEB
1/27/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13976 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J+,I6b	8680000	ug/Kg		7040	20700	20700	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-36-0	Antimony	U,I4	372	ug/Kg	J	342	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-38-2	Arsenic		3.35	mg/kg		0.213	1.06	1.06	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-39-3	Barium	J,I10a	100000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-41-7	Beryllium		0.791	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-42-8	Boron		2530	ug/Kg	J	1040	5180	5180	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-43-9	Cadmium		140	ug/Kg	J	104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-70-2	Calcium	J+,I6b	2330000	ug/Kg		8280	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-47-3	Chromium		11400	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-48-4	Cobalt		5340	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-50-8	Copper		8040	ug/Kg		311	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-89-6	Iron		10800000	ug/Kg		8280	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-92-1	Lead		15100	ug/Kg		259	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-93-2	Lithium	J+,I6b	10.9	mg/kg		0.425	2.13	2.13	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7439-95-4	Magnesium	J+,I6b	1660000	ug/Kg		8800	31100	31100	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-96-5	Manganese		305000	ug/Kg		207	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-97-6	Mercury		30.1	ug/kg	*	4.66	13.7	13.7	1	AV	JXL1	12/07/09 13:59	120709S1-14	925623
7440-02-0	Nickel	J+,I6b	7.08	mg/kg		0.106	0.425	0.425	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-09-7	Potassium	J+,I6b	1330000	ug/Kg		6630	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7782-49-2	Selenium		1.06	mg/kg	U	0.532	1.06	1.06	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-21-3	Silicon	R,I6	1950000	ug/Kg	*N	1750	11700	11700	1	P	HSC	12/14/09 11:06	121409A-1	931873
7440-22-4	Silver		418	ug/Kg	J	104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-23-5	Sodium	U,I4d	147000	ug/Kg		7250	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-28-0	Thallium		0.195	mg/kg	J	0.0638	0.213	0.213	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-32-6	Titanium		378000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-61-1	Uranium		1.32	mg/kg		0.014	0.0425	0.0425	2	MS	BAJ	12/01/09 08:56	091130-13	925472
7440-62-2	Vanadium		22500	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-66-6	Zinc		31900	ug/Kg		342	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.577	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.562	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.523	g	30	mL	12/04/09	TXB3

SEB
1/27/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536003 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13977 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	12200000	ug/Kg		7880	23200	23200	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-36-0	Antimony	1160	ug/Kg	U	383	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-38-2	Arsenic	3.03	mg/kg		0.205	1.02	1.02	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-39-3	Barium J,I10a	223000	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-41-7	Beryllium	1.34	mg/kg		0.0205	0.102	0.102	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-42-8	Boron	2460	ug/Kg	J	1160	5800	5800	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-43-9	Cadmium	580	ug/Kg	U	116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-70-2	Calcium J+,I6b	3610000	ug/Kg		9280	29000	29000	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-47-3	Chromium	10100	ug/Kg		174	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-48-4	Cobalt	16700	ug/Kg		174	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-50-8	Copper	11300	ug/Kg		348	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-89-6	Iron	14000000	ug/Kg		9280	29000	29000	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-92-1	Lead	27900	ug/Kg		290	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-93-2	Lithium J+,I6b	14.3	mg/kg		0.41	2.05	2.05	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7439-95-4	Magnesium J+,I6b	2570000	ug/Kg		9860	34800	34800	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-96-5	Manganese	1420000	ug/Kg		1160	5800	5800	5	P	HSC	12/11/09 12:54	121109A-3	925470
7439-97-6	Mercury	18.4	ug/kg	*	4.4	13	13	1	AV	JXLI	12/07/09 14:01	120709S1-14	925623
7440-02-0	Nickel J+,I6b	9.51	mg/kg		0.102	0.41	0.41	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-09-7	Potassium J+,I6b	1840000	ug/Kg		37100	145000	145000	5	P	HSC	12/11/09 12:54	121109A-3	925470
7782-49-2	Selenium	1.02	mg/kg	U	0.512	1.02	1.02	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-21-3	Silicon R,I6	2030000	ug/Kg	*N	1690	11300	11300	1	P	HSC	12/14/09 11:09	121409A-1	931873
7440-22-4	Silver	601	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-23-5	Sodium J+,I6b	217000	ug/Kg		8120	29000	29000	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-28-0	Thallium	0.289	mg/kg		0.0614	0.205	0.205	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-32-6	Titanium	301000	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-61-1	Uranium	0.557	mg/kg		0.0135	0.041	0.041	2	MS	BAJ	12/01/09 08:58	091130-13	925472
7440-62-2	Vanadium	27300	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-66-6	Zinc	26300	ug/Kg		383	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.514	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.582	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.552	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536004 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13973 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	13300000	ug/Kg		6800	20000	20000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-36-0	Antimony	1000	ug/Kg	U	330	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-38-2	Arsenic	2.13	mg/kg		0.209	1.04	1.04	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-39-3	Barium J,I10a	156000	ug/Kg		100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-41-7	Beryllium	1.6	mg/kg		0.0209	0.104	0.104	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-42-8	Boron	2630	ug/Kg	J	1000	5000	5000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-43-9	Cadmium	227	ug/Kg	J	100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-70-2	Calcium J+,I6b	3510000	ug/Kg		8000	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-47-3	Chromium	10200	ug/Kg		150	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-48-4	Cobalt	5580	ug/Kg		150	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-50-8	Copper	8710	ug/Kg		300	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-89-6	Iron	17800000	ug/Kg		8000	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-92-1	Lead	13600	ug/Kg		250	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-93-2	Lithium J+,I6b	14.2	mg/kg		0.418	2.09	2.09	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7439-95-4	Magnesium J+,I6b	2770000	ug/Kg		8500	30000	30000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-96-5	Manganese	436000	ug/Kg		200	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-97-6	Mercury	14.3	ug/kg	*	3.99	11.7	11.7	1	AV	JXL1	12/07/09 14:03	120709S1-14	925623
7440-02-0	Nickel J+,I6b	12.7	mg/kg		0.104	0.418	0.418	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-09-7	Potassium J+,I6b	1710000	ug/Kg		6400	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7782-49-2	Selenium	1.04	mg/kg	U	0.522	1.04	1.04	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-21-3	Silicon R,I6	2060000	ug/Kg	*N	1610	10700	10700	1	P	HSC	12/14/09 11:12	121409A-1	931873
7440-22-4	Silver	255	ug/Kg	J	100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-23-5	Sodium J+,I6b	458000	ug/Kg		7000	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-28-0	Thallium	0.247	mg/kg		0.0626	0.209	0.209	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-32-6	Titanium	539000	ug/Kg		100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-61-1	Uranium	0.558	mg/kg		0.0138	0.0418	0.0418	2	MS	BAJ	12/01/09 09:00	091130-13	925472
7440-62-2	Vanadium	23700	ug/Kg		100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-66-6	Zinc	46200	ug/Kg		330	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.546	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.523	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.558	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536005 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13972 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J+,I6b	15400000	ug/Kg		6680	19700	19700	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-36-0	Antimony		983	ug/Kg	U	324	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-38-2	Arsenic		3.61	mg/kg		0.206	1.03	1.03	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-39-3	Barium	J,I10a	89500	ug/Kg		98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-41-7	Beryllium		0.920	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-42-8	Boron		2060	ug/Kg	J	983	4910	4910	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-43-9	Cadmium		126	ug/Kg	J	98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-70-2	Calcium	J+,I6b	2810000	ug/Kg		7860	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-47-3	Chromium		12100	ug/Kg		147	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-48-4	Cobalt		5730	ug/Kg		147	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-50-8	Copper		8170	ug/Kg		295	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-89-6	Iron		15300000	ug/Kg		7860	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-92-1	Lead		15800	ug/Kg		246	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-93-2	Lithium	J+,I6b	10.6	mg/kg		0.412	2.06	2.06	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7439-95-4	Magnesium	J+,I6b	2410000	ug/Kg		8350	29500	29500	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-96-5	Manganese		244000	ug/Kg		197	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-97-6	Mercury		31.2	ug/kg	*	4.05	11.9	11.9	1	AV	JXL1	12/07/09 14:05	120709S1-14	925623
7440-02-0	Nickel	J+,I6b	5.96	mg/kg		0.103	0.412	0.412	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-09-7	Potassium	J+,I6b	1300000	ug/Kg		6290	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7782-49-2	Selenium		1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-21-3	Silicon	R,I6	1710000	ug/Kg	*N	1650	11000	11000	1	P	HSC	12/14/09 11:15	121409A-1	931873
7440-22-4	Silver		287	ug/Kg	J	98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-23-5	Sodium	J+,I6b	202000	ug/Kg		6880	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-28-0	Thallium		0.192	mg/kg	J	0.0617	0.206	0.206	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-32-6	Titanium		381000	ug/Kg		98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-61-1	Uranium		0.879	mg/kg		0.0136	0.0412	0.0412	2	MS	BAJ	12/01/09 09:01	091130-13	925472
7440-62-2	Vanadium		31400	ug/Kg		98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-66-6	Zinc		24000	ug/Kg		324	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.559	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.534	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.553	g	30	mL	12/04/09	TXB3

SEB
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536006 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13974 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J+,I6b	7890000	ug/Kg		7050	20700	20700	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-36-0	Antimony		1040	ug/Kg	U	342	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-38-2	Arsenic		2.52	mg/kg		0.218	1.09	1.09	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-39-3	Barium	J,I10a	84000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-41-7	Beryllium		0.744	mg/kg		0.0218	0.109	0.109	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-42-8	Boron		1890	ug/Kg	J	1040	5180	5180	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-43-9	Cadmium		518	ug/Kg	U	104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-70-2	Calcium	J+,I6b	1730000	ug/Kg		8290	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-47-3	Chromium		11300	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-48-4	Cobalt		4980	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-50-8	Copper		6350	ug/Kg		311	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-89-6	Iron		11200000	ug/Kg		8290	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-92-1	Lead		14100	ug/Kg		259	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-93-2	Lithium	J+,I6b	10	mg/kg		0.436	2.18	2.18	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7439-95-4	Magnesium	J+,I6b	1520000	ug/Kg		8810	31100	31100	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-96-5	Manganese		319000	ug/Kg		207	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-97-6	Mercury		17.3	ug/kg	*	4.29	12.6	12.6	1	AV	JXL1	12/07/09 14:07	120709S1-14	925623
7440-02-0	Nickel	J+,I6b	6.53	mg/kg		0.109	0.436	0.436	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-09-7	Potassium	J+,I6b	1070000	ug/Kg		6630	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7782-49-2	Selenium		1.09	mg/kg	U	0.544	1.09	1.09	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-21-3	Silicon	R,I6	1810000	ug/Kg	*N	1690	11300	11300	1	P	HSC	12/14/09 11:19	121409A-1	931873
7440-22-4	Silver		366	ug/Kg	J	104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-23-5	Sodium	J+,I6b	117000	ug/Kg		7260	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-28-0	Thallium		0.209	mg/kg	J	0.0653	0.218	0.218	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-32-6	Titanium		414000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-61-1	Uranium		0.989	mg/kg		0.0144	0.0436	0.0436	2	MS	BAJ	12/01/09 09:03	091130-13	925472
7440-62-2	Vanadium		24300	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-66-6	Zinc		20400	ug/Kg		342	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.562	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.535	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.554	g	30	mL	12/04/09	TXB3

SEB
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536007 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-3915 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.7

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J+,I6b	11000000	ug/Kg		7440	21900	21900	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-36-0	Antimony		1090	ug/Kg	U	361	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-38-2	Arsenic		2.17	mg/kg		0.215	1.08	1.08	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-39-3	Barium	J,I10a	71800	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-41-7	Beryllium		1.67	mg/kg		0.0215	0.108	0.108	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-42-8	Boron		2030	ug/Kg	J	1090	5470	5470	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-43-9	Cadmium		547	ug/Kg	U	109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-70-2	Calcium	J+,I6b	3000000	ug/Kg		8750	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-47-3	Chromium		8300	ug/Kg		164	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-48-4	Cobalt		3010	ug/Kg		164	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-50-8	Copper		6740	ug/Kg		328	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-89-6	Iron		15800000	ug/Kg		8750	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-92-1	Lead		10500	ug/Kg		274	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-93-2	Lithium	J+,I6b	15.5	mg/kg		0.43	2.15	2.15	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7439-95-4	Magnesium	J+,I6b	2340000	ug/Kg		9300	32800	32800	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-96-5	Manganese		270000	ug/Kg		219	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-97-6	Mercury		12	ug/kg	*	3.99	11.7	11.7	1	AV	JXL1	12/07/09 14:09	120709S1-14	925623
7440-02-0	Nickel	J+,I6b	13	mg/kg		0.108	0.43	0.43	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-09-7	Potassium	J+,I6b	1490000	ug/Kg		7000	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7782-49-2	Selenium		1.08	mg/kg	U	0.538	1.08	1.08	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-21-3	Silicon	R,I6	1960000	ug/Kg	*N	1580	10500	10500	1	P	HSC	12/14/09 10:41	121409A-1	931873
7440-22-4	Silver		555	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-23-5	Sodium	J+,I6b	408000	ug/Kg		7660	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-28-0	Thallium		0.251	mg/kg		0.0645	0.215	0.215	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-32-6	Titanium		367000	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-61-1	Uranium		0.593	mg/kg		0.0142	0.043	0.043	2	MS	BAJ	12/01/09 09:05	091130-13	925472
7440-62-2	Vanadium		16800	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-66-6	Zinc		36600	ug/Kg		361	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.504	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.513	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.564	g	30	mL	12/04/09	TXB3

SEB
1/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241537001 **BASIS:** As Received **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-3935 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:48	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:37	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:47	120409A-1	925377
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 17:47	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:47	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/04/09 11:08	120409W1-7	925626
7440-02-0	Nickel	4.67	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:47	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:53	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 17:47	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925626	925625	SW846 7470A Prep	20	mL	20	mL	12/03/09	TXB3

SEB
1/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241537002 **BASIS:** As Received **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-3925 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	261	ug/L		68	200	200	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:50	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-39-3	Barium	3.92	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:39	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7440-70-2	Calcium	121	ug/L	J	50	200	200	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-47-3	Chromium	10.8	ug/L		1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:54	120409A-1	925377
7439-89-6	Iron	215	ug/L		30	100	100	1	P	HSC	12/04/09 17:54	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:54	120409A-1	925377
7439-96-5	Manganese	7.52	ug/L		1	5	5	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/04/09 11:19	120409W1-7	925626
7440-02-0	Nickel	6.3	ug/L		1.5	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-09-7	Potassium	59.6	ug/L	J	50	150	150	1	P	HSC	12/04/09 17:54	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-21-3	Silicon	510	ug/L		25	100	100	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-23-5	Sodium	308	ug/L		100	300	300	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7440-32-6	Titanium	5.18	ug/L		1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:56	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-66-6	Zinc	3.74	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 17:54	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925626	925625	SW846 7470A Prep	20	mL	20	mL	12/03/09	TXB3

SEB
1/27/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-602 VALIDATION DATE: 01/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Susan Ball ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☒ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE): total cyanide only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the soil MB, total cyanide was detected. The associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the soil parent QC samples were from other LANL RNs. It should also be noted that the applicable aqueous parent QC sample, RE03-10-3935, was the FR blank. No sample results were qualified.

Reviewed by: ETM Level: 1 Date: 1/27/10

VALIDATOR'S SIGNATURE: DATE: 01/27/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☐	☒	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13975	Project:	LANL01004
Sample ID:	241536001	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	17.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	78.1	287	ug/kg	1	AXC2 12/02/09	1336	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13976	Project:	LANL01004
Sample ID:	241536002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.7	293	ug/kg	1	AXC2 12/02/09	1337	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13977	Project:	LANL01004
Sample ID:	241536003	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.5	292	ug/kg	1	AXC2 12/02/09	1338	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13973	Project:	LANL01004
Sample ID:	241536004	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.41%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.0	257	ug/kg	1	AXC2 12/02/09	1342	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13972	Project:	LANL01004
Sample ID:	241536005	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.99%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.2	254	ug/kg	1	AXC2 12/02/09	1343	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13974	Project:	LANL01004
Sample ID:	241536006	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	14.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	77.7	286	ug/kg	1	AXC2 12/02/09	1344	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-10-3915	Project:	LANL01004
Sample ID:	241536007	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	9.34%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2 12/02/09	1345	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-602-1

Client Sample ID:	RE03-10-3935	Project:	LANL01004
Sample ID:	241537001	Client ID:	LANL010
Matrix:	W		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1049	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-602-1

Client Sample ID:	RE03-10-3925	Project:	LANL01004
Sample ID:	241537002	Client ID:	LANL010
Matrix:	W		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1056	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

SEB
1/27/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-602

REQUEST NUMBER: 10-602

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241536, 241537.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13975	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13976	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13977	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13973	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13972	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13974	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3915	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3935	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3935	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3925	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3925	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/19/09	1900	Patricia Dover-Dent		11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-602

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-602
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13972	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13973	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13974	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13975	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13976	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13977	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3915	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3925	W	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3935	W	11/18/2009	Plus, B, Li, Si, Ti, U

Thursday, November 19, 2009

REQUEST NUMBER: 10-602

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-10-3925	W	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3935	W	11/18/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-13972	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13973	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13974	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13975	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13976	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13977	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3915	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3925	W	11/18/2009	
		1	RE03-10-3935	W	11/18/2009	

Final Page of REQUEST NUMBER 10-602

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241536 241537
SDG: 10-602

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-602
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241536 and 241537
SDG: 10-602

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- Raw Data 117
- Miscellaneous 557

Metals Analysis **609**
- Case Narrative 610
- Sample Data Summary 616
- Quality Control Summary 619
- Standards 670
- Raw Data 683
- Miscellaneous 978

General Chemistry Analysis **1017**
- Case Narrative 1018
- Sample Data Summary 1023
- Quality Control Summary 1032
- Instrument QC Data Summary 1035
- Cyanide, Total 1037
- Miscellaneous 1047

General Chemistry Analysis **1049**
- Case Narrative 1050
- Sample Data Summary 1055
- Quality Control Summary 1059
- Instrument QC Data Summary 1062
- Cyanide, Total 1064

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241536 and 241537
SDG # : 10-602

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241536001	RE03-09-13975
241536002	RE03-09-13976
241536003	RE03-09-13977
241536004	RE03-09-13973
241536005	RE03-09-13972
241536006	RE03-09-13974
241536007	RE03-10-3915
241537001	RE03-10-3935
241537002	RE03-10-3925

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis
Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-602

REQUEST NUMBER: 10-602

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241536, 241537/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13975	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13976	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13977	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13973	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13972	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13974	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3915	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3935	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3935	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3925	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3925	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/19/09	1800	Patricia Dover-Dent	[illegible]	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-602

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-602

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13972	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13973	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13974	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13975	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13976	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13977	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3915	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3925	W	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3935	W	11/18/2009	Plus, B, Li, Si, Ti, U

Thursday, November 19, 2009

REQUEST NUMBER: 10-602

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-10-3925	W	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3935	W	11/18/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-13972	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13973	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13974	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13975	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13976	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13977	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3915	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3925	W	11/18/2009	
		1	RE03-10-3935	W	11/18/2009	

Final Page of REQUEST NUMBER 10-602

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-602**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **1-5,15**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 2C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PMA) review: Initials _____ Date 11/23/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9855
Mstr# 7209 7848 9844 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 3
TRK# 0201 7209 7848 9796
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9844
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AWEPR1315W200

2c

FedEx Express

RADIOACTIVE SAMPLES

TRK# 0201 7209 7848 9877

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

3c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9822
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4c

FedEx Express

TRK# 0201 7209 7848 9752

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

5c

FedEx Express

TRK# 0201 7209 7848 9866

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: [illegible] LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-602

Sample Analysis

Sample ID	Client ID
241536001	RE03-09-13975
241536002	RE03-09-13976
241536003	RE03-09-13977
241536004	RE03-09-13973
241536005	RE03-09-13972
241536006	RE03-09-13974
241536007	RE03-10-3915
1201978571	Method Blank (MB) **ICP**
1201993388	Method Blank (MB) **ICP**
1201978576	Laboratory Control Sample (LCS)
1201993393	Laboratory Control Sample (LCS)
1201978573	241512001(CALA-10-4848L) Serial Dilution (SD)
1201993390	241536001(RE03-09-13975L) Serial Dilution (SD)
1201978572	241512001(CALA-10-4848D) Sample Duplicate (DUP)
1201993389	241536001(RE03-09-13975D) Sample Duplicate (DUP)
1201978574	241512001(CALA-10-4848S) Matrix Spike (MS)
1201993391	241536001(RE03-09-13975S) Matrix Spike (MS)
1201978575	241512001(CALA-10-4848SD) Matrix Spike Duplicate (MSD)
1201993392	241536001(RE03-09-13975SD) Matrix Spike Duplicate (MSD)
1201978577	Method Blank (MB) **ICP-MS**
1201978582	Laboratory Control Sample (LCS)
1201978579	241512001(CALA-10-4848L) Serial Dilution (SD)
1201978578	241512001(CALA-10-4848D) Sample Duplicate (DUP)
1201978580	241512001(CALA-10-4848S) Matrix Spike (MS)
1201978581	241512001(CALA-10-4848SD) Matrix Spike Duplicate (MSD)
1201978936	Method Blank (MB) **CVAA**
1201978937	Laboratory Control Sample (LCS)
1201978940	241536001(RE03-09-13975L) Serial Dilution (SD)
1201978938	241536001(RE03-09-13975D) Sample Duplicate (DUP)

1201978939	241536001(RE03-09-13975S) Matrix Spike (MS)
1201978941	241536001(RE03-09-13975SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925470, 931873, 925472 and 925623
Prep Batch :	925469, 931870, 925471 and 925622
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits with the exceptions of iron and potassium that recovered outside of the advisory control limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS analyzed with this SDG met the acceptance criteria of percent recovery.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241512001 (CALA-10-4848)-ICP and ICP-MS and 241536001 (RE03-09-13975)-ICP and CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of aluminum, calcium, magnesium, potassium, sodium, lithium, nickel and silicon as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes aluminum, potassium, sodium, nickel and silicon as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exceptions of iron, lithium and silicon as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of barium, titanium, mercury and silicon as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The sample 241536003 on the ICP required dilution in order to bring over range manganese concentrations within the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 764399, 766802, 767860 and 769971. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nick Cole A. Elmore **Date:** 12·15·09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536001 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13975 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13100000	ug/Kg		7930	23300	23300	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-36-0	Antimony	1170	ug/Kg	U	385	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-38-2	Arsenic	2.17	mg/kg		0.233	1.16	1.16	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-39-3	Barium	811000	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-41-7	Beryllium	1.47	mg/kg		0.0233	0.116	0.116	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-42-8	Boron	1730	ug/Kg	J	1170	5830	5830	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-43-9	Cadmium	583	ug/Kg	U	117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-70-2	Calcium	2450000	ug/Kg		9330	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-47-3	Chromium	8720	ug/Kg		175	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-48-4	Cobalt	2910	ug/Kg		175	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-50-8	Copper	6720	ug/Kg		350	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-89-6	Iron	14900000	ug/Kg		9330	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-92-1	Lead	9960	ug/Kg		291	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-93-2	Lithium	19.5	mg/kg		0.465	2.33	2.33	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7439-95-4	Magnesium	2330000	ug/Kg		9910	35000	35000	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-96-5	Manganese	214000	ug/Kg		233	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470
7439-97-6	Mercury	43.9	ug/kg	*	4.28	12.6	12.6	1	AV	JXL1	12/07/09 13:45	120709S1-14	925623
7440-02-0	Nickel	14.9	mg/kg		0.116	0.465	0.465	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-09-7	Potassium	1600000	ug/Kg		7460	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7782-49-2	Selenium	1.16	mg/kg	U	0.582	1.16	1.16	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-21-3	Silicon	2240000	ug/Kg	*N	1830	12200	12200	1	P	HSC	12/14/09 11:03	121409A-1	931873
7440-22-4	Silver	631	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-23-5	Sodium	361000	ug/Kg		8160	29100	29100	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-28-0	Thallium	0.384	mg/kg		0.0698	0.233	0.233	2	MS	BAJ	12/01/09 04:38	091130-4	925472
7440-32-6	Titanium	405000	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-61-1	Uranium	0.702	mg/kg		0.0154	0.0465	0.0465	2	MS	BAJ	12/01/09 08:51	091130-13	925472
7440-62-2	Vanadium	15600	ug/Kg		117	583	583	1	P	HSC	12/08/09 11:50	120809-2	925470
7440-66-6	Zinc	35500	ug/Kg		385	1170	1170	1	P	HSC	12/08/09 11:50	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.522	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.523	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.58	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931873	931870	SW846 3050B	0.5	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13976 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8680000	ug/Kg		7040	20700	20700	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-36-0	Antimony	372	ug/Kg	J	342	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-38-2	Arsenic	3.35	mg/kg		0.213	1.06	1.06	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-39-3	Barium	100000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-41-7	Beryllium	0.791	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-42-8	Boron	2530	ug/Kg	J	1040	5180	5180	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-43-9	Cadmium	140	ug/Kg	J	104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-70-2	Calcium	2330000	ug/Kg		8280	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-47-3	Chromium	11400	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-48-4	Cobalt	5340	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-50-8	Copper	8040	ug/Kg		311	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-89-6	Iron	10800000	ug/Kg		8280	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-92-1	Lead	15100	ug/Kg		259	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-93-2	Lithium	10.9	mg/kg		0.425	2.13	2.13	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7439-95-4	Magnesium	1660000	ug/Kg		8800	31100	31100	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-96-5	Manganese	305000	ug/Kg		207	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470
7439-97-6	Mercury	30.1	ug/kg	*	4.66	13.7	13.7	1	AV	JXL1	12/07/09 13:59	120709S1-14	925623
7440-02-0	Nickel	7.08	mg/kg		0.106	0.425	0.425	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-09-7	Potassium	1330000	ug/Kg		6630	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7782-49-2	Selenium	1.06	mg/kg	U	0.532	1.06	1.06	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-21-3	Silicon	1950000	ug/Kg	*N	1750	11700	11700	1	P	HSC	12/14/09 11:06	121409A-1	931873
7440-22-4	Silver	418	ug/Kg	J	104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-23-5	Sodium	147000	ug/Kg		7250	25900	25900	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-28-0	Thallium	0.195	mg/kg	J	0.0638	0.213	0.213	2	MS	BAJ	12/01/09 04:56	091130-4	925472
7440-32-6	Titanium	378000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-61-1	Uranium	1.32	mg/kg		0.014	0.0425	0.0425	2	MS	BAJ	12/01/09 08:56	091130-13	925472
7440-62-2	Vanadium	22500	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:11	120809-2	925470
7440-66-6	Zinc	31900	ug/Kg		342	1040	1040	1	P	HSC	12/08/09 12:11	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.577	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.562	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.523	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931873	931870	SW846 3050B	0.512	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536003 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13977 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12200000	ug/Kg		7880	23200	23200	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-36-0	Antimony	1160	ug/Kg	U	383	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-38-2	Arsenic	3.03	mg/kg		0.205	1.02	1.02	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-39-3	Barium	223000	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-41-7	Beryllium	1.34	mg/kg		0.0205	0.102	0.102	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-42-8	Boron	2460	ug/Kg	J	1160	5800	5800	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-43-9	Cadmium	580	ug/Kg	U	116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-70-2	Calcium	3610000	ug/Kg		9280	29000	29000	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-47-3	Chromium	10100	ug/Kg		174	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-48-4	Cobalt	16700	ug/Kg		174	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-50-8	Copper	11300	ug/Kg		348	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-89-6	Iron	14000000	ug/Kg		9280	29000	29000	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-92-1	Lead	27900	ug/Kg		290	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-93-2	Lithium	14.3	mg/kg		0.41	2.05	2.05	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7439-95-4	Magnesium	2570000	ug/Kg		9860	34800	34800	1	P	HSC	12/08/09 12:18	120809-2	925470
7439-96-5	Manganese	1420000	ug/Kg		1160	5800	5800	5	P	HSC	12/11/09 12:54	121109A-3	925470
7439-97-6	Mercury	18.4	ug/kg	*	4.4	13	13	1	AV	JXL1	12/07/09 14:01	120709S1-14	925623
7440-02-0	Nickel	9.51	mg/kg		0.102	0.41	0.41	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-09-7	Potassium	1840000	ug/Kg		37100	145000	145000	5	P	HSC	12/11/09 12:54	121109A-3	925470
7782-49-2	Selenium	1.02	mg/kg	U	0.512	1.02	1.02	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-21-3	Silicon	2030000	ug/Kg	*N	1690	11300	11300	1	P	HSC	12/14/09 11:09	121409A-1	931873
7440-22-4	Silver	601	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-23-5	Sodium	217000	ug/Kg		8120	29000	29000	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-28-0	Thallium	0.289	mg/kg		0.0614	0.205	0.205	2	MS	BAJ	12/01/09 05:03	091130-4	925472
7440-32-6	Titanium	301000	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-61-1	Uranium	0.557	mg/kg		0.0135	0.041	0.041	2	MS	BAJ	12/01/09 08:58	091130-13	925472
7440-62-2	Vanadium	27300	ug/Kg		116	580	580	1	P	HSC	12/08/09 12:18	120809-2	925470
7440-66-6	Zinc	26300	ug/Kg		383	1160	1160	1	P	HSC	12/08/09 12:18	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.514	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.582	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.552	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931873	931870	SW846 3050B	0.528	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536004 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13973 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13300000	ug/Kg		6800	20000	20000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-36-0	Antimony	1000	ug/Kg	U	330	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-38-2	Arsenic	2.13	mg/kg		0.209	1.04	1.04	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-39-3	Barium	156000	ug/Kg		100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-41-7	Beryllium	1.6	mg/kg		0.0209	0.104	0.104	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-42-8	Boron	2630	ug/Kg	J	1000	5000	5000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-43-9	Cadmium	227	ug/Kg	J	100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-70-2	Calcium	3510000	ug/Kg		8000	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-47-3	Chromium	10200	ug/Kg		150	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-48-4	Cobalt	5580	ug/Kg		150	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-50-8	Copper	8710	ug/Kg		300	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-89-6	Iron	17800000	ug/Kg		8000	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-92-1	Lead	13600	ug/Kg		250	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-93-2	Lithium	14.2	mg/kg		0.418	2.09	2.09	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7439-95-4	Magnesium	2770000	ug/Kg		8500	30000	30000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-96-5	Manganese	436000	ug/Kg		200	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470
7439-97-6	Mercury	14.3	ug/kg	*	3.99	11.7	11.7	1	AV	JXL1	12/07/09 14:03	120709S1-14	925623
7440-02-0	Nickel	12.7	mg/kg		0.104	0.418	0.418	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-09-7	Potassium	1710000	ug/Kg		6400	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7782-49-2	Selenium	1.04	mg/kg	U	0.522	1.04	1.04	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-21-3	Silicon	2060000	ug/Kg	*N	1610	10700	10700	1	P	HSC	12/14/09 11:12	121409A-1	931873
7440-22-4	Silver	255	ug/Kg	J	100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-23-5	Sodium	458000	ug/Kg		7000	25000	25000	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-28-0	Thallium	0.247	mg/kg		0.0626	0.209	0.209	2	MS	BAJ	12/01/09 05:09	091130-4	925472
7440-32-6	Titanium	539000	ug/Kg		100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-61-1	Uranium	0.558	mg/kg		0.0138	0.0418	0.0418	2	MS	BAJ	12/01/09 09:00	091130-13	925472
7440-62-2	Vanadium	23700	ug/Kg		100	500	500	1	P	HSC	12/08/09 12:26	120809-2	925470
7440-66-6	Zinc	46200	ug/Kg		330	1000	1000	1	P	HSC	12/08/09 12:26	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.546	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.523	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.558	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931873	931870	SW846 3050B	0.51	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536005 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13972 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15400000	ug/Kg		6680	19700	19700	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-36-0	Antimony	983	ug/Kg	U	324	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-38-2	Arsenic	3.61	mg/kg		0.206	1.03	1.03	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-39-3	Barium	89500	ug/Kg		98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-41-7	Beryllium	0.920	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-42-8	Boron	2060	ug/Kg	J	983	4910	4910	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-43-9	Cadmium	126	ug/Kg	J	98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-70-2	Calcium	2810000	ug/Kg		7860	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-47-3	Chromium	12100	ug/Kg		147	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-48-4	Cobalt	5730	ug/Kg		147	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-50-8	Copper	8170	ug/Kg		295	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-89-6	Iron	15300000	ug/Kg		7860	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-92-1	Lead	15800	ug/Kg		246	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-93-2	Lithium	10.6	mg/kg		0.412	2.06	2.06	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7439-95-4	Magnesium	2410000	ug/Kg		8350	29500	29500	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-96-5	Manganese	244000	ug/Kg		197	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470
7439-97-6	Mercury	31.2	ug/kg	*	4.05	11.9	11.9	1	AV	JXL1	12/07/09 14:05	120709S1-14	925623
7440-02-0	Nickel	5.96	mg/kg		0.103	0.412	0.412	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-09-7	Potassium	1300000	ug/Kg		6290	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7782-49-2	Selenium	1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-21-3	Silicon	1710000	ug/Kg	*N	1650	11000	11000	1	P	HSC	12/14/09 11:15	121409A-1	931873
7440-22-4	Silver	287	ug/Kg	J	98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-23-5	Sodium	202000	ug/Kg		6880	24600	24600	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-28-0	Thallium	0.192	mg/kg	J	0.0617	0.206	0.206	2	MS	BAJ	12/01/09 05:15	091130-4	925472
7440-32-6	Titanium	381000	ug/Kg		98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-61-1	Uranium	0.879	mg/kg		0.0136	0.0412	0.0412	2	MS	BAJ	12/01/09 09:01	091130-13	925472
7440-62-2	Vanadium	31400	ug/Kg		98.3	491	491	1	P	HSC	12/08/09 12:33	120809-2	925470
7440-66-6	Zinc	24000	ug/Kg		324	983	983	1	P	HSC	12/08/09 12:33	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.559	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.534	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.553	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931873	931870	SW846 3050B	0.5	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536006 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13974 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7890000	ug/Kg		7050	20700	20700	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-36-0	Antimony	1040	ug/Kg	U	342	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-38-2	Arsenic	2.52	mg/kg		0.218	1.09	1.09	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-39-3	Barium	84000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-41-7	Beryllium	0.744	mg/kg		0.0218	0.109	0.109	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-42-8	Boron	1890	ug/Kg	J	1040	5180	5180	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-43-9	Cadmium	518	ug/Kg	U	104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-70-2	Calcium	1730000	ug/Kg		8290	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-47-3	Chromium	11300	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-48-4	Cobalt	4980	ug/Kg		155	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-50-8	Copper	6350	ug/Kg		311	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-89-6	Iron	11200000	ug/Kg		8290	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-92-1	Lead	14100	ug/Kg		259	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-93-2	Lithium	10	mg/kg		0.436	2.18	2.18	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7439-95-4	Magnesium	1520000	ug/Kg		8810	31100	31100	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-96-5	Manganese	319000	ug/Kg		207	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470
7439-97-6	Mercury	17.3	ug/kg	*	4.29	12.6	12.6	1	AV	JXL1	12/07/09 14:07	120709S1-14	925623
7440-02-0	Nickel	6.53	mg/kg		0.109	0.436	0.436	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-09-7	Potassium	1070000	ug/Kg		6630	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7782-49-2	Selenium	1.09	mg/kg	U	0.544	1.09	1.09	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-21-3	Silicon	1810000	ug/Kg	*N	1690	11300	11300	1	P	HSC	12/14/09 11:19	121409A-1	931873
7440-22-4	Silver	366	ug/Kg	J	104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-23-5	Sodium	117000	ug/Kg		7260	25900	25900	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-28-0	Thallium	0.209	mg/kg	J	0.0653	0.218	0.218	2	MS	BAJ	12/01/09 05:21	091130-4	925472
7440-32-6	Titanium	414000	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-61-1	Uranium	0.989	mg/kg		0.0144	0.0436	0.0436	2	MS	BAJ	12/01/09 09:03	091130-13	925472
7440-62-2	Vanadium	24300	ug/Kg		104	518	518	1	P	HSC	12/08/09 12:40	120809-2	925470
7440-66-6	Zinc	20400	ug/Kg		342	1040	1040	1	P	HSC	12/08/09 12:40	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.562	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.535	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.554	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931873	931870	SW846 3050B	0.516	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241536007 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-3915 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		7440	21900	21900	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-36-0	Antimony	1090	ug/Kg	U	361	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-38-2	Arsenic	2.17	mg/kg		0.215	1.08	1.08	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-39-3	Barium	71800	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-41-7	Beryllium	1.67	mg/kg		0.0215	0.108	0.108	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-42-8	Boron	2030	ug/Kg	J	1090	5470	5470	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-43-9	Cadmium	547	ug/Kg	U	109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-70-2	Calcium	3000000	ug/Kg		8750	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-47-3	Chromium	8300	ug/Kg		164	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-48-4	Cobalt	3010	ug/Kg		164	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-50-8	Copper	6740	ug/Kg		328	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-89-6	Iron	15800000	ug/Kg		8750	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-92-1	Lead	10500	ug/Kg		274	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-93-2	Lithium	15.5	mg/kg		0.43	2.15	2.15	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7439-95-4	Magnesium	2340000	ug/Kg		9300	32800	32800	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-96-5	Manganese	270000	ug/Kg		219	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470
7439-97-6	Mercury	12	ug/kg	*	3.99	11.7	11.7	1	AV	JXL1	12/07/09 14:09	120709S1-14	925623
7440-02-0	Nickel	13	mg/kg		0.108	0.43	0.43	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-09-7	Potassium	1490000	ug/Kg		7000	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7782-49-2	Selenium	1.08	mg/kg	U	0.538	1.08	1.08	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-21-3	Silicon	1960000	ug/Kg	*N	1580	10500	10500	1	P	HSC	12/14/09 10:41	121409A-1	931873
7440-22-4	Silver	555	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-23-5	Sodium	408000	ug/Kg		7660	27400	27400	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-28-0	Thallium	0.251	mg/kg		0.0645	0.215	0.215	2	MS	BAJ	12/01/09 05:27	091130-4	925472
7440-32-6	Titanium	367000	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-61-1	Uranium	0.593	mg/kg		0.0142	0.043	0.043	2	MS	BAJ	12/01/09 09:05	091130-13	925472
7440-62-2	Vanadium	16800	ug/Kg		109	547	547	1	P	HSC	12/08/09 12:47	120809-2	925470
7440-66-6	Zinc	36600	ug/Kg		361	1090	1090	1	P	HSC	12/08/09 12:47	120809-2	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.504	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.513	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.564	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931873	931870	SW846 3050B	0.523	g	50	mL	12/12/09	BCD1

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–602

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	48.7	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	01–DEC–09 01:58	091130–4
	Beryllium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	01–DEC–09 01:58	091130–4
	Lithium	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	01–DEC–09 01:58	091130–4
	Nickel	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	01–DEC–09 01:58	091130–4
	Selenium	49.9	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	01–DEC–09 01:58	091130–4
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	01–DEC–09 01:58	091130–4
	Uranium	54.2	ug/L	50	ug/L	108.5	90.0 – 110.0	MS	01–DEC–09 08:12	091130–13
	Mercury	5.19	ug/L	5	ug/L	103.8	90.0 – 110.0	AV	07–DEC–09 10:07	120709S1–14
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Antimony	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Cadmium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Calcium	4840	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Chromium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Manganese	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Potassium	2440	ug/L	2500	ug/L	97.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Silver	258	ug/L	250	ug/L	103.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Sodium	2370	ug/L	2500	ug/L	94.8	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Zinc	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 11:07	121109A–3
	Potassium	2510	ug/L	2500	ug/L	100.5	90.0 – 110.0	P	11–DEC–09 11:07	121109A–3
	Silicon	4800	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	14–DEC–09 09:44	121409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Arsenic	47.4	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	01-DEC-09 02:29	091130-4
	Beryllium	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	01-DEC-09 02:29	091130-4
	Lithium	49.7	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	01-DEC-09 02:29	091130-4
	Nickel	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	01-DEC-09 02:29	091130-4
	Selenium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	01-DEC-09 02:29	091130-4
	Thallium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	01-DEC-09 02:29	091130-4
	Uranium	52.2	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	01-DEC-09 08:20	091130-13
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	07-DEC-09 10:13	120709S1-14
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Boron	510	ug/L	500	ug/L	102	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Cadmium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Potassium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Sodium	9150	ug/L	10000	ug/L	91.5	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Titanium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Zinc	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11-DEC-09 11:53	121109A-3
	Potassium	5470	ug/L	5000	ug/L	109.5	90.0 – 110.0	P	11-DEC-09 11:53	121109A-3
	Silicon	2610	ug/L	2500	ug/L	104.3	90.0 – 110.0	P	14-DEC-09 10:07	121409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–602

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Arsenic	48.6	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	01–DEC–09 02:47	091130–4
	Beryllium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	01–DEC–09 02:47	091130–4
	Lithium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	01–DEC–09 02:47	091130–4
	Nickel	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	01–DEC–09 02:47	091130–4
	Selenium	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	01–DEC–09 02:47	091130–4
	Thallium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	01–DEC–09 02:47	091130–4
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	01–DEC–09 08:37	091130–13
	Mercury	5.38	ug/L	5	ug/L	107.7	80.0 – 120.0	AV	07–DEC–09 10:37	120709S1–14
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Antimony	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Barium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Boron	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Lead	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Silver	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Sodium	9430	ug/L	10000	ug/L	94.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Titanium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Manganese	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 12:09	121109A–3
	Potassium	4750	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	11–DEC–09 12:09	121109A–3
	Silicon	2570	ug/L	2500	ug/L	103	90.0 – 110.0	P	14–DEC–09 10:27	121409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Arsenic	47.1	ug/L	50	ug/L	94.3	90.0 – 110.0	MS	01-DEC-09 03:48	091130-4
	Beryllium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	01-DEC-09 03:48	091130-4
	Lithium	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	01-DEC-09 03:48	091130-4
	Nickel	48.1	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	01-DEC-09 03:48	091130-4
	Selenium	49.9	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	01-DEC-09 03:48	091130-4
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	01-DEC-09 03:48	091130-4
	Uranium	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	01-DEC-09 08:53	091130-13
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	07-DEC-09 11:01	120709S1-14
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Boron	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Cobalt	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Sodium	9300	ug/L	10000	ug/L	93	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Zinc	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 09:52	120809-2
	Manganese	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-DEC-09 12:30	121109A-3
	Potassium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	11-DEC-09 12:30	121109A-3
	Silicon	2630	ug/L	2500	ug/L	105.2	90.0 – 110.0	P	14-DEC-09 10:56	121409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–602

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Arsenic	47.3	ug/L	50	ug/L	94.5	90.0 – 110.0	MS	01–DEC–09 04:44	091130–4
	Beryllium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	01–DEC–09 04:44	091130–4
	Lithium	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	01–DEC–09 04:44	091130–4
	Nickel	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	01–DEC–09 04:44	091130–4
	Selenium	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	01–DEC–09 04:44	091130–4
	Thallium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	01–DEC–09 04:44	091130–4
	Uranium	52.8	ug/L	50	ug/L	105.5	90.0 – 110.0	MS	01–DEC–09 09:07	091130–13
	Mercury	5.79	ug/L	5	ug/L	115.9	80.0 – 120.0	AV	07–DEC–09 11:24	120709S1–14
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Boron	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Calcium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Iron	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Lead	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Manganese	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Potassium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Sodium	9450	ug/L	10000	ug/L	94.5	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Titanium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Manganese	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 13:02	121109A–3
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	11–DEC–09 13:02	121109A–3
	Silicon	2630	ug/L	2500	ug/L	105.2	90.0 – 110.0	P	14–DEC–09 11:23	121409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–602

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Arsenic	47.5	ug/L	50	ug/L	95	90.0 – 110.0	MS	01–DEC–09 05:33	091130–4
	Beryllium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	01–DEC–09 05:33	091130–4
	Lithium	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	01–DEC–09 05:33	091130–4
	Nickel	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	01–DEC–09 05:33	091130–4
	Selenium	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	01–DEC–09 05:33	091130–4
	Thallium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	01–DEC–09 05:33	091130–4
	Mercury	5.49	ug/L	5	ug/L	109.7	80.0 – 120.0	AV	07–DEC–09 11:48	120709S1–14
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Cadmium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Chromium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Lead	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Manganese	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Sodium	9490	ug/L	10000	ug/L	94.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Vanadium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
CCV06										
	Mercury	5.57	ug/L	5	ug/L	111.4	80.0 – 120.0	AV	07–DEC–09 12:12	120709S1–14
	Aluminum	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Antimony	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 12:54	120809–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Boron	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Lead	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Manganese	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Sodium	9480	ug/L	10000	ug/L	94.8	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Titanium	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 12:54	120809-2
CCV07										
	Mercury	5.54	ug/L	5	ug/L	110.8	80.0 – 120.0	AV	07-DEC-09 12:35	120709S1-14
CCV08										
	Mercury	5.68	ug/L	5	ug/L	113.6	80.0 – 120.0	AV	07-DEC-09 12:59	120709S1-14
CCV09										
	Mercury	5.48	ug/L	5	ug/L	109.5	80.0 – 120.0	AV	07-DEC-09 13:21	120709S1-14
CCV10										
	Mercury	5.19	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	07-DEC-09 13:47	120709S1-14
CCV11										
	Mercury	5.39	ug/L	5	ug/L	107.9	80.0 – 120.0	AV	07-DEC-09 14:11	120709S1-14

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–602

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.16	ug/L	2	ug/L	107.8	70.0 – 130.0	MS	01–DEC–09 02:10	091130–4
	Thallium	1.17	ug/L	1	ug/L	116.6	70.0 – 130.0	MS	01–DEC–09 02:10	091130–4
	Beryllium	.531	ug/L	.5	ug/L	106.2	70.0 – 130.0	MS	01–DEC–09 02:10	091130–4
	Arsenic	5.84	ug/L	5	ug/L	116.8	70.0 – 130.0	MS	01–DEC–09 02:10	091130–4
	Selenium	5.48	ug/L	5	ug/L	109.5	70.0 – 130.0	MS	01–DEC–09 02:10	091130–4
	Lithium	11.1	ug/L	10	ug/L	110.6	70.0 – 130.0	MS	01–DEC–09 02:10	091130–4
	Uranium	.194	ug/L	.2	ug/L	97	70.0 – 130.0	MS	01–DEC–09 08:15	091130–13
	Mercury	.155	ug/L	.2	ug/L	77.4	70.0 – 130.0	AV	07–DEC–09 10:11	120709S1–14
PQL01										
	Aluminum	196	ug/L	200	ug/L	97.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Copper	9.87	ug/L	10	ug/L	98.7	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Cobalt	4.76	ug/L	5	ug/L	95.3	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Chromium	4.82	ug/L	5	ug/L	96.4	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Cadmium	4.96	ug/L	5	ug/L	99.2	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Barium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Antimony	9.93	ug/L	10	ug/L	99.3	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Sodium	274	ug/L	300	ug/L	91.4	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Silver	5.13	ug/L	5	ug/L	102.5	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Potassium	161	ug/L	150	ug/L	107.2	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Titanium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Boron	49.5	ug/L	50	ug/L	98.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Calcium	204	ug/L	200	ug/L	102.1	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Zinc	10.1	ug/L	10	ug/L	100.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Vanadium	5.23	ug/L	5	ug/L	104.5	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Lead	9.88	ug/L	10	ug/L	98.8	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Magnesium	317	ug/L	300	ug/L	105.7	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Iron	132	ug/L	100	ug/L	131.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Manganese	10.3	ug/L	10	ug/L	102.8	70.0 – 130.0	P	08–DEC–09 08:15	120809–2
	Manganese	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	11–DEC–09 11:21	121109A–3
	Potassium	201	ug/L	150	ug/L	134	70.0 – 130.0	P	11–DEC–09 11:21	121109A–3

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Silicon	101	ug/L	100	ug/L	101.5	70.0 - 130.0	P	14-DEC-09 09:51	121409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-602

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	01-DEC-09 02:04	091130-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	01-DEC-09 02:04	091130-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	01-DEC-09 02:04	091130-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	01-DEC-09 02:04	091130-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	01-DEC-09 02:04	091130-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	01-DEC-09 02:04	091130-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	01-DEC-09 08:13	091130-13
	Mercury	-0.096	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:09	120709S1-14
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 08:08	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 08:08	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 08:08	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 11:14	121109A-3
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-DEC-09 11:14	121109A-3
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	14-DEC-09 09:48	121409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-602

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB01										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	01-DEC-09 02:35	091130-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	01-DEC-09 02:35	091130-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	01-DEC-09 02:35	091130-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	01-DEC-09 02:35	091130-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	01-DEC-09 02:35	091130-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	01-DEC-09 02:35	091130-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	01-DEC-09 08:22	091130-13
	Mercury	-0.098	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:15	120709S1-14
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 08:54	120809-2
	Antimony	7.4	+/-10	J	3.3	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Boron	16.85	+/-50	J	10.0	50.0	SOL	P	08-DEC-09 08:54	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 08:54	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Potassium	138.07	+/-250	J	64.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 12:00	121109A-3
	Potassium	261.86	+/-250		64.0	250	SOL	P	11-DEC-09 12:00	121109A-3
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	14-DEC-09 10:11	121409A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–602

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB02										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	01–DEC–09 02:53	091130–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	01–DEC–09 02:53	091130–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	01–DEC–09 02:53	091130–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	01–DEC–09 02:53	091130–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	01–DEC–09 02:53	091130–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	01–DEC–09 02:53	091130–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	01–DEC–09 08:39	091130–13
	Mercury	–0.091	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:39	120709S1–14
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 09:18	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 09:18	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 09:18	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:16	121109A–3
	Potassium	149.38	+/–250	J	64.0	250	SOL	P	11–DEC–09 12:16	121109A–3
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 10:30	121409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–602

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB03										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	01–DEC–09 03:55	091130–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	01–DEC–09 03:55	091130–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	01–DEC–09 03:55	091130–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	01–DEC–09 03:55	091130–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	01–DEC–09 03:55	091130–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	01–DEC–09 03:55	091130–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	01–DEC–09 08:54	091130–13
	Mercury	–0.117	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:03	120709S1–14
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 09:59	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 09:59	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 09:59	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:37	121109A–3
	Potassium	82.76	+/–250	J	64.0	250	SOL	P	11–DEC–09 12:37	121109A–3
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 11:00	121409A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-602

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB04										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	01-DEC-09 04:50	091130-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	01-DEC-09 04:50	091130-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	01-DEC-09 04:50	091130-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	01-DEC-09 04:50	091130-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	01-DEC-09 04:50	091130-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	01-DEC-09 04:50	091130-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	01-DEC-09 09:08	091130-13
	Mercury	-0.136	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 11:26	120709S1-14
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 11:02	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 11:02	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 11:02	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 11:02	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 11:02	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 11:02	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 11:02	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 11:02	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 11:02	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 11:02	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 11:02	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 11:02	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 11:02	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 11:02	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 11:02	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 11:02	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 11:02	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 11:02	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 11:02	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 13:09	121109A-3
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-DEC-09 13:09	121109A-3
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	14-DEC-09 11:26	121409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-602

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	01-DEC-09 05:40	091130-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	01-DEC-09 05:40	091130-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	01-DEC-09 05:40	091130-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	01-DEC-09 05:40	091130-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	01-DEC-09 05:40	091130-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	01-DEC-09 05:40	091130-4
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 11:50	120709S1-14
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 12:04	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 12:04	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 12:04	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 12:04	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 12:04	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 12:04	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 12:04	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 12:04	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 12:04	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 12:04	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 12:04	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 12:04	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 12:04	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 12:04	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 12:04	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 12:04	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 12:04	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 12:04	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 12:04	120809-2
CCB06										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 12:14	120709S1-14
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 13:01	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–602

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 13:01	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 13:01	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 13:01	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 13:01	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 13:01	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 13:01	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 13:01	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 13:01	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 13:01	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 13:01	120809–2
CCB07	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:38	120709S1–14
CCB08	Mercury	–0.081	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:01	120709S1–14
CCB09	Mercury	–0.071	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:23	120709S1–14
CCB10	Mercury	–0.086	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:49	120709S1–14
CCB11	Mercury	–0.106	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 14:13	120709S1–14

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–602

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978571								
	Aluminum	6720	ug/kg	+/–19762.846	U	P	6720	19800
	Antimony	521	ug/kg	+/–988.142	J	P	326	988
	Barium	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Boron	988	ug/kg	+/–4940.711	U	P	988	4940
	Cadmium	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Calcium	7910	ug/kg	+/–24703.557	U	P	7910	24700
	Chromium	148	ug/kg	+/–494.071	U	P	148	494
	Cobalt	148	ug/kg	+/–494.071	U	P	148	494
	Copper	296	ug/kg	+/–988.142	U	P	296	988
	Iron	7910	ug/kg	+/–24703.557	U	P	7910	24700
	Lead	247	ug/kg	+/–988.142	U	P	247	988
	Magnesium	8400	ug/kg	+/–29644.269	U	P	8400	29600
	Manganese	198	ug/kg	+/–988.142	U	P	198	988
	Potassium	6320	ug/kg	+/–24703.557	U	P	6320	24700
	Silver	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Sodium	6920	ug/kg	+/–24703.557	U	P	6920	24700
	Titanium	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Vanadium	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Zinc	326	ug/kg	+/–988.142	U	P	326	988
1201978577								
	Arsenic	190	ug/kg	+/–950.57	U	MS	190	951
	Beryllium	19	ug/kg	+/–95.057	U	MS	19	95.1
	Lithium	380	ug/kg	+/–1901.141	U	MS	380	1900
	Nickel	95.1	ug/kg	+/–380.228	U	MS	95.1	380
	Selenium	475	ug/kg	+/–950.57	U	MS	475	951
	Thallium	57	ug/kg	+/–190.114	U	MS	57	190
	Uranium	0.0126	mg/kg	+/–0.038	U	MS	0.0126	0.038
1201978936								
	Mercury	–6.73	ug/kg	+/–11.342	J	AV	3.86	11.3
1201993388								
	Silicon	6840	ug/Kg	+/–9523.81	J	P	1430	9520

METALS
-4-
Interference Check Sample

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Silicon	19.3	ug/L					14-DEC-09 09:55	121409A-1
ICSAB01									
	Silicon	5270	ug/L	5000	ug/L	105	80.0 - 120.0	14-DEC-09 09:57	121409A-1

METALS
–4–
Interference Check Sample

SDG No: 10–602

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	–0.06	ug/L					01–DEC–09 08:17	091130–13
ICSAB01									
	Uranium	24.0	ug/L	20	ug/L	120	80.0 – 120.0	01–DEC–09 08:18	091130–13

METALS
-4-
Interference Check Sample

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 – 120.0	08-DEC-09 08:22	120809-2
	Antimony	2.47	ug/L					08-DEC-09 08:22	120809-2
	Barium	2.42	ug/L					08-DEC-09 08:22	120809-2
	Boron	-2.81	ug/L					08-DEC-09 08:22	120809-2
	Cadmium	2.22	ug/L					08-DEC-09 08:22	120809-2
	Calcium	481000	ug/L	500000	ug/L	96.1	80.0 – 120.0	08-DEC-09 08:22	120809-2
	Chromium	1.17	ug/L					08-DEC-09 08:22	120809-2
	Cobalt	-1.69	ug/L					08-DEC-09 08:22	120809-2
	Copper	3.23	ug/L					08-DEC-09 08:22	120809-2
	Iron	183000	ug/L	200000	ug/L	91.5	80.0 – 120.0	08-DEC-09 08:22	120809-2
	Lead	-0.012	ug/L					08-DEC-09 08:22	120809-2
	Magnesium	486000	ug/L	500000	ug/L	97.1	80.0 – 120.0	08-DEC-09 08:22	120809-2
	Manganese	8.2	ug/L					08-DEC-09 08:22	120809-2
	Potassium	36.8	ug/L					08-DEC-09 08:22	120809-2
	Silver	-2.89	ug/L					08-DEC-09 08:22	120809-2
	Sodium	12.2	ug/L					08-DEC-09 08:22	120809-2
	Titanium	-3.82	ug/L					08-DEC-09 08:22	120809-2
	Vanadium	-1.05	ug/L					08-DEC-09 08:22	120809-2
	Zinc	-4.58	ug/L					08-DEC-09 08:22	120809-2
ICSAB01									
	Aluminum	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Antimony	517	ug/L	500	ug/L	103	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Barium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Boron	497	ug/L	500	ug/L	99.4	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Cadmium	448	ug/L	500	ug/L	89.7	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Calcium	461000	ug/L	500000	ug/L	92.1	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Chromium	472	ug/L	500	ug/L	94.4	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Cobalt	433	ug/L	500	ug/L	86.5	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Copper	544	ug/L	500	ug/L	109	80.0 – 120.0	08-DEC-09 08:28	120809-2

METALS
-4-
Interference Check Sample

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Iron	180000	ug/L	200000	ug/L	90	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Lead	452	ug/L	500	ug/L	90.3	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Magnesium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Manganese	479	ug/L	500	ug/L	95.8	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Potassium	5370	ug/L	5000	ug/L	107	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Silver	270	ug/L	250	ug/L	108	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Sodium	5100	ug/L	5000	ug/L	102	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Titanium	511	ug/L	500	ug/L	102	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Vanadium	496	ug/L	500	ug/L	99.2	80.0 – 120.0	08-DEC-09 08:28	120809-2
	Zinc	476	ug/L	500	ug/L	95.2	80.0 – 120.0	08-DEC-09 08:28	120809-2

METALS
-4-
Interference Check Sample

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Manganese	10.7	ug/L					11-DEC-09 11:28	121109A-3
	Potassium	46.8	ug/L					11-DEC-09 11:28	121109A-3
ICSAB01									
	Manganese	490	ug/L	500	ug/L	98.1	80.0 - 120.0	11-DEC-09 11:34	121109A-3
	Potassium	5580	ug/L	5000	ug/L	112	80.0 - 120.0	11-DEC-09 11:34	121109A-3

METALS
-4-
Interference Check Sample

SDG No: 10-602

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	-0.13	ug/L					01-DEC-09 02:16	091130-4
	Beryllium	0.046	ug/L					01-DEC-09 02:16	091130-4
	Lithium	0.139	ug/L					01-DEC-09 02:16	091130-4
	Nickel	3.49	ug/L					01-DEC-09 02:16	091130-4
	Selenium	-1.24	ug/L					01-DEC-09 02:16	091130-4
	Thallium	0.028	ug/L					01-DEC-09 02:16	091130-4
ICSAB01									
	Arsenic	21.4	ug/L	20	ug/L	107	80.0 - 120.0	01-DEC-09 02:22	091130-4
	Beryllium	20.2	ug/L	20	ug/L	101	80.0 - 120.0	01-DEC-09 02:22	091130-4
	Lithium	21.3	ug/L	20	ug/L	106	80.0 - 120.0	01-DEC-09 02:22	091130-4
	Nickel	22.8	ug/L	22.7	ug/L	100	80.0 - 120.0	01-DEC-09 02:22	091130-4
	Selenium	20.4	ug/L	20	ug/L	102	80.0 - 120.0	01-DEC-09 02:22	091130-4
	Thallium	21.3	ug/L	20	ug/L	107	80.0 - 120.0	01-DEC-09 02:22	091130-4

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–602 **Client ID** CALA–10–4848S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978574

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg	75–125	3640000		1830000		518000	349	N	P
Antimony	ug/kg	75–125	51700		339	U	51800	99.8		P
Barium	ug/kg	75–125	80500		21000		51800	115		P
Boron	ug/kg	75–125	54300		1240	J	51800	102		P
Cadmium	ug/kg	75–125	52800		103	U	51800	102		P
Calcium	ug/kg	75–125	2500000		1760000		518000	142	N	P
Chromium	ug/kg	75–125	54300		3030		51800	99		P
Cobalt	ug/kg	75–125	52400		1440		51800	98.3		P
Copper	ug/kg	75–125	56600		2600		51800	104		P
Iron	ug/kg		4760000		4620000		518000	26.8	N/A	P
Lead	ug/kg	75–125	55100		2450		51800	102		P
Magnesium	ug/kg	75–125	1540000		881000		518000	127	N	P
Manganese	ug/kg	75–125	140000		96400		51800	84.7		P
Potassium	ug/kg	75–125	1070000		379000		518000	133	N	P
Silver	ug/kg	75–125	54600		149	J	51800	105		P
Sodium	ug/kg	75–125	879000		127000		518000	145	N	P
Titanium	ug/kg	75–125	251000		196000		51800	106		P
Vanadium	ug/kg	75–125	59700		10300		51800	95.2		P
Zinc	ug/kg	75–125	63300		13000		51800	97.1		P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–602 **Client ID** CALA–10–4848SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978575

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Calcium	ug/kg	75–125	2310000		1760000		470000	117		P
Chromium	ug/kg	75–125	53500		3030		47000	107		P
Cobalt	ug/kg	75–125	49000		1440		47000	101		P
Copper	ug/kg	75–125	53200		2600		47000	107		P
Iron	ug/kg		5990000		4620000		470000	292	N/A	P
Lead	ug/kg	75–125	51700		2450		47000	105		P
Magnesium	ug/kg	75–125	1450000		881000		470000	122		P
Manganese	ug/kg	75–125	155000		96400		47000	124		P
Potassium	ug/kg	75–125	981000		379000		470000	128	N	P
Silver	ug/kg	75–125	51000		149	J	47000	108		P
Sodium	ug/kg	75–125	800000		127000		470000	143	N	P
Titanium	ug/kg		305000		196000		47000	232	N/A	P
Vanadium	ug/kg	75–125	59200		10300		47000	104		P
Zinc	ug/kg	75–125	62200		13000		47000	105		P
Aluminum	ug/kg	75–125	3580000		1830000		470000	373	N	P
Antimony	ug/kg	75–125	47400		339	U	47000	101		P
Barium	ug/kg	75–125	75400		21000		47000	116		P
Boron	ug/kg	75–125	50900		1240	J	47000	106		P
Cadmium	ug/kg	75–125	49100		103	U	47000	104		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-602 **Client ID** CALA-10-4848S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978580

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/kg	75-125	8030		348	J	7720	99.5		MS
Beryllium	ug/kg	75-125	5110		105		4830	104		MS
Lithium	ug/kg	75-125	14200		3230		4830	227	N	MS
Nickel	ug/kg	75-125	12000		2500		4830	197	N	MS
Selenium	ug/kg	75-125	1780		482	U	1930	91		MS
Thallium	ug/kg	75-125	10400		57.8	U	9650	107		MS
Uranium	mg/kg	75-125	6.22		0.177		4.83	125		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–602 **Client ID** CALA–10–4848SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978581

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/kg	75–125	8170		348	J	8130	96.2		MS
Beryllium	ug/kg	75–125	5160		105		5080	99.5		MS
Lithium	ug/kg	75–125	9350		3230		5080	121		MS
Nickel	ug/kg	75–125	10300		2500		5080	153	N	MS
Selenium	ug/kg	75–125	1850		482	U	2030	89.8		MS
Thallium	ug/kg	75–125	10600		57.8	U	10200	104		MS
Uranium	mg/kg	75–125	6.22		0.177		5.08	119		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–602 **Client ID** RE03–09–13975S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241536001 **Spike ID:** 1201978939

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	196		43.9		133	115		AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–602 **Client ID** RE03–09–13975SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241536001 **Spike ID:** 1201978941

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	207		43.9		136	119		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–602 **Client ID:** RE03–10–3915S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241536001 **Spike ID:** 1201993391

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Silicon	ug/Kg	75–125	1910000		2240000		598000	–54.9	N	P

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-602 **Client ID** RE03-10-3915SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241536001 **Spike ID:** 1201993392

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Silicon	ug/Kg	75-125	2360000		2240000		562000	22	N	P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA–10–4848D

Sample ID: 241512001 **Duplicate ID:** 1201978572 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/–20%	1830000		1760000		3.82		P
Antimony	ug/kg		339	U	332	U			P
Barium	ug/kg	+/–20%	21000		32300		42.3	*	P
Boron	ug/kg	+/–5030	1240	J	1060	J	15.4		P
Cadmium	ug/kg		103	U	101	U			P
Calcium	ug/kg	+/–20%	1760000		1910000		8.16		P
Chromium	ug/kg	+/–20%	3030		2900		4.41		P
Cobalt	ug/kg	+/–503	1440		1340		7.18		P
Copper	ug/kg	+/–1010	2600		2160		18.4		P
Iron	ug/kg	+/–20%	4620000		4890000		5.79		P
Lead	ug/kg	+/–1010	2450		2550		4.22		P
Magnesium	ug/kg	+/–20%	881000		997000		12.3		P
Manganese	ug/kg	+/–20%	96400		91000		5.66		P
Potassium	ug/kg	+/–20%	379000		374000		1.31		P
Silver	ug/kg	+/–503	149	J	193	J	25.5		P
Sodium	ug/kg	+/–20%	127000		135000		6.33		P
Titanium	ug/kg	+/–20%	196000		275000		33.4	*	P
Vanadium	ug/kg	+/–20%	10300		9000		13.7		P
Zinc	ug/kg	+/–20%	13000		13400		3.2		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA–10–4848SD

Sample ID: 1201978574 **Duplicate ID:** 1201978575 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/–20	3640000		3580000		1.52		P
Antimony	ug/kg	+/–20	51700		47400		8.65		P
Barium	ug/kg	+/–20	80500		75400		6.53		P
Boron	ug/kg	+/–20	54300		50900		6.43		P
Cadmium	ug/kg	+/–20	52800		49100		7.22		P
Calcium	ug/kg	+/–20	2500000		2310000		7.69		P
Chromium	ug/kg	+/–20	54300		53500		1.54		P
Cobalt	ug/kg	+/–20	52400		49000		6.67		P
Copper	ug/kg	+/–20	56600		53200		6.18		P
Iron	ug/kg	+/–20	4760000		5990000		23	*	P
Lead	ug/kg	+/–20	55100		51700		6.29		P
Magnesium	ug/kg	+/–20	1540000		1450000		5.82		P
Manganese	ug/kg	+/–20	140000		155000		9.67		P
Potassium	ug/kg	+/–20	1070000		981000		8.63		P
Silver	ug/kg	+/–20	54600		51000		6.93		P
Sodium	ug/kg	+/–20	879000		800000		9.4		P
Titanium	ug/kg	+/–20	251000		305000		19.4		P
Vanadium	ug/kg	+/–20	59700		59200		.83		P
Zinc	ug/kg	+/–20	63300		62200		1.88		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA–10–4848D

Sample ID: 241512001 **Duplicate ID:** 1201978578 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/–1000	348	J	425	J	20		MS
Beryllium	ug/kg	+/–100	105		131		22.1		MS
Lithium	ug/kg	+/–2000	3230		3720		14.3		MS
Nickel	ug/kg	+/–20%	2500		2960		16.7		MS
Selenium	ug/kg		482	U	500	U			MS
Thallium	ug/kg		57.8	U	60.1	U			MS
Uranium	mg/kg	+/–.04	0.177		0.185		4.22		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA–10–4848SD

Sample ID: 1201978580 **Duplicate ID:** 1201978581 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/–20	8030		8170		1.72		MS
Beryllium	ug/kg	+/–20	5110		5160		.894		MS
Lithium	ug/kg	+/–20	14200		9350		41.1	*	MS
Nickel	ug/kg	+/–20	12000		10300		15.5		MS
Selenium	ug/kg	+/–20	1780		1850		3.8		MS
Thallium	ug/kg	+/–20	10400		10600		2.24		MS
Uranium	mg/kg	+/–20	6.22		6.22		.0191		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13975D

Sample ID: 241536001 **Duplicate ID:** 1201978938 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–13.6	43.9		18.5		81.4	*	AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13975SD

Sample ID: 1201978939 **Duplicate ID:** 1201978941 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	196		207		5.25		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–10–3915D

Sample ID: 241536001 **Duplicate ID:** 1201993389 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Silicon	ug/Kg	+/–20%	2240000		1830000		20.1	*	P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–10–3915SD

Sample ID: 1201993391 **Duplicate ID:** 1201993392 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Silicon	ug/Kg	+/–20	1910000		2360000		21.2	*	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-602

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978576								
	Aluminum	ug/kg	7240000	7590000		105	63.5-118	P
	Antimony	ug/kg	120000	98300		81.9	39.1-132.1	P
	Barium	ug/kg	471000	477000		101	82-110.6	P
	Boron	ug/kg	138000	136000		98.4	74.9-113.6	P
	Cadmium	ug/kg	115000	118000		102	77.9-115.2	P
	Calcium	ug/kg	3690000	3710000		101	77.4-111.7	P
	Chromium	ug/kg	83300	78100		93.7	66.6-116.5	P
	Cobalt	ug/kg	82300	81400		98.9	79-113.9	P
	Copper	ug/kg	104000	103000		99.3	77.6-112	P
	Iron	ug/kg	19800000	18900000		95.6	51.5-145.5	P
	Lead	ug/kg	160000	166000		104	83.1-114.7	P
	Magnesium	ug/kg	2960000	3010000		102	81-114.3	P
	Manganese	ug/kg	395000	367000		92.9	76.6-106.6	P
	Potassium	ug/kg	2370000	2390000		101	72.2-111.1	P
	Silver	ug/kg	132000	133000		101	81.7-115.7	P
	Sodium	ug/kg	609000	521000		85.6	71.5-109.3	P
	Titanium	ug/kg	379000	371000		98	41.7-148.3	P
	Vanadium	ug/kg	165000	151000		91.7	65-118.6	P
	Zinc	ug/kg	193000	197000		102	82.8-111.9	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–602

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978582								
	Arsenic	ug/kg	255000	265000		104	83–120	MS
	Beryllium	ug/kg	86400	95100		110	81.2–126.8	MS
	Lithium	mg/kg	8.01	8.61	J	108	66.7–133.7	MS
	Nickel	ug/kg	101000	108000		107	83.3–121.4	MS
	Selenium	ug/kg	171000	183000		107	80.2–125.9	MS
	Thallium	ug/kg	203000	216000		106	78–123.2	MS
	Uranium	mg/kg	2.12	1.69		79.7	61.9–130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-602

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978937								
	Mercury	ug/kg	5150	6390		124	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-602

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201993393								
	Silicon	ug/Kg	1210000	1600000		132	10-190	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-602 **Client ID** CALA-10-4848L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241512001 **Serial Dilution ID:** 1201978573

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	17800		17800		.281		10	P
Antimony	3.3	U	16.5	U				P
Barium	205		209		1.95		10	P
Boron	12	J	50	U	100			P
Cadmium	1	U	5	U				P
Calcium	17100		17100		.292		10	P
Chromium	29.4		30.6		4.08			P
Cobalt	14		13.8	J	1.43			P
Copper	25.3		25	J	1.19			P
Iron	44900		44200		1.56		10	P
Lead	23.8		28.7	J	20.6			P
Magnesium	8560		9250		8.06		10	P
Manganese	937		975		4.06		10	P
Potassium	3690		3750		1.49		10	P
Silver	1.45	J	5	U	100			P
Sodium	1230		1250		1.63			P
Titanium	1910		1960		2.36		10	P
Vanadium	100		102		1.5		10	P
Zinc	126		130		2.78			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-602 **Client ID** CALA-10-4848L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241512001 **Serial Dilution ID:** 1201978579

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	1.81	J	5	U	100			MS
Beryllium	.546		.57	J	4.4			MS
Lithium	16.7		17.9	J	6.89			MS
Nickel	13		13.5		3.85			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.3	U	1.5	U				MS
Uranium	.92		.665	J	27.7			MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–602 **Client ID** RE03–09–13975L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241536001 **Serial Dilution ID:** 1201978940

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.697		.34	U	100			AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–602 **Client ID** RE03–10–3915L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241536001 **Serial Dilution ID:** 1201993390

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Silicon	18400		18400		.272		10	P

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-602 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925469							
1201978571	MB for batch 925469	MB	S	24-NOV-09	.506g	50mL	
1201978576	LCS for batch 925469	LCS	S	24-NOV-09	.509g	50mL	
1201978574	CALA-10-4848S	MS	S	24-NOV-09	.5g	50mL	
1201978575	CALA-10-4848SD	MSD	S	24-NOV-09	.551g	50mL	
1201978572	CALA-10-4848D	DUP	S	24-NOV-09	.515g	50mL	
241536001	RE03-09-13975	SAMPLE	S	24-NOV-09	.522g	50mL	
241536002	RE03-09-13976	SAMPLE	S	24-NOV-09	.577g	50mL	
241536003	RE03-09-13977	SAMPLE	S	24-NOV-09	.514g	50mL	
241536004	RE03-09-13973	SAMPLE	S	24-NOV-09	.546g	50mL	
241536005	RE03-09-13972	SAMPLE	S	24-NOV-09	.559g	50mL	
241536006	RE03-09-13974	SAMPLE	S	24-NOV-09	.562g	50mL	
241536007	RE03-10-3915	SAMPLE	S	24-NOV-09	.504g	50mL	
Batch Number 931870							
1201993388	MB for batch 931870	MB	S	12-DEC-09	.525g	50mL	
1201993393	LCS for batch 931870	LCS	S	12-DEC-09	.514g	50mL	
1201993391	RE03-10-3915S	MS	S	12-DEC-09	.509g	50mL	
1201993392	RE03-10-3915SD	MSD	S	12-DEC-09	.541g	50mL	
1201993389	RE03-10-3915D	DUP	S	12-DEC-09	.525g	50mL	
241536001	RE03-09-13975	SAMPLE	S	12-DEC-09	.5g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-602 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241536002	RE03-09-13976	SAMPLE	S	12-DEC-09	.512g	50mL	
241536003	RE03-09-13977	SAMPLE	S	12-DEC-09	.528g	50mL	
241536004	RE03-09-13973	SAMPLE	S	12-DEC-09	.51g	50mL	
241536005	RE03-09-13972	SAMPLE	S	12-DEC-09	.5g	50mL	
241536006	RE03-09-13974	SAMPLE	S	12-DEC-09	.516g	50mL	
241536007	RE03-10-3915	SAMPLE	S	12-DEC-09	.523g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-602 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925471							
1201978577	MB for batch 925471	MB	S	24-NOV-09	.526g	50mL	
1201978582	LCS for batch 925471	LCS	S	24-NOV-09	.503g	50mL	
1201978580	CALA-10-4848S	MS	S	24-NOV-09	.537g	50mL	
1201978581	CALA-10-4848SD	MSD	S	24-NOV-09	.51g	50mL	
1201978578	CALA-10-4848D	DUP	S	24-NOV-09	.518g	50mL	
241536001	RE03-09-13975	SAMPLE	S	24-NOV-09	.523g	50mL	
241536002	RE03-09-13976	SAMPLE	S	24-NOV-09	.562g	50mL	
241536003	RE03-09-13977	SAMPLE	S	24-NOV-09	.582g	50mL	
241536004	RE03-09-13973	SAMPLE	S	24-NOV-09	.523g	50mL	
241536005	RE03-09-13972	SAMPLE	S	24-NOV-09	.534g	50mL	
241536006	RE03-09-13974	SAMPLE	S	24-NOV-09	.535g	50mL	
241536007	RE03-10-3915	SAMPLE	S	24-NOV-09	.513g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-602 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925622							
1201978936	MB for batch 925622	MB	S	04-DEC-09	.529g	30mL	
1201978937	LCS for batch 925622	LCS	S	04-DEC-09	.202g	30mL	
1201978939	RE03-09-13975S	MS	S	04-DEC-09	.549g	30mL	
1201978941	RE03-09-13975SD	MSD	S	04-DEC-09	.535g	30mL	
1201978938	RE03-09-13975D	DUP	S	04-DEC-09	.535g	30mL	
241536001	RE03-09-13975	SAMPLE	S	04-DEC-09	.58g	30mL	
241536002	RE03-09-13976	SAMPLE	S	04-DEC-09	.523g	30mL	
241536003	RE03-09-13977	SAMPLE	S	04-DEC-09	.552g	30mL	
241536004	RE03-09-13973	SAMPLE	S	04-DEC-09	.558g	30mL	
241536005	RE03-09-13972	SAMPLE	S	04-DEC-09	.553g	30mL	
241536006	RE03-09-13974	SAMPLE	S	04-DEC-09	.554g	30mL	
241536007	RE03-10-3915	SAMPLE	S	04-DEC-09	.564g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 01–DEC–09 **End Date:** 01–DEC–09

Client Sdg: 10–602
Method MS
Data File: 091130–13

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:07																										X		
S10	1	08:09																										X		
S100	1	08:10																										X		
ICV01	1	08:12																										X		
ICB01	1	08:13																										X		
CRDL01	1	08:15																										X		
ICSA01	1	08:17																										X		
ICSAB01	1	08:18																										X		
CCV01	1	08:20																										X		
CCB01	1	08:22																										X		
1201978577	2	08:23																										X		
ZZZZZZ	20	08:25																												
1201978582	40	08:27																										X		
ZZZZZZ	2	08:29																												
1201978578	2	08:30																										X		
1201978580	2	08:32																										X		
1201978581	2	08:34																										X		
1201978579	10	08:35																										X		
CCV02	1	08:37																										X		
CCB02	1	08:39																										X		
ZZZZZZ	2	08:41																												
ZZZZZZ	2	08:42																												
ZZZZZZ	2	08:44																												
ZZZZZZ	2	08:46																												
ZZZZZZ	2	08:48																												
ZZZZZZ	2	08:49																												
241536001	2	08:51																										X		
CCV03	1	08:53																										X		
CCB03	1	08:54																										X		
241536002	2	08:56																										X		
241536003	2	08:58																										X		
241536004	2	09:00																										X		
241536005	2	09:01																										X		
241536006	2	09:03																										X		
241536007	2	09:05																										X		
CCV04	1	09:07																										X		
CCB04	1	09:08																										X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 01-DEC-09 **End Date:** 01-DEC-09

Client Sdg: 10-602
Method MS
Data File: 091130-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	01:40			X		X									X				X		X				X				
S10	1	01:46			X		X									X				X		X				X				
S100	1	01:52			X		X									X				X		X				X				
ICV01	1	01:58			X		X									X				X		X				X				
ICB01	1	02:04			X		X									X				X		X				X				
CRDL01	1	02:10			X		X									X				X		X				X				
ICSA01	1	02:16			X		X									X				X		X				X				
ICSAB01	1	02:22			X		X									X				X		X				X				
CCV01	1	02:29			X		X									X				X		X				X				
CCB01	1	02:35			X		X									X				X		X				X				
LR01	1	02:41			X		X									X				X		X				X				
CCV02	1	02:47			X		X									X				X		X				X				
CCB02	1	02:53			X		X									X				X		X				X				
1201978577	2	02:59			X		X									X				X		X				X				
1201978582	20	03:05														X														
1201978582	40	03:11			X		X													X		X				X				
ZZZZZZ	2	03:18																												
1201978578	2	03:24			X		X									X				X		X				X				
1201978580	2	03:30			X		X									X				X		X				X				
1201978581	2	03:36			X		X									X				X		X				X				
1201978579	10	03:42			X		X									X				X		X				X				
CCV03	1	03:48			X		X									X				X		X				X				
CCB03	1	03:55			X		X									X				X		X				X				
ZZZZZZ	2	04:01																												
ZZZZZZ	2	04:07																												
ZZZZZZ	2	04:13																												
ZZZZZZ	2	04:19																												
ZZZZZZ	2	04:25																												
ZZZZZZ	2	04:32																												
241536001	2	04:38			X		X									X				X		X				X				
CCV04	1	04:44			X		X									X				X		X				X				
CCB04	1	04:50			X		X									X				X		X				X				
241536002	2	04:56			X		X									X				X		X				X				
241536003	2	05:03			X		X									X				X		X				X				
241536004	2	05:09			X		X									X				X		X				X				
241536005	2	05:15			X		X									X				X		X				X				
241536006	2	05:21			X		X									X				X		X				X				
241536007	2	05:27			X		X									X				X		X				X				
CCV05	1	05:33			X		X									X				X		X				X				
CCB05	1	05:40			X		X									X				X		X				X				

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 08-DEC-09 **End Date:** 08-DEC-09

Client Sdg: 10-602
Method P
Data File: 120809-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	07:35		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	07:41	X	X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	07:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	07:55	X							X				X			X								X					
ICV01	1	08:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	08:08	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	08:15	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	08:22	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	08:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	08:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	08:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV01	1	08:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	08:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	09:04	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	09:11	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	09:18	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	20	09:25																												
ZZZZZZ	20	09:32																												
ZZZZZZ	20	09:38																												
ZZZZZZ	20	09:45																												
CCV03	1	09:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	09:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978571	1	10:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978576	2	10:13	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:20																												
1201978572	1	10:27	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978574	1	10:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978575	1	10:41	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978573	5	10:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV04	1	10:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	11:02	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:15																												
ZZZZZZ	1	11:23																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:36																												
ZZZZZZ	1	11:43																												
241536001	1	11:50	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV05	1	11:57	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	12:04	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241536002	1	12:11	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241536003	1	12:18	X	X		X		X	X	X	X	X	X	X	X		X							X	X		X		X	X
241536004	1	12:26	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241536005	1	12:33	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241536006	1	12:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241536007	1	12:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV06	1	12:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	13:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 11–DEC–09 **End Date:** 11–DEC–09

Client Sdg: 10–602
Method P
Data File: 121109A–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	10:35																X			X									
S0.1	1	10:41																X			X									
S0.5	1	10:48																X			X									
SCAL	1	10:55																X			X									
S10	1	11:02																												
ICV01	1	11:07																X			X									
ICB01	1	11:14																X			X									
PQL01	1	11:21																X			X									
ICSA01	1	11:28																X			X									
ICSAB01	1	11:34																X			X									
LR01	1	11:40																X			X									
LR02	1	11:46																X			X									
CCV01	1	11:53																X			X									
CCB01	1	12:00																X			X									
CCV02	1	12:09																X			X									
CCB02	1	12:16																X			X									
LR03	1	12:23																X			X									
CCV03	1	12:30																X			X									
CCB03	1	12:37																X			X									
ZZZZZZ	5	12:47																												
241536003	5	12:54																X			X									
CCV04	1	13:02																X			X									
CCB04	1	13:09																X			X									

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 07-DEC-09 **End Date:** 07-DEC-09

Client Sdg: 10-602
Method AV
Data File: 120709S1-14

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:55																	X											
S0.2	1	09:57																	X											
S0.5	1	09:59																	X											
S2.0	1	10:01																	X											
S5.0	1	10:03																	X											
S10	1	10:05																	X											
ICV01	1	10:07																	X											
ICB01	1	10:09																	X											
CRDL01	1	10:11																	X											
CCV01	1	10:13																	X											
CCB01	1	10:15																	X											
ZZZZZZ	1	10:17																												
ZZZZZZ	10	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
ZZZZZZ	1	10:35																												
CCV02	1	10:37																	X											
CCB02	1	10:39																	X											
ZZZZZZ	1	10:41																												
ZZZZZZ	10	10:43																												
ZZZZZZ	1	10:45																												
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	1	10:55																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	10:59																												
CCV03	1	11:01																	X											
CCB03	1	11:03																	X											
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:10																												
ZZZZZZ	1	11:12																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:14																											
ZZZZZZ	1	11:16																											
ZZZZZZ	1	11:18																											
ZZZZZZ	1	11:20																											
ZZZZZZ	1	11:22																											
CCV04	1	11:24																X											
CCB04	1	11:26																X											
ZZZZZZ	1	11:28																											
ZZZZZZ	1	11:30																											
ZZZZZZ	1	11:32																											
ZZZZZZ	1	11:34																											
ZZZZZZ	5	11:36																											
ZZZZZZ	1	11:38																											
ZZZZZZ	1	11:40																											
ZZZZZZ	10	11:42																											
ZZZZZZ	1	11:44																											
ZZZZZZ	1	11:46																											
CCV05	1	11:48																X											
CCB05	1	11:50																X											
ZZZZZZ	1	11:52																											
ZZZZZZ	1	11:54																											
ZZZZZZ	1	11:56																											
ZZZZZZ	1	11:58																											
ZZZZZZ	1	12:00																											
ZZZZZZ	1	12:02																											
ZZZZZZ	5	12:04																											
ZZZZZZ	1	12:06																											
ZZZZZZ	1	12:08																											
ZZZZZZ	1	12:10																											
CCV06	1	12:12																X											
CCB06	1	12:14																X											
ZZZZZZ	1	12:16																											
ZZZZZZ	1	12:18																											
ZZZZZZ	1	12:20																											
ZZZZZZ	1	12:22																											
ZZZZZZ	1	12:24																											
ZZZZZZ	1	12:26																											
ZZZZZZ	1	12:28																											
ZZZZZZ	1	12:30																											
ZZZZZZ	1	12:31																											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	12:33																												
CCV07	1	12:35																	X											
CCB07	1	12:38																	X											
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:41																												
ZZZZZZ	1	12:43																												
ZZZZZZ	10	12:45																												
ZZZZZZ	1	12:47																												
ZZZZZZ	1	12:49																												
ZZZZZZ	1	12:51																												
ZZZZZZ	1	12:53																												
ZZZZZZ	1	12:55																												
ZZZZZZ	1	12:57																												
CCV08	1	12:59																	X											
CCB08	1	13:01																	X											
ZZZZZZ	5	13:03																												
ZZZZZZ	1	13:05																												
ZZZZZZ	1	13:07																												
ZZZZZZ	1	13:09																												
ZZZZZZ	1	13:11																												
ZZZZZZ	1	13:13																												
ZZZZZZ	1	13:15																												
ZZZZZZ	1	13:17																												
ZZZZZZ	1	13:19																												
CCV09	1	13:21																	X											
CCB09	1	13:23																	X											
1201978936	1	13:27																	X											
1201978937	10	13:29																	X											
ZZZZZZ	1	13:31																												
ZZZZZZ	1	13:33																												
ZZZZZZ	1	13:35																												
ZZZZZZ	1	13:37																												
ZZZZZZ	1	13:39																												
ZZZZZZ	1	13:41																												
ZZZZZZ	1	13:43																												
241536001	1	13:45																	X											
CCV10	1	13:47																	X											
CCB10	1	13:49																	X											
1201978938	1	13:51																	X											
1201978939	1	13:53																	X											

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																X											
1201978941	1	13:55																X											
1201978940	5	13:57																X											
241536002	1	13:59																X											
241536003	1	14:01																X											
241536004	1	14:03																X											
241536005	1	14:05																X											
241536006	1	14:07																X											
241536007	1	14:09																X											
CCV11	1	14:11																X											
CCB11	1	14:13																X											

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 14–DEC–09 **End Date:** 14–DEC–09

Client Sdg: 10–602
Method P
Data File: 121409A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:28																					X							
S0.1	1	09:32																					X							
S0.5	1	09:34																					X							
SCAL	1	09:38																					X							
S10	1	09:42																												
ICV01	1	09:44																					X							
ICB01	1	09:48																					X							
PQL01	1	09:51																					X							
ICSA01	1	09:55																					X							
ICSAB01	1	09:57																					X							
LR01	1	10:00																					X							
LR02	1	10:03																					X							
CCV01	1	10:07																					X							
CCB01	1	10:11																					X							
LR03	1	10:23																					X							
CCV02	1	10:27																					X							
CCB02	1	10:30																					X							
1201993388	1	10:34																					X							
1201993393	1	10:38																					X							
241536007	1	10:41																					X							
1201993389	1	10:44																					X							
1201993391	1	10:46																					X							
1201993392	1	10:49																					X							
1201993390	5	10:52																					X							
CCV03	1	10:56																					X							
CCB03	1	11:00																					X							
241536001	1	11:03																					X							
241536002	1	11:06																					X							
241536003	1	11:09																					X							
241536004	1	11:12																					X							
241536005	1	11:15																					X							
241536006	1	11:19																					X							
CCV04	1	11:23																					X							
CCB04	1	11:26																					X							

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–602

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–602

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–602

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10–602
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	–0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	–31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-602
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-602
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-602
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-602
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-602
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
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Linear Ranges

SDG NO. 10–602

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–602

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–602

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09

Raw Data

12/14/2009 09:28:02 Hg ReAlign... Actual peak offset (nm): 0.005
Drift (nm): 0.000 Slit adjustment: -3

Analysis Begun

Start Time: 12/14/2009 09:28:27 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409.SIF
Batch ID:
Results Data Set: 121409A
Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/14/2009 09:28:27**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	111545.1	111545.1	99.6	%	09:29:08
1	Al 396.153Radial†	170.6	171.3	[0.00]	µg/L	09:29:08
1	Ca 317.933Radial†	407.2	408.8	[0.00]	µg/L	09:29:28
1	Fe 238.204 Radial†	8.9	9.0	[0.00]	µg/L	09:29:28
1	K 766.490 Radial†	726.0	728.8	[0.00]	µg/L	09:29:08
1	Mg 279.077 IEC†	15.9	16.0	[0.00]	µg/L	09:29:28
1	Na 589.592 Radial†	-394.3	-395.8	[0.00]	µg/L	09:29:08
1	Sr 421.552†	-62.4	-62.7	[0.00]	µg/L	09:29:08
1	Sc 361.383	2008280.5	2008280.5	100.02	%	09:30:30
1	Y 371.029	1224064.9	1224064.9	100.06	%	09:30:30
1	Ag 328.068†	-20.7	-20.6	[0.00]	µg/L	09:30:36
1	As 188.979†	5.7	5.7	[0.00]	µg/L	09:30:56
1	B 249.677†	142.8	142.8	[0.00]	µg/L	09:30:36
1	Ba 233.527†	-72.7	-72.6	[0.00]	µg/L	09:30:56
1	Be 313.107†	3630.2	3629.4	[0.00]	µg/L	09:30:36
1	Cd 226.502†	-91.7	-91.7	[0.00]	µg/L	09:30:56
1	Co 228.616†	-71.2	-71.1	[0.00]	µg/L	09:30:56
1	Cr 267.716†	-100.1	-100.1	[0.00]	µg/L	09:30:36
1	Cu 324.752†	3303.4	3302.6	[0.00]	µg/L	09:30:36
1	Mn 257.610†	-250.3	-250.2	[0.00]	µg/L	09:30:56
1	Mo 202.031†	-3.0	-3.0	[0.00]	µg/L	09:30:56
1	Ni 231.604†	289.7	289.7	[0.00]	µg/L	09:30:56
1	P 214.914†	190.0	189.9	[0.00]	µg/L	09:30:56
1	Pb 220.353†	55.6	55.6	[0.00]	µg/L	09:30:56
1	S 181.975 Axial†	24.4	24.4	[0.00]	µg/L	09:30:56
1	Sb 206.836†	20.5	20.5	[0.00]	µg/L	09:30:56
1	Se 196.026†	10.0	10.0	[0.00]	µg/L	09:30:56
1	SiO2†	2068.0	2067.5	[0.00]	µg/L	09:30:36
1	Si 251.611†	374.9	374.8	[0.00]	µg/L	09:30:56
1	Sn 189.927†	24.1	24.1	[0.00]	µg/L	09:30:56
1	Ti 334.940†	790.6	790.4	[0.00]	µg/L	09:30:36
1	Tl 190.801†	-18.0	-18.0	[0.00]	µg/L	09:30:56
1	U 409.014†	707.6	707.4	[0.00]	µg/L	09:30:36
1	V 292.402†	-92.7	-92.7	[0.00]	µg/L	09:30:36
1	Zn 213.857†	530.0	529.8	[0.00]	µg/L	09:30:56
2	Sc RADIAL	111872.1	111872.1	99.9	%	09:29:34
2	Al 396.153Radial†	164.6	164.8	[0.00]	µg/L	09:29:34
2	Ca 317.933Radial†	414.7	415.1	[0.00]	µg/L	09:29:54
2	Fe 238.204 Radial†	9.0	9.0	[0.00]	µg/L	09:29:54
2	K 766.490 Radial†	751.5	752.2	[0.00]	µg/L	09:29:34
2	Mg 279.077 IEC†	17.2	17.3	[0.00]	µg/L	09:29:54
2	Na 589.592 Radial†	-412.4	-412.8	[0.00]	µg/L	09:29:34
2	Sr 421.552†	-105.5	-105.6	[0.00]	µg/L	09:29:34

2	Sc 361.383	2010268.9	2010268.9	100.12	%	09:31:02
2	Y 371.029	1224527.4	1224527.4	100.09	%	09:31:02
2	Ag 328.068†	-8.5	-8.5	[0.00]	µg/L	09:31:08
2	As 188.979†	2.1	2.1	[0.00]	µg/L	09:31:29
2	B 249.677†	153.3	153.1	[0.00]	µg/L	09:31:08
2	Ba 233.527†	-70.6	-70.5	[0.00]	µg/L	09:31:29
2	Be 313.107†	3625.4	3621.0	[0.00]	µg/L	09:31:08
2	Cd 226.502†	-105.2	-105.0	[0.00]	µg/L	09:31:29
2	Co 228.616†	-68.3	-68.2	[0.00]	µg/L	09:31:29
2	Cr 267.716†	-134.1	-133.9	[0.00]	µg/L	09:31:08
2	Cu 324.752†	3310.3	3306.3	[0.00]	µg/L	09:31:08
2	Mn 257.610†	-250.5	-250.2	[0.00]	µg/L	09:31:29
2	Mo 202.031†	-4.5	-4.5	[0.00]	µg/L	09:31:29
2	Ni 231.604†	287.0	286.7	[0.00]	µg/L	09:31:29
2	P 214.914†	188.0	187.8	[0.00]	µg/L	09:31:29
2	Pb 220.353†	43.8	43.8	[0.00]	µg/L	09:31:29
2	S 181.975 Axial†	29.2	29.2	[0.00]	µg/L	09:31:29
2	Sb 206.836†	30.6	30.5	[0.00]	µg/L	09:31:29
2	Se 196.026†	10.5	10.5	[0.00]	µg/L	09:31:29
2	SiO2†	2020.1	2017.6	[0.00]	µg/L	09:31:08
2	Si 251.611†	353.8	353.4	[0.00]	µg/L	09:31:29
2	Sn 189.927†	24.1	24.1	[0.00]	µg/L	09:31:29
2	Ti 334.940†	826.7	825.7	[0.00]	µg/L	09:31:08
2	Tl 190.801†	-19.7	-19.7	[0.00]	µg/L	09:31:29
2	U 409.014†	668.5	667.7	[0.00]	µg/L	09:31:08
2	V 292.402†	-62.2	-62.1	[0.00]	µg/L	09:31:08
2	Zn 213.857†	530.4	529.8	[0.00]	µg/L	09:31:29
3	Sc RADIAL	112522.8	112522.8	100	%	09:30:00
3	Al 396.153Radial†	158.0	157.2	[0.00]	µg/L	09:30:00
3	Ca 317.933Radial†	415.9	413.9	[0.00]	µg/L	09:30:20
3	Fe 238.204 Radial†	17.9	17.9	[0.00]	µg/L	09:30:20
3	K 766.490 Radial†	762.5	758.9	[0.00]	µg/L	09:30:00
3	Mg 279.077 IEC†	14.9	14.8	[0.00]	µg/L	09:30:20
3	Na 589.592 Radial†	-398.2	-396.3	[0.00]	µg/L	09:30:00
3	Sr 421.552†	-106.2	-105.7	[0.00]	µg/L	09:30:00
3	Sc 361.383	2004968.5	2004968.5	99.857	%	09:31:35
3	Y 371.029	1221511.7	1221511.7	99.848	%	09:31:35
3	Ag 328.068†	-19.6	-19.6	[0.00]	µg/L	09:31:40
3	As 188.979†	1.6	1.6	[0.00]	µg/L	09:32:01
3	B 249.677†	189.1	189.4	[0.00]	µg/L	09:31:40
3	Ba 233.527†	-74.1	-74.2	[0.00]	µg/L	09:32:01
3	Be 313.107†	3600.9	3606.1	[0.00]	µg/L	09:31:40
3	Cd 226.502†	-95.9	-96.0	[0.00]	µg/L	09:32:01
3	Co 228.616†	-70.0	-70.1	[0.00]	µg/L	09:32:01
3	Cr 267.716†	-138.5	-138.7	[0.00]	µg/L	09:31:40
3	Cu 324.752†	3313.1	3317.9	[0.00]	µg/L	09:31:40
3	Mn 257.610†	-242.8	-243.1	[0.00]	µg/L	09:32:01
3	Mo 202.031†	-6.8	-6.8	[0.00]	µg/L	09:32:01
3	Ni 231.604†	296.3	296.8	[0.00]	µg/L	09:32:01
3	P 214.914†	192.0	192.3	[0.00]	µg/L	09:32:01
3	Pb 220.353†	53.5	53.6	[0.00]	µg/L	09:32:01
3	S 181.975 Axial†	23.5	23.5	[0.00]	µg/L	09:32:01
3	Sb 206.836†	21.3	21.4	[0.00]	µg/L	09:32:01
3	Se 196.026†	11.8	11.8	[0.00]	µg/L	09:32:01
3	SiO2†	2012.8	2015.7	[0.00]	µg/L	09:31:40
3	Si 251.611†	341.7	342.1	[0.00]	µg/L	09:32:01
3	Sn 189.927†	18.9	18.9	[0.00]	µg/L	09:32:01
3	Ti 334.940†	778.4	779.5	[0.00]	µg/L	09:31:40
3	Tl 190.801†	-22.6	-22.6	[0.00]	µg/L	09:32:01
3	U 409.014†	728.7	729.7	[0.00]	µg/L	09:31:40
3	V 292.402†	-116.6	-116.8	[0.00]	µg/L	09:31:40
3	Zn 213.857†	523.1	523.9	[0.00]	µg/L	09:32:01

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2007839.3	2677.64	0.13%	100.00	%
Sc RADIAL	111980.0	497.72	0.44%	100	%
Y 371.029	1223368.0	1624.14	0.13%	100.000	%
Ag 328.068†	-16.3	6.73	41.37%	[0.00]	µg/L

Al 396.153Radial†	164.4	7.05	4.28%	[0.00]	µg/L
As 188.979†	3.1	2.25	71.49%	[0.00]	µg/L
B 249.677†	161.7	24.46	15.13%	[0.00]	µg/L
Ba 233.527†	-72.4	1.87	2.57%	[0.00]	µg/L
Be 313.107†	3618.8	11.81	0.33%	[0.00]	µg/L
Ca 317.933Radial†	412.6	3.31	0.80%	[0.00]	µg/L
Cd 226.502†	-97.6	6.80	6.97%	[0.00]	µg/L
Co 228.616†	-69.8	1.50	2.15%	[0.00]	µg/L
Cr 267.716†	-124.2	21.04	16.93%	[0.00]	µg/L
Cu 324.752†	3308.9	7.95	0.24%	[0.00]	µg/L
Fe 238.204 Radial†	12.0	5.11	42.73%	[0.00]	µg/L
K 766.490 Radial†	746.6	15.77	2.11%	[0.00]	µg/L
Mg 279.077 IEC†	16.0	1.21	7.54%	[0.00]	µg/L
Mn 257.610†	-247.8	4.09	1.65%	[0.00]	µg/L
Mo 202.031†	-4.8	1.93	40.56%	[0.00]	µg/L
Na 589.592 Radial†	-401.6	9.66	2.41%	[0.00]	µg/L
Ni 231.604†	291.0	5.19	1.78%	[0.00]	µg/L
P 214.914†	190.0	2.25	1.19%	[0.00]	µg/L
Pb 220.353†	51.0	6.32	12.39%	[0.00]	µg/L
S 181.975 Axial†	25.7	3.07	11.93%	[0.00]	µg/L
Sb 206.836†	24.2	5.54	22.94%	[0.00]	µg/L
Se 196.026†	10.8	0.89	8.28%	[0.00]	µg/L
SiO2†	2033.6	29.36	1.44%	[0.00]	µg/L
Si 251.611†	356.8	16.61	4.65%	[0.00]	µg/L
Sn 189.927†	22.4	2.98	13.34%	[0.00]	µg/L
Sr 421.552†	-91.3	24.82	27.18%	[0.00]	µg/L
Ti 334.940†	798.5	24.15	3.02%	[0.00]	µg/L
Tl 190.801†	-20.1	2.33	11.62%	[0.00]	µg/L
U 409.014†	701.6	31.40	4.47%	[0.00]	µg/L
V 292.402†	-90.5	27.39	30.26%	[0.00]	µg/L
Zn 213.857†	527.8	3.44	0.65%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/14/2009 09:32:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114674.2	114674.2	102	%	09:32:45
1	K 766.490 Radial†	2514.9	1709.2	[1000]	µg/L	09:32:45
1	Sr 421.552†	17626.6	17303.8	[100]	µg/L	09:32:45
1	Sc 361.383	1995045.9	1995045.9	99.363	%	09:33:07
1	Y 371.029	1215141.2	1215141.2	99.328	%	09:33:07
1	Ag 328.068†	10637.6	10722.1	[100]	µg/L	09:33:13
1	As 188.979†	53.2	50.4	[100]	µg/L	09:33:33
1	B 249.677†	2240.5	2093.1	[100]	µg/L	09:33:13
1	Ba 233.527†	3709.0	3805.3	[100]	µg/L	09:33:13
1	Be 313.107†	154634.4	152007.2	[100]	µg/L	09:33:07
1	Cd 226.502†	3536.8	3657.0	[100]	µg/L	09:33:13
1	Co 228.616†	1904.5	1986.5	[100]	µg/L	09:33:33
1	Cr 267.716†	4397.1	4549.5	[100]	µg/L	09:33:13
1	Cu 324.752†	17016.3	13816.5	[100]	µg/L	09:33:13
1	Mn 257.610†	29887.6	30327.1	[100]	µg/L	09:33:13
1	Mo 202.031†	838.5	848.6	[100]	µg/L	09:33:33
1	Ni 231.604†	2078.3	1800.6	[100]	µg/L	09:33:13
1	P 214.914†	423.3	236.0	[500]	µg/L	09:33:33
1	Pb 220.353†	438.8	390.6	[100]	µg/L	09:33:33
1	S 181.975 Axial†	63.6	38.3	[200]	µg/L	09:33:33
1	Sb 206.836†	117.0	93.6	[100]	µg/L	09:33:33
1	Se 196.026†	72.9	62.6	[100]	µg/L	09:33:33
1	SiO2†	7322.1	5335.5	[1069.5]	µg/L	09:33:13
1	Si 251.611†	6494.5	6179.3	[500]	µg/L	09:33:13
1	Sn 189.927†	211.6	190.5	[100]	µg/L	09:33:33
1	Ti 334.940†	42513.3	41987.4	[100]	µg/L	09:33:13
1	Tl 190.801†	44.1	64.5	[100]	µg/L	09:33:33
1	U 409.014†	1667.3	976.3	[100]	µg/L	09:33:13
1	V 292.402†	8210.0	8353.1	[100]	µg/L	09:33:13
1	Zn 213.857†	4128.6	3627.3	[100]	µg/L	09:33:13
2	Sc RADIAL	114272.6	114272.6	102	%	09:32:51
2	K 766.490 Radial†	2568.9	1770.7	[1000]	µg/L	09:32:51
2	Sr 421.552†	17703.8	17440.0	[100]	µg/L	09:32:51
2	Sc 361.383	1989026.5	1989026.5	99.063	%	09:33:40
2	Y 371.029	1211566.5	1211566.5	99.035	%	09:33:40
2	Ag 328.068†	10847.2	10966.0	[100]	µg/L	09:33:45
2	As 188.979†	50.0	47.4	[100]	µg/L	09:34:06
2	B 249.677†	2305.6	2165.6	[100]	µg/L	09:33:45
2	Ba 233.527†	3796.2	3904.6	[100]	µg/L	09:33:45
2	Be 313.107†	155823.8	153678.8	[100]	µg/L	09:33:40
2	Cd 226.502†	3657.2	3789.4	[100]	µg/L	09:33:45
2	Co 228.616†	1907.9	1995.8	[100]	µg/L	09:34:06
2	Cr 267.716†	4511.6	4678.5	[100]	µg/L	09:33:45
2	Cu 324.752†	17399.9	14255.5	[100]	µg/L	09:33:45
2	Mn 257.610†	30605.5	31142.8	[100]	µg/L	09:33:45
2	Mo 202.031†	837.1	849.7	[100]	µg/L	09:34:06
2	Ni 231.604†	2139.7	1868.9	[100]	µg/L	09:33:45
2	P 214.914†	412.2	226.1	[500]	µg/L	09:34:06
2	Pb 220.353†	431.8	384.9	[100]	µg/L	09:34:06
2	S 181.975 Axial†	61.0	35.9	[200]	µg/L	09:34:06
2	Sb 206.836†	116.8	93.7	[100]	µg/L	09:34:06
2	Se 196.026†	75.9	65.8	[100]	µg/L	09:34:06
2	SiO2†	7454.9	5491.8	[1069.5]	µg/L	09:33:45
2	Si 251.611†	6644.3	6350.4	[500]	µg/L	09:33:45
2	Sn 189.927†	218.1	197.8	[100]	µg/L	09:34:06
2	Ti 334.940†	43641.9	43256.1	[100]	µg/L	09:33:45
2	Tl 190.801†	45.4	66.0	[100]	µg/L	09:34:06
2	U 409.014†	1705.7	1020.2	[100]	µg/L	09:33:45
2	V 292.402†	8474.6	8645.3	[100]	µg/L	09:33:45

2	Zn 213.857†	4236.7	3749.0	[100]	µg/L	09:33:45
3	Sc RADIAL	114577.0	114577.0	102	%	09:32:56
3	K 766.490 Radial†	2538.9	1734.7	[1000]	µg/L	09:32:56
3	Sr 421.552†	17657.8	17348.8	[100]	µg/L	09:32:56
3	Sc 361.383	1996562.3	1996562.3	99.438	%	09:34:12
3	Y 371.029	1216394.8	1216394.8	99.430	%	09:34:12
3	Ag 328.068†	10776.4	10853.6	[100]	µg/L	09:34:18
3	As 188.979†	55.2	52.3	[100]	µg/L	09:34:38
3	B 249.677†	2313.4	2164.7	[100]	µg/L	09:34:18
3	Ba 233.527†	3723.9	3817.3	[100]	µg/L	09:34:18
3	Be 313.107†	154900.8	152156.9	[100]	µg/L	09:34:12
3	Cd 226.502†	3617.4	3735.4	[100]	µg/L	09:34:18
3	Co 228.616†	1910.9	1991.5	[100]	µg/L	09:34:38
3	Cr 267.716†	4513.9	4663.6	[100]	µg/L	09:34:18
3	Cu 324.752†	17389.0	14178.3	[100]	µg/L	09:34:18
3	Mn 257.610†	30427.4	30847.1	[100]	µg/L	09:34:18
3	Mo 202.031†	835.5	844.9	[100]	µg/L	09:34:38
3	Ni 231.604†	2099.1	1819.9	[100]	µg/L	09:34:18
3	P 214.914†	416.2	228.5	[500]	µg/L	09:34:38
3	Pb 220.353†	431.2	382.7	[100]	µg/L	09:34:38
3	S 181.975 Axial†	63.2	37.9	[200]	µg/L	09:34:38
3	Sb 206.836†	113.5	90.0	[100]	µg/L	09:34:38
3	Se 196.026†	77.9	67.5	[100]	µg/L	09:34:38
3	SiO2†	7396.9	5405.1	[1069.5]	µg/L	09:34:18
3	Si 251.611†	6597.2	6277.7	[500]	µg/L	09:34:18
3	Sn 189.927†	213.9	192.8	[100]	µg/L	09:34:38
3	Ti 334.940†	43333.9	42780.1	[100]	µg/L	09:34:18
3	Tl 190.801†	43.4	63.7	[100]	µg/L	09:34:38
3	U 409.014†	1710.7	1018.7	[100]	µg/L	09:34:18
3	V 292.402†	8365.7	8503.5	[100]	µg/L	09:34:18
3	Zn 213.857†	4227.6	3723.6	[100]	µg/L	09:34:18

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1993544.9	3985.84	0.20%	99.288	%
Sc RADIAL	114508.0	209.52	0.18%	102	%
Y 371.029	1214367.5	2505.44	0.21%	99.264	%
Ag 328.068†	10847.2	122.08	1.13%	[100]	µg/L
As 188.979†	50.0	2.51	5.01%	[100]	µg/L
B 249.677†	2141.2	41.61	1.94%	[100]	µg/L
Ba 233.527†	3842.4	54.20	1.41%	[100]	µg/L
Be 313.107†	152614.3	924.91	0.61%	[100]	µg/L
Cd 226.502†	3727.3	66.55	1.79%	[100]	µg/L
Co 228.616†	1991.2	4.64	0.23%	[100]	µg/L
Cr 267.716†	4630.6	70.57	1.52%	[100]	µg/L
Cu 324.752†	14083.4	234.38	1.66%	[100]	µg/L
K 766.490 Radial†	1738.2	30.93	1.78%	[1000]	µg/L
Mn 257.610†	30772.3	412.94	1.34%	[100]	µg/L
Mo 202.031†	847.8	2.51	0.30%	[100]	µg/L
Ni 231.604†	1829.8	35.22	1.92%	[100]	µg/L
P 214.914†	230.2	5.15	2.24%	[500]	µg/L
Pb 220.353†	386.0	4.10	1.06%	[100]	µg/L
S 181.975 Axial†	37.4	1.26	3.38%	[200]	µg/L
Sb 206.836†	92.4	2.10	2.27%	[100]	µg/L
Se 196.026†	65.3	2.53	3.87%	[100]	µg/L
SiO2†	5410.8	78.30	1.45%	[1069.5]	µg/L
Si 251.611†	6269.1	85.85	1.37%	[500]	µg/L
Sn 189.927†	193.7	3.70	1.91%	[100]	µg/L
Sr 421.552†	17364.2	69.39	0.40%	[100]	µg/L
Ti 334.940†	42674.5	640.91	1.50%	[100]	µg/L
Tl 190.801†	64.7	1.13	1.74%	[100]	µg/L
U 409.014†	1005.1	24.91	2.48%	[100]	µg/L
V 292.402†	8500.6	146.12	1.72%	[100]	µg/L
Zn 213.857†	3700.0	64.22	1.74%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/14/2009 09:34:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112237.8	112237.8	100	%	09:35:20
1	Al 396.153Radial†	9918.7	9731.5	[5000]	µg/L	09:35:20
1	Ca 317.933Radial†	13180.5	12737.6	[5000]	µg/L	09:35:41
1	K 766.490 Radial†	9753.4	8984.3	[5000]	µg/L	09:35:20
1	Mg 279.077 IEC†	950.8	932.6	[5000]	µg/L	09:35:41
1	Sr 421.552†	87800.2	87689.9	[500]	µg/L	09:35:20
1	Sc 361.383	2013987.2	2013987.2	100.31	%	09:36:45
1	Y 371.029	1221278.2	1221278.2	99.829	%	09:36:45
1	Ag 328.068†	53873.3	53725.2	[500]	µg/L	09:36:50
1	As 188.979†	264.2	260.3	[500]	µg/L	09:37:11
1	B 249.677†	11068.1	10872.6	[500]	µg/L	09:36:50
1	Ba 233.527†	19052.4	19066.7	[500]	µg/L	09:36:50
1	Be 313.107†	765739.3	759783.0	[500]	µg/L	09:36:45
1	Cd 226.502†	18291.9	18333.6	[500]	µg/L	09:36:50
1	Co 228.616†	10032.7	10071.9	[500]	µg/L	09:36:50
1	Cr 267.716†	22860.2	22914.7	[500]	µg/L	09:36:50
1	Cu 324.752†	72237.4	68708.0	[500]	µg/L	09:36:50
1	Mn 257.610†	150528.0	150316.3	[500]	µg/L	09:36:45
1	Mo 202.031†	4228.4	4220.3	[500]	µg/L	09:37:11
1	Ni 231.604†	9231.6	8912.4	[500]	µg/L	09:36:50
1	P 214.914†	1326.7	1132.7	[2500]	µg/L	09:37:11
1	Pb 220.353†	1960.4	1903.4	[500]	µg/L	09:37:11
1	S 181.975 Axial†	210.5	184.2	[1000]	µg/L	09:37:11
1	Sb 206.836†	497.4	471.7	[500]	µg/L	09:37:11
1	Se 196.026†	361.5	349.6	[500]	µg/L	09:37:11
1	SiO2†	28747.2	26625.9	[5347.5]	µg/L	09:36:50
1	Si 251.611†	31541.2	31088.1	[2500]	µg/L	09:36:50
1	Sn 189.927†	1005.0	979.6	[500]	µg/L	09:37:11
1	Ti 334.940†	214795.4	213341.1	[500]	µg/L	09:36:45
1	Tl 190.801†	302.8	322.0	[500]	µg/L	09:37:11
1	U 409.014†	5753.3	5034.1	[500]	µg/L	09:36:50
1	V 292.402†	42380.2	42341.3	[500]	µg/L	09:36:50
1	Zn 213.857†	18873.4	18288.0	[500]	µg/L	09:36:50
2	Sc RADIAL	112643.0	112643.0	101	%	09:35:46
2	Al 396.153Radial†	9969.1	9746.0	[5000]	µg/L	09:35:46
2	Ca 317.933Radial†	13211.3	12720.9	[5000]	µg/L	09:36:07
2	K 766.490 Radial†	9847.3	9042.7	[5000]	µg/L	09:35:46
2	Mg 279.077 IEC†	944.4	922.8	[5000]	µg/L	09:36:07
2	Sr 421.552†	88009.3	87582.6	[500]	µg/L	09:35:46
2	Sc 361.383	2010361.0	2010361.0	100.13	%	09:37:18
2	Y 371.029	1218778.4	1218778.4	99.625	%	09:37:18
2	Ag 328.068†	53747.7	53696.5	[500]	µg/L	09:37:23
2	As 188.979†	256.0	252.5	[500]	µg/L	09:37:44
2	B 249.677†	11056.3	10880.7	[500]	µg/L	09:37:23
2	Ba 233.527†	18953.0	19001.7	[500]	µg/L	09:37:23
2	Be 313.107†	770076.7	765491.9	[500]	µg/L	09:37:18
2	Cd 226.502†	18210.0	18284.7	[500]	µg/L	09:37:23
2	Co 228.616†	10010.0	10067.2	[500]	µg/L	09:37:23
2	Cr 267.716†	22790.2	22885.8	[500]	µg/L	09:37:23
2	Cu 324.752†	72127.1	68727.7	[500]	µg/L	09:37:23
2	Mn 257.610†	151289.0	151347.1	[500]	µg/L	09:37:18
2	Mo 202.031†	4179.1	4178.6	[500]	µg/L	09:37:44
2	Ni 231.604†	9173.4	8870.8	[500]	µg/L	09:37:23
2	P 214.914†	1303.0	1111.4	[2500]	µg/L	09:37:44
2	Pb 220.353†	1929.5	1876.0	[500]	µg/L	09:37:44
2	S 181.975 Axial†	213.4	187.5	[1000]	µg/L	09:37:44
2	Sb 206.836†	499.0	474.2	[500]	µg/L	09:37:44
2	Se 196.026†	346.7	335.5	[500]	µg/L	09:37:44
2	SiO2†	28676.5	26606.9	[5347.5]	µg/L	09:37:23

2	Si 251.611†	31472.3	31076.1	[2500]	µg/L	09:37:23
2	Sn 189.927†	988.6	965.0	[500]	µg/L	09:37:44
2	Ti 334.940†	216332.4	215262.5	[500]	µg/L	09:37:18
2	Tl 190.801†	300.9	320.6	[500]	µg/L	09:37:44
2	U 409.014†	5810.1	5101.2	[500]	µg/L	09:37:23
2	V 292.402†	42213.0	42250.6	[500]	µg/L	09:37:23
2	Zn 213.857†	18811.6	18260.2	[500]	µg/L	09:37:23
3	Sc RADIAL	113546.1	113546.1	101	%	09:36:12
3	Al 396.153Radial†	9973.2	9671.2	[5000]	µg/L	09:36:12
3	Ca 317.933Radial†	13134.9	12541.2	[5000]	µg/L	09:36:33
3	K 766.490 Radial†	9807.1	8925.2	[5000]	µg/L	09:36:12
3	Mg 279.077 IEC†	948.2	919.1	[5000]	µg/L	09:36:33
3	Sr 421.552†	88049.0	86925.9	[500]	µg/L	09:36:12
3	Sc 361.383	1993495.2	1993495.2	99.286	%	09:37:51
3	Y 371.029	1208472.8	1208472.8	98.782	%	09:37:51
3	Ag 328.068†	53975.6	54380.3	[500]	µg/L	09:37:57
3	As 188.979†	264.7	263.5	[500]	µg/L	09:38:17
3	B 249.677†	11123.1	11041.4	[500]	µg/L	09:37:57
3	Ba 233.527†	19061.0	19270.6	[500]	µg/L	09:37:57
3	Be 313.107†	782131.8	784140.7	[500]	µg/L	09:37:51
3	Cd 226.502†	18270.0	18499.0	[500]	µg/L	09:37:57
3	Co 228.616†	10046.7	10188.8	[500]	µg/L	09:37:57
3	Cr 267.716†	22903.4	23192.4	[500]	µg/L	09:37:57
3	Cu 324.752†	72460.4	69672.9	[500]	µg/L	09:37:57
3	Mn 257.610†	153640.0	154993.3	[500]	µg/L	09:37:51
3	Mo 202.031†	4244.5	4279.8	[500]	µg/L	09:38:17
3	Ni 231.604†	9210.2	8985.4	[500]	µg/L	09:37:57
3	P 214.914†	1330.2	1149.7	[2500]	µg/L	09:38:17
3	Pb 220.353†	1971.8	1935.0	[500]	µg/L	09:38:17
3	S 181.975 Axial†	216.5	192.4	[1000]	µg/L	09:38:17
3	Sb 206.836†	503.4	482.9	[500]	µg/L	09:38:17
3	Se 196.026†	357.4	349.2	[500]	µg/L	09:38:17
3	SiO2†	28866.4	27040.5	[5347.5]	µg/L	09:37:57
3	Si 251.611†	31569.1	31439.4	[2500]	µg/L	09:37:57
3	Sn 189.927†	1006.0	990.9	[500]	µg/L	09:38:17
3	Ti 334.940†	219430.6	220210.9	[500]	µg/L	09:37:51
3	Tl 190.801†	301.2	323.5	[500]	µg/L	09:38:17
3	U 409.014†	5728.6	5068.2	[500]	µg/L	09:37:57
3	V 292.402†	42459.2	42855.2	[500]	µg/L	09:37:57
3	Zn 213.857†	18922.1	18530.4	[500]	µg/L	09:37:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2005947.8	10935.62	0.55%	99.906	%
Sc RADIAL	112809.0	669.75	0.59%	101	%
Y 371.029	1216176.5	6787.63	0.56%	99.412	%
Ag 328.068†	53934.0	386.75	0.72%	[500]	µg/L
Al 396.153Radial†	9716.2	39.63	0.41%	[5000]	µg/L
As 188.979†	258.7	5.64	2.18%	[500]	µg/L
B 249.677†	10931.6	95.20	0.87%	[500]	µg/L
Ba 233.527†	19113.0	140.31	0.73%	[500]	µg/L
Be 313.107†	769805.2	12738.86	1.65%	[500]	µg/L
Ca 317.933Radial†	12666.6	108.92	0.86%	[5000]	µg/L
Cd 226.502†	18372.5	112.32	0.61%	[500]	µg/L
Co 228.616†	10109.3	68.89	0.68%	[500]	µg/L
Cr 267.716†	22997.6	169.29	0.74%	[500]	µg/L
Cu 324.752†	69036.2	551.46	0.80%	[500]	µg/L
K 766.490 Radial†	8984.1	58.77	0.65%	[5000]	µg/L
Mg 279.077 IEC†	924.8	6.97	0.75%	[5000]	µg/L
Mn 257.610†	152218.9	2457.39	1.61%	[500]	µg/L
Mo 202.031†	4226.2	50.85	1.20%	[500]	µg/L
Ni 231.604†	8922.9	58.02	0.65%	[500]	µg/L
P 214.914†	1131.3	19.20	1.70%	[2500]	µg/L
Pb 220.353†	1904.8	29.50	1.55%	[500]	µg/L
S 181.975 Axial†	188.0	4.12	2.19%	[1000]	µg/L
Sb 206.836†	476.3	5.86	1.23%	[500]	µg/L
Se 196.026†	344.8	8.04	2.33%	[500]	µg/L
SiO2†	26757.8	245.06	0.92%	[5347.5]	µg/L
Si 251.611†	31201.2	206.39	0.66%	[2500]	µg/L

Sn 189.927†	978.5	12.98	1.33%	[500] µg/L
Sr 421.552†	87399.5	413.57	0.47%	[500] µg/L
Ti 334.940†	216271.5	3544.31	1.64%	[500] µg/L
Tl 190.801†	322.0	1.42	0.44%	[500] µg/L
U 409.014†	5067.8	33.54	0.66%	[500] µg/L
V 292.402†	42482.4	326.05	0.77%	[500] µg/L
Zn 213.857†	18359.5	148.65	0.81%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/14/2009 09:38:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113984.2	113984.2	102	%	09:38:59
1	Al 396.153Radial†	19633.5	19123.8	[10000]	µg/L	09:38:59
1	Ca 317.933Radial†	25941.3	25072.6	[10000]	µg/L	09:39:20
1	Fe 238.204 Radial†	1941.5	1895.4	[10000]	µg/L	09:39:20
1	K 766.490 Radial†	18702.5	17627.0	[10000]	µg/L	09:38:59
1	Mg 279.077 IEC†	1873.6	1824.7	[10000]	µg/L	09:39:20
1	Na 589.592 Radial†	36184.2	35949.6	[10000]	µg/L	09:38:59
1	Sr 421.552†	175317.1	172325.9	[1000]	µg/L	09:38:59
1	Sc 361.383	2002622.8	2002622.8	99.740	%	09:40:24
1	Y 371.029	1211370.5	1211370.5	99.019	%	09:40:24
1	Ag 328.068†	97950.1	98221.5	[1000]	µg/L	09:40:29
1	As 188.979†	516.3	514.5	[1000]	µg/L	09:40:50
1	B 249.677†	20088.4	19978.9	[1000]	µg/L	09:40:29
1	Ba 233.527†	34606.7	34769.2	[1000]	µg/L	09:40:29
1	Be 313.107†	1521377.2	1521721.3	[1000]	µg/L	09:40:24
1	Cd 226.502†	32736.7	32919.5	[1000]	µg/L	09:40:29
1	Co 228.616†	18130.4	18247.5	[1000]	µg/L	09:40:29
1	Cr 267.716†	41721.4	41954.3	[1000]	µg/L	09:40:29
1	Cu 324.752†	142345.0	139406.9	[1000]	µg/L	09:40:24
1	Mn 257.610†	300545.4	301576.1	[1000]	µg/L	09:40:24
1	Mo 202.031†	7796.8	7821.9	[1000]	µg/L	09:40:29
1	Ni 231.604†	16335.8	16087.3	[1000]	µg/L	09:40:29
1	P 214.914†	2434.2	2250.6	[5000]	µg/L	09:40:50
1	Pb 220.353†	3825.9	3784.9	[1000]	µg/L	09:40:50
1	S 181.975 Axial†	399.4	374.7	[2000]	µg/L	09:40:50
1	Sb 206.836†	978.4	956.8	[1000]	µg/L	09:40:50
1	Se 196.026†	687.9	678.9	[1000]	µg/L	09:40:50
1	SiO2†	51027.7	49127.0	[10695]	µg/L	09:40:29
1	Si 251.611†	57470.9	57263.8	[5000]	µg/L	09:40:29
1	Sn 189.927†	1985.2	1968.0	[1000]	µg/L	09:40:50
1	Ti 334.940†	431310.9	431635.8	[1000]	µg/L	09:40:24
1	Tl 190.801†	616.0	637.7	[1000]	µg/L	09:40:50
1	U 409.014†	10037.0	9361.6	[1000]	µg/L	09:40:29
1	V 292.402†	77375.4	77667.4	[1000]	µg/L	09:40:29
1	Zn 213.857†	33125.2	32683.7	[1000]	µg/L	09:40:29
2	Sc RADIAL	115022.4	115022.4	103	%	09:39:25
2	Al 396.153Radial†	19978.9	19286.0	[10000]	µg/L	09:39:25
2	Ca 317.933Radial†	25982.6	24882.7	[10000]	µg/L	09:39:46
2	Fe 238.204 Radial†	1947.5	1884.1	[10000]	µg/L	09:39:46
2	K 766.490 Radial†	18885.4	17639.2	[10000]	µg/L	09:39:25
2	Mg 279.077 IEC†	1872.0	1806.5	[10000]	µg/L	09:39:46
2	Na 589.592 Radial†	36634.6	36067.2	[10000]	µg/L	09:39:25
2	Sr 421.552†	177897.5	173283.4	[1000]	µg/L	09:39:25
2	Sc 361.383	1987476.1	1987476.1	98.986	%	09:40:57
2	Y 371.029	1202627.3	1202627.3	98.305	%	09:40:57
2	Ag 328.068†	106954.6	108066.7	[1000]	µg/L	09:41:03
2	As 188.979†	509.0	511.0	[1000]	µg/L	09:41:23
2	B 249.677†	22072.5	22136.9	[1000]	µg/L	09:41:03
2	Ba 233.527†	37878.1	38338.6	[1000]	µg/L	09:41:03
2	Be 313.107†	1522406.9	1534386.3	[1000]	µg/L	09:40:57
2	Cd 226.502†	35984.5	36450.8	[1000]	µg/L	09:41:03
2	Co 228.616†	19904.3	20178.1	[1000]	µg/L	09:41:03
2	Cr 267.716†	45601.7	46193.1	[1000]	µg/L	09:41:03
2	Cu 324.752†	142429.9	140580.3	[1000]	µg/L	09:40:57
2	Mn 257.610†	300479.8	303806.3	[1000]	µg/L	09:40:57
2	Mo 202.031†	8534.0	8626.2	[1000]	µg/L	09:41:03
2	Ni 231.604†	17835.8	17727.5	[1000]	µg/L	09:41:03
2	P 214.914†	2364.1	2198.3	[5000]	µg/L	09:41:23
2	Pb 220.353†	3727.1	3714.3	[1000]	µg/L	09:41:23

2	S 181.975 Axial†	386.7	365.0	[2000]	µg/L	09:41:23
2	Sb 206.836†	957.7	943.3	[1000]	µg/L	09:41:23
2	Se 196.026†	659.8	655.8	[1000]	µg/L	09:41:23
2	SiO2†	55658.8	54195.5	[10695]	µg/L	09:41:03
2	Si 251.611†	62839.4	63126.4	[5000]	µg/L	09:41:03
2	Sn 189.927†	1932.7	1930.2	[1000]	µg/L	09:41:23
2	Ti 334.940†	431769.8	435395.0	[1000]	µg/L	09:40:57
2	Tl 190.801†	595.3	621.5	[1000]	µg/L	09:41:23
2	U 409.014†	10924.6	10334.9	[1000]	µg/L	09:41:03
2	V 292.402†	84519.4	85475.9	[1000]	µg/L	09:41:03
2	Zn 213.857†	36348.0	36192.6	[1000]	µg/L	09:41:03
3	Sc RADIAL	114576.2	114576.2	102	%	09:39:51
3	Al 396.153Radial†	19865.3	19250.8	[10000]	µg/L	09:39:51
3	Ca 317.933Radial†	26072.4	25069.0	[10000]	µg/L	09:40:11
3	Fe 238.204 Radial†	1950.8	1894.7	[10000]	µg/L	09:40:11
3	K 766.490 Radial†	18915.9	17740.7	[10000]	µg/L	09:39:51
3	Mg 279.077 IEC†	1874.0	1815.5	[10000]	µg/L	09:40:11
3	Na 589.592 Radial†	36541.3	36115.0	[10000]	µg/L	09:39:51
3	Sr 421.552†	176983.3	173064.3	[1000]	µg/L	09:39:51
3	Sc 361.383	1973630.6	1973630.6	98.296	%	09:41:31
3	Y 371.029	1193662.4	1193662.4	97.572	%	09:41:31
3	Ag 328.068†	106378.5	108238.7	[1000]	µg/L	09:41:36
3	As 188.979†	511.6	517.3	[1000]	µg/L	09:41:57
3	B 249.677†	21914.7	22132.8	[1000]	µg/L	09:41:36
3	Ba 233.527†	37652.3	38377.3	[1000]	µg/L	09:41:36
3	Be 313.107†	1520544.2	1543280.7	[1000]	µg/L	09:41:31
3	Cd 226.502†	35759.5	36476.9	[1000]	µg/L	09:41:36
3	Co 228.616†	19791.9	20204.8	[1000]	µg/L	09:41:36
3	Cr 267.716†	45351.7	46262.0	[1000]	µg/L	09:41:36
3	Cu 324.752†	142170.4	141325.6	[1000]	µg/L	09:41:31
3	Mn 257.610†	300447.6	305903.0	[1000]	µg/L	09:41:31
3	Mo 202.031†	8463.9	8615.4	[1000]	µg/L	09:41:36
3	Ni 231.604†	17731.0	17747.3	[1000]	µg/L	09:41:36
3	P 214.914†	2425.6	2277.7	[5000]	µg/L	09:41:57
3	Pb 220.353†	3821.9	3837.2	[1000]	µg/L	09:41:57
3	S 181.975 Axial†	398.7	379.9	[2000]	µg/L	09:41:57
3	Sb 206.836†	983.6	976.5	[1000]	µg/L	09:41:57
3	Se 196.026†	687.6	688.8	[1000]	µg/L	09:41:57
3	SiO2†	55281.5	54206.1	[10695]	µg/L	09:41:36
3	Si 251.611†	62523.2	63250.1	[5000]	µg/L	09:41:36
3	Sn 189.927†	1984.8	1996.8	[1000]	µg/L	09:41:57
3	Ti 334.940†	431265.9	437942.4	[1000]	µg/L	09:41:31
3	Tl 190.801†	611.3	642.0	[1000]	µg/L	09:41:57
3	U 409.014†	10814.2	10300.0	[1000]	µg/L	09:41:36
3	V 292.402†	83984.0	85530.2	[1000]	µg/L	09:41:36
3	Zn 213.857†	36147.7	36246.4	[1000]	µg/L	09:41:36

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1987909.9	14500.97	0.73%	99.007	%
Sc RADIAL	114527.6	520.84	0.45%	102	%
Y 371.029	1202553.4	8854.29	0.74%	98.299	%
Ag 328.068†	104842.3	5734.40	5.47%	[1000]	µg/L
Al 396.153Radial†	19220.2	85.29	0.44%	[10000]	µg/L
As 188.979†	514.3	3.16	0.61%	[1000]	µg/L
B 249.677†	21416.2	1244.71	5.81%	[1000]	µg/L
Ba 233.527†	37161.7	2072.05	5.58%	[1000]	µg/L
Be 313.107†	1533129.4	10834.53	0.71%	[1000]	µg/L
Ca 317.933Radial†	25008.1	108.58	0.43%	[10000]	µg/L
Cd 226.502†	35282.4	2046.37	5.80%	[1000]	µg/L
Co 228.616†	19543.4	1122.41	5.74%	[1000]	µg/L
Cr 267.716†	44803.2	2467.41	5.51%	[1000]	µg/L
Cu 324.752†	140437.6	967.31	0.69%	[1000]	µg/L
Fe 238.204 Radial†	1891.4	6.35	0.34%	[10000]	µg/L
K 766.490 Radial†	17669.0	62.38	0.35%	[10000]	µg/L
Mg 279.077 IEC†	1815.6	9.09	0.50%	[10000]	µg/L
Mn 257.610†	303761.8	2163.82	0.71%	[1000]	µg/L
Mo 202.031†	8354.5	461.30	5.52%	[1000]	µg/L
Na 589.592 Radial†	36043.9	85.10	0.24%	[10000]	µg/L

Ni 231.604†	17187.4	952.75	5.54%	[1000]	µg/L
P 214.914†	2242.2	40.35	1.80%	[5000]	µg/L
Pb 220.353†	3778.8	61.65	1.63%	[1000]	µg/L
S 181.975 Axial†	373.2	7.59	2.03%	[2000]	µg/L
Sb 206.836†	958.9	16.70	1.74%	[1000]	µg/L
Se 196.026†	674.5	16.91	2.51%	[1000]	µg/L
SiO2†	52509.5	2929.33	5.58%	[10695]	µg/L
Si 251.611†	61213.4	3421.05	5.59%	[5000]	µg/L
Sn 189.927†	1965.0	33.43	1.70%	[1000]	µg/L
Sr 421.552†	172891.2	501.67	0.29%	[1000]	µg/L
Ti 334.940†	434991.1	3172.65	0.73%	[1000]	µg/L
Tl 190.801†	633.7	10.80	1.70%	[1000]	µg/L
U 409.014†	9998.8	552.16	5.52%	[1000]	µg/L
V 292.402†	82891.2	4523.96	5.46%	[1000]	µg/L
Zn 213.857†	35040.9	2041.60	5.83%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/14/2009 09:42:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113332.7	113332.7	101	%	09:42:39
1	Al 396.153Radial†	95459.3	94155.5	[50000]	µg/L	09:42:39
1	Ca 317.933Radial†	125338.2	123429.6	[50000]	µg/L	09:42:39
1	Fe 238.204 Radial†	3838.1	3780.3	[20000]	µg/L	09:42:59
1	Mg 279.077 IEC†	9002.2	8878.8	[50000]	µg/L	09:42:59
1	Na 589.592 Radial†	70741.8	70299.1	[20000]	µg/L	09:42:39
1	Sc 361.383	2011704.5	2011704.5	100.19	%	09:44:03
1	Y 371.029	1207873.5	1207873.5	98.733	%	09:44:03
2	Sc RADIAL	113612.7	113612.7	101	%	09:43:05
2	Al 396.153Radial†	96073.6	94528.5	[50000]	µg/L	09:43:05
2	Ca 317.933Radial†	125946.7	123724.2	[50000]	µg/L	09:43:05
2	Fe 238.204 Radial†	3833.2	3766.2	[20000]	µg/L	09:43:25
2	Mg 279.077 IEC†	8997.8	8852.4	[50000]	µg/L	09:43:25
2	Na 589.592 Radial†	71222.2	70600.4	[20000]	µg/L	09:43:05
2	Sc 361.383	1998934.0	1998934.0	99.556	%	09:44:11
2	Y 371.029	1200091.9	1200091.9	98.097	%	09:44:11
3	Sc RADIAL	113863.0	113863.0	102	%	09:43:31
3	Al 396.153Radial†	96638.5	94876.0	[50000]	µg/L	09:43:31
3	Ca 317.933Radial†	126940.8	124429.0	[50000]	µg/L	09:43:31
3	Fe 238.204 Radial†	3816.9	3741.8	[20000]	µg/L	09:43:51
3	Mg 279.077 IEC†	8983.4	8818.8	[50000]	µg/L	09:43:51
3	Na 589.592 Radial†	71729.6	70945.1	[20000]	µg/L	09:43:31
3	Sc 361.383	1997184.4	1997184.4	99.469	%	09:44:19
3	Y 371.029	1199432.9	1199432.9	98.044	%	09:44:19

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2002607.6	7926.56	0.40%	99.739	%
Sc RADIAL	113602.8	265.26	0.23%	101	%
Y 371.029	1202466.1	4694.53	0.39%	98.291	%
Al 396.153Radial†	94520.0	360.33	0.38%	[50000]	µg/L
Ca 317.933Radial†	123860.9	513.55	0.41%	[50000]	µg/L
Fe 238.204 Radial†	3762.8	19.50	0.52%	[20000]	µg/L
Mg 279.077 IEC†	8850.0	30.05	0.34%	[50000]	µg/L
Na 589.592 Radial†	70614.8	323.23	0.46%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	105.5	0.00000	0.999931	
Al 396.153Radial	3	Lin Thru 0	0.0	1.892	0.00000	0.999991	
As 188.979	3	Lin Thru 0	0.0	0.5148	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	21.50	0.00000	0.999966	
Ba 233.527	3	Lin Thru 0	0.0	37.38	0.00000	0.999933	
Be 313.107	3	Lin Thru 0	0.0	1534	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.479	0.00000	0.999996	
Cd 226.502	3	Lin Thru 0	0.0	35.59	0.00000	0.999857	
Co 228.616	3	Lin Thru 0	0.0	19.68	0.00000	0.999906	
Cr 267.716	3	Lin Thru 0	0.0	45.05	0.00000	0.999941	
Cu 324.752	3	Lin Thru 0	0.0	140.0	0.00000	0.999977	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1883	0.00000	0.999998	
K 766.490 Radial	3	Lin Thru 0	0.0	1.773	0.00000	0.999976	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1772	0.00000	0.999979	
Mn 257.610	3	Lin Thru 0	0.0	303.9	0.00000	0.999999	
Mo 202.031	3	Lin Thru 0	0.0	8.375	0.00000	0.999989	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.545	0.00000	0.999965	

Ni 231.604	3	Lin Thru 0	0.0	17.33	0.00000	0.999873
P 214.914	3	Lin Thru 0	0.0	0.4493	0.00000	0.999991
Pb 220.353	3	Lin Thru 0	0.0	3.786	0.00000	0.999993
S 181.975 Axial	3	Lin Thru 0	0.0	0.1869	0.00000	0.999995
Sb 206.836	3	Lin Thru 0	0.0	0.9573	0.00000	0.999992
Se 196.026	3	Lin Thru 0	0.0	0.6773	0.00000	0.999956
SiO2	3	Lin Thru 0	0.0	4.930	0.00000	0.999968
Si 251.611	3	Lin Thru 0	0.0	12.29	0.00000	0.999969
Sn 189.927	3	Lin Thru 0	0.0	1.963	0.00000	0.999998
Sr 421.552	3	Lin Thru 0	0.0	173.3	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	434.4	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	0.6359	0.00000	0.999978
U 409.014	3	Lin Thru 0	0.0	10.03	0.00000	0.999985
V 292.402	3	Lin Thru 0	0.0	83.32	0.00000	0.999949
Zn 213.857	3	Lin Thru 0	0.0	35.39	0.00000	0.999813

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/14/2009 09:44:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113953.0	113953.0	102	%			09:45:01
1	Al 396.153Radial†	10437.3	10092.2	5313.0	µg/L	5313.0	ppb	09:45:01
1	Ca 317.933Radial†	13606.0	12957.8	5227.8	µg/L	5227.8	ppb	09:45:21
1	Fe 238.204 Radial†	1030.3	1000.5	5330.3	µg/L	5330.3	ppb	09:45:21
1	K 766.490 Radial†	5264.3	4426.5	2497.2	µg/L	2497.2	ppb	09:45:01
1	Mg 279.077 IEC†	979.6	946.6	5346.3	µg/L	5346.3	ppb	09:45:21
1	Na 589.592 Radial†	9003.0	9248.8	2608.6	µg/L	2608.6	ppb	09:45:01
1	Sr 421.552†	96077.4	94505.2	545.40	µg/L	545.40	ppb	09:45:01
1	Sc 361.383	1997243.5	1997243.5	99.472	%			09:46:25
1	Y 371.029	1210136.5	1210136.5	98.918	%			09:46:25
1	Ag 328.068†	28000.3	28165.1	271.08	µg/L	271.08	ppb	09:46:31
1	As 188.979†	256.4	254.6	493.26	µg/L	493.26	ppb	09:46:51
1	B 249.677†	11982.4	11884.3	550.96	µg/L	550.96	ppb	09:46:31
1	Ba 233.527†	20016.3	20195.0	541.33	µg/L	541.33	ppb	09:46:31
1	Be 313.107†	408975.7	407526.5	265.42	µg/L	265.42	ppb	09:46:25
1	Cd 226.502†	18823.0	19020.5	534.98	µg/L	534.98	ppb	09:46:31
1	Co 228.616†	10534.7	10660.4	541.91	µg/L	541.91	ppb	09:46:31
1	Cr 267.716†	23139.8	23386.8	520.35	µg/L	520.35	ppb	09:46:31
1	Cu 324.752†	75513.2	72604.9	519.85	µg/L	519.85	ppb	09:46:31
1	Mn 257.610†	156485.3	157563.4	519.09	µg/L	519.09	ppb	09:46:25
1	Mo 202.031†	4557.6	4586.6	547.86	µg/L	547.86	ppb	09:46:51
1	Ni 231.604†	9292.9	9051.1	522.36	µg/L	522.36	ppb	09:46:31
1	P 214.914†	1361.2	1178.4	2566.5	µg/L	2566.5	ppb	09:46:51
1	Pb 220.353†	1990.0	1949.5	515.88	µg/L	515.88	ppb	09:46:51
1	S 181.975 Axial†	496.7	473.6	2532.8	µg/L	2532.8	ppb	09:46:51
1	Sb 206.836†	510.2	488.8	508.95	µg/L	508.95	ppb	09:46:51
1	Se 196.026†	1823.8	1822.7	2693.4	µg/L	2693.4	ppb	09:46:51
1	SiO2†	56741.8	55009.2	11159	µg/L	11159	ppb	09:46:31
1	Si 251.611†	63941.4	63923.8	5151.0	µg/L	5151.0	ppb	09:46:31
1	Sn 189.927†	1088.2	1071.6	548.68	µg/L	548.68	ppb	09:46:51
1	Ti 334.940†	217136.9	217490.3	500.33	µg/L	500.33	ppb	09:46:25
1	Tl 190.801†	316.6	338.4	534.37	µg/L	534.37	ppb	09:46:51
1	U 409.014†	5756.3	5085.2	506.31	µg/L	506.31	ppb	09:46:31
1	V 292.402†	43683.0	44005.2	533.22	µg/L	533.22	ppb	09:46:31
1	Zn 213.857†	19397.5	18972.6	531.93	µg/L	531.93	ppb	09:46:31
2	Sc RADIAL	114478.8	114478.8	102	%			09:45:27
2	Al 396.153Radial†	10422.5	10030.5	5280.7	µg/L	5280.7	ppb	09:45:27
2	Ca 317.933Radial†	13567.2	12858.5	5187.7	µg/L	5187.7	ppb	09:45:47
2	Fe 238.204 Radial†	1021.9	987.6	5260.1	µg/L	5260.1	ppb	09:45:47
2	K 766.490 Radial†	5323.2	4460.3	2516.3	µg/L	2516.3	ppb	09:45:27
2	Mg 279.077 IEC†	986.8	949.2	5361.0	µg/L	5361.0	ppb	09:45:47
2	Na 589.592 Radial†	8928.8	9135.5	2576.7	µg/L	2576.7	ppb	09:45:27
2	Sr 421.552†	95504.7	93511.4	539.67	µg/L	539.67	ppb	09:45:27
2	Sc 361.383	2011772.2	2011772.2	100.20	%			09:46:58
2	Y 371.029	1219654.8	1219654.8	99.696	%			09:46:58
2	Ag 328.068†	25871.1	25836.8	248.69	µg/L	248.69	ppb	09:47:04
2	As 188.979†	254.3	250.7	485.69	µg/L	485.69	ppb	09:47:25
2	B 249.677†	10985.7	10802.4	500.68	µg/L	500.68	ppb	09:47:04
2	Ba 233.527†	18364.2	18400.7	493.24	µg/L	493.24	ppb	09:47:04
2	Be 313.107†	406654.6	402240.7	261.97	µg/L	261.97	ppb	09:46:58
2	Cd 226.502†	17194.9	17258.9	485.41	µg/L	485.41	ppb	09:47:04
2	Co 228.616†	9653.8	9704.7	493.34	µg/L	493.34	ppb	09:47:04
2	Cr 267.716†	21324.3	21406.9	476.30	µg/L	476.30	ppb	09:47:04
2	Cu 324.752†	70041.9	66596.0	476.91	µg/L	476.91	ppb	09:47:04
2	Mn 257.610†	155329.0	155273.2	511.55	µg/L	511.55	ppb	09:46:58
2	Mo 202.031†	4526.6	4522.5	540.21	µg/L	540.21	ppb	09:47:25
2	Ni 231.604†	8546.3	8238.5	475.46	µg/L	475.46	ppb	09:47:04
2	P 214.914†	1367.6	1175.0	2563.9	µg/L	2563.9	ppb	09:47:25
2	Pb 220.353†	1995.1	1940.2	513.49	µg/L	513.49	ppb	09:47:25

2	S 181.975 Axial†	497.3	470.6	2516.6 µg/L	2516.6 ppb	09:47:25
2	Sb 206.836†	510.5	485.3	505.54 µg/L	505.54 ppb	09:47:25
2	Se 196.026†	1809.2	1794.9	2652.2 µg/L	2652.2 ppb	09:47:25
2	SiO2†	52371.5	50235.5	10191 µg/L	10191 ppb	09:47:04
2	Si 251.611†	59001.6	58529.5	4712.8 µg/L	4712.8 ppb	09:47:04
2	Sn 189.927†	1079.2	1054.7	540.08 µg/L	540.08 ppb	09:47:25
2	Ti 334.940†	216043.6	214822.7	494.19 µg/L	494.19 ppb	09:46:58
2	Tl 190.801†	318.6	338.0	533.95 µg/L	533.95 ppb	09:47:25
2	U 409.014†	5398.6	4686.5	466.56 µg/L	466.56 ppb	09:47:04
2	V 292.402†	40246.6	40258.4	488.13 µg/L	488.13 ppb	09:47:04
2	Zn 213.857†	17749.0	17186.5	481.78 µg/L	481.78 ppb	09:47:04
3	Sc RADIAL	114490.4	114490.4	102 %		09:45:53
3	Al 396.153Radial†	10514.5	10119.5	5327.6 µg/L	5327.6 ppb	09:45:53
3	Ca 317.933Radial†	13556.9	12847.0	5183.1 µg/L	5183.1 ppb	09:46:13
3	Fe 238.204 Radial†	1022.7	988.3	5263.1 µg/L	5263.1 ppb	09:46:13
3	K 766.490 Radial†	5409.2	4544.0	2563.5 µg/L	2563.5 ppb	09:45:53
3	Mg 279.077 IEC†	979.9	942.4	5322.9 µg/L	5322.9 ppb	09:46:13
3	Na 589.592 Radial†	8965.4	9170.5	2586.5 µg/L	2586.5 ppb	09:45:53
3	Sr 421.552†	96754.2	94724.0	546.67 µg/L	546.67 ppb	09:45:53
3	Sc 361.383	2013467.6	2013467.6	100.28 %		09:47:32
3	Y 371.029	1220558.6	1220558.6	99.770 %		09:47:32
3	Ag 328.068†	25011.4	24957.8	240.24 µg/L	240.24 ppb	09:47:38
3	As 188.979†	255.4	251.5	487.29 µg/L	487.29 ppb	09:47:58
3	B 249.677†	10636.2	10444.7	484.04 µg/L	484.04 ppb	09:47:38
3	Ba 233.527†	17784.4	17807.1	477.32 µg/L	477.32 ppb	09:47:38
3	Be 313.107†	405320.6	400568.7	260.88 µg/L	260.88 ppb	09:47:32
3	Cd 226.502†	16607.1	16658.3	468.49 µg/L	468.49 ppb	09:47:38
3	Co 228.616†	9338.6	9382.4	476.98 µg/L	476.98 ppb	09:47:38
3	Cr 267.716†	20633.8	20700.4	460.58 µg/L	460.58 ppb	09:47:38
3	Cu 324.752†	67797.9	64299.5	460.50 µg/L	460.50 ppb	09:47:38
3	Mn 257.610†	155067.7	154882.1	510.26 µg/L	510.26 ppb	09:47:32
3	Mo 202.031†	4564.9	4556.9	544.32 µg/L	544.32 ppb	09:47:58
3	Ni 231.604†	8287.9	7973.7	460.17 µg/L	460.17 ppb	09:47:38
3	P 214.914†	1359.7	1165.9	2545.7 µg/L	2545.7 ppb	09:47:58
3	Pb 220.353†	2002.7	1946.1	515.09 µg/L	515.09 ppb	09:47:58
3	S 181.975 Axial†	496.4	469.3	2509.9 µg/L	2509.9 ppb	09:47:58
3	Sb 206.836†	509.2	483.6	503.78 µg/L	503.78 ppb	09:47:58
3	Se 196.026†	1812.1	1796.2	2654.3 µg/L	2654.3 ppb	09:47:58
3	SiO2†	50700.9	48525.6	9843.8 µg/L	9843.8 ppb	09:47:38
3	Si 251.611†	56994.0	56477.9	4545.8 µg/L	4545.8 ppb	09:47:38
3	Sn 189.927†	1085.5	1060.1	542.82 µg/L	542.82 ppb	09:47:58
3	Ti 334.940†	215417.1	214016.4	492.33 µg/L	492.33 ppb	09:47:32
3	Tl 190.801†	323.1	342.3	540.67 µg/L	540.67 ppb	09:47:58
3	U 409.014†	5156.4	4440.4	442.02 µg/L	442.02 ppb	09:47:38
3	V 292.402†	38865.9	38847.8	471.19 µg/L	471.19 ppb	09:47:38
3	Zn 213.857†	17222.3	16646.3	466.62 µg/L	466.62 ppb	09:47:38

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2007494.4	99.983	%	0.4442				0.44%
Sc RADIAL	114307.4	102	%	0.3				0.27%
Y 371.029	1216783.3	99.462	%	0.4720				0.47%
Ag 328.068†	26319.9	253.34	µg/L	15.936	253.34	ppb	15.936	6.29%
QC value within limits for Ag 328.068 Recovery = 101.33%								
Al 396.153Radial†	10080.7	5307.1	µg/L	23.99	5307.1	ppb	23.99	0.45%
QC value within limits for Al 396.153Radial Recovery = 106.14%								
As 188.979†	252.2	488.75	µg/L	3.987	488.75	ppb	3.987	0.82%
QC value within limits for As 188.979 Recovery = 97.75%								
B 249.677†	11043.8	511.89	µg/L	34.842	511.89	ppb	34.842	6.81%
QC value within limits for B 249.677 Recovery = 102.38%								
Ba 233.527†	18800.9	503.96	µg/L	33.324	503.96	ppb	33.324	6.61%
QC value within limits for Ba 233.527 Recovery = 100.79%								
Be 313.107†	403445.3	262.76	µg/L	2.366	262.76	ppb	2.366	0.90%
QC value within limits for Be 313.107 Recovery = 105.10%								
Ca 317.933Radial†	12887.8	5199.5	µg/L	24.58	5199.5	ppb	24.58	0.47%
QC value within limits for Ca 317.933Radial Recovery = 103.99%								
Cd 226.502†	17645.9	496.29	µg/L	34.553	496.29	ppb	34.553	6.96%
QC value within limits for Cd 226.502 Recovery = 99.26%								
Co 228.616†	9915.8	504.08	µg/L	33.771	504.08	ppb	33.771	6.70%

QC value within limits for Co 228.616 Recovery = 100.82%

Cr 267.716†	21831.3	485.74 µg/L	30.986	485.74 ppb	30.986	6.38%

QC value within limits for Cr 267.716 Recovery = 97.15%

Cu 324.752†	67833.5	485.76 µg/L	30.648	485.76 ppb	30.648	6.31%

QC value within limits for Cu 324.752 Recovery = 97.15%

Fe 238.204 Radial†	992.1	5284.5 µg/L	39.72	5284.5 ppb	39.72	0.75%

QC value within limits for Fe 238.204 Radial Recovery = 105.69%

K 766.490 Radial†	4476.9	2525.6 µg/L	34.13	2525.6 ppb	34.13	1.35%

QC value within limits for K 766.490 Radial Recovery = 101.02%

Mg 279.077 IEC†	946.1	5343.4 µg/L	19.26	5343.4 ppb	19.26	0.36%

QC value within limits for Mg 279.077 IEC Recovery = 106.87%

Mn 257.610†	155906.2	513.63 µg/L	4.770	513.63 ppb	4.770	0.93%

QC value within limits for Mn 257.610 Recovery = 102.73%

Mo 202.031†	4555.3	544.13 µg/L	3.830	544.13 ppb	3.830	0.70%

QC value within limits for Mo 202.031 Recovery = 108.83%

Na 589.592 Radial†	9184.9	2590.6 µg/L	16.35	2590.6 ppb	16.35	0.63%

QC value within limits for Na 589.592 Radial Recovery = 103.62%

Ni 231.604†	8421.1	486.00 µg/L	32.403	486.00 ppb	32.403	6.67%

QC value within limits for Ni 231.604 Recovery = 97.20%

P 214.914†	1173.1	2558.7 µg/L	11.31	2558.7 ppb	11.31	0.44%

QC value within limits for P 214.914 Recovery = 102.35%

Pb 220.353†	1945.3	514.82 µg/L	1.219	514.82 ppb	1.219	0.24%

QC value within limits for Pb 220.353 Recovery = 102.96%

S 181.975 Axial†	471.2	2519.8 µg/L	11.77	2519.8 ppb	11.77	0.47%

QC value within limits for S 181.975 Axial Recovery = 100.79%

Sb 206.836†	485.9	506.09 µg/L	2.628	506.09 ppb	2.628	0.52%

QC value within limits for Sb 206.836 Recovery = 101.22%

Se 196.026†	1804.6	2666.6 µg/L	23.22	2666.6 ppb	23.22	0.87%

QC value within limits for Se 196.026 Recovery = 106.67%

SiO2†	51256.8	10398 µg/L	681.7	10398 ppb	681.7	6.56%

QC value within limits for SiO2 Recovery = 97.22%

Si 251.611†	59643.7	4803.2 µg/L	312.56	4803.2 ppb	312.56	6.51%

QC value within limits for Si 251.611 Recovery = 96.06%

Sn 189.927†	1062.1	543.86 µg/L	4.395	543.86 ppb	4.395	0.81%

QC value within limits for Sn 189.927 Recovery = 108.77%

Sr 421.552†	94246.9	543.91 µg/L	3.730	543.91 ppb	3.730	0.69%

QC value within limits for Sr 421.552 Recovery = 108.78%

Ti 334.940†	215443.1	495.62 µg/L	4.184	495.62 ppb	4.184	0.84%

QC value within limits for Ti 334.940 Recovery = 99.12%

Tl 190.801†	339.6	536.33 µg/L	3.765	536.33 ppb	3.765	0.70%

QC value within limits for Tl 190.801 Recovery = 107.27%

U 409.014†	4737.4	471.63 µg/L	32.447	471.63 ppb	32.447	6.88%

QC value within limits for U 409.014 Recovery = 94.33%

V 292.402†	41037.1	497.51 µg/L	32.064	497.51 ppb	32.064	6.44%

QC value within limits for V 292.402 Recovery = 99.50%

Zn 213.857†	17601.8	493.44 µg/L	34.185	493.44 ppb	34.185	6.93%

QC value within limits for Zn 213.857 Recovery = 98.69%

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/14/2009 09:48:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112827.5	112827.5	101	%			09:48:40
1	Al 396.153Radial†	170.8	5.1	2.6478	µg/L	2.6478	ppb	09:48:40
1	Ca 317.933Radial†	433.8	18.0	7.2533	µg/L	7.2533	ppb	09:49:01
1	Fe 238.204 Radial†	11.6	-0.5	-2.6026	µg/L	-2.6026	ppb	09:49:01
1	K 766.490 Radial†	737.0	-15.2	-8.5554	µg/L	-8.5554	ppb	09:48:40
1	Mg 279.077 IEC†	17.4	1.3	7.2632	µg/L	7.2632	ppb	09:49:01
1	Na 589.592 Radial†	-531.1	-125.5	-35.386	µg/L	-35.386	ppb	09:48:40
1	Sr 421.552†	-71.1	20.8	0.1199	µg/L	0.1199	ppb	09:48:40
1	Sc 361.383	2007680.3	2007680.3	99.992	%			09:50:03
1	Y 371.029	1222869.6	1222869.6	99.959	%			09:50:03
1	Ag 328.068†	29.5	45.8	0.4301	µg/L	0.4301	ppb	09:50:09
1	As 188.979†	4.4	1.2	2.3614	µg/L	2.3614	ppb	09:50:29
1	B 249.677†	202.4	40.6	1.8910	µg/L	1.8910	ppb	09:50:09
1	Ba 233.527†	-69.8	2.7	0.0706	µg/L	0.0706	ppb	09:50:29
1	Be 313.107†	3752.1	133.5	0.0870	µg/L	0.0870	ppb	09:50:09
1	Cd 226.502†	-95.0	2.6	0.0713	µg/L	0.0713	ppb	09:50:29
1	Co 228.616†	-70.4	-0.6	-0.0265	µg/L	-0.0265	ppb	09:50:29
1	Cr 267.716†	-131.8	-7.5	-0.1688	µg/L	-0.1688	ppb	09:50:09
1	Cu 324.752†	3259.5	-49.2	-0.3518	µg/L	-0.3518	ppb	09:50:09
1	Mn 257.610†	-214.4	33.4	0.1097	µg/L	0.1097	ppb	09:50:29
1	Mo 202.031†	2.7	7.4	0.8864	µg/L	0.8864	ppb	09:50:29
1	Ni 231.604†	304.7	13.7	0.7918	µg/L	0.7918	ppb	09:50:29
1	P 214.914†	193.1	3.1	7.0654	µg/L	7.0654	ppb	09:50:29
1	Pb 220.353†	52.5	1.5	0.4133	µg/L	0.4133	ppb	09:50:29
1	S 181.975 Axial†	24.0	-1.7	-9.2132	µg/L	-9.2132	ppb	09:50:29
1	Sb 206.836†	20.1	-4.0	-4.2298	µg/L	-4.2298	ppb	09:50:29
1	Se 196.026†	7.9	-2.9	-4.3184	µg/L	-4.3184	ppb	09:50:29
1	SiO2†	2022.8	-10.7	-2.1606	µg/L	-2.1606	ppb	09:50:09
1	Si 251.611†	385.6	28.8	2.2529	µg/L	2.2529	ppb	09:50:29
1	Sn 189.927†	26.2	3.8	1.9388	µg/L	1.9388	ppb	09:50:29
1	Ti 334.940†	866.7	68.2	0.1567	µg/L	0.1567	ppb	09:50:09
1	Tl 190.801†	-15.5	4.5	7.1541	µg/L	7.1541	ppb	09:50:29
1	U 409.014†	674.1	-27.4	-2.7356	µg/L	-2.7356	ppb	09:50:09
1	V 292.402†	-137.4	-46.9	-0.5618	µg/L	-0.5618	ppb	09:50:09
1	Zn 213.857†	531.3	3.5	0.0964	µg/L	0.0964	ppb	09:50:29
2	Sc RADIAL	111831.2	111831.2	99.9	%			09:49:06
2	Al 396.153Radial†	149.7	-14.5	-7.6887	µg/L	-7.6887	ppb	09:49:06
2	Ca 317.933Radial†	408.8	-3.3	-1.3308	µg/L	-1.3308	ppb	09:49:27
2	Fe 238.204 Radial†	8.7	-3.3	-17.476	µg/L	-17.476	ppb	09:49:27
2	K 766.490 Radial†	746.7	1.1	0.5925	µg/L	0.5925	ppb	09:49:06
2	Mg 279.077 IEC†	23.7	7.7	43.308	µg/L	43.308	ppb	09:49:27
2	Na 589.592 Radial†	-479.3	-78.3	-22.071	µg/L	-22.071	ppb	09:49:06
2	Sr 421.552†	-73.9	17.3	0.1000	µg/L	0.1000	ppb	09:49:06
2	Sc 361.383	2016824.5	2016824.5	100.45	%			09:50:35
2	Y 371.029	1227442.3	1227442.3	100.33	%			09:50:35
2	Ag 328.068†	50.5	66.6	0.6317	µg/L	0.6317	ppb	09:50:41
2	As 188.979†	-1.4	-4.5	-8.7854	µg/L	-8.7854	ppb	09:51:01
2	B 249.677†	148.1	-14.3	-0.6592	µg/L	-0.6592	ppb	09:50:41
2	Ba 233.527†	-65.8	6.9	0.1848	µg/L	0.1848	ppb	09:51:01
2	Be 313.107†	3741.9	106.4	0.0694	µg/L	0.0694	ppb	09:50:41
2	Cd 226.502†	-79.8	18.1	0.5105	µg/L	0.5105	ppb	09:51:01
2	Co 228.616†	-63.8	6.3	0.3223	µg/L	0.3223	ppb	09:51:01
2	Cr 267.716†	-135.8	-10.9	-0.2423	µg/L	-0.2423	ppb	09:50:41
2	Cu 324.752†	3278.8	-44.8	-0.3237	µg/L	-0.3237	ppb	09:50:41
2	Mn 257.610†	-198.7	50.0	0.1623	µg/L	0.1623	ppb	09:51:01
2	Mo 202.031†	2.0	6.8	0.8074	µg/L	0.8074	ppb	09:51:01
2	Ni 231.604†	309.2	16.8	0.9711	µg/L	0.9711	ppb	09:51:01
2	P 214.914†	187.8	-3.1	-6.7341	µg/L	-6.7341	ppb	09:51:01
2	Pb 220.353†	52.0	0.8	0.2156	µg/L	0.2156	ppb	09:51:01

2	S 181.975 Axial†	23.9	-1.9	-10.262 µg/L	-10.262 ppb	09:51:01
2	Sb 206.836†	21.7	-2.6	-2.6723 µg/L	-2.6723 ppb	09:51:01
2	Se 196.026†	9.8	-1.0	-1.5735 µg/L	-1.5735 ppb	09:51:01
2	SiO2†	2033.4	-9.2	-1.8760 µg/L	-1.8760 ppb	09:50:41
2	Si 251.611†	384.8	26.2	2.0802 µg/L	2.0802 ppb	09:51:01
2	Sn 189.927†	24.7	2.2	1.1237 µg/L	1.1237 ppb	09:51:01
2	Ti 334.940†	770.2	-31.7	-0.0730 µg/L	-0.0730 ppb	09:50:41
2	Tl 190.801†	-20.2	-0.1	-0.0898 µg/L	-0.0898 ppb	09:51:01
2	U 409.014†	696.3	-8.4	-0.8325 µg/L	-0.8325 ppb	09:50:41
2	V 292.402†	-67.1	23.8	0.2880 µg/L	0.2880 ppb	09:50:41
2	Zn 213.857†	528.9	-1.2	-0.0392 µg/L	-0.0392 ppb	09:51:01
3	Sc RADIAL	113675.2	113675.2	102 %		09:49:32
3	Al 396.153Radial†	184.3	17.1	9.0554 µg/L	9.0554 ppb	09:49:32
3	Ca 317.933Radial†	423.2	4.3	1.7306 µg/L	1.7306 ppb	09:49:53
3	Fe 238.204 Radial†	6.5	-5.6	-29.583 µg/L	-29.583 ppb	09:49:53
3	K 766.490 Radial†	707.8	-49.4	-27.854 µg/L	-27.854 ppb	09:49:32
3	Mg 279.077 IEC†	14.6	-1.7	-9.3890 µg/L	-9.3890 ppb	09:49:53
3	Na 589.592 Radial†	-505.5	-96.4	-27.179 µg/L	-27.179 ppb	09:49:32
3	Sr 421.552†	-35.6	56.2	0.3245 µg/L	0.3245 ppb	09:49:32
3	Sc 361.383	2009779.9	2009779.9	100.10 %		09:51:07
3	Y 371.029	1223681.0	1223681.0	100.03 %		09:51:07
3	Ag 328.068†	69.1	85.3	0.8041 µg/L	0.8041 ppb	09:51:13
3	As 188.979†	4.8	1.7	3.2341 µg/L	3.2341 ppb	09:51:33
3	B 249.677†	191.6	29.6	1.3875 µg/L	1.3875 ppb	09:51:13
3	Ba 233.527†	-70.4	2.1	0.0544 µg/L	0.0544 ppb	09:51:33
3	Be 313.107†	3745.1	122.7	0.0799 µg/L	0.0799 ppb	09:51:13
3	Cd 226.502†	-85.6	12.1	0.3444 µg/L	0.3444 ppb	09:51:33
3	Co 228.616†	-69.7	0.2	0.0087 µg/L	0.0087 ppb	09:51:33
3	Cr 267.716†	-135.1	-10.7	-0.2383 µg/L	-0.2383 ppb	09:51:13
3	Cu 324.752†	3281.0	-31.1	-0.2286 µg/L	-0.2286 ppb	09:51:13
3	Mn 257.610†	-208.9	39.1	0.1250 µg/L	0.1250 ppb	09:51:33
3	Mo 202.031†	-10.4	-5.7	-0.6762 µg/L	-0.6762 ppb	09:51:33
3	Ni 231.604†	307.3	15.9	0.9193 µg/L	0.9193 ppb	09:51:33
3	P 214.914†	190.3	0.1	0.4058 µg/L	0.4058 ppb	09:51:33
3	Pb 220.353†	60.4	9.4	2.4672 µg/L	2.4672 ppb	09:51:33
3	S 181.975 Axial†	22.7	-3.0	-16.196 µg/L	-16.196 ppb	09:51:33
3	Sb 206.836†	24.1	-0.1	-0.0889 µg/L	-0.0889 ppb	09:51:33
3	Se 196.026†	12.2	1.4	2.0630 µg/L	2.0630 ppb	09:51:33
3	SiO2†	2030.3	-5.3	-1.0727 µg/L	-1.0727 ppb	09:51:13
3	Si 251.611†	373.3	16.2	1.3025 µg/L	1.3025 ppb	09:51:33
3	Sn 189.927†	23.8	1.4	0.6883 µg/L	0.6883 ppb	09:51:33
3	Ti 334.940†	890.2	90.8	0.2089 µg/L	0.2089 ppb	09:51:13
3	Tl 190.801†	-22.0	-1.9	-3.0047 µg/L	-3.0047 ppb	09:51:33
3	U 409.014†	732.6	30.3	3.0253 µg/L	3.0253 ppb	09:51:13
3	V 292.402†	-120.2	-29.6	-0.3577 µg/L	-0.3577 ppb	09:51:13
3	Zn 213.857†	528.1	-0.2	-0.0077 µg/L	-0.0077 ppb	09:51:33

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2011428.2	100.18	%	0.239				0.24%
Sc RADIAL	112778.0	101	%	0.8				0.82%
Y 371.029	1224664.3	100.11	%	0.199				0.20%
Ag 328.068†	65.9	0.6220	µg/L	0.18722	0.6220	ppb	0.18722	30.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.6	1.3382	µg/L	8.44854	1.3382	ppb	8.44854	631.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-1.0633	µg/L	6.70173	-1.0633	ppb	6.70173	630.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	18.7	0.8731	µg/L	1.35067	0.8731	ppb	1.35067	154.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.9	0.1033	µg/L	0.07108	0.1033	ppb	0.07108	68.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.9	0.0787	µg/L	0.00886	0.0787	ppb	0.00886	11.25%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	2.5510	µg/L	4.35044	2.5510	ppb	4.35044	170.54%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.9	0.3087	µg/L	0.22172	0.3087	ppb	0.22172	71.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.0	0.1015	µg/L	0.19201	0.1015	ppb	0.19201	189.21%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -9.7     -0.2165 µg/L       0.04135     -0.2165 ppb        0.04135  19.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -41.7     -0.3014 µg/L       0.06457     -0.3014 ppb        0.06457  21.43%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -3.1     -16.554 µg/L       13.5140     -16.554 ppb        13.5140  81.64%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -21.2     -11.939 µg/L       14.5219     -11.939 ppb        14.5219 121.63%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          2.4      13.727 µg/L       26.9367      13.727 ppb        26.9367 196.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             40.8      0.1323 µg/L       0.02705      0.1323 ppb        0.02705  20.45%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              2.8      0.3392 µg/L       0.88027      0.3392 ppb        0.88027 259.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -100.0     -28.212 µg/L        6.7172     -28.212 ppb         6.7172  23.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             15.5      0.8940 µg/L       0.09227      0.8940 ppb        0.09227  10.32%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               0.1      0.2457 µg/L       6.90113      0.2457 ppb        6.90113 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              3.9      1.0321 µg/L       1.24680      1.0321 ppb        1.24680 120.81%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -2.2     -11.891 µg/L        3.7653     -11.891 ppb         3.7653  31.67%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             -2.2     -2.3303 µg/L       2.09152     -2.3303 ppb        2.09152  89.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -0.9     -1.2763 µg/L       3.20106     -1.2763 ppb        3.20106 250.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -8.4     -1.7031 µg/L       0.56417     -1.7031 ppb        0.56417  33.13%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             23.7      1.8785 µg/L       0.50628      1.8785 ppb        0.50628  26.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              2.5      1.2502 µg/L       0.63477      1.2502 ppb        0.63477  50.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             31.4      0.1815 µg/L       0.12427      0.1815 ppb        0.12427  68.48%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             42.4      0.0975 µg/L       0.14994      0.0975 ppb        0.14994 153.74%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              0.9      1.3532 µg/L       5.23089      1.3532 ppb        5.23089 386.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -1.8     -0.1810 µg/L       2.93522     -0.1810 ppb        2.93522 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -17.6     -0.2105 µg/L       0.44359     -0.2105 ppb        0.44359 210.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              0.7      0.0165 µg/L       0.07095      0.0165 ppb        0.07095 429.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/14/2009 09:51:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111486.8	111486.8	99.6	%			09:52:15
1	Al 396.153Radial†	599.4	437.6	230.90	µg/L	230.90	ppb	09:52:15
1	Ca 317.933Radial†	919.7	511.2	206.25	µg/L	206.25	ppb	09:52:36
1	Fe 238.204 Radial†	28.0	16.1	85.843	µg/L	85.843	ppb	09:52:36
1	K 766.490 Radial†	1025.5	283.4	159.85	µg/L	159.85	ppb	09:52:15
1	Mg 279.077 IEC†	71.4	55.7	314.52	µg/L	314.52	ppb	09:52:36
1	Na 589.592 Radial†	591.7	995.9	280.90	µg/L	280.90	ppb	09:52:15
1	Sr 421.552†	801.6	896.4	5.1735	µg/L	5.1735	ppb	09:52:15
1	Sc 361.383	2008736.7	2008736.7	100.04	%			09:53:38
1	Y 371.029	1223315.6	1223315.6	99.996	%			09:53:38
1	Ag 328.068†	640.7	656.7	6.2665	µg/L	6.2665	ppb	09:53:43
1	As 188.979†	17.2	14.0	27.151	µg/L	27.151	ppb	09:54:04
1	B 249.677†	1240.2	1077.9	50.095	µg/L	50.095	ppb	09:53:43
1	Ba 233.527†	113.6	186.0	4.9848	µg/L	4.9848	ppb	09:54:04
1	Be 313.107†	11049.1	7425.4	4.8375	µg/L	4.8375	ppb	09:53:43
1	Cd 226.502†	86.5	184.1	5.2076	µg/L	5.2076	ppb	09:54:04
1	Co 228.616†	32.7	102.5	5.2187	µg/L	5.2187	ppb	09:54:04
1	Cr 267.716†	99.5	223.7	4.9768	µg/L	4.9768	ppb	09:53:43
1	Cu 324.752†	4605.0	1294.0	9.2634	µg/L	9.2634	ppb	09:53:43
1	Mn 257.610†	2778.1	3024.6	9.9626	µg/L	9.9626	ppb	09:53:43
1	Mo 202.031†	76.6	81.3	9.7157	µg/L	9.7157	ppb	09:54:04
1	Ni 231.604†	389.9	98.7	5.6944	µg/L	5.6944	ppb	09:54:04
1	P 214.914†	262.5	72.4	160.07	µg/L	160.07	ppb	09:54:04
1	Pb 220.353†	92.1	41.0	10.833	µg/L	10.833	ppb	09:54:04
1	S 181.975 Axial†	47.1	21.4	114.63	µg/L	114.63	ppb	09:54:04
1	Sb 206.836†	26.9	2.8	2.8637	µg/L	2.8637	ppb	09:54:04
1	Se 196.026†	29.5	18.7	27.510	µg/L	27.510	ppb	09:54:04
1	SiO2†	3112.7	1077.7	218.61	µg/L	218.61	ppb	09:53:43
1	Si 251.611†	1624.2	1266.6	102.29	µg/L	102.29	ppb	09:54:04
1	Sn 189.927†	40.0	17.6	9.0750	µg/L	9.0750	ppb	09:54:04
1	Ti 334.940†	2954.0	2154.1	4.9468	µg/L	4.9468	ppb	09:53:43
1	Tl 190.801†	-5.1	15.0	23.672	µg/L	23.672	ppb	09:54:04
1	U 409.014†	1205.7	503.6	50.215	µg/L	50.215	ppb	09:53:43
1	V 292.402†	312.4	402.7	4.9896	µg/L	4.9896	ppb	09:53:43
1	Zn 213.857†	893.4	365.2	10.258	µg/L	10.258	ppb	09:54:04
2	Sc RADIAL	112464.9	112464.9	100	%			09:52:41
2	Al 396.153Radial†	566.1	399.2	210.59	µg/L	210.59	ppb	09:52:41
2	Ca 317.933Radial†	922.0	505.4	203.91	µg/L	203.91	ppb	09:53:02
2	Fe 238.204 Radial†	28.8	16.7	88.678	µg/L	88.678	ppb	09:53:02
2	K 766.490 Radial†	1058.2	307.0	173.18	µg/L	173.18	ppb	09:52:41
2	Mg 279.077 IEC†	69.6	53.3	300.77	µg/L	300.77	ppb	09:53:02
2	Na 589.592 Radial†	622.1	1021.1	287.99	µg/L	287.99	ppb	09:52:41
2	Sr 421.552†	810.5	898.3	5.1844	µg/L	5.1844	ppb	09:52:41
2	Sc 361.383	2002532.7	2002532.7	99.736	%			09:54:10
2	Y 371.029	1219424.4	1219424.4	99.678	%			09:54:10
2	Ag 328.068†	572.3	590.0	5.6360	µg/L	5.6360	ppb	09:54:16
2	As 188.979†	17.2	14.1	27.410	µg/L	27.410	ppb	09:54:36
2	B 249.677†	1271.5	1113.1	51.732	µg/L	51.732	ppb	09:54:16
2	Ba 233.527†	117.1	189.8	5.0889	µg/L	5.0889	ppb	09:54:36
2	Be 313.107†	11489.0	7900.6	5.1472	µg/L	5.1472	ppb	09:54:16
2	Cd 226.502†	89.8	187.6	5.3096	µg/L	5.3096	ppb	09:54:36
2	Co 228.616†	36.9	106.8	5.4394	µg/L	5.4394	ppb	09:54:36
2	Cr 267.716†	95.7	220.2	4.8996	µg/L	4.8996	ppb	09:54:16
2	Cu 324.752†	4746.6	1450.3	10.380	µg/L	10.380	ppb	09:54:16
2	Mn 257.610†	2948.0	3203.7	10.552	µg/L	10.552	ppb	09:54:16
2	Mo 202.031†	80.8	85.8	10.250	µg/L	10.250	ppb	09:54:36
2	Ni 231.604†	394.8	104.8	6.0490	µg/L	6.0490	ppb	09:54:36
2	P 214.914†	259.9	70.6	155.92	µg/L	155.92	ppb	09:54:36
2	Pb 220.353†	91.5	40.8	10.766	µg/L	10.766	ppb	09:54:36

2	S 181.975 Axial†	44.7	19.2	102.56 µg/L	102.56 ppb	09:54:36
2	Sb 206.836†	29.4	5.3	5.5299 µg/L	5.5299 ppb	09:54:36
2	Se 196.026†	23.9	13.2	19.409 µg/L	19.409 ppb	09:54:36
2	SiO2†	3171.0	1145.8	232.43 µg/L	232.43 ppb	09:54:16
2	Si 251.611†	1611.6	1259.1	101.65 µg/L	101.65 ppb	09:54:36
2	Sn 189.927†	40.1	17.8	9.1795 µg/L	9.1795 ppb	09:54:36
2	Ti 334.940†	3034.5	2244.0	5.1539 µg/L	5.1539 ppb	09:54:16
2	Tl 190.801†	-4.8	15.3	24.087 µg/L	24.087 ppb	09:54:36
2	U 409.014†	1231.6	533.3	53.174 µg/L	53.174 ppb	09:54:16
2	V 292.402†	330.6	422.0	5.2291 µg/L	5.2291 ppb	09:54:16
2	Zn 213.857†	891.0	365.6	10.266 µg/L	10.266 ppb	09:54:36
3	Sc RADIAL	111864.6	111864.6	99.9 %		09:53:07
3	Al 396.153Radial†	546.3	382.5	201.74 µg/L	201.74 ppb	09:53:07
3	Ca 317.933Radial†	922.9	511.3	206.26 µg/L	206.26 ppb	09:53:28
3	Fe 238.204 Radial†	27.5	15.6	83.017 µg/L	83.017 ppb	09:53:28
3	K 766.490 Radial†	1044.4	298.8	168.59 µg/L	168.59 ppb	09:53:07
3	Mg 279.077 IEC†	71.1	55.1	311.19 µg/L	311.19 ppb	09:53:28
3	Na 589.592 Radial†	627.2	1029.5	290.38 µg/L	290.38 ppb	09:53:07
3	Sr 421.552†	818.8	911.0	5.2574 µg/L	5.2574 ppb	09:53:07
3	Sc 361.383	2029392.3	2029392.3	101.07 %		09:54:42
3	Y 371.029	1235996.0	1235996.0	101.03 %		09:54:42
3	Ag 328.068†	606.9	616.7	5.8885 µg/L	5.8885 ppb	09:54:48
3	As 188.979†	15.9	12.6	24.359 µg/L	24.359 ppb	09:55:08
3	B 249.677†	1258.3	1083.2	50.344 µg/L	50.344 ppb	09:54:48
3	Ba 233.527†	123.6	194.8	5.2204 µg/L	5.2204 ppb	09:55:08
3	Be 313.107†	11368.5	7628.9	4.9702 µg/L	4.9702 ppb	09:54:48
3	Cd 226.502†	83.0	179.7	5.0838 µg/L	5.0838 ppb	09:55:08
3	Co 228.616†	35.3	104.8	5.3376 µg/L	5.3376 ppb	09:55:08
3	Cr 267.716†	131.0	253.8	5.6458 µg/L	5.6458 ppb	09:54:48
3	Cu 324.752†	4649.0	1290.7	9.2387 µg/L	9.2387 ppb	09:54:48
3	Mn 257.610†	2949.7	3166.2	10.428 µg/L	10.428 ppb	09:54:48
3	Mo 202.031†	85.4	89.2	10.656 µg/L	10.656 ppb	09:55:08
3	Ni 231.604†	378.3	83.3	4.8069 µg/L	4.8069 ppb	09:55:08
3	P 214.914†	256.0	63.3	139.87 µg/L	139.87 ppb	09:55:08
3	Pb 220.353†	98.7	46.7	12.319 µg/L	12.319 ppb	09:55:08
3	S 181.975 Axial†	45.6	19.4	103.73 µg/L	103.73 ppb	09:55:08
3	Sb 206.836†	29.6	5.1	5.3356 µg/L	5.3356 ppb	09:55:08
3	Se 196.026†	29.2	18.1	26.645 µg/L	26.645 ppb	09:55:08
3	SiO2†	3091.9	1025.4	208.01 µg/L	208.01 ppb	09:54:48
3	Si 251.611†	1618.0	1244.0	100.42 µg/L	100.42 ppb	09:55:08
3	Sn 189.927†	41.4	18.6	9.5783 µg/L	9.5783 ppb	09:55:08
3	Ti 334.940†	2963.3	2133.3	4.8989 µg/L	4.8989 ppb	09:54:48
3	Tl 190.801†	-12.4	7.9	12.389 µg/L	12.389 ppb	09:55:08
3	U 409.014†	1219.8	505.2	50.380 µg/L	50.380 ppb	09:54:48
3	V 292.402†	337.6	424.5	5.2576 µg/L	5.2576 ppb	09:54:48
3	Zn 213.857†	911.2	373.7	10.503 µg/L	10.503 ppb	09:55:08

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2013553.9	100.28	%	0.700				0.70%
Sc RADIAL	111938.8	100.0	%	0.44				0.44%
Y 371.029	1226245.3	100.24	%	0.708				0.71%
Ag 328.068†	621.2	5.9303	µg/L	0.31731	5.9303	ppb	0.31731	5.35%
QC value within limits for Ag 328.068 Recovery = 118.61%								
Al 396.153Radial†	406.4	214.41	µg/L	14.952	214.41	ppb	14.952	6.97%
QC value within limits for Al 396.153Radial Recovery = 107.20%								
As 188.979†	13.6	26.307	µg/L	1.6920	26.307	ppb	1.6920	6.43%
QC value within limits for As 188.979 Recovery = 87.69%								
B 249.677†	1091.4	50.724	µg/L	0.8822	50.724	ppb	0.8822	1.74%
QC value within limits for B 249.677 Recovery = 101.45%								
Ba 233.527†	190.2	5.0981	µg/L	0.11807	5.0981	ppb	0.11807	2.32%
QC value within limits for Ba 233.527 Recovery = 101.96%								
Be 313.107†	7651.6	4.9850	µg/L	0.15534	4.9850	ppb	0.15534	3.12%
QC value within limits for Be 313.107 Recovery = 99.70%								
Ca 317.933Radial†	509.3	205.47	µg/L	1.357	205.47	ppb	1.357	0.66%
QC value within limits for Ca 317.933Radial Recovery = 102.74%								
Cd 226.502†	183.8	5.2003	µg/L	0.11307	5.2003	ppb	0.11307	2.17%
QC value within limits for Cd 226.502 Recovery = 104.01%								
Co 228.616†	104.7	5.3319	µg/L	0.11045	5.3319	ppb	0.11045	2.07%

```
   QC value within limits for Co 228.616  Recovery = 106.64%
Cr 267.716†              232.6      5.1741 µg/L       0.41034      5.1741 ppb        0.41034   7.93%
   QC value within limits for Cr 267.716  Recovery = 103.48%
Cu 324.752†             1345.0      9.6275 µg/L       0.65207      9.6275 ppb        0.65207   6.77%
   QC value within limits for Cu 324.752  Recovery = 96.27%
Fe 238.204 Radial†        16.1      85.846 µg/L        2.8308      85.846 ppb         2.8308   3.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 85.85%
K 766.490 Radial†        296.4      167.21 µg/L         6.772      167.21 ppb          6.772   4.05%
   QC value within limits for K 766.490 Radial  Recovery = 111.47%
Mg 279.077 IEC†           54.7      308.83 µg/L         7.177      308.83 ppb          7.177   2.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.94%
Mn 257.610†             3131.5      10.314 µg/L        0.3108      10.314 ppb         0.3108   3.01%
   QC value within limits for Mn 257.610  Recovery = 103.14%
Mo 202.031†               85.5      10.207 µg/L        0.4716      10.207 ppb         0.4716   4.62%
   QC value within limits for Mo 202.031  Recovery = 102.07%
Na 589.592 Radial†      1015.5      286.42 µg/L         4.930      286.42 ppb          4.930   1.72%
   QC value within limits for Na 589.592 Radial  Recovery = 95.47%
Ni 231.604†               95.6      5.5168 µg/L       0.63981      5.5168 ppb        0.63981  11.60%
   QC value within limits for Ni 231.604  Recovery = 110.34%
P 214.914†                68.7      151.95 µg/L        10.668      151.95 ppb         10.668   7.02%
   QC value within limits for P 214.914  Recovery = 101.30%
Pb 220.353†               42.8      11.306 µg/L        0.8781      11.306 ppb         0.8781   7.77%
   QC value within limits for Pb 220.353  Recovery = 113.06%
S 181.975 Axial†          20.0      106.97 µg/L         6.659      106.97 ppb          6.659   6.22%
   QC value within limits for S 181.975 Axial  Recovery = 106.97%
Sb 206.836†                4.4      4.5764 µg/L       1.48643      4.5764 ppb        1.48643  32.48%
   QC value less than the lower limit for Sb 206.836  Recovery = 45.76%
Se 196.026†               16.6      24.521 µg/L        4.4486      24.521 ppb         4.4486  18.14%
   QC value within limits for Se 196.026  Recovery = 81.74%
SiO2†                   1083.0      219.69 µg/L        12.246      219.69 ppb         12.246   5.57%
   QC value within limits for SiO2  Recovery = 103.14%
Si 251.611†             1256.6      101.45 µg/L         0.955      101.45 ppb          0.955   0.94%
   QC value within limits for Si 251.611  Recovery = 101.45%
Sn 189.927†               18.0      9.2776 µg/L       0.26565      9.2776 ppb        0.26565   2.86%
   QC value within limits for Sn 189.927  Recovery = 92.78%
Sr 421.552†              901.9      5.2051 µg/L       0.04562      5.2051 ppb        0.04562   0.88%
   QC value within limits for Sr 421.552  Recovery = 104.10%
Ti 334.940†             2177.2      4.9999 µg/L       0.13553      4.9999 ppb        0.13553   2.71%
   QC value within limits for Ti 334.940  Recovery = 100.00%
Tl 190.801†               12.7      20.049 µg/L        6.6372      20.049 ppb         6.6372  33.10%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†               514.0      51.257 µg/L        1.6629      51.257 ppb         1.6629   3.24%
   QC value within limits for U 409.014  Recovery = 102.51%
V 292.402†               416.4      5.1588 µg/L       0.14719      5.1588 ppb        0.14719   2.85%
   QC value within limits for V 292.402  Recovery = 103.18%
Zn 213.857†              368.1      10.342 µg/L        0.1390      10.342 ppb         0.1390   1.34%
   QC value within limits for Zn 213.857  Recovery = 103.42%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/14/2009 09:55:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107749.6	107749.6	96.2	%			09:55:59
1	Al 396.153Radial†	951514.8	988708.4	522540	µg/L	522540	ppb	09:55:54
1	Ca 317.933Radial†	1199950.4	1246649.8	502950	µg/L	502950	ppb	09:55:54
1	Fe 238.204 Radial†	35150.4	36518.5	193900	µg/L	193900	ppb	09:55:59
1	K 766.490 Radial†	763.0	46.3	26.115	µg/L	26.115	ppb	09:55:59
1	Mg 279.077 IEC†	84894.9	88212.0	497380	µg/L	497380	ppb	09:55:59
1	Na 589.592 Radial†	-471.5	-88.4	-24.935	µg/L	-24.935	ppb	09:55:59
1	Sr 421.552†	508.9	620.2	3.5790	µg/L	3.5790	ppb	09:55:59
1	Sc 361.383	1828500.5	1828500.5	91.068	%			09:56:33
1	Y 371.029	1097993.9	1097993.9	89.752	%			09:56:33
1	Ag 328.068†	-1787.4	-1946.4	-3.2667	µg/L	-3.2667	ppb	09:56:33
1	As 188.979†	39.6	40.4	-26.102	µg/L	-26.102	ppb	09:56:54
1	B 249.677†	1798.9	1813.6	23.363	µg/L	23.363	ppb	09:56:33
1	Ba 233.527†	124.7	209.4	5.5671	µg/L	5.5671	ppb	09:56:54
1	Be 313.107†	2707.3	-646.0	-0.4304	µg/L	-0.4304	ppb	09:56:33
1	Cd 226.502†	488.5	634.0	2.8159	µg/L	2.8159	ppb	09:56:54
1	Co 228.616†	-92.4	-31.7	-1.6957	µg/L	-1.6957	ppb	09:56:54
1	Cr 267.716†	-233.5	-132.2	-2.9723	µg/L	-2.9723	ppb	09:56:54
1	Cu 324.752†	-1091.0	-4506.9	9.4504	µg/L	9.4504	ppb	09:56:33
1	Mn 257.610†	-2119.7	-2079.8	17.530	µg/L	17.530	ppb	09:56:33
1	Mo 202.031†	-111.5	-117.7	-6.4343	µg/L	-6.4343	ppb	09:56:54
1	Ni 231.604†	263.1	-2.2	-0.1241	µg/L	-0.1241	ppb	09:56:54
1	P 214.914†	202.2	32.0	34.850	µg/L	34.850	ppb	09:56:54
1	Pb 220.353†	-54.6	-110.9	13.788	µg/L	13.788	ppb	09:56:54
1	S 181.975 Axial†	58.5	38.6	106.74	µg/L	106.74	ppb	09:56:54
1	Sb 206.836†	59.7	41.4	-3.8424	µg/L	-3.8424	ppb	09:56:54
1	Se 196.026†	27.4	19.3	29.607	µg/L	29.607	ppb	09:56:54
1	SiO2†	1797.0	-60.4	-12.250	µg/L	-12.250	ppb	09:56:54
1	Si 251.611†	444.4	131.1	19.093	µg/L	19.093	ppb	09:56:54
1	Sn 189.927†	-401.9	-463.7	-2.3477	µg/L	-2.3477	ppb	09:56:54
1	Ti 334.940†	10814.0	11076.1	-2.7861	µg/L	-2.7861	ppb	09:56:33
1	Tl 190.801†	22.5	44.8	3.2165	µg/L	3.2165	ppb	09:56:54
1	U 409.014†	970.5	364.1	12.027	µg/L	12.027	ppb	09:56:33
1	V 292.402†	-1306.8	-1344.5	-0.3577	µg/L	-0.3577	ppb	09:56:33
1	Zn 213.857†	1681.2	1318.3	3.0803	µg/L	3.0803	ppb	09:56:54
2	Sc RADIAL	109100.0	109100.0	97.4	%			09:56:11
2	Al 396.153Radial†	957494.0	982605.2	519320	µg/L	519320	ppb	09:56:05
2	Ca 317.933Radial†	1209166.1	1240672.7	500540	µg/L	500540	ppb	09:56:05
2	Fe 238.204 Radial†	35390.4	36312.7	192810	µg/L	192810	ppb	09:56:11
2	K 766.490 Radial†	744.5	17.5	9.8698	µg/L	9.8698	ppb	09:56:11
2	Mg 279.077 IEC†	85442.1	87681.5	494390	µg/L	494390	ppb	09:56:11
2	Na 589.592 Radial†	-421.3	-30.7	-8.6672	µg/L	-8.6672	ppb	09:56:11
2	Sr 421.552†	529.8	635.1	3.6652	µg/L	3.6652	ppb	09:56:11
2	Sc 361.383	1844902.6	1844902.6	91.885	%			09:57:01
2	Y 371.029	1108308.6	1108308.6	90.595	%			09:57:01
2	Ag 328.068†	-1816.3	-1960.4	-3.4856	µg/L	-3.4856	ppb	09:57:01
2	As 188.979†	34.3	34.2	-37.606	µg/L	-37.606	ppb	09:57:22
2	B 249.677†	1892.8	1898.2	27.640	µg/L	27.640	ppb	09:57:01
2	Ba 233.527†	120.0	203.1	5.3984	µg/L	5.3984	ppb	09:57:22
2	Be 313.107†	2712.6	-666.7	-0.4440	µg/L	-0.4440	ppb	09:57:01
2	Cd 226.502†	458.9	597.1	1.8622	µg/L	1.8622	ppb	09:57:22
2	Co 228.616†	-96.7	-35.4	-1.8855	µg/L	-1.8855	ppb	09:57:22
2	Cr 267.716†	-240.6	-137.6	-3.0915	µg/L	-3.0915	ppb	09:57:22
2	Cu 324.752†	-1168.1	-4580.2	8.6923	µg/L	8.6923	ppb	09:57:01
2	Mn 257.610†	-2145.8	-2087.5	17.367	µg/L	17.367	ppb	09:57:01
2	Mo 202.031†	-111.5	-116.6	-6.3424	µg/L	-6.3424	ppb	09:57:22
2	Ni 231.604†	272.4	5.4	0.3134	µg/L	0.3134	ppb	09:57:22
2	P 214.914†	196.5	23.9	17.004	µg/L	17.004	ppb	09:57:22
2	Pb 220.353†	-52.2	-107.8	14.341	µg/L	14.341	ppb	09:57:22

2	S 181.975 Axial†	58.9	38.5	106.64 µg/L	106.64 ppb	09:57:22
2	Sb 206.836†	66.2	47.9	3.2300 µg/L	3.2300 ppb	09:57:22
2	Se 196.026†	15.4	6.0	10.089 µg/L	10.089 ppb	09:57:22
2	SiO2†	1781.9	-94.3	-19.133 µg/L	-19.133 ppb	09:57:22
2	Si 251.611†	452.5	135.7	19.287 µg/L	19.287 ppb	09:57:22
2	Sn 189.927†	-397.2	-454.7	0.9797 µg/L	0.9797 ppb	09:57:22
2	Ti 334.940†	10966.6	11136.5	-2.5113 µg/L	-2.5113 ppb	09:57:01
2	Tl 190.801†	16.4	37.9	-7.3010 µg/L	-7.3010 ppb	09:57:22
2	U 409.014†	972.6	356.9	11.454 µg/L	11.454 ppb	09:57:01
2	V 292.402†	-1321.7	-1348.0	-0.4886 µg/L	-0.4886 ppb	09:57:01
2	Zn 213.857†	1670.2	1289.9	2.4755 µg/L	2.4755 ppb	09:57:22
3	Sc RADIAL	109206.8	109206.8	97.5 %		09:56:22
3	Al 396.153Radial†	949895.1	973852.8	514690 µg/L	514690 ppb	09:56:17
3	Ca 317.933Radial†	1197102.9	1227090.1	495060 µg/L	495060 ppb	09:56:17
3	Fe 238.204 Radial†	34977.8	35854.0	190370 µg/L	190370 ppb	09:56:22
3	K 766.490 Radial†	704.1	-24.7	-13.912 µg/L	-13.912 ppb	09:56:22
3	Mg 279.077 IEC†	84516.2	86646.4	488560 µg/L	488560 ppb	09:56:22
3	Na 589.592 Radial†	-459.9	-69.9	-19.728 µg/L	-19.728 ppb	09:56:22
3	Sr 421.552†	547.1	652.3	3.7644 µg/L	3.7644 ppb	09:56:22
3	Sc 361.383	1875439.1	1875439.1	93.406 %		09:57:28
3	Y 371.029	1126491.1	1126491.1	92.081 %		09:57:28
3	Ag 328.068†	-1755.8	-1863.4	-2.7599 µg/L	-2.7599 ppb	09:57:28
3	As 188.979†	34.0	33.3	-38.167 µg/L	-38.167 ppb	09:57:49
3	B 249.677†	1789.3	1753.9	21.695 µg/L	21.695 ppb	09:57:28
3	Ba 233.527†	116.9	197.6	5.2508 µg/L	5.2508 ppb	09:57:49
3	Be 313.107†	2687.1	-742.0	-0.4930 µg/L	-0.4930 ppb	09:57:28
3	Cd 226.502†	471.6	602.5	2.1917 µg/L	2.1917 ppb	09:57:49
3	Co 228.616†	-81.0	-16.9	-0.9448 µg/L	-0.9448 ppb	09:57:49
3	Cr 267.716†	-245.9	-139.0	-3.1238 µg/L	-3.1238 ppb	09:57:49
3	Cu 324.752†	-1142.6	-4532.2	8.5119 µg/L	8.5119 ppb	09:57:28
3	Mn 257.610†	-2117.2	-2018.8	17.287 µg/L	17.287 ppb	09:57:28
3	Mo 202.031†	-113.6	-116.9	-6.4732 µg/L	-6.4732 ppb	09:57:49
3	Ni 231.604†	267.8	-4.3	-0.2499 µg/L	-0.2499 ppb	09:57:49
3	P 214.914†	192.1	15.6	-0.0920 µg/L	-0.0920 ppb	09:57:49
3	Pb 220.353†	-71.9	-128.0	8.6429 µg/L	8.6429 ppb	09:57:49
3	S 181.975 Axial†	61.5	40.2	117.16 µg/L	117.16 ppb	09:57:49
3	Sb 206.836†	56.7	36.6	-8.1469 µg/L	-8.1469 ppb	09:57:49
3	Se 196.026†	13.0	3.1	5.8342 µg/L	5.8342 ppb	09:57:49
3	SiO2†	1768.2	-140.5	-28.511 µg/L	-28.511 ppb	09:57:49
3	Si 251.611†	465.0	141.1	19.566 µg/L	19.566 ppb	09:57:49
3	Sn 189.927†	-395.6	-446.0	2.7609 µg/L	2.7609 ppb	09:57:49
3	Ti 334.940†	11076.7	11060.1	-2.3790 µg/L	-2.3790 ppb	09:57:28
3	Tl 190.801†	19.7	41.2	-1.3970 µg/L	-1.3970 ppb	09:57:49
3	U 409.014†	848.0	206.3	-3.2413 µg/L	-3.2413 ppb	09:57:28
3	V 292.402†	-1360.7	-1366.2	-0.9312 µg/L	-0.9312 ppb	09:57:28
3	Zn 213.857†	1671.6	1261.8	2.1021 µg/L	2.1021 ppb	09:57:49

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1849614.1	92.120	%	1.1864				1.29%
Sc RADIAL	108685.5	97.1	%	0.73				0.75%
Y 371.029	1110931.2	90.809	%	1.1794				1.30%
Ag 328.068†	-1923.4	-3.1708	µg/L	0.37224	-3.1708	ppb	0.37224	11.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	981722.1	518850	µg/L	3946.4	518850	ppb	3946.4	0.76%
QC value within limits for Al 396.153Radial Recovery = 103.77%								
As 188.979†	35.9	-33.959	µg/L	6.8096	-33.959	ppb	6.8096	20.05%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1821.9	24.232	µg/L	3.0662	24.232	ppb	3.0662	12.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	203.3	5.4054	µg/L	0.15830	5.4054	ppb	0.15830	2.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-684.9	-0.4558	µg/L	0.03291	-0.4558	ppb	0.03291	7.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1238137.5	499520	µg/L	4043.8	499520	ppb	4043.8	0.81%
QC value within limits for Ca 317.933Radial Recovery = 99.90%								
Cd 226.502†	611.2	2.2900	µg/L	0.48439	2.2900	ppb	0.48439	21.15%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-28.0	-1.5087	µg/L	0.49744	-1.5087	ppb	0.49744	32.97%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -136.3     -3.0626 µg/L      0.07977     -3.0626 ppb       0.07977   2.60%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4539.8      8.8849 µg/L      0.49802      8.8849 ppb       0.49802   5.61%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    36228.4      192360 µg/L       1806.0      192360 ppb        1806.0   0.94%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.18%
K 766.490 Radial†        13.0      7.3577 µg/L     20.13120      7.3577 ppb      20.13120 273.61%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       87513.3      493440 µg/L       4489.6      493440 ppb        4489.6   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.69%
Mn 257.610†           -2062.0      17.395 µg/L       0.1237      17.395 ppb        0.1237   0.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -117.1     -6.4166 µg/L      0.06720     -6.4166 ppb       0.06720   1.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -63.0     -17.777 µg/L       8.3078     -17.777 ppb        8.3078  46.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -0.4     -0.0202 µg/L      0.29564     -0.0202 ppb       0.29564 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               23.8      17.254 µg/L      17.4722      17.254 ppb       17.4722 101.27%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -115.6      12.257 µg/L       3.1423      12.257 ppb        3.1423  25.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         39.1      110.18 µg/L        6.043      110.18 ppb         6.043   5.49%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              42.0     -2.9198 µg/L      5.74428     -2.9198 ppb       5.74428 196.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               9.4      15.177 µg/L      12.6770      15.177 ppb       12.6770  83.53%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -98.4     -19.965 µg/L       8.1622     -19.965 ppb        8.1622  40.88%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             136.0      19.315 µg/L       0.2377      19.315 ppb        0.2377   1.23%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -454.8      0.4643 µg/L      2.59300      0.4643 ppb       2.59300 558.44%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             635.8      3.6695 µg/L      0.09276      3.6695 ppb       0.09276   2.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11090.9     -2.5588 µg/L      0.20765     -2.5588 ppb       0.20765   8.12%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              41.3     -1.8271 µg/L      5.27193     -1.8271 ppb       5.27193 288.53%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              309.1      6.7466 µg/L      8.65451      6.7466 ppb       8.65451 128.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1352.9     -0.5925 µg/L      0.30051     -0.5925 ppb       0.30051  50.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1290.0      2.5526 µg/L      0.49365      2.5526 ppb       0.49365  19.34%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/14/2009 09:57:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108734.5	108734.5	97.1	%			09:58:38
1	Al 396.153Radial†	953843.1	982149.0	519060	µg/L	519060	ppb	09:58:32
1	Ca 317.933Radial†	1198857.6	1234228.5	497940	µg/L	497940	ppb	09:58:32
1	Fe 238.204 Radial†	35210.5	36249.5	192480	µg/L	192480	ppb	09:58:38
1	K 766.490 Radial†	9615.0	9155.3	5164.9	µg/L	5164.9	ppb	09:58:38
1	Mg 279.077 IEC†	85660.5	88201.3	497340	µg/L	497340	ppb	09:58:38
1	Na 589.592 Radial†	17537.3	18462.4	5207.3	µg/L	5207.3	ppb	09:58:38
1	Sr 421.552†	85229.8	87865.0	507.08	µg/L	507.08	ppb	09:58:38
1	Sc 361.383	1847746.6	1847746.6	92.027	%			09:59:12
1	Y 371.029	1111633.4	1111633.4	90.867	%			09:59:12
1	Ag 328.068†	24036.0	26134.8	266.40	µg/L	266.40	ppb	09:59:18
1	As 188.979†	274.4	295.1	470.07	µg/L	470.07	ppb	09:59:38
1	B 249.677†	12248.0	13147.4	550.85	µg/L	550.85	ppb	09:59:18
1	Ba 233.527†	17189.9	18751.7	502.66	µg/L	502.66	ppb	09:59:18
1	Be 313.107†	346135.1	372506.1	242.58	µg/L	242.58	ppb	09:59:12
1	Cd 226.502†	16128.8	17623.9	481.13	µg/L	481.13	ppb	09:59:18
1	Co 228.616†	7890.5	8644.0	439.26	µg/L	439.26	ppb	09:59:38
1	Cr 267.716†	19976.9	21832.0	485.77	µg/L	485.77	ppb	09:59:18
1	Cu 324.752†	67734.2	70293.9	543.54	µg/L	543.54	ppb	09:59:18
1	Mn 257.610†	127748.6	139064.9	481.75	µg/L	481.75	ppb	09:59:18
1	Mo 202.031†	3695.4	4020.4	487.61	µg/L	487.61	ppb	09:59:38
1	Ni 231.604†	7321.7	7665.0	442.36	µg/L	442.36	ppb	09:59:38
1	P 214.914†	1248.5	1166.7	2505.8	µg/L	2505.8	ppb	09:59:38
1	Pb 220.353†	1566.2	1651.0	479.28	µg/L	479.28	ppb	09:59:38
1	S 181.975 Axial†	502.8	520.6	2686.4	µg/L	2686.4	ppb	09:59:38
1	Sb 206.836†	507.5	527.4	503.31	µg/L	503.31	ppb	09:59:38
1	Se 196.026†	1477.0	1594.2	2353.3	µg/L	2353.3	ppb	09:59:38
1	SiO2†	52348.3	54850.2	11127	µg/L	11127	ppb	09:59:18
1	Si 251.611†	59420.6	64212.2	5184.6	µg/L	5184.6	ppb	09:59:18
1	Sn 189.927†	506.4	527.9	501.46	µg/L	501.46	ppb	09:59:38
1	Ti 334.940†	207738.3	224938.7	489.77	µg/L	489.77	ppb	09:59:18
1	Tl 190.801†	287.6	332.6	459.60	µg/L	459.60	ppb	09:59:38
1	U 409.014†	5105.3	4846.0	459.19	µg/L	459.19	ppb	09:59:18
1	V 292.402†	38195.9	41595.8	519.06	µg/L	519.06	ppb	09:59:18
1	Zn 213.857†	17469.5	18455.3	484.40	µg/L	484.40	ppb	09:59:18
2	Sc RADIAL	109658.8	109658.8	97.9	%			09:58:49
2	Al 396.153Radial†	956398.3	976478.4	516060	µg/L	516060	ppb	09:58:44
2	Ca 317.933Radial†	1202313.5	1227350.9	495170	µg/L	495170	ppb	09:58:44
2	Fe 238.204 Radial†	35384.1	36121.1	191800	µg/L	191800	ppb	09:58:49
2	K 766.490 Radial†	9680.0	9138.2	5155.3	µg/L	5155.3	ppb	09:58:49
2	Mg 279.077 IEC†	86074.2	87880.1	495530	µg/L	495530	ppb	09:58:49
2	Na 589.592 Radial†	17687.2	18463.2	5207.5	µg/L	5207.5	ppb	09:58:49
2	Sr 421.552†	85742.4	87648.6	505.83	µg/L	505.83	ppb	09:58:49
2	Sc 361.383	1845548.7	1845548.7	91.917	%			09:59:45
2	Y 371.029	1110407.0	1110407.0	90.766	%			09:59:45
2	Ag 328.068†	24184.6	26327.6	268.21	µg/L	268.21	ppb	09:59:51
2	As 188.979†	286.4	308.4	496.53	µg/L	496.53	ppb	10:00:11
2	B 249.677†	12380.8	13307.8	558.52	µg/L	558.52	ppb	09:59:51
2	Ba 233.527†	17360.6	18959.7	508.23	µg/L	508.23	ppb	09:59:51
2	Be 313.107†	346914.3	373801.8	243.43	µg/L	243.43	ppb	09:59:45
2	Cd 226.502†	16245.1	17771.2	485.33	µg/L	485.33	ppb	09:59:51
2	Co 228.616†	7927.1	8694.0	441.80	µg/L	441.80	ppb	10:00:11
2	Cr 267.716†	20165.8	22063.4	490.92	µg/L	490.92	ppb	09:59:51
2	Cu 324.752†	68218.7	70908.6	547.79	µg/L	547.79	ppb	09:59:51
2	Mn 257.610†	129027.8	140621.8	486.79	µg/L	486.79	ppb	09:59:51
2	Mo 202.031†	3727.8	4060.3	492.36	µg/L	492.36	ppb	10:00:11
2	Ni 231.604†	7370.4	7727.5	445.97	µg/L	445.97	ppb	10:00:11
2	P 214.914†	1240.0	1159.1	2488.0	µg/L	2488.0	ppb	10:00:11
2	Pb 220.353†	1584.0	1672.3	484.66	µg/L	484.66	ppb	10:00:11

2	S 181.975 Axial†	508.9	528.0	2726.0 µg/L	2726.0 ppb	10:00:11
2	Sb 206.836†	500.0	519.8	495.66 µg/L	495.66 ppb	10:00:11
2	Se 196.026†	1491.3	1611.7	2379.0 µg/L	2379.0 ppb	10:00:11
2	SiO2†	52864.7	55479.8	11254 µg/L	11254 ppb	09:59:51
2	Si 251.611†	60071.8	64997.5	5248.1 µg/L	5248.1 ppb	09:59:51
2	Sn 189.927†	514.0	536.8	504.97 µg/L	504.97 ppb	10:00:11
2	Ti 334.940†	209475.6	227097.5	494.89 µg/L	494.89 ppb	09:59:51
2	Tl 190.801†	290.4	336.0	465.40 µg/L	465.40 ppb	10:00:11
2	U 409.014†	5194.8	4950.0	469.62 µg/L	469.62 ppb	09:59:51
2	V 292.402†	38550.5	42031.0	524.28 µg/L	524.28 ppb	09:59:51
2	Zn 213.857†	17694.7	18722.9	492.06 µg/L	492.06 ppb	09:59:51
3	Sc RADIAL	109921.3	109921.3	98.2 %		09:59:01
3	Al 396.153Radial†	958907.4	976702.2	516180 µg/L	516180 ppb	09:58:55
3	Ca 317.933Radial†	1206793.8	1228983.0	495830 µg/L	495830 ppb	09:58:55
3	Fe 238.204 Radial†	35378.4	36029.1	191310 µg/L	191310 ppb	09:59:01
3	K 766.490 Radial†	9666.4	9100.7	5134.1 µg/L	5134.1 ppb	09:59:01
3	Mg 279.077 IEC†	85961.0	87555.0	493690 µg/L	493690 ppb	09:59:01
3	Na 589.592 Radial†	17626.2	18358.0	5177.9 µg/L	5177.9 ppb	09:59:01
3	Sr 421.552†	85517.6	87210.6	503.31 µg/L	503.31 ppb	09:59:01
3	Sc 361.383	1813219.7	1813219.7	90.307 %		10:00:17
3	Y 371.029	1091058.4	1091058.4	89.185 %		10:00:17
3	Ag 328.068†	24361.6	26992.7	274.55 µg/L	274.55 ppb	10:00:23
3	As 188.979†	272.9	299.0	478.22 µg/L	478.22 ppb	10:00:44
3	B 249.677†	12462.5	13638.4	574.04 µg/L	574.04 ppb	10:00:23
3	Ba 233.527†	17427.0	19369.9	519.23 µg/L	519.23 ppb	10:00:23
3	Be 313.107†	346543.4	380120.3	247.54 µg/L	247.54 ppb	10:00:17
3	Cd 226.502†	16373.1	18228.1	498.23 µg/L	498.23 ppb	10:00:23
3	Co 228.616†	7937.0	8858.7	450.16 µg/L	450.16 ppb	10:00:44
3	Cr 267.716†	20278.2	22579.0	502.39 µg/L	502.39 ppb	10:00:23
3	Cu 324.752†	68622.1	72678.7	560.33 µg/L	560.33 ppb	10:00:23
3	Mn 257.610†	129748.0	143922.1	497.59 µg/L	497.59 ppb	10:00:23
3	Mo 202.031†	3720.8	4124.9	500.05 µg/L	500.05 ppb	10:00:44
3	Ni 231.604†	7391.8	7894.2	455.59 µg/L	455.59 ppb	10:00:44
3	P 214.914†	1248.9	1192.9	2562.5 µg/L	2562.5 ppb	10:00:44
3	Pb 220.353†	1588.5	1708.0	494.10 µg/L	494.10 ppb	10:00:44
3	S 181.975 Axial†	498.5	526.4	2717.7 µg/L	2717.7 ppb	10:00:44
3	Sb 206.836†	513.8	544.8	521.66 µg/L	521.66 ppb	10:00:44
3	Se 196.026†	1492.0	1641.4	2423.3 µg/L	2423.3 ppb	10:00:44
3	SiO2†	53086.9	56751.3	11512 µg/L	11512 ppb	10:00:23
3	Si 251.611†	60348.9	66469.6	5367.3 µg/L	5367.3 ppb	10:00:23
3	Sn 189.927†	501.9	533.4	502.95 µg/L	502.95 ppb	10:00:44
3	Ti 334.940†	210933.5	232775.3	507.93 µg/L	507.93 ppb	10:00:23
3	Tl 190.801†	282.4	332.8	460.33 µg/L	460.33 ppb	10:00:44
3	U 409.014†	5223.4	5082.5	482.94 µg/L	482.94 ppb	10:00:23
3	V 292.402†	38725.4	42972.4	535.61 µg/L	535.61 ppb	10:00:23
3	Zn 213.857†	17755.4	19133.3	503.69 µg/L	503.69 ppb	10:00:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1835505.0	91.417	%	0.9628				1.05%
Sc RADIAL	109438.2	97.7	%	0.56				0.57%
Y 371.029	1104366.3	90.273	%	0.9434				1.05%
Ag 328.068†	26485.0	269.72	µg/L	4.282	269.72	ppb	4.282	1.59%
QC value within limits for Ag 328.068 Recovery = 107.89%								
Al 396.153Radial†	978443.2	517100	µg/L	1697.4	517100	ppb	1697.4	0.33%
QC value within limits for Al 396.153Radial Recovery = 103.42%								
As 188.979†	300.8	481.61	µg/L	13.553	481.61	ppb	13.553	2.81%
QC value within limits for As 188.979 Recovery = 96.32%								
B 249.677†	13364.5	561.14	µg/L	11.819	561.14	ppb	11.819	2.11%
QC value within limits for B 249.677 Recovery = 112.23%								
Ba 233.527†	19027.1	510.04	µg/L	8.433	510.04	ppb	8.433	1.65%
QC value within limits for Ba 233.527 Recovery = 102.01%								
Be 313.107†	375476.1	244.52	µg/L	2.652	244.52	ppb	2.652	1.08%
QC value within limits for Be 313.107 Recovery = 97.81%								
Ca 317.933Radial†	1230187.5	496310	µg/L	1449.8	496310	ppb	1449.8	0.29%
QC value within limits for Ca 317.933Radial Recovery = 99.26%								
Cd 226.502†	17874.4	488.23	µg/L	8.911	488.23	ppb	8.911	1.83%
QC value within limits for Cd 226.502 Recovery = 97.65%								
Co 228.616†	8732.2	443.74	µg/L	5.703	443.74	ppb	5.703	1.29%

QC value within limits for Co 228.616 Recovery = 88.75%

Cr 267.716†	22158.1	493.03 µg/L	8.508	493.03 ppb	8.508	1.73%

QC value within limits for Cr 267.716 Recovery = 98.61%

Cu 324.752†	71293.7	550.55 µg/L	8.728	550.55 ppb	8.728	1.59%

QC value within limits for Cu 324.752 Recovery = 110.11%

Fe 238.204 Radial†	36133.2	191870 µg/L	587.5	191870 ppb	587.5	0.31%

QC value within limits for Fe 238.204 Radial Recovery = 95.93%

K 766.490 Radial†	9131.4	5151.4 µg/L	15.76	5151.4 ppb	15.76	0.31%

QC value within limits for K 766.490 Radial Recovery = 103.03%

Mg 279.077 IEC†	87878.8	495520 µg/L	1822.1	495520 ppb	1822.1	0.37%

QC value within limits for Mg 279.077 IEC Recovery = 99.10%

Mn 257.610†	141202.9	488.71 µg/L	8.090	488.71 ppb	8.090	1.66%

QC value within limits for Mn 257.610 Recovery = 97.74%

Mo 202.031†	4068.5	493.34 µg/L	6.274	493.34 ppb	6.274	1.27%

QC value within limits for Mo 202.031 Recovery = 98.67%

Na 589.592 Radial†	18427.9	5197.6 µg/L	17.07	5197.6 ppb	17.07	0.33%

QC value within limits for Na 589.592 Radial Recovery = 103.95%

Ni 231.604†	7762.2	447.97 µg/L	6.837	447.97 ppb	6.837	1.53%

QC value within limits for Ni 231.604 Recovery = 89.59%

P 214.914†	1172.9	2518.8 µg/L	38.88	2518.8 ppb	38.88	1.54%

QC value within limits for P 214.914 Recovery = 100.75%

Pb 220.353†	1677.1	486.01 µg/L	7.504	486.01 ppb	7.504	1.54%

QC value within limits for Pb 220.353 Recovery = 97.20%

S 181.975 Axial†	525.0	2710.0 µg/L	20.85	2710.0 ppb	20.85	0.77%

QC value within limits for S 181.975 Axial Recovery = 108.40%

Sb 206.836†	530.6	506.88 µg/L	13.364	506.88 ppb	13.364	2.64%

QC value within limits for Sb 206.836 Recovery = 101.38%

Se 196.026†	1615.8	2385.2 µg/L	35.44	2385.2 ppb	35.44	1.49%

QC value within limits for Se 196.026 Recovery = 95.41%

SiO2†	55693.8	11298 µg/L	196.4	11298 ppb	196.4	1.74%

QC value within limits for SiO2 Recovery = 105.64%

Si 251.611†	65226.4	5266.7 µg/L	92.75	5266.7 ppb	92.75	1.76%

QC value within limits for Si 251.611 Recovery = 105.33%

Sn 189.927†	532.7	503.13 µg/L	1.764	503.13 ppb	1.764	0.35%

QC value within limits for Sn 189.927 Recovery = 100.63%

Sr 421.552†	87574.7	505.41 µg/L	1.924	505.41 ppb	1.924	0.38%

QC value within limits for Sr 421.552 Recovery = 101.08%

Ti 334.940†	228270.5	497.53 µg/L	9.361	497.53 ppb	9.361	1.88%

QC value within limits for Ti 334.940 Recovery = 99.51%

Tl 190.801†	333.8	461.78 µg/L	3.161	461.78 ppb	3.161	0.68%

QC value within limits for Tl 190.801 Recovery = 92.36%

U 409.014†	4959.5	470.58 µg/L	11.904	470.58 ppb	11.904	2.53%

QC value within limits for U 409.014 Recovery = 94.12%

V 292.402†	42199.7	526.32 µg/L	8.462	526.32 ppb	8.462	1.61%

QC value within limits for V 292.402 Recovery = 105.26%

Zn 213.857†	18770.5	493.39 µg/L	9.713	493.39 ppb	9.713	1.97%

QC value within limits for Zn 213.857 Recovery = 98.68%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/14/2009 10:00:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105695.7	105695.7	94.4	%			10:01:35
1	Al 396.153Radial†	961081.0	1018059.2	538060	µg/L	538060	ppb	10:01:29
1	Ca 317.933Radial†	1215148.5	1286984.6	519230	µg/L	519230	ppb	10:01:29
1	Fe 238.204 Radial†	86797.7	91946.4	488200	µg/L	488200	ppb	10:01:35
1	K 766.490 Radial†	743.1	40.6	22.929	µg/L	22.929	ppb	10:01:35
1	Mg 279.077 IEC†	85994.1	91091.0	513190	µg/L	513190	ppb	10:01:35
1	Na 589.592 Radial†	1741308.2	1845242.2	520450	µg/L	520450	ppb	10:01:29
1	Sr 421.552†	832.7	973.5	5.6185	µg/L	5.6185	ppb	10:01:35
1	Sc 361.383	1799524.9	1799524.9	89.625	%			10:02:10
1	Y 371.029	1073809.0	1073809.0	87.775	%			10:02:10
1	Ag 328.068†	-3716.0	-4130.0	-1.0561	µg/L	-1.0561	ppb	10:02:16
1	As 188.979†	36.8	37.9	-76.061	µg/L	-76.061	ppb	10:02:37
1	B 249.677†	4442.0	4794.5	69.431	µg/L	69.431	ppb	10:02:16
1	Ba 233.527†	263.8	366.7	9.6819	µg/L	9.6819	ppb	10:02:37
1	Be 313.107†	-1964.1	-5810.3	-3.8022	µg/L	-3.8022	ppb	10:02:16
1	Cd 226.502†	1258.0	1501.2	15.186	µg/L	15.186	ppb	10:02:16
1	Co 228.616†	49.9	125.5	6.2274	µg/L	6.2274	ppb	10:02:37
1	Cr 267.716†	-253.1	-158.2	-3.6550	µg/L	-3.6550	ppb	10:02:37
1	Cu 324.752†	-8522.1	-12817.5	13.293	µg/L	13.293	ppb	10:02:16
1	Mn 257.610†	-13185.6	-14464.1	13.776	µg/L	13.776	ppb	10:02:16
1	Mo 202.031†	-200.0	-218.3	-6.8844	µg/L	-6.8844	ppb	10:02:37
1	Ni 231.604†	264.0	3.5	0.2014	µg/L	0.2014	ppb	10:02:37
1	P 214.914†	351.7	202.4	79.871	µg/L	79.871	ppb	10:02:37
1	Pb 220.353†	-0.8	-51.9	14.353	µg/L	14.353	ppb	10:02:37
1	S 181.975 Axial†	66.2	48.1	111.90	µg/L	111.90	ppb	10:02:37
1	Sb 206.836†	58.6	41.2	2.9994	µg/L	2.9994	ppb	10:02:37
1	Se 196.026†	-103.7	-126.4	16.300	µg/L	16.300	ppb	10:02:37
1	SiO2†	1586.7	-263.3	-53.406	µg/L	-53.406	ppb	10:02:37
1	Si 251.611†	-270.3	-658.4	-44.575	µg/L	-44.575	ppb	10:02:37
1	Sn 189.927†	-438.0	-511.1	14.854	µg/L	14.854	ppb	10:02:37
1	Ti 334.940†	16860.0	18013.2	12.267	µg/L	12.267	ppb	10:02:16
1	Tl 190.801†	9.7	30.9	-20.868	µg/L	-20.868	ppb	10:02:37
1	U 409.014†	137175.8	152353.8	15116	µg/L	15116	ppb	10:02:16
1	V 292.402†	-4635.4	-5081.5	3.2391	µg/L	3.2391	ppb	10:02:16
1	Zn 213.857†	2905.0	2713.5	10.809	µg/L	10.809	ppb	10:02:37
2	Sc RADIAL	106427.2	106427.2	95.0	%			10:01:47
2	Al 396.153Radial†	956805.4	1006562.4	531980	µg/L	531980	ppb	10:01:42
2	Ca 317.933Radial†	1208082.7	1270702.0	512660	µg/L	512660	ppb	10:01:42
2	Fe 238.204 Radial†	87256.2	91796.9	487400	µg/L	487400	ppb	10:01:47
2	K 766.490 Radial†	781.5	75.6	42.652	µg/L	42.652	ppb	10:01:47
2	Mg 279.077 IEC†	86445.1	90939.4	512340	µg/L	512340	ppb	10:01:47
2	Na 589.592 Radial†	1734652.7	1825560.1	514900	µg/L	514900	ppb	10:01:42
2	Sr 421.552†	860.1	996.3	5.7500	µg/L	5.7500	ppb	10:01:47
2	Sc 361.383	1801215.5	1801215.5	89.709	%			10:02:43
2	Y 371.029	1074936.4	1074936.4	87.867	%			10:02:43
2	Ag 328.068†	-3686.9	-4093.6	-0.7623	µg/L	-0.7623	ppb	10:02:48
2	As 188.979†	47.0	49.2	-52.988	µg/L	-52.988	ppb	10:03:09
2	B 249.677†	4395.3	4737.8	67.043	µg/L	67.043	ppb	10:02:48
2	Ba 233.527†	270.6	374.1	9.8827	µg/L	9.8827	ppb	10:03:09
2	Be 313.107†	-1872.5	-5706.1	-3.7341	µg/L	-3.7341	ppb	10:02:48
2	Cd 226.502†	1262.6	1505.0	15.270	µg/L	15.270	ppb	10:02:48
2	Co 228.616†	44.0	118.8	5.8893	µg/L	5.8893	ppb	10:03:09
2	Cr 267.716†	-232.1	-134.5	-3.1257	µg/L	-3.1257	ppb	10:03:09
2	Cu 324.752†	-8450.9	-12729.3	13.752	µg/L	13.752	ppb	10:02:48
2	Mn 257.610†	-13120.0	-14377.2	13.962	µg/L	13.962	ppb	10:02:48
2	Mo 202.031†	-203.9	-222.6	-7.4213	µg/L	-7.4213	ppb	10:03:09
2	Ni 231.604†	247.4	-15.2	-0.8783	µg/L	-0.8783	ppb	10:03:09
2	P 214.914†	360.1	211.4	98.488	µg/L	98.488	ppb	10:03:09
2	Pb 220.353†	3.9	-46.7	15.304	µg/L	15.304	ppb	10:03:09

2	S 181.975 Axial†	58.6	39.7	66.874 µg/L	66.874 ppb	10:03:09
2	Sb 206.836†	56.1	38.4	0.6063 µg/L	0.6063 ppb	10:03:09
2	Se 196.026†	-113.0	-136.8	-0.0953 µg/L	-0.0953 ppb	10:03:09
2	SiO2†	1560.9	-293.6	-59.561 µg/L	-59.561 ppb	10:03:09
2	Si 251.611†	-227.7	-610.6	-40.563 µg/L	-40.563 ppb	10:03:09
2	Sn 189.927†	-443.3	-516.6	10.370 µg/L	10.370 ppb	10:03:09
2	Ti 334.940†	16711.7	17830.3	12.215 µg/L	12.215 ppb	10:02:48
2	Tl 190.801†	4.2	24.8	-29.648 µg/L	-29.648 ppb	10:03:09
2	U 409.014†	136280.2	151211.8	15003 µg/L	15003 ppb	10:02:48
2	V 292.402†	-4516.7	-4944.3	4.6330 µg/L	4.6330 ppb	10:02:48
2	Zn 213.857†	2901.7	2706.7	10.731 µg/L	10.731 ppb	10:03:09
3	Sc RADIAL	107262.1	107262.1	95.8 %		10:02:00
3	Al 396.153Radial†	967820.2	1010225.8	533920 µg/L	533920 ppb	10:01:55
3	Ca 317.933Radial†	1224920.1	1278386.2	515760 µg/L	515760 ppb	10:01:55
3	Fe 238.204 Radial†	87873.8	91727.0	487030 µg/L	487030 ppb	10:02:00
3	K 766.490 Radial†	771.3	58.6	33.074 µg/L	33.074 ppb	10:02:00
3	Mg 279.077 IEC†	86875.7	90681.0	510880 µg/L	510880 ppb	10:02:00
3	Na 589.592 Radial†	1754275.6	1831839.8	516670 µg/L	516670 ppb	10:01:55
3	Sr 421.552†	854.9	983.8	5.6778 µg/L	5.6778 ppb	10:02:00
3	Sc 361.383	1801066.5	1801066.5	89.702 %		10:03:15
3	Y 371.029	1075069.5	1075069.5	87.878 %		10:03:15
3	Ag 328.068†	-3666.4	-4071.1	-0.5811 µg/L	-0.5811 ppb	10:03:21
3	As 188.979†	30.6	30.9	-88.948 µg/L	-88.948 ppb	10:03:41
3	B 249.677†	4371.8	4711.9	65.958 µg/L	65.958 ppb	10:03:21
3	Ba 233.527†	282.3	387.2	10.232 µg/L	10.232 ppb	10:03:41
3	Be 313.107†	-1890.3	-5726.2	-3.7471 µg/L	-3.7471 ppb	10:03:21
3	Cd 226.502†	1249.9	1491.0	14.922 µg/L	14.922 ppb	10:03:21
3	Co 228.616†	46.4	121.5	6.0313 µg/L	6.0313 ppb	10:03:41
3	Cr 267.716†	-228.9	-131.0	-3.0478 µg/L	-3.0478 ppb	10:03:41
3	Cu 324.752†	-8388.5	-12660.5	14.164 µg/L	14.164 ppb	10:03:21
3	Mn 257.610†	-13134.3	-14394.4	13.859 µg/L	13.859 ppb	10:03:21
3	Mo 202.031†	-196.4	-214.2	-6.4366 µg/L	-6.4366 ppb	10:03:41
3	Ni 231.604†	234.8	-29.3	-1.6903 µg/L	-1.6903 ppb	10:03:41
3	P 214.914†	357.7	208.8	93.502 µg/L	93.502 ppb	10:03:41
3	Pb 220.353†	-6.9	-58.7	12.278 µg/L	12.278 ppb	10:03:41
3	S 181.975 Axial†	60.4	41.6	77.532 µg/L	77.532 ppb	10:03:41
3	Sb 206.836†	53.9	35.9	-2.2906 µg/L	-2.2906 ppb	10:03:41
3	Se 196.026†	-97.9	-119.9	25.549 µg/L	25.549 ppb	10:03:41
3	SiO2†	1563.6	-290.4	-58.919 µg/L	-58.919 ppb	10:03:41
3	Si 251.611†	-272.6	-660.7	-44.385 µg/L	-44.385 ppb	10:03:41
3	Sn 189.927†	-455.2	-529.8	3.9573 µg/L	3.9573 ppb	10:03:41
3	Ti 334.940†	16599.4	17706.5	11.756 µg/L	11.756 ppb	10:03:21
3	Tl 190.801†	-1.0	19.0	-39.201 µg/L	-39.201 ppb	10:03:41
3	U 409.014†	136494.7	151463.5	15028 µg/L	15028 ppb	10:03:21
3	V 292.402†	-4542.8	-4973.9	4.2954 µg/L	4.2954 ppb	10:03:21
3	Zn 213.857†	2899.8	2704.9	10.763 µg/L	10.763 ppb	10:03:41

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1800602.3	89.679	%	0.0466				0.05%
Sc RADIAL	106461.6	95.1	%	0.70				0.74%
Y 371.029	1074605.0	87.840	%	0.0566				0.06%
Ag 328.068†	-4098.2	-0.7998	µg/L	0.23970	-0.7998	ppb	0.23970	29.97%
Al 396.153Radial†	1011615.8	534650	µg/L	3104.0	534650	ppb	3104.0	0.58%
QC value within limits for Al 396.153Radial Recovery = 106.93%								
As 188.979†	39.4	-72.666	µg/L	18.2192	-72.666	ppb	18.2192	25.07%
B 249.677†	4748.1	67.477	µg/L	1.7768	67.477	ppb	1.7768	2.63%
Ba 233.527†	376.0	9.9322	µg/L	0.27833	9.9322	ppb	0.27833	2.80%
Be 313.107†	-5747.6	-3.7611	µg/L	0.03615	-3.7611	ppb	0.03615	0.96%
Ca 317.933Radial†	1278690.9	515880	µg/L	3286.3	515880	ppb	3286.3	0.64%
QC value within limits for Ca 317.933Radial Recovery = 103.18%								
Cd 226.502†	1499.1	15.126	µg/L	0.1816	15.126	ppb	0.1816	1.20%
Co 228.616†	121.9	6.0493	µg/L	0.16977	6.0493	ppb	0.16977	2.81%
Cr 267.716†	-141.3	-3.2762	µg/L	0.33039	-3.2762	ppb	0.33039	10.08%
Cu 324.752†	-12735.8	13.736	µg/L	0.4359	13.736	ppb	0.4359	3.17%
Fe 238.204 Radial†	91823.4	487550	µg/L	595.2	487550	ppb	595.2	0.12%
QC value within limits for Fe 238.204 Radial Recovery = 97.51%								
K 766.490 Radial†	58.3	32.885	µg/L	9.8627	32.885	ppb	9.8627	29.99%
Mg 279.077 IEC†	90903.8	512140	µg/L	1168.7	512140	ppb	1168.7	0.23%

QC value within limits for Mg 279.077 IEC Recovery = 102.43%

Mn 257.610†	-14411.9	13.866 µg/L	0.0931	13.866 ppb	0.0931	0.67%
Mo 202.031†	-218.4	-6.9141 µg/L	0.49302	-6.9141 ppb	0.49302	7.13%
Na 589.592 Radial†	1834214.0	517340 µg/L	2835.6	517340 ppb	2835.6	0.55%

QC value within limits for Na 589.592 Radial Recovery = 103.47%

Ni 231.604†	-13.7	-0.7890 µg/L	0.94902	-0.7890 ppb	0.94902	120.28%
P 214.914†	207.5	90.620 µg/L	9.6371	90.620 ppb	9.6371	10.63%
Pb 220.353†	-52.4	13.979 µg/L	1.5470	13.979 ppb	1.5470	11.07%
S 181.975 Axial†	43.1	85.435 µg/L	23.5303	85.435 ppb	23.5303	27.54%
Sb 206.836†	38.5	0.4383 µg/L	2.64902	0.4383 ppb	2.64902	604.33%
Se 196.026†	-127.7	13.918 µg/L	12.9870	13.918 ppb	12.9870	93.31%
SiO2†	-282.4	-57.295 µg/L	3.3833	-57.295 ppb	3.3833	5.91%
Si 251.611†	-643.2	-43.174 µg/L	2.2635	-43.174 ppb	2.2635	5.24%
Sn 189.927†	-519.2	9.7273 µg/L	5.47682	9.7273 ppb	5.47682	56.30%
Sr 421.552†	984.6	5.6821 µg/L	0.06587	5.6821 ppb	0.06587	1.16%
Ti 334.940†	17850.0	12.079 µg/L	0.2812	12.079 ppb	0.2812	2.33%
Tl 190.801†	24.9	-29.906 µg/L	9.1689	-29.906 ppb	9.1689	30.66%
U 409.014†	151676.4	15049 µg/L	59.8	15049 ppb	59.8	0.40%

QC value within limits for U 409.014 Recovery = 100.33%

V 292.402†	-4999.9	4.0558 µg/L	0.72713	4.0558 ppb	0.72713	17.93%
Zn 213.857†	2708.4	10.767 µg/L	0.0395	10.767 ppb	0.0395	0.37%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/14/2009 10:03:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112000.3	112000.3	100	%			10:04:33
1	Al 396.153Radial†	1017.7	853.1	65.951	µg/L	65.951	ppb	10:04:33
1	Ca 317.933Radial†	829.1	416.4	167.98	µg/L	167.98	ppb	10:04:53
1	Fe 238.204 Radial†	5.9	-6.1	299.44	µg/L	299.44	ppb	10:04:53
1	K 766.490 Radial†	546245.2	545399.6	307680	µg/L	307680	ppb	10:04:27
1	Mg 279.077 IEC†	-28.9	-44.9	-0.5041	µg/L	-0.5041	ppb	10:04:53
1	Na 589.592 Radial†	92.6	494.3	139.41	µg/L	139.41	ppb	10:04:33
1	Sr 421.552†	1757694.5	1757467.5	10143	µg/L	10143	ppb	10:04:27
1	Sc 361.383	1992183.8	1992183.8	99.220	%			10:06:25
1	Y 371.029	1196389.6	1196389.6	97.795	%			10:06:25
1	Ag 328.068†	-7085.5	-7124.9	4.1279	µg/L	4.1279	ppb	10:06:25
1	As 188.979†	5185.1	5222.7	10153	µg/L	10153	ppb	10:06:30
1	B 249.677†	110421.0	111127.0	5167.5	µg/L	5167.5	ppb	10:06:25
1	Ba 233.527†	488566.3	492478.1	13196	µg/L	13196	ppb	10:06:25
1	Be 313.107†	4559739.4	4591953.0	2989.0	µg/L	2989.0	ppb	10:06:15
1	Cd 226.502†	362215.2	365159.3	10272	µg/L	10272	ppb	10:06:25
1	Co 228.616†	195547.5	197154.0	10020	µg/L	10020	ppb	10:06:25
1	Cr 267.716†	1130526.2	1139534.6	25319	µg/L	25319	ppb	10:06:25
1	Cu 324.752†	2859386.1	2878547.5	20565	µg/L	20565	ppb	10:06:25
1	Mn 257.610†	2904859.8	2927935.2	9633.7	µg/L	9633.7	ppb	10:06:25
1	Mo 202.031†	84104.8	84770.5	10122	µg/L	10122	ppb	10:06:25
1	Ni 231.604†	175160.3	176245.8	10171	µg/L	10171	ppb	10:06:25
1	P 214.914†	8360.3	8236.0	16038	µg/L	16038	ppb	10:06:30
1	Pb 220.353†	95142.4	95839.1	25319	µg/L	25319	ppb	10:06:25
1	S 181.975 Axial†	9748.4	9799.4	52436	µg/L	52436	ppb	10:06:30
1	Sb 206.836†	9960.0	10014.1	10363	µg/L	10363	ppb	10:06:30
1	Se 196.026†	6822.3	6865.1	10136	µg/L	10136	ppb	10:06:30
1	SiO2†	509044.2	511010.9	103660	µg/L	103660	ppb	10:06:25
1	Si 251.611†	589863.1	594141.7	47266	µg/L	47266	ppb	10:06:25
1	Sn 189.927†	21177.3	21321.4	10861	µg/L	10861	ppb	10:06:30
1	Ti 334.940†	4324125.1	4357307.4	10030	µg/L	10030	ppb	10:06:15
1	Tl 190.801†	6230.1	6299.1	9966.1	µg/L	9966.1	ppb	10:06:30
1	U 409.014†	1855.7	1168.7	116.57	µg/L	116.57	ppb	10:06:25
1	V 292.402†	864775.9	871662.2	10532	µg/L	10532	ppb	10:06:25
1	Zn 213.857†	545730.3	549491.0	15444	µg/L	15444	ppb	10:06:25
2	Sc RADIAL	113218.8	113218.8	101	%			10:05:05
2	Al 396.153Radial†	984.0	808.8	40.958	µg/L	40.958	ppb	10:05:05
2	Ca 317.933Radial†	831.4	409.8	165.31	µg/L	165.31	ppb	10:05:25
2	Fe 238.204 Radial†	5.6	-6.5	298.59	µg/L	298.59	ppb	10:05:25
2	K 766.490 Radial†	547114.8	540381.7	304850	µg/L	304850	ppb	10:04:59
2	Mg 279.077 IEC†	-31.5	-47.1	-12.162	µg/L	-12.162	ppb	10:05:25
2	Na 589.592 Radial†	58.1	459.1	129.50	µg/L	129.50	ppb	10:05:05
2	Sr 421.552†	1758402.3	1739253.4	10037	µg/L	10037	ppb	10:04:59
2	Sc 361.383	2012096.8	2012096.8	100.21	%			10:06:50
2	Y 371.029	1208323.8	1208323.8	98.770	%			10:06:50
2	Ag 328.068†	-7167.8	-7136.4	4.2882	µg/L	4.2882	ppb	10:06:50
2	As 188.979†	5206.8	5192.6	10095	µg/L	10095	ppb	10:06:55
2	B 249.677†	112037.5	111638.7	5191.3	µg/L	5191.3	ppb	10:06:50
2	Ba 233.527†	495240.0	494264.5	13244	µg/L	13244	ppb	10:06:50
2	Be 313.107†	4593424.3	4580085.9	2981.3	µg/L	2981.3	ppb	10:06:39
2	Cd 226.502†	367918.0	367237.1	10330	µg/L	10330	ppb	10:06:50
2	Co 228.616†	198290.2	197940.4	10061	µg/L	10061	ppb	10:06:50
2	Cr 267.716†	1146551.1	1144249.3	25423	µg/L	25423	ppb	10:06:50
2	Cu 324.752†	2898824.5	2889381.8	20643	µg/L	20643	ppb	10:06:50
2	Mn 257.610†	2946696.2	2940708.9	9675.7	µg/L	9675.7	ppb	10:06:50
2	Mo 202.031†	85291.1	85115.4	10163	µg/L	10163	ppb	10:06:50
2	Ni 231.604†	177776.2	177109.0	10221	µg/L	10221	ppb	10:06:50
2	P 214.914†	8349.5	8141.8	15817	µg/L	15817	ppb	10:06:55
2	Pb 220.353†	96561.0	96305.7	25442	µg/L	25442	ppb	10:06:50

2	S 181.975 Axial†	9796.9	9750.5	52175 µg/L	52175 ppb	10:06:55
2	Sb 206.836†	9989.7	9944.4	10289 µg/L	10289 ppb	10:06:55
2	Se 196.026†	6856.6	6831.3	10086 µg/L	10086 ppb	10:06:55
2	SiO2†	516470.2	513343.8	104140 µg/L	104140 ppb	10:06:50
2	Si 251.611†	598593.1	596969.7	47501 µg/L	47501 ppb	10:06:50
2	Sn 189.927†	21251.0	21183.7	10790 µg/L	10790 ppb	10:06:55
2	Ti 334.940†	4353240.2	4343230.4	9997.3 µg/L	9997.3 ppb	10:06:39
2	Tl 190.801†	6241.6	6248.5	9886.2 µg/L	9886.2 ppb	10:06:55
2	U 409.014†	1733.4	1028.1	102.55 µg/L	102.55 ppb	10:06:50
2	V 292.402†	876700.3	874935.7	10572 µg/L	10572 ppb	10:06:50
2	Zn 213.857†	553272.7	551574.2	15503 µg/L	15503 ppb	10:06:50
3	Sc RADIAL	114192.0	114192.0	102 %		10:05:37
3	Al 396.153Radial†	981.1	797.7	35.580 µg/L	35.580 ppb	10:05:37
3	Ca 317.933Radial†	853.2	424.1	171.09 µg/L	171.09 ppb	10:05:57
3	Fe 238.204 Radial†	13.6	1.4	340.15 µg/L	340.15 ppb	10:05:57
3	K 766.490 Radial†	544768.7	533469.7	300950 µg/L	300950 ppb	10:05:31
3	Mg 279.077 IEC†	-27.5	-43.0	10.972 µg/L	10.972 ppb	10:05:57
3	Na 589.592 Radial†	37.6	438.5	123.68 µg/L	123.68 ppb	10:05:37
3	Sr 421.552†	1749494.9	1715698.0	9901.6 µg/L	9901.6 ppb	10:05:31
3	Sc 361.383	1998752.1	1998752.1	99.547 %		10:07:15
3	Y 371.029	1199878.5	1199878.5	98.080 %		10:07:15
3	Ag 328.068†	-7107.6	-7123.7	4.3810 µg/L	4.3810 ppb	10:07:15
3	As 188.979†	5193.7	5214.2	10137 µg/L	10137 ppb	10:07:20
3	B 249.677†	111294.7	111639.0	5191.3 µg/L	5191.3 ppb	10:07:15
3	Ba 233.527†	491885.4	494194.2	13242 µg/L	13242 ppb	10:07:15
3	Be 313.107†	4625695.8	4643107.3	3022.3 µg/L	3022.3 ppb	10:07:04
3	Cd 226.502†	365035.4	366792.6	10318 µg/L	10318 ppb	10:07:15
3	Co 228.616†	196834.2	197798.9	10053 µg/L	10053 ppb	10:07:15
3	Cr 267.716†	1138480.2	1143780.4	25413 µg/L	25413 ppb	10:07:15
3	Cu 324.752†	2875936.7	2885703.0	20616 µg/L	20616 ppb	10:07:15
3	Mn 257.610†	2925566.4	2939115.1	9670.5 µg/L	9670.5 ppb	10:07:15
3	Mo 202.031†	84618.9	85008.3	10150 µg/L	10150 ppb	10:07:15
3	Ni 231.604†	176470.8	176982.1	10214 µg/L	10214 ppb	10:07:15
3	P 214.914†	8336.7	8184.6	15917 µg/L	15917 ppb	10:07:20
3	Pb 220.353†	95947.0	96332.2	25449 µg/L	25449 ppb	10:07:15
3	S 181.975 Axial†	9742.8	9761.4	52233 µg/L	52233 ppb	10:07:20
3	Sb 206.836†	10010.8	10032.1	10381 µg/L	10381 ppb	10:07:20
3	Se 196.026†	6834.4	6854.7	10121 µg/L	10121 ppb	10:07:20
3	SiO2†	512812.2	513110.0	104090 µg/L	104090 ppb	10:07:15
3	Si 251.611†	593993.0	596336.7	47443 µg/L	47443 ppb	10:07:15
3	Sn 189.927†	21253.0	21327.2	10864 µg/L	10864 ppb	10:07:20
3	Ti 334.940†	4382582.4	4401708.9	10132 µg/L	10132 ppb	10:07:04
3	Tl 190.801†	6229.5	6277.9	9933.5 µg/L	9933.5 ppb	10:07:20
3	U 409.014†	1811.1	1117.7	111.48 µg/L	111.48 ppb	10:07:15
3	V 292.402†	870510.7	874559.0	10567 µg/L	10567 ppb	10:07:15
3	Zn 213.857†	549214.1	551183.3	15492 µg/L	15492 ppb	10:07:15

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2001010.9	99.660	%	0.5054				0.51%
Sc RADIAL	113137.0	101	%	1.0				0.97%
Y 371.029	1201530.6	98.215	%	0.5016				0.51%
Ag 328.068†	-7128.3	4.2657	µg/L	0.12805	4.2657	ppb	0.12805	3.00%
Al 396.153Radial†	819.9	47.496	µg/L	16.2072	47.496	ppb	16.2072	34.12%
As 188.979†	5209.8	10128	µg/L	30.2	10128	ppb	30.2	0.30%
QC value within limits for As 188.979 Recovery = 101.28%								
B 249.677†	111468.2	5183.4	µg/L	13.74	5183.4	ppb	13.74	0.27%
QC value within limits for B 249.677 Recovery = 103.67%								
Ba 233.527†	493645.6	13227	µg/L	27.1	13227	ppb	27.1	0.20%
QC value less than the lower limit for Ba 233.527 Recovery = 88.18%								
Be 313.107†	4605048.7	2997.6	µg/L	21.80	2997.6	ppb	21.80	0.73%
QC value within limits for Be 313.107 Recovery = 99.92%								
Ca 317.933Radial†	416.7	168.13	µg/L	2.890	168.13	ppb	2.890	1.72%
Cd 226.502†	366396.3	10307	µg/L	30.8	10307	ppb	30.8	0.30%
QC value within limits for Cd 226.502 Recovery = 103.07%								
Co 228.616†	197631.1	10045	µg/L	21.3	10045	ppb	21.3	0.21%
QC value within limits for Co 228.616 Recovery = 100.45%								
Cr 267.716†	1142521.4	25385	µg/L	57.7	25385	ppb	57.7	0.23%
QC value within limits for Cr 267.716 Recovery = 101.54%								

Cu 324.752†	2884544.1	20608 µg/L	39.4	20608 ppb	39.4	0.19%
QC value within limits for Cu 324.752 Recovery = 103.04%						
Fe 238.204 Radial†	-3.7	312.73 µg/L	23.754	312.73 ppb	23.754	7.60%
K 766.490 Radial†	539750.4	304500 µg/L	3379.2	304500 ppb	3379.2	1.11%
QC value within limits for K 766.490 Radial Recovery = 101.50%						
Mg 279.077 IEC†	-45.0	-0.5649 µg/L	11.56723	-0.5649 ppb	11.56723	>999.9%
Mn 257.610†	2935919.7	9659.9 µg/L	22.90	9659.9 ppb	22.90	0.24%
QC value within limits for Mn 257.610 Recovery = 96.60%						
Mo 202.031†	84964.7	10145 µg/L	21.1	10145 ppb	21.1	0.21%
QC value within limits for Mo 202.031 Recovery = 101.45%						
Na 589.592 Radial†	464.0	130.86 µg/L	7.950	130.86 ppb	7.950	6.08%
Ni 231.604†	176778.9	10202 µg/L	26.9	10202 ppb	26.9	0.26%
QC value within limits for Ni 231.604 Recovery = 102.02%						
P 214.914†	8187.5	15924 µg/L	110.5	15924 ppb	110.5	0.69%
QC value within limits for P 214.914 Recovery = 106.16%						
Pb 220.353†	96159.0	25403 µg/L	73.3	25403 ppb	73.3	0.29%
QC value within limits for Pb 220.353 Recovery = 101.61%						
S 181.975 Axial†	9770.4	52281 µg/L	137.2	52281 ppb	137.2	0.26%
QC value within limits for S 181.975 Axial Recovery = 104.56%						
Sb 206.836†	9996.9	10345 µg/L	48.7	10345 ppb	48.7	0.47%
QC value within limits for Sb 206.836 Recovery = 103.45%						
Se 196.026†	6850.4	10114 µg/L	25.6	10114 ppb	25.6	0.25%
QC value within limits for Se 196.026 Recovery = 101.14%						
SiO2†	512488.2	103960 µg/L	260.6	103960 ppb	260.6	0.25%
QC value within limits for SiO2 Recovery = 97.16%						
Si 251.611†	595816.0	47403 µg/L	122.1	47403 ppb	122.1	0.26%
QC value within limits for Si 251.611 Recovery = 94.81%						
Sn 189.927†	21277.4	10838 µg/L	41.4	10838 ppb	41.4	0.38%
QC value within limits for Sn 189.927 Recovery = 108.38%						
Sr 421.552†	1737473.0	10027 µg/L	120.9	10027 ppb	120.9	1.21%
QC value within limits for Sr 421.552 Recovery = 100.27%						
Ti 334.940†	4367415.6	10053 µg/L	70.3	10053 ppb	70.3	0.70%
QC value within limits for Ti 334.940 Recovery = 100.53%						
Tl 190.801†	6275.2	9928.6 µg/L	40.17	9928.6 ppb	40.17	0.40%
QC value within limits for Tl 190.801 Recovery = 99.29%						
U 409.014†	1104.8	110.20 µg/L	7.098	110.20 ppb	7.098	6.44%
V 292.402†	873719.0	10557 µg/L	21.6	10557 ppb	21.6	0.20%
QC value within limits for V 292.402 Recovery = 105.57%						
Zn 213.857†	550749.5	15480 µg/L	31.1	15480 ppb	31.1	0.20%
QC value within limits for Zn 213.857 Recovery = 103.20%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:07:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113486.1	113486.1	101	%			10:08:07
1	Al 396.153Radial†	10393.3	10091.0	5313.3	µg/L	5313.3	ppb	10:08:07
1	Ca 317.933Radial†	13831.5	13235.4	5339.8	µg/L	5339.8	ppb	10:08:27
1	Fe 238.204 Radial†	1037.5	1011.8	5389.9	µg/L	5389.9	ppb	10:08:27
1	K 766.490 Radial†	10272.7	9389.7	5297.1	µg/L	5297.1	ppb	10:08:07
1	Mg 279.077 IEC†	996.3	967.1	5461.2	µg/L	5461.2	ppb	10:08:27
1	Na 589.592 Radial†	37489.7	37393.9	10547	µg/L	10547	ppb	10:08:07
1	Sr 421.552†	90533.1	89422.9	516.07	µg/L	516.07	ppb	10:08:07
1	Sc 361.383	2011456.8	2011456.8	100.18	%			10:09:31
1	Y 371.029	1217127.6	1217127.6	99.490	%			10:09:31
1	Ag 328.068†	55258.1	55175.0	527.16	µg/L	527.16	ppb	10:09:37
1	As 188.979†	272.4	268.7	520.82	µg/L	520.82	ppb	10:09:57
1	B 249.677†	11603.3	11420.7	529.38	µg/L	529.38	ppb	10:09:37
1	Ba 233.527†	19749.4	19786.3	530.39	µg/L	530.39	ppb	10:09:37
1	Be 313.107†	799813.8	794756.5	517.78	µg/L	517.78	ppb	10:09:31
1	Cd 226.502†	19001.6	19065.0	536.25	µg/L	536.25	ppb	10:09:37
1	Co 228.616†	10428.2	10479.3	532.63	µg/L	532.63	ppb	10:09:37
1	Cr 267.716†	23704.6	23786.2	529.21	µg/L	529.21	ppb	10:09:37
1	Cu 324.752†	74458.5	71015.6	508.51	µg/L	508.51	ppb	10:09:37
1	Mn 257.610†	156978.5	156944.0	517.06	µg/L	517.06	ppb	10:09:31
1	Mo 202.031†	4391.3	4388.2	524.18	µg/L	524.18	ppb	10:09:57
1	Ni 231.604†	9462.0	9153.9	528.29	µg/L	528.29	ppb	10:09:37
1	P 214.914†	1363.2	1170.8	2550.2	µg/L	2550.2	ppb	10:09:57
1	Pb 220.353†	2035.7	1981.0	524.12	µg/L	524.12	ppb	10:09:57
1	S 181.975 Axial†	222.1	196.0	1047.4	µg/L	1047.4	ppb	10:09:57
1	Sb 206.836†	521.1	496.0	516.54	µg/L	516.54	ppb	10:09:57
1	Se 196.026†	379.1	367.7	545.09	µg/L	545.09	ppb	10:09:57
1	SiO2†	30117.4	28029.6	5686.0	µg/L	5686.0	ppb	10:09:37
1	Si 251.611†	33165.9	32749.4	2614.8	µg/L	2614.8	ppb	10:09:37
1	Sn 189.927†	1045.1	1020.8	522.89	µg/L	522.89	ppb	10:09:57
1	Ti 334.940†	223556.8	222356.2	511.52	µg/L	511.52	ppb	10:09:31
1	Tl 190.801†	321.4	340.9	538.51	µg/L	538.51	ppb	10:09:57
1	U 409.014†	6000.9	5288.5	526.58	µg/L	526.58	ppb	10:09:37
1	V 292.402†	43865.9	43877.5	531.56	µg/L	531.56	ppb	10:09:37
1	Zn 213.857†	19580.9	19017.8	533.19	µg/L	533.19	ppb	10:09:37
2	Sc RADIAL	113841.8	113841.8	102	%			10:08:33
2	Al 396.153Radial†	10286.6	9953.9	5241.0	µg/L	5241.0	ppb	10:08:33
2	Ca 317.933Radial†	13764.9	13127.2	5296.1	µg/L	5296.1	ppb	10:08:53
2	Fe 238.204 Radial†	1029.2	1000.4	5329.4	µg/L	5329.4	ppb	10:08:53
2	K 766.490 Radial†	10234.5	9320.5	5258.1	µg/L	5258.1	ppb	10:08:33
2	Mg 279.077 IEC†	984.4	952.3	5377.8	µg/L	5377.8	ppb	10:08:53
2	Na 589.592 Radial†	37462.7	37251.7	10507	µg/L	10507	ppb	10:08:33
2	Sr 421.552†	90280.7	88895.5	513.03	µg/L	513.03	ppb	10:08:33
2	Sc 361.383	2030674.1	2030674.1	101.14	%			10:10:04
2	Y 371.029	1229184.0	1229184.0	100.48	%			10:10:04
2	Ag 328.068†	55563.1	54954.5	525.04	µg/L	525.04	ppb	10:10:10
2	As 188.979†	272.7	266.5	516.53	µg/L	516.53	ppb	10:10:30
2	B 249.677†	11648.3	11355.6	526.38	µg/L	526.38	ppb	10:10:10
2	Ba 233.527†	19836.5	19685.8	527.70	µg/L	527.70	ppb	10:10:10
2	Be 313.107†	805663.5	792985.0	516.63	µg/L	516.63	ppb	10:10:04
2	Cd 226.502†	19066.3	18949.5	533.00	µg/L	533.00	ppb	10:10:10
2	Co 228.616†	10450.3	10402.6	528.72	µg/L	528.72	ppb	10:10:10
2	Cr 267.716†	23829.6	23685.9	526.98	µg/L	526.98	ppb	10:10:10
2	Cu 324.752†	74722.2	70573.1	505.34	µg/L	505.34	ppb	10:10:10
2	Mn 257.610†	158256.3	156724.5	516.33	µg/L	516.33	ppb	10:10:04
2	Mo 202.031†	4397.4	4352.7	519.94	µg/L	519.94	ppb	10:10:30
2	Ni 231.604†	9531.8	9133.6	527.11	µg/L	527.11	ppb	10:10:10
2	P 214.914†	1370.4	1165.0	2537.6	µg/L	2537.6	ppb	10:10:30
2	Pb 220.353†	2054.1	1980.0	523.84	µg/L	523.84	ppb	10:10:30

2	S 181.975 Axial†	219.7	191.6	1023.6 µg/L	1023.6 ppb	10:10:30
2	Sb 206.836†	532.8	502.7	523.49 µg/L	523.49 ppb	10:10:30
2	Se 196.026†	377.9	362.9	538.00 µg/L	538.00 ppb	10:10:30
2	SiO2†	30276.7	27902.7	5660.3 µg/L	5660.3 ppb	10:10:10
2	Si 251.611†	33249.5	32518.8	2596.4 µg/L	2596.4 ppb	10:10:10
2	Sn 189.927†	1043.5	1009.4	517.02 µg/L	517.02 ppb	10:10:30
2	Ti 334.940†	225097.6	221767.8	510.17 µg/L	510.17 ppb	10:10:04
2	Tl 190.801†	314.4	331.0	522.84 µg/L	522.84 ppb	10:10:30
2	U 409.014†	6012.5	5243.3	522.08 µg/L	522.08 ppb	10:10:10
2	V 292.402†	44038.0	43633.3	528.59 µg/L	528.59 ppb	10:10:10
2	Zn 213.857†	19673.5	18924.4	530.57 µg/L	530.57 ppb	10:10:10
3	Sc RADIAL	113430.7	113430.7	101 %		10:08:59
3	Al 396.153Radial†	10331.9	10035.3	5284.2 µg/L	5284.2 ppb	10:08:59
3	Ca 317.933Radial†	13846.0	13256.3	5348.2 µg/L	5348.2 ppb	10:09:19
3	Fe 238.204 Radial†	1030.4	1005.3	5355.1 µg/L	5355.1 ppb	10:09:19
3	K 766.490 Radial†	10279.6	9401.5	5303.8 µg/L	5303.8 ppb	10:08:59
3	Mg 279.077 IEC†	992.4	963.7	5442.1 µg/L	5442.1 ppb	10:09:19
3	Na 589.592 Radial†	37636.8	37557.2	10593 µg/L	10593 ppb	10:08:59
3	Sr 421.552†	90882.5	89811.5	518.32 µg/L	518.32 ppb	10:08:59
3	Sc 361.383	2026788.4	2026788.4	100.94 %		10:10:37
3	Y 371.029	1226999.3	1226999.3	100.30 %		10:10:37
3	Ag 328.068†	55706.2	55201.7	527.40 µg/L	527.40 ppb	10:10:43
3	As 188.979†	269.9	264.2	512.12 µg/L	512.12 ppb	10:11:04
3	B 249.677†	11671.1	11400.3	528.45 µg/L	528.45 ppb	10:10:43
3	Ba 233.527†	19869.6	19756.3	529.59 µg/L	529.59 ppb	10:10:43
3	Be 313.107†	809784.7	798594.9	520.28 µg/L	520.28 ppb	10:10:37
3	Cd 226.502†	19092.3	19011.4	534.74 µg/L	534.74 ppb	10:10:43
3	Co 228.616†	10486.3	10458.1	531.53 µg/L	531.53 ppb	10:10:43
3	Cr 267.716†	23914.7	23815.3	529.86 µg/L	529.86 ppb	10:10:43
3	Cu 324.752†	74956.1	70946.4	508.01 µg/L	508.01 ppb	10:10:43
3	Mn 257.610†	159111.4	157871.6	520.11 µg/L	520.11 ppb	10:10:37
3	Mo 202.031†	4351.6	4315.6	515.52 µg/L	515.52 ppb	10:11:04
3	Ni 231.604†	9623.0	9242.0	533.37 µg/L	533.37 ppb	10:10:43
3	P 214.914†	1349.2	1146.6	2496.2 µg/L	2496.2 ppb	10:11:04
3	Pb 220.353†	2035.8	1965.7	520.07 µg/L	520.07 ppb	10:11:04
3	S 181.975 Axial†	219.5	191.8	1024.5 µg/L	1024.5 ppb	10:11:04
3	Sb 206.836†	524.8	495.7	516.26 µg/L	516.26 ppb	10:11:04
3	Se 196.026†	371.1	356.8	529.08 µg/L	529.08 ppb	10:11:04
3	SiO2†	30299.3	27982.4	5676.4 µg/L	5676.4 ppb	10:10:43
3	Si 251.611†	33320.7	32652.4	2607.3 µg/L	2607.3 ppb	10:10:43
3	Sn 189.927†	1034.7	1002.6	513.61 µg/L	513.61 ppb	10:11:04
3	Ti 334.940†	226327.5	223412.9	513.95 µg/L	513.95 ppb	10:10:37
3	Tl 190.801†	312.3	329.5	520.56 µg/L	520.56 ppb	10:11:04
3	U 409.014†	5934.6	5177.5	515.52 µg/L	515.52 ppb	10:10:43
3	V 292.402†	44126.8	43804.7	530.61 µg/L	530.61 ppb	10:10:43
3	Zn 213.857†	19672.5	18960.8	531.55 µg/L	531.55 ppb	10:10:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2022973.1	100.75	%	0.506				0.50%
Sc RADIAL	113586.2	101	%	0.2				0.20%
Y 371.029	1224437.0	100.09	%	0.525				0.52%
Ag 328.068†	55110.4	526.54	µg/L	1.297	526.54	ppb	1.297	0.25%
QC value within limits for Ag 328.068 Recovery = 105.31%								
Al 396.153Radial†	10026.7	5279.5	µg/L	36.37	5279.5	ppb	36.37	0.69%
QC value within limits for Al 396.153Radial Recovery = 105.59%								
As 188.979†	266.5	516.49	µg/L	4.353	516.49	ppb	4.353	0.84%
QC value within limits for As 188.979 Recovery = 103.30%								
B 249.677†	11392.2	528.07	µg/L	1.539	528.07	ppb	1.539	0.29%
QC value within limits for B 249.677 Recovery = 105.61%								
Ba 233.527†	19742.8	529.23	µg/L	1.382	529.23	ppb	1.382	0.26%
QC value within limits for Ba 233.527 Recovery = 105.85%								
Be 313.107†	795445.4	518.23	µg/L	1.868	518.23	ppb	1.868	0.36%
QC value within limits for Be 313.107 Recovery = 103.65%								
Ca 317.933Radial†	13206.3	5328.0	µg/L	27.96	5328.0	ppb	27.96	0.52%
QC value within limits for Ca 317.933Radial Recovery = 106.56%								
Cd 226.502†	19008.6	534.66	µg/L	1.624	534.66	ppb	1.624	0.30%
QC value within limits for Cd 226.502 Recovery = 106.93%								
Co 228.616†	10446.7	530.96	µg/L	2.012	530.96	ppb	2.012	0.38%

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   QC value within limits for Co 228.616  Recovery = 106.19%
Cr 267.716†            23762.5      528.68 µg/L        1.510      528.68 ppb          1.510   0.29%
   QC value within limits for Cr 267.716  Recovery = 105.74%
Cu 324.752†            70845.0      507.29 µg/L        1.707      507.29 ppb          1.707   0.34%
   QC value within limits for Cu 324.752  Recovery = 101.46%
Fe 238.204 Radial†      1005.8      5358.2 µg/L       30.37      5358.2 ppb          30.37   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.16%
K 766.490 Radial†       9370.6      5286.3 µg/L       24.69      5286.3 ppb          24.69   0.47%
   QC value within limits for K 766.490 Radial  Recovery = 105.73%
Mg 279.077 IEC†          961.0      5427.0 µg/L       43.69      5427.0 ppb          43.69   0.81%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.54%
Mn 257.610†           157180.0      517.83 µg/L        2.004      517.83 ppb          2.004   0.39%
   QC value within limits for Mn 257.610  Recovery = 103.57%
Mo 202.031†             4352.2      519.88 µg/L        4.331      519.88 ppb          4.331   0.83%
   QC value within limits for Mo 202.031  Recovery = 103.98%
Na 589.592 Radial†     37400.9       10549 µg/L         43.1       10549 ppb           43.1   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 105.49%
Ni 231.604†             9176.5      529.59 µg/L        3.326      529.59 ppb          3.326   0.63%
   QC value within limits for Ni 231.604  Recovery = 105.92%
P 214.914†              1160.8      2528.0 µg/L       28.21      2528.0 ppb          28.21   1.12%
   QC value within limits for P 214.914  Recovery = 101.12%
Pb 220.353†             1975.6      522.68 µg/L        2.264      522.68 ppb          2.264   0.43%
   QC value within limits for Pb 220.353  Recovery = 104.54%
S 181.975 Axial†         193.1      1031.8 µg/L       13.49      1031.8 ppb          13.49   1.31%
   QC value within limits for S 181.975 Axial  Recovery = 103.18%
Sb 206.836†              498.1      518.76 µg/L        4.098      518.76 ppb          4.098   0.79%
   QC value within limits for Sb 206.836  Recovery = 103.75%
Se 196.026†              362.4      537.39 µg/L        8.025      537.39 ppb          8.025   1.49%
   QC value within limits for Se 196.026  Recovery = 107.48%
SiO2†                   27971.6      5674.2 µg/L       13.02      5674.2 ppb          13.02   0.23%
   QC value within limits for SiO2  Recovery = 106.11%
Si 251.611†             32640.2      2606.2 µg/L        9.25      2606.2 ppb           9.25   0.36%
   QC value within limits for Si 251.611  Recovery = 104.25%
Sn 189.927†             1010.9      517.84 µg/L        4.695      517.84 ppb          4.695   0.91%
   QC value within limits for Sn 189.927  Recovery = 103.57%
Sr 421.552†             89376.6      515.81 µg/L        2.653      515.81 ppb          2.653   0.51%
   QC value within limits for Sr 421.552  Recovery = 103.16%
Ti 334.940†            222512.3      511.88 µg/L        1.917      511.88 ppb          1.917   0.37%
   QC value within limits for Ti 334.940  Recovery = 102.38%
Tl 190.801†              333.8      527.30 µg/L        9.773      527.30 ppb          9.773   1.85%
   QC value within limits for Tl 190.801  Recovery = 105.46%
U 409.014†              5236.4      521.39 µg/L        5.566      521.39 ppb          5.566   1.07%
   QC value within limits for U 409.014  Recovery = 104.28%
V 292.402†              43771.8      530.25 µg/L        1.518      530.25 ppb          1.518   0.29%
   QC value within limits for V 292.402  Recovery = 106.05%
Zn 213.857†             18967.7      531.77 µg/L        1.323      531.77 ppb          1.323   0.25%
   QC value within limits for Zn 213.857  Recovery = 106.35%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 10:11:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113537.7	113537.7	101	%			10:11:45
1	Al 396.153Radial†	252.2	84.4	44.553	µg/L	44.553	ppb	10:11:45
1	Ca 317.933Radial†	496.9	77.5	31.264	µg/L	31.264	ppb	10:12:06
1	Fe 238.204 Radial†	13.5	1.3	7.0047	µg/L	7.0047	ppb	10:12:06
1	K 766.490 Radial†	856.4	98.0	55.279	µg/L	55.279	ppb	10:11:45
1	Mg 279.077 IEC†	27.7	11.3	63.610	µg/L	63.610	ppb	10:12:06
1	Na 589.592 Radial†	-478.1	-69.9	-19.721	µg/L	-19.721	ppb	10:11:45
1	Sr 421.552†	-27.6	64.1	0.3697	µg/L	0.3697	ppb	10:11:45
1	Sc 361.383	2028385.1	2028385.1	101.02	%			10:13:08
1	Y 371.029	1233307.6	1233307.6	100.81	%			10:13:08
1	Ag 328.068†	81.2	96.7	0.9196	µg/L	0.9196	ppb	10:13:13
1	As 188.979†	0.9	-2.2	-4.3025	µg/L	-4.3025	ppb	10:13:34
1	B 249.677†	255.5	91.2	4.2393	µg/L	4.2393	ppb	10:13:13
1	Ba 233.527†	-49.8	23.1	0.6190	µg/L	0.6190	ppb	10:13:34
1	Be 313.107†	3801.8	144.4	0.0940	µg/L	0.0940	ppb	10:13:13
1	Cd 226.502†	-71.4	26.9	0.7557	µg/L	0.7557	ppb	10:13:34
1	Co 228.616†	-62.4	8.0	0.4090	µg/L	0.4090	ppb	10:13:34
1	Cr 267.716†	-64.0	60.8	1.3515	µg/L	1.3515	ppb	10:13:13
1	Cu 324.752†	3365.6	22.6	0.1627	µg/L	0.1627	ppb	10:13:13
1	Mn 257.610†	-67.0	181.6	0.5982	µg/L	0.5982	ppb	10:13:34
1	Mo 202.031†	1.7	6.4	0.7671	µg/L	0.7671	ppb	10:13:34
1	Ni 231.604†	306.3	12.2	0.7042	µg/L	0.7042	ppb	10:13:34
1	P 214.914†	191.5	-0.4	-0.9798	µg/L	-0.9798	ppb	10:13:34
1	Pb 220.353†	54.8	3.3	0.8747	µg/L	0.8747	ppb	10:13:34
1	S 181.975 Axial†	26.1	0.2	0.9982	µg/L	0.9982	ppb	10:13:34
1	Sb 206.836†	15.9	-8.4	-8.8231	µg/L	-8.8231	ppb	10:13:34
1	Se 196.026†	8.2	-2.6	-3.9028	µg/L	-3.9028	ppb	10:13:34
1	SiO2†	2099.2	44.4	8.9975	µg/L	8.9975	ppb	10:13:13
1	Si 251.611†	407.6	46.6	3.7329	µg/L	3.7329	ppb	10:13:34
1	Sn 189.927†	23.2	0.6	0.3192	µg/L	0.3192	ppb	10:13:34
1	Ti 334.940†	993.4	184.8	0.4237	µg/L	0.4237	ppb	10:13:13
1	Tl 190.801†	-16.5	3.8	5.9396	µg/L	5.9396	ppb	10:13:34
1	U 409.014†	707.1	-1.6	-0.1643	µg/L	-0.1643	ppb	10:13:13
1	V 292.402†	-60.1	31.1	0.3784	µg/L	0.3784	ppb	10:13:13
1	Zn 213.857†	563.1	29.6	0.8299	µg/L	0.8299	ppb	10:13:34
2	Sc RADIAL	114686.0	114686.0	102	%			10:12:11
2	Al 396.153Radial†	230.8	60.9	32.164	µg/L	32.164	ppb	10:12:11
2	Ca 317.933Radial†	518.6	93.7	37.818	µg/L	37.818	ppb	10:12:32
2	Fe 238.204 Radial†	12.1	-0.2	-0.9304	µg/L	-0.9304	ppb	10:12:32
2	K 766.490 Radial†	868.8	101.7	57.349	µg/L	57.349	ppb	10:12:11
2	Mg 279.077 IEC†	22.6	6.1	34.344	µg/L	34.344	ppb	10:12:32
2	Na 589.592 Radial†	-475.1	-62.2	-17.547	µg/L	-17.547	ppb	10:12:11
2	Sr 421.552†	47.8	138.0	0.7964	µg/L	0.7964	ppb	10:12:11
2	Sc 361.383	2030887.1	2030887.1	101.15	%			10:13:40
2	Y 371.029	1234961.1	1234961.1	100.95	%			10:13:40
2	Ag 328.068†	45.2	60.9	0.5860	µg/L	0.5860	ppb	10:13:46
2	As 188.979†	-2.9	-6.1	-11.784	µg/L	-11.784	ppb	10:14:06
2	B 249.677†	217.6	53.4	2.4843	µg/L	2.4843	ppb	10:13:46
2	Ba 233.527†	-32.2	40.6	1.0893	µg/L	1.0893	ppb	10:14:06
2	Be 313.107†	4126.5	460.8	0.3000	µg/L	0.3000	ppb	10:13:46
2	Cd 226.502†	-52.0	46.2	1.2997	µg/L	1.2997	ppb	10:14:06
2	Co 228.616†	-51.2	19.2	0.9750	µg/L	0.9750	ppb	10:14:06
2	Cr 267.716†	-5.7	118.6	2.6352	µg/L	2.6352	ppb	10:13:46
2	Cu 324.752†	3434.5	86.6	0.6183	µg/L	0.6183	ppb	10:13:46
2	Mn 257.610†	17.6	265.3	0.8726	µg/L	0.8726	ppb	10:14:06
2	Mo 202.031†	0.0	4.8	0.5698	µg/L	0.5698	ppb	10:14:06
2	Ni 231.604†	320.6	25.9	1.4943	µg/L	1.4943	ppb	10:14:06
2	P 214.914†	193.1	0.9	1.9459	µg/L	1.9459	ppb	10:14:06
2	Pb 220.353†	67.9	16.1	4.2626	µg/L	4.2626	ppb	10:14:06

2	S 181.975 Axial†	24.7	-1.3	-7.0642 µg/L	-7.0642 ppb	10:14:06
2	Sb 206.836†	28.0	3.5	3.6351 µg/L	3.6351 ppb	10:14:06
2	Se 196.026†	12.6	1.7	2.4587 µg/L	2.4587 ppb	10:14:06
2	SiO2†	2123.7	66.0	13.390 µg/L	13.390 ppb	10:13:46
2	Si 251.611†	433.4	71.7	5.8638 µg/L	5.8638 ppb	10:14:06
2	Sn 189.927†	17.7	-4.9	-2.4810 µg/L	-2.4810 ppb	10:14:06
2	Ti 334.940†	1220.3	407.9	0.9368 µg/L	0.9368 ppb	10:13:46
2	Tl 190.801†	-15.2	5.1	7.9832 µg/L	7.9832 ppb	10:14:06
2	U 409.014†	723.3	13.5	1.3466 µg/L	1.3466 ppb	10:13:46
2	V 292.402†	9.3	99.8	1.2033 µg/L	1.2033 ppb	10:13:46
2	Zn 213.857†	595.0	60.4	1.6966 µg/L	1.6966 ppb	10:14:06
3	Sc RADIAL	113545.2	113545.2	101 %		10:12:37
3	Al 396.153Radial†	211.9	44.5	23.507 µg/L	23.507 ppb	10:12:37
3	Ca 317.933Radial†	488.8	69.4	28.013 µg/L	28.013 ppb	10:12:57
3	Fe 238.204 Radial†	11.7	-0.4	-2.3299 µg/L	-2.3299 ppb	10:12:57
3	K 766.490 Radial†	850.1	91.8	51.765 µg/L	51.765 ppb	10:12:37
3	Mg 279.077 IEC†	16.7	0.4	2.3758 µg/L	2.3758 ppb	10:12:57
3	Na 589.592 Radial†	-455.9	-48.0	-13.533 µg/L	-13.533 ppb	10:12:37
3	Sr 421.552†	46.4	137.1	0.7913 µg/L	0.7913 ppb	10:12:37
3	Sc 361.383	2031816.9	2031816.9	101.19 %		10:14:12
3	Y 371.029	1235932.0	1235932.0	101.03 %		10:14:12
3	Ag 328.068†	77.8	93.2	0.8883 µg/L	0.8883 ppb	10:14:18
3	As 188.979†	0.5	-2.6	-5.0734 µg/L	-5.0734 ppb	10:14:38
3	B 249.677†	223.6	59.2	2.7528 µg/L	2.7528 ppb	10:14:18
3	Ba 233.527†	-24.0	48.7	1.3038 µg/L	1.3038 ppb	10:14:38
3	Be 313.107†	4143.3	475.5	0.3096 µg/L	0.3096 ppb	10:14:18
3	Cd 226.502†	-64.2	34.1	0.9605 µg/L	0.9605 ppb	10:14:38
3	Co 228.616†	-48.7	21.7	1.1042 µg/L	1.1042 ppb	10:14:38
3	Cr 267.716†	-30.9	93.7	2.0811 µg/L	2.0811 ppb	10:14:18
3	Cu 324.752†	3507.2	156.9	1.1202 µg/L	1.1202 ppb	10:14:18
3	Mn 257.610†	12.3	260.0	0.8551 µg/L	0.8551 ppb	10:14:38
3	Mo 202.031†	2.3	7.0	0.8362 µg/L	0.8362 ppb	10:14:38
3	Ni 231.604†	330.3	35.3	2.0391 µg/L	2.0391 ppb	10:14:38
3	P 214.914†	193.2	0.9	1.8677 µg/L	1.8677 ppb	10:14:38
3	Pb 220.353†	63.4	11.7	3.0837 µg/L	3.0837 ppb	10:14:38
3	S 181.975 Axial†	22.9	-3.1	-16.609 µg/L	-16.609 ppb	10:14:38
3	Sb 206.836†	19.9	-4.4	-4.6546 µg/L	-4.6546 ppb	10:14:38
3	Se 196.026†	12.3	1.4	2.0681 µg/L	2.0681 ppb	10:14:38
3	SiO2†	2107.7	49.2	9.9831 µg/L	9.9831 ppb	10:14:18
3	Si 251.611†	434.6	72.7	5.9087 µg/L	5.9087 ppb	10:14:38
3	Sn 189.927†	19.5	-3.1	-1.5781 µg/L	-1.5781 ppb	10:14:38
3	Ti 334.940†	1186.5	374.0	0.8592 µg/L	0.8592 ppb	10:14:18
3	Tl 190.801†	-14.7	5.6	8.7730 µg/L	8.7730 ppb	10:14:38
3	U 409.014†	691.2	-18.5	-1.8470 µg/L	-1.8470 ppb	10:14:18
3	V 292.402†	-26.5	64.4	0.7751 µg/L	0.7751 ppb	10:14:18
3	Zn 213.857†	587.1	52.3	1.4658 µg/L	1.4658 ppb	10:14:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030363.1	101.12	%	0.088				0.09%
Sc RADIAL	113923.0	102	%	0.6				0.58%
Y 371.029	1234733.6	100.93	%	0.108				0.11%
Ag 328.068†	83.6	0.7980	µg/L	0.18427	0.7980	ppb	0.18427	23.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	63.3	33.408	µg/L	10.5777	33.408	ppb	10.5777	31.66%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.0535	µg/L	4.11524	-7.0535	ppb	4.11524	58.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	67.9	3.1588	µg/L	0.94534	3.1588	ppb	0.94534	29.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	37.5	1.0040	µg/L	0.35031	1.0040	ppb	0.35031	34.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	360.2	0.2345	µg/L	0.12182	0.2345	ppb	0.12182	51.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	80.2	32.365	µg/L	4.9945	32.365	ppb	4.9945	15.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	35.7	1.0053	µg/L	0.27474	1.0053	ppb	0.27474	27.33%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	16.3	0.8294	µg/L	0.36973	0.8294	ppb	0.36973	44.58%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              91.0      2.0226 µg/L       0.64386      2.0226 ppb        0.64386  31.83%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              88.7      0.6337 µg/L       0.47893      0.6337 ppb        0.47893  75.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.2      1.2481 µg/L       5.03419      1.2481 ppb        5.03419 403.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        97.1      54.797 µg/L        2.8226      54.797 ppb         2.8226   5.15%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           5.9      33.443 µg/L       30.6272      33.443 ppb        30.6272  91.58%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             235.6      0.7753 µg/L       0.15360      0.7753 ppb        0.15360  19.81%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.1      0.7244 µg/L       0.13824      0.7244 ppb        0.13824  19.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -60.0     -16.934 µg/L        3.1389     -16.934 ppb         3.1389  18.54%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              24.5      1.4125 µg/L       0.67120      1.4125 ppb        0.67120  47.52%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                0.5      0.9446 µg/L       1.66706      0.9446 ppb        1.66706 176.48%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.4      2.7403 µg/L       1.71983      2.7403 ppb        1.71983  62.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.4     -7.5584 µg/L       8.81410     -7.5584 ppb        8.81410 116.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -3.1     -3.2809 µg/L       6.34170     -3.2809 ppb        6.34170 193.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.1      0.2080 µg/L       3.56541      0.2080 ppb        3.56541 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    53.2      10.790 µg/L        2.3050      10.790 ppb         2.3050  21.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              63.7      5.1685 µg/L       1.24347      5.1685 ppb        1.24347  24.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -2.5     -1.2467 µg/L       1.42922     -1.2467 ppb        1.42922 114.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             113.1      0.6525 µg/L       0.24489      0.6525 ppb        0.24489  37.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             322.2      0.7399 µg/L       0.27657      0.7399 ppb        0.27657  37.38%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.8      7.5653 µg/L       1.46220      7.5653 ppb        1.46220  19.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -2.2     -0.2216 µg/L       1.59758     -0.2216 ppb        1.59758 721.01%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               65.1      0.7856 µg/L       0.41257      0.7856 ppb        0.41257  52.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              47.4      1.3308 µg/L       0.44885      1.3308 ppb        0.44885  33.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/14/2009 10:23:37 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409A.sif
Batch ID:
Results Data Set: 121409A
Results Library: c:\pe\optima1\Results\Results.mdb

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Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/14/2009 09:32:02**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 113**
Sample ID: LR2 **Date Collected: 12/14/2009 10:23:39**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113428.7	113428.7	101	%			10:24:13
1	Al 396.153Radial†	198.7	31.7	16.714	µg/L	16.714	ppb	10:24:13
1	Ca 317.933Radial†	471.6	53.0	21.379	µg/L	21.379	ppb	10:24:34
1	Fe 238.204 Radial†	10.8	-1.3	-6.9400	µg/L	-6.9400	ppb	10:24:34

1	K 766.490 Radial†	846.6	89.1	50.266 µg/L	50.266 ppb	10:24:13
1	Mg 279.077 IEC†	17.3	1.1	6.0474 µg/L	6.0474 ppb	10:24:34
1	Na 589.592 Radial†	-556.2	-147.4	-41.575 µg/L	-41.575 ppb	10:24:13
1	Sr 421.552†	-49.1	42.8	0.2473 µg/L	0.2473 ppb	10:24:13
1	Sc 361.383	2015299.5	2015299.5	100.37 %		10:25:36
1	Y 371.029	1226931.4	1226931.4	100.29 %		10:25:36
1	Ag 328.068†	23.5	39.7	0.3769 µg/L	0.3769 ppb	10:25:42
1	As 188.979†	1.8	-1.4	-2.7052 µg/L	-2.7052 ppb	10:26:02
1	B 249.677†	169.6	7.2	0.3368 µg/L	0.3368 ppb	10:25:42
1	Ba 233.527†	403272.5	401852.1	10750 µg/L	10750 ppb	10:25:36
1	Be 313.107†	3753.9	121.1	0.0788 µg/L	0.0788 ppb	10:25:42
1	Cd 226.502†	-87.5	10.5	0.2946 µg/L	0.2946 ppb	10:26:02
1	Co 228.616†	13.1	82.9	4.2118 µg/L	4.2118 ppb	10:26:02
1	Cr 267.716†	-78.8	45.8	1.0161 µg/L	1.0161 ppb	10:25:42
1	Cu 324.752†	3294.3	-26.8	-0.1933 µg/L	-0.1933 ppb	10:25:42
1	Mn 257.610†	-183.3	65.2	0.2136 µg/L	0.2136 ppb	10:26:02
1	Mo 202.031†	3.7	8.4	1.0050 µg/L	1.0050 ppb	10:26:02
1	Ni 231.604†	345.9	53.6	3.0938 µg/L	3.0938 ppb	10:26:02
1	P 214.914†	190.0	-0.7	-1.5423 µg/L	-1.5423 ppb	10:26:02
1	Pb 220.353†	52.9	1.7	0.4647 µg/L	0.4647 ppb	10:26:02
1	S 181.975 Axial†	25.3	-0.5	-2.5643 µg/L	-2.5643 ppb	10:26:02
1	Sb 206.836†	20.1	-4.1	-4.2699 µg/L	-4.2699 ppb	10:26:02
1	Se 196.026†	15.6	4.7	6.9919 µg/L	6.9919 ppb	10:26:02
1	SiO2†	2026.9	-14.2	-2.8872 µg/L	-2.8872 ppb	10:25:42
1	Si 251.611†	364.6	6.4	0.5417 µg/L	0.5417 ppb	10:26:02
1	Sn 189.927†	19.1	-3.4	-1.7099 µg/L	-1.7099 ppb	10:26:02
1	Ti 334.940†	959.8	157.7	0.3618 µg/L	0.3618 ppb	10:25:42
1	Tl 190.801†	-22.2	-2.0	-3.1488 µg/L	-3.1488 ppb	10:26:02
1	U 409.014†	660.9	-43.2	-4.3028 µg/L	-4.3028 ppb	10:25:42
1	V 292.402†	-80.4	10.4	0.1241 µg/L	0.1241 ppb	10:25:42
1	Zn 213.857†	559.7	29.8	0.8262 µg/L	0.8262 ppb	10:26:02
2	Sc RADIAL	113221.8	113221.8	101 %		10:24:39
2	Al 396.153Radial†	217.3	50.5	26.726 µg/L	26.726 ppb	10:24:39
2	Ca 317.933Radial†	487.7	69.7	28.129 µg/L	28.129 ppb	10:25:00
2	Fe 238.204 Radial†	14.3	2.2	11.789 µg/L	11.789 ppb	10:25:00
2	K 766.490 Radial†	814.5	58.9	33.242 µg/L	33.242 ppb	10:24:39
2	Mg 279.077 IEC†	23.0	6.7	37.969 µg/L	37.969 ppb	10:25:00
2	Na 589.592 Radial†	-552.1	-144.3	-40.714 µg/L	-40.714 ppb	10:24:39
2	Sr 421.552†	-33.4	58.3	0.3364 µg/L	0.3364 ppb	10:24:39
2	Sc 361.383	2031897.6	2031897.6	101.20 %		10:26:09
2	Y 371.029	1237118.6	1237118.6	101.12 %		10:26:09
2	Ag 328.068†	24.2	40.2	0.3838 µg/L	0.3838 ppb	10:26:14
2	As 188.979†	-0.3	-3.5	-6.7764 µg/L	-6.7764 ppb	10:26:35
2	B 249.677†	189.9	25.9	1.1994 µg/L	1.1994 ppb	10:26:14
2	Ba 233.527†	406926.5	402180.8	10758 µg/L	10758 ppb	10:26:09
2	Be 313.107†	3695.0	32.4	0.0211 µg/L	0.0211 ppb	10:26:14
2	Cd 226.502†	-88.4	10.3	0.2879 µg/L	0.2879 ppb	10:26:35
2	Co 228.616†	20.6	90.2	4.5788 µg/L	4.5788 ppb	10:26:35
2	Cr 267.716†	-108.3	17.2	0.3832 µg/L	0.3832 ppb	10:26:14
2	Cu 324.752†	3299.8	-48.2	-0.3417 µg/L	-0.3417 ppb	10:26:14
2	Mn 257.610†	-174.1	75.8	0.2508 µg/L	0.2508 ppb	10:26:35
2	Mo 202.031†	-12.3	-7.4	-0.8790 µg/L	-0.8790 ppb	10:26:35
2	Ni 231.604†	346.9	51.8	2.9897 µg/L	2.9897 ppb	10:26:35
2	P 214.914†	192.9	0.6	1.4012 µg/L	1.4012 ppb	10:26:35
2	Pb 220.353†	49.9	-1.7	-0.4473 µg/L	-0.4473 ppb	10:26:35
2	S 181.975 Axial†	27.2	1.1	6.1384 µg/L	6.1384 ppb	10:26:35
2	Sb 206.836†	21.3	-3.1	-3.2586 µg/L	-3.2586 ppb	10:26:35
2	Se 196.026†	14.1	3.1	4.6114 µg/L	4.6114 ppb	10:26:35
2	SiO2†	2028.9	-28.7	-5.8213 µg/L	-5.8213 ppb	10:26:14
2	Si 251.611†	353.5	-7.4	-0.5958 µg/L	-0.5958 ppb	10:26:35
2	Sn 189.927†	22.1	-0.5	-0.2637 µg/L	-0.2637 ppb	10:26:35
2	Ti 334.940†	861.9	53.1	0.1207 µg/L	0.1207 ppb	10:26:14
2	Tl 190.801†	-22.1	-1.8	-2.7979 µg/L	-2.7979 ppb	10:26:35
2	U 409.014†	666.6	-42.9	-4.2818 µg/L	-4.2818 ppb	10:26:14
2	V 292.402†	-74.0	17.4	0.1962 µg/L	0.1962 ppb	10:26:14
2	Zn 213.857†	561.0	26.5	0.7328 µg/L	0.7328 ppb	10:26:35
3	Sc RADIAL	113206.0	113206.0	101 %		10:25:05
3	Al 396.153Radial†	226.1	59.2	31.278 µg/L	31.278 ppb	10:25:05
3	Ca 317.933Radial†	467.4	49.8	20.075 µg/L	20.075 ppb	10:25:26
3	Fe 238.204 Radial†	10.8	-1.2	-6.4720 µg/L	-6.4720 ppb	10:25:26
3	K 766.490 Radial†	753.2	-1.6	-0.9013 µg/L	-0.9013 ppb	10:25:05

3	Mg 279.077 IEC†	20.7	4.5	25.429 µg/L	25.429 ppb	10:25:26
3	Na 589.592 Radial†	-567.4	-159.6	-45.020 µg/L	-45.020 ppb	10:25:05
3	Sr 421.552†	-58.3	33.6	0.1941 µg/L	0.1941 ppb	10:25:05
3	Sc 361.383	2027780.3	2027780.3	100.99 %		10:26:41
3	Y 371.029	1235476.0	1235476.0	100.99 %		10:26:41
3	Ag 328.068†	-19.2	-2.8	-0.0241 µg/L	-0.0241 ppb	10:26:47
3	As 188.979†	-1.9	-5.1	-9.8574 µg/L	-9.8574 ppb	10:27:07
3	B 249.677†	180.9	17.4	0.8092 µg/L	0.8092 ppb	10:26:47
3	Ba 233.527†	404106.1	400204.6	10706 µg/L	10706 ppb	10:26:41
3	Be 313.107†	3785.8	129.8	0.0844 µg/L	0.0844 ppb	10:26:47
3	Cd 226.502†	-91.3	7.2	0.2049 µg/L	0.2049 ppb	10:27:07
3	Co 228.616†	15.7	85.3	4.3356 µg/L	4.3356 ppb	10:27:07
3	Cr 267.716†	-121.2	4.2	0.0937 µg/L	0.0937 ppb	10:26:47
3	Cu 324.752†	3308.6	-32.9	-0.2365 µg/L	-0.2365 ppb	10:26:47
3	Mn 257.610†	-165.1	84.4	0.2767 µg/L	0.2767 ppb	10:27:07
3	Mo 202.031†	-1.8	3.0	0.3600 µg/L	0.3600 ppb	10:27:07
3	Ni 231.604†	347.0	52.6	3.0349 µg/L	3.0349 ppb	10:27:07
3	P 214.914†	198.7	6.7	14.935 µg/L	14.935 ppb	10:27:07
3	Pb 220.353†	61.0	9.4	2.5000 µg/L	2.5000 ppb	10:27:07
3	S 181.975 Axial†	25.9	-0.0	-0.2542 µg/L	-0.2542 ppb	10:27:07
3	Sb 206.836†	23.7	-0.7	-0.7034 µg/L	-0.7034 ppb	10:27:07
3	Se 196.026†	6.8	-4.0	-5.9721 µg/L	-5.9721 ppb	10:27:07
3	SiO2†	2025.3	-28.2	-5.7180 µg/L	-5.7180 ppb	10:26:47
3	Si 251.611†	368.8	8.4	0.7746 µg/L	0.7746 ppb	10:27:07
3	Sn 189.927†	16.9	-5.6	-2.8491 µg/L	-2.8491 ppb	10:27:07
3	Ti 334.940†	953.9	146.0	0.3349 µg/L	0.3349 ppb	10:26:47
3	Tl 190.801†	-21.4	-1.1	-1.6806 µg/L	-1.6806 ppb	10:27:07
3	U 409.014†	691.7	-16.7	-1.6634 µg/L	-1.6634 ppb	10:26:47
3	V 292.402†	-58.2	32.9	0.3945 µg/L	0.3945 ppb	10:26:47
3	Zn 213.857†	561.2	27.9	0.7722 µg/L	0.7722 ppb	10:27:07

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024992.5	100.85	%	0.430				0.43%
Sc RADIAL	113285.5	101	%	0.1				0.11%
Y 371.029	1233175.3	100.80	%	0.447				0.44%
Ag 328.068†	25.7	0.2455	µg/L	0.23349	0.2455	ppb	0.23349	95.10%
Al 396.153Radial†	47.1	24.906	µg/L	7.4502	24.906	ppb	7.4502	29.91%
As 188.979†	-3.3	-6.4463	µg/L	3.58753	-6.4463	ppb	3.58753	55.65%
B 249.677†	16.8	0.7818	µg/L	0.43192	0.7818	ppb	0.43192	55.25%
Ba 233.527†	401412.5	10738	µg/L	28.3	10738	ppb	28.3	0.26%
Be 313.107†	94.4	0.0614	µg/L	0.03506	0.0614	ppb	0.03506	57.06%
Ca 317.933Radial†	57.5	23.194	µg/L	4.3229	23.194	ppb	4.3229	18.64%
Cd 226.502†	9.3	0.2625	µg/L	0.04995	0.2625	ppb	0.04995	19.03%
Co 228.616†	86.1	4.3754	µg/L	0.18671	4.3754	ppb	0.18671	4.27%
Cr 267.716†	22.4	0.4977	µg/L	0.47173	0.4977	ppb	0.47173	94.79%
Cu 324.752†	-36.0	-0.2572	µg/L	0.07632	-0.2572	ppb	0.07632	29.68%
Fe 238.204 Radial†	-0.1	-0.5410	µg/L	10.68076	-0.5410	ppb	10.68076	>999.9%
K 766.490 Radial†	48.8	27.535	µg/L	26.0564	27.535	ppb	26.0564	94.63%
Mg 279.077 IEC†	4.1	23.148	µg/L	16.0825	23.148	ppb	16.0825	69.48%
Mn 257.610†	75.1	0.2470	µg/L	0.03172	0.2470	ppb	0.03172	12.84%
Mo 202.031†	1.4	0.1620	µg/L	0.95748	0.1620	ppb	0.95748	590.88%
Na 589.592 Radial†	-150.5	-42.436	µg/L	2.2787	-42.436	ppb	2.2787	5.37%
Ni 231.604†	52.7	3.0395	µg/L	0.05222	3.0395	ppb	0.05222	1.72%
P 214.914†	2.2	4.9312	µg/L	8.78741	4.9312	ppb	8.78741	178.20%
Pb 220.353†	3.2	0.8392	µg/L	1.50889	0.8392	ppb	1.50889	179.81%
S 181.975 Axial†	0.2	1.1066	µg/L	4.50812	1.1066	ppb	4.50812	407.37%
Sb 206.836†	-2.6	-2.7439	µg/L	1.83810	-2.7439	ppb	1.83810	66.99%
Se 196.026†	1.3	1.8770	µg/L	6.90102	1.8770	ppb	6.90102	367.65%
SiO2†	-23.7	-4.8089	µg/L	1.66498	-4.8089	ppb	1.66498	34.62%
Si 251.611†	2.5	0.2402	µg/L	0.73329	0.2402	ppb	0.73329	305.33%
Sn 189.927†	-3.2	-1.6076	µg/L	1.29575	-1.6076	ppb	1.29575	80.60%
Sr 421.552†	44.9	0.2593	µg/L	0.07192	0.2593	ppb	0.07192	27.74%
Ti 334.940†	118.9	0.2725	µg/L	0.13213	0.2725	ppb	0.13213	48.49%
Tl 190.801†	-1.6	-2.5424	µg/L	0.76671	-2.5424	ppb	0.76671	30.16%
U 409.014†	-34.3	-3.4160	µg/L	1.51780	-3.4160	ppb	1.51780	44.43%
V 292.402†	20.2	0.2383	µg/L	0.14001	0.2383	ppb	0.14001	58.76%
Zn 213.857†	28.1	0.7771	µg/L	0.04688	0.7771	ppb	0.04688	6.03%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:27:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114311.6	114311.6	102	%			10:27:52
1	Al 396.153Radial†	10318.5	9943.6	5235.7	µg/L	5235.7	ppb	10:27:52
1	Ca 317.933Radial†	13687.7	12996.0	5243.2	µg/L	5243.2	ppb	10:28:12
1	Fe 238.204 Radial†	1023.7	990.9	5278.4	µg/L	5278.4	ppb	10:28:12
1	K 766.490 Radial†	10176.8	9222.6	5202.8	µg/L	5202.8	ppb	10:27:52
1	Mg 279.077 IEC†	979.6	943.6	5328.8	µg/L	5328.8	ppb	10:28:12
1	Na 589.592 Radial†	37293.4	36934.4	10417	µg/L	10417	ppb	10:27:52
1	Sr 421.552†	90560.7	88804.9	512.51	µg/L	512.51	ppb	10:27:52
1	Sc 361.383	2027504.8	2027504.8	100.98	%			10:29:15
1	Y 371.029	1226162.8	1226162.8	100.23	%			10:29:15
1	Ag 328.068†	54896.9	54380.7	519.54	µg/L	519.54	ppb	10:29:21
1	As 188.979†	269.5	263.7	511.18	µg/L	511.18	ppb	10:29:42
1	B 249.677†	11391.3	11119.0	515.39	µg/L	515.39	ppb	10:29:21
1	Ba 233.527†	19537.8	19420.8	520.59	µg/L	520.59	ppb	10:29:21
1	Be 313.107†	799974.3	788596.2	513.77	µg/L	513.77	ppb	10:29:15
1	Cd 226.502†	18705.3	18621.5	523.77	µg/L	523.77	ppb	10:29:21
1	Co 228.616†	10308.2	10278.0	522.39	µg/L	522.39	ppb	10:29:21
1	Cr 267.716†	23358.2	23255.9	517.41	µg/L	517.41	ppb	10:29:21
1	Cu 324.752†	73615.4	69592.4	498.32	µg/L	498.32	ppb	10:29:21
1	Mn 257.610†	157038.6	155763.3	513.16	µg/L	513.16	ppb	10:29:15
1	Mo 202.031†	4357.0	4319.5	515.98	µg/L	515.98	ppb	10:29:42
1	Ni 231.604†	9366.7	8984.8	518.53	µg/L	518.53	ppb	10:29:21
1	P 214.914†	1353.9	1150.7	2506.8	µg/L	2506.8	ppb	10:29:42
1	Pb 220.353†	2024.0	1953.4	516.82	µg/L	516.82	ppb	10:29:42
1	S 181.975 Axial†	214.1	186.3	995.42	µg/L	995.42	ppb	10:29:42
1	Sb 206.836†	519.5	490.3	510.66	µg/L	510.66	ppb	10:29:42
1	Se 196.026†	378.4	363.9	539.55	µg/L	539.55	ppb	10:29:42
1	SiO2†	29689.7	27368.1	5551.8	µg/L	5551.8	ppb	10:29:21
1	Si 251.611†	32685.9	32012.1	2555.4	µg/L	2555.4	ppb	10:29:21
1	Sn 189.927†	1038.5	1006.1	515.32	µg/L	515.32	ppb	10:29:42
1	Ti 334.940†	223415.3	220449.8	507.14	µg/L	507.14	ppb	10:29:15
1	Tl 190.801†	306.7	323.8	511.60	µg/L	511.60	ppb	10:29:42
1	U 409.014†	5856.4	5098.0	507.60	µg/L	507.60	ppb	10:29:21
1	V 292.402†	43273.2	42944.0	520.26	µg/L	520.26	ppb	10:29:21
1	Zn 213.857†	19231.6	18517.3	519.12	µg/L	519.12	ppb	10:29:21
2	Sc RADIAL	113831.2	113831.2	102	%			10:28:17
2	Al 396.153Radial†	10348.8	10016.0	5273.9	µg/L	5273.9	ppb	10:28:17
2	Ca 317.933Radial†	13670.0	13035.1	5258.9	µg/L	5258.9	ppb	10:28:38
2	Fe 238.204 Radial†	1023.4	994.8	5299.6	µg/L	5299.6	ppb	10:28:38
2	K 766.490 Radial†	10150.4	9238.7	5211.9	µg/L	5211.9	ppb	10:28:17
2	Mg 279.077 IEC†	984.1	952.1	5376.4	µg/L	5376.4	ppb	10:28:38
2	Na 589.592 Radial†	37493.5	37285.4	10516	µg/L	10516	ppb	10:28:17
2	Sr 421.552†	90666.1	89282.9	515.27	µg/L	515.27	ppb	10:28:17
2	Sc 361.383	2022656.1	2022656.1	100.74	%			10:29:49
2	Y 371.029	1223740.6	1223740.6	100.03	%			10:29:49
2	Ag 328.068†	55734.0	55342.0	528.73	µg/L	528.73	ppb	10:29:54
2	As 188.979†	272.0	266.8	517.19	µg/L	517.19	ppb	10:30:15
2	B 249.677†	11577.0	11330.4	525.22	µg/L	525.22	ppb	10:29:54
2	Ba 233.527†	19859.4	19786.4	530.39	µg/L	530.39	ppb	10:29:54
2	Be 313.107†	802638.6	793140.1	516.73	µg/L	516.73	ppb	10:29:49
2	Cd 226.502†	19051.0	19009.1	534.69	µg/L	534.69	ppb	10:29:54
2	Co 228.616†	10480.8	10473.8	532.34	µg/L	532.34	ppb	10:29:54
2	Cr 267.716†	23762.4	23712.5	527.58	µg/L	527.58	ppb	10:29:54
2	Cu 324.752†	74749.6	70893.1	507.62	µg/L	507.62	ppb	10:29:54
2	Mn 257.610†	157400.1	156494.9	515.57	µg/L	515.57	ppb	10:29:49
2	Mo 202.031†	4357.0	4329.8	517.21	µg/L	517.21	ppb	10:30:15
2	Ni 231.604†	9539.4	9178.5	529.71	µg/L	529.71	ppb	10:29:54
2	P 214.914†	1351.3	1151.4	2507.0	µg/L	2507.0	ppb	10:30:15
2	Pb 220.353†	2013.0	1947.2	515.17	µg/L	515.17	ppb	10:30:15

2	S 181.975 Axial†	220.9	193.6	1034.5 µg/L	1034.5 ppb	10:30:15
2	Sb 206.836†	517.4	489.5	509.72 µg/L	509.72 ppb	10:30:15
2	Se 196.026†	366.9	353.4	524.01 µg/L	524.01 ppb	10:30:15
2	SiO2†	30183.9	27929.2	5665.6 µg/L	5665.6 ppb	10:29:54
2	Si 251.611†	33136.8	32537.3	2598.0 µg/L	2598.0 ppb	10:29:54
2	Sn 189.927†	1035.5	1005.5	515.06 µg/L	515.06 ppb	10:30:15
2	Ti 334.940†	224174.2	221733.5	510.09 µg/L	510.09 ppb	10:29:49
2	Tl 190.801†	316.2	334.0	527.54 µg/L	527.54 ppb	10:30:15
2	U 409.014†	6064.7	5318.6	529.60 µg/L	529.60 ppb	10:29:54
2	V 292.402†	44059.2	43827.0	530.90 µg/L	530.90 ppb	10:29:54
2	Zn 213.857†	19624.4	18952.8	531.36 µg/L	531.36 ppb	10:29:54
3	Sc RADIAL	113536.1	113536.1	101 %		10:28:43
3	Al 396.153Radial†	10298.3	9992.7	5261.8 µg/L	5261.8 ppb	10:28:43
3	Ca 317.933Radial†	13718.9	13118.3	5292.5 µg/L	5292.5 ppb	10:29:04
3	Fe 238.204 Radial†	1021.7	995.7	5304.1 µg/L	5304.1 ppb	10:29:04
3	K 766.490 Radial†	10078.7	9193.9	5186.7 µg/L	5186.7 ppb	10:28:43
3	Mg 279.077 IEC†	975.1	945.7	5340.5 µg/L	5340.5 ppb	10:29:04
3	Na 589.592 Radial†	37231.0	37122.3	10470 µg/L	10470 ppb	10:28:43
3	Sr 421.552†	90098.5	88954.9	513.37 µg/L	513.37 ppb	10:28:43
3	Sc 361.383	2026929.4	2026929.4	100.95 %		10:30:22
3	Y 371.029	1226564.7	1226564.7	100.26 %		10:30:22
3	Ag 328.068†	55140.6	54637.5	522.00 µg/L	522.00 ppb	10:30:28
3	As 188.979†	270.1	264.4	512.48 µg/L	512.48 ppb	10:30:48
3	B 249.677†	11449.4	11179.8	518.21 µg/L	518.21 ppb	10:30:28
3	Ba 233.527†	19614.8	19502.5	522.79 µg/L	522.79 ppb	10:30:28
3	Be 313.107†	802973.7	791792.2	515.85 µg/L	515.85 ppb	10:30:22
3	Cd 226.502†	18873.2	18793.0	528.60 µg/L	528.60 ppb	10:30:28
3	Co 228.616†	10320.2	10292.8	523.13 µg/L	523.13 ppb	10:30:28
3	Cr 267.716†	23513.8	23416.6	520.99 µg/L	520.99 ppb	10:30:28
3	Cu 324.752†	73891.4	69886.5	500.43 µg/L	500.43 ppb	10:30:28
3	Mn 257.610†	157526.6	156290.8	514.90 µg/L	514.90 ppb	10:30:22
3	Mo 202.031†	4332.3	4296.3	513.20 µg/L	513.20 ppb	10:30:48
3	Ni 231.604†	9469.0	9088.8	524.53 µg/L	524.53 ppb	10:30:28
3	P 214.914†	1350.2	1147.4	2499.1 µg/L	2499.1 ppb	10:30:48
3	Pb 220.353†	2018.1	1948.1	515.40 µg/L	515.40 ppb	10:30:48
3	S 181.975 Axial†	218.1	190.3	1016.9 µg/L	1016.9 ppb	10:30:48
3	Sb 206.836†	520.0	490.9	511.29 µg/L	511.29 ppb	10:30:48
3	Se 196.026†	368.8	354.5	525.65 µg/L	525.65 ppb	10:30:48
3	SiO2†	29823.4	27508.9	5580.4 µg/L	5580.4 ppb	10:30:28
3	Si 251.611†	32829.6	32163.6	2567.8 µg/L	2567.8 ppb	10:30:28
3	Sn 189.927†	1033.9	1001.8	513.17 µg/L	513.17 ppb	10:30:48
3	Ti 334.940†	224374.4	221462.6	509.47 µg/L	509.47 ppb	10:30:22
3	Tl 190.801†	312.5	329.6	520.72 µg/L	520.72 ppb	10:30:48
3	U 409.014†	5995.0	5236.9	521.45 µg/L	521.45 ppb	10:30:28
3	V 292.402†	43543.9	43224.3	523.63 µg/L	523.63 ppb	10:30:28
3	Zn 213.857†	19413.7	18703.1	524.34 µg/L	524.34 ppb	10:30:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025696.8	100.89	%	0.132				0.13%
Sc RADIAL	113893.0	102	%	0.3				0.34%
Y 371.029	1225489.4	100.17	%	0.125				0.12%
Ag 328.068†	54786.8	523.43	µg/L	4.757	523.43	ppb	4.757	0.91%
QC value within limits for Ag 328.068 Recovery = 104.69%								
Al 396.153Radial†	9984.1	5257.1	µg/L	19.52	5257.1	ppb	19.52	0.37%
QC value within limits for Al 396.153Radial Recovery = 105.14%								
As 188.979†	265.0	513.62	µg/L	3.159	513.62	ppb	3.159	0.62%
QC value within limits for As 188.979 Recovery = 102.72%								
B 249.677†	11209.8	519.61	µg/L	5.059	519.61	ppb	5.059	0.97%
QC value within limits for B 249.677 Recovery = 103.92%								
Ba 233.527†	19569.9	524.59	µg/L	5.144	524.59	ppb	5.144	0.98%
QC value within limits for Ba 233.527 Recovery = 104.92%								
Be 313.107†	791176.2	515.45	µg/L	1.520	515.45	ppb	1.520	0.29%
QC value within limits for Be 313.107 Recovery = 103.09%								
Ca 317.933Radial†	13049.8	5264.9	µg/L	25.20	5264.9	ppb	25.20	0.48%
QC value within limits for Ca 317.933Radial Recovery = 105.30%								
Cd 226.502†	18807.9	529.02	µg/L	5.471	529.02	ppb	5.471	1.03%
QC value within limits for Cd 226.502 Recovery = 105.80%								
Co 228.616†	10348.2	525.95	µg/L	5.541	525.95	ppb	5.541	1.05%

```
   QC value within limits for Co 228.616  Recovery = 105.19%
Cr 267.716†            23461.7      521.99 µg/L        5.154      521.99 ppb          5.154   0.99%
   QC value within limits for Cr 267.716  Recovery = 104.40%
Cu 324.752†            70124.0      502.12 µg/L        4.875      502.12 ppb          4.875   0.97%
   QC value within limits for Cu 324.752  Recovery = 100.42%
Fe 238.204 Radial†       993.8      5294.0 µg/L        13.72      5294.0 ppb          13.72   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.88%
K 766.490 Radial†       9218.4      5200.5 µg/L        12.79      5200.5 ppb          12.79   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 104.01%
Mg 279.077 IEC†          947.1      5348.5 µg/L        24.78      5348.5 ppb          24.78   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.97%
Mn 257.610†           156183.0      514.55 µg/L        1.244      514.55 ppb          1.244   0.24%
   QC value within limits for Mn 257.610  Recovery = 102.91%
Mo 202.031†             4315.2      515.46 µg/L        2.052      515.46 ppb          2.052   0.40%
   QC value within limits for Mo 202.031  Recovery = 103.09%
Na 589.592 Radial†     37114.1       10468 µg/L         49.5       10468 ppb           49.5   0.47%
   QC value within limits for Na 589.592 Radial  Recovery = 104.68%
Ni 231.604†             9084.0      524.25 µg/L        5.594      524.25 ppb          5.594   1.07%
   QC value within limits for Ni 231.604  Recovery = 104.85%
P 214.914†              1149.9      2504.3 µg/L         4.51      2504.3 ppb           4.51   0.18%
   QC value within limits for P 214.914  Recovery = 100.17%
Pb 220.353†             1949.6      515.80 µg/L        0.892      515.80 ppb          0.892   0.17%
   QC value within limits for Pb 220.353  Recovery = 103.16%
S 181.975 Axial†         190.1      1015.6 µg/L        19.57      1015.6 ppb          19.57   1.93%
   QC value within limits for S 181.975 Axial  Recovery = 101.56%
Sb 206.836†              490.2      510.56 µg/L        0.789      510.56 ppb          0.789   0.15%
   QC value within limits for Sb 206.836  Recovery = 102.11%
Se 196.026†              357.3      529.74 µg/L        8.539      529.74 ppb          8.539   1.61%
   QC value within limits for Se 196.026  Recovery = 105.95%
SiO2†                   27602.1      5599.3 µg/L        59.22      5599.3 ppb          59.22   1.06%
   QC value within limits for SiO2  Recovery = 104.71%
Si 251.611†             32237.7      2573.8 µg/L        21.92      2573.8 ppb          21.92   0.85%
   QC value within limits for Si 251.611  Recovery = 102.95%
Sn 189.927†             1004.5      514.52 µg/L        1.171      514.52 ppb          1.171   0.23%
   QC value within limits for Sn 189.927  Recovery = 102.90%
Sr 421.552†            89014.3      513.71 µg/L        1.411      513.71 ppb          1.411   0.27%
   QC value within limits for Sr 421.552  Recovery = 102.74%
Ti 334.940†           221215.3      508.90 µg/L        1.557      508.90 ppb          1.557   0.31%
   QC value within limits for Ti 334.940  Recovery = 101.78%
Tl 190.801†              329.1      519.95 µg/L        7.997      519.95 ppb          7.997   1.54%
   QC value within limits for Tl 190.801  Recovery = 103.99%
U 409.014†              5217.9      519.55 µg/L       11.123      519.55 ppb         11.123   2.14%
   QC value within limits for U 409.014  Recovery = 103.91%
V 292.402†             43331.8      524.93 µg/L        5.440      524.93 ppb          5.440   1.04%
   QC value within limits for V 292.402  Recovery = 104.99%
Zn 213.857†            18724.4      524.94 µg/L        6.138      524.94 ppb          6.138   1.17%
   QC value within limits for Zn 213.857  Recovery = 104.99%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 10:30:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114009.0	114009.0	102	%			10:31:31
1	Al 396.153Radial†	164.2	-3.1	-1.6921	µg/L	-1.6921	ppb	10:31:31
1	Ca 317.933Radial†	432.6	12.3	4.9750	µg/L	4.9750	ppb	10:31:51
1	Fe 238.204 Radial†	10.8	-1.3	-7.0626	µg/L	-7.0626	ppb	10:31:51
1	K 766.490 Radial†	759.8	-0.3	-0.1824	µg/L	-0.1824	ppb	10:31:31
1	Mg 279.077 IEC†	18.8	2.5	14.020	µg/L	14.020	ppb	10:31:51
1	Na 589.592 Radial†	-607.9	-195.4	-55.117	µg/L	-55.117	ppb	10:31:31
1	Sr 421.552†	-62.9	29.5	0.1703	µg/L	0.1703	ppb	10:31:31
1	Sc 361.383	2035762.9	2035762.9	101.39	%			10:32:53
1	Y 371.029	1239214.1	1239214.1	101.30	%			10:32:53
1	Ag 328.068†	95.8	110.7	1.0521	µg/L	1.0521	ppb	10:32:58
1	As 188.979†	2.1	-1.0	-2.0183	µg/L	-2.0183	ppb	10:33:19
1	B 249.677†	186.0	21.7	1.0097	µg/L	1.0097	ppb	10:32:58
1	Ba 233.527†	-42.9	30.2	0.8077	µg/L	0.8077	ppb	10:33:19
1	Be 313.107†	3699.6	30.0	0.0196	µg/L	0.0196	ppb	10:32:58
1	Cd 226.502†	-96.9	2.0	0.0534	µg/L	0.0534	ppb	10:33:19
1	Co 228.616†	-55.2	15.3	0.7824	µg/L	0.7824	ppb	10:33:19
1	Cr 267.716†	-134.5	-8.4	-0.1865	µg/L	-0.1865	ppb	10:32:58
1	Cu 324.752†	3311.9	-42.5	-0.3050	µg/L	-0.3050	ppb	10:32:58
1	Mn 257.610†	-193.4	57.1	0.1871	µg/L	0.1871	ppb	10:33:19
1	Mo 202.031†	6.1	10.8	1.2922	µg/L	1.2922	ppb	10:33:19
1	Ni 231.604†	306.8	11.6	0.6693	µg/L	0.6693	ppb	10:33:19
1	P 214.914†	191.7	-0.9	-2.0024	µg/L	-2.0024	ppb	10:33:19
1	Pb 220.353†	57.3	5.5	1.4592	µg/L	1.4592	ppb	10:33:19
1	S 181.975 Axial†	24.2	-1.8	-9.6608	µg/L	-9.6608	ppb	10:33:19
1	Sb 206.836†	18.9	-5.5	-5.7664	µg/L	-5.7664	ppb	10:33:19
1	Se 196.026†	15.2	4.2	6.2295	µg/L	6.2295	ppb	10:33:19
1	SiO2†	2026.0	-35.4	-7.1878	µg/L	-7.1878	ppb	10:32:58
1	Si 251.611†	348.9	-12.7	-1.0131	µg/L	-1.0131	ppb	10:33:19
1	Sn 189.927†	20.5	-2.2	-1.1071	µg/L	-1.1071	ppb	10:33:19
1	Ti 334.940†	812.5	2.9	0.0063	µg/L	0.0063	ppb	10:32:58
1	Tl 190.801†	-19.5	0.8	1.2980	µg/L	1.2980	ppb	10:33:19
1	U 409.014†	654.1	-56.5	-5.6317	µg/L	-5.6317	ppb	10:32:58
1	V 292.402†	-59.3	32.0	0.3835	µg/L	0.3835	ppb	10:32:58
1	Zn 213.857†	542.6	7.3	0.2044	µg/L	0.2044	ppb	10:33:19
2	Sc RADIAL	112391.7	112391.7	100	%			10:31:56
2	Al 396.153Radial†	160.1	-4.9	-2.5568	µg/L	-2.5568	ppb	10:31:56
2	Ca 317.933Radial†	424.3	10.2	4.1002	µg/L	4.1002	ppb	10:32:17
2	Fe 238.204 Radial†	8.1	-3.9	-20.661	µg/L	-20.661	ppb	10:32:17
2	K 766.490 Radial†	758.0	8.6	4.8419	µg/L	4.8419	ppb	10:31:56
2	Mg 279.077 IEC†	15.5	-0.5	-2.9562	µg/L	-2.9562	ppb	10:32:17
2	Na 589.592 Radial†	-575.3	-171.6	-48.392	µg/L	-48.392	ppb	10:31:56
2	Sr 421.552†	-54.7	36.8	0.2125	µg/L	0.2125	ppb	10:31:56
2	Sc 361.383	2045701.9	2045701.9	101.89	%			10:33:25
2	Y 371.029	1244707.3	1244707.3	101.74	%			10:33:25
2	Ag 328.068†	14.3	30.3	0.2856	µg/L	0.2856	ppb	10:33:30
2	As 188.979†	2.1	-1.1	-2.1551	µg/L	-2.1551	ppb	10:33:51
2	B 249.677†	184.6	19.4	0.9108	µg/L	0.9108	ppb	10:33:30
2	Ba 233.527†	-45.3	28.0	0.7492	µg/L	0.7492	ppb	10:33:51
2	Be 313.107†	3718.5	30.8	0.0200	µg/L	0.0200	ppb	10:33:30
2	Cd 226.502†	-98.5	0.9	0.0238	µg/L	0.0238	ppb	10:33:51
2	Co 228.616†	-66.3	4.8	0.2406	µg/L	0.2406	ppb	10:33:51
2	Cr 267.716†	-117.4	9.0	0.2008	µg/L	0.2008	ppb	10:33:30
2	Cu 324.752†	3286.1	-83.7	-0.6021	µg/L	-0.6021	ppb	10:33:30
2	Mn 257.610†	-208.5	43.1	0.1394	µg/L	0.1394	ppb	10:33:51
2	Mo 202.031†	-9.5	-4.6	-0.5492	µg/L	-0.5492	ppb	10:33:51
2	Ni 231.604†	304.2	7.5	0.4325	µg/L	0.4325	ppb	10:33:51
2	P 214.914†	189.3	-4.2	-9.1845	µg/L	-9.1845	ppb	10:33:51
2	Pb 220.353†	50.2	-1.7	-0.4427	µg/L	-0.4427	ppb	10:33:51

2	S 181.975 Axial†	24.6	-1.5	-8.2828 µg/L	-8.2828 ppb	10:33:51
2	Sb 206.836†	21.1	-3.4	-3.5749 µg/L	-3.5749 ppb	10:33:51
2	Se 196.026†	12.0	1.0	1.5223 µg/L	1.5223 ppb	10:33:51
2	SiO2†	2094.9	22.5	4.5641 µg/L	4.5641 ppb	10:33:30
2	Si 251.611†	366.2	2.6	0.2416 µg/L	0.2416 ppb	10:33:51
2	Sn 189.927†	21.5	-1.3	-0.6670 µg/L	-0.6670 ppb	10:33:51
2	Ti 334.940†	877.5	62.7	0.1441 µg/L	0.1441 ppb	10:33:30
2	Tl 190.801†	-16.0	4.4	6.9108 µg/L	6.9108 ppb	10:33:51
2	U 409.014†	659.5	-54.4	-5.4184 µg/L	-5.4184 ppb	10:33:30
2	V 292.402†	-89.9	2.2	0.0126 µg/L	0.0126 ppb	10:33:30
2	Zn 213.857†	536.5	-1.2	-0.0339 µg/L	-0.0339 ppb	10:33:51
3	Sc RADIAL	113653.3	113653.3	101 %		10:32:22
3	Al 396.153Radial†	180.4	13.3	7.0111 µg/L	7.0111 ppb	10:32:22
3	Ca 317.933Radial†	433.2	14.3	5.7553 µg/L	5.7553 ppb	10:32:43
3	Fe 238.204 Radial†	9.2	-2.9	-15.572 µg/L	-15.572 ppb	10:32:43
3	K 766.490 Radial†	748.6	-9.1	-5.1297 µg/L	-5.1297 ppb	10:32:22
3	Mg 279.077 IEC†	18.6	2.3	13.287 µg/L	13.287 ppb	10:32:43
3	Na 589.592 Radial†	-622.3	-211.5	-59.661 µg/L	-59.661 ppb	10:32:22
3	Sr 421.552†	-50.1	41.9	0.2419 µg/L	0.2419 ppb	10:32:22
3	Sc 361.383	2009444.2	2009444.2	100.08 %		10:33:57
3	Y 371.029	1222762.1	1222762.1	99.950 %		10:33:57
3	Ag 328.068†	80.4	96.6	0.9117 µg/L	0.9117 ppb	10:34:03
3	As 188.979†	3.7	0.5	1.0482 µg/L	1.0482 ppb	10:34:23
3	B 249.677†	169.1	7.3	0.3427 µg/L	0.3427 ppb	10:34:03
3	Ba 233.527†	-39.0	33.5	0.8943 µg/L	0.8943 ppb	10:34:23
3	Be 313.107†	3744.0	122.2	0.0795 µg/L	0.0795 ppb	10:34:03
3	Cd 226.502†	-81.4	16.2	0.4592 µg/L	0.4592 ppb	10:34:23
3	Co 228.616†	-63.1	6.8	0.3438 µg/L	0.3438 ppb	10:34:23
3	Cr 267.716†	-109.6	14.7	0.3263 µg/L	0.3263 ppb	10:34:03
3	Cu 324.752†	3284.1	-27.4	-0.1993 µg/L	-0.1993 ppb	10:34:03
3	Mn 257.610†	-191.6	56.4	0.1835 µg/L	0.1835 ppb	10:34:23
3	Mo 202.031†	-0.8	3.9	0.4680 µg/L	0.4680 ppb	10:34:23
3	Ni 231.604†	291.1	-0.2	-0.0100 µg/L	-0.0100 ppb	10:34:23
3	P 214.914†	193.1	3.0	6.6812 µg/L	6.6812 ppb	10:34:23
3	Pb 220.353†	49.7	-1.4	-0.3573 µg/L	-0.3573 ppb	10:34:23
3	S 181.975 Axial†	23.0	-2.7	-14.703 µg/L	-14.703 ppb	10:34:23
3	Sb 206.836†	20.3	-3.8	-4.0044 µg/L	-4.0044 ppb	10:34:23
3	Se 196.026†	13.6	2.8	4.1249 µg/L	4.1249 ppb	10:34:23
3	SiO2†	2012.5	-22.7	-4.6108 µg/L	-4.6108 ppb	10:34:03
3	Si 251.611†	339.6	-17.5	-1.5151 µg/L	-1.5151 ppb	10:34:23
3	Sn 189.927†	26.3	3.9	1.9812 µg/L	1.9812 ppb	10:34:23
3	Ti 334.940†	911.5	112.2	0.2580 µg/L	0.2580 ppb	10:34:03
3	Tl 190.801†	-21.9	-1.8	-2.7877 µg/L	-2.7877 ppb	10:34:23
3	U 409.014†	727.4	25.2	2.5186 µg/L	2.5186 ppb	10:34:03
3	V 292.402†	-127.9	-37.3	-0.4413 µg/L	-0.4413 ppb	10:34:03
3	Zn 213.857†	527.3	-1.0	-0.0259 µg/L	-0.0259 ppb	10:34:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030303.0	101.12	%	0.933				0.92%
Sc RADIAL	113351.3	101	%	0.8				0.75%
Y 371.029	1235561.2	101.00	%	0.933				0.92%
Ag 328.068†	79.2	0.7498	µg/L	0.40810	0.7498	ppb	0.40810	54.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.8	0.9207	µg/L	5.29210	0.9207	ppb	5.29210	574.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-1.0418	µg/L	1.81120	-1.0418	ppb	1.81120	173.86%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	16.1	0.7544	µg/L	0.35995	0.7544	ppb	0.35995	47.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	30.5	0.8170	µg/L	0.07300	0.8170	ppb	0.07300	8.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	61.0	0.0397	µg/L	0.03449	0.0397	ppb	0.03449	86.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.3	4.9435	µg/L	0.82796	4.9435	ppb	0.82796	16.75%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.4	0.1788	µg/L	0.24327	0.1788	ppb	0.24327	136.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	9.0	0.4556	µg/L	0.28767	0.4556	ppb	0.28767	63.14%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                5.1      0.1135 µg/L       0.26728      0.1135 ppb        0.26728 235.43%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -51.2     -0.3688 µg/L       0.20883     -0.3688 ppb        0.20883  56.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -2.7     -14.432 µg/L        6.8705     -14.432 ppb         6.8705  47.61%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -0.3     -0.1567 µg/L       4.98585     -0.1567 ppb        4.98585 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.4      8.1171 µg/L       9.59676      8.1171 ppb        9.59676 118.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               52.2      0.1700 µg/L       0.02656      0.1700 ppb        0.02656  15.63%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.4      0.4037 µg/L       0.92234      0.4037 ppb        0.92234 228.48%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -192.8     -54.390 µg/L        5.6698     -54.390 ppb         5.6698  10.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                6.3      0.3639 µg/L       0.34482      0.3639 ppb        0.34482  94.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -1.5019 µg/L       7.94469     -1.5019 ppb        7.94469 528.97%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                0.8      0.2197 µg/L       1.07424      0.2197 ppb        1.07424 488.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -2.0     -10.882 µg/L        3.3799     -10.882 ppb         3.3799  31.06%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -4.3     -4.4486 µg/L       1.16128     -4.4486 ppb        1.16128  26.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.7      3.9589 µg/L       2.35801      3.9589 ppb        2.35801  59.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -11.9     -2.4115 µg/L       6.17695     -2.4115 ppb        6.17695 256.15%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               -9.2     -0.7622 µg/L       0.90481     -0.7622 ppb        0.90481 118.71%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.1      0.0690 µg/L       1.67054      0.0690 ppb        1.67054 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               36.1      0.2082 µg/L       0.03599      0.2082 ppb        0.03599  17.28%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               59.3      0.1361 µg/L       0.12603      0.1361 ppb        0.12603  92.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.1      1.8070 µg/L       4.86924      1.8070 ppb        4.86924 269.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -28.5     -2.8438 µg/L       4.64523     -2.8438 ppb        4.64523 163.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -1.0     -0.0151 µg/L       0.41308     -0.0151 ppb        0.41308 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                1.7      0.0482 µg/L       0.13535      0.0482 ppb        0.13535 280.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: 1201993388|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 301
Date Collected: 12/14/2009 10:34:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993388|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113543.4	113543.4	101	%			10:35:08
1	Al 396.153Radial†	280.2	111.9	59.114	µg/L	59.114	ppb	10:35:08
1	Ca 317.933Radial†	550.5	130.4	52.599	µg/L	52.599	ppb	10:35:29
1	Fe 238.204 Radial†	31.8	19.4	103.24	µg/L	103.24	ppb	10:35:29
1	K 766.490 Radial†	794.0	36.5	20.565	µg/L	20.565	ppb	10:35:08
1	Mg 279.077 IEC†	22.2	5.8	32.809	µg/L	32.809	ppb	10:35:29
1	Na 589.592 Radial†	-569.5	-160.0	-45.136	µg/L	-45.136	ppb	10:35:08
1	Sr 421.552†	98.2	188.2	1.0861	µg/L	1.0861	ppb	10:35:08
1	Sc 361.383	1998396.7	1998396.7	99.530	%			10:36:31
1	Y 371.029	1212458.0	1212458.0	99.108	%			10:36:31
1	Ag 328.068†	16.2	32.6	0.3199	µg/L	0.3199	ppb	10:36:36
1	As 188.979†	-7.7	-10.8	-21.080	µg/L	-21.080	ppb	10:36:57
1	B 249.677†	175.4	14.5	0.6419	µg/L	0.6419	ppb	10:36:36
1	Ba 233.527†	-14.2	58.1	1.5562	µg/L	1.5562	ppb	10:36:57
1	Be 313.107†	4276.8	678.2	0.4409	µg/L	0.4409	ppb	10:36:36
1	Cd 226.502†	-86.1	11.1	0.3046	µg/L	0.3046	ppb	10:36:57
1	Co 228.616†	-50.5	19.1	0.9664	µg/L	0.9664	ppb	10:36:57
1	Cr 267.716†	-23.4	100.7	2.2359	µg/L	2.2359	ppb	10:36:36
1	Cu 324.752†	3414.0	121.2	0.8878	µg/L	0.8878	ppb	10:36:36
1	Mn 257.610†	577.5	828.1	2.7376	µg/L	2.7376	ppb	10:36:36
1	Mo 202.031†	0.4	5.1	0.6170	µg/L	0.6170	ppb	10:36:57
1	Ni 231.604†	299.3	9.7	0.5593	µg/L	0.5593	ppb	10:36:57
1	P 214.914†	187.8	-1.3	-3.1184	µg/L	-3.1184	ppb	10:36:57
1	Pb 220.353†	60.0	9.3	2.4666	µg/L	2.4666	ppb	10:36:57
1	S 181.975 Axial†	28.5	2.9	15.735	µg/L	15.735	ppb	10:36:57
1	Sb 206.836†	21.1	-3.0	-3.0923	µg/L	-3.0923	ppb	10:36:57
1	Se 196.026†	13.2	2.5	3.7469	µg/L	3.7469	ppb	10:36:57
1	SiO2†	2801.9	781.6	158.55	µg/L	158.55	ppb	10:36:36
1	Si 251.611†	1236.6	885.6	71.916	µg/L	71.916	ppb	10:36:57
1	Sn 189.927†	22.5	0.2	0.1558	µg/L	0.1558	ppb	10:36:57
1	Ti 334.940†	2092.2	1303.5	2.9975	µg/L	2.9975	ppb	10:36:36
1	Tl 190.801†	-19.4	0.6	0.9733	µg/L	0.9733	ppb	10:36:57
1	U 409.014†	691.7	-6.7	-0.6831	µg/L	-0.6831	ppb	10:36:36
1	V 292.402†	-55.1	35.2	0.4336	µg/L	0.4336	ppb	10:36:36
1	Zn 213.857†	685.6	161.0	4.5335	µg/L	4.5335	ppb	10:36:57
2	Sc RADIAL	113163.9	113163.9	101	%			10:35:34
2	Al 396.153Radial†	222.8	56.0	29.613	µg/L	29.613	ppb	10:35:34
2	Ca 317.933Radial†	537.8	119.5	48.225	µg/L	48.225	ppb	10:35:55
2	Fe 238.204 Radial†	29.8	17.6	93.241	µg/L	93.241	ppb	10:35:55
2	K 766.490 Radial†	829.7	74.4	41.958	µg/L	41.958	ppb	10:35:34
2	Mg 279.077 IEC†	23.1	6.9	38.578	µg/L	38.578	ppb	10:35:55
2	Na 589.592 Radial†	-549.2	-141.8	-39.999	µg/L	-39.999	ppb	10:35:34
2	Sr 421.552†	118.7	208.7	1.2046	µg/L	1.2046	ppb	10:35:34
2	Sc 361.383	2006387.0	2006387.0	99.928	%			10:37:03
2	Y 371.029	1218270.6	1218270.6	99.583	%			10:37:03
2	Ag 328.068†	31.4	47.7	0.4628	µg/L	0.4628	ppb	10:37:08
2	As 188.979†	1.8	-1.4	-2.7091	µg/L	-2.7091	ppb	10:37:29
2	B 249.677†	207.7	46.1	2.1134	µg/L	2.1134	ppb	10:37:08
2	Ba 233.527†	-7.6	64.8	1.7341	µg/L	1.7341	ppb	10:37:29
2	Be 313.107†	4272.9	657.1	0.4271	µg/L	0.4271	ppb	10:37:08
2	Cd 226.502†	-79.9	17.7	0.4841	µg/L	0.4841	ppb	10:37:29
2	Co 228.616†	-63.2	6.6	0.3264	µg/L	0.3264	ppb	10:37:29
2	Cr 267.716†	-26.3	98.0	2.1754	µg/L	2.1754	ppb	10:37:08
2	Cu 324.752†	3374.8	68.3	0.5082	µg/L	0.5082	ppb	10:37:08
2	Mn 257.610†	580.6	828.8	2.7388	µg/L	2.7388	ppb	10:37:08
2	Mo 202.031†	-5.4	-0.6	-0.0721	µg/L	-0.0721	ppb	10:37:29
2	Ni 231.604†	317.0	26.2	1.5124	µg/L	1.5124	ppb	10:37:29
2	P 214.914†	190.5	0.6	1.2605	µg/L	1.2605	ppb	10:37:29
2	Pb 220.353†	48.8	-2.1	-0.5502	µg/L	-0.5502	ppb	10:37:29

2	S 181.975 Axial†	27.0	1.3	7.1579	µg/L	7.1579 ppb	10:37:29
2	Sb 206.836†	19.0	-5.2	-5.4195	µg/L	-5.4195 ppb	10:37:29
2	Se 196.026†	7.4	-3.3	-4.8668	µg/L	-4.8668 ppb	10:37:29
2	SiO2†	2785.2	753.6	152.88	µg/L	152.88 ppb	10:37:08
2	Si 251.611†	1228.4	872.5	70.756	µg/L	70.756 ppb	10:37:29
2	Sn 189.927†	27.3	4.9	2.5276	µg/L	2.5276 ppb	10:37:29
2	Ti 334.940†	2139.4	1342.4	3.0871	µg/L	3.0871 ppb	10:37:08
2	Tl 190.801†	-19.6	0.4	0.7279	µg/L	0.7279 ppb	10:37:29
2	U 409.014†	613.0	-88.2	-8.8097	µg/L	-8.8097 ppb	10:37:08
2	V 292.402†	-51.7	38.8	0.4583	µg/L	0.4583 ppb	10:37:08
2	Zn 213.857†	672.6	145.3	4.0863	µg/L	4.0863 ppb	10:37:29
3	Sc RADIAL	112293.4	112293.4	100	%		10:36:00
3	Al 396.153Radial†	255.1	90.0	47.522	µg/L	47.522 ppb	10:36:00
3	Ca 317.933Radial†	540.6	126.5	51.053	µg/L	51.053 ppb	10:36:21
3	Fe 238.204 Radial†	30.3	18.3	97.190	µg/L	97.190 ppb	10:36:21
3	K 766.490 Radial†	792.5	43.7	24.645	µg/L	24.645 ppb	10:36:00
3	Mg 279.077 IEC†	17.4	1.4	7.5119	µg/L	7.5119 ppb	10:36:21
3	Na 589.592 Radial†	-589.0	-185.7	-52.372	µg/L	-52.372 ppb	10:36:00
3	Sr 421.552†	88.9	180.0	1.0389	µg/L	1.0389 ppb	10:36:00
3	Sc 361.383	1992556.3	1992556.3	99.239	%		10:37:35
3	Y 371.029	1209260.1	1209260.1	98.847	%		10:37:35
3	Ag 328.068†	118.4	135.6	1.2961	µg/L	1.2961 ppb	10:37:41
3	As 188.979†	-2.5	-5.6	-10.943	µg/L	-10.943 ppb	10:38:01
3	B 249.677†	190.8	30.5	1.3894	µg/L	1.3894 ppb	10:37:41
3	Ba 233.527†	-23.7	48.5	1.2995	µg/L	1.2995 ppb	10:38:01
3	Be 313.107†	4316.0	730.3	0.4748	µg/L	0.4748 ppb	10:37:41
3	Cd 226.502†	-84.8	12.2	0.3354	µg/L	0.3354 ppb	10:38:01
3	Co 228.616†	-60.9	8.5	0.4266	µg/L	0.4266 ppb	10:38:01
3	Cr 267.716†	-38.6	85.3	1.8952	µg/L	1.8952 ppb	10:37:41
3	Cu 324.752†	3427.0	144.4	1.0525	µg/L	1.0525 ppb	10:37:41
3	Mn 257.610†	586.2	838.5	2.7712	µg/L	2.7712 ppb	10:37:41
3	Mo 202.031†	5.3	10.1	1.2072	µg/L	1.2072 ppb	10:38:01
3	Ni 231.604†	305.1	16.4	0.9482	µg/L	0.9482 ppb	10:38:01
3	P 214.914†	185.0	-3.6	-8.1892	µg/L	-8.1892 ppb	10:38:01
3	Pb 220.353†	52.7	2.1	0.5571	µg/L	0.5571 ppb	10:38:01
3	S 181.975 Axial†	32.4	6.9	36.976	µg/L	36.976 ppb	10:38:01
3	Sb 206.836†	22.9	-1.1	-1.1094	µg/L	-1.1094 ppb	10:38:01
3	Se 196.026†	17.9	7.2	10.741	µg/L	10.741 ppb	10:38:01
3	SiO2†	2787.0	774.8	157.16	µg/L	157.16 ppb	10:37:41
3	Si 251.611†	1241.6	894.3	72.650	µg/L	72.650 ppb	10:38:01
3	Sn 189.927†	20.4	-1.8	-0.8815	µg/L	-0.8815 ppb	10:38:01
3	Ti 334.940†	2104.9	1322.5	3.0413	µg/L	3.0413 ppb	10:37:41
3	Tl 190.801†	-18.3	1.7	2.6977	µg/L	2.6977 ppb	10:38:01
3	U 409.014†	689.6	-6.7	-0.6834	µg/L	-0.6834 ppb	10:37:41
3	V 292.402†	-57.2	32.9	0.4099	µg/L	0.4099 ppb	10:37:41
3	Zn 213.857†	674.8	152.1	4.2823	µg/L	4.2823 ppb	10:38:01

Mean Data: 1201993388|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1999113.3	99.565	%	0.3458				0.35%
Sc RADIAL	113000.2	101	%	0.6				0.57%
Y 371.029	1213329.6	99.179	%	0.3734				0.38%
Ag 328.068†	72.0	0.6929	µg/L	0.52722	0.6929	ppb	0.52722	76.09%
Al 396.153Radial†	86.0	45.417	µg/L	14.8628	45.417	ppb	14.8628	32.73%
As 188.979†	-6.0	-11.577	µg/L	9.2017	-11.577	ppb	9.2017	79.48%
B 249.677†	30.4	1.3816	µg/L	0.73580	1.3816	ppb	0.73580	53.26%
Ba 233.527†	57.2	1.5299	µg/L	0.21852	1.5299	ppb	0.21852	14.28%
Be 313.107†	688.5	0.4476	µg/L	0.02455	0.4476	ppb	0.02455	5.48%
Ca 317.933Radial†	125.5	50.626	µg/L	2.2182	50.626	ppb	2.2182	4.38%
Cd 226.502†	13.7	0.3747	µg/L	0.09599	0.3747	ppb	0.09599	25.62%
Co 228.616†	11.4	0.5731	µg/L	0.34427	0.5731	ppb	0.34427	60.07%
Cr 267.716†	94.7	2.1022	µg/L	0.18176	2.1022	ppb	0.18176	8.65%
Cu 324.752†	111.3	0.8162	µg/L	0.27913	0.8162	ppb	0.27913	34.20%
Fe 238.204 Radial†	18.4	97.889	µg/L	5.0333	97.889	ppb	5.0333	5.14%
K 766.490 Radial†	51.5	29.056	µg/L	11.3578	29.056	ppb	11.3578	39.09%
Mg 279.077 IEC†	4.7	26.300	µg/L	16.5243	26.300	ppb	16.5243	62.83%
Mn 257.610†	831.8	2.7492	µg/L	0.01908	2.7492	ppb	0.01908	0.69%
Mo 202.031†	4.9	0.5840	µg/L	0.64032	0.5840	ppb	0.64032	109.64%
Na 589.592 Radial†	-162.5	-45.836	µg/L	6.2163	-45.836	ppb	6.2163	13.56%

Ni 231.604†	17.4	1.0066	µg/L	0.47922	1.0066	ppb	0.47922 47.61%
P 214.914†	-1.4	-3.3490	µg/L	4.72907	-3.3490	ppb	4.72907 141.21%
Pb 220.353†	3.1	0.8245	µg/L	1.52607	0.8245	ppb	1.52607 185.10%
S 181.975 Axial†	3.7	19.956	µg/L	15.3508	19.956	ppb	15.3508 76.92%
Sb 206.836†	-3.1	-3.2071	µg/L	2.15734	-3.2071	ppb	2.15734 67.27%
Se 196.026†	2.1	3.2071	µg/L	7.81806	3.2071	ppb	7.81806 243.77%
SiO2†	770.0	156.20	µg/L	2.958	156.20	ppb	2.958 1.89%
Si 251.611†	884.1	71.774	µg/L	0.9552	71.774	ppb	0.9552 1.33%
Sn 189.927†	1.1	0.6006	µg/L	1.74753	0.6006	ppb	1.74753 290.96%
Sr 421.552†	192.3	1.1099	µg/L	0.08537	1.1099	ppb	0.08537 7.69%
Ti 334.940†	1322.8	3.0420	µg/L	0.04484	3.0420	ppb	0.04484 1.47%
Tl 190.801†	0.9	1.4663	µg/L	1.07348	1.4663	ppb	1.07348 73.21%
U 409.014†	-33.8	-3.3921	µg/L	4.69181	-3.3921	ppb	4.69181 138.32%
V 292.402†	35.6	0.4339	µg/L	0.02420	0.4339	ppb	0.02420 5.58%
Zn 213.857†	152.8	4.3007	µg/L	0.22416	4.3007	ppb	0.22416 5.21%

Sequence No.: 5
Sample ID: 1201993393|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 302
Date Collected: 12/14/2009 10:38:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993393|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114144.7	114144.7	102	%			10:38:49
1	Al 396.153Radial†	199796.0	195842.5	103480	µg/L	103480	ppb	10:38:44
1	Ca 317.933Radial†	268131.1	262633.5	105960	µg/L	105960	ppb	10:38:44
1	Fe 238.204 Radial†	42171.9	41360.2	219640	µg/L	219640	ppb	10:38:49
1	K 766.490 Radial†	82257.7	79951.0	45104	µg/L	45104	ppb	10:38:44
1	Mg 279.077 IEC†	7911.1	7745.1	43386	µg/L	43386	ppb	10:38:49
1	Na 589.592 Radial†	39720.0	39368.4	11104	µg/L	11104	ppb	10:38:49
1	Sr 421.552†	429867.1	421806.2	2434.3	µg/L	2434.3	ppb	10:38:44
1	Sc 361.383	1988868.8	1988868.8	99.055	%			10:39:24
1	Y 371.029	1226164.9	1226164.9	100.23	%			10:39:24
1	Ag 328.068†	33740.0	34078.1	349.58	µg/L	349.58	ppb	10:39:30
1	As 188.979†	610.1	612.8	1158.4	µg/L	1158.4	ppb	10:39:51
1	B 249.677†	36602.4	36789.8	1641.7	µg/L	1641.7	ppb	10:39:30
1	Ba 233.527†	80341.0	81179.7	2174.4	µg/L	2174.4	ppb	10:39:30
1	Be 313.107†	1313075.2	1321980.9	859.25	µg/L	859.25	ppb	10:39:24
1	Cd 226.502†	24165.0	24493.1	672.77	µg/L	672.77	ppb	10:39:30
1	Co 228.616†	19749.8	20008.0	1004.8	µg/L	1004.8	ppb	10:39:30
1	Cr 267.716†	113313.1	114518.1	2545.1	µg/L	2545.1	ppb	10:39:30
1	Cu 324.752†	269824.8	269089.6	1969.6	µg/L	1969.6	ppb	10:39:30
1	Mn 257.610†	1760294.4	1777332.5	5875.5	µg/L	5875.5	ppb	10:39:24
1	Mo 202.031†	4539.2	4587.3	556.37	µg/L	556.37	ppb	10:39:51
1	Ni 231.604†	25167.2	25116.2	1449.5	µg/L	1449.5	ppb	10:39:30
1	P 214.914†	4228.3	4078.7	8643.3	µg/L	8643.3	ppb	10:39:51
1	Pb 220.353†	3492.4	3474.7	923.21	µg/L	923.21	ppb	10:39:51
1	S 181.975 Axial†	843.0	825.4	4377.7	µg/L	4377.7	ppb	10:39:51
1	Sb 206.836†	1607.3	1598.5	1670.4	µg/L	1670.4	ppb	10:39:51
1	Se 196.026†	2038.4	2047.1	3173.1	µg/L	3173.1	ppb	10:39:51
1	SiO2†	178417.2	178085.3	36126	µg/L	36126	ppb	10:39:30
1	Si 251.611†	205429.6	207032.3	16548	µg/L	16548	ppb	10:39:30
1	Sn 189.927†	2076.0	2073.5	1114.0	µg/L	1114.0	ppb	10:39:51
1	Ti 334.940†	2713820.0	2738906.8	6298.5	µg/L	6298.5	ppb	10:39:24
1	Tl 190.801†	804.2	831.9	1358.0	µg/L	1358.0	ppb	10:39:51
1	U 409.014†	219.3	-480.2	-86.384	µg/L	-86.384	ppb	10:39:30
1	V 292.402†	110174.2	111315.6	1357.7	µg/L	1357.7	ppb	10:39:30
1	Zn 213.857†	229363.1	231023.0	6493.1	µg/L	6493.1	ppb	10:39:30
2	Sc RADIAL	114199.9	114199.9	102	%			10:39:00
2	Al 396.153Radial†	201515.4	197433.8	104330	µg/L	104330	ppb	10:38:55
2	Ca 317.933Radial†	270495.9	264825.2	106840	µg/L	106840	ppb	10:38:55
2	Fe 238.204 Radial†	42188.8	41356.8	219620	µg/L	219620	ppb	10:39:00
2	K 766.490 Radial†	83035.3	80674.5	45512	µg/L	45512	ppb	10:38:55
2	Mg 279.077 IEC†	7908.4	7738.7	43349	µg/L	43349	ppb	10:39:00
2	Na 589.592 Radial†	39649.8	39280.7	11079	µg/L	11079	ppb	10:39:00
2	Sr 421.552†	433934.9	425591.1	2456.2	µg/L	2456.2	ppb	10:38:55
2	Sc 361.383	1996465.1	1996465.1	99.434	%			10:39:58
2	Y 371.029	1231070.8	1231070.8	100.63	%			10:39:58
2	Ag 328.068†	33474.2	33681.2	345.72	µg/L	345.72	ppb	10:40:04
2	As 188.979†	602.0	602.3	1137.7	µg/L	1137.7	ppb	10:40:24
2	B 249.677†	36335.5	36380.8	1622.7	µg/L	1622.7	ppb	10:40:04
2	Ba 233.527†	79692.2	80218.6	2148.6	µg/L	2148.6	ppb	10:40:04
2	Be 313.107†	1311465.9	1315318.6	854.92	µg/L	854.92	ppb	10:39:58
2	Cd 226.502†	23988.7	24222.9	665.15	µg/L	665.15	ppb	10:40:04
2	Co 228.616†	19644.8	19826.5	995.59	µg/L	995.59	ppb	10:40:04
2	Cr 267.716†	112542.3	113307.7	2518.2	µg/L	2518.2	ppb	10:40:04
2	Cu 324.752†	267676.8	265892.9	1946.8	µg/L	1946.8	ppb	10:40:04
2	Mn 257.610†	1759183.3	1769453.5	5849.6	µg/L	5849.6	ppb	10:39:58
2	Mo 202.031†	4531.6	4562.2	553.38	µg/L	553.38	ppb	10:40:24
2	Ni 231.604†	24905.9	24756.7	1428.8	µg/L	1428.8	ppb	10:40:04
2	P 214.914†	4226.8	4060.9	8606.7	µg/L	8606.7	ppb	10:40:24
2	Pb 220.353†	3468.5	3437.3	913.42	µg/L	913.42	ppb	10:40:24

2	S 181.975 Axial†	834.4	813.5	4314.2	µg/L	4314.2 ppb	10:40:24
2	Sb 206.836†	1580.8	1565.7	1636.1	µg/L	1636.1 ppb	10:40:24
2	Se 196.026†	2040.8	2041.7	3165.2	µg/L	3165.2 ppb	10:40:24
2	SiO2†	176849.7	175823.6	35667	µg/L	35667 ppb	10:40:04
2	Si 251.611†	203604.6	204407.7	16336	µg/L	16336 ppb	10:40:04
2	Sn 189.927†	2068.9	2058.3	1106.5	µg/L	1106.5 ppb	10:40:24
2	Ti 334.940†	2710579.0	2725223.0	6266.9	µg/L	6266.9 ppb	10:39:58
2	Tl 190.801†	804.6	829.3	1353.4	µg/L	1353.4 ppb	10:40:24
2	U 409.014†	157.0	-543.7	-92.695	µg/L	-92.695 ppb	10:40:04
2	V 292.402†	109407.2	110121.0	1343.3	µg/L	1343.3 ppb	10:40:04
2	Zn 213.857†	227576.4	228345.1	6417.6	µg/L	6417.6 ppb	10:40:04
3	Sc RADIAL	113634.8	113634.8	101	%		10:39:12
3	Al 396.153Radial†	200849.5	197760.2	104500	µg/L	104500 ppb	10:39:06
3	Ca 317.933Radial†	269274.6	264940.8	106890	µg/L	106890 ppb	10:39:06
3	Fe 238.204 Radial†	42040.4	41416.2	219940	µg/L	219940 ppb	10:39:12
3	K 766.490 Radial†	82827.2	80874.4	45625	µg/L	45625 ppb	10:39:06
3	Mg 279.077 IEC†	7927.2	7795.8	43671	µg/L	43671 ppb	10:39:12
3	Na 589.592 Radial†	39707.6	39531.0	11150	µg/L	11150 ppb	10:39:12
3	Sr 421.552†	431900.0	425701.9	2456.8	µg/L	2456.8 ppb	10:39:06
3	Sc 361.383	1984314.0	1984314.0	98.828	%		10:40:31
3	Y 371.029	1223461.7	1223461.7	100.01	%		10:40:31
3	Ag 328.068†	33581.4	33995.8	348.79	µg/L	348.79 ppb	10:40:37
3	As 188.979†	597.5	601.4	1136.0	µg/L	1136.0 ppb	10:40:58
3	B 249.677†	36339.6	36608.7	1633.2	µg/L	1633.2 ppb	10:40:37
3	Ba 233.527†	79848.7	80867.8	2166.0	µg/L	2166.0 ppb	10:40:37
3	Be 313.107†	1304072.9	1315914.7	855.31	µg/L	855.31 ppb	10:40:31
3	Cd 226.502†	23952.6	24334.1	668.27	µg/L	668.27 ppb	10:40:37
3	Co 228.616†	19636.2	19938.8	1001.3	µg/L	1001.3 ppb	10:40:37
3	Cr 267.716†	112726.0	114186.6	2537.7	µg/L	2537.7 ppb	10:40:37
3	Cu 324.752†	268039.2	267908.1	1961.3	µg/L	1961.3 ppb	10:40:37
3	Mn 257.610†	1748115.9	1769088.8	5848.4	µg/L	5848.4 ppb	10:40:31
3	Mo 202.031†	4525.6	4584.0	555.99	µg/L	555.99 ppb	10:40:58
3	Ni 231.604†	24968.2	24973.2	1441.3	µg/L	1441.3 ppb	10:40:37
3	P 214.914†	4228.0	4088.2	8665.4	µg/L	8665.4 ppb	10:40:58
3	Pb 220.353†	3478.4	3468.6	921.70	µg/L	921.70 ppb	10:40:58
3	S 181.975 Axial†	837.9	822.2	4360.4	µg/L	4360.4 ppb	10:40:58
3	Sb 206.836†	1587.7	1582.3	1653.4	µg/L	1653.4 ppb	10:40:58
3	Se 196.026†	2030.2	2043.5	3168.0	µg/L	3168.0 ppb	10:40:58
3	SiO2†	177217.5	177285.0	35964	µg/L	35964 ppb	10:40:37
3	Si 251.611†	203887.2	205947.6	16461	µg/L	16461 ppb	10:40:37
3	Sn 189.927†	2071.4	2073.6	1114.4	µg/L	1114.4 ppb	10:40:58
3	Ti 334.940†	2695547.4	2726706.3	6270.4	µg/L	6270.4 ppb	10:40:31
3	Tl 190.801†	796.2	825.7	1347.9	µg/L	1347.9 ppb	10:40:58
3	U 409.014†	220.6	-478.4	-86.237	µg/L	-86.237 ppb	10:40:37
3	V 292.402†	109472.3	110860.7	1352.2	µg/L	1352.2 ppb	10:40:37
3	Zn 213.857†	227767.0	229939.5	6462.5	µg/L	6462.5 ppb	10:40:37

Mean Data: 1201993393|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1989882.6	99.106	%	0.3057				0.31%
Sc RADIAL	113993.2	102	%	0.3				0.27%
Y 371.029	1226899.1	100.29	%	0.315				0.31%
Ag 328.068†	33918.4	348.03	µg/L	2.040	348.03	ppb	2.040	0.59%
Al 396.153Radial†	197012.2	104100	µg/L	542.3	104100	ppb	542.3	0.52%
As 188.979†	605.5	1144.0	µg/L	12.47	1144.0	ppb	12.47	1.09%
B 249.677†	36593.1	1632.5	µg/L	9.52	1632.5	ppb	9.52	0.58%
Ba 233.527†	80755.4	2163.0	µg/L	13.13	2163.0	ppb	13.13	0.61%
Be 313.107†	1317738.1	856.49	µg/L	2.396	856.49	ppb	2.396	0.28%
Ca 317.933Radial†	264133.2	106560	µg/L	524.5	106560	ppb	524.5	0.49%
Cd 226.502†	24350.0	668.73	µg/L	3.829	668.73	ppb	3.829	0.57%
Co 228.616†	19924.5	1000.6	µg/L	4.63	1000.6	ppb	4.63	0.46%
Cr 267.716†	114004.2	2533.6	µg/L	13.90	2533.6	ppb	13.90	0.55%
Cu 324.752†	267630.2	1959.2	µg/L	11.56	1959.2	ppb	11.56	0.59%
Fe 238.204 Radial†	41377.7	219730	µg/L	177.3	219730	ppb	177.3	0.08%
K 766.490 Radial†	80500.0	45413	µg/L	274.1	45413	ppb	274.1	0.60%
Mg 279.077 IEC†	7759.8	43469	µg/L	176.2	43469	ppb	176.2	0.41%
Mn 257.610†	1771958.2	5857.8	µg/L	15.31	5857.8	ppb	15.31	0.26%
Mo 202.031†	4577.8	555.25	µg/L	1.631	555.25	ppb	1.631	0.29%
Na 589.592 Radial†	39393.4	11111	µg/L	35.8	11111	ppb	35.8	0.32%

Ni 231.604†	24948.7	1439.8 µg/L	10.45	1439.8 ppb	10.45	0.73%
P 214.914†	4075.9	8638.5 µg/L	29.65	8638.5 ppb	29.65	0.34%
Pb 220.353†	3460.2	919.44 µg/L	5.271	919.44 ppb	5.271	0.57%
S 181.975 Axial†	820.3	4350.8 µg/L	32.83	4350.8 ppb	32.83	0.75%
Sb 206.836†	1582.2	1653.3 µg/L	17.16	1653.3 ppb	17.16	1.04%
Se 196.026†	2044.1	3168.8 µg/L	3.99	3168.8 ppb	3.99	0.13%
SiO2†	177064.6	35919 µg/L	232.6	35919 ppb	232.6	0.65%
Si 251.611†	205795.9	16448 µg/L	106.6	16448 ppb	106.6	0.65%
Sn 189.927†	2068.5	1111.7 µg/L	4.46	1111.7 ppb	4.46	0.40%
Sr 421.552†	424366.4	2449.1 µg/L	12.80	2449.1 ppb	12.80	0.52%
Ti 334.940†	2730278.7	6278.6 µg/L	17.31	6278.6 ppb	17.31	0.28%
Tl 190.801†	829.0	1353.1 µg/L	5.08	1353.1 ppb	5.08	0.38%
U 409.014†	-500.8	-88.439 µg/L	3.6868	-88.439 ppb	3.6868	4.17%
V 292.402†	110765.7	1351.1 µg/L	7.26	1351.1 ppb	7.26	0.54%
Zn 213.857†	229769.2	6457.8 µg/L	37.99	6457.8 ppb	37.99	0.59%

Sequence No.: 6
Sample ID: 241536007|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 303
Date Collected: 12/14/2009 10:41:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536007|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115131.3	115131.3	103	%			10:41:39
1	Al 396.153Radial†	226074.6	219722.3	116130	µg/L	116130	ppb	10:41:39
1	Ca 317.933Radial†	89845.5	86973.8	35089	µg/L	35089	ppb	10:41:39
1	Fe 238.204 Radial†	36148.2	35146.8	186620	µg/L	186620	ppb	10:41:45
1	K 766.490 Radial†	28602.3	27072.8	15273	µg/L	15273	ppb	10:41:39
1	Mg 279.077 IEC†	4981.9	4829.6	26972	µg/L	26972	ppb	10:41:45
1	Na 589.592 Radial†	17081.7	17015.8	4799.3	µg/L	4799.3	ppb	10:41:45
1	Sr 421.552†	63725.1	62072.2	358.23	µg/L	358.23	ppb	10:41:39
1	Sc 361.383	2009527.1	2009527.1	100.08	%			10:42:20
1	Y 371.029	1326953.7	1326953.7	108.47	%			10:42:20
1	Ag 328.068†	-1700.9	-1683.2	0.3687	µg/L	0.3687	ppb	10:42:26
1	As 188.979†	31.5	28.3	34.440	µg/L	34.440	ppb	10:42:46
1	B 249.677†	2428.8	2265.0	46.641	µg/L	46.641	ppb	10:42:26
1	Ba 233.527†	47281.5	47314.3	1266.2	µg/L	1266.2	ppb	10:42:26
1	Be 313.107†	33964.7	30317.4	18.124	µg/L	18.124	ppb	10:42:26
1	Cd 226.502†	480.6	577.8	1.8516	µg/L	1.8516	ppb	10:42:26
1	Co 228.616†	1230.1	1298.9	56.781	µg/L	56.781	ppb	10:42:46
1	Cr 267.716†	4471.2	4591.7	102.47	µg/L	102.47	ppb	10:42:26
1	Cu 324.752†	9977.7	6660.3	87.669	µg/L	87.669	ppb	10:42:26
1	Mn 257.610†	1312574.7	1311720.1	4339.4	µg/L	4339.4	ppb	10:42:20
1	Mo 202.031†	16.9	21.6	9.9162	µg/L	9.9162	ppb	10:42:46
1	Ni 231.604†	2591.5	2298.3	132.64	µg/L	132.64	ppb	10:42:46
1	P 214.914†	777.4	586.7	1121.3	µg/L	1121.3	ppb	10:42:46
1	Pb 220.353†	585.2	533.7	148.81	µg/L	148.81	ppb	10:42:46
1	S 181.975 Axial†	141.3	115.5	586.54	µg/L	586.54	ppb	10:42:46
1	Sb 206.836†	14.4	-9.8	2.5014	µg/L	2.5014	ppb	10:42:46
1	Se 196.026†	-68.7	-79.4	7.1772	µg/L	7.1772	ppb	10:42:46
1	SiO2†	201886.4	199683.3	40507	µg/L	40507	ppb	10:42:20
1	Si 251.611†	231658.6	231107.2	18639	µg/L	18639	ppb	10:42:20
1	Sn 189.927†	-124.8	-147.1	-39.813	µg/L	-39.813	ppb	10:42:46
1	Ti 334.940†	1920842.7	1918430.8	4413.9	µg/L	4413.9	ppb	10:42:20
1	Tl 190.801†	-40.3	-20.1	13.747	µg/L	13.747	ppb	10:42:46
1	U 409.014†	-271.4	-972.8	-131.03	µg/L	-131.03	ppb	10:42:20
1	V 292.402†	19430.6	19504.8	249.18	µg/L	249.18	ppb	10:42:26
1	Zn 213.857†	18492.5	17949.1	485.82	µg/L	485.82	ppb	10:42:26
2	Sc RADIAL	115845.8	115845.8	103	%			10:41:51
2	Al 396.153Radial†	228815.4	221015.4	116810	µg/L	116810	ppb	10:41:51
2	Ca 317.933Radial†	91302.3	87843.0	35440	µg/L	35440	ppb	10:41:51
2	Fe 238.204 Radial†	36181.1	34961.8	185640	µg/L	185640	ppb	10:41:56
2	K 766.490 Radial†	29100.0	27382.3	15447	µg/L	15447	ppb	10:41:51
2	Mg 279.077 IEC†	4940.8	4759.9	26581	µg/L	26581	ppb	10:41:56
2	Na 589.592 Radial†	17104.6	16935.5	4776.6	µg/L	4776.6	ppb	10:41:56
2	Sr 421.552†	64592.4	62528.2	360.86	µg/L	360.86	ppb	10:41:51
2	Sc 361.383	2008025.3	2008025.3	100.01	%			10:42:54
2	Y 371.029	1326486.9	1326486.9	108.43	%			10:42:54
2	Ag 328.068†	-1754.2	-1737.8	-0.2265	µg/L	-0.2265	ppb	10:43:00
2	As 188.979†	26.7	23.6	25.352	µg/L	25.352	ppb	10:43:20
2	B 249.677†	2432.4	2270.4	47.202	µg/L	47.202	ppb	10:43:00
2	Ba 233.527†	47142.4	47210.5	1263.4	µg/L	1263.4	ppb	10:43:00
2	Be 313.107†	33751.4	30129.5	18.001	µg/L	18.001	ppb	10:43:00
2	Cd 226.502†	528.6	626.1	3.2903	µg/L	3.2903	ppb	10:43:00
2	Co 228.616†	1232.7	1302.4	56.952	µg/L	56.952	ppb	10:43:20
2	Cr 267.716†	4480.8	4604.6	102.76	µg/L	102.76	ppb	10:43:00
2	Cu 324.752†	9959.1	6649.2	87.378	µg/L	87.378	ppb	10:43:00
2	Mn 257.610†	1311718.3	1311844.6	4339.6	µg/L	4339.6	ppb	10:42:54
2	Mo 202.031†	18.4	23.1	10.055	µg/L	10.055	ppb	10:43:20
2	Ni 231.604†	2604.4	2313.1	133.50	µg/L	133.50	ppb	10:43:20
2	P 214.914†	776.5	586.4	1121.9	µg/L	1121.9	ppb	10:43:20
2	Pb 220.353†	588.9	537.9	149.96	µg/L	149.96	ppb	10:43:20

2	S 181.975 Axial†	140.7	115.0	583.81 µg/L	583.81 ppb	10:43:20
2	Sb 206.836†	14.1	-10.1	2.1258 µg/L	2.1258 ppb	10:43:20
2	Se 196.026†	-57.1	-67.9	23.688 µg/L	23.688 ppb	10:43:20
2	SiO2†	201464.9	199412.6	40452 µg/L	40452 ppb	10:42:54
2	Si 251.611†	231243.6	230865.4	18619 µg/L	18619 ppb	10:42:54
2	Sn 189.927†	-131.8	-154.1	-43.530 µg/L	-43.530 ppb	10:43:20
2	Ti 334.940†	1920547.3	1919570.9	4416.5 µg/L	4416.5 ppb	10:42:54
2	Tl 190.801†	-39.8	-19.7	14.363 µg/L	14.363 ppb	10:43:20
2	U 409.014†	-197.8	-899.4	-123.52 µg/L	-123.52 ppb	10:42:54
2	V 292.402†	19408.0	19496.8	249.02 µg/L	249.02 ppb	10:43:00
2	Zn 213.857†	18374.2	17844.7	482.98 µg/L	482.98 ppb	10:43:00
3	Sc RADIAL	116002.1	116002.1	104 %		10:42:02
3	Al 396.153Radial†	229255.5	221142.2	116880 µg/L	116880 ppb	10:42:02
3	Ca 317.933Radial†	91324.3	87745.3	35400 µg/L	35400 ppb	10:42:02
3	Fe 238.204 Radial†	36539.6	35260.7	187220 µg/L	187220 ppb	10:42:07
3	K 766.490 Radial†	29082.6	27327.6	15417 µg/L	15417 ppb	10:42:02
3	Mg 279.077 IEC†	5012.6	4822.8	26933 µg/L	26933 ppb	10:42:07
3	Na 589.592 Radial†	17209.1	17014.1	4798.8 µg/L	4798.8 ppb	10:42:07
3	Sr 421.552†	64699.4	62547.4	360.97 µg/L	360.97 ppb	10:42:02
3	Sc 361.383	2019254.1	2019254.1	100.57 %		10:43:28
3	Y 371.029	1333262.5	1333262.5	108.98 %		10:43:28
3	Ag 328.068†	-1727.2	-1701.2	0.2350 µg/L	0.2350 ppb	10:43:34
3	As 188.979†	32.0	28.7	35.047 µg/L	35.047 ppb	10:43:54
3	B 249.677†	2413.7	2238.3	45.212 µg/L	45.212 ppb	10:43:34
3	Ba 233.527†	47062.2	46868.6	1254.2 µg/L	1254.2 ppb	10:43:34
3	Be 313.107†	33798.3	29988.4	17.915 µg/L	17.915 ppb	10:43:34
3	Cd 226.502†	519.3	613.9	2.8131 µg/L	2.8131 ppb	10:43:34
3	Co 228.616†	1223.8	1286.7	56.189 µg/L	56.189 ppb	10:43:54
3	Cr 267.716†	4516.0	4614.7	102.98 µg/L	102.98 ppb	10:43:34
3	Cu 324.752†	9961.7	6596.4	87.342 µg/L	87.342 ppb	10:43:34
3	Mn 257.610†	1314583.4	1307399.9	4325.2 µg/L	4325.2 ppb	10:43:28
3	Mo 202.031†	13.3	18.0	9.5039 µg/L	9.5039 ppb	10:43:54
3	Ni 231.604†	2573.2	2267.6	130.87 µg/L	130.87 ppb	10:43:54
3	P 214.914†	768.7	574.4	1093.5 µg/L	1093.5 ppb	10:43:54
3	Pb 220.353†	590.3	535.9	149.45 µg/L	149.45 ppb	10:43:54
3	S 181.975 Axial†	134.5	108.1	546.75 µg/L	546.75 ppb	10:43:54
3	Sb 206.836†	31.6	7.2	20.162 µg/L	20.162 ppb	10:43:54
3	Se 196.026†	-55.1	-65.6	28.067 µg/L	28.067 ppb	10:43:54
3	SiO2†	201874.7	198699.9	40308 µg/L	40308 ppb	10:43:28
3	Si 251.611†	231863.6	230196.1	18565 µg/L	18565 ppb	10:43:28
3	Sn 189.927†	-120.0	-141.7	-36.967 µg/L	-36.967 ppb	10:43:54
3	Ti 334.940†	1924243.8	1912567.6	4400.4 µg/L	4400.4 ppb	10:43:28
3	Tl 190.801†	-44.0	-23.6	8.0714 µg/L	8.0714 ppb	10:43:54
3	U 409.014†	-329.5	-1029.3	-136.77 µg/L	-136.77 ppb	10:43:28
3	V 292.402†	19384.7	19365.7	247.55 µg/L	247.55 ppb	10:43:34
3	Zn 213.857†	18324.7	17693.3	478.54 µg/L	478.54 ppb	10:43:34

Mean Data: 241536007|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2012268.8	100.22	%	0.304				0.30%
Sc RADIAL	115659.7	103	%	0.4				0.40%
Y 371.029	1328901.0	108.63	%	0.309				0.28%
Ag 328.068†	-1707.4	0.1257	µg/L	0.31228	0.1257	ppb	0.31228	248.35%
Al 396.153Radial†	220626.6	116600	µg/L	415.3	116600	ppb	415.3	0.36%
As 188.979†	26.8	31.613	µg/L	5.4304	31.613	ppb	5.4304	17.18%
B 249.677†	2257.9	46.351	µg/L	1.0262	46.351	ppb	1.0262	2.21%
Ba 233.527†	47131.1	1261.3	µg/L	6.24	1261.3	ppb	6.24	0.49%
Be 313.107†	30145.1	18.013	µg/L	0.1053	18.013	ppb	0.1053	0.58%
Ca 317.933Radial†	87520.7	35310	µg/L	192.1	35310	ppb	192.1	0.54%
Cd 226.502†	606.0	2.6517	µg/L	0.73280	2.6517	ppb	0.73280	27.64%
Co 228.616†	1296.0	56.641	µg/L	0.4002	56.641	ppb	0.4002	0.71%
Cr 267.716†	4603.7	102.73	µg/L	0.255	102.73	ppb	0.255	0.25%
Cu 324.752†	6635.3	87.463	µg/L	0.1791	87.463	ppb	0.1791	0.20%
Fe 238.204 Radial†	35123.1	186490	µg/L	801.1	186490	ppb	801.1	0.43%
K 766.490 Radial†	27260.9	15379	µg/L	93.2	15379	ppb	93.2	0.61%
Mg 279.077 IEC†	4804.1	26828	µg/L	215.5	26828	ppb	215.5	0.80%
Mn 257.610†	1310321.5	4334.7	µg/L	8.25	4334.7	ppb	8.25	0.19%
Mo 202.031†	20.9	9.8249	µg/L	0.28649	9.8249	ppb	0.28649	2.92%
Na 589.592 Radial†	16988.4	4791.6	µg/L	12.94	4791.6	ppb	12.94	0.27%

Ni 231.604†	2293.0	132.34 µg/L	1.341	132.34 ppb	1.341	1.01%
P 214.914†	582.5	1112.3 µg/L	16.25	1112.3 ppb	16.25	1.46%
Pb 220.353†	535.8	149.41 µg/L	0.579	149.41 ppb	0.579	0.39%
S 181.975 Axial†	112.9	572.37 µg/L	22.228	572.37 ppb	22.228	3.88%
Sb 206.836†	-4.2	8.2630 µg/L	10.30644	8.2630 ppb	10.30644	124.73%
Se 196.026†	-71.0	19.644 µg/L	11.0163	19.644 ppb	11.0163	56.08%
SiO2†	199265.3	40422 µg/L	103.0	40422 ppb	103.0	0.25%
Si 251.611†	230722.9	18608 µg/L	38.2	18608 ppb	38.2	0.21%
Sn 189.927†	-147.6	-40.103 µg/L	3.2907	-40.103 ppb	3.2907	8.21%
Sr 421.552†	62382.6	360.02 µg/L	1.552	360.02 ppb	1.552	0.43%
Ti 334.940†	1916856.4	4410.3 µg/L	8.65	4410.3 ppb	8.65	0.20%
Tl 190.801†	-21.2	12.060 µg/L	3.4682	12.060 ppb	3.4682	28.76%
U 409.014†	-967.1	-130.44 µg/L	6.645	-130.44 ppb	6.645	5.09%
V 292.402†	19455.7	248.58 µg/L	0.899	248.58 ppb	0.899	0.36%
Zn 213.857†	17829.0	482.44 µg/L	3.670	482.44 ppb	3.670	0.76%

Sequence No.: 7
Sample ID: 1201993389|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 304
Date Collected: 12/14/2009 10:44:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993389|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116112.5	116112.5	104	%			10:44:36
1	Al 396.153Radial†	209506.1	201885.3	106700	µg/L	106700	ppb	10:44:36
1	Ca 317.933Radial†	59456.7	56928.0	22967	µg/L	22967	ppb	10:44:42
1	Fe 238.204 Radial†	27204.1	26223.9	139240	µg/L	139240	ppb	10:44:42
1	K 766.490 Radial†	25983.2	24311.8	13715	µg/L	13715	ppb	10:44:36
1	Mg 279.077 IEC†	3900.3	3745.5	20926	µg/L	20926	ppb	10:44:42
1	Na 589.592 Radial†	12416.6	12376.3	3490.7	µg/L	3490.7	ppb	10:44:42
1	Sr 421.552†	45818.4	44279.0	255.54	µg/L	255.54	ppb	10:44:36
1	Sc 361.383	2020748.5	2020748.5	100.64	%			10:45:17
1	Y 371.029	1267841.4	1267841.4	103.64	%			10:45:17
1	Ag 328.068†	-1290.5	-1266.0	0.0095	µg/L	0.0095	ppb	10:45:22
1	As 188.979†	22.7	19.4	22.694	µg/L	22.694	ppb	10:45:43
1	B 249.677†	1822.5	1649.2	32.903	µg/L	32.903	ppb	10:45:22
1	Ba 233.527†	31993.2	31861.3	852.61	µg/L	852.61	ppb	10:45:22
1	Be 313.107†	23971.8	20199.8	11.968	µg/L	11.968	ppb	10:45:22
1	Cd 226.502†	333.0	428.5	1.2896	µg/L	1.2896	ppb	10:45:22
1	Co 228.616†	661.8	727.4	30.208	µg/L	30.208	ppb	10:45:43
1	Cr 267.716†	3502.3	3604.2	80.352	µg/L	80.352	ppb	10:45:22
1	Cu 324.752†	8322.5	4960.4	65.347	µg/L	65.347	ppb	10:45:22
1	Mn 257.610†	547301.0	544052.5	1807.6	µg/L	1807.6	ppb	10:45:17
1	Mo 202.031†	-1.9	2.9	5.8197	µg/L	5.8197	ppb	10:45:43
1	Ni 231.604†	1597.8	1296.6	74.830	µg/L	74.830	ppb	10:45:43
1	P 214.914†	460.4	267.5	465.46	µg/L	465.46	ppb	10:45:43
1	Pb 220.353†	437.9	384.1	109.04	µg/L	109.04	ppb	10:45:43
1	S 181.975 Axial†	103.3	76.9	387.86	µg/L	387.86	ppb	10:45:43
1	Sb 206.836†	28.2	3.9	13.568	µg/L	13.568	ppb	10:45:43
1	Se 196.026†	-44.7	-55.2	10.520	µg/L	10.520	ppb	10:45:43
1	SiO2†	172905.1	169766.9	34438	µg/L	34438	ppb	10:45:17
1	Si 251.611†	198018.8	196397.0	15857	µg/L	15857	ppb	10:45:17
1	Sn 189.927†	-51.3	-73.3	-11.721	µg/L	-11.721	ppb	10:45:43
1	Ti 334.940†	1413821.9	1403991.4	3230.4	µg/L	3230.4	ppb	10:45:17
1	Tl 190.801†	-32.9	-12.6	8.9033	µg/L	8.9033	ppb	10:45:43
1	U 409.014†	100.6	-601.7	-85.461	µg/L	-85.461	ppb	10:45:17
1	V 292.402†	12475.9	12486.7	161.13	µg/L	161.13	ppb	10:45:22
1	Zn 213.857†	13000.2	12389.3	334.24	µg/L	334.24	ppb	10:45:22
2	Sc RADIAL	115510.7	115510.7	103	%			10:44:47
2	Al 396.153Radial†	210162.9	203574.7	107590	µg/L	107590	ppb	10:44:47
2	Ca 317.933Radial†	59559.5	57326.4	23128	µg/L	23128	ppb	10:44:53
2	Fe 238.204 Radial†	27323.2	26476.1	140580	µg/L	140580	ppb	10:44:53
2	K 766.490 Radial†	26051.5	24508.6	13826	µg/L	13826	ppb	10:44:47
2	Mg 279.077 IEC†	3880.5	3745.9	20926	µg/L	20926	ppb	10:44:53
2	Na 589.592 Radial†	12426.2	12448.1	3511.0	µg/L	3511.0	ppb	10:44:53
2	Sr 421.552†	46064.0	44747.4	258.24	µg/L	258.24	ppb	10:44:47
2	Sc 361.383	2005899.7	2005899.7	99.903	%			10:45:50
2	Y 371.029	1258249.8	1258249.8	102.85	%			10:45:50
2	Ag 328.068†	-1258.4	-1243.3	0.3375	µg/L	0.3375	ppb	10:45:56
2	As 188.979†	18.5	15.4	14.598	µg/L	14.598	ppb	10:46:17
2	B 249.677†	1823.8	1663.9	33.165	µg/L	33.165	ppb	10:45:56
2	Ba 233.527†	31899.0	32002.3	856.38	µg/L	856.38	ppb	10:45:56
2	Be 313.107†	23912.0	20316.2	12.048	µg/L	12.048	ppb	10:45:56
2	Cd 226.502†	335.0	432.9	1.3131	µg/L	1.3131	ppb	10:45:56
2	Co 228.616†	676.6	747.1	31.228	µg/L	31.228	ppb	10:46:17
2	Cr 267.716†	3498.4	3626.0	80.839	µg/L	80.839	ppb	10:45:56
2	Cu 324.752†	8352.1	5051.2	66.284	µg/L	66.284	ppb	10:45:56
2	Mn 257.610†	542326.7	543098.9	1804.6	µg/L	1804.6	ppb	10:45:50
2	Mo 202.031†	-9.0	-4.3	5.0115	µg/L	5.0115	ppb	10:46:17
2	Ni 231.604†	1608.2	1318.7	76.108	µg/L	76.108	ppb	10:46:17
2	P 214.914†	445.6	256.0	438.58	µg/L	438.58	ppb	10:46:17
2	Pb 220.353†	431.1	380.6	108.15	µg/L	108.15	ppb	10:46:17

2	S 181.975 Axial†	98.7	73.1	367.33 µg/L	367.33 ppb	10:46:17
2	Sb 206.836†	22.4	-1.7	7.7008 µg/L	7.7008 ppb	10:46:17
2	Se 196.026†	-46.5	-57.3	8.4170 µg/L	8.4170 ppb	10:46:17
2	SiO2†	171220.1	169352.0	34354 µg/L	34354 ppb	10:45:50
2	Si 251.611†	196088.6	195921.5	15819 µg/L	15819 ppb	10:45:50
2	Sn 189.927†	-58.4	-80.8	-15.349 µg/L	-15.349 ppb	10:46:17
2	Ti 334.940†	1399101.3	1399655.7	3220.4 µg/L	3220.4 ppb	10:45:50
2	Tl 190.801†	-30.4	-10.3	12.381 µg/L	12.381 ppb	10:46:17
2	U 409.014†	110.9	-590.6	-84.606 µg/L	-84.606 ppb	10:45:50
2	V 292.402†	12470.5	12573.1	162.27 µg/L	162.27 ppb	10:45:56
2	Zn 213.857†	13025.3	12510.0	337.50 µg/L	337.50 ppb	10:45:56
3	Sc RADIAL	116170.1	116170.1	104 %		10:44:58
3	Al 396.153Radial†	211776.1	203973.3	107800 µg/L	107800 ppb	10:44:58
3	Ca 317.933Radial†	59541.3	56981.2	22989 µg/L	22989 ppb	10:45:04
3	Fe 238.204 Radial†	27252.4	26257.5	139420 µg/L	139420 ppb	10:45:04
3	K 766.490 Radial†	26211.1	24519.1	13832 µg/L	13832 ppb	10:44:58
3	Mg 279.077 IEC†	3914.7	3757.4	20993 µg/L	20993 ppb	10:45:04
3	Na 589.592 Radial†	12444.9	12397.6	3496.8 µg/L	3496.8 ppb	10:45:04
3	Sr 421.552†	46367.6	44786.5	258.47 µg/L	258.47 ppb	10:44:58
3	Sc 361.383	2027861.5	2027861.5	101.00 %		10:46:25
3	Y 371.029	1271287.4	1271287.4	103.92 %		10:46:25
3	Ag 328.068†	-1303.3	-1274.2	-0.0464 µg/L	-0.0464 ppb	10:46:30
3	As 188.979†	24.9	21.5	26.576 µg/L	26.576 ppb	10:46:51
3	B 249.677†	1835.7	1655.8	33.157 µg/L	33.157 ppb	10:46:30
3	Ba 233.527†	32190.0	31944.6	854.84 µg/L	854.84 ppb	10:46:30
3	Be 313.107†	24083.3	20226.7	12.002 µg/L	12.002 ppb	10:46:30
3	Cd 226.502†	341.8	436.0	1.4930 µg/L	1.4930 ppb	10:46:30
3	Co 228.616†	670.0	733.2	30.595 µg/L	30.595 ppb	10:46:51
3	Cr 267.716†	3514.9	3604.4	80.360 µg/L	80.360 ppb	10:46:30
3	Cu 324.752†	8416.6	5024.6	65.844 µg/L	65.844 ppb	10:46:30
3	Mn 257.610†	541774.6	536673.2	1783.3 µg/L	1783.3 ppb	10:46:25
3	Mo 202.031†	-4.0	0.8	5.5747 µg/L	5.5747 ppb	10:46:51
3	Ni 231.604†	1603.9	1297.1	74.856 µg/L	74.856 ppb	10:46:51
3	P 214.914†	449.4	255.0	437.77 µg/L	437.77 ppb	10:46:51
3	Pb 220.353†	436.4	381.1	108.32 µg/L	108.32 ppb	10:46:51
3	S 181.975 Axial†	101.0	74.3	374.05 µg/L	374.05 ppb	10:46:51
3	Sb 206.836†	20.9	-3.4	5.8006 µg/L	5.8006 ppb	10:46:51
3	Se 196.026†	-47.2	-57.5	7.2461 µg/L	7.2461 ppb	10:46:51
3	SiO2†	171253.3	167528.8	33984 µg/L	33984 ppb	10:46:25
3	Si 251.611†	195953.5	193661.9	15636 µg/L	15636 ppb	10:46:25
3	Sn 189.927†	-53.6	-75.4	-12.740 µg/L	-12.740 ppb	10:46:51
3	Ti 334.940†	1399342.5	1384727.5	3186.1 µg/L	3186.1 ppb	10:46:25
3	Tl 190.801†	-42.7	-22.2	-6.6476 µg/L	-6.6476 ppb	10:46:51
3	U 409.014†	171.7	-531.6	-78.508 µg/L	-78.508 ppb	10:46:25
3	V 292.402†	12609.4	12575.4	162.22 µg/L	162.22 ppb	10:46:30
3	Zn 213.857†	13125.8	12468.4	336.46 µg/L	336.46 ppb	10:46:30

Mean Data: 1201993389|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2018169.9	100.51	%	0.558				0.56%
Sc RADIAL	115931.1	104	%	0.3				0.32%
Y 371.029	1265792.9	103.47	%	0.552				0.53%
Ag 328.068†	-1261.2	0.1002	µg/L	0.20740	0.1002	ppb	0.20740	206.98%
Al 396.153Radial†	203144.4	107360	µg/L	585.9	107360	ppb	585.9	0.55%
As 188.979†	18.7	21.289	µg/L	6.1113	21.289	ppb	6.1113	28.71%
B 249.677†	1656.3	33.075	µg/L	0.1492	33.075	ppb	0.1492	0.45%
Ba 233.527†	31936.0	854.61	µg/L	1.897	854.61	ppb	1.897	0.22%
Be 313.107†	20247.6	12.006	µg/L	0.0399	12.006	ppb	0.0399	0.33%
Ca 317.933Radial†	57078.5	23028	µg/L	87.3	23028	ppb	87.3	0.38%
Cd 226.502†	432.5	1.3652	µg/L	0.11131	1.3652	ppb	0.11131	8.15%
Co 228.616†	735.9	30.677	µg/L	0.5149	30.677	ppb	0.5149	1.68%
Cr 267.716†	3611.5	80.517	µg/L	0.2790	80.517	ppb	0.2790	0.35%
Cu 324.752†	5012.1	65.825	µg/L	0.4684	65.825	ppb	0.4684	0.71%
Fe 238.204 Radial†	26319.2	139750	µg/L	727.1	139750	ppb	727.1	0.52%
K 766.490 Radial†	24446.5	13791	µg/L	65.9	13791	ppb	65.9	0.48%
Mg 279.077 IEC†	3749.6	20948	µg/L	38.7	20948	ppb	38.7	0.18%
Mn 257.610†	541274.9	1798.5	µg/L	13.23	1798.5	ppb	13.23	0.74%
Mo 202.031†	-0.2	5.4686	µg/L	0.41439	5.4686	ppb	0.41439	7.58%
Na 589.592 Radial†	12407.3	3499.5	µg/L	10.39	3499.5	ppb	10.39	0.30%

Ni 231.604†	1304.1	75.265	µg/L	0.7304	75.265	ppb	0.7304	0.97%
P 214.914†	259.5	447.27	µg/L	15.759	447.27	ppb	15.759	3.52%
Pb 220.353†	381.9	108.50	µg/L	0.471	108.50	ppb	0.471	0.43%
S 181.975 Axial†	74.8	376.41	µg/L	10.467	376.41	ppb	10.467	2.78%
Sb 206.836†	-0.4	9.0233	µg/L	4.04928	9.0233	ppb	4.04928	44.88%
Se 196.026†	-56.7	8.7276	µg/L	1.65877	8.7276	ppb	1.65877	19.01%
SiO2†	168882.6	34259	µg/L	241.5	34259	ppb	241.5	0.71%
Si 251.611†	195326.8	15771	µg/L	118.1	15771	ppb	118.1	0.75%
Sn 189.927†	-76.5	-13.270	µg/L	1.8713	-13.270	ppb	1.8713	14.10%
Sr 421.552†	44604.3	257.42	µg/L	1.630	257.42	ppb	1.630	0.63%
Ti 334.940†	1396124.9	3212.3	µg/L	23.26	3212.3	ppb	23.26	0.72%
Tl 190.801†	-15.0	4.8788	µg/L	10.13241	4.8788	ppb	10.13241	207.68%
U 409.014†	-574.7	-82.859	µg/L	3.7916	-82.859	ppb	3.7916	4.58%
V 292.402†	12545.0	161.87	µg/L	0.644	161.87	ppb	0.644	0.40%
Zn 213.857†	12455.9	336.07	µg/L	1.665	336.07	ppb	1.665	0.50%

Sequence No.: 8
Sample ID: 1201993391|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 305
Date Collected: 12/14/2009 10:46:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993391|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116155.5	116155.5	104	%			10:47:32
1	Al 396.153Radial†	339476.4	327108.6	172860	µg/L	172860	ppb	10:47:32
1	Ca 317.933Radial†	65804.7	63026.6	25428	µg/L	25428	ppb	10:47:38
1	Fe 238.204 Radial†	32473.4	31294.1	166180	µg/L	166180	ppb	10:47:38
1	K 766.490 Radial†	40490.2	38288.0	21600	µg/L	21600	ppb	10:47:32
1	Mg 279.077 IEC†	5462.4	5250.0	29387	µg/L	29387	ppb	10:47:38
1	Na 589.592 Radial†	31213.9	30493.5	8600.7	µg/L	8600.7	ppb	10:47:32
1	Sr 421.552†	136859.9	132031.4	761.97	µg/L	761.97	ppb	10:47:32
1	Sc 361.383	2004297.9	2004297.9	99.824	%			10:48:13
1	Y 371.029	1256938.2	1256938.2	102.74	%			10:48:13
1	Ag 328.068†	56395.2	56511.1	553.68	µg/L	553.68	ppb	10:48:18
1	As 188.979†	296.7	294.1	556.11	µg/L	556.11	ppb	10:48:39
1	B 249.677†	13553.9	13416.1	571.62	µg/L	571.62	ppb	10:48:18
1	Ba 233.527†	48547.3	48705.5	1304.3	µg/L	1304.3	ppb	10:48:18
1	Be 313.107†	851121.5	849006.5	551.45	µg/L	551.45	ppb	10:48:13
1	Cd 226.502†	19429.5	19561.4	537.73	µg/L	537.73	ppb	10:48:18
1	Co 228.616†	10832.2	10921.1	545.48	µg/L	545.48	ppb	10:48:39
1	Cr 267.716†	28083.1	28257.0	628.85	µg/L	628.85	ppb	10:48:18
1	Cu 324.752†	86059.6	82902.7	627.97	µg/L	627.97	ppb	10:48:18
1	Mn 257.610†	633420.3	634787.3	2109.5	µg/L	2109.5	ppb	10:48:13
1	Mo 202.031†	4239.0	4251.3	514.15	µg/L	514.15	ppb	10:48:39
1	Ni 231.604†	10718.9	10446.8	602.90	µg/L	602.90	ppb	10:48:39
1	P 214.914†	754.2	565.5	1064.9	µg/L	1064.9	ppb	10:48:39
1	Pb 220.353†	2371.7	2324.9	627.49	µg/L	627.49	ppb	10:48:39
1	S 181.975 Axial†	1104.5	1080.8	5754.5	µg/L	5754.5	ppb	10:48:39
1	Sb 206.836†	457.4	434.0	466.52	µg/L	466.52	ppb	10:48:39
1	Se 196.026†	321.8	311.6	567.85	µg/L	567.85	ppb	10:48:39
1	SiO2†	171822.9	170092.9	34505	µg/L	34505	ppb	10:48:18
1	Si 251.611†	197463.0	197455.1	15844	µg/L	15844	ppb	10:48:18
1	Sn 189.927†	1004.3	983.7	532.11	µg/L	532.11	ppb	10:48:39
1	Ti 334.940†	2207610.5	2210712.5	5087.2	µg/L	5087.2	ppb	10:48:13
1	Tl 190.801†	295.3	315.9	538.29	µg/L	538.29	ppb	10:48:39
1	U 409.014†	4802.8	4109.7	379.47	µg/L	379.47	ppb	10:48:18
1	V 292.402†	57840.0	58032.7	714.27	µg/L	714.27	ppb	10:48:18
1	Zn 213.857†	34707.7	34241.2	945.06	µg/L	945.06	ppb	10:48:18
2	Sc RADIAL	115116.5	115116.5	103	%			10:47:43
2	Al 396.153Radial†	338850.3	329453.4	174100	µg/L	174100	ppb	10:47:43
2	Ca 317.933Radial†	65320.3	63128.0	25469	µg/L	25469	ppb	10:47:49
2	Fe 238.204 Radial†	32239.3	31349.0	166470	µg/L	166470	ppb	10:47:49
2	K 766.490 Radial†	40514.7	38664.1	21812	µg/L	21812	ppb	10:47:43
2	Mg 279.077 IEC†	5428.9	5265.0	29471	µg/L	29471	ppb	10:47:49
2	Na 589.592 Radial†	31247.1	30797.4	8686.4	µg/L	8686.4	ppb	10:47:43
2	Sr 421.552†	136278.3	132656.5	765.58	µg/L	765.58	ppb	10:47:43
2	Sc 361.383	1998291.1	1998291.1	99.524	%			10:48:46
2	Y 371.029	1253510.1	1253510.1	102.46	%			10:48:46
2	Ag 328.068†	57117.9	57407.1	562.28	µg/L	562.28	ppb	10:48:52
2	As 188.979†	284.2	282.4	533.44	µg/L	533.44	ppb	10:49:12
2	B 249.677†	13719.9	13623.7	581.18	µg/L	581.18	ppb	10:48:52
2	Ba 233.527†	49174.4	49481.8	1325.1	µg/L	1325.1	ppb	10:48:52
2	Be 313.107†	854455.9	854919.8	555.29	µg/L	555.29	ppb	10:48:46
2	Cd 226.502†	19770.0	19962.0	548.97	µg/L	548.97	ppb	10:48:52
2	Co 228.616†	10859.9	10981.6	548.49	µg/L	548.49	ppb	10:49:12
2	Cr 267.716†	28491.5	28751.8	639.86	µg/L	639.86	ppb	10:48:52
2	Cu 324.752†	86838.7	83944.7	635.48	µg/L	635.48	ppb	10:48:52
2	Mn 257.610†	635700.8	638986.1	2123.4	µg/L	2123.4	ppb	10:48:46
2	Mo 202.031†	4254.5	4279.6	517.54	µg/L	517.54	ppb	10:49:12
2	Ni 231.604†	10723.7	10483.9	605.05	µg/L	605.05	ppb	10:49:12
2	P 214.914†	751.9	565.5	1064.2	µg/L	1064.2	ppb	10:49:12
2	Pb 220.353†	2390.5	2350.9	634.46	µg/L	634.46	ppb	10:49:12

2	S 181.975 Axial†	1108.4	1088.1	5793.2 µg/L	5793.2 ppb	10:49:12
2	Sb 206.836†	467.8	445.9	479.01 µg/L	479.01 ppb	10:49:12
2	Se 196.026†	307.7	298.4	548.54 µg/L	548.54 ppb	10:49:12
2	SiO2†	173828.9	172625.9	35018 µg/L	35018 ppb	10:48:52
2	Si 251.611†	199747.2	200344.9	16077 µg/L	16077 ppb	10:48:52
2	Sn 189.927†	1009.2	991.7	536.25 µg/L	536.25 ppb	10:49:12
2	Ti 334.940†	2216042.6	2225832.6	5122.0 µg/L	5122.0 ppb	10:48:46
2	Tl 190.801†	292.1	313.6	534.99 µg/L	534.99 ppb	10:49:12
2	U 409.014†	4854.9	4176.5	386.07 µg/L	386.07 ppb	10:48:52
2	V 292.402†	58701.7	59072.7	726.81 µg/L	726.81 ppb	10:48:52
2	Zn 213.857†	35140.6	34780.7	960.25 µg/L	960.25 ppb	10:48:52
3	Sc RADIAL	116460.7	116460.7	104 %		10:47:55
3	Al 396.153Radial†	340766.3	327491.2	173060 µg/L	173060 ppb	10:47:55
3	Ca 317.933Radial†	65107.5	62189.9	25090 µg/L	25090 ppb	10:48:00
3	Fe 238.204 Radial†	32141.0	30892.4	164040 µg/L	164040 ppb	10:48:00
3	K 766.490 Radial†	40700.5	38387.9	21656 µg/L	21656 ppb	10:47:55
3	Mg 279.077 IEC†	5418.2	5193.7	29073 µg/L	29073 ppb	10:48:00
3	Na 589.592 Radial†	31392.8	30586.7	8627.0 µg/L	8627.0 ppb	10:47:55
3	Sr 421.552†	137295.7	132104.7	762.40 µg/L	762.40 ppb	10:47:55
3	Sc 361.383	2004948.8	2004948.8	99.856 %		10:49:20
3	Y 371.029	1257644.3	1257644.3	102.80 %		10:49:20
3	Ag 328.068†	56829.5	56927.7	557.50 µg/L	557.50 ppb	10:49:25
3	As 188.979†	283.8	281.1	531.23 µg/L	531.23 ppb	10:49:46
3	B 249.677†	13646.2	13504.1	576.38 µg/L	576.38 ppb	10:49:25
3	Ba 233.527†	48911.8	49054.7	1313.7 µg/L	1313.7 ppb	10:49:25
3	Be 313.107†	858280.8	855899.4	555.93 µg/L	555.93 ppb	10:49:20
3	Cd 226.502†	19607.6	19733.5	542.74 µg/L	542.74 ppb	10:49:25
3	Co 228.616†	10799.5	10884.9	543.56 µg/L	543.56 ppb	10:49:46
3	Cr 267.716†	28315.8	28480.8	633.83 µg/L	633.83 ppb	10:49:25
3	Cu 324.752†	86525.3	83341.1	630.65 µg/L	630.65 ppb	10:49:25
3	Mn 257.610†	638468.4	639636.7	2125.2 µg/L	2125.2 ppb	10:49:20
3	Mo 202.031†	4214.5	4225.3	510.97 µg/L	510.97 ppb	10:49:46
3	Ni 231.604†	10679.0	10403.4	600.40 µg/L	600.40 ppb	10:49:46
3	P 214.914†	741.6	552.6	1038.2 µg/L	1038.2 ppb	10:49:46
3	Pb 220.353†	2373.8	2326.3	627.88 µg/L	627.88 ppb	10:49:46
3	S 181.975 Axial†	1099.1	1075.0	5723.8 µg/L	5723.8 ppb	10:49:46
3	Sb 206.836†	459.6	436.1	468.85 µg/L	468.85 ppb	10:49:46
3	Se 196.026†	308.3	297.9	546.27 µg/L	546.27 ppb	10:49:46
3	SiO2†	172987.3	171203.1	34730 µg/L	34730 ppb	10:49:25
3	Si 251.611†	198901.5	198831.4	15955 µg/L	15955 ppb	10:49:25
3	Sn 189.927†	992.5	971.6	525.57 µg/L	525.57 ppb	10:49:46
3	Ti 334.940†	2222758.3	2225164.3	5120.5 µg/L	5120.5 ppb	10:49:20
3	Tl 190.801†	290.4	310.9	530.80 µg/L	530.80 ppb	10:49:46
3	U 409.014†	4907.7	4213.1	390.17 µg/L	390.17 ppb	10:49:25
3	V 292.402†	58333.3	58507.9	719.79 µg/L	719.79 ppb	10:49:25
3	Zn 213.857†	34988.4	34511.0	952.93 µg/L	952.93 ppb	10:49:25

Mean Data: 1201993391|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2002512.6	99.735	%	0.1828				0.18%
Sc RADIAL	115910.9	104	%	0.6				0.61%
Y 371.029	1256030.9	102.67	%	0.181				0.18%
Ag 328.068†	56948.6	557.82	µg/L	4.311	557.82	ppb	4.311	0.77%
Al 396.153Radial†	328017.7	173340	µg/L	664.7	173340	ppb	664.7	0.38%
As 188.979†	285.9	540.26	µg/L	13.770	540.26	ppb	13.770	2.55%
B 249.677†	13514.7	576.39	µg/L	4.782	576.39	ppb	4.782	0.83%
Ba 233.527†	49080.7	1314.4	µg/L	10.41	1314.4	ppb	10.41	0.79%
Be 313.107†	853275.2	554.22	µg/L	2.423	554.22	ppb	2.423	0.44%
Ca 317.933Radial†	62781.5	25329	µg/L	207.7	25329	ppb	207.7	0.82%
Cd 226.502†	19752.3	543.15	µg/L	5.632	543.15	ppb	5.632	1.04%
Co 228.616†	10929.2	545.84	µg/L	2.483	545.84	ppb	2.483	0.45%
Cr 267.716†	28496.5	634.18	µg/L	5.515	634.18	ppb	5.515	0.87%
Cu 324.752†	83396.2	631.37	µg/L	3.805	631.37	ppb	3.805	0.60%
Fe 238.204 Radial†	31178.5	165560	µg/L	1323.5	165560	ppb	1323.5	0.80%
K 766.490 Radial†	38446.7	21689	µg/L	109.9	21689	ppb	109.9	0.51%
Mg 279.077 IEC†	5236.3	29310	µg/L	210.1	29310	ppb	210.1	0.72%
Mn 257.610†	637803.4	2119.3	µg/L	8.58	2119.3	ppb	8.58	0.40%
Mo 202.031†	4252.1	514.22	µg/L	3.289	514.22	ppb	3.289	0.64%
Na 589.592 Radial†	30625.8	8638.0	µg/L	43.91	8638.0	ppb	43.91	0.51%

Ni 231.604†	10444.7	602.78	µg/L	2.325	602.78	ppb	2.325	0.39%
P 214.914†	561.2	1055.8	µg/L	15.20	1055.8	ppb	15.20	1.44%
Pb 220.353†	2334.0	629.94	µg/L	3.915	629.94	ppb	3.915	0.62%
S 181.975 Axial†	1081.3	5757.1	µg/L	34.80	5757.1	ppb	34.80	0.60%
Sb 206.836†	438.7	471.46	µg/L	6.643	471.46	ppb	6.643	1.41%
Se 196.026†	302.7	554.22	µg/L	11.859	554.22	ppb	11.859	2.14%
SiO2†	171307.3	34751	µg/L	257.6	34751	ppb	257.6	0.74%
Si 251.611†	198877.1	15959	µg/L	116.8	15959	ppb	116.8	0.73%
Sn 189.927†	982.3	531.31	µg/L	5.384	531.31	ppb	5.384	1.01%
Sr 421.552†	132264.2	763.32	µg/L	1.972	763.32	ppb	1.972	0.26%
Ti 334.940†	2220569.8	5109.9	µg/L	19.67	5109.9	ppb	19.67	0.38%
Tl 190.801†	313.4	534.69	µg/L	3.752	534.69	ppb	3.752	0.70%
U 409.014†	4166.4	385.24	µg/L	5.402	385.24	ppb	5.402	1.40%
V 292.402†	58537.8	720.29	µg/L	6.285	720.29	ppb	6.285	0.87%
Zn 213.857†	34511.0	952.75	µg/L	7.596	952.75	ppb	7.596	0.80%

Sequence No.: 9
Sample ID: 1201993392|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 306
Date Collected: 12/14/2009 10:49:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993392|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115555.8	115555.8	103	%			10:50:28
1	Al 396.153Radial†	385171.5	373088.3	197160	µg/L	197160	ppb	10:50:28
1	Ca 317.933Radial†	78353.1	75516.0	30467	µg/L	30467	ppb	10:50:28
1	Fe 238.204 Radial†	35837.7	34716.7	184350	µg/L	184350	ppb	10:50:33
1	K 766.490 Radial†	46036.7	43865.5	24746	µg/L	24746	ppb	10:50:28
1	Mg 279.077 IEC†	6338.6	6126.5	34305	µg/L	34305	ppb	10:50:33
1	Na 589.592 Radial†	33028.2	32407.8	9140.6	µg/L	9140.6	ppb	10:50:28
1	Sr 421.552†	145126.6	140727.1	812.16	µg/L	812.16	ppb	10:50:28
1	Sc 361.383	2004667.4	2004667.4	99.842	%			10:51:08
1	Y 371.029	1259893.5	1259893.5	102.99	%			10:51:08
1	Ag 328.068†	56297.3	56402.7	554.29	µg/L	554.29	ppb	10:51:14
1	As 188.979†	290.2	287.5	540.08	µg/L	540.08	ppb	10:51:34
1	B 249.677†	13812.8	13672.9	577.84	µg/L	577.84	ppb	10:51:14
1	Ba 233.527†	47440.9	47588.4	1274.5	µg/L	1274.5	ppb	10:51:14
1	Be 313.107†	868720.2	866475.9	562.82	µg/L	562.82	ppb	10:51:08
1	Cd 226.502†	19603.9	19732.5	541.17	µg/L	541.17	ppb	10:51:14
1	Co 228.616†	11744.6	11833.0	591.72	µg/L	591.72	ppb	10:51:34
1	Cr 267.716†	28824.0	28993.8	645.27	µg/L	645.27	ppb	10:51:14
1	Cu 324.752†	88083.1	84913.5	646.24	µg/L	646.24	ppb	10:51:14
1	Mn 257.610†	1069473.5	1071413.5	3548.4	µg/L	3548.4	ppb	10:51:08
1	Mo 202.031†	4209.9	4221.3	511.28	µg/L	511.28	ppb	10:51:34
1	Ni 231.604†	11251.1	10977.9	633.55	µg/L	633.55	ppb	10:51:34
1	P 214.914†	776.5	587.7	1099.9	µg/L	1099.9	ppb	10:51:34
1	Pb 220.353†	2479.8	2432.7	657.82	µg/L	657.82	ppb	10:51:34
1	S 181.975 Axial†	1116.8	1092.9	5815.6	µg/L	5815.6	ppb	10:51:34
1	Sb 206.836†	444.8	421.4	452.94	µg/L	452.94	ppb	10:51:34
1	Se 196.026†	307.0	296.7	557.20	µg/L	557.20	ppb	10:51:34
1	SiO2†	226435.6	224760.2	45594	µg/L	45594	ppb	10:51:14
1	Si 251.611†	260736.7	260792.4	20994	µg/L	20994	ppb	10:51:14
1	Sn 189.927†	988.6	967.8	528.25	µg/L	528.25	ppb	10:51:34
1	Ti 334.940†	2226042.6	2228766.2	5128.5	µg/L	5128.5	ppb	10:51:08
1	Tl 190.801†	287.8	308.3	531.88	µg/L	531.88	ppb	10:51:34
1	U 409.014†	4895.3	4201.5	385.35	µg/L	385.35	ppb	10:51:14
1	V 292.402†	60407.2	60593.3	746.47	µg/L	746.47	ppb	10:51:14
1	Zn 213.857†	36737.8	36268.1	1000.1	µg/L	1000.1	ppb	10:51:14
2	Sc RADIAL	115840.3	115840.3	103	%			10:50:39
2	Al 396.153Radial†	386092.7	373062.0	197150	µg/L	197150	ppb	10:50:39
2	Ca 317.933Radial†	78453.2	75426.3	30430	µg/L	30430	ppb	10:50:39
2	Fe 238.204 Radial†	36363.9	35140.1	186600	µg/L	186600	ppb	10:50:44
2	K 766.490 Radial†	46190.1	43904.2	24768	µg/L	24768	ppb	10:50:39
2	Mg 279.077 IEC†	6406.0	6176.5	34584	µg/L	34584	ppb	10:50:44
2	Na 589.592 Radial†	33076.5	32375.9	9131.6	µg/L	9131.6	ppb	10:50:39
2	Sr 421.552†	145441.5	140686.1	811.92	µg/L	811.92	ppb	10:50:39
2	Sc 361.383	2008524.1	2008524.1	100.03	%			10:51:42
2	Y 371.029	1262095.4	1262095.4	103.17	%			10:51:42
2	Ag 328.068†	56236.3	56233.4	552.85	µg/L	552.85	ppb	10:51:47
2	As 188.979†	299.8	296.5	557.23	µg/L	557.23	ppb	10:52:08
2	B 249.677†	13769.6	13603.1	573.89	µg/L	573.89	ppb	10:51:47
2	Ba 233.527†	47392.8	47449.1	1270.8	µg/L	1270.8	ppb	10:51:47
2	Be 313.107†	870647.7	866732.1	562.98	µg/L	562.98	ppb	10:51:42
2	Cd 226.502†	19555.9	19646.8	538.58	µg/L	538.58	ppb	10:51:47
2	Co 228.616†	11750.5	11816.3	590.86	µg/L	590.86	ppb	10:52:08
2	Cr 267.716†	28730.6	28845.1	641.97	µg/L	641.97	ppb	10:51:47
2	Cu 324.752†	88056.0	84717.0	645.32	µg/L	645.32	ppb	10:51:47
2	Mn 257.610†	1071663.5	1071546.0	3549.1	µg/L	3549.1	ppb	10:51:42
2	Mo 202.031†	4198.0	4201.3	508.99	µg/L	508.99	ppb	10:52:08
2	Ni 231.604†	11249.8	10954.9	632.23	µg/L	632.23	ppb	10:52:08
2	P 214.914†	774.4	584.1	1089.2	µg/L	1089.2	ppb	10:52:08
2	Pb 220.353†	2478.7	2426.9	656.26	µg/L	656.26	ppb	10:52:08

2	S 181.975 Axial†	1109.8	1083.7	5766.1 µg/L	5766.1 ppb	10:52:08
2	Sb 206.836†	441.8	417.5	448.89 µg/L	448.89 ppb	10:52:08
2	Se 196.026†	298.0	287.1	544.48 µg/L	544.48 ppb	10:52:08
2	SiO2†	225611.9	223501.4	45339 µg/L	45339 ppb	10:51:47
2	Si 251.611†	259743.8	259298.4	20873 µg/L	20873 ppb	10:51:47
2	Sn 189.927†	978.8	956.1	522.62 µg/L	522.62 ppb	10:52:08
2	Ti 334.940†	2231851.8	2230292.3	5132.0 µg/L	5132.0 ppb	10:51:42
2	Tl 190.801†	293.2	313.2	539.48 µg/L	539.48 ppb	10:52:08
2	U 409.014†	4753.1	4049.9	369.81 µg/L	369.81 ppb	10:51:47
2	V 292.402†	60280.0	60350.0	743.69 µg/L	743.69 ppb	10:51:47
2	Zn 213.857†	36631.1	36090.8	994.84 µg/L	994.84 ppb	10:51:47
3	Sc RADIAL	115107.9	115107.9	103 %		10:50:50
3	Al 396.153Radial†	386187.2	375528.6	198450 µg/L	198450 ppb	10:50:50
3	Ca 317.933Radial†	78127.8	75592.2	30497 µg/L	30497 ppb	10:50:50
3	Fe 238.204 Radial†	36350.8	35351.1	187720 µg/L	187720 ppb	10:50:56
3	K 766.490 Radial†	46125.3	44125.3	24893 µg/L	24893 ppb	10:50:50
3	Mg 279.077 IEC†	6419.6	6229.1	34879 µg/L	34879 ppb	10:50:56
3	Na 589.592 Radial†	33119.8	32621.5	9200.9 µg/L	9200.9 ppb	10:50:50
3	Sr 421.552†	145322.4	141464.7	816.41 µg/L	816.41 ppb	10:50:50
3	Sc 361.383	2007170.4	2007170.4	99.967 %		10:52:15
3	Y 371.029	1261863.6	1261863.6	103.15 %		10:52:15
3	Ag 328.068†	56787.9	56823.0	558.57 µg/L	558.57 ppb	10:52:21
3	As 188.979†	294.9	291.8	547.88 µg/L	547.88 ppb	10:52:41
3	B 249.677†	13861.3	13704.2	578.23 µg/L	578.23 ppb	10:52:21
3	Ba 233.527†	47782.8	47871.2	1282.1 µg/L	1282.1 ppb	10:52:21
3	Be 313.107†	869110.1	865780.9	562.36 µg/L	562.36 ppb	10:52:15
3	Cd 226.502†	19733.6	19837.8	543.86 µg/L	543.86 ppb	10:52:21
3	Co 228.616†	11724.6	11798.4	589.96 µg/L	589.96 ppb	10:52:41
3	Cr 267.716†	28945.1	29078.9	647.17 µg/L	647.17 ppb	10:52:21
3	Cu 324.752†	88785.9	85506.5	651.20 µg/L	651.20 ppb	10:52:21
3	Mn 257.610†	1070124.5	1070729.0	3546.6 µg/L	3546.6 ppb	10:52:15
3	Mo 202.031†	4195.2	4201.4	509.04 µg/L	509.04 ppb	10:52:41
3	Ni 231.604†	11215.0	10927.7	630.66 µg/L	630.66 ppb	10:52:41
3	P 214.914†	780.0	590.3	1101.5 µg/L	1101.5 ppb	10:52:41
3	Pb 220.353†	2462.4	2412.3	652.48 µg/L	652.48 ppb	10:52:41
3	S 181.975 Axial†	1102.4	1077.0	5730.4 µg/L	5730.4 ppb	10:52:41
3	Sb 206.836†	439.6	415.6	446.83 µg/L	446.83 ppb	10:52:41
3	Se 196.026†	296.1	285.4	542.71 µg/L	542.71 ppb	10:52:41
3	SiO2†	227681.3	225723.6	45790 µg/L	45790 ppb	10:52:21
3	Si 251.611†	262184.6	261915.1	21086 µg/L	21086 ppb	10:52:21
3	Sn 189.927†	982.3	960.3	524.95 µg/L	524.95 ppb	10:52:41
3	Ti 334.940†	2227198.4	2227142.1	5124.8 µg/L	5124.8 ppb	10:52:15
3	Tl 190.801†	286.4	306.6	529.09 µg/L	529.09 ppb	10:52:41
3	U 409.014†	4860.9	4160.9	380.67 µg/L	380.67 ppb	10:52:21
3	V 292.402†	60835.6	60946.4	750.96 µg/L	750.96 ppb	10:52:21
3	Zn 213.857†	36985.1	36469.6	1005.4 µg/L	1005.4 ppb	10:52:21

Mean Data: 1201993392|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2006787.3	99.948	%	0.0975				0.10%
Sc RADIAL	115501.3	103	%	0.3				0.32%
Y 371.029	1261284.1	103.10	%	0.099				0.10%
Ag 328.068†	56486.4	555.24	µg/L	2.978	555.24	ppb	2.978	0.54%
Al 396.153Radial†	373893.0	197590	µg/L	748.7	197590	ppb	748.7	0.38%
As 188.979†	292.0	548.40	µg/L	8.588	548.40	ppb	8.588	1.57%
B 249.677†	13660.1	576.65	µg/L	2.403	576.65	ppb	2.403	0.42%
Ba 233.527†	47636.2	1275.8	µg/L	5.76	1275.8	ppb	5.76	0.45%
Be 313.107†	866329.6	562.72	µg/L	0.319	562.72	ppb	0.319	0.06%
Ca 317.933Radial†	75511.5	30465	µg/L	33.5	30465	ppb	33.5	0.11%
Cd 226.502†	19739.0	541.20	µg/L	2.643	541.20	ppb	2.643	0.49%
Co 228.616†	11815.9	590.84	µg/L	0.878	590.84	ppb	0.878	0.15%
Cr 267.716†	28972.6	644.81	µg/L	2.636	644.81	ppb	2.636	0.41%
Cu 324.752†	85045.7	647.59	µg/L	3.163	647.59	ppb	3.163	0.49%
Fe 238.204 Radial†	35069.3	186220	µg/L	1715.2	186220	ppb	1715.2	0.92%
K 766.490 Radial†	43965.0	24802	µg/L	79.1	24802	ppb	79.1	0.32%
Mg 279.077 IEC†	6177.4	34589	µg/L	287.0	34589	ppb	287.0	0.83%
Mn 257.610†	1071229.5	3548.0	µg/L	1.31	3548.0	ppb	1.31	0.04%
Mo 202.031†	4208.0	509.77	µg/L	1.311	509.77	ppb	1.311	0.26%
Na 589.592 Radial†	32468.4	9157.7	µg/L	37.66	9157.7	ppb	37.66	0.41%

Ni 231.604†	10953.5	632.15 µg/L	1.450	632.15 ppb	1.450	0.23%
P 214.914†	587.4	1096.9 µg/L	6.68	1096.9 ppb	6.68	0.61%
Pb 220.353†	2423.9	655.52 µg/L	2.744	655.52 ppb	2.744	0.42%
S 181.975 Axial†	1084.5	5770.7 µg/L	42.79	5770.7 ppb	42.79	0.74%
Sb 206.836†	418.1	449.55 µg/L	3.110	449.55 ppb	3.110	0.69%
Se 196.026†	289.7	548.13 µg/L	7.902	548.13 ppb	7.902	1.44%
SiO2†	224661.7	45574 µg/L	226.1	45574 ppb	226.1	0.50%
Si 251.611†	260668.7	20984 µg/L	106.9	20984 ppb	106.9	0.51%
Sn 189.927†	961.4	525.27 µg/L	2.830	525.27 ppb	2.830	0.54%
Sr 421.552†	140959.3	813.50 µg/L	2.529	813.50 ppb	2.529	0.31%
Ti 334.940†	2228733.5	5128.4 µg/L	3.63	5128.4 ppb	3.63	0.07%
Tl 190.801†	309.4	533.48 µg/L	5.376	533.48 ppb	5.376	1.01%
U 409.014†	4137.4	378.61 µg/L	7.973	378.61 ppb	7.973	2.11%
V 292.402†	60629.9	747.04 µg/L	3.667	747.04 ppb	3.667	0.49%
Zn 213.857†	36276.2	1000.1 µg/L	5.29	1000.1 ppb	5.29	0.53%

Sequence No.: 10
Sample ID: 1201993390|931873|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 307
Date Collected: 12/14/2009 10:52:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993390|931873|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112529.1	112529.1	100	%			10:53:23
1	Al 396.153Radial†	44782.3	44399.3	23466	µg/L	23466	ppb	10:53:23
1	Ca 317.933Radial†	17996.9	17496.5	7058.9	µg/L	7058.9	ppb	10:53:23
1	Fe 238.204 Radial†	7250.5	7203.2	38246	µg/L	38246	ppb	10:53:43
1	K 766.490 Radial†	6318.4	5540.9	3125.9	µg/L	3125.9	ppb	10:53:23
1	Mg 279.077 IEC†	999.6	978.7	5465.2	µg/L	5465.2	ppb	10:53:43
1	Na 589.592 Radial†	2873.6	3261.2	919.82	µg/L	919.82	ppb	10:53:23
1	Sr 421.552†	12412.2	12442.9	71.810	µg/L	71.810	ppb	10:53:23
1	Sc 361.383	2019656.2	2019656.2	100.59	%			10:54:47
1	Y 371.029	1245241.4	1245241.4	101.79	%			10:54:47
1	Ag 328.068†	-355.8	-337.4	0.1356	µg/L	0.1356	ppb	10:54:52
1	As 188.979†	7.6	4.4	4.2689	µg/L	4.2689	ppb	10:55:13
1	B 249.677†	591.1	425.9	7.7761	µg/L	7.7761	ppb	10:54:52
1	Ba 233.527†	9449.0	9466.1	253.32	µg/L	253.32	ppb	10:54:52
1	Be 313.107†	9919.5	6242.6	3.7422	µg/L	3.7422	ppb	10:54:52
1	Cd 226.502†	31.6	129.0	0.6725	µg/L	0.6725	ppb	10:55:13
1	Co 228.616†	192.1	260.8	11.410	µg/L	11.410	ppb	10:55:13
1	Cr 267.716†	817.1	936.6	20.897	µg/L	20.897	ppb	10:54:52
1	Cu 324.752†	4453.2	1118.2	16.204	µg/L	16.204	ppb	10:54:52
1	Mn 257.610†	267655.6	266337.4	881.13	µg/L	881.13	ppb	10:54:47
1	Mo 202.031†	1.3	6.0	2.2245	µg/L	2.2245	ppb	10:55:13
1	Ni 231.604†	766.6	471.1	27.186	µg/L	27.186	ppb	10:55:13
1	P 214.914†	312.7	120.9	231.28	µg/L	231.28	ppb	10:55:13
1	Pb 220.353†	174.4	122.4	33.915	µg/L	33.915	ppb	10:55:13
1	S 181.975 Axial†	43.8	17.8	89.029	µg/L	89.029	ppb	10:55:13
1	Sb 206.836†	24.1	-0.2	2.2777	µg/L	2.2777	ppb	10:55:13
1	Se 196.026†	-2.7	-13.5	5.5867	µg/L	5.5867	ppb	10:55:13
1	SiO2†	41486.7	39210.3	7954.1	µg/L	7954.1	ppb	10:54:52
1	Si 251.611†	46212.0	45584.8	3676.2	µg/L	3676.2	ppb	10:54:52
1	Sn 189.927†	-15.8	-38.0	-12.224	µg/L	-12.224	ppb	10:55:13
1	Ti 334.940†	386063.1	383005.7	881.21	µg/L	881.21	ppb	10:54:47
1	Tl 190.801†	-21.4	-1.2	7.1872	µg/L	7.1872	ppb	10:55:13
1	U 409.014†	434.0	-270.1	-33.914	µg/L	-33.914	ppb	10:54:52
1	V 292.402†	3787.8	3856.2	49.363	µg/L	49.363	ppb	10:54:52
1	Zn 213.857†	4080.6	3528.9	95.341	µg/L	95.341	ppb	10:54:52
2	Sc RADIAL	114059.6	114059.6	102	%			10:53:49
2	Al 396.153Radial†	45256.0	44266.4	23395	µg/L	23395	ppb	10:53:49
2	Ca 317.933Radial†	18219.5	17474.8	7050.1	µg/L	7050.1	ppb	10:53:49
2	Fe 238.204 Radial†	7245.9	7101.9	37709	µg/L	37709	ppb	10:54:09
2	K 766.490 Radial†	6327.9	5465.8	3083.5	µg/L	3083.5	ppb	10:53:49
2	Mg 279.077 IEC†	994.5	960.4	5362.5	µg/L	5362.5	ppb	10:54:09
2	Na 589.592 Radial†	2913.8	3262.3	920.13	µg/L	920.13	ppb	10:53:49
2	Sr 421.552†	12572.6	12434.7	71.762	µg/L	71.762	ppb	10:53:49
2	Sc 361.383	2021954.0	2021954.0	100.70	%			10:55:20
2	Y 371.029	1246499.9	1246499.9	101.89	%			10:55:20
2	Ag 328.068†	-285.9	-267.7	0.7570	µg/L	0.7570	ppb	10:55:25
2	As 188.979†	4.5	1.3	-1.5471	µg/L	-1.5471	ppb	10:55:46
2	B 249.677†	622.4	456.3	9.3591	µg/L	9.3591	ppb	10:55:25
2	Ba 233.527†	9514.5	9520.5	254.77	µg/L	254.77	ppb	10:55:25
2	Be 313.107†	10048.4	6359.4	3.8169	µg/L	3.8169	ppb	10:55:25
2	Cd 226.502†	25.8	123.2	0.5490	µg/L	0.5490	ppb	10:55:46
2	Co 228.616†	199.9	268.3	11.785	µg/L	11.785	ppb	10:55:46
2	Cr 267.716†	846.1	964.5	21.517	µg/L	21.517	ppb	10:55:25
2	Cu 324.752†	4465.5	1125.4	16.140	µg/L	16.140	ppb	10:55:25
2	Mn 257.610†	269180.2	267548.9	885.05	µg/L	885.05	ppb	10:55:20
2	Mo 202.031†	-2.3	2.5	1.7802	µg/L	1.7802	ppb	10:55:46
2	Ni 231.604†	776.1	479.6	27.680	µg/L	27.680	ppb	10:55:46
2	P 214.914†	301.4	109.3	206.20	µg/L	206.20	ppb	10:55:46
2	Pb 220.353†	163.6	111.4	31.016	µg/L	31.016	ppb	10:55:46

2	S 181.975 Axial†	45.7	19.7	99.155 µg/L	99.155 ppb	10:55:46
2	Sb 206.836†	21.3	-3.0	-0.5514 µg/L	-0.5514 ppb	10:55:46
2	Se 196.026†	-8.8	-19.5	-3.6863 µg/L	-3.6863 ppb	10:55:46
2	SiO2†	41798.4	39473.0	8007.4 µg/L	8007.4 ppb	10:55:25
2	Si 251.611†	46514.2	45832.7	3696.1 µg/L	3696.1 ppb	10:55:25
2	Sn 189.927†	-7.1	-29.4	-7.9163 µg/L	-7.9163 ppb	10:55:46
2	Ti 334.940†	388166.2	384657.9	885.01 µg/L	885.01 ppb	10:55:20
2	Tl 190.801†	-26.7	-6.5	-0.9917 µg/L	-0.9917 ppb	10:55:46
2	U 409.014†	421.6	-282.9	-35.091 µg/L	-35.091 ppb	10:55:25
2	V 292.402†	3821.5	3885.3	49.664 µg/L	49.664 ppb	10:55:25
2	Zn 213.857†	4145.0	3588.3	97.075 µg/L	97.075 ppb	10:55:25
3	Sc RADIAL	113790.6	113790.6	102 %		10:54:15
3	Al 396.153Radial†	45228.3	44344.2	23436 µg/L	23436 ppb	10:54:15
3	Ca 317.933Radial†	18264.9	17561.7	7085.2 µg/L	7085.2 ppb	10:54:15
3	Fe 238.204 Radial†	7261.8	7134.3	37881 µg/L	37881 ppb	10:54:35
3	K 766.490 Radial†	6355.8	5508.0	3107.3 µg/L	3107.3 ppb	10:54:15
3	Mg 279.077 IEC†	1004.1	972.1	5428.7 µg/L	5428.7 ppb	10:54:35
3	Na 589.592 Radial†	2903.5	3258.9	919.17 µg/L	919.17 ppb	10:54:15
3	Sr 421.552†	12571.3	12462.5	71.923 µg/L	71.923 ppb	10:54:15
3	Sc 361.383	2034379.3	2034379.3	101.32 %		10:55:53
3	Y 371.029	1254007.3	1254007.3	102.50 %		10:55:53
3	Ag 328.068†	-300.8	-280.6	0.6439 µg/L	0.6439 ppb	10:55:58
3	As 188.979†	5.2	2.0	-0.3272 µg/L	-0.3272 ppb	10:56:19
3	B 249.677†	577.6	408.4	7.0774 µg/L	7.0774 ppb	10:55:58
3	Ba 233.527†	9422.3	9371.8	250.80 µg/L	250.80 ppb	10:55:58
3	Be 313.107†	10157.2	6405.9	3.8488 µg/L	3.8488 ppb	10:55:58
3	Cd 226.502†	34.6	131.8	0.7665 µg/L	0.7665 ppb	10:56:19
3	Co 228.616†	190.0	257.4	11.239 µg/L	11.239 ppb	10:56:19
3	Cr 267.716†	813.7	927.3	20.692 µg/L	20.692 ppb	10:55:58
3	Cu 324.752†	4537.8	1169.7	16.493 µg/L	16.493 ppb	10:55:58
3	Mn 257.610†	269729.9	266458.9	881.48 µg/L	881.48 ppb	10:55:53
3	Mo 202.031†	1.6	6.3	2.2422 µg/L	2.2422 ppb	10:56:19
3	Ni 231.604†	753.1	452.2	26.100 µg/L	26.100 ppb	10:56:19
3	P 214.914†	306.1	112.1	212.22 µg/L	212.22 ppb	10:56:19
3	Pb 220.353†	159.1	106.0	29.595 µg/L	29.595 ppb	10:56:19
3	S 181.975 Axial†	43.9	17.7	88.082 µg/L	88.082 ppb	10:56:19
3	Sb 206.836†	17.3	-7.0	-4.8347 µg/L	-4.8347 ppb	10:56:19
3	Se 196.026†	-7.6	-18.3	-1.7826 µg/L	-1.7826 ppb	10:56:19
3	SiO2†	41255.5	38683.7	7847.3 µg/L	7847.3 ppb	10:55:58
3	Si 251.611†	45964.7	45008.3	3629.2 µg/L	3629.2 ppb	10:55:58
3	Sn 189.927†	-11.4	-33.7	-10.035 µg/L	-10.035 ppb	10:56:19
3	Ti 334.940†	388588.7	382720.7	880.55 µg/L	880.55 ppb	10:55:53
3	Tl 190.801†	-20.3	0.1	9.2374 µg/L	9.2374 ppb	10:56:19
3	U 409.014†	289.1	-416.3	-48.421 µg/L	-48.421 ppb	10:55:58
3	V 292.402†	3795.9	3836.9	49.079 µg/L	49.079 ppb	10:55:58
3	Zn 213.857†	4082.2	3501.1	94.600 µg/L	94.600 ppb	10:55:58

Mean Data: 1201993390|931873|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025329.8	100.87	%	0.394				0.39%
Sc RADIAL	113459.8	101	%	0.7				0.72%
Y 371.029	1248582.9	102.06	%	0.387				0.38%
Ag 328.068†	-295.2	0.5122	µg/L	0.33097	0.5122	ppb	0.33097	64.62%
Al 396.153Radial†	44336.7	23432	µg/L	35.3	23432	ppb	35.3	0.15%
As 188.979†	2.6	0.7982	µg/L	3.06697	0.7982	ppb	3.06697	384.25%
B 249.677†	430.2	8.0709	µg/L	1.16907	8.0709	ppb	1.16907	14.49%
Ba 233.527†	9452.8	252.96	µg/L	2.013	252.96	ppb	2.013	0.80%
Be 313.107†	6336.0	3.8026	µg/L	0.05473	3.8026	ppb	0.05473	1.44%
Ca 317.933Radial†	17511.0	7064.7	µg/L	18.25	7064.7	ppb	18.25	0.26%
Cd 226.502†	128.0	0.6627	µg/L	0.10912	0.6627	ppb	0.10912	16.47%
Co 228.616†	262.1	11.478	µg/L	0.2796	11.478	ppb	0.2796	2.44%
Cr 267.716†	942.8	21.036	µg/L	0.4297	21.036	ppb	0.4297	2.04%
Cu 324.752†	1137.8	16.279	µg/L	0.1880	16.279	ppb	0.1880	1.16%
Fe 238.204 Radial†	7146.4	37945	µg/L	274.7	37945	ppb	274.7	0.72%
K 766.490 Radial†	5504.9	3105.6	µg/L	21.23	3105.6	ppb	21.23	0.68%
Mg 279.077 IEC†	970.4	5418.8	µg/L	52.05	5418.8	ppb	52.05	0.96%
Mn 257.610†	266781.7	882.55	µg/L	2.168	882.55	ppb	2.168	0.25%
Mo 202.031†	5.0	2.0823	µg/L	0.26179	2.0823	ppb	0.26179	12.57%
Na 589.592 Radial†	3260.8	919.71	µg/L	0.488	919.71	ppb	0.488	0.05%

Ni 231.604†	467.6	26.989 µg/L	0.8084	26.989 ppb	0.8084	3.00%
P 214.914†	114.1	216.57 µg/L	13.093	216.57 ppb	13.093	6.05%
Pb 220.353†	113.3	31.508 µg/L	2.2017	31.508 ppb	2.2017	6.99%
S 181.975 Axial†	18.4	92.089 µg/L	6.1382	92.089 ppb	6.1382	6.67%
Sb 206.836†	-3.4	-1.0361 µg/L	3.58086	-1.0361 ppb	3.58086	345.60%
Se 196.026†	-17.1	0.0393 µg/L	4.89761	0.0393 ppb	4.89761	>999.9%
SiO2†	39122.3	7936.2 µg/L	81.53	7936.2 ppb	81.53	1.03%
Si 251.611†	45475.3	3667.2 µg/L	34.32	3667.2 ppb	34.32	0.94%
Sn 189.927†	-33.7	-10.059 µg/L	2.1541	-10.059 ppb	2.1541	21.42%
Sr 421.552†	12446.7	71.832 µg/L	0.0827	71.832 ppb	0.0827	0.12%
Ti 334.940†	383461.5	882.26 µg/L	2.408	882.26 ppb	2.408	0.27%
Tl 190.801†	-2.5	5.1443 µg/L	5.41187	5.1443 ppb	5.41187	105.20%
U 409.014†	-323.1	-39.142 µg/L	8.0576	-39.142 ppb	8.0576	20.59%
V 292.402†	3859.4	49.369 µg/L	0.2928	49.369 ppb	0.2928	0.59%
Zn 213.857†	3539.4	95.672 µg/L	1.2706	95.672 ppb	1.2706	1.33%

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:56:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114455.6	114455.6	102	%			10:57:06
1	Al 396.153Radial†	10440.2	10050.0	5291.7	µg/L	5291.7	ppb	10:57:06
1	Ca 317.933Radial†	13677.5	12969.0	5232.3	µg/L	5232.3	ppb	10:57:26
1	Fe 238.204 Radial†	1034.0	999.7	5325.6	µg/L	5325.6	ppb	10:57:26
1	K 766.490 Radial†	10055.1	9091.0	5128.6	µg/L	5128.6	ppb	10:57:06
1	Mg 279.077 IEC†	990.0	952.6	5379.6	µg/L	5379.6	ppb	10:57:26
1	Na 589.592 Radial†	37542.5	37132.1	10473	µg/L	10473	ppb	10:57:06
1	Sr 421.552†	91022.1	89144.7	514.47	µg/L	514.47	ppb	10:57:06
1	Sc 361.383	2013074.5	2013074.5	100.26	%			10:58:30
1	Y 371.029	1218048.7	1218048.7	99.565	%			10:58:30
1	Ag 328.068†	55305.1	55177.5	527.16	µg/L	527.16	ppb	10:58:36
1	As 188.979†	269.9	266.1	515.74	µg/L	515.74	ppb	10:58:56
1	B 249.677†	11460.2	11268.7	522.34	µg/L	522.34	ppb	10:58:36
1	Ba 233.527†	19628.4	19649.8	526.74	µg/L	526.74	ppb	10:58:36
1	Be 313.107†	802197.7	796492.7	518.91	µg/L	518.91	ppb	10:58:30
1	Cd 226.502†	18828.2	18876.8	530.96	µg/L	530.96	ppb	10:58:36
1	Co 228.616†	10393.4	10436.2	530.43	µg/L	530.43	ppb	10:58:36
1	Cr 267.716†	23516.0	23579.1	524.61	µg/L	524.61	ppb	10:58:36
1	Cu 324.752†	74156.7	70654.9	505.92	µg/L	505.92	ppb	10:58:36
1	Mn 257.610†	157699.5	157537.2	519.01	µg/L	519.01	ppb	10:58:30
1	Mo 202.031†	4376.0	4369.4	521.93	µg/L	521.93	ppb	10:58:56
1	Ni 231.604†	9439.1	9123.5	526.53	µg/L	526.53	ppb	10:58:36
1	P 214.914†	1359.0	1165.4	2538.5	µg/L	2538.5	ppb	10:58:56
1	Pb 220.353†	2023.9	1967.6	520.57	µg/L	520.57	ppb	10:58:56
1	S 181.975 Axial†	221.1	194.8	1040.9	µg/L	1040.9	ppb	10:58:56
1	Sb 206.836†	521.9	496.4	517.00	µg/L	517.00	ppb	10:58:56
1	Se 196.026†	369.7	357.9	530.71	µg/L	530.71	ppb	10:58:56
1	SiO2†	30108.5	27996.5	5679.3	µg/L	5679.3	ppb	10:58:36
1	Si 251.611†	33108.7	32665.8	2608.1	µg/L	2608.1	ppb	10:58:36
1	Sn 189.927†	1040.0	1014.9	519.82	µg/L	519.82	ppb	10:58:56
1	Ti 334.940†	224710.5	223327.6	513.76	µg/L	513.76	ppb	10:58:30
1	Tl 190.801†	314.4	333.7	527.12	µg/L	527.12	ppb	10:58:56
1	U 409.014†	6002.3	5285.1	526.25	µg/L	526.25	ppb	10:58:36
1	V 292.402†	43647.1	43624.1	528.50	µg/L	528.50	ppb	10:58:36
1	Zn 213.857†	19470.1	18891.7	529.65	µg/L	529.65	ppb	10:58:36
2	Sc RADIAL	114452.1	114452.1	102	%			10:57:32
2	Al 396.153Radial†	10474.8	10084.2	5309.8	µg/L	5309.8	ppb	10:57:32
2	Ca 317.933Radial†	13654.5	12947.0	5223.4	µg/L	5223.4	ppb	10:57:52
2	Fe 238.204 Radial†	1040.3	1005.8	5358.3	µg/L	5358.3	ppb	10:57:52
2	K 766.490 Radial†	10065.8	9101.7	5134.7	µg/L	5134.7	ppb	10:57:32
2	Mg 279.077 IEC†	982.4	945.1	5337.4	µg/L	5337.4	ppb	10:57:52
2	Na 589.592 Radial†	37670.5	37258.5	10509	µg/L	10509	ppb	10:57:32
2	Sr 421.552†	91316.0	89435.0	516.14	µg/L	516.14	ppb	10:57:32
2	Sc 361.383	2007572.0	2007572.0	99.987	%			10:59:03
2	Y 371.029	1214163.2	1214163.2	99.248	%			10:59:03
2	Ag 328.068†	55812.5	55836.2	533.45	µg/L	533.45	ppb	10:59:09
2	As 188.979†	267.4	264.3	512.31	µg/L	512.31	ppb	10:59:29
2	B 249.677†	11574.8	11414.6	529.11	µg/L	529.11	ppb	10:59:09
2	Ba 233.527†	19857.9	19933.0	534.33	µg/L	534.33	ppb	10:59:09
2	Be 313.107†	806869.2	803357.8	523.39	µg/L	523.39	ppb	10:59:03
2	Cd 226.502†	19063.0	19163.1	539.01	µg/L	539.01	ppb	10:59:09
2	Co 228.616†	10434.3	10505.6	533.94	µg/L	533.94	ppb	10:59:09
2	Cr 267.716†	23820.9	23948.3	532.82	µg/L	532.82	ppb	10:59:09
2	Cu 324.752†	74848.7	71549.7	512.32	µg/L	512.32	ppb	10:59:09
2	Mn 257.610†	158504.7	158773.7	523.08	µg/L	523.08	ppb	10:59:03
2	Mo 202.031†	4363.3	4368.6	521.84	µg/L	521.84	ppb	10:59:29
2	Ni 231.604†	9565.9	9276.2	535.34	µg/L	535.34	ppb	10:59:09
2	P 214.914†	1355.8	1166.0	2539.0	µg/L	2539.0	ppb	10:59:29
2	Pb 220.353†	2042.3	1991.6	526.90	µg/L	526.90	ppb	10:59:29

2	S 181.975 Axial†	218.8	193.2	1032.2 µg/L	1032.2 ppb	10:59:29
2	Sb 206.836†	523.0	498.9	519.54 µg/L	519.54 ppb	10:59:29
2	Se 196.026†	374.5	363.7	539.32 µg/L	539.32 ppb	10:59:29
2	SiO2†	30395.6	28366.1	5754.3 µg/L	5754.3 ppb	10:59:09
2	Si 251.611†	33414.5	33062.2	2640.3 µg/L	2640.3 ppb	10:59:09
2	Sn 189.927†	1034.6	1012.4	518.54 µg/L	518.54 ppb	10:59:29
2	Ti 334.940†	225715.9	224947.4	517.49 µg/L	517.49 ppb	10:59:03
2	Tl 190.801†	316.2	336.3	531.35 µg/L	531.35 ppb	10:59:29
2	U 409.014†	6009.1	5308.3	528.56 µg/L	528.56 ppb	10:59:09
2	V 292.402†	44073.6	44170.0	535.06 µg/L	535.06 ppb	10:59:09
2	Zn 213.857†	19622.8	19097.5	535.40 µg/L	535.40 ppb	10:59:09
3	Sc RADIAL	113455.2	113455.2	101 %		10:57:58
3	Al 396.153Radial†	10390.7	10091.2	5313.3 µg/L	5313.3 ppb	10:57:58
3	Ca 317.933Radial†	13706.4	13115.6	5291.4 µg/L	5291.4 ppb	10:58:18
3	Fe 238.204 Radial†	1040.2	1014.7	5405.3 µg/L	5405.3 ppb	10:58:18
3	K 766.490 Radial†	10069.6	9192.1	5185.6 µg/L	5185.6 ppb	10:57:58
3	Mg 279.077 IEC†	991.1	962.2	5433.8 µg/L	5433.8 ppb	10:58:18
3	Na 589.592 Radial†	37451.6	37366.3	10539 µg/L	10539 ppb	10:57:58
3	Sr 421.552†	90487.9	89402.7	515.96 µg/L	515.96 ppb	10:57:58
3	Sc 361.383	2004204.5	2004204.5	99.819 %		10:59:37
3	Y 371.029	1212492.2	1212492.2	99.111 %		10:59:37
3	Ag 328.068†	55874.9	55992.5	534.94 µg/L	534.94 ppb	10:59:42
3	As 188.979†	272.6	270.0	523.26 µg/L	523.26 ppb	11:00:03
3	B 249.677†	11579.5	11438.7	530.22 µg/L	530.22 ppb	10:59:42
3	Ba 233.527†	19816.4	19924.8	534.11 µg/L	534.11 ppb	10:59:42
3	Be 313.107†	804639.2	802479.6	522.81 µg/L	522.81 ppb	10:59:37
3	Cd 226.502†	19009.0	19141.0	538.39 µg/L	538.39 ppb	10:59:42
3	Co 228.616†	10457.9	10546.7	536.04 µg/L	536.04 ppb	10:59:42
3	Cr 267.716†	23827.8	23995.2	533.86 µg/L	533.86 ppb	10:59:42
3	Cu 324.752†	74789.7	71616.4	512.81 µg/L	512.81 ppb	10:59:42
3	Mn 257.610†	158107.6	158642.2	522.65 µg/L	522.65 ppb	10:59:37
3	Mo 202.031†	4379.1	4391.8	524.62 µg/L	524.62 ppb	11:00:03
3	Ni 231.604†	9569.2	9295.5	536.46 µg/L	536.46 ppb	10:59:42
3	P 214.914†	1358.9	1171.4	2551.1 µg/L	2551.1 ppb	11:00:03
3	Pb 220.353†	2038.9	1991.7	526.92 µg/L	526.92 ppb	11:00:03
3	S 181.975 Axial†	226.3	201.0	1074.1 µg/L	1074.1 ppb	11:00:03
3	Sb 206.836†	530.7	507.5	528.51 µg/L	528.51 ppb	11:00:03
3	Se 196.026†	375.9	365.8	542.33 µg/L	542.33 ppb	11:00:03
3	SiO2†	30303.0	28324.4	5745.8 µg/L	5745.8 ppb	10:59:42
3	Si 251.611†	33388.8	33092.5	2642.3 µg/L	2642.3 ppb	10:59:42
3	Sn 189.927†	1053.4	1033.0	529.06 µg/L	529.06 ppb	11:00:03
3	Ti 334.940†	225020.2	224629.7	516.76 µg/L	516.76 ppb	10:59:37
3	Tl 190.801†	316.4	337.0	532.43 µg/L	532.43 ppb	11:00:03
3	U 409.014†	6004.9	5314.2	529.14 µg/L	529.14 ppb	10:59:42
3	V 292.402†	44000.3	44170.6	535.09 µg/L	535.09 ppb	10:59:42
3	Zn 213.857†	19621.8	19129.5	536.29 µg/L	536.29 ppb	10:59:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2008283.7	100.02	%	0.223				0.22%
Sc RADIAL	114120.9	102	%	0.5				0.51%
Y 371.029	1214901.4	99.308	%	0.2330				0.23%
Ag 328.068†	55668.7	531.85	µg/L	4.129	531.85	ppb	4.129	0.78%
QC value within limits for Ag 328.068 Recovery = 106.37%								
Al 396.153Radial†	10075.1	5304.9	µg/L	11.62	5304.9	ppb	11.62	0.22%
QC value within limits for Al 396.153Radial Recovery = 106.10%								
As 188.979†	266.8	517.11	µg/L	5.602	517.11	ppb	5.602	1.08%
QC value within limits for As 188.979 Recovery = 103.42%								
B 249.677†	11374.0	527.22	µg/L	4.267	527.22	ppb	4.267	0.81%
QC value within limits for B 249.677 Recovery = 105.44%								
Ba 233.527†	19835.9	531.72	µg/L	4.320	531.72	ppb	4.320	0.81%
QC value within limits for Ba 233.527 Recovery = 106.34%								
Be 313.107†	800776.7	521.71	µg/L	2.434	521.71	ppb	2.434	0.47%
QC value within limits for Be 313.107 Recovery = 104.34%								
Ca 317.933Radial†	13010.6	5249.0	µg/L	36.98	5249.0	ppb	36.98	0.70%
QC value within limits for Ca 317.933Radial Recovery = 104.98%								
Cd 226.502†	19060.3	536.12	µg/L	4.481	536.12	ppb	4.481	0.84%
QC value within limits for Cd 226.502 Recovery = 107.22%								
Co 228.616†	10496.1	533.47	µg/L	2.837	533.47	ppb	2.837	0.53%

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   QC value within limits for Co 228.616  Recovery = 106.69%
Cr 267.716†            23840.9      530.43 µg/L        5.068      530.43 ppb          5.068   0.96%
   QC value within limits for Cr 267.716  Recovery = 106.09%
Cu 324.752†            71273.7      510.35 µg/L        3.843      510.35 ppb          3.843   0.75%
   QC value within limits for Cu 324.752  Recovery = 102.07%
Fe 238.204 Radial†      1006.7      5363.0 µg/L       40.07      5363.0 ppb          40.07   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.26%
K 766.490 Radial†       9128.2      5149.6 µg/L       31.32      5149.6 ppb          31.32   0.61%
   QC value within limits for K 766.490 Radial  Recovery = 102.99%
Mg 279.077 IEC†          953.3      5383.6 µg/L       48.34      5383.6 ppb          48.34   0.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.67%
Mn 257.610†           158317.7      521.58 µg/L        2.238      521.58 ppb          2.238   0.43%
   QC value within limits for Mn 257.610  Recovery = 104.32%
Mo 202.031†             4376.6      522.80 µg/L        1.576      522.80 ppb          1.576   0.30%
   QC value within limits for Mo 202.031  Recovery = 104.56%
Na 589.592 Radial†     37252.3       10507 µg/L         33.1       10507 ppb           33.1   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 105.07%
Ni 231.604†             9231.7      532.78 µg/L        5.438      532.78 ppb          5.438   1.02%
   QC value within limits for Ni 231.604  Recovery = 106.56%
P 214.914†              1167.6      2542.9 µg/L         7.11      2542.9 ppb           7.11   0.28%
   QC value within limits for P 214.914  Recovery = 101.72%
Pb 220.353†             1983.6      524.80 µg/L        3.660      524.80 ppb          3.660   0.70%
   QC value within limits for Pb 220.353  Recovery = 104.96%
S 181.975 Axial†         196.3      1049.1 µg/L        22.12      1049.1 ppb          22.12   2.11%
   QC value within limits for S 181.975 Axial  Recovery = 104.91%
Sb 206.836†              500.9      521.68 µg/L        6.044      521.68 ppb          6.044   1.16%
   QC value within limits for Sb 206.836  Recovery = 104.34%
Se 196.026†              362.5      537.46 µg/L        6.030      537.46 ppb          6.030   1.12%
   QC value within limits for Se 196.026  Recovery = 107.49%
SiO2†                   28229.0      5726.5 µg/L        41.06      5726.5 ppb          41.06   0.72%
   QC value within limits for SiO2  Recovery = 107.09%
Si 251.611†            32940.2      2630.2 µg/L        19.18      2630.2 ppb          19.18   0.73%
   QC value within limits for Si 251.611  Recovery = 105.21%
Sn 189.927†             1020.1      522.47 µg/L        5.741      522.47 ppb          5.741   1.10%
   QC value within limits for Sn 189.927  Recovery = 104.49%
Sr 421.552†            89327.5      515.52 µg/L        0.918      515.52 ppb          0.918   0.18%
   QC value within limits for Sr 421.552  Recovery = 103.10%
Ti 334.940†           224301.6      516.01 µg/L        1.975      516.01 ppb          1.975   0.38%
   QC value within limits for Ti 334.940  Recovery = 103.20%
Tl 190.801†              335.7      530.30 µg/L        2.808      530.30 ppb          2.808   0.53%
   QC value within limits for Tl 190.801  Recovery = 106.06%
U 409.014†              5302.5      527.98 µg/L        1.528      527.98 ppb          1.528   0.29%
   QC value within limits for U 409.014  Recovery = 105.60%
V 292.402†             43988.2      532.88 µg/L        3.795      532.88 ppb          3.795   0.71%
   QC value within limits for V 292.402  Recovery = 106.58%
Zn 213.857†            19039.6      533.78 µg/L        3.610      533.78 ppb          3.610   0.68%
   QC value within limits for Zn 213.857  Recovery = 106.76%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 11:00:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111462.7	111462.7	99.5	%			11:00:45
1	Al 396.153Radial†	187.1	23.5	12.410	µg/L	12.410	ppb	11:00:45
1	Ca 317.933Radial†	416.9	6.2	2.4999	µg/L	2.4999	ppb	11:01:06
1	Fe 238.204 Radial†	12.3	0.4	2.3752	µg/L	2.3752	ppb	11:01:06
1	K 766.490 Radial†	741.2	-2.0	-1.1351	µg/L	-1.1351	ppb	11:00:45
1	Mg 279.077 IEC†	12.7	-3.3	-18.405	µg/L	-18.405	ppb	11:01:06
1	Na 589.592 Radial†	-653.9	-255.2	-71.992	µg/L	-71.992	ppb	11:00:45
1	Sr 421.552†	-19.5	71.7	0.4141	µg/L	0.4141	ppb	11:00:45
1	Sc 361.383	1998738.5	1998738.5	99.547	%			11:02:08
1	Y 371.029	1214838.3	1214838.3	99.303	%			11:02:08
1	Ag 328.068†	-2.8	13.5	0.1273	µg/L	0.1273	ppb	11:02:13
1	As 188.979†	0.1	-3.1	-5.9892	µg/L	-5.9892	ppb	11:02:34
1	B 249.677†	171.1	10.1	0.4687	µg/L	0.4687	ppb	11:02:13
1	Ba 233.527†	-65.2	6.9	0.1848	µg/L	0.1848	ppb	11:02:34
1	Be 313.107†	3804.8	203.2	0.1323	µg/L	0.1323	ppb	11:02:13
1	Cd 226.502†	-90.5	6.7	0.1793	µg/L	0.1793	ppb	11:02:34
1	Co 228.616†	-61.0	8.5	0.4320	µg/L	0.4320	ppb	11:02:34
1	Cr 267.716†	-107.6	16.1	0.3578	µg/L	0.3578	ppb	11:02:13
1	Cu 324.752†	3204.8	-89.5	-0.6389	µg/L	-0.6389	ppb	11:02:13
1	Mn 257.610†	-162.3	84.8	0.2793	µg/L	0.2793	ppb	11:02:34
1	Mo 202.031†	-3.7	1.1	0.1264	µg/L	0.1264	ppb	11:02:34
1	Ni 231.604†	292.5	2.8	0.1628	µg/L	0.1628	ppb	11:02:34
1	P 214.914†	187.1	-2.1	-4.5980	µg/L	-4.5980	ppb	11:02:34
1	Pb 220.353†	55.8	5.0	1.3473	µg/L	1.3473	ppb	11:02:34
1	S 181.975 Axial†	29.6	4.0	21.614	µg/L	21.614	ppb	11:02:34
1	Sb 206.836†	21.2	-2.9	-3.0329	µg/L	-3.0329	ppb	11:02:34
1	Se 196.026†	15.0	4.3	6.3064	µg/L	6.3064	ppb	11:02:34
1	SiO2†	2086.8	62.7	12.715	µg/L	12.715	ppb	11:02:13
1	Si 251.611†	433.9	79.1	6.4847	µg/L	6.4847	ppb	11:02:34
1	Sn 189.927†	19.0	-3.3	-1.6980	µg/L	-1.6980	ppb	11:02:34
1	Ti 334.940†	961.1	166.9	0.3840	µg/L	0.3840	ppb	11:02:13
1	Tl 190.801†	-19.7	0.3	0.5314	µg/L	0.5314	ppb	11:02:34
1	U 409.014†	567.1	-131.9	-13.160	µg/L	-13.160	ppb	11:02:13
1	V 292.402†	-99.7	-9.6	-0.1359	µg/L	-0.1359	ppb	11:02:13
1	Zn 213.857†	543.3	18.0	0.5085	µg/L	0.5085	ppb	11:02:34
2	Sc RADIAL	112604.0	112604.0	101	%			11:01:11
2	Al 396.153Radial†	210.7	45.1	23.800	µg/L	23.800	ppb	11:01:11
2	Ca 317.933Radial†	431.6	16.6	6.6842	µg/L	6.6842	ppb	11:01:32
2	Fe 238.204 Radial†	11.6	-0.5	-2.4769	µg/L	-2.4769	ppb	11:01:32
2	K 766.490 Radial†	721.8	-28.8	-16.261	µg/L	-16.261	ppb	11:01:11
2	Mg 279.077 IEC†	16.4	0.3	1.7206	µg/L	1.7206	ppb	11:01:32
2	Na 589.592 Radial†	-641.0	-235.8	-66.515	µg/L	-66.515	ppb	11:01:11
2	Sr 421.552†	-71.0	20.7	0.1193	µg/L	0.1193	ppb	11:01:11
2	Sc 361.383	2009001.7	2009001.7	100.06	%			11:02:40
2	Y 371.029	1221229.2	1221229.2	99.825	%			11:02:40
2	Ag 328.068†	-23.8	-7.5	-0.0710	µg/L	-0.0710	ppb	11:02:45
2	As 188.979†	4.2	1.0	1.9962	µg/L	1.9962	ppb	11:03:06
2	B 249.677†	187.3	25.4	1.1819	µg/L	1.1819	ppb	11:02:45
2	Ba 233.527†	-72.9	-0.4	-0.0097	µg/L	-0.0097	ppb	11:03:06
2	Be 313.107†	3731.7	110.7	0.0720	µg/L	0.0720	ppb	11:02:45
2	Cd 226.502†	-81.6	16.1	0.4538	µg/L	0.4538	ppb	11:03:06
2	Co 228.616†	-74.1	-4.3	-0.2178	µg/L	-0.2178	ppb	11:03:06
2	Cr 267.716†	-97.6	26.7	0.5931	µg/L	0.5931	ppb	11:02:45
2	Cu 324.752†	3260.3	-50.5	-0.3611	µg/L	-0.3611	ppb	11:02:45
2	Mn 257.610†	-146.3	101.6	0.3340	µg/L	0.3340	ppb	11:03:06
2	Mo 202.031†	-1.4	3.4	0.4066	µg/L	0.4066	ppb	11:03:06
2	Ni 231.604†	306.4	15.2	0.8781	µg/L	0.8781	ppb	11:03:06
2	P 214.914†	192.6	2.5	5.6781	µg/L	5.6781	ppb	11:03:06
2	Pb 220.353†	55.0	3.9	1.0444	µg/L	1.0444	ppb	11:03:06

2	S 181.975 Axial†	25.8	0.1	0.3574 µg/L	0.3574 ppb	11:03:06
2	Sb 206.836†	27.6	3.4	3.5503 µg/L	3.5503 ppb	11:03:06
2	Se 196.026†	25.1	14.3	21.077 µg/L	21.077 ppb	11:03:06
2	SiO2†	2060.2	25.4	5.1506 µg/L	5.1506 ppb	11:02:45
2	Si 251.611†	425.1	68.0	5.4730 µg/L	5.4730 ppb	11:03:06
2	Sn 189.927†	24.6	2.3	1.1502 µg/L	1.1502 ppb	11:03:06
2	Ti 334.940†	973.4	174.3	0.4008 µg/L	0.4008 ppb	11:02:45
2	Tl 190.801†	-21.6	-1.5	-2.3481 µg/L	-2.3481 ppb	11:03:06
2	U 409.014†	722.1	20.1	2.0024 µg/L	2.0024 ppb	11:02:45
2	V 292.402†	-81.5	9.1	0.1151 µg/L	0.1151 ppb	11:02:45
2	Zn 213.857†	530.7	2.5	0.0673 µg/L	0.0673 ppb	11:03:06
3	Sc RADIAL	111949.3	111949.3	100.0 %		11:01:37
3	Al 396.153Radial†	194.9	30.5	16.120 µg/L	16.120 ppb	11:01:37
3	Ca 317.933Radial†	420.0	7.5	3.0243 µg/L	3.0243 ppb	11:01:58
3	Fe 238.204 Radial†	12.0	0.1	0.4183 µg/L	0.4183 ppb	11:01:58
3	K 766.490 Radial†	751.4	5.0	2.7977 µg/L	2.7977 ppb	11:01:37
3	Mg 279.077 IEC†	19.3	3.3	18.533 µg/L	18.533 ppb	11:01:58
3	Na 589.592 Radial†	-706.6	-305.1	-86.053 µg/L	-86.053 ppb	11:01:37
3	Sr 421.552†	-77.5	13.8	0.0798 µg/L	0.0798 ppb	11:01:37
3	Sc 361.383	2009674.4	2009674.4	100.09 %		11:03:12
3	Y 371.029	1221393.1	1221393.1	99.839 %		11:03:12
3	Ag 328.068†	5.4	21.7	0.2064 µg/L	0.2064 ppb	11:03:18
3	As 188.979†	4.2	1.0	2.0327 µg/L	2.0327 ppb	11:03:38
3	B 249.677†	150.2	-11.7	-0.5428 µg/L	-0.5428 ppb	11:03:18
3	Ba 233.527†	-72.6	-0.1	-0.0035 µg/L	-0.0035 ppb	11:03:38
3	Be 313.107†	3730.6	108.4	0.0705 µg/L	0.0705 ppb	11:03:18
3	Cd 226.502†	-91.1	6.6	0.1857 µg/L	0.1857 ppb	11:03:38
3	Co 228.616†	-62.9	7.0	0.3526 µg/L	0.3526 ppb	11:03:38
3	Cr 267.716†	-131.9	-7.5	-0.1662 µg/L	-0.1662 ppb	11:03:18
3	Cu 324.752†	3206.0	-105.8	-0.7560 µg/L	-0.7560 ppb	11:03:18
3	Mn 257.610†	-165.4	82.6	0.2719 µg/L	0.2719 ppb	11:03:38
3	Mo 202.031†	-3.7	1.1	0.1285 µg/L	0.1285 ppb	11:03:38
3	Ni 231.604†	288.6	-2.7	-0.1562 µg/L	-0.1562 ppb	11:03:38
3	P 214.914†	197.2	7.1	15.826 µg/L	15.826 ppb	11:03:38
3	Pb 220.353†	55.2	4.2	1.1127 µg/L	1.1127 ppb	11:03:38
3	S 181.975 Axial†	23.0	-2.7	-14.615 µg/L	-14.615 ppb	11:03:38
3	Sb 206.836†	19.2	-5.0	-5.2008 µg/L	-5.2008 ppb	11:03:38
3	Se 196.026†	11.3	0.5	0.7005 µg/L	0.7005 ppb	11:03:38
3	SiO2†	2093.5	57.9	11.753 µg/L	11.753 ppb	11:03:18
3	Si 251.611†	407.4	50.2	4.0516 µg/L	4.0516 ppb	11:03:38
3	Sn 189.927†	23.1	0.7	0.3480 µg/L	0.3480 ppb	11:03:38
3	Ti 334.940†	987.4	187.9	0.4324 µg/L	0.4324 ppb	11:03:18
3	Tl 190.801†	-21.1	-1.0	-1.5574 µg/L	-1.5574 ppb	11:03:38
3	U 409.014†	707.1	4.8	0.4819 µg/L	0.4819 ppb	11:03:18
3	V 292.402†	-77.5	13.1	0.1587 µg/L	0.1587 ppb	11:03:18
3	Zn 213.857†	541.4	13.1	0.3707 µg/L	0.3707 ppb	11:03:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005804.8	99.899	%	0.3052				0.31%
Sc RADIAL	112005.3	100	%	0.5				0.51%
Y 371.029	1219153.5	99.656	%	0.3056				0.31%
Ag 328.068†	9.2	0.0876	µg/L	0.14289	0.0876	ppb	0.14289	163.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	33.0	17.443	µg/L	5.8094	17.443	ppb	5.8094	33.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.6535	µg/L	4.62095	-0.6535	ppb	4.62095	707.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	7.9	0.3693	µg/L	0.86666	0.3693	ppb	0.86666	234.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0572	µg/L	0.11054	0.0572	ppb	0.11054	193.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	140.8	0.0916	µg/L	0.03527	0.0916	ppb	0.03527	38.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.1	4.0695	µg/L	2.27954	4.0695	ppb	2.27954	56.02%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.8	0.2729	µg/L	0.15670	0.2729	ppb	0.15670	57.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.7	0.1889	µg/L	0.35449	0.1889	ppb	0.35449	187.64%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              11.8      0.2615 µg/L       0.38870      0.2615 ppb        0.38870 148.62%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -81.9     -0.5853 µg/L       0.20284     -0.5853 ppb        0.20284  34.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.0      0.1055 µg/L       2.44108      0.1055 ppb        2.44108 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -8.6     -4.8660 µg/L      10.06202     -4.8660 ppb       10.06202 206.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.1      0.6163 µg/L      18.49354      0.6163 ppb       18.49354 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              89.7      0.2951 µg/L       0.03393      0.2951 ppb        0.03393  11.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.8      0.2205 µg/L       0.16112      0.2205 ppb        0.16112  73.07%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -265.4     -74.853 µg/L       10.0783     -74.853 ppb        10.0783  13.46%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.1      0.2949 µg/L       0.52967      0.2949 ppb        0.52967 179.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                2.5      5.6353 µg/L      10.21202      5.6353 ppb       10.21202 181.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.4      1.1682 µg/L       0.15887      1.1682 ppb        0.15887  13.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.5      2.4522 µg/L      18.20481      2.4522 ppb       18.20481 742.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -1.5     -1.5611 µg/L       4.55741     -1.5611 ppb        4.55741 291.93%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.3      9.3612 µg/L      10.52608      9.3612 ppb       10.52608 112.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    48.7      9.8730 µg/L       4.11797      9.8730 ppb        4.11797  41.71%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              65.8      5.3364 µg/L       1.22231      5.3364 ppb        1.22231  22.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -0.1     -0.0666 µg/L       1.46864     -0.0666 ppb        1.46864 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              35.4      0.2044 µg/L       0.18267      0.2044 ppb        0.18267  89.38%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             176.4      0.4057 µg/L       0.02453      0.4057 ppb        0.02453   6.05%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.7     -1.1247 µg/L       1.48772     -1.1247 ppb        1.48772 132.28%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -35.7     -3.5586 µg/L       8.34979     -3.5586 ppb        8.34979 234.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                4.2      0.0460 µg/L       0.15900      0.0460 ppb        0.15900 345.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              11.2      0.3155 µg/L       0.22574      0.3155 ppb        0.22574  71.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: 241536001|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 308
Date Collected: 12/14/2009 11:03:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536001|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114851.6	114851.6	103	%			11:04:26
1	Al 396.153Radial†	218960.6	213321.6	112740	µg/L	112740	ppb	11:04:26
1	Ca 317.933Radial†	57444.7	55595.9	22430	µg/L	22430	ppb	11:04:31
1	Fe 238.204 Radial†	28532.4	27807.0	147650	µg/L	147650	ppb	11:04:31
1	K 766.490 Radial†	26404.4	24997.6	14102	µg/L	14102	ppb	11:04:26
1	Mg 279.077 IEC†	3964.9	3849.8	21502	µg/L	21502	ppb	11:04:31
1	Na 589.592 Radial†	12532.4	12620.7	3559.7	µg/L	3559.7	ppb	11:04:31
1	Sr 421.552†	45374.2	44331.1	255.84	µg/L	255.84	ppb	11:04:26
1	Sc 361.383	2011377.8	2011377.8	100.18	%			11:05:06
1	Y 371.029	1264181.9	1264181.9	103.34	%			11:05:06
1	Ag 328.068†	-1205.2	-1186.8	1.4337	µg/L	1.4337	ppb	11:05:12
1	As 188.979†	17.0	13.8	12.215	µg/L	12.215	ppb	11:05:32
1	B 249.677†	1955.8	1790.6	36.839	µg/L	36.839	ppb	11:05:12
1	Ba 233.527†	41146.1	41146.1	1101.0	µg/L	1101.0	ppb	11:05:12
1	Be 313.107†	23902.7	20241.8	11.783	µg/L	11.783	ppb	11:05:12
1	Cd 226.502†	340.8	437.7	0.9030	µg/L	0.9030	ppb	11:05:12
1	Co 228.616†	529.1	597.9	22.428	µg/L	22.428	ppb	11:05:32
1	Cr 267.716†	3373.8	3492.1	77.869	µg/L	77.869	ppb	11:05:12
1	Cu 324.752†	8542.3	5218.4	68.995	µg/L	68.995	ppb	11:05:12
1	Mn 257.610†	460984.6	460421.4	1533.5	µg/L	1533.5	ppb	11:05:06
1	Mo 202.031†	-8.9	-4.1	5.3073	µg/L	5.3073	ppb	11:05:32
1	Ni 231.604†	1543.6	1249.8	72.131	µg/L	72.131	ppb	11:05:32
1	P 214.914†	459.6	268.8	460.52	µg/L	460.52	ppb	11:05:32
1	Pb 220.353†	366.9	315.2	91.247	µg/L	91.247	ppb	11:05:32
1	S 181.975 Axial†	106.7	80.8	407.36	µg/L	407.36	ppb	11:05:32
1	Sb 206.836†	18.0	-6.2	5.3117	µg/L	5.3117	ppb	11:05:32
1	Se 196.026†	-47.0	-57.7	12.500	µg/L	12.500	ppb	11:05:32
1	SiO2†	199306.9	196922.7	39947	µg/L	39947	ppb	11:05:06
1	Si 251.611†	228616.8	227857.8	18396	µg/L	18396	ppb	11:05:06
1	Sn 189.927†	-58.9	-81.2	-14.729	µg/L	-14.729	ppb	11:05:32
1	Ti 334.940†	1657822.3	1654107.3	3806.2	µg/L	3806.2	ppb	11:05:06
1	Tl 190.801†	-39.9	-19.8	0.9264	µg/L	0.9264	ppb	11:05:32
1	U 409.014†	206.6	-495.3	-76.437	µg/L	-76.437	ppb	11:05:06
1	V 292.402†	12542.7	12611.1	163.32	µg/L	163.32	ppb	11:05:12
1	Zn 213.857†	13959.0	13406.6	362.09	µg/L	362.09	ppb	11:05:12
2	Sc RADIAL	115503.0	115503.0	103	%			11:04:37
2	Al 396.153Radial†	221871.1	214939.4	113600	µg/L	113600	ppb	11:04:37
2	Ca 317.933Radial†	57479.7	55313.9	22316	µg/L	22316	ppb	11:04:42
2	Fe 238.204 Radial†	28521.4	27639.5	146760	µg/L	146760	ppb	11:04:42
2	K 766.490 Radial†	26703.5	25142.4	14184	µg/L	14184	ppb	11:04:37
2	Mg 279.077 IEC†	3995.7	3857.8	21548	µg/L	21548	ppb	11:04:42
2	Na 589.592 Radial†	12499.0	12519.4	3531.1	µg/L	3531.1	ppb	11:04:42
2	Sr 421.552†	46001.7	44689.9	257.91	µg/L	257.91	ppb	11:04:37
2	Sc 361.383	2025778.3	2025778.3	100.89	%			11:05:40
2	Y 371.029	1272851.6	1272851.6	104.04	%			11:05:40
2	Ag 328.068†	-1309.2	-1281.3	0.4723	µg/L	0.4723	ppb	11:05:46
2	As 188.979†	19.8	16.5	17.555	µg/L	17.555	ppb	11:06:06
2	B 249.677†	1908.1	1729.5	34.274	µg/L	34.274	ppb	11:05:46
2	Ba 233.527†	41449.9	41155.3	1101.2	µg/L	1101.2	ppb	11:05:46
2	Be 313.107†	24150.1	20317.4	11.835	µg/L	11.835	ppb	11:05:46
2	Cd 226.502†	370.2	464.5	1.7237	µg/L	1.7237	ppb	11:05:46
2	Co 228.616†	546.2	611.2	23.115	µg/L	23.115	ppb	11:06:06
2	Cr 267.716†	3400.1	3494.2	77.917	µg/L	77.917	ppb	11:05:46
2	Cu 324.752†	8574.8	5190.0	68.602	µg/L	68.602	ppb	11:05:46
2	Mn 257.610†	463611.8	459754.1	1531.2	µg/L	1531.2	ppb	11:05:40
2	Mo 202.031†	-9.7	-4.9	5.1828	µg/L	5.1828	ppb	11:06:06
2	Ni 231.604†	1540.8	1236.1	71.340	µg/L	71.340	ppb	11:06:06
2	P 214.914†	454.2	260.2	442.63	µg/L	442.63	ppb	11:06:06
2	Pb 220.353†	385.7	331.3	95.561	µg/L	95.561	ppb	11:06:06

2	S 181.975 Axial†	108.3	81.6	411.97 µg/L	411.97 ppb	11:06:06
2	Sb 206.836†	33.6	9.2	21.330 µg/L	21.330 ppb	11:06:06
2	Se 196.026†	-38.3	-48.8	24.968 µg/L	24.968 ppb	11:06:06
2	SiO2†	199638.3	195836.8	39727 µg/L	39727 ppb	11:05:40
2	Si 251.611†	229104.5	226718.9	18303 µg/L	18303 ppb	11:05:40
2	Sn 189.927†	-61.6	-83.5	-16.015 µg/L	-16.015 ppb	11:06:06
2	Ti 334.940†	1666496.3	1650940.3	3798.9 µg/L	3798.9 ppb	11:05:40
2	Tl 190.801†	-39.1	-18.7	2.5828 µg/L	2.5828 ppb	11:06:06
2	U 409.014†	230.0	-473.6	-74.108 µg/L	-74.108 ppb	11:05:40
2	V 292.402†	12690.1	12668.2	163.94 µg/L	163.94 ppb	11:05:46
2	Zn 213.857†	14034.1	13382.0	361.49 µg/L	361.49 ppb	11:05:46
3	Sc RADIAL	115924.2	115924.2	104 %		11:04:48
3	Al 396.153Radial†	221045.5	213360.4	112760 µg/L	112760 ppb	11:04:48
3	Ca 317.933Radial†	57081.9	54727.1	22079 µg/L	22079 ppb	11:04:53
3	Fe 238.204 Radial†	28326.8	27351.1	145220 µg/L	145220 ppb	11:04:53
3	K 766.490 Radial†	26534.3	24884.9	14039 µg/L	14039 ppb	11:04:48
3	Mg 279.077 IEC†	3980.0	3828.6	21386 µg/L	21386 ppb	11:04:53
3	Na 589.592 Radial†	12491.1	12467.7	3516.5 µg/L	3516.5 ppb	11:04:53
3	Sr 421.552†	45685.8	44222.7	255.22 µg/L	255.22 ppb	11:04:48
3	Sc 361.383	2019448.7	2019448.7	100.58 %		11:06:14
3	Y 371.029	1269684.1	1269684.1	103.79 %		11:06:14
3	Ag 328.068†	-1298.8	-1275.1	0.3975 µg/L	0.3975 ppb	11:06:20
3	As 188.979†	18.7	15.4	15.872 µg/L	15.872 ppb	11:06:40
3	B 249.677†	1889.7	1717.1	34.178 µg/L	34.178 ppb	11:06:20
3	Ba 233.527†	41122.0	40958.0	1096.0 µg/L	1096.0 ppb	11:06:20
3	Be 313.107†	23886.6	20130.4	11.707 µg/L	11.707 ppb	11:06:20
3	Cd 226.502†	358.6	454.1	1.5459 µg/L	1.5459 ppb	11:06:20
3	Co 228.616†	521.8	588.6	21.933 µg/L	21.933 ppb	11:06:40
3	Cr 267.716†	3331.0	3436.1	76.622 µg/L	76.622 ppb	11:06:20
3	Cu 324.752†	8580.1	5221.8	68.500 µg/L	68.500 ppb	11:06:20
3	Mn 257.610†	464324.3	461902.8	1538.0 µg/L	1538.0 ppb	11:06:14
3	Mo 202.031†	-15.5	-10.7	4.4309 µg/L	4.4309 ppb	11:06:40
3	Ni 231.604†	1555.4	1255.5	72.456 µg/L	72.456 ppb	11:06:40
3	P 214.914†	455.3	262.7	449.72 µg/L	449.72 ppb	11:06:40
3	Pb 220.353†	374.3	321.2	92.853 µg/L	92.853 ppb	11:06:40
3	S 181.975 Axial†	111.1	84.7	428.84 µg/L	428.84 ppb	11:06:40
3	Sb 206.836†	20.1	-4.2	7.4373 µg/L	7.4373 ppb	11:06:40
3	Se 196.026†	-36.2	-46.8	26.856 µg/L	26.856 ppb	11:06:40
3	SiO2†	200496.2	197309.9	40026 µg/L	40026 ppb	11:06:14
3	Si 251.611†	229910.8	228232.3	18426 µg/L	18426 ppb	11:06:14
3	Sn 189.927†	-60.3	-82.4	-15.719 µg/L	-15.719 ppb	11:06:40
3	Ti 334.940†	1668161.3	1657772.8	3814.6 µg/L	3814.6 ppb	11:06:14
3	Tl 190.801†	-41.1	-20.8	-0.5630 µg/L	-0.5630 ppb	11:06:40
3	U 409.014†	131.4	-571.0	-83.537 µg/L	-83.537 ppb	11:06:14
3	V 292.402†	12492.2	12510.9	161.90 µg/L	161.90 ppb	11:06:20
3	Zn 213.857†	13873.3	13265.7	358.37 µg/L	358.37 ppb	11:06:20

Mean Data: 241536001|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2018868.3	100.55	%	0.359				0.36%
Sc RADIAL	115426.3	103	%	0.5				0.47%
Y 371.029	1268905.9	103.72	%	0.359				0.35%
Ag 328.068†	-1247.7	0.7678	µg/L	0.57789	0.7678	ppb	0.57789	75.26%
Al 396.153Radial†	213873.8	113030	µg/L	487.8	113030	ppb	487.8	0.43%
As 188.979†	15.2	15.214	µg/L	2.7303	15.214	ppb	2.7303	17.95%
B 249.677†	1745.7	35.097	µg/L	1.5093	35.097	ppb	1.5093	4.30%
Ba 233.527†	41086.5	1099.4	µg/L	2.98	1099.4	ppb	2.98	0.27%
Be 313.107†	20229.9	11.775	µg/L	0.0642	11.775	ppb	0.0642	0.55%
Ca 317.933Radial†	55212.3	22275	µg/L	178.8	22275	ppb	178.8	0.80%
Cd 226.502†	452.1	1.3909	µg/L	0.43180	1.3909	ppb	0.43180	31.05%
Co 228.616†	599.2	22.492	µg/L	0.5937	22.492	ppb	0.5937	2.64%
Cr 267.716†	3474.1	77.469	µg/L	0.7338	77.469	ppb	0.7338	0.95%
Cu 324.752†	5210.0	68.699	µg/L	0.2616	68.699	ppb	0.2616	0.38%
Fe 238.204 Radial†	27599.2	146540	µg/L	1224.6	146540	ppb	1224.6	0.84%
K 766.490 Radial†	25008.3	14108	µg/L	72.8	14108	ppb	72.8	0.52%
Mg 279.077 IEC†	3845.4	21479	µg/L	83.8	21479	ppb	83.8	0.39%
Mn 257.610†	460692.8	1534.2	µg/L	3.50	1534.2	ppb	3.50	0.23%
Mo 202.031†	-6.6	4.9737	µg/L	0.47417	4.9737	ppb	0.47417	9.53%
Na 589.592 Radial†	12536.0	3535.8	µg/L	21.95	3535.8	ppb	21.95	0.62%

Ni 231.604†	1247.1	71.976 µg/L	0.5744	71.976 ppb	0.5744	0.80%
P 214.914†	263.9	450.96 µg/L	9.009	450.96 ppb	9.009	2.00%
Pb 220.353†	322.6	93.220 µg/L	2.1806	93.220 ppb	2.1806	2.34%
S 181.975 Axial†	82.4	416.06 µg/L	11.306	416.06 ppb	11.306	2.72%
Sb 206.836†	-0.4	11.360 µg/L	8.7000	11.360 ppb	8.7000	76.59%
Se 196.026†	-51.1	21.441 µg/L	7.8005	21.441 ppb	7.8005	36.38%
SiO2†	196689.8	39900 µg/L	154.9	39900 ppb	154.9	0.39%
Si 251.611†	227603.0	18375 µg/L	63.9	18375 ppb	63.9	0.35%
Sn 189.927†	-82.3	-15.488 µg/L	0.6735	-15.488 ppb	0.6735	4.35%
Sr 421.552†	44414.5	256.32 µg/L	1.411	256.32 ppb	1.411	0.55%
Ti 334.940†	1654273.5	3806.6 µg/L	7.88	3806.6 ppb	7.88	0.21%
Tl 190.801†	-19.8	0.9821 µg/L	1.57368	0.9821 ppb	1.57368	160.24%
U 409.014†	-513.3	-78.027 µg/L	4.9114	-78.027 ppb	4.9114	6.29%
V 292.402†	12596.7	163.05 µg/L	1.043	163.05 ppb	1.043	0.64%
Zn 213.857†	13351.4	360.65 µg/L	1.999	360.65 ppb	1.999	0.55%

Sequence No.: 14
Sample ID: 241536002|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 309
Date Collected: 12/14/2009 11:06:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536002|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117099.8	117099.8	105	%			11:07:22
1	Al 396.153Radial†	166589.1	159141.1	84108	µg/L	84108	ppb	11:07:22
1	Ca 317.933Radial†	55528.1	52687.7	21257	µg/L	21257	ppb	11:07:27
1	Fe 238.204 Radial†	21466.5	20516.0	108930	µg/L	108930	ppb	11:07:27
1	K 766.490 Radial†	21831.3	20130.1	11356	µg/L	11356	ppb	11:07:27
1	Mg 279.077 IEC†	3096.1	2944.7	16453	µg/L	16453	ppb	11:07:27
1	Na 589.592 Radial†	5046.0	5227.1	1474.3	µg/L	1474.3	ppb	11:07:27
1	Sr 421.552†	35453.8	33995.1	196.19	µg/L	196.19	ppb	11:07:27
1	Sc 361.383	2028506.9	2028506.9	101.03	%			11:08:01
1	Y 371.029	1262371.4	1262371.4	103.19	%			11:08:01
1	Ag 328.068†	-1030.1	-1003.4	0.4131	µg/L	0.4131	ppb	11:08:07
1	As 188.979†	18.7	15.4	17.821	µg/L	17.821	ppb	11:08:28
1	B 249.677†	1571.2	1393.4	30.540	µg/L	30.540	ppb	11:08:07
1	Ba 233.527†	36728.6	36426.8	974.83	µg/L	974.83	ppb	11:08:07
1	Be 313.107†	17033.7	13241.3	7.6695	µg/L	7.6695	ppb	11:08:07
1	Cd 226.502†	273.4	368.2	1.9471	µg/L	1.9471	ppb	11:08:28
1	Co 228.616†	1300.8	1357.4	63.566	µg/L	63.566	ppb	11:08:28
1	Cr 267.716†	4857.6	4932.3	109.94	µg/L	109.94	ppb	11:08:07
1	Cu 324.752†	13555.8	10108.8	95.619	µg/L	95.619	ppb	11:08:07
1	Mn 257.610†	1219151.5	1206978.0	3985.0	µg/L	3985.0	ppb	11:08:01
1	Mo 202.031†	42.3	46.6	9.8442	µg/L	9.8442	ppb	11:08:28
1	Ni 231.604†	1439.2	1133.5	65.417	µg/L	65.417	ppb	11:08:28
1	P 214.914†	696.4	499.3	1004.1	µg/L	1004.1	ppb	11:08:28
1	Pb 220.353†	861.9	802.2	217.82	µg/L	217.82	ppb	11:08:28
1	S 181.975 Axial†	158.4	131.1	682.92	µg/L	682.92	ppb	11:08:28
1	Sb 206.836†	25.3	0.9	8.0580	µg/L	8.0580	ppb	11:08:28
1	Se 196.026†	-36.9	-47.3	2.6016	µg/L	2.6016	ppb	11:08:28
1	SiO2†	182601.8	178707.8	36252	µg/L	36252	ppb	11:08:01
1	Si 251.611†	209059.4	206572.5	16709	µg/L	16709	ppb	11:08:01
1	Sn 189.927†	-69.4	-91.1	-25.608	µg/L	-25.608	ppb	11:08:28
1	Ti 334.940†	1139298.4	1126892.1	2592.7	µg/L	2592.7	ppb	11:08:01
1	Tl 190.801†	-37.9	-17.5	4.9315	µg/L	4.9315	ppb	11:08:28
1	U 409.014†	280.1	-424.4	-62.160	µg/L	-62.160	ppb	11:08:07
1	V 292.402†	16268.4	16193.2	203.21	µg/L	203.21	ppb	11:08:07
1	Zn 213.857†	13863.3	13194.2	360.33	µg/L	360.33	ppb	11:08:07
2	Sc RADIAL	116901.8	116901.8	104	%			11:07:33
2	Al 396.153Radial†	167509.5	160292.7	84716	µg/L	84716	ppb	11:07:33
2	Ca 317.933Radial†	56357.2	53571.9	21613	µg/L	21613	ppb	11:07:38
2	Fe 238.204 Radial†	21751.9	20824.2	110570	µg/L	110570	ppb	11:07:38
2	K 766.490 Radial†	22064.2	20388.6	11502	µg/L	11502	ppb	11:07:38
2	Mg 279.077 IEC†	3117.8	2970.5	16596	µg/L	16596	ppb	11:07:38
2	Na 589.592 Radial†	5089.7	5277.1	1488.4	µg/L	1488.4	ppb	11:07:38
2	Sr 421.552†	35982.0	34558.5	199.44	µg/L	199.44	ppb	11:07:38
2	Sc 361.383	2029336.1	2029336.1	101.07	%			11:08:35
2	Y 371.029	1262760.7	1262760.7	103.22	%			11:08:35
2	Ag 328.068†	-1054.0	-1026.5	0.3286	µg/L	0.3286	ppb	11:08:40
2	As 188.979†	22.8	19.4	25.321	µg/L	25.321	ppb	11:09:01
2	B 249.677†	1583.1	1404.6	30.546	µg/L	30.546	ppb	11:08:40
2	Ba 233.527†	36774.2	36457.1	975.65	µg/L	975.65	ppb	11:08:40
2	Be 313.107†	17071.8	13272.1	7.6915	µg/L	7.6915	ppb	11:08:40
2	Cd 226.502†	277.8	372.4	1.9333	µg/L	1.9333	ppb	11:09:01
2	Co 228.616†	1297.8	1353.9	63.399	µg/L	63.399	ppb	11:09:01
2	Cr 267.716†	4903.3	4975.6	110.90	µg/L	110.90	ppb	11:08:40
2	Cu 324.752†	13483.3	10031.6	95.419	µg/L	95.419	ppb	11:08:40
2	Mn 257.610†	1216229.4	1203593.6	3974.0	µg/L	3974.0	ppb	11:08:35
2	Mo 202.031†	46.7	50.9	10.427	µg/L	10.427	ppb	11:09:01
2	Ni 231.604†	1439.1	1132.8	65.378	µg/L	65.378	ppb	11:09:01
2	P 214.914†	691.5	494.2	991.22	µg/L	991.22	ppb	11:09:01
2	Pb 220.353†	861.6	801.5	217.69	µg/L	217.69	ppb	11:09:01

2	S 181.975 Axial†	152.2	124.9	649.51 µg/L	649.51 ppb	11:09:01
2	Sb 206.836†	23.7	-0.7	6.3457 µg/L	6.3457 ppb	11:09:01
2	Se 196.026†	-41.3	-51.7	-2.7003 µg/L	-2.7003 ppb	11:09:01
2	SiO2†	182093.4	178130.8	36135 µg/L	36135 ppb	11:08:35
2	Si 251.611†	208610.4	206043.8	16666 µg/L	16666 ppb	11:08:35
2	Sn 189.927†	-60.6	-82.4	-20.861 µg/L	-20.861 ppb	11:09:01
2	Ti 334.940†	1137474.6	1124626.7	2587.5 µg/L	2587.5 ppb	11:08:35
2	Tl 190.801†	-40.2	-19.7	1.2785 µg/L	1.2785 ppb	11:09:01
2	U 409.014†	219.0	-484.9	-68.497 µg/L	-68.497 ppb	11:08:40
2	V 292.402†	16347.1	16264.5	204.19 µg/L	204.19 ppb	11:08:40
2	Zn 213.857†	13896.2	13221.2	360.92 µg/L	360.92 ppb	11:08:40
3	Sc RADIAL	116642.2	116642.2	104 %		11:07:44
3	Al 396.153Radial†	167456.8	160599.1	84878 µg/L	84878 ppb	11:07:44
3	Ca 317.933Radial†	55978.3	53328.3	21515 µg/L	21515 ppb	11:07:49
3	Fe 238.204 Radial†	21624.5	20748.2	110170 µg/L	110170 ppb	11:07:49
3	K 766.490 Radial†	22068.1	20439.4	11531 µg/L	11531 ppb	11:07:49
3	Mg 279.077 IEC†	3119.0	2978.3	16641 µg/L	16641 ppb	11:07:49
3	Na 589.592 Radial†	5045.4	5245.4	1479.5 µg/L	1479.5 ppb	11:07:49
3	Sr 421.552†	35733.9	34397.0	198.51 µg/L	198.51 ppb	11:07:49
3	Sc 361.383	2022906.6	2022906.6	100.75 %		11:09:08
3	Y 371.029	1258495.6	1258495.6	102.87 %		11:09:08
3	Ag 328.068†	-985.9	-962.3	0.8957 µg/L	0.8957 ppb	11:09:14
3	As 188.979†	25.2	21.8	30.163 µg/L	30.163 ppb	11:09:34
3	B 249.677†	1567.0	1393.6	30.160 µg/L	30.160 ppb	11:09:14
3	Ba 233.527†	36411.4	36212.6	969.10 µg/L	969.10 ppb	11:09:14
3	Be 313.107†	16785.9	13042.1	7.5391 µg/L	7.5391 ppb	11:09:14
3	Cd 226.502†	284.0	379.5	2.1668 µg/L	2.1668 ppb	11:09:34
3	Co 228.616†	1308.1	1368.1	64.111 µg/L	64.111 ppb	11:09:34
3	Cr 267.716†	4807.6	4896.0	109.13 µg/L	109.13 ppb	11:09:14
3	Cu 324.752†	13443.7	10034.6	95.354 µg/L	95.354 ppb	11:09:14
3	Mn 257.610†	1214734.6	1205934.6	3981.7 µg/L	3981.7 ppb	11:09:08
3	Mo 202.031†	49.4	53.8	10.752 µg/L	10.752 ppb	11:09:34
3	Ni 231.604†	1441.8	1140.0	65.792 µg/L	65.792 ppb	11:09:34
3	P 214.914†	699.9	504.7	1014.9 µg/L	1014.9 ppb	11:09:34
3	Pb 220.353†	874.0	816.5	221.67 µg/L	221.67 ppb	11:09:34
3	S 181.975 Axial†	156.2	129.4	673.43 µg/L	673.43 ppb	11:09:34
3	Sb 206.836†	21.6	-2.7	4.3094 µg/L	4.3094 ppb	11:09:34
3	Se 196.026†	-31.2	-41.8	11.596 µg/L	11.596 ppb	11:09:34
3	SiO2†	182305.6	178914.1	36294 µg/L	36294 ppb	11:09:08
3	Si 251.611†	209057.2	207143.3	16755 µg/L	16755 ppb	11:09:08
3	Sn 189.927†	-71.3	-93.1	-26.395 µg/L	-26.395 ppb	11:09:34
3	Ti 334.940†	1136754.4	1127488.9	2594.1 µg/L	2594.1 ppb	11:09:08
3	Tl 190.801†	-40.0	-19.7	1.4473 µg/L	1.4473 ppb	11:09:34
3	U 409.014†	254.5	-449.0	-64.839 µg/L	-64.839 ppb	11:09:14
3	V 292.402†	16169.6	16139.7	202.67 µg/L	202.67 ppb	11:09:14
3	Zn 213.857†	13761.3	13131.0	358.41 µg/L	358.41 ppb	11:09:14

Mean Data: 241536002|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026916.5	100.95	%	0.174				0.17%
Sc RADIAL	116881.3	104	%	0.2				0.20%
Y 371.029	1261209.2	103.09	%	0.193				0.19%
Ag 328.068†	-997.4	0.5458	µg/L	0.30599	0.5458	ppb	0.30599	56.06%
Al 396.153Radial†	160011.0	84567	µg/L	406.3	84567	ppb	406.3	0.48%
As 188.979†	18.9	24.435	µg/L	6.2183	24.435	ppb	6.2183	25.45%
B 249.677†	1397.2	30.415	µg/L	0.2209	30.415	ppb	0.2209	0.73%
Ba 233.527†	36365.5	973.19	µg/L	3.566	973.19	ppb	3.566	0.37%
Be 313.107†	13185.2	7.6334	µg/L	0.08235	7.6334	ppb	0.08235	1.08%
Ca 317.933Radial†	53196.0	21462	µg/L	184.2	21462	ppb	184.2	0.86%
Cd 226.502†	373.4	2.0157	µg/L	0.13101	2.0157	ppb	0.13101	6.50%
Co 228.616†	1359.8	63.692	µg/L	0.3725	63.692	ppb	0.3725	0.58%
Cr 267.716†	4934.6	109.99	µg/L	0.886	109.99	ppb	0.886	0.81%
Cu 324.752†	10058.3	95.464	µg/L	0.1381	95.464	ppb	0.1381	0.14%
Fe 238.204 Radial†	20696.1	109890	µg/L	852.5	109890	ppb	852.5	0.78%
K 766.490 Radial†	20319.4	11463	µg/L	93.6	11463	ppb	93.6	0.82%
Mg 279.077 IEC†	2964.5	16563	µg/L	98.2	16563	ppb	98.2	0.59%
Mn 257.610†	1205502.1	3980.2	µg/L	5.61	3980.2	ppb	5.61	0.14%
Mo 202.031†	50.4	10.341	µg/L	0.4599	10.341	ppb	0.4599	4.45%
Na 589.592 Radial†	5249.8	1480.7	µg/L	7.14	1480.7	ppb	7.14	0.48%

Ni 231.604†	1135.5	65.529	µg/L	0.2288	65.529	ppb	0.2288	0.35%
P 214.914†	499.4	1003.4	µg/L	11.86	1003.4	ppb	11.86	1.18%
Pb 220.353†	806.7	219.06	µg/L	2.259	219.06	ppb	2.259	1.03%
S 181.975 Axial†	128.4	668.62	µg/L	17.221	668.62	ppb	17.221	2.58%
Sb 206.836†	-0.9	6.2377	µg/L	1.87662	6.2377	ppb	1.87662	30.08%
Se 196.026†	-46.9	3.8323	µg/L	7.22698	3.8323	ppb	7.22698	188.58%
SiO2†	178584.2	36227	µg/L	82.4	36227	ppb	82.4	0.23%
Si 251.611†	206586.5	16710	µg/L	44.7	16710	ppb	44.7	0.27%
Sn 189.927†	-88.9	-24.288	µg/L	2.9940	-24.288	ppb	2.9940	12.33%
Sr 421.552†	34316.8	198.05	µg/L	1.674	198.05	ppb	1.674	0.85%
Ti 334.940†	1126335.9	2591.4	µg/L	3.48	2591.4	ppb	3.48	0.13%
Tl 190.801†	-18.9	2.5524	µg/L	2.06206	2.5524	ppb	2.06206	80.79%
U 409.014†	-452.8	-65.165	µg/L	3.1812	-65.165	ppb	3.1812	4.88%
V 292.402†	16199.1	203.36	µg/L	0.772	203.36	ppb	0.772	0.38%
Zn 213.857†	13182.1	359.89	µg/L	1.313	359.89	ppb	1.313	0.36%

Sequence No.: 15
Sample ID: 241536003|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 310
Date Collected: 12/14/2009 11:09:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536003|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117135.3	117135.3	105	%			11:10:16
1	Al 396.153Radial†	207841.3	198529.6	104920	µg/L	104920	ppb	11:10:16
1	Ca 317.933Radial†	82618.3	78569.6	31699	µg/L	31699	ppb	11:10:16
1	Fe 238.204 Radial†	25498.0	24363.8	129370	µg/L	129370	ppb	11:10:22
1	K 766.490 Radial†	28911.2	26892.1	15171	µg/L	15171	ppb	11:10:16
1	Mg 279.077 IEC†	4301.9	4096.5	22921	µg/L	22921	ppb	11:10:22
1	Na 589.592 Radial†	6701.0	6807.7	1920.1	µg/L	1920.1	ppb	11:10:22
1	Sr 421.552†	74736.3	71538.4	412.86	µg/L	412.86	ppb	11:10:16
1	Sc 361.383	2026541.6	2026541.6	100.93	%			11:10:57
1	Y 371.029	1281198.5	1281198.5	104.73	%			11:10:57
1	Ag 328.068†	-1327.2	-1298.7	-0.5000	µg/L	-0.5000	ppb	11:11:02
1	As 188.979†	22.9	19.5	21.338	µg/L	21.338	ppb	11:11:23
1	B 249.677†	1824.6	1646.1	35.864	µg/L	35.864	ppb	11:11:02
1	Ba 233.527†	240873.1	238722.6	6386.4	µg/L	6386.4	ppb	11:10:57
1	Be 313.107†	25621.4	21766.1	13.226	µg/L	13.226	ppb	11:11:02
1	Cd 226.502†	326.9	421.5	1.9584	µg/L	1.9584	ppb	11:11:23
1	Co 228.616†	3013.9	3055.9	149.87	µg/L	149.87	ppb	11:11:23
1	Cr 267.716†	4005.6	4092.9	91.399	µg/L	91.399	ppb	11:11:02
1	Cu 324.752†	14413.5	10971.6	106.17	µg/L	106.17	ppb	11:11:02
1	Mn 257.610†	3349861.1	3319194.2	10937	µg/L	10937	ppb	11:10:57
1	Mo 202.031†	10.3	14.9	6.8678	µg/L	6.8678	ppb	11:11:23
1	Ni 231.604†	3625.3	3300.8	190.50	µg/L	190.50	ppb	11:11:23
1	P 214.914†	511.9	317.2	581.35	µg/L	581.35	ppb	11:11:23
1	Pb 220.353†	827.4	768.8	210.59	µg/L	210.59	ppb	11:11:23
1	S 181.975 Axial†	300.5	272.0	1433.2	µg/L	1433.2	ppb	11:11:23
1	Sb 206.836†	24.1	-0.3	5.9564	µg/L	5.9564	ppb	11:11:23
1	Se 196.026†	-38.3	-48.7	13.596	µg/L	13.596	ppb	11:11:23
1	SiO2†	196412.7	192566.5	39063	µg/L	39063	ppb	11:10:57
1	Si 251.611†	225352.4	222915.9	18038	µg/L	18038	ppb	11:10:57
1	Sn 189.927†	-94.5	-116.0	-32.301	µg/L	-32.301	ppb	11:11:23
1	Ti 334.940†	1137249.3	1125955.5	2590.0	µg/L	2590.0	ppb	11:10:57
1	Tl 190.801†	-54.5	-33.9	4.8505	µg/L	4.8505	ppb	11:11:23
1	U 409.014†	-268.0	-967.1	-119.86	µg/L	-119.86	ppb	11:10:57
1	V 292.402†	19625.4	19534.8	244.87	µg/L	244.87	ppb	11:11:02
1	Zn 213.857†	10728.4	10101.6	269.93	µg/L	269.93	ppb	11:11:02
2	Sc RADIAL	116406.8	116406.8	104	%			11:10:27
2	Al 396.153Radial†	209019.8	200906.7	106180	µg/L	106180	ppb	11:10:27
2	Ca 317.933Radial†	82842.5	79279.5	31985	µg/L	31985	ppb	11:10:27
2	Fe 238.204 Radial†	25700.1	24710.8	131210	µg/L	131210	ppb	11:10:33
2	K 766.490 Radial†	29074.5	27222.2	15357	µg/L	15357	ppb	11:10:27
2	Mg 279.077 IEC†	4311.0	4131.0	23113	µg/L	23113	ppb	11:10:33
2	Na 589.592 Radial†	6706.8	6853.4	1933.0	µg/L	1933.0	ppb	11:10:33
2	Sr 421.552†	75193.3	72425.1	417.98	µg/L	417.98	ppb	11:10:27
2	Sc 361.383	2022609.6	2022609.6	100.74	%			11:11:31
2	Y 371.029	1278766.1	1278766.1	104.53	%			11:11:31
2	Ag 328.068†	-1394.8	-1368.3	-1.0235	µg/L	-1.0235	ppb	11:11:37
2	As 188.979†	27.5	24.2	30.046	µg/L	30.046	ppb	11:11:57
2	B 249.677†	1802.0	1627.1	34.405	µg/L	34.405	ppb	11:11:37
2	Ba 233.527†	240724.2	239038.7	6394.8	µg/L	6394.8	ppb	11:11:31
2	Be 313.107†	25380.4	21576.2	13.101	µg/L	13.101	ppb	11:11:37
2	Cd 226.502†	327.2	422.4	1.8460	µg/L	1.8460	ppb	11:11:57
2	Co 228.616†	3016.1	3063.8	150.27	µg/L	150.27	ppb	11:11:57
2	Cr 267.716†	3995.9	4090.9	91.352	µg/L	91.352	ppb	11:11:37
2	Cu 324.752†	14274.5	10861.4	105.78	µg/L	105.78	ppb	11:11:37
2	Mn 257.610†	3348507.8	3324302.9	10954	µg/L	10954	ppb	11:11:31
2	Mo 202.031†	25.8	30.4	8.7810	µg/L	8.7810	ppb	11:11:57
2	Ni 231.604†	3603.5	3286.2	189.65	µg/L	189.65	ppb	11:11:57
2	P 214.914†	524.3	330.5	609.15	µg/L	609.15	ppb	11:11:57
2	Pb 220.353†	821.0	764.0	209.42	µg/L	209.42	ppb	11:11:57

2	S 181.975 Axial†	302.1	274.2	1444.6	µg/L	1444.6 ppb	11:11:57
2	Sb 206.836†	25.4	1.1	7.3637	µg/L	7.3637 ppb	11:11:57
2	Se 196.026†	-45.7	-56.1	3.9769	µg/L	3.9769 ppb	11:11:57
2	SiO2†	195964.6	192499.9	39050	µg/L	39050 ppb	11:11:31
2	Si 251.611†	224849.7	222850.9	18033	µg/L	18033 ppb	11:11:31
2	Sn 189.927†	-105.4	-127.0	-37.597	µg/L	-37.597 ppb	11:11:57
2	Ti 334.940†	1136532.1	1127434.0	2593.3	µg/L	2593.3 ppb	11:11:31
2	Tl 190.801†	-58.6	-38.1	-1.7550	µg/L	-1.7550 ppb	11:11:57
2	U 409.014†	-202.4	-902.5	-113.75	µg/L	-113.75 ppb	11:11:31
2	V 292.402†	19481.0	19429.3	243.77	µg/L	243.77 ppb	11:11:37
2	Zn 213.857†	10603.2	9998.0	266.81	µg/L	266.81 ppb	11:11:37
3	Sc RADIAL	116103.6	116103.6	104	%		11:10:38
3	Al 396.153Radial†	207323.0	199795.2	105590	µg/L	105590 ppb	11:10:38
3	Ca 317.933Radial†	81858.5	78538.6	31686	µg/L	31686 ppb	11:10:38
3	Fe 238.204 Radial†	25855.0	24924.8	132350	µg/L	132350 ppb	11:10:44
3	K 766.490 Radial†	28791.8	27022.6	15245	µg/L	15245 ppb	11:10:38
3	Mg 279.077 IEC†	4364.4	4193.4	23463	µg/L	23463 ppb	11:10:44
3	Na 589.592 Radial†	6732.9	6895.5	1944.9	µg/L	1944.9 ppb	11:10:44
3	Sr 421.552†	74450.2	71897.3	414.93	µg/L	414.93 ppb	11:10:38
3	Sc 361.383	2025587.9	2025587.9	100.88	%		11:12:05
3	Y 371.029	1280432.5	1280432.5	104.66	%		11:12:05
3	Ag 328.068†	-1358.2	-1330.0	-0.5556	µg/L	-0.5556 ppb	11:12:11
3	As 188.979†	22.2	18.8	19.496	µg/L	19.496 ppb	11:12:31
3	B 249.677†	1851.2	1673.3	36.193	µg/L	36.193 ppb	11:12:11
3	Ba 233.527†	240216.8	238184.4	6372.0	µg/L	6372.0 ppb	11:12:05
3	Be 313.107†	25728.9	21884.7	13.306	µg/L	13.306 ppb	11:12:11
3	Cd 226.502†	314.1	408.9	1.3759	µg/L	1.3759 ppb	11:12:31
3	Co 228.616†	3021.6	3064.9	150.34	µg/L	150.34 ppb	11:12:31
3	Cr 267.716†	4051.5	4140.2	92.452	µg/L	92.452 ppb	11:12:11
3	Cu 324.752†	14400.6	10965.5	106.77	µg/L	106.77 ppb	11:12:11
3	Mn 257.610†	3341450.0	3312419.4	10915	µg/L	10915 ppb	11:12:05
3	Mo 202.031†	23.3	27.9	8.5313	µg/L	8.5313 ppb	11:12:31
3	Ni 231.604†	3613.0	3290.3	189.89	µg/L	189.89 ppb	11:12:31
3	P 214.914†	529.7	335.1	617.81	µg/L	617.81 ppb	11:12:31
3	Pb 220.353†	819.5	761.4	208.66	µg/L	208.66 ppb	11:12:31
3	S 181.975 Axial†	303.9	275.6	1451.7	µg/L	1451.7 ppb	11:12:31
3	Sb 206.836†	23.9	-0.5	5.6903	µg/L	5.6903 ppb	11:12:31
3	Se 196.026†	-41.2	-51.6	11.274	µg/L	11.274 ppb	11:12:31
3	SiO2†	195505.2	191758.5	38900	µg/L	38900 ppb	11:12:05
3	Si 251.611†	224390.0	222067.1	17969	µg/L	17969 ppb	11:12:05
3	Sn 189.927†	-101.3	-122.8	-35.291	µg/L	-35.291 ppb	11:12:31
3	Ti 334.940†	1133811.1	1123077.9	2583.3	µg/L	2583.3 ppb	11:12:05
3	Tl 190.801†	-59.0	-38.4	-2.4160	µg/L	-2.4160 ppb	11:12:31
3	U 409.014†	-240.7	-940.2	-117.73	µg/L	-117.73 ppb	11:12:05
3	V 292.402†	19693.0	19610.9	246.04	µg/L	246.04 ppb	11:12:11
3	Zn 213.857†	10737.5	10115.5	270.00	µg/L	270.00 ppb	11:12:11

Mean Data: 241536003|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024913.0	100.85	%	0.102				0.10%
Sc RADIAL	116548.6	104	%	0.5				0.45%
Y 371.029	1280132.4	104.64	%	0.102				0.10%
Ag 328.068†	-1332.3	-0.6930	µg/L	0.28753	-0.6930	ppb	0.28753	41.49%
Al 396.153Radial†	199743.8	105570	µg/L	628.6	105570	ppb	628.6	0.60%
As 188.979†	20.8	23.627	µg/L	5.6351	23.627	ppb	5.6351	23.85%
B 249.677†	1648.8	35.487	µg/L	0.9516	35.487	ppb	0.9516	2.68%
Ba 233.527†	238648.6	6384.4	µg/L	11.55	6384.4	ppb	11.55	0.18%
Be 313.107†	21742.3	13.211	µg/L	0.1032	13.211	ppb	0.1032	0.78%
Ca 317.933Radial†	78795.9	31790	µg/L	169.1	31790	ppb	169.1	0.53%
Cd 226.502†	417.6	1.7268	µg/L	0.30901	1.7268	ppb	0.30901	17.89%
Co 228.616†	3061.5	150.16	µg/L	0.257	150.16	ppb	0.257	0.17%
Cr 267.716†	4108.0	91.734	µg/L	0.6218	91.734	ppb	0.6218	0.68%
Cu 324.752†	10932.8	106.24	µg/L	0.498	106.24	ppb	0.498	0.47%
Fe 238.204 Radial†	24666.5	130970	µg/L	1503.0	130970	ppb	1503.0	1.15%
K 766.490 Radial†	27045.6	15258	µg/L	93.8	15258	ppb	93.8	0.61%
Mg 279.077 IEC†	4140.3	23165	µg/L	274.8	23165	ppb	274.8	1.19%
Mn 257.610†	3318638.8	10936	µg/L	19.5	10936	ppb	19.5	0.18%
Mo 202.031†	24.4	8.0600	µg/L	1.04000	8.0600	ppb	1.04000	12.90%
Na 589.592 Radial†	6852.2	1932.7	µg/L	12.37	1932.7	ppb	12.37	0.64%

Ni 231.604†	3292.4	190.01 µg/L	0.436	190.01 ppb	0.436	0.23%
P 214.914†	327.6	602.77 µg/L	19.050	602.77 ppb	19.050	3.16%
Pb 220.353†	764.7	209.56 µg/L	0.977	209.56 ppb	0.977	0.47%
S 181.975 Axial†	274.0	1443.1 µg/L	9.34	1443.1 ppb	9.34	0.65%
Sb 206.836†	0.1	6.3368 µg/L	0.89919	6.3368 ppb	0.89919	14.19%
Se 196.026†	-52.1	9.6155 µg/L	5.01928	9.6155 ppb	5.01928	52.20%
SiO2†	192275.0	39004 µg/L	91.0	39004 ppb	91.0	0.23%
Si 251.611†	222611.3	18013 µg/L	38.2	18013 ppb	38.2	0.21%
Sn 189.927†	-122.0	-35.063 µg/L	2.6553	-35.063 ppb	2.6553	7.57%
Sr 421.552†	71953.6	415.26 µg/L	2.574	415.26 ppb	2.574	0.62%
Ti 334.940†	1125489.1	2588.9 µg/L	5.09	2588.9 ppb	5.09	0.20%
Tl 190.801†	-36.8	0.2265 µg/L	4.01810	0.2265 ppb	4.01810	>999.9%
U 409.014†	-936.6	-117.12 µg/L	3.100	-117.12 ppb	3.100	2.65%
V 292.402†	19525.0	244.89 µg/L	1.133	244.89 ppb	1.133	0.46%
Zn 213.857†	10071.7	268.91 µg/L	1.823	268.91 ppb	1.823	0.68%

Sequence No.: 16
Sample ID: 241536004|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 311
Date Collected: 12/14/2009 11:12:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536004|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115829.4	115829.4	103	%			11:13:14
1	Al 396.153Radial†	239361.7	231242.5	122210	µg/L	122210	ppb	11:13:14
1	Ca 317.933Radial†	91369.7	87920.6	35471	µg/L	35471	ppb	11:13:14
1	Fe 238.204 Radial†	34213.0	33064.1	175560	µg/L	175560	ppb	11:13:20
1	K 766.490 Radial†	30878.8	29106.0	16420	µg/L	16420	ppb	11:13:14
1	Mg 279.077 IEC†	5145.2	4958.2	27714	µg/L	27714	ppb	11:13:20
1	Na 589.592 Radial†	16317.6	16177.0	4562.7	µg/L	4562.7	ppb	11:13:20
1	Sr 421.552†	79937.4	77372.2	446.53	µg/L	446.53	ppb	11:13:14
1	Sc 361.383	2024479.4	2024479.4	100.83	%			11:13:55
1	Y 371.029	1333647.2	1333647.2	109.01	%			11:13:55
1	Ag 328.068†	-1699.7	-1669.4	-0.4252	µg/L	-0.4252	ppb	11:14:01
1	As 188.979†	30.4	27.0	32.542	µg/L	32.542	ppb	11:14:21
1	B 249.677†	2284.5	2104.0	42.632	µg/L	42.632	ppb	11:14:01
1	Ba 233.527†	54459.8	54084.6	1447.2	µg/L	1447.2	ppb	11:14:01
1	Be 313.107†	33639.3	29743.9	17.869	µg/L	17.869	ppb	11:14:01
1	Cd 226.502†	468.7	562.4	2.2549	µg/L	2.2549	ppb	11:14:01
1	Co 228.616†	1101.2	1162.0	50.490	µg/L	50.490	ppb	11:14:21
1	Cr 267.716†	4629.8	4716.0	105.21	µg/L	105.21	ppb	11:14:01
1	Cu 324.752†	10111.5	6719.5	85.716	µg/L	85.716	ppb	11:14:01
1	Mn 257.610†	1066164.1	1057648.6	3502.0	µg/L	3502.0	ppb	11:13:55
1	Mo 202.031†	4.1	8.8	7.9542	µg/L	7.9542	ppb	11:14:21
1	Ni 231.604†	2381.0	2070.4	119.49	µg/L	119.49	ppb	11:14:21
1	P 214.914†	808.5	611.9	1192.5	µg/L	1192.5	ppb	11:14:21
1	Pb 220.353†	545.3	489.8	137.87	µg/L	137.87	ppb	11:14:21
1	S 181.975 Axial†	238.0	210.3	1095.5	µg/L	1095.5	ppb	11:14:21
1	Sb 206.836†	25.4	1.1	12.555	µg/L	12.555	ppb	11:14:21
1	Se 196.026†	-61.0	-71.3	11.209	µg/L	11.209	ppb	11:14:21
1	SiO2†	209428.5	205673.5	41722	µg/L	41722	ppb	11:13:55
1	Si 251.611†	240420.4	238087.5	19218	µg/L	19218	ppb	11:13:55
1	Sn 189.927†	-130.5	-151.8	-43.280	µg/L	-43.280	ppb	11:14:21
1	Ti 334.940†	1794894.0	1779342.4	4093.7	µg/L	4093.7	ppb	11:13:55
1	Tl 190.801†	-36.3	-15.9	14.939	µg/L	14.939	ppb	11:14:21
1	U 409.014†	-358.1	-1056.7	-137.33	µg/L	-137.33	ppb	11:13:55
1	V 292.402†	18931.7	18866.6	240.60	µg/L	240.60	ppb	11:14:01
1	Zn 213.857†	16103.2	15443.0	416.23	µg/L	416.23	ppb	11:14:01
2	Sc RADIAL	116536.5	116536.5	104	%			11:13:26
2	Al 396.153Radial†	241691.1	232076.7	122660	µg/L	122660	ppb	11:13:26
2	Ca 317.933Radial†	92364.2	88340.3	35640	µg/L	35640	ppb	11:13:26
2	Fe 238.204 Radial†	34540.4	33178.0	176160	µg/L	176160	ppb	11:13:31
2	K 766.490 Radial†	31038.4	29078.2	16404	µg/L	16404	ppb	11:13:26
2	Mg 279.077 IEC†	5171.2	4953.0	27684	µg/L	27684	ppb	11:13:31
2	Na 589.592 Radial†	16437.4	16196.3	4568.2	µg/L	4568.2	ppb	11:13:31
2	Sr 421.552†	80716.7	77652.1	448.14	µg/L	448.14	ppb	11:13:26
2	Sc 361.383	2022671.9	2022671.9	100.74	%			11:14:29
2	Y 371.029	1331900.5	1331900.5	108.87	%			11:14:29
2	Ag 328.068†	-1631.6	-1603.4	0.2427	µg/L	0.2427	ppb	11:14:35
2	As 188.979†	31.4	28.0	34.481	µg/L	34.481	ppb	11:14:55
2	B 249.677†	2276.7	2098.3	42.177	µg/L	42.177	ppb	11:14:35
2	Ba 233.527†	54069.2	53745.1	1438.2	µg/L	1438.2	ppb	11:14:35
2	Be 313.107†	33436.0	29572.0	17.758	µg/L	17.758	ppb	11:14:35
2	Cd 226.502†	473.4	567.5	2.3656	µg/L	2.3656	ppb	11:14:35
2	Co 228.616†	1084.8	1146.6	49.717	µg/L	49.717	ppb	11:14:55
2	Cr 267.716†	4617.5	4707.9	105.03	µg/L	105.03	ppb	11:14:35
2	Cu 324.752†	10010.0	6627.6	85.189	µg/L	85.189	ppb	11:14:35
2	Mn 257.610†	1064240.8	1056684.4	3498.9	µg/L	3498.9	ppb	11:14:29
2	Mo 202.031†	13.0	17.7	9.0366	µg/L	9.0366	ppb	11:14:55
2	Ni 231.604†	2368.5	2060.1	118.89	µg/L	118.89	ppb	11:14:55
2	P 214.914†	808.2	612.3	1193.0	µg/L	1193.0	ppb	11:14:55
2	Pb 220.353†	560.0	504.9	141.88	µg/L	141.88	ppb	11:14:55

2	S 181.975 Axial†	233.9	206.5	1074.6	µg/L	1074.6 ppb	11:14:55
2	Sb 206.836†	22.9	-1.4	9.9739	µg/L	9.9739 ppb	11:14:55
2	Se 196.026†	-53.2	-63.6	22.984	µg/L	22.984 ppb	11:14:55
2	SiO2†	208847.4	205282.3	41643	µg/L	41643 ppb	11:14:29
2	Si 251.611†	239759.4	237644.4	19182	µg/L	19182 ppb	11:14:29
2	Sn 189.927†	-119.5	-141.0	-37.715	µg/L	-37.715 ppb	11:14:55
2	Ti 334.940†	1792151.4	1778210.7	4091.1	µg/L	4091.1 ppb	11:14:29
2	Tl 190.801†	-37.4	-17.1	13.000	µg/L	13.000 ppb	11:14:55
2	U 409.014†	-149.7	-850.2	-116.84	µg/L	-116.84 ppb	11:14:29
2	V 292.402†	18838.4	18790.8	239.78	µg/L	239.78 ppb	11:14:35
2	Zn 213.857†	15961.2	15316.3	412.59	µg/L	412.59 ppb	11:14:35
3	Sc RADIAL	116106.3	116106.3	104	%		11:13:37
3	Al 396.153Radial†	240613.4	231897.8	122560	µg/L	122560 ppb	11:13:37
3	Ca 317.933Radial†	91734.1	88061.3	35528	µg/L	35528 ppb	11:13:37
3	Fe 238.204 Radial†	34687.8	33443.0	177570	µg/L	177570 ppb	11:13:42
3	K 766.490 Radial†	30944.8	29098.4	16416	µg/L	16416 ppb	11:13:37
3	Mg 279.077 IEC†	5215.1	5013.8	28025	µg/L	28025 ppb	11:13:42
3	Na 589.592 Radial†	16521.9	16336.4	4607.7	µg/L	4607.7 ppb	11:13:42
3	Sr 421.552†	80265.2	77504.0	447.29	µg/L	447.29 ppb	11:13:37
3	Sc 361.383	2024292.8	2024292.8	100.82	%		11:15:03
3	Y 371.029	1334059.8	1334059.8	109.05	%		11:15:03
3	Ag 328.068†	-1687.3	-1657.3	-0.1462	µg/L	-0.1462 ppb	11:15:09
3	As 188.979†	33.7	30.3	38.744	µg/L	38.744 ppb	11:15:29
3	B 249.677†	2347.3	2166.4	44.903	µg/L	44.903 ppb	11:15:09
3	Ba 233.527†	54481.5	54111.1	1448.0	µg/L	1448.0 ppb	11:15:09
3	Be 313.107†	33682.0	29789.4	17.893	µg/L	17.893 ppb	11:15:09
3	Cd 226.502†	453.4	547.3	1.6826	µg/L	1.6826 ppb	11:15:09
3	Co 228.616†	1107.9	1168.7	50.804	µg/L	50.804 ppb	11:15:29
3	Cr 267.716†	4702.0	4788.0	106.81	µg/L	106.81 ppb	11:15:09
3	Cu 324.752†	10128.5	6737.2	86.275	µg/L	86.275 ppb	11:15:09
3	Mn 257.610†	1069054.2	1060612.8	3512.0	µg/L	3512.0 ppb	11:15:03
3	Mo 202.031†	11.0	15.6	8.8468	µg/L	8.8468 ppb	11:15:29
3	Ni 231.604†	2364.4	2054.2	118.55	µg/L	118.55 ppb	11:15:29
3	P 214.914†	808.0	611.4	1189.2	µg/L	1189.2 ppb	11:15:29
3	Pb 220.353†	540.8	485.4	136.70	µg/L	136.70 ppb	11:15:29
3	S 181.975 Axial†	242.0	214.3	1116.5	µg/L	1116.5 ppb	11:15:29
3	Sb 206.836†	12.1	-12.2	-1.2343	µg/L	-1.2343 ppb	11:15:29
3	Se 196.026†	-52.6	-62.9	24.829	µg/L	24.829 ppb	11:15:29
3	SiO2†	209971.2	206230.9	41835	µg/L	41835 ppb	11:15:03
3	Si 251.611†	241017.8	238702.0	19267	µg/L	19267 ppb	11:15:03
3	Sn 189.927†	-127.9	-149.2	-41.664	µg/L	-41.664 ppb	11:15:29
3	Ti 334.940†	1800772.2	1785337.0	4107.5	µg/L	4107.5 ppb	11:15:03
3	Tl 190.801†	-37.7	-17.3	12.885	µg/L	12.885 ppb	11:15:29
3	U 409.014†	-221.9	-921.8	-124.24	µg/L	-124.24 ppb	11:15:03
3	V 292.402†	18992.2	18928.3	241.53	µg/L	241.53 ppb	11:15:09
3	Zn 213.857†	16064.1	15405.7	414.95	µg/L	414.95 ppb	11:15:09

Mean Data: 241536004|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2023814.7	100.80	%	0.050				0.05%
Sc RADIAL	116157.4	104	%	0.3				0.31%
Y 371.029	1333202.5	108.98	%	0.094				0.09%
Ag 328.068†	-1643.4	-0.1096	µg/L	0.33545	-0.1096	ppb	0.33545	306.07%
Al 396.153Radial†	231739.0	122480	µg/L	232.1	122480	ppb	232.1	0.19%
As 188.979†	28.4	35.256	µg/L	3.1729	35.256	ppb	3.1729	9.00%
B 249.677†	2122.9	43.238	µg/L	1.4604	43.238	ppb	1.4604	3.38%
Ba 233.527†	53980.3	1444.5	µg/L	5.46	1444.5	ppb	5.46	0.38%
Be 313.107†	29701.8	17.840	µg/L	0.0723	17.840	ppb	0.0723	0.41%
Ca 317.933Radial†	88107.4	35547	µg/L	86.2	35547	ppb	86.2	0.24%
Cd 226.502†	559.1	2.1010	µg/L	0.36661	2.1010	ppb	0.36661	17.45%
Co 228.616†	1159.1	50.337	µg/L	0.5594	50.337	ppb	0.5594	1.11%
Cr 267.716†	4737.3	105.68	µg/L	0.981	105.68	ppb	0.981	0.93%
Cu 324.752†	6694.8	85.727	µg/L	0.5428	85.727	ppb	0.5428	0.63%
Fe 238.204 Radial†	33228.4	176430	µg/L	1032.5	176430	ppb	1032.5	0.59%
K 766.490 Radial†	29094.2	16413	µg/L	8.1	16413	ppb	8.1	0.05%
Mg 279.077 IEC†	4975.0	27807	µg/L	188.7	27807	ppb	188.7	0.68%
Mn 257.610†	1058315.3	3504.3	µg/L	6.85	3504.3	ppb	6.85	0.20%
Mo 202.031†	14.1	8.6125	µg/L	0.57802	8.6125	ppb	0.57802	6.71%
Na 589.592 Radial†	16236.6	4579.5	µg/L	24.54	4579.5	ppb	24.54	0.54%

Ni 231.604†	2061.6	118.98	µg/L	0.474	118.98	ppb	0.474	0.40%
P 214.914†	611.8	1191.6	µg/L	2.06	1191.6	ppb	2.06	0.17%
Pb 220.353†	493.4	138.82	µg/L	2.717	138.82	ppb	2.717	1.96%
S 181.975 Axial†	210.4	1095.5	µg/L	20.93	1095.5	ppb	20.93	1.91%
Sb 206.836†	-4.2	7.0981	µg/L	7.33056	7.0981	ppb	7.33056	103.27%
Se 196.026†	-65.9	19.674	µg/L	7.3887	19.674	ppb	7.3887	37.56%
SiO2†	205728.9	41734	µg/L	96.7	41734	ppb	96.7	0.23%
Si 251.611†	238144.6	19222	µg/L	43.0	19222	ppb	43.0	0.22%
Sn 189.927†	-147.3	-40.886	µg/L	2.8629	-40.886	ppb	2.8629	7.00%
Sr 421.552†	77509.4	447.32	µg/L	0.808	447.32	ppb	0.808	0.18%
Ti 334.940†	1780963.4	4097.4	µg/L	8.82	4097.4	ppb	8.82	0.22%
Tl 190.801†	-16.7	13.608	µg/L	1.1542	13.608	ppb	1.1542	8.48%
U 409.014†	-942.9	-126.14	µg/L	10.376	-126.14	ppb	10.376	8.23%
V 292.402†	18861.9	240.63	µg/L	0.877	240.63	ppb	0.877	0.36%
Zn 213.857†	15388.3	414.59	µg/L	1.846	414.59	ppb	1.846	0.45%

Sequence No.: 17
Sample ID: 241536005|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 312
Date Collected: 12/14/2009 11:15:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536005|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112284.2	112284.2	100	%			11:16:11
1	Al 396.153Radial†	194314.2	193623.4	102330	µg/L	102330	ppb	11:16:11
1	Ca 317.933Radial†	62452.1	61870.3	24961	µg/L	24961	ppb	11:16:11
1	Fe 238.204 Radial†	25126.8	25046.8	132990	µg/L	132990	ppb	11:16:31
1	K 766.490 Radial†	18748.3	17950.9	10127	µg/L	10127	ppb	11:16:11
1	Mg 279.077 IEC†	3495.9	3470.5	19383	µg/L	19383	ppb	11:16:31
1	Na 589.592 Radial†	5354.1	5741.2	1619.3	µg/L	1619.3	ppb	11:16:31
1	Sr 421.552†	41362.6	41341.9	238.59	µg/L	238.59	ppb	11:16:11
1	Sc 361.383	2019661.4	2019661.4	100.59	%			11:17:36
1	Y 371.029	1248782.8	1248782.8	102.08	%			11:17:36
1	Ag 328.068†	-1277.3	-1253.6	0.3559	µg/L	0.3559	ppb	11:17:42
1	As 188.979†	31.4	28.0	40.415	µg/L	40.415	ppb	11:18:02
1	B 249.677†	1727.1	1555.2	30.499	µg/L	30.499	ppb	11:17:42
1	Ba 233.527†	30468.1	30362.2	812.73	µg/L	812.73	ppb	11:17:42
1	Be 313.107†	18088.8	14364.0	8.1160	µg/L	8.1160	ppb	11:17:42
1	Cd 226.502†	306.2	402.0	1.0460	µg/L	1.0460	ppb	11:18:02
1	Co 228.616†	1158.4	1221.5	55.034	µg/L	55.034	ppb	11:18:02
1	Cr 267.716†	4641.9	4739.0	105.79	µg/L	105.79	ppb	11:17:42
1	Cu 324.752†	9661.3	6295.8	73.545	µg/L	73.545	ppb	11:17:42
1	Mn 257.610†	702031.3	698169.8	2313.9	µg/L	2313.9	ppb	11:17:36
1	Mo 202.031†	-18.7	-13.8	3.5805	µg/L	3.5805	ppb	11:18:02
1	Ni 231.604†	1342.3	1043.4	60.215	µg/L	60.215	ppb	11:18:02
1	P 214.914†	599.4	405.9	777.63	µg/L	777.63	ppb	11:18:02
1	Pb 220.353†	524.3	470.3	131.43	µg/L	131.43	ppb	11:18:02
1	S 181.975 Axial†	147.6	121.0	625.15	µg/L	625.15	ppb	11:18:02
1	Sb 206.836†	21.5	-2.8	6.8140	µg/L	6.8140	ppb	11:18:02
1	Se 196.026†	-35.5	-46.0	20.624	µg/L	20.624	ppb	11:18:02
1	SiO2†	169576.6	166550.4	33786	µg/L	33786	ppb	11:17:36
1	Si 251.611†	194348.8	192854.4	15566	µg/L	15566	ppb	11:17:36
1	Sn 189.927†	-93.8	-115.6	-33.851	µg/L	-33.851	ppb	11:18:02
1	Ti 334.940†	1470931.5	1461522.8	3362.8	µg/L	3362.8	ppb	11:17:36
1	Tl 190.801†	-40.3	-19.9	-0.1814	µg/L	-0.1814	ppb	11:18:02
1	U 409.014†	563.2	-141.7	-38.372	µg/L	-38.372	ppb	11:17:36
1	V 292.402†	21298.3	21264.2	266.03	µg/L	266.03	ppb	11:17:42
1	Zn 213.857†	9199.5	8617.8	228.44	µg/L	228.44	ppb	11:17:42
2	Sc RADIAL	115694.3	115694.3	103	%			11:16:37
2	Al 396.153Radial†	202088.6	195436.2	103290	µg/L	103290	ppb	11:16:37
2	Ca 317.933Radial†	65437.4	62923.9	25386	µg/L	25386	ppb	11:16:37
2	Fe 238.204 Radial†	25110.9	24292.8	128990	µg/L	128990	ppb	11:16:57
2	K 766.490 Radial†	19494.9	18122.4	10224	µg/L	10224	ppb	11:16:37
2	Mg 279.077 IEC†	3480.5	3352.8	18725	µg/L	18725	ppb	11:16:57
2	Na 589.592 Radial†	5369.6	5598.9	1579.2	µg/L	1579.2	ppb	11:16:57
2	Sr 421.552†	43081.1	41789.3	241.17	µg/L	241.17	ppb	11:16:37
2	Sc 361.383	2023754.0	2023754.0	100.79	%			11:18:10
2	Y 371.029	1251335.9	1251335.9	102.29	%			11:18:10
2	Ag 328.068†	-1211.6	-1185.8	0.6750	µg/L	0.6750	ppb	11:18:16
2	As 188.979†	26.3	22.9	31.076	µg/L	31.076	ppb	11:18:36
2	B 249.677†	1728.5	1553.1	31.661	µg/L	31.661	ppb	11:18:16
2	Ba 233.527†	30292.6	30126.9	806.43	µg/L	806.43	ppb	11:18:16
2	Be 313.107†	18040.9	14280.2	8.0609	µg/L	8.0609	ppb	11:18:16
2	Cd 226.502†	301.5	396.7	1.2110	µg/L	1.2110	ppb	11:18:36
2	Co 228.616†	1161.5	1222.2	55.067	µg/L	55.067	ppb	11:18:36
2	Cr 267.716†	4600.1	4688.1	104.66	µg/L	104.66	ppb	11:18:16
2	Cu 324.752†	9760.1	6374.4	73.247	µg/L	73.247	ppb	11:18:16
2	Mn 257.610†	703573.0	698287.9	2313.8	µg/L	2313.8	ppb	11:18:10
2	Mo 202.031†	-21.6	-16.7	3.0788	µg/L	3.0788	ppb	11:18:36
2	Ni 231.604†	1340.7	1039.1	59.968	µg/L	59.968	ppb	11:18:36
2	P 214.914†	589.9	395.2	758.94	µg/L	758.94	ppb	11:18:36
2	Pb 220.353†	539.3	484.1	135.21	µg/L	135.21	ppb	11:18:36

2	S 181.975 Axial†	139.2	112.5	579.94	µg/L	579.94 ppb	11:18:36
2	Sb 206.836†	24.1	-0.2	9.4840	µg/L	9.4840 ppb	11:18:36
2	Se 196.026†	-40.0	-50.5	11.631	µg/L	11.631 ppb	11:18:36
2	SiO2†	170216.8	166844.6	33846	µg/L	33846 ppb	11:18:10
2	Si 251.611†	195133.5	193242.2	15598	µg/L	15598 ppb	11:18:10
2	Sn 189.927†	-97.5	-119.1	-36.134	µg/L	-36.134 ppb	11:18:36
2	Ti 334.940†	1474440.1	1462046.6	3363.9	µg/L	3363.9 ppb	11:18:10
2	Tl 190.801†	-34.4	-14.0	9.0691	µg/L	9.0691 ppb	11:18:36
2	U 409.014†	619.2	-87.3	-32.188	µg/L	-32.188 ppb	11:18:10
2	V 292.402†	21246.7	21170.1	264.58	µg/L	264.58 ppb	11:18:16
2	Zn 213.857†	9163.4	8563.5	227.35	µg/L	227.35 ppb	11:18:16
3	Sc RADIAL	116061.8	116061.8	104	%		11:17:03
3	Al 396.153Radial†	201416.4	194168.3	102620	µg/L	102620 ppb	11:17:03
3	Ca 317.933Radial†	65428.3	62714.7	25302	µg/L	25302 ppb	11:17:03
3	Fe 238.204 Radial†	25070.4	24176.7	128370	µg/L	128370 ppb	11:17:23
3	K 766.490 Radial†	19465.4	18034.1	10174	µg/L	10174 ppb	11:17:03
3	Mg 279.077 IEC†	3492.2	3353.3	18729	µg/L	18729 ppb	11:17:23
3	Na 589.592 Radial†	5354.0	5567.4	1570.3	µg/L	1570.3 ppb	11:17:23
3	Sr 421.552†	43093.3	41669.1	240.48	µg/L	240.48 ppb	11:17:03
3	Sc 361.383	2026260.2	2026260.2	100.92	%		11:18:44
3	Y 371.029	1252621.2	1252621.2	102.39	%		11:18:44
3	Ag 328.068†	-1286.9	-1258.9	-0.0828	µg/L	-0.0828 ppb	11:18:50
3	As 188.979†	24.3	20.9	27.142	µg/L	27.142 ppb	11:19:10
3	B 249.677†	1723.4	1546.0	31.525	µg/L	31.525 ppb	11:18:50
3	Ba 233.527†	30103.1	29901.9	800.41	µg/L	800.41 ppb	11:18:50
3	Be 313.107†	17938.9	14157.0	7.9841	µg/L	7.9841 ppb	11:18:50
3	Cd 226.502†	289.9	384.9	0.9158	µg/L	0.9158 ppb	11:19:10
3	Co 228.616†	1147.8	1207.2	54.327	µg/L	54.327 ppb	11:19:10
3	Cr 267.716†	4551.3	4634.1	103.45	µg/L	103.45 ppb	11:18:50
3	Cu 324.752†	9639.9	6243.3	72.178	µg/L	72.178 ppb	11:18:50
3	Mn 257.610†	703389.9	697243.2	2310.2	µg/L	2310.2 ppb	11:18:44
3	Mo 202.031†	-17.2	-12.2	3.5834	µg/L	3.5834 ppb	11:19:10
3	Ni 231.604†	1332.7	1029.6	59.418	µg/L	59.418 ppb	11:19:10
3	P 214.914†	594.4	399.0	767.97	µg/L	767.97 ppb	11:19:10
3	Pb 220.353†	531.8	475.9	133.02	µg/L	133.02 ppb	11:19:10
3	S 181.975 Axial†	134.3	107.4	552.89	µg/L	552.89 ppb	11:19:10
3	Sb 206.836†	22.4	-2.0	7.6063	µg/L	7.6063 ppb	11:19:10
3	Se 196.026†	-36.6	-47.0	16.272	µg/L	16.272 ppb	11:19:10
3	SiO2†	170054.4	166474.8	33771	µg/L	33771 ppb	11:18:44
3	Si 251.611†	194897.9	192769.3	15560	µg/L	15560 ppb	11:18:44
3	Sn 189.927†	-97.4	-118.9	-36.149	µg/L	-36.149 ppb	11:19:10
3	Ti 334.940†	1472228.8	1458046.1	3354.7	µg/L	3354.7 ppb	11:18:44
3	Tl 190.801†	-38.7	-18.3	2.3113	µg/L	2.3113 ppb	11:19:10
3	U 409.014†	464.8	-241.1	-47.411	µg/L	-47.411 ppb	11:18:44
3	V 292.402†	21079.5	20978.4	262.21	µg/L	262.21 ppb	11:18:50
3	Zn 213.857†	9116.5	8505.8	225.79	µg/L	225.79 ppb	11:18:50

Mean Data: 241536005|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2023225.2	100.77	%	0.166				0.16%
Sc RADIAL	114680.1	102	%	1.9				1.82%
Y 371.029	1250913.3	102.25	%	0.160				0.16%
Ag 328.068†	-1232.8	0.3160	µg/L	0.38047	0.3160	ppb	0.38047	120.39%
Al 396.153Radial†	194409.3	102750	µg/L	491.6	102750	ppb	491.6	0.48%
As 188.979†	24.0	32.878	µg/L	6.8173	32.878	ppb	6.8173	20.74%
B 249.677†	1551.4	31.229	µg/L	0.6352	31.229	ppb	0.6352	2.03%
Ba 233.527†	30130.3	806.52	µg/L	6.160	806.52	ppb	6.160	0.76%
Be 313.107†	14267.1	8.0537	µg/L	0.06629	8.0537	ppb	0.06629	0.82%
Ca 317.933Radial†	62503.0	25217	µg/L	225.0	25217	ppb	225.0	0.89%
Cd 226.502†	394.5	1.0576	µg/L	0.14798	1.0576	ppb	0.14798	13.99%
Co 228.616†	1217.0	54.809	µg/L	0.4179	54.809	ppb	0.4179	0.76%
Cr 267.716†	4687.1	104.63	µg/L	1.167	104.63	ppb	1.167	1.12%
Cu 324.752†	6304.5	72.990	µg/L	0.7190	72.990	ppb	0.7190	0.99%
Fe 238.204 Radial†	24505.4	130120	µg/L	2508.3	130120	ppb	2508.3	1.93%
K 766.490 Radial†	18035.8	10175	µg/L	48.4	10175	ppb	48.4	0.48%
Mg 279.077 IEC†	3392.2	18946	µg/L	378.8	18946	ppb	378.8	2.00%
Mn 257.610†	697900.3	2312.6	µg/L	2.06	2312.6	ppb	2.06	0.09%
Mo 202.031†	-14.2	3.4142	µg/L	0.29053	3.4142	ppb	0.29053	8.51%
Na 589.592 Radial†	5635.8	1589.6	µg/L	26.13	1589.6	ppb	26.13	1.64%

Ni 231.604†	1037.3	59.867	µg/L	0.4080	59.867	ppb	0.4080	0.68%
P 214.914†	400.1	768.18	µg/L	9.351	768.18	ppb	9.351	1.22%
Pb 220.353†	476.8	133.22	µg/L	1.895	133.22	ppb	1.895	1.42%
S 181.975 Axial†	113.6	585.99	µg/L	36.509	585.99	ppb	36.509	6.23%
Sb 206.836†	-1.7	7.9681	µg/L	1.37129	7.9681	ppb	1.37129	17.21%
Se 196.026†	-47.8	16.176	µg/L	4.4972	16.176	ppb	4.4972	27.80%
SiO2†	166623.3	33801	µg/L	39.6	33801	ppb	39.6	0.12%
Si 251.611†	192955.3	15575	µg/L	20.4	15575	ppb	20.4	0.13%
Sn 189.927†	-117.9	-35.378	µg/L	1.3226	-35.378	ppb	1.3226	3.74%
Sr 421.552†	41600.1	240.08	µg/L	1.336	240.08	ppb	1.336	0.56%
Ti 334.940†	1460538.5	3360.5	µg/L	5.01	3360.5	ppb	5.01	0.15%
Tl 190.801†	-17.4	3.7330	µg/L	4.78631	3.7330	ppb	4.78631	128.22%
U 409.014†	-156.7	-39.323	µg/L	7.6558	-39.323	ppb	7.6558	19.47%
V 292.402†	21137.5	264.27	µg/L	1.929	264.27	ppb	1.929	0.73%
Zn 213.857†	8562.4	227.19	µg/L	1.333	227.19	ppb	1.333	0.59%

Sequence No.: 18
Sample ID: 241536006|931873|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 313
Date Collected: 12/14/2009 11:19:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536006|931873|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113815.9	113815.9	102	%			11:19:52
1	Al 396.153Radial†	134186.1	131857.2	69688	µg/L	69688	ppb	11:19:52
1	Ca 317.933Radial†	40896.5	39824.2	16067	µg/L	16067	ppb	11:19:52
1	Fe 238.204 Radial†	22152.4	21783.1	115660	µg/L	115660	ppb	11:20:13
1	K 766.490 Radial†	17449.8	16421.6	9264.1	µg/L	9264.1	ppb	11:19:52
1	Mg 279.077 IEC†	2571.0	2513.5	14010	µg/L	14010	ppb	11:20:13
1	Na 589.592 Radial†	3483.6	3829.1	1080.0	µg/L	1080.0	ppb	11:20:13
1	Sr 421.552†	32544.4	32110.7	185.32	µg/L	185.32	ppb	11:19:52
1	Sc 361.383	1996594.2	1996594.2	99.440	%			11:21:18
1	Y 371.029	1239320.5	1239320.5	101.30	%			11:21:18
1	Ag 328.068†	-1132.0	-1122.2	0.3460	µg/L	0.3460	ppb	11:21:23
1	As 188.979†	21.5	18.4	27.878	µg/L	27.878	ppb	11:21:44
1	B 249.677†	1596.8	1444.1	30.782	µg/L	30.782	ppb	11:21:23
1	Ba 233.527†	33228.0	33487.6	896.37	µg/L	896.37	ppb	11:21:23
1	Be 313.107†	17655.8	14136.4	7.6663	µg/L	7.6663	ppb	11:21:23
1	Cd 226.502†	272.4	371.5	1.5309	µg/L	1.5309	ppb	11:21:44
1	Co 228.616†	1239.7	1316.5	58.163	µg/L	58.163	ppb	11:21:44
1	Cr 267.716†	3899.7	4045.9	90.442	µg/L	90.442	ppb	11:21:23
1	Cu 324.752†	6817.6	3547.1	50.185	µg/L	50.185	ppb	11:21:23
1	Mn 257.610†	1065665.9	1071915.8	3541.4	µg/L	3541.4	ppb	11:21:18
1	Mo 202.031†	-10.7	-6.0	3.8288	µg/L	3.8288	ppb	11:21:44
1	Ni 231.604†	1237.3	953.2	55.012	µg/L	55.012	ppb	11:21:44
1	P 214.914†	651.5	465.1	920.41	µg/L	920.41	ppb	11:21:44
1	Pb 220.353†	576.5	528.8	144.29	µg/L	144.29	ppb	11:21:44
1	S 181.975 Axial†	128.8	103.8	536.22	µg/L	536.22	ppb	11:21:44
1	Sb 206.836†	23.2	-0.8	12.862	µg/L	12.862	ppb	11:21:44
1	Se 196.026†	-26.5	-37.4	22.220	µg/L	22.220	ppb	11:21:44
1	SiO2†	173559.0	172502.9	34993	µg/L	34993	ppb	11:21:18
1	Si 251.611†	198725.9	199488.3	16077	µg/L	16077	ppb	11:21:18
1	Sn 189.927†	-76.2	-99.1	-30.504	µg/L	-30.504	ppb	11:21:44
1	Ti 334.940†	1805831.6	1815203.7	4177.4	µg/L	4177.4	ppb	11:21:18
1	Tl 190.801†	-48.0	-28.1	-1.5814	µg/L	-1.5814	ppb	11:21:44
1	U 409.014†	599.1	-99.2	-31.105	µg/L	-31.105	ppb	11:21:18
1	V 292.402†	22399.3	22616.0	280.85	µg/L	280.85	ppb	11:21:23
1	Zn 213.857†	7991.8	7509.0	199.16	µg/L	199.16	ppb	11:21:23
2	Sc RADIAL	114995.2	114995.2	103	%			11:20:18
2	Al 396.153Radial†	135321.2	131608.6	69557	µg/L	69557	ppb	11:20:18
2	Ca 317.933Radial†	41176.5	39684.3	16010	µg/L	16010	ppb	11:20:18
2	Fe 238.204 Radial†	22307.0	21710.2	115270	µg/L	115270	ppb	11:20:39
2	K 766.490 Radial†	17707.1	16496.2	9306.2	µg/L	9306.2	ppb	11:20:18
2	Mg 279.077 IEC†	2592.7	2508.7	13983	µg/L	13983	ppb	11:20:39
2	Na 589.592 Radial†	3523.5	3832.8	1081.0	µg/L	1081.0	ppb	11:20:39
2	Sr 421.552†	32859.0	32088.7	185.19	µg/L	185.19	ppb	11:20:18
2	Sc 361.383	2019510.4	2019510.4	100.58	%			11:21:52
2	Y 371.029	1253213.6	1253213.6	102.44	%			11:21:52
2	Ag 328.068†	-1087.5	-1064.9	0.8142	µg/L	0.8142	ppb	11:21:57
2	As 188.979†	23.6	20.3	31.526	µg/L	31.526	ppb	11:22:18
2	B 249.677†	1556.7	1385.9	28.198	µg/L	28.198	ppb	11:21:57
2	Ba 233.527†	32734.1	32617.3	873.08	µg/L	873.08	ppb	11:21:57
2	Be 313.107†	17415.2	13695.7	7.3879	µg/L	7.3879	ppb	11:21:57
2	Cd 226.502†	265.6	361.6	1.2869	µg/L	1.2869	ppb	11:22:18
2	Co 228.616†	1229.3	1292.0	56.972	µg/L	56.972	ppb	11:22:18
2	Cr 267.716†	3836.2	3938.2	88.038	µg/L	88.038	ppb	11:21:57
2	Cu 324.752†	6684.5	3337.0	48.601	µg/L	48.601	ppb	11:21:57
2	Mn 257.610†	1072361.4	1066411.8	3523.3	µg/L	3523.3	ppb	11:21:52
2	Mo 202.031†	2.5	7.2	5.3940	µg/L	5.3940	ppb	11:22:18
2	Ni 231.604†	1254.3	956.0	55.172	µg/L	55.172	ppb	11:22:18
2	P 214.914†	648.6	454.8	898.17	µg/L	898.17	ppb	11:22:18
2	Pb 220.353†	576.4	522.1	142.51	µg/L	142.51	ppb	11:22:18

2	S 181.975 Axial†	134.9	108.4	561.09 µg/L	561.09 ppb	11:22:18
2	Sb 206.836†	22.9	-1.4	12.197 µg/L	12.197 ppb	11:22:18
2	Se 196.026†	-32.8	-43.4	13.103 µg/L	13.103 ppb	11:22:18
2	SiO2†	174191.2	171150.9	34719 µg/L	34719 ppb	11:21:52
2	Si 251.611†	199469.9	197960.3	15953 µg/L	15953 ppb	11:21:52
2	Sn 189.927†	-70.0	-92.0	-26.981 µg/L	-26.981 ppb	11:22:18
2	Ti 334.940†	1816152.3	1804857.9	4153.5 µg/L	4153.5 ppb	11:21:52
2	Tl 190.801†	-38.3	-17.9	14.216 µg/L	14.216 ppb	11:22:18
2	U 409.014†	676.1	-29.4	-24.073 µg/L	-24.073 ppb	11:21:52
2	V 292.402†	22119.1	22081.8	274.43 µg/L	274.43 ppb	11:21:57
2	Zn 213.857†	7885.3	7311.9	193.63 µg/L	193.63 ppb	11:21:57
3	Sc RADIAL	115049.6	115049.6	103 %		11:20:44
3	Al 396.153Radial†	135643.1	131859.6	69689 µg/L	69689 ppb	11:20:44
3	Ca 317.933Radial†	41337.7	39822.2	16066 µg/L	16066 ppb	11:20:44
3	Fe 238.204 Radial†	22171.4	21567.9	114520 µg/L	114520 ppb	11:21:05
3	K 766.490 Radial†	17721.3	16501.8	9309.3 µg/L	9309.3 ppb	11:20:44
3	Mg 279.077 IEC†	2571.8	2487.2	13863 µg/L	13863 ppb	11:21:05
3	Na 589.592 Radial†	3473.3	3782.3	1066.8 µg/L	1066.8 ppb	11:21:05
3	Sr 421.552†	32983.1	32194.4	185.80 µg/L	185.80 ppb	11:20:44
3	Sc 361.383	2026202.9	2026202.9	100.91 %		11:22:26
3	Y 371.029	1257376.8	1257376.8	102.78 %		11:22:26
3	Ag 328.068†	-1104.3	-1078.0	0.6220 µg/L	0.6220 ppb	11:22:31
3	As 188.979†	24.9	21.6	34.002 µg/L	34.002 ppb	11:22:52
3	B 249.677†	1532.8	1357.1	27.096 µg/L	27.096 ppb	11:22:31
3	Ba 233.527†	32640.1	32416.7	867.71 µg/L	867.71 ppb	11:22:31
3	Be 313.107†	17316.7	13541.0	7.2907 µg/L	7.2907 ppb	11:22:31
3	Cd 226.502†	273.6	368.7	1.5355 µg/L	1.5355 ppb	11:22:52
3	Co 228.616†	1239.4	1298.0	57.296 µg/L	57.296 ppb	11:22:52
3	Cr 267.716†	3818.1	3907.7	87.358 µg/L	87.358 ppb	11:22:31
3	Cu 324.752†	6685.2	3315.6	48.286 µg/L	48.286 ppb	11:22:31
3	Mn 257.610†	1074394.3	1064904.8	3518.2 µg/L	3518.2 ppb	11:22:26
3	Mo 202.031†	-3.0	1.8	4.7174 µg/L	4.7174 ppb	11:22:52
3	Ni 231.604†	1241.4	939.1	54.195 µg/L	54.195 ppb	11:22:52
3	P 214.914†	652.6	456.7	903.29 µg/L	903.29 ppb	11:22:52
3	Pb 220.353†	580.5	524.3	143.12 µg/L	143.12 ppb	11:22:52
3	S 181.975 Axial†	135.6	108.6	562.36 µg/L	562.36 ppb	11:22:52
3	Sb 206.836†	25.4	1.0	14.678 µg/L	14.678 ppb	11:22:52
3	Se 196.026†	-31.8	-42.3	14.313 µg/L	14.313 ppb	11:22:52
3	SiO2†	174695.7	171078.8	34705 µg/L	34705 ppb	11:22:26
3	Si 251.611†	200030.1	197860.4	15945 µg/L	15945 ppb	11:22:26
3	Sn 189.927†	-74.1	-95.8	-29.025 µg/L	-29.025 ppb	11:22:52
3	Ti 334.940†	1817859.3	1800585.3	4143.7 µg/L	4143.7 ppb	11:22:26
3	Tl 190.801†	-50.1	-29.5	-4.1104 µg/L	-4.1104 ppb	11:22:52
3	U 409.014†	547.2	-159.4	-36.898 µg/L	-36.898 ppb	11:22:26
3	V 292.402†	22091.8	21982.1	273.15 µg/L	273.15 ppb	11:22:31
3	Zn 213.857†	7874.7	7275.5	192.69 µg/L	192.69 ppb	11:22:31

Mean Data: 241536006|931873|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2014102.5	100.31	%	0.773				0.77%
Sc RADIAL	114620.2	102	%	0.6				0.61%
Y 371.029	1249970.3	102.17	%	0.773				0.76%
Ag 328.068†	-1088.4	0.5941	µg/L	0.23531	0.5941	ppb	0.23531	39.61%
Al 396.153Radial†	131775.2	69645	µg/L	76.3	69645	ppb	76.3	0.11%
As 188.979†	20.1	31.135	µg/L	3.0808	31.135	ppb	3.0808	9.89%
B 249.677†	1395.7	28.692	µg/L	1.8916	28.692	ppb	1.8916	6.59%
Ba 233.527†	32840.6	879.05	µg/L	15.237	879.05	ppb	15.237	1.73%
Be 313.107†	13791.0	7.4483	µg/L	0.19495	7.4483	ppb	0.19495	2.62%
Ca 317.933Radial†	39776.9	16048	µg/L	32.4	16048	ppb	32.4	0.20%
Cd 226.502†	367.3	1.4511	µg/L	0.14222	1.4511	ppb	0.14222	9.80%
Co 228.616†	1302.1	57.477	µg/L	0.6154	57.477	ppb	0.6154	1.07%
Cr 267.716†	3963.9	88.612	µg/L	1.6202	88.612	ppb	1.6202	1.83%
Cu 324.752†	3399.9	49.024	µg/L	1.0178	49.024	ppb	1.0178	2.08%
Fe 238.204 Radial†	21687.1	115150	µg/L	581.1	115150	ppb	581.1	0.50%
K 766.490 Radial†	16473.2	9293.2	µg/L	25.24	9293.2	ppb	25.24	0.27%
Mg 279.077 IEC†	2503.1	13952	µg/L	78.3	13952	ppb	78.3	0.56%
Mn 257.610†	1067744.1	3527.6	µg/L	12.21	3527.6	ppb	12.21	0.35%
Mo 202.031†	1.0	4.6467	µg/L	0.78499	4.6467	ppb	0.78499	16.89%
Na 589.592 Radial†	3814.7	1075.9	µg/L	7.94	1075.9	ppb	7.94	0.74%

Ni 231.604†	949.4	54.793	µg/L	0.5239	54.793	ppb	0.5239	0.96%
P 214.914†	458.9	907.29	µg/L	11.648	907.29	ppb	11.648	1.28%
Pb 220.353†	525.0	143.30	µg/L	0.906	143.30	ppb	0.906	0.63%
S 181.975 Axial†	107.0	553.22	µg/L	14.736	553.22	ppb	14.736	2.66%
Sb 206.836†	-0.4	13.245	µg/L	1.2842	13.245	ppb	1.2842	9.70%
Se 196.026†	-41.0	16.545	µg/L	4.9517	16.545	ppb	4.9517	29.93%
SiO2†	171577.6	34806	µg/L	162.7	34806	ppb	162.7	0.47%
Si 251.611†	198436.3	15992	µg/L	73.7	15992	ppb	73.7	0.46%
Sn 189.927†	-95.6	-28.837	µg/L	1.7694	-28.837	ppb	1.7694	6.14%
Sr 421.552†	32131.3	185.43	µg/L	0.322	185.43	ppb	0.322	0.17%
Ti 334.940†	1806882.3	4158.2	µg/L	17.30	4158.2	ppb	17.30	0.42%
Tl 190.801†	-25.2	2.8413	µg/L	9.93142	2.8413	ppb	9.93142	349.53%
U 409.014†	-96.0	-30.692	µg/L	6.4225	-30.692	ppb	6.4225	20.93%
V 292.402†	22226.6	276.14	µg/L	4.128	276.14	ppb	4.128	1.49%
Zn 213.857†	7365.4	195.16	µg/L	3.493	195.16	ppb	3.493	1.79%

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 11:23:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113974.6	113974.6	102	%			11:23:37
1	Al 396.153Radial†	10411.8	10065.2	5299.7	µg/L	5299.7	ppb	11:23:37
1	Ca 317.933Radial†	13739.5	13086.5	5279.7	µg/L	5279.7	ppb	11:23:57
1	Fe 238.204 Radial†	1055.7	1025.3	5461.4	µg/L	5461.4	ppb	11:23:57
1	K 766.490 Radial†	10092.5	9169.2	5172.7	µg/L	5172.7	ppb	11:23:37
1	Mg 279.077 IEC†	995.2	961.8	5431.0	µg/L	5431.0	ppb	11:23:57
1	Na 589.592 Radial†	37264.9	37014.4	10440	µg/L	10440	ppb	11:23:37
1	Sr 421.552†	90140.8	88654.6	511.64	µg/L	511.64	ppb	11:23:37
1	Sc 361.383	2016329.9	2016329.9	100.42	%			11:25:01
1	Y 371.029	1220042.0	1220042.0	99.728	%			11:25:01
1	Ag 328.068†	56002.4	55782.9	532.95	µg/L	532.95	ppb	11:25:06
1	As 188.979†	273.6	269.3	521.89	µg/L	521.89	ppb	11:25:27
1	B 249.677†	11603.4	11392.8	528.06	µg/L	528.06	ppb	11:25:06
1	Ba 233.527†	19933.6	19922.1	534.03	µg/L	534.03	ppb	11:25:06
1	Be 313.107†	805453.8	798443.3	520.18	µg/L	520.18	ppb	11:25:01
1	Cd 226.502†	19059.8	19077.1	536.58	µg/L	536.58	ppb	11:25:06
1	Co 228.616†	10469.4	10495.1	533.42	µg/L	533.42	ppb	11:25:06
1	Cr 267.716†	23871.5	23895.2	531.64	µg/L	531.64	ppb	11:25:06
1	Cu 324.752†	75024.4	71399.6	511.27	µg/L	511.27	ppb	11:25:06
1	Mn 257.610†	158671.3	158250.9	521.37	µg/L	521.37	ppb	11:25:01
1	Mo 202.031†	4384.9	4371.1	522.15	µg/L	522.15	ppb	11:25:27
1	Ni 231.604†	9582.5	9251.1	533.90	µg/L	533.90	ppb	11:25:06
1	P 214.914†	1365.6	1169.9	2547.7	µg/L	2547.7	ppb	11:25:27
1	Pb 220.353†	2037.5	1977.9	523.29	µg/L	523.29	ppb	11:25:27
1	S 181.975 Axial†	222.5	195.9	1046.7	µg/L	1046.7	ppb	11:25:27
1	Sb 206.836†	528.5	502.2	522.98	µg/L	522.98	ppb	11:25:27
1	Se 196.026†	369.3	357.0	529.41	µg/L	529.41	ppb	11:25:27
1	SiO2†	30507.9	28345.8	5750.2	µg/L	5750.2	ppb	11:25:06
1	Si 251.611†	33508.7	33010.8	2636.0	µg/L	2636.0	ppb	11:25:06
1	Sn 189.927†	1046.7	1019.9	522.43	µg/L	522.43	ppb	11:25:27
1	Ti 334.940†	225988.9	224238.7	515.86	µg/L	515.86	ppb	11:25:01
1	Tl 190.801†	308.6	327.4	517.29	µg/L	517.29	ppb	11:25:27
1	U 409.014†	5942.2	5215.6	519.30	µg/L	519.30	ppb	11:25:06
1	V 292.402†	44239.4	44143.6	534.74	µg/L	534.74	ppb	11:25:06
1	Zn 213.857†	19725.7	19114.8	535.89	µg/L	535.89	ppb	11:25:06
2	Sc RADIAL	113133.0	113133.0	101	%			11:24:03
2	Al 396.153Radial†	10386.5	10116.2	5326.8	µg/L	5326.8	ppb	11:24:03
2	Ca 317.933Radial†	13808.3	13255.0	5347.7	µg/L	5347.7	ppb	11:24:23
2	Fe 238.204 Radial†	1059.3	1036.6	5521.4	µg/L	5521.4	ppb	11:24:23
2	K 766.490 Radial†	10105.0	9255.4	5221.4	µg/L	5221.4	ppb	11:24:03
2	Mg 279.077 IEC†	1008.1	981.9	5544.2	µg/L	5544.2	ppb	11:24:23
2	Na 589.592 Radial†	37238.8	37260.9	10509	µg/L	10509	ppb	11:24:03
2	Sr 421.552†	90060.1	89233.6	514.98	µg/L	514.98	ppb	11:24:03
2	Sc 361.383	2032103.4	2032103.4	101.21	%			11:25:34
2	Y 371.029	1229305.8	1229305.8	100.49	%			11:25:34
2	Ag 328.068†	56022.9	55370.3	529.01	µg/L	529.01	ppb	11:25:40
2	As 188.979†	272.3	265.9	515.29	µg/L	515.29	ppb	11:26:00
2	B 249.677†	11582.6	11282.6	522.92	µg/L	522.92	ppb	11:25:40
2	Ba 233.527†	19914.9	19749.5	529.41	µg/L	529.41	ppb	11:25:40
2	Be 313.107†	811300.1	797994.0	519.89	µg/L	519.89	ppb	11:25:34
2	Cd 226.502†	19182.8	19051.3	535.85	µg/L	535.85	ppb	11:25:40
2	Co 228.616†	10527.6	10471.7	532.22	µg/L	532.22	ppb	11:25:40
2	Cr 267.716†	23835.6	23675.3	526.75	µg/L	526.75	ppb	11:25:40
2	Cu 324.752†	75065.7	70860.5	507.43	µg/L	507.43	ppb	11:25:40
2	Mn 257.610†	159766.6	158106.8	520.90	µg/L	520.90	ppb	11:25:34
2	Mo 202.031†	4388.9	4341.2	518.58	µg/L	518.58	ppb	11:26:00
2	Ni 231.604†	9594.6	9189.0	530.31	µg/L	530.31	ppb	11:25:40
2	P 214.914†	1363.7	1157.4	2520.3	µg/L	2520.3	ppb	11:26:00
2	Pb 220.353†	2038.9	1963.6	519.52	µg/L	519.52	ppb	11:26:00

2	S 181.975 Axial†	218.9	190.6	1018.1	µg/L	1018.1	ppb	11:26:00
2	Sb 206.836†	525.0	494.6	515.09	µg/L	515.09	ppb	11:26:00
2	Se 196.026†	367.1	351.9	521.93	µg/L	521.93	ppb	11:26:00
2	SiO2†	30530.1	28131.9	5706.8	µg/L	5706.8	ppb	11:25:40
2	Si 251.611†	33626.8	32868.5	2624.7	µg/L	2624.7	ppb	11:25:40
2	Sn 189.927†	1043.5	1008.6	516.71	µg/L	516.71	ppb	11:26:00
2	Ti 334.940†	227168.0	223657.0	514.52	µg/L	514.52	ppb	11:25:34
2	Tl 190.801†	315.9	332.3	524.92	µg/L	524.92	ppb	11:26:00
2	U 409.014†	5958.2	5185.5	516.28	µg/L	516.28	ppb	11:25:40
2	V 292.402†	44226.3	43788.8	530.45	µg/L	530.45	ppb	11:25:40
2	Zn 213.857†	19631.4	18869.1	528.96	µg/L	528.96	ppb	11:25:40
3	Sc RADIAL	113196.4	113196.4	101	%			11:24:29
3	Al 396.153Radial†	10443.8	10167.1	5353.5	µg/L	5353.5	ppb	11:24:29
3	Ca 317.933Radial†	13779.7	13219.0	5333.1	µg/L	5333.1	ppb	11:24:49
3	Fe 238.204 Radial†	1055.6	1032.3	5499.0	µg/L	5499.0	ppb	11:24:49
3	K 766.490 Radial†	10201.7	9345.5	5272.2	µg/L	5272.2	ppb	11:24:29
3	Mg 279.077 IEC†	1009.4	982.6	5548.4	µg/L	5548.4	ppb	11:24:49
3	Na 589.592 Radial†	37300.7	37301.5	10521	µg/L	10521	ppb	11:24:29
3	Sr 421.552†	90448.7	89568.1	516.91	µg/L	516.91	ppb	11:24:29
3	Sc 361.383	2013250.2	2013250.2	100.27	%			11:26:07
3	Y 371.029	1217631.3	1217631.3	99.531	%			11:26:07
3	Ag 328.068†	55768.3	55634.7	531.54	µg/L	531.54	ppb	11:26:13
3	As 188.979†	268.2	264.3	512.29	µg/L	512.29	ppb	11:26:34
3	B 249.677†	11547.2	11354.4	526.27	µg/L	526.27	ppb	11:26:13
3	Ba 233.527†	19854.0	19873.1	532.72	µg/L	532.72	ppb	11:26:13
3	Be 313.107†	805968.2	800183.2	521.32	µg/L	521.32	ppb	11:26:07
3	Cd 226.502†	19009.4	19055.9	535.99	µg/L	535.99	ppb	11:26:13
3	Co 228.616†	10473.6	10515.3	534.45	µg/L	534.45	ppb	11:26:13
3	Cr 267.716†	23728.6	23789.1	529.28	µg/L	529.28	ppb	11:26:13
3	Cu 324.752†	74781.5	71271.6	510.36	µg/L	510.36	ppb	11:26:13
3	Mn 257.610†	158825.1	158646.1	522.68	µg/L	522.68	ppb	11:26:07
3	Mo 202.031†	4396.6	4389.6	524.35	µg/L	524.35	ppb	11:26:34
3	Ni 231.604†	9556.0	9239.2	533.21	µg/L	533.21	ppb	11:26:13
3	P 214.914†	1363.9	1170.2	2548.5	µg/L	2548.5	ppb	11:26:34
3	Pb 220.353†	2042.4	1985.9	525.41	µg/L	525.41	ppb	11:26:34
3	S 181.975 Axial†	221.8	195.5	1044.6	µg/L	1044.6	ppb	11:26:34
3	Sb 206.836†	530.6	505.0	525.99	µg/L	525.99	ppb	11:26:34
3	Se 196.026†	378.0	366.2	543.05	µg/L	543.05	ppb	11:26:34
3	SiO2†	30305.0	28189.9	5718.5	µg/L	5718.5	ppb	11:26:13
3	Si 251.611†	33394.3	32947.7	2630.9	µg/L	2630.9	ppb	11:26:13
3	Sn 189.927†	1037.4	1012.2	518.53	µg/L	518.53	ppb	11:26:34
3	Ti 334.940†	225697.5	224292.3	515.98	µg/L	515.98	ppb	11:26:07
3	Tl 190.801†	311.0	330.3	521.82	µg/L	521.82	ppb	11:26:34
3	U 409.014†	6034.2	5316.4	529.34	µg/L	529.34	ppb	11:26:13
3	V 292.402†	44065.2	44037.2	533.49	µg/L	533.49	ppb	11:26:13
3	Zn 213.857†	19593.5	19013.0	533.01	µg/L	533.01	ppb	11:26:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020561.1	100.63	%	0.504				0.50%
Sc RADIAL	113434.7	101	%	0.4				0.41%
Y 371.029	1222326.4	99.915	%	0.5038				0.50%
Ag 328.068†	55595.9	531.17	µg/L	1.995	531.17	ppb	1.995	0.38%
QC value within limits for Ag 328.068 Recovery = 106.23%								
Al 396.153Radial†	10116.2	5326.7	µg/L	26.90	5326.7	ppb	26.90	0.50%
QC value within limits for Al 396.153Radial Recovery = 106.53%								
As 188.979†	266.5	516.49	µg/L	4.910	516.49	ppb	4.910	0.95%
QC value within limits for As 188.979 Recovery = 103.30%								
B 249.677†	11343.3	525.75	µg/L	2.610	525.75	ppb	2.610	0.50%
QC value within limits for B 249.677 Recovery = 105.15%								
Ba 233.527†	19848.3	532.05	µg/L	2.384	532.05	ppb	2.384	0.45%
QC value within limits for Ba 233.527 Recovery = 106.41%								
Be 313.107†	798873.5	520.46	µg/L	0.753	520.46	ppb	0.753	0.14%
QC value within limits for Be 313.107 Recovery = 104.09%								
Ca 317.933Radial†	13186.8	5320.2	µg/L	35.81	5320.2	ppb	35.81	0.67%
QC value within limits for Ca 317.933Radial Recovery = 106.40%								
Cd 226.502†	19061.4	536.14	µg/L	0.390	536.14	ppb	0.390	0.07%
QC value within limits for Cd 226.502 Recovery = 107.23%								
Co 228.616†	10494.0	533.36	µg/L	1.113	533.36	ppb	1.113	0.21%

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   QC value within limits for Co 228.616  Recovery = 106.67%
Cr 267.716†            23786.5      529.22 µg/L        2.446      529.22 ppb          2.446   0.46%
   QC value within limits for Cr 267.716  Recovery = 105.84%
Cu 324.752†            71177.2      509.69 µg/L        2.007      509.69 ppb          2.007   0.39%
   QC value within limits for Cu 324.752  Recovery = 101.94%
Fe 238.204 Radial†      1031.4      5493.9 µg/L       30.33      5493.9 ppb         30.33   0.55%
   QC value within limits for Fe 238.204 Radial  Recovery = 109.88%
K 766.490 Radial†       9256.7      5222.1 µg/L       49.72      5222.1 ppb         49.72   0.95%
   QC value within limits for K 766.490 Radial  Recovery = 104.44%
Mg 279.077 IEC†          975.4      5507.9 µg/L       66.63      5507.9 ppb         66.63   1.21%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 110.16%
Mn 257.610†           158334.6      521.65 µg/L       0.918      521.65 ppb         0.918   0.18%
   QC value within limits for Mn 257.610  Recovery = 104.33%
Mo 202.031†             4367.3      521.69 µg/L       2.913      521.69 ppb         2.913   0.56%
   QC value within limits for Mo 202.031  Recovery = 104.34%
Na 589.592 Radial†     37192.3       10490 µg/L        43.8       10490 ppb          43.8   0.42%
   QC value within limits for Na 589.592 Radial  Recovery = 104.90%
Ni 231.604†             9226.4      532.47 µg/L       1.904      532.47 ppb         1.904   0.36%
   QC value within limits for Ni 231.604  Recovery = 106.49%
P 214.914†              1165.8      2538.8 µg/L       16.03      2538.8 ppb         16.03   0.63%
   QC value within limits for P 214.914  Recovery = 101.55%
Pb 220.353†             1975.8      522.74 µg/L       2.987      522.74 ppb         2.987   0.57%
   QC value within limits for Pb 220.353  Recovery = 104.55%
S 181.975 Axial†         194.0      1036.5 µg/L       15.95      1036.5 ppb         15.95   1.54%
   QC value within limits for S 181.975 Axial  Recovery = 103.65%
Sb 206.836†              500.6      521.36 µg/L       5.627      521.36 ppb         5.627   1.08%
   QC value within limits for Sb 206.836  Recovery = 104.27%
Se 196.026†              358.4      531.46 µg/L      10.709      531.46 ppb        10.709   2.01%
   QC value within limits for Se 196.026  Recovery = 106.29%
SiO2†                   28222.6      5725.1 µg/L       22.44      5725.1 ppb         22.44   0.39%
   QC value within limits for SiO2  Recovery = 107.06%
Si 251.611†             32942.3      2630.6 µg/L        5.64      2630.6 ppb          5.64   0.21%
   QC value within limits for Si 251.611  Recovery = 105.22%
Sn 189.927†             1013.6      519.23 µg/L       2.923      519.23 ppb         2.923   0.56%
   QC value within limits for Sn 189.927  Recovery = 103.85%
Sr 421.552†            89152.1      514.51 µg/L       2.667      514.51 ppb         2.667   0.52%
   QC value within limits for Sr 421.552  Recovery = 102.90%
Ti 334.940†           224062.7      515.45 µg/L       0.812      515.45 ppb         0.812   0.16%
   QC value within limits for Ti 334.940  Recovery = 103.09%
Tl 190.801†              330.0      521.34 µg/L       3.840      521.34 ppb         3.840   0.74%
   QC value within limits for Tl 190.801  Recovery = 104.27%
U 409.014†              5239.2      521.64 µg/L       6.840      521.64 ppb         6.840   1.31%
   QC value within limits for U 409.014  Recovery = 104.33%
V 292.402†             43989.9      532.89 µg/L       2.204      532.89 ppb         2.204   0.41%
   QC value within limits for V 292.402  Recovery = 106.58%
Zn 213.857†            18999.0      532.62 µg/L       3.480      532.62 ppb         3.480   0.65%
   QC value within limits for Zn 213.857  Recovery = 106.52%
QC Failed.  Continue with analysis.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 11:26:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113833.6	113833.6	102	%			11:27:15
1	Al 396.153Radial†	242.3	73.9	39.041	µg/L	39.041	ppb	11:27:15
1	Ca 317.933Radial†	434.4	14.8	5.9540	µg/L	5.9540	ppb	11:27:35
1	Fe 238.204 Radial†	20.5	8.2	43.385	µg/L	43.385	ppb	11:27:35
1	K 766.490 Radial†	732.8	-25.8	-14.554	µg/L	-14.554	ppb	11:27:15
1	Mg 279.077 IEC†	16.8	0.5	2.7910	µg/L	2.7910	ppb	11:27:35
1	Na 589.592 Radial†	-671.7	-259.1	-73.087	µg/L	-73.087	ppb	11:27:15
1	Sr 421.552†	-58.3	33.9	0.1957	µg/L	0.1957	ppb	11:27:15
1	Sc 361.383	2020205.0	2020205.0	100.62	%			11:28:37
1	Y 371.029	1227769.5	1227769.5	100.36	%			11:28:37
1	Ag 328.068†	0.2	16.5	0.1602	µg/L	0.1602	ppb	11:28:43
1	As 188.979†	2.1	-1.1	-2.1177	µg/L	-2.1177	ppb	11:29:03
1	B 249.677†	166.2	3.4	0.1466	µg/L	0.1466	ppb	11:28:43
1	Ba 233.527†	-51.1	21.6	0.5789	µg/L	0.5789	ppb	11:29:03
1	Be 313.107†	3780.3	138.3	0.0899	µg/L	0.0899	ppb	11:28:43
1	Cd 226.502†	-79.8	18.3	0.5217	µg/L	0.5217	ppb	11:29:03
1	Co 228.616†	-74.7	-4.4	-0.2249	µg/L	-0.2249	ppb	11:29:03
1	Cr 267.716†	-107.8	17.1	0.3799	µg/L	0.3799	ppb	11:28:43
1	Cu 324.752†	3258.9	-69.9	-0.4904	µg/L	-0.4904	ppb	11:28:43
1	Mn 257.610†	17.7	265.4	0.8786	µg/L	0.8786	ppb	11:29:03
1	Mo 202.031†	-2.9	1.9	0.2254	µg/L	0.2254	ppb	11:29:03
1	Ni 231.604†	294.8	2.0	0.1143	µg/L	0.1143	ppb	11:29:03
1	P 214.914†	190.8	-0.3	-0.7842	µg/L	-0.7842	ppb	11:29:03
1	Pb 220.353†	45.1	-6.1	-1.6233	µg/L	-1.6233	ppb	11:29:03
1	S 181.975 Axial†	27.1	1.2	6.4330	µg/L	6.4330	ppb	11:29:03
1	Sb 206.836†	23.4	-0.9	-0.9416	µg/L	-0.9416	ppb	11:29:03
1	Se 196.026†	7.1	-3.7	-5.4948	µg/L	-5.4948	ppb	11:29:03
1	SiO2†	2121.9	75.3	15.276	µg/L	15.276	ppb	11:28:43
1	Si 251.611†	446.6	87.1	7.1538	µg/L	7.1538	ppb	11:29:03
1	Sn 189.927†	17.7	-4.8	-2.4484	µg/L	-2.4484	ppb	11:29:03
1	Ti 334.940†	1147.8	342.2	0.7874	µg/L	0.7874	ppb	11:28:43
1	Tl 190.801†	-14.7	5.5	8.6697	µg/L	8.6697	ppb	11:29:03
1	U 409.014†	847.7	140.9	14.043	µg/L	14.043	ppb	11:28:43
1	V 292.402†	-81.9	9.1	0.1369	µg/L	0.1369	ppb	11:28:43
1	Zn 213.857†	538.9	7.7	0.2137	µg/L	0.2137	ppb	11:29:03
2	Sc RADIAL	113433.5	113433.5	101	%			11:27:41
2	Al 396.153Radial†	191.8	24.9	13.117	µg/L	13.117	ppb	11:27:41
2	Ca 317.933Radial†	447.2	28.9	11.651	µg/L	11.651	ppb	11:28:01
2	Fe 238.204 Radial†	13.3	1.2	6.2201	µg/L	6.2201	ppb	11:28:01
2	K 766.490 Radial†	826.0	68.8	38.798	µg/L	38.798	ppb	11:27:41
2	Mg 279.077 IEC†	17.1	0.8	4.8052	µg/L	4.8052	ppb	11:28:01
2	Na 589.592 Radial†	-671.7	-261.5	-73.752	µg/L	-73.752	ppb	11:27:41
2	Sr 421.552†	-66.3	25.8	0.1491	µg/L	0.1491	ppb	11:27:41
2	Sc 361.383	2008436.7	2008436.7	100.03	%			11:29:09
2	Y 371.029	1221310.2	1221310.2	99.832	%			11:29:09
2	Ag 328.068†	23.5	39.7	0.3761	µg/L	0.3761	ppb	11:29:15
2	As 188.979†	0.2	-2.9	-5.6888	µg/L	-5.6888	ppb	11:29:36
2	B 249.677†	154.5	-7.3	-0.3403	µg/L	-0.3403	ppb	11:29:15
2	Ba 233.527†	-58.2	14.3	0.3811	µg/L	0.3811	ppb	11:29:36
2	Be 313.107†	3727.5	107.6	0.0698	µg/L	0.0698	ppb	11:29:15
2	Cd 226.502†	-78.7	18.9	0.5303	µg/L	0.5303	ppb	11:29:36
2	Co 228.616†	-63.1	6.7	0.3434	µg/L	0.3434	ppb	11:29:36
2	Cr 267.716†	-96.5	27.8	0.6169	µg/L	0.6169	ppb	11:29:15
2	Cu 324.752†	3257.8	-52.1	-0.3708	µg/L	-0.3708	ppb	11:29:15
2	Mn 257.610†	1.4	249.3	0.8210	µg/L	0.8210	ppb	11:29:36
2	Mo 202.031†	3.2	8.0	0.9528	µg/L	0.9528	ppb	11:29:36
2	Ni 231.604†	292.5	1.4	0.0812	µg/L	0.0812	ppb	11:29:36
2	P 214.914†	193.6	3.5	7.8601	µg/L	7.8601	ppb	11:29:36
2	Pb 220.353†	57.5	6.4	1.7078	µg/L	1.7078	ppb	11:29:36

2	S 181.975 Axial†	23.4	-2.3	-12.189 µg/L	-12.189 ppb	11:29:36
2	Sb 206.836†	19.3	-4.8	-5.0363 µg/L	-5.0363 ppb	11:29:36
2	Se 196.026†	13.9	3.1	4.5995 µg/L	4.5995 ppb	11:29:36
2	SiO2†	2106.5	72.3	14.661 µg/L	14.661 ppb	11:29:15
2	Si 251.611†	441.2	84.3	6.7215 µg/L	6.7215 ppb	11:29:36
2	Sn 189.927†	26.2	3.9	1.9659 µg/L	1.9659 ppb	11:29:36
2	Ti 334.940†	1140.5	341.6	0.7857 µg/L	0.7857 ppb	11:29:15
2	Tl 190.801†	-18.5	1.6	2.4516 µg/L	2.4516 ppb	11:29:36
2	U 409.014†	704.2	2.4	0.2402 µg/L	0.2402 ppb	11:29:15
2	V 292.402†	-103.1	-12.5	-0.1428 µg/L	-0.1428 ppb	11:29:15
2	Zn 213.857†	540.5	12.5	0.3527 µg/L	0.3527 ppb	11:29:36
3	Sc RADIAL	113389.5	113389.5	101 %		11:28:07
3	Al 396.153Radial†	202.8	35.9	18.940 µg/L	18.940 ppb	11:28:07
3	Ca 317.933Radial†	435.0	17.0	6.8600 µg/L	6.8600 ppb	11:28:27
3	Fe 238.204 Radial†	12.1	-0.0	-0.1913 µg/L	-0.1913 ppb	11:28:27
3	K 766.490 Radial†	791.8	35.3	19.907 µg/L	19.907 ppb	11:28:07
3	Mg 279.077 IEC†	14.2	-2.0	-11.387 µg/L	-11.387 ppb	11:28:27
3	Na 589.592 Radial†	-708.8	-298.4	-84.151 µg/L	-84.151 ppb	11:28:07
3	Sr 421.552†	-30.5	61.2	0.3530 µg/L	0.3530 ppb	11:28:07
3	Sc 361.383	2023587.8	2023587.8	100.78 %		11:29:42
3	Y 371.029	1230114.7	1230114.7	100.55 %		11:29:42
3	Ag 328.068†	35.0	51.0	0.4866 µg/L	0.4866 ppb	11:29:47
3	As 188.979†	-3.7	-6.9	-13.319 µg/L	-13.319 ppb	11:30:08
3	B 249.677†	198.6	35.4	1.6439 µg/L	1.6439 ppb	11:29:47
3	Ba 233.527†	-58.2	14.7	0.3943 µg/L	0.3943 ppb	11:30:08
3	Be 313.107†	3764.8	116.6	0.0756 µg/L	0.0756 ppb	11:29:47
3	Cd 226.502†	-102.0	-3.6	-0.1009 µg/L	-0.1009 ppb	11:30:08
3	Co 228.616†	-65.9	4.4	0.2237 µg/L	0.2237 ppb	11:30:08
3	Cr 267.716†	-146.6	-21.2	-0.4705 µg/L	-0.4705 ppb	11:29:47
3	Cu 324.752†	3232.1	-102.0	-0.7284 µg/L	-0.7284 ppb	11:29:47
3	Mn 257.610†	39.6	287.1	0.9447 µg/L	0.9447 ppb	11:30:08
3	Mo 202.031†	-3.1	1.6	0.1959 µg/L	0.1959 ppb	11:30:08
3	Ni 231.604†	297.1	3.8	0.2185 µg/L	0.2185 ppb	11:30:08
3	P 214.914†	188.5	-3.0	-6.5980 µg/L	-6.5980 ppb	11:30:08
3	Pb 220.353†	53.9	2.5	0.6725 µg/L	0.6725 ppb	11:30:08
3	S 181.975 Axial†	25.6	-0.3	-1.7818 µg/L	-1.7818 ppb	11:30:08
3	Sb 206.836†	19.9	-4.4	-4.6338 µg/L	-4.6338 ppb	11:30:08
3	Se 196.026†	10.1	-0.7	-1.0610 µg/L	-1.0610 ppb	11:30:08
3	SiO2†	2121.7	71.5	14.513 µg/L	14.513 ppb	11:29:47
3	Si 251.611†	429.1	68.9	5.6235 µg/L	5.6235 ppb	11:30:08
3	Sn 189.927†	19.1	-3.4	-1.7497 µg/L	-1.7497 ppb	11:30:08
3	Ti 334.940†	1302.6	493.9	1.1366 µg/L	1.1366 ppb	11:29:47
3	Tl 190.801†	-18.2	2.1	3.2508 µg/L	3.2508 ppb	11:30:08
3	U 409.014†	713.8	6.7	0.6641 µg/L	0.6641 ppb	11:29:47
3	V 292.402†	-57.0	33.9	0.4095 µg/L	0.4095 ppb	11:29:47
3	Zn 213.857†	539.0	7.0	0.1978 µg/L	0.1978 ppb	11:30:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017409.8	100.48	%	0.396				0.39%
Sc RADIAL	113552.2	101	%	0.2				0.22%
Y 371.029	1226398.1	100.25	%	0.373				0.37%
Ag 328.068†	35.7	0.3409	µg/L	0.16603	0.3409	ppb	0.16603	48.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	44.9	23.699	µg/L	13.6014	23.699	ppb	13.6014	57.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.0419	µg/L	5.72202	-7.0419	ppb	5.72202	81.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	10.5	0.4834	µg/L	1.03409	0.4834	ppb	1.03409	213.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	16.9	0.4514	µg/L	0.11055	0.4514	ppb	0.11055	24.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.8	0.0784	µg/L	0.01033	0.0784	ppb	0.01033	13.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	20.2	8.1550	µg/L	3.06135	8.1550	ppb	3.06135	37.54%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.2	0.3170	µg/L	0.36196	0.3170	ppb	0.36196	114.17%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.3	0.1141	µg/L	0.29962	0.1141	ppb	0.29962	262.64%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.9      0.1754 µg/L       0.57179      0.1754 ppb        0.57179 325.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -74.7     -0.5299 µg/L       0.18206     -0.5299 ppb        0.18206  34.36%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          3.1      16.471 µg/L       23.5274      16.471 ppb        23.5274 142.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          26.1      14.717 µg/L       27.0519      14.717 ppb        27.0519 183.81%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.2      -1.2636 µg/L       8.82478     -1.2636 ppb        8.82478 698.40%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               267.3      0.8815 µg/L       0.06194      0.8815 ppb        0.06194   7.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4580 µg/L       0.42873      0.4580 ppb        0.42873  93.60%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -273.0     -76.997 µg/L        6.2051     -76.997 ppb         6.2051   8.06%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.4      0.1380 µg/L       0.07167      0.1380 ppb        0.07167  51.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  0.1      0.1593 µg/L       7.27508      0.1593 ppb        7.27508 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.0      0.2524 µg/L       1.70484      0.2524 ppb        1.70484 675.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.5      -2.5125 µg/L       9.33222     -2.5125 ppb        9.33222 371.44%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.4      -3.5372 µg/L       2.25688     -3.5372 ppb        2.25688  63.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.5      -0.6521 µg/L       5.05957     -0.6521 ppb        5.05957 775.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      73.0      14.817 µg/L        0.4044      14.817 ppb         0.4044   2.73%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                80.1      6.4996 µg/L       0.78891      6.4996 ppb        0.78891  12.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.5      -0.7441 µg/L       2.37278     -0.7441 ppb        2.37278 318.90%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                40.3      0.2326 µg/L       0.10686      0.2326 ppb        0.10686  45.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               392.6      0.9032 µg/L       0.20210      0.9032 ppb        0.20210  22.38%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.0      4.7907 µg/L       3.38299      4.7907 ppb        3.38299  70.62%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 50.0      4.9825 µg/L       7.84962      4.9825 ppb        7.84962 157.54%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 10.2      0.1345 µg/L       0.27620      0.1345 ppb        0.27620 205.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.1      0.2548 µg/L       0.08518      0.2548 ppb        0.08518  33.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

12/8/2009 07:27:56 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 2

Analysis Begun

Start Time: 12/8/2009 07:28:37 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/7/2009 08:20:00**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/8/2009 07:28:38**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5745.6	5745.6	98.3	%	07:30:31
1	Y RADIAL	6211.7	6211.7	98.79	%	07:30:31
1	Al 396.153Radial†	-19.0	-19.3	[0.00]	ug/L	07:30:31
1	Ca 317.933Radial†	15.5	15.8	[0.00]	ug/L	07:30:51
1	Fe 238.204 Radial†	5.3	5.4	[0.00]	ug/L	07:30:51
1	K 766.490 Radial†	2457.5	2499.5	[0.00]	ug/L	07:30:31
1	Mg 279.077 IEC†	0.5	0.5	[0.00]	ug/L	07:30:51
1	Na 589.592 Radial†	-1085.4	-1103.9	[0.00]	ug/L	07:30:31
1	Sr 421.552†	-7.0	-7.1	[0.00]	ug/L	07:30:31
1	Sc 361.383	900693.7	900693.7	99.937	%	07:31:48
1	Y 371.029	750994.5	750994.5	99.988	%	07:31:48
1	Ag 328.068†	258.4	258.6	[0.00]	ug/L	07:31:48
1	As 188.979†	-20.1	-20.1	[0.00]	ug/L	07:32:08
1	B 249.677†	-538.8	-539.2	[0.00]	ug/L	07:32:08
1	Ba 233.527†	-14.2	-14.2	[0.00]	ug/L	07:32:08
1	Be 313.107†	-5056.8	-5060.0	[0.00]	ug/L	07:31:48
1	Cd 226.502†	-193.9	-194.0	[0.00]	ug/L	07:32:08
1	Co 228.616†	-62.5	-62.5	[0.00]	ug/L	07:32:08
1	Cr 267.716†	74.9	74.9	[0.00]	ug/L	07:32:08
1	Cu 324.752†	6750.3	6754.6	[0.00]	ug/L	07:31:48
1	Mn 257.610†	418.2	418.5	[0.00]	ug/L	07:32:08
1	Mo 202.031†	24.3	24.3	[0.00]	ug/L	07:32:08
1	Ni 231.604†	82.5	82.6	[0.00]	ug/L	07:32:08
1	P 214.914†	227.9	228.1	[0.00]	ug/L	07:32:08
1	Pb 220.353†	-62.4	-62.5	[0.00]	ug/L	07:32:08
1	S 181.975 Axial†	41.2	41.3	[0.00]	ug/L	07:32:08
1	Sb 206.836†	33.6	33.6	[0.00]	ug/L	07:32:08
1	Se 196.026†	-24.2	-24.2	[0.00]	ug/L	07:32:08
1	Si 251.611†	437.2	437.5	[0.00]	ug/L	07:32:08
1	Sn 189.927†	-2.2	-2.2	[0.00]	ug/L	07:32:08
1	Ti 334.940†	-1030.7	-1031.3	[0.00]	ug/L	07:31:48
1	Tl 190.801†	-27.6	-27.6	[0.00]	ug/L	07:32:08
1	U 409.014†	-2346.9	-2348.4	[0.00]	ug/L	07:31:48
1	V 292.402†	-1372.8	-1373.7	[0.00]	ug/L	07:31:48
1	Zn 213.857†	625.8	626.2	[0.00]	ug/L	07:32:08
1	SiO2†	455.0	455.3	[0.00]	ug/L	07:33:04
2	Sc Radial	5922.7	5922.7	101	%	07:30:56
2	Y RADIAL	6350.2	6350.2	101.0	%	07:30:56
2	Al 396.153Radial†	-27.2	-26.9	[0.00]	ug/L	07:30:56
2	Ca 317.933Radial†	15.9	15.6	[0.00]	ug/L	07:31:16
2	Fe 238.204 Radial†	8.7	8.6	[0.00]	ug/L	07:31:16
2	K 766.490 Radial†	2256.7	2226.7	[0.00]	ug/L	07:30:56
2	Mg 279.077 IEC†	1.4	1.4	[0.00]	ug/L	07:31:16
2	Na 589.592 Radial†	-1070.6	-1056.4	[0.00]	ug/L	07:30:56
2	Sr 421.552†	-29.3	-28.9	[0.00]	ug/L	07:30:56
2	Sc 361.383	897080.5	897080.5	99.536	%	07:32:13
2	Y 371.029	746552.6	746552.6	99.397	%	07:32:13
2	Ag 328.068†	238.8	240.0	[0.00]	ug/L	07:32:13
2	As 188.979†	-23.4	-23.5	[0.00]	ug/L	07:32:33
2	B 249.677†	-533.8	-536.2	[0.00]	ug/L	07:32:33
2	Ba 233.527†	0.1	0.1	[0.00]	ug/L	07:32:33
2	Be 313.107†	-5169.1	-5193.2	[0.00]	ug/L	07:32:13
2	Cd 226.502†	-185.9	-186.8	[0.00]	ug/L	07:32:33
2	Co 228.616†	-67.4	-67.7	[0.00]	ug/L	07:32:33
2	Cr 267.716†	72.6	72.9	[0.00]	ug/L	07:32:33
2	Cu 324.752†	6796.2	6827.9	[0.00]	ug/L	07:32:13
2	Mn 257.610†	427.5	429.5	[0.00]	ug/L	07:32:33
2	Mo 202.031†	14.6	14.7	[0.00]	ug/L	07:32:33
2	Ni 231.604†	86.6	87.0	[0.00]	ug/L	07:32:33
2	P 214.914†	222.0	223.0	[0.00]	ug/L	07:32:33
2	Pb 220.353†	-69.2	-69.5	[0.00]	ug/L	07:32:33
2	S 181.975 Axial†	41.0	41.2	[0.00]	ug/L	07:32:33
2	Sb 206.836†	36.1	36.3	[0.00]	ug/L	07:32:33
2	Se 196.026†	-32.4	-32.6	[0.00]	ug/L	07:32:33
2	Si 251.611†	455.6	457.8	[0.00]	ug/L	07:32:33
2	Sn 189.927†	9.9	10.0	[0.00]	ug/L	07:32:33
2	Ti 334.940†	-1182.5	-1188.0	[0.00]	ug/L	07:32:13
2	Tl 190.801†	-32.3	-32.4	[0.00]	ug/L	07:32:33
2	U 409.014†	-2442.7	-2454.1	[0.00]	ug/L	07:32:13
2	V 292.402†	-1362.6	-1369.0	[0.00]	ug/L	07:32:13

2	Zn 213.857†	620.7	623.6	[0.00]	ug/L	07:32:33
2	SiO2†	500.9	503.3	[0.00]	ug/L	07:33:09
3	Sc Radial	5863.5	5863.5	100	%	07:31:21
3	Y RADIAL	6301.5	6301.5	100.2	%	07:31:21
3	Al 396.153Radial†	-15.1	-15.0	[0.00]	ug/L	07:31:21
3	Ca 317.933Radial†	15.4	15.3	[0.00]	ug/L	07:31:41
3	Fe 238.204 Radial†	6.4	6.4	[0.00]	ug/L	07:31:41
3	K 766.490 Radial†	2336.7	2328.9	[0.00]	ug/L	07:31:21
3	Mg 279.077 IEC†	1.6	1.6	[0.00]	ug/L	07:31:41
3	Na 589.592 Radial†	-1107.2	-1103.5	[0.00]	ug/L	07:31:21
3	Sr 421.552†	-46.2	-46.0	[0.00]	ug/L	07:31:21
3	Sc 361.383	906018.4	906018.4	100.53	%	07:32:38
3	Y 371.029	755705.3	755705.3	100.62	%	07:32:38
3	Ag 328.068†	381.7	379.7	[0.00]	ug/L	07:32:38
3	As 188.979†	-29.1	-29.0	[0.00]	ug/L	07:32:58
3	B 249.677†	-519.4	-516.6	[0.00]	ug/L	07:32:58
3	Ba 233.527†	-11.3	-11.2	[0.00]	ug/L	07:32:58
3	Be 313.107†	-5112.7	-5085.8	[0.00]	ug/L	07:32:38
3	Cd 226.502†	-205.6	-204.5	[0.00]	ug/L	07:32:58
3	Co 228.616†	-66.3	-66.0	[0.00]	ug/L	07:32:58
3	Cr 267.716†	88.6	88.1	[0.00]	ug/L	07:32:58
3	Cu 324.752†	6722.9	6687.6	[0.00]	ug/L	07:32:38
3	Mn 257.610†	421.2	419.0	[0.00]	ug/L	07:32:58
3	Mo 202.031†	16.1	16.0	[0.00]	ug/L	07:32:58
3	Ni 231.604†	90.6	90.1	[0.00]	ug/L	07:32:58
3	P 214.914†	220.6	219.4	[0.00]	ug/L	07:32:58
3	Pb 220.353†	-73.8	-73.4	[0.00]	ug/L	07:32:58
3	S 181.975 Axial†	42.5	42.2	[0.00]	ug/L	07:32:58
3	Sb 206.836†	33.0	32.8	[0.00]	ug/L	07:32:58
3	Se 196.026†	-29.8	-29.7	[0.00]	ug/L	07:32:58
3	Si 251.611†	456.1	453.7	[0.00]	ug/L	07:32:58
3	Sn 189.927†	7.3	7.2	[0.00]	ug/L	07:32:58
3	Ti 334.940†	-1131.4	-1125.5	[0.00]	ug/L	07:32:38
3	Tl 190.801†	-37.6	-37.4	[0.00]	ug/L	07:32:58
3	U 409.014†	-2415.7	-2403.0	[0.00]	ug/L	07:32:38
3	V 292.402†	-1339.4	-1332.4	[0.00]	ug/L	07:32:38
3	Zn 213.857†	618.9	615.7	[0.00]	ug/L	07:32:58
3	SiO2†	446.1	443.8	[0.00]	ug/L	07:33:14

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	901264.2	4496.20	0.50%	100.00	%
Sc Radial	5843.9	90.14	1.54%	100	%
Y 371.029	751084.2	4577.00	0.61%	100.00	%
Y RADIAL	6287.8	70.25	1.12%	100.0	%
Ag 328.068†	292.7	75.86	25.92%	[0.00]	ug/L
Al 396.153Radial†	-20.4	5.98	29.32%	[0.00]	ug/L
As 188.979†	-24.2	4.49	18.59%	[0.00]	ug/L
B 249.677†	-530.7	12.25	2.31%	[0.00]	ug/L
Ba 233.527†	-8.5	7.54	89.18%	[0.00]	ug/L
Be 313.107†	-5113.0	70.64	1.38%	[0.00]	ug/L
Ca 317.933Radial†	15.6	0.26	1.66%	[0.00]	ug/L
Cd 226.502†	-195.1	8.91	4.57%	[0.00]	ug/L
Co 228.616†	-65.4	2.64	4.04%	[0.00]	ug/L
Cr 267.716†	78.7	8.27	10.52%	[0.00]	ug/L
Cu 324.752†	6756.7	70.20	1.04%	[0.00]	ug/L
Fe 238.204 Radial†	6.8	1.66	24.44%	[0.00]	ug/L
K 766.490 Radial†	2351.7	137.81	5.86%	[0.00]	ug/L
Mg 279.077 IEC†	1.2	0.61	52.53%	[0.00]	ug/L
Mn 257.610†	422.3	6.23	1.47%	[0.00]	ug/L
Mo 202.031†	18.3	5.20	28.34%	[0.00]	ug/L
Na 589.592 Radial†	-1087.9	27.36	2.52%	[0.00]	ug/L
Ni 231.604†	86.6	3.79	4.38%	[0.00]	ug/L
P 214.914†	223.5	4.34	1.94%	[0.00]	ug/L
Pb 220.353†	-68.5	5.55	8.11%	[0.00]	ug/L
S 181.975 Axial†	41.6	0.57	1.37%	[0.00]	ug/L
Sb 206.836†	34.2	1.82	5.32%	[0.00]	ug/L
Se 196.026†	-28.8	4.23	14.66%	[0.00]	ug/L
Si 251.611†	449.7	10.73	2.39%	[0.00]	ug/L

Sn 189.927†	5.0	6.41	128.46%	[0.00]	ug/L
Sr 421.552†	-27.4	19.51	71.35%	[0.00]	ug/L
Ti 334.940†	-1114.9	78.85	7.07%	[0.00]	ug/L
Tl 190.801†	-32.5	4.90	15.07%	[0.00]	ug/L
U 409.014†	-2401.8	52.87	2.20%	[0.00]	ug/L
V 292.402†	-1358.4	22.59	1.66%	[0.00]	ug/L
Zn 213.857†	621.8	5.49	0.88%	[0.00]	ug/L
SiO2†	467.5	31.54	6.75%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/8/2009 07:35:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5765.8	5765.8	98.7	%	07:37:21
1	Y RADIAL	6189.1	6189.1	98.43	%	07:37:21
1	K 766.490 Radial†	8010.4	5767.1	[1000]	ug/L	07:37:16
1	Sr 421.552†	15682.7	15922.4	[100]	ug/L	07:37:21
1	Sc 361.383	914536.7	914536.7	101.47	%	07:37:48
1	Y 371.029	754661.2	754661.2	100.48	%	07:37:48
1	Ag 328.068†	21843.7	21234.0	[100]	ug/L	07:37:53
1	As 188.979†	227.9	248.8	[100]	ug/L	07:38:13
1	B 249.677†	3929.5	4403.2	[100]	ug/L	07:37:53
1	Ba 233.527†	13325.8	13140.9	[100]	ug/L	07:37:53
1	Be 313.107†	260898.9	262225.5	[100]	ug/L	07:37:48
1	Cd 226.502†	9200.0	9261.6	[100]	ug/L	07:37:53
1	Co 228.616†	5047.2	5039.4	[100]	ug/L	07:38:13
1	Cr 267.716†	9428.4	9212.9	[100]	ug/L	07:37:53
1	Cu 324.752†	40509.5	33164.9	[100]	ug/L	07:37:53
1	Mn 257.610†	93021.3	91249.0	[100]	ug/L	07:37:53
1	Mo 202.031†	1542.1	1501.4	[100]	ug/L	07:38:13
1	Ni 231.604†	4280.0	4131.4	[100]	ug/L	07:38:13
1	P 214.914†	1053.7	814.9	[500]	ug/L	07:38:13
1	Pb 220.353†	819.7	876.2	[100]	ug/L	07:38:13
1	S 181.975 Axial†	175.1	130.9	[200]	ug/L	07:38:13
1	Sb 206.836†	334.6	295.5	[100]	ug/L	07:38:13
1	Se 196.026†	142.3	169.1	[100]	ug/L	07:38:13
1	Si 251.611†	16559.7	15869.7	[500]	ug/L	07:37:53
1	Sn 189.927†	576.8	563.4	[100]	ug/L	07:38:13
1	Ti 334.940†	59872.4	60118.4	[100]	ug/L	07:37:53
1	Tl 190.801†	319.5	347.4	[100]	ug/L	07:38:13
1	U 409.014†	1213.1	3597.3	[100]	ug/L	07:37:48
1	V 292.402†	13311.9	14477.1	[100]	ug/L	07:37:53
1	Zn 213.857†	11943.1	11147.9	[100]	ug/L	07:37:53
1	SiO2†	16722.0	16011.9	[1069.5]	ug/L	07:39:19
2	Sc Radial	5769.0	5769.0	98.7	%	07:37:31
2	Y RADIAL	6129.7	6129.7	97.49	%	07:37:31
2	K 766.490 Radial†	7990.0	5742.1	[1000]	ug/L	07:37:26
2	Sr 421.552†	15612.4	15842.5	[100]	ug/L	07:37:31
2	Sc 361.383	915362.8	915362.8	101.56	%	07:38:18
2	Y 371.029	757053.4	757053.4	100.79	%	07:38:18
2	Ag 328.068†	22010.2	21378.4	[100]	ug/L	07:38:23
2	As 188.979†	219.9	240.7	[100]	ug/L	07:38:43
2	B 249.677†	3929.3	4399.5	[100]	ug/L	07:38:23
2	Ba 233.527†	13353.9	13156.7	[100]	ug/L	07:38:23
2	Be 313.107†	261281.3	262369.9	[100]	ug/L	07:38:18
2	Cd 226.502†	9245.9	9298.6	[100]	ug/L	07:38:23
2	Co 228.616†	5066.0	5053.3	[100]	ug/L	07:38:43
2	Cr 267.716†	9513.3	9288.1	[100]	ug/L	07:38:23
2	Cu 324.752†	40726.1	33342.1	[100]	ug/L	07:38:23
2	Mn 257.610†	93398.3	91537.5	[100]	ug/L	07:38:23
2	Mo 202.031†	1547.3	1505.1	[100]	ug/L	07:38:43
2	Ni 231.604†	4269.5	4117.2	[100]	ug/L	07:38:43
2	P 214.914†	1060.5	820.7	[500]	ug/L	07:38:43
2	Pb 220.353†	815.7	871.6	[100]	ug/L	07:38:43
2	S 181.975 Axial†	174.2	129.9	[200]	ug/L	07:38:43
2	Sb 206.836†	333.9	294.5	[100]	ug/L	07:38:43
2	Se 196.026†	147.7	174.2	[100]	ug/L	07:38:43
2	Si 251.611†	16619.4	15913.7	[500]	ug/L	07:38:23
2	Sn 189.927†	602.2	587.9	[100]	ug/L	07:38:43
2	Ti 334.940†	60122.7	60311.6	[100]	ug/L	07:38:23
2	Tl 190.801†	325.1	352.6	[100]	ug/L	07:38:43
2	U 409.014†	1005.2	3391.5	[100]	ug/L	07:38:18

2	V 292.402†	13412.6	14564.3	[100]	ug/L	07:38:23
2	Zn 213.857†	11968.2	11162.1	[100]	ug/L	07:38:23
2	SiO2†	16537.0	15814.9	[1069.5]	ug/L	07:39:24
3	Sc Radial	5875.5	5875.5	101	%	07:37:41
3	Y RADIAL	6269.8	6269.8	99.71	%	07:37:41
3	K 766.490 Radial†	7932.9	5538.6	[1000]	ug/L	07:37:36
3	Sr 421.552†	15938.0	15879.7	[100]	ug/L	07:37:41
3	Sc 361.383	919222.5	919222.5	101.99	%	07:38:49
3	Y 371.029	759136.1	759136.1	101.07	%	07:38:49
3	Ag 328.068†	22234.4	21507.3	[100]	ug/L	07:38:54
3	As 188.979†	225.1	244.9	[100]	ug/L	07:39:14
3	B 249.677†	4040.0	4491.7	[100]	ug/L	07:38:54
3	Ba 233.527†	13560.3	13303.8	[100]	ug/L	07:38:54
3	Be 313.107†	261887.7	261884.4	[100]	ug/L	07:38:49
3	Cd 226.502†	9334.1	9346.9	[100]	ug/L	07:38:54
3	Co 228.616†	5039.9	5006.8	[100]	ug/L	07:39:14
3	Cr 267.716†	9582.2	9316.3	[100]	ug/L	07:38:54
3	Cu 324.752†	40945.3	33388.7	[100]	ug/L	07:38:54
3	Mn 257.610†	94457.9	92190.2	[100]	ug/L	07:38:54
3	Mo 202.031†	1552.8	1504.1	[100]	ug/L	07:39:14
3	Ni 231.604†	4263.2	4093.4	[100]	ug/L	07:39:14
3	P 214.914†	1052.4	808.3	[500]	ug/L	07:39:14
3	Pb 220.353†	818.7	871.2	[100]	ug/L	07:39:14
3	S 181.975 Axial†	175.0	130.0	[200]	ug/L	07:39:14
3	Sb 206.836†	329.8	289.1	[100]	ug/L	07:39:14
3	Se 196.026†	150.6	176.5	[100]	ug/L	07:39:14
3	Si 251.611†	16850.5	16071.6	[500]	ug/L	07:38:54
3	Sn 189.927†	596.2	579.5	[100]	ug/L	07:39:14
3	Ti 334.940†	60935.8	60860.2	[100]	ug/L	07:38:54
3	Tl 190.801†	315.6	342.0	[100]	ug/L	07:39:14
3	U 409.014†	972.6	3355.4	[100]	ug/L	07:38:49
3	V 292.402†	13503.5	14598.0	[100]	ug/L	07:38:54
3	Zn 213.857†	12098.0	11239.8	[100]	ug/L	07:38:54
3	SiO2†	16521.2	15731.0	[1069.5]	ug/L	07:39:29

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	916374.0	2501.23	0.27%	101.68	%
Sc Radial	5803.4	62.41	1.08%	99.3	%
Y 371.029	756950.2	2239.21	0.30%	100.78	%
Y RADIAL	6196.2	70.31	1.13%	98.54	%
Ag 328.068†	21373.3	136.74	0.64%	[100]	ug/L
As 188.979†	244.8	4.02	1.64%	[100]	ug/L
B 249.677†	4431.5	52.22	1.18%	[100]	ug/L
Ba 233.527†	13200.4	89.86	0.68%	[100]	ug/L
Be 313.107†	262159.9	249.34	0.10%	[100]	ug/L
Cd 226.502†	9302.4	42.77	0.46%	[100]	ug/L
Co 228.616†	5033.2	23.87	0.47%	[100]	ug/L
Cr 267.716†	9272.4	53.46	0.58%	[100]	ug/L
Cu 324.752†	33298.6	118.07	0.35%	[100]	ug/L
K 766.490 Radial†	5682.6	125.36	2.21%	[1000]	ug/L
Mn 257.610†	91658.9	482.19	0.53%	[100]	ug/L
Mo 202.031†	1503.6	1.93	0.13%	[100]	ug/L
Ni 231.604†	4114.0	19.19	0.47%	[100]	ug/L
P 214.914†	814.6	6.21	0.76%	[500]	ug/L
Pb 220.353†	873.0	2.80	0.32%	[100]	ug/L
S 181.975 Axial†	130.3	0.57	0.43%	[200]	ug/L
Sb 206.836†	293.0	3.44	1.17%	[100]	ug/L
Se 196.026†	173.3	3.78	2.18%	[100]	ug/L
Si 251.611†	15951.7	106.20	0.67%	[500]	ug/L
Sn 189.927†	576.9	12.46	2.16%	[100]	ug/L
Sr 421.552†	15881.5	39.96	0.25%	[100]	ug/L
Ti 334.940†	60430.1	384.83	0.64%	[100]	ug/L
Tl 190.801†	347.3	5.29	1.52%	[100]	ug/L
U 409.014†	3448.1	130.52	3.79%	[100]	ug/L
V 292.402†	14546.5	62.44	0.43%	[100]	ug/L
Zn 213.857†	11183.3	49.46	0.44%	[100]	ug/L
SiO2†	15852.6	144.20	0.91%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/8/2009 07:41:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5755.3	5755.3	98.5	%	07:43:33
1	Y RADIAL	6135.8	6135.8	97.58	%	07:43:33
1	Al 396.153Radial†	6940.6	7067.9	[5000]	ug/L	07:43:33
1	Ca 317.933Radial†	3383.4	3419.9	[5000]	ug/L	07:43:53
1	K 766.490 Radial†	30250.2	28364.4	[5000]	ug/L	07:43:33
1	Mg 279.077 IEC†	149.6	150.7	[5000]	ug/L	07:43:53
1	Sr 421.552†	79566.2	80818.9	[500]	ug/L	07:43:33
1	Sc 361.383	902007.9	902007.9	100.08	%	07:44:50
1	Y 371.029	736818.6	736818.6	98.101	%	07:44:50
1	Ag 328.068†	110404.5	110020.7	[500]	ug/L	07:44:55
1	As 188.979†	1227.6	1250.8	[500]	ug/L	07:45:15
1	B 249.677†	22624.2	23136.2	[500]	ug/L	07:44:55
1	Ba 233.527†	66321.3	66275.0	[500]	ug/L	07:44:55
1	Be 313.107†	1344073.3	1348078.1	[500]	ug/L	07:44:50
1	Cd 226.502†	46481.0	46637.8	[500]	ug/L	07:44:55
1	Co 228.616†	25957.4	26001.4	[500]	ug/L	07:44:55
1	Cr 267.716†	46880.7	46763.4	[500]	ug/L	07:44:55
1	Cu 324.752†	176748.5	169846.1	[500]	ug/L	07:44:55
1	Mn 257.610†	463225.0	462420.8	[500]	ug/L	07:44:50
1	Mo 202.031†	7863.2	7838.4	[500]	ug/L	07:45:15
1	Ni 231.604†	21487.8	21383.5	[500]	ug/L	07:44:55
1	P 214.914†	4473.1	4245.9	[2500]	ug/L	07:45:15
1	Pb 220.353†	4294.6	4359.5	[500]	ug/L	07:45:15
1	S 181.975 Axial†	761.5	719.3	[1000]	ug/L	07:45:15
1	Sb 206.836†	1615.7	1580.1	[500]	ug/L	07:45:15
1	Se 196.026†	818.6	846.7	[500]	ug/L	07:45:15
1	Si 251.611†	82564.9	82047.1	[2500]	ug/L	07:44:55
1	Sn 189.927†	3040.6	3033.1	[500]	ug/L	07:45:15
1	Ti 334.940†	310662.0	311520.8	[500]	ug/L	07:44:55
1	Tl 190.801†	1746.7	1777.8	[500]	ug/L	07:45:15
1	U 409.014†	15499.0	17888.0	[500]	ug/L	07:44:55
1	V 292.402†	72745.3	74043.7	[500]	ug/L	07:44:55
1	Zn 213.857†	56861.0	56192.3	[500]	ug/L	07:44:55
1	SiO2†	83677.9	83141.4	[5347.5]	ug/L	07:46:23
2	Sc Radial	5753.2	5753.2	98.4	%	07:43:58
2	Y RADIAL	6098.6	6098.6	96.99	%	07:43:58
2	Al 396.153Radial†	7008.5	7139.3	[5000]	ug/L	07:43:58
2	Ca 317.933Radial†	3357.1	3394.4	[5000]	ug/L	07:44:18
2	K 766.490 Radial†	30376.3	28503.4	[5000]	ug/L	07:43:58
2	Mg 279.077 IEC†	145.0	146.2	[5000]	ug/L	07:44:18
2	Sr 421.552†	80143.3	81433.9	[500]	ug/L	07:43:58
2	Sc 361.383	897050.9	897050.9	99.533	%	07:45:21
2	Y 371.029	733930.5	733930.5	97.716	%	07:45:21
2	Ag 328.068†	111157.6	111387.0	[500]	ug/L	07:45:26
2	As 188.979†	1224.7	1254.7	[500]	ug/L	07:45:46
2	B 249.677†	22833.2	23471.2	[500]	ug/L	07:45:26
2	Ba 233.527†	66766.7	67088.7	[500]	ug/L	07:45:26
2	Be 313.107†	1337696.5	1349092.5	[500]	ug/L	07:45:21
2	Cd 226.502†	46562.9	46976.7	[500]	ug/L	07:45:26
2	Co 228.616†	26072.6	26260.5	[500]	ug/L	07:45:26
2	Cr 267.716†	47094.3	47236.9	[500]	ug/L	07:45:26
2	Cu 324.752†	179116.2	173200.8	[500]	ug/L	07:45:26
2	Mn 257.610†	460045.0	461783.5	[500]	ug/L	07:45:21
2	Mo 202.031†	7897.3	7916.1	[500]	ug/L	07:45:46
2	Ni 231.604†	21502.8	21517.2	[500]	ug/L	07:45:26
2	P 214.914†	4483.7	4281.3	[2500]	ug/L	07:45:46
2	Pb 220.353†	4299.8	4388.4	[500]	ug/L	07:45:46
2	S 181.975 Axial†	755.4	717.4	[1000]	ug/L	07:45:46
2	Sb 206.836†	1616.8	1590.2	[500]	ug/L	07:45:46

2	Se 196.026†	835.3	868.1	[500]	ug/L	07:45:46
2	Si 251.611†	83146.9	83087.8	[2500]	ug/L	07:45:26
2	Sn 189.927†	3056.2	3065.6	[500]	ug/L	07:45:46
2	Ti 334.940†	313337.6	315924.2	[500]	ug/L	07:45:26
2	Tl 190.801†	1732.8	1773.5	[500]	ug/L	07:45:46
2	U 409.014†	15713.5	18189.1	[500]	ug/L	07:45:26
2	V 292.402†	73060.5	74762.0	[500]	ug/L	07:45:26
2	Zn 213.857†	57384.3	57032.0	[500]	ug/L	07:45:26
2	SiO2†	82111.0	82029.2	[5347.5]	ug/L	07:46:28
3	Sc Radial	5658.5	5658.5	96.8	%	07:44:23
3	Y RADIAL	6000.3	6000.3	95.43	%	07:44:23
3	Al 396.153Radial†	7008.2	7258.2	[5000]	ug/L	07:44:23
3	Ca 317.933Radial†	3379.5	3474.7	[5000]	ug/L	07:44:43
3	K 766.490 Radial†	30355.1	28998.2	[5000]	ug/L	07:44:23
3	Mg 279.077 IEC†	146.2	149.8	[5000]	ug/L	07:44:43
3	Sr 421.552†	80169.9	82824.7	[500]	ug/L	07:44:23
3	Sc 361.383	903673.3	903673.3	100.27	%	07:45:52
3	Y 371.029	738349.2	738349.2	98.304	%	07:45:52
3	Ag 328.068†	111866.7	111275.7	[500]	ug/L	07:45:57
3	As 188.979†	1213.8	1234.8	[500]	ug/L	07:46:17
3	B 249.677†	23191.3	23660.2	[500]	ug/L	07:45:57
3	Ba 233.527†	67179.0	67008.4	[500]	ug/L	07:45:57
3	Be 313.107†	1348404.0	1349922.3	[500]	ug/L	07:45:52
3	Cd 226.502†	47083.0	47152.6	[500]	ug/L	07:45:57
3	Co 228.616†	26298.3	26293.6	[500]	ug/L	07:45:57
3	Cr 267.716†	47483.6	47278.4	[500]	ug/L	07:45:57
3	Cu 324.752†	179916.3	172680.0	[500]	ug/L	07:45:57
3	Mn 257.610†	464824.3	463162.8	[500]	ug/L	07:45:52
3	Mo 202.031†	7859.2	7820.0	[500]	ug/L	07:46:17
3	Ni 231.604†	21680.2	21535.9	[500]	ug/L	07:45:57
3	P 214.914†	4444.9	4209.6	[2500]	ug/L	07:46:17
3	Pb 220.353†	4302.0	4359.0	[500]	ug/L	07:46:17
3	S 181.975 Axial†	750.3	706.7	[1000]	ug/L	07:46:17
3	Sb 206.836†	1605.1	1566.6	[500]	ug/L	07:46:17
3	Se 196.026†	826.7	853.3	[500]	ug/L	07:46:17
3	Si 251.611†	83765.2	83092.2	[2500]	ug/L	07:45:57
3	Sn 189.927†	3059.4	3046.2	[500]	ug/L	07:46:17
3	Ti 334.940†	315390.3	315664.4	[500]	ug/L	07:45:57
3	Tl 190.801†	1716.4	1744.4	[500]	ug/L	07:46:17
3	U 409.014†	15674.1	18034.2	[500]	ug/L	07:45:57
3	V 292.402†	73603.1	74765.2	[500]	ug/L	07:45:57
3	Zn 213.857†	57834.5	57058.5	[500]	ug/L	07:45:57
3	SiO2†	81804.4	81118.8	[5347.5]	ug/L	07:46:33

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	900910.7	3444.89	0.38%	99.961	%
Sc Radial	5722.3	55.31	0.97%	97.9	%
Y 371.029	736366.1	2243.84	0.30%	98.040	%
Y RADIAL	6078.3	70.01	1.15%	96.67	%
Ag 328.068†	110894.5	758.70	0.68%	[500]	ug/L
Al 396.153Radial†	7155.2	96.14	1.34%	[5000]	ug/L
As 188.979†	1246.7	10.54	0.85%	[500]	ug/L
B 249.677†	23422.5	265.36	1.13%	[500]	ug/L
Ba 233.527†	66790.7	448.39	0.67%	[500]	ug/L
Be 313.107†	1349030.9	923.63	0.07%	[500]	ug/L
Ca 317.933Radial†	3429.7	41.02	1.20%	[5000]	ug/L
Cd 226.502†	46922.4	261.67	0.56%	[500]	ug/L
Co 228.616†	26185.2	159.97	0.61%	[500]	ug/L
Cr 267.716†	47092.9	286.09	0.61%	[500]	ug/L
Cu 324.752†	171909.0	1805.36	1.05%	[500]	ug/L
K 766.490 Radial†	28622.0	333.13	1.16%	[5000]	ug/L
Mg 279.077 IEC†	148.9	2.41	1.62%	[5000]	ug/L
Mn 257.610†	462455.7	690.31	0.15%	[500]	ug/L
Mo 202.031†	7858.1	51.01	0.65%	[500]	ug/L
Ni 231.604†	21478.9	83.11	0.39%	[500]	ug/L
P 214.914†	4245.6	35.86	0.84%	[2500]	ug/L
Pb 220.353†	4369.0	16.86	0.39%	[500]	ug/L
S 181.975 Axial†	714.5	6.78	0.95%	[1000]	ug/L

Sb 206.836†	1579.0	11.84	0.75%	[500]	ug/L
Se 196.026†	856.0	10.93	1.28%	[500]	ug/L
Si 251.611†	82742.4	602.11	0.73%	[2500]	ug/L
Sn 189.927†	3048.3	16.37	0.54%	[500]	ug/L
Sr 421.552†	81692.5	1027.61	1.26%	[500]	ug/L
Ti 334.940†	314369.8	2470.75	0.79%	[500]	ug/L
Tl 190.801†	1765.2	18.18	1.03%	[500]	ug/L
U 409.014†	18037.1	150.54	0.83%	[500]	ug/L
V 292.402†	74523.6	415.67	0.56%	[500]	ug/L
Zn 213.857†	56760.9	492.63	0.87%	[500]	ug/L
SiO2†	82096.5	1012.97	1.23%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/8/2009 07:48:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5727.6	5727.6	98.0	%	07:50:36
1	Y RADIAL	6092.4	6092.4	96.89	%	07:50:36
1	Al 396.153Radial†	13699.9	13998.6	[10000]	ug/L	07:50:36
1	Ca 317.933Radial†	6656.5	6776.1	[10000]	ug/L	07:50:36
1	Fe 238.204 Radial†	1055.7	1070.4	[10000]	ug/L	07:50:56
1	K 766.490 Radial†	57301.4	56113.4	[10000]	ug/L	07:50:36
1	Mg 279.077 IEC†	286.7	291.4	[10000]	ug/L	07:50:56
1	Na 589.592 Radial†	26952.5	28587.8	[10000]	ug/L	07:50:36
1	Sr 421.552†	156642.7	159851.3	[1000]	ug/L	07:50:36
1	Sc 361.383	866703.8	866703.8	96.165	%	07:51:59
1	Y 371.029	725126.9	725126.9	96.544	%	07:51:59
1	Ag 328.068†	212191.8	220360.3	[1000]	ug/L	07:51:59
1	As 188.979†	2413.4	2533.8	[1000]	ug/L	07:52:19
1	B 249.677†	45434.2	47776.6	[1000]	ug/L	07:51:59
1	Ba 233.527†	129842.7	135028.7	[1000]	ug/L	07:51:59
1	Be 313.107†	2636643.4	2746894.1	[1000]	ug/L	07:51:54
1	Cd 226.502†	90744.2	94557.8	[1000]	ug/L	07:51:59
1	Co 228.616†	50574.3	52656.4	[1000]	ug/L	07:51:59
1	Cr 267.716†	91836.0	95419.4	[1000]	ug/L	07:51:59
1	Cu 324.752†	343293.5	350225.9	[1000]	ug/L	07:51:59
1	Mn 257.610†	901280.3	936797.1	[1000]	ug/L	07:51:54
1	Mo 202.031†	15191.7	15779.1	[1000]	ug/L	07:52:19
1	Ni 231.604†	41580.1	43151.6	[1000]	ug/L	07:51:59
1	P 214.914†	8615.8	8735.8	[5000]	ug/L	07:52:19
1	Pb 220.353†	8464.2	8870.1	[1000]	ug/L	07:52:19
1	S 181.975 Axial†	1409.9	1424.5	[2000]	ug/L	07:52:19
1	Sb 206.836†	3070.7	3158.9	[1000]	ug/L	07:52:19
1	Se 196.026†	1640.1	1734.3	[1000]	ug/L	07:52:19
1	Si 251.611†	161079.4	167052.8	[5000]	ug/L	07:51:59
1	Sn 189.927†	5873.8	6103.0	[1000]	ug/L	07:52:19
1	Ti 334.940†	600269.7	625320.7	[1000]	ug/L	07:51:59
1	Tl 190.801†	3419.3	3588.1	[1000]	ug/L	07:52:19
1	U 409.014†	32652.6	36356.5	[1000]	ug/L	07:51:59
1	V 292.402†	144700.9	151829.2	[1000]	ug/L	07:51:59
1	Zn 213.857†	110773.1	114568.4	[1000]	ug/L	07:51:59
1	SiO2†	162097.8	168094.0	[10695]	ug/L	07:53:28
2	Sc Radial	5706.1	5706.1	97.6	%	07:51:01
2	Y RADIAL	6044.1	6044.1	96.12	%	07:51:01
2	Al 396.153Radial†	13658.2	14008.6	[10000]	ug/L	07:51:01
2	Ca 317.933Radial†	6641.4	6786.2	[10000]	ug/L	07:51:01
2	Fe 238.204 Radial†	1051.8	1070.4	[10000]	ug/L	07:51:21
2	K 766.490 Radial†	57341.9	56375.2	[10000]	ug/L	07:51:01
2	Mg 279.077 IEC†	284.9	290.6	[10000]	ug/L	07:51:21
2	Na 589.592 Radial†	26942.8	28681.5	[10000]	ug/L	07:51:01
2	Sr 421.552†	156508.0	160315.7	[1000]	ug/L	07:51:01
2	Sc 361.383	870985.3	870985.3	96.640	%	07:52:31
2	Y 371.029	731540.9	731540.9	97.398	%	07:52:31
2	Ag 328.068†	213845.0	220986.4	[1000]	ug/L	07:52:31
2	As 188.979†	2432.4	2541.1	[1000]	ug/L	07:52:51
2	B 249.677†	46010.4	48140.5	[1000]	ug/L	07:52:31
2	Ba 233.527†	130856.3	135413.9	[1000]	ug/L	07:52:31
2	Be 313.107†	2666787.9	2764609.1	[1000]	ug/L	07:52:25
2	Cd 226.502†	91618.2	94998.3	[1000]	ug/L	07:52:31
2	Co 228.616†	51055.4	52895.7	[1000]	ug/L	07:52:31
2	Cr 267.716†	92533.4	95671.6	[1000]	ug/L	07:52:31
2	Cu 324.752†	346989.1	352295.1	[1000]	ug/L	07:52:31
2	Mn 257.610†	910927.9	942173.1	[1000]	ug/L	07:52:25
2	Mo 202.031†	15202.7	15712.9	[1000]	ug/L	07:52:51
2	Ni 231.604†	42023.0	43397.4	[1000]	ug/L	07:52:31

2	P 214.914†	8619.1	8695.2	[5000]	ug/L	07:52:51
2	Pb 220.353†	8484.9	8848.3	[1000]	ug/L	07:52:51
2	S 181.975 Axial†	1414.8	1422.4	[2000]	ug/L	07:52:51
2	Sb 206.836†	3088.5	3161.7	[1000]	ug/L	07:52:51
2	Se 196.026†	1638.9	1724.7	[1000]	ug/L	07:52:51
2	Si 251.611†	162691.4	167897.5	[5000]	ug/L	07:52:31
2	Sn 189.927†	5905.9	6106.2	[1000]	ug/L	07:52:51
2	Ti 334.940†	605448.6	627611.3	[1000]	ug/L	07:52:31
2	Tl 190.801†	3427.2	3578.8	[1000]	ug/L	07:52:51
2	U 409.014†	32852.3	36396.2	[1000]	ug/L	07:52:31
2	V 292.402†	145972.5	152405.4	[1000]	ug/L	07:52:31
2	Zn 213.857†	111675.6	114936.0	[1000]	ug/L	07:52:31
2	SiO2†	162732.6	167922.3	[10695]	ug/L	07:53:33
3	Sc Radial	5835.4	5835.4	99.9	%	07:51:26
3	Y RADIAL	6153.0	6153.0	97.86	%	07:51:26
3	Al 396.153Radial†	13935.7	13976.5	[10000]	ug/L	07:51:26
3	Ca 317.933Radial†	6750.2	6744.5	[10000]	ug/L	07:51:26
3	Fe 238.204 Radial†	1062.5	1057.3	[10000]	ug/L	07:51:46
3	K 766.490 Radial†	58299.6	56033.1	[10000]	ug/L	07:51:26
3	Mg 279.077 IEC†	286.1	285.3	[10000]	ug/L	07:51:46
3	Na 589.592 Radial†	27504.4	28632.6	[10000]	ug/L	07:51:26
3	Sr 421.552†	159231.4	159491.6	[1000]	ug/L	07:51:26
3	Sc 361.383	870659.7	870659.7	96.604	%	07:53:02
3	Y 371.029	729400.6	729400.6	97.113	%	07:53:02
3	Ag 328.068†	213245.6	220448.6	[1000]	ug/L	07:53:02
3	As 188.979†	2437.9	2547.8	[1000]	ug/L	07:53:22
3	B 249.677†	45730.3	47868.4	[1000]	ug/L	07:53:02
3	Ba 233.527†	130842.6	135450.2	[1000]	ug/L	07:53:02
3	Be 313.107†	2658103.6	2756651.3	[1000]	ug/L	07:52:57
3	Cd 226.502†	91430.2	94839.1	[1000]	ug/L	07:53:02
3	Co 228.616†	50994.1	52852.0	[1000]	ug/L	07:53:02
3	Cr 267.716†	92409.5	95579.1	[1000]	ug/L	07:53:02
3	Cu 324.752†	345135.9	350511.0	[1000]	ug/L	07:53:02
3	Mn 257.610†	911726.2	943351.9	[1000]	ug/L	07:52:57
3	Mo 202.031†	15254.9	15772.8	[1000]	ug/L	07:53:22
3	Ni 231.604†	41851.4	43236.0	[1000]	ug/L	07:53:02
3	P 214.914†	8647.5	8728.0	[5000]	ug/L	07:53:22
3	Pb 220.353†	8535.4	8903.9	[1000]	ug/L	07:53:22
3	S 181.975 Axial†	1428.8	1437.4	[2000]	ug/L	07:53:22
3	Sb 206.836†	3094.4	3169.0	[1000]	ug/L	07:53:22
3	Se 196.026†	1655.8	1742.8	[1000]	ug/L	07:53:22
3	Si 251.611†	162249.9	167503.4	[5000]	ug/L	07:53:02
3	Sn 189.927†	5928.4	6131.8	[1000]	ug/L	07:53:22
3	Ti 334.940†	603756.8	626094.3	[1000]	ug/L	07:53:02
3	Tl 190.801†	3424.4	3577.2	[1000]	ug/L	07:53:22
3	U 409.014†	32820.6	36376.1	[1000]	ug/L	07:53:02
3	V 292.402†	145449.4	151920.4	[1000]	ug/L	07:53:02
3	Zn 213.857†	111377.9	114671.1	[1000]	ug/L	07:53:02
3	SiO2†	161107.2	166302.8	[10695]	ug/L	07:53:38

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	869449.6	2383.48	0.27%	96.470	%
Sc Radial	5756.4	69.28	1.20%	98.5	%
Y 371.029	728689.4	3265.57	0.45%	97.018	%
Y RADIAL	6096.5	54.59	0.90%	96.96	%
Ag 328.068†	220598.4	338.87	0.15%	[1000]	ug/L
Al 396.153Radial†	13994.5	16.43	0.12%	[10000]	ug/L
As 188.979†	2540.9	6.99	0.28%	[1000]	ug/L
B 249.677†	47928.5	189.28	0.39%	[1000]	ug/L
Ba 233.527†	135297.6	233.59	0.17%	[1000]	ug/L
Be 313.107†	2756051.5	8872.70	0.32%	[1000]	ug/L
Ca 317.933Radial†	6768.9	21.76	0.32%	[10000]	ug/L
Cd 226.502†	94798.4	223.05	0.24%	[1000]	ug/L
Co 228.616†	52801.4	127.43	0.24%	[1000]	ug/L
Cr 267.716†	95556.7	127.57	0.13%	[1000]	ug/L
Cu 324.752†	351010.6	1121.46	0.32%	[1000]	ug/L
Fe 238.204 Radial†	1066.0	7.56	0.71%	[10000]	ug/L
K 766.490 Radial†	56173.9	178.89	0.32%	[10000]	ug/L

Mg 279.077 IEC†	289.1	3.30	1.14%	[10000]	ug/L
Mn 257.610†	940774.0	3494.17	0.37%	[1000]	ug/L
Mo 202.031†	15754.9	36.54	0.23%	[1000]	ug/L
Na 589.592 Radial†	28634.0	46.86	0.16%	[10000]	ug/L
Ni 231.604†	43261.7	124.89	0.29%	[1000]	ug/L
P 214.914†	8719.7	21.52	0.25%	[5000]	ug/L
Pb 220.353†	8874.1	28.01	0.32%	[1000]	ug/L
S 181.975 Axial†	1428.1	8.14	0.57%	[2000]	ug/L
Sb 206.836†	3163.2	5.19	0.16%	[1000]	ug/L
Se 196.026†	1733.9	9.04	0.52%	[1000]	ug/L
Si 251.611†	167484.6	422.65	0.25%	[5000]	ug/L
Sn 189.927†	6113.7	15.78	0.26%	[1000]	ug/L
Sr 421.552†	159886.2	413.17	0.26%	[1000]	ug/L
Ti 334.940†	626342.1	1165.23	0.19%	[1000]	ug/L
Tl 190.801†	3581.4	5.88	0.16%	[1000]	ug/L
U 409.014†	36376.3	19.85	0.05%	[1000]	ug/L
V 292.402†	152051.7	309.69	0.20%	[1000]	ug/L
Zn 213.857†	114725.2	189.70	0.17%	[1000]	ug/L
SiO2†	167439.7	988.35	0.59%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/8/2009 07:55:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5634.4	5634.4	96.4	%	07:58:03
1	Y RADIAL	5976.9	5976.9	95.06	%	07:58:03
1	Al 396.153Radial†	70118.2	72745.8	[50000]	ug/L	07:57:43
1	Ca 317.933Radial†	33119.0	34334.9	[50000]	ug/L	07:57:43
1	Fe 238.204 Radial†	2068.2	2138.3	[20000]	ug/L	07:58:03
1	Mg 279.077 IEC†	1367.9	1417.6	[50000]	ug/L	07:58:03
1	Na 589.592 Radial†	57661.4	60893.3	[20000]	ug/L	07:57:43
1	Sc 361.383	873678.1	873678.1	96.939	%	07:59:00
1	Y 371.029	712440.2	712440.2	94.855	%	07:59:00
2	Sc Radial	5657.2	5657.2	96.8	%	07:58:28
2	Y RADIAL	5981.2	5981.2	95.12	%	07:58:28
2	Al 396.153Radial†	69017.3	71315.7	[50000]	ug/L	07:58:08
2	Ca 317.933Radial†	32519.9	33577.7	[50000]	ug/L	07:58:08
2	Fe 238.204 Radial†	2074.1	2135.7	[20000]	ug/L	07:58:28
2	Mg 279.077 IEC†	1366.8	1410.8	[50000]	ug/L	07:58:28
2	Na 589.592 Radial†	56539.3	59493.5	[20000]	ug/L	07:58:08
2	Sc 361.383	887334.1	887334.1	98.454	%	07:59:05
2	Y 371.029	723198.7	723198.7	96.287	%	07:59:05
3	Sc Radial	5603.7	5603.7	95.9	%	07:58:53
3	Y RADIAL	5935.7	5935.7	94.40	%	07:58:53
3	Al 396.153Radial†	69152.0	72137.0	[50000]	ug/L	07:58:33
3	Ca 317.933Radial†	32476.7	33853.5	[50000]	ug/L	07:58:33
3	Fe 238.204 Radial†	2056.8	2138.2	[20000]	ug/L	07:58:53
3	Mg 279.077 IEC†	1360.7	1417.9	[50000]	ug/L	07:58:53
3	Na 589.592 Radial†	56639.2	60155.3	[20000]	ug/L	07:58:33
3	Sc 361.383	876437.1	876437.1	97.245	%	07:59:11
3	Y 371.029	715214.6	715214.6	95.224	%	07:59:11

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	879149.8	7220.84	0.82%	97.546	%
Sc Radial	5631.8	26.85	0.48%	96.4	%
Y 371.029	716951.2	5585.53	0.78%	95.456	%
Y RADIAL	5964.6	25.13	0.42%	94.86	%
Al 396.153Radial†	72066.2	717.65	1.00%	[50000]	ug/L
Ca 317.933Radial†	33922.0	383.22	1.13%	[50000]	ug/L
Fe 238.204 Radial†	2137.4	1.46	0.07%	[20000]	ug/L
Mg 279.077 IEC†	1415.5	4.03	0.28%	[50000]	ug/L
Na 589.592 Radial†	60180.7	700.27	1.16%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	220.8	0.00000	0.999994	
Al 396.153Radial	3	Lin Thru 0	0.0	1.440	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	2.531	0.00000	0.999968	
B 249.677	3	Lin Thru 0	0.0	47.68	0.00000	0.999939	
Ba 233.527	3	Lin Thru 0	0.0	134.9	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	2743	0.00000	0.999957	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6785	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	94.60	0.00000	0.999991	
Co 228.616	3	Lin Thru 0	0.0	52.70	0.00000	0.999987	
Cr 267.716	3	Lin Thru 0	0.0	95.26	0.00000	0.999981	
Cu 324.752	3	Lin Thru 0	0.0	349.4	0.00000	0.999958	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1068	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.639	0.00000	0.999971	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0283	0.00000	0.999979
Mn 257.610	3	Lin Thru 0	0.0	937.4	0.00000	0.999975
Mo 202.031	3	Lin Thru 0	0.0	15.74	0.00000	0.999991
Na 589.592 Radia	2	Lin Thru 0	0.0	2.980	0.00000	0.999809
Ni 231.604	3	Lin Thru 0	0.0	43.18	0.00000	0.999987
P 214.914	3	Lin Thru 0	0.0	1.734	0.00000	0.999930
Pb 220.353	3	Lin Thru 0	0.0	8.846	0.00000	0.999981
S 181.975 Axial	3	Lin Thru 0	0.0	0.7136	0.00000	0.999970
Sb 206.836	3	Lin Thru 0	0.0	3.160	0.00000	0.999979
Se 196.026	3	Lin Thru 0	0.0	1.730	0.00000	0.999987
Si 251.611	3	Lin Thru 0	0.0	33.40	0.00000	0.999981
Sn 189.927	3	Lin Thru 0	0.0	6.108	0.00000	0.999987
Sr 421.552	3	Lin Thru 0	0.0	160.6	0.00000	0.999962
Ti 334.940	3	Lin Thru 0	0.0	626.6	0.00000	0.999994
Tl 190.801	3	Lin Thru 0	0.0	3.570	0.00000	0.999981
U 409.014	3	Lin Thru 0	0.0	36.30	0.00000	0.999984
V 292.402	3	Lin Thru 0	0.0	151.4	0.00000	0.999963
Zn 213.857	3	Lin Thru 0	0.0	114.5	0.00000	0.999989
SiO2	3	Lin Thru 0	0.0	15.59	0.00000	0.999960

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/8/2009 08:01:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6009.6	6009.6	103	%			08:03:14
1	Y RADIAL	6456.4	6456.4	102.7	%			08:03:14
1	Al 396.153Radial†	7067.2	6892.7	4765.0	ug/L	4765.0	ppb	08:03:14
1	Ca 317.933Radial†	3331.3	3223.9	4751.8	ug/L	4751.8	ppb	08:03:35
1	Fe 238.204 Radial†	542.1	520.4	4887.1	ug/L	4887.1	ppb	08:03:35
1	K 766.490 Radial†	16331.3	13529.3	2394.0	ug/L	2394.0	ppb	08:03:14
1	Mg 279.077 IEC†	148.3	143.1	5053.8	ug/L	5053.8	ppb	08:03:35
1	Na 589.592 Radial†	6072.0	6992.5	2346.6	ug/L	2346.6	ppb	08:03:14
1	Sr 421.552†	83886.5	81601.2	508.15	ug/L	508.15	ppb	08:03:14
1	Sc 361.383	912453.5	912453.5	101.24	%			08:04:32
1	Y 371.029	752091.5	752091.5	100.13	%			08:04:32
1	Ag 328.068†	57656.7	56656.9	259.65	ug/L	259.65	ppb	08:04:32
1	As 188.979†	1167.3	1177.2	469.45	ug/L	469.45	ppb	08:04:52
1	B 249.677†	23906.7	24144.2	504.43	ug/L	504.43	ppb	08:04:32
1	Ba 233.527†	68424.2	67593.6	502.25	ug/L	502.25	ppb	08:04:32
1	Be 313.107†	705987.4	702442.9	257.03	ug/L	257.03	ppb	08:04:32
1	Cd 226.502†	47081.6	46699.3	493.50	ug/L	493.50	ppb	08:04:32
1	Co 228.616†	26273.8	26017.0	494.03	ug/L	494.03	ppb	08:04:52
1	Cr 267.716†	46520.1	45871.0	482.33	ug/L	482.33	ppb	08:04:32
1	Cu 324.752†	183044.9	174043.5	498.31	ug/L	498.31	ppb	08:04:32
1	Mn 257.610†	477045.7	470773.4	502.59	ug/L	502.59	ppb	08:04:32
1	Mo 202.031†	8517.1	8394.4	533.61	ug/L	533.61	ppb	08:04:52
1	Ni 231.604†	21479.4	21129.4	488.97	ug/L	488.97	ppb	08:04:52
1	P 214.914†	4554.6	4275.2	2390.8	ug/L	2390.8	ppb	08:04:52
1	Pb 220.353†	4364.0	4378.9	496.61	ug/L	496.61	ppb	08:04:52
1	S 181.975 Axial†	1818.9	1755.0	2458.3	ug/L	2458.3	ppb	08:04:52
1	Sb 206.836†	1586.3	1532.6	494.01	ug/L	494.01	ppb	08:04:52
1	Se 196.026†	4375.9	4351.0	2533.6	ug/L	2533.6	ppb	08:04:52
1	Si 251.611†	160353.0	157937.0	4716.2	ug/L	4716.2	ppb	08:04:32
1	Sn 189.927†	3306.2	3260.6	534.43	ug/L	534.43	ppb	08:04:52
1	Ti 334.940†	317801.3	315019.0	502.58	ug/L	502.58	ppb	08:04:32
1	Tl 190.801†	1838.8	1848.8	521.06	ug/L	521.06	ppb	08:04:52
1	U 409.014†	14870.6	17090.1	469.24	ug/L	469.24	ppb	08:04:32
1	V 292.402†	74687.1	75129.5	503.39	ug/L	503.39	ppb	08:04:32
1	Zn 213.857†	58836.0	57492.6	497.92	ug/L	497.92	ppb	08:04:32
1	SiO2†	158439.0	156028.6	9983.3	ug/L	9983.3	ppb	08:05:50
2	Sc Radial	5793.2	5793.2	99.1	%			08:03:40
2	Y RADIAL	6177.7	6177.7	98.25	%			08:03:40
2	Al 396.153Radial†	7001.0	7082.7	4896.9	ug/L	4896.9	ppb	08:03:40
2	Ca 317.933Radial†	3313.6	3327.0	4903.8	ug/L	4903.8	ppb	08:04:00
2	Fe 238.204 Radial†	539.7	537.6	5048.4	ug/L	5048.4	ppb	08:04:00
2	K 766.490 Radial†	16265.1	14055.7	2487.4	ug/L	2487.4	ppb	08:03:40
2	Mg 279.077 IEC†	149.3	149.4	5277.4	ug/L	5277.4	ppb	08:04:00
2	Na 589.592 Radial†	5957.8	7097.9	2381.9	ug/L	2381.9	ppb	08:03:40
2	Sr 421.552†	83562.4	84321.3	525.09	ug/L	525.09	ppb	08:03:40
2	Sc 361.383	907490.4	907490.4	100.69	%			08:04:58
2	Y 371.029	745986.1	745986.1	99.321	%			08:04:58
2	Ag 328.068†	56982.2	56298.5	258.07	ug/L	258.07	ppb	08:04:58
2	As 188.979†	1163.4	1179.6	470.43	ug/L	470.43	ppb	08:05:18
2	B 249.677†	23675.8	24044.1	502.30	ug/L	502.30	ppb	08:04:58
2	Ba 233.527†	67850.0	67393.0	500.76	ug/L	500.76	ppb	08:04:58
2	Be 313.107†	697546.8	697874.0	255.36	ug/L	255.36	ppb	08:04:58
2	Cd 226.502†	46668.9	46543.8	491.84	ug/L	491.84	ppb	08:04:58
2	Co 228.616†	26211.1	26096.7	495.55	ug/L	495.55	ppb	08:05:18
2	Cr 267.716†	46057.8	45663.2	480.15	ug/L	480.15	ppb	08:04:58
2	Cu 324.752†	181224.7	173224.6	495.98	ug/L	495.98	ppb	08:04:58
2	Mn 257.610†	473022.1	469354.4	501.08	ug/L	501.08	ppb	08:04:58
2	Mo 202.031†	8509.7	8433.0	536.07	ug/L	536.07	ppb	08:05:18
2	Ni 231.604†	21412.6	21179.1	490.12	ug/L	490.12	ppb	08:05:18

2	P 214.914†	4536.6	4281.9	2394.9	ug/L	2394.9 ppb	08:05:18
2	Pb 220.353†	4334.8	4373.6	496.03	ug/L	496.03 ppb	08:05:18
2	S 181.975 Axial†	1822.1	1768.0	2476.4	ug/L	2476.4 ppb	08:05:18
2	Sb 206.836†	1605.6	1560.3	502.85	ug/L	502.85 ppb	08:05:18
2	Se 196.026†	4352.9	4351.8	2534.6	ug/L	2534.6 ppb	08:05:18
2	Si 251.611†	158990.5	157450.0	4701.6	ug/L	4701.6 ppb	08:04:58
2	Sn 189.927†	3284.1	3256.6	533.79	ug/L	533.79 ppb	08:05:18
2	Ti 334.940†	314891.7	313846.1	500.72	ug/L	500.72 ppb	08:04:58
2	Tl 190.801†	1828.3	1848.3	520.91	ug/L	520.91 ppb	08:05:18
2	U 409.014†	14835.2	17135.3	470.47	ug/L	470.47 ppb	08:04:58
2	V 292.402†	73950.2	74801.2	501.24	ug/L	501.24 ppb	08:04:58
2	Zn 213.857†	58273.9	57252.3	495.79	ug/L	495.79 ppb	08:04:58
2	SiO2†	160101.9	158536.0	10144	ug/L	10144 ppb	08:05:55
3	Sc Radial	5889.1	5889.1	101	%		08:04:05
3	Y RADIAL	6279.1	6279.1	99.86	%		08:04:05
3	Al 396.153Radial†	7083.1	7049.2	4873.9	ug/L	4873.9 ppb	08:04:05
3	Ca 317.933Radial†	3333.3	3292.1	4852.4	ug/L	4852.4 ppb	08:04:25
3	Fe 238.204 Radial†	542.0	531.1	4987.3	ug/L	4987.3 ppb	08:04:25
3	K 766.490 Radial†	16313.1	13836.3	2448.5	ug/L	2448.5 ppb	08:04:05
3	Mg 279.077 IEC†	149.3	147.0	5193.5	ug/L	5193.5 ppb	08:04:25
3	Na 589.592 Radial†	6061.0	7102.5	2383.5	ug/L	2383.5 ppb	08:04:05
3	Sr 421.552†	83836.6	83221.2	518.23	ug/L	518.23 ppb	08:04:05
3	Sc 361.383	911772.7	911772.7	101.17	%		08:05:24
3	Y 371.029	751267.0	751267.0	100.02	%		08:05:24
3	Ag 328.068†	57151.9	56200.5	257.60	ug/L	257.60 ppb	08:05:24
3	As 188.979†	1153.3	1164.1	464.30	ug/L	464.30 ppb	08:05:44
3	B 249.677†	23705.7	23963.1	500.63	ug/L	500.63 ppb	08:05:24
3	Ba 233.527†	68150.6	67373.6	500.61	ug/L	500.61 ppb	08:05:24
3	Be 313.107†	702427.5	699444.7	255.93	ug/L	255.93 ppb	08:05:24
3	Cd 226.502†	46920.7	46575.1	492.18	ug/L	492.18 ppb	08:05:24
3	Co 228.616†	25964.5	25730.7	488.58	ug/L	488.58 ppb	08:05:44
3	Cr 267.716†	46302.7	45690.4	480.44	ug/L	480.44 ppb	08:05:24
3	Cu 324.752†	181422.2	172574.6	494.11	ug/L	494.11 ppb	08:05:24
3	Mn 257.610†	475160.7	469262.0	500.98	ug/L	500.98 ppb	08:05:24
3	Mo 202.031†	8439.4	8323.8	529.13	ug/L	529.13 ppb	08:05:44
3	Ni 231.604†	21253.5	20922.0	484.17	ug/L	484.17 ppb	08:05:44
3	P 214.914†	4499.7	4224.3	2362.0	ug/L	2362.0 ppb	08:05:44
3	Pb 220.353†	4320.0	4338.7	492.07	ug/L	492.07 ppb	08:05:44
3	S 181.975 Axial†	1804.6	1742.3	2440.4	ug/L	2440.4 ppb	08:05:44
3	Sb 206.836†	1602.0	1549.3	499.13	ug/L	499.13 ppb	08:05:44
3	Se 196.026†	4323.5	4302.5	2505.8	ug/L	2505.8 ppb	08:05:44
3	Si 251.611†	159550.9	157262.3	4696.1	ug/L	4696.1 ppb	08:05:24
3	Sn 189.927†	3266.4	3223.7	528.40	ug/L	528.40 ppb	08:05:44
3	Ti 334.940†	315966.4	313439.7	500.07	ug/L	500.07 ppb	08:05:24
3	Tl 190.801†	1822.4	1833.9	516.90	ug/L	516.90 ppb	08:05:44
3	U 409.014†	14891.2	17121.4	470.10	ug/L	470.10 ppb	08:05:24
3	V 292.402†	74284.8	74787.0	501.05	ug/L	501.05 ppb	08:05:24
3	Zn 213.857†	58572.4	57275.5	496.05	ug/L	496.05 ppb	08:05:24
3	SiO2†	157929.4	155641.7	9958.7	ug/L	9958.7 ppb	08:06:00

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	910572.2	101.03	%	0.299				0.30%
Sc Radial	5897.3	101	%	1.9				1.84%
Y 371.029	749781.5	99.827	%	0.4411				0.44%
Y RADIAL	6304.4	100.3	%	2.24				2.24%
Ag 328.068†	56385.3	258.44	ug/L	1.073	258.44	ppb	1.073	0.42%
QC value within limits for Ag 328.068 Recovery = 103.38%								
Al 396.153Radial†	7008.2	4845.3	ug/L	70.45	4845.3	ppb	70.45	1.45%
QC value within limits for Al 396.153Radial Recovery = 96.91%								
As 188.979†	1173.6	468.06	ug/L	3.291	468.06	ppb	3.291	0.70%
QC value within limits for As 188.979 Recovery = 93.61%								
B 249.677†	24050.5	502.45	ug/L	1.903	502.45	ppb	1.903	0.38%
QC value within limits for B 249.677 Recovery = 100.49%								
Ba 233.527†	67453.4	501.21	ug/L	0.903	501.21	ppb	0.903	0.18%
QC value within limits for Ba 233.527 Recovery = 100.24%								
Be 313.107†	699920.5	256.11	ug/L	0.848	256.11	ppb	0.848	0.33%
QC value within limits for Be 313.107 Recovery = 102.44%								
Ca 317.933Radial†	3281.0	4836.0	ug/L	77.30	4836.0	ppb	77.30	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.72%
Cd 226.502†            46606.1      492.51 ug/L         0.878      492.51 ppb          0.878   0.18%
   QC value within limits for Cd 226.502  Recovery = 98.50%
Co 228.616†            25948.1      492.72 ug/L         3.661      492.72 ppb          3.661   0.74%
   QC value within limits for Co 228.616  Recovery = 98.54%
Cr 267.716†            45741.5      480.97 ug/L         1.187      480.97 ppb          1.187   0.25%
   QC value within limits for Cr 267.716  Recovery = 96.19%
Cu 324.752†           173280.9      496.13 ug/L         2.104      496.13 ppb          2.104   0.42%
   QC value within limits for Cu 324.752  Recovery = 99.23%
Fe 238.204 Radial†       529.7      4974.3 ug/L        81.47      4974.3 ppb         81.47   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.49%
K 766.490 Radial†      13807.1      2443.3 ug/L        46.90      2443.3 ppb         46.90   1.92%
   QC value within limits for K 766.490 Radial  Recovery = 97.73%
Mg 279.077 IEC†          146.5      5174.9 ug/L       112.95      5174.9 ppb        112.95   2.18%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           469796.6      501.55 ug/L         0.898      501.55 ppb          0.898   0.18%
   QC value within limits for Mn 257.610  Recovery = 100.31%
Mo 202.031†             8383.7      532.94 ug/L         3.519      532.94 ppb          3.519   0.66%
   QC value within limits for Mo 202.031  Recovery = 106.59%
Na 589.592 Radial†      7064.3      2370.6 ug/L        20.88      2370.6 ppb         20.88   0.88%
   QC value within limits for Na 589.592 Radial  Recovery = 94.83%
Ni 231.604†            21076.9      487.75 ug/L         3.155      487.75 ppb          3.155   0.65%
   QC value within limits for Ni 231.604  Recovery = 97.55%
P 214.914†              4260.5      2382.6 ug/L        17.95      2382.6 ppb         17.95   0.75%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4363.7      494.90 ug/L         2.468      494.90 ppb          2.468   0.50%
   QC value within limits for Pb 220.353  Recovery = 98.98%
S 181.975 Axial†        1755.1      2458.4 ug/L        18.02      2458.4 ppb         18.02   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 98.33%
Sb 206.836†             1547.4      498.66 ug/L         4.442      498.66 ppb          4.442   0.89%
   QC value within limits for Sb 206.836  Recovery = 99.73%
Se 196.026†             4335.1      2524.7 ug/L        16.33      2524.7 ppb         16.33   0.65%
   QC value within limits for Se 196.026  Recovery = 100.99%
Si 251.611†           157549.8      4704.6 ug/L        10.40      4704.6 ppb         10.40   0.22%
   QC value within limits for Si 251.611  Recovery = 94.09%
Sn 189.927†             3247.0      532.21 ug/L         3.311      532.21 ppb          3.311   0.62%
   QC value within limits for Sn 189.927  Recovery = 106.44%
Sr 421.552†            83047.9      517.16 ug/L         8.521      517.16 ppb          8.521   1.65%
   QC value within limits for Sr 421.552  Recovery = 103.43%
Ti 334.940†           314101.6      501.12 ug/L         1.305      501.12 ppb          1.305   0.26%
   QC value within limits for Ti 334.940  Recovery = 100.22%
Tl 190.801†             1843.6      519.62 ug/L         2.361      519.62 ppb          2.361   0.45%
   QC value within limits for Tl 190.801  Recovery = 103.92%
U 409.014†             17115.6      469.94 ug/L         0.630      469.94 ppb          0.630   0.13%
   QC value within limits for U 409.014  Recovery = 93.99%
V 292.402†             74905.9      501.89 ug/L         1.297      501.89 ppb          1.297   0.26%
   QC value within limits for V 292.402  Recovery = 100.38%
Zn 213.857†            57340.1      496.59 ug/L         1.162      496.59 ppb          1.162   0.23%
   QC value within limits for Zn 213.857  Recovery = 99.32%
SiO2†                 156735.4       10029 ug/L         100.6       10029 ppb          100.6   1.00%
   QC value within limits for SiO2  Recovery = 93.77%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/8/2009 08:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5863.4	5863.4	100	%			08:10:04
1	Y RADIAL	6302.2	6302.2	100.2	%			08:10:04
1	Al 396.153Radial†	-13.8	6.7	4.5878	ug/L	4.5878	ppb	08:10:04
1	Ca 317.933Radial†	19.2	3.6	5.2688	ug/L	5.2688	ppb	08:10:24
1	Fe 238.204 Radial†	8.0	1.2	11.415	ug/L	11.415	ppb	08:10:24
1	K 766.490 Radial†	2488.1	128.1	22.724	ug/L	22.724	ppb	08:10:04
1	Mg 279.077 IEC†	2.3	1.1	38.489	ug/L	38.489	ppb	08:10:24
1	Na 589.592 Radial†	-1113.9	-22.2	-7.4610	ug/L	-7.4610	ppb	08:10:04
1	Sr 421.552†	-33.7	-6.3	-0.0391	ug/L	-0.0391	ppb	08:10:04
1	Sc 361.383	917080.9	917080.9	101.75	%			08:11:21
1	Y 371.029	764417.3	764417.3	101.78	%			08:11:21
1	Ag 328.068†	348.3	49.5	0.2333	ug/L	0.2333	ppb	08:11:26
1	As 188.979†	-22.9	1.6	0.6456	ug/L	0.6456	ppb	08:11:46
1	B 249.677†	-334.1	202.3	4.2414	ug/L	4.2414	ppb	08:11:46
1	Ba 233.527†	-12.6	-4.0	-0.0287	ug/L	-0.0287	ppb	08:11:46
1	Be 313.107†	-4947.4	250.9	0.0916	ug/L	0.0916	ppb	08:11:26
1	Cd 226.502†	-181.7	16.5	0.1736	ug/L	0.1736	ppb	08:11:46
1	Co 228.616†	-63.4	3.1	0.0612	ug/L	0.0612	ppb	08:11:46
1	Cr 267.716†	66.2	-13.6	-0.1409	ug/L	-0.1409	ppb	08:11:46
1	Cu 324.752†	6717.4	-155.2	-0.4435	ug/L	-0.4435	ppb	08:11:26
1	Mn 257.610†	419.5	-10.1	-0.0103	ug/L	-0.0103	ppb	08:11:46
1	Mo 202.031†	32.0	13.1	0.8345	ug/L	0.8345	ppb	08:11:46
1	Ni 231.604†	83.7	-4.3	-0.0992	ug/L	-0.0992	ppb	08:11:46
1	P 214.914†	209.3	-17.8	-10.216	ug/L	-10.216	ppb	08:11:46
1	Pb 220.353†	-65.1	4.5	0.5114	ug/L	0.5114	ppb	08:11:46
1	S 181.975 Axial†	40.0	-2.3	-3.1993	ug/L	-3.1993	ppb	08:11:46
1	Sb 206.836†	39.9	5.0	1.5899	ug/L	1.5899	ppb	08:11:46
1	Se 196.026†	-24.9	4.4	2.5561	ug/L	2.5561	ppb	08:11:46
1	Si 251.611†	479.1	21.1	0.6112	ug/L	0.6112	ppb	08:11:46
1	Sn 189.927†	4.3	-0.8	-0.1275	ug/L	-0.1275	ppb	08:11:46
1	Ti 334.940†	-1091.9	41.9	0.0697	ug/L	0.0697	ppb	08:11:26
1	Tl 190.801†	-35.8	-2.6	-0.7368	ug/L	-0.7368	ppb	08:11:46
1	U 409.014†	-2659.8	-212.1	-5.8431	ug/L	-5.8431	ppb	08:11:21
1	V 292.402†	-1367.8	14.2	0.0934	ug/L	0.0934	ppb	08:11:26
1	Zn 213.857†	672.2	38.8	0.3379	ug/L	0.3379	ppb	08:11:46
1	SiO2†	486.6	10.7	0.6409	ug/L	0.6409	ppb	08:12:52
2	Sc Radial	5788.1	5788.1	99.0	%			08:10:29
2	Y RADIAL	6221.9	6221.9	98.95	%			08:10:29
2	Al 396.153Radial†	-45.4	-25.4	-17.699	ug/L	-17.699	ppb	08:10:29
2	Ca 317.933Radial†	19.1	3.7	5.5102	ug/L	5.5102	ppb	08:10:49
2	Fe 238.204 Radial†	8.1	1.4	13.251	ug/L	13.251	ppb	08:10:49
2	K 766.490 Radial†	2366.7	37.8	6.7059	ug/L	6.7059	ppb	08:10:29
2	Mg 279.077 IEC†	0.6	-0.5	-18.604	ug/L	-18.604	ppb	08:10:49
2	Na 589.592 Radial†	-1117.3	-40.2	-13.477	ug/L	-13.477	ppb	08:10:29
2	Sr 421.552†	-26.1	1.0	0.0061	ug/L	0.0061	ppb	08:10:29
2	Sc 361.383	921030.5	921030.5	102.19	%			08:11:51
2	Y 371.029	765704.1	765704.1	101.95	%			08:11:51
2	Ag 328.068†	345.6	45.5	0.2119	ug/L	0.2119	ppb	08:11:56
2	As 188.979†	-20.9	3.7	1.4577	ug/L	1.4577	ppb	08:12:17
2	B 249.677†	-369.6	169.0	3.5417	ug/L	3.5417	ppb	08:12:17
2	Ba 233.527†	4.8	13.1	0.0982	ug/L	0.0982	ppb	08:12:17
2	Be 313.107†	-4999.5	220.8	0.0806	ug/L	0.0806	ppb	08:11:56
2	Cd 226.502†	-187.8	11.3	0.1186	ug/L	0.1186	ppb	08:12:17
2	Co 228.616†	-68.1	-1.2	-0.0205	ug/L	-0.0205	ppb	08:12:17
2	Cr 267.716†	69.1	-11.0	-0.1148	ug/L	-0.1148	ppb	08:12:17
2	Cu 324.752†	6713.4	-187.4	-0.5357	ug/L	-0.5357	ppb	08:11:56
2	Mn 257.610†	439.8	8.1	0.0103	ug/L	0.0103	ppb	08:12:17
2	Mo 202.031†	36.4	17.3	1.1000	ug/L	1.1000	ppb	08:12:17
2	Ni 231.604†	100.8	12.1	0.2799	ug/L	0.2799	ppb	08:12:17

2	P 214.914†	201.9	-26.0	-14.897	ug/L	-14.897 ppb	08:12:17
2	Pb 220.353†	-58.2	11.5	1.2990	ug/L	1.2990 ppb	08:12:17
2	S 181.975 Axial†	32.1	-10.2	-14.223	ug/L	-14.223 ppb	08:12:17
2	Sb 206.836†	32.9	-2.0	-0.6113	ug/L	-0.6113 ppb	08:12:17
2	Se 196.026†	-24.0	5.4	3.1479	ug/L	3.1479 ppb	08:12:17
2	Si 251.611†	484.7	24.6	0.7154	ug/L	0.7154 ppb	08:12:17
2	Sn 189.927†	5.4	0.3	0.0478	ug/L	0.0478 ppb	08:12:17
2	Ti 334.940†	-1097.3	41.2	0.0666	ug/L	0.0666 ppb	08:11:56
2	Tl 190.801†	-38.7	-5.4	-1.5059	ug/L	-1.5059 ppb	08:12:17
2	U 409.014†	-2499.4	-43.9	-1.2109	ug/L	-1.2109 ppb	08:11:51
2	V 292.402†	-1362.2	25.3	0.1783	ug/L	0.1783 ppb	08:11:56
2	Zn 213.857†	657.7	21.7	0.1879	ug/L	0.1879 ppb	08:12:17
2	SiO2†	477.7	-0.0	-0.0471	ug/L	-0.0471 ppb	08:12:57
3	Sc Radial	5801.4	5801.4	99.3	%		08:10:54
3	Y RADIAL	6256.3	6256.3	99.50	%		08:10:54
3	Al 396.153Radial†	-3.8	16.6	11.493	ug/L	11.493 ppb	08:10:54
3	Ca 317.933Radial†	21.4	6.0	8.8051	ug/L	8.8051 ppb	08:11:15
3	Fe 238.204 Radial†	7.9	1.2	11.147	ug/L	11.147 ppb	08:11:15
3	K 766.490 Radial†	2292.2	-42.7	-7.5763	ug/L	-7.5763 ppb	08:10:54
3	Mg 279.077 IEC†	1.9	0.8	26.566	ug/L	26.566 ppb	08:11:15
3	Na 589.592 Radial†	-1095.1	-15.2	-5.1014	ug/L	-5.1014 ppb	08:10:54
3	Sr 421.552†	-24.4	2.8	0.0174	ug/L	0.0174 ppb	08:10:54
3	Sc 361.383	917281.5	917281.5	101.78	%		08:12:22
3	Y 371.029	764497.1	764497.1	101.79	%		08:12:22
3	Ag 328.068†	371.5	72.2	0.3336	ug/L	0.3336 ppb	08:12:27
3	As 188.979†	-26.0	-1.4	-0.5580	ug/L	-0.5580 ppb	08:12:47
3	B 249.677†	-364.7	172.3	3.6127	ug/L	3.6127 ppb	08:12:47
3	Ba 233.527†	3.5	11.9	0.0885	ug/L	0.0885 ppb	08:12:47
3	Be 313.107†	-4952.6	246.9	0.0901	ug/L	0.0901 ppb	08:12:27
3	Cd 226.502†	-187.5	10.8	0.1139	ug/L	0.1139 ppb	08:12:47
3	Co 228.616†	-63.4	3.1	0.0586	ug/L	0.0586 ppb	08:12:47
3	Cr 267.716†	63.9	-15.9	-0.1653	ug/L	-0.1653 ppb	08:12:47
3	Cu 324.752†	6714.5	-159.4	-0.4557	ug/L	-0.4557 ppb	08:12:27
3	Mn 257.610†	459.3	28.9	0.0315	ug/L	0.0315 ppb	08:12:47
3	Mo 202.031†	20.1	1.4	0.0900	ug/L	0.0900 ppb	08:12:47
3	Ni 231.604†	116.1	27.5	0.6373	ug/L	0.6373 ppb	08:12:47
3	P 214.914†	209.1	-18.1	-10.383	ug/L	-10.383 ppb	08:12:47
3	Pb 220.353†	-61.8	7.7	0.8752	ug/L	0.8752 ppb	08:12:47
3	S 181.975 Axial†	37.7	-4.5	-6.3631	ug/L	-6.3631 ppb	08:12:47
3	Sb 206.836†	36.0	1.1	0.3524	ug/L	0.3524 ppb	08:12:47
3	Se 196.026†	-23.5	5.7	3.3461	ug/L	3.3461 ppb	08:12:47
3	Si 251.611†	486.9	28.7	0.8618	ug/L	0.8618 ppb	08:12:47
3	Sn 189.927†	0.7	-4.3	-0.7058	ug/L	-0.7058 ppb	08:12:47
3	Ti 334.940†	-1114.9	19.5	0.0330	ug/L	0.0330 ppb	08:12:27
3	Tl 190.801†	-24.6	8.3	2.3260	ug/L	2.3260 ppb	08:12:47
3	U 409.014†	-2560.9	-114.4	-3.1511	ug/L	-3.1511 ppb	08:12:22
3	V 292.402†	-1372.0	10.3	0.0621	ug/L	0.0621 ppb	08:12:27
3	Zn 213.857†	632.6	-0.3	-0.0081	ug/L	-0.0081 ppb	08:12:47
3	SiO2†	481.9	6.1	0.3958	ug/L	0.3958 ppb	08:13:02

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918464.3	101.91	%	0.247				0.24%
Sc Radial	5817.6	99.6	%	0.69				0.69%
Y 371.029	764872.8	101.84	%	0.096				0.09%
Y RADIAL	6260.2	99.56	%	0.641				0.64%
Ag 328.068†	55.8	0.2596	ug/L	0.06495	0.2596	ppb	0.06495	25.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.5396	ug/L	15.25647	-0.5396	ppb	15.25647	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5151	ug/L	1.01417	0.5151	ppb	1.01417	196.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	181.2	3.7986	ug/L	0.38512	3.7986	ppb	0.38512	10.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0527	ug/L	0.07066	0.0527	ppb	0.07066	134.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	239.5	0.0874	ug/L	0.00595	0.0874	ppb	0.00595	6.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.4	6.5280	ug/L	1.97572	6.5280	ppb	1.97572	30.27%

QC value within limits for Ca 317.933Radial Recovery = Not calculated

Cd 226.502†	12.9	0.1354 ug/L	0.03318	0.1354 ppb	0.03318	24.51%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616†	1.7	0.0331 ug/L	0.04646	0.0331 ppb	0.04646	140.40%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	-13.5	-0.1403 ug/L	0.02526	-0.1403 ppb	0.02526	18.00%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-167.4	-0.4783 ug/L	0.05006	-0.4783 ppb	0.05006	10.47%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	1.3	11.938 ug/L	1.1452	11.938 ppb	1.1452	9.59%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	41.0	7.2846 ug/L	15.15852	7.2846 ppb	15.15852	208.09%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	0.4	15.484 ug/L	30.1170	15.484 ppb	30.1170	194.51%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	9.0	0.0105 ug/L	0.02090	0.0105 ppb	0.02090	199.54%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	10.6	0.6748 ug/L	0.52359	0.6748 ppb	0.52359	77.59%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-25.9	-8.6799 ug/L	4.31890	-8.6799 ppb	4.31890	49.76%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	11.8	0.2727 ug/L	0.36830	0.2727 ppb	0.36830	135.08%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-20.6	-11.832 ug/L	2.6556	-11.832 ppb	2.6556	22.44%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	7.9	0.8952 ug/L	0.39415	0.8952 ppb	0.39415	44.03%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-5.7	-7.9284 ug/L	5.67605	-7.9284 ppb	5.67605	71.59%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	1.4	0.4437 ug/L	1.10344	0.4437 ppb	1.10344	248.71%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	5.1	3.0167 ug/L	0.41103	3.0167 ppb	0.41103	13.63%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611†	24.8	0.7294 ug/L	0.12588	0.7294 ppb	0.12588	17.26%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	-1.6	-0.2618 ug/L	0.39435	-0.2618 ppb	0.39435	150.61%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	-0.8	-0.0052 ug/L	0.02993	-0.0052 ppb	0.02993	575.71%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	34.2	0.0564 ug/L	0.02032	0.0564 ppb	0.02032	36.00%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	0.1	0.0278 ug/L	2.02711	0.0278 ppb	2.02711	>999.9%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	-123.4	-3.4017 ug/L	2.32626	-3.4017 ppb	2.32626	68.38%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	16.6	0.1113 ug/L	0.06011	0.1113 ppb	0.06011	54.02%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	20.1	0.1726 ug/L	0.17351	0.1726 ppb	0.17351	100.54%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2†	5.6	0.3299 ug/L	0.34869	0.3299 ppb	0.34869	105.71%

QC value within limits for SiO2 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/8/2009 08:15:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5940.5	5940.5	102	%			08:17:06
1	Y RADIAL	6395.2	6395.2	101.7	%			08:17:06
1	Al 396.153Radial†	260.7	276.9	191.93	ug/L	191.93	ppb	08:17:06
1	Ca 317.933Radial†	153.9	135.9	200.25	ug/L	200.25	ppb	08:17:26
1	Fe 238.204 Radial†	20.4	13.3	124.24	ug/L	124.24	ppb	08:17:26
1	K 766.490 Radial†	3305.8	900.3	159.44	ug/L	159.44	ppb	08:17:06
1	Mg 279.077 IEC†	7.2	5.9	209.88	ug/L	209.88	ppb	08:17:26
1	Na 589.592 Radial†	-237.5	854.3	286.69	ug/L	286.69	ppb	08:17:06
1	Sr 421.552†	769.9	784.8	4.8854	ug/L	4.8854	ppb	08:17:06
1	Sc 361.383	901641.8	901641.8	100.04	%			08:18:23
1	Y 371.029	753823.3	753823.3	100.36	%			08:18:23
1	Ag 328.068†	1343.5	1050.2	4.7669	ug/L	4.7669	ppb	08:18:23
1	As 188.979†	48.4	72.6	28.705	ug/L	28.705	ppb	08:18:43
1	B 249.677†	1835.1	2365.0	49.569	ug/L	49.569	ppb	08:18:23
1	Ba 233.527†	676.8	684.9	5.0920	ug/L	5.0920	ppb	08:18:43
1	Be 313.107†	8490.6	13600.1	4.9675	ug/L	4.9675	ppb	08:18:23
1	Cd 226.502†	271.5	466.4	4.9219	ug/L	4.9219	ppb	08:18:43
1	Co 228.616†	190.1	255.4	4.8605	ug/L	4.8605	ppb	08:18:43
1	Cr 267.716†	535.1	456.2	4.7826	ug/L	4.7826	ppb	08:18:43
1	Cu 324.752†	10202.8	3441.8	9.8558	ug/L	9.8558	ppb	08:18:23
1	Mn 257.610†	10097.5	9670.9	10.325	ug/L	10.325	ppb	08:18:23
1	Mo 202.031†	173.7	155.3	9.8742	ug/L	9.8742	ppb	08:18:43
1	Ni 231.604†	315.7	229.0	5.2994	ug/L	5.2994	ppb	08:18:43
1	P 214.914†	456.1	232.4	132.55	ug/L	132.55	ppb	08:18:43
1	Pb 220.353†	25.9	94.4	10.717	ug/L	10.717	ppb	08:18:43
1	S 181.975 Axial†	110.1	68.5	95.956	ug/L	95.956	ppb	08:18:43
1	Sb 206.836†	69.5	35.3	11.434	ug/L	11.434	ppb	08:18:43
1	Se 196.026†	33.0	61.8	36.168	ug/L	36.168	ppb	08:18:43
1	Si 251.611†	3632.7	3181.5	94.983	ug/L	94.983	ppb	08:18:43
1	Sn 189.927†	68.9	63.9	10.481	ug/L	10.481	ppb	08:18:43
1	Ti 334.940†	2173.8	3287.9	5.2317	ug/L	5.2317	ppb	08:18:23
1	Tl 190.801†	39.9	72.4	20.346	ug/L	20.346	ppb	08:18:43
1	U 409.014†	-441.2	1960.8	53.991	ug/L	53.991	ppb	08:18:23
1	V 292.402†	-596.4	762.2	5.2581	ug/L	5.2581	ppb	08:18:23
1	Zn 213.857†	1785.0	1162.4	10.091	ug/L	10.091	ppb	08:18:43
1	SiO2†	3760.9	3291.8	210.60	ug/L	210.60	ppb	08:19:40
2	Sc Radial	5778.3	5778.3	98.9	%			08:17:31
2	Y RADIAL	6209.6	6209.6	98.76	%			08:17:31
2	Al 396.153Radial†	262.1	285.5	197.91	ug/L	197.91	ppb	08:17:31
2	Ca 317.933Radial†	154.9	141.0	207.90	ug/L	207.90	ppb	08:17:52
2	Fe 238.204 Radial†	20.3	13.7	128.46	ug/L	128.46	ppb	08:17:52
2	K 766.490 Radial†	3191.9	876.4	155.21	ug/L	155.21	ppb	08:17:31
2	Mg 279.077 IEC†	10.5	9.5	335.33	ug/L	335.33	ppb	08:17:52
2	Na 589.592 Radial†	-280.7	804.1	269.83	ug/L	269.83	ppb	08:17:31
2	Sr 421.552†	760.1	796.1	4.9557	ug/L	4.9557	ppb	08:17:31
2	Sc 361.383	901543.3	901543.3	100.03	%			08:18:49
2	Y 371.029	753311.9	753311.9	100.30	%			08:18:49
2	Ag 328.068†	1410.9	1117.8	5.0769	ug/L	5.0769	ppb	08:18:49
2	As 188.979†	51.1	75.3	29.767	ug/L	29.767	ppb	08:19:09
2	B 249.677†	1816.1	2346.2	49.173	ug/L	49.173	ppb	08:18:49
2	Ba 233.527†	673.4	681.6	5.0677	ug/L	5.0677	ppb	08:19:09
2	Be 313.107†	8482.4	13592.8	4.9644	ug/L	4.9644	ppb	08:18:49
2	Cd 226.502†	284.4	479.4	5.0588	ug/L	5.0588	ppb	08:19:09
2	Co 228.616†	174.4	239.8	4.5649	ug/L	4.5649	ppb	08:19:09
2	Cr 267.716†	547.3	468.5	4.9130	ug/L	4.9130	ppb	08:19:09
2	Cu 324.752†	10227.0	3467.1	9.9285	ug/L	9.9285	ppb	08:18:49
2	Mn 257.610†	10053.3	9627.9	10.277	ug/L	10.277	ppb	08:18:49
2	Mo 202.031†	176.8	158.4	10.073	ug/L	10.073	ppb	08:19:09
2	Ni 231.604†	319.1	232.5	5.3801	ug/L	5.3801	ppb	08:19:09

2	P 214.914†	470.3	246.6	140.77 ug/L	140.77 ppb	08:19:09
2	Pb 220.353†	11.6	80.1	9.1052 ug/L	9.1052 ppb	08:19:09
2	S 181.975 Axial†	109.3	67.7	94.849 ug/L	94.849 ppb	08:19:09
2	Sb 206.836†	66.3	32.0	10.412 ug/L	10.412 ppb	08:19:09
2	Se 196.026†	28.9	57.7	33.851 ug/L	33.851 ppb	08:19:09
2	Si 251.611†	3618.6	3167.8	94.570 ug/L	94.570 ppb	08:19:09
2	Sn 189.927†	71.4	66.3	10.886 ug/L	10.886 ppb	08:19:09
2	Ti 334.940†	2003.5	3117.8	4.9622 ug/L	4.9622 ppb	08:18:49
2	Tl 190.801†	32.8	65.3	18.347 ug/L	18.347 ppb	08:19:09
2	U 409.014†	-563.6	1838.4	50.616 ug/L	50.616 ppb	08:18:49
2	V 292.402†	-605.8	752.7	5.1946 ug/L	5.1946 ppb	08:18:49
2	Zn 213.857†	1781.3	1158.9	10.054 ug/L	10.054 ppb	08:19:09
2	SiO2†	3752.2	3283.5	210.06 ug/L	210.06 ppb	08:19:45
3	Sc Radial	5805.0	5805.0	99.3 %		08:17:57
3	Y RADIAL	6273.9	6273.9	99.78 %		08:17:57
3	Al 396.153Radial†	262.7	284.9	197.48 ug/L	197.48 ppb	08:17:57
3	Ca 317.933Radial†	153.3	138.7	204.49 ug/L	204.49 ppb	08:18:17
3	Fe 238.204 Radial†	21.8	15.2	142.16 ug/L	142.16 ppb	08:18:17
3	K 766.490 Radial†	3276.4	946.6	167.66 ug/L	167.66 ppb	08:17:57
3	Mg 279.077 IEC†	12.6	11.5	405.90 ug/L	405.90 ppb	08:18:17
3	Na 589.592 Radial†	-294.2	791.8	265.71 ug/L	265.71 ppb	08:17:57
3	Sr 421.552†	792.6	825.2	5.1374 ug/L	5.1374 ppb	08:17:57
3	Sc 361.383	905114.1	905114.1	100.43 %		08:19:14
3	Y 371.029	758310.9	758310.9	100.96 %		08:19:14
3	Ag 328.068†	1518.1	1218.9	5.5368 ug/L	5.5368 ppb	08:19:14
3	As 188.979†	45.6	69.5	27.505 ug/L	27.505 ppb	08:19:34
3	B 249.677†	1844.8	2367.6	49.620 ug/L	49.620 ppb	08:19:14
3	Ba 233.527†	684.6	690.2	5.1316 ug/L	5.1316 ppb	08:19:34
3	Be 313.107†	8549.0	13625.7	4.9766 ug/L	4.9766 ppb	08:19:14
3	Cd 226.502†	270.4	464.4	4.8984 ug/L	4.8984 ppb	08:19:34
3	Co 228.616†	191.0	255.6	4.8644 ug/L	4.8644 ppb	08:19:34
3	Cr 267.716†	535.3	454.3	4.7632 ug/L	4.7632 ppb	08:19:34
3	Cu 324.752†	10231.8	3431.6	9.8274 ug/L	9.8274 ppb	08:19:14
3	Mn 257.610†	10048.0	9582.9	10.229 ug/L	10.229 ppb	08:19:14
3	Mo 202.031†	175.0	155.9	9.9140 ug/L	9.9140 ppb	08:19:34
3	Ni 231.604†	317.8	229.9	5.3208 ug/L	5.3208 ppb	08:19:34
3	P 214.914†	462.6	237.2	135.29 ug/L	135.29 ppb	08:19:34
3	Pb 220.353†	18.1	86.5	9.8297 ug/L	9.8297 ppb	08:19:34
3	S 181.975 Axial†	109.9	67.8	95.025 ug/L	95.025 ppb	08:19:34
3	Sb 206.836†	58.7	24.2	7.9299 ug/L	7.9299 ppb	08:19:34
3	Se 196.026†	37.1	65.8	38.547 ug/L	38.547 ppb	08:19:34
3	Si 251.611†	3618.1	3153.0	94.127 ug/L	94.127 ppb	08:19:34
3	Sn 189.927†	69.7	64.5	10.576 ug/L	10.576 ppb	08:19:34
3	Ti 334.940†	2093.8	3199.8	5.0916 ug/L	5.0916 ppb	08:19:14
3	Tl 190.801†	40.4	72.7	20.436 ug/L	20.436 ppb	08:19:34
3	U 409.014†	-456.0	1947.7	53.628 ug/L	53.628 ppb	08:19:14
3	V 292.402†	-603.6	757.3	5.2280 ug/L	5.2280 ppb	08:19:14
3	Zn 213.857†	1787.2	1157.7	10.041 ug/L	10.041 ppb	08:19:34
3	SiO2†	3771.9	3288.4	210.37 ug/L	210.37 ppb	08:19:50

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902766.4	100.17	%	0.226				0.23%
Sc Radial	5841.3	100.0	%	1.49				1.49%
Y 371.029	755148.7	100.54	%	0.366				0.36%
Y RADIAL	6292.9	100.1	%	1.50				1.50%
Ag 328.068†	1128.9	5.1269	ug/L	0.38740	5.1269	ppb	0.38740	7.56%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	282.5	195.77	ug/L	3.334	195.77	ppb	3.334	1.70%
QC value within limits for Al 396.153Radial Recovery = 97.89%								
As 188.979†	72.5	28.659	ug/L	1.1313	28.659	ppb	1.1313	3.95%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2359.6	49.454	ug/L	0.2442	49.454	ppb	0.2442	0.49%
QC value within limits for B 249.677 Recovery = 98.91%								
Ba 233.527†	685.6	5.0971	ug/L	0.03226	5.0971	ppb	0.03226	0.63%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	13606.2	4.9695	ug/L	0.00635	4.9695	ppb	0.00635	0.13%
QC value within limits for Be 313.107 Recovery = 99.39%								
Ca 317.933Radial†	138.5	204.21	ug/L	3.830	204.21	ppb	3.830	1.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.11%
Cd 226.502†              470.1      4.9597 ug/L       0.08663      4.9597 ppb        0.08663   1.75%
   QC value within limits for Cd 226.502  Recovery = 99.19%
Co 228.616†              250.3      4.7633 ug/L       0.17179      4.7633 ppb        0.17179   3.61%
   QC value within limits for Co 228.616  Recovery = 95.27%
Cr 267.716†              459.7      4.8196 ug/L       0.08146      4.8196 ppb        0.08146   1.69%
   QC value within limits for Cr 267.716  Recovery = 96.39%
Cu 324.752†             3446.8      9.8706 ug/L       0.05214      9.8706 ppb        0.05214   0.53%
   QC value within limits for Cu 324.752  Recovery = 98.71%
Fe 238.204 Radial†        14.0      131.62 ug/L         9.372      131.62 ppb          9.372   7.12%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 131.62%
K 766.490 Radial†        907.8      160.77 ug/L         6.329      160.77 ppb          6.329   3.94%
   QC value within limits for K 766.490 Radial  Recovery = 107.18%
Mg 279.077 IEC†           9.0      317.04 ug/L        99.282      317.04 ppb         99.282  31.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.68%
Mn 257.610†             9627.3      10.277 ug/L        0.0479      10.277 ppb         0.0479   0.47%
   QC value within limits for Mn 257.610  Recovery = 102.77%
Mo 202.031†              156.5      9.9537 ug/L       0.10505      9.9537 ppb        0.10505   1.06%
   QC value within limits for Mo 202.031  Recovery = 99.54%
Na 589.592 Radial†       816.7      274.08 ug/L        11.114      274.08 ppb         11.114   4.05%
   QC value within limits for Na 589.592 Radial  Recovery = 91.36%
Ni 231.604†              230.5      5.3334 ug/L       0.04181      5.3334 ppb        0.04181   0.78%
   QC value within limits for Ni 231.604  Recovery = 106.67%
P 214.914†               238.7      136.20 ug/L         4.184      136.20 ppb          4.184   3.07%
   QC value within limits for P 214.914  Recovery = 90.80%
Pb 220.353†               87.0      9.8839 ug/L       0.80722      9.8839 ppb        0.80722   8.17%
   QC value within limits for Pb 220.353  Recovery = 98.84%
S 181.975 Axial†          68.0      95.277 ug/L        0.5949      95.277 ppb         0.5949   0.62%
   QC value within limits for S 181.975 Axial  Recovery = 95.28%
Sb 206.836†               30.5      9.9256 ug/L       1.80229      9.9256 ppb        1.80229  18.16%
   QC value within limits for Sb 206.836  Recovery = 99.26%
Se 196.026†               61.8      36.189 ug/L        2.3479      36.189 ppb         2.3479   6.49%
   QC value within limits for Se 196.026  Recovery = 120.63%
Si 251.611†             3167.4      94.560 ug/L        0.4282      94.560 ppb         0.4282   0.45%
   QC value within limits for Si 251.611  Recovery = 94.56%
Sn 189.927†               64.9      10.648 ug/L        0.2117      10.648 ppb         0.2117   1.99%
   QC value within limits for Sn 189.927  Recovery = 106.48%
Sr 421.552†              802.0      4.9928 ug/L       0.13002      4.9928 ppb        0.13002   2.60%
   QC value within limits for Sr 421.552  Recovery = 99.86%
Ti 334.940†             3201.8      5.0952 ug/L       0.13476      5.0952 ppb        0.13476   2.64%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†               70.1      19.710 ug/L        1.1813      19.710 ppb         1.1813   5.99%
   QC value within limits for Tl 190.801  Recovery = 98.55%
U 409.014†              1915.6      52.745 ug/L        1.8523      52.745 ppb         1.8523   3.51%
   QC value within limits for U 409.014  Recovery = 105.49%
V 292.402†               757.4      5.2269 ug/L       0.03179      5.2269 ppb        0.03179   0.61%
   QC value within limits for V 292.402  Recovery = 104.54%
Zn 213.857†             1159.7      10.062 ug/L        0.0256      10.062 ppb         0.0256   0.25%
   QC value within limits for Zn 213.857  Recovery = 100.62%
SiO2†                   3287.9      210.35 ug/L         0.271      210.35 ppb          0.271   0.13%
   QC value within limits for SiO2  Recovery = 98.75%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/8/2009 08:22:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5189.8	5189.8	88.8	%			08:23:59
1	Y RADIAL	5590.3	5590.3	88.91	%			08:23:59
1	Al 396.153Radial†	669734.8	754172.3	523870	ug/L	523870	ppb	08:23:54
1	Ca 317.933Radial†	291928.0	328708.7	484500	ug/L	484500	ppb	08:23:54
1	Fe 238.204 Radial†	17643.1	19860.1	185930	ug/L	185930	ppb	08:23:59
1	K 766.490 Radial†	2220.3	148.4	42.540	ug/L	42.540	ppb	08:23:59
1	Mg 279.077 IEC†	12418.2	13982.3	493110	ug/L	493110	ppb	08:23:59
1	Na 589.592 Radial†	-979.9	-15.4	-5.1754	ug/L	-5.1754	ppb	08:23:59
1	Sr 421.552†	535.4	630.3	-0.5657	ug/L	-0.5657	ppb	08:23:59
1	Sc 361.383	776307.7	776307.7	86.135	%			08:24:26
1	Y 371.029	629776.0	629776.0	83.849	%			08:24:26
1	Ag 328.068†	-9607.7	-11447.0	0.2578	ug/L	0.2578	ppb	08:24:26
1	As 188.979†	-78.4	-66.9	2.0669	ug/L	2.0669	ppb	08:24:46
1	B 249.677†	446.4	1048.9	-2.6705	ug/L	-2.6705	ppb	08:24:26
1	Ba 233.527†	-463.0	-529.1	3.0093	ug/L	3.0093	ppb	08:24:46
1	Be 313.107†	-5475.2	-1243.6	-0.5072	ug/L	-0.5072	ppb	08:24:26
1	Cd 226.502†	1417.2	1840.4	0.8697	ug/L	0.8697	ppb	08:24:46
1	Co 228.616†	-13.4	49.8	-1.6911	ug/L	-1.6911	ppb	08:24:46
1	Cr 267.716†	-127.7	-226.9	0.9593	ug/L	0.9593	ppb	08:24:46
1	Cu 324.752†	3902.7	-2225.8	3.1148	ug/L	3.1148	ppb	08:24:26
1	Mn 257.610†	-402.3	-889.3	8.4088	ug/L	8.4088	ppb	08:24:26
1	Mo 202.031†	-211.4	-263.7	-3.5634	ug/L	-3.5634	ppb	08:24:46
1	Ni 231.604†	221.2	170.3	3.9419	ug/L	3.9419	ppb	08:24:46
1	P 214.914†	179.5	-15.1	18.966	ug/L	18.966	ppb	08:24:46
1	Pb 220.353†	-791.2	-850.1	6.1602	ug/L	6.1602	ppb	08:24:46
1	S 181.975 Axial†	83.0	54.8	-26.290	ug/L	-26.290	ppb	08:24:46
1	Sb 206.836†	63.7	39.7	-0.1476	ug/L	-0.1476	ppb	08:24:46
1	Se 196.026†	-1063.9	-1206.3	-16.785	ug/L	-16.785	ppb	08:24:46
1	Si 251.611†	453.6	76.9	2.8018	ug/L	2.8018	ppb	08:24:46
1	Sn 189.927†	-361.1	-424.2	-16.384	ug/L	-16.384	ppb	08:24:46
1	Ti 334.940†	-15761.9	-17184.0	-2.1640	ug/L	-2.1640	ppb	08:24:26
1	Tl 190.801†	-85.3	-66.6	-4.5522	ug/L	-4.5522	ppb	08:24:46
1	U 409.014†	-1013.4	1225.3	10.365	ug/L	10.365	ppb	08:24:26
1	V 292.402†	867.1	2365.0	-1.6778	ug/L	-1.6778	ppb	08:24:46
1	Zn 213.857†	3296.5	3205.3	-6.6524	ug/L	-6.6524	ppb	08:24:46
1	SiO2†	440.3	43.7	3.8863	ug/L	3.8863	ppb	08:25:43
2	Sc Radial	5172.2	5172.2	88.5	%			08:24:09
2	Y RADIAL	5524.2	5524.2	87.86	%			08:24:09
2	Al 396.153Radial†	671985.1	759276.6	527410	ug/L	527410	ppb	08:24:04
2	Ca 317.933Radial†	292632.2	330620.9	487320	ug/L	487320	ppb	08:24:04
2	Fe 238.204 Radial†	17633.3	19916.5	186450	ug/L	186450	ppb	08:24:09
2	K 766.490 Radial†	2182.2	113.9	36.591	ug/L	36.591	ppb	08:24:09
2	Mg 279.077 IEC†	12395.4	14004.0	493880	ug/L	493880	ppb	08:24:09
2	Na 589.592 Radial†	-942.9	22.6	7.5962	ug/L	7.5962	ppb	08:24:09
2	Sr 421.552†	494.0	585.5	-0.8709	ug/L	-0.8709	ppb	08:24:09
2	Sc 361.383	703840.2	703840.2	78.095	%			08:24:52
2	Y 371.029	571920.7	571920.7	76.146	%			08:24:52
2	Ag 328.068†	-9831.3	-12881.6	-6.1038	ug/L	-6.1038	ppb	08:24:52
2	As 188.979†	-85.5	-85.3	-5.1682	ug/L	-5.1682	ppb	08:25:12
2	B 249.677†	361.2	993.2	-3.9085	ug/L	-3.9085	ppb	08:24:52
2	Ba 233.527†	-536.2	-678.2	1.9266	ug/L	1.9266	ppb	08:25:12
2	Be 313.107†	-5405.9	-1809.3	-0.7211	ug/L	-0.7211	ppb	08:24:52
2	Cd 226.502†	1474.1	2082.7	3.3788	ug/L	3.3788	ppb	08:25:12
2	Co 228.616†	-20.8	38.8	-1.9097	ug/L	-1.9097	ppb	08:25:12
2	Cr 267.716†	-87.7	-191.0	1.3502	ug/L	1.3502	ppb	08:25:12
2	Cu 324.752†	3771.0	-1927.9	3.9942	ug/L	3.9942	ppb	08:24:52
2	Mn 257.610†	-522.6	-1091.4	8.2316	ug/L	8.2316	ppb	08:24:52
2	Mo 202.031†	-238.1	-323.2	-7.3030	ug/L	-7.3030	ppb	08:25:12
2	Ni 231.604†	205.0	175.9	4.0727	ug/L	4.0727	ppb	08:25:12

2	P 214.914†	142.8	-40.6	4.8366 ug/L	4.8366 ppb	08:25:12
2	Pb 220.353†	-811.4	-970.5	-6.7096 ug/L	-6.7096 ppb	08:25:12
2	S 181.975 Axial†	82.5	64.0	-14.051 ug/L	-14.051 ppb	08:25:12
2	Sb 206.836†	80.0	68.2	8.6688 ug/L	8.6688 ppb	08:25:12
2	Se 196.026†	-1075.3	-1348.1	-96.472 ug/L	-96.472 ppb	08:25:12
2	Si 251.611†	393.7	54.5	2.2031 ug/L	2.2031 ppb	08:25:12
2	Sn 189.927†	-335.1	-434.1	-17.705 ug/L	-17.705 ppb	08:25:12
2	Ti 334.940†	-16209.8	-19641.7	-5.9362 ug/L	-5.9362 ppb	08:24:52
2	Tl 190.801†	-76.2	-65.1	-4.0711 ug/L	-4.0711 ppb	08:25:12
2	U 409.014†	-1109.0	981.8	3.5914 ug/L	3.5914 ppb	08:24:52
2	V 292.402†	911.5	2525.6	-0.7433 ug/L	-0.7433 ppb	08:25:12
2	Zn 213.857†	3324.6	3635.3	-2.9743 ug/L	-2.9743 ppb	08:25:12
2	SiO2†	494.5	165.8	11.879 ug/L	11.879 ppb	08:25:48
3	Sc Radial	5341.1	5341.1	91.4 %		08:24:20
3	Y RADIAL	5696.8	5696.8	90.60 %		08:24:20
3	Al 396.153Radial†	668773.5	731756.6	508300 ug/L	508300 ppb	08:24:14
3	Ca 317.933Radial†	291429.1	318850.6	469970 ug/L	469970 ppb	08:24:14
3	Fe 238.204 Radial†	17266.5	18885.3	176800 ug/L	176800 ppb	08:24:20
3	K 766.490 Radial†	2229.6	87.8	31.346 ug/L	31.346 ppb	08:24:20
3	Mg 279.077 IEC†	12175.8	13320.9	469790 ug/L	469790 ppb	08:24:20
3	Na 589.592 Radial†	-901.3	101.7	34.145 ug/L	34.145 ppb	08:24:20
3	Sr 421.552†	505.0	579.9	-0.7448 ug/L	-0.7448 ppb	08:24:20
3	Sc 361.383	766708.2	766708.2	85.070 %		08:25:17
3	Y 371.029	621737.7	621737.7	82.779 %		08:25:17
3	Ag 328.068†	-9560.5	-11531.1	-2.8107 ug/L	-2.8107 ppb	08:25:17
3	As 188.979†	-93.2	-85.4	-6.6566 ug/L	-6.6566 ppb	08:25:37
3	B 249.677†	425.5	1030.8	-1.8388 ug/L	-1.8388 ppb	08:25:17
3	Ba 233.527†	-496.6	-575.2	2.3293 ug/L	2.3293 ppb	08:25:37
3	Be 313.107†	-5346.4	-1171.7	-0.4819 ug/L	-0.4819 ppb	08:25:17
3	Cd 226.502†	1451.3	1901.1	2.4241 ug/L	2.4241 ppb	08:25:37
3	Co 228.616†	-9.2	54.7	-1.4754 ug/L	-1.4754 ppb	08:25:37
3	Cr 267.716†	-93.8	-188.9	1.1967 ug/L	1.1967 ppb	08:25:37
3	Cu 324.752†	3834.9	-2248.8	2.5836 ug/L	2.5836 ppb	08:25:17
3	Mn 257.610†	-380.3	-869.3	7.9544 ug/L	7.9544 ppb	08:25:17
3	Mo 202.031†	-241.1	-301.8	-6.6288 ug/L	-6.6288 ppb	08:25:37
3	Ni 231.604†	204.1	153.3	3.5498 ug/L	3.5498 ppb	08:25:37
3	P 214.914†	162.7	-32.3	11.143 ug/L	11.143 ppb	08:25:37
3	Pb 220.353†	-803.2	-875.7	0.5132 ug/L	0.5132 ppb	08:25:37
3	S 181.975 Axial†	75.6	47.3	-33.723 ug/L	-33.723 ppb	08:25:37
3	Sb 206.836†	59.7	36.0	-1.1159 ug/L	-1.1159 ppb	08:25:37
3	Se 196.026†	-1060.8	-1218.2	-55.253 ug/L	-55.253 ppb	08:25:37
3	Si 251.611†	410.8	33.3	1.5399 ug/L	1.5399 ppb	08:25:37
3	Sn 189.927†	-354.6	-421.8	-17.629 ug/L	-17.629 ppb	08:25:37
3	Ti 334.940†	-15808.1	-17467.5	-3.3724 ug/L	-3.3724 ppb	08:25:17
3	Tl 190.801†	-85.2	-67.6	-5.2665 ug/L	-5.2665 ppb	08:25:37
3	U 409.014†	-1140.9	1060.7	6.9789 ug/L	6.9789 ppb	08:25:17
3	V 292.402†	872.8	2384.3	-0.7314 ug/L	-0.7314 ppb	08:25:37
3	Zn 213.857†	3339.7	3304.0	-4.1173 ug/L	-4.1173 ppb	08:25:37
3	SiO2†	414.5	19.8	2.4542 ug/L	2.4542 ppb	08:25:53

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	748952.0	83.100	%	4.3674				5.26%
Sc Radial	5234.3	89.6	%	1.59				1.77%
Y 371.029	607811.5	80.925	%	4.1728				5.16%
Y RADIAL	5603.8	89.12	%	1.385				1.55%
Ag 328.068†	-11953.2	-2.8856	ug/L	3.18143	-2.8856	ppb	3.18143	110.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	748401.9	519860	ug/L	10168.8	519860	ppb	10168.8	1.96%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	-79.2	-3.2526	ug/L	4.66656	-3.2526	ppb	4.66656	143.47%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1024.3	-2.8059	ug/L	1.04145	-2.8059	ppb	1.04145	37.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-594.2	2.4218	ug/L	0.54724	2.4218	ppb	0.54724	22.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1408.2	-0.5701	ug/L	0.13141	-0.5701	ppb	0.13141	23.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	326060.1	480590	ug/L	9310.0	480590	ppb	9310.0	1.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.12%
Cd 226.502†            1941.4      2.2242 ug/L       1.26642      2.2242 ppb        1.26642  56.94%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              47.8     -1.6920 ug/L       0.21716     -1.6920 ppb        0.21716  12.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -202.3      1.1687 ug/L       0.19695      1.1687 ppb        0.19695  16.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2134.2      3.2308 ug/L       0.71244      3.2308 ppb        0.71244  22.05%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    19554.0      183060 ug/L        5428.0      183060 ppb         5428.0   2.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.53%
K 766.490 Radial†       116.7      36.826 ug/L        5.6005      36.826 ppb         5.6005  15.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       13769.1      485590 ug/L       13692.7      485590 ppb        13692.7   2.82%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.12%
Mn 257.610†            -950.0      8.1983 ug/L       0.22901      8.1983 ppb        0.22901   2.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -296.2     -5.8318 ug/L       1.99315     -5.8318 ppb        1.99315  34.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       36.3      12.189 ug/L       20.0583      12.189 ppb        20.0583 164.57%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             166.5      3.8548 ug/L       0.27213      3.8548 ppb        0.27213   7.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -29.3      11.648 ug/L        7.0781      11.648 ppb         7.0781  60.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -898.8     -0.0121 ug/L       6.45097     -0.0121 ppb        6.45097 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         55.4     -24.688 ug/L        9.9331     -24.688 ppb         9.9331  40.23%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              48.0      2.4684 ug/L       5.39148      2.4684 ppb        5.39148 218.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1257.5     -56.170 ug/L       39.8514     -56.170 ppb        39.8514  70.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              54.9      2.1816 ug/L       0.63120      2.1816 ppb        0.63120  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -426.7     -17.239 ug/L        0.7416     -17.239 ppb         0.7416   4.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             598.5     -0.7271 ug/L       0.15335     -0.7271 ppb        0.15335  21.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -18097.7     -3.8242 ug/L       1.92624     -3.8242 ppb        1.92624  50.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -66.4     -4.6299 ug/L       0.60148     -4.6299 ppb        0.60148  12.99%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1089.2      6.9786 ug/L       3.38696      6.9786 ppb        3.38696  48.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2425.0     -1.0508 ug/L       0.54301     -1.0508 ppb        0.54301  51.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            3381.5     -4.5813 ug/L       1.88241     -4.5813 ppb        1.88241  41.09%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    76.4      6.0733 ug/L       5.07889      6.0733 ppb        5.07889  83.63%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/8/2009 08:28:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5678.5	5678.5	97.2	%			08:30:02
1	Y RADIAL	6082.3	6082.3	96.73	%			08:30:02
1	Al 396.153Radial†	666388.7	685819.7	476370	ug/L	476370	ppb	08:29:57
1	Ca 317.933Radial†	290269.6	298709.0	440280	ug/L	440280	ppb	08:29:57
1	Fe 238.204 Radial†	17682.4	18190.6	170310	ug/L	170310	ppb	08:30:02
1	K 766.490 Radial†	30306.4	28837.4	5122.4	ug/L	5122.4	ppb	08:29:57
1	Mg 279.077 IEC†	12380.2	12739.7	449300	ug/L	449300	ppb	08:30:02
1	Na 589.592 Radial†	12920.7	14385.0	4827.3	ug/L	4827.3	ppb	08:30:02
1	Sr 421.552†	73414.3	75580.0	466.61	ug/L	466.61	ppb	08:29:57
1	Sc 361.383	798852.1	798852.1	88.637	%			08:30:29
1	Y 371.029	647271.7	647271.7	86.178	%			08:30:29
1	Ag 328.068†	42822.1	48019.2	266.81	ug/L	266.81	ppb	08:30:29
1	As 188.979†	1018.7	1173.4	493.46	ug/L	493.46	ppb	08:30:50
1	B 249.677†	21666.1	24974.3	500.05	ug/L	500.05	ppb	08:30:29
1	Ba 233.527†	57014.2	64331.8	484.23	ug/L	484.23	ppb	08:30:29
1	Be 313.107†	576364.8	655367.2	239.84	ug/L	239.84	ppb	08:30:29
1	Cd 226.502†	38769.0	43934.3	447.70	ug/L	447.70	ppb	08:30:50
1	Co 228.616†	20156.9	22806.4	430.59	ug/L	430.59	ppb	08:30:50
1	Cr 267.716†	39430.2	44406.4	469.93	ug/L	469.93	ppb	08:30:29
1	Cu 324.752†	171408.3	186626.0	542.76	ug/L	542.76	ppb	08:30:29
1	Mn 257.610†	389330.6	438820.1	476.72	ug/L	476.72	ppb	08:30:29
1	Mo 202.031†	6497.4	7312.0	476.58	ug/L	476.58	ppb	08:30:50
1	Ni 231.604†	16695.5	18749.2	433.89	ug/L	433.89	ppb	08:30:50
1	P 214.914†	3977.5	4263.9	2403.3	ug/L	2403.3	ppb	08:30:50
1	Pb 220.353†	2698.9	3113.3	445.59	ug/L	445.59	ppb	08:30:50
1	S 181.975 Axial†	1732.0	1912.5	2586.2	ug/L	2586.2	ppb	08:30:50
1	Sb 206.836†	1484.7	1640.8	514.93	ug/L	514.93	ppb	08:30:50
1	Se 196.026†	2736.6	3116.2	2426.1	ug/L	2426.1	ppb	08:30:50
1	Si 251.611†	152690.0	171815.1	5132.3	ug/L	5132.3	ppb	08:30:29
1	Sn 189.927†	2275.0	2561.6	467.67	ug/L	467.67	ppb	08:30:50
1	Ti 334.940†	268963.2	304558.9	508.60	ug/L	508.60	ppb	08:30:29
1	Tl 190.801†	1347.6	1552.8	451.07	ug/L	451.07	ppb	08:30:50
1	U 409.014†	13644.1	17795.1	467.88	ug/L	467.88	ppb	08:30:29
1	V 292.402†	66527.3	76414.4	495.81	ug/L	495.81	ppb	08:30:29
1	Zn 213.857†	52450.8	58553.1	476.49	ug/L	476.49	ppb	08:30:29
1	SiO2†	152506.2	171589.9	10983	ug/L	10983	ppb	08:31:47
2	Sc Radial	5253.3	5253.3	89.9	%			08:30:12
2	Y RADIAL	5660.3	5660.3	90.02	%			08:30:12
2	Al 396.153Radial†	669134.5	744386.3	517050	ug/L	517050	ppb	08:30:07
2	Ca 317.933Radial†	291040.4	323746.7	477180	ug/L	477180	ppb	08:30:07
2	Fe 238.204 Radial†	17943.6	19954.2	186820	ug/L	186820	ppb	08:30:12
2	K 766.490 Radial†	30260.5	31311.0	5562.1	ug/L	5562.1	ppb	08:30:07
2	Mg 279.077 IEC†	12561.2	13972.3	492770	ug/L	492770	ppb	08:30:12
2	Na 589.592 Radial†	13114.0	15676.3	5260.7	ug/L	5260.7	ppb	08:30:12
2	Sr 421.552†	73629.2	81934.7	505.84	ug/L	505.84	ppb	08:30:07
2	Sc 361.383	796712.5	796712.5	88.399	%			08:30:55
2	Y 371.029	643552.7	643552.7	85.683	%			08:30:55
2	Ag 328.068†	42735.7	48051.2	271.67	ug/L	271.67	ppb	08:30:55
2	As 188.979†	1015.2	1172.6	495.72	ug/L	495.72	ppb	08:31:16
2	B 249.677†	21486.0	24836.2	494.95	ug/L	494.95	ppb	08:30:55
2	Ba 233.527†	57186.8	64699.9	487.57	ug/L	487.57	ppb	08:30:55
2	Be 313.107†	575113.2	655697.7	239.96	ug/L	239.96	ppb	08:30:55
2	Cd 226.502†	38833.6	44124.8	448.06	ug/L	448.06	ppb	08:31:16
2	Co 228.616†	20227.1	22946.9	433.02	ug/L	433.02	ppb	08:31:16
2	Cr 267.716†	39521.6	44629.3	472.56	ug/L	472.56	ppb	08:30:55
2	Cu 324.752†	171480.3	187226.7	545.32	ug/L	545.32	ppb	08:30:55
2	Mn 257.610†	391057.2	441952.9	480.90	ug/L	480.90	ppb	08:30:55
2	Mo 202.031†	6536.7	7376.1	481.83	ug/L	481.83	ppb	08:31:16
2	Ni 231.604†	16709.6	18815.9	435.43	ug/L	435.43	ppb	08:31:16

2	P 214.914†	3949.7	4244.6	2392.4 ug/L	2392.4 ppb	08:31:16
2	Pb 220.353†	2735.7	3163.2	459.01 ug/L	459.01 ppb	08:31:16
2	S 181.975 Axial†	1746.4	1934.0	2608.4 ug/L	2608.4 ppb	08:31:16
2	Sb 206.836†	1494.1	1656.0	518.97 ug/L	518.97 ppb	08:31:16
2	Se 196.026†	2715.8	3101.0	2476.7 ug/L	2476.7 ppb	08:31:16
2	Si 251.611†	153211.3	172867.4	5163.6 ug/L	5163.6 ppb	08:30:55
2	Sn 189.927†	2278.8	2572.8	473.58 ug/L	473.58 ppb	08:31:16
2	Ti 334.940†	269939.9	306478.8	513.59 ug/L	513.59 ppb	08:30:55
2	Tl 190.801†	1329.2	1536.1	447.53 ug/L	447.53 ppb	08:31:16
2	U 409.014†	13777.1	17986.9	471.08 ug/L	471.08 ppb	08:30:55
2	V 292.402†	66665.8	76772.6	496.71 ug/L	496.71 ppb	08:30:55
2	Zn 213.857†	52594.9	58875.0	476.22 ug/L	476.22 ppb	08:30:55
2	SiO2†	151895.1	171360.7	10968 ug/L	10968 ppb	08:31:52
3	Sc Radial	5329.5	5329.5	91.2 %		08:30:22
3	Y RADIAL	5716.9	5716.9	90.92 %		08:30:22
3	Al 396.153Radial†	656419.4	719803.9	499970 ug/L	499970 ppb	08:30:17
3	Ca 317.933Radial†	287241.2	314952.9	464220 ug/L	464220 ppb	08:30:17
3	Fe 238.204 Radial†	17841.4	19556.9	183100 ug/L	183100 ppb	08:30:22
3	K 766.490 Radial†	29973.6	30515.2	5420.2 ug/L	5420.2 ppb	08:30:17
3	Mg 279.077 IEC†	12509.3	13715.6	483720 ug/L	483720 ppb	08:30:22
3	Na 589.592 Radial†	13157.8	15515.9	5206.8 ug/L	5206.8 ppb	08:30:22
3	Sr 421.552†	72231.6	79231.4	489.13 ug/L	489.13 ppb	08:30:17
3	Sc 361.383	790190.3	790190.3	87.676 %		08:31:21
3	Y 371.029	639607.1	639607.1	85.158 %		08:31:21
3	Ag 328.068†	42287.3	47938.8	270.17 ug/L	270.17 ppb	08:31:21
3	As 188.979†	1035.6	1205.4	508.07 ug/L	508.07 ppb	08:31:42
3	B 249.677†	21305.2	24830.6	495.33 ug/L	495.33 ppb	08:31:21
3	Ba 233.527†	56590.8	64554.0	486.35 ug/L	486.35 ppb	08:31:21
3	Be 313.107†	570088.1	655336.1	239.83 ug/L	239.83 ppb	08:31:21
3	Cd 226.502†	38615.9	44239.1	449.65 ug/L	449.65 ppb	08:31:42
3	Co 228.616†	20126.4	23020.9	434.49 ug/L	434.49 ppb	08:31:42
3	Cr 267.716†	39221.0	44655.5	472.77 ug/L	472.77 ppb	08:31:21
3	Cu 324.752†	169737.3	186839.9	544.02 ug/L	544.02 ppb	08:31:21
3	Mn 257.610†	386530.2	440441.0	479.09 ug/L	479.09 ppb	08:31:21
3	Mo 202.031†	6526.6	7425.7	484.71 ug/L	484.71 ppb	08:31:42
3	Ni 231.604†	16652.9	18907.1	437.54 ug/L	437.54 ppb	08:31:42
3	P 214.914†	3959.3	4292.4	2417.3 ug/L	2417.3 ppb	08:31:42
3	Pb 220.353†	2673.5	3117.8	450.36 ug/L	450.36 ppb	08:31:42
3	S 181.975 Axial†	1725.8	1926.8	2601.6 ug/L	2601.6 ppb	08:31:42
3	Sb 206.836†	1474.2	1647.1	516.57 ug/L	516.57 ppb	08:31:42
3	Se 196.026†	2692.7	3100.1	2461.3 ug/L	2461.3 ppb	08:31:42
3	Si 251.611†	151474.4	172316.8	5147.1 ug/L	5147.1 ppb	08:31:21
3	Sn 189.927†	2237.1	2546.5	467.87 ug/L	467.87 ppb	08:31:42
3	Ti 334.940†	267030.2	305680.5	511.64 ug/L	511.64 ppb	08:31:21
3	Tl 190.801†	1335.4	1555.6	452.50 ug/L	452.50 ppb	08:31:42
3	U 409.014†	13591.7	17904.1	469.27 ug/L	469.27 ppb	08:31:21
3	V 292.402†	65923.7	76548.7	495.64 ug/L	495.64 ppb	08:31:21
3	Zn 213.857†	51997.0	58684.2	475.21 ug/L	475.21 ppb	08:31:21
3	SiO2†	151961.7	172854.8	11064 ug/L	11064 ppb	08:31:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	795251.6	88.237	%	0.5006				0.57%
Sc Radial	5420.4	92.8	%	3.88				4.18%
Y 371.029	643477.2	85.673	%	0.5103				0.60%
Y RADIAL	5819.8	92.56	%	3.643				3.94%
Ag 328.068†	48003.0	269.55	ug/L	2.490	269.55	ppb	2.490	0.92%
QC value within limits for Ag 328.068 Recovery = 107.82%								
Al 396.153Radial†	716670.0	497800	ug/L	20427.9	497800	ppb	20427.9	4.10%
QC value within limits for Al 396.153Radial Recovery = 99.56%								
As 188.979†	1183.8	499.08	ug/L	7.867	499.08	ppb	7.867	1.58%
QC value within limits for As 188.979 Recovery = 99.82%								
B 249.677†	24880.4	496.78	ug/L	2.839	496.78	ppb	2.839	0.57%
QC value within limits for B 249.677 Recovery = 99.36%								
Ba 233.527†	64528.6	486.05	ug/L	1.693	486.05	ppb	1.693	0.35%
QC value within limits for Ba 233.527 Recovery = 97.21%								
Be 313.107†	655467.0	239.88	ug/L	0.075	239.88	ppb	0.075	0.03%
QC value within limits for Be 313.107 Recovery = 95.95%								
Ca 317.933Radial†	312469.5	460560	ug/L	18722.4	460560	ppb	18722.4	4.07%

QC value within limits for Ca 317.933Radial Recovery = 92.11%

Cd 226.502†	44099.4	448.47 ug/L	1.035	448.47 ppb	1.035	0.23%

QC value within limits for Cd 226.502 Recovery = 89.69%

Co 228.616†	22924.7	432.70 ug/L	1.971	432.70 ppb	1.971	0.46%

QC value within limits for Co 228.616 Recovery = 86.54%

Cr 267.716†	44563.7	471.75 ug/L	1.586	471.75 ppb	1.586	0.34%

QC value within limits for Cr 267.716 Recovery = 94.35%

Cu 324.752†	186897.5	544.03 ug/L	1.281	544.03 ppb	1.281	0.24%

QC value within limits for Cu 324.752 Recovery = 108.81%

Fe 238.204 Radial†	19233.9	180080 ug/L	8660.4	180080 ppb	8660.4	4.81%

QC value within limits for Fe 238.204 Radial Recovery = 90.04%

K 766.490 Radial†	30221.2	5368.2 ug/L	224.43	5368.2 ppb	224.43	4.18%

QC value within limits for K 766.490 Radial Recovery = 107.36%

Mg 279.077 IEC†	13475.9	475260 ug/L	22935.4	475260 ppb	22935.4	4.83%

QC value within limits for Mg 279.077 IEC Recovery = 95.05%

Mn 257.610†	440404.7	478.90 ug/L	2.095	478.90 ppb	2.095	0.44%

QC value within limits for Mn 257.610 Recovery = 95.78%

Mo 202.031†	7371.3	481.04 ug/L	4.122	481.04 ppb	4.122	0.86%

QC value within limits for Mo 202.031 Recovery = 96.21%

Na 589.592 Radial†	15192.4	5098.3 ug/L	236.19	5098.3 ppb	236.19	4.63%

QC value within limits for Na 589.592 Radial Recovery = 101.97%

Ni 231.604†	18824.1	435.62 ug/L	1.834	435.62 ppb	1.834	0.42%

QC value within limits for Ni 231.604 Recovery = 87.12%

P 214.914†	4266.9	2404.3 ug/L	12.48	2404.3 ppb	12.48	0.52%

QC value within limits for P 214.914 Recovery = 96.17%

Pb 220.353†	3131.4	451.66 ug/L	6.802	451.66 ppb	6.802	1.51%

QC value within limits for Pb 220.353 Recovery = 90.33%

S 181.975 Axial†	1924.4	2598.7 ug/L	11.39	2598.7 ppb	11.39	0.44%

QC value within limits for S 181.975 Axial Recovery = 103.95%

Sb 206.836†	1648.0	516.82 ug/L	2.030	516.82 ppb	2.030	0.39%

QC value within limits for Sb 206.836 Recovery = 103.36%

Se 196.026†	3105.8	2454.7 ug/L	25.95	2454.7 ppb	25.95	1.06%

QC value within limits for Se 196.026 Recovery = 98.19%

Si 251.611†	172333.1	5147.7 ug/L	15.65	5147.7 ppb	15.65	0.30%

QC value within limits for Si 251.611 Recovery = 102.95%

Sn 189.927†	2560.3	469.70 ug/L	3.357	469.70 ppb	3.357	0.71%

QC value within limits for Sn 189.927 Recovery = 93.94%

Sr 421.552†	78915.4	487.20 ug/L	19.688	487.20 ppb	19.688	4.04%

QC value within limits for Sr 421.552 Recovery = 97.44%

Ti 334.940†	305572.7	511.28 ug/L	2.512	511.28 ppb	2.512	0.49%

QC value within limits for Ti 334.940 Recovery = 102.26%

Tl 190.801†	1548.2	450.37 ug/L	2.558	450.37 ppb	2.558	0.57%

QC value within limits for Tl 190.801 Recovery = 90.07%

U 409.014†	17895.4	469.41 ug/L	1.606	469.41 ppb	1.606	0.34%

QC value within limits for U 409.014 Recovery = 93.88%

V 292.402†	76578.6	496.05 ug/L	0.577	496.05 ppb	0.577	0.12%

QC value within limits for V 292.402 Recovery = 99.21%

Zn 213.857†	58704.1	475.97 ug/L	0.675	475.97 ppb	0.675	0.14%

QC value within limits for Zn 213.857 Recovery = 95.19%

SiO2†	171935.1	11005 ug/L	51.5	11005 ppb	51.5	0.47%

QC value within limits for SiO2 Recovery = 102.90%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/8/2009 08:34:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5000.9	5000.9	85.6	%			08:36:06
1	Y RADIAL	5375.7	5375.7	85.49	%			08:36:06
1	Al 396.153Radial†	649764.4	759313.3	527440	ug/L	527440	ppb	08:36:01
1	Ca 317.933Radial†	281096.4	328464.2	484140	ug/L	484140	ppb	08:36:01
1	Fe 238.204 Radial†	39476.3	46123.9	431800	ug/L	431800	ppb	08:36:06
1	K 766.490 Radial†	3503.5	1742.3	121.03	ug/L	121.03	ppb	08:36:06
1	Mg 279.077 IEC†	11841.5	13836.5	487760	ug/L	487760	ppb	08:36:06
1	Na 589.592 Radial†	1231875.6	1440616.5	483440	ug/L	483440	ppb	08:36:01
1	Sr 421.552†	695.9	840.5	0.7472	ug/L	0.7472	ppb	08:36:06
1	Sc 361.383	771300.7	771300.7	85.580	%			08:36:34
1	Y 371.029	626017.5	626017.5	83.349	%			08:36:34
1	Ag 328.068†	-22719.5	-26840.4	-3.2200	ug/L	-3.2200	ppb	08:36:34
1	As 188.979†	-207.8	-218.6	-19.790	ug/L	-19.790	ppb	08:36:54
1	B 249.677†	1415.1	2184.2	-11.491	ug/L	-11.491	ppb	08:36:34
1	Ba 233.527†	-1526.8	-1775.6	2.9110	ug/L	2.9110	ppb	08:36:54
1	Be 313.107†	-11993.9	-8901.9	-3.2741	ug/L	-3.2741	ppb	08:36:34
1	Cd 226.502†	3639.7	4448.1	3.8564	ug/L	3.8564	ppb	08:36:54
1	Co 228.616†	198.8	297.7	-0.5794	ug/L	-0.5794	ppb	08:36:54
1	Cr 267.716†	123.2	65.3	3.8985	ug/L	3.8985	ppb	08:36:54
1	Cu 324.752†	1091.9	-5480.9	6.3424	ug/L	6.3424	ppb	08:36:34
1	Mn 257.610†	-25668.8	-30416.2	1.5267	ug/L	1.5267	ppb	08:36:34
1	Mo 202.031†	-493.2	-594.6	-7.1425	ug/L	-7.1425	ppb	08:36:54
1	Ni 231.604†	283.8	245.0	5.6702	ug/L	5.6702	ppb	08:36:54
1	P 214.914†	594.9	471.6	103.98	ug/L	103.98	ppb	08:36:54
1	Pb 220.353†	-558.6	-584.3	16.782	ug/L	16.782	ppb	08:36:54
1	S 181.975 Axial†	112.6	90.0	22.368	ug/L	22.368	ppb	08:36:54
1	Sb 206.836†	65.0	41.7	3.7037	ug/L	3.7037	ppb	08:36:54
1	Se 196.026†	-2484.6	-2874.4	-206.03	ug/L	-206.03	ppb	08:36:54
1	Si 251.611†	-583.5	-1131.5	-33.075	ug/L	-33.075	ppb	08:36:54
1	Sn 189.927†	-400.0	-472.4	-21.025	ug/L	-21.025	ppb	08:36:54
1	Ti 334.940†	-8964.2	-9359.7	4.0726	ug/L	4.0726	ppb	08:36:34
1	Tl 190.801†	-104.9	-90.1	-11.168	ug/L	-11.168	ppb	08:36:54
1	U 409.014†	437392.5	513494.5	14091	ug/L	14091	ppb	08:36:34
1	V 292.402†	2035.5	3736.8	-3.0468	ug/L	-3.0468	ppb	08:36:54
1	Zn 213.857†	6171.5	6589.6	-0.3854	ug/L	-0.3854	ppb	08:36:54
1	SiO2†	-667.1	-1247.0	-78.271	ug/L	-78.271	ppb	08:37:51
2	Sc Radial	5047.1	5047.1	86.4	%			08:36:16
2	Y RADIAL	5379.7	5379.7	85.56	%			08:36:16
2	Al 396.153Radial†	648919.6	751395.2	521940	ug/L	521940	ppb	08:36:11
2	Ca 317.933Radial†	280281.3	324518.2	478320	ug/L	478320	ppb	08:36:11
2	Fe 238.204 Radial†	39267.0	45459.9	425590	ug/L	425590	ppb	08:36:16
2	K 766.490 Radial†	3384.7	1567.4	92.631	ug/L	92.631	ppb	08:36:16
2	Mg 279.077 IEC†	11734.0	13585.5	478910	ug/L	478910	ppb	08:36:16
2	Na 589.592 Radial†	1226896.0	1421693.4	477090	ug/L	477090	ppb	08:36:11
2	Sr 421.552†	705.7	844.5	0.8257	ug/L	0.8257	ppb	08:36:16
2	Sc 361.383	760812.5	760812.5	84.416	%			08:36:59
2	Y 371.029	617644.0	617644.0	82.234	%			08:36:59
2	Ag 328.068†	-22429.0	-26862.3	-5.1840	ug/L	-5.1840	ppb	08:36:59
2	As 188.979†	-197.3	-209.6	-17.174	ug/L	-17.174	ppb	08:37:19
2	B 249.677†	1451.0	2249.6	-9.2958	ug/L	-9.2958	ppb	08:36:59
2	Ba 233.527†	-1497.0	-1764.9	2.7630	ug/L	2.7630	ppb	08:37:19
2	Be 313.107†	-11778.7	-8840.1	-3.2506	ug/L	-3.2506	ppb	08:36:59
2	Cd 226.502†	3625.7	4490.2	4.9226	ug/L	4.9226	ppb	08:37:19
2	Co 228.616†	200.5	302.9	-0.4003	ug/L	-0.4003	ppb	08:37:19
2	Cr 267.716†	67.3	1.1	3.1242	ug/L	3.1242	ppb	08:37:19
2	Cu 324.752†	1131.9	-5415.9	6.2112	ug/L	6.2112	ppb	08:36:59
2	Mn 257.610†	-25098.4	-30154.0	1.3513	ug/L	1.3513	ppb	08:36:59
2	Mo 202.031†	-524.4	-639.6	-10.441	ug/L	-10.441	ppb	08:37:19
2	Ni 231.604†	280.4	245.7	5.6851	ug/L	5.6851	ppb	08:37:19

2	P 214.914†	587.8	472.7	107.76	ug/L	107.76 ppb	08:37:19
2	Pb 220.353†	-552.6	-586.2	15.843	ug/L	15.843 ppb	08:37:19
2	S 181.975 Axial†	102.3	79.6	8.8127	ug/L	8.8127 ppb	08:37:19
2	Sb 206.836†	51.5	26.8	-0.9806	ug/L	-0.9806 ppb	08:37:19
2	Se 196.026†	-2486.1	-2916.3	-250.79	ug/L	-250.79 ppb	08:37:19
2	Si 251.611†	-513.5	-1058.0	-30.818	ug/L	-30.818 ppb	08:37:19
2	Sn 189.927†	-389.4	-466.3	-20.709	ug/L	-20.709 ppb	08:37:19
2	Ti 334.940†	-8570.3	-9037.5	4.2951	ug/L	4.2951 ppb	08:36:59
2	Tl 190.801†	-106.2	-93.3	-12.214	ug/L	-12.214 ppb	08:37:19
2	U 409.014†	430645.6	512547.8	14066	ug/L	14066 ppb	08:36:59
2	V 292.402†	2197.4	3961.4	-0.9096	ug/L	-0.9096 ppb	08:37:19
2	Zn 213.857†	6159.1	6674.3	1.2507	ug/L	1.2507 ppb	08:37:19
2	SiO2†	-605.6	-1184.9	-74.162	ug/L	-74.162 ppb	08:37:56
3	Sc Radial	5165.7	5165.7	88.4	%		08:36:27
3	Y RADIAL	5522.4	5522.4	87.83	%		08:36:27
3	Al 396.153Radial†	642891.5	727321.1	505220	ug/L	505220 ppb	08:36:21
3	Ca 317.933Radial†	278315.4	314841.6	464060	ug/L	464060 ppb	08:36:21
3	Fe 238.204 Radial†	39710.3	44917.3	420510	ug/L	420510 ppb	08:36:27
3	K 766.490 Radial†	3439.3	1539.1	94.417	ug/L	94.417 ppb	08:36:27
3	Mg 279.077 IEC†	11899.8	13461.0	474520	ug/L	474520 ppb	08:36:27
3	Na 589.592 Radial†	1210113.3	1370084.6	459770	ug/L	459770 ppb	08:36:21
3	Sr 421.552†	717.5	839.1	0.9243	ug/L	0.9243 ppb	08:36:27
3	Sc 361.383	772776.7	772776.7	85.744	%		08:37:25
3	Y 371.029	625753.3	625753.3	83.313	%		08:37:25
3	Ag 328.068†	-22889.6	-26988.2	-7.1932	ug/L	-7.1932 ppb	08:37:25
3	As 188.979†	-196.3	-204.7	-16.043	ug/L	-16.043 ppb	08:37:45
3	B 249.677†	1532.1	2317.5	-7.1964	ug/L	-7.1964 ppb	08:37:25
3	Ba 233.527†	-1572.7	-1825.8	2.1229	ug/L	2.1229 ppb	08:37:45
3	Be 313.107†	-12043.2	-8932.6	-3.2847	ug/L	-3.2847 ppb	08:37:25
3	Cd 226.502†	3599.9	4393.5	4.4090	ug/L	4.4090 ppb	08:37:45
3	Co 228.616†	199.7	298.3	-0.4121	ug/L	-0.4121 ppb	08:37:45
3	Cr 267.716†	74.0	7.7	3.0910	ug/L	3.0910 ppb	08:37:45
3	Cu 324.752†	1115.2	-5456.1	5.8371	ug/L	5.8371 ppb	08:37:25
3	Mn 257.610†	-25593.9	-30271.7	0.8010	ug/L	0.8010 ppb	08:37:25
3	Mo 202.031†	-517.6	-622.0	-9.6842	ug/L	-9.6842 ppb	08:37:45
3	Ni 231.604†	292.4	254.5	5.8899	ug/L	5.8899 ppb	08:37:45
3	P 214.914†	577.1	449.5	92.795	ug/L	92.795 ppb	08:37:45
3	Pb 220.353†	-556.8	-581.0	13.099	ug/L	13.099 ppb	08:37:45
3	S 181.975 Axial†	91.4	65.0	-8.2624	ug/L	-8.2624 ppb	08:37:45
3	Sb 206.836†	35.6	7.3	-6.7597	ug/L	-6.7597 ppb	08:37:45
3	Se 196.026†	-2465.4	-2846.5	-229.50	ug/L	-229.50 ppb	08:37:45
3	Si 251.611†	-520.1	-1056.3	-30.784	ug/L	-30.784 ppb	08:37:45
3	Sn 189.927†	-398.3	-469.5	-22.789	ug/L	-22.789 ppb	08:37:45
3	Ti 334.940†	-8828.6	-9181.6	3.3055	ug/L	3.3055 ppb	08:37:25
3	Tl 190.801†	-95.8	-79.2	-8.7262	ug/L	-8.7262 ppb	08:37:45
3	U 409.014†	438523.0	513836.9	14102	ug/L	14102 ppb	08:37:25
3	V 292.402†	2204.3	3929.2	-0.3636	ug/L	-0.3636 ppb	08:37:45
3	Zn 213.857†	6143.8	6543.5	0.7426	ug/L	0.7426 ppb	08:37:45
3	SiO2†	-603.9	-1171.7	-73.351	ug/L	-73.351 ppb	08:38:01

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	768296.6	85.247	%	0.7238				0.85%
Sc Radial	5071.2	86.8	%	1.45				1.68%
Y 371.029	623138.3	82.965	%	0.6338				0.76%
Y RADIAL	5425.9	86.29	%	1.329				1.54%
Ag 328.068†	-26897.0	-5.1991	ug/L	1.98666	-5.1991	ppb	1.98666	38.21%
Al 396.153Radial†	746009.9	518200	ug/L	11573.9	518200	ppb	11573.9	2.23%
QC value within limits for Al 396.153Radial Recovery = 103.64%								
As 188.979†	-211.0	-17.669	ug/L	1.9221	-17.669	ppb	1.9221	10.88%
B 249.677†	2250.4	-9.3278	ug/L	2.14768	-9.3278	ppb	2.14768	23.02%
Ba 233.527†	-1788.7	2.5990	ug/L	0.41885	2.5990	ppb	0.41885	16.12%
Be 313.107†	-8891.5	-3.2698	ug/L	0.01747	-3.2698	ppb	0.01747	0.53%
Ca 317.933Radial†	322608.0	475510	ug/L	10331.3	475510	ppb	10331.3	2.17%
QC value within limits for Ca 317.933Radial Recovery = 95.10%								
Cd 226.502†	4443.9	4.3960	ug/L	0.53322	4.3960	ppb	0.53322	12.13%
Co 228.616†	299.6	-0.4640	ug/L	0.10017	-0.4640	ppb	0.10017	21.59%
Cr 267.716†	24.7	3.3712	ug/L	0.45693	3.3712	ppb	0.45693	13.55%
Cu 324.752†	-5450.9	6.1302	ug/L	0.26219	6.1302	ppb	0.26219	4.28%

Fe 238.204 Radial†	45500.4	425970 ug/L	5657.7	425970 ppb	5657.7	1.33%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 85.19%						
K 766.490 Radial†	1616.3	102.69 ug/L	15.907	102.69 ppb	15.907	15.49%
Mg 279.077 IEC†	13627.6	480400 ug/L	6742.2	480400 ppb	6742.2	1.40%
QC value within limits for Mg 279.077 IEC Recovery = 96.08%						
Mn 257.610†	-30280.6	1.2263 ug/L	0.37865	1.2263 ppb	0.37865	30.88%
Mo 202.031†	-618.7	-9.0891 ug/L	1.72772	-9.0891 ppb	1.72772	19.01%
Na 589.592 Radial†	1410798.2	473440 ug/L	12250.8	473440 ppb	12250.8	2.59%
QC value within limits for Na 589.592 Radial Recovery = 94.69%						
Ni 231.604†	248.4	5.7484 ug/L	0.12280	5.7484 ppb	0.12280	2.14%
P 214.914†	464.6	101.51 ug/L	7.782	101.51 ppb	7.782	7.67%
Pb 220.353†	-583.8	15.241 ug/L	1.9138	15.241 ppb	1.9138	12.56%
S 181.975 Axial†	78.2	7.6395 ug/L	15.34901	7.6395 ppb	15.34901	200.92%
Sb 206.836†	25.3	-1.3456 ug/L	5.24120	-1.3456 ppb	5.24120	389.52%
Se 196.026†	-2879.1	-228.77 ug/L	22.392	-228.77 ppb	22.392	9.79%
Si 251.611†	-1081.9	-31.559 ug/L	1.3131	-31.559 ppb	1.3131	4.16%
Sn 189.927†	-469.4	-21.508 ug/L	1.1209	-21.508 ppb	1.1209	5.21%
Sr 421.552†	841.4	0.8324 ug/L	0.08875	0.8324 ppb	0.08875	10.66%
Ti 334.940†	-9192.9	3.8911 ug/L	0.51918	3.8911 ppb	0.51918	13.34%
Tl 190.801†	-87.5	-10.703 ug/L	1.7899	-10.703 ppb	1.7899	16.72%
U 409.014†	513293.1	14086 ug/L	18.5	14086 ppb	18.5	0.13%
QC value within limits for U 409.014 Recovery = 93.91%						
V 292.402†	3875.8	-1.4400 ug/L	1.41804	-1.4400 ppb	1.41804	98.48%
Zn 213.857†	6602.5	0.5360 ug/L	0.83740	0.5360 ppb	0.83740	156.24%
SiO2†	-1201.2	-75.261 ug/L	2.6374	-75.261 ppb	2.6374	3.50%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/8/2009 08:40:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5467.0	5467.0	93.5	%			08:42:08
1	Y RADIAL	5820.4	5820.4	92.57	%			08:42:08
1	Al 396.153Radial†	648.2	713.3	73.153	ug/L	73.153	ppb	08:42:08
1	Ca 317.933Radial†	40.2	27.3	40.294	ug/L	40.294	ppb	08:42:28
1	Fe 238.204 Radial†	-20.2	-28.4	30.402	ug/L	30.402	ppb	08:42:28
1	K 766.490 Radial†	1630640.1	1740720.3	308600	ug/L	308600	ppb	08:42:03
1	Mg 279.077 IEC†	-4.9	-6.4	-27.533	ug/L	-27.533	ppb	08:42:28
1	Na 589.592 Radial†	-395.2	665.5	223.32	ug/L	223.32	ppb	08:42:08
1	Sr 421.552†	1474708.6	1576416.5	9817.5	ug/L	9817.5	ppb	08:42:03
1	Sc 361.383	867124.6	867124.6	96.212	%			08:43:46
1	Y 371.029	701273.1	701273.1	93.368	%			08:43:46
1	Ag 328.068†	-7380.9	-7964.3	3.0125	ug/L	3.0125	ppb	08:43:51
1	As 188.979†	24239.3	25217.9	10051	ug/L	10051	ppb	08:43:51
1	B 249.677†	225599.7	235012.5	4904.6	ug/L	4904.6	ppb	08:43:46
1	Ba 233.527†	1819903.5	1891563.5	14041	ug/L	14041	ppb	08:43:46
1	Be 313.107†	7677022.8	7984388.4	2930.5	ug/L	2930.5	ppb	08:43:39
1	Cd 226.502†	883298.9	918270.4	9713.7	ug/L	9713.7	ppb	08:43:46
1	Co 228.616†	476506.8	495332.8	9401.0	ug/L	9401.0	ppb	08:43:51
1	Cr 267.716†	2192143.9	2278372.3	23934	ug/L	23934	ppb	08:43:46
1	Cu 324.752†	6813641.4	7075145.1	20247	ug/L	20247	ppb	08:43:39
1	Mn 257.610†	8511935.4	8846637.1	9437.0	ug/L	9437.0	ppb	08:43:39
1	Mo 202.031†	149411.9	155276.0	9864.1	ug/L	9864.1	ppb	08:43:51
1	Ni 231.604†	406202.4	422108.5	9768.5	ug/L	9768.5	ppb	08:43:46
1	P 214.914†	30887.7	31880.2	15285	ug/L	15285	ppb	08:43:51
1	Pb 220.353†	205565.7	213727.5	24170	ug/L	24170	ppb	08:43:51
1	S 181.975 Axial†	36410.6	37802.5	52971	ug/L	52971	ppb	08:43:51
1	Sb 206.836†	32057.5	33285.4	10343	ug/L	10343	ppb	08:43:51
1	Se 196.026†	16842.4	17534.3	10169	ug/L	10169	ppb	08:43:51
1	Si 251.611†	1547757.8	1608245.0	47837	ug/L	47837	ppb	08:43:46
1	Sn 189.927†	62087.1	64526.6	10565	ug/L	10565	ppb	08:43:51
1	Ti 334.940†	6182963.9	6427508.7	10249	ug/L	10249	ppb	08:43:39
1	Tl 190.801†	33155.5	34493.4	9723.9	ug/L	9723.9	ppb	08:43:51
1	U 409.014†	-1235.9	1117.3	-15.386	ug/L	-15.386	ppb	08:43:51
1	V 292.402†	1452120.7	1510650.6	10098	ug/L	10098	ppb	08:43:46
1	Zn 213.857†	1555331.3	1615944.6	14031	ug/L	14031	ppb	08:43:46
1	SiO2†	1561537.4	1622549.4	103410	ug/L	103410	ppb	08:44:38
2	Sc Radial	5444.5	5444.5	93.2	%			08:42:39
2	Y RADIAL	5757.5	5757.5	91.57	%			08:42:39
2	Al 396.153Radial†	634.7	701.7	68.198	ug/L	68.198	ppb	08:42:39
2	Ca 317.933Radial†	40.9	28.3	41.687	ug/L	41.687	ppb	08:42:59
2	Fe 238.204 Radial†	-21.6	-30.0	14.286	ug/L	14.286	ppb	08:42:59
2	K 766.490 Radial†	1678331.1	1799114.9	318960	ug/L	318960	ppb	08:42:34
2	Mg 279.077 IEC†	-4.3	-5.8	-5.8103	ug/L	-5.8103	ppb	08:42:59
2	Na 589.592 Radial†	-444.2	611.2	205.10	ug/L	205.10	ppb	08:42:39
2	Sr 421.552†	1524852.5	1636755.0	10193	ug/L	10193	ppb	08:42:34
2	Sc 361.383	875997.1	875997.1	97.196	%			08:44:05
2	Y 371.029	706892.2	706892.2	94.116	%			08:44:05
2	Ag 328.068†	-7542.1	-8052.4	2.5047	ug/L	2.5047	ppb	08:44:11
2	As 188.979†	24445.9	25175.2	10032	ug/L	10032	ppb	08:44:11
2	B 249.677†	227893.7	234997.7	4904.4	ug/L	4904.4	ppb	08:44:05
2	Ba 233.527†	1836991.3	1889985.5	14029	ug/L	14029	ppb	08:44:05
2	Be 313.107†	7606544.6	7831059.2	2874.2	ug/L	2874.2	ppb	08:43:59
2	Cd 226.502†	890702.9	916589.3	9695.9	ug/L	9695.9	ppb	08:44:05
2	Co 228.616†	478916.3	492795.5	9353.1	ug/L	9353.1	ppb	08:44:11
2	Cr 267.716†	2207826.3	2271429.7	23862	ug/L	23862	ppb	08:44:05
2	Cu 324.752†	6728151.8	6915460.5	19790	ug/L	19790	ppb	08:43:59
2	Mn 257.610†	8436455.1	8679372.2	9258.6	ug/L	9258.6	ppb	08:43:59
2	Mo 202.031†	149840.4	154144.1	9792.2	ug/L	9792.2	ppb	08:44:11
2	Ni 231.604†	409458.3	421182.0	9747.1	ug/L	9747.1	ppb	08:44:05

2	P 214.914†	31072.0	31744.7	15279	ug/L	15279 ppb	08:44:11
2	Pb 220.353†	206625.4	212653.7	24048	ug/L	24048 ppb	08:44:11
2	S 181.975 Axial†	36505.0	37516.4	52570	ug/L	52570 ppb	08:44:11
2	Sb 206.836†	32226.2	33121.5	10291	ug/L	10291 ppb	08:44:11
2	Se 196.026†	16905.3	17421.7	10103	ug/L	10103 ppb	08:44:11
2	Si 251.611†	1563796.3	1608452.5	47841	ug/L	47841 ppb	08:44:05
2	Sn 189.927†	62338.6	64131.7	10500	ug/L	10500 ppb	08:44:11
2	Ti 334.940†	6117371.6	6294934.8	10037	ug/L	10037 ppb	08:43:59
2	Tl 190.801†	33295.1	34288.0	9664.0	ug/L	9664.0 ppb	08:44:11
2	U 409.014†	-1090.5	1279.9	-10.764	ug/L	-10.764 ppb	08:44:11
2	V 292.402†	1463232.8	1506796.3	10072	ug/L	10072 ppb	08:44:05
2	Zn 213.857†	1567638.7	1612233.5	13999	ug/L	13999 ppb	08:44:05
2	SiO2†	1556021.4	1600435.5	101990	ug/L	101990 ppb	08:44:45
3	Sc Radial	5627.2	5627.2	96.3	%		08:43:09
3	Y RADIAL	5959.5	5959.5	94.78	%		08:43:09
3	Al 396.153Radial†	620.4	664.7	38.156	ug/L	38.156 ppb	08:43:09
3	Ca 317.933Radial†	43.5	29.6	43.629	ug/L	43.629 ppb	08:43:29
3	Fe 238.204 Radial†	-20.6	-28.2	34.402	ug/L	34.402 ppb	08:43:29
3	K 766.490 Radial†	1663829.2	1725552.7	305910	ug/L	305910 ppb	08:43:04
3	Mg 279.077 IEC†	-2.4	-3.7	71.666	ug/L	71.666 ppb	08:43:29
3	Na 589.592 Radial†	-505.0	563.5	189.12	ug/L	189.12 ppb	08:43:09
3	Sr 421.552†	1503489.9	1561417.6	9724.1	ug/L	9724.1 ppb	08:43:04
3	Sc 361.383	860972.2	860972.2	95.529	%		08:44:25
3	Y 371.029	693995.6	693995.6	92.399	%		08:44:25
3	Ag 328.068†	-7391.7	-8030.3	2.6685	ug/L	2.6685 ppb	08:44:30
3	As 188.979†	24137.2	25291.0	10079	ug/L	10079 ppb	08:44:30
3	B 249.677†	224130.1	235149.6	4907.3	ug/L	4907.3 ppb	08:44:25
3	Ba 233.527†	1812109.2	1896921.1	14081	ug/L	14081 ppb	08:44:25
3	Be 313.107†	7558719.3	7917566.9	2906.0	ug/L	2906.0 ppb	08:44:19
3	Cd 226.502†	877962.6	919244.8	9724.0	ug/L	9724.0 ppb	08:44:25
3	Co 228.616†	475940.9	498279.5	9457.1	ug/L	9457.1 ppb	08:44:30
3	Cr 267.716†	2176726.4	2278514.6	23936	ug/L	23936 ppb	08:44:25
3	Cu 324.752†	6705646.3	7012701.8	20068	ug/L	20068 ppb	08:44:19
3	Mn 257.610†	8434113.9	8828393.0	9417.6	ug/L	9417.6 ppb	08:44:19
3	Mo 202.031†	148782.4	155726.8	9892.7	ug/L	9892.7 ppb	08:44:30
3	Ni 231.604†	403751.5	422559.8	9778.9	ug/L	9778.9 ppb	08:44:25
3	P 214.914†	30822.4	32041.3	15407	ug/L	15407 ppb	08:44:30
3	Pb 220.353†	205278.5	214953.7	24308	ug/L	24308 ppb	08:44:30
3	S 181.975 Axial†	36042.6	37687.8	52810	ug/L	52810 ppb	08:44:30
3	Sb 206.836†	31930.0	33390.0	10378	ug/L	10378 ppb	08:44:30
3	Se 196.026†	16715.5	17526.6	10164	ug/L	10164 ppb	08:44:30
3	Si 251.611†	1540381.3	1612018.7	47950	ug/L	47950 ppb	08:44:25
3	Sn 189.927†	61948.9	64843.0	10617	ug/L	10617 ppb	08:44:30
3	Ti 334.940†	6107035.0	6393948.3	10195	ug/L	10195 ppb	08:44:19
3	Tl 190.801†	33080.3	34660.9	9770.0	ug/L	9770.0 ppb	08:44:30
3	U 409.014†	-984.4	1371.4	-8.3904	ug/L	-8.3904 ppb	08:44:30
3	V 292.402†	1440370.5	1509135.6	10089	ug/L	10089 ppb	08:44:25
3	Zn 213.857†	1547039.7	1618816.6	14056	ug/L	14056 ppb	08:44:25
3	SiO2†	1561660.1	1634275.6	104160	ug/L	104160 ppb	08:44:52

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868031.3	96.313	%	0.8381				0.87%
Sc Radial	5512.9	94.3	%	1.71				1.81%
Y 371.029	700720.3	93.295	%	0.8609				0.92%
Y RADIAL	5845.8	92.97	%	1.643				1.77%
Ag 328.068†	-8015.7	2.7286	ug/L	0.25915	2.7286	ppb	0.25915	9.50%
Al 396.153Radial†	693.2	59.836	ug/L	18.9377	59.836	ppb	18.9377	31.65%
As 188.979†	25228.0	10054	ug/L	23.7	10054	ppb	23.7	0.24%
QC value within limits for As 188.979 Recovery = 100.54%								
B 249.677†	235053.3	4905.5	ug/L	1.63	4905.5	ppb	1.63	0.03%
QC value within limits for B 249.677 Recovery = 98.11%								
Ba 233.527†	1892823.4	14050	ug/L	27.0	14050	ppb	27.0	0.19%
QC value within limits for Ba 233.527 Recovery = 93.67%								
Be 313.107†	7911004.8	2903.6	ug/L	28.23	2903.6	ppb	28.23	0.97%
QC value within limits for Be 313.107 Recovery = 96.79%								
Ca 317.933Radial†	28.4	41.870	ug/L	1.6750	41.870	ppb	1.6750	4.00%
Cd 226.502†	918034.8	9711.2	ug/L	14.21	9711.2	ppb	14.21	0.15%
QC value within limits for Cd 226.502 Recovery = 97.11%								

Co 228.616†	495469.3	9403.8 ug/L	52.05	9403.8 ppb	52.05	0.55%
QC value within limits for Co 228.616 Recovery = 94.04%						
Cr 267.716†	2276105.6	23911 ug/L	42.5	23911 ppb	42.5	0.18%
QC value within limits for Cr 267.716 Recovery = 95.64%						
Cu 324.752†	7001102.5	20035 ug/L	230.3	20035 ppb	230.3	1.15%
QC value within limits for Cu 324.752 Recovery = 100.18%						
Fe 238.204 Radial†	-28.9	26.363 ug/L	10.6490	26.363 ppb	10.6490	40.39%
K 766.490 Radial†	1755129.3	311160 ug/L	6888.6	311160 ppb	6888.6	2.21%
QC value within limits for K 766.490 Radial Recovery = 103.72%						
Mg 279.077 IEC†	-5.3	12.774 ug/L	52.1454	12.774 ppb	52.1454	408.21%
Mn 257.610†	8784800.8	9371.1 ug/L	97.88	9371.1 ppb	97.88	1.04%
QC value within limits for Mn 257.610 Recovery = 93.71%						
Mo 202.031†	155049.0	9849.6 ug/L	51.80	9849.6 ppb	51.80	0.53%
QC value within limits for Mo 202.031 Recovery = 98.50%						
Na 589.592 Radial†	613.4	205.85 ug/L	17.116	205.85 ppb	17.116	8.32%
Ni 231.604†	421950.1	9764.9 ug/L	16.23	9764.9 ppb	16.23	0.17%
QC value within limits for Ni 231.604 Recovery = 97.65%						
P 214.914†	31888.7	15324 ug/L	72.3	15324 ppb	72.3	0.47%
QC value within limits for P 214.914 Recovery = 102.16%						
Pb 220.353†	213778.3	24175 ug/L	130.1	24175 ppb	130.1	0.54%
QC value within limits for Pb 220.353 Recovery = 96.70%						
S 181.975 Axial†	37668.9	52784 ug/L	201.8	52784 ppb	201.8	0.38%
QC value within limits for S 181.975 Axial Recovery = 105.57%						
Sb 206.836†	33265.6	10337 ug/L	43.8	10337 ppb	43.8	0.42%
QC value within limits for Sb 206.836 Recovery = 103.37%						
Se 196.026†	17494.2	10145 ug/L	36.5	10145 ppb	36.5	0.36%
QC value within limits for Se 196.026 Recovery = 101.45%						
Si 251.611†	1609572.1	47876 ug/L	64.2	47876 ppb	64.2	0.13%
QC value within limits for Si 251.611 Recovery = 95.75%						
Sn 189.927†	64500.4	10561 ug/L	58.4	10561 ppb	58.4	0.55%
QC value within limits for Sn 189.927 Recovery = 105.61%						
Sr 421.552†	1591529.7	9911.6 ug/L	248.35	9911.6 ppb	248.35	2.51%
QC value within limits for Sr 421.552 Recovery = 99.12%						
Ti 334.940†	6372130.6	10160 ug/L	110.0	10160 ppb	110.0	1.08%
QC value within limits for Ti 334.940 Recovery = 101.60%						
Tl 190.801†	34480.7	9719.3 ug/L	53.15	9719.3 ppb	53.15	0.55%
QC value within limits for Tl 190.801 Recovery = 97.19%						
U 409.014†	1256.2	-11.514 ug/L	3.5577	-11.514 ppb	3.5577	30.90%
V 292.402†	1508860.8	10086 ug/L	13.3	10086 ppb	13.3	0.13%
QC value within limits for V 292.402 Recovery = 100.86%						
Zn 213.857†	1615664.9	14029 ug/L	28.5	14029 ppb	28.5	0.20%
QC value within limits for Zn 213.857 Recovery = 93.53%						
SiO2†	1619086.8	103190 ug/L	1105.0	103190 ppb	1105.0	1.07%
QC value within limits for SiO2 Recovery = 96.44%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 08:47:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5782.1	5782.1	98.9	%			08:48:55
1	Y RADIAL	6146.7	6146.7	97.76	%			08:48:55
1	Al 396.153Radial†	7076.6	7172.7	4961.1	ug/L	4961.1	ppb	08:48:55
1	Ca 317.933Radial†	3407.2	3428.0	5052.7	ug/L	5052.7	ppb	08:49:15
1	Fe 238.204 Radial†	532.6	531.5	4991.6	ug/L	4991.6	ppb	08:49:15
1	K 766.490 Radial†	32409.0	30403.6	5383.4	ug/L	5383.4	ppb	08:48:55
1	Mg 279.077 IEC†	148.2	148.6	5249.8	ug/L	5249.8	ppb	08:49:15
1	Na 589.592 Radial†	25995.9	27361.6	9182.0	ug/L	9182.0	ppb	08:48:55
1	Sr 421.552†	78123.6	78985.8	491.86	ug/L	491.86	ppb	08:48:55
1	Sc 361.383	915700.9	915700.9	101.60	%			08:50:12
1	Y 371.029	748883.0	748883.0	99.707	%			08:50:12
1	Ag 328.068†	111463.9	109413.9	498.59	ug/L	498.59	ppb	08:50:17
1	As 188.979†	1317.5	1320.9	526.25	ug/L	526.25	ppb	08:50:37
1	B 249.677†	24216.2	24365.1	509.06	ug/L	509.06	ppb	08:50:17
1	Ba 233.527†	67026.7	65978.4	490.26	ug/L	490.26	ppb	08:50:17
1	Be 313.107†	1367141.0	1350700.0	493.30	ug/L	493.30	ppb	08:50:12
1	Cd 226.502†	47097.9	46550.5	491.92	ug/L	491.92	ppb	08:50:17
1	Co 228.616†	26192.0	25844.5	490.66	ug/L	490.66	ppb	08:50:17
1	Cr 267.716†	47478.6	46651.4	490.51	ug/L	490.51	ppb	08:50:17
1	Cu 324.752†	179450.2	169864.4	486.36	ug/L	486.36	ppb	08:50:17
1	Mn 257.610†	468544.1	460734.8	491.88	ug/L	491.88	ppb	08:50:12
1	Mo 202.031†	7937.6	7794.1	495.48	ug/L	495.48	ppb	08:50:37
1	Ni 231.604†	21717.3	21288.4	492.65	ug/L	492.65	ppb	08:50:17
1	P 214.914†	4496.1	4201.7	2349.8	ug/L	2349.8	ppb	08:50:37
1	Pb 220.353†	4339.1	4339.2	492.07	ug/L	492.07	ppb	08:50:37
1	S 181.975 Axial†	768.7	715.0	1001.0	ug/L	1001.0	ppb	08:50:37
1	Sb 206.836†	1660.7	1600.3	513.72	ug/L	513.72	ppb	08:50:37
1	Se 196.026†	829.5	845.2	506.85	ug/L	506.85	ppb	08:50:37
1	Si 251.611†	83963.3	82189.9	2448.4	ug/L	2448.4	ppb	08:50:17
1	Sn 189.927†	3091.0	3037.3	497.89	ug/L	497.89	ppb	08:50:37
1	Ti 334.940†	314148.2	310310.4	495.07	ug/L	495.07	ppb	08:50:17
1	Tl 190.801†	1753.9	1758.8	495.78	ug/L	495.78	ppb	08:50:37
1	U 409.014†	15497.7	17655.2	484.78	ug/L	484.78	ppb	08:50:17
1	V 292.402†	73683.2	73879.9	494.61	ug/L	494.61	ppb	08:50:17
1	Zn 213.857†	58008.6	56472.2	488.98	ug/L	488.98	ppb	08:50:17
1	SiO2†	84671.3	82869.0	5289.8	ug/L	5289.8	ppb	08:51:45
2	Sc Radial	5788.5	5788.5	99.1	%			08:49:20
2	Y RADIAL	6144.8	6144.8	97.73	%			08:49:20
2	Al 396.153Radial†	7103.7	7192.2	4974.5	ug/L	4974.5	ppb	08:49:20
2	Ca 317.933Radial†	3346.8	3363.2	4957.2	ug/L	4957.2	ppb	08:49:40
2	Fe 238.204 Radial†	527.8	526.1	4940.5	ug/L	4940.5	ppb	08:49:40
2	K 766.490 Radial†	32276.6	30234.0	5353.3	ug/L	5353.3	ppb	08:49:20
2	Mg 279.077 IEC†	146.4	146.7	5180.9	ug/L	5180.9	ppb	08:49:40
2	Na 589.592 Radial†	25876.0	27211.8	9131.8	ug/L	9131.8	ppb	08:49:20
2	Sr 421.552†	78170.1	78946.0	491.61	ug/L	491.61	ppb	08:49:20
2	Sc 361.383	916693.8	916693.8	101.71	%			08:50:43
2	Y 371.029	749698.1	749698.1	99.815	%			08:50:43
2	Ag 328.068†	111726.1	109552.8	499.21	ug/L	499.21	ppb	08:50:48
2	As 188.979†	1322.7	1324.7	527.73	ug/L	527.73	ppb	08:51:08
2	B 249.677†	24303.2	24424.8	510.31	ug/L	510.31	ppb	08:50:48
2	Ba 233.527†	67467.5	66340.4	492.94	ug/L	492.94	ppb	08:50:48
2	Be 313.107†	1368824.6	1350897.8	493.38	ug/L	493.38	ppb	08:50:43
2	Cd 226.502†	47404.8	46802.0	494.59	ug/L	494.59	ppb	08:50:48
2	Co 228.616†	26331.6	25953.8	492.74	ug/L	492.74	ppb	08:50:48
2	Cr 267.716†	47593.6	46713.8	491.16	ug/L	491.16	ppb	08:50:48
2	Cu 324.752†	179807.8	170024.6	486.81	ug/L	486.81	ppb	08:50:48
2	Mn 257.610†	469543.6	461218.1	492.39	ug/L	492.39	ppb	08:50:43
2	Mo 202.031†	8012.0	7858.8	499.59	ug/L	499.59	ppb	08:51:08
2	Ni 231.604†	21790.2	21336.9	493.77	ug/L	493.77	ppb	08:50:48

2	P 214.914†	4553.2	4253.0	2379.4 ug/L	2379.4 ppb	08:51:08
2	Pb 220.353†	4360.0	4355.1	493.88 ug/L	493.88 ppb	08:51:08
2	S 181.975 Axial†	776.7	722.1	1010.8 ug/L	1010.8 ppb	08:51:08
2	Sb 206.836†	1674.2	1611.8	517.49 ug/L	517.49 ppb	08:51:08
2	Se 196.026†	850.9	865.4	518.35 ug/L	518.35 ppb	08:51:08
2	Si 251.611†	84254.2	82386.4	2454.3 ug/L	2454.3 ppb	08:50:48
2	Sn 189.927†	3110.0	3052.7	500.40 ug/L	500.40 ppb	08:51:08
2	Ti 334.940†	315465.2	311270.3	496.60 ug/L	496.60 ppb	08:50:48
2	Tl 190.801†	1762.5	1765.4	497.62 ug/L	497.62 ppb	08:51:08
2	U 409.014†	15551.4	17691.4	485.78 ug/L	485.78 ppb	08:50:48
2	V 292.402†	73936.6	74050.4	495.80 ug/L	495.80 ppb	08:50:48
2	Zn 213.857†	58308.9	56705.6	491.02 ug/L	491.02 ppb	08:50:48
2	SiO2†	84289.9	82403.7	5259.8 ug/L	5259.8 ppb	08:51:50
3	Sc Radial	5847.4	5847.4	100 %		08:49:45
3	Y RADIAL	6208.4	6208.4	98.74 %		08:49:45
3	Al 396.153Radial†	7161.0	7177.2	4964.1 ug/L	4964.1 ppb	08:49:45
3	Ca 317.933Radial†	3361.4	3343.9	4928.7 ug/L	4928.7 ppb	08:50:05
3	Fe 238.204 Radial†	533.2	526.1	4940.8 ug/L	4940.8 ppb	08:50:05
3	K 766.490 Radial†	32465.1	30094.2	5328.5 ug/L	5328.5 ppb	08:49:45
3	Mg 279.077 IEC†	147.3	146.0	5157.2 ug/L	5157.2 ppb	08:50:05
3	Na 589.592 Radial†	26135.2	27207.7	9130.4 ug/L	9130.4 ppb	08:49:45
3	Sr 421.552†	79104.0	79084.6	492.47 ug/L	492.47 ppb	08:49:45
3	Sc 361.383	913157.2	913157.2	101.32 %		08:51:14
3	Y 371.029	746146.8	746146.8	99.343 %		08:51:14
3	Ag 328.068†	111949.4	110198.7	502.13 ug/L	502.13 ppb	08:51:19
3	As 188.979†	1322.9	1329.9	529.82 ug/L	529.82 ppb	08:51:39
3	B 249.677†	24230.2	24445.3	510.73 ug/L	510.73 ppb	08:51:19
3	Ba 233.527†	67345.5	66476.8	493.96 ug/L	493.96 ppb	08:51:19
3	Be 313.107†	1359749.2	1347152.8	492.02 ug/L	492.02 ppb	08:51:14
3	Cd 226.502†	47198.8	46779.2	494.35 ug/L	494.35 ppb	08:51:19
3	Co 228.616†	26403.8	26125.3	495.99 ug/L	495.99 ppb	08:51:19
3	Cr 267.716†	47416.6	46720.4	491.23 ug/L	491.23 ppb	08:51:19
3	Cu 324.752†	180362.3	171256.6	490.34 ug/L	490.34 ppb	08:51:19
3	Mn 257.610†	467972.0	461454.8	492.65 ug/L	492.65 ppb	08:51:14
3	Mo 202.031†	7964.6	7842.6	498.56 ug/L	498.56 ppb	08:51:39
3	Ni 231.604†	21690.8	21321.7	493.42 ug/L	493.42 ppb	08:51:19
3	P 214.914†	4511.2	4229.0	2365.0 ug/L	2365.0 ppb	08:51:39
3	Pb 220.353†	4333.2	4345.2	492.76 ug/L	492.76 ppb	08:51:39
3	S 181.975 Axial†	770.2	718.6	1005.9 ug/L	1005.9 ppb	08:51:39
3	Sb 206.836†	1648.3	1592.6	511.39 ug/L	511.39 ppb	08:51:39
3	Se 196.026†	837.6	855.5	512.64 ug/L	512.64 ppb	08:51:39
3	Si 251.611†	84314.0	82766.2	2465.7 ug/L	2465.7 ppb	08:51:19
3	Sn 189.927†	3099.7	3054.3	500.67 ug/L	500.67 ppb	08:51:39
3	Ti 334.940†	315905.7	312906.3	499.20 ug/L	499.20 ppb	08:51:19
3	Tl 190.801†	1760.2	1769.7	498.86 ug/L	498.86 ppb	08:51:39
3	U 409.014†	15741.3	17938.2	492.58 ug/L	492.58 ppb	08:51:19
3	V 292.402†	73739.7	74137.7	496.37 ug/L	496.37 ppb	08:51:19
3	Zn 213.857†	58213.2	56833.2	492.13 ug/L	492.13 ppb	08:51:19
3	SiO2†	84868.2	83295.4	5317.0 ug/L	5317.0 ppb	08:51:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	915183.9	101.54	%	0.202				0.20%
Sc Radial	5806.0	99.4	%	0.62				0.62%
Y 371.029	748242.6	99.622	%	0.2477				0.25%
Y RADIAL	6166.6	98.07	%	0.575				0.59%
Ag 328.068†	109721.8	499.98	ug/L	1.891	499.98	ppb	1.891	0.38%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	7180.7	4966.6	ug/L	7.01	4966.6	ppb	7.01	0.14%
QC value within limits for Al 396.153Radial Recovery = 99.33%								
As 188.979†	1325.2	527.94	ug/L	1.794	527.94	ppb	1.794	0.34%
QC value within limits for As 188.979 Recovery = 105.59%								
B 249.677†	24411.7	510.03	ug/L	0.871	510.03	ppb	0.871	0.17%
QC value within limits for B 249.677 Recovery = 102.01%								
Ba 233.527†	66265.2	492.39	ug/L	1.910	492.39	ppb	1.910	0.39%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	1349583.6	492.90	ug/L	0.764	492.90	ppb	0.764	0.16%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	3378.4	4979.5	ug/L	64.94	4979.5	ppb	64.94	1.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.59%
Cd 226.502†            46710.6      493.62 ug/L        1.474      493.62 ppb          1.474   0.30%
   QC value within limits for Cd 226.502  Recovery = 98.72%
Co 228.616†            25974.5      493.13 ug/L        2.686      493.13 ppb          2.686   0.54%
   QC value within limits for Co 228.616  Recovery = 98.63%
Cr 267.716†            46695.2      490.97 ug/L        0.400      490.97 ppb          0.400   0.08%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†           170381.8      487.84 ug/L        2.179      487.84 ppb          2.179   0.45%
   QC value within limits for Cu 324.752  Recovery = 97.57%
Fe 238.204 Radial†       527.9      4957.6 ug/L       29.40      4957.6 ppb          29.40   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.15%
K 766.490 Radial†      30243.9      5355.1 ug/L       27.45      5355.1 ppb          27.45   0.51%
   QC value within limits for K 766.490 Radial  Recovery = 107.10%
Mg 279.077 IEC†          147.1      5195.9 ug/L       48.14      5195.9 ppb          48.14   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†           461135.9      492.31 ug/L        0.390      492.31 ppb          0.390   0.08%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             7831.8      497.88 ug/L        2.135      497.88 ppb          2.135   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     27260.4      9148.1 ug/L       29.43      9148.1 ppb          29.43   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 91.48%
Ni 231.604†            21315.7      493.28 ug/L        0.574      493.28 ppb          0.574   0.12%
   QC value within limits for Ni 231.604  Recovery = 98.66%
P 214.914†              4227.9      2364.7 ug/L       14.81      2364.7 ppb          14.81   0.63%
   QC value within limits for P 214.914  Recovery = 94.59%
Pb 220.353†             4346.5      492.90 ug/L        0.915      492.90 ppb          0.915   0.19%
   QC value within limits for Pb 220.353  Recovery = 98.58%
S 181.975 Axial†         718.6      1005.9 ug/L        4.92      1005.9 ppb           4.92   0.49%
   QC value within limits for S 181.975 Axial  Recovery = 100.59%
Sb 206.836†             1601.6      514.20 ug/L        3.082      514.20 ppb          3.082   0.60%
   QC value within limits for Sb 206.836  Recovery = 102.84%
Se 196.026†              855.4      512.61 ug/L        5.748      512.61 ppb          5.748   1.12%
   QC value within limits for Se 196.026  Recovery = 102.52%
Si 251.611†            82447.5      2456.1 ug/L        8.75      2456.1 ppb           8.75   0.36%
   QC value within limits for Si 251.611  Recovery = 98.24%
Sn 189.927†             3048.1      499.65 ug/L        1.532      499.65 ppb          1.532   0.31%
   QC value within limits for Sn 189.927  Recovery = 99.93%
Sr 421.552†            79005.5      491.98 ug/L        0.445      491.98 ppb          0.445   0.09%
   QC value within limits for Sr 421.552  Recovery = 98.40%
Ti 334.940†           311495.6      496.96 ug/L        2.090      496.96 ppb          2.090   0.42%
   QC value within limits for Ti 334.940  Recovery = 99.39%
Tl 190.801†             1764.6      497.42 ug/L        1.546      497.42 ppb          1.546   0.31%
   QC value within limits for Tl 190.801  Recovery = 99.48%
U 409.014†             17761.6      487.71 ug/L        4.243      487.71 ppb          4.243   0.87%
   QC value within limits for U 409.014  Recovery = 97.54%
V 292.402†             74022.7      495.60 ug/L        0.899      495.60 ppb          0.899   0.18%
   QC value within limits for V 292.402  Recovery = 99.12%
Zn 213.857†            56670.3      490.71 ug/L        1.599      490.71 ppb          1.599   0.33%
   QC value within limits for Zn 213.857  Recovery = 98.14%
SiO2†                  82856.0      5288.9 ug/L       28.64      5288.9 ppb          28.64   0.54%
   QC value within limits for SiO2  Recovery = 98.90%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 08:54:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.9	5848.9	100	%			08:55:57
1	Y RADIAL	6279.8	6279.8	99.87	%			08:55:57
1	Al 396.153Radial†	-26.0	-5.6	-3.9206	ug/L	-3.9206	ppb	08:55:57
1	Ca 317.933Radial†	21.0	5.4	7.9071	ug/L	7.9071	ppb	08:56:17
1	Fe 238.204 Radial†	5.7	-1.1	-10.330	ug/L	-10.330	ppb	08:56:17
1	K 766.490 Radial†	3182.5	828.1	146.83	ug/L	146.83	ppb	08:55:57
1	Mg 279.077 IEC†	2.1	1.0	34.534	ug/L	34.534	ppb	08:56:17
1	Na 589.592 Radial†	-941.9	146.9	49.290	ug/L	49.290	ppb	08:55:57
1	Sr 421.552†	15.9	43.3	0.2694	ug/L	0.2694	ppb	08:55:57
1	Sc 361.383	901425.1	901425.1	100.02	%			08:57:14
1	Y 371.029	753544.9	753544.9	100.33	%			08:57:14
1	Ag 328.068†	368.5	75.7	0.3398	ug/L	0.3398	ppb	08:57:14
1	As 188.979†	15.2	39.3	15.531	ug/L	15.531	ppb	08:57:34
1	B 249.677†	312.7	843.3	17.688	ug/L	17.688	ppb	08:57:34
1	Ba 233.527†	11.1	19.6	0.1457	ug/L	0.1457	ppb	08:57:34
1	Be 313.107†	-4890.2	223.7	0.0819	ug/L	0.0819	ppb	08:57:14
1	Cd 226.502†	-156.4	38.7	0.4107	ug/L	0.4107	ppb	08:57:34
1	Co 228.616†	-74.1	-8.7	-0.1627	ug/L	-0.1627	ppb	08:57:34
1	Cr 267.716†	79.8	1.2	0.0123	ug/L	0.0123	ppb	08:57:34
1	Cu 324.752†	6899.0	141.1	0.4032	ug/L	0.4032	ppb	08:57:14
1	Mn 257.610†	479.6	57.2	0.0593	ug/L	0.0593	ppb	08:57:34
1	Mo 202.031†	34.7	16.4	1.0403	ug/L	1.0403	ppb	08:57:34
1	Ni 231.604†	94.7	8.1	0.1884	ug/L	0.1884	ppb	08:57:34
1	P 214.914†	218.2	-5.3	-3.0892	ug/L	-3.0892	ppb	08:57:34
1	Pb 220.353†	-50.4	18.1	2.0453	ug/L	2.0453	ppb	08:57:34
1	S 181.975 Axial†	42.4	0.8	1.0843	ug/L	1.0843	ppb	08:57:34
1	Sb 206.836†	62.0	27.7	8.8422	ug/L	8.8422	ppb	08:57:34
1	Se 196.026†	-16.2	12.6	7.2774	ug/L	7.2774	ppb	08:57:34
1	Si 251.611†	602.0	152.3	4.4842	ug/L	4.4842	ppb	08:57:34
1	Sn 189.927†	18.6	13.6	2.2351	ug/L	2.2351	ppb	08:57:34
1	Ti 334.940†	-1003.7	111.4	0.1774	ug/L	0.1774	ppb	08:57:14
1	Tl 190.801†	-20.6	11.9	3.3333	ug/L	3.3333	ppb	08:57:34
1	U 409.014†	-2337.6	64.6	1.7809	ug/L	1.7809	ppb	08:57:14
1	V 292.402†	-1287.7	70.9	0.4890	ug/L	0.4890	ppb	08:57:14
1	Zn 213.857†	853.4	231.4	2.0199	ug/L	2.0199	ppb	08:57:34
1	SiO2†	567.6	100.0	6.2536	ug/L	6.2536	ppb	08:58:30
2	Sc Radial	5763.2	5763.2	98.6	%			08:56:22
2	Y RADIAL	6204.0	6204.0	98.67	%			08:56:22
2	Al 396.153Radial†	-35.2	-15.2	-10.645	ug/L	-10.645	ppb	08:56:22
2	Ca 317.933Radial†	18.1	2.8	4.1167	ug/L	4.1167	ppb	08:56:42
2	Fe 238.204 Radial†	8.3	1.6	14.665	ug/L	14.665	ppb	08:56:42
2	K 766.490 Radial†	3056.0	747.1	132.47	ug/L	132.47	ppb	08:56:22
2	Mg 279.077 IEC†	0.6	-0.6	-19.519	ug/L	-19.519	ppb	08:56:42
2	Na 589.592 Radial†	-945.8	128.9	43.263	ug/L	43.263	ppb	08:56:22
2	Sr 421.552†	-26.0	1.0	0.0062	ug/L	0.0062	ppb	08:56:22
2	Sc 361.383	904499.4	904499.4	100.36	%			08:57:39
2	Y 371.029	753447.4	753447.4	100.31	%			08:57:39
2	Ag 328.068†	351.8	57.8	0.2600	ug/L	0.2600	ppb	08:57:39
2	As 188.979†	11.6	35.7	14.109	ug/L	14.109	ppb	08:57:59
2	B 249.677†	271.6	801.3	16.804	ug/L	16.804	ppb	08:57:59
2	Ba 233.527†	-16.9	-8.4	-0.0622	ug/L	-0.0622	ppb	08:57:59
2	Be 313.107†	-5037.8	93.2	0.0338	ug/L	0.0338	ppb	08:57:39
2	Cd 226.502†	-148.0	47.6	0.5021	ug/L	0.5021	ppb	08:57:59
2	Co 228.616†	-75.2	-9.5	-0.1759	ug/L	-0.1759	ppb	08:57:59
2	Cr 267.716†	96.7	17.7	0.1836	ug/L	0.1836	ppb	08:57:59
2	Cu 324.752†	6834.9	53.7	0.1545	ug/L	0.1545	ppb	08:57:39
2	Mn 257.610†	476.0	52.0	0.0573	ug/L	0.0573	ppb	08:57:59
2	Mo 202.031†	41.2	22.7	1.4411	ug/L	1.4411	ppb	08:57:59
2	Ni 231.604†	102.3	15.4	0.3561	ug/L	0.3561	ppb	08:57:59

2	P 214.914†	217.8	-6.5	-3.7894 ug/L	-3.7894 ppb	08:57:59
2	Pb 220.353†	-42.2	26.4	2.9877 ug/L	2.9877 ppb	08:57:59
2	S 181.975 Axial†	42.4	0.7	0.9493 ug/L	0.9493 ppb	08:57:59
2	Sb 206.836†	61.2	26.7	8.5108 ug/L	8.5108 ppb	08:57:59
2	Se 196.026†	-30.8	-1.9	-1.0542 ug/L	-1.0542 ppb	08:57:59
2	Si 251.611†	599.3	147.4	4.3396 ug/L	4.3396 ppb	08:57:59
2	Sn 189.927†	15.2	10.1	1.6614 ug/L	1.6614 ppb	08:57:59
2	Ti 334.940†	-1183.0	-63.8	-0.1044 ug/L	-0.1044 ppb	08:57:39
2	Tl 190.801†	-30.7	1.9	0.5410 ug/L	0.5410 ppb	08:57:59
2	U 409.014†	-2192.6	217.1	5.9770 ug/L	5.9770 ppb	08:57:39
2	V 292.402†	-1417.6	-54.1	-0.3279 ug/L	-0.3279 ppb	08:57:39
2	Zn 213.857†	827.2	202.4	1.7647 ug/L	1.7647 ppb	08:57:59
2	SiO2†	578.3	108.8	6.8154 ug/L	6.8154 ppb	08:58:35
3	Sc Radial	5778.5	5778.5	98.9 %		08:56:47
3	Y RADIAL	6196.6	6196.6	98.55 %		08:56:47
3	Al 396.153Radial†	-13.1	7.2	4.9512 ug/L	4.9512 ppb	08:56:47
3	Ca 317.933Radial†	17.3	1.9	2.8636 ug/L	2.8636 ppb	08:57:07
3	Fe 238.204 Radial†	5.3	-1.4	-13.193 ug/L	-13.193 ppb	08:57:07
3	K 766.490 Radial†	3077.8	760.9	134.91 ug/L	134.91 ppb	08:56:47
3	Mg 279.077 IEC†	2.2	1.0	36.914 ug/L	36.914 ppb	08:57:07
3	Na 589.592 Radial†	-940.2	137.1	45.999 ug/L	45.999 ppb	08:56:47
3	Sr 421.552†	-14.7	12.4	0.0774 ug/L	0.0774 ppb	08:56:47
3	Sc 361.383	901678.2	901678.2	100.05 %		08:58:05
3	Y 371.029	751276.9	751276.9	100.03 %		08:58:05
3	Ag 328.068†	353.0	60.1	0.2640 ug/L	0.2640 ppb	08:58:05
3	As 188.979†	1.1	25.2	9.9656 ug/L	9.9656 ppb	08:58:25
3	B 249.677†	234.5	765.1	16.046 ug/L	16.046 ppb	08:58:25
3	Ba 233.527†	16.8	25.3	0.1861 ug/L	0.1861 ppb	08:58:25
3	Be 313.107†	-4967.7	147.6	0.0540 ug/L	0.0540 ppb	08:58:05
3	Cd 226.502†	-152.4	42.8	0.4533 ug/L	0.4533 ppb	08:58:25
3	Co 228.616†	-67.8	-2.4	-0.0438 ug/L	-0.0438 ppb	08:58:25
3	Cr 267.716†	87.7	9.0	0.0923 ug/L	0.0923 ppb	08:58:25
3	Cu 324.752†	6900.3	140.5	0.4013 ug/L	0.4013 ppb	08:58:05
3	Mn 257.610†	424.4	1.9	0.0000 ug/L	0.0000 ppb	08:58:25
3	Mo 202.031†	28.5	10.1	0.6413 ug/L	0.6413 ppb	08:58:25
3	Ni 231.604†	91.4	4.8	0.1114 ug/L	0.1114 ppb	08:58:25
3	P 214.914†	212.5	-11.1	-6.4313 ug/L	-6.4313 ppb	08:58:25
3	Pb 220.353†	-56.8	11.7	1.3264 ug/L	1.3264 ppb	08:58:25
3	S 181.975 Axial†	35.8	-5.8	-8.1206 ug/L	-8.1206 ppb	08:58:25
3	Sb 206.836†	49.5	15.2	4.8512 ug/L	4.8512 ppb	08:58:25
3	Se 196.026†	-26.0	2.9	1.6149 ug/L	1.6149 ppb	08:58:25
3	Si 251.611†	583.4	133.4	3.9342 ug/L	3.9342 ppb	08:58:25
3	Sn 189.927†	13.7	8.8	1.4330 ug/L	1.4330 ppb	08:58:25
3	Ti 334.940†	-1043.5	71.9	0.1135 ug/L	0.1135 ppb	08:58:05
3	Tl 190.801†	-33.7	-1.2	-0.3407 ug/L	-0.3407 ppb	08:58:25
3	U 409.014†	-2289.9	113.0	3.1135 ug/L	3.1135 ppb	08:58:05
3	V 292.402†	-1405.9	-46.9	-0.2917 ug/L	-0.2917 ppb	08:58:05
3	Zn 213.857†	837.0	214.7	1.8749 ug/L	1.8749 ppb	08:58:25
3	SiO2†	586.3	118.6	7.4719 ug/L	7.4719 ppb	08:58:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902534.2	100.14	%	0.189				0.19%
Sc Radial	5796.9	99.2	%	0.78				0.79%
Y 371.029	752756.4	100.22	%	0.171				0.17%
Y RADIAL	6226.8	99.03	%	0.732				0.74%
Ag 328.068†	64.5	0.2879	ug/L	0.04497	0.2879	ppb	0.04497	15.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.5	-3.2049	ug/L	7.82294	-3.2049	ppb	7.82294	244.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	33.4	13.202	ug/L	2.8916	13.202	ppb	2.8916	21.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	803.2	16.846	ug/L	0.8218	16.846	ppb	0.8218	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0899	ug/L	0.13323	0.0899	ppb	0.13323	148.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.8	0.0566	ug/L	0.02416	0.0566	ppb	0.02416	42.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9625	ug/L	2.62598	4.9625	ppb	2.62598	52.92%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              43.0      0.4554 ug/L       0.04576      0.4554 ppb        0.04576  10.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -6.9     -0.1275 ug/L       0.07277     -0.1275 ppb        0.07277  57.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               9.3      0.0961 ug/L       0.08574      0.0961 ppb        0.08574  89.25%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             111.8      0.3197 ug/L       0.14300      0.3197 ppb        0.14300  44.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.3     -2.9527 ug/L      15.32419     -2.9527 ppb       15.32419 518.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        778.7      138.07 ug/L         7.683      138.07 ppb          7.683   5.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.5      17.309 ug/L       31.9168      17.309 ppb        31.9168 184.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              37.0      0.0389 ug/L       0.03368      0.0389 ppb        0.03368  86.60%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              16.4      1.0409 ug/L       0.39988      1.0409 ppb        0.39988  38.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       137.6      46.184 ug/L        3.0177      46.184 ppb         3.0177   6.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               9.4      0.2186 ug/L       0.12512      0.2186 ppb        0.12512  57.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.6     -4.4366 ug/L       1.76250     -4.4366 ppb        1.76250  39.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              18.7      2.1198 ug/L       0.83315      2.1198 ppb        0.83315  39.30%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.4     -2.0290 ug/L       5.27591     -2.0290 ppb        5.27591 260.03%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              23.2      7.4014 ug/L       2.21472      7.4014 ppb        2.21472  29.92%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.5      2.6127 ug/L       4.25448      2.6127 ppb        4.25448 162.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             144.4      4.2527 ug/L       0.28511      4.2527 ppb        0.28511   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              10.8      1.7765 ug/L       0.41326      1.7765 ppb        0.41326  23.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.9      0.1177 ug/L       0.13614      0.1177 ppb        0.13614 115.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              39.8      0.0622 ug/L       0.14773      0.0622 ppb        0.14773 237.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.2      1.1779 ug/L       1.91799      1.1779 ppb        1.91799 162.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              131.5      3.6238 ug/L       2.14410      3.6238 ppb        2.14410  59.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -10.0     -0.0436 ug/L       0.46154     -0.0436 ppb        0.46154 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             216.2      1.8865 ug/L       0.12801      1.8865 ppb        0.12801   6.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   109.1      6.8470 ug/L       0.60978      6.8470 ppb        0.60978   8.91%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 12/8/2009 09:04:46 **Plasma On Time:** 12/7/2009 05:17:52
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved:** 12/8/2009 07:33:15
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location:** 37
Sample ID: LR1 **Date Collected:** 12/8/2009 09:04:47
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5674.8	5674.8	97.1	%			09:06:40
1	Y RADIAL	6109.0	6109.0	97.16	%			09:06:40
1	Al 396.153Radial†	-44.6	-25.5	-16.605	ug/L	-16.605	ppb	09:06:40

1	Ca 317.933Radial†	48.4	34.2	50.475 ug/L	50.475 ppb	09:07:00
1	Fe 238.204 Radial†	39249.2	40411.8	378330 ug/L	378330 ppb	09:06:40
1	K 766.490 Radial†	2474.7	196.7	47.290 ug/L	47.290 ppb	09:06:40
1	Mg 279.077 IEC†	8.2	7.2	-68.508 ug/L	-68.508 ppb	09:07:00
1	Na 589.592 Radial†	-982.9	75.8	25.423 ug/L	25.423 ppb	09:06:40
1	Sr 421.552†	73.8	103.4	0.6433 ug/L	0.6433 ppb	09:06:40
1	Sc 361.383	897521.6	897521.6	99.585 %		09:07:58
1	Y 371.029	739294.0	739294.0	98.430 %		09:07:58
1	Ag 328.068†	-25481.6	-25880.6	3.3525 ug/L	3.3525 ppb	09:07:58
1	As 188.979†	-214.5	-191.2	-17.133 ug/L	-17.133 ppb	09:08:18
1	B 249.677†	2487.7	3028.7	13.314 ug/L	13.314 ppb	09:07:58
1	Ba 233.527†	-1770.5	-1769.5	1.0427 ug/L	1.0427 ppb	09:07:58
1	Be 313.107†	-4846.7	246.1	0.0894 ug/L	0.0894 ppb	09:07:58
1	Cd 226.502†	3574.9	3784.9	2.1903 ug/L	2.1903 ppb	09:07:58
1	Co 228.616†	211.8	278.1	-0.1855 ug/L	-0.1855 ppb	09:08:18
1	Cr 267.716†	-619.6	-700.8	-0.5095 ug/L	-0.5095 ppb	09:07:58
1	Cu 324.752†	21.2	-6735.4	0.0244 ug/L	0.0244 ppb	09:07:58
1	Mn 257.610†	-37238.4	-37815.9	-2.6165 ug/L	-2.6165 ppb	09:07:58
1	Mo 202.031†	-382.7	-402.6	1.2600 ug/L	1.2600 ppb	09:07:58
1	Ni 231.604†	208.3	122.6	2.8363 ug/L	2.8363 ppb	09:08:18
1	P 214.914†	753.0	532.6	5.1179 ug/L	5.1179 ppb	09:08:18
1	Pb 220.353†	220.4	289.7	1.6461 ug/L	1.6461 ppb	09:08:18
1	S 181.975 Axial†	53.1	11.7	16.442 ug/L	16.442 ppb	09:08:18
1	Sb 206.836†	31.2	-3.0	4.8987 ug/L	4.8987 ppb	09:08:18
1	Se 196.026†	-2121.3	-2101.3	-23.019 ug/L	-23.019 ppb	09:08:18
1	Si 251.611†	-704.3	-1156.9	-34.181 ug/L	-34.181 ppb	09:07:58
1	Sn 189.927†	-28.8	-33.9	-0.4826 ug/L	-0.4826 ppb	09:08:18
1	Ti 334.940†	-1214.7	-104.8	-0.1851 ug/L	-0.1851 ppb	09:07:58
1	Tl 190.801†	-43.3	-10.9	-3.4531 ug/L	-3.4531 ppb	09:08:18
1	U 409.014†	-505.7	1894.0	4.5915 ug/L	4.5915 ppb	09:07:58
1	V 292.402†	7050.4	8438.2	-2.0700 ug/L	-2.0700 ppb	09:07:58
1	Zn 213.857†	4885.8	4284.4	1.3044 ug/L	1.3044 ppb	09:08:18
1	SiO2†	-783.5	-1254.3	-79.480 ug/L	-79.480 ppb	09:09:15
2	Sc Radial	5859.6	5859.6	100 %		09:07:05
2	Y RADIAL	6268.0	6268.0	99.69 %		09:07:05
2	Al 396.153Radial†	-53.2	-32.6	-21.569 ug/L	-21.569 ppb	09:07:05
2	Ca 317.933Radial†	51.5	35.8	52.701 ug/L	52.701 ppb	09:07:25
2	Fe 238.204 Radial†	39706.4	39593.5	370670 ug/L	370670 ppb	09:07:05
2	K 766.490 Radial†	2416.7	58.5	22.531 ug/L	22.531 ppb	09:07:05
2	Mg 279.077 IEC†	7.2	6.0	-104.83 ug/L	-104.83 ppb	09:07:25
2	Na 589.592 Radial†	-981.9	108.7	36.480 ug/L	36.480 ppb	09:07:05
2	Sr 421.552†	69.0	96.2	0.5986 ug/L	0.5986 ppb	09:07:05
2	Sc 361.383	892276.6	892276.6	99.003 %		09:08:24
2	Y 371.029	734022.9	734022.9	97.728 %		09:08:24
2	Ag 328.068†	-25591.8	-26142.3	-0.2725 ug/L	-0.2725 ppb	09:08:24
2	As 188.979†	-212.9	-190.9	-18.162 ug/L	-18.162 ppb	09:08:44
2	B 249.677†	2371.1	2925.6	12.168 ug/L	12.168 ppb	09:08:24
2	Ba 233.527†	-1757.7	-1767.0	0.7774 ug/L	0.7774 ppb	09:08:24
2	Be 313.107†	-4974.3	88.6	0.0322 ug/L	0.0322 ppb	09:08:24
2	Cd 226.502†	3528.9	3759.6	2.6878 ug/L	2.6878 ppb	09:08:24
2	Co 228.616†	210.9	278.5	-0.0703 ug/L	-0.0703 ppb	09:08:44
2	Cr 267.716†	-604.4	-689.1	-0.5247 ug/L	-0.5247 ppb	09:08:24
2	Cu 324.752†	24.9	-6731.6	-0.3556 ug/L	-0.3556 ppb	09:08:24
2	Mn 257.610†	-37010.4	-37805.5	-3.3686 ug/L	-3.3686 ppb	09:08:24
2	Mo 202.031†	-385.1	-407.3	0.4165 ug/L	0.4165 ppb	09:08:24
2	Ni 231.604†	185.1	100.5	2.3228 ug/L	2.3228 ppb	09:08:44
2	P 214.914†	738.7	522.7	5.5558 ug/L	5.5558 ppb	09:08:44
2	Pb 220.353†	220.1	290.8	2.3945 ug/L	2.3945 ppb	09:08:44
2	S 181.975 Axial†	57.0	16.0	22.396 ug/L	22.396 ppb	09:08:44
2	Sb 206.836†	24.3	-9.7	2.6260 ug/L	2.6260 ppb	09:08:44
2	Se 196.026†	-2108.8	-2101.2	-47.131 ug/L	-47.131 ppb	09:08:44
2	Si 251.611†	-790.8	-1248.4	-36.906 ug/L	-36.906 ppb	09:08:24
2	Sn 189.927†	-30.1	-35.3	-0.8273 ug/L	-0.8273 ppb	09:08:44
2	Ti 334.940†	-1122.8	-19.2	-0.0494 ug/L	-0.0494 ppb	09:08:24
2	Tl 190.801†	-38.2	-6.0	-2.0739 ug/L	-2.0739 ppb	09:08:44
2	U 409.014†	-422.2	1975.4	7.7953 ug/L	7.7953 ppb	09:08:24
2	V 292.402†	7016.4	8445.5	-0.8577 ug/L	-0.8577 ppb	09:08:24
2	Zn 213.857†	4882.3	4309.7	2.2615 ug/L	2.2615 ppb	09:08:44
2	SiO2†	-749.4	-1224.4	-77.532 ug/L	-77.532 ppb	09:09:20
3	Sc Radial	5765.3	5765.3	98.7 %		09:07:30
3	Y RADIAL	6199.1	6199.1	98.59 %		09:07:30

3	Al 396.153Radial†	-80.6	-61.3	-41.455 ug/L	-41.455 ppb	09:07:30
3	Ca 317.933Radial†	48.2	33.3	49.051 ug/L	49.051 ppb	09:07:50
3	Fe 238.204 Radial†	39281.5	39810.2	372700 ug/L	372700 ppb	09:07:30
3	K 766.490 Radial†	2355.2	35.6	18.540 ug/L	18.540 ppb	09:07:30
3	Mg 279.077 IEC†	13.9	12.9	136.09 ug/L	136.09 ppb	09:07:50
3	Na 589.592 Radial†	-1033.0	40.9	13.709 ug/L	13.709 ppb	09:07:30
3	Sr 421.552†	60.1	88.3	0.5492 ug/L	0.5492 ppb	09:07:30
3	Sc 361.383	894183.3	894183.3	99.214 %		09:08:50
3	Y 371.029	735495.5	735495.5	97.925 %		09:08:50
3	Ag 328.068†	-25540.2	-26035.2	0.8586 ug/L	0.8586 ppb	09:08:50
3	As 188.979†	-218.4	-195.9	-19.849 ug/L	-19.849 ppb	09:09:10
3	B 249.677†	2406.5	2956.3	12.542 ug/L	12.542 ppb	09:08:50
3	Ba 233.527†	-1710.9	-1716.0	1.2281 ug/L	1.2281 ppb	09:08:50
3	Be 313.107†	-4932.6	141.3	0.0513 ug/L	0.0513 ppb	09:08:50
3	Cd 226.502†	3569.6	3793.0	2.8380 ug/L	2.8380 ppb	09:08:50
3	Co 228.616†	200.3	267.3	-0.3114 ug/L	-0.3114 ppb	09:09:10
3	Cr 267.716†	-627.3	-710.9	-0.7171 ug/L	-0.7171 ppb	09:08:50
3	Cu 324.752†	-29.6	-6786.5	-0.4093 ug/L	-0.4093 ppb	09:08:50
3	Mn 257.610†	-37288.3	-38005.9	-3.3844 ug/L	-3.3844 ppb	09:08:50
3	Mo 202.031†	-394.6	-416.1	0.0069 ug/L	0.0069 ppb	09:08:50
3	Ni 231.604†	174.2	89.0	2.0577 ug/L	2.0577 ppb	09:09:10
3	P 214.914†	751.9	534.3	10.658 ug/L	10.658 ppb	09:09:10
3	Pb 220.353†	253.9	324.4	6.0178 ug/L	6.0178 ppb	09:09:10
3	S 181.975 Axial†	58.5	17.4	24.396 ug/L	24.396 ppb	09:09:10
3	Sb 206.836†	22.0	-12.1	1.9004 ug/L	1.9004 ppb	09:09:10
3	Se 196.026†	-2099.6	-2087.5	-32.776 ug/L	-32.776 ppb	09:09:10
3	Si 251.611†	-792.9	-1248.9	-36.910 ug/L	-36.910 ppb	09:08:50
3	Sn 189.927†	-27.3	-32.5	-0.3349 ug/L	-0.3349 ppb	09:09:10
3	Ti 334.940†	-1172.2	-66.6	-0.1230 ug/L	-0.1230 ppb	09:08:50
3	Tl 190.801†	-37.5	-5.3	-1.8614 ug/L	-1.8614 ppb	09:09:10
3	U 409.014†	-595.4	1801.7	2.7559 ug/L	2.7559 ppb	09:08:50
3	V 292.402†	6887.9	8300.8	-2.1334 ug/L	-2.1334 ppb	09:08:50
3	Zn 213.857†	4888.1	4305.0	2.0203 ug/L	2.0203 ppb	09:09:10
3	SiO2†	-772.8	-1246.4	-78.924 ug/L	-78.924 ppb	09:09:25

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894660.5	99.267	%	0.2946				0.30%
Sc Radial	5766.6	98.7	%	1.58				1.60%
Y 371.029	736270.8	98.028	%	0.3621				0.37%
Y RADIAL	6192.0	98.48	%	1.269				1.29%
Ag 328.068†	-26019.4	1.3128	ug/L	1.85472	1.3128	ppb	1.85472	141.28%
Al 396.153Radial†	-39.8	-26.543	ug/L	13.1508	-26.543	ppb	13.1508	49.55%
As 188.979†	-192.7	-18.381	ug/L	1.3714	-18.381	ppb	1.3714	7.46%
B 249.677†	2970.2	12.675	ug/L	0.5842	12.675	ppb	0.5842	4.61%
Ba 233.527†	-1750.8	1.0161	ug/L	0.22652	1.0161	ppb	0.22652	22.29%
Be 313.107†	158.7	0.0576	ug/L	0.02910	0.0576	ppb	0.02910	50.48%
Ca 317.933Radial†	34.4	50.742	ug/L	1.8397	50.742	ppb	1.8397	3.63%
Cd 226.502†	3779.2	2.5720	ug/L	0.33898	2.5720	ppb	0.33898	13.18%
Co 228.616†	274.6	-0.1891	ug/L	0.12058	-0.1891	ppb	0.12058	63.77%
Cr 267.716†	-700.3	-0.5838	ug/L	0.11570	-0.5838	ppb	0.11570	19.82%
Cu 324.752†	-6751.2	-0.2468	ug/L	0.23640	-0.2468	ppb	0.23640	95.77%
Fe 238.204 Radial†	39938.5	373900	ug/L	3969.2	373900	ppb	3969.2	1.06%
K 766.490 Radial†	97.0	29.454	ug/L	15.5752	29.454	ppb	15.5752	52.88%
Mg 279.077 IEC†	8.7	-12.417	ug/L	129.8883	-12.417	ppb	129.8883	>999.9%
Mn 257.610†	-37875.8	-3.1232	ug/L	0.43887	-3.1232	ppb	0.43887	14.05%
Mo 202.031†	-408.7	0.5611	ug/L	0.63894	0.5611	ppb	0.63894	113.87%
Na 589.592 Radial†	75.1	25.204	ug/L	11.3872	25.204	ppb	11.3872	45.18%
Ni 231.604†	104.0	2.4056	ug/L	0.39584	2.4056	ppb	0.39584	16.45%
P 214.914†	529.9	7.1105	ug/L	3.07985	7.1105	ppb	3.07985	43.31%
Pb 220.353†	301.6	3.3528	ug/L	2.33809	3.3528	ppb	2.33809	69.74%
S 181.975 Axial†	15.0	21.078	ug/L	4.1374	21.078	ppb	4.1374	19.63%
Sb 206.836†	-8.2	3.1417	ug/L	1.56424	3.1417	ppb	1.56424	49.79%
Se 196.026†	-2096.7	-34.309	ug/L	12.1289	-34.309	ppb	12.1289	35.35%
Si 251.611†	-1218.1	-35.999	ug/L	1.5747	-35.999	ppb	1.5747	4.37%
Sn 189.927†	-33.9	-0.5483	ug/L	0.25266	-0.5483	ppb	0.25266	46.08%
Sr 421.552†	95.9	0.5970	ug/L	0.04707	0.5970	ppb	0.04707	7.88%
Ti 334.940†	-63.5	-0.1192	ug/L	0.06791	-0.1192	ppb	0.06791	56.99%
Tl 190.801†	-7.4	-2.4628	ug/L	0.86420	-2.4628	ppb	0.86420	35.09%

U 409.014†	1890.4	5.0475	ug/L	2.55046	5.0475	ppb	2.55046	50.53%
V 292.402†	8394.8	-1.6870	ug/L	0.71891	-1.6870	ppb	0.71891	42.61%
Zn 213.857†	4299.7	1.8621	ug/L	0.49779	1.8621	ppb	0.49779	26.73%
SiO2†	-1241.7	-78.646	ug/L	1.0035	-78.646	ppb	1.0035	1.28%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5760.8	5760.8	98.6	%			09:13:29
1	Y RADIAL	6116.4	6116.4	97.27	%			09:13:29
1	Al 396.153Radial†	7034.5	7156.4	4950.1	ug/L	4950.1	ppb	09:13:29
1	Ca 317.933Radial†	3364.6	3397.5	5007.8	ug/L	5007.8	ppb	09:13:49
1	Fe 238.204 Radial†	538.1	539.0	5061.5	ug/L	5061.5	ppb	09:13:49
1	K 766.490 Radial†	31007.5	29103.4	5152.6	ug/L	5152.6	ppb	09:13:29
1	Mg 279.077 IEC†	150.9	151.9	5364.4	ug/L	5364.4	ppb	09:13:49
1	Na 589.592 Radial†	26896.4	28372.6	9521.3	ug/L	9521.3	ppb	09:13:29
1	Sr 421.552†	79592.9	80769.1	502.96	ug/L	502.96	ppb	09:13:29
1	Sc 361.383	922734.0	922734.0	102.38	%			09:14:46
1	Y 371.029	754063.7	754063.7	100.40	%			09:14:46
1	Ag 328.068†	110965.4	108090.8	492.60	ug/L	492.60	ppb	09:14:51
1	As 188.979†	1231.3	1226.8	489.06	ug/L	489.06	ppb	09:15:12
1	B 249.677†	22929.7	22926.9	478.90	ug/L	478.90	ppb	09:14:51
1	Ba 233.527†	66920.1	65371.5	485.75	ug/L	485.75	ppb	09:14:51
1	Be 313.107†	1375184.7	1348300.4	492.42	ug/L	492.42	ppb	09:14:46
1	Cd 226.502†	46992.1	46093.8	487.09	ug/L	487.09	ppb	09:14:51
1	Co 228.616†	26129.9	25587.3	485.77	ug/L	485.77	ppb	09:14:51
1	Cr 267.716†	47317.9	46138.3	485.11	ug/L	485.11	ppb	09:14:51
1	Cu 324.752†	177843.4	166948.7	478.02	ug/L	478.02	ppb	09:14:51
1	Mn 257.610†	471345.6	459956.2	491.06	ug/L	491.06	ppb	09:14:46
1	Mo 202.031†	7882.8	7681.1	488.31	ug/L	488.31	ppb	09:15:12
1	Ni 231.604†	21715.5	21123.7	488.84	ug/L	488.84	ppb	09:14:51
1	P 214.914†	4481.1	4153.3	2323.1	ug/L	2323.1	ppb	09:15:12
1	Pb 220.353†	4313.2	4281.3	485.50	ug/L	485.50	ppb	09:15:12
1	S 181.975 Axial†	757.5	698.3	977.50	ug/L	977.50	ppb	09:15:12
1	Sb 206.836†	1596.8	1525.4	489.90	ug/L	489.90	ppb	09:15:12
1	Se 196.026†	838.3	847.6	508.44	ug/L	508.44	ppb	09:15:12
1	Si 251.611†	83061.3	80679.0	2403.4	ug/L	2403.4	ppb	09:14:51
1	Sn 189.927†	3071.2	2994.7	490.93	ug/L	490.93	ppb	09:15:12
1	Ti 334.940†	312506.5	306350.1	488.75	ug/L	488.75	ppb	09:14:51
1	Tl 190.801†	1729.6	1721.8	485.42	ug/L	485.42	ppb	09:15:12
1	U 409.014†	15419.3	17462.3	479.47	ug/L	479.47	ppb	09:14:51
1	V 292.402†	73201.8	72857.0	487.74	ug/L	487.74	ppb	09:14:51
1	Zn 213.857†	57549.1	55588.2	481.28	ug/L	481.28	ppb	09:14:51
1	SiO2†	83836.2	81418.0	5197.2	ug/L	5197.2	ppb	09:16:19
2	Sc Radial	5745.5	5745.5	98.3	%			09:13:54
2	Y RADIAL	6192.6	6192.6	98.49	%			09:13:54
2	Al 396.153Radial†	7003.1	7143.6	4941.1	ug/L	4941.1	ppb	09:13:54
2	Ca 317.933Radial†	3363.9	3406.0	5020.2	ug/L	5020.2	ppb	09:14:14
2	Fe 238.204 Radial†	533.2	535.5	5028.9	ug/L	5028.9	ppb	09:14:14
2	K 766.490 Radial†	30739.7	28914.8	5119.2	ug/L	5119.2	ppb	09:13:54
2	Mg 279.077 IEC†	147.9	149.3	5273.6	ug/L	5273.6	ppb	09:14:14
2	Na 589.592 Radial†	26537.9	28080.6	9423.3	ug/L	9423.3	ppb	09:13:54
2	Sr 421.552†	78795.9	80173.6	499.25	ug/L	499.25	ppb	09:13:54
2	Sc 361.383	918645.3	918645.3	101.93	%			09:15:17
2	Y 371.029	749404.0	749404.0	99.776	%			09:15:17
2	Ag 328.068†	111114.6	108719.5	495.44	ug/L	495.44	ppb	09:15:22
2	As 188.979†	1241.3	1241.9	495.05	ug/L	495.05	ppb	09:15:43
2	B 249.677†	22912.8	23009.9	480.64	ug/L	480.64	ppb	09:15:22
2	Ba 233.527†	66956.5	65698.1	488.17	ug/L	488.17	ppb	09:15:22
2	Be 313.107†	1358622.3	1338029.7	488.68	ug/L	488.68	ppb	09:15:17
2	Cd 226.502†	46897.3	46205.1	488.27	ug/L	488.27	ppb	09:15:22
2	Co 228.616†	26185.9	25755.9	488.97	ug/L	488.97	ppb	09:15:22
2	Cr 267.716†	47298.1	46324.5	487.07	ug/L	487.07	ppb	09:15:22
2	Cu 324.752†	178329.4	168198.6	481.59	ug/L	481.59	ppb	09:15:22
2	Mn 257.610†	468894.0	459600.0	490.68	ug/L	490.68	ppb	09:15:17
2	Mo 202.031†	7898.2	7730.5	491.44	ug/L	491.44	ppb	09:15:43
2	Ni 231.604†	21658.2	21161.9	489.72	ug/L	489.72	ppb	09:15:22

2	P 214.914†	4481.9	4173.6	2334.2 ug/L	2334.2 ppb	09:15:43
2	Pb 220.353†	4305.7	4292.7	486.80 ug/L	486.80 ppb	09:15:43
2	S 181.975 Axial†	742.6	687.0	961.68 ug/L	961.68 ppb	09:15:43
2	Sb 206.836†	1611.4	1546.7	496.65 ug/L	496.65 ppb	09:15:43
2	Se 196.026†	816.5	829.9	498.09 ug/L	498.09 ppb	09:15:43
2	Si 251.611†	83451.2	81422.6	2425.7 ug/L	2425.7 ppb	09:15:22
2	Sn 189.927†	3064.3	3001.3	492.00 ug/L	492.00 ppb	09:15:43
2	Ti 334.940†	313467.9	308651.9	492.42 ug/L	492.42 ppb	09:15:22
2	Tl 190.801†	1733.8	1733.5	488.68 ug/L	488.68 ppb	09:15:43
2	U 409.014†	15637.9	17743.9	487.22 ug/L	487.22 ppb	09:15:22
2	V 292.402†	73233.5	73206.2	490.11 ug/L	490.11 ppb	09:15:22
2	Zn 213.857†	57577.9	55866.6	483.71 ug/L	483.71 ppb	09:15:22
2	SiO2†	84539.8	82472.9	5264.8 ug/L	5264.8 ppb	09:16:24
3	Sc Radial	5870.9	5870.9	100 %		09:14:19
3	Y RADIAL	6265.4	6265.4	99.64 %		09:14:19
3	Al 396.153Radial†	7091.8	7079.6	4896.6 ug/L	4896.6 ppb	09:14:19
3	Ca 317.933Radial†	3390.8	3359.6	4951.9 ug/L	4951.9 ppb	09:14:39
3	Fe 238.204 Radial†	544.0	534.7	5021.2 ug/L	5021.2 ppb	09:14:39
3	K 766.490 Radial†	31070.1	28575.4	5059.1 ug/L	5059.1 ppb	09:14:19
3	Mg 279.077 IEC†	148.1	146.3	5165.6 ug/L	5165.6 ppb	09:14:39
3	Na 589.592 Radial†	26868.9	27833.2	9340.3 ug/L	9340.3 ppb	09:14:19
3	Sr 421.552†	79717.2	79377.6	494.30 ug/L	494.30 ppb	09:14:19
3	Sc 361.383	925667.8	925667.8	102.71 %		09:15:48
3	Y 371.029	756709.0	756709.0	100.75 %		09:15:48
3	Ag 328.068†	111245.2	108019.7	492.26 ug/L	492.26 ppb	09:15:53
3	As 188.979†	1236.1	1227.6	489.36 ug/L	489.36 ppb	09:16:14
3	B 249.677†	23103.8	23025.4	480.97 ug/L	480.97 ppb	09:15:53
3	Ba 233.527†	66683.4	64933.9	482.50 ug/L	482.50 ppb	09:15:53
3	Be 313.107†	1368635.9	1337667.3	488.54 ug/L	488.54 ppb	09:15:48
3	Cd 226.502†	46751.6	45714.1	483.07 ug/L	483.07 ppb	09:15:53
3	Co 228.616†	26093.7	25471.2	483.57 ug/L	483.57 ppb	09:15:53
3	Cr 267.716†	47245.6	45921.4	482.83 ug/L	482.83 ppb	09:15:53
3	Cu 324.752†	179081.9	167604.0	479.89 ug/L	479.89 ppb	09:15:53
3	Mn 257.610†	469661.4	456857.3	487.75 ug/L	487.75 ppb	09:15:48
3	Mo 202.031†	7946.8	7719.0	490.71 ug/L	490.71 ppb	09:16:14
3	Ni 231.604†	21620.0	20963.5	485.13 ug/L	485.13 ppb	09:15:53
3	P 214.914†	4497.4	4155.4	2324.0 ug/L	2324.0 ppb	09:16:14
3	Pb 220.353†	4343.4	4297.4	487.32 ug/L	487.32 ppb	09:16:14
3	S 181.975 Axial†	765.5	703.7	985.12 ug/L	985.12 ppb	09:16:14
3	Sb 206.836†	1633.4	1556.1	499.75 ug/L	499.75 ppb	09:16:14
3	Se 196.026†	833.8	840.6	504.26 ug/L	504.26 ppb	09:16:14
3	Si 251.611†	83304.0	80658.2	2402.8 ug/L	2402.8 ppb	09:15:53
3	Sn 189.927†	3097.9	3011.3	493.62 ug/L	493.62 ppb	09:16:14
3	Ti 334.940†	313165.7	306024.6	488.23 ug/L	488.23 ppb	09:15:53
3	Tl 190.801†	1748.1	1734.5	488.96 ug/L	488.96 ppb	09:16:14
3	U 409.014†	15443.1	17437.8	478.80 ug/L	478.80 ppb	09:15:53
3	V 292.402†	73192.0	72620.7	486.22 ug/L	486.22 ppb	09:15:53
3	Zn 213.857†	57567.6	55428.1	479.91 ug/L	479.91 ppb	09:15:53
3	SiO2†	83513.2	80844.1	5160.3 ug/L	5160.3 ppb	09:16:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922349.0	102.34	%	0.391				0.38%
Sc Radial	5792.4	99.1	%	1.17				1.18%
Y 371.029	753392.2	100.31	%	0.492				0.49%
Y RADIAL	6191.5	98.47	%	1.186				1.20%
Ag 328.068†	108276.7	493.43	ug/L	1.746	493.43	ppb	1.746	0.35%
QC value within limits for Ag 328.068 Recovery = 98.69%								
Al 396.153Radial†	7126.5	4929.3	ug/L	28.62	4929.3	ppb	28.62	0.58%
QC value within limits for Al 396.153Radial Recovery = 98.59%								
As 188.979†	1232.1	491.16	ug/L	3.377	491.16	ppb	3.377	0.69%
QC value within limits for As 188.979 Recovery = 98.23%								
B 249.677†	22987.4	480.17	ug/L	1.114	480.17	ppb	1.114	0.23%
QC value within limits for B 249.677 Recovery = 96.03%								
Ba 233.527†	65334.5	485.48	ug/L	2.846	485.48	ppb	2.846	0.59%
QC value within limits for Ba 233.527 Recovery = 97.10%								
Be 313.107†	1341332.5	489.88	ug/L	2.199	489.88	ppb	2.199	0.45%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	3387.7	4993.3	ug/L	36.39	4993.3	ppb	36.39	0.73%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.87%
Cd 226.502†            46004.4      486.14 ug/L         2.722      486.14 ppb          2.722   0.56%
   QC value within limits for Cd 226.502  Recovery = 97.23%
Co 228.616†            25604.8      486.10 ug/L         2.713      486.10 ppb          2.713   0.56%
   QC value within limits for Co 228.616  Recovery = 97.22%
Cr 267.716†            46128.1      485.01 ug/L         2.120      485.01 ppb          2.120   0.44%
   QC value within limits for Cr 267.716  Recovery = 97.00%
Cu 324.752†           167583.8      479.83 ug/L         1.788      479.83 ppb          1.788   0.37%
   QC value within limits for Cu 324.752  Recovery = 95.97%
Fe 238.204 Radial†       536.4      5037.2 ug/L        21.40      5037.2 ppb         21.40   0.42%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      28864.5      5110.3 ug/L        47.39      5110.3 ppb         47.39   0.93%
   QC value within limits for K 766.490 Radial  Recovery = 102.21%
Mg 279.077 IEC†          149.2      5267.9 ug/L        99.54      5267.9 ppb         99.54   1.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.36%
Mn 257.610†           458804.5      489.83 ug/L         1.809      489.83 ppb          1.809   0.37%
   QC value within limits for Mn 257.610  Recovery = 97.97%
Mo 202.031†             7710.2      490.15 ug/L         1.640      490.15 ppb          1.640   0.33%
   QC value within limits for Mo 202.031  Recovery = 98.03%
Na 589.592 Radial†     28095.5      9428.3 ug/L        90.60      9428.3 ppb         90.60   0.96%
   QC value within limits for Na 589.592 Radial  Recovery = 94.28%
Ni 231.604†            21083.0      487.90 ug/L         2.436      487.90 ppb          2.436   0.50%
   QC value within limits for Ni 231.604  Recovery = 97.58%
P 214.914†              4160.8      2327.1 ug/L         6.18      2327.1 ppb          6.18   0.27%
   QC value within limits for P 214.914  Recovery = 93.08%
Pb 220.353†             4290.5      486.54 ug/L         0.936      486.54 ppb          0.936   0.19%
   QC value within limits for Pb 220.353  Recovery = 97.31%
S 181.975 Axial†         696.3      974.77 ug/L        11.960      974.77 ppb         11.960   1.23%
   QC value within limits for S 181.975 Axial  Recovery = 97.48%
Sb 206.836†             1542.7      495.43 ug/L         5.037      495.43 ppb          5.037   1.02%
   QC value within limits for Sb 206.836  Recovery = 99.09%
Se 196.026†              839.4      503.59 ug/L         5.207      503.59 ppb          5.207   1.03%
   QC value within limits for Se 196.026  Recovery = 100.72%
Si 251.611†            80919.9      2410.6 ug/L        13.01      2410.6 ppb         13.01   0.54%
   QC value within limits for Si 251.611  Recovery = 96.43%
Sn 189.927†             3002.4      492.18 ug/L         1.357      492.18 ppb          1.357   0.28%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            80106.8      498.84 ug/L         4.348      498.84 ppb          4.348   0.87%
   QC value within limits for Sr 421.552  Recovery = 99.77%
Ti 334.940†           307008.9      489.80 ug/L         2.284      489.80 ppb          2.284   0.47%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†             1729.9      487.69 ug/L         1.971      487.69 ppb          1.971   0.40%
   QC value within limits for Tl 190.801  Recovery = 97.54%
U 409.014†             17548.0      481.83 ug/L         4.683      481.83 ppb          4.683   0.97%
   QC value within limits for U 409.014  Recovery = 96.37%
V 292.402†             72894.6      488.02 ug/L         1.960      488.02 ppb          1.960   0.40%
   QC value within limits for V 292.402  Recovery = 97.60%
Zn 213.857†            55627.6      481.63 ug/L         1.922      481.63 ppb          1.922   0.40%
   QC value within limits for Zn 213.857  Recovery = 96.33%
SiO2†                  81578.3      5207.4 ug/L        52.96      5207.4 ppb         52.96   1.02%
   QC value within limits for SiO2  Recovery = 97.38%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:18:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5673.3	5673.3	97.1	%			09:20:32
1	Y RADIAL	6094.3	6094.3	96.92	%			09:20:32
1	Al 396.153Radial†	-30.7	-11.2	-7.7882	ug/L	-7.7882	ppb	09:20:32
1	Ca 317.933Radial†	21.1	6.1	9.0265	ug/L	9.0265	ppb	09:20:52
1	Fe 238.204 Radial†	7.9	1.3	12.187	ug/L	12.187	ppb	09:20:52
1	K 766.490 Radial†	2609.3	336.1	59.601	ug/L	59.601	ppb	09:20:32
1	Mg 279.077 IEC†	2.8	1.7	61.423	ug/L	61.423	ppb	09:20:52
1	Na 589.592 Radial†	-1099.0	-44.1	-14.808	ug/L	-14.808	ppb	09:20:32
1	Sr 421.552†	0.7	28.1	0.1748	ug/L	0.1748	ppb	09:20:32
1	Sc 361.383	904057.2	904057.2	100.31	%			09:21:49
1	Y 371.029	754720.7	754720.7	100.48	%			09:21:49
1	Ag 328.068†	312.9	19.2	0.0919	ug/L	0.0919	ppb	09:21:49
1	As 188.979†	-23.0	1.2	0.4798	ug/L	0.4798	ppb	09:22:09
1	B 249.677†	-87.7	443.2	9.2934	ug/L	9.2934	ppb	09:22:09
1	Ba 233.527†	-11.7	-3.2	-0.0229	ug/L	-0.0229	ppb	09:22:09
1	Be 313.107†	-4874.0	254.1	0.0927	ug/L	0.0927	ppb	09:21:49
1	Cd 226.502†	-179.4	16.3	0.1714	ug/L	0.1714	ppb	09:22:09
1	Co 228.616†	-79.9	-14.3	-0.2709	ug/L	-0.2709	ppb	09:22:09
1	Cr 267.716†	68.7	-10.1	-0.1056	ug/L	-0.1056	ppb	09:22:09
1	Cu 324.752†	6725.9	-51.6	-0.1469	ug/L	-0.1469	ppb	09:21:49
1	Mn 257.610†	420.1	-3.5	-0.0036	ug/L	-0.0036	ppb	09:22:09
1	Mo 202.031†	18.8	0.4	0.0244	ug/L	0.0244	ppb	09:22:09
1	Ni 231.604†	113.9	27.0	0.6255	ug/L	0.6255	ppb	09:22:09
1	P 214.914†	226.0	1.7	1.0491	ug/L	1.0491	ppb	09:22:09
1	Pb 220.353†	-56.2	12.4	1.4025	ug/L	1.4025	ppb	09:22:09
1	S 181.975 Axial†	39.2	-2.5	-3.4623	ug/L	-3.4623	ppb	09:22:09
1	Sb 206.836†	40.8	6.4	2.0583	ug/L	2.0583	ppb	09:22:09
1	Se 196.026†	-27.6	1.3	0.7972	ug/L	0.7972	ppb	09:22:09
1	Si 251.611†	479.1	28.0	0.8114	ug/L	0.8114	ppb	09:22:09
1	Sn 189.927†	17.7	12.7	2.0783	ug/L	2.0783	ppb	09:22:09
1	Ti 334.940†	-1083.6	34.6	0.0561	ug/L	0.0561	ppb	09:21:49
1	Tl 190.801†	-28.5	4.1	1.1534	ug/L	1.1534	ppb	09:22:09
1	U 409.014†	-2434.0	-24.7	-0.6809	ug/L	-0.6809	ppb	09:21:49
1	V 292.402†	-1342.8	19.7	0.1285	ug/L	0.1285	ppb	09:21:49
1	Zn 213.857†	711.6	87.6	0.7583	ug/L	0.7583	ppb	09:22:09
1	SiO2†	526.8	57.7	3.6408	ug/L	3.6408	ppb	09:23:05
2	Sc Radial	5946.6	5946.6	102	%			09:20:57
2	Y RADIAL	6401.7	6401.7	101.8	%			09:20:57
2	Al 396.153Radial†	-7.9	12.7	8.7846	ug/L	8.7846	ppb	09:20:57
2	Ca 317.933Radial†	24.4	8.4	12.347	ug/L	12.347	ppb	09:21:17
2	Fe 238.204 Radial†	8.6	1.6	15.360	ug/L	15.360	ppb	09:21:17
2	K 766.490 Radial†	2552.1	156.3	27.714	ug/L	27.714	ppb	09:20:57
2	Mg 279.077 IEC†	0.8	-0.4	-14.689	ug/L	-14.689	ppb	09:21:17
2	Na 589.592 Radial†	-1075.1	31.4	10.531	ug/L	10.531	ppb	09:20:57
2	Sr 421.552†	-38.2	-10.2	-0.0635	ug/L	-0.0635	ppb	09:20:57
2	Sc 361.383	913109.6	913109.6	101.31	%			09:22:14
2	Y 371.029	762217.3	762217.3	101.48	%			09:22:14
2	Ag 328.068†	373.3	75.7	0.3473	ug/L	0.3473	ppb	09:22:14
2	As 188.979†	-22.0	2.5	0.9795	ug/L	0.9795	ppb	09:22:34
2	B 249.677†	-143.7	388.9	8.1531	ug/L	8.1531	ppb	09:22:34
2	Ba 233.527†	-8.4	0.2	0.0033	ug/L	0.0033	ppb	09:22:34
2	Be 313.107†	-4965.6	211.8	0.0770	ug/L	0.0770	ppb	09:22:14
2	Cd 226.502†	-173.3	24.0	0.2526	ug/L	0.2526	ppb	09:22:34
2	Co 228.616†	-67.4	-1.1	-0.0193	ug/L	-0.0193	ppb	09:22:34
2	Cr 267.716†	75.4	-4.2	-0.0439	ug/L	-0.0439	ppb	09:22:34
2	Cu 324.752†	6711.1	-132.7	-0.3789	ug/L	-0.3789	ppb	09:22:14
2	Mn 257.610†	437.1	9.1	0.0115	ug/L	0.0115	ppb	09:22:34
2	Mo 202.031†	27.1	8.4	0.5349	ug/L	0.5349	ppb	09:22:34
2	Ni 231.604†	93.1	5.4	0.1242	ug/L	0.1242	ppb	09:22:34

2	P 214.914†	209.0	-17.2	-9.8660 ug/L	-9.8660 ppb	09:22:34
2	Pb 220.353†	-64.7	4.6	0.5214 ug/L	0.5214 ppb	09:22:34
2	S 181.975 Axial†	41.5	-0.6	-0.8812 ug/L	-0.8812 ppb	09:22:34
2	Sb 206.836†	44.6	9.8	3.1149 ug/L	3.1149 ppb	09:22:34
2	Se 196.026†	-31.9	-2.7	-1.4810 ug/L	-1.4810 ppb	09:22:34
2	Si 251.611†	482.1	26.2	0.7650 ug/L	0.7650 ppb	09:22:34
2	Sn 189.927†	8.0	2.9	0.4693 ug/L	0.4693 ppb	09:22:34
2	Ti 334.940†	-1207.0	-76.4	-0.1226 ug/L	-0.1226 ppb	09:22:14
2	Tl 190.801†	-28.9	4.0	1.1274 ug/L	1.1274 ppb	09:22:34
2	U 409.014†	-2327.4	104.7	2.8810 ug/L	2.8810 ppb	09:22:14
2	V 292.402†	-1294.0	81.1	0.5465 ug/L	0.5465 ppb	09:22:14
2	Zn 213.857†	712.1	81.1	0.7069 ug/L	0.7069 ppb	09:22:34
2	SiO2†	494.8	20.9	1.2965 ug/L	1.2965 ppb	09:23:10
3	Sc Radial	5965.8	5965.8	102 %		09:21:22
3	Y RADIAL	6390.8	6390.8	101.6 %		09:21:22
3	Al 396.153Radial†	-18.0	2.8	1.8837 ug/L	1.8837 ppb	09:21:22
3	Ca 317.933Radial†	21.0	5.0	7.3675 ug/L	7.3675 ppb	09:21:42
3	Fe 238.204 Radial†	8.8	1.8	17.163 ug/L	17.163 ppb	09:21:42
3	K 766.490 Radial†	2654.1	248.2	44.012 ug/L	44.012 ppb	09:21:22
3	Mg 279.077 IEC†	2.7	1.5	51.921 ug/L	51.921 ppb	09:21:42
3	Na 589.592 Radial†	-1140.7	-29.5	-9.8839 ug/L	-9.8839 ppb	09:21:22
3	Sr 421.552†	-12.2	15.4	0.0956 ug/L	0.0956 ppb	09:21:22
3	Sc 361.383	916495.3	916495.3	101.69 %		09:22:39
3	Y 371.029	767046.2	767046.2	102.13 %		09:22:39
3	Ag 328.068†	305.8	8.0	0.0385 ug/L	0.0385 ppb	09:22:39
3	As 188.979†	-16.6	7.9	3.1139 ug/L	3.1139 ppb	09:22:59
3	B 249.677†	-153.3	379.9	7.9653 ug/L	7.9653 ppb	09:22:59
3	Ba 233.527†	-1.6	6.9	0.0519 ug/L	0.0519 ppb	09:22:59
3	Be 313.107†	-4926.0	268.9	0.0981 ug/L	0.0981 ppb	09:22:39
3	Cd 226.502†	-178.1	19.9	0.2092 ug/L	0.2092 ppb	09:22:59
3	Co 228.616†	-68.9	-2.4	-0.0426 ug/L	-0.0426 ppb	09:22:59
3	Cr 267.716†	77.8	-2.2	-0.0234 ug/L	-0.0234 ppb	09:22:59
3	Cu 324.752†	6814.0	-56.0	-0.1594 ug/L	-0.1594 ppb	09:22:39
3	Mn 257.610†	440.3	10.7	0.0122 ug/L	0.0122 ppb	09:22:59
3	Mo 202.031†	34.1	15.2	0.9654 ug/L	0.9654 ppb	09:22:59
3	Ni 231.604†	98.7	10.5	0.2430 ug/L	0.2430 ppb	09:22:59
3	P 214.914†	223.4	-3.8	-2.1956 ug/L	-2.1956 ppb	09:22:59
3	Pb 220.353†	-65.7	3.8	0.4307 ug/L	0.4307 ppb	09:22:59
3	S 181.975 Axial†	39.1	-3.1	-4.3810 ug/L	-4.3810 ppb	09:22:59
3	Sb 206.836†	43.6	8.7	2.7720 ug/L	2.7720 ppb	09:22:59
3	Se 196.026†	-25.3	3.9	2.3314 ug/L	2.3314 ppb	09:22:59
3	Si 251.611†	505.4	47.3	1.3841 ug/L	1.3841 ppb	09:22:59
3	Sn 189.927†	6.5	1.4	0.2312 ug/L	0.2312 ppb	09:22:59
3	Ti 334.940†	-1100.5	32.7	0.0506 ug/L	0.0506 ppb	09:22:39
3	Tl 190.801†	-31.0	2.0	0.5543 ug/L	0.5543 ppb	09:22:59
3	U 409.014†	-2281.5	158.3	4.3581 ug/L	4.3581 ppb	09:22:39
3	V 292.402†	-1351.2	29.6	0.2165 ug/L	0.2165 ppb	09:22:39
3	Zn 213.857†	707.0	73.4	0.6366 ug/L	0.6366 ppb	09:22:59
3	SiO2†	503.4	27.6	1.6973 ug/L	1.6973 ppb	09:23:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911220.7	101.10	%	0.714				0.71%
Sc Radial	5861.9	100	%	2.8				2.79%
Y 371.029	761328.0	101.36	%	0.827				0.82%
Y RADIAL	6295.6	100.1	%	2.77				2.77%
Ag 328.068†	34.3	0.1592	ug/L	0.16502	0.1592	ppb	0.16502	103.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.4	0.9600	ug/L	8.32490	0.9600	ppb	8.32490	867.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.9	1.5244	ug/L	1.39905	1.5244	ppb	1.39905	91.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	404.0	8.4706	ug/L	0.71870	8.4706	ppb	0.71870	8.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.3	0.0108	ug/L	0.03799	0.0108	ppb	0.03799	352.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	244.9	0.0893	ug/L	0.01098	0.0893	ppb	0.01098	12.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.5	9.5803	ug/L	2.53552	9.5803	ppb	2.53552	26.47%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                20.1      0.2111 ug/L       0.04065      0.2111 ppb        0.04065  19.26%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.9     -0.1109 ug/L       0.13905     -0.1109 ppb        0.13905 125.33%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -5.5     -0.0576 ug/L       0.04278     -0.0576 ppb        0.04278  74.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -80.1     -0.2284 ug/L       0.13050     -0.2284 ppb        0.13050  57.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.6      14.903 ug/L        2.5196      14.903 ppb         2.5196  16.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         246.8      43.776 ug/L       15.9447      43.776 ppb        15.9447  36.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.9      32.885 ug/L       41.4731      32.885 ppb        41.4731 126.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 5.5      0.0067 ug/L       0.00894      0.0067 ppb        0.00894 133.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.0      0.5082 ug/L       0.47108      0.5082 ppb        0.47108  92.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -14.1     -4.7202 ug/L      13.43550     -4.7202 ppb       13.43550 284.64%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.3      0.3309 ug/L       0.26193      0.3309 ppb        0.26193  79.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.4     -3.6708 ug/L       5.60512     -3.6708 ppb        5.60512 152.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.9      0.7849 ug/L       0.53682      0.7849 ppb        0.53682  68.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.1     -2.9082 ug/L       1.81452     -2.9082 ppb        1.81452  62.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 8.3      2.6484 ug/L       0.53904      2.6484 ppb        0.53904  20.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5492 ug/L       1.91828      0.5492 ppb        1.91828 349.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                33.8      0.9868 ug/L       0.34483      0.9868 ppb        0.34483  34.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.9263 ug/L       1.00478      0.9263 ppb        1.00478 108.48%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.1      0.0690 ug/L       0.12137      0.0690 ppb        0.12137 175.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -3.0     -0.0053 ug/L       0.10161     -0.0053 ppb        0.10161 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.4      0.9450 ug/L       0.33865      0.9450 ppb        0.33865  35.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 79.4      2.1861 ug/L       2.59036      2.1861 ppb        2.59036 118.49%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 43.5      0.2972 ug/L       0.22039      0.2972 ppb        0.22039  74.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                80.7      0.7006 ug/L       0.06110      0.7006 ppb        0.06110   8.72%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      35.4      2.2115 ug/L       1.25386      2.2115 ppb        1.25386  56.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:52:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5798.3	5798.3	99.2	%			09:54:38
1	Y RADIAL	6170.9	6170.9	98.14	%			09:54:38
1	Al 396.153Radial†	7003.2	7078.7	4895.8	ug/L	4895.8	ppb	09:54:38
1	Ca 317.933Radial†	3348.4	3359.1	4951.2	ug/L	4951.2	ppb	09:54:58
1	Fe 238.204 Radial†	532.5	529.9	4976.0	ug/L	4976.0	ppb	09:54:58
1	K 766.490 Radial†	30386.2	28273.5	5005.6	ug/L	5005.6	ppb	09:54:38
1	Mg 279.077 IEC†	143.2	143.2	5056.6	ug/L	5056.6	ppb	09:54:58
1	Na 589.592 Radial†	26305.9	27600.8	9262.3	ug/L	9262.3	ppb	09:54:38
1	Sr 421.552†	78338.6	78982.3	491.84	ug/L	491.84	ppb	09:54:38
1	Sc 361.383	913291.3	913291.3	101.33	%			09:55:55
1	Y 371.029	746166.9	746166.9	99.345	%			09:55:55
1	Ag 328.068†	111619.8	109857.2	500.60	ug/L	500.60	ppb	09:56:00
1	As 188.979†	1235.9	1243.8	495.83	ug/L	495.83	ppb	09:56:20
1	B 249.677†	22935.9	23164.5	483.87	ug/L	483.87	ppb	09:56:00
1	Ba 233.527†	67190.5	66314.2	492.75	ug/L	492.75	ppb	09:56:00
1	Be 313.107†	1363119.3	1350281.4	493.16	ug/L	493.16	ppb	09:55:55
1	Cd 226.502†	47270.4	46843.0	495.02	ug/L	495.02	ppb	09:56:00
1	Co 228.616†	26329.1	26047.8	494.52	ug/L	494.52	ppb	09:56:00
1	Cr 267.716†	47557.2	46852.2	492.62	ug/L	492.62	ppb	09:56:00
1	Cu 324.752†	179106.7	169991.4	486.72	ug/L	486.72	ppb	09:56:00
1	Mn 257.610†	467768.4	461186.1	492.37	ug/L	492.37	ppb	09:55:55
1	Mo 202.031†	7951.8	7828.7	497.68	ug/L	497.68	ppb	09:56:20
1	Ni 231.604†	21776.8	21403.5	495.31	ug/L	495.31	ppb	09:56:00
1	P 214.914†	4496.3	4213.6	2356.6	ug/L	2356.6	ppb	09:56:20
1	Pb 220.353†	4324.7	4336.2	491.73	ug/L	491.73	ppb	09:56:20
1	S 181.975 Axial†	761.4	709.8	993.59	ug/L	993.59	ppb	09:56:20
1	Sb 206.836†	1610.3	1554.9	499.36	ug/L	499.36	ppb	09:56:20
1	Se 196.026†	830.1	847.9	508.36	ug/L	508.36	ppb	09:56:20
1	Si 251.611†	83663.7	82112.3	2446.2	ug/L	2446.2	ppb	09:56:00
1	Sn 189.927†	3087.2	3041.6	498.59	ug/L	498.59	ppb	09:56:20
1	Ti 334.940†	314687.5	311658.3	497.22	ug/L	497.22	ppb	09:56:00
1	Tl 190.801†	1737.0	1746.6	492.37	ug/L	492.37	ppb	09:56:20
1	U 409.014†	15597.8	17794.2	488.61	ug/L	488.61	ppb	09:56:00
1	V 292.402†	73648.2	74036.7	495.68	ug/L	495.68	ppb	09:56:00
1	Zn 213.857†	57897.4	56513.1	489.33	ug/L	489.33	ppb	09:56:00
1	SiO2†	82623.5	81068.0	5174.4	ug/L	5174.4	ppb	09:57:28
2	Sc Radial	5699.5	5699.5	97.5	%			09:55:03
2	Y RADIAL	6095.6	6095.6	96.94	%			09:55:03
2	Al 396.153Radial†	6983.8	7181.2	4967.1	ug/L	4967.1	ppb	09:55:03
2	Ca 317.933Radial†	3382.0	3452.1	5088.2	ug/L	5088.2	ppb	09:55:23
2	Fe 238.204 Radial†	536.3	543.1	5100.2	ug/L	5100.2	ppb	09:55:23
2	K 766.490 Radial†	30276.6	28692.1	5079.8	ug/L	5079.8	ppb	09:55:03
2	Mg 279.077 IEC†	148.2	150.8	5324.3	ug/L	5324.3	ppb	09:55:23
2	Na 589.592 Radial†	26033.4	27781.1	9322.8	ug/L	9322.8	ppb	09:55:03
2	Sr 421.552†	77942.2	79944.7	497.83	ug/L	497.83	ppb	09:55:03
2	Sc 361.383	917308.5	917308.5	101.78	%			09:56:26
2	Y 371.029	749645.7	749645.7	99.808	%			09:56:26
2	Ag 328.068†	112752.9	110488.1	503.50	ug/L	503.50	ppb	09:56:31
2	As 188.979†	1226.0	1228.7	489.90	ug/L	489.90	ppb	09:56:51
2	B 249.677†	23222.7	23347.2	487.68	ug/L	487.68	ppb	09:56:31
2	Ba 233.527†	68008.6	66827.5	496.57	ug/L	496.57	ppb	09:56:31
2	Be 313.107†	1371532.3	1352656.2	494.03	ug/L	494.03	ppb	09:56:26
2	Cd 226.502†	47576.1	46939.1	496.02	ug/L	496.02	ppb	09:56:31
2	Co 228.616†	26565.9	26166.7	496.75	ug/L	496.75	ppb	09:56:31
2	Cr 267.716†	48003.3	47085.1	495.07	ug/L	495.07	ppb	09:56:31
2	Cu 324.752†	181535.2	171603.3	491.34	ug/L	491.34	ppb	09:56:31
2	Mn 257.610†	470796.4	462139.6	493.39	ug/L	493.39	ppb	09:56:26
2	Mo 202.031†	7918.0	7761.2	493.40	ug/L	493.40	ppb	09:56:51
2	Ni 231.604†	21967.0	21496.2	497.46	ug/L	497.46	ppb	09:56:31

2	P 214.914†	4508.4	4206.0	2351.4 ug/L	2351.4 ppb	09:56:51
2	Pb 220.353†	4313.4	4306.4	488.35 ug/L	488.35 ppb	09:56:51
2	S 181.975 Axial†	750.8	696.1	974.45 ug/L	974.45 ppb	09:56:51
2	Sb 206.836†	1620.0	1557.5	499.99 ug/L	499.99 ppb	09:56:51
2	Se 196.026†	819.8	834.2	500.83 ug/L	500.83 ppb	09:56:51
2	Si 251.611†	84641.3	82711.1	2464.2 ug/L	2464.2 ppb	09:56:31
2	Sn 189.927†	3086.1	3027.1	496.23 ug/L	496.23 ppb	09:56:51
2	Ti 334.940†	318134.5	313685.0	500.46 ug/L	500.46 ppb	09:56:31
2	Tl 190.801†	1738.7	1740.8	490.77 ug/L	490.77 ppb	09:56:51
2	U 409.014†	15717.0	17843.9	489.96 ug/L	489.96 ppb	09:56:31
2	V 292.402†	74442.7	74499.0	498.66 ug/L	498.66 ppb	09:56:31
2	Zn 213.857†	58410.1	56766.6	491.50 ug/L	491.50 ppb	09:56:31
2	SiO2†	83428.0	81501.3	5202.4 ug/L	5202.4 ppb	09:57:33
3	Sc Radial	5781.7	5781.7	98.9 %		09:55:28
3	Y RADIAL	6134.2	6134.2	97.56 %		09:55:28
3	Al 396.153Radial†	7144.4	7241.7	5009.0 ug/L	5009.0 ppb	09:55:28
3	Ca 317.933Radial†	3390.8	3411.7	5028.7 ug/L	5028.7 ppb	09:55:48
3	Fe 238.204 Radial†	533.2	532.2	4997.9 ug/L	4997.9 ppb	09:55:48
3	K 766.490 Radial†	31003.1	28985.2	5131.8 ug/L	5131.8 ppb	09:55:28
3	Mg 279.077 IEC†	146.5	146.9	5189.7 ug/L	5189.7 ppb	09:55:48
3	Na 589.592 Radial†	26404.0	27776.3	9321.2 ug/L	9321.2 ppb	09:55:28
3	Sr 421.552†	79363.0	80245.0	499.70 ug/L	499.70 ppb	09:55:28
3	Sc 361.383	911611.3	911611.3	101.15 %		09:56:57
3	Y 371.029	745769.9	745769.9	99.292 %		09:56:57
3	Ag 328.068†	112067.6	110502.8	503.55 ug/L	503.55 ppb	09:57:02
3	As 188.979†	1237.5	1247.6	497.35 ug/L	497.35 ppb	09:57:22
3	B 249.677†	23101.5	23370.0	488.17 ug/L	488.17 ppb	09:57:02
3	Ba 233.527†	67671.0	66911.4	497.19 ug/L	497.19 ppb	09:57:02
3	Be 313.107†	1364038.9	1353669.5	494.40 ug/L	494.40 ppb	09:56:57
3	Cd 226.502†	47536.3	47191.8	498.71 ug/L	498.71 ppb	09:57:02
3	Co 228.616†	26480.7	26245.6	498.26 ug/L	498.26 ppb	09:57:02
3	Cr 267.716†	47913.3	47290.8	497.23 ug/L	497.23 ppb	09:57:02
3	Cu 324.752†	179727.3	170930.7	489.41 ug/L	489.41 ppb	09:57:02
3	Mn 257.610†	467403.8	461676.3	492.89 ug/L	492.89 ppb	09:56:57
3	Mo 202.031†	7909.1	7801.0	495.92 ug/L	495.92 ppb	09:57:22
3	Ni 231.604†	21876.1	21541.2	498.50 ug/L	498.50 ppb	09:57:02
3	P 214.914†	4487.9	4213.5	2356.1 ug/L	2356.1 ppb	09:57:22
3	Pb 220.353†	4324.6	4343.9	492.62 ug/L	492.62 ppb	09:57:22
3	S 181.975 Axial†	753.5	703.4	984.64 ug/L	984.64 ppb	09:57:22
3	Sb 206.836†	1616.8	1564.2	502.10 ug/L	502.10 ppb	09:57:22
3	Se 196.026†	830.8	850.1	509.72 ug/L	509.72 ppb	09:57:22
3	Si 251.611†	84048.4	82644.7	2462.1 ug/L	2462.1 ppb	09:57:02
3	Sn 189.927†	3062.7	3023.0	495.55 ug/L	495.55 ppb	09:57:22
3	Ti 334.940†	316195.2	313721.2	500.51 ug/L	500.51 ppb	09:57:02
3	Tl 190.801†	1738.8	1751.6	493.76 ug/L	493.76 ppb	09:57:22
3	U 409.014†	15569.6	17794.7	488.61 ug/L	488.61 ppb	09:57:02
3	V 292.402†	74329.4	74844.1	500.98 ug/L	500.98 ppb	09:57:02
3	Zn 213.857†	58136.8	56855.1	492.29 ug/L	492.29 ppb	09:57:02
3	SiO2†	82825.2	81417.6	5196.9 ug/L	5196.9 ppb	09:57:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914070.4	101.42	%	0.325				0.32%
Sc Radial	5759.8	98.6	%	0.91				0.92%
Y 371.029	747194.2	99.482	%	0.2839				0.29%
Y RADIAL	6133.6	97.55	%	0.599				0.61%
Ag 328.068†	110282.7	502.55	ug/L	1.691	502.55	ppb	1.691	0.34%
QC value within limits for Ag 328.068 Recovery = 100.51%								
Al 396.153Radial†	7167.2	4957.3	ug/L	57.27	4957.3	ppb	57.27	1.16%
QC value within limits for Al 396.153Radial Recovery = 99.15%								
As 188.979†	1240.1	494.36	ug/L	3.935	494.36	ppb	3.935	0.80%
QC value within limits for As 188.979 Recovery = 98.87%								
B 249.677†	23293.9	486.57	ug/L	2.353	486.57	ppb	2.353	0.48%
QC value within limits for B 249.677 Recovery = 97.31%								
Ba 233.527†	66684.4	495.50	ug/L	2.403	495.50	ppb	2.403	0.49%
QC value within limits for Ba 233.527 Recovery = 99.10%								
Be 313.107†	1352202.4	493.86	ug/L	0.637	493.86	ppb	0.637	0.13%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	3407.6	5022.7	ug/L	68.70	5022.7	ppb	68.70	1.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.45%
Cd 226.502†            46991.3      496.58 ug/L        1.906      496.58 ppb        1.906   0.38%
   QC value within limits for Cd 226.502  Recovery = 99.32%
Co 228.616†            26153.3      496.51 ug/L        1.883      496.51 ppb        1.883   0.38%
   QC value within limits for Co 228.616  Recovery = 99.30%
Cr 267.716†            47076.0      494.97 ug/L        2.308      494.97 ppb        2.308   0.47%
   QC value within limits for Cr 267.716  Recovery = 98.99%
Cu 324.752†           170841.8      489.16 ug/L        2.320      489.16 ppb        2.320   0.47%
   QC value within limits for Cu 324.752  Recovery = 97.83%
Fe 238.204 Radial†       535.0      5024.7 ug/L       66.27      5024.7 ppb       66.27   1.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.49%
K 766.490 Radial†      28650.3      5072.4 ug/L       63.41      5072.4 ppb       63.41   1.25%
   QC value within limits for K 766.490 Radial  Recovery = 101.45%
Mg 279.077 IEC†          147.0      5190.2 ug/L      133.85      5190.2 ppb      133.85   2.58%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.80%
Mn 257.610†           461667.3      492.88 ug/L        0.512      492.88 ppb        0.512   0.10%
   QC value within limits for Mn 257.610  Recovery = 98.58%
Mo 202.031†             7797.0      495.67 ug/L        2.152      495.67 ppb        2.152   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.13%
Na 589.592 Radial†     27719.4      9302.1 ug/L       34.47      9302.1 ppb       34.47   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 93.02%
Ni 231.604†            21480.3      497.09 ug/L        1.625      497.09 ppb        1.625   0.33%
   QC value within limits for Ni 231.604  Recovery = 99.42%
P 214.914†              4211.0      2354.7 ug/L        2.87      2354.7 ppb        2.87   0.12%
   QC value within limits for P 214.914  Recovery = 94.19%
Pb 220.353†             4328.9      490.90 ug/L        2.250      490.90 ppb        2.250   0.46%
   QC value within limits for Pb 220.353  Recovery = 98.18%
S 181.975 Axial†         703.1      984.23 ug/L        9.577      984.23 ppb        9.577   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 98.42%
Sb 206.836†             1558.8      500.49 ug/L        1.436      500.49 ppb        1.436   0.29%
   QC value within limits for Sb 206.836  Recovery = 100.10%
Se 196.026†              844.1      506.30 ug/L        4.789      506.30 ppb        4.789   0.95%
   QC value within limits for Se 196.026  Recovery = 101.26%
Si 251.611†            82489.4      2457.5 ug/L        9.85      2457.5 ppb        9.85   0.40%
   QC value within limits for Si 251.611  Recovery = 98.30%
Sn 189.927†             3030.5      496.79 ug/L        1.593      496.79 ppb        1.593   0.32%
   QC value within limits for Sn 189.927  Recovery = 99.36%
Sr 421.552†            79724.0      496.45 ug/L        4.108      496.45 ppb        4.108   0.83%
   QC value within limits for Sr 421.552  Recovery = 99.29%
Ti 334.940†           313021.5      499.39 ug/L        1.886      499.39 ppb        1.886   0.38%
   QC value within limits for Ti 334.940  Recovery = 99.88%
Tl 190.801†             1746.4      492.30 ug/L        1.499      492.30 ppb        1.499   0.30%
   QC value within limits for Tl 190.801  Recovery = 98.46%
U 409.014†             17810.9      489.06 ug/L        0.779      489.06 ppb        0.779   0.16%
   QC value within limits for U 409.014  Recovery = 97.81%
V 292.402†             74459.9      498.44 ug/L        2.658      498.44 ppb        2.658   0.53%
   QC value within limits for V 292.402  Recovery = 99.69%
Zn 213.857†            56711.6      491.04 ug/L        1.532      491.04 ppb        1.532   0.31%
   QC value within limits for Zn 213.857  Recovery = 98.21%
SiO2†                  81329.0      5191.2 ug/L       14.79      5191.2 ppb       14.79   0.28%
   QC value within limits for SiO2  Recovery = 97.08%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5856.6	5856.6	100	%			10:01:40
1	Y RADIAL	6302.7	6302.7	100.2	%			10:01:40
1	Al 396.153Radial†	-34.9	-14.4	-10.047	ug/L	-10.047	ppb	10:01:40
1	Ca 317.933Radial†	25.4	9.8	14.456	ug/L	14.456	ppb	10:02:00
1	Fe 238.204 Radial†	10.4	3.5	33.153	ug/L	33.153	ppb	10:02:00
1	K 766.490 Radial†	2417.2	60.2	10.691	ug/L	10.691	ppb	10:01:40
1	Mg 279.077 IEC†	1.7	0.5	17.521	ug/L	17.521	ppb	10:02:00
1	Na 589.592 Radial†	-1131.4	-41.1	-13.778	ug/L	-13.778	ppb	10:01:40
1	Sr 421.552†	-11.1	16.3	0.1012	ug/L	0.1012	ppb	10:01:40
1	Sc 361.383	910453.7	910453.7	101.02	%			10:02:57
1	Y 371.029	761123.5	761123.5	101.34	%			10:02:57
1	Ag 328.068†	424.3	127.3	0.5854	ug/L	0.5854	ppb	10:02:57
1	As 188.979†	-20.3	4.1	1.6169	ug/L	1.6169	ppb	10:03:17
1	B 249.677†	-282.4	251.1	5.2624	ug/L	5.2624	ppb	10:03:17
1	Ba 233.527†	-10.7	-2.2	-0.0145	ug/L	-0.0145	ppb	10:03:17
1	Be 313.107†	-4984.1	179.2	0.0655	ug/L	0.0655	ppb	10:02:57
1	Cd 226.502†	-199.5	-2.4	-0.0279	ug/L	-0.0279	ppb	10:03:17
1	Co 228.616†	-71.1	-4.9	-0.0924	ug/L	-0.0924	ppb	10:03:17
1	Cr 267.716†	90.6	11.0	0.1154	ug/L	0.1154	ppb	10:03:17
1	Cu 324.752†	6722.7	-101.8	-0.2898	ug/L	-0.2898	ppb	10:02:57
1	Mn 257.610†	429.7	3.1	0.0062	ug/L	0.0062	ppb	10:03:17
1	Mo 202.031†	29.8	11.2	0.7111	ug/L	0.7111	ppb	10:03:17
1	Ni 231.604†	110.3	22.6	0.5242	ug/L	0.5242	ppb	10:03:17
1	P 214.914†	216.2	-9.5	-5.4823	ug/L	-5.4823	ppb	10:03:17
1	Pb 220.353†	-58.5	10.5	1.1878	ug/L	1.1878	ppb	10:03:17
1	S 181.975 Axial†	42.2	0.2	0.2210	ug/L	0.2210	ppb	10:03:17
1	Sb 206.836†	42.3	7.6	2.4420	ug/L	2.4420	ppb	10:03:17
1	Se 196.026†	-34.3	-5.1	-2.8713	ug/L	-2.8713	ppb	10:03:17
1	Si 251.611†	498.1	43.4	1.2818	ug/L	1.2818	ppb	10:03:17
1	Sn 189.927†	7.9	2.9	0.4713	ug/L	0.4713	ppb	10:03:17
1	Ti 334.940†	-1069.0	56.8	0.0901	ug/L	0.0901	ppb	10:02:57
1	Tl 190.801†	-32.9	-0.0	-0.0121	ug/L	-0.0121	ppb	10:03:17
1	U 409.014†	-2331.2	94.1	2.5885	ug/L	2.5885	ppb	10:02:57
1	V 292.402†	-1353.0	19.0	0.1359	ug/L	0.1359	ppb	10:02:57
1	Zn 213.857†	694.0	65.1	0.5621	ug/L	0.5621	ppb	10:03:17
1	SiO2†	465.2	-7.0	-0.4864	ug/L	-0.4864	ppb	10:04:13
2	Sc Radial	5902.5	5902.5	101	%			10:02:05
2	Y RADIAL	6366.5	6366.5	101.3	%			10:02:05
2	Al 396.153Radial†	-13.1	7.4	5.1522	ug/L	5.1522	ppb	10:02:05
2	Ca 317.933Radial†	20.3	4.5	6.7005	ug/L	6.7005	ppb	10:02:25
2	Fe 238.204 Radial†	5.6	-1.3	-11.735	ug/L	-11.735	ppb	10:02:25
2	K 766.490 Radial†	2448.0	72.0	12.773	ug/L	12.773	ppb	10:02:05
2	Mg 279.077 IEC†	2.0	0.9	30.205	ug/L	30.205	ppb	10:02:25
2	Na 589.592 Radial†	-1120.1	-21.0	-7.0524	ug/L	-7.0524	ppb	10:02:05
2	Sr 421.552†	-4.8	22.6	0.1409	ug/L	0.1409	ppb	10:02:05
2	Sc 361.383	906696.3	906696.3	100.60	%			10:03:22
2	Y 371.029	757143.8	757143.8	100.81	%			10:03:22
2	Ag 328.068†	460.3	164.8	0.7406	ug/L	0.7406	ppb	10:03:22
2	As 188.979†	-18.5	5.8	2.2924	ug/L	2.2924	ppb	10:03:42
2	B 249.677†	-286.2	246.2	5.1636	ug/L	5.1636	ppb	10:03:42
2	Ba 233.527†	-12.4	-3.8	-0.0285	ug/L	-0.0285	ppb	10:03:42
2	Be 313.107†	-4940.5	202.1	0.0737	ug/L	0.0737	ppb	10:03:22
2	Cd 226.502†	-189.0	7.3	0.0778	ug/L	0.0778	ppb	10:03:42
2	Co 228.616†	-61.9	3.9	0.0757	ug/L	0.0757	ppb	10:03:42
2	Cr 267.716†	76.6	-2.5	-0.0269	ug/L	-0.0269	ppb	10:03:42
2	Cu 324.752†	6780.8	-16.6	-0.0480	ug/L	-0.0480	ppb	10:03:22
2	Mn 257.610†	438.7	13.7	0.0129	ug/L	0.0129	ppb	10:03:42
2	Mo 202.031†	24.4	6.0	0.3775	ug/L	0.3775	ppb	10:03:42
2	Ni 231.604†	74.4	-12.6	-0.2911	ug/L	-0.2911	ppb	10:03:42

2	P 214.914†	211.6	-13.2	-7.5926 ug/L	-7.5926 ppb	10:03:42
2	Pb 220.353†	-63.4	5.4	0.6161 ug/L	0.6161 ppb	10:03:42
2	S 181.975 Axial†	45.7	3.9	5.4030 ug/L	5.4030 ppb	10:03:42
2	Sb 206.836†	42.8	8.3	2.6247 ug/L	2.6247 ppb	10:03:42
2	Se 196.026†	-24.4	4.6	2.6330 ug/L	2.6330 ppb	10:03:42
2	Si 251.611†	494.0	41.4	1.2271 ug/L	1.2271 ppb	10:03:42
2	Sn 189.927†	5.3	0.3	0.0474 ug/L	0.0474 ppb	10:03:42
2	Ti 334.940†	-1108.9	12.6	0.0192 ug/L	0.0192 ppb	10:03:22
2	Tl 190.801†	-30.9	1.8	0.5082 ug/L	0.5082 ppb	10:03:42
2	U 409.014†	-2307.9	107.7	2.9690 ug/L	2.9690 ppb	10:03:22
2	V 292.402†	-1348.2	18.2	0.1339 ug/L	0.1339 ppb	10:03:22
2	Zn 213.857†	689.0	63.0	0.5524 ug/L	0.5524 ppb	10:03:42
2	SiO2†	513.6	43.1	2.7395 ug/L	2.7395 ppb	10:04:18
3	Sc Radial	5922.3	5922.3	101 %		10:02:30
3	Y RADIAL	6371.5	6371.5	101.3 %		10:02:30
3	Al 396.153Radial†	-29.0	-8.2	-5.7155 ug/L	-5.7155 ppb	10:02:30
3	Ca 317.933Radial†	20.3	4.5	6.5597 ug/L	6.5597 ppb	10:02:50
3	Fe 238.204 Radial†	8.3	1.4	13.121 ug/L	13.121 ppb	10:02:50
3	K 766.490 Radial†	2353.1	-29.8	-5.2822 ug/L	-5.2822 ppb	10:02:30
3	Mg 279.077 IEC†	0.6	-0.6	-20.672 ug/L	-20.672 ppb	10:02:50
3	Na 589.592 Radial†	-1094.9	7.5	2.5235 ug/L	2.5235 ppb	10:02:30
3	Sr 421.552†	3.7	31.0	0.1931 ug/L	0.1931 ppb	10:02:30
3	Sc 361.383	902829.2	902829.2	100.17 %		10:03:47
3	Y 371.029	755411.0	755411.0	100.58 %		10:03:47
3	Ag 328.068†	358.0	64.7	0.2988 ug/L	0.2988 ppb	10:03:47
3	As 188.979†	-15.0	9.2	3.6283 ug/L	3.6283 ppb	10:04:07
3	B 249.677†	-300.1	231.1	4.8434 ug/L	4.8434 ppb	10:04:07
3	Ba 233.527†	-0.7	7.7	0.0580 ug/L	0.0580 ppb	10:04:07
3	Be 313.107†	-4892.1	229.3	0.0837 ug/L	0.0837 ppb	10:03:47
3	Cd 226.502†	-180.1	15.3	0.1610 ug/L	0.1610 ppb	10:04:07
3	Co 228.616†	-60.9	4.6	0.0881 ug/L	0.0881 ppb	10:04:07
3	Cr 267.716†	79.3	0.5	0.0064 ug/L	0.0064 ppb	10:04:07
3	Cu 324.752†	6709.2	-59.1	-0.1685 ug/L	-0.1685 ppb	10:03:47
3	Mn 257.610†	438.1	15.0	0.0177 ug/L	0.0177 ppb	10:04:07
3	Mo 202.031†	21.5	3.2	0.2015 ug/L	0.2015 ppb	10:04:07
3	Ni 231.604†	99.5	12.8	0.2969 ug/L	0.2969 ppb	10:04:07
3	P 214.914†	215.8	-8.1	-4.6716 ug/L	-4.6716 ppb	10:04:07
3	Pb 220.353†	-65.9	2.6	0.2959 ug/L	0.2959 ppb	10:04:07
3	S 181.975 Axial†	39.7	-2.0	-2.7906 ug/L	-2.7906 ppb	10:04:07
3	Sb 206.836†	32.3	-2.0	-0.6310 ug/L	-0.6310 ppb	10:04:07
3	Se 196.026†	-16.8	12.0	6.9843 ug/L	6.9843 ppb	10:04:07
3	Si 251.611†	489.0	38.5	1.1488 ug/L	1.1488 ppb	10:04:07
3	Sn 189.927†	6.7	1.7	0.2867 ug/L	0.2867 ppb	10:04:07
3	Ti 334.940†	-1078.5	38.3	0.0622 ug/L	0.0622 ppb	10:03:47
3	Tl 190.801†	-33.1	-0.6	-0.1545 ug/L	-0.1545 ppb	10:04:07
3	U 409.014†	-2470.8	-64.7	-1.7847 ug/L	-1.7847 ppb	10:03:47
3	V 292.402†	-1354.7	6.0	0.0363 ug/L	0.0363 ppb	10:03:47
3	Zn 213.857†	672.6	49.6	0.4309 ug/L	0.4309 ppb	10:04:07
3	SiO2†	501.7	33.4	2.1374 ug/L	2.1374 ppb	10:04:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906659.7	100.60	%	0.423				0.42%
Sc Radial	5893.8	101	%	0.6				0.57%
Y 371.029	757892.8	100.91	%	0.390				0.39%
Y RADIAL	6346.9	100.9	%	0.61				0.60%
Ag 328.068†	118.9	0.5416	ug/L	0.22414	0.5416	ppb	0.22414	41.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.1	-3.5369	ug/L	7.83042	-3.5369	ppb	7.83042	221.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.4	2.5125	ug/L	1.02361	2.5125	ppb	1.02361	40.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	242.8	5.0898	ug/L	0.21902	5.0898	ppb	0.21902	4.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.6	0.0050	ug/L	0.04645	0.0050	ppb	0.04645	932.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.5	0.0743	ug/L	0.00913	0.0743	ppb	0.00913	12.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	9.2388	ug/L	4.51901	9.2388	ppb	4.51901	48.91%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 6.7      0.0703 ug/L       0.09465      0.0703 ppb        0.09465 134.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.2      0.0238 ug/L       0.10080      0.0238 ppb        0.10080 423.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.0      0.0316 ug/L       0.07442      0.0316 ppb        0.07442 235.34%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -59.2     -0.1688 ug/L       0.12088     -0.1688 ppb        0.12088  71.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.2      11.513 ug/L       22.4868      11.513 ppb        22.4868 195.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          34.2      6.0606 ug/L       9.87817      6.0606 ppb        9.87817 162.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      9.0182 ug/L      26.48267      9.0182 ppb       26.48267 293.66%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.6      0.0123 ug/L       0.00577      0.0123 ppb        0.00577  46.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.8      0.4300 ug/L       0.25880      0.4300 ppb        0.25880  60.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -18.2     -6.1022 ug/L       8.19208     -6.1022 ppb        8.19208 134.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.6      0.1767 ug/L       0.42074      0.1767 ppb        0.42074 238.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -10.3     -5.9155 ug/L       1.50790     -5.9155 ppb        1.50790  25.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.2      0.7000 ug/L       0.45182      0.7000 ppb        0.45182  64.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.7      0.9445 ug/L       4.14441      0.9445 ppb        4.14441 438.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.6      1.4786 ug/L       1.82922      1.4786 ppb        1.82922 123.72%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.8      2.2487 ug/L       4.93905      2.2487 ppb        4.93905 219.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                41.1      1.2192 ug/L       0.06684      1.2192 ppb        0.06684   5.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.6      0.2684 ug/L       0.21256      0.2684 ppb        0.21256  79.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.3      0.1451 ug/L       0.04613      0.1451 ppb        0.04613  31.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                35.9      0.0572 ug/L       0.03572      0.0572 ppb        0.03572  62.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.4      0.1139 ug/L       0.34885      0.1139 ppb        0.34885 306.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 45.7      1.2576 ug/L       2.64158      1.2576 ppb        2.64158 210.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 14.4      0.1020 ug/L       0.05695      0.1020 ppb        0.05695  55.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                59.2      0.5151 ug/L       0.07311      0.5151 ppb        0.07311  14.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      23.2      1.4635 ug/L       1.71530      1.4635 ppb        1.71530 117.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 10:06:51 **Plasma On Time:** 12/7/2009 05:17:52
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 38
Sample ID: 1201978571|925470|1 **Date Collected:** 12/8/2009 10:06:52
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201978571|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5972.3	5972.3	102	%			10:08:45
1	Y RADIAL	6378.6	6378.6	101.4	%			10:08:45
1	Al 396.153Radial†	-1.0	19.5	13.512	ug/L	13.512	ppb	10:08:45
1	Ca 317.933Radial†	26.4	10.3	15.121	ug/L	15.121	ppb	10:09:05
1	Fe 238.204 Radial†	13.5	6.4	59.842	ug/L	59.842	ppb	10:09:05
1	K 766.490 Radial†	2401.9	-1.5	-0.2754	ug/L	-0.2754	ppb	10:08:45
1	Mg 279.077 IEC†	0.2	-0.9	-33.145	ug/L	-33.145	ppb	10:09:05
1	Na 589.592 Radial†	-1041.1	69.2	23.220	ug/L	23.220	ppb	10:08:45
1	Sr 421.552†	-6.3	21.2	0.1319	ug/L	0.1319	ppb	10:08:45
1	Sc 361.383	904809.8	904809.8	100.39	%			10:10:02
1	Y 371.029	754363.5	754363.5	100.44	%			10:10:02
1	Ag 328.068†	259.7	-34.0	-0.1391	ug/L	-0.1391	ppb	10:10:02
1	As 188.979†	-2.9	21.3	8.4169	ug/L	8.4169	ppb	10:10:22
1	B 249.677†	-345.3	186.7	3.9079	ug/L	3.9079	ppb	10:10:22
1	Ba 233.527†	8.0	16.4	0.1243	ug/L	0.1243	ppb	10:10:22
1	Be 313.107†	-4984.6	147.9	0.0547	ug/L	0.0547	ppb	10:10:02
1	Cd 226.502†	-187.8	8.0	0.0792	ug/L	0.0792	ppb	10:10:22
1	Co 228.616†	-66.2	-0.6	-0.0117	ug/L	-0.0117	ppb	10:10:22
1	Cr 267.716†	152.1	72.9	0.7647	ug/L	0.7647	ppb	10:10:22
1	Cu 324.752†	6622.3	-160.4	-0.4559	ug/L	-0.4559	ppb	10:10:02
1	Mn 257.610†	959.4	533.3	0.5755	ug/L	0.5755	ppb	10:10:22
1	Mo 202.031†	24.9	6.5	0.4156	ug/L	0.4156	ppb	10:10:22
1	Ni 231.604†	101.8	14.8	0.3430	ug/L	0.3430	ppb	10:10:22
1	P 214.914†	211.3	-13.0	-7.4686	ug/L	-7.4686	ppb	10:10:22
1	Pb 220.353†	-54.6	14.1	1.5899	ug/L	1.5899	ppb	10:10:22
1	S 181.975 Axial†	40.9	-0.8	-1.1423	ug/L	-1.1423	ppb	10:10:22
1	Sb 206.836†	56.1	21.7	6.8702	ug/L	6.8702	ppb	10:10:22
1	Se 196.026†	-21.7	7.2	4.3809	ug/L	4.3809	ppb	10:10:22
1	Si 251.611†	767.5	314.8	9.4127	ug/L	9.4127	ppb	10:10:22
1	Sn 189.927†	14.8	9.7	1.5928	ug/L	1.5928	ppb	10:10:22
1	Ti 334.940†	-858.8	259.5	0.4121	ug/L	0.4121	ppb	10:10:02
1	Tl 190.801†	-36.8	-4.1	-1.1557	ug/L	-1.1557	ppb	10:10:22
1	U 409.014†	-2204.3	206.2	5.6703	ug/L	5.6703	ppb	10:10:02
1	V 292.402†	-1325.2	38.4	0.2597	ug/L	0.2597	ppb	10:10:02
1	Zn 213.857†	838.7	213.6	1.8596	ug/L	1.8596	ppb	10:10:22
1	SiO2†	814.0	343.3	21.999	ug/L	21.999	ppb	10:11:18
2	Sc Radial	5956.5	5956.5	102	%			10:09:10
2	Y RADIAL	6417.8	6417.8	102.1	%			10:09:10
2	Al 396.153Radial†	-23.9	-3.1	-2.1638	ug/L	-2.1638	ppb	10:09:10
2	Ca 317.933Radial†	27.7	11.6	17.027	ug/L	17.027	ppb	10:09:31
2	Fe 238.204 Radial†	14.7	7.6	71.370	ug/L	71.370	ppb	10:09:31
2	K 766.490 Radial†	2384.6	-12.2	-2.1904	ug/L	-2.1904	ppb	10:09:10
2	Mg 279.077 IEC†	2.7	1.5	51.476	ug/L	51.476	ppb	10:09:31
2	Na 589.592 Radial†	-1000.1	106.8	35.833	ug/L	35.833	ppb	10:09:10
2	Sr 421.552†	-20.0	7.7	0.0480	ug/L	0.0480	ppb	10:09:10
2	Sc 361.383	905516.1	905516.1	100.47	%			10:10:28
2	Y 371.029	756263.6	756263.6	100.69	%			10:10:28

2	Ag 328.068†	360.7	66.3	0.3222 ug/L	0.3222 ppb	10:10:28
2	As 188.979†	3.9	28.1	11.111 ug/L	11.111 ppb	10:10:48
2	B 249.677†	-357.0	175.3	3.6680 ug/L	3.6680 ppb	10:10:48
2	Ba 233.527†	15.6	23.9	0.1816 ug/L	0.1816 ppb	10:10:48
2	Be 313.107†	-4914.8	221.3	0.0811 ug/L	0.0811 ppb	10:10:28
2	Cd 226.502†	-178.0	17.9	0.1821 ug/L	0.1821 ppb	10:10:48
2	Co 228.616†	-74.5	-8.7	-0.1643 ug/L	-0.1643 ppb	10:10:48
2	Cr 267.716†	161.5	82.1	0.8633 ug/L	0.8633 ppb	10:10:48
2	Cu 324.752†	6717.1	-71.1	-0.1999 ug/L	-0.1999 ppb	10:10:28
2	Mn 257.610†	951.7	524.9	0.5661 ug/L	0.5661 ppb	10:10:48
2	Mo 202.031†	32.0	13.6	0.8660 ug/L	0.8660 ppb	10:10:48
2	Ni 231.604†	97.8	10.8	0.2505 ug/L	0.2505 ppb	10:10:48
2	P 214.914†	209.2	-15.3	-8.8401 ug/L	-8.8401 ppb	10:10:48
2	Pb 220.353†	-40.5	28.1	3.1734 ug/L	3.1734 ppb	10:10:48
2	S 181.975 Axial†	53.0	11.2	15.696 ug/L	15.696 ppb	10:10:48
2	Sb 206.836†	43.1	8.6	2.7738 ug/L	2.7738 ppb	10:10:48
2	Se 196.026†	-19.3	9.6	5.7826 ug/L	5.7826 ppb	10:10:48
2	Si 251.611†	777.5	324.2	9.6831 ug/L	9.6831 ppb	10:10:48
2	Sn 189.927†	20.2	15.1	2.4802 ug/L	2.4802 ppb	10:10:48
2	Ti 334.940†	-968.7	150.8	0.2395 ug/L	0.2395 ppb	10:10:28
2	Tl 190.801†	-44.1	-11.3	-3.1713 ug/L	-3.1713 ppb	10:10:48
2	U 409.014†	-2275.0	137.5	3.7783 ug/L	3.7783 ppb	10:10:28
2	V 292.402†	-1260.7	103.6	0.6935 ug/L	0.6935 ppb	10:10:28
2	Zn 213.857†	845.5	219.7	1.9097 ug/L	1.9097 ppb	10:10:48
2	SiO2†	773.5	302.4	19.351 ug/L	19.351 ppb	10:11:23
3	Sc Radial	5825.6	5825.6	99.7 %		10:09:36
3	Y RADIAL	6258.2	6258.2	99.53 %		10:09:36
3	Al 396.153Radial†	-25.0	-4.7	-3.2651 ug/L	-3.2651 ppb	10:09:36
3	Ca 317.933Radial†	24.0	8.5	12.542 ug/L	12.542 ppb	10:09:56
3	Fe 238.204 Radial†	11.4	4.6	43.106 ug/L	43.106 ppb	10:09:56
3	K 766.490 Radial†	2401.7	57.5	10.180 ug/L	10.180 ppb	10:09:36
3	Mg 279.077 IEC†	1.0	-0.2	-5.3751 ug/L	-5.3751 ppb	10:09:56
3	Na 589.592 Radial†	-980.4	104.4	35.043 ug/L	35.043 ppb	10:09:36
3	Sr 421.552†	-15.1	12.2	0.0757 ug/L	0.0757 ppb	10:09:36
3	Sc 361.383	910341.5	910341.5	101.01 %		10:10:53
3	Y 371.029	761914.4	761914.4	101.44 %		10:10:53
3	Ag 328.068†	426.9	129.9	0.6000 ug/L	0.6000 ppb	10:10:53
3	As 188.979†	-3.7	20.5	8.0981 ug/L	8.0981 ppb	10:11:13
3	B 249.677†	-365.5	168.8	3.5358 ug/L	3.5358 ppb	10:11:13
3	Ba 233.527†	4.8	13.2	0.1001 ug/L	0.1001 ppb	10:11:13
3	Be 313.107†	-4868.4	293.2	0.1073 ug/L	0.1073 ppb	10:10:53
3	Cd 226.502†	-190.7	6.3	0.0629 ug/L	0.0629 ppb	10:11:13
3	Co 228.616†	-82.0	-15.8	-0.3007 ug/L	-0.3007 ppb	10:11:13
3	Cr 267.716†	139.3	59.3	0.6223 ug/L	0.6223 ppb	10:11:13
3	Cu 324.752†	6858.7	33.6	0.0984 ug/L	0.0984 ppb	10:10:53
3	Mn 257.610†	966.5	534.6	0.5746 ug/L	0.5746 ppb	10:11:13
3	Mo 202.031†	20.4	1.8	0.1188 ug/L	0.1188 ppb	10:11:13
3	Ni 231.604†	115.9	28.2	0.6523 ug/L	0.6523 ppb	10:11:13
3	P 214.914†	211.2	-14.5	-8.3969 ug/L	-8.3969 ppb	10:11:13
3	Pb 220.353†	-59.2	9.8	1.1042 ug/L	1.1042 ppb	10:11:13
3	S 181.975 Axial†	40.5	-1.5	-2.0590 ug/L	-2.0590 ppb	10:11:13
3	Sb 206.836†	54.4	19.6	6.1873 ug/L	6.1873 ppb	10:11:13
3	Se 196.026†	-21.4	7.7	4.5726 ug/L	4.5726 ppb	10:11:13
3	Si 251.611†	744.9	287.8	8.6109 ug/L	8.6109 ppb	10:11:13
3	Sn 189.927†	4.9	-0.1	-0.0217 ug/L	-0.0217 ppb	10:11:13
3	Ti 334.940†	-986.0	138.8	0.2202 ug/L	0.2202 ppb	10:10:53
3	Tl 190.801†	-31.6	1.2	0.3461 ug/L	0.3461 ppb	10:11:13
3	U 409.014†	-2285.4	139.2	3.8285 ug/L	3.8285 ppb	10:10:53
3	V 292.402†	-1317.3	54.2	0.3597 ug/L	0.3597 ppb	10:10:53
3	Zn 213.857†	855.0	224.6	1.9542 ug/L	1.9542 ppb	10:11:13
3	SiO2†	769.3	294.2	18.861 ug/L	18.861 ppb	10:11:28

Mean Data: 1201978571|925470|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906889.1	100.62	%	0.334				0.33%
Sc Radial	5918.1	101	%	1.4				1.36%
Y 371.029	757513.9	100.86	%	0.523				0.52%
Y RADIAL	6351.5	101.0	%	1.32				1.31%
Ag 328.068†	54.1	0.2610	ug/L	0.37332	0.2610	ppb	0.37332	143.03%

Al 396.153Radial†	3.9	2.6943	ug/L	9.38443	2.6943	ppb	9.38443 348.31%
As 188.979†	23.3	9.2088	ug/L	1.65546	9.2088	ppb	1.65546 17.98%
B 249.677†	177.0	3.7039	ug/L	0.18864	3.7039	ppb	0.18864 5.09%
Ba 233.527†	17.8	0.1353	ug/L	0.04187	0.1353	ppb	0.04187 30.94%
Be 313.107†	220.8	0.0811	ug/L	0.02628	0.0811	ppb	0.02628 32.42%
Ca 317.933Radial†	10.1	14.897	ug/L	2.2509	14.897	ppb	2.2509 15.11%
Cd 226.502†	10.7	0.1081	ug/L	0.06464	0.1081	ppb	0.06464 59.80%
Co 228.616†	-8.3	-0.1589	ug/L	0.14461	-0.1589	ppb	0.14461 91.01%
Cr 267.716†	71.4	0.7501	ug/L	0.12118	0.7501	ppb	0.12118 16.15%
Cu 324.752†	-66.0	-0.1858	ug/L	0.27742	-0.1858	ppb	0.27742 149.28%
Fe 238.204 Radial†	6.2	58.106	ug/L	14.2119	58.106	ppb	14.2119 24.46%
K 766.490 Radial†	14.6	2.5715	ug/L	6.65854	2.5715	ppb	6.65854 258.94%
Mg 279.077 IEC†	0.1	4.3186	ug/L	43.13497	4.3186	ppb	43.13497 998.83%
Mn 257.610†	530.9	0.5721	ug/L	0.00519	0.5721	ppb	0.00519 0.91%
Mo 202.031†	7.3	0.4668	ug/L	0.37622	0.4668	ppb	0.37622 80.59%
Na 589.592 Radial†	93.5	31.365	ug/L	7.0652	31.365	ppb	7.0652 22.53%
Ni 231.604†	17.9	0.4152	ug/L	0.21045	0.4152	ppb	0.21045 50.68%
P 214.914†	-14.3	-8.2352	ug/L	0.69990	-8.2352	ppb	0.69990 8.50%
Pb 220.353†	17.3	1.9559	ug/L	1.08205	1.9559	ppb	1.08205 55.32%
S 181.975 Axial†	3.0	4.1649	ug/L	9.99672	4.1649	ppb	9.99672 240.02%
Sb 206.836†	16.6	5.2771	ug/L	2.19467	5.2771	ppb	2.19467 41.59%
Se 196.026†	8.2	4.9120	ug/L	0.75998	4.9120	ppb	0.75998 15.47%
Si 251.611†	309.0	9.2356	ug/L	0.55761	9.2356	ppb	0.55761 6.04%
Sn 189.927†	8.2	1.3504	ug/L	1.26842	1.3504	ppb	1.26842 93.93%
Sr 421.552†	13.7	0.0852	ug/L	0.04275	0.0852	ppb	0.04275 50.16%
Ti 334.940†	183.0	0.2906	ug/L	0.10566	0.2906	ppb	0.10566 36.36%
Tl 190.801†	-4.8	-1.3270	ug/L	1.76491	-1.3270	ppb	1.76491 133.00%
U 409.014†	161.0	4.4257	ug/L	1.07817	4.4257	ppb	1.07817 24.36%
V 292.402†	65.4	0.4377	ug/L	0.22715	0.4377	ppb	0.22715 51.90%
Zn 213.857†	219.3	1.9078	ug/L	0.04736	1.9078	ppb	0.04736 2.48%
SiO2†	313.3	20.070	ug/L	1.6879	20.070	ppb	1.6879 8.41%

Sequence No.: 2
Sample ID: 1201978576|925470|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 12/8/2009 10:13:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978576|925470|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5727.2	5727.2	98.0	%			10:15:51
1	Y RADIAL	6511.6	6511.6	103.6	%			10:15:51
1	Al 396.153Radial†	55254.6	56401.2	39159	ug/L	39159	ppb	10:15:31
1	Ca 317.933Radial†	12803.1	13048.5	19233	ug/L	19233	ppb	10:15:31
1	Fe 238.204 Radial†	10245.0	10447.0	97816	ug/L	97816	ppb	10:15:31
1	K 766.490 Radial†	70630.1	69718.0	12347	ug/L	12347	ppb	10:15:31
1	Mg 279.077 IEC†	430.0	437.6	15364	ug/L	15364	ppb	10:15:51
1	Na 589.592 Radial†	6853.7	8081.3	2711.9	ug/L	2711.9	ppb	10:15:31
1	Sr 421.552†	135014.9	137794.1	857.97	ug/L	857.97	ppb	10:15:31
1	Sc 361.383	924402.8	924402.8	102.57	%			10:16:51
1	Y 371.029	806556.5	806556.5	107.39	%			10:16:51
1	Ag 328.068†	146137.9	142187.2	678.04	ug/L	678.04	ppb	10:16:51
1	As 188.979†	3295.9	3237.6	1309.5	ug/L	1309.5	ppb	10:17:11
1	B 249.677†	33812.2	33496.5	688.42	ug/L	688.42	ppb	10:16:51
1	Ba 233.527†	335124.4	326744.4	2426.9	ug/L	2426.9	ppb	10:16:51
1	Be 313.107†	1288158.7	1261027.9	463.35	ug/L	463.35	ppb	10:16:51
1	Cd 226.502†	58835.9	57558.3	599.02	ug/L	599.02	ppb	10:16:51
1	Co 228.616†	22447.5	21951.1	413.21	ug/L	413.21	ppb	10:17:11
1	Cr 267.716†	38509.4	37466.8	396.47	ug/L	396.47	ppb	10:16:51
1	Cu 324.752†	193260.3	181666.1	524.87	ug/L	524.87	ppb	10:16:51
1	Mn 257.610†	1783255.4	1738196.6	1863.7	ug/L	1863.7	ppb	10:16:51
1	Mo 202.031†	6876.6	6686.1	431.68	ug/L	431.68	ppb	10:17:11
1	Ni 231.604†	22733.4	22077.8	510.98	ug/L	510.98	ppb	10:17:11
1	P 214.914†	6871.0	6475.5	3593.1	ug/L	3593.1	ppb	10:17:11
1	Pb 220.353†	7574.2	7453.1	843.94	ug/L	843.94	ppb	10:17:11
1	S 181.975 Axial†	803.1	741.4	1031.2	ug/L	1031.2	ppb	10:17:11
1	Sb 206.836†	1640.2	1564.9	501.63	ug/L	501.63	ppb	10:17:11
1	Se 196.026†	1057.8	1060.2	929.56	ug/L	929.56	ppb	10:17:11
1	Si 251.611†	524314.1	510740.3	15276	ug/L	15276	ppb	10:16:51
1	Sn 189.927†	3421.8	3331.2	548.74	ug/L	548.74	ppb	10:17:11
1	Ti 334.940†	1210688.1	1181498.4	1886.4	ug/L	1886.4	ppb	10:16:51
1	Tl 190.801†	3606.1	3548.4	1016.3	ug/L	1016.3	ppb	10:17:11
1	U 409.014†	-7806.7	-5209.4	-156.57	ug/L	-156.57	ppb	10:16:51
1	V 292.402†	119342.7	117713.8	766.52	ug/L	766.52	ppb	10:16:51
1	Zn 213.857†	120007.7	116382.0	1003.0	ug/L	1003.0	ppb	10:16:51
1	SiO2†	527243.5	513578.6	32916	ug/L	32916	ppb	10:18:11
2	Sc Radial	5761.0	5761.0	98.6	%			10:16:17
2	Y RADIAL	6548.3	6548.3	104.1	%			10:16:17
2	Al 396.153Radial†	54378.1	55180.8	38312	ug/L	38312	ppb	10:15:57
2	Ca 317.933Radial†	12525.5	12690.1	18705	ug/L	18705	ppb	10:15:57
2	Fe 238.204 Radial†	10043.4	10181.1	95327	ug/L	95327	ppb	10:15:57
2	K 766.490 Radial†	69232.1	67876.4	12020	ug/L	12020	ppb	10:15:57
2	Mg 279.077 IEC†	434.6	439.7	15438	ug/L	15438	ppb	10:16:17
2	Na 589.592 Radial†	6624.6	7807.8	2620.2	ug/L	2620.2	ppb	10:15:57
2	Sr 421.552†	132029.1	133956.0	834.07	ug/L	834.07	ppb	10:15:57
2	Sc 361.383	921250.2	921250.2	102.22	%			10:17:18
2	Y 371.029	806429.0	806429.0	107.37	%			10:17:18
2	Ag 328.068†	146370.5	142902.4	680.51	ug/L	680.51	ppb	10:17:18
2	As 188.979†	3300.2	3252.8	1315.2	ug/L	1315.2	ppb	10:17:38
2	B 249.677†	33783.8	33581.5	690.53	ug/L	690.53	ppb	10:17:18
2	Ba 233.527†	334806.8	327551.8	2432.8	ug/L	2432.8	ppb	10:17:18
2	Be 313.107†	1291593.4	1268686.0	466.15	ug/L	466.15	ppb	10:17:18
2	Cd 226.502†	58744.6	57665.3	600.40	ug/L	600.40	ppb	10:17:18
2	Co 228.616†	22542.9	22119.2	416.44	ug/L	416.44	ppb	10:17:38
2	Cr 267.716†	38472.2	37559.0	397.40	ug/L	397.40	ppb	10:17:18
2	Cu 324.752†	193381.7	182429.7	526.92	ug/L	526.92	ppb	10:17:18
2	Mn 257.610†	1781736.7	1742660.6	1868.2	ug/L	1868.2	ppb	10:17:18
2	Mo 202.031†	6891.7	6723.8	433.90	ug/L	433.90	ppb	10:17:38
2	Ni 231.604†	22808.0	22226.6	514.42	ug/L	514.42	ppb	10:17:38

2	P 214.914†	6865.2	6492.8	3604.5 ug/L	3604.5 ppb	10:17:38
2	Pb 220.353†	7599.3	7502.9	849.59 ug/L	849.59 ppb	10:17:38
2	S 181.975 Axial†	806.8	747.7	1040.2 ug/L	1040.2 ppb	10:17:38
2	Sb 206.836†	1630.5	1560.9	500.37 ug/L	500.37 ppb	10:17:38
2	Se 196.026†	1072.6	1078.1	931.96 ug/L	931.96 ppb	10:17:38
2	Si 251.611†	524266.8	512443.5	15327 ug/L	15327 ppb	10:17:18
2	Sn 189.927†	3412.1	3333.1	548.97 ug/L	548.97 ppb	10:17:38
2	Ti 334.940†	1210269.4	1185128.2	1892.1 ug/L	1892.1 ppb	10:17:18
2	Tl 190.801†	3612.9	3567.0	1021.6 ug/L	1021.6 ppb	10:17:38
2	U 409.014†	-7795.8	-5224.8	-156.68 ug/L	-156.68 ppb	10:17:18
2	V 292.402†	119341.8	118111.1	769.55 ug/L	769.55 ppb	10:17:18
2	Zn 213.857†	119987.8	116762.9	1006.5 ug/L	1006.5 ppb	10:17:18
2	SiO2†	524286.1	512444.6	32843 ug/L	32843 ppb	10:18:17
3	Sc Radial	5763.3	5763.3	98.6 %		10:16:42
3	Y RADIAL	6552.0	6552.0	104.2 %		10:16:42
3	Al 396.153Radial†	54496.5	55279.4	38380 ug/L	38380 ppb	10:16:22
3	Ca 317.933Radial†	12529.0	12688.8	18702 ug/L	18702 ppb	10:16:22
3	Fe 238.204 Radial†	10105.6	10240.1	95879 ug/L	95879 ppb	10:16:22
3	K 766.490 Radial†	69458.0	68078.0	12056 ug/L	12056 ppb	10:16:22
3	Mg 279.077 IEC†	426.0	430.8	15125 ug/L	15125 ppb	10:16:42
3	Na 589.592 Radial†	6649.6	7830.6	2627.8 ug/L	2627.8 ppb	10:16:22
3	Sr 421.552†	132330.1	134208.9	835.64 ug/L	835.64 ppb	10:16:22
3	Sc 361.383	918852.7	918852.7	101.95 %		10:17:45
3	Y 371.029	803866.9	803866.9	107.03 %		10:17:45
3	Ag 328.068†	145734.6	142652.2	679.55 ug/L	679.55 ppb	10:17:45
3	As 188.979†	3274.0	3235.5	1308.4 ug/L	1308.4 ppb	10:18:05
3	B 249.677†	33838.9	33721.8	693.40 ug/L	693.40 ppb	10:17:45
3	Ba 233.527†	333692.9	327313.9	2431.1 ug/L	2431.1 ppb	10:17:45
3	Be 313.107†	1288584.2	1269031.4	466.28 ug/L	466.28 ppb	10:17:45
3	Cd 226.502†	58656.2	57728.5	601.01 ug/L	601.01 ppb	10:17:45
3	Co 228.616†	22332.8	21970.7	413.61 ug/L	413.61 ppb	10:18:05
3	Cr 267.716†	38445.4	37630.9	398.16 ug/L	398.16 ppb	10:17:45
3	Cu 324.752†	192966.4	182516.0	527.20 ug/L	527.20 ppb	10:17:45
3	Mn 257.610†	1776731.9	1742299.8	1867.9 ug/L	1867.9 ppb	10:17:45
3	Mo 202.031†	6835.4	6686.3	431.55 ug/L	431.55 ppb	10:18:05
3	Ni 231.604†	22595.7	22076.6	510.95 ug/L	510.95 ppb	10:18:05
3	P 214.914†	6827.6	6473.4	3592.8 ug/L	3592.8 ppb	10:18:05
3	Pb 220.353†	7544.5	7468.5	845.67 ug/L	845.67 ppb	10:18:05
3	S 181.975 Axial†	806.4	749.4	1042.5 ug/L	1042.5 ppb	10:18:05
3	Sb 206.836†	1621.9	1556.6	498.87 ug/L	498.87 ppb	10:18:05
3	Se 196.026†	1066.5	1074.9	931.81 ug/L	931.81 ppb	10:18:05
3	Si 251.611†	522308.6	511861.0	15310 ug/L	15310 ppb	10:17:45
3	Sn 189.927†	3376.7	3307.0	544.71 ug/L	544.71 ppb	10:18:05
3	Ti 334.940†	1206018.0	1184047.6	1890.4 ug/L	1890.4 ppb	10:17:45
3	Tl 190.801†	3590.6	3554.3	1018.0 ug/L	1018.0 ppb	10:18:05
3	U 409.014†	-7749.2	-5199.1	-156.04 ug/L	-156.04 ppb	10:17:45
3	V 292.402†	119085.0	118163.9	769.77 ug/L	769.77 ppb	10:17:45
3	Zn 213.857†	119596.3	116685.2	1005.8 ug/L	1005.8 ppb	10:17:45
3	SiO2†	522590.8	512120.0	32823 ug/L	32823 ppb	10:18:22

Mean Data: 1201978576|925470|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	921501.9	102.25	%	0.309				0.30%
Sc Radial	5750.5	98.4	%	0.35				0.35%
Y 371.029	805617.5	107.26	%	0.202				0.19%
Y RADIAL	6537.3	104.0	%	0.36				0.34%
Ag 328.068†	142580.6	679.37	ug/L	1.243	679.37	ppb	1.243	0.18%
Al 396.153Radial†	55620.5	38617	ug/L	470.9	38617	ppb	470.9	1.22%
As 188.979†	3242.0	1311.1	ug/L	3.62	1311.1	ppb	3.62	0.28%
B 249.677†	33600.0	690.79	ug/L	2.500	690.79	ppb	2.500	0.36%
Ba 233.527†	327203.4	2430.3	ug/L	3.03	2430.3	ppb	3.03	0.12%
Be 313.107†	1266248.4	465.26	ug/L	1.655	465.26	ppb	1.655	0.36%
Ca 317.933Radial†	12809.1	18880	ug/L	305.5	18880	ppb	305.5	1.62%
Cd 226.502†	57650.7	600.15	ug/L	1.021	600.15	ppb	1.021	0.17%
Co 228.616†	22013.7	414.42	ug/L	1.758	414.42	ppb	1.758	0.42%
Cr 267.716†	37552.2	397.34	ug/L	0.848	397.34	ppb	0.848	0.21%
Cu 324.752†	182203.9	526.33	ug/L	1.275	526.33	ppb	1.275	0.24%
Fe 238.204 Radial†	10289.4	96341	ug/L	1307.0	96341	ppb	1307.0	1.36%
K 766.490 Radial†	68557.5	12141	ug/L	179.2	12141	ppb	179.2	1.48%

Mg 279.077 IEC†	436.0	15309	ug/L	163.8	15309	ppb	163.8	1.07%
Mn 257.610†	1741052.3	1866.6	ug/L	2.52	1866.6	ppb	2.52	0.13%
Mo 202.031†	6698.7	432.38	ug/L	1.321	432.38	ppb	1.321	0.31%
Na 589.592 Radial†	7906.6	2653.3	ug/L	50.93	2653.3	ppb	50.93	1.92%
Ni 231.604†	22127.0	512.12	ug/L	1.997	512.12	ppb	1.997	0.39%
P 214.914†	6480.6	3596.8	ug/L	6.65	3596.8	ppb	6.65	0.18%
Pb 220.353†	7474.8	846.40	ug/L	2.894	846.40	ppb	2.894	0.34%
S 181.975 Axial†	746.2	1038.0	ug/L	6.01	1038.0	ppb	6.01	0.58%
Sb 206.836†	1560.8	500.29	ug/L	1.381	500.29	ppb	1.381	0.28%
Se 196.026†	1071.1	931.11	ug/L	1.346	931.11	ppb	1.346	0.14%
Si 251.611†	511681.6	15304	ug/L	26.0	15304	ppb	26.0	0.17%
Sn 189.927†	3323.8	547.47	ug/L	2.395	547.47	ppb	2.395	0.44%
Sr 421.552†	135319.7	842.56	ug/L	13.366	842.56	ppb	13.366	1.59%
Ti 334.940†	1183558.0	1889.6	ug/L	2.96	1889.6	ppb	2.96	0.16%
Tl 190.801†	3556.6	1018.7	ug/L	2.68	1018.7	ppb	2.68	0.26%
U 409.014†	-5211.1	-156.43	ug/L	0.341	-156.43	ppb	0.341	0.22%
V 292.402†	117996.3	768.61	ug/L	1.819	768.61	ppb	1.819	0.24%
Zn 213.857†	116610.0	1005.1	ug/L	1.87	1005.1	ppb	1.87	0.19%
SiO2†	512714.4	32861	ug/L	49.0	32861	ppb	49.0	0.15%

Sequence No.: 4
Sample ID: 1201978572|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/8/2009 10:27:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978572|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5731.8	5731.8	98.1	%			10:29:14
1	Y RADIAL	6648.9	6648.9	105.7	%			10:29:14
1	Al 396.153Radial†	25027.5	25537.3	17739	ug/L	17739	ppb	10:29:14
1	Ca 317.933Radial†	12835.8	13071.3	19266	ug/L	19266	ppb	10:29:14
1	Fe 238.204 Radial†	5187.4	5282.0	49450	ug/L	49450	ppb	10:29:14
1	K 766.490 Radial†	23328.4	21432.9	3790.6	ug/L	3790.6	ppb	10:29:14
1	Mg 279.077 IEC†	286.5	291.0	10223	ug/L	10223	ppb	10:29:34
1	Na 589.592 Radial†	2895.5	4040.0	1355.8	ug/L	1355.8	ppb	10:29:14
1	Sr 421.552†	15362.6	15690.3	97.537	ug/L	97.537	ppb	10:29:14
1	Sc 361.383	912834.6	912834.6	101.28	%			10:30:31
1	Y 371.029	815124.4	815124.4	108.53	%			10:30:31
1	Ag 328.068†	-2679.2	-2937.9	2.6074	ug/L	2.6074	ppb	10:30:36
1	As 188.979†	-63.8	-38.8	15.363	ug/L	15.363	ppb	10:30:56
1	B 249.677†	305.6	832.4	10.846	ug/L	10.846	ppb	10:30:36
1	Ba 233.527†	43872.9	43325.2	323.15	ug/L	323.15	ppb	10:30:36
1	Be 313.107†	-18111.3	-12768.8	0.7525	ug/L	0.7525	ppb	10:30:36
1	Cd 226.502†	343.0	533.7	0.7243	ug/L	0.7243	ppb	10:30:56
1	Co 228.616†	1004.6	1057.2	13.639	ug/L	13.639	ppb	10:30:56
1	Cr 267.716†	2773.0	2659.2	29.001	ug/L	29.001	ppb	10:30:56
1	Cu 324.752†	13675.8	6745.8	21.827	ug/L	21.827	ppb	10:30:36
1	Mn 257.610†	861638.5	850294.7	911.78	ug/L	911.78	ppb	10:30:31
1	Mo 202.031†	-2.5	-20.8	2.1892	ug/L	2.1892	ppb	10:30:56
1	Ni 231.604†	1841.4	1731.5	40.083	ug/L	40.083	ppb	10:30:56
1	P 214.914†	4694.2	4411.2	2506.7	ug/L	2506.7	ppb	10:30:56
1	Pb 220.353†	157.8	224.3	25.256	ug/L	25.256	ppb	10:30:56
1	S 181.975 Axial†	157.1	113.6	155.65	ug/L	155.65	ppb	10:30:56
1	Sb 206.836†	54.2	19.3	-1.9644	ug/L	-1.9644	ppb	10:30:56
1	Se 196.026†	-289.3	-256.8	10.515	ug/L	10.515	ppb	10:30:56
1	Si 251.611†	635964.1	627453.4	18782	ug/L	18782	ppb	10:30:31
1	Sn 189.927†	-136.3	-139.5	-20.172	ug/L	-20.172	ppb	10:30:56
1	Ti 334.940†	1744730.5	1723730.5	2751.8	ug/L	2751.8	ppb	10:30:31
1	Tl 190.801†	-133.2	-99.0	-1.1286	ug/L	-1.1286	ppb	10:30:56
1	U 409.014†	-5242.8	-2774.5	-82.705	ug/L	-82.705	ppb	10:30:36
1	V 292.402†	14019.1	15199.7	89.894	ug/L	89.894	ppb	10:30:36
1	Zn 213.857†	16736.0	15902.0	133.57	ug/L	133.57	ppb	10:30:36
1	SiO2†	637326.7	628780.9	40332	ug/L	40332	ppb	10:32:04
2	Sc Radial	5846.4	5846.4	100	%			10:29:39
2	Y RADIAL	6795.3	6795.3	108.1	%			10:29:39
2	Al 396.153Radial†	24931.8	24941.8	17325	ug/L	17325	ppb	10:29:39
2	Ca 317.933Radial†	12792.5	12771.6	18825	ug/L	18825	ppb	10:29:39
2	Fe 238.204 Radial†	5157.1	5148.1	48196	ug/L	48196	ppb	10:29:39
2	K 766.490 Radial†	23261.9	20900.4	3696.2	ug/L	3696.2	ppb	10:29:39
2	Mg 279.077 IEC†	278.1	276.8	9723.8	ug/L	9723.8	ppb	10:29:59
2	Na 589.592 Radial†	2909.0	3995.7	1340.9	ug/L	1340.9	ppb	10:29:39
2	Sr 421.552†	15186.8	15207.8	94.536	ug/L	94.536	ppb	10:29:39
2	Sc 361.383	911373.6	911373.6	101.12	%			10:31:02
2	Y 371.029	816178.5	816178.5	108.67	%			10:31:02
2	Ag 328.068†	-2805.4	-3067.0	1.6287	ug/L	1.6287	ppb	10:31:07
2	As 188.979†	-64.1	-39.2	14.997	ug/L	14.997	ppb	10:31:27
2	B 249.677†	319.1	846.3	11.304	ug/L	11.304	ppb	10:31:07
2	Ba 233.527†	43619.2	43143.8	321.76	ug/L	321.76	ppb	10:31:07
2	Be 313.107†	-18209.0	-12894.1	0.7002	ug/L	0.7002	ppb	10:31:07
2	Cd 226.502†	337.3	528.7	0.7958	ug/L	0.7958	ppb	10:31:27
2	Co 228.616†	985.5	1040.0	13.336	ug/L	13.336	ppb	10:31:27
2	Cr 267.716†	2775.5	2666.1	29.049	ug/L	29.049	ppb	10:31:27
2	Cu 324.752†	13572.7	6665.4	21.533	ug/L	21.533	ppb	10:31:07
2	Mn 257.610†	857298.6	847366.7	908.55	ug/L	908.55	ppb	10:31:02
2	Mo 202.031†	-0.3	-18.6	2.2358	ug/L	2.2358	ppb	10:31:27
2	Ni 231.604†	1828.7	1721.9	39.860	ug/L	39.860	ppb	10:31:27

2	P 214.914†	4681.3	4405.9	2504.6	ug/L	2504.6 ppb	10:31:27
2	Pb 220.353†	156.5	223.3	25.153	ug/L	25.153 ppb	10:31:27
2	S 181.975 Axial†	154.0	110.7	151.70	ug/L	151.70 ppb	10:31:27
2	Sb 206.836†	60.1	25.1	-0.1324	ug/L	-0.1324 ppb	10:31:27
2	Se 196.026†	-275.4	-243.6	14.163	ug/L	14.163 ppb	10:31:27
2	Si 251.611†	633384.4	625908.9	18736	ug/L	18736 ppb	10:31:02
2	Sn 189.927†	-141.8	-145.2	-21.161	ug/L	-21.161 ppb	10:31:27
2	Ti 334.940†	1739815.8	1721631.9	2748.4	ug/L	2748.4 ppb	10:31:02
2	Tl 190.801†	-134.8	-100.8	-1.7083	ug/L	-1.7083 ppb	10:31:27
2	U 409.014†	-5305.3	-2844.6	-84.480	ug/L	-84.480 ppb	10:31:07
2	V 292.402†	13870.2	15074.7	89.250	ug/L	89.250 ppb	10:31:07
2	Zn 213.857†	16638.1	15831.7	133.10	ug/L	133.10 ppb	10:31:07
2	SiO2†	633070.0	625580.3	40127	ug/L	40127 ppb	10:32:10
3	Sc Radial	5804.9	5804.9	99.3	%		10:30:04
3	Y RADIAL	6719.1	6719.1	106.9	%		10:30:04
3	Al 396.153Radial†	24828.0	25015.2	17376	ug/L	17376 ppb	10:30:04
3	Ca 317.933Radial†	12739.4	12809.4	18880	ug/L	18880 ppb	10:30:04
3	Fe 238.204 Radial†	5117.7	5145.3	48169	ug/L	48169 ppb	10:30:04
3	K 766.490 Radial†	22967.3	20769.9	3673.2	ug/L	3673.2 ppb	10:30:04
3	Mg 279.077 IEC†	277.0	277.8	9757.3	ug/L	9757.3 ppb	10:30:24
3	Na 589.592 Radial†	2836.2	3943.2	1323.2	ug/L	1323.2 ppb	10:30:04
3	Sr 421.552†	15101.5	15230.3	94.676	ug/L	94.676 ppb	10:30:04
3	Sc 361.383	926753.2	926753.2	102.83	%		10:31:33
3	Y 371.029	827318.1	827318.1	110.15	%		10:31:33
3	Ag 328.068†	-2875.7	-3089.4	1.5126	ug/L	1.5126 ppb	10:31:38
3	As 188.979†	-56.6	-30.9	17.854	ug/L	17.854 ppb	10:31:58
3	B 249.677†	234.2	758.5	9.4672	ug/L	9.4672 ppb	10:31:38
3	Ba 233.527†	43961.4	42760.8	318.92	ug/L	318.92 ppb	10:31:38
3	Be 313.107†	-18232.7	-12618.3	0.7017	ug/L	0.7017 ppb	10:31:38
3	Cd 226.502†	327.9	513.9	0.6424	ug/L	0.6424 ppb	10:31:58
3	Co 228.616†	975.3	1013.9	12.947	ug/L	12.947 ppb	10:31:58
3	Cr 267.716†	2744.3	2590.1	28.249	ug/L	28.249 ppb	10:31:58
3	Cu 324.752†	13636.7	6504.9	21.072	ug/L	21.072 ppb	10:31:38
3	Mn 257.610†	856720.8	832735.7	892.93	ug/L	892.93 ppb	10:31:33
3	Mo 202.031†	-5.1	-23.3	1.9340	ug/L	1.9340 ppb	10:31:58
3	Ni 231.604†	1819.5	1682.9	38.957	ug/L	38.957 ppb	10:31:58
3	P 214.914†	4688.2	4335.7	2464.2	ug/L	2464.2 ppb	10:31:58
3	Pb 220.353†	164.0	228.0	25.700	ug/L	25.700 ppb	10:31:58
3	S 181.975 Axial†	144.1	98.5	134.66	ug/L	134.66 ppb	10:31:58
3	Sb 206.836†	62.0	26.0	0.2922	ug/L	0.2922 ppb	10:31:58
3	Se 196.026†	-284.4	-247.8	11.648	ug/L	11.648 ppb	10:31:58
3	Si 251.611†	632180.8	614343.9	18390	ug/L	18390 ppb	10:31:33
3	Sn 189.927†	-146.5	-147.5	-21.533	ug/L	-21.533 ppb	10:31:58
3	Ti 334.940†	1736702.1	1690051.6	2698.0	ug/L	2698.0 ppb	10:31:33
3	Tl 190.801†	-132.0	-95.9	-0.7909	ug/L	-0.7909 ppb	10:31:58
3	U 409.014†	-5212.7	-2667.5	-79.595	ug/L	-79.595 ppb	10:31:38
3	V 292.402†	14051.1	15023.0	88.974	ug/L	88.974 ppb	10:31:38
3	Zn 213.857†	16861.3	15775.8	132.62	ug/L	132.62 ppb	10:31:38
3	SiO2†	632376.8	614516.8	39417	ug/L	39417 ppb	10:32:15

Mean Data: 1201978572|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916987.1	101.74	%	0.942				0.93%
Sc Radial	5794.4	99.2	%	0.99				1.00%
Y 371.029	819540.4	109.11	%	0.900				0.82%
Y RADIAL	6721.1	106.9	%	1.16				1.09%
Ag 328.068†	-3031.4	1.9162	ug/L	0.60140	1.9162	ppb	0.60140	31.38%
Al 396.153Radial†	25164.8	17480	ug/L	225.6	17480	ppb	225.6	1.29%
As 188.979†	-36.3	16.071	ug/L	1.5550	16.071	ppb	1.5550	9.68%
B 249.677†	812.4	10.539	ug/L	0.9559	10.539	ppb	0.9559	9.07%
Ba 233.527†	43076.6	321.28	ug/L	2.158	321.28	ppb	2.158	0.67%
Be 313.107†	-12760.4	0.7181	ug/L	0.02975	0.7181	ppb	0.02975	4.14%
Ca 317.933Radial†	12884.1	18990	ug/L	240.5	18990	ppb	240.5	1.27%
Cd 226.502†	525.4	0.7209	ug/L	0.07679	0.7209	ppb	0.07679	10.65%
Co 228.616†	1037.0	13.308	ug/L	0.3468	13.308	ppb	0.3468	2.61%
Cr 267.716†	2638.5	28.766	ug/L	0.4484	28.766	ppb	0.4484	1.56%
Cu 324.752†	6638.7	21.478	ug/L	0.3804	21.478	ppb	0.3804	1.77%
Fe 238.204 Radial†	5191.8	48605	ug/L	731.6	48605	ppb	731.6	1.51%
K 766.490 Radial†	21034.4	3720.0	ug/L	62.21	3720.0	ppb	62.21	1.67%

Mg 279.077 IEC†	281.8	9901.3	ug/L	278.95	9901.3	ppb	278.95	2.82%
Mn 257.610†	843465.7	904.42	ug/L	10.079	904.42	ppb	10.079	1.11%
Mo 202.031†	-20.9	2.1197	ug/L	0.16247	2.1197	ppb	0.16247	7.66%
Na 589.592 Radial†	3993.0	1340.0	ug/L	16.27	1340.0	ppb	16.27	1.21%
Ni 231.604†	1712.1	39.633	ug/L	0.5958	39.633	ppb	0.5958	1.50%
P 214.914†	4384.2	2491.8	ug/L	23.94	2491.8	ppb	23.94	0.96%
Pb 220.353†	225.2	25.370	ug/L	0.2907	25.370	ppb	0.2907	1.15%
S 181.975 Axial†	107.6	147.34	ug/L	11.153	147.34	ppb	11.153	7.57%
Sb 206.836†	23.5	-0.6015	ug/L	1.19920	-0.6015	ppb	1.19920	199.36%
Se 196.026†	-249.4	12.108	ug/L	1.8670	12.108	ppb	1.8670	15.42%
Si 251.611†	622568.7	18636	ug/L	214.5	18636	ppb	214.5	1.15%
Sn 189.927†	-144.1	-20.955	ug/L	0.7031	-20.955	ppb	0.7031	3.36%
Sr 421.552†	15376.2	95.583	ug/L	1.6937	95.583	ppb	1.6937	1.77%
Ti 334.940†	1711804.7	2732.7	ug/L	30.12	2732.7	ppb	30.12	1.10%
Tl 190.801†	-98.6	-1.2092	ug/L	0.46400	-1.2092	ppb	0.46400	38.37%
U 409.014†	-2762.2	-82.260	ug/L	2.4727	-82.260	ppb	2.4727	3.01%
V 292.402†	15099.2	89.373	ug/L	0.4722	89.373	ppb	0.4722	0.53%
Zn 213.857†	15836.5	133.10	ug/L	0.478	133.10	ppb	0.478	0.36%
SiO2†	622959.3	39959	ug/L	480.1	39959	ppb	480.1	1.20%

Sequence No.: 5
Sample ID: 1201978574|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/8/2009 10:34:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978574|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5650.9	5650.9	96.7	%			10:36:38
1	Y RADIAL	6319.4	6319.4	100.5	%			10:36:38
1	Al 396.153Radial†	49662.7	51379.8	35668	ug/L	35668	ppb	10:36:18
1	Ca 317.933Radial†	16093.0	16627.2	24508	ug/L	24508	ppb	10:36:18
1	Fe 238.204 Radial†	4836.6	4995.0	46778	ug/L	46778	ppb	10:36:38
1	K 766.490 Radial†	59550.2	59233.0	10488	ug/L	10488	ppb	10:36:18
1	Mg 279.077 IEC†	419.2	432.4	15224	ug/L	15224	ppb	10:36:38
1	Na 589.592 Radial†	23752.1	25651.5	8608.2	ug/L	8608.2	ppb	10:36:18
1	Sr 421.552†	107820.0	111530.9	694.36	ug/L	694.36	ppb	10:36:18
1	Sc 361.383	905054.7	905054.7	100.42	%			10:37:37
1	Y 371.029	777157.0	777157.0	103.47	%			10:37:37
1	Ag 328.068†	113918.1	113148.2	528.93	ug/L	528.93	ppb	10:37:37
1	As 188.979†	1257.1	1276.0	531.21	ug/L	531.21	ppb	10:37:57
1	B 249.677†	24953.3	25379.4	524.73	ug/L	524.73	ppb	10:37:37
1	Ba 233.527†	105384.0	104951.1	780.85	ug/L	780.85	ppb	10:37:37
1	Be 313.107†	1485143.3	1484036.3	545.72	ug/L	545.72	ppb	10:37:37
1	Cd 226.502†	48890.5	48880.8	512.40	ug/L	512.40	ppb	10:37:37
1	Co 228.616†	26942.8	26895.3	506.00	ug/L	506.00	ppb	10:37:57
1	Cr 267.716†	50194.2	49905.3	525.59	ug/L	525.59	ppb	10:37:37
1	Cu 324.752†	197971.7	190385.9	547.22	ug/L	547.22	ppb	10:37:37
1	Mn 257.610†	1276478.9	1270710.5	1359.9	ug/L	1359.9	ppb	10:37:37
1	Mo 202.031†	7874.8	7823.5	500.31	ug/L	500.31	ppb	10:37:57
1	Ni 231.604†	22663.6	22482.1	520.28	ug/L	520.28	ppb	10:37:57
1	P 214.914†	3752.4	3513.2	1920.0	ug/L	1920.0	ppb	10:37:57
1	Pb 220.353†	4617.0	4666.1	532.45	ug/L	532.45	ppb	10:37:57
1	S 181.975 Axial†	3800.0	3742.5	5237.2	ug/L	5237.2	ppb	10:37:57
1	Sb 206.836†	1625.0	1584.0	502.57	ug/L	502.57	ppb	10:37:57
1	Se 196.026†	613.3	639.6	525.17	ug/L	525.17	ppb	10:37:57
1	Si 251.611†	895060.6	890862.2	26655	ug/L	26655	ppb	10:37:37
1	Sn 189.927†	3067.2	3049.3	502.46	ug/L	502.46	ppb	10:37:57
1	Ti 334.940†	1530510.5	1525215.4	2434.9	ug/L	2434.9	ppb	10:37:37
1	Tl 190.801†	1661.5	1687.0	496.16	ug/L	496.16	ppb	10:37:57
1	U 409.014†	13148.2	15495.0	419.95	ug/L	419.95	ppb	10:37:37
1	V 292.402†	86824.6	87819.4	578.31	ug/L	578.31	ppb	10:37:37
1	Zn 213.857†	72150.5	71226.5	613.30	ug/L	613.30	ppb	10:37:37
1	SiO2†	888438.0	884249.6	56693	ug/L	56693	ppb	10:38:58
2	Sc Radial	5781.9	5781.9	98.9	%			10:37:03
2	Y RADIAL	6434.5	6434.5	102.3	%			10:37:03
2	Al 396.153Radial†	49283.6	49832.6	34594	ug/L	34594	ppb	10:36:43
2	Ca 317.933Radial†	15968.6	16124.3	23766	ug/L	23766	ppb	10:36:43
2	Fe 238.204 Radial†	4781.9	4826.4	45200	ug/L	45200	ppb	10:37:03
2	K 766.490 Radial†	59259.7	57543.6	10189	ug/L	10189	ppb	10:36:43
2	Mg 279.077 IEC†	411.8	415.1	14616	ug/L	14616	ppb	10:37:03
2	Na 589.592 Radial†	23653.4	24995.0	8387.8	ug/L	8387.8	ppb	10:36:43
2	Sr 421.552†	107139.7	108316.2	674.34	ug/L	674.34	ppb	10:36:43
2	Sc 361.383	903333.2	903333.2	100.23	%			10:38:04
2	Y 371.029	777589.8	777589.8	103.53	%			10:38:04
2	Ag 328.068†	113109.4	112557.6	525.75	ug/L	525.75	ppb	10:38:04
2	As 188.979†	1272.4	1293.7	537.80	ug/L	537.80	ppb	10:38:24
2	B 249.677†	24775.3	25249.2	522.21	ug/L	522.21	ppb	10:38:04
2	Ba 233.527†	104381.4	104150.7	774.85	ug/L	774.85	ppb	10:38:04
2	Be 313.107†	1477546.1	1479274.9	543.94	ug/L	543.94	ppb	10:38:04
2	Cd 226.502†	48410.4	48494.6	508.47	ug/L	508.47	ppb	10:38:04
2	Co 228.616†	26968.6	26972.3	507.53	ug/L	507.53	ppb	10:38:24
2	Cr 267.716†	49957.3	49764.2	524.08	ug/L	524.08	ppb	10:38:04
2	Cu 324.752†	196378.5	189172.0	543.66	ug/L	543.66	ppb	10:38:04
2	Mn 257.610†	1264230.2	1260912.3	1349.3	ug/L	1349.3	ppb	10:38:04
2	Mo 202.031†	7888.3	7851.9	502.01	ug/L	502.01	ppb	10:38:24
2	Ni 231.604†	22694.1	22555.6	521.98	ug/L	521.98	ppb	10:38:24

2	P 214.914†	3749.6	3517.5	1924.0 ug/L	1924.0 ppb	10:38:24
2	Pb 220.353†	4615.1	4673.0	533.12 ug/L	533.12 ppb	10:38:24
2	S 181.975 Axial†	3814.9	3764.6	5268.4 ug/L	5268.4 ppb	10:38:24
2	Sb 206.836†	1606.9	1569.0	497.97 ug/L	497.97 ppb	10:38:24
2	Se 196.026†	602.7	630.1	514.54 ug/L	514.54 ppb	10:38:24
2	Si 251.611†	886484.9	884004.8	26450 ug/L	26450 ppb	10:38:04
2	Sn 189.927†	3067.7	3055.7	503.40 ug/L	503.40 ppb	10:38:24
2	Ti 334.940†	1515533.5	1513177.3	2415.6 ug/L	2415.6 ppb	10:38:04
2	Tl 190.801†	1672.1	1700.7	499.77 ug/L	499.77 ppb	10:38:24
2	U 409.014†	13220.0	15591.6	422.81 ug/L	422.81 ppb	10:38:04
2	V 292.402†	86060.9	87222.2	574.65 ug/L	574.65 ppb	10:38:04
2	Zn 213.857†	71552.8	70767.1	609.45 ug/L	609.45 ppb	10:38:04
2	SiO2†	886957.5	884458.5	56706 ug/L	56706 ppb	10:39:04
3	Sc Radial	5726.0	5726.0	98.0 %		10:37:28
3	Y RADIAL	6367.3	6367.3	101.3 %		10:37:28
3	Al 396.153Radial†	49329.8	50366.5	34965 ug/L	34965 ppb	10:37:08
3	Ca 317.933Radial†	15972.7	16286.1	24005 ug/L	24005 ppb	10:37:08
3	Fe 238.204 Radial†	4782.8	4874.6	45651 ug/L	45651 ppb	10:37:28
3	K 766.490 Radial†	59041.2	57905.8	10253 ug/L	10253 ppb	10:37:08
3	Mg 279.077 IEC†	411.6	418.9	14749 ug/L	14749 ppb	10:37:28
3	Na 589.592 Radial†	23528.3	25101.0	8423.4 ug/L	8423.4 ppb	10:37:08
3	Sr 421.552†	106907.0	109136.8	679.45 ug/L	679.45 ppb	10:37:08
3	Sc 361.383	914640.7	914640.7	101.48 %		10:38:32
3	Y 371.029	786513.5	786513.5	104.72 %		10:38:32
3	Ag 328.068†	114506.1	112538.7	525.80 ug/L	525.80 ppb	10:38:32
3	As 188.979†	1268.8	1274.4	530.28 ug/L	530.28 ppb	10:38:52
3	B 249.677†	25203.0	25365.1	524.59 ug/L	524.59 ppb	10:38:32
3	Ba 233.527†	105547.7	104012.5	773.84 ug/L	773.84 ppb	10:38:32
3	Be 313.107†	1493203.8	1476478.9	542.93 ug/L	542.93 ppb	10:38:32
3	Cd 226.502†	48885.1	48365.2	507.06 ug/L	507.06 ppb	10:38:32
3	Co 228.616†	27025.2	26695.3	502.24 ug/L	502.24 ppb	10:38:52
3	Cr 267.716†	50418.4	49602.4	522.39 ug/L	522.39 ppb	10:38:32
3	Cu 324.752†	199541.9	189866.9	545.67 ug/L	545.67 ppb	10:38:32
3	Mn 257.610†	1280048.9	1260906.1	1349.3 ug/L	1349.3 ppb	10:38:32
3	Mo 202.031†	7882.8	7749.2	495.52 ug/L	495.52 ppb	10:38:52
3	Ni 231.604†	22736.7	22317.7	516.47 ug/L	516.47 ppb	10:38:52
3	P 214.914†	3778.4	3499.6	1913.1 ug/L	1913.1 ppb	10:38:52
3	Pb 220.353†	4629.4	4630.1	528.30 ug/L	528.30 ppb	10:38:52
3	S 181.975 Axial†	3828.6	3731.0	5221.3 ug/L	5221.3 ppb	10:38:52
3	Sb 206.836†	1621.3	1563.3	495.95 ug/L	495.95 ppb	10:38:52
3	Se 196.026†	615.1	634.9	518.78 ug/L	518.78 ppb	10:38:52
3	Si 251.611†	899867.2	886257.1	26517 ug/L	26517 ppb	10:38:32
3	Sn 189.927†	3066.0	3016.2	496.97 ug/L	496.97 ppb	10:38:52
3	Ti 334.940†	1536162.6	1514811.4	2418.2 ug/L	2418.2 ppb	10:38:32
3	Tl 190.801†	1670.8	1678.9	493.71 ug/L	493.71 ppb	10:38:52
3	U 409.014†	13277.4	15485.0	419.82 ug/L	419.82 ppb	10:38:32
3	V 292.402†	86954.5	87041.1	573.28 ug/L	573.28 ppb	10:38:32
3	Zn 213.857†	72485.4	70803.5	609.76 ug/L	609.76 ppb	10:38:32
3	SiO2†	889594.1	876116.5	56171 ug/L	56171 ppb	10:39:10

Mean Data: 1201978574|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907676.2	100.71	%	0.676				0.67%
Sc Radial	5719.6	97.9	%	1.13				1.15%
Y 371.029	780420.1	103.91	%	0.703				0.68%
Y RADIAL	6373.8	101.4	%	0.92				0.91%
Ag 328.068†	112748.2	526.82	ug/L	1.824	526.82	ppb	1.824	0.35%
Al 396.153Radial†	50526.3	35075	ug/L	545.9	35075	ppb	545.9	1.56%
As 188.979†	1281.3	533.10	ug/L	4.099	533.10	ppb	4.099	0.77%
B 249.677†	25331.3	523.84	ug/L	1.419	523.84	ppb	1.419	0.27%
Ba 233.527†	104371.5	776.52	ug/L	3.789	776.52	ppb	3.789	0.49%
Be 313.107†	1479930.1	544.20	ug/L	1.411	544.20	ppb	1.411	0.26%
Ca 317.933Radial†	16345.9	24093	ug/L	378.4	24093	ppb	378.4	1.57%
Cd 226.502†	48580.2	509.31	ug/L	2.766	509.31	ppb	2.766	0.54%
Co 228.616†	26854.3	505.26	ug/L	2.720	505.26	ppb	2.720	0.54%
Cr 267.716†	49757.3	524.02	ug/L	1.606	524.02	ppb	1.606	0.31%
Cu 324.752†	189808.3	545.52	ug/L	1.782	545.52	ppb	1.782	0.33%
Fe 238.204 Radial†	4898.7	45876	ug/L	813.0	45876	ppb	813.0	1.77%
K 766.490 Radial†	58227.4	10310	ug/L	157.7	10310	ppb	157.7	1.53%

Mg 279.077 IEC†	422.1	14863	ug/L	319.6	14863	ppb	319.6	2.15%
Mn 257.610†	1264176.3	1352.8	ug/L	6.11	1352.8	ppb	6.11	0.45%
Mo 202.031†	7808.2	499.28	ug/L	3.367	499.28	ppb	3.367	0.67%
Na 589.592 Radial†	25249.2	8473.1	ug/L	118.28	8473.1	ppb	118.28	1.40%
Ni 231.604†	22451.8	519.58	ug/L	2.820	519.58	ppb	2.820	0.54%
P 214.914†	3510.1	1919.0	ug/L	5.55	1919.0	ppb	5.55	0.29%
Pb 220.353†	4656.4	531.29	ug/L	2.609	531.29	ppb	2.609	0.49%
S 181.975 Axial†	3746.1	5242.3	ug/L	23.97	5242.3	ppb	23.97	0.46%
Sb 206.836†	1572.1	498.83	ug/L	3.393	498.83	ppb	3.393	0.68%
Se 196.026†	634.9	519.50	ug/L	5.349	519.50	ppb	5.349	1.03%
Si 251.611†	887041.4	26541	ug/L	104.6	26541	ppb	104.6	0.39%
Sn 189.927†	3040.4	500.94	ug/L	3.473	500.94	ppb	3.473	0.69%
Sr 421.552†	109661.3	682.72	ug/L	10.399	682.72	ppb	10.399	1.52%
Ti 334.940†	1517734.7	2422.9	ug/L	10.44	2422.9	ppb	10.44	0.43%
Tl 190.801†	1688.9	496.54	ug/L	3.047	496.54	ppb	3.047	0.61%
U 409.014†	15523.8	420.86	ug/L	1.690	420.86	ppb	1.690	0.40%
V 292.402†	87360.9	575.41	ug/L	2.600	575.41	ppb	2.600	0.45%
Zn 213.857†	70932.4	610.84	ug/L	2.140	610.84	ppb	2.140	0.35%
SiO2†	881608.2	56523	ug/L	305.0	56523	ppb	305.0	0.54%

Sequence No.: 6
Sample ID: 1201978575|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 12/8/2009 10:41:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978575|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5750.2	5750.2	98.4	%			10:43:33
1	Y RADIAL	6538.4	6538.4	104.0	%			10:43:33
1	Al 396.153Radial†	54002.5	54902.6	38115	ug/L	38115	ppb	10:43:13
1	Ca 317.933Radial†	16444.6	16696.9	24610	ug/L	24610	ppb	10:43:13
1	Fe 238.204 Radial†	6665.1	6766.9	63367	ug/L	63367	ppb	10:43:33
1	K 766.490 Radial†	60071.0	58697.9	10391	ug/L	10391	ppb	10:43:13
1	Mg 279.077 IEC†	427.5	433.3	15242	ug/L	15242	ppb	10:43:33
1	Na 589.592 Radial†	23849.4	25325.9	8498.9	ug/L	8498.9	ppb	10:43:13
1	Sr 421.552†	109668.1	111482.0	694.05	ug/L	694.05	ppb	10:43:13
1	Sc 361.383	903923.7	903923.7	100.30	%			10:44:32
1	Y 371.029	793560.0	793560.0	105.66	%			10:44:32
1	Ag 328.068†	115367.7	114735.5	541.62	ug/L	541.62	ppb	10:44:32
1	As 188.979†	1274.3	1294.7	547.95	ug/L	547.95	ppb	10:44:52
1	B 249.677†	25810.9	26265.7	541.08	ug/L	541.08	ppb	10:44:32
1	Ba 233.527†	107628.9	107320.7	799.15	ug/L	799.15	ppb	10:44:32
1	Be 313.107†	1502003.1	1502696.9	554.10	ug/L	554.10	ppb	10:44:32
1	Cd 226.502†	49728.8	49777.6	520.23	ug/L	520.23	ppb	10:44:32
1	Co 228.616†	27771.6	27755.4	520.39	ug/L	520.39	ppb	10:44:52
1	Cr 267.716†	54020.1	53782.5	566.69	ug/L	566.69	ppb	10:44:32
1	Cu 324.752†	204130.6	196773.3	566.34	ug/L	566.34	ppb	10:44:32
1	Mn 257.610†	1534881.8	1529943.5	1638.1	ug/L	1638.1	ppb	10:44:32
1	Mo 202.031†	8043.9	8001.9	512.82	ug/L	512.82	ppb	10:44:52
1	Ni 231.604†	23222.4	23067.5	533.83	ug/L	533.83	ppb	10:44:52
1	P 214.914†	4666.1	4428.9	2432.8	ug/L	2432.8	ppb	10:44:52
1	Pb 220.353†	4761.1	4815.5	548.54	ug/L	548.54	ppb	10:44:52
1	S 181.975 Axial†	3973.3	3920.0	5485.5	ug/L	5485.5	ppb	10:44:52
1	Sb 206.836†	1629.6	1590.5	502.18	ug/L	502.18	ppb	10:44:52
1	Se 196.026†	526.3	553.5	528.16	ug/L	528.16	ppb	10:44:52
1	Si 251.611†	921241.7	918081.6	27470	ug/L	27470	ppb	10:44:32
1	Sn 189.927†	3123.9	3109.7	512.59	ug/L	512.59	ppb	10:44:52
1	Ti 334.940†	2035584.0	2030709.8	3241.5	ug/L	3241.5	ppb	10:44:32
1	Tl 190.801†	1680.4	1707.9	509.69	ug/L	509.69	ppb	10:44:52
1	U 409.014†	12621.4	14986.1	403.76	ug/L	403.76	ppb	10:44:32
1	V 292.402†	94752.5	95832.0	627.94	ug/L	627.94	ppb	10:44:32
1	Zn 213.857†	77575.1	76725.1	659.64	ug/L	659.64	ppb	10:44:32
1	SiO2†	934337.5	931121.0	59699	ug/L	59699	ppb	10:45:53
2	Sc Radial	5725.1	5725.1	98.0	%			10:43:58
2	Y RADIAL	6490.4	6490.4	103.2	%			10:43:58
2	Al 396.153Radial†	53127.2	54250.5	37662	ug/L	37662	ppb	10:43:38
2	Ca 317.933Radial†	16248.9	16570.6	24424	ug/L	24424	ppb	10:43:38
2	Fe 238.204 Radial†	6687.6	6819.6	63861	ug/L	63861	ppb	10:43:58
2	K 766.490 Radial†	59565.7	58450.6	10347	ug/L	10347	ppb	10:43:38
2	Mg 279.077 IEC†	434.1	441.9	15547	ug/L	15547	ppb	10:43:58
2	Na 589.592 Radial†	23448.4	25023.1	8397.3	ug/L	8397.3	ppb	10:43:38
2	Sr 421.552†	107778.8	110043.6	685.10	ug/L	685.10	ppb	10:43:38
2	Sc 361.383	906895.0	906895.0	100.62	%			10:44:59
2	Y 371.029	797130.0	797130.0	106.13	%			10:44:59
2	Ag 328.068†	115730.3	114719.0	541.71	ug/L	541.71	ppb	10:44:59
2	As 188.979†	1277.1	1293.4	547.51	ug/L	547.51	ppb	10:45:19
2	B 249.677†	25871.7	26241.8	540.52	ug/L	540.52	ppb	10:44:59
2	Ba 233.527†	108334.4	107670.3	801.76	ug/L	801.76	ppb	10:44:59
2	Be 313.107†	1510216.5	1505952.8	555.29	ug/L	555.29	ppb	10:44:59
2	Cd 226.502†	50057.9	49942.2	521.92	ug/L	521.92	ppb	10:44:59
2	Co 228.616†	27743.7	27636.8	518.13	ug/L	518.13	ppb	10:45:19
2	Cr 267.716†	54341.0	53925.0	568.19	ug/L	568.19	ppb	10:44:59
2	Cu 324.752†	204316.2	196291.0	564.99	ug/L	564.99	ppb	10:44:59
2	Mn 257.610†	1542988.6	1532986.1	1641.4	ug/L	1641.4	ppb	10:44:59
2	Mo 202.031†	8040.0	7971.8	510.95	ug/L	510.95	ppb	10:45:19
2	Ni 231.604†	23197.7	22967.1	531.50	ug/L	531.50	ppb	10:45:19

2	P 214.914†	4686.1	4433.5	2435.1 ug/L	2435.1 ppb	10:45:19
2	Pb 220.353†	4778.9	4817.7	548.64 ug/L	548.64 ppb	10:45:19
2	S 181.975 Axial†	3994.7	3928.3	5497.2 ug/L	5497.2 ppb	10:45:19
2	Sb 206.836†	1638.9	1594.5	503.33 ug/L	503.33 ppb	10:45:19
2	Se 196.026†	526.6	552.1	528.80 ug/L	528.80 ppb	10:45:19
2	Si 251.611†	923263.6	917081.6	27440 ug/L	27440 ppb	10:44:59
2	Sn 189.927†	3120.3	3095.9	510.31 ug/L	510.31 ppb	10:45:19
2	Ti 334.940†	2043377.2	2031805.1	3243.3 ug/L	3243.3 ppb	10:44:59
2	Tl 190.801†	1672.1	1694.2	505.88 ug/L	505.88 ppb	10:45:19
2	U 409.014†	12723.0	15045.8	405.35 ug/L	405.35 ppb	10:44:59
2	V 292.402†	95243.1	96010.1	629.02 ug/L	629.02 ppb	10:44:59
2	Zn 213.857†	77863.7	76758.5	659.90 ug/L	659.90 ppb	10:44:59
2	SiO2†	915619.3	909466.9	58310 ug/L	58310 ppb	10:45:59
3	Sc Radial	5717.4	5717.4	97.8 %		10:44:23
3	Y RADIAL	6492.9	6492.9	103.3 %		10:44:23
3	Al 396.153Radial†	54138.0	55356.0	38430 ug/L	38430 ppb	10:44:03
3	Ca 317.933Radial†	16422.9	16770.6	24719 ug/L	24719 ppb	10:44:03
3	Fe 238.204 Radial†	6674.3	6815.1	63819 ug/L	63819 ppb	10:44:23
3	K 766.490 Radial†	60489.6	59476.0	10529 ug/L	10529 ppb	10:44:03
3	Mg 279.077 IEC†	434.1	442.5	15567 ug/L	15567 ppb	10:44:23
3	Na 589.592 Radial†	24011.4	25630.5	8601.1 ug/L	8601.1 ppb	10:44:03
3	Sr 421.552†	110199.1	112664.1	701.41 ug/L	701.41 ppb	10:44:03
3	Sc 361.383	903228.5	903228.5	100.22 %		10:45:27
3	Y 371.029	792778.4	792778.4	105.55 %		10:45:27
3	Ag 328.068†	115246.0	114702.7	541.62 ug/L	541.62 ppb	10:45:27
3	As 188.979†	1282.2	1303.6	551.56 ug/L	551.56 ppb	10:45:47
3	B 249.677†	25853.0	26327.4	542.30 ug/L	542.30 ppb	10:45:27
3	Ba 233.527†	108177.1	107950.3	803.83 ug/L	803.83 ppb	10:45:27
3	Be 313.107†	1506533.6	1508370.2	556.18 ug/L	556.18 ppb	10:45:27
3	Cd 226.502†	50077.4	50163.6	524.26 ug/L	524.26 ppb	10:45:27
3	Co 228.616†	27948.0	27952.7	524.13 ug/L	524.13 ppb	10:45:47
3	Cr 267.716†	54388.7	54191.7	571.00 ug/L	571.00 ppb	10:45:27
3	Cu 324.752†	203169.3	195970.7	564.07 ug/L	564.07 ppb	10:45:27
3	Mn 257.610†	1542217.1	1538440.9	1647.2 ug/L	1647.2 ppb	10:45:27
3	Mo 202.031†	8102.9	8066.9	516.99 ug/L	516.99 ppb	10:45:47
3	Ni 231.604†	23317.8	23180.5	536.44 ug/L	536.44 ppb	10:45:47
3	P 214.914†	4716.2	4482.4	2463.8 ug/L	2463.8 ppb	10:45:47
3	Pb 220.353†	4789.3	4847.4	552.18 ug/L	552.18 ppb	10:45:47
3	S 181.975 Axial†	4026.0	3975.7	5563.5 ug/L	5563.5 ppb	10:45:47
3	Sb 206.836†	1643.2	1605.4	506.91 ug/L	506.91 ppb	10:45:47
3	Se 196.026†	542.7	570.3	539.38 ug/L	539.38 ppb	10:45:47
3	Si 251.611†	920935.3	918482.8	27481 ug/L	27481 ppb	10:45:27
3	Sn 189.927†	3139.8	3128.0	515.60 ug/L	515.60 ppb	10:45:47
3	Ti 334.940†	2038179.3	2034861.7	3248.2 ug/L	3248.2 ppb	10:45:27
3	Tl 190.801†	1698.5	1727.3	515.22 ug/L	515.22 ppb	10:45:47
3	U 409.014†	12570.5	14945.0	402.57 ug/L	402.57 ppb	10:45:27
3	V 292.402†	94934.3	96086.2	629.61 ug/L	629.61 ppb	10:45:27
3	Zn 213.857†	77827.7	77036.6	662.30 ug/L	662.30 ppb	10:45:27
3	SiO2†	918293.1	915828.5	58718 ug/L	58718 ppb	10:46:05

Mean Data: 1201978575|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904682.4	100.38	%	0.216				0.22%
Sc Radial	5730.9	98.1	%	0.29				0.30%
Y 371.029	794489.4	105.78	%	0.309				0.29%
Y RADIAL	6507.2	103.5	%	0.43				0.42%
Ag 328.068†	114719.1	541.65	ug/L	0.051	541.65	ppb	0.051	0.01%
Al 396.153Radial†	54836.4	38069	ug/L	385.9	38069	ppb	385.9	1.01%
As 188.979†	1297.2	549.00	ug/L	2.226	549.00	ppb	2.226	0.41%
B 249.677†	26278.3	541.30	ug/L	0.914	541.30	ppb	0.914	0.17%
Ba 233.527†	107647.1	801.58	ug/L	2.348	801.58	ppb	2.348	0.29%
Be 313.107†	1505673.3	555.19	ug/L	1.044	555.19	ppb	1.044	0.19%
Ca 317.933Radial†	16679.4	24584	ug/L	149.0	24584	ppb	149.0	0.61%
Cd 226.502†	49961.1	522.14	ug/L	2.028	522.14	ppb	2.028	0.39%
Co 228.616†	27781.6	520.88	ug/L	3.030	520.88	ppb	3.030	0.58%
Cr 267.716†	53966.4	568.63	ug/L	2.186	568.63	ppb	2.186	0.38%
Cu 324.752†	196345.0	565.13	ug/L	1.144	565.13	ppb	1.144	0.20%
Fe 238.204 Radial†	6800.5	63682	ug/L	273.7	63682	ppb	273.7	0.43%
K 766.490 Radial†	58874.8	10422	ug/L	94.8	10422	ppb	94.8	0.91%

Mg 279.077 IEC†	439.3	15452	ug/L	181.8	15452	ppb	181.8	1.18%
Mn 257.610†	1533790.1	1642.2	ug/L	4.61	1642.2	ppb	4.61	0.28%
Mo 202.031†	8013.5	513.58	ug/L	3.091	513.58	ppb	3.091	0.60%
Na 589.592 Radial†	25326.5	8499.1	ug/L	101.92	8499.1	ppb	101.92	1.20%
Ni 231.604†	23071.7	533.92	ug/L	2.470	533.92	ppb	2.470	0.46%
P 214.914†	4448.3	2443.9	ug/L	17.29	2443.9	ppb	17.29	0.71%
Pb 220.353†	4826.9	549.79	ug/L	2.076	549.79	ppb	2.076	0.38%
S 181.975 Axial†	3941.4	5515.4	ug/L	42.03	5515.4	ppb	42.03	0.76%
Sb 206.836†	1596.8	504.14	ug/L	2.464	504.14	ppb	2.464	0.49%
Se 196.026†	558.7	532.11	ug/L	6.298	532.11	ppb	6.298	1.18%
Si 251.611†	917882.0	27464	ug/L	21.5	27464	ppb	21.5	0.08%
Sn 189.927†	3111.2	512.83	ug/L	2.653	512.83	ppb	2.653	0.52%
Sr 421.552†	111396.6	693.52	ug/L	8.172	693.52	ppb	8.172	1.18%
Ti 334.940†	2032458.9	3244.3	ug/L	3.44	3244.3	ppb	3.44	0.11%
Tl 190.801†	1709.8	510.26	ug/L	4.695	510.26	ppb	4.695	0.92%
U 409.014†	14992.3	403.89	ug/L	1.393	403.89	ppb	1.393	0.34%
V 292.402†	95976.1	628.86	ug/L	0.845	628.86	ppb	0.845	0.13%
Zn 213.857†	76840.0	660.61	ug/L	1.465	660.61	ppb	1.465	0.22%
SiO2†	918805.5	58909	ug/L	713.9	58909	ppb	713.9	1.21%

Sequence No.: 7
Sample ID: 1201978573|925470|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 12/8/2009 10:48:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978573|925470|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5843.6	5843.6	100.0	%			10:50:08
1	Y RADIAL	6328.6	6328.6	100.6	%			10:50:08
1	Al 396.153Radial†	5035.3	5055.9	3512.0	ug/L	3512.0	ppb	10:50:08
1	Ca 317.933Radial†	2335.6	2320.1	3419.7	ug/L	3419.7	ppb	10:50:28
1	Fe 238.204 Radial†	954.6	947.9	8873.8	ug/L	8873.8	ppb	10:50:28
1	K 766.490 Radial†	6504.6	4153.2	734.32	ug/L	734.32	ppb	10:50:08
1	Mg 279.077 IEC†	56.7	55.5	1951.7	ug/L	1951.7	ppb	10:50:28
1	Na 589.592 Radial†	-337.5	750.5	251.84	ug/L	251.84	ppb	10:50:08
1	Sr 421.552†	2662.5	2690.0	16.721	ug/L	16.721	ppb	10:50:08
1	Sc 361.383	897166.6	897166.6	99.545	%			10:51:25
1	Y 371.029	751566.8	751566.8	100.06	%			10:51:25
1	Ag 328.068†	-269.7	-563.7	0.3214	ug/L	0.3214	ppb	10:51:25
1	As 188.979†	-22.4	1.7	5.3316	ug/L	5.3316	ppb	10:51:45
1	B 249.677†	-128.8	401.3	7.2283	ug/L	7.2283	ppb	10:51:25
1	Ba 233.527†	5567.5	5601.3	41.892	ug/L	41.892	ppb	10:51:25
1	Be 313.107†	-6416.4	-1332.7	0.2835	ug/L	0.2835	ppb	10:51:25
1	Cd 226.502†	-76.6	118.2	0.3673	ug/L	0.3673	ppb	10:51:45
1	Co 228.616†	126.1	192.1	2.7006	ug/L	2.7006	ppb	10:51:45
1	Cr 267.716†	646.8	571.1	6.1976	ug/L	6.1976	ppb	10:51:45
1	Cu 324.752†	8253.4	1534.4	4.8437	ug/L	4.8437	ppb	10:51:25
1	Mn 257.610†	181666.1	182073.5	195.07	ug/L	195.07	ppb	10:51:25
1	Mo 202.031†	8.9	-9.4	0.0345	ug/L	0.0345	ppb	10:51:45
1	Ni 231.604†	429.0	344.4	7.9736	ug/L	7.9736	ppb	10:51:45
1	P 214.914†	1035.2	816.4	464.08	ug/L	464.08	ppb	10:51:45
1	Pb 220.353†	-28.0	40.3	4.6079	ug/L	4.6079	ppb	10:51:45
1	S 181.975 Axial†	54.9	13.6	18.385	ug/L	18.385	ppb	10:51:45
1	Sb 206.836†	30.5	-3.6	-2.3766	ug/L	-2.3766	ppb	10:51:45
1	Se 196.026†	-75.0	-46.5	1.7154	ug/L	1.7154	ppb	10:51:45
1	Si 251.611†	127178.0	127309.2	3810.9	ug/L	3810.9	ppb	10:51:25
1	Sn 189.927†	-37.7	-42.9	-6.5464	ug/L	-6.5464	ppb	10:51:45
1	Ti 334.940†	243045.4	245270.4	391.59	ug/L	391.59	ppb	10:51:25
1	Tl 190.801†	-44.4	-12.1	0.7732	ug/L	0.7732	ppb	10:51:45
1	U 409.014†	-2946.4	-558.0	-16.500	ug/L	-16.500	ppb	10:51:25
1	V 292.402†	2004.2	3371.7	20.492	ug/L	20.492	ppb	10:51:25
1	Zn 213.857†	3702.8	3097.9	26.094	ug/L	26.094	ppb	10:51:45
1	SiO2†	127651.7	127767.2	8195.5	ug/L	8195.5	ppb	10:52:41
2	Sc Radial	5824.6	5824.6	99.7	%			10:50:33
2	Y RADIAL	6303.3	6303.3	100.2	%			10:50:33
2	Al 396.153Radial†	5134.5	5172.0	3592.6	ug/L	3592.6	ppb	10:50:33
2	Ca 317.933Radial†	2330.2	2322.4	3423.0	ug/L	3423.0	ppb	10:50:53
2	Fe 238.204 Radial†	950.4	946.8	8863.6	ug/L	8863.6	ppb	10:50:53
2	K 766.490 Radial†	6579.1	4249.3	751.37	ug/L	751.37	ppb	10:50:33
2	Mg 279.077 IEC†	54.9	54.0	1895.9	ug/L	1895.9	ppb	10:50:53
2	Na 589.592 Radial†	-351.1	735.7	246.88	ug/L	246.88	ppb	10:50:33
2	Sr 421.552†	2725.8	2762.2	17.171	ug/L	17.171	ppb	10:50:33
2	Sc 361.383	908946.8	908946.8	100.85	%			10:51:50
2	Y 371.029	761775.5	761775.5	101.42	%			10:51:50
2	Ag 328.068†	-294.3	-584.5	0.2202	ug/L	0.2202	ppb	10:51:50
2	As 188.979†	-31.1	-6.6	2.0370	ug/L	2.0370	ppb	10:52:10
2	B 249.677†	-68.7	462.5	8.5149	ug/L	8.5149	ppb	10:51:50
2	Ba 233.527†	5614.8	5575.8	41.702	ug/L	41.702	ppb	10:51:50
2	Be 313.107†	-6518.6	-1350.6	0.2777	ug/L	0.2777	ppb	10:51:50
2	Cd 226.502†	-81.3	114.5	0.3294	ug/L	0.3294	ppb	10:52:10
2	Co 228.616†	124.5	188.9	2.6406	ug/L	2.6406	ppb	10:52:10
2	Cr 267.716†	648.7	564.6	6.1276	ug/L	6.1276	ppb	10:52:10
2	Cu 324.752†	8418.3	1590.4	5.0034	ug/L	5.0034	ppb	10:51:50
2	Mn 257.610†	184081.5	182103.3	195.11	ug/L	195.11	ppb	10:51:50
2	Mo 202.031†	16.5	-2.0	0.5004	ug/L	0.5004	ppb	10:52:10
2	Ni 231.604†	445.4	355.1	8.2208	ug/L	8.2208	ppb	10:52:10

2	P 214.914†	1028.5	796.2	452.46 ug/L	452.46 ppb	10:52:10
2	Pb 220.353†	-9.2	59.3	6.7804 ug/L	6.7804 ppb	10:52:10
2	S 181.975 Axial†	56.7	14.6	19.799 ug/L	19.799 ppb	10:52:10
2	Sb 206.836†	38.4	3.8	-0.0258 ug/L	-0.0258 ppb	10:52:10
2	Se 196.026†	-79.8	-50.3	-0.5332 ug/L	-0.5332 ppb	10:52:10
2	Si 251.611†	128720.3	127182.6	3807.1 ug/L	3807.1 ppb	10:51:50
2	Sn 189.927†	-32.5	-37.2	-5.6229 ug/L	-5.6229 ppb	10:52:10
2	Ti 334.940†	246447.9	245479.8	391.92 ug/L	391.92 ppb	10:51:50
2	Tl 190.801†	-45.4	-12.5	0.6784 ug/L	0.6784 ppb	10:52:10
2	U 409.014†	-2852.8	-426.8	-12.885 ug/L	-12.885 ppb	10:51:50
2	V 292.402†	2007.2	3348.6	20.353 ug/L	20.353 ppb	10:51:50
2	Zn 213.857†	3700.9	3047.8	25.657 ug/L	25.657 ppb	10:52:10
2	SiO2†	127624.0	126077.8	8087.1 ug/L	8087.1 ppb	10:52:46
3	Sc Radial	5836.4	5836.4	99.9 %		10:50:58
3	Y RADIAL	6304.7	6304.7	100.3 %		10:50:58
3	Al 396.153Radial†	5092.8	5119.8	3556.3 ug/L	3556.3 ppb	10:50:58
3	Ca 317.933Radial†	2316.4	2303.9	3395.7 ug/L	3395.7 ppb	10:51:18
3	Fe 238.204 Radial†	942.2	936.6	8768.8 ug/L	8768.8 ppb	10:51:18
3	K 766.490 Radial†	6650.8	4307.7	761.74 ug/L	761.74 ppb	10:50:58
3	Mg 279.077 IEC†	49.8	48.7	1710.8 ug/L	1710.8 ppb	10:51:18
3	Na 589.592 Radial†	-340.5	747.0	250.68 ug/L	250.68 ppb	10:50:58
3	Sr 421.552†	2706.5	2737.4	17.016 ug/L	17.016 ppb	10:50:58
3	Sc 361.383	897195.8	897195.8	99.549 %		10:52:16
3	Y 371.029	751426.2	751426.2	100.05 %		10:52:16
3	Ag 328.068†	-291.4	-585.5	0.1854 ug/L	0.1854 ppb	10:52:16
3	As 188.979†	-23.3	0.8	4.9095 ug/L	4.9095 ppb	10:52:36
3	B 249.677†	-102.9	427.3	7.7879 ug/L	7.7879 ppb	10:52:16
3	Ba 233.527†	5536.9	5570.5	41.658 ug/L	41.658 ppb	10:52:16
3	Be 313.107†	-6495.7	-1412.1	0.2494 ug/L	0.2494 ppb	10:52:16
3	Cd 226.502†	-67.5	127.3	0.4743 ug/L	0.4743 ppb	10:52:36
3	Co 228.616†	137.8	203.8	2.9333 ug/L	2.9333 ppb	10:52:36
3	Cr 267.716†	632.3	556.5	6.0414 ug/L	6.0414 ppb	10:52:36
3	Cu 324.752†	8358.0	1639.2	5.1382 ug/L	5.1382 ppb	10:52:16
3	Mn 257.610†	181019.9	181418.4	194.37 ug/L	194.37 ppb	10:52:16
3	Mo 202.031†	23.4	5.1	0.9484 ug/L	0.9484 ppb	10:52:36
3	Ni 231.604†	449.1	364.6	8.4400 ug/L	8.4400 ppb	10:52:36
3	P 214.914†	1027.1	808.3	459.43 ug/L	459.43 ppb	10:52:36
3	Pb 220.353†	-17.5	50.9	5.8251 ug/L	5.8251 ppb	10:52:36
3	S 181.975 Axial†	53.0	11.6	15.610 ug/L	15.610 ppb	10:52:36
3	Sb 206.836†	35.6	1.5	-0.7280 ug/L	-0.7280 ppb	10:52:36
3	Se 196.026†	-66.1	-37.6	6.5458 ug/L	6.5458 ppb	10:52:36
3	Si 251.611†	126835.1	126960.6	3800.4 ug/L	3800.4 ppb	10:52:16
3	Sn 189.927†	-33.3	-38.5	-5.8299 ug/L	-5.8299 ppb	10:52:36
3	Ti 334.940†	241406.9	243616.4	388.95 ug/L	388.95 ppb	10:52:16
3	Tl 190.801†	-37.4	-5.1	2.7276 ug/L	2.7276 ppb	10:52:36
3	U 409.014†	-2855.7	-466.9	-13.975 ug/L	-13.975 ppb	10:52:16
3	V 292.402†	1920.3	3287.4	19.967 ug/L	19.967 ppb	10:52:16
3	Zn 213.857†	3700.5	3095.4	26.087 ug/L	26.087 ppb	10:52:36
3	SiO2†	128455.2	128570.2	8246.9 ug/L	8246.9 ppb	10:52:51

Mean Data: 1201978573|925470|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901103.1	99.982	%	0.7537				0.75%
Sc Radial	5834.8	99.8	%	0.16				0.16%
Y 371.029	754922.8	100.51	%	0.790				0.79%
Y RADIAL	6312.2	100.4	%	0.23				0.23%
Ag 328.068†	-577.9	0.2423	ug/L	0.07066	0.2423	ppb	0.07066	29.16%
Al 396.153Radial†	5115.9	3553.6	ug/L	40.37	3553.6	ppb	40.37	1.14%
As 188.979†	-1.4	4.0927	ug/L	1.79275	4.0927	ppb	1.79275	43.80%
B 249.677†	430.4	7.8437	ug/L	0.64511	7.8437	ppb	0.64511	8.22%
Ba 233.527†	5582.5	41.751	ug/L	0.1243	41.751	ppb	0.1243	0.30%
Be 313.107†	-1365.1	0.2702	ug/L	0.01825	0.2702	ppb	0.01825	6.75%
Ca 317.933Radial†	2315.4	3412.8	ug/L	14.88	3412.8	ppb	14.88	0.44%
Cd 226.502†	120.0	0.3903	ug/L	0.07514	0.3903	ppb	0.07514	19.25%
Co 228.616†	194.9	2.7582	ug/L	0.15462	2.7582	ppb	0.15462	5.61%
Cr 267.716†	564.1	6.1222	ug/L	0.07824	6.1222	ppb	0.07824	1.28%
Cu 324.752†	1588.0	4.9951	ug/L	0.14741	4.9951	ppb	0.14741	2.95%
Fe 238.204 Radial†	943.8	8835.4	ug/L	57.92	8835.4	ppb	57.92	0.66%
K 766.490 Radial†	4236.7	749.15	ug/L	13.846	749.15	ppb	13.846	1.85%

Mg 279.077 IEC†	52.7	1852.8	ug/L	126.06	1852.8	ppb	126.06	6.80%
Mn 257.610†	181865.1	194.85	ug/L	0.416	194.85	ppb	0.416	0.21%
Mo 202.031†	-2.1	0.4945	ug/L	0.45701	0.4945	ppb	0.45701	92.42%
Na 589.592 Radial†	744.4	249.80	ug/L	2.594	249.80	ppb	2.594	1.04%
Ni 231.604†	354.7	8.2115	ug/L	0.23335	8.2115	ppb	0.23335	2.84%
P 214.914†	807.0	458.66	ug/L	5.848	458.66	ppb	5.848	1.28%
Pb 220.353†	50.2	5.7378	ug/L	1.08885	5.7378	ppb	1.08885	18.98%
S 181.975 Axial†	13.3	17.932	ug/L	2.1309	17.932	ppb	2.1309	11.88%
Sb 206.836†	0.6	-1.0434	ug/L	1.20671	-1.0434	ppb	1.20671	115.65%
Se 196.026†	-44.8	2.5760	ug/L	3.61713	2.5760	ppb	3.61713	140.42%
Si 251.611†	127150.8	3806.1	ug/L	5.30	3806.1	ppb	5.30	0.14%
Sn 189.927†	-39.5	-5.9997	ug/L	0.48460	-5.9997	ppb	0.48460	8.08%
Sr 421.552†	2729.9	16.969	ug/L	0.2285	16.969	ppb	0.2285	1.35%
Ti 334.940†	244788.9	390.82	ug/L	1.630	390.82	ppb	1.630	0.42%
Tl 190.801†	-9.9	1.3931	ug/L	1.15672	1.3931	ppb	1.15672	83.03%
U 409.014†	-483.9	-14.453	ug/L	1.8545	-14.453	ppb	1.8545	12.83%
V 292.402†	3335.9	20.271	ug/L	0.2723	20.271	ppb	0.2723	1.34%
Zn 213.857†	3080.3	25.946	ug/L	0.2502	25.946	ppb	0.2502	0.96%
SiO2†	127471.7	8176.5	ug/L	81.60	8176.5	ppb	81.60	1.00%

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 10:55:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5836.7	5836.7	99.9	%			10:56:54
1	Y RADIAL	6210.2	6210.2	98.77	%			10:56:54
1	Al 396.153Radial†	7234.6	7264.0	5024.4	ug/L	5024.4	ppb	10:56:54
1	Ca 317.933Radial†	3402.4	3391.0	4998.2	ug/L	4998.2	ppb	10:57:14
1	Fe 238.204 Radial†	541.2	535.0	5024.5	ug/L	5024.5	ppb	10:57:14
1	K 766.490 Radial†	31171.5	28858.3	5109.2	ug/L	5109.2	ppb	10:56:54
1	Mg 279.077 IEC†	147.8	146.8	5185.7	ug/L	5185.7	ppb	10:57:14
1	Na 589.592 Radial†	26951.7	28073.0	9420.8	ug/L	9420.8	ppb	10:56:54
1	Sr 421.552†	80685.7	80812.9	503.24	ug/L	503.24	ppb	10:56:54
1	Sc 361.383	912942.5	912942.5	101.30	%			10:58:11
1	Y 371.029	746090.1	746090.1	99.335	%			10:58:11
1	Ag 328.068†	113045.6	111306.8	507.20	ug/L	507.20	ppb	10:58:16
1	As 188.979†	1243.0	1251.3	498.84	ug/L	498.84	ppb	10:58:36
1	B 249.677†	23351.6	23583.6	492.64	ug/L	492.64	ppb	10:58:16
1	Ba 233.527†	68082.7	67220.2	499.48	ug/L	499.48	ppb	10:58:16
1	Be 313.107†	1379726.6	1367190.1	499.33	ug/L	499.33	ppb	10:58:11
1	Cd 226.502†	47784.4	47368.2	500.57	ug/L	500.57	ppb	10:58:16
1	Co 228.616†	26603.3	26328.4	499.82	ug/L	499.82	ppb	10:58:16
1	Cr 267.716†	48114.7	47420.6	498.60	ug/L	498.60	ppb	10:58:16
1	Cu 324.752†	182183.4	173096.2	495.61	ug/L	495.61	ppb	10:58:16
1	Mn 257.610†	472775.1	466305.0	497.83	ug/L	497.83	ppb	10:58:11
1	Mo 202.031†	7944.6	7824.7	497.43	ug/L	497.43	ppb	10:58:36
1	Ni 231.604†	22018.7	21650.5	501.03	ug/L	501.03	ppb	10:58:16
1	P 214.914†	4530.0	4248.6	2375.4	ug/L	2375.4	ppb	10:58:36
1	Pb 220.353†	4336.0	4349.0	493.19	ug/L	493.19	ppb	10:58:36
1	S 181.975 Axial†	760.5	709.2	992.78	ug/L	992.78	ppb	10:58:36
1	Sb 206.836†	1628.6	1573.5	505.12	ug/L	505.12	ppb	10:58:36
1	Se 196.026†	832.9	851.0	510.32	ug/L	510.32	ppb	10:58:36
1	Si 251.611†	85003.3	83466.2	2486.7	ug/L	2486.7	ppb	10:58:16
1	Sn 189.927†	3093.2	3048.7	499.75	ug/L	499.75	ppb	10:58:36
1	Ti 334.940†	319189.1	316220.9	504.49	ug/L	504.49	ppb	10:58:16
1	Tl 190.801†	1748.6	1758.7	495.80	ug/L	495.80	ppb	10:58:36
1	U 409.014†	15769.5	17969.6	493.42	ug/L	493.42	ppb	10:58:16
1	V 292.402†	74759.8	75161.8	503.10	ug/L	503.10	ppb	10:58:16
1	Zn 213.857†	58554.3	57183.4	495.13	ug/L	495.13	ppb	10:58:16
1	SiO2†	84380.2	82833.4	5287.6	ug/L	5287.6	ppb	10:59:44
2	Sc Radial	5834.9	5834.9	99.8	%			10:57:19
2	Y RADIAL	6222.6	6222.6	98.96	%			10:57:19
2	Al 396.153Radial†	7203.7	7235.3	5004.3	ug/L	5004.3	ppb	10:57:19
2	Ca 317.933Radial†	3392.1	3381.8	4984.6	ug/L	4984.6	ppb	10:57:39
2	Fe 238.204 Radial†	535.4	529.4	4972.3	ug/L	4972.3	ppb	10:57:39
2	K 766.490 Radial†	31223.2	28919.9	5120.1	ug/L	5120.1	ppb	10:57:19
2	Mg 279.077 IEC†	147.2	146.2	5165.0	ug/L	5165.0	ppb	10:57:39
2	Na 589.592 Radial†	27037.9	28167.8	9452.6	ug/L	9452.6	ppb	10:57:19
2	Sr 421.552†	80750.8	80903.3	503.80	ug/L	503.80	ppb	10:57:19
2	Sc 361.383	909552.0	909552.0	100.92	%			10:58:42
2	Y 371.029	743255.5	743255.5	98.958	%			10:58:42
2	Ag 328.068†	112515.9	111198.0	506.69	ug/L	506.69	ppb	10:58:47
2	As 188.979†	1256.0	1268.7	505.70	ug/L	505.70	ppb	10:59:07
2	B 249.677†	23323.4	23641.6	493.86	ug/L	493.86	ppb	10:58:47
2	Ba 233.527†	67589.6	66982.2	497.72	ug/L	497.72	ppb	10:58:47
2	Be 313.107†	1376097.3	1368671.4	499.87	ug/L	499.87	ppb	10:58:42
2	Cd 226.502†	47400.4	47163.6	498.41	ug/L	498.41	ppb	10:58:47
2	Co 228.616†	26513.1	26336.9	500.00	ug/L	500.00	ppb	10:58:47
2	Cr 267.716†	47769.9	47256.0	496.86	ug/L	496.86	ppb	10:58:47
2	Cu 324.752†	181689.9	173277.6	496.12	ug/L	496.12	ppb	10:58:47
2	Mn 257.610†	471465.6	466747.3	498.30	ug/L	498.30	ppb	10:58:42
2	Mo 202.031†	7999.6	7908.4	502.74	ug/L	502.74	ppb	10:59:07
2	Ni 231.604†	21920.1	21633.9	500.64	ug/L	500.64	ppb	10:58:47

2	P 214.914†	4543.1	4278.2	2392.4 ug/L	2392.4 ppb	10:59:07
2	Pb 220.353†	4354.4	4383.1	497.06 ug/L	497.06 ppb	10:59:07
2	S 181.975 Axial†	764.8	716.3	1002.7 ug/L	1002.7 ppb	10:59:07
2	Sb 206.836†	1632.7	1583.6	508.54 ug/L	508.54 ppb	10:59:07
2	Se 196.026†	848.5	869.6	520.92 ug/L	520.92 ppb	10:59:07
2	Si 251.611†	84780.6	83558.4	2489.4 ug/L	2489.4 ppb	10:58:47
2	Sn 189.927†	3104.1	3070.8	503.38 ug/L	503.38 ppb	10:59:07
2	Ti 334.940†	317707.7	315927.7	504.03 ug/L	504.03 ppb	10:58:47
2	Tl 190.801†	1746.8	1763.4	497.13 ug/L	497.13 ppb	10:59:07
2	U 409.014†	15661.1	17920.2	492.07 ug/L	492.07 ppb	10:58:47
2	V 292.402†	74294.6	74976.0	501.96 ug/L	501.96 ppb	10:58:47
2	Zn 213.857†	58260.9	57108.1	494.48 ug/L	494.48 ppb	10:58:47
2	SiO2†	84649.4	83410.6	5324.4 ug/L	5324.4 ppb	10:59:49
3	Sc Radial	5661.5	5661.5	96.9 %		10:57:44
3	Y RADIAL	6036.7	6036.7	96.01 %		10:57:44
3	Al 396.153Radial†	7058.0	7305.9	5053.4 ug/L	5053.4 ppb	10:57:44
3	Ca 317.933Radial†	3401.0	3495.0	5151.4 ug/L	5151.4 ppb	10:58:04
3	Fe 238.204 Radial†	540.2	550.8	5172.0 ug/L	5172.0 ppb	10:58:04
3	K 766.490 Radial†	30464.0	29093.9	5150.9 ug/L	5150.9 ppb	10:57:44
3	Mg 279.077 IEC†	150.6	154.3	5450.5 ug/L	5450.5 ppb	10:58:04
3	Na 589.592 Radial†	26299.4	28234.8	9475.0 ug/L	9475.0 ppb	10:57:44
3	Sr 421.552†	78649.8	81211.4	505.72 ug/L	505.72 ppb	10:57:44
3	Sc 361.383	910135.6	910135.6	100.98 %		10:59:13
3	Y 371.029	743780.8	743780.8	99.028 %		10:59:13
3	Ag 328.068†	112947.9	111554.2	508.37 ug/L	508.37 ppb	10:59:18
3	As 188.979†	1238.3	1250.4	498.50 ug/L	498.50 ppb	10:59:38
3	B 249.677†	23406.9	23709.4	495.25 ug/L	495.25 ppb	10:59:18
3	Ba 233.527†	67980.8	67326.6	500.28 ug/L	500.28 ppb	10:59:18
3	Be 313.107†	1377213.7	1368902.5	499.96 ug/L	499.96 ppb	10:59:13
3	Cd 226.502†	47687.0	47417.3	501.07 ug/L	501.07 ppb	10:59:18
3	Co 228.616†	26599.4	26405.6	501.29 ug/L	501.29 ppb	10:59:18
3	Cr 267.716†	47962.8	47416.7	498.56 ug/L	498.56 ppb	10:59:18
3	Cu 324.752†	182088.2	173556.6	496.93 ug/L	496.93 ppb	10:59:18
3	Mn 257.610†	472502.0	467474.0	499.09 ug/L	499.09 ppb	10:59:13
3	Mo 202.031†	7966.0	7870.1	500.32 ug/L	500.32 ppb	10:59:38
3	Ni 231.604†	21954.6	21654.0	501.11 ug/L	501.11 ppb	10:59:18
3	P 214.914†	4524.4	4256.8	2379.8 ug/L	2379.8 ppb	10:59:38
3	Pb 220.353†	4326.4	4352.7	493.61 ug/L	493.61 ppb	10:59:38
3	S 181.975 Axial†	764.3	715.3	1001.3 ug/L	1001.3 ppb	10:59:38
3	Sb 206.836†	1612.5	1562.5	501.73 ug/L	501.73 ppb	10:59:38
3	Se 196.026†	836.6	857.2	514.39 ug/L	514.39 ppb	10:59:38
3	Si 251.611†	85020.0	83741.6	2494.9 ug/L	2494.9 ppb	10:59:18
3	Sn 189.927†	3089.6	3054.5	500.73 ug/L	500.73 ppb	10:59:38
3	Ti 334.940†	318560.4	316570.2	505.06 ug/L	505.06 ppb	10:59:18
3	Tl 190.801†	1744.8	1760.3	496.26 ug/L	496.26 ppb	10:59:38
3	U 409.014†	15645.4	17894.7	491.34 ug/L	491.34 ppb	10:59:18
3	V 292.402†	74546.6	75178.3	503.23 ug/L	503.23 ppb	10:59:18
3	Zn 213.857†	58671.4	57477.7	497.67 ug/L	497.67 ppb	10:59:18
3	SiO2†	83527.3	82245.7	5249.8 ug/L	5249.8 ppb	10:59:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910876.7	101.07	%	0.201				0.20%
Sc Radial	5777.7	98.9	%	1.72				1.74%
Y 371.029	744375.4	99.107	%	0.2008				0.20%
Y RADIAL	6156.5	97.91	%	1.653				1.69%
Ag 328.068†	111353.0	507.42	ug/L	0.861	507.42	ppb	0.861	0.17%
QC value within limits for Ag 328.068 Recovery = 101.48%								
Al 396.153Radial†	7268.4	5027.4	ug/L	24.71	5027.4	ppb	24.71	0.49%
QC value within limits for Al 396.153Radial Recovery = 100.55%								
As 188.979†	1256.8	501.01	ug/L	4.064	501.01	ppb	4.064	0.81%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	23644.8	493.92	ug/L	1.308	493.92	ppb	1.308	0.26%
QC value within limits for B 249.677 Recovery = 98.78%								
Ba 233.527†	67176.3	499.16	ug/L	1.312	499.16	ppb	1.312	0.26%
QC value within limits for Ba 233.527 Recovery = 99.83%								
Be 313.107†	1368254.7	499.72	ug/L	0.339	499.72	ppb	0.339	0.07%
QC value within limits for Be 313.107 Recovery = 99.94%								
Ca 317.933Radial†	3422.6	5044.7	ug/L	92.67	5044.7	ppb	92.67	1.84%

QC value within limits for Ca 317.933Radial Recovery = 100.89%

Cd 226.502†	47316.4	500.02 ug/L	1.414	500.02 ppb	1.414	0.28%

QC value within limits for Cd 226.502 Recovery = 100.00%

Co 228.616†	26357.0	500.37 ug/L	0.802	500.37 ppb	0.802	0.16%

QC value within limits for Co 228.616 Recovery = 100.07%

Cr 267.716†	47364.4	498.01 ug/L	0.988	498.01 ppb	0.988	0.20%

QC value within limits for Cr 267.716 Recovery = 99.60%

Cu 324.752†	173310.1	496.22 ug/L	0.668	496.22 ppb	0.668	0.13%

QC value within limits for Cu 324.752 Recovery = 99.24%

Fe 238.204 Radial†	538.4	5056.3 ug/L	103.60	5056.3 ppb	103.60	2.05%

QC value within limits for Fe 238.204 Radial Recovery = 101.13%

K 766.490 Radial†	28957.4	5126.7 ug/L	21.65	5126.7 ppb	21.65	0.42%

QC value within limits for K 766.490 Radial Recovery = 102.53%

Mg 279.077 IEC†	149.1	5267.1 ug/L	159.20	5267.1 ppb	159.20	3.02%

QC value within limits for Mg 279.077 IEC Recovery = 105.34%

Mn 257.610†	466842.1	498.40 ug/L	0.635	498.40 ppb	0.635	0.13%

QC value within limits for Mn 257.610 Recovery = 99.68%

Mo 202.031†	7867.7	500.16 ug/L	2.660	500.16 ppb	2.660	0.53%

QC value within limits for Mo 202.031 Recovery = 100.03%

Na 589.592 Radial†	28158.5	9449.5 ug/L	27.27	9449.5 ppb	27.27	0.29%

QC value within limits for Na 589.592 Radial Recovery = 94.49%

Ni 231.604†	21646.1	500.93 ug/L	0.249	500.93 ppb	0.249	0.05%

QC value within limits for Ni 231.604 Recovery = 100.19%

P 214.914†	4261.2	2382.5 ug/L	8.85	2382.5 ppb	8.85	0.37%

QC value within limits for P 214.914 Recovery = 95.30%

Pb 220.353†	4361.6	494.62 ug/L	2.124	494.62 ppb	2.124	0.43%

QC value within limits for Pb 220.353 Recovery = 98.92%

S 181.975 Axial†	713.6	998.91 ug/L	5.360	998.91 ppb	5.360	0.54%

QC value within limits for S 181.975 Axial Recovery = 99.89%

Sb 206.836†	1573.2	505.13 ug/L	3.408	505.13 ppb	3.408	0.67%

QC value within limits for Sb 206.836 Recovery = 101.03%

Se 196.026†	859.3	515.21 ug/L	5.347	515.21 ppb	5.347	1.04%

QC value within limits for Se 196.026 Recovery = 103.04%

Si 251.611†	83588.8	2490.3 ug/L	4.17	2490.3 ppb	4.17	0.17%

QC value within limits for Si 251.611 Recovery = 99.61%

Sn 189.927†	3058.0	501.29 ug/L	1.878	501.29 ppb	1.878	0.37%

QC value within limits for Sn 189.927 Recovery = 100.26%

Sr 421.552†	80975.9	504.25 ug/L	1.300	504.25 ppb	1.300	0.26%

QC value within limits for Sr 421.552 Recovery = 100.85%

Ti 334.940†	316239.6	504.53 ug/L	0.518	504.53 ppb	0.518	0.10%

QC value within limits for Ti 334.940 Recovery = 100.91%

Tl 190.801†	1760.8	496.40 ug/L	0.673	496.40 ppb	0.673	0.14%

QC value within limits for Tl 190.801 Recovery = 99.28%

U 409.014†	17928.2	492.28 ug/L	1.056	492.28 ppb	1.056	0.21%

QC value within limits for U 409.014 Recovery = 98.46%

V 292.402†	75105.4	502.76 ug/L	0.701	502.76 ppb	0.701	0.14%

QC value within limits for V 292.402 Recovery = 100.55%

Zn 213.857†	57256.4	495.76 ug/L	1.689	495.76 ppb	1.689	0.34%

QC value within limits for Zn 213.857 Recovery = 99.15%

SiO2†	82829.9	5287.3 ug/L	37.32	5287.3 ppb	37.32	0.71%

QC value within limits for SiO2 Recovery = 98.87%

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 11:02:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5907.4	5907.4	101	%			11:03:56
1	Y RADIAL	6373.2	6373.2	101.4	%			11:03:56
1	Al 396.153Radial†	-16.4	4.2	2.8934	ug/L	2.8934	ppb	11:03:56
1	Ca 317.933Radial†	26.3	10.4	15.372	ug/L	15.372	ppb	11:04:16
1	Fe 238.204 Radial†	8.9	2.0	18.992	ug/L	18.992	ppb	11:04:16
1	K 766.490 Radial†	2487.0	108.5	19.254	ug/L	19.254	ppb	11:03:56
1	Mg 279.077 IEC†	1.8	0.6	20.816	ug/L	20.816	ppb	11:04:16
1	Na 589.592 Radial†	-1139.5	-39.4	-13.208	ug/L	-13.208	ppb	11:03:56
1	Sr 421.552†	-17.9	9.7	0.0600	ug/L	0.0600	ppb	11:03:56
1	Sc 361.383	921090.1	921090.1	102.20	%			11:05:13
1	Y 371.029	765057.3	765057.3	101.86	%			11:05:13
1	Ag 328.068†	422.5	120.7	0.5537	ug/L	0.5537	ppb	11:05:18
1	As 188.979†	-29.5	-4.7	-1.8629	ug/L	-1.8629	ppb	11:05:38
1	B 249.677†	-196.7	338.2	7.0890	ug/L	7.0890	ppb	11:05:38
1	Ba 233.527†	-11.6	-2.9	-0.0190	ug/L	-0.0190	ppb	11:05:38
1	Be 313.107†	-5013.6	207.3	0.0759	ug/L	0.0759	ppb	11:05:18
1	Cd 226.502†	-193.1	6.1	0.0631	ug/L	0.0631	ppb	11:05:38
1	Co 228.616†	-63.1	3.7	0.0701	ug/L	0.0701	ppb	11:05:38
1	Cr 267.716†	78.2	-2.2	-0.0219	ug/L	-0.0219	ppb	11:05:38
1	Cu 324.752†	6827.8	-75.9	-0.2162	ug/L	-0.2162	ppb	11:05:18
1	Mn 257.610†	450.5	18.5	0.0213	ug/L	0.0213	ppb	11:05:38
1	Mo 202.031†	27.3	8.4	0.5323	ug/L	0.5323	ppb	11:05:38
1	Ni 231.604†	89.4	0.9	0.0214	ug/L	0.0214	ppb	11:05:38
1	P 214.914†	211.9	-16.2	-9.3236	ug/L	-9.3236	ppb	11:05:38
1	Pb 220.353†	-64.3	5.6	0.6285	ug/L	0.6285	ppb	11:05:38
1	S 181.975 Axial†	41.5	-1.0	-1.3774	ug/L	-1.3774	ppb	11:05:38
1	Sb 206.836†	36.6	1.5	0.4904	ug/L	0.4904	ppb	11:05:38
1	Se 196.026†	-26.5	2.9	1.7419	ug/L	1.7419	ppb	11:05:38
1	Si 251.611†	653.6	189.9	5.6697	ug/L	5.6697	ppb	11:05:38
1	Sn 189.927†	2.2	-2.9	-0.4695	ug/L	-0.4695	ppb	11:05:38
1	Ti 334.940†	-1019.1	117.8	0.1879	ug/L	0.1879	ppb	11:05:18
1	Tl 190.801†	-30.7	2.5	0.6973	ug/L	0.6973	ppb	11:05:38
1	U 409.014†	-2386.4	66.7	1.8362	ug/L	1.8362	ppb	11:05:13
1	V 292.402†	-1272.8	113.0	0.7547	ug/L	0.7547	ppb	11:05:18
1	Zn 213.857†	691.1	54.4	0.4729	ug/L	0.4729	ppb	11:05:38
1	SiO2†	679.7	197.6	12.642	ug/L	12.642	ppb	11:06:44
2	Sc Radial	5763.9	5763.9	98.6	%			11:04:21
2	Y RADIAL	6194.3	6194.3	98.51	%			11:04:21
2	Al 396.153Radial†	4.4	24.8	17.233	ug/L	17.233	ppb	11:04:21
2	Ca 317.933Radial†	28.7	13.5	19.943	ug/L	19.943	ppb	11:04:41
2	Fe 238.204 Radial†	6.9	0.2	1.8678	ug/L	1.8678	ppb	11:04:41
2	K 766.490 Radial†	2548.3	232.0	41.140	ug/L	41.140	ppb	11:04:21
2	Mg 279.077 IEC†	3.6	2.5	86.967	ug/L	86.967	ppb	11:04:41
2	Na 589.592 Radial†	-1094.3	-21.6	-7.2337	ug/L	-7.2337	ppb	11:04:21
2	Sr 421.552†	-18.4	8.7	0.0542	ug/L	0.0542	ppb	11:04:21
2	Sc 361.383	926942.0	926942.0	102.85	%			11:05:43
2	Y 371.029	770672.4	770672.4	102.61	%			11:05:43
2	Ag 328.068†	401.4	97.5	0.4398	ug/L	0.4398	ppb	11:05:48
2	As 188.979†	-22.5	2.3	0.9165	ug/L	0.9165	ppb	11:06:08
2	B 249.677†	-182.2	353.5	7.4138	ug/L	7.4138	ppb	11:06:08
2	Ba 233.527†	-3.0	5.6	0.0422	ug/L	0.0422	ppb	11:06:08
2	Be 313.107†	-5006.2	245.5	0.0896	ug/L	0.0896	ppb	11:05:48
2	Cd 226.502†	-191.4	9.0	0.0952	ug/L	0.0952	ppb	11:06:08
2	Co 228.616†	-69.6	-2.2	-0.0411	ug/L	-0.0411	ppb	11:06:08
2	Cr 267.716†	63.2	-17.2	-0.1810	ug/L	-0.1810	ppb	11:06:08
2	Cu 324.752†	6828.8	-117.1	-0.3350	ug/L	-0.3350	ppb	11:05:48
2	Mn 257.610†	438.6	4.1	0.0030	ug/L	0.0030	ppb	11:06:08
2	Mo 202.031†	23.8	4.8	0.3045	ug/L	0.3045	ppb	11:06:08
2	Ni 231.604†	81.8	-7.1	-0.1636	ug/L	-0.1636	ppb	11:06:08

2	P 214.914†	205.3	-23.9	-13.726 ug/L	-13.726 ppb	11:06:08
2	Pb 220.353†	-62.5	7.7	0.8775 ug/L	0.8775 ppb	11:06:08
2	S 181.975 Axial†	41.7	-1.0	-1.4676 ug/L	-1.4676 ppb	11:06:08
2	Sb 206.836†	29.2	-5.9	-1.8352 ug/L	-1.8352 ppb	11:06:08
2	Se 196.026†	-22.1	7.4	4.2662 ug/L	4.2662 ppb	11:06:08
2	Si 251.611†	667.8	199.7	5.9570 ug/L	5.9570 ppb	11:06:08
2	Sn 189.927†	8.0	2.8	0.4656 ug/L	0.4656 ppb	11:06:08
2	Ti 334.940†	-1103.5	42.0	0.0662 ug/L	0.0662 ppb	11:05:48
2	Tl 190.801†	-29.8	3.5	0.9826 ug/L	0.9826 ppb	11:06:08
2	U 409.014†	-2304.3	161.3	4.4447 ug/L	4.4447 ppb	11:05:43
2	V 292.402†	-1330.3	64.9	0.4431 ug/L	0.4431 ppb	11:05:48
2	Zn 213.857†	694.5	53.4	0.4652 ug/L	0.4652 ppb	11:06:08
2	SiO2†	634.7	149.7	9.5550 ug/L	9.5550 ppb	11:06:49
3	Sc Radial	5852.5	5852.5	100 %		11:04:46
3	Y RADIAL	6294.3	6294.3	100.1 %		11:04:46
3	Al 396.153Radial†	-20.8	-0.3	-0.2076 ug/L	-0.2076 ppb	11:04:46
3	Ca 317.933Radial†	26.3	10.6	15.688 ug/L	15.688 ppb	11:05:06
3	Fe 238.204 Radial†	7.6	0.7	6.9508 ug/L	6.9508 ppb	11:05:06
3	K 766.490 Radial†	2526.5	171.1	30.334 ug/L	30.334 ppb	11:04:46
3	Mg 279.077 IEC†	-0.1	-1.2	-43.215 ug/L	-43.215 ppb	11:05:06
3	Na 589.592 Radial†	-1082.0	7.5	2.5188 ug/L	2.5188 ppb	11:04:46
3	Sr 421.552†	-35.5	-8.1	-0.0508 ug/L	-0.0508 ppb	11:04:46
3	Sc 361.383	926310.6	926310.6	102.78 %		11:06:13
3	Y 371.029	767982.9	767982.9	102.25 %		11:06:13
3	Ag 328.068†	331.6	29.9	0.1375 ug/L	0.1375 ppb	11:06:18
3	As 188.979†	-35.3	-10.2	-4.0182 ug/L	-4.0182 ppb	11:06:38
3	B 249.677†	-161.8	373.2	7.8261 ug/L	7.8261 ppb	11:06:38
3	Ba 233.527†	-5.2	3.4	0.0266 ug/L	0.0266 ppb	11:06:38
3	Be 313.107†	-5081.7	168.7	0.0619 ug/L	0.0619 ppb	11:06:18
3	Cd 226.502†	-185.5	14.6	0.1543 ug/L	0.1543 ppb	11:06:38
3	Co 228.616†	-67.0	0.2	0.0024 ug/L	0.0024 ppb	11:06:38
3	Cr 267.716†	86.4	5.4	0.0568 ug/L	0.0568 ppb	11:06:38
3	Cu 324.752†	6866.4	-75.9	-0.2170 ug/L	-0.2170 ppb	11:06:18
3	Mn 257.610†	434.6	0.6	0.0021 ug/L	0.0021 ppb	11:06:38
3	Mo 202.031†	13.3	-5.4	-0.3443 ug/L	-0.3443 ppb	11:06:38
3	Ni 231.604†	103.4	14.1	0.3264 ug/L	0.3264 ppb	11:06:38
3	P 214.914†	224.7	-4.9	-2.7834 ug/L	-2.7834 ppb	11:06:38
3	Pb 220.353†	-59.6	10.5	1.1836 ug/L	1.1836 ppb	11:06:38
3	S 181.975 Axial†	39.4	-3.2	-4.5029 ug/L	-4.5029 ppb	11:06:38
3	Sb 206.836†	24.5	-10.4	-3.3172 ug/L	-3.3172 ppb	11:06:38
3	Se 196.026†	-23.1	6.4	3.7104 ug/L	3.7104 ppb	11:06:38
3	Si 251.611†	645.3	178.2	5.3332 ug/L	5.3332 ppb	11:06:38
3	Sn 189.927†	1.3	-3.7	-0.6028 ug/L	-0.6028 ppb	11:06:38
3	Ti 334.940†	-1024.2	118.4	0.1890 ug/L	0.1890 ppb	11:06:18
3	Tl 190.801†	-28.7	4.6	1.2797 ug/L	1.2797 ppb	11:06:38
3	U 409.014†	-2403.5	63.3	1.7426 ug/L	1.7426 ppb	11:06:13
3	V 292.402†	-1333.5	61.0	0.3988 ug/L	0.3988 ppb	11:06:18
3	Zn 213.857†	675.7	35.6	0.3103 ug/L	0.3103 ppb	11:06:38
3	SiO2†	640.4	155.6	9.9788 ug/L	9.9788 ppb	11:06:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	924780.9	102.61	%	0.356				0.35%
Sc Radial	5841.3	100.0	%	1.24				1.24%
Y 371.029	767904.2	102.24	%	0.374				0.37%
Y RADIAL	6287.3	99.99	%	1.426				1.43%
Ag 328.068†	82.7	0.3770	ug/L	0.21509	0.3770	ppb	0.21509	57.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.6	6.6396	ug/L	9.30430	6.6396	ppb	9.30430	140.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.2	-1.6548	ug/L	2.47392	-1.6548	ppb	2.47392	149.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	355.0	7.4429	ug/L	0.36945	7.4429	ppb	0.36945	4.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0166	ug/L	0.03179	0.0166	ppb	0.03179	191.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	207.1	0.0758	ug/L	0.01388	0.0758	ppb	0.01388	18.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.5	17.001	ug/L	2.5526	17.001	ppb	2.5526	15.01%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.9      0.1042 ug/L       0.04626      0.1042 ppb        0.04626  44.41%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0104 ug/L       0.05605      0.0104 ppb        0.05605 536.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.7     -0.0487 ug/L       0.12113     -0.0487 ppb        0.12113 248.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -89.6     -0.2560 ug/L       0.06838     -0.2560 ppb        0.06838  26.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2701 ug/L       8.79450      9.2701 ppb        8.79450  94.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         170.5      30.243 ug/L       10.9433      30.243 ppb        10.9433  36.18%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.522 ug/L       65.0937      21.522 ppb        65.0937 302.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.7      0.0088 ug/L       0.01083      0.0088 ppb        0.01083 123.29%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.6      0.1642 ug/L       0.45483      0.1642 ppb        0.45483 277.06%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -17.8     -5.9743 ug/L       7.93874     -5.9743 ppb        7.93874 132.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.7      0.0614 ug/L       0.24741      0.0614 ppb        0.24741 402.87%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.0     -8.6109 ug/L       5.50587     -8.6109 ppb        5.50587  63.94%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8965 ug/L       0.27803      0.8965 ppb        0.27803  31.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.7     -2.4493 ug/L       1.77904     -2.4493 ppb        1.77904  72.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.9     -1.5540 ug/L       1.91933     -1.5540 ppb        1.91933 123.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      3.2395 ug/L       1.32638      3.2395 ppb        1.32638  40.94%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               189.3      5.6533 ug/L       0.31226      5.6533 ppb        0.31226   5.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.2     -0.2022 ug/L       0.58216     -0.2022 ppb        0.58216 287.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 3.4      0.0211 ug/L       0.06241      0.0211 ppb        0.06241 295.14%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                92.7      0.1477 ug/L       0.07062      0.1477 ppb        0.07062  47.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.5      0.9865 ug/L       0.29122      0.9865 ppb        0.29122  29.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 97.1      2.6745 ug/L       1.53372      2.6745 ppb        1.53372  57.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 79.6      0.5322 ug/L       0.19394      0.5322 ppb        0.19394  36.44%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.4161 ug/L       0.09172      0.4161 ppb        0.09172  22.04%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     167.6      10.725 ug/L        1.6735      10.725 ppb         1.6735  15.60%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: 241536001|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 12/8/2009 11:50:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536001|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5868.1	5868.1	100	%			11:53:09
1	Y RADIAL	7164.7	7164.7	113.9	%			11:53:09
1	Al 396.153Radial†	162860.7	162210.7	112680	ug/L	112680	ppb	11:52:49
1	Ca 317.933Radial†	14395.4	14320.5	21108	ug/L	21108	ppb	11:52:49
1	Fe 238.204 Radial†	13864.6	13800.7	129200	ug/L	129200	ppb	11:52:49
1	K 766.490 Radial†	80507.3	77824.2	13794	ug/L	13794	ppb	11:52:49
1	Mg 279.077 IEC†	575.3	571.8	20060	ug/L	20060	ppb	11:53:09
1	Na 589.592 Radial†	8243.8	9297.8	3120.2	ug/L	3120.2	ppb	11:52:49
1	Sr 421.552†	54342.4	54146.0	337.01	ug/L	337.01	ppb	11:52:49
1	Sc 361.383	927047.8	927047.8	102.86	%			11:54:07
1	Y 371.029	872135.4	872135.4	116.12	%			11:54:07
1	Ag 328.068†	-7850.6	-7925.0	5.7587	ug/L	5.7587	ppb	11:54:27
1	As 188.979†	-68.6	-42.5	32.361	ug/L	32.361	ppb	11:54:27
1	B 249.677†	1005.1	1507.8	14.401	ug/L	14.401	ppb	11:54:07
1	Ba 233.527†	964688.6	937866.5	6955.9	ug/L	6955.9	ppb	11:54:07
1	Be 313.107†	2204.2	7255.9	9.4795	ug/L	9.4795	ppb	11:54:07
1	Cd 226.502†	1106.3	1270.6	0.5603	ug/L	0.5603	ppb	11:54:27
1	Co 228.616†	1622.1	1642.4	25.019	ug/L	25.019	ppb	11:54:27
1	Cr 267.716†	7161.7	6883.8	74.935	ug/L	74.935	ppb	11:54:27
1	Cu 324.752†	25395.2	17932.2	57.908	ug/L	57.908	ppb	11:54:07
1	Mn 257.610†	1759026.3	1709680.9	1836.3	ug/L	1836.3	ppb	11:54:07
1	Mo 202.031†	-34.9	-52.3	5.8443	ug/L	5.8443	ppb	11:54:27
1	Ni 231.604†	3196.7	3021.2	69.941	ug/L	69.941	ppb	11:54:27
1	P 214.914†	1030.0	777.9	374.34	ug/L	374.34	ppb	11:54:27
1	Pb 220.353†	579.7	632.0	86.083	ug/L	86.083	ppb	11:54:27
1	S 181.975 Axial†	1401.2	1320.7	1828.4	ug/L	1828.4	ppb	11:54:27
1	Sb 206.836†	57.9	22.1	-5.0189	ug/L	-5.0189	ppb	11:54:27
1	Se 196.026†	-741.6	-692.2	27.258	ug/L	27.258	ppb	11:54:27
1	Si 251.611†	1055361.6	1025559.5	30696	ug/L	30696	ppb	11:54:07
1	Sn 189.927†	-12.1	-16.7	1.2447	ug/L	1.2447	ppb	11:54:27
1	Ti 334.940†	2240185.6	2178995.1	3478.4	ug/L	3478.4	ppb	11:54:07
1	Tl 190.801†	-192.2	-154.3	-3.2702	ug/L	-3.2702	ppb	11:54:27
1	U 409.014†	-12478.9	-9730.0	-284.43	ug/L	-284.43	ppb	11:54:07
1	V 292.402†	23049.0	23766.4	133.35	ug/L	133.35	ppb	11:54:27
1	Zn 213.857†	38158.1	36474.9	305.13	ug/L	305.13	ppb	11:54:07
1	SiO2†	1059612.6	1029674.5	66041	ug/L	66041	ppb	11:55:27
2	Sc Radial	5891.7	5891.7	101	%			11:53:34
2	Y RADIAL	7217.5	7217.5	114.8	%			11:53:34
2	Al 396.153Radial†	164100.1	162790.2	113080	ug/L	113080	ppb	11:53:14
2	Ca 317.933Radial†	14471.9	14338.9	21135	ug/L	21135	ppb	11:53:14
2	Fe 238.204 Radial†	13882.7	13763.3	128850	ug/L	128850	ppb	11:53:14
2	K 766.490 Radial†	81123.0	78113.6	13845	ug/L	13845	ppb	11:53:14
2	Mg 279.077 IEC†	574.7	568.9	19959	ug/L	19959	ppb	11:53:34
2	Na 589.592 Radial†	8285.2	9306.0	3122.9	ug/L	3122.9	ppb	11:53:14
2	Sr 421.552†	54836.9	54419.7	338.72	ug/L	338.72	ppb	11:53:14
2	Sc 361.383	916699.8	916699.8	101.71	%			11:54:34
2	Y 371.029	862665.1	862665.1	114.86	%			11:54:34
2	Ag 328.068†	-7797.0	-7958.4	5.4996	ug/L	5.4996	ppb	11:54:54
2	As 188.979†	-61.4	-36.2	34.802	ug/L	34.802	ppb	11:54:54
2	B 249.677†	999.9	1513.7	14.572	ug/L	14.572	ppb	11:54:34
2	Ba 233.527†	955167.4	939092.5	6964.9	ug/L	6964.9	ppb	11:54:34
2	Be 313.107†	2073.6	7151.7	9.4405	ug/L	9.4405	ppb	11:54:34
2	Cd 226.502†	1080.4	1257.3	0.4554	ug/L	0.4554	ppb	11:54:54
2	Co 228.616†	1601.8	1640.2	24.985	ug/L	24.985	ppb	11:54:54
2	Cr 267.716†	7103.9	6905.6	75.160	ug/L	75.160	ppb	11:54:54
2	Cu 324.752†	25077.4	17898.4	57.793	ug/L	57.793	ppb	11:54:34
2	Mn 257.610†	1739399.3	1709688.6	1836.3	ug/L	1836.3	ppb	11:54:34
2	Mo 202.031†	-49.4	-66.9	4.8923	ug/L	4.8923	ppb	11:54:54
2	Ni 231.604†	3183.4	3043.3	70.452	ug/L	70.452	ppb	11:54:54

2	P 214.914†	1023.1	782.4	377.35	ug/L	377.35 ppb	11:54:54
2	Pb 220.353†	571.2	630.0	85.971	ug/L	85.971 ppb	11:54:54
2	S 181.975 Axial†	1375.4	1310.6	1814.3	ug/L	1814.3 ppb	11:54:54
2	Sb 206.836†	70.8	35.4	-0.8661	ug/L	-0.8661 ppb	11:54:54
2	Se 196.026†	-738.4	-697.1	23.385	ug/L	23.385 ppb	11:54:54
2	Si 251.611†	1042988.5	1024976.8	30679	ug/L	30679 ppb	11:54:34
2	Sn 189.927†	-20.4	-25.0	-0.1183	ug/L	-0.1183 ppb	11:54:54
2	Ti 334.940†	2214870.9	2178691.2	3478.0	ug/L	3478.0 ppb	11:54:34
2	Tl 190.801†	-174.0	-138.6	1.1433	ug/L	1.1433 ppb	11:54:54
2	U 409.014†	-12395.0	-9784.5	-285.89	ug/L	-285.89 ppb	11:54:34
2	V 292.402†	22914.2	23886.7	134.18	ug/L	134.18 ppb	11:54:54
2	Zn 213.857†	37682.7	36426.3	304.73	ug/L	304.73 ppb	11:54:34
2	SiO2†	1057799.2	1039520.2	66673	ug/L	66673 ppb	11:55:33
3	Sc Radial	5900.2	5900.2	101	%		11:53:59
3	Y RADIAL	7223.5	7223.5	114.9	%		11:53:59
3	Al 396.153Radial†	160987.4	159472.4	110770	ug/L	110770 ppb	11:53:39
3	Ca 317.933Radial†	14242.2	14090.8	20769	ug/L	20769 ppb	11:53:39
3	Fe 238.204 Radial†	13589.9	13453.5	125950	ug/L	125950 ppb	11:53:39
3	K 766.490 Radial†	79580.6	76469.8	13553	ug/L	13553 ppb	11:53:39
3	Mg 279.077 IEC†	574.9	568.3	19940	ug/L	19940 ppb	11:53:59
3	Na 589.592 Radial†	8102.4	9113.0	3058.2	ug/L	3058.2 ppb	11:53:39
3	Sr 421.552†	53485.6	53002.8	329.90	ug/L	329.90 ppb	11:53:39
3	Sc 361.383	924509.9	924509.9	102.58	%		11:55:01
3	Y 371.029	871693.7	871693.7	116.06	%		11:55:01
3	Ag 328.068†	-7772.9	-7870.2	4.9708	ug/L	4.9708 ppb	11:55:21
3	As 188.979†	-53.6	-28.0	37.533	ug/L	37.533 ppb	11:55:21
3	B 249.677†	1032.7	1537.4	15.454	ug/L	15.454 ppb	11:55:01
3	Ba 233.527†	960645.6	936499.7	6945.6	ug/L	6945.6 ppb	11:55:01
3	Be 313.107†	1953.0	7016.9	9.3850	ug/L	9.3850 ppb	11:55:01
3	Cd 226.502†	1124.1	1290.9	1.0996	ug/L	1.0996 ppb	11:55:21
3	Co 228.616†	1610.0	1634.9	24.928	ug/L	24.928 ppb	11:55:21
3	Cr 267.716†	7093.7	6836.7	74.380	ug/L	74.380 ppb	11:55:21
3	Cu 324.752†	25166.0	17776.6	57.296	ug/L	57.296 ppb	11:55:01
3	Mn 257.610†	1749875.6	1705454.7	1831.5	ug/L	1831.5 ppb	11:55:01
3	Mo 202.031†	-29.8	-47.4	5.9247	ug/L	5.9247 ppb	11:55:21
3	Ni 231.604†	3179.4	3012.9	69.748	ug/L	69.748 ppb	11:55:21
3	P 214.914†	1032.9	783.4	379.62	ug/L	379.62 ppb	11:55:21
3	Pb 220.353†	562.3	616.6	84.176	ug/L	84.176 ppb	11:55:21
3	S 181.975 Axial†	1377.7	1301.5	1801.9	ug/L	1801.9 ppb	11:55:21
3	Sb 206.836†	86.3	49.8	3.8115	ug/L	3.8115 ppb	11:55:21
3	Se 196.026†	-732.8	-685.5	20.518	ug/L	20.518 ppb	11:55:21
3	Si 251.611†	1050048.9	1023197.0	30626	ug/L	30626 ppb	11:55:01
3	Sn 189.927†	-5.9	-10.7	2.1474	ug/L	2.1474 ppb	11:55:21
3	Ti 334.940†	2231643.8	2176646.6	3474.7	ug/L	3474.7 ppb	11:55:01
3	Tl 190.801†	-184.8	-147.6	-1.5041	ug/L	-1.5041 ppb	11:55:21
3	U 409.014†	-12355.2	-9642.8	-281.62	ug/L	-281.62 ppb	11:55:01
3	V 292.402†	22824.4	23608.9	132.81	ug/L	132.81 ppb	11:55:21
3	Zn 213.857†	37959.4	36383.1	304.64	ug/L	304.64 ppb	11:55:01
3	SiO2†	1067078.7	1039780.7	66690	ug/L	66690 ppb	11:55:39

Mean Data: 241536001|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922752.5	102.38	%	0.598				0.58%
Sc Radial	5886.6	101	%	0.3				0.28%
Y 371.029	868831.4	115.68	%	0.712				0.62%
Y RADIAL	7201.9	114.5	%	0.51				0.45%
Ag 328.068†	-7917.9	5.4097	ug/L	0.40154	5.4097	ppb	0.40154	7.42%
Al 396.153Radial†	161491.1	112180	ug/L	1231.0	112180	ppb	1231.0	1.10%
As 188.979†	-35.6	34.899	ug/L	2.5872	34.899	ppb	2.5872	7.41%
B 249.677†	1519.6	14.809	ug/L	0.5647	14.809	ppb	0.5647	3.81%
Ba 233.527†	937819.6	6955.5	ug/L	9.67	6955.5	ppb	9.67	0.14%
Be 313.107†	7141.5	9.4350	ug/L	0.04748	9.4350	ppb	0.04748	0.50%
Ca 317.933Radial†	14250.1	21004	ug/L	203.8	21004	ppb	203.8	0.97%
Cd 226.502†	1273.0	0.7051	ug/L	0.34569	0.7051	ppb	0.34569	49.03%
Co 228.616†	1639.2	24.977	ug/L	0.0458	24.977	ppb	0.0458	0.18%
Cr 267.716†	6875.4	74.825	ug/L	0.4016	74.825	ppb	0.4016	0.54%
Cu 324.752†	17869.1	57.666	ug/L	0.3249	57.666	ppb	0.3249	0.56%
Fe 238.204 Radial†	13672.5	128000	ug/L	1784.3	128000	ppb	1784.3	1.39%
K 766.490 Radial†	77469.2	13730	ug/L	155.8	13730	ppb	155.8	1.13%

Mg 279.077 IEC†	569.6	19987	ug/L	64.6	19987	ppb	64.6	0.32%
Mn 257.610†	1708274.7	1834.7	ug/L	2.78	1834.7	ppb	2.78	0.15%
Mo 202.031†	-55.5	5.5538	ug/L	0.57429	5.5538	ppb	0.57429	10.34%
Na 589.592 Radial†	9238.9	3100.4	ug/L	36.62	3100.4	ppb	36.62	1.18%
Ni 231.604†	3025.8	70.047	ug/L	0.3636	70.047	ppb	0.3636	0.52%
P 214.914†	781.2	377.10	ug/L	2.648	377.10	ppb	2.648	0.70%
Pb 220.353†	626.2	85.410	ug/L	1.0697	85.410	ppb	1.0697	1.25%
S 181.975 Axial†	1310.9	1814.9	ug/L	13.26	1814.9	ppb	13.26	0.73%
Sb 206.836†	35.8	-0.6912	ug/L	4.41779	-0.6912	ppb	4.41779	639.16%
Se 196.026†	-691.6	23.720	ug/L	3.3827	23.720	ppb	3.3827	14.26%
Si 251.611†	1024577.8	30667	ug/L	36.8	30667	ppb	36.8	0.12%
Sn 189.927†	-17.5	1.0913	ug/L	1.14057	1.0913	ppb	1.14057	104.52%
Sr 421.552†	53856.2	335.21	ug/L	4.679	335.21	ppb	4.679	1.40%
Ti 334.940†	2178111.0	3477.0	ug/L	2.05	3477.0	ppb	2.05	0.06%
Tl 190.801†	-146.8	-1.2103	ug/L	2.22139	-1.2103	ppb	2.22139	183.54%
U 409.014†	-9719.1	-283.98	ug/L	2.171	-283.98	ppb	2.171	0.76%
V 292.402†	23754.0	133.45	ug/L	0.688	133.45	ppb	0.688	0.52%
Zn 213.857†	36428.1	304.83	ug/L	0.257	304.83	ppb	0.257	0.08%
SiO2†	1036325.2	66468	ug/L	369.6	66468	ppb	369.6	0.56%

Sequence No.: 17
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 11:57:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5830.5	5830.5	99.8	%			11:59:41
1	Y RADIAL	6202.8	6202.8	98.65	%			11:59:41
1	Al 396.153Radial†	7094.2	7130.9	4932.0	ug/L	4932.0	ppb	11:59:41
1	Ca 317.933Radial†	3394.3	3386.6	4991.6	ug/L	4991.6	ppb	12:00:01
1	Fe 238.204 Radial†	542.6	537.1	5043.6	ug/L	5043.6	ppb	12:00:01
1	K 766.490 Radial†	30903.2	28622.7	5067.4	ug/L	5067.4	ppb	11:59:41
1	Mg 279.077 IEC†	148.5	147.6	5214.1	ug/L	5214.1	ppb	12:00:01
1	Na 589.592 Radial†	27223.4	28374.1	9521.8	ug/L	9521.8	ppb	11:59:41
1	Sr 421.552†	80201.0	80413.2	500.75	ug/L	500.75	ppb	11:59:41
1	Sc 361.383	918521.4	918521.4	101.91	%			12:00:59
1	Y 371.029	750066.3	750066.3	99.864	%			12:00:59
1	Ag 328.068†	112350.8	109947.2	501.03	ug/L	501.03	ppb	12:01:04
1	As 188.979†	1247.6	1248.3	497.63	ug/L	497.63	ppb	12:01:24
1	B 249.677†	22959.7	23059.0	481.64	ug/L	481.64	ppb	12:01:04
1	Ba 233.527†	67958.6	66690.2	495.54	ug/L	495.54	ppb	12:01:04
1	Be 313.107†	1373495.7	1352803.5	494.08	ug/L	494.08	ppb	12:00:59
1	Cd 226.502†	47617.2	46917.7	495.80	ug/L	495.80	ppb	12:01:04
1	Co 228.616†	26557.5	26124.0	495.96	ug/L	495.96	ppb	12:01:04
1	Cr 267.716†	47889.0	46910.6	493.23	ug/L	493.23	ppb	12:01:04
1	Cu 324.752†	180614.2	170464.1	488.08	ug/L	488.08	ppb	12:01:04
1	Mn 257.610†	472034.3	462743.4	494.03	ug/L	494.03	ppb	12:00:59
1	Mo 202.031†	8022.2	7853.2	499.24	ug/L	499.24	ppb	12:01:24
1	Ni 231.604†	21931.5	21432.9	495.99	ug/L	495.99	ppb	12:01:04
1	P 214.914†	4554.7	4245.6	2374.8	ug/L	2374.8	ppb	12:01:24
1	Pb 220.353†	4352.0	4338.7	492.01	ug/L	492.01	ppb	12:01:24
1	S 181.975 Axial†	765.9	710.0	993.87	ug/L	993.87	ppb	12:01:24
1	Sb 206.836†	1635.2	1570.2	504.25	ug/L	504.25	ppb	12:01:24
1	Se 196.026†	844.2	857.1	513.90	ug/L	513.90	ppb	12:01:24
1	Si 251.611†	84702.9	82661.8	2462.6	ug/L	2462.6	ppb	12:01:04
1	Sn 189.927†	3110.9	3047.4	499.55	ug/L	499.55	ppb	12:01:24
1	Ti 334.940†	317360.8	312513.2	498.58	ug/L	498.58	ppb	12:01:04
1	Tl 190.801†	1776.2	1775.3	500.42	ug/L	500.42	ppb	12:01:24
1	U 409.014†	15668.6	17776.0	488.10	ug/L	488.10	ppb	12:01:04
1	V 292.402†	74306.5	74268.8	497.23	ug/L	497.23	ppb	12:01:04
1	Zn 213.857†	58266.2	56549.7	489.63	ug/L	489.63	ppb	12:01:04
1	SiO2†	83444.8	81409.6	5196.2	ug/L	5196.2	ppb	12:02:31
2	Sc Radial	5836.0	5836.0	99.9	%			12:00:06
2	Y RADIAL	6237.9	6237.9	99.21	%			12:00:06
2	Al 396.153Radial†	7113.8	7143.8	4941.2	ug/L	4941.2	ppb	12:00:06
2	Ca 317.933Radial†	3379.1	3368.1	4964.4	ug/L	4964.4	ppb	12:00:26
2	Fe 238.204 Radial†	541.4	535.4	5027.5	ug/L	5027.5	ppb	12:00:26
2	K 766.490 Radial†	30922.1	28612.4	5065.6	ug/L	5065.6	ppb	12:00:06
2	Mg 279.077 IEC†	145.0	144.1	5087.7	ug/L	5087.7	ppb	12:00:26
2	Na 589.592 Radial†	27104.4	28229.2	9473.2	ug/L	9473.2	ppb	12:00:06
2	Sr 421.552†	79988.6	80124.7	498.95	ug/L	498.95	ppb	12:00:06
2	Sc 361.383	915777.4	915777.4	101.61	%			12:01:29
2	Y 371.029	747914.5	747914.5	99.578	%			12:01:29
2	Ag 328.068†	112273.2	110201.2	502.17	ug/L	502.17	ppb	12:01:35
2	As 188.979†	1226.2	1230.9	490.75	ug/L	490.75	ppb	12:01:55
2	B 249.677†	22927.2	23094.5	482.39	ug/L	482.39	ppb	12:01:35
2	Ba 233.527†	67534.9	66473.1	493.93	ug/L	493.93	ppb	12:01:35
2	Be 313.107†	1367741.0	1351178.1	493.49	ug/L	493.49	ppb	12:01:29
2	Cd 226.502†	47330.6	46775.6	494.30	ug/L	494.30	ppb	12:01:35
2	Co 228.616†	26423.0	26069.6	494.91	ug/L	494.91	ppb	12:01:35
2	Cr 267.716†	47634.4	46800.8	492.08	ug/L	492.08	ppb	12:01:35
2	Cu 324.752†	181101.5	171474.7	490.97	ug/L	490.97	ppb	12:01:35
2	Mn 257.610†	470818.6	462934.8	494.24	ug/L	494.24	ppb	12:01:29
2	Mo 202.031†	7886.3	7742.9	492.23	ug/L	492.23	ppb	12:01:55
2	Ni 231.604†	21779.2	21347.5	494.02	ug/L	494.02	ppb	12:01:35

2	P 214.914†	4507.0	4212.1	2354.9 ug/L	2354.9 ppb	12:01:55
2	Pb 220.353†	4296.6	4297.0	487.28 ug/L	487.28 ppb	12:01:55
2	S 181.975 Axial†	749.8	696.4	974.83 ug/L	974.83 ppb	12:01:55
2	Sb 206.836†	1600.2	1540.6	494.60 ug/L	494.60 ppb	12:01:55
2	Se 196.026†	823.5	839.3	503.52 ug/L	503.52 ppb	12:01:55
2	Si 251.611†	84593.1	82802.8	2467.0 ug/L	2467.0 ppb	12:01:35
2	Sn 189.927†	3046.2	2993.0	490.63 ug/L	490.63 ppb	12:01:55
2	Ti 334.940†	316972.8	313064.4	499.46 ug/L	499.46 ppb	12:01:35
2	Tl 190.801†	1733.2	1738.2	490.05 ug/L	490.05 ppb	12:01:55
2	U 409.014†	15918.3	18067.9	496.14 ug/L	496.14 ppb	12:01:35
2	V 292.402†	74100.8	74284.8	497.25 ug/L	497.25 ppb	12:01:35
2	Zn 213.857†	58044.3	56502.6	489.23 ug/L	489.23 ppb	12:01:35
2	SiO2†	84324.6	82520.8	5267.8 ug/L	5267.8 ppb	12:02:36
3	Sc Radial	5884.4	5884.4	101 %		12:00:31
3	Y RADIAL	6270.2	6270.2	99.72 %		12:00:31
3	Al 396.153Radial†	7158.7	7129.8	4931.4 ug/L	4931.4 ppb	12:00:31
3	Ca 317.933Radial†	3409.0	3370.0	4967.2 ug/L	4967.2 ppb	12:00:51
3	Fe 238.204 Radial†	545.2	534.7	5021.0 ug/L	5021.0 ppb	12:00:51
3	K 766.490 Radial†	31146.7	28580.5	5059.9 ug/L	5059.9 ppb	12:00:31
3	Mg 279.077 IEC†	147.8	145.7	5144.4 ug/L	5144.4 ppb	12:00:51
3	Na 589.592 Radial†	27319.4	28219.2	9469.8 ug/L	9469.8 ppb	12:00:31
3	Sr 421.552†	80838.8	80309.4	500.10 ug/L	500.10 ppb	12:00:31
3	Sc 361.383	916763.4	916763.4	101.72 %		12:02:00
3	Y 371.029	750219.5	750219.5	99.885 %		12:02:00
3	Ag 328.068†	112532.6	110337.4	502.79 ug/L	502.79 ppb	12:02:06
3	As 188.979†	1232.9	1236.2	492.84 ug/L	492.84 ppb	12:02:26
3	B 249.677†	22961.7	23104.2	482.60 ug/L	482.60 ppb	12:02:06
3	Ba 233.527†	67633.9	66498.9	494.13 ug/L	494.13 ppb	12:02:06
3	Be 313.107†	1372957.1	1354858.4	494.83 ug/L	494.83 ppb	12:02:00
3	Cd 226.502†	47315.4	46710.6	493.61 ug/L	493.61 ppb	12:02:06
3	Co 228.616†	26421.4	26040.1	494.36 ug/L	494.36 ppb	12:02:06
3	Cr 267.716†	47764.7	46878.6	492.90 ug/L	492.90 ppb	12:02:06
3	Cu 324.752†	181442.5	171618.3	491.38 ug/L	491.38 ppb	12:02:06
3	Mn 257.610†	470737.9	462357.1	493.62 ug/L	493.62 ppb	12:02:00
3	Mo 202.031†	7937.8	7785.2	494.92 ug/L	494.92 ppb	12:02:26
3	Ni 231.604†	21824.4	21368.9	494.51 ug/L	494.51 ppb	12:02:06
3	P 214.914†	4510.5	4210.8	2354.1 ug/L	2354.1 ppb	12:02:26
3	Pb 220.353†	4325.6	4321.0	490.00 ug/L	490.00 ppb	12:02:26
3	S 181.975 Axial†	761.3	706.8	989.49 ug/L	989.49 ppb	12:02:26
3	Sb 206.836†	1624.9	1563.2	501.88 ug/L	501.88 ppb	12:02:26
3	Se 196.026†	832.2	846.9	507.93 ug/L	507.93 ppb	12:02:26
3	Si 251.611†	84649.0	82768.2	2465.9 ug/L	2465.9 ppb	12:02:06
3	Sn 189.927†	3082.7	3025.6	495.96 ug/L	495.96 ppb	12:02:26
3	Ti 334.940†	317453.6	313201.5	499.68 ug/L	499.68 ppb	12:02:06
3	Tl 190.801†	1745.8	1748.8	493.00 ug/L	493.00 ppb	12:02:26
3	U 409.014†	15926.1	18058.6	495.88 ug/L	495.88 ppb	12:02:06
3	V 292.402†	74332.9	74434.6	498.28 ug/L	498.28 ppb	12:02:06
3	Zn 213.857†	58061.6	56458.2	488.84 ug/L	488.84 ppb	12:02:06
3	SiO2†	84953.7	83050.0	5301.7 ug/L	5301.7 ppb	12:02:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917020.7	101.75	%	0.154				0.15%
Sc Radial	5850.3	100	%	0.5				0.51%
Y 371.029	749400.1	99.776	%	0.1716				0.17%
Y RADIAL	6237.0	99.19	%	0.536				0.54%
Ag 328.068†	110161.9	502.00	ug/L	0.892	502.00	ppb	0.892	0.18%
QC value within limits for Ag 328.068 Recovery = 100.40%								
Al 396.153Radial†	7134.9	4934.8	ug/L	5.53	4934.8	ppb	5.53	0.11%
QC value within limits for Al 396.153Radial Recovery = 98.70%								
As 188.979†	1238.5	493.74	ug/L	3.525	493.74	ppb	3.525	0.71%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	23085.9	482.21	ug/L	0.502	482.21	ppb	0.502	0.10%
QC value within limits for B 249.677 Recovery = 96.44%								
Ba 233.527†	66554.1	494.54	ug/L	0.879	494.54	ppb	0.879	0.18%
QC value within limits for Ba 233.527 Recovery = 98.91%								
Be 313.107†	1352946.7	494.13	ug/L	0.673	494.13	ppb	0.673	0.14%
QC value within limits for Be 313.107 Recovery = 98.83%								
Ca 317.933Radial†	3374.9	4974.4	ug/L	14.97	4974.4	ppb	14.97	0.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.49%
Cd 226.502†            46801.3      494.57 ug/L         1.119      494.57 ppb          1.119   0.23%
   QC value within limits for Cd 226.502  Recovery = 98.91%
Co 228.616†            26077.9      495.08 ug/L         0.815      495.08 ppb          0.815   0.16%
   QC value within limits for Co 228.616  Recovery = 99.02%
Cr 267.716†            46863.3      492.74 ug/L         0.594      492.74 ppb          0.594   0.12%
   QC value within limits for Cr 267.716  Recovery = 98.55%
Cu 324.752†           171185.7      490.14 ug/L         1.800      490.14 ppb          1.800   0.37%
   QC value within limits for Cu 324.752  Recovery = 98.03%
Fe 238.204 Radial†       535.7      5030.7 ug/L        11.65      5030.7 ppb          11.65   0.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.61%
K 766.490 Radial†      28605.2      5064.3 ug/L         3.89      5064.3 ppb           3.89   0.08%
   QC value within limits for K 766.490 Radial  Recovery = 101.29%
Mg 279.077 IEC†          145.8      5148.7 ug/L        63.35      5148.7 ppb          63.35   1.23%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.97%
Mn 257.610†           462678.4      493.96 ug/L         0.315      493.96 ppb          0.315   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.79%
Mo 202.031†             7793.8      495.46 ug/L         3.533      495.46 ppb          3.533   0.71%
   QC value within limits for Mo 202.031  Recovery = 99.09%
Na 589.592 Radial†     28274.2      9488.3 ug/L        29.09      9488.3 ppb          29.09   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 94.88%
Ni 231.604†            21383.1      494.84 ug/L         1.030      494.84 ppb          1.030   0.21%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4222.8      2361.3 ug/L        11.71      2361.3 ppb          11.71   0.50%
   QC value within limits for P 214.914  Recovery = 94.45%
Pb 220.353†             4318.9      489.76 ug/L         2.373      489.76 ppb          2.373   0.48%
   QC value within limits for Pb 220.353  Recovery = 97.95%
S 181.975 Axial†         704.4      986.06 ug/L         9.972      986.06 ppb          9.972   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 98.61%
Sb 206.836†             1558.0      500.24 ug/L         5.028      500.24 ppb          5.028   1.01%
   QC value within limits for Sb 206.836  Recovery = 100.05%
Se 196.026†              847.8      508.45 ug/L         5.213      508.45 ppb          5.213   1.03%
   QC value within limits for Se 196.026  Recovery = 101.69%
Si 251.611†            82744.3      2465.2 ug/L          2.27      2465.2 ppb           2.27   0.09%
   QC value within limits for Si 251.611  Recovery = 98.61%
Sn 189.927†             3022.0      495.38 ug/L         4.487      495.38 ppb          4.487   0.91%
   QC value within limits for Sn 189.927  Recovery = 99.08%
Sr 421.552†            80282.4      499.93 ug/L         0.910      499.93 ppb          0.910   0.18%
   QC value within limits for Sr 421.552  Recovery = 99.99%
Ti 334.940†           312926.3      499.24 ug/L         0.579      499.24 ppb          0.579   0.12%
   QC value within limits for Ti 334.940  Recovery = 99.85%
Tl 190.801†             1754.1      494.49 ug/L         5.347      494.49 ppb          5.347   1.08%
   QC value within limits for Tl 190.801  Recovery = 98.90%
U 409.014†             17967.5      493.37 ug/L         4.573      493.37 ppb          4.573   0.93%
   QC value within limits for U 409.014  Recovery = 98.67%
V 292.402†             74329.4      497.58 ug/L         0.600      497.58 ppb          0.600   0.12%
   QC value within limits for V 292.402  Recovery = 99.52%
Zn 213.857†            56503.5      489.23 ug/L         0.395      489.23 ppb          0.395   0.08%
   QC value within limits for Zn 213.857  Recovery = 97.85%
SiO2†                  82326.8      5255.2 ug/L        53.83      5255.2 ppb          53.83   1.02%
   QC value within limits for SiO2  Recovery = 98.27%
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 12:04:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5943.6	5943.6	102	%			12:06:44
1	Y RADIAL	6397.8	6397.8	101.7	%			12:06:44
1	Al 396.153Radial†	-36.7	-15.7	-10.945	ug/L	-10.945	ppb	12:06:44
1	Ca 317.933Radial†	31.9	15.8	23.253	ug/L	23.253	ppb	12:07:04
1	Fe 238.204 Radial†	6.4	-0.5	-5.0186	ug/L	-5.0186	ppb	12:07:04
1	K 766.490 Radial†	2423.9	31.5	5.5818	ug/L	5.5818	ppb	12:06:44
1	Mg 279.077 IEC†	1.9	0.7	26.364	ug/L	26.364	ppb	12:07:04
1	Na 589.592 Radial†	-1049.6	55.9	18.772	ug/L	18.772	ppb	12:06:44
1	Sr 421.552†	-27.7	0.1	0.0002	ug/L	0.0002	ppb	12:06:44
1	Sc 361.383	904747.1	904747.1	100.39	%			12:08:01
1	Y 371.029	752940.7	752940.7	100.25	%			12:08:01
1	Ag 328.068†	351.0	57.0	0.2560	ug/L	0.2560	ppb	12:08:01
1	As 188.979†	-22.3	2.0	0.7794	ug/L	0.7794	ppb	12:08:21
1	B 249.677†	-384.4	147.8	3.0992	ug/L	3.0992	ppb	12:08:21
1	Ba 233.527†	-10.1	-1.6	-0.0110	ug/L	-0.0110	ppb	12:08:21
1	Be 313.107†	-4990.4	141.8	0.0518	ug/L	0.0518	ppb	12:08:01
1	Cd 226.502†	-182.7	13.1	0.1395	ug/L	0.1395	ppb	12:08:21
1	Co 228.616†	-62.0	3.6	0.0702	ug/L	0.0702	ppb	12:08:21
1	Cr 267.716†	81.3	2.4	0.0248	ug/L	0.0248	ppb	12:08:21
1	Cu 324.752†	6819.0	36.1	0.1029	ug/L	0.1029	ppb	12:08:01
1	Mn 257.610†	447.6	23.6	0.0241	ug/L	0.0241	ppb	12:08:21
1	Mo 202.031†	28.1	9.7	0.6137	ug/L	0.6137	ppb	12:08:21
1	Ni 231.604†	95.1	8.2	0.1888	ug/L	0.1888	ppb	12:08:21
1	P 214.914†	211.1	-13.3	-7.6724	ug/L	-7.6724	ppb	12:08:21
1	Pb 220.353†	-64.7	4.0	0.4526	ug/L	0.4526	ppb	12:08:21
1	S 181.975 Axial†	39.4	-2.3	-3.2083	ug/L	-3.2083	ppb	12:08:21
1	Sb 206.836†	34.8	0.4	0.1241	ug/L	0.1241	ppb	12:08:21
1	Se 196.026†	-25.1	3.8	2.1663	ug/L	2.1663	ppb	12:08:21
1	Si 251.611†	725.9	273.4	8.1744	ug/L	8.1744	ppb	12:08:21
1	Sn 189.927†	0.5	-4.5	-0.7298	ug/L	-0.7298	ppb	12:08:21
1	Ti 334.940†	-1079.7	39.4	0.0632	ug/L	0.0632	ppb	12:08:01
1	Tl 190.801†	-37.9	-5.2	-1.4600	ug/L	-1.4600	ppb	12:08:21
1	U 409.014†	-2334.6	76.2	2.1001	ug/L	2.1001	ppb	12:08:01
1	V 292.402†	-1295.7	67.6	0.4609	ug/L	0.4609	ppb	12:08:01
1	Zn 213.857†	678.6	54.1	0.4711	ug/L	0.4711	ppb	12:08:21
1	SiO2†	563.1	93.5	5.9727	ug/L	5.9727	ppb	12:09:17
2	Sc Radial	5877.5	5877.5	101	%			12:07:09
2	Y RADIAL	6301.1	6301.1	100.2	%			12:07:09
2	Al 396.153Radial†	-30.4	-9.8	-6.7942	ug/L	-6.7942	ppb	12:07:09
2	Ca 317.933Radial†	29.5	13.7	20.250	ug/L	20.250	ppb	12:07:29
2	Fe 238.204 Radial†	8.5	1.6	15.144	ug/L	15.144	ppb	12:07:29
2	K 766.490 Radial†	2420.9	55.3	9.8013	ug/L	9.8013	ppb	12:07:09
2	Mg 279.077 IEC†	0.3	-0.9	-30.512	ug/L	-30.512	ppb	12:07:29
2	Na 589.592 Radial†	-1064.0	30.1	10.092	ug/L	10.092	ppb	12:07:09
2	Sr 421.552†	-6.2	21.2	0.1316	ug/L	0.1316	ppb	12:07:09
2	Sc 361.383	915787.5	915787.5	101.61	%			12:08:26
2	Y 371.029	763840.5	763840.5	101.70	%			12:08:26
2	Ag 328.068†	373.0	74.4	0.3355	ug/L	0.3355	ppb	12:08:26
2	As 188.979†	-22.8	1.8	0.7053	ug/L	0.7053	ppb	12:08:46
2	B 249.677†	-358.0	178.3	3.7375	ug/L	3.7375	ppb	12:08:46
2	Ba 233.527†	16.7	24.9	0.1859	ug/L	0.1859	ppb	12:08:46
2	Be 313.107†	-5092.2	101.6	0.0371	ug/L	0.0371	ppb	12:08:26
2	Cd 226.502†	-198.1	0.2	0.0002	ug/L	0.0002	ppb	12:08:46
2	Co 228.616†	-66.9	-0.4	-0.0071	ug/L	-0.0071	ppb	12:08:46
2	Cr 267.716†	95.7	15.5	0.1608	ug/L	0.1608	ppb	12:08:46
2	Cu 324.752†	6866.8	1.2	0.0042	ug/L	0.0042	ppb	12:08:26
2	Mn 257.610†	453.6	24.1	0.0278	ug/L	0.0278	ppb	12:08:46
2	Mo 202.031†	21.7	3.0	0.1917	ug/L	0.1917	ppb	12:08:46
2	Ni 231.604†	90.0	2.1	0.0479	ug/L	0.0479	ppb	12:08:46

2	P 214.914†	213.6	-13.3	-7.6526 ug/L	-7.6526 ppb	12:08:46
2	Pb 220.353†	-68.6	0.9	0.1004 ug/L	0.1004 ppb	12:08:46
2	S 181.975 Axial†	40.1	-2.1	-2.9631 ug/L	-2.9631 ppb	12:08:46
2	Sb 206.836†	38.8	3.9	1.2504 ug/L	1.2504 ppb	12:08:46
2	Se 196.026†	-16.0	13.1	7.5950 ug/L	7.5950 ppb	12:08:46
2	Si 251.611†	678.6	218.2	6.5230 ug/L	6.5230 ppb	12:08:46
2	Sn 189.927†	9.9	4.8	0.7858 ug/L	0.7858 ppb	12:08:46
2	Ti 334.940†	-1103.3	29.1	0.0434 ug/L	0.0434 ppb	12:08:26
2	Tl 190.801†	-37.2	-4.1	-1.1582 ug/L	-1.1582 ppb	12:08:46
2	U 409.014†	-2106.4	328.8	9.0562 ug/L	9.0562 ppb	12:08:26
2	V 292.402†	-1307.0	72.1	0.4934 ug/L	0.4934 ppb	12:08:26
2	Zn 213.857†	689.6	56.9	0.4960 ug/L	0.4960 ppb	12:08:46
2	SiO2†	577.4	100.8	6.4452 ug/L	6.4452 ppb	12:09:22
3	Sc Radial	5765.2	5765.2	98.7 %		12:07:34
3	Y RADIAL	6230.6	6230.6	99.09 %		12:07:34
3	Al 396.153Radial†	-30.3	-10.3	-7.1552 ug/L	-7.1552 ppb	12:07:34
3	Ca 317.933Radial†	31.8	16.7	24.546 ug/L	24.546 ppb	12:07:54
3	Fe 238.204 Radial†	6.9	0.1	1.3209 ug/L	1.3209 ppb	12:07:54
3	K 766.490 Radial†	2425.1	106.5	18.876 ug/L	18.876 ppb	12:07:34
3	Mg 279.077 IEC†	0.7	-0.5	-16.193 ug/L	-16.193 ppb	12:07:54
3	Na 589.592 Radial†	-1040.0	33.8	11.341 ug/L	11.341 ppb	12:07:34
3	Sr 421.552†	0.5	27.8	0.1730 ug/L	0.1730 ppb	12:07:34
3	Sc 361.383	904812.9	904812.9	100.39 %		12:08:51
3	Y 371.029	754674.2	754674.2	100.48 %		12:08:51
3	Ag 328.068†	311.7	17.7	0.0780 ug/L	0.0780 ppb	12:08:51
3	As 188.979†	-26.5	-2.2	-0.8622 ug/L	-0.8622 ppb	12:09:11
3	B 249.677†	-375.9	156.2	3.2768 ug/L	3.2768 ppb	12:09:11
3	Ba 233.527†	-9.4	-1.0	-0.0062 ug/L	-0.0062 ppb	12:09:11
3	Be 313.107†	-4986.8	145.8	0.0531 ug/L	0.0531 ppb	12:08:51
3	Cd 226.502†	-180.6	15.3	0.1612 ug/L	0.1612 ppb	12:09:11
3	Co 228.616†	-73.7	-8.0	-0.1515 ug/L	-0.1515 ppb	12:09:11
3	Cr 267.716†	75.4	-3.5	-0.0376 ug/L	-0.0376 ppb	12:09:11
3	Cu 324.752†	6811.0	27.6	0.0790 ug/L	0.0790 ppb	12:08:51
3	Mn 257.610†	443.6	19.6	0.0213 ug/L	0.0213 ppb	12:09:11
3	Mo 202.031†	20.5	2.1	0.1318 ug/L	0.1318 ppb	12:09:11
3	Ni 231.604†	90.4	3.4	0.0800 ug/L	0.0800 ppb	12:09:11
3	P 214.914†	205.7	-18.7	-10.767 ug/L	-10.767 ppb	12:09:11
3	Pb 220.353†	-57.3	11.3	1.2803 ug/L	1.2803 ppb	12:09:11
3	S 181.975 Axial†	42.1	0.4	0.5027 ug/L	0.5027 ppb	12:09:11
3	Sb 206.836†	31.3	-3.1	-0.9572 ug/L	-0.9572 ppb	12:09:11
3	Se 196.026†	-28.5	0.4	0.2427 ug/L	0.2427 ppb	12:09:11
3	Si 251.611†	587.0	135.0	4.0314 ug/L	4.0314 ppb	12:09:11
3	Sn 189.927†	7.7	2.6	0.4341 ug/L	0.4341 ppb	12:09:11
3	Ti 334.940†	-1138.7	-19.4	-0.0317 ug/L	-0.0317 ppb	12:08:51
3	Tl 190.801†	-40.8	-8.1	-2.2771 ug/L	-2.2771 ppb	12:09:11
3	U 409.014†	-2241.4	169.2	4.6600 ug/L	4.6600 ppb	12:08:51
3	V 292.402†	-1304.3	59.2	0.4013 ug/L	0.4013 ppb	12:08:51
3	Zn 213.857†	688.0	63.4	0.5539 ug/L	0.5539 ppb	12:09:11
3	SiO2†	579.7	110.0	7.0334 ug/L	7.0334 ppb	12:09:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908449.2	100.80	%	0.705				0.70%
Sc Radial	5862.1	100	%	1.5				1.54%
Y 371.029	757151.8	100.81	%	0.780				0.77%
Y RADIAL	6309.8	100.4	%	1.34				1.33%
Ag 328.068†	49.7	0.2232	ug/L	0.13185	0.2232	ppb	0.13185	59.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.9	-8.2981	ug/L	2.29928	-8.2981	ppb	2.29928	27.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.2075	ug/L	0.92711	0.2075	ppb	0.92711	446.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.8	3.3712	ug/L	0.32948	3.3712	ppb	0.32948	9.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.4	0.0562	ug/L	0.11232	0.0562	ppb	0.11232	199.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	129.7	0.0473	ug/L	0.00887	0.0473	ppb	0.00887	18.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.4	22.683	ug/L	2.2037	22.683	ppb	2.2037	9.72%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.5      0.1003 ug/L       0.08734      0.1003 ppb        0.08734  87.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.6     -0.0295 ug/L       0.11254     -0.0295 ppb        0.11254 381.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.8      0.0494 ug/L       0.10145      0.0494 ppb        0.10145 205.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                21.6      0.0621 ug/L       0.05151      0.0621 ppb        0.05151  83.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.4      3.8155 ug/L      10.31030      3.8155 ppb       10.31030 270.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          64.4      11.420 ug/L        6.7935      11.420 ppb        6.7935  59.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.2     -6.7803 ug/L      29.58356     -6.7803 ppb       29.58356 436.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.4      0.0244 ug/L       0.00323      0.0244 ppb        0.00323  13.22%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.9      0.3124 ug/L       0.26266      0.3124 ppb        0.26266  84.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         39.9      13.402 ug/L        4.6928      13.402 ppb        4.6928  35.02%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.6      0.1056 ug/L       0.07387      0.1056 ppb        0.07387  69.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.1     -8.6973 ug/L       1.79249     -8.6973 ppb        1.79249  20.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 5.4      0.6111 ug/L       0.60572      0.6111 ppb        0.60572  99.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.3     -1.8896 ug/L       2.07538     -1.8896 ppb        2.07538 109.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.4      0.1391 ug/L       1.10385      0.1391 ppb        1.10385 793.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.7      3.3347 ug/L       3.81286      3.3347 ppb        3.81286 114.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               208.9      6.2429 ug/L       2.08565      6.2429 ppb        2.08565  33.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.0      0.1634 ug/L       0.79323      0.1634 ppb        0.79323 485.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                16.3      0.1016 ug/L       0.09020      0.1016 ppb        0.09020  88.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                16.4      0.0250 ug/L       0.05004      0.0250 ppb        0.05004 200.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.8     -1.6318 ug/L       0.57888     -1.6318 ppb        0.57888  35.48%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                191.4      5.2721 ug/L       3.51825      5.2721 ppb        3.51825  66.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 66.3      0.4518 ug/L       0.04670      0.4518 ppb        0.04670  10.33%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                58.1      0.5070 ug/L       0.04248      0.5070 ppb        0.04248   8.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     101.4      6.4838 ug/L       0.53137      6.4838 ppb        0.53137   8.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 19
Sample ID: 241536002|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 12/8/2009 12:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536002|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5803.1	5803.1	99.3	%			12:13:50
1	Y RADIAL	7006.3	7006.3	111.4	%			12:13:50
1	Al 396.153Radial†	119267.5	120126.7	83443	ug/L	83443	ppb	12:13:30
1	Ca 317.933Radial†	15197.3	15288.6	22535	ug/L	22535	ppb	12:13:30
1	Fe 238.204 Radial†	11067.8	11138.8	104280	ug/L	104280	ppb	12:13:30
1	K 766.490 Radial†	73935.4	72103.7	12761	ug/L	12761	ppb	12:13:30
1	Mg 279.077 IEC†	460.0	462.1	16212	ug/L	16212	ppb	12:13:50
1	Na 589.592 Radial†	3127.8	4237.7	1422.1	ug/L	1422.1	ppb	12:13:30
1	Sr 421.552†	35549.5	35826.9	222.91	ug/L	222.91	ppb	12:13:30
1	Sc 361.383	912566.8	912566.8	101.25	%			12:14:48
1	Y 371.029	849025.8	849025.8	113.04	%			12:14:48
1	Ag 328.068†	-6319.1	-6533.6	4.3563	ug/L	4.3563	ppb	12:14:53
1	As 188.979†	-38.8	-14.2	41.146	ug/L	41.146	ppb	12:15:13
1	B 249.677†	1332.8	1846.9	24.745	ug/L	24.745	ppb	12:14:53
1	Ba 233.527†	130228.8	128624.3	957.66	ug/L	957.66	ppb	12:14:53
1	Be 313.107†	-8401.0	-3184.0	6.0108	ug/L	6.0108	ppb	12:14:53
1	Cd 226.502†	907.6	1091.5	1.1598	ug/L	1.1598	ppb	12:15:13
1	Co 228.616†	3154.1	3180.5	51.499	ug/L	51.499	ppb	12:15:13
1	Cr 267.716†	10304.7	10098.4	108.35	ug/L	108.35	ppb	12:14:53
1	Cu 324.752†	32018.5	24865.2	76.477	ug/L	76.477	ppb	12:14:53
1	Mn 257.610†	2779547.8	2744699.3	2938.0	ug/L	2938.0	ppb	12:14:48
1	Mo 202.031†	23.3	4.7	7.6936	ug/L	7.6936	ppb	12:15:13
1	Ni 231.604†	3255.9	3129.0	72.418	ug/L	72.418	ppb	12:15:13
1	P 214.914†	2441.4	2187.6	1194.1	ug/L	1194.1	ppb	12:15:13
1	Pb 220.353†	1141.5	1195.8	145.29	ug/L	145.29	ppb	12:15:13
1	S 181.975 Axial†	696.6	646.4	889.34	ug/L	889.34	ppb	12:15:13
1	Sb 206.836†	81.8	46.5	1.7646	ug/L	1.7646	ppb	12:15:13
1	Se 196.026†	-571.5	-535.6	34.000	ug/L	34.000	ppb	12:15:13
1	Si 251.611†	1072372.2	1058640.7	31687	ug/L	31687	ppb	12:14:48
1	Sn 189.927†	-120.2	-123.7	-16.477	ug/L	-16.477	ppb	12:15:13
1	Ti 334.940†	2313871.6	2286328.0	3649.8	ug/L	3649.8	ppb	12:14:48
1	Tl 190.801†	-208.0	-173.0	-1.8304	ug/L	-1.8304	ppb	12:15:13
1	U 409.014†	-9763.4	-7240.7	-212.79	ug/L	-212.79	ppb	12:14:48
1	V 292.402†	34619.4	35548.9	214.86	ug/L	214.86	ppb	12:14:53
1	Zn 213.857†	37188.9	36106.5	304.38	ug/L	304.38	ppb	12:14:53
1	SiO2†	1072413.3	1058663.4	67901	ug/L	67901	ppb	12:16:22
2	Sc Radial	5855.3	5855.3	100	%			12:14:15
2	Y RADIAL	7064.8	7064.8	112.4	%			12:14:15
2	Al 396.153Radial†	121302.9	121088.3	84111	ug/L	84111	ppb	12:13:55
2	Ca 317.933Radial†	15333.2	15287.9	22534	ug/L	22534	ppb	12:13:55
2	Fe 238.204 Radial†	11184.1	11155.6	104440	ug/L	104440	ppb	12:13:55
2	K 766.490 Radial†	74916.2	72419.4	12817	ug/L	12817	ppb	12:13:55
2	Mg 279.077 IEC†	458.2	456.2	16004	ug/L	16004	ppb	12:14:15
2	Na 589.592 Radial†	3102.6	4184.5	1404.3	ug/L	1404.3	ppb	12:13:55
2	Sr 421.552†	36275.8	36232.9	225.44	ug/L	225.44	ppb	12:13:55
2	Sc 361.383	910000.9	910000.9	100.97	%			12:15:19
2	Y 371.029	846559.5	846559.5	112.71	%			12:15:19
2	Ag 328.068†	-6465.8	-6696.5	3.6856	ug/L	3.6856	ppb	12:15:24
2	As 188.979†	-34.6	-10.0	42.674	ug/L	42.674	ppb	12:15:44
2	B 249.677†	1355.0	1872.6	25.263	ug/L	25.263	ppb	12:15:24
2	Ba 233.527†	132296.7	131035.0	975.54	ug/L	975.54	ppb	12:15:24
2	Be 313.107†	-8766.0	-3568.8	5.8403	ug/L	5.8403	ppb	12:15:24
2	Cd 226.502†	928.9	1115.1	1.3933	ug/L	1.3933	ppb	12:15:44
2	Co 228.616†	3152.5	3187.7	51.673	ug/L	51.673	ppb	12:15:44
2	Cr 267.716†	10508.2	10328.6	110.78	ug/L	110.78	ppb	12:15:24
2	Cu 324.752†	32747.0	25675.9	78.805	ug/L	78.805	ppb	12:15:24
2	Mn 257.610†	2762726.8	2735780.1	2928.5	ug/L	2928.5	ppb	12:15:19
2	Mo 202.031†	21.6	3.1	7.6051	ug/L	7.6051	ppb	12:15:44
2	Ni 231.604†	3256.0	3138.2	72.630	ug/L	72.630	ppb	12:15:44

2	P 214.914†	2454.6	2207.5	1205.3	ug/L	1205.3 ppb	12:15:44
2	Pb 220.353†	1155.8	1213.1	147.39	ug/L	147.39 ppb	12:15:44
2	S 181.975 Axial†	688.9	640.7	881.24	ug/L	881.24 ppb	12:15:44
2	Sb 206.836†	94.5	59.3	5.7881	ug/L	5.7881 ppb	12:15:44
2	Se 196.026†	-580.3	-546.0	28.627	ug/L	28.627 ppb	12:15:44
2	Si 251.611†	1064523.4	1053853.5	31544	ug/L	31544 ppb	12:15:19
2	Sn 189.927†	-123.3	-127.1	-17.034	ug/L	-17.034 ppb	12:15:44
2	Ti 334.940†	2297640.9	2276696.6	3634.4	ug/L	3634.4 ppb	12:15:19
2	Tl 190.801†	-198.7	-164.3	0.4403	ug/L	0.4403 ppb	12:15:44
2	U 409.014†	-9745.5	-7250.1	-213.07	ug/L	-213.07 ppb	12:15:19
2	V 292.402†	35174.3	36195.0	219.11	ug/L	219.11 ppb	12:15:24
2	Zn 213.857†	37784.3	36799.7	310.42	ug/L	310.42 ppb	12:15:24
2	SiO2†	1066701.1	1055992.5	67730	ug/L	67730 ppb	12:16:27
3	Sc Radial	5895.3	5895.3	101	%		12:14:41
3	Y RADIAL	7086.0	7086.0	112.7	%		12:14:41
3	Al 396.153Radial†	121943.3	120900.3	83980	ug/L	83980 ppb	12:14:21
3	Ca 317.933Radial†	15417.6	15267.6	22504	ug/L	22504 ppb	12:14:21
3	Fe 238.204 Radial†	11274.3	11169.2	104570	ug/L	104570 ppb	12:14:21
3	K 766.490 Radial†	75688.2	72676.4	12863	ug/L	12863 ppb	12:14:21
3	Mg 279.077 IEC†	454.3	449.2	15758	ug/L	15758 ppb	12:14:41
3	Na 589.592 Radial†	3203.0	4263.1	1430.6	ug/L	1430.6 ppb	12:14:21
3	Sr 421.552†	36484.4	36193.6	225.20	ug/L	225.20 ppb	12:14:21
3	Sc 361.383	909524.5	909524.5	100.92	%		12:15:50
3	Y 371.029	848347.4	848347.4	112.95	%		12:15:50
3	Ag 328.068†	-6385.5	-6620.2	4.0736	ug/L	4.0736 ppb	12:15:55
3	As 188.979†	-36.7	-12.2	42.180	ug/L	42.180 ppb	12:16:15
3	B 249.677†	1263.8	1783.0	23.367	ug/L	23.367 ppb	12:15:55
3	Ba 233.527†	131603.3	130416.5	970.96	ug/L	970.96 ppb	12:15:55
3	Be 313.107†	-8832.9	-3639.7	5.8921	ug/L	5.8921 ppb	12:15:55
3	Cd 226.502†	940.2	1126.8	1.5041	ug/L	1.5041 ppb	12:16:15
3	Co 228.616†	3147.4	3184.2	51.523	ug/L	51.523 ppb	12:16:15
3	Cr 267.716†	10465.6	10291.8	110.39	ug/L	110.39 ppb	12:15:55
3	Cu 324.752†	32356.3	25305.8	77.752	ug/L	77.752 ppb	12:15:55
3	Mn 257.610†	2788651.3	2762902.4	2957.4	ug/L	2957.4 ppb	12:15:50
3	Mo 202.031†	43.7	24.9	9.0013	ug/L	9.0013 ppb	12:16:15
3	Ni 231.604†	3245.0	3128.9	72.416	ug/L	72.416 ppb	12:16:15
3	P 214.914†	2442.9	2197.2	1199.4	ug/L	1199.4 ppb	12:16:15
3	Pb 220.353†	1139.4	1197.5	145.58	ug/L	145.58 ppb	12:16:15
3	S 181.975 Axial†	682.7	634.9	873.11	ug/L	873.11 ppb	12:16:15
3	Sb 206.836†	86.4	51.3	3.2173	ug/L	3.2173 ppb	12:16:15
3	Se 196.026†	-587.6	-553.5	24.669	ug/L	24.669 ppb	12:16:15
3	Si 251.611†	1075262.9	1065047.6	31879	ug/L	31879 ppb	12:15:50
3	Sn 189.927†	-115.5	-119.4	-15.768	ug/L	-15.768 ppb	12:16:15
3	Ti 334.940†	2321422.4	2301454.0	3673.9	ug/L	3673.9 ppb	12:15:50
3	Tl 190.801†	-201.1	-166.8	0.2019	ug/L	0.2019 ppb	12:16:15
3	U 409.014†	-9969.1	-7476.8	-219.33	ug/L	-219.33 ppb	12:15:50
3	V 292.402†	35020.6	36060.9	218.17	ug/L	218.17 ppb	12:15:55
3	Zn 213.857†	37598.3	36635.0	308.98	ug/L	308.98 ppb	12:15:55
3	SiO2†	1084990.8	1074669.4	68928	ug/L	68928 ppb	12:16:33

Mean Data: 241536002|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910697.4	101.05	%	0.182				0.18%
Sc Radial	5851.2	100	%	0.8				0.79%
Y 371.029	847977.6	112.90	%	0.170				0.15%
Y RADIAL	7052.3	112.2	%	0.66				0.59%
Ag 328.068†	-6616.7	4.0385	ug/L	0.33672	4.0385	ppb	0.33672	8.34%
Al 396.153Radial†	120705.1	83844	ug/L	354.0	83844	ppb	354.0	0.42%
As 188.979†	-12.1	42.000	ug/L	0.7798	42.000	ppb	0.7798	1.86%
B 249.677†	1834.2	24.458	ug/L	0.9802	24.458	ppb	0.9802	4.01%
Ba 233.527†	130025.3	968.05	ug/L	9.289	968.05	ppb	9.289	0.96%
Be 313.107†	-3464.2	5.9144	ug/L	0.08740	5.9144	ppb	0.08740	1.48%
Ca 317.933Radial†	15281.4	22524	ug/L	17.6	22524	ppb	17.6	0.08%
Cd 226.502†	1111.1	1.3524	ug/L	0.17578	1.3524	ppb	0.17578	13.00%
Co 228.616†	3184.1	51.565	ug/L	0.0943	51.565	ppb	0.0943	0.18%
Cr 267.716†	10239.6	109.84	ug/L	1.305	109.84	ppb	1.305	1.19%
Cu 324.752†	25282.3	77.678	ug/L	1.1658	77.678	ppb	1.1658	1.50%
Fe 238.204 Radial†	11154.5	104430	ug/L	142.1	104430	ppb	142.1	0.14%
K 766.490 Radial†	72399.8	12814	ug/L	50.8	12814	ppb	50.8	0.40%

Mg 279.077 IEC†	455.8	15991	ug/L	227.3	15991	ppb	227.3	1.42%
Mn 257.610†	2747793.9	2941.3	ug/L	14.76	2941.3	ppb	14.76	0.50%
Mo 202.031†	10.9	8.1000	ug/L	0.78180	8.1000	ppb	0.78180	9.65%
Na 589.592 Radial†	4228.4	1419.0	ug/L	13.45	1419.0	ppb	13.45	0.95%
Ni 231.604†	3132.0	72.488	ug/L	0.1227	72.488	ppb	0.1227	0.17%
P 214.914†	2197.4	1199.6	ug/L	5.59	1199.6	ppb	5.59	0.47%
Pb 220.353†	1202.2	146.09	ug/L	1.134	146.09	ppb	1.134	0.78%
S 181.975 Axial†	640.7	881.23	ug/L	8.117	881.23	ppb	8.117	0.92%
Sb 206.836†	52.4	3.5900	ug/L	2.03747	3.5900	ppb	2.03747	56.75%
Se 196.026†	-545.0	29.099	ug/L	4.6831	29.099	ppb	4.6831	16.09%
Si 251.611†	1059180.6	31703	ug/L	168.1	31703	ppb	168.1	0.53%
Sn 189.927†	-123.4	-16.427	ug/L	0.6344	-16.427	ppb	0.6344	3.86%
Sr 421.552†	36084.4	224.52	ug/L	1.395	224.52	ppb	1.395	0.62%
Ti 334.940†	2288159.6	3652.7	ug/L	19.92	3652.7	ppb	19.92	0.55%
Tl 190.801†	-168.0	-0.3961	ug/L	1.24790	-0.3961	ppb	1.24790	315.08%
U 409.014†	-7322.5	-215.06	ug/L	3.698	-215.06	ppb	3.698	1.72%
V 292.402†	35935.0	217.38	ug/L	2.233	217.38	ppb	2.233	1.03%
Zn 213.857†	36513.7	307.93	ug/L	3.157	307.93	ppb	3.157	1.03%
SiO2†	1063108.5	68186	ug/L	647.9	68186	ppb	647.9	0.95%

Sequence No.: 20
Sample ID: 241536003|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 12/8/2009 12:18:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536003|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5836.9	5836.9	99.9	%			12:20:57
1	Y RADIAL	7220.6	7220.6	114.8	%			12:20:57
1	Al 396.153Radial†	151567.5	151770.5	105420	ug/L	105420	ppb	12:20:37
1	Ca 317.933Radial†	21119.4	21129.2	31143	ug/L	31143	ppb	12:20:37
1	Fe 238.204 Radial†	12923.4	12932.2	121070	ug/L	121070	ppb	12:20:37
1	K 766.490 Radial†	87856.2	85610.3	15058	ug/L	15058	ppb	12:20:37
1	Mg 279.077 IEC†	633.6	633.2	22236	ug/L	22236	ppb	12:20:57
1	Na 589.592 Radial†	4521.5	5614.9	1884.3	ug/L	1884.3	ppb	12:20:37
1	Sr 421.552†	51716.7	51806.4	322.35	ug/L	322.35	ppb	12:20:37
1	Sc 361.383	929433.4	929433.4	103.13	%			12:22:00
1	Y 371.029	881654.0	881654.0	117.38	%			12:22:00
1	Ag 328.068†	-7490.9	-7556.6	5.3346	ug/L	5.3346	ppb	12:22:06
1	As 188.979†	-10.9	13.6	45.868	ug/L	45.868	ppb	12:22:26
1	B 249.677†	1319.4	1810.1	21.518	ug/L	21.518	ppb	12:22:06
1	Ba 233.527†	265678.7	257635.0	1914.5	ug/L	1914.5	ppb	12:22:06
1	Be 313.107†	13296.1	18006.1	11.665	ug/L	11.665	ppb	12:22:06
1	Cd 226.502†	1009.6	1174.1	0.4231	ug/L	0.4231	ppb	12:22:26
1	Co 228.616†	8090.7	7910.9	143.71	ug/L	143.71	ppb	12:22:26
1	Cr 267.716†	8326.4	7995.4	86.729	ug/L	86.729	ppb	12:22:06
1	Cu 324.752†	39616.4	31659.0	96.775	ug/L	96.775	ppb	12:22:06
1	Mn 257.610†	10664484.2	10340843.5	11043	ug/L	11043	ppb	12:21:55
1	Mo 202.031†	35.2	15.8	9.5931	ug/L	9.5931	ppb	12:22:26
1	Ni 231.604†	8047.8	7717.3	178.61	ug/L	178.61	ppb	12:22:26
1	P 214.914†	1295.4	1032.7	518.78	ug/L	518.78	ppb	12:22:26
1	Pb 220.353†	1980.8	1989.2	238.52	ug/L	238.52	ppb	12:22:26
1	S 181.975 Axial†	327.8	276.3	366.48	ug/L	366.48	ppb	12:22:26
1	Sb 206.836†	59.6	23.5	-2.4341	ug/L	-2.4341	ppb	12:22:26
1	Se 196.026†	-700.2	-650.2	24.629	ug/L	24.629	ppb	12:22:26
1	Si 251.611†	1120113.3	1085715.3	32497	ug/L	32497	ppb	12:22:00
1	Sn 189.927†	-150.5	-150.9	-19.803	ug/L	-19.803	ppb	12:22:26
1	Ti 334.940†	1676287.5	1626597.6	2597.6	ug/L	2597.6	ppb	12:22:00
1	Tl 190.801†	-338.5	-295.7	3.2757	ug/L	3.2757	ppb	12:22:26
1	U 409.014†	-23561.9	-20446.0	-578.62	ug/L	-578.62	ppb	12:22:00
1	V 292.402†	38611.7	38799.8	234.38	ug/L	234.38	ppb	12:22:06
1	Zn 213.857†	28909.5	27411.5	225.90	ug/L	225.90	ppb	12:22:06
1	SiO2†	1118765.4	1084390.5	69550	ug/L	69550	ppb	12:23:46
2	Sc Radial	5831.7	5831.7	99.8	%			12:21:22
2	Y RADIAL	7212.1	7212.1	114.7	%			12:21:22
2	Al 396.153Radial†	153736.1	154077.9	107030	ug/L	107030	ppb	12:21:02
2	Ca 317.933Radial†	21472.1	21501.4	31692	ug/L	31692	ppb	12:21:02
2	Fe 238.204 Radial†	13086.3	13106.8	122710	ug/L	122710	ppb	12:21:02
2	K 766.490 Radial†	88997.5	86831.9	15275	ug/L	15275	ppb	12:21:02
2	Mg 279.077 IEC†	633.0	633.2	22233	ug/L	22233	ppb	12:21:22
2	Na 589.592 Radial†	4517.1	5614.4	1884.1	ug/L	1884.1	ppb	12:21:02
2	Sr 421.552†	52200.7	52337.2	325.65	ug/L	325.65	ppb	12:21:02
2	Sc 361.383	928846.9	928846.9	103.06	%			12:22:37
2	Y 371.029	883625.3	883625.3	117.65	%			12:22:37
2	Ag 328.068†	-7456.0	-7527.3	5.9850	ug/L	5.9850	ppb	12:22:43
2	As 188.979†	-15.1	9.6	44.507	ug/L	44.507	ppb	12:23:03
2	B 249.677†	1294.2	1786.5	20.805	ug/L	20.805	ppb	12:22:43
2	Ba 233.527†	267244.2	259316.7	1927.0	ug/L	1927.0	ppb	12:22:43
2	Be 313.107†	13309.4	18027.1	11.669	ug/L	11.669	ppb	12:22:43
2	Cd 226.502†	998.8	1164.3	0.1559	ug/L	0.1559	ppb	12:23:03
2	Co 228.616†	8093.8	7918.9	143.84	ug/L	143.84	ppb	12:23:03
2	Cr 267.716†	8299.8	7974.7	86.543	ug/L	86.543	ppb	12:22:43
2	Cu 324.752†	40149.2	32200.2	98.407	ug/L	98.407	ppb	12:22:43
2	Mn 257.610†	10670372.4	10353087.1	11056	ug/L	11056	ppb	12:22:32
2	Mo 202.031†	30.4	11.1	9.4114	ug/L	9.4114	ppb	12:23:03
2	Ni 231.604†	8085.9	7759.2	179.58	ug/L	179.58	ppb	12:23:03

2	P 214.914†	1282.1	1020.5	510.74 ug/L	510.74 ppb	12:23:03
2	Pb 220.353†	1983.1	1992.7	239.14 ug/L	239.14 ppb	12:23:03
2	S 181.975 Axial†	339.8	288.2	382.76 ug/L	382.76 ppb	12:23:03
2	Sb 206.836†	47.2	11.5	-6.2344 ug/L	-6.2344 ppb	12:23:03
2	Se 196.026†	-698.0	-648.5	31.071 ug/L	31.071 ppb	12:23:03
2	Si 251.611†	1119586.1	1085889.7	32502 ug/L	32502 ppb	12:22:37
2	Sn 189.927†	-150.5	-151.0	-19.730 ug/L	-19.730 ppb	12:23:03
2	Ti 334.940†	1673793.6	1625204.2	2595.4 ug/L	2595.4 ppb	12:22:37
2	Tl 190.801†	-348.5	-305.7	0.5796 ug/L	0.5796 ppb	12:23:03
2	U 409.014†	-23312.3	-20218.2	-572.55 ug/L	-572.55 ppb	12:22:37
2	V 292.402†	39018.5	39218.2	236.91 ug/L	236.91 ppb	12:22:43
2	Zn 213.857†	29112.7	27626.4	227.62 ug/L	227.62 ppb	12:22:43
2	SiO2†	1120394.6	1086656.4	69695 ug/L	69695 ppb	12:23:52
3	Sc Radial	5915.3	5915.3	101 %		12:21:47
3	Y RADIAL	7303.9	7303.9	116.2 %		12:21:47
3	Al 396.153Radial†	150750.8	148951.7	103470 ug/L	103470 ppb	12:21:27
3	Ca 317.933Radial†	20990.3	20721.4	30542 ug/L	30542 ppb	12:21:27
3	Fe 238.204 Radial†	12844.8	12683.0	118740 ug/L	118740 ppb	12:21:27
3	K 766.490 Radial†	87399.5	83993.0	14771 ug/L	14771 ppb	12:21:27
3	Mg 279.077 IEC†	636.4	627.6	22039 ug/L	22039 ppb	12:21:47
3	Na 589.592 Radial†	4431.2	5465.6	1834.2 ug/L	1834.2 ppb	12:21:27
3	Sr 421.552†	51306.3	50714.4	315.55 ug/L	315.55 ppb	12:21:27
3	Sc 361.383	932917.7	932917.7	103.51 %		12:23:15
3	Y 371.029	884923.9	884923.9	117.82 %		12:23:15
3	Ag 328.068†	-7604.5	-7639.2	4.2283 ug/L	4.2283 ppb	12:23:20
3	As 188.979†	-26.7	-1.6	39.532 ug/L	39.532 ppb	12:23:40
3	B 249.677†	1297.9	1784.5	21.291 ug/L	21.291 ppb	12:23:20
3	Ba 233.527†	268373.5	259276.1	1926.5 ug/L	1926.5 ppb	12:23:20
3	Be 313.107†	13464.6	18120.8	11.711 ug/L	11.711 ppb	12:23:20
3	Cd 226.502†	1001.5	1162.6	0.5351 ug/L	0.5351 ppb	12:23:40
3	Co 228.616†	8120.3	7910.2	143.73 ug/L	143.73 ppb	12:23:40
3	Cr 267.716†	8418.2	8053.9	87.302 ug/L	87.302 ppb	12:23:20
3	Cu 324.752†	40149.0	32030.0	97.718 ug/L	97.718 ppb	12:23:20
3	Mn 257.610†	10701402.6	10337886.3	11039 ug/L	11039 ppb	12:23:09
3	Mo 202.031†	32.6	13.1	9.2579 ug/L	9.2579 ppb	12:23:40
3	Ni 231.604†	8099.6	7738.2	179.09 ug/L	179.09 ppb	12:23:40
3	P 214.914†	1279.7	1012.8	508.36 ug/L	508.36 ppb	12:23:40
3	Pb 220.353†	2033.7	2033.2	243.25 ug/L	243.25 ppb	12:23:40
3	S 181.975 Axial†	338.4	285.4	379.55 ug/L	379.55 ppb	12:23:40
3	Sb 206.836†	47.9	12.0	-6.0757 ug/L	-6.0757 ppb	12:23:40
3	Se 196.026†	-690.0	-637.7	24.127 ug/L	24.127 ppb	12:23:40
3	Si 251.611†	1126465.9	1087795.7	32559 ug/L	32559 ppb	12:23:15
3	Sn 189.927†	-151.7	-151.6	-20.003 ug/L	-20.003 ppb	12:23:40
3	Ti 334.940†	1683816.9	1627800.6	2599.5 ug/L	2599.5 ppb	12:23:15
3	Tl 190.801†	-351.3	-306.9	0.0899 ug/L	0.0899 ppb	12:23:40
3	U 409.014†	-23493.1	-20294.2	-574.15 ug/L	-574.15 ppb	12:23:15
3	V 292.402†	38961.8	38998.2	236.05 ug/L	236.05 ppb	12:23:20
3	Zn 213.857†	29206.3	27593.6	227.72 ug/L	227.72 ppb	12:23:20
3	SiO2†	1117865.2	1079469.0	69234 ug/L	69234 ppb	12:23:58

Mean Data: 241536003|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	930399.3	103.23	%	0.244				0.24%
Sc Radial	5861.3	100	%	0.8				0.80%
Y 371.029	883401.1	117.62	%	0.219				0.19%
Y RADIAL	7245.5	115.2	%	0.81				0.70%
Ag 328.068†	-7574.3	5.1826	ug/L	0.88813	5.1826	ppb	0.88813	17.14%
Al 396.153Radial†	151600.0	105300	ug/L	1783.3	105300	ppb	1783.3	1.69%
As 188.979†	7.2	43.302	ug/L	3.3355	43.302	ppb	3.3355	7.70%
B 249.677†	1793.7	21.205	ug/L	0.3641	21.205	ppb	0.3641	1.72%
Ba 233.527†	258742.6	1922.7	ug/L	7.11	1922.7	ppb	7.11	0.37%
Be 313.107†	18051.3	11.682	ug/L	0.0254	11.682	ppb	0.0254	0.22%
Ca 317.933Radial†	21117.3	31126	ug/L	575.1	31126	ppb	575.1	1.85%
Cd 226.502†	1167.0	0.3714	ug/L	0.19483	0.3714	ppb	0.19483	52.46%
Co 228.616†	7913.3	143.76	ug/L	0.075	143.76	ppb	0.075	0.05%
Cr 267.716†	8008.0	86.858	ug/L	0.3955	86.858	ppb	0.3955	0.46%
Cu 324.752†	31963.1	97.633	ug/L	0.8194	97.633	ppb	0.8194	0.84%
Fe 238.204 Radial†	12907.3	120840	ug/L	1994.3	120840	ppb	1994.3	1.65%
K 766.490 Radial†	85478.4	15035	ug/L	252.7	15035	ppb	252.7	1.68%

Mg 279.077 IEC†	631.3	22170	ug/L	113.0	22170	ppb	113.0	0.51%
Mn 257.610†	10343939.0	11046	ug/L	8.8	11046	ppb	8.8	0.08%
Mo 202.031†	13.4	9.4208	ug/L	0.16777	9.4208	ppb	0.16777	1.78%
Na 589.592 Radial†	5565.0	1867.5	ug/L	28.87	1867.5	ppb	28.87	1.55%
Ni 231.604†	7738.2	179.09	ug/L	0.485	179.09	ppb	0.485	0.27%
P 214.914†	1022.0	512.63	ug/L	5.461	512.63	ppb	5.461	1.07%
Pb 220.353†	2005.0	240.30	ug/L	2.567	240.30	ppb	2.567	1.07%
S 181.975 Axial†	283.3	376.26	ug/L	8.621	376.26	ppb	8.621	2.29%
Sb 206.836†	15.7	-4.9148	ug/L	2.14979	-4.9148	ppb	2.14979	43.74%
Se 196.026†	-645.5	26.609	ug/L	3.8722	26.609	ppb	3.8722	14.55%
Si 251.611†	1086466.9	32519	ug/L	34.6	32519	ppb	34.6	0.11%
Sn 189.927†	-151.2	-19.846	ug/L	0.1415	-19.846	ppb	0.1415	0.71%
Sr 421.552†	51619.3	321.18	ug/L	5.148	321.18	ppb	5.148	1.60%
Ti 334.940†	1626534.1	2597.5	ug/L	2.04	2597.5	ppb	2.04	0.08%
Tl 190.801†	-302.8	1.3151	ug/L	1.71555	1.3151	ppb	1.71555	130.45%
U 409.014†	-20319.5	-575.11	ug/L	3.147	-575.11	ppb	3.147	0.55%
V 292.402†	39005.4	235.78	ug/L	1.284	235.78	ppb	1.284	0.54%
Zn 213.857†	27543.8	227.08	ug/L	1.020	227.08	ppb	1.020	0.45%
SiO2†	1083505.3	69493	ug/L	235.5	69493	ppb	235.5	0.34%

Sequence No.: 21
Sample ID: 241536004|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 12/8/2009 12:26:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536004|925470|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5925.0	5925.0	101	%			12:28:21
1	Y RADIAL	8525.9	8525.9	135.6	%			12:28:21
1	Al 396.153Radial†	193736.4	191104.4	132750	ug/L	132750	ppb	12:28:01
1	Ca 317.933Radial†	24138.9	23792.8	35069	ug/L	35069	ppb	12:28:01
1	Fe 238.204 Radial†	19268.0	18997.4	177850	ug/L	177850	ppb	12:28:01
1	K 766.490 Radial†	100553.3	96824.9	17134	ug/L	17134	ppb	12:28:01
1	Mg 279.077 IEC†	805.9	793.7	27849	ug/L	27849	ppb	12:28:21
1	Na 589.592 Radial†	12703.4	13617.4	4569.7	ug/L	4569.7	ppb	12:28:01
1	Sr 421.552†	60011.2	59216.9	368.46	ug/L	368.46	ppb	12:28:01
1	Sc 361.383	903036.4	903036.4	100.20	%			12:29:25
1	Y 371.029	1027370.7	1027370.7	136.79	%			12:29:19
1	Ag 328.068†	-11844.0	-12113.5	2.5976	ug/L	2.5976	ppb	12:29:25
1	As 188.979†	-70.7	-46.4	54.447	ug/L	54.447	ppb	12:29:45
1	B 249.677†	1841.2	2368.3	25.897	ug/L	25.897	ppb	12:29:25
1	Ba 233.527†	210214.7	209810.6	1562.2	ug/L	1562.2	ppb	12:29:25
1	Be 313.107†	12902.0	17989.6	17.166	ug/L	17.166	ppb	12:29:25
1	Cd 226.502†	1690.2	1882.0	2.1989	ug/L	2.1989	ppb	12:29:45
1	Co 228.616†	3580.7	3639.1	55.697	ug/L	55.697	ppb	12:29:45
1	Cr 267.716†	9401.4	9304.3	101.45	ug/L	101.45	ppb	12:29:45
1	Cu 324.752†	34140.9	27317.2	87.247	ug/L	87.247	ppb	12:29:25
1	Mn 257.610†	4080850.2	4072419.1	4361.4	ug/L	4361.4	ppb	12:29:19
1	Mo 202.031†	-43.7	-61.9	8.6809	ug/L	8.6809	ppb	12:29:45
1	Ni 231.604†	5775.2	5677.3	131.42	ug/L	131.42	ppb	12:29:45
1	P 214.914†	1945.4	1718.1	879.60	ug/L	879.60	ppb	12:29:45
1	Pb 220.353†	983.6	1050.1	133.84	ug/L	133.84	ppb	12:29:45
1	S 181.975 Axial†	521.3	478.7	644.70	ug/L	644.70	ppb	12:29:45
1	Sb 206.836†	86.8	52.4	-1.1000	ug/L	-1.1000	ppb	12:29:45
1	Se 196.026†	-1042.1	-1011.3	-0.3029	ug/L	-0.3029	ppb	12:29:45
1	Si 251.611†	1163170.4	1160438.0	34733	ug/L	34733	ppb	12:29:19
1	Sn 189.927†	-119.1	-123.9	-14.191	ug/L	-14.191	ppb	12:29:45
1	Ti 334.940†	3387669.8	3382136.3	5399.2	ug/L	5399.2	ppb	12:29:19
1	Tl 190.801†	-269.4	-236.3	3.3650	ug/L	3.3650	ppb	12:29:45
1	U 409.014†	-15757.3	-13324.6	-389.62	ug/L	-389.62	ppb	12:29:25
1	V 292.402†	39736.3	41016.7	237.74	ug/L	237.74	ppb	12:29:25
1	Zn 213.857†	55719.4	54988.2	461.53	ug/L	461.53	ppb	12:29:25
1	SiO2†	1160795.5	1158049.9	74274	ug/L	74274	ppb	12:30:55
2	Sc Radial	5980.4	5980.4	102	%			12:28:46
2	Y RADIAL	8603.9	8603.9	136.8	%			12:28:46
2	Al 396.153Radial†	195992.4	191540.0	133050	ug/L	133050	ppb	12:28:26
2	Ca 317.933Radial†	24436.7	23863.5	35173	ug/L	35173	ppb	12:28:26
2	Fe 238.204 Radial†	19495.7	19044.0	178290	ug/L	178290	ppb	12:28:26
2	K 766.490 Radial†	101553.9	96884.6	17144	ug/L	17144	ppb	12:28:26
2	Mg 279.077 IEC†	806.2	786.6	27598	ug/L	27598	ppb	12:28:46
2	Na 589.592 Radial†	12937.5	13730.2	4607.6	ug/L	4607.6	ppb	12:28:26
2	Sr 421.552†	60800.1	59439.9	369.85	ug/L	369.85	ppb	12:28:26
2	Sc 361.383	894524.2	894524.2	99.252	%			12:29:57
2	Y 371.029	1018921.8	1018921.8	135.66	%			12:29:51
2	Ag 328.068†	-11710.8	-12091.8	2.8323	ug/L	2.8323	ppb	12:29:57
2	As 188.979†	-90.9	-67.5	46.279	ug/L	46.279	ppb	12:30:17
2	B 249.677†	1836.3	2380.8	26.100	ug/L	26.100	ppb	12:29:57
2	Ba 233.527†	208817.3	210399.1	1566.5	ug/L	1566.5	ppb	12:29:57
2	Be 313.107†	12704.7	17913.5	17.161	ug/L	17.161	ppb	12:29:57
2	Cd 226.502†	1717.5	1925.5	2.6168	ug/L	2.6168	ppb	12:30:17
2	Co 228.616†	3579.5	3671.9	56.290	ug/L	56.290	ppb	12:30:17
2	Cr 267.716†	9474.1	9466.8	103.16	ug/L	103.16	ppb	12:30:17
2	Cu 324.752†	33740.7	27238.3	87.043	ug/L	87.043	ppb	12:29:57
2	Mn 257.610†	4057195.1	4087342.7	4377.4	ug/L	4377.4	ppb	12:29:51
2	Mo 202.031†	-42.6	-61.2	8.7572	ug/L	8.7572	ppb	12:30:17
2	Ni 231.604†	5806.0	5763.2	133.41	ug/L	133.41	ppb	12:30:17

2	P 214.914†	1958.8	1750.1	897.79 ug/L	897.79 ppb	12:30:17
2	Pb 220.353†	1010.2	1086.2	137.94 ug/L	137.94 ppb	12:30:17
2	S 181.975 Axial†	514.7	477.0	642.19 ug/L	642.19 ppb	12:30:17
2	Sb 206.836†	80.5	46.8	-3.0032 ug/L	-3.0032 ppb	12:30:17
2	Se 196.026†	-1040.0	-1019.0	-3.3785 ug/L	-3.3785 ppb	12:30:17
2	Si 251.611†	1155607.5	1163865.0	34836 ug/L	34836 ppb	12:29:51
2	Sn 189.927†	-141.2	-147.3	-18.000 ug/L	-18.000 ppb	12:30:17
2	Ti 334.940†	3362949.7	3389403.5	5410.8 ug/L	5410.8 ppb	12:29:51
2	Tl 190.801†	-264.1	-233.5	4.3334 ug/L	4.3334 ppb	12:30:17
2	U 409.014†	-15692.5	-13408.9	-392.00 ug/L	-392.00 ppb	12:29:57
2	V 292.402†	39258.2	40912.3	236.96 ug/L	236.96 ppb	12:29:57
2	Zn 213.857†	55250.0	55044.4	461.97 ug/L	461.97 ppb	12:29:57
2	SiO2†	1163698.0	1171998.7	75168 ug/L	75168 ppb	12:31:01
3	Sc Radial	5943.8	5943.8	102 %		12:29:11
3	Y RADIAL	8551.2	8551.2	136.0 %		12:29:11
3	Al 396.153Radial†	194325.8	191081.7	132730 ug/L	132730 ppb	12:28:51
3	Ca 317.933Radial†	24221.1	23798.6	35078 ug/L	35078 ppb	12:28:51
3	Fe 238.204 Radial†	19314.4	18983.2	177720 ug/L	177720 ppb	12:28:51
3	K 766.490 Radial†	100778.7	96734.0	17118 ug/L	17118 ppb	12:28:51
3	Mg 279.077 IEC†	803.2	788.5	27666 ug/L	27666 ppb	12:29:11
3	Na 589.592 Radial†	12755.8	13629.4	4573.8 ug/L	4573.8 ppb	12:28:51
3	Sr 421.552†	60169.1	59185.7	368.27 ug/L	368.27 ppb	12:28:51
3	Sc 361.383	901519.6	901519.6	100.03 %		12:30:28
3	Y 371.029	1015023.1	1015023.1	135.14 %		12:30:23
3	Ag 328.068†	-11894.0	-12183.3	2.2359 ug/L	2.2359 ppb	12:30:28
3	As 188.979†	-82.7	-58.5	49.300 ug/L	49.300 ppb	12:30:49
3	B 249.677†	1881.8	2411.9	26.830 ug/L	26.830 ppb	12:30:28
3	Ba 233.527†	210485.6	210434.5	1566.8 ug/L	1566.8 ppb	12:30:28
3	Be 313.107†	13215.5	18324.7	17.207 ug/L	17.207 ppb	12:30:28
3	Cd 226.502†	1665.5	1860.1	1.9808 ug/L	1.9808 ppb	12:30:49
3	Co 228.616†	3558.7	3623.1	55.482 ug/L	55.482 ppb	12:30:49
3	Cr 267.716†	9392.8	9311.5	101.52 ug/L	101.52 ppb	12:30:49
3	Cu 324.752†	34068.8	27302.4	87.197 ug/L	87.197 ppb	12:30:28
3	Mn 257.610†	4046902.8	4045334.2	4332.5 ug/L	4332.5 ppb	12:30:23
3	Mo 202.031†	-58.3	-76.6	7.7391 ug/L	7.7391 ppb	12:30:49
3	Ni 231.604†	5762.8	5674.6	131.36 ug/L	131.36 ppb	12:30:49
3	P 214.914†	1956.2	1732.1	887.80 ug/L	887.80 ppb	12:30:49
3	Pb 220.353†	992.8	1060.9	135.06 ug/L	135.06 ppb	12:30:49
3	S 181.975 Axial†	513.6	471.8	635.07 ug/L	635.07 ppb	12:30:49
3	Sb 206.836†	74.4	40.1	-4.9121 ug/L	-4.9121 ppb	12:30:49
3	Se 196.026†	-1043.3	-1014.2	-2.4197 ug/L	-2.4197 ppb	12:30:49
3	Si 251.611†	1153292.9	1152516.6	34496 ug/L	34496 ppb	12:30:23
3	Sn 189.927†	-126.9	-131.9	-15.497 ug/L	-15.497 ppb	12:30:49
3	Ti 334.940†	3356158.2	3356322.4	5358.0 ug/L	5358.0 ppb	12:30:23
3	Tl 190.801†	-280.2	-247.6	-0.2879 ug/L	-0.2879 ppb	12:30:49
3	U 409.014†	-15656.6	-13250.3	-387.56 ug/L	-387.56 ppb	12:30:28
3	V 292.402†	39625.0	40972.2	237.49 ug/L	237.49 ppb	12:30:28
3	Zn 213.857†	55821.4	55183.8	463.26 ug/L	463.26 ppb	12:30:28
3	SiO2†	1162924.2	1162127.4	74535 ug/L	74535 ppb	12:31:07

Mean Data: 241536004|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899693.4	99.826	%	0.5038				0.50%
Sc Radial	5949.7	102	%	0.5				0.47%
Y 371.029	1020438.5	135.86	%	0.840				0.62%
Y RADIAL	8560.3	136.1	%	0.63				0.46%
Ag 328.068†	-12129.5	2.5553	ug/L	0.30045	2.5553	ppb	0.30045	11.76%
Al 396.153Radial†	191242.0	132840	ug/L	179.4	132840	ppb	179.4	0.14%
As 188.979†	-57.4	50.009	ug/L	4.1302	50.009	ppb	4.1302	8.26%
B 249.677†	2387.0	26.276	ug/L	0.4910	26.276	ppb	0.4910	1.87%
Ba 233.527†	210214.7	1565.2	ug/L	2.60	1565.2	ppb	2.60	0.17%
Be 313.107†	18075.9	17.178	ug/L	0.0253	17.178	ppb	0.0253	0.15%
Ca 317.933Radial†	23818.3	35107	ug/L	57.8	35107	ppb	57.8	0.16%
Cd 226.502†	1889.2	2.2655	ug/L	0.32317	2.2655	ppb	0.32317	14.26%
Co 228.616†	3644.7	55.823	ug/L	0.4183	55.823	ppb	0.4183	0.75%
Cr 267.716†	9360.9	102.04	ug/L	0.969	102.04	ppb	0.969	0.95%
Cu 324.752†	27285.9	87.162	ug/L	0.1063	87.162	ppb	0.1063	0.12%
Fe 238.204 Radial†	19008.2	177950	ug/L	297.5	177950	ppb	297.5	0.17%
K 766.490 Radial†	96814.5	17132	ug/L	13.2	17132	ppb	13.2	0.08%

Mg 279.077 IEC†	789.6	27704	ug/L	129.5	27704	ppb	129.5	0.47%
Mn 257.610†	4068365.3	4357.1	ug/L	22.74	4357.1	ppb	22.74	0.52%
Mo 202.031†	-66.6	8.3924	ug/L	0.56706	8.3924	ppb	0.56706	6.76%
Na 589.592 Radial†	13659.0	4583.7	ug/L	20.78	4583.7	ppb	20.78	0.45%
Ni 231.604†	5705.0	132.06	ug/L	1.166	132.06	ppb	1.166	0.88%
P 214.914†	1733.4	888.40	ug/L	9.111	888.40	ppb	9.111	1.03%
Pb 220.353†	1065.8	135.61	ug/L	2.110	135.61	ppb	2.110	1.56%
S 181.975 Axial†	475.8	640.65	ug/L	4.995	640.65	ppb	4.995	0.78%
Sb 206.836†	46.5	-3.0051	ug/L	1.90603	-3.0051	ppb	1.90603	63.43%
Se 196.026†	-1014.8	-2.0337	ug/L	1.57373	-2.0337	ppb	1.57373	77.38%
Si 251.611†	1158939.8	34688	ug/L	174.2	34688	ppb	174.2	0.50%
Sn 189.927†	-134.3	-15.896	ug/L	1.9355	-15.896	ppb	1.9355	12.18%
Sr 421.552†	59280.8	368.86	ug/L	0.863	368.86	ppb	0.863	0.23%
Ti 334.940†	3375954.1	5389.3	ug/L	27.75	5389.3	ppb	27.75	0.51%
Tl 190.801†	-239.2	2.4702	ug/L	2.43716	2.4702	ppb	2.43716	98.66%
U 409.014†	-13327.9	-389.73	ug/L	2.223	-389.73	ppb	2.223	0.57%
V 292.402†	40967.1	237.40	ug/L	0.398	237.40	ppb	0.398	0.17%
Zn 213.857†	55072.1	462.25	ug/L	0.897	462.25	ppb	0.897	0.19%
SiO2†	1164058.7	74659	ug/L	460.1	74659	ppb	460.1	0.62%

Sequence No.: 22
Sample ID: 241536005|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 12/8/2009 12:33:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536005|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6036.6	6036.6	103	%			12:35:30
1	Y RADIAL	7108.2	7108.2	113.0	%			12:35:30
1	Al 396.153Radial†	235750.5	228247.7	158550	ug/L	158550	ppb	12:35:10
1	Ca 317.933Radial†	20348.5	19683.6	29012	ug/L	29012	ppb	12:35:10
1	Fe 238.204 Radial†	17426.8	16863.9	157880	ug/L	157880	ppb	12:35:10
1	K 766.490 Radial†	80329.3	75414.2	13365	ug/L	13365	ppb	12:35:10
1	Mg 279.077 IEC†	710.3	686.5	24083	ug/L	24083	ppb	12:35:30
1	Na 589.592 Radial†	5313.5	6231.9	2091.3	ug/L	2091.3	ppb	12:35:10
1	Sr 421.552†	48579.8	47056.9	292.79	ug/L	292.79	ppb	12:35:10
1	Sc 361.383	928798.5	928798.5	103.06	%			12:36:29
1	Y 371.029	841214.9	841214.9	112.00	%			12:36:29
1	Ag 328.068†	-10507.9	-10489.1	3.8478	ug/L	3.8478	ppb	12:36:29
1	As 188.979†	-34.5	-9.3	53.323	ug/L	53.323	ppb	12:36:49
1	B 249.677†	1517.4	2003.1	20.890	ug/L	20.890	ppb	12:36:29
1	Ba 233.527†	125889.5	122165.9	912.04	ug/L	912.04	ppb	12:36:29
1	Be 313.107†	-2107.0	3068.4	8.7519	ug/L	8.7519	ppb	12:36:29
1	Cd 226.502†	1436.1	1588.7	1.0573	ug/L	1.0573	ppb	12:36:49
1	Co 228.616†	3645.4	3602.7	58.198	ug/L	58.198	ppb	12:36:49
1	Cr 267.716†	11767.4	11339.9	122.54	ug/L	122.54	ppb	12:36:49
1	Cu 324.752†	34177.3	26407.4	83.624	ug/L	83.624	ppb	12:36:29
1	Mn 257.610†	2384675.8	2313559.6	2483.3	ug/L	2483.3	ppb	12:36:29
1	Mo 202.031†	-120.3	-135.1	2.6169	ug/L	2.6169	ppb	12:36:49
1	Ni 231.604†	3319.7	3134.8	72.547	ug/L	72.547	ppb	12:36:49
1	P 214.914†	1717.9	1443.4	746.44	ug/L	746.44	ppb	12:36:49
1	Pb 220.353†	1204.0	1236.7	162.35	ug/L	162.35	ppb	12:36:49
1	S 181.975 Axial†	436.1	381.6	503.56	ug/L	503.56	ppb	12:36:49
1	Sb 206.836†	95.2	58.2	3.3245	ug/L	3.3245	ppb	12:36:49
1	Se 196.026†	-900.3	-844.8	37.665	ug/L	37.665	ppb	12:36:49
1	Si 251.611†	1148626.4	1114125.6	33348	ug/L	33348	ppb	12:36:29
1	Sn 189.927†	-142.4	-143.2	-18.235	ug/L	-18.235	ppb	12:36:49
1	Ti 334.940†	2506853.0	2433652.0	3885.2	ug/L	3885.2	ppb	12:36:29
1	Tl 190.801†	-195.0	-156.8	3.5838	ug/L	3.5838	ppb	12:36:49
1	U 409.014†	-9886.4	-7191.5	-218.20	ug/L	-218.20	ppb	12:36:29
1	V 292.402†	52983.3	52771.0	320.25	ug/L	320.25	ppb	12:36:29
1	Zn 213.857†	31296.4	29746.8	243.42	ug/L	243.42	ppb	12:36:49
1	SiO2†	1141919.3	1107599.5	71040	ug/L	71040	ppb	12:37:49
2	Sc Radial	5772.0	5772.0	98.8	%			12:35:55
2	Y RADIAL	6832.1	6832.1	108.7	%			12:35:55
2	Al 396.153Radial†	214196.5	216887.6	150660	ug/L	150660	ppb	12:35:35
2	Ca 317.933Radial†	18535.4	18751.0	27638	ug/L	27638	ppb	12:35:35
2	Fe 238.204 Radial†	15909.6	16101.2	150740	ug/L	150740	ppb	12:35:35
2	K 766.490 Radial†	73354.3	71917.2	12744	ug/L	12744	ppb	12:35:35
2	Mg 279.077 IEC†	714.0	721.7	25332	ug/L	25332	ppb	12:35:55
2	Na 589.592 Radial†	4742.9	5889.9	1976.6	ug/L	1976.6	ppb	12:35:35
2	Sr 421.552†	43832.6	44406.4	276.30	ug/L	276.30	ppb	12:35:35
2	Sc 361.383	922040.1	922040.1	102.31	%			12:36:56
2	Y 371.029	835105.1	835105.1	111.19	%			12:36:56
2	Ag 328.068†	-10567.0	-10621.6	0.9947	ug/L	0.9947	ppb	12:36:56
2	As 188.979†	-31.3	-6.5	53.310	ug/L	53.310	ppb	12:37:16
2	B 249.677†	1490.0	1987.1	21.501	ug/L	21.501	ppb	12:36:56
2	Ba 233.527†	125152.3	122340.8	913.06	ug/L	913.06	ppb	12:36:56
2	Be 313.107†	-2132.4	3028.6	8.7248	ug/L	8.7248	ppb	12:36:56
2	Cd 226.502†	1437.4	1600.1	1.8927	ug/L	1.8927	ppb	12:37:16
2	Co 228.616†	3647.8	3631.0	58.852	ug/L	58.852	ppb	12:37:16
2	Cr 267.716†	11810.4	11465.6	123.73	ug/L	123.73	ppb	12:37:16
2	Cu 324.752†	33718.8	26202.3	82.673	ug/L	82.673	ppb	12:36:56
2	Mn 257.610†	2370041.1	2316215.8	2485.4	ug/L	2485.4	ppb	12:36:56
2	Mo 202.031†	-110.0	-125.8	2.6990	ug/L	2.6990	ppb	12:37:16
2	Ni 231.604†	3316.2	3154.9	73.013	ug/L	73.013	ppb	12:37:16

2	P 214.914†	1706.3	1444.4	750.12 ug/L	750.12 ppb	12:37:16
2	Pb 220.353†	1176.5	1218.5	159.10 ug/L	159.10 ppb	12:37:16
2	S 181.975 Axial†	447.6	396.0	525.22 ug/L	525.22 ppb	12:37:16
2	Sb 206.836†	99.3	62.8	4.8587 ug/L	4.8587 ppb	12:37:16
2	Se 196.026†	-914.9	-865.5	1.7969 ug/L	1.7969 ppb	12:37:16
2	Si 251.611†	1139039.6	1112924.5	33312 ug/L	33312 ppb	12:36:56
2	Sn 189.927†	-155.4	-156.9	-20.725 ug/L	-20.725 ppb	12:37:16
2	Ti 334.940†	2484495.6	2429628.6	3878.7 ug/L	3878.7 ppb	12:36:56
2	Tl 190.801†	-190.4	-153.6	4.2129 ug/L	4.2129 ppb	12:37:16
2	U 409.014†	-9862.0	-7238.0	-218.58 ug/L	-218.58 ppb	12:36:56
2	V 292.402†	52510.0	52685.2	320.81 ug/L	320.81 ppb	12:36:56
2	Zn 213.857†	31450.1	30119.6	247.32 ug/L	247.32 ppb	12:37:16
2	SiO2†	1152404.0	1125969.9	72219 ug/L	72219 ppb	12:37:55
3	Sc Radial	5926.2	5926.2	101 %		12:36:20
3	Y RADIAL	7012.7	7012.7	111.5 %		12:36:20
3	Al 396.153Radial†	233263.5	230046.3	159800 ug/L	159800 ppb	12:36:00
3	Ca 317.933Radial†	20131.3	19836.3	29238 ug/L	29238 ppb	12:36:00
3	Fe 238.204 Radial†	17178.3	16933.1	158530 ug/L	158530 ppb	12:36:00
3	K 766.490 Radial†	79497.1	76042.0	13476 ug/L	13476 ppb	12:36:00
3	Mg 279.077 IEC†	701.9	691.0	24243 ug/L	24243 ppb	12:36:20
3	Na 589.592 Radial†	5270.8	6285.6	2109.3 ug/L	2109.3 ppb	12:36:00
3	Sr 421.552†	47874.5	47237.4	293.91 ug/L	293.91 ppb	12:36:00
3	Sc 361.383	932019.9	932019.9	103.41 %		12:37:23
3	Y 371.029	842626.1	842626.1	112.19 %		12:37:23
3	Ag 328.068†	-10575.2	-10518.9	3.9065 ug/L	3.9065 ppb	12:37:23
3	As 188.979†	-37.5	-12.0	52.269 ug/L	52.269 ppb	12:37:43
3	B 249.677†	1513.3	1994.0	20.615 ug/L	20.615 ppb	12:37:23
3	Ba 233.527†	125793.9	121651.3	908.24 ug/L	908.24 ppb	12:37:23
3	Be 313.107†	-1929.6	3247.1	8.7964 ug/L	8.7964 ppb	12:37:23
3	Cd 226.502†	1432.2	1580.1	0.9016 ug/L	0.9016 ppb	12:37:43
3	Co 228.616†	3635.5	3580.9	57.794 ug/L	57.794 ppb	12:37:43
3	Cr 267.716†	11735.3	11269.4	121.81 ug/L	121.81 ppb	12:37:43
3	Cu 324.752†	34043.3	26163.2	82.958 ug/L	82.958 ppb	12:37:23
3	Mn 257.610†	2386590.5	2307413.3	2476.8 ug/L	2476.8 ppb	12:37:23
3	Mo 202.031†	-127.6	-141.7	2.2408 ug/L	2.2408 ppb	12:37:43
3	Ni 231.604†	3334.2	3137.6	72.612 ug/L	72.612 ppb	12:37:43
3	P 214.914†	1700.2	1420.6	733.22 ug/L	733.22 ppb	12:37:43
3	Pb 220.353†	1184.2	1213.6	159.96 ug/L	159.96 ppb	12:37:43
3	S 181.975 Axial†	427.4	371.8	489.49 ug/L	489.49 ppb	12:37:43
3	Sb 206.836†	87.1	50.0	0.7285 ug/L	0.7285 ppb	12:37:43
3	Se 196.026†	-919.6	-860.4	30.905 ug/L	30.905 ppb	12:37:43
3	Si 251.611†	1148277.8	1109936.2	33222 ug/L	33222 ppb	12:37:23
3	Sn 189.927†	-153.8	-153.8	-19.929 ug/L	-19.929 ppb	12:37:43
3	Ti 334.940†	2508745.3	2427074.3	3874.7 ug/L	3874.7 ppb	12:37:23
3	Tl 190.801†	-207.2	-167.8	0.3998 ug/L	0.3998 ppb	12:37:43
3	U 409.014†	-9763.8	-7039.8	-214.10 ug/L	-214.10 ppb	12:37:23
3	V 292.402†	52941.4	52552.7	318.72 ug/L	318.72 ppb	12:37:23
3	Zn 213.857†	31284.8	29630.6	242.34 ug/L	242.34 ppb	12:37:43
3	SiO2†	1129080.0	1091354.2	69998 ug/L	69998 ppb	12:38:01

Mean Data: 241536005|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	927619.5	102.92	%	0.565				0.55%
Sc Radial	5911.6	101	%	2.3				2.25%
Y 371.029	839648.7	111.79	%	0.532				0.48%
Y RADIAL	6984.3	111.1	%	2.23				2.01%
Ag 328.068†	-10543.2	2.9163	ug/L	1.66443	2.9163	ppb	1.66443	57.07%
Al 396.153Radial†	225060.6	156330	ug/L	4956.1	156330	ppb	4956.1	3.17%
As 188.979†	-9.3	52.967	ug/L	0.6048	52.967	ppb	0.6048	1.14%
B 249.677†	1994.8	21.002	ug/L	0.4536	21.002	ppb	0.4536	2.16%
Ba 233.527†	122052.7	911.11	ug/L	2.540	911.11	ppb	2.540	0.28%
Be 313.107†	3114.7	8.7577	ug/L	0.03615	8.7577	ppb	0.03615	0.41%
Ca 317.933Radial†	19423.6	28629	ug/L	866.0	28629	ppb	866.0	3.02%
Cd 226.502†	1589.6	1.2838	ug/L	0.53298	1.2838	ppb	0.53298	41.51%
Co 228.616†	3604.9	58.281	ug/L	0.5340	58.281	ppb	0.5340	0.92%
Cr 267.716†	11358.3	122.69	ug/L	0.971	122.69	ppb	0.971	0.79%
Cu 324.752†	26257.6	83.085	ug/L	0.4880	83.085	ppb	0.4880	0.59%
Fe 238.204 Radial†	16632.7	155710	ug/L	4321.3	155710	ppb	4321.3	2.78%
K 766.490 Radial†	74457.8	13195	ug/L	394.9	13195	ppb	394.9	2.99%

Mg 279.077 IEC†	699.8	24553	ug/L	679.8	24553	ppb	679.8	2.77%
Mn 257.610†	2312396.2	2481.8	ug/L	4.48	2481.8	ppb	4.48	0.18%
Mo 202.031†	-134.2	2.5189	ug/L	0.24428	2.5189	ppb	0.24428	9.70%
Na 589.592 Radial†	6135.8	2059.1	ug/L	72.01	2059.1	ppb	72.01	3.50%
Ni 231.604†	3142.4	72.724	ug/L	0.2524	72.724	ppb	0.2524	0.35%
P 214.914†	1436.1	743.26	ug/L	8.886	743.26	ppb	8.886	1.20%
Pb 220.353†	1222.9	160.47	ug/L	1.682	160.47	ppb	1.682	1.05%
S 181.975 Axial†	383.1	506.09	ug/L	17.995	506.09	ppb	17.995	3.56%
Sb 206.836†	57.0	2.9706	ug/L	2.08775	2.9706	ppb	2.08775	70.28%
Se 196.026†	-856.9	23.456	ug/L	19.0590	23.456	ppb	19.0590	81.26%
Si 251.611†	1112328.8	33294	ug/L	64.6	33294	ppb	64.6	0.19%
Sn 189.927†	-151.3	-19.630	ug/L	1.2719	-19.630	ppb	1.2719	6.48%
Sr 421.552†	46233.6	287.67	ug/L	9.863	287.67	ppb	9.863	3.43%
Ti 334.940†	2430118.3	3879.5	ug/L	5.29	3879.5	ppb	5.29	0.14%
Tl 190.801†	-159.4	2.7321	ug/L	2.04425	2.7321	ppb	2.04425	74.82%
U 409.014†	-7156.4	-216.96	ug/L	2.485	-216.96	ppb	2.485	1.15%
V 292.402†	52669.6	319.92	ug/L	1.078	319.92	ppb	1.078	0.34%
Zn 213.857†	29832.3	244.36	ug/L	2.617	244.36	ppb	2.617	1.07%
SiO2†	1108307.9	71086	ug/L	1111.2	71086	ppb	1111.2	1.56%

Sequence No.: 23
Sample ID: 241536006|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 12/8/2009 12:40:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536006|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5841.4	5841.4	100.0	%			12:42:24
1	Y RADIAL	6913.2	6913.2	109.9	%			12:42:24
1	Al 396.153Radial†	110045.8	110114.4	76488	ug/L	76488	ppb	12:42:04
1	Ca 317.933Radial†	11378.1	11367.5	16755	ug/L	16755	ppb	12:42:04
1	Fe 238.204 Radial†	11680.2	11678.5	109330	ug/L	109330	ppb	12:42:04
1	K 766.490 Radial†	61108.3	58783.4	10397	ug/L	10397	ppb	12:42:04
1	Mg 279.077 IEC†	422.3	421.3	14770	ug/L	14770	ppb	12:42:24
1	Na 589.592 Radial†	2333.5	3422.5	1148.5	ug/L	1148.5	ppb	12:42:04
1	Sr 421.552†	31038.7	31079.6	193.40	ug/L	193.40	ppb	12:42:04
1	Sc 361.383	926488.1	926488.1	102.80	%			12:43:21
1	Y 371.029	845956.0	845956.0	112.63	%			12:43:21
1	Ag 328.068†	-6854.2	-6960.3	4.1795	ug/L	4.1795	ppb	12:43:27
1	As 188.979†	-52.1	-26.5	39.997	ug/L	39.997	ppb	12:43:47
1	B 249.677†	1039.7	1542.1	17.689	ug/L	17.689	ppb	12:43:27
1	Ba 233.527†	111214.9	108195.5	806.49	ug/L	806.49	ppb	12:43:27
1	Be 313.107†	-11659.6	-6229.1	5.5867	ug/L	5.5867	ppb	12:43:27
1	Cd 226.502†	916.1	1086.3	0.5947	ug/L	0.5947	ppb	12:43:47
1	Co 228.616†	3036.0	3018.8	47.541	ug/L	47.541	ppb	12:43:47
1	Cr 267.716†	10495.4	10131.0	108.81	ug/L	108.81	ppb	12:43:27
1	Cu 324.752†	26857.7	19369.8	61.008	ug/L	61.008	ppb	12:43:27
1	Mn 257.610†	2954837.0	2873968.3	3076.4	ug/L	3076.4	ppb	12:43:21
1	Mo 202.031†	-17.6	-35.4	5.5036	ug/L	5.5036	ppb	12:43:47
1	Ni 231.604†	2955.4	2788.4	64.533	ug/L	64.533	ppb	12:43:47
1	P 214.914†	1917.0	1641.3	875.21	ug/L	875.21	ppb	12:43:47
1	Pb 220.353†	1075.8	1115.0	134.18	ug/L	134.18	ppb	12:43:47
1	S 181.975 Axial†	456.8	402.8	549.37	ug/L	549.37	ppb	12:43:47
1	Sb 206.836†	87.5	50.9	2.4923	ug/L	2.4923	ppb	12:43:47
1	Se 196.026†	-601.0	-555.8	36.971	ug/L	36.971	ppb	12:43:47
1	Si 251.611†	981648.5	954473.1	28569	ug/L	28569	ppb	12:43:21
1	Sn 189.927†	-103.7	-105.9	-14.092	ug/L	-14.092	ppb	12:43:47
1	Ti 334.940†	2573964.5	2505002.4	3998.4	ug/L	3998.4	ppb	12:43:21
1	Tl 190.801†	-207.5	-169.3	2.4563	ug/L	2.4563	ppb	12:43:47
1	U 409.014†	-9329.1	-6673.3	-197.79	ug/L	-197.79	ppb	12:43:21
1	V 292.402†	38197.9	38516.3	233.27	ug/L	233.27	ppb	12:43:27
1	Zn 213.857†	25068.4	23764.0	196.19	ug/L	196.19	ppb	12:43:27
1	SiO2†	976634.7	949578.0	60906	ug/L	60906	ppb	12:44:55
2	Sc Radial	5827.2	5827.2	99.7	%			12:42:49
2	Y RADIAL	6913.3	6913.3	109.9	%			12:42:49
2	Al 396.153Radial†	110954.7	111293.4	77307	ug/L	77307	ppb	12:42:29
2	Ca 317.933Radial†	11446.2	11463.5	16896	ug/L	16896	ppb	12:42:29
2	Fe 238.204 Radial†	11692.6	11719.4	109720	ug/L	109720	ppb	12:42:29
2	K 766.490 Radial†	61284.6	59108.6	10455	ug/L	10455	ppb	12:42:29
2	Mg 279.077 IEC†	420.9	420.9	14755	ug/L	14755	ppb	12:42:49
2	Na 589.592 Radial†	2289.9	3384.4	1135.7	ug/L	1135.7	ppb	12:42:29
2	Sr 421.552†	31178.7	31295.5	194.74	ug/L	194.74	ppb	12:42:29
2	Sc 361.383	923505.7	923505.7	102.47	%			12:43:52
2	Y 371.029	842558.3	842558.3	112.18	%			12:43:52
2	Ag 328.068†	-6940.6	-7066.2	3.8301	ug/L	3.8301	ppb	12:43:58
2	As 188.979†	-43.8	-18.5	43.165	ug/L	43.165	ppb	12:44:18
2	B 249.677†	1105.3	1609.4	19.048	ug/L	19.048	ppb	12:43:58
2	Ba 233.527†	112302.7	109606.5	816.96	ug/L	816.96	ppb	12:43:58
2	Be 313.107†	-11640.0	-6246.7	5.5732	ug/L	5.5732	ppb	12:43:58
2	Cd 226.502†	933.3	1106.0	0.7642	ug/L	0.7642	ppb	12:44:18
2	Co 228.616†	3073.4	3064.8	48.423	ug/L	48.423	ppb	12:44:18
2	Cr 267.716†	10513.2	10181.3	109.35	ug/L	109.35	ppb	12:43:58
2	Cu 324.752†	26974.4	19568.0	61.595	ug/L	61.595	ppb	12:43:58
2	Mn 257.610†	2944510.6	2873173.3	3075.6	ug/L	3075.6	ppb	12:43:52
2	Mo 202.031†	-13.1	-31.1	5.8045	ug/L	5.8045	ppb	12:44:18
2	Ni 231.604†	2945.1	2787.6	64.515	ug/L	64.515	ppb	12:44:18

2	P 214.914†	1910.1	1640.6	874.66 ug/L	874.66 ppb	12:44:18
2	Pb 220.353†	1110.7	1152.4	138.56 ug/L	138.56 ppb	12:44:18
2	S 181.975 Axial†	472.1	419.2	572.16 ug/L	572.16 ppb	12:44:18
2	Sb 206.836†	94.3	57.8	4.6871 ug/L	4.6871 ppb	12:44:18
2	Se 196.026†	-595.6	-552.5	40.239 ug/L	40.239 ppb	12:44:18
2	Si 251.611†	978601.5	954583.4	28573 ug/L	28573 ppb	12:43:52
2	Sn 189.927†	-102.7	-105.2	-13.960 ug/L	-13.960 ppb	12:44:18
2	Ti 334.940†	2563344.6	2502724.4	3994.8 ug/L	3994.8 ppb	12:43:52
2	Tl 190.801†	-211.6	-174.0	1.1226 ug/L	1.1226 ppb	12:44:18
2	U 409.014†	-9286.3	-6660.8	-197.50 ug/L	-197.50 ppb	12:43:52
2	V 292.402†	38500.4	38931.5	235.96 ug/L	235.96 ppb	12:43:58
2	Zn 213.857†	25292.4	24061.4	198.75 ug/L	198.75 ppb	12:43:58
2	SiO2†	969505.3	945688.5	60656 ug/L	60656 ppb	12:45:01
3	Sc Radial	5923.3	5923.3	101 %		12:43:14
3	Y RADIAL	7017.7	7017.7	111.6 %		12:43:14
3	Al 396.153Radial†	108727.1	107289.8	74526 ug/L	74526 ppb	12:42:54
3	Ca 317.933Radial†	11234.8	11068.6	16315 ug/L	16315 ppb	12:42:54
3	Fe 238.204 Radial†	11449.1	11288.8	105690 ug/L	105690 ppb	12:42:54
3	K 766.490 Radial†	60055.3	56898.4	10063 ug/L	10063 ppb	12:42:54
3	Mg 279.077 IEC†	421.9	415.1	14553 ug/L	14553 ppb	12:43:14
3	Na 589.592 Radial†	2185.3	3243.9	1088.6 ug/L	1088.6 ppb	12:42:54
3	Sr 421.552†	30524.1	30142.2	187.57 ug/L	187.57 ppb	12:42:54
3	Sc 361.383	928484.3	928484.3	103.02 %		12:44:24
3	Y 371.029	846485.0	846485.0	112.70 %		12:44:24
3	Ag 328.068†	-6967.2	-7055.7	2.5924 ug/L	2.5924 ppb	12:44:29
3	As 188.979†	-35.2	-10.0	45.955 ug/L	45.955 ppb	12:44:49
3	B 249.677†	1026.7	1527.3	17.862 ug/L	17.862 ppb	12:44:29
3	Ba 233.527†	111434.3	108175.9	806.20 ug/L	806.20 ppb	12:44:29
3	Be 313.107†	-11722.1	-6265.4	5.5786 ug/L	5.5786 ppb	12:44:29
3	Cd 226.502†	921.7	1089.7	0.9957 ug/L	0.9957 ppb	12:44:49
3	Co 228.616†	3070.6	3046.0	48.107 ug/L	48.107 ppb	12:44:49
3	Cr 267.716†	10388.6	10005.4	107.43 ug/L	107.43 ppb	12:44:29
3	Cu 324.752†	27023.2	19474.3	61.121 ug/L	61.121 ppb	12:44:29
3	Mn 257.610†	2961981.2	2874723.2	3076.9 ug/L	3076.9 ppb	12:44:24
3	Mo 202.031†	-10.5	-28.5	5.6855 ug/L	5.6855 ppb	12:44:49
3	Ni 231.604†	2953.0	2779.9	64.336 ug/L	64.336 ppb	12:44:49
3	P 214.914†	1916.1	1636.4	874.64 ug/L	874.64 ppb	12:44:49
3	Pb 220.353†	1087.1	1123.7	135.03 ug/L	135.03 ppb	12:44:49
3	S 181.975 Axial†	456.3	401.3	547.69 ug/L	547.69 ppb	12:44:49
3	Sb 206.836†	76.8	40.3	-0.7953 ug/L	-0.7953 ppb	12:44:49
3	Se 196.026†	-602.8	-556.3	24.828 ug/L	24.828 ppb	12:44:49
3	Si 251.611†	984599.7	955284.8	28594 ug/L	28594 ppb	12:44:24
3	Sn 189.927†	-95.9	-98.1	-12.909 ug/L	-12.909 ppb	12:44:49
3	Ti 334.940†	2581177.7	2506620.9	4001.0 ug/L	4001.0 ppb	12:44:24
3	Tl 190.801†	-232.4	-193.1	-4.2265 ug/L	-4.2265 ppb	12:44:49
3	U 409.014†	-9376.8	-6700.1	-198.07 ug/L	-198.07 ppb	12:44:24
3	V 292.402†	38236.6	38473.9	233.54 ug/L	233.54 ppb	12:44:29
3	Zn 213.857†	25147.4	23788.3	196.76 ug/L	196.76 ppb	12:44:29
3	SiO2†	987477.3	958060.2	61450 ug/L	61450 ppb	12:45:07

Mean Data: 241536006|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	926159.4	102.76	%	0.278				0.27%
Sc Radial	5864.0	100	%	0.9				0.89%
Y 371.029	844999.8	112.50	%	0.284				0.25%
Y RADIAL	6948.0	110.5	%	0.96				0.87%
Ag 328.068†	-7027.4	3.5340	ug/L	0.83392	3.5340	ppb	0.83392	23.60%
Al 396.153Radial†	109565.9	76107	ug/L	1429.1	76107	ppb	1429.1	1.88%
As 188.979†	-18.3	43.039	ug/L	2.9810	43.039	ppb	2.9810	6.93%
B 249.677†	1559.6	18.200	ug/L	0.7396	18.200	ppb	0.7396	4.06%
Ba 233.527†	108659.3	809.88	ug/L	6.132	809.88	ppb	6.132	0.76%
Be 313.107†	-6247.1	5.5795	ug/L	0.00682	5.5795	ppb	0.00682	0.12%
Ca 317.933Radial†	11299.9	16655	ug/L	303.5	16655	ppb	303.5	1.82%
Cd 226.502†	1094.0	0.7849	ug/L	0.20130	0.7849	ppb	0.20130	25.65%
Co 228.616†	3043.2	48.023	ug/L	0.4467	48.023	ppb	0.4467	0.93%
Cr 267.716†	10105.9	108.53	ug/L	0.992	108.53	ppb	0.992	0.91%
Cu 324.752†	19470.7	61.241	ug/L	0.3114	61.241	ppb	0.3114	0.51%
Fe 238.204 Radial†	11562.2	108250	ug/L	2225.0	108250	ppb	2225.0	2.06%
K 766.490 Radial†	58263.5	10305	ug/L	211.8	10305	ppb	211.8	2.06%

Mg 279.077 IEC†	419.1	14693	ug/L	121.0	14693	ppb	121.0	0.82%
Mn 257.610†	2873954.9	3076.3	ug/L	0.64	3076.3	ppb	0.64	0.02%
Mo 202.031†	-31.7	5.6645	ug/L	0.15158	5.6645	ppb	0.15158	2.68%
Na 589.592 Radial†	3350.2	1124.3	ug/L	31.56	1124.3	ppb	31.56	2.81%
Ni 231.604†	2785.3	64.461	ug/L	0.1090	64.461	ppb	0.1090	0.17%
P 214.914†	1639.4	874.83	ug/L	0.323	874.83	ppb	0.323	0.04%
Pb 220.353†	1130.3	135.92	ug/L	2.324	135.92	ppb	2.324	1.71%
S 181.975 Axial†	407.8	556.40	ug/L	13.669	556.40	ppb	13.669	2.46%
Sb 206.836†	49.7	2.1280	ug/L	2.75929	2.1280	ppb	2.75929	129.66%
Se 196.026†	-554.9	34.013	ug/L	8.1206	34.013	ppb	8.1206	23.88%
Si 251.611†	954780.4	28579	ug/L	13.2	28579	ppb	13.2	0.05%
Sn 189.927†	-103.1	-13.654	ug/L	0.6481	-13.654	ppb	0.6481	4.75%
Sr 421.552†	30839.1	191.90	ug/L	3.815	191.90	ppb	3.815	1.99%
Ti 334.940†	2504782.6	3998.1	ug/L	3.11	3998.1	ppb	3.11	0.08%
Tl 190.801†	-178.8	-0.2158	ug/L	3.53679	-0.2158	ppb	3.53679	>999.9%
U 409.014†	-6678.1	-197.79	ug/L	0.286	-197.79	ppb	0.286	0.14%
V 292.402†	38640.6	234.25	ug/L	1.482	234.25	ppb	1.482	0.63%
Zn 213.857†	23871.3	197.23	ug/L	1.345	197.23	ppb	1.345	0.68%
SiO2†	951108.9	61004	ug/L	406.0	61004	ppb	406.0	0.67%

Sequence No.: 24
Sample ID: 241536007|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 12/8/2009 12:47:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536007|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5834.9	5834.9	99.8	%			12:49:30
1	Y RADIAL	8468.9	8468.9	134.7	%			12:49:10
1	Al 396.153Radial†	143819.5	144063.2	100070	ug/L	100070	ppb	12:49:10
1	Ca 317.933Radial†	18500.2	18513.4	27288	ug/L	27288	ppb	12:49:10
1	Fe 238.204 Radial†	15315.1	15332.1	143540	ug/L	143540	ppb	12:49:10
1	K 766.490 Radial†	78532.2	76302.4	13514	ug/L	13514	ppb	12:49:10
1	Mg 279.077 IEC†	613.7	613.5	21521	ug/L	21521	ppb	12:49:30
1	Na 589.592 Radial†	9890.9	10994.2	3689.4	ug/L	3689.4	ppb	12:49:10
1	Sr 421.552†	42550.5	42643.9	265.32	ug/L	265.32	ppb	12:49:10
1	Sc 361.383	936823.2	936823.2	103.95	%			12:50:28
1	Y 371.029	1023602.2	1023602.2	136.28	%			12:50:28
1	Ag 328.068†	-9110.8	-9057.7	5.2281	ug/L	5.2281	ppb	12:50:33
1	As 188.979†	-50.0	-24.0	40.924	ug/L	40.924	ppb	12:50:53
1	B 249.677†	1288.2	1769.9	17.985	ug/L	17.985	ppb	12:50:33
1	Ba 233.527†	90831.1	87391.9	653.40	ug/L	653.40	ppb	12:50:33
1	Be 313.107†	11097.7	15789.5	12.364	ug/L	12.364	ppb	12:50:33
1	Cd 226.502†	1231.1	1379.5	0.2849	ug/L	0.2849	ppb	12:50:53
1	Co 228.616†	1910.3	1903.2	27.173	ug/L	27.173	ppb	12:50:53
1	Cr 267.716†	7261.1	6906.8	75.487	ug/L	75.487	ppb	12:50:33
1	Cu 324.752†	26531.6	18767.8	61.030	ug/L	61.030	ppb	12:50:33
1	Mn 257.610†	2396852.9	2305453.1	2473.2	ug/L	2473.2	ppb	12:50:28
1	Mo 202.031†	-50.4	-66.9	5.9346	ug/L	5.9346	ppb	12:50:53
1	Ni 231.604†	3733.3	3505.1	81.142	ug/L	81.142	ppb	12:50:53
1	P 214.914†	2334.0	2021.9	1075.4	ug/L	1075.4	ppb	12:50:53
1	Pb 220.353†	693.3	735.4	93.761	ug/L	93.761	ppb	12:50:53
1	S 181.975 Axial†	307.4	254.2	336.52	ug/L	336.52	ppb	12:50:53
1	Sb 206.836†	66.8	30.0	-1.8422	ug/L	-1.8422	ppb	12:50:53
1	Se 196.026†	-803.9	-744.6	39.854	ug/L	39.854	ppb	12:50:53
1	Si 251.611†	1104591.4	1062214.6	31794	ug/L	31794	ppb	12:50:28
1	Sn 189.927†	-103.7	-104.7	-12.337	ug/L	-12.337	ppb	12:50:53
1	Ti 334.940†	2188952.7	2106981.4	3363.9	ug/L	3363.9	ppb	12:50:28
1	Tl 190.801†	-204.2	-163.9	-3.5319	ug/L	-3.5319	ppb	12:50:53
1	U 409.014†	-14595.0	-11639.2	-338.83	ug/L	-338.83	ppb	12:50:28
1	V 292.402†	26617.2	26965.2	152.34	ug/L	152.34	ppb	12:50:33
1	Zn 213.857†	42125.9	39905.1	333.60	ug/L	333.60	ppb	12:50:33
1	SiO2†	1086573.0	1044862.5	67016	ug/L	67016	ppb	12:52:01
2	Sc Radial	5878.2	5878.2	101	%			12:49:55
2	Y RADIAL	8587.8	8587.8	136.6	%			12:49:35
2	Al 396.153Radial†	145756.3	144927.2	100670	ug/L	100670	ppb	12:49:35
2	Ca 317.933Radial†	18635.3	18511.1	27284	ug/L	27284	ppb	12:49:35
2	Fe 238.204 Radial†	15493.6	15396.5	144140	ug/L	144140	ppb	12:49:35
2	K 766.490 Radial†	79576.3	76760.8	13595	ug/L	13595	ppb	12:49:35
2	Mg 279.077 IEC†	609.1	604.3	21197	ug/L	21197	ppb	12:49:55
2	Na 589.592 Radial†	10063.2	11092.5	3722.4	ug/L	3722.4	ppb	12:49:35
2	Sr 421.552†	43284.3	43059.4	267.91	ug/L	267.91	ppb	12:49:35
2	Sc 361.383	928759.2	928759.2	103.05	%			12:50:59
2	Y 371.029	1015547.7	1015547.7	135.21	%			12:50:59
2	Ag 328.068†	-9157.7	-9179.3	4.8791	ug/L	4.8791	ppb	12:51:04
2	As 188.979†	-56.4	-30.5	38.367	ug/L	38.367	ppb	12:51:24
2	B 249.677†	1356.0	1846.5	19.510	ug/L	19.510	ppb	12:51:04
2	Ba 233.527†	90429.8	87761.2	656.16	ug/L	656.16	ppb	12:51:04
2	Be 313.107†	10889.4	15680.0	12.309	ug/L	12.309	ppb	12:51:04
2	Cd 226.502†	1242.9	1401.2	0.4547	ug/L	0.4547	ppb	12:51:24
2	Co 228.616†	1906.6	1915.6	27.417	ug/L	27.417	ppb	12:51:24
2	Cr 267.716†	7228.3	6935.7	75.805	ug/L	75.805	ppb	12:51:04
2	Cu 324.752†	26518.2	18976.5	61.658	ug/L	61.658	ppb	12:51:04
2	Mn 257.610†	2369732.7	2299156.7	2466.6	ug/L	2466.6	ppb	12:50:59
2	Mo 202.031†	-49.5	-66.4	6.0082	ug/L	6.0082	ppb	12:51:24
2	Ni 231.604†	3701.8	3505.7	81.156	ug/L	81.156	ppb	12:51:24

2	P 214.914†	2353.7	2060.5	1097.2	ug/L	1097.2 ppb	12:51:24
2	Pb 220.353†	719.7	766.8	97.396	ug/L	97.396 ppb	12:51:24
2	S 181.975 Axial†	326.3	275.1	365.64	ug/L	365.64 ppb	12:51:24
2	Sb 206.836†	72.9	36.5	0.2278	ug/L	0.2278 ppb	12:51:24
2	Se 196.026†	-796.8	-744.4	41.969	ug/L	41.969 ppb	12:51:24
2	Si 251.611†	1088895.4	1056210.0	31614	ug/L	31614 ppb	12:50:59
2	Sn 189.927†	-105.1	-107.0	-12.707	ug/L	-12.707 ppb	12:51:24
2	Ti 334.940†	2165193.5	2102209.9	3356.3	ug/L	3356.3 ppb	12:50:59
2	Tl 190.801†	-196.5	-158.2	-2.0139	ug/L	-2.0139 ppb	12:51:24
2	U 409.014†	-14676.2	-11839.9	-344.43	ug/L	-344.43 ppb	12:50:59
2	V 292.402†	26597.5	27168.4	153.58	ug/L	153.58 ppb	12:51:04
2	Zn 213.857†	41911.1	40048.5	334.81	ug/L	334.81 ppb	12:51:04
2	SiO2†	1094835.8	1061956.8	68112	ug/L	68112 ppb	12:52:07
3	Sc Radial	5866.8	5866.8	100	%		12:50:21
3	Y RADIAL	8719.0	8719.0	138.7	%		12:50:01
3	Al 396.153Radial†	147109.6	146556.8	101800	ug/L	101800 ppb	12:50:01
3	Ca 317.933Radial†	18800.6	18711.8	27580	ug/L	27580 ppb	12:50:01
3	Fe 238.204 Radial†	15573.7	15506.3	145170	ug/L	145170 ppb	12:50:01
3	K 766.490 Radial†	80436.3	77771.2	13774	ug/L	13774 ppb	12:50:01
3	Mg 279.077 IEC†	616.4	612.8	21495	ug/L	21495 ppb	12:50:21
3	Na 589.592 Radial†	10194.3	11242.5	3772.8	ug/L	3772.8 ppb	12:50:01
3	Sr 421.552†	43703.7	43560.8	271.03	ug/L	271.03 ppb	12:50:01
3	Sc 361.383	921717.7	921717.7	102.27	%		12:51:30
3	Y 371.029	1010303.5	1010303.5	134.51	%		12:51:30
3	Ag 328.068†	-9110.4	-9200.9	5.1038	ug/L	5.1038 ppb	12:51:35
3	As 188.979†	-43.8	-18.6	43.203	ug/L	43.203 ppb	12:51:55
3	B 249.677†	1283.8	1786.0	18.102	ug/L	18.102 ppb	12:51:35
3	Ba 233.527†	90121.9	88130.5	658.94	ug/L	658.94 ppb	12:51:35
3	Be 313.107†	10830.8	15703.4	12.314	ug/L	12.314 ppb	12:51:35
3	Cd 226.502†	1242.4	1409.9	0.4446	ug/L	0.4446 ppb	12:51:55
3	Co 228.616†	1926.3	1949.0	28.043	ug/L	28.043 ppb	12:51:55
3	Cr 267.716†	7213.3	6974.6	76.232	ug/L	76.232 ppb	12:51:35
3	Cu 324.752†	26472.8	19128.6	62.146	ug/L	62.146 ppb	12:51:35
3	Mn 257.610†	2349037.3	2296488.2	2463.8	ug/L	2463.8 ppb	12:51:30
3	Mo 202.031†	-39.7	-57.2	6.6661	ug/L	6.6661 ppb	12:51:55
3	Ni 231.604†	3728.1	3558.9	82.387	ug/L	82.387 ppb	12:51:55
3	P 214.914†	2344.8	2069.3	1101.8	ug/L	1101.8 ppb	12:51:55
3	Pb 220.353†	696.8	749.8	95.638	ug/L	95.638 ppb	12:51:55
3	S 181.975 Axial†	313.4	264.9	351.10	ug/L	351.10 ppb	12:51:55
3	Sb 206.836†	77.9	41.9	1.9303	ug/L	1.9303 ppb	12:51:55
3	Se 196.026†	-810.8	-763.9	34.111	ug/L	34.111 ppb	12:51:55
3	Si 251.611†	1078594.4	1054209.9	31554	ug/L	31554 ppb	12:51:30
3	Sn 189.927†	-98.9	-101.7	-11.791	ug/L	-11.791 ppb	12:51:55
3	Ti 334.940†	2147460.2	2100921.5	3354.2	ug/L	3354.2 ppb	12:51:30
3	Tl 190.801†	-199.5	-162.6	-3.2572	ug/L	-3.2572 ppb	12:51:55
3	U 409.014†	-14445.4	-11723.0	-341.34	ug/L	-341.34 ppb	12:51:30
3	V 292.402†	26504.0	27274.2	154.15	ug/L	154.15 ppb	12:51:35
3	Zn 213.857†	41712.6	40165.2	335.71	ug/L	335.71 ppb	12:51:35
3	SiO2†	1091874.3	1067177.5	68447	ug/L	68447 ppb	12:52:13

Mean Data: 241536007|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	929100.1	103.09	%	0.839				0.81%
Sc Radial	5859.9	100	%	0.4				0.38%
Y 371.029	1016484.5	135.34	%	0.892				0.66%
Y RADIAL	8591.9	136.6	%	1.99				1.46%
Ag 328.068†	-9146.0	5.0703	ug/L	0.17691	5.0703	ppb	0.17691	3.49%
Al 396.153Radial†	145182.4	100850	ug/L	879.5	100850	ppb	879.5	0.87%
As 188.979†	-24.4	40.831	ug/L	2.4196	40.831	ppb	2.4196	5.93%
B 249.677†	1800.8	18.533	ug/L	0.8489	18.533	ppb	0.8489	4.58%
Ba 233.527†	87761.2	656.17	ug/L	2.770	656.17	ppb	2.770	0.42%
Be 313.107†	15724.3	12.329	ug/L	0.0305	12.329	ppb	0.0305	0.25%
Ca 317.933Radial†	18578.8	27384	ug/L	169.8	27384	ppb	169.8	0.62%
Cd 226.502†	1396.9	0.3947	ug/L	0.09526	0.3947	ppb	0.09526	24.13%
Co 228.616†	1922.6	27.544	ug/L	0.4486	27.544	ppb	0.4486	1.63%
Cr 267.716†	6939.0	75.841	ug/L	0.3738	75.841	ppb	0.3738	0.49%
Cu 324.752†	18957.6	61.611	ug/L	0.5594	61.611	ppb	0.5594	0.91%
Fe 238.204 Radial†	15411.6	144280	ug/L	824.3	144280	ppb	824.3	0.57%
K 766.490 Radial†	76944.8	13628	ug/L	133.4	13628	ppb	133.4	0.98%

Mg 279.077 IEC†	610.2	21404	ug/L	180.1	21404	ppb	180.1	0.84%
Mn 257.610†	2300366.0	2467.9	ug/L	4.83	2467.9	ppb	4.83	0.20%
Mo 202.031†	-63.5	6.2030	ug/L	0.40276	6.2030	ppb	0.40276	6.49%
Na 589.592 Radial†	11109.7	3728.2	ug/L	41.97	3728.2	ppb	41.97	1.13%
Ni 231.604†	3523.2	81.562	ug/L	0.7147	81.562	ppb	0.7147	0.88%
P 214.914†	2050.5	1091.5	ug/L	14.13	1091.5	ppb	14.13	1.29%
Pb 220.353†	750.7	95.598	ug/L	1.8182	95.598	ppb	1.8182	1.90%
S 181.975 Axial†	264.7	351.09	ug/L	14.561	351.09	ppb	14.561	4.15%
Sb 206.836†	36.1	0.1053	ug/L	1.88922	0.1053	ppb	1.88922	>999.9%
Se 196.026†	-751.0	38.645	ug/L	4.0662	38.645	ppb	4.0662	10.52%
Si 251.611†	1057544.9	31654	ug/L	124.8	31654	ppb	124.8	0.39%
Sn 189.927†	-104.5	-12.278	ug/L	0.4611	-12.278	ppb	0.4611	3.76%
Sr 421.552†	43088.0	268.09	ug/L	2.858	268.09	ppb	2.858	1.07%
Ti 334.940†	2103370.9	3358.1	ug/L	5.09	3358.1	ppb	5.09	0.15%
Tl 190.801†	-161.6	-2.9344	ug/L	0.80887	-2.9344	ppb	0.80887	27.57%
U 409.014†	-11734.0	-341.53	ug/L	2.807	-341.53	ppb	2.807	0.82%
V 292.402†	27136.0	153.36	ug/L	0.924	153.36	ppb	0.924	0.60%
Zn 213.857†	40039.6	334.70	ug/L	1.058	334.70	ppb	1.058	0.32%
SiO2†	1057998.9	67858	ug/L	748.6	67858	ppb	748.6	1.10%

Sequence No.: 25
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 12:54:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.2	5848.2	100	%			12:56:17
1	Y RADIAL	6232.2	6232.2	99.12	%			12:56:17
1	Al 396.153Radial†	7194.6	7209.7	4986.7	ug/L	4986.7	ppb	12:56:17
1	Ca 317.933Radial†	3408.9	3390.8	4997.8	ug/L	4997.8	ppb	12:56:37
1	Fe 238.204 Radial†	540.1	532.9	5005.0	ug/L	5005.0	ppb	12:56:37
1	K 766.490 Radial†	31431.1	29056.3	5144.2	ug/L	5144.2	ppb	12:56:17
1	Mg 279.077 IEC†	146.4	145.1	5124.1	ug/L	5124.1	ppb	12:56:37
1	Na 589.592 Radial†	27231.8	28299.8	9496.9	ug/L	9496.9	ppb	12:56:17
1	Sr 421.552†	80956.2	80924.2	503.93	ug/L	503.93	ppb	12:56:17
1	Sc 361.383	912254.4	912254.4	101.22	%			12:57:34
1	Y 371.029	744537.5	744537.5	99.128	%			12:57:34
1	Ag 328.068†	112666.9	111016.8	505.86	ug/L	505.86	ppb	12:57:39
1	As 188.979†	1234.9	1244.2	496.11	ug/L	496.11	ppb	12:57:59
1	B 249.677†	22942.3	23196.5	484.53	ug/L	484.53	ppb	12:57:39
1	Ba 233.527†	67793.9	66985.6	497.74	ug/L	497.74	ppb	12:57:39
1	Be 313.107†	1375749.3	1364288.2	498.30	ug/L	498.30	ppb	12:57:34
1	Cd 226.502†	47434.1	47057.7	497.29	ug/L	497.29	ppb	12:57:39
1	Co 228.616†	26515.2	26261.2	498.53	ug/L	498.53	ppb	12:57:39
1	Cr 267.716†	47769.1	47114.9	495.38	ug/L	495.38	ppb	12:57:39
1	Cu 324.752†	181657.9	172712.7	494.51	ug/L	494.51	ppb	12:57:39
1	Mn 257.610†	473453.5	467327.3	498.92	ug/L	498.92	ppb	12:57:34
1	Mo 202.031†	7948.0	7833.9	498.01	ug/L	498.01	ppb	12:57:59
1	Ni 231.604†	21906.5	21556.1	498.84	ug/L	498.84	ppb	12:57:39
1	P 214.914†	4536.0	4257.8	2380.8	ug/L	2380.8	ppb	12:57:59
1	Pb 220.353†	4319.8	4336.2	491.73	ug/L	491.73	ppb	12:57:59
1	S 181.975 Axial†	756.8	706.1	988.42	ug/L	988.42	ppb	12:57:59
1	Sb 206.836†	1617.9	1564.2	502.19	ug/L	502.19	ppb	12:57:59
1	Se 196.026†	831.0	849.9	509.57	ug/L	509.57	ppb	12:57:59
1	Si 251.611†	84761.3	83290.5	2481.4	ug/L	2481.4	ppb	12:57:39
1	Sn 189.927†	3078.5	3036.4	497.75	ug/L	497.75	ppb	12:57:59
1	Ti 334.940†	325620.8	322812.9	515.01	ug/L	515.01	ppb	12:57:34
1	Tl 190.801†	1749.0	1760.5	496.40	ug/L	496.40	ppb	12:57:59
1	U 409.014†	15897.7	18108.0	497.24	ug/L	497.24	ppb	12:57:39
1	V 292.402†	74188.5	74653.1	499.75	ug/L	499.75	ppb	12:57:39
1	Zn 213.857†	58215.4	56892.3	492.60	ug/L	492.60	ppb	12:57:39
1	SiO2†	84461.0	82976.0	5296.7	ug/L	5296.7	ppb	12:59:07
2	Sc Radial	5803.5	5803.5	99.3	%			12:56:42
2	Y RADIAL	6206.0	6206.0	98.70	%			12:56:42
2	Al 396.153Radial†	7175.4	7245.8	5011.9	ug/L	5011.9	ppb	12:56:42
2	Ca 317.933Radial†	3438.4	3446.8	5080.3	ug/L	5080.3	ppb	12:57:02
2	Fe 238.204 Radial†	545.7	542.7	5096.7	ug/L	5096.7	ppb	12:57:02
2	K 766.490 Radial†	31189.8	29055.6	5144.1	ug/L	5144.1	ppb	12:56:42
2	Mg 279.077 IEC†	147.8	147.6	5214.0	ug/L	5214.0	ppb	12:57:02
2	Na 589.592 Radial†	26929.5	28205.2	9465.1	ug/L	9465.1	ppb	12:56:42
2	Sr 421.552†	80181.3	80767.7	502.95	ug/L	502.95	ppb	12:56:42
2	Sc 361.383	913415.6	913415.6	101.35	%			12:58:05
2	Y 371.029	745440.7	745440.7	99.249	%			12:58:05
2	Ag 328.068†	113535.7	111732.6	509.14	ug/L	509.14	ppb	12:58:11
2	As 188.979†	1239.3	1247.0	497.24	ug/L	497.24	ppb	12:58:31
2	B 249.677†	23165.3	23387.8	488.52	ug/L	488.52	ppb	12:58:11
2	Ba 233.527†	68388.5	67487.2	501.47	ug/L	501.47	ppb	12:58:11
2	Be 313.107†	1373939.6	1360774.7	497.01	ug/L	497.01	ppb	12:58:05
2	Cd 226.502†	47909.1	47466.9	501.61	ug/L	501.61	ppb	12:58:11
2	Co 228.616†	26781.7	26490.8	502.88	ug/L	502.88	ppb	12:58:11
2	Cr 267.716†	48292.3	47571.2	500.18	ug/L	500.18	ppb	12:58:11
2	Cu 324.752†	183289.2	174094.2	498.47	ug/L	498.47	ppb	12:58:11
2	Mn 257.610†	473255.3	466537.2	498.08	ug/L	498.08	ppb	12:58:05
2	Mo 202.031†	7917.2	7793.5	495.45	ug/L	495.45	ppb	12:58:31
2	Ni 231.604†	22089.9	21709.5	502.39	ug/L	502.39	ppb	12:58:11

2	P 214.914†	4515.2	4231.6	2365.1 ug/L	2365.1 ppb	12:58:31
2	Pb 220.353†	4309.4	4320.5	489.95 ug/L	489.95 ppb	12:58:31
2	S 181.975 Axial†	752.7	701.1	981.44 ug/L	981.44 ppb	12:58:31
2	Sb 206.836†	1612.0	1556.4	499.57 ug/L	499.57 ppb	12:58:31
2	Se 196.026†	835.8	853.5	511.94 ug/L	511.94 ppb	12:58:31
2	Si 251.611†	85473.2	83886.5	2499.3 ug/L	2499.3 ppb	12:58:11
2	Sn 189.927†	3086.7	3040.6	498.45 ug/L	498.45 ppb	12:58:31
2	Ti 334.940†	325546.6	322330.7	514.24 ug/L	514.24 ppb	12:58:05
2	Tl 190.801†	1735.6	1745.1	492.04 ug/L	492.04 ppb	12:58:31
2	U 409.014†	16225.5	18411.5	505.58 ug/L	505.58 ppb	12:58:11
2	V 292.402†	74965.0	75326.1	504.16 ug/L	504.16 ppb	12:58:11
2	Zn 213.857†	58717.4	57314.4	496.25 ug/L	496.25 ppb	12:58:11
2	SiO2†	85200.7	83599.8	5336.8 ug/L	5336.8 ppb	12:59:12
3	Sc Radial	5762.9	5762.9	98.6 %		12:57:07
3	Y RADIAL	6173.0	6173.0	98.17 %		12:57:07
3	Al 396.153Radial†	7133.9	7254.6	5017.9 ug/L	5017.9 ppb	12:57:07
3	Ca 317.933Radial†	3390.6	3422.7	5044.8 ug/L	5044.8 ppb	12:57:27
3	Fe 238.204 Radial†	542.7	543.5	5103.8 ug/L	5103.8 ppb	12:57:27
3	K 766.490 Radial†	30798.1	28879.2	5112.9 ug/L	5112.9 ppb	12:57:07
3	Mg 279.077 IEC†	149.9	150.9	5328.4 ug/L	5328.4 ppb	12:57:27
3	Na 589.592 Radial†	26765.7	28229.9	9473.4 ug/L	9473.4 ppb	12:57:07
3	Sr 421.552†	79557.2	80702.8	502.55 ug/L	502.55 ppb	12:57:07
3	Sc 361.383	913286.2	913286.2	101.33 %		12:58:37
3	Y 371.029	745920.9	745920.9	99.313 %		12:58:37
3	Ag 328.068†	113322.2	111537.7	508.26 ug/L	508.26 ppb	12:58:42
3	As 188.979†	1234.0	1242.0	495.25 ug/L	495.25 ppb	12:59:02
3	B 249.677†	23113.6	23340.1	487.52 ug/L	487.52 ppb	12:58:42
3	Ba 233.527†	68321.3	67430.4	501.05 ug/L	501.05 ppb	12:58:42
3	Be 313.107†	1375010.7	1362023.8	497.47 ug/L	497.47 ppb	12:58:37
3	Cd 226.502†	47830.2	47395.7	500.85 ug/L	500.85 ppb	12:58:42
3	Co 228.616†	26719.9	26433.6	501.80 ug/L	501.80 ppb	12:58:42
3	Cr 267.716†	48139.2	47426.9	498.66 ug/L	498.66 ppb	12:58:42
3	Cu 324.752†	182898.0	173733.7	497.44 ug/L	497.44 ppb	12:58:42
3	Mn 257.610†	473496.5	466841.3	498.41 ug/L	498.41 ppb	12:58:37
3	Mo 202.031†	7957.6	7834.5	498.06 ug/L	498.06 ppb	12:59:02
3	Ni 231.604†	21966.3	21590.6	499.64 ug/L	499.64 ppb	12:58:42
3	P 214.914†	4534.6	4251.4	2376.6 ug/L	2376.6 ppb	12:59:02
3	Pb 220.353†	4365.7	4376.6	496.30 ug/L	496.30 ppb	12:59:02
3	S 181.975 Axial†	771.7	720.0	1007.9 ug/L	1007.9 ppb	12:59:02
3	Sb 206.836†	1609.2	1553.8	498.84 ug/L	498.84 ppb	12:59:02
3	Se 196.026†	823.7	841.7	505.15 ug/L	505.15 ppb	12:59:02
3	Si 251.611†	85416.9	83842.8	2498.0 ug/L	2498.0 ppb	12:58:42
3	Sn 189.927†	3083.0	3037.5	497.92 ug/L	497.92 ppb	12:59:02
3	Ti 334.940†	325654.1	322482.3	514.48 ug/L	514.48 ppb	12:58:37
3	Tl 190.801†	1752.9	1762.4	496.90 ug/L	496.90 ppb	12:59:02
3	U 409.014†	16132.8	18322.3	503.13 ug/L	503.13 ppb	12:58:42
3	V 292.402†	74830.0	75203.4	503.39 ug/L	503.39 ppb	12:58:42
3	Zn 213.857†	58637.8	57244.1	495.65 ug/L	495.65 ppb	12:58:42
3	SiO2†	84734.0	83151.2	5308.0 ug/L	5308.0 ppb	12:59:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912985.4	101.30	%	0.071				0.07%
Sc Radial	5804.9	99.3	%	0.73				0.73%
Y 371.029	745299.7	99.230	%	0.0935				0.09%
Y RADIAL	6203.8	98.66	%	0.472				0.48%
Ag 328.068†	111429.0	507.76	ug/L	1.698	507.76	ppb	1.698	0.33%
QC value within limits for Ag 328.068 Recovery = 101.55%								
Al 396.153Radial†	7236.7	5005.5	ug/L	16.55	5005.5	ppb	16.55	0.33%
QC value within limits for Al 396.153Radial Recovery = 100.11%								
As 188.979†	1244.4	496.20	ug/L	0.999	496.20	ppb	0.999	0.20%
QC value within limits for As 188.979 Recovery = 99.24%								
B 249.677†	23308.1	486.85	ug/L	2.075	486.85	ppb	2.075	0.43%
QC value within limits for B 249.677 Recovery = 97.37%								
Ba 233.527†	67301.1	500.08	ug/L	2.043	500.08	ppb	2.043	0.41%
QC value within limits for Ba 233.527 Recovery = 100.02%								
Be 313.107†	1362362.2	497.59	ug/L	0.650	497.59	ppb	0.650	0.13%
QC value within limits for Be 313.107 Recovery = 99.52%								
Ca 317.933Radial†	3420.1	5041.0	ug/L	41.39	5041.0	ppb	41.39	0.82%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.82%
Cd 226.502†            47306.8      499.91 ug/L         2.306      499.91 ppb          2.306   0.46%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†            26395.2      501.07 ug/L         2.265      501.07 ppb          2.265   0.45%
   QC value within limits for Co 228.616  Recovery = 100.21%
Cr 267.716†            47371.0      498.07 ug/L         2.452      498.07 ppb          2.452   0.49%
   QC value within limits for Cr 267.716  Recovery = 99.61%
Cu 324.752†           173513.5      496.80 ug/L         2.053      496.80 ppb          2.053   0.41%
   QC value within limits for Cu 324.752  Recovery = 99.36%
Fe 238.204 Radial†       539.7      5068.5 ug/L        55.12      5068.5 ppb         55.12   1.09%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.37%
K 766.490 Radial†      28997.0      5133.7 ug/L        18.08      5133.7 ppb         18.08   0.35%
   QC value within limits for K 766.490 Radial  Recovery = 102.67%
Mg 279.077 IEC†          147.9      5222.2 ug/L       102.39      5222.2 ppb        102.39   1.96%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.44%
Mn 257.610†           466901.9      498.47 ug/L         0.421      498.47 ppb          0.421   0.08%
   QC value within limits for Mn 257.610  Recovery = 99.69%
Mo 202.031†             7820.7      497.17 ug/L         1.491      497.17 ppb          1.491   0.30%
   QC value within limits for Mo 202.031  Recovery = 99.43%
Na 589.592 Radial†     28245.0      9478.5 ug/L        16.47      9478.5 ppb         16.47   0.17%
   QC value within limits for Na 589.592 Radial  Recovery = 94.78%
Ni 231.604†            21618.7      500.29 ug/L         1.863      500.29 ppb          1.863   0.37%
   QC value within limits for Ni 231.604  Recovery = 100.06%
P 214.914†              4247.0      2374.2 ug/L         8.17      2374.2 ppb          8.17   0.34%
   QC value within limits for P 214.914  Recovery = 94.97%
Pb 220.353†             4344.4      492.66 ug/L         3.276      492.66 ppb          3.276   0.67%
   QC value within limits for Pb 220.353  Recovery = 98.53%
S 181.975 Axial†         709.1      992.58 ug/L        13.705      992.58 ppb         13.705   1.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.26%
Sb 206.836†             1558.1      500.20 ug/L         1.762      500.20 ppb          1.762   0.35%
   QC value within limits for Sb 206.836  Recovery = 100.04%
Se 196.026†              848.3      508.89 ug/L         3.448      508.89 ppb          3.448   0.68%
   QC value within limits for Se 196.026  Recovery = 101.78%
Si 251.611†            83673.3      2492.9 ug/L         9.96      2492.9 ppb          9.96   0.40%
   QC value within limits for Si 251.611  Recovery = 99.72%
Sn 189.927†             3038.2      498.04 ug/L         0.362      498.04 ppb          0.362   0.07%
   QC value within limits for Sn 189.927  Recovery = 99.61%
Sr 421.552†            80798.2      503.14 ug/L         0.709      503.14 ppb          0.709   0.14%
   QC value within limits for Sr 421.552  Recovery = 100.63%
Ti 334.940†           322542.0      514.58 ug/L         0.394      514.58 ppb          0.394   0.08%
   QC value within limits for Ti 334.940  Recovery = 102.92%
Tl 190.801†             1756.0      495.11 ug/L         2.674      495.11 ppb          2.674   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.02%
U 409.014†             18280.6      501.98 ug/L         4.285      501.98 ppb          4.285   0.85%
   QC value within limits for U 409.014  Recovery = 100.40%
V 292.402†             75060.8      502.43 ug/L         2.355      502.43 ppb          2.355   0.47%
   QC value within limits for V 292.402  Recovery = 100.49%
Zn 213.857†            57150.3      494.84 ug/L         1.957      494.84 ppb          1.957   0.40%
   QC value within limits for Zn 213.857  Recovery = 98.97%
SiO2†                  83242.3      5313.8 ug/L        20.69      5313.8 ppb         20.69   0.39%
   QC value within limits for SiO2  Recovery = 99.37%
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 13:01:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5868.7	5868.7	100	%			13:03:21
1	Y RADIAL	6266.3	6266.3	99.66	%			13:03:21
1	Al 396.153Radial†	-30.6	-10.0	-6.9732	ug/L	-6.9732	ppb	13:03:21
1	Ca 317.933Radial†	27.1	11.4	16.834	ug/L	16.834	ppb	13:03:41
1	Fe 238.204 Radial†	7.1	0.3	2.8617	ug/L	2.8617	ppb	13:03:41
1	K 766.490 Radial†	2529.2	166.8	29.557	ug/L	29.557	ppb	13:03:21
1	Mg 279.077 IEC†	2.6	1.4	48.947	ug/L	48.947	ppb	13:03:41
1	Na 589.592 Radial†	-997.4	94.8	31.813	ug/L	31.813	ppb	13:03:21
1	Sr 421.552†	-4.1	23.2	0.1444	ug/L	0.1444	ppb	13:03:21
1	Sc 361.383	909330.4	909330.4	100.89	%			13:04:37
1	Y 371.029	756247.7	756247.7	100.69	%			13:04:37
1	Ag 328.068†	309.1	13.6	0.0644	ug/L	0.0644	ppb	13:04:37
1	As 188.979†	-26.8	-2.4	-0.9536	ug/L	-0.9536	ppb	13:04:57
1	B 249.677†	-417.1	117.3	2.4588	ug/L	2.4588	ppb	13:04:57
1	Ba 233.527†	-20.7	-12.0	-0.0874	ug/L	-0.0874	ppb	13:04:57
1	Be 313.107†	-5096.0	62.2	0.0227	ug/L	0.0227	ppb	13:04:37
1	Cd 226.502†	-193.8	3.0	0.0311	ug/L	0.0311	ppb	13:04:57
1	Co 228.616†	-60.1	5.8	0.1104	ug/L	0.1104	ppb	13:04:57
1	Cr 267.716†	70.5	-8.8	-0.0914	ug/L	-0.0914	ppb	13:04:57
1	Cu 324.752†	6809.4	-7.7	-0.0218	ug/L	-0.0218	ppb	13:04:37
1	Mn 257.610†	455.0	28.6	0.0299	ug/L	0.0299	ppb	13:04:57
1	Mo 202.031†	16.2	-2.3	-0.1469	ug/L	-0.1469	ppb	13:04:57
1	Ni 231.604†	76.1	-11.2	-0.2588	ug/L	-0.2588	ppb	13:04:57
1	P 214.914†	204.8	-20.5	-11.821	ug/L	-11.821	ppb	13:04:57
1	Pb 220.353†	-56.1	12.9	1.4528	ug/L	1.4528	ppb	13:04:57
1	S 181.975 Axial†	41.0	-1.0	-1.3701	ug/L	-1.3701	ppb	13:04:57
1	Sb 206.836†	35.0	0.4	0.1492	ug/L	0.1492	ppb	13:04:57
1	Se 196.026†	-22.5	6.6	3.7976	ug/L	3.7976	ppb	13:04:57
1	Si 251.611†	555.9	101.3	3.0211	ug/L	3.0211	ppb	13:04:57
1	Sn 189.927†	11.9	6.8	1.1211	ug/L	1.1211	ppb	13:04:57
1	Ti 334.940†	-1127.8	-2.9	-0.0042	ug/L	-0.0042	ppb	13:04:37
1	Tl 190.801†	-37.4	-4.6	-1.2783	ug/L	-1.2783	ppb	13:04:57
1	U 409.014†	-2380.6	42.3	1.1648	ug/L	1.1648	ppb	13:04:37
1	V 292.402†	-1258.8	110.7	0.7320	ug/L	0.7320	ppb	13:04:37
1	Zn 213.857†	683.4	55.5	0.4848	ug/L	0.4848	ppb	13:04:57
1	SiO2†	542.9	70.6	4.5059	ug/L	4.5059	ppb	13:05:53
2	Sc Radial	5855.0	5855.0	100	%			13:03:46
2	Y RADIAL	6293.2	6293.2	100.1	%			13:03:46
2	Al 396.153Radial†	-28.1	-7.6	-5.3089	ug/L	-5.3089	ppb	13:03:46
2	Ca 317.933Radial†	28.7	13.1	19.271	ug/L	19.271	ppb	13:04:06
2	Fe 238.204 Radial†	6.7	-0.1	-0.8685	ug/L	-0.8685	ppb	13:04:06
2	K 766.490 Radial†	2589.7	233.1	41.320	ug/L	41.320	ppb	13:03:46
2	Mg 279.077 IEC†	2.6	1.4	50.157	ug/L	50.157	ppb	13:04:06
2	Na 589.592 Radial†	-1015.8	74.1	24.869	ug/L	24.869	ppb	13:03:46
2	Sr 421.552†	-45.3	-17.9	-0.1116	ug/L	-0.1116	ppb	13:03:46
2	Sc 361.383	901165.7	901165.7	99.989	%			13:05:03
2	Y 371.029	749854.7	749854.7	99.836	%			13:05:03
2	Ag 328.068†	310.6	17.9	0.0813	ug/L	0.0813	ppb	13:05:03
2	As 188.979†	-14.4	9.8	3.8646	ug/L	3.8646	ppb	13:05:23
2	B 249.677†	-420.0	110.6	2.3197	ug/L	2.3197	ppb	13:05:23
2	Ba 233.527†	1.0	9.5	0.0704	ug/L	0.0704	ppb	13:05:23
2	Be 313.107†	-5025.4	87.0	0.0318	ug/L	0.0318	ppb	13:05:03
2	Cd 226.502†	-196.4	-1.3	-0.0140	ug/L	-0.0140	ppb	13:05:23
2	Co 228.616†	-58.2	7.2	0.1379	ug/L	0.1379	ppb	13:05:23
2	Cr 267.716†	91.5	12.8	0.1348	ug/L	0.1348	ppb	13:05:23
2	Cu 324.752†	6670.0	-86.0	-0.2461	ug/L	-0.2461	ppb	13:05:03
2	Mn 257.610†	575.8	153.5	0.1628	ug/L	0.1628	ppb	13:05:23
2	Mo 202.031†	22.9	4.5	0.2874	ug/L	0.2874	ppb	13:05:23
2	Ni 231.604†	88.3	1.7	0.0399	ug/L	0.0399	ppb	13:05:23

2	P 214.914†	217.0	-6.5	-3.7298 ug/L	-3.7298 ppb		13:05:23
2	Pb 220.353†	-51.8	16.6	1.8791 ug/L	1.8791 ppb		13:05:23
2	S 181.975 Axial†	44.5	2.9	4.0947 ug/L	4.0947 ppb		13:05:23
2	Sb 206.836†	33.9	-0.3	-0.1071 ug/L	-0.1071 ppb		13:05:23
2	Se 196.026†	-13.0	15.9	9.1655 ug/L	9.1655 ppb		13:05:23
2	Si 251.611†	597.7	148.1	4.4168 ug/L	4.4168 ppb		13:05:23
2	Sn 189.927†	2.5	-2.5	-0.4044 ug/L	-0.4044 ppb		13:05:23
2	Ti 334.940†	-1080.2	34.6	0.0563 ug/L	0.0563 ppb		13:05:03
2	Tl 190.801†	-32.3	0.3	0.0723 ug/L	0.0723 ppb		13:05:23
2	U 409.014†	-2419.0	-17.5	-0.4815 ug/L	-0.4815 ppb		13:05:03
2	V 292.402†	-1344.5	13.7	0.0947 ug/L	0.0947 ppb		13:05:03
2	Zn 213.857†	675.2	53.4	0.4649 ug/L	0.4649 ppb		13:05:23
2	SiO2†	559.6	92.2	5.8782 ug/L	5.8782 ppb		13:05:58
3	Sc Radial	5767.9	5767.9	98.7 %			13:04:11
3	Y RADIAL	6173.0	6173.0	98.17 %			13:04:11
3	Al 396.153Radial†	-28.0	-8.0	-5.5661 ug/L	-5.5661 ppb		13:04:11
3	Ca 317.933Radial†	25.0	9.7	14.340 ug/L	14.340 ppb		13:04:31
3	Fe 238.204 Radial†	6.6	-0.2	-1.4562 ug/L	-1.4562 ppb		13:04:31
3	K 766.490 Radial†	2509.3	190.6	33.799 ug/L	33.799 ppb		13:04:11
3	Mg 279.077 IEC†	-1.3	-2.5	-87.543 ug/L	-87.543 ppb		13:04:31
3	Na 589.592 Radial†	-1023.7	50.7	17.013 ug/L	17.013 ppb		13:04:11
3	Sr 421.552†	-34.9	-8.0	-0.0497 ug/L	-0.0497 ppb		13:04:11
3	Sc 361.383	904623.9	904623.9	100.37 %			13:05:28
3	Y 371.029	754861.8	754861.8	100.50 %			13:05:28
3	Ag 328.068†	417.8	123.5	0.5554 ug/L	0.5554 ppb		13:05:28
3	As 188.979†	-16.9	7.3	2.8912 ug/L	2.8912 ppb		13:05:48
3	B 249.677†	-395.9	136.2	2.8560 ug/L	2.8560 ppb		13:05:48
3	Ba 233.527†	1.7	10.1	0.0762 ug/L	0.0762 ppb		13:05:48
3	Be 313.107†	-4983.4	148.1	0.0545 ug/L	0.0545 ppb		13:05:28
3	Cd 226.502†	-176.5	19.2	0.2035 ug/L	0.2035 ppb		13:05:48
3	Co 228.616†	-58.4	7.2	0.1366 ug/L	0.1366 ppb		13:05:48
3	Cr 267.716†	78.7	-0.3	-0.0042 ug/L	-0.0042 ppb		13:05:48
3	Cu 324.752†	6872.2	90.0	0.2573 ug/L	0.2573 ppb		13:05:28
3	Mn 257.610†	469.1	45.1	0.0496 ug/L	0.0496 ppb		13:05:48
3	Mo 202.031†	22.0	3.6	0.2268 ug/L	0.2268 ppb		13:05:48
3	Ni 231.604†	96.7	9.8	0.2258 ug/L	0.2258 ppb		13:05:48
3	P 214.914†	225.9	1.5	0.8286 ug/L	0.8286 ppb		13:05:48
3	Pb 220.353†	-48.5	20.1	2.2709 ug/L	2.2709 ppb		13:05:48
3	S 181.975 Axial†	40.5	-1.3	-1.7683 ug/L	-1.7683 ppb		13:05:48
3	Sb 206.836†	35.0	0.7	0.2079 ug/L	0.2079 ppb		13:05:48
3	Se 196.026†	-15.1	13.8	7.9618 ug/L	7.9618 ppb		13:05:48
3	Si 251.611†	545.0	93.3	2.7804 ug/L	2.7804 ppb		13:05:48
3	Sn 189.927†	2.6	-2.4	-0.3905 ug/L	-0.3905 ppb		13:05:48
3	Ti 334.940†	-944.1	174.4	0.2764 ug/L	0.2764 ppb		13:05:28
3	Tl 190.801†	-31.8	0.9	0.2397 ug/L	0.2397 ppb		13:05:48
3	U 409.014†	-2197.1	212.9	5.8648 ug/L	5.8648 ppb		13:05:28
3	V 292.402†	-1294.3	68.9	0.4674 ug/L	0.4674 ppb		13:05:28
3	Zn 213.857†	659.7	35.5	0.3111 ug/L	0.3111 ppb		13:05:48
3	SiO2†	559.8	90.3	5.7599 ug/L	5.7599 ppb		13:06:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905040.0	100.42	%	0.455				0.45%
Sc Radial	5830.5	99.8	%	0.94				0.94%
Y 371.029	753654.7	100.34	%	0.448				0.45%
Y RADIAL	6244.2	99.31	%	1.004				1.01%
Ag 328.068†	51.7	0.2337	ug/L	0.27875	0.2337	ppb	0.27875	119.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.6	-5.9494	ug/L	0.89589	-5.9494	ppb	0.89589	15.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.9	1.9341	ug/L	2.54769	1.9341	ppb	2.54769	131.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	121.4	2.5448	ug/L	0.27833	2.5448	ppb	0.27833	10.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.5	0.0197	ug/L	0.09280	0.0197	ppb	0.09280	470.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	99.1	0.0363	ug/L	0.01641	0.0363	ppb	0.01641	45.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.4	16.815	ug/L	2.4656	16.815	ppb	2.4656	14.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.0      0.0735 ug/L       0.11483      0.0735 ppb        0.11483 156.20%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                6.8      0.1283 ug/L       0.01552      0.1283 ppb        0.01552  12.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.2      0.0131 ug/L       0.11408      0.0131 ppb        0.11408 872.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -1.2     -0.0035 ug/L       0.25223     -0.0035 ppb        0.25223 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.0      0.1790 ug/L       2.34180      0.1790 ppb        2.34180 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        196.8     34.892 ug/L        5.9572     34.892 ppb         5.9572  17.07%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      3.8537 ug/L      79.15382      3.8537 ppb       79.15382 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               75.8      0.0808 ug/L       0.07169      0.0808 ppb        0.07169  88.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.9      0.1224 ug/L       0.23521      0.1224 ppb        0.23521 192.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        73.2     24.565 ug/L        7.4046     24.565 ppb         7.4046  30.14%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.1      0.0023 ug/L       0.24447      0.0023 ppb        0.24447 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -8.5     -4.9075 ug/L       6.40658     -4.9075 ppb        6.40658 130.55%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               16.5      1.8676 ug/L       0.40916      1.8676 ppb        0.40916  21.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.3188 ug/L       3.27610      0.3188 ppb        3.27610 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.2      0.0833 ug/L       0.16755      0.0833 ppb        0.16755 201.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               12.1      6.9750 ug/L       2.81675      6.9750 ppb        2.81675  40.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              114.2      3.4061 ug/L       0.88355      3.4061 ppb        0.88355  25.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.7      0.1087 ug/L       0.87675      0.1087 ppb        0.87675 806.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -0.9     -0.0056 ug/L       0.13359     -0.0056 ppb        0.13359 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               68.7      0.1095 ug/L       0.14767      0.1095 ppb        0.14767 134.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.1     -0.3221 ug/L       0.83232     -0.3221 ppb        0.83232 258.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                79.2      2.1827 ug/L       3.29335      2.1827 ppb        3.29335 150.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                64.4      0.4314 ug/L       0.32014      0.4314 ppb        0.32014  74.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               48.1      0.4203 ug/L       0.09507      0.4203 ppb        0.09507  22.62%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     84.4      5.3813 ug/L       0.76046      5.3813 ppb        0.76046  14.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 121109
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 121109A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/11/2009 12:44:17**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/11/2009 10:35:01**
Analyst: **Data Type: Reprocessed on 12/11/2009 12:45:49**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	867384.7	867384.7	99.939	%	10:38:11
1	Sc Radial	5608.5	5608.5	101	%	10:36:54
1	Y 371.029	729366.4	729366.4	99.988	%	10:38:11
1	Y RADIAL	6113.1	6113.1	101.2	%	10:36:54
1	Ag 328.068†	291.2	291.4	[0.00]	ug/L	10:38:11

1	Al 396.153Radial†	-27.8	-27.7	[0.00] ug/L	10:36:54
1	As 188.979†	-33.2	-33.2	[0.00] ug/L	10:38:31
1	B 249.677†	-500.0	-500.3	[0.00] ug/L	10:38:31
1	Ba 233.527†	-23.0	-23.0	[0.00] ug/L	10:38:31
1	Be 313.107†	-4673.8	-4676.6	[0.00] ug/L	10:38:11
1	Ca 317.933Radial†	18.4	18.3	[0.00] ug/L	10:37:14
1	Cd 226.502†	-195.7	-195.8	[0.00] ug/L	10:38:31
1	Co 228.616†	-73.5	-73.5	[0.00] ug/L	10:38:31
1	Cr 267.716†	98.1	98.1	[0.00] ug/L	10:38:31
1	Cu 324.752†	6710.6	6714.7	[0.00] ug/L	10:38:11
1	Fe 238.204 Radial†	11.2	11.2	[0.00] ug/L	10:37:14
1	K 766.490 Radial†	2781.3	2765.0	[0.00] ug/L	10:36:54
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	10:37:14
1	Mn 257.610†	514.8	515.2	[0.00] ug/L	10:38:31
1	Mo 202.031†	16.4	16.4	[0.00] ug/L	10:38:31
1	Na 589.592 Radial†	-1549.4	-1540.3	[0.00] ug/L	10:36:54
1	Ni 231.604†	92.4	92.4	[0.00] ug/L	10:38:31
1	P 214.914†	242.5	242.6	[0.00] ug/L	10:38:31
1	Pb 220.353†	-68.7	-68.7	[0.00] ug/L	10:38:31
1	S 181.975 Axial†	46.0	46.1	[0.00] ug/L	10:38:31
1	Sb 206.836†	43.0	43.0	[0.00] ug/L	10:38:31
1	Se 196.026†	-23.4	-23.4	[0.00] ug/L	10:38:31
1	Si 251.611†	471.9	472.2	[0.00] ug/L	10:38:31
1	Sn 189.927†	5.3	5.3	[0.00] ug/L	10:38:31
1	Sr 421.552†	8.4	8.3	[0.00] ug/L	10:36:54
1	Ti 334.940†	-1298.5	-1299.3	[0.00] ug/L	10:38:11
1	Tl 190.801†	-28.3	-28.3	[0.00] ug/L	10:38:31
1	U 409.014†	-2617.2	-2618.8	[0.00] ug/L	10:38:11
1	V 292.402†	-1364.9	-1365.7	[0.00] ug/L	10:38:11
1	Zn 213.857†	737.5	738.0	[0.00] ug/L	10:38:31
1	SiO2†	543.0	543.4	[0.00] ug/L	10:39:27
2	Sc 361.383	873164.9	873164.9	100.60 %	10:38:36
2	Sc Radial	5567.4	5567.4	99.9 %	10:37:19
2	Y 371.029	733929.4	733929.4	100.61 %	10:38:36
2	Y RADIAL	6042.1	6042.1	100.0 %	10:37:19
2	Ag 328.068†	268.9	267.3	[0.00] ug/L	10:38:36
2	Al 396.153Radial†	-36.3	-36.3	[0.00] ug/L	10:37:19
2	As 188.979†	-30.2	-30.0	[0.00] ug/L	10:38:56
2	B 249.677†	-501.5	-498.5	[0.00] ug/L	10:38:56
2	Ba 233.527†	-11.8	-11.7	[0.00] ug/L	10:38:56
2	Be 313.107†	-4652.0	-4624.1	[0.00] ug/L	10:38:36
2	Ca 317.933Radial†	14.4	14.4	[0.00] ug/L	10:37:39
2	Cd 226.502†	-208.8	-207.6	[0.00] ug/L	10:38:56
2	Co 228.616†	-74.9	-74.4	[0.00] ug/L	10:38:56
2	Cr 267.716†	76.0	75.5	[0.00] ug/L	10:38:56
2	Cu 324.752†	6865.2	6823.9	[0.00] ug/L	10:38:36
2	Fe 238.204 Radial†	8.6	8.6	[0.00] ug/L	10:37:39
2	K 766.490 Radial†	2732.7	2736.8	[0.00] ug/L	10:37:19
2	Mg 279.077 IEC†	0.6	0.6	[0.00] ug/L	10:37:39
2	Mn 257.610†	513.2	510.1	[0.00] ug/L	10:38:56
2	Mo 202.031†	21.4	21.3	[0.00] ug/L	10:38:56
2	Na 589.592 Radial†	-1616.8	-1619.2	[0.00] ug/L	10:37:19
2	Ni 231.604†	82.6	82.1	[0.00] ug/L	10:38:56
2	P 214.914†	229.0	227.6	[0.00] ug/L	10:38:56
2	Pb 220.353†	-75.5	-75.1	[0.00] ug/L	10:38:56
2	S 181.975 Axial†	49.2	48.9	[0.00] ug/L	10:38:56
2	Sb 206.836†	34.6	34.4	[0.00] ug/L	10:38:56
2	Se 196.026†	-27.5	-27.3	[0.00] ug/L	10:38:56
2	Si 251.611†	487.6	484.7	[0.00] ug/L	10:38:56
2	Sn 189.927†	9.1	9.1	[0.00] ug/L	10:38:56
2	Sr 421.552†	-10.9	-10.9	[0.00] ug/L	10:37:19
2	Ti 334.940†	-1175.8	-1168.7	[0.00] ug/L	10:38:36
2	Tl 190.801†	-31.7	-31.5	[0.00] ug/L	10:38:56
2	U 409.014†	-2571.7	-2556.3	[0.00] ug/L	10:38:36
2	V 292.402†	-1358.1	-1349.9	[0.00] ug/L	10:38:36
2	Zn 213.857†	758.6	754.0	[0.00] ug/L	10:38:56
2	SiO2†	515.7	512.6	[0.00] ug/L	10:39:32
3	Sc 361.383	863198.0	863198.0	99.456 %	10:39:02
3	Sc Radial	5551.4	5551.4	99.6 %	10:37:44
3	Y 371.029	725074.5	725074.5	99.399 %	10:39:02
3	Y RADIAL	5962.3	5962.3	98.73 %	10:37:44

3	Ag 328.068†	261.9	263.4	[0.00] ug/L	10:39:02
3	Al 396.153Radial†	-41.8	-41.9	[0.00] ug/L	10:37:44
3	As 188.979†	-30.5	-30.7	[0.00] ug/L	10:39:22
3	B 249.677†	-478.2	-480.8	[0.00] ug/L	10:39:22
3	Ba 233.527†	1.4	1.4	[0.00] ug/L	10:39:22
3	Be 313.107†	-4661.7	-4687.2	[0.00] ug/L	10:39:02
3	Ca 317.933Radial†	18.0	18.0	[0.00] ug/L	10:38:05
3	Cd 226.502†	-192.4	-193.4	[0.00] ug/L	10:39:22
3	Co 228.616†	-72.0	-72.4	[0.00] ug/L	10:39:22
3	Cr 267.716†	84.0	84.5	[0.00] ug/L	10:39:22
3	Cu 324.752†	6698.3	6734.9	[0.00] ug/L	10:39:02
3	Fe 238.204 Radial†	9.9	9.9	[0.00] ug/L	10:38:05
3	K 766.490 Radial†	2704.9	2716.8	[0.00] ug/L	10:37:44
3	Mg 279.077 IEC†	3.2	3.2	[0.00] ug/L	10:38:05
3	Mn 257.610†	532.3	535.3	[0.00] ug/L	10:39:22
3	Mo 202.031†	17.4	17.5	[0.00] ug/L	10:39:22
3	Na 589.592 Radial†	-1496.3	-1502.9	[0.00] ug/L	10:37:44
3	Ni 231.604†	82.9	83.3	[0.00] ug/L	10:39:22
3	P 214.914†	254.4	255.8	[0.00] ug/L	10:39:22
3	Pb 220.353†	-59.8	-60.1	[0.00] ug/L	10:39:22
3	S 181.975 Axial†	52.9	53.2	[0.00] ug/L	10:39:22
3	Sb 206.836†	34.5	34.7	[0.00] ug/L	10:39:22
3	Se 196.026†	-29.5	-29.6	[0.00] ug/L	10:39:22
3	Si 251.611†	485.7	488.4	[0.00] ug/L	10:39:22
3	Sn 189.927†	12.1	12.1	[0.00] ug/L	10:39:22
3	Sr 421.552†	1.9	1.9	[0.00] ug/L	10:37:44
3	Ti 334.940†	-1293.7	-1300.8	[0.00] ug/L	10:39:02
3	Tl 190.801†	-43.7	-43.9	[0.00] ug/L	10:39:22
3	U 409.014†	-2562.9	-2576.9	[0.00] ug/L	10:39:02
3	V 292.402†	-1365.1	-1372.6	[0.00] ug/L	10:39:02
3	Zn 213.857†	765.4	769.6	[0.00] ug/L	10:39:22
3	SiO2†	514.6	517.4	[0.00] ug/L	10:39:37

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	867915.8	5004.66	0.58%	100.00	%
Sc Radial	5575.8	29.49	0.53%	100	%
Y 371.029	729456.7	4428.18	0.61%	100.00	%
Y RADIAL	6039.2	75.46	1.25%	100.0	%
Ag 328.068†	274.0	15.19	5.54%	[0.00]	ug/L
Al 396.153Radial†	-35.3	7.20	20.40%	[0.00]	ug/L
As 188.979†	-31.3	1.70	5.42%	[0.00]	ug/L
B 249.677†	-493.2	10.80	2.19%	[0.00]	ug/L
Ba 233.527†	-11.1	12.19	109.76%	[0.00]	ug/L
Be 313.107†	-4662.6	33.82	0.73%	[0.00]	ug/L
Ca 317.933Radial†	16.9	2.17	12.81%	[0.00]	ug/L
Cd 226.502†	-198.9	7.58	3.81%	[0.00]	ug/L
Co 228.616†	-73.4	1.03	1.40%	[0.00]	ug/L
Cr 267.716†	86.0	11.38	13.22%	[0.00]	ug/L
Cu 324.752†	6757.8	58.13	0.86%	[0.00]	ug/L
Fe 238.204 Radial†	9.9	1.30	13.13%	[0.00]	ug/L
K 766.490 Radial†	2739.5	24.23	0.88%	[0.00]	ug/L
Mg 279.077 IEC†	1.9	1.29	67.77%	[0.00]	ug/L
Mn 257.610†	520.2	13.31	2.56%	[0.00]	ug/L
Mo 202.031†	18.4	2.55	13.83%	[0.00]	ug/L
Na 589.592 Radial†	-1554.1	59.38	3.82%	[0.00]	ug/L
Ni 231.604†	85.9	5.65	6.58%	[0.00]	ug/L
P 214.914†	242.0	14.10	5.83%	[0.00]	ug/L
Pb 220.353†	-68.0	7.50	11.03%	[0.00]	ug/L
S 181.975 Axial†	49.4	3.61	7.31%	[0.00]	ug/L
Sb 206.836†	37.4	4.89	13.08%	[0.00]	ug/L
Se 196.026†	-26.8	3.12	11.65%	[0.00]	ug/L
Si 251.611†	481.7	8.49	1.76%	[0.00]	ug/L
Sn 189.927†	8.8	3.41	38.63%	[0.00]	ug/L
Sr 421.552†	-0.2	9.82	>999.9%	[0.00]	ug/L
Ti 334.940†	-1256.2	75.82	6.04%	[0.00]	ug/L
Tl 190.801†	-34.6	8.24	23.82%	[0.00]	ug/L
U 409.014†	-2584.0	31.88	1.23%	[0.00]	ug/L
V 292.402†	-1362.7	11.62	0.85%	[0.00]	ug/L

Zn 213.857†	753.9	15.79	2.09%	[0.00] ug/L
SiO2†	524.5	16.53	3.15%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/11/2009 10:41:48
Data Type: Reprocessed on 12/11/2009 12:45:50

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	875842.7	875842.7	100.91	%	10:44:12
1	Sc Radial	5490.5	5490.5	98.5	%	10:43:46
1	Y 371.029	731965.3	731965.3	100.34	%	10:44:12
1	Y RADIAL	5960.4	5960.4	98.70	%	10:43:46
1	Ag 328.068†	21744.6	21273.8	[100]	ug/L	10:44:17
1	As 188.979†	217.4	246.7	[100]	ug/L	10:44:37
1	B 249.677†	3900.4	4358.3	[100]	ug/L	10:44:17
1	Ba 233.527†	13083.6	12976.3	[100]	ug/L	10:44:17
1	Be 313.107†	259024.2	261342.5	[100]	ug/L	10:44:12
1	Cd 226.502†	9235.0	9350.4	[100]	ug/L	10:44:17
1	Co 228.616†	4935.1	4963.9	[100]	ug/L	10:44:37
1	Cr 267.716†	9393.3	9222.2	[100]	ug/L	10:44:17
1	Cu 324.752†	39672.7	32555.8	[100]	ug/L	10:44:17
1	K 766.490 Radial†	8407.4	5798.4	[1000]	ug/L	10:43:40
1	Mn 257.610†	91938.6	90586.4	[100]	ug/L	10:44:17
1	Mo 202.031†	1522.8	1490.6	[100]	ug/L	10:44:37
1	Ni 231.604†	4178.8	4055.1	[100]	ug/L	10:44:37
1	P 214.914†	1076.2	824.4	[500]	ug/L	10:44:37
1	Pb 220.353†	785.2	846.1	[100]	ug/L	10:44:37
1	S 181.975 Axial†	185.0	134.0	[200]	ug/L	10:44:37
1	Sb 206.836†	324.9	284.5	[100]	ug/L	10:44:37
1	Se 196.026†	139.6	165.1	[100]	ug/L	10:44:37
1	Si 251.611†	16386.5	15756.4	[500]	ug/L	10:44:17
1	Sn 189.927†	584.6	570.5	[100]	ug/L	10:44:37
1	Sr 421.552†	15716.8	15961.0	[100]	ug/L	10:43:46
1	Ti 334.940†	58684.5	59409.6	[100]	ug/L	10:44:17
1	Tl 190.801†	306.5	338.3	[100]	ug/L	10:44:37
1	U 409.014†	652.2	3230.3	[100]	ug/L	10:44:12
1	V 292.402†	13019.5	14264.4	[100]	ug/L	10:44:17
1	Zn 213.857†	12046.1	11183.3	[100]	ug/L	10:44:17
1	SiO2†	16331.5	15659.2	[1069.5]	ug/L	10:45:44
2	Sc 361.383	876251.3	876251.3	100.96	%	10:44:43
2	Sc Radial	5517.6	5517.6	99.0	%	10:43:56
2	Y 371.029	732181.8	732181.8	100.37	%	10:44:43
2	Y RADIAL	6014.9	6014.9	99.60	%	10:43:56
2	Ag 328.068†	21438.3	20960.3	[100]	ug/L	10:44:48
2	As 188.979†	215.7	244.9	[100]	ug/L	10:45:08
2	B 249.677†	3806.3	4263.3	[100]	ug/L	10:44:48
2	Ba 233.527†	12864.3	12753.0	[100]	ug/L	10:44:48
2	Be 313.107†	258711.3	260912.9	[100]	ug/L	10:44:43
2	Cd 226.502†	9036.0	9149.0	[100]	ug/L	10:44:48
2	Co 228.616†	4922.9	4949.5	[100]	ug/L	10:45:08
2	Cr 267.716†	9233.9	9060.1	[100]	ug/L	10:44:48
2	Cu 324.752†	38791.5	31664.6	[100]	ug/L	10:44:48
2	K 766.490 Radial†	8506.7	5856.8	[1000]	ug/L	10:43:51
2	Mn 257.610†	90655.4	89272.9	[100]	ug/L	10:44:48
2	Mo 202.031†	1526.9	1494.0	[100]	ug/L	10:45:08
2	Ni 231.604†	4185.8	4060.0	[100]	ug/L	10:45:08
2	P 214.914†	1063.0	810.8	[500]	ug/L	10:45:08
2	Pb 220.353†	786.4	846.9	[100]	ug/L	10:45:08
2	S 181.975 Axial†	193.4	142.2	[200]	ug/L	10:45:08
2	Sb 206.836†	328.4	287.9	[100]	ug/L	10:45:08
2	Se 196.026†	143.4	168.9	[100]	ug/L	10:45:08
2	Si 251.611†	16134.8	15499.6	[500]	ug/L	10:44:48
2	Sn 189.927†	595.0	580.5	[100]	ug/L	10:45:08
2	Sr 421.552†	15803.8	15970.6	[100]	ug/L	10:43:56
2	Ti 334.940†	57870.5	58576.2	[100]	ug/L	10:44:48
2	Tl 190.801†	304.5	336.2	[100]	ug/L	10:45:08

2	U 409.014†	865.7	3441.5	[100]	ug/L	10:44:43
2	V 292.402†	12746.3	13987.8	[100]	ug/L	10:44:48
2	Zn 213.857†	11880.2	11013.4	[100]	ug/L	10:44:48
2	SiO2†	16234.1	15555.2	[1069.5]	ug/L	10:45:49
3	Sc 361.383	871070.4	871070.4	100.36	%	10:45:13
3	Sc Radial	5463.9	5463.9	98.0	%	10:44:06
3	Y 371.029	728966.6	728966.6	99.933	%	10:45:13
3	Y RADIAL	5953.0	5953.0	98.57	%	10:44:06
3	Ag 328.068†	21625.9	21273.6	[100]	ug/L	10:45:18
3	As 188.979†	218.8	249.3	[100]	ug/L	10:45:38
3	B 249.677†	3831.9	4311.2	[100]	ug/L	10:45:18
3	Ba 233.527†	13046.8	13010.7	[100]	ug/L	10:45:18
3	Be 313.107†	258070.6	261798.7	[100]	ug/L	10:45:13
3	Cd 226.502†	9135.9	9301.8	[100]	ug/L	10:45:18
3	Co 228.616†	4918.9	4974.6	[100]	ug/L	10:45:38
3	Cr 267.716†	9344.1	9224.2	[100]	ug/L	10:45:18
3	Cu 324.752†	39512.1	32611.2	[100]	ug/L	10:45:18
3	K 766.490 Radial†	8464.4	5898.1	[1000]	ug/L	10:44:01
3	Mn 257.610†	91873.8	91020.9	[100]	ug/L	10:45:18
3	Mo 202.031†	1534.5	1510.6	[100]	ug/L	10:45:38
3	Ni 231.604†	4204.2	4103.0	[100]	ug/L	10:45:38
3	P 214.914†	1070.9	824.9	[500]	ug/L	10:45:38
3	Pb 220.353†	786.1	851.2	[100]	ug/L	10:45:38
3	S 181.975 Axial†	186.1	136.0	[200]	ug/L	10:45:38
3	Sb 206.836†	327.2	288.7	[100]	ug/L	10:45:38
3	Se 196.026†	154.0	180.3	[100]	ug/L	10:45:38
3	Si 251.611†	16375.9	15834.9	[500]	ug/L	10:45:18
3	Sn 189.927†	604.1	593.1	[100]	ug/L	10:45:38
3	Sr 421.552†	15771.1	16094.2	[100]	ug/L	10:44:06
3	Ti 334.940†	58689.0	59732.7	[100]	ug/L	10:45:18
3	Tl 190.801†	303.8	337.3	[100]	ug/L	10:45:38
3	U 409.014†	486.0	3068.3	[100]	ug/L	10:45:13
3	V 292.402†	12958.4	14274.2	[100]	ug/L	10:45:18
3	Zn 213.857†	11966.3	11169.1	[100]	ug/L	10:45:18
3	SiO2†	16008.2	15425.8	[1069.5]	ug/L	10:45:54

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	874388.1	2880.49	0.33%	100.75	%
Sc Radial	5490.7	26.84	0.49%	98.5	%
Y 371.029	731037.9	1797.06	0.25%	100.22	%
Y RADIAL	5976.1	33.76	0.56%	98.96	%
Ag 328.068†	21169.2	180.92	0.85%	[100]	ug/L
As 188.979†	247.0	2.22	0.90%	[100]	ug/L
B 249.677†	4310.9	47.50	1.10%	[100]	ug/L
Ba 233.527†	12913.3	139.90	1.08%	[100]	ug/L
Be 313.107†	261351.4	442.96	0.17%	[100]	ug/L
Cd 226.502†	9267.0	105.10	1.13%	[100]	ug/L
Co 228.616†	4962.6	12.57	0.25%	[100]	ug/L
Cr 267.716†	9168.8	94.20	1.03%	[100]	ug/L
Cu 324.752†	32277.2	531.23	1.65%	[100]	ug/L
K 766.490 Radial†	5851.1	50.10	0.86%	[1000]	ug/L
Mn 257.610†	90293.4	910.10	1.01%	[100]	ug/L
Mo 202.031†	1498.4	10.66	0.71%	[100]	ug/L
Ni 231.604†	4072.7	26.39	0.65%	[100]	ug/L
P 214.914†	820.1	8.01	0.98%	[500]	ug/L
Pb 220.353†	848.1	2.78	0.33%	[100]	ug/L
S 181.975 Axial†	137.4	4.26	3.10%	[200]	ug/L
Sb 206.836†	287.0	2.20	0.77%	[100]	ug/L
Se 196.026†	171.4	7.91	4.62%	[100]	ug/L
Si 251.611†	15697.0	175.35	1.12%	[500]	ug/L
Sn 189.927†	581.4	11.35	1.95%	[100]	ug/L
Sr 421.552†	16008.6	74.27	0.46%	[100]	ug/L
Ti 334.940†	59239.5	596.69	1.01%	[100]	ug/L
Tl 190.801†	337.2	1.06	0.31%	[100]	ug/L
U 409.014†	3246.7	187.14	5.76%	[100]	ug/L
V 292.402†	14175.5	162.60	1.15%	[100]	ug/L
Zn 213.857†	11121.9	94.26	0.85%	[100]	ug/L
SiO2†	15546.7	116.97	0.75%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2009 10:48:04
Data Type: Reprocessed on 12/11/2009 12:45:56

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	862154.4	862154.4	99.336	%	10:51:14
1	Sc Radial	5481.4	5481.4	98.3	%	10:49:57
1	Y 371.029	712144.1	712144.1	97.627	%	10:51:14
1	Y RADIAL	5921.2	5921.2	98.05	%	10:49:57
1	Ag 328.068†	113189.5	113671.8	[500]	ug/L	10:51:19
1	Al 396.153Radial†	7182.3	7341.3	[5000]	ug/L	10:49:57
1	As 188.979†	1282.0	1321.9	[500]	ug/L	10:51:39
1	B 249.677†	23230.2	23878.7	[500]	ug/L	10:51:19
1	Ba 233.527†	67975.9	68441.2	[500]	ug/L	10:51:19
1	Be 313.107†	1405181.5	1419234.3	[500]	ug/L	10:51:14
1	Ca 317.933Radial†	3492.8	3536.1	[5000]	ug/L	10:50:17
1	Cd 226.502†	49155.7	49683.2	[500]	ug/L	10:51:19
1	Co 228.616†	26963.6	27217.2	[500]	ug/L	10:51:19
1	Cr 267.716†	48603.2	48842.0	[500]	ug/L	10:51:19
1	Cu 324.752†	179701.3	174144.3	[500]	ug/L	10:51:19
1	K 766.490 Radial†	32539.6	30360.4	[5000]	ug/L	10:49:57
1	Mg 279.077 IEC†	159.8	160.7	[5000]	ug/L	10:50:17
1	Mn 257.610†	480086.9	482774.9	[500]	ug/L	10:51:14
1	Mo 202.031†	8055.5	8090.9	[500]	ug/L	10:51:39
1	Ni 231.604†	22326.2	22389.5	[500]	ug/L	10:51:19
1	P 214.914†	4773.9	4563.8	[2500]	ug/L	10:51:39
1	Pb 220.353†	4475.4	4573.3	[500]	ug/L	10:51:39
1	S 181.975 Axial†	839.9	796.1	[1000]	ug/L	10:51:39
1	Sb 206.836†	1659.7	1633.4	[500]	ug/L	10:51:39
1	Se 196.026†	882.8	915.5	[500]	ug/L	10:51:39
1	Si 251.611†	87899.1	88004.8	[2500]	ug/L	10:51:19
1	Sn 189.927†	3195.2	3207.7	[500]	ug/L	10:51:39
1	Sr 421.552†	85559.7	87033.4	[500]	ug/L	10:49:57
1	Ti 334.940†	315692.6	319058.5	[500]	ug/L	10:51:19
1	Tl 190.801†	1768.4	1814.8	[500]	ug/L	10:51:39
1	U 409.014†	14815.3	17498.3	[500]	ug/L	10:51:19
1	V 292.402†	74574.4	76435.5	[500]	ug/L	10:51:19
1	Zn 213.857†	60376.0	60025.6	[500]	ug/L	10:51:19
1	SiO2†	86990.1	87046.9	[5347.5]	ug/L	10:52:47
2	Sc 361.383	869710.7	869710.7	100.21	%	10:51:45
2	Sc Radial	5365.2	5365.2	96.2	%	10:50:22
2	Y 371.029	718941.2	718941.2	98.558	%	10:51:45
2	Y RADIAL	5826.9	5826.9	96.48	%	10:50:22
2	Ag 328.068†	113787.1	113278.3	[500]	ug/L	10:51:50
2	Al 396.153Radial†	7081.8	7395.0	[5000]	ug/L	10:50:22
2	As 188.979†	1283.1	1311.8	[500]	ug/L	10:52:10
2	B 249.677†	23348.0	23793.0	[500]	ug/L	10:51:50
2	Ba 233.527†	68259.7	68130.0	[500]	ug/L	10:51:50
2	Be 313.107†	1417482.9	1419220.2	[500]	ug/L	10:51:45
2	Ca 317.933Radial†	3479.3	3599.0	[5000]	ug/L	10:50:42
2	Cd 226.502†	49266.7	49363.9	[500]	ug/L	10:51:50
2	Co 228.616†	27019.5	27037.1	[500]	ug/L	10:51:50
2	Cr 267.716†	48764.9	48578.2	[500]	ug/L	10:51:50
2	Cu 324.752†	180993.9	173862.5	[500]	ug/L	10:51:50
2	K 766.490 Radial†	32284.5	30811.7	[5000]	ug/L	10:50:22
2	Mg 279.077 IEC†	158.5	162.8	[5000]	ug/L	10:50:42
2	Mn 257.610†	482638.4	481122.2	[500]	ug/L	10:51:45
2	Mo 202.031†	8034.1	7999.1	[500]	ug/L	10:52:10
2	Ni 231.604†	22414.2	22282.0	[500]	ug/L	10:51:50
2	P 214.914†	4776.3	4524.5	[2500]	ug/L	10:52:10
2	Pb 220.353†	4468.2	4526.9	[500]	ug/L	10:52:10
2	S 181.975 Axial†	825.9	774.7	[1000]	ug/L	10:52:10
2	Sb 206.836†	1651.7	1610.9	[500]	ug/L	10:52:10

2	Se 196.026†	877.5	902.4	[500]	ug/L	10:52:10
2	Si 251.611†	88332.2	87668.2	[2500]	ug/L	10:51:50
2	Sn 189.927†	3195.2	3179.8	[500]	ug/L	10:52:10
2	Sr 421.552†	83941.4	87235.3	[500]	ug/L	10:50:22
2	Ti 334.940†	317719.6	318320.1	[500]	ug/L	10:51:50
2	Tl 190.801†	1766.5	1797.5	[500]	ug/L	10:52:10
2	U 409.014†	15164.8	17717.5	[500]	ug/L	10:51:50
2	V 292.402†	75076.8	76284.6	[500]	ug/L	10:51:50
2	Zn 213.857†	60583.5	59704.6	[500]	ug/L	10:51:50
2	SiO2†	88381.8	87675.0	[5347.5]	ug/L	10:52:52
3	Sc 361.383	879497.5	879497.5	101.33	%	10:52:16
3	Sc Radial	5472.2	5472.2	98.1	%	10:50:47
3	Y 371.029	727729.6	727729.6	99.763	%	10:52:16
3	Y RADIAL	5921.7	5921.7	98.05	%	10:50:47
3	Ag 328.068†	113888.3	112114.5	[500]	ug/L	10:52:21
3	Al 396.153Radial†	7240.2	7412.5	[5000]	ug/L	10:50:47
3	As 188.979†	1290.5	1304.8	[500]	ug/L	10:52:41
3	B 249.677†	23462.3	23646.5	[500]	ug/L	10:52:21
3	Ba 233.527†	68134.9	67248.8	[500]	ug/L	10:52:21
3	Be 313.107†	1436756.2	1422498.9	[500]	ug/L	10:52:16
3	Ca 317.933Radial†	3445.1	3493.4	[5000]	ug/L	10:51:07
3	Cd 226.502†	49122.3	48674.3	[500]	ug/L	10:52:21
3	Co 228.616†	27027.0	26744.5	[500]	ug/L	10:52:21
3	Cr 267.716†	48752.2	48024.1	[500]	ug/L	10:52:21
3	Cu 324.752†	181069.6	171927.4	[500]	ug/L	10:52:21
3	K 766.490 Radial†	32771.2	30651.6	[5000]	ug/L	10:50:47
3	Mg 279.077 IEC†	155.8	156.8	[5000]	ug/L	10:51:07
3	Mn 257.610†	487896.6	480951.6	[500]	ug/L	10:52:16
3	Mo 202.031†	8036.7	7912.5	[500]	ug/L	10:52:41
3	Ni 231.604†	22306.3	21926.6	[500]	ug/L	10:52:21
3	P 214.914†	4778.5	4473.5	[2500]	ug/L	10:52:41
3	Pb 220.353†	4426.8	4436.5	[500]	ug/L	10:52:41
3	S 181.975 Axial†	816.1	756.0	[1000]	ug/L	10:52:41
3	Sb 206.836†	1659.4	1600.2	[500]	ug/L	10:52:41
3	Se 196.026†	884.8	900.0	[500]	ug/L	10:52:41
3	Si 251.611†	88184.8	86541.8	[2500]	ug/L	10:52:21
3	Sn 189.927†	3185.0	3134.3	[500]	ug/L	10:52:41
3	Sr 421.552†	85571.7	87190.7	[500]	ug/L	10:50:47
3	Ti 334.940†	317393.1	314469.8	[500]	ug/L	10:52:21
3	Tl 190.801†	1768.6	1779.8	[500]	ug/L	10:52:41
3	U 409.014†	15098.8	17484.0	[500]	ug/L	10:52:21
3	V 292.402†	74801.1	75178.8	[500]	ug/L	10:52:21
3	Zn 213.857†	60531.6	58980.6	[500]	ug/L	10:52:21
3	SiO2†	87774.3	86094.0	[5347.5]	ug/L	10:52:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	870454.2	8695.40	1.00%	100.29	%
Sc Radial	5439.6	64.57	1.19%	97.6	%
Y 371.029	719605.0	7813.91	1.09%	98.649	%
Y RADIAL	5889.9	54.59	0.93%	97.53	%
Ag 328.068†	113021.5	809.76	0.72%	[500]	ug/L
Al 396.153Radial†	7382.9	37.08	0.50%	[5000]	ug/L
As 188.979†	1312.8	8.58	0.65%	[500]	ug/L
B 249.677†	23772.7	117.39	0.49%	[500]	ug/L
Ba 233.527†	67940.0	618.48	0.91%	[500]	ug/L
Be 313.107†	1420317.8	1888.90	0.13%	[500]	ug/L
Ca 317.933Radial†	3542.8	53.11	1.50%	[5000]	ug/L
Cd 226.502†	49240.5	515.63	1.05%	[500]	ug/L
Co 228.616†	26999.6	238.58	0.88%	[500]	ug/L
Cr 267.716†	48481.4	417.42	0.86%	[500]	ug/L
Cu 324.752†	173311.4	1206.87	0.70%	[500]	ug/L
K 766.490 Radial†	30607.9	228.83	0.75%	[5000]	ug/L
Mg 279.077 IEC†	160.1	3.01	1.88%	[5000]	ug/L
Mn 257.610†	481616.2	1007.05	0.21%	[500]	ug/L
Mo 202.031†	8000.8	89.21	1.12%	[500]	ug/L
Ni 231.604†	22199.3	242.25	1.09%	[500]	ug/L
P 214.914†	4520.6	45.26	1.00%	[2500]	ug/L
Pb 220.353†	4512.2	69.56	1.54%	[500]	ug/L

S 181.975 Axial†	775.6	20.09	2.59%	[1000]	ug/L
Sb 206.836†	1614.8	16.98	1.05%	[500]	ug/L
Se 196.026†	906.0	8.34	0.92%	[500]	ug/L
Si 251.611†	87404.9	766.17	0.88%	[2500]	ug/L
Sn 189.927†	3173.9	37.08	1.17%	[500]	ug/L
Sr 421.552†	87153.1	106.08	0.12%	[500]	ug/L
Ti 334.940†	317282.8	2463.95	0.78%	[500]	ug/L
Tl 190.801†	1797.4	17.50	0.97%	[500]	ug/L
U 409.014†	17566.6	130.90	0.75%	[500]	ug/L
V 292.402†	75966.3	686.14	0.90%	[500]	ug/L
Zn 213.857†	59570.3	535.28	0.90%	[500]	ug/L
SiO2†	86938.6	796.02	0.92%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/11/2009 10:55:08
Data Type: Reprocessed on 12/11/2009 12:45:57

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	853185.0	853185.0	98.303	%	10:58:24
1	Sc Radial	5453.9	5453.9	97.8	%	10:57:01
1	Y 371.029	706727.3	706727.3	96.884	%	10:58:24
1	Y RADIAL	5894.8	5894.8	97.61	%	10:57:01
1	Ag 328.068†	216668.2	220135.1	[1000]	ug/L	10:58:24
1	Al 396.153Radial†	13864.0	14209.2	[10000]	ug/L	10:57:01
1	As 188.979†	2487.8	2562.1	[1000]	ug/L	10:58:44
1	B 249.677†	45672.0	46953.8	[1000]	ug/L	10:58:24
1	Ba 233.527†	131213.3	133489.8	[1000]	ug/L	10:58:24
1	Be 313.107†	2694496.8	2745681.6	[1000]	ug/L	10:58:19
1	Ca 317.933Radial†	6738.5	6872.2	[10000]	ug/L	10:57:01
1	Cd 226.502†	94285.2	96112.0	[1000]	ug/L	10:58:24
1	Co 228.616†	51927.8	52897.8	[1000]	ug/L	10:58:24
1	Cr 267.716†	93794.4	95327.8	[1000]	ug/L	10:58:24
1	Cu 324.752†	345381.4	344586.8	[1000]	ug/L	10:58:24
1	Fe 238.204 Radial†	1097.6	1112.3	[10000]	ug/L	10:57:21
1	K 766.490 Radial†	60558.7	59172.9	[10000]	ug/L	10:57:01
1	Mg 279.077 IEC†	298.3	303.0	[10000]	ug/L	10:57:21
1	Mn 257.610†	915562.2	930849.8	[1000]	ug/L	10:58:19
1	Mo 202.031†	15288.8	15534.4	[1000]	ug/L	10:58:44
1	Na 589.592 Radial†	29494.4	31707.9	[10000]	ug/L	10:57:01
1	Ni 231.604†	42800.5	43453.5	[1000]	ug/L	10:58:24
1	P 214.914†	8932.9	8845.1	[5000]	ug/L	10:58:44
1	Pb 220.353†	8650.8	8868.2	[1000]	ug/L	10:58:44
1	S 181.975 Axial†	1510.1	1486.8	[2000]	ug/L	10:58:44
1	Sb 206.836†	3111.7	3128.0	[1000]	ug/L	10:58:44
1	Se 196.026†	1704.5	1760.7	[1000]	ug/L	10:58:44
1	Si 251.611†	164115.4	166467.2	[5000]	ug/L	10:58:24
1	Sn 189.927†	6048.0	6143.6	[1000]	ug/L	10:58:44
1	Sr 421.552†	160418.7	164004.8	[1000]	ug/L	10:57:01
1	Ti 334.940†	616360.4	628258.5	[1000]	ug/L	10:58:19
1	Tl 190.801†	3412.4	3505.9	[1000]	ug/L	10:58:44
1	U 409.014†	31688.2	34819.3	[1000]	ug/L	10:58:24
1	V 292.402†	146096.9	149982.1	[1000]	ug/L	10:58:24
1	Zn 213.857†	114549.0	115772.9	[1000]	ug/L	10:58:24
1	SiO2†	162872.7	165160.3	[10695]	ug/L	10:59:54
2	Sc 361.383	845212.1	845212.1	97.384	%	10:58:56
2	Sc Radial	5375.1	5375.1	96.4	%	10:57:26
2	Y 371.029	702106.8	702106.8	96.251	%	10:58:56
2	Y RADIAL	5817.0	5817.0	96.32	%	10:57:26
2	Ag 328.068†	214228.6	219709.1	[1000]	ug/L	10:58:56
2	Al 396.153Radial†	13767.3	14316.5	[10000]	ug/L	10:57:26
2	As 188.979†	2504.5	2603.1	[1000]	ug/L	10:59:16
2	B 249.677†	44921.9	46621.8	[1000]	ug/L	10:58:56
2	Ba 233.527†	129473.4	132962.3	[1000]	ug/L	10:58:56
2	Be 313.107†	2728112.9	2806057.1	[1000]	ug/L	10:58:51
2	Ca 317.933Radial†	6632.8	6863.5	[10000]	ug/L	10:57:26
2	Cd 226.502†	92841.3	95534.1	[1000]	ug/L	10:58:56
2	Co 228.616†	51178.4	52626.6	[1000]	ug/L	10:58:56
2	Cr 267.716†	92627.1	95029.1	[1000]	ug/L	10:58:56
2	Cu 324.752†	341207.0	343614.6	[1000]	ug/L	10:58:56
2	Fe 238.204 Radial†	1089.7	1120.5	[10000]	ug/L	10:57:46
2	K 766.490 Radial†	59733.1	59223.1	[10000]	ug/L	10:57:26
2	Mg 279.077 IEC†	297.7	306.9	[10000]	ug/L	10:57:46
2	Mn 257.610†	925258.4	949592.2	[1000]	ug/L	10:58:51
2	Mo 202.031†	15392.0	15787.0	[1000]	ug/L	10:59:16
2	Na 589.592 Radial†	28816.5	31446.2	[10000]	ug/L	10:57:26
2	Ni 231.604†	42127.9	43173.6	[1000]	ug/L	10:58:56

2	P 214.914†	9025.3	9025.7	[5000]	ug/L	10:59:16
2	Pb 220.353†	8677.8	8978.9	[1000]	ug/L	10:59:16
2	S 181.975 Axial†	1524.6	1516.2	[2000]	ug/L	10:59:16
2	Sb 206.836†	3130.8	3177.5	[1000]	ug/L	10:59:16
2	Se 196.026†	1708.5	1781.2	[1000]	ug/L	10:59:16
2	Si 251.611†	161974.9	165844.1	[5000]	ug/L	10:58:56
2	Sn 189.927†	6084.3	6238.9	[1000]	ug/L	10:59:16
2	Sr 421.552†	157729.9	163617.5	[1000]	ug/L	10:57:26
2	Ti 334.940†	622983.8	640974.4	[1000]	ug/L	10:58:51
2	Tl 190.801†	3442.1	3569.1	[1000]	ug/L	10:59:16
2	U 409.014†	31177.9	34599.3	[1000]	ug/L	10:58:56
2	V 292.402†	144580.6	149827.0	[1000]	ug/L	10:58:56
2	Zn 213.857†	112917.6	115196.9	[1000]	ug/L	10:58:56
2	SiO2†	162491.3	166331.6	[10695]	ug/L	10:59:59
3	Sc 361.383	853864.7	853864.7	98.381	%	10:59:28
3	Sc Radial	5464.8	5464.8	98.0	%	10:57:51
3	Y 371.029	708211.8	708211.8	97.088	%	10:59:28
3	Y RADIAL	5914.4	5914.4	97.93	%	10:57:51
3	Ag 328.068†	216589.6	219879.7	[1000]	ug/L	10:59:28
3	Al 396.153Radial†	13938.9	14257.2	[10000]	ug/L	10:57:51
3	As 188.979†	2508.7	2581.3	[1000]	ug/L	10:59:48
3	B 249.677†	45602.5	46846.2	[1000]	ug/L	10:59:28
3	Ba 233.527†	131477.4	133652.1	[1000]	ug/L	10:59:28
3	Be 313.107†	2717028.2	2766401.9	[1000]	ug/L	10:59:23
3	Ca 317.933Radial†	6728.8	6848.6	[10000]	ug/L	10:57:51
3	Cd 226.502†	94433.2	96186.1	[1000]	ug/L	10:59:28
3	Co 228.616†	52001.9	52931.1	[1000]	ug/L	10:59:28
3	Cr 267.716†	93825.2	95283.1	[1000]	ug/L	10:59:28
3	Cu 324.752†	344619.5	343532.6	[1000]	ug/L	10:59:28
3	Fe 238.204 Radial†	1090.9	1103.2	[10000]	ug/L	10:58:11
3	K 766.490 Radial†	60752.2	59246.2	[10000]	ug/L	10:57:51
3	Mg 279.077 IEC†	298.0	302.1	[10000]	ug/L	10:58:11
3	Mn 257.610†	921996.7	936648.8	[1000]	ug/L	10:59:23
3	Mo 202.031†	15392.5	15627.4	[1000]	ug/L	10:59:48
3	Na 589.592 Radial†	29549.3	31703.5	[10000]	ug/L	10:57:51
3	Ni 231.604†	42734.9	43352.2	[1000]	ug/L	10:59:28
3	P 214.914†	9045.5	8952.4	[5000]	ug/L	10:59:48
3	Pb 220.353†	8686.4	8897.3	[1000]	ug/L	10:59:48
3	S 181.975 Axial†	1538.7	1514.6	[2000]	ug/L	10:59:48
3	Sb 206.836†	3146.0	3160.4	[1000]	ug/L	10:59:48
3	Se 196.026†	1711.8	1766.8	[1000]	ug/L	10:59:48
3	Si 251.611†	164219.2	166439.8	[5000]	ug/L	10:59:28
3	Sn 189.927†	6088.8	6180.2	[1000]	ug/L	10:59:48
3	Sr 421.552†	160324.3	163579.9	[1000]	ug/L	10:57:51
3	Ti 334.940†	620417.6	631883.3	[1000]	ug/L	10:59:23
3	Tl 190.801†	3452.1	3543.5	[1000]	ug/L	10:59:48
3	U 409.014†	31628.3	34732.7	[1000]	ug/L	10:59:28
3	V 292.402†	146327.9	150098.6	[1000]	ug/L	10:59:28
3	Zn 213.857†	114636.0	115768.6	[1000]	ug/L	10:59:28
3	SiO2†	164626.4	166811.0	[10695]	ug/L	11:00:04

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	850753.9	4811.42	0.57%	98.023	%
Sc Radial	5431.3	48.92	0.90%	97.4	%
Y 371.029	705682.0	3183.94	0.45%	96.741	%
Y RADIAL	5875.4	51.52	0.88%	97.29	%
Ag 328.068†	219908.0	214.38	0.10%	[1000]	ug/L
Al 396.153Radial†	14260.9	53.73	0.38%	[10000]	ug/L
As 188.979†	2582.1	20.52	0.79%	[1000]	ug/L
B 249.677†	46807.3	169.38	0.36%	[1000]	ug/L
Ba 233.527†	133368.1	360.63	0.27%	[1000]	ug/L
Be 313.107†	2772713.6	30678.59	1.11%	[1000]	ug/L
Ca 317.933Radial†	6861.4	11.95	0.17%	[10000]	ug/L
Cd 226.502†	95944.1	356.96	0.37%	[1000]	ug/L
Co 228.616†	52818.5	167.02	0.32%	[1000]	ug/L
Cr 267.716†	95213.3	161.08	0.17%	[1000]	ug/L
Cu 324.752†	343911.3	586.41	0.17%	[1000]	ug/L
Fe 238.204 Radial†	1112.0	8.69	0.78%	[10000]	ug/L

K 766.490 Radial†	59214.1	37.52	0.06%	[10000]	ug/L
Mg 279.077 IEC†	304.0	2.54	0.83%	[10000]	ug/L
Mn 257.610†	939030.3	9595.46	1.02%	[1000]	ug/L
Mo 202.031†	15649.6	127.78	0.82%	[1000]	ug/L
Na 589.592 Radial†	31619.2	149.79	0.47%	[10000]	ug/L
Ni 231.604†	43326.4	141.72	0.33%	[1000]	ug/L
P 214.914†	8941.0	90.83	1.02%	[5000]	ug/L
Pb 220.353†	8914.8	57.38	0.64%	[1000]	ug/L
S 181.975 Axial†	1505.8	16.54	1.10%	[2000]	ug/L
Sb 206.836†	3155.3	25.11	0.80%	[1000]	ug/L
Se 196.026†	1769.6	10.54	0.60%	[1000]	ug/L
Si 251.611†	166250.4	352.13	0.21%	[5000]	ug/L
Sn 189.927†	6187.5	48.07	0.78%	[1000]	ug/L
Sr 421.552†	163734.0	235.21	0.14%	[1000]	ug/L
Ti 334.940†	633705.4	6550.82	1.03%	[1000]	ug/L
Tl 190.801†	3539.5	31.82	0.90%	[1000]	ug/L
U 409.014†	34717.1	110.82	0.32%	[1000]	ug/L
V 292.402†	149969.2	136.25	0.09%	[1000]	ug/L
Zn 213.857†	115579.5	331.33	0.29%	[1000]	ug/L
SiO2†	166101.0	849.19	0.51%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/11/2009 11:02:15
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860963.7	860963.7	99.199	%	11:05:26
1	Sc Radial	5387.2	5387.2	96.6	%	11:04:29
1	Y 371.029	709124.8	709124.8	97.213	%	11:05:26
1	Y RADIAL	5822.0	5822.0	96.40	%	11:04:29
1	Al 396.153Radial†	68975.6	71425.6	[50000]	ug/L	11:04:09
1	Ca 317.933Radial†	32653.3	33779.6	[50000]	ug/L	11:04:09
1	Fe 238.204 Radial†	2164.6	2230.5	[20000]	ug/L	11:04:29
1	Mg 279.077 IEC†	1433.3	1481.6	[50000]	ug/L	11:04:29
1	Na 589.592 Radial†	61862.2	65582.1	[20000]	ug/L	11:04:09
2	Sc 361.383	854136.3	854136.3	98.412	%	11:05:32
2	Sc Radial	5350.4	5350.4	96.0	%	11:04:54
2	Y 371.029	702699.8	702699.8	96.332	%	11:05:32
2	Y RADIAL	5769.4	5769.4	95.53	%	11:04:54
2	Al 396.153Radial†	70067.2	73053.7	[50000]	ug/L	11:04:34
2	Ca 317.933Radial†	32982.7	34355.0	[50000]	ug/L	11:04:34
2	Fe 238.204 Radial†	2153.5	2234.3	[20000]	ug/L	11:04:54
2	Mg 279.077 IEC†	1432.1	1490.5	[50000]	ug/L	11:04:54
2	Na 589.592 Radial†	62754.2	66951.5	[20000]	ug/L	11:04:34
3	Sc 361.383	843792.7	843792.7	97.221	%	11:05:38
3	Sc Radial	5364.3	5364.3	96.2	%	11:05:19
3	Y 371.029	695516.3	695516.3	95.347	%	11:05:38
3	Y RADIAL	5786.0	5786.0	95.81	%	11:05:19
3	Al 396.153Radial†	70617.8	73437.3	[50000]	ug/L	11:04:59
3	Ca 317.933Radial†	33303.8	34599.9	[50000]	ug/L	11:04:59
3	Fe 238.204 Radial†	2163.3	2238.8	[20000]	ug/L	11:05:19
3	Mg 279.077 IEC†	1426.7	1481.1	[50000]	ug/L	11:05:19
3	Na 589.592 Radial†	63458.0	67514.1	[20000]	ug/L	11:04:59

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	852964.2	8645.27	1.01%	98.277	%
Sc Radial	5367.3	18.56	0.35%	96.3	%
Y 371.029	702447.0	6807.78	0.97%	96.297	%
Y RADIAL	5792.4	26.90	0.46%	95.91	%
Al 396.153Radial†	72638.9	1068.08	1.47%	[50000]	ug/L
Ca 317.933Radial†	34244.8	421.13	1.23%	[50000]	ug/L
Fe 238.204 Radial†	2234.5	4.14	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1484.4	5.33	0.36%	[50000]	ug/L
Na 589.592 Radial†	66682.5	993.69	1.49%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	221.1	0.00000	0.999932	
Al 396.153Radial	3	Lin Thru 0	0.0	1.452	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	2.590	0.00000	0.999969	
B 249.677	3	Lin Thru 0	0.0	46.92	0.00000	0.999954	
Ba 233.527	3	Lin Thru 0	0.0	133.8	0.00000	0.999967	
Be 313.107	3	Lin Thru 0	0.0	2785	0.00000	0.999938	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6852	0.00000	0.999994	
Cd 226.502	3	Lin Thru 0	0.0	96.42	0.00000	0.999939	
Co 228.616	3	Lin Thru 0	0.0	53.03	0.00000	0.999944	
Cr 267.716	3	Lin Thru 0	0.0	95.53	0.00000	0.999967	
Cu 324.752	3	Lin Thru 0	0.0	344.3	0.00000	0.999979	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1116	0.00000	0.999998	

K 766.490 Radial	3	Lin Thru 0	0.0	5.961	0.00000	0.999909
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0297	0.00000	0.999961
Mn 257.610	3	Lin Thru 0	0.0	943.5	0.00000	0.999940
Mo 202.031	3	Lin Thru 0	0.0	15.71	0.00000	0.999952
Na 589.592 Radia	2	Lin Thru 0	0.0	3.300	0.00000	0.999782
Ni 231.604	3	Lin Thru 0	0.0	43.52	0.00000	0.999935
P 214.914	3	Lin Thru 0	0.0	1.791	0.00000	0.999962
Pb 220.353	3	Lin Thru 0	0.0	8.933	0.00000	0.999978
S 181.975 Axial	3	Lin Thru 0	0.0	0.7569	0.00000	0.999894
Sb 206.836	3	Lin Thru 0	0.0	3.168	0.00000	0.999921
Se 196.026	3	Lin Thru 0	0.0	1.778	0.00000	0.999950
Si 251.611	3	Lin Thru 0	0.0	33.58	0.00000	0.999777
Sn 189.927	3	Lin Thru 0	0.0	6.216	0.00000	0.999930
Sr 421.552	3	Lin Thru 0	0.0	165.8	0.00000	0.999673
Ti 334.940	3	Lin Thru 0	0.0	633.5	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	3.549	0.00000	0.999971
U 409.014	3	Lin Thru 0	0.0	34.78	0.00000	0.999971
V 292.402	3	Lin Thru 0	0.0	150.3	0.00000	0.999974
Zn 213.857	3	Lin Thru 0	0.0	116.3	0.00000	0.999918
SiO2	3	Lin Thru 0	0.0	15.67	0.00000	0.999808

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/11/2009 11:07:49
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	874645.6	874645.6	100.78	%			11:10:59
1	Sc Radial	5587.3	5587.3	100	%			11:09:42
1	Y 371.029	728574.2	728574.2	99.879	%			11:10:59
1	Y RADIAL	6058.4	6058.4	100.3	%			11:09:42
1	Ag 328.068†	58053.1	57332.4	262.49	ug/L	262.49	ppb	11:10:59
1	Al 396.153Radial†	7264.0	7284.3	4993.5	ug/L	4993.5	ppb	11:09:42
1	As 188.979†	1218.1	1240.0	483.13	ug/L	483.13	ppb	11:11:20
1	B 249.677†	23759.8	24070.2	511.00	ug/L	511.00	ppb	11:10:59
1	Ba 233.527†	68791.2	68273.0	511.47	ug/L	511.47	ppb	11:10:59
1	Be 313.107†	723572.8	722668.1	260.48	ug/L	260.48	ppb	11:10:59
1	Ca 317.933Radial†	3406.8	3382.8	4937.2	ug/L	4937.2	ppb	11:10:02
1	Cd 226.502†	48503.8	48329.6	501.04	ug/L	501.04	ppb	11:10:59
1	Co 228.616†	26736.9	26604.6	502.05	ug/L	502.05	ppb	11:11:20
1	Cr 267.716†	47283.2	46833.4	491.07	ug/L	491.07	ppb	11:10:59
1	Cu 324.752†	182267.7	174107.5	505.97	ug/L	505.97	ppb	11:10:59
1	Fe 238.204 Radial†	582.9	571.8	5139.0	ug/L	5139.0	ppb	11:10:02
1	K 766.490 Radial†	17719.4	14943.3	2501.7	ug/L	2501.7	ppb	11:09:42
1	Mg 279.077 IEC†	162.2	160.0	5385.9	ug/L	5385.9	ppb	11:10:02
1	Mn 257.610†	487398.0	483127.7	512.44	ug/L	512.44	ppb	11:10:59
1	Mo 202.031†	8653.5	8568.5	545.63	ug/L	545.63	ppb	11:11:20
1	Na 589.592 Radial†	6915.1	8455.0	2562.4	ug/L	2562.4	ppb	11:09:42
1	Ni 231.604†	22000.8	21745.5	499.36	ug/L	499.36	ppb	11:11:20
1	P 214.914†	4771.1	4492.3	2432.3	ug/L	2432.3	ppb	11:11:20
1	Pb 220.353†	4457.3	4491.0	504.37	ug/L	504.37	ppb	11:11:20
1	S 181.975 Axial†	1968.6	1904.0	2514.6	ug/L	2514.6	ppb	11:11:20
1	Sb 206.836†	1636.5	1586.5	510.11	ug/L	510.11	ppb	11:11:20
1	Se 196.026†	4530.0	4521.9	2562.2	ug/L	2562.2	ppb	11:11:20
1	Si 251.611†	163300.9	161562.7	4800.0	ug/L	4800.0	ppb	11:10:59
1	Sn 189.927†	3417.0	3381.9	544.62	ug/L	544.62	ppb	11:11:20
1	Sr 421.552†	89500.9	89316.4	538.64	ug/L	538.64	ppb	11:09:42
1	Ti 334.940†	319392.4	318191.1	502.11	ug/L	502.11	ppb	11:10:59
1	Tl 190.801†	1859.2	1879.5	532.82	ug/L	532.82	ppb	11:11:20
1	U 409.014†	14369.1	16842.5	482.64	ug/L	482.64	ppb	11:10:59
1	V 292.402†	75659.8	76440.4	515.94	ug/L	515.94	ppb	11:10:59
1	Zn 213.857†	60676.5	59455.8	506.97	ug/L	506.97	ppb	11:10:59
1	SiO2†	162240.8	160468.0	10216	ug/L	10216	ppb	11:12:17
2	Sc 361.383	878001.3	878001.3	101.16	%			11:11:26
2	Sc Radial	5467.5	5467.5	98.1	%			11:10:07
2	Y 371.029	730239.8	730239.8	100.11	%			11:11:26
2	Y RADIAL	5921.3	5921.3	98.05	%			11:10:07
2	Ag 328.068†	58405.7	57460.7	263.11	ug/L	263.11	ppb	11:11:26
2	Al 396.153Radial†	7160.7	7337.8	5030.5	ug/L	5030.5	ppb	11:10:07
2	As 188.979†	1203.4	1220.8	475.74	ug/L	475.74	ppb	11:11:46
2	B 249.677†	24050.9	24267.9	515.21	ug/L	515.21	ppb	11:11:26
2	Ba 233.527†	69257.7	68473.2	512.97	ug/L	512.97	ppb	11:11:26
2	Be 313.107†	727003.0	723314.6	260.71	ug/L	260.71	ppb	11:11:26
2	Ca 317.933Radial†	3402.8	3453.3	5040.0	ug/L	5040.0	ppb	11:10:27
2	Cd 226.502†	48761.4	48400.2	501.76	ug/L	501.76	ppb	11:11:26
2	Co 228.616†	26605.2	26373.1	497.67	ug/L	497.67	ppb	11:11:46
2	Cr 267.716†	47507.9	46876.1	491.52	ug/L	491.52	ppb	11:11:26
2	Cu 324.752†	183955.9	175085.0	508.82	ug/L	508.82	ppb	11:11:26
2	Fe 238.204 Radial†	581.1	582.8	5236.6	ug/L	5236.6	ppb	11:10:27
2	K 766.490 Radial†	17421.0	15026.4	2515.6	ug/L	2515.6	ppb	11:10:07
2	Mg 279.077 IEC†	160.2	161.5	5437.4	ug/L	5437.4	ppb	11:10:27
2	Mn 257.610†	490051.8	483902.5	513.27	ug/L	513.27	ppb	11:11:26
2	Mo 202.031†	8613.8	8496.5	541.06	ug/L	541.06	ppb	11:11:46
2	Na 589.592 Radial†	6700.5	8387.3	2541.8	ug/L	2541.8	ppb	11:10:07
2	Ni 231.604†	21861.8	21524.8	494.29	ug/L	494.29	ppb	11:11:46

2	P 214.914†	4761.7	4464.9	2416.4 ug/L	2416.4 ppb	11:11:46
2	Pb 220.353†	4437.6	4454.6	500.29 ug/L	500.29 ppb	11:11:46
2	S 181.975 Axial†	1950.1	1878.3	2480.6 ug/L	2480.6 ppb	11:11:46
2	Sb 206.836†	1631.7	1575.5	506.43 ug/L	506.43 ppb	11:11:46
2	Se 196.026†	4526.8	4501.6	2551.0 ug/L	2551.0 ppb	11:11:46
2	Si 251.611†	164658.6	162285.4	4821.6 ug/L	4821.6 ppb	11:11:26
2	Sn 189.927†	3387.7	3339.9	537.87 ug/L	537.87 ppb	11:11:46
2	Sr 421.552†	87524.2	89257.6	538.29 ug/L	538.29 ppb	11:10:07
2	Ti 334.940†	321061.9	318630.1	502.80 ug/L	502.80 ppb	11:11:26
2	Tl 190.801†	1840.7	1854.1	525.70 ug/L	525.70 ppb	11:11:46
2	U 409.014†	14592.1	17008.4	487.40 ug/L	487.40 ppb	11:11:26
2	V 292.402†	76145.1	76633.1	517.15 ug/L	517.15 ppb	11:11:26
2	Zn 213.857†	61065.8	59610.5	508.32 ug/L	508.32 ppb	11:11:26
2	SiO2†	162458.2	160067.6	10191 ug/L	10191 ppb	11:12:22
3	Sc 361.383	870914.4	870914.4	100.35 %		11:11:52
3	Sc Radial	5417.4	5417.4	97.2 %		11:10:32
3	Y 371.029	722870.7	722870.7	99.097 %		11:11:52
3	Y RADIAL	5860.9	5860.9	97.05 %		11:10:32
3	Ag 328.068†	57902.4	57429.0	262.99 ug/L	262.99 ppb	11:11:52
3	Al 396.153Radial†	7053.3	7294.8	5000.5 ug/L	5000.5 ppb	11:10:32
3	As 188.979†	1214.7	1241.8	483.83 ug/L	483.83 ppb	11:12:12
3	B 249.677†	23877.0	24288.0	515.61 ug/L	515.61 ppb	11:11:52
3	Ba 233.527†	68734.2	68508.7	513.24 ug/L	513.24 ppb	11:11:52
3	Be 313.107†	720723.4	722904.6	260.57 ug/L	260.57 ppb	11:11:52
3	Ca 317.933Radial†	3424.3	3507.5	5119.1 ug/L	5119.1 ppb	11:10:52
3	Cd 226.502†	48419.6	48451.8	502.29 ug/L	502.29 ppb	11:11:52
3	Co 228.616†	26795.1	26776.3	505.30 ug/L	505.30 ppb	11:12:12
3	Cr 267.716†	47171.2	46922.8	492.00 ug/L	492.00 ppb	11:11:52
3	Cu 324.752†	182186.1	174800.9	508.00 ug/L	508.00 ppb	11:11:52
3	Fe 238.204 Radial†	587.6	594.9	5345.6 ug/L	5345.6 ppb	11:10:52
3	K 766.490 Radial†	17277.6	15043.0	2518.4 ug/L	2518.4 ppb	11:10:32
3	Mg 279.077 IEC†	161.6	164.4	5535.9 ug/L	5535.9 ppb	11:10:52
3	Mn 257.610†	487073.8	484876.7	514.32 ug/L	514.32 ppb	11:11:52
3	Mo 202.031†	8691.2	8642.8	550.38 ug/L	550.38 ppb	11:12:12
3	Na 589.592 Radial†	6591.4	8338.2	2527.0 ug/L	2527.0 ppb	11:10:32
3	Ni 231.604†	22035.2	21873.4	502.30 ug/L	502.30 ppb	11:12:12
3	P 214.914†	4774.7	4516.2	2445.2 ug/L	2445.2 ppb	11:12:12
3	Pb 220.353†	4472.6	4525.2	508.20 ug/L	508.20 ppb	11:12:12
3	S 181.975 Axial†	1963.5	1907.3	2519.0 ug/L	2519.0 ppb	11:12:12
3	Sb 206.836†	1653.4	1610.3	517.77 ug/L	517.77 ppb	11:12:12
3	Se 196.026†	4555.5	4566.6	2587.9 ug/L	2587.9 ppb	11:12:12
3	Si 251.611†	163499.9	162455.2	4826.4 ug/L	4826.4 ppb	11:11:52
3	Sn 189.927†	3416.9	3396.3	546.95 ug/L	546.95 ppb	11:12:12
3	Sr 421.552†	86670.2	89203.7	537.96 ug/L	537.96 ppb	11:10:32
3	Ti 334.940†	318502.9	318662.5	502.86 ug/L	502.86 ppb	11:11:52
3	Tl 190.801†	1856.3	1884.5	534.22 ug/L	534.22 ppb	11:12:12
3	U 409.014†	14588.1	17121.9	490.65 ug/L	490.65 ppb	11:11:52
3	V 292.402†	75362.7	76466.0	516.16 ug/L	516.16 ppb	11:11:52
3	Zn 213.857†	60732.2	59769.3	509.62 ug/L	509.62 ppb	11:11:52
3	SiO2†	163681.3	162593.3	10352 ug/L	10352 ppb	11:12:28

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874520.4	100.76	%	0.408				0.41%
Sc Radial	5490.7	98.5	%	1.57				1.59%
Y 371.029	727228.3	99.695	%	0.5298				0.53%
Y RADIAL	5946.9	98.47	%	1.676				1.70%
Ag 328.068†	57407.4	262.86	ug/L	0.324	262.86	ppb	0.324	0.12%
QC value within limits for Ag 328.068 Recovery = 105.15%								
Al 396.153Radial†	7305.6	5008.1	ug/L	19.66	5008.1	ppb	19.66	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.16%								
As 188.979†	1234.2	480.90	ug/L	4.484	480.90	ppb	4.484	0.93%
QC value within limits for As 188.979 Recovery = 96.18%								
B 249.677†	24208.7	513.94	ug/L	2.553	513.94	ppb	2.553	0.50%
QC value within limits for B 249.677 Recovery = 102.79%								
Ba 233.527†	68418.3	512.56	ug/L	0.954	512.56	ppb	0.954	0.19%
QC value within limits for Ba 233.527 Recovery = 102.51%								
Be 313.107†	722962.4	260.59	ug/L	0.118	260.59	ppb	0.118	0.05%
QC value within limits for Be 313.107 Recovery = 104.23%								

Ca 317.933Radial†	3447.9	5032.1 ug/L	91.20	5032.1 ppb	91.20	1.81%
QC value within limits for Ca 317.933Radial Recovery = 100.64%						
Cd 226.502†	48393.9	501.70 ug/L	0.627	501.70 ppb	0.627	0.13%
QC value within limits for Cd 226.502 Recovery = 100.34%						
Co 228.616†	26584.7	501.67 ug/L	3.827	501.67 ppb	3.827	0.76%
QC value within limits for Co 228.616 Recovery = 100.33%						
Cr 267.716†	46877.4	491.53 ug/L	0.469	491.53 ppb	0.469	0.10%
QC value within limits for Cr 267.716 Recovery = 98.31%						
Cu 324.752†	174664.5	507.60 ug/L	1.464	507.60 ppb	1.464	0.29%
QC value within limits for Cu 324.752 Recovery = 101.52%						
Fe 238.204 Radial†	583.2	5240.4 ug/L	103.38	5240.4 ppb	103.38	1.97%
QC value within limits for Fe 238.204 Radial Recovery = 104.81%						
K 766.490 Radial†	15004.3	2511.9 ug/L	8.96	2511.9 ppb	8.96	0.36%
QC value within limits for K 766.490 Radial Recovery = 100.48%						
Mg 279.077 IEC†	162.0	5453.1 ug/L	76.21	5453.1 ppb	76.21	1.40%
QC value within limits for Mg 279.077 IEC Recovery = 109.06%						
Mn 257.610†	483968.9	513.35 ug/L	0.938	513.35 ppb	0.938	0.18%
QC value within limits for Mn 257.610 Recovery = 102.67%						
Mo 202.031†	8569.3	545.69 ug/L	4.661	545.69 ppb	4.661	0.85%
QC value within limits for Mo 202.031 Recovery = 109.14%						
Na 589.592 Radial†	8393.5	2543.7 ug/L	17.76	2543.7 ppb	17.76	0.70%
QC value within limits for Na 589.592 Radial Recovery = 101.75%						
Ni 231.604†	21714.6	498.65 ug/L	4.050	498.65 ppb	4.050	0.81%
QC value within limits for Ni 231.604 Recovery = 99.73%						
P 214.914†	4491.2	2431.3 ug/L	14.43	2431.3 ppb	14.43	0.59%
QC value within limits for P 214.914 Recovery = 97.25%						
Pb 220.353†	4490.3	504.29 ug/L	3.953	504.29 ppb	3.953	0.78%
QC value within limits for Pb 220.353 Recovery = 100.86%						
S 181.975 Axial†	1896.6	2504.7 ug/L	21.01	2504.7 ppb	21.01	0.84%
QC value within limits for S 181.975 Axial Recovery = 100.19%						
Sb 206.836†	1590.8	511.44 ug/L	5.783	511.44 ppb	5.783	1.13%
QC value within limits for Sb 206.836 Recovery = 102.29%						
Se 196.026†	4530.0	2567.0 ug/L	18.93	2567.0 ppb	18.93	0.74%
QC value within limits for Se 196.026 Recovery = 102.68%						
Si 251.611†	162101.1	4816.0 ug/L	14.10	4816.0 ppb	14.10	0.29%
QC value within limits for Si 251.611 Recovery = 96.32%						
Sn 189.927†	3372.7	543.15 ug/L	4.717	543.15 ppb	4.717	0.87%
QC value within limits for Sn 189.927 Recovery = 108.63%						
Sr 421.552†	89259.2	538.30 ug/L	0.341	538.30 ppb	0.341	0.06%
QC value within limits for Sr 421.552 Recovery = 107.66%						
Ti 334.940†	318494.6	502.59 ug/L	0.418	502.59 ppb	0.418	0.08%
QC value within limits for Ti 334.940 Recovery = 100.52%						
Tl 190.801†	1872.7	530.91 ug/L	4.567	530.91 ppb	4.567	0.86%
QC value within limits for Tl 190.801 Recovery = 106.18%						
U 409.014†	16991.0	486.90 ug/L	4.025	486.90 ppb	4.025	0.83%
QC value within limits for U 409.014 Recovery = 97.38%						
V 292.402†	76513.2	516.42 ug/L	0.645	516.42 ppb	0.645	0.12%
QC value within limits for V 292.402 Recovery = 103.28%						
Zn 213.857†	59611.8	508.30 ug/L	1.325	508.30 ppb	1.325	0.26%
QC value within limits for Zn 213.857 Recovery = 101.66%						
SiO2†	161043.0	10253 ug/L	86.5	10253 ppb	86.5	0.84%
QC value within limits for SiO2 Recovery = 95.87%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/11/2009 11:14:38
Data Type: Reprocessed on 12/11/2009 12:46:00

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	871028.0	871028.0	100.36	%			11:17:48
1	Sc Radial	5612.3	5612.3	101	%			11:16:31
1	Y 371.029	732501.0	732501.0	100.42	%			11:17:48
1	Y RADIAL	6085.8	6085.8	100.8	%			11:16:31
1	Ag 328.068†	348.8	73.5	0.3353	ug/L	0.3353	ppb	11:17:48
1	Al 396.153Radial†	-12.8	22.6	15.521	ug/L	15.521	ppb	11:16:31
1	As 188.979†	-27.4	3.9	1.5214	ug/L	1.5214	ppb	11:18:08
1	B 249.677†	-289.2	205.0	4.3696	ug/L	4.3696	ppb	11:18:08
1	Ba 233.527†	-12.6	-1.4	-0.0107	ug/L	-0.0107	ppb	11:18:08
1	Be 313.107†	-4511.2	167.5	0.0602	ug/L	0.0602	ppb	11:17:48
1	Ca 317.933Radial†	19.7	2.7	3.9544	ug/L	3.9544	ppb	11:16:51
1	Cd 226.502†	-200.3	-0.7	-0.0070	ug/L	-0.0070	ppb	11:18:08
1	Co 228.616†	-84.2	-10.4	-0.1945	ug/L	-0.1945	ppb	11:18:08
1	Cr 267.716†	88.4	2.1	0.0230	ug/L	0.0230	ppb	11:18:08
1	Cu 324.752†	6779.9	-2.2	-0.0063	ug/L	-0.0063	ppb	11:17:48
1	Fe 238.204 Radial†	9.9	-0.0	-0.0536	ug/L	-0.0536	ppb	11:16:51
1	K 766.490 Radial†	2839.1	81.1	13.610	ug/L	13.610	ppb	11:16:31
1	Mg 279.077 IEC†	4.7	2.8	94.399	ug/L	94.399	ppb	11:16:51
1	Mn 257.610†	522.8	0.8	-0.0009	ug/L	-0.0009	ppb	11:18:08
1	Mo 202.031†	31.5	13.0	0.8243	ug/L	0.8243	ppb	11:18:08
1	Na 589.592 Radial†	-1625.7	-61.0	-18.490	ug/L	-18.490	ppb	11:16:31
1	Ni 231.604†	94.7	8.4	0.1942	ug/L	0.1942	ppb	11:18:08
1	P 214.914†	228.2	-14.7	-8.1967	ug/L	-8.1967	ppb	11:18:08
1	Pb 220.353†	-63.2	5.0	0.5673	ug/L	0.5673	ppb	11:18:08
1	S 181.975 Axial†	48.3	-1.3	-1.7250	ug/L	-1.7250	ppb	11:18:08
1	Sb 206.836†	49.7	12.2	3.8364	ug/L	3.8364	ppb	11:18:08
1	Se 196.026†	-30.8	-3.9	-2.1655	ug/L	-2.1655	ppb	11:18:08
1	Si 251.611†	550.8	67.1	1.9835	ug/L	1.9835	ppb	11:18:08
1	Sn 189.927†	3.0	-5.8	-0.9386	ug/L	-0.9386	ppb	11:18:08
1	Sr 421.552†	-20.8	-20.5	-0.1236	ug/L	-0.1236	ppb	11:16:31
1	Ti 334.940†	-1250.7	10.0	0.0175	ug/L	0.0175	ppb	11:17:48
1	Tl 190.801†	-23.1	11.6	3.2610	ug/L	3.2610	ppb	11:18:08
1	U 409.014†	-2714.8	-121.1	-3.4828	ug/L	-3.4828	ppb	11:17:48
1	V 292.402†	-1376.0	-8.3	-0.0481	ug/L	-0.0481	ppb	11:17:48
1	Zn 213.857†	753.9	-2.6	-0.0268	ug/L	-0.0268	ppb	11:18:08
1	SiO2†	514.4	-11.9	-0.7943	ug/L	-0.7943	ppb	11:19:04
2	Sc 361.383	868979.5	868979.5	100.12	%			11:18:13
2	Sc Radial	5550.9	5550.9	99.6	%			11:16:56
2	Y 371.029	731655.6	731655.6	100.30	%			11:18:13
2	Y RADIAL	6018.6	6018.6	99.66	%			11:16:56
2	Ag 328.068†	291.0	16.6	0.0729	ug/L	0.0729	ppb	11:18:13
2	Al 396.153Radial†	-9.6	25.7	17.661	ug/L	17.661	ppb	11:16:56
2	As 188.979†	-32.4	-1.1	-0.4345	ug/L	-0.4345	ppb	11:18:33
2	B 249.677†	-299.4	194.2	4.1401	ug/L	4.1401	ppb	11:18:33
2	Ba 233.527†	-11.9	-0.8	-0.0064	ug/L	-0.0064	ppb	11:18:33
2	Be 313.107†	-4488.3	179.8	0.0646	ug/L	0.0646	ppb	11:18:13
2	Ca 317.933Radial†	17.4	0.6	0.9006	ug/L	0.9006	ppb	11:17:16
2	Cd 226.502†	-198.1	1.1	0.0125	ug/L	0.0125	ppb	11:18:33
2	Co 228.616†	-81.8	-8.2	-0.1526	ug/L	-0.1526	ppb	11:18:33
2	Cr 267.716†	97.0	10.9	0.1143	ug/L	0.1143	ppb	11:18:33
2	Cu 324.752†	6774.6	8.5	0.0240	ug/L	0.0240	ppb	11:18:13
2	Fe 238.204 Radial†	8.3	-1.6	-14.202	ug/L	-14.202	ppb	11:17:16
2	K 766.490 Radial†	2861.4	134.7	22.618	ug/L	22.618	ppb	11:16:56
2	Mg 279.077 IEC†	4.5	2.6	89.132	ug/L	89.132	ppb	11:17:16
2	Mn 257.610†	557.3	36.5	0.0356	ug/L	0.0356	ppb	11:18:33
2	Mo 202.031†	31.0	12.6	0.8003	ug/L	0.8003	ppb	11:18:33
2	Na 589.592 Radial†	-1655.0	-108.2	-32.804	ug/L	-32.804	ppb	11:16:56
2	Ni 231.604†	91.5	5.5	0.1258	ug/L	0.1258	ppb	11:18:33

2	P 214.914†	235.1	-7.2	-4.0257	ug/L	-4.0257 ppb	11:18:33
2	Pb 220.353†	-70.1	-2.0	-0.2169	ug/L	-0.2169 ppb	11:18:33
2	S 181.975 Axial†	48.6	-0.8	-1.1038	ug/L	-1.1038 ppb	11:18:33
2	Sb 206.836†	24.2	-13.2	-4.1820	ug/L	-4.1820 ppb	11:18:33
2	Se 196.026†	-25.5	1.3	0.6912	ug/L	0.6912 ppb	11:18:33
2	Si 251.611†	542.2	59.8	1.7624	ug/L	1.7624 ppb	11:18:33
2	Sn 189.927†	1.4	-7.5	-1.2016	ug/L	-1.2016 ppb	11:18:33
2	Sr 421.552†	-48.0	-48.0	-0.2897	ug/L	-0.2897 ppb	11:16:56
2	Ti 334.940†	-1247.0	10.8	0.0184	ug/L	0.0184 ppb	11:18:13
2	Tl 190.801†	-32.9	1.7	0.4765	ug/L	0.4765 ppb	11:18:33
2	U 409.014†	-2695.5	-108.2	-3.1097	ug/L	-3.1097 ppb	11:18:13
2	V 292.402†	-1381.9	-17.4	-0.1066	ug/L	-0.1066 ppb	11:18:13
2	Zn 213.857†	749.9	-4.9	-0.0444	ug/L	-0.0444 ppb	11:18:33
2	SiO2†	585.7	60.5	3.8244	ug/L	3.8244 ppb	11:19:09
3	Sc 361.383	873513.7	873513.7	100.64	%		11:18:38
3	Sc Radial	5529.5	5529.5	99.2	%		11:17:21
3	Y 371.029	733605.4	733605.4	100.57	%		11:18:38
3	Y RADIAL	5996.7	5996.7	99.30	%		11:17:21
3	Ag 328.068†	326.3	50.2	0.2326	ug/L	0.2326 ppb	11:18:38
3	Al 396.153Radial†	-32.8	2.3	1.5538	ug/L	1.5538 ppb	11:17:21
3	As 188.979†	-28.7	2.8	1.0687	ug/L	1.0687 ppb	11:18:58
3	B 249.677†	-285.2	209.8	4.4719	ug/L	4.4719 ppb	11:18:58
3	Ba 233.527†	-12.3	-1.1	-0.0082	ug/L	-0.0082 ppb	11:18:58
3	Be 313.107†	-4603.0	89.1	0.0321	ug/L	0.0321 ppb	11:18:38
3	Ca 317.933Radial†	16.9	0.1	0.1833	ug/L	0.1833 ppb	11:17:41
3	Cd 226.502†	-199.6	0.6	0.0061	ug/L	0.0061 ppb	11:18:58
3	Co 228.616†	-76.0	-2.1	-0.0391	ug/L	-0.0391 ppb	11:18:58
3	Cr 267.716†	79.0	-7.6	-0.0771	ug/L	-0.0771 ppb	11:18:58
3	Cu 324.752†	6812.4	10.9	0.0317	ug/L	0.0317 ppb	11:18:38
3	Fe 238.204 Radial†	9.9	0.1	1.1664	ug/L	1.1664 ppb	11:17:41
3	K 766.490 Radial†	2728.0	11.3	1.9062	ug/L	1.9062 ppb	11:17:21
3	Mg 279.077 IEC†	3.0	1.1	38.007	ug/L	38.007 ppb	11:17:41
3	Mn 257.610†	543.0	19.3	0.0199	ug/L	0.0199 ppb	11:18:58
3	Mo 202.031†	19.4	0.8	0.0534	ug/L	0.0534 ppb	11:18:58
3	Na 589.592 Radial†	-1614.2	-73.6	-22.309	ug/L	-22.309 ppb	11:17:21
3	Ni 231.604†	89.0	2.4	0.0563	ug/L	0.0563 ppb	11:18:58
3	P 214.914†	235.9	-7.7	-4.2936	ug/L	-4.2936 ppb	11:18:58
3	Pb 220.353†	-62.0	6.3	0.7110	ug/L	0.7110 ppb	11:18:58
3	S 181.975 Axial†	42.5	-7.2	-9.5340	ug/L	-9.5340 ppb	11:18:58
3	Sb 206.836†	32.1	-5.5	-1.7119	ug/L	-1.7119 ppb	11:18:58
3	Se 196.026†	-31.9	-4.9	-2.7624	ug/L	-2.7624 ppb	11:18:58
3	Si 251.611†	524.2	39.1	1.1628	ug/L	1.1628 ppb	11:18:58
3	Sn 189.927†	12.1	3.2	0.5085	ug/L	0.5085 ppb	11:18:58
3	Sr 421.552†	-25.5	-25.5	-0.1539	ug/L	-0.1539 ppb	11:17:21
3	Ti 334.940†	-1240.4	23.8	0.0402	ug/L	0.0402 ppb	11:18:38
3	Tl 190.801†	-46.1	-11.3	-3.1726	ug/L	-3.1726 ppb	11:18:58
3	U 409.014†	-2816.5	-214.4	-6.1647	ug/L	-6.1647 ppb	11:18:38
3	V 292.402†	-1369.5	2.0	0.0030	ug/L	0.0030 ppb	11:18:38
3	Zn 213.857†	769.9	11.2	0.0941	ug/L	0.0941 ppb	11:18:58
3	SiO2†	579.8	51.6	3.2857	ug/L	3.2857 ppb	11:19:14

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871173.7	100.38	%	0.262				0.26%
Sc Radial	5564.2	99.8	%	0.77				0.77%
Y 371.029	732587.3	100.43	%	0.134				0.13%
Y RADIAL	6033.7	99.91	%	0.768				0.77%
Ag 328.068†	46.8	0.2136	ug/L	0.13224	0.2136	ppb	0.13224	61.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.8	11.578	ug/L	8.7473	11.578	ppb	8.7473	75.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	0.7185	ug/L	1.02385	0.7185	ppb	1.02385	142.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	203.0	4.3272	ug/L	0.16987	4.3272	ppb	0.16987	3.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.1	-0.0084	ug/L	0.00213	-0.0084	ppb	0.00213	25.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.5	0.0523	ug/L	0.01764	0.0523	ppb	0.01764	33.74%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.2      1.6794 ug/L       2.00260      1.6794 ppb        2.00260 119.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                0.3      0.0039 ug/L       0.00993      0.0039 ppb        0.00993 256.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -6.9     -0.1287 ug/L       0.08042     -0.1287 ppb        0.08042  62.47%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.8      0.0201 ug/L       0.09576      0.0201 ppb        0.09576 477.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                5.7      0.0165 ug/L       0.02006      0.0165 ppb        0.02006 121.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.5     -4.3629 ug/L       8.54236     -4.3629 ppb        8.54236 195.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         75.7      12.712 ug/L       10.3853      12.712 ppb        10.3853  81.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      73.846 ug/L       31.1487      73.846 ppb        31.1487  42.18%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.9      0.0182 ug/L       0.01832      0.0182 ppb        0.01832 100.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                8.8      0.5593 ug/L       0.43831      0.5593 ppb        0.43831  78.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -81.0     -24.534 ug/L        7.4119     -24.534 ppb         7.4119  30.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.5      0.1254 ug/L       0.06896      0.1254 ppb        0.06896  54.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.9     -5.5053 ug/L       2.33463     -5.5053 ppb        2.33463  42.41%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.1      0.3538 ug/L       0.49945      0.3538 ppb        0.49945 141.18%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.1     -4.1209 ug/L       4.69812     -4.1209 ppb        4.69812 114.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.2     -0.6858 ug/L       4.10651     -0.6858 ppb        4.10651 598.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.5     -1.4122 ug/L       1.84594     -1.4122 ppb        1.84594 130.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.3      1.6362 ug/L       0.42468      1.6362 ppb        0.42468  25.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.4     -0.5439 ug/L       0.92085     -0.5439 ppb        0.92085 169.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -31.3     -0.1891 ug/L       0.08845     -0.1891 ppb        0.08845  46.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               14.8      0.0254 ug/L       0.01288      0.0254 ppb        0.01288  50.72%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.7      0.1883 ug/L       3.22645      0.1883 ppb        3.22645 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -147.9     -4.2524 ug/L       1.66656     -4.2524 ppb        1.66656  39.19%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -7.9     -0.0506 ug/L       0.05485     -0.0506 ppb        0.05485 108.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                1.2      0.0076 ug/L       0.07540      0.0076 ppb        0.07540 985.80%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     33.4      2.1053 ug/L       2.52552      2.1053 ppb        2.52552 119.96%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/11/2009 11:21:24
Data Type: Reprocessed on 12/11/2009 12:46:01

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	869577.2	869577.2	100.19	%			11:24:35
1	Sc Radial	4842.6	4842.6	86.9	%			11:23:18
1	Y 371.029	732644.8	732644.8	100.44	%			11:24:35
1	Y RADIAL	5290.9	5290.9	87.61	%			11:23:18
1	Ag 328.068†	1484.8	1207.9	5.4853	ug/L	5.4853	ppb	11:24:35
1	Al 396.153Radial†	270.1	346.3	238.07	ug/L	238.07	ppb	11:23:18
1	As 188.979†	45.7	76.9	29.713	ug/L	29.713	ppb	11:24:55
1	B 249.677†	1805.2	2294.9	48.874	ug/L	48.874	ppb	11:24:35
1	Ba 233.527†	656.4	666.2	4.9940	ug/L	4.9940	ppb	11:24:55
1	Be 313.107†	8959.2	13604.7	4.8949	ug/L	4.8949	ppb	11:24:35
1	Ca 317.933Radial†	156.2	162.9	237.79	ug/L	237.79	ppb	11:23:38
1	Cd 226.502†	291.1	489.5	5.0649	ug/L	5.0649	ppb	11:24:55
1	Co 228.616†	188.2	261.3	4.9417	ug/L	4.9417	ppb	11:24:55
1	Cr 267.716†	549.7	462.6	4.8376	ug/L	4.8376	ppb	11:24:55
1	Cu 324.752†	10209.9	3432.6	9.9779	ug/L	9.9779	ppb	11:24:35
1	Fe 238.204 Radial†	23.2	16.8	150.52	ug/L	150.52	ppb	11:23:38
1	K 766.490 Radial†	3786.4	1620.1	271.59	ug/L	271.59	ppb	11:23:18
1	Mg 279.077 IEC†	11.2	11.0	370.57	ug/L	370.57	ppb	11:23:38
1	Mn 257.610†	10186.4	9646.7	10.232	ug/L	10.232	ppb	11:24:35
1	Mo 202.031†	176.0	157.3	10.020	ug/L	10.020	ppb	11:24:55
1	Na 589.592 Radial†	-576.3	890.6	269.91	ug/L	269.91	ppb	11:23:18
1	Ni 231.604†	329.7	243.2	5.5841	ug/L	5.5841	ppb	11:24:55
1	P 214.914†	488.2	245.2	135.36	ug/L	135.36	ppb	11:24:55
1	Pb 220.353†	16.0	83.9	9.4534	ug/L	9.4534	ppb	11:24:55
1	S 181.975 Axial†	123.8	74.2	97.933	ug/L	97.933	ppb	11:24:55
1	Sb 206.836†	67.5	30.0	9.6730	ug/L	9.6730	ppb	11:24:55
1	Se 196.026†	20.2	47.0	26.973	ug/L	26.973	ppb	11:24:55
1	Si 251.611†	3706.6	3217.8	95.552	ug/L	95.552	ppb	11:24:55
1	Sn 189.927†	52.2	43.3	6.9935	ug/L	6.9935	ppb	11:24:55
1	Sr 421.552†	845.7	974.0	5.8722	ug/L	5.8722	ppb	11:23:18
1	Ti 334.940†	1903.6	3156.2	4.9711	ug/L	4.9711	ppb	11:24:35
1	Tl 190.801†	37.1	71.6	20.243	ug/L	20.243	ppb	11:24:55
1	U 409.014†	-899.4	1686.3	48.455	ug/L	48.455	ppb	11:24:35
1	V 292.402†	-670.0	694.0	4.8329	ug/L	4.8329	ppb	11:24:35
1	Zn 213.857†	1936.5	1179.0	10.067	ug/L	10.067	ppb	11:24:55
1	SiO2†	3854.5	3322.7	211.45	ug/L	211.45	ppb	11:25:51
2	Sc 361.383	867433.3	867433.3	99.944	%			11:25:00
2	Sc Radial	5581.3	5581.3	100	%			11:23:43
2	Y 371.029	729901.6	729901.6	100.06	%			11:25:00
2	Y RADIAL	6092.4	6092.4	100.9	%			11:23:43
2	Ag 328.068†	1380.6	1107.4	5.0231	ug/L	5.0231	ppb	11:25:00
2	Al 396.153Radial†	293.4	328.5	225.78	ug/L	225.78	ppb	11:23:43
2	As 188.979†	51.9	83.2	32.155	ug/L	32.155	ppb	11:25:20
2	B 249.677†	1788.5	2282.7	48.616	ug/L	48.616	ppb	11:25:00
2	Ba 233.527†	665.1	676.6	5.0706	ug/L	5.0706	ppb	11:25:20
2	Be 313.107†	9192.1	13859.8	4.9863	ug/L	4.9863	ppb	11:25:00
2	Ca 317.933Radial†	158.3	141.3	206.21	ug/L	206.21	ppb	11:24:03
2	Cd 226.502†	279.4	478.5	4.9534	ug/L	4.9534	ppb	11:25:20
2	Co 228.616†	178.1	251.7	4.7607	ug/L	4.7607	ppb	11:25:20
2	Cr 267.716†	555.4	469.6	4.9105	ug/L	4.9105	ppb	11:25:20
2	Cu 324.752†	10097.0	3344.8	9.7219	ug/L	9.7219	ppb	11:25:00
2	Fe 238.204 Radial†	24.3	14.4	129.38	ug/L	129.38	ppb	11:24:03
2	K 766.490 Radial†	3728.1	984.8	165.00	ug/L	165.00	ppb	11:23:43
2	Mg 279.077 IEC†	10.0	8.1	272.93	ug/L	272.93	ppb	11:24:03
2	Mn 257.610†	10271.6	9757.1	10.349	ug/L	10.349	ppb	11:25:00
2	Mo 202.031†	178.1	159.8	10.178	ug/L	10.178	ppb	11:25:20
2	Na 589.592 Radial†	-538.0	1016.7	308.11	ug/L	308.11	ppb	11:23:43
2	Ni 231.604†	312.7	226.9	5.2112	ug/L	5.2112	ppb	11:25:20

2	P 214.914†	496.2	254.4	140.61 ug/L	140.61 ppb	11:25:20
2	Pb 220.353†	27.1	95.1	10.699 ug/L	10.699 ppb	11:25:20
2	S 181.975 Axial†	124.6	75.3	99.446 ug/L	99.446 ppb	11:25:20
2	Sb 206.836†	73.8	36.5	11.769 ug/L	11.769 ppb	11:25:20
2	Se 196.026†	26.0	52.8	30.186 ug/L	30.186 ppb	11:25:20
2	Si 251.611†	3692.9	3213.2	95.442 ug/L	95.442 ppb	11:25:20
2	Sn 189.927†	66.8	58.0	9.3598 ug/L	9.3598 ppb	11:25:20
2	Sr 421.552†	852.9	852.3	5.1383 ug/L	5.1383 ppb	11:23:43
2	Ti 334.940†	1843.4	3100.7	4.8813 ug/L	4.8813 ppb	11:25:00
2	Tl 190.801†	30.2	64.8	18.334 ug/L	18.334 ppb	11:25:20
2	U 409.014†	-858.9	1724.6	49.557 ug/L	49.557 ppb	11:25:00
2	V 292.402†	-676.1	686.3	4.7869 ug/L	4.7869 ppb	11:25:00
2	Zn 213.857†	1919.3	1166.5	9.9676 ug/L	9.9676 ppb	11:25:20
2	SiO2†	3846.8	3324.4	211.62 ug/L	211.62 ppb	11:25:56
3	Sc 361.383	881014.9	881014.9	101.51 %		11:25:25
3	Sc Radial	5538.1	5538.1	99.3 %		11:24:08
3	Y 371.029	740744.8	740744.8	101.55 %		11:25:25
3	Y RADIAL	6054.5	6054.5	100.3 %		11:24:08
3	Ag 328.068†	1438.5	1143.1	5.1803 ug/L	5.1803 ppb	11:25:25
3	Al 396.153Radial†	274.4	311.6	214.13 ug/L	214.13 ppb	11:24:08
3	As 188.979†	58.8	89.2	34.480 ug/L	34.480 ppb	11:25:45
3	B 249.677†	1856.1	2321.7	49.451 ug/L	49.451 ppb	11:25:25
3	Ba 233.527†	669.2	670.3	5.0232 ug/L	5.0232 ppb	11:25:45
3	Be 313.107†	9258.8	13783.7	4.9590 ug/L	4.9590 ppb	11:25:25
3	Ca 317.933Radial†	153.8	137.9	201.33 ug/L	201.33 ppb	11:24:28
3	Cd 226.502†	277.4	472.2	4.8893 ug/L	4.8893 ppb	11:25:45
3	Co 228.616†	180.1	250.9	4.7470 ug/L	4.7470 ppb	11:25:45
3	Cr 267.716†	571.0	476.5	4.9824 ug/L	4.9824 ppb	11:25:45
3	Cu 324.752†	10294.2	3383.3	9.8327 ug/L	9.8327 ppb	11:25:25
3	Fe 238.204 Radial†	21.9	12.2	109.35 ug/L	109.35 ppb	11:24:28
3	K 766.490 Radial†	3707.0	992.7	166.32 ug/L	166.32 ppb	11:24:08
3	Mg 279.077 IEC†	11.8	10.0	334.97 ug/L	334.97 ppb	11:24:28
3	Mn 257.610†	10367.7	9693.4	10.278 ug/L	10.278 ppb	11:25:25
3	Mo 202.031†	181.2	160.1	10.198 ug/L	10.198 ppb	11:25:45
3	Na 589.592 Radial†	-596.5	953.6	289.00 ug/L	289.00 ppb	11:24:08
3	Ni 231.604†	309.3	218.8	5.0239 ug/L	5.0239 ppb	11:25:45
3	P 214.914†	479.9	230.7	127.35 ug/L	127.35 ppb	11:25:45
3	Pb 220.353†	37.2	104.6	11.769 ug/L	11.769 ppb	11:25:45
3	S 181.975 Axial†	132.5	81.1	107.13 ug/L	107.13 ppb	11:25:45
3	Sb 206.836†	66.0	27.6	8.9622 ug/L	8.9622 ppb	11:25:45
3	Se 196.026†	27.9	54.3	30.951 ug/L	30.951 ppb	11:25:45
3	Si 251.611†	3731.0	3193.8	94.865 ug/L	94.865 ppb	11:25:45
3	Sn 189.927†	61.6	51.8	8.3624 ug/L	8.3624 ppb	11:25:45
3	Sr 421.552†	820.1	825.9	4.9794 ug/L	4.9794 ppb	11:24:08
3	Ti 334.940†	1869.5	3098.0	4.8776 ug/L	4.8776 ppb	11:25:25
3	Tl 190.801†	30.3	64.4	18.212 ug/L	18.212 ppb	11:25:45
3	U 409.014†	-942.7	1655.3	47.568 ug/L	47.568 ppb	11:25:25
3	V 292.402†	-679.5	693.3	4.8348 ug/L	4.8348 ppb	11:25:25
3	Zn 213.857†	1935.7	1153.1	9.8533 ug/L	9.8533 ppb	11:25:45
3	SiO2†	3816.3	3235.1	205.92 ug/L	205.92 ppb	11:26:01

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	872675.2	100.55	%	0.841				0.84%
Sc Radial	5320.7	95.4	%	7.44				7.79%
Y 371.029	734430.4	100.68	%	0.773				0.77%
Y RADIAL	5812.6	96.25	%	7.488				7.78%
Ag 328.068†	1152.8	5.2296	ug/L	0.23498	5.2296	ppb	0.23498	4.49%
QC value within limits for Ag 328.068 Recovery = 104.59%								
Al 396.153Radial†	328.8	225.99	ug/L	11.970	225.99	ppb	11.970	5.30%
QC value within limits for Al 396.153Radial Recovery = 113.00%								
As 188.979†	83.1	32.116	ug/L	2.3836	32.116	ppb	2.3836	7.42%
QC value within limits for As 188.979 Recovery = 107.05%								
B 249.677†	2299.8	48.981	ug/L	0.4272	48.981	ppb	0.4272	0.87%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	671.1	5.0293	ug/L	0.03861	5.0293	ppb	0.03861	0.77%
QC value within limits for Ba 233.527 Recovery = 100.59%								
Be 313.107†	13749.4	4.9468	ug/L	0.04694	4.9468	ppb	0.04694	0.95%
QC value within limits for Be 313.107 Recovery = 98.94%								

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Ca 317.933Radial†        147.4      215.11 ug/L        19.794      215.11 ppb        19.794   9.20%
   QC value within limits for Ca 317.933Radial  Recovery = 107.56%
Cd 226.502†              480.1      4.9692 ug/L       0.08885      4.9692 ppb       0.08885   1.79%
   QC value within limits for Cd 226.502  Recovery = 99.38%
Co 228.616†              254.6      4.8165 ug/L       0.10864      4.8165 ppb       0.10864   2.26%
   QC value within limits for Co 228.616  Recovery = 96.33%
Cr 267.716†              469.6      4.9101 ug/L       0.07240      4.9101 ppb       0.07240   1.47%
   QC value within limits for Cr 267.716  Recovery = 98.20%
Cu 324.752†             3386.9      9.8442 ug/L       0.12836      9.8442 ppb       0.12836   1.30%
   QC value within limits for Cu 324.752  Recovery = 98.44%
Fe 238.204 Radial†        14.5      129.75 ug/L        20.588      129.75 ppb        20.588  15.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.75%
K 766.490 Radial†       1199.2      200.97 ug/L        61.163      200.97 ppb        61.163  30.43%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 133.98%
Mg 279.077 IEC†            9.7      326.16 ug/L        49.410      326.16 ppb        49.410  15.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.72%
Mn 257.610†             9699.1      10.286 ug/L        0.0588      10.286 ppb        0.0588   0.57%
   QC value within limits for Mn 257.610  Recovery = 102.86%
Mo 202.031†              159.1      10.132 ug/L        0.0975      10.132 ppb        0.0975   0.96%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†       953.6      289.00 ug/L        19.101      289.00 ppb        19.101   6.61%
   QC value within limits for Na 589.592 Radial  Recovery = 96.33%
Ni 231.604†              229.6      5.2731 ug/L       0.28518      5.2731 ppb       0.28518   5.41%
   QC value within limits for Ni 231.604  Recovery = 105.46%
P 214.914†               243.5      134.44 ug/L         6.678      134.44 ppb         6.678   4.97%
   QC value within limits for P 214.914  Recovery = 89.63%
Pb 220.353†               94.5      10.641 ug/L        1.1591      10.641 ppb        1.1591  10.89%
   QC value within limits for Pb 220.353  Recovery = 106.41%
S 181.975 Axial†          76.9      101.50 ug/L         4.930      101.50 ppb         4.930   4.86%
   QC value within limits for S 181.975 Axial  Recovery = 101.50%
Sb 206.836†               31.3      10.135 ug/L        1.4595      10.135 ppb        1.4595  14.40%
   QC value within limits for Sb 206.836  Recovery = 101.35%
Se 196.026†               51.4      29.370 ug/L        2.1103      29.370 ppb        2.1103   7.19%
   QC value within limits for Se 196.026  Recovery = 97.90%
Si 251.611†             3208.3      95.286 ug/L        0.3691      95.286 ppb        0.3691   0.39%
   QC value within limits for Si 251.611  Recovery = 95.29%
Sn 189.927†               51.1      8.2386 ug/L       1.18799      8.2386 ppb       1.18799  14.42%
   QC value within limits for Sn 189.927  Recovery = 82.39%
Sr 421.552†              884.1      5.3300 ug/L       0.47629      5.3300 ppb       0.47629   8.94%
   QC value within limits for Sr 421.552  Recovery = 106.60%
Ti 334.940†             3118.3      4.9100 ug/L       0.05293      4.9100 ppb       0.05293   1.08%
   QC value within limits for Ti 334.940  Recovery = 98.20%
Tl 190.801†               66.9      18.930 ug/L        1.1388      18.930 ppb        1.1388   6.02%
   QC value within limits for Tl 190.801  Recovery = 94.65%
U 409.014†              1688.7      48.527 ug/L        0.9963      48.527 ppb        0.9963   2.05%
   QC value within limits for U 409.014  Recovery = 97.05%
V 292.402†               691.2      4.8182 ug/L       0.02710      4.8182 ppb       0.02710   0.56%
   QC value within limits for V 292.402  Recovery = 96.36%
Zn 213.857†             1166.2      9.9626 ug/L       0.10681      9.9626 ppb       0.10681   1.07%
   QC value within limits for Zn 213.857  Recovery = 99.63%
SiO2†                   3294.1      209.67 ug/L         3.241      209.67 ppb         3.241   1.55%
   QC value within limits for SiO2  Recovery = 98.43%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/11/2009 11:28:12
Data Type: Reprocessed on 12/11/2009 12:46:02

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	756993.4	756993.4	87.220	%			11:30:38
1	Sc Radial	4880.9	4880.9	87.5	%			11:30:10
1	Y 371.029	620548.2	620548.2	85.070	%			11:30:38
1	Y RADIAL	5338.7	5338.7	88.40	%			11:30:10
1	Ag 328.068†	-9919.8	-11647.4	1.5150	ug/L	1.5150	ppb	11:30:38
1	Al 396.153Radial†	689990.2	788262.9	542890	ug/L	542890	ppb	11:30:05
1	As 188.979†	-105.2	-89.4	-4.8296	ug/L	-4.8296	ppb	11:30:58
1	B 249.677†	600.4	1181.6	-0.4812	ug/L	-0.4812	ppb	11:30:38
1	Ba 233.527†	-572.8	-645.6	2.3899	ug/L	2.3899	ppb	11:30:58
1	Be 313.107†	-4945.1	-1007.1	-0.4108	ug/L	-0.4108	ppb	11:30:38
1	Ca 317.933Radial†	302719.8	345802.7	504700	ug/L	504700	ppb	11:30:05
1	Cd 226.502†	1418.0	1824.8	-0.4092	ug/L	-0.4092	ppb	11:30:58
1	Co 228.616†	-4.8	68.0	-1.4714	ug/L	-1.4714	ppb	11:30:58
1	Cr 267.716†	-70.1	-166.4	1.7380	ug/L	1.7380	ppb	11:30:58
1	Cu 324.752†	4107.1	-2048.9	3.9153	ug/L	3.9153	ppb	11:30:38
1	Fe 238.204 Radial†	18907.2	21589.2	193420	ug/L	193420	ppb	11:30:10
1	K 766.490 Radial†	2657.0	295.8	66.366	ug/L	66.366	ppb	11:30:05
1	Mg 279.077 IEC†	13012.5	14863.3	499660	ug/L	499660	ppb	11:30:10
1	Mn 257.610†	1219.3	877.7	10.913	ug/L	10.913	ppb	11:30:38
1	Mo 202.031†	-231.7	-284.0	-4.3540	ug/L	-4.3540	ppb	11:30:58
1	Na 589.592 Radial†	-1428.1	-77.3	-23.415	ug/L	-23.415	ppb	11:30:10
1	Ni 231.604†	240.6	189.9	4.3628	ug/L	4.3628	ppb	11:30:58
1	P 214.914†	197.0	-16.2	18.997	ug/L	18.997	ppb	11:30:58
1	Pb 220.353†	-811.3	-862.2	9.3939	ug/L	9.3939	ppb	11:30:58
1	S 181.975 Axial†	76.0	37.7	-56.928	ug/L	-56.928	ppb	11:30:58
1	Sb 206.836†	86.2	61.4	6.2629	ug/L	6.2629	ppb	11:30:58
1	Se 196.026†	-1040.9	-1166.6	19.008	ug/L	19.008	ppb	11:30:58
1	Si 251.611†	466.9	53.5	2.1022	ug/L	2.1022	ppb	11:30:58
1	Sn 189.927†	-357.2	-418.4	-12.019	ug/L	-12.019	ppb	11:30:58
1	Sr 421.552†	575.5	657.7	-0.7113	ug/L	-0.7113	ppb	11:30:10
1	Ti 334.940†	-14931.3	-15862.9	1.2743	ug/L	1.2743	ppb	11:30:38
1	Tl 190.801†	-93.8	-72.9	-5.9073	ug/L	-5.9073	ppb	11:30:58
1	U 409.014†	-1285.6	1110.0	7.5826	ug/L	7.5826	ppb	11:30:38
1	V 292.402†	1155.9	2688.0	-0.4308	ug/L	-0.4308	ppb	11:30:58
1	Zn 213.857†	3322.4	3055.4	-9.3150	ug/L	-9.3150	ppb	11:30:58
1	SiO2†	472.1	16.8	2.1784	ug/L	2.1784	ppb	11:31:54
2	Sc 361.383	748375.7	748375.7	86.227	%			11:31:03
2	Sc Radial	5137.5	5137.5	92.1	%			11:30:21
2	Y 371.029	613588.1	613588.1	84.116	%			11:31:03
2	Y RADIAL	5544.8	5544.8	91.81	%			11:30:21
2	Ag 328.068†	-10027.9	-11903.8	-1.3768	ug/L	-1.3768	ppb	11:31:03
2	Al 396.153Radial†	643630.0	698570.9	481110	ug/L	481110	ppb	11:30:16
2	As 188.979†	-72.9	-53.2	7.9134	ug/L	7.9134	ppb	11:31:23
2	B 249.677†	650.9	1248.1	1.9790	ug/L	1.9790	ppb	11:31:03
2	Ba 233.527†	-566.8	-646.3	2.0929	ug/L	2.0929	ppb	11:31:23
2	Be 313.107†	-5112.7	-1266.8	-0.5041	ug/L	-0.5041	ppb	11:31:03
2	Ca 317.933Radial†	285126.3	309432.5	451610	ug/L	451610	ppb	11:30:16
2	Cd 226.502†	1400.8	1823.5	0.3625	ug/L	0.3625	ppb	11:31:23
2	Co 228.616†	7.3	81.9	-1.0956	ug/L	-1.0956	ppb	11:31:23
2	Cr 267.716†	-95.1	-196.3	1.2811	ug/L	1.2811	ppb	11:31:23
2	Cu 324.752†	4033.3	-2080.2	3.4233	ug/L	3.4233	ppb	11:31:03
2	Fe 238.204 Radial†	19093.0	20711.9	185560	ug/L	185560	ppb	11:30:21
2	K 766.490 Radial†	2667.1	155.0	40.166	ug/L	40.166	ppb	11:30:16
2	Mg 279.077 IEC†	13097.5	14212.9	477790	ug/L	477790	ppb	11:30:21
2	Mn 257.610†	1083.5	736.5	10.386	ug/L	10.386	ppb	11:31:03
2	Mo 202.031†	-226.6	-281.2	-4.7343	ug/L	-4.7343	ppb	11:31:23
2	Na 589.592 Radial†	-1350.8	88.1	26.712	ug/L	26.712	ppb	11:30:21
2	Ni 231.604†	192.9	137.8	3.1652	ug/L	3.1652	ppb	11:31:23

2	P 214.914†	167.9	-47.4	-13.017 ug/L	-13.017 ppb	11:31:23
2	Pb 220.353†	-834.9	-900.3	-8.0877 ug/L	-8.0877 ppb	11:31:23
2	S 181.975 Axial†	68.2	29.7	-55.392 ug/L	-55.392 ppb	11:31:23
2	Sb 206.836†	67.4	40.8	1.3270 ug/L	1.3270 ppb	11:31:23
2	Se 196.026†	-1013.6	-1148.8	-4.2965 ug/L	-4.2965 ppb	11:31:23
2	Si 251.611†	467.8	60.8	2.3247 ug/L	2.3247 ppb	11:31:23
2	Sn 189.927†	-357.8	-423.8	-18.546 ug/L	-18.546 ppb	11:31:23
2	Sr 421.552†	520.6	565.2	-0.7770 ug/L	-0.7770 ppb	11:30:21
2	Ti 334.940†	-14753.1	-15853.5	-1.4837 ug/L	-1.4837 ppb	11:31:03
2	Tl 190.801†	-62.9	-38.4	2.1377 ug/L	2.1377 ppb	11:31:23
2	U 409.014†	-990.6	1435.1	17.919 ug/L	17.919 ppb	11:31:03
2	V 292.402†	1127.3	2670.1	0.1734 ug/L	0.1734 ppb	11:31:23
2	Zn 213.857†	3343.9	3124.2	-7.2162 ug/L	-7.2162 ppb	11:31:23
2	SiO2†	472.1	23.0	2.5906 ug/L	2.5906 ppb	11:31:59
3	Sc 361.383	731671.0	731671.0	84.302 %		11:31:28
3	Sc Radial	5024.3	5024.3	90.1 %		11:30:31
3	Y 371.029	601193.9	601193.9	82.417 %		11:31:28
3	Y RADIAL	5440.1	5440.1	90.08 %		11:30:31
3	Ag 328.068†	-10018.7	-12158.3	-1.0690 ug/L	-1.0690 ppb	11:31:28
3	Al 396.153Radial†	664641.7	737630.5	508020 ug/L	508020 ppb	11:30:26
3	As 188.979†	-72.7	-54.9	8.1410 ug/L	8.1410 ppb	11:31:48
3	B 249.677†	582.2	1183.8	-0.1430 ug/L	-0.1430 ppb	11:31:28
3	Ba 233.527†	-531.7	-619.6	2.5022 ug/L	2.5022 ppb	11:31:48
3	Be 313.107†	-5001.9	-1270.7	-0.5069 ug/L	-0.5069 ppb	11:31:28
3	Ca 317.933Radial†	294034.9	326292.3	476220 ug/L	476220 ppb	11:30:26
3	Cd 226.502†	1410.2	1871.8	0.2962 ug/L	0.2962 ppb	11:31:48
3	Co 228.616†	-32.8	34.5	-2.0714 ug/L	-2.0714 ppb	11:31:48
3	Cr 267.716†	-82.7	-184.1	1.5151 ug/L	1.5151 ppb	11:31:48
3	Cu 324.752†	4076.9	-1921.8	4.1731 ug/L	4.1731 ppb	11:31:28
3	Fe 238.204 Radial†	19243.2	21345.6	191230 ug/L	191230 ppb	11:30:31
3	K 766.490 Radial†	2570.1	112.6	33.988 ug/L	33.988 ppb	11:30:26
3	Mg 279.077 IEC†	13195.9	14642.4	492230 ug/L	492230 ppb	11:30:31
3	Mn 257.610†	1029.6	701.2	10.646 ug/L	10.646 ppb	11:31:28
3	Mo 202.031†	-233.6	-295.5	-5.2381 ug/L	-5.2381 ppb	11:31:48
3	Na 589.592 Radial†	-1340.0	67.0	20.318 ug/L	20.318 ppb	11:30:31
3	Ni 231.604†	214.7	168.8	3.8778 ug/L	3.8778 ppb	11:31:48
3	P 214.914†	163.9	-47.6	-8.7638 ug/L	-8.7638 ppb	11:31:48
3	Pb 220.353†	-816.2	-900.2	-2.5019 ug/L	-2.5019 ppb	11:31:48
3	S 181.975 Axial†	74.1	38.5	-49.071 ug/L	-49.071 ppb	11:31:48
3	Sb 206.836†	58.8	32.3	-2.1131 ug/L	-2.1131 ppb	11:31:48
3	Se 196.026†	-1038.8	-1205.4	-14.715 ug/L	-14.715 ppb	11:31:48
3	Si 251.611†	431.0	29.5	1.4270 ug/L	1.4270 ppb	11:31:48
3	Sn 189.927†	-376.1	-455.0	-20.917 ug/L	-20.917 ppb	11:31:48
3	Sr 421.552†	554.7	615.8	-0.6998 ug/L	-0.6998 ppb	11:30:31
3	Ti 334.940†	-14815.5	-16318.0	-0.9262 ug/L	-0.9262 ppb	11:31:28
3	Tl 190.801†	-106.1	-91.3	-12.048 ug/L	-12.048 ppb	11:31:48
3	U 409.014†	-1449.0	865.2	0.8188 ug/L	0.8188 ppb	11:31:28
3	V 292.402†	1066.8	2628.1	-0.6876 ug/L	-0.6876 ppb	11:31:48
3	Zn 213.857†	3344.7	3213.7	-7.4880 ug/L	-7.4880 ppb	11:31:48
3	SiO2†	364.7	-91.9	-4.6727 ug/L	-4.6727 ppb	11:32:04

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	745680.1	85.916	%	1.4834				1.73%
Sc Radial	5014.2	89.9	%	2.31				2.57%
Y 371.029	611776.7	83.867	%	1.3439				1.60%
Y RADIAL	5441.2	90.10	%	1.707				1.89%
Ag 328.068†	-11903.1	-0.3103	ug/L	1.58818	-0.3103	ppb	1.58818	511.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	741488.1	510670	ug/L	30971.5	510670	ppb	30971.5	6.06%
QC value within limits for Al 396.153Radial Recovery = 102.13%								
As 188.979†	-65.8	3.7416	ug/L	7.42374	3.7416	ppb	7.42374	198.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1204.5	0.4516	ug/L	1.33353	0.4516	ppb	1.33353	295.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-637.1	2.3283	ug/L	0.21149	2.3283	ppb	0.21149	9.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1181.5	-0.4739	ug/L	0.05467	-0.4739	ppb	0.05467	11.53%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     327175.8      477510 ug/L       26564.5      477510 ppb        26564.5   5.56%
   QC value within limits for Ca 317.933Radial  Recovery = 95.50%
Cd 226.502†             1840.0      0.0832 ug/L       0.42771      0.0832 ppb        0.42771 514.38%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.5     -1.5462 ug/L       0.49217     -1.5462 ppb        0.49217  31.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -182.3      1.5114 ug/L       0.22845      1.5114 ppb        0.22845  15.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -2017.0      3.8372 ug/L       0.38095      3.8372 ppb        0.38095   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     21215.6      190070 ug/L        4057.3      190070 ppb         4057.3   2.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.03%
K 766.490 Radial†        187.8      46.840 ug/L       17.1898      46.840 ppb        17.1898  36.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        14572.9      489890 ug/L       11118.2      489890 ppb        11118.2   2.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.98%
Mn 257.610†              771.8      10.648 ug/L        0.2632      10.648 ppb         0.2632   2.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -286.9     -4.7755 ug/L       0.44349     -4.7755 ppb        0.44349   9.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        26.0      7.8718 ug/L      27.28290      7.8718 ppb       27.28290 346.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              165.5      3.8019 ug/L       0.60243      3.8019 ppb        0.60243  15.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -37.1     -0.9278 ug/L      17.38629     -0.9278 ppb       17.38629 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -887.6     -0.3986 ug/L       8.92859     -0.3986 ppb        8.92859 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          35.3     -53.797 ug/L        4.1643     -53.797 ppb         4.1643   7.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               44.9      1.8256 ug/L       4.21020      1.8256 ppb        4.21020 230.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1173.6     -0.0013 ug/L      17.26716     -0.0013 ppb       17.26716 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               47.9      1.9513 ug/L       0.46751      1.9513 ppb        0.46751  23.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -432.4     -17.161 ug/L        4.6077     -17.161 ppb         4.6077  26.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              612.9     -0.7293 ug/L       0.04164     -0.7293 ppb        0.04164   5.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16011.5     -0.3785 ug/L       1.45827     -0.3785 ppb        1.45827 385.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -67.5     -5.2725 ug/L       7.11413     -5.2725 ppb        7.11413 134.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1136.8      8.7736 ug/L       8.61226      8.7736 ppb        8.61226  98.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2662.1     -0.3150 ug/L       0.44201     -0.3150 ppb        0.44201 140.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3131.1     -8.0064 ug/L       1.14141     -8.0064 ppb        1.14141  14.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -17.3      0.0321 ug/L       4.07969      0.0321 ppb        4.07969 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/11/2009 11:34:15
Data Type: Reprocessed on 12/11/2009 12:46:03

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	758951.0	758951.0	87.445	%			11:36:41
1	Sc Radial	4987.2	4987.2	89.4	%			11:36:13
1	Y 371.029	621080.9	621080.9	85.143	%			11:36:41
1	Y RADIAL	5400.8	5400.8	89.43	%			11:36:13
1	Ag 328.068†	42647.1	48496.1	274.60	ug/L	274.60	ppb	11:36:41
1	Al 396.153Radial†	660949.3	738982.6	508930	ug/L	508930	ppb	11:36:08
1	As 188.979†	1049.6	1231.6	508.39	ug/L	508.39	ppb	11:37:01
1	B 249.677†	21526.7	25110.5	508.75	ug/L	508.75	ppb	11:36:41
1	Ba 233.527†	57172.2	65391.7	496.83	ug/L	496.83	ppb	11:36:41
1	Be 313.107†	582917.2	671270.9	242.00	ug/L	242.00	ppb	11:36:41
1	Ca 317.933Radial†	289405.7	323541.3	472210	ug/L	472210	ppb	11:36:08
1	Cd 226.502†	40964.3	47044.6	469.17	ug/L	469.17	ppb	11:36:41
1	Co 228.616†	20702.3	23748.1	445.38	ug/L	445.38	ppb	11:37:01
1	Cr 267.716†	39985.1	45639.8	481.89	ug/L	481.89	ppb	11:36:41
1	Cu 324.752†	171387.9	189236.7	559.36	ug/L	559.36	ppb	11:36:41
1	Fe 238.204 Radial†	19000.6	21233.0	190240	ug/L	190240	ppb	11:36:13
1	K 766.490 Radial†	31877.7	32900.0	5528.6	ug/L	5528.6	ppb	11:36:08
1	Mg 279.077 IEC†	13124.0	14670.8	493200	ug/L	493200	ppb	11:36:13
1	Mn 257.610†	396615.6	453038.6	489.93	ug/L	489.93	ppb	11:36:41
1	Mo 202.031†	6533.4	7453.0	487.78	ug/L	487.78	ppb	11:37:01
1	Na 589.592 Radial†	15252.2	18606.2	5638.8	ug/L	5638.8	ppb	11:36:13
1	Ni 231.604†	17062.5	19426.2	446.10	ug/L	446.10	ppb	11:37:01
1	P 214.914†	4156.3	4511.0	2455.5	ug/L	2455.5	ppb	11:37:01
1	Pb 220.353†	2780.9	3248.2	462.94	ug/L	462.94	ppb	11:37:01
1	S 181.975 Axial†	1860.9	2078.6	2646.2	ug/L	2646.2	ppb	11:37:01
1	Sb 206.836†	1514.6	1694.6	530.20	ug/L	530.20	ppb	11:37:01
1	Se 196.026†	2895.9	3338.4	2540.1	ug/L	2540.1	ppb	11:37:01
1	Si 251.611†	154917.7	176677.9	5250.8	ug/L	5250.8	ppb	11:36:41
1	Sn 189.927†	2316.7	2640.5	476.61	ug/L	476.61	ppb	11:37:01
1	Sr 421.552†	76362.9	85374.7	510.54	ug/L	510.54	ppb	11:36:08
1	Ti 334.940†	268916.2	308781.5	511.62	ug/L	511.62	ppb	11:36:41
1	Tl 190.801†	1350.0	1578.3	461.73	ug/L	461.73	ppb	11:37:01
1	U 409.014†	13317.1	17813.1	487.28	ug/L	487.28	ppb	11:36:41
1	V 292.402†	66843.3	77803.0	506.91	ug/L	506.91	ppb	11:36:41
1	Zn 213.857†	53716.7	60675.1	483.37	ug/L	483.37	ppb	11:36:41
1	SiO2†	156111.1	178000.0	11337	ug/L	11337	ppb	11:37:58
2	Sc 361.383	760073.7	760073.7	87.575	%			11:37:07
2	Sc Radial	5036.8	5036.8	90.3	%			11:36:23
2	Y 371.029	622660.3	622660.3	85.359	%			11:37:07
2	Y RADIAL	5470.1	5470.1	90.58	%			11:36:23
2	Ag 328.068†	42822.9	48624.8	275.06	ug/L	275.06	ppb	11:37:07
2	Al 396.153Radial†	668783.0	740388.7	509890	ug/L	509890	ppb	11:36:18
2	As 188.979†	1057.7	1239.1	511.27	ug/L	511.27	ppb	11:37:27
2	B 249.677†	21772.6	25355.0	514.00	ug/L	514.00	ppb	11:37:07
2	Ba 233.527†	57342.2	65489.2	497.55	ug/L	497.55	ppb	11:37:07
2	Be 313.107†	584422.8	672005.6	242.26	ug/L	242.26	ppb	11:37:07
2	Ca 317.933Radial†	293875.9	325308.4	474790	ug/L	474790	ppb	11:36:18
2	Cd 226.502†	41033.4	47054.3	469.30	ug/L	469.30	ppb	11:37:07
2	Co 228.616†	20775.3	23796.5	446.31	ug/L	446.31	ppb	11:37:27
2	Cr 267.716†	40113.5	45718.9	482.71	ug/L	482.71	ppb	11:37:07
2	Cu 324.752†	171912.4	189546.1	560.25	ug/L	560.25	ppb	11:37:07
2	Fe 238.204 Radial†	19164.0	21205.0	189990	ug/L	189990	ppb	11:36:23
2	K 766.490 Radial†	32285.0	33000.4	5545.3	ug/L	5545.3	ppb	11:36:18
2	Mg 279.077 IEC†	13200.4	14611.1	491190	ug/L	491190	ppb	11:36:23
2	Mn 257.610†	397691.3	453597.1	490.53	ug/L	490.53	ppb	11:37:07
2	Mo 202.031†	6575.2	7489.6	490.09	ug/L	490.09	ppb	11:37:27
2	Na 589.592 Radial†	15268.6	18456.7	5593.5	ug/L	5593.5	ppb	11:36:23
2	Ni 231.604†	17120.7	19463.9	446.97	ug/L	446.97	ppb	11:37:27

2	P 214.914†	4170.4	4520.0	2461.0 ug/L	2461.0 ppb	11:37:27
2	Pb 220.353†	2775.6	3237.4	461.98 ug/L	461.98 ppb	11:37:27
2	S 181.975 Axial†	1850.2	2063.3	2625.7 ug/L	2625.7 ppb	11:37:27
2	Sb 206.836†	1535.4	1715.9	536.97 ug/L	536.97 ppb	11:37:27
2	Se 196.026†	2927.9	3370.1	2557.4 ug/L	2557.4 ppb	11:37:27
2	Si 251.611†	155531.8	177117.5	5263.8 ug/L	5263.8 ppb	11:37:07
2	Sn 189.927†	2340.2	2663.4	480.56 ug/L	480.56 ppb	11:37:27
2	Sr 421.552†	77355.4	85633.9	512.08 ug/L	512.08 ppb	11:36:18
2	Ti 334.940†	269367.0	308842.1	511.85 ug/L	511.85 ppb	11:37:07
2	Tl 190.801†	1353.2	1579.7	462.15 ug/L	462.15 ppb	11:37:27
2	U 409.014†	13457.9	17951.4	491.29 ug/L	491.29 ppb	11:37:07
2	V 292.402†	66938.6	77798.8	506.92 ug/L	506.92 ppb	11:37:07
2	Zn 213.857†	53878.9	60769.5	484.27 ug/L	484.27 ppb	11:37:07
2	SiO2†	154326.5	175698.4	11189 ug/L	11189 ppb	11:38:04
3	Sc 361.383	753121.3	753121.3	86.774 %		11:37:33
3	Sc Radial	4947.8	4947.8	88.7 %		11:36:33
3	Y 371.029	616563.3	616563.3	84.524 %		11:37:33
3	Y RADIAL	5419.6	5419.6	89.74 %		11:36:33
3	Ag 328.068†	42451.5	48648.2	275.53 ug/L	275.53 ppb	11:37:33
3	Al 396.153Radial†	669785.4	754825.5	519840 ug/L	519840 ppb	11:36:28
3	As 188.979†	1063.9	1257.4	518.56 ug/L	518.56 ppb	11:37:53
3	B 249.677†	21521.5	25295.1	512.51 ug/L	512.51 ppb	11:37:33
3	Ba 233.527†	56818.0	65489.6	497.61 ug/L	497.61 ppb	11:37:33
3	Be 313.107†	578443.8	671275.7	242.00 ug/L	242.00 ppb	11:37:33
3	Ca 317.933Radial†	293749.8	331013.8	483110 ug/L	483110 ppb	11:36:28
3	Cd 226.502†	40771.4	47184.9	470.51 ug/L	470.51 ppb	11:37:33
3	Co 228.616†	20701.7	23930.6	448.82 ug/L	448.82 ppb	11:37:53
3	Cr 267.716†	39768.4	45744.0	483.00 ug/L	483.00 ppb	11:37:33
3	Cu 324.752†	169859.6	188992.6	558.72 ug/L	558.72 ppb	11:37:33
3	Fe 238.204 Radial†	18976.5	21375.0	191510 ug/L	191510 ppb	11:36:33
3	K 766.490 Radial†	32308.4	33669.2	5657.9 ug/L	5657.9 ppb	11:36:28
3	Mg 279.077 IEC†	13082.5	14741.0	495550 ug/L	495550 ppb	11:36:33
3	Mn 257.610†	394294.3	453874.5	490.90 ug/L	490.90 ppb	11:37:33
3	Mo 202.031†	6534.9	7512.6	491.66 ug/L	491.66 ppb	11:37:53
3	Na 589.592 Radial†	15175.1	18655.2	5653.6 ug/L	5653.6 ppb	11:36:33
3	Ni 231.604†	17057.9	19572.1	449.45 ug/L	449.45 ppb	11:37:53
3	P 214.914†	4154.4	4545.6	2477.7 ug/L	2477.7 ppb	11:37:53
3	Pb 220.353†	2759.8	3248.5	465.32 ug/L	465.32 ppb	11:37:53
3	S 181.975 Axial†	1869.6	2105.2	2679.0 ug/L	2679.0 ppb	11:37:53
3	Sb 206.836†	1520.7	1715.1	536.53 ug/L	536.53 ppb	11:37:53
3	Se 196.026†	2889.0	3356.2	2555.7 ug/L	2555.7 ppb	11:37:53
3	Si 251.611†	153939.2	176921.7	5257.9 ug/L	5257.9 ppb	11:37:33
3	Sn 189.927†	2327.8	2673.7	483.12 ug/L	483.12 ppb	11:37:53
3	Sr 421.552†	77374.4	87194.4	521.41 ug/L	521.41 ppb	11:36:28
3	Ti 334.940†	267159.7	309137.7	512.75 ug/L	512.75 ppb	11:37:33
3	Tl 190.801†	1350.3	1590.7	465.49 ug/L	465.49 ppb	11:37:53
3	U 409.014†	13410.7	18038.8	493.61 ug/L	493.61 ppb	11:37:33
3	V 292.402†	66385.9	77867.5	507.27 ug/L	507.27 ppb	11:37:33
3	Zn 213.857†	53341.8	60718.6	483.52 ug/L	483.52 ppb	11:37:33
3	SiO2†	156041.1	179301.1	11419 ug/L	11419 ppb	11:38:09

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757382.0	87.264	%	0.4300				0.49%
Sc Radial	4990.6	89.5	%	0.80				0.89%
Y 371.029	620101.5	85.009	%	0.4338				0.51%
Y RADIAL	5430.1	89.92	%	0.593				0.66%
Ag 328.068†	48589.7	275.06	ug/L	0.465	275.06	ppb	0.465	0.17%
QC value within limits for Ag 328.068 Recovery = 110.02%								
Al 396.153Radial†	744732.3	512880	ug/L	6039.4	512880	ppb	6039.4	1.18%
QC value within limits for Al 396.153Radial Recovery = 102.58%								
As 188.979†	1242.7	512.74	ug/L	5.241	512.74	ppb	5.241	1.02%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	25253.5	511.75	ug/L	2.701	511.75	ppb	2.701	0.53%
QC value within limits for B 249.677 Recovery = 102.35%								
Ba 233.527†	65456.8	497.33	ug/L	0.434	497.33	ppb	0.434	0.09%
QC value within limits for Ba 233.527 Recovery = 99.47%								
Be 313.107†	671517.4	242.08	ug/L	0.152	242.08	ppb	0.152	0.06%
QC value within limits for Be 313.107 Recovery = 96.83%								

Ca 317.933Radial†	326621.2	476700 ug/L	5699.8	476700 ppb	5699.8	1.20%
QC value within limits for Ca 317.933Radial Recovery = 95.34%						
Cd 226.502†	47094.6	469.66 ug/L	0.734	469.66 ppb	0.734	0.16%
QC value within limits for Cd 226.502 Recovery = 93.93%						
Co 228.616†	23825.1	446.84 ug/L	1.777	446.84 ppb	1.777	0.40%
QC value within limits for Co 228.616 Recovery = 89.37%						
Cr 267.716†	45700.9	482.54 ug/L	0.577	482.54 ppb	0.577	0.12%
QC value within limits for Cr 267.716 Recovery = 96.51%						
Cu 324.752†	189258.5	559.44 ug/L	0.768	559.44 ppb	0.768	0.14%
QC value within limits for Cu 324.752 Recovery = 111.89%						
Fe 238.204 Radial†	21271.0	190580 ug/L	816.7	190580 ppb	816.7	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 95.29%						
K 766.490 Radial†	33189.9	5577.3 ug/L	70.35	5577.3 ppb	70.35	1.26%
QC value within limits for K 766.490 Radial Recovery = 111.55%						
Mg 279.077 IEC†	14674.3	493310 ug/L	2184.9	493310 ppb	2184.9	0.44%
QC value within limits for Mg 279.077 IEC Recovery = 98.66%						
Mn 257.610†	453503.4	490.45 ug/L	0.489	490.45 ppb	0.489	0.10%
QC value within limits for Mn 257.610 Recovery = 98.09%						
Mo 202.031†	7485.1	489.84 ug/L	1.955	489.84 ppb	1.955	0.40%
QC value within limits for Mo 202.031 Recovery = 97.97%						
Na 589.592 Radial†	18572.7	5628.6 ug/L	31.33	5628.6 ppb	31.33	0.56%
QC value within limits for Na 589.592 Radial Recovery = 112.57%						
Ni 231.604†	19487.4	447.51 ug/L	1.739	447.51 ppb	1.739	0.39%
QC value within limits for Ni 231.604 Recovery = 89.50%						
P 214.914†	4525.5	2464.7 ug/L	11.55	2464.7 ppb	11.55	0.47%
QC value within limits for P 214.914 Recovery = 98.59%						
Pb 220.353†	3244.7	463.41 ug/L	1.722	463.41 ppb	1.722	0.37%
QC value within limits for Pb 220.353 Recovery = 92.68%						
S 181.975 Axial†	2082.4	2650.3 ug/L	26.93	2650.3 ppb	26.93	1.02%
QC value within limits for S 181.975 Axial Recovery = 106.01%						
Sb 206.836†	1708.5	534.57 ug/L	3.789	534.57 ppb	3.789	0.71%
QC value within limits for Sb 206.836 Recovery = 106.91%						
Se 196.026†	3354.9	2551.1 ug/L	9.50	2551.1 ppb	9.50	0.37%
QC value within limits for Se 196.026 Recovery = 102.04%						
Si 251.611†	176905.7	5257.5 ug/L	6.53	5257.5 ppb	6.53	0.12%
QC value within limits for Si 251.611 Recovery = 105.15%						
Sn 189.927†	2659.2	480.10 ug/L	3.278	480.10 ppb	3.278	0.68%
QC value within limits for Sn 189.927 Recovery = 96.02%						
Sr 421.552†	86067.7	514.68 ug/L	5.884	514.68 ppb	5.884	1.14%
QC value within limits for Sr 421.552 Recovery = 102.94%						
Ti 334.940†	308920.4	512.07 ug/L	0.596	512.07 ppb	0.596	0.12%
QC value within limits for Ti 334.940 Recovery = 102.41%						
Tl 190.801†	1582.9	463.12 ug/L	2.059	463.12 ppb	2.059	0.44%
QC value within limits for Tl 190.801 Recovery = 92.62%						
U 409.014†	17934.4	490.73 ug/L	3.200	490.73 ppb	3.200	0.65%
QC value within limits for U 409.014 Recovery = 98.15%						
V 292.402†	77823.1	507.03 ug/L	0.203	507.03 ppb	0.203	0.04%
QC value within limits for V 292.402 Recovery = 101.41%						
Zn 213.857†	60721.1	483.72 ug/L	0.481	483.72 ppb	0.481	0.10%
QC value within limits for Zn 213.857 Recovery = 96.74%						
SiO2†	177666.5	11315 ug/L	116.4	11315 ppb	116.4	1.03%
QC value within limits for SiO2 Recovery = 105.80%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/11/2009 11:40:18
Data Type: Reprocessed on 12/11/2009 12:46:04

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	740552.4	740552.4	85.325	%			11:42:45
1	Sc Radial	4969.6	4969.6	89.1	%			11:42:16
1	Y 371.029	607165.9	607165.9	83.235	%			11:42:45
1	Y RADIAL	5424.0	5424.0	89.81	%			11:42:16
1	Ag 328.068†	-23489.1	-27802.9	-2.8641	ug/L	-2.8641	ppb	11:42:45
1	Al 396.153Radial†	644142.1	722747.2	497770	ug/L	497770	ppb	11:42:11
1	As 188.979†	-201.4	-204.8	-10.167	ug/L	-10.167	ppb	11:43:05
1	B 249.677†	1984.5	2819.0	0.8022	ug/L	0.8022	ppb	11:42:45
1	Ba 233.527†	-1613.5	-1879.9	2.5961	ug/L	2.5961	ppb	11:43:05
1	Be 313.107†	-11598.1	-8930.2	-3.2347	ug/L	-3.2347	ppb	11:42:45
1	Ca 317.933Radial†	284191.5	318839.1	465340	ug/L	465340	ppb	11:42:11
1	Cd 226.502†	3571.9	4385.1	0.8224	ug/L	0.8224	ppb	11:43:05
1	Co 228.616†	194.7	301.7	-0.7620	ug/L	-0.7620	ppb	11:43:05
1	Cr 267.716†	42.7	-36.0	2.9304	ug/L	2.9304	ppb	11:43:05
1	Cu 324.752†	1283.7	-5253.3	7.5286	ug/L	7.5286	ppb	11:42:45
1	Fe 238.204 Radial†	44449.7	49861.6	446710	ug/L	446710	ppb	11:42:16
1	K 766.490 Radial†	3284.2	945.3	-49.160	ug/L	-49.160	ppb	11:42:11
1	Mg 279.077 IEC†	12857.3	14423.7	484660	ug/L	484660	ppb	11:42:16
1	Mn 257.610†	-23452.1	-28005.7	5.8356	ug/L	5.8356	ppb	11:42:45
1	Mo 202.031†	-533.6	-643.7	-9.2781	ug/L	-9.2781	ppb	11:43:05
1	Na 589.592 Radial†	1542374.9	1732061.6	524920	ug/L	524920	ppb	11:42:11
1	Ni 231.604†	297.4	262.6	6.0309	ug/L	6.0309	ppb	11:43:05
1	P 214.914†	601.0	462.3	67.963	ug/L	67.963	ppb	11:43:05
1	Pb 220.353†	-588.5	-621.7	5.3514	ug/L	5.3514	ppb	11:43:05
1	S 181.975 Axial†	129.4	102.3	37.240	ug/L	37.240	ppb	11:43:05
1	Sb 206.836†	52.1	23.7	-1.0104	ug/L	-1.0104	ppb	11:43:05
1	Se 196.026†	-2373.2	-2754.5	-102.71	ug/L	-102.71	ppb	11:43:05
1	Si 251.611†	-568.9	-1148.5	-33.299	ug/L	-33.299	ppb	11:43:05
1	Sn 189.927†	-412.7	-492.5	-24.674	ug/L	-24.674	ppb	11:43:05
1	Sr 421.552†	806.9	905.5	1.1481	ug/L	1.1481	ppb	11:42:16
1	Ti 334.940†	-8809.8	-9068.7	3.4577	ug/L	3.4577	ppb	11:42:45
1	Tl 190.801†	-125.0	-111.9	-18.286	ug/L	-18.286	ppb	11:43:05
1	U 409.014†	434877.4	512253.5	14671	ug/L	14671	ppb	11:42:45
1	V 292.402†	3110.2	5007.9	4.3404	ug/L	4.3404	ppb	11:42:45
1	Zn 213.857†	6282.7	6609.4	-2.4207	ug/L	-2.4207	ppb	11:43:05
1	SiO2†	-560.3	-1181.2	-73.425	ug/L	-73.425	ppb	11:44:02
2	Sc 361.383	731220.0	731220.0	84.250	%			11:43:10
2	Sc Radial	4811.2	4811.2	86.3	%			11:42:27
2	Y 371.029	599802.7	599802.7	82.226	%			11:43:10
2	Y RADIAL	5273.6	5273.6	87.32	%			11:42:27
2	Ag 328.068†	-22989.1	-27560.7	-0.4938	ug/L	-0.4938	ppb	11:43:10
2	Al 396.153Radial†	654324.4	758342.3	522280	ug/L	522280	ppb	11:42:22
2	As 188.979†	-189.0	-193.1	-4.8776	ug/L	-4.8776	ppb	11:43:31
2	B 249.677†	1680.6	2487.9	-6.9076	ug/L	-6.9076	ppb	11:43:10
2	Ba 233.527†	-1578.3	-1862.2	2.9075	ug/L	2.9075	ppb	11:43:31
2	Be 313.107†	-11555.5	-9053.0	-3.2781	ug/L	-3.2781	ppb	11:43:10
2	Ca 317.933Radial†	287901.6	333636.9	486940	ug/L	486940	ppb	11:42:22
2	Cd 226.502†	3576.5	4444.1	0.9420	ug/L	0.9420	ppb	11:43:31
2	Co 228.616†	205.6	317.5	-0.5340	ug/L	-0.5340	ppb	11:43:31
2	Cr 267.716†	39.3	-39.4	2.9922	ug/L	2.9922	ppb	11:43:31
2	Cu 324.752†	1345.1	-5161.3	8.0471	ug/L	8.0471	ppb	11:43:10
2	Fe 238.204 Radial†	43507.1	50411.2	451630	ug/L	451630	ppb	11:42:27
2	K 766.490 Radial†	3352.4	1145.6	-25.351	ug/L	-25.351	ppb	11:42:22
2	Mg 279.077 IEC†	12571.2	14567.0	489470	ug/L	489470	ppb	11:42:27
2	Mn 257.610†	-23090.5	-27927.3	6.3199	ug/L	6.3199	ppb	11:43:10
2	Mo 202.031†	-519.0	-634.4	-8.3347	ug/L	-8.3347	ppb	11:43:31
2	Na 589.592 Radial†	1563595.8	1813630.2	549640	ug/L	549640	ppb	11:42:22
2	Ni 231.604†	306.0	277.3	6.3685	ug/L	6.3685	ppb	11:43:31

2	P 214.914†	575.4	440.9	60.292 ug/L	60.292 ppb	11:43:31
2	Pb 220.353†	-591.1	-633.6	9.1208 ug/L	9.1208 ppb	11:43:31
2	S 181.975 Axial†	121.8	95.2	23.018 ug/L	23.018 ppb	11:43:31
2	Sb 206.836†	70.4	46.2	5.5298 ug/L	5.5298 ppb	11:43:31
2	Se 196.026†	-2383.3	-2802.0	-110.63 ug/L	-110.63 ppb	11:43:31
2	Si 251.611†	-547.0	-1131.0	-32.801 ug/L	-32.801 ppb	11:43:31
2	Sn 189.927†	-404.0	-488.4	-21.688 ug/L	-21.688 ppb	11:43:31
2	Sr 421.552†	781.2	905.6	0.9485 ug/L	0.9485 ppb	11:42:27
2	Ti 334.940†	-8483.5	-8813.2	5.0026 ug/L	5.0026 ppb	11:43:10
2	Tl 190.801†	-107.4	-92.9	-12.247 ug/L	-12.247 ppb	11:43:31
2	U 409.014†	428397.3	511066.8	14637 ug/L	14637 ppb	11:43:10
2	V 292.402†	2914.2	4821.7	2.4034 ug/L	2.4034 ppb	11:43:10
2	Zn 213.857†	6285.7	6707.0	-2.2191 ug/L	-2.2191 ppb	11:43:31
2	SiO2†	-609.5	-1247.9	-77.734 ug/L	-77.734 ppb	11:44:07
3	Sc 361.383	733959.0	733959.0	84.566 %		11:43:36
3	Sc Radial	4847.4	4847.4	86.9 %		11:42:38
3	Y 371.029	603107.7	603107.7	82.679 %		11:43:36
3	Y RADIAL	5267.1	5267.1	87.22 %		11:42:38
3	Ag 328.068†	-23001.8	-27473.9	0.0752 ug/L	0.0752 ppb	11:43:36
3	Al 396.153Radial†	642180.4	738704.7	508760 ug/L	508760 ppb	11:42:33
3	As 188.979†	-201.1	-206.5	-10.095 ug/L	-10.095 ppb	11:43:56
3	B 249.677†	1627.2	2417.4	-8.3983 ug/L	-8.3983 ppb	11:43:36
3	Ba 233.527†	-1605.5	-1887.4	2.7148 ug/L	2.7148 ppb	11:43:56
3	Be 313.107†	-11402.2	-8820.6	-3.1955 ug/L	-3.1955 ppb	11:43:36
3	Ca 317.933Radial†	282744.6	325210.7	474640 ug/L	474640 ppb	11:42:33
3	Cd 226.502†	3580.9	4433.3	0.8396 ug/L	0.8396 ppb	11:43:56
3	Co 228.616†	208.9	320.5	-0.4742 ug/L	-0.4742 ppb	11:43:56
3	Cr 267.716†	-1.4	-87.7	2.4940 ug/L	2.4940 ppb	11:43:56
3	Cu 324.752†	1152.4	-5395.1	7.3634 ug/L	7.3634 ppb	11:43:36
3	Fe 238.204 Radial†	43826.3	50401.4	451550 ug/L	451550 ppb	11:42:38
3	K 766.490 Radial†	3322.7	1082.4	-30.604 ug/L	-30.604 ppb	11:42:33
3	Mg 279.077 IEC†	12659.1	14559.3	489210 ug/L	489210 ppb	11:42:38
3	Mn 257.610†	-23139.4	-27882.8	6.3632 ug/L	6.3632 ppb	11:43:36
3	Mo 202.031†	-519.4	-632.6	-8.2254 ug/L	-8.2254 ppb	11:43:56
3	Na 589.592 Radial†	1537159.2	1769674.9	536320 ug/L	536320 ppb	11:42:33
3	Ni 231.604†	313.0	284.2	6.5265 ug/L	6.5265 ppb	11:43:56
3	P 214.914†	574.5	437.3	53.897 ug/L	53.897 ppb	11:43:56
3	Pb 220.353†	-582.2	-620.5	7.5575 ug/L	7.5575 ppb	11:43:56
3	S 181.975 Axial†	122.3	95.2	25.688 ug/L	25.688 ppb	11:43:56
3	Sb 206.836†	69.5	44.8	5.4590 ug/L	5.4590 ppb	11:43:56
3	Se 196.026†	-2374.6	-2781.2	-101.23 ug/L	-101.23 ppb	11:43:56
3	Si 251.611†	-568.1	-1153.6	-33.468 ug/L	-33.468 ppb	11:43:56
3	Sn 189.927†	-412.6	-496.7	-24.312 ug/L	-24.312 ppb	11:43:56
3	Sr 421.552†	811.0	933.0	1.2279 ug/L	1.2279 ppb	11:42:38
3	Ti 334.940†	-8748.4	-9088.9	3.9399 ug/L	3.9399 ppb	11:43:36
3	Tl 190.801†	-111.6	-97.4	-13.906 ug/L	-13.906 ppb	11:43:56
3	U 409.014†	429086.3	509984.0	14606 ug/L	14606 ppb	11:43:36
3	V 292.402†	2838.4	4719.2	1.6707 ug/L	1.6707 ppb	11:43:36
3	Zn 213.857†	6258.4	6646.8	-2.7197 ug/L	-2.7197 ppb	11:43:56
3	SiO2†	-683.4	-1332.6	-83.127 ug/L	-83.127 ppb	11:44:12

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	735243.8	84.714	%	0.5527				0.65%
Sc Radial	4876.1	87.5	%	1.49				1.70%
Y 371.029	603358.7	82.713	%	0.5056				0.61%
Y RADIAL	5321.5	88.12	%	1.470				1.67%
Ag 328.068†	-27612.5	-1.0942	ug/L	1.55893	-1.0942	ppb	1.55893	142.47%
Al 396.153Radial†	739931.4	509600	ug/L	12279.1	509600	ppb	12279.1	2.41%
QC value within limits for Al 396.153Radial Recovery = 101.92%								
As 188.979†	-201.5	-8.3797	ug/L	3.03311	-8.3797	ppb	3.03311	36.20%
B 249.677†	2574.8	-4.8346	ug/L	4.93817	-4.8346	ppb	4.93817	102.14%
Ba 233.527†	-1876.5	2.7395	ug/L	0.15716	2.7395	ppb	0.15716	5.74%
Be 313.107†	-8934.6	-3.2361	ug/L	0.04133	-3.2361	ppb	0.04133	1.28%
Ca 317.933Radial†	325895.6	475640	ug/L	10833.3	475640	ppb	10833.3	2.28%
QC value within limits for Ca 317.933Radial Recovery = 95.13%								
Cd 226.502†	4420.8	0.8680	ug/L	0.06461	0.8680	ppb	0.06461	7.44%
Co 228.616†	313.2	-0.5900	ug/L	0.15184	-0.5900	ppb	0.15184	25.73%
Cr 267.716†	-54.4	2.8055	ug/L	0.27155	2.8055	ppb	0.27155	9.68%

Cu 324.752†	-5269.9	7.6464	ug/L	0.35675	7.6464	ppb	0.35675	4.67%
Fe 238.204 Radial†	50224.7	449960	ug/L	2817.5	449960	ppb	2817.5	0.63%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.99%								
K 766.490 Radial†	1057.8	-35.039	ug/L	12.5088	-35.039	ppb	12.5088	35.70%
Mg 279.077 IEC†	14516.7	487780	ug/L	2708.0	487780	ppb	2708.0	0.56%
QC value within limits for Mg 279.077 IEC Recovery = 97.56%								
Mn 257.610†	-27938.6	6.1729	ug/L	0.29292	6.1729	ppb	0.29292	4.75%
Mo 202.031†	-636.9	-8.6128	ug/L	0.57883	-8.6128	ppb	0.57883	6.72%
Na 589.592 Radial†	1771788.9	536960	ug/L	12372.5	536960	ppb	12372.5	2.30%
QC value within limits for Na 589.592 Radial Recovery = 107.39%								
Ni 231.604†	274.7	6.3086	ug/L	0.25318	6.3086	ppb	0.25318	4.01%
P 214.914†	446.9	60.717	ug/L	7.0429	60.717	ppb	7.0429	11.60%
Pb 220.353†	-625.3	7.3432	ug/L	1.89385	7.3432	ppb	1.89385	25.79%
S 181.975 Axial†	97.6	28.649	ug/L	7.5591	28.649	ppb	7.5591	26.39%
Sb 206.836†	38.2	3.3262	ug/L	3.75571	3.3262	ppb	3.75571	112.91%
Se 196.026†	-2779.3	-104.85	ug/L	5.054	-104.85	ppb	5.054	4.82%
Si 251.611†	-1144.3	-33.189	ug/L	0.3467	-33.189	ppb	0.3467	1.04%
Sn 189.927†	-492.6	-23.558	ug/L	1.6298	-23.558	ppb	1.6298	6.92%
Sr 421.552†	914.7	1.1082	ug/L	0.14389	1.1082	ppb	0.14389	12.98%
Ti 334.940†	-8990.3	4.1334	ug/L	0.79042	4.1334	ppb	0.79042	19.12%
Tl 190.801†	-100.8	-14.813	ug/L	3.1200	-14.813	ppb	3.1200	21.06%
U 409.014†	511101.5	14638	ug/L	32.9	14638	ppb	32.9	0.23%
QC value within limits for U 409.014 Recovery = 97.59%								
V 292.402†	4849.6	2.8048	ug/L	1.37938	2.8048	ppb	1.37938	49.18%
Zn 213.857†	6654.4	-2.4532	ug/L	0.25188	-2.4532	ppb	0.25188	10.27%
SiO2†	-1253.9	-78.095	ug/L	4.8613	-78.095	ppb	4.8613	6.22%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/11/2009 11:46:21
Data Type: Reprocessed on 12/11/2009 12:46:06
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	837251.0	837251.0	96.467	%			11:49:56
1	Sc Radial	5347.5	5347.5	95.9	%			11:48:19
1	Y 371.029	683255.2	683255.2	93.666	%			11:49:56
1	Y RADIAL	5762.6	5762.6	95.42	%			11:48:19
1	Ag 328.068†	-8049.0	-8617.8	0.3257	ug/L	0.3257	ppb	11:50:01
1	Al 396.153Radial†	621.7	683.6	45.489	ug/L	45.489	ppb	11:48:19
1	As 188.979†	25286.5	26243.9	10217	ug/L	10217	ppb	11:50:01
1	B 249.677†	225772.5	234534.8	4974.0	ug/L	4974.0	ppb	11:49:56
1	Ba 233.527†	1845481.4	1913084.5	14317	ug/L	14317	ppb	11:49:56
1	Be 313.107†	7686962.2	7973164.7	2882.6	ug/L	2882.6	ppb	11:49:50
1	Ca 317.933Radial†	39.3	24.1	35.124	ug/L	35.124	ppb	11:48:39
1	Cd 226.502†	906122.1	939508.4	9750.1	ug/L	9750.1	ppb	11:49:56
1	Co 228.616†	486152.4	504031.5	9507.2	ug/L	9507.2	ppb	11:50:01
1	Cr 267.716†	2213381.5	2294361.9	24034	ug/L	24034	ppb	11:49:56
1	Cu 324.752†	6710633.2	6949656.6	20186	ug/L	20186	ppb	11:49:50
1	Fe 238.204 Radial†	-20.8	-31.6	17.073	ug/L	17.073	ppb	11:48:39
1	K 766.490 Radial†	1732609.8	1803834.1	302550	ug/L	302550	ppb	11:48:14
1	Mg 279.077 IEC†	-4.0	-6.0	-1.3443	ug/L	-1.3443	ppb	11:48:39
1	Mn 257.610†	8551310.9	8863987.9	9394.3	ug/L	9394.3	ppb	11:49:50
1	Mo 202.031†	150610.7	156108.5	9934.2	ug/L	9934.2	ppb	11:50:01
1	Na 589.592 Radial†	-779.4	741.4	224.70	ug/L	224.70	ppb	11:48:19
1	Ni 231.604†	412809.2	427842.6	9825.2	ug/L	9825.2	ppb	11:49:56
1	P 214.914†	33067.1	34036.2	15914	ug/L	15914	ppb	11:50:01
1	Pb 220.353†	211539.7	219355.4	24564	ug/L	24564	ppb	11:50:01
1	S 181.975 Axial†	39022.2	40402.1	53378	ug/L	53378	ppb	11:50:01
1	Sb 206.836†	32817.6	33982.2	10540	ug/L	10540	ppb	11:50:01
1	Se 196.026†	17638.7	18311.5	10332	ug/L	10332	ppb	11:50:01
1	Si 251.611†	1577623.0	1634922.7	48388	ug/L	48388	ppb	11:49:56
1	Sn 189.927†	63790.0	66117.5	10636	ug/L	10636	ppb	11:50:01
1	Sr 421.552†	1570688.8	1637740.6	9877.6	ug/L	9877.6	ppb	11:48:14
1	Ti 334.940†	6094708.6	6319187.5	9965.8	ug/L	9965.8	ppb	11:49:50
1	Tl 190.801†	33633.3	34899.7	9893.2	ug/L	9893.2	ppb	11:50:01
1	U 409.014†	-1295.4	1241.1	-10.671	ug/L	-10.671	ppb	11:50:01
1	V 292.402†	1453895.5	1508508.1	10159	ug/L	10159	ppb	11:49:56
1	Zn 213.857†	1587837.1	1645238.8	14065	ug/L	14065	ppb	11:49:56
1	SiO2†	1596693.8	1654649.3	104940	ug/L	104940	ppb	11:50:49
2	Sc 361.383	842169.8	842169.8	97.034	%			11:50:16
2	Sc Radial	5370.5	5370.5	96.3	%			11:48:49
2	Y 371.029	688325.6	688325.6	94.361	%			11:50:16
2	Y RADIAL	5799.1	5799.1	96.03	%			11:48:49
2	Ag 328.068†	-8067.9	-8588.6	0.4127	ug/L	0.4127	ppb	11:50:21
2	Al 396.153Radial†	619.6	678.6	48.109	ug/L	48.109	ppb	11:48:49
2	As 188.979†	24976.6	25771.4	10035	ug/L	10035	ppb	11:50:21
2	B 249.677†	227113.3	234549.6	4974.7	ug/L	4974.7	ppb	11:50:16
2	Ba 233.527†	1849328.5	1905875.6	14263	ug/L	14263	ppb	11:50:16
2	Be 313.107†	7743416.3	7984803.5	2886.8	ug/L	2886.8	ppb	11:50:10
2	Ca 317.933Radial†	37.1	21.6	31.569	ug/L	31.569	ppb	11:49:09
2	Cd 226.502†	906906.5	934830.6	9701.6	ug/L	9701.6	ppb	11:50:16
2	Co 228.616†	482505.6	497329.7	9380.4	ug/L	9380.4	ppb	11:50:21
2	Cr 267.716†	2219678.0	2287449.9	23962	ug/L	23962	ppb	11:50:16
2	Cu 324.752†	6770226.2	6970441.5	20246	ug/L	20246	ppb	11:50:10
2	Fe 238.204 Radial†	-22.3	-33.0	0.3162	ug/L	0.3162	ppb	11:49:09
2	K 766.490 Radial†	1752650.9	1816897.6	304740	ug/L	304740	ppb	11:48:44
2	Mg 279.077 IEC†	-2.7	-4.8	38.628	ug/L	38.628	ppb	11:49:09
2	Mn 257.610†	8593488.9	8855681.0	9385.5	ug/L	9385.5	ppb	11:50:10
2	Mo 202.031†	149327.0	153873.7	9792.0	ug/L	9792.0	ppb	11:50:21
2	Na 589.592 Radial†	-789.4	734.5	222.61	ug/L	222.61	ppb	11:48:49
2	Ni 231.604†	413677.8	426238.5	9788.4	ug/L	9788.4	ppb	11:50:16

2	P 214.914†	32679.1	33436.1	15567	ug/L	15567 ppb	11:50:21
2	Pb 220.353†	209886.8	216371.2	24230	ug/L	24230 ppb	11:50:21
2	S 181.975 Axial†	38581.7	39711.8	52466	ug/L	52466 ppb	11:50:21
2	Sb 206.836†	32499.6	33455.8	10369	ug/L	10369 ppb	11:50:21
2	Se 196.026†	17411.4	17970.5	10140	ug/L	10140 ppb	11:50:21
2	Si 251.611†	1584599.5	1632560.7	48320	ug/L	48320 ppb	11:50:16
2	Sn 189.927†	63289.6	65215.5	10491	ug/L	10491 ppb	11:50:21
2	Sr 421.552†	1595897.7	1656893.1	9993.2	ug/L	9993.2 ppb	11:48:44
2	Ti 334.940†	6138412.0	6327326.1	9978.7	ug/L	9978.7 ppb	11:50:10
2	Tl 190.801†	33440.6	34497.5	9780.6	ug/L	9780.6 ppb	11:50:21
2	U 409.014†	-1543.1	993.7	-17.644	ug/L	-17.644 ppb	11:50:21
2	V 292.402†	1460677.7	1506694.9	10145	ug/L	10145 ppb	11:50:16
2	Zn 213.857†	1590430.7	1638298.1	14006	ug/L	14006 ppb	11:50:16
2	SiO2†	1605901.9	1654471.6	104930	ug/L	104930 ppb	11:50:56
3	Sc 361.383	837288.5	837288.5	96.471	%		11:50:36
3	Sc Radial	5294.4	5294.4	95.0	%		11:49:20
3	Y 371.029	684764.8	684764.8	93.873	%		11:50:36
3	Y RADIAL	5705.6	5705.6	94.48	%		11:49:20
3	Ag 328.068†	-8049.9	-8618.4	0.2868	ug/L	0.2868 ppb	11:50:41
3	Al 396.153Radial†	638.7	708.0	63.575	ug/L	63.575 ppb	11:49:20
3	As 188.979†	25083.6	26032.4	10135	ug/L	10135 ppb	11:50:41
3	B 249.677†	225219.1	233950.7	4961.7	ug/L	4961.7 ppb	11:50:36
3	Ba 233.527†	1838531.9	1905795.1	14263	ug/L	14263 ppb	11:50:36
3	Be 313.107†	7707648.1	7994250.8	2890.2	ug/L	2890.2 ppb	11:50:29
3	Ca 317.933Radial†	37.4	22.5	32.782	ug/L	32.782 ppb	11:49:40
3	Cd 226.502†	902023.4	935217.7	9705.6	ug/L	9705.6 ppb	11:50:36
3	Co 228.616†	484907.3	502718.3	9482.3	ug/L	9482.3 ppb	11:50:41
3	Cr 267.716†	2209225.0	2289950.7	23988	ug/L	23988 ppb	11:50:36
3	Cu 324.752†	6725933.8	6965205.7	20231	ug/L	20231 ppb	11:50:29
3	Fe 238.204 Radial†	-23.4	-34.5	-10.387	ug/L	-10.387 ppb	11:49:40
3	K 766.490 Radial†	1724455.2	1813374.3	304150	ug/L	304150 ppb	11:49:15
3	Mg 279.077 IEC†	-3.7	-5.8	5.8542	ug/L	5.8542 ppb	11:49:40
3	Mn 257.610†	8548946.0	8861140.0	9391.3	ug/L	9391.3 ppb	11:50:29
3	Mo 202.031†	150164.3	155638.8	9904.3	ug/L	9904.3 ppb	11:50:41
3	Na 589.592 Radial†	-873.1	634.6	192.33	ug/L	192.33 ppb	11:49:20
3	Ni 231.604†	411099.0	426050.8	9784.0	ug/L	9784.0 ppb	11:50:36
3	P 214.914†	32871.0	33831.4	15792	ug/L	15792 ppb	11:50:41
3	Pb 220.353†	210969.1	218754.1	24497	ug/L	24497 ppb	11:50:41
3	S 181.975 Axial†	38817.6	40188.1	53096	ug/L	53096 ppb	11:50:41
3	Sb 206.836†	32632.9	33789.2	10478	ug/L	10478 ppb	11:50:41
3	Se 196.026†	17505.7	18172.8	10254	ug/L	10254 ppb	11:50:41
3	Si 251.611†	1572697.9	1629744.3	48234	ug/L	48234 ppb	11:50:36
3	Sn 189.927†	63614.8	65933.0	10606	ug/L	10606 ppb	11:50:41
3	Sr 421.552†	1564038.8	1647171.2	9934.5	ug/L	9934.5 ppb	11:49:15
3	Ti 334.940†	6103807.6	6328336.6	9980.3	ug/L	9980.3 ppb	11:50:29
3	Tl 190.801†	33596.9	34860.4	9882.4	ug/L	9882.4 ppb	11:50:41
3	U 409.014†	-1533.3	994.6	-17.667	ug/L	-17.667 ppb	11:50:41
3	V 292.402†	1452717.8	1507219.9	10150	ug/L	10150 ppb	11:50:36
3	Zn 213.857†	1581952.4	1639065.2	14013	ug/L	14013 ppb	11:50:36
3	SiO2†	1590163.2	1647805.7	104500	ug/L	104500 ppb	11:51:03

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	838903.1	96.657	%	0.3260				0.34%
Sc Radial	5337.5	95.7	%	0.70				0.73%
Y 371.029	685448.5	93.967	%	0.3569				0.38%
Y RADIAL	5755.8	95.31	%	0.780				0.82%
Ag 328.068†	-8608.3	0.3418	ug/L	0.06447	0.3418	ppb	0.06447	18.86%
Al 396.153Radial†	690.1	52.391	ug/L	9.7738	52.391	ppb	9.7738	18.66%
As 188.979†	26015.9	10129	ug/L	91.3	10129	ppb	91.3	0.90%
QC value within limits for As 188.979 Recovery = 101.29%								
B 249.677†	234345.0	4970.1	ug/L	7.34	4970.1	ppb	7.34	0.15%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	1908251.7	14281	ug/L	31.3	14281	ppb	31.3	0.22%
QC value within limits for Ba 233.527 Recovery = 95.21%								
Be 313.107†	7984073.0	2886.5	ug/L	3.81	2886.5	ppb	3.81	0.13%
QC value within limits for Be 313.107 Recovery = 96.22%								
Ca 317.933Radial†	22.7	33.158	ug/L	1.8072	33.158	ppb	1.8072	5.45%
Cd 226.502†	936518.9	9719.1	ug/L	26.94	9719.1	ppb	26.94	0.28%

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   QC value within limits for Cd 226.502  Recovery = 97.19%
Co 228.616†          501359.9      9456.7 ug/L        67.18      9456.7 ppb          67.18   0.71%
   QC value within limits for Co 228.616  Recovery = 94.57%
Cr 267.716†         2290587.5       23995 ug/L         36.6       23995 ppb           36.6   0.15%
   QC value within limits for Cr 267.716  Recovery = 95.98%
Cu 324.752†         6961767.9       20221 ug/L         31.4       20221 ppb           31.4   0.16%
   QC value within limits for Cu 324.752  Recovery = 101.11%
Fe 238.204 Radial†      -33.0      2.3340 ug/L     13.84073      2.3340 ppb       13.84073 592.99%
K 766.490 Radial†   1811368.7      303810 ug/L       1133.7      303810 ppb         1133.7   0.37%
   QC value within limits for K 766.490 Radial  Recovery = 101.27%
Mg 279.077 IEC†          -5.5      14.379 ug/L      21.3060      14.379 ppb        21.3060 148.17%
Mn 257.610†         8860269.6      9390.4 ug/L         4.47      9390.4 ppb           4.47   0.05%
   QC value within limits for Mn 257.610  Recovery = 93.90%
Mo 202.031†          155207.0      9876.9 ug/L        74.99      9876.9 ppb          74.99   0.76%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†      703.5      213.21 ug/L       18.115      213.21 ppb         18.115   8.50%
Ni 231.604†          426710.6      9799.2 ug/L        22.61      9799.2 ppb          22.61   0.23%
   QC value within limits for Ni 231.604  Recovery = 97.99%
P 214.914†            33767.9       15758 ug/L        175.9       15758 ppb          175.9   1.12%
   QC value within limits for P 214.914  Recovery = 105.05%
Pb 220.353†          218160.3       24430 ug/L        176.9       24430 ppb          176.9   0.72%
   QC value within limits for Pb 220.353  Recovery = 97.72%
S 181.975 Axial†      40100.6       52980 ug/L        466.9       52980 ppb          466.9   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 105.96%
Sb 206.836†           33742.4       10462 ug/L         86.2       10462 ppb           86.2   0.82%
   QC value within limits for Sb 206.836  Recovery = 104.62%
Se 196.026†           18151.6       10242 ug/L         96.7       10242 ppb           96.7   0.94%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†         1632409.3       48314 ug/L         77.2       48314 ppb           77.2   0.16%
   QC value within limits for Si 251.611  Recovery = 96.63%
Sn 189.927†           65755.4       10578 ug/L         76.7       10578 ppb           76.7   0.72%
   QC value within limits for Sn 189.927  Recovery = 105.78%
Sr 421.552†         1647268.3      9935.1 ug/L        57.76      9935.1 ppb          57.76   0.58%
   QC value within limits for Sr 421.552  Recovery = 99.35%
Ti 334.940†         6324950.1      9974.9 ug/L         7.93      9974.9 ppb           7.93   0.08%
   QC value within limits for Ti 334.940  Recovery = 99.75%
Tl 190.801†           34752.5      9852.1 ug/L        62.12      9852.1 ppb          62.12   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             1076.5     -15.327 ug/L       4.0323     -15.327 ppb         4.0323  26.31%
V 292.402†          1507474.3       10151 ug/L          7.1       10151 ppb            7.1   0.07%
   QC value within limits for V 292.402  Recovery = 101.51%
Zn 213.857†         1640867.3       14028 ug/L         32.6       14028 ppb           32.6   0.23%
   QC value within limits for Zn 213.857  Recovery = 93.52%
SiO2†               1652308.8      104790 ug/L        250.2      104790 ppb          250.2   0.24%
   QC value within limits for SiO2  Recovery = 97.94%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 11:53:12
Data Type: Reprocessed on 12/11/2009 12:46:07

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	863964.4	863964.4	99.545	%			11:56:22
1	Sc Radial	5504.0	5504.0	98.7	%			11:55:04
1	Y 371.029	714434.9	714434.9	97.941	%			11:56:22
1	Y RADIAL	5955.5	5955.5	98.61	%			11:55:04
1	Ag 328.068†	111593.8	111830.1	508.99	ug/L	508.99	ppb	11:56:27
1	Al 396.153Radial†	7082.6	7210.2	4944.1	ug/L	4944.1	ppb	11:55:04
1	As 188.979†	1327.3	1364.6	531.23	ug/L	531.23	ppb	11:56:47
1	B 249.677†	24139.7	24743.3	525.33	ug/L	525.33	ppb	11:56:27
1	Ba 233.527†	66828.8	67145.6	503.03	ug/L	503.03	ppb	11:56:27
1	Be 313.107†	1371508.7	1382444.2	497.37	ug/L	497.37	ppb	11:56:22
1	Ca 317.933Radial†	3415.6	3443.2	5025.3	ug/L	5025.3	ppb	11:55:24
1	Cd 226.502†	48442.8	48863.3	506.57	ug/L	506.57	ppb	11:56:27
1	Co 228.616†	26549.5	26744.4	504.59	ug/L	504.59	ppb	11:56:27
1	Cr 267.716†	47819.0	47951.7	502.75	ug/L	502.75	ppb	11:56:27
1	Cu 324.752†	177055.2	171107.1	497.26	ug/L	497.26	ppb	11:56:27
1	Fe 238.204 Radial†	580.6	578.3	5196.7	ug/L	5196.7	ppb	11:55:24
1	K 766.490 Radial†	35101.9	32819.8	5497.4	ug/L	5497.4	ppb	11:55:04
1	Mg 279.077 IEC†	157.0	157.1	5288.6	ug/L	5288.6	ppb	11:55:24
1	Mn 257.610†	468210.9	469832.1	498.36	ug/L	498.36	ppb	11:56:22
1	Mo 202.031†	7925.6	7943.4	505.86	ug/L	505.86	ppb	11:56:47
1	Na 589.592 Radial†	32449.4	34426.4	10433	ug/L	10433	ppb	11:55:04
1	Ni 231.604†	21952.5	21967.0	504.45	ug/L	504.45	ppb	11:56:27
1	P 214.914†	4693.5	4473.0	2422.3	ug/L	2422.3	ppb	11:56:47
1	Pb 220.353†	4391.9	4480.0	503.04	ug/L	503.04	ppb	11:56:47
1	S 181.975 Axial†	829.8	784.2	1035.1	ug/L	1035.1	ppb	11:56:47
1	Sb 206.836†	1666.9	1637.2	524.33	ug/L	524.33	ppb	11:56:47
1	Se 196.026†	864.2	895.0	521.77	ug/L	521.77	ppb	11:56:47
1	Si 251.611†	86606.4	86520.8	2564.7	ug/L	2564.7	ppb	11:56:27
1	Sn 189.927†	3156.9	3162.5	509.33	ug/L	509.33	ppb	11:56:47
1	Sr 421.552†	83999.5	85094.4	513.18	ug/L	513.18	ppb	11:55:04
1	Ti 334.940†	310688.6	313365.8	494.49	ug/L	494.49	ppb	11:56:27
1	Tl 190.801†	1750.4	1792.9	508.30	ug/L	508.30	ppb	11:56:47
1	U 409.014†	14719.6	17370.9	497.80	ug/L	497.80	ppb	11:56:27
1	V 292.402†	73286.6	74984.5	505.70	ug/L	505.70	ppb	11:56:27
1	Zn 213.857†	59525.8	59044.2	503.41	ug/L	503.41	ppb	11:56:27
1	SiO2†	86672.4	86544.3	5497.3	ug/L	5497.3	ppb	11:57:54
2	Sc 361.383	867146.6	867146.6	99.911	%			11:56:53
2	Sc Radial	5452.5	5452.5	97.8	%			11:55:30
2	Y 371.029	716354.7	716354.7	98.204	%			11:56:53
2	Y RADIAL	5873.6	5873.6	97.26	%			11:55:30
2	Ag 328.068†	112371.5	112197.2	510.67	ug/L	510.67	ppb	11:56:58
2	Al 396.153Radial†	7048.5	7243.2	4966.9	ug/L	4966.9	ppb	11:55:30
2	As 188.979†	1324.7	1357.2	528.38	ug/L	528.38	ppb	11:57:18
2	B 249.677†	24316.6	24831.4	527.20	ug/L	527.20	ppb	11:56:58
2	Ba 233.527†	67384.3	67455.2	505.35	ug/L	505.35	ppb	11:56:58
2	Be 313.107†	1375274.0	1381156.7	496.92	ug/L	496.92	ppb	11:56:53
2	Ca 317.933Radial†	3411.4	3471.7	5066.9	ug/L	5066.9	ppb	11:55:50
2	Cd 226.502†	48848.4	49090.6	508.93	ug/L	508.93	ppb	11:56:58
2	Co 228.616†	26707.2	26804.4	505.71	ug/L	505.71	ppb	11:56:58
2	Cr 267.716†	48238.9	48195.7	505.31	ug/L	505.31	ppb	11:56:58
2	Cu 324.752†	178605.9	172006.5	499.88	ug/L	499.88	ppb	11:56:58
2	Fe 238.204 Radial†	580.4	583.6	5244.8	ug/L	5244.8	ppb	11:55:50
2	K 766.490 Radial†	34520.6	32561.4	5454.1	ug/L	5454.1	ppb	11:55:30
2	Mg 279.077 IEC†	159.9	161.6	5440.3	ug/L	5440.3	ppb	11:55:50
2	Mn 257.610†	469700.5	469597.0	498.11	ug/L	498.11	ppb	11:56:53
2	Mo 202.031†	7936.3	7924.9	504.69	ug/L	504.69	ppb	11:57:18
2	Na 589.592 Radial†	31804.2	34077.3	10327	ug/L	10327	ppb	11:55:30
2	Ni 231.604†	22133.8	22067.5	506.76	ug/L	506.76	ppb	11:56:58

2	P 214.914†	4705.8	4467.9	2419.0 ug/L	2419.0 ppb	11:57:18
2	Pb 220.353†	4409.9	4481.8	503.24 ug/L	503.24 ppb	11:57:18
2	S 181.975 Axial†	841.2	792.5	1046.0 ug/L	1046.0 ppb	11:57:18
2	Sb 206.836†	1680.1	1644.2	526.44 ug/L	526.44 ppb	11:57:18
2	Se 196.026†	875.2	902.8	526.32 ug/L	526.32 ppb	11:57:18
2	Si 251.611†	87501.2	87097.1	2581.9 ug/L	2581.9 ppb	11:56:58
2	Sn 189.927†	3165.9	3159.9	508.91 ug/L	508.91 ppb	11:57:18
2	Sr 421.552†	82795.3	84667.2	510.60 ug/L	510.60 ppb	11:55:30
2	Ti 334.940†	313440.0	314974.3	497.03 ug/L	497.03 ppb	11:56:58
2	Tl 190.801†	1737.0	1773.1	502.71 ug/L	502.71 ppb	11:57:18
2	U 409.014†	14815.4	17412.5	498.99 ug/L	498.99 ppb	11:56:58
2	V 292.402†	73939.9	75368.2	508.23 ug/L	508.23 ppb	11:56:58
2	Zn 213.857†	60005.1	59304.4	505.62 ug/L	505.62 ppb	11:56:58
2	SiO2†	85548.6	85100.0	5405.2 ug/L	5405.2 ppb	11:58:00
3	Sc 361.383	865766.7	865766.7	99.752 %		11:57:24
3	Sc Radial	5487.2	5487.2	98.4 %		11:55:55
3	Y 371.029	715205.5	715205.5	98.046 %		11:57:24
3	Y RADIAL	5904.0	5904.0	97.76 %		11:55:55
3	Ag 328.068†	111370.8	111373.2	506.94 ug/L	506.94 ppb	11:57:29
3	Al 396.153Radial†	7047.4	7196.4	4934.6 ug/L	4934.6 ppb	11:55:55
3	As 188.979†	1320.8	1355.3	527.66 ug/L	527.66 ppb	11:57:49
3	B 249.677†	24128.9	24682.0	524.02 ug/L	524.02 ppb	11:57:29
3	Ba 233.527†	66953.3	67130.6	502.91 ug/L	502.91 ppb	11:57:29
3	Be 313.107†	1371679.0	1379746.6	496.41 ug/L	496.41 ppb	11:57:24
3	Ca 317.933Radial†	3432.1	3470.6	5065.2 ug/L	5065.2 ppb	11:56:15
3	Cd 226.502†	48351.6	48670.6	504.57 ug/L	504.57 ppb	11:57:29
3	Co 228.616†	26573.8	26713.2	504.00 ug/L	504.00 ppb	11:57:29
3	Cr 267.716†	47762.2	47794.8	501.11 ug/L	501.11 ppb	11:57:29
3	Cu 324.752†	177287.9	170970.2	496.87 ug/L	496.87 ppb	11:57:29
3	Fe 238.204 Radial†	585.1	584.7	5253.8 ug/L	5253.8 ppb	11:56:15
3	K 766.490 Radial†	34816.4	32638.6	5467.0 ug/L	5467.0 ppb	11:55:55
3	Mg 279.077 IEC†	156.0	156.6	5271.2 ug/L	5271.2 ppb	11:56:15
3	Mn 257.610†	468391.6	469034.1	497.52 ug/L	497.52 ppb	11:57:24
3	Mo 202.031†	7936.6	7937.9	505.51 ug/L	505.51 ppb	11:57:49
3	Na 589.592 Radial†	32093.4	34165.3	10354 ug/L	10354 ppb	11:55:55
3	Ni 231.604†	21970.5	21939.1	503.81 ug/L	503.81 ppb	11:57:29
3	P 214.914†	4712.3	4481.9	2427.3 ug/L	2427.3 ppb	11:57:49
3	Pb 220.353†	4397.4	4476.3	502.62 ug/L	502.62 ppb	11:57:49
3	S 181.975 Axial†	824.6	777.3	1025.9 ug/L	1025.9 ppb	11:57:49
3	Sb 206.836†	1662.7	1629.5	521.92 ug/L	521.92 ppb	11:57:49
3	Se 196.026†	871.9	900.8	525.23 ug/L	525.23 ppb	11:57:49
3	Si 251.611†	86694.0	86427.5	2562.0 ug/L	2562.0 ppb	11:57:29
3	Sn 189.927†	3160.2	3159.2	508.80 ug/L	508.80 ppb	11:57:49
3	Sr 421.552†	83348.7	84693.6	510.76 ug/L	510.76 ppb	11:55:55
3	Ti 334.940†	311161.4	313190.1	494.21 ug/L	494.21 ppb	11:57:29
3	Tl 190.801†	1745.5	1784.4	505.88 ug/L	505.88 ppb	11:57:49
3	U 409.014†	14530.8	17150.9	491.47 ug/L	491.47 ppb	11:57:29
3	V 292.402†	73265.1	74809.7	504.52 ug/L	504.52 ppb	11:57:29
3	Zn 213.857†	59407.5	58801.1	501.32 ug/L	501.32 ppb	11:57:29
3	SiO2†	86760.1	86451.0	5491.4 ug/L	5491.4 ppb	11:58:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865625.9	99.736	%	0.1839				0.18%
Sc Radial	5481.3	98.3	%	0.47				0.48%
Y 371.029	715331.7	98.064	%	0.1324				0.14%
Y RADIAL	5911.0	97.88	%	0.685				0.70%
Ag 328.068†	111800.2	508.87	ug/L	1.869	508.87	ppb	1.869	0.37%
QC value within limits for Ag 328.068 Recovery = 101.77%								
Al 396.153Radial†	7216.6	4948.5	ug/L	16.56	4948.5	ppb	16.56	0.33%
QC value within limits for Al 396.153Radial Recovery = 98.97%								
As 188.979†	1359.0	529.09	ug/L	1.890	529.09	ppb	1.890	0.36%
QC value within limits for As 188.979 Recovery = 105.82%								
B 249.677†	24752.3	525.52	ug/L	1.598	525.52	ppb	1.598	0.30%
QC value within limits for B 249.677 Recovery = 105.10%								
Ba 233.527†	67243.8	503.76	ug/L	1.374	503.76	ppb	1.374	0.27%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	1381115.8	496.90	ug/L	0.485	496.90	ppb	0.485	0.10%
QC value within limits for Be 313.107 Recovery = 99.38%								

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Ca 317.933Radial†       3461.8      5052.5 ug/L        23.53      5052.5 ppb        23.53   0.47%
   QC value within limits for Ca 317.933Radial  Recovery = 101.05%
Cd 226.502†            48874.8      506.69 ug/L        2.182      506.69 ppb        2.182   0.43%
   QC value within limits for Cd 226.502  Recovery = 101.34%
Co 228.616†            26754.0      504.77 ug/L        0.869      504.77 ppb        0.869   0.17%
   QC value within limits for Co 228.616  Recovery = 100.95%
Cr 267.716†            47980.7      503.06 ug/L        2.117      503.06 ppb        2.117   0.42%
   QC value within limits for Cr 267.716  Recovery = 100.61%
Cu 324.752†           171361.3      498.00 ug/L        1.636      498.00 ppb        1.636   0.33%
   QC value within limits for Cu 324.752  Recovery = 99.60%
Fe 238.204 Radial†       582.2      5231.7 ug/L        30.70      5231.7 ppb        30.70   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.63%
K 766.490 Radial†      32673.3      5472.8 ug/L        22.23      5472.8 ppb        22.23   0.41%
   QC value within limits for K 766.490 Radial  Recovery = 109.46%
Mg 279.077 IEC†          158.4      5333.3 ug/L        93.05      5333.3 ppb        93.05   1.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.67%
Mn 257.610†           469487.8      498.00 ug/L        0.432      498.00 ppb        0.432   0.09%
   QC value within limits for Mn 257.610  Recovery = 99.60%
Mo 202.031†             7935.4      505.35 ug/L        0.601      505.35 ppb        0.601   0.12%
   QC value within limits for Mo 202.031  Recovery = 101.07%
Na 589.592 Radial†     34223.0       10372 ug/L         55.0       10372 ppb         55.0   0.53%
   QC value within limits for Na 589.592 Radial  Recovery = 103.72%
Ni 231.604†            21991.2      505.01 ug/L        1.551      505.01 ppb        1.551   0.31%
   QC value within limits for Ni 231.604  Recovery = 101.00%
P 214.914†              4474.3      2422.9 ug/L         4.18      2422.9 ppb         4.18   0.17%
   QC value within limits for P 214.914  Recovery = 96.92%
Pb 220.353†             4479.4      502.97 ug/L        0.318      502.97 ppb        0.318   0.06%
   QC value within limits for Pb 220.353  Recovery = 100.59%
S 181.975 Axial†         784.7      1035.7 ug/L        10.06      1035.7 ppb        10.06   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†             1636.9      524.23 ug/L        2.261      524.23 ppb        2.261   0.43%
   QC value within limits for Sb 206.836  Recovery = 104.85%
Se 196.026†              899.5      524.44 ug/L        2.375      524.44 ppb        2.375   0.45%
   QC value within limits for Se 196.026  Recovery = 104.89%
Si 251.611†            86681.8      2569.5 ug/L        10.82      2569.5 ppb        10.82   0.42%
   QC value within limits for Si 251.611  Recovery = 102.78%
Sn 189.927†             3160.5      509.02 ug/L        0.281      509.02 ppb        0.281   0.06%
   QC value within limits for Sn 189.927  Recovery = 101.80%
Sr 421.552†            84818.4      511.52 ug/L        1.444      511.52 ppb        1.444   0.28%
   QC value within limits for Sr 421.552  Recovery = 102.30%
Ti 334.940†           313843.4      495.24 ug/L        1.551      495.24 ppb        1.551   0.31%
   QC value within limits for Ti 334.940  Recovery = 99.05%
Tl 190.801†             1783.5      505.63 ug/L        2.802      505.63 ppb        2.802   0.55%
   QC value within limits for Tl 190.801  Recovery = 101.13%
U 409.014†             17311.4      496.09 ug/L        4.041      496.09 ppb        4.041   0.81%
   QC value within limits for U 409.014  Recovery = 99.22%
V 292.402†             75054.1      506.15 ug/L        1.900      506.15 ppb        1.900   0.38%
   QC value within limits for V 292.402  Recovery = 101.23%
Zn 213.857†            59049.9      503.45 ug/L        2.152      503.45 ppb        2.152   0.43%
   QC value within limits for Zn 213.857  Recovery = 100.69%
SiO2†                  86031.8      5464.7 ug/L        51.56      5464.7 ppb        51.56   0.94%
   QC value within limits for SiO2  Recovery = 102.19%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:00:14
Data Type: Reprocessed on 12/11/2009 12:46:08

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899225.0	899225.0	103.61	%			12:03:24
1	Sc Radial	5574.2	5574.2	100.0	%			12:02:07
1	Y 371.029	754915.1	754915.1	103.49	%			12:03:24
1	Y RADIAL	6020.5	6020.5	99.69	%			12:02:07
1	Ag 328.068†	314.4	29.5	0.1304	ug/L	0.1304	ppb	12:03:29
1	Al 396.153Radial†	-17.9	17.4	11.952	ug/L	11.952	ppb	12:02:07
1	As 188.979†	14.4	45.2	17.457	ug/L	17.457	ppb	12:03:49
1	B 249.677†	293.3	776.3	16.543	ug/L	16.543	ppb	12:03:29
1	Ba 233.527†	6.6	17.5	0.1304	ug/L	0.1304	ppb	12:03:49
1	Be 313.107†	-4567.3	254.3	0.0916	ug/L	0.0916	ppb	12:03:29
1	Ca 317.933Radial†	17.6	0.7	1.0760	ug/L	1.0760	ppb	12:02:27
1	Cd 226.502†	-176.2	28.9	0.2995	ug/L	0.2995	ppb	12:03:49
1	Co 228.616†	-65.4	10.4	0.1985	ug/L	0.1985	ppb	12:03:49
1	Cr 267.716†	96.4	7.0	0.0723	ug/L	0.0723	ppb	12:03:49
1	Cu 324.752†	6796.9	-197.6	-0.5739	ug/L	-0.5739	ppb	12:03:29
1	Fe 238.204 Radial†	9.9	0.1	0.4846	ug/L	0.4846	ppb	12:02:27
1	K 766.490 Radial†	4296.7	1558.4	261.42	ug/L	261.42	ppb	12:02:07
1	Mg 279.077 IEC†	0.5	-1.4	-46.595	ug/L	-46.595	ppb	12:02:27
1	Mn 257.610†	514.9	-23.2	-0.0237	ug/L	-0.0237	ppb	12:03:49
1	Mo 202.031†	39.3	19.5	1.2426	ug/L	1.2426	ppb	12:03:49
1	Na 589.592 Radial†	-1274.1	279.7	84.765	ug/L	84.765	ppb	12:02:07
1	Ni 231.604†	98.6	9.2	0.2118	ug/L	0.2118	ppb	12:03:49
1	P 214.914†	223.6	-26.2	-14.556	ug/L	-14.556	ppb	12:03:49
1	Pb 220.353†	-60.4	9.7	1.0905	ug/L	1.0905	ppb	12:03:49
1	S 181.975 Axial†	55.7	4.4	5.8074	ug/L	5.8074	ppb	12:03:49
1	Sb 206.836†	46.7	7.7	2.4698	ug/L	2.4698	ppb	12:03:49
1	Se 196.026†	-35.7	-7.6	-4.2827	ug/L	-4.2827	ppb	12:03:49
1	Si 251.611†	600.7	98.1	2.8129	ug/L	2.8129	ppb	12:03:49
1	Sn 189.927†	9.8	0.6	0.0926	ug/L	0.0926	ppb	12:03:49
1	Sr 421.552†	-31.0	-30.8	-0.1858	ug/L	-0.1858	ppb	12:02:07
1	Ti 334.940†	-1214.4	84.2	0.1318	ug/L	0.1318	ppb	12:03:29
1	Tl 190.801†	-38.3	-2.4	-0.6739	ug/L	-0.6739	ppb	12:03:49
1	U 409.014†	-2588.1	86.0	2.4729	ug/L	2.4729	ppb	12:03:24
1	V 292.402†	-1446.3	-33.2	-0.1995	ug/L	-0.1995	ppb	12:03:29
1	Zn 213.857†	841.2	58.1	0.5003	ug/L	0.5003	ppb	12:03:49
1	SiO2†	574.8	30.3	1.6953	ug/L	1.6953	ppb	12:04:55
2	Sc 361.383	856785.8	856785.8	98.718	%			12:03:54
2	Sc Radial	5655.9	5655.9	101	%			12:02:32
2	Y 371.029	718466.2	718466.2	98.493	%			12:03:54
2	Y RADIAL	6136.2	6136.2	101.6	%			12:02:32
2	Ag 328.068†	299.0	28.8	0.1308	ug/L	0.1308	ppb	12:03:59
2	Al 396.153Radial†	-15.1	20.5	14.040	ug/L	14.040	ppb	12:02:32
2	As 188.979†	11.6	43.0	16.603	ug/L	16.603	ppb	12:04:19
2	B 249.677†	232.0	728.2	15.520	ug/L	15.520	ppb	12:03:59
2	Ba 233.527†	-0.0	11.1	0.0824	ug/L	0.0824	ppb	12:04:19
2	Be 313.107†	-4589.5	13.5	0.0048	ug/L	0.0048	ppb	12:03:59
2	Ca 317.933Radial†	14.3	-2.8	-4.0322	ug/L	-4.0322	ppb	12:02:52
2	Cd 226.502†	-158.9	38.0	0.3951	ug/L	0.3951	ppb	12:04:19
2	Co 228.616†	-77.3	-4.8	-0.0877	ug/L	-0.0877	ppb	12:04:19
2	Cr 267.716†	95.3	10.5	0.1112	ug/L	0.1112	ppb	12:04:19
2	Cu 324.752†	6921.7	253.8	0.7367	ug/L	0.7367	ppb	12:03:59
2	Fe 238.204 Radial†	9.0	-1.0	-8.9708	ug/L	-8.9708	ppb	12:02:52
2	K 766.490 Radial†	4372.5	1571.0	263.54	ug/L	263.54	ppb	12:02:32
2	Mg 279.077 IEC†	-0.8	-2.7	-91.143	ug/L	-91.143	ppb	12:02:52
2	Mn 257.610†	528.4	15.1	0.0168	ug/L	0.0168	ppb	12:04:19
2	Mo 202.031†	38.2	20.3	1.2890	ug/L	1.2890	ppb	12:04:19
2	Na 589.592 Radial†	-1331.0	242.0	73.329	ug/L	73.329	ppb	12:02:32
2	Ni 231.604†	98.9	14.2	0.3272	ug/L	0.3272	ppb	12:04:19

2	P 214.914†	223.3	-15.9	-8.9718 ug/L	-8.9718 ppb	12:04:19
2	Pb 220.353†	-72.0	-5.0	-0.5491 ug/L	-0.5491 ppb	12:04:19
2	S 181.975 Axial†	55.5	6.8	8.9914 ug/L	8.9914 ppb	12:04:19
2	Sb 206.836†	43.2	6.4	2.0316 ug/L	2.0316 ppb	12:04:19
2	Se 196.026†	-27.2	-0.8	-0.4531 ug/L	-0.4531 ppb	12:04:19
2	Si 251.611†	626.0	152.4	4.4304 ug/L	4.4304 ppb	12:04:19
2	Sn 189.927†	7.8	-1.0	-0.1582 ug/L	-0.1582 ppb	12:04:19
2	Sr 421.552†	-48.0	-47.1	-0.2843 ug/L	-0.2843 ppb	12:02:32
2	Ti 334.940†	-1259.2	-19.4	-0.0290 ug/L	-0.0290 ppb	12:03:59
2	Tl 190.801†	-31.3	2.9	0.8168 ug/L	0.8168 ppb	12:04:19
2	U 409.014†	-2693.0	-144.0	-4.1394 ug/L	-4.1394 ppb	12:03:54
2	V 292.402†	-1353.6	-8.4	-0.0465 ug/L	-0.0465 ppb	12:03:59
2	Zn 213.857†	856.0	113.3	0.9754 ug/L	0.9754 ppb	12:04:19
2	SiO2†	577.0	60.1	3.5906 ug/L	3.5906 ppb	12:05:00
3	Sc 361.383	880066.8	880066.8	101.40 %		12:04:25
3	Sc Radial	5379.1	5379.1	96.5 %		12:02:57
3	Y 371.029	738261.2	738261.2	101.21 %		12:04:25
3	Y RADIAL	5820.9	5820.9	96.39 %		12:02:57
3	Ag 328.068†	302.6	24.4	0.1168 ug/L	0.1168 ppb	12:04:30
3	Al 396.153Radial†	-28.2	6.1	4.1223 ug/L	4.1223 ppb	12:02:57
3	As 188.979†	1.7	33.0	12.719 ug/L	12.719 ppb	12:04:50
3	B 249.677†	226.9	716.9	15.276 ug/L	15.276 ppb	12:04:30
3	Ba 233.527†	6.0	17.0	0.1280 ug/L	0.1280 ppb	12:04:50
3	Be 313.107†	-4594.7	131.3	0.0474 ug/L	0.0474 ppb	12:04:30
3	Ca 317.933Radial†	17.6	1.3	1.9409 ug/L	1.9409 ppb	12:03:17
3	Cd 226.502†	-167.9	33.3	0.3435 ug/L	0.3435 ppb	12:04:50
3	Co 228.616†	-74.7	-0.3	-0.0019 ug/L	-0.0019 ppb	12:04:50
3	Cr 267.716†	74.1	-12.9	-0.1349 ug/L	-0.1349 ppb	12:04:50
3	Cu 324.752†	6940.3	86.7	0.2527 ug/L	0.2527 ppb	12:04:30
3	Fe 238.204 Radial†	11.8	2.3	20.828 ug/L	20.828 ppb	12:03:17
3	K 766.490 Radial†	4141.7	1553.6	260.63 ug/L	260.63 ppb	12:02:57
3	Mg 279.077 IEC†	3.6	1.9	62.406 ug/L	62.406 ppb	12:03:17
3	Mn 257.610†	548.2	20.4	0.0226 ug/L	0.0226 ppb	12:04:50
3	Mo 202.031†	40.7	21.7	1.3849 ug/L	1.3849 ppb	12:04:50
3	Na 589.592 Radial†	-1288.7	218.3	66.150 ug/L	66.150 ppb	12:02:57
3	Ni 231.604†	81.3	-5.8	-0.1326 ug/L	-0.1326 ppb	12:04:50
3	P 214.914†	240.1	-5.3	-2.9996 ug/L	-2.9996 ppb	12:04:50
3	Pb 220.353†	-70.5	-1.5	-0.1701 ug/L	-0.1701 ppb	12:04:50
3	S 181.975 Axial†	49.8	-0.3	-0.4468 ug/L	-0.4468 ppb	12:04:50
3	Sb 206.836†	51.7	13.6	4.3256 ug/L	4.3256 ppb	12:04:50
3	Se 196.026†	-19.6	7.5	4.2930 ug/L	4.2930 ppb	12:04:50
3	Si 251.611†	567.3	77.7	2.2042 ug/L	2.2042 ppb	12:04:50
3	Sn 189.927†	9.6	0.6	0.0948 ug/L	0.0948 ppb	12:04:50
3	Sr 421.552†	-13.4	-13.6	-0.0822 ug/L	-0.0822 ppb	12:02:57
3	Ti 334.940†	-1193.7	79.0	0.1244 ug/L	0.1244 ppb	12:04:30
3	Tl 190.801†	-35.3	-0.2	-0.0538 ug/L	-0.0538 ppb	12:04:50
3	U 409.014†	-2587.8	31.9	0.9148 ug/L	0.9148 ppb	12:04:25
3	V 292.402†	-1356.8	24.7	0.1838 ug/L	0.1838 ppb	12:04:30
3	Zn 213.857†	818.6	53.4	0.4561 ug/L	0.4561 ppb	12:04:50
3	SiO2†	591.0	58.4	3.4822 ug/L	3.4822 ppb	12:05:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878692.5	101.24	%	2.449				2.42%
Sc Radial	5536.4	99.3	%	2.55				2.57%
Y 371.029	737214.2	101.06	%	2.501				2.48%
Y RADIAL	5992.5	99.23	%	2.641				2.66%
Ag 328.068†	27.5	0.1260	ug/L	0.00800	0.1260	ppb	0.00800	6.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	10.038	ug/L	5.2286	10.038	ppb	5.2286	52.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	40.4	15.593	ug/L	2.5253	15.593	ppb	2.5253	16.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	740.5	15.779	ug/L	0.6721	15.779	ppb	0.6721	4.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.1136	ug/L	0.02706	0.1136	ppb	0.02706	23.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	133.0	0.0479	ug/L	0.04341	0.0479	ppb	0.04341	90.58%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -0.2     -0.3384 ug/L       3.22799     -0.3384 ppb        3.22799 953.84%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                33.4      0.3460 ug/L       0.04784      0.3460 ppb        0.04784  13.82%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0363 ug/L       0.14688      0.0363 ppb        0.14688 404.85%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 1.5      0.0162 ug/L       0.13233      0.0162 ppb        0.13233 816.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                47.6      0.1385 ug/L       0.66271      0.1385 ppb        0.66271 478.48%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.1140 ug/L      15.22749      4.1140 ppb       15.22749 370.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        1561.0      261.86 ug/L         1.506      261.86 ppb          1.506   0.58%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.7    -25.111 ug/L       78.9972     -25.111 ppb        78.9972 314.60%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 4.1      0.0052 ug/L       0.02523      0.0052 ppb        0.02523 482.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                20.5      1.3055 ug/L       0.07254      1.3055 ppb        0.07254   5.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        246.6     74.748 ug/L        9.3882     74.748 ppb         9.3882  12.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.9      0.1355 ug/L       0.23922      0.1355 ppb        0.23922 176.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.8     -8.8423 ug/L       5.77912     -8.8423 ppb        5.77912  65.36%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.1      0.1238 ug/L       0.85841      0.1238 ppb        0.85841 693.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.6      4.7840 ug/L       4.80157      4.7840 ppb        4.80157 100.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.2      2.9423 ug/L       1.21781      2.9423 ppb        1.21781  41.39%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.3     -0.1476 ug/L       4.29600     -0.1476 ppb        4.29600 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               109.4      3.1492 ug/L       1.15055      3.1492 ppb        1.15055  36.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.1      0.0098 ug/L       0.14543      0.0098 ppb        0.14543 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -30.5     -0.1841 ug/L       0.10103     -0.1841 ppb        0.10103  54.87%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                47.9      0.0757 ug/L       0.09077      0.0757 ppb        0.09077 119.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.1      0.0297 ug/L       0.74885      0.0297 ppb        0.74885 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 -8.7     -0.2506 ug/L       3.45672     -0.2506 ppb        3.45672 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.7     -0.0207 ug/L       0.19295     -0.0207 ppb        0.19295 931.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                74.9      0.6439 ug/L       0.28788      0.6439 ppb        0.28788  44.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      49.6      2.9227 ug/L       1.06435      2.9227 ppb        1.06435  36.42%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:09:40
Data Type: Reprocessed on 12/11/2009 12:46:09

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	875638.3	875638.3	100.89	%			12:12:50
1	Sc Radial	5429.2	5429.2	97.4	%			12:11:32
1	Y 371.029	723807.3	723807.3	99.226	%			12:12:50
1	Y RADIAL	5896.7	5896.7	97.64	%			12:11:32
1	Ag 328.068†	110582.1	109332.8	497.68	ug/L	497.68	ppb	12:12:55
1	Al 396.153Radial†	7008.0	7232.6	4959.8	ug/L	4959.8	ppb	12:11:32
1	As 188.979†	1277.0	1297.0	505.08	ug/L	505.08	ppb	12:13:15
1	B 249.677†	23016.5	23306.7	494.74	ug/L	494.74	ppb	12:12:55
1	Ba 233.527†	66448.8	65873.9	493.50	ug/L	493.50	ppb	12:12:55
1	Be 313.107†	1392693.8	1385073.8	498.30	ug/L	498.30	ppb	12:12:50
1	Ca 317.933Radial†	3425.4	3501.0	5109.7	ug/L	5109.7	ppb	12:11:52
1	Cd 226.502†	48048.2	47823.4	495.78	ug/L	495.78	ppb	12:12:55
1	Co 228.616†	26374.2	26215.0	494.61	ug/L	494.61	ppb	12:12:55
1	Cr 267.716†	47569.7	47064.2	493.45	ug/L	493.45	ppb	12:12:55
1	Cu 324.752†	175534.7	167228.8	486.00	ug/L	486.00	ppb	12:12:55
1	Fe 238.204 Radial†	578.2	583.9	5247.1	ug/L	5247.1	ppb	12:11:52
1	K 766.490 Radial†	33041.0	31193.5	5224.6	ug/L	5224.6	ppb	12:11:32
1	Mg 279.077 IEC†	153.6	155.9	5246.7	ug/L	5246.7	ppb	12:11:52
1	Mn 257.610†	475093.7	470383.6	498.95	ug/L	498.95	ppb	12:12:50
1	Mo 202.031†	7936.1	7847.7	499.77	ug/L	499.77	ppb	12:13:15
1	Na 589.592 Radial†	31411.3	33813.5	10247	ug/L	10247	ppb	12:11:32
1	Ni 231.604†	21807.3	21529.1	494.39	ug/L	494.39	ppb	12:12:55
1	P 214.914†	4705.5	4422.0	2395.5	ug/L	2395.5	ppb	12:13:15
1	Pb 220.353†	4423.0	4452.0	499.90	ug/L	499.90	ppb	12:13:15
1	S 181.975 Axial†	813.0	756.5	998.44	ug/L	998.44	ppb	12:13:15
1	Sb 206.836†	1660.3	1608.3	515.20	ug/L	515.20	ppb	12:13:15
1	Se 196.026†	867.5	886.7	517.22	ug/L	517.22	ppb	12:13:15
1	Si 251.611†	85830.4	84591.7	2507.5	ug/L	2507.5	ppb	12:12:55
1	Sn 189.927†	3158.9	3122.2	502.85	ug/L	502.85	ppb	12:13:15
1	Sr 421.552†	82692.5	84925.3	512.16	ug/L	512.16	ppb	12:11:32
1	Ti 334.940†	308600.9	307135.5	484.66	ug/L	484.66	ppb	12:12:55
1	Tl 190.801†	1747.6	1766.7	500.92	ug/L	500.92	ppb	12:13:15
1	U 409.014†	14535.8	16991.6	486.91	ug/L	486.91	ppb	12:12:55
1	V 292.402†	72837.9	73558.2	496.11	ug/L	496.11	ppb	12:12:55
1	Zn 213.857†	58972.5	57698.5	491.91	ug/L	491.91	ppb	12:12:55
1	SiO2†	85357.0	84079.8	5340.5	ug/L	5340.5	ppb	12:14:22
2	Sc 361.383	875573.2	875573.2	100.88	%			12:13:21
2	Sc Radial	5960.6	5960.6	107	%			12:11:57
2	Y 371.029	724459.8	724459.8	99.315	%			12:13:21
2	Y RADIAL	6427.7	6427.7	106.4	%			12:11:57
2	Ag 328.068†	111738.3	110487.1	502.78	ug/L	502.78	ppb	12:13:26
2	Al 396.153Radial†	6723.0	6324.3	4334.2	ug/L	4334.2	ppb	12:11:57
2	As 188.979†	1290.9	1310.9	510.41	ug/L	510.41	ppb	12:13:46
2	B 249.677†	23369.6	23658.4	502.28	ug/L	502.28	ppb	12:13:26
2	Ba 233.527†	67099.8	66524.1	498.36	ug/L	498.36	ppb	12:13:26
2	Be 313.107†	1396730.2	1389177.7	499.78	ug/L	499.78	ppb	12:13:21
2	Ca 317.933Radial†	3417.0	3179.6	4640.5	ug/L	4640.5	ppb	12:12:17
2	Cd 226.502†	48317.9	48094.3	498.63	ug/L	498.63	ppb	12:13:26
2	Co 228.616†	26608.6	26449.3	499.03	ug/L	499.03	ppb	12:13:26
2	Cr 267.716†	47929.9	47424.7	497.22	ug/L	497.22	ppb	12:13:26
2	Cu 324.752†	177929.5	169615.6	492.91	ug/L	492.91	ppb	12:13:26
2	Fe 238.204 Radial†	581.1	533.7	4797.4	ug/L	4797.4	ppb	12:12:17
2	K 766.490 Radial†	32020.2	27213.5	4557.4	ug/L	4557.4	ppb	12:11:57
2	Mg 279.077 IEC†	152.9	141.1	4750.6	ug/L	4750.6	ppb	12:12:17
2	Mn 257.610†	474874.7	470201.5	498.72	ug/L	498.72	ppb	12:13:21
2	Mo 202.031†	7963.5	7875.4	501.50	ug/L	501.50	ppb	12:13:46
2	Na 589.592 Radial†	29968.0	29587.5	8966.8	ug/L	8966.8	ppb	12:11:57
2	Ni 231.604†	21971.3	21693.2	498.16	ug/L	498.16	ppb	12:13:26

2	P 214.914†	4711.5	4428.2	2398.0 ug/L	2398.0 ppb	12:13:46
2	Pb 220.353†	4428.3	4457.5	500.41 ug/L	500.41 ppb	12:13:46
2	S 181.975 Axial†	820.7	764.1	1008.6 ug/L	1008.6 ppb	12:13:46
2	Sb 206.836†	1650.6	1598.8	512.15 ug/L	512.15 ppb	12:13:46
2	Se 196.026†	874.7	893.8	519.77 ug/L	519.77 ppb	12:13:46
2	Si 251.611†	86883.9	85642.3	2539.0 ug/L	2539.0 ppb	12:13:26
2	Sn 189.927†	3160.1	3123.7	503.04 ug/L	503.04 ppb	12:13:46
2	Sr 421.552†	78610.6	73536.0	443.47 ug/L	443.47 ppb	12:11:57
2	Ti 334.940†	312119.6	310646.2	490.18 ug/L	490.18 ppb	12:13:26
2	Tl 190.801†	1745.7	1765.0	500.42 ug/L	500.42 ppb	12:13:46
2	U 409.014†	14686.0	17141.6	491.27 ug/L	491.27 ppb	12:13:26
2	V 292.402†	73499.2	74219.2	500.59 ug/L	500.59 ppb	12:13:26
2	Zn 213.857†	59423.7	58150.1	495.82 ug/L	495.82 ppb	12:13:26
2	SiO2†	86519.8	85238.7	5414.9 ug/L	5414.9 ppb	12:14:27
3	Sc 361.383	861169.5	861169.5	99.223 %		12:13:52
3	Sc Radial	6087.9	6087.9	109 %		12:12:22
3	Y 371.029	712398.4	712398.4	97.662 %		12:13:52
3	Y RADIAL	6565.2	6565.2	108.7 %		12:12:22
3	Ag 328.068†	112865.7	113475.9	516.31 ug/L	516.31 ppb	12:13:57
3	Al 396.153Radial†	6721.6	6191.4	4242.3 ug/L	4242.3 ppb	12:12:22
3	As 188.979†	1276.6	1317.9	513.19 ug/L	513.19 ppb	12:14:17
3	B 249.677†	23748.1	24427.3	518.65 ug/L	518.65 ppb	12:13:57
3	Ba 233.527†	67856.0	68398.6	512.39 ug/L	512.39 ppb	12:13:57
3	Be 313.107†	1374575.3	1390006.3	500.11 ug/L	500.11 ppb	12:13:52
3	Ca 317.933Radial†	3396.0	3093.4	4514.8 ug/L	4514.8 ppb	12:12:42
3	Cd 226.502†	49074.6	49657.9	514.87 ug/L	514.87 ppb	12:13:57
3	Co 228.616†	26890.6	27174.7	512.70 ug/L	512.70 ppb	12:13:57
3	Cr 267.716†	48434.3	48727.7	510.88 ug/L	510.88 ppb	12:13:57
3	Cu 324.752†	179617.3	174266.5	506.41 ug/L	506.41 ppb	12:13:57
3	Fe 238.204 Radial†	577.1	518.7	4663.1 ug/L	4663.1 ppb	12:12:42
3	K 766.490 Radial†	32203.3	26754.7	4480.5 ug/L	4480.5 ppb	12:12:22
3	Mg 279.077 IEC†	156.7	141.6	4767.3 ug/L	4767.3 ppb	12:12:42
3	Mn 257.610†	468651.1	471802.3	500.41 ug/L	500.41 ppb	12:13:52
3	Mo 202.031†	7954.1	7998.0	509.30 ug/L	509.30 ppb	12:14:17
3	Na 589.592 Radial†	30250.4	29259.7	8867.4 ug/L	8867.4 ppb	12:12:22
3	Ni 231.604†	22247.5	22335.8	512.92 ug/L	512.92 ppb	12:13:57
3	P 214.914†	4734.4	4529.5	2452.6 ug/L	2452.6 ppb	12:14:17
3	Pb 220.353†	4407.6	4510.2	506.31 ug/L	506.31 ppb	12:14:17
3	S 181.975 Axial†	827.2	784.3	1035.4 ug/L	1035.4 ppb	12:14:17
3	Sb 206.836†	1656.2	1631.8	522.55 ug/L	522.55 ppb	12:14:17
3	Se 196.026†	871.8	905.5	525.93 ug/L	525.93 ppb	12:14:17
3	Si 251.611†	87807.2	88013.3	2609.4 ug/L	2609.4 ppb	12:13:57
3	Sn 189.927†	3156.1	3172.0	510.80 ug/L	510.80 ppb	12:14:17
3	Sr 421.552†	79155.7	72496.9	437.21 ug/L	437.21 ppb	12:12:22
3	Ti 334.940†	315664.1	319393.2	503.97 ug/L	503.97 ppb	12:13:57
3	Tl 190.801†	1759.7	1808.1	512.57 ug/L	512.57 ppb	12:14:17
3	U 409.014†	14688.7	17387.8	498.34 ug/L	498.34 ppb	12:13:57
3	V 292.402†	74374.7	76320.1	514.70 ug/L	514.70 ppb	12:13:57
3	Zn 213.857†	60227.6	59945.6	511.16 ug/L	511.16 ppb	12:13:57
3	SiO2†	85613.7	85760.0	5447.9 ug/L	5447.9 ppb	12:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	870793.7	100.33	%	0.960				0.96%
Sc Radial	5825.9	104	%	6.3				6.00%
Y 371.029	720221.8	98.734	%	0.9299				0.94%
Y RADIAL	6296.6	104.3	%	5.85				5.61%
Ag 328.068†	111098.6	505.59	ug/L	9.626	505.59	ppb	9.626	1.90%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	6582.8	4512.1	ug/L	390.42	4512.1	ppb	390.42	8.65%
QC value within limits for Al 396.153Radial Recovery = 90.24%								
As 188.979†	1308.6	509.56	ug/L	4.123	509.56	ppb	4.123	0.81%
QC value within limits for As 188.979 Recovery = 101.91%								
B 249.677†	23797.5	505.22	ug/L	12.224	505.22	ppb	12.224	2.42%
QC value within limits for B 249.677 Recovery = 101.04%								
Ba 233.527†	66932.2	501.42	ug/L	9.807	501.42	ppb	9.807	1.96%
QC value within limits for Ba 233.527 Recovery = 100.28%								
Be 313.107†	1388085.9	499.40	ug/L	0.965	499.40	ppb	0.965	0.19%
QC value within limits for Be 313.107 Recovery = 99.88%								

Ca 317.933Radial†	3258.0	4755.0 ug/L	313.50	4755.0 ppb	313.50	6.59%
QC value within limits for Ca 317.933Radial Recovery = 95.10%						
Cd 226.502†	48525.2	503.10 ug/L	10.300	503.10 ppb	10.300	2.05%
QC value within limits for Cd 226.502 Recovery = 100.62%						
Co 228.616†	26613.0	502.11 ug/L	9.433	502.11 ppb	9.433	1.88%
QC value within limits for Co 228.616 Recovery = 100.42%						
Cr 267.716†	47738.9	500.52 ug/L	9.171	500.52 ppb	9.171	1.83%
QC value within limits for Cr 267.716 Recovery = 100.10%						
Cu 324.752†	170370.3	495.11 ug/L	10.382	495.11 ppb	10.382	2.10%
QC value within limits for Cu 324.752 Recovery = 99.02%						
Fe 238.204 Radial†	545.5	4902.5 ug/L	305.83	4902.5 ppb	305.83	6.24%
QC value within limits for Fe 238.204 Radial Recovery = 98.05%						
K 766.490 Radial†	28387.2	4754.2 ug/L	409.22	4754.2 ppb	409.22	8.61%
QC value within limits for K 766.490 Radial Recovery = 95.08%						
Mg 279.077 IEC†	146.2	4921.6 ug/L	281.71	4921.6 ppb	281.71	5.72%
QC value within limits for Mg 279.077 IEC Recovery = 98.43%						
Mn 257.610†	470795.8	499.36 ug/L	0.913	499.36 ppb	0.913	0.18%
QC value within limits for Mn 257.610 Recovery = 99.87%						
Mo 202.031†	7907.0	503.52 ug/L	5.074	503.52 ppb	5.074	1.01%
QC value within limits for Mo 202.031 Recovery = 100.70%						
Na 589.592 Radial†	30886.9	9360.6 ug/L	769.70	9360.6 ppb	769.70	8.22%
QC value within limits for Na 589.592 Radial Recovery = 93.61%						
Ni 231.604†	21852.7	501.83 ug/L	9.792	501.83 ppb	9.792	1.95%
QC value within limits for Ni 231.604 Recovery = 100.37%						
P 214.914†	4459.9	2415.4 ug/L	32.24	2415.4 ppb	32.24	1.33%
QC value within limits for P 214.914 Recovery = 96.62%						
Pb 220.353†	4473.2	502.21 ug/L	3.560	502.21 ppb	3.560	0.71%
QC value within limits for Pb 220.353 Recovery = 100.44%						
S 181.975 Axial†	768.3	1014.1 ug/L	19.07	1014.1 ppb	19.07	1.88%
QC value within limits for S 181.975 Axial Recovery = 101.41%						
Sb 206.836†	1612.9	516.63 ug/L	5.345	516.63 ppb	5.345	1.03%
QC value within limits for Sb 206.836 Recovery = 103.33%						
Se 196.026†	895.3	520.97 ug/L	4.475	520.97 ppb	4.475	0.86%
QC value within limits for Se 196.026 Recovery = 104.19%						
Si 251.611†	86082.5	2552.0 ug/L	52.21	2552.0 ppb	52.21	2.05%
QC value within limits for Si 251.611 Recovery = 102.08%						
Sn 189.927†	3139.3	505.56 ug/L	4.534	505.56 ppb	4.534	0.90%
QC value within limits for Sn 189.927 Recovery = 101.11%						
Sr 421.552†	76986.1	464.28 ug/L	41.584	464.28 ppb	41.584	8.96%
QC value within limits for Sr 421.552 Recovery = 92.86%						
Ti 334.940†	312391.7	492.94 ug/L	9.944	492.94 ppb	9.944	2.02%
QC value within limits for Ti 334.940 Recovery = 98.59%						
Tl 190.801†	1780.0	504.64 ug/L	6.878	504.64 ppb	6.878	1.36%
QC value within limits for Tl 190.801 Recovery = 100.93%						
U 409.014†	17173.7	492.17 ug/L	5.768	492.17 ppb	5.768	1.17%
QC value within limits for U 409.014 Recovery = 98.43%						
V 292.402†	74699.2	503.80 ug/L	9.699	503.80 ppb	9.699	1.93%
QC value within limits for V 292.402 Recovery = 100.76%						
Zn 213.857†	58598.1	499.63 ug/L	10.179	499.63 ppb	10.179	2.04%
QC value within limits for Zn 213.857 Recovery = 99.93%						
SiO2†	85026.1	5401.1 ug/L	55.01	5401.1 ppb	55.01	1.02%
QC value within limits for SiO2 Recovery = 101.00%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:16:43
Data Type: Reprocessed on 12/11/2009 12:46:10

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	878516.8	878516.8	101.22	%			12:19:52
1	Sc Radial	5246.4	5246.4	94.1	%			12:18:35
1	Y 371.029	738877.4	738877.4	101.29	%			12:19:52
1	Y RADIAL	5741.2	5741.2	95.07	%			12:18:35
1	Ag 328.068†	305.4	27.7	0.1333	ug/L	0.1333	ppb	12:19:52
1	Al 396.153Radial†	-14.2	20.2	13.882	ug/L	13.882	ppb	12:18:35
1	As 188.979†	-18.9	12.7	4.8840	ug/L	4.8840	ppb	12:20:12
1	B 249.677†	-12.7	480.6	10.239	ug/L	10.239	ppb	12:20:12
1	Ba 233.527†	-12.1	-0.8	-0.0053	ug/L	-0.0053	ppb	12:20:12
1	Be 313.107†	-4609.0	109.3	0.0393	ug/L	0.0393	ppb	12:19:52
1	Ca 317.933Radial†	21.3	5.7	8.3750	ug/L	8.3750	ppb	12:18:55
1	Cd 226.502†	-166.1	34.8	0.3581	ug/L	0.3581	ppb	12:20:12
1	Co 228.616†	-73.8	0.5	0.0115	ug/L	0.0115	ppb	12:20:12
1	Cr 267.716†	73.1	-13.8	-0.1441	ug/L	-0.1441	ppb	12:20:12
1	Cu 324.752†	6826.6	-13.7	-0.0383	ug/L	-0.0383	ppb	12:19:52
1	Fe 238.204 Radial†	12.2	3.1	27.577	ug/L	27.577	ppb	12:18:55
1	K 766.490 Radial†	3558.7	1042.6	174.91	ug/L	174.91	ppb	12:18:35
1	Mg 279.077 IEC†	3.9	2.2	73.687	ug/L	73.687	ppb	12:18:55
1	Mn 257.610†	509.3	-17.0	-0.0166	ug/L	-0.0166	ppb	12:20:12
1	Mo 202.031†	30.7	11.9	0.7590	ug/L	0.7590	ppb	12:20:12
1	Na 589.592 Radial†	-1422.0	42.8	12.984	ug/L	12.984	ppb	12:18:35
1	Ni 231.604†	79.2	-7.7	-0.1779	ug/L	-0.1779	ppb	12:20:12
1	P 214.914†	227.9	-16.8	-9.4048	ug/L	-9.4048	ppb	12:20:12
1	Pb 220.353†	-58.5	10.2	1.1427	ug/L	1.1427	ppb	12:20:12
1	S 181.975 Axial†	54.2	4.2	5.5186	ug/L	5.5186	ppb	12:20:12
1	Sb 206.836†	45.0	7.1	2.2641	ug/L	2.2641	ppb	12:20:12
1	Se 196.026†	-25.5	1.6	0.9949	ug/L	0.9949	ppb	12:20:12
1	Si 251.611†	534.3	46.2	1.3013	ug/L	1.3013	ppb	12:20:12
1	Sn 189.927†	13.2	4.2	0.6808	ug/L	0.6808	ppb	12:20:12
1	Sr 421.552†	-6.1	-6.2	-0.0377	ug/L	-0.0377	ppb	12:18:35
1	Ti 334.940†	-1262.3	9.1	0.0146	ug/L	0.0146	ppb	12:19:52
1	Tl 190.801†	-34.3	0.7	0.1981	ug/L	0.1981	ppb	12:20:12
1	U 409.014†	-2594.1	21.2	0.6055	ug/L	0.6055	ppb	12:19:52
1	V 292.402†	-1385.1	-5.6	-0.0278	ug/L	-0.0278	ppb	12:19:52
1	Zn 213.857†	777.0	13.8	0.1149	ug/L	0.1149	ppb	12:20:12
1	SiO2†	508.9	-21.7	-1.5475	ug/L	-1.5475	ppb	12:21:08
2	Sc 361.383	869660.2	869660.2	100.20	%			12:20:17
2	Sc Radial	5600.5	5600.5	100	%			12:19:00
2	Y 371.029	732581.1	732581.1	100.43	%			12:20:17
2	Y RADIAL	6095.4	6095.4	100.9	%			12:19:00
2	Ag 328.068†	253.6	-21.0	-0.0988	ug/L	-0.0988	ppb	12:20:17
2	Al 396.153Radial†	-17.0	18.4	12.629	ug/L	12.629	ppb	12:19:00
2	As 188.979†	-13.8	17.6	6.7688	ug/L	6.7688	ppb	12:20:37
2	B 249.677†	-24.0	469.2	10.001	ug/L	10.001	ppb	12:20:37
2	Ba 233.527†	-3.7	7.4	0.0550	ug/L	0.0550	ppb	12:20:37
2	Be 313.107†	-4553.9	117.8	0.0422	ug/L	0.0422	ppb	12:20:17
2	Ca 317.933Radial†	15.4	-1.6	-2.3484	ug/L	-2.3484	ppb	12:19:20
2	Cd 226.502†	-174.0	25.3	0.2635	ug/L	0.2635	ppb	12:20:37
2	Co 228.616†	-57.8	15.7	0.2990	ug/L	0.2990	ppb	12:20:37
2	Cr 267.716†	89.4	3.2	0.0333	ug/L	0.0333	ppb	12:20:37
2	Cu 324.752†	6852.1	80.5	0.2333	ug/L	0.2333	ppb	12:20:17
2	Fe 238.204 Radial†	8.6	-1.3	-11.614	ug/L	-11.614	ppb	12:19:20
2	K 766.490 Radial†	3590.6	835.2	140.10	ug/L	140.10	ppb	12:19:00
2	Mg 279.077 IEC†	1.5	-0.5	-15.361	ug/L	-15.361	ppb	12:19:20
2	Mn 257.610†	517.5	-3.7	-0.0048	ug/L	-0.0048	ppb	12:20:37
2	Mo 202.031†	30.9	12.4	0.7895	ug/L	0.7895	ppb	12:20:37
2	Na 589.592 Radial†	-1378.6	181.6	55.033	ug/L	55.033	ppb	12:19:00
2	Ni 231.604†	89.1	3.0	0.0682	ug/L	0.0682	ppb	12:20:37

2	P 214.914†	225.0	-17.5	-9.7541 ug/L	-9.7541 ppb	12:20:37
2	Pb 220.353†	-61.1	7.0	0.7929 ug/L	0.7929 ppb	12:20:37
2	S 181.975 Axial†	43.2	-6.3	-8.3044 ug/L	-8.3044 ppb	12:20:37
2	Sb 206.836†	38.4	1.0	0.3394 ug/L	0.3394 ppb	12:20:37
2	Se 196.026†	-25.2	1.7	0.9088 ug/L	0.9088 ppb	12:20:37
2	Si 251.611†	522.4	39.7	1.1172 ug/L	1.1172 ppb	12:20:37
2	Sn 189.927†	16.4	7.5	1.2041 ug/L	1.2041 ppb	12:20:37
2	Sr 421.552†	-13.3	-13.0	-0.0785 ug/L	-0.0785 ppb	12:19:00
2	Ti 334.940†	-1286.3	-27.5	-0.0436 ug/L	-0.0436 ppb	12:20:17
2	Tl 190.801†	-38.6	-4.0	-1.1227 ug/L	-1.1227 ppb	12:20:37
2	U 409.014†	-2583.2	6.0	0.1727 ug/L	0.1727 ppb	12:20:17
2	V 292.402†	-1371.0	-5.6	-0.0240 ug/L	-0.0240 ppb	12:20:17
2	Zn 213.857†	789.8	34.4	0.2969 ug/L	0.2969 ppb	12:20:37
2	SiO2†	538.3	12.7	0.6702 ug/L	0.6702 ppb	12:21:13
3	Sc 361.383	874124.6	874124.6	100.72 %		12:20:43
3	Sc Radial	5577.2	5577.2	100 %		12:19:25
3	Y 371.029	735292.9	735292.9	100.80 %		12:20:43
3	Y RADIAL	6069.2	6069.2	100.5 %		12:19:25
3	Ag 328.068†	287.0	10.9	0.0521 ug/L	0.0521 ppb	12:20:43
3	Al 396.153Radial†	-29.2	6.1	4.1795 ug/L	4.1795 ppb	12:19:25
3	As 188.979†	-18.2	13.3	5.1209 ug/L	5.1209 ppb	12:21:03
3	B 249.677†	-91.2	402.7	8.5816 ug/L	8.5816 ppb	12:21:03
3	Ba 233.527†	-11.0	0.2	0.0011 ug/L	0.0011 ppb	12:21:03
3	Be 313.107†	-4503.8	190.8	0.0688 ug/L	0.0688 ppb	12:20:43
3	Ca 317.933Radial†	9.5	-7.4	-10.864 ug/L	-10.864 ppb	12:19:45
3	Cd 226.502†	-182.9	17.4	0.1803 ug/L	0.1803 ppb	12:21:03
3	Co 228.616†	-82.9	-8.8	-0.1652 ug/L	-0.1652 ppb	12:21:03
3	Cr 267.716†	90.0	3.3	0.0360 ug/L	0.0360 ppb	12:21:03
3	Cu 324.752†	6801.4	-4.8	-0.0139 ug/L	-0.0139 ppb	12:20:43
3	Fe 238.204 Radial†	9.7	-0.2	-1.6037 ug/L	-1.6037 ppb	12:19:45
3	K 766.490 Radial†	3534.0	793.5	133.11 ug/L	133.11 ppb	12:19:25
3	Mg 279.077 IEC†	2.1	0.1	4.8443 ug/L	4.8443 ppb	12:19:45
3	Mn 257.610†	500.5	-23.2	-0.0249 ug/L	-0.0249 ppb	12:21:03
3	Mo 202.031†	29.8	11.2	0.7112 ug/L	0.7112 ppb	12:21:03
3	Na 589.592 Radial†	-1391.4	163.1	49.427 ug/L	49.427 ppb	12:19:25
3	Ni 231.604†	87.3	0.7	0.0161 ug/L	0.0161 ppb	12:21:03
3	P 214.914†	237.0	-6.7	-3.7174 ug/L	-3.7174 ppb	12:21:03
3	Pb 220.353†	-47.4	20.9	2.3410 ug/L	2.3410 ppb	12:21:03
3	S 181.975 Axial†	48.8	-0.9	-1.2359 ug/L	-1.2359 ppb	12:21:03
3	Sb 206.836†	36.7	-1.0	-0.2826 ug/L	-0.2826 ppb	12:21:03
3	Se 196.026†	-23.7	3.3	1.8454 ug/L	1.8454 ppb	12:21:03
3	Si 251.611†	540.5	54.9	1.5760 ug/L	1.5760 ppb	12:21:03
3	Sn 189.927†	13.9	5.0	0.8044 ug/L	0.8044 ppb	12:21:03
3	Sr 421.552†	-21.1	-20.9	-0.1259 ug/L	-0.1259 ppb	12:19:25
3	Ti 334.940†	-1179.6	85.0	0.1353 ug/L	0.1353 ppb	12:20:43
3	Tl 190.801†	-31.4	3.4	0.9565 ug/L	0.9565 ppb	12:21:03
3	U 409.014†	-2735.1	-131.7	-3.7860 ug/L	-3.7860 ppb	12:20:43
3	V 292.402†	-1376.4	-3.9	-0.0231 ug/L	-0.0231 ppb	12:20:43
3	Zn 213.857†	804.2	44.6	0.3838 ug/L	0.3838 ppb	12:21:03
3	SiO2†	544.3	15.9	0.8859 ug/L	0.8859 ppb	12:21:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874100.5	100.71	%	0.510				0.51%
Sc Radial	5474.7	98.2	%	3.55				3.62%
Y 371.029	735583.8	100.84	%	0.433				0.43%
Y RADIAL	5968.6	98.83	%	3.269				3.31%
Ag 328.068†	5.9	0.0289	ug/L	0.11774	0.0289	ppb	0.11774	407.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.9	10.230	ug/L	5.2772	10.230	ppb	5.2772	51.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	14.5	5.5912	ug/L	1.02664	5.5912	ppb	1.02664	18.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	450.8	9.6072	ug/L	0.89611	9.6072	ppb	0.89611	9.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.3	0.0169	ug/L	0.03314	0.0169	ppb	0.03314	195.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	139.3	0.0501	ug/L	0.01626	0.0501	ppb	0.01626	32.45%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.1     -1.6125 ug/L       9.64065     -1.6125 ppb        9.64065 597.87%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                25.8      0.2673 ug/L       0.08895      0.2673 ppb        0.08895  33.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.5      0.0484 ug/L       0.23428      0.0484 ppb        0.23428 483.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -2.4     -0.0249 ug/L       0.10322     -0.0249 ppb        0.10322 414.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.7      0.0603 ug/L       0.15025      0.0603 ppb        0.15025 248.96%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.7863 ug/L      20.36173      4.7863 ppb       20.36173 425.41%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         890.4      149.38 ug/L        22.389      149.38 ppb         22.389  14.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.057 ug/L       46.6852      21.057 ppb        46.6852 221.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -14.6     -0.0154 ug/L       0.01009     -0.0154 ppb        0.01009  65.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                11.8      0.7533 ug/L       0.03947      0.7533 ppb        0.03947   5.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        129.2      39.148 ug/L       22.8314      39.148 ppb        22.8314  58.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.4     -0.0312 ug/L       0.12971     -0.0312 ppb        0.12971 415.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -13.7     -7.6254 ug/L       3.38898     -7.6254 ppb        3.38898  44.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.7      1.4256 ug/L       0.81188      1.4256 ppb        0.81188  56.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0     -1.3406 ug/L       6.91208     -1.3406 ppb        6.91208 515.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7736 ug/L       1.32771      0.7736 ppb        1.32771 171.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.2      1.2497 ug/L       0.51768      1.2497 ppb        0.51768  41.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                46.9      1.3315 ug/L       0.23091      1.3315 ppb        0.23091  17.34%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.8965 ug/L       0.27351      0.8965 ppb        0.27351  30.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -13.4     -0.0807 ug/L       0.04413     -0.0807 ppb        0.04413  54.68%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.2      0.0355 ug/L       0.09123      0.0355 ppb        0.09123 257.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.0      0.0106 ug/L       1.05217      0.0106 ppb        1.05217 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -34.9     -1.0026 ug/L       2.42018     -1.0026 ppb        2.42018 241.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.0     -0.0250 ug/L       0.00250     -0.0250 ppb        0.00250  10.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.9      0.2652 ug/L       0.13722      0.2652 ppb        0.13722  51.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       2.3      0.0029 ug/L       1.34702      0.0029 ppb        1.34702 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/11/2009 12:23:28
Data Type: Reprocessed on 12/11/2009 12:46:11
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	861705.9	861705.9	99.284	%			12:26:39
1	Sc Radial	5356.0	5356.0	96.1	%			12:25:22
1	Y 371.029	718237.7	718237.7	98.462	%			12:26:39
1	Y RADIAL	5821.6	5821.6	96.40	%			12:25:22
1	Ag 328.068†	-25788.0	-26247.8	4.5515	ug/L	4.5515	ppb	12:26:39
1	Al 396.153Radial†	-58.7	-25.8	-16.754	ug/L	-16.754	ppb	12:25:22
1	As 188.979†	-219.6	-189.9	-13.581	ug/L	-13.581	ppb	12:26:59
1	B 249.677†	2608.9	3120.9	15.176	ug/L	15.176	ppb	12:26:39
1	Ba 233.527†	-1736.5	-1737.9	1.4933	ug/L	1.4933	ppb	12:26:39
1	Be 313.107†	-4122.4	510.6	0.1831	ug/L	0.1831	ppb	12:26:39
1	Ca 317.933Radial†	8.8	-7.7	-11.255	ug/L	-11.255	ppb	12:25:42
1	Cd 226.502†	3508.9	3733.1	0.0438	ug/L	0.0438	ppb	12:26:39
1	Co 228.616†	244.3	319.5	0.4449	ug/L	0.4449	ppb	12:26:59
1	Cr 267.716†	-583.7	-673.9	-0.0534	ug/L	-0.0534	ppb	12:26:39
1	Cu 324.752†	453.7	-6300.8	1.4319	ug/L	1.4319	ppb	12:26:39
1	Fe 238.204 Radial†	41486.5	43178.9	386840	ug/L	386840	ppb	12:25:22
1	K 766.490 Radial†	3092.8	480.1	93.208	ug/L	93.208	ppb	12:25:22
1	Mg 279.077 IEC†	15.4	14.1	143.65	ug/L	143.65	ppb	12:25:42
1	Mn 257.610†	-35683.4	-36460.7	-0.0742	ug/L	-0.0742	ppb	12:26:39
1	Mo 202.031†	-356.2	-377.2	3.4378	ug/L	3.4378	ppb	12:26:39
1	Na 589.592 Radial†	-1407.6	88.8	26.914	ug/L	26.914	ppb	12:25:22
1	Ni 231.604†	178.6	93.9	2.1545	ug/L	2.1545	ppb	12:26:59
1	P 214.914†	743.8	507.2	-25.892	ug/L	-25.892	ppb	12:26:59
1	Pb 220.353†	227.0	296.6	1.3987	ug/L	1.3987	ppb	12:26:59
1	S 181.975 Axial†	70.3	21.4	28.312	ug/L	28.312	ppb	12:26:59
1	Sb 206.836†	21.4	-15.9	1.0130	ug/L	1.0130	ppb	12:26:59
1	Se 196.026†	-2056.6	-2044.7	38.448	ug/L	38.448	ppb	12:26:59
1	Si 251.611†	-787.4	-1274.8	-37.562	ug/L	-37.562	ppb	12:26:39
1	Sn 189.927†	-21.3	-30.2	0.3038	ug/L	0.3038	ppb	12:26:59
1	Sr 421.552†	64.7	67.6	0.4076	ug/L	0.4076	ppb	12:25:22
1	Ti 334.940†	-1316.7	-69.9	-0.1365	ug/L	-0.1365	ppb	12:26:39
1	Tl 190.801†	-46.9	-12.7	-3.9619	ug/L	-3.9619	ppb	12:26:59
1	U 409.014†	-376.4	2204.9	14.736	ug/L	14.736	ppb	12:26:39
1	V 292.402†	7414.8	8831.0	-0.2906	ug/L	-0.2906	ppb	12:26:39
1	Zn 213.857†	4916.8	4198.4	-0.8283	ug/L	-0.8283	ppb	12:26:59
1	SiO2†	-780.4	-1310.5	-82.767	ug/L	-82.767	ppb	12:27:57
2	Sc 361.383	860218.2	860218.2	99.113	%			12:27:05
2	Sc Radial	5513.5	5513.5	98.9	%			12:25:47
2	Y 371.029	717273.7	717273.7	98.330	%			12:27:05
2	Y RADIAL	5987.8	5987.8	99.15	%			12:25:47
2	Ag 328.068†	-25878.0	-26383.6	3.2131	ug/L	3.2131	ppb	12:27:05
2	Al 396.153Radial†	-33.1	1.8	2.3584	ug/L	2.3584	ppb	12:25:47
2	As 188.979†	-233.0	-203.8	-19.307	ug/L	-19.307	ppb	12:27:25
2	B 249.677†	2427.4	2942.3	11.675	ug/L	11.675	ppb	12:27:05
2	Ba 233.527†	-1834.7	-1840.0	0.6453	ug/L	0.6453	ppb	12:27:05
2	Be 313.107†	-4135.8	489.8	0.1759	ug/L	0.1759	ppb	12:27:05
2	Ca 317.933Radial†	7.2	-9.6	-14.036	ug/L	-14.036	ppb	12:26:07
2	Cd 226.502†	3495.6	3725.8	0.1960	ug/L	0.1960	ppb	12:27:05
2	Co 228.616†	199.9	275.1	-0.3648	ug/L	-0.3648	ppb	12:27:25
2	Cr 267.716†	-581.4	-672.7	-0.0809	ug/L	-0.0809	ppb	12:27:05
2	Cu 324.752†	320.9	-6434.0	0.9288	ug/L	0.9288	ppb	12:27:05
2	Fe 238.204 Radial†	42455.2	42924.5	384560	ug/L	384560	ppb	12:25:47
2	K 766.490 Radial†	3107.1	402.6	80.127	ug/L	80.127	ppb	12:25:47
2	Mg 279.077 IEC†	12.8	11.1	43.037	ug/L	43.037	ppb	12:26:07
2	Mn 257.610†	-36042.6	-36885.3	-0.7496	ug/L	-0.7496	ppb	12:27:05
2	Mo 202.031†	-385.2	-407.1	1.3735	ug/L	1.3735	ppb	12:27:05
2	Na 589.592 Radial†	-1391.5	147.0	44.541	ug/L	44.541	ppb	12:25:47
2	Ni 231.604†	176.9	92.5	2.1221	ug/L	2.1221	ppb	12:27:25

2	P 214.914†	751.8	516.5	-18.782 ug/L	-18.782 ppb	12:27:25
2	Pb 220.353†	260.1	330.4	5.3728 ug/L	5.3728 ppb	12:27:25
2	S 181.975 Axial†	73.1	24.3	32.140 ug/L	32.140 ppb	12:27:25
2	Sb 206.836†	21.7	-15.5	1.0522 ug/L	1.0522 ppb	12:27:25
2	Se 196.026†	-2057.2	-2048.9	29.075 ug/L	29.075 ppb	12:27:25
2	Si 251.611†	-690.5	-1178.4	-34.651 ug/L	-34.651 ppb	12:27:05
2	Sn 189.927†	-23.0	-32.0	-0.0145 ug/L	-0.0145 ppb	12:27:25
2	Sr 421.552†	111.1	112.5	0.6788 ug/L	0.6788 ppb	12:25:47
2	Ti 334.940†	-1239.0	6.2	-0.0155 ug/L	-0.0155 ppb	12:27:05
2	Tl 190.801†	-45.5	-11.4	-3.5871 ug/L	-3.5871 ppb	12:27:25
2	U 409.014†	-457.8	2122.1	12.643 ug/L	12.643 ppb	12:27:05
2	V 292.402†	7362.4	8791.0	-0.2444 ug/L	-0.2444 ppb	12:27:05
2	Zn 213.857†	4870.6	4160.3	-0.9335 ug/L	-0.9335 ppb	12:27:25
2	SiO2†	-581.7	-1111.4	-69.976 ug/L	-69.976 ppb	12:28:02
3	Sc 361.383	855218.9	855218.9	98.537 %		12:27:31
3	Sc Radial	5682.5	5682.5	102 %		12:26:12
3	Y 371.029	712850.6	712850.6	97.723 %		12:27:31
3	Y RADIAL	6133.6	6133.6	101.6 %		12:26:12
3	Ag 328.068†	-25694.0	-26349.5	-2.5804 ug/L	-2.5804 ppb	12:27:31
3	Al 396.153Radial†	-39.2	-3.2	-1.0218 ug/L	-1.0218 ppb	12:26:12
3	As 188.979†	-227.7	-199.7	-20.616 ug/L	-20.616 ppb	12:27:51
3	B 249.677†	2486.5	3016.7	15.739 ug/L	15.739 ppb	12:27:31
3	Ba 233.527†	-1842.5	-1858.7	-0.1875 ug/L	-0.1875 ppb	12:27:31
3	Be 313.107†	-4027.5	575.4	0.2066 ug/L	0.2066 ppb	12:27:31
3	Ca 317.933Radial†	5.7	-11.3	-16.464 ug/L	-16.464 ppb	12:26:32
3	Cd 226.502†	3457.9	3708.2	1.8822 ug/L	1.8822 ppb	12:27:31
3	Co 228.616†	204.3	280.8	0.0046 ug/L	0.0046 ppb	12:27:51
3	Cr 267.716†	-622.3	-717.5	-0.8845 ug/L	-0.8845 ppb	12:27:31
3	Cu 324.752†	486.8	-6263.8	0.4695 ug/L	0.4695 ppb	12:27:31
3	Fe 238.204 Radial†	41629.6	40838.0	365870 ug/L	365870 ppb	12:26:12
3	K 766.490 Radial†	3141.6	343.1	69.553 ug/L	69.553 ppb	12:26:12
3	Mg 279.077 IEC†	10.9	8.8	-18.363 ug/L	-18.363 ppb	12:26:32
3	Mn 257.610†	-35630.1	-36679.3	-2.3939 ug/L	-2.3939 ppb	12:27:31
3	Mo 202.031†	-403.3	-427.7	-1.2629 ug/L	-1.2629 ppb	12:27:31
3	Na 589.592 Radial†	-1501.4	81.0	24.540 ug/L	24.540 ppb	12:26:12
3	Ni 231.604†	172.6	89.2	2.0466 ug/L	2.0466 ppb	12:27:51
3	P 214.914†	741.7	510.7	-7.0329 ug/L	-7.0329 ppb	12:27:51
3	Pb 220.353†	240.5	312.0	4.8421 ug/L	4.8421 ppb	12:27:51
3	S 181.975 Axial†	62.5	14.0	18.505 ug/L	18.505 ppb	12:27:51
3	Sb 206.836†	35.6	-1.3	5.2054 ug/L	5.2054 ppb	12:27:51
3	Se 196.026†	-2059.5	-2063.3	-36.500 ug/L	-36.500 ppb	12:27:51
3	Si 251.611†	-699.2	-1191.4	-35.013 ug/L	-35.013 ppb	12:27:31
3	Sn 189.927†	-20.5	-29.7	0.1133 ug/L	0.1133 ppb	12:27:51
3	Sr 421.552†	91.2	89.7	0.5413 ug/L	0.5413 ppb	12:26:12
3	Ti 334.940†	-1228.4	9.6	-0.0098 ug/L	-0.0098 ppb	12:27:31
3	Tl 190.801†	-48.5	-14.6	-4.5105 ug/L	-4.5105 ppb	12:27:51
3	U 409.014†	-476.8	2100.1	14.364 ug/L	14.364 ppb	12:27:31
3	V 292.402†	7338.9	8810.5	2.7077 ug/L	2.7077 ppb	12:27:31
3	Zn 213.857†	4894.2	4213.0	1.3067 ug/L	1.3067 ppb	12:27:51
3	SiO2†	-786.8	-1322.9	-83.424 ug/L	-83.424 ppb	12:28:07

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859047.7	98.978	%	0.3915				0.40%
Sc Radial	5517.3	99.0	%	2.93				2.96%
Y 371.029	716120.7	98.172	%	0.3938				0.40%
Y RADIAL	5981.0	99.04	%	2.585				2.61%
Ag 328.068†	-26327.0	1.7281	ug/L	3.79081	1.7281	ppb	3.79081	219.37%
Al 396.153Radial†	-9.1	-5.1393	ug/L	10.20005	-5.1393	ppb	10.20005	198.47%
As 188.979†	-197.8	-17.835	ug/L	3.7414	-17.835	ppb	3.7414	20.98%
B 249.677†	3026.6	14.197	ug/L	2.2019	14.197	ppb	2.2019	15.51%
Ba 233.527†	-1812.2	0.6504	ug/L	0.84043	0.6504	ppb	0.84043	129.22%
Be 313.107†	525.3	0.1886	ug/L	0.01607	0.1886	ppb	0.01607	8.52%
Ca 317.933Radial†	-9.5	-13.918	ug/L	2.6066	-13.918	ppb	2.6066	18.73%
Cd 226.502†	3722.4	0.7073	ug/L	1.02032	0.7073	ppb	1.02032	144.25%
Co 228.616†	291.8	0.0282	ug/L	0.40539	0.0282	ppb	0.40539	>999.9%
Cr 267.716†	-688.0	-0.3396	ug/L	0.47210	-0.3396	ppb	0.47210	139.01%
Cu 324.752†	-6332.9	0.9434	ug/L	0.48134	0.9434	ppb	0.48134	51.02%
Fe 238.204 Radial†	42313.8	379090	ug/L	11507.0	379090	ppb	11507.0	3.04%

K 766.490 Radial†	408.6	80.963	ug/L	11.8498	80.963	ppb	11.8498 14.64%
Mg 279.077 IEC†	11.3	56.108	ug/L	81.7938	56.108	ppb	81.7938 145.78%
Mn 257.610†	-36675.1	-1.0726	ug/L	1.19309	-1.0726	ppb	1.19309 111.24%
Mo 202.031†	-404.0	1.1828	ug/L	2.35610	1.1828	ppb	2.35610 199.20%
Na 589.592 Radial†	105.6	31.999	ug/L	10.9271	31.999	ppb	10.9271 34.15%
Ni 231.604†	91.9	2.1077	ug/L	0.05540	2.1077	ppb	0.05540 2.63%
P 214.914†	511.4	-17.236	ug/L	9.5241	-17.236	ppb	9.5241 55.26%
Pb 220.353†	313.0	3.8712	ug/L	2.15762	3.8712	ppb	2.15762 55.73%
S 181.975 Axial†	19.9	26.319	ug/L	7.0329	26.319	ppb	7.0329 26.72%
Sb 206.836†	-10.9	2.4235	ug/L	2.40924	2.4235	ppb	2.40924 99.41%
Se 196.026†	-2052.3	10.341	ug/L	40.8356	10.341	ppb	40.8356 394.88%
Si 251.611†	-1214.8	-35.742	ug/L	1.5862	-35.742	ppb	1.5862 4.44%
Sn 189.927†	-30.7	0.1342	ug/L	0.16017	0.1342	ppb	0.16017 119.34%
Sr 421.552†	89.9	0.5426	ug/L	0.13561	0.5426	ppb	0.13561 24.99%
Ti 334.940†	-18.1	-0.0539	ug/L	0.07156	-0.0539	ppb	0.07156 132.74%
Tl 190.801†	-12.9	-4.0198	ug/L	0.46438	-4.0198	ppb	0.46438 11.55%
U 409.014†	2142.4	13.914	ug/L	1.1168	13.914	ppb	1.1168 8.03%
V 292.402†	8810.8	0.7242	ug/L	1.71790	0.7242	ppb	1.71790 237.21%
Zn 213.857†	4190.6	-0.1517	ug/L	1.26412	-0.1517	ppb	1.26412 833.32%
SiO2†	-1248.3	-78.722	ug/L	7.5817	-78.722	ppb	7.5817 9.63%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:30:18
Data Type: Reprocessed on 12/11/2009 12:46:12

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874709.1	874709.1	100.78	%			12:33:28
1	Sc Radial	5563.9	5563.9	99.8	%			12:32:10
1	Y 371.029	722977.6	722977.6	99.112	%			12:33:28
1	Y RADIAL	6026.8	6026.8	99.79	%			12:32:10
1	Ag 328.068†	111391.2	110252.1	501.81	ug/L	501.81	ppb	12:33:33
1	Al 396.153Radial†	7064.0	7114.4	4878.3	ug/L	4878.3	ppb	12:32:10
1	As 188.979†	1272.7	1294.1	503.96	ug/L	503.96	ppb	12:33:53
1	B 249.677†	23228.1	23541.0	499.74	ug/L	499.74	ppb	12:33:33
1	Ba 233.527†	66804.5	66296.8	496.67	ug/L	496.67	ppb	12:33:33
1	Be 313.107†	1388852.3	1382728.6	497.47	ug/L	497.47	ppb	12:33:28
1	Ca 317.933Radial†	3365.3	3355.5	4897.4	ug/L	4897.4	ppb	12:32:30
1	Cd 226.502†	48309.9	48133.7	499.01	ug/L	499.01	ppb	12:33:33
1	Co 228.616†	26539.2	26406.5	498.22	ug/L	498.22	ppb	12:33:33
1	Cr 267.716†	47776.1	47319.0	496.12	ug/L	496.12	ppb	12:33:33
1	Cu 324.752†	177379.4	169244.0	491.85	ug/L	491.85	ppb	12:33:33
1	Fe 238.204 Radial†	578.8	570.1	5123.5	ug/L	5123.5	ppb	12:32:30
1	K 766.490 Radial†	32804.6	30134.8	5047.0	ug/L	5047.0	ppb	12:32:10
1	Mg 279.077 IEC†	152.2	150.6	5070.1	ug/L	5070.1	ppb	12:32:30
1	Mn 257.610†	473929.3	469728.5	498.25	ug/L	498.25	ppb	12:33:28
1	Mo 202.031†	7939.6	7859.5	500.52	ug/L	500.52	ppb	12:33:53
1	Na 589.592 Radial†	32525.7	34149.0	10349	ug/L	10349	ppb	12:32:10
1	Ni 231.604†	21887.3	21631.3	496.74	ug/L	496.74	ppb	12:33:33
1	P 214.914†	4726.0	4447.3	2408.7	ug/L	2408.7	ppb	12:33:53
1	Pb 220.353†	4384.0	4417.9	496.08	ug/L	496.08	ppb	12:33:53
1	S 181.975 Axial†	821.4	765.6	1010.5	ug/L	1010.5	ppb	12:33:53
1	Sb 206.836†	1643.6	1593.4	510.43	ug/L	510.43	ppb	12:33:53
1	Se 196.026†	863.8	883.9	515.28	ug/L	515.28	ppb	12:33:53
1	Si 251.611†	86522.9	85369.2	2530.7	ug/L	2530.7	ppb	12:33:33
1	Sn 189.927†	3148.6	3115.3	501.72	ug/L	501.72	ppb	12:33:53
1	Sr 421.552†	84421.0	84600.7	510.20	ug/L	510.20	ppb	12:32:10
1	Ti 334.940†	310984.2	309825.2	488.90	ug/L	488.90	ppb	12:33:33
1	Tl 190.801†	1743.6	1764.7	500.33	ug/L	500.33	ppb	12:33:53
1	U 409.014†	14618.2	17088.7	489.71	ug/L	489.71	ppb	12:33:33
1	V 292.402†	73236.0	74030.0	499.28	ug/L	499.28	ppb	12:33:33
1	Zn 213.857†	59285.0	58070.7	495.10	ug/L	495.10	ppb	12:33:33
1	SiO2†	86443.9	85248.1	5415.2	ug/L	5415.2	ppb	12:35:00
2	Sc 361.383	871455.0	871455.0	100.41	%			12:33:59
2	Sc Radial	5511.6	5511.6	98.8	%			12:32:36
2	Y 371.029	721889.3	721889.3	98.963	%			12:33:59
2	Y RADIAL	5973.0	5973.0	98.90	%			12:32:36
2	Ag 328.068†	111979.3	111250.5	506.37	ug/L	506.37	ppb	12:34:04
2	Al 396.153Radial†	7134.0	7252.3	4973.4	ug/L	4973.4	ppb	12:32:36
2	As 188.979†	1267.8	1293.9	503.94	ug/L	503.94	ppb	12:34:24
2	B 249.677†	23257.8	23656.5	502.18	ug/L	502.18	ppb	12:34:04
2	Ba 233.527†	67214.9	66953.0	501.59	ug/L	501.59	ppb	12:34:04
2	Be 313.107†	1382869.5	1381916.0	497.18	ug/L	497.18	ppb	12:33:59
2	Ca 317.933Radial†	3403.2	3425.9	5000.1	ug/L	5000.1	ppb	12:32:56
2	Cd 226.502†	48455.7	48457.8	502.37	ug/L	502.37	ppb	12:34:04
2	Co 228.616†	26689.7	26654.8	502.88	ug/L	502.88	ppb	12:34:04
2	Cr 267.716†	47985.5	47704.6	500.17	ug/L	500.17	ppb	12:34:04
2	Cu 324.752†	177894.6	170414.3	495.25	ug/L	495.25	ppb	12:34:04
2	Fe 238.204 Radial†	582.6	579.5	5207.7	ug/L	5207.7	ppb	12:32:56
2	K 766.490 Radial†	33027.5	30672.4	5137.1	ug/L	5137.1	ppb	12:32:36
2	Mg 279.077 IEC†	152.2	152.0	5118.7	ug/L	5118.7	ppb	12:32:56
2	Mn 257.610†	470267.0	467837.0	496.25	ug/L	496.25	ppb	12:33:59
2	Mo 202.031†	7879.3	7828.8	498.57	ug/L	498.57	ppb	12:34:24
2	Na 589.592 Radial†	32681.8	34616.4	10491	ug/L	10491	ppb	12:32:36
2	Ni 231.604†	21939.9	21764.8	499.81	ug/L	499.81	ppb	12:34:04

2	P 214.914†	4707.7	4446.5	2407.8 ug/L	2407.8 ppb	12:34:24
2	Pb 220.353†	4386.3	4436.5	498.16 ug/L	498.16 ppb	12:34:24
2	S 181.975 Axial†	812.0	759.3	1002.2 ug/L	1002.2 ppb	12:34:24
2	Sb 206.836†	1641.9	1597.9	511.72 ug/L	511.72 ppb	12:34:24
2	Se 196.026†	864.8	888.1	517.90 ug/L	517.90 ppb	12:34:24
2	Si 251.611†	86976.6	86141.7	2553.7 ug/L	2553.7 ppb	12:34:04
2	Sn 189.927†	3145.1	3123.5	503.05 ug/L	503.05 ppb	12:34:24
2	Sr 421.552†	84743.4	85730.0	517.01 ug/L	517.01 ppb	12:32:36
2	Ti 334.940†	312388.6	312376.2	492.93 ug/L	492.93 ppb	12:34:04
2	Tl 190.801†	1740.7	1768.2	501.32 ug/L	501.32 ppb	12:34:24
2	U 409.014†	14640.0	17164.5	491.87 ug/L	491.87 ppb	12:34:04
2	V 292.402†	73801.7	74864.7	504.79 ug/L	504.79 ppb	12:34:04
2	Zn 213.857†	59575.7	58579.9	499.45 ug/L	499.45 ppb	12:34:04
2	SiO2†	86190.0	85315.5	5419.5 ug/L	5419.5 ppb	12:35:06
3	Sc 361.383	868637.4	868637.4	100.08 %		12:34:30
3	Sc Radial	5484.0	5484.0	98.4 %		12:33:01
3	Y 371.029	718522.2	718522.2	98.501 %		12:34:30
3	Y RADIAL	5942.8	5942.8	98.40 %		12:33:01
3	Ag 328.068†	111539.4	111172.7	506.01 ug/L	506.01 ppb	12:34:35
3	Al 396.153Radial†	6980.7	7132.8	4890.9 ug/L	4890.9 ppb	12:33:01
3	As 188.979†	1269.6	1299.8	506.21 ug/L	506.21 ppb	12:34:55
3	B 249.677†	23148.6	23622.6	501.45 ug/L	501.45 ppb	12:34:35
3	Ba 233.527†	67128.5	67083.9	502.56 ug/L	502.56 ppb	12:34:35
3	Be 313.107†	1381302.3	1384817.6	498.22 ug/L	498.22 ppb	12:34:30
3	Ca 317.933Radial†	3378.4	3418.1	4988.7 ug/L	4988.7 ppb	12:33:21
3	Cd 226.502†	48625.2	48783.7	505.75 ug/L	505.75 ppb	12:34:35
3	Co 228.616†	26670.3	26721.6	504.16 ug/L	504.16 ppb	12:34:35
3	Cr 267.716†	47975.8	47849.9	501.69 ug/L	501.69 ppb	12:34:35
3	Cu 324.752†	176857.8	169953.1	493.91 ug/L	493.91 ppb	12:34:35
3	Fe 238.204 Radial†	575.7	575.5	5171.7 ug/L	5171.7 ppb	12:33:21
3	K 766.490 Radial†	32329.9	30131.5	5046.4 ug/L	5046.4 ppb	12:33:01
3	Mg 279.077 IEC†	157.8	158.5	5336.5 ug/L	5336.5 ppb	12:33:21
3	Mn 257.610†	470878.8	469967.5	498.50 ug/L	498.50 ppb	12:34:30
3	Mo 202.031†	7939.5	7914.5	504.02 ug/L	504.02 ppb	12:34:55
3	Na 589.592 Radial†	31935.8	34024.5	10311 ug/L	10311 ppb	12:33:01
3	Ni 231.604†	22062.0	21957.7	504.24 ug/L	504.24 ppb	12:34:35
3	P 214.914†	4718.4	4472.4	2422.5 ug/L	2422.5 ppb	12:34:55
3	Pb 220.353†	4401.9	4466.3	501.49 ug/L	501.49 ppb	12:34:55
3	S 181.975 Axial†	821.4	771.3	1018.1 ug/L	1018.1 ppb	12:34:55
3	Sb 206.836†	1653.3	1614.5	517.12 ug/L	517.12 ppb	12:34:55
3	Se 196.026†	868.2	894.3	521.29 ug/L	521.29 ppb	12:34:55
3	Si 251.611†	86644.6	86090.9	2552.1 ug/L	2552.1 ppb	12:34:35
3	Sn 189.927†	3156.0	3144.6	506.44 ug/L	506.44 ppb	12:34:55
3	Sr 421.552†	83013.6	84403.4	509.01 ug/L	509.01 ppb	12:33:01
3	Ti 334.940†	311422.2	312419.8	492.99 ug/L	492.99 ppb	12:34:35
3	Tl 190.801†	1738.0	1771.1	502.13 ug/L	502.13 ppb	12:34:55
3	U 409.014†	14591.5	17163.4	491.84 ug/L	491.84 ppb	12:34:35
3	V 292.402†	73520.9	74822.6	504.60 ug/L	504.60 ppb	12:34:35
3	Zn 213.857†	59543.0	58739.7	500.79 ug/L	500.79 ppb	12:34:35
3	SiO2†	86642.0	86045.6	5465.9 ug/L	5465.9 ppb	12:35:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871600.5	100.42	%	0.350				0.35%
Sc Radial	5519.8	99.0	%	0.73				0.74%
Y 371.029	721129.7	98.858	%	0.3184				0.32%
Y RADIAL	5980.8	99.03	%	0.704				0.71%
Ag 328.068†	110891.8	504.73	ug/L	2.535	504.73	ppb	2.535	0.50%
QC value within limits for Ag 328.068 Recovery = 100.95%								
Al 396.153Radial†	7166.5	4914.2	ug/L	51.66	4914.2	ppb	51.66	1.05%
QC value within limits for Al 396.153Radial Recovery = 98.28%								
As 188.979†	1296.0	504.71	ug/L	1.305	504.71	ppb	1.305	0.26%
QC value within limits for As 188.979 Recovery = 100.94%								
B 249.677†	23606.7	501.12	ug/L	1.254	501.12	ppb	1.254	0.25%
QC value within limits for B 249.677 Recovery = 100.22%								
Ba 233.527†	66777.9	500.27	ug/L	3.160	500.27	ppb	3.160	0.63%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 313.107†	1383154.1	497.62	ug/L	0.539	497.62	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 99.52%								

Ca 317.933Radial†	3399.8	4962.1 ug/L	56.32	4962.1 ppb	56.32	1.14%
QC value within limits for Ca 317.933Radial Recovery = 99.24%						
Cd 226.502†	48458.4	502.38 ug/L	3.371	502.38 ppb	3.371	0.67%
QC value within limits for Cd 226.502 Recovery = 100.48%						
Co 228.616†	26594.3	501.75 ug/L	3.128	501.75 ppb	3.128	0.62%
QC value within limits for Co 228.616 Recovery = 100.35%						
Cr 267.716†	47624.5	499.32 ug/L	2.877	499.32 ppb	2.877	0.58%
QC value within limits for Cr 267.716 Recovery = 99.86%						
Cu 324.752†	169870.4	493.67 ug/L	1.714	493.67 ppb	1.714	0.35%
QC value within limits for Cu 324.752 Recovery = 98.73%						
Fe 238.204 Radial†	575.0	5167.6 ug/L	42.23	5167.6 ppb	42.23	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 103.35%						
K 766.490 Radial†	30312.9	5076.8 ug/L	52.21	5076.8 ppb	52.21	1.03%
QC value within limits for K 766.490 Radial Recovery = 101.54%						
Mg 279.077 IEC†	153.7	5175.1 ug/L	141.91	5175.1 ppb	141.91	2.74%
QC value within limits for Mg 279.077 IEC Recovery = 103.50%						
Mn 257.610†	469177.7	497.67 ug/L	1.233	497.67 ppb	1.233	0.25%
QC value within limits for Mn 257.610 Recovery = 99.53%						
Mo 202.031†	7867.6	501.04 ug/L	2.761	501.04 ppb	2.761	0.55%
QC value within limits for Mo 202.031 Recovery = 100.21%						
Na 589.592 Radial†	34263.3	10384 ug/L	94.6	10384 ppb	94.6	0.91%
QC value within limits for Na 589.592 Radial Recovery = 103.84%						
Ni 231.604†	21784.6	500.26 ug/L	3.768	500.26 ppb	3.768	0.75%
QC value within limits for Ni 231.604 Recovery = 100.05%						
P 214.914†	4455.4	2413.0 ug/L	8.23	2413.0 ppb	8.23	0.34%
QC value within limits for P 214.914 Recovery = 96.52%						
Pb 220.353†	4440.2	498.58 ug/L	2.732	498.58 ppb	2.732	0.55%
QC value within limits for Pb 220.353 Recovery = 99.72%						
S 181.975 Axial†	765.4	1010.2 ug/L	7.95	1010.2 ppb	7.95	0.79%
QC value within limits for S 181.975 Axial Recovery = 101.02%						
Sb 206.836†	1601.9	513.09 ug/L	3.551	513.09 ppb	3.551	0.69%
QC value within limits for Sb 206.836 Recovery = 102.62%						
Se 196.026†	888.8	518.16 ug/L	3.012	518.16 ppb	3.012	0.58%
QC value within limits for Se 196.026 Recovery = 103.63%						
Si 251.611†	85867.3	2545.5 ug/L	12.85	2545.5 ppb	12.85	0.50%
QC value within limits for Si 251.611 Recovery = 101.82%						
Sn 189.927†	3127.8	503.74 ug/L	2.435	503.74 ppb	2.435	0.48%
QC value within limits for Sn 189.927 Recovery = 100.75%						
Sr 421.552†	84911.4	512.08 ug/L	4.317	512.08 ppb	4.317	0.84%
QC value within limits for Sr 421.552 Recovery = 102.42%						
Ti 334.940†	311540.4	491.61 ug/L	2.346	491.61 ppb	2.346	0.48%
QC value within limits for Ti 334.940 Recovery = 98.32%						
Tl 190.801†	1768.0	501.26 ug/L	0.902	501.26 ppb	0.902	0.18%
QC value within limits for Tl 190.801 Recovery = 100.25%						
U 409.014†	17138.9	491.14 ug/L	1.239	491.14 ppb	1.239	0.25%
QC value within limits for U 409.014 Recovery = 98.23%						
V 292.402†	74572.4	502.89 ug/L	3.128	502.89 ppb	3.128	0.62%
QC value within limits for V 292.402 Recovery = 100.58%						
Zn 213.857†	58463.4	498.45 ug/L	2.974	498.45 ppb	2.974	0.60%
QC value within limits for Zn 213.857 Recovery = 99.69%						
SiO2†	85536.4	5433.5 ug/L	28.13	5433.5 ppb	28.13	0.52%
QC value within limits for SiO2 Recovery = 101.61%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:37:20
Data Type: Reprocessed on 12/11/2009 12:46:13
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	847568.2	847568.2	97.656	%			12:40:30
1	Sc Radial	5624.4	5624.4	101	%			12:39:13
1	Y 371.029	713720.6	713720.6	97.843	%			12:40:30
1	Y RADIAL	6144.5	6144.5	101.7	%			12:39:13
1	Ag 328.068†	378.1	113.2	0.5160	ug/L	0.5160	ppb	12:40:30
1	Al 396.153Radial†	-18.5	16.9	11.642	ug/L	11.642	ppb	12:39:13
1	As 188.979†	-22.0	8.7	3.3641	ug/L	3.3641	ppb	12:40:50
1	B 249.677†	-169.4	319.7	6.8141	ug/L	6.8141	ppb	12:40:50
1	Ba 233.527†	-26.0	-15.5	-0.1172	ug/L	-0.1172	ppb	12:40:50
1	Be 313.107†	-4472.9	82.3	0.0296	ug/L	0.0296	ppb	12:40:30
1	Ca 317.933Radial†	13.7	-3.3	-4.8029	ug/L	-4.8029	ppb	12:39:33
1	Cd 226.502†	-181.9	12.7	0.1317	ug/L	0.1317	ppb	12:40:50
1	Co 228.616†	-85.9	-14.5	-0.2722	ug/L	-0.2722	ppb	12:40:50
1	Cr 267.716†	63.8	-20.7	-0.2157	ug/L	-0.2157	ppb	12:40:50
1	Cu 324.752†	6713.9	117.3	0.3406	ug/L	0.3406	ppb	12:40:30
1	Fe 238.204 Radial†	10.0	-0.0	-0.1211	ug/L	-0.1211	ppb	12:39:33
1	K 766.490 Radial†	3088.5	322.2	54.063	ug/L	54.063	ppb	12:39:13
1	Mg 279.077 IEC†	2.0	0.1	3.4114	ug/L	3.4114	ppb	12:39:33
1	Mn 257.610†	485.0	-23.5	-0.0250	ug/L	-0.0250	ppb	12:40:50
1	Mo 202.031†	26.8	9.0	0.5714	ug/L	0.5714	ppb	12:40:50
1	Na 589.592 Radial†	-1538.6	28.8	8.7370	ug/L	8.7370	ppb	12:39:13
1	Ni 231.604†	75.9	-8.2	-0.1882	ug/L	-0.1882	ppb	12:40:50
1	P 214.914†	227.6	-9.0	-5.0728	ug/L	-5.0728	ppb	12:40:50
1	Pb 220.353†	-58.9	7.7	0.8665	ug/L	0.8665	ppb	12:40:50
1	S 181.975 Axial†	54.1	6.0	7.9430	ug/L	7.9430	ppb	12:40:50
1	Sb 206.836†	38.0	1.5	0.4847	ug/L	0.4847	ppb	12:40:50
1	Se 196.026†	-33.4	-7.5	-4.1895	ug/L	-4.1895	ppb	12:40:50
1	Si 251.611†	528.4	59.3	1.7391	ug/L	1.7391	ppb	12:40:50
1	Sn 189.927†	7.8	-0.8	-0.1315	ug/L	-0.1315	ppb	12:40:50
1	Sr 421.552†	-51.0	-50.3	-0.3033	ug/L	-0.3033	ppb	12:39:13
1	Ti 334.940†	-1231.0	-4.3	-0.0037	ug/L	-0.0037	ppb	12:40:30
1	Tl 190.801†	-32.0	1.8	0.4998	ug/L	0.4998	ppb	12:40:50
1	U 409.014†	-2775.7	-258.4	-7.4274	ug/L	-7.4274	ppb	12:40:30
1	V 292.402†	-1414.2	-85.5	-0.5746	ug/L	-0.5746	ppb	12:40:30
1	Zn 213.857†	779.8	44.7	0.3849	ug/L	0.3849	ppb	12:40:50
1	SiO2†	535.2	23.5	1.4416	ug/L	1.4416	ppb	12:41:46
2	Sc 361.383	850980.6	850980.6	98.049	%			12:40:55
2	Sc Radial	5226.4	5226.4	93.7	%			12:39:38
2	Y 371.029	716574.3	716574.3	98.234	%			12:40:55
2	Y RADIAL	5690.7	5690.7	94.23	%			12:39:38
2	Ag 328.068†	348.6	81.5	0.3744	ug/L	0.3744	ppb	12:40:55
2	Al 396.153Radial†	-36.8	-3.9	-2.7236	ug/L	-2.7236	ppb	12:39:38
2	As 188.979†	-23.9	6.9	2.6793	ug/L	2.6793	ppb	12:41:15
2	B 249.677†	-177.9	311.8	6.6422	ug/L	6.6422	ppb	12:41:15
2	Ba 233.527†	-10.5	0.4	0.0019	ug/L	0.0019	ppb	12:41:15
2	Be 313.107†	-4484.6	88.8	0.0319	ug/L	0.0319	ppb	12:40:55
2	Ca 317.933Radial†	13.4	-2.6	-3.7376	ug/L	-3.7376	ppb	12:39:58
2	Cd 226.502†	-190.0	5.2	0.0527	ug/L	0.0527	ppb	12:41:15
2	Co 228.616†	-65.8	6.4	0.1208	ug/L	0.1208	ppb	12:41:15
2	Cr 267.716†	81.6	-2.8	-0.0290	ug/L	-0.0290	ppb	12:41:15
2	Cu 324.752†	6807.4	185.0	0.5381	ug/L	0.5381	ppb	12:40:55
2	Fe 238.204 Radial†	10.7	1.5	13.644	ug/L	13.644	ppb	12:39:58
2	K 766.490 Radial†	3279.1	758.8	127.31	ug/L	127.31	ppb	12:39:38
2	Mg 279.077 IEC†	2.5	0.7	24.525	ug/L	24.525	ppb	12:39:58
2	Mn 257.610†	508.2	-1.8	-0.0010	ug/L	-0.0010	ppb	12:41:15
2	Mo 202.031†	24.8	6.9	0.4417	ug/L	0.4417	ppb	12:41:15
2	Na 589.592 Radial†	-1499.3	-45.4	-13.764	ug/L	-13.764	ppb	12:39:38
2	Ni 231.604†	91.9	7.8	0.1795	ug/L	0.1795	ppb	12:41:15

2	P 214.914†	236.7	-0.7	-0.4870 ug/L	-0.4870 ppb	12:41:15
2	Pb 220.353†	-67.3	-0.7	-0.0795 ug/L	-0.0795 ppb	12:41:15
2	S 181.975 Axial†	47.6	-0.8	-1.0703 ug/L	-1.0703 ppb	12:41:15
2	Sb 206.836†	35.8	-0.9	-0.2940 ug/L	-0.2940 ppb	12:41:15
2	Se 196.026†	-15.0	11.5	6.5280 ug/L	6.5280 ppb	12:41:15
2	Si 251.611†	497.0	25.2	0.7024 ug/L	0.7024 ppb	12:41:15
2	Sn 189.927†	2.4	-6.3	-1.0202 ug/L	-1.0202 ppb	12:41:15
2	Sr 421.552†	-16.5	-17.4	-0.1049 ug/L	-0.1049 ppb	12:39:38
2	Ti 334.940†	-1223.0	8.9	0.0158 ug/L	0.0158 ppb	12:40:55
2	Tl 190.801†	-29.5	4.5	1.2547 ug/L	1.2547 ppb	12:41:15
2	U 409.014†	-2678.8	-148.1	-4.2607 ug/L	-4.2607 ppb	12:40:55
2	V 292.402†	-1420.0	-85.5	-0.5724 ug/L	-0.5724 ppb	12:40:55
2	Zn 213.857†	767.0	28.4	0.2403 ug/L	0.2403 ppb	12:41:15
2	SiO2†	543.1	29.4	1.7730 ug/L	1.7730 ppb	12:41:51
3	Sc 361.383	871743.4	871743.4	100.44 %		12:41:20
3	Sc Radial	5613.5	5613.5	101 %		12:40:03
3	Y 371.029	732016.1	732016.1	100.35 %		12:41:20
3	Y RADIAL	6098.6	6098.6	101.0 %		12:40:03
3	Ag 328.068†	321.4	45.9	0.2161 ug/L	0.2161 ppb	12:41:20
3	Al 396.153Radial†	-14.4	21.0	14.465 ug/L	14.465 ppb	12:40:03
3	As 188.979†	-28.8	2.6	0.9995 ug/L	0.9995 ppb	12:41:40
3	B 249.677†	-175.0	319.0	6.7956 ug/L	6.7956 ppb	12:41:40
3	Ba 233.527†	3.9	15.0	0.1125 ug/L	0.1125 ppb	12:41:40
3	Be 313.107†	-4613.2	69.7	0.0249 ug/L	0.0249 ppb	12:41:20
3	Ca 317.933Radial†	14.9	-2.1	-3.0652 ug/L	-3.0652 ppb	12:40:23
3	Cd 226.502†	-191.1	8.7	0.0878 ug/L	0.0878 ppb	12:41:40
3	Co 228.616†	-73.5	0.2	0.0045 ug/L	0.0045 ppb	12:41:40
3	Cr 267.716†	66.6	-19.7	-0.2057 ug/L	-0.2057 ppb	12:41:40
3	Cu 324.752†	6808.2	20.5	0.0606 ug/L	0.0606 ppb	12:41:20
3	Fe 238.204 Radial†	12.3	2.4	21.114 ug/L	21.114 ppb	12:40:23
3	K 766.490 Radial†	3159.7	398.9	66.917 ug/L	66.917 ppb	12:40:03
3	Mg 279.077 IEC†	3.2	1.3	43.185 ug/L	43.185 ppb	12:40:23
3	Mn 257.610†	509.9	-12.5	-0.0119 ug/L	-0.0119 ppb	12:41:40
3	Mo 202.031†	20.7	2.1	0.1378 ug/L	0.1378 ppb	12:41:40
3	Na 589.592 Radial†	-1474.7	89.3	27.067 ug/L	27.067 ppb	12:40:03
3	Ni 231.604†	71.5	-14.8	-0.3389 ug/L	-0.3389 ppb	12:41:40
3	P 214.914†	230.9	-12.2	-6.8179 ug/L	-6.8179 ppb	12:41:40
3	Pb 220.353†	-60.8	7.4	0.8329 ug/L	0.8329 ppb	12:41:40
3	S 181.975 Axial†	52.2	2.6	3.4239 ug/L	3.4239 ppb	12:41:40
3	Sb 206.836†	43.9	6.3	2.0264 ug/L	2.0264 ppb	12:41:40
3	Se 196.026†	-38.8	-11.8	-6.5690 ug/L	-6.5690 ppb	12:41:40
3	Si 251.611†	527.2	43.2	1.2583 ug/L	1.2583 ppb	12:41:40
3	Sn 189.927†	14.2	5.3	0.8595 ug/L	0.8595 ppb	12:41:40
3	Sr 421.552†	-37.7	-37.2	-0.2243 ug/L	-0.2243 ppb	12:40:03
3	Ti 334.940†	-1298.4	-36.4	-0.0565 ug/L	-0.0565 ppb	12:41:20
3	Tl 190.801†	-27.3	7.4	2.0781 ug/L	2.0781 ppb	12:41:40
3	U 409.014†	-2681.9	-86.1	-2.4777 ug/L	-2.4777 ppb	12:41:20
3	V 292.402†	-1391.1	-22.3	-0.1531 ug/L	-0.1531 ppb	12:41:20
3	Zn 213.857†	776.4	19.1	0.1631 ug/L	0.1631 ppb	12:41:40
3	SiO2†	530.9	4.1	0.2003 ug/L	0.2003 ppb	12:41:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856764.1	98.715	%	1.5075				1.53%
Sc Radial	5488.1	98.4	%	4.07				4.13%
Y 371.029	720770.3	98.809	%	1.3494				1.37%
Y RADIAL	5977.9	98.99	%	4.137				4.18%
Ag 328.068†	80.2	0.3689	ug/L	0.15003	0.3689	ppb	0.15003	40.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.3	7.7943	ug/L	9.21744	7.7943	ppb	9.21744	118.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.1	2.3476	ug/L	1.21668	2.3476	ppb	1.21668	51.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	316.8	6.7506	ug/L	0.09438	6.7506	ppb	0.09438	1.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0009	ug/L	0.11484	-0.0009	ppb	0.11484	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.3	0.0288	ug/L	0.00356	0.0288	ppb	0.00356	12.36%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -2.7     -3.8686 ug/L       0.87624     -3.8686 ppb        0.87624  22.65%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.9      0.0907 ug/L       0.03961      0.0907 ppb        0.03961  43.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.6     -0.0490 ug/L       0.20189     -0.0490 ppb        0.20189 412.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -14.4     -0.1501 ug/L       0.10498     -0.1501 ppb        0.10498  69.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               107.6      0.3131 ug/L       0.23993      0.3131 ppb        0.23993  76.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3     11.546 ug/L       10.7720     11.546 ppb        10.7720  93.30%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         493.3     82.763 ug/L       39.1107     82.763 ppb        39.1107  47.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7     23.707 ug/L       19.8994     23.707 ppb        19.8994  83.94%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -12.6     -0.0127 ug/L       0.01201     -0.0127 ppb        0.01201  94.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.0      0.3837 ug/L       0.22256      0.3837 ppb        0.22256  58.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         24.2      7.3467 ug/L      20.45092      7.3467 ppb       20.45092 278.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.0     -0.1159 ug/L       0.26666     -0.1159 ppb        0.26666 230.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.3     -4.1259 ug/L       3.26994     -4.1259 ppb        3.26994  79.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.8      0.5399 ug/L       0.53675      0.5399 ppb        0.53675  99.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.6      3.4322 ug/L       4.50668      3.4322 ppb        4.50668 131.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7390 ug/L       1.18090      0.7390 ppb        1.18090 159.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.6     -1.4101 ug/L       6.97685     -1.4101 ppb        6.97685 494.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                42.5      1.2332 ug/L       0.51879      1.2332 ppb        0.51879  42.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.6     -0.0974 ug/L       0.94032     -0.0974 ppb        0.94032 965.25%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -35.0     -0.2108 ug/L       0.09986     -0.2108 ppb        0.09986  47.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -10.6     -0.0148 ug/L       0.03737     -0.0148 ppb        0.03737 252.28%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.5      1.2775 ug/L       0.78940      1.2775 ppb        0.78940  61.79%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -164.2     -4.7219 ug/L       2.50685     -4.7219 ppb        2.50685  53.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -64.4     -0.4334 ug/L       0.24273     -0.4334 ppb        0.24273  56.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.7      0.2628 ug/L       0.11259      0.2628 ppb        0.11259  42.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      19.0      1.1383 ug/L       0.82903      1.1383 ppb        0.82903  72.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: 241536003|925470|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/11/2009 12:54:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241536003|925470|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5387.5	5387.5	96.6	%			12:56:49
1	Y RADIAL	6057.0	6057.0	100.3	%			12:56:49
1	Al 396.153Radial†	31966.8	33119.3	22810	ug/L	22810	ppb	12:56:49
1	Ca 317.933Radial†	4404.4	4541.4	6628.2	ug/L	6628.2	ppb	12:56:49
1	Fe 238.204 Radial†	2913.0	3005.0	26922	ug/L	26922	ppb	12:57:09
1	K 766.490 Radial†	21373.3	19380.8	3224.1	ug/L	3224.1	ppb	12:56:49
1	Mg 279.077 IEC†	144.9	148.1	4957.2	ug/L	4957.2	ppb	12:57:09
1	Na 589.592 Radial†	-122.2	1427.6	432.66	ug/L	432.66	ppb	12:56:49
1	Sr 421.552†	10969.9	11353.5	68.414	ug/L	68.414	ppb	12:56:49
1	Sc 361.383	882959.0	882959.0	101.73	%			12:58:06
1	Y 371.029	755717.1	755717.1	103.60	%			12:58:06
1	Ag 328.068†	-1283.2	-1535.3	1.8451	ug/L	1.8451	ppb	12:58:11
1	As 188.979†	-20.2	11.4	13.172	ug/L	13.172	ppb	12:58:31
1	B 249.677†	55.7	548.0	8.0219	ug/L	8.0219	ppb	12:58:11
1	Ba 233.527†	56804.6	55848.0	418.42	ug/L	418.42	ppb	12:58:11
1	Be 313.107†	-874.0	3803.5	2.4450	ug/L	2.4450	ppb	12:58:11
1	Cd 226.502†	52.5	250.5	-0.0678	ug/L	-0.0678	ppb	12:58:31
1	Co 228.616†	1723.9	1767.9	31.970	ug/L	31.970	ppb	12:58:31
1	Cr 267.716†	1841.3	1723.9	18.663	ug/L	18.663	ppb	12:58:31
1	Cu 324.752†	13363.2	6377.7	19.898	ug/L	19.898	ppb	12:58:11
1	Mn 257.610†	2343164.0	2302722.9	2443.1	ug/L	2443.1	ppb	12:58:06
1	Mo 202.031†	26.3	7.4	2.3827	ug/L	2.3827	ppb	12:58:31
1	Ni 231.604†	1839.9	1722.6	39.562	ug/L	39.562	ppb	12:58:31
1	P 214.914†	475.8	225.6	108.90	ug/L	108.90	ppb	12:58:31
1	Pb 220.353†	376.4	438.0	51.926	ug/L	51.926	ppb	12:58:31
1	S 181.975 Axial†	109.8	58.6	72.869	ug/L	72.869	ppb	12:58:31
1	Sb 206.836†	41.9	3.8	-0.9777	ug/L	-0.9777	ppb	12:58:31
1	Se 196.026†	-164.6	-135.0	10.170	ug/L	10.170	ppb	12:58:31
1	Si 251.611†	242175.3	237567.6	7074.7	ug/L	7074.7	ppb	12:58:11
1	Sn 189.927†	-55.0	-62.9	-9.0501	ug/L	-9.0501	ppb	12:58:31
1	Ti 334.940†	352626.4	347874.8	549.48	ug/L	549.48	ppb	12:58:06
1	Tl 190.801†	-109.9	-73.4	-1.8511	ug/L	-1.8511	ppb	12:58:31
1	U 409.014†	-6924.2	-4222.2	-124.81	ug/L	-124.81	ppb	12:58:11
1	V 292.402†	7027.1	8270.1	50.203	ug/L	50.203	ppb	12:58:11
1	Zn 213.857†	6820.1	5950.1	48.167	ug/L	48.167	ppb	12:58:31
1	SiO2†	240726.9	236101.2	15068	ug/L	15068	ppb	12:59:39
2	Sc Radial	5494.9	5494.9	98.6	%			12:57:14
2	Y RADIAL	6106.8	6106.8	101.1	%			12:57:14
2	Al 396.153Radial†	31773.2	32275.9	22229	ug/L	22229	ppb	12:57:14
2	Ca 317.933Radial†	4367.2	4414.5	6443.0	ug/L	6443.0	ppb	12:57:14
2	Fe 238.204 Radial†	2919.3	2952.4	26452	ug/L	26452	ppb	12:57:34
2	K 766.490 Radial†	21349.1	18923.6	3147.2	ug/L	3147.2	ppb	12:57:14
2	Mg 279.077 IEC†	145.7	145.9	4884.0	ug/L	4884.0	ppb	12:57:34
2	Na 589.592 Radial†	-162.8	1389.0	420.94	ug/L	420.94	ppb	12:57:14
2	Sr 421.552†	10873.3	11033.5	66.486	ug/L	66.486	ppb	12:57:14
2	Sc 361.383	883205.1	883205.1	101.76	%			12:58:37
2	Y 371.029	756065.4	756065.4	103.65	%			12:58:37
2	Ag 328.068†	-1402.2	-1652.0	1.1700	ug/L	1.1700	ppb	12:58:42
2	As 188.979†	-20.3	11.4	13.090	ug/L	13.090	ppb	12:59:02
2	B 249.677†	40.1	532.6	7.7576	ug/L	7.7576	ppb	12:58:42
2	Ba 233.527†	56619.9	55650.8	416.93	ug/L	416.93	ppb	12:58:42
2	Be 313.107†	-772.5	3903.5	2.4814	ug/L	2.4814	ppb	12:58:42
2	Cd 226.502†	46.2	244.4	-0.0842	ug/L	-0.0842	ppb	12:59:02
2	Co 228.616†	1705.0	1748.9	31.616	ug/L	31.616	ppb	12:59:02
2	Cr 267.716†	1808.1	1690.8	18.308	ug/L	18.308	ppb	12:59:02
2	Cu 324.752†	13168.8	6183.0	19.308	ug/L	19.308	ppb	12:58:42
2	Mn 257.610†	2356112.2	2314805.0	2455.9	ug/L	2455.9	ppb	12:58:37
2	Mo 202.031†	12.4	-6.3	1.4778	ug/L	1.4778	ppb	12:59:02
2	Ni 231.604†	1859.4	1741.3	39.992	ug/L	39.992	ppb	12:59:02

2	P 214.914†	460.4	210.4	100.68 ug/L	100.68 ppb	12:59:02
2	Pb 220.353†	377.6	439.1	51.956 ug/L	51.956 ppb	12:59:02
2	S 181.975 Axial†	111.7	60.3	75.327 ug/L	75.327 ppb	12:59:02
2	Sb 206.836†	37.1	-0.9	-2.4669 ug/L	-2.4669 ppb	12:59:02
2	Se 196.026†	-165.8	-136.1	8.0097 ug/L	8.0097 ppb	12:59:02
2	Si 251.611†	240682.7	236034.5	7029.1 ug/L	7029.1 ppb	12:58:42
2	Sn 189.927†	-55.9	-63.8	-9.2215 ug/L	-9.2215 ppb	12:59:02
2	Ti 334.940†	352900.2	348047.4	549.75 ug/L	549.75 ppb	12:58:37
2	Tl 190.801†	-102.6	-66.3	0.2360 ug/L	0.2360 ppb	12:59:02
2	U 409.014†	-6973.0	-4268.3	-126.08 ug/L	-126.08 ppb	12:58:42
2	V 292.402†	6974.0	8216.0	49.897 ug/L	49.897 ppb	12:58:42
2	Zn 213.857†	6854.9	5982.4	48.490 ug/L	48.490 ppb	12:59:02
2	SiO2†	245404.1	240631.4	15357 ug/L	15357 ppb	12:59:44
3	Sc Radial	5537.9	5537.9	99.3 %		12:57:39
3	Y RADIAL	6187.7	6187.7	102.5 %		12:57:39
3	Al 396.153Radial†	31970.3	32224.5	22193 ug/L	22193 ppb	12:57:39
3	Ca 317.933Radial†	4388.5	4401.6	6424.1 ug/L	6424.1 ppb	12:57:39
3	Fe 238.204 Radial†	2896.5	2906.4	26039 ug/L	26039 ppb	12:57:59
3	K 766.490 Radial†	21387.5	18794.4	3125.6 ug/L	3125.6 ppb	12:57:39
3	Mg 279.077 IEC†	144.3	143.4	4800.5 ug/L	4800.5 ppb	12:57:59
3	Na 589.592 Radial†	-170.5	1382.5	418.97 ug/L	418.97 ppb	12:57:39
3	Sr 421.552†	10902.6	10977.5	66.149 ug/L	66.149 ppb	12:57:39
3	Sc 361.383	887040.3	887040.3	102.20 %		12:59:08
3	Y 371.029	758891.3	758891.3	104.04 %		12:59:08
3	Ag 328.068†	-1300.2	-1546.2	1.5103 ug/L	1.5103 ppb	12:59:13
3	As 188.979†	-20.4	11.4	13.022 ug/L	13.022 ppb	12:59:33
3	B 249.677†	68.3	560.0	8.3970 ug/L	8.3970 ppb	12:59:13
3	Ba 233.527†	55959.2	54763.9	410.28 ug/L	410.28 ppb	12:59:13
3	Be 313.107†	-811.4	3868.8	2.4685 ug/L	2.4685 ppb	12:59:13
3	Cd 226.502†	56.7	254.5	0.0613 ug/L	0.0613 ppb	12:59:33
3	Co 228.616†	1695.1	1732.0	31.300 ug/L	31.300 ppb	12:59:33
3	Cr 267.716†	1836.2	1710.5	18.504 ug/L	18.504 ppb	12:59:33
3	Cu 324.752†	13141.3	6100.1	19.047 ug/L	19.047 ppb	12:59:13
3	Mn 257.610†	2359222.8	2307838.1	2448.4 ug/L	2448.4 ppb	12:59:08
3	Mo 202.031†	16.7	-2.1	1.7122 ug/L	1.7122 ppb	12:59:33
3	Ni 231.604†	1850.3	1724.5	39.605 ug/L	39.605 ppb	12:59:33
3	P 214.914†	455.8	204.0	97.428 ug/L	97.428 ppb	12:59:33
3	Pb 220.353†	393.4	452.9	53.531 ug/L	53.531 ppb	12:59:33
3	S 181.975 Axial†	118.5	66.6	83.597 ug/L	83.597 ppb	12:59:33
3	Sb 206.836†	39.5	1.2	-1.7858 ug/L	-1.7858 ppb	12:59:33
3	Se 196.026†	-156.1	-126.0	12.469 ug/L	12.469 ppb	12:59:33
3	Si 251.611†	238010.4	232397.2	6920.7 ug/L	6920.7 ppb	12:59:13
3	Sn 189.927†	-54.2	-61.9	-8.9298 ug/L	-8.9298 ppb	12:59:33
3	Ti 334.940†	354263.6	347881.9	549.48 ug/L	549.48 ppb	12:59:08
3	Tl 190.801†	-96.6	-60.0	1.9677 ug/L	1.9677 ppb	12:59:33
3	U 409.014†	-6856.8	-4124.9	-121.90 ug/L	-121.90 ppb	12:59:13
3	V 292.402†	6859.0	8073.9	49.025 ug/L	49.025 ppb	12:59:13
3	Zn 213.857†	6827.6	5926.5	48.055 ug/L	48.055 ppb	12:59:33
3	SiO2†	241113.9	235391.1	15022 ug/L	15022 ppb	12:59:49

Mean Data: 241536003|925470|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884401.5	101.90	%	0.264				0.26%
Sc Radial	5473.4	98.2	%	1.39				1.42%
Y 371.029	756891.3	103.76	%	0.239				0.23%
Y RADIAL	6117.2	101.3	%	1.09				1.08%
Ag 328.068†	-1577.8	1.5085	ug/L	0.33757	1.5085	ppb	0.33757	22.38%
Al 396.153Radial†	32539.9	22411	ug/L	346.0	22411	ppb	346.0	1.54%
As 188.979†	11.4	13.095	ug/L	0.0754	13.095	ppb	0.0754	0.58%
B 249.677†	546.9	8.0588	ug/L	0.32134	8.0588	ppb	0.32134	3.99%
Ba 233.527†	55420.9	415.21	ug/L	4.332	415.21	ppb	4.332	1.04%
Be 313.107†	3858.6	2.4650	ug/L	0.01847	2.4650	ppb	0.01847	0.75%
Ca 317.933Radial†	4452.5	6498.4	ug/L	112.76	6498.4	ppb	112.76	1.74%
Cd 226.502†	249.8	-0.0302	ug/L	0.07971	-0.0302	ppb	0.07971	263.65%
Co 228.616†	1749.6	31.629	ug/L	0.3354	31.629	ppb	0.3354	1.06%
Cr 267.716†	1708.4	18.491	ug/L	0.1780	18.491	ppb	0.1780	0.96%
Cu 324.752†	6220.3	19.418	ug/L	0.4360	19.418	ppb	0.4360	2.25%
Fe 238.204 Radial†	2954.6	26471	ug/L	441.8	26471	ppb	441.8	1.67%
K 766.490 Radial†	19032.9	3165.7	ug/L	51.79	3165.7	ppb	51.79	1.64%

Mg 279.077 IEC†	145.8	4880.6	ug/L	78.39	4880.6	ppb	78.39	1.61%
Mn 257.610†	2308455.3	2449.1	ug/L	6.41	2449.1	ppb	6.41	0.26%
Mo 202.031†	-0.3	1.8576	ug/L	0.46961	1.8576	ppb	0.46961	25.28%
Na 589.592 Radial†	1399.7	424.19	ug/L	7.402	424.19	ppb	7.402	1.74%
Ni 231.604†	1729.5	39.720	ug/L	0.2366	39.720	ppb	0.2366	0.60%
P 214.914†	213.3	102.33	ug/L	5.910	102.33	ppb	5.910	5.78%
Pb 220.353†	443.3	52.471	ug/L	0.9181	52.471	ppb	0.9181	1.75%
S 181.975 Axial†	61.8	77.264	ug/L	5.6205	77.264	ppb	5.6205	7.27%
Sb 206.836†	1.4	-1.7434	ug/L	0.74551	-1.7434	ppb	0.74551	42.76%
Se 196.026†	-132.4	10.216	ug/L	2.2300	10.216	ppb	2.2300	21.83%
Si 251.611†	235333.1	7008.1	ug/L	79.08	7008.1	ppb	79.08	1.13%
Sn 189.927†	-62.8	-9.0671	ug/L	0.14658	-9.0671	ppb	0.14658	1.62%
Sr 421.552†	11121.5	67.016	ug/L	1.2225	67.016	ppb	1.2225	1.82%
Ti 334.940†	347934.7	549.57	ug/L	0.152	549.57	ppb	0.152	0.03%
Tl 190.801†	-66.6	0.1175	ug/L	1.91213	0.1175	ppb	1.91213	>999.9%
U 409.014†	-4205.1	-124.27	ug/L	2.140	-124.27	ppb	2.140	1.72%
V 292.402†	8186.7	49.708	ug/L	0.6114	49.708	ppb	0.6114	1.23%
Zn 213.857†	5953.0	48.237	ug/L	0.2260	48.237	ppb	0.2260	0.47%
SiO2†	237374.5	15149	ug/L	181.5	15149	ppb	181.5	1.20%

Sequence No.: 3
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 13:02:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5959.4	5959.4	107	%			13:03:53
1	Y RADIAL	6433.9	6433.9	106.5	%			13:03:53
1	Al 396.153Radial†	6880.1	6472.5	4436.2	ug/L	4436.2	ppb	13:03:53
1	Ca 317.933Radial†	3391.0	3155.8	4605.9	ug/L	4605.9	ppb	13:04:13
1	Fe 238.204 Radial†	580.6	533.3	4793.9	ug/L	4793.9	ppb	13:04:13
1	K 766.490 Radial†	32130.2	27322.1	4575.4	ug/L	4575.4	ppb	13:03:53
1	Mg 279.077 IEC†	154.9	143.0	4815.3	ug/L	4815.3	ppb	13:04:13
1	Na 589.592 Radial†	31940.4	31438.2	9527.6	ug/L	9527.6	ppb	13:03:53
1	Sr 421.552†	82353.6	77051.8	464.68	ug/L	464.68	ppb	13:03:53
1	Sc 361.383	868304.2	868304.2	100.04	%			13:05:11
1	Y 371.029	718002.5	718002.5	98.430	%			13:05:11
1	Ag 328.068†	111566.0	111242.1	506.20	ug/L	506.20	ppb	13:05:16
1	As 188.979†	1272.4	1303.2	507.45	ug/L	507.45	ppb	13:05:36
1	B 249.677†	23032.5	23515.4	499.22	ug/L	499.22	ppb	13:05:16
1	Ba 233.527†	66943.7	66924.9	501.36	ug/L	501.36	ppb	13:05:16
1	Be 313.107†	1385036.2	1389079.4	499.76	ug/L	499.76	ppb	13:05:11
1	Cd 226.502†	48353.2	48530.5	503.16	ug/L	503.16	ppb	13:05:16
1	Co 228.616†	26620.9	26682.5	503.42	ug/L	503.42	ppb	13:05:16
1	Cr 267.716†	47781.5	47674.1	499.84	ug/L	499.84	ppb	13:05:16
1	Cu 324.752†	177423.8	170586.6	495.73	ug/L	495.73	ppb	13:05:16
1	Mn 257.610†	472521.3	471789.8	500.40	ug/L	500.40	ppb	13:05:11
1	Mo 202.031†	7896.7	7874.7	501.46	ug/L	501.46	ppb	13:05:36
1	Ni 231.604†	21927.6	21831.9	501.35	ug/L	501.35	ppb	13:05:16
1	P 214.914†	4708.4	4464.3	2417.8	ug/L	2417.8	ppb	13:05:36
1	Pb 220.353†	4390.4	4456.4	500.31	ug/L	500.31	ppb	13:05:36
1	S 181.975 Axial†	819.1	769.4	1015.6	ug/L	1015.6	ppb	13:05:36
1	Sb 206.836†	1637.0	1598.9	512.13	ug/L	512.13	ppb	13:05:36
1	Se 196.026†	868.5	894.9	520.39	ug/L	520.39	ppb	13:05:36
1	Si 251.611†	86739.6	86219.0	2556.1	ug/L	2556.1	ppb	13:05:16
1	Sn 189.927†	3142.3	3132.1	504.39	ug/L	504.39	ppb	13:05:36
1	Ti 334.940†	311670.3	312787.2	493.55	ug/L	493.55	ppb	13:05:16
1	Tl 190.801†	1745.1	1778.9	504.35	ug/L	504.35	ppb	13:05:36
1	U 409.014†	14952.8	17530.1	502.44	ug/L	502.44	ppb	13:05:16
1	V 292.402†	73449.6	74779.4	504.34	ug/L	504.34	ppb	13:05:16
1	Zn 213.857†	59419.1	58638.7	500.00	ug/L	500.00	ppb	13:05:16
1	SiO2†	86119.9	85556.9	5435.2	ug/L	5435.2	ppb	13:06:43
2	Sc Radial	5427.5	5427.5	97.3	%			13:04:18
2	Y RADIAL	5846.3	5846.3	96.81	%			13:04:18
2	Al 396.153Radial†	6976.9	7202.8	4939.2	ug/L	4939.2	ppb	13:04:18
2	Ca 317.933Radial†	3369.6	3444.7	5027.6	ug/L	5027.6	ppb	13:04:38
2	Fe 238.204 Radial†	578.6	584.5	5252.6	ug/L	5252.6	ppb	13:04:38
2	K 766.490 Radial†	32118.8	30256.5	5067.3	ug/L	5067.3	ppb	13:04:18
2	Mg 279.077 IEC†	152.0	154.3	5194.1	ug/L	5194.1	ppb	13:04:38
2	Na 589.592 Radial†	32122.3	34553.8	10472	ug/L	10472	ppb	13:04:18
2	Sr 421.552†	83110.6	85380.7	514.91	ug/L	514.91	ppb	13:04:18
2	Sc 361.383	868381.1	868381.1	100.05	%			13:05:42
2	Y 371.029	717381.1	717381.1	98.345	%			13:05:42
2	Ag 328.068†	112619.5	112285.1	511.08	ug/L	511.08	ppb	13:05:47
2	As 188.979†	1257.8	1288.4	501.86	ug/L	501.86	ppb	13:06:07
2	B 249.677†	23342.0	23822.7	505.69	ug/L	505.69	ppb	13:05:47
2	Ba 233.527†	67721.2	67696.0	507.15	ug/L	507.15	ppb	13:05:47
2	Be 313.107†	1385484.5	1389404.7	499.88	ug/L	499.88	ppb	13:05:42
2	Cd 226.502†	48926.1	49098.8	509.01	ug/L	509.01	ppb	13:05:47
2	Co 228.616†	26952.7	27011.7	509.61	ug/L	509.61	ppb	13:05:47
2	Cr 267.716†	48407.5	48295.6	506.36	ug/L	506.36	ppb	13:05:47
2	Cu 324.752†	178880.8	172027.1	499.94	ug/L	499.94	ppb	13:05:47
2	Mn 257.610†	474037.8	473263.6	502.01	ug/L	502.01	ppb	13:05:42
2	Mo 202.031†	7887.5	7864.8	500.86	ug/L	500.86	ppb	13:06:07
2	Ni 231.604†	22264.6	22166.7	509.04	ug/L	509.04	ppb	13:05:47

2	P 214.914†	4697.4	4452.8	2410.5 ug/L	2410.5 ppb	13:06:07
2	Pb 220.353†	4377.4	4443.0	498.88 ug/L	498.88 ppb	13:06:07
2	S 181.975 Axial†	810.4	760.6	1003.9 ug/L	1003.9 ppb	13:06:07
2	Sb 206.836†	1617.5	1579.2	505.76 ug/L	505.76 ppb	13:06:07
2	Se 196.026†	870.1	896.5	522.76 ug/L	522.76 ppb	13:06:07
2	Si 251.611†	87756.7	87227.9	2586.0 ug/L	2586.0 ppb	13:05:47
2	Sn 189.927†	3143.0	3132.5	504.51 ug/L	504.51 ppb	13:06:07
2	Ti 334.940†	314645.2	315732.8	498.22 ug/L	498.22 ppb	13:05:47
2	Tl 190.801†	1726.0	1759.6	498.92 ug/L	498.92 ppb	13:06:07
2	U 409.014†	14759.9	17336.0	496.78 ug/L	496.78 ppb	13:05:47
2	V 292.402†	74164.6	75487.6	508.96 ug/L	508.96 ppb	13:05:47
2	Zn 213.857†	60106.5	59320.4	505.75 ug/L	505.75 ppb	13:05:47
2	SiO2†	85989.9	85419.4	5426.1 ug/L	5426.1 ppb	13:06:48
3	Sc Radial	5434.7	5434.7	97.5 %		13:04:43
3	Y RADIAL	5906.3	5906.3	97.80 %		13:04:43
3	Al 396.153Radial†	6977.6	7194.0	4933.5 ug/L	4933.5 ppb	13:04:43
3	Ca 317.933Radial†	3381.9	3452.7	5039.3 ug/L	5039.3 ppb	13:05:03
3	Fe 238.204 Radial†	573.9	578.9	5202.1 ug/L	5202.1 ppb	13:05:03
3	K 766.490 Radial†	32398.3	30499.8	5108.1 ug/L	5108.1 ppb	13:04:43
3	Mg 279.077 IEC†	158.1	160.3	5397.0 ug/L	5397.0 ppb	13:05:03
3	Na 589.592 Radial†	32068.4	34455.0	10442 ug/L	10442 ppb	13:04:43
3	Sr 421.552†	83420.9	85586.6	516.15 ug/L	516.15 ppb	13:04:43
3	Sc 361.383	875985.1	875985.1	100.93 %		13:06:12
3	Y 371.029	723429.5	723429.5	99.174 %		13:06:12
3	Ag 328.068†	112126.0	110819.1	504.41 ug/L	504.41 ppb	13:06:18
3	As 188.979†	1252.0	1271.7	495.36 ug/L	495.36 ppb	13:06:38
3	B 249.677†	23210.9	23490.3	498.64 ug/L	498.64 ppb	13:06:18
3	Ba 233.527†	67343.9	66734.7	499.95 ug/L	499.95 ppb	13:06:18
3	Be 313.107†	1399333.1	1391105.5	500.48 ug/L	500.48 ppb	13:06:12
3	Cd 226.502†	48639.6	48390.5	501.67 ug/L	501.67 ppb	13:06:18
3	Co 228.616†	26704.2	26531.7	500.55 ug/L	500.55 ppb	13:06:18
3	Cr 267.716†	48090.7	47561.6	498.67 ug/L	498.67 ppb	13:06:18
3	Cu 324.752†	177858.7	169462.5	492.49 ug/L	492.49 ppb	13:06:18
3	Mn 257.610†	477719.8	472799.0	501.50 ug/L	501.50 ppb	13:06:12
3	Mo 202.031†	7834.2	7743.6	493.15 ug/L	493.15 ppb	13:06:38
3	Ni 231.604†	22095.0	21805.5	500.74 ug/L	500.74 ppb	13:06:18
3	P 214.914†	4653.0	4368.1	2364.3 ug/L	2364.3 ppb	13:06:38
3	Pb 220.353†	4359.3	4387.1	492.61 ug/L	492.61 ppb	13:06:38
3	S 181.975 Axial†	806.7	749.9	989.80 ug/L	989.80 ppb	13:06:38
3	Sb 206.836†	1607.0	1554.8	497.90 ug/L	497.90 ppb	13:06:38
3	Se 196.026†	864.5	883.3	515.16 ug/L	515.16 ppb	13:06:38
3	Si 251.611†	87004.1	85720.9	2541.3 ug/L	2541.3 ppb	13:06:18
3	Sn 189.927†	3112.4	3074.9	495.24 ug/L	495.24 ppb	13:06:38
3	Ti 334.940†	312623.4	310999.9	490.76 ug/L	490.76 ppb	13:06:18
3	Tl 190.801†	1725.5	1744.2	494.58 ug/L	494.58 ppb	13:06:38
3	U 409.014†	14588.3	17037.9	488.24 ug/L	488.24 ppb	13:06:18
3	V 292.402†	73779.3	74462.4	502.04 ug/L	502.04 ppb	13:06:18
3	Zn 213.857†	59657.7	58354.3	497.50 ug/L	497.50 ppb	13:06:18
3	SiO2†	86650.3	85327.7	5420.5 ug/L	5420.5 ppb	13:06:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870890.1	100.34	%	0.508				0.51%
Sc Radial	5607.2	101	%	5.5				5.44%
Y 371.029	719604.4	98.649	%	0.4561				0.46%
Y RADIAL	6062.2	100.4	%	5.35				5.33%
Ag 328.068†	111448.8	507.23	ug/L	3.451	507.23	ppb	3.451	0.68%
QC value within limits for Ag 328.068 Recovery = 101.45%								
Al 396.153Radial†	6956.4	4769.6	ug/L	288.77	4769.6	ppb	288.77	6.05%
QC value within limits for Al 396.153Radial Recovery = 95.39%								
As 188.979†	1287.8	501.56	ug/L	6.050	501.56	ppb	6.050	1.21%
QC value within limits for As 188.979 Recovery = 100.31%								
B 249.677†	23609.5	501.19	ug/L	3.915	501.19	ppb	3.915	0.78%
QC value within limits for B 249.677 Recovery = 100.24%								
Ba 233.527†	67118.5	502.82	ug/L	3.816	502.82	ppb	3.816	0.76%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1389863.2	500.04	ug/L	0.386	500.04	ppb	0.386	0.08%
QC value within limits for Be 313.107 Recovery = 100.01%								
Ca 317.933Radial†	3351.1	4890.9	ug/L	246.91	4890.9	ppb	246.91	5.05%

QC value within limits for Ca 317.933Radial Recovery = 97.82%

Cd 226.502†	48673.3	504.61 ug/L	3.883	504.61 ppb	3.883	0.77%

QC value within limits for Cd 226.502 Recovery = 100.92%

Co 228.616†	26741.9	504.53 ug/L	4.628	504.53 ppb	4.628	0.92%

QC value within limits for Co 228.616 Recovery = 100.91%

Cr 267.716†	47843.8	501.62 ug/L	4.145	501.62 ppb	4.145	0.83%

QC value within limits for Cr 267.716 Recovery = 100.32%

Cu 324.752†	170692.1	496.05 ug/L	3.736	496.05 ppb	3.736	0.75%

QC value within limits for Cu 324.752 Recovery = 99.21%

Fe 238.204 Radial†	565.6	5082.9 ug/L	251.53	5082.9 ppb	251.53	4.95%

QC value within limits for Fe 238.204 Radial Recovery = 101.66%

K 766.490 Radial†	29359.4	4916.9 ug/L	296.48	4916.9 ppb	296.48	6.03%

QC value within limits for K 766.490 Radial Recovery = 98.34%

Mg 279.077 IEC†	152.5	5135.5 ug/L	295.22	5135.5 ppb	295.22	5.75%

QC value within limits for Mg 279.077 IEC Recovery = 102.71%

Mn 257.610†	472617.5	501.30 ug/L	0.819	501.30 ppb	0.819	0.16%

QC value within limits for Mn 257.610 Recovery = 100.26%

Mo 202.031†	7827.7	498.49 ug/L	4.638	498.49 ppb	4.638	0.93%

QC value within limits for Mo 202.031 Recovery = 99.70%

Na 589.592 Radial†	33482.3	10147 ug/L	536.7	10147 ppb	536.7	5.29%

QC value within limits for Na 589.592 Radial Recovery = 101.47%

Ni 231.604†	21934.7	503.71 ug/L	4.624	503.71 ppb	4.624	0.92%

QC value within limits for Ni 231.604 Recovery = 100.74%

P 214.914†	4428.4	2397.5 ug/L	29.00	2397.5 ppb	29.00	1.21%

QC value within limits for P 214.914 Recovery = 95.90%

Pb 220.353†	4428.9	497.27 ug/L	4.095	497.27 ppb	4.095	0.82%

QC value within limits for Pb 220.353 Recovery = 99.45%

S 181.975 Axial†	760.0	1003.1 ug/L	12.91	1003.1 ppb	12.91	1.29%

QC value within limits for S 181.975 Axial Recovery = 100.31%

Sb 206.836†	1577.6	505.26 ug/L	7.131	505.26 ppb	7.131	1.41%

QC value within limits for Sb 206.836 Recovery = 101.05%

Se 196.026†	891.6	519.44 ug/L	3.887	519.44 ppb	3.887	0.75%

QC value within limits for Se 196.026 Recovery = 103.89%

Si 251.611†	86389.3	2561.1 ug/L	22.79	2561.1 ppb	22.79	0.89%

QC value within limits for Si 251.611 Recovery = 102.45%

Sn 189.927†	3113.2	501.38 ug/L	5.315	501.38 ppb	5.315	1.06%

QC value within limits for Sn 189.927 Recovery = 100.28%

Sr 421.552†	82673.1	498.58 ug/L	29.365	498.58 ppb	29.365	5.89%

QC value within limits for Sr 421.552 Recovery = 99.72%

Ti 334.940†	313173.3	494.18 ug/L	3.771	494.18 ppb	3.771	0.76%

QC value within limits for Ti 334.940 Recovery = 98.84%

Tl 190.801†	1760.9	499.28 ug/L	4.891	499.28 ppb	4.891	0.98%

QC value within limits for Tl 190.801 Recovery = 99.86%

U 409.014†	17301.3	495.82 ug/L	7.149	495.82 ppb	7.149	1.44%

QC value within limits for U 409.014 Recovery = 99.16%

V 292.402†	74909.8	505.11 ug/L	3.526	505.11 ppb	3.526	0.70%

QC value within limits for V 292.402 Recovery = 101.02%

Zn 213.857†	58771.1	501.08 ug/L	4.231	501.08 ppb	4.231	0.84%

QC value within limits for Zn 213.857 Recovery = 100.22%

SiO2†	85434.7	5427.3 ug/L	7.40	5427.3 ppb	7.40	0.14%

QC value within limits for SiO2 Recovery = 101.49%

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:09:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5692.7	5692.7	102	%			13:10:56
1	Y RADIAL	6161.1	6161.1	102.0	%			13:10:56
1	Al 396.153Radial†	-4.7	30.7	21.091	ug/L	21.091	ppb	13:10:56
1	Ca 317.933Radial†	14.8	-2.4	-3.5139	ug/L	-3.5139	ppb	13:11:16
1	Fe 238.204 Radial†	10.4	0.3	2.2803	ug/L	2.2803	ppb	13:11:16
1	K 766.490 Radial†	3060.7	258.3	43.330	ug/L	43.330	ppb	13:10:56
1	Mg 279.077 IEC†	1.8	-0.2	-5.6613	ug/L	-5.6613	ppb	13:11:16
1	Na 589.592 Radial†	-1535.5	50.2	15.210	ug/L	15.210	ppb	13:10:56
1	Sr 421.552†	-33.8	-32.9	-0.1981	ug/L	-0.1981	ppb	13:10:56
1	Sc 361.383	871003.4	871003.4	100.36	%			13:12:13
1	Y 371.029	732360.3	732360.3	100.40	%			13:12:13
1	Ag 328.068†	372.0	96.6	0.4413	ug/L	0.4413	ppb	13:12:13
1	As 188.979†	-24.9	6.5	2.4896	ug/L	2.4896	ppb	13:12:33
1	B 249.677†	-214.7	279.3	5.9514	ug/L	5.9514	ppb	13:12:33
1	Ba 233.527†	-16.6	-5.5	-0.0405	ug/L	-0.0405	ppb	13:12:33
1	Be 313.107†	-4604.9	74.1	0.0264	ug/L	0.0264	ppb	13:12:13
1	Cd 226.502†	-198.1	1.5	0.0154	ug/L	0.0154	ppb	13:12:33
1	Co 228.616†	-80.2	-6.4	-0.1176	ug/L	-0.1176	ppb	13:12:33
1	Cr 267.716†	77.2	-9.1	-0.0937	ug/L	-0.0937	ppb	13:12:33
1	Cu 324.752†	6713.5	-68.1	-0.1977	ug/L	-0.1977	ppb	13:12:13
1	Mn 257.610†	529.1	7.1	0.0078	ug/L	0.0078	ppb	13:12:33
1	Mo 202.031†	38.8	20.2	1.2860	ug/L	1.2860	ppb	13:12:33
1	Ni 231.604†	88.0	1.7	0.0399	ug/L	0.0399	ppb	13:12:33
1	P 214.914†	228.1	-14.7	-8.1756	ug/L	-8.1756	ppb	13:12:33
1	Pb 220.353†	-68.0	0.3	0.0364	ug/L	0.0364	ppb	13:12:33
1	S 181.975 Axial†	50.5	0.9	1.1638	ug/L	1.1638	ppb	13:12:33
1	Sb 206.836†	41.3	3.8	1.2370	ug/L	1.2370	ppb	13:12:33
1	Se 196.026†	-22.9	4.0	2.2601	ug/L	2.2601	ppb	13:12:33
1	Si 251.611†	525.7	42.1	1.2169	ug/L	1.2169	ppb	13:12:33
1	Sn 189.927†	10.7	1.8	0.2965	ug/L	0.2965	ppb	13:12:33
1	Ti 334.940†	-1314.7	-53.8	-0.0836	ug/L	-0.0836	ppb	13:12:13
1	Tl 190.801†	-30.7	3.9	1.1088	ug/L	1.1088	ppb	13:12:33
1	U 409.014†	-2705.0	-111.4	-3.2038	ug/L	-3.2038	ppb	13:12:13
1	V 292.402†	-1342.9	24.5	0.1751	ug/L	0.1751	ppb	13:12:13
1	Zn 213.857†	767.1	10.5	0.0901	ug/L	0.0901	ppb	13:12:33
1	SiO2†	529.1	2.8	0.0943	ug/L	0.0943	ppb	13:13:29
2	Sc Radial	5700.2	5700.2	102	%			13:11:21
2	Y RADIAL	6213.4	6213.4	102.9	%			13:11:21
2	Al 396.153Radial†	-10.8	24.8	17.055	ug/L	17.055	ppb	13:11:21
2	Ca 317.933Radial†	15.8	-1.5	-2.1535	ug/L	-2.1535	ppb	13:11:41
2	Fe 238.204 Radial†	9.2	-0.9	-7.6609	ug/L	-7.6609	ppb	13:11:41
2	K 766.490 Radial†	2798.1	-2.5	-0.4269	ug/L	-0.4269	ppb	13:11:21
2	Mg 279.077 IEC†	2.7	0.7	24.628	ug/L	24.628	ppb	13:11:41
2	Na 589.592 Radial†	-1529.9	57.6	17.451	ug/L	17.451	ppb	13:11:21
2	Sr 421.552†	-26.4	-25.6	-0.1543	ug/L	-0.1543	ppb	13:11:21
2	Sc 361.383	872038.6	872038.6	100.48	%			13:12:38
2	Y 371.029	733622.4	733622.4	100.57	%			13:12:38
2	Ag 328.068†	320.6	45.1	0.2030	ug/L	0.2030	ppb	13:12:38
2	As 188.979†	-22.8	8.6	3.2992	ug/L	3.2992	ppb	13:12:58
2	B 249.677†	-230.0	264.3	5.6346	ug/L	5.6346	ppb	13:12:58
2	Ba 233.527†	8.3	19.3	0.1443	ug/L	0.1443	ppb	13:12:58
2	Be 313.107†	-4567.0	117.2	0.0416	ug/L	0.0416	ppb	13:12:38
2	Cd 226.502†	-203.4	-3.5	-0.0359	ug/L	-0.0359	ppb	13:12:58
2	Co 228.616†	-81.0	-7.2	-0.1340	ug/L	-0.1340	ppb	13:12:58
2	Cr 267.716†	99.3	12.8	0.1348	ug/L	0.1348	ppb	13:12:58
2	Cu 324.752†	6802.2	12.2	0.0349	ug/L	0.0349	ppb	13:12:38
2	Mn 257.610†	510.0	-12.5	-0.0145	ug/L	-0.0145	ppb	13:12:58
2	Mo 202.031†	24.2	5.6	0.3573	ug/L	0.3573	ppb	13:12:58
2	Ni 231.604†	86.6	0.3	0.0063	ug/L	0.0063	ppb	13:12:58

2	P 214.914†	234.4	-8.7	-4.8677 ug/L	-4.8677 ppb	13:12:58
2	Pb 220.353†	-70.9	-2.5	-0.2794 ug/L	-0.2794 ppb	13:12:58
2	S 181.975 Axial†	55.4	5.8	7.6105 ug/L	7.6105 ppb	13:12:58
2	Sb 206.836†	44.5	6.9	2.1847 ug/L	2.1847 ppb	13:12:58
2	Se 196.026†	-23.7	3.2	1.7875 ug/L	1.7875 ppb	13:12:58
2	Si 251.611†	536.1	51.8	1.5376 ug/L	1.5376 ppb	13:12:58
2	Sn 189.927†	8.9	0.0	0.0028 ug/L	0.0028 ppb	13:12:58
2	Ti 334.940†	-1408.1	-145.2	-0.2288 ug/L	-0.2288 ppb	13:12:38
2	Tl 190.801†	-33.2	1.6	0.4399 ug/L	0.4399 ppb	13:12:58
2	U 409.014†	-2635.5	-39.1	-1.1224 ug/L	-1.1224 ppb	13:12:38
2	V 292.402†	-1352.5	16.7	0.1158 ug/L	0.1158 ppb	13:12:38
2	Zn 213.857†	763.5	6.0	0.0514 ug/L	0.0514 ppb	13:12:58
2	SiO2†	500.5	-26.3	-1.6927 ug/L	-1.6927 ppb	13:13:34
3	Sc Radial	5765.8	5765.8	103 %		13:11:46
3	Y RADIAL	6256.3	6256.3	103.6 %		13:11:46
3	Al 396.153Radial†	-22.4	13.7	9.4289 ug/L	9.4289 ppb	13:11:46
3	Ca 317.933Radial†	17.9	0.5	0.6607 ug/L	0.6607 ppb	13:12:06
3	Fe 238.204 Radial†	12.7	2.4	21.299 ug/L	21.299 ppb	13:12:06
3	K 766.490 Radial†	2860.1	26.2	4.3980 ug/L	4.3980 ppb	13:11:46
3	Mg 279.077 IEC†	-2.3	-4.1	-138.65 ug/L	-138.65 ppb	13:12:06
3	Na 589.592 Radial†	-1539.2	65.6	19.891 ug/L	19.891 ppb	13:11:46
3	Sr 421.552†	-2.4	-2.1	-0.0129 ug/L	-0.0129 ppb	13:11:46
3	Sc 361.383	872446.7	872446.7	100.52 %		13:13:03
3	Y 371.029	732965.3	732965.3	100.48 %		13:13:03
3	Ag 328.068†	318.3	42.6	0.2025 ug/L	0.2025 ppb	13:13:03
3	As 188.979†	-23.2	8.2	3.1715 ug/L	3.1715 ppb	13:13:23
3	B 249.677†	-263.8	230.8	4.9152 ug/L	4.9152 ppb	13:13:23
3	Ba 233.527†	-9.1	2.0	0.0155 ug/L	0.0155 ppb	13:13:23
3	Be 313.107†	-4495.3	190.6	0.0686 ug/L	0.0686 ppb	13:13:03
3	Cd 226.502†	-207.0	-6.9	-0.0741 ug/L	-0.0741 ppb	13:13:23
3	Co 228.616†	-74.5	-0.7	-0.0138 ug/L	-0.0138 ppb	13:13:23
3	Cr 267.716†	100.0	13.5	0.1427 ug/L	0.1427 ppb	13:13:23
3	Cu 324.752†	6737.6	-55.3	-0.1594 ug/L	-0.1594 ppb	13:13:03
3	Mn 257.610†	521.7	-1.1	0.0035 ug/L	0.0035 ppb	13:13:23
3	Mo 202.031†	19.5	0.9	0.0618 ug/L	0.0618 ppb	13:13:23
3	Ni 231.604†	86.5	0.1	0.0035 ug/L	0.0035 ppb	13:13:23
3	P 214.914†	237.5	-5.8	-3.2263 ug/L	-3.2263 ppb	13:13:23
3	Pb 220.353†	-64.6	3.7	0.4120 ug/L	0.4120 ppb	13:13:23
3	S 181.975 Axial†	48.2	-1.4	-1.9171 ug/L	-1.9171 ppb	13:13:23
3	Sb 206.836†	42.0	4.4	1.3982 ug/L	1.3982 ppb	13:13:23
3	Se 196.026†	-31.6	-4.6	-2.5419 ug/L	-2.5419 ppb	13:13:23
3	Si 251.611†	507.6	23.2	0.6874 ug/L	0.6874 ppb	13:13:23
3	Sn 189.927†	10.5	1.6	0.2586 ug/L	0.2586 ppb	13:13:23
3	Ti 334.940†	-1214.3	48.3	0.0781 ug/L	0.0781 ppb	13:13:03
3	Tl 190.801†	-37.5	-2.7	-0.7700 ug/L	-0.7700 ppb	13:13:23
3	U 409.014†	-2746.4	-148.2	-4.2625 ug/L	-4.2625 ppb	13:13:03
3	V 292.402†	-1394.8	-24.8	-0.1789 ug/L	-0.1789 ppb	13:13:03
3	Zn 213.857†	770.0	12.1	0.1071 ug/L	0.1071 ppb	13:13:23
3	SiO2†	529.8	2.6	0.1564 ug/L	0.1564 ppb	13:13:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871829.6	100.45	%	0.086				0.09%
Sc Radial	5719.6	103	%	0.7				0.70%
Y 371.029	732982.7	100.48	%	0.087				0.09%
Y RADIAL	6210.3	102.8	%	0.79				0.77%
Ag 328.068†	61.4	0.2823	ug/L	0.13775	0.2823	ppb	0.13775	48.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.1	15.858	ug/L	5.9224	15.858	ppb	5.9224	37.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.7	2.9868	ug/L	0.43527	2.9868	ppb	0.43527	14.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	258.1	5.5004	ug/L	0.53096	5.5004	ppb	0.53096	9.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.3	0.0398	ug/L	0.09476	0.0398	ppb	0.09476	238.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.3	0.0456	ug/L	0.02136	0.0456	ppb	0.02136	46.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.1	-1.6689	ug/L	2.12910	-1.6689	ppb	2.12910	127.57%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -3.0     -0.0315 ug/L       0.04492     -0.0315 ppb        0.04492 142.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -4.8     -0.0885 ug/L       0.06521     -0.0885 ppb        0.06521  73.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.7      0.0612 ug/L       0.13427      0.0612 ppb        0.13427 219.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -37.1     -0.1074 ug/L       0.12473     -0.1074 ppb        0.12473 116.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      5.3062 ug/L      14.71531      5.3062 ppb       14.71531 277.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          94.0      15.767 ug/L       23.9916      15.767 ppb        23.9916 152.16%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -39.896 ug/L       86.8579     -39.896 ppb        86.8579 217.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -2.2     -0.0011 ug/L       0.01184     -0.0011 ppb        0.01184 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.9      0.5684 ug/L       0.63883      0.5684 ppb        0.63883 112.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.8      17.517 ug/L        2.3410      17.517 ppb         2.3410  13.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.7      0.0165 ug/L       0.02025      0.0165 ppb        0.02025 122.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -9.8     -5.4232 ug/L       2.52099     -5.4232 ppb        2.52099  46.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.5      0.0564 ug/L       0.34614      0.0564 ppb        0.34614 614.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      2.2858 ug/L       4.86186      2.2858 ppb        4.86186 212.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.0      1.6066 ug/L       0.50705      1.6066 ppb        0.50705  31.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5019 ug/L       2.64660      0.5019 ppb        2.64660 527.33%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                39.0      1.1473 ug/L       0.42932      1.1473 ppb        0.42932  37.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.1860 ug/L       0.15974      0.1860 ppb        0.15974  85.89%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -20.2     -0.1218 ug/L       0.09679     -0.1218 ppb        0.09679  79.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -50.2     -0.0781 ug/L       0.15353     -0.0781 ppb        0.15353 196.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      0.2596 ug/L       0.95230      0.2596 ppb        0.95230 366.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -99.5     -2.8629 ug/L       1.59755     -2.8629 ppb        1.59755  55.80%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  5.5      0.0373 ug/L       0.18959      0.0373 ppb        0.18959 507.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.5      0.0829 ug/L       0.02853      0.0829 ppb        0.02853  34.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -7.0     -0.4806 ug/L       1.05009     -0.4806 ppb        1.05009 218.47%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, November 30, 2009 11:18:16
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1367
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5395.4	5395.419	120.784	2.2
	Mg	24.0	42997.0	42997.018	572.720	1.3
	Co	58.9	77073.0	77072.963	701.412	0.9
	Rh	102.9	138167.4	138167.357	744.527	0.5
	In	114.9	194228.7	194228.655	2720.554	1.4
	Pb	208.0	161213.0	161212.973	1206.377	0.7
⌈>	Ba	137.9	176680.9	176680.937	1795.539	1.0
⌊	Ba++	69.0	2059.5	0.012	0.000	1.5
⌈>	Ce	139.9	216810.1	216810.068	1002.787	0.5
⌊	CeO	155.9	5672.6	0.026	0.001	2.1
	Bkgd	220.0	9.6	9.600	2.485	25.9

Current Optimization File Data

Current Value	Description
0.81	Nebulizer Gas Flow
4.50	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	4.3	5232.6
Co	59	13	4.5	72500.5
In	115	13	5.0	171657.2

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	612	2050	0.637
Be	9.0	9.0	2062	2055	0.653
Mg	24.0	24.0	5687	2055	0.611
Mg	25.0	25.0	5951	2070	0.623
Mg	26.0	26.0	6175	2060	0.607
Co	58.9	58.9	14190	2085	0.623
Rh	102.9	102.9	24886	2140	0.637
In	114.9	114.9	27800	2170	0.625
Ce	139.9	139.9	33872	2190	0.609
Pb	206.0	206.0	49948	2265	0.632
Pb	207.0	207.0	50171	2250	0.634
Pb	208.0	208.0	50439	2255	0.662
U	238.1	238.0	57726	2260	0.721

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 01, 2009 01:40:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\Blank.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		189	
	Be	9		ug/L		14	
	B	11		ug/L		869	
	Na	23		ug/L		31368	
	Mg	24		ug/L		6668	
	Al	27		ug/L		8336	
	P	31		ug/L		7728	
	K	39		ug/L		652225	
	Ca	43		ug/L		166	
>	Sc	45		ug/L		966415	
	Ti	47		ug/L		373	
	V	51		ug/L		-4150	
	Cr	52		ug/L		-56	
	Cr	53		ug/L		60459	
	Mn	55		ug/L		2766	
	Fe	57		ug/L		5553	
	Co	59		ug/L		172	
	Ni	60		ug/L		100	
	Cu	63		ug/L		237	
	Cu	65		ug/L		75	
	Zn	66		ug/L		202	
	Zn	67		ug/L		7286	
	Zn	68		ug/L		1172	
>	Ge	74		ug/L		305972	
	As	75		ug/L		-353	
	Se	77		ug/L		3368	
	Se	82		ug/L		-44	
	Kr	83		ug/L		101	
	Sr	88		ug/L		207	
	Y	89		ug/L		98	
	Mo	98		ug/L		108	
	Ag	107		ug/L		69	
	Cd	111		ug/L		31	
	Cd	114		ug/L		53	
>	In	115		ug/L		189548	
	Sn	120		ug/L		377	
	Sb	121		ug/L		600	
	Sb	123		ug/L		462	
	Ba	135		ug/L		48	
	Ba	137		ug/L		83	
	Ho	165		ug/L		31	
>	Lu	175		ug/L		293289	
	Tl	205		ug/L		606	
	Pb	208		ug/L		776	
	Bi	209		ug/L		195	
	Th	232		ug/L		2314	
	U	238		ug/L		496	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 01, 2009 01:46:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\Standard 1.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.568	23286	0.024
	Be	9	10.000	ug/L	2.545	4851	0.005
	B	11	20.000	ug/L	3.304	9989	0.009
	Na	23	1000.000	ug/L	6.776	4264054	4.335
	Mg	24	1000.000	ug/L	6.216	3247574	3.320
	Al	27	1000.000	ug/L	1.380	3538593	3.616
	P	31	1000.000	ug/L	2.243	225651	0.223
	K	39	1000.000	ug/L	3.228	5389860	4.845
	Ca	43	1000.000	ug/L	0.458	12395	0.013
>	Sc	45		ug/L		976314	976314.089
	Ti	47	10.000	ug/L	3.395	5902	0.006
	V	51	10.000	ug/L	3.357	52658	0.058
	Cr	52	10.000	ug/L	0.682	43168	0.044
	Cr	53		ug/L		65576	0.005
	Mn	55	10.000	ug/L	2.547	79614	0.079
	Fe	57	1000.000	ug/L	3.069	161683	0.160
	Co	59	10.000	ug/L	2.648	56897	0.058
	Ni	60	10.000	ug/L	3.355	11769	0.012
	Cu	63		ug/L		26899	0.027
	Cu	65	10.000	ug/L	1.878	12538	0.013
	Zn	66	10.000	ug/L	1.461	8982	0.029
	Zn	67		ug/L		8633	0.004
	Zn	68		ug/L		7356	0.020
>	Ge	74		ug/L		306895	306894.573
	As	75	10.000	ug/L	2.305	9000	0.030
	Se	77		ug/L		4171	0.003
	Se	82	10.000	ug/L	7.311	833	0.003
	Kr	83		ug/L		102	0.000
	Sr	88	10.000	ug/L	1.294	102843	0.532
	Y	89		ug/L		101	0.000
	Mo	98	10.000	ug/L	2.593	24868	0.128
	Ag	107	10.000	ug/L	0.142	43697	0.226
	Cd	111	10.000	ug/L	1.503	11004	0.057
	Cd	114		ug/L		25700	0.133
>	In	115		ug/L		192748	192748.481
	Sn	120	10.000	ug/L	1.231	43760	0.225
	Sb	121	10.000	ug/L	9.977	32943	0.168
	Sb	123		ug/L		25108	0.128
	Ba	135		ug/L		10842	0.037
	Ba	137	10.000	ug/L	1.365	19007	0.065
	Ho	165		ug/L		30	-0.000
>	Lu	175		ug/L		293110	293110.161
	Tl	205	10.000	ug/L	1.606	141152	0.479
	Pb	208	10.000	ug/L	1.481	199971	0.680
	Bi	209		ug/L		201	0.000
	Th	232	10.000	ug/L	2.342	235824	0.797
	U	238	10.000	ug/L	1.844	251405	0.856

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 01, 2009 01:52:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\Standard 2.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.978**	**ug/L**	0.754	220436	0.231
	Be	9	**99.995**	**ug/L**	0.830	46944	0.049
	B	11	**200.041**	**ug/L**	2.005	91606	0.095
	Na	23	**10008.955**	**ug/L**	6.119	45406538	47.656
	Mg	24	**10005.114**	**ug/L**	7.969	33316041	35.003
	Al	27	**10012.701**	**ug/L**	6.866	39498563	41.477
	P	31	**9989.994**	**ug/L**	1.261	1937194	2.027
	K	39	**10004.975**	**ug/L**	4.036	49203139	51.015
	Ca	43	**9998.840**	**ug/L**	1.171	118035	0.124
>	Sc	45		**ug/L**		952185	952184.638
	Ti	47	**100.011**	**ug/L**	0.748	54862	0.057
	V	51	**99.950**	**ug/L**	1.986	523668	0.554
	Cr	52	**99.962**	**ug/L**	1.710	406037	0.427
	Cr	53		**ug/L**		110476	0.053
	Mn	55	**99.952**	**ug/L**	0.865	717706	0.751
	Fe	57	**9988.864**	**ug/L**	0.566	1373975	1.437
	Co	59	**99.954**	**ug/L**	1.588	528761	0.555
	Ni	60	**99.986**	**ug/L**	1.243	112309	0.118
	Cu	63		**ug/L**		255679	0.268
	Cu	65	**99.986**	**ug/L**	0.493	119879	0.126
	Zn	66	**100.005**	**ug/L**	1.497	85162	0.288
	Zn	67		**ug/L**		20634	0.046
	Zn	68		**ug/L**		60011	0.199
>	Ge	74		**ug/L**		295537	295537.143
	As	75	**99.963**	**ug/L**	2.166	86505	0.294
	Se	77		**ug/L**		10536	0.025
	Se	82	**100.049**	**ug/L**	2.261	8845	0.030
	Kr	83		**ug/L**		122	0.000
	Sr	88	**99.972**	**ug/L**	1.932	953172	5.181
	Y	89		**ug/L**		154	0.000
	Mo	98	**100.008**	**ug/L**	1.761	238331	1.295
	Ag	107	**99.967**	**ug/L**	2.330	403158	2.191
	Cd	111	**99.999**	**ug/L**	1.258	104672	0.569
	Cd	114		**ug/L**		242305	1.317
>	In	115		**ug/L**		183969	183968.877
	Sn	120	**99.987**	**ug/L**	0.489	409173	2.222
	Sb	121	**100.049**	**ug/L**	7.404	325337	1.765
	Sb	123		**ug/L**		253819	1.377
	Ba	135		**ug/L**		104700	0.372
	Ba	137	**100.002**	**ug/L**	2.054	182236	0.647
	Ho	165		**ug/L**		29	-0.000
>	Lu	175		**ug/L**		281487	281486.855
	Tl	205	**99.895**	**ug/L**	1.650	1220580	4.335
	Pb	208	**99.941**	**ug/L**	1.921	1805171	6.412
	Bi	209		**ug/L**		311	0.000
	Th	232	**99.855**	**ug/L**	0.813	1957695	6.948
	U	238	**99.789**	**ug/L**	2.049	1985750	7.054

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 01, 2009 01:58:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 1.152

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.267**	**ug/L**	0.949	110795	0.116
	Be	9	**51.461**	**ug/L**	0.186	24136	0.025
	B	11	**107.277**	**ug/L**	3.113	49463	0.051
	Na	23	**5209.883**	**ug/L**	2.572	23623672	24.806
	Mg	24	**4661.247**	**ug/L**	6.280	15511196	16.308
	Al	27	**4559.273**	**ug/L**	3.796	17967857	18.887
	P	31	**5260.089**	**ug/L**	2.689	1022359	1.067
	K	39	**5177.878**	**ug/L**	9.636	25747879	26.402
	Ca	43	**4942.223**	**ug/L**	0.534	58357	0.061
>	Sc	45		**ug/L**		951040	951039.703
	Ti	47	**49.112**	**ug/L**	0.901	27095	0.028
	V	51	**51.710**	**ug/L**	3.441	268612	0.287
	Cr	52	**52.638**	**ug/L**	1.655	213535	0.225
	Cr	53		**ug/L**		88397	0.030
	Mn	55	**52.901**	**ug/L**	1.087	380665	0.397
	Fe	57	**5251.471**	**ug/L**	0.781	724068	0.756
	Co	59	**50.387**	**ug/L**	1.934	266320	0.280
	Ni	60	**50.288**	**ug/L**	0.842	56470	0.059
	Cu	63		**ug/L**		132811	0.139
	Cu	65	**51.786**	**ug/L**	0.686	62054	0.065
	Zn	66	**50.483**	**ug/L**	1.363	43171	0.145
	Zn	67		**ug/L**		14112	0.024
	Zn	68		**ug/L**		31128	0.101
>	Ge	74		**ug/L**		296108	296108.330
	As	75	**48.656**	**ug/L**	1.978	42014	0.143
	Se	77		**ug/L**		7373	0.014
	Se	82	**49.925**	**ug/L**	0.664	4401	0.015
	Kr	83		**ug/L**		108	0.000
	Sr	88	**50.326**	**ug/L**	0.180	483308	2.608
	Y	89		**ug/L**		95	-0.000
	Mo	98	**49.863**	**ug/L**	1.509	119715	0.646
	Ag	107	**51.316**	**ug/L**	0.757	208454	1.125
	Cd	111	**50.013**	**ug/L**	0.187	52732	0.284
	Cd	114		**ug/L**		121904	0.658
>	In	115		**ug/L**		185243	185243.227
	Sn	120	**50.856**	**ug/L**	1.973	209733	1.130
	Sb	121	**51.518**	**ug/L**	6.210	168905	0.909
	Sb	123		**ug/L**		130339	0.701
	Ba	135		**ug/L**		52124	0.183
	Ba	137	**49.807**	**ug/L**	2.081	91876	0.322
	Ho	165		**ug/L**		59	0.000
>	Lu	175		**ug/L**		284779	284778.867
	Tl	205	**50.581**	**ug/L**	1.358	625675	2.195
	Pb	208	**51.932**	**ug/L**	2.074	949415	3.332
	Bi	209		**ug/L**		231	0.000
	Th	232	**55.015**	**ug/L**	0.605	1092258	3.828
	U	238	**57.277**	**ug/L**	2.432	1153386	4.049

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.534				
	Be	9	102.921				
	B	11	107.277				
	Na	23	104.198				
	Mg	24	93.225				
	Al	27	90.283				
	P	31	105.202				
	K	39	103.558				
	Ca	43	98.844				
>	Sc	45		98.4			
	Ti	47	98.225				
	V	51	103.419				
	Cr	52	105.276				
	Cr	53					
	Mn	55	105.802				
	Fe	57	105.029				
	Co	59	100.774				
	Ni	60	100.576				
	Cu	63					
	Cu	65	103.573				
	Zn	66	100.965				
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75	97.311				
	Se	77					
	Se	82	99.851				
	Kr	83					
	Sr	88	100.653				
	Y	89					
	Mo	98	99.725				
	Ag	107	102.633				
	Cd	111	100.026				
	Cd	114					
>	In	115		97.7			
	Sn	120	101.711				
	Sb	121	103.037				
	Sb	123					
	Ba	135					
	Ba	137	99.614				
	Ho	165					
>	Lu	175		97.1			
	Tl	205	101.163				
	Pb	208	103.864				
	Bi	209					
	Th	232	110.029				
	U	238	114.554				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Th	232	ICV is out of limits (+/- 10%)
QC Std 1	U	238	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 01, 2009 02:04:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 2.153

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.018**	**ug/L**	36.705	231	0.000
	Be	9	**0.009**	**ug/L**	91.589	18	0.000
	B	11	**4.248**	**ug/L**	17.186	2827	0.002
	Na	23	**0.204**	**ug/L**	114.737	32370	0.001
	Mg	24	**2.635**	**ug/L**	88.435	15677	0.009
	Al	27	**1.992**	**ug/L**	37.349	16343	0.008
	P	31	**1.264**	**ug/L**	115.774	7989	0.000
	K	39	**-1.901**	**ug/L**	378.618	644250	-0.010
	Ca	43	**3.743**	**ug/L**	56.933	211	0.000
>	Sc	45		**ug/L**		968009	968009.115
	Ti	47	**0.100**	**ug/L**	24.099	429	0.000
	V	51	**-0.208**	**ug/L**	269.502	-5301	-0.001
	Cr	52	**0.033**	**ug/L**	40.894	78	0.000
	Cr	53		**ug/L**		61604	0.001
	Mn	55	**-0.087**	**ug/L**	8.740	2138	-0.001
	Fe	57	**1.648**	**ug/L**	60.698	5793	0.000
	Co	59	**0.016**	**ug/L**	51.981	260	0.000
	Ni	60	**0.000**	**ug/L**	8661.368	100	0.000
	Cu	63		**ug/L**		320	0.000
	Cu	65	**0.010**	**ug/L**	42.198	88	0.000
	Zn	66	**0.021**	**ug/L**	36.496	218	0.000
	Zn	67		**ug/L**		7087	-0.000
	Zn	68		**ug/L**		1148	-0.000
>	Ge	74		**ug/L**		303224	303224.314
	As	75	**0.481**	**ug/L**	34.159	80	0.001
	Se	77		**ug/L**		3685	0.001
	Se	82	**0.201**	**ug/L**	57.341	-25	0.000
	Kr	83		**ug/L**		100	-0.000
	Sr	88	**0.011**	**ug/L**	32.904	318	0.001
	Y	89		**ug/L**		91	-0.000
	Mo	98	**0.082**	**ug/L**	34.440	308	0.001
	Ag	107	**0.012**	**ug/L**	33.318	118	0.000
	Cd	111	**0.011**	**ug/L**	28.160	43	0.000
	Cd	114		**ug/L**		83	0.000
>	In	115		**ug/L**		188839	188839.204
	Sn	120	**0.374**	**ug/L**	15.115	1942	0.008
	Sb	121	**1.371**	**ug/L**	22.841	5157	0.024
	Sb	123		**ug/L**		4032	0.019
	Ba	135		**ug/L**		60	0.000
	Ba	137	**0.009**	**ug/L**	45.110	99	0.000
	Ho	165		**ug/L**		30	-0.000
>	Lu	175		**ug/L**		287812	287811.527
	Tl	205	**0.151**	**ug/L**	15.235	2478	0.007
	Pb	208	**0.011**	**ug/L**	50.526	964	0.001
	Bi	209		**ug/L**		178	-0.000
	Th	232	**0.581**	**ug/L**	21.892	13905	0.040
	U	238	**0.030**	**ug/L**	19.507	1093	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
.	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 01, 2009 02:10:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 3.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.063**	ug/L	1.143	24835	0.026
	Be	9	**0.531**	ug/L	1.188	266	0.000
	B	11	**17.645**	ug/L	1.980	8962	0.008
	Na	23	**250.092**	ug/L	7.636	1177779	1.191
	Mg	24	**15.873**	ug/L	14.828	60128	0.056
	Al	27	**36.408**	ug/L	24.485	153516	0.151
	P	31	**56.526**	ug/L	2.900	18743	0.011
	K	39	**296.536**	ug/L	8.260	2105644	1.512
	Ca	43	**213.907**	ug/L	1.948	2716	0.003
>	Sc	45		ug/L		962927	962927.013
	Ti	47	**8.256**	ug/L	0.934	4921	0.005
	V	51	**11.260**	ug/L	2.974	55995	0.062
	Cr	52	**10.851**	ug/L	3.260	44526	0.046
	Cr	53		ug/L		66259	0.006
	Mn	55	**5.704**	ug/L	2.630	44014	0.043
	Fe	57	**116.849**	ug/L	3.081	21723	0.017
	Co	59	**1.076**	ug/L	2.941	5926	0.006
	Ni	60	**2.156**	ug/L	1.958	2546	0.003
	Cu	63		ug/L		3201	0.003
	Cu	65	**1.098**	ug/L	3.998	1405	0.001
	Zn	66	**10.754**	ug/L	2.405	9590	0.031
	Zn	67		ug/L		8763	0.005
	Zn	68		ug/L		7596	0.021
>	Ge	74		ug/L		303749	303748.544
	As	75	**5.841**	ug/L	6.442	4868	0.017
	Se	77		ug/L		3942	0.002
	Se	82	**5.475**	ug/L	3.700	457	0.002
	Kr	83		ug/L		97	-0.000
	Sr	88	**11.315**	ug/L	1.659	110425	0.586
	Y	89		ug/L		81	-0.000
	Mo	98	**0.521**	ug/L	1.462	1374	0.007
	Ag	107	**1.056**	ug/L	1.785	4418	0.023
	Cd	111	**1.069**	ug/L	2.617	1174	0.006
	Cd	114		ug/L		2697	0.014
>	In	115		ug/L		187979	187979.099
	Sn	120	**5.341**	ug/L	2.304	22686	0.119
	Sb	121	**3.193**	ug/L	7.653	11178	0.056
	Sb	123		ug/L		8574	0.043
	Ba	135		ug/L		2213	0.008
	Ba	137	**2.070**	ug/L	2.097	3945	0.013
	Ho	165		ug/L		30	-0.000
>	Lu	175		ug/L		288309	288308.809
	Tl	205	**1.166**	ug/L	2.341	15184	0.051
	Pb	208	**2.211**	ug/L	0.882	41652	0.142
	Bi	209		ug/L		174	-0.000
	Th	232	**1.348**	ug/L	1.575	29310	0.094
	U	238	**0.249**	ug/L	3.672	5565	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.630				
	Be	9	106.213				
	B	11	117.631				
	Na	23	100.037				
	Mg	24	105.823				
	Al	27	121.361				
	P	31	113.051				
	K	39	98.845				
	Ca	43	106.953				
>	Sc	45		99.6			
	Ti	47	82.561				
	V	51	112.602				
	Cr	52	108.511				
	Cr	53					
	Mn	55	114.080				
	Fe	57	116.849				
	Co	59	107.589				
	Ni	60	107.789				
	Cu	63					
	Cu	65	109.792				
	Zn	66	107.539				
	Zn	67					
	Zn	68					
>	Ge	74		99.3			
	As	75	116.816				
	Se	77					
	Se	82	109.510				
	Kr	83					
	Sr	88	113.154				
	Y	89					
	Mo	98	104.111				
	Ag	107	105.570				
	Cd	111	106.905				
	Cd	114					
>	In	115		99.2			
	Sn	120	106.822				
	Sb	121	106.434				
	Sb	123					
	Ba	135					
	Ba	137	103.524				
	Ho	165					
>	Lu	175		98.3			
	Tl	205	116.620				
	Pb	208	110.541				
	Bi	209					
	Th	232	134.798				
	U	238	124.594				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 01, 2009 02:16:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 4.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.139**	**ug/L**	10.112	427	0.000
	Be	9	**0.046**	**ug/L**	25.014	31	0.000
	B	11	**1.830**	**ug/L**	11.441	1465	0.001
	Na	23	**97383.353**	**ug/L**	4.392	383347766	463.673
	Mg	24	**96485.152**	**ug/L**	3.862	279042987	337.557
	Al	27	**90628.619**	**ug/L**	6.307	310296567	375.427
	P	31	**103538.510**	**ug/L**	2.374	17371594	21.005
	K	39	**103774.050**	**ug/L**	1.409	438066660	529.140
	Ca	43	**92680.651**	**ug/L**	2.002	948805	1.148
>	Sc	45		**ug/L**		826823	826823.035
	Ti	47	**1403.523**	**ug/L**	1.636	664332	0.803
	V	51	**0.183**	**ug/L**	219.505	-2702	0.001
	Cr	52	**2.225**	**ug/L**	3.199	7804	0.009
	Cr	53		**ug/L**		54332	0.003
	Mn	55	**5.851**	**ug/L**	2.249	38700	0.044
	Fe	57	**108296.302**	**ug/L**	0.928	12888024	15.583
	Co	59	**0.431**	**ug/L**	4.499	2128	0.002
	Ni	60	**3.489**	**ug/L**	1.625	3485	0.004
	Cu	63		**ug/L**		9534	0.011
	Cu	65	**6.785**	**ug/L**	2.245	7124	0.009
	Zn	66	**4.869**	**ug/L**	4.915	3686	0.014
	Zn	67		**ug/L**		6855	0.003
	Zn	68		**ug/L**		1478	0.002
>	Ge	74		**ug/L**		251473	251473.288
	As	75	**-0.130**	**ug/L**	265.358	-386	-0.000
	Se	77		**ug/L**		5587	0.011
	Se	82	**-1.236**	**ug/L**	14.236	-130	-0.000
	Kr	83		**ug/L**		253	0.001
	Sr	88	**1.252**	**ug/L**	2.231	10616	0.065
	Y	89		**ug/L**		356	0.002
	Mo	98	**1920.808**	**ug/L**	1.717	4002121	24.874
	Ag	107	**0.069**	**ug/L**	4.405	300	0.002
	Cd	111	**0.452**	**ug/L**	16.525	440	0.003
	Cd	114		**ug/L**		7468	0.046
>	In	115		**ug/L**		160909	160908.635
	Sn	120	**0.280**	**ug/L**	5.847	1322	0.006
	Sb	121	**0.403**	**ug/L**	24.538	1652	0.007
	Sb	123		**ug/L**		1282	0.006
	Ba	135		**ug/L**		714	0.003
	Ba	137	**0.721**	**ug/L**	2.096	1233	0.005
	Ho	165		**ug/L**		633	0.002
>	Lu	175		**ug/L**		249211	249211.428
	Tl	205	**0.028**	**ug/L**	7.527	814	0.001
	Pb	208	**0.182**	**ug/L**	1.901	3563	0.012
	Bi	209		**ug/L**		684	0.002
	Th	232	**0.493**	**ug/L**	32.452	10523	0.034
	U	238	**-0.001**	**ug/L**	105.427	409	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	97.383				
	Mg	24	96.485				
	Al	27	90.629				
	P	31	103.539				
	K	39	103.774				
	Ca	43	92.681				
>	Sc	45		85.6			
	Ti	47	70.176				
	V	51					
	Cr	52	60.141				
	Cr	53					
	Mn	55	100.875				
	Fe	57	108.296				
	Co	59	172.467				
	Ni	60	129.227				
	Cu	63					
	Cu	65	233.959				
	Zn	66	135.250				
	Zn	67					
	Zn	68					
>	Ge	74		82.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	104.342				
	Y	89					
	Mo	98	96.040				
	Ag	107					
	Cd	111	113.107				
	Cd	114					
>	In	115		84.9			
	Sn	120					
	Sb	121	402.805				
	Sb	123					
	Ba	135					
	Ba	137	107.566				
	Ho	165					
>	Lu	175		85.0			
	Tl	205					
	Pb	208	90.824				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 01, 2009 02:22:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 5.156

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.290**	ug/L	1.312	40804	0.049
	Be	9	**20.241**	ug/L	1.701	8244	0.010
	B	11	**21.013**	ug/L	0.725	9004	0.010
	Na	23	**98622.107**	ug/L	1.323	387489579	469.571
	Mg	24	**97486.139**	ug/L	5.829	281410625	341.059
	Al	27	**93311.594**	ug/L	3.943	318920708	386.541
	P	31	**103320.538**	ug/L	1.245	17301592	20.961
	K	39	**101667.693**	ug/L	4.040	428367117	518.400
	Ca	43	**92944.801**	ug/L	1.631	949686	1.151
>	Sc	45		ug/L		825153	825152.937
	Ti	47	**1407.314**	ug/L	0.835	664845	0.805
	V	51	**21.694**	ug/L	0.891	95731	0.120
	Cr	52	**23.105**	ug/L	1.319	81299	0.099
	Cr	53		ug/L		61069	0.011
	Mn	55	**26.604**	ug/L	0.677	167268	0.200
	Fe	57	**108137.356**	ug/L	1.150	12843619	15.560
	Co	59	**20.460**	ug/L	1.417	93918	0.114
	Ni	60	**22.804**	ug/L	3.626	22262	0.027
	Cu	63		ug/L		52030	0.063
	Cu	65	**26.116**	ug/L	1.037	27183	0.033
	Zn	66	**24.580**	ug/L	0.924	18038	0.071
	Zn	67		ug/L		9028	0.012
	Zn	68		ug/L		11345	0.041
>	Ge	74		ug/L		252867	252867.202
	As	75	**21.404**	ug/L	2.228	15622	0.063
	Se	77		ug/L		6455	0.015
	Se	82	**20.377**	ug/L	5.110	1513	0.006
	Kr	83		ug/L		241	0.001
	Sr	88	**23.688**	ug/L	1.191	198718	1.228
	Y	89		ug/L		356	0.002
	Mo	98	**1935.508**	ug/L	0.432	4054037	25.064
	Ag	107	**19.302**	ug/L	2.254	68489	0.423
	Cd	111	**20.107**	ug/L	1.998	18524	0.114
	Cd	114		ug/L		49727	0.307
>	In	115		ug/L		161746	161746.357
	Sn	120	**20.695**	ug/L	0.805	74711	0.460
	Sb	121	**23.455**	ug/L	1.323	67430	0.414
	Sb	123		ug/L		51731	0.317
	Ba	135		ug/L		19606	0.079
	Ba	137	**21.284**	ug/L	1.131	34373	0.138
	Ho	165		ug/L		666	0.003
>	Lu	175		ug/L		249009	249009.318
	Tl	205	**21.306**	ug/L	1.672	230752	0.925
	Pb	208	**21.164**	ug/L	0.756	338741	1.358
	Bi	209		ug/L		958	0.003
	Th	232	**24.194**	ug/L	0.982	421135	1.683
	U	238	**24.955**	ug/L	0.711	439710	1.764

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	106.450				
	Be	9	101.205				
	B	11	105.064				
	Na	23	98.622				
	Mg	24	97.486				
	Al	27	93.312				
	P	31	103.321				
	K	39	101.668				
	Ca	43	92.945				
>	Sc	45		85.4			
	Ti	47	70.366				
	V	51	108.470				
	Cr	52	97.489				
	Cr	53					
	Mn	55	103.118				
	Fe	57	108.137				
	Co	59	101.037				
	Ni	60	100.458				
	Cu	63					
	Cu	65	114.043				
	Zn	66	104.153				
	Zn	67					
	Zn	68					
>	Ge	74		82.6			
	As	75	107.020				
	Se	77					
	Se	82	101.884				
	Kr	83					
	Sr	88	111.734				
	Y	89					
	Mo	98	96.775				
	Ag	107	96.508				
	Cd	111	98.566				
	Cd	114					
>	In	115		85.3			
	Sn	120	103.473				
	Sb	121	116.691				
	Sb	123					
	Ba	135					
	Ba	137	102.970				
	Ho	165					
>	Lu	175		84.9			
	Tl	205	106.532				
	Pb	208	104.771				
	Bi	209					
	Th	232	120.969				
	U	238	124.776				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	Th	232	ICSAB is out of limits
QC Std 5	U	238	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 01, 2009 02:29:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 6.157

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	49.724	ug/L	1.437	111497	0.115
	Be	9	49.559	ug/L	2.261	23647	0.024
	B	11	98.867	ug/L	2.397	46451	0.047
	Na	23	4751.399	ug/L	13.237	21936267	22.623
	Mg	24	4521.264	ug/L	0.855	15313012	15.818
	Al	27	4902.141	ug/L	9.552	19671125	20.307
	P	31	5087.543	ug/L	1.880	1006334	1.032
	K	39	5302.626	ug/L	6.011	26806011	27.038
	Ca	43	4837.638	ug/L	0.529	58122	0.060
>	Sc	45		ug/L		967625	967625.202
	Ti	47	51.326	ug/L	2.038	28791	0.029
	V	51	51.284	ug/L	2.509	270996	0.284
	Cr	52	51.383	ug/L	1.793	212074	0.219
	Cr	53		ug/L		86697	0.027
	Mn	55	51.729	ug/L	1.958	378719	0.389
	Fe	57	5190.051	ug/L	2.949	728023	0.747
	Co	59	49.629	ug/L	1.283	266891	0.276
	Ni	60	49.296	ug/L	1.370	56323	0.058
	Cu	63		ug/L		131949	0.136
	Cu	65	51.130	ug/L	0.671	62333	0.064
	Zn	66	49.633	ug/L	3.167	43393	0.143
	Zn	67		ug/L		14016	0.022
	Zn	68		ug/L		31303	0.100
>	Ge	74		ug/L		302777	302777.044
	As	75	47.372	ug/L	3.789	41810	0.139
	Se	77		ug/L		7189	0.013
	Se	82	49.672	ug/L	1.478	4477	0.015
	Kr	83		ug/L		74	-0.000
	Sr	88	49.587	ug/L	1.309	486072	2.570
	Y	89		ug/L		199	0.001
	Mo	98	48.955	ug/L	1.674	119974	0.634
	Ag	107	50.125	ug/L	1.394	207828	1.099
	Cd	111	49.091	ug/L	2.028	52827	0.279
	Cd	114		ug/L		122719	0.649
>	In	115		ug/L		189103	189102.826
	Sn	120	49.485	ug/L	0.184	208357	1.100
	Sb	121	49.169	ug/L	6.159	164703	0.867
	Sb	123		ug/L		126444	0.666
	Ba	135		ug/L		52110	0.181
	Ba	137	49.287	ug/L	1.845	91711	0.319
	Ho	165		ug/L		63	0.000
>	Lu	175		ug/L		287275	287275.264
	Tl	205	49.237	ug/L	1.014	614345	2.137
	Pb	208	51.009	ug/L	1.021	940777	3.273
	Bi	209		ug/L		239	0.000
	Th	232	54.260	ug/L	1.482	1086788	3.775
	U	238	56.296	ug/L	1.841	1143585	3.980

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	99.449				
	Be	9	99.117				
	B	11	98.867				
	Na	23	95.028				
	Mg	24	90.425				
	Al	27	97.072				
	P	31	101.751				
	K	39	106.053				
	Ca	43	96.753				
>	Sc	45		100.1			
	Ti	47	102.652				
	V	51	102.567				
	Cr	52	102.766				
	Cr	53					
	Mn	55	103.457				
	Fe	57	103.801				
	Co	59	99.257				
	Ni	60	98.591				
	Cu	63					
	Cu	65	102.260				
	Zn	66	99.266				
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75	94.744				
	Se	77					
	Se	82	99.344				
	Kr	83					
	Sr	88	99.174				
	Y	89					
	Mo	98	97.909				
	Ag	107	100.251				
	Cd	111	98.181				
	Cd	114					
>	In	115		99.8			
	Sn	120	98.971				
	Sb	121	98.339				
	Sb	123					
	Ba	135					
	Ba	137	98.575				
	Ho	165					
>	Lu	175		97.9			
	Tl	205	98.473				
	Pb	208	102.018				
	Bi	209					
	Th	232	108.521				
	U	238	112.592				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 01, 2009 02:35:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 7.158

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.062	ug/L	5.041	330	0.000
	Be	9	0.006	ug/L	159.759	17	0.000
	B	11	2.535	ug/L	19.083	2054	0.001
	Na	23	5.796	ug/L	67.204	58460	0.028
	Mg	24	4.402	ug/L	63.495	21685	0.015
	Al	27	1.717	ug/L	71.191	15342	0.007
	P	31	-0.336	ug/L	505.648	7730	-0.000
	K	39	-3.517	ug/L	301.638	640433	-0.018
	Ca	43	3.137	ug/L	40.310	205	0.000
>	Sc	45		ug/L		974945	974944.515
	Ti	47	0.732	ug/L	7.356	785	0.000
	V	51	-0.230	ug/L	134.295	-5423	-0.001
	Cr	52	0.011	ug/L	474.752	-11	0.000
	Cr	53		ug/L		60757	-0.000
	Mn	55	-0.176	ug/L	6.617	1501	-0.001
	Fe	57	3.587	ug/L	1.256	6105	0.001
	Co	59	0.010	ug/L	22.930	227	0.000
	Ni	60	-0.004	ug/L	214.705	96	-0.000
	Cu	63		ug/L		290	0.000
	Cu	65	0.017	ug/L	66.693	97	0.000
	Zn	66	0.001	ug/L	2527.784	204	0.000
	Zn	67		ug/L		7085	-0.001
	Zn	68		ug/L		1110	-0.000
>	Ge	74		ug/L		308135	308135.407
	As	75	0.474	ug/L	44.406	75	0.001
	Se	77		ug/L		3655	0.001
	Se	82	0.412	ug/L	35.438	-6	0.000
	Kr	83		ug/L		67	-0.000
	Sr	88	0.005	ug/L	43.560	262	0.000
	Y	89		ug/L		61	-0.000
	Mo	98	0.215	ug/L	3.920	642	0.003
	Ag	107	0.006	ug/L	76.126	96	0.000
	Cd	111	0.008	ug/L	38.977	40	0.000
	Cd	114		ug/L		68	0.000
>	In	115		ug/L		190944	190944.469
	Sn	120	0.290	ug/L	15.276	1610	0.006
	Sb	121	0.929	ug/L	24.504	3738	0.016
	Sb	123		ug/L		2918	0.013
	Ba	135		ug/L		60	0.000
	Ba	137	0.014	ug/L	6.039	108	0.000
	Ho	165		ug/L		28	-0.000
>	Lu	175		ug/L		289654	289653.904
	Tl	205	0.155	ug/L	23.788	2546	0.007
	Pb	208	0.005	ug/L	53.384	858	0.000
	Bi	209		ug/L		175	-0.000
	Th	232	0.433	ug/L	29.365	11020	0.030
	U	238	0.017	ug/L	7.538	838	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 01, 2009 02:41:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 10.159

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**909.750**	ug/L	1.389	1803162	2.105
	Be	9	**955.593**	ug/L	0.928	403477	0.471
	B	11	**1.289**	ug/L	18.540	1297	0.001
	Na	23	**47689.406**	ug/L	2.233	194511792	227.064
	Mg	24	**46836.251**	ug/L	4.090	140367078	163.858
	Al	27	**49496.115**	ug/L	5.286	175587496	205.036
	P	31	**25872.223**	ug/L	1.804	4502491	5.249
	K	39	**53409.058**	ug/L	1.300	233847179	272.331
	Ca	43	**47654.640**	ug/L	1.682	505525	0.590
>	Sc	45		ug/L		856663	856662.714
	Ti	47	**53.348**	ug/L	0.637	26482	0.031
	V	51	**917.845**	ug/L	2.537	4355963	5.090
	Cr	52	**918.993**	ug/L	2.452	3358462	3.921
	Cr	53		ug/L		486658	0.506
	Mn	55	**943.010**	ug/L	0.416	6070850	7.084
	Fe	57	**55262.971**	ug/L	1.321	6816124	7.952
	Co	59	**850.597**	ug/L	2.285	4046966	4.725
	Ni	60	**887.387**	ug/L	2.049	895986	1.046
	Cu	63		ug/L		1837027	2.144
	Cu	65	**885.262**	ug/L	0.089	954427	1.114
	Zn	66	**2127.038**	ug/L	0.943	1599717	6.115
	Zn	67		ug/L		274415	1.025
	Zn	68		ug/L		1136486	4.341
>	Ge	74		ug/L		261562	261562.416
	As	75	**906.304**	ug/L	1.174	696651	2.665
	Se	77		ug/L		32790	0.114
	Se	82	**489.305**	ug/L	0.927	38434	0.147
	Kr	83		ug/L		209	0.000
	Sr	88	**1005.199**	ug/L	1.201	8548102	52.090
	Y	89		ug/L		303	0.001
	Mo	98	**869.307**	ug/L	2.668	1846990	11.257
	Ag	107	**240.049**	ug/L	0.591	863655	5.262
	Cd	111	**901.014**	ug/L	1.517	841053	5.125
	Cd	114		ug/L		1772323	10.801
>	In	115		ug/L		164127	164127.147
	Sn	120	**967.356**	ug/L	4.072	3526862	21.500
	Sb	121	**244.630**	ug/L	11.605	707453	4.315
	Sb	123		ug/L		550308	3.357
	Ba	135		ug/L		863521	3.387
	Ba	137	**868.403**	ug/L	0.433	1432988	5.621
	Ho	165		ug/L		206	0.001
>	Lu	175		ug/L		254929	254929.415
	Tl	205	**488.330**	ug/L	0.364	5402583	21.191
	Pb	208	**4668.190**	ug/L	0.153	76349280	299.488
	Bi	209		ug/L		2160	0.008
	Th	232	**2609.701**	ug/L	0.295	46291407	181.575
	U	238	**5496.098**	ug/L	0.348	99050491	388.540

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	90.975				
	Be	9	95.559				
	B	11					
	Na	23	95.379				
	Mg	24	93.673				
	Al	27	98.992				
	P	31	103.489				
	K	39	106.818				
	Ca	43	95.309				
>	Sc	45		88.6			
	Ti	47					
	V	51	91.785				
	Cr	52	91.899				
	Cr	53					
	Mn	55	94.301				
	Fe	57	110.526				
	Co	59	85.060				
	Ni	60	88.739				
	Cu	63					
	Cu	65	88.526				
	Zn	66	85.082				
	Zn	67					
	Zn	68					
>	Ge	74		85.5			
	As	75	90.630				
	Se	77					
	Se	82	97.861				
	Kr	83					
	Sr	88	100.520				
	Y	89					
	Mo	98	86.931				
	Ag	107	96.020				
	Cd	111	90.101				
	Cd	114					
>	In	115		86.6			
	Sn	120	96.736				
	Sb	121	97.852				
	Sb	123					
	Ba	135					
	Ba	137	86.840				
	Ho	165					
>	Lu	175		86.9			
	Tl	205	97.666				
	Pb	208	93.364				
	Bi	209					
	Th	232	104.388				
	U	238	109.922				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 01, 2009 02:47:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 11.160

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.516**	ug/L	1.284	112352	0.119
	Be	9	**52.210**	ug/L	1.686	24231	0.026
	B	11	**101.697**	ug/L	1.465	46457	0.048
	Na	23	**5026.118**	ug/L	2.901	22549869	23.931
	Mg	24	**4767.830**	ug/L	2.138	15706738	16.680
	Al	27	**4697.333**	ug/L	3.695	18318213	19.459
	P	31	**5221.077**	ug/L	1.915	1004305	1.059
	K	39	**5417.928**	ug/L	8.800	26629656	27.626
	Ca	43	**4990.578**	ug/L	2.273	58322	0.062
>	Sc	45		ug/L		941191	941190.604
	Ti	47	**49.535**	ug/L	1.960	27037	0.028
	V	51	**51.834**	ug/L	2.781	266489	0.287
	Cr	52	**52.255**	ug/L	1.810	209774	0.223
	Cr	53		ug/L		85975	0.029
	Mn	55	**53.367**	ug/L	2.552	379940	0.401
	Fe	57	**5321.746**	ug/L	2.776	725960	0.766
	Co	59	**50.118**	ug/L	1.837	262141	0.278
	Ni	60	**50.498**	ug/L	1.711	56113	0.060
	Cu	63		ug/L		131744	0.140
	Cu	65	**52.146**	ug/L	1.881	61827	0.066
	Zn	66	**50.749**	ug/L	1.202	43246	0.146
	Zn	67		ug/L		13838	0.023
	Zn	68		ug/L		31046	0.101
>	Ge	74		ug/L		295067	295066.720
	As	75	**48.643**	ug/L	0.765	41858	0.143
	Se	77		ug/L		6975	0.013
	Se	82	**50.459**	ug/L	3.089	4433	0.015
	Kr	83		ug/L		96	-0.000
	Sr	88	**50.554**	ug/L	0.622	485029	2.620
	Y	89		ug/L		81	-0.000
	Mo	98	**50.272**	ug/L	0.413	120591	0.651
	Ag	107	**51.349**	ug/L	0.427	208386	1.126
	Cd	111	**50.215**	ug/L	0.700	52894	0.286
	Cd	114		ug/L		122205	0.660
>	In	115		ug/L		185071	185070.721
	Sn	120	**55.944**	ug/L	1.135	230466	1.243
	Sb	121	**54.994**	ug/L	4.738	180107	0.970
	Sb	123		ug/L		138390	0.745
	Ba	135		ug/L		52085	0.185
	Ba	137	**50.095**	ug/L	2.045	91295	0.324
	Ho	165		ug/L		55	0.000
>	Lu	175		ug/L		281334	281334.476
	Tl	205	**50.552**	ug/L	0.987	617698	2.194
	Pb	208	**52.129**	ug/L	0.789	941596	3.344
	Bi	209		ug/L		217	0.000
	Th	232	**59.142**	ug/L	2.098	1159790	4.115
	U	238	**57.852**	ug/L	1.624	1150957	4.090

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	103.032				
	Be	9	104.419				
	B	11	101.697				
	Na	23	100.522				
	Mg	24	95.357				
	Al	27	93.016				
	P	31	104.422				
	K	39	108.359				
	Ca	43	99.812				
>	Sc	45		97.4			
	Ti	47	99.069				
	V	51	103.668				
	Cr	52	104.510				
	Cr	53					
	Mn	55	106.734				
	Fe	57	106.435				
	Co	59	100.236				
	Ni	60	100.997				
	Cu	63					
	Cu	65	104.293				
	Zn	66	101.499				
	Zn	67					
	Zn	68					
>	Ge	74		96.4			
	As	75	97.286				
	Se	77					
	Se	82	100.919				
	Kr	83					
	Sr	88	101.108				
	Y	89					
	Mo	98	100.545				
	Ag	107	102.697				
	Cd	111	100.429				
	Cd	114					
>	In	115		97.6			
	Sn	120	111.887				
	Sb	121	109.988				
	Sb	123					
	Ba	135					
	Ba	137	100.190				
	Ho	165					
>	Lu	175		95.9			
	Tl	205	101.104				
	Pb	208	104.258				
	Bi	209					
	Th	232	118.284				
	U	238	115.703				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 01, 2009 02:53:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 12.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.136**	**ug/L**	6.956	491	0.000
	Be	9	**0.027**	**ug/L**	28.820	27	0.000
	B	11	**2.710**	**ug/L**	20.293	2104	0.001
	Na	23	**2.013**	**ug/L**	130.792	40394	0.010
	Mg	24	**1.892**	**ug/L**	53.918	13006	0.007
	Al	27	**2.172**	**ug/L**	87.114	17012	0.009
	P	31	**-1.133**	**ug/L**	81.731	7466	-0.000
	K	39	**-3.511**	**ug/L**	63.553	631667	-0.018
	Ca	43	**3.437**	**ug/L**	22.021	206	0.000
>	Sc	45		**ug/L**		961466	961465.976
	Ti	47	**0.170**	**ug/L**	14.091	465	0.000
	V	51	**-0.163**	**ug/L**	320.923	-4985	-0.001
	Cr	52	**-0.059**	**ug/L**	61.093	-297	-0.000
	Cr	53		**ug/L**		60685	0.001
	Mn	55	**-0.144**	**ug/L**	7.531	1710	-0.001
	Fe	57	**2.287**	**ug/L**	32.069	5842	0.000
	Co	59	**0.072**	**ug/L**	11.871	556	0.000
	Ni	60	**0.074**	**ug/L**	22.017	183	0.000
	Cu	63		**ug/L**		408	0.000
	Cu	65	**0.046**	**ug/L**	22.995	131	0.000
	Zn	66	**0.073**	**ug/L**	23.003	259	0.000
	Zn	67		**ug/L**		7130	0.000
	Zn	68		**ug/L**		1131	-0.000
>	Ge	74		**ug/L**		297708	297708.442
	As	75	**0.319**	**ug/L**	73.808	-64	0.001
	Se	77		**ug/L**		3519	0.001
	Se	82	**0.410**	**ug/L**	18.208	-6	0.000
	Kr	83		**ug/L**		79	-0.000
	Sr	88	**0.028**	**ug/L**	45.785	474	0.001
	Y	89		**ug/L**		60	-0.000
	Mo	98	**0.219**	**ug/L**	19.538	633	0.003
	Ag	107	**0.017**	**ug/L**	28.754	136	0.000
	Cd	111	**0.027**	**ug/L**	58.674	59	0.000
	Cd	114		**ug/L**		123	0.000
>	In	115		**ug/L**		186252	186251.777
	Sn	120	**1.675**	**ug/L**	11.585	7297	0.037
	Sb	121	**2.185**	**ug/L**	17.541	7758	0.039
	Sb	123		**ug/L**		5911	0.029
	Ba	135		**ug/L**		96	0.000
	Ba	137	**0.045**	**ug/L**	19.154	163	0.000
	Ho	165		**ug/L**		26	-0.000
>	Lu	175		**ug/L**		283723	283722.980
	Tl	205	**0.219**	**ug/L**	20.827	3285	0.010
	Pb	208	**0.117**	**ug/L**	37.440	2881	0.008
	Bi	209		**ug/L**		169	-0.000
	Th	232	**1.161**	**ug/L**	19.755	25142	0.081
	U	238	**0.203**	**ug/L**	23.913	4563	0.014

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 12	Th	232CCB is out of limits (+/- PQL)
QC Std 12	U	238CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978577
Sample Date/Time: Tuesday, December 01, 2009 02:59:38
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978577.162

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.027**	**ug/L**	47.053	257	0.000
	Be	9	**-0.004**	**ug/L**	163.615	13	-0.000
	B	11	**0.778**	**ug/L**	9.011	1267	0.000
	Na	23	**1.195**	**ug/L**	224.023	38054	0.006
	Mg	24	**-0.639**	**ug/L**	91.638	4668	-0.002
	Al	27	**0.173**	**ug/L**	483.058	9337	0.001
	P	31	**23.677**	**ug/L**	18.957	12775	0.005
	K	39	**-11.779**	**ug/L**	48.091	613580	-0.060
	Ca	43	**4.581**	**ug/L**	27.543	228	0.000
>	Sc	45		**ug/L**		998184	998184.188
	Ti	47	**0.317**	**ug/L**	14.878	566	0.000
	V	51	**0.324**	**ug/L**	40.531	-2494	0.002
	Cr	52	**0.366**	**ug/L**	12.162	1500	0.002
	Cr	53		**ug/L**		47337	-0.015
	Mn	55	**-0.069**	**ug/L**	8.968	2342	-0.001
	Fe	57	**10.027**	**ug/L**	11.135	7175	0.001
	Co	59	**0.017**	**ug/L**	9.176	273	0.000
	Ni	60	**0.028**	**ug/L**	54.932	136	0.000
	Cu	63		**ug/L**		616	0.000
	Cu	65	**0.118**	**ug/L**	11.012	226	0.000
	Zn	66	**0.982**	**ug/L**	2.674	1063	0.003
	Zn	67		**ug/L**		5851	-0.005
	Zn	68		**ug/L**		1523	0.001
>	Ge	74		**ug/L**		305159	305158.514
	As	75	**0.573**	**ug/L**	55.924	161	0.002
	Se	77		**ug/L**		2486	-0.003
	Se	82	**0.269**	**ug/L**	75.296	-19	0.000
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**0.001**	**ug/L**	153.681	225	0.000
	Y	89		**ug/L**		69	-0.000
	Mo	98	**0.087**	**ug/L**	12.699	327	0.001
	Ag	107	**-0.005**	**ug/L**	25.473	48	-0.000
	Cd	111	**-0.001**	**ug/L**	839.165	30	-0.000
	Cd	114		**ug/L**		41	-0.000
>	In	115		**ug/L**		193309	193308.583
	Sn	120	**0.649**	**ug/L**	5.459	3169	0.014
	Sb	121	**0.965**	**ug/L**	13.984	3898	0.017
	Sb	123		**ug/L**		3027	0.013
	Ba	135		**ug/L**		56	0.000
	Ba	137	**0.009**	**ug/L**	42.856	100	0.000
	Ho	165		**ug/L**		29	-0.000
>	Lu	175		**ug/L**		294362	294362.181
	Tl	205	**0.075**	**ug/L**	14.193	1569	0.003
	Pb	208	**0.005**	**ug/L**	35.415	867	0.000
	Bi	209		**ug/L**		175	-0.000
	Th	232	**0.823**	**ug/L**	15.125	19198	0.057
	U	238	**0.046**	**ug/L**	13.616	1462	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978582
Sample Date/Time: Tuesday, December 01, 2009 03:05:49
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925472|20|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978582.163

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.332**	**ug/L**	2.338	10001	0.010
	Be	9	**46.978**	**ug/L**	0.704	22677	0.023
	B	11	**72.056**	**ug/L**	4.325	34476	0.034
	Na	23	**318.554**	**ug/L**	2.522	1516076	1.517
	Mg	24	**1601.402**	**ug/L**	3.296	5491016	5.603
	Al	27	**4492.478**	**ug/L**	4.924	18226581	18.610
	P	31	**416.022**	**ug/L**	1.546	90422	0.084
	K	39	**1340.917**	**ug/L**	4.322	7354569	6.837
	Ca	43	**1923.923**	**ug/L**	0.924	23481	0.024
>	Sc	45		**ug/L**		978754	978754.411
	Ti	47	**123.033**	**ug/L**	1.061	69283	0.070
	V	51	**67.361**	**ug/L**	2.022	361395	0.374
	Cr	52	**36.849**	**ug/L**	0.676	153826	0.157
	Cr	53		**ug/L**		74421	0.013
	Mn	55	**183.043**	**ug/L**	1.052	1348485	1.375
	Fe	57	**5856.769**	**ug/L**	1.981	830319	0.843
	Co	59	**43.810**	**ug/L**	1.109	238326	0.243
	Ni	60	**53.605**	**ug/L**	2.909	61934	0.063
	Cu	63		**ug/L**		136982	0.140
	Cu	65	**52.477**	**ug/L**	0.594	64715	0.066
	Zn	66	**106.932**	**ug/L**	2.637	92470	0.307
	Zn	67		**ug/L**		21465	0.048
	Zn	68		**ug/L**		67607	0.221
>	Ge	74		**ug/L**		300213	300212.974
	As	75	**132.010**	**ug/L**	0.775	116162	0.388
	Se	77		**ug/L**		9537	0.021
	Se	82	**91.743**	**ug/L**	3.015	8233	0.028
	Kr	83		**ug/L**		99	0.000
	Sr	88	**87.246**	**ug/L**	2.295	849907	4.521
	Y	89		**ug/L**		71898	0.382
	Mo	98	**42.458**	**ug/L**	2.471	103437	0.550
	Ag	107	**10.961**	**ug/L**	1.135	45232	0.240
	Cd	111	**62.034**	**ug/L**	2.049	66353	0.353
	Cd	114		**ug/L**		153737	0.818
>	In	115		**ug/L**		187971	187971.422
	Sn	120	**24.187**	**ug/L**	1.543	101409	0.538
	Sb	121	**16.662**	**ug/L**	2.524	55827	0.294
	Sb	123		**ug/L**		42918	0.226
	Ba	135		**ug/L**		256598	0.897
	Ba	137	**240.370**	**ug/L**	1.620	445193	1.556
	Ho	165		**ug/L**		4752	0.017
>	Lu	175		**ug/L**		286109	286108.563
	Tl	205	**100.961**	**ug/L**	1.686	1254000	4.381
	Pb	208	**88.791**	**ug/L**	1.048	1630461	5.696
	Bi	209		**ug/L**		2988	0.010
	Th	232	**7.413**	**ug/L**	2.655	149815	0.516
	U	238	**1.029**	**ug/L**	1.024	21299	0.073

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978582
Sample Date/Time: Tuesday, December 01, 2009 03:11:59
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925472|40|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978582.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.214**	**ug/L**	0.665	5181	0.005
	Be	9	**23.914**	**ug/L**	0.389	11497	0.012
	B	11	**38.373**	**ug/L**	3.000	18685	0.018
	Na	23	**155.425**	**ug/L**	5.059	752691	0.740
	Mg	24	**849.204**	**ug/L**	9.123	2898770	2.971
	Al	27	**2548.737**	**ug/L**	2.210	10292372	10.558
	P	31	**206.968**	**ug/L**	2.611	48687	0.042
	K	39	**659.705**	**ug/L**	8.980	3934928	3.364
	Ca	43	**959.877**	**ug/L**	3.207	11742	0.012
>	Sc	45		**ug/L**		974201	974201.206
	Ti	47	**63.137**	**ug/L**	0.865	35571	0.036
	V	51	**34.475**	**ug/L**	3.461	182027	0.191
	Cr	52	**18.397**	**ug/L**	2.972	76399	0.078
	Cr	53		**ug/L**		67370	0.007
	Mn	55	**97.295**	**ug/L**	1.745	714702	0.731
	Fe	57	**3067.090**	**ug/L**	3.023	435426	0.441
	Co	59	**22.529**	**ug/L**	2.933	122056	0.125
	Ni	60	**27.201**	**ug/L**	1.609	31334	0.032
	Cu	63		**ug/L**		69193	0.071
	Cu	65	**26.250**	**ug/L**	0.885	32256	0.033
	Zn	66	**53.443**	**ug/L**	0.724	46971	0.154
	Zn	67		**ug/L**		14378	0.023
	Zn	68		**ug/L**		34997	0.111
>	Ge	74		**ug/L**		304384	304384.051
	As	75	**66.546**	**ug/L**	1.548	59202	0.196
	Se	77		**ug/L**		6541	0.010
	Se	82	**46.111**	**ug/L**	1.977	4175	0.014
	Kr	83		**ug/L**		93	-0.000
	Sr	88	**45.055**	**ug/L**	0.644	436968	2.335
	Y	89		**ug/L**		36269	0.193
	Mo	98	**21.747**	**ug/L**	2.598	52781	0.282
	Ag	107	**5.569**	**ug/L**	1.447	22905	0.122
	Cd	111	**31.109**	**ug/L**	1.170	33134	0.177
	Cd	114		**ug/L**		78223	0.418
>	In	115		**ug/L**		187076	187075.685
	Sn	120	**12.407**	**ug/L**	2.383	51948	0.276
	Sb	121	**8.660**	**ug/L**	1.357	29167	0.153
	Sb	123		**ug/L**		22361	0.117
	Ba	135		**ug/L**		130448	0.457
	Ba	137	**123.227**	**ug/L**	1.147	227667	0.798
	Ho	165		**ug/L**		2433	0.008
>	Lu	175		**ug/L**		285360	285360.267
	Tl	205	**54.245**	**ug/L**	1.880	672262	2.354
	Pb	208	**46.546**	**ug/L**	1.009	852838	2.986
	Bi	209		**ug/L**		1596	0.005
	Th	232	**3.802**	**ug/L**	3.320	77716	0.265
	U	238	**0.510**	**ug/L**	2.161	10767	0.036

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978578
Sample Date/Time: Tuesday, December 01, 2009 03:24:17
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978578.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**18.597**	**ug/L**	1.423	42476	0.043
	Be	9	**0.656**	**ug/L**	2.509	332	0.000
	B	11	**3.487**	**ug/L**	3.937	2516	0.002
	Na	23	**379.617**	**ug/L**	5.521	1807718	1.807
	Mg	24	**3715.953**	**ug/L**	3.557	12784185	13.000
	Al	27	**9066.827**	**ug/L**	7.369	36911320	37.559
	P	31	**824.899**	**ug/L**	2.150	172296	0.167
	K	39	**2207.065**	**ug/L**	6.555	11724874	11.254
	Ca	43	**7423.256**	**ug/L**	1.249	90484	0.092
>	Sc	45		**ug/L**		982701	982700.649
	Ti	47	**517.375**	**ug/L**	1.499	291307	0.296
	V	51	**25.491**	**ug/L**	1.609	134692	0.141
	Cr	52	**11.082**	**ug/L**	2.498	46407	0.047
	Cr	53		**ug/L**		48818	-0.013
	Mn	55	**342.192**	**ug/L**	1.783	2528728	2.571
	Fe	57	**13070.795**	**ug/L**	1.408	1853842	1.881
	Co	59	**5.231**	**ug/L**	0.930	28725	0.029
	Ni	60	**14.764**	**ug/L**	1.753	17202	0.017
	Cu	63		**ug/L**		26077	0.026
	Cu	65	**10.325**	**ug/L**	1.353	12844	0.013
	Zn	66	**46.918**	**ug/L**	1.302	39935	0.135
	Zn	67		**ug/L**		11616	0.016
	Zn	68		**ug/L**		29970	0.098
>	Ge	74		**ug/L**		294616	294616.226
	As	75	**2.125**	**ug/L**	7.226	1501	0.006
	Se	77		**ug/L**		2502	-0.003
	Se	82	**0.275**	**ug/L**	70.518	-18	0.000
	Kr	83		**ug/L**		111	0.000
	Sr	88	**35.569**	**ug/L**	1.028	340790	1.843
	Y	89		**ug/L**		221471	1.198
	Mo	98	**0.613**	**ug/L**	2.087	1571	0.008
	Ag	107	**0.171**	**ug/L**	4.492	760	0.004
	Cd	111	**0.558**	**ug/L**	2.861	617	0.003
	Cd	114		**ug/L**		184	0.001
>	In	115		**ug/L**		184783	184783.055
	Sn	120	**0.922**	**ug/L**	0.683	4152	0.020
	Sb	121	**0.206**	**ug/L**	15.237	1257	0.004
	Sb	123		**ug/L**		978	0.003
	Ba	135		**ug/L**		147813	0.508
	Ba	137	**137.811**	**ug/L**	1.668	259711	0.892
	Ho	165		**ug/L**		14322	0.049
>	Lu	175		**ug/L**		291080	291079.820
	Tl	205	**0.150**	**ug/L**	5.678	2501	0.007
	Pb	208	**10.721**	**ug/L**	1.036	200963	0.688
	Bi	209		**ug/L**		3272	0.011
	Th	232	**7.702**	**ug/L**	1.540	158293	0.536
	U	238	**1.003**	**ug/L**	1.052	21139	0.071

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978580
Sample Date/Time: Tuesday, December 01, 2009 03:30:27
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925472|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978580.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**73.537**	**ug/L**	1.069	164376	0.170
	Be	9	**26.490**	**ug/L**	1.860	12614	0.013
	B	11	**55.471**	**ug/L**	3.482	26373	0.026
	Na	23	**4166.964**	**ug/L**	9.376	19175058	19.840
	Mg	24	**11322.003**	**ug/L**	5.917	38220433	39.610
	Al	27	**30577.579**	**ug/L**	7.236	122290309	126.667
	P	31	**3271.201**	**ug/L**	1.123	648166	0.664
	K	39	**3480.120**	**ug/L**	0.832	17776067	17.745
	Ca	43	**20090.847**	**ug/L**	1.127	240247	0.249
>	Sc	45		**ug/L**		965095	965094.935
	Ti	47	**767.242**	**ug/L**	1.767	424070	0.439
	V	51	**66.527**	**ug/L**	2.682	351878	0.369
	Cr	52	**42.345**	**ug/L**	1.985	174299	0.181
	Cr	53		**ug/L**		62047	0.002
	Mn	55	**543.668**	**ug/L**	1.765	3943783	4.084
	Fe	57	**26690.018**	**ug/L**	2.170	3711590	3.840
	Co	59	**42.289**	**ug/L**	1.941	226849	0.235
	Ni	60	**62.256**	**ug/L**	1.260	70916	0.073
	Cu	63		**ug/L**		111757	0.116
	Cu	65	**44.169**	**ug/L**	1.845	53714	0.056
	Zn	66	**105.668**	**ug/L**	0.746	86967	0.304
	Zn	67		**ug/L**		19229	0.044
	Zn	68		**ug/L**		64544	0.222
>	Ge	74		**ug/L**		285641	285640.571
	As	75	**41.609**	**ug/L**	1.806	34613	0.122
	Se	77		**ug/L**		3207	0.000
	Se	82	**9.205**	**ug/L**	6.540	749	0.003
	Kr	83		**ug/L**		144	0.000
	Sr	88	**343.231**	**ug/L**	0.982	3203217	17.787
	Y	89		**ug/L**		272531	1.513
	Mo	98	**24.957**	**ug/L**	2.567	58291	0.323
	Ag	107	**26.185**	**ug/L**	0.320	103446	0.574
	Cd	111	**6.328**	**ug/L**	3.424	6510	0.036
	Cd	114		**ug/L**		12736	0.070
>	In	115		**ug/L**		180097	180097.317
	Sn	120	**22.914**	**ug/L**	2.134	92054	0.509
	Sb	121	**74.120**	**ug/L**	1.456	235980	1.307
	Sb	123		**ug/L**		183019	1.014
	Ba	135		**ug/L**		320239	1.136
	Ba	137	**305.998**	**ug/L**	2.338	558507	1.981
	Ho	165		**ug/L**		17486	0.062
>	Lu	175		**ug/L**		282010	282009.664
	Tl	205	**53.610**	**ug/L**	3.197	656438	2.326
	Pb	208	**115.839**	**ug/L**	1.221	2096252	7.432
	Bi	209		**ug/L**		4277	0.014
	Th	232	**38.811**	**ug/L**	1.520	763643	2.700
	U	238	**33.022**	**ug/L**	1.940	658672	2.334

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978581
Sample Date/Time: Tuesday, December 01, 2009 03:36:38
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978581.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.008**	ug/L	0.869	103003	0.106
	Be	9	**25.384**	ug/L	3.308	12097	0.013
	B	11	**53.638**	ug/L	0.217	25556	0.026
	Na	23	**1448.051**	ug/L	3.808	6689698	6.895
	Mg	24	**6402.576**	ug/L	5.351	21646971	22.400
	Al	27	**12927.167**	ug/L	3.724	51744842	53.550
	P	31	**1826.269**	ug/L	1.323	365566	0.370
	K	39	**3300.559**	ug/L	3.607	16908068	16.829
	Ca	43	**8284.657**	ug/L	0.909	99242	0.103
>	Sc	45		ug/L		965918	965917.524
	Ti	47	**557.431**	ug/L	1.003	308480	0.319
	V	51	**52.981**	ug/L	1.448	279632	0.294
	Cr	52	**39.532**	ug/L	2.544	162862	0.169
	Cr	53		ug/L		61180	0.001
	Mn	55	**283.149**	ug/L	4.792	2057680	2.127
	Fe	57	**14103.144**	ug/L	0.850	1965577	2.029
	Co	59	**31.135**	ug/L	1.850	167203	0.173
	Ni	60	**50.600**	ug/L	1.787	57707	0.060
	Cu	63		ug/L		89237	0.092
	Cu	65	**34.954**	ug/L	1.027	42561	0.044
	Zn	66	**66.658**	ug/L	1.600	56108	0.192
	Zn	67		ug/L		13960	0.024
	Zn	68		ug/L		40868	0.136
>	Ge	74		ug/L		291787	291787.280
	As	75	**40.204**	ug/L	1.238	34154	0.118
	Se	77		ug/L		3012	-0.001
	Se	82	**9.081**	ug/L	5.349	755	0.003
	Kr	83		ug/L		115	0.000
	Sr	88	**65.168**	ug/L	1.246	622663	3.377
	Y	89		ug/L		230673	1.251
	Mo	98	**24.820**	ug/L	1.493	59351	0.321
	Ag	107	**25.197**	ug/L	1.993	101871	0.552
	Cd	111	**5.773**	ug/L	0.708	6083	0.033
	Cd	114		ug/L		12443	0.067
>	In	115		ug/L		184341	184341.405
	Sn	120	**23.682**	ug/L	0.909	97385	0.526
	Sb	121	**75.805**	ug/L	0.709	247063	1.337
	Sb	123		ug/L		190351	1.030
	Ba	135		ug/L		136651	0.477
	Ba	137	**129.726**	ug/L	1.112	240597	0.840
	Ho	165		ug/L		14751	0.051
>	Lu	175		ug/L		286440	286440.046
	Tl	205	**52.070**	ug/L	0.930	647809	2.260
	Pb	208	**108.179**	ug/L	0.190	1988738	6.940
	Bi	209		ug/L		4360	0.015
	Th	232	**36.391**	ug/L	0.741	727542	2.532
	U	238	**31.155**	ug/L	1.221	631329	2.202

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978579
Sample Date/Time: Tuesday, December 01, 2009 03:42:49
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925472|10|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978579.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.571**	**ug/L**	1.430	8125	0.008
	Be	9	**0.114**	**ug/L**	24.320	68	0.000
	B	11	**2.161**	**ug/L**	12.241	1852	0.001
	Na	23	**90.726**	**ug/L**	5.248	446204	0.432
	Mg	24	**669.246**	**ug/L**	12.936	2256036	2.341
	Al	27	**1747.088**	**ug/L**	3.249	6961298	7.237
	P	31	**169.969**	**ug/L**	2.976	40811	0.034
	K	39	**399.246**	**ug/L**	6.591	2603997	2.036
	Ca	43	**1382.834**	**ug/L**	3.097	16614	0.017
>	Sc	45		**ug/L**		960817	960817.173
	Ti	47	**85.486**	**ug/L**	0.938	47371	0.049
	V	51	**5.548**	**ug/L**	7.509	25432	0.031
	Cr	52	**2.016**	**ug/L**	5.545	8209	0.009
	Cr	53		**ug/L**		52959	-0.007
	Mn	55	**57.902**	**ug/L**	0.128	420664	0.435
	Fe	57	**2587.290**	**ug/L**	0.705	363216	0.372
	Co	59	**0.900**	**ug/L**	1.756	4973	0.005
	Ni	60	**2.697**	**ug/L**	1.976	3154	0.003
	Cu	63		**ug/L**		5049	0.005
	Cu	65	**1.913**	**ug/L**	3.972	2389	0.002
	Zn	66	**8.411**	**ug/L**	2.046	7421	0.024
	Zn	67		**ug/L**		7106	-0.000
	Zn	68		**ug/L**		6145	0.017
>	Ge	74		**ug/L**		298734	298734.492
	As	75	**0.628**	**ug/L**	37.986	206	0.002
	Se	77		**ug/L**		3070	-0.001
	Se	82	**0.236**	**ug/L**	79.385	-22	0.000
	Kr	83		**ug/L**		83	-0.000
	Sr	88	**6.888**	**ug/L**	0.192	66979	0.357
	Y	89		**ug/L**		39937	0.213
	Mo	98	**0.104**	**ug/L**	2.826	358	0.001
	Ag	107	**0.018**	**ug/L**	3.587	142	0.000
	Cd	111	**0.060**	**ug/L**	10.257	95	0.000
	Cd	114		**ug/L**		57	0.000
>	In	115		**ug/L**		187074	187074.092
	Sn	120	**0.295**	**ug/L**	10.601	1598	0.007
	Sb	121	**0.534**	**ug/L**	15.127	2354	0.009
	Sb	123		**ug/L**		1772	0.007
	Ba	135		**ug/L**		20168	0.070
	Ba	137	**18.981**	**ug/L**	1.375	35458	0.123
	Ho	165		**ug/L**		2581	0.009
>	Lu	175		**ug/L**		287942	287941.548
	Tl	205	**0.048**	**ug/L**	20.394	1191	0.002
	Pb	208	**1.942**	**ug/L**	0.756	36638	0.125
	Bi	209		**ug/L**		853	0.002
	Th	232	**1.827**	**ug/L**	0.951	38867	0.127
	U	238	**0.196**	**ug/L**	1.211	4474	0.014

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 01, 2009 03:48:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 8.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.442**	**ug/L**	0.881	109504	0.117
	Be	9	**50.878**	**ug/L**	1.186	23506	0.025
	B	11	**98.628**	**ug/L**	2.027	44864	0.047
	Na	23	**5253.095**	**ug/L**	7.742	23470271	25.012
	Mg	24	**4469.788**	**ug/L**	3.895	14652399	15.638
	Al	27	**4292.527**	**ug/L**	3.112	16668846	17.782
	P	31	**5058.766**	**ug/L**	0.562	968911	1.026
	K	39	**4999.762**	**ug/L**	2.630	24513392	25.494
	Ca	43	**4855.488**	**ug/L**	1.282	56473	0.060
>	Sc	45		**ug/L**		936789	936788.565
	Ti	47	**49.203**	**ug/L**	0.914	26736	0.028
	V	51	**50.655**	**ug/L**	0.665	259130	0.281
	Cr	52	**50.986**	**ug/L**	1.418	203762	0.218
	Cr	53		**ug/L**		80353	0.023
	Mn	55	**51.601**	**ug/L**	1.168	365782	0.388
	Fe	57	**5166.101**	**ug/L**	1.947	701655	0.743
	Co	59	**48.448**	**ug/L**	1.898	252244	0.269
	Ni	60	**48.131**	**ug/L**	0.354	53245	0.057
	Cu	63		**ug/L**		125305	0.134
	Cu	65	**50.344**	**ug/L**	1.753	59417	0.063
	Zn	66	**49.257**	**ug/L**	1.990	41680	0.142
	Zn	67		**ug/L**		12992	0.021
	Zn	68		**ug/L**		30240	0.099
>	Ge	74		**ug/L**		292993	292992.525
	As	75	**47.141**	**ug/L**	2.064	40265	0.139
	Se	77		**ug/L**		6685	0.012
	Se	82	**49.925**	**ug/L**	1.477	4355	0.015
	Kr	83		**ug/L**		87	-0.000
	Sr	88	**49.280**	**ug/L**	1.255	466434	2.554
	Y	89		**ug/L**		188	0.001
	Mo	98	**48.541**	**ug/L**	0.528	114870	0.629
	Ag	107	**49.700**	**ug/L**	1.721	198969	1.089
	Cd	111	**48.739**	**ug/L**	0.287	50649	0.277
	Cd	114		**ug/L**		118209	0.647
>	In	115		**ug/L**		182574	182574.270
	Sn	120	**49.132**	**ug/L**	0.170	199726	1.092
	Sb	121	**49.256**	**ug/L**	6.949	159182	0.869
	Sb	123		**ug/L**		121913	0.665
	Ba	135		**ug/L**		49643	0.179
	Ba	137	**48.542**	**ug/L**	1.346	87226	0.314
	Ho	165		**ug/L**		60	0.000
>	Lu	175		**ug/L**		277394	277394.241
	Tl	205	**49.704**	**ug/L**	2.903	598764	2.157
	Pb	208	**51.169**	**ug/L**	1.534	911240	3.283
	Bi	209		**ug/L**		245	0.000
	Th	232	**54.277**	**ug/L**	1.601	1049726	3.776
	U	238	**56.618**	**ug/L**	1.996	1110606	4.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.884				
	Be	9	101.756				
	B	11	98.628				
	Na	23	105.062				
	Mg	24	89.396				
	Al	27	85.001				
	P	31	101.175				
	K	39	99.995				
	Ca	43	97.110				
>	Sc	45		96.9			
	Ti	47	98.406				
	V	51	101.310				
	Cr	52	101.972				
	Cr	53					
	Mn	55	103.203				
	Fe	57	103.322				
	Co	59	96.897				
	Ni	60	96.263				
	Cu	63					
	Cu	65	100.687				
	Zn	66	98.513				
	Zn	67					
	Zn	68					
>	Ge	74		95.8			
	As	75	94.281				
	Se	77					
	Se	82	99.849				
	Kr	83					
	Sr	88	98.561				
	Y	89					
	Mo	98	97.082				
	Ag	107	99.399				
	Cd	111	97.478				
	Cd	114					
>	In	115		96.3			
	Sn	120	98.264				
	Sb	121	98.511				
	Sb	123					
	Ba	135					
	Ba	137	97.084				
	Ho	165					
>	Lu	175		94.6			
	Tl	205	99.409				
	Pb	208	102.337				
	Bi	209					
	Th	232	108.554				
	U	238	113.235				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)
QC Std 8	Al	27	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 01, 2009 03:55:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 9.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.024**	**ug/L**	16.012	235	0.000
	Be	9	**0.010**	**ug/L**	42.584	18	0.000
	B	11	**2.686**	**ug/L**	20.454	2041	0.001
	Na	23	**0.433**	**ug/L**	240.293	32371	0.002
	Mg	24	**0.573**	**ug/L**	65.007	8336	0.002
	Al	27	**0.840**	**ug/L**	48.624	11338	0.003
	P	31	**-3.795**	**ug/L**	37.334	6771	-0.001
	K	39	**-4.244**	**ug/L**	117.281	612194	-0.022
	Ca	43	**3.826**	**ug/L**	8.263	205	0.000
>	Sc	45		**ug/L**		936956	936956.251
	Ti	47	**0.130**	**ug/L**	48.238	431	0.000
	V	51	**0.172**	**ug/L**	147.017	-3140	0.001
	Cr	52	**0.025**	**ug/L**	175.856	47	0.000
	Cr	53		**ug/L**		56472	-0.002
	Mn	55	**-0.171**	**ug/L**	3.096	1478	-0.001
	Fe	57	**-0.691**	**ug/L**	75.106	5290	-0.000
	Co	59	**0.016**	**ug/L**	43.744	251	0.000
	Ni	60	**0.002**	**ug/L**	562.667	98	0.000
	Cu	63		**ug/L**		384	0.000
	Cu	65	**0.013**	**ug/L**	30.540	88	0.000
	Zn	66	**-0.009**	**ug/L**	111.841	187	-0.000
	Zn	67		**ug/L**		6571	-0.002
	Zn	68		**ug/L**		1032	-0.000
>	Ge	74		**ug/L**		295590	295589.905
	As	75	**0.252**	**ug/L**	49.406	-122	0.001
	Se	77		**ug/L**		3300	0.000
	Se	82	**0.243**	**ug/L**	85.931	-21	0.000
	Kr	83		**ug/L**		81	-0.000
	Sr	88	**0.007**	**ug/L**	42.899	264	0.000
	Y	89		**ug/L**		71	-0.000
	Mo	98	**0.070**	**ug/L**	23.915	271	0.001
	Ag	107	**0.006**	**ug/L**	80.324	90	0.000
	Cd	111	**0.006**	**ug/L**	216.403	36	0.000
	Cd	114		**ug/L**		73	0.000
>	In	115		**ug/L**		183757	183756.606
	Sn	120	**0.348**	**ug/L**	13.687	1787	0.008
	Sb	121	**1.095**	**ug/L**	24.161	4133	0.019
	Sb	123		**ug/L**		3166	0.015
	Ba	135		**ug/L**		61	0.000
	Ba	137	**0.018**	**ug/L**	22.435	112	0.000
	Ho	165		**ug/L**		32	0.000
>	Lu	175		**ug/L**		280743	280743.449
	Tl	205	**0.137**	**ug/L**	20.410	2244	0.006
	Pb	208	**0.012**	**ug/L**	13.881	953	0.001
	Bi	209		**ug/L**		180	-0.000
	Th	232	**0.504**	**ug/L**	27.267	12042	0.035
	U	238	**0.021**	**ug/L**	14.965	897	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536001
Sample Date/Time: Tuesday, December 01, 2009 04:38:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241536001.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**83.664**	ug/L	1.549	180480	0.194
	Be	9	**6.323**	ug/L	1.334	2916	0.003
	B	11	**21.731**	ug/L	2.405	10480	0.010
	Na	23	**1881.296**	ug/L	2.421	8372310	8.957
	Mg	24	**14378.681**	ug/L	3.965	46845398	50.304
	Al	27	**96303.894**	ug/L	8.049	371355481	398.937
	P	31	**306.212**	ug/L	0.076	65309	0.062
	K	39	**12158.706**	ug/L	0.504	58373617	61.997
	Ca	43	**10765.008**	ug/L	1.167	124310	0.133
>	Sc	45		ug/L		931415	931414.883
	Ti	47	**1010.166**	ug/L	1.381	538709	0.578
	V	51	**90.953**	ug/L	1.471	465755	0.504
	Cr	52	**56.218**	ug/L	1.603	223343	0.240
	Cr	53		ug/L		63708	0.006
	Mn	55	**1722.955**	ug/L	1.779	12056060	12.943
	Fe	57	**84414.061**	ug/L	2.183	11316709	12.146
	Co	59	**35.415**	ug/L	2.867	183349	0.197
	Ni	60	**63.986**	ug/L	1.880	70338	0.075
	Cu	63		ug/L		90693	0.097
	Cu	65	**37.770**	ug/L	1.130	44341	0.048
	Zn	66	**205.903**	ug/L	1.076	148444	0.592
	Zn	67		ug/L		28072	0.088
	Zn	68		ug/L		106884	0.423
>	Ge	74		ug/L		250497	250497.168
	As	75	**9.329**	ug/L	0.743	6581	0.027
	Se	77		ug/L		2134	-0.002
	Se	82	**-2.040**	ug/L	27.383	-189	-0.001
	Kr	83		ug/L		372	0.001
	Sr	88	**143.636**	ug/L	0.599	1206999	7.443
	Y	89		ug/L		692089	4.268
	Mo	98	**3.224**	ug/L	2.107	6861	0.042
	Ag	107	**0.694**	ug/L	6.929	2525	0.015
	Cd	111	**2.393**	ug/L	4.785	2234	0.014
	Cd	114		ug/L		311	0.002
>	In	115		ug/L		162135	162134.872
	Sn	120	**2.527**	ug/L	2.209	9429	0.056
	Sb	121	**0.094**	ug/L	10.863	783	0.002
	Sb	123		ug/L		608	0.001
	Ba	135		ug/L		399783	1.567
	Ba	137	**414.090**	ug/L	1.416	683895	2.680
	Ho	165		ug/L		43935	0.172
>	Lu	175		ug/L		255170	255169.631
	Tl	205	**1.651**	ug/L	3.011	18799	0.072
	Pb	208	**55.117**	ug/L	0.824	902898	3.536
	Bi	209		ug/L		14611	0.057
	Th	232	**36.095**	ug/L	2.244	642695	2.511
	U	238	**3.099**	ug/L	1.884	56329	0.219

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		81.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		87.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 01, 2009 04:44:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 8.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.748**	**ug/L**	0.422	99386	0.113
	Be	9	**50.688**	**ug/L**	1.222	21989	0.025
	B	11	**98.950**	**ug/L**	1.628	42265	0.047
	Na	23	**5266.935**	**ug/L**	13.673	22089667	25.078
	Mg	24	**4672.958**	**ug/L**	2.294	14385512	16.349
	Al	27	**4660.677**	**ug/L**	1.726	16989556	19.307
	P	31	**5264.463**	**ug/L**	2.415	946455	1.068
	K	39	**5178.054**	**ug/L**	9.840	23807971	26.403
	Ca	43	**4803.033**	**ug/L**	1.037	52460	0.059
>	Sc	45		**ug/L**		879686	879686.216
	Ti	47	**50.035**	**ug/L**	1.401	25525	0.029
	V	51	**51.232**	**ug/L**	2.172	246121	0.284
	Cr	52	**51.925**	**ug/L**	1.991	194831	0.222
	Cr	53		**ug/L**		76510	0.024
	Mn	55	**51.817**	**ug/L**	0.820	344937	0.389
	Fe	57	**5199.336**	**ug/L**	1.599	663108	0.748
	Co	59	**49.434**	**ug/L**	1.805	241678	0.275
	Ni	60	**49.328**	**ug/L**	1.254	51236	0.058
	Cu	63		**ug/L**		121273	0.138
	Cu	65	**51.482**	**ug/L**	0.742	57058	0.065
	Zn	66	**49.917**	**ug/L**	1.200	39361	0.144
	Zn	67		**ug/L**		12054	0.020
	Zn	68		**ug/L**		28243	0.100
>	Ge	74		**ug/L**		273014	273013.824
	As	75	**47.263**	**ug/L**	2.968	37623	0.139
	Se	77		**ug/L**		6309	0.012
	Se	82	**48.425**	**ug/L**	1.691	3935	0.015
	Kr	83		**ug/L**		86	-0.000
	Sr	88	**49.330**	**ug/L**	0.592	433119	2.556
	Y	89		**ug/L**		215	0.001
	Mo	98	**49.010**	**ug/L**	0.607	107579	0.635
	Ag	107	**50.815**	**ug/L**	0.348	188708	1.114
	Cd	111	**49.118**	**ug/L**	0.863	47347	0.279
	Cd	114		**ug/L**		109004	0.643
>	In	115		**ug/L**		169355	169354.664
	Sn	120	**49.565**	**ug/L**	0.707	186891	1.102
	Sb	121	**48.881**	**ug/L**	7.788	146576	0.862
	Sb	123		**ug/L**		112779	0.663
	Ba	135		**ug/L**		47570	0.182
	Ba	137	**49.271**	**ug/L**	0.281	83284	0.319
	Ho	165		**ug/L**		67	0.000
>	Lu	175		**ug/L**		260919	260919.472
	Tl	205	**50.359**	**ug/L**	0.579	570731	2.185
	Pb	208	**51.208**	**ug/L**	0.529	857861	3.285
	Bi	209		**ug/L**		231	0.000
	Th	232	**54.280**	**ug/L**	1.635	987492	3.777
	U	238	**55.407**	**ug/L**	0.486	1022430	3.917

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.497				
	Be	9	101.376				
	B	11	98.950				
	Na	23	105.339				
	Mg	24	93.459				
	Al	27	92.291				
	P	31	105.289				
	K	39	103.561				
	Ca	43	96.061				
>	Sc	45			91.0		
	Ti	47	100.071				
	V	51	102.463				
	Cr	52	103.850				
	Cr	53					
	Mn	55	103.634				
	Fe	57	103.987				
	Co	59	98.869				
	Ni	60	98.656				
	Cu	63					
	Cu	65	102.965				
	Zn	66	99.834				
	Zn	67					
	Zn	68					
>	Ge	74			89.2		
	As	75	94.525				
	Se	77					
	Se	82	96.850				
	Kr	83					
	Sr	88	98.661				
	Y	89					
	Mo	98	98.019				
	Ag	107	101.629				
	Cd	111	98.236				
	Cd	114					
>	In	115			89.3		
	Sn	120	99.130				
	Sb	121	97.762				
	Sb	123					
	Ba	135					
	Ba	137	98.541				
	Ho	165					
>	Lu	175			89.0		
	Tl	205	100.718				
	Pb	208	102.415				
	Bi	209					
	Th	232	108.560				
	U	238	110.813				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 01, 2009 04:50:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 9.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.031**	**ug/L**	22.231	242	0.000
	Be	9	**0.009**	**ug/L**	26.508	17	0.000
	B	11	**2.710**	**ug/L**	20.528	1982	0.001
	Na	23	**0.448**	**ug/L**	161.050	31368	0.002
	Mg	24	**2.122**	**ug/L**	48.737	13006	0.007
	Al	27	**2.972**	**ug/L**	60.927	19014	0.012
	P	31	**-4.314**	**ug/L**	48.023	6450	-0.001
	K	39	**-3.378**	**ug/L**	115.285	595845	-0.017
	Ca	43	**1.693**	**ug/L**	21.733	175	0.000
>	Sc	45		**ug/L**		906084	906084.107
	Ti	47	**0.179**	**ug/L**	70.003	442	0.000
	V	51	**0.380**	**ug/L**	82.638	-1973	0.002
	Cr	52	**-0.010**	**ug/L**	264.266	-93	-0.000
	Cr	53		**ug/L**		55457	-0.001
	Mn	55	**-0.063**	**ug/L**	2.993	2161	-0.000
	Fe	57	**1.026**	**ug/L**	103.200	5339	0.000
	Co	59	**0.008**	**ug/L**	47.363	200	0.000
	Ni	60	**-0.009**	**ug/L**	131.043	84	-0.000
	Cu	63		**ug/L**		179	-0.000
	Cu	65	**-0.002**	**ug/L**	382.043	69	-0.000
	Zn	66	**-0.001**	**ug/L**	1407.946	186	-0.000
	Zn	67		**ug/L**		6296	-0.002
	Zn	68		**ug/L**		934	-0.001
>	Ge	74		**ug/L**		283432	283432.272
	As	75	**0.347**	**ug/L**	100.040	-37	0.001
	Se	77		**ug/L**		3397	0.001
	Se	82	**0.278**	**ug/L**	42.063	-17	0.000
	Kr	83		**ug/L**		72	-0.000
	Sr	88	**0.007**	**ug/L**	34.297	249	0.000
	Y	89		**ug/L**		69	-0.000
	Mo	98	**0.051**	**ug/L**	34.587	213	0.001
	Ag	107	**0.004**	**ug/L**	46.622	77	0.000
	Cd	111	**0.008**	**ug/L**	33.629	36	0.000
	Cd	114		**ug/L**		61	0.000
>	In	115		**ug/L**		173816	173815.968
	Sn	120	**0.271**	**ug/L**	24.821	1392	0.006
	Sb	121	**0.908**	**ug/L**	30.514	3332	0.016
	Sb	123		**ug/L**		2564	0.012
	Ba	135		**ug/L**		66	0.000
	Ba	137	**0.018**	**ug/L**	23.353	107	0.000
	Ho	165		**ug/L**		24	-0.000
>	Lu	175		**ug/L**		266265	266265.485
	Tl	205	**0.115**	**ug/L**	29.504	1876	0.005
	Pb	208	**0.008**	**ug/L**	24.330	845	0.001
	Bi	209		**ug/L**		167	-0.000
	Th	232	**0.381**	**ug/L**	33.500	9163	0.027
	U	238	**0.014**	**ug/L**	24.919	720	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536002
Sample Date/Time: Tuesday, December 01, 2009 04:56:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241536002.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.344**	**ug/L**	1.784	114099	0.119
	Be	9	**3.720**	**ug/L**	3.087	1772	0.002
	B	11	**16.762**	**ug/L**	5.056	8519	0.008
	Na	23	**782.430**	**ug/L**	5.005	3602514	3.725
	Mg	24	**8116.577**	**ug/L**	5.710	27227831	28.396
	Al	27	**57023.327**	**ug/L**	4.232	226469924	236.218
	P	31	**973.132**	**ug/L**	2.260	196963	0.197
	K	39	**8994.247**	**ug/L**	7.218	44617901	45.861
	Ca	43	**9931.293**	**ug/L**	0.395	118082	0.123
>	Sc	45		**ug/L**		959004	959004.105
	Ti	47	**954.374**	**ug/L**	1.243	524068	0.546
	V	51	**111.540**	**ug/L**	2.147	588996	0.619
	Cr	52	**44.252**	**ug/L**	2.092	180994	0.189
	Cr	53		**ug/L**		61992	0.002
	Mn	55	**2403.606**	**ug/L**	1.709	17316367	18.056
	Fe	57	**64151.713**	**ug/L**	2.491	8856229	9.231
	Co	59	**34.776**	**ug/L**	1.985	185390	0.193
	Ni	60	**33.280**	**ug/L**	0.736	37718	0.039
	Cu	63		**ug/L**		89702	0.093
	Cu	65	**35.774**	**ug/L**	2.398	43243	0.045
	Zn	66	**170.476**	**ug/L**	1.354	130651	0.490
	Zn	67		**ug/L**		27124	0.078
	Zn	68		**ug/L**		97465	0.362
>	Ge	74		**ug/L**		266214	266214.394
	As	75	**15.752**	**ug/L**	7.746	12020	0.046
	Se	77		**ug/L**		2272	-0.002
	Se	82	**-0.402**	**ug/L**	64.719	-70	-0.000
	Kr	83		**ug/L**		259	0.001
	Sr	88	**106.848**	**ug/L**	0.723	929148	5.537
	Y	89		**ug/L**		572920	3.415
	Mo	98	**4.292**	**ug/L**	0.998	9422	0.056
	Ag	107	**0.493**	**ug/L**	2.016	1875	0.011
	Cd	111	**1.976**	**ug/L**	6.430	1912	0.011
	Cd	114		**ug/L**		1138	0.007
>	In	115		**ug/L**		167769	167769.406
	Sn	120	**1.329**	**ug/L**	0.216	5287	0.030
	Sb	121	**1.003**	**ug/L**	2.976	3500	0.018
	Sb	123		**ug/L**		2634	0.013
	Ba	135		**ug/L**		603061	2.264
	Ba	137	**590.849**	**ug/L**	2.512	1018617	3.824
	Ho	165		**ug/L**		38016	0.143
>	Lu	175		**ug/L**		266369	266368.940
	Tl	205	**0.916**	**ug/L**	0.851	11139	0.040
	Pb	208	**93.639**	**ug/L**	1.587	1600698	6.007
	Bi	209		**ug/L**		26667	0.099
	Th	232	**32.211**	**ug/L**	1.674	599091	2.241
	U	238	**6.283**	**ug/L**	2.182	118761	0.444

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241536003
Sample Date/Time: Tuesday, December 01, 2009 05:03:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241536003.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**69.670**	ug/L	0.953	150531	0.161
	Be	9	**6.523**	ug/L	1.359	3013	0.003
	B	11	**20.949**	ug/L	2.402	10151	0.010
	Na	23	**1151.039**	ug/L	4.343	5141313	5.480
	Mg	24	**16324.904**	ug/L	4.558	53271843	57.113
	Al	27	**92434.312**	ug/L	5.529	357211891	382.907
	P	31	**355.336**	ug/L	0.388	74698	0.072
	K	39	**12657.875**	ug/L	5.375	60842592	64.542
	Ca	43	**39048.384**	ug/L	1.767	451047	0.483
>	Sc	45		ug/L		932733	932733.495
	Ti	47	**679.417**	ug/L	1.085	362968	0.389
	V	51	**112.753**	ug/L	0.549	579214	0.625
	Cr	52	**62.727**	ug/L	0.801	249578	0.268
	Cr	53		ug/L		67725	0.010
	Mn	55	**1169.130**	ug/L	0.858	8193811	8.782
	Fe	57	**81454.287**	ug/L	1.273	10937254	11.720
	Co	59	**23.689**	ug/L	1.417	122901	0.132
	Ni	60	**46.460**	ug/L	1.925	51172	0.055
	Cu	63		ug/L		110203	0.118
	Cu	65	**45.534**	ug/L	0.908	53517	0.057
	Zn	66	**187.636**	ug/L	1.895	129082	0.539
	Zn	67		ug/L		37692	0.134
	Zn	68		ug/L		135006	0.561
>	Ge	74		ug/L		238997	238997.002
	As	75	**14.774**	ug/L	2.207	10105	0.043
	Se	77		ug/L		2755	0.001
	Se	82	**-0.670**	ug/L	9.931	-82	-0.000
	Kr	83		ug/L		273	0.001
	Sr	88	**277.040**	ug/L	0.862	2215688	14.356
	Y	89		ug/L		629255	4.077
	Mo	98	**1.425**	ug/L	2.298	2935	0.018
	Ag	107	**0.506**	ug/L	4.986	1768	0.011
	Cd	111	**1.864**	ug/L	3.644	1661	0.011
	Cd	114		ug/L		354	0.002
>	In	115		ug/L		154332	154332.105
	Sn	120	**0.515**	ug/L	5.050	2072	0.011
	Sb	121	**0.165**	ug/L	4.582	937	0.003
	Sb	123		ug/L		783	0.003
	Ba	135		ug/L		3148961	12.598
	Ba	137	**3306.374**	ug/L	0.752	5349149	21.401
	Ho	165		ug/L		44769	0.179
>	Lu	175		ug/L		249947	249947.129
	Tl	205	**1.410**	ug/L	2.642	15805	0.061
	Pb	208	**59.424**	ug/L	1.511	953502	3.812
	Bi	209		ug/L		16487	0.065
	Th	232	**44.615**	ug/L	1.518	777828	3.104
	U	238	**2.798**	ug/L	0.435	49869	0.198

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		78.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		81.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		85.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)
Ba 137 Upper, S, EEBa	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241536004
Sample Date/Time: Tuesday, December 01, 2009 05:09:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241536004.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**68.257**	ug/L	1.144	140666	0.158
	Be	9	**7.661**	ug/L	3.160	3372	0.004
	B	11	**19.712**	ug/L	1.112	9155	0.009
	Na	23	**2315.811**	ug/L	8.565	9836805	11.026
	Mg	24	**14832.981**	ug/L	4.871	46168931	51.894
	Al	27	**88520.775**	ug/L	4.734	326164986	366.695
	P	31	**495.590**	ug/L	1.632	96549	0.101
	K	39	**11528.774**	ug/L	5.721	52906601	58.785
	Ca	43	**13878.750**	ug/L	0.383	153017	0.172
>	Sc	45		ug/L		889596	889596.201
	Ti	47	**861.093**	ug/L	0.358	438691	0.493
	V	51	**94.910**	ug/L	1.760	464388	0.526
	Cr	52	**55.444**	ug/L	1.251	210400	0.237
	Cr	53		ug/L		63373	0.009
	Mn	55	**1470.113**	ug/L	0.436	9826722	11.043
	Fe	57	**80521.472**	ug/L	1.527	10311453	11.586
	Co	59	**21.567**	ug/L	1.091	106724	0.120
	Ni	60	**60.738**	ug/L	0.684	63782	0.072
	Cu	63		ug/L		88801	0.100
	Cu	65	**38.257**	ug/L	1.217	42899	0.048
	Zn	66	**194.727**	ug/L	0.667	134277	0.560
	Zn	67		ug/L		27161	0.090
	Zn	68		ug/L		100111	0.414
>	Ge	74		ug/L		239562	239562.016
	As	75	**10.203**	ug/L	0.703	6910	0.030
	Se	77		ug/L		2444	-0.001
	Se	82	**-1.240**	ug/L	20.285	-124	-0.000
	Kr	83		ug/L		377	0.001
	Sr	88	**165.481**	ug/L	0.899	1324657	8.575
	Y	89		ug/L		1004705	6.505
	Mo	98	**2.447**	ug/L	1.218	4982	0.032
	Ag	107	**0.654**	ug/L	4.671	2270	0.014
	Cd	111	**2.753**	ug/L	5.023	2444	0.016
	Cd	114		ug/L		397	0.002
>	In	115		ug/L		154460	154459.505
	Sn	120	**1.071**	ug/L	1.808	3982	0.024
	Sb	121	**0.080**	ug/L	11.815	706	0.001
	Sb	123		ug/L		548	0.001
	Ba	135		ug/L		539302	2.062
	Ba	137	**543.133**	ug/L	0.510	919299	3.515
	Ho	165		ug/L		70257	0.269
>	Lu	175		ug/L		261479	261478.908
	Tl	205	**1.182**	ug/L	1.363	13954	0.051
	Pb	208	**51.445**	ug/L	0.574	863676	3.300
	Bi	209		ug/L		14711	0.056
	Th	232	**36.199**	ug/L	1.892	660603	2.519
	U	238	**2.784**	ug/L	1.565	51895	0.197

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		78.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		81.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241536005
Sample Date/Time: Tuesday, December 01, 2009 05:15:21
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241536005.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.557**	ug/L	0.296	109546	0.119
	Be	9	**4.470**	ug/L	2.459	2033	0.002
	B	11	**14.517**	ug/L	3.442	7167	0.007
	Na	23	**887.056**	ug/L	4.495	3902124	4.224
	Mg	24	**9541.069**	ug/L	0.573	30610170	33.380
	Al	27	**75391.182**	ug/L	1.316	286321457	312.306
	P	31	**655.338**	ug/L	1.264	129216	0.133
	K	39	**7410.926**	ug/L	1.852	35271068	37.788
	Ca	43	**10504.797**	ug/L	0.541	119414	0.130
>	Sc	45		ug/L		916889	916889.373
	Ti	47	**784.305**	ug/L	0.752	411846	0.449
	V	51	**127.728**	ug/L	3.018	645435	0.708
	Cr	52	**50.746**	ug/L	0.925	198461	0.217
	Cr	53		ug/L		61545	0.005
	Mn	55	**2881.605**	ug/L	1.125	19849527	21.646
	Fe	57	**76932.349**	ug/L	0.974	10155096	11.070
	Co	59	**33.339**	ug/L	1.891	169926	0.185
	Ni	60	**28.984**	ug/L	1.651	31415	0.034
	Cu	63		ug/L		77106	0.084
	Cu	65	**32.480**	ug/L	1.065	37545	0.041
	Zn	66	**158.083**	ug/L	1.797	113165	0.455
	Zn	67		ug/L		24035	0.073
	Zn	68		ug/L		85271	0.339
>	Ge	74		ug/L		248664	248664.300
	As	75	**17.537**	ug/L	1.969	12532	0.052
	Se	77		ug/L		2258	-0.002
	Se	82	**-0.500**	ug/L	52.729	-73	-0.000
	Kr	83		ug/L		329	0.001
	Sr	88	**112.458**	ug/L	1.203	929092	5.828
	Y	89		ug/L		699451	4.388
	Mo	98	**2.315**	ug/L	2.558	4868	0.030
	Ag	107	**0.596**	ug/L	3.773	2141	0.013
	Cd	111	**2.225**	ug/L	7.164	2044	0.013
	Cd	114		ug/L		659	0.004
>	In	115		ug/L		159417	159416.933
	Sn	120	**0.728**	ug/L	5.222	2895	0.016
	Sb	121	**0.112**	ug/L	9.304	818	0.002
	Sb	123		ug/L		652	0.002
	Ba	135		ug/L		538368	2.110
	Ba	137	**547.492**	ug/L	1.417	904389	3.544
	Ho	165		ug/L		50104	0.196
>	Lu	175		ug/L		255204	255204.281
	Tl	205	**0.931**	ug/L	1.369	10838	0.040
	Pb	208	**85.201**	ug/L	0.256	1395633	5.466
	Bi	209		ug/L		12571	0.049
	Th	232	**40.986**	ug/L	1.284	729783	2.852
	U	238	**4.432**	ug/L	0.796	80394	0.313

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		81.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		87.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241536006
Sample Date/Time: Tuesday, December 01, 2009 05:21:32
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241536006.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**45.986**	ug/L	1.258	95986	0.106
	Be	9	**3.418**	ug/L	3.275	1530	0.002
	B	11	**12.964**	ug/L	2.104	6372	0.006
	Na	23	**787.871**	ug/L	8.559	3408367	3.751
	Mg	24	**8853.832**	ug/L	3.147	27904299	30.975
	Al	27	**56024.610**	ug/L	3.906	209049160	232.081
	P	31	**528.803**	ug/L	0.805	103809	0.107
	K	39	**7393.937**	ug/L	5.848	34565646	37.701
	Ca	43	**8019.788**	ug/L	0.182	89576	0.099
>	Sc	45		ug/L		900565	900565.136
	Ti	47	**935.500**	ug/L	0.875	482427	0.535
	V	51	**108.899**	ug/L	1.983	539956	0.604
	Cr	52	**45.913**	ug/L	1.001	176372	0.196
	Cr	53		ug/L		58657	0.003
	Mn	55	**1699.452**	ug/L	1.101	11499043	12.766
	Fe	57	**56905.527**	ug/L	1.464	7378579	8.188
	Co	59	**36.047**	ug/L	1.224	180471	0.200
	Ni	60	**29.994**	ug/L	1.652	31930	0.035
	Cu	63		ug/L		64928	0.072
	Cu	65	**27.866**	ug/L	1.376	31649	0.035
	Zn	66	**101.713**	ug/L	1.196	74747	0.292
	Zn	67		ug/L		17614	0.045
	Zn	68		ug/L		56195	0.217
>	Ge	74		ug/L		255045	255044.557
	As	75	**11.565**	ug/L	0.967	8378	0.034
	Se	77		ug/L		2103	-0.003
	Se	82	**-0.535**	ug/L	43.940	-78	-0.000
	Kr	83		ug/L		266	0.001
	Sr	88	**104.496**	ug/L	0.142	878094	5.415
	Y	89		ug/L		419802	2.589
	Mo	98	**1.511**	ug/L	4.433	3264	0.020
	Ag	107	**0.482**	ug/L	1.608	1773	0.011
	Cd	111	**1.587**	ug/L	7.780	1490	0.009
	Cd	114		ug/L		505	0.003
>	In	115		ug/L		162124	162124.459
	Sn	120	**0.870**	ug/L	4.589	3458	0.019
	Sb	121	**0.071**	ug/L	22.353	716	0.001
	Sb	123		ug/L		566	0.001
	Ba	135		ug/L		363579	1.431
	Ba	137	**381.120**	ug/L	0.921	626882	2.467
	Ho	165		ug/L		29053	0.114
>	Lu	175		ug/L		254099	254099.448
	Tl	205	**0.958**	ug/L	1.113	11084	0.042
	Pb	208	**59.203**	ug/L	0.872	965773	3.798
	Bi	209		ug/L		12402	0.048
	Th	232	**37.281**	ug/L	1.061	661116	2.594
	U	238	**4.626**	ug/L	0.707	83538	0.327

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		83.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		86.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241536007
Sample Date/Time: Tuesday, December 01, 2009 05:27:44
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241536007.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**72.150**	ug/L	0.647	150894	0.167
	Be	9	**7.749**	ug/L	1.961	3461	0.004
	B	11	**21.426**	ug/L	2.473	10030	0.010
	Na	23	**2421.634**	ug/L	12.585	10438422	11.530
	Mg	24	**15310.161**	ug/L	3.255	48367451	53.563
	Al	27	**94349.170**	ug/L	2.441	352899820	390.839
	P	31	**624.672**	ug/L	1.273	121642	0.127
	K	39	**11435.702**	ug/L	5.424	53259312	58.310
	Ca	43	**14787.046**	ug/L	1.110	165457	0.183
>	Sc	45		ug/L		902894	902894.035
	Ti	47	**958.074**	ug/L	1.026	495355	0.548
	V	51	**95.219**	ug/L	0.631	472905	0.528
	Cr	52	**55.364**	ug/L	0.776	213243	0.236
	Cr	53		ug/L		61475	0.006
	Mn	55	**1500.614**	ug/L	0.351	10180495	11.273
	Fe	57	**82869.195**	ug/L	0.880	10771307	11.924
	Co	59	**26.890**	ug/L	2.022	135018	0.149
	Ni	60	**60.456**	ug/L	0.202	64435	0.071
	Cu	63		ug/L		90938	0.100
	Cu	65	**39.038**	ug/L	1.046	44427	0.049
	Zn	66	**193.794**	ug/L	0.752	135058	0.557
	Zn	67		ug/L		27191	0.089
	Zn	68		ug/L		100917	0.413
>	Ge	74		ug/L		242112	242112.484
	As	75	**10.104**	ug/L	3.617	6913	0.030
	Se	77		ug/L		2319	-0.001
	Se	82	**-1.779**	ug/L	28.156	-164	-0.001
	Kr	83		ug/L		416	0.001
	Sr	88	**173.908**	ug/L	0.665	1385697	9.012
	Y	89		ug/L		1082843	7.043
	Mo	98	**2.526**	ug/L	2.132	5117	0.033
	Ag	107	**0.662**	ug/L	2.514	2288	0.015
	Cd	111	**2.868**	ug/L	1.132	2534	0.016
	Cd	114		ug/L		427	0.002
>	In	115		ug/L		153741	153741.307
	Sn	120	**1.244**	ug/L	1.902	4556	0.028
	Sb	121	**0.078**	ug/L	19.984	699	0.001
	Sb	123		ug/L		577	0.001
	Ba	135		ug/L		523357	1.980
	Ba	137	**522.023**	ug/L	1.050	892952	3.379
	Ho	165		ug/L		76926	0.291
>	Lu	175		ug/L		264261	264261.134
	Tl	205	**1.166**	ug/L	2.289	13920	0.051
	Pb	208	**55.624**	ug/L	0.889	943703	3.569
	Bi	209		ug/L		14446	0.054
	Th	232	**35.942**	ug/L	1.695	662895	2.501
	U	238	**2.812**	ug/L	0.221	52974	0.199

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		79.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		81.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 01, 2009 05:33:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 6.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.053**	**ug/L**	1.281	96156	0.113
	Be	9	**50.979**	**ug/L**	0.958	21264	0.025
	B	11	**97.756**	**ug/L**	1.238	40156	0.047
	Na	23	**5058.974**	**ug/L**	6.633	20402262	24.087
	Mg	24	**4784.232**	**ug/L**	2.676	14160903	16.738
	Al	27	**4982.977**	**ug/L**	7.815	17461189	20.642
	P	31	**5323.500**	**ug/L**	0.735	920163	1.080
	K	39	**5428.158**	**ug/L**	6.817	23984326	27.678
	Ca	43	**4812.393**	**ug/L**	1.758	50538	0.060
>	Sc	45		**ug/L**		845768	845768.130
	Ti	47	**51.013**	**ug/L**	2.123	25014	0.029
	V	51	**51.016**	**ug/L**	0.691	235648	0.283
	Cr	52	**51.817**	**ug/L**	0.747	186946	0.221
	Cr	53		**ug/L**		74460	0.025
	Mn	55	**52.318**	**ug/L**	2.105	334797	0.393
	Fe	57	**5184.349**	**ug/L**	0.546	635767	0.746
	Co	59	**49.775**	**ug/L**	1.522	233985	0.276
	Ni	60	**49.365**	**ug/L**	0.227	49301	0.058
	Cu	63		**ug/L**		116897	0.138
	Cu	65	**51.488**	**ug/L**	0.638	54868	0.065
	Zn	66	**49.417**	**ug/L**	1.405	37611	0.142
	Zn	67		**ug/L**		11928	0.021
	Zn	68		**ug/L**		27100	0.099
>	Ge	74		**ug/L**		263523	263523.175
	As	75	**47.497**	**ug/L**	1.335	36492	0.140
	Se	77		**ug/L**		6037	0.012
	Se	82	**48.829**	**ug/L**	1.592	3831	0.015
	Kr	83		**ug/L**		104	0.000
	Sr	88	**49.073**	**ug/L**	1.843	418037	2.543
	Y	89		**ug/L**		287	0.001
	Mo	98	**48.302**	**ug/L**	2.058	102878	0.626
	Ag	107	**50.716**	**ug/L**	1.437	182745	1.112
	Cd	111	**48.885**	**ug/L**	1.073	45723	0.278
	Cd	114		**ug/L**		105072	0.639
>	In	115		**ug/L**		164329	164329.357
	Sn	120	**48.799**	**ug/L**	1.295	178547	1.085
	Sb	121	**48.311**	**ug/L**	7.728	140511	0.852
	Sb	123		**ug/L**		108944	0.661
	Ba	135		**ug/L**		46347	0.182
	Ba	137	**49.386**	**ug/L**	2.865	81294	0.320
	Ho	165		**ug/L**		61	0.000
>	Lu	175		**ug/L**		254182	254181.704
	Tl	205	**50.563**	**ug/L**	2.466	558096	2.194
	Pb	208	**51.050**	**ug/L**	1.430	833002	3.275
	Bi	209		**ug/L**		221	0.000
	Th	232	**54.633**	**ug/L**	2.092	967962	3.801
	U	238	**55.532**	**ug/L**	1.688	998082	3.926

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.106				
	Be	9	101.959				
	B	11	97.756				
	Na	23	101.179				
	Mg	24	95.685				
	Al	27	98.673				
	P	31	106.470				
	K	39	108.563				
	Ca	43	96.248				
>	Sc	45		87.5			
	Ti	47	102.026				
	V	51	102.031				
	Cr	52	103.634				
	Cr	53					
	Mn	55	104.636				
	Fe	57	103.687				
	Co	59	99.549				
	Ni	60	98.729				
	Cu	63					
	Cu	65	102.976				
	Zn	66	98.834				
	Zn	67					
	Zn	68					
>	Ge	74		86.1			
	As	75	94.993				
	Se	77					
	Se	82	97.659				
	Kr	83					
	Sr	88	98.146				
	Y	89					
	Mo	98	96.605				
	Ag	107	101.433				
	Cd	111	97.769				
	Cd	114					
>	In	115		86.7			
	Sn	120	97.598				
	Sb	121	96.622				
	Sb	123					
	Ba	135					
	Ba	137	98.771				
	Ho	165					
>	Lu	175		86.7			
	Tl	205	101.126				
	Pb	208	102.099				
	Bi	209					
	Th	232	109.266				
	U	238	111.063				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	U	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 01, 2009 05:40:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 7.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.024**	**ug/L**	42.521	218	0.000
	Be	9	**0.003**	**ug/L**	354.098	14	0.000
	B	11	**2.515**	**ug/L**	21.268	1823	0.001
	Na	23	**-0.282**	**ug/L**	458.560	27026	-0.001
	Mg	24	**0.440**	**ug/L**	41.084	7335	0.002
	Al	27	**3.662**	**ug/L**	61.723	20683	0.015
	P	31	**1.615**	**ug/L**	77.382	7235	0.000
	K	39	**8.844**	**ug/L**	32.264	625746	0.045
	Ca	43	**3.217**	**ug/L**	78.404	184	0.000
>	Sc	45		**ug/L**		869159	869158.556
	Ti	47	**0.270**	**ug/L**	38.960	470	0.000
	V	51	**0.036**	**ug/L**	706.129	-3559	0.000
	Cr	52	**-0.025**	**ug/L**	53.510	-143	-0.000
	Cr	53		**ug/L**		52687	-0.002
	Mn	55	**0.236**	**ug/L**	6.889	4029	0.002
	Fe	57	**6.073**	**ug/L**	5.376	5754	0.001
	Co	59	**0.006**	**ug/L**	52.975	186	0.000
	Ni	60	**-0.011**	**ug/L**	76.669	79	-0.000
	Cu	63		**ug/L**		194	-0.000
	Cu	65	**0.008**	**ug/L**	13.719	76	0.000
	Zn	66	**-0.003**	**ug/L**	413.796	177	-0.000
	Zn	67		**ug/L**		6252	-0.001
	Zn	68		**ug/L**		963	-0.000
>	Ge	74		**ug/L**		271692	271692.304
	As	75	**0.180**	**ug/L**	156.514	-171	0.001
	Se	77		**ug/L**		2993	0.000
	Se	82	**0.298**	**ug/L**	32.420	-15	0.000
	Kr	83		**ug/L**		75	-0.000
	Sr	88	**0.011**	**ug/L**	9.107	277	0.001
	Y	89		**ug/L**		107	0.000
	Mo	98	**0.052**	**ug/L**	34.485	209	0.001
	Ag	107	**0.007**	**ug/L**	12.274	87	0.000
	Cd	111	**-0.000**	**ug/L**	4566.931	27	-0.000
	Cd	114		**ug/L**		55	0.000
>	In	115		**ug/L**		167914	167914.030
	Sn	120	**0.264**	**ug/L**	18.593	1317	0.006
	Sb	121	**0.909**	**ug/L**	27.562	3223	0.016
	Sb	123		**ug/L**		2527	0.013
	Ba	135		**ug/L**		66	0.000
	Ba	137	**0.020**	**ug/L**	51.845	106	0.000
	Ho	165		**ug/L**		25	-0.000
>	Lu	175		**ug/L**		256979	256979.296
	Tl	205	**0.115**	**ug/L**	21.267	1816	0.005
	Pb	208	**0.012**	**ug/L**	18.047	876	0.001
	Bi	209		**ug/L**		155	-0.000
	Th	232	**0.376**	**ug/L**	32.257	8754	0.026
	U	238	**0.016**	**ug/L**	22.113	733	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		87.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 01, 2009 08:07:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\Blank.240

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		264474	
	U	238		ug/L		1753	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 01, 2009 08:09:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\Standard 1.241

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		263019	263018.511
	U	238	10.000	ug/L	0.595	224001	0.845

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 01, 2009 08:10:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\Standard 2.242

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		255465	255465.435
	U	238	99.830	ug/L	1.263	1843043	7.209

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 01, 2009 08:12:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 1.243

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		260222	260222.479
	U	238	54.224	ug/L	1.386	1020575	3.916

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.4			
	U	238	108.448				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 01, 2009 08:13:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 2.244

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		260800	260800.423
	U	238	0.001	ug/L	257.624	1738	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 01, 2009 08:15:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 3.245

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		259307	259307.206
	U	238	0.194	ug/L	0.802	5349	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.0			
	U	238	96.945				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 01, 2009 08:17:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 4.246

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		225955	225955.182
⌊	U	238	-0.060	ug/L	1.142	512	-0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		85.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 01, 2009 08:18:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 5.247

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		257151	257151.399
	U	238	23.949	ug/L	1.490	446423	1.729

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.2			
	U	238	119.747				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 01, 2009 08:20:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 6.248

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		260374	260374.228
	U	238	52.223	ug/L	2.249	983368	3.771

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.4			
	U	238	104.446				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 01, 2009 08:22:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 7.249

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		260260	260259.750
	U	238	-0.015	ug/L	4.955	1434	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978577
Sample Date/Time: Tuesday, December 01, 2009 08:23:53
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\1201978577.250

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		268176	268176.226
⌊	U	238	-0.063	ug/L	1.948	565	-0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		101.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978582
Sample Date/Time: Tuesday, December 01, 2009 08:27:21
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925472|40|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\1201978582.252

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		264625	264625.407
⌊	U	238	0.425	ug/L	2.954	9867	0.031

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978578
Sample Date/Time: Tuesday, December 01, 2009 08:30:47
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\1201978578.254

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		266201	266200.794
	U	238	0.924	ug/L	0.257	19536	0.067

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978580
Sample Date/Time: Tuesday, December 01, 2009 08:32:30
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\1201978580.255

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		260127	260127.182
⌊	U	238	32.217	ug/L	0.388	606938	2.327

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978581
Sample Date/Time: Tuesday, December 01, 2009 08:34:15
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\1201978581.256

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		262133	262133.069
	U	238	30.603	ug/L	1.554	580932	2.210

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.1			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978579
Sample Date/Time: Tuesday, December 01, 2009 08:35:59
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925472|10|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\1201978579.257

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		265182	265181.789
⌊	U	238	0.133	ug/L	3.938	4301	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.3			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 01, 2009 08:37:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 8.258

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		260047	260047.008
	U	238	52.094	ug/L	0.560	979941	3.762

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.3			
	U	238	104.187				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 01, 2009 08:39:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 9.259

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		261840	261840.480
	U	238	**-0.021**	**ug/L**	6.410	1333	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.0			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536001
Sample Date/Time: Tuesday, December 01, 2009 08:51:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\241536001.266

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		246588	246587.838
	U	238	3.016	ug/L	0.569	55338	0.218

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		93.2			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 01, 2009 08:53:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 8.267

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		251586	251586.106
	U	238	53.137	ug/L	0.227	967065	3.837

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		95.1			
	U	238	106.273				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 01, 2009 08:54:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 9.268

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		254722	254721.708
	U	238	-0.023	ug/L	20.343	1262	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		96.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536002
Sample Date/Time: Tuesday, December 01, 2009 08:56:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\241536002.269

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		252975	252974.773
	U	238	6.212	ug/L	0.380	115157	0.449

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		95.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536003
Sample Date/Time: Tuesday, December 01, 2009 08:58:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|ba|
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\241536003.270

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		246663	246663.461
	U	238	2.722	ug/L	1.177	50121	0.197

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		93.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536004
Sample Date/Time: Tuesday, December 01, 2009 09:00:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\241536004.271

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		258073	258072.648
⌊	U	238	2.672	ug/L	0.626	51514	0.193

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536005
Sample Date/Time: Tuesday, December 01, 2009 09:01:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\241536005.272

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		253625	253624.821
	U	238	**4.270**	**ug/L**	0.351	79890	0.308

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		95.9			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536006
Sample Date/Time: Tuesday, December 01, 2009 09:03:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\241536006.273

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		247687	247686.547
	U	238	4.540	ug/L	0.489	82840	0.328

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		93.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241536007
Sample Date/Time: Tuesday, December 01, 2009 09:05:18
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\241536007.274

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		256267	256267.000
⌊	U	238	**2.759**	**ug/L**	0.769	52751	0.199

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		96.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 01, 2009 09:07:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 6.275

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		249321	249321.025
	U	238	52.750	ug/L	0.997	951341	3.809

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		94.3			
	U	238	105.501				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 01, 2009 09:08:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\dataset\091130\QC Std 7.276

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		254879	254879.204
⌊	U	238	-0.024	ug/L	8.205	1244	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		96.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/07/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120709S1.SIF Results Data Set Name: 120709S1

==========

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/07/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0043	09:54:40	No
2			0.0044	0.0044	09:55:15	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.5786			

Auto-zero performed.

==========

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/07/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0056	09:56:37	No
2			0.0017	0.0060	09:57:13	No
Mean:			0.0014			
SD :			0.0003			
%RSD:			21.7220			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00720
Intercept : 0.00000

==========

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/07/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0041	0.0085	09:58:35	No
2			0.0040	0.0084	09:59:11	No
Mean:			0.0041			
SD :			0.0001			
%RSD:			1.6133			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99849 Slope: 0.00824
Intercept : -0.00008

==========

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/07/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0165	0.0209	10:00:35	No
2			0.0168	0.0211	10:01:10	No
Mean:			0.0166			
SD :			0.0002			
%RSD:			1.1765			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99992 Slope: 0.00837
Intercept : -0.00010

==========
Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/07/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0406	0.0449	10:02:36	No
2			0.0407	0.0451	10:03:10	No
Mean:			0.0406			
SD :			0.0001			
%RSD:			0.2535			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99993 Slope: 0.00815
Intercept : 0.00001

==========
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/07/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0801	0.0845	10:04:36	No
2			0.0817	0.0860	10:05:11	No
Mean:			0.0809			
SD :			0.0011			
%RSD:			1.3799			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00809
Intercept : 0.00008

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0014	0.200	0.168	0.0003	21.7
S0.5	0.0041	0.500	0.497	0.0001	1.6
S2.0	0.0166	2.000	2.047	0.0002	1.2
S5.0	0.0406	5.000	5.011	0.0001	0.3
S10	0.0809	10.000	9.986	0.0011	1.4
Calib Blank	0.0044	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00809 Intercept: 0.0001

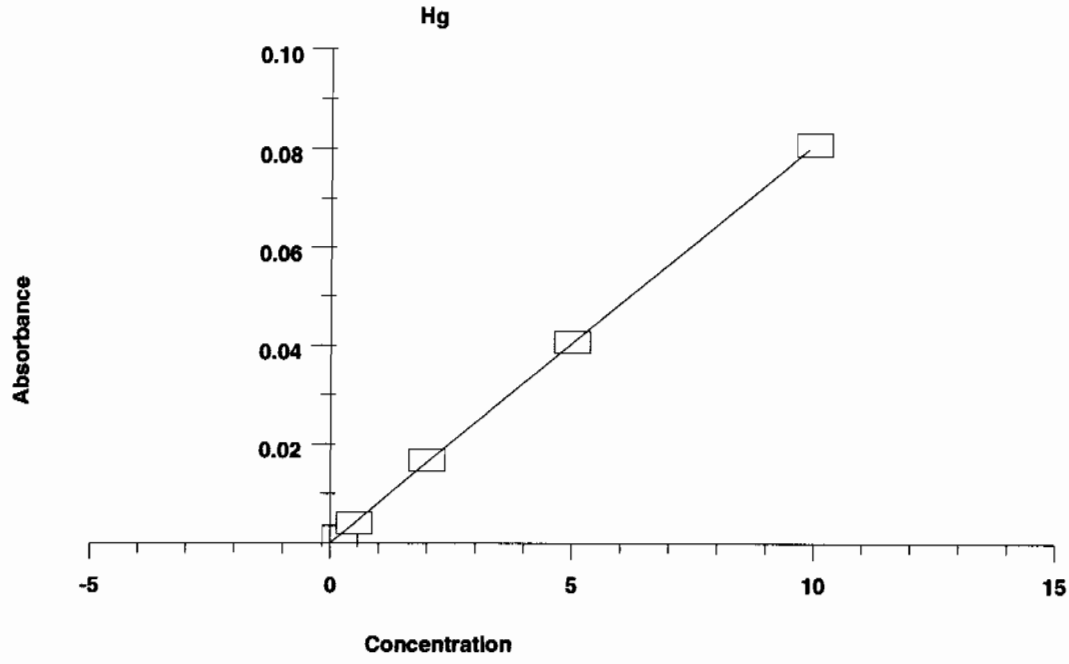

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/07/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0421	0.0465	10:06:40	No
2	5.181	5.181	0.0420	0.0464	10:07:15	No
Mean:	5.188	5.188	0.0421			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.2	0.2	0.2028			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/07/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:08:38	No
2	-0.104	-0.104	-0.0008	0.0036	10:09:13	No
Mean:	-0.096	-0.096	-0.0007			
SD :	0.0124	0.0124	0.0001			
%RSD:	13.0	13.0	14.4602			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/07/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0014	0.0057	10:10:35	No
2	0.148	0.148	0.0013	0.0056	10:11:10	No
Mean:	0.155	0.155	0.0013			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.9	5.9	5.5112			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0420	0.0463	10:12:35	No
2	5.181	5.181	0.0420	0.0464	10:13:09	No
Mean:	5.178	5.178	0.0420			
SD :	0.0040	0.0040	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0006	0.0037	10:14:37	No
2	-0.106	-0.106	-0.0008	0.0036	10:15:12	No
Mean:	-0.098	-0.098	-0.0007			
SD :	0.0123	0.0123	0.0001			
%RSD:	12.5	12.5	13.8998			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978905|i||925609|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0039	10:16:38	No
2	-0.093	-0.093	-0.0007	0.0037	10:17:13	No
Mean:	-0.077	-0.077	-0.0005			
SD :	0.0218	0.0218	0.0002			
%RSD:	28.2	28.2	32.1293			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978906|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.940	3.940	0.0320	0.0363	10:18:37	No
2	3.939	3.939	0.0319	0.0363	10:19:12	No
Mean:	3.939	3.939	0.0320			
SD :	0.0008	0.0008	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241604001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0057	10:20:38	No
2	0.157	0.157	0.0014	0.0057	10:21:14	No
Mean:	0.158	0.158	0.0014			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.5109			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241604002|i|||

%RSD: 7.6 7.6 8.0893

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/07/2009
Sample ID: 241608002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0013	0.0057	10:34:28	No
2	0.136	0.136	0.0012	0.0055	10:35:03	No
Mean:	0.143	0.143	0.0012			
SD :	0.0106	0.0106	0.0001			
%RSD:	7.4	7.4	6.9743			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.376	5.376	0.0436	0.0479	10:36:28	No
2	5.389	5.389	0.0437	0.0481	10:37:02	No
Mean:	5.383	5.383	0.0436			
SD :	0.0096	0.0096	0.0001			
%RSD:	0.2	0.2	0.1786			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:38:30	No
2	-0.095	-0.095	-0.0007	0.0037	10:39:04	No
Mean:	-0.091	-0.091	-0.0007			
SD :	0.0058	0.0058	0.0000			
%RSD:	6.4	6.4	7.1360			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201977155|i||924862|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0038	10:40:29	No
2	-0.083	-0.083	-0.0006	0.0038	10:41:04	No
Mean:	-0.083	-0.083	-0.0006			
SD :	0.0010	0.0010	0.0000			
%RSD:	1.2	1.2	1.4027			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201977156|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.825	3.825	0.0310	0.0354	10:42:28	No
2	3.817	3.817	0.0310	0.0353	10:43:02	No
Mean:	3.821	3.821	0.0310			
SD :	0.0054	0.0054	0.0000			
%RSD:	0.1	0.1	0.1420			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/07/2009
Sample ID: 241417001|i|||

%RSD: 1.9 1.9 1.8136

==========

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 12/07/2009
Sample ID: 241419005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.410	0.410	0.0034	0.0078	10:56:30	No
2	0.392	0.392	0.0033	0.0076	10:57:05	No
Mean:	0.401	0.401	0.0033			
SD :	0.0126	0.0126	0.0001			
%RSD:	3.1	3.1	3.0692			

==========

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 12/07/2009
Sample ID: 241419006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.446	0.446	0.0037	0.0080	10:58:33	No
2	0.430	0.430	0.0036	0.0079	10:59:07	No
Mean:	0.438	0.438	0.0036			
SD :	0.0109	0.0109	0.0001			
%RSD:	2.5	2.5	2.4393			

==========

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.212	5.212	0.0423	0.0466	11:00:33	No
2	5.240	5.240	0.0425	0.0468	11:01:08	No
Mean:	5.226	5.226	0.0424			
SD :	0.0193	0.0193	0.0002			
%RSD:	0.4	0.4	0.3682			

QC value within specified limits.

==========

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.122	-0.122	-0.0009	0.0035	11:02:36	No
2	-0.111	-0.111	-0.0008	0.0035	11:03:10	No
Mean:	-0.116	-0.116	-0.0009			
SD :	0.0079	0.0079	0.0001			
%RSD:	6.8	6.8	7.3534			

QC value within specified limits.

==========

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 12/07/2009
Sample ID: 241419007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.387	0.387	0.0032	0.0076	11:04:34	No
2	0.368	0.368	0.0031	0.0074	11:05:09	No
Mean:	0.377	0.377	0.0031			
SD :	0.0133	0.0133	0.0001			
%RSD:	3.5	3.5	3.4418			

==========

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 12/07/2009
Sample ID: 241419008|i|||

%RSD: 1.8 1.8 1.7307

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/07/2009
Sample ID: 241419014|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0000	0.0043	11:18:08	No
2	-0.016	-0.016	-0.0001	0.0043	11:18:43	No
Mean:	-0.015	-0.015	0.0000			
SD :	0.0014	0.0014	0.0000			
%RSD:	9.3	9.3	24.9239			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/07/2009
Sample ID: 241419015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.432	0.432	0.0036	0.0079	11:20:06	No
2	0.415	0.415	0.0034	0.0078	11:20:41	No
Mean:	0.423	0.423	0.0035			
SD :	0.0118	0.0118	0.0001			
%RSD:	2.8	2.8	2.7227			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/07/2009
Sample ID: 241419016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0045	11:22:05	No
2	0.006	0.006	0.0001	0.0045	11:22:40	No
Mean:	0.004	0.004	0.0001			
SD :	0.0027	0.0027	0.0000			
%RSD:	70.3	70.3	20.4054			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.803	5.803	0.0470	0.0514	11:24:05	No
2	5.786	5.786	0.0469	0.0513	11:24:40	No
Mean:	5.795	5.795	0.0470			
SD :	0.0123	0.0123	0.0001			
%RSD:	0.2	0.2	0.2123			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0009	0.0034	11:26:08	No
2	-0.150	-0.150	-0.0011	0.0032	11:26:43	No
Mean:	-0.136	-0.136	-0.0010			
SD :	0.0186	0.0186	0.0002			
%RSD:	13.6	13.6	14.6683			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/07/2009
Sample ID: 241425001|i|||

%RSD: 0.9 0.9 0.9205

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/07/2009
Sample ID: 1201978947|i||925629|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0007	0.0036	11:40:13	No
2	-0.115	-0.115	-0.0009	0.0035	11:40:47	No
Mean:	-0.107	-0.107	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	10.2	10.2	11.2501			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/07/2009
Sample ID: 1201978948|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.055	4.055	0.0329	0.0373	11:42:08	No
2	4.065	4.065	0.0330	0.0373	11:42:43	No
Mean:	4.060	4.060	0.0329			
SD :	0.0066	0.0066	0.0001			
%RSD:	0.2	0.2	0.1622			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/07/2009
Sample ID: 241539001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.375	0.375	0.0031	0.0075	11:44:03	No
2	0.392	0.392	0.0032	0.0076	11:44:38	No
Mean:	0.383	0.383	0.0032			
SD :	0.0119	0.0119	0.0001			
%RSD:	3.1	3.1	3.0346			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/07/2009
Sample ID: 241539002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0012	0.0056	11:45:59	No
2	0.120	0.120	0.0010	0.0054	11:46:34	No
Mean:	0.132	0.132	0.0011			
SD :	0.0167	0.0167	0.0001			
%RSD:	12.7	12.7	11.8118			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.520	5.520	0.0447	0.0491	11:47:58	No
2	5.454	5.454	0.0442	0.0486	11:48:33	No
Mean:	5.487	5.487	0.0445			
SD :	0.0470	0.0470	0.0004			
%RSD:	0.9	0.9	0.8544			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0043	11:50:01	No
2	-0.023	-0.023	-0.0001	0.0042	11:50:36	No
Mean:	-0.022	-0.022	-0.0001			
SD :	0.0019	0.0019	0.0000			
%RSD:	8.7	8.7	15.3097			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/07/2009
Sample ID: 241539003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.086	0.086	0.0008	0.0051	11:52:01	No
2	0.084	0.084	0.0008	0.0051	11:52:37	No
Mean:	0.085	0.085	0.0008			
SD :	0.0009	0.0009	0.0000			
%RSD:	1.1	1.1	0.9509			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/07/2009
Sample ID: 241539004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.221	0.221	0.0019	0.0062	11:53:59	No
2	0.209	0.209	0.0018	0.0061	11:54:34	No
Mean:	0.215	0.215	0.0018			
SD :	0.0083	0.0083	0.0001			
%RSD:	3.8	3.8	3.6864			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/07/2009
Sample ID: 241541001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.546	0.546	0.0045	0.0089	11:55:56	No
2	0.545	0.545	0.0045	0.0089	11:56:31	No
Mean:	0.546	0.546	0.0045			
SD :	0.0002	0.0002	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/07/2009
Sample ID: 1201978949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.487	0.487	0.0040	0.0084	11:57:54	No
2	0.483	0.483	0.0040	0.0083	11:58:29	No
Mean:	0.485	0.485	0.0040			
SD :	0.0026	0.0026	0.0000			
%RSD:	0.5	0.5	0.5236			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/07/2009
Sample ID: 1201978950|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	11:59:52	No
2	3.254	3.254	0.0264	0.0308	12:00:27	No
Mean:	3.240	3.240	0.0263			
SD :	0.0199	0.0199	0.0002			

%RSD: 0.6 0.6 0.6129

==========

Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 12/07/2009
Sample ID: 1201978952|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.158	3.158	0.0256	0.0300	12:01:51	No
2	3.162	3.162	0.0257	0.0300	12:02:27	No
Mean:	3.160	3.160	0.0256			
SD :	0.0032	0.0032	0.0000			
%RSD:	0.1	0.1	0.1021			

==========

Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 12/07/2009
Sample ID: 1201978951|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0003	0.0040	12:03:50	No
2	-0.044	-0.044	-0.0003	0.0041	12:04:26	No
Mean:	-0.046	-0.046	-0.0003			
SD :	0.0026	0.0026	0.0000			
%RSD:	5.6	5.6	7.1103			

==========

Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 12/07/2009
Sample ID: 241541002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.289	0.289	0.0024	0.0068	12:05:49	No
2	0.275	0.275	0.0023	0.0067	12:06:24	No
Mean:	0.282	0.282	0.0024			
SD :	0.0100	0.0100	0.0001			
%RSD:	3.6	3.6	3.4438			

==========

Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 12/07/2009
Sample ID: 241541003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.449	0.449	0.0037	0.0081	12:07:49	No
2	0.441	0.441	0.0036	0.0080	12:08:24	No
Mean:	0.445	0.445	0.0037			
SD :	0.0062	0.0062	0.0001			
%RSD:	1.4	1.4	1.3659			

==========

Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 12/07/2009
Sample ID: 241541004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.301	0.301	0.0025	0.0069	12:09:50	No
2	0.274	0.274	0.0023	0.0067	12:10:25	No
Mean:	0.287	0.287	0.0024			
SD :	0.0190	0.0190	0.0002			
%RSD:	6.6	6.6	6.4003			

==========

Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Time	Peak

#	µg/L	µg/L	Signal	Height		Stored
1	5.542	5.542	0.0449	0.0493	12:11:51	No
2	5.592	5.592	0.0453	0.0497	12:12:25	No
Mean:	5.567	5.567	0.0451			
SD :	0.0353	0.0353	0.0003			
%RSD:	0.6	0.6	0.6332			

QC value within specified limits.

==========

Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0045	12:13:53	No
2	-0.005	-0.005	0.0000	0.0044	12:14:27	No
Mean:	-0.001	-0.001	0.0001			
SD :	0.0060	0.0060	0.0000			
%RSD:	918.9	918.9	67.3940			

QC value within specified limits.

==========

Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 12/07/2009
Sample ID: 241541005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0046	12:15:55	No
2	0.006	0.006	0.0001	0.0045	12:16:29	No
Mean:	0.010	0.010	0.0002			
SD :	0.0064	0.0064	0.0001			
%RSD:	63.0	63.0	32.5458			

==========

Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 12/07/2009
Sample ID: 241541006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.373	2.373	0.0193	0.0236	12:17:52	No
2	2.365	2.365	0.0192	0.0236	12:18:27	No
Mean:	2.369	2.369	0.0192			
SD :	0.0056	0.0056	0.0000			
%RSD:	0.2	0.2	0.2355			

==========

Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 12/07/2009
Sample ID: 241541007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.314	0.314	0.0026	0.0070	12:19:46	No
2	0.309	0.309	0.0026	0.0069	12:20:21	No
Mean:	0.312	0.312	0.0026			
SD :	0.0032	0.0032	0.0000			
%RSD:	1.0	1.0	0.9999			

==========

Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 12/07/2009
Sample ID: 241541008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.619	0.619	0.0051	0.0094	12:21:41	No
2	0.621	0.621	0.0051	0.0095	12:22:16	No
Mean:	0.620	0.620	0.0051			
SD :	0.0014	0.0014	0.0000			

#	µg/L	µg/L	Signal	Height		Stored
1	0.416	0.416	0.0034	0.0078	12:33:22	No
2	0.409	0.409	0.0034	0.0077	12:33:57	No
Mean:	0.412	0.412	0.0034			
SD :	0.0047	0.0047	0.0000			
%RSD:	1.1	1.1	1.1031			

==========

Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.554	5.554	0.0450	0.0494	12:35:22	No
2	5.529	5.529	0.0448	0.0492	12:35:57	No
Mean:	5.541	5.541	0.0449			
SD :	0.0183	0.0183	0.0001			
%RSD:	0.3	0.3	0.3293			

QC value within specified limits.

==========

Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0002	0.0042	12:37:25	No
2	-0.042	-0.042	-0.0003	0.0041	12:38:00	No
Mean:	-0.036	-0.036	-0.0002			
SD :	0.0078	0.0078	0.0001			
%RSD:	21.5	21.5	29.1602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 12/07/2009
Sample ID: 241541015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.317	0.317	0.0026	0.0070	12:39:26	No
2	0.302	0.302	0.0025	0.0069	12:40:01	No
Mean:	0.309	0.309	0.0026			
SD :	0.0107	0.0107	0.0001			
%RSD:	3.4	3.4	3.3438			

==========

Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 12/07/2009
Sample ID: 241541016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0036	0.0080	12:41:25	No
2	0.437	0.437	0.0036	0.0080	12:41:59	No
Mean:	0.438	0.438	0.0036			
SD :	0.0022	0.0022	0.0000			
%RSD:	0.5	0.5	0.4829			

==========

Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 12/07/2009
Sample ID: 1201978959|i||925634|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.055	-0.055	-0.0004	0.0040	12:43:23	No
2	-0.103	-0.103	-0.0008	0.0036	12:43:58	No
Mean:	-0.079	-0.079	-0.0006			
SD :	0.0336	0.0336	0.0003			

#	µg/L	µg/L	Signal	Height		Stored
1	2.691	2.691	0.0219	0.0262	12:55:11	No
2	2.692	2.692	0.0219	0.0262	12:55:46	No
Mean:	2.692	2.692	0.0219			
SD :	0.0005	0.0005	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 93 AS Loc.: 81 Date: 12/07/2009
Sample ID: 1201978964|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.666	2.666	0.0217	0.0260	12:57:06	No
2	2.667	2.667	0.0217	0.0260	12:57:40	No
Mean:	2.667	2.667	0.0217			
SD :	0.0007	0.0007	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 94 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored.
1	5.672	5.672	0.0460	0.0503	12:59:04	No
2	5.684	5.684	0.0461	0.0504	12:59:39	No
Mean:	5.678	5.678	0.0460			
SD :	0.0086	0.0086	0.0001			
%RSD:	0.2	0.2	0.1509			

QC value within specified limits.

==========

Element: Hg Seq. No.: 95 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.077	-0.077	-0.0005	0.0038	13:01:07	No
2	-0.085	-0.085	-0.0006	0.0037	13:01:41	No
Mean:	-0.081	-0.081	-0.0006			
SD :	0.0061	0.0061	0.0000			
%RSD:	7.6	7.6	8.5833			

QC value within specified limits.

==========

Element: Hg Seq. No.: 96 AS Loc.: 82 Date: 12/07/2009
Sample ID: 1201978963|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.196	-0.196	-0.0015	0.0029	13:03:06	No
2	-0.201	-0.201	-0.0015	0.0028	13:03:41	No
Mean:	-0.198	-0.198	-0.0015			
SD :	0.0033	0.0033	0.0000			
%RSD:	1.7	1.7	1.7580			

==========

Element: Hg Seq. No.: 97 AS Loc.: 83 Date: 12/07/2009
Sample ID: 241611002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.059	0.059	0.0006	0.0049	13:05:02	No
2	0.043	0.043	0.0004	0.0048	13:05:37	No
Mean:	0.051	0.051	0.0005			
SD :	0.0118	0.0118	0.0001			

#	µg/L	µg/L	Signal	Height		Stored
1	0.283	0.283	0.0024	0.0067	13:16:50	No
2	0.301	0.301	0.0025	0.0069	13:17:25	No
Mean:	0.292	0.292	0.0024			
SD :	0.0125	0.0125	0.0001			
%RSD:	4.3	4.3	4.1354			

==========

Element: Hg Seq. No.: 104 AS Loc.: 90 Date: 12/07/2009
Sample ID: 241611009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.275	0.275	0.0023	0.0067	13:18:50	No
2	0.287	0.287	0.0024	0.0068	13:19:25	No
Mean:	0.281	0.281	0.0023			
SD :	0.0084	0.0084	0.0001			
%RSD:	3.0	3.0	2.8894			

==========

Element: Hg Seq. No.: 105 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.484	5.484	0.0445	0.0488	13:20:51	No
2	5.468	5.468	0.0443	0.0487	13:21:26	No
Mean:	5.476	5.476	0.0444			
SD :	0.0108	0.0108	0.0001			
%RSD:	0.2	0.2	0.1963			

QC value within specified limits.

==========

Element: Hg Seq. No.: 106 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.070	-0.070	-0.0005	0.0039	13:22:54	No
2	-0.072	-0.072	-0.0005	0.0039	13:23:30	No
Mean:	-0.071	-0.071	-0.0005			
SD :	0.0013	0.0013	0.0000			
%RSD:	1.8	1.8	2.0491			

QC value within specified limits.

Element: Hg Seq. No.: 107 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978936|i||925623|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.128	-0.128	-0.0010	0.0034	13:27:17	No
2	-0.109	-0.109	-0.0008	0.0036	13:27:52	No
Mean:	-0.119	-0.119	-0.0009			
SD :	0.0139	0.0139	0.0001			
%RSD:	11.7	11.7	12.7130			

Element: Hg Seq. No.: 108 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978937|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.279	4.279	0.0347	0.0391	13:29:15	No
2	4.322	4.322	0.0351	0.0394	13:29:50	No
Mean:	4.300	4.300	0.0349			
SD :	0.0307	0.0307	0.0002			
%RSD:	0.7	0.7	0.7124			

Element: Hg Seq. No.: 109 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241512001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0007	0.0037	13:31:16	No
2	-0.076	-0.076	-0.0005	0.0038	13:31:51	No
Mean:	-0.084	-0.084	-0.0006			
SD :	0.0109	0.0109	0.0001			
%RSD:	13.0	13.0	14.6074			

Element: Hg Seq. No.: 110 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241512002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0003	0.0046	13:33:18	No
2	0.008	0.008	0.0001	0.0045	13:33:52	No
Mean:	0.015	0.015	0.0002			
SD :	0.0107	0.0107	0.0001			
%RSD:	70.4	70.4	43.2809			

Element: Hg Seq. No.: 111 AS Loc.: 16 Date: 12/07/2009
Sample ID: 241512003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0045	13:35:20	No
2	-0.019	-0.019	-0.0001	0.0043	13:35:55	No
Mean:	-0.007	-0.007	0.0000			
SD :	0.0164	0.0164	0.0001			
%RSD:	236.2	236.2	640.8807			

Element: Hg Seq. No.: 112 AS Loc.: 17 Date: 12/07/2009
Sample ID: 241512004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0004	0.0047	13:37:19	No
2	0.030	0.030	0.0003	0.0047	13:37:54	No
Mean:	0.033	0.033	0.0003			

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SD  :     0.0040    0.0040    0.0000
%RSD:       12.1       12.1    9.3787

==========================================================================================
Element: Hg    Seq. No.: 113      AS Loc.: 18   Date: 12/07/2009
Sample ID: 241512005|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.256     0.256    0.0021     0.0065   13:39:15  No
 2        0.255     0.255    0.0021     0.0065   13:39:50  No
Mean:     0.255     0.255    0.0021
SD  :    0.0002    0.0002    0.0000
%RSD:

==========================================================================================
Element: Hg    Seq. No.: 114      AS Loc.: 19   Date: 12/07/2009
Sample ID: 241512006|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.165     0.165    0.0014     0.0058   13:41:11  No
 2        0.174     0.174    0.0015     0.0058   13:41:45  No
Mean:     0.170     0.170    0.0014
SD  :    0.0059    0.0059    0.0000
%RSD:       3.5       3.5    3.3110

==========================================================================================
Element: Hg    Seq. No.: 115      AS Loc.: 20   Date: 12/07/2009
Sample ID: 241524002|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.159     0.159    0.0014     0.0057   13:43:07  No
 2        0.158     0.158    0.0014     0.0057   13:43:42  No
Mean:     0.158     0.158    0.0014
SD  :    0.0007    0.0007    0.0000
%RSD:       0.4       0.4    0.4216

==========================================================================================
Element: Hg    Seq. No.: 116      AS Loc.: 21   Date: 12/07/2009
Sample ID: 241536001|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.703     0.703    0.0058     0.0101   13:45:04  No
 2        0.690     0.690    0.0057     0.0100   13:45:39  No
Mean:     0.697     0.697    0.0057
SD  :    0.0091    0.0091    0.0001
%RSD:       1.3       1.3    1.2881

==========================================================================================
Element: Hg    Seq. No.: 117      AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.181     5.181    0.0420     0.0464   13:47:04  No
 2        5.190     5.190    0.0421     0.0464   13:47:39  No
Mean:     5.185     5.185    0.0420
SD  :    0.0066    0.0066    0.0001
%RSD:       0.1       0.1    0.1267
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 118      AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
```

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.080	-0.080	-0.0006	0.0038	13:49:07	No
2	-0.092	-0.092	-0.0007	0.0037	13:49:42	No
Mean:	-0.086	-0.086	-0.0006			
SD :	0.0085	0.0085	0.0001			
%RSD:	9.9	9.9	11.1567			

QC value within specified limits.

Element: Hg Seq. No.: 119 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201978938|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.264	0.264	0.0022	0.0066	13:51:07	No
2	0.278	0.278	0.0023	0.0067	13:51:42	No
Mean:	0.271	0.271	0.0023			
SD :	0.0098	0.0098	0.0001			
%RSD:	3.6	3.6	3.5143			

Element: Hg Seq. No.: 120 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201978939|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.949	2.949	0.0239	0.0283	13:53:06	No
2	2.956	2.956	0.0240	0.0284	13:53:40	No
Mean:	2.953	2.953	0.0240			
SD :	0.0045	0.0045	0.0000			
%RSD:	0.2	0.2	0.1522			

Element: Hg Seq. No.: 121 AS Loc.: 24 Date: 12/07/2009
Sample ID: 1201978941|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.032	3.032	0.0246	0.0290	13:55:04	No
2	3.033	3.033	0.0246	0.0290	13:55:39	No
Mean:	3.032	3.032	0.0246			
SD :	0.0008	0.0008	0.0000			
%RSD:						

Element: Hg Seq. No.: 122 AS Loc.: 25 Date: 12/07/2009
Sample ID: 1201978940|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.078	-0.078	-0.0006	0.0038	13:57:04	No
2	-0.078	-0.078	-0.0006	0.0038	13:57:38	No
Mean:	-0.078	-0.078	-0.0006			
SD :	0.0003	0.0003	0.0000			
%RSD:	0.4	0.4	0.3994			

Element: Hg Seq. No.: 123 AS Loc.: 26 Date: 12/07/2009
Sample ID: 241536002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.442	0.442	0.0037	0.0080	13:59:03	No
2	0.436	0.436	0.0036	0.0080	13:59:38	No
Mean:	0.439	0.439	0.0036			

SD :	0.0042	0.0042	0.0000
%RSD:	1.0	1.0	0.9419

==========

Element: Hg Seq. No.: 124 AS Loc.: 27 Date: 12/07/2009
Sample ID: 241536003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.287	0.287	0.0024	0.0068	14:01:03	No
2	0.281	0.281	0.0024	0.0067	14:01:38	No
Mean:	0.284	0.284	0.0024			
SD :	0.0045	0.0045	0.0000			
%RSD:	1.6	1.6	1.5473			

==========

Element: Hg Seq. No.: 125 AS Loc.: 28 Date: 12/07/2009
Sample ID: 241536004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.257	0.257	0.0022	0.0065	14:03:04	No
2	0.232	0.232	0.0020	0.0063	14:03:39	No
Mean:	0.244	0.244	0.0021			
SD :	0.0173	0.0173	0.0001			
%RSD:	7.1	7.1	6.8206			

==========

Element: Hg Seq. No.: 126 AS Loc.: 29 Date: 12/07/2009
Sample ID: 241536005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.534	0.534	0.0044	0.0088	14:05:05	No
2	0.511	0.511	0.0042	0.0086	14:05:40	No
Mean:	0.523	0.523	0.0043			
SD :	0.0162	0.0162	0.0001			
%RSD:	3.1	3.1	3.0432			

==========

Element: Hg Seq. No.: 127 AS Loc.: 30 Date: 12/07/2009
Sample ID: 241536006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.283	0.283	0.0024	0.0067	14:07:07	No
2	0.264	0.264	0.0022	0.0066	14:07:42	No
Mean:	0.274	0.274	0.0023			
SD :	0.0136	0.0136	0.0001			
%RSD:	4.9	4.9	4.7832			

==========

Element: Hg Seq. No.: 128 AS Loc.: 31 Date: 12/07/2009
Sample ID: 241536007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.207	0.207	0.0018	0.0061	14:09:10	No
2	0.202	0.202	0.0017	0.0061	14:09:45	No
Mean:	0.205	0.205	0.0017			
SD :	0.0038	0.0038	0.0000			
%RSD:	1.8	1.8	1.7583			

==========

Element: Hg Seq. No.: 129 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.378	5.378	0.0436	0.0480	14:11:12	No
2	5.407	5.407	0.0438	0.0482	14:11:47	No
Mean:	5.393	5.393	0.0437			
SD :	0.0209	0.0209	0.0002			
%RSD:	0.4	0.4	0.3861			

QC value within specified limits.

==========

Element: Hg Seq. No.: 130 AS Loc.: 8 Date: 12/07/2009

Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0007	0.0036	14:13:15	No
2	-0.112	-0.112	-0.0008	0.0035	14:13:50	No
Mean:	-0.106	-0.106	-0.0008			
SD :	0.0079	0.0079	0.0001			
%RSD:	7.4	7.4	8.1684			

QC value within specified limits.

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925471

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978582	UI647733-01	.503	g
MS	1201978580	UI090611-A	.5	mL
MS	1201978580	UI090611-B	.5	mL
MSD	1201978581	UI090611-A	.5	mL
MSD	1201978581	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978577		SW846 3050B	24-NOV-2009 19:04	0.526 g	50 mL	95.05703	SOIL
LCS	1201978582		SW846 3050B	24-NOV-2009 19:04	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241512001		SW846 3050B	24-NOV-2009 19:04	0.538 g	50 mL	92.9368	SOIL
DUP	1201978578	241512001	SW846 3050B	24-NOV-2009 19:04	0.518 g	50 mL	96.5251	SOIL
SDILT	1201978579	241512001	SW846 3050B	24-NOV-2009 19:04	0.538 g	50 mL	92.9368	SOIL
MS	1201978580	241512001	SW846 3050B	24-NOV-2009 19:04	0.537 g	50 mL	93.10987	SOIL
MSD	1201978581	241512001	SW846 3050B	24-NOV-2009 19:04	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241512002		SW846 3050B	24-NOV-2009 19:04	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241512003		SW846 3050B	24-NOV-2009 19:04	0.532 g	50 mL	93.98496	SOIL
SAMPLE	241512004		SW846 3050B	24-NOV-2009 19:04	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241512005		SW846 3050B	24-NOV-2009 19:04	0.547 g	50 mL	91.40768	SOIL
SAMPLE	241512006		SW846 3050B	24-NOV-2009 19:04	0.569 g	50 mL	87.87346	SOIL
SAMPLE	241524002		SW846 3050B	24-NOV-2009 19:04	0.544 g	50 mL	91.91176	SOIL
SAMPLE	241536001		SW846 3050B	24-NOV-2009 19:04	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241536002		SW846 3050B	24-NOV-2009 19:04	0.562 g	50 mL	88.96797	SOIL
SAMPLE	241536003		SW846 3050B	24-NOV-2009 19:04	0.582 g	50 mL	85.91065	SOIL
SAMPLE	241536004		SW846 3050B	24-NOV-2009 19:04	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241536005		SW846 3050B	24-NOV-2009 19:04	0.534 g	50 mL	93.63296	SOIL
SAMPLE	241536006		SW846 3050B	24-NOV-2009 19:04	0.535 g	50 mL	93.45794	SOIL
SAMPLE	241536007		SW846 3050B	24-NOV-2009 19:04	0.513 g	50 mL	97.46589	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: sample#241512001 is a moist sand.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925469

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978576	UI652380	.505	g
MS	1201978574	UI091119-01	.25	mL
MS	1201978574	UI091119-06	.25	mL
MSD	1201978575	UI091119-01	.25	mL
MSD	1201978575	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978571		SW846 3050B	24-NOV-2009 19:14	0.506 g	50 mL	98.81423	SOIL
LCS	1201978576		SW846 3050B	24-NOV-2009 19:14	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241512001		SW846 3050B	24-NOV-2009 19:14	0.504 g	50 mL	99.20635	SOIL
DUP	1201978572	241512001	SW846 3050B	24-NOV-2009 19:14	0.515 g	50 mL	97.08738	SOIL
SDILT	1201978573	241512001	SW846 3050B	24-NOV-2009 19:14	0.504 g	50 mL	99.20635	SOIL
MS	1201978574	241512001	SW846 3050B	24-NOV-2009 19:14	0.5 g	50 mL	100	SOIL
MSD	1201978575	241512001	SW846 3050B	24-NOV-2009 19:14	0.551 g	50 mL	90.7441	SOIL
SAMPLE	241512002		SW846 3050B	24-NOV-2009 19:14	0.542 g	50 mL	92.25092	SOIL
SAMPLE	241512003		SW846 3050B	24-NOV-2009 19:14	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241512004		SW846 3050B	24-NOV-2009 19:14	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241512005		SW846 3050B	24-NOV-2009 19:14	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241512006		SW846 3050B	24-NOV-2009 19:14	0.572 g	50 mL	87.41259	SOIL
SAMPLE	241524002		SW846 3050B	24-NOV-2009 19:14	0.572 g	50 mL	87.41259	SOIL
SAMPLE	241536001		SW846 3050B	24-NOV-2009 19:14	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241536002		SW846 3050B	24-NOV-2009 19:14	0.577 g	50 mL	86.65511	SOIL
SAMPLE	241536003		SW846 3050B	24-NOV-2009 19:14	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241536004		SW846 3050B	24-NOV-2009 19:14	0.546 g	50 mL	91.57509	SOIL
SAMPLE	241536005		SW846 3050B	24-NOV-2009 19:14	0.559 g	50 mL	89.44544	SOIL
SAMPLE	241536006		SW846 3050B	24-NOV-2009 19:14	0.562 g	50 mL	88.96797	SOIL
SAMPLE	241536007		SW846 3050B	24-NOV-2009 19:14	0.504 g	50 mL	99.20635	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1100721TCLP	1.25 mL	Nitric Acid CONC.

Comments sample#241512001 is a moist sand.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 931870

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201993393	UI062540-I	.514	g
MS	1201993391	UI091124-01	.25	mL
MS	1201993391	UI091124-06	.25	mL
MSD	1201993392	UI091124-01	.25	mL
MSD	1201993392	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201993388		SW846 3050B	12-DEC-2009 08:15	0.525 g	50 mL	95.2381	SOIL
LCS	1201993393		SW846 3050B	12-DEC-2009 08:15	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241536001		SW846 3050B	12-DEC-2009 08:15	0.5 g	50 mL	100	SOIL
DUP	1201993389	241536001	SW846 3050B	12-DEC-2009 08:15	0.525 g	50 mL	95.2381	SOIL
SDILT	1201993390	241536001	SW846 3050B	12-DEC-2009 08:15	0.5 g	50 mL	100	SOIL
MS	1201993391	241536001	SW846 3050B	12-DEC-2009 08:15	0.509 g	50 mL	98.23183	SOIL
MSD	1201993392	241536001	SW846 3050B	12-DEC-2009 08:15	0.541 g	50 mL	92.42144	SOIL
SAMPLE	241536002		SW846 3050B	12-DEC-2009 08:15	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241536003		SW846 3050B	12-DEC-2009 08:15	0.528 g	50 mL	94.69697	SOIL
SAMPLE	241536004		SW846 3050B	12-DEC-2009 08:15	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241536005		SW846 3050B	12-DEC-2009 08:15	0.5 g	50 mL	100	SOIL
SAMPLE	241536006		SW846 3050B	12-DEC-2009 08:15	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241536007		SW846 3050B	12-DEC-2009 08:15	0.523 g	50 mL	95.60229	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238343	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: The QC sample is a medium, brown soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925622

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978937	UI031809A	.202	g
MS	1201978939	WHG091204-14	.3	mL
MSD	1201978941	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978936		SW846 7471A Prep	04-DEC-2009 10:35	0.529 g	30 mL	56.71078	SOIL
LCS	1201978937		SW846 7471A Prep	04-DEC-2009 10:35	0.202 g	30 mL	148.51485	SOIL
SAMPLE	241512001		SW846 7471A Prep	04-DEC-2009 10:35	0.556 g	30 mL	53.95683	SOIL
SAMPLE	241512002		SW846 7471A Prep	04-DEC-2009 10:35	0.508 g	30 mL	59.05512	SOIL
SAMPLE	241512003		SW846 7471A Prep	04-DEC-2009 10:35	0.544 g	30 mL	55.14706	SOIL
SAMPLE	241512004		SW846 7471A Prep	04-DEC-2009 10:35	0.596 g	30 mL	50.33557	SOIL
SAMPLE	241512005		SW846 7471A Prep	04-DEC-2009 10:35	0.514 g	30 mL	58.36576	SOIL
SAMPLE	241512006		SW846 7471A Prep	04-DEC-2009 10:35	0.574 g	30 mL	52.26481	SOIL
SAMPLE	241524002		SW846 7471A Prep	04-DEC-2009 10:35	0.511 g	30 mL	58.70841	SOIL
SAMPLE	241536001		SW846 7471A Prep	04-DEC-2009 10:35	0.58 g	30 mL	51.72414	SOIL
DUP	1201978938	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.535 g	30 mL	56.07477	SOIL
MS	1201978939	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.549 g	30 mL	54.64481	SOIL
MSD	1201978941	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.535 g	30 mL	56.07477	SOIL
SDILT	1201978940	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.58 g	30 mL	51.72414	SOIL
SAMPLE	241536002		SW846 7471A Prep	04-DEC-2009 10:35	0.523 g	30 mL	57.36138	SOIL
SAMPLE	241536003		SW846 7471A Prep	04-DEC-2009 10:35	0.552 g	30 mL	54.34783	SOIL
SAMPLE	241536004		SW846 7471A Prep	04-DEC-2009 10:35	0.558 g	30 mL	53.76344	SOIL
SAMPLE	241536005		SW846 7471A Prep	04-DEC-2009 10:35	0.553 g	30 mL	54.24955	SOIL
SAMPLE	241536006		SW846 7471A Prep	04-DEC-2009 10:35	0.554 g	30 mL	54.15162	SOIL
SAMPLE	241536007		SW846 7471A Prep	04-DEC-2009 10:35	0.564 g	30 mL	53.19149	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments: Sample 241536001 is a brown rocky soil.
Digestion Start Date: 04-DEC-09 10:35
Digestion End Date: 04-DEC-09 11:05

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925472	See Below		

Potentially affected work order(s)(SDG): 241512(10-598),241524(10-600),241536(10-602)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978580MS	The matrix spike recovery failed outside of the control limits for Li and Ni due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
2. Failed RPD for MS/MSD, or PS/PSD: QC 1201978581MSD	The matrix spike duplicate recovery failed outside of the control limits for Ni due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
3. Failed Recovery for MSD/PSD: QC 1201978581MSD	The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Li due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Elizabeth Janssen 05-DEC-09

Data Validator/Group Leader:
Rose Jenkins 07-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal		Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7471A	Solid	LANL
Batch ID:	**Sample Numbers:**		
925623	1201978938		

Potentially affected work order(s)(SDG): 241512(10-598),241524(10-600),241536(10-602)

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201978938DUP	1. The sample and sample duplicate % RPD failed outside the control limits for Hg due to possible sample non-homogeneity and/or matrix interference. Sample is a rocky, brown soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jason Loy 07-DEC-09

Data Validator/Group Leader:

Eric Lawson 08-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925470	See Below		

Potentially affected work order(s)(SDG): 241512(10-598),241524(10-600),241536(10-602)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978574MS 2. Failed RPD for DUP: QC 1201978572DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1201978575MSD 4. Failed Recovery for MSD/PSD: QC 1201978575MSD	1. The matrix spike recovery failed outside of the control limits for aluminum,calcium,magnesium,potassium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for barium and titanium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for iron due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 4. The matrix spike duplicate recovery failed outside of the control limits for aluminum,potassium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 11-DEC-09

Data Validator/Group Leader:

Bryan Davis 11-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
14-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
931873	See Below		

Potentially affected work order(s)(SDG): 241536(10-602)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201993391MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1201993392MSD 3. Failed Recovery for MSD/PSD: QC 1201993392MSD	1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for silicon due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 14-DEC-09

Data Validator/Group Leader:
Louise Smith 15-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Carnello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL

Analyte	Concentration	Analyte	Concentration
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091130-49.13 **Opened:** 14-DEC-09 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 01-DEC-09 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 15-DEC-09 **Lot Number :** 1018046
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Standard Logbook

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Standard Logbook

Serial ID: UMS090929-01 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 29-SEP-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-31CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090929-02 **Opened:** 29-SEP-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 29-SEP-09 **Lot Number :** 19-174JB
Type: Source Material **Expires:** 29-SEP-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090929-03 **Opened:** 29-SEP-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 29-SEP-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-30CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Standard Logbook

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Standard Logbook

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091208-42 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091208-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091208-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091208-43 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091208-44 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Carnello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091208-45 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091208-46 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091208-47 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091211-42 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091211-43 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI091211-44 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091211-45 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091211-46 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091211-47 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091214-42 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091214-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091214-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091214-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091214-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091214-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091214-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091214-43 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI091214-44 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1242318
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091214-45 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091214-46 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1242318
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091214-47 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL &1%HNO3-1242318
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091130-04 **Opened:** 30-NOV-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 30-NOV-09 **Balance Id :** 4025216
Type: Working **Expires:** 01-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091130-04A **Opened:** 30-NOV-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 30-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091130-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091130-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091130-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091130-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091130-05 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 30-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091130-06 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 30-NOV-09 **Pipet Id :** 3820544
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS091130-07 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 30-NOV-09 **Lot Number :** 1010773
Type: Working **Expires:** 01-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091130-08 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 30-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091130-70 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 30-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER

Standard Logbook

Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242318 **Opened:** 14-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 20-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-602-1

Sample Analysis

Sample ID	Client ID
241537001	RE03-10-3935
241537002	RE03-10-3925
1201978326	Method Blank (MB) **ICP**
1201978327	Laboratory Control Sample (LCS)
1201978330	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978328	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978329	241325001(RE03-10-6088S) Matrix Spike (MS)
1201978333	Method Blank (MB) **ICP-MS**
1201978334	Laboratory Control Sample (LCS)
1201978337	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978335	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978336	241325001(RE03-10-6088S) Matrix Spike (MS)
1201978942	Method Blank (MB) **CVAA**
1201978943	Laboratory Control Sample (LCS)
1201978946	241537001(RE03-10-3935L) Serial Dilution (SD)
1201978944	241537001(RE03-10-3935D) Sample Duplicate (DUP)
1201978945	241537001(RE03-10-3935S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	925377, 925379 and 925626
Prep Batch :	925376, 925378 and 925625
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241325001 (RE03-10-6088)-ICP and ICP-MS and 241537001 (RE03-10-3935)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight

on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Dirk Robert Elmore **Date:** 12-16-09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241537001 **BASIS:** As Received **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-3935 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:48	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:37	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:47	120409A-1	925377
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 17:47	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:47	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/04/09 11:08	120409W1-7	925626
7440-02-0	Nickel	4.67	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:47	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:51	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:53	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:47	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 17:47	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925626	925625	SW846 7470A Prep	20	mL	20	mL	12/03/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-602-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241537002 **BASIS:** As Received **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-3925 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	261	ug/L		68	200	200	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:50	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-39-3	Barium	3.92	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:39	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7440-70-2	Calcium	121	ug/L	J	50	200	200	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-47-3	Chromium	10.8	ug/L		1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:54	120409A-1	925377
7439-89-6	Iron	215	ug/L		30	100	100	1	P	HSC	12/04/09 17:54	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:54	120409A-1	925377
7439-96-5	Manganese	7.52	ug/L		1	5	5	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXLI	12/04/09 11:19	120409W1-7	925626
7440-02-0	Nickel	6.3	ug/L		1.5	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-09-7	Potassium	59.6	ug/L	J	50	150	150	1	P	HSC	12/04/09 17:54	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-21-3	Silicon	510	ug/L		25	100	100	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-23-5	Sodium	308	ug/L		100	300	300	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:57	091204-5	925379
7440-32-6	Titanium	5.18	ug/L		1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:56	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:54	120409A-1	925377
7440-66-6	Zinc	3.74	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 17:54	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925626	925625	SW846 7470A Prep	20	mL	20	mL	12/03/09	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Nickel	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Selenium	2660	ug/L	2500	ug/L	106.6	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Silicon	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Mercury	5.07	ug/L	5	ug/L	101.4	90.0 – 110.0	AV	04-DEC-09 09:35	120409W1-7
	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Lead	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Lithium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Manganese	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Thallium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Beryllium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	05-DEC-09 19:59	091205-6
	Uranium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	06-DEC-09 01:58	091205-2
	Antimony	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	06-DEC-09 06:55	091205-4
CCV01										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	04-DEC-09 09:41	120409W1-7

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Barium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Boron	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Selenium	519	ug/L	500	ug/L	103.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Titanium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Zinc	495	ug/L	500	ug/L	99	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Lead	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Lithium	51.5	ug/L	50	ug/L	103	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Manganese	52.7	ug/L	50	ug/L	105.3	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Thallium	51.2	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Beryllium	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	05-DEC-09 20:08	091205-6
	Uranium	52.3	ug/L	50	ug/L	104.5	90.0 - 110.0	MS	06-DEC-09 02:10	091205-2
	Antimony	45.1	ug/L	50	ug/L	90.3	90.0 - 110.0	MS	06-DEC-09 07:07	091205-4
CCV02										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 - 120.0	AV	04-DEC-09 10:04	120409W1-7
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Boron	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Nickel	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Selenium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Cadmium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Lead	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Lithium	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Manganese	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Thallium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Beryllium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	05–DEC–09 20:23	091205–6
	Uranium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	06–DEC–09 02:33	091205–2
	Antimony	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	06–DEC–09 07:28	091205–4
CCV03										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	04–DEC–09 10:27	120409W1–7
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Arsenic	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Nickel	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Selenium	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Cadmium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Lead	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Lithium	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Manganese	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Thallium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Beryllium	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	05-DEC-09 20:40	091205-6
	Uranium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	06-DEC-09 02:58	091205-2
	Antimony	51.9	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	06-DEC-09 07:53	091205-4
CCV04										
	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	04-DEC-09 10:50	120409W1-7
	Aluminum	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Arsenic	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Selenium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lead	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lithium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Manganese	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Thallium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
CCV05										
	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	04-DEC-09 11:14	120409W1-7
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Selenium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Cadmium	49.8	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
	Lead	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
	Lithium	54.8	ug/L	50	ug/L	109.5	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
	Manganese	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
CCV06										
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	04-DEC-09 11:37	120409W1-7
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Boron	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Nickel	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Selenium	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silicon	2500	ug/L	2500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Cadmium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Lead	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Lithium	55.2	ug/L	50	ug/L	110.3	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Manganese	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Thallium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
CCV07										
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Boron	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Copper	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Nickel	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Selenium	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silicon	2520	ug/L	2500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Titanium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Cadmium	50.7	ug/L	50	ug/L	101.5	90.0 - 110.0	MS	05-DEC-09 08:02	091204-5
	Lead	52.2	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	05-DEC-09 08:02	091204-5
	Lithium	53.3	ug/L	50	ug/L	106.5	90.0 - 110.0	MS	05-DEC-09 08:02	091204-5
	Manganese	52.4	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	05-DEC-09 08:02	091204-5
	Thallium	50.2	ug/L	50	ug/L	100.3	90.0 - 110.0	MS	05-DEC-09 08:02	091204-5
CCV08										
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Arsenic	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Barium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Boron	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Chromium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Copper	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Nickel	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Selenium	528	ug/L	500	ug/L	105.7	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Silicon	2520	ug/L	2500	ug/L	101	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Silver	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Titanium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 16:58	120409A-1
	Cadmium	50.3	ug/L	50	ug/L	100.6	90.0 - 110.0	MS	05-DEC-09 09:10	091204-5
	Lead	53.5	ug/L	50	ug/L	107	90.0 - 110.0	MS	05-DEC-09 09:10	091204-5

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lithium	54.9	ug/L	50	ug/L	109.9	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Manganese	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Thallium	47.1	ug/L	50	ug/L	94.2	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
CCV09										
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Arsenic	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Boron	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Nickel	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Selenium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.204	ug/L	.2	ug/L	102	70.0 - 130.0	AV	04-DEC-09 09:39	120409W1-7
	Cadmium	1.11	ug/L	1	ug/L	111.3	70.0 - 130.0	MS	05-DEC-09 03:00	091204-5
	Lead	2.3	ug/L	2	ug/L	115.2	70.0 - 130.0	MS	05-DEC-09 03:00	091204-5
	Lithium	11.4	ug/L	10	ug/L	114.1	70.0 - 130.0	MS	05-DEC-09 03:00	091204-5
	Manganese	5.72	ug/L	5	ug/L	114.5	70.0 - 130.0	MS	05-DEC-09 03:00	091204-5
	Thallium	1.2	ug/L	1	ug/L	119.6	70.0 - 130.0	MS	05-DEC-09 03:00	091204-5
	Beryllium	.573	ug/L	.5	ug/L	114.6	70.0 - 130.0	MS	05-DEC-09 20:03	091205-6
	Uranium	.218	ug/L	.2	ug/L	109	70.0 - 130.0	MS	06-DEC-09 02:03	091205-2
	Antimony	3	ug/L	3	ug/L	100.1	70.0 - 130.0	MS	06-DEC-09 07:00	091205-4
PQL01										
	Aluminum	206	ug/L	200	ug/L	103	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Nickel	5.43	ug/L	5	ug/L	108.5	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Potassium	162	ug/L	150	ug/L	107.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Sodium	292	ug/L	300	ug/L	97.4	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Arsenic	29.2	ug/L	30	ug/L	97.5	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Barium	5.2	ug/L	5	ug/L	104	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Chromium	5.1	ug/L	5	ug/L	102	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Calcium	203	ug/L	200	ug/L	101.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Selenium	29.4	ug/L	30	ug/L	98	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Silicon	103	ug/L	100	ug/L	102.8	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–602–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–DEC–09 09:37	120409W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 09:41	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 09:41	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 09:41	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 09:41	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 09:41	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 09:41	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 09:41	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:01	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 02:00	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 06:57	091205–4
CCB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–DEC–09 09:43	120409W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 10:42	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–602–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 10:42	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Potassium	101.63	+/–150	J	50.0	150	LIQ	P	04–DEC–09 10:42	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:09	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 02:13	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 07:09	091205–4
CCB02										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–DEC–09 10:06	120409W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 11:03	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-602-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 11:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 11:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 11:03	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 11:03	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 11:03	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 11:03	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	05-DEC-09 20:25	091205-6
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	06-DEC-09 02:35	091205-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	06-DEC-09 07:31	091205-4
CCB03										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	04-DEC-09 10:29	120409W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 12:20	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 12:20	120409A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–602–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 12:20	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:42	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 03:01	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 07:55	091205–4
CCB04										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–DEC–09 10:52	120409W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-602-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 12:55	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
CCB05										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	04-DEC-09 11:16	120409W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 14:03	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 14:03	120409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-602-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 14:03	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 06:29	091204-5
CCB06										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	04-DEC-09 11:39	120409W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 14:59	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 14:59	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 14:59	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 14:59	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 14:59	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 14:59	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 14:59	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–602–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 07:12	091204–5
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 15:55	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 15:55	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 15:55	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 15:55	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 15:55	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 15:55	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 15:55	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 08:08	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 08:08	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 08:08	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 08:08	091204–5

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–602–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Thallium	0.523	+/–1	J	0.3	1.0	LIQ	MS	05–DEC–09 08:08	091204–5
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 17:05	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 17:05	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 17:05	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 17:05	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 17:05	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 17:05	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 17:05	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Thallium	0.735	+/–1	J	0.3	1.0	LIQ	MS	05–DEC–09 09:16	091204–5
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 18:08	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 18:08	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–602–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 18:08	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 18:08	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 18:08	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 18:08	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 18:08	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 18:08	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 18:08	120409A–1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–602–1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978326								
	Arsenic	5	ug/L	+/–30.0	U	P	5	30
	Barium	1	ug/L	+/–5.0	U	P	1	5
	Boron	15	ug/L	+/–50.0	U	P	15	50
	Calcium	50	ug/L	+/–200	U	P	50	200
	Cobalt	1	ug/L	+/–5.0	U	P	1	5
	Iron	30	ug/L	+/–100	U	P	30	100
	Nickel	1.5	ug/L	+/–5.0	U	P	1.5	5
	Selenium	5	ug/L	+/–30.0	U	P	5	30
	Silver	1	ug/L	+/–5.0	U	P	1	5
	Zinc	3.3	ug/L	+/–10.0	U	P	3.3	10
	Vanadium	1	ug/L	+/–5.0	U	P	1	5
	Titanium	1	ug/L	+/–5.0	U	P	1	5
	Sodium	100	ug/L	+/–300	U	P	100	300
	Silicon	25	ug/L	+/–100	U	P	25	100
	Potassium	50	ug/L	+/–150	U	P	50	150
	Magnesium	85	ug/L	+/–300	U	P	85	300
	Copper	3	ug/L	+/–10.0	U	P	3	10
	Aluminum	68	ug/L	+/–200	U	P	68	200
	Chromium	1	ug/L	+/–5.0	U	P	1	5
1201978333								
	Uranium	0.05	ug/L	+/–0.2	U	MS	0.05	0.2
	Beryllium	0.1	ug/L	+/–0.5	U	MS	0.1	0.5
	Lead	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Manganese	1	ug/L	+/–5.0	U	MS	1	5
	Thallium	0.3	ug/L	+/–1.0	U	MS	0.3	1
	Lithium	2	ug/L	+/–10.0	U	MS	2	10
	Cadmium	0.11	ug/L	+/–1.0	U	MS	0.11	1
	Antimony	1	ug/L	+/–3.0	U	MS	1	3
1201978942								
	Mercury	0.066	ug/L	+/–0.2	U	AV	0.066	0.2

METALS
–4–
Interference Check Sample

SDG No: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 – 120.0	04–DEC–09 09:55	120409A–1
	Arsenic	–0.564	ug/L					04–DEC–09 09:55	120409A–1
	Barium	1.92	ug/L					04–DEC–09 09:55	120409A–1
	Boron	–5.89	ug/L					04–DEC–09 09:55	120409A–1
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	04–DEC–09 09:55	120409A–1
	Chromium	1.28	ug/L					04–DEC–09 09:55	120409A–1
	Cobalt	–1.39	ug/L					04–DEC–09 09:55	120409A–1
	Copper	1.06	ug/L					04–DEC–09 09:55	120409A–1
	Iron	184000	ug/L	200000	ug/L	92	80.0 – 120.0	04–DEC–09 09:55	120409A–1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	04–DEC–09 09:55	120409A–1
	Nickel	3.73	ug/L					04–DEC–09 09:55	120409A–1
	Potassium	–19.7	ug/L					04–DEC–09 09:55	120409A–1
	Selenium	–0.0013	ug/L					04–DEC–09 09:55	120409A–1
	Silicon	0.455	ug/L					04–DEC–09 09:55	120409A–1
	Silver	–1.58	ug/L					04–DEC–09 09:55	120409A–1
	Sodium	24.7	ug/L					04–DEC–09 09:55	120409A–1
	Titanium	–0.536	ug/L					04–DEC–09 09:55	120409A–1
	Vanadium	–1.65	ug/L					04–DEC–09 09:55	120409A–1
	Zinc	–7.1	ug/L					04–DEC–09 09:55	120409A–1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Arsenic	512	ug/L	500	ug/L	102	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Barium	505	ug/L	500	ug/L	101	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Boron	519	ug/L	500	ug/L	104	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Chromium	482	ug/L	500	ug/L	96.3	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Copper	574	ug/L	500	ug/L	115	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 – 120.0	04–DEC–09 10:01	120409A–1

METALS
-4-
Interference Check Sample

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Nickel	462	ug/L	500	ug/L	92.4	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Potassium	5530	ug/L	5000	ug/L	111	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Selenium	2610	ug/L	2500	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Silicon	5370	ug/L	5000	ug/L	107	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Silver	274	ug/L	250	ug/L	110	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Sodium	5210	ug/L	5000	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Titanium	514	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Vanadium	513	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Zinc	488	ug/L	500	ug/L	97.7	80.0 – 120.0	04-DEC-09 10:01	120409A-1

METALS
-4-
Interference Check Sample

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	-0.012	ug/L					06-DEC-09 02:05	091205-2
ICSAB01									
	Uranium	21.8	ug/L	20	ug/L	109	80.0 - 120.0	06-DEC-09 02:08	091205-2

METALS
–4–
Interference Check Sample

SDG No: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.157	ug/L					06–DEC–09 07:02	091205–4
ICSAB01									
	Antimony	22.4	ug/L	20.1	ug/L	111	80.0 – 120.0	06–DEC–09 07:04	091205–4

METALS
-4-
Interference Check Sample

SDG No: 10-602-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Cadmium	0.546	ug/L					05-DEC-09 03:06	091204-5
	Lead	0.294	ug/L					05-DEC-09 03:06	091204-5
	Lithium	0.133	ug/L					05-DEC-09 03:06	091204-5
	Manganese	6.12	ug/L					05-DEC-09 03:06	091204-5
	Thallium	0.046	ug/L					05-DEC-09 03:06	091204-5
ICSAB01									
	Cadmium	20.4	ug/L	20.4	ug/L	100	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Lead	21.5	ug/L	20.5	ug/L	105	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Lithium	20.3	ug/L	20	ug/L	102	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Manganese	27.6	ug/L	25.8	ug/L	107	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Thallium	21.4	ug/L	20	ug/L	107	80.0 - 120.0	05-DEC-09 03:12	091204-5

METALS
–4–
Interference Check Sample

SDG No: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.079	ug/L					05–DEC–09 20:04	091205–6
ICSAB01									
	Beryllium	21.3	ug/L	20	ug/L	106	80.0 – 120.0	05–DEC–09 20:06	091205–6

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-602-1 **Client ID** RE03-10-6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978329

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5270		68	U	5000	105		P
Arsenic	ug/L	75-125	515		5	U	500	103		P
Barium	ug/L	75-125	534		1	U	500	107		P
Boron	ug/L	75-125	513		15	U	500	102		P
Calcium	ug/L	75-125	5180		50	U	5000	103		P
Chromium	ug/L	75-125	521		1	U	500	104		P
Cobalt	ug/L	75-125	508		1	U	500	102		P
Copper	ug/L	75-125	532		3	U	500	106		P
Iron	ug/L	75-125	5240		30	U	5000	105		P
Magnesium	ug/L	75-125	5350		85	U	5000	107		P
Nickel	ug/L	75-125	517		1.5	U	500	103		P
Potassium	ug/L	75-125	5100		50	U	5000	102		P
Selenium	ug/L	75-125	519		5	U	500	104		P
Silicon	ug/L	75-125	5170		25	U	5000	103		P
Silver	ug/L	75-125	519		1	U	500	104		P
Sodium	ug/L	75-125	5160		100	U	5000	102		P
Titanium	ug/L	75-125	527		1	U	500	105		P
Vanadium	ug/L	75-125	533		1	U	500	107		P
Zinc	ug/L	75-125	511		9.12	J	500	100		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-602-1 **Client ID** RE03-10-6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978336

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	233		1	U	200	116		MS
Beryllium	ug/L	75-125	47.7		0.1	U	50	95.5		MS
Cadmium	ug/L	75-125	10.9		0.11	U	10	109		MS
Lead	ug/L	75-125	43.6		0.5	U	40	109		MS
Lithium	ug/L	75-125	53.8		2	U	50	108		MS
Manganese	ug/L	75-125	51.7		1	U	50	103		MS
Thallium	ug/L	75-125	96.5		0.49	J	100	96		MS
Uranium	ug/L	75-125	56.7		0.05	U	50	113		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–602–1 **Client ID** RE03–10–3935S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241537001 **Spike ID:** 1201978945

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.06		0.066	U	2	103		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–6088D

Sample ID: 241325001 **Duplicate ID:** 1201978328 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Boron	ug/L		15	U	15	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L		50	U	50	U			P
Selenium	ug/L		5	U	5	U			P
Silicon	ug/L		25	U	25	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L		100	U	100	U			P
Titanium	ug/L		1	U	1	U			P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		9.12	J	3.3	U	200		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–6088D

Sample ID: 241325001 **Duplicate ID:** 1201978335 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Lithium	ug/L		2	U	2	U			MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.49	J	0.3	U	200		MS
Uranium	ug/L		0.05	U	0.05	U			MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–602–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–3935D

Sample ID: 241537001 **Duplicate ID:** 1201978944 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-602-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978327								
	Aluminum	ug/L	5000	5310		106	80-120	P
	Arsenic	ug/L	500	519		104	80-120	P
	Barium	ug/L	500	535		107	80-120	P
	Boron	ug/L	500	514		103	80-120	P
	Calcium	ug/L	5000	5280		106	80-120	P
	Chromium	ug/L	500	519		104	80-120	P
	Cobalt	ug/L	500	510		102	80-120	P
	Copper	ug/L	500	529		106	80-120	P
	Iron	ug/L	5000	5280		106	80-120	P
	Magnesium	ug/L	5000	5300		106	80-120	P
	Nickel	ug/L	500	516		103	80-120	P
	Potassium	ug/L	5000	5140		103	80-120	P
	Selenium	ug/L	500	519		104	80-120	P
	Silicon	ug/L	5000	5150		103	80-120	P
	Silver	ug/L	500	520		104	80-120	P
	Sodium	ug/L	5000	5200		104	80-120	P
	Titanium	ug/L	500	525		105	80-120	P
	Vanadium	ug/L	500	530		106	80-120	P
	Zinc	ug/L	500	510		102	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-602-1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978334								
	Antimony	ug/L	50	57.4		115	80-120	MS
	Beryllium	ug/L	50	50.6		101	80-120	MS
	Cadmium	ug/L	50	52.9		106	80-120	MS
	Lead	ug/L	50	53.4		107	80-120	MS
	Lithium	ug/L	50	52.5		105	80-120	MS
	Manganese	ug/L	50	51.1		102	80-120	MS
	Thallium	ug/L	50	49.7		99.5	80-120	MS
	Uranium	ug/L	50	58.9		118	80-120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-602-1

Contract: LANL01004

Aqueous LCS Source:GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978943								
	Mercury	ug/L	2	2.05		103	80-120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-602-1 **Client ID** RE03-10-6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978330

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Boron	15	U	75	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silicon	25	U	125	U				P
Silver	1	U	5	U				P
Sodium	100	U	500	U				P
Titanium	1	U	5	U				P
Vanadium	1	U	5	U				P
Zinc	9.12	J	16.5	U	100			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-602-1 **Client ID** RE03-10-6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978337

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Lithium	2	U	10	U				MS
Manganese	1	U	5	U				MS
Thallium	.49	J	6.35		1200			MS
Uranium	.05	U	.25	U				MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-602-1 **Client ID** RE03-10-3935L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241537001 **Serial Dilution ID:** 1201978946

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-602-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925376						
1201978326	MB for batch 925376	MB	W	22-NOV-09	50mL	50mL	
1201978327	LCS for batch 925376	LCS	W	22-NOV-09	50mL	50mL	
1201978329	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978328	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241537001	RE03-10-3935	SAMPLE	W	22-NOV-09	50mL	50mL	
241537002	RE03-10-3925	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-602-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925378						
1201978333	MB for batch 925378	MB	W	22-NOV-09	50mL	50mL	
1201978334	LCS for batch 925378	LCS	W	22-NOV-09	50mL	50mL	
1201978336	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978335	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241537001	RE03-10-3935	SAMPLE	W	22-NOV-09	50mL	50mL	
241537002	RE03-10-3925	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-602-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925625						
1201978942	MB for batch 925625	MB	W	03-DEC-09	20mL	20mL	
1201978943	LCS for batch 925625	LCS	W	03-DEC-09	20mL	20mL	
1201978945	RE03-10-3935S	MS	W	03-DEC-09	20mL	20mL	
1201978944	RE03-10-3935D	DUP	W	03-DEC-09	20mL	20mL	
241537001	RE03-10-3935	SAMPLE	W	03-DEC-09	20mL	20mL	
241537002	RE03-10-3925	SAMPLE	W	03-DEC-09	20mL	20mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–602–1
Method MS
Data File: 091204–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:29							X						X	X		X								X				
S10	1	02:36							X						X	X		X								X				
S100	1	02:42							X						X	X		X								X				
ICV01	1	02:48							X						X	X		X								X				
ICB01	1	02:54							X						X	X		X								X				
CRDL01	1	03:00							X						X	X		X								X				
ICSA01	1	03:06							X						X	X		X								X				
ICSAB01	1	03:12							X						X	X		X								X				
CCV01	1	03:18							X						X	X		X								X				
CCB01	1	03:24							X						X	X		X								X				
LR01	1	03:31							X						X	X		X								X				
CCV02	1	03:37							X						X	X		X								X				
CCB02	1	03:43							X						X	X		X								X				
ZZZZZZ	2	03:49																												
ZZZZZZ	20	03:55																												
ZZZZZZ	40	04:01																												
ZZZZZZ	2	04:07																												
ZZZZZZ	2	04:14																												
ZZZZZZ	2	04:20																												
ZZZZZZ	2	04:26																												
ZZZZZZ	10	04:32																												
CCV03	1	04:38							X						X	X		X								X				
CCB03	1	04:44							X						X	X		X								X				
ZZZZZZ	2	04:50																												
ZZZZZZ	2	04:57																												
ZZZZZZ	2	05:03																												
ZZZZZZ	2	05:09																												
ZZZZZZ	2	05:15																												
ZZZZZZ	2	05:21																												
ZZZZZZ	2	05:27																												
CCV04	1	05:34							X						X	X		X								X				
CCB04	1	05:40							X						X	X		X								X				
ZZZZZZ	2	05:46																												
ZZZZZZ	2	05:52																												
ZZZZZZ	2	05:58																												
ZZZZZZ	2	06:04																												
ZZZZZZ	2	06:11																												
ZZZZZZ	2	06:17																												
CCV05	1	06:23							X						X	X		X								X				
CCB05	1	06:29							X						X	X		X								X				

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	2	06:35																											
ZZZZZZ	2	06:41																											
ZZZZZZ	2	06:48																											
ZZZZZZ	2	06:54																											
ZZZZZZ	2	07:00																											
CCV06	1	07:06						X					X	X		X							X						
CCB06	1	07:12						X					X	X		X							X						
1201978333	1	07:18						X					X	X		X							X						
1201978334	1	07:24						X					X	X		X							X						
ZZZZZZ	1	07:31																											
1201978335	1	07:37						X					X	X		X							X						
1201978336	1	07:43						X					X	X		X							X						
1201978337	5	07:49						X					X	X		X							X						
ZZZZZZ	1	07:55																											
CCV07	1	08:02						X					X	X		X							X						
CCB07	1	08:08						X					X	X		X							X						
ZZZZZZ	1	08:14																											
ZZZZZZ	1	08:20																											
ZZZZZZ	1	08:26																											
ZZZZZZ	1	08:32																											
ZZZZZZ	1	08:39																											
ZZZZZZ	1	08:45																											
241537001	1	08:51						X					X	X		X							X						
241537002	1	08:57						X					X	X		X							X						
ZZZZZZ	10	09:03																											
CCV08	1	09:10						X					X	X		X							X						
CCB08	1	09:16						X					X	X		X							X						

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–602–1
Method MS
Data File: 091205–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:54					X																							
S10	1	19:56					X																							
S100	1	19:58					X																							
ICV01	1	19:59					X																							
ICB01	1	20:01					X																							
CRDL01	1	20:03					X																							
ICSA01	1	20:04					X																							
ICSAB01	1	20:06					X																							
CCV01	1	20:08					X																							
CCB01	1	20:09					X																							
1201978333	1	20:11					X																							
1201978334	1	20:13					X																							
ZZZZZZ	1	20:14																												
1201978335	1	20:16					X																							
1201978336	1	20:18					X																							
1201978337	5	20:20					X																							
ZZZZZZ	1	20:21																												
CCV02	1	20:23					X																							
CCB02	1	20:25					X																							
ZZZZZZ	1	20:27																												
ZZZZZZ	1	20:28																												
ZZZZZZ	1	20:30																												
ZZZZZZ	1	20:32																												
ZZZZZZ	1	20:33																												
ZZZZZZ	1	20:35																												
241537001	1	20:37					X																							
241537002	1	20:39					X																							
CCV03	1	20:40					X																							
CCB03	1	20:42					X																							

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 04–DEC–09

Client Sdg: 10–602–1
Method P
Data File: 120409A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S0.1	1	09:08			X	X		X			X	X	X							X	X	X	X	X			X		X	X
S0.5	1	09:14	X		X	X		X		X	X	X	X				X			X	X	X	X	X			X		X	X
SCAL	1	09:21	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S10	1	09:28	X							X				X			X								X					
ICV01	1	09:34	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICB01	1	09:41	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
PQL01	1	09:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSA01	1	09:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSAB01	1	10:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR01	1	10:06	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR02	1	10:12	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB01	1	10:42	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR03	1	10:49	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV02	1	10:56	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB02	1	11:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB03	1	12:20	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV04	1	12:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB04	1	12:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	14:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
ZZZZZZ	1	14:45																												
CCV06	1	14:52	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB06	1	14:59	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	15:06																												
ZZZZZZ	1	15:13																												
ZZZZZZ	5	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB07	1	15:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978326	1	16:02	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978327	1	16:09	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:16																												
1201978328	1	16:23	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978329	1	16:30	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978330	5	16:37	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:44																												
ZZZZZZ	1	16:51																												
CCV08	1	16:58	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB08	1	17:05	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	17:12																												
ZZZZZZ	1	17:19																												
ZZZZZZ	1	17:26																												
ZZZZZZ	1	17:33																												
ZZZZZZ	1	17:40																												
241537001	1	17:47	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241537002	1	17:54	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV09	1	18:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB09	1	18:08	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 04–DEC–09 **End Date:** 04–DEC–09

Client Sdg: 10–602–1
Method AV
Data File: 120409W1–7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:24																	X											
S0.2	1	09:26																	X											
S0.5	1	09:28																	X											
S2.0	1	09:30																	X											
S5.0	1	09:32																	X											
S10.0	1	09:34																	X											
ICV01	1	09:35																	X											
ICB01	1	09:37																	X											
CRDL01	1	09:39																	X											
CCV01	1	09:41																	X											
CCB01	1	09:43																	X											
ZZZZZZ	1	09:45																												
ZZZZZZ	1	09:47																												
ZZZZZZ	1	09:49																												
ZZZZZZ	1	09:51																												
ZZZZZZ	1	09:53																												
ZZZZZZ	1	09:55																												
ZZZZZZ	1	09:57																												
ZZZZZZ	1	09:59																												
ZZZZZZ	1	10:00																												
ZZZZZZ	1	10:02																												
CCV02	1	10:04																	X											
CCB02	1	10:06																	X											
ZZZZZZ	1	10:08																												
ZZZZZZ	5	10:10																												
ZZZZZZ	1	10:12																												
ZZZZZZ	1	10:14																												
ZZZZZZ	1	10:16																												
ZZZZZZ	1	10:18																												
ZZZZZZ	1	10:20																												
ZZZZZZ	1	10:22																												
ZZZZZZ	1	10:24																												
ZZZZZZ	1	10:25																												
CCV03	1	10:27																	X											
CCB03	1	10:29																	X											
ZZZZZZ	5	10:31																												
ZZZZZZ	1	10:33																												
ZZZZZZ	1	10:35																												
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	10:41																											
ZZZZZZ	1	10:43																											
ZZZZZZ	5	10:45																											
ZZZZZZ	1	10:47																											
ZZZZZZ	1	10:49																											
CCV04	1	10:50															X												
CCB04	1	10:52															X												
ZZZZZZ	1	10:54																											
ZZZZZZ	1	10:56																											
ZZZZZZ	1	10:58																											
ZZZZZZ	1	11:00																											
ZZZZZZ	1	11:02																											
1201978942	1	11:04															X												
1201978943	1	11:06															X												
241537001	1	11:08															X												
1201978944	1	11:10															X												
1201978945	1	11:12															X												
CCV05	1	11:14															X												
CCB05	1	11:16															X												
1201978946	5	11:17															X												
241537002	1	11:19															X												
ZZZZZZ	1	11:21																											
ZZZZZZ	1	11:23																											
ZZZZZZ	1	11:25																											
ZZZZZZ	1	11:27																											
ZZZZZZ	1	11:29																											
ZZZZZZ	1	11:31																											
ZZZZZZ	5	11:33																											
ZZZZZZ	1	11:35																											
CCV06	1	11:37															X												
CCB06	1	11:39															X												

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05-DEC-09 **End Date:** 06-DEC-09

Client Sdg: 10-602-1
Method MS
Data File: 091205-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	01:51																										X		
S10	1	01:53																										X		
S100	1	01:55																										X		
ICV01	1	01:58																										X		
ICB01	1	02:00																										X		
CRDL01	1	02:03																										X		
ICSA01	1	02:05																										X		
ICSAB01	1	02:08																										X		
CCV01	1	02:10																										X		
CCB01	1	02:13																										X		
1201978333	1	02:15																										X		
1201978334	1	02:18																										X		
ZZZZZZ	1	02:20																												
1201978335	1	02:23																										X		
1201978336	1	02:25																										X		
1201978337	5	02:28																										X		
ZZZZZZ	1	02:30																												
CCV02	1	02:33																										X		
CCB02	1	02:35																										X		
ZZZZZZ	1	02:38																												
ZZZZZZ	1	02:40																												
ZZZZZZ	1	02:43																												
ZZZZZZ	1	02:46																												
ZZZZZZ	1	02:48																												
ZZZZZZ	1	02:51																												
241537001	1	02:53																										X		
241537002	1	02:56																										X		
CCV03	1	02:58																										X		
CCB03	1	03:01																										X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–602–1
Method MS
Data File: 091205–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:48		X																										
S10	1	06:50		X																										
S100	1	06:53		X																										
ICV01	1	06:55		X																										
ICB01	1	06:57		X																										
CRDL01	1	07:00		X																										
ICSA01	1	07:02		X																										
ICSAB01	1	07:04		X																										
CCV01	1	07:07		X																										
CCB01	1	07:09		X																										
1201978333	1	07:11		X																										
1201978334	1	07:14		X																										
ZZZZZZ	1	07:16																												
1201978335	1	07:19		X																										
1201978336	1	07:21		X																										
1201978337	5	07:24		X																										
ZZZZZZ	1	07:26																												
CCV02	1	07:28		X																										
CCB02	1	07:31		X																										
ZZZZZZ	1	07:33																												
ZZZZZZ	1	07:36																												
ZZZZZZ	1	07:38																												
ZZZZZZ	1	07:41																												
ZZZZZZ	1	07:43																												
ZZZZZZ	1	07:45																												
241537001	1	07:48		X																										
241537002	1	07:50		X																										
CCV03	1	07:53		X																										
CCB03	1	07:55		X																										

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-602-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-602-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-602-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	15.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silicon	251.611	25.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-602-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-602-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-602-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Linear Ranges

SDG NO. 10–602–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
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Linear Ranges

SDG NO. 10-602-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09

METALS
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Linear Ranges

SDG NO. 10-602-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

Raw Data

==========

Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00] ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00] ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00] ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00] ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00] ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00] ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00] ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00] ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00] ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00] ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00] ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00] ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00] ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00] ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00] ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00] ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00] ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00] ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00] ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00] ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00] ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00] ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00] ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00] ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00] ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00] ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00] ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00] ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00] ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00] ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43 %	09:04:58
2	Sc Radial	4907.6	4907.6	100.0 %	09:03:36
2	Y 371.029	887859.3	887859.3	100.38 %	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74 %	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00] ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00] ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00] ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00] ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00] ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00] ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00] ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00] ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00] ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00] ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00] ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00] ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00] ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00] ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00] ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00] ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00] ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00] ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00] ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00] ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00] ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00] ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00] ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00] ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00] ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00] ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00] ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00] ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00] ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00] ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00] ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00] ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260 %	09:05:29
3	Sc Radial	4823.8	4823.8	98.2 %	09:04:01
3	Y 371.029	877949.7	877949.7	99.263 %	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13 %	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7 ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22 ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3 ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80 ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2 ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9 ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52 ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75 ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38 ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56 ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50 ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65 ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16 ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453 ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293 %		09:38:03
3	Sc Radial	4901.3	4901.3	99.8 %		09:36:44
3	Y 371.029	861618.1	861618.1	97.417 %		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79 %		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44 ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6 ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49 ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04 ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71 ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45 ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3 ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32 ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52 ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91 ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13 ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4 ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2 ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8 ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16 ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72 ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3 ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30 ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6 ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68 ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4 ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17 ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8 ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3 ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45 ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46 ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68 ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65 ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14 ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35 ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97 ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560 ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

Ca 317.933Radial†	2844.7	5036.6 ug/L	62.48	5036.6 ppb	62.48	1.24%
QC value within limits for Ca 317.933Radial Recovery = 100.73%						
Cd 226.502†	58712.0	511.84 ug/L	0.548	511.84 ppb	0.548	0.11%
QC value within limits for Cd 226.502 Recovery = 102.37%						
Co 228.616†	31299.0	515.85 ug/L	4.347	515.85 ppb	4.347	0.84%
QC value within limits for Co 228.616 Recovery = 103.17%						
Cr 267.716†	55808.3	502.22 ug/L	0.664	502.22 ppb	0.664	0.13%
QC value within limits for Cr 267.716 Recovery = 100.44%						
Cu 324.752†	194870.1	520.66 ug/L	0.629	520.66 ppb	0.629	0.12%
QC value within limits for Cu 324.752 Recovery = 104.13%						
Fe 238.204 Radial†	417.6	5064.8 ug/L	94.14	5064.8 ppb	94.14	1.86%
QC value within limits for Fe 238.204 Radial Recovery = 101.30%						
K 766.490 Radial†	13749.0	2500.5 ug/L	7.68	2500.5 ppb	7.68	0.31%
QC value within limits for K 766.490 Radial Recovery = 100.02%						
Mg 279.077 IEC†	117.5	5266.4 ug/L	91.10	5266.4 ppb	91.10	1.73%
QC value within limits for Mg 279.077 IEC Recovery = 105.33%						
Mn 257.610†	554773.8	525.75 ug/L	0.407	525.75 ppb	0.407	0.08%
QC value within limits for Mn 257.610 Recovery = 105.15%						
Mo 202.031†	10431.0	553.90 ug/L	4.052	553.90 ppb	4.052	0.73%
QC value greater than the upper limit for Mo 202.031 Recovery = 110.78%						
Na 589.592 Radial†	8728.4	2448.3 ug/L	22.68	2448.3 ppb	22.68	0.93%
QC value within limits for Na 589.592 Radial Recovery = 97.93%						
Ni 231.604†	26132.9	511.71 ug/L	4.139	511.71 ppb	4.139	0.81%
QC value within limits for Ni 231.604 Recovery = 102.34%						
P 214.914†	5812.7	2521.9 ug/L	18.35	2521.9 ppb	18.35	0.73%
QC value within limits for P 214.914 Recovery = 100.88%						
Pb 220.353†	5504.1	518.39 ug/L	2.831	518.39 ppb	2.831	0.55%
QC value within limits for Pb 220.353 Recovery = 103.68%						
S 181.975 Axial†	2375.5	2558.4 ug/L	15.13	2558.4 ppb	15.13	0.59%
QC value within limits for S 181.975 Axial Recovery = 102.33%						
Sb 206.836†	1947.3	522.68 ug/L	3.231	522.68 ppb	3.231	0.62%
QC value within limits for Sb 206.836 Recovery = 104.54%						
Se 196.026†	5969.5	2664.5 ug/L	20.95	2664.5 ppb	20.95	0.79%
QC value within limits for Se 196.026 Recovery = 106.58%						
Si 251.611†	193620.3	4905.1 ug/L	2.68	4905.1 ppb	2.68	0.05%
QC value within limits for Si 251.611 Recovery = 98.10%						
Sn 189.927†	4161.1	550.94 ug/L	4.468	550.94 ppb	4.468	0.81%
QC value greater than the upper limit for Sn 189.927 Recovery = 110.19%						
Sr 421.552†	100372.3	526.55 ug/L	0.859	526.55 ppb	0.859	0.16%
QC value within limits for Sr 421.552 Recovery = 105.31%						
Ti 334.940†	367149.6	506.26 ug/L	0.490	506.26 ppb	0.490	0.10%
QC value within limits for Ti 334.940 Recovery = 101.25%						
Tl 190.801†	2251.7	547.80 ug/L	5.406	547.80 ppb	5.406	0.99%
QC value within limits for Tl 190.801 Recovery = 109.56%						
U 409.014†	19450.3	501.27 ug/L	1.183	501.27 ppb	1.183	0.24%
QC value within limits for U 409.014 Recovery = 100.25%						
V 292.402†	90935.8	528.06 ug/L	0.368	528.06 ppb	0.368	0.07%
QC value within limits for V 292.402 Recovery = 105.61%						
Zn 213.857†	71271.1	519.16 ug/L	0.195	519.16 ppb	0.195	0.04%
QC value within limits for Zn 213.857 Recovery = 103.83%						
SiO2†	194471.8	10543 ug/L	82.7	10543 ppb	82.7	0.78%
QC value within limits for SiO2 Recovery = 98.58%						

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573 ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874 ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858 ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828 ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035 ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137 ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619 ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177 ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430 ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693 ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067 ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993 ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191 ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448 ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62 %		09:45:16
3	Sc Radial	4809.8	4809.8	98.0 %		09:43:49
3	Y 371.029	891134.4	891134.4	100.75 %		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29 %		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441 ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723 ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610 ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180 ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992 ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472 ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457 ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343 ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153 ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058 ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762 ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825 ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115 ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478 ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335 ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760 ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264 ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146 ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869 ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168 ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676 ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895 ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168 ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177 ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090 ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625 ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335 ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911 ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862 ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122 ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761 ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033 ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %		09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %		09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

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Ca 317.933Radial†        114.9      203.44 ug/L        5.843      203.44 ppb        5.843   2.87%
   QC value within limits for Ca 317.933Radial  Recovery = 101.72%
Cd 226.502†              583.9      5.0878 ug/L      0.03067      5.0878 ppb      0.03067   0.60%
   QC value within limits for Cd 226.502  Recovery = 101.76%
Co 228.616†              304.8      5.0359 ug/L      0.08115      5.0359 ppb      0.08115   1.61%
   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†              568.2      5.0983 ug/L      0.10423      5.0983 ppb      0.10423   2.04%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†             3983.8      10.643 ug/L       0.4808      10.643 ppb       0.4808   4.52%
   QC value within limits for Cu 324.752  Recovery = 106.43%
Fe 238.204 Radial†         6.6      79.730 ug/L      29.0033      79.730 ppb      29.0033  36.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 79.73%
K 766.490 Radial†        889.4      161.88 ug/L       26.810      161.88 ppb       26.810  16.56%
   QC value within limits for K 766.490 Radial  Recovery = 107.92%
Mg 279.077 IEC†            7.3      326.69 ug/L       36.025      326.69 ppb       36.025  11.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.90%
Mn 257.610†            11132.0      10.543 ug/L       0.1659      10.543 ppb       0.1659   1.57%
   QC value within limits for Mn 257.610  Recovery = 105.43%
Mo 202.031†              195.8      10.395 ug/L       0.7057      10.395 ppb       0.7057   6.79%
   QC value within limits for Mo 202.031  Recovery = 103.95%
Na 589.592 Radial†      1041.2      292.04 ug/L       11.429      292.04 ppb       11.429   3.91%
   QC value within limits for Na 589.592 Radial  Recovery = 97.35%
Ni 231.604†              277.1      5.4266 ug/L      0.08048      5.4266 ppb      0.08048   1.48%
   QC value within limits for Ni 231.604  Recovery = 108.53%
P 214.914†               338.0      149.63 ug/L        3.816      149.63 ppb        3.816   2.55%
   QC value within limits for P 214.914  Recovery = 99.75%
Pb 220.353†               96.3      9.0961 ug/L      1.14169      9.0961 ppb      1.14169  12.55%
   QC value within limits for Pb 220.353  Recovery = 90.96%
S 181.975 Axial†          89.5      96.357 ug/L       7.4396      96.357 ppb       7.4396   7.72%
   QC value within limits for S 181.975 Axial  Recovery = 96.36%
Sb 206.836†               43.7      11.807 ug/L       0.5867      11.807 ppb       0.5867   4.97%
   QC value within limits for Sb 206.836  Recovery = 118.07%
Se 196.026†               65.7      29.405 ug/L       2.6665      29.405 ppb       2.6665   9.07%
   QC value within limits for Se 196.026  Recovery = 98.02%
Si 251.611†            4059.5      102.83 ug/L        1.217      102.83 ppb        1.217   1.18%
   QC value within limits for Si 251.611  Recovery = 102.83%
Sn 189.927†               80.0      10.600 ug/L       0.2084      10.600 ppb       0.2084   1.97%
   QC value within limits for Sn 189.927  Recovery = 106.00%
Sr 421.552†              936.7      4.9127 ug/L      0.04891      4.9127 ppb      0.04891   1.00%
   QC value within limits for Sr 421.552  Recovery = 98.25%
Ti 334.940†            3574.6      4.9172 ug/L      0.11528      4.9172 ppb      0.11528   2.34%
   QC value within limits for Ti 334.940  Recovery = 98.34%
Tl 190.801†               82.0      19.906 ug/L       0.6555      19.906 ppb       0.6555   3.29%
   QC value within limits for Tl 190.801  Recovery = 99.53%
U 409.014†             1925.7      49.768 ug/L       2.3685      49.768 ppb       2.3685   4.76%
   QC value within limits for U 409.014  Recovery = 99.54%
V 292.402†               835.7      5.0170 ug/L      0.03359      5.0170 ppb      0.03359   0.67%
   QC value within limits for V 292.402  Recovery = 100.34%
Zn 213.857†            1408.8      10.286 ug/L       0.1748      10.286 ppb       0.1748   1.70%
   QC value within limits for Zn 213.857  Recovery = 102.86%
SiO2†                  4025.3      218.19 ug/L        1.897      218.19 ppb        1.897   0.87%
   QC value within limits for SiO2  Recovery = 102.44%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125 ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358 ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332 ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716 ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926 ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720 ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740 ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396 ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397 ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291 ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433 ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413 ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610 ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770 ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657 %		09:58:28
3	Sc Radial	4452.3	4452.3	90.7 %		09:57:29
3	Y 371.029	763138.6	763138.6	86.282 %		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26 %		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167 ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860 ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512 ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439 ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675 ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922 ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820 ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732 ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789 ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279 ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638 ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310 ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175 ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750 ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540 ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843 ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311 ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227 ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915 ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746 ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932 ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176 ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896 ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226 ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013 ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829 ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545 ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683 ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715 ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573 ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528 ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768 ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

Ca 317.933Radial†	272506.6	482480 ug/L	5269.3	482480 ppb	5269.3	1.09%
QC value within limits for Ca 317.933Radial Recovery = 96.50%						
Cd 226.502†	56301.0	472.81 ug/L	3.758	472.81 ppb	3.758	0.79%
QC value within limits for Cd 226.502 Recovery = 94.56%						
Co 228.616†	28228.3	462.55 ug/L	3.948	462.55 ppb	3.948	0.85%
QC value within limits for Co 228.616 Recovery = 92.51%						
Cr 267.716†	53154.8	481.60 ug/L	2.521	481.60 ppb	2.521	0.52%
QC value within limits for Cr 267.716 Recovery = 96.32%						
Cu 324.752†	211552.8	574.38 ug/L	6.835	574.38 ppb	6.835	1.19%
QC value within limits for Cu 324.752 Recovery = 114.88%						
Fe 238.204 Radial†	15285.8	184820 ug/L	1613.6	184820 ppb	1613.6	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 92.41%						
K 766.490 Radial†	30276.9	5529.3 ug/L	61.46	5529.3 ppb	61.46	1.11%
QC value within limits for K 766.490 Radial Recovery = 110.59%						
Mg 279.077 IEC†	11072.2	495270 ug/L	3223.1	495270 ppb	3223.1	0.65%
QC value within limits for Mg 279.077 IEC Recovery = 99.05%						
Mn 257.610†	519055.3	500.72 ug/L	5.664	500.72 ppb	5.664	1.13%
QC value within limits for Mn 257.610 Recovery = 100.14%						
Mo 202.031†	9037.2	492.69 ug/L	3.967	492.69 ppb	3.967	0.81%
QC value within limits for Mo 202.031 Recovery = 98.54%						
Na 589.592 Radial†	18579.3	5211.5 ug/L	48.18	5211.5 ppb	48.18	0.92%
QC value within limits for Na 589.592 Radial Recovery = 104.23%						
Ni 231.604†	23602.9	462.17 ug/L	3.523	462.17 ppb	3.523	0.76%
QC value within limits for Ni 231.604 Recovery = 92.43%						
P 214.914†	5752.3	2520.4 ug/L	39.08	2520.4 ppb	39.08	1.55%
QC value within limits for P 214.914 Recovery = 100.81%						
Pb 220.353†	3920.0	473.36 ug/L	5.165	473.36 ppb	5.165	1.09%
QC value within limits for Pb 220.353 Recovery = 94.67%						
S 181.975 Axial†	2522.0	2612.1 ug/L	33.01	2612.1 ppb	33.01	1.26%
QC value within limits for S 181.975 Axial Recovery = 104.49%						
Sb 206.836†	2110.6	551.22 ug/L	2.592	551.22 ppb	2.592	0.47%
QC value within limits for Sb 206.836 Recovery = 110.24%						
Se 196.026†	4382.9	2608.9 ug/L	24.27	2608.9 ppb	24.27	0.93%
QC value within limits for Se 196.026 Recovery = 104.36%						
Si 251.611†	211822.2	5368.0 ug/L	59.89	5368.0 ppb	59.89	1.12%
QC value within limits for Si 251.611 Recovery = 107.36%						
Sn 189.927†	3306.5	490.18 ug/L	5.219	490.18 ppb	5.219	1.06%
QC value within limits for Sn 189.927 Recovery = 98.04%						
Sr 421.552†	95213.6	495.06 ug/L	5.584	495.06 ppb	5.584	1.13%
QC value within limits for Sr 421.552 Recovery = 99.01%						
Ti 334.940†	354526.5	513.76 ug/L	5.094	513.76 ppb	5.094	0.99%
QC value within limits for Ti 334.940 Recovery = 102.75%						
Tl 190.801†	1932.2	484.94 ug/L	3.312	484.94 ppb	3.312	0.68%
QC value within limits for Tl 190.801 Recovery = 96.99%						
U 409.014†	20126.5	496.18 ug/L	5.005	496.18 ppb	5.005	1.01%
QC value within limits for U 409.014 Recovery = 99.24%						
V 292.402†	91259.0	512.63 ug/L	5.805	512.63 ppb	5.805	1.13%
QC value within limits for V 292.402 Recovery = 102.53%						
Zn 213.857†	71647.8	488.25 ug/L	4.200	488.25 ppb	4.200	0.86%
QC value within limits for Zn 213.857 Recovery = 97.65%						
SiO2†	212042.7	11499 ug/L	145.5	11499 ppb	145.5	1.27%
QC value within limits for SiO2 Recovery = 107.52%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756 ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667 ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135 ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848 ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093 ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797 ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198 ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818 ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763 ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182 ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618 ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359 ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817 ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239 ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303 %		10:09:54
3	Sc Radial	4249.7	4249.7	86.6 %		10:08:52
3	Y 371.029	725964.8	725964.8	82.079 %		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68 %		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798 ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190 ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643 ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484 ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540 ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451 ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510 ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493 ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166 ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306 ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824 ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920 ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523 ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000 ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543 ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915 ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130 ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607 ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07 ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769 ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606 ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498 ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648 ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634 ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188 ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173 ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661 ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929 ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598 ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512 ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635 ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674 ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731	ug/L	14731 ppb	10:16:40
2	Pb 220.353†	248482.1	260348.9	24447	ug/L	24447 ppb	10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788	ug/L	51788 ppb	10:16:40
2	Sb 206.836†	38447.2	40237.0	10413	ug/L	10413 ppb	10:16:40
2	Se 196.026†	22029.2	23096.0	10261	ug/L	10261 ppb	10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861	ug/L	47861 ppb	10:16:35
2	Sn 189.927†	75436.2	79020.2	10451	ug/L	10451 ppb	10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6	ug/L	9440.6 ppb	10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9	ug/L	9887.9 ppb	10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4	ug/L	9993.4 ppb	10:16:40
2	U 409.014†	-1890.4	793.9	-25.762	ug/L	-25.762 ppb	10:16:40
2	V 292.402†	1672052.7	1753005.2	10154	ug/L	10154 ppb	10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064	ug/L	14064 ppb	10:16:35
2	SiO2†	1854816.0	1942233.7	104910	ug/L	104910 ppb	10:17:14
3	Sc 361.383	988641.8	988641.8	95.109	%		10:16:54
3	Sc Radial	4729.3	4729.3	96.3	%		10:15:38
3	Y 371.029	819320.7	819320.7	92.634	%		10:16:54
3	Y RADIAL	5365.7	5365.7	95.02	%		10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602	ug/L	3.2602 ppb	10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512	ug/L	89.512 ppb	10:15:38
3	As 188.979†	30234.5	31825.9	10000	ug/L	10000 ppb	10:17:00
3	B 249.677†	253820.4	267339.4	5029.4	ug/L	5029.4 ppb	10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711	ug/L	13711 ppb	10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8	ug/L	2949.8 ppb	10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255	ug/L	41.255 ppb	10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7	ug/L	9764.7 ppb	10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6	ug/L	9048.6 ppb	10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049	ug/L	24049 ppb	10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842	ug/L	20842 ppb	10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040	ug/L	-4.8040 ppb	10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920	ug/L	288920 ppb	10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120	ug/L	67.120 ppb	10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3	ug/L	9608.3 ppb	10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1	ug/L	9732.1 ppb	10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49	ug/L	158.49 ppb	10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0	ug/L	9890.0 ppb	10:16:54
3	P 214.914†	38530.7	40247.0	14805	ug/L	14805 ppb	10:17:00
3	Pb 220.353†	247695.8	260509.3	24462	ug/L	24462 ppb	10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768	ug/L	51768 ppb	10:17:00
3	Sb 206.836†	38484.3	40428.7	10462	ug/L	10462 ppb	10:17:00
3	Se 196.026†	22001.3	23154.1	10287	ug/L	10287 ppb	10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957	ug/L	47957 ppb	10:16:54
3	Sn 189.927†	75099.1	78965.5	10444	ug/L	10444 ppb	10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4	ug/L	9338.4 ppb	10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1	ug/L	9968.1 ppb	10:16:48
3	Tl 190.801†	39204.4	41264.8	10043	ug/L	10043 ppb	10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525	ug/L	-16.525 ppb	10:17:00
3	V 292.402†	1668512.3	1755925.1	10171	ug/L	10171 ppb	10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095	ug/L	14095 ppb	10:16:54
3	SiO2†	1844505.7	1938761.5	104720	ug/L	104720 ppb	10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

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   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb        20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L        28.6       24016 ppb         28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L        68.9       20784 ppb         68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L     12.73507      7.1483 ppb     12.73507 178.15%
K 766.490 Radial†   1604818.8      292410 ug/L      3446.4      292410 ppb      3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†          -5.2     -33.655 ug/L      97.1262     -33.655 ppb     97.1262 288.59%
Mn 257.610†        10099618.1      9563.8 ug/L        44.75      9563.8 ppb        44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb         5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb        0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb        11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb         37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb         16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb         14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb         35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb         21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb         48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb          3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb       113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb        40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb         24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb      5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb          8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb         18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb       1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

Ca 317.933Radial†	2842.6	5033.0 ug/L	38.86	5033.0 ppb	38.86	0.77%
QC value within limits for Ca 317.933Radial Recovery = 100.66%						
Cd 226.502†	57296.6	499.49 ug/L	1.604	499.49 ppb	1.604	0.32%
QC value within limits for Cd 226.502 Recovery = 99.90%						
Co 228.616†	29764.2	490.44 ug/L	1.510	490.44 ppb	1.510	0.31%
QC value within limits for Co 228.616 Recovery = 98.09%						
Cr 267.716†	55373.5	498.28 ug/L	1.039	498.28 ppb	1.039	0.21%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	186833.2	499.20 ug/L	1.013	499.20 ppb	1.013	0.20%
QC value within limits for Cu 324.752 Recovery = 99.84%						
Fe 238.204 Radial†	413.6	5016.3 ug/L	43.97	5016.3 ppb	43.97	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 100.33%						
K 766.490 Radial†	27646.2	5030.3 ug/L	29.10	5030.3 ppb	29.10	0.58%
QC value within limits for K 766.490 Radial Recovery = 100.61%						
Mg 279.077 IEC†	115.0	5152.7 ug/L	45.64	5152.7 ppb	45.64	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 103.05%						
Mn 257.610†	527884.4	500.28 ug/L	0.793	500.28 ppb	0.793	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%						
Mo 202.031†	9375.3	497.87 ug/L	2.477	497.87 ppb	2.477	0.50%
QC value within limits for Mo 202.031 Recovery = 99.57%						
Na 589.592 Radial†	34004.4	9538.2 ug/L	12.76	9538.2 ppb	12.76	0.13%
QC value within limits for Na 589.592 Radial Recovery = 95.38%						
Ni 231.604†	25164.0	492.74 ug/L	1.916	492.74 ppb	1.916	0.39%
QC value within limits for Ni 231.604 Recovery = 98.55%						
P 214.914†	5537.8	2401.6 ug/L	5.33	2401.6 ppb	5.33	0.22%
QC value within limits for P 214.914 Recovery = 96.06%						
Pb 220.353†	5333.7	502.25 ug/L	2.030	502.25 ppb	2.030	0.40%
QC value within limits for Pb 220.353 Recovery = 100.45%						
S 181.975 Axial†	914.8	984.56 ug/L	14.228	984.56 ppb	14.228	1.45%
QC value within limits for S 181.975 Axial Recovery = 98.46%						
Sb 206.836†	1878.1	502.30 ug/L	0.614	502.30 ppb	0.614	0.12%
QC value within limits for Sb 206.836 Recovery = 100.46%						
Se 196.026†	1126.1	518.56 ug/L	3.244	518.56 ppb	3.244	0.63%
QC value within limits for Se 196.026 Recovery = 103.71%						
Si 251.611†	97340.7	2460.2 ug/L	4.93	2460.2 ppb	4.93	0.20%
QC value within limits for Si 251.611 Recovery = 98.41%						
Sn 189.927†	3741.6	495.45 ug/L	2.400	495.45 ppb	2.400	0.48%
QC value within limits for Sn 189.927 Recovery = 99.09%						
Sr 421.552†	93386.6	489.90 ug/L	1.389	489.90 ppb	1.389	0.28%
QC value within limits for Sr 421.552 Recovery = 97.98%						
Ti 334.940†	359415.4	495.61 ug/L	0.472	495.61 ppb	0.472	0.10%
QC value within limits for Ti 334.940 Recovery = 99.12%						
Tl 190.801†	2062.9	502.10 ug/L	2.272	502.10 ppb	2.272	0.45%
QC value within limits for Tl 190.801 Recovery = 100.42%						
U 409.014†	18512.1	477.03 ug/L	1.407	477.03 ppb	1.407	0.29%
QC value within limits for U 409.014 Recovery = 95.41%						
V 292.402†	86553.8	502.14 ug/L	0.660	502.14 ppb	0.660	0.13%
QC value within limits for V 292.402 Recovery = 100.43%						
Zn 213.857†	67981.0	495.14 ug/L	0.700	495.14 ppb	0.700	0.14%
QC value within limits for Zn 213.857 Recovery = 99.03%						
SiO2†	97459.5	5271.0 ug/L	21.25	5271.0 ppb	21.25	0.40%
QC value within limits for SiO2 Recovery = 98.57%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142 ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204 ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748 ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236 ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607 ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238 ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416 ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924 ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677 ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894 ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750 ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873 ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359 ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940 ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70 %		10:46:30
3	Sc Radial	4898.4	4898.4	99.8 %		10:45:03
3	Y 371.029	891482.0	891482.0	100.79 %		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70 %		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626 ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479 ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415 ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651 ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466 ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383 ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758 ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172 ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063 ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401 ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056 ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671 ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339 ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75 ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452 ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415 ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775 ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537 ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081 ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238 ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446 ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873 ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933 ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715 ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116 ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563 ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284 ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025 ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651 ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454 ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553 ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424 ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5      -1.5484 ug/L       2.77737      -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2      -4.5703 ug/L       5.15146      -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2       3.7743 ug/L       1.87844       3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3      -1.9597 ug/L       2.16197      -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2       1.5615 ug/L       0.21151       1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5       1.5214 ug/L       0.96781       1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5      -0.0343 ug/L       0.07167      -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1      -0.0500 ug/L       0.01994      -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446       0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -175.7      -4.5411 ug/L       3.27969      -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -22.7      -0.1300 ug/L       0.15236      -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217       0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3       2.3658 ug/L       1.17872       2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753 ug/L	-8.3753 ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374 ug/L	0.9374 ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728 ug/L	17.728 ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640 ug/L	1.8640 ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03 ug/L	183.03 ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144 ug/L	-36.144 ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244 ug/L	-0.8244 ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527 ug/L	0.3527 ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635 ug/L	-0.1635 ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719 ug/L	-3.3719 ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309 ug/L	4.2309 ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606 ug/L	-6.7606 ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455 ug/L	-0.4455 ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451 ug/L	-81.451 ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220 %		10:53:23
3	Sc Radial	4812.6	4812.6	98.0 %		10:52:05
3	Y 371.029	862360.3	862360.3	97.500 %		10:53:23
3	Y RADIAL	5507.3	5507.3	97.52 %		10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149 ug/L	-2.3149 ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070 ug/L	-4.1070 ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627 ug/L	-11.627 ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198 ug/L	1.4198 ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813 ug/L	-0.0813 ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080 ug/L	0.0080 ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437 ug/L	21.437 ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926 ug/L	-0.8926 ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116 ug/L	0.0116 ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157 ug/L	0.1157 ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678 ug/L	-5.1678 ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140 ug/L	382140 ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864 ug/L	62.864 ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088 ug/L	-8.8088 ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260 ug/L	-6.2260 ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035 ug/L	0.0035 ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218 ug/L	10.218 ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003 ug/L	2.5003 ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049 ug/L	-17.049 ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633 ug/L	0.8633 ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577 ug/L	16.577 ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703 ug/L	1.2703 ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98 ug/L	187.98 ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230 ug/L	-36.230 ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851 ug/L	0.0851 ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075 ug/L	0.5075 ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587 ug/L	-0.1587 ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379 ug/L	-1.5379 ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506 ug/L	6.4506 ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115 ug/L	-7.3115 ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488 ug/L	-0.5488 ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404 ug/L	-87.404 ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774	13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122	678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903	2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898	87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095	54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575	16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955	33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103	38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019	16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134	87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174	2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643	0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699	166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835	18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037	6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860	37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671	54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332	7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455	68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899	5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8 ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07 ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86 ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37 ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66 ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8 ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84 ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95 ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61 ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62 ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09 ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56 ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99 ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0 ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71 %		11:00:17
3	Sc Radial	4925.8	4925.8	100 %		10:58:53
3	Y 371.029	877905.3	877905.3	99.258 %		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84 %		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35 ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8 ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79 ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35 ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61 ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82 ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2 ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62 ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69 ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61 ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06 ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7 ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2 ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0 ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71 ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33 ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1 ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55 ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1 ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20 ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00 ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56 ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51 ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1 ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74 ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39 ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24 ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29 ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34 ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66 ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31 ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1 ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

Ca 317.933Radial†	2795.2	4949.0 ug/L	61.06	4949.0 ppb	61.06	1.23%
QC value within limits for Ca 317.933Radial Recovery = 98.98%						
Cd 226.502†	57300.2	499.53 ug/L	1.852	499.53 ppb	1.852	0.37%
QC value within limits for Cd 226.502 Recovery = 99.91%						
Co 228.616†	29608.9	487.87 ug/L	1.689	487.87 ppb	1.689	0.35%
QC value within limits for Co 228.616 Recovery = 97.57%						
Cr 267.716†	55297.6	497.60 ug/L	1.743	497.60 ppb	1.743	0.35%
QC value within limits for Cr 267.716 Recovery = 99.52%						
Cu 324.752†	186009.6	496.99 ug/L	1.464	496.99 ppb	1.464	0.29%
QC value within limits for Cu 324.752 Recovery = 99.40%						
Fe 238.204 Radial†	405.0	4912.1 ug/L	80.46	4912.1 ppb	80.46	1.64%
QC value within limits for Fe 238.204 Radial Recovery = 98.24%						
K 766.490 Radial†	27016.4	4915.6 ug/L	26.56	4915.6 ppb	26.56	0.54%
QC value within limits for K 766.490 Radial Recovery = 98.31%						
Mg 279.077 IEC†	111.4	4989.5 ug/L	96.39	4989.5 ppb	96.39	1.93%
QC value within limits for Mg 279.077 IEC Recovery = 99.79%						
Mn 257.610†	527731.1	500.13 ug/L	1.476	500.13 ppb	1.476	0.30%
QC value within limits for Mn 257.610 Recovery = 100.03%						
Mo 202.031†	9298.8	493.81 ug/L	2.195	493.81 ppb	2.195	0.44%
QC value within limits for Mo 202.031 Recovery = 98.76%						
Na 589.592 Radial†	33372.8	9361.1 ug/L	50.41	9361.1 ppb	50.41	0.54%
QC value within limits for Na 589.592 Radial Recovery = 93.61%						
Ni 231.604†	25005.0	489.63 ug/L	1.726	489.63 ppb	1.726	0.35%
QC value within limits for Ni 231.604 Recovery = 97.93%						
P 214.914†	5502.4	2386.1 ug/L	11.15	2386.1 ppb	11.15	0.47%
QC value within limits for P 214.914 Recovery = 95.45%						
Pb 220.353†	5299.9	499.06 ug/L	1.860	499.06 ppb	1.860	0.37%
QC value within limits for Pb 220.353 Recovery = 99.81%						
S 181.975 Axial†	903.8	972.73 ug/L	4.706	972.73 ppb	4.706	0.48%
QC value within limits for S 181.975 Axial Recovery = 97.27%						
Sb 206.836†	1847.1	494.01 ug/L	3.403	494.01 ppb	3.403	0.69%
QC value within limits for Sb 206.836 Recovery = 98.80%						
Se 196.026†	1106.9	509.66 ug/L	6.212	509.66 ppb	6.212	1.22%
QC value within limits for Se 196.026 Recovery = 101.93%						
Si 251.611†	97204.8	2456.9 ug/L	7.70	2456.9 ppb	7.70	0.31%
QC value within limits for Si 251.611 Recovery = 98.28%						
Sn 189.927†	3719.5	492.52 ug/L	2.434	492.52 ppb	2.434	0.49%
QC value within limits for Sn 189.927 Recovery = 98.50%						
Sr 421.552†	92292.4	484.16 ug/L	1.112	484.16 ppb	1.112	0.23%
QC value within limits for Sr 421.552 Recovery = 96.83%						
Ti 334.940†	358750.6	494.69 ug/L	1.509	494.69 ppb	1.509	0.31%
QC value within limits for Ti 334.940 Recovery = 98.94%						
Tl 190.801†	2050.0	498.98 ug/L	1.719	498.98 ppb	1.719	0.34%
QC value within limits for Tl 190.801 Recovery = 99.80%						
U 409.014†	18423.6	474.75 ug/L	1.188	474.75 ppb	1.188	0.25%
QC value within limits for U 409.014 Recovery = 94.95%						
V 292.402†	86361.9	501.00 ug/L	1.491	501.00 ppb	1.491	0.30%
QC value within limits for V 292.402 Recovery = 100.20%						
Zn 213.857†	67835.2	494.11 ug/L	1.146	494.11 ppb	1.146	0.23%
QC value within limits for Zn 213.857 Recovery = 98.82%						
SiO2†	96661.6	5227.9 ug/L	22.02	5227.9 ppb	22.02	0.42%
QC value within limits for SiO2 Recovery = 97.76%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951 ug/L	0.9951 ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458 ug/L	1.7458 ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298 ug/L	-2.7298 ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989 ug/L	2.8989 ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951 ug/L	-3.2951 ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309 ug/L	0.5309 ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661 ug/L	1.2661 ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167 ug/L	-0.1167 ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867 ug/L	-0.0867 ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171 ug/L	-1.7171 ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062 ug/L	0.7062 ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749 ug/L	-0.3749 ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912 ug/L	0.1912 ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073 ug/L	2.4073 ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43 %		11:07:13
3	Sc Radial	4909.9	4909.9	100 %		11:05:46
3	Y 371.029	889449.2	889449.2	100.56 %		11:07:13
3	Y RADIAL	5657.3	5657.3	100.2 %		11:05:46
3	Ag 328.068†	489.6	13.4	0.0605 ug/L	0.0605 ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350 ug/L	22.350 ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242 ug/L	0.7242 ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618 ug/L	7.2618 ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758 ug/L	0.0758 ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242 ug/L	0.0242 ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990 ug/L	3.8990 ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798 ug/L	0.1798 ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058 ug/L	0.0058 ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718 ug/L	0.1718 ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108 ug/L	-0.2108 ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976 ug/L	16.976 ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709 ug/L	25.709 ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52 ug/L	-176.52 ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313 ug/L	0.0313 ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939 ug/L	0.1939 ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755 ug/L	1.0755 ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707 ug/L	-0.0707 ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232 ug/L	0.5232 ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380 ug/L	0.5380 ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618 ug/L	-7.9618 ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903 ug/L	2.2903 ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492 ug/L	0.3492 ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962 ug/L	0.5962 ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103 ug/L	2.2103 ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222 ug/L	-0.0222 ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947 ug/L	-0.0947 ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125 ug/L	-2.2125 ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983 ug/L	-2.0983 ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210 ug/L	0.0210 ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153 ug/L	0.3153 ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484 ug/L	1.7484 ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5	ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62	ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4	ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79	ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50	ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7	ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14	ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22	ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73	ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06	ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23	ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73	ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1	ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2	%		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86	%		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9	ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9	ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0	ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6	ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3	ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8	ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49	ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849	%		12:17:52
3	Y 371.029	872084.7	872084.7	98.600	%		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61	ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35	ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70	ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37	ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30	ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46	ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38	ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43	ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62	ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50	ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54	ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00	ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1	ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64	ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0	ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03	ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64	ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1	ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18	ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49	ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93	ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25	ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98	ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35	ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4	ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L         3.149      507.31 ppb          3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L         3.818      500.79 ppb          3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L         3.018      504.61 ppb          3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L         2.623      506.08 ppb          2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L        45.45      5082.5 ppb          45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L        68.50      4957.3 ppb          68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L        11.74      5217.9 ppb          11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L         3.320      507.64 ppb          3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L         3.216      507.25 ppb          3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L       135.46      9625.8 ppb         135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L         3.555      502.09 ppb          3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L        11.55      2454.7 ppb          11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L         3.072      511.03 ppb          3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L         2.21      1000.2 ppb           2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L         3.960      508.48 ppb          3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L         3.225      525.79 ppb          3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L        14.63      2500.7 ppb          14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L         3.651      502.21 ppb          3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L         6.861      494.05 ppb          6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L         2.661      502.89 ppb          2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L         2.825      511.74 ppb          2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L         2.617      485.15 ppb          2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L         2.757      508.62 ppb          2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L         3.269      502.43 ppb          3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L        57.67      5346.1 ppb          57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -23.990 ug/L       73.3513     -23.990 ppb        73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time:** 11/30/2009 06:07:59
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/4/2009 12:48:33
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

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   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L         53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L         85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L        105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L         48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L        151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L         43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L         52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L         47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750 ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466 ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347 ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960 ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216 ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014 ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740 ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164 ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635 ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594 ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408 ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073 ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106 ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8 %		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0 %		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013 ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244 ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453 ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928 ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436 ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845 ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165 ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628 %		12:59:35
3	Y 371.029	880903.4	880903.4	99.597 %		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441 ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565 ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068 ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624 ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288 ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633 ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888 ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060 ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141 ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162 ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630 ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537 ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106 ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791 ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859 ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539 ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160 ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207 ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458 ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330 ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739 ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096 ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533 ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302 ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247 ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8     34.227 ug/L       24.6248     34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758	ug/L	7.6758 ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119	ug/L	2.2119 ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324	ug/L	-7.1324 ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069	ug/L	3.1069 ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363	ug/L	-1.9363 ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149	ug/L	1.8149 ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313	ug/L	0.4313 ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017	ug/L	0.1017 ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009	ug/L	-1.3009 ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491	ug/L	-1.7491 ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527	ug/L	0.3527 ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144	ug/L	0.3144 ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249	ug/L	3.2249 ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0	%		14:06:39
3	Y RADIAL	5653.4	5653.4	100.1	%		14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078	ug/L	9.0078 ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238	ug/L	25.238 ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557	ug/L	-11.557 ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614	ug/L	26.614 ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277	ug/L	-67.277 ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433	ug/L	13.433 ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743	ug/L	-0.0743 ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53	%		14:08:07
3	Y 371.029	887847.1	887847.1	100.38	%		14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092	ug/L	-0.0092 ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368	ug/L	0.7368 ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077	ug/L	3.0077 ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964	ug/L	0.0964 ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077	ug/L	-0.0077 ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791	ug/L	0.1791 ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226	ug/L	-0.0226 ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834	ug/L	0.0834 ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251	ug/L	0.3251 ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064	ug/L	0.0064 ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662	ug/L	-0.0662 ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191	ug/L	-0.1191 ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622	ug/L	-4.6622 ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536	ug/L	-1.2536 ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407	ug/L	-6.9407 ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302	ug/L	2.5302 ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220	ug/L	-5.9220 ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899	ug/L	2.1899 ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576	ug/L	-0.1576 ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379	ug/L	0.0379 ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674	ug/L	-2.8674 ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636	ug/L	2.5636 ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930	ug/L	-0.1930 ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247	ug/L	0.2247 ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671	ug/L	4.2671 ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       141.0      25.699 ug/L        9.7077      25.699 ppb        9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.9     -40.386 ug/L       44.6154     -40.386 ppb       44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       56.4      15.809 ug/L       12.6890      15.809 ppb       12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb         59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb         14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb        179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb         10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb         13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L         5.14      2504.1 ppb          5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb         40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237	ug/L	8.7237 ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503	ug/L	-0.7503 ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231	ug/L	-7.3231 ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716	ug/L	4.0716 ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231	ug/L	-1.9231 ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718	ug/L	1.4718 ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274	ug/L	1.5274 ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146	ug/L	-0.1146 ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667	ug/L	-0.1667 ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992	ug/L	-4.3992 ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848	ug/L	-0.0848 ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817	ug/L	0.1817 ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213	ug/L	3.4213 ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101	%		15:02:30
3	Y RADIAL	5692.8	5692.8	100.8	%		15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650	ug/L	-1.9650 ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501	ug/L	16.501 ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962	ug/L	-12.962 ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364	ug/L	13.364 ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663	ug/L	48.663 ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078	ug/L	36.078 ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131	ug/L	-0.1131 ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06	%		15:03:57
3	Y 371.029	884765.2	884765.2	100.03	%		15:03:57
3	Ag 328.068†	546.5	72.1	0.2822	ug/L	0.2822 ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412	ug/L	1.2412 ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362	ug/L	0.7362 ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116	ug/L	-0.0116 ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116	ug/L	0.0116 ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212	ug/L	0.0212 ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510	ug/L	0.2510 ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157	ug/L	0.3157 ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543	ug/L	0.3543 ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154	ug/L	0.0154 ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656	ug/L	-0.0656 ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330	ug/L	-0.1330 ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179	ug/L	1.9179 ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499	ug/L	-1.5499 ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618	ug/L	-1.6618 ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470	ug/L	1.9470 ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666	ug/L	-1.0666 ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213	ug/L	1.7213 ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060	ug/L	-0.0060 ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030	ug/L	0.0030 ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751	ug/L	1.5751 ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249	ug/L	-2.0249 ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440	ug/L	-0.2440 ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181	ug/L	0.3181 ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869	ug/L	1.9869 ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3     -15.423 ug/L        6.5866     -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2      20.428 ug/L       19.9912      20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      29.809 ug/L       20.4595      29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2      32.884 ug/L        2.9232      32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb	15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb	15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb	15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb	15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb	15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb	15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb	15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb	15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb	15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb	15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb	15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb	15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb	15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %		15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %		15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb	15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb	15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb	15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb	15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb	15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb	15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb	15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %		15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %		15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb	15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb	15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb	15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb	15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb	15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb	15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb	15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb	15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb	15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb	15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb	15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb	15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb	15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb	15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb	15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb	15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb	15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb	15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb	15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb	15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb	15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb	15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb	15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb	15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb	15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L        2.287      511.43 ppb        2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L        1.146      503.91 ppb        1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L        1.662      508.31 ppb        1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L        2.326      511.16 ppb        2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L       25.16      5027.1 ppb       25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L       44.05      4939.1 ppb       44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L       81.91      5126.5 ppb       81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L        2.081      512.46 ppb        2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L        1.419      507.72 ppb        1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L       66.05      9820.7 ppb       66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L        1.302      503.63 ppb        1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L       10.07      2478.2 ppb       10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L        0.126      512.95 ppb        0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L         2.77      1003.1 ppb         2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L        3.500      515.53 ppb        3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L        2.058      527.42 ppb        2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L         9.97      2519.4 ppb         9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L        1.147      506.74 ppb        1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L        3.343      499.14 ppb        3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L        2.319      508.04 ppb        2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L        1.578      508.52 ppb        1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L        2.387      493.42 ppb        2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L        2.377      512.95 ppb        2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L        1.824      506.84 ppb        1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L       37.27      5379.2 ppb       37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
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Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120 ug/L	2.5120 ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279 ug/L	-1.9279 ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495 ug/L	-0.1495 ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770 ug/L	1.6770 ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989 ug/L	-2.4989 ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415 ug/L	1.7415 ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240 ug/L	2.0240 ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840 ug/L	0.0840 ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260 ug/L	-1.7260 ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950 ug/L	0.4950 ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658 ug/L	0.1658 ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793 ug/L	0.3793 ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045 ug/L	1.4045 ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9 %		15:58:24
3	Y RADIAL	5536.8	5536.8	98.05 %		15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014 ug/L	-2.7014 ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137 ug/L	10.137 ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928 ug/L	-19.928 ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858 ug/L	37.858 ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734 ug/L	69.734 ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211 ug/L	45.211 ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220 ug/L	-0.2220 ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773 %		15:59:52
3	Y 371.029	882258.7	882258.7	99.750 %		15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838 ug/L	-0.2838 ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697 ug/L	0.9697 ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790 ug/L	1.1790 ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208 ug/L	0.0208 ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339 ug/L	0.0339 ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026 ug/L	0.1026 ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501 ug/L	-0.2501 ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010 ug/L	0.1010 ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474 ug/L	0.1474 ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012 ug/L	0.0012 ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361 ug/L	0.1361 ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230 ug/L	0.2230 ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402 ug/L	3.5402 ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038 ug/L	1.3038 ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872 ug/L	-2.2872 ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858 ug/L	5.1858 ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930 ug/L	-1.6930 ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103 ug/L	1.3103 ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187 ug/L	1.9187 ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536 ug/L	0.0536 ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928 ug/L	-0.6928 ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296 ug/L	1.2296 ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732 ug/L	-0.2732 ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459 ug/L	0.3459 ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862 ug/L	3.4862 ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -20.252 ug/L       10.1579     -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0001 ug/L       0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1199 ug/L       0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7      0.1902 ug/L       0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      4.1321 ug/L       1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4     -0.1226 ug/L       1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0     -0.0008 ug/L       2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      2.4728 ug/L       2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1     -2.3223 ug/L       0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0      1.3081 ug/L       0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.3975 ug/L       0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5     -0.0971 ug/L       0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5      0.0132 ug/L       0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -0.5672 ug/L       1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9      0.7761 ug/L       0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4     -0.0073 ug/L       0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0      0.3381 ug/L       0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6      2.8325 ug/L       1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 29
Sample ID: 1201978326|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 16:02:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978326|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4932.6	4932.6	100	%			16:04:35
1	Y RADIAL	5701.0	5701.0	101.0	%			16:04:35
1	Al 396.153Radial†	-28.2	15.7	10.406	ug/L	10.406	ppb	16:04:35
1	Ca 317.933Radial†	22.5	4.6	8.0674	ug/L	8.0674	ppb	16:04:55
1	Fe 238.204 Radial†	10.8	-0.3	-3.4536	ug/L	-3.4536	ppb	16:04:55
1	K 766.490 Radial†	2630.1	48.4	8.8026	ug/L	8.8026	ppb	16:04:35
1	Mg 279.077 IEC†	3.4	0.9	39.158	ug/L	39.158	ppb	16:04:55
1	Na 589.592 Radial†	-1152.5	132.8	37.244	ug/L	37.244	ppb	16:04:35
1	Sr 421.552†	4.1	11.5	0.0602	ug/L	0.0602	ppb	16:04:35
1	Sc 361.383	1047796.0	1047796.0	100.80	%			16:05:52
1	Y 371.029	890128.2	890128.2	100.64	%			16:05:52
1	Ag 328.068†	470.6	-7.2	-0.0322	ug/L	-0.0322	ppb	16:05:57
1	As 188.979†	-45.4	-8.4	-2.6125	ug/L	-2.6125	ppb	16:06:17
1	B 249.677†	-465.2	4.6	0.0868	ug/L	0.0868	ppb	16:06:17
1	Ba 233.527†	33.4	33.2	0.2130	ug/L	0.2130	ppb	16:06:17
1	Be 313.107†	-4907.8	5.1	0.0022	ug/L	0.0022	ppb	16:05:57
1	Cd 226.502†	-245.2	-7.6	-0.0657	ug/L	-0.0657	ppb	16:06:17
1	Co 228.616†	-85.7	1.3	0.0199	ug/L	0.0199	ppb	16:06:17
1	Cr 267.716†	99.7	11.1	0.0987	ug/L	0.0987	ppb	16:06:17
1	Cu 324.752†	9071.5	62.0	0.1655	ug/L	0.1655	ppb	16:05:57
1	Mn 257.610†	701.4	119.2	0.1118	ug/L	0.1118	ppb	16:06:17
1	Mo 202.031†	24.4	-5.0	-0.2655	ug/L	-0.2655	ppb	16:06:17
1	Ni 231.604†	152.3	19.2	0.3755	ug/L	0.3755	ppb	16:06:17
1	P 214.914†	287.8	20.4	9.1377	ug/L	9.1377	ppb	16:06:17
1	Pb 220.353†	-83.3	-7.0	-0.6596	ug/L	-0.6596	ppb	16:06:17
1	S 181.975 Axial†	54.2	-6.4	-6.8784	ug/L	-6.8784	ppb	16:06:17
1	Sb 206.836†	50.2	15.2	4.0336	ug/L	4.0336	ppb	16:06:17
1	Se 196.026†	-19.6	1.9	0.8388	ug/L	0.8388	ppb	16:06:17
1	Si 251.611†	842.9	278.6	7.0704	ug/L	7.0704	ppb	16:06:17
1	Sn 189.927†	11.3	15.5	2.0556	ug/L	2.0556	ppb	16:06:17
1	Ti 334.940†	-1063.2	205.7	0.2829	ug/L	0.2829	ppb	16:05:57
1	Tl 190.801†	-47.9	-3.2	-0.7814	ug/L	-0.7814	ppb	16:06:17
1	U 409.014†	-2690.0	105.4	2.7241	ug/L	2.7241	ppb	16:05:52
1	V 292.402†	-1632.0	-10.5	-0.0575	ug/L	-0.0575	ppb	16:05:57
1	Zn 213.857†	1197.6	302.5	2.2192	ug/L	2.2192	ppb	16:06:17
1	SiO2†	871.6	265.6	14.426	ug/L	14.426	ppb	16:07:23
2	Sc Radial	4922.9	4922.9	100	%			16:05:00
2	Y RADIAL	5665.1	5665.1	100.3	%			16:05:00
2	Al 396.153Radial†	-44.3	-0.4	-0.2733	ug/L	-0.2733	ppb	16:05:00
2	Ca 317.933Radial†	19.5	1.6	2.8673	ug/L	2.8673	ppb	16:05:20
2	Fe 238.204 Radial†	10.8	-0.2	-2.4500	ug/L	-2.4500	ppb	16:05:20
2	K 766.490 Radial†	2568.4	-7.9	-1.4645	ug/L	-1.4645	ppb	16:05:00
2	Mg 279.077 IEC†	3.0	0.5	23.514	ug/L	23.514	ppb	16:05:20
2	Na 589.592 Radial†	-1173.1	110.0	30.847	ug/L	30.847	ppb	16:05:00
2	Sr 421.552†	-1.2	6.2	0.0326	ug/L	0.0326	ppb	16:05:00
2	Sc 361.383	1045732.5	1045732.5	100.60	%			16:06:22
2	Y 371.029	888127.7	888127.7	100.41	%			16:06:22
2	Ag 328.068†	411.6	-64.9	-0.2604	ug/L	-0.2604	ppb	16:06:27
2	As 188.979†	-33.8	3.0	0.9431	ug/L	0.9431	ppb	16:06:47
2	B 249.677†	-464.8	4.1	0.0771	ug/L	0.0771	ppb	16:06:47
2	Ba 233.527†	9.7	9.7	0.0619	ug/L	0.0619	ppb	16:06:47
2	Be 313.107†	-4970.4	-66.8	-0.0202	ug/L	-0.0202	ppb	16:06:27
2	Cd 226.502†	-238.1	-1.0	-0.0083	ug/L	-0.0083	ppb	16:06:47
2	Co 228.616†	-82.8	4.0	0.0642	ug/L	0.0642	ppb	16:06:47
2	Cr 267.716†	150.6	61.9	0.5551	ug/L	0.5551	ppb	16:06:47
2	Cu 324.752†	9047.6	56.1	0.1496	ug/L	0.1496	ppb	16:06:27
2	Mn 257.610†	695.9	115.1	0.1083	ug/L	0.1083	ppb	16:06:47
2	Mo 202.031†	22.4	-7.0	-0.3715	ug/L	-0.3715	ppb	16:06:47
2	Ni 231.604†	141.5	8.8	0.1717	ug/L	0.1717	ppb	16:06:47

2	P 214.914†	298.8	31.9	14.259	ug/L	14.259 ppb	16:06:47
2	Pb 220.353†	-91.7	-15.5	-1.4603	ug/L	-1.4603 ppb	16:06:47
2	S 181.975 Axial†	56.1	-4.4	-4.7179	ug/L	-4.7179 ppb	16:06:47
2	Sb 206.836†	62.0	27.0	7.1139	ug/L	7.1139 ppb	16:06:47
2	Se 196.026†	-25.3	-3.7	-1.6687	ug/L	-1.6687 ppb	16:06:47
2	Si 251.611†	833.7	271.1	6.8868	ug/L	6.8868 ppb	16:06:47
2	Sn 189.927†	9.2	13.5	1.7797	ug/L	1.7797 ppb	16:06:47
2	Ti 334.940†	-1036.3	230.3	0.3164	ug/L	0.3164 ppb	16:06:27
2	Tl 190.801†	-48.5	-4.0	-0.9635	ug/L	-0.9635 ppb	16:06:47
2	U 409.014†	-2683.6	106.4	2.7500	ug/L	2.7500 ppb	16:06:22
2	V 292.402†	-1620.0	-1.8	-0.0100	ug/L	-0.0100 ppb	16:06:27
2	Zn 213.857†	1174.4	281.8	2.0687	ug/L	2.0687 ppb	16:06:47
2	SiO2†	829.9	225.9	12.283	ug/L	12.283 ppb	16:07:28
3	Sc Radial	4880.5	4880.5	99.4	%		16:05:25
3	Y RADIAL	5628.3	5628.3	99.67	%		16:05:25
3	Al 396.153Radial†	-54.2	-10.8	-7.0720	ug/L	-7.0720 ppb	16:05:25
3	Ca 317.933Radial†	25.5	7.8	13.789	ug/L	13.789 ppb	16:05:45
3	Fe 238.204 Radial†	11.9	0.9	11.439	ug/L	11.439 ppb	16:05:45
3	K 766.490 Radial†	2528.4	-26.0	-4.7596	ug/L	-4.7596 ppb	16:05:25
3	Mg 279.077 IEC†	3.8	1.3	58.615	ug/L	58.615 ppb	16:05:45
3	Na 589.592 Radial†	-1099.0	174.4	48.923	ug/L	48.923 ppb	16:05:25
3	Sr 421.552†	-12.5	-5.2	-0.0274	ug/L	-0.0274 ppb	16:05:25
3	Sc 361.383	1052110.0	1052110.0	101.21	%		16:06:53
3	Y 371.029	894573.2	894573.2	101.14	%		16:06:53
3	Ag 328.068†	477.4	-2.4	-0.0078	ug/L	-0.0078 ppb	16:06:58
3	As 188.979†	-40.0	-2.9	-0.9061	ug/L	-0.9061 ppb	16:07:18
3	B 249.677†	-462.1	9.5	0.1785	ug/L	0.1785 ppb	16:07:18
3	Ba 233.527†	19.2	19.0	0.1226	ug/L	0.1226 ppb	16:07:18
3	Be 313.107†	-4864.4	67.9	0.0218	ug/L	0.0218 ppb	16:06:58
3	Cd 226.502†	-235.8	2.6	0.0219	ug/L	0.0219 ppb	16:07:18
3	Co 228.616†	-84.9	2.4	0.0368	ug/L	0.0368 ppb	16:07:18
3	Cr 267.716†	131.5	42.1	0.3779	ug/L	0.3779 ppb	16:07:18
3	Cu 324.752†	9038.5	-7.4	-0.0193	ug/L	-0.0193 ppb	16:06:58
3	Mn 257.610†	703.9	118.8	0.1125	ug/L	0.1125 ppb	16:07:18
3	Mo 202.031†	15.2	-14.2	-0.7520	ug/L	-0.7520 ppb	16:07:18
3	Ni 231.604†	134.1	0.6	0.0112	ug/L	0.0112 ppb	16:07:18
3	P 214.914†	282.0	13.5	6.0665	ug/L	6.0665 ppb	16:07:18
3	Pb 220.353†	-81.6	-5.1	-0.4804	ug/L	-0.4804 ppb	16:07:18
3	S 181.975 Axial†	62.9	2.1	2.2393	ug/L	2.2393 ppb	16:07:18
3	Sb 206.836†	61.1	25.7	6.8028	ug/L	6.8028 ppb	16:07:18
3	Se 196.026†	-16.2	5.4	2.4187	ug/L	2.4187 ppb	16:07:18
3	Si 251.611†	849.1	281.3	7.1499	ug/L	7.1499 ppb	16:07:18
3	Sn 189.927†	16.7	20.8	2.7541	ug/L	2.7541 ppb	16:07:18
3	Ti 334.940†	-1053.5	219.6	0.3025	ug/L	0.3025 ppb	16:06:58
3	Tl 190.801†	-36.3	8.4	2.0381	ug/L	2.0381 ppb	16:07:18
3	U 409.014†	-2722.0	84.7	2.1866	ug/L	2.1866 ppb	16:06:53
3	V 292.402†	-1627.7	0.3	-0.0055	ug/L	-0.0055 ppb	16:06:58
3	Zn 213.857†	1207.3	307.2	2.2544	ug/L	2.2544 ppb	16:07:18
3	SiO2†	828.4	219.4	11.939	ug/L	11.939 ppb	16:07:33

Mean Data: 1201978326|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048546.1	100.87	%	0.313				0.31%
Sc Radial	4912.0	100	%	0.6				0.56%
Y 371.029	890943.0	100.73	%	0.373				0.37%
Y RADIAL	5664.8	100.3	%	0.64				0.64%
Ag 328.068†	-24.8	-0.1001	ug/L	0.13934	-0.1001	ppb	0.13934	139.15%
Al 396.153Radial†	1.5	1.0203	ug/L	8.81059	1.0203	ppb	8.81059	863.51%
As 188.979†	-2.8	-0.8585	ug/L	1.77824	-0.8585	ppb	1.77824	207.13%
B 249.677†	6.1	0.1141	ug/L	0.05597	0.1141	ppb	0.05597	49.05%
Ba 233.527†	20.6	0.1325	ug/L	0.07601	0.1325	ppb	0.07601	57.37%
Be 313.107†	2.1	0.0012	ug/L	0.02100	0.0012	ppb	0.02100	>999.9%
Ca 317.933Radial†	4.7	8.2412	ug/L	5.46291	8.2412	ppb	5.46291	66.29%
Cd 226.502†	-2.0	-0.0174	ug/L	0.04451	-0.0174	ppb	0.04451	256.23%
Co 228.616†	2.6	0.0403	ug/L	0.02233	0.0403	ppb	0.02233	55.42%
Cr 267.716†	38.4	0.3439	ug/L	0.23006	0.3439	ppb	0.23006	66.90%
Cu 324.752†	36.9	0.0986	ug/L	0.10239	0.0986	ppb	0.10239	103.84%
Fe 238.204 Radial†	0.2	1.8453	ug/L	8.32389	1.8453	ppb	8.32389	451.10%
K 766.490 Radial†	4.8	0.8595	ug/L	7.07346	0.8595	ppb	7.07346	822.99%

Mg 279.077 IEC†	0.9	40.429	ug/L	17.5850	40.429	ppb	17.5850	43.50%
Mn 257.610†	117.7	0.1109	ug/L	0.00225	0.1109	ppb	0.00225	2.03%
Mo 202.031†	-8.7	-0.4630	ug/L	0.25584	-0.4630	ppb	0.25584	55.26%
Na 589.592 Radial†	139.1	39.005	ug/L	9.1656	39.005	ppb	9.1656	23.50%
Ni 231.604†	9.5	0.1861	ug/L	0.18257	0.1861	ppb	0.18257	98.11%
P 214.914†	21.9	9.8210	ug/L	4.13868	9.8210	ppb	4.13868	42.14%
Pb 220.353†	-9.2	-0.8668	ug/L	0.52173	-0.8668	ppb	0.52173	60.19%
S 181.975 Axial†	-2.9	-3.1190	ug/L	4.76449	-3.1190	ppb	4.76449	152.76%
Sb 206.836†	22.6	5.9834	ug/L	1.69577	5.9834	ppb	1.69577	28.34%
Se 196.026†	1.2	0.5296	ug/L	2.06114	0.5296	ppb	2.06114	389.18%
Si 251.611†	277.0	7.0357	ug/L	0.13492	7.0357	ppb	0.13492	1.92%
Sn 189.927†	16.6	2.1965	ug/L	0.50223	2.1965	ppb	0.50223	22.87%
Sr 421.552†	4.2	0.0218	ug/L	0.04480	0.0218	ppb	0.04480	205.23%
Ti 334.940†	218.5	0.3006	ug/L	0.01686	0.3006	ppb	0.01686	5.61%
Tl 190.801†	0.4	0.0977	ug/L	1.68287	0.0977	ppb	1.68287	>999.9%
U 409.014†	98.8	2.5536	ug/L	0.31806	2.5536	ppb	0.31806	12.46%
V 292.402†	-4.0	-0.0243	ug/L	0.02883	-0.0243	ppb	0.02883	118.46%
Zn 213.857†	297.2	2.1808	ug/L	0.09862	2.1808	ppb	0.09862	4.52%
SiO2†	237.0	12.883	ug/L	1.3476	12.883	ppb	1.3476	10.46%

Sequence No.: 30
Sample ID: 1201978327|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 12/4/2009 16:09:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978327|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4958.9	4958.9	101	%			16:11:38
1	Y RADIAL	5669.9	5669.9	100.4	%			16:11:38
1	Al 396.153Radial†	8113.0	8076.3	5311.1	ug/L	5311.1	ppb	16:11:38
1	Ca 317.933Radial†	3022.8	2975.0	5267.3	ug/L	5267.3	ppb	16:11:58
1	Fe 238.204 Radial†	449.9	434.4	5267.9	ug/L	5267.9	ppb	16:11:58
1	K 766.490 Radial†	31238.0	28358.5	5161.7	ug/L	5161.7	ppb	16:11:38
1	Mg 279.077 IEC†	123.0	119.3	5343.4	ug/L	5343.4	ppb	16:11:58
1	Na 589.592 Radial†	17471.8	18578.4	5211.2	ug/L	5211.2	ppb	16:11:38
1	Sr 421.552†	101178.1	100181.7	525.55	ug/L	525.55	ppb	16:11:38
1	Sc 361.383	1050652.2	1050652.2	101.07	%			16:12:57
1	Y 371.029	879674.3	879674.3	99.458	%			16:12:57
1	Ag 328.068†	132265.3	130385.2	520.02	ug/L	520.02	ppb	16:12:57
1	As 188.979†	1620.6	1640.0	515.61	ug/L	515.61	ppb	16:13:17
1	B 249.677†	27101.4	27279.4	513.56	ug/L	513.56	ppb	16:12:57
1	Ba 233.527†	84009.8	83116.8	535.34	ug/L	535.34	ppb	16:12:57
1	Be 313.107†	1679850.3	1666866.9	520.75	ug/L	520.75	ppb	16:12:57
1	Cd 226.502†	59978.0	59576.1	519.36	ug/L	519.36	ppb	16:12:57
1	Co 228.616†	31004.2	30760.9	506.83	ug/L	506.83	ppb	16:13:17
1	Cr 267.716†	58436.2	57727.2	519.46	ug/L	519.46	ppb	16:12:57
1	Cu 324.752†	209196.2	198034.9	529.12	ug/L	529.12	ppb	16:12:57
1	Mn 257.610†	566653.9	560053.5	530.77	ug/L	530.77	ppb	16:12:57
1	Mo 202.031†	9717.9	9585.4	509.04	ug/L	509.04	ppb	16:13:17
1	Ni 231.604†	26636.3	26221.2	513.44	ug/L	513.44	ppb	16:13:17
1	P 214.914†	1593.6	1311.6	506.78	ug/L	506.78	ppb	16:13:17
1	Pb 220.353†	5528.1	5544.9	522.11	ug/L	522.11	ppb	16:13:17
1	S 181.975 Axial†	4891.6	4779.5	5148.4	ug/L	5148.4	ppb	16:13:17
1	Sb 206.836†	2085.9	2029.1	542.45	ug/L	542.45	ppb	16:13:17
1	Se 196.026†	1103.9	1113.6	513.95	ug/L	513.95	ppb	16:13:17
1	Si 251.611†	206012.2	203264.6	5150.0	ug/L	5150.0	ppb	16:12:57
1	Sn 189.927†	4058.0	4019.2	532.19	ug/L	532.19	ppb	16:13:17
1	Ti 334.940†	383578.9	380761.7	525.03	ug/L	525.03	ppb	16:12:57
1	Tl 190.801†	2102.4	2124.3	517.21	ug/L	517.21	ppb	16:13:17
1	U 409.014†	18070.3	20652.2	532.28	ug/L	532.28	ppb	16:12:57
1	V 292.402†	90867.9	91510.5	530.71	ug/L	530.71	ppb	16:12:57
1	Zn 213.857†	71715.8	70067.8	510.28	ug/L	510.28	ppb	16:12:57
1	SiO2†	206309.8	203517.6	11035	ug/L	11035	ppb	16:14:18
2	Sc Radial	4963.2	4963.2	101	%			16:12:03
2	Y RADIAL	5655.3	5655.3	100.1	%			16:12:03
2	Al 396.153Radial†	8080.8	8037.5	5285.3	ug/L	5285.3	ppb	16:12:03
2	Ca 317.933Radial†	2994.5	2944.4	5213.1	ug/L	5213.1	ppb	16:12:23
2	Fe 238.204 Radial†	447.3	431.5	5232.9	ug/L	5232.9	ppb	16:12:23
2	K 766.490 Radial†	30944.8	28041.7	5104.0	ug/L	5104.0	ppb	16:12:03
2	Mg 279.077 IEC†	119.6	115.8	5189.1	ug/L	5189.1	ppb	16:12:23
2	Na 589.592 Radial†	17434.6	18526.6	5196.7	ug/L	5196.7	ppb	16:12:03
2	Sr 421.552†	100365.2	99290.5	520.87	ug/L	520.87	ppb	16:12:03
2	Sc 361.383	1045640.0	1045640.0	100.59	%			16:13:24
2	Y 371.029	876102.0	876102.0	99.054	%			16:13:24
2	Ag 328.068†	131586.0	130337.2	519.82	ug/L	519.82	ppb	16:13:24
2	As 188.979†	1635.5	1662.5	522.59	ug/L	522.59	ppb	16:13:45
2	B 249.677†	26997.6	27304.7	514.03	ug/L	514.03	ppb	16:13:24
2	Ba 233.527†	83542.1	83050.2	534.91	ug/L	534.91	ppb	16:13:24
2	Be 313.107†	1672613.6	1667639.4	520.99	ug/L	520.99	ppb	16:13:24
2	Cd 226.502†	59555.6	59440.5	518.18	ug/L	518.18	ppb	16:13:24
2	Co 228.616†	31088.2	30991.5	510.64	ug/L	510.64	ppb	16:13:45
2	Cr 267.716†	58139.2	57709.1	519.30	ug/L	519.30	ppb	16:13:24
2	Cu 324.752†	208437.3	198272.5	529.76	ug/L	529.76	ppb	16:13:24
2	Mn 257.610†	563467.5	559573.2	530.31	ug/L	530.31	ppb	16:13:24
2	Mo 202.031†	9765.4	9678.6	513.99	ug/L	513.99	ppb	16:13:45
2	Ni 231.604†	26665.8	26376.8	516.49	ug/L	516.49	ppb	16:13:45

2	P 214.914†	1603.2	1328.6	514.37 ug/L	514.37 ppb	16:13:45
2	Pb 220.353†	5546.0	5588.9	526.25 ug/L	526.25 ppb	16:13:45
2	S 181.975 Axial†	4888.7	4799.8	5170.3 ug/L	5170.3 ppb	16:13:45
2	Sb 206.836†	2089.5	2042.5	546.17 ug/L	546.17 ppb	16:13:45
2	Se 196.026†	1106.1	1121.0	517.11 ug/L	517.11 ppb	16:13:45
2	Si 251.611†	205001.7	203237.0	5149.2 ug/L	5149.2 ppb	16:13:24
2	Sn 189.927†	4063.4	4043.8	535.45 ug/L	535.45 ppb	16:13:45
2	Ti 334.940†	381741.4	380754.2	525.02 ug/L	525.02 ppb	16:13:24
2	Tl 190.801†	2126.4	2158.1	525.37 ug/L	525.37 ppb	16:13:45
2	U 409.014†	17926.3	20594.7	530.80 ug/L	530.80 ppb	16:13:24
2	V 292.402†	90378.3	91454.7	530.46 ug/L	530.46 ppb	16:13:24
2	Zn 213.857†	71330.6	70025.1	509.95 ug/L	509.95 ppb	16:13:24
2	SiO2†	206080.2	204267.8	11075 ug/L	11075 ppb	16:14:23
3	Sc Radial	4914.8	4914.8	100 %		16:12:28
3	Y RADIAL	5625.1	5625.1	99.61 %		16:12:28
3	Al 396.153Radial†	8063.4	8098.9	5325.8 ug/L	5325.8 ppb	16:12:28
3	Ca 317.933Radial†	3041.7	3020.7	5348.3 ug/L	5348.3 ppb	16:12:48
3	Fe 238.204 Radial†	452.2	440.8	5345.2 ug/L	5345.2 ppb	16:12:48
3	K 766.490 Radial†	30932.4	28331.0	5156.8 ug/L	5156.8 ppb	16:12:28
3	Mg 279.077 IEC†	122.5	119.9	5370.1 ug/L	5370.1 ppb	16:12:48
3	Na 589.592 Radial†	17300.1	18562.2	5206.7 ug/L	5206.7 ppb	16:12:28
3	Sr 421.552†	99856.3	99760.7	523.34 ug/L	523.34 ppb	16:12:28
3	Sc 361.383	1051624.1	1051624.1	101.17 %		16:13:52
3	Y 371.029	882020.4	882020.4	99.723 %		16:13:52
3	Ag 328.068†	132258.1	130257.2	519.54 ug/L	519.54 ppb	16:13:52
3	As 188.979†	1636.9	1654.6	520.16 ug/L	520.16 ppb	16:14:12
3	B 249.677†	27226.7	27378.4	515.40 ug/L	515.40 ppb	16:13:52
3	Ba 233.527†	84017.1	83047.2	534.89 ug/L	534.89 ppb	16:13:52
3	Be 313.107†	1682549.8	1667999.2	521.10 ug/L	521.10 ppb	16:13:52
3	Cd 226.502†	59890.8	59435.0	518.12 ug/L	518.12 ppb	16:13:52
3	Co 228.616†	31439.2	31162.6	513.46 ug/L	513.46 ppb	16:14:12
3	Cr 267.716†	58446.0	57683.5	519.07 ug/L	519.07 ppb	16:13:52
3	Cu 324.752†	209521.8	198165.4	529.48 ug/L	529.48 ppb	16:13:52
3	Mn 257.610†	565740.6	558632.6	529.43 ug/L	529.43 ppb	16:13:52
3	Mo 202.031†	9864.9	9721.8	516.29 ug/L	516.29 ppb	16:14:12
3	Ni 231.604†	26968.8	26525.5	519.40 ug/L	519.40 ppb	16:14:12
3	P 214.914†	1624.7	1340.8	519.84 ug/L	519.84 ppb	16:14:12
3	Pb 220.353†	5608.9	5619.7	529.15 ug/L	529.15 ppb	16:14:12
3	S 181.975 Axial†	4949.8	4832.6	5205.5 ug/L	5205.5 ppb	16:14:12
3	Sb 206.836†	2101.2	2042.3	546.21 ug/L	546.21 ppb	16:14:12
3	Se 196.026†	1130.6	1138.9	525.48 ug/L	525.48 ppb	16:14:12
3	Si 251.611†	205851.2	202917.1	5141.0 ug/L	5141.0 ppb	16:13:52
3	Sn 189.927†	4109.2	4066.1	538.41 ug/L	538.41 ppb	16:14:12
3	Ti 334.940†	383544.0	380376.6	524.50 ug/L	524.50 ppb	16:13:52
3	Tl 190.801†	2140.4	2160.0	525.79 ug/L	525.79 ppb	16:14:12
3	U 409.014†	18073.3	20638.6	531.92 ug/L	531.92 ppb	16:13:52
3	V 292.402†	90832.3	91392.2	530.13 ug/L	530.13 ppb	16:13:52
3	Zn 213.857†	71564.1	69852.3	508.65 ug/L	508.65 ppb	16:13:52
3	SiO2†	206714.7	203729.2	11046 ug/L	11046 ppb	16:14:28

Mean Data: 1201978327|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049305.4	100.94	%	0.309				0.31%
Sc Radial	4945.6	101	%	0.5				0.54%
Y 371.029	879265.6	99.412	%	0.3370				0.34%
Y RADIAL	5650.1	100.1	%	0.40				0.40%
Ag 328.068†	130326.5	519.80	ug/L	0.245	519.80	ppb	0.245	0.05%
Al 396.153Radial†	8070.9	5307.4	ug/L	20.48	5307.4	ppb	20.48	0.39%
As 188.979†	1652.4	519.45	ug/L	3.545	519.45	ppb	3.545	0.68%
B 249.677†	27320.8	514.33	ug/L	0.958	514.33	ppb	0.958	0.19%
Ba 233.527†	83071.4	535.04	ug/L	0.253	535.04	ppb	0.253	0.05%
Be 313.107†	1667501.8	520.95	ug/L	0.180	520.95	ppb	0.180	0.03%
Ca 317.933Radial†	2980.0	5276.3	ug/L	68.03	5276.3	ppb	68.03	1.29%
Cd 226.502†	59483.9	518.55	ug/L	0.696	518.55	ppb	0.696	0.13%
Co 228.616†	30971.7	510.31	ug/L	3.329	510.31	ppb	3.329	0.65%
Cr 267.716†	57706.6	519.28	ug/L	0.197	519.28	ppb	0.197	0.04%
Cu 324.752†	198157.6	529.45	ug/L	0.317	529.45	ppb	0.317	0.06%
Fe 238.204 Radial†	435.6	5282.0	ug/L	57.45	5282.0	ppb	57.45	1.09%
K 766.490 Radial†	28243.7	5140.9	ug/L	31.98	5140.9	ppb	31.98	0.62%

Mg 279.077 IEC†	118.3	5300.9	ug/L	97.74	5300.9	ppb	97.74	1.84%
Mn 257.610†	559419.8	530.17	ug/L	0.680	530.17	ppb	0.680	0.13%
Mo 202.031†	9661.9	513.11	ug/L	3.701	513.11	ppb	3.701	0.72%
Na 589.592 Radial†	18555.8	5204.9	ug/L	7.43	5204.9	ppb	7.43	0.14%
Ni 231.604†	26374.5	516.45	ug/L	2.979	516.45	ppb	2.979	0.58%
P 214.914†	1327.0	513.66	ug/L	6.563	513.66	ppb	6.563	1.28%
Pb 220.353†	5584.5	525.83	ug/L	3.537	525.83	ppb	3.537	0.67%
S 181.975 Axial†	4804.0	5174.7	ug/L	28.85	5174.7	ppb	28.85	0.56%
Sb 206.836†	2038.0	544.94	ug/L	2.158	544.94	ppb	2.158	0.40%
Se 196.026†	1124.5	518.85	ug/L	5.955	518.85	ppb	5.955	1.15%
Si 251.611†	203139.6	5146.7	ug/L	4.97	5146.7	ppb	4.97	0.10%
Sn 189.927†	4043.0	535.35	ug/L	3.108	535.35	ppb	3.108	0.58%
Sr 421.552†	99744.3	523.25	ug/L	2.339	523.25	ppb	2.339	0.45%
Ti 334.940†	380630.8	524.85	ug/L	0.301	524.85	ppb	0.301	0.06%
Tl 190.801†	2147.5	522.79	ug/L	4.838	522.79	ppb	4.838	0.93%
U 409.014†	20628.5	531.67	ug/L	0.773	531.67	ppb	0.773	0.15%
V 292.402†	91452.4	530.43	ug/L	0.294	530.43	ppb	0.294	0.06%
Zn 213.857†	69981.7	509.63	ug/L	0.863	509.63	ppb	0.863	0.17%
SiO2†	203838.2	11052	ug/L	21.0	11052	ppb	21.0	0.19%

Sequence No.: 32
Sample ID: 1201978328|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 12/4/2009 16:23:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978328|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4948.8	4948.8	101	%			16:25:32
1	Y RADIAL	5689.1	5689.1	100.7	%			16:25:32
1	Al 396.153Radial†	-43.8	0.3	0.2043	ug/L	0.2043	ppb	16:25:32
1	Ca 317.933Radial†	23.6	5.6	9.8315	ug/L	9.8315	ppb	16:25:52
1	Fe 238.204 Radial†	12.6	1.5	17.696	ug/L	17.696	ppb	16:25:52
1	K 766.490 Radial†	2581.7	-8.2	-1.5491	ug/L	-1.5491	ppb	16:25:32
1	Mg 279.077 IEC†	5.7	3.1	139.57	ug/L	139.57	ppb	16:25:52
1	Na 589.592 Radial†	-1111.9	176.8	49.599	ug/L	49.599	ppb	16:25:32
1	Sr 421.552†	21.2	28.4	0.1489	ug/L	0.1489	ppb	16:25:32
1	Sc 361.383	1061054.4	1061054.4	102.08	%			16:26:48
1	Y 371.029	900097.4	900097.4	101.77	%			16:26:48
1	Ag 328.068†	495.2	11.1	0.0469	ug/L	0.0469	ppb	16:26:53
1	As 188.979†	-36.4	0.9	0.2997	ug/L	0.2997	ppb	16:27:14
1	B 249.677†	-491.0	-14.9	-0.2843	ug/L	-0.2843	ppb	16:27:14
1	Ba 233.527†	3.3	3.2	0.0216	ug/L	0.0216	ppb	16:27:14
1	Be 313.107†	-4910.6	63.1	0.0205	ug/L	0.0205	ppb	16:26:53
1	Cd 226.502†	-227.8	12.4	0.1065	ug/L	0.1065	ppb	16:27:14
1	Co 228.616†	-84.8	3.2	0.0506	ug/L	0.0506	ppb	16:27:14
1	Cr 267.716†	141.5	50.9	0.4565	ug/L	0.4565	ppb	16:27:14
1	Cu 324.752†	9070.6	-51.3	-0.1360	ug/L	-0.1360	ppb	16:26:53
1	Mn 257.610†	3120.7	2480.5	2.3481	ug/L	2.3481	ppb	16:26:53
1	Mo 202.031†	24.0	-5.7	-0.3034	ug/L	-0.3034	ppb	16:27:14
1	Ni 231.604†	129.3	-5.2	-0.1023	ug/L	-0.1023	ppb	16:27:14
1	P 214.914†	276.6	5.9	2.6490	ug/L	2.6490	ppb	16:27:14
1	Pb 220.353†	-82.4	-5.2	-0.4874	ug/L	-0.4874	ppb	16:27:14
1	S 181.975 Axial†	51.9	-9.3	-9.9671	ug/L	-9.9671	ppb	16:27:14
1	Sb 206.836†	49.3	13.6	3.5927	ug/L	3.5927	ppb	16:27:14
1	Se 196.026†	-18.1	3.7	1.6896	ug/L	1.6896	ppb	16:27:14
1	Si 251.611†	1109.6	529.4	13.448	ug/L	13.448	ppb	16:27:14
1	Sn 189.927†	3.2	7.5	0.9932	ug/L	0.9932	ppb	16:27:14
1	Ti 334.940†	-996.5	284.2	0.3909	ug/L	0.3909	ppb	16:26:53
1	Tl 190.801†	-42.3	2.8	0.7035	ug/L	0.7035	ppb	16:27:14
1	U 409.014†	-2705.8	123.2	3.1828	ug/L	3.1828	ppb	16:26:48
1	V 292.402†	-1627.2	14.4	0.0844	ug/L	0.0844	ppb	16:26:53
1	Zn 213.857†	1036.1	129.4	0.9454	ug/L	0.9454	ppb	16:27:14
1	SiO2†	1177.3	554.3	30.133	ug/L	30.133	ppb	16:28:20
2	Sc Radial	5027.2	5027.2	102	%			16:25:57
2	Y RADIAL	5771.3	5771.3	102.2	%			16:25:57
2	Al 396.153Radial†	-27.9	16.6	10.921	ug/L	10.921	ppb	16:25:57
2	Ca 317.933Radial†	30.5	12.0	21.199	ug/L	21.199	ppb	16:26:17
2	Fe 238.204 Radial†	11.3	0.1	1.0451	ug/L	1.0451	ppb	16:26:17
2	K 766.490 Radial†	2506.0	-122.0	-22.288	ug/L	-22.288	ppb	16:25:57
2	Mg 279.077 IEC†	3.0	0.4	20.081	ug/L	20.081	ppb	16:26:17
2	Na 589.592 Radial†	-1140.9	165.7	46.469	ug/L	46.469	ppb	16:25:57
2	Sr 421.552†	29.2	35.9	0.1881	ug/L	0.1881	ppb	16:25:57
2	Sc 361.383	1057285.3	1057285.3	101.71	%			16:27:19
2	Y 371.029	897680.4	897680.4	101.49	%			16:27:19
2	Ag 328.068†	541.1	57.9	0.2287	ug/L	0.2287	ppb	16:27:24
2	As 188.979†	-41.2	-3.9	-1.2033	ug/L	-1.2033	ppb	16:27:44
2	B 249.677†	-498.8	-24.3	-0.4589	ug/L	-0.4589	ppb	16:27:44
2	Ba 233.527†	3.7	3.7	0.0241	ug/L	0.0241	ppb	16:27:44
2	Be 313.107†	-4893.1	63.2	0.0204	ug/L	0.0204	ppb	16:27:24
2	Cd 226.502†	-227.8	11.7	0.1017	ug/L	0.1017	ppb	16:27:44
2	Co 228.616†	-84.5	3.2	0.0528	ug/L	0.0528	ppb	16:27:44
2	Cr 267.716†	130.8	40.8	0.3666	ug/L	0.3666	ppb	16:27:44
2	Cu 324.752†	8992.4	-96.5	-0.2577	ug/L	-0.2577	ppb	16:27:24
2	Mn 257.610†	3172.4	2542.3	2.4071	ug/L	2.4071	ppb	16:27:24
2	Mo 202.031†	37.8	7.9	0.4219	ug/L	0.4219	ppb	16:27:44
2	Ni 231.604†	148.9	14.4	0.2830	ug/L	0.2830	ppb	16:27:44

2	P 214.914†	293.7	23.6	10.636 ug/L	10.636 ppb	16:27:44
2	Pb 220.353†	-77.9	-1.0	-0.0932 ug/L	-0.0932 ppb	16:27:44
2	S 181.975 Axial†	64.1	2.9	3.1341 ug/L	3.1341 ppb	16:27:44
2	Sb 206.836†	57.7	22.1	5.8439 ug/L	5.8439 ppb	16:27:44
2	Se 196.026†	-19.5	2.2	0.9744 ug/L	0.9744 ppb	16:27:44
2	Si 251.611†	1120.5	544.0	13.811 ug/L	13.811 ppb	16:27:44
2	Sn 189.927†	5.8	10.1	1.3318 ug/L	1.3318 ppb	16:27:44
2	Ti 334.940†	-1008.6	268.8	0.3709 ug/L	0.3709 ppb	16:27:24
2	Tl 190.801†	-52.0	-6.8	-1.6369 ug/L	-1.6369 ppb	16:27:44
2	U 409.014†	-2749.2	71.0	1.8354 ug/L	1.8354 ppb	16:27:19
2	V 292.402†	-1602.8	32.7	0.1966 ug/L	0.1966 ppb	16:27:24
2	Zn 213.857†	1048.6	145.4	1.0658 ug/L	1.0658 ppb	16:27:44
2	SiO2†	1160.5	541.9	29.446 ug/L	29.446 ppb	16:28:25
3	Sc Radial	4996.7	4996.7	102 %		16:26:22
3	Y RADIAL	5739.5	5739.5	101.6 %		16:26:22
3	Al 396.153Radial†	-49.7	-5.1	-3.3500 ug/L	-3.3500 ppb	16:26:22
3	Ca 317.933Radial†	31.4	13.1	23.131 ug/L	23.131 ppb	16:26:42
3	Fe 238.204 Radial†	12.5	1.3	15.775 ug/L	15.775 ppb	16:26:42
3	K 766.490 Radial†	2650.6	35.0	6.3180 ug/L	6.3180 ppb	16:26:22
3	Mg 279.077 IEC†	2.8	0.3	12.304 ug/L	12.304 ppb	16:26:42
3	Na 589.592 Radial†	-1144.9	155.0	43.467 ug/L	43.467 ppb	16:26:22
3	Sr 421.552†	35.1	41.9	0.2197 ug/L	0.2197 ppb	16:26:22
3	Sc 361.383	1051991.8	1051991.8	101.20 %		16:27:49
3	Y 371.029	894184.1	894184.1	101.10 %		16:27:49
3	Ag 328.068†	459.0	-20.5	-0.0795 ug/L	-0.0795 ppb	16:27:54
3	As 188.979†	-45.5	-8.3	-2.5901 ug/L	-2.5901 ppb	16:28:14
3	B 249.677†	-493.9	-22.0	-0.4173 ug/L	-0.4173 ppb	16:28:14
3	Ba 233.527†	18.9	18.7	0.1204 ug/L	0.1204 ppb	16:28:14
3	Be 313.107†	-4954.2	-21.4	-0.0059 ug/L	-0.0059 ppb	16:27:54
3	Cd 226.502†	-258.6	-19.9	-0.1748 ug/L	-0.1748 ppb	16:28:14
3	Co 228.616†	-80.4	6.9	0.1117 ug/L	0.1117 ppb	16:28:14
3	Cr 267.716†	134.7	45.3	0.4061 ug/L	0.4061 ppb	16:28:14
3	Cu 324.752†	9031.2	-13.7	-0.0357 ug/L	-0.0357 ppb	16:27:54
3	Mn 257.610†	3241.8	2626.6	2.4886 ug/L	2.4886 ppb	16:27:54
3	Mo 202.031†	25.7	-3.8	-0.2014 ug/L	-0.2014 ppb	16:28:14
3	Ni 231.604†	150.2	16.5	0.3233 ug/L	0.3233 ppb	16:28:14
3	P 214.914†	279.5	11.1	4.9720 ug/L	4.9720 ppb	16:28:14
3	Pb 220.353†	-81.8	-5.3	-0.5011 ug/L	-0.5011 ppb	16:28:14
3	S 181.975 Axial†	63.7	2.8	3.0579 ug/L	3.0579 ppb	16:28:14
3	Sb 206.836†	43.3	8.2	2.1557 ug/L	2.1557 ppb	16:28:14
3	Se 196.026†	-29.1	-7.4	-3.2137 ug/L	-3.2137 ppb	16:28:14
3	Si 251.611†	1140.6	569.4	14.461 ug/L	14.461 ppb	16:28:14
3	Sn 189.927†	0.9	5.3	0.6987 ug/L	0.6987 ppb	16:28:14
3	Ti 334.940†	-984.9	287.2	0.3963 ug/L	0.3963 ppb	16:27:54
3	Tl 190.801†	-48.3	-3.5	-0.8221 ug/L	-0.8221 ppb	16:28:14
3	U 409.014†	-2724.1	82.3	2.1252 ug/L	2.1252 ppb	16:27:49
3	V 292.402†	-1677.7	-49.3	-0.2835 ug/L	-0.2835 ppb	16:27:54
3	Zn 213.857†	1046.0	148.0	1.0835 ug/L	1.0835 ppb	16:28:14
3	SiO2†	2257.1	1631.3	88.657 ug/L	88.657 ppb	16:28:30

Mean Data: 1201978328|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1056777.2	101.66	%	0.438				0.43%
Sc Radial	4990.9	102	%	0.8				0.79%
Y 371.029	897320.7	101.45	%	0.336				0.33%
Y RADIAL	5733.3	101.5	%	0.73				0.72%
Ag 328.068†	16.2	0.0654	ug/L	0.15495	0.0654	ppb	0.15495	237.01%
Al 396.153Radial†	3.9	2.5918	ug/L	7.42912	2.5918	ppb	7.42912	286.63%
As 188.979†	-3.8	-1.1646	ug/L	1.44530	-1.1646	ppb	1.44530	124.11%
B 249.677†	-20.4	-0.3868	ug/L	0.09116	-0.3868	ppb	0.09116	23.57%
Ba 233.527†	8.6	0.0554	ug/L	0.05632	0.0554	ppb	0.05632	101.70%
Be 313.107†	35.0	0.0117	ug/L	0.01521	0.0117	ppb	0.01521	130.34%
Ca 317.933Radial†	10.2	18.054	ug/L	7.1861	18.054	ppb	7.1861	39.80%
Cd 226.502†	1.4	0.0111	ug/L	0.16107	0.0111	ppb	0.16107	>999.9%
Co 228.616†	4.4	0.0717	ug/L	0.03463	0.0717	ppb	0.03463	48.29%
Cr 267.716†	45.7	0.4097	ug/L	0.04503	0.4097	ppb	0.04503	10.99%
Cu 324.752†	-53.8	-0.1431	ug/L	0.11118	-0.1431	ppb	0.11118	77.70%
Fe 238.204 Radial†	1.0	11.505	ug/L	9.1094	11.505	ppb	9.1094	79.18%
K 766.490 Radial†	-31.8	-5.8397	ug/L	14.77781	-5.8397	ppb	14.77781	253.06%

Mg 279.077 IEC†	1.3	57.318	ug/L	71.3369	57.318	ppb	71.3369 124.46%
Mn 257.610†	2549.8	2.4146	ug/L	0.07055	2.4146	ppb	0.07055 2.92%
Mo 202.031†	-0.5	-0.0277	ug/L	0.39266	-0.0277	ppb	0.39266 >999.9%
Na 589.592 Radial†	165.8	46.512	ug/L	3.0663	46.512	ppb	3.0663 6.59%
Ni 231.604†	8.6	0.1680	ug/L	0.23491	0.1680	ppb	0.23491 139.83%
P 214.914†	13.5	6.0858	ug/L	4.10843	6.0858	ppb	4.10843 67.51%
Pb 220.353†	-3.8	-0.3606	ug/L	0.23167	-0.3606	ppb	0.23167 64.25%
S 181.975 Axial†	-1.2	-1.2584	ug/L	7.54206	-1.2584	ppb	7.54206 599.34%
Sb 206.836†	14.6	3.8641	ug/L	1.85902	3.8641	ppb	1.85902 48.11%
Se 196.026†	-0.5	-0.1832	ug/L	2.64869	-0.1832	ppb	2.64869 >999.9%
Si 251.611†	547.6	13.907	ug/L	0.5133	13.907	ppb	0.5133 3.69%
Sn 189.927†	7.6	1.0079	ug/L	0.31682	1.0079	ppb	0.31682 31.43%
Sr 421.552†	35.4	0.1856	ug/L	0.03546	0.1856	ppb	0.03546 19.11%
Ti 334.940†	280.1	0.3860	ug/L	0.01335	0.3860	ppb	0.01335 3.46%
Tl 190.801†	-2.5	-0.5852	ug/L	1.18804	-0.5852	ppb	1.18804 203.03%
U 409.014†	92.2	2.3811	ug/L	0.70923	2.3811	ppb	0.70923 29.79%
V 292.402†	-0.7	-0.0008	ug/L	0.25111	-0.0008	ppb	0.25111 >999.9%
Zn 213.857†	140.9	1.0316	ug/L	0.07514	1.0316	ppb	0.07514 7.28%
SiO2†	909.2	49.412	ug/L	33.9890	49.412	ppb	33.9890 68.79%

Sequence No.: 33
Sample ID: 1201978329|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/4/2009 16:30:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978329|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5008.2	5008.2	102	%			16:32:33
1	Y RADIAL	5680.8	5680.8	100.6	%			16:32:33
1	Al 396.153Radial†	8081.3	7966.2	5238.1	ug/L	5238.1	ppb	16:32:33
1	Ca 317.933Radial†	2981.7	2905.2	5143.8	ug/L	5143.8	ppb	16:32:53
1	Fe 238.204 Radial†	449.9	430.0	5215.1	ug/L	5215.1	ppb	16:32:53
1	K 766.490 Radial†	31041.5	27861.5	5071.2	ug/L	5071.2	ppb	16:32:33
1	Mg 279.077 IEC†	122.3	117.4	5259.8	ug/L	5259.8	ppb	16:32:53
1	Na 589.592 Radial†	17360.2	18298.8	5132.8	ug/L	5132.8	ppb	16:32:33
1	Sr 421.552†	100638.6	98666.9	517.60	ug/L	517.60	ppb	16:32:33
1	Sc 361.383	1046617.3	1046617.3	100.69	%			16:33:52
1	Y 371.029	876052.0	876052.0	99.048	%			16:33:52
1	Ag 328.068†	131428.1	130058.3	518.72	ug/L	518.72	ppb	16:33:52
1	As 188.979†	1624.6	1650.1	518.76	ug/L	518.76	ppb	16:34:12
1	B 249.677†	26944.4	27226.9	512.56	ug/L	512.56	ppb	16:33:52
1	Ba 233.527†	83633.9	83063.9	535.00	ug/L	535.00	ppb	16:33:52
1	Be 313.107†	1667156.9	1660667.3	518.82	ug/L	518.82	ppb	16:33:52
1	Cd 226.502†	59533.6	59363.5	517.51	ug/L	517.51	ppb	16:33:52
1	Co 228.616†	31106.7	30981.0	510.47	ug/L	510.47	ppb	16:34:12
1	Cr 267.716†	58467.2	57980.9	521.75	ug/L	521.75	ppb	16:33:52
1	Cu 324.752†	209336.2	198971.8	531.62	ug/L	531.62	ppb	16:33:52
1	Mn 257.610†	565692.9	561260.4	531.90	ug/L	531.90	ppb	16:33:52
1	Mo 202.031†	9822.2	9726.1	516.50	ug/L	516.50	ppb	16:34:12
1	Ni 231.604†	26806.7	26492.0	518.75	ug/L	518.75	ppb	16:34:12
1	P 214.914†	1610.2	1334.1	516.57	ug/L	516.57	ppb	16:34:12
1	Pb 220.353†	5554.0	5591.7	526.50	ug/L	526.50	ppb	16:34:12
1	S 181.975 Axial†	4924.9	4831.2	5204.1	ug/L	5204.1	ppb	16:34:12
1	Sb 206.836†	2097.5	2048.5	547.81	ug/L	547.81	ppb	16:34:12
1	Se 196.026†	1126.7	1140.4	525.67	ug/L	525.67	ppb	16:34:12
1	Si 251.611†	206056.6	204094.4	5170.9	ug/L	5170.9	ppb	16:33:52
1	Sn 189.927†	4094.4	4070.8	539.00	ug/L	539.00	ppb	16:34:12
1	Ti 334.940†	383148.6	381797.5	526.45	ug/L	526.45	ppb	16:33:52
1	Tl 190.801†	2114.9	2144.8	522.15	ug/L	522.15	ppb	16:34:12
1	U 409.014†	17989.8	20641.2	532.00	ug/L	532.00	ppb	16:33:52
1	V 292.402†	90934.8	91923.5	533.18	ug/L	533.18	ppb	16:33:52
1	Zn 213.857†	71475.4	70102.7	510.51	ug/L	510.51	ppb	16:33:52
1	SiO2†	209406.5	207380.1	11244	ug/L	11244	ppb	16:35:12
2	Sc Radial	4964.3	4964.3	101	%			16:32:58
2	Y RADIAL	5653.8	5653.8	100.1	%			16:32:58
2	Al 396.153Radial†	8042.2	7997.5	5258.9	ug/L	5258.9	ppb	16:32:58
2	Ca 317.933Radial†	2982.8	2932.2	5191.5	ug/L	5191.5	ppb	16:33:18
2	Fe 238.204 Radial†	450.9	434.9	5274.2	ug/L	5274.2	ppb	16:33:18
2	K 766.490 Radial†	30939.6	28029.8	5101.9	ug/L	5101.9	ppb	16:32:58
2	Mg 279.077 IEC†	125.9	122.0	5464.4	ug/L	5464.4	ppb	16:33:18
2	Na 589.592 Radial†	17289.1	18378.9	5155.3	ug/L	5155.3	ppb	16:32:58
2	Sr 421.552†	100182.3	99087.7	519.81	ug/L	519.81	ppb	16:32:58
2	Sc 361.383	1048828.2	1048828.2	100.90	%			16:34:19
2	Y 371.029	879039.3	879039.3	99.386	%			16:34:19
2	Ag 328.068†	131959.3	130309.5	519.73	ug/L	519.73	ppb	16:34:19
2	As 188.979†	1608.6	1630.8	512.76	ug/L	512.76	ppb	16:34:39
2	B 249.677†	27082.9	27307.7	514.09	ug/L	514.09	ppb	16:34:19
2	Ba 233.527†	83768.5	83022.2	534.73	ug/L	534.73	ppb	16:34:19
2	Be 313.107†	1671718.8	1661698.1	519.14	ug/L	519.14	ppb	16:34:19
2	Cd 226.502†	59784.9	59487.9	518.59	ug/L	518.59	ppb	16:34:19
2	Co 228.616†	31041.0	30850.7	508.31	ug/L	508.31	ppb	16:34:39
2	Cr 267.716†	58576.4	57966.7	521.62	ug/L	521.62	ppb	16:34:19
2	Cu 324.752†	210269.6	199458.6	532.93	ug/L	532.93	ppb	16:34:19
2	Mn 257.610†	567207.7	561577.3	532.21	ug/L	532.21	ppb	16:34:19
2	Mo 202.031†	9806.8	9690.2	514.60	ug/L	514.60	ppb	16:34:39
2	Ni 231.604†	26777.4	26406.8	517.08	ug/L	517.08	ppb	16:34:39

2	P 214.914†	1589.6	1310.3	505.64 ug/L	505.64 ppb	16:34:39
2	Pb 220.353†	5524.8	5551.1	522.69 ug/L	522.69 ppb	16:34:39
2	S 181.975 Axial†	4889.8	4786.1	5155.5 ug/L	5155.5 ppb	16:34:39
2	Sb 206.836†	2083.0	2029.8	542.79 ug/L	542.79 ppb	16:34:39
2	Se 196.026†	1102.4	1114.0	514.16 ug/L	514.16 ppb	16:34:39
2	Si 251.611†	206514.0	204116.4	5171.5 ug/L	5171.5 ppb	16:34:19
2	Sn 189.927†	4084.1	4052.1	536.53 ug/L	536.53 ppb	16:34:39
2	Ti 334.940†	384627.7	382461.2	527.37 ug/L	527.37 ppb	16:34:19
2	Tl 190.801†	2122.2	2147.6	522.84 ug/L	522.84 ppb	16:34:39
2	U 409.014†	18118.0	20730.5	534.30 ug/L	534.30 ppb	16:34:19
2	V 292.402†	91078.7	91875.7	532.88 ug/L	532.88 ppb	16:34:19
2	Zn 213.857†	71725.7	70201.1	511.23 ug/L	511.23 ppb	16:34:19
2	SiO2†	205788.1	203355.5	11026 ug/L	11026 ppb	16:35:18
3	Sc Radial	4951.9	4951.9	101 %		16:33:23
3	Y RADIAL	5645.1	5645.1	99.96 %		16:33:23
3	Al 396.153Radial†	8095.8	8070.7	5307.3 ug/L	5307.3 ppb	16:33:23
3	Ca 317.933Radial†	2982.8	2939.6	5204.6 ug/L	5204.6 ppb	16:33:43
3	Fe 238.204 Radial†	446.0	431.2	5229.5 ug/L	5229.5 ppb	16:33:43
3	K 766.490 Radial†	30946.0	28113.1	5117.0 ug/L	5117.0 ppb	16:33:23
3	Mg 279.077 IEC†	122.7	119.2	5337.4 ug/L	5337.4 ppb	16:33:43
3	Na 589.592 Radial†	17339.1	18471.4	5181.2 ug/L	5181.2 ppb	16:33:23
3	Sr 421.552†	100380.7	99533.5	522.15 ug/L	522.15 ppb	16:33:23
3	Sc 361.383	1049768.6	1049768.6	100.99 %		16:34:47
3	Y 371.029	880675.4	880675.4	99.571 %		16:34:47
3	Ag 328.068†	131636.5	129872.8	517.99 ug/L	517.99 ppb	16:34:47
3	As 188.979†	1614.7	1635.4	514.19 ug/L	514.19 ppb	16:35:07
3	B 249.677†	27083.3	27284.1	513.65 ug/L	513.65 ppb	16:34:47
3	Ba 233.527†	83678.8	82859.0	533.68 ug/L	533.68 ppb	16:34:47
3	Be 313.107†	1675494.3	1663952.4	519.84 ug/L	519.84 ppb	16:34:47
3	Cd 226.502†	59601.0	59252.7	516.54 ug/L	516.54 ppb	16:34:47
3	Co 228.616†	30954.0	30737.0	506.44 ug/L	506.44 ppb	16:35:07
3	Cr 267.716†	58547.9	57886.5	520.90 ug/L	520.90 ppb	16:34:47
3	Cu 324.752†	210297.3	199299.4	532.50 ug/L	532.50 ppb	16:34:47
3	Mn 257.610†	566805.3	560675.2	531.35 ug/L	531.35 ppb	16:34:47
3	Mo 202.031†	9775.1	9650.1	512.47 ug/L	512.47 ppb	16:35:07
3	Ni 231.604†	26699.0	26305.5	515.10 ug/L	515.10 ppb	16:35:07
3	P 214.914†	1596.3	1315.6	508.10 ug/L	508.10 ppb	16:35:07
3	Pb 220.353†	5516.1	5537.6	521.43 ug/L	521.43 ppb	16:35:07
3	S 181.975 Axial†	4874.1	4766.2	5134.1 ug/L	5134.1 ppb	16:35:07
3	Sb 206.836†	2094.9	2039.7	545.36 ug/L	545.36 ppb	16:35:07
3	Se 196.026†	1111.7	1122.2	517.65 ug/L	517.65 ppb	16:35:07
3	Si 251.611†	206327.9	203748.7	5162.2 ug/L	5162.2 ppb	16:34:47
3	Sn 189.927†	4078.5	4042.9	535.32 ug/L	535.32 ppb	16:35:07
3	Ti 334.940†	384623.3	382115.4	526.89 ug/L	526.89 ppb	16:34:47
3	Tl 190.801†	2112.7	2136.3	520.13 ug/L	520.13 ppb	16:35:07
3	U 409.014†	18127.3	20723.7	534.13 ug/L	534.13 ppb	16:34:47
3	V 292.402†	91179.5	91894.7	532.97 ug/L	532.97 ppb	16:34:47
3	Zn 213.857†	71660.1	70072.5	510.30 ug/L	510.30 ppb	16:34:47
3	SiO2†	206766.5	204141.7	11068 ug/L	11068 ppb	16:35:23

Mean Data: 1201978329|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048404.7	100.86	%	0.156				0.15%
Sc Radial	4974.8	101	%	0.6				0.59%
Y 371.029	878588.9	99.335	%	0.2651				0.27%
Y RADIAL	5659.9	100.2	%	0.33				0.33%
Ag 328.068†	130080.2	518.82	ug/L	0.876	518.82	ppb	0.876	0.17%
Al 396.153Radial†	8011.5	5268.1	ug/L	35.50	5268.1	ppb	35.50	0.67%
As 188.979†	1638.8	515.24	ug/L	3.134	515.24	ppb	3.134	0.61%
B 249.677†	27272.9	513.43	ug/L	0.786	513.43	ppb	0.786	0.15%
Ba 233.527†	82981.7	534.47	ug/L	0.696	534.47	ppb	0.696	0.13%
Be 313.107†	1662105.9	519.27	ug/L	0.524	519.27	ppb	0.524	0.10%
Ca 317.933Radial†	2925.7	5180.0	ug/L	32.02	5180.0	ppb	32.02	0.62%
Cd 226.502†	59368.0	517.55	ug/L	1.024	517.55	ppb	1.024	0.20%
Co 228.616†	30856.2	508.40	ug/L	2.017	508.40	ppb	2.017	0.40%
Cr 267.716†	57944.7	521.42	ug/L	0.458	521.42	ppb	0.458	0.09%
Cu 324.752†	199243.3	532.35	ug/L	0.664	532.35	ppb	0.664	0.12%
Fe 238.204 Radial†	432.1	5239.6	ug/L	30.80	5239.6	ppb	30.80	0.59%
K 766.490 Radial†	28001.5	5096.7	ug/L	23.34	5096.7	ppb	23.34	0.46%

Mg 279.077 IEC†	119.5	5353.9	ug/L	103.27	5353.9	ppb	103.27	1.93%
Mn 257.610†	561171.0	531.82	ug/L	0.434	531.82	ppb	0.434	0.08%
Mo 202.031†	9688.8	514.53	ug/L	2.017	514.53	ppb	2.017	0.39%
Na 589.592 Radial†	18383.1	5156.4	ug/L	24.23	5156.4	ppb	24.23	0.47%
Ni 231.604†	26401.4	516.98	ug/L	1.829	516.98	ppb	1.829	0.35%
P 214.914†	1320.0	510.10	ug/L	5.737	510.10	ppb	5.737	1.12%
Pb 220.353†	5560.1	523.54	ug/L	2.640	523.54	ppb	2.640	0.50%
S 181.975 Axial†	4794.5	5164.6	ug/L	35.89	5164.6	ppb	35.89	0.69%
Sb 206.836†	2039.4	545.32	ug/L	2.510	545.32	ppb	2.510	0.46%
Se 196.026†	1125.5	519.16	ug/L	5.904	519.16	ppb	5.904	1.14%
Si 251.611†	203986.5	5168.2	ug/L	5.21	5168.2	ppb	5.21	0.10%
Sn 189.927†	4055.2	536.95	ug/L	1.877	536.95	ppb	1.877	0.35%
Sr 421.552†	99096.1	519.85	ug/L	2.273	519.85	ppb	2.273	0.44%
Ti 334.940†	382124.7	526.91	ug/L	0.459	526.91	ppb	0.459	0.09%
Tl 190.801†	2142.9	521.71	ug/L	1.413	521.71	ppb	1.413	0.27%
U 409.014†	20698.5	533.48	ug/L	1.283	533.48	ppb	1.283	0.24%
V 292.402†	91898.0	533.01	ug/L	0.156	533.01	ppb	0.156	0.03%
Zn 213.857†	70125.4	510.68	ug/L	0.485	510.68	ppb	0.485	0.09%
SiO2†	204959.1	11113	ug/L	115.9	11113	ppb	115.9	1.04%

Sequence No.: 34
Sample ID: 1201978330|925377|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/4/2009 16:37:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978330|925377|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4846.6	4846.6	98.7	%			16:39:26
1	Y RADIAL	5589.9	5589.9	98.99	%			16:39:26
1	Al 396.153Radial†	-22.3	21.2	14.008	ug/L	14.008	ppb	16:39:26
1	Ca 317.933Radial†	19.2	1.6	2.8537	ug/L	2.8537	ppb	16:39:46
1	Fe 238.204 Radial†	12.8	2.0	24.335	ug/L	24.335	ppb	16:39:46
1	K 766.490 Radial†	2652.4	117.4	21.402	ug/L	21.402	ppb	16:39:26
1	Mg 279.077 IEC†	1.2	-1.3	-58.635	ug/L	-58.635	ppb	16:39:46
1	Na 589.592 Radial†	-1206.5	57.8	16.205	ug/L	16.205	ppb	16:39:26
1	Sr 421.552†	-23.5	-16.4	-0.0860	ug/L	-0.0860	ppb	16:39:26
1	Sc 361.383	1028230.0	1028230.0	98.917	%			16:40:42
1	Y 371.029	872841.8	872841.8	98.686	%			16:40:42
1	Ag 328.068†	426.6	-42.8	-0.1581	ug/L	-0.1581	ppb	16:40:48
1	As 188.979†	-39.9	-3.8	-1.1745	ug/L	-1.1745	ppb	16:41:08
1	B 249.677†	-388.3	73.5	1.3863	ug/L	1.3863	ppb	16:41:08
1	Ba 233.527†	-5.9	-6.0	-0.0378	ug/L	-0.0378	ppb	16:41:08
1	Be 313.107†	-4930.2	-110.2	-0.0340	ug/L	-0.0340	ppb	16:40:48
1	Cd 226.502†	-218.8	14.5	0.1239	ug/L	0.1239	ppb	16:41:08
1	Co 228.616†	-92.5	-7.2	-0.1180	ug/L	-0.1180	ppb	16:41:08
1	Cr 267.716†	116.4	29.9	0.2707	ug/L	0.2707	ppb	16:41:08
1	Cu 324.752†	9019.7	180.9	0.4843	ug/L	0.4843	ppb	16:40:48
1	Mn 257.610†	622.0	52.1	0.0528	ug/L	0.0528	ppb	16:41:08
1	Mo 202.031†	36.9	8.0	0.4289	ug/L	0.4289	ppb	16:41:08
1	Ni 231.604†	127.6	-2.9	-0.0566	ug/L	-0.0566	ppb	16:41:08
1	P 214.914†	286.1	24.1	10.695	ug/L	10.695	ppb	16:41:08
1	Pb 220.353†	-61.2	13.7	1.2909	ug/L	1.2909	ppb	16:41:08
1	S 181.975 Axial†	56.8	-2.6	-2.8489	ug/L	-2.8489	ppb	16:41:08
1	Sb 206.836†	39.7	5.5	1.4711	ug/L	1.4711	ppb	16:41:08
1	Se 196.026†	-26.6	-5.5	-2.3643	ug/L	-2.3643	ppb	16:41:08
1	Si 251.611†	691.0	140.9	3.5606	ug/L	3.5606	ppb	16:41:08
1	Sn 189.927†	6.5	10.9	1.4397	ug/L	1.4397	ppb	16:41:08
1	Ti 334.940†	-1117.1	131.2	0.1832	ug/L	0.1832	ppb	16:40:48
1	Tl 190.801†	-51.5	-7.9	-1.8965	ug/L	-1.8965	ppb	16:41:08
1	U 409.014†	-2935.2	-193.4	-5.0029	ug/L	-5.0029	ppb	16:40:42
1	V 292.402†	-1617.3	-26.5	-0.1607	ug/L	-0.1607	ppb	16:40:48
1	Zn 213.857†	952.4	77.3	0.5673	ug/L	0.5673	ppb	16:41:08
1	SiO2†	728.6	137.5	7.4320	ug/L	7.4320	ppb	16:42:14
2	Sc Radial	4930.9	4930.9	100	%			16:39:51
2	Y RADIAL	5661.0	5661.0	100.2	%			16:39:51
2	Al 396.153Radial†	-16.1	27.8	18.353	ug/L	18.353	ppb	16:39:51
2	Ca 317.933Radial†	23.3	5.4	9.4787	ug/L	9.4787	ppb	16:40:11
2	Fe 238.204 Radial†	8.2	-2.8	-34.265	ug/L	-34.265	ppb	16:40:11
2	K 766.490 Radial†	2594.4	13.8	2.4919	ug/L	2.4919	ppb	16:39:51
2	Mg 279.077 IEC†	2.4	-0.1	-4.9919	ug/L	-4.9919	ppb	16:40:11
2	Na 589.592 Radial†	-1160.8	124.1	34.820	ug/L	34.820	ppb	16:39:51
2	Sr 421.552†	-27.7	-20.2	-0.1058	ug/L	-0.1058	ppb	16:39:51
2	Sc 361.383	1050220.0	1050220.0	101.03	%			16:41:13
2	Y 371.029	890516.9	890516.9	100.68	%			16:41:13
2	Ag 328.068†	400.4	-77.7	-0.3198	ug/L	-0.3198	ppb	16:41:18
2	As 188.979†	-41.5	-4.5	-1.4023	ug/L	-1.4023	ppb	16:41:38
2	B 249.677†	-420.8	49.6	0.9424	ug/L	0.9424	ppb	16:41:38
2	Ba 233.527†	9.3	9.3	0.0580	ug/L	0.0580	ppb	16:41:38
2	Be 313.107†	-4881.4	42.4	0.0134	ug/L	0.0134	ppb	16:41:18
2	Cd 226.502†	-230.3	7.7	0.0702	ug/L	0.0702	ppb	16:41:38
2	Co 228.616†	-90.2	-3.0	-0.0490	ug/L	-0.0490	ppb	16:41:38
2	Cr 267.716†	105.2	16.4	0.1462	ug/L	0.1462	ppb	16:41:38
2	Cu 324.752†	8877.3	-151.0	-0.4050	ug/L	-0.4050	ppb	16:41:18
2	Mn 257.610†	625.4	42.4	0.0368	ug/L	0.0368	ppb	16:41:38
2	Mo 202.031†	31.1	1.5	0.0781	ug/L	0.0781	ppb	16:41:38
2	Ni 231.604†	129.4	-3.9	-0.0760	ug/L	-0.0760	ppb	16:41:38

2	P 214.914†	275.3	7.4	3.3965 ug/L	3.3965 ppb	16:41:38
2	Pb 220.353†	-75.4	0.9	0.0924 ug/L	0.0924 ppb	16:41:38
2	S 181.975 Axial†	53.3	-7.4	-7.9256 ug/L	-7.9256 ppb	16:41:38
2	Sb 206.836†	30.5	-4.5	-1.1699 ug/L	-1.1699 ppb	16:41:38
2	Se 196.026†	-16.4	5.2	2.1600 ug/L	2.1600 ppb	16:41:38
2	Si 251.611†	733.1	168.0	4.2623 ug/L	4.2623 ppb	16:41:38
2	Sn 189.927†	-1.2	3.1	0.4142 ug/L	0.4142 ppb	16:41:38
2	Ti 334.940†	-1195.6	77.1	0.1067 ug/L	0.1067 ppb	16:41:18
2	Tl 190.801†	-43.9	0.8	0.2024 ug/L	0.2024 ppb	16:41:38
2	U 409.014†	-2799.8	2.8	0.0771 ug/L	0.0771 ppb	16:41:13
2	V 292.402†	-1649.3	-23.9	-0.1306 ug/L	-0.1306 ppb	16:41:18
2	Zn 213.857†	945.9	50.7	0.3770 ug/L	0.3770 ppb	16:41:38
2	SiO2†	753.9	147.2	7.9901 ug/L	7.9901 ppb	16:42:19
3	Sc Radial	4870.2	4870.2	99.2 %		16:40:16
3	Y RADIAL	5605.3	5605.3	99.26 %		16:40:16
3	Al 396.153Radial†	-42.0	1.5	0.9971 ug/L	0.9971 ppb	16:40:16
3	Ca 317.933Radial†	22.6	4.9	8.7091 ug/L	8.7091 ppb	16:40:36
3	Fe 238.204 Radial†	9.5	-1.4	-16.794 ug/L	-16.794 ppb	16:40:36
3	K 766.490 Radial†	2644.7	96.6	17.592 ug/L	17.592 ppb	16:40:16
3	Mg 279.077 IEC†	6.3	3.8	171.40 ug/L	171.40 ppb	16:40:36
3	Na 589.592 Radial†	-1154.3	116.3	32.612 ug/L	32.612 ppb	16:40:16
3	Sr 421.552†	-51.0	-44.0	-0.2308 ug/L	-0.2308 ppb	16:40:16
3	Sc 361.383	1040755.4	1040755.4	100.12 %		16:41:43
3	Y 371.029	884432.9	884432.9	99.996 %		16:41:43
3	Ag 328.068†	473.7	-1.0	-0.0113 ug/L	-0.0113 ppb	16:41:48
3	As 188.979†	-38.5	-1.9	-0.5903 ug/L	-0.5903 ppb	16:42:08
3	B 249.677†	-441.2	25.4	0.4826 ug/L	0.4826 ppb	16:42:08
3	Ba 233.527†	-12.6	-12.6	-0.0809 ug/L	-0.0809 ppb	16:42:08
3	Be 313.107†	-4808.8	71.0	0.0223 ug/L	0.0223 ppb	16:41:48
3	Cd 226.502†	-247.4	-11.5	-0.0984 ug/L	-0.0984 ppb	16:42:08
3	Co 228.616†	-72.9	13.5	0.2223 ug/L	0.2223 ppb	16:42:08
3	Cr 267.716†	103.8	15.9	0.1417 ug/L	0.1417 ppb	16:42:08
3	Cu 324.752†	8963.3	14.9	0.0389 ug/L	0.0389 ppb	16:41:48
3	Mn 257.610†	616.2	38.7	0.0318 ug/L	0.0318 ppb	16:42:08
3	Mo 202.031†	24.2	-5.0	-0.2688 ug/L	-0.2688 ppb	16:42:08
3	Ni 231.604†	130.3	-1.8	-0.0350 ug/L	-0.0350 ppb	16:42:08
3	P 214.914†	268.5	3.0	1.3911 ug/L	1.3911 ppb	16:42:08
3	Pb 220.353†	-64.2	11.5	1.0773 ug/L	1.0773 ppb	16:42:08
3	S 181.975 Axial†	61.6	1.4	1.5125 ug/L	1.5125 ppb	16:42:08
3	Sb 206.836†	38.6	3.9	1.0492 ug/L	1.0492 ppb	16:42:08
3	Se 196.026†	-9.2	12.2	5.3446 ug/L	5.3446 ppb	16:42:08
3	Si 251.611†	702.4	143.9	3.6481 ug/L	3.6481 ppb	16:42:08
3	Sn 189.927†	7.6	11.9	1.5797 ug/L	1.5797 ppb	16:42:08
3	Ti 334.940†	-1204.9	57.1	0.0775 ug/L	0.0775 ppb	16:41:48
3	Tl 190.801†	-37.6	6.7	1.6179 ug/L	1.6179 ppb	16:42:08
3	U 409.014†	-2635.6	141.6	3.6619 ug/L	3.6619 ppb	16:41:43
3	V 292.402†	-1555.1	55.3	0.3262 ug/L	0.3262 ppb	16:41:48
3	Zn 213.857†	936.3	49.6	0.3601 ug/L	0.3601 ppb	16:42:08
3	SiO2†	729.1	129.2	7.0056 ug/L	7.0056 ppb	16:42:24

Mean Data: 1201978330|925377|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039735.1	100.02	%	1.061				1.06%
Sc Radial	4882.6	99.4	%	0.89				0.89%
Y 371.029	882597.2	99.788	%	1.0152				1.02%
Y RADIAL	5618.7	99.50	%	0.662				0.67%
Ag 328.068†	-40.5	-0.1631	ug/L	0.15432	-0.1631	ppb	0.15432	94.64%
Al 396.153Radial†	16.8	11.119	ug/L	9.0313	11.119	ppb	9.0313	81.22%
As 188.979†	-3.4	-1.0557	ug/L	0.41884	-1.0557	ppb	0.41884	39.68%
B 249.677†	49.5	0.9371	ug/L	0.45186	0.9371	ppb	0.45186	48.22%
Ba 233.527†	-3.1	-0.0202	ug/L	0.07108	-0.0202	ppb	0.07108	351.58%
Be 313.107†	1.1	0.0006	ug/L	0.03027	0.0006	ppb	0.03027	>999.9%
Ca 317.933Radial†	4.0	7.0139	ug/L	3.62329	7.0139	ppb	3.62329	51.66%
Cd 226.502†	3.6	0.0319	ug/L	0.11599	0.0319	ppb	0.11599	363.86%
Co 228.616†	1.1	0.0184	ug/L	0.17988	0.0184	ppb	0.17988	976.55%
Cr 267.716†	20.7	0.1862	ug/L	0.07317	0.1862	ppb	0.07317	39.30%
Cu 324.752†	14.9	0.0394	ug/L	0.44463	0.0394	ppb	0.44463	>999.9%
Fe 238.204 Radial†	-0.7	-8.9079	ug/L	30.08502	-8.9079	ppb	30.08502	337.73%
K 766.490 Radial†	75.9	13.829	ug/L	10.0010	13.829	ppb	10.0010	72.32%

Mg 279.077 IEC†	0.8	35.925	ug/L	120.3538	35.925	ppb	120.3538 335.01%
Mn 257.610†	44.4	0.0405	ug/L	0.01100	0.0405	ppb	0.01100 27.17%
Mo 202.031†	1.5	0.0794	ug/L	0.34888	0.0794	ppb	0.34888 439.47%
Na 589.592 Radial†	99.4	27.879	ug/L	10.1700	27.879	ppb	10.1700 36.48%
Ni 231.604†	-2.9	-0.0559	ug/L	0.02049	-0.0559	ppb	0.02049 36.68%
P 214.914†	11.5	5.1609	ug/L	4.89650	5.1609	ppb	4.89650 94.88%
Pb 220.353†	8.7	0.8202	ug/L	0.63926	0.8202	ppb	0.63926 77.94%
S 181.975 Axial†	-2.9	-3.0873	ug/L	4.72358	-3.0873	ppb	4.72358 153.00%
Sb 206.836†	1.6	0.4501	ug/L	1.41878	0.4501	ppb	1.41878 315.20%
Se 196.026†	3.9	1.7134	ug/L	3.87381	1.7134	ppb	3.87381 226.09%
Si 251.611†	150.9	3.8237	ug/L	0.38238	3.8237	ppb	0.38238 10.00%
Sn 189.927†	8.6	1.1445	ug/L	0.63631	1.1445	ppb	0.63631 55.60%
Sr 421.552†	-26.8	-0.1409	ug/L	0.07847	-0.1409	ppb	0.07847 55.70%
Ti 334.940†	88.4	0.1224	ug/L	0.05457	0.1224	ppb	0.05457 44.57%
Tl 190.801†	-0.1	-0.0254	ug/L	1.76825	-0.0254	ppb	1.76825 >999.9%
U 409.014†	-16.3	-0.4213	ug/L	4.35384	-0.4213	ppb	4.35384 >999.9%
V 292.402†	1.6	0.0116	ug/L	0.27286	0.0116	ppb	0.27286 >999.9%
Zn 213.857†	59.2	0.4348	ug/L	0.11505	0.4348	ppb	0.11505 26.46%
SiO2†	137.9	7.4759	ug/L	0.49372	7.4759	ppb	0.49372 6.60%

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0 ug/L	2467.0 ppb	17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00 ug/L	510.00 ppb	17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08 ug/L	988.08 ppb	17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65 ug/L	511.65 ppb	17:02:35
2	Se 196.026†	1101.6	1134.9	522.91 ug/L	522.91 ppb	17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9 ug/L	2523.9 ppb	17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00 ug/L	505.00 ppb	17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34 ug/L	508.34 ppb	17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32 ug/L	505.32 ppb	17:02:35
2	U 409.014†	16132.6	19081.4	491.71 ug/L	491.71 ppb	17:02:15
2	V 292.402†	85992.6	88533.4	513.61 ug/L	513.61 ppb	17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27 ug/L	506.27 ppb	17:02:15
2	SiO2†	99096.4	99571.7	5385.4 ug/L	5385.4 ppb	17:03:13
3	Sc Radial	4783.8	4783.8	97.4 %		17:01:19
3	Y RADIAL	5474.3	5474.3	96.94 %		17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1 ug/L	5154.1 ppb	17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7 ug/L	5093.7 ppb	17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5 ug/L	5010.5 ppb	17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8 ug/L	5005.8 ppb	17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6 ug/L	5244.6 ppb	17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6 ug/L	9733.6 ppb	17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13 ug/L	501.13 ppb	17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474 %		17:02:43
3	Y 371.029	860032.6	860032.6	97.237 %		17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06 ug/L	509.06 ppb	17:02:43
3	As 188.979†	1574.3	1635.3	513.94 ug/L	513.94 ppb	17:03:03
3	B 249.677†	25888.6	26755.8	503.69 ug/L	503.69 ppb	17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18 ug/L	511.18 ppb	17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43 ug/L	511.43 ppb	17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37 ug/L	511.37 ppb	17:02:43
3	Co 228.616†	30331.0	30887.2	508.95 ug/L	508.95 ppb	17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88 ug/L	509.88 ppb	17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19 ug/L	511.19 ppb	17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05 ug/L	512.05 ppb	17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93 ug/L	513.93 ppb	17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25 ug/L	508.25 ppb	17:03:03
3	P 214.914†	5929.5	5756.2	2497.7 ug/L	2497.7 ppb	17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78 ug/L	517.78 ppb	17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4 ug/L	1006.4 ppb	17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71 ug/L	516.71 ppb	17:03:03
3	Se 196.026†	1126.1	1164.9	535.77 ug/L	535.77 ppb	17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5 ug/L	2520.5 ppb	17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39 ug/L	512.39 ppb	17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94 ug/L	507.94 ppb	17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85 ug/L	515.85 ppb	17:03:03
3	U 409.014†	16138.4	19162.4	493.81 ug/L	493.81 ppb	17:02:43
3	V 292.402†	85723.1	88659.8	514.45 ug/L	514.45 ppb	17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31 ug/L	506.31 ppb	17:02:43
3	SiO2†	99466.9	100408.9	5430.6 ug/L	5430.6 ppb	17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L         1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L         3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L         0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L         0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L        62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L        18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L        10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L         0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L         3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L        43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L         2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L        15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L         4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L        13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L         3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L         6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L          3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L         3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L         1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L         0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L         5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L         2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L         0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L         1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L        22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
```

Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628 ug/L	-2.1628 ppb	17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982 ug/L	1.3982 ppb	17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236 ug/L	2.6236 ppb	17:09:34
2	Sb 206.836†	49.9	15.7	4.1740 ug/L	4.1740 ppb	17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105 ug/L	-1.6105 ppb	17:09:34
2	Si 251.611†	628.2	76.8	1.9315 ug/L	1.9315 ppb	17:09:34
2	Sn 189.927†	5.3	9.7	1.2851 ug/L	1.2851 ppb	17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699 ug/L	0.0699 ppb	17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234 ug/L	-0.2234 ppb	17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719 ug/L	-3.0719 ppb	17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052 ug/L	-0.4052 ppb	17:09:14
2	Zn 213.857†	959.6	83.5	0.6171 ug/L	0.6171 ppb	17:09:34
2	SiO2†	603.8	10.7	0.5423 ug/L	0.5423 ppb	17:10:14
3	Sc Radial	4823.8	4823.8	98.3 %		17:08:12
3	Y RADIAL	5537.0	5537.0	98.05 %		17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834 ug/L	11.834 ppb	17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300 ug/L	10.300 ppb	17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132 ug/L	-18.132 ppb	17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822 ug/L	13.822 ppb	17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369 ug/L	60.369 ppb	17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232 ug/L	30.232 ppb	17:08:12
3	Sr 421.552†	12.6	20.3	0.1063 ug/L	0.1063 ppb	17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05 %		17:09:39
3	Y 371.029	885792.9	885792.9	100.15 %		17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296 ug/L	-0.3296 ppb	17:09:44
3	As 188.979†	-34.7	1.9	0.5789 ug/L	0.5789 ppb	17:10:04
3	B 249.677†	-424.2	42.1	0.7986 ug/L	0.7986 ppb	17:10:04
3	Ba 233.527†	12.8	12.8	0.0818 ug/L	0.0818 ppb	17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557 ug/L	0.0557 ppb	17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147 ug/L	0.1147 ppb	17:10:04
3	Co 228.616†	-81.4	5.0	0.0830 ug/L	0.0830 ppb	17:10:04
3	Cr 267.716†	106.9	19.1	0.1704 ug/L	0.1704 ppb	17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477 ug/L	0.1477 ppb	17:09:44
3	Mn 257.610†	610.1	33.1	0.0284 ug/L	0.0284 ppb	17:10:04
3	Mo 202.031†	31.4	2.1	0.1121 ug/L	0.1121 ppb	17:10:04
3	Ni 231.604†	133.0	1.0	0.0189 ug/L	0.0189 ppb	17:10:04
3	P 214.914†	272.4	7.2	3.2450 ug/L	3.2450 ppb	17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314 ug/L	0.1314 ppb	17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316 ug/L	-0.9316 ppb	17:10:04
3	Sb 206.836†	35.8	1.1	0.3268 ug/L	0.3268 ppb	17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605 ug/L	-2.1605 ppb	17:10:04
3	Si 251.611†	612.6	54.6	1.3742 ug/L	1.3742 ppb	17:10:04
3	Sn 189.927†	12.1	16.5	2.1777 ug/L	2.1777 ppb	17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180 ug/L	-0.0180 ppb	17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673 ug/L	-1.9673 ppb	17:10:04
3	U 409.014†	-2701.8	73.4	1.9008 ug/L	1.9008 ppb	17:09:39
3	V 292.402†	-1606.8	2.4	0.0234 ug/L	0.0234 ppb	17:09:44
3	Zn 213.857†	941.9	55.9	0.4102 ug/L	0.4102 ppb	17:10:04
3	SiO2†	646.1	46.8	2.5143 ug/L	2.5143 ppb	17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       115.7      21.072 ug/L        7.6270      21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.0     -42.772 ug/L       91.5125     -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      125.9      35.327 ug/L        6.6209      35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 44
Sample ID: 241537001|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 12/4/2009 17:47:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241537001|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4963.4	4963.4	101	%			17:49:33
1	Y RADIAL	5686.6	5686.6	100.7	%			17:49:33
1	Al 396.153Radial†	-44.7	-0.4	-0.2520	ug/L	-0.2520	ppb	17:49:33
1	Ca 317.933Radial†	24.1	6.0	10.619	ug/L	10.619	ppb	17:49:53
1	Fe 238.204 Radial†	9.3	-1.8	-22.102	ug/L	-22.102	ppb	17:49:53
1	K 766.490 Radial†	2559.3	-37.9	-6.9213	ug/L	-6.9213	ppb	17:49:33
1	Mg 279.077 IEC†	2.6	0.1	3.0233	ug/L	3.0233	ppb	17:49:53
1	Na 589.592 Radial†	-1175.7	116.9	32.803	ug/L	32.803	ppb	17:49:33
1	Sr 421.552†	-6.5	1.0	0.0051	ug/L	0.0051	ppb	17:49:33
1	Sc 361.383	1053117.9	1053117.9	101.31	%			17:50:50
1	Y 371.029	894334.5	894334.5	101.12	%			17:50:50
1	Ag 328.068†	516.4	35.7	0.1337	ug/L	0.1337	ppb	17:50:55
1	As 188.979†	-43.9	-6.7	-2.0842	ug/L	-2.0842	ppb	17:51:15
1	B 249.677†	-556.0	-82.7	-1.5609	ug/L	-1.5609	ppb	17:51:15
1	Ba 233.527†	23.4	23.1	0.1477	ug/L	0.1477	ppb	17:51:15
1	Be 313.107†	-4874.8	62.2	0.0198	ug/L	0.0198	ppb	17:50:55
1	Cd 226.502†	-233.7	4.9	0.0482	ug/L	0.0482	ppb	17:51:15
1	Co 228.616†	-86.9	0.5	0.0080	ug/L	0.0080	ppb	17:51:15
1	Cr 267.716†	118.5	29.2	0.2614	ug/L	0.2614	ppb	17:51:15
1	Cu 324.752†	9908.0	842.2	2.2479	ug/L	2.2479	ppb	17:50:55
1	Mn 257.610†	711.1	125.2	0.1163	ug/L	0.1163	ppb	17:51:15
1	Mo 202.031†	26.9	-2.7	-0.1434	ug/L	-0.1434	ppb	17:51:15
1	Ni 231.604†	379.6	242.8	4.7571	ug/L	4.7571	ppb	17:51:15
1	P 214.914†	289.9	21.1	9.0969	ug/L	9.0969	ppb	17:51:15
1	Pb 220.353†	-64.9	11.5	1.0773	ug/L	1.0773	ppb	17:51:15
1	S 181.975 Axial†	59.7	-1.1	-1.2209	ug/L	-1.2209	ppb	17:51:15
1	Sb 206.836†	40.0	4.8	1.2799	ug/L	1.2799	ppb	17:51:15
1	Se 196.026†	-21.6	0.0	-0.0745	ug/L	-0.0745	ppb	17:51:15
1	Si 251.611†	1552.7	975.0	24.761	ug/L	24.761	ppb	17:51:15
1	Sn 189.927†	6.4	10.6	1.4037	ug/L	1.4037	ppb	17:51:15
1	Ti 334.940†	-1119.5	155.5	0.2144	ug/L	0.2144	ppb	17:50:55
1	Tl 190.801†	-54.0	-9.0	-2.1772	ug/L	-2.1772	ppb	17:51:15
1	U 409.014†	-2763.4	46.4	1.2019	ug/L	1.2019	ppb	17:50:50
1	V 292.402†	-1613.4	16.0	0.0951	ug/L	0.0951	ppb	17:50:55
1	Zn 213.857†	1178.1	277.2	2.0061	ug/L	2.0061	ppb	17:51:15
1	SiO2†	1614.4	994.4	54.049	ug/L	54.049	ppb	17:52:21
2	Sc Radial	4910.4	4910.4	100	%			17:49:58
2	Y RADIAL	5630.3	5630.3	99.70	%			17:49:58
2	Al 396.153Radial†	-22.2	21.6	14.232	ug/L	14.232	ppb	17:49:58
2	Ca 317.933Radial†	25.5	7.6	13.523	ug/L	13.523	ppb	17:50:18
2	Fe 238.204 Radial†	8.8	-2.2	-26.253	ug/L	-26.253	ppb	17:50:18
2	K 766.490 Radial†	2658.4	88.5	16.124	ug/L	16.124	ppb	17:49:58
2	Mg 279.077 IEC†	2.0	-0.5	-23.228	ug/L	-23.228	ppb	17:50:18
2	Na 589.592 Radial†	-1156.6	123.5	34.644	ug/L	34.644	ppb	17:49:58
2	Sr 421.552†	-32.1	-24.7	-0.1297	ug/L	-0.1297	ppb	17:49:58
2	Sc 361.383	1058860.9	1058860.9	101.86	%			17:51:20
2	Y 371.029	898748.4	898748.4	101.61	%			17:51:20
2	Ag 328.068†	398.0	-83.3	-0.3376	ug/L	-0.3376	ppb	17:51:25
2	As 188.979†	-45.9	-8.4	-2.6352	ug/L	-2.6352	ppb	17:51:45
2	B 249.677†	-514.7	-39.2	-0.7371	ug/L	-0.7371	ppb	17:51:45
2	Ba 233.527†	22.4	22.0	0.1402	ug/L	0.1402	ppb	17:51:45
2	Be 313.107†	-4865.3	97.7	0.0308	ug/L	0.0308	ppb	17:51:25
2	Cd 226.502†	-240.5	-0.4	0.0019	ug/L	0.0019	ppb	17:51:45
2	Co 228.616†	-84.6	3.3	0.0546	ug/L	0.0546	ppb	17:51:45
2	Cr 267.716†	137.2	46.9	0.4216	ug/L	0.4216	ppb	17:51:45
2	Cu 324.752†	9989.5	869.2	2.3199	ug/L	2.3199	ppb	17:51:25
2	Mn 257.610†	696.2	106.8	0.0989	ug/L	0.0989	ppb	17:51:45
2	Mo 202.031†	37.3	7.4	0.3913	ug/L	0.3913	ppb	17:51:45
2	Ni 231.604†	383.2	244.3	4.7863	ug/L	4.7863	ppb	17:51:45

2	P 214.914†	291.5	21.0	9.0624 ug/L	9.0624 ppb	17:51:45
2	Pb 220.353†	-77.7	-0.7	-0.0608 ug/L	-0.0608 ppb	17:51:45
2	S 181.975 Axial†	49.8	-11.2	-12.046 ug/L	-12.046 ppb	17:51:45
2	Sb 206.836†	52.6	17.0	4.4731 ug/L	4.4731 ppb	17:51:45
2	Se 196.026†	-25.1	-3.3	-1.5617 ug/L	-1.5617 ppb	17:51:45
2	Si 251.611†	1564.5	978.3	24.834 ug/L	24.834 ppb	17:51:45
2	Sn 189.927†	-8.2	-3.7	-0.4845 ug/L	-0.4845 ppb	17:51:45
2	Ti 334.940†	-1168.5	113.4	0.1578 ug/L	0.1578 ppb	17:51:25
2	Tl 190.801†	-53.0	-7.8	-1.8846 ug/L	-1.8846 ppb	17:51:45
2	U 409.014†	-2902.4	-75.3	-1.9437 ug/L	-1.9437 ppb	17:51:20
2	V 292.402†	-1658.5	-19.6	-0.1073 ug/L	-0.1073 ppb	17:51:25
2	Zn 213.857†	1192.3	284.9	2.0635 ug/L	2.0635 ppb	17:51:45
2	SiO2†	1624.2	995.4	54.076 ug/L	54.076 ppb	17:52:26
3	Sc Radial	4968.1	4968.1	101 %		17:50:23
3	Y RADIAL	5730.3	5730.3	101.5 %		17:50:23
3	Al 396.153Radial†	-13.6	30.4	20.087 ug/L	20.087 ppb	17:50:23
3	Ca 317.933Radial†	24.1	6.0	10.641 ug/L	10.641 ppb	17:50:43
3	Fe 238.204 Radial†	11.0	-0.1	-1.3264 ug/L	-1.3264 ppb	17:50:43
3	K 766.490 Radial†	2553.6	-45.9	-8.3895 ug/L	-8.3895 ppb	17:50:23
3	Mg 279.077 IEC†	1.9	-0.6	-26.800 ug/L	-26.800 ppb	17:50:43
3	Na 589.592 Radial†	-1153.0	140.5	39.413 ug/L	39.413 ppb	17:50:23
3	Sr 421.552†	8.9	16.2	0.0849 ug/L	0.0849 ppb	17:50:23
3	Sc 361.383	1062362.2	1062362.2	102.20 %		17:51:50
3	Y 371.029	902784.7	902784.7	102.07 %		17:51:50
3	Ag 328.068†	514.5	29.3	0.1144 ug/L	0.1144 ppb	17:51:55
3	As 188.979†	-36.5	0.9	0.2771 ug/L	0.2771 ppb	17:52:15
3	B 249.677†	-531.2	-53.7	-1.0141 ug/L	-1.0141 ppb	17:52:15
3	Ba 233.527†	25.3	24.8	0.1591 ug/L	0.1591 ppb	17:52:15
3	Be 313.107†	-4840.9	137.3	0.0432 ug/L	0.0432 ppb	17:51:55
3	Cd 226.502†	-235.6	5.1	0.0475 ug/L	0.0475 ppb	17:52:15
3	Co 228.616†	-82.4	5.7	0.0927 ug/L	0.0927 ppb	17:52:15
3	Cr 267.716†	120.7	30.3	0.2715 ug/L	0.2715 ppb	17:52:15
3	Cu 324.752†	10008.0	855.0	2.2832 ug/L	2.2832 ppb	17:51:55
3	Mn 257.610†	707.1	115.2	0.1095 ug/L	0.1095 ppb	17:52:15
3	Mo 202.031†	23.1	-6.7	-0.3543 ug/L	-0.3543 ppb	17:52:15
3	Ni 231.604†	367.3	227.4	4.4564 ug/L	4.4564 ppb	17:52:15
3	P 214.914†	290.9	19.5	8.3877 ug/L	8.3877 ppb	17:52:15
3	Pb 220.353†	-99.3	-21.6	-2.0224 ug/L	-2.0224 ppb	17:52:15
3	S 181.975 Axial†	62.9	1.4	1.5368 ug/L	1.5368 ppb	17:52:15
3	Sb 206.836†	49.3	13.6	3.5774 ug/L	3.5774 ppb	17:52:15
3	Se 196.026†	-27.6	-5.6	-2.4842 ug/L	-2.4842 ppb	17:52:15
3	Si 251.611†	1546.9	955.9	24.285 ug/L	24.285 ppb	17:52:15
3	Sn 189.927†	-2.2	2.1	0.2854 ug/L	0.2854 ppb	17:52:15
3	Ti 334.940†	-1131.3	153.5	0.2118 ug/L	0.2118 ppb	17:51:55
3	Tl 190.801†	-46.1	-0.9	-0.2046 ug/L	-0.2046 ppb	17:52:15
3	U 409.014†	-2800.1	34.2	0.8827 ug/L	0.8827 ppb	17:51:50
3	V 292.402†	-1668.3	-23.9	-0.1407 ug/L	-0.1407 ppb	17:51:55
3	Zn 213.857†	1194.1	282.8	2.0481 ug/L	2.0481 ppb	17:52:15
3	SiO2†	1635.1	1000.8	54.414 ug/L	54.414 ppb	17:52:31

Mean Data: 241537001|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1058113.7	101.79	%	0.449				0.44%
Sc Radial	4947.3	101	%	0.7				0.65%
Y 371.029	898622.5	101.60	%	0.478				0.47%
Y RADIAL	5682.4	100.6	%	0.89				0.88%
Ag 328.068†	-6.1	-0.0299	ug/L	0.26673	-0.0299	ppb	0.26673	893.30%
Al 396.153Radial†	17.2	11.356	ug/L	10.4700	11.356	ppb	10.4700	92.20%
As 188.979†	-4.8	-1.4808	ug/L	1.54708	-1.4808	ppb	1.54708	104.48%
B 249.677†	-58.5	-1.1040	ug/L	0.41921	-1.1040	ppb	0.41921	37.97%
Ba 233.527†	23.3	0.1490	ug/L	0.00954	0.1490	ppb	0.00954	6.41%
Be 313.107†	99.1	0.0313	ug/L	0.01171	0.0313	ppb	0.01171	37.44%
Ca 317.933Radial†	6.5	11.594	ug/L	1.6702	11.594	ppb	1.6702	14.41%
Cd 226.502†	3.2	0.0326	ug/L	0.02653	0.0326	ppb	0.02653	81.45%
Co 228.616†	3.2	0.0517	ug/L	0.04240	0.0517	ppb	0.04240	81.94%
Cr 267.716†	35.5	0.3182	ug/L	0.08969	0.3182	ppb	0.08969	28.19%
Cu 324.752†	855.5	2.2837	ug/L	0.03600	2.2837	ppb	0.03600	1.58%
Fe 238.204 Radial†	-1.4	-16.561	ug/L	13.3554	-16.561	ppb	13.3554	80.65%
K 766.490 Radial†	1.6	0.2710	ug/L	13.74844	0.2710	ppb	13.74844	>999.9%

Mg 279.077 IEC†	-0.4	-15.668	ug/L	16.2857	-15.668	ppb	16.2857	103.94%
Mn 257.610†	115.7	0.1082	ug/L	0.00877	0.1082	ppb	0.00877	8.10%
Mo 202.031†	-0.6	-0.0355	ug/L	0.38433	-0.0355	ppb	0.38433	>999.9%
Na 589.592 Radial†	127.0	35.620	ug/L	3.4114	35.620	ppb	3.4114	9.58%
Ni 231.604†	238.2	4.6666	ug/L	0.18263	4.6666	ppb	0.18263	3.91%
P 214.914†	20.6	8.8490	ug/L	0.39987	8.8490	ppb	0.39987	4.52%
Pb 220.353†	-3.6	-0.3353	ug/L	1.56795	-0.3353	ppb	1.56795	467.62%
S 181.975 Axial†	-3.6	-3.9101	ug/L	7.17975	-3.9101	ppb	7.17975	183.62%
Sb 206.836†	11.8	3.1102	ug/L	1.64710	3.1102	ppb	1.64710	52.96%
Se 196.026†	-3.0	-1.3735	ug/L	1.21582	-1.3735	ppb	1.21582	88.52%
Si 251.611†	969.7	24.627	ug/L	0.2980	24.627	ppb	0.2980	1.21%
Sn 189.927†	3.0	0.4015	ug/L	0.94944	0.4015	ppb	0.94944	236.47%
Sr 421.552†	-2.5	-0.0132	ug/L	0.10847	-0.0132	ppb	0.10847	819.20%
Ti 334.940†	140.8	0.1947	ug/L	0.03197	0.1947	ppb	0.03197	16.42%
Tl 190.801†	-5.9	-1.4221	ug/L	1.06450	-1.4221	ppb	1.06450	74.85%
U 409.014†	1.8	0.0470	ug/L	1.73136	0.0470	ppb	1.73136	>999.9%
V 292.402†	-9.2	-0.0510	ug/L	0.12760	-0.0510	ppb	0.12760	250.32%
Zn 213.857†	281.7	2.0393	ug/L	0.02971	2.0393	ppb	0.02971	1.46%
SiO2†	996.9	54.180	ug/L	0.2032	54.180	ppb	0.2032	0.38%

Sequence No.: 45
Sample ID: 241537002|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 12/4/2009 17:54:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241537002|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5017.0	5017.0	102	%			17:56:34
1	Y RADIAL	5737.6	5737.6	101.6	%			17:56:34
1	Al 396.153Radial†	361.9	397.9	262.72	ug/L	262.72	ppb	17:56:34
1	Ca 317.933Radial†	84.8	65.2	115.40	ug/L	115.40	ppb	17:56:54
1	Fe 238.204 Radial†	27.9	16.3	196.68	ug/L	196.68	ppb	17:56:54
1	K 766.490 Radial†	2990.7	357.2	64.909	ug/L	64.909	ppb	17:56:34
1	Mg 279.077 IEC†	2.5	-0.0	-0.8747	ug/L	-0.8747	ppb	17:56:54
1	Na 589.592 Radial†	-157.6	1125.7	315.75	ug/L	315.75	ppb	17:56:34
1	Sr 421.552†	177.3	180.9	0.9479	ug/L	0.9479	ppb	17:56:34
1	Sc 361.383	1061520.0	1061520.0	102.12	%			17:57:50
1	Y 371.029	900802.8	900802.8	101.85	%			17:57:50
1	Ag 328.068†	321.4	-159.4	-0.5663	ug/L	-0.5663	ppb	17:57:56
1	As 188.979†	-42.8	-5.3	-1.5608	ug/L	-1.5608	ppb	17:58:16
1	B 249.677†	-543.4	-66.0	-1.2743	ug/L	-1.2743	ppb	17:58:16
1	Ba 233.527†	612.4	599.7	3.8617	ug/L	3.8617	ppb	17:58:16
1	Be 313.107†	-4855.5	119.3	0.0473	ug/L	0.0473	ppb	17:57:56
1	Cd 226.502†	-233.3	7.2	0.0472	ug/L	0.0472	ppb	17:58:16
1	Co 228.616†	-71.9	15.9	0.2471	ug/L	0.2471	ppb	17:58:16
1	Cr 267.716†	1321.4	1206.2	10.842	ug/L	10.842	ppb	17:58:16
1	Cu 324.752†	9243.7	114.3	0.3154	ug/L	0.3154	ppb	17:57:56
1	Mn 257.610†	8204.4	7457.4	7.0814	ug/L	7.0814	ppb	17:57:56
1	Mo 202.031†	40.0	9.9	0.5390	ug/L	0.5390	ppb	17:58:16
1	Ni 231.604†	464.5	322.9	6.3264	ug/L	6.3264	ppb	17:58:16
1	P 214.914†	295.8	24.5	10.843	ug/L	10.843	ppb	17:58:16
1	Pb 220.353†	-100.0	-22.3	-2.0525	ug/L	-2.0525	ppb	17:58:16
1	S 181.975 Axial†	70.0	8.4	9.0351	ug/L	9.0351	ppb	17:58:16
1	Sb 206.836†	58.7	22.9	5.7656	ug/L	5.7656	ppb	17:58:16
1	Se 196.026†	-18.9	2.9	1.9928	ug/L	1.9928	ppb	17:58:16
1	Si 251.611†	20912.5	19920.8	505.89	ug/L	505.89	ppb	17:57:56
1	Sn 189.927†	-2.9	1.5	0.2120	ug/L	0.2120	ppb	17:58:16
1	Ti 334.940†	2535.9	3743.7	5.1666	ug/L	5.1666	ppb	17:57:56
1	Tl 190.801†	-60.4	-14.9	-3.5139	ug/L	-3.5139	ppb	17:58:16
1	U 409.014†	-2903.2	-69.0	-1.8285	ug/L	-1.8285	ppb	17:57:50
1	V 292.402†	-1506.1	133.7	0.7295	ug/L	0.7295	ppb	17:57:56
1	Zn 213.857†	1415.0	500.0	3.6147	ug/L	3.6147	ppb	17:58:16
1	SiO2†	21129.3	20091.6	1091.9	ug/L	1091.9	ppb	17:59:22
2	Sc Radial	5015.5	5015.5	102	%			17:56:59
2	Y RADIAL	5764.4	5764.4	102.1	%			17:56:59
2	Al 396.153Radial†	348.7	385.2	254.32	ug/L	254.32	ppb	17:56:59
2	Ca 317.933Radial†	88.9	69.1	122.42	ug/L	122.42	ppb	17:57:19
2	Fe 238.204 Radial†	28.5	16.9	203.83	ug/L	203.83	ppb	17:57:19
2	K 766.490 Radial†	2882.5	252.2	45.761	ug/L	45.761	ppb	17:56:59
2	Mg 279.077 IEC†	3.3	0.7	31.247	ug/L	31.247	ppb	17:57:19
2	Na 589.592 Radial†	-194.0	1090.0	305.75	ug/L	305.75	ppb	17:56:59
2	Sr 421.552†	151.2	155.5	0.8144	ug/L	0.8144	ppb	17:56:59
2	Sc 361.383	1059595.8	1059595.8	101.93	%			17:58:21
2	Y 371.029	898534.0	898534.0	101.59	%			17:58:21
2	Ag 328.068†	487.8	4.5	0.0867	ug/L	0.0867	ppb	17:58:26
2	As 188.979†	-43.5	-6.1	-1.8212	ug/L	-1.8212	ppb	17:58:46
2	B 249.677†	-579.0	-101.9	-1.9529	ug/L	-1.9529	ppb	17:58:46
2	Ba 233.527†	621.6	609.8	3.9257	ug/L	3.9257	ppb	17:58:46
2	Be 313.107†	-4944.7	23.1	0.0175	ug/L	0.0175	ppb	17:58:26
2	Cd 226.502†	-236.5	3.6	0.0151	ug/L	0.0151	ppb	17:58:46
2	Co 228.616†	-76.3	11.5	0.1741	ug/L	0.1741	ppb	17:58:46
2	Cr 267.716†	1292.7	1180.4	10.610	ug/L	10.610	ppb	17:58:46
2	Cu 324.752†	9329.5	215.0	0.5844	ug/L	0.5844	ppb	17:58:26
2	Mn 257.610†	8363.7	7628.2	7.2433	ug/L	7.2433	ppb	17:58:26
2	Mo 202.031†	36.3	6.4	0.3536	ug/L	0.3536	ppb	17:58:46
2	Ni 231.604†	456.6	316.0	6.1915	ug/L	6.1915	ppb	17:58:46

2	P 214.914†	277.7	7.3	3.1066 ug/L	3.1066 ppb	17:58:46
2	Pb 220.353†	-91.5	-14.2	-1.2930 ug/L	-1.2930 ppb	17:58:46
2	S 181.975 Axial†	72.6	11.1	11.898 ug/L	11.898 ppb	17:58:46
2	Sb 206.836†	41.7	6.3	1.3881 ug/L	1.3881 ppb	17:58:46
2	Se 196.026†	-17.8	3.9	2.4817 ug/L	2.4817 ppb	17:58:46
2	Si 251.611†	21225.2	20264.7	514.63 ug/L	514.63 ppb	17:58:26
2	Sn 189.927†	-3.3	1.1	0.1562 ug/L	0.1562 ppb	17:58:46
2	Ti 334.940†	2571.3	3783.0	5.2228 ug/L	5.2228 ppb	17:58:26
2	Tl 190.801†	-42.9	2.1	0.6032 ug/L	0.6032 ppb	17:58:46
2	U 409.014†	-3039.1	-207.4	-5.4086 ug/L	-5.4086 ppb	17:58:21
2	V 292.402†	-1580.8	57.8	0.2848 ug/L	0.2848 ppb	17:58:26
2	Zn 213.857†	1438.3	525.4	3.8000 ug/L	3.8000 ppb	17:58:46
2	SiO2†	21290.3	20287.2	1102.6 ug/L	1102.6 ppb	17:59:27
3	Sc Radial	4985.8	4985.8	102 %		17:57:24
3	Y RADIAL	5724.9	5724.9	101.4 %		17:57:24
3	Al 396.153Radial†	365.7	403.9	266.72 ug/L	266.72 ppb	17:57:24
3	Ca 317.933Radial†	90.4	71.1	125.95 ug/L	125.95 ppb	17:57:44
3	Fe 238.204 Radial†	31.8	20.3	245.47 ug/L	245.47 ppb	17:57:44
3	K 766.490 Radial†	2990.6	375.5	68.240 ug/L	68.240 ppb	17:57:24
3	Mg 279.077 IEC†	4.0	1.4	63.006 ug/L	63.006 ppb	17:57:44
3	Na 589.592 Radial†	-202.4	1080.7	303.13 ug/L	303.13 ppb	17:57:24
3	Sr 421.552†	132.0	137.4	0.7197 ug/L	0.7197 ppb	17:57:24
3	Sc 361.383	1054774.1	1054774.1	101.47 %		17:58:51
3	Y 371.029	896436.3	896436.3	101.35 %		17:58:51
3	Ag 328.068†	338.5	-140.5	-0.4780 ug/L	-0.4780 ppb	17:58:56
3	As 188.979†	-38.1	-0.9	-0.1993 ug/L	-0.1993 ppb	17:59:16
3	B 249.677†	-501.5	-28.1	-0.5649 ug/L	-0.5649 ppb	17:59:16
3	Ba 233.527†	627.5	618.5	3.9840 ug/L	3.9840 ppb	17:59:16
3	Be 313.107†	-4885.2	59.5	0.0287 ug/L	0.0287 ppb	17:58:56
3	Cd 226.502†	-239.8	-0.6	-0.0260 ug/L	-0.0260 ppb	17:59:16
3	Co 228.616†	-66.0	21.3	0.3346 ug/L	0.3346 ppb	17:59:16
3	Cr 267.716†	1314.6	1207.8	10.856 ug/L	10.856 ppb	17:59:16
3	Cu 324.752†	9185.3	114.6	0.3187 ug/L	0.3187 ppb	17:58:56
3	Mn 257.610†	8186.6	7491.2	7.1171 ug/L	7.1171 ppb	17:58:56
3	Mo 202.031†	31.7	2.0	0.1217 ug/L	0.1217 ppb	17:59:16
3	Ni 231.604†	463.9	325.2	6.3717 ug/L	6.3717 ppb	17:59:16
3	P 214.914†	283.2	14.0	6.0942 ug/L	6.0942 ppb	17:59:16
3	Pb 220.353†	-73.8	2.8	0.3035 ug/L	0.3035 ppb	17:59:16
3	S 181.975 Axial†	65.4	4.4	4.6540 ug/L	4.6540 ppb	17:59:16
3	Sb 206.836†	48.9	13.6	3.2909 ug/L	3.2909 ppb	17:59:16
3	Se 196.026†	-24.7	-3.0	-0.4458 ug/L	-0.4458 ppb	17:59:16
3	Si 251.611†	20905.1	20044.4	509.04 ug/L	509.04 ppb	17:58:56
3	Sn 189.927†	-9.6	-5.1	-0.6606 ug/L	-0.6606 ppb	17:59:16
3	Ti 334.940†	2498.5	3722.7	5.1372 ug/L	5.1372 ppb	17:58:56
3	Tl 190.801†	-49.6	-4.6	-1.0392 ug/L	-1.0392 ppb	17:59:16
3	U 409.014†	-2796.2	18.4	0.4226 ug/L	0.4226 ppb	17:58:51
3	V 292.402†	-1491.6	138.5	0.7495 ug/L	0.7495 ppb	17:58:56
3	Zn 213.857†	1431.9	525.6	3.7957 ug/L	3.7957 ppb	17:59:16
3	SiO2†	21451.5	20541.4	1116.4 ug/L	1116.4 ppb	17:59:32

Mean Data: 241537002|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1058630.0	101.84	%	0.334				0.33%
Sc Radial	5006.1	102	%	0.4				0.35%
Y 371.029	898591.0	101.60	%	0.247				0.24%
Y RADIAL	5742.3	101.7	%	0.36				0.35%
Ag 328.068†	-98.5	-0.3192	ug/L	0.35427	-0.3192	ppb	0.35427	110.99%
Al 396.153Radial†	395.7	261.25	ug/L	6.333	261.25	ppb	6.333	2.42%
As 188.979†	-4.1	-1.1938	ug/L	0.87104	-1.1938	ppb	0.87104	72.96%
B 249.677†	-65.3	-1.2640	ug/L	0.69403	-1.2640	ppb	0.69403	54.91%
Ba 233.527†	609.3	3.9238	ug/L	0.06121	3.9238	ppb	0.06121	1.56%
Be 313.107†	67.3	0.0311	ug/L	0.01510	0.0311	ppb	0.01510	48.47%
Ca 317.933Radial†	68.5	121.26	ug/L	5.373	121.26	ppb	5.373	4.43%
Cd 226.502†	3.4	0.0121	ug/L	0.03671	0.0121	ppb	0.03671	304.06%
Co 228.616†	16.2	0.2519	ug/L	0.08036	0.2519	ppb	0.08036	31.90%
Cr 267.716†	1198.1	10.770	ug/L	0.1380	10.770	ppb	0.1380	1.28%
Cu 324.752†	148.0	0.4062	ug/L	0.15440	0.4062	ppb	0.15440	38.01%
Fe 238.204 Radial†	17.8	215.33	ug/L	26.348	215.33	ppb	26.348	12.24%
K 766.490 Radial†	328.3	59.637	ug/L	12.1318	59.637	ppb	12.1318	20.34%

Mg 279.077 IEC†	0.7	31.126 ug/L	31.9407	31.126 ppb	31.9407	102.62%
Mn 257.610†	7525.6	7.1472 ug/L	0.08507	7.1472 ppb	0.08507	1.19%
Mo 202.031†	6.1	0.3381 ug/L	0.20908	0.3381 ppb	0.20908	61.84%
Na 589.592 Radial†	1098.8	308.21 ug/L	6.662	308.21 ppb	6.662	2.16%
Ni 231.604†	321.4	6.2965 ug/L	0.09376	6.2965 ppb	0.09376	1.49%
P 214.914†	15.3	6.6812 ug/L	3.90141	6.6812 ppb	3.90141	58.39%
Pb 220.353†	-11.2	-1.0140 ug/L	1.20252	-1.0140 ppb	1.20252	118.59%
S 181.975 Axial†	8.0	8.5292 ug/L	3.64861	8.5292 ppb	3.64861	42.78%
Sb 206.836†	14.3	3.4815 ug/L	2.19497	3.4815 ppb	2.19497	63.05%
Se 196.026†	1.3	1.3429 ug/L	1.56822	1.3429 ppb	1.56822	116.78%
Si 251.611†	20076.6	509.85 ug/L	4.429	509.85 ppb	4.429	0.87%
Sn 189.927†	-0.9	-0.0975 ug/L	0.48850	-0.0975 ppb	0.48850	501.21%
Sr 421.552†	157.9	0.8274 ug/L	0.11465	0.8274 ppb	0.11465	13.86%
Ti 334.940†	3749.8	5.1755 ug/L	0.04350	5.1755 ppb	0.04350	0.84%
Tl 190.801†	-5.8	-1.3166 ug/L	2.07255	-1.3166 ppb	2.07255	157.41%
U 409.014†	-86.0	-2.2715 ug/L	2.94074	-2.2715 ppb	2.94074	129.46%
V 292.402†	110.0	0.5879 ug/L	0.26270	0.5879 ppb	0.26270	44.68%
Zn 213.857†	517.0	3.7368 ug/L	0.10577	3.7368 ppb	0.10577	2.83%
SiO2†	20306.7	1103.6 ug/L	12.27	1103.6 ppb	12.27	1.11%

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 18:01:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4830.0	4830.0	98.4	%			18:03:34
1	Y RADIAL	5529.5	5529.5	97.92	%			18:03:34
1	Al 396.153Radial†	7608.5	7777.9	5114.3	ug/L	5114.3	ppb	18:03:34
1	Ca 317.933Radial†	2838.8	2867.8	5077.6	ug/L	5077.6	ppb	18:03:54
1	Fe 238.204 Radial†	423.3	419.3	5084.9	ug/L	5084.9	ppb	18:03:54
1	K 766.490 Radial†	29286.1	27199.9	4948.8	ug/L	4948.8	ppb	18:03:34
1	Mg 279.077 IEC†	113.0	112.4	5035.0	ug/L	5035.0	ppb	18:03:54
1	Na 589.592 Radial†	33434.5	35266.2	9892.2	ug/L	9892.2	ppb	18:03:34
1	Sr 421.552†	94452.4	96018.5	503.71	ug/L	503.71	ppb	18:03:34
1	Sc 361.383	1035614.3	1035614.3	99.628	%			18:04:53
1	Y 371.029	868981.8	868981.8	98.249	%			18:04:53
1	Ag 328.068†	126389.0	126387.2	504.08	ug/L	504.08	ppb	18:04:53
1	As 188.979†	1566.5	1609.0	505.73	ug/L	505.73	ppb	18:05:13
1	B 249.677†	25789.7	26352.1	496.08	ug/L	496.08	ppb	18:04:53
1	Ba 233.527†	78461.3	78754.5	507.26	ug/L	507.26	ppb	18:04:53
1	Be 313.107†	1611683.8	1622579.0	506.90	ug/L	506.90	ppb	18:04:53
1	Cd 226.502†	57528.7	57979.3	505.44	ug/L	505.44	ppb	18:04:53
1	Co 228.616†	30048.6	30247.1	498.39	ug/L	498.39	ppb	18:05:13
1	Cr 267.716†	55897.5	56018.6	504.09	ug/L	504.09	ppb	18:04:53
1	Cu 324.752†	197518.4	189318.8	505.84	ug/L	505.84	ppb	18:04:53
1	Mn 257.610†	534062.2	535480.8	507.48	ug/L	507.48	ppb	18:04:53
1	Mo 202.031†	9485.8	9492.0	504.07	ug/L	504.07	ppb	18:05:13
1	Ni 231.604†	25499.9	25463.2	498.60	ug/L	498.60	ppb	18:05:13
1	P 214.914†	5884.7	5641.6	2447.0	ug/L	2447.0	ppb	18:05:13
1	Pb 220.353†	5298.3	5393.7	507.89	ug/L	507.89	ppb	18:05:13
1	S 181.975 Axial†	974.6	918.2	988.21	ug/L	988.21	ppb	18:05:13
1	Sb 206.836†	1936.0	1908.6	510.46	ug/L	510.46	ppb	18:05:13
1	Se 196.026†	1104.7	1130.2	520.64	ug/L	520.64	ppb	18:05:13
1	Si 251.611†	99034.8	98847.1	2498.4	ug/L	2498.4	ppb	18:04:53
1	Sn 189.927†	3777.7	3796.2	502.67	ug/L	502.67	ppb	18:05:13
1	Ti 334.940†	362106.9	364720.2	502.92	ug/L	502.92	ppb	18:04:53
1	Tl 190.801†	2016.9	2068.7	503.55	ug/L	503.55	ppb	18:05:13
1	U 409.014†	15956.3	18789.9	484.19	ug/L	484.19	ppb	18:04:53
1	V 292.402†	85828.1	87757.3	509.11	ug/L	509.11	ppb	18:04:53
1	Zn 213.857†	69570.7	68945.1	502.18	ug/L	502.18	ppb	18:04:53
1	SiO2†	99394.4	99166.7	5363.6	ug/L	5363.6	ppb	18:06:13
2	Sc Radial	4837.6	4837.6	98.5	%			18:03:59
2	Y RADIAL	5523.5	5523.5	97.81	%			18:03:59
2	Al 396.153Radial†	7635.5	7793.2	5124.5	ug/L	5124.5	ppb	18:03:59
2	Ca 317.933Radial†	2827.0	2851.3	5048.3	ug/L	5048.3	ppb	18:04:19
2	Fe 238.204 Radial†	425.3	420.7	5101.5	ug/L	5101.5	ppb	18:04:19
2	K 766.490 Radial†	29236.2	27102.5	4931.0	ug/L	4931.0	ppb	18:03:59
2	Mg 279.077 IEC†	116.1	115.4	5167.3	ug/L	5167.3	ppb	18:04:19
2	Na 589.592 Radial†	33358.2	35135.5	9855.5	ug/L	9855.5	ppb	18:03:59
2	Sr 421.552†	94046.6	95456.0	500.76	ug/L	500.76	ppb	18:03:59
2	Sc 361.383	1035808.6	1035808.6	99.646	%			18:05:20
2	Y 371.029	867528.3	867528.3	98.085	%			18:05:20
2	Ag 328.068†	126769.6	126745.3	505.50	ug/L	505.50	ppb	18:05:20
2	As 188.979†	1557.5	1599.7	502.84	ug/L	502.84	ppb	18:05:41
2	B 249.677†	25701.8	26259.1	494.32	ug/L	494.32	ppb	18:05:20
2	Ba 233.527†	78605.2	78884.1	508.09	ug/L	508.09	ppb	18:05:20
2	Be 313.107†	1608110.3	1618689.4	505.69	ug/L	505.69	ppb	18:05:20
2	Cd 226.502†	57666.3	58106.5	506.55	ug/L	506.55	ppb	18:05:20
2	Co 228.616†	29927.7	30120.2	496.29	ug/L	496.29	ppb	18:05:41
2	Cr 267.716†	55912.4	56023.0	504.13	ug/L	504.13	ppb	18:05:20
2	Cu 324.752†	197921.4	189686.1	506.82	ug/L	506.82	ppb	18:05:20
2	Mn 257.610†	534944.8	536266.0	508.23	ug/L	508.23	ppb	18:05:20
2	Mo 202.031†	9432.8	9437.1	501.16	ug/L	501.16	ppb	18:05:41
2	Ni 231.604†	25444.8	25403.1	497.42	ug/L	497.42	ppb	18:05:41

2	P 214.914†	5862.9	5618.6	2436.5 ug/L	2436.5 ppb	18:05:41
2	Pb 220.353†	5283.8	5378.1	506.42 ug/L	506.42 ppb	18:05:41
2	S 181.975 Axial†	962.8	906.1	975.23 ug/L	975.23 ppb	18:05:41
2	Sb 206.836†	1917.4	1889.5	505.30 ug/L	505.30 ppb	18:05:41
2	Se 196.026†	1087.0	1112.2	512.72 ug/L	512.72 ppb	18:05:41
2	Si 251.611†	99182.7	98977.0	2501.8 ug/L	2501.8 ppb	18:05:20
2	Sn 189.927†	3754.3	3771.9	499.47 ug/L	499.47 ppb	18:05:41
2	Ti 334.940†	362842.0	365389.7	503.84 ug/L	503.84 ppb	18:05:20
2	Tl 190.801†	1992.7	2044.0	497.59 ug/L	497.59 ppb	18:05:41
2	U 409.014†	15978.8	18809.5	484.69 ug/L	484.69 ppb	18:05:20
2	V 292.402†	85852.5	87765.6	509.12 ug/L	509.12 ppb	18:05:20
2	Zn 213.857†	69526.6	68887.7	501.76 ug/L	501.76 ppb	18:05:20
2	SiO2†	99499.1	99253.0	5368.4 ug/L	5368.4 ppb	18:06:19
3	Sc Radial	4799.2	4799.2	97.7 %		18:04:24
3	Y RADIAL	5498.6	5498.6	97.37 %		18:04:24
3	Al 396.153Radial†	7619.7	7839.0	5154.6 ug/L	5154.6 ppb	18:04:24
3	Ca 317.933Radial†	2853.2	2901.0	5136.3 ug/L	5136.3 ppb	18:04:44
3	Fe 238.204 Radial†	431.9	430.9	5225.2 ug/L	5225.2 ppb	18:04:44
3	K 766.490 Radial†	29093.2	27193.5	4947.7 ug/L	4947.7 ppb	18:04:24
3	Mg 279.077 IEC†	119.0	119.2	5339.1 ug/L	5339.1 ppb	18:04:44
3	Na 589.592 Radial†	32907.5	34945.0	9802.1 ug/L	9802.1 ppb	18:04:24
3	Sr 421.552†	93251.9	95406.2	500.50 ug/L	500.50 ppb	18:04:24
3	Sc 361.383	1038206.6	1038206.6	99.877 %		18:05:48
3	Y 371.029	871182.2	871182.2	98.498 %		18:05:48
3	Ag 328.068†	126926.4	126608.4	504.99 ug/L	504.99 ppb	18:05:48
3	As 188.979†	1576.5	1615.1	507.65 ug/L	507.65 ppb	18:06:08
3	B 249.677†	25829.6	26327.4	495.59 ug/L	495.59 ppb	18:05:48
3	Ba 233.527†	78220.4	78316.7	504.45 ug/L	504.45 ppb	18:05:48
3	Be 313.107†	1610405.9	1617260.4	505.24 ug/L	505.24 ppb	18:05:48
3	Cd 226.502†	57420.6	57726.9	503.22 ug/L	503.22 ppb	18:05:48
3	Co 228.616†	30208.3	30331.8	499.79 ug/L	499.79 ppb	18:06:08
3	Cr 267.716†	55861.2	55842.1	502.50 ug/L	502.50 ppb	18:05:48
3	Cu 324.752†	198284.6	189591.0	506.57 ug/L	506.57 ppb	18:05:48
3	Mn 257.610†	533597.1	533676.7	505.78 ug/L	505.78 ppb	18:05:48
3	Mo 202.031†	9542.9	9525.4	505.86 ug/L	505.86 ppb	18:06:08
3	Ni 231.604†	25662.7	25562.4	500.54 ug/L	500.54 ppb	18:06:08
3	P 214.914†	5892.8	5635.0	2443.9 ug/L	2443.9 ppb	18:06:08
3	Pb 220.353†	5325.7	5407.8	509.22 ug/L	509.22 ppb	18:06:08
3	S 181.975 Axial†	987.2	928.3	999.15 ug/L	999.15 ppb	18:06:08
3	Sb 206.836†	1957.6	1925.3	514.98 ug/L	514.98 ppb	18:06:08
3	Se 196.026†	1116.3	1139.0	525.06 ug/L	525.06 ppb	18:06:08
3	Si 251.611†	98993.5	98557.6	2491.0 ug/L	2491.0 ppb	18:05:48
3	Sn 189.927†	3799.2	3808.2	504.27 ug/L	504.27 ppb	18:06:08
3	Ti 334.940†	362935.3	364642.1	502.82 ug/L	502.82 ppb	18:05:48
3	Tl 190.801†	2018.1	2064.8	502.60 ug/L	502.60 ppb	18:06:08
3	U 409.014†	16280.7	19074.7	491.53 ug/L	491.53 ppb	18:05:48
3	V 292.402†	85865.0	87579.2	508.12 ug/L	508.12 ppb	18:05:48
3	Zn 213.857†	69400.3	68600.1	499.61 ug/L	499.61 ppb	18:05:48
3	SiO2†	98935.3	98458.0	5325.0 ug/L	5325.0 ppb	18:06:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036543.2	99.717	%	0.1389				0.14%
Sc Radial	4822.3	98.2	%	0.41				0.42%
Y 371.029	869230.8	98.277	%	0.2080				0.21%
Y RADIAL	5517.2	97.70	%	0.290				0.30%
Ag 328.068†	126580.3	504.86	ug/L	0.722	504.86	ppb	0.722	0.14%
QC value within limits for Ag 328.068 Recovery = 100.97%								
Al 396.153Radial†	7803.3	5131.1	ug/L	20.93	5131.1	ppb	20.93	0.41%
QC value within limits for Al 396.153Radial Recovery = 102.62%								
As 188.979†	1607.9	505.41	ug/L	2.420	505.41	ppb	2.420	0.48%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	26312.9	495.33	ug/L	0.906	495.33	ppb	0.906	0.18%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	78651.7	506.60	ug/L	1.909	506.60	ppb	1.909	0.38%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1619509.6	505.94	ug/L	0.858	505.94	ppb	0.858	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	2873.4	5087.4	ug/L	44.83	5087.4	ppb	44.83	0.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.75%
Cd 226.502†            57937.6      505.07 ug/L         1.691      505.07 ppb          1.691   0.33%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†            30233.1      498.16 ug/L         1.760      498.16 ppb          1.760   0.35%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            55961.2      503.57 ug/L         0.928      503.57 ppb          0.928   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.71%
Cu 324.752†           189532.0      506.41 ug/L         0.510      506.41 ppb          0.510   0.10%
   QC value within limits for Cu 324.752  Recovery = 101.28%
Fe 238.204 Radial†       423.6      5137.2 ug/L        76.66      5137.2 ppb          76.66   1.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27165.3      4942.5 ug/L         9.94      4942.5 ppb           9.94   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          115.6      5180.4 ug/L       152.48      5180.4 ppb         152.48   2.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.61%
Mn 257.610†           535141.2      507.16 ug/L         1.252      507.16 ppb          1.252   0.25%
   QC value within limits for Mn 257.610  Recovery = 101.43%
Mo 202.031†             9484.8      503.70 ug/L         2.371      503.70 ppb          2.371   0.47%
   QC value within limits for Mo 202.031  Recovery = 100.74%
Na 589.592 Radial†     35115.6      9849.9 ug/L        45.31      9849.9 ppb          45.31   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†            25476.2      498.85 ug/L         1.575      498.85 ppb          1.575   0.32%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              5631.7      2442.5 ug/L         5.37      2442.5 ppb           5.37   0.22%
   QC value within limits for P 214.914  Recovery = 97.70%
Pb 220.353†             5393.2      507.84 ug/L         1.401      507.84 ppb          1.401   0.28%
   QC value within limits for Pb 220.353  Recovery = 101.57%
S 181.975 Axial†         917.5      987.53 ug/L        11.972      987.53 ppb         11.972   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 98.75%
Sb 206.836†             1907.8      510.25 ug/L         4.840      510.25 ppb          4.840   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.05%
Se 196.026†             1127.2      519.48 ug/L         6.252      519.48 ppb          6.252   1.20%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            98793.9      2497.0 ug/L         5.50      2497.0 ppb           5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 99.88%
Sn 189.927†             3792.1      502.14 ug/L         2.448      502.14 ppb          2.448   0.49%
   QC value within limits for Sn 189.927  Recovery = 100.43%
Sr 421.552†            95626.9      501.65 ug/L         1.784      501.65 ppb          1.784   0.36%
   QC value within limits for Sr 421.552  Recovery = 100.33%
Ti 334.940†           364917.3      503.19 ug/L         0.566      503.19 ppb          0.566   0.11%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†             2059.2      501.25 ug/L         3.199      501.25 ppb          3.199   0.64%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†             18891.3      486.80 ug/L         4.105      486.80 ppb          4.105   0.84%
   QC value within limits for U 409.014  Recovery = 97.36%
V 292.402†             87700.7      508.78 ug/L         0.576      508.78 ppb          0.576   0.11%
   QC value within limits for V 292.402  Recovery = 101.76%
Zn 213.857†            68811.0      501.18 ug/L         1.379      501.18 ppb          1.379   0.28%
   QC value within limits for Zn 213.857  Recovery = 100.24%
SiO2†                  98959.2      5352.4 ug/L        23.80      5352.4 ppb          23.80   0.44%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
```

Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 18:08:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4766.6	4766.6	97.1	%			18:10:25
1	Y RADIAL	5473.3	5473.3	96.92	%			18:10:25
1	Al 396.153Radial†	-20.4	22.8	15.038	ug/L	15.038	ppb	18:10:25
1	Ca 317.933Radial†	22.5	5.3	9.4050	ug/L	9.4050	ppb	18:10:45
1	Fe 238.204 Radial†	8.0	-2.8	-33.253	ug/L	-33.253	ppb	18:10:45
1	K 766.490 Radial†	2545.0	51.9	9.4686	ug/L	9.4686	ppb	18:10:25
1	Mg 279.077 IEC†	4.0	1.6	72.341	ug/L	72.341	ppb	18:10:45
1	Na 589.592 Radial†	-1272.2	-30.5	-8.5443	ug/L	-8.5443	ppb	18:10:25
1	Sr 421.552†	-32.1	-25.7	-0.1348	ug/L	-0.1348	ppb	18:10:25
1	Sc 361.383	1034609.2	1034609.2	99.531	%			18:11:42
1	Y 371.029	881696.7	881696.7	99.687	%			18:11:42
1	Ag 328.068†	446.5	-25.5	-0.1118	ug/L	-0.1118	ppb	18:11:47
1	As 188.979†	-33.8	2.6	0.8128	ug/L	0.8128	ppb	18:12:07
1	B 249.677†	-454.8	9.1	0.1770	ug/L	0.1770	ppb	18:12:07
1	Ba 233.527†	-2.6	-2.6	-0.0192	ug/L	-0.0192	ppb	18:12:07
1	Be 313.107†	-4791.6	59.7	0.0187	ug/L	0.0187	ppb	18:11:47
1	Cd 226.502†	-228.8	5.7	0.0536	ug/L	0.0536	ppb	18:12:07
1	Co 228.616†	-84.4	1.6	0.0263	ug/L	0.0263	ppb	18:12:07
1	Cr 267.716†	106.0	18.8	0.1679	ug/L	0.1679	ppb	18:12:07
1	Cu 324.752†	8941.8	46.4	0.1223	ug/L	0.1223	ppb	18:11:47
1	Mn 257.610†	570.8	-3.2	-0.0077	ug/L	-0.0077	ppb	18:12:07
1	Mo 202.031†	29.9	0.8	0.0391	ug/L	0.0391	ppb	18:12:07
1	Ni 231.604†	151.8	20.6	0.4030	ug/L	0.4030	ppb	18:12:07
1	P 214.914†	248.4	-15.6	-6.9397	ug/L	-6.9397	ppb	18:12:07
1	Pb 220.353†	-71.0	4.3	0.4060	ug/L	0.4060	ppb	18:12:07
1	S 181.975 Axial†	60.8	0.9	1.0132	ug/L	1.0132	ppb	18:12:07
1	Sb 206.836†	49.6	15.2	4.0184	ug/L	4.0184	ppb	18:12:07
1	Se 196.026†	-29.1	-7.9	-3.6032	ug/L	-3.6032	ppb	18:12:07
1	Si 251.611†	580.7	25.8	0.6494	ug/L	0.6494	ppb	18:12:07
1	Sn 189.927†	0.4	4.7	0.6278	ug/L	0.6278	ppb	18:12:07
1	Ti 334.940†	-1230.3	24.3	0.0350	ug/L	0.0350	ppb	18:11:47
1	Tl 190.801†	-42.1	1.9	0.4708	ug/L	0.4708	ppb	18:12:07
1	U 409.014†	-2850.8	-90.3	-2.3302	ug/L	-2.3302	ppb	18:11:42
1	V 292.402†	-1689.4	-88.8	-0.5058	ug/L	-0.5058	ppb	18:11:47
1	Zn 213.857†	887.3	5.9	0.0415	ug/L	0.0415	ppb	18:12:07
1	SiO2†	594.9	-1.3	-0.0849	ug/L	-0.0849	ppb	18:13:13
2	Sc Radial	4831.6	4831.6	98.4	%			18:10:50
2	Y RADIAL	5539.0	5539.0	98.08	%			18:10:50
2	Al 396.153Radial†	-19.9	23.6	15.571	ug/L	15.571	ppb	18:10:50
2	Ca 317.933Radial†	20.6	3.1	5.4395	ug/L	5.4395	ppb	18:11:10
2	Fe 238.204 Radial†	12.0	1.2	14.105	ug/L	14.105	ppb	18:11:10
2	K 766.490 Radial†	2640.1	113.3	20.647	ug/L	20.647	ppb	18:10:50
2	Mg 279.077 IEC†	6.5	4.1	183.27	ug/L	183.27	ppb	18:11:10
2	Na 589.592 Radial†	-1259.8	-0.2	-0.0693	ug/L	-0.0693	ppb	18:10:50
2	Sr 421.552†	-7.2	0.1	0.0004	ug/L	0.0004	ppb	18:10:50
2	Sc 361.383	1027067.1	1027067.1	98.806	%			18:12:12
2	Y 371.029	874594.2	874594.2	98.884	%			18:12:12
2	Ag 328.068†	449.8	-18.9	-0.0704	ug/L	-0.0704	ppb	18:12:17
2	As 188.979†	-40.3	-4.2	-1.3039	ug/L	-1.3039	ppb	18:12:37
2	B 249.677†	-427.8	33.1	0.6230	ug/L	0.6230	ppb	18:12:37
2	Ba 233.527†	-2.6	-2.6	-0.0166	ug/L	-0.0166	ppb	18:12:37
2	Be 313.107†	-4776.7	39.5	0.0122	ug/L	0.0122	ppb	18:12:17
2	Cd 226.502†	-219.3	13.7	0.1183	ug/L	0.1183	ppb	18:12:37
2	Co 228.616†	-75.9	9.5	0.1565	ug/L	0.1565	ppb	18:12:37
2	Cr 267.716†	97.6	11.0	0.0989	ug/L	0.0989	ppb	18:12:37
2	Cu 324.752†	8954.3	125.1	0.3347	ug/L	0.3347	ppb	18:12:17
2	Mn 257.610†	567.3	-2.6	-0.0044	ug/L	-0.0044	ppb	18:12:37
2	Mo 202.031†	27.2	-1.7	-0.0888	ug/L	-0.0888	ppb	18:12:37
2	Ni 231.604†	137.1	6.8	0.1336	ug/L	0.1336	ppb	18:12:37

2	P 214.914†	289.4	27.8	12.395 ug/L	12.395 ppb	18:12:37
2	Pb 220.353†	-86.1	-11.5	-1.0822 ug/L	-1.0822 ppb	18:12:37
2	S 181.975 Axial†	51.7	-7.8	-8.3923 ug/L	-8.3923 ppb	18:12:37
2	Sb 206.836†	34.7	0.5	0.1412 ug/L	0.1412 ppb	18:12:37
2	Se 196.026†	-20.9	0.2	0.1369 ug/L	0.1369 ppb	18:12:37
2	Si 251.611†	575.3	24.6	0.6161 ug/L	0.6161 ppb	18:12:37
2	Sn 189.927†	3.8	8.2	1.0891 ug/L	1.0891 ppb	18:12:37
2	Ti 334.940†	-1271.1	-26.0	-0.0353 ug/L	-0.0353 ppb	18:12:17
2	Tl 190.801†	-40.7	3.1	0.7471 ug/L	0.7471 ppb	18:12:37
2	U 409.014†	-2766.3	-25.8	-0.6692 ug/L	-0.6692 ppb	18:12:12
2	V 292.402†	-1617.8	-28.8	-0.1657 ug/L	-0.1657 ppb	18:12:17
2	Zn 213.857†	888.8	14.0	0.0937 ug/L	0.0937 ppb	18:12:37
2	SiO2†	620.8	29.3	1.5731 ug/L	1.5731 ppb	18:13:18
3	Sc Radial	4720.5	4720.5	96.1 %		18:11:15
3	Y RADIAL	5456.3	5456.3	96.62 %		18:11:15
3	Al 396.153Radial†	-34.8	7.6	5.0192 ug/L	5.0192 ppb	18:11:15
3	Ca 317.933Radial†	12.2	-5.1	-9.1137 ug/L	-9.1137 ppb	18:11:35
3	Fe 238.204 Radial†	9.7	-0.9	-10.769 ug/L	-10.769 ppb	18:11:35
3	K 766.490 Radial†	2595.0	129.5	23.622 ug/L	23.622 ppb	18:11:15
3	Mg 279.077 IEC†	2.1	-0.3	-11.938 ug/L	-11.938 ppb	18:11:35
3	Na 589.592 Radial†	-1312.6	-85.3	-23.919 ug/L	-23.919 ppb	18:11:15
3	Sr 421.552†	1.0	8.4	0.0443 ug/L	0.0443 ppb	18:11:15
3	Sc 361.383	1017127.6	1017127.6	97.849 %		18:12:42
3	Y 371.029	865924.7	865924.7	97.903 %		18:12:42
3	Ag 328.068†	366.4	-99.6	-0.4011 ug/L	-0.4011 ppb	18:12:47
3	As 188.979†	-29.3	6.6	2.0560 ug/L	2.0560 ppb	18:13:07
3	B 249.677†	-440.2	16.3	0.3089 ug/L	0.3089 ppb	18:13:07
3	Ba 233.527†	9.3	9.5	0.0592 ug/L	0.0592 ppb	18:13:07
3	Be 313.107†	-4801.3	-32.9	-0.0104 ug/L	-0.0104 ppb	18:12:47
3	Cd 226.502†	-236.4	-5.9	-0.0502 ug/L	-0.0502 ppb	18:13:07
3	Co 228.616†	-91.6	-7.3	-0.1196 ug/L	-0.1196 ppb	18:13:07
3	Cr 267.716†	114.8	29.6	0.2642 ug/L	0.2642 ppb	18:13:07
3	Cu 324.752†	8925.1	183.8	0.4903 ug/L	0.4903 ppb	18:12:47
3	Mn 257.610†	576.7	12.7	0.0111 ug/L	0.0111 ppb	18:13:07
3	Mo 202.031†	31.1	2.6	0.1363 ug/L	0.1363 ppb	18:13:07
3	Ni 231.604†	141.1	12.2	0.2399 ug/L	0.2399 ppb	18:13:07
3	P 214.914†	272.2	13.1	5.7950 ug/L	5.7950 ppb	18:13:07
3	Pb 220.353†	-73.4	0.5	0.0523 ug/L	0.0523 ppb	18:13:07
3	S 181.975 Axial†	54.0	-4.9	-5.2941 ug/L	-5.2941 ppb	18:13:07
3	Sb 206.836†	34.2	0.3	0.1003 ug/L	0.1003 ppb	18:13:07
3	Se 196.026†	-20.9	0.0	-0.0283 ug/L	-0.0283 ppb	18:13:07
3	Si 251.611†	567.7	22.6	0.5592 ug/L	0.5592 ppb	18:13:07
3	Sn 189.927†	3.6	8.0	1.0610 ug/L	1.0610 ppb	18:13:07
3	Ti 334.940†	-1272.2	-39.7	-0.0555 ug/L	-0.0555 ppb	18:12:47
3	Tl 190.801†	-39.6	3.8	0.9126 ug/L	0.9126 ppb	18:13:07
3	U 409.014†	-2696.8	17.9	0.4644 ug/L	0.4644 ppb	18:12:42
3	V 292.402†	-1683.0	-111.5	-0.6339 ug/L	-0.6339 ppb	18:12:47
3	Zn 213.857†	892.5	26.6	0.1945 ug/L	0.1945 ppb	18:13:07
3	SiO2†	608.0	22.3	1.1842 ug/L	1.1842 ppb	18:13:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026268.0	98.729	%	0.8435				0.85%
Sc Radial	4772.9	97.2	%	1.14				1.17%
Y 371.029	874071.9	98.825	%	0.8931				0.90%
Y RADIAL	5489.5	97.21	%	0.774				0.80%
Ag 328.068†	-48.0	-0.1945	ug/L	0.18018	-0.1945	ppb	0.18018	92.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.0	11.876	ug/L	5.9441	11.876	ppb	5.9441	50.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	0.5216	ug/L	1.69881	0.5216	ppb	1.69881	325.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.5	0.3696	ug/L	0.22913	0.3696	ppb	0.22913	61.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0078	ug/L	0.04452	0.0078	ppb	0.04452	572.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.1	0.0069	ug/L	0.01526	0.0069	ppb	0.01526	222.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	1.9103	ug/L	9.75075	1.9103	ppb	9.75075	510.44%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.5      0.0406 ug/L       0.08501      0.0406 ppb        0.08501 209.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.3      0.0211 ug/L       0.13814      0.0211 ppb        0.13814 655.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.8      0.1770 ug/L       0.08304      0.1770 ppb        0.08304  46.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               118.4      0.3158 ug/L       0.18470      0.3158 ppb        0.18470  58.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -9.9724 ug/L      23.68902     -9.9724 ppb       23.68902 237.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          98.3      17.912 ug/L        7.4622      17.912 ppb         7.4622  41.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.8      81.225 ug/L       97.9077      81.225 ppb        97.9077 120.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0003 ug/L       0.01006     -0.0003 ppb        0.01006 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0289 ug/L       0.11291      0.0289 ppb        0.11291 390.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -38.7     -10.844 ug/L       12.0902     -10.844 ppb       12.0902 111.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.2      0.2588 ug/L       0.13570      0.2588 ppb        0.13570  52.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7502 ug/L       9.82845      3.7502 ppb        9.82845 262.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.3     -0.2079 ug/L       0.77747     -0.2079 ppb        0.77747 373.89%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.9     -4.2244 ug/L       4.79313     -4.2244 ppb        4.79313 113.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.3      1.4200 ug/L       2.25041      1.4200 ppb        2.25041 158.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.5     -1.1649 ug/L       2.11326     -1.1649 ppb        2.11326 181.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.3      0.6082 ug/L       0.04564      0.6082 ppb        0.04564   7.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.0      0.9260 ug/L       0.25857      0.9260 ppb        0.25857  27.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.7     -0.0300 ug/L       0.09336     -0.0300 ppb        0.09336 310.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.8     -0.0186 ug/L       0.04751     -0.0186 ppb        0.04751 255.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      0.7102 ug/L       0.22320      0.7102 ppb        0.22320  31.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.7     -0.8450 ug/L       1.40556     -0.8450 ppb        1.40556 166.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -76.4     -0.4351 ug/L       0.24200     -0.4351 ppb        0.24200  55.62%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                15.5      0.1099 ug/L       0.07776      0.1099 ppb        0.07776  70.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      16.8      0.8908 ug/L       0.86705      0.8908 ppb        0.86705  97.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 14:45:06
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.293
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1083.0	1083.041	31.331	2.9
	Mg	24.0	17160.1	17160.100	83.179	0.5
	Co	58.9	41851.8	41851.817	233.658	0.6
	Rh	102.9	69668.7	69668.682	726.654	1.0
	In	114.9	88317.6	88317.573	728.115	0.8
	Pb	208.0	54128.4	54128.357	444.880	0.8
⌈>	Ba	137.9	76857.7	76857.668	361.085	0.5
⌊	Ba++	69.0	1192.0	0.016	0.000	2.2
⌈>	Ce	139.9	92145.2	92145.232	645.220	0.7
⌊	CeO	155.9	1941.5	0.021	0.000	1.3
	Bkgd	220.0	4.6	4.600	1.710	37.2

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.0	649.7
Co	59	15	7.0	23678.9
In	115	15	8.3	56319.1

ICPMS #4 TUNING REPORT

File Name: 091205.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	604	2060	0.678
Be	9.0	9.0	2044	2055	0.677
Mg	24.0	24.0	5675	2085	0.609
Mg	25.0	25.0	5949	2080	0.649
Mg	26.0	26.0	6152	2095	0.653
Co	58.9	58.9	14166	2120	0.711
Rh	102.9	102.9	24871	2220	0.689
In	114.9	114.9	27780	2255	0.676
Ce	139.9	139.9	33857	2300	0.664
Pb	206.0	206.0	49925	2460	0.687
Pb	207.0	207.0	50113	2380	0.647
Pb	208.0	208.0	50436	2490	0.665
U	238.1	238.0	57686	2480	0.669

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 01:51:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Blank.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94881	
|	Sb	121		ug/L		206	
⌊	Sb	123		ug/L		168	
⌈>	Lu	175		ug/L		124843	
⌊	U	238		ug/L		274	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 01:53:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		93794	93794.222
|	Sb	121	10.000	ug/L	1.806	14981	0.158
⌊	Sb	123		ug/L		11540	0.121
⌈>	Lu	175		ug/L		124991	124991.001
⌊	U	238	10.000	ug/L	1.907	105780	0.844

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 01:55:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97726	97726.327
|	Sb	121	100.045	ug/L	2.339	161443	1.650
⌊	Sb	123		ug/L		123252	1.259
⌈>	Lu	175		ug/L		131325	131324.849
⌊	U	238	99.969	ug/L	1.560	1075405	8.186

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 01:58:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101548	101548.169
|	Sb	121	47.532	ug/L	3.319	79808	0.784
⌊	Sb	123		ug/L		60743	0.596
⌈>	Lu	175		ug/L		131776	131776.014
⌊	U	238	52.464	ug/L	0.204	566416	4.296

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.0			
|	Sb	121	95.063				
⌊	Sb	123					
⌈>	Lu	175		105.6			
⌊	U	238	104.928				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 02:00:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99963	99963.314
|	Sb	121	0.646	ug/L	2.928	1282	0.011
⌊	Sb	123		ug/L		1016	0.008
⌈>	Lu	175		ug/L		129577	129576.659
⌊	U	238	0.007	ug/L	20.004	363	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		105.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		103.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 02:03:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99922	99922.127
|	Sb	121	3.019	ug/L	2.978	5191	0.050
⌊	Sb	123		ug/L		4004	0.038
⌈>	Lu	175		ug/L		130370	130370.500
⌊	U	238	0.218	ug/L	0.590	2617	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		105.3			
|	Sb	121	100.629				
⌊	Sb	123					
⌈>	Lu	175		104.4			
⌊	U	238	109.180				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 02:05:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96099	96098.868
|	Sb	121	**0.275**	ug/L	5.749	645	0.005
⌊	Sb	123		ug/L		499	0.003
⌈>	Lu	175		ug/L		136251	136251.066
⌊	U	238	**-0.012**	ug/L	5.267	161	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.3			
|	Sb	121	275.478				
⌊	Sb	123					
⌈>	Lu	175		109.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 02:08:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		95824	95823.967
|	Sb	121	**22.746**	ug/L	1.165	36149	0.375
⌊	Sb	123		ug/L		27696	0.287
⌈>	Lu	175		ug/L		134971	134970.625
⌊	U	238	**21.753**	ug/L	0.441	240717	1.781

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.0			
|	Sb	121	113.163				
⌊	Sb	123					
⌈>	Lu	175		108.1			
⌊	U	238	108.764				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:10:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.667

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		105255	105255.407
|	Sb	121	46.271	ug/L	3.521	80528	0.763
⌊	Sb	123		ug/L		61839	0.586
⌈>	Lu	175		ug/L		137607	137607.309
⌊	U	238	52.272	ug/L	0.865	589321	4.280

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.9			
|	Sb	121	92.543				
⌊	Sb	123					
⌈>	Lu	175		110.2			
⌊	U	238	104.544				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:13:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.668

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103341	103341.175
|	Sb	121	0.466	ug/L	1.179	1019	0.008
⌊	Sb	123		ug/L		786	0.006
⌈>	Lu	175		ug/L		134147	134146.585
⌊	U	238	0.007	ug/L	53.173	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.9			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 02:15:39
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.669

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98677	98677.061
|	Sb	121	0.297	ug/L	11.519	697	0.005
⌊	Sb	123		ug/L		532	0.004
⌈>	Lu	175		ug/L		134491	134490.586
⌊	U	238	-0.019	ug/L	6.656	81	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		104.0			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 02:18:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.670

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94240	94239.748
|	Sb	121	60.514	ug/L	4.873	94098	0.998
⌊	Sb	123		ug/L		71790	0.761
⌈>	Lu	175		ug/L		131309	131309.045
⌊	U	238	58.935	ug/L	4.695	633198	4.826

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.3			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		105.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 02:23:17
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.672

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97907	97907.017
|	Sb	121	0.053	ug/L	29.941	298	0.001
⌊	Sb	123		ug/L		221	0.000
⌈>	Lu	175		ug/L		134933	134932.994
⌊	U	238	-0.021	ug/L	3.566	68	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			103.2		
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175			108.1		
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 02:25:49
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.673

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97276	97275.842
|	Sb	121	**230.692**	ug/L	1.853	370180	3.804
⌊	Sb	123		ug/L		285040	2.929
⌈>	Lu	175		ug/L		138254	138254.229
⌊	U	238	**56.663**	ug/L	0.828	641847	4.640

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			102.5		
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175			110.7		
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 02:28:20
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.674

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102303	102302.909
|	Sb	121	0.116	ug/L	8.019	418	0.002
⌊	Sb	123		ug/L		342	0.002
⌈>	Lu	175		ug/L		133000	132999.932
⌊	U	238	-0.011	ug/L	8.371	173	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		106.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:33:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104645	104645.062
|	Sb	121	44.663	ug/L	3.625	77290	0.736
⌊	Sb	123		ug/L		58955	0.562
⌈>	Lu	175		ug/L		135843	135843.408
⌊	U	238	52.000	ug/L	1.107	578638	4.258

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.3			
|	Sb	121	89.325				
⌊	Sb	123					
⌈>	Lu	175		108.8			
⌊	U	238	103.999				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:35:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.677

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102840	102840.323
|	Sb	121	0.475	ug/L	4.081	1029	0.008
⌊	Sb	123		ug/L		832	0.006
⌈>	Lu	175		ug/L		134766	134766.026
⌊	U	238	0.007	ug/L	27.530	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241537001
Sample Date/Time: Sunday, December 06, 2009 02:53:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241537001.684

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96593	96592.548
|	Sb	121	-0.038	ug/L	10.637	150	-0.001
⌊	Sb	123		ug/L		124	-0.000
⌈>	Lu	175		ug/L		134769	134769.111
⌊	U	238	-0.023	ug/L	3.185	41	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		108.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241537002
Sample Date/Time: Sunday, December 06, 2009 02:56:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241537002.685

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96042	96041.584
|	Sb	121	-0.033	ug/L	16.591	157	-0.001
⌊	Sb	123		ug/L		123	-0.000
⌈>	Lu	175		ug/L		134229	134229.095
⌊	U	238	-0.007	ug/L	29.499	214	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.2			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:58:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.686

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103529	103529.259
|	Sb	121	**44.137**	ug/L	2.888	75555	0.728
⌊	Sb	123		ug/L		57698	0.556
⌈>	Lu	175		ug/L		134829	134828.672
⌊	U	238	**52.172**	ug/L	1.163	576272	4.272

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		109.1			
|	Sb	121	88.274				
⌊	Sb	123					
⌈>	Lu	175		108.0			
⌊	U	238	104.345				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 03:01:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.687

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102555	102554.905
|	Sb	121	0.469	ug/L	4.748	1016	0.008
⌊	Sb	123		ug/L		811	0.006
⌈>	Lu	175		ug/L		132021	132021.280
⌊	U	238	0.008	ug/L	9.369	378	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.1			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		105.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 06:48:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Blank.698

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		103990	
	Sb	121		ug/L		387	
	Sb	123		ug/L		284	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115					
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 06:50:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.699

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104439	104438.648
|	Sb	121	10.000	ug/L	3.353	15696	0.147
⌊	Sb	123		ug/L		12228	0.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 06:53:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.700

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		102809	102808.739
Sb	121	100.057	ug/L	1.734	160268	1.555
Sb	123		ug/L		122687	1.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115					
Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 06:55:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.701

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104936	104936.382
|	Sb	121	47.429	ug/L	2.427	77727	0.737
⌊	Sb	123		ug/L		59633	0.566

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		100.9			
|	Sb	121	94.858				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 06:57:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103664	103664.345
|	Sb	121	0.577	ug/L	6.610	1314	0.009
⌊	Sb	123		ug/L		1011	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.7			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 07:00:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.703

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103667	103667.137
|	Sb	121	3.003	ug/L	2.855	5223	0.047
⌊	Sb	123		ug/L		4048	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.7			
|	Sb	121	100.103				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 07:02:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.704

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96888	96888.062
|	Sb	121	0.157	ug/L	17.849	596	0.002
⌊	Sb	123		ug/L		456	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			93.2		
|	Sb	121	156.604				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 07:04:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.705

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		97262	97261.862
Sb	121	22.379	ug/L	2.910	34184	0.348
Sb	123		ug/L		26455	0.269

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115			93.5		
Sb	121	111.337				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:07:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.706

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104423	104422.693
|	Sb	121	45.130	ug/L	0.662	73637	0.702
⌊	Sb	123		ug/L		56804	0.541

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		100.4			
|	Sb	121	90.261				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:09:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.707

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103475	103475.010
|	Sb	121	0.373	ug/L	6.997	985	0.006
⌊	Sb	123		ug/L		765	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.5			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 07:11:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99218	99217.948
|	Sb	121	0.232	ug/L	1.796	727	0.004
⌊	Sb	123		ug/L		547	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.4			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 07:14:23
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98264	98264.209
|	Sb	121	57.361	ug/L	4.434	87916	0.892
⌊	Sb	123		ug/L		66805	0.677

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		94.5			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 07:19:16
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.711

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98799	98799.490
|	Sb	121	-0.050	ug/L	7.222	290	-0.001
⌊	Sb	123		ug/L		239	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.0			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 07:21:42
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.712

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98020	98019.587
|	Sb	121	**232.616**	ug/L	5.328	354564	3.616
⌊	Sb	123		ug/L		273620	2.790

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		94.3			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 07:24:06
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.713

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101812	101811.784
|	Sb	121	0.073	ug/L	16.762	494	0.001
⌊	Sb	123		ug/L		385	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		97.9			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:28:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.715

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102894	102894.081
|	Sb	121	**52.491**	ug/L	4.276	84269	0.816
⌊	Sb	123		ug/L		63858	0.618

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			98.9		
|	Sb	121	104.981				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:31:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.716

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103848	103848.492
|	Sb	121	0.180	ug/L	15.753	676	0.003
⌊	Sb	123		ug/L		524	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.9			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241537001
Sample Date/Time: Sunday, December 06, 2009 07:48:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241537001.723

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		72474	72474.028
|	Sb	121	-0.110	ug/L	16.341	145	-0.002
⌊	Sb	123		ug/L		128	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			69.7		
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241537002
Sample Date/Time: Sunday, December 06, 2009 07:50:47
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241537002.724

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94369	94368.997
|	Sb	121	-0.137	ug/L	2.330	150	-0.002
⌊	Sb	123		ug/L		148	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		90.7			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:53:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.725

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		100744	100743.848
|	Sb	121	51.860	ug/L	4.854	81554	0.806
⌊	Sb	123		ug/L		62632	0.619

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			96.9		
|	Sb	121	103.720				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:55:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.726

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101982	101982.020
|	Sb	121	**0.146**	ug/L	15.157	610	0.002
⌊	Sb	123		ug/L		466	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		98.1			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, December 04, 2009 17:10:05
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1393
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3656.5	3656.468	46.959	1.3
	Mg	24.0	33148.4	33148.415	197.622	0.6
	Co	58.9	77411.2	77411.206	1133.042	1.5
	Rh	102.9	141123.3	141123.253	984.846	0.7
	In	114.9	192067.3	192067.328	2730.625	1.4
	Pb	208.0	142811.1	142811.081	483.021	0.3
⌈>	Ba	137.9	191898.6	191898.598	1606.226	0.8
⌊	Ba++	69.0	3033.7	0.016	0.000	1.1
⌈>	Ce	139.9	239168.6	239168.575	2249.215	0.9
⌊	CeO	155.9	4645.9	0.019	0.000	1.3
	Bkgd	220.0	17.2	17.200	2.280	13.3

Current Optimization File Data

Current Value	Description
0.82	Nebulizer Gas Flow
6.25	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	5.8	3946.9
Co	59	9	6.0	76591.8
In	115	9	6.5	198967.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2060	0.592
Be	9.0	9.0	2066	2070	0.631
Mg	24.0	24.0	5699	2070	0.696
Mg	25.0	25.0	5915	2075	0.626
Mg	26.0	26.0	6201	2070	0.658
Co	58.9	59.0	14190	2095	0.653
Rh	102.9	102.9	24874	2160	0.628
In	114.9	114.9	27788	2180	0.627
Ce	139.9	139.9	33872	2195	0.644
Pb	206.0	206.0	49948	2290	0.613
Pb	207.0	207.0	50159	2260	0.606
Pb	208.0	208.0	50451	2280	0.640
U	238.1	238.1	57732	2295	0.653

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 02:29:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Blank.654

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		83	
	Be	9		ug/L		12	
	B	11		ug/L		565	
	Na	23		ug/L		7002	
	Mg	24		ug/L		3000	
	Al	27		ug/L		8003	
	P	31		ug/L		3471	
	K	39		ug/L		457208	
	Ca	43		ug/L		213	
>	Sc	45		ug/L		325296	
	Ti	47		ug/L		307	
	V	51		ug/L		5688	
	Cr	52		ug/L		-1171	
	Cr	53		ug/L		67764	
	Mn	55		ug/L		1013	
	Fe	57		ug/L		6366	
	Co	59		ug/L		113	
	Ni	60		ug/L		81	
	Cu	63		ug/L		175	
	Cu	65		ug/L		94	
	Zn	66		ug/L		258	
	Zn	67		ug/L		6067	
	Zn	68		ug/L		747	
>	Ge	74		ug/L		367892	
	As	75		ug/L		147	
	Se	77		ug/L		3492	
	Se	82		ug/L		-11	
	Kr	83		ug/L		110	
	Sr	88		ug/L		189	
	Y	89		ug/L		59	
	Mo	98		ug/L		110	
	Ag	107		ug/L		55	
	Cd	111		ug/L		24	
	Cd	114		ug/L		54	
>	In	115		ug/L		223674	
	Sn	120		ug/L		439	
	Sb	121		ug/L		548	
	Sb	123		ug/L		448	
	Ba	135		ug/L		38	
	Ba	137		ug/L		61	
	Ho	165		ug/L		40	
>	Lu	175		ug/L		367322	
	Tl	205		ug/L		712	
	Pb	208		ug/L		984	
	Bi	209		ug/L		376	
	Th	232		ug/L		1896	
	U	238		ug/L		408	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 02:36:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 1.655

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.268	15542	0.048
	Be	9	10.000	ug/L	0.927	3331	0.010
	B	11	20.000	ug/L	4.411	6183	0.017
	Na	23	1000.000	ug/L	2.304	2871399	8.893
	Mg	24	1000.000	ug/L	0.121	1863055	5.774
	Al	27	1000.000	ug/L	7.415	2926472	9.062
	P	31	1000.000	ug/L	3.205	182352	0.555
	K	39	1000.000	ug/L	11.422	4958549	13.998
	Ca	43	1000.000	ug/L	1.960	9893	0.030
>	Sc	45		ug/L		322144	322144.200
	Ti	47	10.000	ug/L	1.104	5000	0.015
	V	51	10.000	ug/L	8.230	62190	0.176
	Cr	52	10.000	ug/L	0.249	43558	0.139
	Cr	53		ug/L		79619	0.039
	Mn	55	10.000	ug/L	0.164	78434	0.240
	Fe	57	1000.000	ug/L	1.712	164717	0.492
	Co	59	10.000	ug/L	2.061	58983	0.183
	Ni	60	10.000	ug/L	2.986	12462	0.038
	Cu	63		ug/L		30558	0.094
	Cu	65	10.000	ug/L	1.703	14838	0.046
	Zn	66	10.000	ug/L	2.419	10687	0.028
	Zn	67		ug/L		8046	0.005
	Zn	68		ug/L		8364	0.021
>	Ge	74		ug/L		367660	367660.467
	As	75	10.000	ug/L	0.994	10809	0.029
	Se	77		ug/L		4931	0.004
	Se	82	10.000	ug/L	4.356	1088	0.003
	Kr	83		ug/L		106	-0.000
	Sr	88	10.000	ug/L	0.458	124702	0.559
	Y	89		ug/L		63	0.000
	Mo	98	10.000	ug/L	0.600	28839	0.129
	Ag	107	10.000	ug/L	0.886	49442	0.222
	Cd	111	10.000	ug/L	0.816	12165	0.055
	Cd	114		ug/L		28717	0.129
>	In	115		ug/L		222563	222563.256
	Sn	120	10.000	ug/L	4.055	49744	0.222
	Sb	121	10.000	ug/L	11.691	35653	0.158
	Sb	123		ug/L		28005	0.124
	Ba	135		ug/L		13512	0.037
	Ba	137	10.000	ug/L	0.828	24071	0.066
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		364712	364711.741
	Tl	205	10.000	ug/L	1.179	153881	0.420
	Pb	208	10.000	ug/L	1.449	235761	0.644
	Bi	209		ug/L		384	0.000
	Th	232	10.000	ug/L	1.876	272227	0.741
	U	238	10.000	ug/L	1.851	300336	0.822

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 02:42:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 2.656

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.980**	ug/L	0.704	156240	0.470
	Be	9	**99.961**	ug/L	0.979	32944	0.099
	B	11	**200.020**	ug/L	3.536	59127	0.176
	Na	23	**10006.696**	ug/L	2.940	31684406	95.373
	Mg	24	**10011.906**	ug/L	5.136	21789350	65.623
	Al	27	**10002.905**	ug/L	10.624	30963959	93.355
	P	31	**9989.801**	ug/L	1.904	1675066	5.035
	K	39	**9997.962**	ug/L	7.215	45973459	137.155
	Ca	43	**9997.517**	ug/L	3.951	97522	0.293
>	Sc	45		ug/L		332045	332045.124
	Ti	47	**100.007**	ug/L	2.350	49067	0.147
	V	51	**99.984**	ug/L	3.276	579381	1.728
	Cr	52	**99.982**	ug/L	2.030	451432	1.364
	Cr	53		ug/L		145292	0.229
	Mn	55	**99.966**	ug/L	1.870	772327	2.323
	Fe	57	**9988.172**	ug/L	4.279	1464426	4.393
	Co	59	**99.957**	ug/L	0.728	581507	1.751
	Ni	60	**99.981**	ug/L	0.989	125275	0.377
	Cu	63		ug/L		299907	0.903
	Cu	65	**99.971**	ug/L	2.592	147706	0.445
	Zn	66	**99.987**	ug/L	1.708	104895	0.280
	Zn	67		ug/L		24828	0.050
	Zn	68		ug/L		76488	0.203
>	Ge	74		ug/L		373529	373528.738
	As	75	**100.010**	ug/L	0.969	109601	0.293
	Se	77		ug/L		13814	0.027
	Se	82	**99.964**	ug/L	1.181	10769	0.029
	Kr	83		ug/L		138	0.000
	Sr	88	**99.942**	ug/L	0.937	1178005	5.282
	Y	89		ug/L		156	0.000
	Mo	98	**99.993**	ug/L	2.875	285749	1.281
	Ag	107	**99.956**	ug/L	1.702	473704	2.124
	Cd	111	**99.976**	ug/L	1.185	118713	0.532
	Cd	114		ug/L		279353	1.253
>	In	115		ug/L		222981	222980.818
	Sn	120	**99.993**	ug/L	1.690	490793	2.199
	Sb	121	**100.112**	ug/L	9.451	396906	1.779
	Sb	123		ug/L		312221	1.399
	Ba	135		ug/L		133607	0.375
	Ba	137	**99.998**	ug/L	0.628	234019	0.657
	Ho	165		ug/L		53	0.000
>	Lu	175		ug/L		356006	356005.501
	Tl	205	**99.865**	ug/L	1.271	1316358	3.696
	Pb	208	**99.921**	ug/L	0.369	2123639	5.963
	Bi	209		ug/L		521	0.000
	Th	232	**99.954**	ug/L	1.354	2524233	7.085
	U	238	**99.877**	ug/L	2.285	2604978	7.316

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 02:48:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 1.657

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.754**	ug/L	1.871	81520	0.243
	Be	9	**52.697**	ug/L	3.657	17497	0.052
	B	11	**109.542**	ug/L	3.920	32884	0.097
	Na	23	**4602.047**	ug/L	2.954	14687911	43.862
	Mg	24	**4978.796**	ug/L	2.172	10917581	32.633
	Al	27	**4758.204**	ug/L	3.854	14862464	44.407
	P	31	**5275.789**	ug/L	1.572	893070	2.659
	K	39	**4730.387**	ug/L	10.830	22204413	64.893
	Ca	43	**5059.015**	ug/L	0.813	49855	0.148
>	Sc	45		ug/L		334573	334573.295
	Ti	47	**50.275**	ug/L	4.388	24999	0.074
	V	51	**51.547**	ug/L	1.584	303857	0.891
	Cr	52	**51.730**	ug/L	3.000	234714	0.705
	Cr	53		ug/L		112569	0.128
	Mn	55	**51.930**	ug/L	3.638	404616	1.207
	Fe	57	**5181.134**	ug/L	0.099	768921	2.279
	Co	59	**49.440**	ug/L	2.075	289817	0.866
	Ni	60	**50.089**	ug/L	0.920	63283	0.189
	Cu	63		ug/L		157248	0.470
	Cu	65	**51.541**	ug/L	2.414	76765	0.229
	Zn	66	**51.172**	ug/L	0.975	53884	0.143
	Zn	67		ug/L		16218	0.027
	Zn	68		ug/L		39964	0.105
>	Ge	74		ug/L		374072	374071.882
	As	75	**47.863**	ug/L	3.253	52598	0.140
	Se	77		ug/L		9276	0.015
	Se	82	**49.996**	ug/L	1.532	5389	0.014
	Kr	83		ug/L		129	0.000
	Sr	88	**51.089**	ug/L	1.916	599434	2.700
	Y	89		ug/L		107	0.000
	Mo	98	**50.405**	ug/L	3.850	143408	0.646
	Ag	107	**50.413**	ug/L	1.470	237837	1.071
	Cd	111	**50.386**	ug/L	2.430	59555	0.268
	Cd	114		ug/L		141968	0.639
>	In	115		ug/L		221956	221955.880
	Sn	120	**51.024**	ug/L	3.316	249445	1.122
	Sb	121	**48.038**	ug/L	11.255	189857	0.854
	Sb	123		ug/L		148988	0.670
	Ba	135		ug/L		67472	0.186
	Ba	137	**49.832**	ug/L	2.258	118635	0.327
	Ho	165		ug/L		81	0.000
>	Lu	175		ug/L		362133	362133.114
	Tl	205	**51.019**	ug/L	1.264	684350	1.888
	Pb	208	**52.132**	ug/L	1.299	1127496	3.111
	Bi	209		ug/L		421	0.000
	Th	232	**50.374**	ug/L	2.626	1294845	3.571
	U	238	**52.866**	ug/L	1.221	1402577	3.872

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	103.509				
	Be	9	105.394				
	B	11	109.542				
	Na	23	92.041				
	Mg	24	99.576				
	Al	27	94.222				
	P	31	105.516				
	K	39	94.608				
	Ca	43	101.180				
>	Sc	45		102.9			
	Ti	47	100.551				
	V	51	103.094				
	Cr	52	103.461				
	Cr	53					
	Mn	55	103.859				
	Fe	57	103.623				
	Co	59	98.879				
	Ni	60	100.178				
	Cu	63					
	Cu	65	103.083				
	Zn	66	102.345				
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75	95.725				
	Se	77					
	Se	82	99.991				
	Kr	83					
	Sr	88	102.179				
	Y	89					
	Mo	98	100.809				
	Ag	107	100.826				
	Cd	111	100.772				
	Cd	114					
>	In	115		99.2			
	Sn	120	102.048				
	Sb	121	96.075				
	Sb	123					
	Ba	135					
	Ba	137	99.663				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	102.038				
	Pb	208	104.263				
	Bi	209					
	Th	232	100.747				
	U	238	105.731				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 02:54:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 2.658

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.040**	**ug/L**	30.669	143	0.000
	Be	9	**0.026**	**ug/L**	6.323	20	0.000
	B	11	**5.314**	**ug/L**	12.145	2075	0.005
	Na	23	**2.832**	**ug/L**	53.845	15676	0.027
	Mg	24	**3.017**	**ug/L**	34.751	9336	0.020
	Al	27	**2.320**	**ug/L**	66.584	15008	0.022
	P	31	**4.079**	**ug/L**	25.449	4108	0.002
	K	39	**2.526**	**ug/L**	154.623	464775	0.035
	Ca	43	**3.164**	**ug/L**	69.386	242	0.000
>	Sc	45		**ug/L**		322887	322886.661
	Ti	47	**0.013**	**ug/L**	216.146	311	0.000
	V	51	**0.258**	**ug/L**	166.985	7071	0.004
	Cr	52	**0.066**	**ug/L**	188.033	-879	0.001
	Cr	53		**ug/L**		67393	0.000
	Mn	55	**0.007**	**ug/L**	122.333	1059	0.000
	Fe	57	**4.316**	**ug/L**	9.005	6932	0.002
	Co	59	**0.022**	**ug/L**	26.589	237	0.000
	Ni	60	**0.013**	**ug/L**	110.042	96	0.000
	Cu	63		**ug/L**		245	0.000
	Cu	65	**0.027**	**ug/L**	18.534	133	0.000
	Zn	66	**0.045**	**ug/L**	46.386	303	0.000
	Zn	67		**ug/L**		5908	-0.000
	Zn	68		**ug/L**		772	0.000
>	Ge	74		**ug/L**		366642	366641.550
	As	75	**0.023**	**ug/L**	543.824	171	0.000
	Se	77		**ug/L**		3691	0.001
	Se	82	**-0.112**	**ug/L**	125.363	-23	-0.000
	Kr	83		**ug/L**		114	0.000
	Sr	88	**0.015**	**ug/L**	47.178	366	0.001
	Y	89		**ug/L**		43	-0.000
	Mo	98	**0.122**	**ug/L**	24.449	459	0.002
	Ag	107	**0.018**	**ug/L**	52.088	142	0.000
	Cd	111	**0.016**	**ug/L**	42.009	43	0.000
	Cd	114		**ug/L**		91	0.000
>	In	115		**ug/L**		223944	223944.208
	Sn	120	**0.512**	**ug/L**	12.937	2964	0.011
	Sb	121	**1.427**	**ug/L**	17.965	6227	0.025
	Sb	123		**ug/L**		4924	0.020
	Ba	135		**ug/L**		60	0.000
	Ba	137	**0.014**	**ug/L**	29.189	95	0.000
	Ho	165		**ug/L**		45	0.000
>	Lu	175		**ug/L**		368839	368839.171
	Tl	205	**0.159**	**ug/L**	21.683	2880	0.006
	Pb	208	**0.021**	**ug/L**	20.418	1446	0.001
	Bi	209		**ug/L**		372	-0.000
	Th	232	**0.322**	**ug/L**	13.552	10321	0.023
	U	238	**0.031**	**ug/L**	26.660	1247	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 03:00:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 3.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.411**	ug/L	1.528	17552	0.054
	Be	9	**0.577**	ug/L	7.263	198	0.001
	B	11	**19.046**	ug/L	0.638	6032	0.017
	Na	23	**244.917**	ug/L	4.909	767110	2.334
	Mg	24	**16.048**	ug/L	41.204	37052	0.105
	Al	27	**35.032**	ug/L	22.710	114132	0.327
	P	31	**67.507**	ug/L	1.242	14546	0.034
	K	39	**270.704**	ug/L	2.625	1666197	3.714
	Ca	43	**223.743**	ug/L	0.846	2349	0.007
>	Sc	45		ug/L		325470	325469.703
	Ti	47	**9.230**	ug/L	0.659	4718	0.014
	V	51	**11.156**	ug/L	3.134	68473	0.193
	Cr	52	**11.116**	ug/L	3.279	48147	0.152
	Cr	53		ug/L		91452	0.073
	Mn	55	**5.723**	ug/L	0.910	44304	0.133
	Fe	57	**118.097**	ug/L	4.311	23275	0.052
	Co	59	**1.104**	ug/L	2.631	6408	0.019
	Ni	60	**2.183**	ug/L	1.528	2761	0.008
	Cu	63		ug/L		3563	0.010
	Cu	65	**1.144**	ug/L	2.964	1750	0.005
	Zn	66	**10.934**	ug/L	1.179	11539	0.031
	Zn	67		ug/L		9355	0.009
	Zn	68		ug/L		8951	0.022
>	Ge	74		ug/L		368286	368286.456
	As	75	**5.201**	ug/L	6.037	5759	0.015
	Se	77		ug/L		5651	0.006
	Se	82	**5.408**	ug/L	4.211	564	0.002
	Kr	83		ug/L		106	-0.000
	Sr	88	**11.419**	ug/L	0.805	135019	0.604
	Y	89		ug/L		49	-0.000
	Mo	98	**0.552**	ug/L	1.856	1690	0.007
	Ag	107	**1.046**	ug/L	1.917	5021	0.022
	Cd	111	**1.113**	ug/L	2.266	1348	0.006
	Cd	114		ug/L		3061	0.013
>	In	115		ug/L		223405	223405.298
	Sn	120	**5.656**	ug/L	1.025	28228	0.124
	Sb	121	**3.626**	ug/L	6.710	14937	0.064
	Sb	123		ug/L		11721	0.050
	Ba	135		ug/L		2907	0.008
	Ba	137	**2.127**	ug/L	2.383	5138	0.014
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		363271	363271.336
	Tl	205	**1.196**	ug/L	3.137	16779	0.044
	Pb	208	**2.304**	ug/L	0.713	50921	0.137
	Bi	209		ug/L		331	-0.000
	Th	232	**1.387**	ug/L	2.932	37591	0.098
	U	238	**0.254**	ug/L	0.539	7174	0.019

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	114.107				
	Be	9	115.481				
	B	11	126.974				
	Na	23	97.967				
	Mg	24	106.988				
	Al	27	116.775				
	P	31	135.015				
	K	39	90.235				
	Ca	43	111.871				
>	Sc	45		100.1			
	Ti	47	92.299				
	V	51	111.558				
	Cr	52	111.162				
	Cr	53					
	Mn	55	114.459				
	Fe	57	118.097				
	Co	59	110.421				
	Ni	60	109.174				
	Cu	63					
	Cu	65	114.420				
	Zn	66	109.339				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75	104.012				
	Se	77					
	Se	82	108.157				
	Kr	83					
	Sr	88	114.185				
	Y	89					
	Mo	98	110.406				
	Ag	107	104.600				
	Cd	111	111.251				
	Cd	114					
>	In	115		99.9			
	Sn	120	113.113				
	Sb	121	120.876				
	Sb	123					
	Ba	135					
	Ba	137	106.332				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	119.589				
	Pb	208	115.210				
	Bi	209					
	Th	232	138.716				
	U	238	127.215				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	P	31	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 03:06:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 4.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.133**	**ug/L**	14.153	292	0.001
	Be	9	**0.113**	**ug/L**	20.921	49	0.000
	B	11	**1.915**	**ug/L**	17.624	1134	0.002
	Na	23	**91260.194**	**ug/L**	3.361	287994573	869.794
	Mg	24	**100461.732**	**ug/L**	3.250	218065300	658.473
	Al	27	**93009.750**	**ug/L**	5.819	287171837	868.037
	P	31	**95325.534**	**ug/L**	1.753	15906388	48.048
	K	39	**92215.233**	**ug/L**	2.892	419158827	1265.037
	Ca	43	**93932.565**	**ug/L**	0.771	912162	2.755
>	Sc	45		**ug/L**		331040	331040.369
	Ti	47	**1477.981**	**ug/L**	1.342	718635	2.170
	V	51	**0.472**	**ug/L**	68.934	8469	0.008
	Cr	52	**3.074**	**ug/L**	7.610	12673	0.042
	Cr	53		**ug/L**		68952	-0.000
	Mn	55	**6.121**	**ug/L**	0.917	48129	0.142
	Fe	57	**102215.553**	**ug/L**	1.374	14885439	44.953
	Co	59	**0.281**	**ug/L**	1.957	1745	0.005
	Ni	60	**2.754**	**ug/L**	3.278	3521	0.010
	Cu	63		**ug/L**		11685	0.035
	Cu	65	**4.604**	**ug/L**	1.479	6873	0.020
	Zn	66	**3.428**	**ug/L**	0.594	3788	0.010
	Zn	67		**ug/L**		7368	0.004
	Zn	68		**ug/L**		1695	0.003
>	Ge	74		**ug/L**		367679	367679.141
	As	75	**-0.007**	**ug/L**	7431.206	138	-0.000
	Se	77		**ug/L**		5679	0.006
	Se	82	**-0.917**	**ug/L**	20.413	-108	-0.000
	Kr	83		**ug/L**		280	0.000
	Sr	88	**1.292**	**ug/L**	2.333	14842	0.068
	Y	89		**ug/L**		411	0.002
	Mo	98	**2147.326**	**ug/L**	3.297	5906088	27.516
	Ag	107	**0.081**	**ug/L**	14.652	421	0.002
	Cd	111	**0.546**	**ug/L**	24.541	647	0.003
	Cd	114		**ug/L**		6856	0.032
>	In	115		**ug/L**		214699	214699.337
	Sn	120	**0.426**	**ug/L**	4.235	2433	0.009
	Sb	121	**0.384**	**ug/L**	16.642	1990	0.007
	Sb	123		**ug/L**		1617	0.006
	Ba	135		**ug/L**		978	0.003
	Ba	137	**0.712**	**ug/L**	3.113	1649	0.005
	Ho	165		**ug/L**		901	0.003
>	Lu	175		**ug/L**		340404	340404.446
	Tl	205	**0.046**	**ug/L**	20.645	1244	0.002
	Pb	208	**0.294**	**ug/L**	1.368	6874	0.018
	Bi	209		**ug/L**		965	0.002
	Th	232	**0.786**	**ug/L**	33.527	20691	0.056
	U	238	**0.112**	**ug/L**	3.389	3183	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	91.260				
	Mg	24	100.462				
	Al	27	93.010				
	P	31	95.326				
	K	39	92.215				
	Ca	43	93.933				
>	Sc	45		101.8			
	Ti	47	73.899				
	V	51					
	Cr	52	83.076				
	Cr	53					
	Mn	55	105.531				
	Fe	57	102.216				
	Co	59	112.408				
	Ni	60	102.016				
	Cu	63					
	Cu	65	158.753				
	Zn	66	95.211				
	Zn	67					
	Zn	68					
>	Ge	74		99.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	107.674				
	Y	89					
	Mo	98	107.366				
	Ag	107					
	Cd	111	136.404				
	Cd	114					
>	In	115		96.0			
	Sn	120					
	Sb	121	383.649				
	Sb	123					
	Ba	135					
	Ba	137	106.311				
	Ho	165					
>	Lu	175		92.7			
	Tl	205					
	Pb	208	146.765				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 03:12:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 5.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.317**	ug/L	3.364	31107	0.096
	Be	9	**19.234**	ug/L	2.507	6207	0.019
	B	11	**19.438**	ug/L	4.152	6129	0.017
	Na	23	**99073.516**	ug/L	2.909	306838457	944.262
	Mg	24	**99557.273**	ug/L	5.522	212018111	652.545
	Al	27	**97347.246**	ug/L	3.062	295101632	908.518
	P	31	**97263.889**	ug/L	4.180	15913691	49.025
	K	39	**95834.052**	ug/L	3.850	427720686	1314.681
	Ca	43	**94651.729**	ug/L	1.177	901545	2.776
>	Sc	45		ug/L		324774	324773.835
	Ti	47	**1483.017**	ug/L	2.999	707138	2.178
	V	51	**22.137**	ug/L	5.218	129828	0.383
	Cr	52	**24.375**	ug/L	5.139	106693	0.332
	Cr	53		ug/L		79180	0.036
	Mn	55	**27.581**	ug/L	2.597	209115	0.641
	Fe	57	**104028.057**	ug/L	3.311	14856281	45.751
	Co	59	**20.901**	ug/L	4.184	118938	0.366
	Ni	60	**22.341**	ug/L	3.932	27425	0.084
	Cu	63		ug/L		68141	0.209
	Cu	65	**23.987**	ug/L	1.450	34734	0.107
	Zn	66	**22.497**	ug/L	2.661	23239	0.063
	Zn	67		ug/L		10617	0.013
	Zn	68		ug/L		15807	0.041
>	Ge	74		ug/L		364770	364770.358
	As	75	**20.757**	ug/L	3.324	22334	0.061
	Se	77		ug/L		7124	0.010
	Se	82	**19.872**	ug/L	1.839	2082	0.006
	Kr	83		ug/L		272	0.000
	Sr	88	**24.222**	ug/L	0.723	277534	1.280
	Y	89		ug/L		411	0.002
	Mo	98	**2114.437**	ug/L	2.469	5868610	27.094
	Ag	107	**19.515**	ug/L	1.933	89895	0.415
	Cd	111	**20.422**	ug/L	3.892	23573	0.109
	Cd	114		ug/L		62939	0.290
>	In	115		ug/L		216625	216624.562
	Sn	120	**21.335**	ug/L	1.907	102070	0.469
	Sb	121	**23.795**	ug/L	3.631	92110	0.423
	Sb	123		ug/L		72711	0.334
	Ba	135		ug/L		28466	0.083
	Ba	137	**21.907**	ug/L	2.821	49653	0.144
	Ho	165		ug/L		942	0.003
>	Lu	175		ug/L		344588	344587.864
	Tl	205	**21.387**	ug/L	2.823	273330	0.791
	Pb	208	**21.492**	ug/L	2.381	442728	1.282
	Bi	209		ug/L		1322	0.003
	Th	232	**22.551**	ug/L	2.588	552478	1.599
	U	238	**23.826**	ug/L	1.602	601675	1.745

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.584				
	Be	9	96.172				
	B	11	97.188				
	Na	23	99.074				
	Mg	24	99.557				
	Al	27	97.347				
	P	31	97.264				
	K	39	95.834				
	Ca	43	94.652				
>	Sc	45		99.8			
	Ti	47	74.151				
	V	51	110.683				
	Cr	52	102.849				
	Cr	53					
	Mn	55	106.905				
	Fe	57	104.028				
	Co	59	103.213				
	Ni	60	98.416				
	Cu	63					
	Cu	65	104.745				
	Zn	66	95.326				
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75	103.787				
	Se	77					
	Se	82	99.362				
	Kr	83					
	Sr	88	114.255				
	Y	89					
	Mo	98	105.722				
	Ag	107	97.573				
	Cd	111	100.108				
	Cd	114					
>	In	115		96.8			
	Sn	120	106.675				
	Sb	121	118.384				
	Sb	123					
	Ba	135					
	Ba	137	105.985				
	Ho	165					
>	Lu	175		93.8			
	Tl	205	106.933				
	Pb	208	106.394				
	Bi	209					
	Th	232	112.757				
	U	238	119.129				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 03:18:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.494**	**ug/L**	1.475	76824	0.242
	Be	9	**52.602**	**ug/L**	1.232	16550	0.052
	B	11	**101.515**	**ug/L**	2.435	28913	0.090
	Na	23	**4945.476**	**ug/L**	4.582	14935445	47.135
	Mg	24	**5121.495**	**ug/L**	1.922	10642709	33.569
	Al	27	**5030.481**	**ug/L**	5.042	14894915	46.948
	P	31	**5320.040**	**ug/L**	2.105	853081	2.682
	K	39	**4897.029**	**ug/L**	11.192	21739095	67.179
	Ca	43	**5067.031**	**ug/L**	2.885	47277	0.149
>	Sc	45		**ug/L**		316880	316879.709
	Ti	47	**54.881**	**ug/L**	0.833	25832	0.081
	V	51	**52.971**	**ug/L**	3.490	295517	0.916
	Cr	52	**52.559**	**ug/L**	2.303	225926	0.717
	Cr	53		**ug/L**		106918	0.129
	Mn	55	**52.667**	**ug/L**	1.091	388822	1.224
	Fe	57	**5350.264**	**ug/L**	2.101	751603	2.353
	Co	59	**50.209**	**ug/L**	1.694	278766	0.880
	Ni	60	**50.819**	**ug/L**	0.999	60805	0.192
	Cu	63		**ug/L**		149098	0.470
	Cu	65	**51.728**	**ug/L**	0.743	72990	0.230
	Zn	66	**50.620**	**ug/L**	2.959	51955	0.142
	Zn	67		**ug/L**		15315	0.026
	Zn	68		**ug/L**		38309	0.103
>	Ge	74		**ug/L**		364622	364621.590
	As	75	**46.755**	**ug/L**	0.945	50100	0.137
	Se	77		**ug/L**		9049	0.015
	Se	82	**50.789**	**ug/L**	1.729	5336	0.015
	Kr	83		**ug/L**		100	-0.000
	Sr	88	**49.973**	**ug/L**	1.263	585667	2.641
	Y	89		**ug/L**		111	0.000
	Mo	98	**49.883**	**ug/L**	2.153	141774	0.639
	Ag	107	**50.353**	**ug/L**	1.063	237302	1.070
	Cd	111	**50.612**	**ug/L**	1.832	59753	0.269
	Cd	114		**ug/L**		140960	0.636
>	In	115		**ug/L**		221686	221685.874
	Sn	120	**49.763**	**ug/L**	2.159	243020	1.095
	Sb	121	**46.864**	**ug/L**	12.040	184895	0.833
	Sb	123		**ug/L**		147008	0.662
	Ba	135		**ug/L**		67344	0.185
	Ba	137	**49.462**	**ug/L**	1.848	118185	0.325
	Ho	165		**ug/L**		76	0.000
>	Lu	175		**ug/L**		363415	363415.120
	Tl	205	**51.231**	**ug/L**	1.287	689658	1.896
	Pb	208	**52.410**	**ug/L**	0.685	1137510	3.127
	Bi	209		**ug/L**		380	0.000
	Th	232	**50.296**	**ug/L**	0.506	1297506	3.565
	U	238	**52.593**	**ug/L**	1.504	1400414	3.852

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.987				
	Be	9	105.204				
	B	11	101.515				
	Na	23	98.910				
	Mg	24	102.430				
	Al	27	99.613				
	P	31	106.401				
	K	39	97.941				
	Ca	43	101.341				
>	Sc	45		97.4			
	Ti	47	109.762				
	V	51	105.942				
	Cr	52	105.119				
	Cr	53					
	Mn	55	105.333				
	Fe	57	107.005				
	Co	59	100.419				
	Ni	60	101.638				
	Cu	63					
	Cu	65	103.457				
	Zn	66	101.240				
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75	93.510				
	Se	77					
	Se	82	101.577				
	Kr	83					
	Sr	88	99.947				
	Y	89					
	Mo	98	99.766				
	Ag	107	100.707				
	Cd	111	101.225				
	Cd	114					
>	In	115		99.1			
	Sn	120	99.526				
	Sb	121	93.728				
	Sb	123					
	Ba	135					
	Ba	137	98.924				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	102.462				
	Pb	208	104.821				
	Bi	209					
	Th	232	100.592				
	U	238	105.187				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 03:24:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.022**	**ug/L**	13.690	111	0.000
	Be	9	**0.034**	**ug/L**	62.996	22	0.000
	B	11	**3.237**	**ug/L**	15.543	1420	0.003
	Na	23	**4.991**	**ug/L**	18.503	21349	0.048
	Mg	24	**4.170**	**ug/L**	76.122	11339	0.027
	Al	27	**2.916**	**ug/L**	42.035	16009	0.027
	P	31	**8.263**	**ug/L**	13.037	4587	0.004
	K	39	**20.166**	**ug/L**	34.334	519974	0.277
	Ca	43	**8.140**	**ug/L**	23.358	277	0.000
>	Sc	45		**ug/L**		309216	309215.594
	Ti	47	**1.062**	**ug/L**	6.669	774	0.002
	V	51	**0.160**	**ug/L**	179.355	6263	0.003
	Cr	52	**-0.137**	**ug/L**	67.510	-1692	-0.002
	Cr	53		**ug/L**		66434	0.006
	Mn	55	**-0.006**	**ug/L**	149.171	919	-0.000
	Fe	57	**9.839**	**ug/L**	4.340	7389	0.004
	Co	59	**0.016**	**ug/L**	18.081	193	0.000
	Ni	60	**0.019**	**ug/L**	36.518	100	0.000
	Cu	63		**ug/L**		219	0.000
	Cu	65	**0.028**	**ug/L**	26.941	127	0.000
	Zn	66	**0.038**	**ug/L**	18.968	290	0.000
	Zn	67		**ug/L**		5847	-0.000
	Zn	68		**ug/L**		758	0.000
>	Ge	74		**ug/L**		359437	359437.203
	As	75	**-0.013**	**ug/L**	2600.637	130	-0.000
	Se	77		**ug/L**		3779	0.001
	Se	82	**0.001**	**ug/L**	15902.475	-11	0.000
	Kr	83		**ug/L**		101	-0.000
	Sr	88	**0.011**	**ug/L**	42.023	312	0.001
	Y	89		**ug/L**		43	-0.000
	Mo	98	**0.312**	**ug/L**	15.361	985	0.004
	Ag	107	**0.014**	**ug/L**	52.884	117	0.000
	Cd	111	**0.022**	**ug/L**	30.796	50	0.000
	Cd	114		**ug/L**		91	0.000
>	In	115		**ug/L**		219100	219100.424
	Sn	120	**0.408**	**ug/L**	10.406	2401	0.009
	Sb	121	**1.078**	**ug/L**	19.874	4739	0.019
	Sb	123		**ug/L**		3744	0.015
	Ba	135		**ug/L**		57	0.000
	Ba	137	**0.012**	**ug/L**	13.306	90	0.000
	Ho	165		**ug/L**		50	0.000
>	Lu	175		**ug/L**		372286	372286.021
	Tl	205	**0.155**	**ug/L**	25.073	2853	0.006
	Pb	208	**0.018**	**ug/L**	32.192	1395	0.001
	Bi	209		**ug/L**		325	-0.000
	Th	232	**0.218**	**ug/L**	16.886	7670	0.015
	U	238	**0.026**	**ug/L**	24.830	1117	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Saturday, December 05, 2009 03:31:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 10.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**939.329**	ug/L	1.435	1352503	4.419
	Be	9	**954.770**	ug/L	3.872	289915	0.947
	B	11	**1.277**	ug/L	10.583	876	0.001
	Na	23	**45361.556**	ug/L	10.553	132240704	432.338
	Mg	24	**50831.691**	ug/L	8.514	101885972	333.175
	Al	27	**46812.174**	ug/L	8.484	133673676	436.886
	P	31	**24705.045**	ug/L	5.970	3812517	12.452
	K	39	**45977.597**	ug/L	7.344	193386333	630.735
	Ca	43	**48648.703**	ug/L	2.229	436815	1.427
>	Sc	45		ug/L		306128	306127.946
	Ti	47	**41.466**	ug/L	4.428	18921	0.061
	V	51	**1014.760**	ug/L	5.544	5371038	17.539
	Cr	52	**1006.360**	ug/L	5.710	4197108	13.724
	Cr	53		ug/L		548118	1.583
	Mn	55	**973.610**	ug/L	4.661	6923815	22.629
	Fe	57	**52320.330**	ug/L	5.538	7044387	23.010
	Co	59	**958.254**	ug/L	5.712	5134913	16.787
	Ni	60	**892.271**	ug/L	1.615	1029972	3.365
	Cu	63		ug/L		2653237	8.668
	Cu	65	**870.883**	ug/L	3.082	1185360	3.873
	Zn	66	**1978.436**	ug/L	1.943	1933522	5.542
	Zn	67		ug/L		358473	1.011
	Zn	68		ug/L		1490911	4.272
>	Ge	74		ug/L		348856	348855.810
	As	75	**879.135**	ug/L	2.456	898633	2.576
	Se	77		ug/L		41384	0.109
	Se	82	**490.934**	ug/L	1.206	49435	0.142
	Kr	83		ug/L		170	0.000
	Sr	88	**1053.959**	ug/L	4.960	11442443	55.708
	Y	89		ug/L		359	0.001
	Mo	98	**1125.540**	ug/L	4.030	2963250	14.423
	Ag	107	**243.655**	ug/L	3.473	1063928	5.179
	Cd	111	**924.588**	ug/L	0.950	1011612	4.923
	Cd	114		ug/L		2628242	12.791
>	In	115		ug/L		205493	205492.547
	Sn	120	**1054.640**	ug/L	3.536	4766031	23.197
	Sb	121	**227.169**	ug/L	15.925	829420	4.037
	Sb	123		ug/L		662613	3.225
	Ba	135		ug/L		1177832	3.361
	Ba	137	**828.898**	ug/L	2.739	1909272	5.448
	Ho	165		ug/L		294	0.001
>	Lu	175		ug/L		350570	350569.865
	Tl	205	**489.283**	ug/L	2.690	6346450	18.107
	Pb	208	**4923.827**	ug/L	2.596	102978605	293.817
	Bi	209		ug/L		2898	0.007
	Th	232	**2519.921**	ug/L	3.264	62599943	178.623
	U	238	**5241.764**	ug/L	2.995	134559502	383.954

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	93.933				
	Be	9	95.477				
	B	11					
	Na	23	90.723				
	Mg	24	101.663				
	Al	27	93.624				
	P	31	98.820				
	K	39	91.955				
	Ca	43	97.297				
>	Sc	45		94.1			
	Ti	47					
	V	51	101.476				
	Cr	52	100.636				
	Cr	53					
	Mn	55	97.361				
	Fe	57	104.641				
	Co	59	95.825				
	Ni	60	89.227				
	Cu	63					
	Cu	65	87.088				
	Zn	66	79.137				
	Zn	67					
	Zn	68					
>	Ge	74		94.8			
	As	75	87.913				
	Se	77					
	Se	82	98.187				
	Kr	83					
	Sr	88	105.396				
	Y	89					
	Mo	98	112.554				
	Ag	107	97.462				
	Cd	111	92.459				
	Cd	114					
>	In	115		91.9			
	Sn	120	105.464				
	Sb	121	90.868				
	Sb	123					
	Ba	135					
	Ba	137	82.890				
	Ho	165					
>	Lu	175		95.4			
	Tl	205	97.857				
	Pb	208	98.477				
	Bi	209					
	Th	232	100.797				
	U	238	104.835				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Saturday, December 05, 2009 03:37:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 11.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.653**	**ug/L**	3.012	79823	0.248
	Be	9	**53.503**	**ug/L**	3.175	17102	0.053
	B	11	**103.696**	**ug/L**	4.014	29993	0.091
	Na	23	**4884.243**	**ug/L**	1.219	14997980	46.551
	Mg	24	**5447.889**	**ug/L**	4.082	11498821	35.708
	Al	27	**5132.455**	**ug/L**	10.084	15408228	47.900
	P	31	**5461.456**	**ug/L**	2.871	889829	2.753
	K	39	**4565.749**	**ug/L**	2.784	20622330	62.634
	Ca	43	**5159.513**	**ug/L**	1.591	48941	0.151
>	Sc	45		**ug/L**		322104	322104.480
	Ti	47	**52.244**	**ug/L**	3.454	24999	0.077
	V	51	**53.576**	**ug/L**	4.504	303658	0.926
	Cr	52	**52.869**	**ug/L**	3.491	230980	0.721
	Cr	53		**ug/L**		108298	0.128
	Mn	55	**53.716**	**ug/L**	2.410	402972	1.248
	Fe	57	**5405.725**	**ug/L**	3.413	771590	2.377
	Co	59	**51.009**	**ug/L**	2.294	287857	0.894
	Ni	60	**50.991**	**ug/L**	2.336	62000	0.192
	Cu	63		**ug/L**		154728	0.480
	Cu	65	**52.764**	**ug/L**	2.153	75655	0.235
	Zn	66	**52.240**	**ug/L**	2.584	54255	0.146
	Zn	67		**ug/L**		16628	0.029
	Zn	68		**ug/L**		40051	0.107
>	Ge	74		**ug/L**		369038	369038.162
	As	75	**48.738**	**ug/L**	1.537	52839	0.143
	Se	77		**ug/L**		8749	0.014
	Se	82	**50.840**	**ug/L**	1.260	5405	0.015
	Kr	83		**ug/L**		114	0.000
	Sr	88	**51.453**	**ug/L**	1.274	602065	2.720
	Y	89		**ug/L**		101	0.000
	Mo	98	**51.247**	**ug/L**	0.387	145456	0.657
	Ag	107	**51.580**	**ug/L**	1.779	242651	1.096
	Cd	111	**52.035**	**ug/L**	0.643	61346	0.277
	Cd	114		**ug/L**		144853	0.654
>	In	115		**ug/L**		221331	221330.607
	Sn	120	**60.262**	**ug/L**	2.190	293836	1.325
	Sb	121	**53.667**	**ug/L**	6.738	211474	0.954
	Sb	123		**ug/L**		168000	0.758
	Ba	135		**ug/L**		68486	0.187
	Ba	137	**49.838**	**ug/L**	1.072	119671	0.328
	Ho	165		**ug/L**		80	0.000
>	Lu	175		**ug/L**		365175	365175.476
	Tl	205	**51.474**	**ug/L**	0.723	696296	1.905
	Pb	208	**53.947**	**ug/L**	0.905	1176558	3.219
	Bi	209		**ug/L**		347	-0.000
	Th	232	**55.162**	**ug/L**	1.308	1429815	3.910
	U	238	**53.765**	**ug/L**	0.978	1438529	3.938

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.307				
	Be	9	107.007				
	B	11	103.696				
	Na	23	97.685				
	Mg	24	108.958				
	Al	27	101.633				
	P	31	109.229				
	K	39	91.315				
	Ca	43	103.190				
>	Sc	45		99.0			
	Ti	47	104.488				
	V	51	107.153				
	Cr	52	105.738				
	Cr	53					
	Mn	55	107.431				
	Fe	57	108.114				
	Co	59	102.017				
	Ni	60	101.981				
	Cu	63					
	Cu	65	105.528				
	Zn	66	104.479				
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75	97.476				
	Se	77					
	Se	82	101.680				
	Kr	83					
	Sr	88	102.907				
	Y	89					
	Mo	98	102.495				
	Ag	107	103.160				
	Cd	111	104.070				
	Cd	114					
>	In	115		99.0			
	Sn	120	120.523				
	Sb	121	107.334				
	Sb	123					
	Ba	135					
	Ba	137	99.675				
	Ho	165					
>	Lu	175		99.4			
	Tl	205	102.947				
	Pb	208	107.893				
	Bi	209					
	Th	232	110.323				
	U	238	107.530				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Saturday, December 05, 2009 03:43:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 12.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.153**	**ug/L**	7.571	307	0.001
	Be	9	**0.073**	**ug/L**	15.887	34	0.000
	B	11	**3.163**	**ug/L**	17.669	1424	0.003
	Na	23	**6.167**	**ug/L**	39.723	25357	0.059
	Mg	24	**4.108**	**ug/L**	20.018	11338	0.027
	Al	27	**2.590**	**ug/L**	23.286	15342	0.024
	P	31	**7.508**	**ug/L**	13.284	4542	0.004
	K	39	**10.052**	**ug/L**	18.490	484759	0.138
	Ca	43	**6.999**	**ug/L**	17.215	271	0.000
>	Sc	45		**ug/L**		314096	314095.650
	Ti	47	**0.173**	**ug/L**	6.221	377	0.000
	V	51	**0.242**	**ug/L**	105.715	6783	0.004
	Cr	52	**-0.072**	**ug/L**	64.549	-1442	-0.001
	Cr	53		**ug/L**		66165	0.002
	Mn	55	**0.035**	**ug/L**	45.916	1232	0.001
	Fe	57	**4.208**	**ug/L**	8.909	6728	0.002
	Co	59	**0.062**	**ug/L**	20.896	451	0.001
	Ni	60	**0.065**	**ug/L**	21.719	155	0.000
	Cu	63		**ug/L**		371	0.001
	Cu	65	**0.083**	**ug/L**	26.235	207	0.000
	Zn	66	**0.157**	**ug/L**	19.964	415	0.000
	Zn	67		**ug/L**		6279	0.001
	Zn	68		**ug/L**		924	0.001
>	Ge	74		**ug/L**		364366	364365.801
	As	75	**0.054**	**ug/L**	282.304	205	0.000
	Se	77		**ug/L**		3504	0.000
	Se	82	**0.022**	**ug/L**	641.535	-9	0.000
	Kr	83		**ug/L**		105	-0.000
	Sr	88	**0.049**	**ug/L**	23.904	763	0.003
	Y	89		**ug/L**		47	-0.000
	Mo	98	**0.359**	**ug/L**	11.203	1132	0.005
	Ag	107	**0.064**	**ug/L**	22.653	357	0.001
	Cd	111	**0.053**	**ug/L**	41.196	87	0.000
	Cd	114		**ug/L**		196	0.001
>	In	115		**ug/L**		222678	222678.180
	Sn	120	**2.415**	**ug/L**	7.302	12266	0.053
	Sb	121	**2.130**	**ug/L**	13.300	8975	0.038
	Sb	123		**ug/L**		7138	0.030
	Ba	135		**ug/L**		98	0.000
	Ba	137	**0.053**	**ug/L**	19.840	189	0.000
	Ho	165		**ug/L**		39	-0.000
>	Lu	175		**ug/L**		366395	366395.215
	Tl	205	**0.244**	**ug/L**	17.652	4022	0.009
	Pb	208	**0.226**	**ug/L**	24.890	5941	0.014
	Bi	209		**ug/L**		294	-0.000
	Th	232	**0.824**	**ug/L**	4.329	23305	0.058
	U	238	**0.304**	**ug/L**	15.992	8568	0.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 04:38:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.675

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.850**	**ug/L**	1.999	68742	0.249
	Be	9	**56.200**	**ug/L**	1.543	15415	0.056
	B	11	**107.689**	**ug/L**	4.076	26715	0.095
	Na	23	**4869.724**	**ug/L**	7.435	12824889	46.413
	Mg	24	**5021.295**	**ug/L**	5.303	9093689	32.912
	Al	27	**4817.219**	**ug/L**	0.836	12425704	44.958
	P	31	**5241.512**	**ug/L**	0.721	732748	2.642
	K	39	**4627.687**	**ug/L**	2.497	17926392	63.484
	Ca	43	**4942.719**	**ug/L**	2.302	40219	0.145
>	Sc	45		**ug/L**		276241	276241.453
	Ti	47	**49.518**	**ug/L**	2.905	20349	0.073
	V	51	**51.637**	**ug/L**	3.461	251408	0.892
	Cr	52	**52.169**	**ug/L**	2.699	195519	0.711
	Cr	53		**ug/L**		89339	0.115
	Mn	55	**52.294**	**ug/L**	1.047	336598	1.215
	Fe	57	**5334.610**	**ug/L**	1.840	653553	2.346
	Co	59	**49.480**	**ug/L**	1.457	239544	0.867
	Ni	60	**49.869**	**ug/L**	0.979	52019	0.188
	Cu	63		**ug/L**		129521	0.468
	Cu	65	**51.664**	**ug/L**	2.072	63553	0.230
	Zn	66	**49.017**	**ug/L**	3.326	44712	0.137
	Zn	67		**ug/L**		12831	0.023
	Zn	68		**ug/L**		33421	0.101
>	Ge	74		**ug/L**		324100	324100.463
	As	75	**46.373**	**ug/L**	2.220	44147	0.136
	Se	77		**ug/L**		7394	0.013
	Se	82	**49.035**	**ug/L**	2.877	4576	0.014
	Kr	83		**ug/L**		115	0.000
	Sr	88	**48.162**	**ug/L**	1.971	516562	2.546
	Y	89		**ug/L**		190	0.001
	Mo	98	**47.939**	**ug/L**	1.518	124700	0.614
	Ag	107	**49.879**	**ug/L**	2.551	215097	1.060
	Cd	111	**49.816**	**ug/L**	0.806	53824	0.265
	Cd	114		**ug/L**		128662	0.634
>	In	115		**ug/L**		202844	202843.635
	Sn	120	**49.959**	**ug/L**	1.832	223298	1.099
	Sb	121	**46.314**	**ug/L**	9.947	167462	0.823
	Sb	123		**ug/L**		132949	0.653
	Ba	135		**ug/L**		61565	0.171
	Ba	137	**45.705**	**ug/L**	0.190	108417	0.300
	Ho	165		**ug/L**		91	0.000
>	Lu	175		**ug/L**		360743	360743.002
	Tl	205	**50.008**	**ug/L**	0.374	668276	1.851
	Pb	208	**51.424**	**ug/L**	1.219	1107878	3.069
	Bi	209		**ug/L**		417	0.000
	Th	232	**50.118**	**ug/L**	1.302	1283480	3.553
	U	238	**53.114**	**ug/L**	2.487	1403737	3.891

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.701				
	Be	9	112.399				
	B	11	107.689				
	Na	23	97.394				
	Mg	24	100.426				
	Al	27	95.390				
	P	31	104.830				
	K	39	92.554				
	Ca	43	98.854				
>	Sc	45		84.9			
	Ti	47	99.036				
	V	51	103.275				
	Cr	52	104.337				
	Cr	53					
	Mn	55	104.588				
	Fe	57	106.692				
	Co	59	98.960				
	Ni	60	99.737				
	Cu	63					
	Cu	65	103.328				
	Zn	66	98.034				
	Zn	67					
	Zn	68					
>	Ge	74		88.1			
	As	75	92.746				
	Se	77					
	Se	82	98.070				
	Kr	83					
	Sr	88	96.324				
	Y	89					
	Mo	98	95.878				
	Ag	107	99.757				
	Cd	111	99.633				
	Cd	114					
>	In	115		90.7			
	Sn	120	99.917				
	Sb	121	92.627				
	Sb	123					
	Ba	135					
	Ba	137	91.411				
	Ho	165					
>	Lu	175		98.2			
	Tl	205	100.015				
	Pb	208	102.848				
	Bi	209					
	Th	232	100.237				
	U	238	106.228				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 04:44:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.048**	**ug/L**	5.628	135	0.000
	Be	9	**0.044**	**ug/L**	21.979	22	0.000
	B	11	**3.394**	**ug/L**	16.213	1324	0.003
	Na	23	**1.014**	**ug/L**	100.846	8669	0.010
	Mg	24	**-0.120**	**ug/L**	549.825	2334	-0.001
	Al	27	**1.070**	**ug/L**	17.342	9670	0.010
	P	31	**4.174**	**ug/L**	37.874	3566	0.002
	K	39	**16.585**	**ug/L**	51.399	457253	0.228
	Ca	43	**4.590**	**ug/L**	59.187	221	0.000
>	Sc	45		**ug/L**		279579	279579.140
	Ti	47	**0.134**	**ug/L**	59.967	319	0.000
	V	51	**0.250**	**ug/L**	23.475	6099	0.004
	Cr	52	**-0.038**	**ug/L**	169.419	-1157	-0.001
	Cr	53		**ug/L**		56733	-0.006
	Mn	55	**0.030**	**ug/L**	9.083	1064	0.001
	Fe	57	**5.253**	**ug/L**	20.816	6115	0.002
	Co	59	**0.013**	**ug/L**	23.099	163	0.000
	Ni	60	**0.030**	**ug/L**	5.695	101	0.000
	Cu	63		**ug/L**		189	0.000
	Cu	65	**0.014**	**ug/L**	10.528	98	0.000
	Zn	66	**-0.010**	**ug/L**	166.663	223	-0.000
	Zn	67		**ug/L**		4898	-0.002
	Zn	68		**ug/L**		605	-0.000
>	Ge	74		**ug/L**		332786	332786.420
	As	75	**0.109**	**ug/L**	304.216	240	0.000
	Se	77		**ug/L**		3021	-0.000
	Se	82	**-0.175**	**ug/L**	103.504	-27	-0.000
	Kr	83		**ug/L**		101	0.000
	Sr	88	**0.010**	**ug/L**	14.257	285	0.001
	Y	89		**ug/L**		65	0.000
	Mo	98	**0.104**	**ug/L**	26.890	380	0.001
	Ag	107	**0.014**	**ug/L**	13.749	111	0.000
	Cd	111	**0.018**	**ug/L**	31.640	43	0.000
	Cd	114		**ug/L**		82	0.000
>	In	115		**ug/L**		208746	208745.770
	Sn	120	**0.473**	**ug/L**	14.260	2580	0.010
	Sb	121	**1.206**	**ug/L**	18.865	4981	0.021
	Sb	123		**ug/L**		4022	0.017
	Ba	135		**ug/L**		48	0.000
	Ba	137	**0.006**	**ug/L**	66.946	77	0.000
	Ho	165		**ug/L**		45	0.000
>	Lu	175		**ug/L**		368604	368603.926
	Tl	205	**0.130**	**ug/L**	19.964	2493	0.005
	Pb	208	**0.017**	**ug/L**	11.052	1354	0.001
	Bi	209		**ug/L**		332	-0.000
	Th	232	**0.252**	**ug/L**	12.191	8491	0.018
	U	238	**0.027**	**ug/L**	21.121	1152	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		85.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 05:34:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.684

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.696**	ug/L	1.490	71287	0.243
	Be	9	**53.305**	ug/L	2.182	15498	0.053
	B	11	**102.608**	ug/L	1.636	27007	0.090
	Na	23	**4903.533**	ug/L	0.506	13692562	46.735
	Mg	24	**6002.867**	ug/L	2.176	11524591	39.346
	Al	27	**4862.918**	ug/L	4.870	13298926	45.384
	P	31	**5283.363**	ug/L	1.151	782978	2.663
	K	39	**4829.137**	ug/L	1.557	19810931	66.248
	Ca	43	**5018.657**	ug/L	1.455	43295	0.147
>	Sc	45		ug/L		292854	292853.693
	Ti	47	**50.562**	ug/L	0.909	22018	0.074
	V	51	**53.533**	ug/L	3.087	276055	0.925
	Cr	52	**53.214**	ug/L	3.170	211455	0.726
	Cr	53		ug/L		92412	0.107
	Mn	55	**53.277**	ug/L	1.250	363516	1.238
	Fe	57	**5450.161**	ug/L	0.915	707638	2.397
	Co	59	**52.132**	ug/L	1.315	267560	0.913
	Ni	60	**52.374**	ug/L	0.941	57916	0.198
	Cu	63		ug/L		141140	0.481
	Cu	65	**53.192**	ug/L	1.184	69375	0.237
	Zn	66	**50.327**	ug/L	1.388	49311	0.141
	Zn	67		ug/L		13344	0.022
	Zn	68		ug/L		36293	0.102
>	Ge	74		ug/L		348053	348052.722
	As	75	**46.394**	ug/L	0.595	47448	0.136
	Se	77		ug/L		7951	0.013
	Se	82	**50.222**	ug/L	2.905	5036	0.015
	Kr	83		ug/L		110	0.000
	Sr	88	**49.273**	ug/L	1.290	557786	2.604
	Y	89		ug/L		316	0.001
	Mo	98	**49.220**	ug/L	1.560	135146	0.631
	Ag	107	**50.184**	ug/L	1.780	228412	1.067
	Cd	111	**50.603**	ug/L	1.337	57709	0.269
	Cd	114		ug/L		135299	0.632
>	In	115		ug/L		214117	214116.913
	Sn	120	**50.030**	ug/L	1.713	236013	1.100
	Sb	121	**46.558**	ug/L	10.132	177710	0.827
	Sb	123		ug/L		141215	0.657
	Ba	135		ug/L		65597	0.178
	Ba	137	**47.784**	ug/L	1.843	115546	0.314
	Ho	165		ug/L		102	0.000
>	Lu	175		ug/L		367804	367803.711
	Tl	205	**50.301**	ug/L	1.232	685286	1.861
	Pb	208	**52.250**	ug/L	1.960	1147506	3.118
	Bi	209		ug/L		367	-0.000
	Th	232	**50.158**	ug/L	2.573	1309378	3.555
	U	238	**52.913**	ug/L	1.852	1425887	3.876

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	103.392				
|	Be	9	106.610				
|	B	11	102.608				
|	Na	23	98.071				
|	Mg	24	120.057				
|	Al	27	96.295				
|	P	31	105.667				
|	K	39	96.583				
|	Ca	43	100.373				
|>	Sc	45		90.0			
|	Ti	47	101.125				
|	V	51	107.067				
|	Cr	52	106.429				
|	Cr	53					
|	Mn	55	106.554				
|	Fe	57	109.003				
|	Co	59	104.265				
|	Ni	60	104.748				
|	Cu	63					
⌊	Cu	65	106.384				
⌈	Zn	66	100.654				
|	Zn	67					
|	Zn	68					
|>	Ge	74		94.6			
|	As	75	92.787				
|	Se	77					
|	Se	82	100.445				
⌊	Kr	83					
⌈	Sr	88	98.545				
|	Y	89					
|	Mo	98	98.441				
|	Ag	107	100.369				
|	Cd	111	101.205				
|	Cd	114					
|>	In	115		95.7			
|	Sn	120	100.061				
|	Sb	121	93.117				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	95.569				
|	Ho	165					
|>	Lu	175		100.1			
|	Tl	205	100.603				
|	Pb	208	104.499				
|	Bi	209					
|	Th	232	100.317				
⌊	U	238	105.825				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 05:40:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.685

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.029**	**ug/L**	44.690	113	0.000
	Be	9	**0.041**	**ug/L**	45.890	22	0.000
	B	11	**2.657**	**ug/L**	22.350	1178	0.002
	Na	23	**2.212**	**ug/L**	77.112	12339	0.021
	Mg	24	**0.359**	**ug/L**	92.092	3334	0.002
	Al	27	**0.454**	**ug/L**	329.332	8336	0.004
	P	31	**3.821**	**ug/L**	18.252	3634	0.002
	K	39	**0.206**	**ug/L**	4680.265	406053	0.003
	Ca	43	**6.446**	**ug/L**	55.421	244	0.000
>	Sc	45		**ug/L**		288410	288409.997
	Ti	47	**0.223**	**ug/L**	24.477	367	0.000
	V	51	**0.158**	**ug/L**	183.019	5843	0.003
	Cr	52	**0.077**	**ug/L**	220.020	-741	0.001
	Cr	53		**ug/L**		56675	-0.012
	Mn	55	**0.090**	**ug/L**	18.231	1502	0.002
	Fe	57	**5.220**	**ug/L**	24.247	6307	0.002
	Co	59	**0.017**	**ug/L**	26.559	187	0.000
	Ni	60	**0.020**	**ug/L**	36.139	93	0.000
	Cu	63		**ug/L**		233	0.000
	Cu	65	**0.024**	**ug/L**	42.124	115	0.000
	Zn	66	**-0.039**	**ug/L**	26.672	204	-0.000
	Zn	67		**ug/L**		4786	-0.003
	Zn	68		**ug/L**		575	-0.000
>	Ge	74		**ug/L**		345254	345253.604
	As	75	**0.106**	**ug/L**	67.301	245	0.000
	Se	77		**ug/L**		3020	-0.001
	Se	82	**0.028**	**ug/L**	426.250	-8	0.000
	Kr	83		**ug/L**		97	-0.000
	Sr	88	**0.011**	**ug/L**	24.874	312	0.001
	Y	89		**ug/L**		84	0.000
	Mo	98	**0.093**	**ug/L**	28.653	365	0.001
	Ag	107	**0.015**	**ug/L**	31.500	123	0.000
	Cd	111	**0.016**	**ug/L**	24.637	42	0.000
	Cd	114		**ug/L**		84	0.000
>	In	115		**ug/L**		216744	216743.639
	Sn	120	**0.389**	**ug/L**	16.579	2282	0.009
	Sb	121	**1.082**	**ug/L**	20.808	4695	0.019
	Sb	123		**ug/L**		3600	0.015
	Ba	135		**ug/L**		54	0.000
	Ba	137	**0.013**	**ug/L**	5.579	92	0.000
	Ho	165		**ug/L**		39	-0.000
>	Lu	175		**ug/L**		370019	370018.765
	Tl	205	**0.111**	**ug/L**	30.588	2237	0.004
	Pb	208	**0.021**	**ug/L**	27.601	1452	0.001
	Bi	209		**ug/L**		325	-0.000
	Th	232	**0.235**	**ug/L**	17.350	8064	0.017
	U	238	**0.025**	**ug/L**	33.856	1094	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 06:23:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.692

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.764**	ug/L	1.305	66893	0.258
	Be	9	**57.929**	ug/L	1.753	14916	0.057
	B	11	**108.525**	ug/L	1.125	25272	0.096
	Na	23	**5222.250**	ug/L	3.523	12910874	49.773
	Mg	24	**4888.939**	ug/L	2.309	8314885	32.044
	Al	27	**4827.205**	ug/L	11.045	11688186	45.051
	P	31	**5251.882**	ug/L	2.836	689278	2.647
	K	39	**4375.393**	ug/L	1.045	15931339	60.023
	Ca	43	**4931.862**	ug/L	0.753	37684	0.145
>	Sc	45		ug/L		259380	259379.985
	Ti	47	**49.740**	ug/L	2.618	19182	0.073
	V	51	**51.265**	ug/L	1.990	234316	0.886
	Cr	52	**50.965**	ug/L	1.484	179325	0.695
	Cr	53		ug/L		80036	0.100
	Mn	55	**52.484**	ug/L	1.532	317149	1.220
	Fe	57	**5398.651**	ug/L	2.426	620749	2.374
	Co	59	**50.193**	ug/L	1.805	228120	0.879
	Ni	60	**49.900**	ug/L	2.957	48866	0.188
	Cu	63		ug/L		121025	0.466
	Cu	65	**50.416**	ug/L	0.996	58242	0.224
	Zn	66	**49.656**	ug/L	2.267	42333	0.139
	Zn	67		ug/L		11802	0.022
	Zn	68		ug/L		30818	0.100
>	Ge	74		ug/L		302922	302921.955
	As	75	**45.643**	ug/L	1.049	40624	0.134
	Se	77		ug/L		6454	0.012
	Se	82	**50.322**	ug/L	2.740	4392	0.015
	Kr	83		ug/L		91	0.000
	Sr	88	**48.212**	ug/L	1.327	487151	2.548
	Y	89		ug/L		250	0.001
	Mo	98	**47.973**	ug/L	0.493	117583	0.615
	Ag	107	**49.158**	ug/L	1.331	199711	1.045
	Cd	111	**49.832**	ug/L	1.358	50726	0.265
	Cd	114		ug/L		119820	0.627
>	In	115		ug/L		191133	191133.325
	Sn	120	**50.705**	ug/L	0.713	213520	1.115
	Sb	121	**46.766**	ug/L	10.039	159502	0.831
	Sb	123		ug/L		126470	0.659
	Ba	135		ug/L		58608	0.166
	Ba	137	**44.657**	ug/L	2.069	103837	0.293
	Ho	165		ug/L		85	0.000
>	Lu	175		ug/L		353658	353658.350
	Tl	205	**50.607**	ug/L	1.386	662935	1.873
	Pb	208	**52.083**	ug/L	2.358	1099876	3.108
	Bi	209		ug/L		317	-0.000
	Th	232	**50.493**	ug/L	1.469	1267573	3.579
	U	238	**53.831**	ug/L	2.139	1394705	3.943

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	109.529				
	Be	9	115.857				
	B	11	108.525				
	Na	23	104.445				
	Mg	24	97.779				
	Al	27	95.588				
	P	31	105.038				
	K	39	87.508				
	Ca	43	98.637				
>	Sc	45		79.7			
	Ti	47	99.479				
	V	51	102.530				
	Cr	52	101.929				
	Cr	53					
	Mn	55	104.968				
	Fe	57	107.973				
	Co	59	100.385				
	Ni	60	99.800				
	Cu	63					
	Cu	65	100.832				
	Zn	66	99.312				
	Zn	67					
	Zn	68					
>	Ge	74		82.3			
	As	75	91.286				
	Se	77					
	Se	82	100.643				
	Kr	83					
	Sr	88	96.424				
	Y	89					
	Mo	98	95.946				
	Ag	107	98.315				
	Cd	111	99.664				
	Cd	114					
>	In	115		85.5			
	Sn	120	101.411				
	Sb	121	93.532				
	Sb	123					
	Ba	135					
	Ba	137	89.314				
	Ho	165					
>	Lu	175		96.3			
	Tl	205	101.214				
	Pb	208	104.166				
	Bi	209					
	Th	232	100.987				
	U	238	107.663				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 8	Ba	137	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 06:29:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.693

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	**ug/L**	15.535	100	0.000
	Be	9	**0.041**	**ug/L**	43.779	20	0.000
	B	11	**2.753**	**ug/L**	26.393	1098	0.002
	Na	23	**4.242**	**ug/L**	38.678	16343	0.040
	Mg	24	**0.920**	**ug/L**	168.385	4001	0.006
	Al	27	**1.276**	**ug/L**	139.491	9670	0.012
	P	31	**7.261**	**ug/L**	38.555	3781	0.004
	K	39	**8.894**	**ug/L**	116.746	403666	0.122
	Ca	43	**1.594**	**ug/L**	227.833	185	0.000
>	Sc	45		**ug/L**		264028	264027.913
	Ti	47	**0.262**	**ug/L**	21.057	351	0.000
	V	51	**-0.100**	**ug/L**	435.334	4139	-0.002
	Cr	52	**-0.104**	**ug/L**	72.478	-1325	-0.001
	Cr	53		**ug/L**		51233	-0.014
	Mn	55	**0.126**	**ug/L**	11.095	1595	0.003
	Fe	57	**4.274**	**ug/L**	32.692	5663	0.002
	Co	59	**0.019**	**ug/L**	6.544	179	0.000
	Ni	60	**0.015**	**ug/L**	106.152	81	0.000
	Cu	63		**ug/L**		247	0.000
	Cu	65	**0.018**	**ug/L**	12.694	98	0.000
	Zn	66	**-0.027**	**ug/L**	67.595	195	-0.000
	Zn	67		**ug/L**		4570	-0.002
	Zn	68		**ug/L**		616	-0.000
>	Ge	74		**ug/L**		311952	311951.776
	As	75	**-0.143**	**ug/L**	71.276	-7	-0.000
	Se	77		**ug/L**		2400	-0.002
	Se	82	**-0.137**	**ug/L**	119.966	-21	-0.000
	Kr	83		**ug/L**		93	0.000
	Sr	88	**0.011**	**ug/L**	25.483	280	0.001
	Y	89		**ug/L**		83	0.000
	Mo	98	**0.098**	**ug/L**	35.184	345	0.001
	Ag	107	**0.015**	**ug/L**	14.087	112	0.000
	Cd	111	**0.016**	**ug/L**	5.995	39	0.000
	Cd	114		**ug/L**		74	0.000
>	In	115		**ug/L**		197686	197685.845
	Sn	120	**0.394**	**ug/L**	14.690	2102	0.009
	Sb	121	**1.149**	**ug/L**	21.160	4524	0.020
	Sb	123		**ug/L**		3613	0.016
	Ba	135		**ug/L**		53	0.000
	Ba	137	**0.011**	**ug/L**	38.304	85	0.000
	Ho	165		**ug/L**		42	0.000
>	Lu	175		**ug/L**		357093	357092.754
	Tl	205	**0.110**	**ug/L**	33.828	2148	0.004
	Pb	208	**0.024**	**ug/L**	9.125	1475	0.001
	Bi	209		**ug/L**		277	-0.000
	Th	232	**0.259**	**ug/L**	17.994	8414	0.018
	U	238	**0.028**	**ug/L**	16.514	1123	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		81.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 07:06:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.699

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.149**	**ug/L**	1.620	68555	0.259
	Be	9	**57.821**	**ug/L**	2.854	15155	0.057
	B	11	**109.310**	**ug/L**	2.660	25907	0.096
	Na	23	**4906.560**	**ug/L**	7.329	12340242	46.764
	Mg	24	**5266.264**	**ug/L**	13.438	9116596	34.518
	Al	27	**5235.395**	**ug/L**	2.083	12912466	48.861
	P	31	**5327.683**	**ug/L**	0.288	711930	2.685
	K	39	**4481.359**	**ug/L**	5.684	16617684	61.477
	Ca	43	**5070.137**	**ug/L**	2.275	39449	0.149
>	Sc	45		**ug/L**		264055	264054.803
	Ti	47	**51.309**	**ug/L**	4.556	20133	0.075
	V	51	**52.670**	**ug/L**	3.730	244860	0.910
	Cr	52	**53.032**	**ug/L**	3.197	189935	0.723
	Cr	53		**ug/L**		81214	0.099
	Mn	55	**53.774**	**ug/L**	3.959	330780	1.250
	Fe	57	**5398.743**	**ug/L**	2.474	631997	2.374
	Co	59	**51.052**	**ug/L**	1.939	236179	0.894
	Ni	60	**50.803**	**ug/L**	0.758	50663	0.192
	Cu	63		**ug/L**		127160	0.481
	Cu	65	**52.573**	**ug/L**	2.581	61807	0.234
	Zn	66	**49.910**	**ug/L**	1.582	43747	0.140
	Zn	67		**ug/L**		12111	0.022
	Zn	68		**ug/L**		32502	0.102
>	Ge	74		**ug/L**		311314	311314.455
	As	75	**47.404**	**ug/L**	0.787	43366	0.139
	Se	77		**ug/L**		6464	0.011
	Se	82	**50.942**	**ug/L**	0.913	4569	0.015
	Kr	83		**ug/L**		110	0.000
	Sr	88	**48.827**	**ug/L**	0.747	502847	2.581
	Y	89		**ug/L**		299	0.001
	Mo	98	**48.344**	**ug/L**	1.029	120744	0.619
	Ag	107	**49.946**	**ug/L**	1.491	206811	1.062
	Cd	111	**50.570**	**ug/L**	0.584	52464	0.269
	Cd	114		**ug/L**		124100	0.637
>	In	115		**ug/L**		194771	194770.825
	Sn	120	**51.456**	**ug/L**	1.806	220793	1.132
	Sb	121	**47.443**	**ug/L**	11.499	164727	0.843
	Sb	123		**ug/L**		130663	0.669
	Ba	135		**ug/L**		60386	0.171
	Ba	137	**45.880**	**ug/L**	0.929	106348	0.302
	Ho	165		**ug/L**		103	0.000
>	Lu	175		**ug/L**		352530	352530.376
	Tl	205	**51.765**	**ug/L**	1.396	675918	1.916
	Pb	208	**52.577**	**ug/L**	0.533	1106925	3.137
	Bi	209		**ug/L**		341	-0.000
	Th	232	**51.192**	**ug/L**	3.103	1280750	3.629
	U	238	**53.918**	**ug/L**	1.377	1392522	3.949

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.298				
	Be	9	115.643				
	B	11	109.310				
	Na	23	98.131				
	Mg	24	105.325				
	Al	27	103.671				
	P	31	106.554				
	K	39	89.627				
	Ca	43	101.403				
>	Sc	45		81.2			
	Ti	47	102.617				
	V	51	105.340				
	Cr	52	106.064				
	Cr	53					
	Mn	55	107.548				
	Fe	57	107.975				
	Co	59	102.105				
	Ni	60	101.606				
	Cu	63					
	Cu	65	105.146				
	Zn	66	99.820				
	Zn	67					
	Zn	68					
>	Ge	74		84.6			
	As	75	94.808				
	Se	77					
	Se	82	101.884				
	Kr	83					
	Sr	88	97.654				
	Y	89					
	Mo	98	96.688				
	Ag	107	99.893				
	Cd	111	101.140				
	Cd	114					
>	In	115		87.1			
	Sn	120	102.912				
	Sb	121	94.885				
	Sb	123					
	Ba	135					
	Ba	137	91.760				
	Ho	165					
>	Lu	175		96.0			
	Tl	205	103.530				
	Pb	208	105.154				
	Bi	209					
	Th	232	102.384				
	U	238	107.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	CCV is out of limits (+/- 10%)
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 07:12:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.700

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.023**	ug/L	30.318	100	0.000
	Be	9	**0.020**	ug/L	61.049	15	0.000
	B	11	**2.674**	ug/L	23.866	1126	0.002
	Na	23	**3.090**	ug/L	46.022	14007	0.029
	Mg	24	**0.256**	ug/L	5.076	3000	0.002
	Al	27	**-0.170**	ug/L	347.673	6335	-0.002
	P	31	**5.820**	ug/L	13.237	3743	0.003
	K	39	**12.703**	ug/L	66.968	434528	0.174
	Ca	43	**1.353**	ug/L	323.516	191	0.000
>	Sc	45		ug/L		275154	275154.062
	Ti	47	**0.266**	ug/L	29.793	367	0.000
	V	51	**-0.135**	ug/L	166.461	4171	-0.002
	Cr	52	**-0.052**	ug/L	76.021	-1185	-0.001
	Cr	53		ug/L		52244	-0.018
	Mn	55	**0.087**	ug/L	12.775	1413	0.002
	Fe	57	**3.432**	ug/L	14.992	5800	0.002
	Co	59	**0.014**	ug/L	40.615	164	0.000
	Ni	60	**0.015**	ug/L	69.744	84	0.000
	Cu	63		ug/L		247	0.000
	Cu	65	**0.015**	ug/L	28.098	98	0.000
	Zn	66	**-0.017**	ug/L	35.618	211	-0.000
	Zn	67		ug/L		4681	-0.002
	Zn	68		ug/L		595	-0.000
>	Ge	74		ug/L		322731	322731.006
	As	75	**-0.159**	ug/L	111.724	-22	-0.000
	Se	77		ug/L		2600	-0.001
	Se	82	**-0.005**	ug/L	1841.843	-10	-0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	**0.012**	ug/L	34.372	297	0.001
	Y	89		ug/L		75	0.000
	Mo	98	**0.096**	ug/L	30.109	350	0.001
	Ag	107	**0.013**	ug/L	41.846	106	0.000
	Cd	111	**0.030**	ug/L	12.815	54	0.000
	Cd	114		ug/L		86	0.000
>	In	115		ug/L		203252	203252.473
	Sn	120	**0.391**	ug/L	14.389	2148	0.009
	Sb	121	**1.125**	ug/L	22.148	4566	0.020
	Sb	123		ug/L		3598	0.016
	Ba	135		ug/L		57	0.000
	Ba	137	**0.007**	ug/L	87.275	75	0.000
	Ho	165		ug/L		38	-0.000
>	Lu	175		ug/L		360284	360283.717
	Tl	205	**0.115**	ug/L	31.082	2232	0.004
	Pb	208	**0.025**	ug/L	14.324	1499	0.001
	Bi	209		ug/L		275	-0.000
	Th	232	**0.247**	ug/L	16.506	8169	0.018
	U	238	**0.025**	ug/L	23.317	1063	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		84.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 07:18:48
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978333.701

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.076	ug/L	13.263	186	0.000
	Be	9	0.015	ug/L	164.326	15	0.000
	B	11	1.179	ug/L	10.398	840	0.001
	Na	23	3.765	ug/L	36.521	17344	0.036
	Mg	24	-0.903	ug/L	1.374	1000	-0.006
	Al	27	-1.346	ug/L	38.308	3667	-0.013
	P	31	3.451	ug/L	51.913	3754	0.002
	K	39	9.770	ug/L	35.450	466161	0.134
	Ca	43	21.676	ug/L	9.353	391	0.001
>	Sc	45		ug/L		302722	302721.671
	Ti	47	0.674	ug/L	5.493	586	0.001
	V	51	-2.438	ug/L	84.274	-7546	-0.042
	Cr	52	-1.450	ug/L	14.710	-7065	-0.020
	Cr	53		ug/L		222197	0.527
	Mn	55	0.196	ug/L	3.898	2319	0.005
	Fe	57	3.328	ug/L	54.979	6365	0.001
	Co	59	0.001	ug/L	243.566	109	0.000
	Ni	60	0.024	ug/L	48.510	102	0.000
	Cu	63		ug/L		283	0.000
	Cu	65	0.028	ug/L	41.735	125	0.000
	Zn	66	0.993	ug/L	7.224	1137	0.003
	Zn	67		ug/L		30480	0.077
	Zn	68		ug/L		2685	0.006
>	Ge	74		ug/L		326630	326629.610
	As	75	-0.222	ug/L	186.772	-81	-0.001
	Se	77		ug/L		15105	0.037
	Se	82	0.103	ug/L	164.798	-0	0.000
	Kr	83		ug/L		81	-0.000
	Sr	88	0.014	ug/L	4.687	314	0.001
	Y	89		ug/L		58	0.000
	Mo	98	0.003	ug/L	67.762	103	0.000
	Ag	107	0.002	ug/L	52.475	59	0.000
	Cd	111	0.012	ug/L	93.401	34	0.000
	Cd	114		ug/L		22	-0.000
>	In	115		ug/L		197388	197387.639
	Sn	120	1.246	ug/L	26.841	5800	0.027
	Sb	121	0.536	ug/L	31.358	2365	0.010
	Sb	123		ug/L		1827	0.007
	Ba	135		ug/L		36	0.000
	Ba	137	-0.001	ug/L	153.767	52	-0.000
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		332931	332931.155
	Tl	205	0.006	ug/L	88.321	722	0.000
	Pb	208	-0.010	ug/L	25.396	688	-0.001
	Bi	209		ug/L		320	-0.000
	Th	232	0.289	ug/L	21.629	8539	0.020
	U	238	-0.007	ug/L	18.225	201	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 07:24:59
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978334.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.474**	**ug/L**	3.162	74411	0.247
	Be	9	**56.061**	**ug/L**	2.016	16768	0.056
	B	11	**111.074**	**ug/L**	3.758	30024	0.098
	Na	23	**1925.567**	**ug/L**	10.301	5526532	18.352
	Mg	24	**2107.333**	**ug/L**	5.817	4160306	13.812
	Al	27	**1903.180**	**ug/L**	7.131	5354381	17.762
	P	31	**2165.864**	**ug/L**	3.879	331920	1.092
	K	39	**2108.461**	**ug/L**	12.656	9149323	28.925
	Ca	43	**2094.955**	**ug/L**	2.510	18704	0.061
>	Sc	45		**ug/L**		301309	301308.535
	Ti	47	**46.342**	**ug/L**	2.914	20778	0.068
	V	51	**46.689**	**ug/L**	5.039	248251	0.807
	Cr	52	**47.962**	**ug/L**	4.193	195858	0.654
	Cr	53		**ug/L**		265005	0.672
	Mn	55	**51.145**	**ug/L**	3.601	358878	1.189
	Fe	57	**2138.970**	**ug/L**	3.653	289170	0.941
	Co	59	**49.887**	**ug/L**	3.980	263244	0.874
	Ni	60	**51.082**	**ug/L**	4.304	58077	0.193
	Cu	63		**ug/L**		137053	0.455
	Cu	65	**49.625**	**ug/L**	4.325	66540	0.221
	Zn	66	**53.981**	**ug/L**	3.127	48708	0.151
	Zn	67		**ug/L**		42557	0.116
	Zn	68		**ug/L**		36914	0.113
>	Ge	74		**ug/L**		320725	320725.138
	As	75	**49.095**	**ug/L**	2.983	46248	0.144
	Se	77		**ug/L**		19317	0.051
	Se	82	**54.433**	**ug/L**	2.005	5032	0.016
	Kr	83		**ug/L**		106	0.000
	Sr	88	**53.598**	**ug/L**	1.729	537157	2.833
	Y	89		**ug/L**		306	0.001
	Mo	98	**50.341**	**ug/L**	1.578	122403	0.645
	Ag	107	**52.552**	**ug/L**	2.363	211748	1.117
	Cd	111	**52.862**	**ug/L**	1.165	53377	0.281
	Cd	114		**ug/L**		127478	0.672
>	In	115		**ug/L**		189582	189581.558
	Sn	120	**55.127**	**ug/L**	1.519	230245	1.213
	Sb	121	**60.838**	**ug/L**	0.683	205394	1.081
	Sb	123		**ug/L**		162601	0.856
	Ba	135		**ug/L**		59727	0.179
	Ba	137	**47.639**	**ug/L**	2.297	104322	0.313
	Ho	165		**ug/L**		75	0.000
>	Lu	175		**ug/L**		333082	333081.650
	Tl	205	**49.737**	**ug/L**	0.550	613733	1.841
	Pb	208	**53.406**	**ug/L**	1.363	1062256	3.187
	Bi	209		**ug/L**		880264	2.642
	Th	232	**52.488**	**ug/L**	0.140	1240960	3.721
	U	238	**56.093**	**ug/L**	2.189	1368663	4.109

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 07:37:19
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978335.704

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.069**	ug/L	9.101	173	0.000
	Be	9	**0.010**	ug/L	56.584	14	0.000
	B	11	**1.350**	ug/L	13.214	871	0.001
	Na	23	**5.759**	ug/L	51.495	22686	0.055
	Mg	24	**-0.728**	ug/L	80.710	1333	-0.005
	Al	27	**0.124**	ug/L	171.089	7669	0.001
	P	31	**11.971**	ug/L	10.798	4974	0.006
	K	39	**14.797**	ug/L	18.999	478898	0.203
	Ca	43	**26.350**	ug/L	5.463	425	0.001
>	Sc	45		ug/L		297730	297730.141
	Ti	47	**0.518**	ug/L	11.417	508	0.001
	V	51	**-3.360**	ug/L	41.851	-12024	-0.058
	Cr	52	**-1.675**	ug/L	7.990	-7871	-0.023
	Cr	53		ug/L		246505	0.620
	Mn	55	**0.216**	ug/L	1.474	2424	0.005
	Fe	57	**5.615**	ug/L	21.587	6562	0.002
	Co	59	**-0.004**	ug/L	13.434	84	-0.000
	Ni	60	**0.034**	ug/L	29.228	112	0.000
	Cu	63		ug/L		380	0.001
	Cu	65	**0.083**	ug/L	12.918	196	0.000
	Zn	66	**1.040**	ug/L	4.247	1130	0.003
	Zn	67		ug/L		36507	0.100
	Zn	68		ug/L		2998	0.008
>	Ge	74		ug/L		312562	312561.671
	As	75	**-0.398**	ug/L	59.578	-241	-0.001
	Se	77		ug/L		15683	0.041
	Se	82	**-0.068**	ug/L	15.756	-15	-0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	**0.018**	ug/L	21.766	342	0.001
	Y	89		ug/L		47	-0.000
	Mo	98	**-0.004**	ug/L	54.280	83	-0.000
	Ag	107	**0.009**	ug/L	9.158	82	0.000
	Cd	111	**-0.004**	ug/L	204.056	17	-0.000
	Cd	114		ug/L		31	-0.000
>	In	115		ug/L		191581	191581.401
	Sn	120	**0.281**	ug/L	5.906	1558	0.006
	Sb	121	**0.107**	ug/L	20.901	833	0.002
	Sb	123		ug/L		647	0.001
	Ba	135		ug/L		74	0.000
	Ba	137	**0.027**	ug/L	21.823	113	0.000
	Ho	165		ug/L		44	0.000
>	Lu	175		ug/L		332090	332090.331
	Tl	205	**0.163**	ug/L	7.474	2647	0.006
	Pb	208	**0.026**	ug/L	11.067	1403	0.002
	Bi	209		ug/L		237	-0.000
	Th	232	**0.267**	ug/L	20.239	7989	0.019
	U	238	**-0.010**	ug/L	1.368	130	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 07:43:29
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978336.705

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.826**	**ug/L**	1.329	75150	0.253
	Be	9	**56.678**	**ug/L**	1.865	16686	0.056
	B	11	**116.608**	**ug/L**	4.909	30994	0.103
	Na	23	**2050.666**	**ug/L**	5.051	5802728	19.545
	Mg	24	**2031.353**	**ug/L**	4.667	3951288	13.314
	Al	27	**1963.631**	**ug/L**	5.634	5442883	18.326
	P	31	**2113.617**	**ug/L**	0.350	319061	1.065
	K	39	**1834.666**	**ug/L**	9.096	7875514	25.169
	Ca	43	**2091.185**	**ug/L**	4.741	18373	0.061
>	Sc	45		**ug/L**		296524	296524.133
	Ti	47	**46.891**	**ug/L**	2.244	20692	0.069
	V	51	**45.784**	**ug/L**	4.016	239752	0.791
	Cr	52	**50.085**	**ug/L**	2.275	201424	0.683
	Cr	53		**ug/L**		273515	0.714
	Mn	55	**51.725**	**ug/L**	1.348	357367	1.202
	Fe	57	**2213.557**	**ug/L**	2.416	294424	0.974
	Co	59	**50.179**	**ug/L**	2.036	260713	0.879
	Ni	60	**50.825**	**ug/L**	1.450	56903	0.192
	Cu	63		**ug/L**		135466	0.456
	Cu	65	**49.478**	**ug/L**	1.094	65341	0.220
	Zn	66	**53.193**	**ug/L**	2.232	46714	0.149
	Zn	67		**ug/L**		45180	0.128
	Zn	68		**ug/L**		35314	0.111
>	Ge	74		**ug/L**		312049	312048.794
	As	75	**77.830**	**ug/L**	3.717	71274	0.228
	Se	77		**ug/L**		17244	0.046
	Se	82	**20.603**	**ug/L**	2.149	1847	0.006
	Kr	83		**ug/L**		113	0.000
	Sr	88	**54.495**	**ug/L**	0.852	544589	2.880
	Y	89		**ug/L**		85	0.000
	Mo	98	**50.668**	**ug/L**	2.361	122797	0.649
	Ag	107	**52.827**	**ug/L**	1.717	212261	1.123
	Cd	111	**10.927**	**ug/L**	1.695	11018	0.058
	Cd	114		**ug/L**		25001	0.132
>	In	115		**ug/L**		189021	189021.386
	Sn	120	**55.844**	**ug/L**	1.668	232521	1.228
	Sb	121	**235.133**	**ug/L**	0.868	790160	4.178
	Sb	123		**ug/L**		639056	3.379
	Ba	135		**ug/L**		60386	0.180
	Ba	137	**48.137**	**ug/L**	2.744	106038	0.316
	Ho	165		**ug/L**		240	0.001
>	Lu	175		**ug/L**		335064	335063.825
	Tl	205	**96.512**	**ug/L**	0.770	1197287	3.572
	Pb	208	**43.612**	**ug/L**	0.743	872841	2.602
	Bi	209		**ug/L**		495	0.000
	Th	232	**55.066**	**ug/L**	0.733	1309533	3.903
	U	238	**57.627**	**ug/L**	2.013	1414520	4.221

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 07:49:41
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978337.706

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	**ug/L**	75.472	87	0.000
	Be	9	**0.030**	**ug/L**	78.276	18	0.000
	B	11	**3.012**	**ug/L**	17.136	1183	0.003
	Na	23	**2.186**	**ug/L**	63.165	11338	0.021
	Mg	24	**-1.034**	**ug/L**	31.220	667	-0.007
	Al	27	**-1.309**	**ug/L**	16.609	3334	-0.012
	P	31	**5.214**	**ug/L**	9.524	3578	0.003
	K	39	**11.539**	**ug/L**	28.981	420781	0.158
	Ca	43	**17.241**	**ug/L**	13.964	313	0.001
>	Sc	45		**ug/L**		269039	269038.703
	Ti	47	**0.258**	**ug/L**	8.504	356	0.000
	V	51	**0.112**	**ug/L**	600.727	5185	0.002
	Cr	52	**-0.743**	**ug/L**	5.523	-3698	-0.010
	Cr	53		**ug/L**		104933	0.182
	Mn	55	**0.062**	**ug/L**	7.989	1226	0.001
	Fe	57	**0.739**	**ug/L**	297.514	5348	0.000
	Co	59	**0.002**	**ug/L**	211.496	102	0.000
	Ni	60	**0.018**	**ug/L**	66.933	85	0.000
	Cu	63		**ug/L**		388	0.001
	Cu	65	**0.088**	**ug/L**	14.728	183	0.000
	Zn	66	**0.429**	**ug/L**	11.110	589	0.001
	Zn	67		**ug/L**		10754	0.018
	Zn	68		**ug/L**		1381	0.002
>	Ge	74		**ug/L**		309597	309596.511
	As	75	**0.224**	**ug/L**	154.882	325	0.001
	Se	77		**ug/L**		5548	0.008
	Se	82	**-0.168**	**ug/L**	153.703	-24	-0.000
	Kr	83		**ug/L**		99	0.000
	Sr	88	**0.006**	**ug/L**	16.143	229	0.000
	Y	89		**ug/L**		49	-0.000
	Mo	98	**0.032**	**ug/L**	24.990	176	0.000
	Ag	107	**0.004**	**ug/L**	38.739	63	0.000
	Cd	111	**0.001**	**ug/L**	483.564	23	0.000
	Cd	114		**ug/L**		41	-0.000
>	In	115		**ug/L**		195783	195783.457
	Sn	120	**0.293**	**ug/L**	1.896	1645	0.006
	Sb	121	**0.658**	**ug/L**	15.029	2774	0.012
	Sb	123		**ug/L**		2185	0.009
	Ba	135		**ug/L**		71	0.000
	Ba	137	**0.022**	**ug/L**	25.138	108	0.000
	Ho	165		**ug/L**		47	0.000
>	Lu	175		**ug/L**		351452	351451.990
	Tl	205	**1.267**	**ug/L**	23.890	17137	0.047
	Pb	208	**0.013**	**ug/L**	7.298	1224	0.001
	Bi	209		**ug/L**		288	-0.000
	Th	232	**0.210**	**ug/L**	16.907	7040	0.015
	U	238	**0.003**	**ug/L**	14.631	479	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		82.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 08:02:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.249**	ug/L	0.829	68705	0.250
	Be	9	**56.325**	ug/L	1.034	15323	0.056
	B	11	**105.974**	ug/L	2.611	26081	0.093
	Na	23	**5113.312**	ug/L	5.666	13356436	48.735
	Mg	24	**5227.783**	ug/L	1.615	9391468	34.265
	Al	27	**5147.637**	ug/L	2.947	13172073	48.042
	P	31	**5238.448**	ug/L	0.988	726386	2.640
	K	39	**4422.767**	ug/L	4.189	17013205	60.673
	Ca	43	**4920.187**	ug/L	1.171	39718	0.144
>	Sc	45		ug/L		274010	274009.674
	Ti	47	**49.100**	ug/L	2.577	20011	0.072
	V	51	**51.034**	ug/L	3.178	246450	0.882
	Cr	52	**50.565**	ug/L	4.764	187932	0.690
	Cr	53		ug/L		110660	0.195
	Mn	55	**52.352**	ug/L	3.091	334215	1.217
	Fe	57	**5243.039**	ug/L	2.542	637115	2.306
	Co	59	**49.376**	ug/L	3.405	237083	0.865
	Ni	60	**49.730**	ug/L	1.204	51457	0.188
	Cu	63		ug/L		127977	0.466
	Cu	65	**51.580**	ug/L	1.650	62937	0.229
	Zn	66	**49.626**	ug/L	1.898	44784	0.139
	Zn	67		ug/L		15634	0.032
	Zn	68		ug/L		33492	0.102
>	Ge	74		ug/L		320532	320532.294
	As	75	**46.148**	ug/L	3.519	43471	0.135
	Se	77		ug/L		7906	0.015
	Se	82	**50.277**	ug/L	2.704	4643	0.015
	Kr	83		ug/L		98	0.000
	Sr	88	**49.254**	ug/L	0.313	516792	2.603
	Y	89		ug/L		163	0.001
	Mo	98	**48.149**	ug/L	1.785	122513	0.617
	Ag	107	**49.779**	ug/L	2.535	209970	1.058
	Cd	111	**50.744**	ug/L	2.887	53620	0.270
	Cd	114		ug/L		126834	0.639
>	In	115		ug/L		198436	198435.927
	Sn	120	**49.928**	ug/L	2.977	218248	1.098
	Sb	121	**46.236**	ug/L	10.067	163636	0.822
	Sb	123		ug/L		130797	0.657
	Ba	135		ug/L		60641	0.171
	Ba	137	**45.839**	ug/L	1.338	106559	0.301
	Ho	165		ug/L		88	0.000
>	Lu	175		ug/L		353540	353539.945
	Tl	205	**50.163**	ug/L	2.971	656857	1.856
	Pb	208	**52.146**	ug/L	0.638	1101016	3.112
	Bi	209		ug/L		327	-0.000
	Th	232	**49.480**	ug/L	2.526	1241625	3.507
	U	238	**53.968**	ug/L	1.569	1397845	3.953

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	106.499				
	Be	9	112.650				
	B	11	105.974				
	Na	23	102.266				
	Mg	24	104.556				
	Al	27	101.933				
	P	31	104.769				
	K	39	88.455				
	Ca	43	98.404				
>	Sc	45		84.2			
	Ti	47	98.200				
	V	51	102.067				
	Cr	52	101.131				
	Cr	53					
	Mn	55	104.705				
	Fe	57	104.861				
	Co	59	98.752				
	Ni	60	99.459				
	Cu	63					
	Cu	65	103.160				
	Zn	66	99.251				
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75	92.297				
	Se	77					
	Se	82	100.555				
	Kr	83					
	Sr	88	98.509				
	Y	89					
	Mo	98	96.298				
	Ag	107	99.557				
	Cd	111	101.489				
	Cd	114					
>	In	115		88.7			
	Sn	120	99.856				
	Sb	121	92.472				
	Sb	123					
	Ba	135					
	Ba	137	91.677				
	Ho	165					
>	Lu	175		96.2			
	Tl	205	100.327				
	Pb	208	104.293				
	Bi	209					
	Th	232	98.961				
	U	238	107.936				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 08:08:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	**ug/L**	44.018	81	0.000
	Be	9	**0.034**	**ug/L**	76.649	19	0.000
	B	11	**3.193**	**ug/L**	18.494	1214	0.003
	Na	23	**1.547**	**ug/L**	81.007	9670	0.015
	Mg	24	**1.061**	**ug/L**	185.551	4334	0.007
	Al	27	**0.723**	**ug/L**	92.807	8336	0.007
	P	31	**5.062**	**ug/L**	23.750	3525	0.003
	K	39	**12.990**	**ug/L**	49.749	421811	0.178
	Ca	43	**5.886**	**ug/L**	39.322	221	0.000
>	Sc	45		**ug/L**		266467	266467.294
	Ti	47	**0.092**	**ug/L**	62.201	287	0.000
	V	51	**0.195**	**ug/L**	212.424	5575	0.003
	Cr	52	**-0.275**	**ug/L**	22.904	-1959	-0.004
	Cr	53		**ug/L**		67198	0.044
	Mn	55	**0.017**	**ug/L**	2.424	935	0.000
	Fe	57	**5.339**	**ug/L**	9.158	5840	0.002
	Co	59	**0.011**	**ug/L**	10.492	146	0.000
	Ni	60	**0.018**	**ug/L**	46.382	84	0.000
	Cu	63		**ug/L**		187	0.000
	Cu	65	**0.009**	**ug/L**	22.584	88	0.000
	Zn	66	**0.085**	**ug/L**	36.840	299	0.000
	Zn	67		**ug/L**		6142	0.003
	Zn	68		**ug/L**		809	0.001
>	Ge	74		**ug/L**		319019	319019.264
	As	75	**0.020**	**ug/L**	342.803	147	0.000
	Se	77		**ug/L**		3181	0.000
	Se	82	**-0.026**	**ug/L**	414.347	-12	-0.000
	Kr	83		**ug/L**		93	-0.000
	Sr	88	**0.007**	**ug/L**	8.563	241	0.000
	Y	89		**ug/L**		44	-0.000
	Mo	98	**0.109**	**ug/L**	29.189	382	0.001
	Ag	107	**0.012**	**ug/L**	23.916	102	0.000
	Cd	111	**0.018**	**ug/L**	37.546	41	0.000
	Cd	114		**ug/L**		69	0.000
>	In	115		**ug/L**		201770	201770.025
	Sn	120	**0.392**	**ug/L**	18.681	2137	0.009
	Sb	121	**1.257**	**ug/L**	22.869	5002	0.022
	Sb	123		**ug/L**		3911	0.017
	Ba	135		**ug/L**		46	0.000
	Ba	137	**0.000**	**ug/L**	1660.599	59	0.000
	Ho	165		**ug/L**		39	0.000
>	Lu	175		**ug/L**		351683	351682.748
	Tl	205	**0.523**	**ug/L**	17.405	7477	0.019
	Pb	208	**0.018**	**ug/L**	12.624	1330	0.001
	Bi	209		**ug/L**		266	-0.000
	Th	232	**0.485**	**ug/L**	13.683	13899	0.034
	U	238	**0.025**	**ug/L**	20.325	1046	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		81.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241537001
Sample Date/Time: Saturday, December 05, 2009 08:51:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241537001.716

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.020**	**ug/L**	59.284	99	0.000
	Be	9	**0.010**	**ug/L**	76.010	13	0.000
	B	11	**-0.480**	**ug/L**	17.577	370	-0.000
	Na	23	**12.164**	**ug/L**	15.569	38720	0.116
	Mg	24	**-0.138**	**ug/L**	917.231	2334	-0.001
	Al	27	**1.170**	**ug/L**	59.776	10004	0.011
	P	31	**16.529**	**ug/L**	7.343	5356	0.008
	K	39	**21.640**	**ug/L**	18.158	479931	0.297
	Ca	43	**36.365**	**ug/L**	11.115	485	0.001
>	Sc	45		**ug/L**		282086	282085.885
	Ti	47	**0.625**	**ug/L**	9.423	525	0.001
	V	51	**-3.472**	**ug/L**	49.886	-12075	-0.060
	Cr	52	**-1.154**	**ug/L**	16.476	-5448	-0.016
	Cr	53		**ug/L**		260906	0.718
	Mn	55	**0.262**	**ug/L**	10.280	2589	0.006
	Fe	57	**10.506**	**ug/L**	17.159	6819	0.005
	Co	59	**-0.002**	**ug/L**	146.736	86	-0.000
	Ni	60	**0.043**	**ug/L**	6.806	116	0.000
	Cu	63		**ug/L**		709	0.002
	Cu	65	**0.230**	**ug/L**	4.082	370	0.001
	Zn	66	**1.400**	**ug/L**	1.113	1413	0.004
	Zn	67		**ug/L**		37876	0.107
	Zn	68		**ug/L**		3344	0.009
>	Ge	74		**ug/L**		305590	305589.704
	As	75	**-0.427**	**ug/L**	180.887	-257	-0.001
	Se	77		**ug/L**		17068	0.046
	Se	82	**-0.011**	**ug/L**	1043.616	-10	-0.000
	Kr	83		**ug/L**		89	-0.000
	Sr	88	**0.042**	**ug/L**	5.725	568	0.002
	Y	89		**ug/L**		87	0.000
	Mo	98	**-0.019**	**ug/L**	13.716	46	-0.000
	Ag	107	**0.010**	**ug/L**	30.935	86	0.000
	Cd	111	**-0.004**	**ug/L**	173.612	16	-0.000
	Cd	114		**ug/L**		39	-0.000
>	In	115		**ug/L**		186761	186760.979
	Sn	120	**0.075**	**ug/L**	9.508	673	0.002
	Sb	121	**-0.043**	**ug/L**	19.637	314	-0.001
	Sb	123		**ug/L**		266	-0.001
	Ba	135		**ug/L**		138	0.000
	Ba	137	**0.078**	**ug/L**	7.442	222	0.001
	Ho	165		**ug/L**		41	0.000
>	Lu	175		**ug/L**		327913	327912.507
	Tl	205	**0.027**	**ug/L**	19.012	963	0.001
	Pb	208	**0.067**	**ug/L**	9.648	2186	0.004
	Bi	209		**ug/L**		194	-0.000
	Th	232	**0.031**	**ug/L**	13.902	2416	0.002
	U	238	**-0.011**	**ug/L**	0.261	92	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		86.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		83.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		83.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241537002
Sample Date/Time: Saturday, December 05, 2009 08:57:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241537002.717

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.232**	**ug/L**	10.513	384	0.001
	Be	9	**0.029**	**ug/L**	42.150	19	0.000
	B	11	**-0.381**	**ug/L**	22.885	399	-0.000
	Na	23	**329.717**	**ug/L**	4.885	904947	3.143
	Mg	24	**50.808**	**ug/L**	11.826	97331	0.333
	Al	27	**240.357**	**ug/L**	12.391	644960	2.243
	P	31	**14.913**	**ug/L**	36.816	5164	0.008
	K	39	**94.767**	**ug/L**	10.930	771277	1.300
	Ca	43	**155.664**	**ug/L**	7.354	1488	0.005
>	Sc	45		**ug/L**		285617	285617.195
	Ti	47	**5.240**	**ug/L**	7.410	2461	0.008
	V	51	**-1.880**	**ug/L**	112.331	-4465	-0.032
	Cr	52	**11.301**	**ug/L**	5.114	42919	0.154
	Cr	53		**ug/L**		271977	0.747
	Mn	55	**7.520**	**ug/L**	7.501	50665	0.175
	Fe	57	**273.936**	**ug/L**	6.778	39912	0.120
	Co	59	**0.275**	**ug/L**	7.845	1473	0.005
	Ni	60	**6.861**	**ug/L**	5.534	7446	0.026
	Cu	63		**ug/L**		2065	0.007
	Cu	65	**0.742**	**ug/L**	10.472	1021	0.003
	Zn	66	**4.631**	**ug/L**	8.943	4187	0.013
	Zn	67		**ug/L**		39165	0.111
	Zn	68		**ug/L**		5321	0.015
>	Ge	74		**ug/L**		306752	306751.963
	As	75	**-0.008**	**ug/L**	11755.308	106	-0.000
	Se	77		**ug/L**		17293	0.047
	Se	82	**-0.161**	**ug/L**	70.862	-24	-0.000
	Kr	83		**ug/L**		101	0.000
	Sr	88	**1.055**	**ug/L**	6.437	10182	0.056
	Y	89		**ug/L**		2792	0.015
	Mo	98	**0.380**	**ug/L**	8.719	964	0.005
	Ag	107	**0.006**	**ug/L**	23.194	66	0.000
	Cd	111	**0.023**	**ug/L**	32.938	41	0.000
	Cd	114		**ug/L**		54	0.000
>	In	115		**ug/L**		180230	180230.404
	Sn	120	**0.090**	**ug/L**	19.920	708	0.002
	Sb	121	**-0.033**	**ug/L**	18.752	334	-0.001
	Sb	123		**ug/L**		268	-0.001
	Ba	135		**ug/L**		4695	0.014
	Ba	137	**3.837**	**ug/L**	4.660	8237	0.025
	Ho	165		**ug/L**		248	0.001
>	Lu	175		**ug/L**		325010	325009.519
	Tl	205	**0.024**	**ug/L**	17.731	916	0.001
	Pb	208	**0.312**	**ug/L**	8.025	6900	0.019
	Bi	209		**ug/L**		240	-0.000
	Th	232	**0.090**	**ug/L**	5.701	3740	0.006
	U	238	**0.008**	**ug/L**	18.105	550	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		87.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		83.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		80.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		88.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 09:10:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.719

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.925**	**ug/L**	2.862	69681	0.258
	Be	9	**57.176**	**ug/L**	4.121	15292	0.057
	B	11	**107.126**	**ug/L**	3.241	25920	0.094
	Na	23	**5011.631**	**ug/L**	1.930	12882212	47.765
	Mg	24	**5259.759**	**ug/L**	4.387	9288391	34.475
	Al	27	**4914.337**	**ug/L**	8.831	12354903	45.864
	P	31	**5380.620**	**ug/L**	1.737	733709	2.712
	K	39	**4396.917**	**ug/L**	1.242	16640950	60.318
	Ca	43	**5075.773**	**ug/L**	1.548	40299	0.149
>	Sc	45		**ug/L**		269555	269555.443
	Ti	47	**50.539**	**ug/L**	2.706	20251	0.074
	V	51	**53.718**	**ug/L**	2.489	254879	0.928
	Cr	52	**52.821**	**ug/L**	2.262	193126	0.720
	Cr	53		**ug/L**		105323	0.183
	Mn	55	**53.655**	**ug/L**	3.287	336800	1.247
	Fe	57	**5411.348**	**ug/L**	3.229	646423	2.380
	Co	59	**51.384**	**ug/L**	3.280	242602	0.900
	Ni	60	**51.792**	**ug/L**	1.061	52709	0.195
	Cu	63		**ug/L**		128655	0.477
	Cu	65	**53.011**	**ug/L**	4.729	63585	0.236
	Zn	66	**50.566**	**ug/L**	1.359	45104	0.142
	Zn	67		**ug/L**		14785	0.030
	Zn	68		**ug/L**		33507	0.104
>	Ge	74		**ug/L**		316855	316854.836
	As	75	**47.700**	**ug/L**	2.204	44410	0.140
	Se	77		**ug/L**		7851	0.015
	Se	82	**51.201**	**ug/L**	1.757	4674	0.015
	Kr	83		**ug/L**		99	0.000
	Sr	88	**49.193**	**ug/L**	1.878	519603	2.600
	Y	89		**ug/L**		162	0.001
	Mo	98	**49.016**	**ug/L**	0.618	125561	0.628
	Ag	107	**50.128**	**ug/L**	0.412	212876	1.065
	Cd	111	**50.318**	**ug/L**	0.571	53540	0.268
	Cd	114		**ug/L**		126488	0.633
>	In	115		**ug/L**		199761	199760.505
	Sn	120	**49.910**	**ug/L**	1.102	219684	1.098
	Sb	121	**47.154**	**ug/L**	9.955	167924	0.838
	Sb	123		**ug/L**		133000	0.664
	Ba	135		**ug/L**		61011	0.176
	Ba	137	**47.092**	**ug/L**	2.051	107049	0.309
	Ho	165		**ug/L**		84	0.000
>	Lu	175		**ug/L**		345804	345804.222
	Tl	205	**47.089**	**ug/L**	3.332	603036	1.743
	Pb	208	**53.511**	**ug/L**	1.605	1104883	3.193
	Bi	209		**ug/L**		267	-0.000
	Th	232	**51.732**	**ug/L**	3.460	1269337	3.667
	U	238	**54.525**	**ug/L**	3.313	1380898	3.994

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	109.850				
	Be	9	114.352				
	B	11	107.126				
	Na	23	100.233				
	Mg	24	105.195				
	Al	27	97.314				
	P	31	107.612				
	K	39	87.938				
	Ca	43	101.515				
>	Sc	45		82.9			
	Ti	47	101.078				
	V	51	107.436				
	Cr	52	105.642				
	Cr	53					
	Mn	55	107.309				
	Fe	57	108.227				
	Co	59	102.768				
	Ni	60	103.585				
	Cu	63					
	Cu	65	106.021				
	Zn	66	101.132				
	Zn	67					
	Zn	68					
>	Ge	74		86.1			
	As	75	95.401				
	Se	77					
	Se	82	102.401				
	Kr	83					
	Sr	88	98.385				
	Y	89					
	Mo	98	98.032				
	Ag	107	100.257				
	Cd	111	100.636				
	Cd	114					
>	In	115		89.3			
	Sn	120	99.821				
	Sb	121	94.309				
	Sb	123					
	Ba	135					
	Ba	137	94.184				
	Ho	165					
>	Lu	175		94.1			
	Tl	205	94.179				
	Pb	208	107.022				
	Bi	209					
	Th	232	103.464				
	U	238	109.050				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 09:16:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.720

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.000**	ug/L	2116.398	70	0.000
	Be	9	**0.022**	ug/L	81.337	16	0.000
	B	11	**2.246**	ug/L	22.111	1010	0.002
	Na	23	**2.378**	ug/L	14.749	12005	0.023
	Mg	24	**0.460**	ug/L	251.864	3334	0.003
	Al	27	**-0.135**	ug/L	459.321	6335	-0.001
	P	31	**3.492**	ug/L	39.071	3375	0.002
	K	39	**14.687**	ug/L	102.816	436297	0.201
	Ca	43	**3.429**	ug/L	81.571	205	0.000
>	Sc	45		ug/L		271572	271571.780
	Ti	47	**0.131**	ug/L	52.100	309	0.000
	V	51	**0.015**	ug/L	2772.675	4812	0.000
	Cr	52	**-0.142**	ug/L	69.544	-1506	-0.002
	Cr	53		ug/L		65365	0.032
	Mn	55	**0.001**	ug/L	209.247	853	0.000
	Fe	57	**3.331**	ug/L	7.139	5712	0.001
	Co	59	**0.006**	ug/L	58.721	121	0.000
	Ni	60	**0.024**	ug/L	31.081	93	0.000
	Cu	63		ug/L		176	0.000
	Cu	65	**0.010**	ug/L	28.364	90	0.000
	Zn	66	**0.196**	ug/L	12.543	407	0.001
	Zn	67		ug/L		6106	0.002
	Zn	68		ug/L		816	0.000
>	Ge	74		ug/L		325870	325869.827
	As	75	**0.216**	ug/L	36.958	337	0.001
	Se	77		ug/L		3190	0.000
	Se	82	**-0.186**	ug/L	60.039	-27	-0.000
	Kr	83		ug/L		110	0.000
	Sr	88	**0.005**	ug/L	34.700	222	0.000
	Y	89		ug/L		46	-0.000
	Mo	98	**0.108**	ug/L	18.790	381	0.001
	Ag	107	**0.007**	ug/L	31.586	81	0.000
	Cd	111	**0.013**	ug/L	45.021	36	0.000
	Cd	114		ug/L		79	0.000
>	In	115		ug/L		203584	203583.894
	Sn	120	**0.367**	ug/L	18.181	2037	0.008
	Sb	121	**1.198**	ug/L	22.608	4822	0.021
	Sb	123		ug/L		3869	0.017
	Ba	135		ug/L		42	0.000
	Ba	137	**0.001**	ug/L	649.837	60	0.000
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		356257	356256.772
	Tl	205	**0.735**	ug/L	11.085	10387	0.027
	Pb	208	**0.034**	ug/L	7.436	1668	0.002
	Bi	209		ug/L		157	-0.001
	Th	232	**0.348**	ug/L	8.559	10626	0.025
	U	238	**0.022**	ug/L	7.120	962	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		83.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 11:20:22
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1404
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6084.1	6084.096	126.122	2.1
	Mg	24.0	37933.7	37933.699	246.062	0.6
	Co	58.9	131465.5	131465.545	391.169	0.3
	Rh	102.9	287728.9	287728.860	2520.918	0.9
	In	114.9	384046.5	384046.542	2719.920	0.7
	Pb	208.0	227115.9	227115.942	904.488	0.4
⌈>	Ba	137.9	372943.0	372943.011	2197.849	0.6
⌊	Ba++	69.0	6670.6	0.018	0.000	0.7
⌈>	Ce	139.9	452582.0	452582.036	2432.404	0.5
⌊	CeO	155.9	10781.5	0.024	0.001	2.4
	Bkgd	220.0	29.1	29.100	2.485	8.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	7.0	5548.1
Co	59	9	7.0	144363.8
In	115	9	7.3	374732.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	604	2060	0.615
Be	9.0	9.1	2061	2070	0.655
Mg	24.0	24.0	5671	2080	0.651
Mg	25.0	25.0	5923	2075	0.623
Mg	26.0	26.0	6187	2070	0.695
Co	58.9	58.9	14186	2110	0.657
Rh	102.9	102.9	24872	2160	0.653
In	114.9	114.9	27786	2180	0.652
Ce	139.9	139.9	33870	2195	0.677
Pb	206.0	206.0	49948	2290	0.663
Pb	207.0	207.0	50159	2260	0.626
Pb	208.0	208.0	50451	2280	0.672
U	238.1	238.0	57718	2285	0.714

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 19:54:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Blank.201

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		26	
Sc	45		ug/L		451819	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 19:56:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 1.202

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	1.504	4291	0.010
Sc	45		ug/L		448236	448236.284

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 19:58:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 2.203

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	99.950	ug/L	1.387	41554	0.091
Sc	45		ug/L		458207	458206.717

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 19:59:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 1.204

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.550	ug/L	2.261	21535	0.047
Sc	45		ug/L		460155	460154.758

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	103.100				
Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 20:01:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 2.205

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.007	ug/L	87.518	30	0.000
Sc	45		ug/L		468270	468269.954

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 20:03:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 3.206

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.573**	**ug/L**	13.614	270	0.001
Sc	45		**ug/L**		468826	468826.477

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	114.555				
Sc	45		103.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 20:04:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 4.207

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.079	ug/L	26.149	60	0.000
Sc	45		ug/L		458641	458641.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		101.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 20:06:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 5.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	21.293	ug/L	2.059	8369	0.019
⌊>	Sc	45		ug/L		432165	432164.506

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	106.466				
⌊>	Sc	45		95.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 20:08:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	52.874	ug/L	4.235	21543	0.048
⌊>	Sc	45		ug/L		449096	449096.234

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	105.748				
⌊>	Sc	45		99.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 20:09:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.210

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.019	ug/L	39.713	35	0.000
Sc	45		ug/L		460215	460215.149

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		101.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 20:11:27
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978333.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.003	ug/L	279.819	26	-0.000
⌊>	Sc	45		ug/L		468278	468278.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 20:13:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978334.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	50.558	ug/L	1.108	21913	0.046
⌊>	Sc	45		ug/L		477347	477346.608

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		105.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 20:16:38
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978335.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.016	ug/L	56.833	22	-0.000
⌊>	Sc	45		ug/L		495941	495941.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		109.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 20:18:22
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978336.215

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	47.743	ug/L	2.253	21693	0.043
Sc	45		ug/L		500478	500478.200

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		110.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 20:20:07
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978337.216

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.022**	**ug/L**	50.979	36	0.000
⌊>	Sc	45		**ug/L**		459820	459820.282

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 20:23:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 8.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	49.475	ug/L	2.143	21229	0.045
⌊>	Sc	45		ug/L		472626	472625.711

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	98.949				
⌊>	Sc	45		104.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 20:25:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 9.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.026	ug/L	41.795	38	0.000
⌊>	Sc	45		ug/L		463752	463751.924

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241537001
Sample Date/Time: Saturday, December 05, 2009 20:37:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241537001.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.002	ug/L	352.982	30	0.000
>	Sc	45		ug/L		505640	505639.640

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		111.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241537002
Sample Date/Time: Saturday, December 05, 2009 20:39:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241537002.227

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	212.457	30	0.000
Sc	45		ug/L		498299	498298.985

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		110.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 20:40:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.228

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.048	ug/L	1.726	21635	0.044
Sc	45		ug/L		485814	485813.776

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	98.096				
Sc	45		107.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 20:42:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.020	ug/L	5.543	35	0.000
⌊>	Sc	45		ug/L		459706	459705.881

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

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Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120409W1.SIF
Batch ID:
Results Data Set: 120409W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

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Method Loaded
Method Name: WATER **Method Last Saved: 11/25/2009 14:49:28**
Method Description: 7470A, 245.2, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/4/2009 09:22:48**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0003	0.0002	09:23:50	Yes
2		[0.00]	0.0002	-0.0001	0.0002	09:24:25	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	9.75				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/4/2009 09:24:44**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0022	0.0101	0.0024	09:25:44	Yes
2		[0.2]	0.0022	0.0102	0.0024	09:26:19	Yes
Mean:		[0.2]	0.0022				
SD:		0.0	0.0000				
%RSD:		0.0	0.02				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01107 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/4/2009 09:26:38**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0055	0.0247	0.0056	09:27:39	Yes
2		[0.5]	0.0055	0.0255	0.0057	09:28:14	Yes
Mean:		[0.5]	0.0055				
SD:		0.0	0.0000				
%RSD:		0.0	0.58				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999993 Slope: 0.01097 Intercept: 0.00001

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/4/2009 09:28:34**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0227	0.1046	0.0229	09:29:35	Yes
2		[2.0]	0.0225	0.1029	0.0227	09:30:10	Yes
Mean:		[2.0]	0.0226				
SD:		0.0	0.0001				
%RSD:		0.0	0.64				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999972 Slope: 0.01133 Intercept: -0.00007

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/4/2009 09:30:30**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0547	0.2508	0.0549	09:31:32	Yes
2		[5.0]	0.0548	0.2502	0.0550	09:32:07	Yes
Mean:		[5.0]	0.0547				
SD:		0.0	0.0001				
%RSD:		0.0	0.15				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999905 Slope: 0.01096 Intercept: 0.00013

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/4/2009 09:32:28**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1112	0.5106	0.1114	09:33:28	Yes
2		[10.0]	0.1102	0.5032	0.1104	09:34:03	Yes
Mean:		[10.0]	0.1107				
SD:		0.0	0.0007				
%RSD:		0.0	0.65				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999970 Slope: 0.01105 Intercept: 0.00003

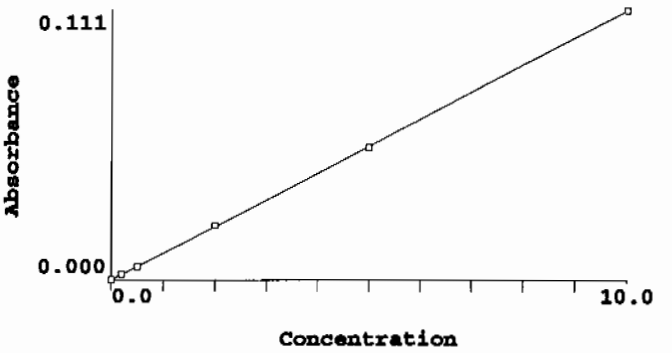

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.003	0.00	9.7
S0.2	0.0022	0.2	0.198	0.00	0.0
S0.5	0.0055	0.5	0.494	0.00	0.6
S2.0	0.0226	2.0	2.044	0.00	0.6

S5.0	0.0547	5.0	4.951	0.00	0.2
S10.0	0.1107	10.0	10.016	0.00	0.6

Correlation Coef.: 0.999970 Slope: 0.01105 Intercept: 0.00003

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/4/2009 09:34:22**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.080	5.080	0.0562	0.2559	0.0563	09:35:23	Yes
2	5.064	5.064	0.0560	0.2540	0.0562	09:35:58	Yes
Mean:	5.072	5.072	0.0561				
SD:	0.011	0.011	0.0001				
%RSD:	0.215	0.215	0.22				

QC value within limits for Hg 253.7 Recovery = 101.44%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/4/2009 09:36:17**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	0.0000	0.0002	09:37:19	Yes
2	-0.003	-0.003	-0.0000	-0.0003	0.0002	09:37:54	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	3.526	3.526	25.88				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/4/2009 09:38:14**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.205	0.205	0.0023	0.0106	0.0025	09:39:15	Yes
2	0.203	0.203	0.0023	0.0105	0.0025	09:39:50	Yes
Mean:	0.204	0.204	0.0023				
SD:	0.001	0.001	0.0000				
%RSD:	0.664	0.664	0.66				

QC value within limits for Hg 253.7 Recovery = 102.11%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/4/2009 09:40:10**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.041	5.041	0.0557	0.2557	0.0559	09:41:10	Yes
2	4.999	4.999	0.0553	0.2506	0.0555	09:41:45	Yes
Mean:	5.020	5.020	0.0555				
SD:	0.030	0.030	0.0003				
%RSD:	0.594	0.594	0.59				

QC value within limits for Hg 253.7 Recovery = 100.40%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/4/2009 09:42:04
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0003	0.0002	09:43:05	Yes
2	-0.002	-0.002	0.0000	0.0003	0.0002	09:43:40	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.935	0.935	12.01				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201979021|925654|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 12/4/2009 09:43:59
Data Type: Original

Replicate Data: 1201979021|925654|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0005	0.0002	09:45:01	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0002	09:45:36	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	338.9	338.9	172.68				

Sequence No.: 13
Sample ID: 1201979022|925654|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 12/4/2009 09:45:56
Data Type: Original

Replicate Data: 1201979022|925654|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.058	2.058	0.0228	0.1057	0.0230	09:46:58	Yes
2	2.047	2.047	0.0226	0.1031	0.0228	09:47:32	Yes
Mean:	2.052	2.052	0.0227				
SD:	0.008	0.008	0.0001				
%RSD:	0.381	0.381	0.38				

Sequence No.: 14
Sample ID: 241511001|925654|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 12/4/2009 09:47:53
Data Type: Original

Replicate Data: 241511001|925654|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0001	0.0002	09:48:53	Yes
2	0.003	0.003	0.0001	0.0008	0.0002	09:49:28	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	10.72	10.72	5.56				

Sequence No.: 15
Sample ID: 241511002|925654|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 12/4/2009 09:49:47
Data Type: Original

Replicate Data: 241511002|925654|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 241601001|925654|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0017	0.0003	10:00:20	Yes
2	0.000	0.000	0.0000	0.0006	0.0002	10:00:55	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	154.0	154.0	87.57				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1201979023|925654|1 **Date Collected: 12/4/2009 10:01:15**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201979023|925654|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0004	0.0002	10:02:16	Yes
2	0.003	0.003	0.0001	0.0005	0.0002	10:02:51	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	13.16	13.16	6.27				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/4/2009 10:03:10**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.062	5.062	0.0560	0.2554	0.0561	10:04:11	Yes
2	5.057	5.057	0.0559	0.2541	0.0561	10:04:46	Yes
Mean:	5.060	5.060	0.0559				
SD:	0.003	0.003	0.0000				
%RSD:	0.065	0.065	0.06				

QC value within limits for Hg 253.7 Recovery = 101.19%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/4/2009 10:05:05**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0009	0.0002	10:06:06	Yes
2	-0.009	-0.009	-0.0001	-0.0007	0.0001	10:06:40	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	132.9	132.9	329.61				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 1201979024|925654|1 **Date Collected: 12/4/2009 10:07:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201979024|925654|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.233	2.233	0.0247	0.1119	0.0249	10:08:01	Yes
2	2.229	2.229	0.0247	0.1112	0.0248	10:08:36	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0014	0.0002	10:17:41	Yes
2	0.002	0.002	0.0000	0.0011	0.0002	10:18:17	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	39.34	39.34	18.45				

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Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 1201985289|928451|1 **Date Collected: 12/4/2009 10:18:36**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985289|928451|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.133	2.133	0.0236	0.1079	0.0238	10:19:37	Yes
2	2.110	2.110	0.0233	0.1067	0.0235	10:20:12	Yes
Mean:	2.122	2.122	0.0235				
SD:	0.016	0.016	0.0002				
%RSD:	0.756	0.756	0.75				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 242001001|928451|1 **Date Collected: 12/4/2009 10:20:31**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242001001|928451|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.321	0.321	0.0036	0.0190	0.0038	10:21:32	Yes
2	0.315	0.315	0.0035	0.0180	0.0037	10:22:07	Yes
Mean:	0.318	0.318	0.0035				
SD:	0.004	0.004	0.0000				
%RSD:	1.403	1.403	1.39				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 1201985290|928451|1 **Date Collected: 12/4/2009 10:22:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985290|928451|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	0.0006	0.0002	10:23:27	Yes
2	-0.004	-0.004	-0.0000	0.0006	0.0002	10:24:01	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	22.39	22.39	94.33				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 1201985291|928451|1 **Date Collected: 12/4/2009 10:24:21**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985291|928451|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.578	1.578	0.0175	0.0872	0.0176	10:25:21	Yes
2	1.561	1.561	0.0173	0.0865	0.0175	10:25:56	Yes
Mean:	1.569	1.569	0.0174				
SD:	0.012	0.012	0.0001				
%RSD:	0.736	0.736	0.73				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/4/2009 10:26:15**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.148	5.148	0.0569	0.2595	0.0571	10:27:17	Yes
2	5.136	5.136	0.0568	0.2594	0.0570	10:27:51	Yes
Mean:	5.142	5.142	0.0568				
SD:	0.008	0.008	0.0001				
%RSD:	0.165	0.165	0.16				

QC value within limits for Hg 253.7 Recovery = 102.84%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/4/2009 10:28:10
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0011	0.0002	10:29:11	Yes
2	0.002	0.002	0.0000	0.0010	0.0002	10:29:46	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	46.90	46.90	15.37				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 1201985292|928451|5 Date Collected: 12/4/2009 10:30:05
Analyst: JXL1 Data Type: Original

Replicate Data: 1201985292|928451|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.089	0.089	0.0010	0.0055	0.0012	10:31:06	Yes
2	0.047	0.047	0.0005	0.0030	0.0007	10:31:41	Yes
Mean:	0.068	0.068	0.0008				
SD:	0.030	0.030	0.0003				
%RSD:	43.93	43.93	42.28				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1201983447|928781|1 Date Collected: 12/4/2009 10:32:00
Analyst: JXL1 Data Type: Original

Replicate Data: 1201983447|928781|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0011	0.0002	10:33:02	Yes
2	-0.001	-0.001	0.0000	0.0007	0.0002	10:33:36	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	196.9	196.9	69.43				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1201986015|928781|1 Date Collected: 12/4/2009 10:33:56
Analyst: JXL1 Data Type: Original

Replicate Data: 1201986015|928781|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0013	0.0002	10:34:57	Yes

Replicate Data: 1201986020|928781|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0013	0.0003	10:44:38	Yes
2	0.002	0.002	0.0000	0.0011	0.0002	10:45:13	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	65.46	65.46	35.77				

==========

Sequence No.: 44 Autosampler Location: 40
Sample ID: 241089002|928781|1 Date Collected: 12/4/2009 10:45:33
Analyst: JXL1 Data Type: Original

Replicate Data: 241089002|928781|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	0.0006	0.0002	10:46:34	Yes
2	0.001	0.001	0.0000	0.0012	0.0002	10:47:08	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	213.6	213.6	282.25				

==========

Sequence No.: 45 Autosampler Location: 41
Sample ID: 241089003|928781|1 Date Collected: 12/4/2009 10:47:28
Analyst: JXL1 Data Type: Original

Replicate Data: 241089003|928781|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0011	0.0002	10:48:29	Yes
2	0.000	0.000	0.0000	0.0009	0.0002	10:49:04	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	7.944	7.944	0.77				

==========

Sequence No.: 46 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/4/2009 10:49:23
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.149	5.149	0.0569	0.2610	0.0571	10:50:24	Yes
2	5.151	5.151	0.0569	0.2607	0.0571	10:50:58	Yes
Mean:	5.150	5.150	0.0569				
SD:	0.002	0.002	0.0000				
%RSD:	0.030	0.030	0.03				

QC value within limits for Hg 253.7 Recovery = 103.00%
All analyte(s) passed QC.

==========

Sequence No.: 47 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/4/2009 10:51:17
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0010	0.0002	10:52:18	Yes
2	0.003	0.003	0.0001	0.0010	0.0002	10:52:54	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	43.48	43.48	19.52				

QC value within limits for Hg 253.7 Recovery = Not calculated

1	-0.002	-0.002	0.0000	0.0009	0.0002	11:01:57	Yes
2	-0.002	-0.002	0.0000	0.0009	0.0002	11:02:32	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	4.243	4.243	9.80				

==========

Sequence No.: 53 **Autosampler Location: 47**
Sample ID: 1201978942|925626|1 **Date Collected: 12/4/2009 11:02:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978942|925626|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	0.0000	0.0006	0.0002	11:03:53	Yes
2	0.002	0.002	0.0001	0.0012	0.0002	11:04:28	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	>999.9%	>999.9%	133.82				

==========

Sequence No.: 54 **Autosampler Location: 48**
Sample ID: 1201978943|925626|1 **Date Collected: 12/4/2009 11:04:48**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978943|925626|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.056	2.056	0.0227	0.1046	0.0229	11:05:50	Yes
2	2.051	2.051	0.0227	0.1045	0.0229	11:06:24	Yes
Mean:	2.053	2.053	0.0227				
SD:	0.004	0.004	0.0000				
%RSD:	0.178	0.178	0.18				

==========

Sequence No.: 55 **Autosampler Location: 49**
Sample ID: 241537001|925626|1 **Date Collected: 12/4/2009 11:06:45**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241537001|925626|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0012	0.0002	11:07:46	Yes
2	0.002	0.002	0.0001	0.0012	0.0002	11:08:21	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	62.57	62.57	21.15				

==========

Sequence No.: 56 **Autosampler Location: 50**
Sample ID: 1201978944|925626|1 **Date Collected: 12/4/2009 11:08:42**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978944|925626|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	0.0000	0.0005	0.0002	11:09:43	Yes
2	-0.001	-0.001	0.0000	0.0008	0.0002	11:10:17	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	57.71	57.71	122.38				

==========

Sequence No.: 57 **Autosampler Location: 51**
Sample ID: 1201978945|925626|1 **Date Collected: 12/4/2009 11:10:37**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978945|925626|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.063	2.063	0.0228	0.1053	0.0230	11:11:38	Yes
2	2.047	2.047	0.0227	0.1044	0.0228	11:12:13	Yes
Mean:	2.055	2.055	0.0227				
SD:	0.011	0.011	0.0001				
%RSD:	0.539	0.539	0.54				

Sequence No.: 58
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/4/2009 11:12:33
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.135	5.135	0.0568	0.2609	0.0570	11:13:33	Yes
2	5.163	5.163	0.0571	0.2608	0.0573	11:14:08	Yes
Mean:	5.149	5.149	0.0569				
SD:	0.020	0.020	0.0002				
%RSD:	0.382	0.382	0.38				

QC value within limits for Hg 253.7 Recovery = 102.98%
All analyte(s) passed QC.

Sequence No.: 59
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/4/2009 11:14:27
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0013	0.0003	11:15:28	Yes
2	0.001	0.001	0.0000	0.0009	0.0002	11:16:03	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	68.04	68.04	32.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60
Sample ID: 1201978946|925626|5
Analyst: JXL1
Autosampler Location: 52
Date Collected: 12/4/2009 11:16:23
Data Type: Original

Replicate Data: 1201978946|925626|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	0.0006	0.0002	11:17:24	Yes
2	-0.001	-0.001	0.0000	0.0008	0.0002	11:17:59	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	106.5	106.5	844.48				

Sequence No.: 61
Sample ID: 241537002|925626|1
Analyst: JXL1
Autosampler Location: 53
Date Collected: 12/4/2009 11:18:18
Data Type: Original

Replicate Data: 241537002|925626|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0009	0.0002	11:19:19	Yes
2	0.001	0.001	0.0000	0.0011	0.0002	11:19:54	Yes
Mean:	0.000	0.000	0.0000				

SD:	0.001	0.001	0.0000
%RSD:	224.1	224.1	25.50

Sequence No.: 62
Sample ID: 1201983836|928448|1
Analyst: JXL1
Autosampler Location: 54
Date Collected: 12/4/2009 11:20:14
Data Type: Original

Replicate Data: 1201983836|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0007	0.0002	11:21:15	Yes
2	0.000	0.000	0.0000	0.0011	0.0002	11:21:50	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	194.9	194.9	59.19				

Sequence No.: 63
Sample ID: 1201985282|928448|1
Analyst: JXL1
Autosampler Location: 55
Date Collected: 12/4/2009 11:22:09
Data Type: Original

Replicate Data: 1201985282|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0009	0.0002	11:23:10	Yes
2	-0.002	-0.002	0.0000	0.0008	0.0002	11:23:45	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	3.893	3.893	8.88				

Sequence No.: 64
Sample ID: 1201985283|928448|1
Analyst: JXL1
Autosampler Location: 56
Date Collected: 12/4/2009 11:24:05
Data Type: Original

Replicate Data: 1201985283|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.142	2.142	0.0237	0.1090	0.0239	11:25:06	Yes
2	2.121	2.121	0.0235	0.1079	0.0236	11:25:41	Yes
Mean:	2.132	2.132	0.0236				
SD:	0.015	0.015	0.0002				
%RSD:	0.727	0.727	0.73				

Sequence No.: 65
Sample ID: 241906001|928448|1
Analyst: JXL1
Autosampler Location: 57
Date Collected: 12/4/2009 11:26:00
Data Type: Original

Replicate Data: 241906001|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	0.0005	0.0002	11:27:01	Yes
2	0.000	0.000	0.0000	0.0008	0.0002	11:27:37	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	108.6	108.6	142.54				

Sequence No.: 66
Sample ID: 1201983834|928448|1
Analyst: JXL1
Autosampler Location: 58
Date Collected: 12/4/2009 11:27:56
Data Type: Original

Replicate Data: 1201983834|928448|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.742	1.742	0.0193	0.0893	0.0195	11:28:58	Yes
2	1.728	1.728	0.0191	0.0881	0.0193	11:29:33	Yes
Mean:	1.735	1.735	0.0192				
SD:	0.010	0.010	0.0001				
%RSD:	0.567	0.567	0.57				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 1201985284|928448|1 **Date Collected: 12/4/2009 11:29:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985284|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0010	0.0003	11:30:54	Yes
2	0.008	0.008	0.0001	0.0012	0.0003	11:31:29	Yes
Mean:	0.006	0.006	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	42.63	42.63	29.67				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 1201985287|928448|5 **Date Collected: 12/4/2009 11:31:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985287|928448|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0008	0.0002	11:32:51	Yes
2	-0.002	-0.002	0.0000	0.0006	0.0002	11:33:26	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.03	11.03	25.79				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 241910001|928448|1 **Date Collected: 12/4/2009 11:33:46**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241910001|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	0.0004	0.0002	11:34:48	Yes
2	0.000	0.000	0.0000	0.0007	0.0002	11:35:23	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	131.5	131.5	>999.9%				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/4/2009 11:35:44**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.203	5.203	0.0575	0.2643	0.0577	11:36:44	Yes
2	5.188	5.188	0.0574	0.2632	0.0575	11:37:19	Yes
Mean:	5.195	5.195	0.0574				
SD:	0.011	0.011	0.0001				
%RSD:	0.208	0.208	0.21				

QC value within limits for Hg 253.7 Recovery = 103.91%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 12/4/2009 11:37:38
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0007	0.0002	11:38:39	Yes
2	0.002	0.002	0.0000	0.0011	0.0002	11:39:14	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	387.0	387.0	51.18				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 241910002|928448|1
Analyst: JXL1
Autosampler Location: 62
Date Collected: 12/4/2009 11:39:33
Data Type: Original

Replicate Data: 241910002|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	0.0006	0.0002	11:40:34	Yes
2	-0.002	-0.002	0.0000	0.0008	0.0002	11:41:09	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	29.57	29.57	289.01				

Sequence No.: 73
Sample ID: 241914001|928448|1
Analyst: JXL1
Autosampler Location: 63
Date Collected: 12/4/2009 11:41:29
Data Type: Original

Replicate Data: 241914001|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0007	0.0002	11:42:30	Yes
2	-0.002	-0.002	0.0000	0.0006	0.0002	11:43:05	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	9.047	9.047	29.57				

Sequence No.: 74
Sample ID: 241914002|928448|1
Analyst: JXL1
Autosampler Location: 64
Date Collected: 12/4/2009 11:43:25
Data Type: Original

Replicate Data: 241914002|928448|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0008	0.0002	11:44:26	Yes
2	0.000	0.000	0.0000	0.0007	0.0002	11:45:01	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	90.53	90.53	20.48				

Sequence No.: 75
Sample ID: 1201983850|928460|1
Analyst: JXL1
Autosampler Location: 65
Date Collected: 12/4/2009 11:45:21
Data Type: Original

Replicate Data: 1201983850|928460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0008	0.0002	11:46:22	Yes
2	0.000	0.000	0.0000	0.0009	0.0002	11:46:57	Yes

Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925625

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978943	WHG091203-13	.2	mL
MS	1201978945	WHG091203-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978942		SW846 7470A Prep	03-DEC-2009 12:05	<2	20 mL	20 mL	1	WATER
LCS	1201978943		SW846 7470A Prep	03-DEC-2009 12:05	<2	20 mL	20 mL	1	WATER
SAMPLE	241537001		SW846 7470A Prep	03-DEC-2009 12:05	<2	20 mL	20 mL	1	WATER
DUP	1201978944	241537001	SW846 7470A Prep	03-DEC-2009 12:05	<2	20 mL	20 mL	1	WATER
MS	1201978945	241537001	SW846 7470A Prep	03-DEC-2009 12:05	<2	20 mL	20 mL	1	WATER
SDILT	1201978946	241537001	SW846 7470A Prep	03-DEC-2009 12:05	<2	20 mL	20 mL	1	WATER
SAMPLE	241537002		SW846 7470A Prep	03-DEC-2009 12:05	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1236359-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091203-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091203-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091203-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091203-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091203-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091203-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments: Digestion Start Date: 03-DEC-09 12:05
Digestion End Date: 03-DEC-09 14:05

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925376

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978327	UI091119-01	.25	mL
LCS	1201978327	UI091119-06	.25	mL
MS	1201978329	UI091119-01	.25	mL
MS	1201978329	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978326		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
LCS	1201978327		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
DUP	1201978328	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
MS	1201978329	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SDILT	1201978330	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925378

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978334	UI091119-A00	.5	mL
LCS	1201978334	UI091119-B	.5	mL
MS	1201978336	UI090930-A	.5	mL
MS	1201978336	UI090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978333		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
LCS	1201978334		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
DUP	1201978335	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
MS	1201978336	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SDILT	1201978337	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: O2SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091119-A00 **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091119-B **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091203-01 **Opened:** 03-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 03-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 04-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091203-02 **Opened:** 03-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 04-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091203-01 **Opened:** 03-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 09-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091203-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG091203-02 **Opened:** 03-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 09-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091203-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091203-03 **Opened:** 03-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 09-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091203-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091203-04 **Opened:** 03-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 09-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091203-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG091203-05 **Opened:** 03-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 09-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091203-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG091203-06 **Opened:** 03-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 09-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091203-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091203-13 **Opened:** 03-DEC-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 03-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 09-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091204-04 **Opened:** 04-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 04-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091204-04A **Opened:** 04-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091204-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091204-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091204-05 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091204-06 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 04-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091204-07 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 04-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-08 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-70 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091205-04 **Opened:** 05-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 05-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091205-04A **Opened:** 05-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091205-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091205-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091205-05 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091205-06 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 05-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091205-07 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 05-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091205-08 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 05-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Standard Logbook

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Standard Logbook

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL

Standard Logbook

Description: 5% KMnO4 solution

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-602

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	925669	**Method:**	SW846 9012A
Prep Batch :	925668	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241536001	RE03-09-13975
241536002	RE03-09-13976
241536003	RE03-09-13977
241536004	RE03-09-13973
241536005	RE03-09-13972
241536006	RE03-09-13974
241536007	RE03-10-3915
1201979055	Method Blank (MB)
1201979056	241604001(RE16-10-2876) Sample Duplicate (DUP)
1201979057	241604002(RE16-10-2884) Sample Duplicate (DUP)
1201979058	241604001(RE16-10-2876) Matrix Spike (MS)
1201979059	241604002(RE16-10-2884) Matrix Spike (MS)
1201979060	241604001(RE16-10-2876) Matrix Spike Duplicate (MSD)
1201979061	241604002(RE16-10-2884) Matrix Spike Duplicate (MSD)
1201979062	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 241604001 (RE16-10-2876) and 241604002 (RE16-10-2884).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1201979059 (RE16-10-2884).

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

One or more of the values for the sample and/or duplicate are less than 5 times the Practical Quantitation Limit (PQL), and the difference is within one PQL value; therefore, the RPD is not applicable. 1201979057 (RE16-10-2884).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201979062 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 764780 1201979059 (RE16-10-2884).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 16Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-602 GEL Work Order: 241536

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13975	Project:	LANL01004
Sample ID:	241536001	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	17.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	78.1	287	ug/kg	1	AXC2 12/02/09	1336	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13976	Project:	LANL01004
Sample ID:	241536002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.7	293	ug/kg	1	AXC2 12/02/09	1337	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13977	Project:	LANL01004
Sample ID:	241536003	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.5	292	ug/kg	1	AXC2 12/02/09	1338	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13973	Project:	LANL01004
Sample ID:	241536004	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.41%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.0	257	ug/kg	1	AXC2 12/02/09	1342	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13972	Project:	LANL01004
Sample ID:	241536005	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.99%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.2	254	ug/kg	1	AXC2 12/02/09	1343	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-09-13974	Project:	LANL01004
Sample ID:	241536006	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	14.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	77.7	286	ug/kg	1	AXC2 12/02/09	1344	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-602

Client Sample ID:	RE03-10-3915	Project:	LANL01004
Sample ID:	241536007	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	9.34%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2 12/02/09	1345	925669	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1530	925668

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 16, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241536

Parmname	NOM		Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Flow Injection Analysis												
Batch 925669												
QC1201979056 241604001 DUP												
Cyanide, Total		J	132	J	145	ug/kg	9.26	^		(+/-351)	AXC2	12/02/09 13:50
QC1201979057 241604002 DUP												
Cyanide, Total			446	J	181	ug/kg	84.7	^		(+/-330)		12/02/09 13:57
QC1201979062 LCS												
Cyanide, Total	67900				69300	ug/kg			102	(46%-145%)		12/02/09 13:35
QC1201979055 MB												
Cyanide, Total				U	250	ug/kg						12/02/09 13:34
QC1201979058 241604001 MS												
Cyanide, Total	6630	J	132		5150	ug/kg			75.6	(50%-130%)		12/02/09 13:55
QC1201979059 241604002 MS												
Cyanide, Total	6980		446		5530	ug/kg			72.8	(50%-130%)		12/02/09 13:58
QC1201979060 241604001 MSD												
Cyanide, Total	6630	J	132		5450	ug/kg	5.76		80.2	(0%-30%)		12/02/09 13:56
QC1201979061 241604002 MSD												
Cyanide, Total	6470		446		5830	ug/kg	5.23		83.1	(0%-30%)		12/02/09 13:59

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: 241536

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 16-DEC-2009 17:50

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-602**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**02-DEC-2009 12:59:54**	**OM_12-2-2009_12-51-59**	**149**	**150**	**99**	**(90%-110%)**	**Yes**
CCV	02-DEC-2009 13:26:32	OM_12-2-2009_12-51-59	106	100	106	(90%-110%)	Yes
CCV	02-DEC-2009 13:39:04	OM_12-2-2009_12-51-59	106	100	106	(90%-110%)	Yes
CCV	02-DEC-2009 13:51:31	OM_12-2-2009_12-51-59	106	100	106	(90%-110%)	Yes
CCV	02-DEC-2009 14:03:58	OM_12-2-2009_12-51-59	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**02-DEC-2009 13:01:45**	**OM_12-2-2009_12-51-59**	**2.2**	**5**	**Yes**
CCB	02-DEC-2009 13:28:22	OM_12-2-2009_12-51-59	0.426	5	Yes
CCB	02-DEC-2009 13:40:54	OM_12-2-2009_12-51-59	0.889	5	Yes
CCB	02-DEC-2009 13:53:21	OM_12-2-2009_12-51-59	0.539	5	Yes
CCB	02-DEC-2009 14:05:48	OM_12-2-2009_12-51-59	0.892	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925668

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979062	URF1200957-01	.25	g
MS	1201979058	URF1184831-02	.025	mL
MS	1201979059	URF1184831-02	.025	mL
MSD	1201979060	URF1184831-02	.025	mL
MSD	1201979061	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201979055		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
LCS	1201979062		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241536001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241536002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241536003		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241536004		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241536005		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241536006		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241536007		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241539001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241539002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241539003		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241539004		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241604001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1201979056	241604001	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.52 g	25 mL	48.07692	SOIL
MS	1201979058	241604001	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1201979060	241604001	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241604002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201979057	241604002	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
MS	1201979059	241604002	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1201979061	241604002	SW846 9010B Prep	01-DEC-2009 15:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241611001		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241611002		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611003		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611004		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611005		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241611006		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241611007		SW846 9010B Prep	01-DEC-2009 15:30	>12	0.54 g	25 mL	46.2963	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091201-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/2/2009 12:52:45	OM_12-2-2009_12-51-59
150 ppb		1	axc2	12/2/2009 12:53:37	OM_12-2-2009_12-51-59
100 ppb		1	axc2	12/2/2009 12:54:29	OM_12-2-2009_12-51-59
50 ppb		1	axc2	12/2/2009 12:55:22	OM_12-2-2009_12-51-59
10 ppb		1	axc2	12/2/2009 12:56:15	OM_12-2-2009_12-51-59
CRDL 5.0 ppb		1	axc2	12/2/2009 12:57:09	OM_12-2-2009_12-51-59
ICAL-00		1	axc2	12/2/2009 12:58:03	OM_12-2-2009_12-51-59
ICV		1	axc2	12/2/2009 12:59:54	OM_12-2-2009_12-51-59
ICB		1	axc2	12/2/2009 13:01:45	OM_12-2-2009_12-51-59
CRDL		1	axc2	12/2/2009 13:03:34	OM_12-2-2009_12-51-59
1201982106	927059	1	axc2	12/2/2009 13:05:23	OM_12-2-2009_12-51-59
1201982110	927059	1	axc2	12/2/2009 13:06:15	OM_12-2-2009_12-51-59
1201982114	927059	1	axc2	12/2/2009 13:07:06	OM_12-2-2009_12-51-59
241793001	927059	2	axc2	12/2/2009 13:07:58	OM_12-2-2009_12-51-59
241813005	927059	1	axc2	12/2/2009 13:08:50	OM_12-2-2009_12-51-59
1201982103	927059	1	axc2	12/2/2009 13:09:44	OM_12-2-2009_12-51-59
1201982107	927059	1	axc2	12/2/2009 13:10:37	OM_12-2-2009_12-51-59
1201982111	927059	1	axc2	12/2/2009 13:11:30	OM_12-2-2009_12-51-59
241835005	927059	1	axc2	12/2/2009 13:12:24	OM_12-2-2009_12-51-59
1201982104	927059	1	axc2	12/2/2009 13:13:17	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:14:09	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:16:00	OM_12-2-2009_12-51-59
1201982108	927059	1	axc2	12/2/2009 13:17:48	OM_12-2-2009_12-51-59
1201982112	927059	1	axc2	12/2/2009 13:18:41	OM_12-2-2009_12-51-59
241835006	927059	1	axc2	12/2/2009 13:19:34	OM_12-2-2009_12-51-59
241848004*	927059	1	axc2	12/2/2009 13:20:26	OM_12-2-2009_12-51-59
241848005	927059	1	axc2	12/2/2009 13:21:19	OM_12-2-2009_12-51-59
241848006	927059	1	axc2	12/2/2009 13:22:11	OM_12-2-2009_12-51-59
241898001	927059	1	axc2	12/2/2009 13:23:03	OM_12-2-2009_12-51-59
241898002	927059	1	axc2	12/2/2009 13:23:55	OM_12-2-2009_12-51-59
241898003	927059	1	axc2	12/2/2009 13:24:47	OM_12-2-2009_12-51-59
241898004	927059	1	axc2	12/2/2009 13:25:39	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:26:32	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:28:22	OM_12-2-2009_12-51-59
241848004	927059	1	axc2	12/2/2009 13:30:11	OM_12-2-2009_12-51-59
241902001	927059	1	axc2	12/2/2009 13:31:05	OM_12-2-2009_12-51-59
241902002	927059	1	axc2	12/2/2009 13:31:59	OM_12-2-2009_12-51-59
241917001	927059	1	axc2	12/2/2009 13:32:52	OM_12-2-2009_12-51-59
241919001	927059	1	axc2	12/2/2009 13:33:46	OM_12-2-2009_12-51-59
1201979055	925669	1	axc2	12/2/2009 13:34:39	OM_12-2-2009_12-51-59
1201979062	925669	25	axc2	12/2/2009 13:35:32	OM_12-2-2009_12-51-59
241536001	925669	1	axc2	12/2/2009 13:36:25	OM_12-2-2009_12-51-59
241536002	925669	1	axc2	12/2/2009 13:37:18	OM_12-2-2009_12-51-59
241536003	925669	1	axc2	12/2/2009 13:38:11	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:39:04	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:40:54	OM_12-2-2009_12-51-59
241536004	925669	1	axc2	12/2/2009 13:42:42	OM_12-2-2009_12-51-59
241536005	925669	1	axc2	12/2/2009 13:43:34	OM_12-2-2009_12-51-59
241536006	925669	1	axc2	12/2/2009 13:44:27	OM_12-2-2009_12-51-59
241536007	925669	1	axc2	12/2/2009 13:45:19	OM_12-2-2009_12-51-59
241539001	925669	1	axc2	12/2/2009 13:46:11	OM_12-2-2009_12-51-59
241539002	925669	1	axc2	12/2/2009 13:47:03	OM_12-2-2009_12-51-59
241539003	925669	1	axc2	12/2/2009 13:47:57	OM_12-2-2009_12-51-59
241539004	925669	1	axc2	12/2/2009 13:48:51	OM_12-2-2009_12-51-59
241604001	925669	1	axc2	12/2/2009 13:49:45	OM_12-2-2009_12-51-59
1201979056	925669	1	axc2	12/2/2009 13:50:38	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:51:31	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:53:21	OM_12-2-2009_12-51-59

1201979058	925669	1	axc2	12/2/2009	13:55:11	OM_12-2-2009_12-51-59
1201979060	925669	1	axc2	12/2/2009	13:56:04	OM_12-2-2009_12-51-59
241604002	925669	1	axc2	12/2/2009	13:56:57	OM_12-2-2009_12-51-59
1201979057	925669	1	axc2	12/2/2009	13:57:50	OM_12-2-2009_12-51-59
1201979059	925669	1	axc2	12/2/2009	13:58:43	OM_12-2-2009_12-51-59
1201979061	925669	1	axc2	12/2/2009	13:59:36	OM_12-2-2009_12-51-59
241611001	925669	1	axc2	12/2/2009	14:00:29	OM_12-2-2009_12-51-59
241611002	925669	1	axc2	12/2/2009	14:01:21	OM_12-2-2009_12-51-59
241611003	925669	1	axc2	12/2/2009	14:02:13	OM_12-2-2009_12-51-59
241611004	925669	1	axc2	12/2/2009	14:03:06	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009	14:03:58	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009	14:05:48	OM_12-2-2009_12-51-59
241611005	925669	1	axc2	12/2/2009	14:07:36	OM_12-2-2009_12-51-59
241611006	925669	1	axc2	12/2/2009	14:08:32	OM_12-2-2009_12-51-59
241611007	925669	1	axc2	12/2/2009	14:09:25	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009	14:10:18	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009	14:12:08	OM_12-2-2009_12-51-59

Author: axc2 Date : 12/2/2009

Original Run Filename: OM_12-2-2009_12-51-59.OMN created 12/2/2009 12:51:59
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-2-2009_12-51-59.OMN last modified 12/2/2009 14:13:13
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091202-01	1	S1	200	7.81	12/2/2009@12:52:45			200 ppb
WCN091202-02	1	S2	150	6.05	12/2/2009@12:53:37			150 ppb
WCN091202-03	1	S3	100	4.16	12/2/2009@12:54:29			100 ppb
WCN091202-04	1	S4	50.0	2.05	12/2/2009@12:55:22			50 ppb
WCN091202-05	1	S5	10.0	0.566	12/2/2009@12:56:15			10 ppb
WCN091202-06	1	S6	5.00	0.251	12/2/2009@12:57:09			CRDL 5.0 ppb
WCN091202-08	1	S7	0.00	0.0222	12/2/2009@12:58:03			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99952 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091202-07	1	S8	149	5.96	12/2/2009@12:59:54			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-0.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091202-08	1	S7	2.20	0.194	12/2/2009@13:01:45			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091201-06	1	S6	3.76	0.255	12/2/2009@13:03:34			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.76 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.76 > 2.50					
		Message	Pass					
		Action	None					
1201982106|927059|DUP	1	11	6.20	0.350	12/2/2009@13:05:23			
1201982110||MS	1	12	111	4.45	12/2/2009@13:06:15			
1201982114||MSD	1	13	115	4.60	12/2/2009@13:07:06			
241793001	1	14	122	4.89	12/2/2009@13:07:58		2.00	
241813005	1	15	2.58	0.208	12/2/2009@13:08:50			
1201982103||DUP	1	16	5.05	0.305	12/2/2009@13:09:44			
1201982107||MS	1	17	102	4.10	12/2/2009@13:10:37			
1201982111||MSD	1	18	102	4.10	12/2/2009@13:11:30			
241835005	1	19	0.611	0.132	12/2/2009@13:12:24			
1201982104||DUP	1	20	-1.89	0.0336	12/2/2009@13:13:17			
WCN091202-03	1	S3	104	4.19	12/2/2009@13:14:09			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.3 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.768	0.138	12/2/2009@13:16:00			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.768 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.768 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982108||MS	1	21	101	4.08	12/2/2009@13:17:48			
1201982112||MSD	1	22	104	4.16	12/2/2009@13:18:41			
241835006	1	23	0.772	0.138	12/2/2009@13:19:34			
241848004	1	24	4.46	0.282	12/2/2009@13:20:26			
241848005	1	25	-2.26	0.0193	12/2/2009@13:21:19			
241848006	1	26	-1.84	0.0355	12/2/2009@13:22:11			
241898001	1	27	-0.883	0.0731	12/2/2009@13:23:03			
241898002	1	28	-1.73	0.0398	12/2/2009@13:23:55			
241898003	1	29	-1.54	0.0474	12/2/2009@13:24:47			
241898004	1	30	-1.81	0.0369	12/2/2009@13:25:39			
WCN091202-03	1	S3	106	4.26	12/2/2009@13:26:32			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.426	0.124	12/2/2009@13:28:22			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.426 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.426 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241848004	1	24	-1.80	0.0372	12/2/2009@13:30:11			
241902001	1	31	-2.74	2.27e-4	12/2/2009@13:31:05			
241902002	1	32	-2.72	0.00102	12/2/2009@13:31:59			
241917001	1	33	-2.22	0.0206	12/2/2009@13:32:52			
241919001	1	34	-1.27	0.0579	12/2/2009@13:33:46			
1201979055|925669|MB	1	35	-1.80	0.0374	12/2/2009@13:34:39			
1201979062||LCS	1	36	27.7	1.19	12/2/2009@13:35:32		25.00	
241536001	1	37	-0.723	0.0793	12/2/2009@13:36:25			
241536002	1	38	-0.102	0.104	12/2/2009@13:37:18			
241536003	1	39	-1.64	0.0435	12/2/2009@13:38:11			
WCN091202-03	1	S3	106	4.24	12/2/2009@13:39:04			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.889	0.142	12/2/2009@13:40:54			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	0.889 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.889 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241536004	1	40	-1.71	0.0405	12/2/2009@13:42:42			
241536005	1	41	-0.186	0.100	12/2/2009@13:43:34			
241536006	1	42	-0.694	0.0804	12/2/2009@13:44:27			
241536007	1	43	-1.72	0.0404	12/2/2009@13:45:19			
241539001	1	44	-0.788	0.0767	12/2/2009@13:46:11			
241539002	1	45	13.2	0.626	12/2/2009@13:47:03			
241539003	1	46	-1.39	0.0533	12/2/2009@13:47:57			
241539004	1	47	-1.39	0.0532	12/2/2009@13:48:51			
241604001	1	48	1.95	0.184	12/2/2009@13:49:45			
1201979056||DUP	1	49	2.06	0.188	12/2/2009@13:50:38			
WCN091202-03	1	S3	106	4.26	12/2/2009@13:51:31			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.539	0.129	12/2/2009@13:53:21			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.539 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.539 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979058||MS	1	50	77.6	3.14	12/2/2009@13:55:11			
1201979060||MSD	1	51	82.2	3.32	12/2/2009@13:56:04			
241604002	1	52	6.39	0.358	12/2/2009@13:56:57			
1201979057||DUP	1	53	2.74	0.215	12/2/2009@13:57:50			
1201979059||MS	1	54	79.2	3.21	12/2/2009@13:58:43			
1201979061||MSD	1	55	90.0	3.63	12/2/2009@13:59:36			
241611001	1	56	-0.369	0.0931	12/2/2009@14:00:29			
241611002	1	57	-1.63	0.0437	12/2/2009@14:01:21			
241611003	1	58	0.396	0.123	12/2/2009@14:02:13			
241611004	1	59	-1.17	0.0617	12/2/2009@14:03:06			
WCN091202-03	1	S3	105	4.22	12/2/2009@14:03:58			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.892	0.143	12/2/2009@14:05:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.892 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.892 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241611005	1	60	-0.730	0.0790	12/2/2009@14:07:36			
241611006	1	61	-1.35	0.0547	12/2/2009@14:08:32			
241611007	1	62	-0.492	0.0884	12/2/2009@14:09:25			
WCN091202-03	1	S3	106	4.26	12/2/2009@14:10:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091202-08	1	S7	1.35	0.161	12/2/2009@14:12:08			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.35 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.35 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_12-2-2009_12-51-59.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 12/2/2009

Channel 1: Current View

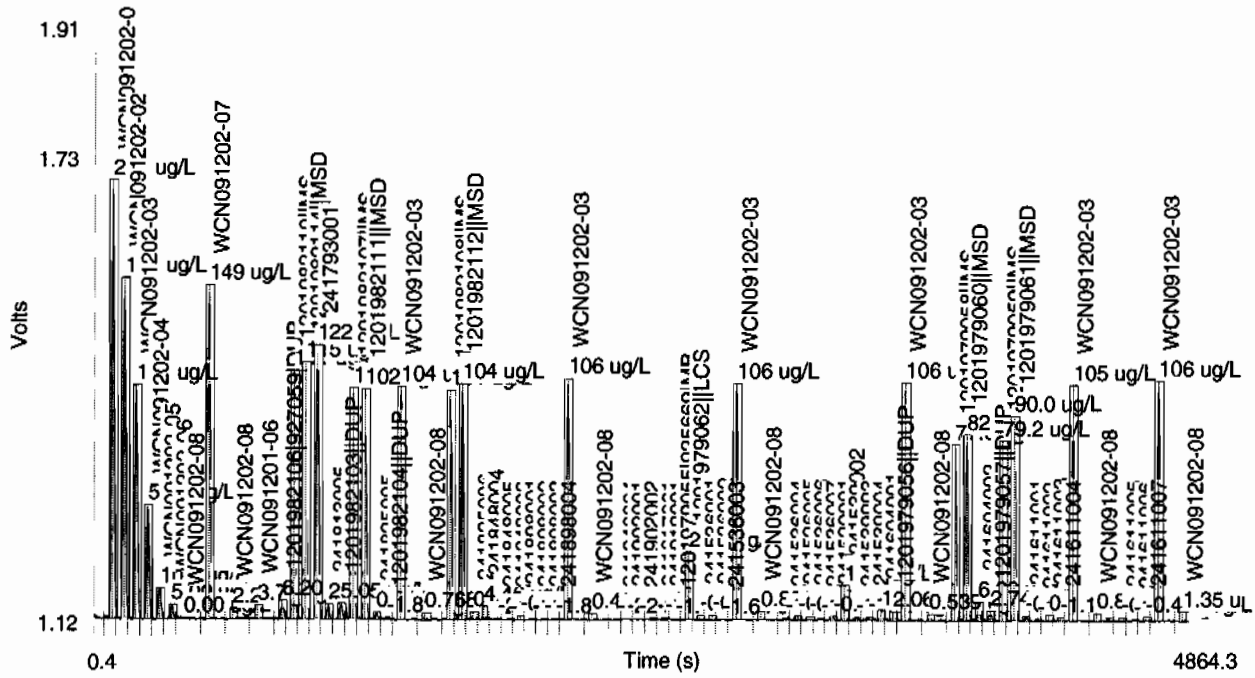

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.81	0.576	1.5	12/2/2009	12:53:48
2	150	1	6.05	0.447	-1.2	12/2/2009	12:54:40
3	100	1	4.16	0.308	-3.5	12/2/2009	12:55:32
4	50.0	1	2.05	0.151	0.5	12/2/2009	12:56:25
5	10.0	1	0.566	0.0404	-12.9	12/2/2009	12:57:19
6	5.00	1	0.251	0.0189	17.8	12/2/2009	12:58:12
7	0.00	1	0.0222	0.00155		12/2/2009	12:59:06

Figure 1: TCYANIDE

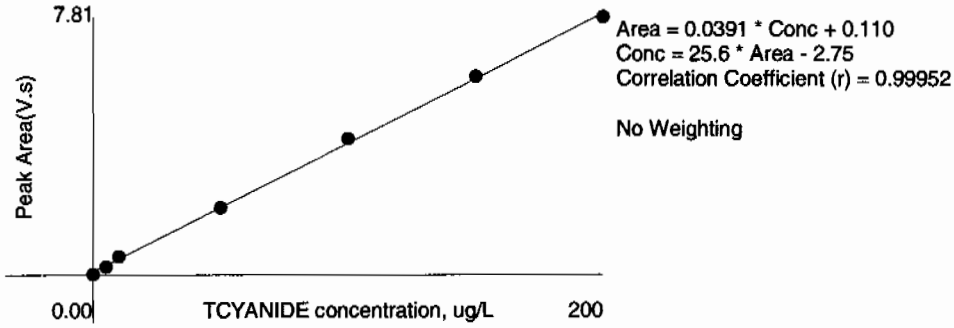

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-DEC-09			
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
		%Null%	
Batch ID:	**Sample Numbers:**		
925669	See Below		

Potentially affected work order(s)(SDG): 241536(10-602),241539(10-603),241604(10-638),241611(10-642)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed recovery for : QC 1201979059MS	1. The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported

Originator's Name:

Ashley Earl 02-DEC-09

Data Validator/Group Leader:

Elzbieta Szulc 08-DEC-09

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-602-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	925667	**Method:**	SW846 9012A
Prep Batch :	925666	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241537001	RE03-10-3935
241537002	RE03-10-3925
1201979044	Method Blank (MB)
1201979046	241563001(CAMO-10-5483) Sample Duplicate (DUP)
1201979047	241537001(RE03-10-3935) Sample Duplicate (DUP)
1201979049	241563001(CAMO-10-5483) Matrix Spike (MS)
1201979050	241537001(RE03-10-3935) Matrix Spike (MS)
1201979052	241563001(CAMO-10-5483) Matrix Spike Duplicate (MSD)
1201979053	241537001(RE03-10-3935) Matrix Spike Duplicate (MSD)
1201979054	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241537001 (RE03-10-3935) and 241563001 (CAMO-10-5483).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation

An NCR was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 16Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-602-1 GEL Work Order: 241537

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-602-1

Client Sample ID:	RE03-10-3935	Project:	LANL01004
Sample ID:	241537001	Client ID:	LANL010
Matrix:	W		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1049	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-602-1

Client Sample ID:	RE03-10-3925	Project:	LANL01004
Sample ID:	241537002	Client ID:	LANL010
Matrix:	W		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1056	925667	1

The following Prep Methods were performed

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SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 2, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241537

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 925667										
QC1201979046 241563001 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A			AXC2	11/30/09 10:59
QC1201979047 241537001 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A				11/30/09 10:54
QC1201979054 LCS										
Cyanide, Total	50.0			52.4	ug/L		105	(90%-110%)		11/30/09 10:42
QC1201979044 MB										
Cyanide, Total			U	5.00	ug/L					11/30/09 10:41
QC1201979049 241563001 MS										
Cyanide, Total	100 U	ND		110	ug/L		110	(60%-127%)		11/30/09 11:00
QC1201979050 241537001 MS										
Cyanide, Total	100 U	ND		104	ug/L		104	(60%-127%)		11/30/09 10:55
QC1201979052 241563001 MSD										
Cyanide, Total	100 U	ND		115	ug/L	4.44	115	(0%-20%)		11/30/09 11:01
QC1201979053 241537001 MSD										
Cyanide, Total	100 U	ND		112	ug/L	7.41	112	(0%-20%)		11/30/09 10:56

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

QC Summary

Workorder: 241537

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 02-DEC-2009 17:33

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-602-1**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**30-NOV-2009 10:36:13**	**OM_11-30-2009_10-25-45**	**153**	**150**	**102**	**(90%-110%)**	**Yes**
CCV	30-NOV-2009 10:50:35	OM_11-30-2009_10-25-45	106	100	106	(90%-110%)	Yes
CCV	30-NOV-2009 11:03:02	OM_11-30-2009_10-25-45	108	100	108	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**30-NOV-2009 10:38:03**	**OM_11-30-2009_10-25-45**	**1.59**	**5**	**Yes**
CCB	30-NOV-2009 10:52:24	OM_11-30-2009_10-25-45	0.988	5	Yes
CCB	30-NOV-2009 11:04:53	OM_11-30-2009_10-25-45	1.14	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925666

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979054	URF1184831-02	.0125	mL
MS	1201979048	URF1184831-02	.025	mL
MS	1201979049	URF1184831-02	.025	mL
MS	1201979050	URF1184831-02	.025	mL
MSD	1201979051	URF1184831-02	.025	mL
MSD	1201979052	URF1184831-02	.025	mL
MSD	1201979053	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201979044		EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
LCS	1201979054		EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241449002		EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
DUP	1201979045	241449002	EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MS	1201979048	241449002	EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MSD	1201979051	241449002	EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241472001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	241511001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241511003		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241537001		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
DUP	1201979047	241537001	SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MS	1201979050	241537001	SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MSD	1201979053	241537001	SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241537002		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241542013		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241563001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201979046	241563001	EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
MS	1201979049	241563001	EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201979052	241563001	EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241590001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241600002		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241601002		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241601004		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241612001		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241612002		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241614001		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925666

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979054	URF1184831-02	.0125	mL
MS	1201979048	URF1184831-02	.025	mL
MS	1201979049	URF1184831-02	.025	mL
MS	1201979050	URF1184831-02	.025	mL
MSD	1201979051	URF1184831-02	.025	mL
MSD	1201979052	URF1184831-02	.025	mL
MSD	1201979053	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
SAMPLE	241614002		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241614003		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241614004		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/30/2009 10:29:03	OM_11-30-2009_10-25-45
150 ppb		1	axc2	11/30/2009 10:29:55	OM_11-30-2009_10-25-45
100 ppb		1	axc2	11/30/2009 10:30:48	OM_11-30-2009_10-25-45
50 ppb		1	axc2	11/30/2009 10:31:41	OM_11-30-2009_10-25-45
10 ppb		1	axc2	11/30/2009 10:32:34	OM_11-30-2009_10-25-45
CRDL 5.0 ppb		1	axc2	11/30/2009 10:33:28	OM_11-30-2009_10-25-45
ICAL-00		1	axc2	11/30/2009 10:34:22	OM_11-30-2009_10-25-45
ICV		1	axc2	11/30/2009 10:36:13	OM_11-30-2009_10-25-45
ICB		1	axc2	11/30/2009 10:38:03	OM_11-30-2009_10-25-45
CRDL		1	axc2	11/30/2009 10:39:53	OM_11-30-2009_10-25-45
1201979044	925667	1	axc2	11/30/2009 10:41:42	OM_11-30-2009_10-25-45
1201979054	925667	1	axc2	11/30/2009 10:42:34	OM_11-30-2009_10-25-45
241449002	925667	1	axc2	11/30/2009 10:43:27	OM_11-30-2009_10-25-45
1201979045	925667	1	axc2	11/30/2009 10:44:19	OM_11-30-2009_10-25-45
1201979048	925667	1	axc2	11/30/2009 10:45:13	OM_11-30-2009_10-25-45
1201979051	925667	1	axc2	11/30/2009 10:46:07	OM_11-30-2009_10-25-45
241472001	925667	1	axc2	11/30/2009 10:47:01	OM_11-30-2009_10-25-45
241511001	925667	1	axc2	11/30/2009 10:47:55	OM_11-30-2009_10-25-45
241511003	925667	1	axc2	11/30/2009 10:48:49	OM_11-30-2009_10-25-45
241537001	925667	1	axc2	11/30/2009 10:49:42	OM_11-30-2009_10-25-45
CCV		1	axc2	11/30/2009 10:50:35	OM_11-30-2009_10-25-45
CCB		1	axc2	11/30/2009 10:52:24	OM_11-30-2009_10-25-45
1201979047	925667	1	axc2	11/30/2009 10:54:14	OM_11-30-2009_10-25-45
1201979050	925667	1	axc2	11/30/2009 10:55:08	OM_11-30-2009_10-25-45
1201979053	925667	1	axc2	11/30/2009 10:56:00	OM_11-30-2009_10-25-45
241537002	925667	1	axc2	11/30/2009 10:56:53	OM_11-30-2009_10-25-45
241542013	925667	1	axc2	11/30/2009 10:57:46	OM_11-30-2009_10-25-45
241563001	925667	1	axc2	11/30/2009 10:58:39	OM_11-30-2009_10-25-45
1201979046	925667	1	axc2	11/30/2009 10:59:32	OM_11-30-2009_10-25-45
1201979049	925667	1	axc2	11/30/2009 11:00:24	OM_11-30-2009_10-25-45
1201979052	925667	1	axc2	11/30/2009 11:01:16	OM_11-30-2009_10-25-45
241590001	925667	1	axc2	11/30/2009 11:02:11	OM_11-30-2009_10-25-45
CCV		1	axc2	11/30/2009 11:03:02	OM_11-30-2009_10-25-45
CCB		1	axc2	11/30/2009 11:04:53	OM_11-30-2009_10-25-45
241600002	925667	1	axc2	11/30/2009 11:06:44	OM_11-30-2009_10-25-45
241601002	925667	1	axc2	11/30/2009 11:07:37	OM_11-30-2009_10-25-45
241601004	925667	1	axc2	11/30/2009 11:08:32	OM_11-30-2009_10-25-45
241612001	925667	1	axc2	11/30/2009 11:09:26	OM_11-30-2009_10-25-45
241612002	925667	1	axc2	11/30/2009 11:10:19	OM_11-30-2009_10-25-45
241614001	925667	1	axc2	11/30/2009 11:11:12	OM_11-30-2009_10-25-45
241614002	925667	1	axc2	11/30/2009 11:12:06	OM_11-30-2009_10-25-45
241614003	925667	1	axc2	11/30/2009 11:12:59	OM_11-30-2009_10-25-45
241614004	925667	1	axc2	11/30/2009 11:13:52	OM_11-30-2009_10-25-45
CCV		1	axc2	11/30/2009 11:14:44	OM_11-30-2009_10-25-45
CCB		1	axc2	11/30/2009 11:16:35	OM_11-30-2009_10-25-45

Author: axc2 Date : 11/30/2009

Original Run Filename: OM_11-30-2009_10-25-45.OMN created 11/30/2009 10:25:45
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-30-2009_10-25-45.OMN last modified 11/30/2009 11:17:40
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091130-01	1	S1	200	6.80	11/30/2009@10:29:03			200 ppb
WCN091130-02	1	S2	150	5.13	11/30/2009@10:29:55			150 ppb
WCN091130-03	1	S3	100	3.46	11/30/2009@10:30:48			100 ppb
WCN091130-04	1	S4	50.0	1.80	11/30/2009@10:31:41			50 ppb
WCN091130-05	1	S5	10.0	0.512	11/30/2009@10:32:34			10 ppb
WCN091130-06	1	S6	5.00	0.250	11/30/2009@10:33:28			CRDL 5.0 ppb
WCN091130-08	1	S7	0.00	0.0367	11/30/2009@10:34:22			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99987 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091130-07	1	S8	153	5.24	11/30/2009@10:36:13			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	2.1 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.1 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091130-08	1	S7	1.59	0.155	11/30/2009@10:38:03			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.59 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.59 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091130-06	1	S6	4.59	0.255	11/30/2009@10:39:53			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.59 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.59 > 2.50					
		Message	Pass					
		Action	None					
1201979044|925667|MB	1	57	-1.70	0.0443	11/30/2009@10:41:42			
1201979054||LCS	1	58	52.4	1.86	11/30/2009@10:42:34			
241449002	1	59	0.214	0.109	11/30/2009@10:43:27			
1201979045||DUP	1	60	-1.16	0.0626	11/30/2009@10:44:19			
1201979048||MS	1	61	109	3.75	11/30/2009@10:45:13			
1201979051||MSD	1	62	111	3.82	11/30/2009@10:46:07			
241472001	1	63	1.68	0.158	11/30/2009@10:47:01			
241511001	1	64	2.29	0.178	11/30/2009@10:47:55			
241511003	1	65	-1.93	0.0367	11/30/2009@10:48:49			
241537001	1	66	-2.05	0.0326	11/30/2009@10:49:42			
WCN091130-03	1	S3	106	3.67	11/30/2009@10:50:35			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.4 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091130-08	1	S7	0.988	0.135	11/30/2009@10:52:24			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.988 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.988 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979047||DUP	1	67	-1.68	0.0452	11/30/2009@10:54:14			
1201979050||MS	1	68	104	3.58	11/30/2009@10:55:08			
1201979053||MSD	1	69	112	3.86	11/30/2009@10:56:00			
241537002	1	70	0.955	0.134	11/30/2009@10:56:53			
241542013	1	71	-0.864	0.0725	11/30/2009@10:57:46			
241563001	1	72	-1.72	0.0437	11/30/2009@10:58:39			
1201979046||DUP	1	73	-2.05	0.0326	11/30/2009@10:59:32			
1201979049||MS	1	74	110	3.79	11/30/2009@11:00:24			
1201979052||MSD	1	75	115	3.98	11/30/2009@11:01:16			
241590001	1	76	1.21	0.142	11/30/2009@11:02:11			
WCN091130-03	1	S3	108	3.73	11/30/2009@11:03:02			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091130-08	1	S7	1.14	0.140	11/30/2009@11:04:53			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.14 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.14 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241600002	1	77	-1.50	0.0511	11/30/2009@11:06:44			
241601002	1	78	-2.05	0.0326	11/30/2009@11:07:37			
241601004	1	79	-2.20	0.0278	11/30/2009@11:08:32			
241612001	1	80	-1.65	0.0461	11/30/2009@11:09:26			
241612002	1	81	-1.68	0.0450	11/30/2009@11:10:19			
241614001	1	82	-2.21	0.0274	11/30/2009@11:11:12			
241614002	1	83	-2.01	0.0341	11/30/2009@11:12:06			
241614003	1	84	-1.95	0.0359	11/30/2009@11:12:59			
241614004	1	85	-3.03	-1.48e-4	11/30/2009@11:13:52			
WCN091130-03	1	S3	108	3.73	11/30/2009@11:14:44			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091130-08	1	S7	1.11	0.139	11/30/2009@11:16:35			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								

Author: axc2 Date : 11/30/2009

Result:	1.11 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.11 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-30-2009_10-25-45.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

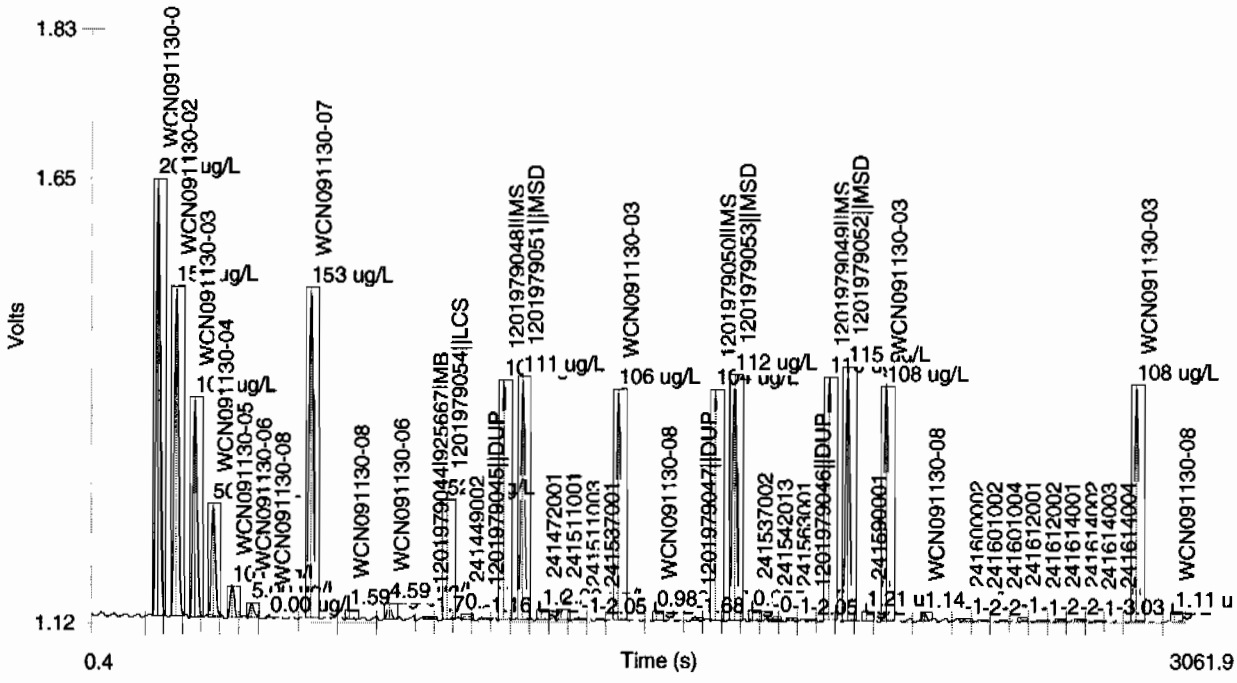

Author: axc2 Date : 11/30/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.80	0.527	0.1	11/30/2009	10:30:07
2	150	1	5.13	0.400	0.0	11/30/2009	10:30:59
3	100	1	3.46	0.267	-0.0	11/30/2009	10:31:51
4	50.0	1	1.80	0.136	-1.0	11/30/2009	10:32:44
5	10.0	1	0.512	0.0374	-17.0	11/30/2009	10:33:37
6	5.00	1	0.250	0.0178	7.3	11/30/2009	10:34:31
7	0.00	1	0.0367	7.85e-4		11/30/2009	10:35:25

Figure 1: TCYANIDE

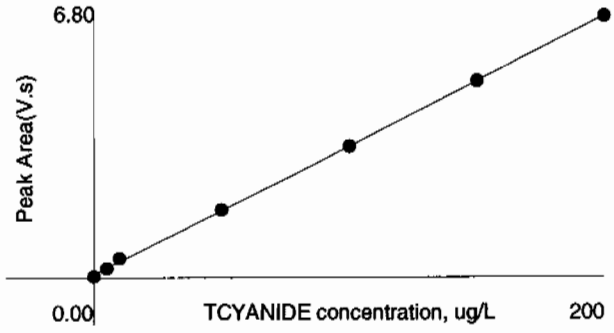

Area = 0.0335 * Conc + 0.102
Conc = 29.8 * Area - 3.03
Correlation Coefficient (r) = 0.99987

No Weighting

Thursday, November 19, 2009

REQUEST NUMBER: 10-601

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-601
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13972	S	11/18/2009	
		1	RE03-09-13973	S	11/18/2009	
		1	RE03-09-13974	S	11/18/2009	
		1	RE03-09-13975	S	11/18/2009	
		1	RE03-09-13976	S	11/18/2009	
		1	RE03-09-13977	S	11/18/2009	
		1	RE03-10-3915	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13972	S	11/18/2009	
		1	RE03-09-13973	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-601

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13974	S	11/18/2009	
		1	RE03-09-13975	S	11/18/2009	
		1	RE03-09-13976	S	11/18/2009	
		1	RE03-09-13977	S	11/18/2009	
		1	RE03-09-14033	S	11/18/2009	
		1	RE03-10-3915	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13972	S	11/18/2009	
		1	RE03-09-13973	S	11/18/2009	
		1	RE03-09-13974	S	11/18/2009	
		1	RE03-09-13975	S	11/18/2009	
		1	RE03-09-13976	S	11/18/2009	
		1	RE03-09-13977	S	11/18/2009	
		1	RE03-10-3915	S	11/18/2009	

Final Page of REQUEST NUMBER 10-601

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-601

REQUEST NUMBER: 10-601

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13975	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13975	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13976	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13976	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13973	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13973	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13972	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13972	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13977	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13977	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13974	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13974	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-14033	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-3915	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-3915	1	AMBER GLASS	8270C+8082	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/19/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13972 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	
TIME COLLECTED (HH:MM)		0810	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608337	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY, SAND CLAY w/ plant roots. BROWN (7.5 YR 5/3)

SAMPLE COMMENTS: mr 11/17/09 ~~HIT TUFF @ 4'~~

LOCATION DESC: 03-052(b) - 6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 21.7 ppm BACKGROUND α: 16 dpm β: 1352 ↓ SAMPLES MDA

COLLECTED BY (PRINT) D. Thomas, M. Shendo REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13973 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	~~[illegible]~~ mc 11/19/09 All H
TIME COLLECTED (HH:MM)		0822	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608337	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~X~~ ~~R~~ S mc 11/19/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY, SAND w/ tuff. Reddish yelow (7.5 YR 8/6)

SAMPLE COMMENTS: hit tuff @ 4.5'

LOCATION DESC: 03-052(b)

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8 ppm
BACKGROUND SAMPLES MDA
α: 16 dpm
β: 1350 ↓

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-19-09	(Printed Name)	11-19-09
(Signature)	1630	(Signature) [illegible]	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13974 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		844	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608338		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2' ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ~~NA~~ COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is clay with sand and silt. Plant roots present. Brown (7.5YR 4/3) Location was moved 6' East

SAMPLE COMMENTS:

LOCATION DESC: 03-526-5

FIELD SCREENING/MEASUREMENT RESULTS:

PID: 0.8 ppm

Background Samples MDA

α: 16 dpm

β: 1350 ↓

COLLECTED BY (PRINT) Micah Nauck

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13975 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		0857	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608338	↓	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is clay with sand. Brown (7.5YR 4/3)
Location was moved 6' East

SAMPLE COMMENTS:

LOCATION DESC: 03-526-5

FIELD SCREENING/MEASUREMENT RESULTS:

PID: 0ppm

Background
α: 16 dpm
β: 1352 dpm

Samples MAA

COLLECTED BY (PRINT) Micah Deuck

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13976 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		0905	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608339		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is silty clay. Moist. Brown - dark brown. (7.5YR 3/2)

SAMPLE COMMENTS:

LOCATION DESC: 03-526-2

FIELD SCREENING/MEASUREMENT RESULTS:

PID: 0.0 ppm

Background: α: 16 dpm, β 1352

Sample MDA

COLLECTED BY (PRINT) Connie Horne

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13977 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		0923	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608339	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Material is silty sand with clay. Brown. (7.5 YR 4/3)

SAMPLE COMMENTS:

LOCATION DESC: 03-526-2

FIELD SCREENING/MEASUREMENT RESULTS:

PID 00 ppm

BACKGROUND SAMPLE MDA
α: 16 dpm
β: 1350 ↓

COLLECTED BY (PRINT) Lonnie Horne **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jonathan Jordan	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-14033 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-18-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		0810	SUB-MEDIA:	OTHER	OK
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK	03-608337	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 11-18-09 JLS 11-18-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13972

SAMPLE COMMENTS: NA

LOCATION DESC: ~~03-0~~ JLS 11-18-09 03-526-6

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sherwood REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Sherwood (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3915 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		0822	SUB-MEDIA:	SOIL	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608337	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: QC Sample of RE03-09-13973

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Vauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vauck (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3925 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0920	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608339	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13977

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Ward

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Ward	11-18-09	(Printed Name)	11-18-09
(Signature)	1635	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3935 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	~~NA~~ OK
TIME COLLECTED (HH:MM)		0935	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-60839	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC		FIELD PREP:	UF	
TOP DEPTH:	0	4'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13977

SAMPLE COMMENTS: NA

LOCATION DESC: ~~03-5~~ PT 11/18/09

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Megan Rains **REVIEWED BY (PRINT)** M. Marck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Marck (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-601 VALIDATION DATE: 1/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eyda Hergenreder ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV and/or CCV %Ds for dichlorodifluoromethane, trichlorofluoromethane, 2-butanone, 2-hexanone and tetrachloroethylene were >20%. All associated sample results were NDs and, thus, were qualified UJ,V7c.

Reviewed by: MLD **Level I** **Date:** 01/26/10

VALIDATOR'S SIGNATURE: Eyda Hergenreder Eyda Hergenreder DATE: 1/25/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☒	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 15:04	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:46	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n312.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10	UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10	UJ,V7c
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49	
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10	
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49	
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49	
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10	
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10	
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10	UJ,V7c
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10	

EH
1/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 15:04	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:46	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n312.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

EH
1/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534003	Date Received:	11/20/2009 08:50	%Moisture:	8.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13973	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 14:30	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:44	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n311.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.371	1.09	UJ,V7c
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09	
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09	
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09	
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09	
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09	UJ,V7c
67-64-1	Acetone	J	3.91	ug/kg	1.81	5.46	
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
74-88-4	Iodomethane	U	5.46	ug/kg	1.75	5.46	
75-09-2	Methylene chloride	U	5.46	ug/kg	2.18	5.46	
75-15-0	Carbon disulfide	U	5.46	ug/kg	1.36	5.46	
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09	
78-93-3	2-Butanone	U	5.46	ug/kg	1.64	5.46	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09	
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09	
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09	
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09	
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09	
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09	
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09	
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09	
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09	
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09	
108-10-1	4-Methyl-2-pentanone	U	5.46	ug/kg	1.36	5.46	
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09	
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09	
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09	
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09	
591-78-6	2-Hexanone	U	5.46	ug/kg	1.64	5.46	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09	UJ,V7c
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09	
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09	
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534003	Date Received:	11/20/2009 08:50	%Moisture:	8.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13973	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 14:30	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:44	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n311.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.328	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.46	ug/kg	1.75	5.46
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 16:13	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:50	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n314.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.396	1.17	UJ,V7c
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17	
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17	
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17	
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17	
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17	UJ,V7c
67-64-1	Acetone	U	5.83	ug/kg	1.93	5.83	
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
74-88-4	Iodomethane	U	5.83	ug/kg	1.86	5.83	
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83	
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83	
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17	
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17	
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.385	1.17	
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17	
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17	
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17	
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17	
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17	
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.385	1.17	
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17	
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17	
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83	
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17	
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17	
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17	
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17	
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17	UJ,V7c
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17	
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17	
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 16:13	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:50	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n314.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.86	5.83
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 13:23	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:38	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n309.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.414	1.22	UJ,V7c
74-87-3	Chloromethane	U	1.22	ug/kg	0.365	1.22	
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.365	1.22	
74-83-9	Bromomethane	U	1.22	ug/kg	0.365	1.22	
75-00-3	Chloroethane	U	1.22	ug/kg	0.365	1.22	
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.365	1.22	UJ,V7c
67-64-1	Acetone	J	2.26	ug/kg	2.02	6.09	
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.365	1.22	
74-88-4	Iodomethane	U	6.09	ug/kg	1.95	6.09	
75-09-2	Methylene chloride	U	6.09	ug/kg	2.43	6.09	
75-15-0	Carbon disulfide	U	6.09	ug/kg	1.52	6.09	
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22	
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.365	1.22	
78-93-3	2-Butanone	U	6.09	ug/kg	1.83	6.09	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22	
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22	
67-66-3	Chloroform	U	1.22	ug/kg	0.365	1.22	
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.402	1.22	
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.365	1.22	
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.365	1.22	
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.365	1.22	
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.365	1.22	
71-43-2	Benzene	U	1.22	ug/kg	0.365	1.22	
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.402	1.22	
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22	
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.365	1.22	
74-95-3	Dibromomethane	U	1.22	ug/kg	0.365	1.22	
108-10-1	4-Methyl-2-pentanone	U	6.09	ug/kg	1.52	6.09	
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22	
108-88-3	Toluene	U	1.22	ug/kg	0.365	1.22	
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22	
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.365	1.22	
591-78-6	2-Hexanone	U	6.09	ug/kg	1.83	6.09	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.365	1.22	
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.365	1.22	UJ,V7c
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.365	1.22	
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.365	1.22	
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.365	1.22	

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 13:23	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:38	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n309.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes	U	2.43	ug/kg	0.365	2.43
95-47-6	o-Xylene	U	1.22	ug/kg	0.365	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.365	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.365	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	No Tentatively Identified Compounds Found			ug/kg		

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 13:56	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:42	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n310.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.406	1.19	UJ,V7c
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19	
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19	
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19	
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19	
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19	UJ,V7c
67-64-1	Acetone	U	5.97	ug/kg	1.98	5.97	
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
74-88-4	Iodomethane	U	5.97	ug/kg	1.91	5.97	
75-09-2	Methylene chloride	U	5.97	ug/kg	2.39	5.97	
75-15-0	Carbon disulfide	U	5.97	ug/kg	1.49	5.97	
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19	
78-93-3	2-Butanone	U	5.97	ug/kg	1.79	5.97	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19	
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.394	1.19	
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19	
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19	
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19	
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19	
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19	
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.394	1.19	
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19	
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19	
108-10-1	4-Methyl-2-pentanone	U	5.97	ug/kg	1.49	5.97	
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19	
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19	
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19	
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19	
591-78-6	2-Hexanone	U	5.97	ug/kg	1.79	5.97	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19	UJ,V7c
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19	
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19	
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 13:56	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:42	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n310.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.358	2.39
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.97	ug/kg	1.91	5.97
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 15:39	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:48	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n313.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19	UJ,V7c
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19	
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19	
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19	
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19	
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19	UJ,V7c
67-64-1	Acetone	U	5.96	ug/kg	1.98	5.96	
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
74-88-4	Iodomethane	U	5.96	ug/kg	1.91	5.96	
75-09-2	Methylene chloride	U	5.96	ug/kg	2.38	5.96	
75-15-0	Carbon disulfide	U	5.96	ug/kg	1.49	5.96	
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19	
78-93-3	2-Butanone	U	5.96	ug/kg	1.79	5.96	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19	
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19	
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19	
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19	
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19	
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19	
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19	
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19	
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19	
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19	
108-10-1	4-Methyl-2-pentanone	U	5.96	ug/kg	1.49	5.96	
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19	
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19	
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19	
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19	
591-78-6	2-Hexanone	U	5.96	ug/kg	1.79	5.96	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19	UJ,V7c
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19	
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19	
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 15:39	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:48	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n313.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.358	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.96	ug/kg	1.91	5.96
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	18.64	59.6	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534007	Date Received:	11/20/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14033	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 12:49	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:35	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n308.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	UJ,V7c
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	UJ,V7c
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534007	Date Received:	11/20/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14033	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 12:49	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:35	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n308.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	21.56	9.18	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534008	Date Received:	11/20/2009 08:50	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3915	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 16:47	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:52	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n315.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10	UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10	UJ,V7c
67-64-1	Acetone		5.53	ug/kg	1.83	5.52	
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
74-88-4	Iodomethane	U	5.52	ug/kg	1.76	5.52	
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52	
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
78-93-3	2-Butanone	U	5.52	ug/kg	1.65	5.52	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
591-78-6	2-Hexanone	U	5.52	ug/kg	1.65	5.52	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10	UJ,V7c
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10	

EH
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534008	Date Received:	11/20/2009 08:50	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3915	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 16:47	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:52	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n315.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.76	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

EH
1/25/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-601 VALIDATION DATE: 1/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eyda Hergenreder ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV and/or CCV %Ds for pyridine, bis(2-chloroisopropyl)ether, hexachlorocyclopentadiene, 3-nitroaniline and 4-nitroaniline were >20%. All associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The MSD %R for 2,4-dinitrophenol and the MS/MSD RPDs for hexachlorocyclopentadiene, 2,4-dinitrophenol, 2-methyl-4,6-dinitrophenol and benzo(ghi)perylene were outside the laboratory acceptance limits. Since MS/MSD analyses are not required for the requested method, no sample data were qualified as a result. In addition, it should be noted that the MS/MSD analyses were performed on a sample from another LANL RN. No data were qualified as a result.

Reviewed by: MLD **Level I** **Date:** 01/26/10

VALIDATOR'S SIGNATURE: Eyda Hergenreder (Eyda Hergenreder) DATE: 1/25/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:56	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2925.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	72.9	365	
108-95-2	Phenol	U	365	ug/kg	72.9	365	
95-57-8	2-Chlorophenol	U	365	ug/kg	72.9	365	
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	72.9	365	
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	72.9	365	
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	72.9	365	
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5	
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365	
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365	
87-86-5	Pentachlorophenol	U	365	ug/kg	91.2	365	
129-00-0	Pyrene	U	36.5	ug/kg	10.9	36.5	
110-86-1	Pyridine	U	365	ug/kg	72.9	365	UJ,SV7c
62-53-3	Aniline	U	365	ug/kg	109	365	
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	72.9	365	
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	72.9	365	
100-51-6	Benzyl alcohol	U	365	ug/kg	109	365	
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	72.9	365	
108-60-1	bis(2-Chloroisopropyl)ether	U	365	ug/kg	72.9	365	UJ,SV7c
95-48-7	o-Cresol	U	365	ug/kg	72.9	365	
65794-96-9	m,p-Cresols	U	365	ug/kg	109	365	
67-72-1	Hexachloroethane	U	365	ug/kg	72.9	365	
98-95-3	Nitrobenzene	U	365	ug/kg	72.9	365	
78-59-1	Isophorone	U	365	ug/kg	72.9	365	
88-75-5	2-Nitrophenol	U	365	ug/kg	72.9	365	
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365	
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	72.9	365	
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	72.9	365	
65-85-0	Benzoic acid	U	729	ug/kg	182	729	
91-20-3	Naphthalene	U	36.5	ug/kg	10.9	36.5	
106-47-8	4-Chloroaniline	U	365	ug/kg	72.9	365	
87-68-3	Hexachlorobutadiene	U	365	ug/kg	72.9	365	
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.29	36.5	
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	72.9	365	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	72.9	365	
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	72.9	365	
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	365	ug/kg	72.9	365	
99-09-2	3-Nitroaniline	U	365	ug/kg	72.9	365	UJ,SV7c

EH
1/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:56	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2925.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	365	ug/kg	72.9	365	
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365	
208-96-8	Acenaphthylene	U	36.5	ug/kg	10.9	36.5	
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	139	729	
132-64-9	Dibenzofuran	U	365	ug/kg	72.9	365	
84-66-2	Diethylphthalate	U	365	ug/kg	72.9	365	
86-73-7	Fluorene	U	36.5	ug/kg	10.9	36.5	
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	72.9	365	
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	72.9	365	
100-01-6	4-Nitroaniline	U	365	ug/kg	109	365	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	365	ug/kg	72.9	365	
122-66-7	Azobenzene	U	365	ug/kg	72.9	365	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	72.9	365	
118-74-1	Hexachlorobenzene	U	365	ug/kg	72.9	365	
85-01-8	Phenanthrene	U	36.5	ug/kg	10.9	36.5	
120-12-7	Anthracene	U	36.5	ug/kg	7.29	36.5	
84-74-2	Di-n-butylphthalate	U	365	ug/kg	72.9	365	
206-44-0	Fluoranthene	U	36.5	ug/kg	10.9	36.5	
85-68-7	Butylbenzylphthalate	U	365	ug/kg	72.9	365	
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	10.9	36.5	
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	109	365	
218-01-9	Chrysene	U	36.5	ug/kg	10.9	36.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	72.9	365	
117-84-0	Di-n-octylphthalate	U	365	ug/kg	72.9	365	
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	10.9	36.5	
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	10.9	36.5	
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	10.9	36.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	10.9	36.5	
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	10.9	36.5	
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	10.9	36.5	
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	72.9	365	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	910	ug/kg		J
	Unknown Aldol Condensate	2.87	278	ug/kg		JA

EH
1/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:56	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2925.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	3.79	257	ug/kg	97	NJ
3310-94-9	Methyl palustrate isomer	8.05	153	ug/kg	83	NJ
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.06	316	ug/kg	91	NJ
	Unknown	8.12	314	ug/kg		J
127-25-3	Methyl abietate	8.25	211	ug/kg	95	NJ
	Unknown	8.37	172	ug/kg		J
	Unknown	11.58	667	ug/kg		J
	Unknown	11.76	283	ug/kg		J

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534003	Date Received:	11/20/2009 08:50	%Moisture:	8.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13973	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s1k2924.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.7	363	
108-95-2	Phenol	U	363	ug/kg	72.7	363	
95-57-8	2-Chlorophenol	U	363	ug/kg	72.7	363	
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.7	363	
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.7	363	
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.7	363	
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3	
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363	
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363	
87-86-5	Pentachlorophenol	U	363	ug/kg	90.9	363	
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3	
110-86-1	Pyridine	U	363	ug/kg	72.7	363	UJ,SV7c
62-53-3	Aniline	U	363	ug/kg	109	363	
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.7	363	
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.7	363	
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363	
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.7	363	
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.7	363	UJ,SV7c
95-48-7	o-Cresol	U	363	ug/kg	72.7	363	
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363	
67-72-1	Hexachloroethane	U	363	ug/kg	72.7	363	
98-95-3	Nitrobenzene	U	363	ug/kg	72.7	363	
78-59-1	Isophorone	U	363	ug/kg	72.7	363	
88-75-5	2-Nitrophenol	U	363	ug/kg	72.7	363	
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363	
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.7	363	
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.7	363	
65-85-0	Benzoic acid	U	727	ug/kg	182	727	
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3	
106-47-8	4-Chloroaniline	U	363	ug/kg	72.7	363	
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.7	363	
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.27	36.3	
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.7	363	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.7	363	
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.7	363	
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	363	ug/kg	72.7	363	
99-09-2	3-Nitroaniline	U	363	ug/kg	72.7	363	UJ,SV7c

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534003	Date Received:	11/20/2009 08:50	%Moisture:	8.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13973	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s1k2924.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	363	ug/kg	72.7	363	
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363	
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3	
51-28-5	2,4-Dinitrophenol	U	727	ug/kg	138	727	
132-64-9	Dibenzofuran	U	363	ug/kg	72.7	363	
84-66-2	Diethylphthalate	U	363	ug/kg	72.7	363	
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3	
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.7	363	
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.7	363	
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	363	ug/kg	72.7	363	
122-66-7	Azobenzene	U	363	ug/kg	72.7	363	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.7	363	
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.7	363	
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3	
120-12-7	Anthracene	U	36.3	ug/kg	7.27	36.3	
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.7	363	
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3	
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.7	363	
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3	
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363	
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.7	363	
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.7	363	
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3	
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3	
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3	
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3	
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3	
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.7	363	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.87	275	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:42	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2927.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	387	ug/kg	77.3	387	
108-95-2	Phenol	U	387	ug/kg	77.3	387	
95-57-8	2-Chlorophenol	U	387	ug/kg	77.3	387	
106-46-7	1,4-Dichlorobenzene	U	387	ug/kg	77.3	387	
621-64-7	N-Nitrosodipropylamine	U	387	ug/kg	77.3	387	
59-50-7	4-Chloro-3-methylphenol	U	387	ug/kg	77.3	387	
83-32-9	Acenaphthene	U	38.7	ug/kg	12.8	38.7	
121-14-2	2,4-Dinitrotoluene	U	387	ug/kg	38.7	387	
100-02-7	4-Nitrophenol	U	387	ug/kg	128	387	
87-86-5	Pentachlorophenol	U	387	ug/kg	96.7	387	
129-00-0	Pyrene	U	38.7	ug/kg	11.6	38.7	
110-86-1	Pyridine	U	387	ug/kg	77.3	387	UJ,SV7c
62-53-3	Aniline	U	387	ug/kg	116	387	
111-44-4	bis(2-Chloroethyl) ether	U	387	ug/kg	77.3	387	
541-73-1	1,3-Dichlorobenzene	U	387	ug/kg	77.3	387	
100-51-6	Benzyl alcohol	U	387	ug/kg	116	387	
95-50-1	1,2-Dichlorobenzene	U	387	ug/kg	77.3	387	
108-60-1	bis(2-Chloroisopropyl)ether	U	387	ug/kg	77.3	387	UJ,SV7c
95-48-7	o-Cresol	U	387	ug/kg	77.3	387	
65794-96-9	m,p-Cresols	U	387	ug/kg	116	387	
67-72-1	Hexachloroethane	U	387	ug/kg	77.3	387	
98-95-3	Nitrobenzene	U	387	ug/kg	77.3	387	
78-59-1	Isophorone	U	387	ug/kg	77.3	387	
88-75-5	2-Nitrophenol	U	387	ug/kg	77.3	387	
105-67-9	2,4-Dimethylphenol	U	387	ug/kg	135	387	
111-91-1	bis(2-Chloroethoxy)methane	U	387	ug/kg	77.3	387	
120-83-2	2,4-Dichlorophenol	U	387	ug/kg	77.3	387	
65-85-0	Benzoic acid	U	773	ug/kg	193	773	
91-20-3	Naphthalene	U	38.7	ug/kg	11.6	38.7	
106-47-8	4-Chloroaniline	U	387	ug/kg	77.3	387	
87-68-3	Hexachlorobutadiene	U	387	ug/kg	77.3	387	
91-57-6	2-Methylnaphthalene	U	38.7	ug/kg	7.73	38.7	
77-47-4	Hexachlorocyclopentadiene	U	387	ug/kg	77.3	387	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	387	ug/kg	77.3	387	
95-95-4	2,4,5-Trichlorophenol	U	387	ug/kg	77.3	387	
91-58-7	2-Chloronaphthalene	U	38.7	ug/kg	12.8	38.7	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	387	ug/kg	77.3	387	
99-09-2	3-Nitroaniline	U	387	ug/kg	77.3	387	UJ,SV7c

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:42	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2927.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	387	ug/kg	77.3	387	
606-20-2	2,6-Dinitrotoluene	U	387	ug/kg	38.7	387	
208-96-8	Acenaphthylene	U	38.7	ug/kg	11.6	38.7	
51-28-5	2,4-Dinitrophenol	U	773	ug/kg	147	773	
132-64-9	Dibenzofuran	U	387	ug/kg	77.3	387	
84-66-2	Diethylphthalate	U	387	ug/kg	77.3	387	
86-73-7	Fluorene	U	38.7	ug/kg	11.6	38.7	
7005-72-3	4-Chlorophenylphenylether	U	387	ug/kg	77.3	387	
534-52-1	2-Methyl-4,6-dinitrophenol	U	387	ug/kg	77.3	387	
100-01-6	4-Nitroaniline	U	387	ug/kg	116	387	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	387	ug/kg	77.3	387	
122-66-7	Azobenzene	U	387	ug/kg	77.3	387	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	387	ug/kg	77.3	387	
118-74-1	Hexachlorobenzene	U	387	ug/kg	77.3	387	
85-01-8	Phenanthrene	U	38.7	ug/kg	11.6	38.7	
120-12-7	Anthracene	U	38.7	ug/kg	7.73	38.7	
84-74-2	Di-n-butylphthalate	U	387	ug/kg	77.3	387	
206-44-0	Fluoranthene	U	38.7	ug/kg	11.6	38.7	
85-68-7	Butylbenzylphthalate	U	387	ug/kg	77.3	387	
56-55-3	Benzo(a)anthracene	U	38.7	ug/kg	11.6	38.7	
91-94-1	3,3'-Dichlorobenzidine	U	387	ug/kg	116	387	
218-01-9	Chrysene	U	38.7	ug/kg	11.6	38.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	387	ug/kg	77.3	387	
117-84-0	Di-n-octylphthalate	U	387	ug/kg	77.3	387	
205-99-2	Benzo(b)fluoranthene	U	38.7	ug/kg	11.6	38.7	
207-08-9	Benzo(k)fluoranthene	U	38.7	ug/kg	11.6	38.7	
50-32-8	Benzo(a)pyrene	U	38.7	ug/kg	11.6	38.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.7	ug/kg	11.6	38.7	
53-70-3	Dibenzo(a,h)anthracene	U	38.7	ug/kg	11.6	38.7	
191-24-2	Benzo(ghi)perylene	U	38.7	ug/kg	11.6	38.7	
120-82-1	1,2,4-Trichlorobenzene	U	387	ug/kg	77.3	387	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	279	ug/kg		JA

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:46	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1k2922.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	403	ug/kg	80.7	403	
108-95-2	Phenol	U	403	ug/kg	80.7	403	
95-57-8	2-Chlorophenol	U	403	ug/kg	80.7	403	
106-46-7	1,4-Dichlorobenzene	U	403	ug/kg	80.7	403	
621-64-7	N-Nitrosodipropylamine	U	403	ug/kg	80.7	403	
59-50-7	4-Chloro-3-methylphenol	U	403	ug/kg	80.7	403	
83-32-9	Acenaphthene	U	40.3	ug/kg	13.3	40.3	
121-14-2	2,4-Dinitrotoluene	U	403	ug/kg	40.3	403	
100-02-7	4-Nitrophenol	U	403	ug/kg	133	403	
87-86-5	Pentachlorophenol	U	403	ug/kg	101	403	
129-00-0	Pyrene	U	40.3	ug/kg	12.1	40.3	
110-86-1	Pyridine	U	403	ug/kg	80.7	403	UJ,SV7c
62-53-3	Aniline	U	403	ug/kg	121	403	
111-44-4	bis(2-Chloroethyl) ether	U	403	ug/kg	80.7	403	
541-73-1	1,3-Dichlorobenzene	U	403	ug/kg	80.7	403	
100-51-6	Benzyl alcohol	U	403	ug/kg	121	403	
95-50-1	1,2-Dichlorobenzene	U	403	ug/kg	80.7	403	
108-60-1	bis(2-Chloroisopropyl)ether	U	403	ug/kg	80.7	403	UJ,SV7c
95-48-7	o-Cresol	U	403	ug/kg	80.7	403	
65794-96-9	m,p-Cresols	U	403	ug/kg	121	403	
67-72-1	Hexachloroethane	U	403	ug/kg	80.7	403	
98-95-3	Nitrobenzene	U	403	ug/kg	80.7	403	
78-59-1	Isophorone	U	403	ug/kg	80.7	403	
88-75-5	2-Nitrophenol	U	403	ug/kg	80.7	403	
105-67-9	2,4-Dimethylphenol	U	403	ug/kg	141	403	
111-91-1	bis(2-Chloroethoxy)methane	U	403	ug/kg	80.7	403	
120-83-2	2,4-Dichlorophenol	U	403	ug/kg	80.7	403	
65-85-0	Benzoic acid	U	807	ug/kg	202	807	
91-20-3	Naphthalene	U	40.3	ug/kg	12.1	40.3	
106-47-8	4-Chloroaniline	U	403	ug/kg	80.7	403	
87-68-3	Hexachlorobutadiene	U	403	ug/kg	80.7	403	
91-57-6	2-Methylnaphthalene	U	40.3	ug/kg	8.07	40.3	
77-47-4	Hexachlorocyclopentadiene	U	403	ug/kg	80.7	403	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	403	ug/kg	80.7	403	
95-95-4	2,4,5-Trichlorophenol	U	403	ug/kg	80.7	403	
91-58-7	2-Chloronaphthalene	U	40.3	ug/kg	13.3	40.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	403	ug/kg	80.7	403	
99-09-2	3-Nitroaniline	U	403	ug/kg	80.7	403	UJ,SV7c

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:46	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1k2922.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	403	ug/kg	80.7	403	
606-20-2	2,6-Dinitrotoluene	U	403	ug/kg	40.3	403	
208-96-8	Acenaphthylene	U	40.3	ug/kg	12.1	40.3	
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807	
132-64-9	Dibenzofuran	U	403	ug/kg	80.7	403	
84-66-2	Diethylphthalate	U	403	ug/kg	80.7	403	
86-73-7	Fluorene	U	40.3	ug/kg	12.1	40.3	
7005-72-3	4-Chlorophenylphenylether	U	403	ug/kg	80.7	403	
534-52-1	2-Methyl-4,6-dinitrophenol	U	403	ug/kg	80.7	403	
100-01-6	4-Nitroaniline	U	403	ug/kg	121	403	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	403	ug/kg	80.7	403	
122-66-7	Azobenzene	U	403	ug/kg	80.7	403	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	403	ug/kg	80.7	403	
118-74-1	Hexachlorobenzene	U	403	ug/kg	80.7	403	
85-01-8	Phenanthrene	U	40.3	ug/kg	12.1	40.3	
120-12-7	Anthracene	U	40.3	ug/kg	8.07	40.3	
84-74-2	Di-n-butylphthalate	U	403	ug/kg	80.7	403	
206-44-0	Fluoranthene	U	40.3	ug/kg	12.1	40.3	
85-68-7	Butylbenzylphthalate	U	403	ug/kg	80.7	403	
56-55-3	Benzo(a)anthracene	U	40.3	ug/kg	12.1	40.3	
91-94-1	3,3'-Dichlorobenzidine	U	403	ug/kg	121	403	
218-01-9	Chrysene	U	40.3	ug/kg	12.1	40.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	403	ug/kg	80.7	403	
117-84-0	Di-n-octylphthalate	U	403	ug/kg	80.7	403	
205-99-2	Benzo(b)fluoranthene	U	40.3	ug/kg	12.1	40.3	
207-08-9	Benzo(k)fluoranthene	U	40.3	ug/kg	12.1	40.3	
50-32-8	Benzo(a)pyrene	U	40.3	ug/kg	12.1	40.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.3	ug/kg	12.1	40.3	
53-70-3	Dibenzo(a,h)anthracene	U	40.3	ug/kg	12.1	40.3	
191-24-2	Benzo(ghi)perylene	U	40.3	ug/kg	12.1	40.3	
120-82-1	1,2,4-Trichlorobenzene	U	403	ug/kg	80.7	403	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.87	312	ug/kg		JA

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:09	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2923.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.3	397	
108-95-2	Phenol	U	397	ug/kg	79.3	397	
95-57-8	2-Chlorophenol	U	397	ug/kg	79.3	397	
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.3	397	
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.3	397	
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.3	397	
83-32-9	Acenaphthene	J	34.5	ug/kg	13.1	39.7	
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397	
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397	
87-86-5	Pentachlorophenol	U	397	ug/kg	99.1	397	
129-00-0	Pyrene		242	ug/kg	11.9	39.7	
110-86-1	Pyridine	U	397	ug/kg	79.3	397	UJ,SV7c
62-53-3	Aniline	U	397	ug/kg	119	397	
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.3	397	
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.3	397	
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397	
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.3	397	
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.3	397	UJ,SV7c
95-48-7	o-Cresol	U	397	ug/kg	79.3	397	
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397	
67-72-1	Hexachloroethane	U	397	ug/kg	79.3	397	
98-95-3	Nitrobenzene	U	397	ug/kg	79.3	397	
78-59-1	Isophorone	U	397	ug/kg	79.3	397	
88-75-5	2-Nitrophenol	U	397	ug/kg	79.3	397	
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397	
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.3	397	
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.3	397	
65-85-0	Benzoic acid	U	793	ug/kg	198	793	
91-20-3	Naphthalene	J	17.1	ug/kg	11.9	39.7	
106-47-8	4-Chloroaniline	U	397	ug/kg	79.3	397	
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.3	397	
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.93	39.7	
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.3	397	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.3	397	
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.3	397	
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	397	ug/kg	79.3	397	
99-09-2	3-Nitroaniline	U	397	ug/kg	79.3	397	UJ,SV7c

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:09	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2923.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	397	ug/kg	79.3	397	
606-20-2	2,6-Dinitrotoluene	U	397	ug/kg	39.7	397	
208-96-8	Acenaphthylene	U	39.7	ug/kg	11.9	39.7	
51-28-5	2,4-Dinitrophenol	U	793	ug/kg	151	793	
132-64-9	Dibenzofuran	U	397	ug/kg	79.3	397	
84-66-2	Diethylphthalate	U	397	ug/kg	79.3	397	
86-73-7	Fluorene	J	30.0	ug/kg	11.9	39.7	
7005-72-3	4-Chlorophenylphenylether	U	397	ug/kg	79.3	397	
534-52-1	2-Methyl-4,6-dinitrophenol	U	397	ug/kg	79.3	397	
100-01-6	4-Nitroaniline	U	397	ug/kg	119	397	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	397	ug/kg	79.3	397	
122-66-7	Azobenzene	U	397	ug/kg	79.3	397	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	397	ug/kg	79.3	397	
118-74-1	Hexachlorobenzene	U	397	ug/kg	79.3	397	
85-01-8	Phenanthrene		207	ug/kg	11.9	39.7	
120-12-7	Anthracene		53.8	ug/kg	7.93	39.7	
84-74-2	Di-n-butylphthalate	U	397	ug/kg	79.3	397	
206-44-0	Fluoranthene		249	ug/kg	11.9	39.7	
85-68-7	Butylbenzylphthalate	U	397	ug/kg	79.3	397	
56-55-3	Benzo(a)anthracene		97.7	ug/kg	11.9	39.7	
91-94-1	3,3'-Dichlorobenzidine	U	397	ug/kg	119	397	
218-01-9	Chrysene		101	ug/kg	11.9	39.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	397	ug/kg	79.3	397	
117-84-0	Di-n-octylphthalate	U	397	ug/kg	79.3	397	
205-99-2	Benzo(b)fluoranthene		231	ug/kg	11.9	39.7	
207-08-9	Benzo(k)fluoranthene	U	39.7	ug/kg	11.9	39.7	
50-32-8	Benzo(a)pyrene		71.9	ug/kg	11.9	39.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.7	ug/kg	11.9	39.7	
53-70-3	Dibenzo(a,h)anthracene	U	39.7	ug/kg	11.9	39.7	
191-24-2	Benzo(ghi)perylene	U	39.7	ug/kg	11.9	39.7	
120-82-1	1,2,4-Trichlorobenzene	U	397	ug/kg	79.3	397	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	298	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.07	298	ug/kg	83	NJ

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2926.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	396	ug/kg	79.1	396	
108-95-2	Phenol	U	396	ug/kg	79.1	396	
95-57-8	2-Chlorophenol	U	396	ug/kg	79.1	396	
106-46-7	1,4-Dichlorobenzene	U	396	ug/kg	79.1	396	
621-64-7	N-Nitrosodipropylamine	U	396	ug/kg	79.1	396	
59-50-7	4-Chloro-3-methylphenol	U	396	ug/kg	79.1	396	
83-32-9	Acenaphthene	U	39.6	ug/kg	13.1	39.6	
121-14-2	2,4-Dinitrotoluene	U	396	ug/kg	39.6	396	
100-02-7	4-Nitrophenol	U	396	ug/kg	131	396	
87-86-5	Pentachlorophenol	U	396	ug/kg	98.9	396	
129-00-0	Pyrene	U	39.6	ug/kg	11.9	39.6	
110-86-1	Pyridine	U	396	ug/kg	79.1	396	UJ,SV7c
62-53-3	Aniline	U	396	ug/kg	119	396	
111-44-4	bis(2-Chloroethyl) ether	U	396	ug/kg	79.1	396	
541-73-1	1,3-Dichlorobenzene	U	396	ug/kg	79.1	396	
100-51-6	Benzyl alcohol	U	396	ug/kg	119	396	
95-50-1	1,2-Dichlorobenzene	U	396	ug/kg	79.1	396	
108-60-1	bis(2-Chloroisopropyl)ether	U	396	ug/kg	79.1	396	UJ,SV7c
95-48-7	o-Cresol	U	396	ug/kg	79.1	396	
65794-96-9	m,p-Cresols	U	396	ug/kg	119	396	
67-72-1	Hexachloroethane	U	396	ug/kg	79.1	396	
98-95-3	Nitrobenzene	U	396	ug/kg	79.1	396	
78-59-1	Isophorone	U	396	ug/kg	79.1	396	
88-75-5	2-Nitrophenol	U	396	ug/kg	79.1	396	
105-67-9	2,4-Dimethylphenol	U	396	ug/kg	138	396	
111-91-1	bis(2-Chloroethoxy)methane	U	396	ug/kg	79.1	396	
120-83-2	2,4-Dichlorophenol	U	396	ug/kg	79.1	396	
65-85-0	Benzoic acid	U	791	ug/kg	198	791	
91-20-3	Naphthalene	U	39.6	ug/kg	11.9	39.6	
106-47-8	4-Chloroaniline	U	396	ug/kg	79.1	396	
87-68-3	Hexachlorobutadiene	U	396	ug/kg	79.1	396	
91-57-6	2-Methylnaphthalene	U	39.6	ug/kg	7.91	39.6	
77-47-4	Hexachlorocyclopentadiene	U	396	ug/kg	79.1	396	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	396	ug/kg	79.1	396	
95-95-4	2,4,5-Trichlorophenol	U	396	ug/kg	79.1	396	
91-58-7	2-Chloronaphthalene	U	39.6	ug/kg	13.1	39.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	396	ug/kg	79.1	396	
99-09-2	3-Nitroaniline	U	396	ug/kg	79.1	396	UJ,SV7c

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2926.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	396	ug/kg	79.1	396	
606-20-2	2,6-Dinitrotoluene	U	396	ug/kg	39.6	396	
208-96-8	Acenaphthylene	U	39.6	ug/kg	11.9	39.6	
51-28-5	2,4-Dinitrophenol	U	791	ug/kg	150	791	
132-64-9	Dibenzofuran	U	396	ug/kg	79.1	396	
84-66-2	Diethylphthalate	U	396	ug/kg	79.1	396	
86-73-7	Fluorene	U	39.6	ug/kg	11.9	39.6	
7005-72-3	4-Chlorophenylphenylether	U	396	ug/kg	79.1	396	
534-52-1	2-Methyl-4,6-dinitrophenol	U	396	ug/kg	79.1	396	
100-01-6	4-Nitroaniline	U	396	ug/kg	119	396	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	396	ug/kg	79.1	396	
122-66-7	Azobenzene	U	396	ug/kg	79.1	396	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	396	ug/kg	79.1	396	
118-74-1	Hexachlorobenzene	U	396	ug/kg	79.1	396	
85-01-8	Phenanthrene	U	39.6	ug/kg	11.9	39.6	
120-12-7	Anthracene	U	39.6	ug/kg	7.91	39.6	
84-74-2	Di-n-butylphthalate	U	396	ug/kg	79.1	396	
206-44-0	Fluoranthene	U	39.6	ug/kg	11.9	39.6	
85-68-7	Butylbenzylphthalate	U	396	ug/kg	79.1	396	
56-55-3	Benzo(a)anthracene	U	39.6	ug/kg	11.9	39.6	
91-94-1	3,3'-Dichlorobenzidine	U	396	ug/kg	119	396	
218-01-9	Chrysene	U	39.6	ug/kg	11.9	39.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	396	ug/kg	79.1	396	
117-84-0	Di-n-octylphthalate	U	396	ug/kg	79.1	396	
205-99-2	Benzo(b)fluoranthene	U	39.6	ug/kg	11.9	39.6	
207-08-9	Benzo(k)fluoranthene	U	39.6	ug/kg	11.9	39.6	
50-32-8	Benzo(a)pyrene	U	39.6	ug/kg	11.9	39.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.6	ug/kg	11.9	39.6	
53-70-3	Dibenzo(a,h)anthracene	U	39.6	ug/kg	11.9	39.6	
191-24-2	Benzo(ghi)perylene	U	39.6	ug/kg	11.9	39.6	
120-82-1	1,2,4-Trichlorobenzene	U	396	ug/kg	79.1	396	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	323	ug/kg		JA
	Unknown	9.82	1740	ug/kg		J

EH
1/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2926.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.49	1650	ug/kg		J
	Unknown	11.57	208	ug/kg		J

EH
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534008	Date Received:	11/20/2009 08:50	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3915	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:06	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s1k2928.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.4	367	
108-95-2	Phenol	U	367	ug/kg	73.4	367	
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367	
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367	
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367	
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367	
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7	
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367	
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367	
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367	
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7	
110-86-1	Pyridine	U	367	ug/kg	73.4	367	UJ,SV7c
62-53-3	Aniline	U	367	ug/kg	110	367	
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367	
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367	
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367	
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367	
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.4	367	UJ,SV7c
95-48-7	o-Cresol	U	367	ug/kg	73.4	367	
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367	
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367	
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367	
78-59-1	Isophorone	U	367	ug/kg	73.4	367	
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367	
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367	
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367	
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367	
65-85-0	Benzoic acid	U	734	ug/kg	183	734	
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7	
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367	
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367	
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7	
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367	
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367	
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	367	ug/kg	73.4	367	
99-09-2	3-Nitroaniline	U	367	ug/kg	73.4	367	UJ,SV7c

EH
1/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534008	Date Received:	11/20/2009 08:50	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3915	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:06	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s1k2928.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	367	ug/kg	73.4	367	
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367	
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7	
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	139	734	
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367	
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367	
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7	
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367	
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367	
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367	
122-66-7	Azobenzene	U	367	ug/kg	73.4	367	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367	
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367	
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7	
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7	
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367	
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7	
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367	
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7	
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367	
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367	
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367	
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7	
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7	
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7	
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7	
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7	
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	276	ug/kg		JA

EH
1/25/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-601 VALIDATION DATE: 1/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eyda Hergenreder ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. None

Reviewed by: MLD **Level I** **Date:** 01/26/10

VALIDATOR'S SIGNATURE: Eyda Hergenreder Eyda Hergenreder DATE: 1/26/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13972	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:38	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.11 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

EH
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13973	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:27	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.62	ug/kg	1.20	3.62	1
11104-28-2	Aroclor-1221	U	3.62	ug/kg	1.20	3.62	1
11141-16-5	Aroclor-1232	U	3.62	ug/kg	1.20	3.62	1
53469-21-9	Aroclor-1242	U	3.62	ug/kg	1.20	3.62	1
12672-29-6	Aroclor-1248	U	3.62	ug/kg	1.20	3.62	1
11097-69-1	Aroclor-1254	U	3.62	ug/kg	1.20	3.62	1
11096-82-5	Aroclor-1260	U	3.62	ug/kg	1.20	3.62	1

EH
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13974	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/02/2009 00:23	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	085f8501.d	**Column:**	1 CLP1	**Level:**	LOW
	085b8501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.87	ug/kg	1.29	3.87	1
11104-28-2	Aroclor-1221	U	3.87	ug/kg	1.29	3.87	1
11141-16-5	Aroclor-1232	U	3.87	ug/kg	1.29	3.87	1
53469-21-9	Aroclor-1242	U	3.87	ug/kg	1.29	3.87	1
12672-29-6	Aroclor-1248	U	3.87	ug/kg	1.29	3.87	1
11097-69-1	Aroclor-1254	U	3.87	ug/kg	1.29	3.87	1
11096-82-5	Aroclor-1260	J	2.60	ug/kg	1.29	3.87	1

EH
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	17.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13975	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 22:42	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.05	ug/kg	1.35	4.05	1
11104-28-2	Aroclor-1221	U	4.05	ug/kg	1.35	4.05	1
11141-16-5	Aroclor-1232	U	4.05	ug/kg	1.35	4.05	1
53469-21-9	Aroclor-1242	U	4.05	ug/kg	1.35	4.05	1
12672-29-6	Aroclor-1248	U	4.05	ug/kg	1.35	4.05	1
11097-69-1	Aroclor-1254	U	4.05	ug/kg	1.35	4.05	1
11096-82-5	Aroclor-1260	U	4.05	ug/kg	1.35	4.05	1

EH
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13976	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:16	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.96	ug/kg	1.32	3.96	1
11104-28-2	Aroclor-1221	U	3.96	ug/kg	1.32	3.96	1
11141-16-5	Aroclor-1232	U	3.96	ug/kg	1.32	3.96	1
53469-21-9	Aroclor-1242	U	3.96	ug/kg	1.32	3.96	1
12672-29-6	Aroclor-1248	U	3.96	ug/kg	1.32	3.96	1
11097-69-1	Aroclor-1254		16.7	ug/kg	1.32	3.96	1
11096-82-5	Aroclor-1260		16.1	ug/kg	1.32	3.96	2

EH
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13977	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:49	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	082f8201.d	**Column:**	1 CLP1	**Level:**	LOW
	082b8201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.97	ug/kg	1.32	3.97	1
11104-28-2	Aroclor-1221	U	3.97	ug/kg	1.32	3.97	1
11141-16-5	Aroclor-1232	U	3.97	ug/kg	1.32	3.97	1
53469-21-9	Aroclor-1242	U	3.97	ug/kg	1.32	3.97	1
12672-29-6	Aroclor-1248	U	3.97	ug/kg	1.32	3.97	1
11097-69-1	Aroclor-1254	U	3.97	ug/kg	1.32	3.97	1
11096-82-5	Aroclor-1260	U	3.97	ug/kg	1.32	3.97	1

EH
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3915	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A,I	**Dilution:**	1
Run Date:	12/02/2009 00:34	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	086f8601.d	**Column:**	1 CLP1	**Level:**	LOW
	086b8601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

EH
1/26/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-601

REQUEST NUMBER: 10-601

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241534%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13975	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13975	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13976	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13976	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13973	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13973	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13972	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13972	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13977	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13977	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13974	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13974	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-14033	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-3915	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-3915	1	AMBER GLASS	8270C+8082	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/19/09	[illegible]	Patricia Dover-Dent	[illegible]	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-601

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-601
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13972	S	11/18/2009	
		1	RE03-09-13973	S	11/18/2009	
		1	RE03-09-13974	S	11/18/2009	
		1	RE03-09-13975	S	11/18/2009	
		1	RE03-09-13976	S	11/18/2009	
		1	RE03-09-13977	S	11/18/2009	
		1	RE03-10-3915	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13972	S	11/18/2009	
		1	RE03-09-13973	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-601

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13974	S	11/18/2009	
		1	RE03-09-13975	S	11/18/2009	
		1	RE03-09-13976	S	11/18/2009	
		1	RE03-09-13977	S	11/18/2009	
		1	RE03-09-14033	S	11/18/2009	
		1	RE03-10-3915	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13972	S	11/18/2009	
		1	RE03-09-13973	S	11/18/2009	
		1	RE03-09-13974	S	11/18/2009	
		1	RE03-09-13975	S	11/18/2009	
		1	RE03-09-13976	S	11/18/2009	
		1	RE03-09-13977	S	11/18/2009	
		1	RE03-10-3915	S	11/18/2009	

Final Page of REQUEST NUMBER 10-601

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241534
SDG: 10-601

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-601
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241534
SDG: 10-601

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- Miscellaneous Data 612

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241534
SDG # : 10-601

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241534001	RE03-09-13975
241534002	RE03-09-13976
241534003	RE03-09-13973
241534004	RE03-09-13972
241534005	RE03-09-13977
241534006	RE03-09-13974
241534007	RE03-09-14033
241534008	RE03-10-3915

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for Francis

Valerie Davis
Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-601

REQUEST NUMBER: 10-601

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241534%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
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Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/19/09	[illegible]	Patricia Dover-Dent	P. M. Dent	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-601

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-601

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
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		1	RE03-09-13973	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-601

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		1	RE03-09-13974	S	11/18/2009	
		1	RE03-09-13975	S	11/18/2009	
		1	RE03-09-13976	S	11/18/2009	
		1	RE03-09-13977	S	11/18/2009	
		1	RE03-10-3915	S	11/18/2009	

Final Page of REQUEST NUMBER 10-601

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-601**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:**40 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **1-5,15**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 4C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PMA) review: Initials [illegible] Date 11/25/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9855
Mstr# 7209 7848 9844 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 3
TRK# 0201 7209 7848 9796
MASTER

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PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

2c

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1 of 2
TRK# 0201 7209 7848 9844
HH MASTER HH

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AWEPR1315W200

2c

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Radioactive

FRI - 20NOV A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9877

Samples

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

3c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9822
HH MASTER HH

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4c

FedEx Express

TRK# 0201 7209 7848 9752

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

5c

FedEx Express

TRK# 0201 7209 7848 9866

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: [illegible] LB MAN
CAD: 0014176/CAFE2434

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

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UNITED STATES US

SHIP DATE: 19NOV09
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GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
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REF: 6B010AMR1A015AGWK0

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3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-601

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 926830
Prep Batch Number: 926827

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241534001	RE03-09-13975
241534002	RE03-09-13976
241534003	RE03-09-13973
241534004	RE03-09-13972
241534005	RE03-09-13977
241534006	RE03-09-13974
241534007	RE03-09-14033
241534008	RE03-10-3915
1201981617	Method Blank (MB)
1201981620	Laboratory Control Sample (LCS)
1201981621	Laboratory Control Sample (LCS)
1201981618	241534001(RE03-09-13975) Post Spike (PS)
1201981619	241534001(RE03-09-13975) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
Samples 241534 001, 002, 003, 004, 005, 006 and 008 in this SDG were analyzed on an "dry weight" basis.
Samples 241534 007 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241534001 (RE03-09-13975) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA7.I	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5973N	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-601 GEL Work Order: 241534

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 12 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-601 VOA

This roadmap was analyzed by ale01592 on 12-02-2009, 11:00.
This roadmap was reviewed by sar00518 on 12-08-2009, 20:27.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA7.i/112509v7/7n308.d	241534007	RE03-09-14033	25-NOV-2009	12:49	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n309.d	241534001	RE03-09-13975	25-NOV-2009	13:23	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n310.d	241534002	RE03-09-13976	25-NOV-2009	13:56	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n311.d	241534003	RE03-09-13973	25-NOV-2009	14:30	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n312.d	241534004	RE03-09-13972	25-NOV-2009	15:04	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n313.d	241534005	RE03-09-13977	25-NOV-2009	15:39	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n314.d	241534006	RE03-09-13974	25-NOV-2009	16:13	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n315.d	241534008	RE03-10-3915	25-NOV-2009	16:47	10-601.sub	1	926830	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA7.i/112509v7/7n303LL.d	1201981620	LCS	lcs	25-NOV-2009	09:45	all.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n305LL.d	1201981621	SLCS	lcs	25-NOV-2009	10:53	all.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n307BL.d	1201981617	BLANK	mb	25-NOV-2009	12:00	all.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n320.d	1201981618	RE03-09-13975MS	ms	25-NOV-2009	19:38	10-601.sub	1	926830	
☐	N	/chem/VOA7.i/112509v7/7n321.d	1201981619	RE03-09-13975MSD	msd	25-NOV-2009	20:12	10-601.sub	1	926830	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13972	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 15:04	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n312.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13972	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 15:04	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n312.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13973**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:30**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n311.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.371	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	J	3.91	ug/kg	1.81	5.46
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.46	ug/kg	1.75	5.46
75-09-2	Methylene chloride	U	5.46	ug/kg	2.18	5.46
75-15-0	Carbon disulfide	U	5.46	ug/kg	1.36	5.46
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.46	ug/kg	1.64	5.46
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.46	ug/kg	1.36	5.46
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.46	ug/kg	1.64	5.46
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13973**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:30**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n311.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.328	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.46	ug/kg	1.75	5.46
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13974	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 16:13	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n314.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.396	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone	U	5.83	ug/kg	1.93	5.83
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.83	ug/kg	1.86	5.83
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.385	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.385	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 16:13	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:50	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n314.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.86	5.83
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**17.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13975**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 13:23**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:38**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n309.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.414	1.22
74-87-3	Chloromethane	U	1.22	ug/kg	0.365	1.22
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.365	1.22
74-83-9	Bromomethane	U	1.22	ug/kg	0.365	1.22
75-00-3	Chloroethane	U	1.22	ug/kg	0.365	1.22
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.365	1.22
67-64-1	Acetone	J	2.26	ug/kg	2.02	6.09
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
74-88-4	Iodomethane	U	6.09	ug/kg	1.95	6.09
75-09-2	Methylene chloride	U	6.09	ug/kg	2.43	6.09
75-15-0	Carbon disulfide	U	6.09	ug/kg	1.52	6.09
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.365	1.22
78-93-3	2-Butanone	U	6.09	ug/kg	1.83	6.09
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
67-66-3	Chloroform	U	1.22	ug/kg	0.365	1.22
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.402	1.22
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.365	1.22
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.365	1.22
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.365	1.22
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.365	1.22
71-43-2	Benzene	U	1.22	ug/kg	0.365	1.22
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.402	1.22
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.365	1.22
74-95-3	Dibromomethane	U	1.22	ug/kg	0.365	1.22
108-10-1	4-Methyl-2-pentanone	U	6.09	ug/kg	1.52	6.09
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
108-88-3	Toluene	U	1.22	ug/kg	0.365	1.22
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.365	1.22
591-78-6	2-Hexanone	U	6.09	ug/kg	1.83	6.09
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.365	1.22
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.365	1.22
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.365	1.22
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.365	1.22
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.365	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**17.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13975**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 13:23**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:38**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n309.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes	U	2.43	ug/kg	0.365	2.43
95-47-6	o-Xylene	U	1.22	ug/kg	0.365	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.365	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.365	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 13:56	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:42	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n310.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.406	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19
67-64-1	Acetone	U	5.97	ug/kg	1.98	5.97
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
74-88-4	Iodomethane	U	5.97	ug/kg	1.91	5.97
75-09-2	Methylene chloride	U	5.97	ug/kg	2.39	5.97
75-15-0	Carbon disulfide	U	5.97	ug/kg	1.49	5.97
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19
78-93-3	2-Butanone	U	5.97	ug/kg	1.79	5.97
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.394	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.394	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19
108-10-1	4-Methyl-2-pentanone	U	5.97	ug/kg	1.49	5.97
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19
591-78-6	2-Hexanone	U	5.97	ug/kg	1.79	5.97
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13976	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 13:56	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:42	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n310.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.358	2.39
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.97	ug/kg	1.91	5.97
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 15:39	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:48	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n313.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19
67-64-1	Acetone	U	5.96	ug/kg	1.98	5.96
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
74-88-4	Iodomethane	U	5.96	ug/kg	1.91	5.96
75-09-2	Methylene chloride	U	5.96	ug/kg	2.38	5.96
75-15-0	Carbon disulfide	U	5.96	ug/kg	1.49	5.96
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19
78-93-3	2-Butanone	U	5.96	ug/kg	1.79	5.96
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19
108-10-1	4-Methyl-2-pentanone	U	5.96	ug/kg	1.49	5.96
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19
591-78-6	2-Hexanone	U	5.96	ug/kg	1.79	5.96
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13977	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 15:39	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:48	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n313.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.358	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.96	ug/kg	1.91	5.96
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	18.64	59.6	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534007	Date Received:	11/20/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14033	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 12:49	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:35	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n308.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534007**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14033**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 12:49**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:35**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n308.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	21.56	9.18	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3915	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 16:47	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n315.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone		5.53	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.76	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.65	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.65	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534008**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3915**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 16:47**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n315.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.76	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-601

Matrix Type: SOLID

CAP Column (1) : DB-624

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201981620	LCS for batch 926827	108	93	94
1201981621	LCS for batch 926827	107	93	90
1201981617	MB for batch 926827	107	95	93
241534007	RE03-09-14033	109	94	95
241534001	RE03-09-13975	101	92	93
241534002	RE03-09-13976	103	94	100
241534003	RE03-09-13973	104	92	93
241534004	RE03-09-13972	105	94	98
241534005	RE03-09-13977	99	93	96
241534006	RE03-09-13974	100	93	98
241534008	RE03-10-3915	99	93	94
1201981618	RE03-09-13975PS	98	92	95
1201981619	RE03-09-13975PSD	98	93	94

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: RE03-09-13975PS
Lab Sample ID: 1201981618
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 19:38
Prep Batch ID: 926827
Batch ID: 926830
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	44.3	89	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	39.5	79	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	39.8	80	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	46.4	93	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	43.2	86	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	53.5	107	51-151
67-64-1	PS	Acetone	250	1.86	J	118	47	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	50.2	100	61-125
74-88-4	PS	Iodomethane	250	0.00	U	233	93	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	46.9	94	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	242	97	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	43.0	86	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	44.2	88	62-125
78-93-3	PS	2-Butanone	250	0.00	U	119	48	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	41.9	84	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	41.1	82	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	45.4	91	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	41.2	82	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	50.1	100	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	45.5	91	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	50.1	100	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	41.8	84	58-126

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: RE03-09-13975PS
Lab Sample ID: 1201981618
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 19:38
Dilution: 1
Prep Batch ID 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	43.2	86	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	45.3	91	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	38.9	78	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	45.6	91	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	43.9	88	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	162	65	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	39.8	80	54-133
108-88-3	PS	Toluene	50.0	0.00	U	40.5	81	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	38.6	77	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	39.3	79	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	104	42	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	38.4	77	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	51.4	103	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	44.7	89	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	42.0	84	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	40.9	82	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	39.7	79	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	78.5	78	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	39.9	80	52-127
100-42-5	PS	Styrene	50.0	0.00	U	36.5	73	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	48.8	98	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	41.2	82	63-127

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: RE03-09-13975PS
Lab Sample ID: 1201981618
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 19:38
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	42.4	85	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	41.3	83	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	40.4	81	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	39.0	78	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	41.5	83	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	39.5	79	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	40.2	80	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	42.3	85	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	39.9	80	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	41.7	83	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	40.8	82	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	40.4	81	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	40.3	81	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	40.3	81	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	45.3	91	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	42.2	84	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	41.2	82	43-129

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: RE03-09-13975PSD
Lab Sample ID: 1201981619
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 20:12 **Dilution:** 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	43.1	86	25-149	3	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	40.2	80	39-140	2	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	40.6	81	47-129	2	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	45.1	90	31-135	3	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	42.7	85	53-128	1	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	55.1	110	51-151	3	0-25
67-64-1	PSD	Acetone	250	1.86	J	113	44	21-153	5	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	49.7	99	61-125	1	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	235	94	53-142	1	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	46.5	93	59-136	1	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	241	96	46-129	1	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	44.9	90	56-126	4	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	46.3	93	62-125	5	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	113	45	26-152	5	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	43.3	87	60-130	3	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	42.7	85	55-135	4	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	47.2	94	60-127	4	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	42.5	85	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	52.0	104	59-131	4	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	46.6	93	57-128	2	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	52.0	104	58-136	4	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	42.7	85	58-126	2	0-25

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: RE03-09-13975PSD
Lab Sample ID: 1201981619
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 20:12
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	44.0	88	56-123	2	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	45.8	92	51-137	1	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	40.2	80	60-126	3	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	47.0	94	55-138	3	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	44.1	88	60-132	1	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	158	63	58-136	3	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	40.5	81	54-133	2	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	41.8	84	52-128	3	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	40.1	80	53-137	4	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	41.4	83	59-130	5	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	98.9	40	31-148	5	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	38.8	78	57-127	1	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	52.3	105	51-128	2	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	45.6	91	59-139	2	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	41.6	83	57-133	1	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	42.0	84	53-122	3	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	41.1	82	51-125	3	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	81.9	82	50-126	4	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	40.8	82	52-127	2	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	37.7	75	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	48.5	97	57-149	1	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	40.0	80	63-127	3	0-25

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: RE03-09-13975PSD
Lab Sample ID: 1201981619
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17.8
Analysis Date: 11/25/2009 20:12 **Dilution:** 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	40.4	81	57-149	5	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	41.7	83	49-131	1	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	40.8	82	40-136	1	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	39.4	79	44-135	1	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	42.3	85	44-140	2	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	39.8	80	42-140	1	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	40.2	80	44-132	0	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	42.4	85	42-142	0	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	40.0	80	43-137	0	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	42.2	84	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	40.8	82	38-145	0	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	40.9	82	43-129	1	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	39.9	80	44-125	1	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	40.3	81	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	43.4	87	47-151	4	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	43.4	87	59-131	3	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	40.2	80	43-129	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 926827
Lab Sample ID: 1201981620
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:45
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	52.7	105	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	45.6	91	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	48.6	97	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	50.1	100	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	46.7	93	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	61.9	124	67-151
67-64-1	LCS	Acetone	250	0.0	208	83	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	55.0	110	70-125
74-88-4	LCS	Iodomethane	250	0.0	251	101	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	47.4	95	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	264	106	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	49.3	99	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	49.1	98	75-120
78-93-3	LCS	2-Butanone	250	0.0	186	74	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	46.9	94	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	51.2	102	74-135
67-66-3	LCS	Chloroform	50.0	0.0	50.1	100	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	45.4	91	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	57.2	114	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	52.5	105	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	57.9	116	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	48.3	97	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 926827
Lab Sample ID: 1201981620
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:45
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	46.8	94	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	51.6	103	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	42.6	85	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	51.0	102	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	48.7	97	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	207	83	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	45.8	92	80-125
108-88-3	LCS	Toluene	50.0	0.0	44.4	89	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	46.0	92	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	43.6	87	76-120
591-78-6	LCS	2-Hexanone	250	0.0	159	64	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	41.6	83	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	56.6	113	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	49.7	99	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	47.7	95	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	44.8	90	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	44.7	89	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	89.4	89	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	43.7	87	74-120
100-42-5	LCS	Styrene	50.0	0.0	41.5	83	76-125
75-25-2	LCS	Bromoform	50.0	0.0	54.8	110	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	43.9	88	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 926827
Lab Sample ID: 1201981620
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:45
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	47.1	94	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	42.7	85	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	43.4	87	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	41.5	83	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	43.9	88	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	42.3	85	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	43.5	87	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	44.4	89	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	42.6	85	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	45.3	91	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	45.1	90	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	43.1	86	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	43.6	87	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	44.4	89	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	52.6	105	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	46.1	92	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	43.5	87	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 926827
Lab Sample ID: 1201981621
Instrument: VOA7.I
Analyst: AXO1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 10:53
Dilution: 1
Prep Batch ID: 926827
Batch ID: 926830

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	304	122	52-139

Method Blank Summary

SDG Number:	10-601	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926827	Instrument ID:	VOA7.I	Data File:	7n307BL.d
Lab Sample ID:	1201981617	Prep Date:	11/25/2009 08:00	Analyzed:	11/25/09 12:00
Column:	DB-624	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926827	1201981620	7n303LL.d	11/25/09	0945
02	LCS for batch 926827	1201981621	7n305LL.d	11/25/09	1053
03	RE03-09-14033	241534007	7n308.d	11/25/09	1249
04	RE03-09-13975	241534001	7n309.d	11/25/09	1323
05	RE03-09-13976	241534002	7n310.d	11/25/09	1356
06	RE03-09-13973	241534003	7n311.d	11/25/09	1430
07	RE03-09-13972	241534004	7n312.d	11/25/09	1504
08	RE03-09-13977	241534005	7n313.d	11/25/09	1539
09	RE03-09-13974	241534006	7n314.d	11/25/09	1613
10	RE03-10-3915	241534008	7n315.d	11/25/09	1647
11	RE03-09-13975PS	1201981618	7n320.d	11/25/09	1938
12	RE03-09-13975PSD	1201981619	7n321.d	11/25/09	2012

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-601

Instrument ID: VOA7.I **Injection Date/Time:** 15-NOV-09 23:14

Column Description: db624 **Lab File ID** /111509v7/7l702.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	29.2
75	30.0 - 60.0% of mass 95	51.2
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1
174	50.0 - 100.0% of mass 95	71
175	5.0 -9.0% of mass 174	7.7
176	95.0 - 101.0% of mass 174	97.8
177	5.0 - 9.0% of mass 176	6.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD002	W7VM0911115-02	/111509v7/7l704.d	16-NOV-09 00:20
VSTD005	W7VM0911115-03	/111509v7/7l705.d	16-NOV-09 00:55
VSTD010	W7VM0911115-04	/111509v7/7l706.d	16-NOV-09 01:29
VSTD020	W7VM0911115-05	/111509v7/7l707.d	16-NOV-09 02:03
VSTD050	W7VM0911115-06	/111509v7/7l708.d	16-NOV-09 02:36
VSTD100	W7VM0911115-07	/111509v7/7l709.d	16-NOV-09 03:10
VSTD0005	W7VM0911115-08	/111509v7/7l711.d	16-NOV-09 04:18
VSTD005S	W7VM0911115-09	/111509v7/7l712.d	16-NOV-09 04:51
VSTD010S	W7VM0911115-10	/111509v7/7l713.d	16-NOV-09 05:25
VSTD025S	W7VM0911115-11	/111509v7/7l714.d	16-NOV-09 05:58
VSTD050S	W7VM0911115-12	/111509v7/7l715.d	16-NOV-09 06:32
VSTD100S	W7VM0911115-13	/111509v7/7l716.d	16-NOV-09 07:05
VSTD500S	W7VM0911115-15	/111509v7/7l718.d	16-NOV-09 08:11
VSTD001	W7VM0911115-18	/111509v7/7l723.d	16-NOV-09 10:57

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-601

Instrument ID: VOA7.I **Injection Date/Time:** 16-NOV-09 13:54

Column Description: db624 **Lab File ID** /111509v7/7m102BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	31.4
75	30.0 - 60.0% of mass 95	53.7
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	1.1
174	50.0 - 100.0% of mass 95	72.9
175	5.0 -9.0% of mass 174	7.6
176	95.0 - 101.0% of mass 174	97.7
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W7VM0911116-01	/111509v7/7m102.d	16-NOV-09 13:54
VSTD250S	W7VM0911116-03	/111509v7/7m104.d	16-NOV-09 15:02

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-601

Instrument ID: VOA7.I **Injection Date/Time:** 25-NOV-09 09:45

Column Description: db624 **Lab File ID** /112509v7/7n303BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	31.1
75	30.0 - 60.0% of mass 95	54.1
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	1
174	50.0 - 100.0% of mass 95	74.6
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.5
177	5.0 - 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W7VM091125-02	/112509v7/7n303.d	25-NOV-09 09:45
LCS	1201981620	/112509v7/7n303LL.d	25-NOV-09 09:45
VSTD250S	W7VM091125-03	/112509v7/7n304.d	25-NOV-09 10:19
SLCS	1201981621	/112509v7/7n305LL.d	25-NOV-09 10:53
BLANK	1201981617	/112509v7/7n307BL.d	25-NOV-09 12:00
RE03-09-14033	241534007	/112509v7/7n308.d	25-NOV-09 12:49
RE03-09-13975	241534001	/112509v7/7n309.d	25-NOV-09 13:23
RE03-09-13976	241534002	/112509v7/7n310.d	25-NOV-09 13:56
RE03-09-13973	241534003	/112509v7/7n311.d	25-NOV-09 14:30
RE03-09-13972	241534004	/112509v7/7n312.d	25-NOV-09 15:04
RE03-09-13977	241534005	/112509v7/7n313.d	25-NOV-09 15:39
RE03-09-13974	241534006	/112509v7/7n314.d	25-NOV-09 16:13
RE03-10-3915	241534008	/112509v7/7n315.d	25-NOV-09 16:47
RE03-09-13975MS	1201981618	/112509v7/7n320.d	25-NOV-09 19:38
RE03-09-13975MSD	1201981619	/112509v7/7n321.d	25-NOV-09 20:12

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA7.I

GC Column: DB-624

Client SDG: 10-601

STD Analysis Time: 25-NOV-09 09:45

Data File: 7n303.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1179357		15.3		938749		18.7		568823		21.0	
Upper Limit	2358714		15.8		1877498		19.2		1137646		21.5	
Lower Limit	589679		14.8		469375		18.2		284412		20.5	
Sample ID												
BLK01LCS	1179357		15.3		938749		18.7		568823		21.0	
BLK01SLCS	1174785		15.3		934821		18.7		582436		21.0	
BLK01	1179768		15.3		921229		18.7		552530		21.0	
RE03-09-14033	1204121		15.3		958090		18.7		561228		21.0	
RE03-09-13975	1242172		15.3		981070		18.7		569506		21.0	
RE03-09-13976	1213971		15.3		934694		18.7		477843		21.0	
RE03-09-13973	1138684		15.3		896342		18.7		522370		21.0	
RE03-09-13972	1178806		15.3		929263		18.7		509477		21.0	
RE03-09-13977	1219427		15.3		956016		18.7		521535		21.0	
RE03-09-13974	1181478		15.3		921472		18.7		491821		21.0	
RE03-10-3915	1203624		15.3		943276		18.7		538335		21.0	
RE03-09-13975MS	1154055		15.3		907062		18.7		516976		21.0	
RE03-09-13975MSD	1150589		15.3		900930		18.7		521339		21.0	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 15:04	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:46	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n312.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13972	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 15:04	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n312.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n312.d
Lab Smp Id: 241534004 Client Smp ID: RE03-09-13972
Inj Date : 25-NOV-2009 15:04
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534004|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.98600	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1178806	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	929263	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	509477	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	540865	52.6223	57.8
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1304721	47.0327	51.7
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	585350	48.8164	53.6

ION RATIO REPORT

VOA REPORT

Data file: 7n312.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534004 SampleType: SAMPLE
Injection Date: 25-NOV-2009 15:04
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241534004|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	15381	17.13	16.94	80-120	100	(T)
43	10435	17.13	16.94	247-307	68	(QT)
100	904502	17.14	16.94	0- 56	5881	(QT)
82 Bromoform				CAS#: 75-25-2		
173	3095	19.82	19.54	80-120	100	(T)
175	32850	19.82	19.54	18- 78	1061	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n312.d
Lab Smp Id: 241534004 Client Smp ID: RE03-09-13972
Inj Date : 25-NOV-2009 15:04
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534004|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n312.d
Date : 25-NOV-2009 15:04
Client ID: RE03-09-13972
Sample Info: |241534004|926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

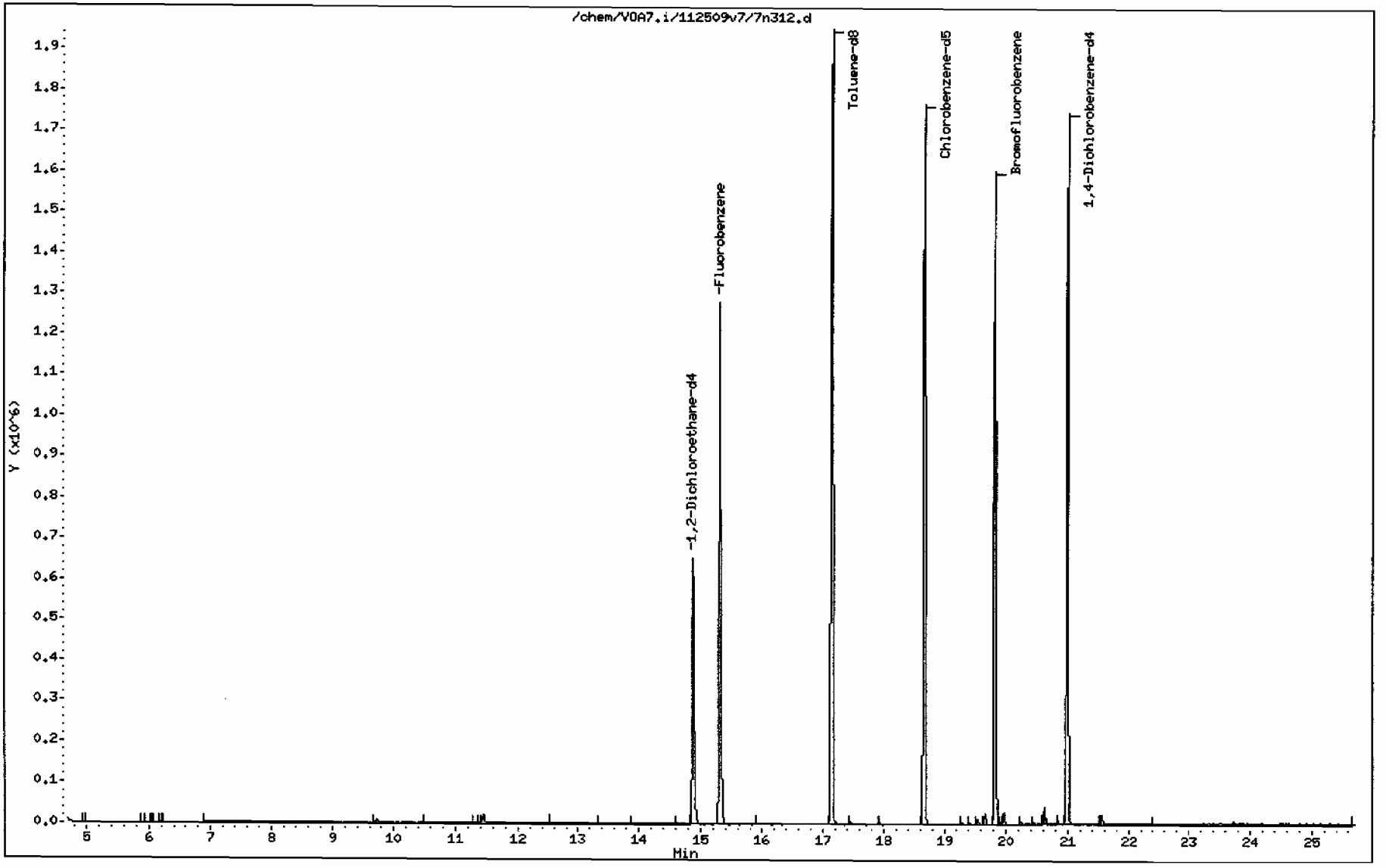

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13973	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 14:30	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:44	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n311.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.371	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	J	3.91	ug/kg	1.81	5.46
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.46	ug/kg	1.75	5.46
75-09-2	Methylene chloride	U	5.46	ug/kg	2.18	5.46
75-15-0	Carbon disulfide	U	5.46	ug/kg	1.36	5.46
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.46	ug/kg	1.64	5.46
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.46	ug/kg	1.36	5.46
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.46	ug/kg	1.64	5.46
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13973	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 14:30	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:44	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n311.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.328	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.46	ug/kg	1.75	5.46
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n311.d
Lab Smp Id: 241534003 Client Smp ID: RE03-09-13973
Inj Date : 25-NOV-2009 14:30
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534003|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.40560	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1138684	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	896342	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	522370	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	513884	51.7589	56.5
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1230179	45.9744	50.2
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	570707	46.4204	50.7
13 Acetone	43	10.474	10.423	(0.684)	33349	3.58513	3.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 7n311.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534003 SampleType: SAMPLE
Injection Date: 25-NOV-2009 14:30
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241534003|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
13 Acetone			CAS#: 67-64-1			
43	33349	10.47	10.42	80-120	100	( )
58	8157	10.46	10.42	0- 56	24	( )
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	15095	17.13	16.94	80-120	100	(T)
43	9741	17.14	16.94	247-307	65	(QT)
100	866804	17.14	16.94	0- 56	5742	(QT)
82 Bromoform			CAS#: 75-25-2			
173	2898	19.82	19.54	80-120	100	(T)
175	33219	19.81	19.54	18- 78	1146	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n311.d
Lab Smp Id: 241534003 Client Smp ID: RE03-09-13973
Inj Date : 25-NOV-2009 14:30
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534003|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n311.d
Date : 25-NOV-2009 14:30
Client ID: RE03-09-13973
Sample Info: |2415340031926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

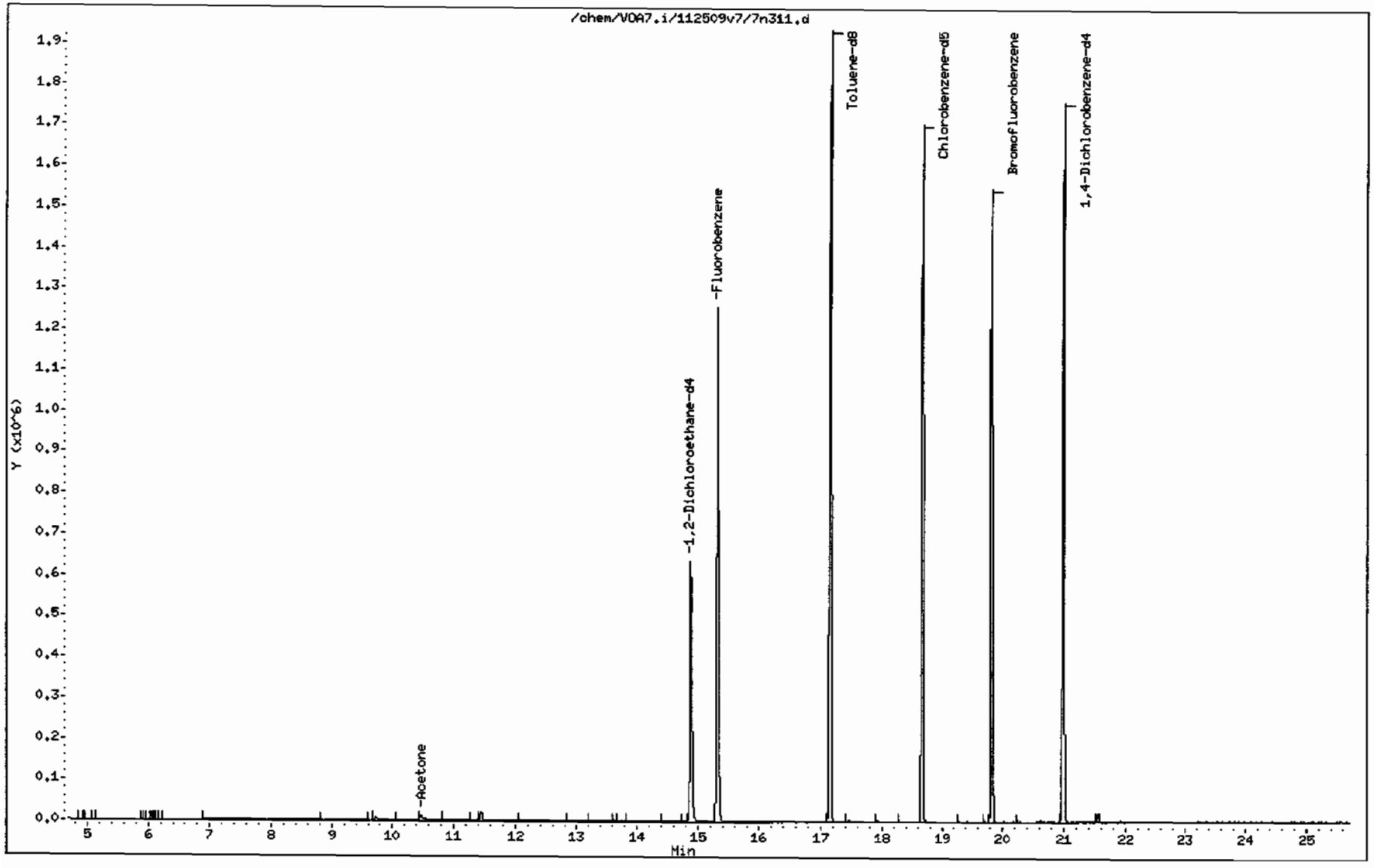

Data File: /chem/VOA7.i/112509v7/7n311.d

Date : 25-NOV-2009 14:30

Client ID: RE03-09-13973

Instrument: VOA7.i

Sample Info: |2415340031926830|1|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 3.9 ug/Kg

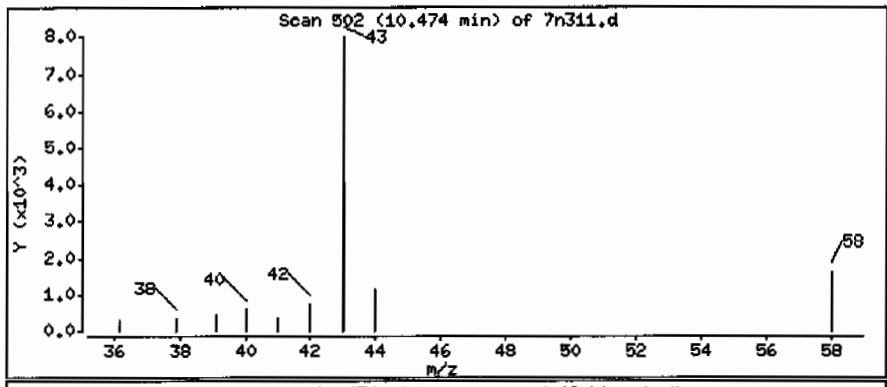

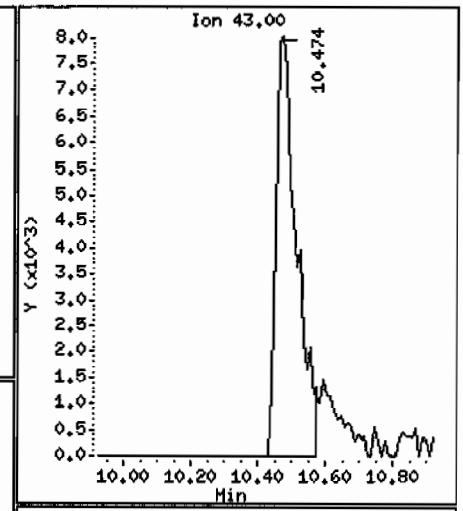

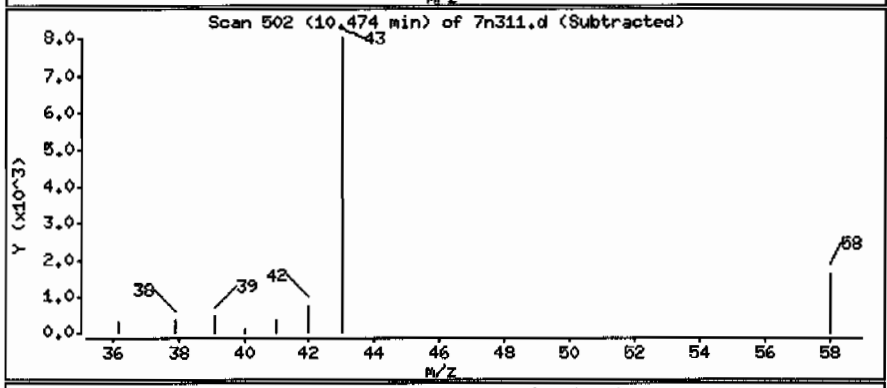

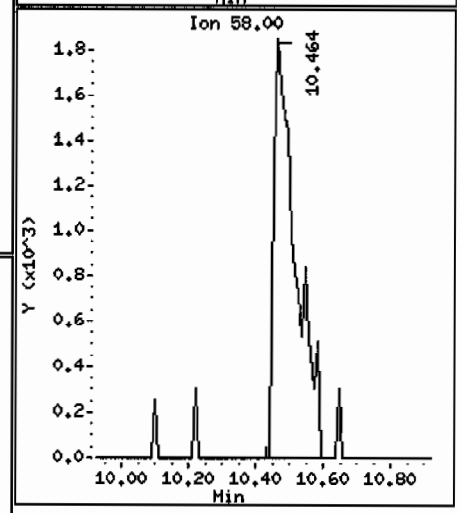

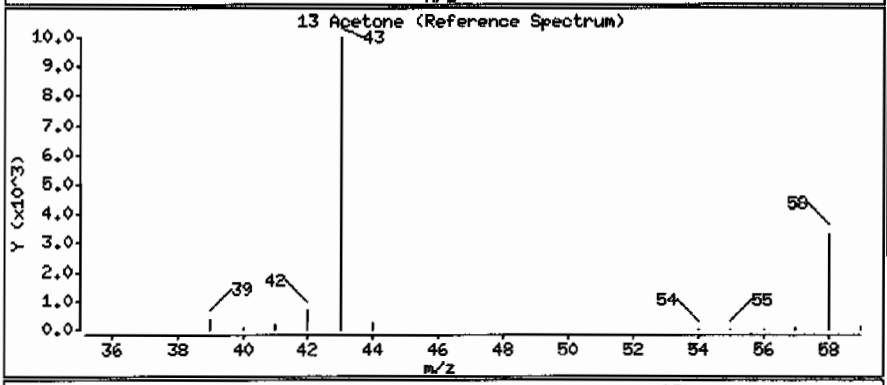

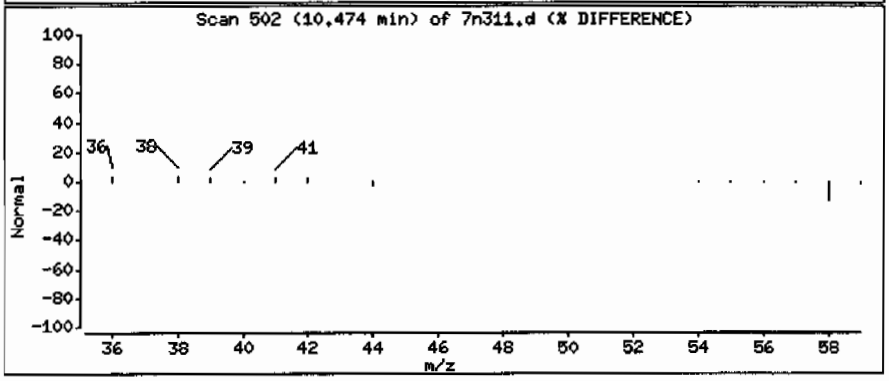

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13974	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 16:13	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n314.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.396	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone	U	5.83	ug/kg	1.93	5.83
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.83	ug/kg	1.86	5.83
75-09-2	Methylene chloride	U	5.83	ug/kg	2.33	5.83
75-15-0	Carbon disulfide	U	5.83	ug/kg	1.46	5.83
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.83	ug/kg	1.75	5.83
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.385	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.385	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.83	ug/kg	1.46	5.83
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.83	ug/kg	1.75	5.83
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13974	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 16:13	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n314.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.350	2.33
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.83	ug/kg	1.86	5.83
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n314.d
Lab Smp Id: 241534006 Client Smp ID: RE03-09-13974
Inj Date : 25-NOV-2009 16:13
Operator : AX01 Inst ID: VOA7.i
Smp Info : |241534006|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.17490	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1181478	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	921472	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	491821	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	516693	50.1568	58.4
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1272923	46.2744	53.9
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	565461	48.8506	56.9

ION RATIO REPORT

VOA REPORT

Data file: 7n314.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534006 SampleType: SAMPLE
Injection Date: 25-NOV-2009 16:13
Operator: AX01 Instrument: VOA7.i
Sample Info: |241534006|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	15147	17.14	16.94	80-120	100	(T)
43	8793	17.13	16.94	247-307	58	(QT)
100	892524	17.14	16.94	0- 56	5892	(QT)
82 Bromoform				CAS#: 75-25-2		
173	3307	19.82	19.54	80-120	100	(T)
175	31953	19.82	19.54	18- 78	966	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n314.d
Lab Smp Id: 241534006 Client Smp ID: RE03-09-13974
Inj Date : 25-NOV-2009 16:13
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534006|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n314.d
Date : 25-NOV-2009 16:13
Client ID: RE03-09-13974
Sample Info: |241534006|926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

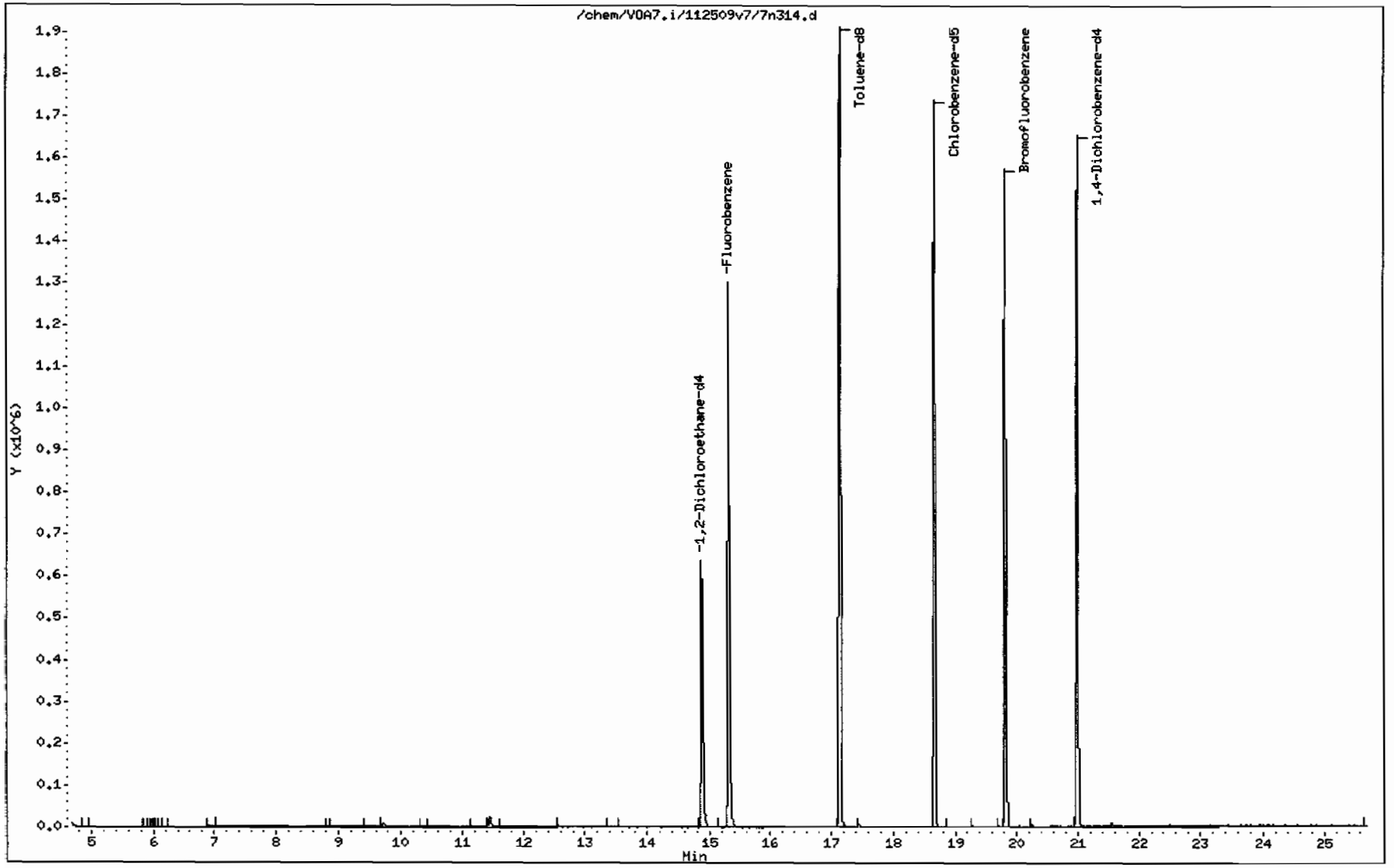

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**17.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13975**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 13:23**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:38**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n309.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.414	1.22
74-87-3	Chloromethane	U	1.22	ug/kg	0.365	1.22
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.365	1.22
74-83-9	Bromomethane	U	1.22	ug/kg	0.365	1.22
75-00-3	Chloroethane	U	1.22	ug/kg	0.365	1.22
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.365	1.22
67-64-1	Acetone	J	2.26	ug/kg	2.02	6.09
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
74-88-4	Iodomethane	U	6.09	ug/kg	1.95	6.09
75-09-2	Methylene chloride	U	6.09	ug/kg	2.43	6.09
75-15-0	Carbon disulfide	U	6.09	ug/kg	1.52	6.09
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.365	1.22
78-93-3	2-Butanone	U	6.09	ug/kg	1.83	6.09
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
67-66-3	Chloroform	U	1.22	ug/kg	0.365	1.22
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.402	1.22
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.365	1.22
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.365	1.22
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.365	1.22
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.365	1.22
71-43-2	Benzene	U	1.22	ug/kg	0.365	1.22
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.402	1.22
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.365	1.22
74-95-3	Dibromomethane	U	1.22	ug/kg	0.365	1.22
108-10-1	4-Methyl-2-pentanone	U	6.09	ug/kg	1.52	6.09
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
108-88-3	Toluene	U	1.22	ug/kg	0.365	1.22
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.365	1.22
591-78-6	2-Hexanone	U	6.09	ug/kg	1.83	6.09
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.365	1.22
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.365	1.22
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.365	1.22
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.365	1.22
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.365	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	17.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13975	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 13:23	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:38	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n309.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes	U	2.43	ug/kg	0.365	2.43
95-47-6	o-Xylene	U	1.22	ug/kg	0.365	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.365	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.365	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n309.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 25-NOV-2009 13:23
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534001|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.83110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1242172	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	981070	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	569506	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	549430	50.7287	61.7
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1346481	45.9750	56.0
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	625403	46.6591	56.8
13 Acetone	43	10.484	10.423	(0.684)	18885	1.86106	2.3(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 7n309.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534001 SampleType: SAMPLE
Injection Date: 25-NOV-2009 13:23
Operator: AX01 Instrument: VOA7.i
Sample Info: |241534001|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
13 Acetone			CAS#: 67-64-1			
43	18885	10.48	10.42	80-120	100	(T)
58	3057	10.48	10.42	0- 56	16	(T)
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	16787	17.13	16.94	80-120	100	(T)
43	10386	17.13	16.94	247-307	62	(QT)
100	943332	17.14	16.94	0- 56	5619	(QT)
82 Bromoform			CAS#: 75-25-2			
173	3862	19.82	19.54	80-120	100	(T)
175	35292	19.81	19.54	18- 78	914	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n309.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 25-NOV-2009 13:23
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534001|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n309.d

Date : 25-NOV-2009 13:23

Client ID: RE03-09-13975

Sample Info: |241534001|926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AXD1

Column diameter: 0.25

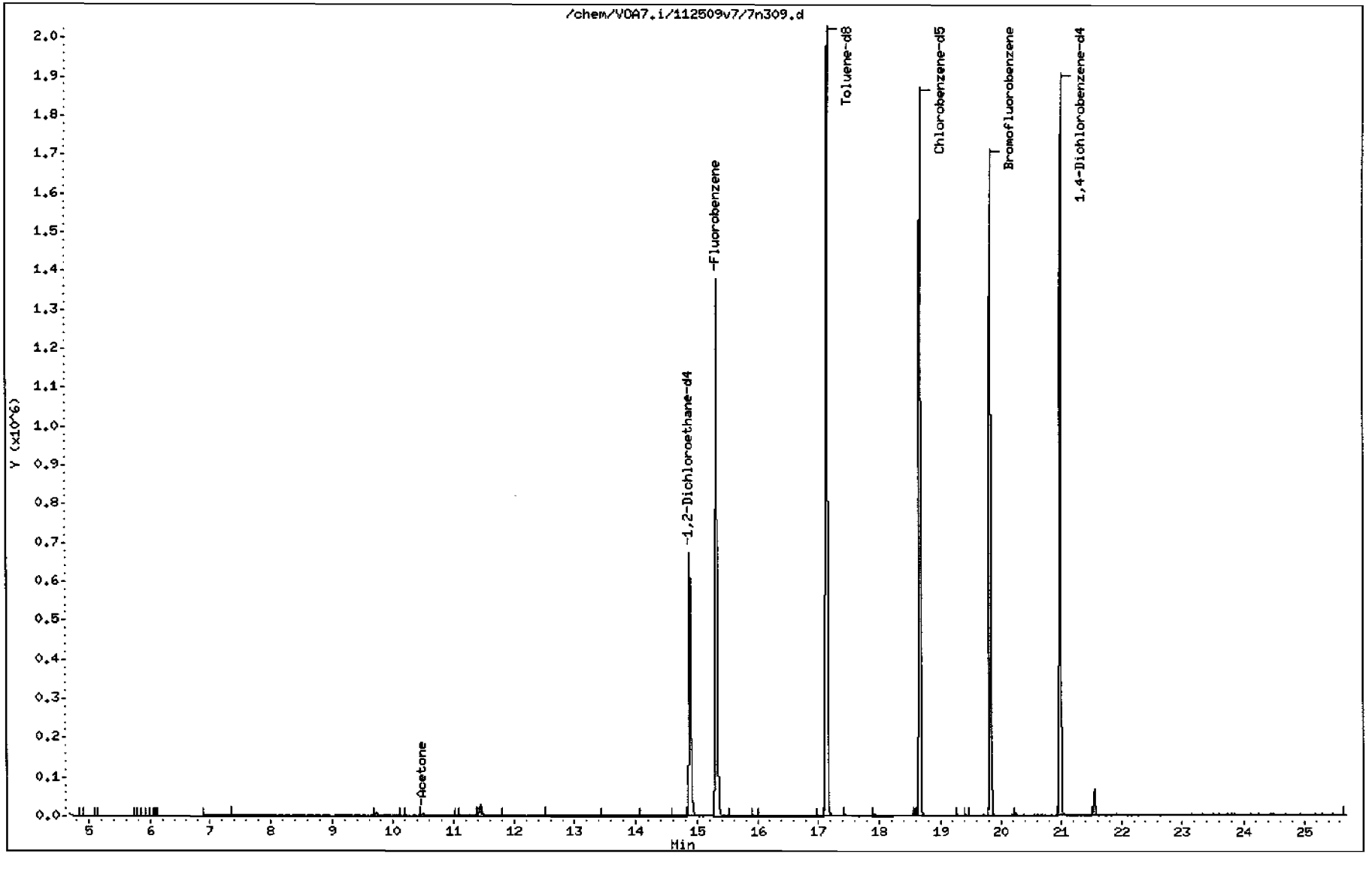

Data File: /chem/VOA7.i/112509v7/7n309.d

Date : 25-NOV-2009 13:23

Client ID: RE03-09-13975

Instrument: VOA7.i

Sample Info: |241534001|926830|1|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 2.3 ug/Kg

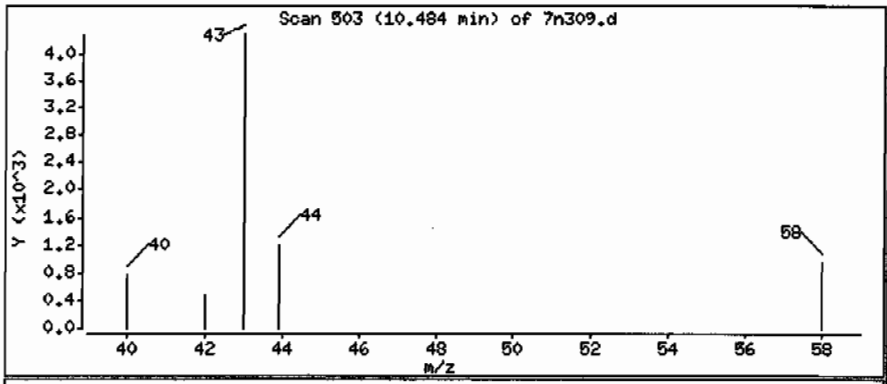

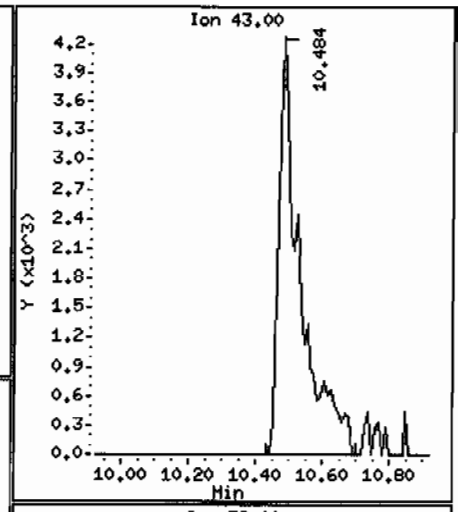

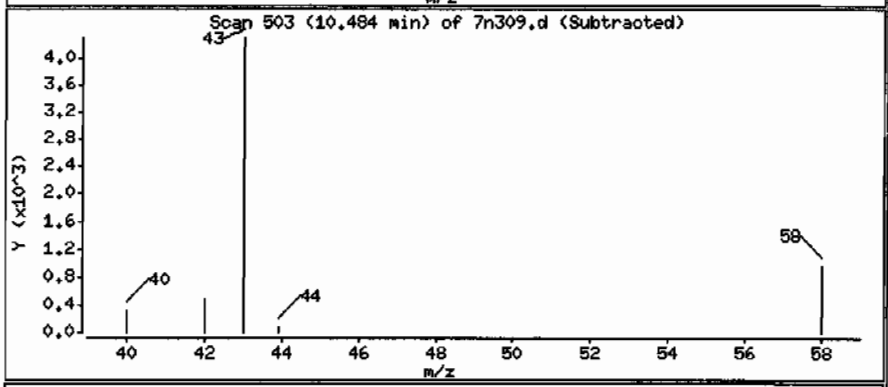

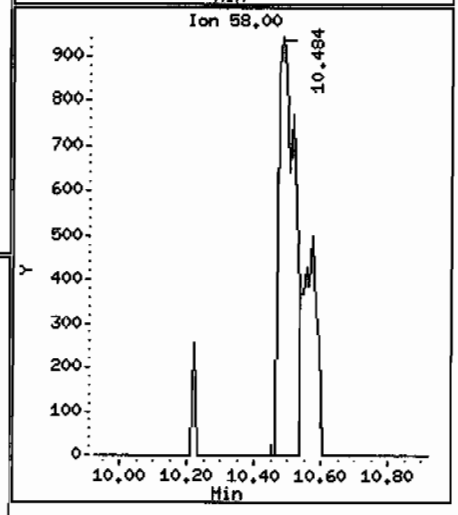

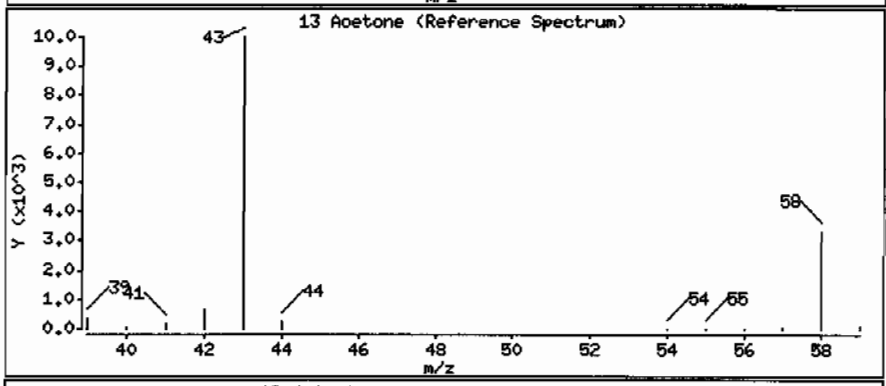

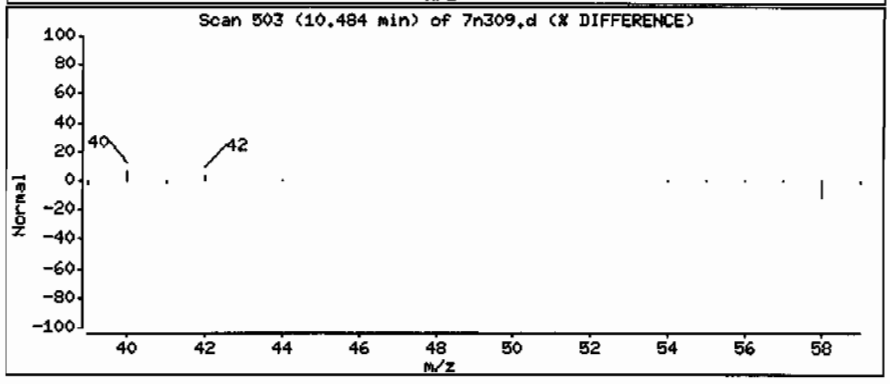

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 13:56	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:42	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n310.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.406	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19
67-64-1	Acetone	U	5.97	ug/kg	1.98	5.97
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
74-88-4	Iodomethane	U	5.97	ug/kg	1.91	5.97
75-09-2	Methylene chloride	U	5.97	ug/kg	2.39	5.97
75-15-0	Carbon disulfide	U	5.97	ug/kg	1.49	5.97
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19
78-93-3	2-Butanone	U	5.97	ug/kg	1.79	5.97
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.394	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.394	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19
108-10-1	4-Methyl-2-pentanone	U	5.97	ug/kg	1.49	5.97
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19
591-78-6	2-Hexanone	U	5.97	ug/kg	1.79	5.97
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13976	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 13:56	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:42	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n310.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.358	2.39
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.97	ug/kg	1.91	5.97
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n310.d
Lab Smp Id: 241534002 Client Smp ID: RE03-09-13976
Inj Date : 25-NOV-2009 13:56
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534002|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.30520	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1213971	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	934694	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	477843	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	544632	51.4539	61.5
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1315610	47.1497	56.3
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	564453	50.1900	60.0

ION RATIO REPORT

VOA REPORT

Data file: 7n310.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534002 SampleType: SAMPLE
Injection Date: 25-NOV-2009 13:56
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241534002|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	15982	17.13	16.94	80-120	100	(T)
43	10392	17.13	16.94	247-307	65	(QT)
100	924371	17.14	16.94	0- 56	5784	(QT)
82	Bromoform			CAS#: 75-25-2		
173	2704	19.81	19.54	80-120	100	(T)
175	32619	19.81	19.54	18- 78	1206	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n310.d
Lab Smp Id: 241534002 Client Smp ID: RE03-09-13976
Inj Date : 25-NOV-2009 13:56
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534002|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n310.d
Date : 25-NOV-2009 13:56
Client ID: RE03-09-13976
Sample Info: |2415340021926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AXD1
Column diameter: 0.25

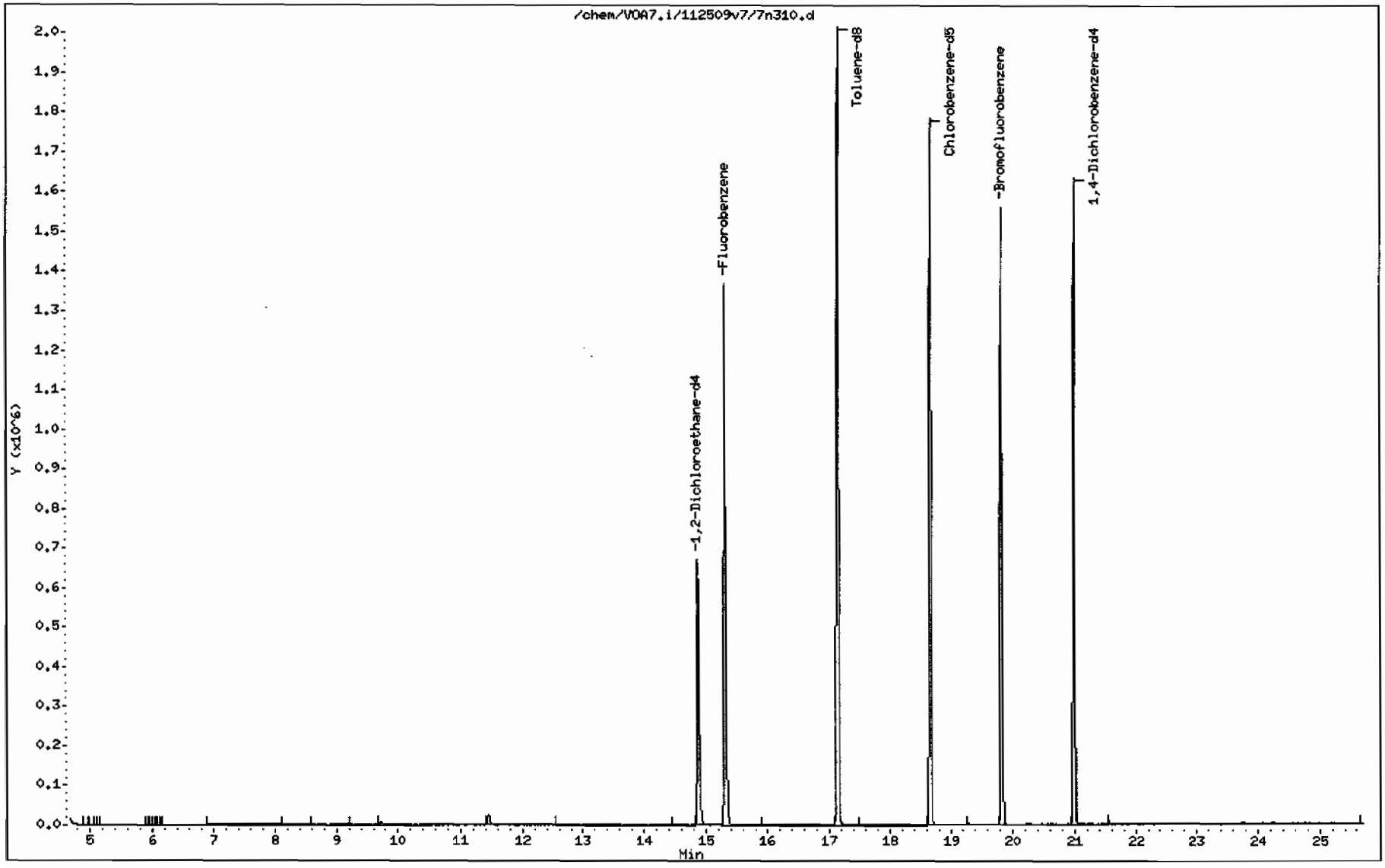

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13977	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 15:39	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:48	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n313.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19
67-64-1	Acetone	U	5.96	ug/kg	1.98	5.96
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
74-88-4	Iodomethane	U	5.96	ug/kg	1.91	5.96
75-09-2	Methylene chloride	U	5.96	ug/kg	2.38	5.96
75-15-0	Carbon disulfide	U	5.96	ug/kg	1.49	5.96
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19
78-93-3	2-Butanone	U	5.96	ug/kg	1.79	5.96
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19
108-10-1	4-Methyl-2-pentanone	U	5.96	ug/kg	1.49	5.96
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19
591-78-6	2-Hexanone	U	5.96	ug/kg	1.79	5.96
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13977	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 15:39	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:48	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n313.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.358	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.96	ug/kg	1.91	5.96
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	18.64	59.6	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n313.d
Lab Smp Id: 241534005 Client Smp ID: RE03-09-13977
Inj Date : 25-NOV-2009 15:39
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534005|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.09930	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1219427	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	956016	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	521535	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	527705	49.6316	59.2
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1320761	46.2786	55.2
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	589609	48.0347	57.2

ION RATIO REPORT

VOA REPORT

Data file: 7n313.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534005 SampleType: SAMPLE
Injection Date: 25-NOV-2009 15:39
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241534005|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	15840	17.13	16.94	80-120	100	(T)
43	10693	17.14	16.94	247-307	68	(QT)
100	924540	17.14	16.94	0- 56	5837	(QT)
73 1,2-Dibromoethane				CAS#: 106-93-4		
107	30686	18.65	18.22	80-120	100	(T)
109	16538	18.64	18.22	65-125	54	(QT)
77 1,1,1,2-Tetrachloroethane				CAS#: 630-20-6		
131	4288	18.64	18.76	80-120	100	(T)
133	27716	18.64	18.76	70-130	646	(QT)
119	334094	18.67	18.76	32- 92	7790	(QT)
78 Ethylbenzene				CAS#: 100-41-4		
91	65311	18.64	18.77	80-120	100	(T)
106	15632	18.64	18.77	1- 61	24	(T)
79 m,p-Xylenes				CAS#:		
106	15632	18.64	18.87	80-120	100	(T)
91	65311	18.64	18.87	172-232	418	(QT)
82 Bromoform				CAS#: 75-25-2		
173	3303	19.82	19.54	80-120	100	(T)
175	33968	19.82	19.54	18- 78	1028	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n313.d
Lab Smp Id: 241534005 Client Smp ID: RE03-09-13977
Inj Date : 25-NOV-2009 15:39
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534005|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.09930	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 75 Chlorobenzene-d5	18.667	549057	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon				CAS #:			
18.636	549058	50.0000000	59.6	0		0	75(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/VOA7.i/112509v7/7n313.d
Date : 25-NOV-2009 15:39
Client ID: RE03-09-13977
Sample Info: |2415340051926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

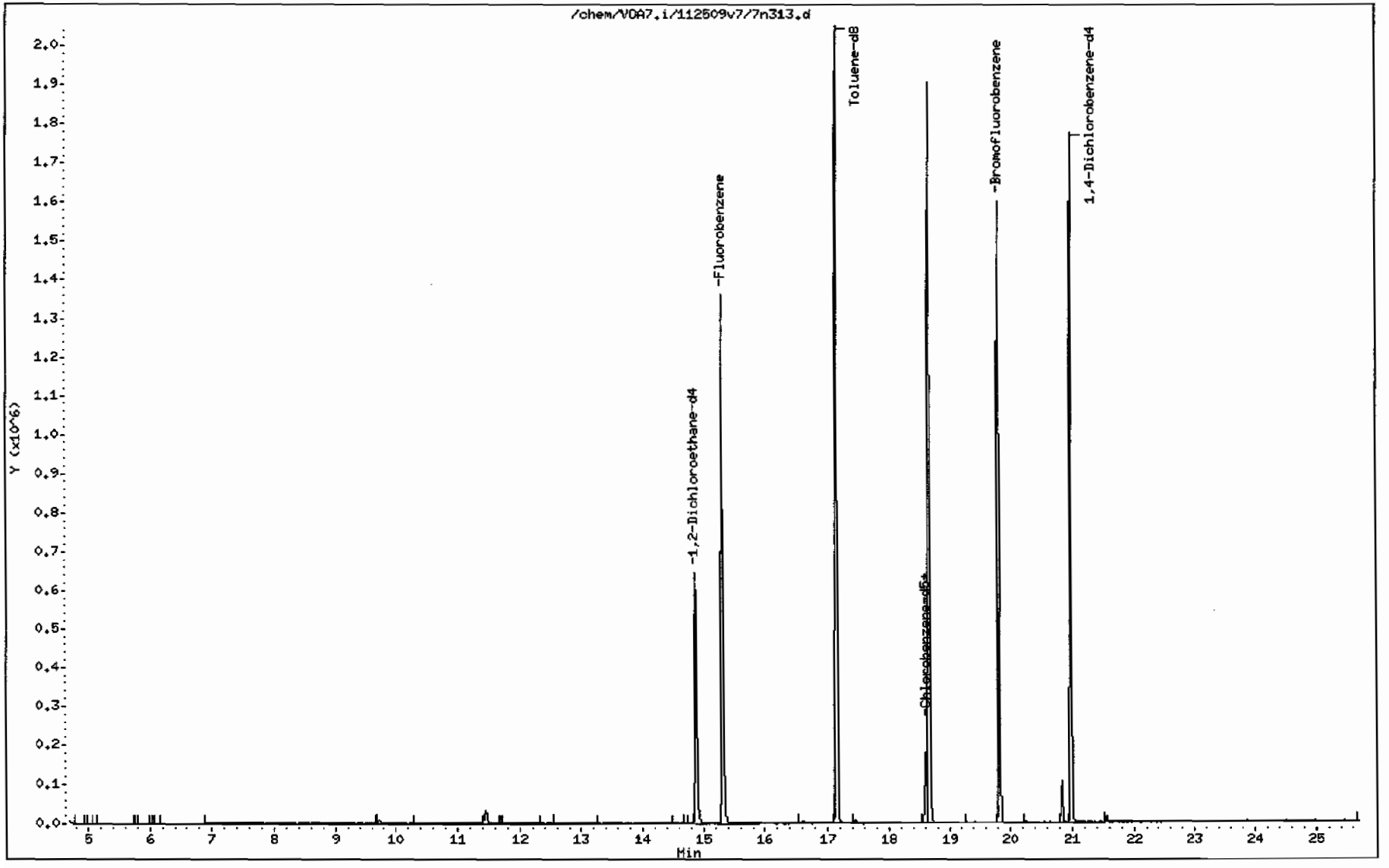

Data File: /chem/VOA7.i/112509v7/7n313.d

Page 1

Date : 25-NOV-2009 15:39

Client ID: RE03-09-13977

Instrument: VOA7.i

Sample Info: |241534005|926830|1|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	97	C15H24	204

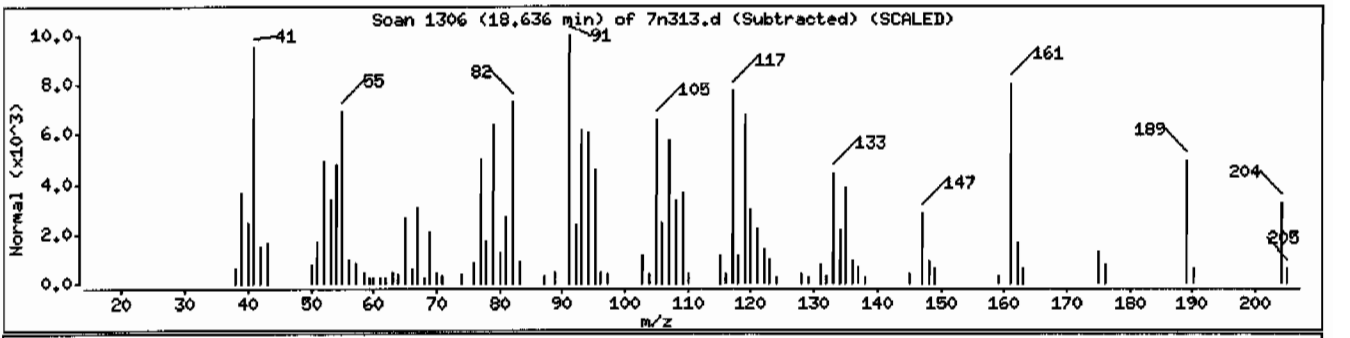

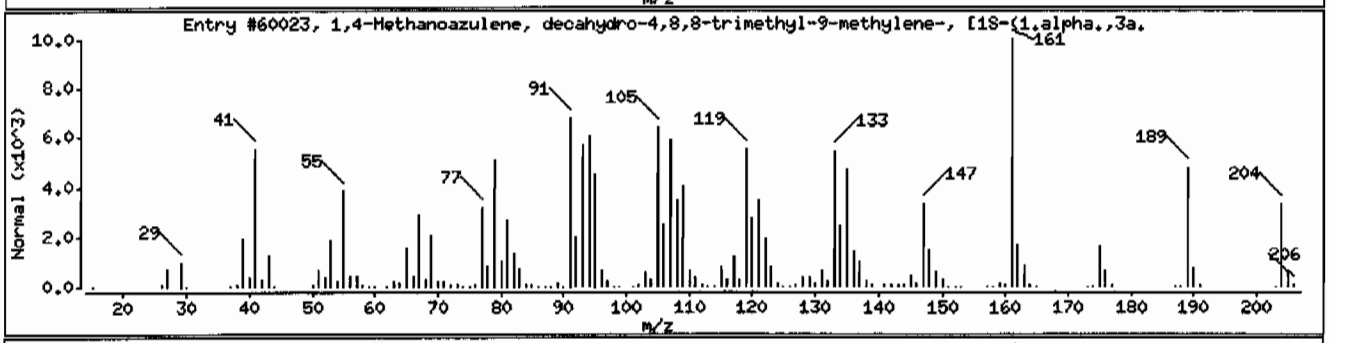

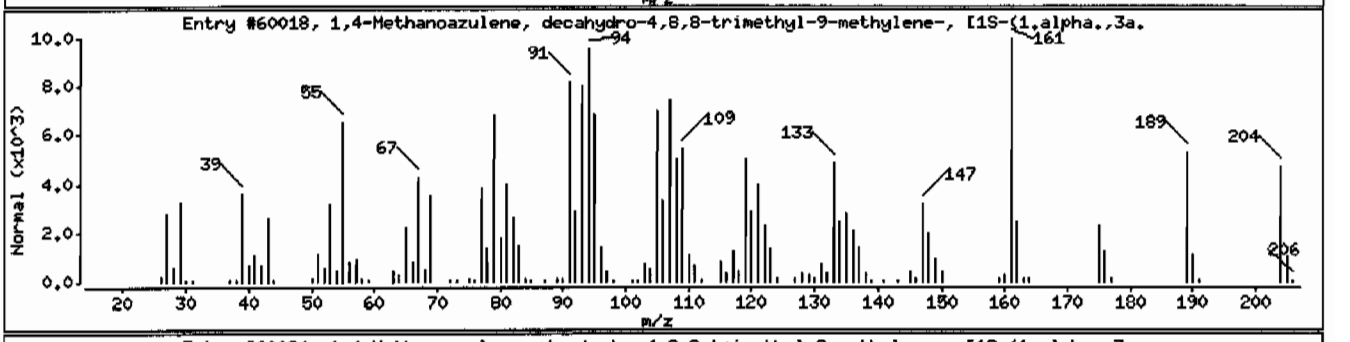

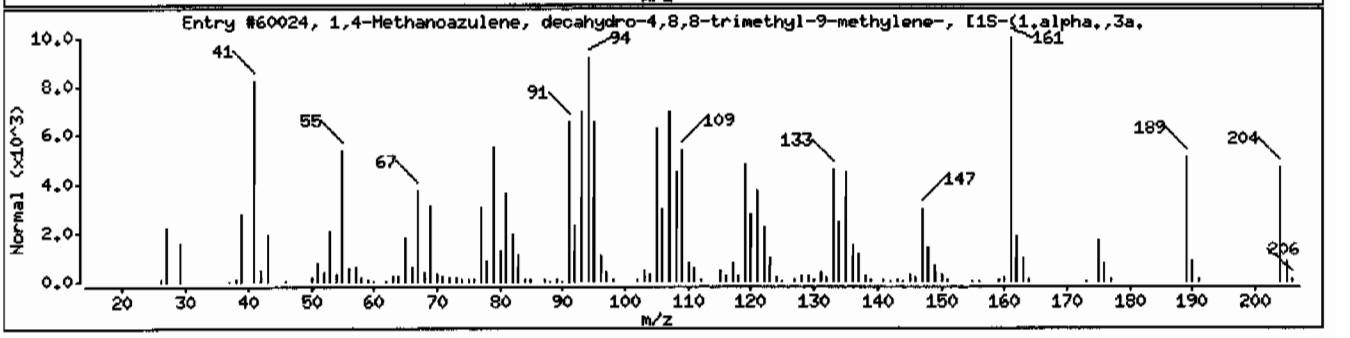

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534007	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14033	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 12:49	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:35	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n308.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534007**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14033**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 12:49**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:35**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n308.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	21.56	9.18	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n308.d
Lab Smp Id: 241534007 Client Smp ID: RE03-09-14033
Inj Date : 25-NOV-2009 12:49
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534007|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1204121	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	958090	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	561228	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	570698	54.3575	54.4
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1339735	46.8418	46.8
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	628813	47.6054	47.6

ION RATIO REPORT

VOA REPORT

Data file: 7n308.d
Report Date: 11/30/2009 07:51
Lab. ID: 241534007 SampleType: SAMPLE
Injection Date: 25-NOV-2009 12:49
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241534007|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	16724	17.13	16.94	80-120	100	(T)
43	11035	17.13	16.94	247-307	66	(QT)
100	933189	17.14	16.94	0- 56	5580	(QT)
82	Bromoform			CAS#: 75-25-2		
173	3561	19.81	19.54	80-120	100	(T)
175	35076	19.82	19.54	18- 78	985	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n308.d
Lab Smp Id: 241534007 Client Smp ID: RE03-09-14033
Inj Date : 25-NOV-2009 12:49
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534007|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 101 1,4-Dichlorobenzene-d4	20.991	3596214	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
21.560	660379	9.18158175	9.2	0		0	101

Data File: /chem/VOA7.i/112509v7/7n308.d
Date : 25-NOV-2009 12:49
Client ID: RE03-09-14033
Sample Info: |241534007|926830|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

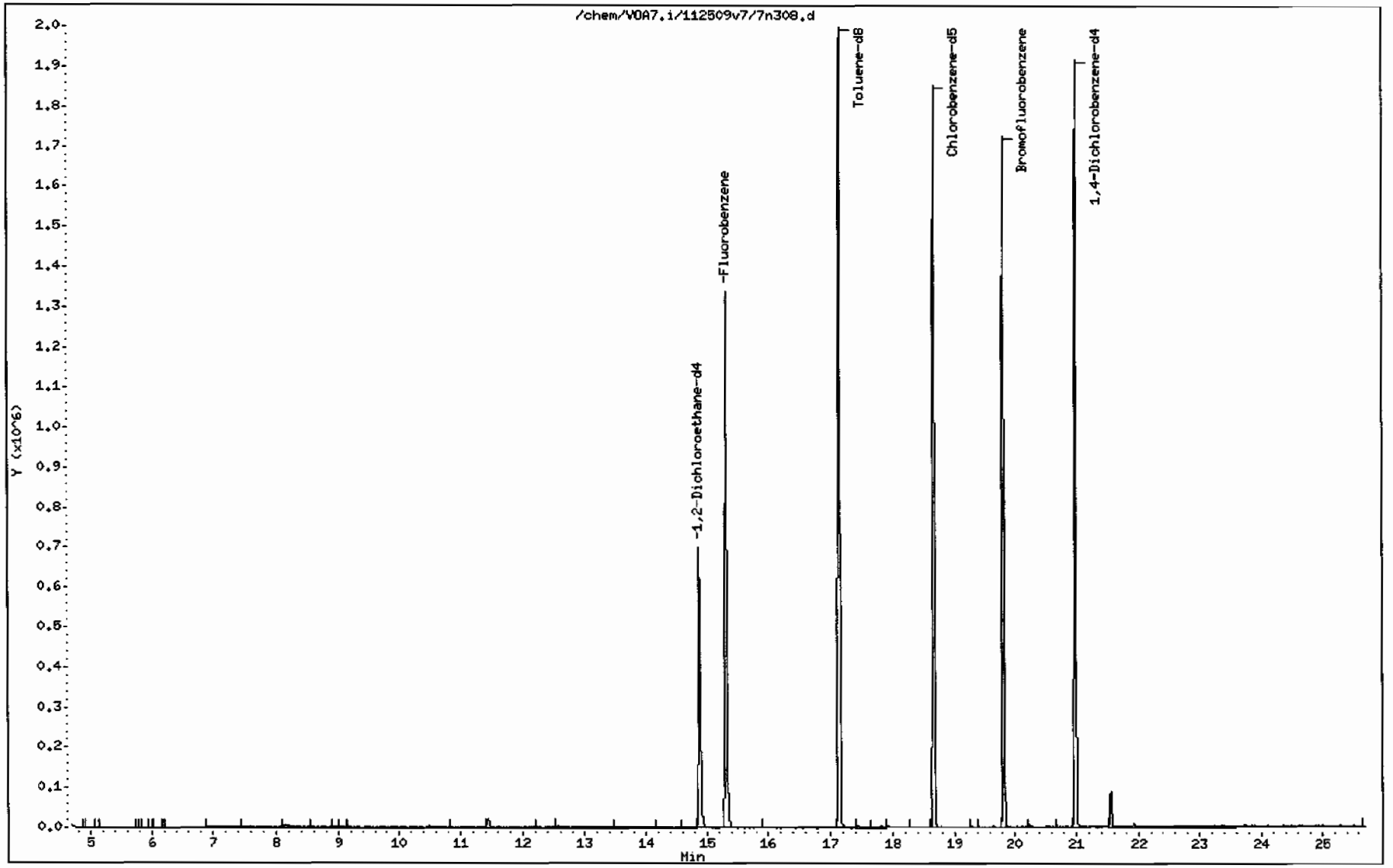

Data File: /chem/VOA7.i/112509v7/7n308.d

Date : 25-NOV-2009 12:49

Client ID: RE03-09-14033

Instrument: VOA7.i

Sample Info: |2415340071926830|1|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Bicyclo[5.3.0]decan-2-one, 9-methylene-1	1000153-97-3	NIST05.L	82418	36	C14H24OSi	236
1-(t-Butyldimethylsilyl)-4-(2,2-dimethyl	95452-00-9	NIST05.L	129777	17	C19H36OSi	308

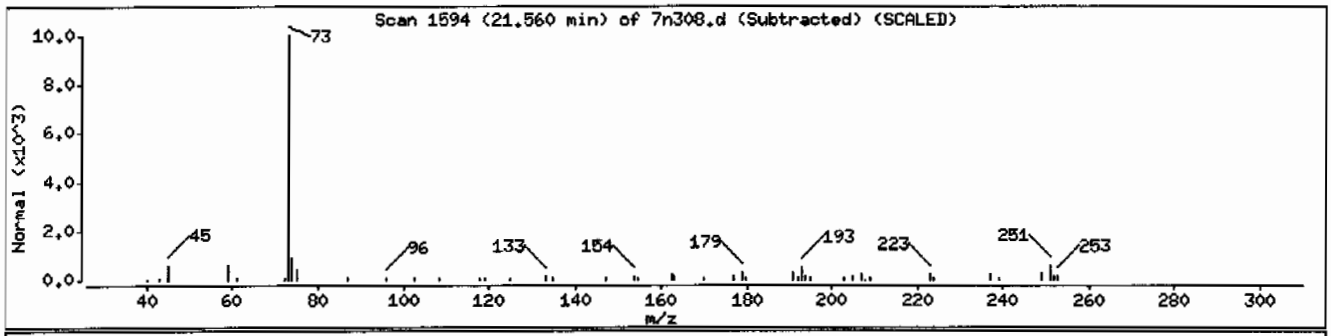

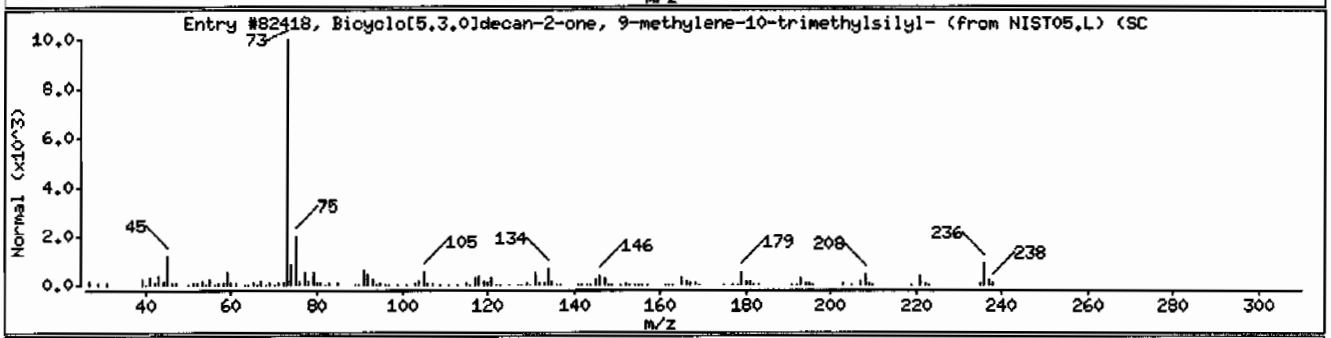

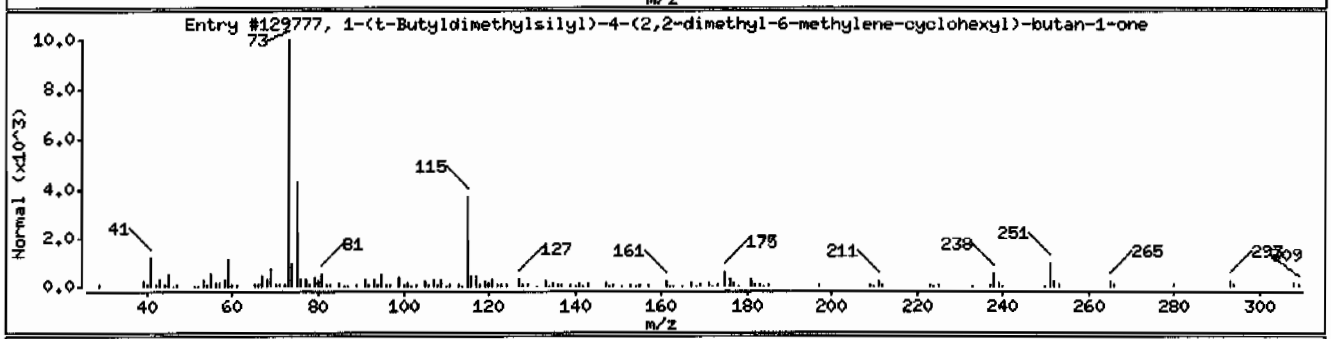

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3915	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.1	**Dilution:**	1
Run Date:	11/25/2009 16:47	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n315.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone		5.53	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.76	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.65	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.65	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3915	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 16:47	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n315.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.76	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n315.d
Lab Smp Id: 241534008 Client Smp ID: RE03-10-3915
Inj Date : 25-NOV-2009 16:47
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534008|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.34110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1203624	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	943276	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	538335	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	517683	49.3283	54.4
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1303141	46.2779	51.0
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	596388	47.0707	51.9
13 Acetone	43	10.464	10.423	(0.683)	49268	5.01071	5.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 7n315.d
Report Date: 11/30/2009 07:52
Lab. ID: 241534008 SampleType: SAMPLE
Injection Date: 25-NOV-2009 16:47
Operator: AXO1 Instrument: VOA7.i
Sample Info: |241534008|926830|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
13 Acetone			CAS#: 67-64-1			
43	49268	10.46	10.42	80-120	100	( )
58	11257	10.46	10.42	0- 56	23	( )
63 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	15953	17.14	16.94	80-120	100	(T)
43	10102	17.14	16.94	247-307	63	(QT)
100	915984	17.14	16.94	0- 56	5742	(QT)
82 Bromoform			CAS#: 75-25-2			
173	3173	19.81	19.54	80-120	100	(T)
175	33887	19.81	19.54	18- 78	1068	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n315.d
Lab Smp Id: 241534008 Client Smp ID: RE03-10-3915
Inj Date : 25-NOV-2009 16:47
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |241534008|926830|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/112509v7/7n315.d
Date : 25-NOV-2009 16:47
Client ID: RE03-10-3915
Sample Info: |24153400819268301|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

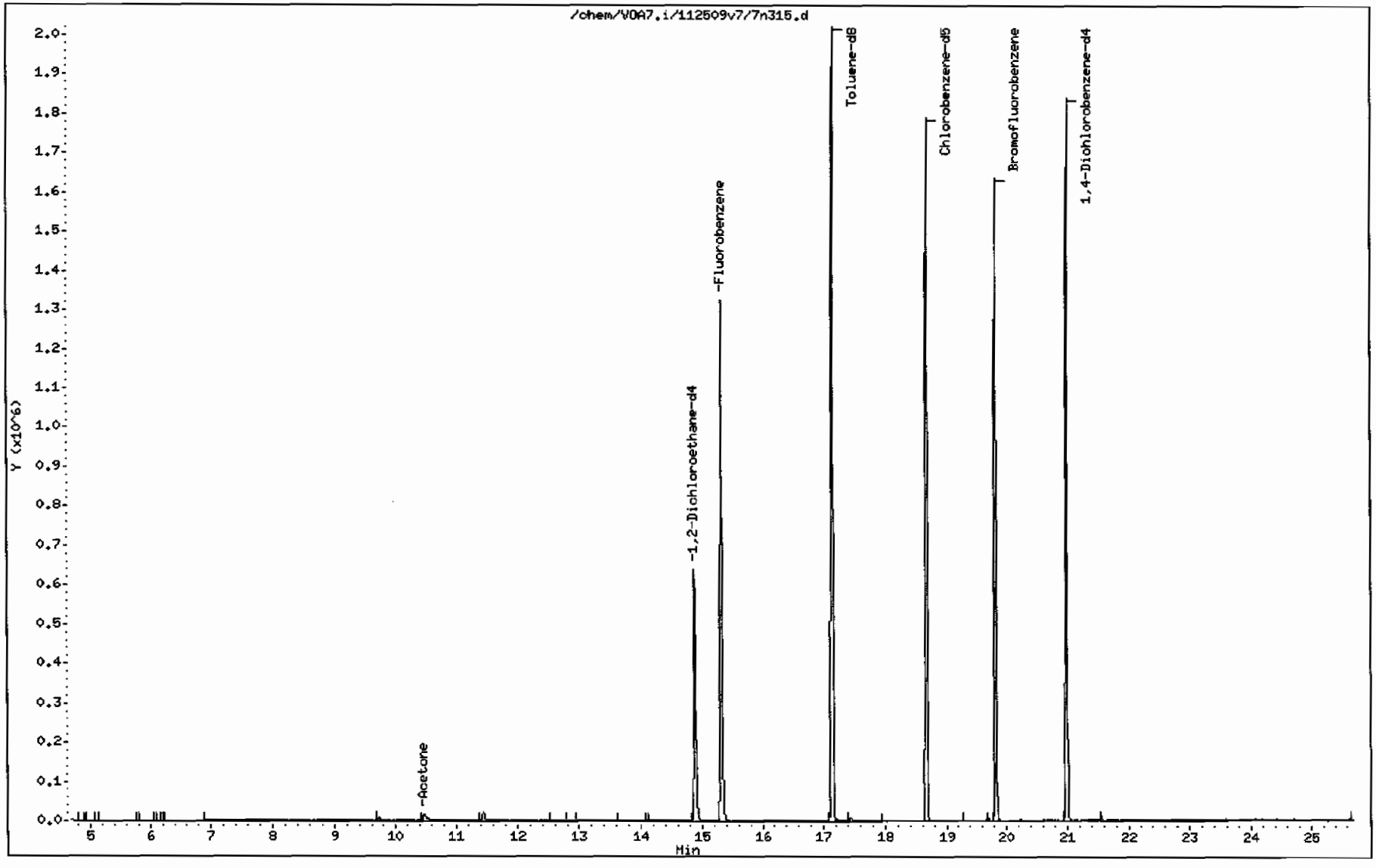

Data File: /chem/VOA7.i/112509v7/7n315.d

Page 2

Date : 25-NOV-2009 16:47

Client ID: RE03-10-3915

Instrument: VOA7.i

Sample Info: |2415340081926830|1|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 5.5 ug/Kg

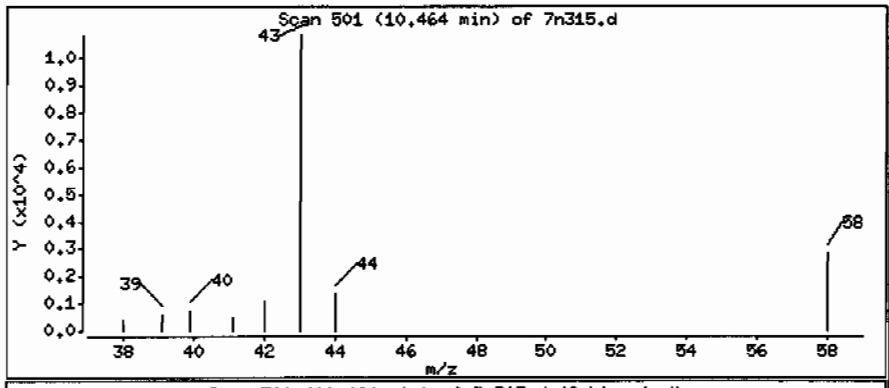

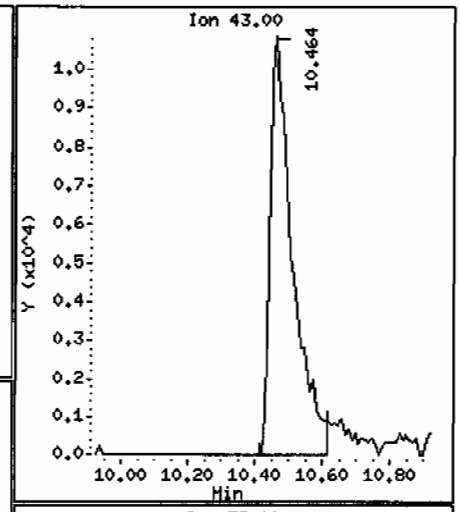

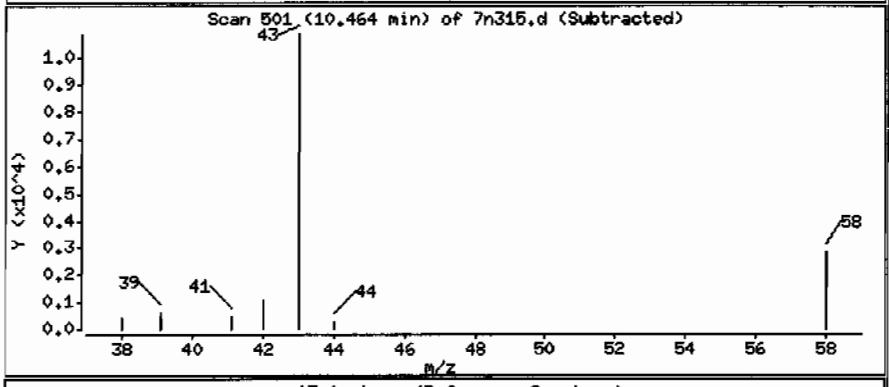

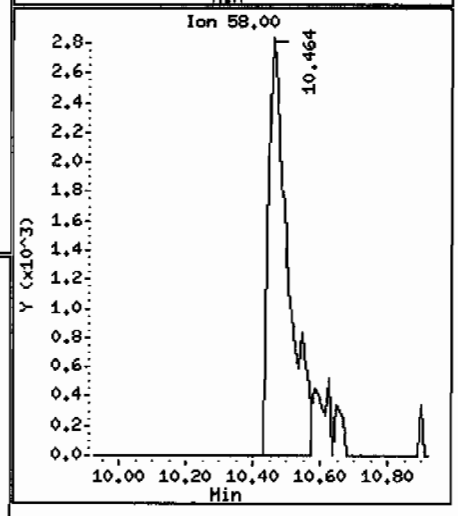

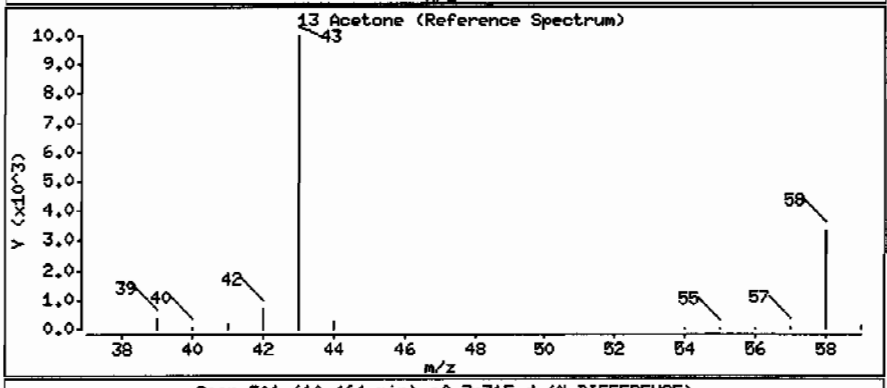

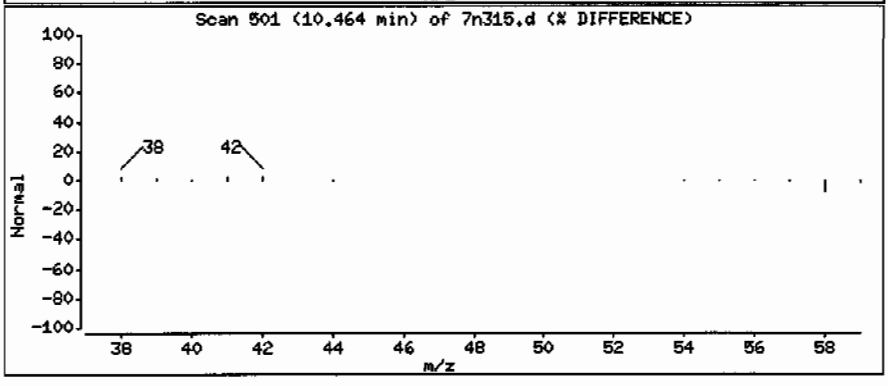

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 30-Nov-2009 08:08

Calibration History

Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Start Cal Date: 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
16-NOV-2009 10:57	ICALsubL+	/chem/VOA7.i/111509v7/71723.d
16-NOV-2009 04:51	ICALsubS	/chem/VOA7.i/111509v7/71712.d
Cal Level: 2 , Cal Amount: 2.00000		
16-NOV-2009 05:25	ICALsubS	/chem/VOA7.i/111509v7/71713.d
16-NOV-2009 00:20	ICALsubL+	/chem/VOA7.i/111509v7/71704.d
Cal Level: 3 , Cal Amount: 5.00000		
16-NOV-2009 05:58	ICALsubS	/chem/VOA7.i/111509v7/71714.d
16-NOV-2009 00:55	ICALsubL+	/chem/VOA7.i/111509v7/71705.d
Cal Level: 4 , Cal Amount: 10.00000		
16-NOV-2009 06:32	ICALsubS	/chem/VOA7.i/111509v7/71715.d
16-NOV-2009 01:29	ICALsubL+	/chem/VOA7.i/111509v7/71706.d
Cal Level: 5 , Cal Amount: 20.00000		
16-NOV-2009 07:05	ICALsubS	/chem/VOA7.i/111509v7/71716.d
16-NOV-2009 02:03	ICALsubL+	/chem/VOA7.i/111509v7/71707.d
Cal Level: 6 , Cal Amount: 50.00000		
16-NOV-2009 02:36	ICALsubL+	/chem/VOA7.i/111509v7/71708.d
Cal Level: 7 , Cal Amount: 100.00000		
16-NOV-2009 08:11	ICALsubS	/chem/VOA7.i/111509v7/71718.d
16-NOV-2009 03:10	ICALsubL+	/chem/VOA7.i/111509v7/71709.d
Cal Level: 8 , Cal Amount: 200.00000		
16-NOV-2009 04:18	BENZENE+	/chem/VOA7.i/111509v7/71711.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0

25-NOV-2009 09:45	CALsubL+	/chem/VOA7.i/112509v7/7n303.d
Ccal Level: 6 , Ccal Amount: 50.0		
25-NOV-2009 10:19	CALsubS+SS	/chem/VOA7.i/112509v7/7n304.d
Ccal Level: 6 , Ccal Amount: 50.0		
25-NOV-2009 09:11	CALsubL+	/chem/VOA7.i/112509v7/7n302.d

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Start Cal Date : 16-NOV-2009 00:20
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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Calibration File Names:
Level 1: /chem/VOA7.i/111509v7/71723.d
Level 2: /chem/VOA7.i/111509v7/71713.d
Level 3: /chem/VOA7.i/111509v7/71714.d
Level 4: /chem/VOA7.i/111509v7/71715.d
Level 5: /chem/VOA7.i/111509v7/71716.d
Level 6: /chem/VOA7.i/111509v7/71708.d
Level 7: /chem/VOA7.i/111509v7/71718.d
Level 8: /chem/VOA7.i/111509v7/71711.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
M 1 1,3-Dichloropropylene	0.48162	0.51141	0.48991	0.49506	0.47915	0.45634						
	0.45814	+++++					AVRG		0.48166		4.09435	
M 2 Xylenes (total)	0.70187	0.71107	0.68541	0.65468	0.62432	0.58624						
	0.54217	+++++					AVRG		0.64368		9.77778	
M 3 1,2-Dichloroethylene (total)	0.50335	0.51390	0.49246	0.48613	0.47127	0.44528						
	0.43027	+++++					AVRG		0.47752		6.39683	
147 Chlorotrifluoroethylene	+++++	0.11567	0.12629	0.13006	0.15103	+++++						
	0.12864	+++++					AVRG		0.13034		9.87423	<-
148 2-Chloro-1,1,1-trifluoroethan	+++++	0.29483	0.28977	0.28633	0.28136	+++++						
	0.26145	+++++					AVRG		0.28275		4.55528	<-

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Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
4 Dichlorodifluoromethane	9878	9249	23150	48278	92822	212089						
	442243	++++++					LINR	-0.00674	0.19647		0.99903	
5 Chloromethane	17787	25991	62744	120715	235311	545414						
	++++++	++++++					LINR	-0.01618	0.48059		0.99934	
6 Vinyl chloride	0.45101	0.32267	0.32843	0.32002	0.31485	0.31553						
	0.32064	++++++					AVRG		0.33902		14.62820	
7 Bromomethane	0.27284	0.23477	0.21739	0.23189	0.22221	0.22062						
	0.22663	++++++					AVRG		0.23234		8.13362	
8 Chloroethane	0.26449	0.29143	0.26656	0.24776	0.24161	0.22593						
	0.23650	++++++					AVRG		0.25347		8.75362	
9 Trichlorofluoromethane	0.36936	0.32081	0.34380	0.33088	0.34454	0.33922						
	0.34228	++++++					AVRG		0.34155		4.37091	
10 Ethyl Ether	0.32395	0.40505	0.37935	0.37257	0.35783	0.33864						
	0.33947	++++++					AVRG		0.35955		7.81915	
11 Acrolein	0.10338	0.08120	0.07335	0.07632	0.07973	++++++						
	0.08321	++++++					AVRG		0.08287		12.84791	<-
12 Trichlorotrifluoroethane	0.10801	0.09022	0.09121	0.09389	0.09152	++++++						
	0.08403	++++++					AVRG		0.09315		8.58517	<-

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	ml	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
13 Acetone	0.41356	0.45387	0.41433	0.43007	0.40244	0.39042						
	0.35449	+++++					AVRG		0.40846		7.65356	
14 1,1-Dichloroethylene	0.22088	0.21532	0.20364	0.20899	0.20024	0.20565						
	0.19213	+++++					AVRG		0.20669		4.61138	
15 Isopropyl Alcohol	0.03168	0.03567	0.03718	0.03843	0.04149	+++++						
	0.03561	+++++					AVRG		0.03668		8.93039	<-
16 Iodomethane	0.40955	0.39246	0.38281	0.39460	0.37262	0.36662						
	0.32402	+++++					AVRG		0.37752		7.31342	
17 Acetonitrile	0.06684	0.07498	0.06894	0.07076	0.06571	0.07505						
	0.05949	+++++					AVRG		0.06882		7.98603	
18 Methyl acetate	0.46706	0.48972	0.42740	0.44391	0.40101	0.34961						
	0.32566	+++++					AVRG		0.41491		14.50657	
19 Carbon disulfide	0.81399	0.71905	0.65613	0.72387	0.66367	0.64827						
	0.51116	+++++					AVRG		0.67659		13.71592	
20 Allyl chloride	0.73189	0.65846	0.65047	0.64089	0.62129	+++++						
	0.50912	+++++					AVRG		0.63535		11.40310	<-
21 tert-Butyl Alcohol	0.05404	0.05110	0.05011	0.05014	0.05625	+++++						
	0.04447	+++++					AVRG		0.05102		7.88694	<-

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
22 Methylene chloride	+++++	18349	33412	50196	94022	216889						
	400402	+++++					LINR	-0.06474	0.17592		0.99946	
23 Acrylonitrile	0.17475	0.15791	0.16794	0.16478	0.17200	+++++						
	0.15900	+++++					AVRG		0.16606		4.10463	<-
24 tert-Butyl methyl ether	0.83012	0.96761	0.88767	0.95137	0.84252	0.79052						
	0.79091	+++++					AVRG		0.86582		8.33600	
25 trans-1,2-Dichloroethylene	0.46674	0.47157	0.45561	0.44548	0.43475	0.41412						
	0.39387	+++++					AVRG		0.44031		6.43042	
26 Vinyl acetate	0.93699	1.00832	0.91797	0.90197	0.90475	0.80868						
	0.69472	+++++					AVRG		0.88192		11.49269	
27 Isopropyl ether	+++++	1.67983	1.73405	1.73947	1.73231	+++++						
	1.56232	+++++					AVRG		1.68959		4.44716	<-
28 1,1-Dichloroethane	0.55908	0.56733	0.55912	0.55824	0.54325	0.53477						
	0.52674	+++++					AVRG		0.54979		2.73004	
29 2-Chloro-1,3-butadiene	0.60061	0.54347	0.55048	0.54911	0.52692	+++++						
	0.50165	+++++					AVRG		0.54538		5.99603	<-
30 Ethyl tert-butyl ether	+++++	1.15038	1.14159	1.15815	1.16883	+++++						
	1.11754	+++++					AVRG		1.14730		1.69286	<-

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
31 2-Butanone	0.50656	0.55953	0.46507	0.47110	0.45593	0.42908						
	0.37852	+++++					AVRG		0.46654		12.23007	
32 Ethyl acetate	0.61522	0.48944	0.49792	0.47694	0.49442	+++++						
	0.38738	+++++					AVRG		0.49355		14.71943	<-
33 cis-1,2-Dichloroethylene	0.53996	0.55622	0.52930	0.52679	0.50779	0.47645						
	0.46666	+++++					AVRG		0.51474		6.41363	
34 2,2-Dichloropropane	0.30573	0.33532	0.29995	0.28909	0.27942	0.25411						
	0.26495	+++++					AVRG		0.28980		9.37472	
35 Propionitrile	0.07599	0.06418	0.06422	0.06603	0.07037	+++++						
	0.06037	+++++					AVRG		0.06686		8.26398	<-
36 Methacrylonitrile	0.34622	0.29982	0.30977	0.29213	0.30586	+++++						
	0.25040	+++++					AVRG		0.30070		10.28807	<-
37 Bromochloromethane	0.44336	0.47430	0.45054	0.46944	0.44692	0.42910						
	0.41925	+++++					AVRG		0.44756		4.43402	
38 Chloroform	0.50752	0.53598	0.51019	0.49879	0.48385	0.47123						
	0.46937	+++++					AVRG		0.49671		4.79790	
39 Tetrahydrofuran	0.46962	0.36550	0.36733	0.34702	0.36837	+++++						
	0.30065	+++++					AVRG		0.36975		14.95593	<-

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
41 1,1,1-Trichloroethane	0.39389	0.39912	0.37452	0.36015	0.36051	0.35090						
	0.35034	+++++					AVRG		0.36992		5.38140	
42 Isobutyl alcohol	0.01894	0.01539	0.01791	0.01817	0.02004	+++++						
	0.01579	+++++					AVRG		0.01771		10.19142	<-
43 Cyclohexane	0.73385	0.76995	0.62800	0.60896	0.58507	0.55714						
	0.51772	+++++					AVRG		0.62867		14.62772	
44 1,1-Dichloropropene	0.36948	0.35436	0.34505	0.33268	0.32380	0.31448						
	0.30567	+++++					AVRG		0.33508		6.75846	
45 Carbon tetrachloride	0.30515	0.31489	0.29276	0.29301	0.28324	0.27677						
	0.28441	+++++					AVRG		0.29289		4.53638	
47 1,2-Dichloroethane	0.50646	0.55371	0.53797	0.54777	0.52405	0.49015						
	0.47757	+++++					AVRG		0.51967		5.62217	
48 Benzene	1.08245	1.13296	1.06418	1.03887	0.99466	0.94896						
	0.90668	+++++					AVRG		1.02411		7.70711	
49 Methyl tert-amyl ether	+++++	0.79368	0.79088	0.81205	0.81522	+++++						
	0.76488	+++++					AVRG		0.79534		2.53396	<-
50 Cyclohexene	0.53525	0.54627	0.49088	0.47223	0.46857	0.44496						
	0.42837	+++++					AVRG		0.48379		9.06743	

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
52 n-Butyl alcohol	0.01414	0.01540	0.01465	0.01549	0.01195	0.01360						
	0.01298	0.01589					AVRG		0.01426		9.55415	
53 Trichloroethylene	0.29668	0.27864	0.26410	0.26925	0.25379	0.24558						
	0.24343	+++++					AVRG		0.26450		7.19813	
54 Methyl methacrylate	0.23403	0.21190	0.21903	0.20630	0.21130	+++++						
	0.17483	+++++					AVRG		0.20956		9.33602	<-
55 Methylcyclohexane	0.48623	0.45049	0.41633	0.40547	0.39190	0.36154						
	0.34719	+++++					AVRG		0.40845		11.87464	
56 1,2-Dichloropropane	0.34729	0.36852	0.34844	0.34238	0.32116	0.30810						
	0.29588	+++++					AVRG		0.33311		7.68307	
57 1,4-Dioxane	0.00311	0.00342	0.00301	0.00321	0.00334	+++++						
	0.00291	+++++					AVRG		0.00316		6.09053	<-
58 Dibromomethane	0.17530	0.21136	0.18851	0.19605	0.18940	0.17505						
	0.17768	+++++					AVRG		0.18762		7.04018	
59 Bromodichloromethane	0.40306	0.39688	0.39882	0.39409	0.39111	0.38250						
	0.38772	+++++					AVRG		0.39346		1.77175	
60 2-Nitropropane	0.14779	0.11222	0.12974	0.11925	0.13313	+++++						
	0.13745	+++++					AVRG		0.12993		9.81668	<-

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	100 Level 7	200 Level 8										
61 2-Chloroethylvinyl ether	0.13440	0.14994	0.14076	0.14163	0.13735	0.12335						
	0.12792	+++++					AVRG		0.13648		6.53115	
62 cis-1,3-Dichloropropylene	0.51907	0.52113	0.50923	0.50627	0.49050	0.46742						
	0.46560	+++++					AVRG		0.49703		4.65191	
63 4-Methyl-2-pentanone	0.26289	0.29681	0.26991	0.26674	0.25619	0.24532						
	0.21162	+++++					AVRG		0.25850		10.06509	
65 Toluene	1.06152	0.94181	0.92209	0.85591	0.83869	0.81855						
	0.77591	+++++					AVRG		0.88778		10.78602	
66 Ethyl methacrylate	0.60106	0.55204	0.56173	0.54685	0.53056	+++++						
	0.39826	+++++					AVRG		0.53175		13.07283	<-
67 trans-1,3-Dichloropropylene	0.59340	0.66097	0.62140	0.63870	0.61596	0.60172						
	0.59157	+++++					AVRG		0.61767		4.10553	
68 1,1,2-Trichloroethane	0.28152	0.34176	0.31919	0.31408	0.30560	0.28919						
	0.27725	+++++					AVRG		0.30409		7.59572	
69 2-Hexanone	0.87481	0.97568	0.87145	0.82622	0.78128	0.70076						
	+++++	+++++					AVRG		0.83837		11.14091	
70 1,3-Dichloropropane	0.62125	0.70580	0.63473	0.62515	0.59521	0.54769						
	0.50020	+++++					AVRG		0.60429		10.90903	

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	100 Level 7	200 Level 8										
71 Tetrachloroethylene	5992	9474	21832	39767	78891	181061						
	337900	+++++					LINR	-0.03372	0.19968		0.99822	
72 Dibromochloromethane	0.36374	0.35126	0.34534	0.35045	0.34793	0.36389						
	0.36418	+++++					AVRG		0.35526		2.34746	
73 1,2-Dibromoethane	0.36352	0.39368	0.36505	0.37797	0.37853	0.35728						
	0.34784	+++++					AVRG		0.36913		4.15400	
74 1-Chlorohexane	0.43766	0.42600	0.40282	0.39261	0.39261	+++++						
	0.36131	+++++					AVRG		0.40217		6.74585	<-
76 Chlorobenzene	1.07372	1.00204	1.00902	0.96396	0.93337	0.90160						
	0.86204	+++++					AVRG		0.96368		7.42752	
77 1,1,1,2-Tetrachloroethane	0.36216	0.35620	0.34804	0.35642	0.33854	0.33649						
	0.32622	+++++					AVRG		0.34629		3.75530	
78 Ethylbenzene	1.95324	1.84797	1.75084	1.66559	1.62080	1.50242						
	1.36911	+++++					AVRG		1.67285		11.94152	
79 m,p-Xylenes	0.69767	0.70455	0.67501	0.64826	0.61794	0.58065						
	0.53207	+++++					AVRG		0.63659		10.00955	
80 o-Xylene	0.71025	0.72410	0.70621	0.66754	0.63709	0.59741						
	0.56236	+++++					AVRG		0.65785		9.36415	

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
81 Styrene	1.33560	1.30153	1.23519	1.21219	1.13822	1.07539						
	0.97845	+++++					AVRG		1.18237		10.71682	
82 Bromoform	0.44442	0.39902	0.41763	0.44297	0.44404	0.44186						
	0.46661	+++++					AVRG		0.43665		4.99810	
83 Isopropylbenzene	3.19302	3.18561	3.07411	2.86686	2.75667	2.54796						
	2.34976	+++++					AVRG		2.85343		11.36410	
84 cis-1,4-Dichloro-2-butene	0.40887	0.38461	0.41067	0.39342	0.41002	+++++						
	0.34203	+++++					AVRG		0.39160		6.76684	<-
85 Cyclohexanone	27609	47983	120128	244566	605155	+++++						
	4411964	+++++					LINR	1.47957	0.10625		0.99599	
87 1,1,2,2-Tetrachloroethane	0.96106	0.97912	0.93144	0.92496	0.89645	0.82377						
	0.80765	+++++					AVRG		0.90349		7.26714	
88 trans-1,4-Dichloro-2-butene	0.37041	0.36328	0.36660	0.35482	0.37473	+++++						
	0.31675	+++++					AVRG		0.35776		5.92605	<-
89 1,2,3-Trichloropropane	0.23019	0.25194	0.24061	0.23026	0.22741	0.20232						
	0.21092	+++++					AVRG		0.22766		7.37759	
90 Bromobenzene	0.92906	0.82900	0.85652	0.80922	0.76616	0.73191						
	0.69906	+++++					AVRG		0.80299		9.73768	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
91 n-Propylbenzene	4.25249	3.88792	3.79288	3.45018	3.34064	3.08225						
	2.76462	+++++					AVRG		3.51014		14.45630	
92 1,3,5-Trimethylbenzene	3.01475	2.80798	2.70222	2.54197	2.39987	2.22252						
	2.01642	+++++					AVRG		2.52939		13.66966	
93 2-Chlorotoluene	3.08010	2.87993	2.74165	2.51611	2.36428	2.20489						
	2.03238	+++++					AVRG		2.54562		14.77810	
94 4-Chlorotoluene	2.91904	2.51920	2.55214	2.40451	2.27488	2.19788						
	2.06680	+++++					AVRG		2.41921		11.59035	
95 tert-Butylbenzene	2.67976	2.70138	2.45161	2.29001	2.24015	2.11655						
	2.00828	+++++					AVRG		2.35539		11.35607	
96 1,2,4-Trimethylbenzene	3.16701	2.84657	2.89890	2.74678	2.59171	2.41019						
	2.24517	+++++					AVRG		2.70091		11.55019	
97 Pentachloroethane	0.25571	0.26641	0.25616	0.27985	0.26289	+++++						
	0.23937	+++++					AVRG		0.26007		5.16533	<-
98 sec-Butylbenzene	3.82934	3.45485	3.46206	3.15695	3.07500	2.85836						
	2.63727	+++++					AVRG		3.21055		12.58655	
99 4-Isopropyltoluene	2.98217	2.73304	2.65706	2.51190	2.48606	2.31346						
	2.17912	+++++					AVRG		2.55183		10.50000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
100 1,3-Dichlorobenzene	1.62812	1.57179	1.47014	1.45207	1.39072	1.30402						
	1.25519	+++++					AVRG		1.43886		9.36211	
102 1,4-Dichlorobenzene	1.63344	1.50373	1.46244	1.41694	1.36741	1.28628						
	1.25795	+++++					AVRG		1.41831		9.15964	
103 Benzyl chloride	1.52159	1.39923	1.36711	1.35007	1.35827	+++++						
	1.00071	+++++					AVRG		1.33283		13.10142	<-
104 n-Butylbenzene	3.30748	3.01305	2.86173	2.59921	2.52845	2.34730						
	2.22372	+++++					AVRG		2.69728		14.23037	
105 1,2-Dichlorobenzene	1.58423	1.53813	1.49742	1.43620	1.40103	1.30168						
	1.26719	+++++					AVRG		1.43227		8.25322	
106 bis(2-Chloroisopropyl)ether	0.83054	0.76699	0.77671	0.70559	0.76759	+++++						
	0.58050	+++++					AVRG		0.73799		11.75584	<-
107 1,2-Dibromo-3-chloropropane	0.12210	0.19215	0.18173	0.19639	0.18470	0.16898						
	0.18479	+++++					AVRG		0.17584		14.34396	
108 1,2,4-Trichlorobenzene	1.10365	1.08552	1.04867	1.04578	1.02857	0.91854						
	0.95721	+++++					AVRG		1.02685		6.50341	
109 Hexachlorobutadiene	0.63352	0.54241	0.57883	0.54434	0.54151	0.49744						
	0.50824	+++++					AVRG		0.54947		8.29752	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
110 Naphthalene	2.54277	2.49253	2.33228	2.33148	2.24296	1.96980					
	2.06384	+++++					AVRG		2.28224		9.18916
111 1,2,3-Trichlorobenzene	0.97923	0.94023	0.91669	0.92850	0.93014	0.82251					
	0.86694	+++++					AVRG		0.91204		5.65838
$ 46 1,2-Dichloroethane-d4	0.42117	0.44272	0.43099	0.44388	0.44038	0.43427					
	0.43830	+++++					AVRG		0.43596		1.82484
$ 64 Toluene-d8	1.44558	1.50527	1.50116	1.49559	1.48833	1.50905					
	1.50335	+++++					AVRG		1.49262		1.46212
$ 86 Bromofluorobenzene	1.15699	1.19361	1.18690	1.18005	1.16824	1.17494					
	1.17673	+++++					AVRG		1.17678		1.01982

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-NOV-2009 00:20
End Cal Date : 16-NOV-2009 10:57
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Cal Date : 30-Nov-2009 08:04 ale01592

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 16-NOV-2009 13:54
Lab File ID: 7m102.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM0911116-01 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	2 Xylenes (total)	0.64368	0.61838	0.61838	0.050	-3.93101	30.00000	Averaged	
M	3 1,2-Dichloroethylene (total	0.47752	0.48210	0.48210	0.050	0.95860	30.00000	Averaged	
M	1 1,3-Dichloropropylene	0.48166	0.47100	0.47100	0.050	-2.21429	30.00000	Averaged	
	4 Dichlorodifluoromethane	65.27028	50.00000	0.25780	0.050	30.54056	30.00000	Linear	<-
	5 Chloromethane	52.40285	50.00000	0.51146	0.100	4.80570	30.00000	Linear	spcc
	6 Vinyl chloride	0.33902	0.36244	0.36244	0.050	6.90732	20.00000	Averaged	ccc
	7 Bromomethane	0.23234	0.22930	0.22930	0.050	-1.30821	30.00000	Averaged	
	8 Chloroethane	0.25347	0.24541	0.24541	0.010	-3.17791	30.00000	Averaged	
	9 Trichlorofluoromethane	0.34155	0.41490	0.41490	0.050	21.47309	30.00000	Averaged	
	10 Ethyl Ether	0.35955	0.32619	0.32619	0.001	-9.27739	30.00000	Averaged	
	13 Acetone	0.40846	0.34477	0.34477	0.050	-15.59171	40.00000	Averaged	
	17 Acetonitrile	0.06882	0.08302	0.08302	0.010	20.62908	30.00000	Averaged	
	14 1,1-Dichloroethylene	0.20669	0.22529	0.22529	0.050	8.99624	20.00000	Averaged	ccc
	18 Methyl acetate	0.41491	0.36212	0.36212	0.010	-12.72228	40.00000	Averaged	
	16 Iodomethane	0.37752	0.36997	0.36997	0.050	-2.00102	30.00000	Averaged	
	22 Methylene chloride	50.50060	50.00000	0.18907	0.050	1.00119	30.00000	Linear	
	19 Carbon disulfide	0.67659	0.74146	0.74146	0.050	9.58807	30.00000	Averaged	
	24 tert-Butyl methyl ether	0.86582	0.81699	0.81699	0.050	-5.63917	30.00000	Averaged	
	25 trans-1,2-Dichloroethylene	0.44031	0.45584	0.45584	0.050	3.52742	30.00000	Averaged	
	26 Vinyl acetate	0.88192	0.90935	0.90935	0.010	3.11086	40.00000	Averaged	
	28 1,1-Dichloroethane	0.54979	0.56486	0.56486	0.100	2.74140	30.00000	Averaged	spcc
	31 2-Butanone	0.46654	0.36247	0.36247	0.030	-22.30657	40.00000	Averaged	
	33 cis-1,2-Dichloroethylene	0.51474	0.50836	0.50836	0.050	-1.23876	30.00000	Averaged	
	34 2,2-Dichloropropane	0.28980	0.33154	0.33154	0.050	14.40365	30.00000	Averaged	
	38 Chloroform	0.49671	0.49767	0.49767	0.010	0.19521	20.00000	Averaged	ccc
	37 Bromochloromethane	0.44756	0.43371	0.43371	0.010	-3.09319	30.00000	Averaged	
	41 1,1,1-Trichloroethane	0.36992	0.42264	0.42264	0.010	14.25119	30.00000	Averaged	
	43 Cyclohexane	0.62867	0.68433	0.68433	0.010	8.85406	30.00000	Averaged	
	44 1,1-Dichloropropene	0.33508	0.36362	0.36362	0.010	8.51916	30.00000	Averaged	
	52 n-Butyl alcohol	0.01426	0.01523	0.01523	0.001	6.79075	40.00000	Averaged	
	45 Carbon tetrachloride	0.29289	0.33705	0.33705	0.010	15.07531	30.00000	Averaged	
$	46 1,2-Dichloroethane-d4	0.43596	0.42203	0.42203	0.010	-3.19455	30.00000	Averaged	
	47 1,2-Dichloroethane	0.51967	0.49347	0.49347	0.010	-5.04145	30.00000	Averaged	
	48 Benzene	1.02411	0.99220	0.99220	0.010	-3.11562	30.00000	Averaged	
	50 Cyclohexene	0.48379	0.51528	0.51528	0.010	6.50957	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7m102.d
Analysis Type: WATER
Lab Sample ID: W7VM0911116-01 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

Injection Date: 16-NOV-2009 13:54
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	53 Trichloroethylene	0.26450	0.26775	0.26775	0.010	1.23195	30.00000	Averaged	
	56 1,2-Dichloropropane	0.33311	0.30902	0.30902	0.010	-7.23364	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.40845	0.44750	0.44750	0.010	9.55994	30.00000	Averaged	
	59 Bromodichloromethane	0.39346	0.39039	0.39039	0.010	-0.77802	30.00000	Averaged	
	58 Dibromomethane	0.18762	0.18134	0.18134	0.010	-3.34917	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	0.13648	0.10225	0.10225	0.010	-25.07832	30.00000	Averaged	
	63 4-Methyl-2-pentanone	0.25850	0.23312	0.23312	0.010	-9.81605	40.00000	Averaged	
	62 cis-1,3-Dichloropropylene	0.49703	0.47715	0.47715	0.010	-4.00062	30.00000	Averaged	
$	64 Toluene-d8	1.49262	1.42409	1.42409	0.010	-4.59148	30.00000	Averaged	
	65 Toluene	0.88778	0.86384	0.86384	0.010	-2.69700	20.00000	Averaged	ccc
	67 trans-1,3-Dichloropropylene	0.61767	0.61917	0.61917	0.010	0.24200	30.00000	Averaged	
	68 1,1,2-Trichloroethane	0.30409	0.28713	0.28713	0.010	-5.57532	30.00000	Averaged	
	69 2-Hexanone	0.83837	0.58839	0.58839	0.010	-29.81693	40.00000	Averaged	
	70 1,3-Dichloropropane	0.60429	0.55350	0.55350	0.010	-8.40404	30.00000	Averaged	
	71 Tetrachloroethylene	61.33392	50.00000	0.25168	0.010	22.66783	30.00000	Linear	
	72 Dibromochloromethane	0.35526	0.36420	0.36420	0.010	2.51615	30.00000	Averaged	
	73 1,2-Dibromoethane	0.36913	0.36068	0.36068	0.010	-2.28673	30.00000	Averaged	
	76 Chlorobenzene	0.96368	0.93968	0.93968	0.300	-2.49061	30.00000	Averaged	spcc
	77 1,1,1,2-Tetrachloroethane	0.34629	0.33927	0.33927	0.010	-2.02963	30.00000	Averaged	
	78 Ethylbenzene	1.67285	1.61310	1.61310	0.010	-3.57170	20.00000	Averaged	ccc
	79 m,p-Xylenes	0.63659	0.61295	0.61295	0.010	-3.71431	30.00000	Averaged	
	80 o-Xylene	0.65785	0.62923	0.62923	0.010	-4.35042	30.00000	Averaged	
	81 Styrene	1.18237	1.06949	1.06949	0.010	-9.54661	30.00000	Averaged	
	82 Bromoform	0.43665	0.48550	0.48550	0.100	11.18812	30.00000	Averaged	spcc
	83 Isopropylbenzene	2.85343	2.85798	2.85798	0.010	0.15935	30.00000	Averaged	
	87 1,1,2,2-Tetrachloroethane	0.90349	0.88621	0.88621	0.300	-1.91337	30.00000	Averaged	spcc
$	86 Bromofluorobenzene	1.17678	1.15082	1.15082	0.010	-2.20576	30.00000	Averaged	
	89 1,2,3-Trichloropropane	0.22766	0.22998	0.22998	0.010	1.01599	30.00000	Averaged	
	90 Bromobenzene	0.80299	0.77041	0.77041	0.010	-4.05731	30.00000	Averaged	
	91 n-Propylbenzene	3.51014	3.45563	3.45563	0.010	-1.55306	30.00000	Averaged	
	93 2-Chlorotoluene	2.54562	2.39286	2.39286	0.010	-6.00103	30.00000	Averaged	
	92 1,3,5-Trimethylbenzene	2.52939	2.42878	2.42878	0.010	-3.97768	30.00000	Averaged	
	94 4-Chlorotoluene	2.41921	2.36505	2.36505	0.010	-2.23841	30.00000	Averaged	
	95 tert-Butylbenzene	2.35539	2.37838	2.37838	0.010	0.97575	30.00000	Averaged	
	96 1,2,4-Trimethylbenzene	2.70091	2.61045	2.61045	0.010	-3.34902	30.00000	Averaged	
	98 sec-Butylbenzene	3.21055	3.25000	3.25000	0.010	1.22884	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7m102.d
Analysis Type: WATER
Lab Sample ID: W7VM0911116-01
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

Injection Date: 16-NOV-2009 13:54
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.55183	2.60229	2.60229	0.010	1.97753	30.00000	Averaged
100 1,3-Dichlorobenzene	1.43886	1.40699	1.40699	0.010	-2.21503	30.00000	Averaged
102 1,4-Dichlorobenzene	1.41831	1.37830	1.37830	0.010	-2.82098	30.00000	Averaged
104 n-Butylbenzene	2.69728	2.72809	2.72809	0.010	1.14238	30.00000	Averaged
105 1,2-Dichlorobenzene	1.43227	1.37461	1.37461	0.010	-4.02547	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	0.17584	0.19973	0.19973	0.010	13.58816	30.00000	Averaged
108 1,2,4-Trichlorobenzene	1.02685	1.05297	1.05297	0.010	2.54314	30.00000	Averaged
109 Hexachlorobutadiene	0.54947	0.60933	0.60933	0.010	10.89290	30.00000	Averaged
110 Naphthalene	2.28224	2.22128	2.22128	0.010	-2.67074	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.91204	0.95052	0.95052	0.010	4.21953	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.59555
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/111509v7/7m102.d
Lab Smp Id: W7VM0911116-01 Client Smp ID: VSTD050
Inj Date : 16-NOV-2009 13:54
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091111-01B/IVM091111-01
Comment :
Method : /chem/VOA7.i/111509v7/VOA7-8260B-111509.m
Meth Date : 19-Nov-2009 09:38 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 08:11 Cal File: 71718.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				1674996	150.000	144
M 3 1,2-Dichloroethylene (total)	96				1159591	100.000	101
M 1 1,3-Dichloropropylene	75				1132889	100.000	97.8
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	310040	50.0000	65.3
5 Chloromethane	50	5.757	5.757	(0.376)	615104	50.0000	52.4
6 Vinyl chloride	62	6.188	6.188	(0.404)	435887	50.0000	53.4
7 Bromomethane	94	7.429	7.429	(0.485)	275765	50.0000	49.3
8 Chloroethane	64	7.835	7.835	(0.512)	295146	50.0000	48.4
9 Trichlorofluoromethane	101	8.789	8.789	(0.574)	498975	50.0000	60.7
10 Ethyl Ether	59	9.703	9.703	(0.633)	392296	50.0000	45.4
13 Acetone	43	10.423	10.423	(0.681)	2073184	250.000	211
17 Acetonitrile	41	11.073	11.073	(0.723)	1996927	1000.00	1210
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	270942	50.0000	54.5
18 Methyl acetate	43	11.225	11.225	(0.733)	2177529	250.000	218
16 Iodomethane	142	10.667	10.667	(0.696)	2224717	250.000	245

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
22 Methylene chloride	86	11.449	11.449	(0.747)	227387	50.0000	50.5
19 Carbon disulfide	76	10.840	10.840	(0.708)	4458593	250.000	274
24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	982555	50.0000	47.2
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	548211	50.0000	51.8
26 Vinyl acetate	43	12.860	12.860	(0.840)	5468142	250.000	258
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	679329	50.0000	51.4
31 2-Butanone	43	13.723	13.723	(0.896)	2179625	250.000	194
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	611380	50.0000	49.4
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	398722	50.0000	57.2
38 Chloroform	83	14.190	14.190	(0.926)	598527	50.0000	50.1
37 Bromochloromethane	49	14.088	14.088	(0.920)	521603	50.0000	48.4
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	508283	50.0000	57.1
43 Cyclohexane	56	14.586	14.586	(0.952)	823011	50.0000	54.4
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	437308	50.0000	54.2
52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1831848	5000.00	5340
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	405347	50.0000	57.5
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	507557	50.0000	48.4
47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	593470	50.0000	47.5
48 Benzene	78	14.992	14.992	(0.979)	1193269	50.0000	48.4
50 Cyclohexene	67	15.124	15.124	(0.987)	619701	50.0000	53.2
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1202647	50.0000	
53 Trichloroethylene	95	15.773	15.773	(1.030)	322013	50.0000	50.6
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	371636	50.0000	46.4
55 Methylcyclohexane	83	16.037	16.037	(1.047)	538183	50.0000	54.8
59 Bromodichloromethane	83	16.332	16.332	(1.066)	469506	50.0000	49.6
58 Dibromomethane	93	16.190	16.190	(1.057)	218086	50.0000	48.3
61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	614859	250.000	187
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1052433	250.000	225
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	573841	50.0000	48.0
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1285807	50.0000	47.7
65 Toluene	92	17.215	17.215	(0.922)	779961	50.0000	48.6
67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	559048	50.0000	50.1
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	259252	50.0000	47.2
69 2-Hexanone	43	17.804	17.804	(0.954)	2656294	250.000	175
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	499758	50.0000	45.8
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	227238	50.0000	61.3
72 Dibromochloromethane	129	18.068	18.068	(0.968)	328832	50.0000	51.2
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	325662	50.0000	48.8
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	902900	50.0000	
76 Chlorobenzene	112	18.697	18.697	(1.002)	848435	50.0000	48.8
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	306323	50.0000	49.0
78 Ethylbenzene	91	18.768	18.768	(1.005)	1456471	50.0000	48.2
79 m,p-Xylenes	106	18.870	18.870	(1.011)	1106860	100.000	96.3
80 o-Xylene	106	19.286	19.286	(1.033)	568136	50.0000	47.8
81 Styrene	104	19.286	19.286	(1.033)	965645	50.0000	45.2
82 Bromoform	173	19.540	19.540	(0.931)	252479	50.0000	55.6
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1486250	50.0000	50.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	460859	50.0000	49.0
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	598470	50.0000	48.9
89 1,2,3-Trichloropropane	110	19.976	19.976	(0.952)	119596	50.0000	50.5
90 Bromobenzene	156	20.017	20.017	(0.954)	400641	50.0000	48.0
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1797050	50.0000	49.2
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1244371	50.0000	47.0
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1263052	50.0000	48.0
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1229913	50.0000	48.9
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1236841	50.0000	50.5
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1357529	50.0000	48.3
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1690117	50.0000	50.6
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1353286	50.0000	51.0
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	731687	50.0000	48.9
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	520036	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	716767	50.0000	48.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1418705	50.0000	50.6
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	714849	50.0000	48.0
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	103866	50.0000	56.8
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	547580	50.0000	51.3
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	316871	50.0000	55.4
110 Naphthalene	128	23.753	23.753	(1.132)	1155148	50.0000	48.7
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	494304	50.0000	52.1

Data File: /chem/VOA7.i/111509v7/7m102.d
Date : 16-NOV-2009 13:54
Client ID: VSTD050
Sample Info: IW7VH09111116-01|BFB/CCV/ICV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

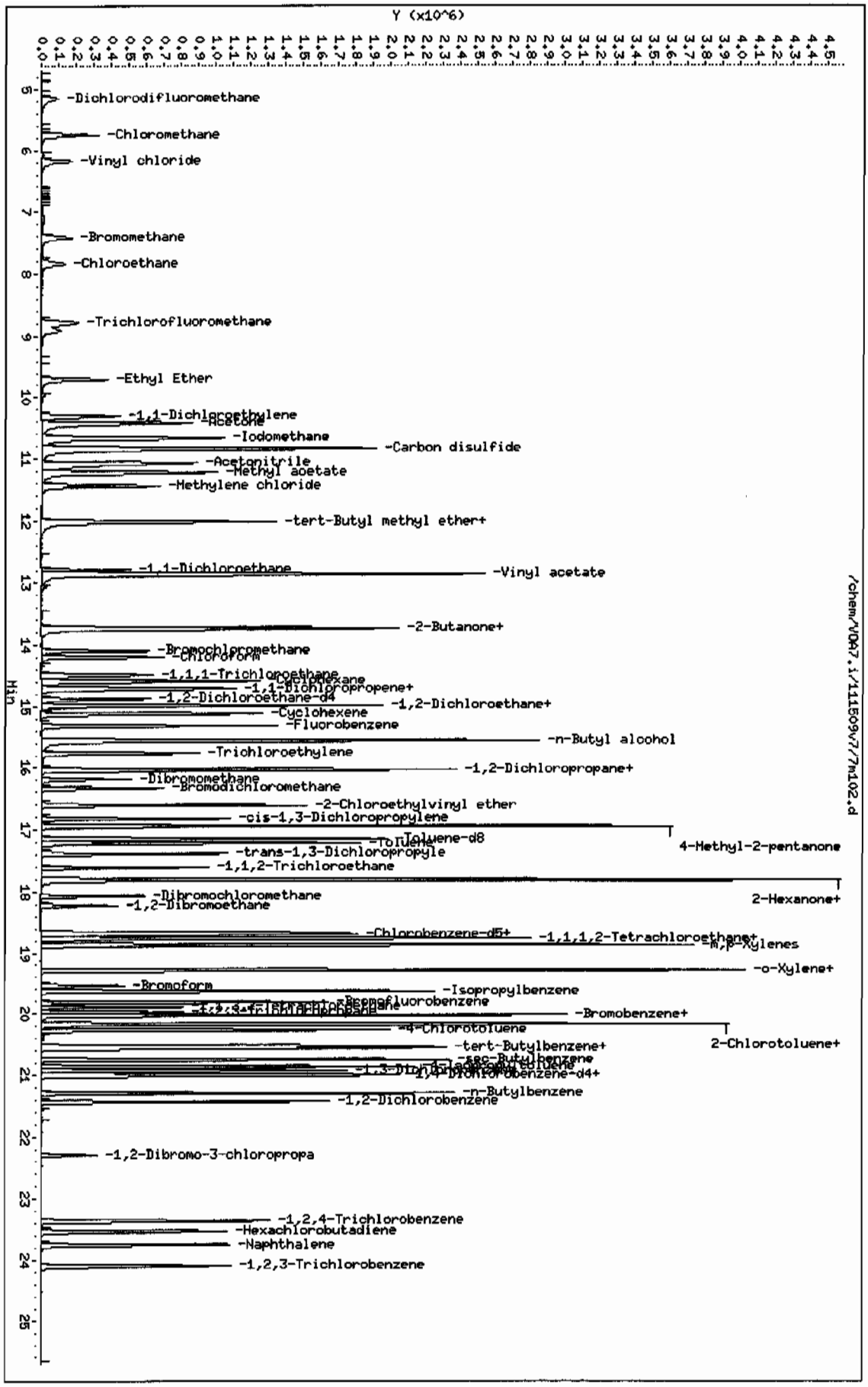

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 16-NOV-2009 15:02
Lab File ID: 7m104.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM0911116-03 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
147 Chlorotrifluoroethylene	0.13034	0.11386	0.11386	0.010	-12.64237	30.00000	Averaged	
148 2-Chloro-1,1,1-trifluoroeth	0.28275	0.28071	0.28071	0.010	-0.72093	30.00000	Averaged	
11 Acrolein	0.08287	0.06941	0.06941	0.001	-16.23448	30.00000	Averaged	
12 Trichlorotrifluoroethane	0.09315	0.10191	0.10191	0.010	9.40527	30.00000	Averaged	
15 Isopropyl Alcohol	0.03668	0.03613	0.03613	0.010	-1.49040	40.00000	Averaged	
20 Allyl chloride	0.63535	0.56685	0.56685	0.010	-10.78282	30.00000	Averaged	
21 tert-Butyl Alcohol	0.05102	0.04422	0.04422	0.001	-13.33240	40.00000	Averaged	
23 Acrylonitrile	0.16606	0.14706	0.14706	0.010	-11.44411	30.00000	Averaged	
27 Isopropyl ether	1.68959	1.55881	1.55881	0.010	-7.74051	30.00000	Averaged	
29 2-Chloro-1,3-butadiene	0.54538	0.56770	0.56770	0.010	4.09436	30.00000	Averaged	
30 Ethyl tert-butyl ether	1.14730	1.05285	1.05285	0.010	-8.23203	30.00000	Averaged	
35 Propionitrile	0.06686	0.05447	0.05447	0.010	-18.53670	30.00000	Averaged	
32 Ethyl acetate	0.49355	0.37954	0.37954	0.010	-23.10090	40.00000	Averaged	
36 Methacrylonitrile	0.30070	0.24588	0.24588	0.010	-18.22985	30.00000	Averaged	
39 Tetrahydrofuran	0.36975	0.29563	0.29563	0.010	-20.04589	30.00000	Averaged	
42 Isobutyl alcohol	0.01771	0.01567	0.01567	0.005	-11.47778	40.00000	Averaged	
49 Methyl tert-amyl ether	0.79534	0.71876	0.71876	0.010	-9.62869	30.00000	Averaged	
54 Methyl methacrylate	0.20956	0.17138	0.17138	0.010	-18.22289	30.00000	Averaged	
66 Ethyl methacrylate	0.53175	0.42289	0.42289	0.010	-20.47197	30.00000	Averaged	
74 1-Chlorohexane	0.40217	0.39655	0.39655	0.010	-1.39670	30.00000	Averaged	
57 1,4-Dioxane	0.00316	0.00300	0.00300	0.001	-5.35019	40.00000	Averaged	
60 2-Nitropropane	0.12993	0.12531	0.12531	0.010	-3.55739	30.00000	Averaged	
84 cis-1,4-Dichloro-2-butene	0.39160	0.38169	0.38169	0.010	-2.53006	30.00000	Averaged	
85 Cyclohexanone	447	1250	0.03173	0.010	-64.21353	40.00000	Linear	<-
88 trans-1,4-Dichloro-2-butene	0.35776	0.35074	0.35074	0.010	-1.96337	30.00000	Averaged	
97 Pentachloroethane	0.26007	0.33861	0.33861	0.010	30.20065	30.00000	Averaged	<-
103 Benzyl chloride	1.33283	1.27530	1.27530	0.010	-4.31636	30.00000	Averaged	
106 bis(2-Chloroisopropyl)ether	0.73799	0.58864	0.58864	0.010	-20.23679	30.00000	Averaged	
$ 46 1,2-Dichloroethane-d4	0.43596	0.41806	0.41806	0.010	-4.10492	30.00000	Averaged	
$ 64 Toluene-d8	1.49262	1.44877	1.44877	0.010	-2.93779	30.00000	Averaged	
$ 86 Bromofluorobenzene	1.17678	1.13072	1.13072	0.010	-3.91437	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 16-NOV-2009 15:02
Lab File ID: 7m104.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM0911116-03 Quant Type: ISTD
Method: /chem/VOA7.i/111509v7/VOA7-8260B-111509.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	12.27602
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/111509v7/7m104.d
Lab Smp Id: W7VM0911116-03 Client Smp ID: VSTD250S
Inj Date : 16-NOV-2009 15:02
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM0911116-03|SHORT/ICV/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091023-08A/UVM091105-02A
Comment :
Method : /chem/VOA7.i/111509v7/VOA7-8260B-111509.m
Meth Date : 19-Nov-2009 09:39 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 08:11 Cal File: 71718.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
147 Chlorotrifluoroethylene	116	5.043	5.043	(0.329)	406483	150.000	131
148 2-Chloro-1,1,1-trifluoroethane	118	6.604	6.604	(0.431)	1002157	150.000	149
11 Acrolein	56	10.027	10.027	(0.655)	413012	250.000	209
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	606354	250.000	274
15 Isopropyl Alcohol	45	10.789	10.789	(0.704)	2149853	2500.00	2460
20 Allyl chloride	41	11.185	11.185	(0.730)	3372788	250.000	223
21 tert-Butyl Alcohol	59	11.672	11.672	(0.762)	2630900	2500.00	2170
23 Acrylonitrile	53	11.926	11.926	(0.779)	875009	250.000	221
27 Isopropyl ether	45	12.911	12.911	(0.843)	1855017	50.0000	46.1
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	675580	50.0000	52.0
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1252915	50.0000	45.9
35 Propionitrile	54	13.804	13.804	(0.901)	324075	250.000	204
32 Ethyl acetate	43	13.804	13.804	(0.901)	2258287	250.000	192
36 Methacrylonitrile	41	14.048	14.048	(0.917)	1463037	250.000	204
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	787178	250.000	200

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	932613	2500.00	2210
49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	855341	50.0000	45.2
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1019700	250.000	204
66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1906825	250.000	199
74 1-Chlorohexane	55	18.575	18.575	(1.213)	471906	50.0000	49.3
57 1,4-Dioxane	88	16.159	16.159	(1.055)	178240	2500.00	2370
60 2-Nitropropane	43	16.555	16.555	(1.081)	745593	250.000	241
84 cis-1,4-Dichloro-2-butene	53	19.662	19.662	(0.937)	1016347	250.000	244
85 Cyclohexanone	55	19.773	19.773	(1.059)	715444	1250.00	447
88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	933923	250.000	245
97 Pentachloroethane	167	20.606	20.606	(0.982)	901619	250.000	326(A)
103 Benzyl chloride	91	21.123	21.123	(1.006)	3395776	250.000	239
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1567396	250.000	199
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1190020	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	901807	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	532545	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	497505	50.0000	47.9
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1306510	50.0000	48.5
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	602158	50.0000	48.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA7.i/111509v7/7m104.d
Date : 16-NOV-2009 15:02
Client ID: VSTD250S
Sample Info: IW7VM091116-03|SHORT/ICV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: AXD1
Column diameter: 0.25

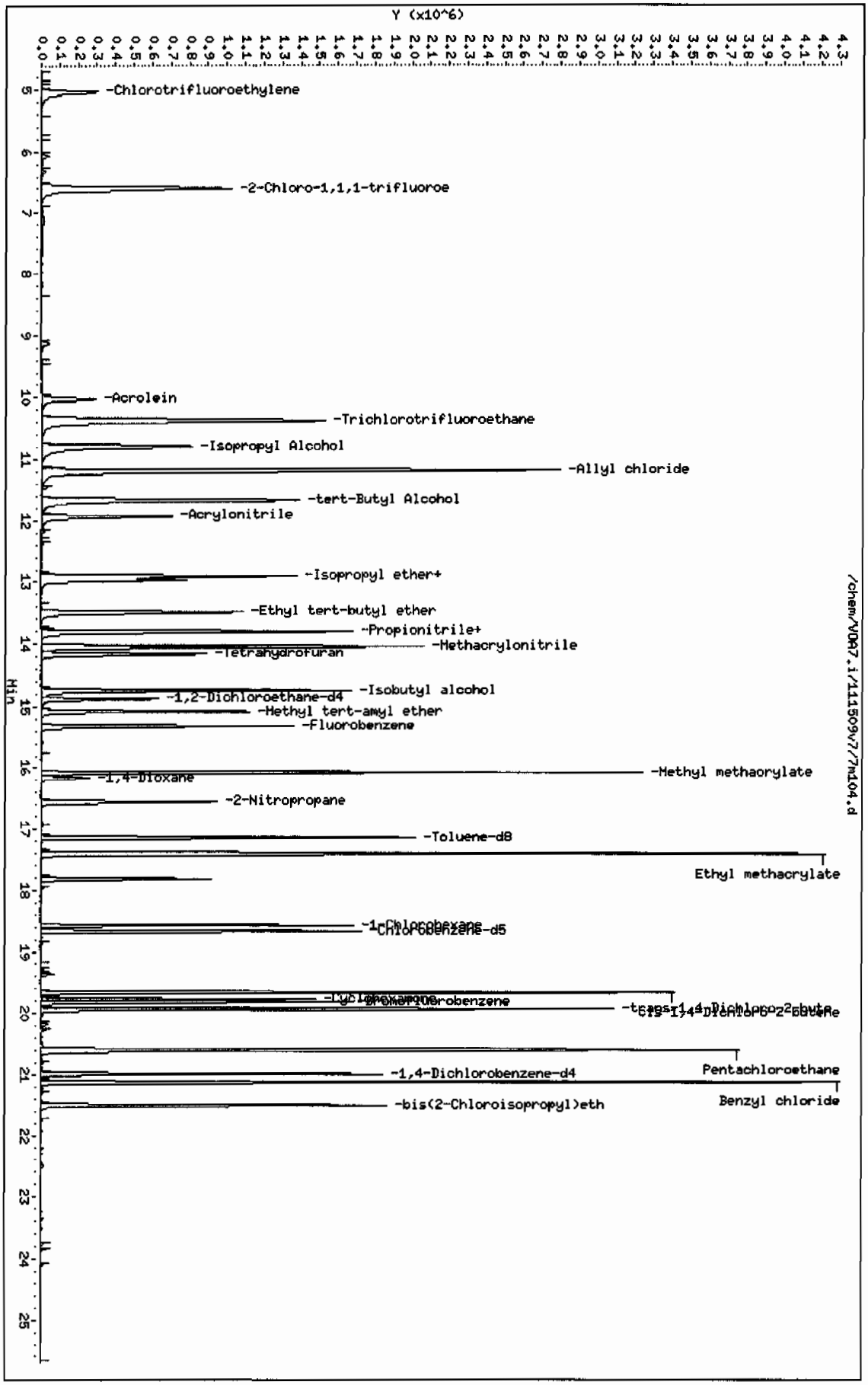

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 09:45
Lab File ID: 7n303.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-02 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	2 Xylenes (total)	0.64368	0.57096	0.57096	0.050	-11.29782	30.00000	Averaged	
M	3 1,2-Dichloroethylene (total	0.47752	0.45838	0.45838	0.050	-4.00801	30.00000	Averaged	
M	1 1,3-Dichloropropylene	0.48166	0.45399	0.45399	0.050	-5.74520	30.00000	Averaged	
	4 Dichlorodifluoromethane	52.70480	50.00000	0.20842	0.050	5.40960	30.00000	Linear	
	5 Chloromethane	45.60804	50.00000	0.44615	0.100	-8.78393	30.00000	Linear	spcc
	6 Vinyl chloride	0.33902	0.32933	0.32933	0.050	-2.85982	20.00000	Averaged	ccc
	7 Bromomethane	0.23234	0.23287	0.23287	0.050	0.23019	30.00000	Averaged	
	8 Chloroethane	0.25347	0.23681	0.23681	0.010	-6.57313	30.00000	Averaged	
	9 Trichlorofluoromethane	0.34155	0.42260	0.42260	0.050	23.72945	30.00000	Averaged	
	10 Ethyl Ether	0.35955	0.31033	0.31033	0.001	-13.68924	30.00000	Averaged	
	13 Acetone	0.40846	0.33980	0.33980	0.050	-16.80901	40.00000	Averaged	
	17 Acetonitrile	0.06882	0.07972	0.07972	0.010	15.82831	30.00000	Averaged	
	14 1,1-Dichloroethylene	0.20669	0.22749	0.22749	0.050	10.05954	20.00000	Averaged	ccc
	18 Methyl acetate	0.41491	0.34809	0.34809	0.010	-16.10358	40.00000	Averaged	
	16 Iodomethane	0.37752	0.37966	0.37966	0.050	0.56495	30.00000	Averaged	
	22 Methylene chloride	47.40540	50.00000	0.17818	0.050	-5.18920	30.00000	Linear	
	19 Carbon disulfide	0.67659	0.71522	0.71522	0.050	5.70866	30.00000	Averaged	
	24 tert-Butyl methyl ether	0.86582	0.77968	0.77968	0.050	-9.94921	30.00000	Averaged	
	25 trans-1,2-Dichloroethylene	0.44031	0.43386	0.43386	0.050	-1.46386	30.00000	Averaged	
	26 Vinyl acetate	0.88192	0.84041	0.84041	0.010	-4.70666	40.00000	Averaged	
	28 1,1-Dichloroethane	0.54979	0.53966	0.53966	0.100	-1.84165	30.00000	Averaged	spcc
	31 2-Butanone	0.46654	0.34650	0.34650	0.030	-25.72962	40.00000	Averaged	
	33 cis-1,2-Dichloroethylene	0.51474	0.48291	0.48291	0.050	-6.18427	30.00000	Averaged	
	34 2,2-Dichloropropane	0.28980	0.29671	0.29671	0.050	2.38733	30.00000	Averaged	
	38 Chloroform	0.49671	0.49763	0.49763	0.010	0.18699	20.00000	Averaged	ccc
	37 Bromochloromethane	0.44756	0.40647	0.40647	0.010	-9.18018	30.00000	Averaged	
	41 1,1,1-Trichloroethane	0.36992	0.42320	0.42320	0.010	14.40344	30.00000	Averaged	
	43 Cyclohexane	0.62867	0.62540	0.62540	0.010	-0.52015	30.00000	Averaged	
	44 1,1-Dichloropropene	0.33508	0.35176	0.35176	0.010	4.97786	30.00000	Averaged	
	52 n-Butyl alcohol	0.01426	0.01466	0.01466	0.001	2.76891	40.00000	Averaged	
	45 Carbon tetrachloride	0.29289	0.33911	0.33911	0.010	15.78134	30.00000	Averaged	
$	46 1,2-Dichloroethane-d4	0.43596	0.47253	0.47253	0.010	8.38919	30.00000	Averaged	
	47 1,2-Dichloroethane	0.51967	0.50206	0.50206	0.010	-3.38893	30.00000	Averaged	
	48 Benzene	1.02411	0.95904	0.95904	0.010	-6.35382	30.00000	Averaged	
	50 Cyclohexene	0.48379	0.48645	0.48645	0.010	0.55048	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 09:45
Lab File ID: 7n303.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-02 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
53 Trichloroethylene	0.26450	0.27293	0.27293	0.010	3.18781	30.00000	Averaged	
56 1,2-Dichloropropane	0.33311	0.28404	0.28404	0.010	-14.73205	20.00000	Averaged	ccc
55 Methylcyclohexane	0.40845	0.42450	0.42450	0.010	3.92838	30.00000	Averaged	
59 Bromodichloromethane	0.39346	0.40104	0.40104	0.010	1.92707	30.00000	Averaged	
58 Dibromomethane	0.18762	0.18292	0.18292	0.010	-2.50525	30.00000	Averaged	
61 2-Chloroethylvinyl ether	0.13648	0.11214	0.11214	0.010	-17.82946	30.00000	Averaged	
63 4-Methyl-2-pentanone	0.25850	0.21358	0.21358	0.010	-17.37713	40.00000	Averaged	
62 cis-1,3-Dichloropropylene	0.49703	0.45562	0.45562	0.010	-8.33261	30.00000	Averaged	
$ 64 Toluene-d8	1.49262	1.38909	1.38909	0.010	-6.93584	30.00000	Averaged	
65 Toluene	0.88778	0.78869	0.78869	0.010	-11.16164	20.00000	Averaged	ccc
67 trans-1,3-Dichloropropylene	0.61767	0.56831	0.56831	0.010	-7.99208	30.00000	Averaged	
68 1,1,2-Trichloroethane	0.30409	0.26537	0.26537	0.010	-12.73302	30.00000	Averaged	
69 2-Hexanone	0.83837	0.53363	0.53363	0.010	-36.34860	40.00000	Averaged	
70 1,3-Dichloropropane	0.60429	0.50288	0.50288	0.010	-16.78085	30.00000	Averaged	
71 Tetrachloroethylene	56.56852	50.00000	0.23264	0.010	13.13703	30.00000	Linear	
72 Dibromochloromethane	0.35526	0.35335	0.35335	0.010	-0.53666	30.00000	Averaged	
73 1,2-Dibromoethane	0.36913	0.35209	0.35209	0.010	-4.61539	30.00000	Averaged	
76 Chlorobenzene	0.96368	0.86435	0.86435	0.300	-10.30770	30.00000	Averaged	spcc
77 1,1,1,2-Tetrachloroethane	0.34629	0.31963	0.31963	0.010	-7.70028	30.00000	Averaged	
78 Ethylbenzene	1.67285	1.49589	1.49589	0.010	-10.57870	20.00000	Averaged	ccc
79 m,p-Xylenes	0.63659	0.56920	0.56920	0.010	-10.58630	30.00000	Averaged	
80 o-Xylene	0.65785	0.57447	0.57447	0.010	-12.67486	30.00000	Averaged	
81 Styrene	1.18237	0.98040	0.98040	0.010	-17.08131	30.00000	Averaged	
82 Bromoform	0.43665	0.47840	0.47840	0.100	9.56187	30.00000	Averaged	spcc
83 Isopropylbenzene	2.85343	2.50622	2.50622	0.010	-12.16796	30.00000	Averaged	
87 1,1,2,2-Tetrachloroethane	0.90349	0.79373	0.79373	0.300	-12.14834	30.00000	Averaged	spcc
$ 86 Bromofluorobenzene	1.17678	1.10789	1.10789	0.010	-5.85380	30.00000	Averaged	
89 1,2,3-Trichloropropane	0.22766	0.21448	0.21448	0.010	-5.78930	30.00000	Averaged	
90 Bromobenzene	0.80299	0.68621	0.68621	0.010	-14.54358	30.00000	Averaged	
91 n-Propylbenzene	3.51014	3.04358	3.04358	0.010	-13.29186	30.00000	Averaged	
93 2-Chlorotoluene	2.54562	2.11092	2.11092	0.010	-17.07627	30.00000	Averaged	
92 1,3,5-Trimethylbenzene	2.52939	2.13799	2.13799	0.010	-15.47391	30.00000	Averaged	
94 4-Chlorotoluene	2.41921	2.10471	2.10471	0.010	-12.99998	30.00000	Averaged	
95 tert-Butylbenzene	2.35539	2.09215	2.09215	0.010	-11.17603	30.00000	Averaged	
96 1,2,4-Trimethylbenzene	2.70091	2.30024	2.30024	0.010	-14.83440	30.00000	Averaged	
98 sec-Butylbenzene	3.21055	2.90992	2.90992	0.010	-9.36360	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 09:45
Lab File ID: 7n303.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-02 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.55183	2.30283	2.30283	0.010	-9.75760	30.00000	Averaged
100 1,3-Dichlorobenzene	1.43886	1.24131	1.24131	0.010	-13.72984	30.00000	Averaged
102 1,4-Dichlorobenzene	1.41831	1.23767	1.23767	0.010	-12.73611	30.00000	Averaged
104 n-Butylbenzene	2.69728	2.39629	2.39629	0.010	-11.15891	30.00000	Averaged
105 1,2-Dichlorobenzene	1.43227	1.24522	1.24522	0.010	-13.05966	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	0.17584	0.18490	0.18490	0.010	5.15764	30.00000	Averaged
108 1,2,4-Trichlorobenzene	1.02685	0.92448	0.92448	0.010	-9.96935	30.00000	Averaged
109 Hexachlorobutadiene	0.54947	0.52981	0.52981	0.010	-3.57865	30.00000	Averaged
110 Naphthalene	2.28224	1.98230	1.98230	0.010	-13.14239	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.91204	0.85298	0.85298	0.010	-6.47465	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.54802
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n303.d
Lab Smp Id: W7VM091125-02 Client Smp ID: VSTD050
Inj Date : 25-NOV-2009 09:45
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM091125-02|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 2 Xylenes (total)	106				1607958	150.000	133
M 3 1,2-Dichloroethylene (total)	96				1081194	100.000	96.2
M 1 1,3-Dichloropropylene	75				1070835	100.000	94.2
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	245805	50.0000	52.7
5 Chloromethane	50	5.757	5.757	(0.376)	526168	50.0000	45.6
6 Vinyl chloride	62	6.188	6.188	(0.404)	388394	50.0000	48.6
7 Bromomethane	94	7.429	7.429	(0.485)	274640	50.0000	50.1
8 Chloroethane	64	7.845	7.845	(0.512)	279281	50.0000	46.7
9 Trichlorofluoromethane	101	8.799	8.799	(0.574)	498401	50.0000	61.9
10 Ethyl Ether	59	9.703	9.703	(0.633)	365991	50.0000	43.2
13 Acetone	43	10.423	10.423	(0.681)	2003716	250.000	208
17 Acetonitrile	41	11.073	11.073	(0.723)	1880321	1000.00	1160
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	268287	50.0000	55.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	18 Methyl acetate	43	11.225	11.225	(0.733)	2052632	250.000	210
	16 Iodomethane	142	10.667	10.667	(0.696)	2238757	250.000	251
	22 Methylene chloride	86	11.449	11.449	(0.747)	210140	50.0000	47.4
	19 Carbon disulfide	76	10.840	10.840	(0.708)	4217472	250.000	264
	24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	919517	50.0000	45.0
	25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	511676	50.0000	49.3
	26 Vinyl acetate	43	12.860	12.860	(0.840)	4955700	250.000	238
	28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	636457	50.0000	49.1
	31 2-Butanone	43	13.723	13.723	(0.896)	2043244	250.000	186
	33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	569518	50.0000	46.9
	34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	349932	50.0000	51.2
	38 Chloroform	83	14.190	14.190	(0.926)	586888	50.0000	50.1
	37 Bromochloromethane	49	14.088	14.088	(0.920)	479373	50.0000	45.4
	41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	499104	50.0000	57.2
	43 Cyclohexane	56	14.586	14.586	(0.952)	737570	50.0000	49.7
	44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	414845	50.0000	52.5
	52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1728720	5000.00	5140
	45 Carbon tetrachloride	117	14.728	14.728	(0.962)	399936	50.0000	57.9
$	46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	557286	50.0000	54.2
	47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	592105	50.0000	48.3
	48 Benzene	78	14.982	14.982	(0.978)	1131050	50.0000	46.8
	50 Cyclohexene	67	15.124	15.124	(0.987)	573700	50.0000	50.3
*	51 Fluorobenzene	96	15.317	15.317	(1.000)	1179357	50.0000	
	53 Trichloroethylene	95	15.773	15.773	(1.030)	321878	50.0000	51.6
	56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	334981	50.0000	42.6
	55 Methylcyclohexane	83	16.037	16.037	(1.047)	500633	50.0000	52.0
	59 Bromodichloromethane	83	16.332	16.332	(1.066)	472966	50.0000	51.0
	58 Dibromomethane	93	16.180	16.180	(1.056)	215730	50.0000	48.7
	61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	661289	250.000	205
	63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1002479	250.000	206
	62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	537335	50.0000	45.8
$	64 Toluene-d8	98	17.144	17.144	(0.918)	1304010	50.0000	46.5
	65 Toluene	92	17.215	17.215	(0.922)	740384	50.0000	44.4
	67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	533500	50.0000	46.0
	68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	249113	50.0000	43.6
	69 2-Hexanone	43	17.804	17.804	(0.954)	2504734	250.000	159
	70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	472081	50.0000	41.6
	71 Tetrachloroethylene	164	17.824	17.824	(0.955)	218395	50.0000	56.6
	72 Dibromochloromethane	129	18.068	18.068	(0.968)	331707	50.0000	49.7
	73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	330523	50.0000	47.7
*	75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	938749	50.0000	
	76 Chlorobenzene	112	18.697	18.697	(1.002)	811404	50.0000	44.8
	77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	300051	50.0000	46.1
	78 Ethylbenzene	91	18.768	18.768	(1.005)	1404262	50.0000	44.7
	79 m,p-Xylenes	106	18.870	18.870	(1.011)	1068673	100.000	89.4
	80 o-Xylene	106	19.286	19.286	(1.033)	539285	50.0000	43.7
	81 Styrene	104	19.286	19.286	(1.033)	920354	50.0000	41.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
82 Bromoform	173	19.540	19.540	(0.931)	272126	50.0000	54.8
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1425598	50.0000	43.9
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	451494	50.0000	43.9
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	630196	50.0000	47.1
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	122003	50.0000	47.1
90 Bromobenzene	156	20.017	20.017	(0.954)	390330	50.0000	42.7
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1731257	50.0000	43.4
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1200741	50.0000	41.5
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1216140	50.0000	42.3
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1197207	50.0000	43.5
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1190065	50.0000	44.4
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1308431	50.0000	42.6
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1655232	50.0000	45.3
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1309904	50.0000	45.1
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	706086	50.0000	43.1
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	568823	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	704018	50.0000	43.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1363065	50.0000	44.4
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	708310	50.0000	43.5
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	105178	50.0000	52.6
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	525866	50.0000	45.0
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	301367	50.0000	48.2
110 Naphthalene	128	23.753	23.753	(1.132)	1127576	50.0000	43.4
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	485197	50.0000	46.8

Data File: /chem/VOA7.i/112509v7/7n303.d
Date : 25-NOV-2009 09:45
Client ID: VSTD050
Sample Info: IW7VH091125-02|CCV/LCS|1|VOAF|1|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXD1
Column diameter: 0.25

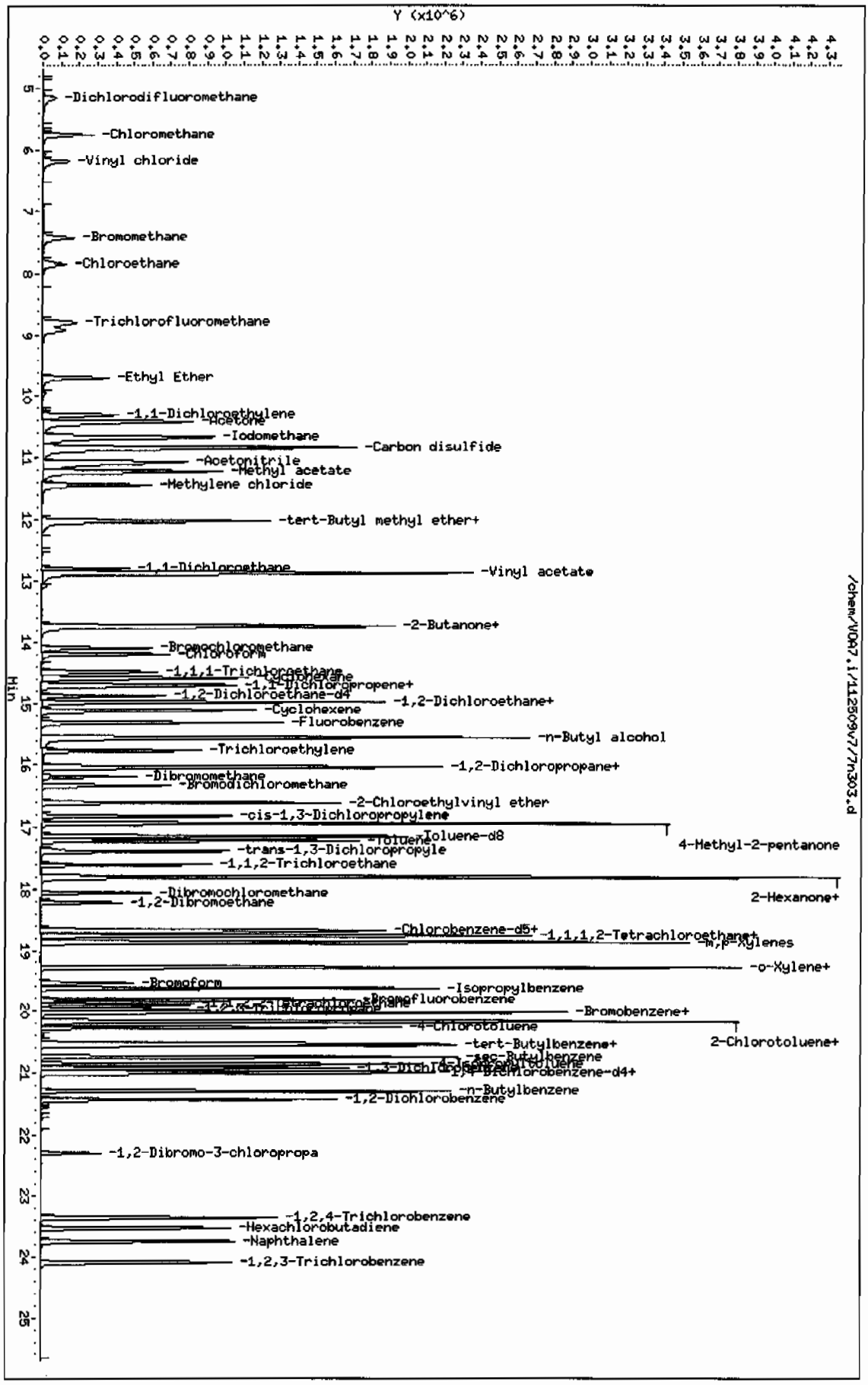

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 25-NOV-2009 10:19
Lab File ID: 7n304.d Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Analysis Type: WATER Init. Cal. Times: 00:20 10:57
Lab Sample ID: W7VM091125-03 Quant Type: ISTD
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
147 Chlorotrifluoroethylene	0.13034	0.14878	0.14878	0.010	14.14868	30.00000	Averaged
148 2-Chloro-1,1,1-trifluoroeth	0.28275	0.30617	0.30617	0.010	8.28361	30.00000	Averaged
11 Acrolein	0.08287	0.07875	0.07875	0.001	-4.96294	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09315	0.11158	0.11158	0.010	19.79114	30.00000	Averaged
15 Isopropyl Alcohol	0.03668	0.03766	0.03766	0.010	2.66684	40.00000	Averaged
20 Allyl chloride	0.63535	0.56328	0.56328	0.010	-11.34467	30.00000	Averaged
21 tert-Butyl Alcohol	0.05102	0.04786	0.04786	0.001	-6.19687	40.00000	Averaged
23 Acrylonitrile	0.16606	0.15025	0.15025	0.010	-9.52468	30.00000	Averaged
27 Isopropyl ether	1.68959	1.61053	1.61053	0.010	-4.67923	30.00000	Averaged
29 2-Chloro-1,3-butadiene	0.54538	0.59273	0.59273	0.010	8.68319	30.00000	Averaged
30 Ethyl tert-butyl ether	1.14730	1.08778	1.08778	0.010	-5.18788	30.00000	Averaged
35 Propionitrile	0.06686	0.05657	0.05657	0.010	-15.38642	30.00000	Averaged
32 Ethyl acetate	0.49355	0.38527	0.38527	0.010	-21.93858	40.00000	Averaged
36 Methacrylonitrile	0.30070	0.24819	0.24819	0.010	-17.46291	30.00000	Averaged
39 Tetrahydrofuran	0.36975	0.27281	0.27281	0.010	-26.21782	30.00000	Averaged
42 Isobutyl alcohol	0.01771	0.01575	0.01575	0.005	-11.05717	40.00000	Averaged
49 Methyl tert-amyl ether	0.79534	0.74989	0.74989	0.010	-5.71452	30.00000	Averaged
54 Methyl methacrylate	0.20956	0.17607	0.17607	0.010	-15.98045	30.00000	Averaged
66 Ethyl methacrylate	0.53175	0.40749	0.40749	0.010	-23.36822	30.00000	Averaged
74 1-Chlorohexane	0.40217	0.41295	0.41295	0.010	2.68130	30.00000	Averaged
57 1,4-Dioxane	0.00316	0.00298	0.00298	0.001	-5.77397	40.00000	Averaged
60 2-Nitropropane	0.12993	0.12873	0.12873	0.010	-0.92646	30.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.39160	0.36566	0.36566	0.010	-6.62424	30.00000	Averaged
85 Cyclohexanone	539	1250	0.03949	0.010	-56.90884	40.00000	Linear <-
88 trans-1,4-Dichloro-2-butene	0.35776	0.33561	0.33561	0.010	-6.19200	30.00000	Averaged
97 Pentachloroethane	0.26007	0.31436	0.31436	0.010	20.87890	30.00000	Averaged
103 Benzyl chloride	1.33283	1.19823	1.19823	0.010	-10.09859	30.00000	Averaged
106 bis(2-Chloroisopropyl)ether	0.73799	0.55360	0.55360	0.010	-24.98579	30.00000	Averaged
$ 46 1,2-Dichloroethane-d4	0.43596	0.46284	0.46284	0.010	6.16616	30.00000	Averaged
$ 64 Toluene-d8	1.49262	1.44550	1.44550	0.010	-3.15681	30.00000	Averaged
$ 86 Bromofluorobenzene	1.17678	1.08666	1.08666	0.010	-7.65837	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i
Lab File ID: 7n304.d
Analysis Type: WATER
Lab Sample ID: W7VM091125-03
Method: /chem/VOA7.i/112509v7/VOA7-8260B-111509.m

Injection Date: 25-NOV-2009 10:19
Init. Cal. Date(s): 16-NOV-2009 16-NOV-2009
Init. Cal. Times: 00:20 10:57
Quant Type: ISTD

Average %D / Drift Results.
Calculated Average %D/Drift = 9.54802
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n304.d
Lab Smp Id: W7VM091125-03 Client Smp ID: VSTD250S
Inj Date : 25-NOV-2009 10:19
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |W7VM091125-03|SHORT/LCS|1|VOAF|1|
Misc Info : GEL 5mL N/A UVM091118-08A/UVM091105-02C
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
147 Chlorotrifluoroethylene	116	5.043	5.043	(0.329)	522106	150.000	171
148 2-Chloro-1,1,1-trifluoroethane	118	6.603	6.603	(0.431)	1074452	150.000	162
11 Acrolein	56	10.027	10.027	(0.655)	460613	250.000	238
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	652618	250.000	299
15 Isopropyl Alcohol	45	10.789	10.789	(0.704)	2202454	2500.00	2570
20 Allyl chloride	41	11.185	11.185	(0.730)	3294519	250.000	222
21 tert-Butyl Alcohol	59	11.672	11.672	(0.762)	2799055	2500.00	2340
23 Acrylonitrile	53	11.936	11.936	(0.779)	878763	250.000	226
27 Isopropyl ether	45	12.911	12.911	(0.843)	1883957	50.0000	47.7
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	693359	50.0000	54.3
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1272450	50.0000	47.4
35 Propionitrile	54	13.804	13.804	(0.901)	330879	250.000	212
32 Ethyl acetate	43	13.804	13.804	(0.901)	2253414	250.000	195
36 Methacrylonitrile	41	14.048	14.048	(0.917)	1451631	250.000	206
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	785223	250.000	184
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	921099	2500.00	2220

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	877203	50.0000	47.1
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1029834	250.000	210
66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1899490	250.000	192
74 1-Chlorohexane	55	18.575	18.575	(1.213)	483061	50.0000	51.3
57 1,4-Dioxane	88	16.159	16.159	(1.055)	174422	2500.00	2360
60 2-Nitropropane	43	16.555	16.555	(1.081)	752899	250.000	248
84 cis-1,4-Dichloro-2-butene	53	19.661	19.661	(0.937)	1052483	250.000	233
85 Cyclohexanone	55	19.773	19.773	(1.059)	920514	1250.00	539
88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	965989	250.000	234
97 Pentachloroethane	167	20.606	20.606	(0.982)	904836	250.000	302(A)
103 Benzyl chloride	91	21.123	21.123	(1.006)	3448876	250.000	225
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1593417	250.000	188
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1169771	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	932290	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	575660	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	541419	50.0000	53.1
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1347625	50.0000	48.4
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	625546	50.0000	46.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA7.i/112509v7/7n304.d
Date : 25-NOV-2009 10:19
Client ID: VSTD250S
Sample Info: |W7VM091125-03|SHORT/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i

Operator: AXO1
Column diameter: 0.25

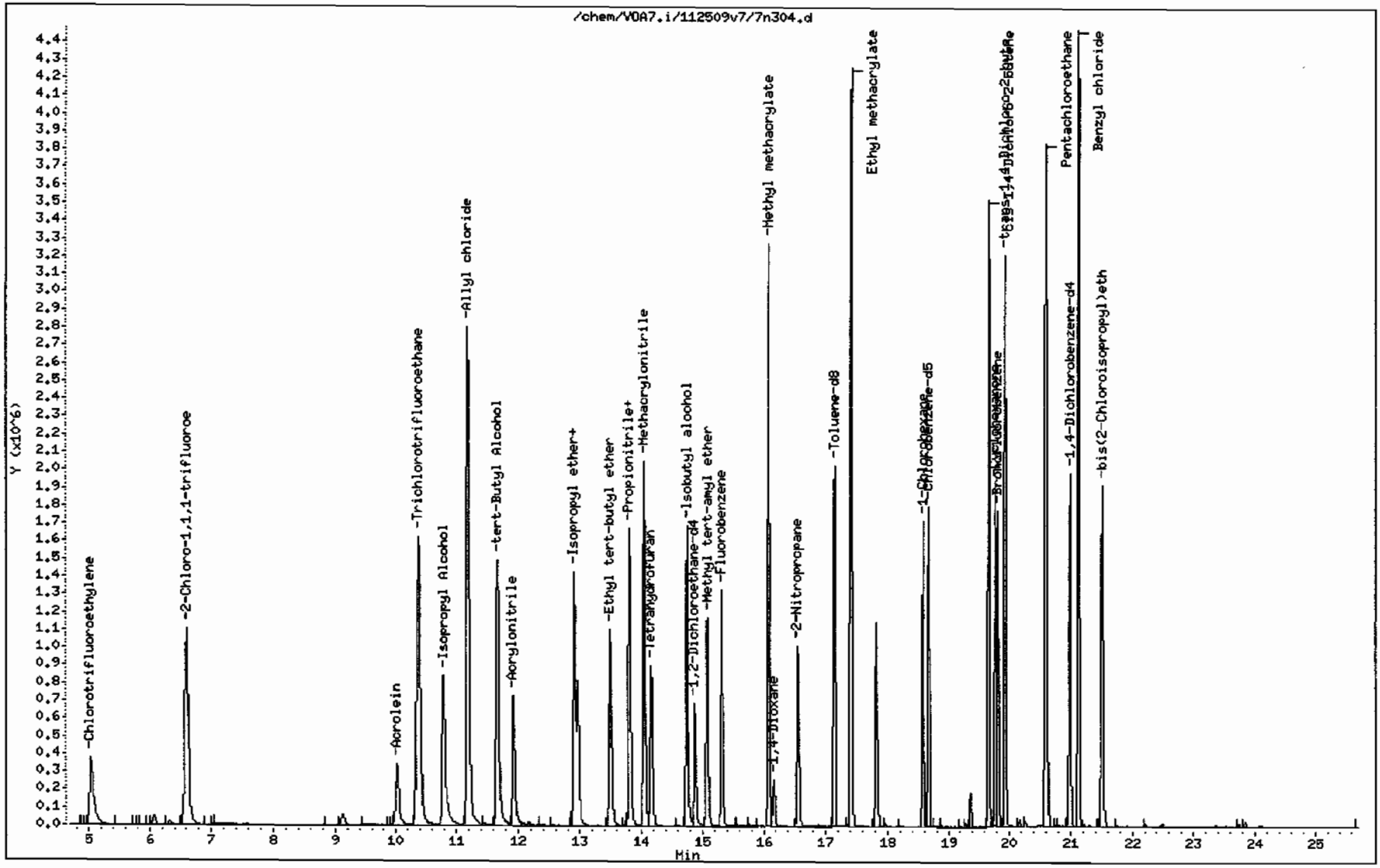

QC Data

Data File: /chem/VOA7.i/111509v7/71702.d

Page 1

Date : 15-NOV-2009 23:14

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |12019-----|BFB01|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

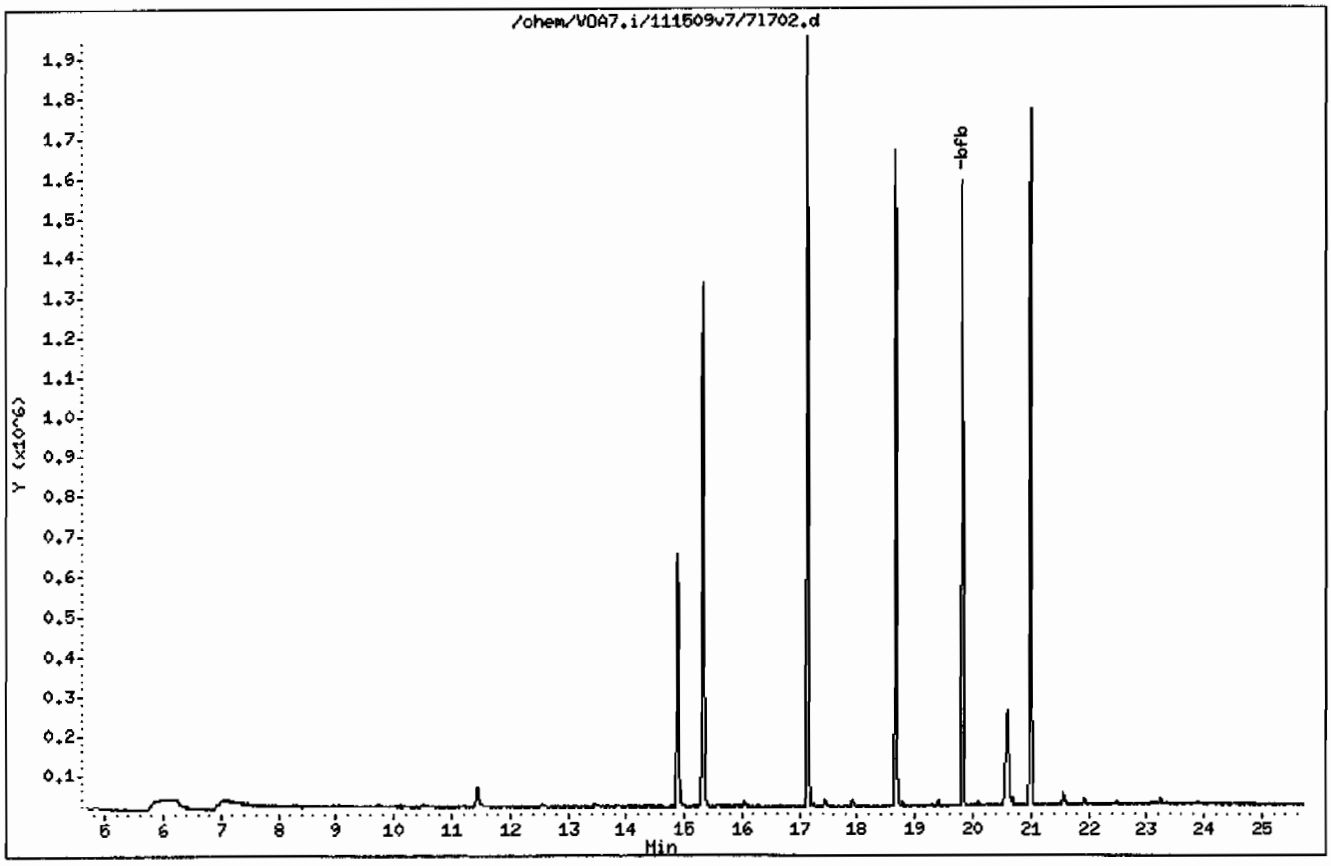

Data File: /chem/VOA7.i/111509v7/71702.d

Date : 15-NOV-2009 23:14

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |12019-----|BFB01|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb

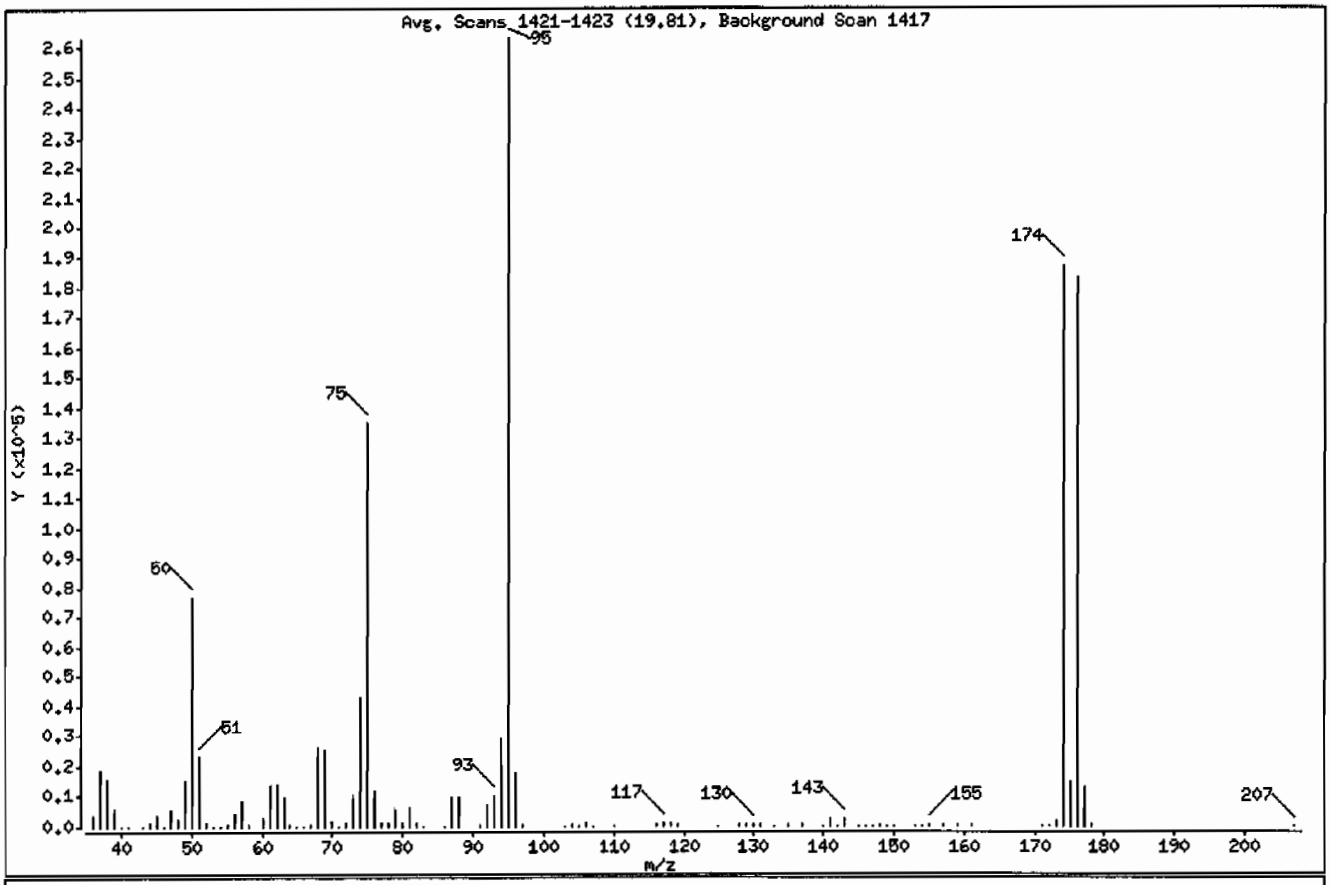

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	29.18
75	30.00 - 60.00% of mass 95	51.18
96	5.00 - 9.00% of mass 95	6.73
173	Less than 2.00% of mass 174	0.67 (0.95)
174	50.00 - 100.00% of mass 95	70.97
175	5.00 - 9.00% of mass 174	5.45 (7.68)
176	95.00 - 101.00% of mass 174	69.44 (97.84)
177	5.00 - 9.00% of mass 176	4.78 (6.88)

Data File: /chem/VOA7.i/111509v7/71702.d

Date : 15-NOV-2009 23:14

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |12019-----|BFB01|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

Data File: 71702.d
Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3333	63.00	9564	92.00	7156	141.00	2201
37.00	18888	64.00	721	93.00	10047	142.00	209
38.00	15641	65.00	130	94.00	28776	143.00	2553
39.00	5866	66.00	83	95.00	263232	145.00	241
40.00	248	67.00	433	96.00	17712	146.00	257
41.00	54	68.00	26144	97.00	558	147.00	85
43.00	67	69.00	25688	103.00	86	148.00	460
44.00	1305	70.00	1759	104.00	779	149.00	205
45.00	3641	71.00	254	105.00	214	150.00	236
46.00	266	72.00	1385	106.00	1126	153.00	182
47.00	5342	73.00	10068	107.00	293	154.00	90
48.00	2413	74.00	42920	110.00	85	155.00	665
49.00	14979	75.00	134720	116.00	817	157.00	311
50.00	76824	76.00	11733	117.00	1329	159.00	346
51.00	22800	77.00	1457	118.00	973	161.00	315
52.00	1184	78.00	980	119.00	879	171.00	166
53.00	233	79.00	5165	125.00	91	172.00	281
54.00	87	80.00	1473	128.00	746	173.00	1775
55.00	866	81.00	6044	129.00	436	174.00	186816
56.00	4408	82.00	1176	130.00	778	175.00	14343
57.00	8581	83.00	113	131.00	464	176.00	182784
58.00	419	86.00	95	133.00	110	177.00	12570
60.00	3198	87.00	9814	135.00	565	178.00	360
61.00	13497	88.00	9439	137.00	434	207.00	200
62.00	13813	91.00	612	140.00	192		

Data File: /chem/VOA7.i/111509v7/7m102BFB.d

Page 1

Date : 16-NOV-2009 13:54

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |W7VM0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

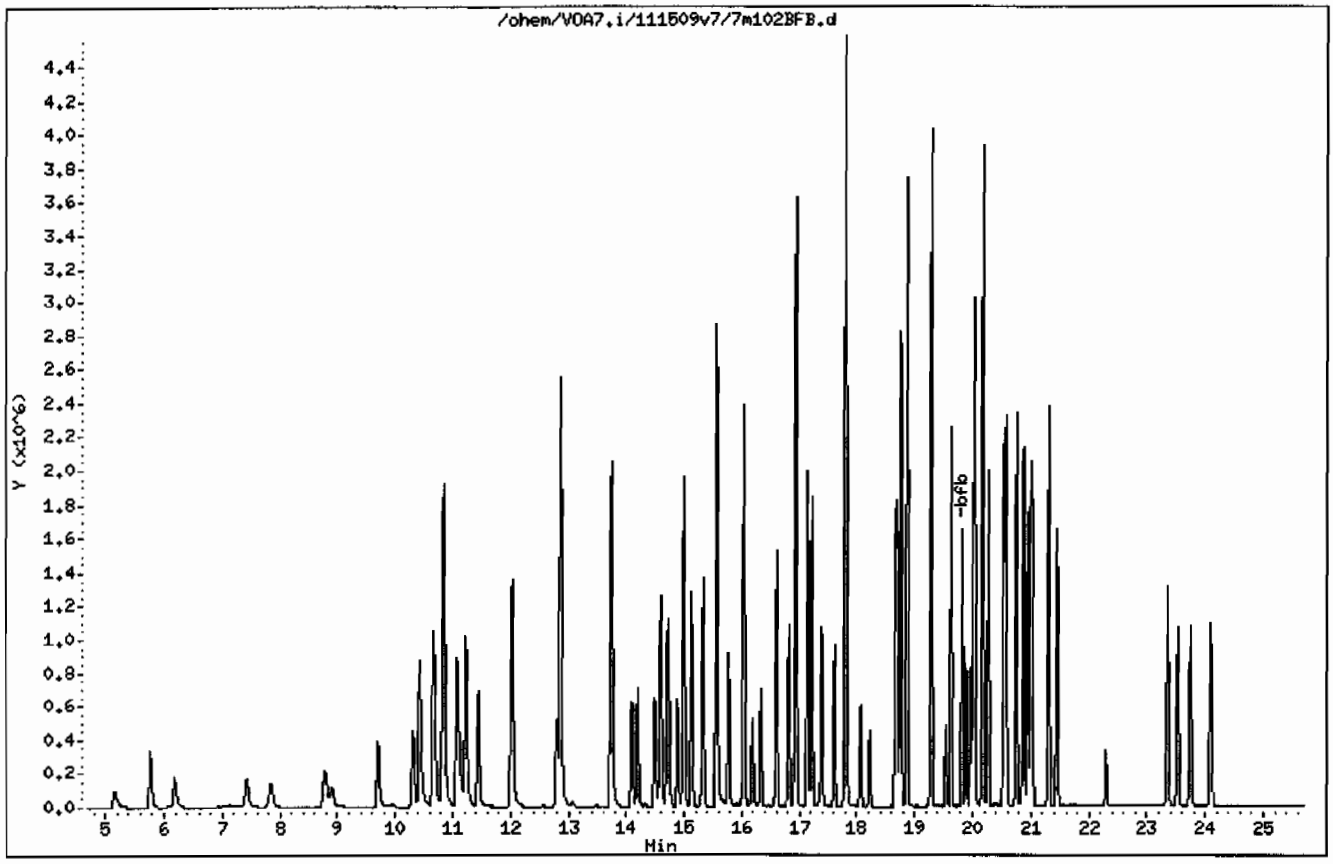

Data File: /chem/VOA7.i/111509v7/7m102BFB.d

Date : 16-NOV-2009 13:54

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |W7VM0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb

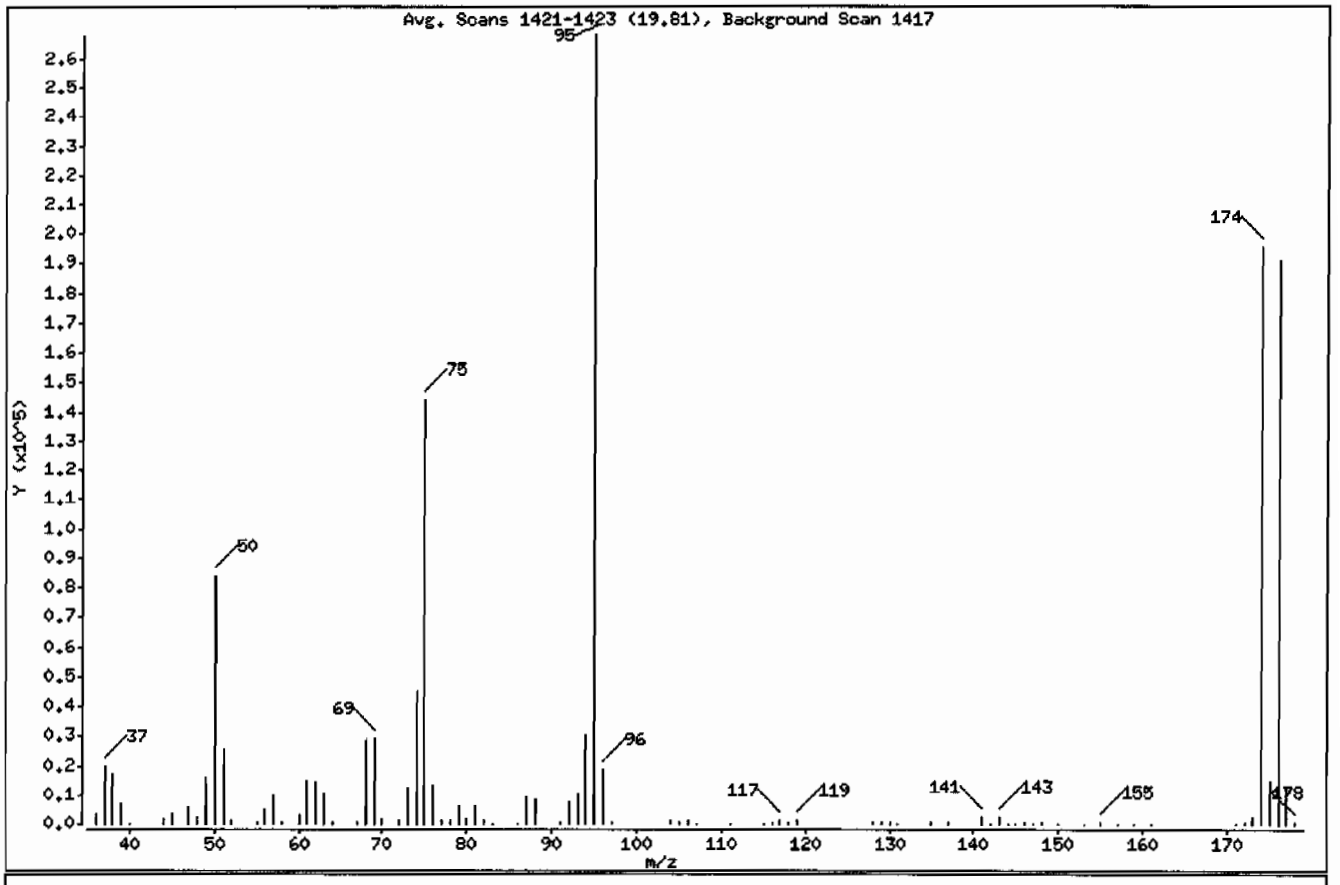

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	31.35
75	30.00 - 60.00% of mass 95	53.68
96	5.00 - 9.00% of mass 95	6.95
173	Less than 2.00% of mass 174	0.83 (1.14)
174	50.00 - 100.00% of mass 95	72.93
175	5.00 - 9.00% of mass 174	6.57 (7.63)
176	95.00 - 101.00% of mass 174	71.26 (97.71)
177	5.00 - 9.00% of mass 176	4.79 (6.72)

Data File: /chem/VOA7.i/111509v7/7m102BFB.d

Date : 16-NOV-2009 13:54

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |W7VM0911116-01|BFB/CCV/ICV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624 Column diameter: 0.25

Data File: 7m102BFB.d
Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417
Location of Maximum: 95.00
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3492	67.00	802	94.00	30088	143.00	2290
37.00	19896	68.00	28072	95.00	267904	144.00	182
38.00	17176	69.00	28720	96.00	18608	145.00	246
39.00	6767	70.00	2115	97.00	689	146.00	368
40.00	56	72.00	1438	104.00	940	147.00	197
44.00	1726	73.00	12133	105.00	456	148.00	524
45.00	3498	74.00	45264	106.00	1256	150.00	86
47.00	5334	75.00	143808	107.00	86	153.00	91
48.00	2508	76.00	12687	111.00	230	155.00	646
49.00	16192	77.00	1415	115.00	163	157.00	282
50.00	84000	78.00	1061	116.00	809	159.00	241
51.00	25096	79.00	6247	117.00	1378	161.00	85
52.00	1004	80.00	1703	118.00	830	171.00	107
55.00	720	81.00	6177	119.00	1140	172.00	463
56.00	5221	82.00	1168	128.00	870	173.00	2233
57.00	9634	83.00	94	129.00	344	174.00	195392
58.00	407	86.00	268	130.00	747	175.00	14910
60.00	2957	87.00	9327	131.00	236	176.00	190912
61.00	14580	88.00	8928	135.00	321	177.00	12835
62.00	14245	91.00	654	137.00	514	178.00	367
63.00	10431	92.00	7178	141.00	2289		
64.00	865	93.00	10518	142.00	239		

Data File: /chem/VOA7.i/112509v7/7n303BFB.d

Page 1

Date : 25-NOV-2009 09:45

Client ID: BFB01

Instrument: VOA7.i

Sample Info: IW7VH091125-02|CCV/LCS|1|VOAF|1|

Operator: AXD1

Column phase: db624

Column diameter: 0.25

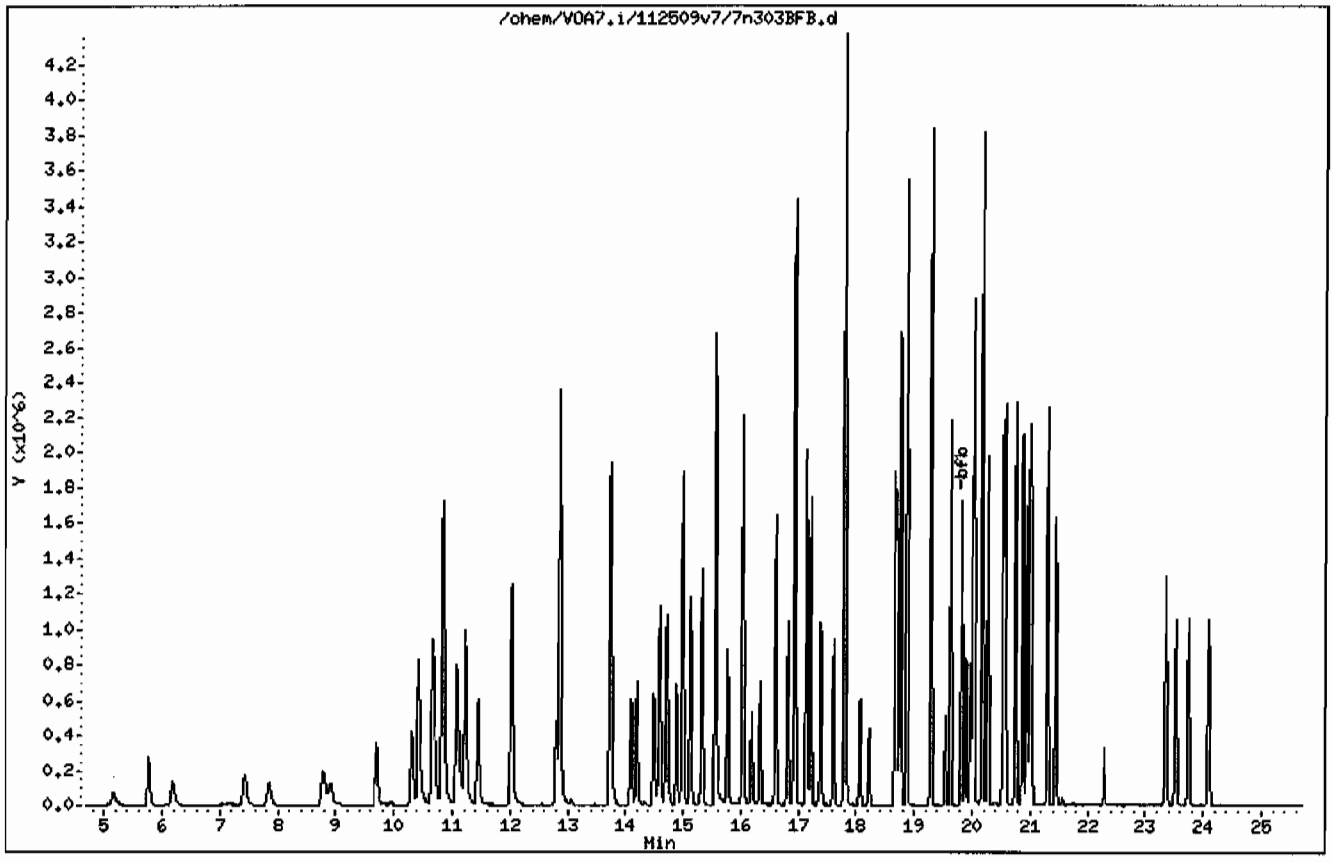

Data File: /chem/VOA7.i/112509v7/7n303BFB.d

Date : 25-NOV-2009 09:45

Client ID: BFB01

Instrument: VOA7.i

Sample Info: |W7VM091125-02|CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb

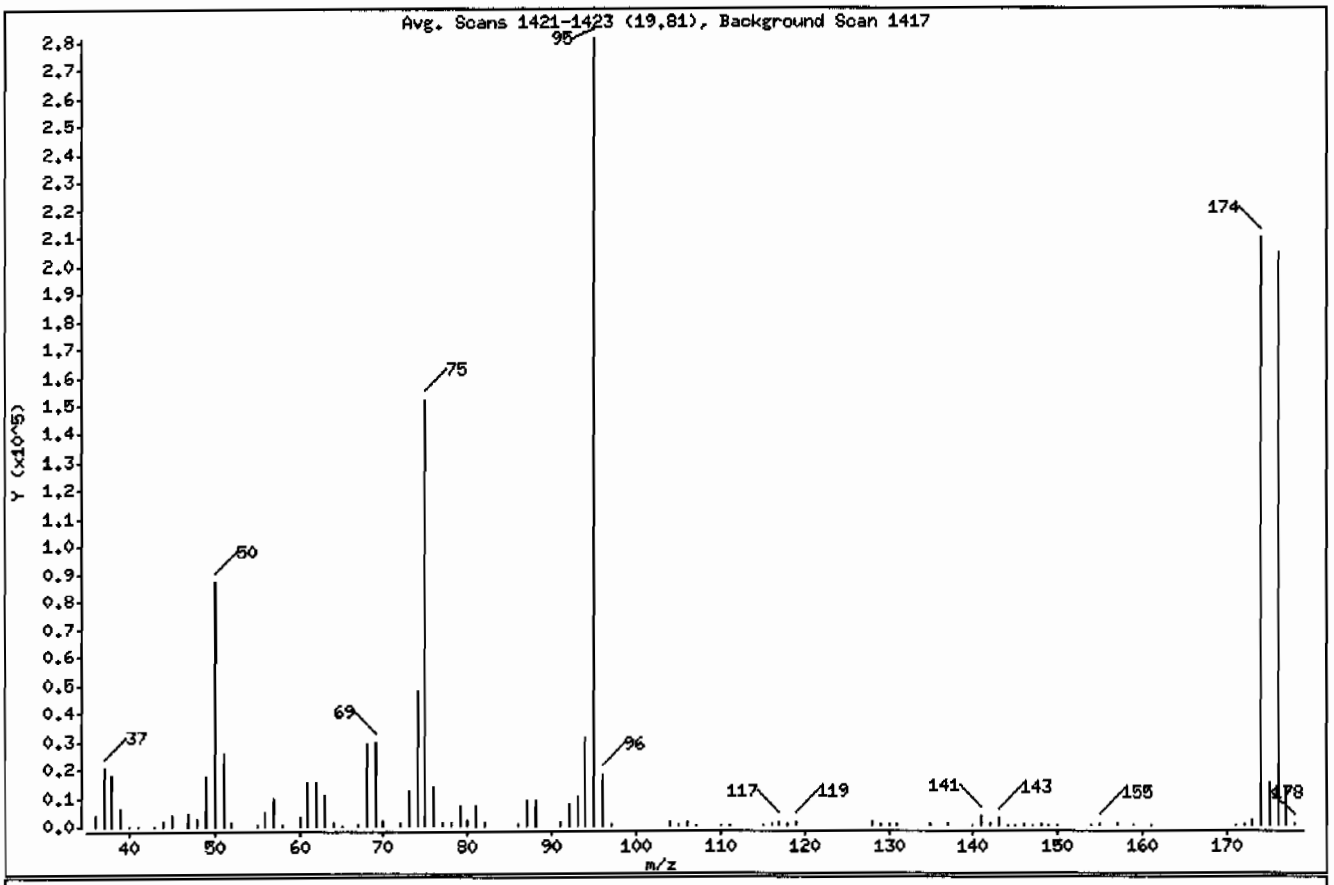

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	31.06
75	30.00 - 60.00% of mass 95	54.10
96	5.00 - 9.00% of mass 95	6.53
173	Less than 2.00% of mass 174	0.71 (0.96)
174	50.00 - 100.00% of mass 95	74.56
175	5.00 - 9.00% of mass 174	5.36 (7.19)
176	95.00 - 101.00% of mass 174	72.69 (97.50)
177	5.00 - 9.00% of mass 176	4.82 (6.62)

Data File: /chem/VOA7.i/112509v7/7n303BFB.d

Date : 25-NOV-2009 09:45

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |W7VH091125-02|CCV/LCS|1|VOAF|1|

Operator: AX01

Column phase: db624 Column diameter: 0.25

Data File: 7n303BFB.d
Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417
Location of Maximum: 95.00
Number of points: 91

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3661	64.00	1025	94.00	31088	142.00	357
37.00	20456	65.00	83	95.00	281216	143.00	2858
38.00	18424	67.00	693	96.00	18376	144.00	92
39.00	6781	68.00	29152	97.00	622	145.00	283
40.00	162	69.00	29960	104.00	1112	146.00	367
41.00	177	70.00	2116	105.00	489	147.00	95
43.00	126	72.00	1568	106.00	1109	148.00	564
44.00	1676	73.00	12220	107.00	186	149.00	94
45.00	3819	74.00	47848	110.00	89	150.00	214
47.00	4783	75.00	152128	111.00	266	154.00	112
48.00	2475	76.00	13300	115.00	250	155.00	575
49.00	17496	77.00	1316	116.00	857	157.00	346
50.00	87352	78.00	1036	117.00	1541	159.00	317
51.00	25792	79.00	6886	118.00	800	161.00	321
52.00	1292	80.00	1955	119.00	1414	171.00	114
55.00	828	81.00	7133	128.00	1065	172.00	326
56.00	5483	82.00	1446	129.00	358	173.00	2007
57.00	9736	86.00	416	130.00	858	174.00	209664
58.00	520	87.00	9329	131.00	399	175.00	15068
60.00	3208	88.00	9276	135.00	384	176.00	204416
61.00	15750	91.00	1130	137.00	550	177.00	13542
62.00	15666	92.00	7694	140.00	103	178.00	326
63.00	11099	93.00	10471	141.00	3039		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601			**Matrix:**	SOIL
Lab Sample ID:	1201981617				
Client Sample:	QC for batch 926827	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926827	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 12:00	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 08:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n307BL.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981617**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 12:00**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n307BL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	21.56	6.37	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n307BL.d
Lab Smp Id: 1201981617 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 12:00
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981617|926830|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	552281	53.6892	53.7
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1179768	50.0000	
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1299923	47.2684	47.3
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	921229	50.0000	
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	606883	46.6685	46.7
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	552530	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n307BL.d
Lab Smp Id: 1201981617 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 12:00
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981617|926830|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 101 1,4-Dichlorobenzene-d4	20.991	3532919	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
21.560	450018	6.36891923	6.4	0		0	101

Data File: /chem/VOA7.i/112509v7/7n307BL.d
Date : 25-NOV-2009 12:00
Client ID: BLANK
Sample Info: |120198161719268301|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

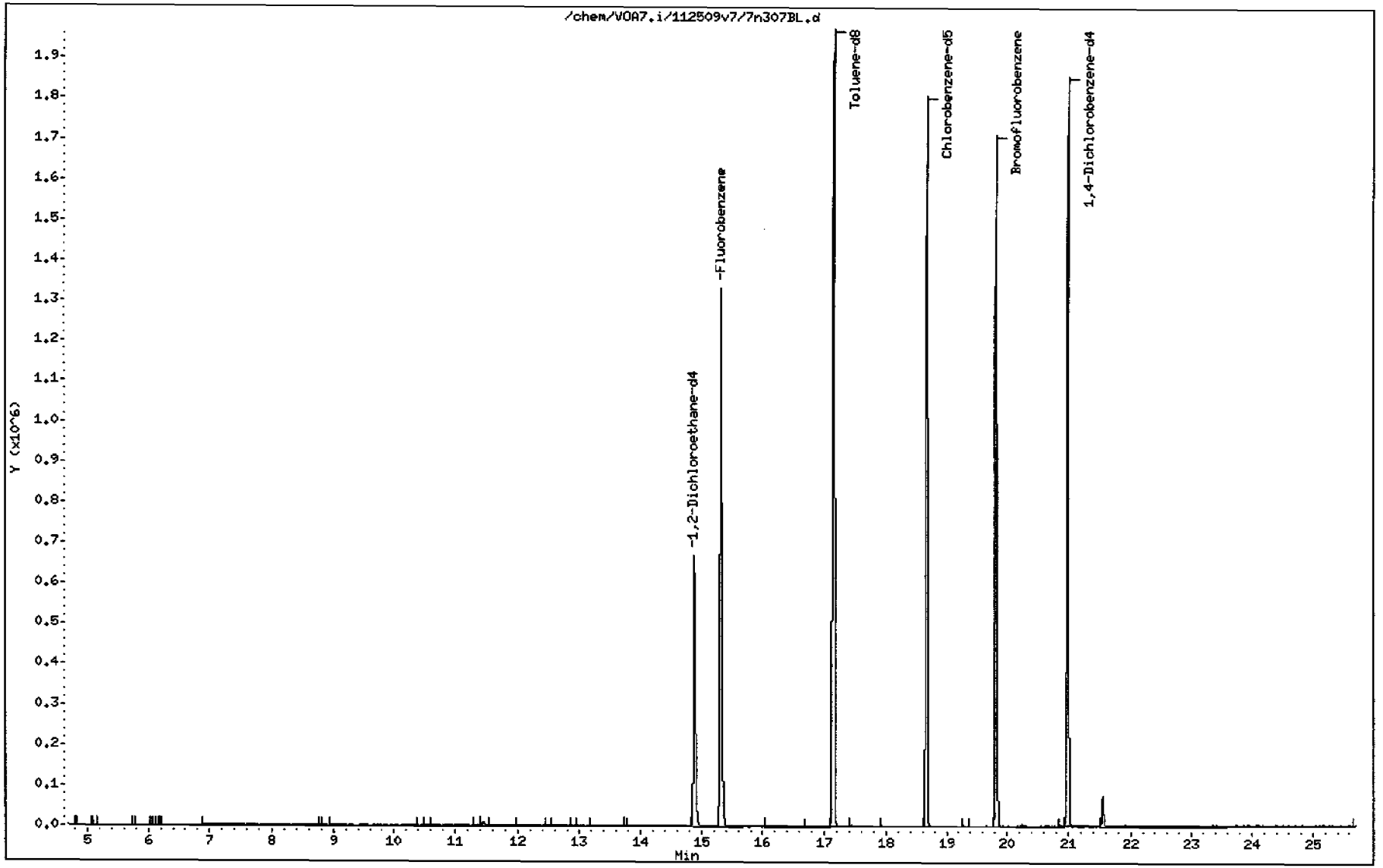

Data File: /chem/VOA7.i/112509v7/7n307BL.d

Date : 25-NOV-2009 12:00

Client ID: BLANK

Instrument: VOA7.i

Sample Info: |120198161719268301|VOAF|1|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Bicyclo[5.3.0]decan-2-one, 9-methylene-1	1000153-97-3	NIST05.L	82418	36	C14H24OSi	236
Silane, 9H-fluoren-9-yltrimethyl-	7385-10-6	NIST05.L	83985	12	C16H18Si	238

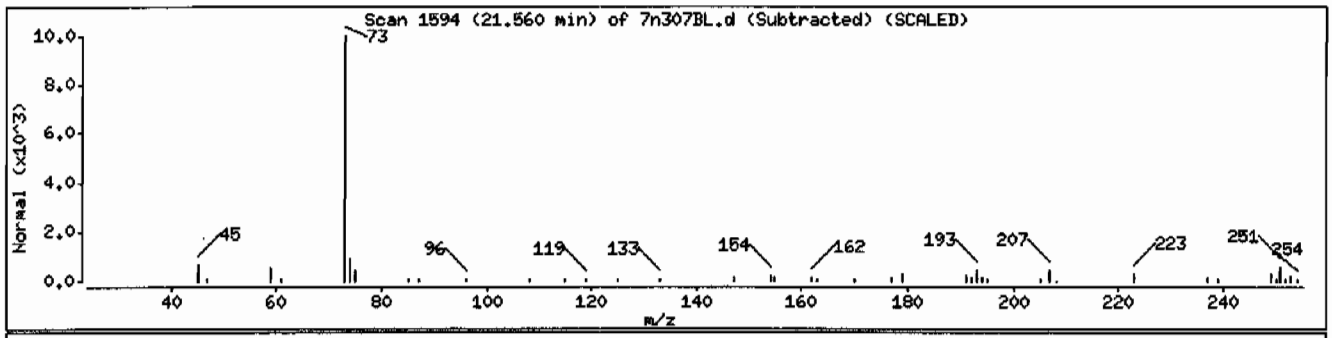

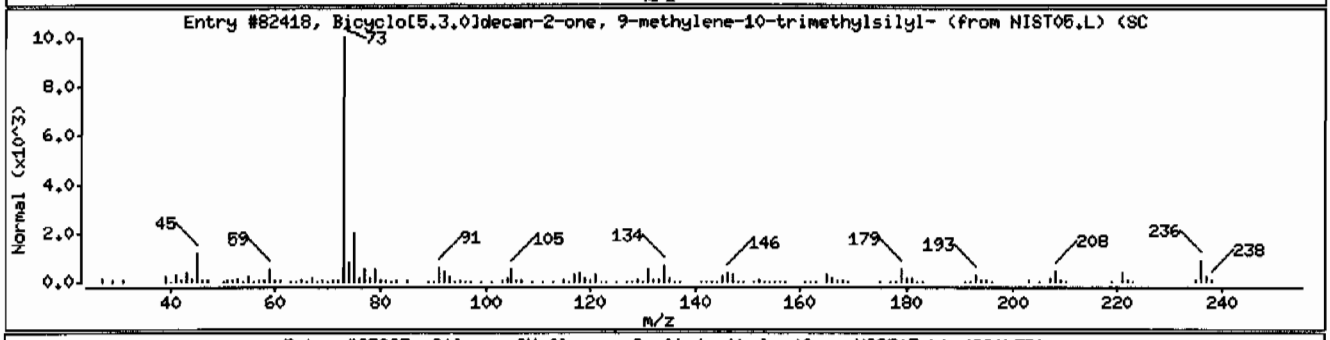

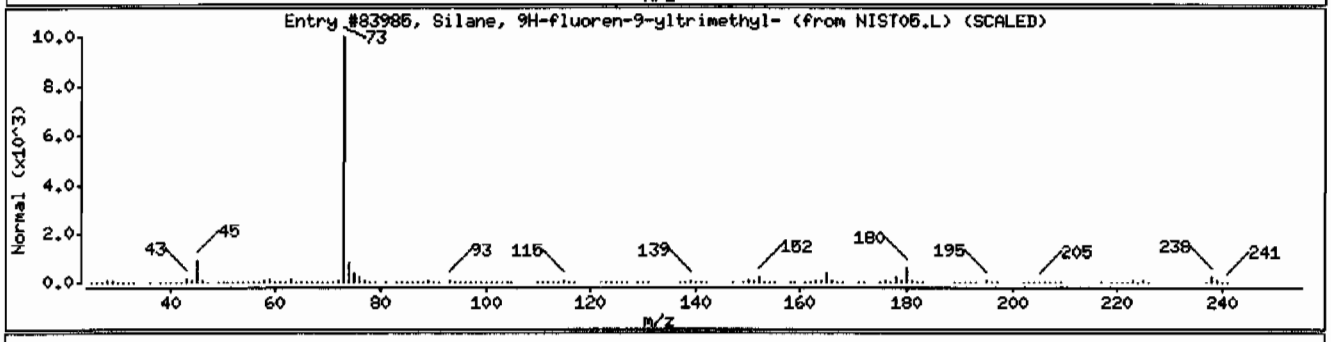

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981620**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 09:45**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n303LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		52.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.6	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		48.6	ug/kg	0.300	1.00
74-83-9	Bromomethane		50.1	ug/kg	0.300	1.00
75-00-3	Chloroethane		46.7	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		61.9	ug/kg	0.300	1.00
67-64-1	Acetone		208	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		55.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		251	ug/kg	1.60	5.00
75-09-2	Methylene chloride		47.4	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		264	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		49.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		49.1	ug/kg	0.300	1.00
78-93-3	2-Butanone		186	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.9	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		51.2	ug/kg	0.300	1.00
67-66-3	Chloroform		50.1	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		45.4	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		57.2	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		52.5	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		57.9	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		48.3	ug/kg	0.300	1.00
71-43-2	Benzene		46.8	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		51.6	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		42.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		48.7	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		207	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		45.8	ug/kg	0.300	1.00
108-88-3	Toluene		44.4	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		43.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		159	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		41.6	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		56.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		47.7	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		44.8	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981620**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 09:45**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n303LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		44.7	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		89.4	ug/kg	0.300	2.00
95-47-6	o-Xylene		43.7	ug/kg	0.300	1.00
100-42-5	Styrene		41.5	ug/kg	0.300	1.00
75-25-2	Bromoform		54.8	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		43.9	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		42.7	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		43.4	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		41.5	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		43.9	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		42.3	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		43.5	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		44.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		42.6	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		45.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		43.1	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		43.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		44.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		46.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		43.5	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n303LL.d
Lab Smp Id: 1201981620 Client Smp ID: LCS
Inj Date : 25-NOV-2009 09:45
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981620|926830|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 1,3-Dichloropropylene	75				1070835	94.2548	94.2
M 2 Xylenes (total)	106				1607958	133.076	133
M 3 1,2-Dichloroethylene (total)	96				1081194	96.1759	96.2
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	245805	52.7048	52.7
5 Chloromethane	50	5.757	5.757	(0.376)	526168	45.6080	45.6
6 Vinyl chloride	62	6.188	6.188	(0.404)	388394	48.5701	48.6
7 Bromomethane	94	7.429	7.429	(0.485)	274640	50.1151	50.1
8 Chloroethane	64	7.845	7.845	(0.512)	279281	46.7134	46.7
9 Trichlorofluoromethane	101	8.799	8.799	(0.574)	498401	61.8647	61.9
10 Ethyl Ether	59	9.703	9.703	(0.633)	365991	43.1554	43.2
13 Acetone	43	10.423	10.423	(0.681)	2003716	207.977	208
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	268287	55.0298	55.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	16 Iodomethane	142	10.667	10.667	(0.696)	2238757	251.412	251
	17 Acetonitrile	41	11.073	11.073	(0.723)	1880321	1158.28	1160
	18 Methyl acetate	43	11.225	11.225	(0.733)	2052632	209.741	210
	19 Carbon disulfide	76	10.840	10.840	(0.708)	4217472	264.272	264
	22 Methylene chloride	86	11.449	11.449	(0.747)	210140	47.4054	47.4
	24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	919517	45.0254	45.0
	25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	511676	49.2681	49.3
	26 Vinyl acetate	43	12.860	12.860	(0.840)	4955700	238.233	238
	28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	636457	49.0792	49.1
	31 2-Butanone	43	13.723	13.723	(0.896)	2043244	185.676	186
	33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	569518	46.9079	46.9
	34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	349932	51.1937	51.2
	37 Bromochloromethane	49	14.088	14.088	(0.920)	479373	45.4099	45.4
	38 Chloroform	83	14.190	14.190	(0.926)	586888	50.0935	50.1
	41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	499104	57.2017	57.2
	43 Cyclohexane	56	14.586	14.586	(0.952)	737570	49.7399	49.7
	44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	414845	52.4889	52.5
	45 Carbon tetrachloride	117	14.728	14.728	(0.962)	399936	57.8907	57.9
$	46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	557286	54.1946	54.2
	47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	592105	48.3055	48.3
	48 Benzene	78	14.982	14.982	(0.978)	1131050	46.8231	46.8
	50 Cyclohexene	67	15.124	15.124	(0.987)	573700	50.2752	50.3
*	51 Fluorobenzene	96	15.317	15.317	(1.000)	1179357	50.0000	
	52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1728720	5138.45	5140
	53 Trichloroethylene	95	15.773	15.773	(1.030)	321878	51.5939	51.6
	55 Methylcyclohexane	83	16.037	16.037	(1.047)	500633	51.9642	52.0
	56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	334981	42.6340	42.6
	58 Dibromomethane	93	16.180	16.180	(1.056)	215730	48.7474	48.7
	59 Bromodichloromethane	83	16.332	16.332	(1.066)	472966	50.9635	51.0
	61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	661289	205.426	205
	62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	537335	45.8337	45.8
	63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	1002479	206.557	206
$	64 Toluene-d8	98	17.144	17.144	(0.918)	1304010	46.5321	46.5
	65 Toluene	92	17.215	17.215	(0.922)	740384	44.4192	44.4
	67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	533500	46.0040	46.0
	68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	249113	43.6335	43.6
	69 2-Hexanone	43	17.804	17.804	(0.954)	2504734	159.129	159
	70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	472081	41.6096	41.6
	71 Tetrachloroethylene	164	17.824	17.824	(0.955)	218395	56.5685	56.6
	72 Dibromochloromethane	129	18.068	18.068	(0.968)	331707	49.7317	49.7
	73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	330523	47.6923	47.7
*	75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	938749	50.0000	
	76 Chlorobenzene	112	18.697	18.697	(1.002)	811404	44.8462	44.8
	77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	300051	46.1499	46.1
	78 Ethylbenzene	91	18.768	18.768	(1.005)	1404262	44.7106	44.7
	79 m,p-Xylenes	106	18.870	18.870	(1.011)	1068673	89.4137	89.4
	80 o-Xylene	106	19.286	19.286	(1.033)	539285	43.6626	43.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
81 Styrene	104	19.286	19.286	(1.033)	920354	41.4593	41.4
82 Bromoform	173	19.540	19.540	(0.931)	272126	54.7809	54.8
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1425598	43.9160	43.9
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	630196	47.0731	47.1
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	451494	43.9258	43.9
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	122003	47.1054	47.1
90 Bromobenzene	156	20.017	20.017	(0.954)	390330	42.7282	42.7
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1731257	43.3541	43.4
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1216140	42.2630	42.3
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1200741	41.4619	41.5
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1197207	43.5000	43.5
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1190065	44.4120	44.4
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1308431	42.5828	42.6
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1655232	45.3182	45.3
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1309904	45.1212	45.1
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	706086	43.1351	43.1
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	568823	50.0000	
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	704018	43.6319	43.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1363065	44.4205	44.4
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	708310	43.4702	43.5
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	105178	52.5788	52.6
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	525866	45.0153	45.0
109 Hexachlorobutadiene	225	23.540	23.540	(1.121)	301367	48.2107	48.2
110 Naphthalene	128	23.753	23.753	(1.132)	1127576	43.4288	43.4
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	485197	46.7627	46.8

Data File: /chem/VOA7.i/112509v7/7n303LL.d
Date : 25-NOV-2009 09:45
Client ID: LCS
Sample Info: 1120198162019268301|1|VOAF|1|
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

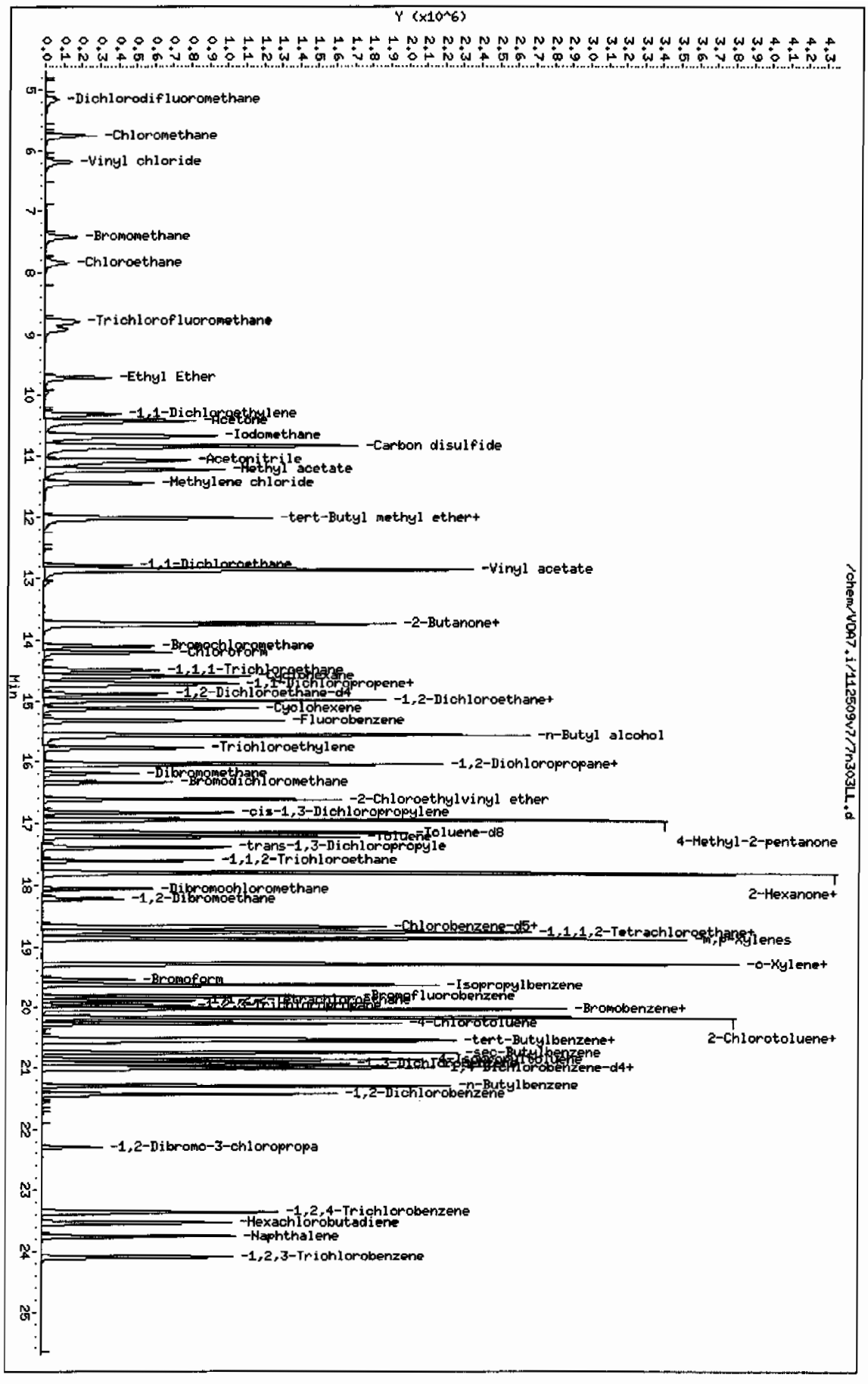

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981621**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 10:53**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n305LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981621**				
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926827**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 10:53**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 08:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n305LL.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		304	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n305LL.d
Lab Smp Id: 1201981621 Client Smp ID: SLCS
Inj Date : 25-NOV-2009 10:53
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981621|926830|1|VOAF|1|
Misc Info : GEL 5g N/A UVM091118-08A/UVM091105-02C
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
147 Chlorotrifluoroethylene	116	5.029	5.043	(0.328)	495941	161.948	162
148 2-Chloro-1,1,1-trifluoroethane	118	6.603	6.603	(0.431)	1058202	159.286	159
11 Acrolein	56	10.027	10.027	(0.655)	495634	254.566	254
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	664872	303.799	304
15 Isopropyl Alcohol	45	10.779	10.789	(0.704)	2338267	2713.31	2710
20 Allyl chloride	41	11.185	11.185	(0.730)	3298440	220.955	221
21 tert-Butyl Alcohol	59	11.672	11.672	(0.762)	2995588	2499.02	2500
23 Acrylonitrile	53	11.936	11.936	(0.779)	925509	237.204	237
27 Isopropyl ether	45	12.911	12.911	(0.843)	1730244	43.5849	43.6
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	715614	55.8464	55.8
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1164661	43.2051	43.2
32 Ethyl acetate	43	13.804	13.804	(0.901)	2379222	205.170	205

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	35 Propionitrile	54	13.804	13.804	(0.901)	359341	228.749	229
	36 Methacrylonitrile	41	14.047	14.048	(0.917)	1514159	214.312	214
	39 Tetrahydrofuran	42	14.159	14.159	(0.675)	847558	196.782	197
	42 Isobutyl alcohol	41	14.748	14.748	(0.963)	1034200	2485.94	2480
$	46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	545983	53.3020	53.3
	49 Methyl tert-amyl ether	73	15.083	15.083	(0.985)	807057	43.1878	43.2
*	51 Fluorobenzene	96	15.316	15.317	(1.000)	1174785	50.0000	
	54 Methyl methacrylate	69	16.078	16.078	(1.050)	1062611	215.809	216
	57 1,4-Dioxane	88	16.159	16.159	(1.055)	201542	2710.29	2710
	60 2-Nitropropane	43	16.555	16.555	(1.081)	794924	260.393	260
$	64 Toluene-d8	98	17.144	17.144	(0.918)	1301570	46.6402	46.6
	66 Ethyl methacrylate	69	17.418	17.418	(0.933)	1919782	193.102	193
	74 1-Chlorohexane	55	18.575	18.575	(1.213)	457840	48.4524	48.4
*	75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	934821	50.0000	
	84 cis-1,4-Dichloro-2-butene	53	19.661	19.661	(0.937)	1068124	234.152	234
	85 Cyclohexanone	55	19.773	19.773	(1.059)	1026305	590.638	591
$	86 Bromofluorobenzene	95	19.814	19.814	(0.944)	616229	44.9540	45.0
	88 trans-1,4-Dichloro-2-butene	53	19.936	19.936	(0.950)	997866	239.441	239
	97 Pentachloroethane	167	20.606	20.606	(0.982)	790992	261.102	261
*	101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	582436	50.0000	
	103 Benzyl chloride	91	21.123	21.123	(1.006)	3447384	222.043	222
	106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1738018	202.174	202

Data File: /chem/VOA7.i/112509v7/7n305LL.d
Date : 25-NOV-2009 10:53
Client ID: SLCS
Sample Info: 1120198162119268301!1!VOAF!1!
Column phase: DB-624

Instrument: VOA7.i
Operator: AXO1
Column diameter: 0.25

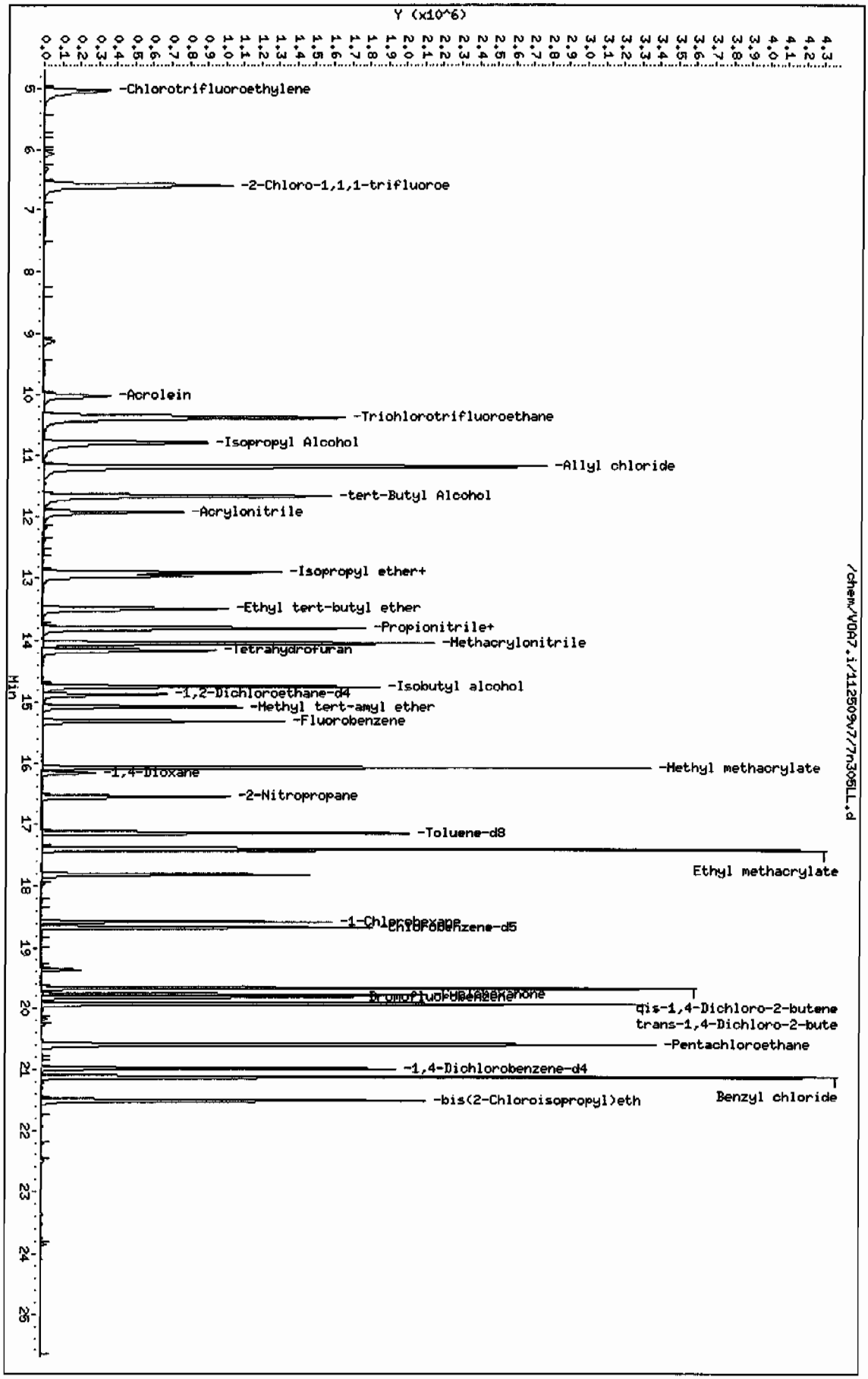

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	1201981618	Date Received:	11/20/2009 08:50	%Moisture:	17.8
Client Sample:	QC for batch 926827	Client:	LANL010	Project:	QC
Client ID:	RE03-09-13975PS	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926830	Inst:	VOA7.I	Dilution:	1
Run Date:	11/25/2009 19:38	Analyst:	AXO1	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:40	Aliquot:	5 g	Final Volume:	5 mL
Data File:	7n320.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		53.9	ug/kg	0.414	1.22
74-87-3	Chloromethane		48.1	ug/kg	0.365	1.22
75-01-4	Vinyl chloride		48.4	ug/kg	0.365	1.22
74-83-9	Bromomethane		56.5	ug/kg	0.365	1.22
75-00-3	Chloroethane		52.5	ug/kg	0.365	1.22
75-69-4	Trichlorofluoromethane		65.2	ug/kg	0.365	1.22
67-64-1	Acetone		144	ug/kg	2.02	6.09
75-35-4	1,1-Dichloroethylene		61.1	ug/kg	0.365	1.22
74-88-4	Iodomethane		283	ug/kg	1.95	6.09
75-09-2	Methylene chloride		57.0	ug/kg	2.43	6.09
75-15-0	Carbon disulfide		295	ug/kg	1.52	6.09
156-60-5	trans-1,2-Dichloroethylene		52.4	ug/kg	0.365	1.22
75-34-3	1,1-Dichloroethane		53.9	ug/kg	0.365	1.22
78-93-3	2-Butanone		145	ug/kg	1.83	6.09
156-59-2	cis-1,2-Dichloroethylene		51.0	ug/kg	0.365	1.22
594-20-7	2,2-Dichloropropane		50.0	ug/kg	0.365	1.22
67-66-3	Chloroform		55.2	ug/kg	0.365	1.22
74-97-5	Bromochloromethane		50.2	ug/kg	0.402	1.22
71-55-6	1,1,1-Trichloroethane		61.0	ug/kg	0.365	1.22
563-58-6	1,1-Dichloropropene		55.3	ug/kg	0.365	1.22
56-23-5	Carbon tetrachloride		60.9	ug/kg	0.365	1.22
107-06-2	1,2-Dichloroethane		50.8	ug/kg	0.365	1.22
71-43-2	Benzene		52.5	ug/kg	0.365	1.22
79-01-6	Trichloroethylene		55.2	ug/kg	0.402	1.22
78-87-5	1,2-Dichloropropane		47.4	ug/kg	0.365	1.22
75-27-4	Bromodichloromethane		55.5	ug/kg	0.365	1.22
74-95-3	Dibromomethane		53.4	ug/kg	0.365	1.22
108-10-1	4-Methyl-2-pentanone		198	ug/kg	1.52	6.09
10061-01-5	cis-1,3-Dichloropropylene		48.4	ug/kg	0.365	1.22
108-88-3	Toluene		49.3	ug/kg	0.365	1.22
10061-02-6	trans-1,3-Dichloropropylene		47.0	ug/kg	0.365	1.22
79-00-5	1,1,2-Trichloroethane		47.9	ug/kg	0.365	1.22
591-78-6	2-Hexanone		127	ug/kg	1.83	6.09
142-28-9	1,3-Dichloropropane		46.7	ug/kg	0.365	1.22
127-18-4	Tetrachloroethylene		62.5	ug/kg	0.365	1.22
124-48-1	Dibromochloromethane		54.4	ug/kg	0.365	1.22
106-93-4	1,2-Dibromoethane		51.1	ug/kg	0.365	1.22
108-90-7	Chlorobenzene		49.8	ug/kg	0.365	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201981618**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**17.8**
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13975PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 19:38**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n320.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		48.3	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes		95.5	ug/kg	0.365	2.43
95-47-6	o-Xylene		48.5	ug/kg	0.365	1.22
100-42-5	Styrene		44.4	ug/kg	0.365	1.22
75-25-2	Bromoform		59.4	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane		50.2	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane		51.6	ug/kg	0.365	1.22
108-86-1	Bromobenzene		50.2	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene		49.2	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene		47.5	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene		50.5	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene		48.1	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene		48.9	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene		51.4	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene		48.5	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene		50.8	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene		49.6	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene		49.2	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene		49.0	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene		49.1	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane		55.1	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane		51.4	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene		50.1	ug/kg	0.365	1.22

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n320.d
Lab Smp Id: 1201981618 Client Smp ID: RE03-09-13975MS
Inj Date : 25-NOV-2009 19:38
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981618|926830|1|VOAF|1|
Misc Info : LANL 5g N/A MS 241534001
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.83110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.317	(1.000)	1154055	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	907062	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	516976	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	495059	49.1987	59.9
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1244549	45.9617	55.9
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	576298	47.3643	57.6
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	202210	44.2542	53.8
5 Chloromethane	50	5.757	5.757	(0.376)	447050	39.4931	48.1
6 Vinyl chloride	62	6.187	6.188	(0.404)	311221	39.7726	48.4
7 Bromomethane	94	7.428	7.429	(0.485)	248890	46.4121	56.5
8 Chloroethane	64	7.845	7.845	(0.512)	252510	43.1616	52.5
9 Trichlorofluoromethane	101	8.789	8.799	(0.574)	422097	53.5421	65.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Acetone	43	10.423	10.423	(0.681)	1116988	118.481	144
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	239353	50.1713	61.0
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	590527	40.2687	49.0
16 Iodomethane	142	10.677	10.667	(0.697)	2028396	232.783	283
22 Methylene chloride	86	11.449	11.449	(0.747)	203477	46.8748	57.0
19 Carbon disulfide	76	10.839	10.840	(0.708)	3781509	242.149	295
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	437346	43.0343	52.4
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	561507	44.2489	53.8
31 2-Butanone	43	13.723	13.723	(0.896)	1279481	118.820	145
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	497950	41.9124	51.0
100 1,3-Dichlorobenzene	146	20.930	20.931	(0.997)	601371	40.4224	49.2
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	274778	41.0803	50.0
38 Chloroform	83	14.190	14.190	(0.926)	519984	45.3560	55.2
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	609773	41.1759	50.1
37 Bromochloromethane	49	14.088	14.088	(0.920)	426012	41.2399	50.2
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	428155	50.1462	61.0
44 1,1-Dichloropropene	75	14.707	14.697	(0.960)	351720	45.4776	55.3
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	338438	50.0629	60.9
47 1,2-Dichloroethane	62	14.981	14.982	(0.978)	500850	41.7566	50.8
48 Benzene	78	14.981	14.982	(0.978)	1020082	43.1551	52.5
53 Trichloroethylene	95	15.773	15.773	(1.030)	276665	45.3190	55.2
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	299463	38.9491	47.4
59 Bromodichloromethane	83	16.332	16.332	(1.066)	414168	45.6063	55.5
58 Dibromomethane	93	16.179	16.180	(1.056)	189972	43.8681	53.4
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	761905	162.472	198
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	456461	39.7889	48.4
65 Toluene	92	17.215	17.215	(0.922)	652728	40.5283	49.3
67 trans-1,3-Dichloropropylene	75	17.387	17.388	(0.931)	432710	38.6163	47.0
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	217074	39.3499	47.9
69 2-Hexanone	43	17.804	17.804	(0.954)	1587069	104.351	127
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	420520	38.3598	46.7
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	192216	51.3766	62.5
72 Dibromochloromethane	129	18.068	18.068	(0.968)	287830	44.6608	54.4
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	281255	42.0010	51.1
76 Chlorobenzene	112	18.697	18.697	(1.002)	715119	40.9052	49.8
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	265284	42.2278	51.4
78 Ethylbenzene	91	18.768	18.768	(1.005)	1204079	39.6762	48.3
79 m,p-Xylenes	106	18.870	18.870	(1.011)	906373	78.4836	95.5
80 o-Xylene	106	19.286	19.286	(1.033)	475808	39.8690	48.5
81 Styrene	104	19.286	19.286	(1.033)	782274	36.4703	44.4
82 Bromoform	173	19.540	19.540	(0.931)	220344	48.8053	59.4
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	385136	41.2277	50.2
89 1,2,3-Trichloropropane	110	19.976	19.966	(0.952)	99751	42.3764	51.6
90 Bromobenzene	156	20.017	20.017	(0.954)	342626	41.2677	50.2
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1467877	40.4450	49.2
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1027125	39.0238	47.5
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1224538	41.5054	50.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1034113	39.5414	48.1
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1004314	40.1510	48.9
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1029051	42.2545	51.4
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1114047	39.8927	48.5
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1385419	41.7351	50.8
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1075541	40.7638	49.6
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1124878	40.3348	49.1
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	82298	45.2670	55.1

Data File: /chem/VOA7.i/112509v7/7n320.d
Date : 25-NOV-2009 19:38
Client ID: RE03-09-13975MS
Sample Info: |120198161819268301|1|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01
Column diameter: 0.25

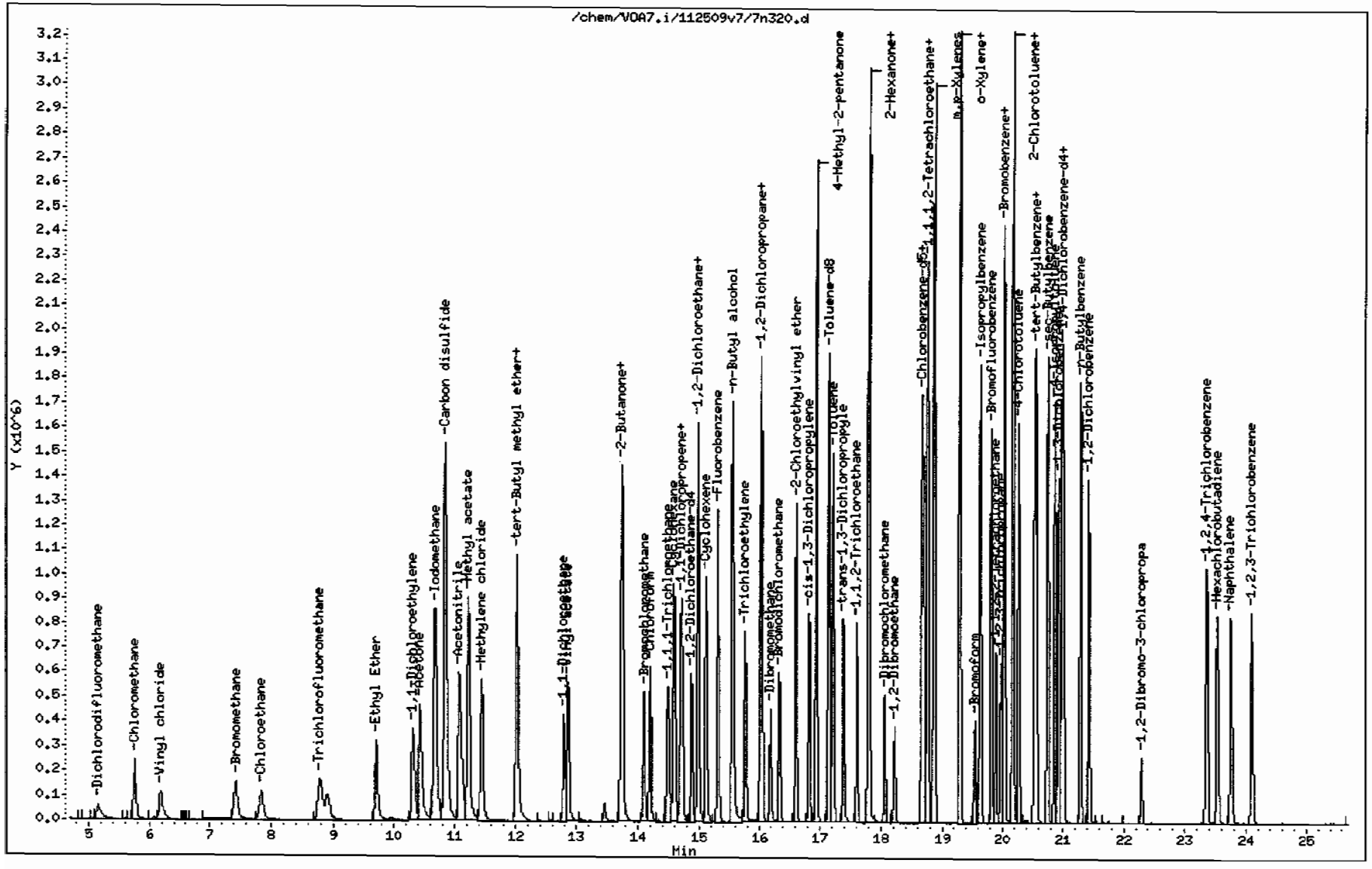

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981619	**Date Received:**	11/20/2009 08:50	**%Moisture:**	17.8
Client Sample:	QC for batch 926827	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13975PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926830	**Inst:**	VOA7.I	**Dilution:**	1
Run Date:	11/25/2009 20:12	**Analyst:**	AXO1	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:41	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	7n321.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		52.5	ug/kg	0.414	1.22
74-87-3	Chloromethane		48.9	ug/kg	0.365	1.22
75-01-4	Vinyl chloride		49.4	ug/kg	0.365	1.22
74-83-9	Bromomethane		54.8	ug/kg	0.365	1.22
75-00-3	Chloroethane		52.0	ug/kg	0.365	1.22
75-69-4	Trichlorofluoromethane		67.1	ug/kg	0.365	1.22
67-64-1	Acetone		137	ug/kg	2.02	6.09
75-35-4	1,1-Dichloroethylene		60.5	ug/kg	0.365	1.22
74-88-4	Iodomethane		286	ug/kg	1.95	6.09
75-09-2	Methylene chloride		56.5	ug/kg	2.43	6.09
75-15-0	Carbon disulfide		293	ug/kg	1.52	6.09
156-60-5	trans-1,2-Dichloroethylene		54.6	ug/kg	0.365	1.22
75-34-3	1,1-Dichloroethane		56.4	ug/kg	0.365	1.22
78-93-3	2-Butanone		137	ug/kg	1.83	6.09
156-59-2	cis-1,2-Dichloroethylene		52.7	ug/kg	0.365	1.22
594-20-7	2,2-Dichloropropane		52.0	ug/kg	0.365	1.22
67-66-3	Chloroform		57.5	ug/kg	0.365	1.22
74-97-5	Bromochloromethane		51.7	ug/kg	0.402	1.22
71-55-6	1,1,1-Trichloroethane		63.2	ug/kg	0.365	1.22
563-58-6	1,1-Dichloropropene		56.7	ug/kg	0.365	1.22
56-23-5	Carbon tetrachloride		63.3	ug/kg	0.365	1.22
107-06-2	1,2-Dichloroethane		52.0	ug/kg	0.365	1.22
71-43-2	Benzene		53.6	ug/kg	0.365	1.22
79-01-6	Trichloroethylene		55.7	ug/kg	0.402	1.22
78-87-5	1,2-Dichloropropane		48.9	ug/kg	0.365	1.22
75-27-4	Bromodichloromethane		57.2	ug/kg	0.365	1.22
74-95-3	Dibromomethane		53.7	ug/kg	0.365	1.22
108-10-1	4-Methyl-2-pentanone		192	ug/kg	1.52	6.09
10061-01-5	cis-1,3-Dichloropropylene		49.3	ug/kg	0.365	1.22
108-88-3	Toluene		50.8	ug/kg	0.365	1.22
10061-02-6	trans-1,3-Dichloropropylene		48.8	ug/kg	0.365	1.22
79-00-5	1,1,2-Trichloroethane		50.4	ug/kg	0.365	1.22
591-78-6	2-Hexanone		120	ug/kg	1.83	6.09
142-28-9	1,3-Dichloropropane		47.2	ug/kg	0.365	1.22
127-18-4	Tetrachloroethylene		63.6	ug/kg	0.365	1.22
124-48-1	Dibromochloromethane		55.5	ug/kg	0.365	1.22
106-93-4	1,2-Dibromoethane		50.7	ug/kg	0.365	1.22
108-90-7	Chlorobenzene		51.1	ug/kg	0.365	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201981619**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**17.8**
Client Sample:	**QC for batch 926827**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13975PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926830**	**Inst:**	**VOA7.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 20:12**	**Analyst:**	**AXO1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:41**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**7n321.d**	**Column:**	**DB-624**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		50.0	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes		99.7	ug/kg	0.365	2.43
95-47-6	o-Xylene		49.6	ug/kg	0.365	1.22
100-42-5	Styrene		45.9	ug/kg	0.365	1.22
75-25-2	Bromoform		59.1	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane		48.6	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane		49.2	ug/kg	0.365	1.22
108-86-1	Bromobenzene		50.7	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene		49.7	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene		48.0	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene		51.5	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene		48.5	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene		48.9	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene		51.6	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene		48.7	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene		51.4	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene		49.7	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene		49.8	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene		48.5	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene		49.1	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane		52.9	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane		52.9	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene		48.9	ug/kg	0.365	1.22

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/112509v7/7n321.d
Lab Smp Id: 1201981619 Client Smp ID: RE03-09-13975MSD
Inj Date : 25-NOV-2009 20:12
Operator : AXO1 Inst ID: VOA7.i
Smp Info : |1201981619|926830|1|VOAF|1|
Misc Info : LANL 5g N/A MSD 241534001
Comment :
Method : /chem/VOA7.i/112509v7/VOA7-8260B-111509.m
Meth Date : 30-Nov-2009 08:04 ale01592 Quant Type: ISTD
Cal Date : 16-NOV-2009 02:36 Cal File: 71708.d
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.83110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1150589	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	900930	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	521339	50.0000	
$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	493356	49.1771	59.8
$ 64 Toluene-d8	98	17.144	17.144	(0.918)	1251253	46.5238	56.6
$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	576669	46.9981	57.2
4 Dichlorodifluoromethane	85	5.148	5.147	(0.336)	196498	43.1251	52.5
5 Chloromethane	50	5.757	5.757	(0.376)	453136	40.1649	48.9
6 Vinyl chloride	62	6.188	6.188	(0.404)	316805	40.6082	49.4
7 Bromomethane	94	7.429	7.429	(0.485)	240930	45.0631	54.8
8 Chloroethane	64	7.845	7.845	(0.512)	249054	42.6991	52.0
9 Trichlorofluoromethane	101	8.789	8.799	(0.574)	433292	55.1277	67.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Acetone	43	10.423	10.423	(0.681)	1058969	112.665	137
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	236308	49.6823	60.5
102 1,4-Dichlorobenzene	146	21.022	21.022	(1.001)	589521	39.8636	48.5
16 Iodomethane	142	10.667	10.667	(0.696)	2041271	234.966	286
22 Methylene chloride	86	11.449	11.449	(0.747)	201197	46.4625	56.5
19 Carbon disulfide	76	10.840	10.840	(0.708)	3745730	240.580	293
25 trans-1,2-Dichloroethylene	61	12.027	12.027	(0.785)	454833	44.8898	54.6
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	585954	46.3145	56.4
31 2-Butanone	43	13.723	13.723	(0.896)	1211532	112.848	137
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	513042	43.3128	52.7
100 1,3-Dichlorobenzene	146	20.931	20.931	(0.997)	613426	40.8876	49.8
34 2,2-Dichloropropane	77	13.753	13.753	(0.898)	285026	42.7407	52.0
38 Chloroform	83	14.190	14.190	(0.926)	539688	47.2165	57.5
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	600604	40.2173	48.9
37 Bromochloromethane	49	14.088	14.088	(0.920)	437849	42.5135	51.7
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	442256	51.9537	63.2
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	359203	46.5851	56.7
45 Carbon tetrachloride	117	14.728	14.728	(0.962)	350714	52.0351	63.3
47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	511044	42.7348	52.0
48 Benzene	78	14.982	14.982	(0.978)	1037525	44.0253	53.6
53 Trichloroethylene	95	15.773	15.773	(1.030)	278744	45.7971	55.7
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	308306	40.2201	48.9
59 Bromodichloromethane	83	16.332	16.332	(1.066)	425647	47.0115	57.2
58 Dibromomethane	93	16.180	16.180	(1.056)	190515	44.1260	53.7
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	736172	158.053	192
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	463656	40.5378	49.3
65 Toluene	92	17.215	17.215	(0.922)	668081	41.7639	50.8
67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	446465	40.1150	48.8
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	226724	41.3790	50.4
69 2-Hexanone	43	17.804	17.804	(0.954)	1493628	98.8752	120
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	421943	38.7515	47.2
71 Tetrachloroethylene	164	17.824	17.824	(0.955)	194159	52.2778	63.6
72 Dibromochloromethane	129	18.068	18.068	(0.968)	291707	45.5705	55.4
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	276887	41.6301	50.7
76 Chlorobenzene	112	18.697	18.697	(1.002)	729362	42.0039	51.1
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	271100	43.4473	52.9
78 Ethylbenzene	91	18.768	18.768	(1.005)	1237679	41.0610	50.0
79 m,p-Xylenes	106	18.870	18.870	(1.011)	939577	81.9125	99.7
80 o-Xylene	106	19.286	19.286	(1.033)	483250	40.7682	49.6
81 Styrene	104	19.286	19.286	(1.033)	804211	37.7482	45.9
82 Bromoform	173	19.540	19.540	(0.931)	220927	48.5250	59.0
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	376408	39.9562	48.6
89 1,2,3-Trichloropropane	110	19.976	19.966	(0.952)	95873	40.3881	49.2
90 Bromobenzene	156	20.017	20.017	(0.954)	348850	41.6657	50.7
91 n-Propylbenzene	91	20.037	20.037	(0.955)	1493461	40.8055	49.7
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1046347	39.4214	48.0
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1258389	42.2958	51.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1050554	39.8339	48.5
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	1013501	40.1792	48.9
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	1041528	42.4089	51.6
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1127221	40.0267	48.7
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1412785	42.2033	51.4
99 4-Isopropyltoluene	119	20.870	20.870	(0.994)	1086479	40.8338	49.7
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1133576	40.3065	49.0
107 1,2-Dibromo-3-chloropropane	157	22.301	22.301	(1.062)	79652	43.4450	52.9

Data File: /chem/VOA7.i/112509v7/7n321.d

Date : 25-NOV-2009 20:12

Client ID: RE03-09-13975MSD

Sample Info: |120198161919268301|VOAF|1|

Column phase: DB-624

Instrument: VOA7.i

Operator: AX01

Column diameter: 0.25

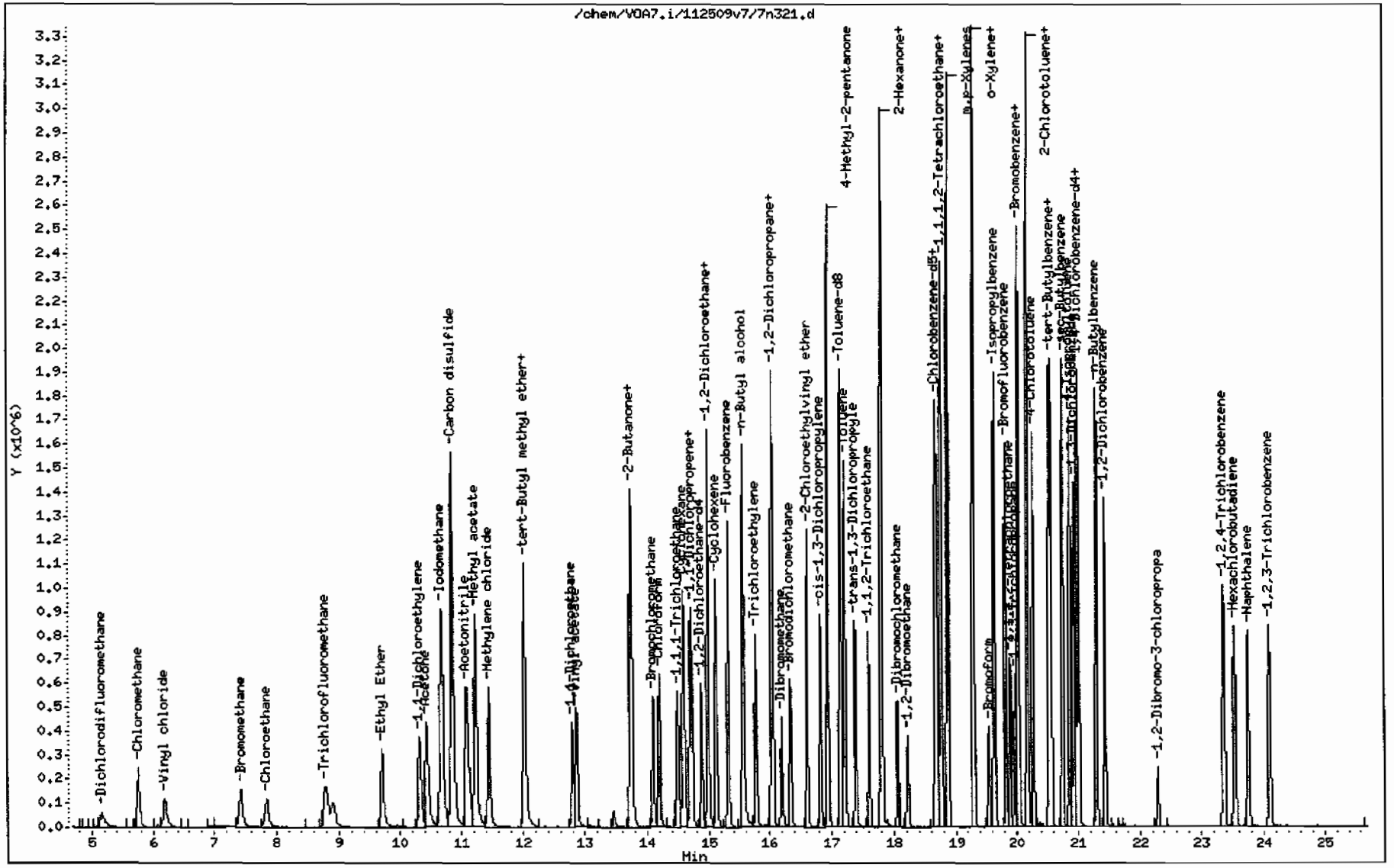

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926827** Verified by: _____

Analyst: Alex Olson
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201981617 MB	25-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201981620 LCS	25-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201981621 LCS	25-NOV-2009 08:00:00	Soil	5	5	1	N/A
241534007	25-NOV-2009 12:35:00	Soil	5	5	1	N/A
241534001	25-NOV-2009 12:38:00	Soil	5	5	1	N/A
1201981618 PS (241534001)	25-NOV-2009 12:40:00	Soil	5	5	1	N/A
1201981619 PSD (241534001)	25-NOV-2009 12:41:00	Soil	5	5	1	N/A
241534002	25-NOV-2009 12:42:00	Soil	5	5	1	N/A
241534003	25-NOV-2009 12:44:00	Soil	5	5	1	N/A
241534004	25-NOV-2009 12:46:00	Soil	5	5	1	N/A
241534005	25-NOV-2009 12:48:00	Soil	5	5	1	N/A
241534006	25-NOV-2009 12:50:00	Soil	5	5	1	N/A
241534008	25-NOV-2009 12:52:00	Soil	5	5	1	N/A
241539003	25-NOV-2009 12:58:00	Soil	5	5	1	N/A
241539004	25-NOV-2009 13:00:00	Soil	5	5	1	N/A
1201984324 MB	30-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201984325 LCS	30-NOV-2009 08:00:00	Soil	5	5	1	N/A
1201984326 LCS	30-NOV-2009 08:00:00	Soil	5	5	1	N/A
241539001	30-NOV-2009 13:20:00	Soil	5	5	1	N/A
241539002	30-NOV-2009 13:21:00	Soil	5	5	1	N/A

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 11/15/2009 Method 8260B/624 Operator: AXO1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1918

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/14/2009

(See pg. 217 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111509V7

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
LONG ICV	W7VM091115-16/17		5+5		
IS	UVM090910-01	1	1	1	
SS	UVM090921-02	1	1	1	
BFB	UVM090921-02				1
SHORT ICV	See 111609v7 Seq		5+5	5+5	

Purge Amount	
5	Water Purge Vol:
N/A	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/15/2009 22:41	7L701.D	12019-----	GEL	BLANK	1uL	1	N/A	1	w	AXO1	N/A	X	BFB TEST
11/15/2009 23:14	7L702.D	UVM090921-02	GEL	BFB01	5mL	1	N/A	28	w	AXO1	N/A	O	
11/15/2009 23:47	7L703.D	W7VM091115-01	GEL	VSTD001	5mL	1	N/A	29	w	AXO1	N/A	X	UVM090911-02B/UVM091012-02D Chloromethane variance see 7L723
11/16/2009 0:20	7L704.D	W7VM091115-02	GEL	VSTD002	5mL	1	N/A	30	w	AXO1	N/A	O	UVM090911-03B/UVM091012-03D
11/16/2009 0:55	7L705.D	W7VM091115-03	GEL	VSTD005	5mL	1	N/A	31	w	AXO1	N/A	O	UVM090911-04B/UVM091012-04D
11/16/2009 1:29	7L706.D	W7VM091115-04	GEL	VSTD010	5mL	1	N/A	32	w	AXO1	N/A	O	UVM090911-05B/UVM091012-05D
11/16/2009 2:03	7L707.D	W7VM091115-05	GEL	VSTD020	5mL	1	N/A	33	w	AXO1	N/A	O	UVM090911-06B/UVM091012-06D
11/16/2009 2:36	7L708.D	W7VM091115-06	GEL	VSTD050	5mL	1	N/A	34	w	AXO1	N/A	O	UVM090911-07B/UVM091012-07D
11/16/2009 3:10	7L709.D	W7VM091115-07	GEL	VSTD100	5mL	1	N/A	35	w	AXO1	N/A	O	UVM090911-08B/UVM091012-08D
11/16/2009 3:43	7L710.D	12019-----	GEL	RINSE	5mL	1	N/A	36	w	AXO1	N/A	X	
11/16/2009 4:18	7L711.D	W7VM091115-08	GEL	VSTD0005	5mL	1	N/A	37	w	AXO1	N/A	O	UVM090911-01B/UVM091012-01D
11/16/2009 4:51	7L712.D	W7VM091115-09	GEL	VSTD005S	5mL	1	N/A	38	w	AXO1	N/A	O	UVM091023-01/UVM091110-01E
11/16/2009 5:25	7L713.D	W7VM091115-10	GEL	VSTD010S	5mL	1	N/A	39	w	AXO1	N/A	O	UVM091023-02/UVM091110-02E
11/16/2009 5:58	7L714.D	W7VM091115-11	GEL	VSTD025S	5mL	1	N/A	40	w	AXO1	N/A	O	UVM091023-03/UVM091110-03E
11/16/2009 6:32	7L715.D	W7VM091115-12	GEL	VSTD050S	5mL	1	N/A	41	w	AXO1	N/A	O	UVM091023-04/UVM091110-04E
11/16/2009 7:05	7L716.D	W7VM091115-13	GEL	VSTD100S	5mL	1	N/A	42	w	AXO1	N/A	O	UVM091023-05/UVM091110-05E
11/16/2009 7:38	7L717.D	W7VM091115-14	GEL	VSTD250S	5mL	1	N/A	43	w	AXO1	N/A	O	UVM091023-06/UVM091110-06E
11/16/2009 8:11	7L718.D	W7VM091115-15	GEL	VSTD500S	5mL	1	N/A	44	w	AXO1	N/A	O	UVM091023-07/UVM091110-07E
11/16/2009 8:45	7L719.D	12019-----	GEL	RINSE	5mL	1	N/A	45	w	AXO1	N/A	X	
11/16/2009 9:18	7L720.D	W7VM091115-16	GEL	ICV	5mL	1	N/A	46	w	AXO1	N/A	X	UVM091105-01A/IVM091111-01 See 111609v7 seq
11/16/2009 9:51	7L721.D	W7VM091115-17	GEL	ICV	5mL	1	N/A	47	w	AXO1	N/A	X	UVM091111-01A/IVM091111-01 See 111609v7 seq
11/16/2009 10:24	7L722.D	12019-----	GEL	RINSE	5mL	1	N/A	48	w	AXO1	N/A	X	
11/16/2009 10:57	7L723.D	W7VM0911115-18	GEL	VSTD001	5mL	1	N/A	49	w	AXO1	N/A	O	UVM090911-02B/UVM091012-02D

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 11/16/2009 Method 8260B/624 Operator: AXO1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1918

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/14/2009

(See pg. 217 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 111609V7

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7VM091116-01		5+5		
IS	UVM090910-01	1	1	1	
SS	UVM090921-02	1	1	1	
LCS/MS	W7VM091116-01/02			5+5	
BFB	UVM090921-02				1
SHORT	W7VM091116-03/04		5+5	5+5	
DHEC	N/A				

Purge Amount	
5	Water Purge Vol:
5g	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/16/2009	13:20	7M101.D	12019-----	GEL	BLANK	5mL	1	N/A	1	w	AXO1	N/A	X	
11/16/2009	13:54	7M102.D	W7VM091116-01	GEL	BFB/CCV/ICV/LCS	5mL	1	N/A	2	w	AXO1	N/A	O	UVM091111-01B/IVM091111-01 Dichlorodiflourmethane high
11/16/2009	14:28	7M103.D	W7VM091116-02	GEL	LCS	5g	1	N/A	3	s	AXO1	N/A	O	UVM091111-01B/IVM091111-01
11/16/2009	15:02	7M104.D	W7VM091116-03	GEL	SHORT/ICV/LCS	5mL	1	N/A	4	w	AXO1	N/A	O	UVM091023-08A/UVM091105-02A Cyclohexanone, Pentachloroethane low
11/16/2009	15:35	7M105.D	W7VM091116-04	GEL	SLCS	5g	1	N/A	5	s	AXO1	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009	16:08	7M106.D	12019-----	GEL	BLANK	5mL	1	N/A	6	w	AXO1	N/A	O	
11/16/2009	16:41	7M107.D	12019-----	GEL	BLANK	5g	1	N/A	7	s	AXO1	N/A	O	
11/16/2009	17:13	7M108.D	240587001	LANL	923260	5g	1	N/A	8	s	AXO1	N/A	O	
11/16/2009	17:46	7M109.D	240587002	LANL	923260	5g	1	N/A	9	s	AXO1	N/A	O	
11/16/2009	18:19	7M110.D	240589001	LANL	923260	5g	1	N/A	10	s	AXO1	N/A	O	
11/16/2009	18:52	7M111.D	240592001	LANL	923260	5g	1	N/A	11	s	AXO1	N/A	O	
11/16/2009	19:25	7M112.D	240579001	LANL	923260	5g	1	N/A	12	s	AXO1	N/A	O	
11/16/2009	19:59	7M113.D	240579002	LANL	923260	5g	1	N/A	13	s	AXO1	N/A	O	
11/16/2009	20:33	7M114.D	240579003	LANL	923260	5g	1	N/A	14	s	AXO1	N/A	O	
11/16/2009	21:07	7M115.D	240587003	LANL	923260	5g	1	N/A	15	s	AXO1	N/A	O	
11/16/2009	21:40	7M116.D	240587004	LANL	923260	5g	1	N/A	16	s	AXO1	N/A	O	
11/16/2009	22:13	7M117.D	240636005	LANL	923260	5g	1	N/A	17	s	AXO1	N/A	O	
11/16/2009	22:46	7M118.D	240504002	KAPL	922073	1mL	5	pH2	18	w	AXO1	N	X	Not Required
11/16/2009	23:18	7M119.D	240504002	KAPL	922073	2.5mL	2	pH2	19	w	AXO1	N	X	Not Required
11/16/2009	23:51	7M120.D	240504002	KAPL	922073	5mL	1	pH2	20	w	AXO1	N	X	Not Required
11/17/2009	0:24	7M121.D	12019-----	GEL	BLANK	5mL	1	N/A	21	w	AXO1	N	X	
11/17/2009	0:57	7M122.D	1201973553	LANL	923260	5g	1	N/A	22	s	AXO1	N/A	O	MS 240579001
11/17/2009	1:31	7M123.D	1201973554	LANL	923260	5g	1	N/A	23	s	AXO1	N/A	O	MSD 240579001

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 11/25/2009 Method 8260B/624 Operator: AXO1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1918

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/15/2009

(See pg. 217 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 112509v7

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7VM091125-02		5+5		
IS	UVM090910-01	1	1	1	
SS	UVM090921-02	1	1	1	
LCS/MS	W7VM091125-02			5+5	
BFB	UVM090921-02				1
SHORT	W7VM091125-03/04		5+5	5+5	
DHEC	N/A				

Purge Amount	
5	Water Purge Vol:
5g	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/25/2009 8:38	7N301.D	12019-----	GEL	BLANK	5mL	1	N/A	1	w	AXO1	N/A	X	
11/25/2009 9:11	7N302.D	W7VM091125-01	GEL	CCV	5mL	1	N/A	2	w	AXO1	N/A	X	UVM091111-01D/IVM091122-01
11/25/2009 9:45	7N303.D	W7VM091125-02	GEL	BFB/CCV/LCS	5g	1	N/A	3	s	AXO1	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 10:19	7N304.D	W7VM091125-03	GEL	SHORT/LCS	5mL	1	N/A	4	w	AXO1	N/A	O	UVM091118-08A/UVM091105-02C
11/25/2009 10:53	7N305.D	W7VM091125-04	GEL	SLCS	5g	1	N/A	5	s	AXO1	N/A	O	UVM091118-08A/UVM091105-02C
11/25/2009 11:27	7N306.D	12019-----	GEL	BLANK	5mL	1	N/A	6	w	AXO1	N/A	X	
11/25/2009 12:00	7N307.D	12019-----	GEL	BLANK	5g	1	N/A	7	s	AXO1	N/A	O	
11/25/2009 12:49	7N308.D	241534007	LANL	926830	5g	1	N/A	8	s	AXO1	N/A	O	
11/25/2009 13:23	7N309.D	241534001	LANL	926830	5g	1	N/A	9	s	AXO1	N/A	O	
11/25/2009 13:56	7N310.D	241534002	LANL	926830	5g	1	N/A	10	s	AXO1	N/A	O	
11/25/2009 14:30	7N311.D	241534003	LANL	926830	5g	1	N/A	11	s	AXO1	N/A	O	
11/25/2009 15:04	7N312.D	241534004	LANL	926830	5g	1	N/A	12	s	AXO1	N/A	O	
11/25/2009 15:39	7N313.D	241534005	LANL	926830	5g	1	N/A	13	s	AXO1	N/A	O	
11/25/2009 16:13	7N314.D	241534006	LANL	926830	5g	1	N/A	14	s	AXO1	N/A	O	
11/25/2009 16:47	7N315.D	241534008	LANL	926830	5g	1	N/A	15	s	AXO1	N/A	O	
11/25/2009 17:21	7N316.D	241539001	LANL	926830	5g	1	N/A	16	s	AXO1	N/A	X	RR IS Failure See file 7O109
11/25/2009 17:55	7N317.D	241539002	LANL	926830	5g	1	N/A	17	s	AXO1	N/A	X	RR IS Failure See file 7O110
11/25/2009 18:29	7N318.D	241539003	LANL	926830	5g	1	N/A	18	s	AXO1	N/A	O	
11/25/2009 19:04	7N319.D	241539004	LANL	926830	5g	1	N/A	19	s	AXO1	N/A	O	
11/25/2009 19:38	7N320.D	1201981618	LANL	926830	5g	1	N/A	20	s	AXO1	N/A	O	MS 241534001
11/25/2009 20:12	7N321.D	1201981619	LANL	926830	5g	1	N/A	21	s	AXO1	N/A	O	MSD 241534001

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-601

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	926126
Prep Batch Number:	926121

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241534001	RE03-09-13975
241534002	RE03-09-13976
241534003	RE03-09-13973
241534004	RE03-09-13972
241534005	RE03-09-13977
241534006	RE03-09-13974
241534008	RE03-10-3915
1201980154	Method Blank (MB)
1201980155	241524002(WST03-10-2132) Matrix Spike (MS)
1201980156	241524002(WST03-10-2132) Matrix Spike Duplicate (MSD)
1201980157	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
The non-SDG sample 241524002 (WST03-10-2132) was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD(1201980156) recovered 2,4-Dinitrophenol at 21%. The limits are 25%-104%. Since the MS displayed a similar low (but passing) recovery to the MSD, the failure was attributed to matrix interference and the data results have been reported.

MS/MSD Relative Percent Difference (RPD) Statement
Multiple MS(1201980155)/MSD(1201980156) RPD values were outside of the established acceptance limits. Please see the QC Summary Report for specific failures. Since the analytes were all individually within the acceptance limits for the MS and MSD (with the exception of 2,4-Dinitrophenol), the data results have been reported. The 2,4-Dinitrophenol RPD failure was attributed to matrix interference and the data results have been reported (see MSD recovery statement above).

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
A non-conformance report was not required for the samples reported in this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration
The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD1.I	HP 5973 Mass Spectrometer	HP6890/HP5973	ZB-5ms	25m x 0.2mm, 0.33um (5% Polysilarylene-95% Polydimethylsiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: _____ **Date:** 12-14-09

Roadmap for LANL 10-601 SVOA

This roadmap was analyzed by amy01291 on 12-01-2009, 12:14.
This roadmap was reviewed by bar00895 on 12-01-2009, 14:33.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2922.d	241534001	29-NOV-2009	20:46	10-601.sub	RE03-09-13975	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2923.d	241534002	29-NOV-2009	21:09	10-601.sub	RE03-09-13976	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2924.d	241534003	29-NOV-2009	21:32	10-601.sub	RE03-09-13973	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2925.d	241534004	29-NOV-2009	21:56	10-601.sub	RE03-09-13972	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2926.d	241534005	29-NOV-2009	22:19	10-601.sub	RE03-09-13977	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2927.d	241534006	29-NOV-2009	22:42	10-601.sub	RE03-09-13974	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2928.d	241534008	29-NOV-2009	23:06	10-601.sub	RE03-10-3915	1	926126	REPORT

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2912-3.d	1201980154	mb	29-NOV-2009	16:50	10-601.sub	SBLK01	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2913-3.d	1201980157	lcs	29-NOV-2009	17:14	10-601.sub	SBLK01LCS	1	926126	REPORT

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:56	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2925.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	72.9	365
108-95-2	Phenol	U	365	ug/kg	72.9	365
95-57-8	2-Chlorophenol	U	365	ug/kg	72.9	365
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	72.9	365
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	72.9	365
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	72.9	365
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365
87-86-5	Pentachlorophenol	U	365	ug/kg	91.2	365
129-00-0	Pyrene	U	36.5	ug/kg	10.9	36.5
110-86-1	Pyridine	U	365	ug/kg	72.9	365
62-53-3	Aniline	U	365	ug/kg	109	365
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	72.9	365
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	72.9	365
100-51-6	Benzyl alcohol	U	365	ug/kg	109	365
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	72.9	365
108-60-1	bis(2-Chloroisopropyl)ether	U	365	ug/kg	72.9	365
95-48-7	o-Cresol	U	365	ug/kg	72.9	365
65794-96-9	m,p-Cresols	U	365	ug/kg	109	365
67-72-1	Hexachloroethane	U	365	ug/kg	72.9	365
98-95-3	Nitrobenzene	U	365	ug/kg	72.9	365
78-59-1	Isophorone	U	365	ug/kg	72.9	365
88-75-5	2-Nitrophenol	U	365	ug/kg	72.9	365
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	72.9	365
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	72.9	365
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.5	ug/kg	10.9	36.5
106-47-8	4-Chloroaniline	U	365	ug/kg	72.9	365
87-68-3	Hexachlorobutadiene	U	365	ug/kg	72.9	365
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.29	36.5
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	72.9	365
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	72.9	365
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	72.9	365
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5
88-74-4	2-Nitroaniline	U	365	ug/kg	72.9	365
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	365	ug/kg	72.9	365

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.1	Dilution:	1
Run Date:	11/29/2009 21:56	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2925.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	365	ug/kg	72.9	365
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365
208-96-8	Acenaphthylene	U	36.5	ug/kg	10.9	36.5
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	139	729
132-64-9	Dibenzofuran	U	365	ug/kg	72.9	365
84-66-2	Diethylphthalate	U	365	ug/kg	72.9	365
86-73-7	Fluorene	U	36.5	ug/kg	10.9	36.5
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	72.9	365
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	72.9	365
100-01-6	4-Nitroaniline	U	365	ug/kg	109	365
	p-Nitroaniline					
122-39-4	Diphenylamine	U	365	ug/kg	72.9	365
122-66-7	Azobenzene	U	365	ug/kg	72.9	365
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	72.9	365
118-74-1	Hexachlorobenzene	U	365	ug/kg	72.9	365
85-01-8	Phenanthrene	U	36.5	ug/kg	10.9	36.5
120-12-7	Anthracene	U	36.5	ug/kg	7.29	36.5
84-74-2	Di-n-butylphthalate	U	365	ug/kg	72.9	365
206-44-0	Fluoranthene	U	36.5	ug/kg	10.9	36.5
85-68-7	Butylbenzylphthalate	U	365	ug/kg	72.9	365
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	10.9	36.5
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	109	365
218-01-9	Chrysene	U	36.5	ug/kg	10.9	36.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	72.9	365
117-84-0	Di-n-octylphthalate	U	365	ug/kg	72.9	365
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	10.9	36.5
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	10.9	36.5
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	10.9	36.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	10.9	36.5
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	10.9	36.5
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	10.9	36.5
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	72.9	365

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	910	ug/kg		J
	Unknown Aldol Condensate	2.87	278	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13972**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:56**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2925.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	3.79	257	ug/kg	97	NJ
3310-94-9	Methyl palustrate isomer	8.05	153	ug/kg	83	NJ
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.06	316	ug/kg	91	NJ
	Unknown	8.12	314	ug/kg		J
127-25-3	Methyl abietate	8.25	211	ug/kg	95	NJ
	Unknown	8.37	172	ug/kg		J
	Unknown	11.58	667	ug/kg		J
	Unknown	11.76	283	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534003	Date Received:	11/20/2009 08:50	%Moisture:	8.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13973	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s1k2924.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.7	363
108-95-2	Phenol	U	363	ug/kg	72.7	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.7	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.7	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.7	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.7	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.9	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.7	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.7	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.7	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.7	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.7	363
95-48-7	o-Cresol	U	363	ug/kg	72.7	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.7	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.7	363
78-59-1	Isophorone	U	363	ug/kg	72.7	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.7	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.7	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.7	363
65-85-0	Benzoic acid	U	727	ug/kg	182	727
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.7	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.7	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.27	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.7	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.7	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.7	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	363	ug/kg	72.7	363
99-09-2	3-Nitroaniline	U	363	ug/kg	72.7	363

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534003	Date Received:	11/20/2009 08:50	%Moisture:	8.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13973	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.l	Dilution:	1
Run Date:	11/29/2009 21:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s1k2924.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.7	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	727	ug/kg	138	727
132-64-9	Dibenzofuran	U	363	ug/kg	72.7	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.7	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.7	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.7	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	p-Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.7	363
122-66-7	Azobenzene	U	363	ug/kg	72.7	363
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.7	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.7	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.27	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.7	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.7	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.7	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.7	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.7	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.87	275	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:42	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2927.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	387	ug/kg	77.3	387
108-95-2	Phenol	U	387	ug/kg	77.3	387
95-57-8	2-Chlorophenol	U	387	ug/kg	77.3	387
106-46-7	1,4-Dichlorobenzene	U	387	ug/kg	77.3	387
621-64-7	N-Nitrosodipropylamine	U	387	ug/kg	77.3	387
59-50-7	4-Chloro-3-methylphenol	U	387	ug/kg	77.3	387
83-32-9	Acenaphthene	U	38.7	ug/kg	12.8	38.7
121-14-2	2,4-Dinitrotoluene	U	387	ug/kg	38.7	387
100-02-7	4-Nitrophenol	U	387	ug/kg	128	387
87-86-5	Pentachlorophenol	U	387	ug/kg	96.7	387
129-00-0	Pyrene	U	38.7	ug/kg	11.6	38.7
110-86-1	Pyridine	U	387	ug/kg	77.3	387
62-53-3	Aniline	U	387	ug/kg	116	387
111-44-4	bis(2-Chloroethyl) ether	U	387	ug/kg	77.3	387
541-73-1	1,3-Dichlorobenzene	U	387	ug/kg	77.3	387
100-51-6	Benzyl alcohol	U	387	ug/kg	116	387
95-50-1	1,2-Dichlorobenzene	U	387	ug/kg	77.3	387
108-60-1	bis(2-Chloroisopropyl)ether	U	387	ug/kg	77.3	387
95-48-7	o-Cresol	U	387	ug/kg	77.3	387
65794-96-9	m,p-Cresols	U	387	ug/kg	116	387
67-72-1	Hexachloroethane	U	387	ug/kg	77.3	387
98-95-3	Nitrobenzene	U	387	ug/kg	77.3	387
78-59-1	Isophorone	U	387	ug/kg	77.3	387
88-75-5	2-Nitrophenol	U	387	ug/kg	77.3	387
105-67-9	2,4-Dimethylphenol	U	387	ug/kg	135	387
111-91-1	bis(2-Chloroethoxy)methane	U	387	ug/kg	77.3	387
120-83-2	2,4-Dichlorophenol	U	387	ug/kg	77.3	387
65-85-0	Benzoic acid	U	773	ug/kg	193	773
91-20-3	Naphthalene	U	38.7	ug/kg	11.6	38.7
106-47-8	4-Chloroaniline	U	387	ug/kg	77.3	387
87-68-3	Hexachlorobutadiene	U	387	ug/kg	77.3	387
91-57-6	2-Methylnaphthalene	U	38.7	ug/kg	7.73	38.7
77-47-4	Hexachlorocyclopentadiene	U	387	ug/kg	77.3	387
88-06-2	2,4,6-Trichlorophenol	U	387	ug/kg	77.3	387
95-95-4	2,4,5-Trichlorophenol	U	387	ug/kg	77.3	387
91-58-7	2-Chloronaphthalene	U	38.7	ug/kg	12.8	38.7
88-74-4	2-Nitroaniline	U	387	ug/kg	77.3	387
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	387	ug/kg	77.3	387

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:42	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2927.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	387	ug/kg	77.3	387
606-20-2	2,6-Dinitrotoluene	U	387	ug/kg	38.7	387
208-96-8	Acenaphthylene	U	38.7	ug/kg	11.6	38.7
51-28-5	2,4-Dinitrophenol	U	773	ug/kg	147	773
132-64-9	Dibenzofuran	U	387	ug/kg	77.3	387
84-66-2	Diethylphthalate	U	387	ug/kg	77.3	387
86-73-7	Fluorene	U	38.7	ug/kg	11.6	38.7
7005-72-3	4-Chlorophenylphenylether	U	387	ug/kg	77.3	387
534-52-1	2-Methyl-4,6-dinitrophenol	U	387	ug/kg	77.3	387
100-01-6	4-Nitroaniline	U	387	ug/kg	116	387
	p-Nitroaniline					
122-39-4	Diphenylamine	U	387	ug/kg	77.3	387
122-66-7	Azobenzene	U	387	ug/kg	77.3	387
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	387	ug/kg	77.3	387
118-74-1	Hexachlorobenzene	U	387	ug/kg	77.3	387
85-01-8	Phenanthrene	U	38.7	ug/kg	11.6	38.7
120-12-7	Anthracene	U	38.7	ug/kg	7.73	38.7
84-74-2	Di-n-butylphthalate	U	387	ug/kg	77.3	387
206-44-0	Fluoranthene	U	38.7	ug/kg	11.6	38.7
85-68-7	Butylbenzylphthalate	U	387	ug/kg	77.3	387
56-55-3	Benzo(a)anthracene	U	38.7	ug/kg	11.6	38.7
91-94-1	3,3'-Dichlorobenzidine	U	387	ug/kg	116	387
218-01-9	Chrysene	U	38.7	ug/kg	11.6	38.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	387	ug/kg	77.3	387
117-84-0	Di-n-octylphthalate	U	387	ug/kg	77.3	387
205-99-2	Benzo(b)fluoranthene	U	38.7	ug/kg	11.6	38.7
207-08-9	Benzo(k)fluoranthene	U	38.7	ug/kg	11.6	38.7
50-32-8	Benzo(a)pyrene	U	38.7	ug/kg	11.6	38.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.7	ug/kg	11.6	38.7
53-70-3	Dibenzo(a,h)anthracene	U	38.7	ug/kg	11.6	38.7
191-24-2	Benzo(ghi)perylene	U	38.7	ug/kg	11.6	38.7
120-82-1	1,2,4-Trichlorobenzene	U	387	ug/kg	77.3	387

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	279	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:46	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1k2922.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	403	ug/kg	80.7	403
108-95-2	Phenol	U	403	ug/kg	80.7	403
95-57-8	2-Chlorophenol	U	403	ug/kg	80.7	403
106-46-7	1,4-Dichlorobenzene	U	403	ug/kg	80.7	403
621-64-7	N-Nitrosodipropylamine	U	403	ug/kg	80.7	403
59-50-7	4-Chloro-3-methylphenol	U	403	ug/kg	80.7	403
83-32-9	Acenaphthene	U	40.3	ug/kg	13.3	40.3
121-14-2	2,4-Dinitrotoluene	U	403	ug/kg	40.3	403
100-02-7	4-Nitrophenol	U	403	ug/kg	133	403
87-86-5	Pentachlorophenol	U	403	ug/kg	101	403
129-00-0	Pyrene	U	40.3	ug/kg	12.1	40.3
110-86-1	Pyridine	U	403	ug/kg	80.7	403
62-53-3	Aniline	U	403	ug/kg	121	403
111-44-4	bis(2-Chloroethyl) ether	U	403	ug/kg	80.7	403
541-73-1	1,3-Dichlorobenzene	U	403	ug/kg	80.7	403
100-51-6	Benzyl alcohol	U	403	ug/kg	121	403
95-50-1	1,2-Dichlorobenzene	U	403	ug/kg	80.7	403
108-60-1	bis(2-Chloroisopropyl)ether	U	403	ug/kg	80.7	403
95-48-7	o-Cresol	U	403	ug/kg	80.7	403
65794-96-9	m,p-Cresols	U	403	ug/kg	121	403
67-72-1	Hexachloroethane	U	403	ug/kg	80.7	403
98-95-3	Nitrobenzene	U	403	ug/kg	80.7	403
78-59-1	Isophorone	U	403	ug/kg	80.7	403
88-75-5	2-Nitrophenol	U	403	ug/kg	80.7	403
105-67-9	2,4-Dimethylphenol	U	403	ug/kg	141	403
111-91-1	bis(2-Chloroethoxy)methane	U	403	ug/kg	80.7	403
120-83-2	2,4-Dichlorophenol	U	403	ug/kg	80.7	403
65-85-0	Benzoic acid	U	807	ug/kg	202	807
91-20-3	Naphthalene	U	40.3	ug/kg	12.1	40.3
106-47-8	4-Chloroaniline	U	403	ug/kg	80.7	403
87-68-3	Hexachlorobutadiene	U	403	ug/kg	80.7	403
91-57-6	2-Methylnaphthalene	U	40.3	ug/kg	8.07	40.3
77-47-4	Hexachlorocyclopentadiene	U	403	ug/kg	80.7	403
88-06-2	2,4,6-Trichlorophenol	U	403	ug/kg	80.7	403
95-95-4	2,4,5-Trichlorophenol	U	403	ug/kg	80.7	403
91-58-7	2-Chloronaphthalene	U	40.3	ug/kg	13.3	40.3
88-74-4	2-Nitroaniline	U	403	ug/kg	80.7	403
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	403	ug/kg	80.7	403

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:46	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1k2922.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	403	ug/kg	80.7	403
606-20-2	2,6-Dinitrotoluene	U	403	ug/kg	40.3	403
208-96-8	Acenaphthylene	U	40.3	ug/kg	12.1	40.3
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807
132-64-9	Dibenzofuran	U	403	ug/kg	80.7	403
84-66-2	Diethylphthalate	U	403	ug/kg	80.7	403
86-73-7	Fluorene	U	40.3	ug/kg	12.1	40.3
7005-72-3	4-Chlorophenylphenylether	U	403	ug/kg	80.7	403
534-52-1	2-Methyl-4,6-dinitrophenol	U	403	ug/kg	80.7	403
100-01-6	4-Nitroaniline	U	403	ug/kg	121	403
	p-Nitroaniline					
122-39-4	Diphenylamine	U	403	ug/kg	80.7	403
122-66-7	Azobenzene	U	403	ug/kg	80.7	403
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	403	ug/kg	80.7	403
118-74-1	Hexachlorobenzene	U	403	ug/kg	80.7	403
85-01-8	Phenanthrene	U	40.3	ug/kg	12.1	40.3
120-12-7	Anthracene	U	40.3	ug/kg	8.07	40.3
84-74-2	Di-n-butylphthalate	U	403	ug/kg	80.7	403
206-44-0	Fluoranthene	U	40.3	ug/kg	12.1	40.3
85-68-7	Butylbenzylphthalate	U	403	ug/kg	80.7	403
56-55-3	Benzo(a)anthracene	U	40.3	ug/kg	12.1	40.3
91-94-1	3,3'-Dichlorobenzidine	U	403	ug/kg	121	403
218-01-9	Chrysene	U	40.3	ug/kg	12.1	40.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	403	ug/kg	80.7	403
117-84-0	Di-n-octylphthalate	U	403	ug/kg	80.7	403
205-99-2	Benzo(b)fluoranthene	U	40.3	ug/kg	12.1	40.3
207-08-9	Benzo(k)fluoranthene	U	40.3	ug/kg	12.1	40.3
50-32-8	Benzo(a)pyrene	U	40.3	ug/kg	12.1	40.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.3	ug/kg	12.1	40.3
53-70-3	Dibenzo(a,h)anthracene	U	40.3	ug/kg	12.1	40.3
191-24-2	Benzo(ghi)perylene	U	40.3	ug/kg	12.1	40.3
120-82-1	1,2,4-Trichlorobenzene	U	403	ug/kg	80.7	403

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.87	312	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:09	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2923.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.3	397
108-95-2	Phenol	U	397	ug/kg	79.3	397
95-57-8	2-Chlorophenol	U	397	ug/kg	79.3	397
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.3	397
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.3	397
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.3	397
83-32-9	Acenaphthene	J	34.5	ug/kg	13.1	39.7
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397
87-86-5	Pentachlorophenol	U	397	ug/kg	99.1	397
129-00-0	Pyrene		242	ug/kg	11.9	39.7
110-86-1	Pyridine	U	397	ug/kg	79.3	397
62-53-3	Aniline	U	397	ug/kg	119	397
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.3	397
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.3	397
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.3	397
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.3	397
95-48-7	o-Cresol	U	397	ug/kg	79.3	397
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397
67-72-1	Hexachloroethane	U	397	ug/kg	79.3	397
98-95-3	Nitrobenzene	U	397	ug/kg	79.3	397
78-59-1	Isophorone	U	397	ug/kg	79.3	397
88-75-5	2-Nitrophenol	U	397	ug/kg	79.3	397
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.3	397
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.3	397
65-85-0	Benzoic acid	U	793	ug/kg	198	793
91-20-3	Naphthalene	J	17.1	ug/kg	11.9	39.7
106-47-8	4-Chloroaniline	U	397	ug/kg	79.3	397
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.3	397
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.93	39.7
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.3	397
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.3	397
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.3	397
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7
88-74-4	2-Nitroaniline	U	397	ug/kg	79.3	397
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	397	ug/kg	79.3	397

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13976	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 21:09	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2923.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	397	ug/kg	79.3	397
606-20-2	2,6-Dinitrotoluene	U	397	ug/kg	39.7	397
208-96-8	Acenaphthylene	U	39.7	ug/kg	11.9	39.7
51-28-5	2,4-Dinitrophenol	U	793	ug/kg	151	793
132-64-9	Dibenzofuran	U	397	ug/kg	79.3	397
84-66-2	Diethylphthalate	U	397	ug/kg	79.3	397
86-73-7	Fluorene	J	30.0	ug/kg	11.9	39.7
7005-72-3	4-Chlorophenylphenylether	U	397	ug/kg	79.3	397
534-52-1	2-Methyl-4,6-dinitrophenol	U	397	ug/kg	79.3	397
100-01-6	4-Nitroaniline	U	397	ug/kg	119	397
	p-Nitroaniline					
122-39-4	Diphenylamine	U	397	ug/kg	79.3	397
122-66-7	Azobenzene	U	397	ug/kg	79.3	397
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	397	ug/kg	79.3	397
118-74-1	Hexachlorobenzene	U	397	ug/kg	79.3	397
85-01-8	Phenanthrene		207	ug/kg	11.9	39.7
120-12-7	Anthracene		53.8	ug/kg	7.93	39.7
84-74-2	Di-n-butylphthalate	U	397	ug/kg	79.3	397
206-44-0	Fluoranthene		249	ug/kg	11.9	39.7
85-68-7	Butylbenzylphthalate	U	397	ug/kg	79.3	397
56-55-3	Benzo(a)anthracene		97.7	ug/kg	11.9	39.7
91-94-1	3,3'-Dichlorobenzidine	U	397	ug/kg	119	397
218-01-9	Chrysene		101	ug/kg	11.9	39.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	397	ug/kg	79.3	397
117-84-0	Di-n-octylphthalate	U	397	ug/kg	79.3	397
205-99-2	Benzo(b)fluoranthene		231	ug/kg	11.9	39.7
207-08-9	Benzo(k)fluoranthene	U	39.7	ug/kg	11.9	39.7
50-32-8	Benzo(a)pyrene		71.9	ug/kg	11.9	39.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.7	ug/kg	11.9	39.7
53-70-3	Dibenzo(a,h)anthracene	U	39.7	ug/kg	11.9	39.7
191-24-2	Benzo(ghi)perylene	U	39.7	ug/kg	11.9	39.7
120-82-1	1,2,4-Trichlorobenzene	U	397	ug/kg	79.3	397

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	298	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.07	298	ug/kg	83	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2926.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	396	ug/kg	79.1	396
108-95-2	Phenol	U	396	ug/kg	79.1	396
95-57-8	2-Chlorophenol	U	396	ug/kg	79.1	396
106-46-7	1,4-Dichlorobenzene	U	396	ug/kg	79.1	396
621-64-7	N-Nitrosodipropylamine	U	396	ug/kg	79.1	396
59-50-7	4-Chloro-3-methylphenol	U	396	ug/kg	79.1	396
83-32-9	Acenaphthene	U	39.6	ug/kg	13.1	39.6
121-14-2	2,4-Dinitrotoluene	U	396	ug/kg	39.6	396
100-02-7	4-Nitrophenol	U	396	ug/kg	131	396
87-86-5	Pentachlorophenol	U	396	ug/kg	98.9	396
129-00-0	Pyrene	U	39.6	ug/kg	11.9	39.6
110-86-1	Pyridine	U	396	ug/kg	79.1	396
62-53-3	Aniline	U	396	ug/kg	119	396
111-44-4	bis(2-Chloroethyl) ether	U	396	ug/kg	79.1	396
541-73-1	1,3-Dichlorobenzene	U	396	ug/kg	79.1	396
100-51-6	Benzyl alcohol	U	396	ug/kg	119	396
95-50-1	1,2-Dichlorobenzene	U	396	ug/kg	79.1	396
108-60-1	bis(2-Chloroisopropyl)ether	U	396	ug/kg	79.1	396
95-48-7	o-Cresol	U	396	ug/kg	79.1	396
65794-96-9	m,p-Cresols	U	396	ug/kg	119	396
67-72-1	Hexachloroethane	U	396	ug/kg	79.1	396
98-95-3	Nitrobenzene	U	396	ug/kg	79.1	396
78-59-1	Isophorone	U	396	ug/kg	79.1	396
88-75-5	2-Nitrophenol	U	396	ug/kg	79.1	396
105-67-9	2,4-Dimethylphenol	U	396	ug/kg	138	396
111-91-1	bis(2-Chloroethoxy)methane	U	396	ug/kg	79.1	396
120-83-2	2,4-Dichlorophenol	U	396	ug/kg	79.1	396
65-85-0	Benzoic acid	U	791	ug/kg	198	791
91-20-3	Naphthalene	U	39.6	ug/kg	11.9	39.6
106-47-8	4-Chloroaniline	U	396	ug/kg	79.1	396
87-68-3	Hexachlorobutadiene	U	396	ug/kg	79.1	396
91-57-6	2-Methylnaphthalene	U	39.6	ug/kg	7.91	39.6
77-47-4	Hexachlorocyclopentadiene	U	396	ug/kg	79.1	396
88-06-2	2,4,6-Trichlorophenol	U	396	ug/kg	79.1	396
95-95-4	2,4,5-Trichlorophenol	U	396	ug/kg	79.1	396
91-58-7	2-Chloronaphthalene	U	39.6	ug/kg	13.1	39.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	396	ug/kg	79.1	396
99-09-2	3-Nitroaniline	U	396	ug/kg	79.1	396

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534005**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13977**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 22:19**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2926.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	396	ug/kg	79.1	396
606-20-2	2,6-Dinitrotoluene	U	396	ug/kg	39.6	396
208-96-8	Acenaphthylene	U	39.6	ug/kg	11.9	39.6
51-28-5	2,4-Dinitrophenol	U	791	ug/kg	150	791
132-64-9	Dibenzofuran	U	396	ug/kg	79.1	396
84-66-2	Diethylphthalate	U	396	ug/kg	79.1	396
86-73-7	Fluorene	U	39.6	ug/kg	11.9	39.6
7005-72-3	4-Chlorophenylphenylether	U	396	ug/kg	79.1	396
534-52-1	2-Methyl-4,6-dinitrophenol	U	396	ug/kg	79.1	396
100-01-6	4-Nitroaniline	U	396	ug/kg	119	396
	p-Nitroaniline					
122-39-4	Diphenylamine	U	396	ug/kg	79.1	396
122-66-7	Azobenzene	U	396	ug/kg	79.1	396
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	396	ug/kg	79.1	396
118-74-1	Hexachlorobenzene	U	396	ug/kg	79.1	396
85-01-8	Phenanthrene	U	39.6	ug/kg	11.9	39.6
120-12-7	Anthracene	U	39.6	ug/kg	7.91	39.6
84-74-2	Di-n-butylphthalate	U	396	ug/kg	79.1	396
206-44-0	Fluoranthene	U	39.6	ug/kg	11.9	39.6
85-68-7	Butylbenzylphthalate	U	396	ug/kg	79.1	396
56-55-3	Benzo(a)anthracene	U	39.6	ug/kg	11.9	39.6
91-94-1	3,3'-Dichlorobenzidine	U	396	ug/kg	119	396
218-01-9	Chrysene	U	39.6	ug/kg	11.9	39.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	396	ug/kg	79.1	396
117-84-0	Di-n-octylphthalate	U	396	ug/kg	79.1	396
205-99-2	Benzo(b)fluoranthene	U	39.6	ug/kg	11.9	39.6
207-08-9	Benzo(k)fluoranthene	U	39.6	ug/kg	11.9	39.6
50-32-8	Benzo(a)pyrene	U	39.6	ug/kg	11.9	39.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.6	ug/kg	11.9	39.6
53-70-3	Dibenzo(a,h)anthracene	U	39.6	ug/kg	11.9	39.6
191-24-2	Benzo(ghi)perylene	U	39.6	ug/kg	11.9	39.6
120-82-1	1,2,4-Trichlorobenzene	U	396	ug/kg	79.1	396

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	323	ug/kg		JA
	Unknown	9.82	1740	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13977	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 22:19	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2926.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.49	1650	ug/kg		J
	Unknown	11.57	208	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534008	Date Received:	11/20/2009 08:50	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3915	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:06	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s1k2928.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	183	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	367	ug/kg	73.4	367
99-09-2	3-Nitroaniline	U	367	ug/kg	73.4	367

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534008	Date Received:	11/20/2009 08:50	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3915	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 23:06	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s1k2928.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	367	ug/kg	73.4	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	139	734
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	p-Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	276	ug/kg		JA

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-601

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201980154	MB for batch 926121	80	76	85	91	92	97
1201980157	LCS for batch 926121	79	75	79	89	100	97
241534001	RE03-09-13975	69	70	73	80	89	106
241534002	RE03-09-13976	73	71	76	84	95	106
241534003	RE03-09-13973	73	75	77	86	92	95
241534004	RE03-09-13972	78	76	80	89	98	109
241534005	RE03-09-13977	71	74	78	85	93	107
241534006	RE03-09-13974	73	73	76	84	96	103
241534008	RE03-10-3915	72	73	79	89	90	108

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1770	0.00	U	1150	65	32-90
108-95-2	MS	Phenol	1770	0.00	U	1200	68	32-105
95-57-8	MS	2-Chlorophenol	1770	0.00	U	1170	66	33-106
106-46-7	MS	1,4-Dichlorobenzene	1770	0.00	U	1060	60	33-95
621-64-7	MS	N-Nitrosodipropylamine	1770	0.00	U	1120	63	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1770	0.00	U	1230	70	38-119
83-32-9	MS	Acenaphthene	1770	0.00	U	1210	68	39-100
121-14-2	MS	2,4-Dinitrotoluene	1770	0.00	U	1140	64	42-107
100-02-7	MS	4-Nitrophenol	1770	0.00	U	1160	65	24-120
87-86-5	MS	Pentachlorophenol	1770	0.00	U	1250	70	26-121
129-00-0	MS	Pyrene	1770	59.8		1460	79	34-120
110-86-1	MS	Pyridine	1770	0.00	U	786	44	30-95
62-53-3	MS	Aniline	1770	0.00	U	949	54	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1770	0.00	U	1110	63	34-101
541-73-1	MS	1,3-Dichlorobenzene	1770	0.00	U	1010	57	31-97
100-51-6	MS	Benzyl alcohol	1770	0.00	U	908	51	17-120
95-50-1	MS	1,2-Dichlorobenzene	1770	0.00	U	1090	62	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1770	0.00	U	1100	62	32-113
95-48-7	MS	o-Cresol	1770	0.00	U	1630	92	31-119
65794-96-9	MS	m,p-Cresols	1770	0.00	U	1360	77	35-125
67-72-1	MS	Hexachloroethane	1770	0.00	U	996	56	30-100
98-95-3	MS	Nitrobenzene	1770	0.00	U	1220	69	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1770	0.00	U	1310	74	34-110
88-75-5	MS	2-Nitrophenol	1770	0.00	U	1120	63	32-108
105-67-9	MS	2,4-Dimethylphenol	1770	0.00	U	1230	69	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1770	0.00	U	1120	63	35-108
120-83-2	MS	2,4-Dichlorophenol	1770	0.00	U	1160	65	38-110
65-85-0	MS	Benzoic acid	3540	0.00	U	1170	33	18-134
91-20-3	MS	Naphthalene	1770	0.00	U	1140	64	31-105
106-47-8	MS	4-Chloroaniline	1770	0.00	U	1010	57	29-123
87-68-3	MS	Hexachlorobutadiene	1770	0.00	U	1150	65	31-109
91-57-6	MS	2-Methylnaphthalene	1770	0.00	U	1190	67	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1770	0.00	U	1580	89	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1770	0.00	U	1390	78	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1770	0.00	U	1440	81	37-116
91-58-7	MS	2-Chloronaphthalene	1770	0.00	U	1190	67	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1110	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	980	55	39-117
131-11-3	MS	Dimethylphthalate	1770	0.00	U	1330	75	41-105
606-20-2	MS	2,6-Dinitrotoluene	1770	0.00	U	1230	69	41-103
208-96-8	MS	Acenaphthylene	1770	0.00	U	1240	70	41-103
51-28-5	MS	2,4-Dinitrophenol	1770	0.00	U	513	29	25-104
132-64-9	MS	Dibenzofuran	1770	0.00	U	1450	82	40-114
84-66-2	MS	Diethylphthalate	1770	0.00	U	1410	80	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1770	0.00	U	1280	72	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1770	0.00	U	1380	78	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1770	0.00	U	647	37	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	1040	59	35-139
122-39-4	MS	Diphenylamine	1770	0.00	U	1290	73	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1310	74	37-118
101-55-3	MS	4-Bromophenylphenylether	1770	0.00	U	1540	87	39-112
118-74-1	MS	Hexachlorobenzene	1770	0.00	U	1230	70	38-113
85-01-8	MS	Phenanthrene	1770	61.1		1300	70	38-110
120-12-7	MS	Anthracene	1770	14.7	J	1240	69	38-112
84-74-2	MS	Di-n-butylphthalate	1770	0.00	U	1480	84	42-119
206-44-0	MS	Fluoranthene	1770	64.8		1270	68	38-119
85-68-7	MS	Butylbenzylphthalate	1770	0.00	U	1710	97	39-126
56-55-3	MS	Benzo(a)anthracene	1770	29.5	J	1290	71	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1770	0.00	U	1070	61	35-106
218-01-9	MS	Chrysene	1770	26.2	J	1160	64	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1770	0.00	U	1560	88	40-125
117-84-0	MS	Di-n-octylphthalate	1770	0.00	U	1850	104	30-147
205-99-2	MS	Benzo(b)fluoranthene	1770	0.00	U	1530	86	38-117
207-08-9	MS	Benzo(k)fluoranthene	1770	0.00	U	1220	69	39-120
50-32-8	MS	Benzo(a)pyrene	1770	16.9	J	1280	71	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1770	0.00	U	1000	57	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1770	0.00	U	1030	58	32-124
191-24-2	MS	Benzo(ghi)perylene	1770	0.00	U	942	53	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1770	0.00	U	1130	64	31-105

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-601

Client ID: WST03-10-2132MSD

Lab Sample ID: 1201980156

Instrument: MSD1.I

Analyst: AMY

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 6.2

Analysis Date: 11/29/2009 20:22

Dilution: 1

Prep Batch ID: 926121

Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD	N-Methyl-N-nitrosomethylam	1770	0.00	U	1120	63	32-90	3	0-30
108-95-2	MSD	Phenol	1770	0.00	U	1120	63	32-105	7	0-30
95-57-8	MSD	2-Chlorophenol	1770	0.00	U	1120	63	33-106	4	0-30
106-46-7	MSD	1,4-Dichlorobenzene	1770	0.00	U	1020	58	33-95	4	0-30
621-64-7	MSD	N-Nitrosodipropylamine	1770	0.00	U	1010	57	31-109	10	0-30
59-50-7	MSD	4-Chloro-3-methylphenol	1770	0.00	U	1150	65	38-119	7	0-30
83-32-9	MSD	Acenaphthene	1770	0.00	U	1130	64	39-100	6	0-30
121-14-2	MSD	2,4-Dinitrotoluene	1770	0.00	U	1030	59	42-107	9	0-30
100-02-7	MSD	4-Nitrophenol	1770	0.00	U	1090	62	24-120	6	0-30
87-86-5	MSD	Pentachlorophenol	1770	0.00	U	1030	58	26-121	19	0-30
129-00-0	MSD	Pyrene	1770	59.8		1410	76	34-120	4	0-30
110-86-1	MSD	Pyridine	1770	0.00	U	826	47	30-95	5	0-30
62-53-3	MSD	Aniline	1770	0.00	U	944	53	34-111	1	0-30
111-44-4	MSD	bis(2-Chloroethyl) ether	1770	0.00	U	1080	61	34-101	3	0-30
541-73-1	MSD	1,3-Dichlorobenzene	1770	0.00	U	981	55	31-97	3	0-30
100-51-6	MSD	Benzyl alcohol	1770	0.00	U	723	41	17-120	23	0-30
95-50-1	MSD	1,2-Dichlorobenzene	1770	0.00	U	1050	60	32-102	4	0-30
108-60-1	MSD	bis(2-Chloroisopropyl)ether	1770	0.00	U	1070	60	32-113	3	0-30
95-48-7	MSD	o-Cresol	1770	0.00	U	1530	87	31-119	6	0-30
65794-96-9	MSD	m,p-Cresols	1770	0.00	U	1280	72	35-125	6	0-30
67-72-1	MSD	Hexachloroethane	1770	0.00	U	914	52	30-100	9	0-30
98-95-3	MSD	Nitrobenzene	1770	0.00	U	1160	66	33-108	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD	Isophorone	1770	0.00	U	1230	70	34-110	6	0-30
88-75-5	MSD	2-Nitrophenol	1770	0.00	U	1010	57	32-108	11	0-30
105-67-9	MSD	2,4-Dimethylphenol	1770	0.00	U	1140	65	32-115	7	0-30
111-91-1	MSD	bis(2-Chloroethoxy)methane	1770	0.00	U	1070	60	35-108	4	0-30
120-83-2	MSD	2,4-Dichlorophenol	1770	0.00	U	1090	62	38-110	6	0-30
65-85-0	MSD	Benzoic acid	3540	0.00	U	1310	37	18-134	11	0-30
91-20-3	MSD	Naphthalene	1770	0.00	U	1070	61	31-105	6	0-30
106-47-8	MSD	4-Chloroaniline	1770	0.00	U	973	55	29-123	4	0-30
87-68-3	MSD	Hexachlorobutadiene	1770	0.00	U	1090	62	31-109	5	0-30
91-57-6	MSD	2-Methylnaphthalene	1770	0.00	U	1120	64	32-110	6	0-30
77-47-4	MSD	Hexachlorocyclopentadiene	1770	0.00	U	1040	59	21-122	41 *	0-30
88-06-2	MSD	2,4,6-Trichlorophenol	1770	0.00	U	1250	71	37-108	11	0-30
95-95-4	MSD	2,4,5-Trichlorophenol	1770	0.00	U	1330	75	37-116	8	0-30
91-58-7	MSD	2-Chloronaphthalene	1770	0.00	U	1090	62	37-103	8	0-30
88-74-4	MSD	2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1010	57	36-115	9	0-30
99-09-2	MSD	3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	920	52	39-117	6	0-30
131-11-3	MSD	Dimethylphthalate	1770	0.00	U	1230	70	41-105	8	0-30
606-20-2	MSD	2,6-Dinitrotoluene	1770	0.00	U	1100	62	41-103	11	0-30
208-96-8	MSD	Acenaphthylene	1770	0.00	U	1140	64	41-103	8	0-30
51-28-5	MSD	2,4-Dinitrophenol	1770	0.00	U	364	21 *	25-104	34 *	0-30
132-64-9	MSD	Dibenzofuran	1770	0.00	U	1350	76	40-114	7	0-30
84-66-2	MSD	Diethylphthalate	1770	0.00	U	1320	75	43-110	7	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-601

Client ID: WST03-10-2132MSD

Lab Sample ID: 1201980156

Instrument: MSD1.I

Analyst: AMY

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 6.2

Analysis Date: 11/29/2009 20:22

Dilution: 1

Prep Batch ID: 926121

Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1770	0.00	U	1190	68	48-99	7	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1770	0.00	U	1300	74	42-111	6	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1770	0.00	U	433	25	19-118	40 *	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	948	54	35-139	9	0-30
122-39-4	MSD	Diphenylamine	1770	0.00	U	1170	66	41-112	9	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1200	68	37-118	9	0-30
101-55-3	MSD	4-Bromophenylphenylether	1770	0.00	U	1430	81	39-112	8	0-30
118-74-1	MSD	Hexachlorobenzene	1770	0.00	U	1130	64	38-113	9	0-30
85-01-8	MSD	Phenanthrene	1770	61.1		1190	64	38-110	9	0-30
120-12-7	MSD	Anthracene	1770	14.7	J	1150	64	38-112	7	0-30
84-74-2	MSD	Di-n-butylphthalate	1770	0.00	U	1360	77	42-119	9	0-30
206-44-0	MSD	Fluoranthene	1770	64.8		1130	60	38-119	11	0-30
85-68-7	MSD	Butylbenzylphthalate	1770	0.00	U	1600	90	39-126	7	0-30
56-55-3	MSD	Benzo(a)anthracene	1770	29.5	J	1140	63	39-110	13	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1770	0.00	U	1030	58	35-106	4	0-30
218-01-9	MSD	Chrysene	1770	26.2	J	1080	60	39-109	7	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1770	0.00	U	1460	82	40-125	7	0-30
117-84-0	MSD	Di-n-octylphthalate	1770	0.00	U	2020	114	30-147	9	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1770	0.00	U	1270	72	38-117	19	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1770	0.00	U	1370	77	39-120	12	0-30
50-32-8	MSD	Benzo(a)pyrene	1770	16.9	J	1160	65	40-115	10	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1770	0.00	U	742	42	32-120	30	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-601**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**WST03-10-2132MSD**	**Matrix:**	**R**
Lab Sample ID:	**1201980156**	**%Moisture:**	**6.2**
Instrument:	**MSD1.I**	**Analysis Date:**	**11/29/2009 20:22**
Analyst:	**AMY**	**Prep Batch ID:**	**926121**
Inj. Vol:	**.5 uL**	**Batch ID:**	**926126**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1770	0.00	U	790	45	32-124	26	0-30
191-24-2	MSD Benzo(ghi)perylene	1770	0.00	U	686	39	28-119	31 *	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1770	0.00	U	1070	61	31-105	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1230	74	31-95
108-95-2	LCS	Phenol	1670	0.0	1220	73	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1210	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1180	71	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1130	68	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1230	74	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1280	77	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1230	74	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1170	70	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1390	84	38-116
129-00-0	LCS	Pyrene	1670	0.0	1370	82	43-108
110-86-1	LCS	Pyridine	1670	0.0	927	56	13-129
62-53-3	LCS	Aniline	1670	0.0	1020	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1180	71	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1130	68	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1220	73	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1200	72	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1160	70	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1360	82	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1350	81	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1140	68	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1280	77	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1330	80	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1190	71	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1210	73	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1140	68	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1160	70	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	2170	65	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1190	71	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1020	61	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1230	74	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1250	75	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	2090	126	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1340	81	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1430	86	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1210	73	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1130	68	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	986	59	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1340	81	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1250	75	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1280	77	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1350	81	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1470	88	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1410	85	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926121 **Matrix:** SOIL

Lab Sample ID: 1201980157

Instrument: MSD1.I **Analysis Date:** 11/29/2009 17:14 **Dilution:** 1

Analyst: AMY **Prep Batch ID:** 926121

Inj. Vol: .5 uL **Batch ID:** 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1300	78	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1390	83	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1200	72	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1110	67	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1240	75	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1290	77	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1520	91	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1330	80	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1290	78	45-107
120-12-7	LCS	Anthracene	1670	0.0	1280	77	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1510	91	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1360	82	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1510	91	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1220	73	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1190	71	45-98
218-01-9	LCS	Chrysene	1670	0.0	1230	74	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1450	87	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1490	89	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1240	74	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1380	83	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1290	77	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1180	71	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1160	70	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1220	73	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1220	73	36-109

Method Blank Summary

SDG Number:	10-601	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926121	Instrument ID:	MSD1.I	Data File:	s1k2912-1.d
Lab Sample ID:	1201980154	Prep Date:	11/25/2009 21:20	Analyzed:	11/29/09 16:50
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926121	1201980157	s1k2913-1.d	11/29/09	1714
04	RE03-09-13975	241534001	s1k2922.d	11/29/09	2046
05	RE03-09-13976	241534002	s1k2923.d	11/29/09	2109
06	RE03-09-13973	241534003	s1k2924.d	11/29/09	2132
07	RE03-09-13972	241534004	s1k2925.d	11/29/09	2156
08	RE03-09-13977	241534005	s1k2926.d	11/29/09	2219
09	RE03-09-13974	241534006	s1k2927.d	11/29/09	2242
10	RE03-10-3915	241534008	s1k2928.d	11/29/09	2306

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-601

Instrument ID: MSD1.I **Injection Date/Time:** 14-NOV-09 17:38

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.3
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	36.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	77.4
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091111-16	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:22
MEGA010	WBN091111-15	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:51
MEGA020	WBN091111-14	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:21
MEGA040	WBN091111-13.1	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:50
MEGA050	WBN091111-12	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:19
MEGA080	WBN091111-11	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:47
MEGA100	WBN091111-10	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 21:16
MEGA120	WBN091111-09	/chem/MSD1.i/s111409.b/s1k121	14-NOV-09 21:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-601

Instrument ID: MSD1.I **Injection Date/Time:** 15-NOV-09 14:50

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1213.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	39.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.2
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	72.7
442	Greater than 40% of mass 198	70.7
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP010	WBN091111-01	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:28
AP020	WBN091111-02	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:51
AP040	WBN091111-03.1	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:14
AP050	WBN091111-04	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:38
AP080	WBN091111-05	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 17:01
AP100	WBN091111-06	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:24
AP120	WBN091111-07	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:47
APICV	WBN091111-08.1	/chem/MSD1.i/s111409.b/s1k123	15-NOV-09 23:17

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-601

Instrument ID: MSD1.I **Injection Date/Time:** 17-NOV-09 15:48

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1259.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.2
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.5
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	72.4
442	Greater than 40% of mass 198	78.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091027-09.3	/chem/MSD1.i/s111409.b/s1k126	17-NOV-09 16:27

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-601

Instrument ID: MSD1.I **Injection Date/Time:** 29-NOV-09 15:00

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s112909.b/s1k2907.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.7
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	42.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	52.9
197	0 - 1% of mass 198	1
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	74.6
442	Greater than 40% of mass 198	69.8
443	17 - 23% of mass 442	18.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-03.5	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:16
APCVS	WBN091111-03.3	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:40
SBLK01	1201980154	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 16:50
SBLK01LCS	1201980157	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 17:14
RE03-09-13975	241534001	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 20:46
RE03-09-13976	241534002	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 21:09
RE03-09-13973	241534003	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 21:32
RE03-09-13972	241534004	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 21:56
RE03-09-13977	241534005	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 22:19
RE03-09-13974	241534006	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 22:42
RE03-10-3915	241534008	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 23:06

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD1.I

GC Column: J&W DB-5MS

Client SDG: 10-601

STD Analysis Time: 29-NOV-09 15:16

Data File: s1k2908.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	531725		3.83	2194392		4.69	1110069		5.94	1851790		6.92	1672748		8.56	1414560		9.95
Upper Limit	1063450		4.33	4388784		5.19	2220138		6.44	3703580		7.42	3345496		9.06	2829120		10.5
Lower Limit	265863		3.33	1097196		4.19	555035		5.44	925895		6.42	836374		8.06	707280		9.45
Sample ID																		
BLK01	582567		3.83	2290441		4.69	1227579		5.93	2026415		6.92	1690866		8.55	1420003		9.94
BLK01LCS	617030		3.83	2615814		4.69	1327800		5.93	2222627		6.92	1876046		8.56	1522701		9.95
RE03-09-13975	670086		3.83	2643739		4.69	1414329		5.93	2339933		6.92	1727720		8.56	1223177		9.95
RE03-09-13976	646535		3.83	2536054		4.69	1347946		5.93	2203797		6.92	1486748		8.56	945984		9.95
RE03-09-13973	651681		3.83	2650068		4.69	1415296		5.93	2401836		6.92	1921897		8.56	1404931		9.95
RE03-09-13972	647388		3.83	2570293		4.69	1385688		5.93	2344423		6.92	1655924		8.56	1094284		9.95
RE03-09-13977	679813		3.83	2739740		4.69	1454464		5.93	2477124		6.92	1773963		8.56	1190235		9.95
RE03-09-13974	701376		3.83	2790700		4.69	1475615		5.93	2482031		6.92	1893543		8.56	1342314		9.95
RE03-10-3915	795028		3.83	3126531		4.69	1588919		5.93	2600699		6.92	1832095		8.56	1255871		9.95

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:56	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2925.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	72.9	365
108-95-2	Phenol	U	365	ug/kg	72.9	365
95-57-8	2-Chlorophenol	U	365	ug/kg	72.9	365
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	72.9	365
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	72.9	365
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	72.9	365
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365
87-86-5	Pentachlorophenol	U	365	ug/kg	91.2	365
129-00-0	Pyrene	U	36.5	ug/kg	10.9	36.5
110-86-1	Pyridine	U	365	ug/kg	72.9	365
62-53-3	Aniline	U	365	ug/kg	109	365
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	72.9	365
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	72.9	365
100-51-6	Benzyl alcohol	U	365	ug/kg	109	365
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	72.9	365
108-60-1	bis(2-Chloroisopropyl)ether	U	365	ug/kg	72.9	365
95-48-7	o-Cresol	U	365	ug/kg	72.9	365
65794-96-9	m,p-Cresols	U	365	ug/kg	109	365
67-72-1	Hexachloroethane	U	365	ug/kg	72.9	365
98-95-3	Nitrobenzene	U	365	ug/kg	72.9	365
78-59-1	Isophorone	U	365	ug/kg	72.9	365
88-75-5	2-Nitrophenol	U	365	ug/kg	72.9	365
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	72.9	365
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	72.9	365
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.5	ug/kg	10.9	36.5
106-47-8	4-Chloroaniline	U	365	ug/kg	72.9	365
87-68-3	Hexachlorobutadiene	U	365	ug/kg	72.9	365
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.29	36.5
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	72.9	365
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	72.9	365
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	72.9	365
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5
88-74-4	2-Nitroaniline	U	365	ug/kg	72.9	365
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	365	ug/kg	72.9	365

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534004	Date Received:	11/20/2009 08:50	%Moisture:	9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13972	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:56	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2925.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	365	ug/kg	72.9	365
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365
208-96-8	Acenaphthylene	U	36.5	ug/kg	10.9	36.5
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	139	729
132-64-9	Dibenzofuran	U	365	ug/kg	72.9	365
84-66-2	Diethylphthalate	U	365	ug/kg	72.9	365
86-73-7	Fluorene	U	36.5	ug/kg	10.9	36.5
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	72.9	365
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	72.9	365
100-01-6	4-Nitroaniline	U	365	ug/kg	109	365
	p-Nitroaniline					
122-39-4	Diphenylamine	U	365	ug/kg	72.9	365
122-66-7	Azobenzene	U	365	ug/kg	72.9	365
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	72.9	365
118-74-1	Hexachlorobenzene	U	365	ug/kg	72.9	365
85-01-8	Phenanthrene	U	36.5	ug/kg	10.9	36.5
120-12-7	Anthracene	U	36.5	ug/kg	7.29	36.5
84-74-2	Di-n-butylphthalate	U	365	ug/kg	72.9	365
206-44-0	Fluoranthene	U	36.5	ug/kg	10.9	36.5
85-68-7	Butylbenzylphthalate	U	365	ug/kg	72.9	365
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	10.9	36.5
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	109	365
218-01-9	Chrysene	U	36.5	ug/kg	10.9	36.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	72.9	365
117-84-0	Di-n-octylphthalate	U	365	ug/kg	72.9	365
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	10.9	36.5
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	10.9	36.5
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	10.9	36.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	10.9	36.5
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	10.9	36.5
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	10.9	36.5
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	72.9	365

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	910	ug/kg		J
	Unknown Aldol Condensate	2.87	278	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13972**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:56**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2925.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	3.79	257	ug/kg	97	NJ
3310-94-9	Methyl palustrate isomer	8.05	153	ug/kg	83	NJ
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.06	316	ug/kg	91	NJ
	Unknown	8.12	314	ug/kg		J
127-25-3	Methyl abietate	8.25	211	ug/kg	95	NJ
	Unknown	8.37	172	ug/kg		J
	Unknown	11.58	667	ug/kg		J
	Unknown	11.76	283	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2925.d
Lab Smp Id: 241534004 Client Smp ID: RE03-09-13972
Inj Date : 29-NOV-2009 21:56
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534004|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	8.98600	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	647388	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2570293	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1385688	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2344423	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1655924	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1094284	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1318548	77.9767	2840
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1571127	76.4468	2790
$ 20 Nitrobenzene-d5	82	4.192	4.199	(0.895)	678416	40.0518	1460
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1482531	44.6718	1630
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	379411	98.0559	3580
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1422513	54.7272	2000

ION RATIO REPORT

SV REPORT

Data file: s1k2925.d
Report Date: 11/30/2009 08:48
Lab. ID: 241534004 SampleType: SAMPLE
Injection Date: 29-NOV-2009 21:56
Operator: AMY Instrument: MSD1.i
Sample Info: |241534004|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	22645	2.10	2.35	80-120	100	(T)
42	7917	2.11	2.35	79-139	35	(QT)
43	58231	2.12	2.35	17- 77	257	(QT)
4 Aniline			CAS#: 62-53-3			
66	75585	3.56	3.63	80-120	100	(T)
93	5735	3.60	3.63	408-468	8	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	91472	4.19	4.08	80-120	100	(T)
42	60284	4.19	4.08	48-108	66	(T)
22 Isophorone			CAS#: 78-59-1			
82	678416	4.19	4.37	80-120	100	(T)
138	110	4.40	4.37	0- 50	0	( )
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	26439	5.66	5.54	80-120	100	(T)
164	1760	5.66	5.54	3- 63	7	(T)
127	1733	5.66	5.53	9- 69	7	(QT)
42 o-Nitroaniline				CAS#: 88-74-4		
65	33894	5.66	5.60	80-120	100	( )
92	38366	5.66	5.60	35- 95	113	(Q)
138	3040	5.66	5.60	81-141	9	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
43 Dimethylphthalate			CAS#: 131-11-3			
163	245135	5.93	5.72	80-120	100	(T)
164	1385688	5.93	5.72	0- 40	565	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	175572	5.93	5.76	80-120	100	(T)
63	2318	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	175572	5.93	6.05	80-120	100	(T)
89	1930	5.93	6.05	40-100	1	(QT)
63	2318	5.93	6.05	19- 79	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	23917	6.47	6.31	80-120	100	(T)
165	25391	6.47	6.31	65-125	106	(T)
167	7577	6.47	6.31	0- 43	32	(T)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	22731	6.47	6.62	80-120	100	(T)
141	147008	6.47	6.62	62-122	647	(QT)
250	48132	6.47	6.62	66-126	212	(QT)
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	1149	9.51	9.51	80-120	100	( )
253	357	9.49	9.51	0- 51	31	( )
125	559	9.53	9.50	0- 44	49	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2925.d
Lab Smp Id: 241534004 Client Smp ID: RE03-09-13972
Inj Date : 29-NOV-2009 21:56
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534004|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	8.98600	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3881286	40.000
* 91 Chrysene-d12	8.557	4270071	40.000
* 98 Perylene-d12	9.951	3024658	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.981	2420208	24.9423320	910	0		0	10
Unknown Aldol Condensate				CAS #:			
2.875	740395	7.63040703	278	0		0	10
3-Carene				CAS #:	13466-78-9		
3.787	684085	7.05008239	257	97	NIST05.L	15157	10
Methyl palustrate isomer				CAS #:	3310-94-9		
8.045	448111	4.19768974	153	83	NIST05.L	134723	91
1-Phenanthrenecarboxylic acid, 7-ethenyl				CAS #:	1686-62-0		
8.063	924097	8.65649812	316	91	NIST05.L	134785	91
Unknown				CAS #:			
8.116	920624	8.62396918	314	0		0	91
Methyl abietate				CAS #:	127-25-3		
8.245	618480	5.79362524	211	95	NIST05.L	134712	91
Unknown				CAS #:			
8.375	502381	4.70606476	172	0		0	91
Unknown				CAS #:			
11.580	1383854	18.3009680	667	0		0	98
Unknown				CAS #:			
11.757	586430	7.75532385	283	0		0	98

Data File: /chem/MSD1.i/s112909.b/s1k2925.d
Date : 29-NOV-2009 21:56
Client ID: RE03-09-13972
Sample Info: |2415340041926126|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

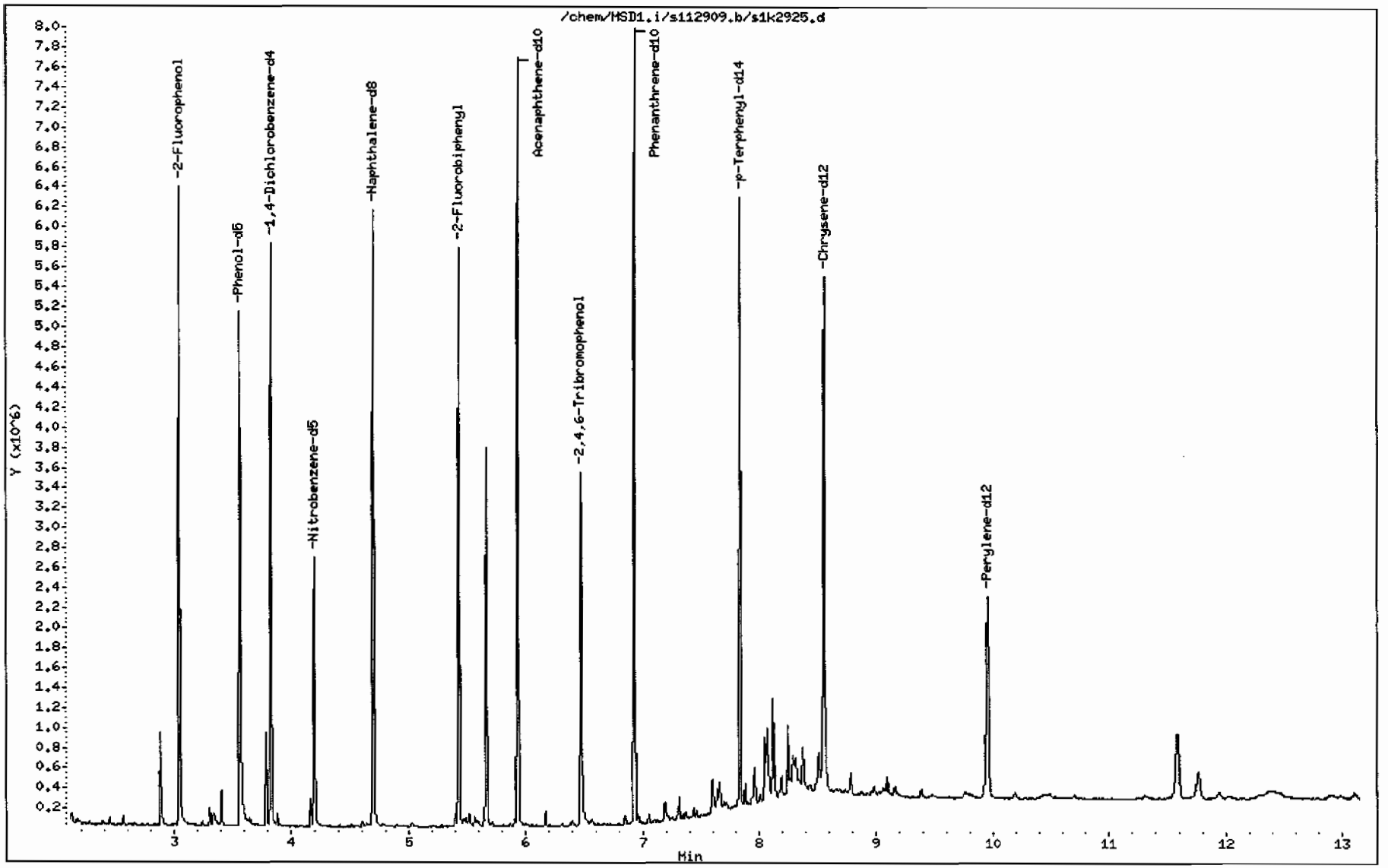

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972

Instrument: MSD1.i

Sample Info: |2415340041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	39	C5H12O2	104
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	9	CH7N5	89

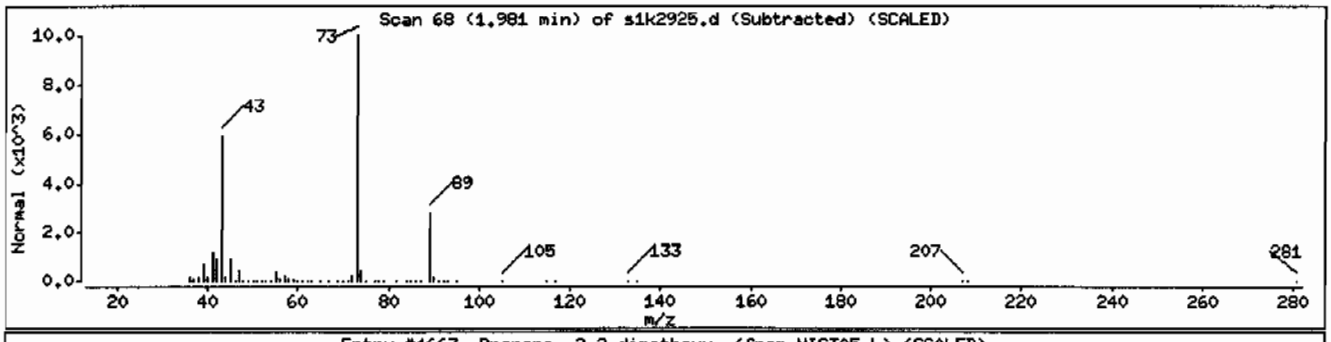

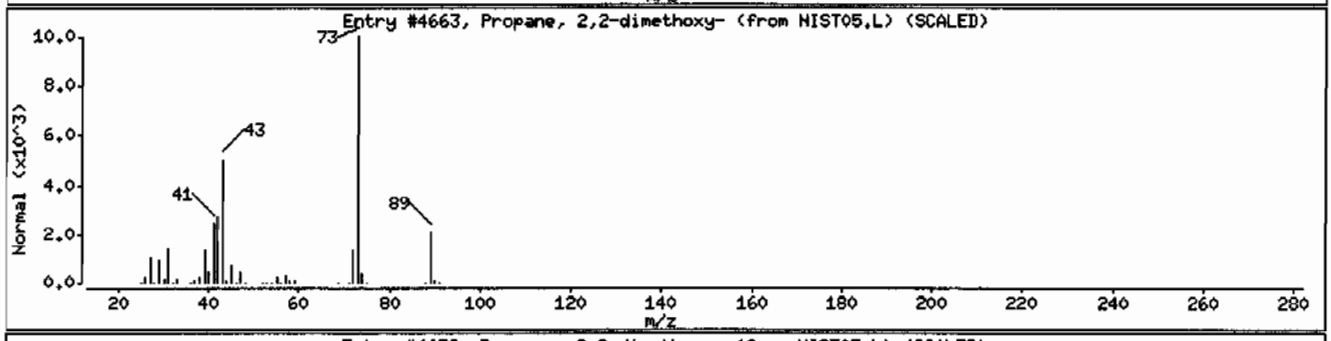

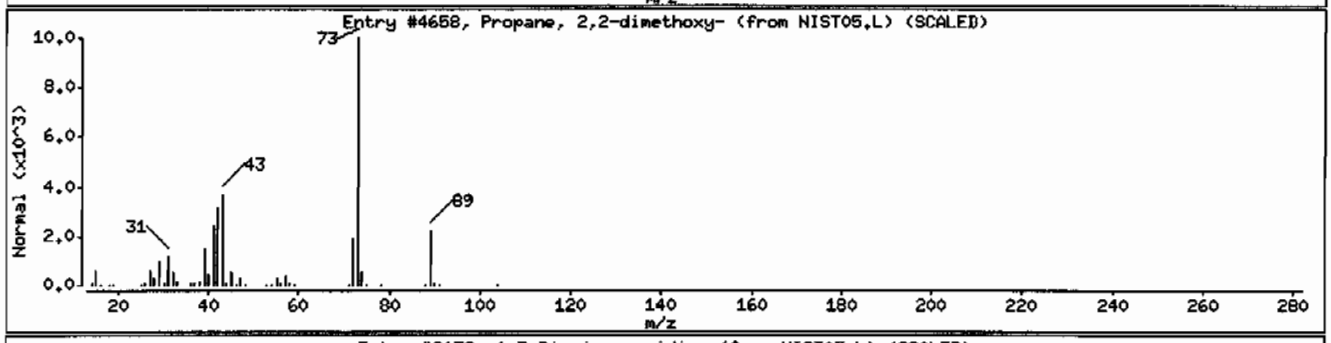

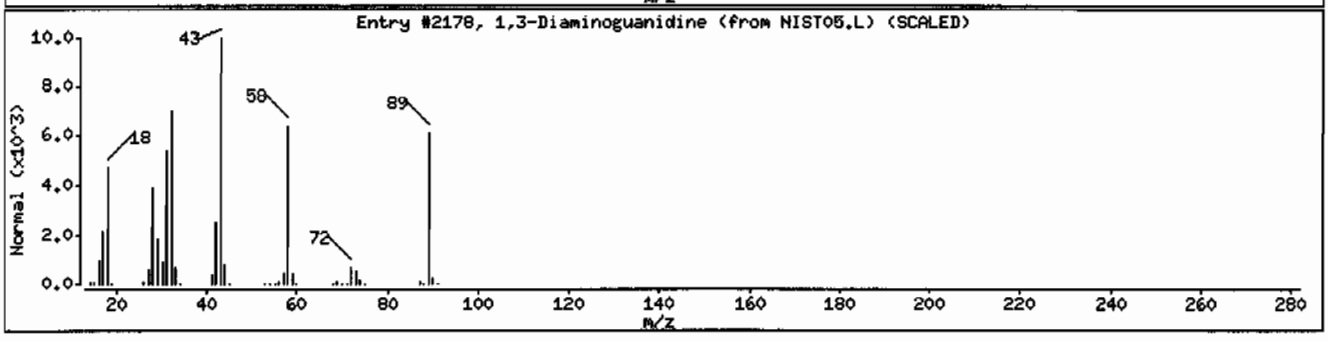

Data File: /chem/HSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972

Instrument: HSD1.i

Sample Info: |24153400419261261|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116

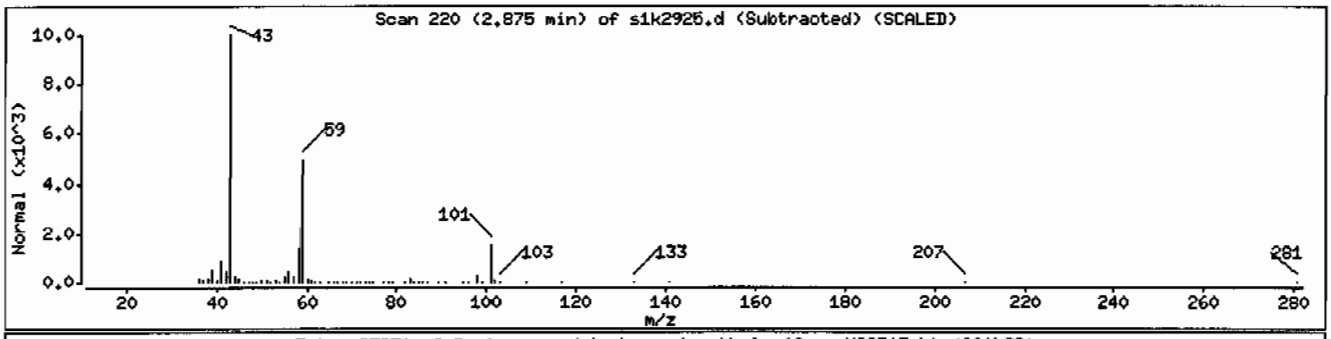

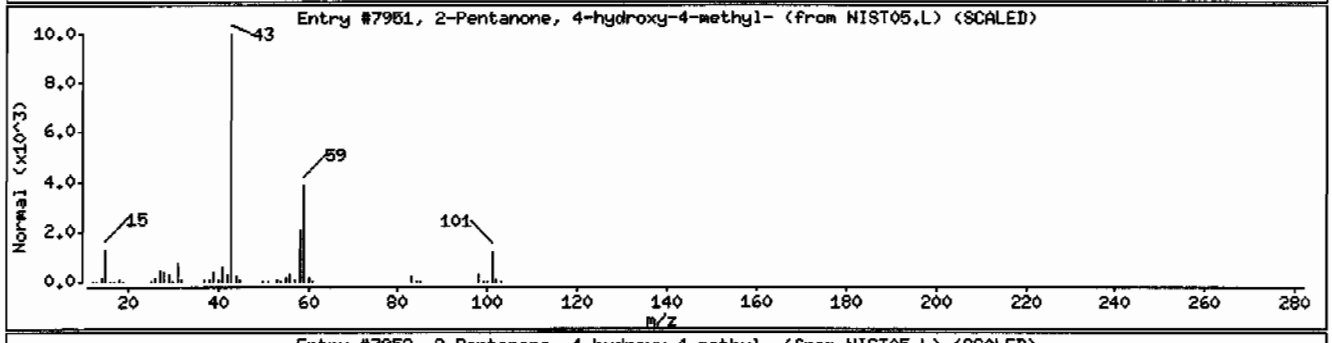

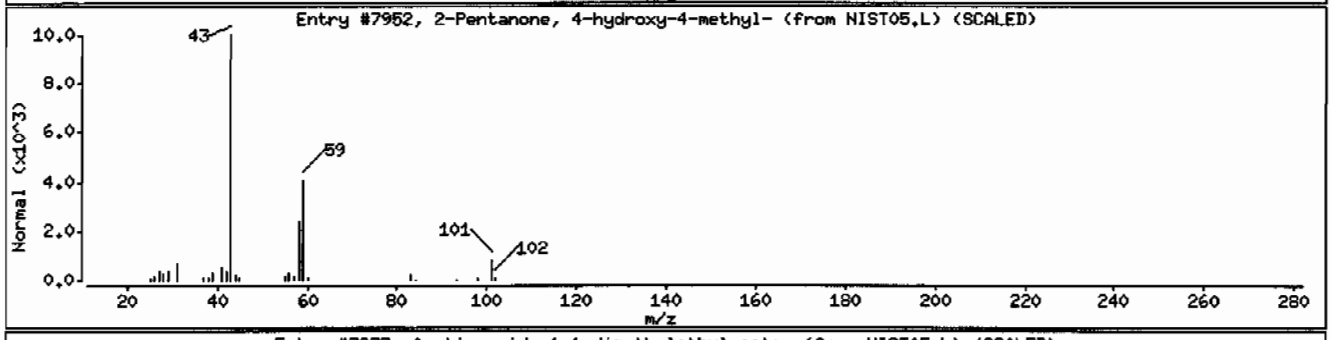

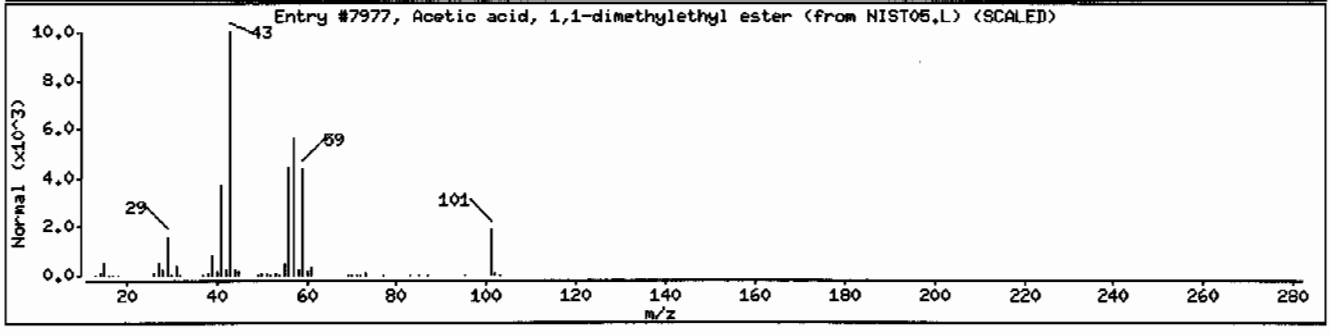

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972

Instrument: MSD1.i

Sample Info: |2415340041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15157	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	96	C10H16	136

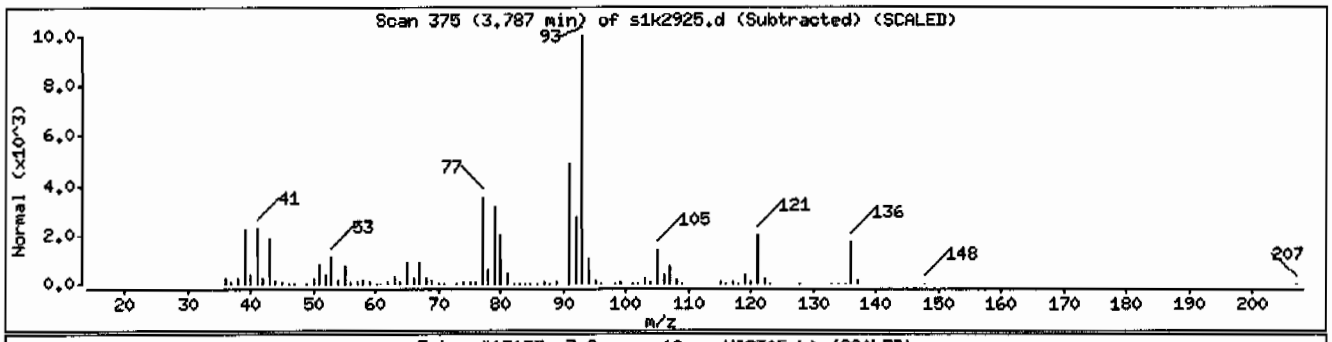

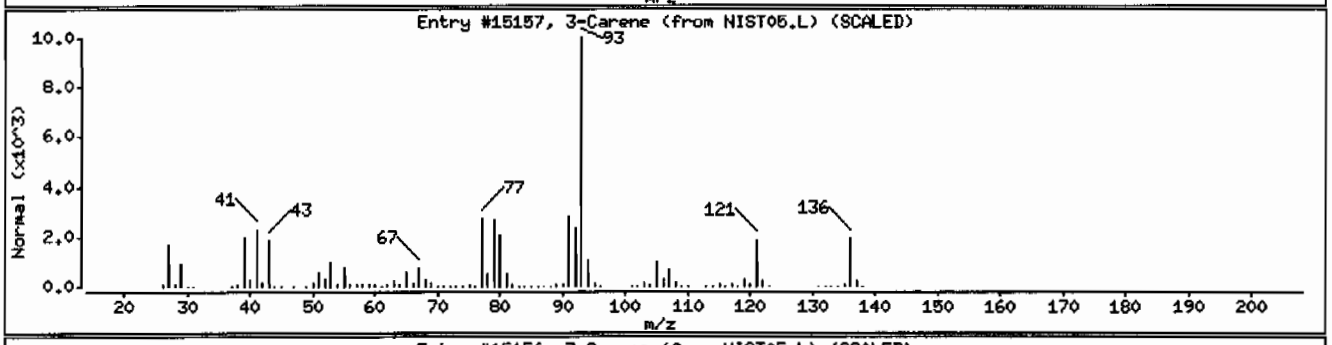

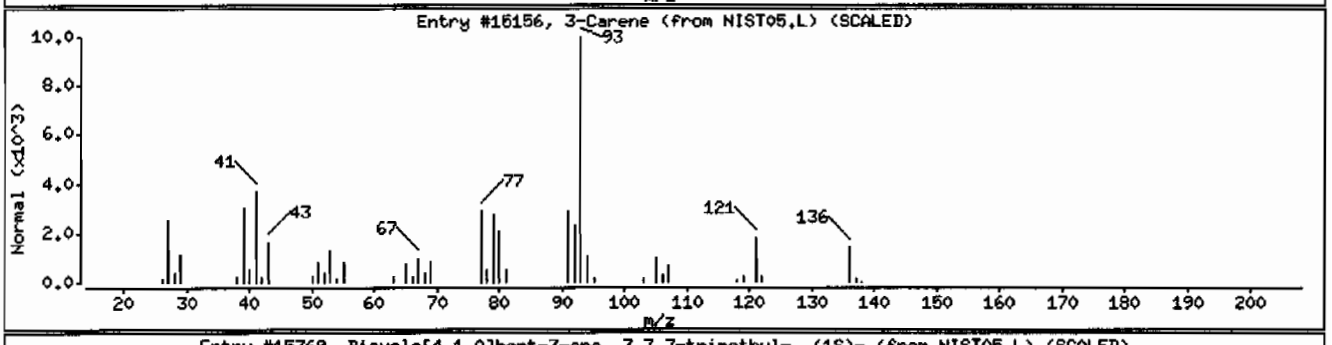

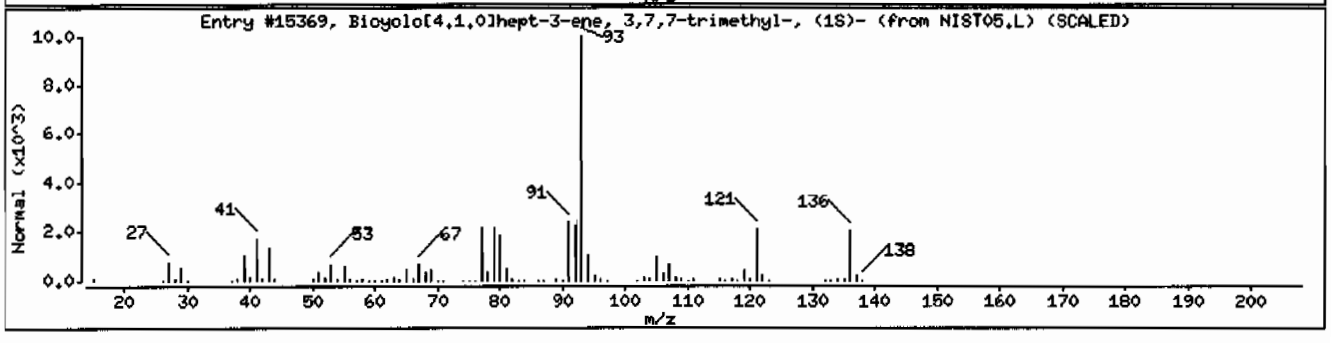

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972 Instrument: MSD1.i

Sample Info: |2415340041926126111SVHF11ILANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Methyl palustrate isomer	3310-94-9	NIST05.L	134723	83	C21H32O2	316
Silane, 1,4-phenylenebis[trimethyl-	13183-70-5	NIST05.L	72522	38	C12H22Si2	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	38	C12H22Si2	222

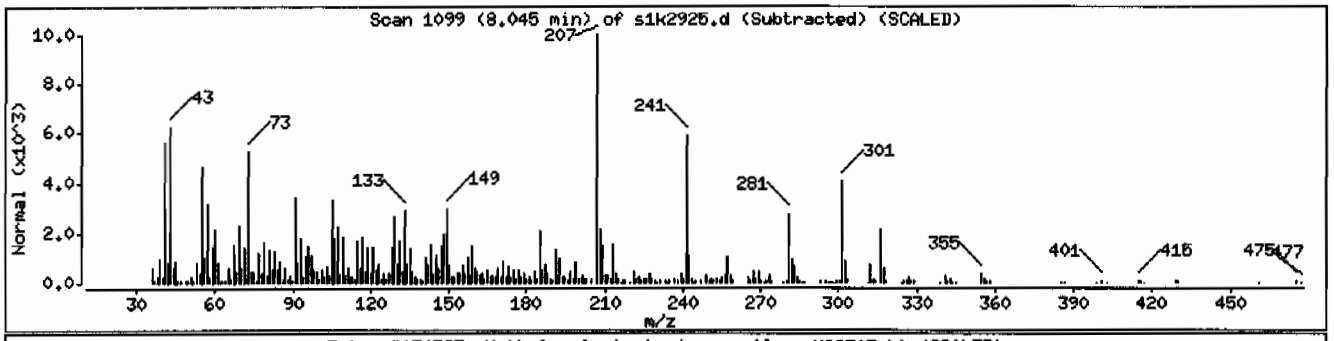

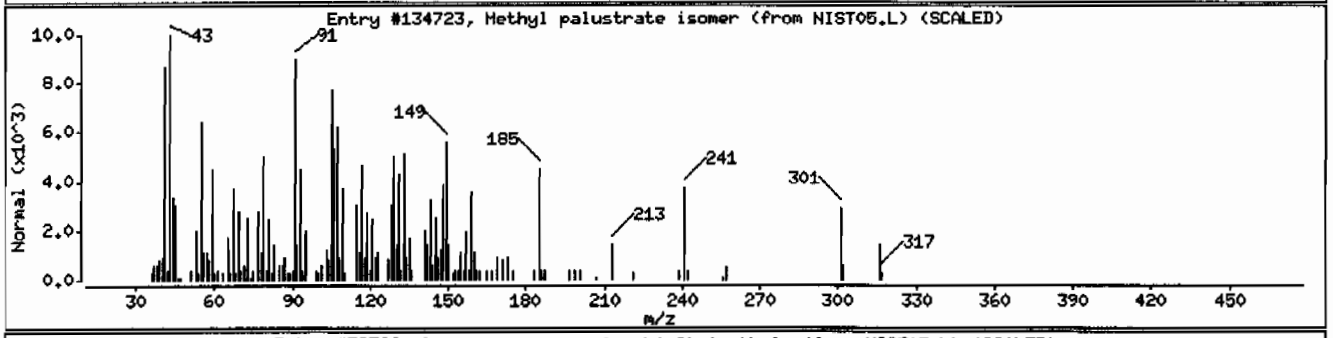

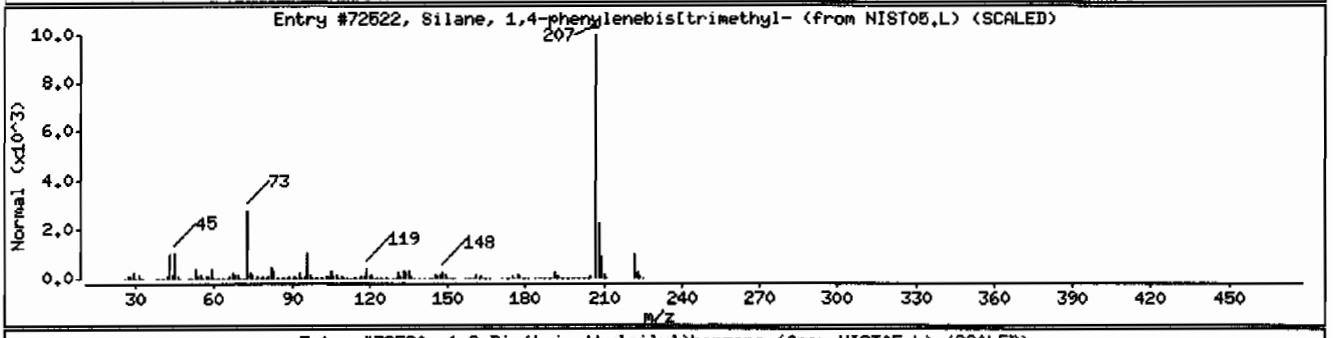

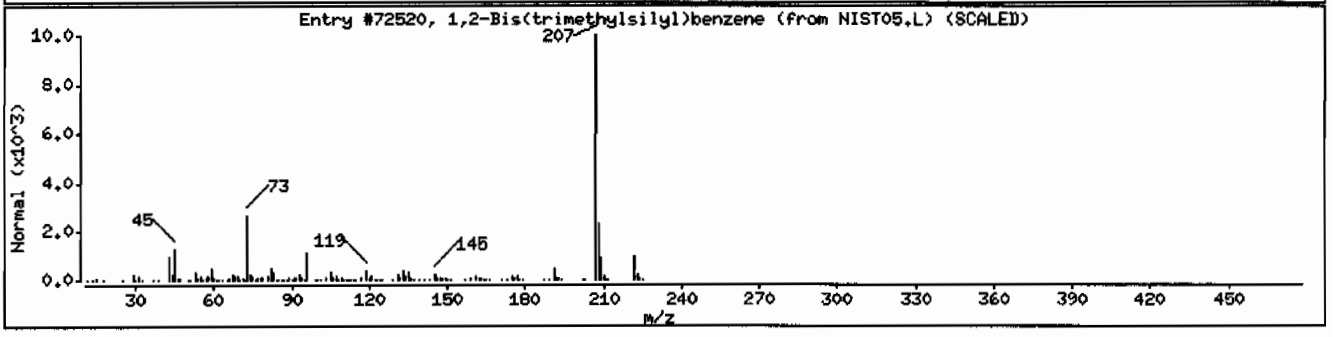

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972

Instrument: MSD1.i

Sample Info: |2415340041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 7-ethenyl	1686-62-0	NIST05.L	134785	91	C21H3202	316
1-Phenanthrenecarboxylic acid, 7-ethenyl	1686-62-0	NIST05.L	134782	35	C21H3202	316
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	30	C12H22Si2	222

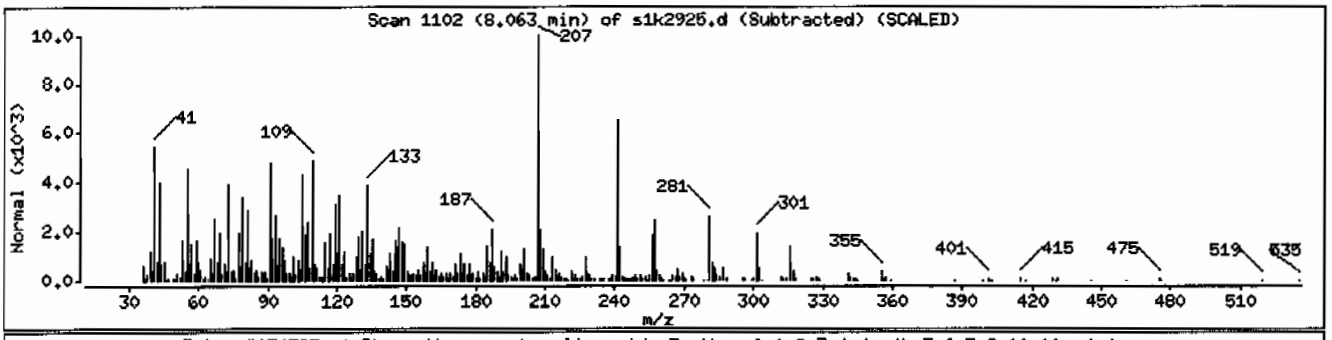

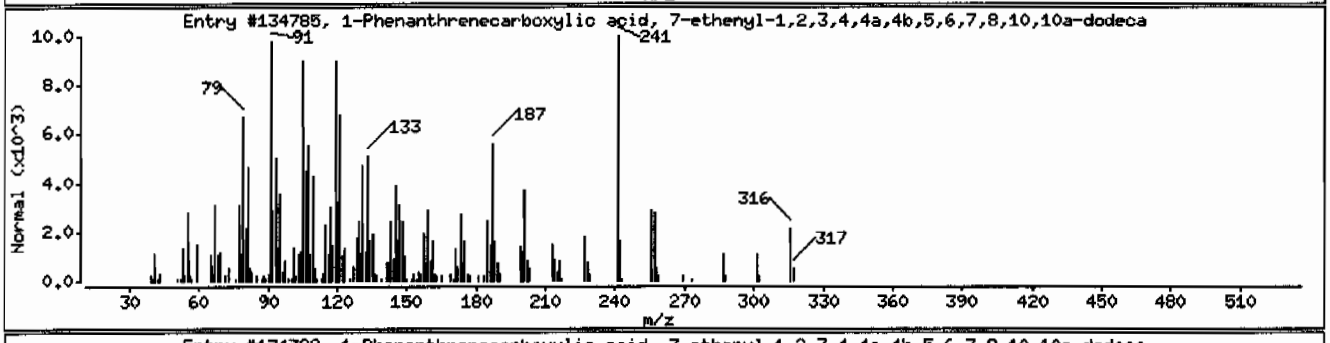

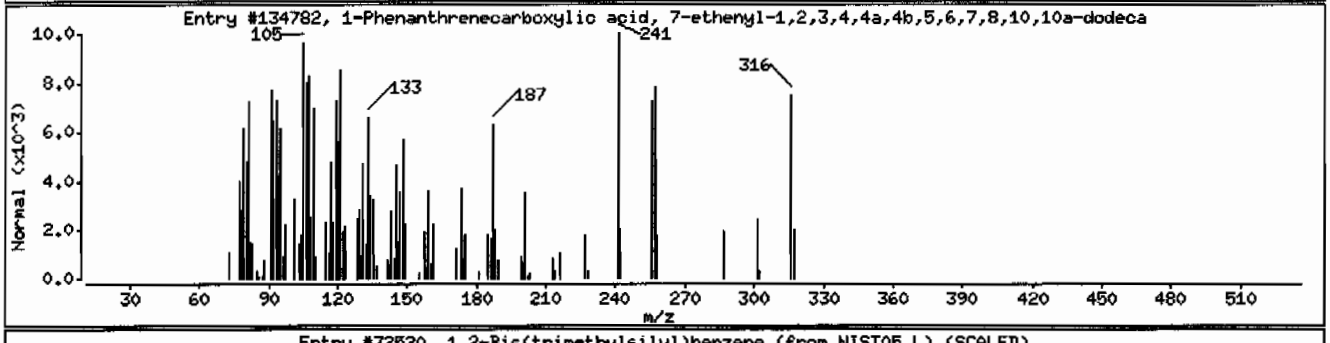

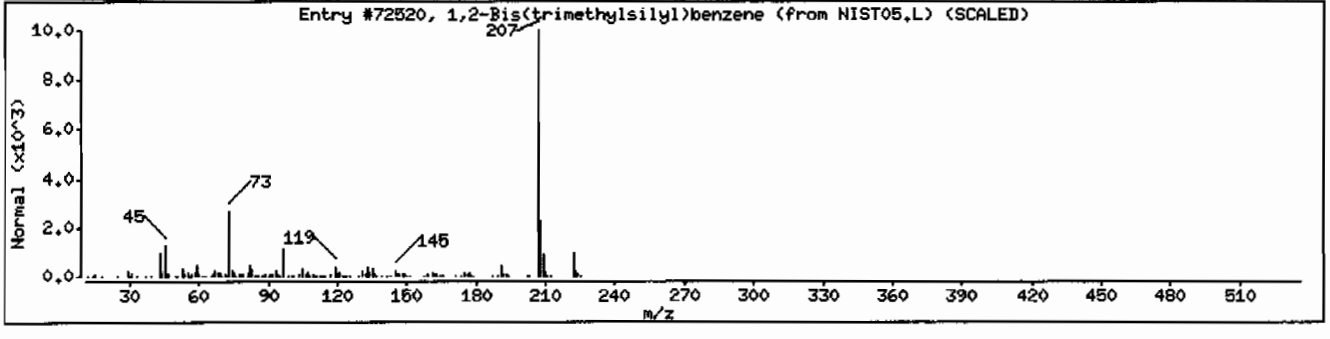

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972

Instrument: MSD1.i

Sample Info: 12415340041926126111SVMF111LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	91	C21H3002	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	86	C21H3002	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	86	C21H3002	314

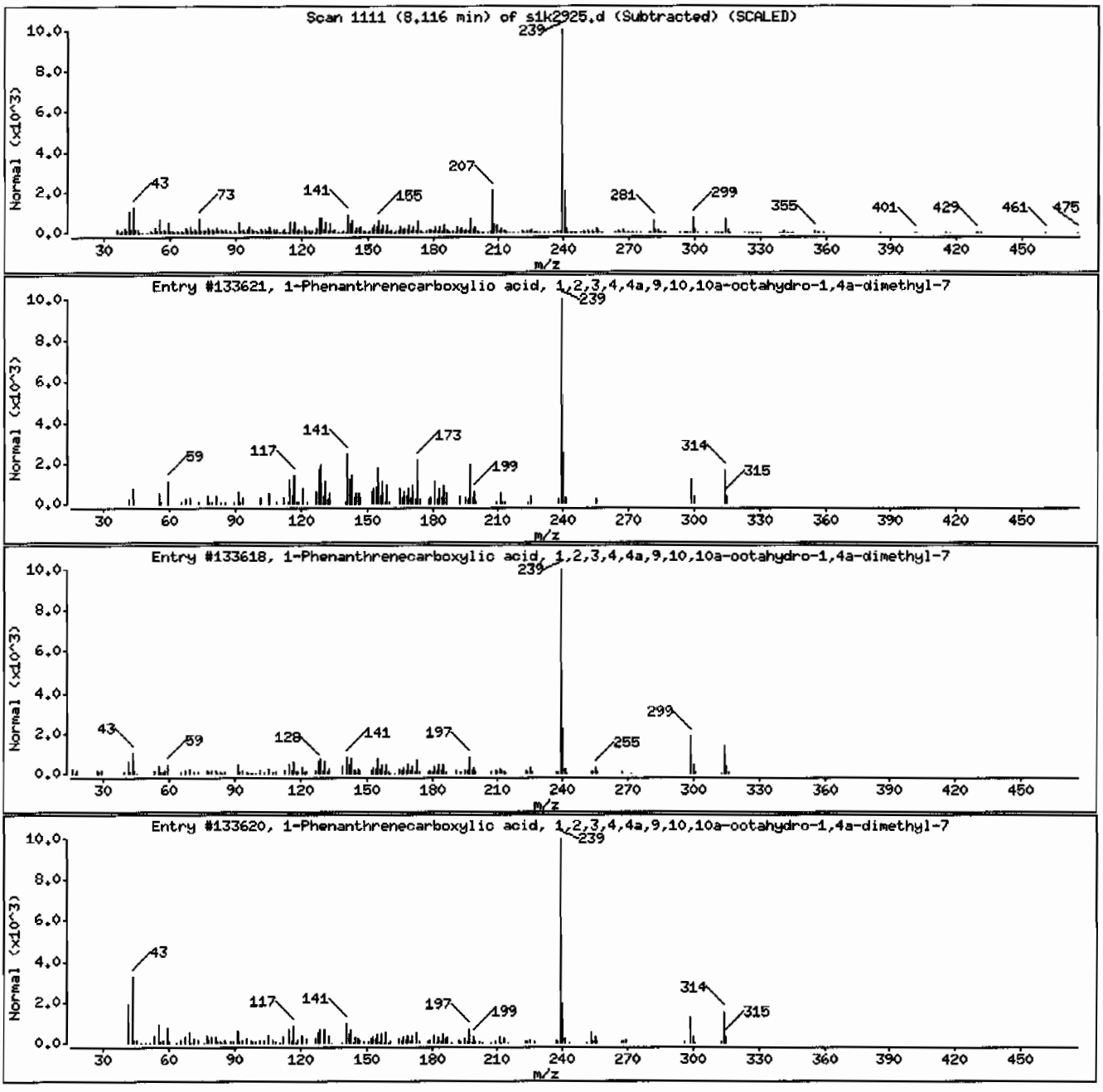

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972 Instrument: MSD1.i

Sample Info: |2415340041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Methyl abietate	127-25-3	NIST05.L	134712	95	C21H3202	316
Methyl abietate	127-25-3	NIST05.L	134711	94	C21H3202	316
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207

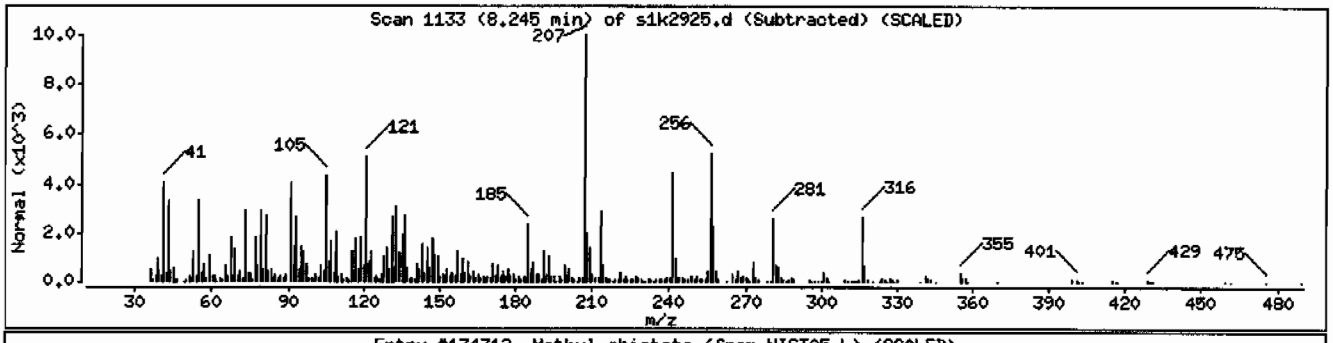

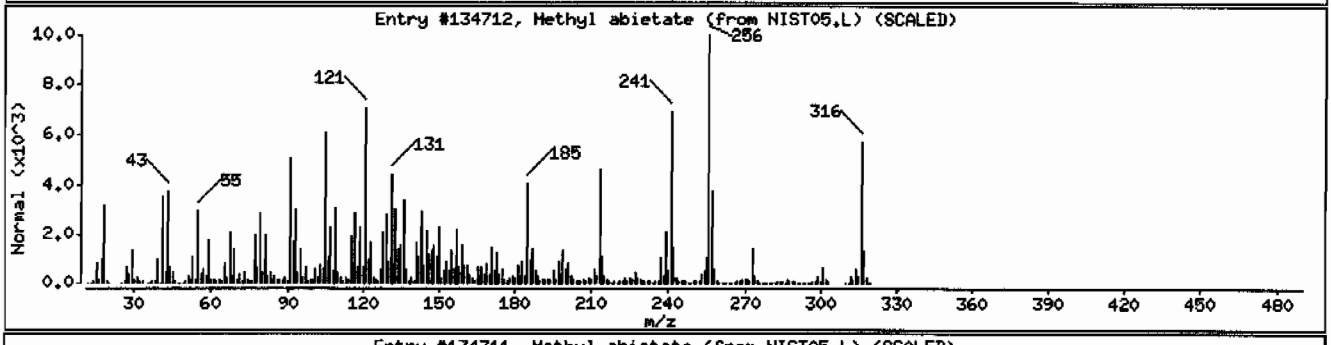

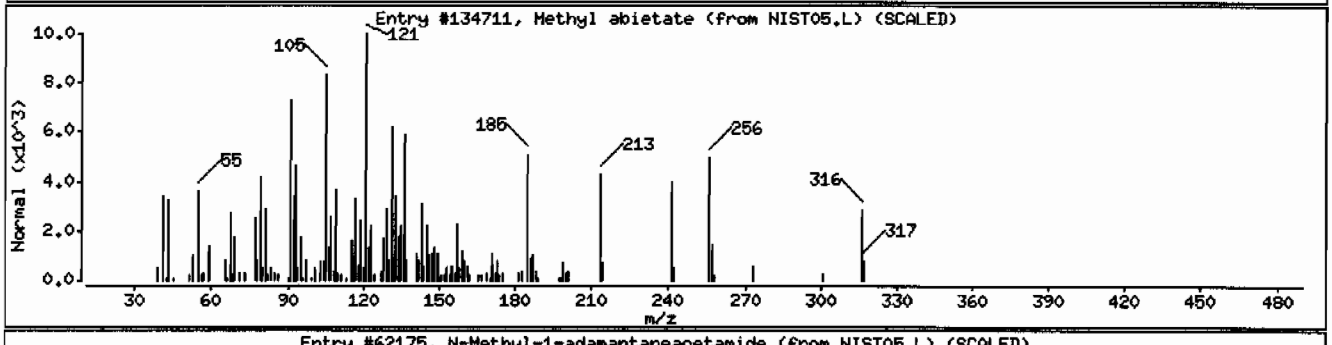

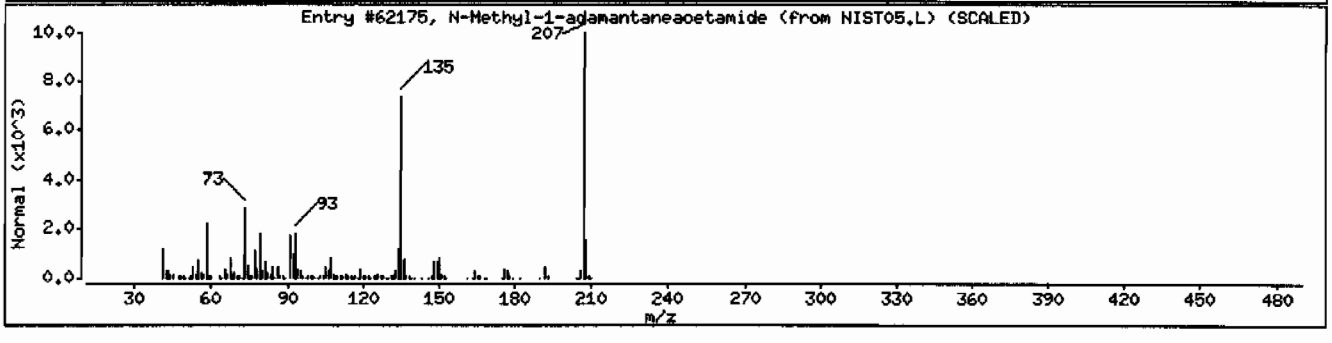

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972 Instrument: MSD1.i

Sample Info: |2415340041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-n-butyladamantane	14449-41-3	NIST05.L	51342	56	C14H24	192
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	52	C13H21NO	207
1-Adamantanecarboxamide, N,N-dimethyl-,	1502-00-7	NIST05.L	62177	46	C13H21NO	207

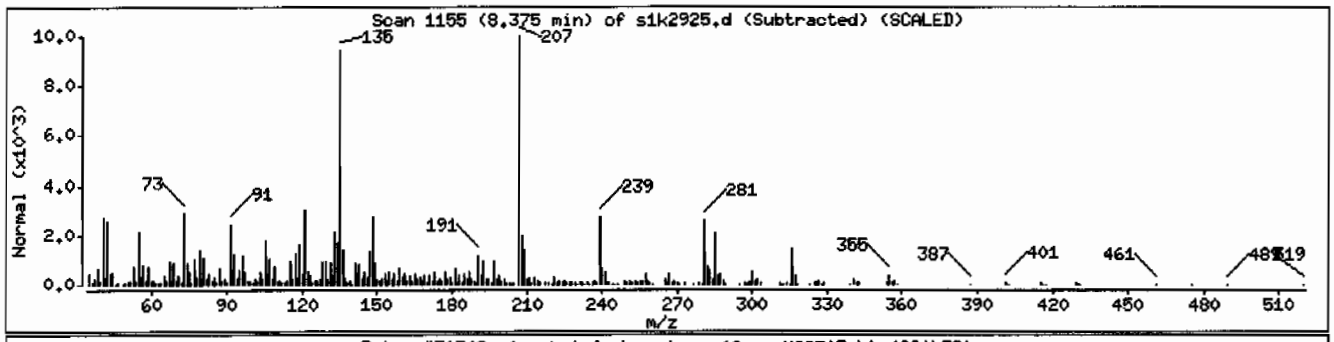

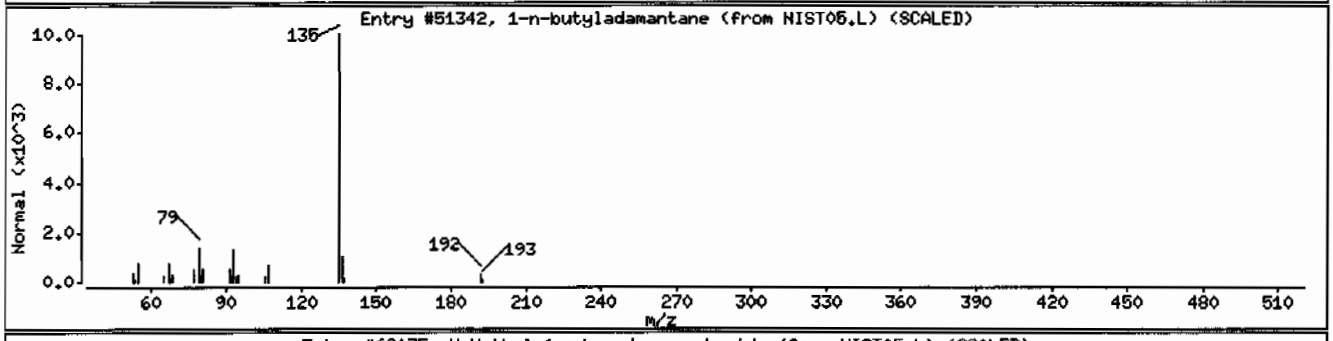

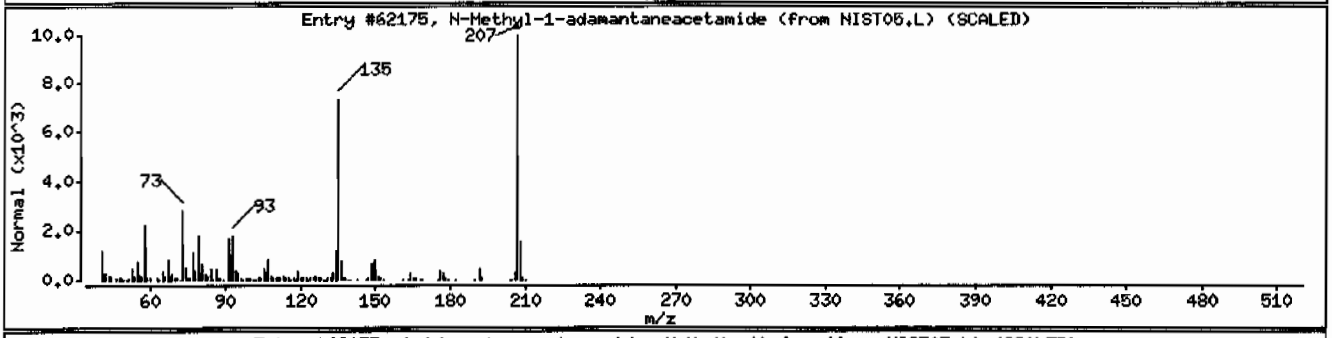

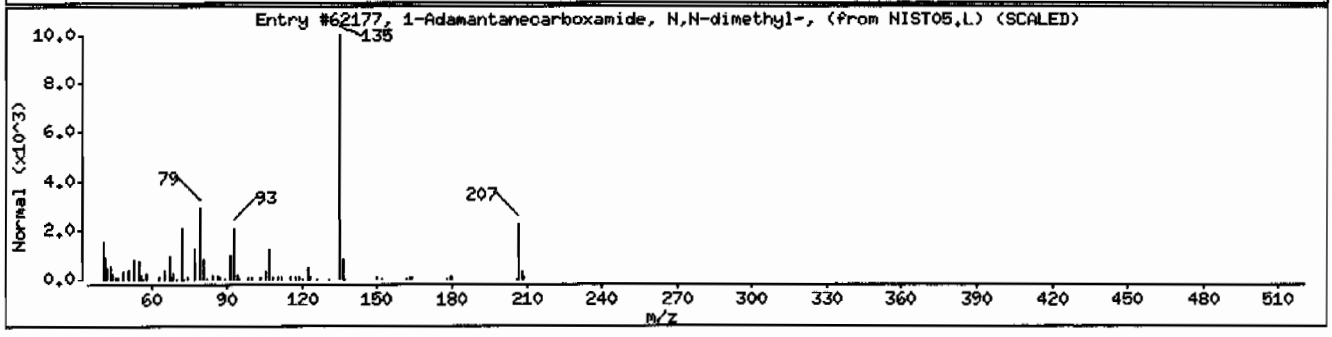

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972 Instrument: MSD1.i

Sample Info: |2415340041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	41	C15H24	204
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	38	C6H18O3Si3	222

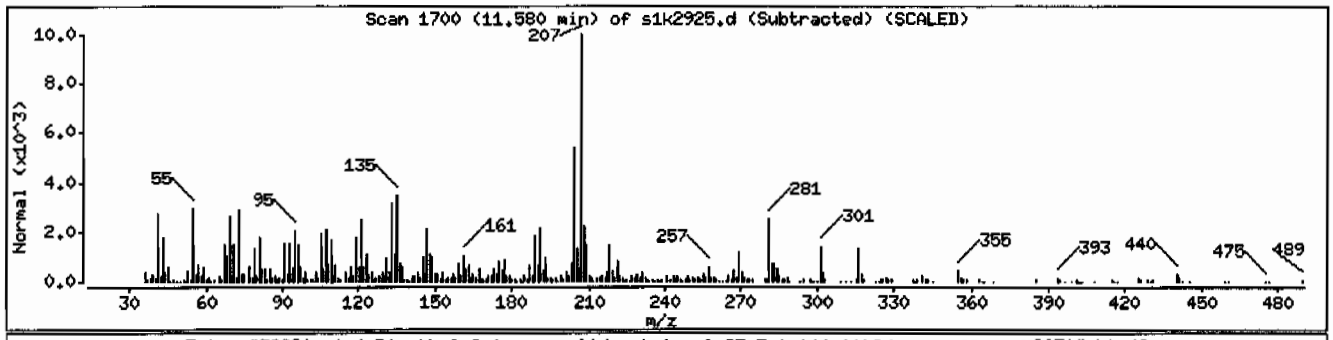

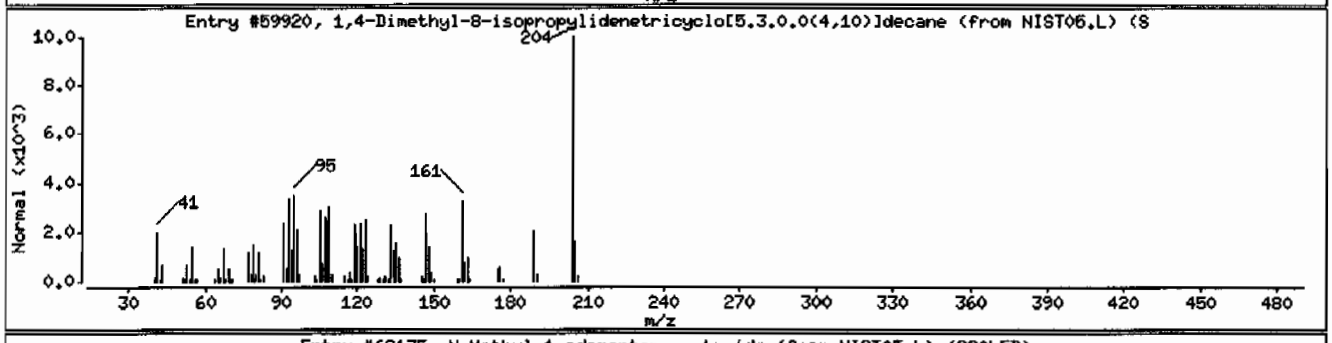

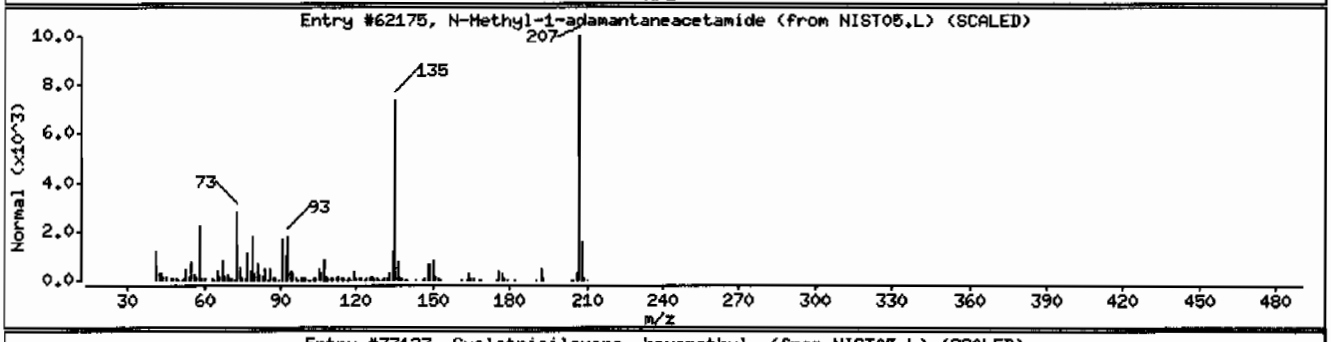

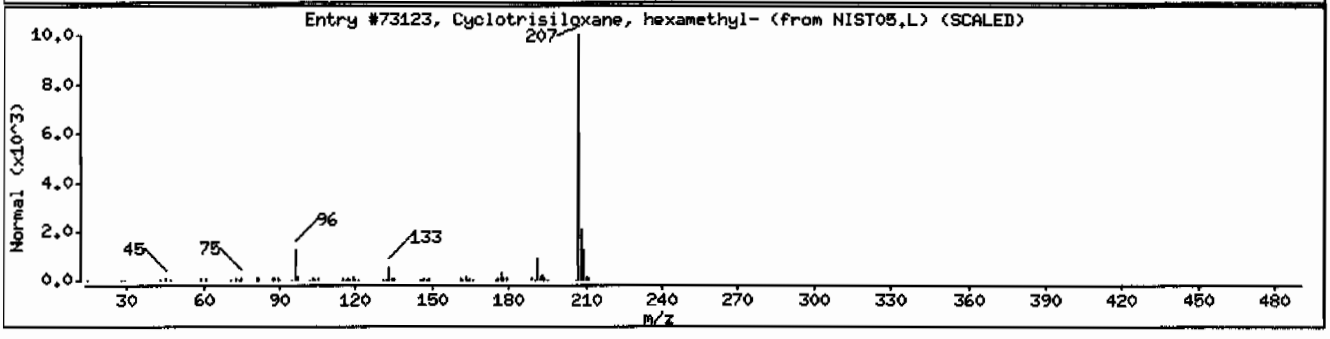

Data File: /chem/MSD1.i/s112909.b/s1k2925.d

Date : 29-NOV-2009 21:56

Client ID: RE03-09-13972 Instrument: MSD1.i

Sample Info: |2415340041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, 1,4-phenylenebis[trimethyl-	13183-70-5	NIST05.L	72522	47	C12H22Si2	222
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	43	C15H13N	207
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	43	C13H22OSi	222

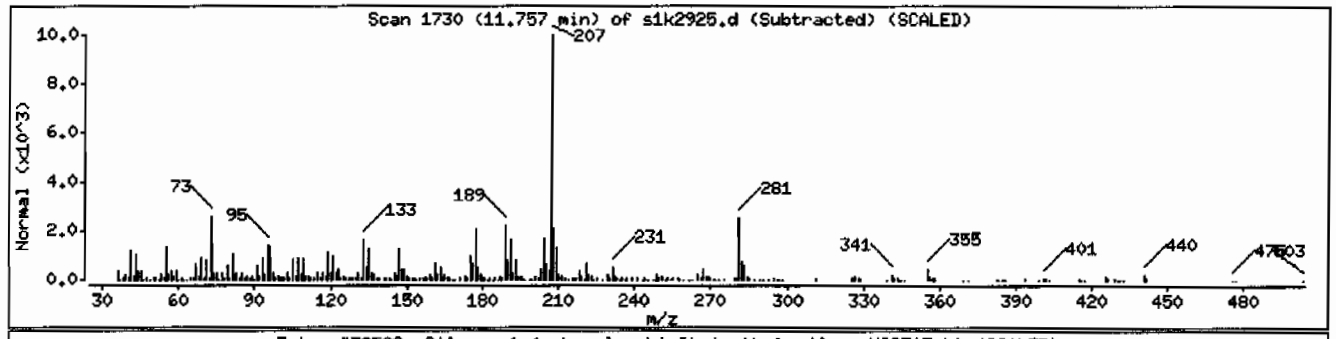

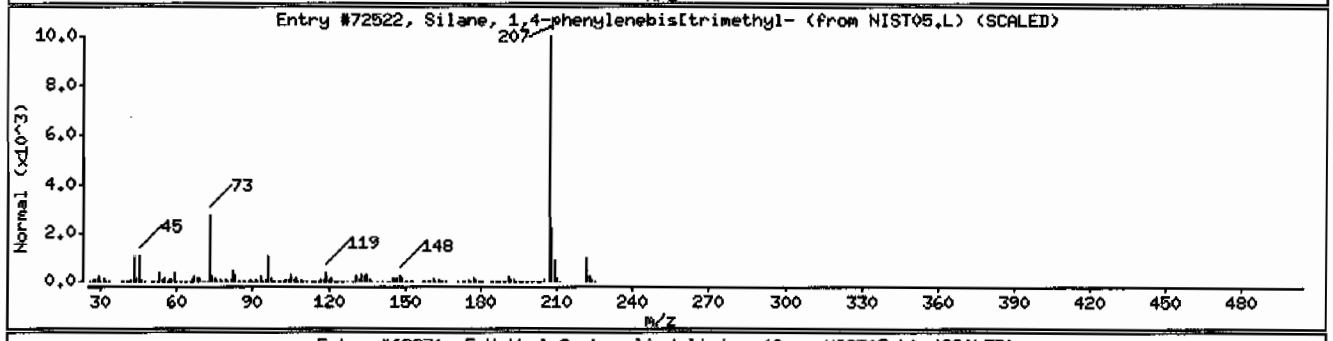

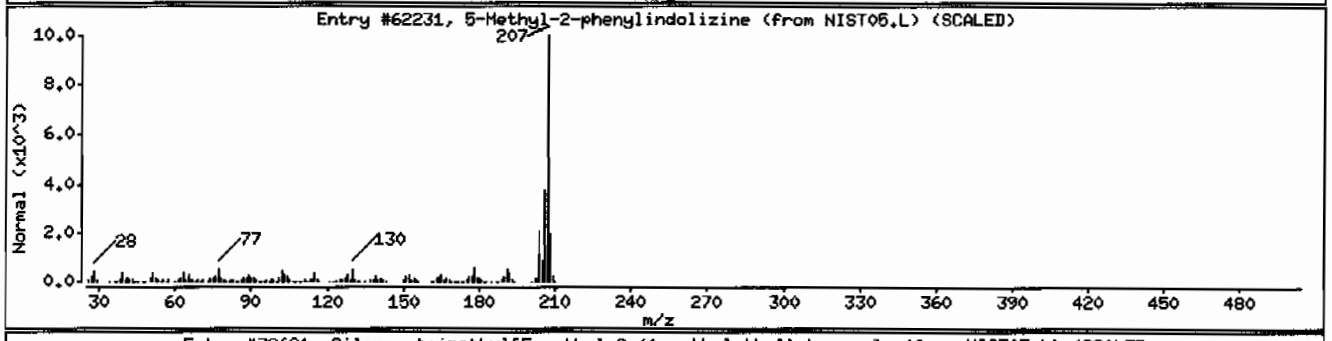

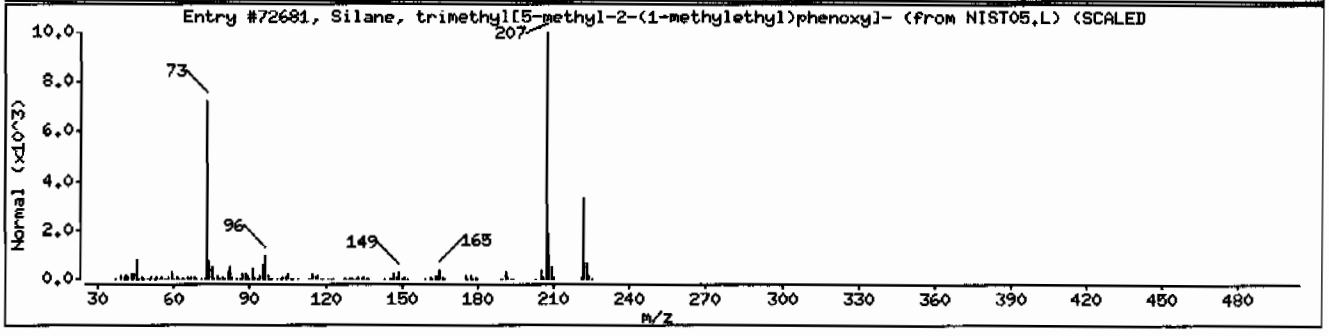

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13973	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 21:32	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s1k2924.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.7	363
108-95-2	Phenol	U	363	ug/kg	72.7	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.7	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.7	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.7	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.7	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.9	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.7	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.7	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.7	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.7	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.7	363
95-48-7	o-Cresol	U	363	ug/kg	72.7	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.7	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.7	363
78-59-1	Isophorone	U	363	ug/kg	72.7	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.7	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.7	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.7	363
65-85-0	Benzoic acid	U	727	ug/kg	182	727
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.7	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.7	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.27	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.7	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.7	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.7	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	363	ug/kg	72.7	363
99-09-2	3-Nitroaniline	U	363	ug/kg	72.7	363

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13973	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 21:32	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s1k2924.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.7	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	727	ug/kg	138	727
132-64-9	Dibenzofuran	U	363	ug/kg	72.7	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.7	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.7	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.7	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	p-Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.7	363
122-66-7	Azobenzene	U	363	ug/kg	72.7	363
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.7	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.7	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.27	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.7	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.7	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.7	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.7	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.7	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.87	275	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2924.d
Lab Smp Id: 241534003 Client Smp ID: RE03-09-13973
Inj Date : 29-NOV-2009 21:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534003|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	8.40560	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	651681	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2650068	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1415296	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2401836	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1921897	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1404931	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1249721	73.4195	2670
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1554438	75.1365	2730
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	670799	38.4100	1400
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1456558	42.9710	1560
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	363071	91.8699	3340
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1437498	47.6502	1730

ION RATIO REPORT

SV REPORT

Data file: s1k2924.d
Report Date: 11/30/2009 08:47
Lab. ID: 241534003 SampleType: SAMPLE
Injection Date: 29-NOV-2009 21:32
Operator: AMY Instrument: MSD1.i
Sample Info: |241534003|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	73963	3.56	3.63	80-120	100	(T)
93	796	3.60	3.63	408-468	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	91043	4.19	4.08	80-120	100	(T)
42	58871	4.19	4.08	48-108	65	(T)
22 Isophorone			CAS#: 78-59-1			
82	670799	4.19	4.37	80-120	100	(T)
138	172	4.25	4.37	0- 50	0	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	250519	5.93	5.72	80-120	100	(T)
164	1415296	5.93	5.72	0- 40	565	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	182043	5.93	5.76	80-120	100	(T)
63	2346	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	182043	5.93	6.05	80-120	100	(T)
89	2041	5.93	6.05	40-100	1	(QT)
63	2346	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	22708	6.47	6.31	80-120	100	(T)
165	24112	6.47	6.31	65-125	106	(T)
167	7796	6.47	6.31	0- 43	34	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	21733	6.47	6.62	80-120	100	(T)
141	141362	6.47	6.62	62-122	650	(QT)
250	42513	6.47	6.62	66-126	196	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	325	9.52	9.51	80-120	100	( )
253	298	9.51	9.51	0- 51	92	(Q)
125	562	9.51	9.50	0- 44	173	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2924.d
Lab Smp Id: 241534003 Client Smp ID: RE03-09-13973
Inj Date : 29-NOV-2009 21:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534003|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	8.40560	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3899489	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.875	737753	7.56768719	275	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2924.d
Date : 29-NOV-2009 21:32
Client ID: RE03-09-13973
Sample Info: |241534003|926126|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

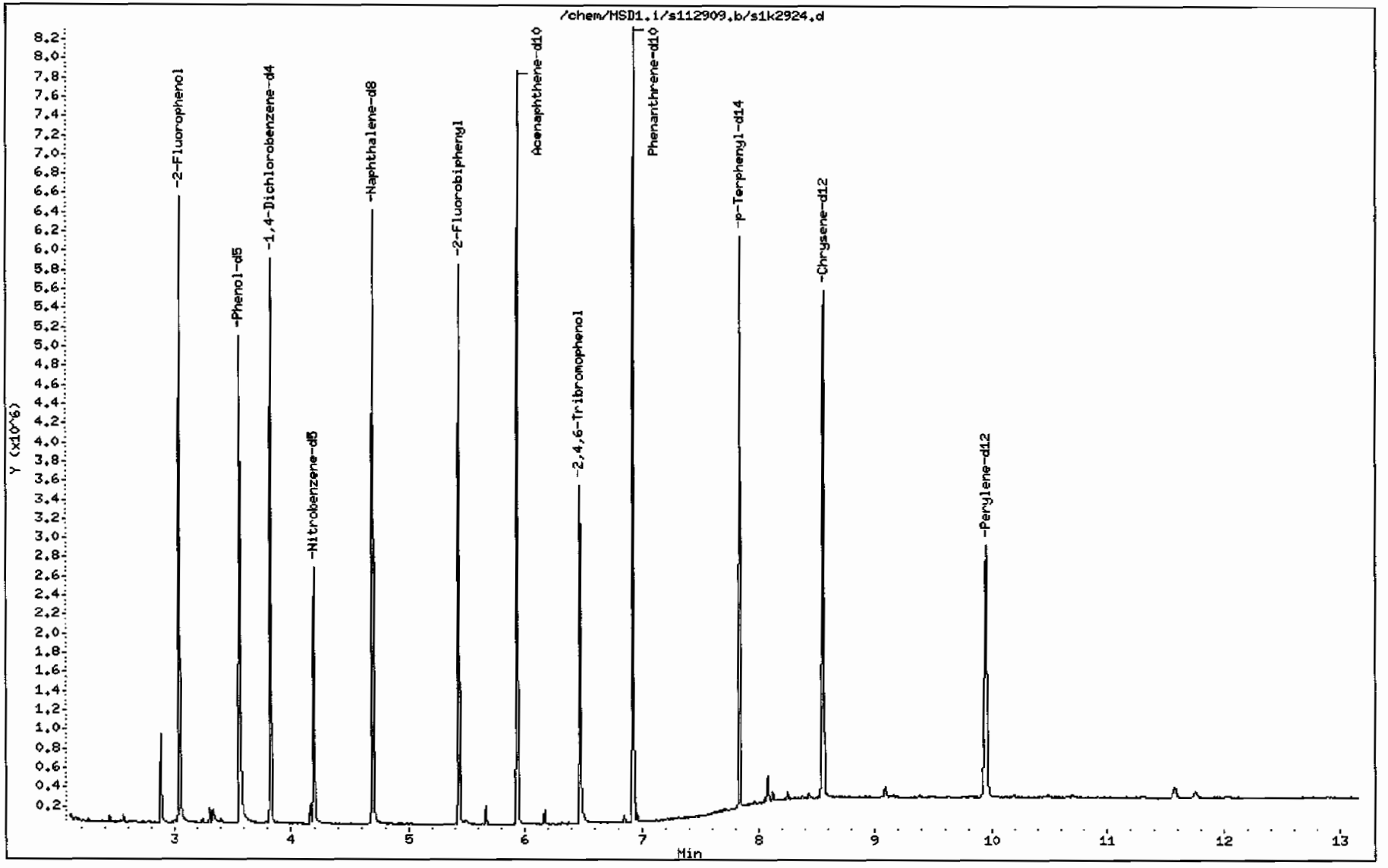

Data File: /chem/HSD1.i/s112909.b/s1k2924.d

Date : 29-NOV-2009 21:32

Client ID: RE03-09-13973

Instrument: HSD1.i

Sample Info: |2415340031926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

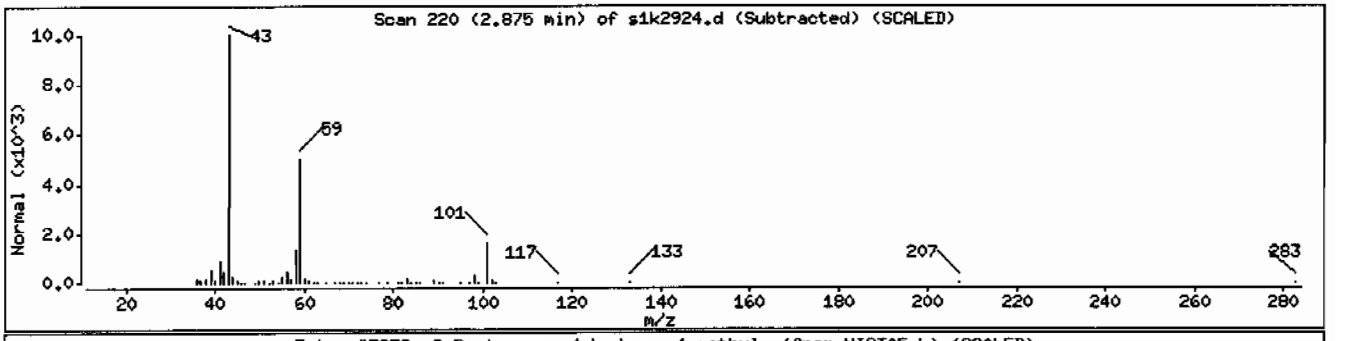

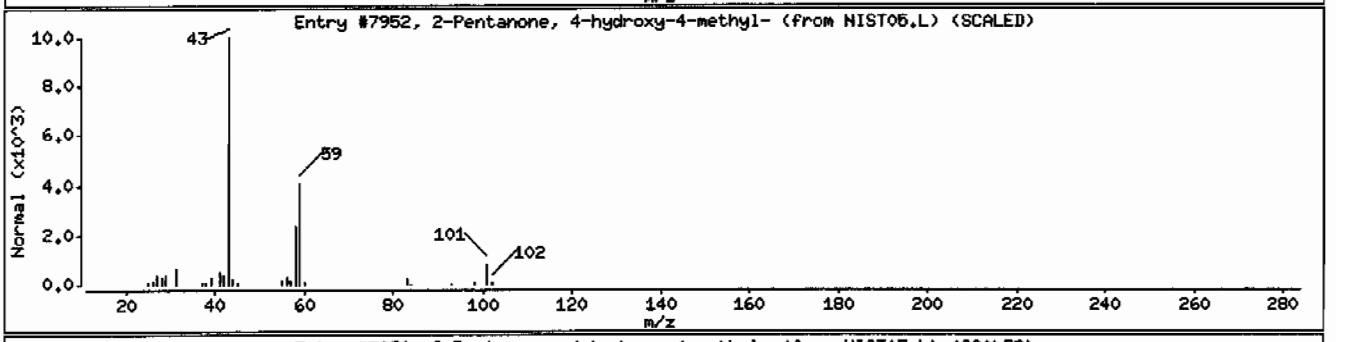

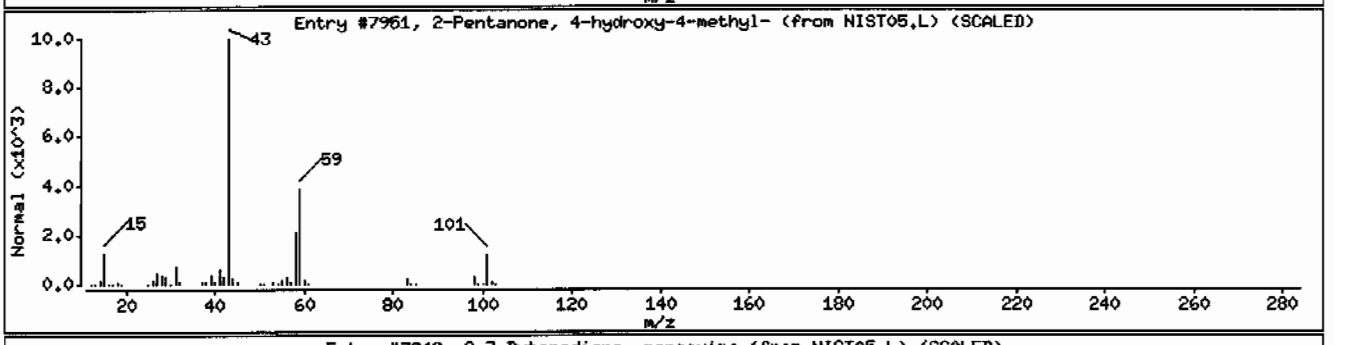

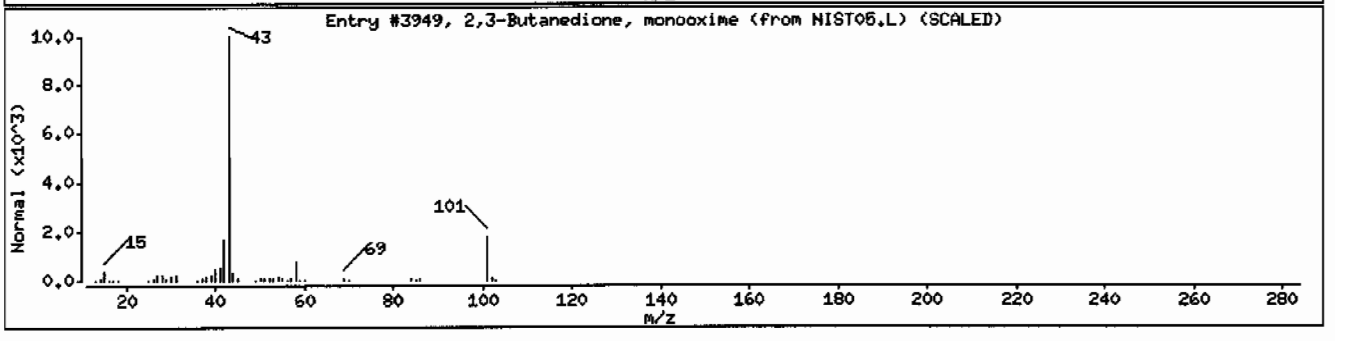

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534006	Date Received:	11/20/2009 08:50	%Moisture:	14.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13974	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:42	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2927.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	387	ug/kg	77.3	387
108-95-2	Phenol	U	387	ug/kg	77.3	387
95-57-8	2-Chlorophenol	U	387	ug/kg	77.3	387
106-46-7	1,4-Dichlorobenzene	U	387	ug/kg	77.3	387
621-64-7	N-Nitrosodipropylamine	U	387	ug/kg	77.3	387
59-50-7	4-Chloro-3-methylphenol	U	387	ug/kg	77.3	387
83-32-9	Acenaphthene	U	38.7	ug/kg	12.8	38.7
121-14-2	2,4-Dinitrotoluene	U	387	ug/kg	38.7	387
100-02-7	4-Nitrophenol	U	387	ug/kg	128	387
87-86-5	Pentachlorophenol	U	387	ug/kg	96.7	387
129-00-0	Pyrene	U	38.7	ug/kg	11.6	38.7
110-86-1	Pyridine	U	387	ug/kg	77.3	387
62-53-3	Aniline	U	387	ug/kg	116	387
111-44-4	bis(2-Chloroethyl) ether	U	387	ug/kg	77.3	387
541-73-1	1,3-Dichlorobenzene	U	387	ug/kg	77.3	387
100-51-6	Benzyl alcohol	U	387	ug/kg	116	387
95-50-1	1,2-Dichlorobenzene	U	387	ug/kg	77.3	387
108-60-1	bis(2-Chloroisopropyl)ether	U	387	ug/kg	77.3	387
95-48-7	o-Cresol	U	387	ug/kg	77.3	387
65794-96-9	m,p-Cresols	U	387	ug/kg	116	387
67-72-1	Hexachloroethane	U	387	ug/kg	77.3	387
98-95-3	Nitrobenzene	U	387	ug/kg	77.3	387
78-59-1	Isophorone	U	387	ug/kg	77.3	387
88-75-5	2-Nitrophenol	U	387	ug/kg	77.3	387
105-67-9	2,4-Dimethylphenol	U	387	ug/kg	135	387
111-91-1	bis(2-Chloroethoxy)methane	U	387	ug/kg	77.3	387
120-83-2	2,4-Dichlorophenol	U	387	ug/kg	77.3	387
65-85-0	Benzoic acid	U	773	ug/kg	193	773
91-20-3	Naphthalene	U	38.7	ug/kg	11.6	38.7
106-47-8	4-Chloroaniline	U	387	ug/kg	77.3	387
87-68-3	Hexachlorobutadiene	U	387	ug/kg	77.3	387
91-57-6	2-Methylnaphthalene	U	38.7	ug/kg	7.73	38.7
77-47-4	Hexachlorocyclopentadiene	U	387	ug/kg	77.3	387
88-06-2	2,4,6-Trichlorophenol	U	387	ug/kg	77.3	387
95-95-4	2,4,5-Trichlorophenol	U	387	ug/kg	77.3	387
91-58-7	2-Chloronaphthalene	U	38.7	ug/kg	12.8	38.7
88-74-4	2-Nitroaniline	U	387	ug/kg	77.3	387
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	387	ug/kg	77.3	387

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13974	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 22:42	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2927.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	387	ug/kg	77.3	387
606-20-2	2,6-Dinitrotoluene	U	387	ug/kg	38.7	387
208-96-8	Acenaphthylene	U	38.7	ug/kg	11.6	38.7
51-28-5	2,4-Dinitrophenol	U	773	ug/kg	147	773
132-64-9	Dibenzofuran	U	387	ug/kg	77.3	387
84-66-2	Diethylphthalate	U	387	ug/kg	77.3	387
86-73-7	Fluorene	U	38.7	ug/kg	11.6	38.7
7005-72-3	4-Chlorophenylphenylether	U	387	ug/kg	77.3	387
534-52-1	2-Methyl-4,6-dinitrophenol	U	387	ug/kg	77.3	387
100-01-6	4-Nitroaniline	U	387	ug/kg	116	387
	p-Nitroaniline					
122-39-4	Diphenylamine	U	387	ug/kg	77.3	387
122-66-7	Azobenzene	U	387	ug/kg	77.3	387
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	387	ug/kg	77.3	387
118-74-1	Hexachlorobenzene	U	387	ug/kg	77.3	387
85-01-8	Phenanthrene	U	38.7	ug/kg	11.6	38.7
120-12-7	Anthracene	U	38.7	ug/kg	7.73	38.7
84-74-2	Di-n-butylphthalate	U	387	ug/kg	77.3	387
206-44-0	Fluoranthene	U	38.7	ug/kg	11.6	38.7
85-68-7	Butylbenzylphthalate	U	387	ug/kg	77.3	387
56-55-3	Benzo(a)anthracene	U	38.7	ug/kg	11.6	38.7
91-94-1	3,3'-Dichlorobenzidine	U	387	ug/kg	116	387
218-01-9	Chrysene	U	38.7	ug/kg	11.6	38.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	387	ug/kg	77.3	387
117-84-0	Di-n-octylphthalate	U	387	ug/kg	77.3	387
205-99-2	Benzo(b)fluoranthene	U	38.7	ug/kg	11.6	38.7
207-08-9	Benzo(k)fluoranthene	U	38.7	ug/kg	11.6	38.7
50-32-8	Benzo(a)pyrene	U	38.7	ug/kg	11.6	38.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.7	ug/kg	11.6	38.7
53-70-3	Dibenzo(a,h)anthracene	U	38.7	ug/kg	11.6	38.7
191-24-2	Benzo(ghi)perylene	U	38.7	ug/kg	11.6	38.7
120-82-1	1,2,4-Trichlorobenzene	U	387	ug/kg	77.3	387

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	279	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2927.d
Lab Smp Id: 241534006 Client Smp ID: RE03-09-13974
Inj Date : 29-NOV-2009 22:42
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534006|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	14.17490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	701376	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2790700	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1475615	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2482031	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1893543	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1342314	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1345317	73.4357	2840
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1622638	72.8758	2820
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	694881	37.7838	1460
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1480231	41.8843	1620
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	394291	95.6914	3700
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1535375	51.6567	2000

ION RATIO REPORT

SV REPORT

Data file: s1k2927.d
Report Date: 11/30/2009 08:48
Lab. ID: 241534006 SampleType: SAMPLE
Injection Date: 29-NOV-2009 22:42
Operator: AMY Instrument: MSD1.i
Sample Info: |241534006|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	77031	3.56	3.63	80-120	100	(T)
93	842	3.59	3.63	408-468	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	93100	4.19	4.08	80-120	100	(T)
42	59433	4.19	4.08	48-108	64	(T)
22 Isophorone			CAS#: 78-59-1			
82	694881	4.19	4.37	80-120	100	(T)
138	161	4.62	4.37	0- 50	0	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	262841	5.93	5.72	80-120	100	(T)
164	1475615	5.93	5.72	0- 40	561	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	187506	5.93	5.76	80-120	100	(T)
63	2347	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	187356	5.93	6.05	80-120	100	(T)
89	2187	5.93	6.05	40-100	1	(QT)
63	2347	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	24634	6.47	6.31	80-120	100	(T)
165	23453	6.47	6.31	65-125	95	(T)
167	8260	6.47	6.31	0- 43	34	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	23199	6.47	6.62	80-120	100	(T)
141	150432	6.47	6.62	62-122	648	(QT)
250	47266	6.47	6.62	66-126	204	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	1006	9.50	9.51	80-120	100	( )
253	459	9.45	9.51	0- 51	46	( )
125	598	9.45	9.50	0- 44	59	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2927.d
Lab Smp Id: 241534006 Client Smp ID: RE03-09-13974
Inj Date : 29-NOV-2009 22:42
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534006|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	14.17490	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	4198514	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.875	758276	7.22423124	279	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2927.d
Date : 29-NOV-2009 22:42
Client ID: RE03-09-13974
Sample Info: 1241534006|926426|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

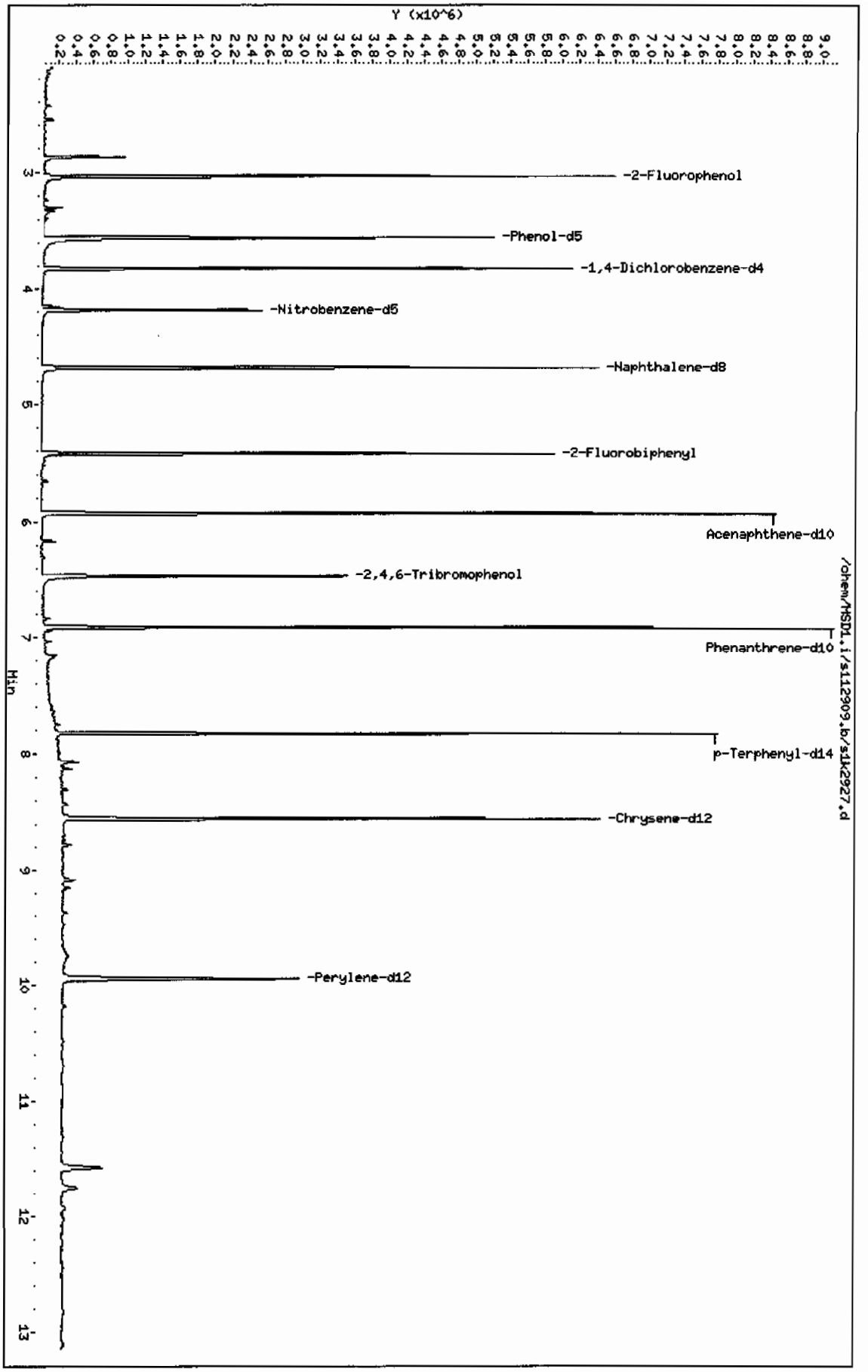

Page 1

Data File: /chem/MSD1.i/s112909.b/s1k2927.d

Date : 29-NOV-2009 22:42

Client ID: RE03-09-13974

Instrument: MSD1.i

Sample Info: |241534006|926126|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1,3,5-Pentanetriol, 3-methyl-	7564-64-9	NIST05.L	14621	39	C6H14O3	134
t-Butyl nitrite	540-80-7	NIST05.L	4426	39	C4H9NO2	103

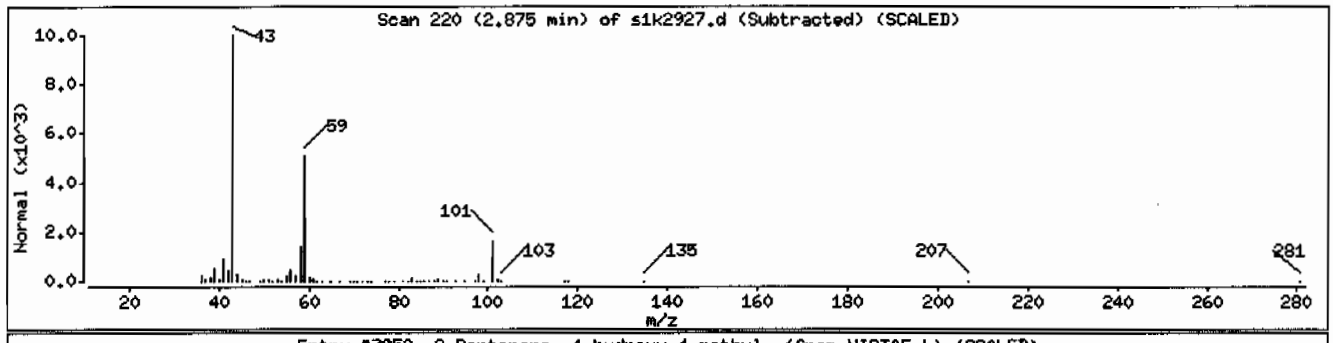

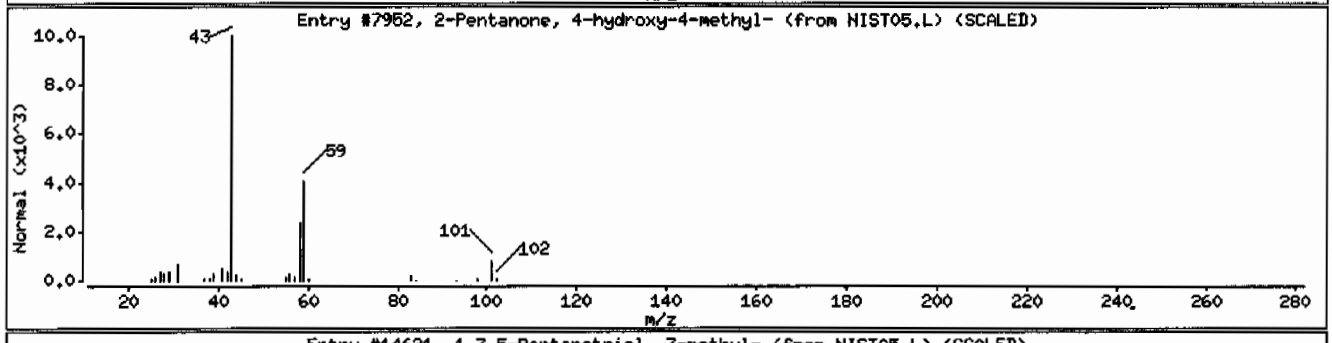

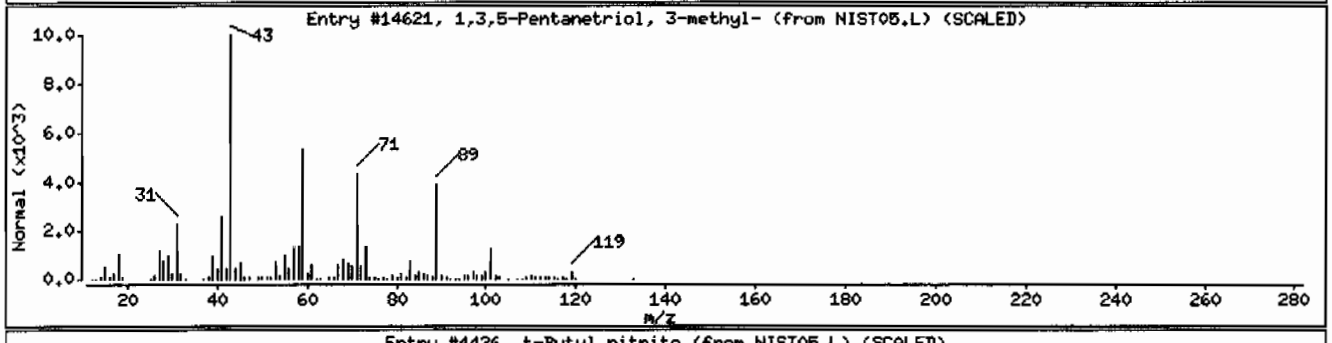

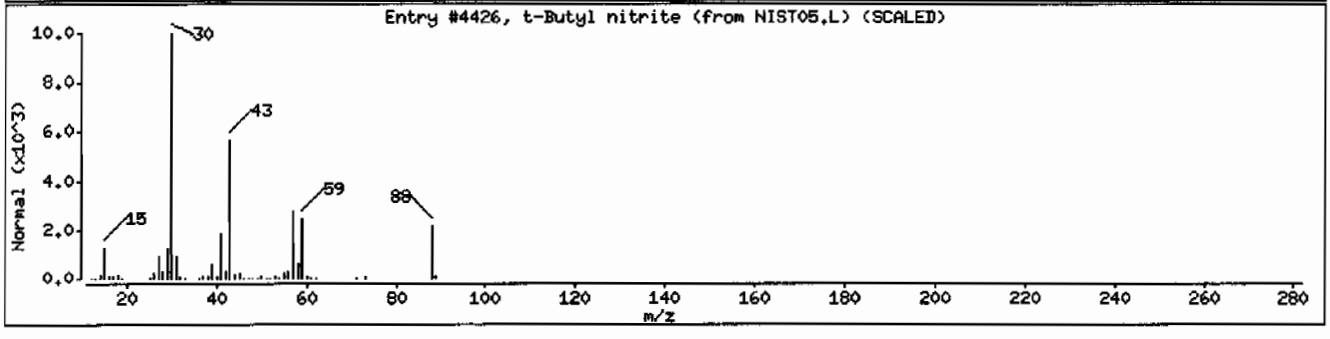

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:46	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1k2922.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	403	ug/kg	80.7	403
108-95-2	Phenol	U	403	ug/kg	80.7	403
95-57-8	2-Chlorophenol	U	403	ug/kg	80.7	403
106-46-7	1,4-Dichlorobenzene	U	403	ug/kg	80.7	403
621-64-7	N-Nitrosodipropylamine	U	403	ug/kg	80.7	403
59-50-7	4-Chloro-3-methylphenol	U	403	ug/kg	80.7	403
83-32-9	Acenaphthene	U	40.3	ug/kg	13.3	40.3
121-14-2	2,4-Dinitrotoluene	U	403	ug/kg	40.3	403
100-02-7	4-Nitrophenol	U	403	ug/kg	133	403
87-86-5	Pentachlorophenol	U	403	ug/kg	101	403
129-00-0	Pyrene	U	40.3	ug/kg	12.1	40.3
110-86-1	Pyridine	U	403	ug/kg	80.7	403
62-53-3	Aniline	U	403	ug/kg	121	403
111-44-4	bis(2-Chloroethyl) ether	U	403	ug/kg	80.7	403
541-73-1	1,3-Dichlorobenzene	U	403	ug/kg	80.7	403
100-51-6	Benzyl alcohol	U	403	ug/kg	121	403
95-50-1	1,2-Dichlorobenzene	U	403	ug/kg	80.7	403
108-60-1	bis(2-Chloroisopropyl)ether	U	403	ug/kg	80.7	403
95-48-7	o-Cresol	U	403	ug/kg	80.7	403
65794-96-9	m,p-Cresols	U	403	ug/kg	121	403
67-72-1	Hexachloroethane	U	403	ug/kg	80.7	403
98-95-3	Nitrobenzene	U	403	ug/kg	80.7	403
78-59-1	Isophorone	U	403	ug/kg	80.7	403
88-75-5	2-Nitrophenol	U	403	ug/kg	80.7	403
105-67-9	2,4-Dimethylphenol	U	403	ug/kg	141	403
111-91-1	bis(2-Chloroethoxy)methane	U	403	ug/kg	80.7	403
120-83-2	2,4-Dichlorophenol	U	403	ug/kg	80.7	403
65-85-0	Benzoic acid	U	807	ug/kg	202	807
91-20-3	Naphthalene	U	40.3	ug/kg	12.1	40.3
106-47-8	4-Chloroaniline	U	403	ug/kg	80.7	403
87-68-3	Hexachlorobutadiene	U	403	ug/kg	80.7	403
91-57-6	2-Methylnaphthalene	U	40.3	ug/kg	8.07	40.3
77-47-4	Hexachlorocyclopentadiene	U	403	ug/kg	80.7	403
88-06-2	2,4,6-Trichlorophenol	U	403	ug/kg	80.7	403
95-95-4	2,4,5-Trichlorophenol	U	403	ug/kg	80.7	403
91-58-7	2-Chloronaphthalene	U	40.3	ug/kg	13.3	40.3
88-74-4	2-Nitroaniline	U	403	ug/kg	80.7	403
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	403	ug/kg	80.7	403

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534001	Date Received:	11/20/2009 08:50	%Moisture:	17.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13975	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:46	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1k2922.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	403	ug/kg	80.7	403
606-20-2	2,6-Dinitrotoluene	U	403	ug/kg	40.3	403
208-96-8	Acenaphthylene	U	40.3	ug/kg	12.1	40.3
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807
132-64-9	Dibenzofuran	U	403	ug/kg	80.7	403
84-66-2	Diethylphthalate	U	403	ug/kg	80.7	403
86-73-7	Fluorene	U	40.3	ug/kg	12.1	40.3
7005-72-3	4-Chlorophenylphenylether	U	403	ug/kg	80.7	403
534-52-1	2-Methyl-4,6-dinitrophenol	U	403	ug/kg	80.7	403
100-01-6	4-Nitroaniline	U	403	ug/kg	121	403
	p-Nitroaniline					
122-39-4	Diphenylamine	U	403	ug/kg	80.7	403
122-66-7	Azobenzene	U	403	ug/kg	80.7	403
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	403	ug/kg	80.7	403
118-74-1	Hexachlorobenzene	U	403	ug/kg	80.7	403
85-01-8	Phenanthrene	U	40.3	ug/kg	12.1	40.3
120-12-7	Anthracene	U	40.3	ug/kg	8.07	40.3
84-74-2	Di-n-butylphthalate	U	403	ug/kg	80.7	403
206-44-0	Fluoranthene	U	40.3	ug/kg	12.1	40.3
85-68-7	Butylbenzylphthalate	U	403	ug/kg	80.7	403
56-55-3	Benzo(a)anthracene	U	40.3	ug/kg	12.1	40.3
91-94-1	3,3'-Dichlorobenzidine	U	403	ug/kg	121	403
218-01-9	Chrysene	U	40.3	ug/kg	12.1	40.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	403	ug/kg	80.7	403
117-84-0	Di-n-octylphthalate	U	403	ug/kg	80.7	403
205-99-2	Benzo(b)fluoranthene	U	40.3	ug/kg	12.1	40.3
207-08-9	Benzo(k)fluoranthene	U	40.3	ug/kg	12.1	40.3
50-32-8	Benzo(a)pyrene	U	40.3	ug/kg	12.1	40.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.3	ug/kg	12.1	40.3
53-70-3	Dibenzo(a,h)anthracene	U	40.3	ug/kg	12.1	40.3
191-24-2	Benzo(ghi)perylene	U	40.3	ug/kg	12.1	40.3
120-82-1	1,2,4-Trichlorobenzene	U	403	ug/kg	80.7	403

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.87	312	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2922.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 29-NOV-2009 20:46
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534001|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	17.83110	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	670086	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2643739	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1414329	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2339933	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1727720	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1223177	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1205740	68.8900	2780
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1498277	70.4327	2840
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	631971	36.2733	1460
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1357902	40.0879	1620
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	349685	88.5433	3570
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1443220	53.2166	2150

ION RATIO REPORT

SV REPORT

Data file: s1k2922.d
Report Date: 11/30/2009 08:47
Lab. ID: 241534001 SampleType: SAMPLE
Injection Date: 29-NOV-2009 20:46
Operator: AMY Instrument: MSD1.i
Sample Info: |241534001|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	71429	3.56	3.63	80-120	100	(T)
93	184	3.57	3.63	408-468	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	87267	4.19	4.08	80-120	100	(T)
42	55641	4.19	4.08	48-108	64	(T)
22 Isophorone		CAS#: 78-59-1				
82	631971	4.19	4.37	80-120	100	(T)
138	400	4.25	4.37	0- 50	0	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	248536	5.93	5.72	80-120	100	(T)
164	1413670	5.93	5.72	0- 40	569	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	184204	5.93	5.76	80-120	100	(T)
63	2446	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	184204	5.93	6.05	80-120	100	(T)
89	2270	5.93	6.05	40-100	1	(QT)
63	2446	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	20939	6.47	6.31	80-120	100	(T)
165	21930	6.47	6.31	65-125	105	(T)
167	6830	6.47	6.31	0- 43	33	(T)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	21153	6.47	6.62	80-120	100	(T)
141	133586	6.47	6.62	62-122	632	(QT)
250	41289	6.47	6.62	66-126	195	(QT)
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	645	9.52	9.51	80-120	100	( )
253	402	9.47	9.51	0- 51	62	(Q)
125	755	9.55	9.50	0- 44	117	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2922.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 29-NOV-2009 20:46
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534001|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	17.83110	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3991265	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.875	770973	7.72660660	312	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2922.d
Date : 29-NOV-2009 20:46
Client ID: RE03-09-13975
Sample Info: |241534001|926126|1|SVHF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

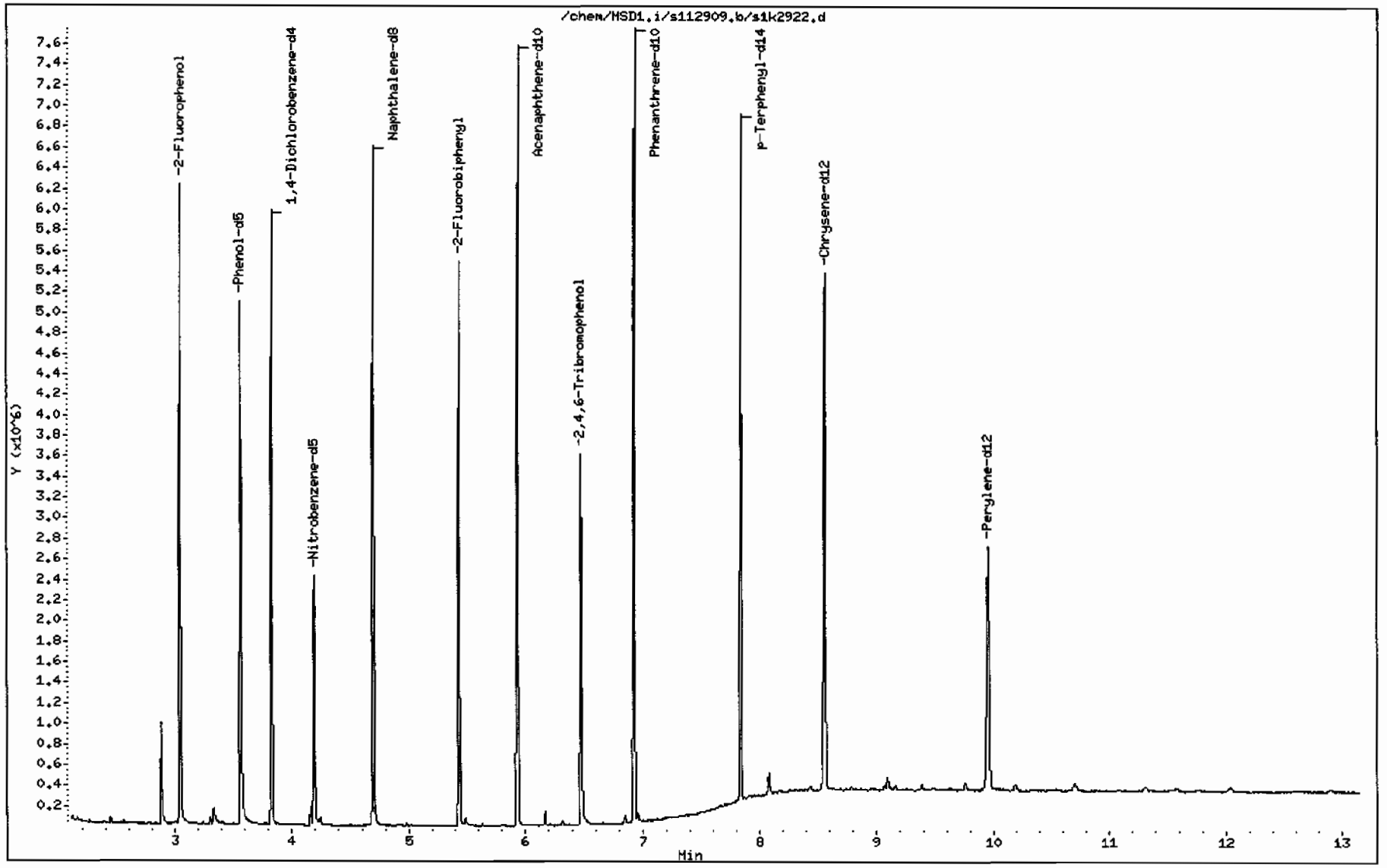

Data File: /chem/MSD1.i/s112909.b/s1k2922.d

Date : 29-NOV-2009 20:46

Client ID: RE03-09-13975

Instrument: MSD1.i

Sample Info: |2415340011926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

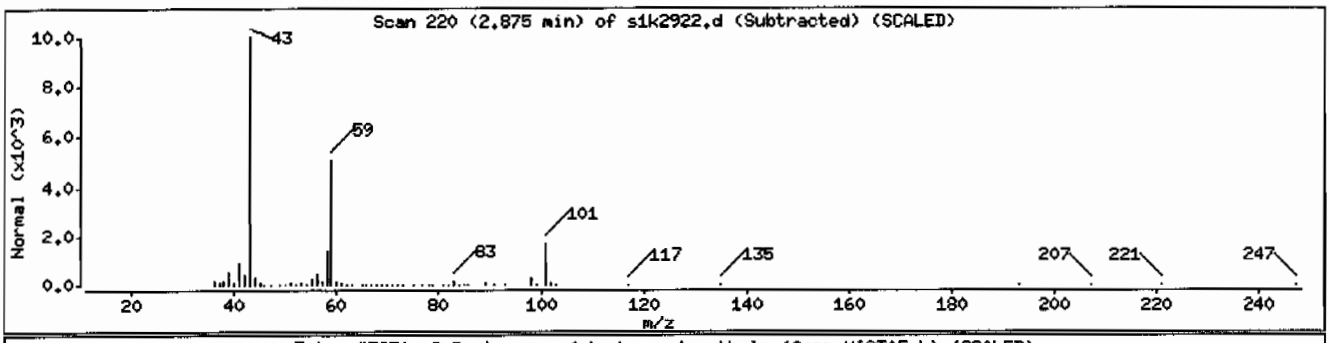

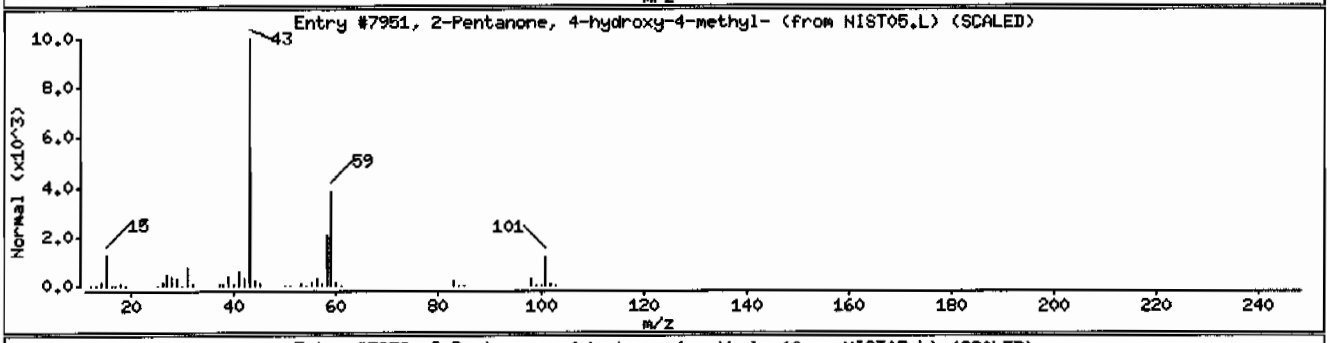

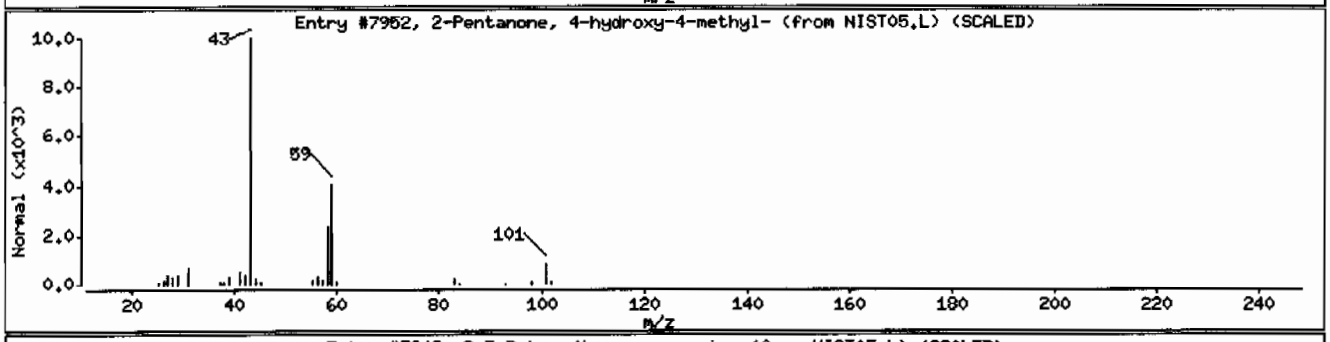

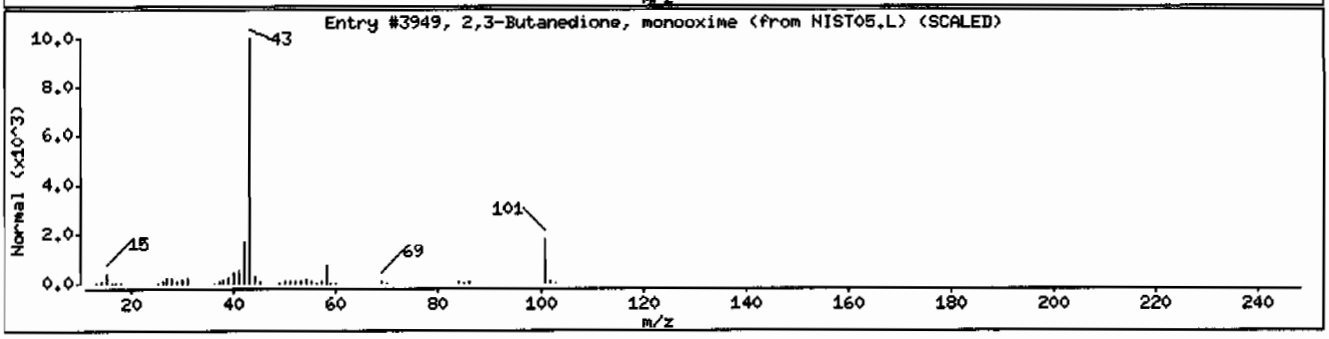

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13976**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:09**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2923.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.3	397
108-95-2	Phenol	U	397	ug/kg	79.3	397
95-57-8	2-Chlorophenol	U	397	ug/kg	79.3	397
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.3	397
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.3	397
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.3	397
83-32-9	Acenaphthene	J	34.5	ug/kg	13.1	39.7
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397
87-86-5	Pentachlorophenol	U	397	ug/kg	99.1	397
129-00-0	Pyrene		242	ug/kg	11.9	39.7
110-86-1	Pyridine	U	397	ug/kg	79.3	397
62-53-3	Aniline	U	397	ug/kg	119	397
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.3	397
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.3	397
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.3	397
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.3	397
95-48-7	o-Cresol	U	397	ug/kg	79.3	397
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397
67-72-1	Hexachloroethane	U	397	ug/kg	79.3	397
98-95-3	Nitrobenzene	U	397	ug/kg	79.3	397
78-59-1	Isophorone	U	397	ug/kg	79.3	397
88-75-5	2-Nitrophenol	U	397	ug/kg	79.3	397
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.3	397
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.3	397
65-85-0	Benzoic acid	U	793	ug/kg	198	793
91-20-3	Naphthalene	J	17.1	ug/kg	11.9	39.7
106-47-8	4-Chloroaniline	U	397	ug/kg	79.3	397
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.3	397
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.93	39.7
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.3	397
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.3	397
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.3	397
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7
88-74-4	2-Nitroaniline	U	397	ug/kg	79.3	397
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	397	ug/kg	79.3	397

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534002	Date Received:	11/20/2009 08:50	%Moisture:	16.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13976	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 21:09	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2923.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	397	ug/kg	79.3	397
606-20-2	2,6-Dinitrotoluene	U	397	ug/kg	39.7	397
208-96-8	Acenaphthylene	U	39.7	ug/kg	11.9	39.7
51-28-5	2,4-Dinitrophenol	U	793	ug/kg	151	793
132-64-9	Dibenzofuran	U	397	ug/kg	79.3	397
84-66-2	Diethylphthalate	U	397	ug/kg	79.3	397
86-73-7	Fluorene	J	30.0	ug/kg	11.9	39.7
7005-72-3	4-Chlorophenylphenylether	U	397	ug/kg	79.3	397
534-52-1	2-Methyl-4,6-dinitrophenol	U	397	ug/kg	79.3	397
100-01-6	4-Nitroaniline	U	397	ug/kg	119	397
	p-Nitroaniline					
122-39-4	Diphenylamine	U	397	ug/kg	79.3	397
122-66-7	Azobenzene	U	397	ug/kg	79.3	397
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	397	ug/kg	79.3	397
118-74-1	Hexachlorobenzene	U	397	ug/kg	79.3	397
85-01-8	Phenanthrene		207	ug/kg	11.9	39.7
120-12-7	Anthracene		53.8	ug/kg	7.93	39.7
84-74-2	Di-n-butylphthalate	U	397	ug/kg	79.3	397
206-44-0	Fluoranthene		249	ug/kg	11.9	39.7
85-68-7	Butylbenzylphthalate	U	397	ug/kg	79.3	397
56-55-3	Benzo(a)anthracene		97.7	ug/kg	11.9	39.7
91-94-1	3,3'-Dichlorobenzidine	U	397	ug/kg	119	397
218-01-9	Chrysene		101	ug/kg	11.9	39.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	397	ug/kg	79.3	397
117-84-0	Di-n-octylphthalate	U	397	ug/kg	79.3	397
205-99-2	Benzo(b)fluoranthene		231	ug/kg	11.9	39.7
207-08-9	Benzo(k)fluoranthene	U	39.7	ug/kg	11.9	39.7
50-32-8	Benzo(a)pyrene		71.9	ug/kg	11.9	39.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.7	ug/kg	11.9	39.7
53-70-3	Dibenzo(a,h)anthracene	U	39.7	ug/kg	11.9	39.7
191-24-2	Benzo(ghi)perylene	U	39.7	ug/kg	11.9	39.7
120-82-1	1,2,4-Trichlorobenzene	U	397	ug/kg	79.3	397

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	298	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.07	298	ug/kg	83	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2923.d
Lab Smp Id: 241534002 Client Smp ID: RE03-09-13976
Inj Date : 29-NOV-2009 21:09
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534002|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	16.30520	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	646535	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2536054	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1347946	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2203797	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1486748	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	945984	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1227763	72.7036	2880
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1456969	70.9857	2810
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	638428	38.1999	1510
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1355392	41.9844	1660
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	355895	94.5537	3750
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1233930	52.8738	2100

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
47 Acenaphthene	154	5.957	5.957	(1.004)	27059	0.87034	34.5(a)
79 Pyrene	202	7.786	7.787	(0.910)	240973	6.09940	242
30 Naphthalene	128	4.704	4.710	(1.004)	22788	0.43054	17.1(aQ)
53 Fluorene	166	6.310	6.310	(1.063)	27419	0.75633	30.0(a)
68 Phenanthrene	178	6.934	6.940	(1.002)	261613	5.22357	207
69 Anthracene	178	6.963	6.969	(1.006)	69123	1.35712	53.8
76 Fluoranthene	202	7.645	7.645	(1.105)	303196	6.27168	249
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	87846	2.46410	97.7
92 Chrysene	228	8.575	8.581	(1.002)	85240	2.55817	101
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.955)	81170	5.82188	231
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	40504	1.81392	71.9

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s1k2923.d
Report Date: 11/30/2009 08:47
Lab. ID: 241534002 SampleType: SAMPLE
Injection Date: 29-NOV-2009 21:09
Operator: AMY Instrument: MSD1.i
Sample Info: |241534002|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	69733	3.56	3.63	80-120	100	(T)
93	898	3.60	3.63	408-468	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	84786	4.19	4.08	80-120	100	(T)
42	52655	4.19	4.08	48-108	62	(T)
22 Isophorone		CAS#: 78-59-1				
82	638428	4.19	4.37	80-120	100	(T)
138	155	4.25	4.37	0- 50	0	(T)
30 Naphthalene		CAS#: 91-20-3				
128	22788	4.70	4.71	80-120	100	( )
129	2669	4.70	4.71	0- 41	12	( )
127	2971	4.70	4.71	15- 75	13	(Q)
43 Dimethylphthalate		CAS#: 131-11-3				
163	235397	5.93	5.72	80-120	100	(T)
164	1347946	5.93	5.72	0- 40	573	(QT)
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	172291	5.93	5.76	80-120	100	(T)
63	2514	5.93	5.76	53-113	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
47 Acenaphthene			CAS#: 83-32-9			
154	27059	5.96	5.96	80-120	100	( )
153	28305	5.96	5.96	71-131	105	( )
152	13641	5.96	5.96	17- 77	50	( )
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	172291	5.93	6.05	80-120	100	(T)
89	2110	5.93	6.05	40-100	1	(QT)
63	2514	5.93	6.05	19- 79	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	27419	6.31	6.31	80-120	100	( )
165	25899	6.30	6.31	65-125	94	( )
167	4617	6.31	6.31	0- 43	17	( )
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	20797	6.47	6.62	80-120	100	(T)
141	133945	6.47	6.62	62-122	644	(QT)
250	41147	6.47	6.62	66-126	198	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	261613	6.93	6.94	80-120	100	( )
179	43126	6.93	6.94	0- 45	16	( )
176	47842	6.93	6.94	0- 48	18	( )
69 Anthracene			CAS#: 120-12-7			
178	69123	6.96	6.97	80-120	100	( )
179	13308	6.96	6.97	0- 45	19	( )
176	11675	6.96	6.97	0- 48	17	( )
76 Fluoranthene			CAS#: 206-44-0			
202	303196	7.65	7.65	80-120	100	( )
203	52713	7.65	7.65	0- 47	17	( )
101	43508	7.65	7.65	0- 43	14	( )
79 Pyrene			CAS#: 129-00-0			
202	240973	7.79	7.79	80-120	100	( )
200	51199	7.79	7.79	0- 51	21	( )
101	44005	7.78	7.79	0- 45	18	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	87846	8.55	8.55	80-120	100	( )
226	21403	8.55	8.55	0- 55	24	( )
229	25005	8.55	8.55	0- 49	28	( )
92 Chrysene			CAS#: 218-01-9			
228	85240	8.57	8.58	80-120	100	( )
229	15603	8.57	8.58	0- 49	18	( )
226	24464	8.57	8.58	0- 58	29	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	81170	9.50	9.51	80-120	100	( )
253	18422	9.50	9.51	0- 51	23	( )
125	12138	9.50	9.50	0- 44	15	( )
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	81185	9.50	9.53	80-120	100	( )
253	19128	9.50	9.53	0- 51	24	( )
125	13503	9.50	9.53	0- 43	17	( )
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	40504	9.88	9.89	80-120	100	( )
253	9150	9.88	9.89	0- 52	23	( )
125	7188	9.87	9.89	0- 48	18	( )
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	16241	11.47	11.50	80-120	100	( )
138	5499	11.47	11.50	7- 67	34	( )
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	11082	11.72	11.50	80-120	100	(T)
139	1522	11.72	11.50	0- 58	14	(T)
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	16943	11.96	11.98	80-120	100	( )
138	5423	11.96	11.98	7- 67	32	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2923.d
Lab Smp Id: 241534002 Client Smp ID: RE03-09-13976
Inj Date : 29-NOV-2009 21:09
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534002|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	16.30520	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3855369	40.000
* 91 Chrysene-d12	8.557	4537726	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.875	723654	7.50800745	298	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.075	853242	7.52132035	298	83	NIST05.L	112657	91

Data File: /chem/MSD1.i/s112909.b/s1k2923.d
Date : 29-NOV-2009 21:09
Client ID: RE03-09-13976
Sample Info: 1241534002192612611|SVMF11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

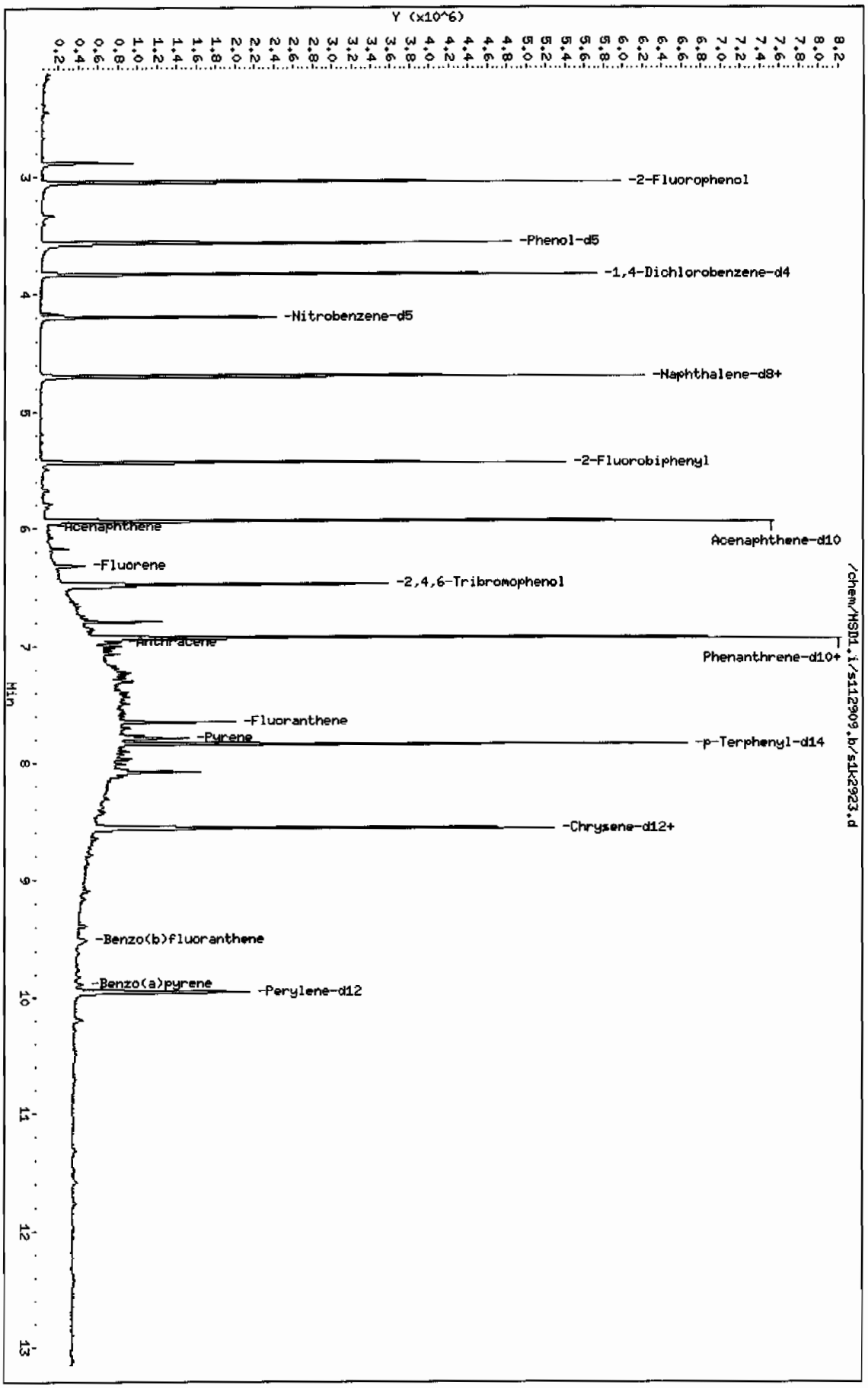

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |2415340021926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 34.5 ug/Kg

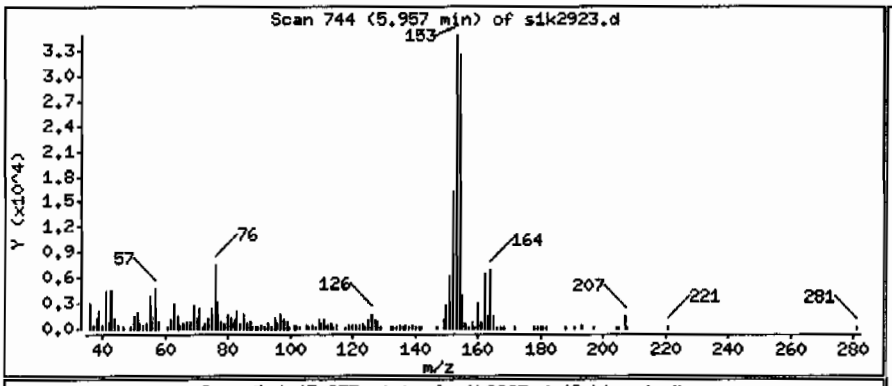

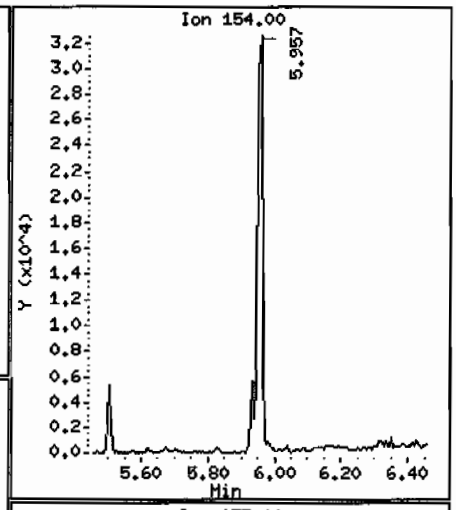

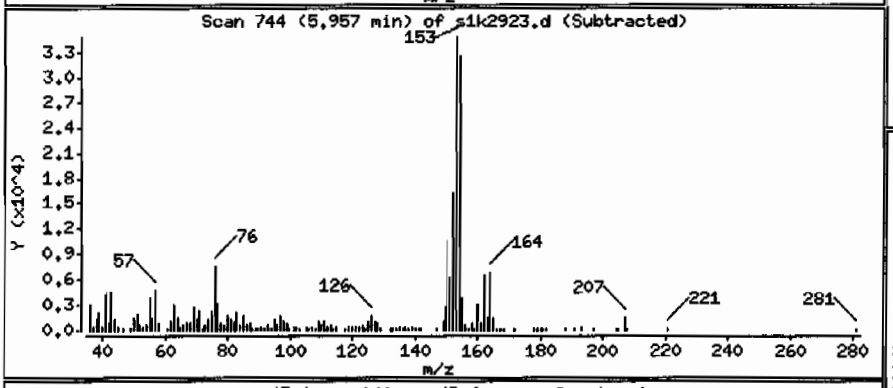

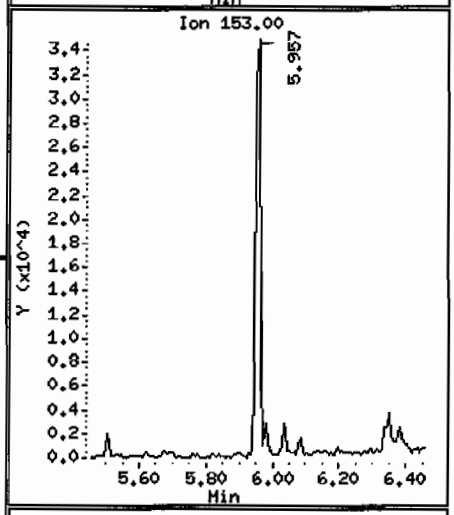

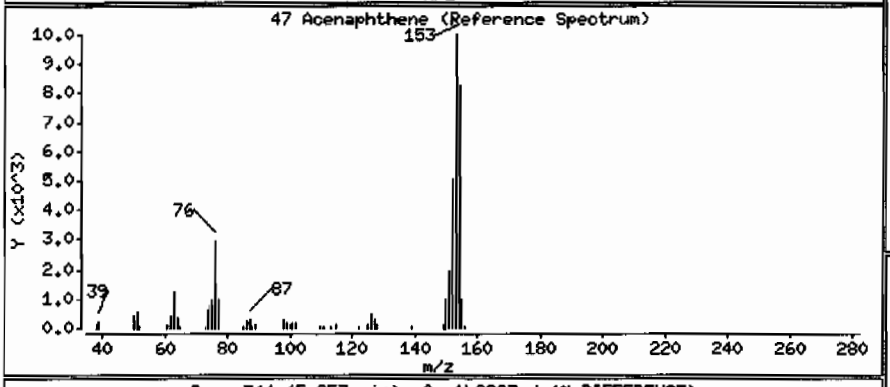

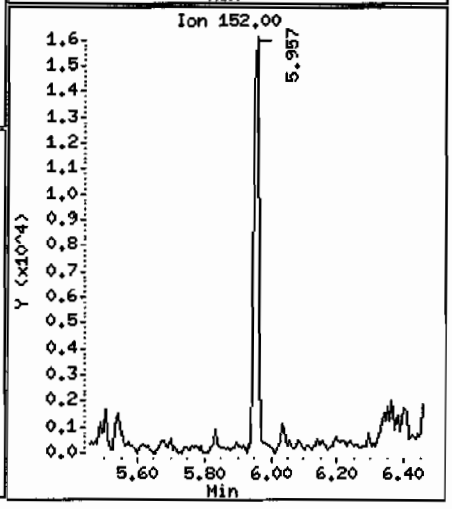

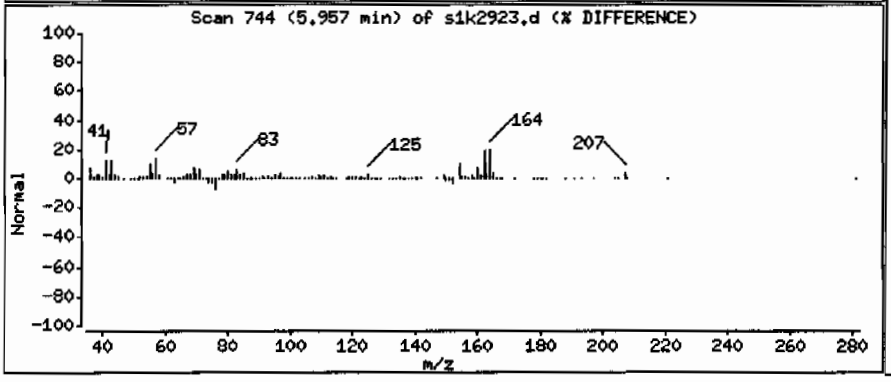

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |24153400219261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 242 ug/Kg

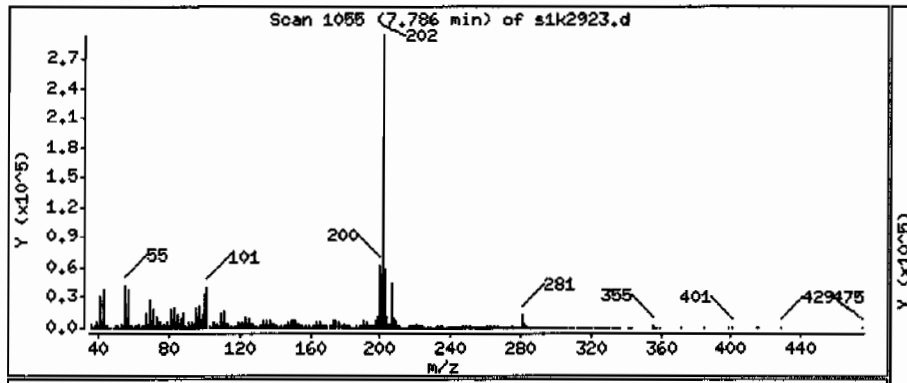

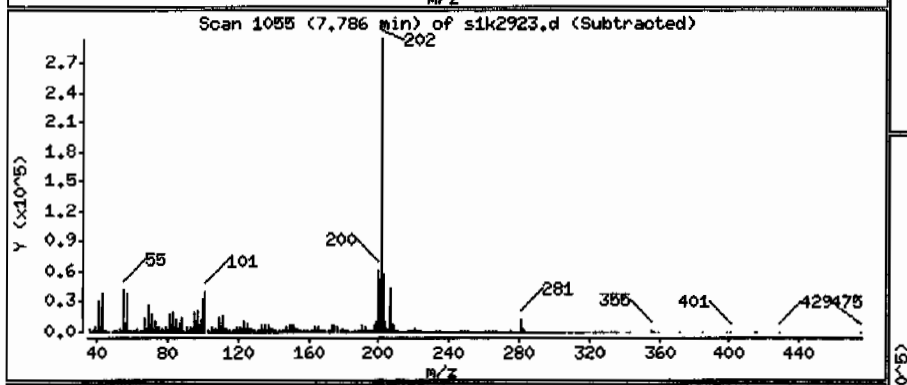

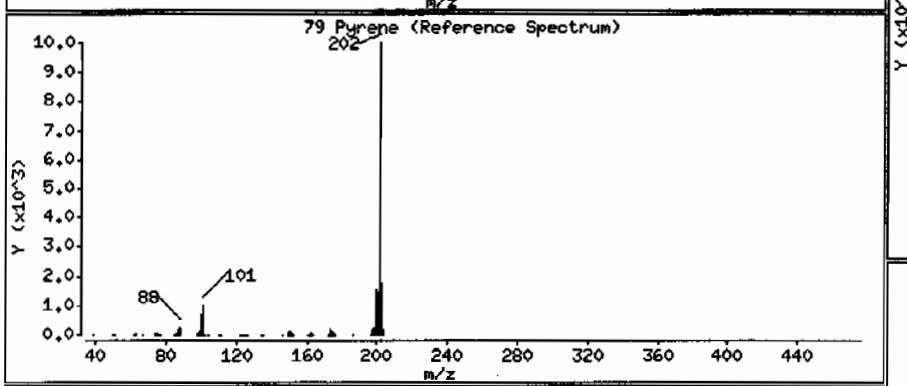

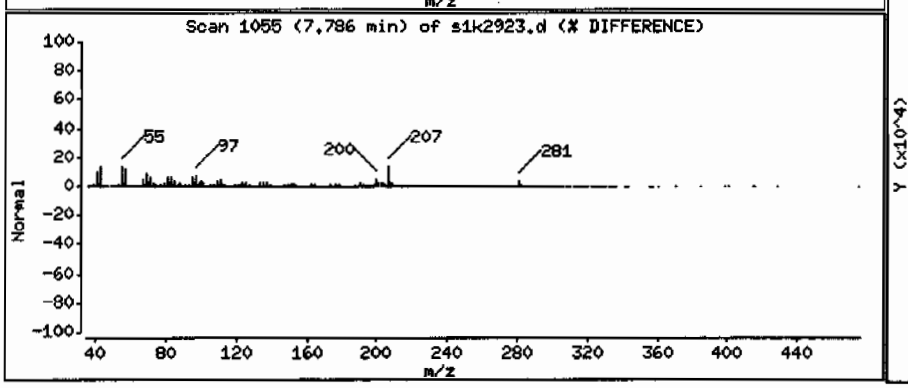

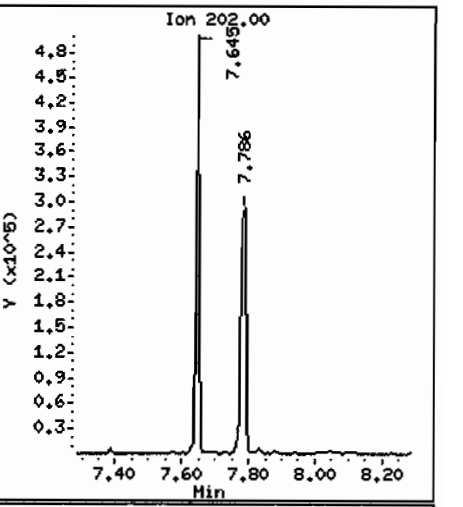

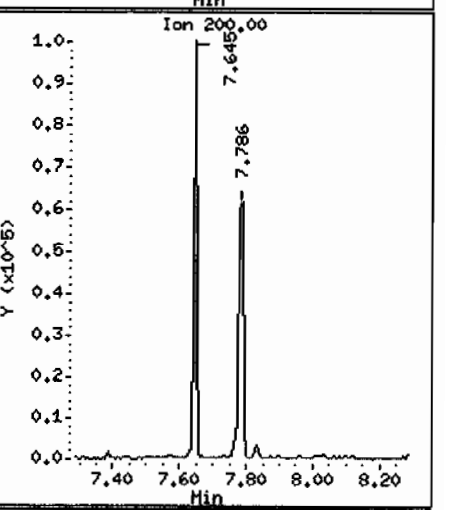

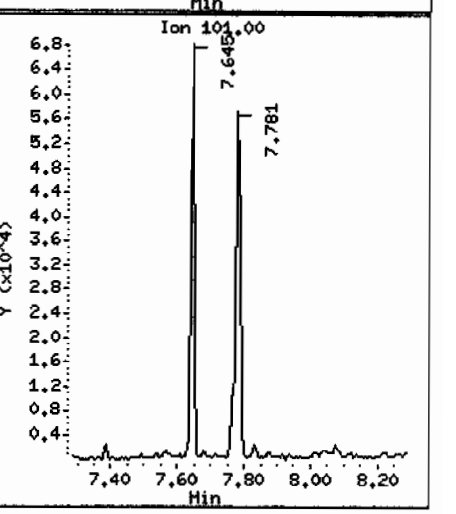

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |2415340021926126|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

30 Naphthalene

Concentration: 17.1 ug/Kg

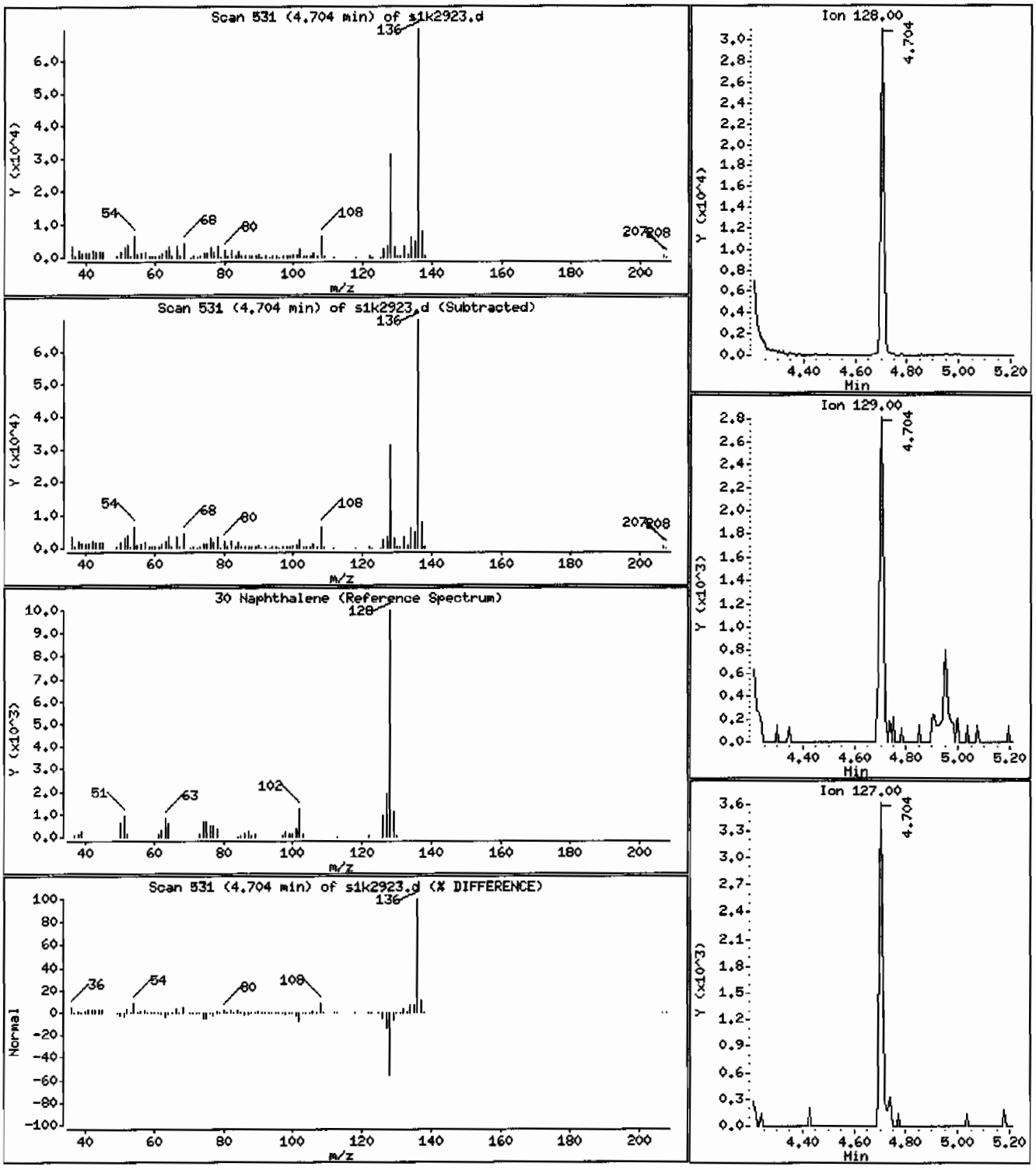

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Page 5

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: 1241534002|92612611|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

53 Fluorene

Concentration: 30.0 ug/Kg

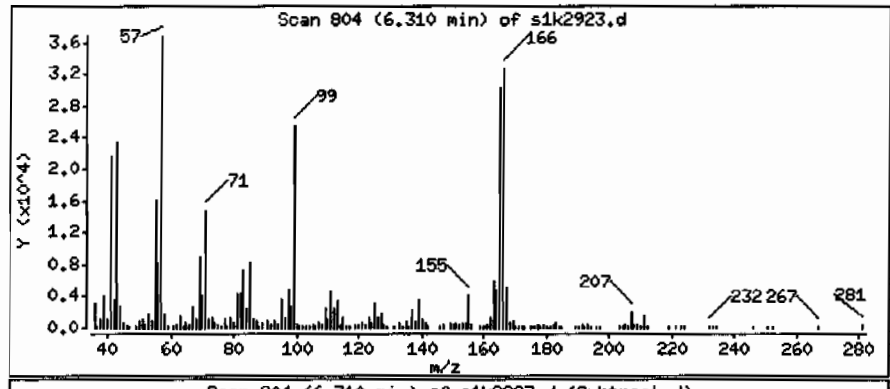

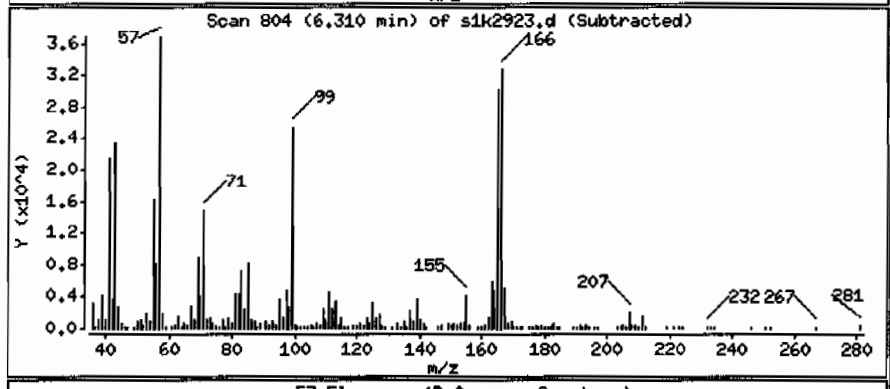

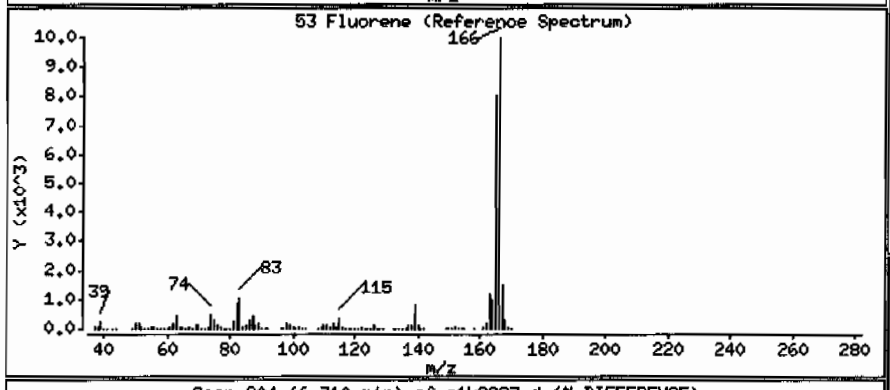

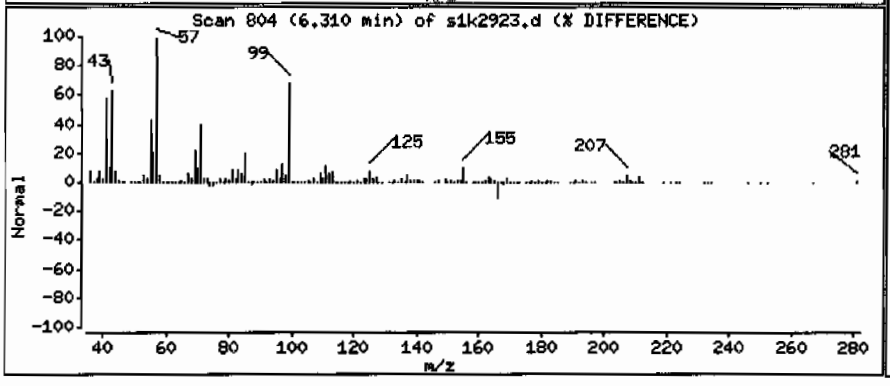

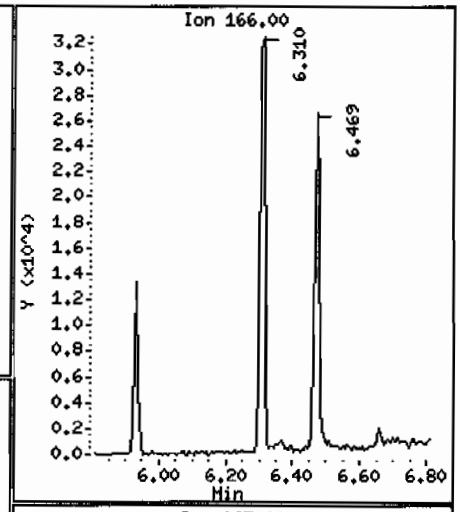

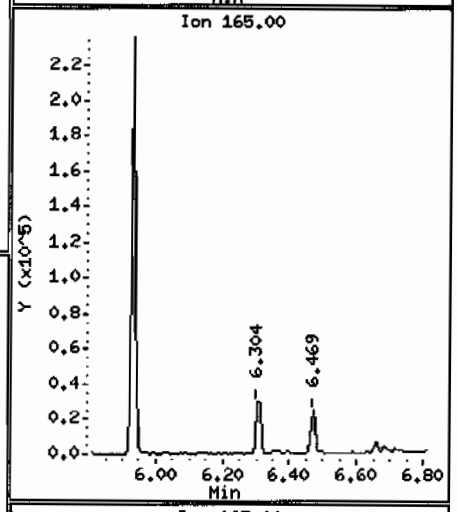

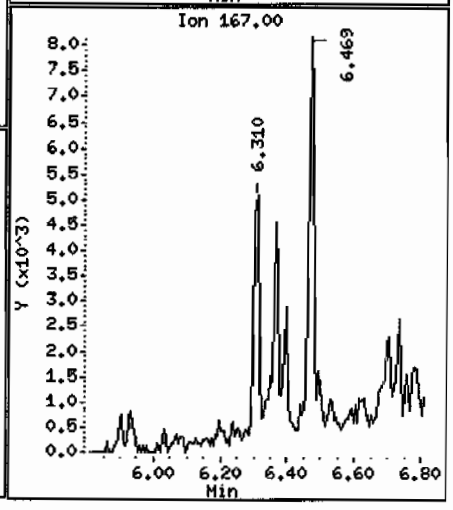

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: 1241534002|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 207 ug/Kg

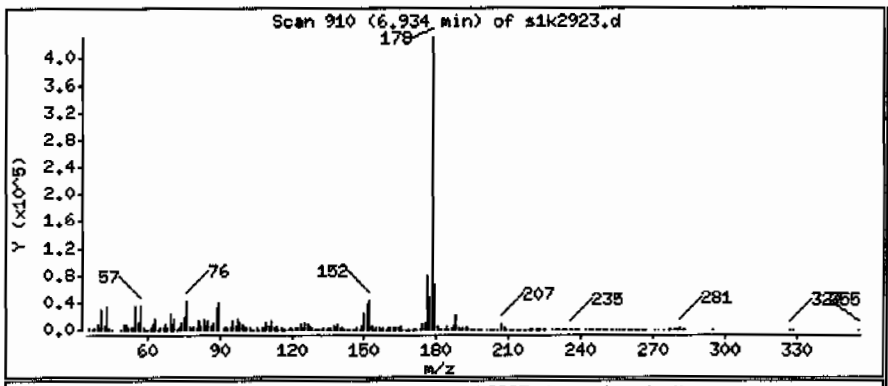

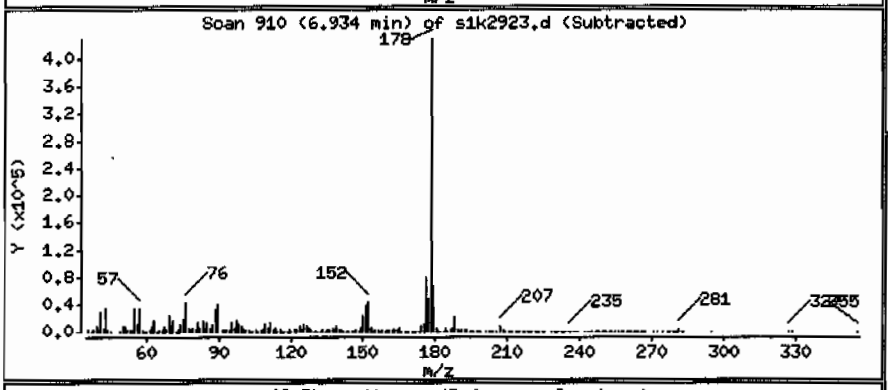

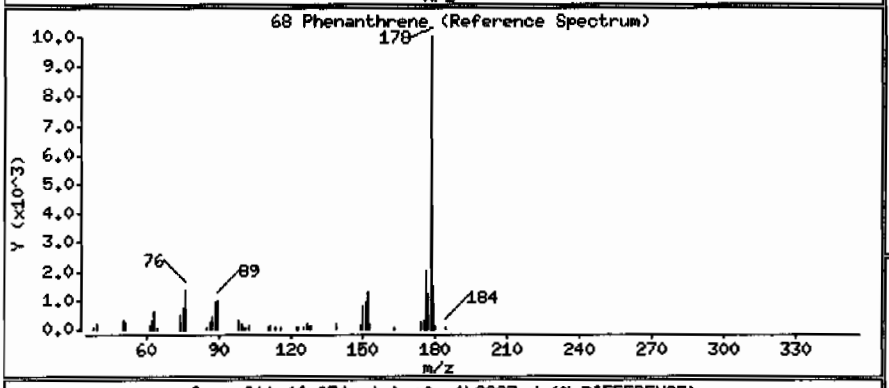

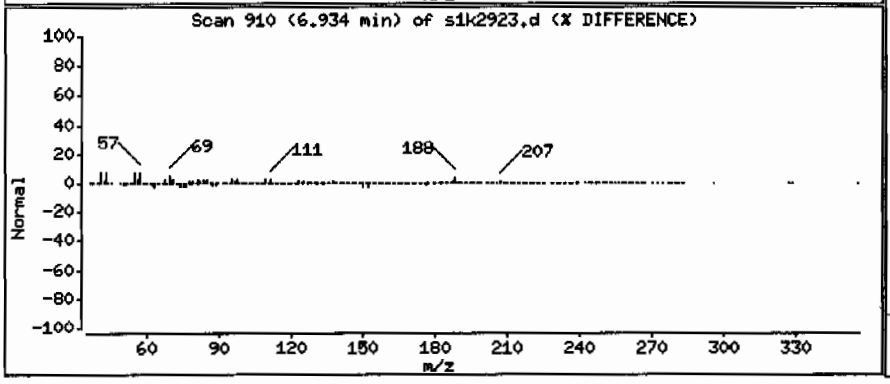

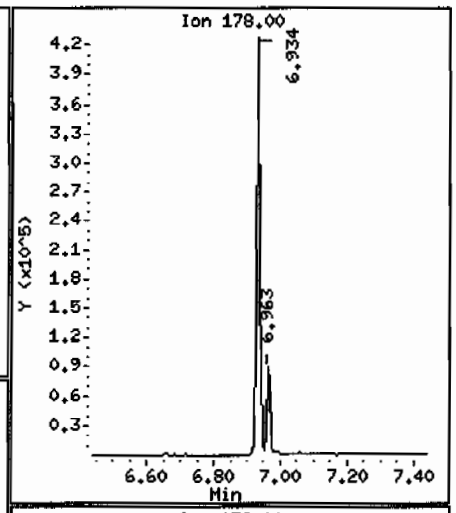

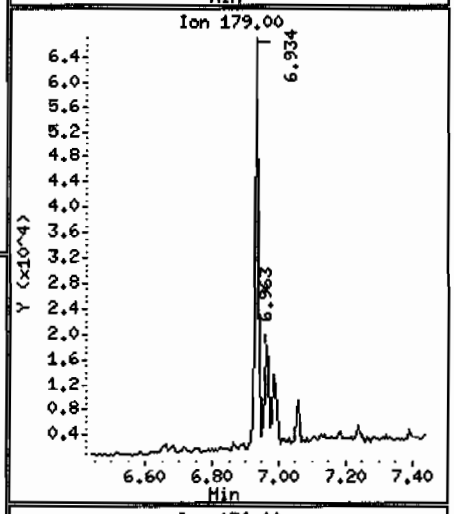

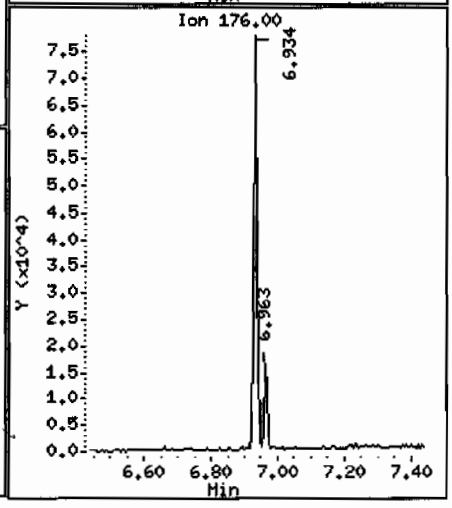

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976 Instrument: MSD1.i

Sample Info: 1241534002192612611ISVMF11LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

69 Anthracene Concentration: 53.8 ug/Kg

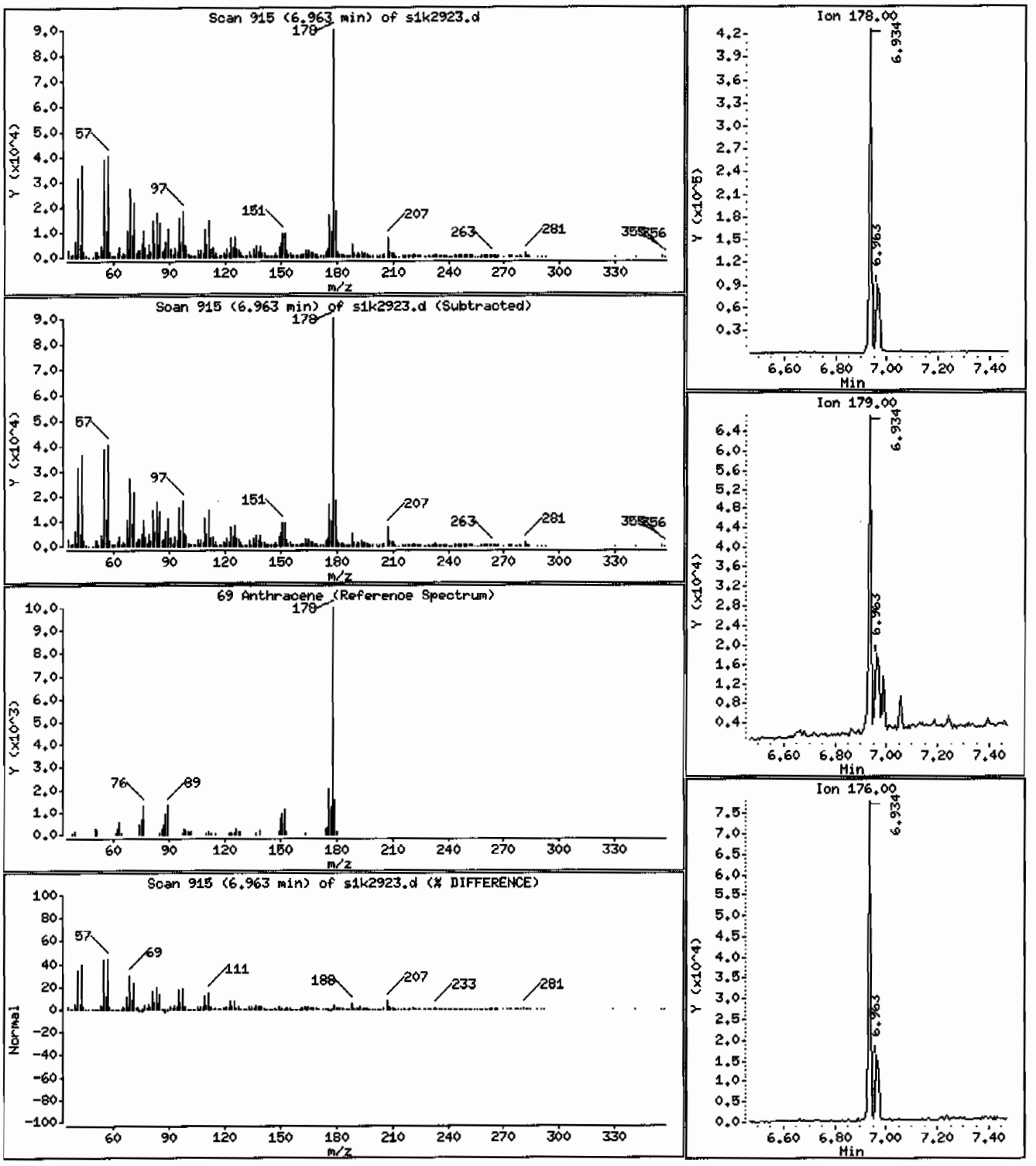

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |2415340021926126111SVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 249 ug/Kg

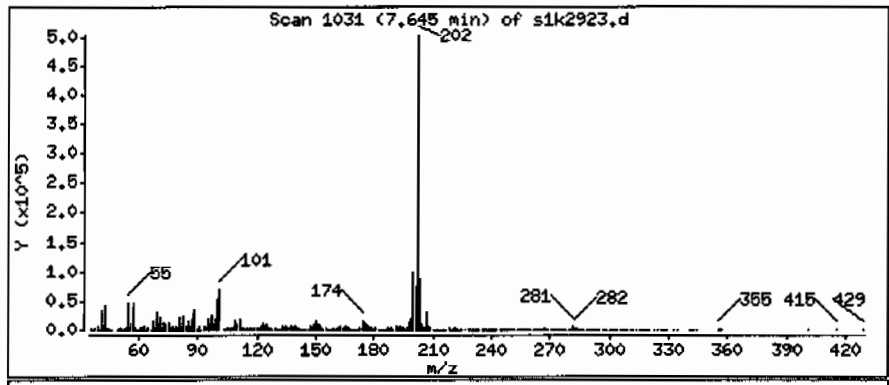

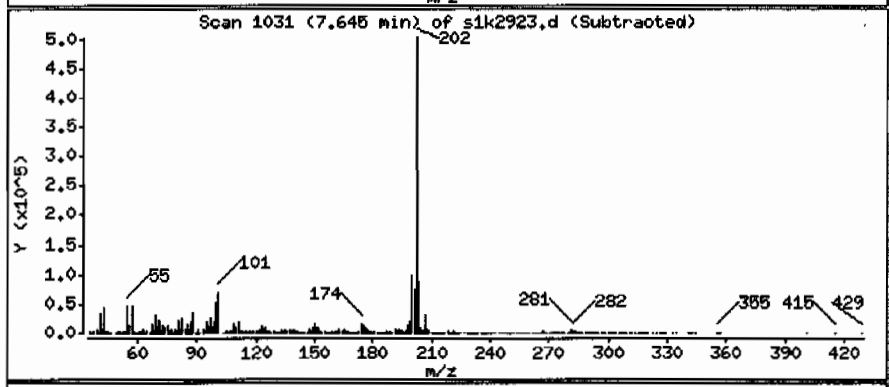

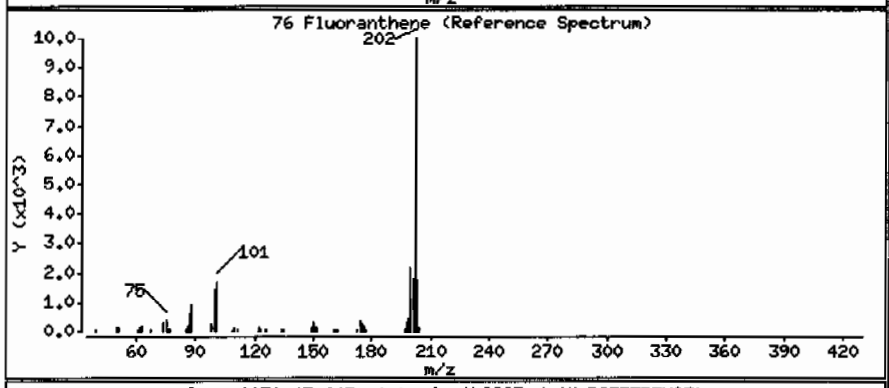

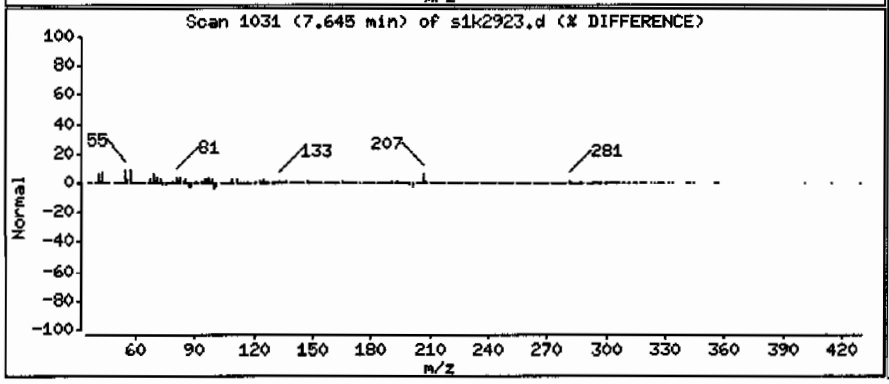

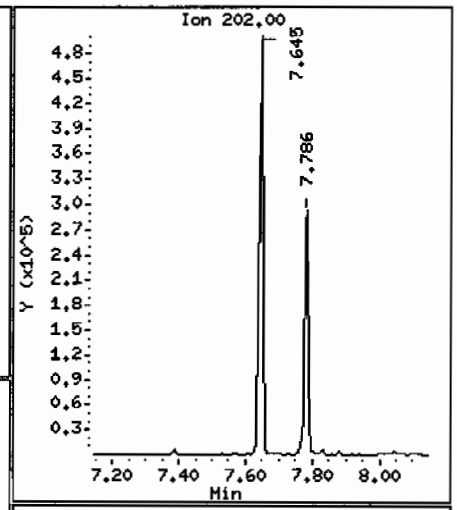

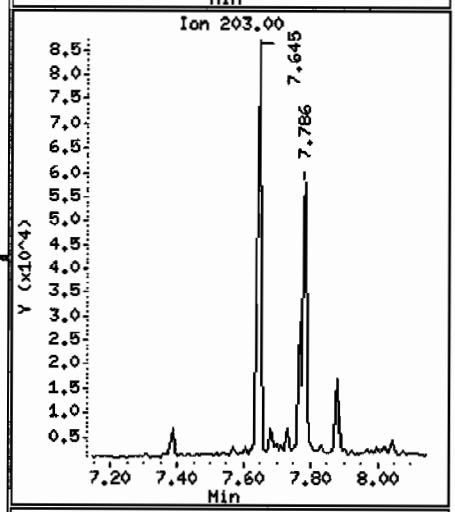

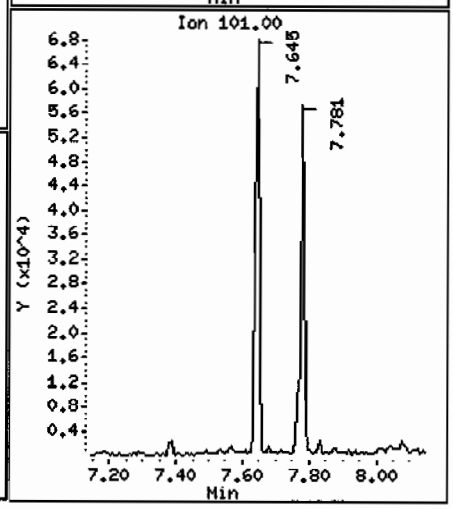

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |241534002|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 97.7 ug/Kg

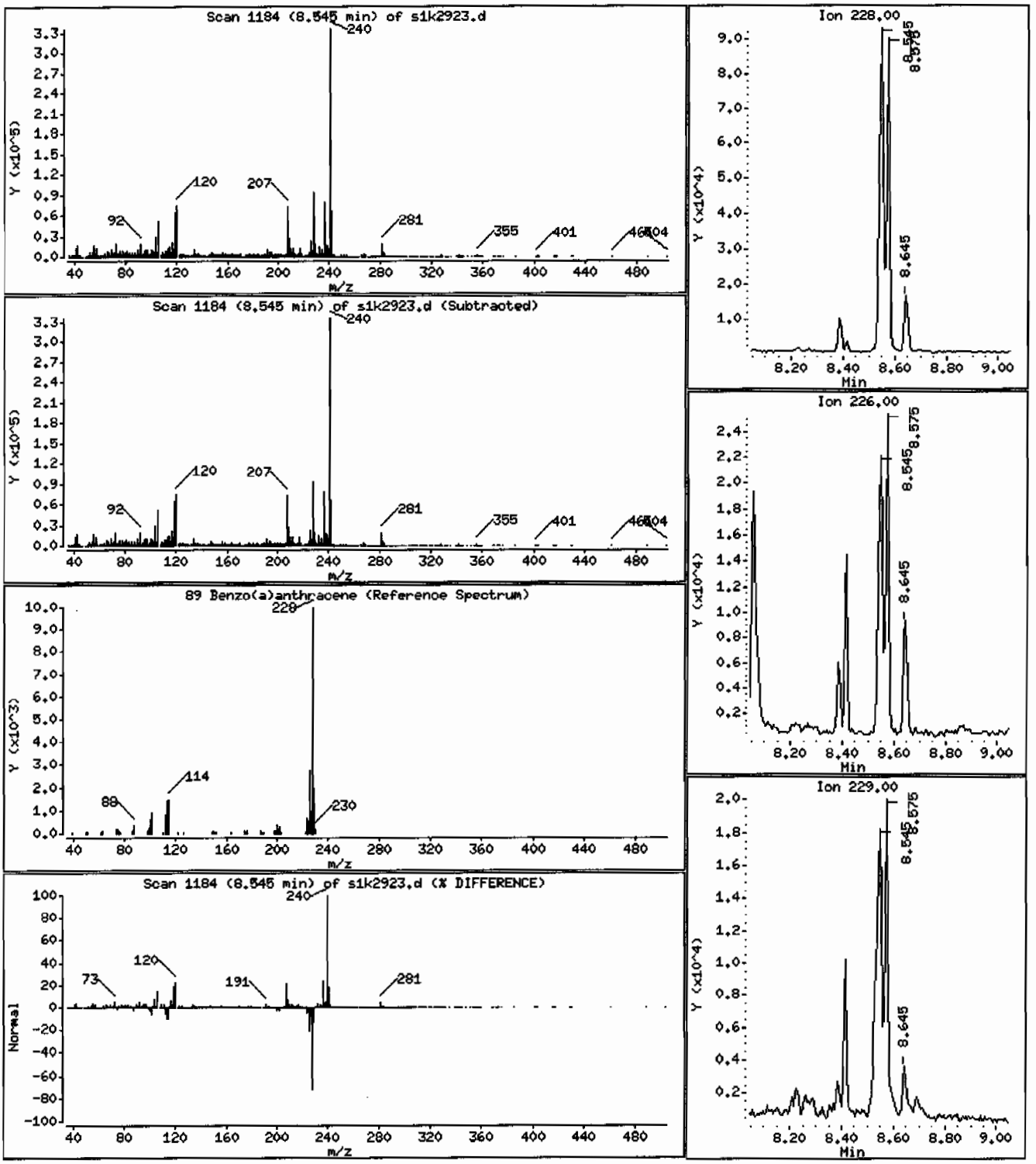

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |2415340021926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 101 ug/Kg

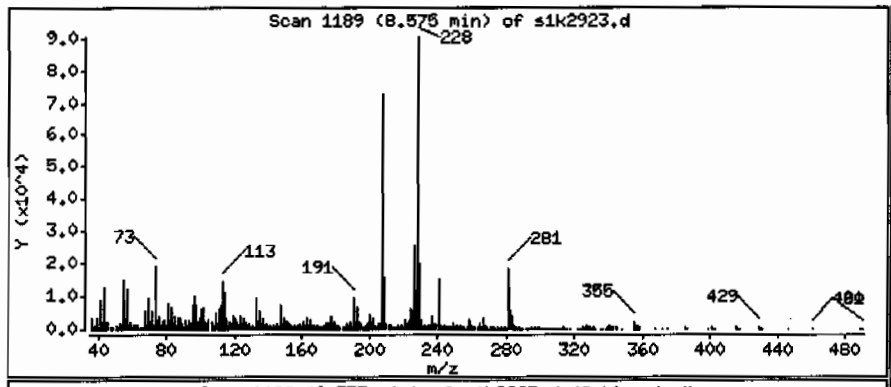

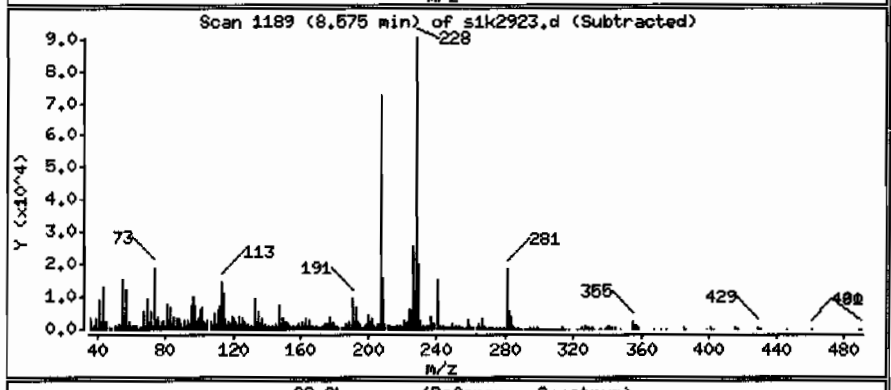

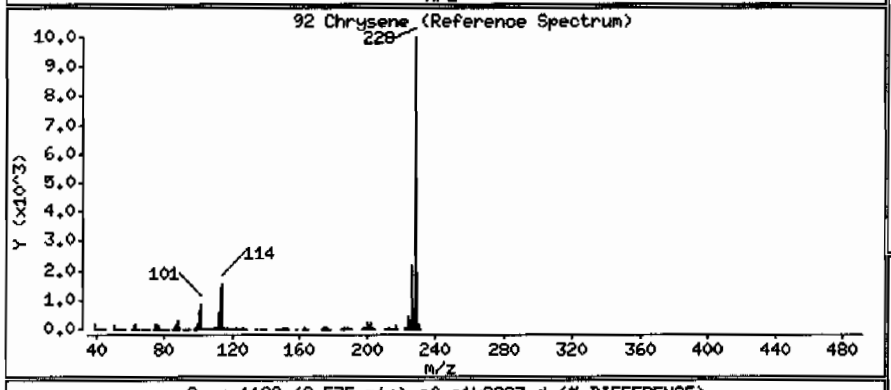

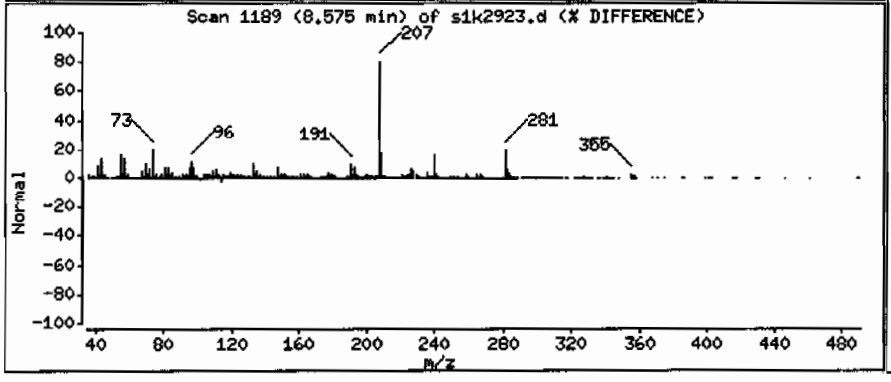

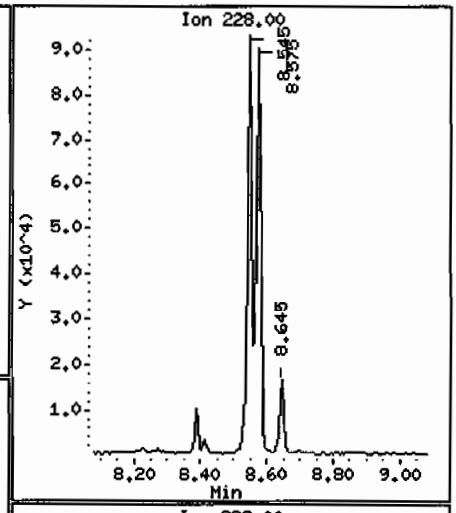

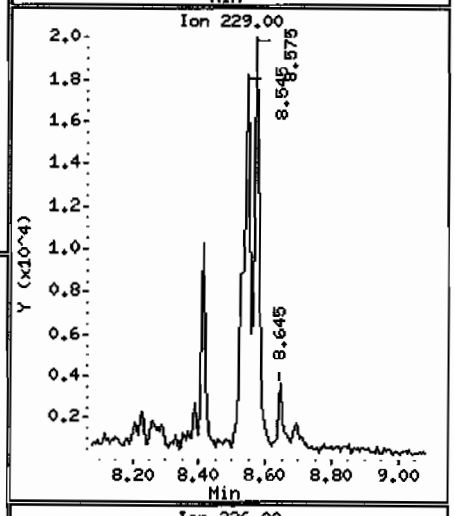

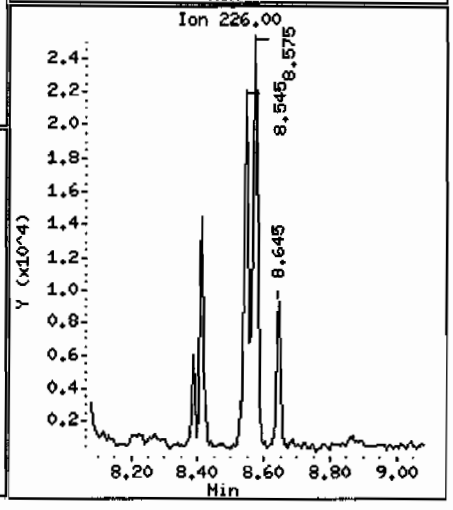

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |2415340021926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 231 ug/Kg

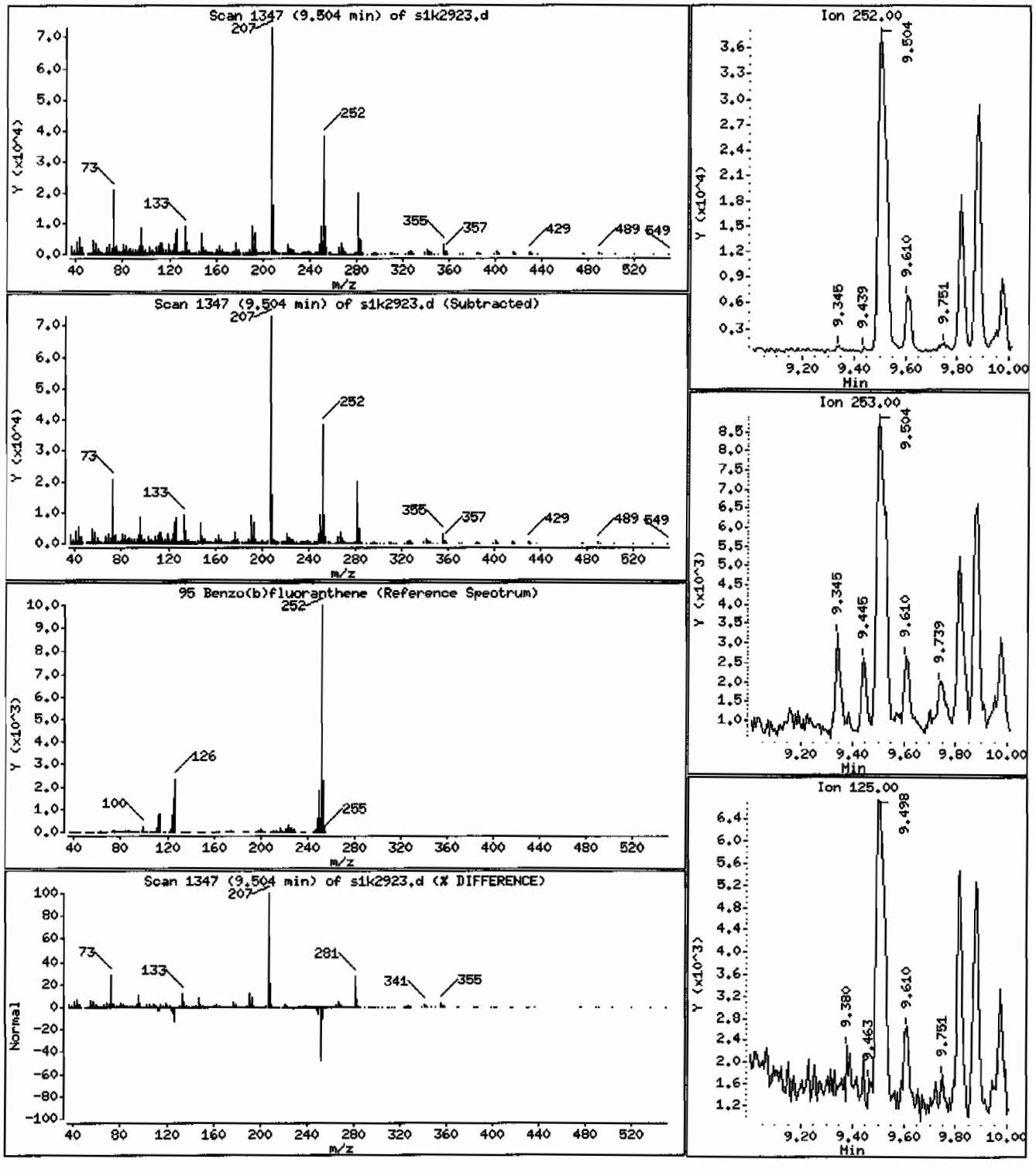

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |2415340021926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 71.9 ug/Kg

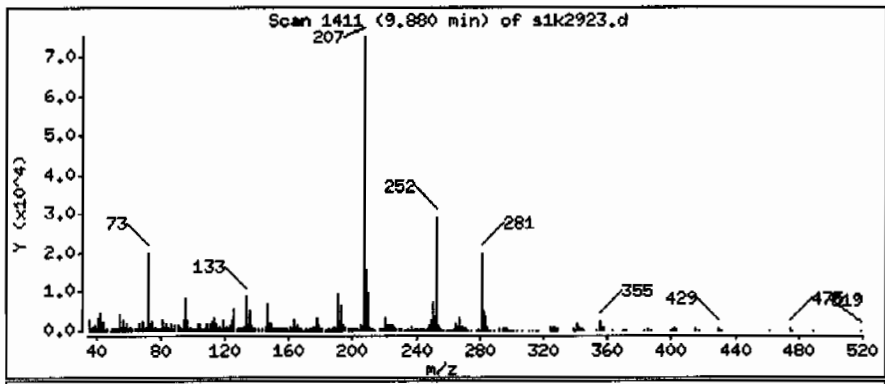

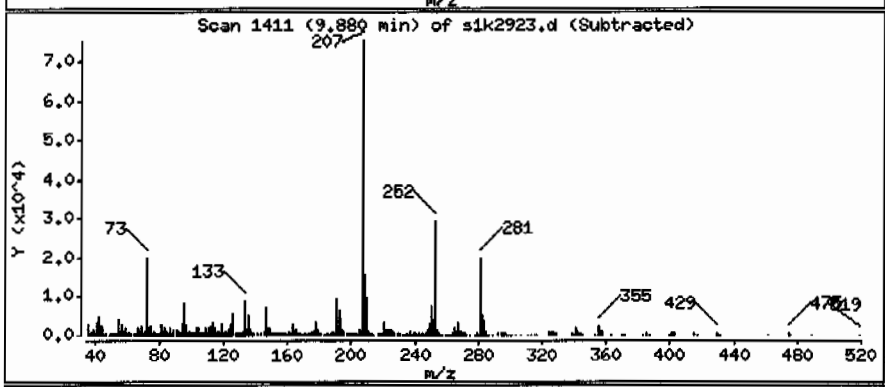

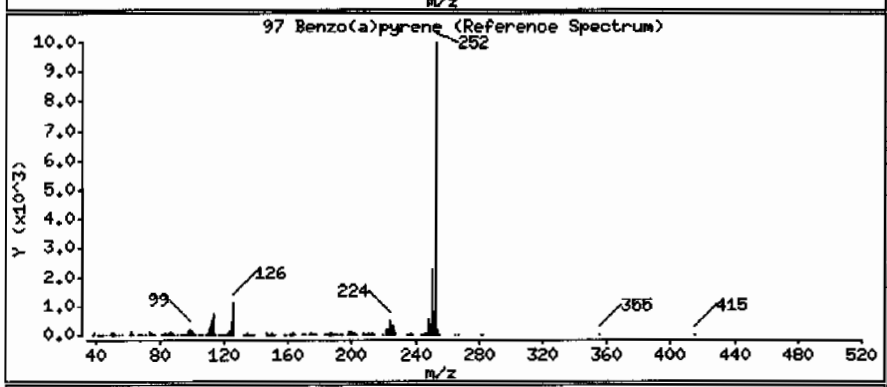

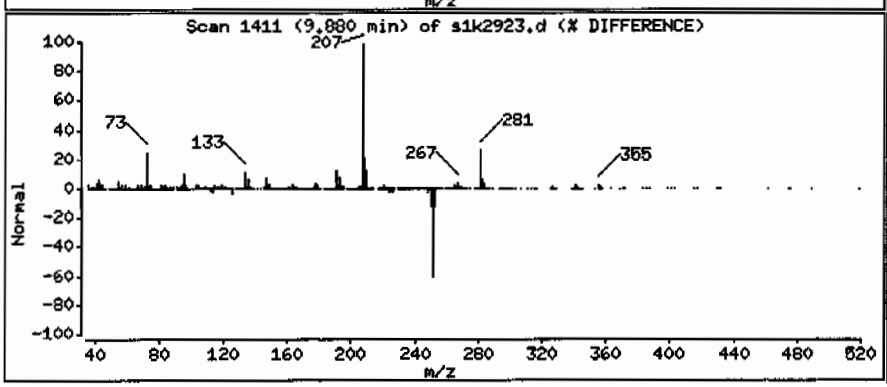

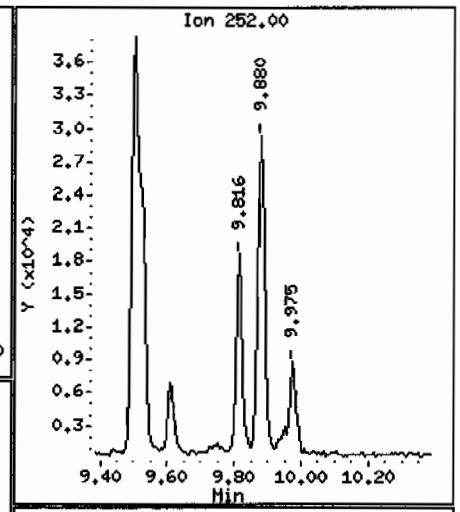

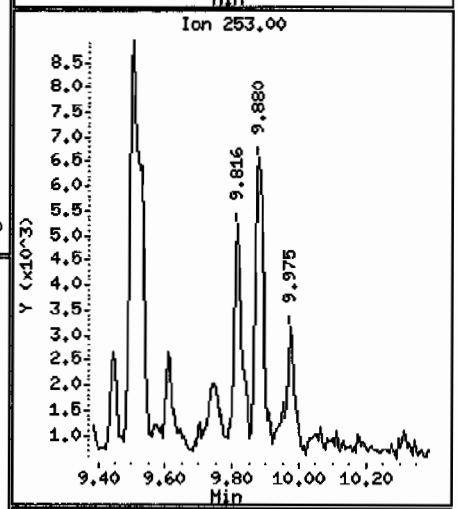

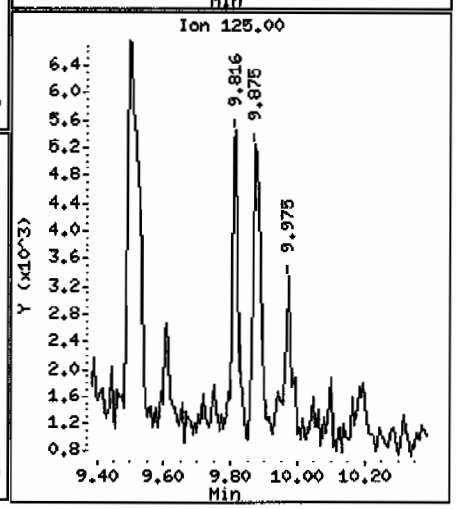

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |241534002|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116

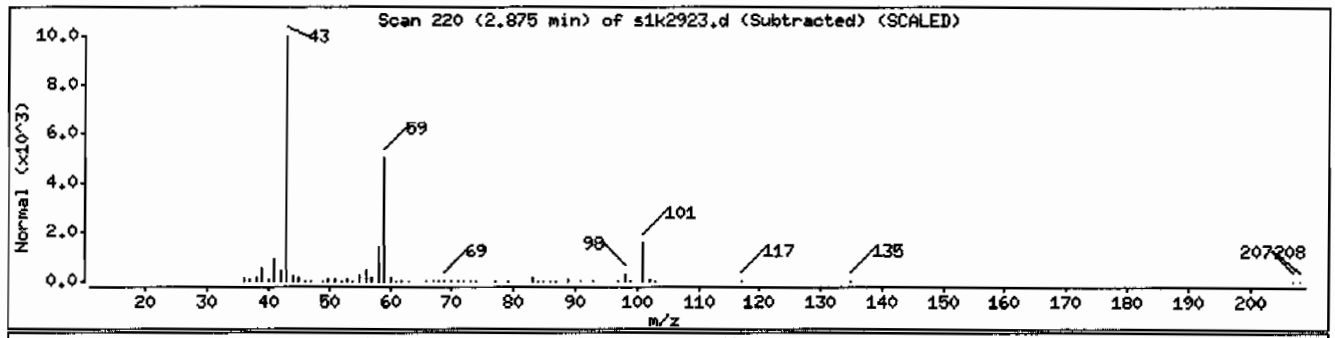

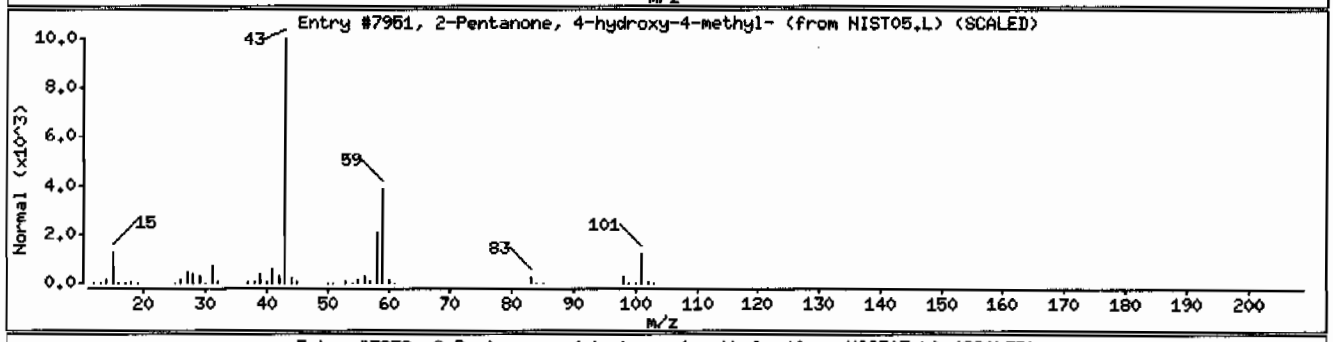

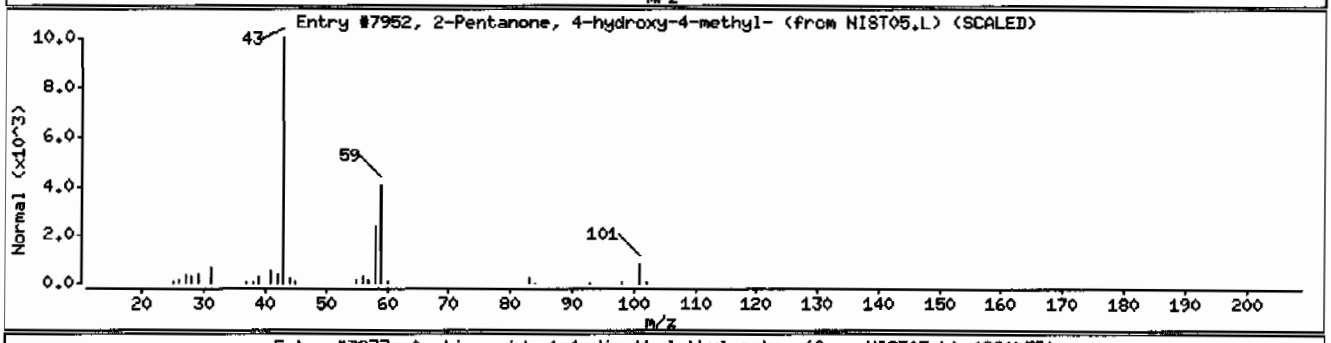

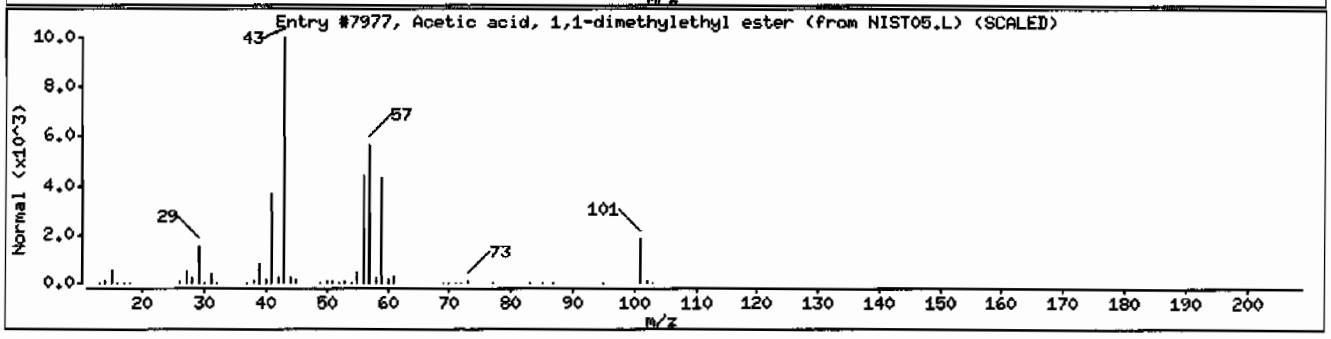

Data File: /chem/MSD1.i/s112909.b/s1k2923.d

Date : 29-NOV-2009 21:09

Client ID: RE03-09-13976

Instrument: MSD1.i

Sample Info: |24153400219261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	83	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	72	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	64	C18H35NO	281

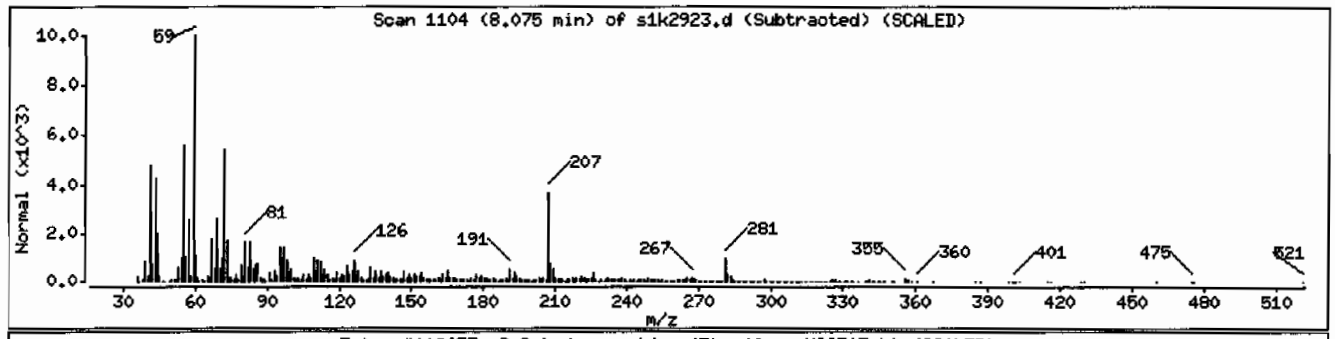

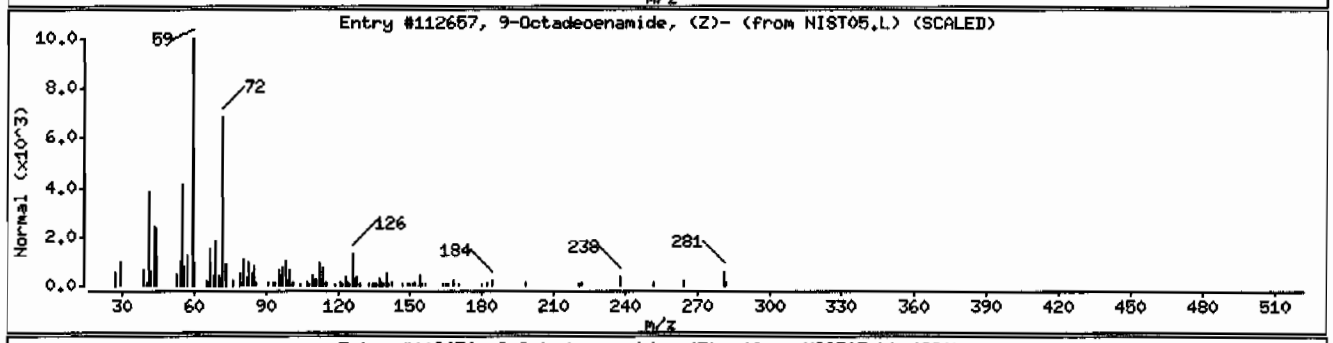

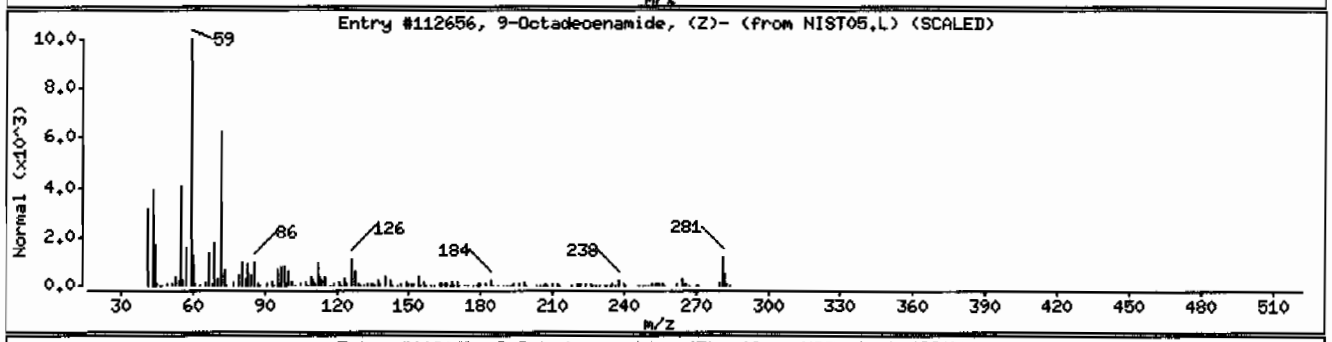

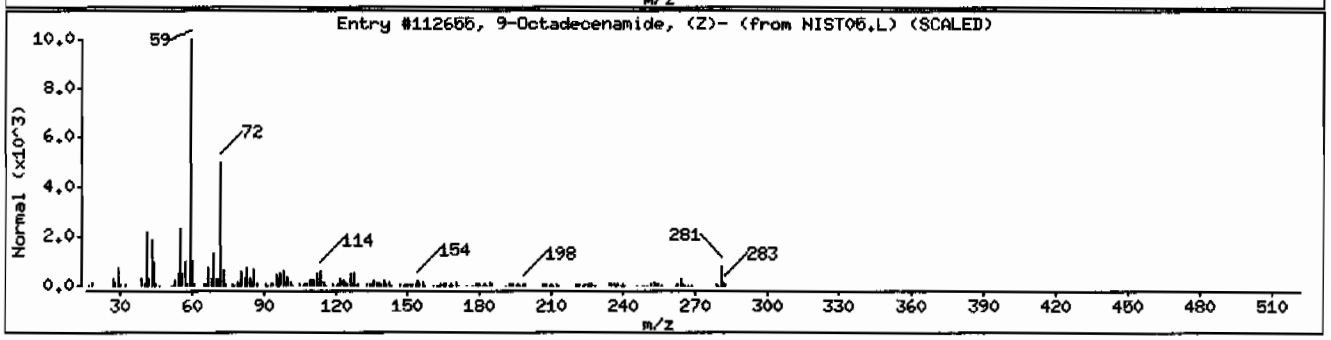

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2926.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	396	ug/kg	79.1	396
108-95-2	Phenol	U	396	ug/kg	79.1	396
95-57-8	2-Chlorophenol	U	396	ug/kg	79.1	396
106-46-7	1,4-Dichlorobenzene	U	396	ug/kg	79.1	396
621-64-7	N-Nitrosodipropylamine	U	396	ug/kg	79.1	396
59-50-7	4-Chloro-3-methylphenol	U	396	ug/kg	79.1	396
83-32-9	Acenaphthene	U	39.6	ug/kg	13.1	39.6
121-14-2	2,4-Dinitrotoluene	U	396	ug/kg	39.6	396
100-02-7	4-Nitrophenol	U	396	ug/kg	131	396
87-86-5	Pentachlorophenol	U	396	ug/kg	98.9	396
129-00-0	Pyrene	U	39.6	ug/kg	11.9	39.6
110-86-1	Pyridine	U	396	ug/kg	79.1	396
62-53-3	Aniline	U	396	ug/kg	119	396
111-44-4	bis(2-Chloroethyl) ether	U	396	ug/kg	79.1	396
541-73-1	1,3-Dichlorobenzene	U	396	ug/kg	79.1	396
100-51-6	Benzyl alcohol	U	396	ug/kg	119	396
95-50-1	1,2-Dichlorobenzene	U	396	ug/kg	79.1	396
108-60-1	bis(2-Chloroisopropyl)ether	U	396	ug/kg	79.1	396
95-48-7	o-Cresol	U	396	ug/kg	79.1	396
65794-96-9	m,p-Cresols	U	396	ug/kg	119	396
67-72-1	Hexachloroethane	U	396	ug/kg	79.1	396
98-95-3	Nitrobenzene	U	396	ug/kg	79.1	396
78-59-1	Isophorone	U	396	ug/kg	79.1	396
88-75-5	2-Nitrophenol	U	396	ug/kg	79.1	396
105-67-9	2,4-Dimethylphenol	U	396	ug/kg	138	396
111-91-1	bis(2-Chloroethoxy)methane	U	396	ug/kg	79.1	396
120-83-2	2,4-Dichlorophenol	U	396	ug/kg	79.1	396
65-85-0	Benzoic acid	U	791	ug/kg	198	791
91-20-3	Naphthalene	U	39.6	ug/kg	11.9	39.6
106-47-8	4-Chloroaniline	U	396	ug/kg	79.1	396
87-68-3	Hexachlorobutadiene	U	396	ug/kg	79.1	396
91-57-6	2-Methylnaphthalene	U	39.6	ug/kg	7.91	39.6
77-47-4	Hexachlorocyclopentadiene	U	396	ug/kg	79.1	396
88-06-2	2,4,6-Trichlorophenol	U	396	ug/kg	79.1	396
95-95-4	2,4,5-Trichlorophenol	U	396	ug/kg	79.1	396
91-58-7	2-Chloronaphthalene	U	39.6	ug/kg	13.1	39.6
88-74-4	2-Nitroaniline	U	396	ug/kg	79.1	396
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	396	ug/kg	79.1	396

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241534005	Date Received:	11/20/2009 08:50	%Moisture:	16.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13977	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 22:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2926.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	396	ug/kg	79.1	396
606-20-2	2,6-Dinitrotoluene	U	396	ug/kg	39.6	396
208-96-8	Acenaphthylene	U	39.6	ug/kg	11.9	39.6
51-28-5	2,4-Dinitrophenol	U	791	ug/kg	150	791
132-64-9	Dibenzofuran	U	396	ug/kg	79.1	396
84-66-2	Diethylphthalate	U	396	ug/kg	79.1	396
86-73-7	Fluorene	U	39.6	ug/kg	11.9	39.6
7005-72-3	4-Chlorophenylphenylether	U	396	ug/kg	79.1	396
534-52-1	2-Methyl-4,6-dinitrophenol	U	396	ug/kg	79.1	396
100-01-6	4-Nitroaniline	U	396	ug/kg	119	396
	p-Nitroaniline					
122-39-4	Diphenylamine	U	396	ug/kg	79.1	396
122-66-7	Azobenzene	U	396	ug/kg	79.1	396
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	396	ug/kg	79.1	396
118-74-1	Hexachlorobenzene	U	396	ug/kg	79.1	396
85-01-8	Phenanthrene	U	39.6	ug/kg	11.9	39.6
120-12-7	Anthracene	U	39.6	ug/kg	7.91	39.6
84-74-2	Di-n-butylphthalate	U	396	ug/kg	79.1	396
206-44-0	Fluoranthene	U	39.6	ug/kg	11.9	39.6
85-68-7	Butylbenzylphthalate	U	396	ug/kg	79.1	396
56-55-3	Benzo(a)anthracene	U	39.6	ug/kg	11.9	39.6
91-94-1	3,3'-Dichlorobenzidine	U	396	ug/kg	119	396
218-01-9	Chrysene	U	39.6	ug/kg	11.9	39.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	396	ug/kg	79.1	396
117-84-0	Di-n-octylphthalate	U	396	ug/kg	79.1	396
205-99-2	Benzo(b)fluoranthene	U	39.6	ug/kg	11.9	39.6
207-08-9	Benzo(k)fluoranthene	U	39.6	ug/kg	11.9	39.6
50-32-8	Benzo(a)pyrene	U	39.6	ug/kg	11.9	39.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.6	ug/kg	11.9	39.6
53-70-3	Dibenzo(a,h)anthracene	U	39.6	ug/kg	11.9	39.6
191-24-2	Benzo(ghi)perylene	U	39.6	ug/kg	11.9	39.6
120-82-1	1,2,4-Trichlorobenzene	U	396	ug/kg	79.1	396

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	323	ug/kg		JA
	Unknown	9.82	1740	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13977	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 22:19	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2926.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.49	1650	ug/kg		J
	Unknown	11.57	208	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2926.d
Lab Smp Id: 241534005 Client Smp ID: RE03-09-13977
Inj Date : 29-NOV-2009 22:19
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534005|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	16.09930	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	679813	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2739740	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1454464	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2477124	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1773963	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1190235	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1266195	71.3090	2820
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1588986	73.6280	2910
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	703036	38.9383	1540
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1487245	42.6948	1690
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	375937	92.5638	3660
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1483184	53.2645	2110

ION RATIO REPORT

SV REPORT

Data file: s1k2926.d
Report Date: 11/30/2009 08:48
Lab. ID: 241534005 SampleType: SAMPLE
Injection Date: 29-NOV-2009 22:19
Operator: AMY Instrument: MSD1.i
Sample Info: |241534005|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	75733	3.56	3.63	80-120	100	(T)
93	285	3.57	3.63	408-468	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	95304	4.19	4.08	80-120	100	(T)
42	59978	4.19	4.08	48-108	63	(T)
22 Isophorone		CAS#: 78-59-1				
82	703040	4.19	4.37	80-120	100	(T)
138	171	4.26	4.37	0- 50	0	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	255078	5.93	5.72	80-120	100	(T)
164	1454464	5.93	5.72	0- 40	570	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	185857	5.93	5.76	80-120	100	(T)
63	2408	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	185857	5.93	6.05	80-120	100	(T)
89	2009	5.93	6.05	40-100	1	(QT)
63	2408	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	24132	6.47	6.31	80-120	100	(T)
165	25187	6.47	6.31	65-125	104	(T)
167	7618	6.47	6.31	0- 43	32	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	22604	6.47	6.62	80-120	100	(T)
141	142041	6.47	6.62	62-122	628	(QT)
250	46898	6.47	6.62	66-126	207	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	282	9.50	9.51	80-120	100	( )
253	332	9.49	9.51	0- 51	117	(Q)
125	421	9.49	9.50	0- 44	149	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2926.d
Lab Smp Id: 241534005 Client Smp ID: RE03-09-13977
Inj Date : 29-NOV-2009 22:19
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534005|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	16.09930	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	4088911	40.000
* 98 Perylene-d12	9.945	3277785	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.875	835141	8.16981075	323	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
9.822	3603760	43.9779904	1740	0		0	98
Unknown				CAS #:			
10.492	3425181	41.7987226	1650	0		0	98
Unknown				CAS #:			
11.575	430886	5.25825940	208	0		0	98

Data File: /chem/MSD1.i/s112909.b/s1k2926.d
Date : 29-NOV-2009 22:19
Client ID: RE03-09-13977
Sample Info: |2415340051926126|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

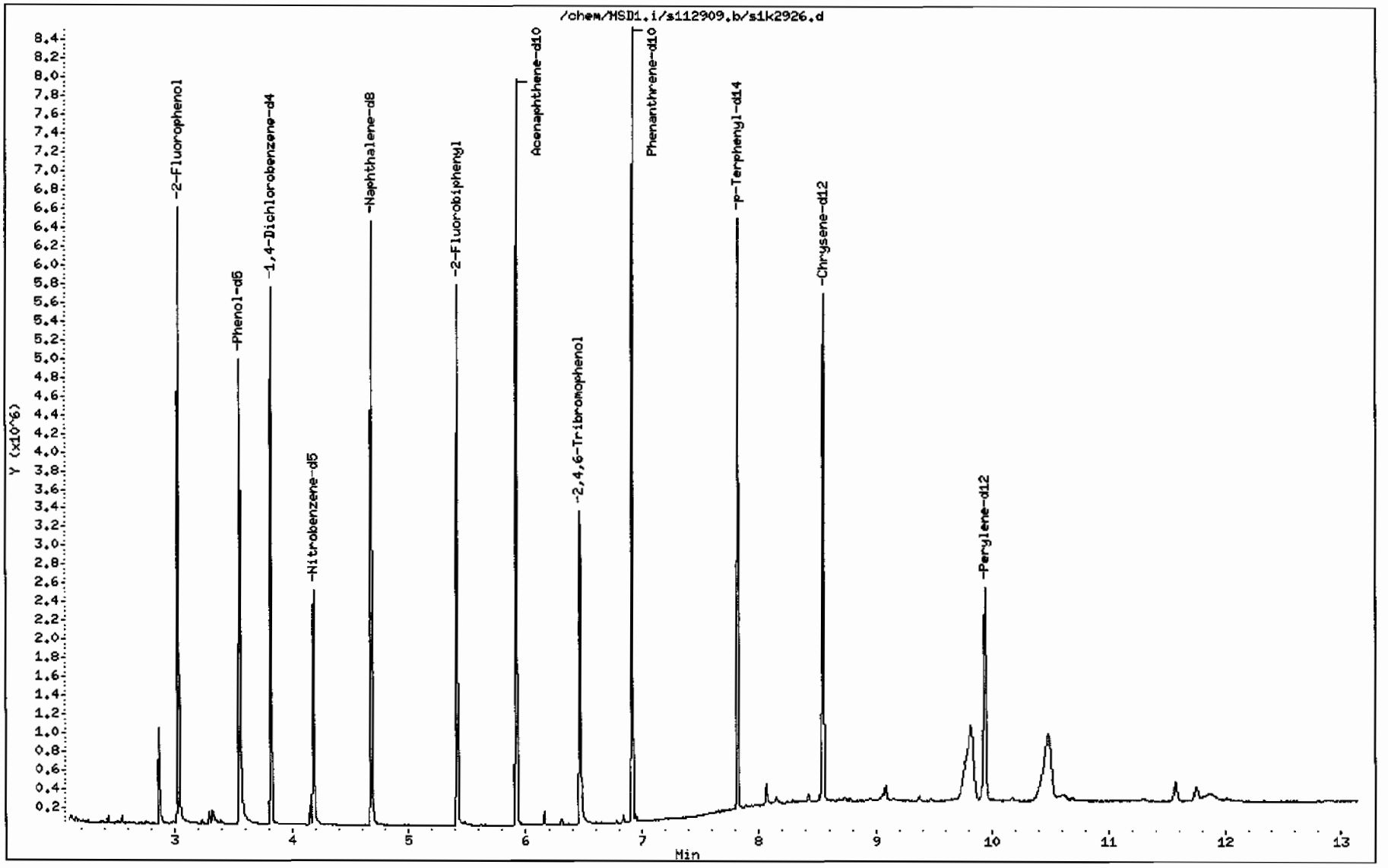

Data File: /chem/MSD1.i/s112909.b/s1k2926.d

Date : 29-NOV-2009 22:19

Client ID: RE03-09-13977 Instrument: MSD1.i

Sample Info: |2415340051926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

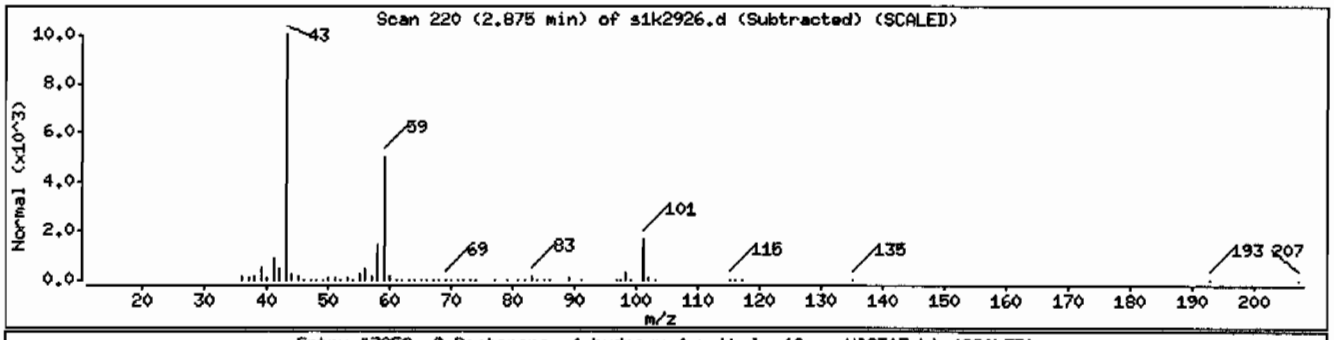

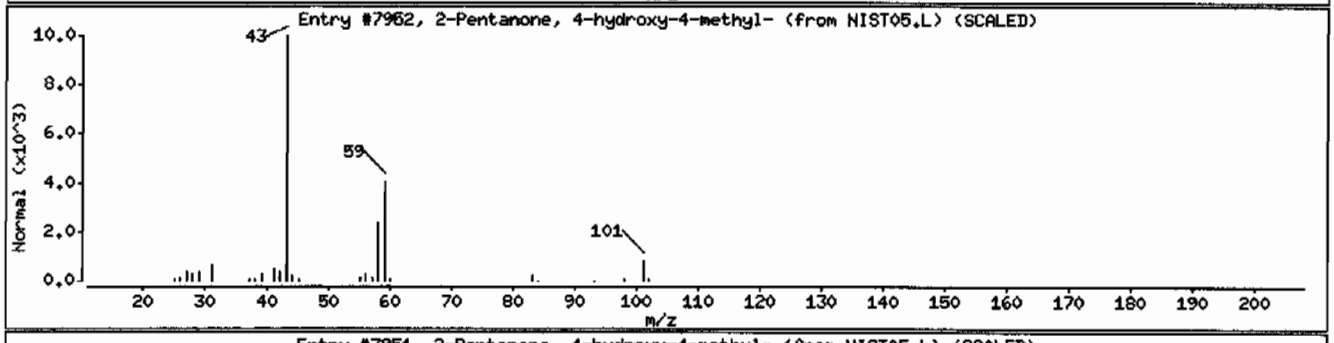

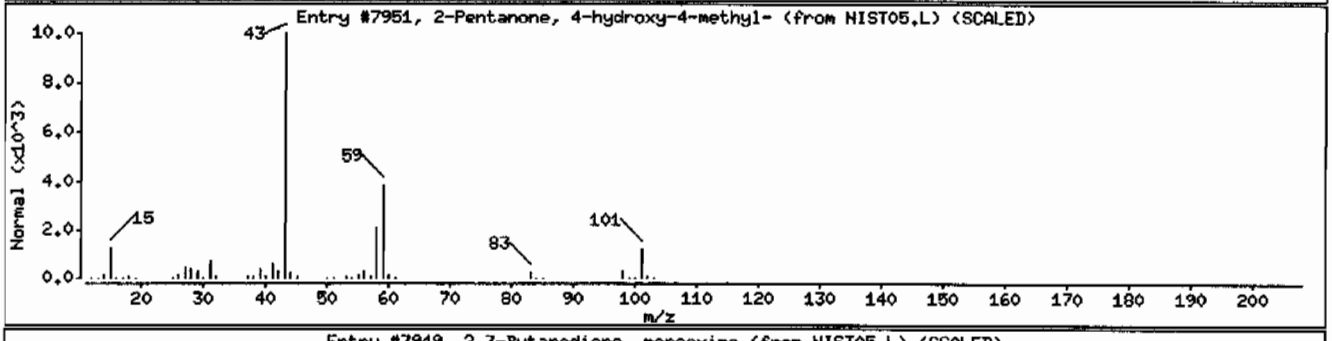

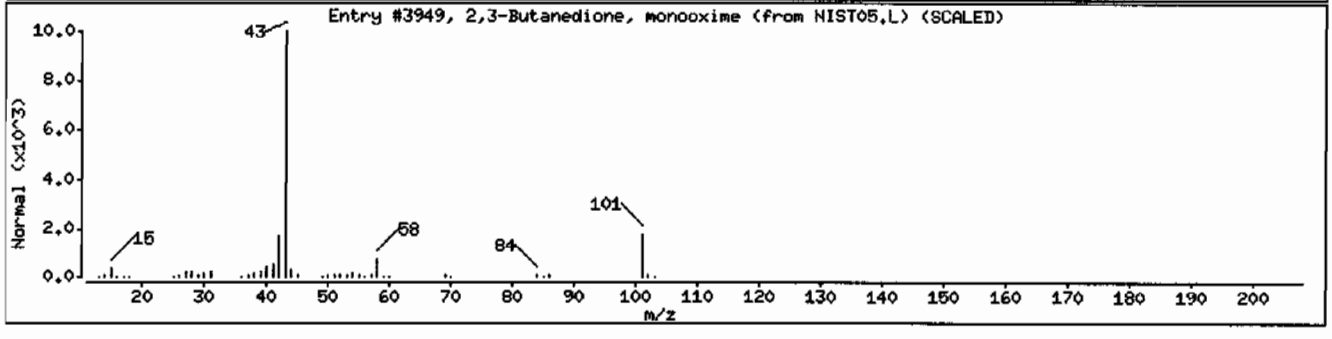

Data File: /chem/MSD1.i/s112909.b/s1k2926.d

Date : 29-NOV-2009 22:19

Client ID: RE03-09-13977

Instrument: MSD1.i

Sample Info: |2415340051926126111SVHF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl	17993-84-9	NIST05.L	72386	38	C11H18N2OSi	222
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	30	C13H18O3	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	30	C13H21NO	207

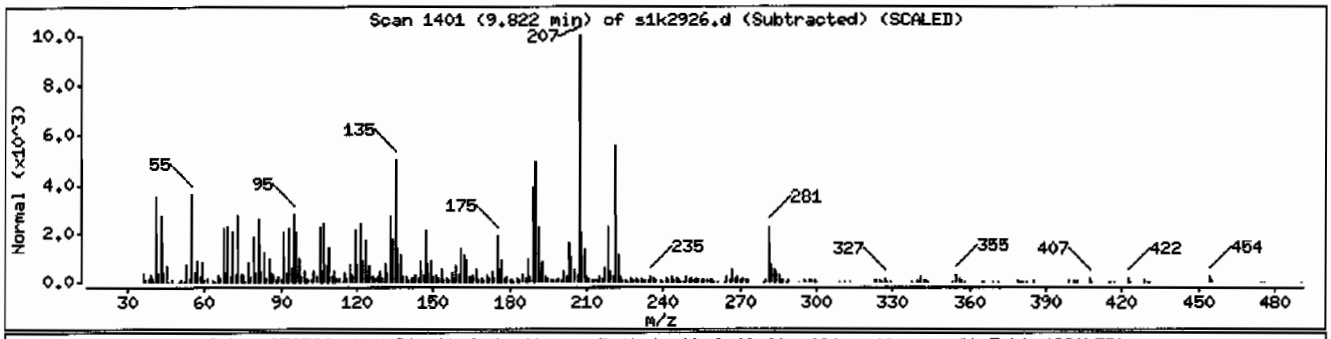

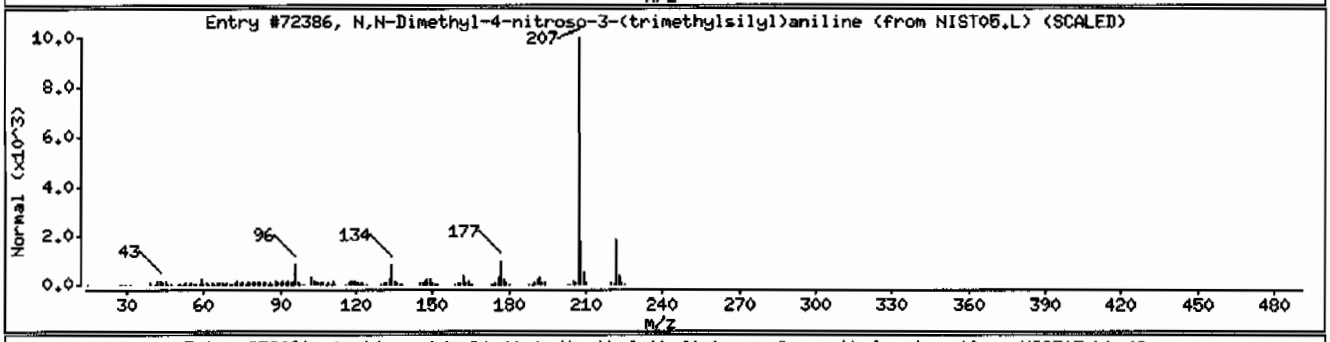

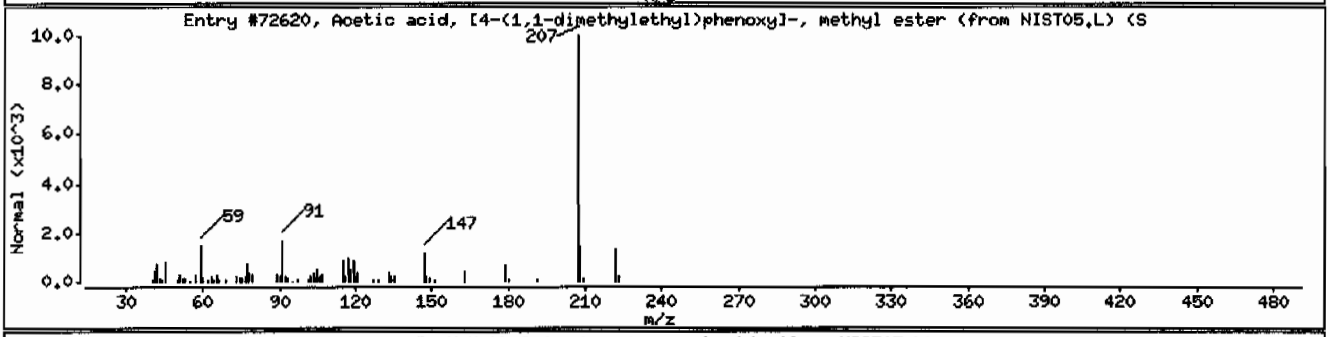

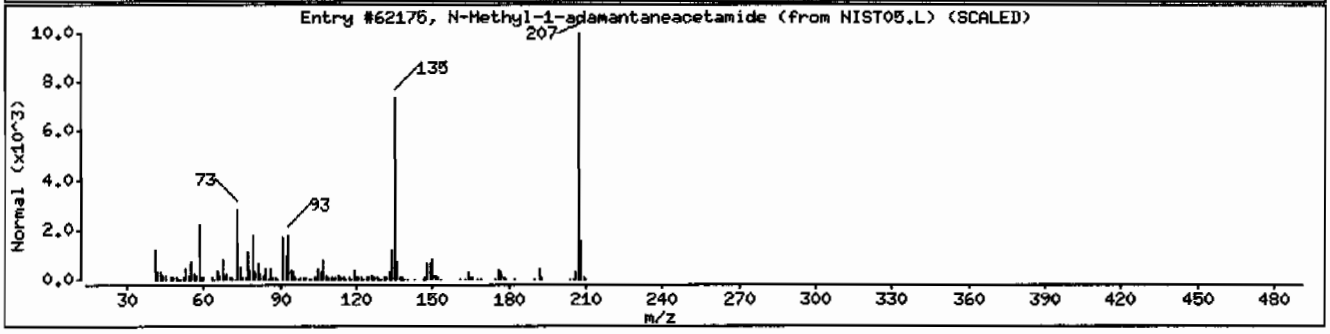

Data File: /chem/MSD1.i/s112909.b/s1k2926.d

Date : 29-NOV-2009 22:19

Client ID: RE03-09-13977 Instrument: MSD1.i

Sample Info: |241534005|926126|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	30	C12H22Si2	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207
Formic acid, 1-(4,7-dihydro-2-methyl-7-o	1000267-28-6	NIST05.L	62365	27	C9H9N3O3	207

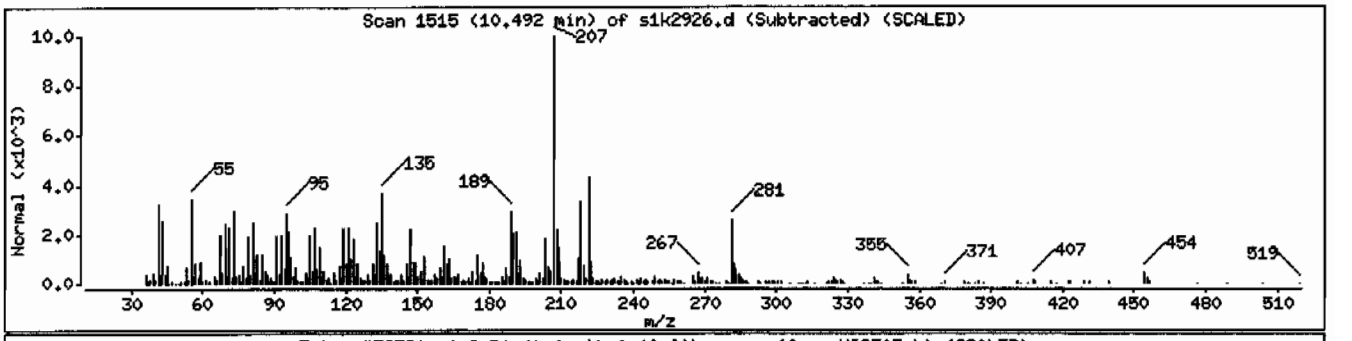

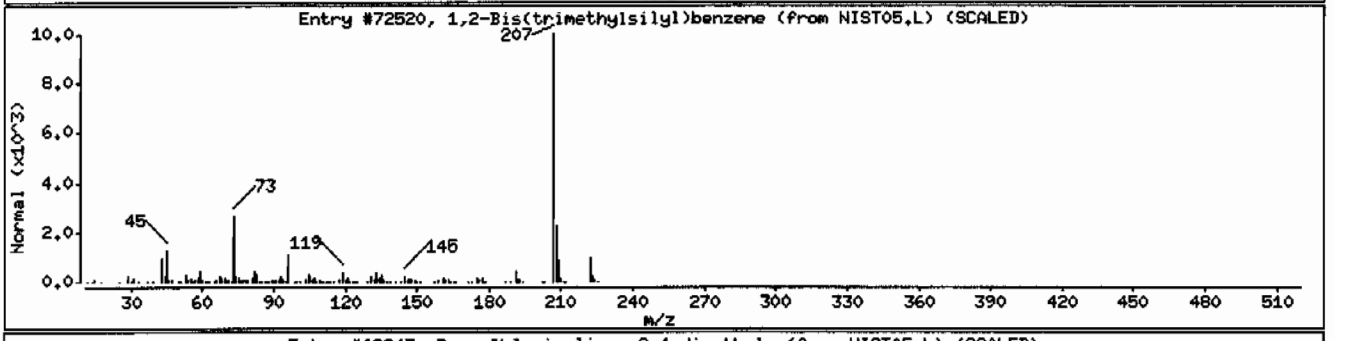

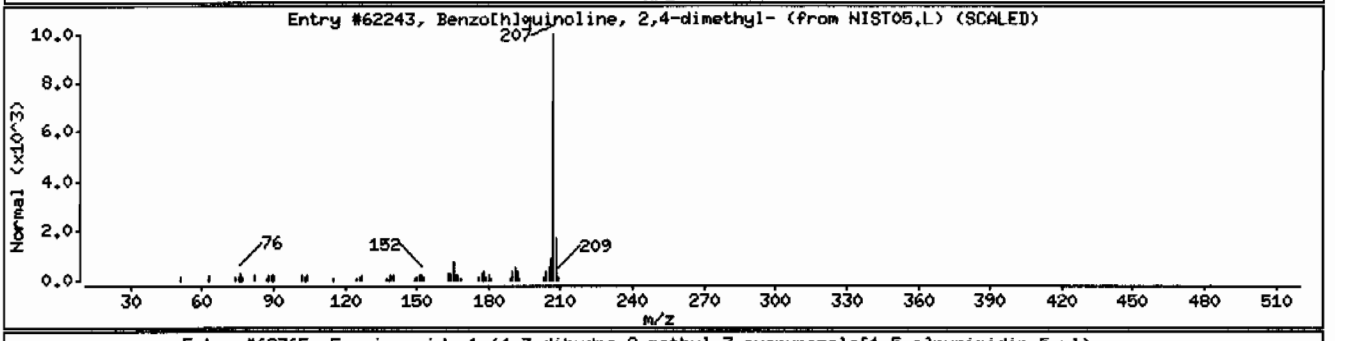

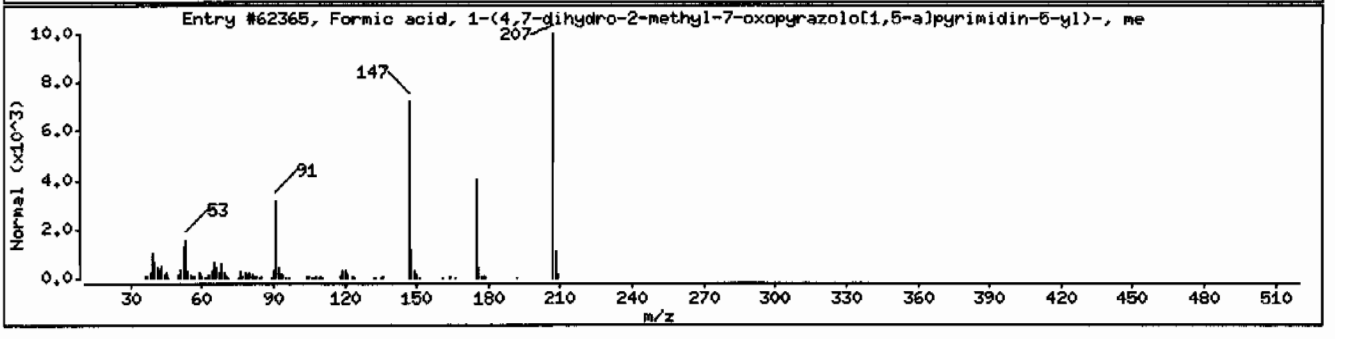

Data File: /chem/MSD1.i/s112909.b/s1k2926.d

Date : 29-NOV-2009 22:19

Client ID: RE03-09-13977

Instrument: MSD1.i

Sample Info: |24153400519261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	53	C10H30O3Si4	310
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	49	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	47	C6H18O3Si3	222

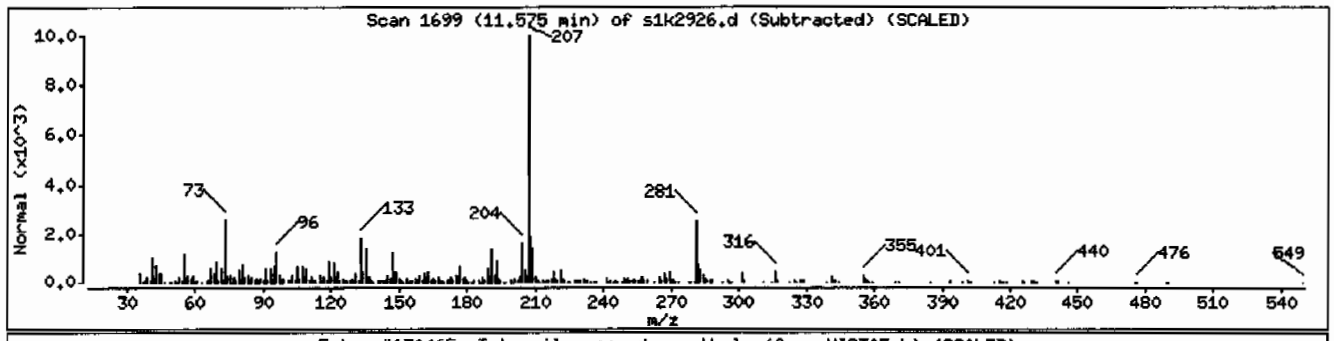

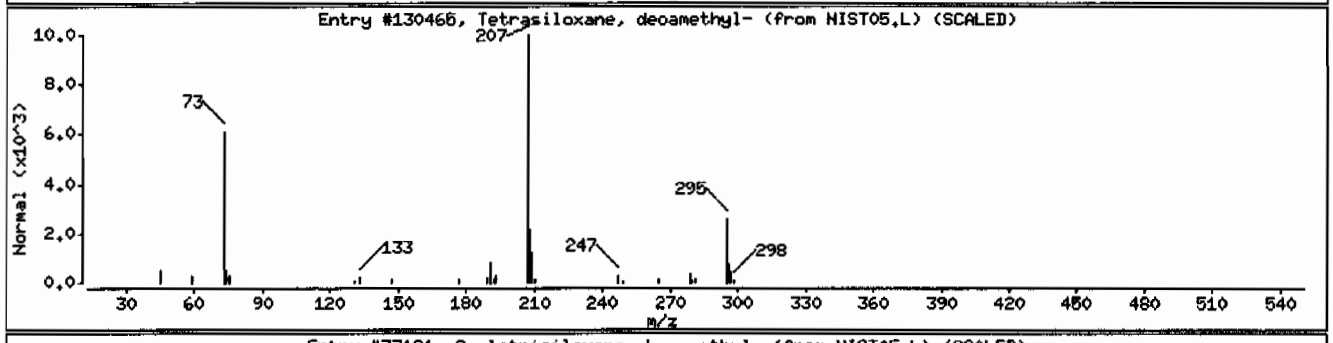

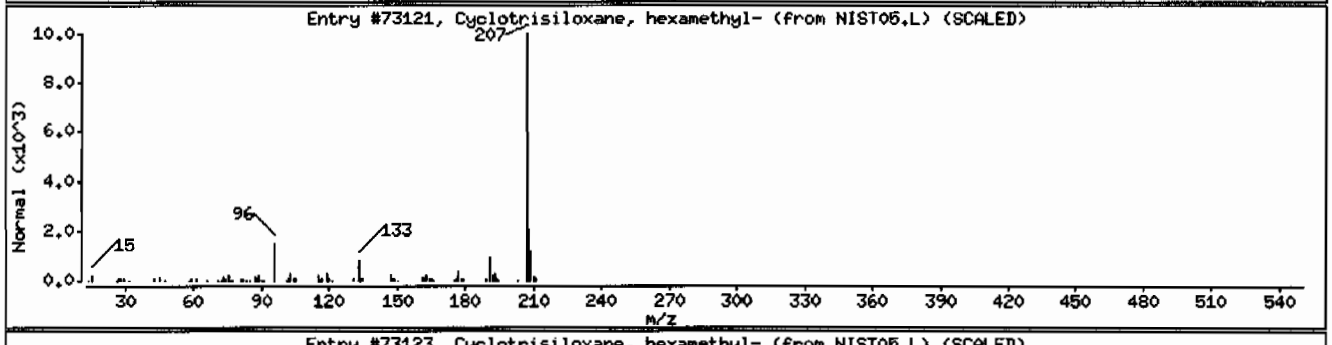

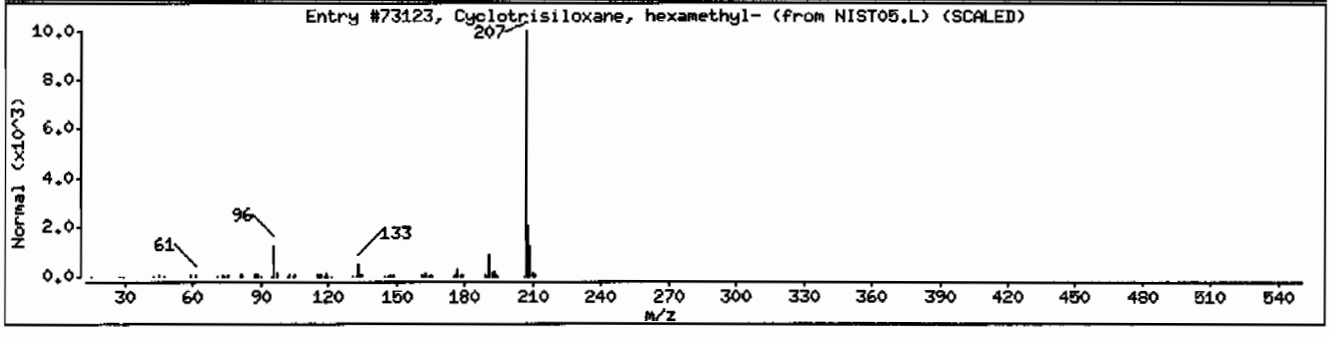

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3915	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 23:06	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s1k2928.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Uuits	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	183	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.4	367
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	367	ug/kg	73.4	367

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3915	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 23:06	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s1k2928.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	367	ug/kg	73.4	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	139	734
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	p-Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	276	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2928.d
Lab Smp Id: 241534008 Client Smp ID: RE03-10-3915
Inj Date : 29-NOV-2009 23:06
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534008|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	9.34110	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	795028	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	3126531	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1588919	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2600699	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1832095	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1255871	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1492576	71.8766	2640
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1839508	72.8839	2670
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	808879	39.2581	1440
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1693786	44.5094	1630
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	398426	89.7997	3290
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1551308	53.9433	1980

ION RATIO REPORT

SV REPORT

Data file: s1k2928.d
Report Date: 11/30/2009 08:48
Lab. ID: 241534008 SampleType: SAMPLE
Injection Date: 29-NOV-2009 23:06
Operator: AMY Instrument: MSD1.i
Sample Info: |241534008|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-601
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	85481	3.56	3.63	80-120	100	(T)
93	860	3.59	3.63	408-468	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	109621	4.19	4.08	80-120	100	(T)
42	70379	4.19	4.08	48-108	64	(T)
22 Isophorone		CAS#: 78-59-1				
82	808062	4.19	4.37	80-120	100	(T)
138	195	4.25	4.37	0- 50	0	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	281825	5.93	5.72	80-120	100	(T)
164	1588919	5.93	5.72	0- 40	564	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	202211	5.93	5.76	80-120	100	(T)
63	2433	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	202211	5.93	6.05	80-120	100	(T)
89	2245	5.93	6.05	40-100	1	(QT)
63	2433	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	24412	6.47	6.31	80-120	100	(T)
165	25403	6.47	6.31	65-125	104	(T)
167	7382	6.47	6.31	0- 43	30	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	22340	6.47	6.62	80-120	100	(T)
141	150088	6.47	6.62	62-122	672	(QT)
250	47408	6.47	6.62	66-126	212	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	721	9.50	9.51	80-120	100	( )
253	302	9.49	9.51	0- 51	42	( )
125	369	9.42	9.50	0- 44	51	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2928.d
Lab Smp Id: 241534008 Client Smp ID: RE03-10-3915
Inj Date : 29-NOV-2009 23:06
Operator : AMY Inst ID: MSD1.i
Smp Info : |241534008|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	9.34110	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	4735959	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.881	890569	7.52176392	276	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2928.d
Date : 29-NOV-2009 23:06
Client ID: RE03-10-3915
Sample Info: |241534008|926126|1|SVHF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

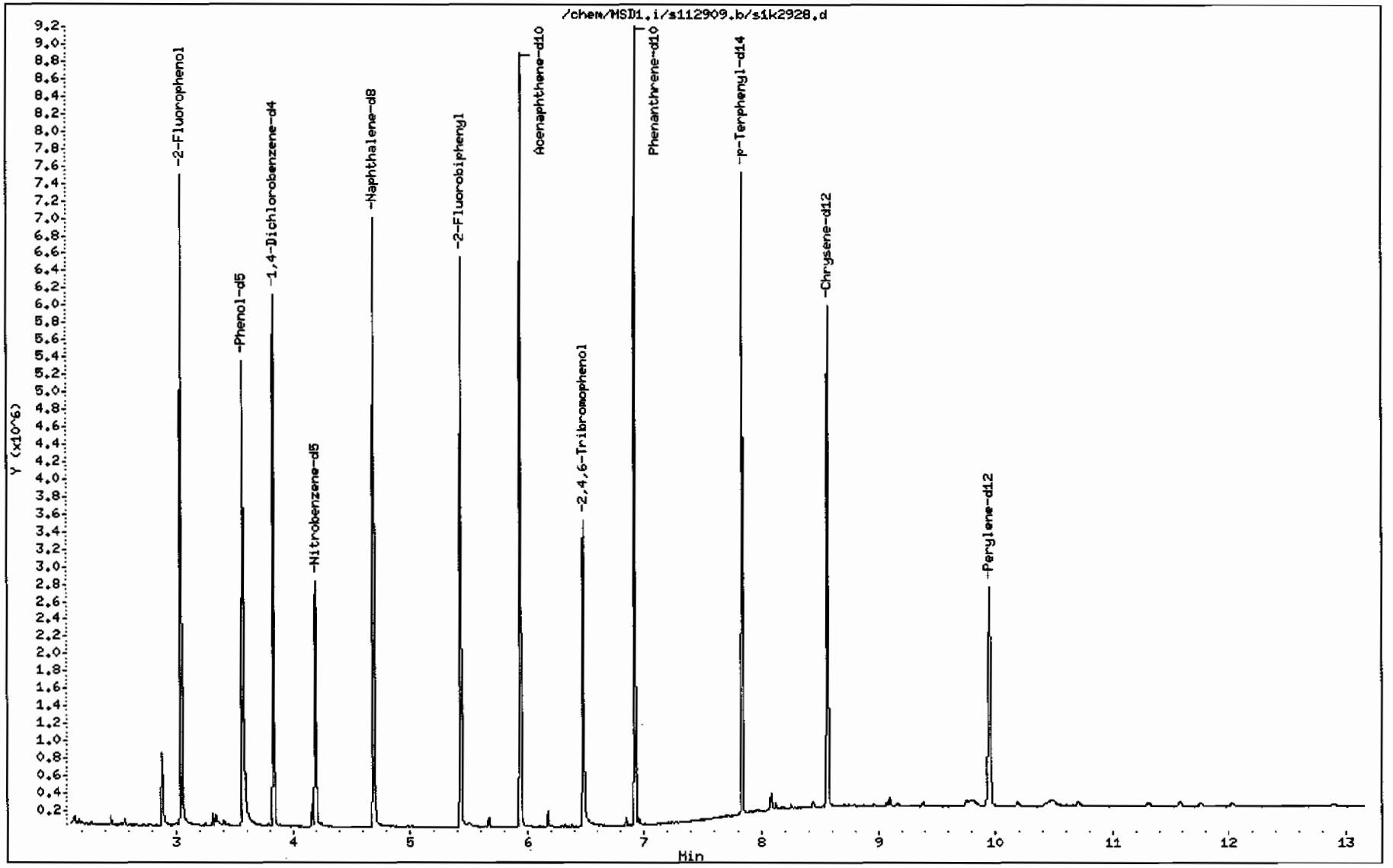

Data File: /chem/MSD1.i/s112909.b/s1k2928.d

Date : 29-NOV-2009 23:06

Client ID: RE03-10-3915

Instrument: MSD1.i

Sample Info: |2415340081926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
1,3,5-Pentanetriol, 3-methyl-	7564-64-9	NIST05.L	14621	39	C6H14O3	134
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

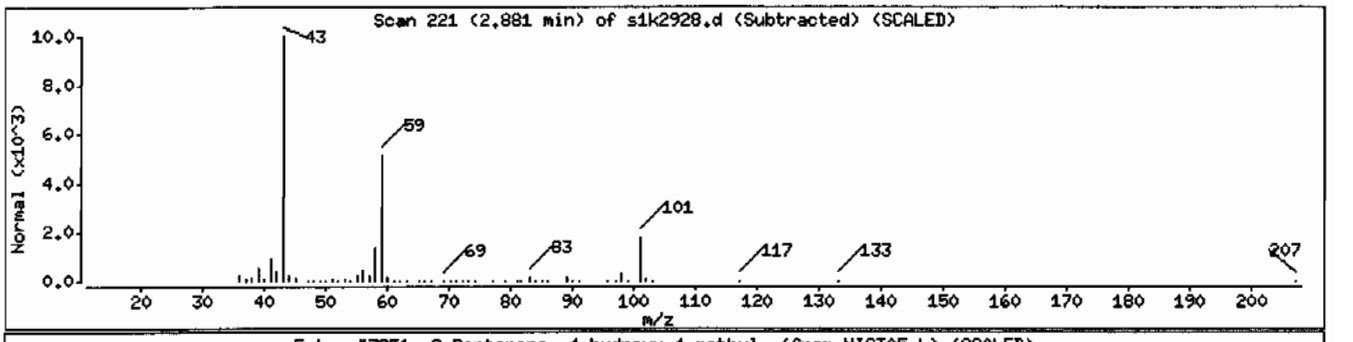

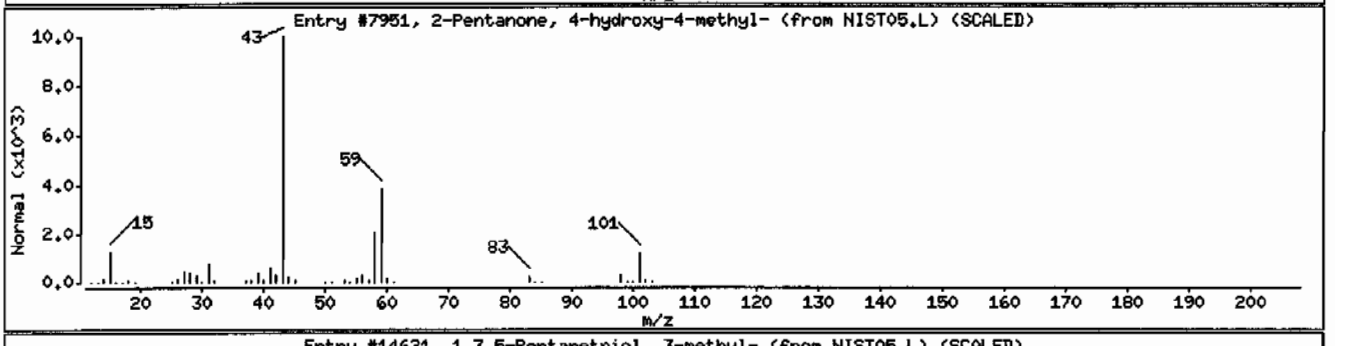

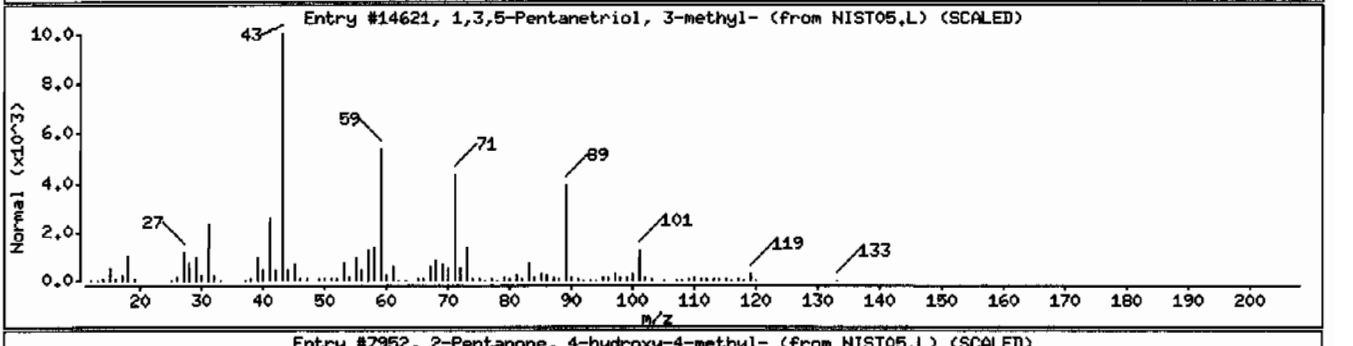

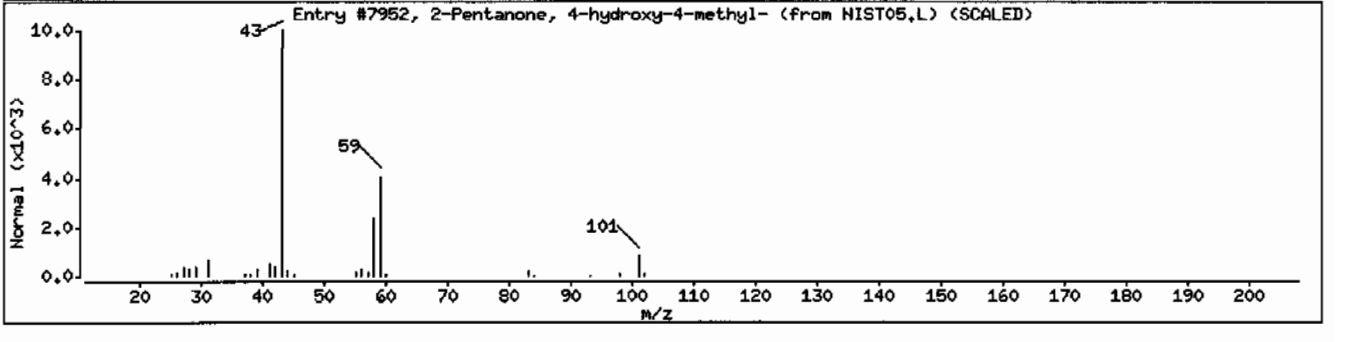

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX								
1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 30-Nov-2009 09:10

Calibration History

Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Start Cal Date: 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 18:22	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1203.d
Cal Level: 2 , Cal Amount: 10.00000		
17-NOV-2009 16:56	nev	/chem/MSD1.i/s111409.b/s1k1262.d
15-NOV-2009 20:55	hex	/chem/MSD1.i/s111409.b/s1k1229.d
15-NOV-2009 18:11	pest	/chem/MSD1.i/s111409.b/s1k1222.d
15-NOV-2009 15:28	ap12	/chem/MSD1.i/s111409.b/s1k1215.d
14-NOV-2009 18:51	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1204.d
Cal Level: 3 , Cal Amount: 20.00000		
17-NOV-2009 17:19	nev	/chem/MSD1.i/s111409.b/s1k1263.d
15-NOV-2009 21:18	hex	/chem/MSD1.i/s111409.b/s1k1230.d
15-NOV-2009 18:35	pest	/chem/MSD1.i/s111409.b/s1k1223.d
15-NOV-2009 15:51	ap12	/chem/MSD1.i/s111409.b/s1k1216.d
14-NOV-2009 19:21	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1205.d
Cal Level: 4 , Cal Amount: 40.00000		
17-NOV-2009 17:42	nev	/chem/MSD1.i/s111409.b/s1k1264.d
15-NOV-2009 21:42	hex	/chem/MSD1.i/s111409.b/s1k1231.d
15-NOV-2009 18:58	pest	/chem/MSD1.i/s111409.b/s1k1224.d
15-NOV-2009 16:14	ap12	/chem/MSD1.i/s111409.b/s1k1217.d
14-NOV-2009 19:50	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1206.d
Cal Level: 5 , Cal Amount: 50.00000		
17-NOV-2009 18:05	nev	/chem/MSD1.i/s111409.b/s1k1265.d
15-NOV-2009 22:06	hex	/chem/MSD1.i/s111409.b/s1k1232.d
15-NOV-2009 19:21	pest	/chem/MSD1.i/s111409.b/s1k1225.d
15-NOV-2009 16:38	ap12	/chem/MSD1.i/s111409.b/s1k1218.d
14-NOV-2009 20:19	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1207.d
Cal Level: 6 , Cal Amount: 80.00000		
17-NOV-2009 18:28	nev	/chem/MSD1.i/s111409.b/s1k1266.d
15-NOV-2009 22:30	hex	/chem/MSD1.i/s111409.b/s1k1233.d
15-NOV-2009 19:45	pest	/chem/MSD1.i/s111409.b/s1k1226.d
15-NOV-2009 17:01	ap12	/chem/MSD1.i/s111409.b/s1k1219.d
14-NOV-2009 20:47	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1208.d
Cal Level: 7 , Cal Amount: 100.00000		

17-NOV-2009 18:52	nev	/chem/MSD1.i/s111409.b/s1k1267.d
15-NOV-2009 22:53	hex	/chem/MSD1.i/s111409.b/s1k1234.d
15-NOV-2009 20:09	pest	/chem/MSD1.i/s111409.b/s1k1227.d
15-NOV-2009 17:24	ap12	/chem/MSD1.i/s111409.b/s1k1220.d
14-NOV-2009 21:16	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1209.d

Cal Level: 8 , Cal Amount: 120.00000		
17-NOV-2009 19:15	nev	/chem/MSD1.i/s111409.b/s1k1268.d
15-NOV-2009 20:31	pest	/chem/MSD1.i/s111409.b/s1k1228.d
15-NOV-2009 17:47	ap12	/chem/MSD1.i/s111409.b/s1k1221.d
14-NOV-2009 21:45	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1210.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 15:16	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2908.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 16:27	pest	/chem/MSD1.i/s112909.b/s1k2911.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 16:04	nev	/chem/MSD1.i/s112909.b/s1k2910.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 15:40	ap12	/chem/MSD1.i/s112909.b/s1k2909.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 13:43	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2906.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 11:23	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2904.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 10:50	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2903.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Calibration File Names:
Level 1: /chem/MSD1.i/s111409.b/s1k1203.d
Level 2: /chem/MSD1.i/s111409.b/s1k1262.d
Level 3: /chem/MSD1.i/s111409.b/s1k1263.d
Level 4: /chem/MSD1.i/s111409.b/s1k1264.d
Level 5: /chem/MSD1.i/s111409.b/s1k1265.d
Level 6: /chem/MSD1.i/s111409.b/s1k1266.d
Level 7: /chem/MSD1.i/s111409.b/s1k1267.d
Level 8: /chem/MSD1.i/s111409.b/s1k1268.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.54039	0.59425	0.56483	0.56773	0.57115					
	0.58358	0.54985					AVRG		0.56740		3.25055
2 Pyridine	+++++	0.93895	1.06231	1.03607	0.88870	0.86312					
	1.01434	0.86615					AVRG		0.95281		8.83991
4 Aniline	+++++	0.52437	0.56877	0.55954	0.56752	0.56439					
	0.57920	0.54312					AVRG		0.55813		3.31324
209 Benzaldehyde	+++++	0.85863	0.89515	0.82459	0.84178	+++++					
	0.78498	0.73887					AVRG		0.82400		6.72378
6 Phenol	+++++	1.30044	1.37922	1.37450	1.34330	1.33206					
	1.36293	1.27353					AVRG		1.33800		2.93989

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.97066	0.92013	0.97374	0.95071	0.94120	0.92474					
	0.92138	0.84393					AVRG		0.93081		4.39644
8 2-Chlorophenol	+++++	1.10018	1.18374	1.15316	1.14675	1.13425					
	1.15576	1.08633					AVRG		1.13717		2.96542
203 n-Decane	+++++	1.60577	1.68138	1.52755	1.45137	1.35767					
	1.27260	1.12485					AVRG		1.43160		13.59167
9 1,3-Dichlorobenzene	+++++	1.34153	1.44138	1.36782	1.35778	1.32788					
	1.29449	1.20929					AVRG		1.33431		5.33878
11 1,4-Dichlorobenzene	+++++	1.33212	1.41388	1.35420	1.32607	1.29299					
	1.26993	1.16675					AVRG		1.30799		5.91221
12 Benzyl alcohol	+++++	0.65002	0.69243	0.70051	0.67929	0.68651					
	0.73179	0.69932					AVRG		0.69141		3.57264
13 1,2-Dichlorobenzene	+++++	1.29605	1.34639	1.26381	1.21944	1.15866					
	1.13607	1.03545					AVRG		1.20798		8.78247
14 bis(2-Chloroisopropyl)ether	+++++	2.32509	2.42028	2.31148	2.26329	2.15456					
	2.11135	1.93355					AVRG		2.21709		7.35350
15 o-Cresol	+++++	0.90774	0.91911	0.87727	0.85502	0.81471					
	0.80779	0.74384					AVRG		0.84650		7.32849

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Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.16435	1.20208	1.12556	1.15316	+++++					
	1.08411	1.04352					AVRG		1.12880		5.09017
17 N-Nitrosodipropylamine	0.81293	0.75653	0.80116	0.77693	0.78822	0.71050					
	0.77452	0.67823					AVRG		0.76238		6.05014
18 m,p-Cresols	+++++	1.13181	1.16963	1.17353	1.13669	1.14618					
	1.18516	1.11948					AVRG		1.15179		2.12873
19 Hexachloroethane	+++++	0.47556	0.50281	0.48245	0.48088	0.46955					
	0.46206	0.42193					AVRG		0.47075		5.31168
21 Nitrobenzene	+++++	0.28437	0.30442	0.28298	0.28351	0.27052					
	0.25822	0.23858					AVRG		0.27466		7.74785
22 Isophorone	+++++	0.49709	0.51707	0.49540	0.49196	0.47802					
	0.46730	0.41658					AVRG		0.48049		6.70733
23 2-Nitrophenol	+++++	0.14839	0.15989	0.15609	0.15578	0.14421					
	0.13558	0.12065					AVRG		0.14580		9.49803
24 2,4-Dimethylphenol	+++++	0.25377	0.24260	0.23030	0.24361	0.23323					
	0.21824	0.21248					AVRG		0.23346		6.25831
25 bis(2-Chloroethoxy)methane	+++++	0.32659	0.33857	0.32017	0.31630	0.30271					
	0.29085	0.27012					AVRG		0.30933		7.51487

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	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.21991	0.23451	0.22671	0.22578	0.22138					
	0.21025	0.19507					AVRG		0.21909		5.89795
27 Benzoic acid	+++++	+++++	0.12652	0.15647	0.17043	0.17939					
	0.17420	0.15820					AVRG		0.16087		11.85426
28 1,2,4-Trichlorobenzene	+++++	0.25324	0.26639	0.25283	0.25336	0.23817					
	0.22476	0.20597					AVRG		0.24210		8.56147
30 Naphthalene	1.00192	0.89427	0.93446	0.86563	0.83102	0.76369					
	0.73215	0.65539					AVRG		0.83482		13.59329
204 alpha-Terpineol	+++++	0.21791	0.22387	0.20802	0.18690	0.18694					
	0.18377	0.16707					AVRG		0.19635		10.50339
31 4-Chloroaniline	+++++	0.39677	0.40757	0.39487	0.39324	0.37614					
	0.36195	0.33806					AVRG		0.38123		6.35973
189 Caprolactam	+++++	0.06846	0.07656	0.07363	0.07653	+++++					
	0.06782	0.06711					AVRG		0.07169		6.15581
32 Hexachlorobutadiene	+++++	0.13511	0.14100	0.13045	0.12864	0.12021					
	0.11205	0.10277					AVRG		0.12432		10.80535
33 4-Chloro-3-methylphenol	+++++	0.21530	0.22699	0.22627	0.22610	0.21202					
	0.21204	0.17967					AVRG		0.21406		7.75567

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	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.63189	0.59091	0.61031	0.56805	0.55492	0.51261					
	0.47801	0.44368					AVRG		0.54880		11.97650
35 1-Methylnaphthalene	0.57039	0.52594	0.54774	0.50754	0.49716	0.46294					
	0.43668	0.39804					AVRG		0.49330		11.71827
36 Hexachlorocyclopentadiene	+++++	0.10604	0.13033	0.13014	0.13942	0.12687					
	0.11688	0.10523					AVRG		0.12213		10.70285
208 1,1'-Biphenyl	+++++	1.17951	1.24377	1.14549	1.13585	+++++					
	1.04839	0.97002					AVRG		1.12050		8.68804
205 2,3-Dichloroaniline	+++++	0.46645	0.48933	0.47427	0.46997	0.44649					
	0.43405	0.39749					AVRG		0.45401		6.79831
37 2,4,6-Trichlorophenol	+++++	0.26977	0.29094	0.27785	0.27904	0.25743					
	0.25024	0.23713					AVRG		0.26606		7.03474
38 2,4,5-Trichlorophenol	+++++	0.26905	0.31036	0.32159	0.23043	0.31171					
	0.26900	0.26816					AVRG		0.28290		11.57703
40 2-Chloronaphthalene	1.06866	1.01017	1.06218	1.02382	1.00740	0.95458					
	0.92971	0.84336					AVRG		0.98748		7.61587
42 o-Nitroaniline	+++++	0.29397	0.31274	0.31408	0.31185	0.30784					
	0.31350	0.28932					AVRG		0.30619		3.33957

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	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.27156	0.28234	0.28082	0.27143	0.25979					
	0.28219	0.24573					AVRG		0.27055		5.03620
43 Dimethylphthalate	+++++	1.09522	1.14427	1.12702	1.11254	1.08188					
	1.07235	0.99634					AVRG		1.08995		4.43176
44 2,6-Dinitrotoluene	+++++	0.26660	0.28518	0.28098	0.27933	0.27123					
	0.26992	0.24768					AVRG		0.27156		4.59036
45 Acenaphthylene	1.62784	1.60004	1.67564	1.59865	1.57380	1.47905					
	1.44269	1.32968					AVRG		1.54092		7.42836
47 Acenaphthene	1.00456	0.99034	1.02942	0.97302	0.94853	0.86787					
	0.82882	0.73816					AVRG		0.92259		10.97291
48 2,4-Dinitrophenol	+++++	+++++	0.08843	0.11349	0.11534	0.11082					
	0.11305	0.10198					AVRG		0.10718		9.63049
49 Dibenzofuran	+++++	1.40383	1.45777	1.40759	1.36431	1.30285					
	1.24923	1.15395					AVRG		1.33422		7.92638
50 2,4-Dinitrotoluene	+++++	0.34056	0.36497	0.37079	0.37131	0.36633					
	0.36565	0.33990					AVRG		0.35993		3.80091
51 Diethylphthalate	+++++	1.04278	1.09197	1.06193	1.04018	0.99480					
	0.99307	0.88837					AVRG		1.01616		6.53371

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	0.13809	0.17287	0.18777	0.19477	0.20369					
	0.21665	0.20716					AVRG		0.18871		14.01343
53 Fluorene	1.22796	1.15355	1.19493	1.10753	1.06188	0.99894					
	0.97721	0.88428					AVRG		1.07578		10.93658
54 4-Chlorophenylphenylether	+++++	0.47537	0.49720	0.47503	0.46785	0.44264					
	0.43218	0.38915					AVRG		0.45420		7.92169
55 2-Methyl-4,6-dinitrophenol	+++++	0.08375	0.09608	0.10582	0.10320	0.10771					
	0.10908	0.10272					AVRG		0.10120		8.67983
56 p-Nitroaniline	+++++	0.24392	0.26348	0.26430	0.28144	0.26774					
	0.27465	0.25651					AVRG		0.26458		4.60021
133 Diphenylamine	+++++	0.55588	0.57977	0.55886	0.54789	0.52659					
	0.50269	0.46310					AVRG		0.53354		7.43632
58 1,2-Diphenylhydrazine	+++++	0.69850	0.71486	0.68099	0.66427	0.63670					
	0.61324	0.54832					AVRG		0.65098		8.77582
59 Tributylphosphate	+++++	1.22698	1.16066	1.10479	1.12684	1.06119					
	1.01440	0.96114					AVRG		1.09371		8.21068
61 4-Bromophenylphenylether	+++++	0.13960	0.14381	0.14105	0.13893	0.13903					
	0.13474	0.12486					AVRG		0.13743		4.49074

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	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.18056	0.18610	0.17775	0.16888	0.16686					
	0.15868	0.14199					AVRG		0.16869		8.86819
207 Atrazine	+++++	0.04275	0.04402	0.04191	0.04036	+++++					
	0.03698	0.03447					AVRG		0.04008		9.14364
65 Pentachlorophenol	+++++	0.08713	0.10123	0.10564	0.10198	0.10716					
	0.10688	0.09814					AVRG		0.10117		6.93558
206 n-Octadecane	+++++	0.49445	0.50531	0.45683	0.42873	0.36788					
	0.34975	+++++					AVRG		0.43383		14.85243
68 Phenanthrene	1.08140	0.97577	0.96718	0.91676	0.90684	0.85016					
	0.82329	0.75087					AVRG		0.90903		11.26824
69 Anthracene	1.05572	0.98071	1.00934	0.97561	0.92329	0.88140					
	0.83261	0.73707					AVRG		0.92447		11.24280
72 Di-n-butylphthalate	+++++	1.06714	1.12314	1.06117	1.02135	0.94081					
	0.88726	0.80148					AVRG		0.98605		11.57265
76 Fluoranthene	0.94603	0.94387	0.96313	0.92832	0.88364	0.83514					
	0.79976	0.71979					AVRG		0.87746		9.80038
77 Benzidine	+++++	0.28582	0.36970	0.35152	0.36897	+++++					
	0.43187	0.36504					AVRG		0.36215		12.90005

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	100 Level 7	120 Level 8									
79 Pyrene	1.12921	1.08043	1.13184	1.09423	1.03887	1.05677					
	1.02924	0.94284					AVRG		1.06293		5.79953
85 Butylbenzylphthalate	+++++	0.53253	0.56219	0.50335	0.46569	0.43331					
	0.40529	+++++					AVRG		0.48372		12.38419
89 Benzo(a)anthracene	1.00602	0.91134	0.98073	0.96992	0.98002	0.96903					
	0.95763	0.89850					AVRG		0.95915		3.79585
90 3,3'-Dichlorobenzidine	+++++	0.24634	0.28908	0.28847	0.28710	+++++					
	0.28231	0.25909					AVRG		0.27540		6.60230
92 Chrysene	0.98731	0.93210	0.94599	0.88032	0.86729	0.85456					
	0.87955	0.82465					AVRG		0.89647		6.00506
93 bis(2-Ethylhexyl)phthalate	0.57061	0.72394	0.78180	0.75934	0.74451	0.72196					
	0.68855	0.63132					AVRG		0.70275		10.02985
94 Di-n-octylphthalate	+++++	1.17035	1.39716	1.40560	1.36840	1.34274					
	1.30766	1.16752					AVRG		1.30849		7.70640
95 Benzo(b)fluoranthene	21625	340509	730849	1739197	2305837	3304287					
	3978698	5127789					LINR	0.06661	1.08695		0.99870
96 Benzo(k)fluoranthene	1.03711	1.06722	1.12263	1.01575	1.02623	1.00211					
	0.97020	0.78256					AVRG		1.00298		9.96839

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	20918	319721	688146	1504125	2094282	2912657					
	3398226	3934490					LINR	-0.00385	0.87033		0.99612
99 Indeno(1,2,3-cd)pyrene	21578	336515	700258	1580353	2201480	3025334					
	3523403	4020592					LINR	-0.01092	0.89653		0.99431
100 Dibenzo(a,h)anthracene	16162	268427	581631	1325626	1846286	2532762					
	2946699	3397425					LINR	-0.00445	0.75511		0.99519
101 Benzo(ghi)perylene	0.56462	0.70452	0.77602	0.81299	0.83023	0.80394					
	0.79303	0.72783					AVRG		0.75165		11.54879
102 1,4-Dioxane	+++++	0.32550	0.33716	0.30934	0.31455	+++++					
	0.30805	0.28861					AVRG		0.31387		5.27573
103 Methyl methacrylate	+++++	0.17774	0.19107	0.17805	0.17495	+++++					
	0.17326	0.16336					AVRG		0.17640		5.08144
104 Ethyl methacrylate	+++++	0.73346	0.76622	0.70794	0.70643	+++++					
	0.69714	0.66675					AVRG		0.71299		4.73943
105 2-Picoline	+++++	1.18802	1.23130	1.15065	1.15312	+++++					
	1.12223	1.07774					AVRG		1.15384		4.58113
106 N-Nitrosomethylethylamine	+++++	0.42951	0.48460	0.44623	0.45222	+++++					
	0.46395	0.44906					AVRG		0.45426		4.08577

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.43204	0.45674	0.42468	0.43227	+++++					
	0.41648	0.39202					AVRG		0.42570		5.00242
108 N-Nitrosodiethylamine	+++++	0.47915	0.50719	0.47065	0.48068	+++++					
	0.47830	0.46128					AVRG		0.47954		3.20356
109 Ethyl Methanesulfonate	+++++	0.59343	0.63202	0.58286	0.59990	+++++					
	0.59568	0.57362					AVRG		0.59625		3.34808
110 Pentachloroethane	+++++	0.30094	0.30775	0.28811	0.28717	+++++					
	0.28774	0.27522					AVRG		0.29115		3.95122
111 N-Nitrosopyrrolidine	+++++	0.47773	0.52978	0.49561	0.51566	+++++					
	0.41369	0.41806					AVRG		0.47509		10.34926
113 N-Nitrosomorpholine	+++++	0.63587	0.69755	0.63481	0.65791	+++++					
	0.54487	0.53392					AVRG		0.61749		10.47980
114 o-Toluidine	+++++	1.64551	1.76888	1.61850	1.65178	+++++					
	1.65679	1.57817					AVRG		1.65327		3.85302
115 N-Nitrosopiperidine	+++++	0.12931	0.13922	0.12850	0.13280	+++++					
	0.13244	0.12709					AVRG		0.13156		3.32124
116 a,a-Dimethylphenethylamine	+++++	0.70597	0.78545	0.76293	0.79408	+++++					
	0.79335	0.76628					AVRG		0.76801		4.32000

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.12812	0.12428	0.12751	0.12901	0.12488					
	0.12021	0.11633					AVRG		0.12433		3.70966
118 2,6-Dichlorophenol	+++++	0.18796	0.20530	0.19528	0.20193	+++++					
	0.20014	0.19147					AVRG		0.19701		3.35416
119 Hexachloropropene	+++++	0.07891	0.09539	0.09133	0.09091	+++++					
	0.09225	0.08492					AVRG		0.08895		6.72708
120 p-Phenylenediamine	+++++	0.17417	0.23091	0.21919	0.22009	+++++					
	0.19257	0.17231					AVRG		0.20154		12.55674
121 N-Nitrosodi-n-butylamine	+++++	0.16926	0.19309	0.16843	0.17454	+++++					
	0.16640	0.15862					AVRG		0.17172		6.79719
122 Safrole	+++++	0.18021	0.18852	0.17847	0.18253	+++++					
	0.17443	0.16766					AVRG		0.17864		3.98501
123 1,2,4,5-Tetrachlorobenzene	+++++	0.38048	0.40351	0.37295	0.37017	+++++					
	0.35065	0.32500					AVRG		0.36713		7.29953
124 Isosafrole	+++++	0.32136	0.34935	0.32718	0.32927	+++++					
	0.32898	0.30952					AVRG		0.32761		3.96520
125 1,4-Naphthoquinone	+++++	0.37346	0.38046	0.31457	0.30180	+++++					
	0.18844	0.22186					AVRG		0.29676		26.34996 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
126 m-Dinitrobenzene	+++++	0.17349	0.18721	0.19120	0.19440	0.19057					
	0.19238	0.17644					AVRG		0.18653		4.41251
127 Pentachlorobenzene	+++++	0.32992	0.34557	0.31675	0.31835	+++++					
	0.29677	0.27972					AVRG		0.31451		7.45207
128 1-Naphthylamine	+++++	0.82636	0.98891	0.93384	0.93443	+++++					
	0.87178	0.80990					AVRG		0.89420		7.80762
129 2-Naphthylamine	+++++	0.96588	1.05556	1.00159	1.00599	+++++					
	0.94403	0.87535					AVRG		0.97473		6.34557
130 2,3,4,6-Tetrachlorophenol	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
131 5-Nitro-o-toluidine	+++++	0.25535	0.29363	0.28574	0.29496	+++++					
	0.29982	0.28219					AVRG		0.28528		5.60973
132 Thionazin	+++++	0.16358	0.16364	0.16630	0.16880	0.16339					
	0.15554	0.14821					AVRG		0.16135		4.38820
134 Sulfotepp	+++++	0.08562	0.08304	0.08303	0.08467	0.07953					
	0.07427	0.07214					AVRG		0.08033		6.54838
135 Phorate	+++++	0.36567	0.35586	0.35721	0.36683	0.34385					
	0.32742	0.31541					AVRG		0.34747		5.65187

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	0.10196	0.12348	0.12395	0.12006	+++++					
	0.11894	0.10898					AVRG		0.11623		7.60291
137 Phenacetin	+++++	0.22684	0.26317	0.26291	0.26441	+++++					
	0.26599	0.25918					AVRG		0.25708		5.83046
138 Diallate	+++++	0.24760	0.24927	0.23322	0.23010	+++++					
	0.21802	0.20853					AVRG		0.23112		6.94549
139 Dimethoate	+++++	0.21461	0.21994	0.23007	0.23724	0.23858					
	0.23513	0.22967					AVRG		0.22932		3.92960
140 4-Aminobiphenyl	+++++	0.53696	0.55369	0.57677	0.59426	+++++					
	0.49840	0.45674					AVRG		0.53614		9.53476
141 Pentachloronitrobenzene	+++++	0.05720	0.06067	0.05490	0.05533	+++++					
	0.04673	0.04463					AVRG		0.05324		11.71339
142 Pronamide	+++++	0.24822	0.26125	0.24154	0.23765	+++++					
	0.17973	+++++					AVRG		0.23368		13.46482
143 Dinoseb	+++++	0.10297	0.12216	0.13126	0.12950	0.13024					
	0.13017	0.12500					AVRG		0.12447		8.06727
144 Disulfoton	+++++	0.32280	0.31415	0.31231	0.32231	0.30214					
	0.27306	0.26345					AVRG		0.30146		7.92046

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.18413	0.18908	0.19611	0.20206	0.20472					
	0.19613	0.19053					AVRG		0.19468		3.74715
146 4-Nitroquinoline-1-oxide	+++++	0.00831	0.00998	0.00800	0.01074	+++++					
	0.01133	0.01046					AVRG		0.00980		13.77700
147 Methapyrilene	+++++	0.36466	0.38869	0.39386	0.38311	+++++					
	0.36077	0.31821					AVRG		0.36822		7.55340
148 Isodrin	+++++	0.09085	0.09372	0.08925	0.08743	+++++					
	0.07960	0.07570					AVRG		0.08609		8.09255
149 Aramite	+++++	0.04141	0.04570	0.04371	0.04272	+++++					
	0.04204	0.03972					AVRG		0.04255		4.79399
150 Kepone	+++++	0.06055	0.06732	0.06349	0.06380	+++++					
	0.06458	0.05876					AVRG		0.06308		4.80408
151 p-(Dimethylamino)azobenzene	+++++	0.28782	0.31583	0.29702	0.29097	+++++					
	0.26535	0.24656					AVRG		0.28392		8.62091
152 Chlorobenzilate	+++++	0.21991	0.23787	0.22800	0.23044	+++++					
	0.20814	0.19524					AVRG		0.21994		7.17760
153 3,3'-Dimethylbenzidine	+++++	0.45675	0.51768	0.48413	0.48879	+++++					
	0.49372	0.43564					AVRG		0.47945		6.05117

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
154 Famphur	+++++	0.29819	0.30032	0.31780	0.33430	0.32440					
	0.30595	0.30061					AVRG		0.31165		4.49495
155 2-Acetylaminofluorene	+++++	0.23107	0.30345	0.31881	0.32045	+++++					
	0.34822	0.32608					AVRG		0.30801		13.11206
157 7,12Dimethylbenz(a)anthracene	+++++	0.41118	0.44192	0.42666	0.43253	+++++					
	0.40970	0.40537					AVRG		0.42123		3.47443
158 3-Methylcholanthrene	+++++	0.29680	0.36865	0.37932	0.38459	+++++					
	0.39125	0.38204					AVRG		0.36711		9.59696
26 Phthalic anhydride	+++++	30283	90214	245905	320454	497228					
	555160	687649					LINR	0.08413	0.10332		0.99692
173 Carbazole	0.90246	0.82255	0.80875	0.81414	0.83946	0.78812					
	0.78058	0.70109					AVRG		0.80714		7.06036
174 Hexachlorophene	+++++	0.03640	0.04820	0.05180	0.05353	0.05136					
	0.04905	+++++					AVRG		0.04839		12.77621
179 Dibenzo(a,e)pyrene	+++++	117900	312429	817402	1225621	1557621					
	1812574	+++++					LINR	0.07449	0.50549		0.99368
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	2462	14132	46568	48315	83536					
	96111	113764					LINR	0.17192	0.08067		0.99223
191 Parathion	+++++	0.06169	0.06089	0.06449	0.06621	0.06308					
	0.06173	0.06112					AVRG		0.06274		3.14637
192 Methoxychlor	+++++	0.32535	0.36631	0.33959	0.33867	0.27894					
	0.25594	+++++					AVRG		0.31747		13.10686
210 m-Toluidine	+++++	0.77272	0.88703	0.90355	0.94226	1.01524					
	0.94351	+++++					AVRG		0.91072		8.87324
211 p-Toluidine	+++++	0.69169	0.70617	0.72166	0.71562	0.68688					
	+++++	+++++					AVRG		0.70440		2.12367
212 Cis Diallate	+++++	0.23437	0.24880	0.23465	0.23944	+++++					
	0.24434	0.23833					AVRG		0.23999		2.35508
213 Trans Diallate	+++++	0.29129	0.29326	0.27438	0.27070	+++++					
	0.25649	0.24533					AVRG		0.27191		6.94549
214 1,4-Dinitrobenzene	+++++	0.16000	0.17119	0.17754	0.17866	0.17639					
	0.17966	0.16860					AVRG		0.17315		4.08379
215 2-Ethoxyethanol	+++++	0.57555	0.62918	0.65385	0.56961	0.58718					
	0.62071	0.58595					AVRG		0.60315		5.24047

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Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.11447	0.12909	0.13171	0.13536	0.13420					
	0.13376	0.12587					AVRG		0.12921		5.63660
229 2,2'-Dichlorobenzil	+++++	0.67948	0.77608	0.71487	+++++	0.73565					
	+++++	0.63422					AVRG		0.70806		7.63914
230 4-Chlorothioanisole	+++++	0.23155	0.23520	0.23685	+++++	0.23140					
	+++++	0.22159					AVRG		0.23132		2.56050
231 4-Chlorothiophenol	+++++	0.15409	0.17482	0.19368	+++++	0.19893					
	+++++	0.19703					AVRG		0.18371		10.41669
232 bis(p-Chlorophenyl)sulfone	+++++	0.39430	0.43698	0.38579	+++++	0.39600					
	+++++	0.34721					AVRG		0.39206		8.15529
233 bis(p-Chlorophenyl)disulfide	+++++	0.10045	0.11150	0.11707	+++++	0.12020					
	+++++	0.10635					AVRG		0.11111		7.18003
234 Diphenyl disulfide	+++++	0.17804	0.18209	0.18631	+++++	0.17491					
	+++++	0.16341					AVRG		0.17695		4.91531
235 Diphenyl sulfide	+++++	0.71955	0.73103	0.70874	+++++	0.65333					
	+++++	0.61709					AVRG		0.68595		7.09988
236 Phenyl sulfone	+++++	0.43275	0.44078	0.42799	+++++	0.41905					
	+++++	0.39177					AVRG		0.42247		4.46830

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.12384	0.15720	0.10384	+++++	0.13032						
	+++++	0.12669					AVRG		0.12838		14.88299	
238 Phthalic acid	+++++	24604	70600	163991	+++++	411903						
	+++++	634014					LINR	0.25540	0.11087		0.99102	
239 Thiophenol	+++++	0.94048	1.03561	1.08365	+++++	1.12900						
	+++++	1.09332					AVRG		1.05641		6.89893	
240 bis(Chloromethyl)ether	+++++	0.78790	0.79417	0.76917	+++++	0.75455						
	+++++	0.73576					AVRG		0.76831		3.12263	
241 Octachlorostyrene	+++++	0.06103	0.06315	0.05827	+++++	0.05420						
	+++++	0.04861					AVRG		0.05705		10.14342	
M 225 Trichlorophenols	+++++	0.26941	0.30065	0.29972	0.25473	0.28457						
	0.25962	0.25265					AVRG		0.27448		7.49129	
M 226 Tetrachlorophenols	+++++	0.20567	0.22518	0.22987	0.20102	0.22712						
	0.21818	0.20523					AVRG		0.21604		5.51582	
M 227 Benzo(b,k)fluoranthene	0.78278	0.93887	1.02131	1.01324	1.00976	1.01479						
	1.00963	0.93381					AVRG		0.96552		8.47131	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.97776	1.06271	1.06423	1.06306	1.07281						
	1.07136	1.00157					AVRG		1.04478		3.68308	
$ 5 Phenol-d5	+++++	1.21974	1.33050	1.28249	1.27680	1.26954						
	1.29216	1.21764					AVRG		1.26984		3.15351	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27426	0.28571	0.27066	0.27231	0.25884						
	0.24945	0.23400					AVRG		0.26360		6.62019	
$ 39 2-Fluorobiphenyl	+++++	0.99823	1.04801	1.00239	0.98618	0.93991						
	0.91199	0.81928					AVRG		0.95800		7.87748	
$ 60 2,4,6-Tribromophenol	+++++	0.10924	0.11530	0.11503	0.10898	0.11186						
	0.11271	0.10874					AVRG		0.11169		2.51418	
$ 81 p-Terphenyl-d14	+++++	0.64452	0.67675	0.65301	0.63863	0.61256						
	0.60853	0.56112					AVRG		0.62787		5.98666	

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Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 15-NOV-2009 23:17
Lab File ID: s1k1235.d Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 22:53
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.71239	0.71239	0.000	-13.54468	60.00000	Averaged
16 Acetophenone	1.12880	1.15012	1.15012	0.000	1.88924	60.00000	Averaged
189 Caprolactam	0.07169	0.08295	0.08295	0.000	15.71078	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.24126	1.24126	0.000	10.77724	60.00000	Averaged
207 Atrazine	0.04008	0.04737	0.04737	0.000	18.18184	60.00000	Averaged
77 Benzidine	0.36215	0.33951	0.33951	0.000	-6.25196	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.29917	0.29917	0.000	8.63115	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.37981	0.37981	0.000	21.00923	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.20821	0.20821	0.000	18.03005	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.86659	0.86659	0.000	21.54329	60.00000	Averaged
105 2-Picoline	1.15384	1.13306	1.13306	0.000	-1.80140	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.46463	0.46463	0.000	2.28123	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48978	0.48978	0.000	15.05276	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.49102	0.49102	0.000	2.39384	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.74183	0.74183	0.000	24.41607	60.00000	Averaged
110 Pentachloroethane	0.29115	0.40985	0.40985	0.000	40.76840	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.50932	0.50932	0.000	7.20593	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.67896	0.67896	0.000	9.95518	60.00000	Averaged
114 o-Toluidine	1.65327	1.64031	1.64031	0.000	-0.78415	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.13273	0.13273	0.000	0.88789	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.79273	0.79273	0.000	3.21891	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.21797	0.21797	0.000	10.63653	60.00000	Averaged
119 Hexachloropropene	0.08895	0.13367	0.13367	0.000	50.27176	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.18980	0.18980	0.000	-5.82557	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.17829	0.17829	0.000	3.82057	60.00000	Averaged
122 Safrole	0.17864	0.21665	0.21665	0.000	21.27785	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.42376	0.42376	0.000	15.42574	60.00000	Averaged
124 Isosafrole	0.32761	0.46202	0.46202	0.000	41.02664	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.32067	0.32067	0.000	8.05637	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.35074	0.35074	0.000	11.51805	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.98926	0.98926	0.000	10.62991	60.00000	Averaged
129 2-Naphthylamine	0.97473	1.09077	1.09077	0.000	11.90459	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.30775	0.30775	0.000	7.87638	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.15168	0.15168	0.000	30.50015	60.00000	Averaged
137 Phenacetin	0.25708	0.29576	0.29576	0.000	15.04579	60.00000	Averaged
138 Diallate	0.23112	0.23284	0.23284	0.000	0.74457	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1235.d
Analysis Type:
Lab Sample ID: WBN091111-08.1
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 15-NOV-2009 23:17
Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Init. Cal. Times: 18:22 22:53
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.31739	0.31739	0.000	32.25095	60.00000	Averaged
213 Trans Diallate	0.27191	0.27393	0.27393	0.000	0.74457	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.62569	0.62569	0.000	16.70322	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06215	0.06215	0.000	16.73283	60.00000	Averaged
142 Pronamide	0.23368	0.26726	0.26726	0.000	14.37225	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.00923	0.00923	0.000	-5.86960	60.00000	Averaged
147 Methapyrilene	0.36822	0.29090	0.29090	0.000	-20.99905	60.00000	Averaged
148 Isodrin	0.08609	0.08812	0.08812	0.000	2.35297	60.00000	Averaged
149 Aramite	0.04255	0.04327	0.04327	0.000	1.67534	60.00000	Averaged
150 Kepone	0.06308	0.07178	0.07178	0.000	13.77677	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.29411	0.29411	0.000	3.58893	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.24578	0.24578	0.000	11.75217	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.47257	0.47257	0.000	-1.43591	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.33042	0.33042	0.000	7.27461	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.42978	0.42978	0.000	2.03140	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40048	0.40048	0.000	9.08958	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1235.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: APICV
Inj Date : 15-NOV-2009 23:17
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091111-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 10:44 nat00999 Quant Type: ISTD
Cal Date : 15-NOV-2009 21:42 Cal File: s1k1231.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.957	3.940	(1.000)	601939	40.0000		
* 29 Naphthalene-d8	136	4.828	4.810	(1.000)	2374945	40.0000		
* 46 Acenaphthene-d10	164	6.075	6.057	(1.000)	1270499	40.0000		
* 67 Phenanthrene-d10	188	7.057	7.040	(1.000)	2114263	40.0000		
* 91 Chrysene-d12	240	8.739	8.722	(1.000)	1927170	40.0000		
* 98 Perylene-d12	264	10.251	10.222	(1.000)	1696025	40.0000		(H)
209 Benzaldehyde	77	3.681	3.681	(0.930)	428816	40.0000	34.6	
16 Acetophenone	105	4.210	4.210	(1.064)	692304	40.0000	40.8	
189 Caprolactam	113	5.104	5.122	(1.057)	197001	40.0000	46.3	
208 1,1'-Biphenyl	154	5.646	5.651	(0.929)	1577025	40.0000	44.3	
207 Atrazine	173	6.822	6.834	(0.967)	100151	40.0000	47.3	
77 Benzidine	184	7.828	7.834	(0.896)	654298	40.0000	37.5	
90 3,3'-Dichlorobenzidine	252	8.663	8.669	(0.991)	576557	40.0000	43.4	
102 1,4-Dioxane	88	2.281	2.287	(0.576)	228622	40.0000	48.4	
103 Methyl methacrylate	100	2.275	2.275	(0.575)	125330	40.0000	47.2	
104 Ethyl methacrylate	69	2.652	2.652	(0.670)	521635	40.0000	48.6	
105 2-Picoline	93	2.846	2.846	(0.719)	682032	40.0000	39.3	
106 N-Nitrosomethylethylamine	88	2.887	2.893	(0.729)	279676	40.0000	40.9	
107 Methyl methanesulfonate	80	3.046	3.052	(0.770)	294820	40.0000	46.0	
108 N-Nitrosodiethylamine	102	3.281	3.287	(0.829)	295564	40.0000	41.0	
109 Ethyl Methanesulfonate	79	3.440	3.446	(0.869)	446538	40.0000	49.8	
110 Pentachloroethane	167	3.781	3.781	(0.955)	246707	40.0000	56.3	
111 N-Nitrosopyrrolidine	100	4.199	4.216	(1.061)	306582	40.0000	42.9	
113 N-Nitrosomorpholine	56	4.216	4.228	(1.065)	408692	40.0000	44.0	
114 o-Toluidine	106	4.234	4.246	(1.070)	987365	40.0000	39.7	
115 N-Nitrosopiperidine	114	4.434	4.446	(0.918)	315224	40.0000	40.4	
116 a,a-Dimethylphenethylamine	58	4.681	4.681	(0.970)	1882697	40.0000	41.3	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.869	4.875	(1.009)	517655	40.0000	44.2
119 Hexachloropropene	213	4.899	4.898	(1.015)	317465	40.0000	60.1
120 p-Phenylenediamine	108	5.104	5.116	(1.057)	450756	40.0000	37.7
121 N-Nitrosodi-n-butylamine	84	5.069	5.075	(1.050)	423419	40.0000	41.5(T)
122 Safrole	162	5.234	5.240	(1.084)	514526	40.0000	48.5
123 1,2,4,5-Tetrachlorobenzene	216	5.440	5.446	(0.895)	538386	40.0000	46.2
124 Isosafrole	162	5.604	5.610	(0.923)	586994	40.0000	56.4
125 1,4-Naphthoquinone	158	5.793	5.793	(0.954)	407413	40.0000	43.2
127 Pentachlorobenzene	250	6.181	6.187	(1.017)	445615	40.0000	44.6
128 1-Naphthylamine	143	6.263	6.269	(1.031)	1256848	40.0000	44.2
129 2-Naphthylamine	143	6.316	6.322	(1.040)	1385825	40.0000	44.8
131 5-Nitro-o-toluidine	152	6.434	6.445	(1.059)	390998	40.0000	43.2
136 1,3,5-Trinitrobenzene	75	6.645	6.651	(0.942)	320686	40.0000	52.2
137 Phenacetin	108	6.687	6.698	(0.947)	625324	40.0000	46.0
138 Diallate	86	6.669	6.675	(0.945)	492291	40.0000	40.3
212 Cis Diallate	86	6.734	6.734	(0.954)	100656	6.00000	7.9
213 Trans Diallate	86	6.669	6.675	(0.945)	492291	34.0000	34.2
140 4-Aminobiphenyl	169	6.910	6.916	(0.979)	1322873	40.0000	46.7
141 Pentachloronitrobenzene	237	6.934	6.940	(0.982)	131405	40.0000	46.7
142 Pronamide	173	6.922	6.928	(0.981)	565063	40.0000	45.7
146 4-Nitroquinoline-1-oxide	101	7.516	7.522	(1.065)	19512	40.0000	37.6
147 Methapyrilene	58	7.534	7.539	(1.067)	615031	40.0000	31.6
148 Isodrin	193	7.692	7.692	(1.090)	186303	40.0000	40.9
149 Aramite	185	7.916	7.916	(1.122)	91474	40.0000	40.7
150 Kepone	272	8.351	8.363	(1.183)	151752	40.0000	45.5
151 p-(Dimethylamino)azobenzene	120	8.045	8.051	(0.921)	566806	40.0000	41.4
152 Chlorobenzilate	251	8.057	8.063	(0.922)	473667	40.0000	44.7
153 3,3'-Dimethylbenzidine	212	8.257	8.263	(0.945)	910722	40.0000	39.4
155 2-Acetylaminofluorene	181	8.445	8.457	(0.966)	636774	40.0000	42.9
157 7,12Dimethylbenz(a)anthracene	256	9.733	9.745	(0.945)	728922	40.0000	40.8
158 3-Methylcholanthrene	268	10.622	10.639	(1.031)	679223	40.0000	43.6

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1235.d
Date : 15-NOV-2009 23:17
Client ID: APICV
Sample Info: IWBN091111-08.1|40 PPM|1|SVMF|1|APICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

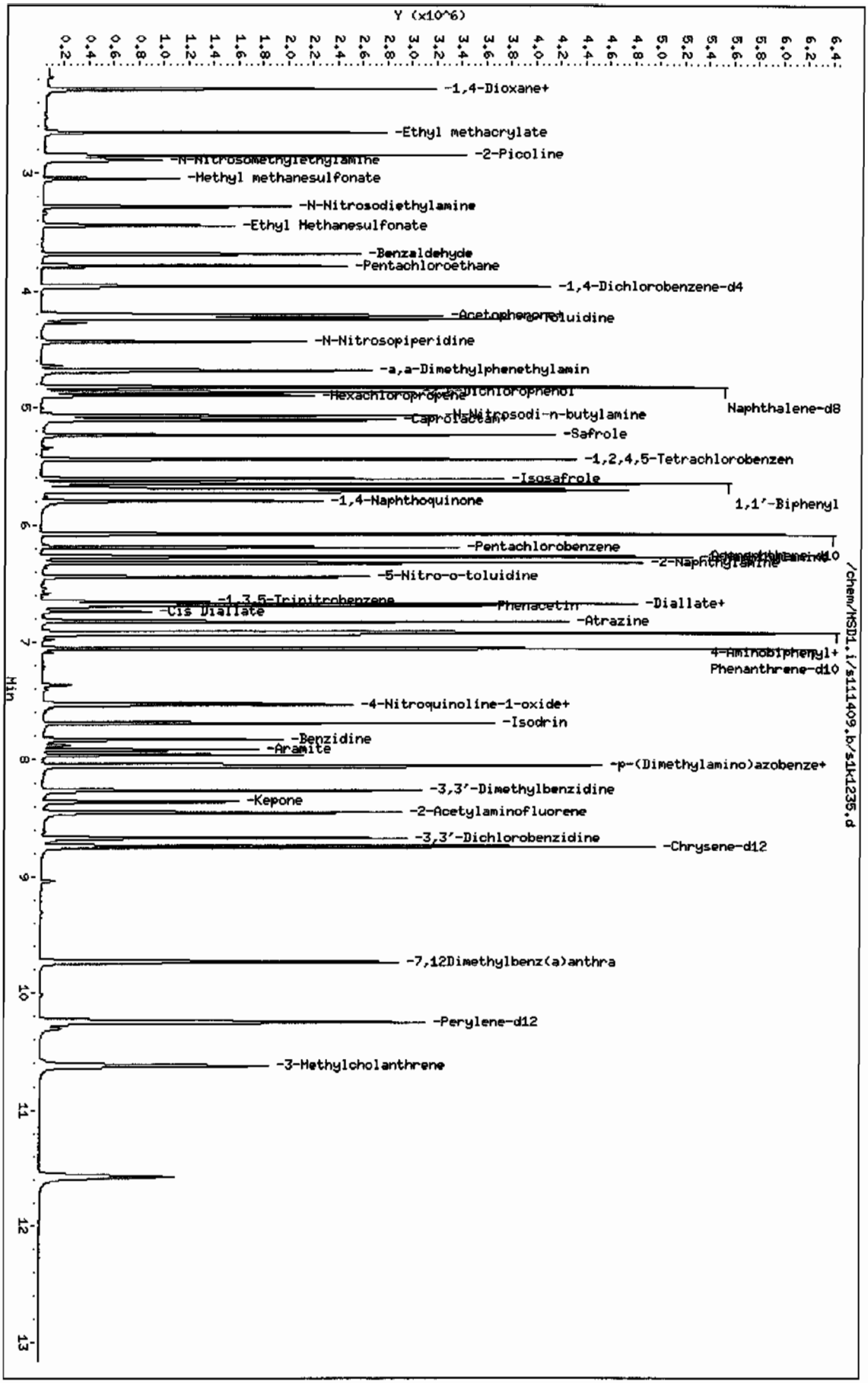

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.04478	0.92701	0.92701	0.000	-11.27306	60.00000	Averaged
$ 5 Phenol-d5	1.26984	1.11829	1.11829	0.000	-11.93416	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.26360	0.25882	0.25882	0.000	-1.81289	60.00000	Averaged
$ 39 2-Fluorobiphenyl	0.95800	0.95545	0.95545	0.000	-0.26619	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11169	0.11397	0.11397	0.000	2.04032	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.62787	0.61091	0.61091	0.000	-2.70233	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.56740	0.52259	0.52259	0.000	-7.89719	60.00000	Averaged
2 Pyridine	0.95281	0.72054	0.72054	0.000	-24.37721	60.00000	Averaged
4 Aniline	0.55813	0.46069	0.46069	0.000	-17.45935	60.00000	Averaged
6 Phenol	1.33800	1.13102	1.13102	0.001	-15.46941	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.93081	0.78725	0.78725	0.000	-15.42323	60.00000	Averaged
8 2-Chlorophenol	1.13717	0.96631	0.96631	0.000	-15.02517	60.00000	Averaged
203 n-Decane	1.43160	1.33489	1.33489	0.000	-6.75532	60.00000	Averaged
9 1,3-Dichlorobenzene	1.33431	1.14485	1.14485	0.000	-14.19930	60.00000	Averaged
11 1,4-Dichlorobenzene	1.30799	1.12905	1.12905	0.001	-13.68038	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.20798	1.02631	1.02631	0.000	-15.03923	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.21709	1.93928	1.93928	0.000	-12.53006	60.00000	Averaged
12 Benzyl alcohol	0.69141	0.59629	0.59629	0.000	-13.75808	60.00000	Averaged
15 o-Cresol	0.84650	0.72216	0.72216	0.000	-14.68816	60.00000	Averaged
18 m,p-Cresols	1.15179	1.00178	1.00178	0.000	-13.02332	60.00000	Averaged
17 N-Nitrosodipropylamine	0.76238	0.61385	0.61385	0.050	-19.48192	60.00000	Averaged spcc
19 Hexachloroethane	0.47075	0.38923	0.38923	0.000	-17.31682	60.00000	Averaged
21 Nitrobenzene	0.27466	0.23975	0.23975	0.000	-12.70858	60.00000	Averaged
22 Isophorone	0.48049	0.42824	0.42824	0.000	-10.87384	60.00000	Averaged
23 2-Nitrophenol	0.14580	0.12443	0.12443	0.001	-14.65471	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.23346	0.23407	0.23407	0.000	0.25935	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30933	0.25445	0.25445	0.000	-17.74126	60.00000	Averaged
26 2,4-Dichlorophenol	0.21909	0.18847	0.18847	0.001	-13.97781	20.00000	Averaged ccc
27 Benzoic acid	0.16087	0.16553	0.16553	0.000	2.89975	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24210	0.21218	0.21218	0.000	-12.36169	60.00000	Averaged
30 Naphthalene	0.83482	0.76679	0.76679	0.000	-8.14910	60.00000	Averaged
204 alpha-Terpineol	0.19635	0.19249	0.19249	0.000	-1.96852	60.00000	Averaged
31 4-Chloroaniline	0.38123	0.34324	0.34324	0.000	-9.96471	60.00000	Averaged
32 Hexachlorobutadiene	0.12432	0.10582	0.10582	0.001	-14.87841	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.21406	0.17276	0.17276	0.001	-19.29025	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.54880	0.51972	0.51972	0.000	-5.29812	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.49330	0.47920	0.47920	0.000	-2.85884	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.12213	0.12462	0.12462	0.050	2.03810	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.45401	0.44519	0.44519	0.000	-1.94238	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.26606	0.24935	0.24935	0.001	-6.28041	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.28290	0.25595	0.25595	0.000	-9.52679	60.00000	Averaged	
40 2-Chloronaphthalene	0.98748	0.82050	0.82050	0.000	-16.91018	60.00000	Averaged	
42 o-Nitroaniline	0.30619	0.24946	0.24946	0.000	-18.52571	60.00000	Averaged	
41 m-Nitroaniline	0.27055	0.22438	0.22438	0.000	-17.06469	60.00000	Averaged	
43 Dimethylphthalate	1.08995	0.95932	0.95932	0.000	-11.98438	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.27156	0.22271	0.22271	0.000	-17.99006	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.35993	0.29440	0.29440	0.000	-18.20706	60.00000	Averaged	
45 Acenaphthylene	1.54092	1.46812	1.46812	0.000	-4.72441	60.00000	Averaged	
47 Acenaphthene	0.92259	0.85781	0.85781	0.001	-7.02192	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	0.10718	0.09229	0.09229	0.050	-13.89853	60.00000	Averaged	spcc
49 Dibenzofuran	1.33422	1.12564	1.12564	0.000	-15.63294	60.00000	Averaged	
51 Diethylphthalate	1.01616	0.93320	0.93320	0.000	-8.16403	60.00000	Averaged	
52 4-Nitrophenol	0.18871	0.18660	0.18660	0.050	-1.12202	60.00000	Averaged	spcc
53 Fluorene	1.07578	0.99783	0.99783	0.000	-7.24582	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.45420	0.42578	0.42578	0.000	-6.25867	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	0.10120	0.09844	0.09844	0.000	-2.71965	60.00000	Averaged	
56 p-Nitroaniline	0.26458	0.21819	0.21819	0.000	-17.53206	60.00000	Averaged	
133 Diphenylamine	0.53354	0.46493	0.46493	0.001	-12.85961	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.65098	0.55777	0.55777	0.000	-14.31896	60.00000	Averaged	
61 4-Bromophenylphenylether	0.13743	0.14126	0.14126	0.000	2.79050	60.00000	Averaged	
63 Hexachlorobenzene	0.16869	0.14433	0.14433	0.000	-14.43782	60.00000	Averaged	
65 Pentachlorophenol	0.10117	0.09042	0.09042	0.001	-10.61921	20.00000	Averaged	ccc
206 n-Octadecane	0.43383	0.42570	0.42570	0.000	-1.87309	60.00000	Averaged	
68 Phenanthrene	0.90903	0.83581	0.83581	0.000	-8.05558	60.00000	Averaged	
69 Anthracene	0.92447	0.85110	0.85110	0.000	-7.93592	60.00000	Averaged	
72 Di-n-butylphthalate	0.98605	0.95396	0.95396	0.000	-3.25457	60.00000	Averaged	
76 Fluoranthene	0.87746	0.81704	0.81704	0.001	-6.88555	20.00000	Averaged	ccc
79 Pyrene	1.06293	0.98267	0.98267	0.000	-7.55079	60.00000	Averaged	
85 Butylbenzylphthalate	0.48372	0.46739	0.46739	0.000	-3.37649	60.00000	Averaged	
89 Benzo(a)anthracene	0.95915	0.87571	0.87571	0.000	-8.69930	60.00000	Averaged	
92 Chrysene	0.89647	0.82199	0.82199	0.000	-8.30767	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	0.70275	0.65271	0.65271	0.000	-7.12169	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.19375	1.19375	0.001	-8.76858	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	34.69168	40.00000	0.87030	0.000	-13.27080	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	0.95633	0.95633	0.000	-4.65112	60.00000	Averaged	
	97 Benzo(a)pyrene	37.92700	40.00000	0.82858	0.001	-5.18249	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	35.83759	40.00000	0.81303	0.000	-10.40601	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	35.09981	40.00000	0.66597	0.000	-12.25048	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.69836	0.69836	0.000	-7.08991	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15696	0.15696	0.000	-15.84920	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
	143 Dinoseb	0.12447	0.10965	0.10965	0.000	-11.90708	60.00000	Averaged	
	173 Carbazole	0.80714	0.69773	0.69773	0.000	-13.55506	60.00000	Averaged	
	184 p-Benzoquinone	40.49777	40.00000	0.06781	0.000	1.24442	60.00000	Linear	
	192 Methoxychlor	0.31747	0.36177	0.36177	0.000	13.95477	60.00000	Averaged	
	211 p-Toluidine	0.70440	0.95402	0.95402	0.000	35.43664	60.00000	Averaged	
	210 m-Toluidine	0.91072	0.95200	0.95200	0.000	4.53333	60.00000	Averaged	
	26 Phthalic anhydride	42.71723	40.00000	0.10164	0.000	6.79306	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	24.88814	40.00000	0.27687	0.000	-37.77964	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14504	0.14504	0.000	-16.23762	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.59707	0.59707	0.000	-1.00765	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.12373	0.12373	0.000	-4.23543	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.25265	0.25265	0.000	-7.95340	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	0.91331	0.91331	0.000	-5.40733	60.00000	Averaged	

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Data file : /chem/MSD1.i/s111409.b/s1k1261.d
Lab Smp Id: WBN091027-09.3 Client Smp ID: MEGAICV
Inj Date : 17-NOV-2009 16:27
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091027-09.3|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 16:47 llo00884 Quant Type: ISTD
Cal Date : 17-NOV-2009 12:38 Cal File: s1k1256.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.928	3.928	(1.000)	530038	40.0000		
* 29 Naphthalene-d8	136	4.793	4.793	(1.000)	2205306	40.0000		
* 46 Acenaphthene-d10	164	6.040	6.040	(1.000)	1135267	40.0000		
* 67 Phenanthrene-d10	188	7.022	7.022	(1.000)	1874551	40.0000		(H)
* 91 Chrysene-d12	240	8.704	8.704	(1.000)	1621760	40.0000		
* 98 Perylene-d12	264	10.198	10.198	(1.000)	1481649	40.0000		
$ 3 2-Fluorophenol	112	3.104	3.104	(0.790)	491348	40.0000	35.5	
$ 5 Phenol-d5	99	3.640	3.640	(0.927)	592737	40.0000	35.2	
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	570788	40.0000	39.3	
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.916)	1084689	40.0000	39.9	
$ 60 2,4,6-Tribromophenol	329	6.575	6.575	(1.089)	129390	40.0000	40.8	
$ 81 p-Terphenyl-d14	244	7.939	7.939	(0.912)	990744	40.0000	38.9	
1 N-Methyl-N-nitrosomethylamine	74	2.410	2.410	(0.614)	276992	40.0000	36.8	
2 Pyridine	79	2.446	2.446	(0.623)	381913	40.0000	30.2	
4 Aniline	66	3.710	3.710	(0.945)	244181	40.0000	33.0	
6 Phenol	94	3.646	3.646	(0.928)	599483	40.0000	33.8	
7 bis(2-Chloroethyl) ether	63	3.722	3.722	(0.948)	417273	40.0000	33.8	
8 2-Chlorophenol	128	3.787	3.787	(0.964)	512179	40.0000	34.0	
203 n-Decane	43	3.775	3.775	(0.961)	707542	40.0000	37.3	
9 1,3-Dichlorobenzene	146	3.893	3.893	(0.991)	606813	40.0000	34.3	
11 1,4-Dichlorobenzene	146	3.934	3.934	(1.001)	598440	40.0000	34.5	
13 1,2-Dichlorobenzene	146	4.040	4.040	(1.028)	543984	40.0000	34.0	
14 bis(2-Chloroisopropyl)ether	45	4.069	4.069	(1.036)	1027894	40.0000	35.0	
12 Benzyl alcohol	108	3.993	3.993	(1.016)	316054	40.0000	34.5	
15 o-Cresol	107	4.040	4.040	(1.028)	382773	40.0000	34.1	
18 m,p-Cresols	107	4.146	4.146	(1.055)	530984	40.0000	34.8	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.163	4.163	(1.060)	325364	40.0000	32.2
19 Hexachloroethane	117	4.269	4.269	(1.087)	206306	40.0000	33.1
21 Nitrobenzene	77	4.304	4.304	(0.898)	528723	40.0000	34.9
22 Isophorone	82	4.457	4.457	(0.930)	944401	40.0000	35.6
23 2-Nitrophenol	139	4.516	4.516	(0.942)	274410	40.0000	34.1
24 2,4-Dimethylphenol	122	4.504	4.504	(0.940)	516190	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.575	4.575	(0.955)	561140	40.0000	32.9
26 2,4-Dichlorophenol	162	4.681	4.681	(0.977)	415624	40.0000	34.4
27 Benzoic acid	105	4.575	4.575	(0.955)	365053	40.0000	41.2
28 1,2,4-Trichlorobenzene	180	4.745	4.745	(0.990)	467914	40.0000	35.0
30 Naphthalene	128	4.810	4.810	(1.004)	1690998	40.0000	36.7
204 alpha-Terpineol	59	4.787	4.787	(0.999)	424496	40.0000	39.2
31 4-Chloroaniline	127	4.822	4.822	(1.006)	756952	40.0000	36.0
32 Hexachlorobutadiene	225	4.875	4.875	(1.017)	233369	40.0000	34.0
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	380998	40.0000	32.3
34 2-Methylnaphthalene	142	5.293	5.293	(1.104)	1146146	40.0000	37.9
35 1-Methylnaphthalene	142	5.363	5.363	(1.119)	1056787	40.0000	38.8
36 Hexachlorocyclopentadiene	237	5.393	5.393	(0.893)	141475	40.0000	40.8
205 2,3-Dichloroaniline	161	5.487	5.487	(0.908)	505408	40.0000	39.2
37 2,4,6-Trichlorophenol	196	5.475	5.475	(0.906)	283075	40.0000	37.5(H)
38 2,4,5-Trichlorophenol	196	5.504	5.504	(0.911)	290570	40.0000	36.2
40 2-Chloronaphthalene	162	5.645	5.645	(0.935)	931485	40.0000	33.2
42 o-Nitroaniline	65	5.698	5.698	(0.944)	283207	40.0000	32.6
41 m-Nitroaniline	138	5.992	5.992	(0.992)	254734	40.0000	33.2
43 Dimethylphthalate	163	5.810	5.810	(0.962)	1089088	40.0000	35.2
44 2,6-Dinitrotoluene	165	5.863	5.863	(0.971)	252831	40.0000	32.8
50 2,4-Dinitrotoluene	165	6.145	6.145	(1.018)	334220	40.0000	32.7
45 Acenaphthylene	152	5.945	5.945	(0.984)	1666713	40.0000	38.1
47 Acenaphthene	154	6.063	6.063	(1.004)	973838	40.0000	37.2
48 2,4-Dinitrophenol	184	6.057	6.057	(1.003)	104771	40.0000	34.4(Q)
49 Dibenzofuran	168	6.181	6.181	(1.023)	1277902	40.0000	33.7
51 Diethylphthalate	149	6.287	6.287	(1.041)	1059428	40.0000	36.7
52 4-Nitrophenol	139	6.075	6.075	(1.006)	211838	40.0000	39.6
53 Fluorene	166	6.416	6.416	(1.062)	1132809	40.0000	37.1
54 4-Chlorophenylphenylether	204	6.392	6.392	(1.058)	483371	40.0000	37.5
55 2-Methyl-4,6-dinitrophenol	198	6.428	6.428	(0.911)	184539	40.0000	38.9
56 p-Nitroaniline	138	6.410	6.410	(1.061)	247705	40.0000	33.0
133 Diphenylamine	169	6.469	6.469	(0.917)	871532	40.0000	34.8
58 1,2-Diphenylhydrazine	77	6.498	6.498	(0.921)	1045567	40.0000	34.3
61 4-Bromophenylphenylether	248	6.716	6.716	(0.952)	264808	40.0000	41.1(H)
63 Hexachlorobenzene	284	6.775	6.775	(0.960)	270561	40.0000	34.2
65 Pentachlorophenol	266	6.892	6.892	(0.977)	169503	40.0000	35.8
206 n-Octadecane	57	6.869	6.869	(0.973)	797995	40.0000	39.2
68 Phenanthrene	178	7.039	7.039	(0.997)	1566761	40.0000	36.8
69 Anthracene	178	7.069	7.069	(1.002)	1595437	40.0000	36.8
72 Di-n-butylphthalate	149	7.310	7.310	(1.036)	1788243	40.0000	38.7
76 Fluoranthene	202	7.751	7.751	(1.098)	1531590	40.0000	37.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.892	7.892	(0.907)	1593654	40.0000	37.0
85 Butylbenzylphthalate	149	8.204	8.204	(0.943)	757996	40.0000	38.6
89 Benzo(a)anthracene	228	8.692	8.692	(0.999)	1420191	40.0000	36.5(H)
92 Chrysene	228	8.728	8.728	(1.003)	1333078	40.0000	36.7
93 bis(2-Ethylhexyl)phthalate	149	8.569	8.569	(0.984)	1058534	40.0000	37.2(H)
94 Di-n-octylphthalate	149	9.110	9.110	(0.893)	1768724	40.0000	36.5
95 Benzo(b)fluoranthene	252	9.716	9.716	(0.953)	1289484	40.0000	34.7(H)
96 Benzo(k)fluoranthene	252	9.745	9.745	(0.956)	1416940	40.0000	38.1
97 Benzo(a)pyrene	252	10.122	10.122	(0.992)	1227658	40.0000	37.9
99 Indeno(1,2,3-cd)pyrene	276	11.863	11.863	(1.163)	1204623	40.0000	35.8(H)
100 Dibenzo(a,h)anthracene	278	11.863	11.863	(1.163)	986733	40.0000	35.1
101 Benzo(ghi)perylene	276	12.380	12.380	(1.214)	1034720	40.0000	37.2
126 m-Dinitrobenzene	168	5.845	5.845	(0.968)	178196	40.0000	33.7
130 2,3,4,6-Tetrachlorophenol	232	6.251	6.251	(1.035)	223733	40.0000	36.5
143 Dinoseb	211	6.981	6.981	(0.989)	205546	40.0000	35.2
173 Carbazole	167	7.151	7.151	(1.013)	1307938	40.0000	34.6
184 p-Benzoquinone	54	3.404	3.404	(0.867)	35940	40.0000	40.5
192 Methoxychlor	227	8.557	8.557	(0.983)	586700	40.0000	45.6
211 p-Toluidine	106	4.204	4.204	(1.070)	505668	40.0000	54.2(H)
210 m-Toluidine	106	4.228	4.228	(1.076)	504598	40.0000	41.8
26 Phthalic anhydride	104	5.322	5.322	(1.110)	224154	40.0000	42.7
179 Dibenzo(a,e)pyrene	302	16.327	16.327	(1.601)	410219	40.0000	24.9(H)
214 1,4-Dinitrobenzene	168	5.787	5.787	(0.958)	164654	40.0000	33.5
215 2-Ethoxyethanol	59	2.257	2.257	(0.575)	316469	40.0000	39.6
216 Methylenebis(2-chloroaniline)	231	8.622	8.622	(0.991)	200666	40.0000	38.3
M 225 Trichlorophenols	196				573645	80.0000	73.6
M 226 Tetrachlorophenols	232				223733	40.0000	36.5
M 227 Benzo(b,k)fluoranthene	252				2706424	80.0000	75.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1261.d
Date : 17-NOV-2009 16:27
Client ID: MEGAICV
Sample Info: IWBN091027-09,3140 PPMI11SVMF11MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

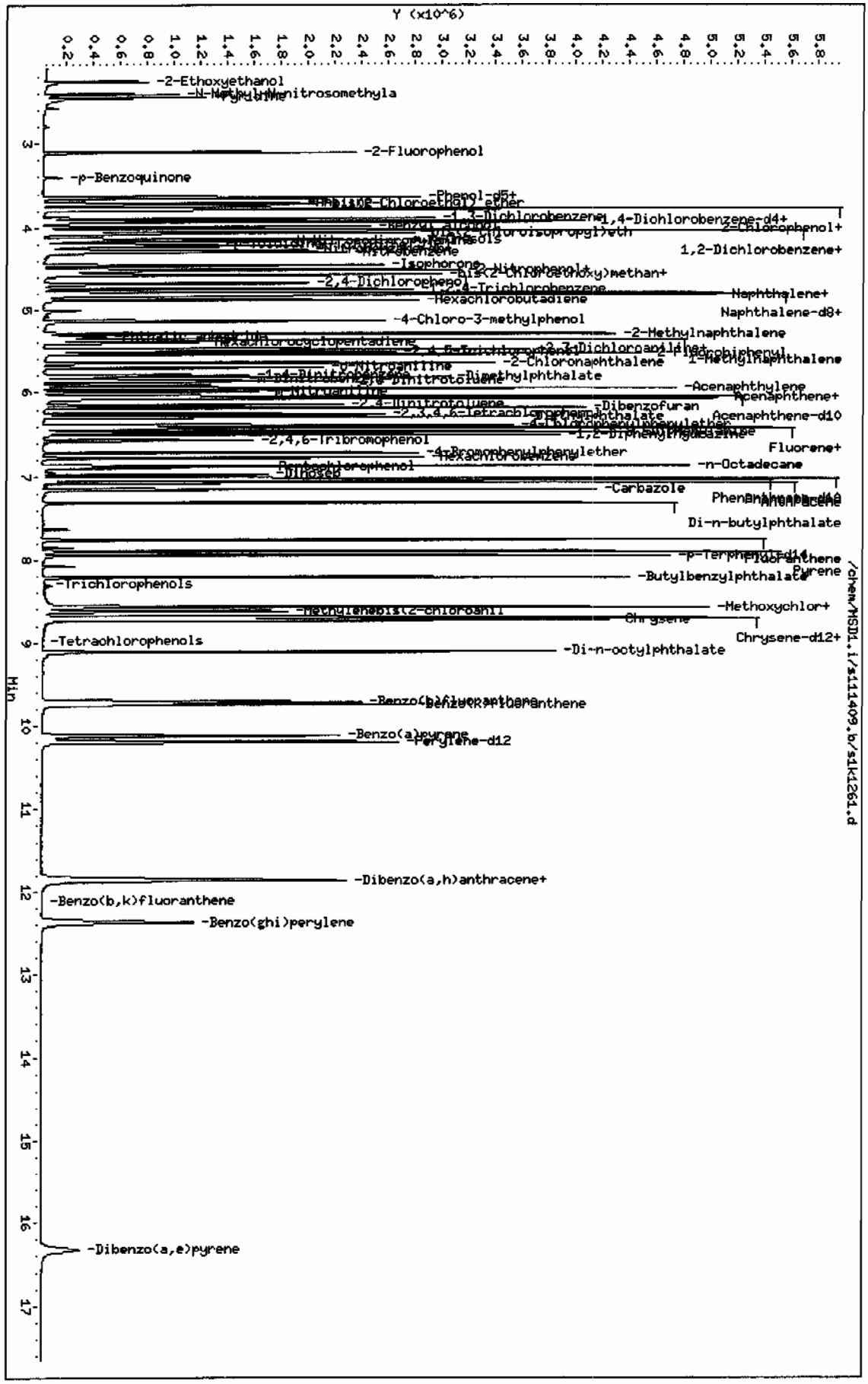

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:16
Lab File ID: s1k2908.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.04478	0.93534	0.93534	0.000	-10.47542	60.00000	Averaged	
$ 5 Phenol-d5	1.26984	1.10416	1.10416	0.000	-13.04738	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.26360	0.25055	0.25055	0.000	-4.95183	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	0.95800	1.05400	1.05400	0.000	10.02136	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.11169	0.12797	0.12797	0.000	14.57528	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.62787	0.69462	0.69462	0.000	10.62981	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.56740	0.49062	0.49062	0.000	-13.53082	60.00000	Averaged	
2 Pyridine	0.95281	0.62500	0.62500	0.000	-34.40414	60.00000	Averaged	
4 Aniline	0.55813	0.45585	0.45585	0.000	-18.32607	60.00000	Averaged	
6 Phenol	1.33800	1.14177	1.14177	0.001	-14.66627	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	0.93081	0.79196	0.79196	0.000	-14.91692	60.00000	Averaged	
8 2-Chlorophenol	1.13717	1.01207	1.01207	0.000	-11.00062	60.00000	Averaged	
203 n-Decane	1.43160	1.34530	1.34530	0.000	-6.02780	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.33431	1.17510	1.17510	0.000	-11.93236	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.30799	1.17800	1.17800	0.001	-9.93823	20.00000	Averaged	ccc
13 1,2-Dichlorobenzene	1.20798	1.11925	1.11925	0.000	-7.34571	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	2.21709	1.72913	1.72913	0.000	-22.00911	60.00000	Averaged	
12 Benzyl alcohol	0.69141	0.59324	0.59324	0.000	-14.19871	60.00000	Averaged	
15 o-Cresol	0.84650	0.74615	0.74615	0.000	-11.85443	60.00000	Averaged	
18 m,p-Cresols	1.15179	1.01215	1.01215	0.000	-12.12379	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.76238	0.62107	0.62107	0.050	-18.53430	60.00000	Averaged	spcc
19 Hexachloroethane	0.47075	0.42894	0.42894	0.000	-8.88187	60.00000	Averaged	
21 Nitrobenzene	0.27466	0.26056	0.26056	0.000	-5.13308	60.00000	Averaged	
22 Isophorone	0.48049	0.43538	0.43538	0.000	-9.38891	60.00000	Averaged	
23 2-Nitrophenol	0.14580	0.12807	0.12807	0.001	-12.15608	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	0.23346	0.21295	0.21295	0.000	-8.78609	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.30933	0.25463	0.25463	0.000	-17.68395	60.00000	Averaged	
26 2,4-Dichlorophenol	0.21909	0.19606	0.19606	0.001	-10.51358	20.00000	Averaged	ccc
27 Benzoic acid	0.16087	0.14918	0.14918	0.000	-7.26607	60.00000	Averaged	
28 1,2,4-Trichlorobenzene	0.24210	0.22426	0.22426	0.000	-7.36864	60.00000	Averaged	
30 Naphthalene	0.83482	0.79378	0.79378	0.000	-4.91550	60.00000	Averaged	
204 alpha-Terpineol	0.19635	0.19582	0.19582	0.000	-0.27040	60.00000	Averaged	
31 4-Chloroaniline	0.38123	0.33848	0.33848	0.000	-11.21420	60.00000	Averaged	
32 Hexachlorobutadiene	0.12432	0.12097	0.12097	0.001	-2.68941	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.21406	0.20208	0.20208	0.001	-5.59590	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.54880	0.55002	0.55002	0.000	0.22355	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k2908.d
Analysis Type:
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

Injection Date: 29-NOV-2009 15:16
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.49330	0.50931	0.50931	0.000	3.24506	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.12213	0.17063	0.17063	0.050	39.71345	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.45401	0.47182	0.47182	0.000	3.92390	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.26606	0.26941	0.26941	0.001	1.26039	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.28290	0.29203	0.29203	0.000	3.22560	60.00000	Averaged	
40	2-Chloronaphthalene	0.98748	0.89344	0.89344	0.000	-9.52396	60.00000	Averaged	
42	o-Nitroaniline	0.30619	0.25914	0.25914	0.000	-15.36408	60.00000	Averaged	
41	m-Nitroaniline	0.27055	0.21032	0.21032	0.000	-22.26231	60.00000	Averaged	
43	Dimethylphthalate	1.08995	1.05973	1.05973	0.000	-2.77241	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.27156	0.23667	0.23667	0.000	-12.84701	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.35993	0.30949	0.30949	0.000	-14.01501	60.00000	Averaged	
45	Acenaphthylene	1.54092	1.53763	1.53763	0.000	-0.21389	60.00000	Averaged	
47	Acenaphthene	0.92259	0.95527	0.95527	0.001	3.54259	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	0.10718	0.12010	0.12010	0.050	12.05024	60.00000	Averaged	spcc
49	Dibenzofuran	1.33422	1.18008	1.18008	0.000	-11.55280	60.00000	Averaged	
51	Diethylphthalate	1.01616	1.07013	1.07013	0.000	5.31178	60.00000	Averaged	
52	4-Nitrophenol	0.18871	0.17717	0.17717	0.050	-6.11858	60.00000	Averaged	spcc
53	Fluorene	1.07578	1.10537	1.10537	0.000	2.75033	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.45420	0.45002	0.45002	0.000	-0.92213	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	0.10120	0.12048	0.12048	0.000	19.05454	60.00000	Averaged	
56	p-Nitroaniline	0.26458	0.18690	0.18690	0.000	-29.36053	60.00000	Averaged	
133	Diphenylamine	0.53354	0.47781	0.47781	0.001	-10.44542	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.65098	0.58501	0.58501	0.000	-10.13455	60.00000	Averaged	
61	4-Bromophenylphenylether	0.13743	0.14843	0.14843	0.000	8.00692	60.00000	Averaged	
63	Hexachlorobenzene	0.16869	0.15850	0.15850	0.000	-6.03827	60.00000	Averaged	
65	Pentachlorophenol	0.10117	0.10563	0.10563	0.001	4.40818	20.00000	Averaged	ccc
206	n-Octadecane	0.43383	0.43789	0.43789	0.000	0.93605	60.00000	Averaged	
68	Phenanthrene	0.90903	0.92186	0.92186	0.000	1.41141	60.00000	Averaged	
69	Anthracene	0.92447	0.92361	0.92361	0.000	-0.09333	60.00000	Averaged	
72	Di-n-butylphthalate	0.98605	1.13002	1.13002	0.000	14.60116	60.00000	Averaged	
76	Fluoranthene	0.87746	0.96605	0.96605	0.001	10.09605	20.00000	Averaged	ccc
79	Pyrene	1.06293	1.12001	1.12001	0.000	5.37036	60.00000	Averaged	
85	Butylbenzylphthalate	0.48372	0.55218	0.55218	0.000	14.15240	60.00000	Averaged	
89	Benzo(a)anthracene	0.95915	0.91088	0.91088	0.000	-5.03296	60.00000	Averaged	
92	Chrysene	0.89647	0.84644	0.84644	0.000	-5.58054	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	0.70275	0.78551	0.78551	0.000	11.77612	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:16
Lab File ID: s1k2908.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	1.30849	1.50858	1.50858	0.001	15.29192	20.00000	Averaged	ccc
95 Benzo(b)fluoranthene	40.03695	40.00000	1.01555	0.000	0.09238	60.00000	Linear	
96 Benzo(k)fluoranthene	1.00298	1.01457	1.01457	0.000	1.15574	60.00000	Averaged	
97 Benzo(a)pyrene	39.54204	40.00000	0.86372	0.001	-1.14489	20.00000	Linear	ccc
99 Indeno(1,2,3-cd)pyrene	36.77191	40.00000	0.83397	0.000	-8.07024	60.00000	Linear	
100 Dibenzo(a,h)anthracene	36.10091	40.00000	0.68487	0.000	-9.74773	60.00000	Linear	
101 Benzo(ghi)perylene	0.75165	0.72206	0.72206	0.000	-3.93684	60.00000	Averaged	
126 m-Dinitrobenzene	0.18653	0.15928	0.15928	0.000	-14.60839	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
143 Dinoseb	0.12447	0.13803	0.13803	0.000	10.88892	60.00000	Averaged	
173 Carbazole	0.80714	0.65601	0.65601	0.000	-18.72500	60.00000	Averaged	
184 p-Benzoquinone	47.43522	40.00000	0.08180	0.000	18.58805	60.00000	Linear	
192 Methoxychlor	0.31747	0.50861	0.50861	0.000	60.20967	60.00000	Averaged	<-
211 p-Toluidine	0.70440	0.85962	0.85962	0.000	22.03509	60.00000	Averaged	
210 m-Toluidine	0.91072	1.22068	1.22068	0.000	34.03536	60.00000	Averaged	
26 Phthalic anhydride	52.14166	40.00000	0.12599	0.000	30.35416	60.00000	Linear	
214 1,4-Dinitrobenzene	0.17315	0.14690	0.14690	0.000	-15.16088	60.00000	Averaged	
215 2-Ethoxyethanol	0.60315	0.51251	0.51251	0.000	-15.02672	60.00000	Averaged	
216 Methylenebis(2-chloroanilin	0.12921	0.11982	0.11982	0.000	-7.26553	60.00000	Averaged	
M 225 Trichlorophenols	0.27448	0.28072	0.28072	0.000	2.27314	60.00000	Averaged	
M 226 Tetrachlorophenols	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
M 227 Benzo(b,k)fluoranthene	0.96552	1.01506	1.01506	0.000	5.13058	60.00000	Averaged	

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Data file : /chem/MSD1.i/s112909.b/s1k2908.d
Lab Smp Id: WBN091111-03.5 Client Smp ID: MEGACVS
Inj Date : 29-NOV-2009 15:16
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.5|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	531725	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2194392	40.0000	
* 46 Acenaphthene-d10	164	5.940	5.940	(1.000)	1110069	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	1851790	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1672748	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1414560	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	497343	40.0000	35.8
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	587107	40.0000	34.8
$ 20 Nitrobenzene-d5	82	4.199	4.199	(0.895)	549806	40.0000	38.0
$ 39 2-Fluorobiphenyl	172	5.434	5.434	(0.915)	1170016	40.0000	44.0
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.090)	142060	40.0000	45.8
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1161917	40.0000	44.2
1 N-Methyl-N-nitrosomethylamine	74	2.352	2.352	(0.614)	260877	40.0000	34.6
2 Pyridine	79	2.410	2.410	(0.630)	332329	40.0000	26.2
4 Aniline	66	3.628	3.628	(0.948)	242386	40.0000	32.7
6 Phenol	94	3.575	3.575	(0.934)	607105	40.0000	34.1
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	421107	40.0000	34.0
8 2-Chlorophenol	128	3.704	3.704	(0.968)	538144	40.0000	35.6
203 n-Decane	43	3.675	3.675	(0.960)	715332	40.0000	37.6
9 1,3-Dichlorobenzene	146	3.799	3.799	(0.992)	624828	40.0000	35.2
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	626371	40.0000	36.0
13 1,2-Dichlorobenzene	146	3.946	3.946	(1.031)	595132	40.0000	37.1
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	919419	40.0000	31.2
12 Benzyl alcohol	108	3.910	3.910	(1.022)	315440	40.0000	34.3
15 o-Cresol	107	3.963	3.963	(1.035)	396746	40.0000	35.2
18 m,p-Cresols	107	4.063	4.063	(1.061)	538183	40.0000	35.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	330241	40.0000	32.6
19 Hexachloroethane	117	4.169	4.169	(1.089)	228076	40.0000	36.4
21 Nitrobenzene	77	4.210	4.210	(0.897)	571764	40.0000	37.9
22 Isophorone	82	4.369	4.369	(0.931)	955384	40.0000	36.2
23 2-Nitrophenol	139	4.422	4.422	(0.942)	281046	40.0000	35.1
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	467295	40.0000	36.5
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	558752	40.0000	32.9
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	430222	40.0000	35.8
27 Benzoic acid	105	4.499	4.499	(0.959)	327360	40.0000	37.1
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	492125	40.0000	37.0
30 Naphthalene	128	4.710	4.710	(1.004)	1741866	40.0000	38.0(Q)
204 alpha-Terpineol	59	4.687	4.687	(0.999)	429712	40.0000	39.9
31 4-Chloroaniline	127	4.734	4.734	(1.009)	742753	40.0000	35.5
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	265466	40.0000	38.9
33 4-Chloro-3-methylphenol	107	5.051	5.051	(1.076)	443438	40.0000	37.8
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1206970	40.0000	40.1
35 1-Methylnaphthalene	142	5.257	5.257	(1.120)	1117632	40.0000	41.3
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.890)	189412	40.0000	55.9
205 2,3-Dichloroaniline	161	5.387	5.387	(0.907)	523755	40.0000	41.6
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.906)	299063	40.0000	40.5
38 2,4,5-Trichlorophenol	196	5.410	5.410	(0.911)	324168	40.0000	41.3
40 2-Chloronaphthalene	162	5.540	5.540	(0.933)	991776	40.0000	36.2
42 o-Nitroaniline	65	5.604	5.604	(0.944)	287667	40.0000	33.8
41 m-Nitroaniline	138	5.898	5.898	(0.993)	233470	40.0000	31.1
43 Dimethylphthalate	163	5.716	5.716	(0.962)	1176372	40.0000	38.9
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.970)	262723	40.0000	34.9
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.019)	343551	40.0000	34.4
45 Acenaphthylene	152	5.840	5.840	(0.983)	1706873	40.0000	39.9
47 Acenaphthene	154	5.957	5.957	(1.003)	1060418	40.0000	41.4
48 2,4-Dinitrophenol	184	5.963	5.963	(1.004)	133320	40.0000	44.8(Q)
49 Dibenzofuran	168	6.075	6.075	(1.023)	1309968	40.0000	35.4
51 Diethylphthalate	149	6.198	6.198	(1.044)	1187921	40.0000	42.1
52 4-Nitrophenol	139	6.004	6.004	(1.011)	196669	40.0000	37.6
53 Fluorene	166	6.310	6.310	(1.062)	1227039	40.0000	41.1
54 4-Chlorophenylphenylether	204	6.293	6.293	(1.059)	499549	40.0000	39.6
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	223102	40.0000	47.6
56 p-Nitroaniline	138	6.328	6.328	(1.065)	207467	40.0000	28.2
133 Diphenylamine	169	6.369	6.369	(0.920)	884802	40.0000	35.8
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1083314	40.0000	35.9
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	274868	40.0000	43.2
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	293514	40.0000	37.6
65 Pentachlorophenol	266	6.792	6.792	(0.981)	195597	40.0000	41.8
206 n-Octadecane	57	6.769	6.769	(0.978)	810873	40.0000	40.4
68 Phenanthrene	178	6.940	6.940	(1.003)	1707099	40.0000	40.6
69 Anthracene	178	6.969	6.969	(1.007)	1710324	40.0000	40.0
72 Di-n-butylphthalate	149	7.216	7.216	(1.042)	2092568	40.0000	45.8
76 Fluoranthene	202	7.645	7.645	(1.105)	1788923	40.0000	44.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.787	7.787	(0.910)	1873498	40.0000	42.1
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	923662	40.0000	45.7
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1523665	40.0000	38.0
92 Chrysene	228	8.581	8.581	(1.003)	1415885	40.0000	37.8
93 bis(2-Ethylhexyl)phthalate	149	8.434	8.434	(0.986)	1313964	40.0000	44.7
94 Di-n-octylphthalate	149	8.939	8.939	(0.898)	2133981	40.0000	46.1
95 Benzo(b)fluoranthene	252	9.510	9.510	(0.956)	1436562	40.0000	40.0
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	1435167	40.0000	40.5
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	1221778	40.0000	39.5
99 Indeno(1,2,3-cd)pyrene	276	11.504	11.504	(1.156)	1179700	40.0000	36.8
100 Dibenzo(a,h)anthracene	278	11.498	11.498	(1.155)	968787	40.0000	36.1
101 Benzo(ghi)perylene	276	11.980	11.980	(1.204)	1021393	40.0000	38.4
126 m-Dinitrobenzene	168	5.751	5.751	(0.968)	176810	40.0000	34.2
130 2,3,4,6-Tetrachlorophenol	232	6.157	6.157	(1.037)	249214	40.0000	41.6
143 Dinoseb	211	6.881	6.881	(0.994)	255594	40.0000	44.4
173 Carbazole	167	7.057	7.057	(1.020)	1214784	40.0000	32.5
184 p-Benzoquinone	54	3.334	3.334	(0.871)	43494	40.0000	47.4
192 Methoxychlor	227	8.428	8.428	(0.985)	850778	40.0000	64.1
211 p-Toluidine	106	4.116	4.116	(1.075)	457082	40.0000	48.8
210 m-Toluidine	106	4.140	4.140	(1.081)	649068	40.0000	53.6
26 Phthalic anhydride	104	5.240	5.240	(1.117)	276462	40.0000	52.1
214 1,4-Dinitrobenzene	168	5.693	5.693	(0.958)	163069	40.0000	33.9
215 2-Ethoxyethanol	59	2.205	2.205	(0.576)	272516	40.0000	34.0
216 Methylenebis(2-chloroaniline)	231	8.486	8.486	(0.992)	200426	40.0000	37.1
M 225 Trichlorophenols	196				623231	80.0000	81.8
M 226 Tetrachlorophenols	232				249214	40.0000	41.6
M 227 Benzo(b,k)fluoranthene	252				2871729	80.0000	84.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2908.d
Date : 29-NOV-2009 15:16
Client ID: HEGACVS
Sample Info: !WBN091111-03.5140 PPM!!SVHF1!!HEGACVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: ANY
Column diameter: 0.20

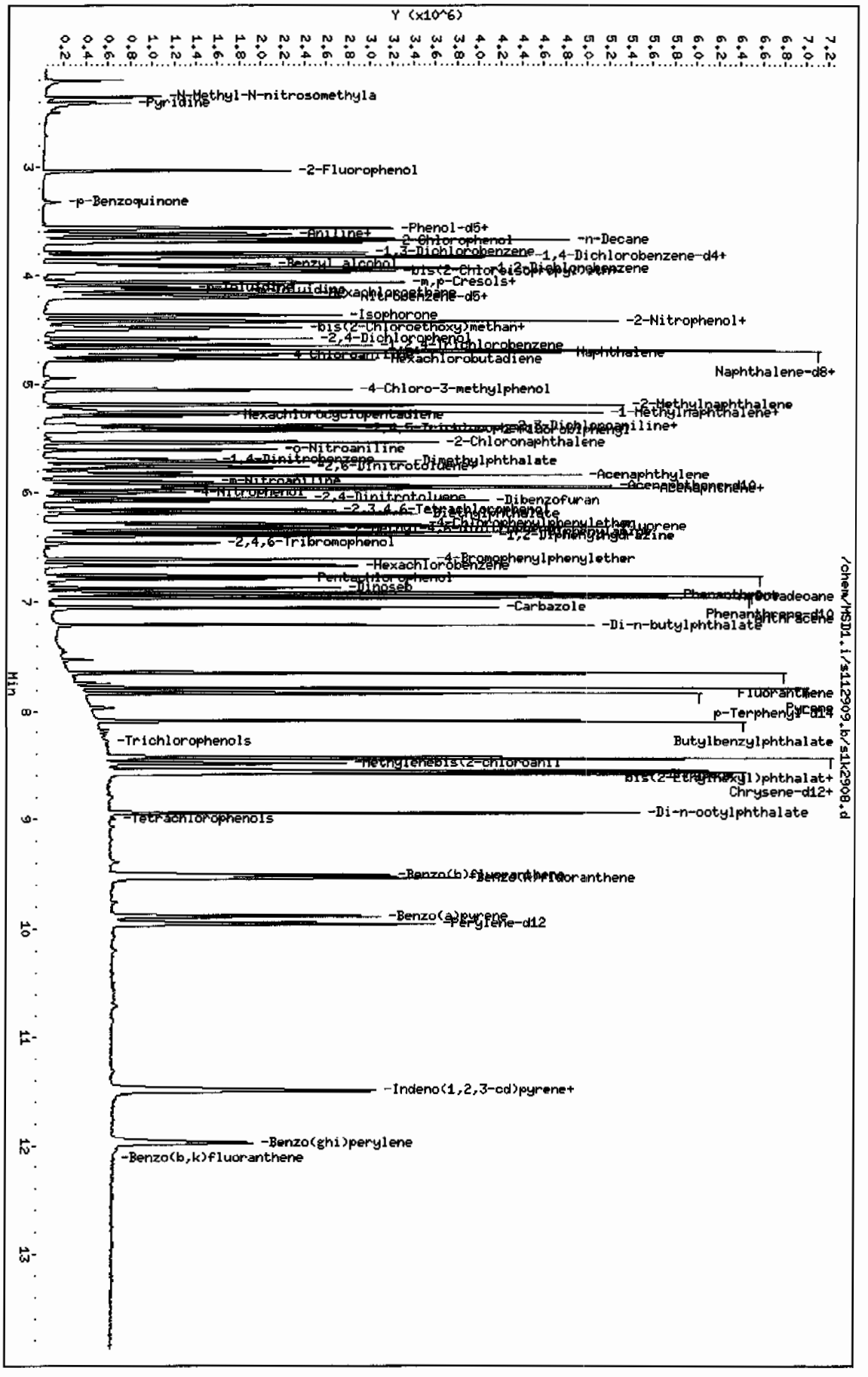

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:40
Lab File ID: s1k2909.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.3 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.83285	0.83285	0.000	1.07424	60.00000	Averaged
16 Acetophenone	1.12880	1.17413	1.17413	0.000	4.01561	60.00000	Averaged
189 Caprolactam	0.07169	0.06992	0.06992	0.000	-2.46899	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.19952	1.19952	0.000	7.05141	60.00000	Averaged
207 Atrazine	0.04008	0.03858	0.03858	0.000	-3.74021	60.00000	Averaged
77 Benzidine	0.36215	0.28557	0.28557	0.000	-21.14800	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.26579	0.26579	0.000	-3.49092	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.32551	0.32551	0.000	3.71012	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.18209	0.18209	0.000	3.22239	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.73877	0.73877	0.000	3.61556	60.00000	Averaged
105 2-Picoline	1.15384	1.17090	1.17090	0.000	1.47854	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.43981	0.43981	0.000	-3.18151	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48596	0.48596	0.000	14.15516	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.45100	0.45100	0.000	-5.95154	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.58421	0.58421	0.000	-2.01938	60.00000	Averaged
110 Pentachloroethane	0.29115	0.32136	0.32136	0.000	10.37514	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.46474	0.46474	0.000	-2.17748	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.66176	0.66176	0.000	7.16931	60.00000	Averaged
114 o-Toluidine	1.65327	1.66011	1.66011	0.000	0.41384	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.12196	0.12196	0.000	-7.29855	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.67623	0.67623	0.000	-11.95066	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.19074	0.19074	0.000	-3.18439	60.00000	Averaged
119 Hexachloropropene	0.08895	0.10078	0.10078	0.000	13.29710	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.16507	0.16507	0.000	-18.09275	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.15467	0.15467	0.000	-9.93437	60.00000	Averaged
122 Safrole	0.17864	0.18418	0.18418	0.000	3.10262	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.40592	0.40592	0.000	10.56556	60.00000	Averaged
124 Isosafrole	0.32761	0.32754	0.32754	0.000	-0.02086	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.27300	0.27300	0.000	-8.00801	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.33822	0.33822	0.000	7.53761	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.87935	0.87935	0.000	-1.66142	60.00000	Averaged
129 2-Naphthylamine	0.97473	0.86505	0.86505	0.000	-11.25277	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.26430	0.26430	0.000	-7.35350	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.13606	0.13606	0.000	17.06678	60.00000	Averaged
137 Phenacetin	0.25708	0.25386	0.25386	0.000	-1.25486	60.00000	Averaged
138 Diallate	0.23112	0.21973	0.21973	0.000	-4.92775	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k2909.d
Analysis Type:
Lab Sample ID: WBN091111-03.3
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

Injection Date: 29-NOV-2009 15:40
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.21402	0.21402	0.000	-10.82059	60.00000	Averaged
213 Trans Diallate	0.27191	0.25851	0.25851	0.000	-4.92775	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.50169	0.50169	0.000	-6.42545	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06382	0.06382	0.000	19.86535	60.00000	Averaged
142 Pronamide	0.23368	0.26093	0.26093	0.000	11.66162	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.01142	0.01142	0.000	16.48447	60.00000	Averaged
147 Methapyrilene	0.36822	0.41116	0.41116	0.000	11.66210	60.00000	Averaged
148 Isodrin	0.08609	0.09797	0.09797	0.000	13.79210	60.00000	Averaged
149 Aramite	0.04255	0.04739	0.04739	0.000	11.36229	60.00000	Averaged
150 Kepone	0.06308	0.06796	0.06796	0.000	7.73416	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.31425	0.31425	0.000	10.68260	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.30459	0.30459	0.000	38.48914	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.46482	0.46482	0.000	-3.05232	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.34018	0.34018	0.000	10.44468	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.47473	0.47473	0.000	12.70311	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40587	0.40587	0.000	10.55824	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2909.d
Lab Smp Id: WBN091111-03.3 Client Smp ID: APCVS
Inj Date : 29-NOV-2009 15:40
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.3|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:21 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	598729	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2366758	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.934	(1.000)	1267857	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2141696	40.0000	
* 91 Chrysene-d12	240	8.551	8.551	(1.000)	1838470	40.0000	
* 98 Perylene-d12	264	9.939	9.939	(1.000)	1489902	40.0000	
209 Benzaldehyde	77	3.563	3.563	(0.931)	498652	40.0000	40.4
16 Acetophenone	105	4.087	4.087	(1.068)	702983	40.0000	41.6(H)
189 Caprolactam	113	5.004	5.004	(1.066)	165477	40.0000	39.0
208 1,1'-Biphenyl	154	5.510	5.510	(0.929)	1520815	40.0000	42.8(H)
207 Atrazine	173	6.698	6.698	(0.968)	82632	40.0000	38.5
77 Benzidine	184	7.704	7.704	(0.901)	525004	40.0000	31.5
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.993)	488644	40.0000	38.6(H)
102 1,4-Dioxane	88	2.199	2.199	(0.574)	194894	40.0000	41.5
103 Methyl methacrylate	100	2.187	2.187	(0.571)	109022	40.0000	41.3
104 Ethyl methacrylate	69	2.552	2.552	(0.667)	442322	40.0000	41.4
105 2-Picoline	93	2.769	2.769	(0.723)	701054	40.0000	40.6
106 N-Nitrosomethylethylamine	88	2.793	2.793	(0.730)	263327	40.0000	38.7
107 Methyl methanesulfonate	80	2.952	2.952	(0.771)	290960	40.0000	45.7
108 N-Nitrosodiethylamine	102	3.175	3.175	(0.829)	270027	40.0000	37.6
109 Ethyl Methanesulfonate	79	3.334	3.334	(0.871)	349784	40.0000	39.2
110 Pentachloroethane	167	3.657	3.657	(0.955)	192409	40.0000	44.2
111 N-Nitrosopyrrolidine	100	4.087	4.087	(1.068)	278256	40.0000	39.1
113 N-Nitrosomorpholine	56	4.099	4.099	(1.071)	396213	40.0000	42.9(H)
114 o-Toluidine	106	4.110	4.110	(1.074)	993958	40.0000	40.2
115 N-Nitrosopiperidine	114	4.316	4.316	(0.920)	288647	40.0000	37.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.557	4.557	(0.971)	1600470	40.0000	35.2(H)
118 2,6-Dichlorophenol	162	4.740	4.740	(1.010)	451427	40.0000	38.7
119 Hexachloropropene	213	4.757	4.757	(1.014)	238527	40.0000	45.3(H)
120 p-Phenylenediamine	108	4.987	4.987	(1.063)	390689	40.0000	32.8(H)
121 N-Nitrosodi-n-butylamine	84	4.940	4.940	(1.053)	366055	40.0000	36.0(TH)
122 Safrole	162	5.104	5.104	(1.088)	435909	40.0000	41.2
123 1,2,4,5-Tetrachlorobenzene	216	5.304	5.304	(0.894)	514644	40.0000	44.2(H)
124 Isosafrole	162	5.469	5.469	(0.922)	415277	40.0000	40.0(H)
125 1,4-Naphthoquinone	158	5.663	5.663	(0.954)	346123	40.0000	36.8
127 Pentachlorobenzene	250	6.046	6.046	(1.019)	428816	40.0000	43.0(H)
128 1-Naphthylamine	143	6.134	6.134	(1.034)	1114885	40.0000	39.3(H)
129 2-Naphthylamine	143	6.187	6.187	(1.043)	1096759	40.0000	35.5
131 5-Nitro-o-toluidine	152	6.310	6.310	(1.063)	335099	40.0000	37.0(H)
136 1,3,5-Trinitrobenzene	75	6.528	6.528	(0.943)	291408	40.0000	46.8(H)
137 Phenacetin	108	6.569	6.569	(0.949)	543687	40.0000	39.5
138 Diallate	86	6.540	6.540	(0.945)	470601	40.0000	38.0(H)
212 Cis Diallate	86	6.604	6.604	(0.954)	68755	6.00000	5.4
213 Trans Diallate	86	6.540	6.540	(0.945)	470601	34.0000	32.3(H)
140 4-Aminobiphenyl	169	6.787	6.787	(0.980)	1074464	40.0000	37.4(H)
141 Pentachloronitrobenzene	237	6.798	6.798	(0.982)	136682	40.0000	47.9
142 Pronamide	173	6.798	6.798	(0.982)	558829	40.0000	44.7(H)
146 4-Nitroquinoline-1-oxide	101	7.392	7.392	(1.068)	24459	40.0000	46.6
147 Methapyrilene	58	7.404	7.404	(1.070)	880581	40.0000	44.7(H)
148 Isodrin	193	7.557	7.557	(1.092)	209812	40.0000	45.5
149 Aramite	185	7.787	7.787	(1.125)	101489	40.0000	44.5(H)
150 Kepone	272	8.192	8.192	(1.184)	145557	40.0000	43.1(H)
151 p-(Dimethylamino)azobenzene	120	7.904	7.904	(0.924)	577746	40.0000	44.3
152 Chlorobenzilate	251	7.922	7.922	(0.926)	559976	40.0000	55.4(H)
153 3,3'-Dimethylbenzidine	212	8.110	8.110	(0.948)	854557	40.0000	38.8(H)
155 2-Acetylaminofluorene	181	8.292	8.292	(0.970)	625417	40.0000	44.2
157 7,12Dimethylbenz(a)anthracene	256	9.469	9.469	(0.953)	707308	40.0000	45.1(H)
158 3-Methylcholanthrene	268	10.281	10.281	(1.034)	604708	40.0000	44.2(H)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s112909.b/s1k2909.d
Date : 29-NOV-2009 15:40
Client ID: APCVS
Sample Info: IWBN091111-03.3|40 PPM|1|SVMF|1|APCVS

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

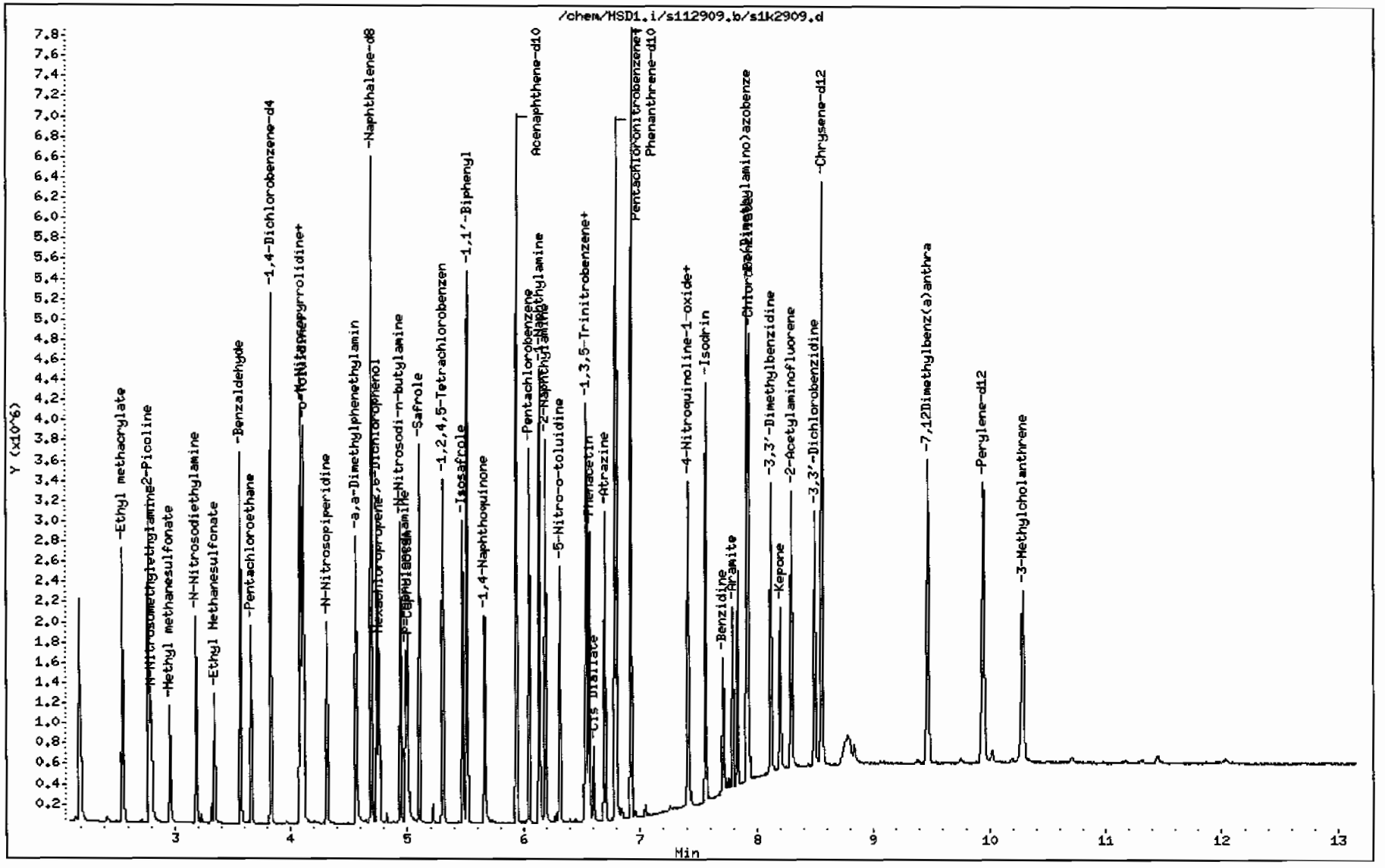

QC Data

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Page 1

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

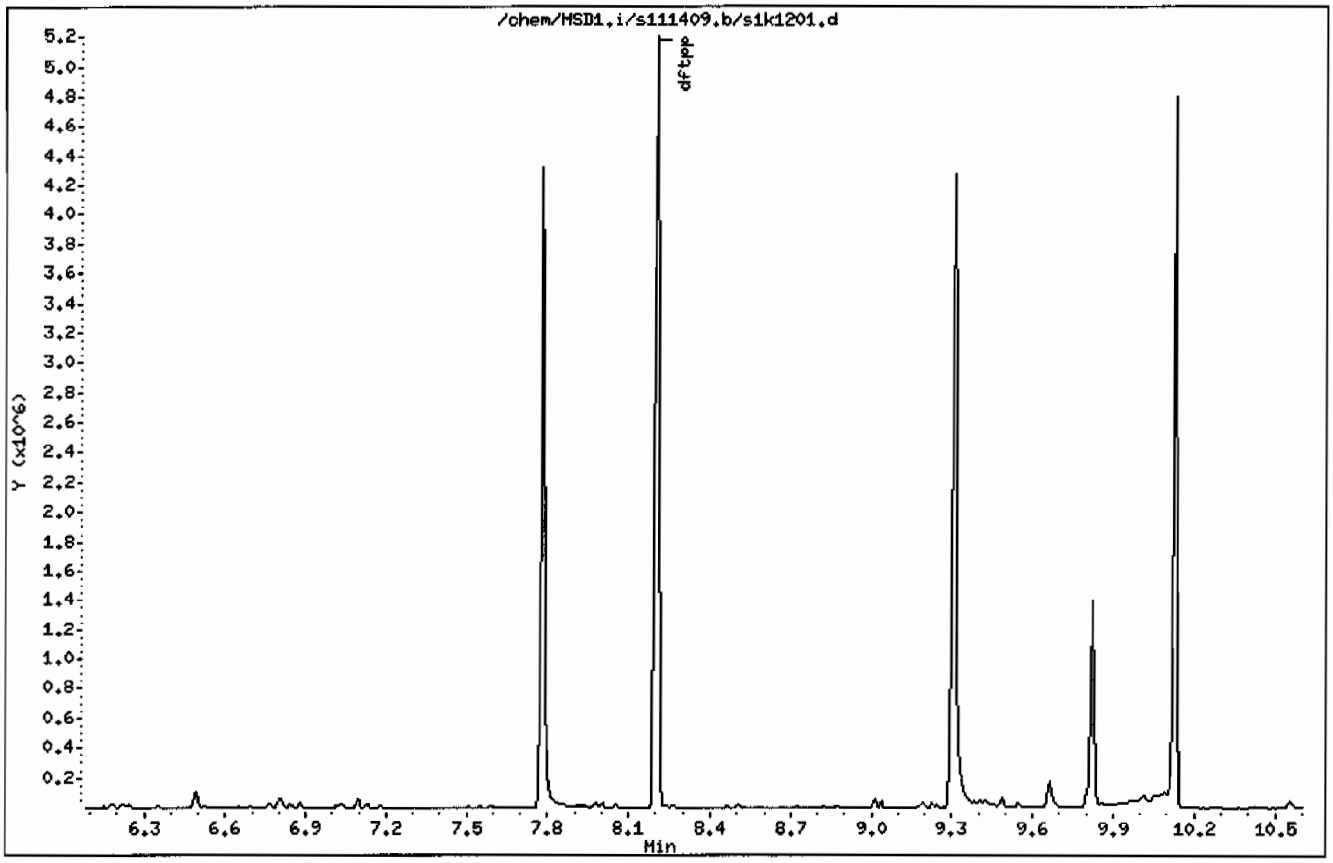

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

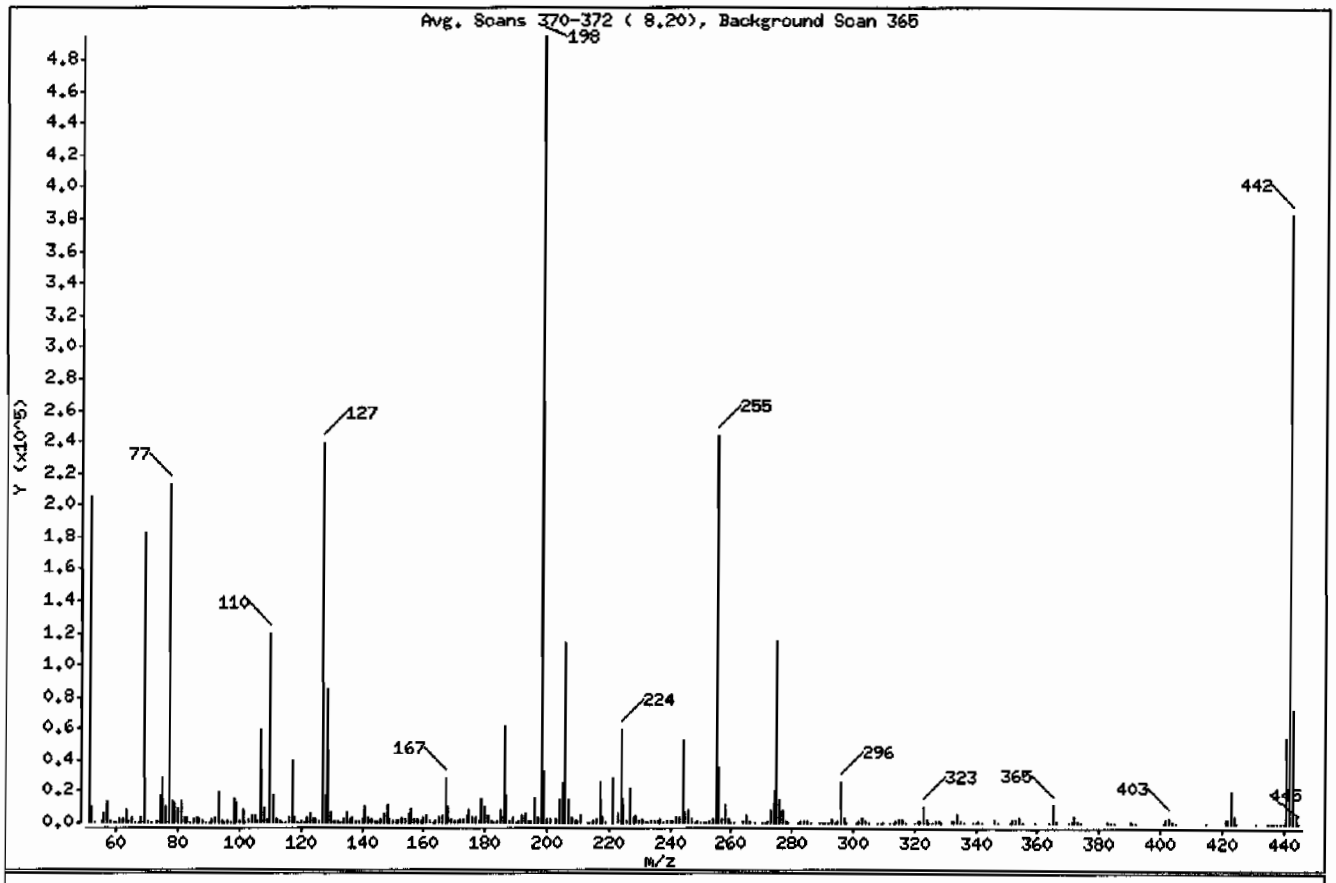

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.33
68	Less than 2.00% of mass 69	0.66 (1.81)
69	Mass 69 relative abundance	36.68
70	Less than 2.00% of mass 69	0.20 (0.55)
127	40.00 - 60.00% of mass 198	48.32
197	Less than 1.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.23
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	77.37
443	17.00 - 23.00% of mass 442	14.83 (19.16)

Date : 14-NOV-2009 17:38

Client ID: DFTPP Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	204544	132.00	849	213.00	322	304.00	857
52.00	10058	133.00	398	214.00	81	305.00	126
53.00	476	134.00	2213	215.00	1065	308.00	339
55.00	808	135.00	6445	216.00	2209	309.00	249
56.00	5675	136.00	2682	217.00	25976	310.00	361
57.00	13163	137.00	3409	218.00	3600	312.00	52
58.00	676	138.00	864	219.00	390	313.00	288
59.00	142	139.00	1285	221.00	28416	314.00	1372
60.00	58	140.00	1711	223.00	5970	315.00	2833
61.00	2414	141.00	10495	224.00	59288	316.00	1731
62.00	2627	142.00	3783	225.00	15318	317.00	279
63.00	7561	143.00	2378	226.00	1533	320.00	54
64.00	1048	144.00	706	227.00	21184	321.00	903
65.00	3902	145.00	666	228.00	3165	322.00	596
66.00	253	146.00	1908	229.00	4804	323.00	9908
67.00	264	147.00	5356	230.00	759	324.00	1942
68.00	3280	148.00	10849	231.00	2133	325.00	119
69.00	181568	149.00	2326	232.00	408	326.00	93
70.00	999	150.00	640	233.00	450	327.00	1701
71.00	119	151.00	1554	234.00	1483	328.00	891
73.00	1219	152.00	808	235.00	1658	329.00	88
74.00	17536	153.00	3187	236.00	1183	332.00	578
75.00	28056	154.00	2701	237.00	1728	333.00	855
76.00	9746	155.00	5991	238.00	324	334.00	5817
77.00	212736	156.00	9066	239.00	813	335.00	1475
78.00	13840	157.00	1942	240.00	775	336.00	75
79.00	12099	158.00	1971	241.00	1214	339.00	62
80.00	9416	159.00	1574	242.00	3186	340.00	77
81.00	13432	160.00	3233	243.00	3508	341.00	1027
82.00	3448	161.00	4832	244.00	51832	342.00	243
83.00	3440	162.00	1519	245.00	6691	346.00	2015
84.00	276	163.00	414	246.00	8221	347.00	283
85.00	2469	164.00	763	247.00	1725	351.00	182
86.00	3499	165.00	3823	248.00	403	352.00	2745
87.00	1914	166.00	4542	249.00	1698	353.00	2043

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	945	167.00	28056	250.00	338	354.00	3347
89.00	408	168.00	9882	251.00	378	355.00	568
90.00	81	169.00	1949	252.00	461	359.00	68
91.00	2811	170.00	666	253.00	965	364.00	82
92.00	3305	171.00	868	254.00	2194	365.00	11049
93.00	19392	172.00	1736	255.00	243712	366.00	1525
94.00	1530	173.00	2151	256.00	34792	370.00	312
95.00	401	174.00	4365	257.00	2654	371.00	749
96.00	1021	175.00	8331	258.00	11699	372.00	5103
97.00	481	176.00	2950	259.00	1976	373.00	1317
98.00	14829	177.00	3734	260.00	354	374.00	211
99.00	12143	178.00	1429	261.00	488	383.00	1475
100.00	1081	179.00	14903	264.00	588	384.00	413
101.00	7582	180.00	10676	265.00	4651	385.00	112
102.00	501	181.00	5074	266.00	630	390.00	664
103.00	2806	182.00	848	268.00	97	391.00	481
104.00	4764	183.00	484	270.00	316	392.00	349
105.00	4470	184.00	1118	271.00	565	401.00	323
106.00	1531	185.00	7578	272.00	574	402.00	2059
107.00	58720	186.00	61632	273.00	7763	403.00	3027
108.00	9198	187.00	16824	274.00	20360	404.00	981
109.00	1983	188.00	1678	275.00	115400	405.00	157
110.00	119360	189.00	3368	276.00	14998	415.00	61
111.00	17336	190.00	542	277.00	8371	421.00	2728
112.00	2224	191.00	1652	278.00	1328	422.00	2498
113.00	793	192.00	4637	279.00	337	423.00	19928
114.00	277	193.00	5425	282.00	172	424.00	3991
115.00	405	194.00	1196	283.00	908	425.00	403
116.00	3276	195.00	960	284.00	671	431.00	50
117.00	39312	196.00	15938	285.00	1513	435.00	182
118.00	2868	197.00	3428	286.00	245	436.00	64
119.00	376	198.00	494976	289.00	275	437.00	123
120.00	724	199.00	32528	290.00	365	438.00	300
121.00	279	200.00	2387	291.00	237	439.00	370
122.00	3763	201.00	2747	292.00	481	440.00	354

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	6008	203.00	2693	293.00	2054	441.00	54440
124.00	2602	204.00	14604	294.00	532	442.00	382976
125.00	2647	205.00	25208	295.00	657	443.00	73384
126.00	904	206.00	113680	296.00	26240	444.00	6543
127.00	239168	207.00	14454	297.00	3789	445.00	363
128.00	17576	208.00	3160	298.00	253		
129.00	85072	209.00	1021	301.00	417		
130.00	7156	210.00	801	302.00	580		
131.00	1445	211.00	4362	303.00	3041		

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

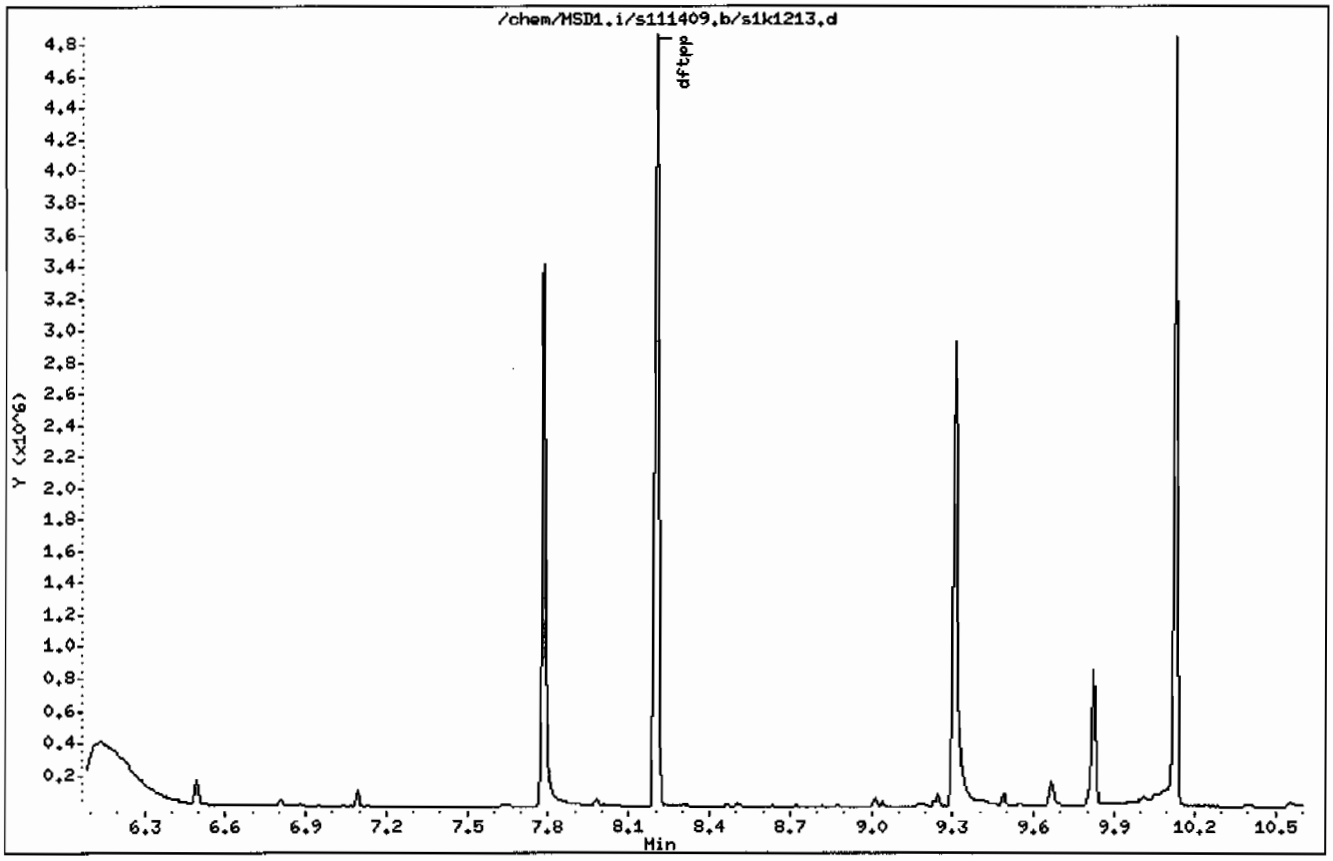

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

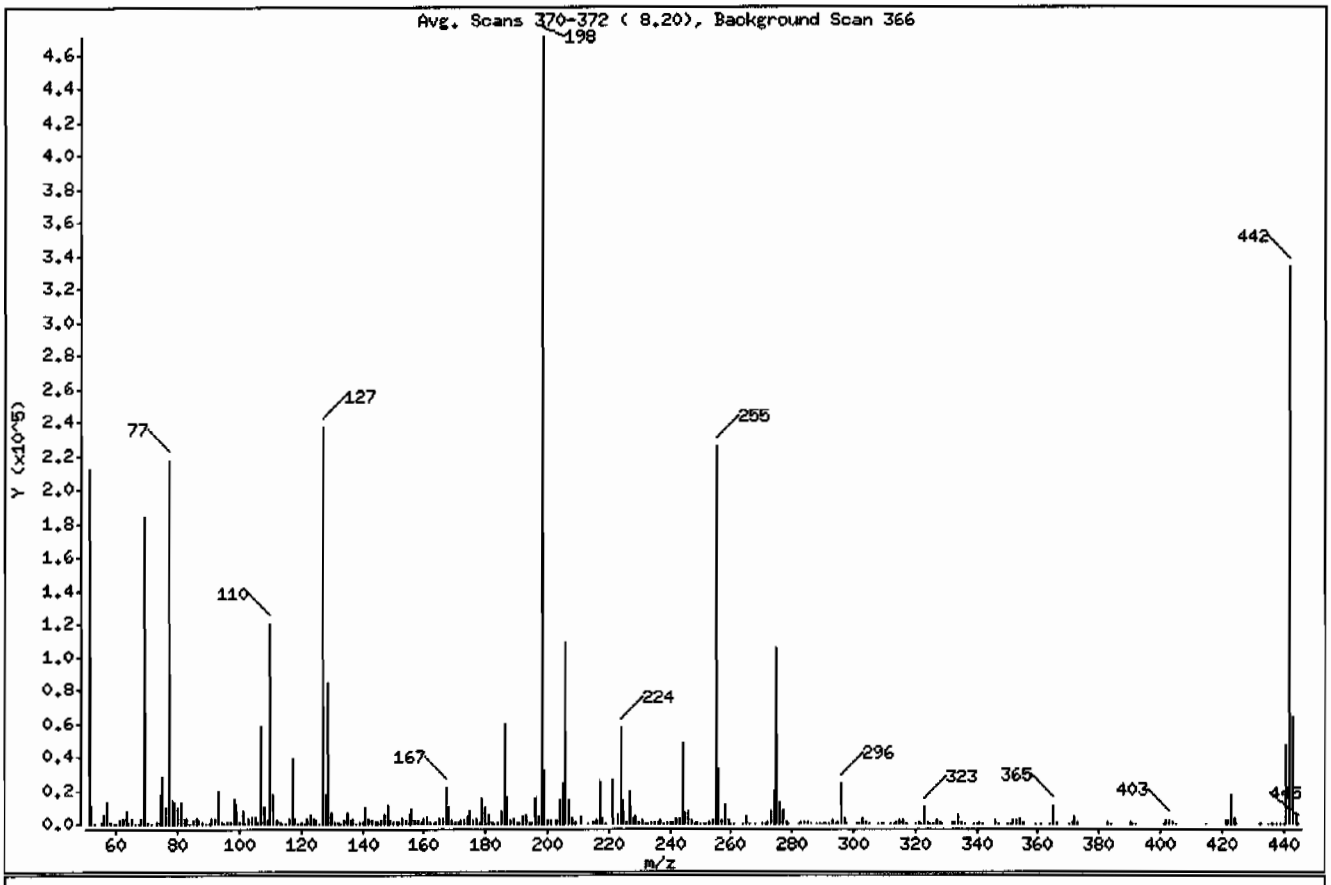

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.07
68	Less than 2.00% of mass 69	0.69 (1.77)
69	Mass 69 relative abundance	39.06
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	50.24
197	Less than 1.00% of mass 198	0.94
199	5.00 - 9.00% of mass 198	6.64
275	10.00 - 30.00% of mass 198	22.36
365	Greater than 1.00% of mass 198	2.27
441	Present, but less than mass 443	9.91
442	Greater than 40.00% of mass 198	70.70
443	17.00 - 23.00% of mass 442	13.63 (19.28)

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	212096	132.00	898	215.00	1069	305.00	54
52.00	10563	133.00	158	216.00	2175	308.00	369
53.00	539	134.00	2246	217.00	25096	309.00	234
55.00	827	135.00	6673	218.00	3427	310.00	330
56.00	5710	136.00	2589	219.00	310	312.00	53
57.00	13040	137.00	3388	221.00	26264	313.00	225
58.00	622	138.00	481	223.00	6732	314.00	1148
59.00	197	139.00	738	224.00	57128	315.00	2673
60.00	264	140.00	1183	225.00	14268	316.00	1636
61.00	2458	141.00	10022	226.00	1583	317.00	257
62.00	2719	142.00	3500	227.00	19912	320.00	120
63.00	7568	143.00	2527	228.00	3016	321.00	868
64.00	1100	144.00	604	229.00	4436	322.00	443
65.00	3684	145.00	642	230.00	645	323.00	9345
66.00	306	146.00	1966	231.00	2162	324.00	1574
67.00	172	147.00	5499	232.00	373	325.00	117
68.00	3245	148.00	10590	233.00	410	326.00	63
69.00	183808	149.00	2267	234.00	1277	327.00	1667
70.00	937	150.00	711	235.00	1617	328.00	859
71.00	201	151.00	1389	236.00	1067	329.00	66
73.00	1312	152.00	1009	237.00	1713	332.00	666
74.00	16976	153.00	3123	238.00	252	333.00	761
75.00	27896	154.00	2582	239.00	815	334.00	5270
76.00	9904	155.00	5732	240.00	635	335.00	1342
77.00	217344	156.00	8806	241.00	1337	336.00	127
78.00	14484	157.00	1860	242.00	2922	339.00	65
79.00	12543	158.00	1872	243.00	3255	340.00	61
80.00	9582	159.00	1459	244.00	47840	341.00	1023
81.00	13483	160.00	3146	245.00	6361	342.00	289
82.00	3494	161.00	4861	246.00	7662	346.00	1844
83.00	3404	162.00	1440	247.00	1632	347.00	399
84.00	268	163.00	441	248.00	425	350.00	54
85.00	2429	164.00	756	249.00	1557	351.00	146
86.00	3717	165.00	3644	250.00	323	352.00	2683
87.00	1777	166.00	3330	251.00	376	353.00	1903

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	858	167.00	21384	252.00	497	354.00	2848
89.00	353	168.00	9329	253.00	1026	355.00	645
90.00	52	169.00	1925	254.00	2307	359.00	128
91.00	2960	170.00	698	255.00	224896	361.00	54
92.00	3280	171.00	771	256.00	32856	364.00	139
93.00	19472	172.00	1741	257.00	2457	365.00	10703
94.00	1413	173.00	2444	258.00	11321	366.00	1552
95.00	284	174.00	4219	259.00	1877	370.00	274
96.00	1152	175.00	8099	260.00	305	371.00	720
97.00	591	176.00	2630	261.00	356	372.00	4645
98.00	14679	177.00	3711	264.00	230	373.00	1151
99.00	12313	178.00	1199	265.00	4470	383.00	1268
100.00	1108	179.00	14622	266.00	429	384.00	380
101.00	7679	180.00	10168	268.00	129	390.00	651
102.00	505	181.00	5015	270.00	325	391.00	487
103.00	2879	182.00	784	271.00	443	392.00	279
104.00	4625	183.00	540	272.00	688	401.00	276
105.00	4311	184.00	1176	273.00	7045	402.00	1862
106.00	1512	185.00	7084	274.00	19240	403.00	2656
107.00	58544	186.00	59904	275.00	105256	404.00	848
108.00	9265	187.00	16158	276.00	13094	405.00	140
109.00	1897	188.00	1716	277.00	7627	415.00	133
110.00	119952	189.00	3108	278.00	1312	421.00	2323
111.00	16904	190.00	572	279.00	308	422.00	2190
112.00	2240	191.00	1592	282.00	136	423.00	16944
113.00	758	192.00	4599	283.00	867	424.00	3191
114.00	126	193.00	5084	284.00	734	425.00	414
115.00	267	194.00	1198	285.00	1299	432.00	51
116.00	3229	195.00	880	286.00	172	433.00	63
117.00	38800	196.00	15085	288.00	53	435.00	138
118.00	2837	197.00	4415	289.00	263	436.00	193
119.00	448	198.00	470656	290.00	271	437.00	144
120.00	769	199.00	31248	291.00	161	438.00	208
121.00	319	200.00	2323	292.00	403	439.00	422
122.00	3761	201.00	2603	293.00	1958	440.00	420

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	5880	203.00	2606	294.00	491	441.00	46632
124.00	2783	204.00	13871	295.00	593	442.00	332736
125.00	2563	205.00	24136	296.00	24248	443.00	64136
126.00	365	206.00	107936	297.00	3568	444.00	5493
127.00	236480	207.00	13718	298.00	201	445.00	305
128.00	17448	208.00	3264	301.00	372		
129.00	84656	209.00	932	302.00	462		
130.00	6942	211.00	4014	303.00	2821		
131.00	1354	213.00	308	304.00	785		

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

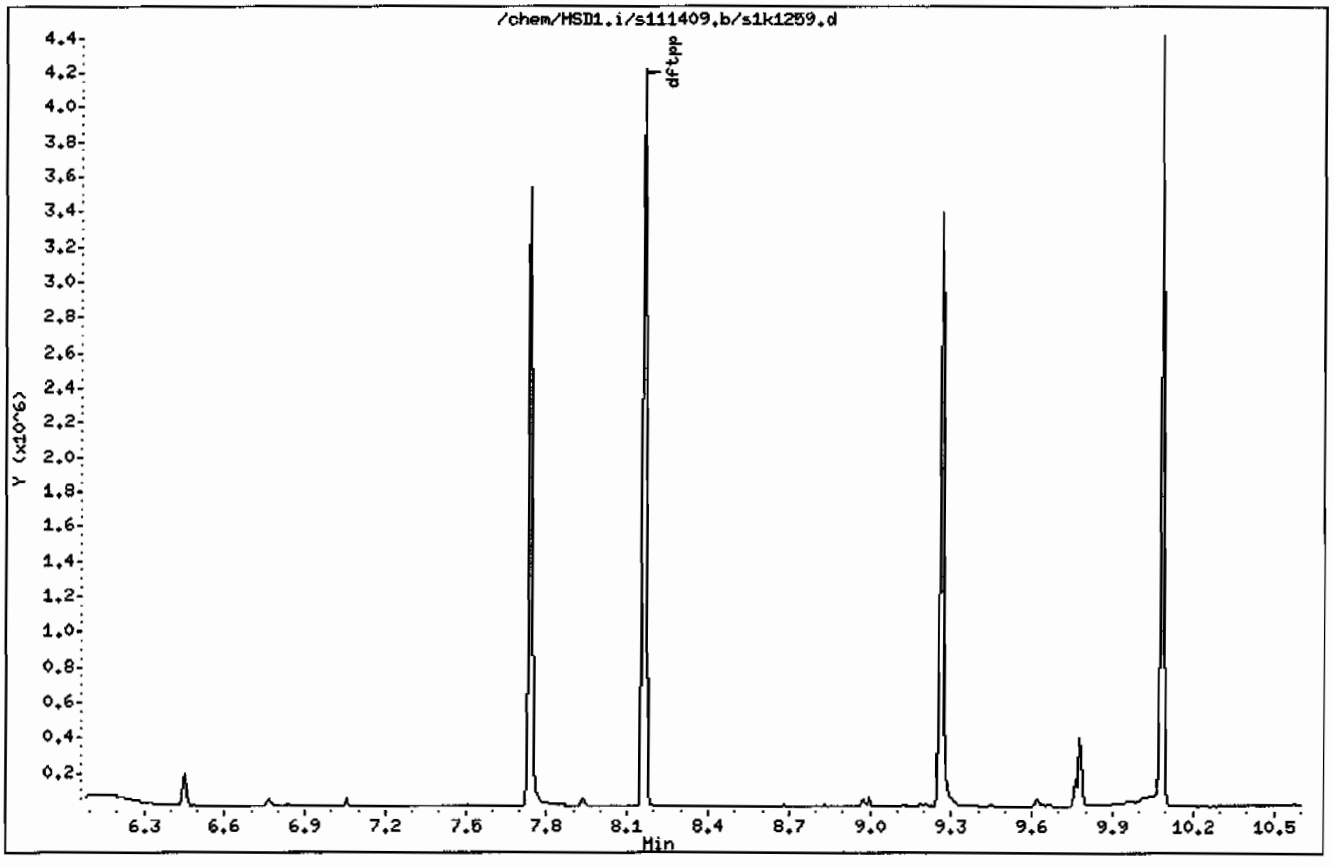

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

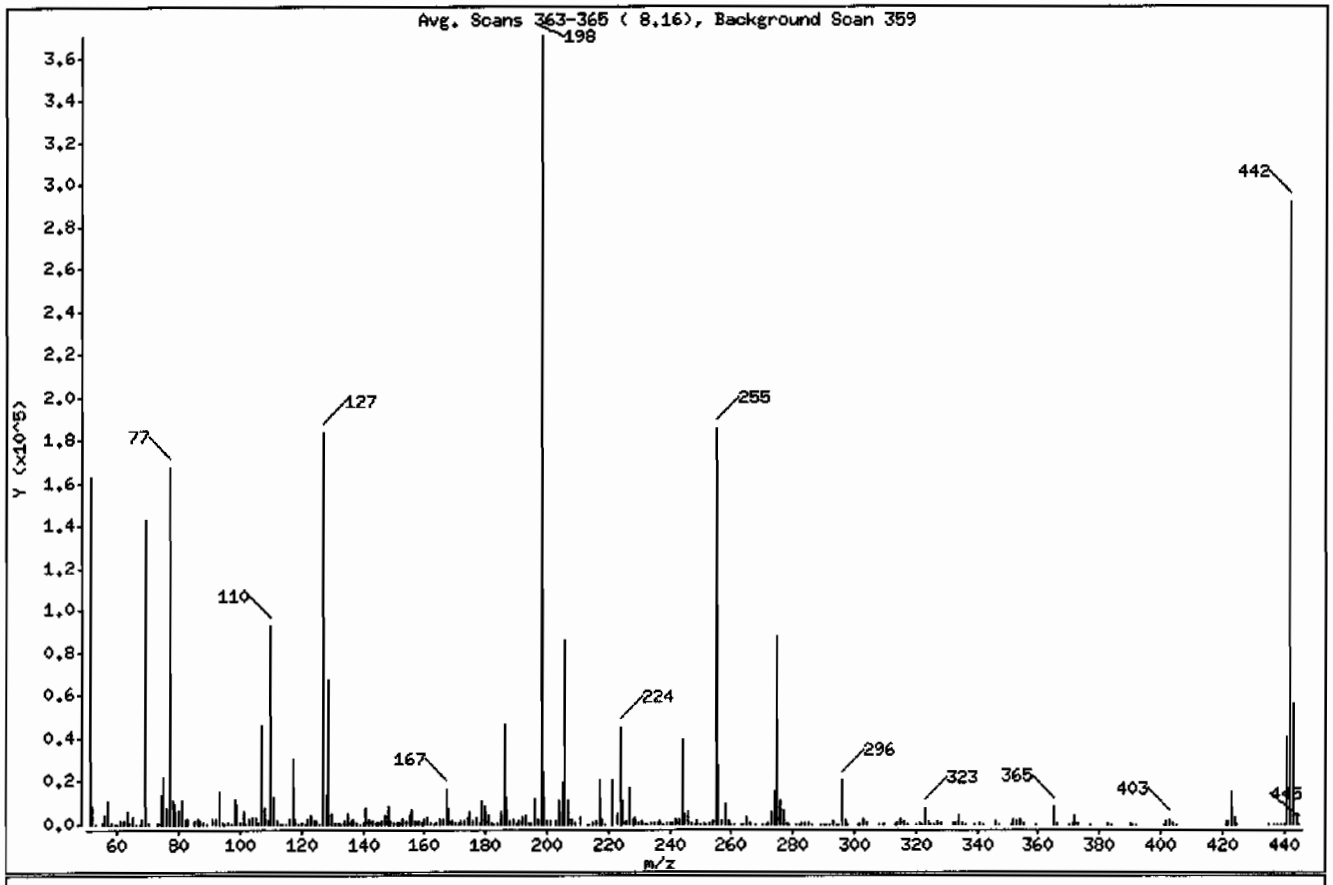

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.19
68	Less than 2.00% of mass 69	0.70 (1.82)
69	Mass 69 relative abundance	38.52
70	Less than 2.00% of mass 69	0.22 (0.58)
127	40.00 - 60.00% of mass 198	49.61
197	Less than 1.00% of mass 198	0.73
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	23.76
365	Greater than 1.00% of mass 198	2.39
441	Present, but less than mass 443	10.94
442	Greater than 40.00% of mass 198	78.91
443	17.00 - 23.00% of mass 442	15.11 (19.15)

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVHF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	163520	132.00	696	209.00	894	295.00	409
52.00	8218	133.00	165	211.00	3176	296.00	20504
53.00	278	134.00	1736	213.00	157	297.00	2961
55.00	768	135.00	5284	214.00	60	298.00	242
56.00	4517	136.00	1990	215.00	896	301.00	228
57.00	10646	137.00	2882	216.00	1633	302.00	377
58.00	485	138.00	608	217.00	20280	303.00	2440
59.00	173	139.00	322	218.00	2791	304.00	779
60.00	130	140.00	728	219.00	287	308.00	333
61.00	1880	141.00	8017	221.00	20640	309.00	180
62.00	1926	142.00	2864	223.00	4752	310.00	288
63.00	5930	143.00	1765	224.00	45496	313.00	172
64.00	771	144.00	446	225.00	11459	314.00	1000
65.00	3009	145.00	462	226.00	1320	315.00	2189
66.00	190	146.00	1638	227.00	16640	316.00	1304
67.00	147	147.00	4131	228.00	2433	317.00	255
68.00	2590	148.00	8419	229.00	3596	320.00	58
69.00	142592	149.00	1752	230.00	541	321.00	701
70.00	823	150.00	512	231.00	1631	322.00	395
73.00	1236	151.00	1272	232.00	323	323.00	7827
74.00	13875	152.00	886	233.00	236	324.00	1465
75.00	21824	153.00	2474	234.00	1059	325.00	55
76.00	7905	154.00	2034	235.00	1215	326.00	117
77.00	167296	155.00	4599	236.00	846	327.00	1319
78.00	11034	156.00	6876	237.00	1279	328.00	683
79.00	9492	157.00	1450	238.00	168	332.00	545
80.00	7131	158.00	1509	239.00	670	333.00	652
81.00	10804	159.00	1113	240.00	518	334.00	4627
82.00	2610	160.00	2655	241.00	1019	335.00	1148
83.00	2719	161.00	3658	242.00	2369	336.00	50
85.00	1896	162.00	1109	243.00	2744	339.00	57
86.00	2616	163.00	339	244.00	39256	341.00	855
87.00	1519	164.00	493	245.00	4982	342.00	192
88.00	684	165.00	2904	246.00	6349	346.00	1554
89.00	219	166.00	2427	247.00	1255	347.00	356

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	2379	167.00	16175	248.00	341	351.00	56
92.00	2447	168.00	7387	249.00	1305	352.00	2339
93.00	14969	169.00	1311	250.00	210	353.00	1624
94.00	1153	170.00	539	251.00	450	354.00	2500
95.00	287	171.00	706	252.00	278	355.00	434
96.00	810	172.00	1473	253.00	769	359.00	83
97.00	388	173.00	1748	254.00	1972	365.00	8863
98.00	11810	174.00	3414	255.00	185216	366.00	1195
99.00	9686	175.00	6350	256.00	27176	370.00	215
100.00	914	176.00	2063	257.00	2039	371.00	581
101.00	5933	177.00	3047	258.00	9022	372.00	4002
102.00	375	178.00	995	259.00	1444	373.00	996
103.00	2163	179.00	11274	260.00	214	377.00	51
104.00	3736	180.00	8159	261.00	279	383.00	974
105.00	3394	181.00	4009	263.00	55	384.00	323
106.00	1190	182.00	670	264.00	157	390.00	592
107.00	46232	183.00	413	265.00	3712	391.00	375
108.00	7538	184.00	909	266.00	481	392.00	323
109.00	1503	185.00	5852	268.00	53	401.00	231
110.00	92872	186.00	47008	270.00	282	402.00	1478
111.00	12963	187.00	12615	271.00	380	403.00	2390
112.00	1503	188.00	1316	272.00	540	404.00	821
113.00	406	189.00	2602	273.00	5676	405.00	134
114.00	121	190.00	427	274.00	15599	421.00	2054
115.00	133	191.00	1281	275.00	87936	422.00	1867
116.00	2637	192.00	3712	276.00	11240	423.00	15373
117.00	30336	193.00	4225	277.00	6439	424.00	3047
118.00	2397	194.00	901	278.00	950	425.00	291
119.00	332	195.00	603	279.00	182	435.00	71
120.00	620	196.00	12028	281.00	60	437.00	71
121.00	175	197.00	2717	282.00	68	438.00	134
122.00	2801	198.00	370176	283.00	713	439.00	238
123.00	4622	199.00	24728	284.00	493	440.00	191
124.00	2083	200.00	1826	285.00	1250	441.00	40480
125.00	1949	201.00	2072	286.00	254	442.00	292096

Date : 17-NOV-2009 15:48

Client ID: DFTPP Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	135	203.00	2082	289.00	243	443.00	55944
127.00	183616	204.00	10956	290.00	235	444.00	5034
128.00	13544	205.00	19552	291.00	131	445.00	311
129.00	66872	206.00	85904	292.00	339		
130.00	5516	207.00	10725	293.00	1482		
131.00	1048	208.00	2576	294.00	389		

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Page 1

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

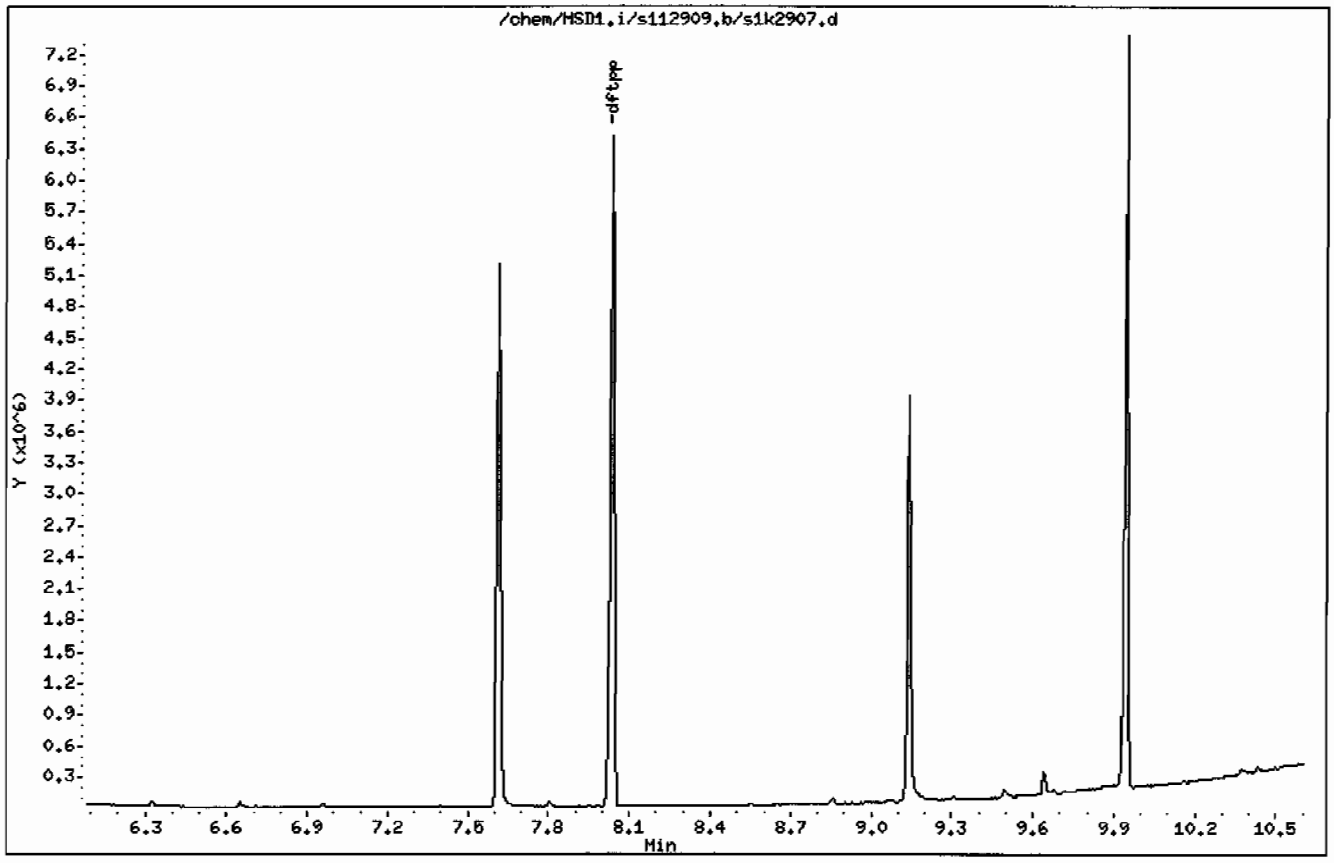

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

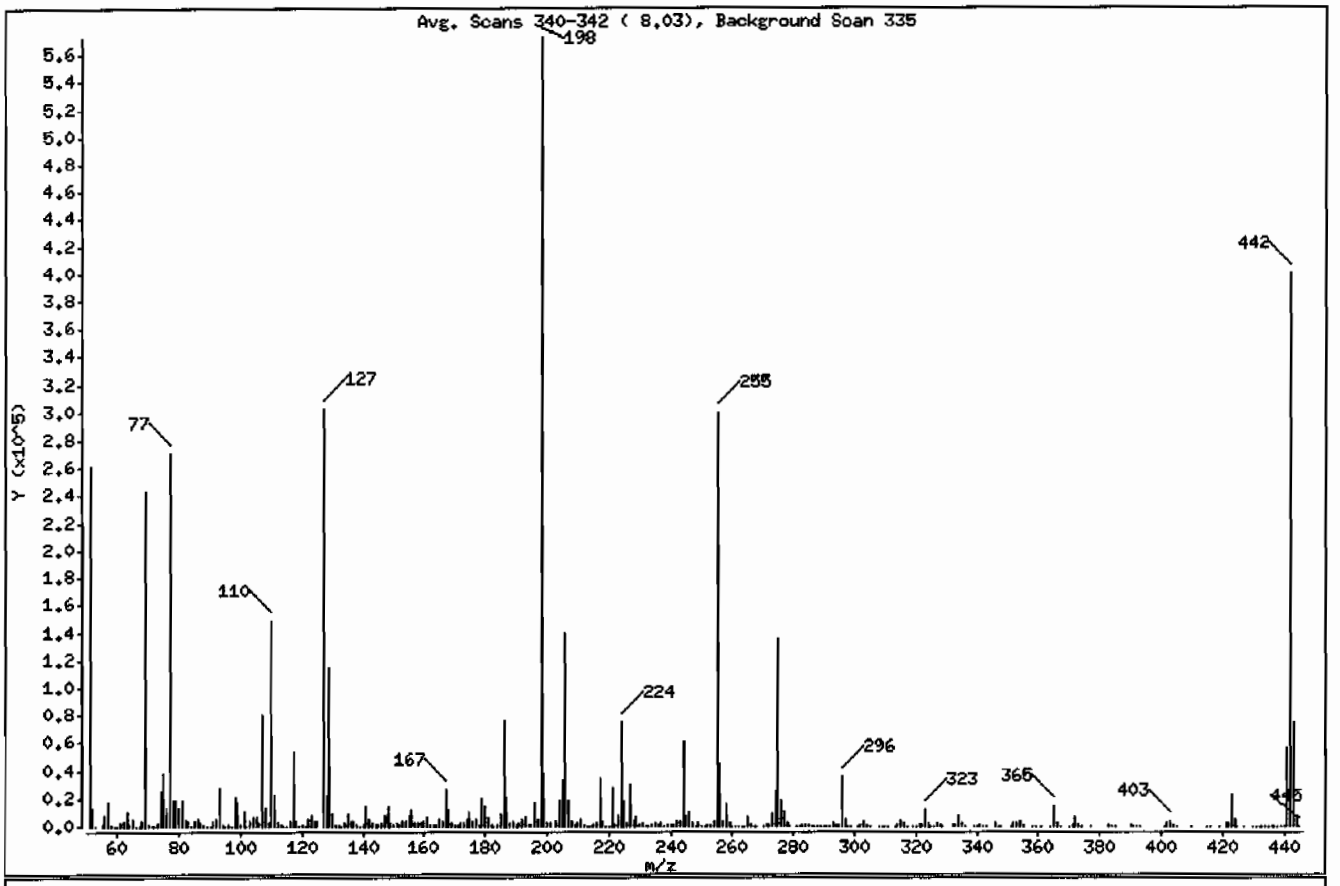

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.73
68	Less than 2.00% of mass 69	0.80 (1.89)
69	Mass 69 relative abundance	42.62
70	Less than 2.00% of mass 69	0.22 (0.51)
127	40.00 - 60.00% of mass 198	52.85
197	Less than 1.00% of mass 198	0.97
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.78
365	Greater than 1.00% of mass 198	2.52
441	Present, but less than mass 443	9.80
442	Greater than 40.00% of mass 198	69.82
443	17.00 - 23.00% of mass 442	13.14 (18.81)

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	261568	138.00	1011	224.00	74344	315.00	3766
52.00	13053	139.00	525	225.00	18856	316.00	2257
53.00	546	140.00	1213	226.00	2157	317.00	486
55.00	1276	141.00	13910	227.00	29936	319.00	124
56.00	7361	142.00	4991	228.00	4406	320.00	122
57.00	17608	143.00	3037	229.00	6070	321.00	1364
58.00	859	144.00	875	230.00	793	322.00	724
59.00	186	145.00	933	231.00	2539	323.00	12258
60.00	263	146.00	2317	232.00	343	324.00	2267
61.00	3281	147.00	7337	233.00	584	325.00	276
62.00	3450	148.00	14197	234.00	1971	326.00	277
63.00	9977	149.00	3063	235.00	2107	327.00	2299
64.00	1410	150.00	969	236.00	1359	328.00	1374
65.00	4855	151.00	1996	237.00	2622	329.00	176
66.00	354	152.00	1456	238.00	390	332.00	714
67.00	343	153.00	4354	239.00	1056	333.00	1069
68.00	4596	154.00	3352	240.00	998	334.00	7631
69.00	243776	155.00	7645	241.00	1606	335.00	2168
70.00	1241	156.00	11790	242.00	3920	336.00	184
71.00	129	157.00	2594	243.00	4817	339.00	161
72.00	199	158.00	2349	244.00	59896	340.00	194
73.00	2063	159.00	2070	245.00	7845	341.00	1320
74.00	24384	160.00	4131	246.00	10789	342.00	355
75.00	38152	161.00	6758	247.00	2026	343.00	153
76.00	12974	162.00	1653	248.00	636	346.00	2491
77.00	271360	163.00	701	249.00	2240	347.00	542
78.00	18368	164.00	926	250.00	436	348.00	50
79.00	17928	165.00	5065	251.00	641	351.00	193
80.00	13399	166.00	4101	252.00	720	352.00	3193
81.00	18440	167.00	25808	253.00	1512	353.00	2434
82.00	4915	168.00	12341	254.00	3754	354.00	3882
83.00	4045	169.00	2508	255.00	299840	355.00	737
84.00	487	170.00	906	256.00	44336	358.00	63
85.00	3384	171.00	1170	257.00	3929	359.00	186
86.00	5076	172.00	2281	258.00	15933	361.00	56

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	2450	173.00	2934	259.00	2669	364.00	187
88.00	896	174.00	5759	260.00	449	365.00	14431
89.00	560	175.00	10393	261.00	575	366.00	2213
90.00	52	176.00	3562	262.00	64	367.00	268
91.00	4069	177.00	4928	263.00	78	370.00	280
92.00	4877	178.00	1696	264.00	532	371.00	909
93.00	27096	179.00	19400	265.00	6513	372.00	6291
94.00	1944	180.00	14536	266.00	1163	373.00	1495
95.00	588	181.00	6593	267.00	245	374.00	151
96.00	1550	182.00	1216	268.00	277	377.00	175
97.00	606	183.00	567	270.00	481	383.00	1569
98.00	20592	184.00	1573	271.00	711	384.00	388
99.00	17440	185.00	9262	272.00	1001	385.00	151
100.00	1594	186.00	76128	273.00	9247	390.00	761
101.00	10170	187.00	21496	274.00	24496	391.00	516
102.00	520	188.00	2625	275.00	136000	392.00	400
103.00	3750	189.00	4538	276.00	18096	393.00	62
104.00	6276	190.00	825	277.00	10425	401.00	375
105.00	6355	191.00	2089	278.00	2137	402.00	2479
106.00	2176	192.00	5816	279.00	353	403.00	3482
107.00	79800	193.00	6494	281.00	500	404.00	1163
108.00	12799	194.00	1326	282.00	275	405.00	207
109.00	2573	195.00	1041	283.00	1191	410.00	170
110.00	148544	196.00	17744	284.00	981	415.00	200
111.00	22320	197.00	5562	285.00	1943	416.00	51
112.00	2828	198.00	671968	286.00	288	419.00	51
113.00	1025	199.00	37560	287.00	61	421.00	3008
114.00	180	200.00	2980	288.00	103	422.00	2724
115.00	250	201.00	2509	289.00	376	423.00	22240
116.00	4436	203.00	3664	290.00	418	424.00	5666
117.00	54352	204.00	18912	291.00	326	425.00	618
118.00	4423	205.00	32640	292.00	471	427.00	128
119.00	380	206.00	138880	293.00	2634	430.00	90
120.00	1253	207.00	17984	294.00	732	431.00	144
121.00	446	208.00	4448	295.00	933	432.00	114

Data File: /chem/HSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: HSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d

Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	5609	209.00	1626	296.00	35128	433.00	194
123.00	7700	210.00	1988	297.00	4998	434.00	130
124.00	3542	211.00	4936	298.00	403	435.00	213
125.00	3500	212.00	675	299.00	96	436.00	289
127.00	302272	213.00	424	301.00	479	437.00	282
128.00	22824	214.00	214	302.00	742	438.00	198
129.00	114216	215.00	1361	303.00	4244	439.00	300
130.00	9428	216.00	2918	304.00	1082	440.00	326
131.00	1699	217.00	34040	305.00	158	441.00	56056
132.00	1008	218.00	4578	308.00	544	442.00	399360
133.00	415	219.00	558	309.00	411	443.00	75136
134.00	3137	220.00	130	310.00	539	444.00	6738
135.00	8896	221.00	27264	311.00	71	445.00	344
136.00	3689	222.00	1274	313.00	282		
137.00	4593	223.00	8318	314.00	1642		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980154**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 16:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2912-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601			Matrix:	SOIL
Lab Sample ID:	1201980154				
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	MB for batch 926121	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 16:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1k2912-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	316	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2912-3.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	582567	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2290441	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1227579	40.0000	
* 67 Phenanthrene-d10	188	6.916	6.922	(1.000)	2026415	40.0000	
* 91 Chrysene-d12	240	8.551	8.557	(1.000)	1690866	40.0000	
* 98 Perylene-d12	264	9.939	9.951	(1.000)	1420003	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1213962	79.7797	2660
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1404929	75.9663	2530
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	640323	42.4217	1410
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1337726	45.5002	1520
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	315669	92.0898	3070
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1290910	48.6378	1620

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2912-3.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3529801	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.881	836229	9.47621609	316	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2912-3.d
Date : 29-NOV-2009 16:50
Client ID: SBLK01
Sample Info: |120198015419261261|1|SVMF|1|SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

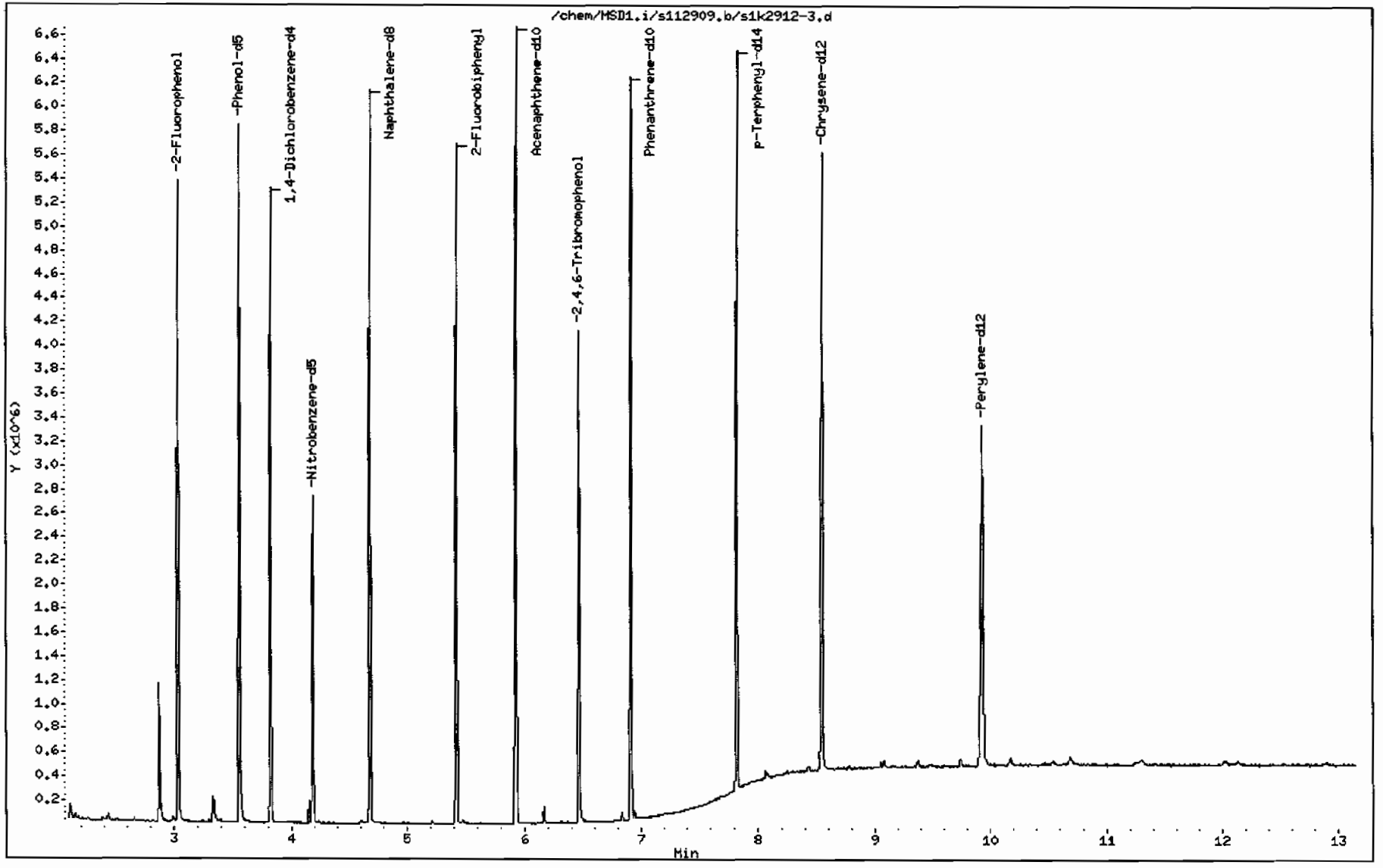

Data File: /chem/MSD1.i/s112909.b/s1k2912-3.d

Date : 29-NOV-2009 16:50

Client ID: SBLK01

Instrument: MSD1.i

Sample Info: 1120198015419261261|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1,3,5-Pentanetriol, 3-methyl-	7564-64-9	NIST05.L	14621	39	C6H14O3	134

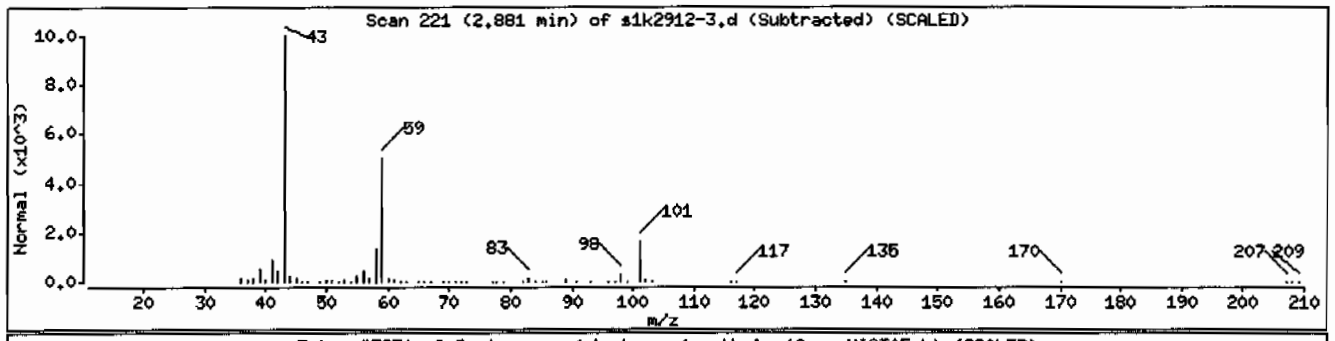

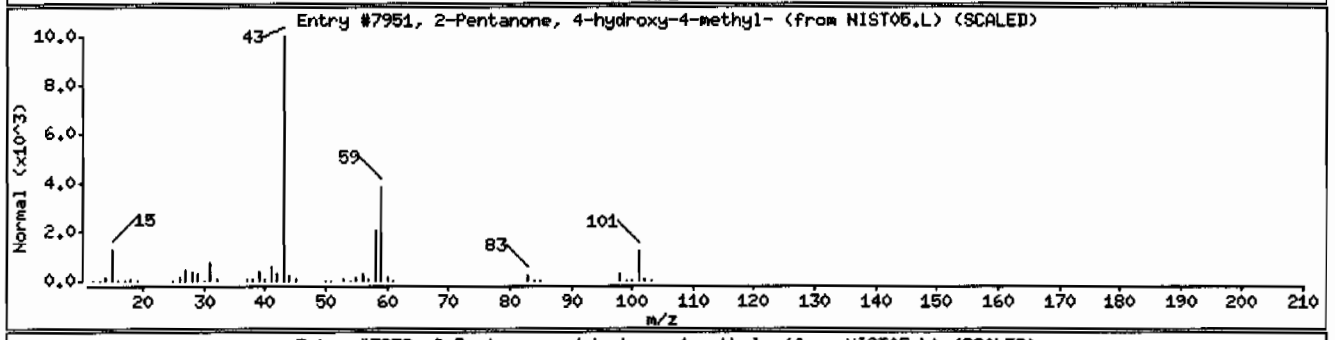

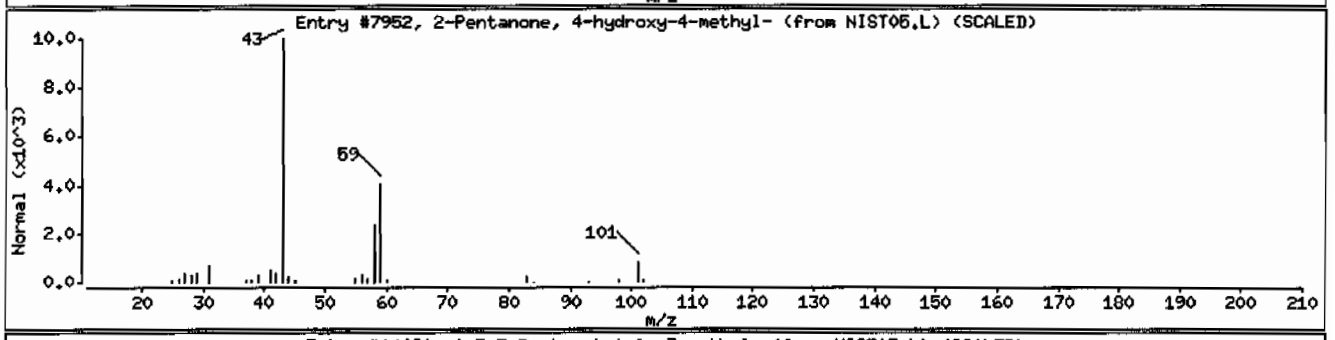

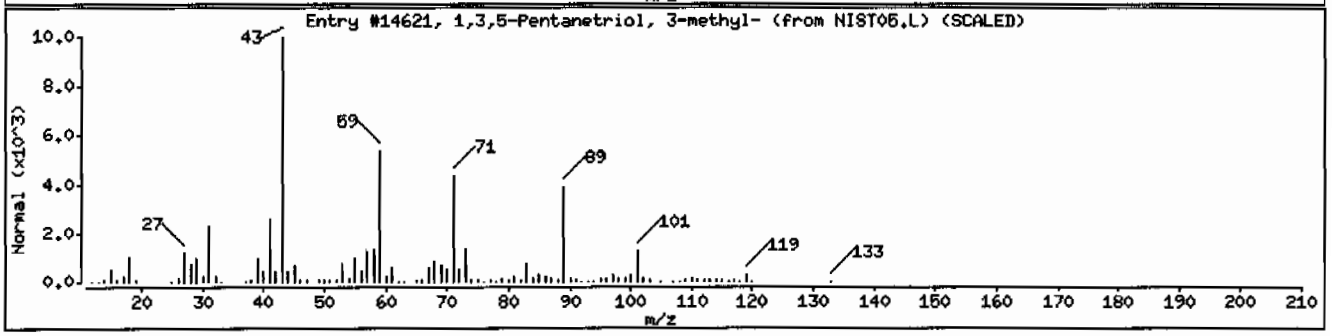

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980157**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 17:14**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2913-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1230	ug/kg	66.7	333
108-95-2	Phenol		1220	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1210	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1180	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1130	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1230	ug/kg	66.7	333
83-32-9	Acenaphthene		1280	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1230	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1170	ug/kg	110	333
87-86-5	Pentachlorophenol		1390	ug/kg	83.3	333
129-00-0	Pyrene		1370	ug/kg	10.0	33.3
110-86-1	Pyridine		927	ug/kg	66.7	333
62-53-3	Aniline		1020	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1180	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1130	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1220	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1200	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1160	ug/kg	66.7	333
95-48-7	o-Cresol		1360	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1350	ug/kg	100	333
67-72-1	Hexachloroethane		1140	ug/kg	66.7	333
98-95-3	Nitrobenzene		1280	ug/kg	66.7	333
78-59-1	Isophorone		1330	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1190	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1210	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1140	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1160	ug/kg	66.7	333
65-85-0	Benzoic acid		2170	ug/kg	167	667
91-20-3	Naphthalene		1190	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1020	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1230	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1250	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		2090	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1340	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1430	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1210	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1130	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		986	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-601			Matrix:	SOIL
Lab Sample ID:	1201980157				
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926121	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:14	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1k2913-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1340	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1250	ug/kg	33.3	333
208-96-8	Acenaphthylene		1280	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1350	ug/kg	127	667
132-64-9	Dibenzofuran		1470	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1300	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1390	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1200	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1110	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1240	ug/kg	66.7	333
122-66-7	Azobenzene		1290	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1520	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1330	ug/kg	66.7	333
85-01-8	Phenanthrene		1290	ug/kg	10.0	33.3
120-12-7	Anthracene		1280	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1510	ug/kg	66.7	333
206-44-0	Fluoranthene		1360	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1510	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1220	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1190	ug/kg	100	333
218-01-9	Chrysene		1230	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1450	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1490	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1240	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1380	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1290	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1180	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1160	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1220	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1220	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2913-3.d
Lab Smp Id: 1201980157 Client Smp ID: SBLK01LCS
Inj Date : 29-NOV-2009 17:14
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980157|926126|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-601.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	617030	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2615814	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1327800	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2222627	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1876046	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1522701	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1271871	78.9169	2630
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1461421	74.6073	2490
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	684430	39.7037	1320
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1416944	44.5569	1480
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	371535	100.207	3340
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1434844	48.7247	1620

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	752654	36.4664	1220
8 2-Chlorophenol	128	3.704	3.704	(0.968)	639061	36.4310	1210
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	713236	35.3495	1180
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	399043	33.9316	1130(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	577162	36.4542	1220
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	516096	36.8685	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1174835	38.3615	1280
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	440376	36.8581	1230
52 4-Nitrophenol	139	6.010	6.004	(1.013)	220683	35.2282	1170
65 Pentachlorophenol	266	6.798	6.792	(0.982)	235029	41.8099	1390
79 Pyrene	202	7.781	7.787	(0.909)	2047657	41.0742	1370
2 Pyridine	79	2.428	2.410	(0.634)	408899	27.8205	927
4 Aniline	66	3.622	3.628	(0.946)	263031	30.5509	1020
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510398	35.5468	1180
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	696923	33.8596	1130
12 Benzyl alcohol	108	3.910	3.910	(1.022)	390042	36.5704	1220
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	672531	36.0915	1200
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1191956	34.8523	1160
15 o-Cresol	107	3.963	3.963	(1.035)	534295	40.9176	1360
18 m,p-Cresols	107	4.063	4.063	(1.061)	719000	40.4679	1350
19 Hexachloroethane	117	4.169	4.169	(1.089)	248216	34.1819	1140
21 Nitrobenzene	77	4.210	4.210	(0.897)	691613	38.5060	1280
22 Isophorone	82	4.363	4.369	(0.930)	1252978	39.8762	1330
23 2-Nitrophenol	139	4.422	4.422	(0.942)	340801	35.7439	1190
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	554549	36.3226	1210
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	691571	34.1877	1140
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	497973	34.7566	1160
27 Benzoic acid	105	4.516	4.499	(0.962)	683711	64.9910	2170
30 Naphthalene	128	4.704	4.710	(1.002)	1951439	35.7452	1190(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	763147	30.6108	1020
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	299492	36.8387	1230
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349146	37.5924	1250
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	254671	62.8185	2090
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	356012	40.3106	1340
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	403669	42.9853	1430
40 2-Chloronaphthalene	162	5.540	5.540	(0.934)	1190080	36.3056	1210
42 o-Nitroaniline	65	5.604	5.604	(0.944)	343985	33.8440	1130
41 m-Nitroaniline	138	5.898	5.898	(0.994)	265638	29.5780	986
43 Dimethylphthalate	163	5.710	5.716	(0.962)	1456615	40.2594	1340
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	338062	37.5023	1250
45 Acenaphthylene	152	5.840	5.840	(0.984)	1959446	38.3071	1280
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	144123	40.5068	1350(Q)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1952785	44.0915	1470
51 Diethylphthalate	149	6.192	6.198	(1.044)	1428178	42.3398	1410
53 Fluorene	166	6.310	6.310	(1.063)	1390645	38.9420	1300
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	628903	41.7119	1390
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	202018	35.9267	1200

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	292736	33.3313	1110
133 Diphenylamine	169	6.369	6.369	(0.920)	1105073	37.2750	1240
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1396329	38.6021	1290
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	348687	45.6613	1520
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	375137	40.0219	1330
68 Phenanthrene	178	6.939	6.940	(1.003)	1960363	38.8105	1290
69 Anthracene	178	6.969	6.969	(1.007)	1974619	38.4401	1280
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2486060	45.3739	1510
76 Fluoranthene	202	7.645	7.645	(1.105)	1989736	40.8094	1360
85 Butylbenzylphthalate	149	8.086	8.092	(0.945)	1030539	45.4238	1510
89 Benzo(a)anthracene	228	8.539	8.545	(0.998)	1649744	36.6730	1220
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	461604	35.7370	1190
92 Chrysene	228	8.575	8.581	(1.002)	1554454	36.9708	1230
93 bis(2-Ethylhexyl)phthalate	149	8.428	8.434	(0.985)	1434232	43.5143	1450
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	2221573	44.6001	1490
95 Benzo(b)fluoranthene	252	9.498	9.510	(0.955)	1426222	37.1329	1240
96 Benzo(k)fluoranthene	252	9.528	9.533	(0.958)	1583032	41.4615	1380
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	1285249	38.6386	1290
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	1223235	35.4050	1180
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	1008016	34.8891	1160
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	1046013	36.5568	1220
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	323215	36.9282	1230

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2913-3.d
Date : 29-NOV-2009 17:14
Client ID: SBLK01LCS
Sample Info: 1120198015719261261|1|SVHF|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

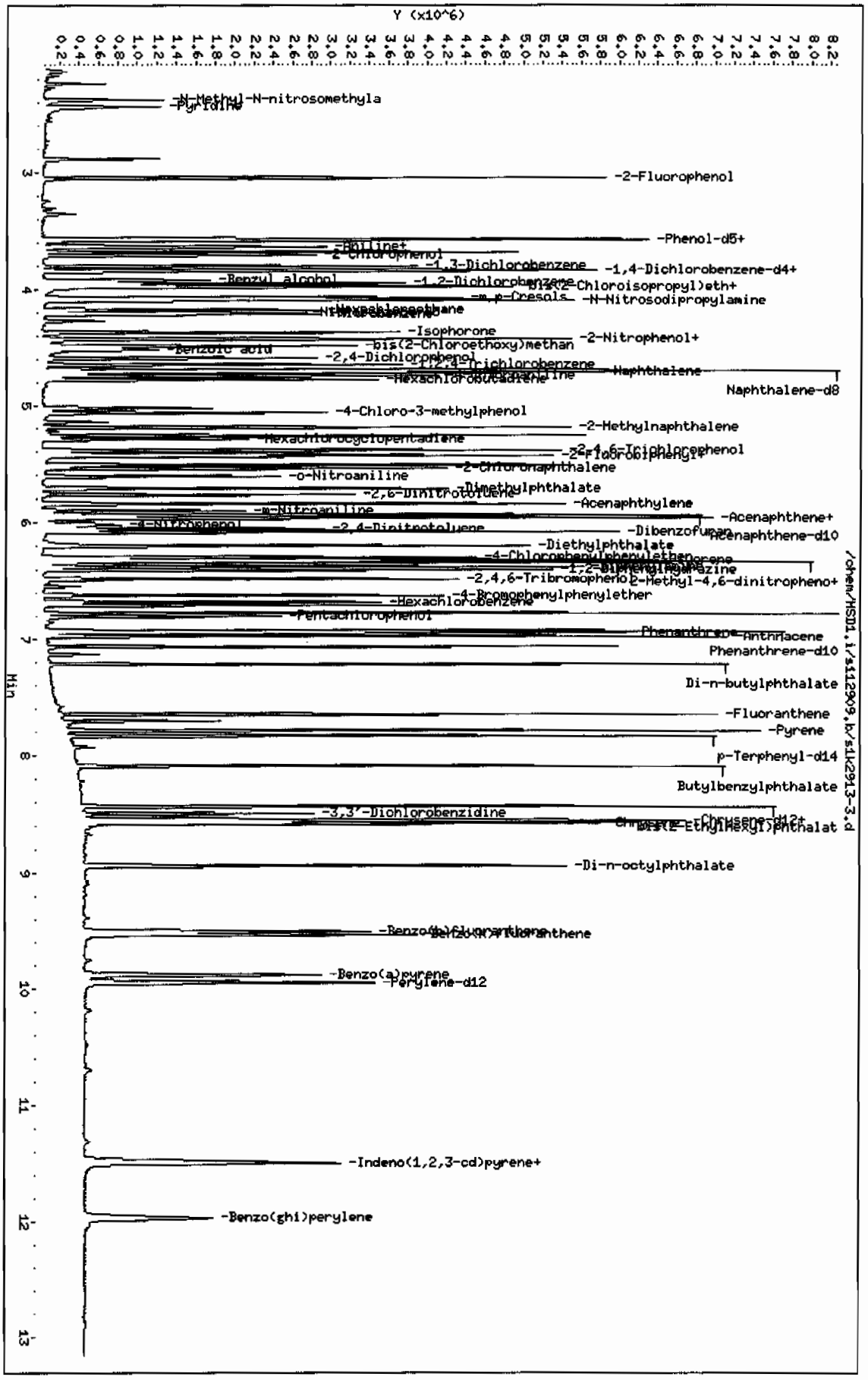

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926121 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201980154 MB	25-NOV-2009 21:20:56	30	1	0.03333
1201980157 LCS	25-NOV-2009 21:20:56	30	1	0.03333
241423004	25-NOV-2009 21:20:56	30.13	1	0.03319
241423005	25-NOV-2009 21:20:56	30.13	1	0.03319
241503002	25-NOV-2009 21:20:56	30.13	1	0.03319
241503003	25-NOV-2009 21:20:56	30.12	1	0.0332
241503004	25-NOV-2009 21:20:56	30.06	1	0.03327
241524002	25-NOV-2009 21:20:56	30.13	1	0.03319
1201980155 MS (241524002)	25-NOV-2009 21:20:56	30.12	1	0.0332
1201980156 MSD (241524002)	25-NOV-2009 21:20:56	30.16	1	0.03316
241534001	25-NOV-2009 21:20:56	30.17	1	0.03315
241534002	25-NOV-2009 21:20:56	30.13	1	0.03319
241534003	25-NOV-2009 21:20:56	30.04	1	0.03329
241534004	25-NOV-2009 21:20:56	30.13	1	0.03319
241534005	25-NOV-2009 21:20:56	30.13	1	0.03319
241534006	25-NOV-2009 21:20:56	30.13	1	0.03319
241534008	25-NOV-2009 21:20:56	30.07	1	0.03326
241539001	25-NOV-2009 21:20:56	30.01	1	0.03332
241539002	25-NOV-2009 21:20:56	30.13	1	0.03319
241539003	25-NOV-2009 21:20:56	30.13	1	0.03319
241539004	25-NOV-2009 21:20:56	30.04	1	0.03329

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201980157	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201980157	BENZIDINE LCS	UE091117-20	1	mL
MS	1201980155	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201980155	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201980156	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201980156	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/14/2009 METHOD: See raw data OPERATOR: AMY REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:116462-D
Multiplier Voltage: 1400 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091006-01 Internal Std ID: WBN091024-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s111409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k1201-D.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1201.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1202.d	INST BLK	amy	14-NOV-2009 17:53	-----	s111409	1.0	INST BLK	
s1k1203.d	WBN091111-16	amy	14-NOV-2009 18:22	1 PPM	s111409	1.0	MEGA001	
s1k1204.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	
s1k1204MRQ.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	pass linearity for c26 and c184
s1k1205.d	WBN091111-14	amy	14-NOV-2009 19:21	20 PPM	s111409	1.0	MEGA020	
s1k1206.d	WBN091111-13.1	amy	14-NOV-2009 19:50	40 PPM	s111409	1.0	MEGA040	
s1k1207.d	WBN091111-12	amy	14-NOV-2009 20:19	50 PPM	s111409	1.0	MEGA050	
s1k1208.d	WBN091111-11	amy	14-NOV-2009 20:47	80 PPM	s111409	1.0	MEGA080	
s1k1209.d	WBN091111-10	amy	14-NOV-2009 21:16	100 PPM	s111409	1.0	MEGA100	
s1k1210.d	WBN091111-09	amy	14-NOV-2009 21:45	120 PPM	s111409	1.0	MEGA120	
s1k1211.d	INST BLK	amy	14-NOV-2009 22:14	-----	s111409	1.0	INST BLK	
s1k1212-BOE.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212-D.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE: fails c65
s1k1213-D.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1213.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1214.d	INST BLK	amy	15-NOV-2009 15:05	-----	s111409	1.0	INST BLK	

s1k1215.d	WBN091111-01	amy	15-NOV-2009 15:28	10 PPM	s111409	1.0	AP010	
s1k1216.d	WBN091111-02	amy	15-NOV-2009 15:51	20 PPM	s111409	1.0	AP020	
s1k1217.d	WBN091111-03.1	amy	15-NOV-2009 16:14	40 PPM	s111409	1.0	AP040	
s1k1218.d	WBN091111-04	amy	15-NOV-2009 16:38	50 PPM	s111409	1.0	AP050	
s1k1219.d	WBN091111-05	amy	15-NOV-2009 17:01	80 PPM	s111409	1.0	AP080	
s1k1220.d	WBN091111-06	amy	15-NOV-2009 17:24	100 PPM	s111409	1.0	AP100	
s1k1221.d	WBN091111-07	amy	15-NOV-2009 17:47	120 PPM	s111409	1.0	AP120	
s1k1222.d	WBN091029-25	amy	15-NOV-2009 18:11	10 PPM	s111409	1.0	PEST010	
s1k1223.d	WBN091029-24	amy	15-NOV-2009 18:35	20 PPM	s111409	1.0	PEST020	
s1k1224.d	WBN091029-23.1	amy	15-NOV-2009 18:58	40 PPM	s111409	1.0	PEST040	
s1k1225.d	WBN091029-22	amy	15-NOV-2009 19:21	50 PPM	s111409	1.0	PEST050	
s1k1226.d	WBN091029-21	amy	15-NOV-2009 19:45	80 PPM	s111409	1.0	PEST080	
s1k1227.d	WBN091029-20	amy	15-NOV-2009 20:09	100 PPM	s111409	1.0	PEST100	
s1k1228.d	WBN091029-19	amy	15-NOV-2009 20:31	120 PPM	s111409	1.0	PEST120	
s1k1229.d	WBN091016-16	amy	15-NOV-2009 20:55	500 PPM	s111409	1.0	HEX500	
s1k1230.d	WBN091016-15	amy	15-NOV-2009 21:18	1000 PPM	s111409	1.0	HEX1000	
s1k1231.d	WBN091016-14	amy	15-NOV-2009 21:42	1250 PPM	s111409	1.0	HEX1250	
s1k1232.d	WBN091016-13	amy	15-NOV-2009 22:06	1500 PPM	s111409	1.0	HEX503	
s1k1233.d	WBN091016-12	amy	15-NOV-2009 22:30	1750 PPM	s111409	1.0	HEX504	
s1k1234.d	UBN090825-02.4	amy	15-NOV-2009 22:53	2000 PPM	s111409	1.0	HEX2000	
s1k1235-D.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1235.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1236-D.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1236.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1237-D.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1237.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1238-D.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown

s1k1238.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown
s1k1239.d	INST BLK	amy	16-NOV-2009 00:43	-----	s111409	1.0	INST BLK	
s1k1240.d	UBN090924-01	amy	16-NOV-2009 01:05	10 PPM	s111409	1.0	NEV010	DUSE
s1k1241.d	UBN090924-02	amy	16-NOV-2009 01:28	20 PPM	s111409	1.0	NEV020	DUSE
s1k1242.d	UBN090924-03	amy	16-NOV-2009 01:51	40 PPM	s111409	1.0	NEV040	DUSE
s1k1243.d	UBN090924-04	amy	16-NOV-2009 02:14	50 PPM	s111409	1.0	NEV050	DUSE
s1k1244.d	UBN090924-05	amy	16-NOV-2009 02:38	80 PPM	s111409	1.0	NEV080	DUSE
s1k1245.d	UBN090924-06	amy	16-NOV-2009 03:01	100 PPM	s111409	1.0	NEV100	DUSE
s1k1246.d	UBN090924-07	amy	16-NOV-2009 03:23	120 PPM	s111409	1.0	NEV120	DUSE
s1k1247-D.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1247.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1248.d	INST BLK	amy	17-NOV-2009 09:20	-----	s111409	1.0	INST BLK	
s1k1249.d	WBN091027-09.2	amy	17-NOV-2009 09:48	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails
s1k1250.d	UBN090924-01	amy	17-NOV-2009 10:17	10 PPM	s111409	1.0	NEV010	DUSE
s1k1251.d	UBN090924-02	amy	17-NOV-2009 10:41	20 PPM	s111409	1.0	NEV020	DUSE
s1k1252.d	UBN090924-03	amy	17-NOV-2009 11:04	40 PPM	s111409	1.0	NEV040	DUSE
s1k1253.d	UBN090924-04	amy	17-NOV-2009 11:27	50 PPM	s111409	1.0	NEV050	DUSE
s1k1254.d	UBN090924-05	amy	17-NOV-2009 11:50	80 PPM	s111409	1.0	NEV080	DUSE
s1k1255.d	UBN090924-06	amy	17-NOV-2009 12:14	100 PPM	s111409	1.0	NEV100	DUSE
s1k1256.d	UBN090924-07	amy	17-NOV-2009 12:38	120 PPM	s111409	1.0	NEV120	DUSE
s1k1257.d	WBN091027-09.1	amy	17-NOV-2009 13:02	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails /clean inj port
s1k1259-D.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1259.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1260.d	INST BLK	amy	17-NOV-2009 16:04	-----	s111409	1.0	INST BLK	
s1k1261-BOE.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261-D.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	pass 530038

s1k1262.d	UBN091117-01	amy	17-NOV-2009 16:56	10 PPM	s111409	1.0	NEV010	
s1k1263.d	UBN091117-02	amy	17-NOV-2009 17:19	20 PPM	s111409	1.0	NEV020	
s1k1264.d	UBN091117-03	amy	17-NOV-2009 17:42	40 PPM	s111409	1.0	NEV040	
s1k1265.d	UBN091117-04	amy	17-NOV-2009 18:05	50 PPM	s111409	1.0	NEV050	DUSE
s1k1266.d	UBN091117-05	amy	17-NOV-2009 18:28	80 PPM	s111409	1.0	NEV080	
s1k1267.d	UBN091117-06	amy	17-NOV-2009 18:52	100 PPM	s111409	1.0	NEV100	DUSE
s1k1268.d	UBN091117-07	amy	17-NOV-2009 19:15	120 PPM	s111409	1.0	NEV120	

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/29/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1318 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k2901.d	WBN091101-01	AMY	29-NOV-2009 10:14	50 PPM	s112909	1.0	DFTPP	DUSE-tune failed
s1k2902.d	WBN091101-01	AMY	29-NOV-2009 10:34	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2903.d	WBN091106-05.5	AMY	29-NOV-2009 10:50	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2904.d	WBN091106-05.5	AMY	29-NOV-2009 11:23	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2905.d	WBN091101-01	AMY	29-NOV-2009 13:27	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2906.d	WBN091111-03.5	AMY	29-NOV-2009 13:43	40 PPM	s112909	1.0	MEGACVS	DUSE-megacheck failed
s1k2907.d	WBN091101-01	AMY	29-NOV-2009 15:00	50 PPM	s112909	1.0	DFTPP	PASSING
s1k2908.d	WBN091111-03.5	AMY	29-NOV-2009 15:16	40 PPM	MEGAIICARE	1.0	MEGACVS	PASSING
s1k2909.d	WBN091111-03.3	AMY	29-NOV-2009 15:40	40 PPM	ap12	1.0	APCVS	PASSING
s1k2910.d	WBN091117-08.1	AMY	29-NOV-2009 16:04	40 PPM	nev	1.0	NEVCVS	DUSE-not needed
s1k2911.d	WBN091029-23.3	AMY	29-NOV-2009 16:27	40 PPM	pest	1.0	PESTCVS	DUSE-not needed
s1k2912-1.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-589	1.0	SBLK01	REPORT
s1k2912-2.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-600	1.0	SBLK01	REPORT
s1k2912-3.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-601	1.0	SBLK01	REPORT
s1k2912-4.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-603	1.0	SBLK01	REPORT
s1k2912.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-578	1.0	SBLK01	REPORT
s1k2913-1.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-589	1.0	SBLK01LCS	REPORT
s1k2913-2.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-600	1.0	SBLK01LCS	REPORT
s1k2913-3.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-601	1.0	SBLK01LCS	REPORT

s1k2913-4.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-603		1.0	SBLK01LCS	REPORT
s1k2913.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-578		1.0	SBLK01LCS	REPORT
s1k2914.d	241423004	AMY	29-NOV-2009 17:37	926126	10-578		1.0	LANL	REPORT
s1k2915.d	241423005	AMY	29-NOV-2009 18:01	926126	10-578		1.0	LANL	REPORT
s1k2916.d	241503002	AMY	29-NOV-2009 18:24	926126	10-589		1.0	LANL	REPORT
s1k2917.d	241503003	AMY	29-NOV-2009 18:48	926126	10-589		1.0	LANL	REPORT
s1k2918.d	241503004	AMY	29-NOV-2009 19:11	926126	10-589		1.0	LANL	REPORT
s1k2919.d	241524002	AMY	29-NOV-2009 19:35	926126	10-600		1.0	LANL	REPORT
s1k2920.d	1201980155	AMY	29-NOV-2009 19:59	926126	10-600		1.0	MS	REPORT
s1k2921.d	1201980156	AMY	29-NOV-2009 20:22	926126	10-600		1.0	MSD	REPORT
s1k2922.d	241534001	AMY	29-NOV-2009 20:46	926126	10-601		1.0	LANL	REPORT
s1k2923.d	241534002	AMY	29-NOV-2009 21:09	926126	10-601		1.0	LANL	REPORT
s1k2924.d	241534003	AMY	29-NOV-2009 21:32	926126	10-601		1.0	LANL	REPORT
s1k2925.d	241534004	AMY	29-NOV-2009 21:56	926126	10-601		1.0	LANL	REPORT
s1k2926.d	241534005	AMY	29-NOV-2009 22:19	926126	10-601		1.0	LANL	REPORT
s1k2927.d	241534006	AMY	29-NOV-2009 22:42	926126	10-601		1.0	LANL	REPORT
s1k2928.d	241534008	AMY	29-NOV-2009 23:06	926126	10-601		1.0	LANL	REPORT
s1k2929.d	241539001	AMY	29-NOV-2009 23:29	926126	10-603		4.0	LANL	REPORT
s1k2930.d	241539002	AMY	29-NOV-2009 23:52	926126	10-603		1.0	LANL	REPORT
s1k2931.d	241539003	AMY	30-NOV-2009 00:15	926126	10-603		4.0	LANL	REPORT
s1k2932.d	241539004	AMY	30-NOV-2009 00:39	926126	10-603		4.0	LANL	REPORT

Instrument Batch: /chem/MSD1.i/s112909.b

Page: 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2920.d
Lab Smp Id: 1201980155 Client Smp ID: WST03-10-2132MS
Inj Date : 29-NOV-2009 19:59
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980155|926126|1|SVMF|1|MS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	699947	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2934133	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1463731	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2363993	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1684742	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1120190	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1289380	70.5260	2500
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1547686	69.6514	2470
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	673013	34.8059	1230
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1433542	40.8925	1450
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	370034	90.5336	3200
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1328013	50.2177	1780

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	796747	34.0298	1200
8 2-Chlorophenol	128	3.704	3.704	(0.968)	656662	32.9999	1170
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	685652	29.9567	1060
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	420390	31.5122	1120(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	566160	31.8799	1130
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	545668	34.7521	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1149404	34.0458	1200
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	422299	32.0627	1140
52 4-Nitrophenol	139	6.016	6.004	(1.014)	225669	32.6788	1160(Q)
65 Pentachlorophenol	266	6.798	6.792	(0.982)	210344	35.1811	1240
79 Pyrene	202	7.786	7.787	(0.910)	1850873	41.3427	1460
2 Pyridine	79	2.422	2.410	(0.633)	370227	22.2054	786
4 Aniline	66	3.622	3.628	(0.946)	261857	26.8116	949
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510651	31.3514	1110
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	668790	28.6436	1010
12 Benzyl alcohol	108	3.916	3.910	(1.023)	310221	25.6408	908
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	652552	30.8709	1090
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1201535	30.9706	1100
15 o-Cresol	107	3.969	3.963	(1.037)	683532	46.1455	1630
18 m,p-Cresols	107	4.063	4.063	(1.061)	772494	38.3282	1360
19 Hexachloroethane	117	4.169	4.169	(1.089)	231829	28.1433	996
21 Nitrobenzene	77	4.204	4.210	(0.896)	695598	34.5264	1220
22 Isophorone	82	4.363	4.369	(0.930)	1299945	36.8827	1300
23 2-Nitrophenol	139	4.422	4.422	(0.942)	337453	31.5531	1120
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	592642	34.6064	1220
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	715403	31.5291	1120
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	524523	32.6380	1160
27 Benzoic acid	105	4.498	4.499	(0.959)	390090	33.0577	1170
30 Naphthalene	128	4.704	4.710	(1.002)	1963373	32.0621	1140(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	797874	28.5317	1010
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	297235	32.5947	1150
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349639	33.5263	1190
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	199168	44.5657	1580
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	381472	39.1822	1390
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	421700	40.7352	1440
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	1212305	33.5491	1190
42 o-Nitroaniline	65	5.604	5.604	(0.944)	350257	31.2609	1110
41 m-Nitroaniline	138	5.898	5.898	(0.994)	274130	27.6889	980
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1500237	37.6143	1330
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	344190	34.6363	1230
45 Acenaphthylene	152	5.839	5.840	(0.984)	1966987	34.8834	1240
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	56861	14.4972	513(aQ)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1996093	40.8839	1450
51 Diethylphthalate	149	6.192	6.198	(1.044)	1481999	39.8553	1410
53 Fluorene	166	6.310	6.310	(1.063)	1421709	36.1147	1280
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	646361	38.8886	1380
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	109209	18.2603	646

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	284762	29.4123	1040
133 Diphenylamine	169	6.369	6.369	(0.920)	1145372	36.3240	1290
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1426823	37.0863	1310
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	354319	43.6242	1540
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	346909	34.7972	1230
68 Phenanthrene	178	6.939	6.940	(1.003)	1975120	36.7644	1300
69 Anthracene	178	6.969	6.969	(1.007)	1913297	35.0190	1240
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2440805	41.8840	1480
76 Fluoranthene	202	7.645	7.645	(1.105)	1854236	35.7562	1270
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	984368	48.3155	1710
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1477404	36.5712	1290
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	350925	30.2533	1070
92 Chrysene	228	8.575	8.581	(1.002)	1231772	32.6228	1160
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1306621	44.1441	1560
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1909554	52.1111	1840
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.955)	1234751	43.2281	1530
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	964822	34.3499	1220
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	883640	36.1004	1280
99 Indeno(1,2,3-cd)pyrene	276	11.492	11.504	(1.155)	722470	28.3387	1000
100 Dibenzo(a,h)anthracene	278	11.492	11.498	(1.155)	615954	28.9496	1020
101 Benzo(ghi)perylene	276	11.974	11.980	(1.203)	559720	26.5904	942
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	321743	32.4054	1150

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2920.d
Date : 29-NOV-2009 19:59
Client ID: WSTQ3-10-2132MS
Sample Info: 1120198015519261261|1|SVMF|1|MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

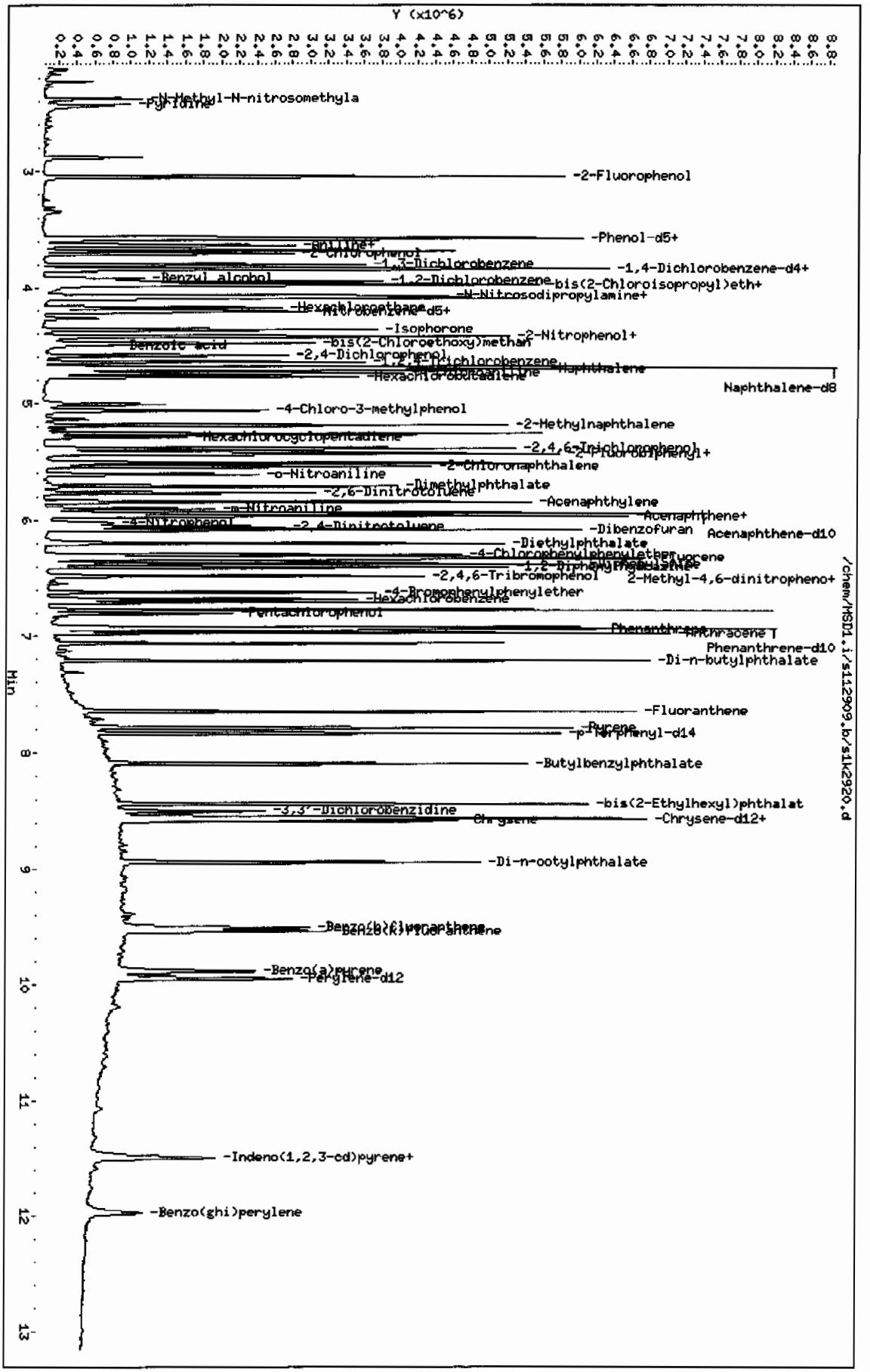

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2921.d
Lab Smp Id: 1201980156 Client Smp ID: WST03-10-2132MSD
Inj Date : 29-NOV-2009 20:22
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980156|926126|1|SVMF|1|MSD
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.16000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	615056	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2554313	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1300161	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2151794	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1447390	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	806048	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1069314	66.5616	2350
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1262977	64.6835	2290
$ 20 Nitrobenzene-d5	82	4.192	4.199	(0.893)	552216	32.8053	1160
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1174801	37.7279	1330
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	298226	82.1443	2900
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1075352	47.3318	1670

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	651465	31.6651	1120
8 2-Chlorophenol	128	3.704	3.704	(0.968)	553085	31.6310	1120
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	582464	28.9608	1020
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	333817	28.4764	1010(Q)
28 1,2,4-Trichlorobenzene	180	4.639	4.640	(0.989)	469632	30.3767	1070
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	442703	32.3870	1140
47 Acenaphthene	154	5.957	5.957	(1.004)	961549	32.0646	1130
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	342426	29.2692	1030
52 4-Nitrophenol	139	6.016	6.004	(1.014)	189174	30.8403	1090
65 Pentachlorophenol	266	6.798	6.792	(0.982)	158486	29.1215	1030
79 Pyrene	202	7.786	7.787	(0.910)	1531042	39.8068	1410
2 Pyridine	79	2.416	2.410	(0.631)	342320	23.3654	826
4 Aniline	66	3.622	3.628	(0.946)	229123	26.6979	944
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	435483	30.4267	1080
9 1,3-Dichlorobenzene	146	3.792	3.799	(0.991)	569061	27.7362	981
12 Benzyl alcohol	108	3.916	3.910	(1.023)	217397	20.4486	723
13 1,2-Dichlorobenzene	146	3.945	3.946	(1.031)	553673	29.8084	1050
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1027417	30.1377	1060
15 o-Cresol	107	3.963	3.963	(1.035)	564636	43.3800	1530
18 m,p-Cresols	107	4.063	4.063	(1.061)	640140	36.1451	1280
19 Hexachloroethane	117	4.169	4.169	(1.089)	187184	25.8600	914
21 Nitrobenzene	77	4.204	4.210	(0.896)	575076	32.7886	1160
22 Isophorone	82	4.363	4.369	(0.930)	1071543	34.9231	1230
23 2-Nitrophenol	139	4.422	4.422	(0.942)	264819	28.4435	1000
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	481800	32.3175	1140
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	596951	30.2207	1070
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	431087	30.8127	1090
27 Benzoic acid	105	4.492	4.499	(0.957)	380487	37.0385	1310
30 Naphthalene	128	4.704	4.710	(1.002)	1617437	30.3405	1070(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	670092	27.5254	973
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	245534	30.9288	1090
34 2-Methylnaphthalene	142	5.186	5.187	(1.105)	1113411	31.7709	1120
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	116360	29.3123	1040
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	305116	35.2822	1250
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	345638	37.5882	1330
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	992781	30.9305	1090
42 o-Nitroaniline	65	5.604	5.604	(0.944)	284051	28.5413	1010
41 m-Nitroaniline	138	5.898	5.898	(0.994)	228764	26.0137	920
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1233662	34.8220	1230
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	273916	31.0324	1100
45 Acenaphthylene	152	5.839	5.840	(0.984)	1610084	32.1462	1140
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	35859	10.2927	364(aQR)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1650486	38.0582	1340
51 Diethylphthalate	149	6.192	6.198	(1.044)	1231486	37.2848	1320
53 Fluorene	166	6.310	6.310	(1.063)	1181344	33.7842	1190
54 4-Chlorophenylphenylether	204	6.292	6.293	(1.060)	542687	36.7587	1300
55 2-Methyl-4,6-dinitrophenol	198	6.333	6.334	(0.915)	66699	12.2522	433

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.322	6.328	(1.065)	230458	26.7980	948
133 Diphenylamine	169	6.369	6.369	(0.920)	953629	33.2255	1170
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1185255	33.8455	1200
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	299469	40.5070	1430
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	288959	31.8427	1120
68 Phenanthrene	178	6.939	6.940	(1.003)	1651328	33.7686	1190
69 Anthracene	178	6.969	6.969	(1.007)	1620434	32.5836	1150
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2043329	38.5211	1360
76 Fluoranthene	202	7.645	7.645	(1.105)	1511208	32.0151	1130
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	791858	45.2402	1600
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1120091	32.2732	1140
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	289961	29.0969	1030
92 Chrysene	228	8.575	8.581	(1.002)	992111	30.5843	1080
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1048714	41.2409	1460
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1507003	57.1534	2020
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.956)	727997	35.9011	1270
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.959)	781492	38.6663	1370
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	578752	32.8455	1160
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	387228	20.9970	742
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	342583	22.3360	790
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	293979	19.4089	686
1 N-Methyl-N-nitrosomethylamine	74	2.363	2.352	(0.617)	275353	31.5608	1120

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD1.i/s112909.b/s1k2921.d
Date : 29-NOV-2009 20:22
Client ID: MSTO3-10-2132MSD
Sample Info: 1120198015619261261|1|SVMF11MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

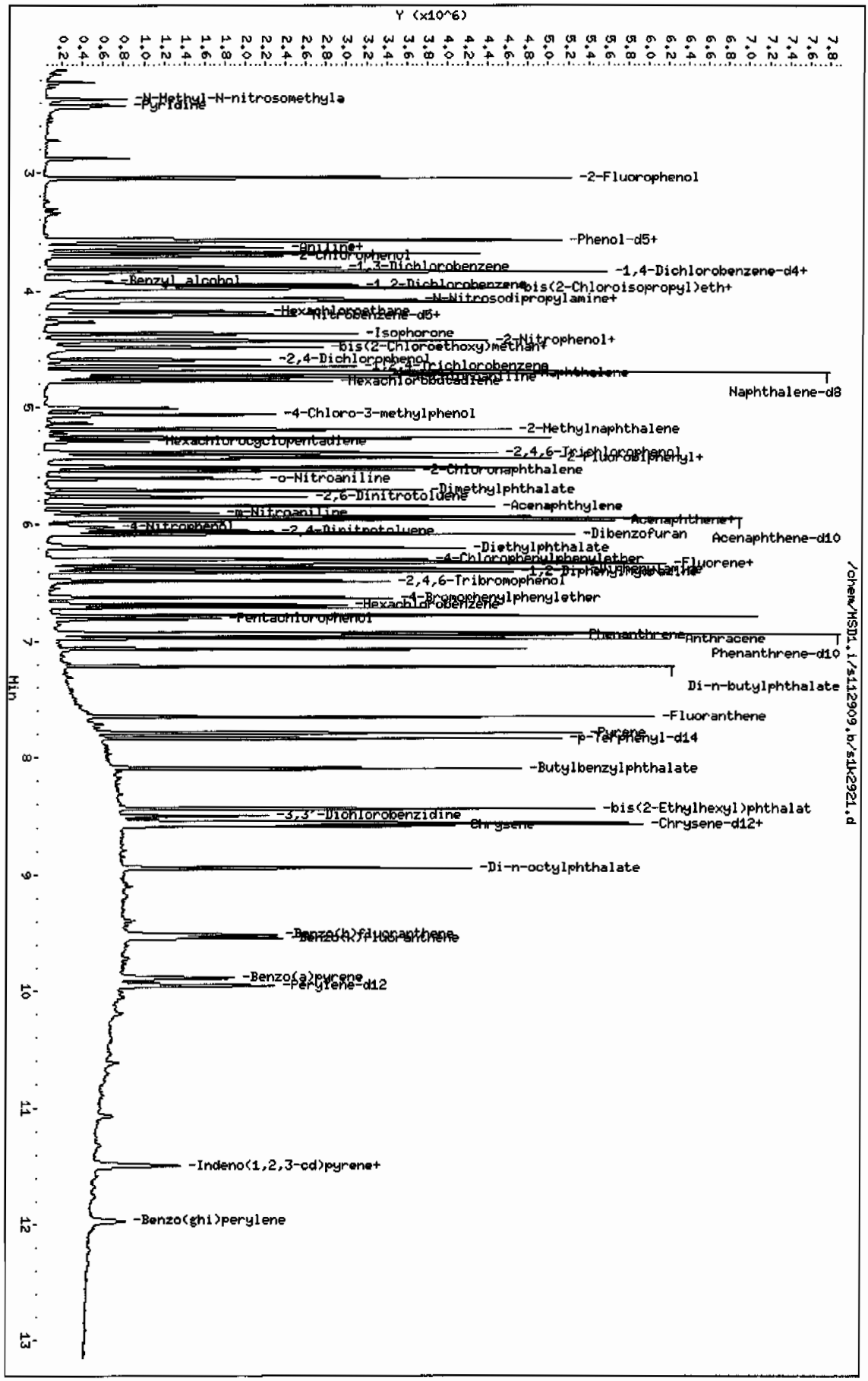

Page 1

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-601

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927078
Prep Batch Number:	927077

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241534001	RE03-09-13975
241534002	RE03-09-13976
241534003	RE03-09-13973
241534004	RE03-09-13972
241534005	RE03-09-13977
241534006	RE03-09-13974
241534008	RE03-10-3915
1201982132	Method Blank (MB)
1201982135	Laboratory Control Sample (LCS)
1201982133	241534001(RE03-09-13975) Matrix Spike (MS)
1201982134	241534001(RE03-09-13975) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the

independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria for the Aroclors.

Surrogate recovery did not meet the acceptance criteria in Aroclor-1248 standard analyzed for this SDG; however this had no adverse effects on the data as all samples associated with this SDG met surrogate recovery acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241534001 (RE03-09-13975) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to

eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/17/09

Roadmap for LANL 10-601 PCB

This roadmap was analyzed by jen01212 on 12-02-2009, 15:11.
This roadmap was reviewed by rob01090 on 12-08-2009, 17:09.
This roadmap was packaged by sha01289 on 12-15-2009, 20:00.
This roadmap was validated by jim01140 on 12-17-2009, 12:20.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120109.b/076f7601.d	241534001	sample	01-DEC-2009	22:42	10-601.sub	RE03-09-13975	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/079f7901.d	241534002	sample	01-DEC-2009	23:16	10-601.sub	RE03-09-13976	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/080f8001.d	241534003	sample	01-DEC-2009	23:27	10-601.sub	RE03-09-13973	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/081f8101.d	241534004	sample	01-DEC-2009	23:38	10-601.sub	RE03-09-13972	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/082f8201.d	241534005	sample	01-DEC-2009	23:49	10-601.sub	RE03-09-13977	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/085f8501.d	241534006	sample	02-DEC-2009	00:23	10-601.sub	RE03-09-13974	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/086f8601.d	241534008	sample	02-DEC-2009	00:34	10-601.sub	RE03-10-3915	1.00000	927078	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120109.b/076b7601.d	241534001	sample	01-DEC-2009	22:42	10-601.sub	RE03-09-13975	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/079b7901.d	241534002	sample	01-DEC-2009	23:16	10-601.sub	RE03-09-13976	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/080b8001.d	241534003	sample	01-DEC-2009	23:27	10-601.sub	RE03-09-13973	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/081b8101.d	241534004	sample	01-DEC-2009	23:38	10-601.sub	RE03-09-13972	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/082b8201.d	241534005	sample	01-DEC-2009	23:49	10-601.sub	RE03-09-13977	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/085b8501.d	241534006	sample	02-DEC-2009	00:23	10-601.sub	RE03-09-13974	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/086b8601.d	241534008	sample	02-DEC-2009	00:34	10-601.sub	RE03-10-3915	1.00000	927078	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120109.b/074f7401.d	1201982132	mb	01-DEC-2009	22:20	10-601.sub	PBLK01	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/075f7501.d	1201982135	lcs	01-DEC-2009	22:31	10-601.sub	PBLK01LCS	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/077f7701.d	1201982133	ms	01-DEC-2009	22:53	10-601.sub	RE03-09-13975MS	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/078f7801.d	1201982134	msd	01-DEC-2009	23:04	10-601.sub	RE03-09-13975MSD	1.00000	927078	UPLOAD BOTH, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment

☐	N	/chem/ecd2a.i/120109.b/074b7401.d	1201982132	mb	01-DEC-2009	22:20	10-601.sub	PBLK01	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/075b7501.d	1201982135	lcs	01-DEC-2009	22:31	10-601.sub	PBLK01LCS	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/077b7701.d	1201982133	ms	01-DEC-2009	22:53	10-601.sub	RE03-09-13975MS	1.00000	927078	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120109.b/078b7801.d	1201982134	msd	01-DEC-2009	23:04	10-601.sub	RE03-09-13975MSD	1.00000	927078	UPLOAD BOTH, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13972	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:38	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.11 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.65	ug/kg	1.22	3.65	1
11104–28–2	Aroclor–1221	U	3.65	ug/kg	1.22	3.65	1
11141–16–5	Aroclor–1232	U	3.65	ug/kg	1.22	3.65	1
53469–21–9	Aroclor–1242	U	3.65	ug/kg	1.22	3.65	1
12672–29–6	Aroclor–1248	U	3.65	ug/kg	1.22	3.65	1
11097–69–1	Aroclor–1254	U	3.65	ug/kg	1.22	3.65	1
11096–82–5	Aroclor–1260	U	3.65	ug/kg	1.22	3.65	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13973	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:27	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.62	ug/kg	1.20	3.62	1
11104-28-2	Aroclor-1221	U	3.62	ug/kg	1.20	3.62	1
11141-16-5	Aroclor-1232	U	3.62	ug/kg	1.20	3.62	1
53469-21-9	Aroclor-1242	U	3.62	ug/kg	1.20	3.62	1
12672-29-6	Aroclor-1248	U	3.62	ug/kg	1.20	3.62	1
11097-69-1	Aroclor-1254	U	3.62	ug/kg	1.20	3.62	1
11096-82-5	Aroclor-1260	U	3.62	ug/kg	1.20	3.62	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534006**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13974**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 00:23**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**085f8501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	085b8501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.87	ug/kg	1.29	3.87	1
11104–28–2	Aroclor–1221	U	3.87	ug/kg	1.29	3.87	1
11141–16–5	Aroclor–1232	U	3.87	ug/kg	1.29	3.87	1
53469–21–9	Aroclor–1242	U	3.87	ug/kg	1.29	3.87	1
12672–29–6	Aroclor–1248	U	3.87	ug/kg	1.29	3.87	1
11097–69–1	Aroclor–1254	U	3.87	ug/kg	1.29	3.87	1
11096–82–5	Aroclor–1260	J	2.60	ug/kg	1.29	3.87	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**17.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13975**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:42**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**076f7601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	076b7601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.05	ug/kg	1.35	4.05	1
11104–28–2	Aroclor–1221	U	4.05	ug/kg	1.35	4.05	1
11141–16–5	Aroclor–1232	U	4.05	ug/kg	1.35	4.05	1
53469–21–9	Aroclor–1242	U	4.05	ug/kg	1.35	4.05	1
12672–29–6	Aroclor–1248	U	4.05	ug/kg	1.35	4.05	1
11097–69–1	Aroclor–1254	U	4.05	ug/kg	1.35	4.05	1
11096–82–5	Aroclor–1260	U	4.05	ug/kg	1.35	4.05	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13976	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:16	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.96	ug/kg	1.32	3.96	1
11104–28–2	Aroclor–1221	U	3.96	ug/kg	1.32	3.96	1
11141–16–5	Aroclor–1232	U	3.96	ug/kg	1.32	3.96	1
53469–21–9	Aroclor–1242	U	3.96	ug/kg	1.32	3.96	1
12672–29–6	Aroclor–1248	U	3.96	ug/kg	1.32	3.96	1
11097–69–1	Aroclor–1254		16.7	ug/kg	1.32	3.96	1
11096–82–5	Aroclor–1260		16.1	ug/kg	1.32	3.96	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13977	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:49	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	082f8201.d	**Column:**	1 CLP1	**Level:**	LOW
	082b8201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.97	ug/kg	1.32	3.97	1
11104–28–2	Aroclor–1221	U	3.97	ug/kg	1.32	3.97	1
11141–16–5	Aroclor–1232	U	3.97	ug/kg	1.32	3.97	1
53469–21–9	Aroclor–1242	U	3.97	ug/kg	1.32	3.97	1
12672–29–6	Aroclor–1248	U	3.97	ug/kg	1.32	3.97	1
11097–69–1	Aroclor–1254	U	3.97	ug/kg	1.32	3.97	1
11096–82–5	Aroclor–1260	U	3.97	ug/kg	1.32	3.97	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–3915	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/02/2009 00:34	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	086f8601.d	**Column:**	1 CLP1	**Level:**	LOW
	086b8601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.66	ug/kg	1.22	3.66	1
11104–28–2	Aroclor–1221	U	3.66	ug/kg	1.22	3.66	1
11141–16–5	Aroclor–1232	U	3.66	ug/kg	1.22	3.66	1
53469–21–9	Aroclor–1242	U	3.66	ug/kg	1.22	3.66	1
12672–29–6	Aroclor–1248	U	3.66	ug/kg	1.22	3.66	1
11097–69–1	Aroclor–1254	U	3.66	ug/kg	1.22	3.66	1
11096–82–5	Aroclor–1260	U	3.66	ug/kg	1.22	3.66	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10–601

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201982132	MB for batch 927077	90	96	78	80
1201982135	LCS for batch 927077	89	95	79	81
241534001	RE03–09–13975	79	84	71	72
1201982133	RE03–09–13975MS	88	93	78	84
1201982134	RE03–09–13975MSD	88	94	82	85
241534002	RE03–09–13976	80	84	62	67
241534003	RE03–09–13973	85	90	76	77
241534004	RE03–09–13972	74	79	69	73
241534005	RE03–09–13977	82	87	75	61
241534006	RE03–09–13974	71	77	64	70
241534008	RE03–10–3915	79	84	72	64

Surrogate		Acceptance Limits
4CMX	= 4cmx	(34%–105%)
DCB	= Decachlorobiphenyl	(33%–115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: LCS for batch 927077
Lab Sample ID: 1201982135
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 22:31
Dilution: 1
Prep Batch ID: 927077
Batch ID: 927078

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	29.1	87	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	31.4	94	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-601
Client ID: RE03-09-13975MS
Lab Sample ID: 1201982133
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 17.8
Analysis Date: 12/01/2009 22:53
Prep Batch ID: 927077
Batch ID: 927078
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	40.5	0.00	U	34.4	85	23-117
11096-82-5	MS	Aroclor-1260	40.5	0.00	U	40.0	99	27-116

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–601**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03–09–13975MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201982134**	**%Moisture:**	**17.8**
Instrument:	**ECD2A.I**	**Analysis Date:**	**12/01/2009 23:04**
Analyst:	**JAOC**	**Prep Batch ID**	**927077**
Inj. Vol:	**1 uL**	**Batch ID:**	**927078**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	40.3	0.00	U	35.3	88	23–117	3	0–30
11096–82–5	MSD Aroclor–1260	40.3	0.00	U	40.8	101	27–116	2	0–30

Method Blank Summary

SDG Number:	10-601	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927077	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	074b7401-1.d 074f7401-1.d
Lab Sample ID:	1201982132				
Column:	CLP2 CLP1	Prep Date:	11/29/2009 15:56	Analyzed:	12/01/09 22:20
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 927077	1201982135	075f7501-1.d 075b7501-1.d	12/01/09	2231
02	RE03-09-13975	241534001	076f7601.d 076b7601.d	12/01/09	2242
03	RE03-09-13975MS	1201982133	077f7701.d 077b7701.d	12/01/09	2253
04	RE03-09-13975MSD	1201982134	078f7801.d 078b7801.d	12/01/09	2304
05	RE03-09-13976	241534002	079f7901.d 079b7901.d	12/01/09	2316
06	RE03-09-13973	241534003	080f8001.d 080b8001.d	12/01/09	2327
07	RE03-09-13972	241534004	081f8101.d 081b8101.d	12/01/09	2338
08	RE03-09-13977	241534005	082f8201.d 082b8201.d	12/01/09	2349
09	RE03-09-13974	241534006	085f8501.d 085b8501.d	12/02/09	0023
10	RE03-10-3915	241534008	086f8601.d 086b8601.d	12/02/09	0034

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13972**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:38**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**081f8101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	081b8101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.65	ug/kg	1.22	3.65	1
11104–28–2	Aroclor–1221	U	3.65	ug/kg	1.22	3.65	1
11141–16–5	Aroclor–1232	U	3.65	ug/kg	1.22	3.65	1
53469–21–9	Aroclor–1242	U	3.65	ug/kg	1.22	3.65	1
12672–29–6	Aroclor–1248	U	3.65	ug/kg	1.22	3.65	1
11097–69–1	Aroclor–1254	U	3.65	ug/kg	1.22	3.65	1
11096–82–5	Aroclor–1260	U	3.65	ug/kg	1.22	3.65	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/081f8101.d
Lab Smp Id: 241534004 Client Smp ID: RE03-09-13972
Inj Date : 01-DEC-2009 23:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534004|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13972|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	8.98600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	8539074	147.962	5.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7525404	137.252	5.0	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/081f8101.d
Date : 01-DEC-2009 23:38
Client ID: RE03-09-13972
Sample Info: |241534004|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

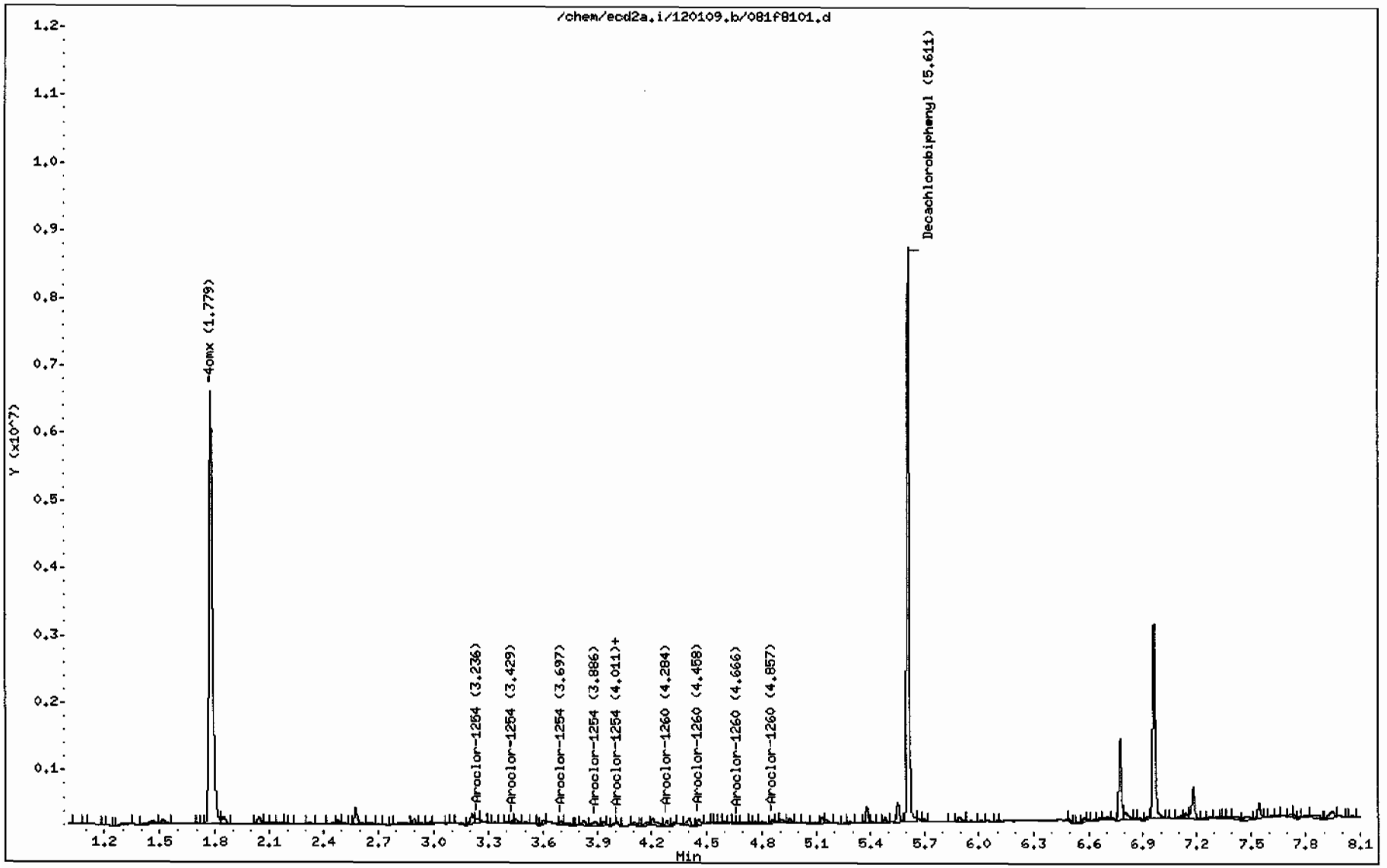

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/081b8101.d
Lab Smp Id: 241534004 Client Smp ID: RE03-09-13972
Inj Date : 01-DEC-2009 23:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534004|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13972|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	8.98600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	18654216	157.819	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.304	0.002	15843758	145.835	5.3	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/081b8101.d
Date : 01-DEC-2009 23:38
Client ID: RE03-09-13972
Sample Info: |241534004|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

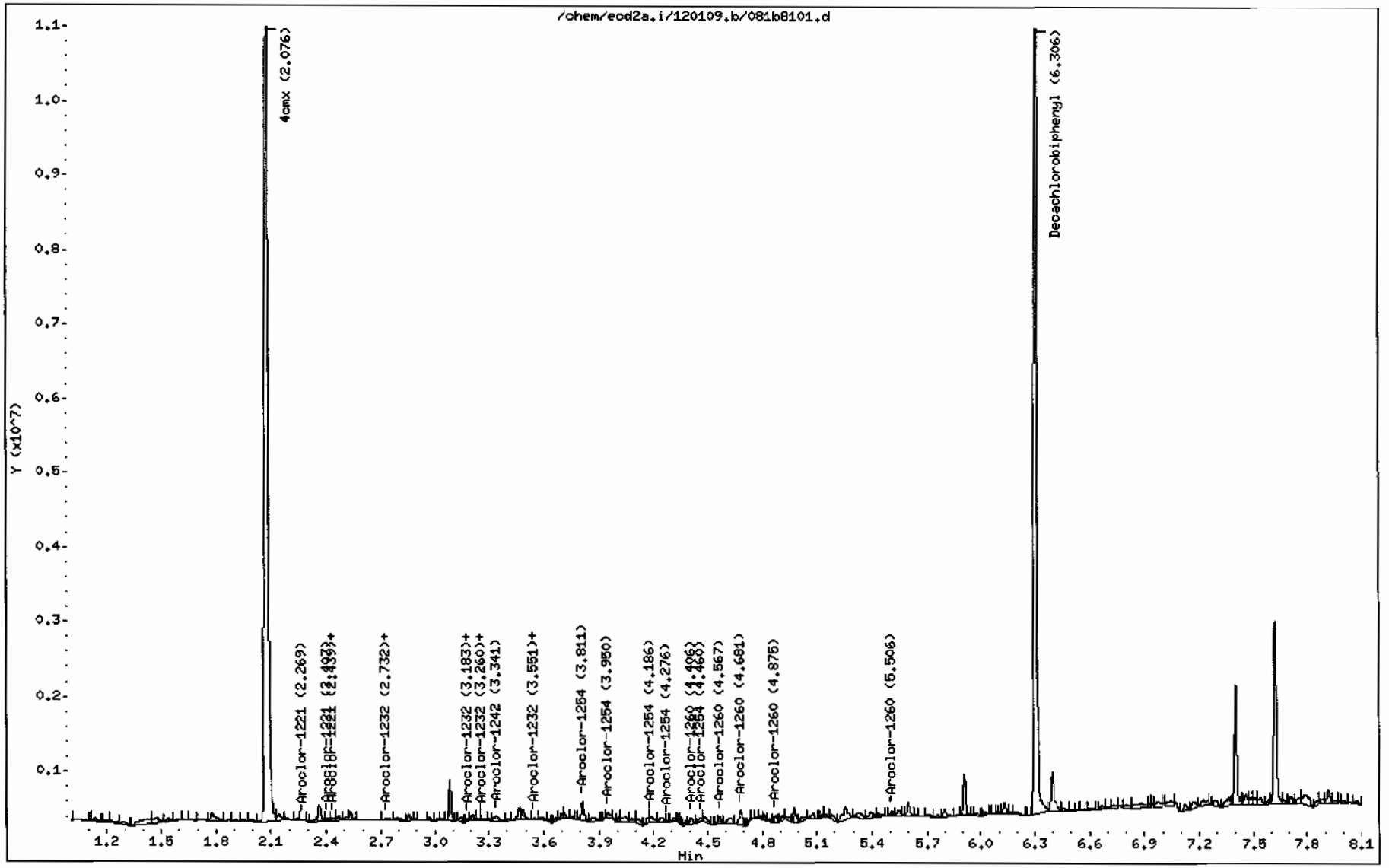

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13973	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:27	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.62	ug/kg	1.20	3.62	1
11104–28–2	Aroclor–1221	U	3.62	ug/kg	1.20	3.62	1
11141–16–5	Aroclor–1232	U	3.62	ug/kg	1.20	3.62	1
53469–21–9	Aroclor–1242	U	3.62	ug/kg	1.20	3.62	1
12672–29–6	Aroclor–1248	U	3.62	ug/kg	1.20	3.62	1
11097–69–1	Aroclor–1254	U	3.62	ug/kg	1.20	3.62	1
11096–82–5	Aroclor–1260	U	3.62	ug/kg	1.20	3.62	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/080f8001.d
Lab Smp Id: 241534003 Client Smp ID: RE03-09-13973
Inj Date : 01-DEC-2009 23:27
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534003|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13973|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 80
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	8.40560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9830796	170.345	6.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8329878	151.924	5.5	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/080f8001.d
Date : 01-DEC-2009 23:27
Client ID: RE03-09-13973
Sample Info: |241534003|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

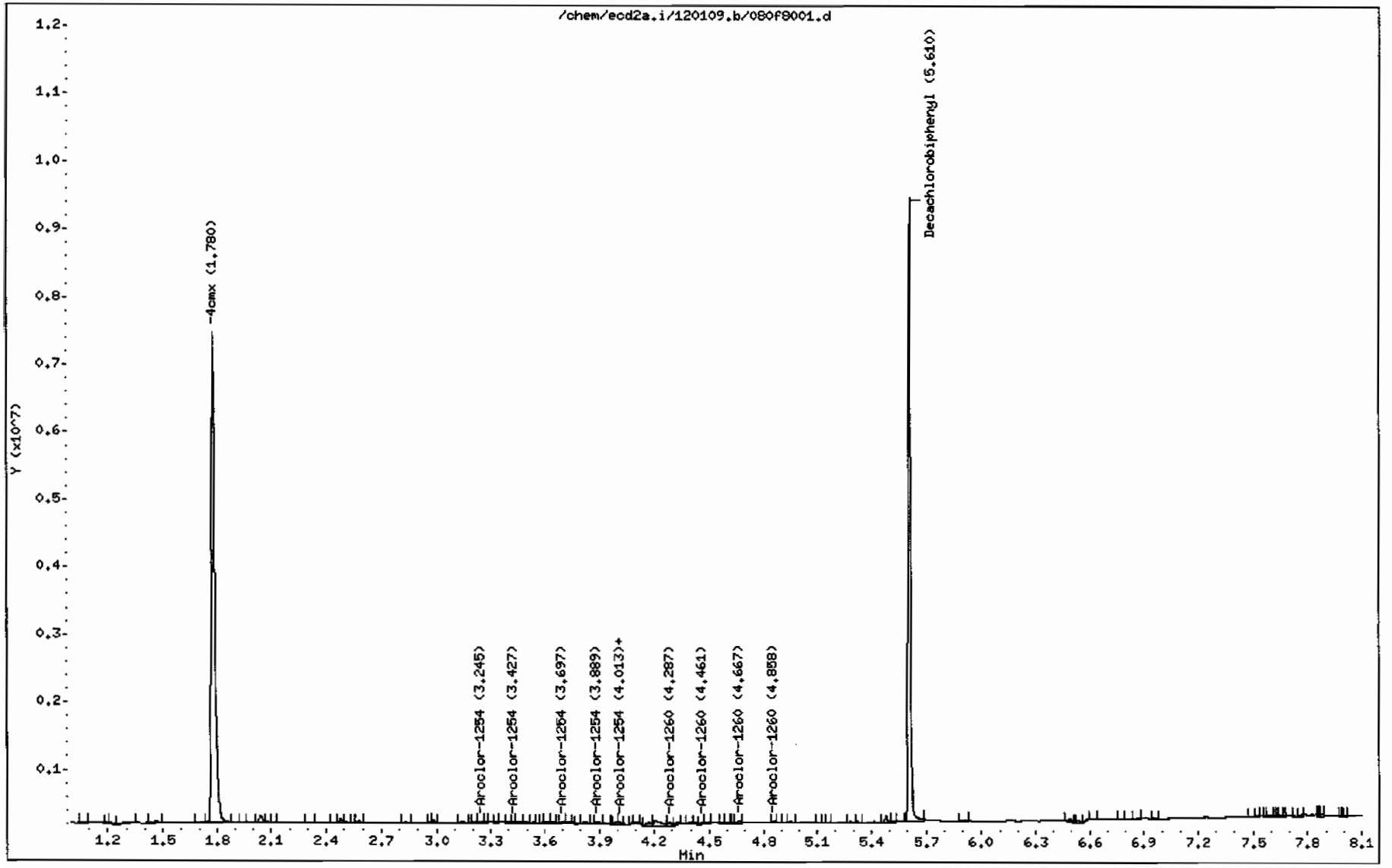

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/080b8001.d
Lab Smp Id: 241534003 Client Smp ID: RE03-09-13973
Inj Date : 01-DEC-2009 23:27
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534003|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13973|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 80
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	8.40560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	21280375	180.037	6.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.304	0.002	16834581	154.955	5.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/080b8001.d
Date : 01-DEC-2009 23:27
Client ID: RE03-09-13973
Sample Info: |241534003|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

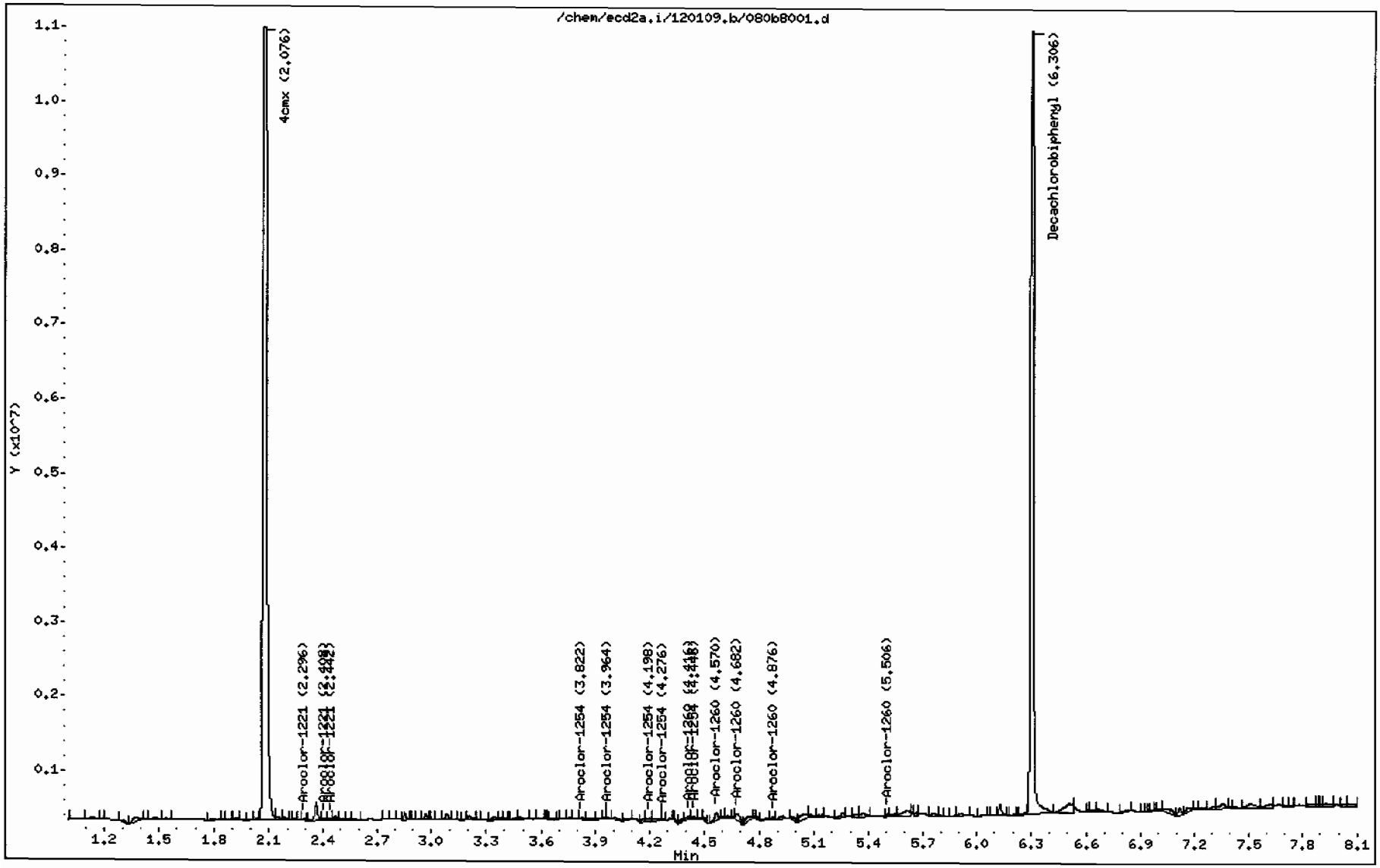

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13974	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/02/2009 00:23	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	085f8501.d	**Column:**	1 CLP1	**Level:**	LOW
	085b8501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.87	ug/kg	1.29	3.87	1
11104-28-2	Aroclor-1221	U	3.87	ug/kg	1.29	3.87	1
11141-16-5	Aroclor-1232	U	3.87	ug/kg	1.29	3.87	1
53469-21-9	Aroclor-1242	U	3.87	ug/kg	1.29	3.87	1
12672-29-6	Aroclor-1248	U	3.87	ug/kg	1.29	3.87	1
11097-69-1	Aroclor-1254	U	3.87	ug/kg	1.29	3.87	1
11096-82-5	Aroclor-1260	J	2.60	ug/kg	1.29	3.87	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/085f8501.d
Lab Smp Id: 241534006 Client Smp ID: RE03-09-13974
Inj Date : 02-DEC-2009 00:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534006|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13974|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 85
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	14.17490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	8138489	141.021	5.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	6983484	127.368	4.9	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.016	0.000	215693	53.0376	2.0	80.00- 120.00	100.00(a)
4.287	4.288	-0.001	185374	73.3191	2.8	39.98- 79.98	85.94
4.455	4.454	0.001	160202	62.0168	2.4	41.33- 81.33	74.27
4.667	4.666	0.001	359056	59.4847	2.3	123.75- 163.75	166.47

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
4.857	4.855	0.002	268769	92.2987	3.6	48.23- 88.23	124.61
Average of Peak Concentrations =					2.6		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120109.b/085f8501.d
Date : 02-DEC-2009 00:23
Client ID: RE03-09-13974
Sample Info: |241534006|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

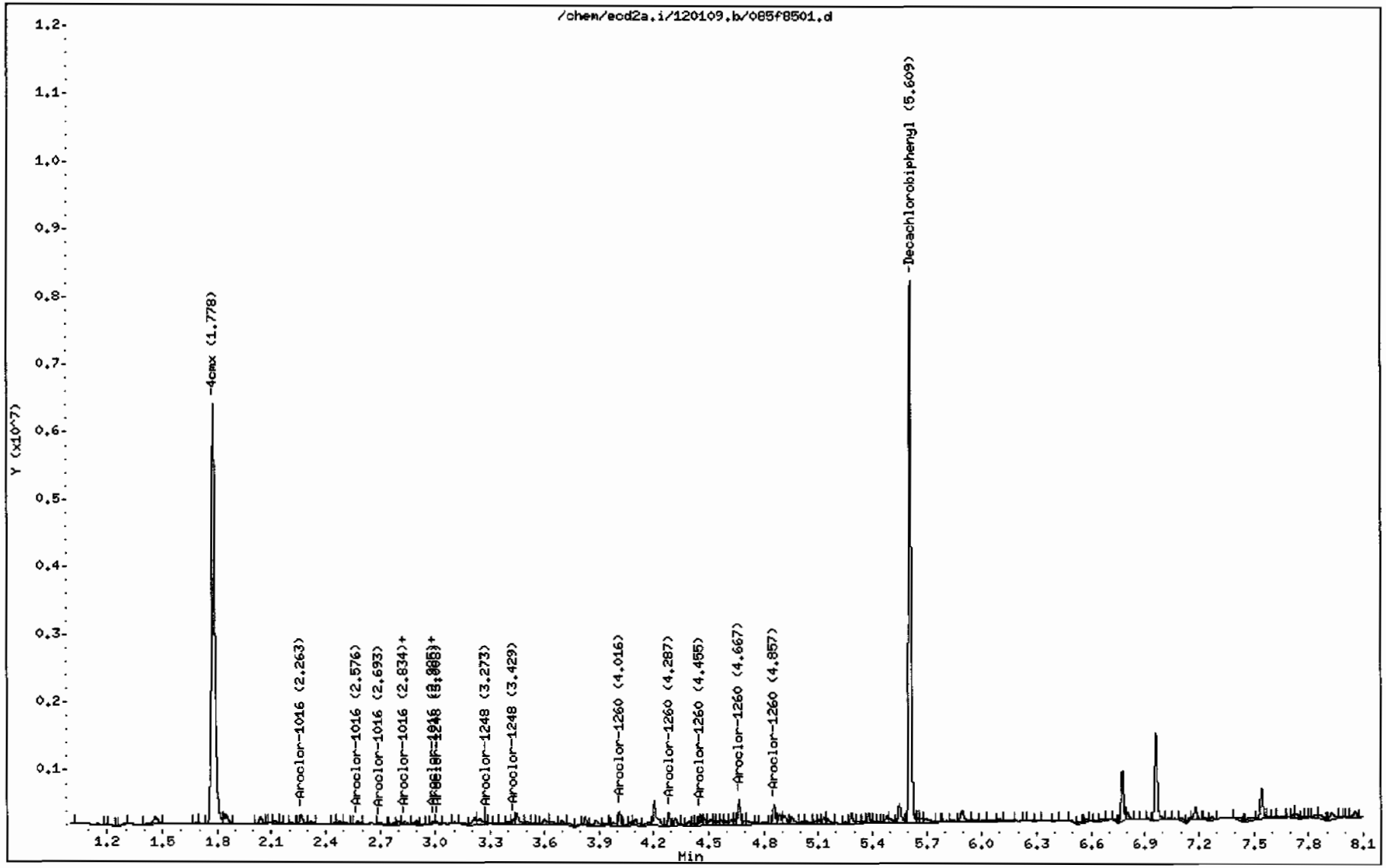

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/085b8501.d
Lab Smp Id: 241534006 Client Smp ID: RE03-09-13974
Inj Date : 02-DEC-2009 00:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534006|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13974|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 85
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	14.17490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.074	2.075	-0.001	18216568	154.117	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	15232805	140.212	5.4	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	102173	18.5343	0.72	80.00- 120.00	100.00(aM)
4.569	4.569	0.000	406864	57.0479	2.2	107.33- 147.33	398.21
4.681	4.681	0.000	354890	75.0080	2.9	63.39- 103.39	347.34
4.878	4.879	-0.001	366333	63.1537	2.4	78.36- 118.36	358.54

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
5.506	5.505	0.001	620162	68.5968	2.6	131.09- 171.09	606.97
Average of Peak Concentrations =					2.2		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/085b8501.d
Date : 02-DEC-2009 00:23
Client ID: RE03-09-13974
Sample Info: |241534006|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

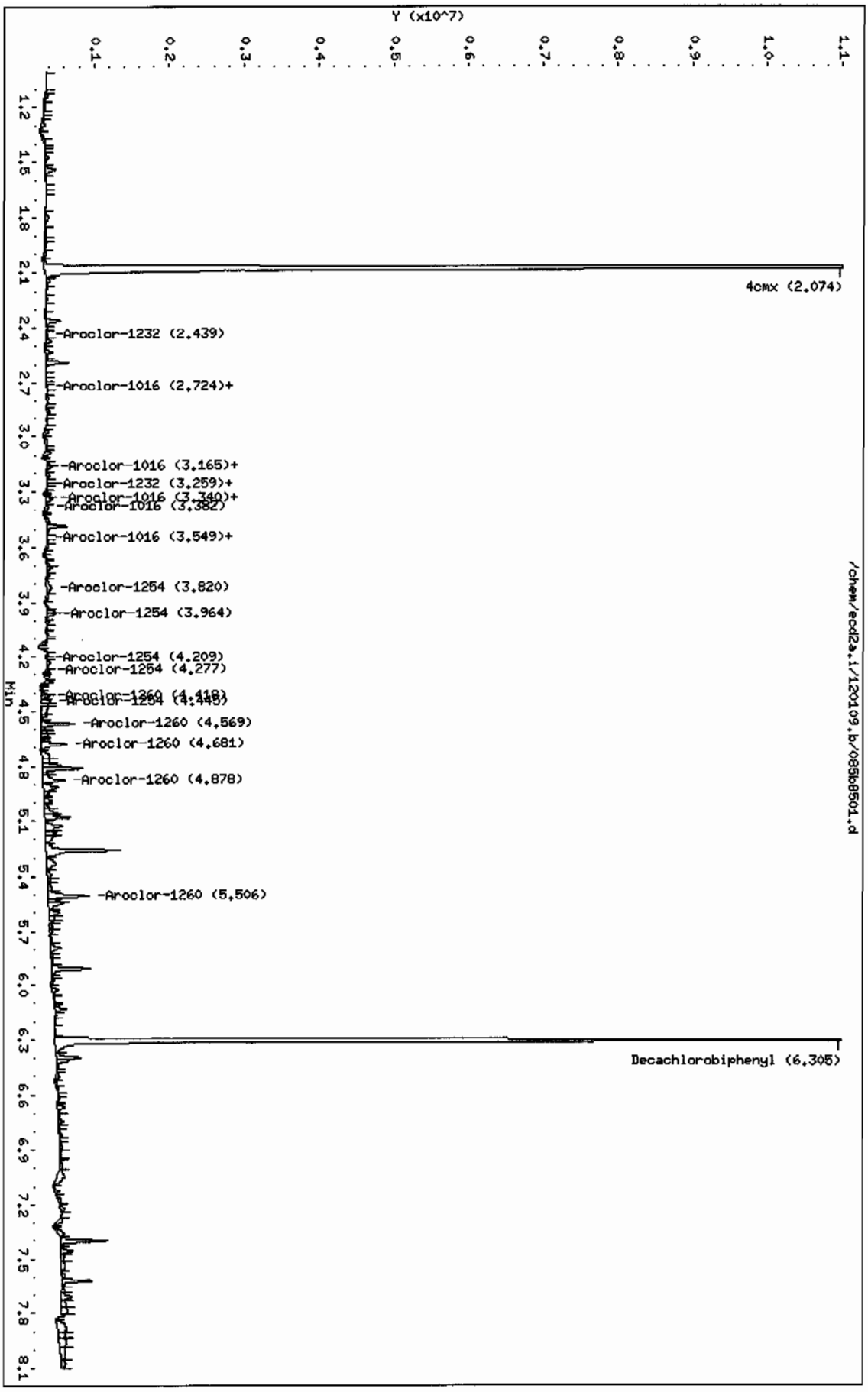

Page 1

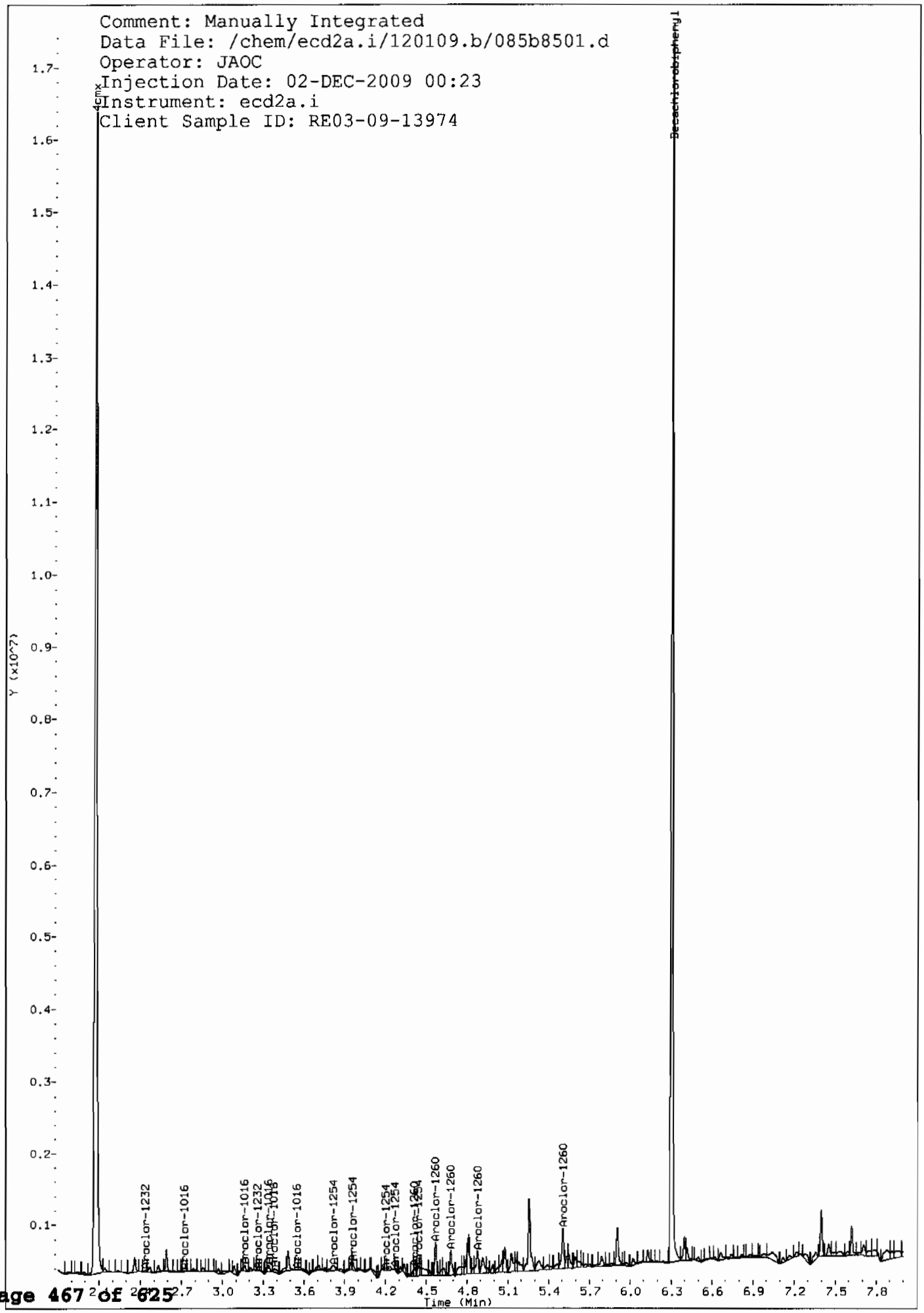
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/085b8501.d
Operator: JAOC
Injection Date: 02-DEC-2009 00:23
Instrument: ecd2a.i
Client Sample ID: RE03-09-13974
Decachlorobiphenyl
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
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Aroclor-1260
Y (x10^7)
Time (Min)

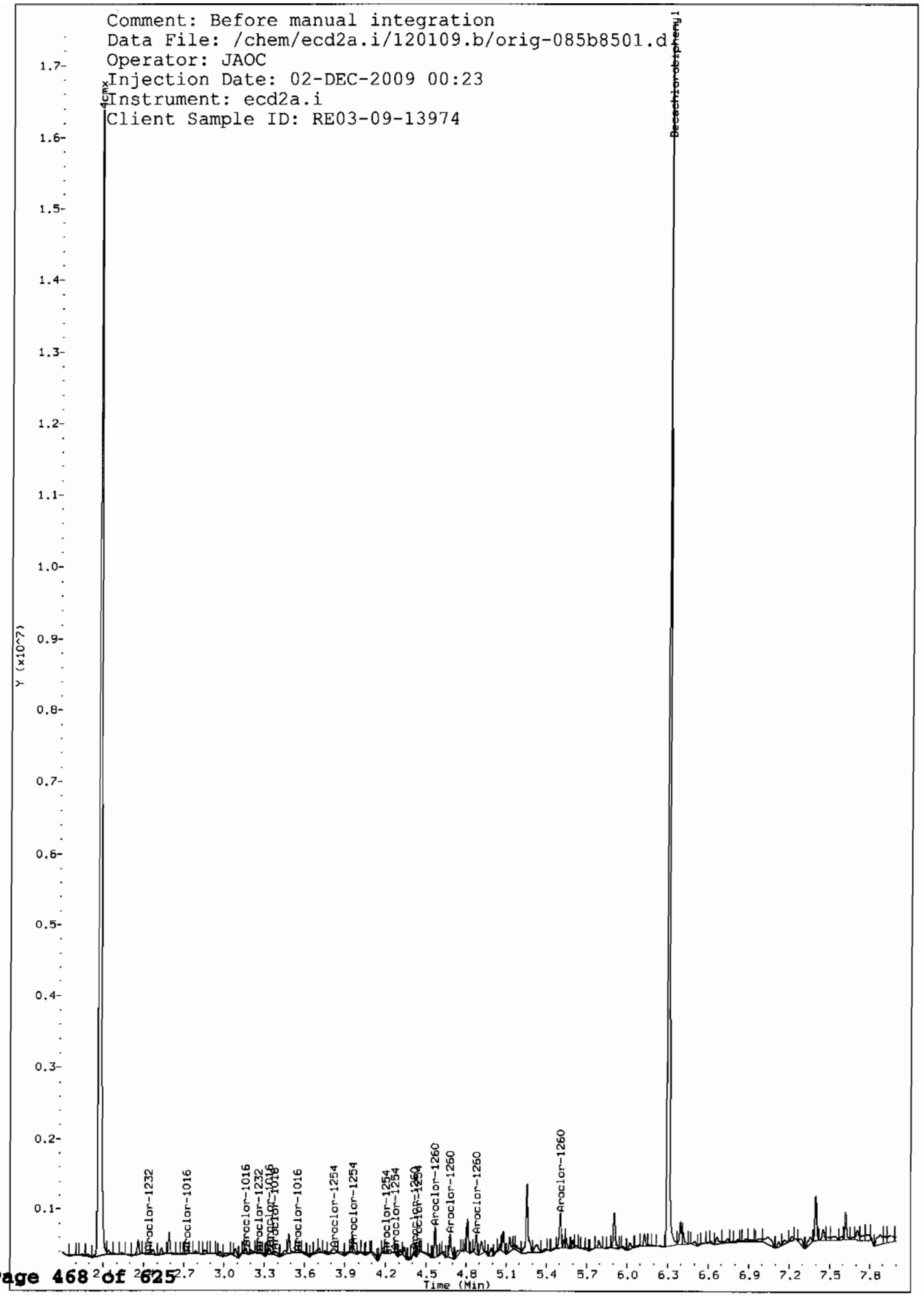
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-085b8501.d
Operator: JAOC
Injection Date: 02-DEC-2009 00:23
Instrument: ecd2a.i
Client Sample ID: RE03-09-13974
Decachlorobiphenyl
Aroclor-1232
Aroclor-1016
Aroclor-1254
Aroclor-1260
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	17.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13975	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 22:42	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.05	ug/kg	1.35	4.05	1
11104–28–2	Aroclor–1221	U	4.05	ug/kg	1.35	4.05	1
11141–16–5	Aroclor–1232	U	4.05	ug/kg	1.35	4.05	1
53469–21–9	Aroclor–1242	U	4.05	ug/kg	1.35	4.05	1
12672–29–6	Aroclor–1248	U	4.05	ug/kg	1.35	4.05	1
11097–69–1	Aroclor–1254	U	4.05	ug/kg	1.35	4.05	1
11096–82–5	Aroclor–1260	U	4.05	ug/kg	1.35	4.05	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/076f7601.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 01-DEC-2009 22:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534001|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13975|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	9132804	158.250	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7804716	142.346	5.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/076f7601.d
Date : 01-DEC-2009 22:42
Client ID: RE03-09-13975
Sample Info: |241534001|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

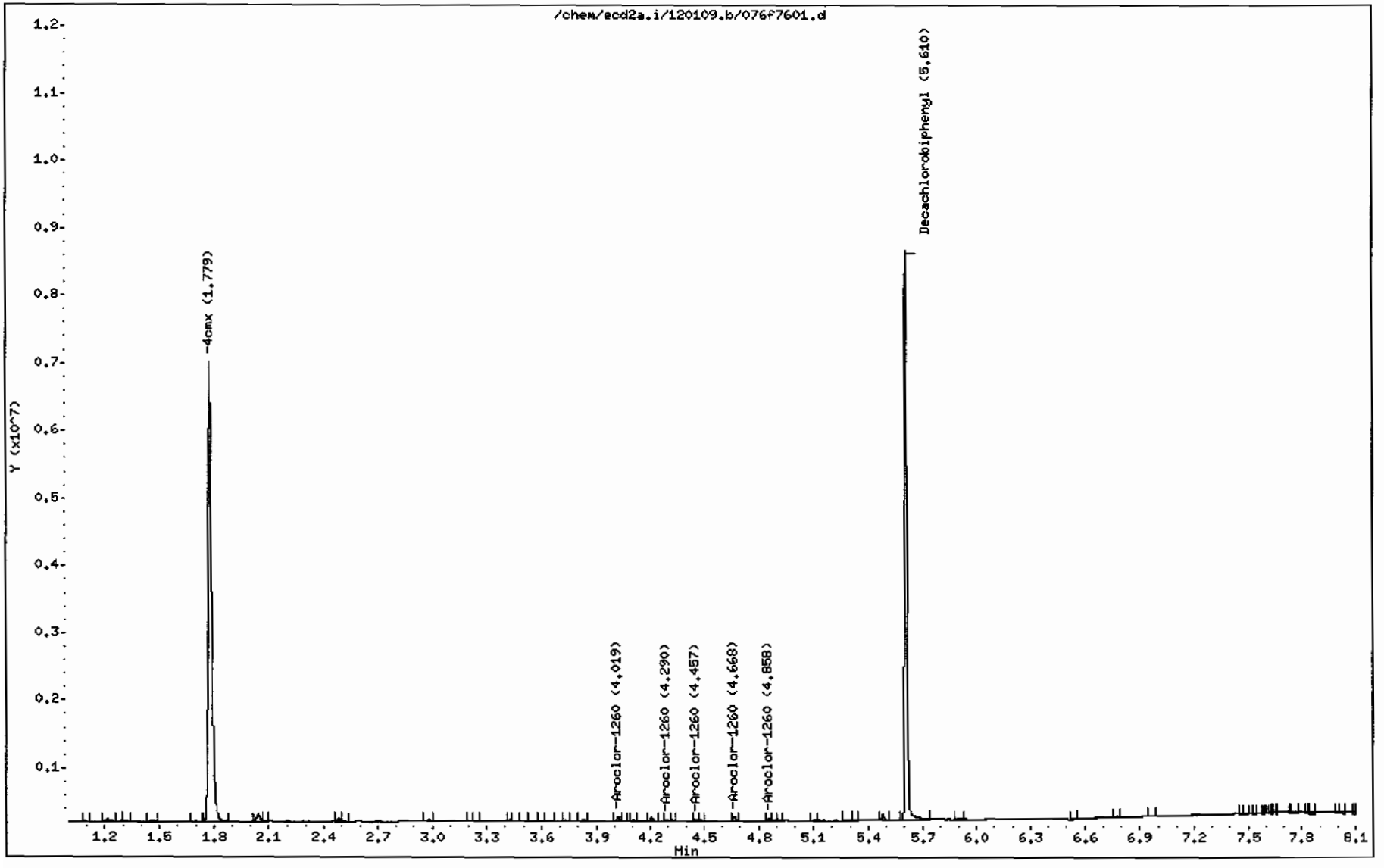

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/076b7601.d
Lab Smp Id: 241534001 Client Smp ID: RE03-09-13975
Inj Date : 01-DEC-2009 22:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534001|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13975|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	19877547	168.169	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.304	0.002	15593595	143.533	5.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/076b7601.d
Date : 01-DEC-2009 22:42
Client ID: RE03-09-13975
Sample Info: |241534001|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

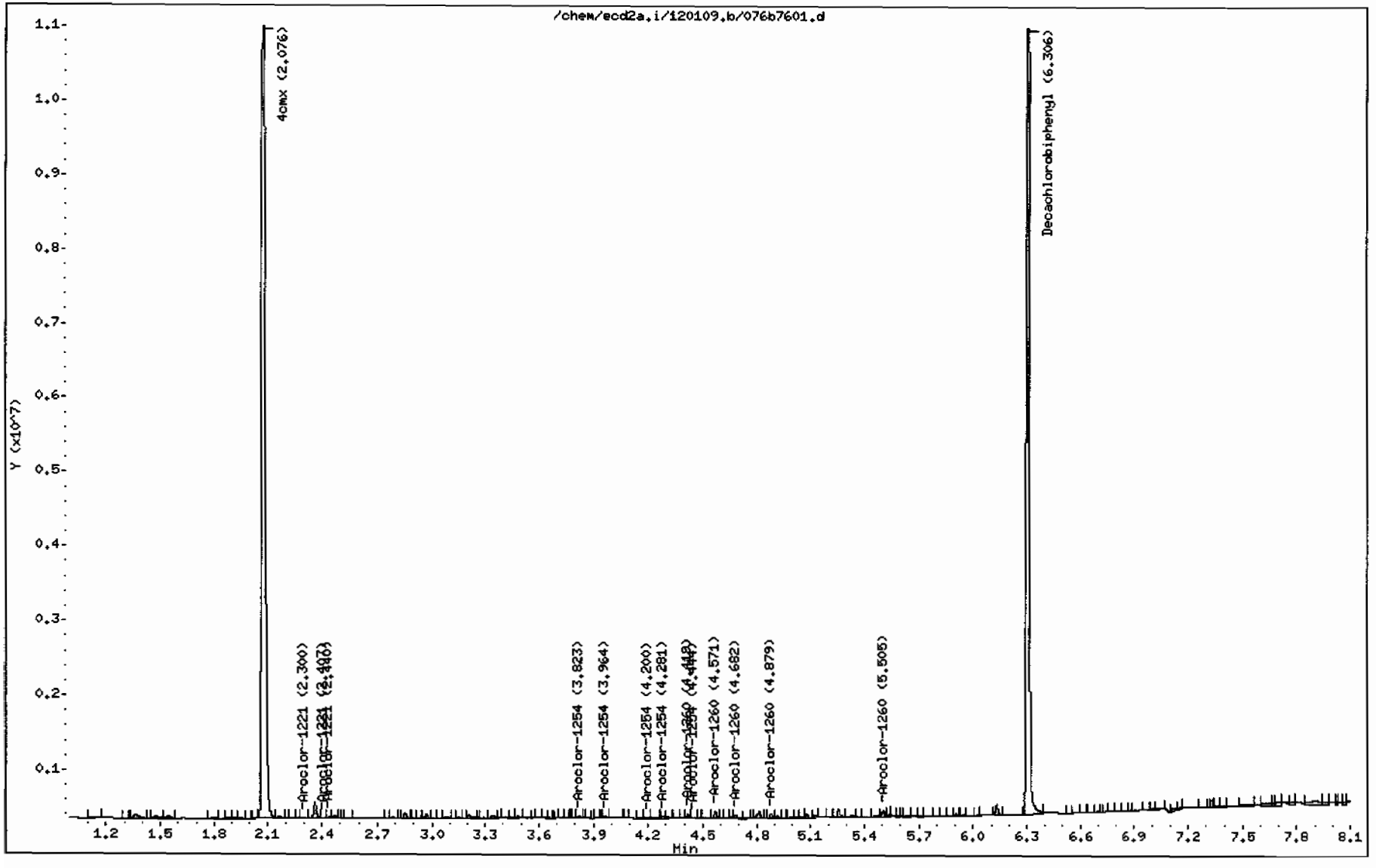

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241534002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13976	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:16	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.96	ug/kg	1.32	3.96	1
11104-28-2	Aroclor-1221	U	3.96	ug/kg	1.32	3.96	1
11141-16-5	Aroclor-1232	U	3.96	ug/kg	1.32	3.96	1
53469-21-9	Aroclor-1242	U	3.96	ug/kg	1.32	3.96	1
12672-29-6	Aroclor-1248	U	3.96	ug/kg	1.32	3.96	1
11097-69-1	Aroclor-1254		16.7	ug/kg	1.32	3.96	1
11096-82-5	Aroclor-1260		16.1	ug/kg	1.32	3.96	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/079f7901.d
Lab Smp Id: 241534002 Client Smp ID: RE03-09-13976
Inj Date : 01-DEC-2009 23:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534002|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13976|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 79
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	16.30520	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	9216718	159.704	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	6847655	124.891	4.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.244	3.245	-0.001	909944	437.462	17.3	80.00- 120.00	100.00
3.427	3.427	0.000	848207	305.976	12.1	115.38- 155.38	93.22
3.696	3.696	0.000	1251337	334.368	13.2	165.59- 205.59	137.52
3.887	3.887	0.000	1001904	360.047	14.2	116.99- 156.99	110.11

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.017	4.017	0.000	1863469	675.159	26.7	114.90- 154.90	204.79
Average of Peak Concentrations =					16.7		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	1863469	458.216	18.1	80.00- 120.00	100.00
4.288	4.288	0.000	561741	222.180	8.8	39.98- 79.98	30.14
4.454	4.454	0.000	1323539	512.364	20.3	41.33- 81.33	71.03
4.667	4.666	0.001	1306039	216.371	8.6	123.75- 163.75	70.09
4.856	4.855	0.001	1055916	362.615	14.4	48.23- 88.23	56.66
Average of Peak Concentrations =					14.0		

Data File: /chem/ecd2a.i/120109.b/079f7901.d
Date : 01-DEC-2009 23:16
Client ID: RE03-09-13976
Sample Info: |241534002|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

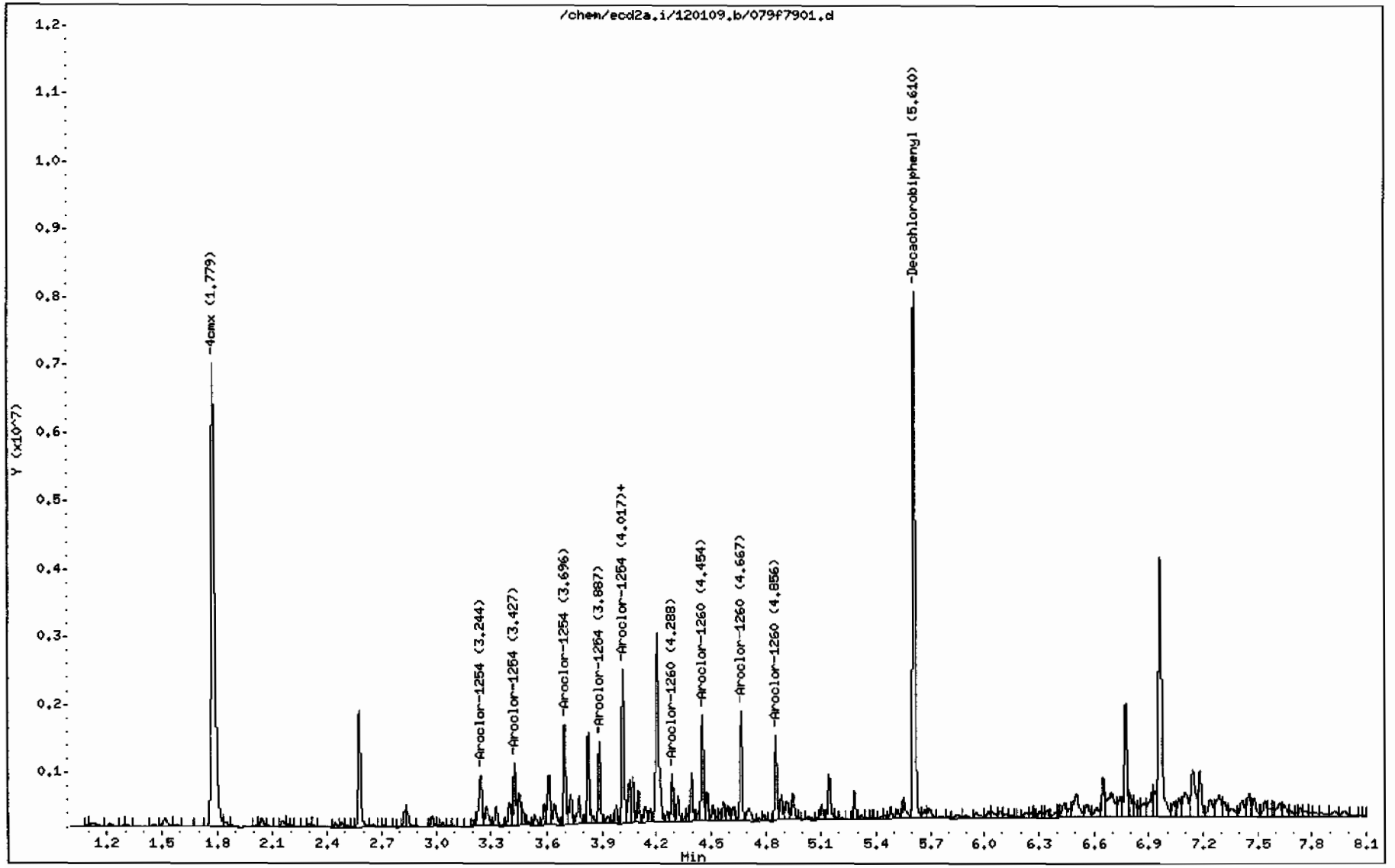

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/079b7901.d
Lab Smp Id: 241534002 Client Smp ID: RE03-09-13976
Inj Date : 01-DEC-2009 23:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534002|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13976|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 79
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	16.30520	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	19765089	167.218	6.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.304	0.002	14632420	134.685	5.3	80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	1912376	383.603	15.2	80.00- 120.00	100.00(M)
3.964	3.963	0.001	2299933	396.612	15.7	96.76- 136.76	120.27
4.200	4.200	0.000	1635762	406.604	16.1	61.64- 101.64	85.54
4.281	4.280	0.001	2797578	361.848	14.3	137.47- 177.47	146.29

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.444	4.444	0.000	2119409	377.905	15.0	91.37- 131.37	110.83
Average of Peak Concentrations =					15.2		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	2712303	492.015	19.5	80.00- 120.00	100.00(M)
4.570	4.569	0.001	2721585	381.604	15.1	107.33- 147.33	100.34
4.681	4.681	0.000	2408830	509.119	20.2	63.39- 103.39	88.81
4.880	4.879	0.001	1999069	344.628	13.6	78.36- 118.36	73.70
5.505	5.505	0.000	2729915	301.959	12.0	131.09- 171.09	100.65
Average of Peak Concentrations =					16.1		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/079b7901.d
Date : 01-DEC-2009 23:16
Client ID: RE03-09-13976
Sample Info: |241534002|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

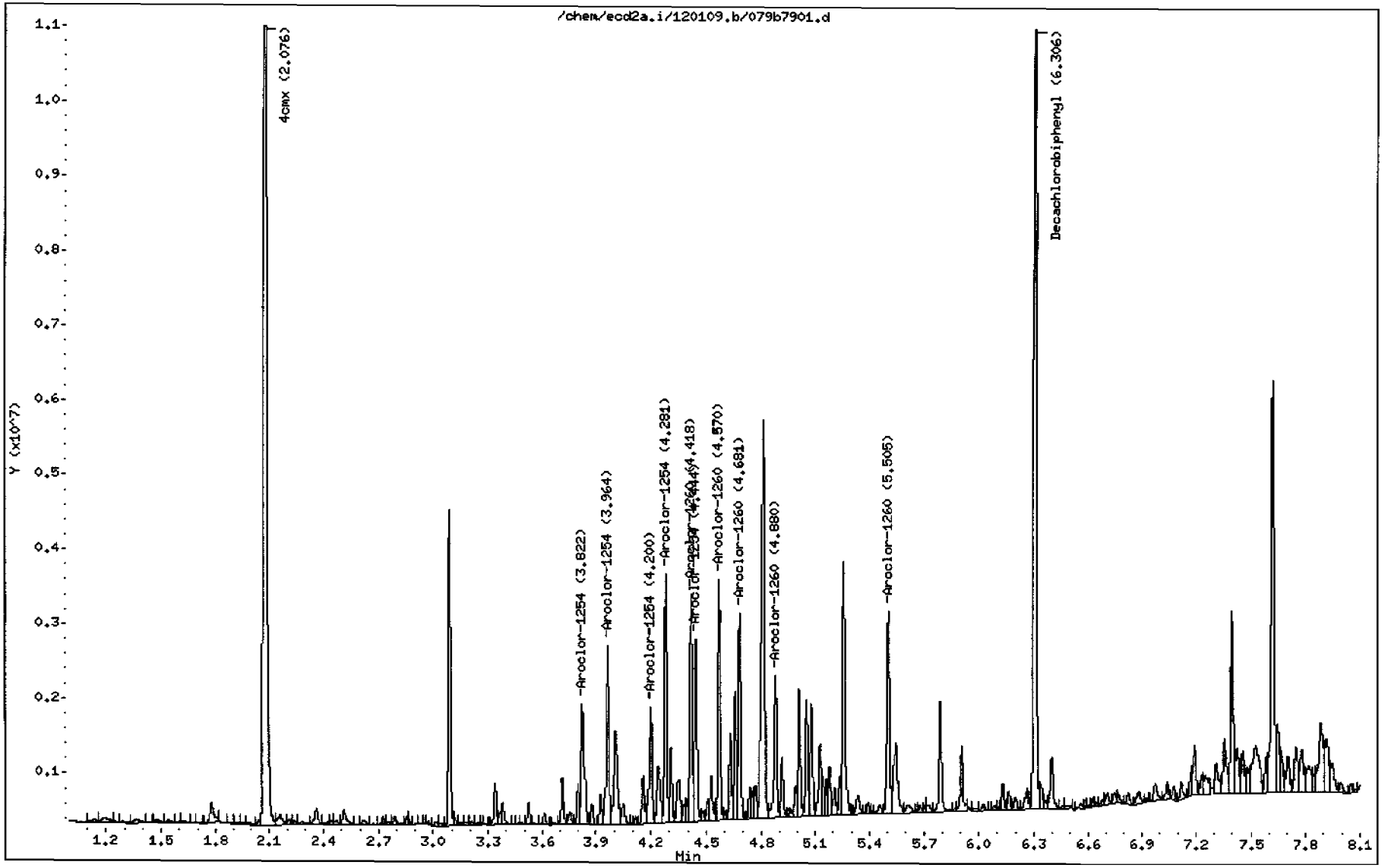

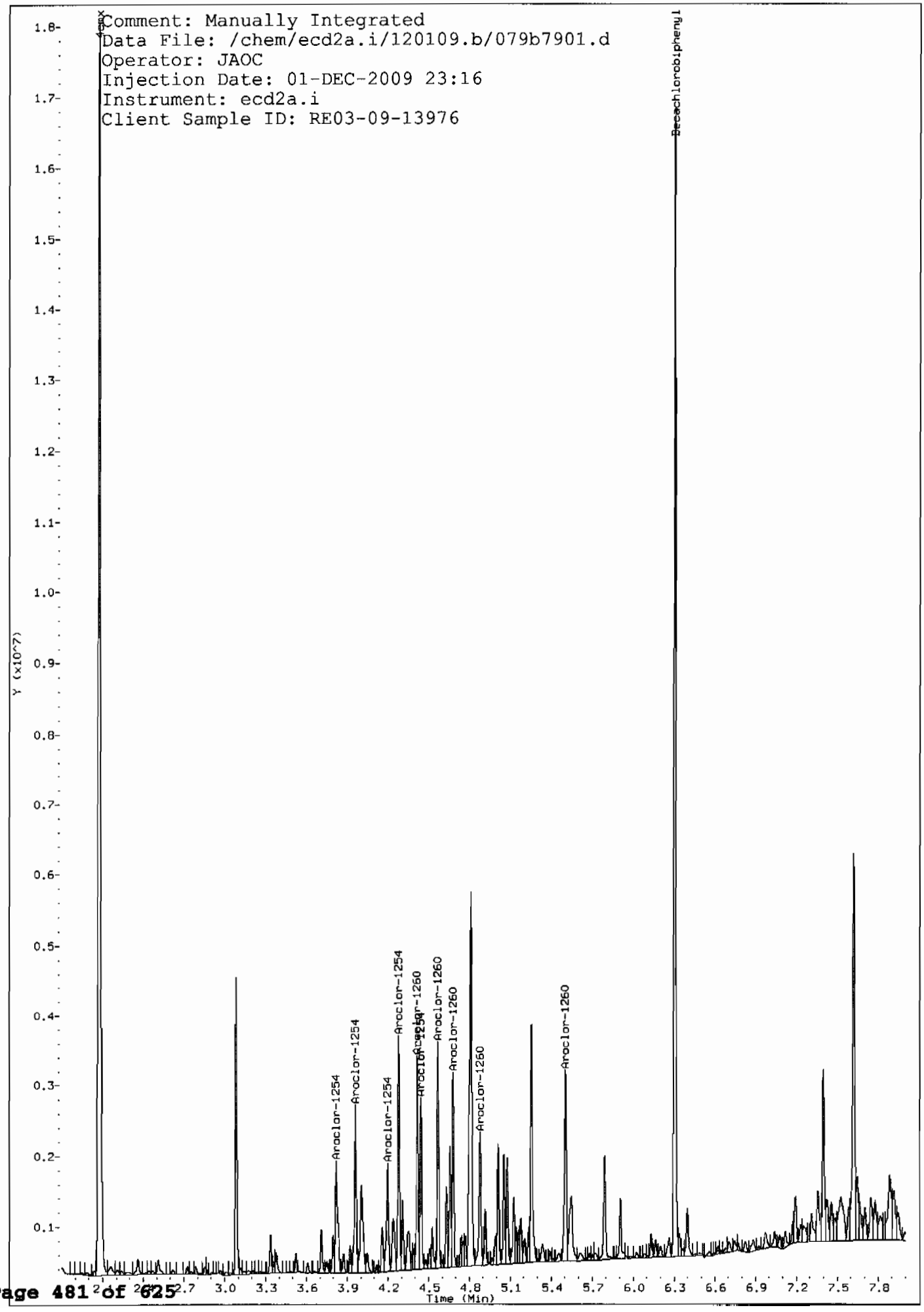
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/079b7901.d
Operator: JAOC
Injection Date: 01-DEC-2009 23:16
Instrument: ecd2a.i
Client Sample ID: RE03-09-13976
Decachlorobiphenyl
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
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Y (x10^7)
Time (Min)

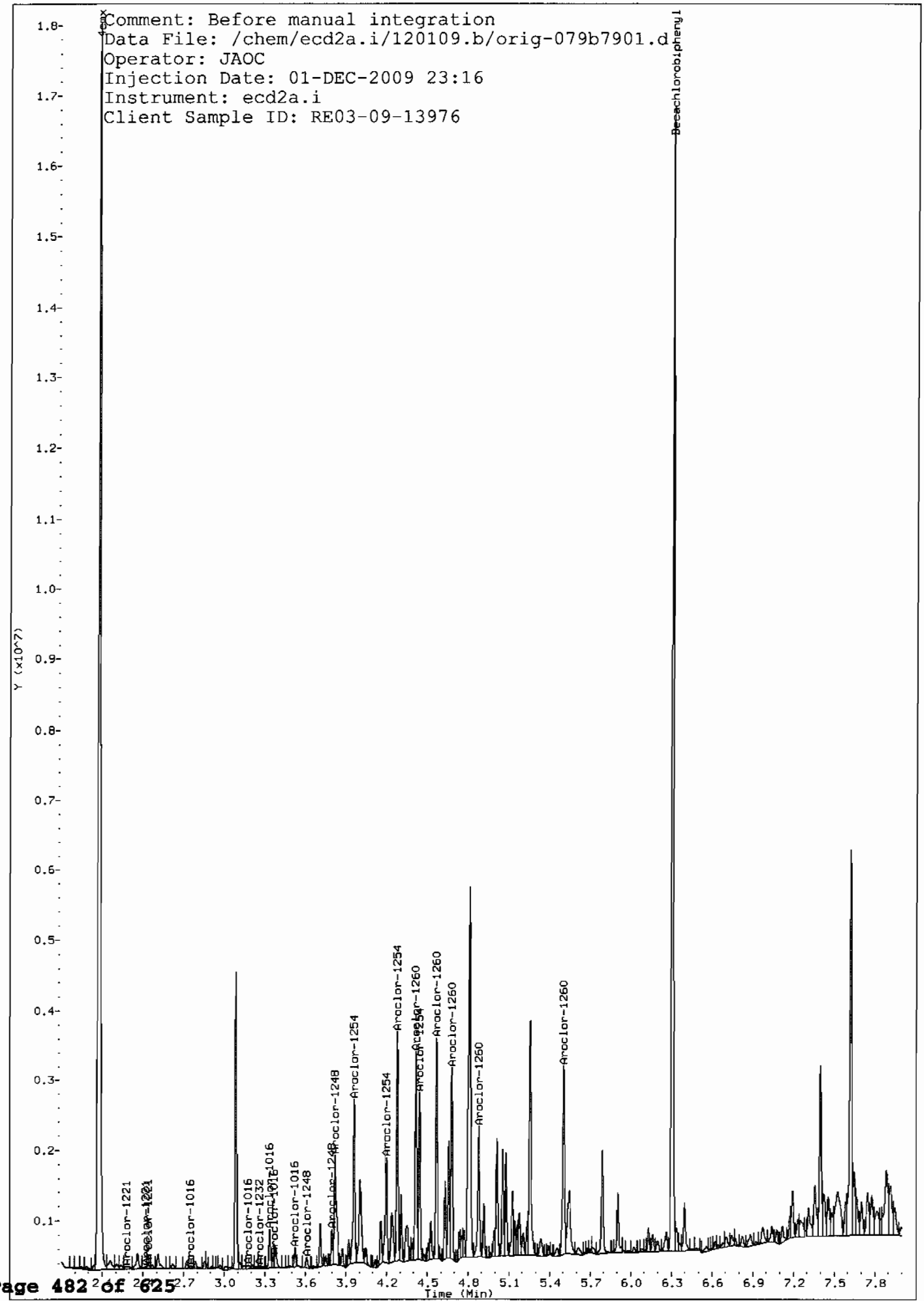
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Data File: /chem/ecd2a.i/120109.b/orig-079b7901.d
Operator: JAOC
Injection Date: 01-DEC-2009 23:16
Instrument: ecd2a.i
Client Sample ID: RE03-09-13976
Decachlorobiphenyl
Aroclor-1221
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534005**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13977**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:49**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**082f8201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	082b8201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.97	ug/kg	1.32	3.97	1
11104–28–2	Aroclor–1221	U	3.97	ug/kg	1.32	3.97	1
11141–16–5	Aroclor–1232	U	3.97	ug/kg	1.32	3.97	1
53469–21–9	Aroclor–1242	U	3.97	ug/kg	1.32	3.97	1
12672–29–6	Aroclor–1248	U	3.97	ug/kg	1.32	3.97	1
11097–69–1	Aroclor–1254	U	3.97	ug/kg	1.32	3.97	1
11096–82–5	Aroclor–1260	U	3.97	ug/kg	1.32	3.97	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/082f8201.d
Lab Smp Id: 241534005 Client Smp ID: RE03-09-13977
Inj Date : 01-DEC-2009 23:49
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534005|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13977|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 82
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	16.09930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	9508287	164.756	6.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8253838	150.537	6.0	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/082f8201.d
Date : 01-DEC-2009 23:49
Client ID: RE03-09-13977
Sample Info: |241534005|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

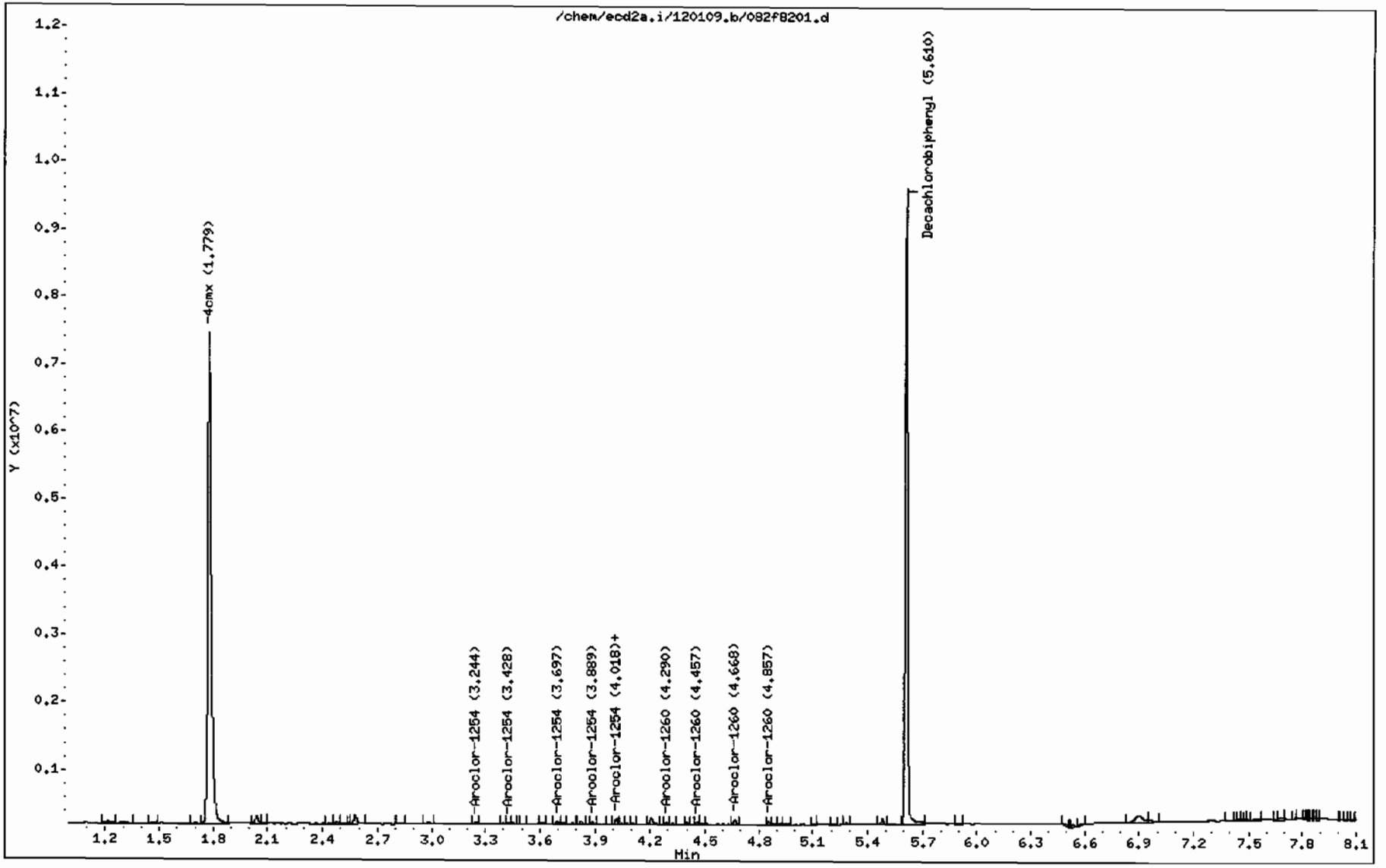

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/082b8201.d
Lab Smp Id: 241534005 Client Smp ID: RE03-09-13977
Inj Date : 01-DEC-2009 23:49
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534005|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-09-13977|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 82
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	16.09930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	20610818	174.373	6.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	13150002	121.040	4.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/082b8201.d
Date : 01-DEC-2009 23:49
Client ID: RE03-09-13977
Sample Info: 1241534005111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

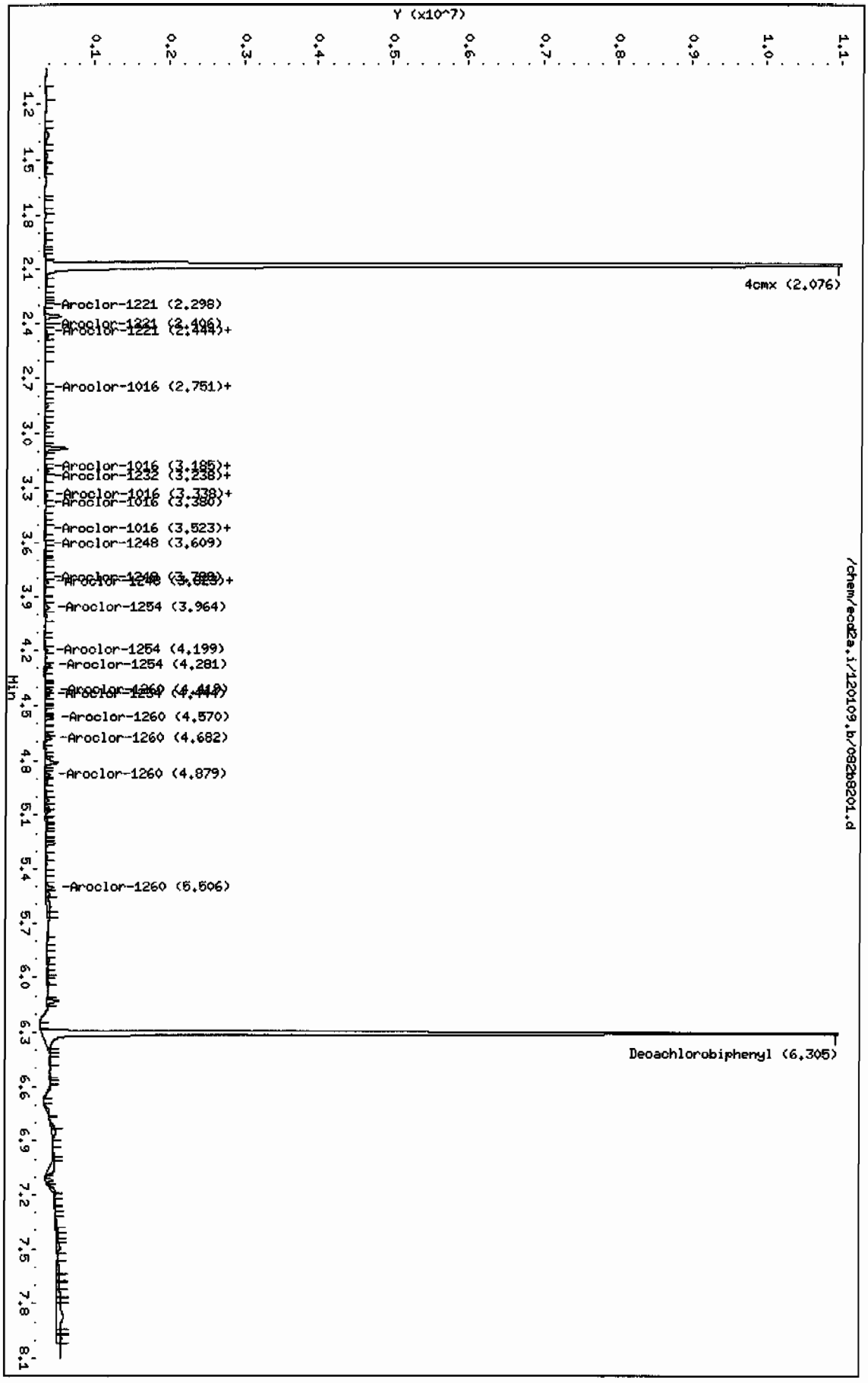

Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–601**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241534008**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–10–3915**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 00:34**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**086f8601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	086b8601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.66	ug/kg	1.22	3.66	1
11104–28–2	Aroclor–1221	U	3.66	ug/kg	1.22	3.66	1
11141–16–5	Aroclor–1232	U	3.66	ug/kg	1.22	3.66	1
53469–21–9	Aroclor–1242	U	3.66	ug/kg	1.22	3.66	1
12672–29–6	Aroclor–1248	U	3.66	ug/kg	1.22	3.66	1
11097–69–1	Aroclor–1254	U	3.66	ug/kg	1.22	3.66	1
11096–82–5	Aroclor–1260	U	3.66	ug/kg	1.22	3.66	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/086f8601.d
Lab Smp Id: 241534008 Client Smp ID: RE03-10-3915
Inj Date : 02-DEC-2009 00:34
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534008|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-10-3915|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 86
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	9.34110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	9117273	157.981	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7872026	143.573	5.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/086f8601.d

Date : 02-DEC-2009 00:34

Client ID: RE03-10-3915

Sample Info: |241534008|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

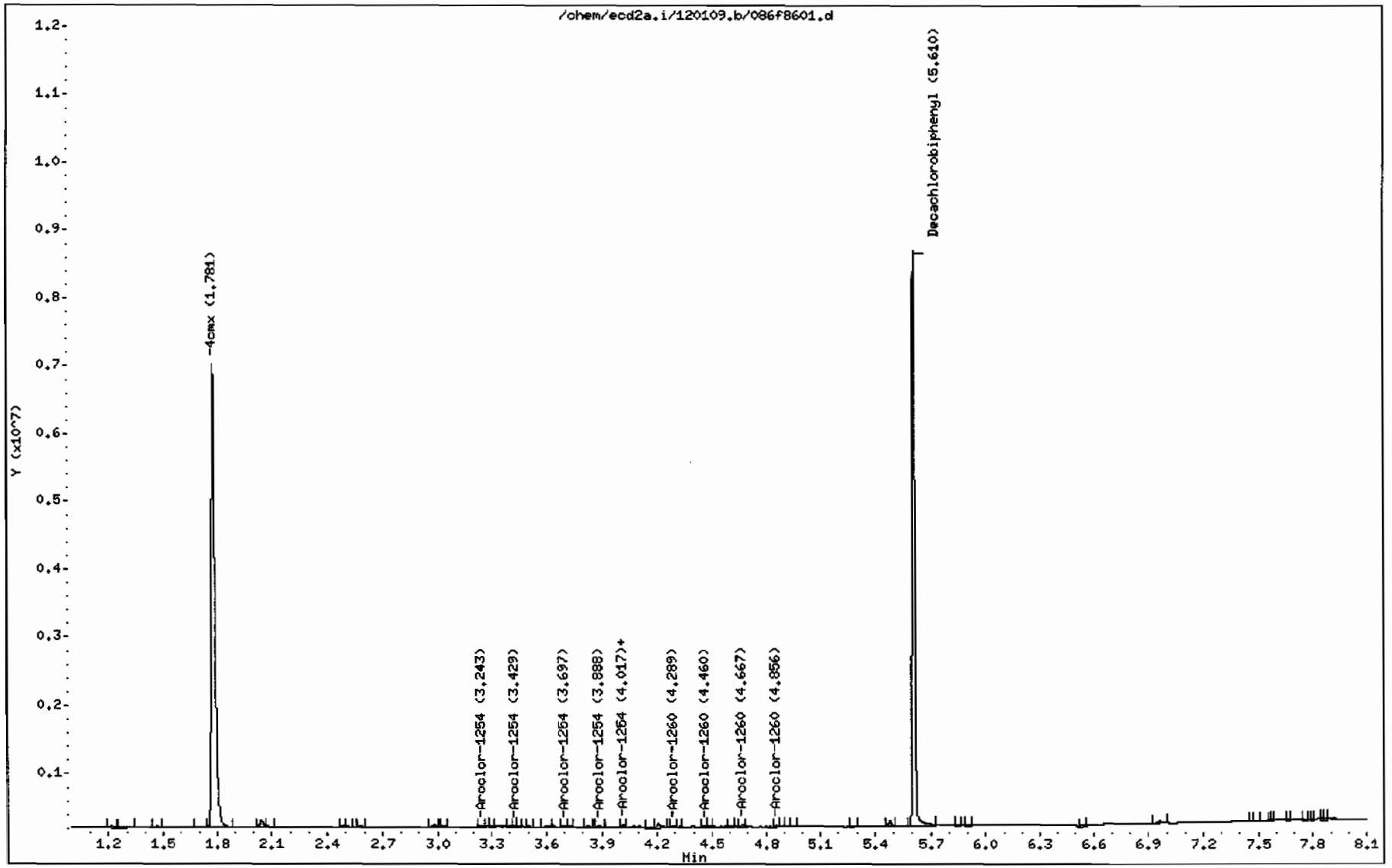

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/086b8601.d
Lab Smp Id: 241534008 Client Smp ID: RE03-10-3915
Inj Date : 02-DEC-2009 00:34
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241534008|1|
Misc Info : |ECD82P_1S|927078|SVA|LANL|SOIL|RE03-10-3915|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 86
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	9.34110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	19818247	167.667	6.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.304	0.002	13816033	127.171	4.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/086b8601.d
Date : 02-DEC-2009 00:34
Client ID: RE03-10-3915
Sample Info: |241534008|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

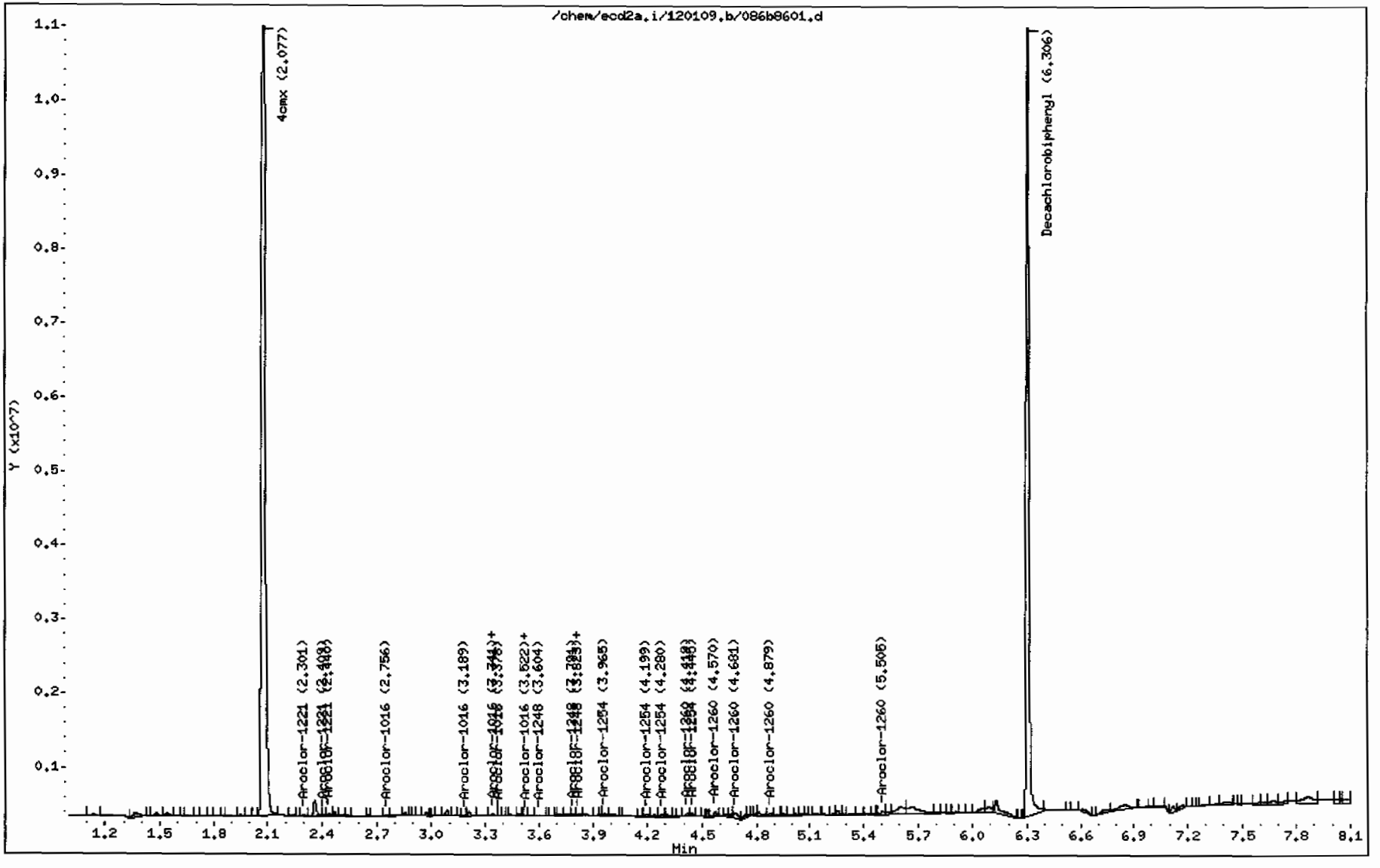

STANDARDS DATA

Report Date: 02-Dec-2009 07:31

Calibration History

Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008f0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 01:29	AR1660	/chem/ecd2a.i/120109.b/091f9101.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 00:00	AR1660	/chem/ecd2a.i/120109.b/083f8301.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 19:33	AR1660	/chem/ecd2a.i/120109.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 21:47	AR1660	/chem/ecd2a.i/120109.b/071f7101.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 17:20	AR1660	/chem/ecd2a.i/120109.b/047f4701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 15:14	AR1660	/chem/ecd2a.i/120109.b/036f3601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 11:14	AR1660	/chem/ecd2a.i/120109.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 12:56	AR1660	/chem/ecd2a.i/120109.b/024f2401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:48	AR1248	/chem/ecd2a.i/120109.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:37	AR1268	/chem/ecd2a.i/120109.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:26	AR1262	/chem/ecd2a.i/120109.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:15	AR1221	/chem/ecd2a.i/120109.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:04	AR1232	/chem/ecd2a.i/120109.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:53	AR1248	/chem/ecd2a.i/120109.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:41	AR1242	/chem/ecd2a.i/120109.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:30	AR1254	/chem/ecd2a.i/120109.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:19	AR1660	/chem/ecd2a.i/120109.b/002f0201.d

Report Date: 02-Dec-2009 07:31

Calibration History

Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008b0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 01:29	AR1660	/chem/ecd2a.i/120109.b/091b9101.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 00:00	AR1660	/chem/ecd2a.i/120109.b/083b8301.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 21:47	AR1660	/chem/ecd2a.i/120109.b/071b7101.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 19:33	AR1660	/chem/ecd2a.i/120109.b/059b5901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 17:20	AR1660	/chem/ecd2a.i/120109.b/047b4701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 15:14	AR1660	/chem/ecd2a.i/120109.b/036b3601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 12:56	AR1660	/chem/ecd2a.i/120109.b/024b2401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 11:14	AR1660	/chem/ecd2a.i/120109.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 11:14	AR1660	/chem/ecd2a.i/120109.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:48	AR1248	/chem/ecd2a.i/120109.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:37	AR1268	/chem/ecd2a.i/120109.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:26	AR1262	/chem/ecd2a.i/120109.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:15	AR1221	/chem/ecd2a.i/120109.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 09:04	AR1232	/chem/ecd2a.i/120109.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:53	AR1248	/chem/ecd2a.i/120109.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:41	AR1242	/chem/ecd2a.i/120109.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 08:30	AR1254	/chem/ecd2a.i/120109.b/003b0301.d

| Ccal Level: 4 , Ccal Amount: 1000 |

01-DEC-2009 08:19	AR1660	/chem/ecd2a.i/120109.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 02-Dec-2009 06:31 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.279	2.249-2.309	2.100e+03
	2.602	2.572-2.632	4.505e+03
	2.692	2.662-2.722	1.820e+03
	2.827	2.797-2.857	9.329e+02
	2.978	2.948-3.008	1.378e+03
2 Aroclor-1221	1.445	1.415-1.475	4.641e+02
	1.904	1.874-1.934	6.570e+02
	2.004	1.974-2.034	3.467e+02
3 Aroclor-1232	2.032	2.002-2.062	1.165e+03
	2.280	2.250-2.310	9.314e+02
	2.693	2.663-2.723	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.735	2.705-2.765	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.978	2.948-3.008	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
		3.427	3.397-3.457	2.772e+03
		3.696	3.666-3.726	3.742e+03
		3.887	3.857-3.917	2.783e+03
		4.017	3.987-4.047	2.760e+03
	7 Aroclor-1260	4.016	3.986-4.046	4.067e+03
		4.288	4.258-4.318	2.528e+03
		4.454	4.424-4.484	2.583e+03
		4.666	4.636-4.696	6.036e+03
		4.855	4.825-4.885	2.912e+03
	8 Aroclor-1262	3.826	3.796-3.856	1.983e+03
		4.018	3.988-4.048	2.689e+03
		4.289	4.259-4.319	3.536e+03
		4.455	4.425-4.485	3.145e+03
		4.856	4.826-4.886	2.254e+03
	9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
		4.912	4.882-4.942	9.361e+03
		5.045	5.015-5.075	7.073e+03
		5.283	5.253-5.313	3.056e+03
		5.479	5.449-5.509	2.201e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.779	1.749-1.809	5.771e+04
$	12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
	13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
	14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
	15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 02-Dec-2009 05:55 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.750	2.720-2.780	4.258e+03
	3.184	3.154-3.214	3.445e+03
	3.335	3.305-3.365	1.979e+03
	3.364	3.334-3.394	2.061e+03
	3.522	3.492-3.552	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.403	2.373-2.433	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.448	2.418-2.478	2.061e+03
	2.751	2.721-2.781	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.256	3.226-3.286	9.309e+02
	3.522	3.492-3.552	1.107e+03
4 Aroclor-1242	2.750	2.720-2.780	3.445e+03
	3.184	3.154-3.214	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.335	3.305-3.365	1.508e+03
	3.523	3.493-3.553	2.145e+03
5 Aroclor-1248	3.335	3.305-3.365	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.797	3.767-3.827	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.822	3.792-3.852	4.985e+03
		3.963	3.933-3.993	5.799e+03
		4.200	4.170-4.230	4.023e+03
		4.280	4.250-4.310	7.731e+03
		4.444	4.414-4.474	5.608e+03
	7 Aroclor-1260	4.418	4.388-4.448	5.513e+03
		4.569	4.539-4.599	7.132e+03
		4.681	4.651-4.711	4.731e+03
		4.879	4.849-4.909	5.801e+03
		5.505	5.475-5.535	9.041e+03
	8 Aroclor-1262	4.419	4.389-4.449	3.827e+03
		4.570	4.540-4.600	5.052e+03
		4.879	4.849-4.909	7.695e+03
		5.080	5.050-5.110	6.486e+03
		5.257	5.227-5.287	1.455e+04
	9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
		5.535	5.505-5.565	2.018e+04
		5.707	5.677-5.737	1.496e+04
		5.907	5.877-5.937	6.438e+03
		6.130	6.100-6.160	4.409e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.075	2.045-2.105	1.182e+05
$	12 Decachlorobiphenyl	6.304	6.274-6.334	1.086e+05
	13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
	14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
	15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Cal Date : 02-Dec-2009 06:31 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035f3501.d
Level 2: /chem/ecd2a.i/111209a.b/036f3601.d
Level 3: /chem/ecd2a.i/111209a.b/037f3701.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/111209a.b/039f3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	$\overline{RRF}$	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Cal Date : 02-Dec-2009 06:31 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
	(2)	2598	2539	2501	2535	2469	2528	1.903
	(3)	2625	2577	2548	2609	2557	2583	1.287
	(4)	5914	5894	5999	6196	6179	6036	2.381
	(5)	2944	2846	2851	2940	2978	2912	2.044
	8 Aroclor-1262(1)	+++++	+++++	+++++	1983	+++++	1983	0.000
	(2)	+++++	+++++	+++++	2689	+++++	2689	0.000
	(3)	+++++	+++++	+++++	3536	+++++	3536	0.000
	(4)	+++++	+++++	+++++	3145	+++++	3145	0.000
	(5)	+++++	+++++	+++++	2254	+++++	2254	0.000
	9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
	(2)	9332	9272	9238	9197	9765	9361	2.470
	(3)	6985	6923	6953	6984	7523	7073	3.568
	(4)	3112	3015	2984	2964	3207	3056	3.331
	(5)	21397	21592	21760	21851	23464	22013	3.767
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
	14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
	15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$	11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$	12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Cal Date : 02-Dec-2009 05:55 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035b3501.d
Level 2: /chem/ecd2a.i/111209a.b/036b3601.d
Level 3: /chem/ecd2a.i/111209a.b/037b3701.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/111209a.b/039b3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Cal Date : 02-Dec-2009 05:55 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	+++++	+++++	+++++	3827	+++++	3827	0.000
(2)	+++++	+++++	+++++	5052	+++++	5052	0.000
(3)	+++++	+++++	+++++	7695	+++++	7695	0.000
(4)	+++++	+++++	+++++	6486	+++++	6486	0.000
(5)	+++++	+++++	+++++	14548	+++++	14548	0.000
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0819

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1929.050	0.01	-8.1	15.0
(2)	4504.513	4228.004	0.01	-6.1	15.0
(3)	1820.211	1663.316	0.01	-8.6	15.0
(4)	932.883	812.926	0.01	-12.8	15.0
(5)	1378.125	1257.961	0.01	-8.7	15.0
Aroclor-1260	4066.794	4006.816	0.01	-1.5	15.0
(2)	2528.317	2462.617	0.01	-2.6	15.0
(3)	2583.202	2523.605	0.01	-2.3	15.0
(4)	6036.106	6011.590	0.01	-0.4	15.0
(5)	2911.947	2857.590	0.01	-1.9	15.0
4cmx	57711.247	61068.410	0.01	5.8	15.0
Decachlorobiphenyl	54829.246	52393.690	0.01	-4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0819

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4116.757	0.01	-3.3	15.0
(2)	3444.681	3313.702	0.01	-3.8	15.0
(3)	1979.487	1917.398	0.01	-3.1	15.0
(4)	2061.253	1995.940	0.01	-3.2	15.0
(5)	2754.170	2721.253	0.01	-1.2	15.0
Aroclor-1260	5512.644	5703.714	0.01	3.5	15.0
(2)	7131.968	7371.959	0.01	3.4	15.0
(3)	4731.365	4928.364	0.01	4.2	15.0
(4)	5800.657	5891.557	0.01	1.6	15.0
(5)	9040.681	9394.194	0.01	3.9	15.0
4cmx	118199.83	130134.90	0.01	10.1	15.0
Decachlorobiphenyl	108641.52	109657.99	0.01	0.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0830

Lab File ID: 003F0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1933.570	0.01	-7.0	15.0
(2)	2772.138	2617.595	0.01	-5.6	15.0
(3)	3742.400	3588.524	0.01	-4.1	15.0
(4)	2782.705	2648.810	0.01	-4.8	15.0
(5)	2760.043	2608.380	0.01	-5.5	15.0
4cmx	57711.247	64276.360	0.01	11.4	15.0
Decachlorobiphenyl	54829.246	56627.600	0.01	3.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0830

Lab File ID: 003B0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4886.308	0.01	-2.0	15.0	
(2)	5798.946	5705.323	0.01	-1.6	15.0	
(3)	4022.990	3988.969	0.01	-0.8	15.0	
(4)	7731.372	7694.603	0.01	-0.5	15.0	
(5)	5608.308	5441.758	0.01	-3.0	15.0	
4cmx	118199.83	138872.22	0.01	17.5	15.0	<-
Decachlorobiphenyl	108641.52	118915.50	0.01	9.4	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 2147

Lab File ID: 071F7101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2004.622	0.01	-4.5	15.0
(2)	4504.513	4377.481	0.01	-2.8	15.0
(3)	1820.211	1722.126	0.01	-5.4	15.0
(4)	932.883	845.038	0.01	-9.4	15.0
(5)	1378.125	1303.128	0.01	-5.4	15.0
Aroclor-1260	4066.794	4171.397	0.01	2.6	15.0
(2)	2528.317	2535.539	0.01	0.3	15.0
(3)	2583.202	2584.355	0.01	0.0	15.0
(4)	6036.106	6146.696	0.01	1.8	15.0
(5)	2911.947	2915.592	0.01	0.1	15.0
4cmx	57711.247	62640.270	0.01	8.5	15.0
Decachlorobiphenyl	54829.246	50363.350	0.01	-8.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 2147

Lab File ID: 071B7101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4271.054	0.01	0.3	15.0
(2)	3444.681	3427.215	0.01	-0.5	15.0
(3)	1979.487	1967.846	0.01	-0.6	15.0
(4)	2061.253	2071.726	0.01	0.5	15.0
(5)	2754.170	2821.385	0.01	2.4	15.0
Aroclor-1260	5512.644	5816.856	0.01	5.5	15.0
(2)	7131.968	7476.776	0.01	4.8	15.0
(3)	4731.365	4924.199	0.01	4.1	15.0
(4)	5800.657	5797.610	0.01	-0.0	15.0
(5)	9040.681	9037.267	0.01	-0.0	15.0
4cmx	118199.83	134790.75	0.01	14.0	15.0
Decachlorobiphenyl	108641.52	94300.730	0.01	-13.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0000

Lab File ID: 083F8301 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2060.686	0.01	-1.9	15.0
(2)	4504.513	4331.233	0.01	-3.8	15.0
(3)	1820.211	1707.251	0.01	-6.2	15.0
(4)	932.883	844.470	0.01	-9.5	15.0
(5)	1378.125	1303.696	0.01	-5.4	15.0
Aroclor-1260	4066.794	4124.206	0.01	1.4	15.0
(2)	2528.317	2523.819	0.01	-0.2	15.0
(3)	2583.202	2574.281	0.01	-0.3	15.0
(4)	6036.106	6158.896	0.01	2.0	15.0
(5)	2911.947	2940.128	0.01	1.0	15.0
4cmx	57711.247	61718.590	0.01	6.9	15.0
Decachlorobiphenyl	54829.246	50228.940	0.01	-8.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0000

Lab File ID: 083B8301 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4214.187	0.01	-1.0	15.0
(2)	3444.681	3421.530	0.01	-0.7	15.0
(3)	1979.487	1976.972	0.01	-0.1	15.0
(4)	2061.253	2050.457	0.01	-0.5	15.0
(5)	2754.170	2816.403	0.01	2.2	15.0
Aroclor-1260	5512.644	5869.240	0.01	6.5	15.0
(2)	7131.968	7550.346	0.01	5.9	15.0
(3)	4731.365	4985.085	0.01	5.4	15.0
(4)	5800.657	5967.206	0.01	2.9	15.0
(5)	9040.681	9455.932	0.01	4.6	15.0
4cmx	118199.83	132583.55	0.01	12.2	15.0
Decachlorobiphenyl	108641.52	101381.39	0.01	-6.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0129

Lab File ID: 091F9101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2055.766	0.01	-2.1	15.0	
(2)	4504.513	4395.401	0.01	-2.4	15.0	
(3)	1820.211	1732.171	0.01	-4.8	15.0	
(4)	932.883	845.021	0.01	-9.4	15.0	
(5)	1378.125	1325.481	0.01	-3.8	15.0	
Aroclor-1260	4066.794	4125.814	0.01	1.4	15.0	
(2)	2528.317	2474.822	0.01	-2.1	15.0	
(3)	2583.202	2530.567	0.01	-2.0	15.0	
(4)	6036.106	5930.901	0.01	-1.7	15.0	
(5)	2911.947	2815.158	0.01	-3.3	15.0	
4cmx	57711.247	63027.630	0.01	9.2	15.0	
Decachlorobiphenyl	54829.246	43686.400	0.01	-20.3	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

Instrument ID: ECD2A Calibration Date: 12/02/09 Time: 0129

Lab File ID: 091B9101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4275.247	0.01	0.4	15.0	
(2)	3444.681	3463.872	0.01	0.6	15.0	
(3)	1979.487	1997.302	0.01	0.9	15.0	
(4)	2061.253	2077.488	0.01	0.8	15.0	
(5)	2754.170	2825.676	0.01	2.6	15.0	
Aroclor-1260	5512.644	5722.496	0.01	3.8	15.0	
(2)	7131.968	7286.723	0.01	2.2	15.0	
(3)	4731.365	4771.910	0.01	0.8	15.0	
(4)	5800.657	5628.643	0.01	-3.0	15.0	
(5)	9040.681	8645.843	0.01	-4.4	15.0	
4cmx	118199.83	134778.39	0.01	14.0	15.0	
Decachlorobiphenyl	108641.52	85654.780	0.01	-21.2	15.0	<-

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 01-DEC-2009 08:19
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6106841	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5239369	100.000	95.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.279	2.279	0.000	1929050	1000.00	919	80.00- 120.00	100.00(M)
2.602	2.602	0.000	4228004	1000.00	939	198.60- 238.60	219.18
2.692	2.692	0.000	1663316	1000.00	914	66.35- 106.35	86.22
2.827	2.827	0.000	812926	1000.00	871	22.88- 62.88	42.14
2.978	2.978	0.000	1257961	1000.00	913	44.54- 84.54	65.21
Average of Peak Amounts =					911		
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.016	0.000	4006816	1000.00	985	80.00- 120.00	100.00
4.288	4.288	0.000	2462617	1000.00	974	41.68- 81.68	61.46
4.454	4.454	0.000	2523605	1000.00	977	43.14- 83.14	62.98
4.666	4.666	0.000	6011590	1000.00	996	130.34- 170.34	150.03
4.855	4.855	0.000	2857590	1000.00	981	51.33- 91.33	71.32
Average of Peak Amounts =					983		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/002f0201.d
Date : 01-DEC-2009 08:19
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

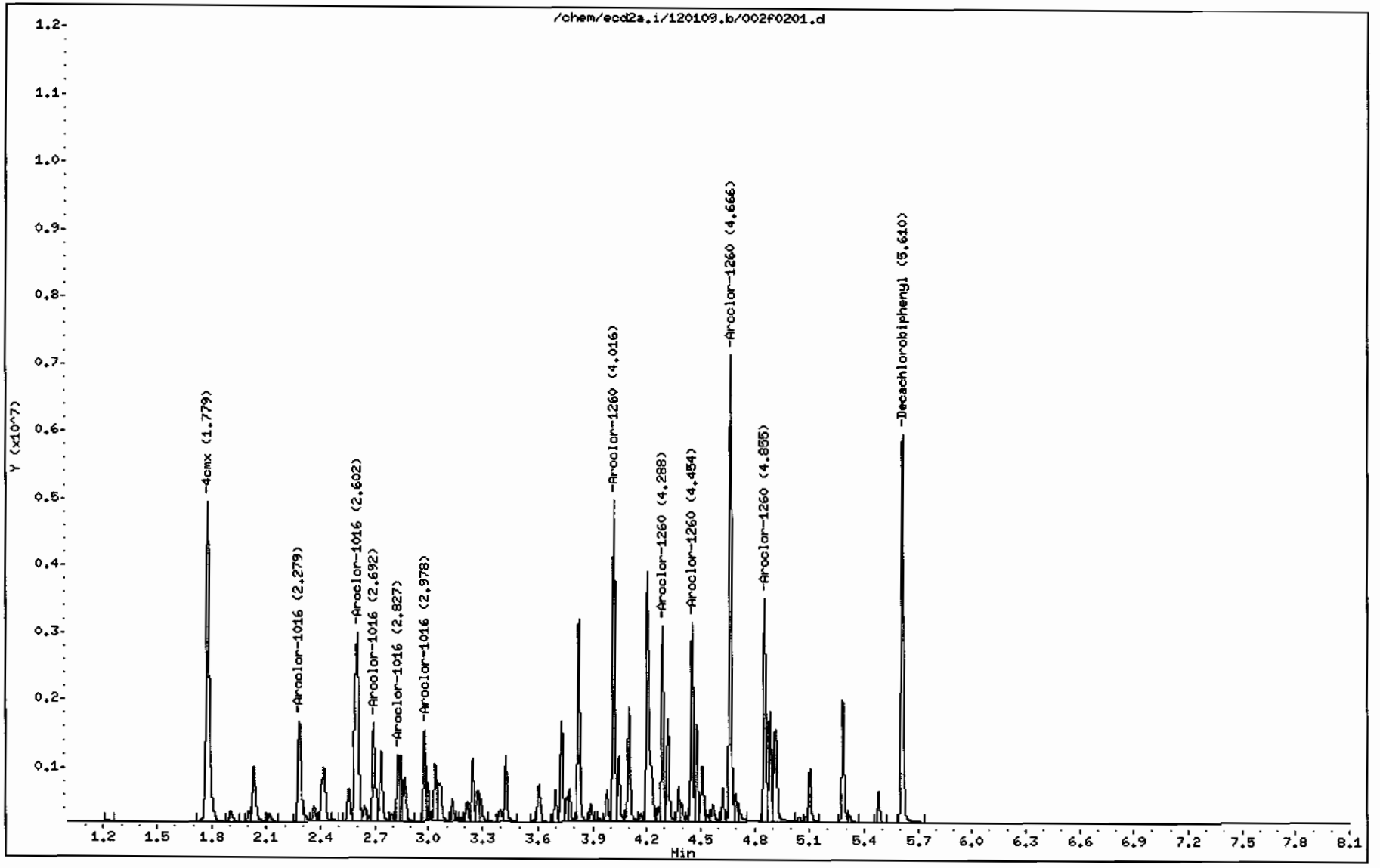

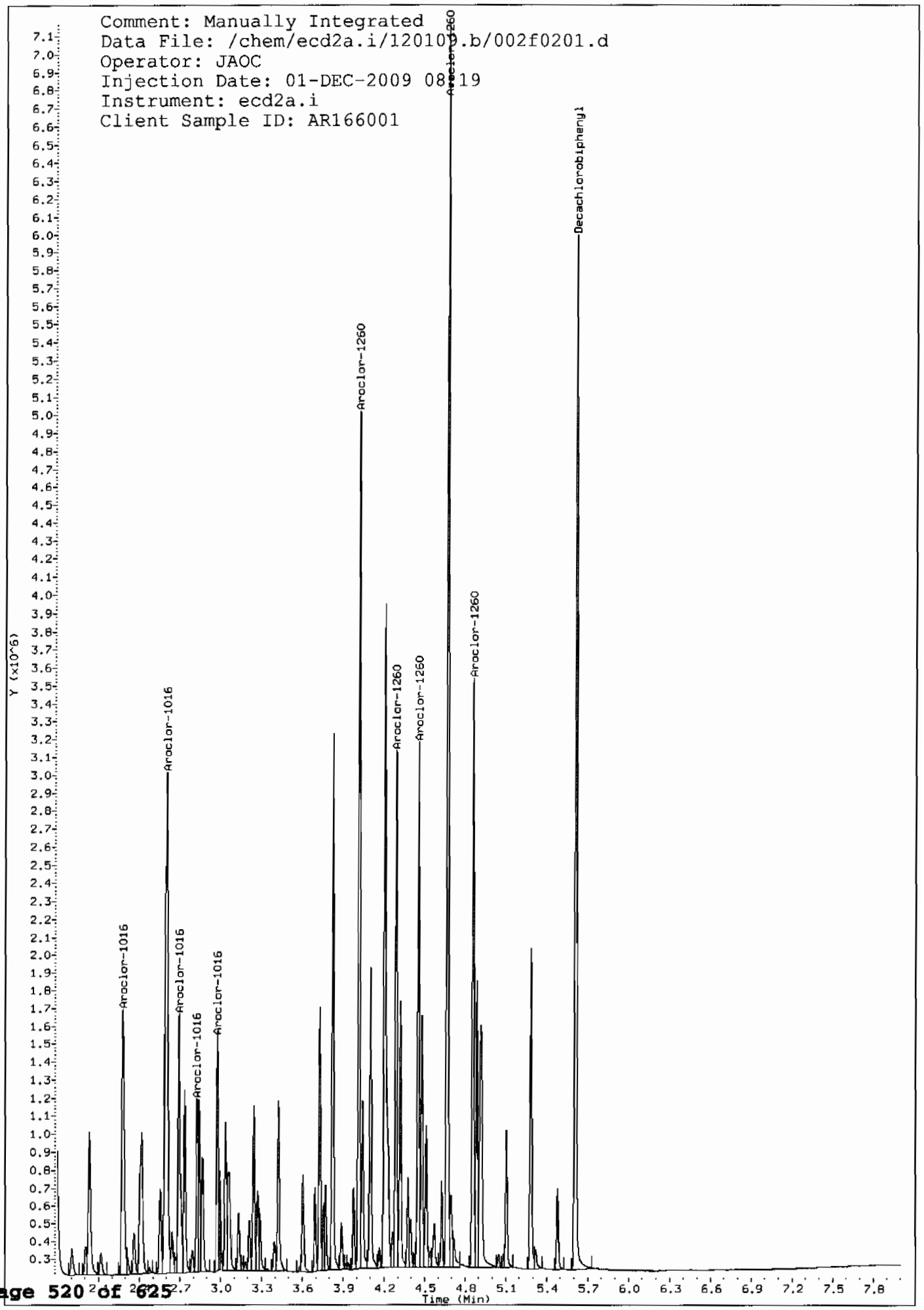
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/002f0201.d
Operator: JAOC
Injection Date: 01-DEC-2009 08:19
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1260
Decachlorobiphenyl
Aroclor-1016
Y (x10^6)
Time (Min)

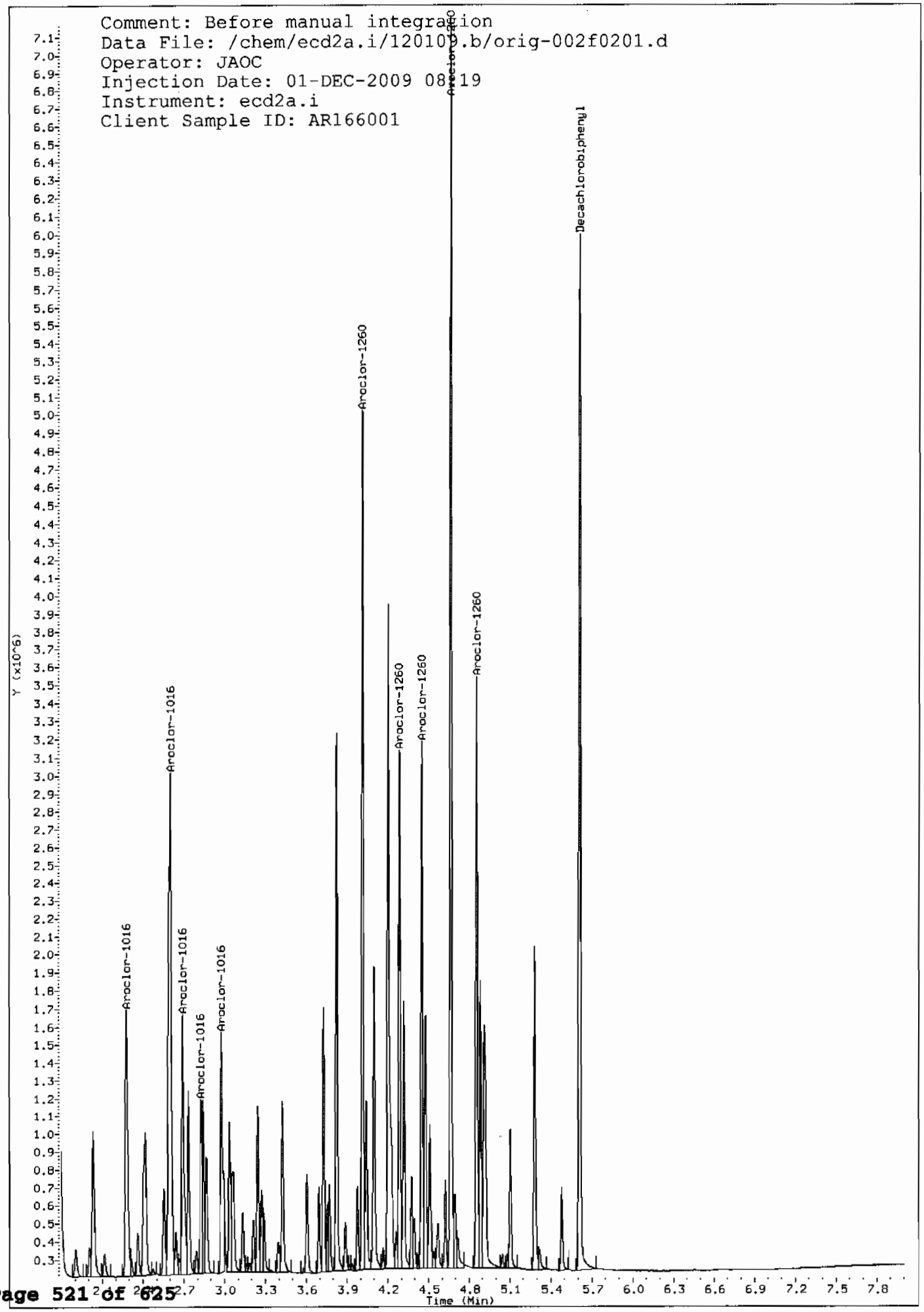
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-002f0201.d
Operator: JAOC
Injection Date: 01-DEC-2009 08:19
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 01-DEC-2009 08:19
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13013490	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.304	0.000	10965799	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.750	0.000	4116757	1000.00	967	80.00- 120.00	100.00
3.184	3.184	0.000	3313702	1000.00	962	60.64- 100.64	80.49
3.335	3.335	0.000	1917398	1000.00	969	26.90- 66.90	46.58
3.364	3.364	0.000	1995940	1000.00	968	29.03- 69.03	48.48
3.522	3.522	0.000	2721253	1000.00	988	46.26- 86.26	66.10
Average of Peak Amounts =					971		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5703714	1000.00	1030	80.00- 120.00	100.00
4.569	4.569	0.000	7371959	1000.00	1030	109.12- 149.12	129.25
4.681	4.681	0.000	4928363	1000.00	1040	66.63- 106.63	86.41
4.879	4.879	0.000	5891556	1000.00	1020	83.49- 123.49	103.29
5.505	5.505	0.000	9394193	1000.00	1040	143.68- 183.68	164.70
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/120109.b/002b0201.d
Date : 01-DEC-2009 08:19
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

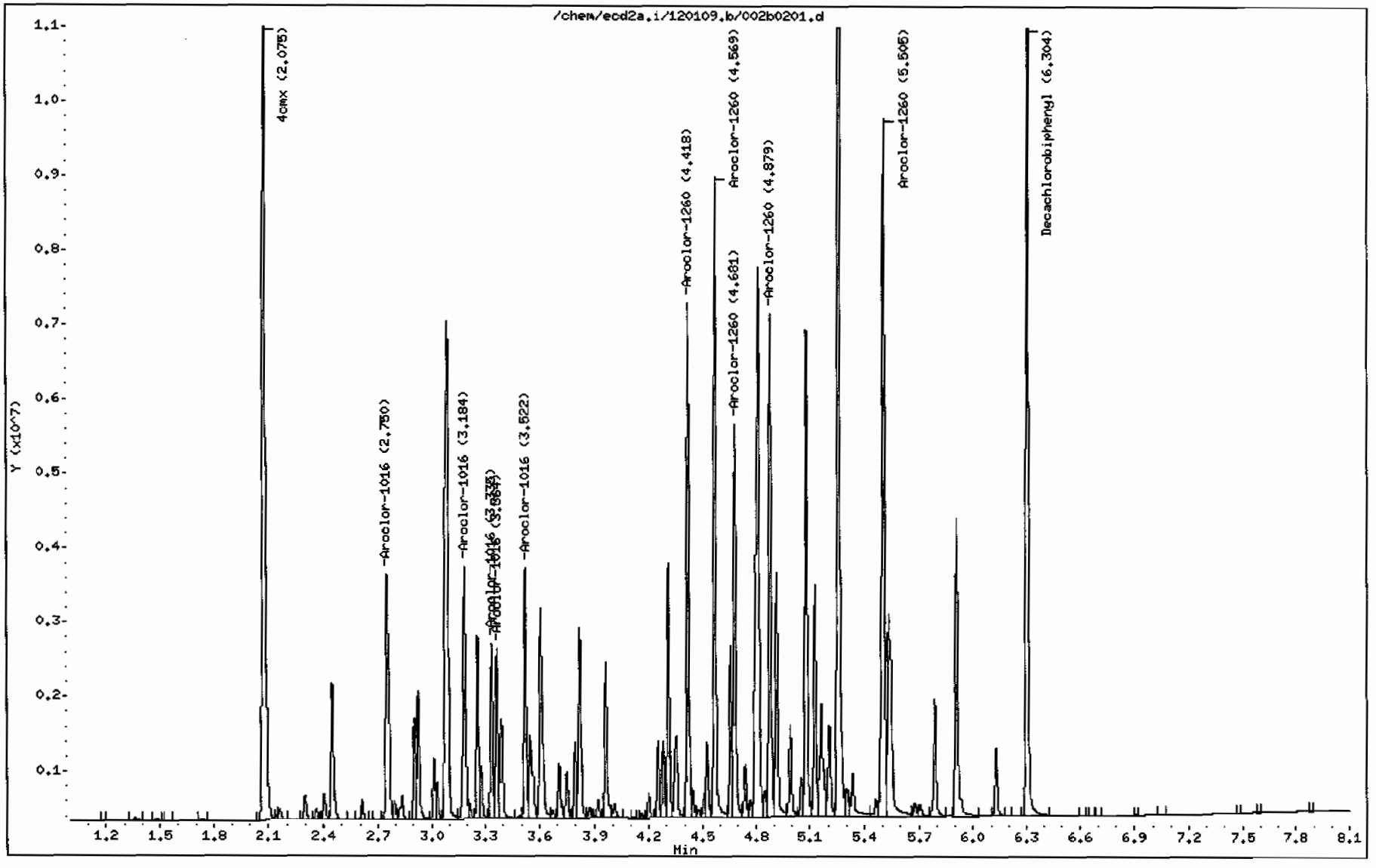

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 01-DEC-2009 08:30
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6427636	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5662760	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1933570	1000.00	930	80.00- 120.00	100.00
3.427	3.427	0.000	2617595	1000.00	944	115.38- 155.38	135.38
3.696	3.696	0.000	3588523	1000.00	959	165.59- 205.59	185.59
3.887	3.887	0.000	2648809	1000.00	952	116.99- 156.99	136.99
4.017	4.017	0.000	2608380	1000.00	945	114.90- 154.90	134.90
			Average of Peak Amounts =		946		

Data File: /chem/ecd2a.i/120109.b/003f0301.d
Date : 01-DEC-2009 08:30
Client ID: AR125401
Sample Info: !WAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

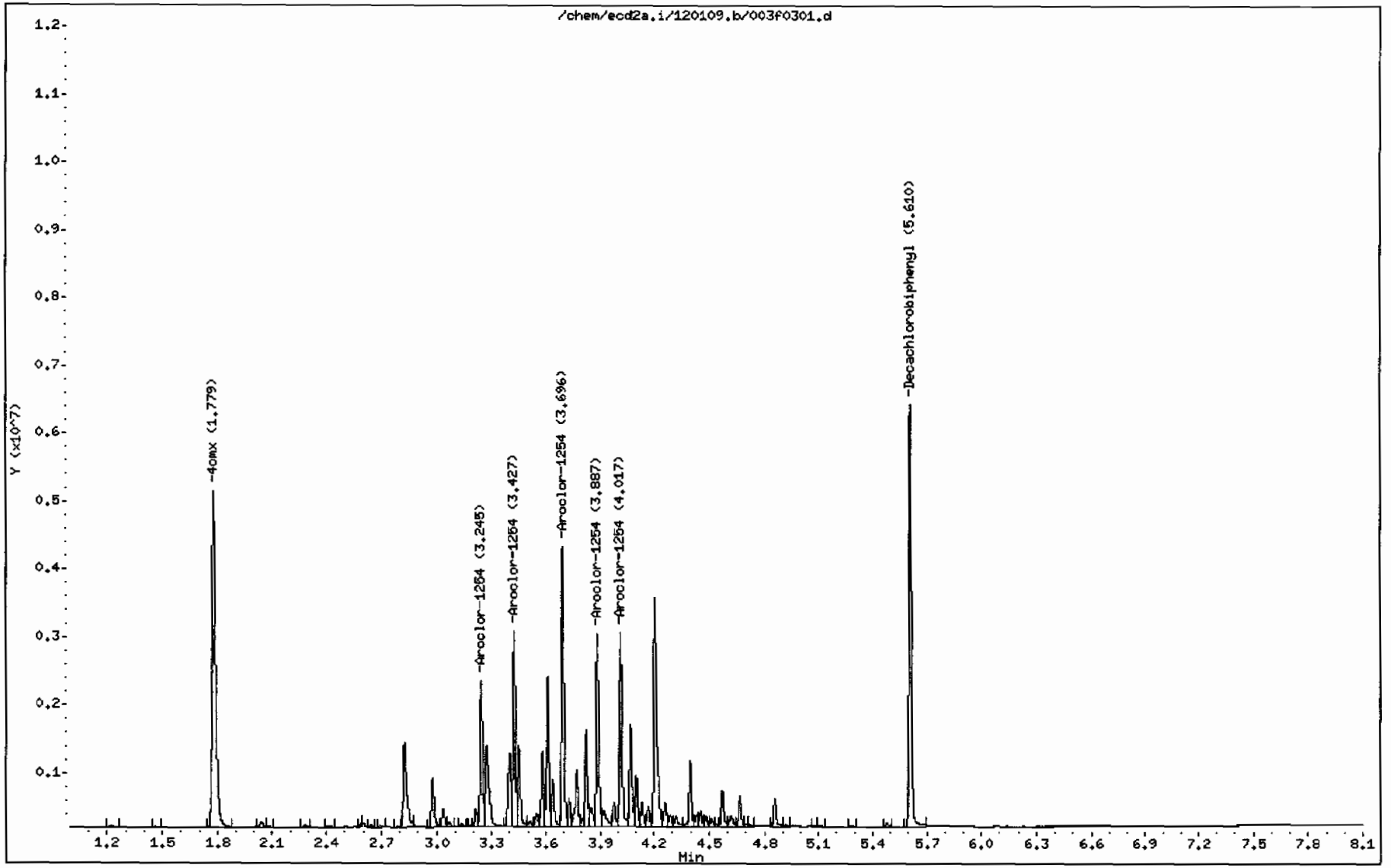

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 01-DEC-2009 08:30
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13887222	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.304	0.000	11891550	100.000	109	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	4886308	1000.00	980	80.00- 120.00	100.00
3.963	3.963	0.000	5705323	1000.00	984	96.76- 136.76	116.76
4.200	4.200	0.000	3988968	1000.00	992	61.64- 101.64	81.64
4.280	4.280	0.000	7694603	1000.00	995	137.47- 177.47	157.47
4.444	4.444	0.000	5441758	1000.00	970	91.37- 131.37	111.37
Average of Peak Amounts =					984		

Data File: /chem/ecd2a.i/120109.b/003b0301.d
Date : 01-DEC-2009 08:30
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

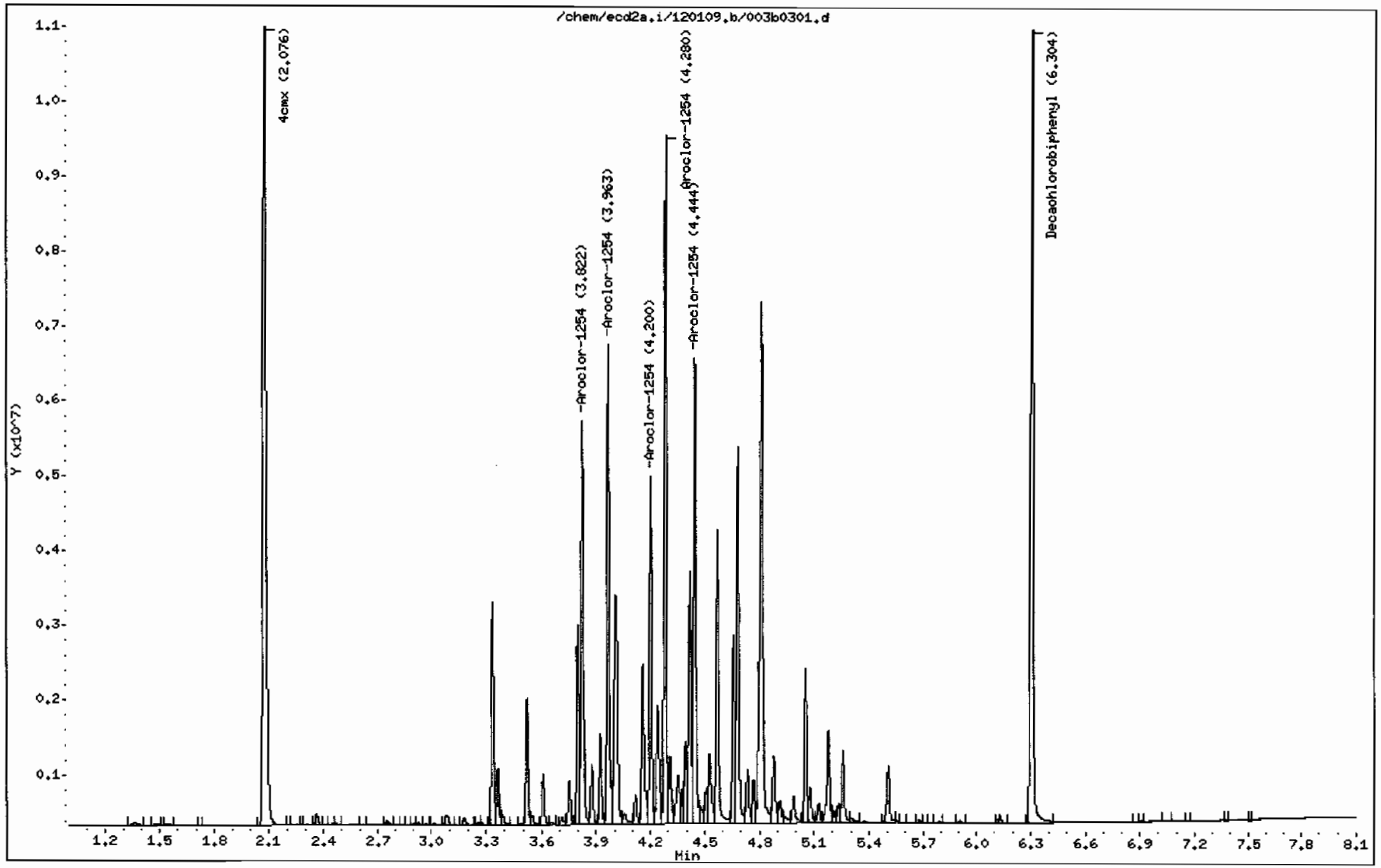

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 01-DEC-2009 08:41
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6465532	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5713678	100.000	104	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1714315	1000.00	989	80.00- 120.00	100.00
2.693	2.693	0.000	1461296	1000.00	984	65.24- 105.24	85.24
2.735	2.735	0.000	901114	1000.00	995	32.56- 72.56	52.56
2.828	2.828	0.000	728625	1000.00	1000	22.50- 62.50	42.50
2.979	2.979	0.000	1137467	1000.00	1020	46.35- 86.35	66.35
			Average of Peak Amounts =		997		

Data File: /chem/ecd2a.i/120109.b/004f0401.d
Date : 01-DEC-2009 08:41
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

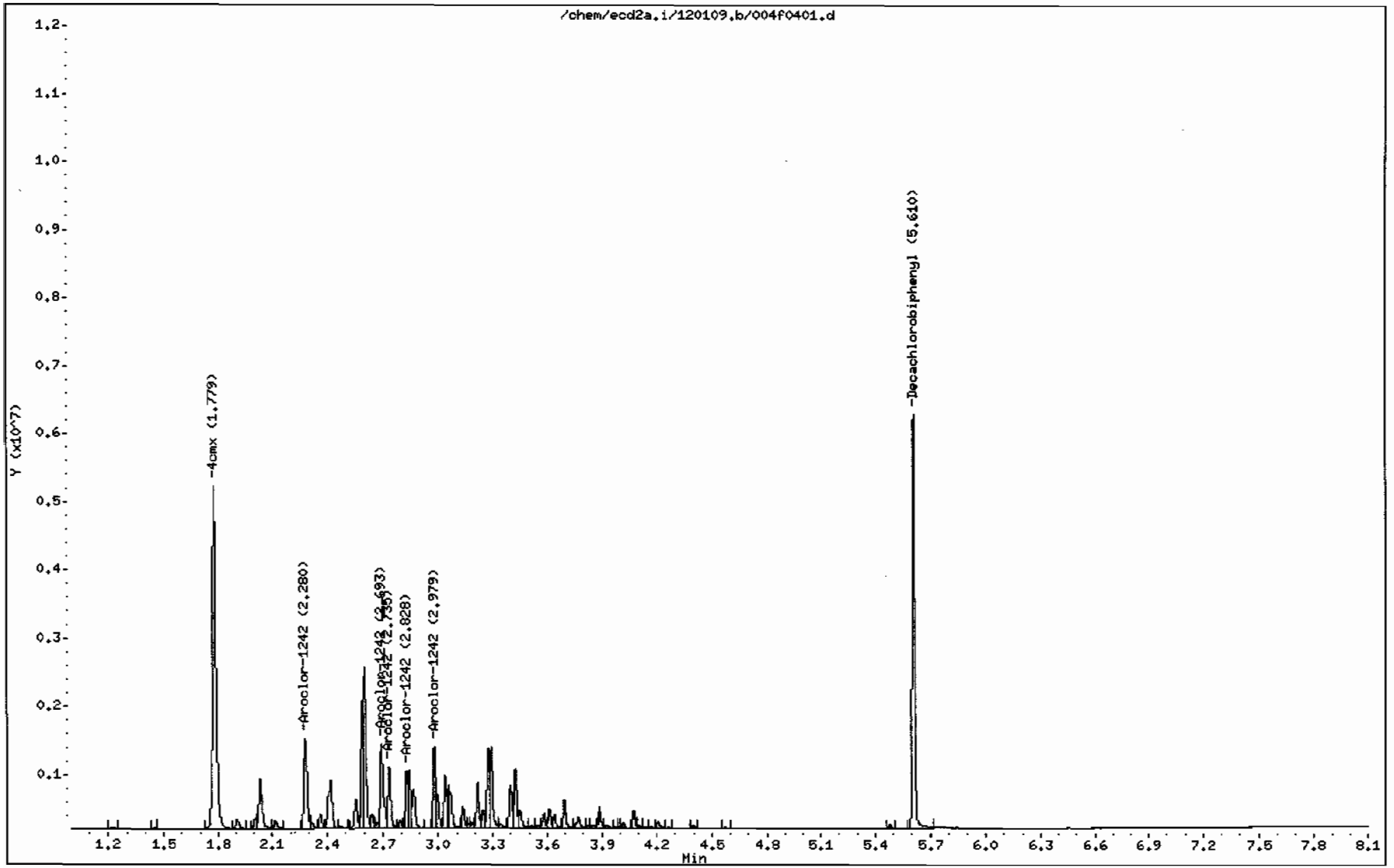

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 01-DEC-2009 08:41
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13904293	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	11928642	100.000	110	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.750	2.750	0.000	3660078	1000.00	1060	80.00- 120.00	100.00
3.184	3.184	0.000	2873696	1000.00	1070	58.51- 98.51	78.51
3.257	3.257	0.000	1750928	1000.00	1070	27.84- 67.84	47.84
3.335	3.335	0.000	1620153	1000.00	1070	24.27- 64.27	44.27
3.523	3.523	0.000	2380463	1000.00	1110	45.04- 85.04	65.04

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd2a.i/120109.b/004b0401.d
Date : 01-DEC-2009 08:41
Client ID: AR124201
Sample Info: !WAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

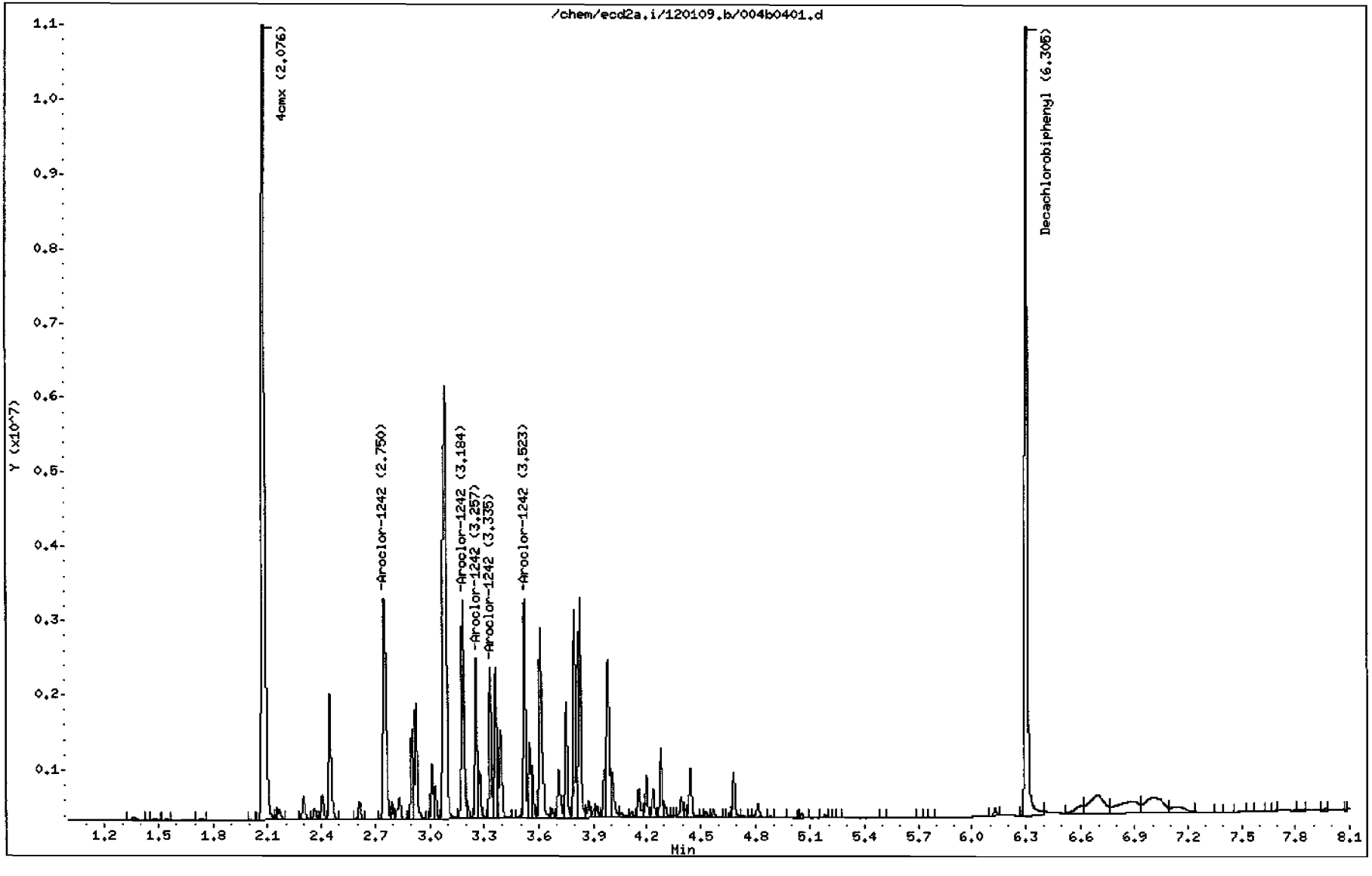

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 01-DEC-2009 09:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	8259719	100.000	143	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7293948	100.000	133	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.032	2.032	0.000	1291685	1000.00	1110	80.00- 120.00	100.00
2.280	2.280	0.000	1039247	1000.00	1120	60.46- 100.46	80.46
2.693	2.693	0.000	899024	1000.00	1120	49.60- 89.60	69.60
2.736	2.736	0.000	574056	1000.00	1120	24.44- 64.44	44.44
2.979	2.979	0.000	674245	1000.00	1150	32.20- 72.20	52.20

Average of Peak Amounts = 1.13e+03

Data File: /chem/ecd2a.i/120109.b/006f0601.d
Date : 01-DEC-2009 09:04
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

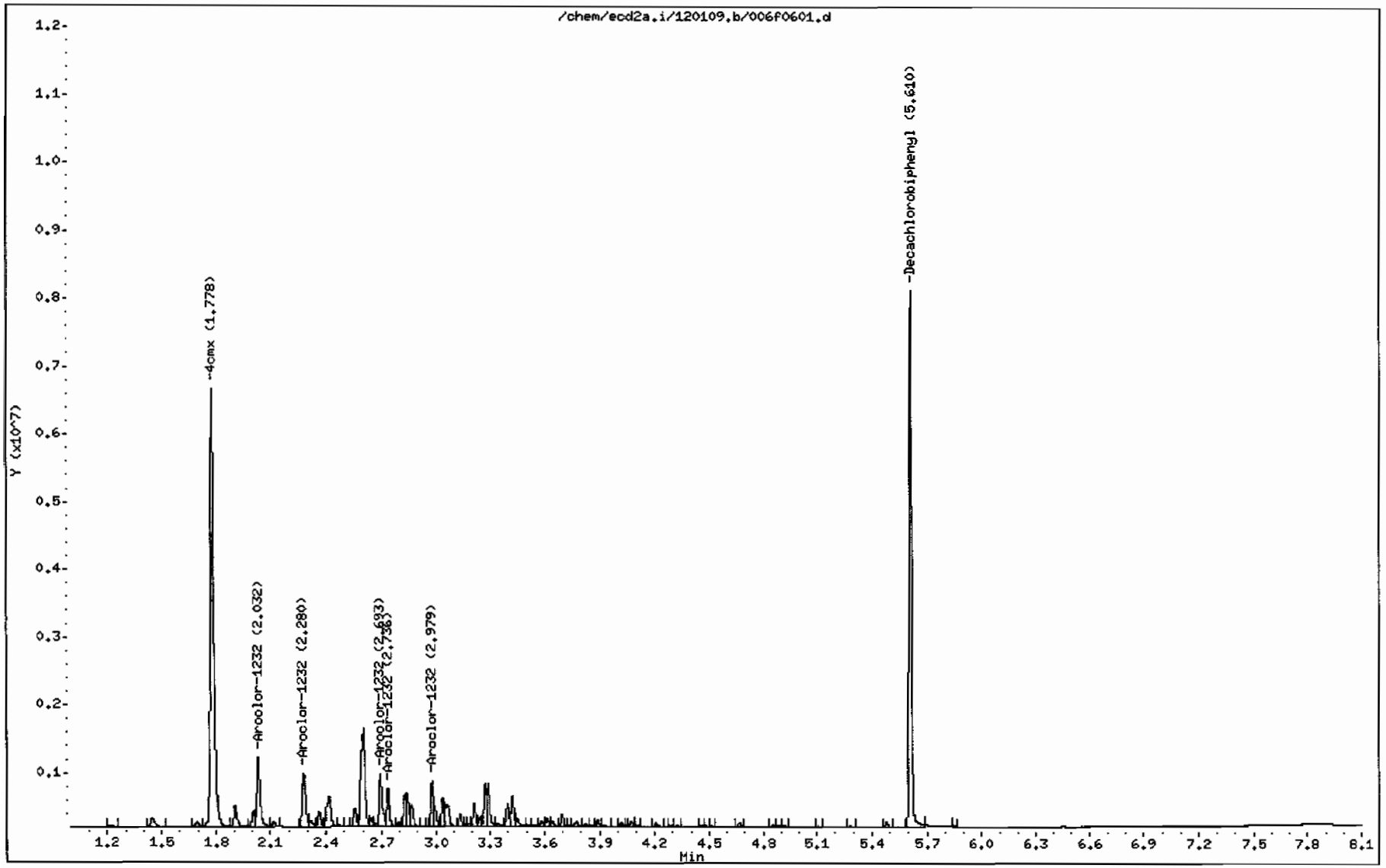

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 01-DEC-2009 09:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	17770300	100.000	150	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	15609769	100.000	144	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.448	2.448	0.000	2349950	1000.00	1140	80.00- 120.00	100.00
2.751	2.751	0.000	2264563	1000.00	1160	76.37- 116.37	96.37
3.185	3.185	0.000	1747497	1000.00	1170	54.36- 94.36	74.36
3.256	3.256	0.000	1078419	1000.00	1160	25.89- 65.89	45.89
3.522	3.522	0.000	1319563	1000.00	1190	36.15- 76.15	56.15

Average of Peak Amounts = 1.16e+03

Data File: /chem/ecd2a.i/120109.b/006b0601.d
Date : 01-DEC-2009 09:04
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

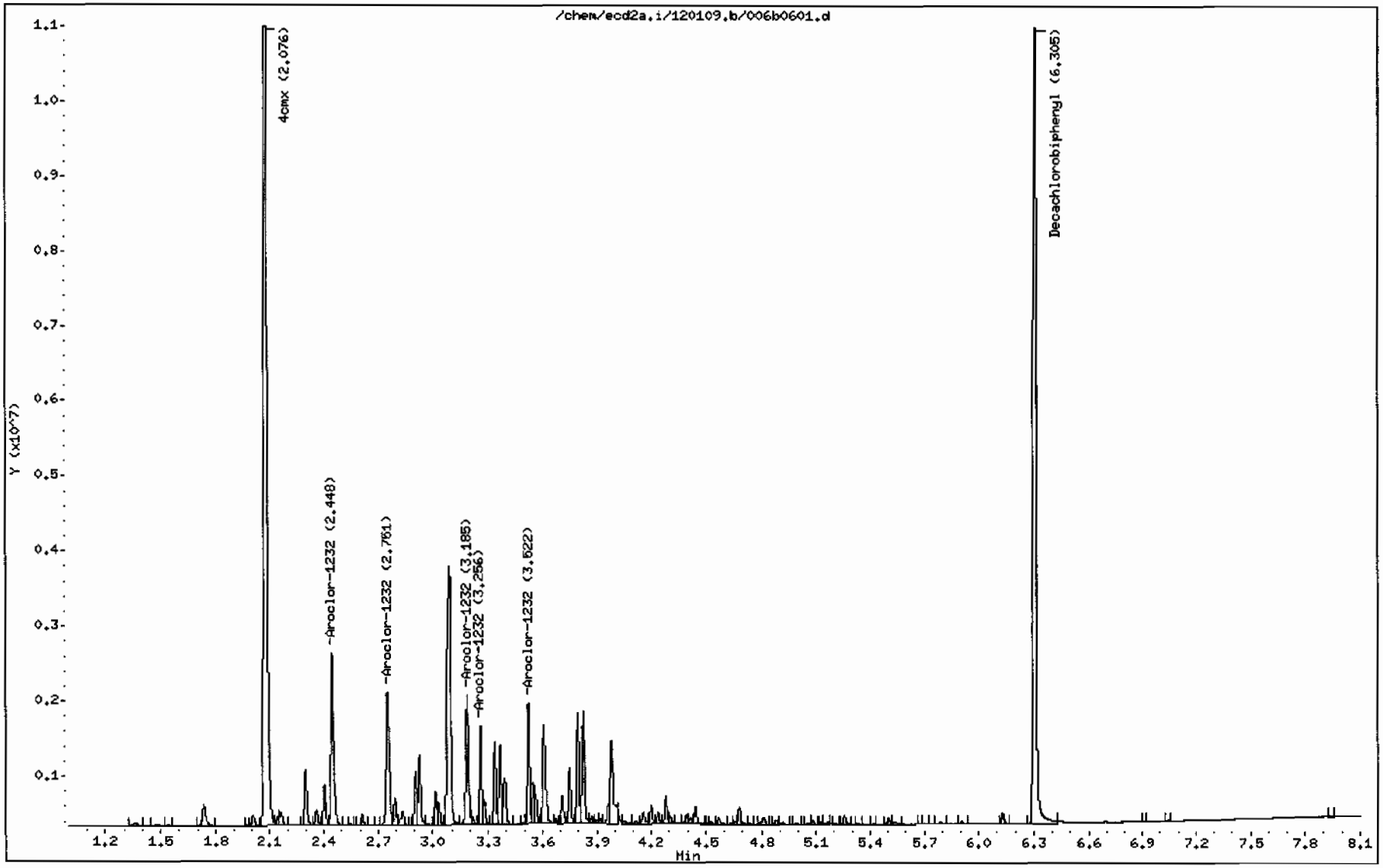

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 01-DEC-2009 09:15
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6413106	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5691170	100.000	104	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	500150	1000.00	1080	80.00- 120.00	100.00
1.904	1.904	0.000	708310	1000.00	1080	121.62- 161.62	141.62
2.004	2.004	0.000	379032	1000.00	1090	55.78- 95.78	75.78

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd2a.i/120109.b/007f0701.d

Date : 01-DEC-2009 09:15

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

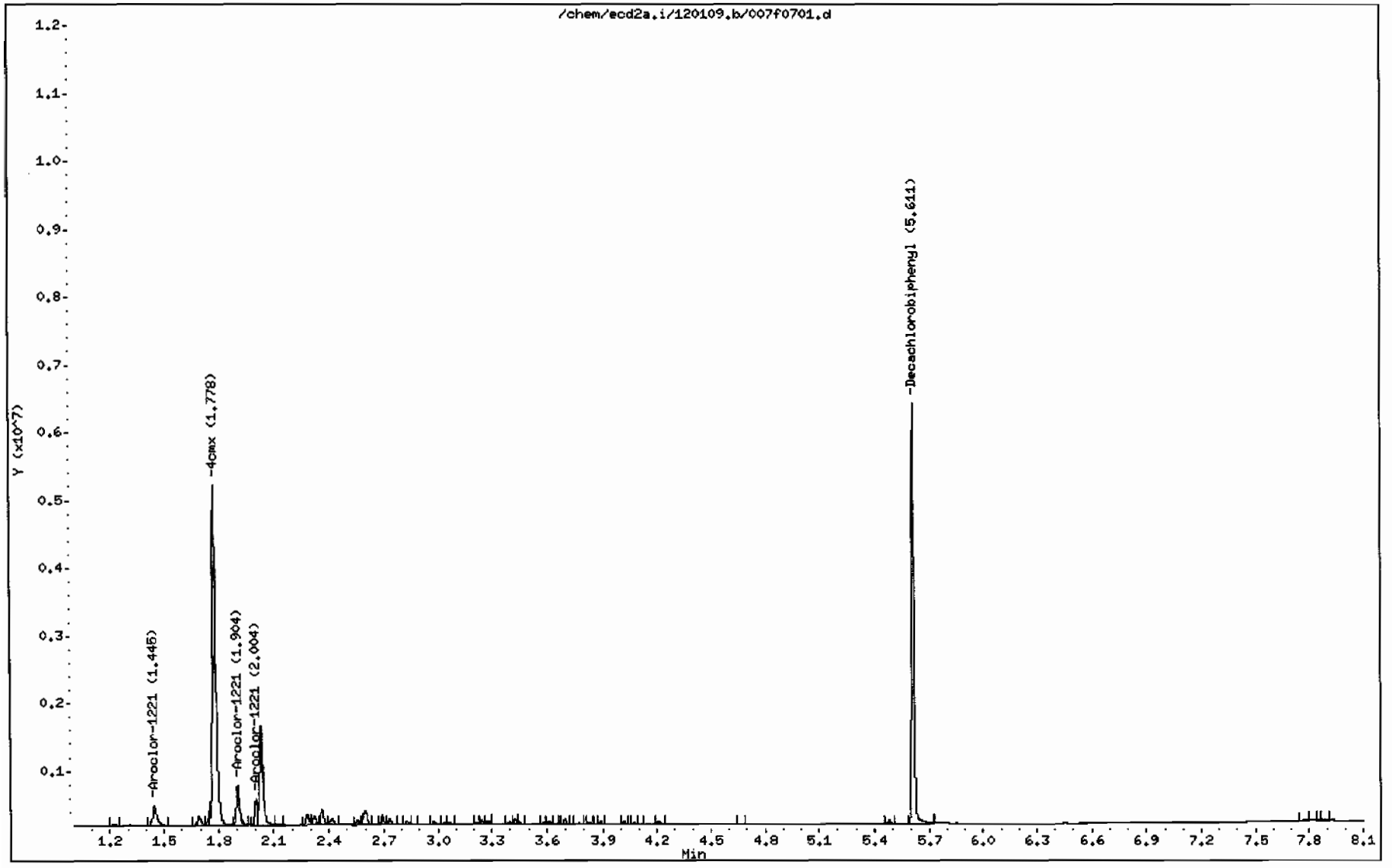

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 01-DEC-2009 09:15
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13763840	100.000	116	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	11955705	100.000	110	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1387240	1000.00	1100	80.00- 120.00	100.00
2.403	2.403	0.000	847927	1000.00	1100	41.12- 81.12	61.12
2.448	2.448	0.000	3361902	1000.00	1100	222.34- 262.34	242.34

Average of Peak Amounts = 1.1e+03

Data File: /chem/ecd2a.i/120109.b/007b0701.d
Date : 01-DEC-2009 09:15
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

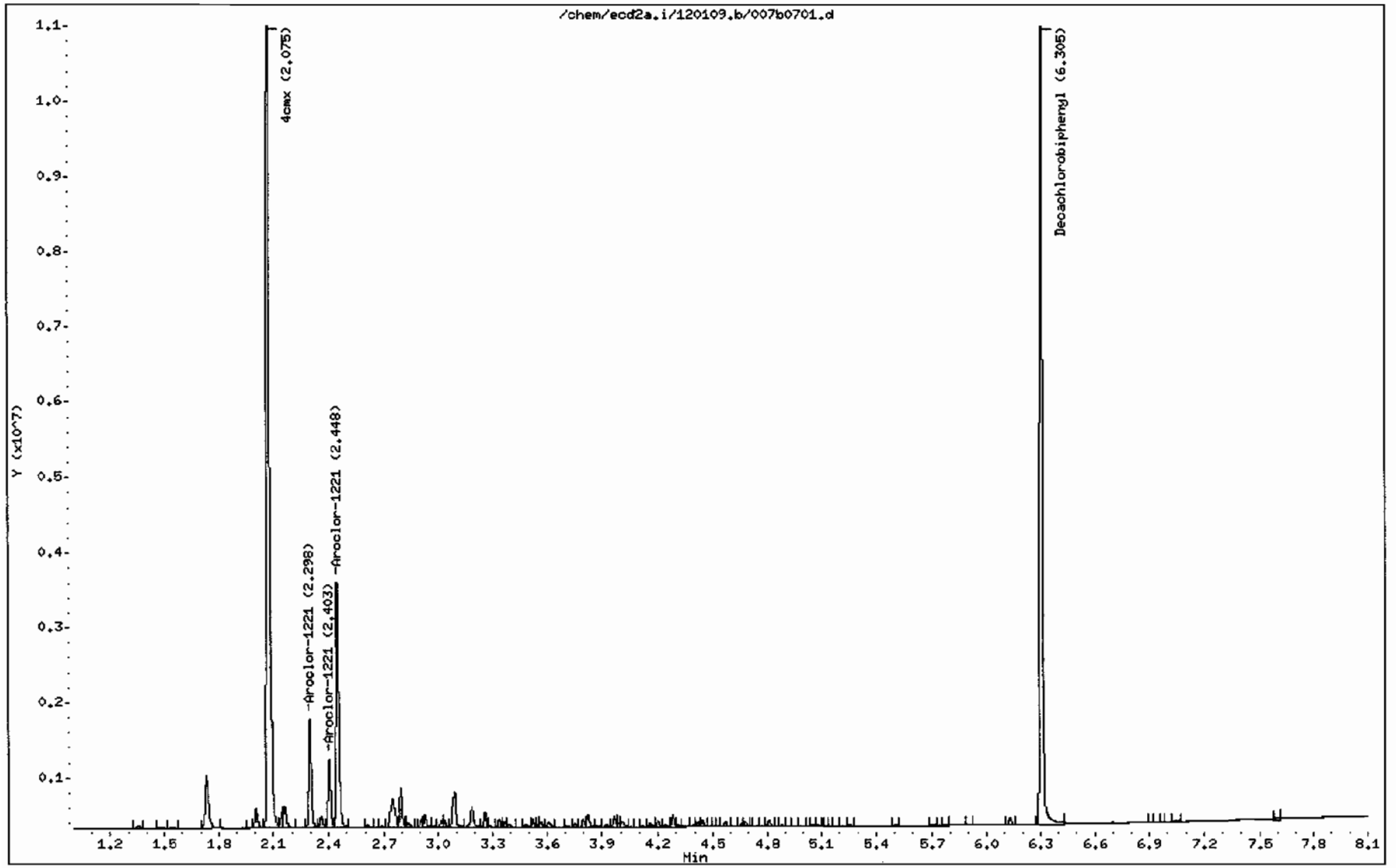

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/010f1001.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 01-DEC-2009 09:48
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 13:24 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6993402	100.000	121	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	6249593	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.827	2.827	0.000	1422470	1000.00	932	80.00- 120.00	100.00(M)
2.978	2.978	0.000	1962250	1000.00	968	117.95- 157.95	137.95
3.038	3.038	0.000	1533368	1000.00	976	87.80- 127.80	107.80
3.272	3.272	0.000	2150295	1000.00	970	131.17- 171.17	151.17
3.425	3.425	0.000	1832165	1000.00	958	108.80- 148.80	128.80
			Average of Peak Amounts =		961		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod2a.i/120109.b/010f1001.d
Date : 01-DEC-2009 09:48
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: eod2a.i

Operator: JAOC
Column diameter: 0.25

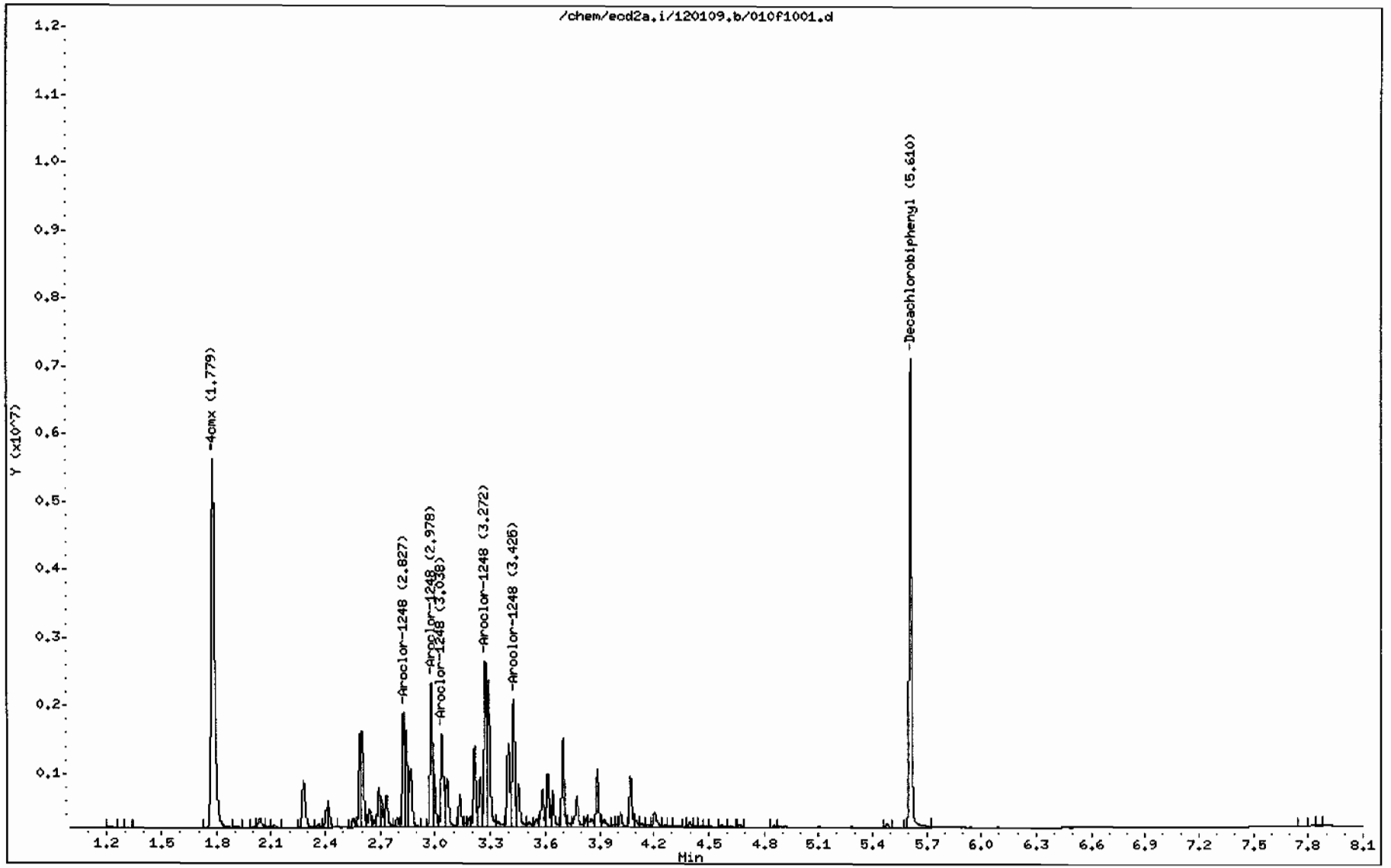

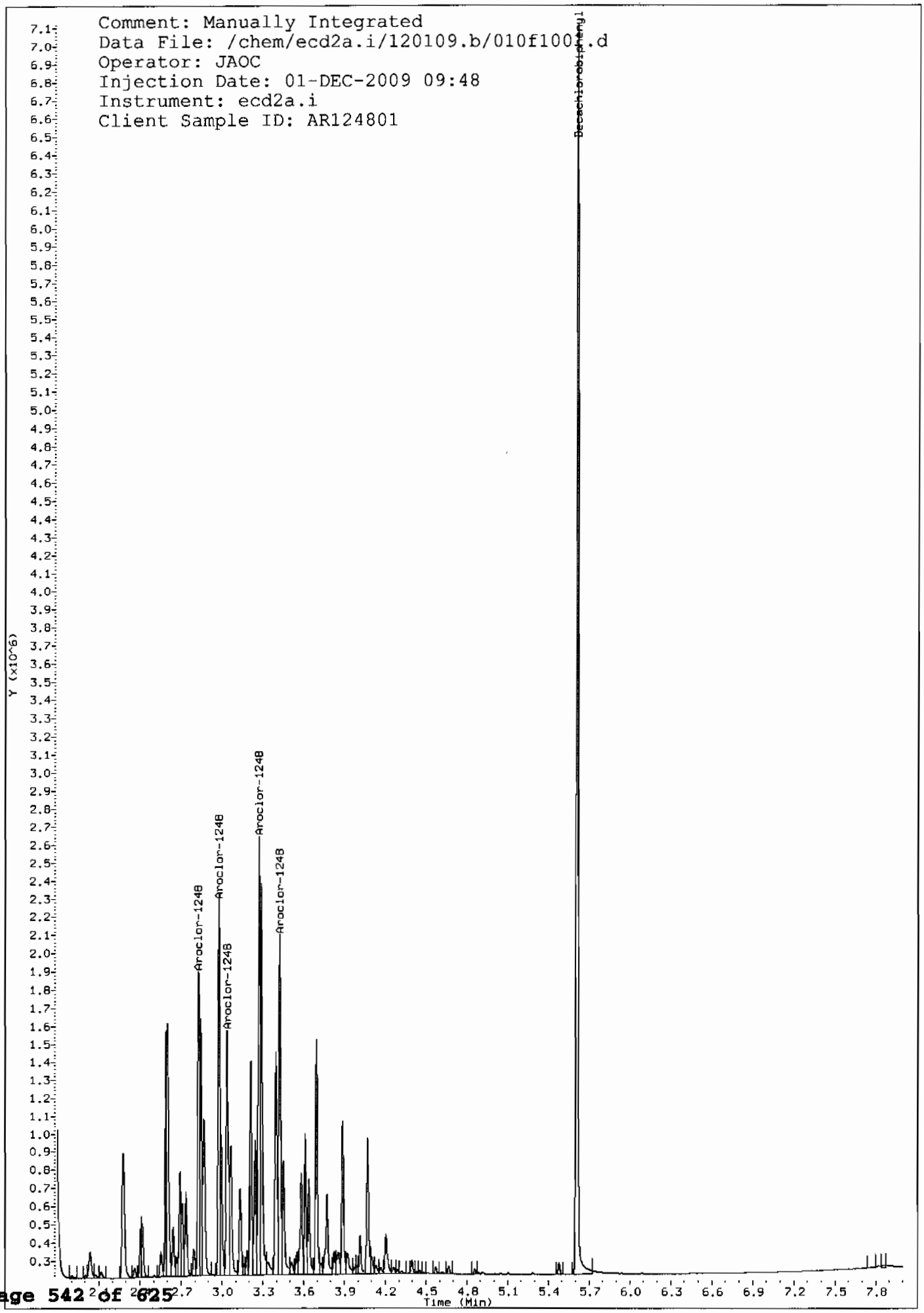
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/010f1001.d
Operator: JAOC
Injection Date: 01-DEC-2009 09:48
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

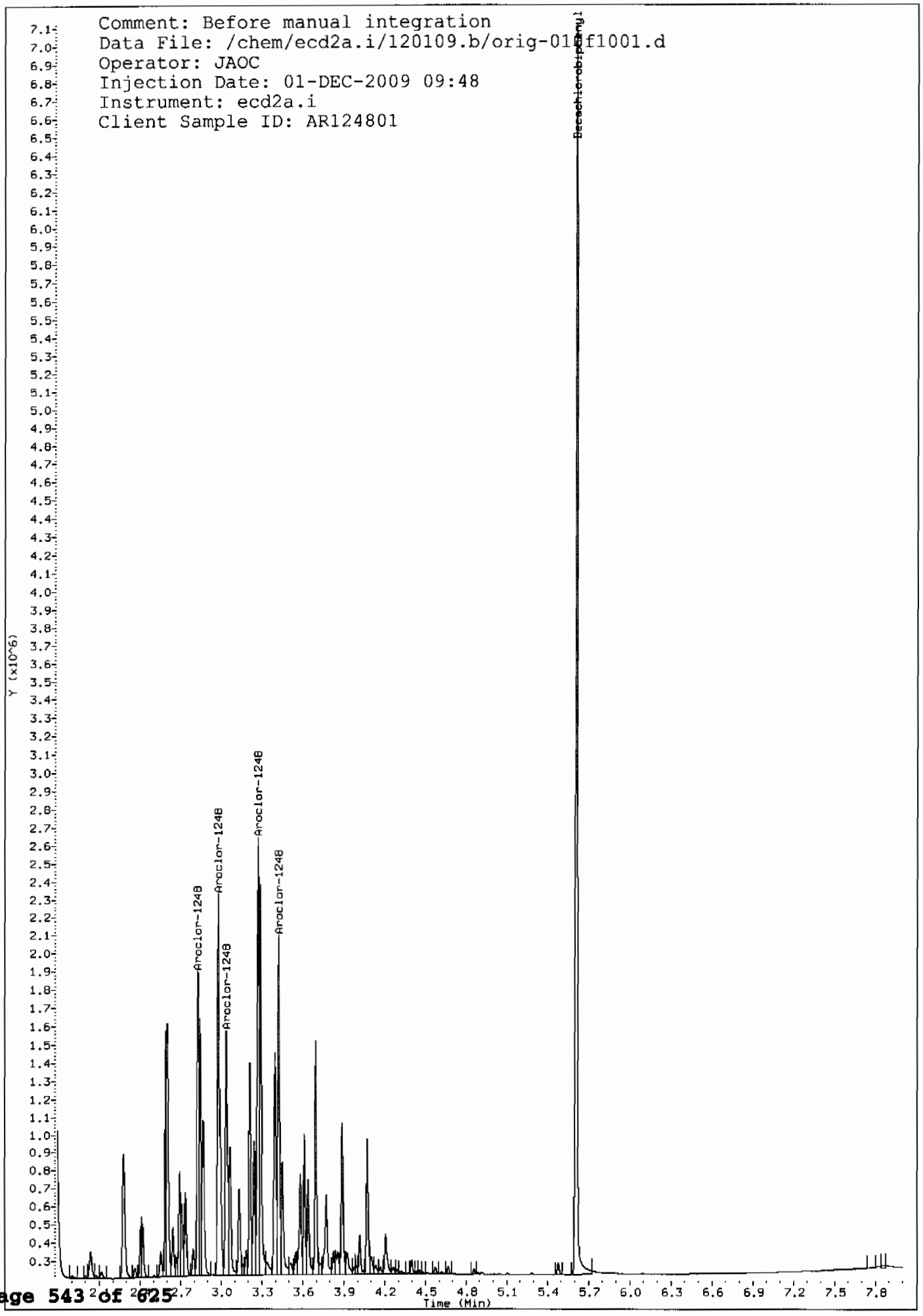
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-01f1001.d
Operator: JAOC
Injection Date: 01-DEC-2009 09:48
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/010b1001.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 01-DEC-2009 09:48
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 13:13 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	15124441	100.000	128	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.304	0.000	13151897	100.000	121	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.335	3.335	0.000	3303928	1000.00	1010	80.00- 120.00	100.00
3.522	3.522	0.000	4229721	1000.00	1010	108.02- 148.02	128.02
3.609	3.609	0.000	4482498	1000.00	1010	115.67- 155.67	135.67
3.797	3.797	0.000	4734457	1000.00	1010	123.30- 163.30	143.30
3.827	3.827	0.000	5413128	1000.00	1000	143.84- 183.84	163.84

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/120109.b/010b1001.d
Date : 01-DEC-2009 09:48
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

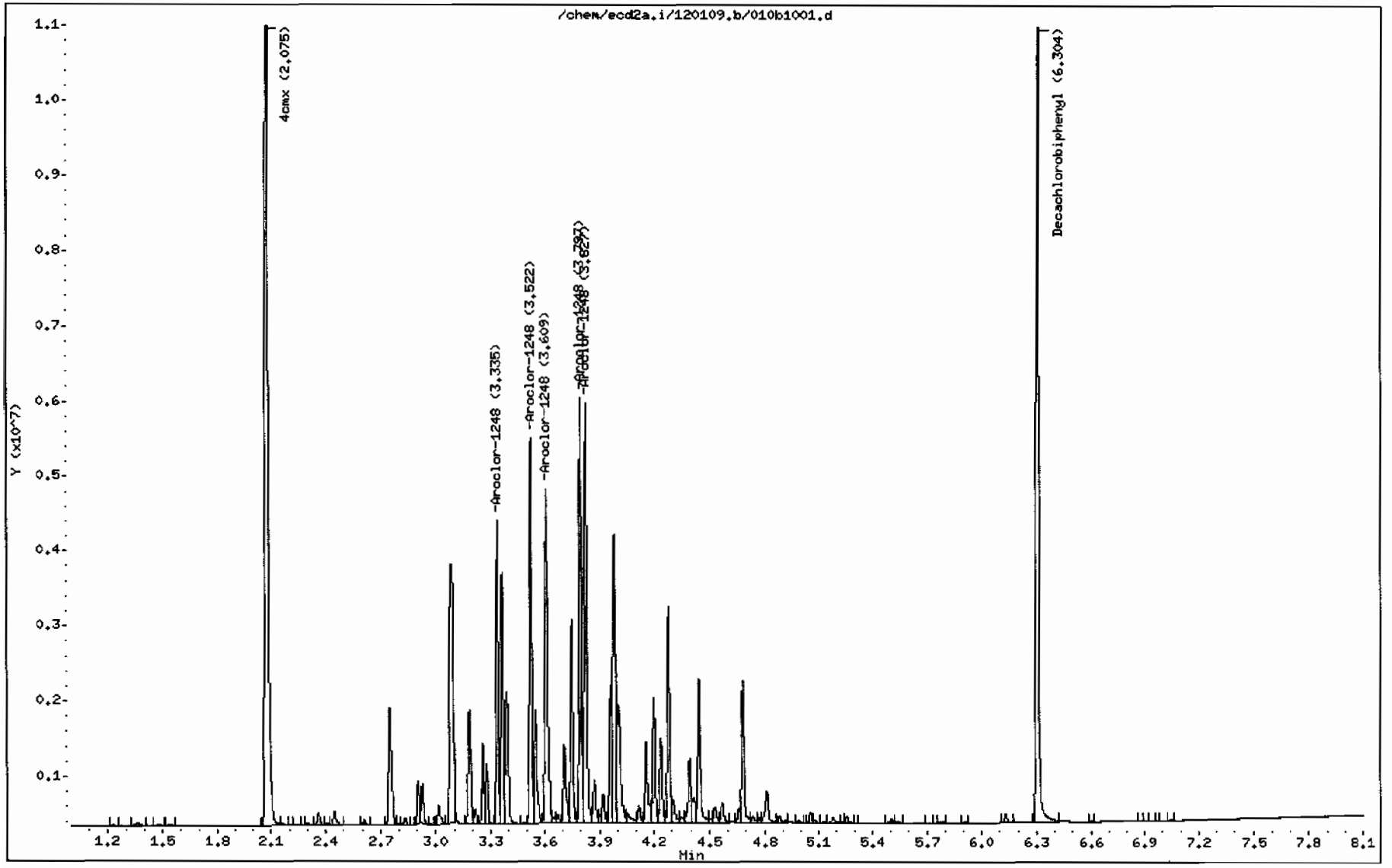

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/071f7101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 01-DEC-2009 21:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6264027	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5036335	100.000	91.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	2004622	1000.00	955	80.00- 120.00	100.00
2.603	2.602	0.001	4377480	1000.00	972	193.81- 233.81	218.37
2.693	2.692	0.001	1722125	1000.00	946	64.26- 104.26	85.91
2.828	2.827	0.001	845038	1000.00	906	21.10- 61.10	42.15
2.979	2.978	0.001	1303127	1000.00	946	44.48- 84.48	65.01
Average of Peak Amounts =					945		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4171396	1000.00	1020	80.00- 120.00	100.00
4.290	4.288	0.002	2535539	1000.00	1000	39.98- 79.98	60.78
4.455	4.454	0.001	2584354	1000.00	1000	41.33- 81.33	61.95
4.667	4.666	0.001	6146696	1000.00	1020	123.75- 163.75	147.35
4.856	4.855	0.001	2915591	1000.00	1000	48.23- 88.23	69.89
Average of Peak Amounts =					1.01e+03		

Data File: /chem/ecd2a.i/120109.b/071f7101.d
Date : 01-DEC-2009 21:47
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

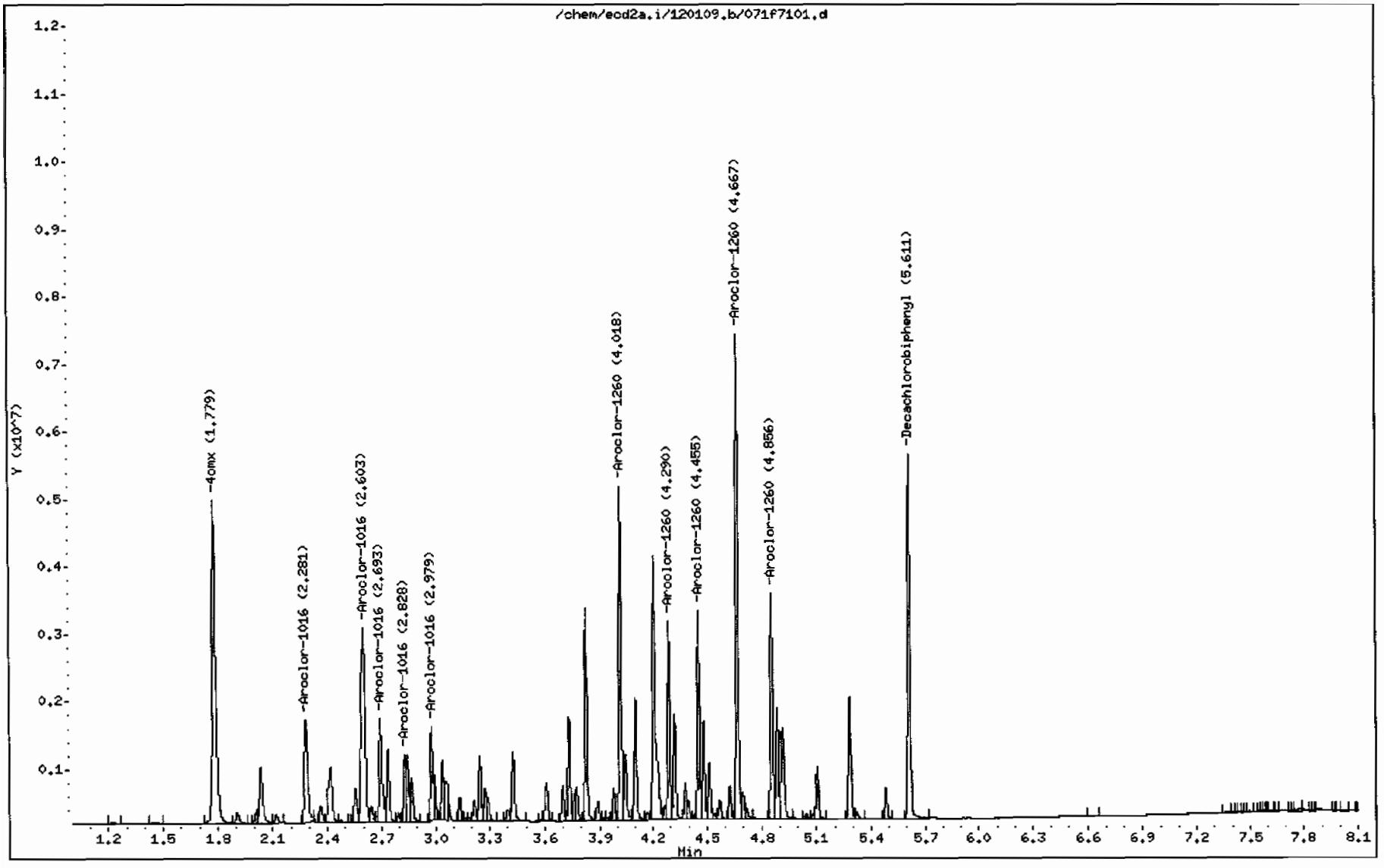

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/071b7101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR160007
Inj Date : 01-DEC-2009 21:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13479075	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	9430073	100.000	86.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4271054	1000.00	1000	80.00- 120.00	100.00
3.185	3.184	0.001	3427214	1000.00	995	61.02- 101.02	80.24
3.336	3.335	0.001	1967846	1000.00	994	26.72- 66.72	46.07
3.364	3.364	0.000	2071726	1000.00	1000	28.59- 68.59	48.51
3.523	3.522	0.001	2821385	1000.00	1020	46.09- 86.09	66.06
Average of Peak Amounts =					1e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5816855	1000.00	1060	80.00- 120.00	100.00
4.570	4.569	0.001	7476776	1000.00	1050	107.33- 147.33	128.54
4.682	4.681	0.001	4924199	1000.00	1040	63.39- 103.39	84.65
4.878	4.879	-0.001	5797610	1000.00	999	78.36- 118.36	99.67
5.505	5.505	0.000	9037267	1000.00	1000	131.09- 171.09	155.36
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/120109.b/071b7101.d
Date : 01-DEC-2009 21:47
Client ID: AR160007
Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

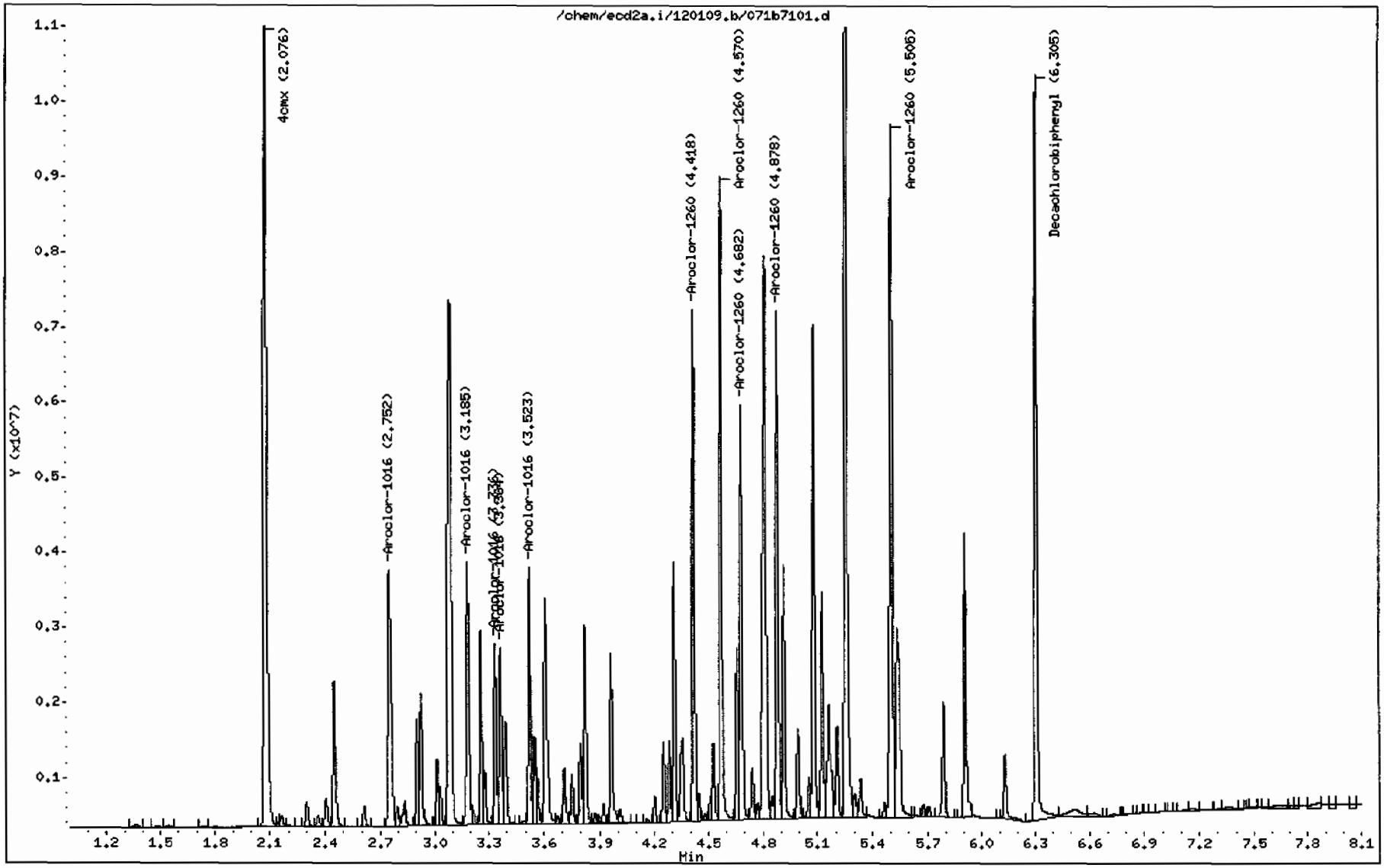

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/083f8301.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 02-DEC-2009 00:00
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 83 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	6171859	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5022894	100.000	91.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	2060686	1000.00	981	80.00- 120.00	100.00(M)
2.603	2.602	0.001	4331233	1000.00	962	193.81- 233.81	210.18
2.693	2.692	0.001	1707251	1000.00	938	64.26- 104.26	82.85
2.828	2.827	0.001	844470	1000.00	905	21.10- 61.10	40.98
2.979	2.978	0.001	1303696	1000.00	946	44.48- 84.48	63.27
Average of Peak Amounts =					946		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4124206	1000.00	1010	80.00- 120.00	100.00
4.289	4.288	0.001	2523819	1000.00	998	39.98- 79.98	61.20
4.455	4.454	0.001	2574281	1000.00	996	41.33- 81.33	62.42
4.668	4.666	0.002	6158896	1000.00	1020	123.75- 163.75	149.34
4.857	4.855	0.002	2940128	1000.00	1010	48.23- 88.23	71.29
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/083f8301.d
Date : 02-DEC-2009 00:00
Client ID: AR166008
Sample Info: IWAR091119-60 08

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

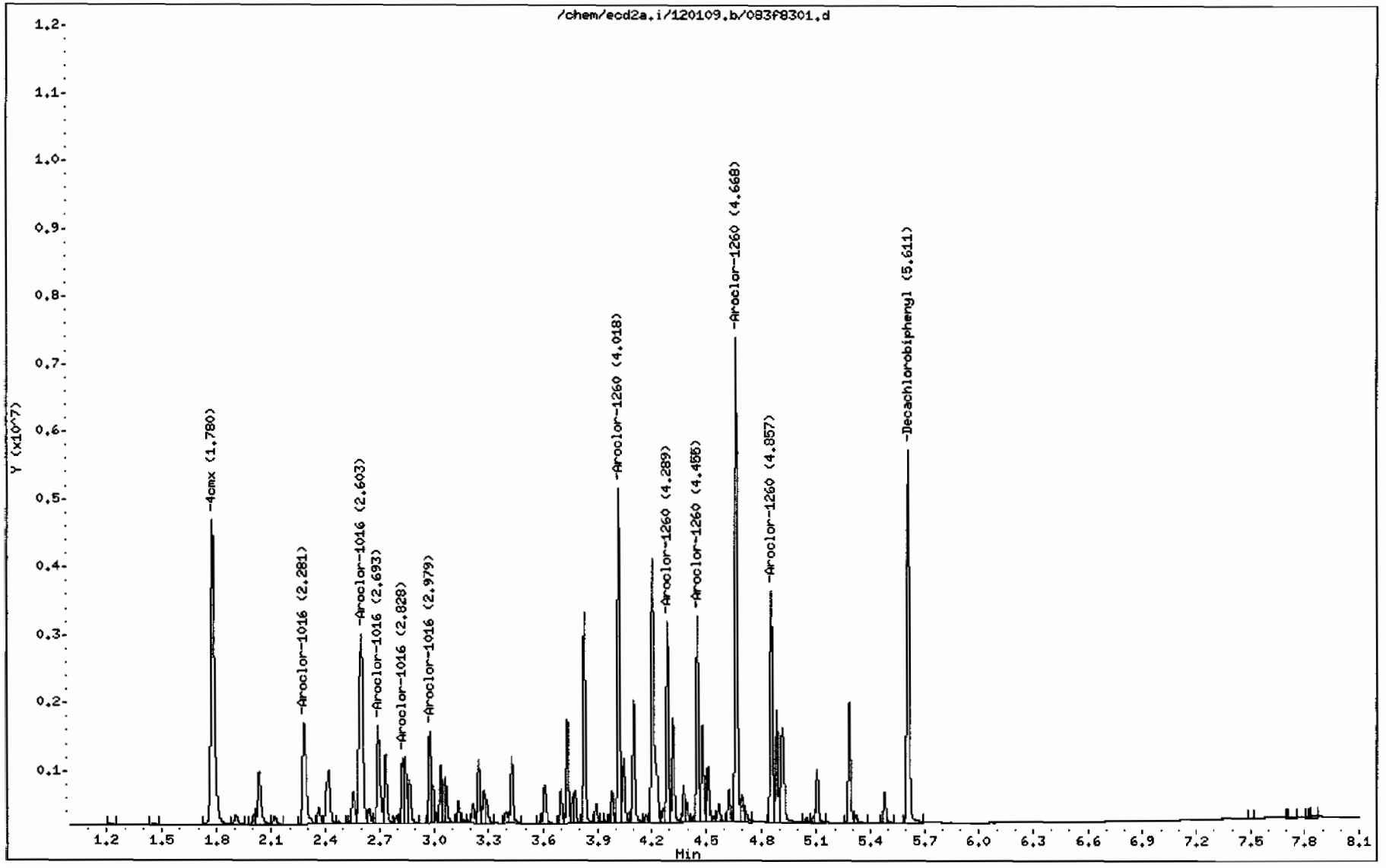

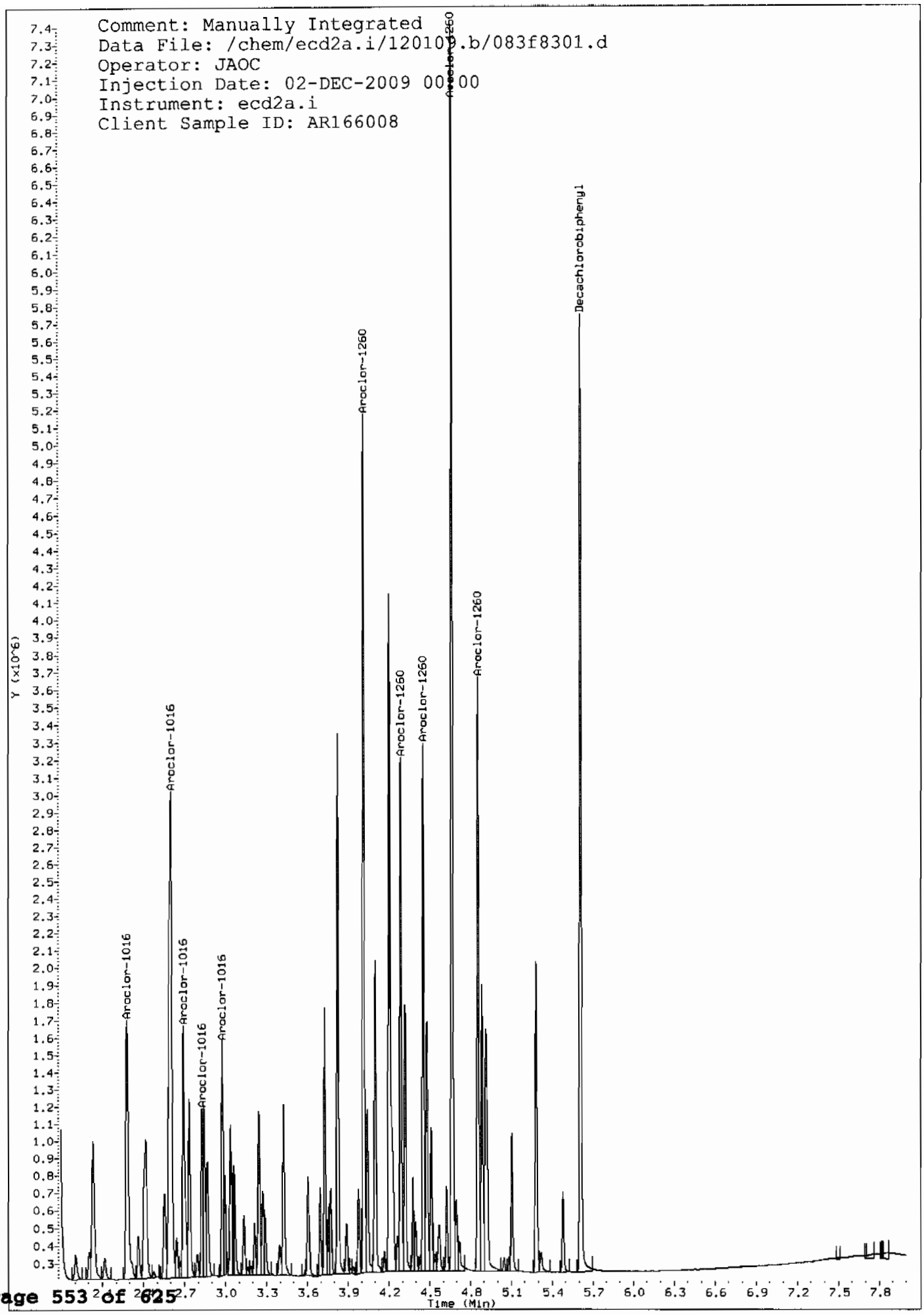
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/083f8301.d
Operator: JAOC
Injection Date: 02-DEC-2009 00:00
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1260
Decachlorobiphenyl
Aroclor-1016
Y (x10^6)
Time (Min)

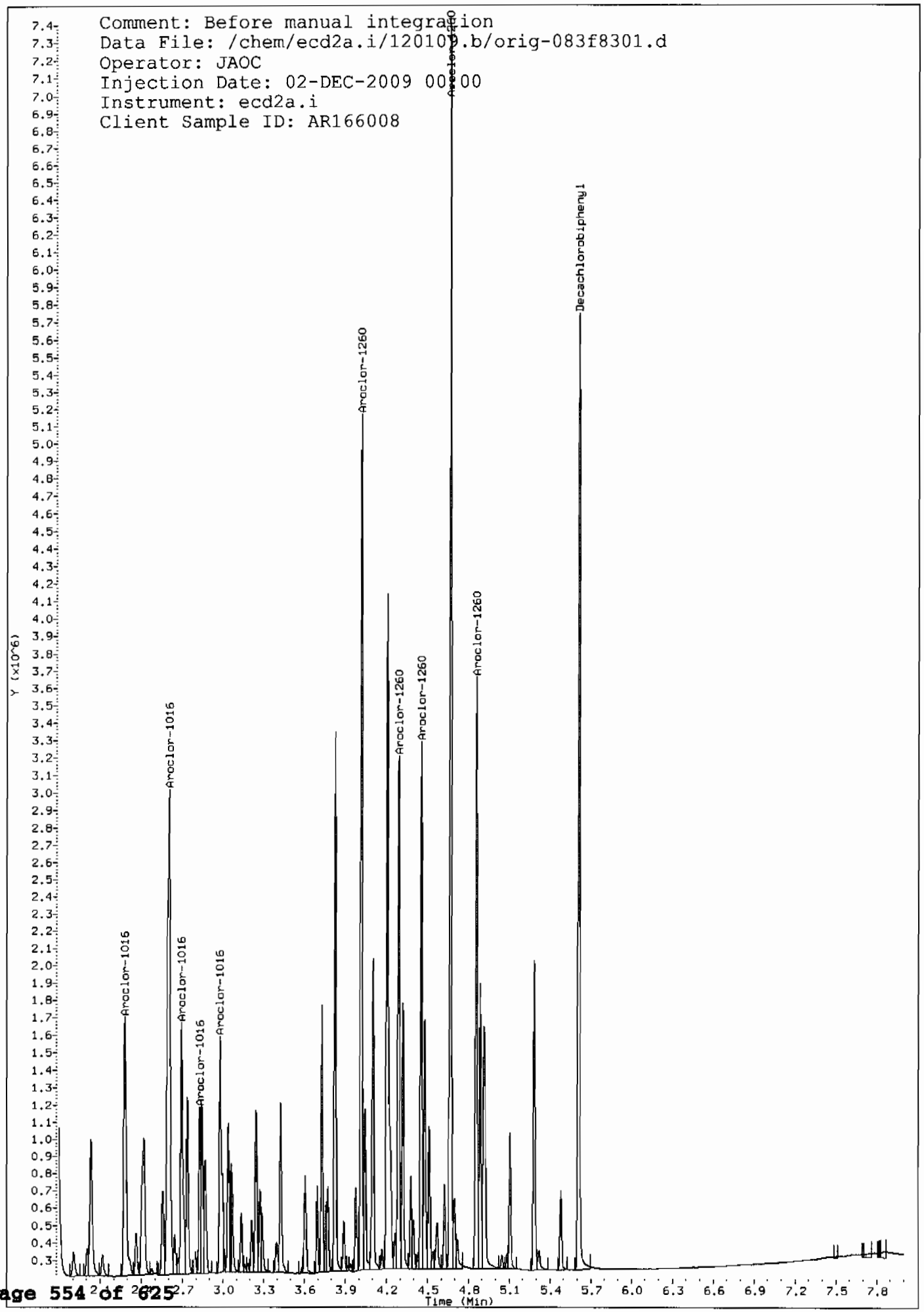
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-083f8301.d
Operator: JAOC
Injection Date: 02-DEC-2009 00:00
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/083b8301.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 02-DEC-2009 00:00
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 83 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13258355	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	10138139	100.000	93.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.750	0.001	4214186	1000.00	990	80.00- 120.00	100.00
3.185	3.184	0.001	3421530	1000.00	993	61.02- 101.02	81.19
3.336	3.335	0.001	1976971	1000.00	999	26.72- 66.72	46.91
3.364	3.364	0.000	2050457	1000.00	995	28.59- 68.59	48.66
3.523	3.522	0.001	2816402	1000.00	1020	46.09- 86.09	66.83
Average of Peak Amounts =					1e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5869239	1000.00	1060	80.00- 120.00	100.00
4.570	4.569	0.001	7550345	1000.00	1060	107.33- 147.33	128.64
4.682	4.681	0.001	4985084	1000.00	1050	63.39- 103.39	84.94
4.878	4.879	-0.001	5967205	1000.00	1030	78.36- 118.36	101.67
5.505	5.505	0.000	9455932	1000.00	1040	131.09- 171.09	161.11
Average of Peak Amounts =					1.05e+03		

Data File: /chem/ecd2a.i/120109.b/083b8301.d

Date : 02-DEC-2009 00:00

Client ID: AR166008

Sample Info: IWAR091119-60 08

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

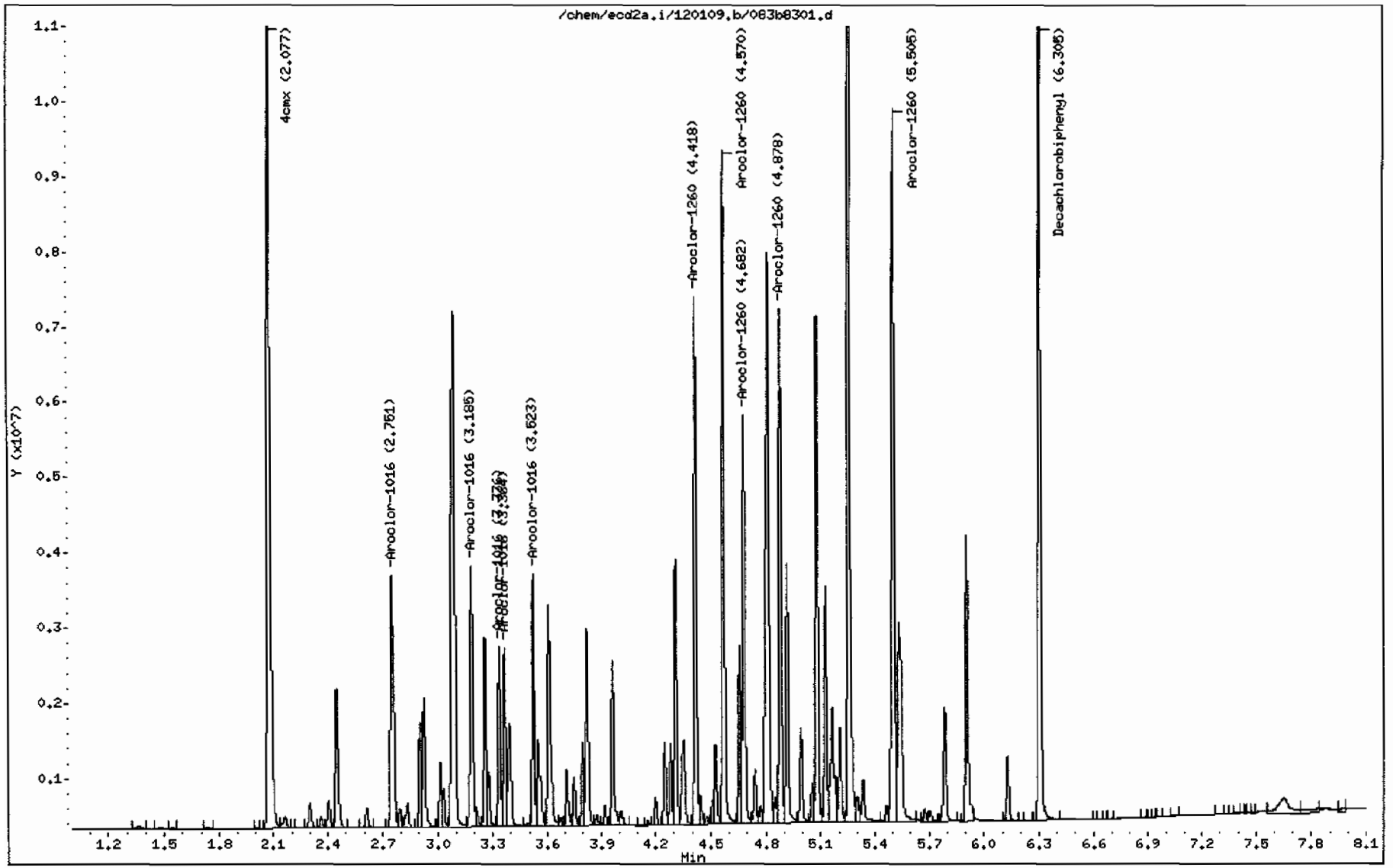

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/091f9101.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 02-DEC-2009 01:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 09
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 91 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	6302763	100.000	109	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4368640	100.000	79.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	2055766	1000.00	979	80.00- 120.00	100.00(M)
2.602	2.602	0.000	4395401	1000.00	976	193.81- 233.81	213.81
2.694	2.692	0.002	1732171	1000.00	952	64.26- 104.26	84.26
2.828	2.827	0.001	845021	1000.00	906	21.10- 61.10	41.10
2.979	2.978	0.001	1325481	1000.00	962	44.48- 84.48	64.48
Average of Peak Amounts =					955		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4125814	1000.00	1010	80.00- 120.00	100.00
4.289	4.288	0.001	2474822	1000.00	979	39.98- 79.98	59.98
4.455	4.454	0.001	2530567	1000.00	980	41.33- 81.33	61.33
4.667	4.666	0.001	5930901	1000.00	982	123.75- 163.75	143.75
4.857	4.855	0.002	2815158	1000.00	967	48.23- 88.23	68.23
Average of Peak Amounts =					984		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/091f9101.d
Date : 02-DEC-2009 01:29
Client ID: AR166009
Sample Info: IWAR091119-60 09

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

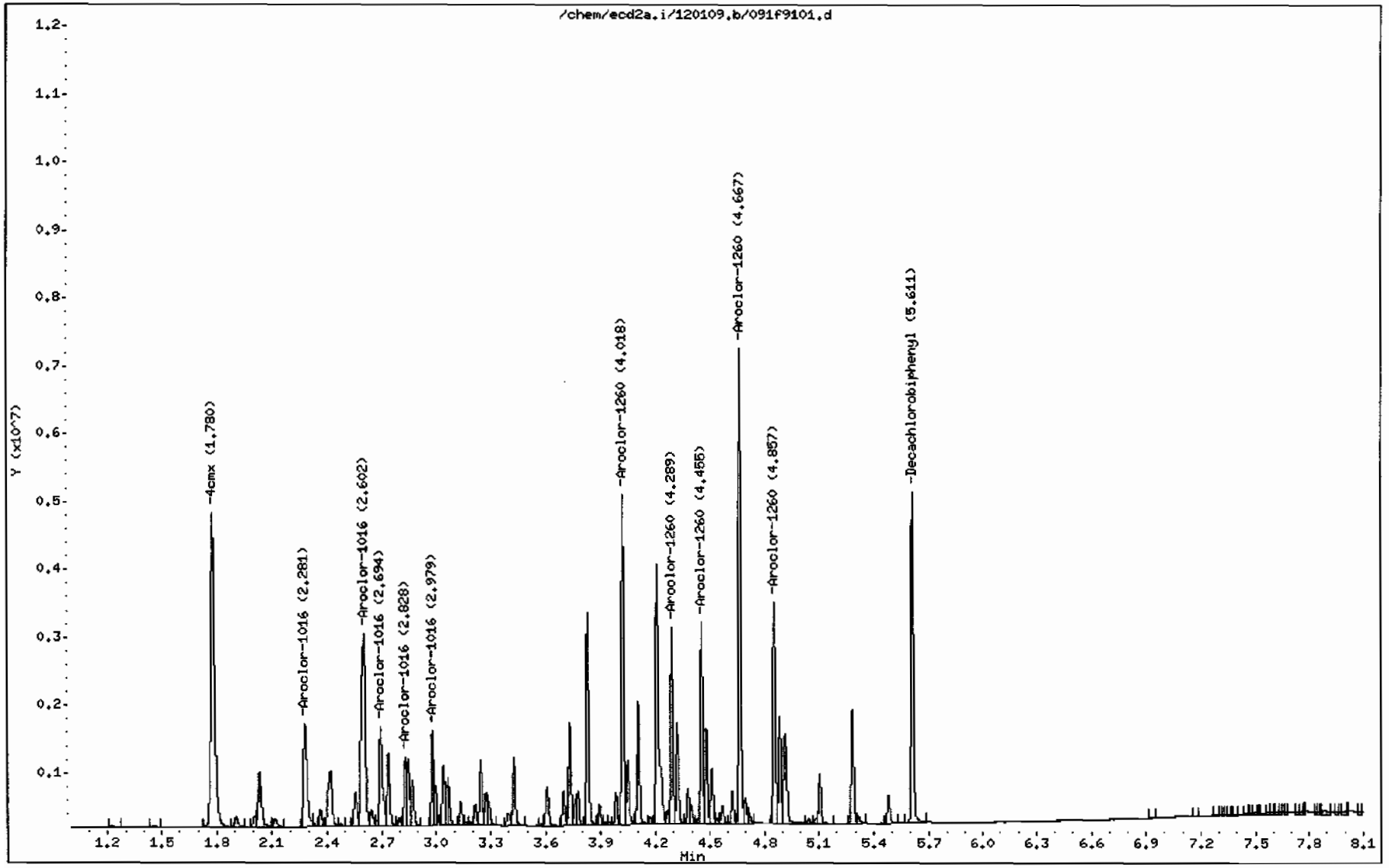

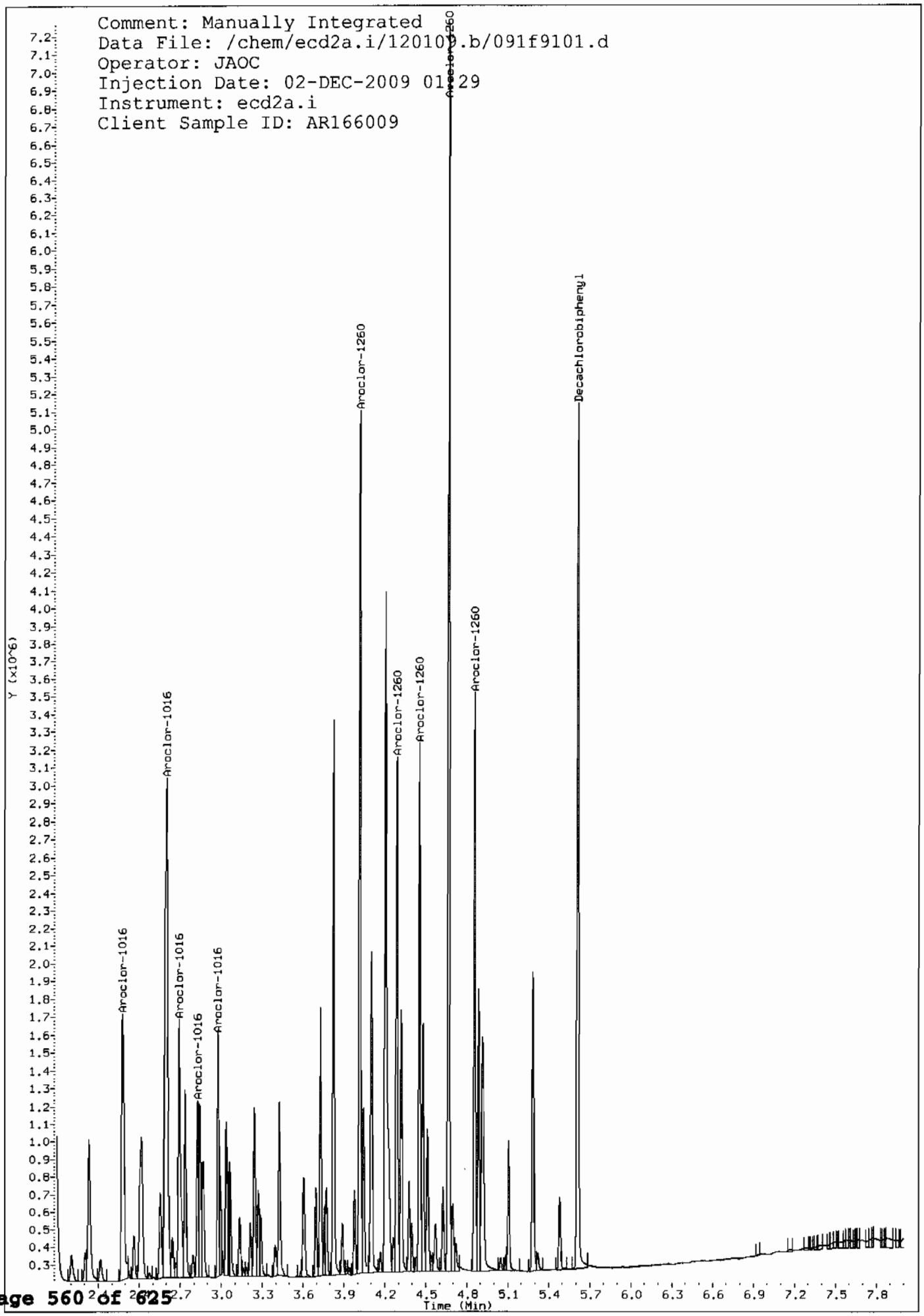
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/091f9101.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:29
Instrument: ecd2a.i
Client Sample ID: AR166009
Y (x10^6)
Time (Min)
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-091f9101.d
Operator: JAOC
Injection Date: 02-DEC-2009 01:29
Instrument: ecd2a.i
Client Sample ID: AR166009

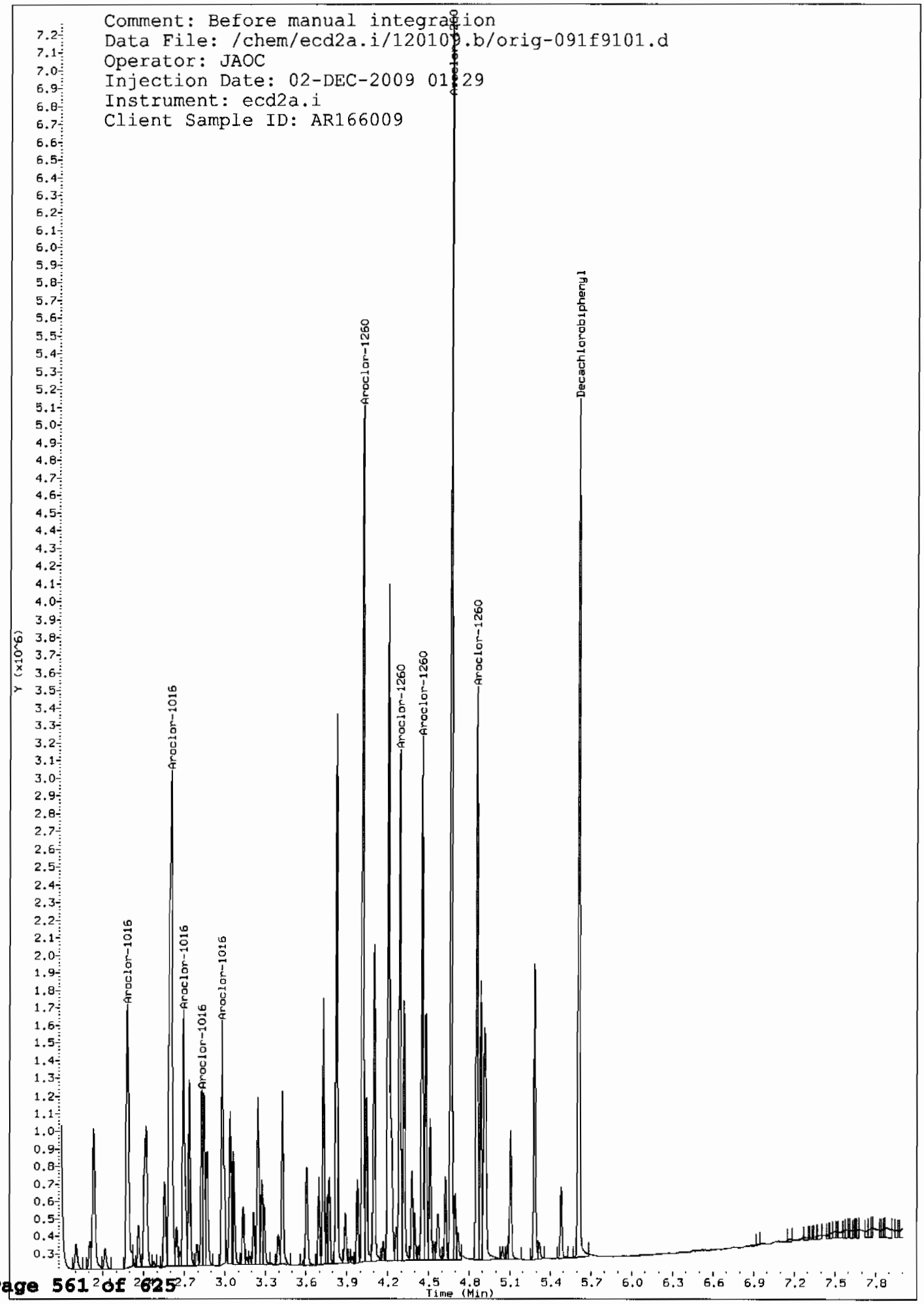

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/091b9101.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 02-DEC-2009 01:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 09
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 91 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13477839	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.304	0.002	8565478	100.000	78.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4275247	1000.00	1000	80.00- 120.00	100.00
3.186	3.184	0.002	3463872	1000.00	1000	61.02- 101.02	81.02
3.337	3.335	0.002	1997302	1000.00	1010	26.72- 66.72	46.72
3.365	3.364	0.001	2077487	1000.00	1010	28.59- 68.59	48.59
3.523	3.522	0.001	2825675	1000.00	1020	46.09- 86.09	66.09
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5722496	1000.00	1040	80.00- 120.00	100.00
4.571	4.569	0.002	7286722	1000.00	1020	107.33- 147.33	127.33
4.682	4.681	0.001	4771909	1000.00	1010	63.39- 103.39	83.39
4.880	4.879	0.001	5628643	1000.00	970	78.36- 118.36	98.36
5.506	5.505	0.001	8645842	1000.00	956	131.09- 171.09	151.09
Average of Peak Amounts =					999		

Data File: /chem/ecd2a.i/120109.b/091b9101.d
Date : 02-DEC-2009 01:29
Client ID: AR166009
Sample Info: IWAR091119-60 09

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

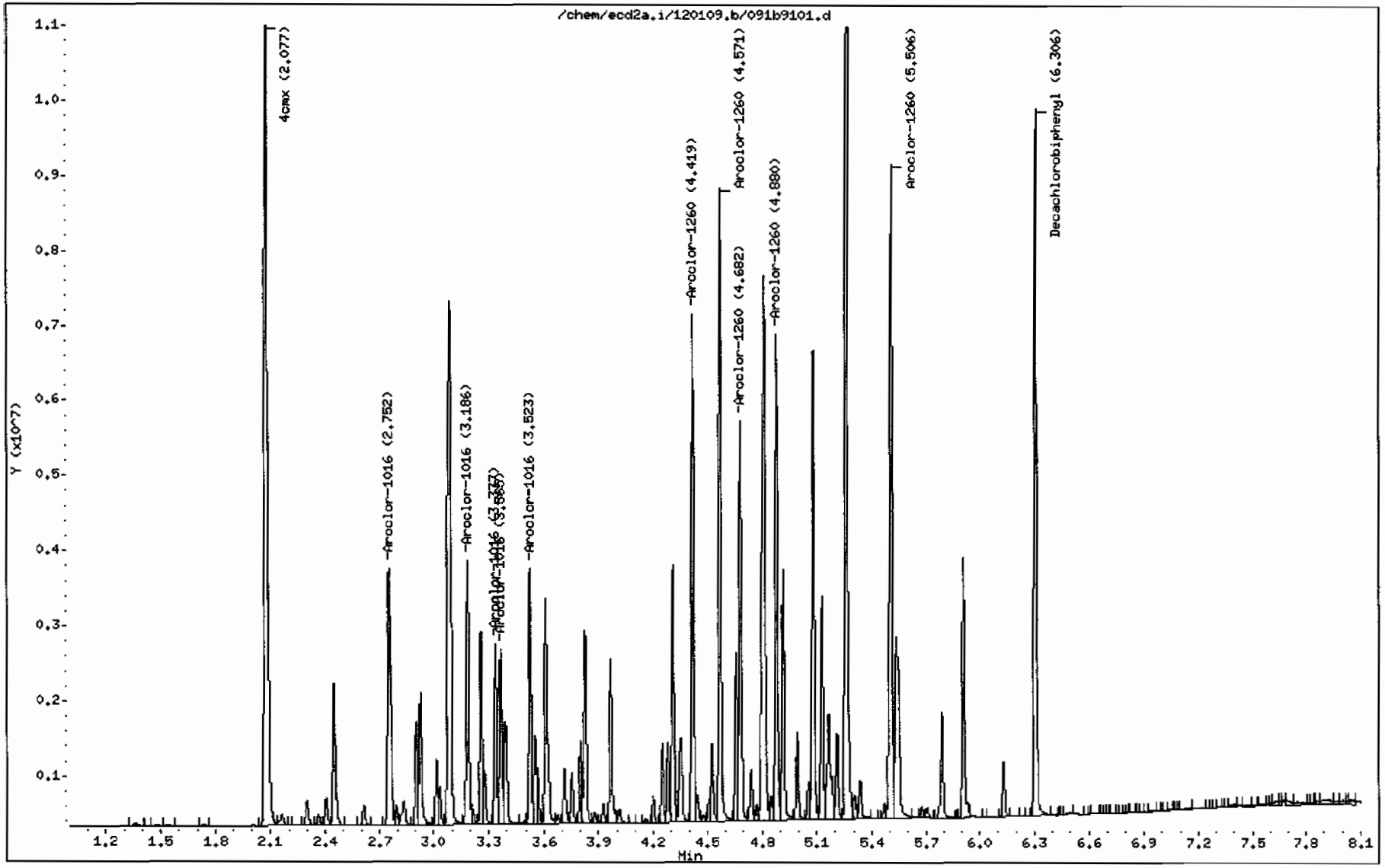

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	AR166001	WAR091119-60	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	AR124801	WAR091027-48	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	AR166001	WAR091119-60	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	AR124801	WAR091027-48	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/01/09	0808	1.78	5.61
02	AR166001	WAR091119-60	12/01/09	0819	1.78	5.61
03	AR125401	WAR091102-54	12/01/09	0830	1.78	5.61
04	AR124201	WAR091102-42	12/01/09	0841	1.78	5.61
05	ZZZZZ	ZZZZZ	12/01/09	0853	1.78	5.61
06	AR123201	WAR090930-32	12/01/09	0904	1.78	5.61
07	AR122101	WAR091111-21	12/01/09	0915	1.78	5.61
08	AR126201	WAR091111-62	12/01/09	0926	1.78	5.61
09	AR126801	WAR091106-68	12/01/09	0937	1.78	5.61
10	AR124801	WAR091027-48	12/01/09	0948	1.78	5.61
11	DDTANALOGSTD	WAR091020-DD	12/01/09	0959		
12	PIBLK02	WAR090916-99	12/01/09	1015	1.78	5.62
13	ZZZZZ	ZZZZZ	12/01/09	1026	1.78	5.61
14	ZZZZZ	ZZZZZ	12/01/09	1037	1.78	5.61
15	ZZZZZ	ZZZZZ	12/01/09	1048	1.78	5.61
16	ZZZZZ	ZZZZZ	12/01/09	1059	1.78	5.61
17	AR166002	WAR091119-60	12/01/09	1114	1.78	5.61
18	PIBLK03	WAR090916-99	12/01/09	1136	1.78	5.62
19	ZZZZZ	ZZZZZ	12/01/09	1147	1.78	5.61
20	ZZZZZ	ZZZZZ	12/01/09	1158	1.78	5.61
21	ZZZZZ	ZZZZZ	12/01/09	1209	1.78	5.61
22	ZZZZZ	ZZZZZ	12/01/09	1225	1.78	5.61
23	ZZZZZ	ZZZZZ	12/01/09	1240	1.78	5.61
24	AR166003	WAR091119-60	12/01/09	1256	1.78	5.61
25	PIBLK04	WAR090916-99	12/01/09	1307	1.78	5.61
26	ZZZZZ	ZZZZZ	12/01/09	1318	1.78	5.61
27	ZZZZZ	ZZZZZ	12/01/09	1329	1.78	5.61
28	ZZZZZ	ZZZZZ	12/01/09	1340	1.78	5.61
29	ZZZZZ	ZZZZZ	12/01/09	1352	1.78	5.61
30	ZZZZZ	ZZZZZ	12/01/09	1403	1.78	5.61
31	ZZZZZ	ZZZZZ	12/01/09	1414	1.78	5.61
32	ZZZZZ	ZZZZZ	12/01/09	1425	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	1436	1.78	5.61
02	ZZZZZ	ZZZZZ	12/01/09	1447	1.78	5.61
03	ZZZZZ	ZZZZZ	12/01/09	1458	1.78	5.61
04	AR166004	WAR091119-60	12/01/09	1514	1.78	5.61
05	PIBLK05	WAR090916-99	12/01/09	1525	1.78	5.61
06	ZZZZZ	ZZZZZ	12/01/09	1536	1.78	5.61
07	ZZZZZ	ZZZZZ	12/01/09	1547	1.78	5.61
08	ZZZZZ	ZZZZZ	12/01/09	1558	1.78	5.61
09	ZZZZZ	ZZZZZ	12/01/09	1609	1.78	5.61
10	ZZZZZ	ZZZZZ	12/01/09	1620	1.78	5.61
11	ZZZZZ	ZZZZZ	12/01/09	1631	1.78	5.61
12	ZZZZZ	ZZZZZ	12/01/09	1642	1.78	5.61
13	ZZZZZ	ZZZZZ	12/01/09	1654	1.78	5.61
14	ZZZZZ	ZZZZZ	12/01/09	1705	1.78	5.61
15	AR166005	WAR091119-60	12/01/09	1720	1.78	5.61
16	PIBLK06	WAR090916-99	12/01/09	1731	1.78	5.61
17	ZZZZZ	ZZZZZ	12/01/09	1742	1.78	5.61
18	ZZZZZ	ZZZZZ	12/01/09	1754	1.78	5.61
19	ZZZZZ	ZZZZZ	12/01/09	1805	1.78	5.61
20	ZZZZZ	ZZZZZ	12/01/09	1816	1.78	5.61
21	ZZZZZ	ZZZZZ	12/01/09	1827	1.78	5.61
22	ZZZZZ	ZZZZZ	12/01/09	1838	1.78	5.61
23	ZZZZZ	ZZZZZ	12/01/09	1849	1.78	5.61
24	ZZZZZ	ZZZZZ	12/01/09	1900	1.78	5.61
25	ZZZZZ	ZZZZZ	12/01/09	1911	1.78	5.61
26	ZZZZZ	ZZZZZ	12/01/09	1922	1.78	5.61
27	AR166006	WAR091119-60	12/01/09	1933	1.78	5.61
28	PIBLK07	WAR090916-99	12/01/09	1944	1.78	5.61
29	ZZZZZ	ZZZZZ	12/01/09	1956	1.78	5.61
30	ZZZZZ	ZZZZZ	12/01/09	2007	1.78	5.61
31	ZZZZZ	ZZZZZ	12/01/09	2018	1.78	5.61
32	ZZZZZ	ZZZZZ	12/01/09	2029	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	2040	1.78	5.61
02	ZZZZZ	ZZZZZ	12/01/09	2051	1.78	5.61
03	ZZZZZ	ZZZZZ	12/01/09	2102	1.78	5.61
04	ZZZZZ	ZZZZZ	12/01/09	2113	1.78	5.61
05	ZZZZZ	ZZZZZ	12/01/09	2124	1.78	5.61
06	ZZZZZ	ZZZZZ	12/01/09	2135	1.78	5.61
07	AR166007	WAR091119-60	12/01/09	2147	1.78	5.61
08	PIBLK08	WAR090916-99	12/01/09	2158	1.78	5.61
09	ZZZZZ	ZZZZZ	12/01/09	2209	1.78	5.62
10	PBLK01	1201982132	12/01/09	2220	1.78	5.61
11	PBLK01LCS	1201982135	12/01/09	2231	1.78	5.61
12	RE03-09-13975	241534001	12/01/09	2242	1.78	5.61
13	RE03-09-13975MS	1201982133	12/01/09	2253	1.78	5.61
14	RE03-09-13975MSD	1201982134	12/01/09	2304	1.78	5.61
15	RE03-09-13976	241534002	12/01/09	2316	1.78	5.61
16	RE03-09-13973	241534003	12/01/09	2327	1.78	5.61
17	RE03-09-13972	241534004	12/01/09	2338	1.78	5.61
18	RE03-09-13977	241534005	12/01/09	2349	1.78	5.61
19	AR166008	WAR091119-60	12/02/09	0000	1.78	5.61
20	PIBLK09	WAR090916-99	12/02/09	0011	1.78	5.61
21	RE03-09-13974	241534006	12/02/09	0023	1.78	5.61
22	RE03-10-3915	241534008	12/02/09	0034	1.78	5.61
23	ZZZZZ	ZZZZZ	12/02/09	0045	1.78	5.61
24	ZZZZZ	ZZZZZ	12/02/09	0056	1.78	5.61
25	ZZZZZ	ZZZZZ	12/02/09	0107	1.78	5.61
26	ZZZZZ	ZZZZZ	12/02/09	0118	1.78	5.61
27	AR166009	WAR091119-60	12/02/09	0129	1.78	5.61
28	PIBLK10	WAR090916-99	12/02/09	0140	1.78	5.61
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/01/09	0808	2.07	6.30
02	AR166001	WAR091119-60	12/01/09	0819	2.08	6.30
03	AR125401	WAR091102-54	12/01/09	0830	2.08	6.30
04	AR124201	WAR091102-42	12/01/09	0841	2.08	6.31
05	ZZZZZ	ZZZZZ	12/01/09	0853	2.08	6.30
06	AR123201	WAR090930-32	12/01/09	0904	2.08	6.30
07	AR122101	WAR091111-21	12/01/09	0915	2.07	6.30
08	AR126201	WAR091111-62	12/01/09	0926	2.07	6.30
09	AR126801	WAR091106-68	12/01/09	0937	2.08	6.30
10	AR124801	WAR091027-48	12/01/09	0948	2.08	6.30
11	DDTANALOGSTD	WAR091020-DD	12/01/09	0959		
12	PIBLK02	WAR090916-99	12/01/09	1015	2.08	6.31
13	ZZZZZ	ZZZZZ	12/01/09	1026	2.08	6.31
14	ZZZZZ	ZZZZZ	12/01/09	1037	2.07	6.31
15	ZZZZZ	ZZZZZ	12/01/09	1048	2.08	6.31
16	ZZZZZ	ZZZZZ	12/01/09	1059	2.08	6.31
17	AR166002	WAR091119-60	12/01/09	1114	2.07	6.30
18	PIBLK03	WAR090916-99	12/01/09	1136	2.08	6.31
19	ZZZZZ	ZZZZZ	12/01/09	1147	2.08	6.31
20	ZZZZZ	ZZZZZ	12/01/09	1158	2.07	6.30
21	ZZZZZ	ZZZZZ	12/01/09	1209	2.08	6.30
22	ZZZZZ	ZZZZZ	12/01/09	1225	2.07	6.30
23	ZZZZZ	ZZZZZ	12/01/09	1240	2.08	6.30
24	AR166003	WAR091119-60	12/01/09	1256	2.07	6.30
25	PIBLK04	WAR090916-99	12/01/09	1307	2.08	6.30
26	ZZZZZ	ZZZZZ	12/01/09	1318	2.08	6.30
27	ZZZZZ	ZZZZZ	12/01/09	1329	2.07	6.30
28	ZZZZZ	ZZZZZ	12/01/09	1340	2.08	6.30
29	ZZZZZ	ZZZZZ	12/01/09	1352	2.08	6.30
30	ZZZZZ	ZZZZZ	12/01/09	1403	2.08	6.31
31	ZZZZZ	ZZZZZ	12/01/09	1414	2.08	6.31
32	ZZZZZ	ZZZZZ	12/01/09	1425	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	1436	2.08	6.30
02	ZZZZZ	ZZZZZ	12/01/09	1447	2.08	6.30
03	ZZZZZ	ZZZZZ	12/01/09	1458	2.08	6.31
04	AR166004	WAR091119-60	12/01/09	1514	2.07	6.30
05	PIBLK05	WAR090916-99	12/01/09	1525	2.08	6.30
06	ZZZZZ	ZZZZZ	12/01/09	1536	2.08	6.30
07	ZZZZZ	ZZZZZ	12/01/09	1547	2.08	6.30
08	ZZZZZ	ZZZZZ	12/01/09	1558	2.08	6.30
09	ZZZZZ	ZZZZZ	12/01/09	1609	2.08	6.30
10	ZZZZZ	ZZZZZ	12/01/09	1620	2.08	6.30
11	ZZZZZ	ZZZZZ	12/01/09	1631	2.08	6.31
12	ZZZZZ	ZZZZZ	12/01/09	1642	2.07	6.31
13	ZZZZZ	ZZZZZ	12/01/09	1654	2.08	6.30
14	ZZZZZ	ZZZZZ	12/01/09	1705	2.08	6.30
15	AR166005	WAR091119-60	12/01/09	1720	2.08	6.30
16	PIBLK06	WAR090916-99	12/01/09	1731	2.08	6.30
17	ZZZZZ	ZZZZZ	12/01/09	1742	2.08	6.30
18	ZZZZZ	ZZZZZ	12/01/09	1754	2.08	6.30
19	ZZZZZ	ZZZZZ	12/01/09	1805	2.08	6.30
20	ZZZZZ	ZZZZZ	12/01/09	1816	2.08	6.31
21	ZZZZZ	ZZZZZ	12/01/09	1827	2.08	6.31
22	ZZZZZ	ZZZZZ	12/01/09	1838	2.08	6.31
23	ZZZZZ	ZZZZZ	12/01/09	1849	2.08	6.31
24	ZZZZZ	ZZZZZ	12/01/09	1900	2.08	6.30
25	ZZZZZ	ZZZZZ	12/01/09	1911	2.08	6.31
26	ZZZZZ	ZZZZZ	12/01/09	1922	2.08	6.31
27	AR166006	WAR091119-60	12/01/09	1933	2.08	6.30
28	PIBLK07	WAR090916-99	12/01/09	1944	2.08	6.31
29	ZZZZZ	ZZZZZ	12/01/09	1956	2.07	6.31
30	ZZZZZ	ZZZZZ	12/01/09	2007	2.08	6.31
31	ZZZZZ	ZZZZZ	12/01/09	2018	2.08	6.31
32	ZZZZZ	ZZZZZ	12/01/09	2029	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-601

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/01/09	2040	2.08	6.30
02	ZZZZZ	ZZZZZ	12/01/09	2051	2.08	6.31
03	ZZZZZ	ZZZZZ	12/01/09	2102	2.08	6.31
04	ZZZZZ	ZZZZZ	12/01/09	2113	2.08	6.30
05	ZZZZZ	ZZZZZ	12/01/09	2124	2.08	6.30
06	ZZZZZ	ZZZZZ	12/01/09	2135	2.08	6.31
07	AR160007	WAR091119-60	12/01/09	2147	2.08	6.31
08	PIBLK08	WAR090916-99	12/01/09	2158	2.08	6.31
09	ZZZZZ	ZZZZZ	12/01/09	2209	2.08	6.31
10	PBLK01	1201982132	12/01/09	2220	2.08	6.31
11	PBLK01LCS	1201982135	12/01/09	2231	2.08	6.31
12	RE03-09-13975	241534001	12/01/09	2242	2.08	6.31
13	RE03-09-13975MS	1201982133	12/01/09	2253	2.08	6.30
14	RE03-09-13975MSD	1201982134	12/01/09	2304	2.08	6.30
15	RE03-09-13976	241534002	12/01/09	2316	2.08	6.31
16	RE03-09-13973	241534003	12/01/09	2327	2.08	6.31
17	RE03-09-13972	241534004	12/01/09	2338	2.08	6.31
18	RE03-09-13977	241534005	12/01/09	2349	2.08	6.31
19	AR166008	WAR091119-60	12/02/09	0000	2.08	6.31
20	PIBLK09	WAR090916-99	12/02/09	0011	2.08	6.31
21	RE03-09-13974	241534006	12/02/09	0023	2.07	6.31
22	RE03-10-3915	241534008	12/02/09	0034	2.08	6.31
23	ZZZZZ	ZZZZZ	12/02/09	0045	2.08	6.30
24	ZZZZZ	ZZZZZ	12/02/09	0056	2.08	6.31
25	ZZZZZ	ZZZZZ	12/02/09	0107	2.08	6.31
26	ZZZZZ	ZZZZZ	12/02/09	0118	2.08	6.30
27	AR166009	WAR091119-60	12/02/09	0129	2.08	6.31
28	PIBLK10	WAR090916-99	12/02/09	0140	2.08	6.30
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10–601 **Client ID:** LCS for batch 927077

Lab Sample ID: 1201982135

Data File:	075f7501.d	**Data File:**	075b7501.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 22:31	**Analyzed:**	01–DEC–09 22:31

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							4.19
Column 1	1	2.28	2.25 – 2.31	28.4		ug/kg	
	2	2.6	2.57 – 2.63	28.2		ug/kg	
	3	2.69	2.66 – 2.72	27.5		ug/kg	
	4	2.83	2.8 – 2.86	26.8		ug/kg	
	5	2.98	2.95 – 3.01	28.7		ug/kg	
					27.9		
Column 2	1	2.75	2.72 – 2.78	29.2		ug/kg	
	2	3.19	3.15 – 3.21	31		ug/kg	
	3	3.34	3.31 – 3.37	30.1		ug/kg	
	4	3.37	3.33 – 3.39	25.2		ug/kg	
	5	3.52	3.49 – 3.55	30		ug/kg	
					29.1		
Aroclor–1260							.594
Column 1	1	4.02	3.99 – 4.05	31.2		ug/kg	
	2	4.29	4.26 – 4.32	30.7		ug/kg	
	3	4.46	4.42 – 4.48	30.9		ug/kg	
	4	4.67	4.64 – 4.7	31.9		ug/kg	
	5	4.86	4.83 – 4.89	31.2		ug/kg	
					31.2		
Column 2	1	4.42	4.39 – 4.45	32		ug/kg	
	2	4.57	4.54 – 4.6	31.9		ug/kg	
	3	4.68	4.65 – 4.71	31.5		ug/kg	
	4	4.88	4.85 – 4.91	30.9		ug/kg	
	5	5.51	5.48 – 5.54	30.5		ug/kg	
					31.4		

Identification Summary

SDG Number: 10–601 **Client ID:** RE03–09–13974

Lab Sample ID: 241534006

Data File:	085f8501.d	**Data File:**	085b8501.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	02–DEC–09 00:23	**Analyzed:**	02–DEC–09 00:23

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							18.6
Column 1	1	4.02	3.99 – 4.05	2.05		ug/kg	
	2	4.29	4.26 – 4.32	2.84		ug/kg	
	3	4.46	4.42 – 4.48	2.4		ug/kg	
	4	4.67	4.64 – 4.7	2.3		ug/kg	
	5	4.86	4.83 – 4.89	3.57		ug/kg	
					2.63		
Column 2	1	4.42	4.39 – 4.45	.718		ug/kg	
	2	4.57	4.54 – 4.6	2.21		ug/kg	
	3	4.68	4.65 – 4.71	2.91		ug/kg	
	4	4.88	4.85 – 4.91	2.45		ug/kg	
	5	5.51	5.48 – 5.54	2.66		ug/kg	
					2.19		

Identification Summary

SDG Number: 10–601 **Client ID:** RE03–09–13975MS

Lab Sample ID: 1201982133

Data File:	077f7701.d	**Data File:**	077b7701.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 22:53	**Analyzed:**	01–DEC–09 22:53

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							2.3
Column 1	1	2.28	2.25 – 2.31	34		ug/kg	
	2	2.6	2.57 – 2.63	35		ug/kg	
	3	2.69	2.66 – 2.72	34.1		ug/kg	
	4	2.83	2.8 – 2.86	33.1		ug/kg	
	5	2.98	2.95 – 3.01	35.8		ug/kg	
					34.4		
Column 2	1	2.75	2.72 – 2.78	35.4		ug/kg	
	2	3.18	3.15 – 3.21	36.3		ug/kg	
	3	3.34	3.31 – 3.37	36.7		ug/kg	
	4	3.36	3.33 – 3.39	30.2		ug/kg	
	5	3.52	3.49 – 3.55	37.5		ug/kg	
					35.2		
Aroclor–1260							1.61
Column 1	1	4.02	3.99 – 4.05	40.5		ug/kg	
	2	4.29	4.26 – 4.32	39.7		ug/kg	
	3	4.45	4.42 – 4.48	40.1		ug/kg	
	4	4.67	4.64 – 4.7	40.1		ug/kg	
	5	4.86	4.83 – 4.89	39.6		ug/kg	
					40		
Column 2	1	4.42	4.39 – 4.45	41.2		ug/kg	
	2	4.57	4.54 – 4.6	41.9		ug/kg	
	3	4.68	4.65 – 4.71	41		ug/kg	
	4	4.88	4.85 – 4.91	40.4		ug/kg	
	5	5.51	5.48 – 5.54	38.8		ug/kg	
					40.7		

Identification Summary

SDG Number: 10–601 **Client ID:** RE03–09–13975MSD

Lab Sample ID: 1201982134

Data File:	078f7801.d	**Data File:**	078b7801.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 23:04	**Analyzed:**	01–DEC–09 23:04

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							3.43
Column 1	1	2.28	2.25 – 2.31	34.5		ug/kg	
	2	2.6	2.57 – 2.63	35.5		ug/kg	
	3	2.69	2.66 – 2.72	34.5		ug/kg	
	4	2.83	2.8 – 2.86	35.8		ug/kg	
	5	2.98	2.95 – 3.01	36.3		ug/kg	
					35.3		
Column 2	1	2.75	2.72 – 2.78	36.4		ug/kg	
	2	3.18	3.15 – 3.21	36.7		ug/kg	
	3	3.34	3.31 – 3.37	37.5		ug/kg	
	4	3.36	3.33 – 3.39	34.1		ug/kg	
	5	3.52	3.49 – 3.55	38.1		ug/kg	
					36.5		
Aroclor–1260							2.3
Column 1	1	4.02	3.99 – 4.05	41		ug/kg	
	2	4.29	4.26 – 4.32	40.2		ug/kg	
	3	4.45	4.42 – 4.48	40.2		ug/kg	
	4	4.67	4.64 – 4.7	41.6		ug/kg	
	5	4.86	4.83 – 4.89	41.1		ug/kg	
					40.8		
Column 2	1	4.42	4.39 – 4.45	42.1		ug/kg	
	2	4.57	4.54 – 4.6	42.4		ug/kg	
	3	4.68	4.65 – 4.71	42.1		ug/kg	
	4	4.88	4.85 – 4.91	40.7		ug/kg	
	5	5.5	5.48 – 5.54	41.6		ug/kg	
					41.8		

Identification Summary

SDG Number: 10–601 **Client ID:** RE03–09–13976

Lab Sample ID: 241534002

Data File:	079f7901.d	**Data File:**	079b7901.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 23:16	**Analyzed:**	01–DEC–09 23:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							9.23
Column 1	1	3.24	3.21 – 3.27	17.3		ug/kg	
	2	3.43	3.4 – 3.46	12.1		ug/kg	
	3	3.7	3.67 – 3.73	13.2		ug/kg	
	4	3.89	3.86 – 3.92	14.3		ug/kg	
	5	4.02	3.99 – 4.05	26.7		ug/kg	
					16.7		
Column 2	1	3.82	3.79 – 3.85	15.2		ug/kg	
	2	3.96	3.93 – 3.99	15.7		ug/kg	
	3	4.2	4.17 – 4.23	16.1		ug/kg	
	4	4.28	4.25 – 4.31	14.3		ug/kg	
	5	4.44	4.41 – 4.47	15		ug/kg	
					15.3		
Aroclor–1260							13.6
Column 1	1	4.02	3.99 – 4.05	18.1		ug/kg	
	2	4.29	4.26 – 4.32	8.8		ug/kg	
	3	4.45	4.42 – 4.48	20.3		ug/kg	
	4	4.67	4.64 – 4.7	8.57		ug/kg	
	5	4.86	4.83 – 4.89	14.4		ug/kg	
					14		
Column 2	1	4.42	4.39 – 4.45	19.5		ug/kg	
	2	4.57	4.54 – 4.6	15.1		ug/kg	
	3	4.68	4.65 – 4.71	20.2		ug/kg	
	4	4.88	4.85 – 4.91	13.7		ug/kg	
	5	5.5	5.48 – 5.54	12		ug/kg	
					16.1		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-601			**Matrix:**	SOIL
Lab Sample ID:	1201982132				
Client Sample:	QC for batch 927077	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 927077	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 22:20	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	074f7401-1.d	**Column:**	1 CLP1	**Level:**	LOW
	074b7401-1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/074f7401.d
Lab Smp Id: 1201982132 Client Smp ID: PBLK01
Inj Date : 01-DEC-2009 22:20
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982132|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 74 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10402157	180.245	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8541076	155.776	5.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/074f7401.d
Date : 01-DEC-2009 22:20
Client ID: PBLK01
Sample Info: |120198213211|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

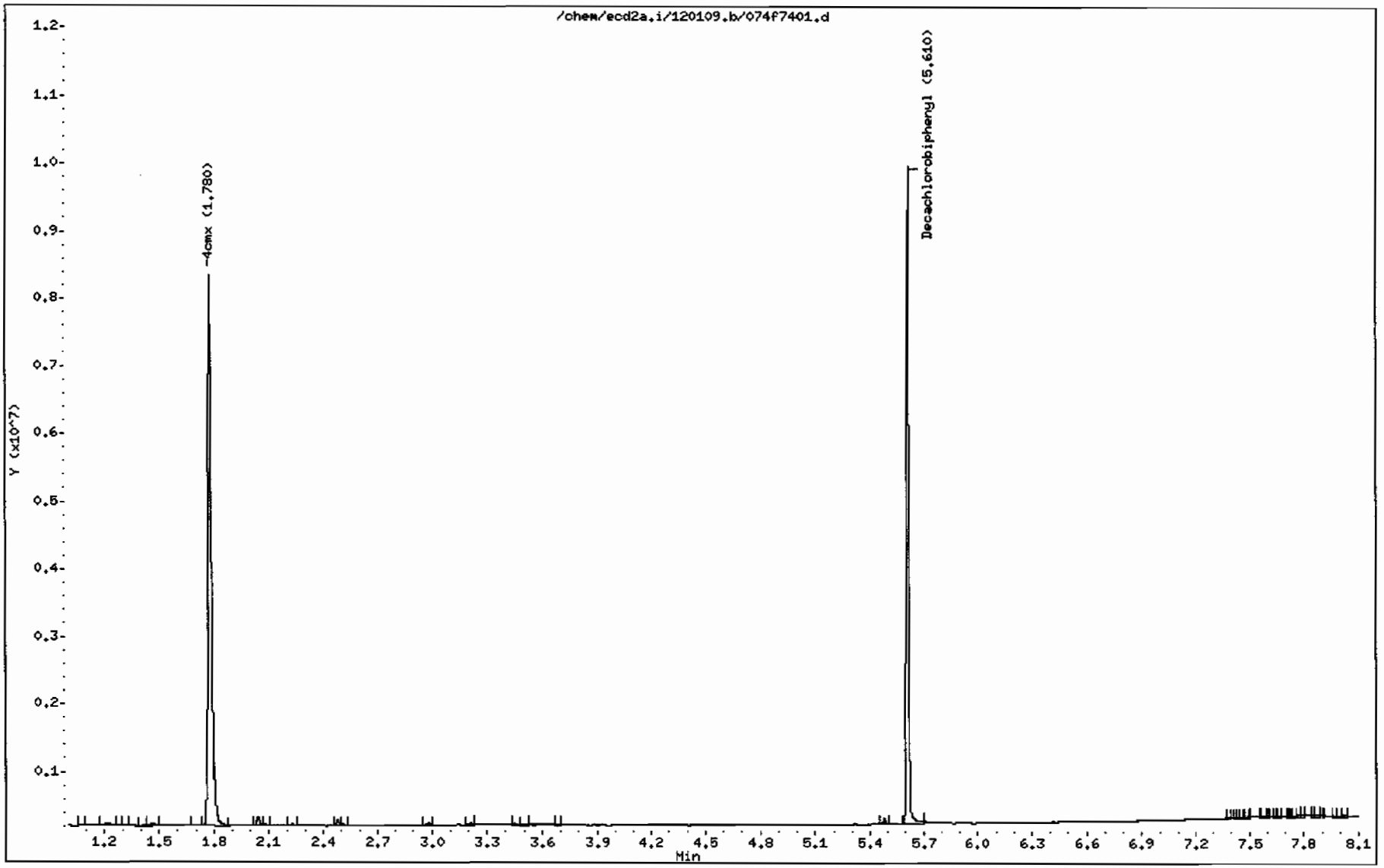

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/074b7401.d
Lab Smp Id: 1201982132 Client Smp ID: PBLK01
Inj Date : 01-DEC-2009 22:20
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982132|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 74 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	22578997	191.024	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	17472575	160.828	5.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120109.b/074b7401.d
Date : 01-DEC-2009 22:20
Client ID: PBLK01
Sample Info: |120198213211|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

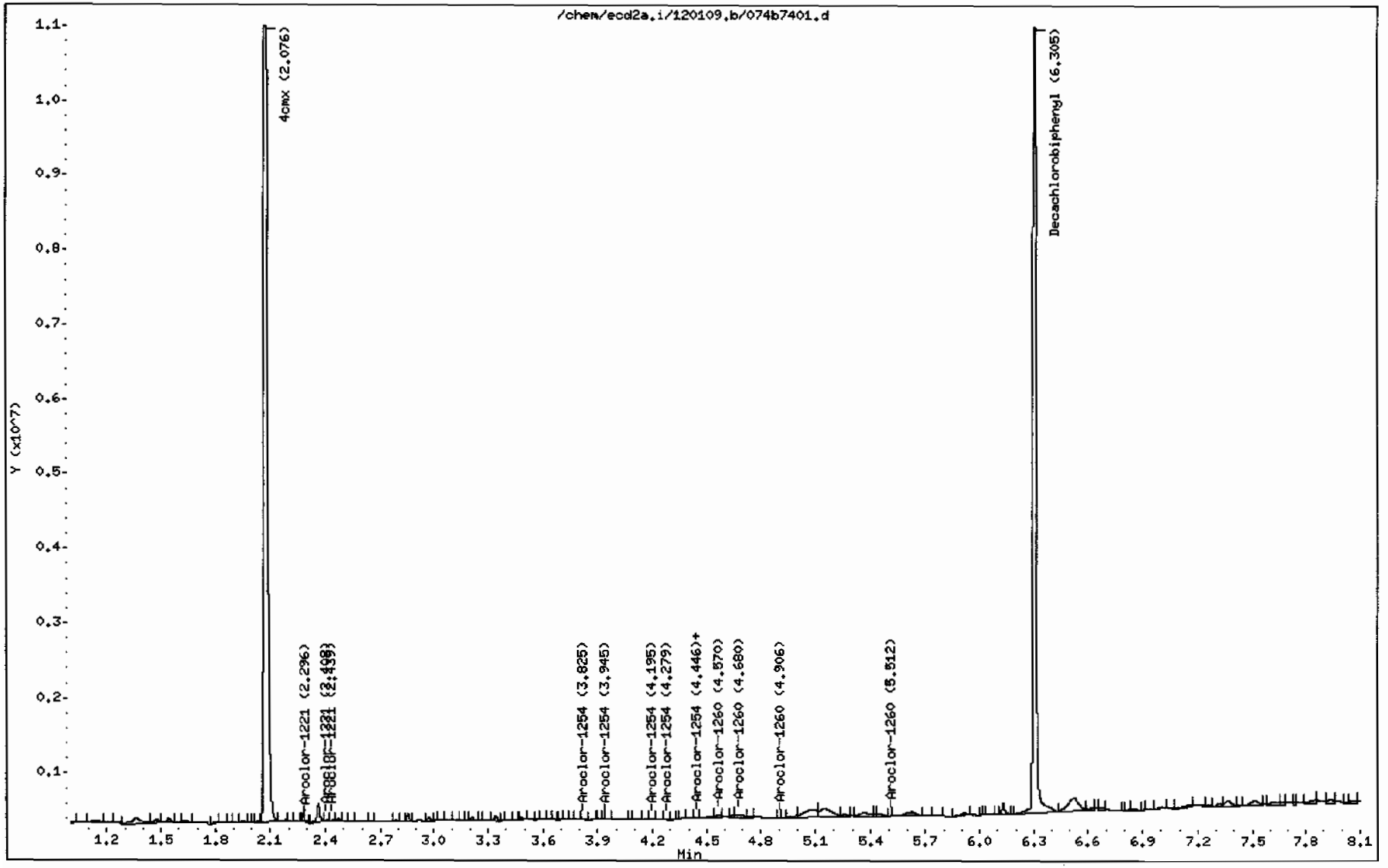

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-601**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982135**				
Client Sample:	**QC for batch 927077**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927077**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927078**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:31**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 15:56**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**075f7501-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	075b7501-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		29.1	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		31.4	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/075f7501.d
Lab Smp Id: 1201982135 Client Smp ID: PBLK01LCS
Inj Date : 01-DEC-2009 22:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982135|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 75 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10298600	178.450	5.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8714618	158.941	5.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	1791375	853.115	28.4	80.00- 120.00	100.00(M)
2.603	2.602	0.001	3806664	845.078	28.2	193.81- 233.81	212.50
2.693	2.692	0.001	1504176	826.375	27.5	64.26- 104.26	83.97
2.828	2.827	0.001	750963	804.992	26.8	21.10- 61.10	41.92

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.979	2.978	0.001	1185502	860.228	28.7	44.48- 84.48	66.18
Average of Peak Concentrations =					27.9		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	3805103	935.652	31.2	80.00- 120.00	100.00
4.289	4.288	0.001	2329093	921.203	30.7	39.98- 79.98	61.21
4.455	4.454	0.001	2398614	928.543	31.0	41.33- 81.33	63.04
4.667	4.666	0.001	5777506	957.158	31.9	123.75- 163.75	151.84
4.857	4.855	0.002	2723635	935.331	31.2	48.23- 88.23	71.58
Average of Peak Concentrations =					31.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/075f7501.d
Date : 01-DEC-2009 22:31
Client ID: PBLK01LCS
Sample Info: |1201982135|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

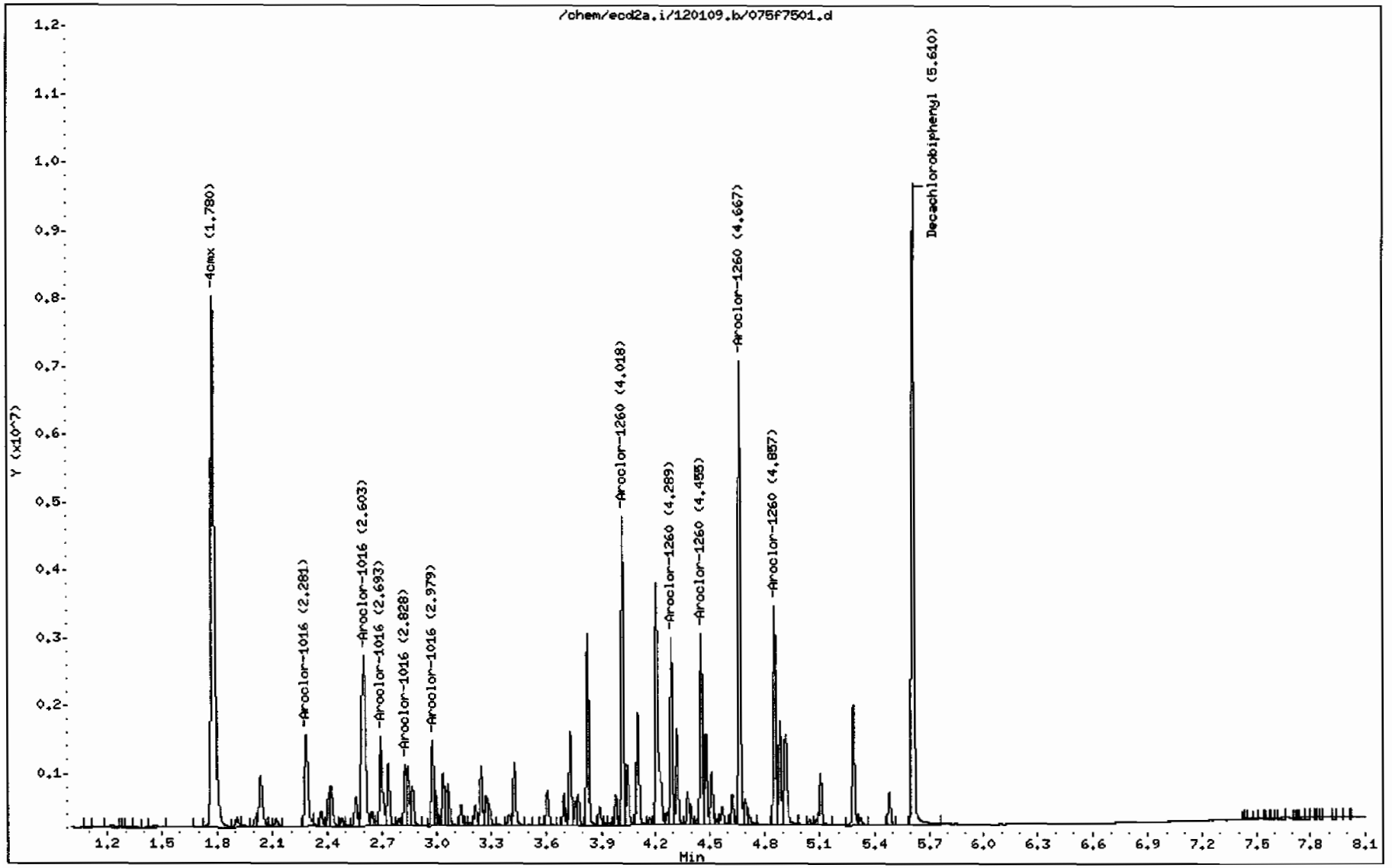

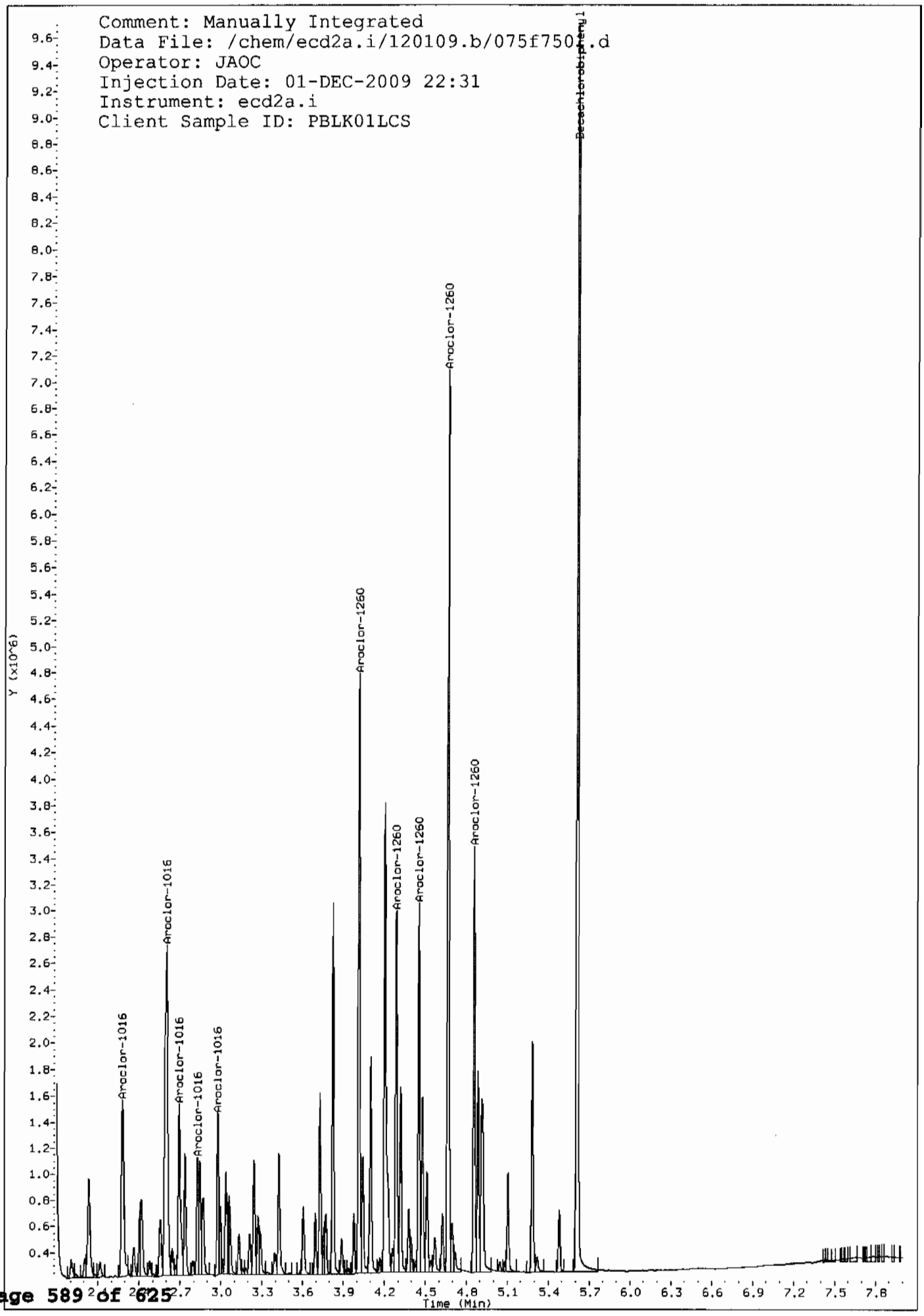
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/075f7501.d
Operator: JAOC
Injection Date: 01-DEC-2009 22:31
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

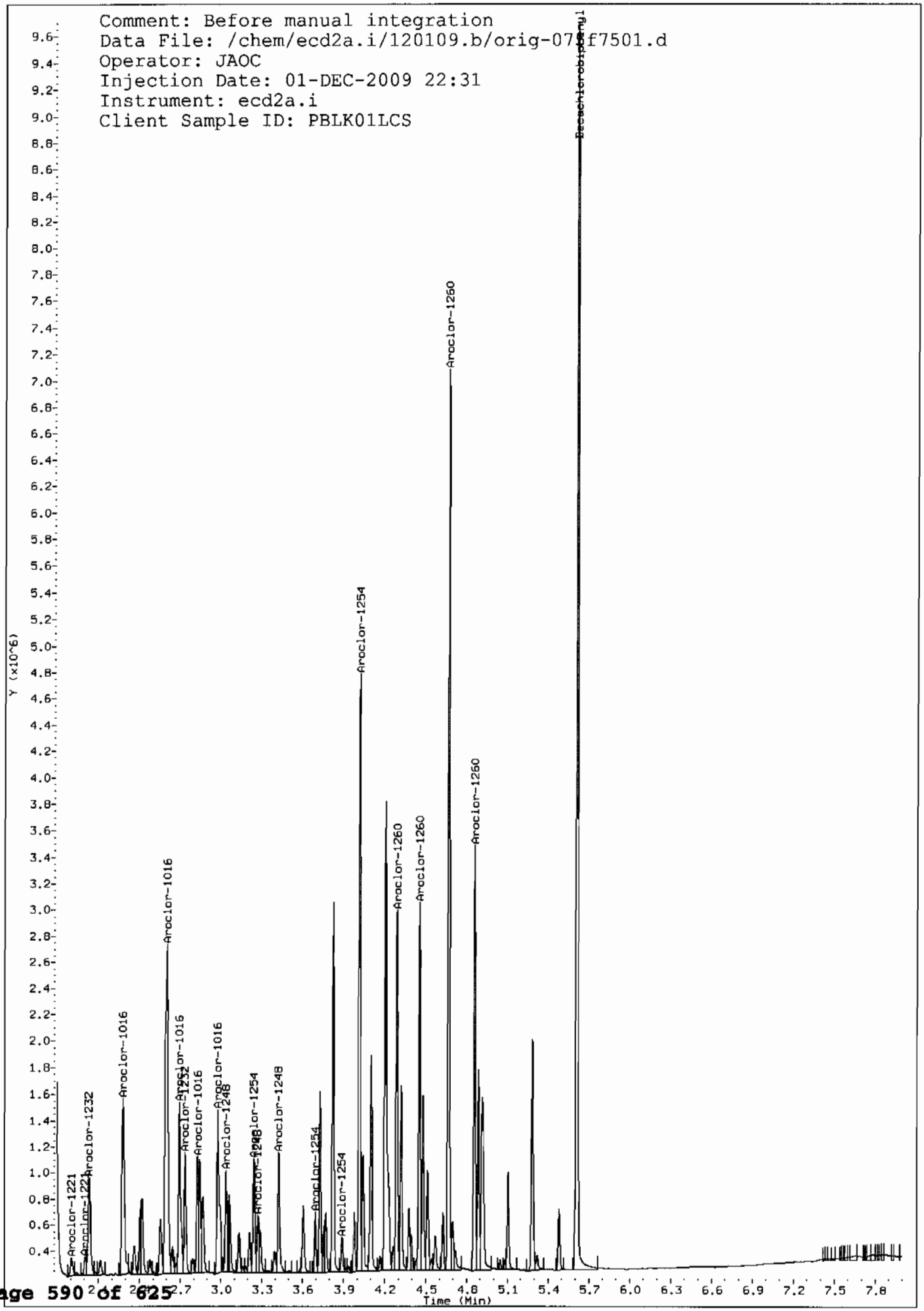
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-07f7501.d
Operator: JAOC
Injection Date: 01-DEC-2009 22:31
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Y (x10^6)
Time (Min)
Aroclor-1221
Aroclor-1232
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1260
Decachlorobiphenyl

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/075b7501.d
Lab Smp Id: 1201982135 Client Smp ID: PBLK01LCS
Inj Date : 01-DEC-2009 22:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982135|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 75 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22466128	190.069	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	17690124	162.830	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3734638	877.077	29.2	80.00- 120.00	100.00
3.185	3.184	0.001	3204853	930.377	31.0	61.02- 101.02	85.81
3.337	3.335	0.002	1789429	903.986	30.1	26.72- 66.72	47.91
3.365	3.364	0.001	1560066	756.853	25.2	28.59- 68.59	41.77

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.522	0.001	2480465	900.622	30.0	46.09- 86.09	66.42
Average of Peak Concentrations =					29.1		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5287948	959.240	32.0	80.00- 120.00	100.00
4.571	4.569	0.002	6825399	957.015	31.9	107.33- 147.33	129.07
4.682	4.681	0.001	4474742	945.761	31.5	63.39- 103.39	84.62
4.879	4.879	0.000	5380066	927.492	30.9	78.36- 118.36	101.74
5.506	5.505	0.001	8283456	916.243	30.5	131.09- 171.09	156.65
Average of Peak Concentrations =					31.4		

Data File: /chem/ecd2a.i/120109.b/075b7501.d
Date : 01-DEC-2009 22:31
Client ID: PBLK01LCS
Sample Info: |120198213511|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

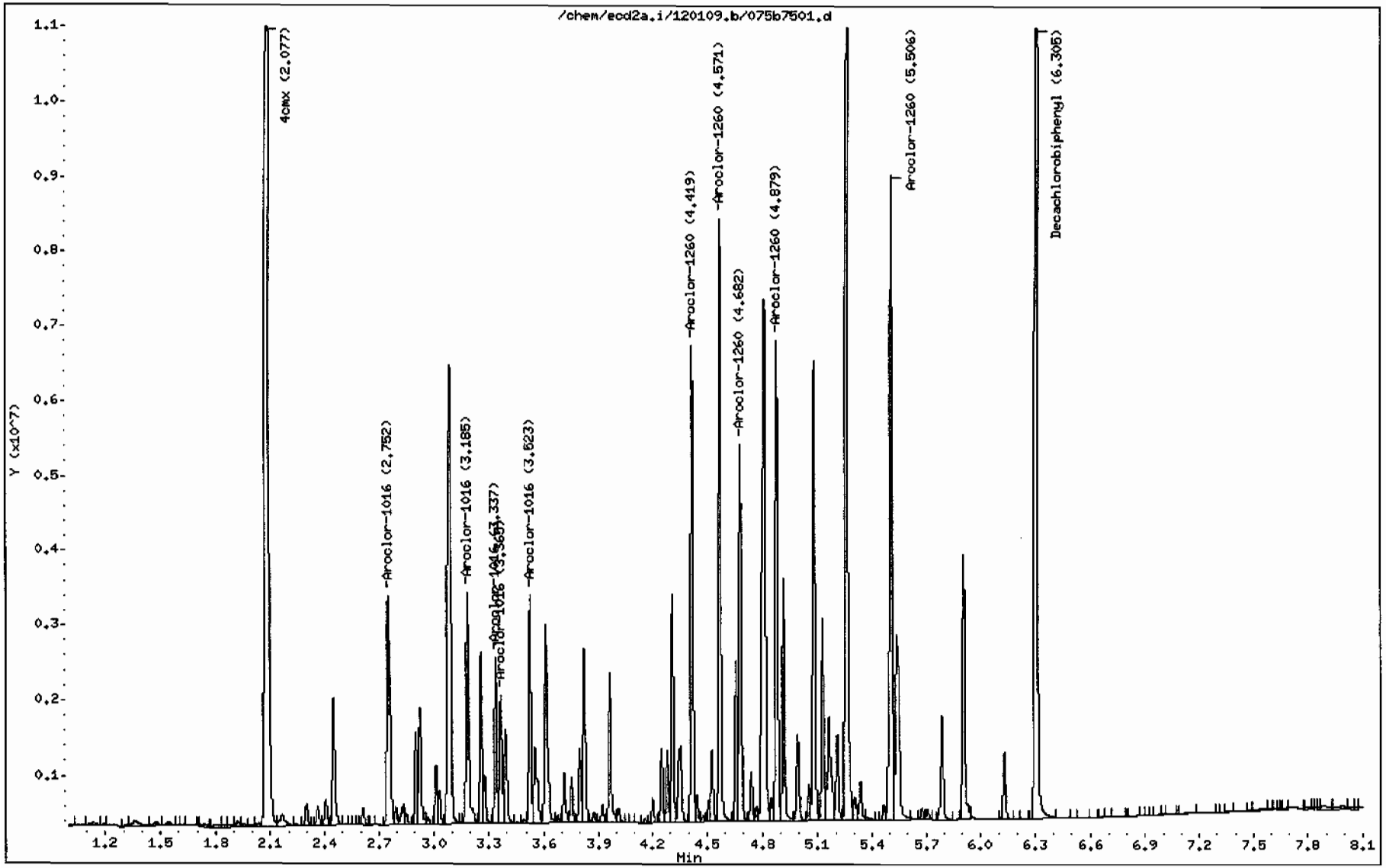

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982133	**Date Received:**	11/20/2009 08:50	**%Moisture:**	17.8
Client Sample:	QC for batch 927077	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–13975MS	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 22:53	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		34.4	ug/kg	1.35	4.05	1
11104–28–2	Aroclor–1221	U	4.05	ug/kg	1.35	4.05	1
11141–16–5	Aroclor–1232	U	4.05	ug/kg	1.35	4.05	1
53469–21–9	Aroclor–1242	U	4.05	ug/kg	1.35	4.05	1
12672–29–6	Aroclor–1248	U	4.05	ug/kg	1.35	4.05	1
11097–69–1	Aroclor–1254	U	4.05	ug/kg	1.35	4.05	1
11096–82–5	Aroclor–1260		40.0	ug/kg	1.35	4.05	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/077f7701.d
Lab Smp Id: 1201982133 Client Smp ID: RE03-09-13975MS
Inj Date : 01-DEC-2009 22:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982133|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 77 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	10161567	176.076	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8528568	155.548	6.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.279	0.001	1762419	839.325	34.0	80.00- 120.00	100.00(M)
2.602	2.602	0.000	3899805	865.755	35.0	193.81- 233.81	221.28
2.693	2.692	0.001	1533364	842.410	34.1	64.26- 104.26	87.00
2.829	2.827	0.002	763675	818.618	33.1	21.10- 61.10	43.33

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.979	2.978	0.001	1221283	886.192	35.8	44.48- 84.48	69.30
Average of Peak Concentrations =					34.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4070946	1001.02	40.5	80.00- 120.00	100.00
4.290	4.288	0.002	2480936	981.260	39.7	39.98- 79.98	60.94
4.455	4.454	0.001	2561586	991.632	40.1	41.33- 81.33	62.92
4.667	4.666	0.001	5984012	991.370	40.1	123.75- 163.75	146.99
4.856	4.855	0.001	2851569	979.265	39.6	48.23- 88.23	70.05
Average of Peak Concentrations =					40.0		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/077f7701.d
Date : 01-DEC-2009 22:53
Client ID: RE03-09-13975MS
Sample Info: |120198213311|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

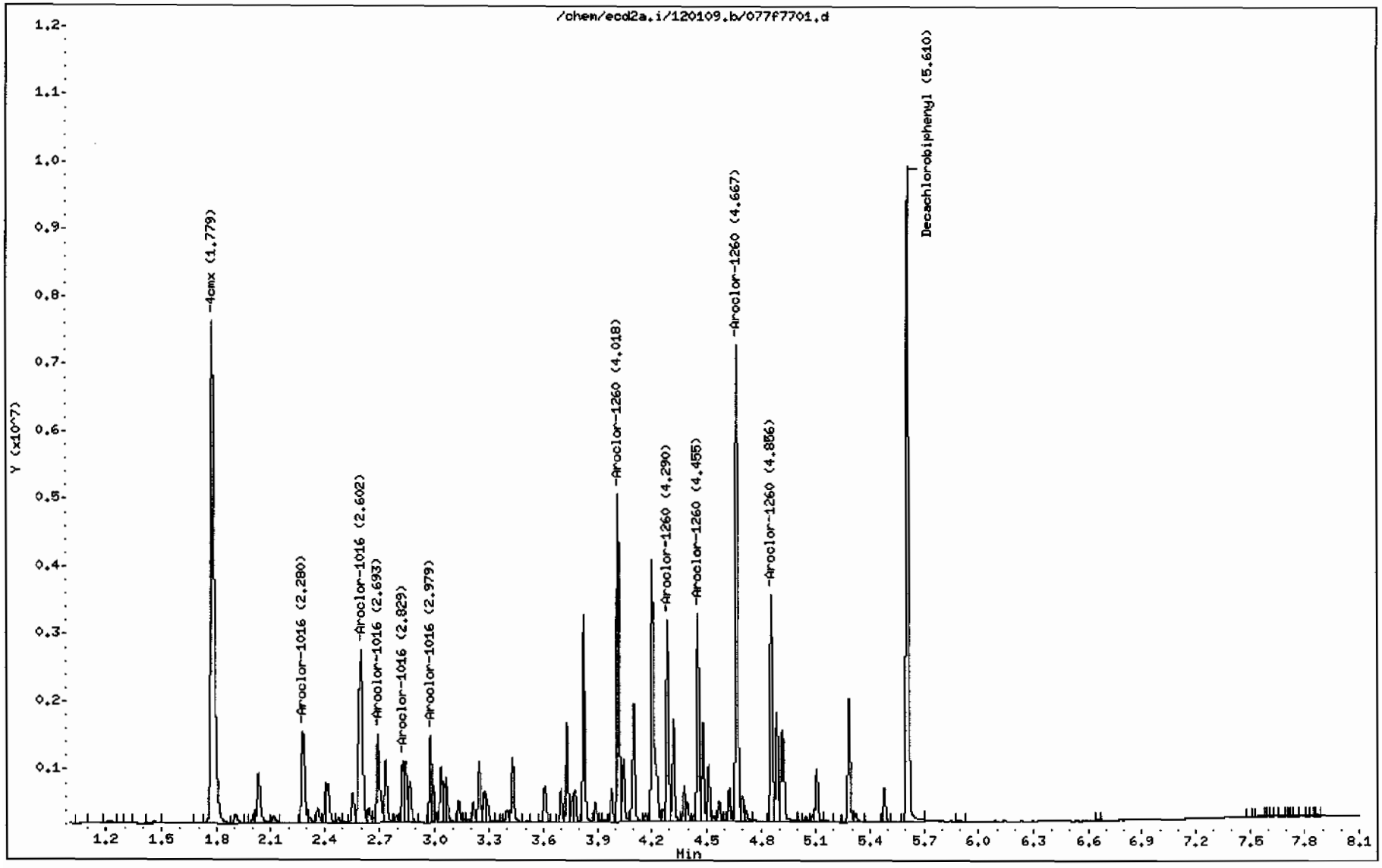

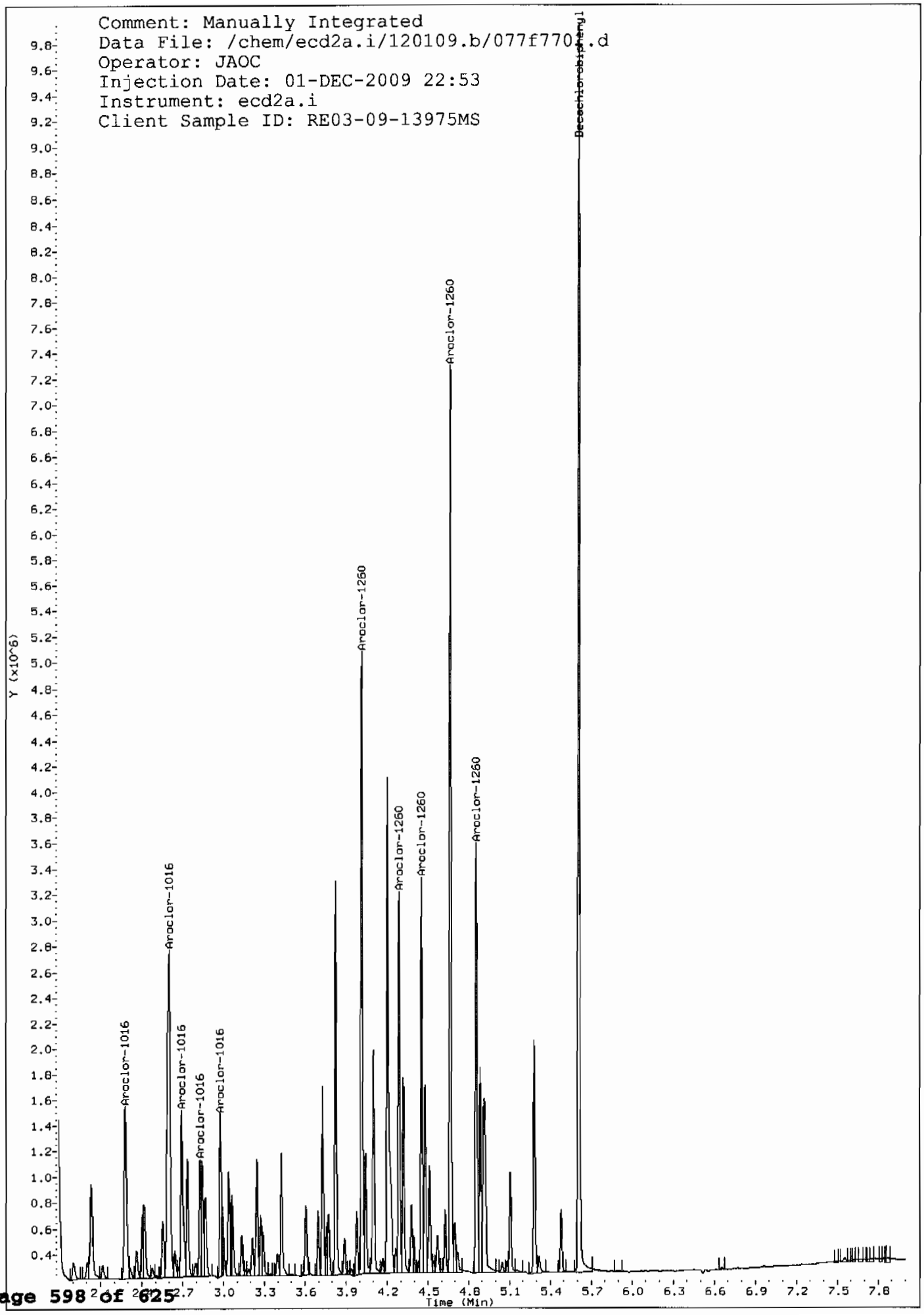
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Data File: /chem/ecd2a.i/120109.b/077f7703.d
Operator: JAOC
Injection Date: 01-DEC-2009 22:53
Instrument: ecd2a.i
Client Sample ID: RE03-09-13975MS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
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Y (x10^6)
Time (Min)

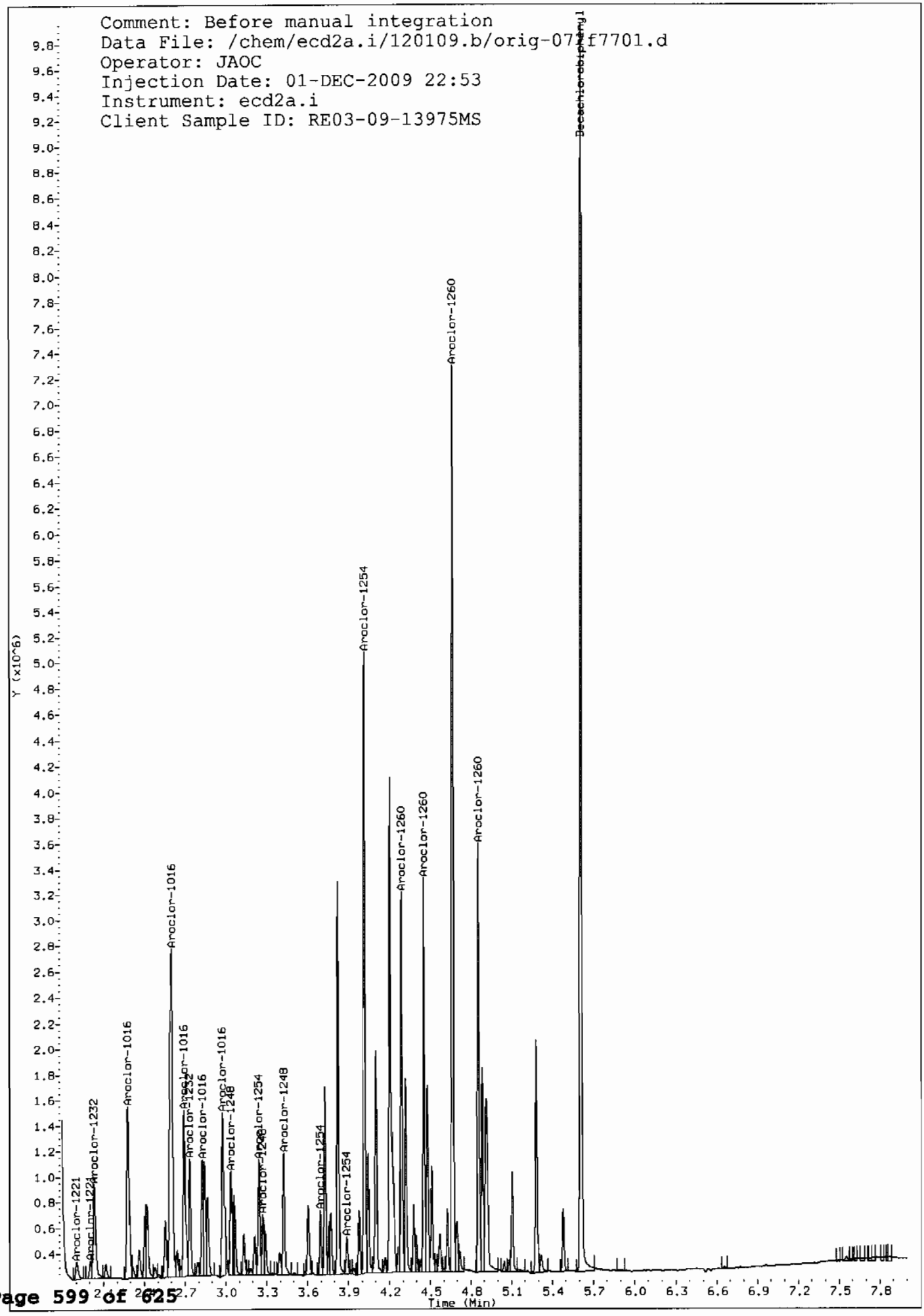
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-07f7701.d
Operator: JAOC
Injection Date: 01-DEC-2009 22:53
Instrument: ecd2a.i
Client Sample ID: RE03-09-13975MS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1016
Aroclor-1248
Aroclor-1232
Aroclor-1221
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/077b7701.d
Lab Smp Id: 1201982133 Client Smp ID: RE03-09-13975MS
Inj Date : 01-DEC-2009 22:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982133|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 77 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	22001377	186.137	7.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	18313296	168.566	6.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.750	0.001	3729262	875.814	35.4	80.00- 120.00	100.00
3.185	3.184	0.001	3087046	896.178	36.2	61.02- 101.02	82.78
3.336	3.335	0.001	1793938	906.264	36.7	26.72- 66.72	48.10
3.365	3.364	0.001	1538593	746.436	30.2	28.59- 68.59	41.26

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.522	0.001	2551634	926.462	37.5	46.09- 86.09	68.42
Average of Peak Concentrations =					35.2		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5621044	1019.66	41.2	80.00- 120.00	100.00
4.570	4.569	0.001	7384206	1035.37	41.9	107.33- 147.33	131.37
4.682	4.681	0.001	4791286	1012.66	41.0	63.39- 103.39	85.24
4.879	4.879	0.000	5788785	997.953	40.4	78.36- 118.36	102.98
5.505	5.505	0.000	8672245	959.247	38.8	131.09- 171.09	154.28
Average of Peak Concentrations =					40.7		

Data File: /chem/ecd2a.i/120109.b/077b7701.d
Date : 01-DEC-2009 22:53
Client ID: RE03-09-13975MS
Sample Info: !120198213311!
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

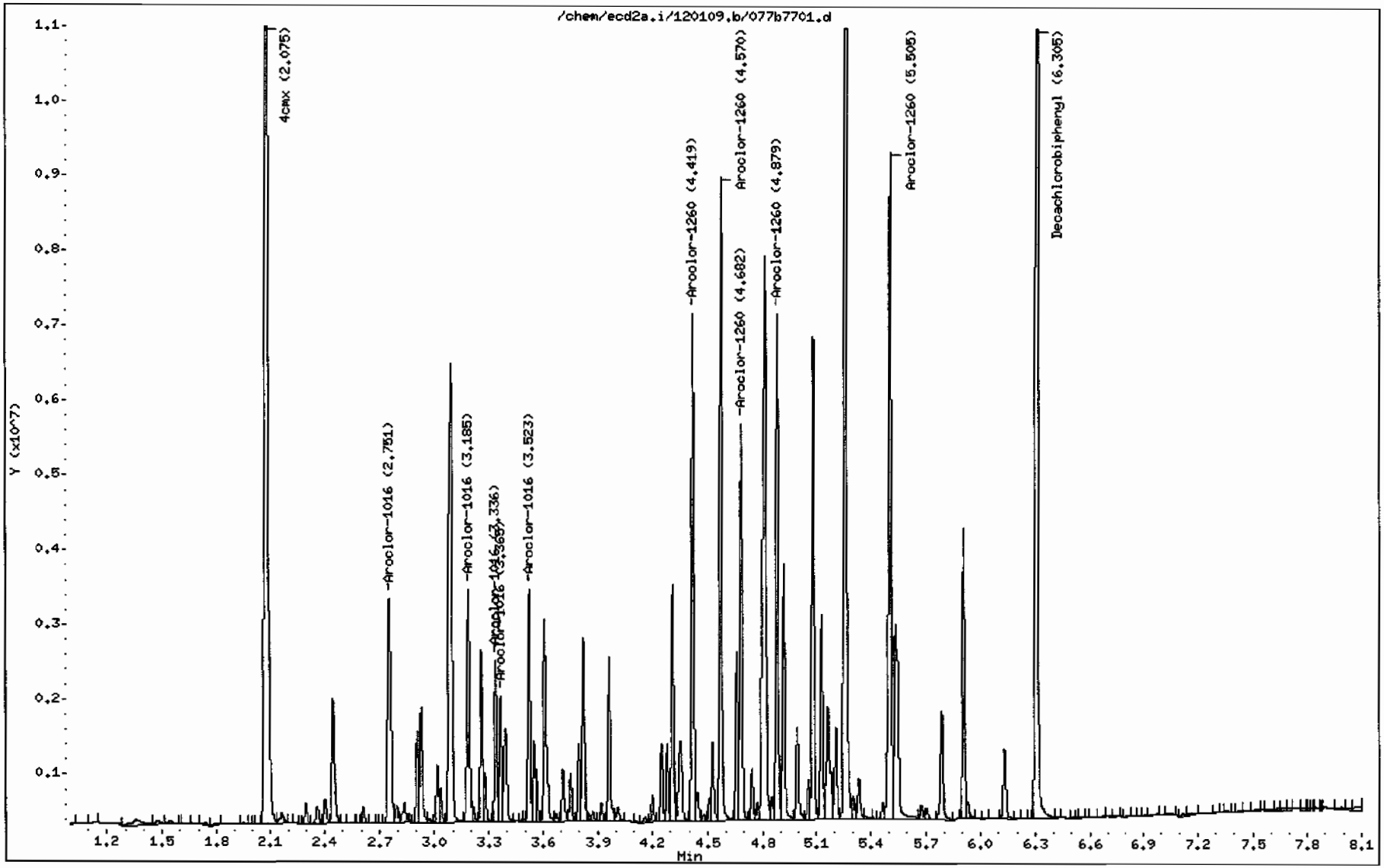

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–601	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982134	**Date Received:**	11/20/2009 08:50	**%Moisture:**	17.8
Client Sample:	QC for batch 927077	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–13975MSD	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927078	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 23:04	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 15:56	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	078f7801.d	**Column:**	1 CLP1	**Level:**	LOW
	078b7801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		35.3	ug/kg	1.34	4.03	1
11104–28–2	Aroclor–1221	U	4.03	ug/kg	1.34	4.03	1
11141–16–5	Aroclor–1232	U	4.03	ug/kg	1.34	4.03	1
53469–21–9	Aroclor–1242	U	4.03	ug/kg	1.34	4.03	1
12672–29–6	Aroclor–1248	U	4.03	ug/kg	1.34	4.03	1
11097–69–1	Aroclor–1254	U	4.03	ug/kg	1.34	4.03	1
11096–82–5	Aroclor–1260		40.8	ug/kg	1.34	4.03	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/078f7801.d
Lab Smp Id: 1201982134 Client Smp ID: RE03-09-13975MSD
Inj Date : 01-DEC-2009 23:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982134|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-F-8082-111209A.m
Meth Date : 02-Dec-2009 06:31 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 78 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	10206197	176.849	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8977440	163.735	6.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.279	0.002	1797194	855.886	34.5	80.00- 120.00	100.00(M)
2.602	2.602	0.000	3966158	880.485	35.5	193.81- 233.81	220.69
2.693	2.692	0.001	1556924	855.354	34.5	64.26- 104.26	86.63
2.828	2.827	0.001	829169	888.824	35.8	21.10- 61.10	46.14

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.980	2.978	0.002	1240961	900.471	36.3	44.48- 84.48	69.05
Average of Peak Concentrations =					35.3		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	4141038	1018.26	41.0	80.00- 120.00	100.00
4.289	4.288	0.001	2519008	996.318	40.2	39.98- 79.98	60.83
4.455	4.454	0.001	2576861	997.545	40.2	41.33- 81.33	62.23
4.667	4.666	0.001	6226960	1031.62	41.6	123.75- 163.75	150.37
4.856	4.855	0.001	2967836	1019.19	41.1	48.23- 88.23	71.67
Average of Peak Concentrations =					40.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120109.b/078f7801.d
Date : 01-DEC-2009 23:04
Client ID: RE03-09-13975MSD
Sample Info: |120198213411|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

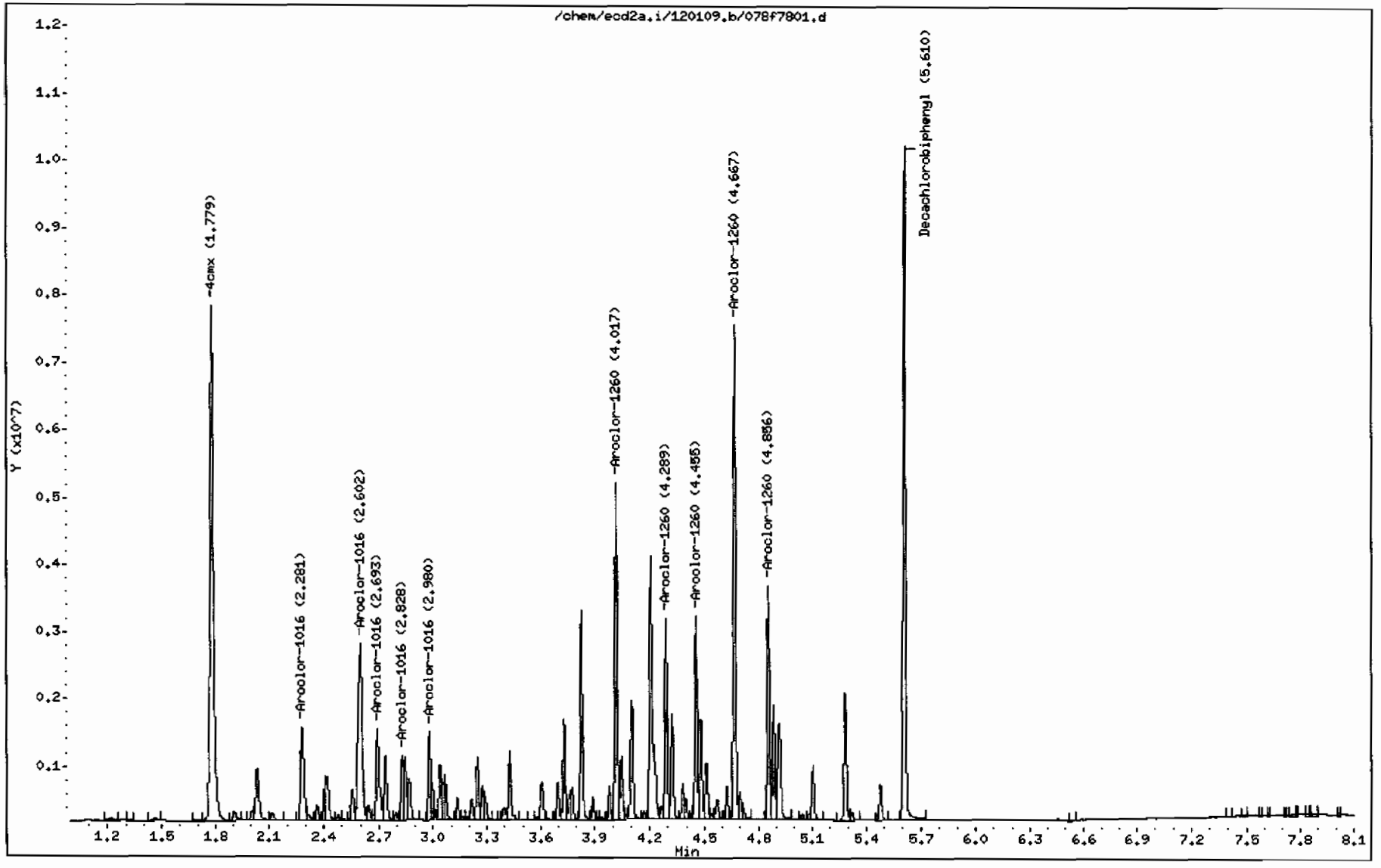

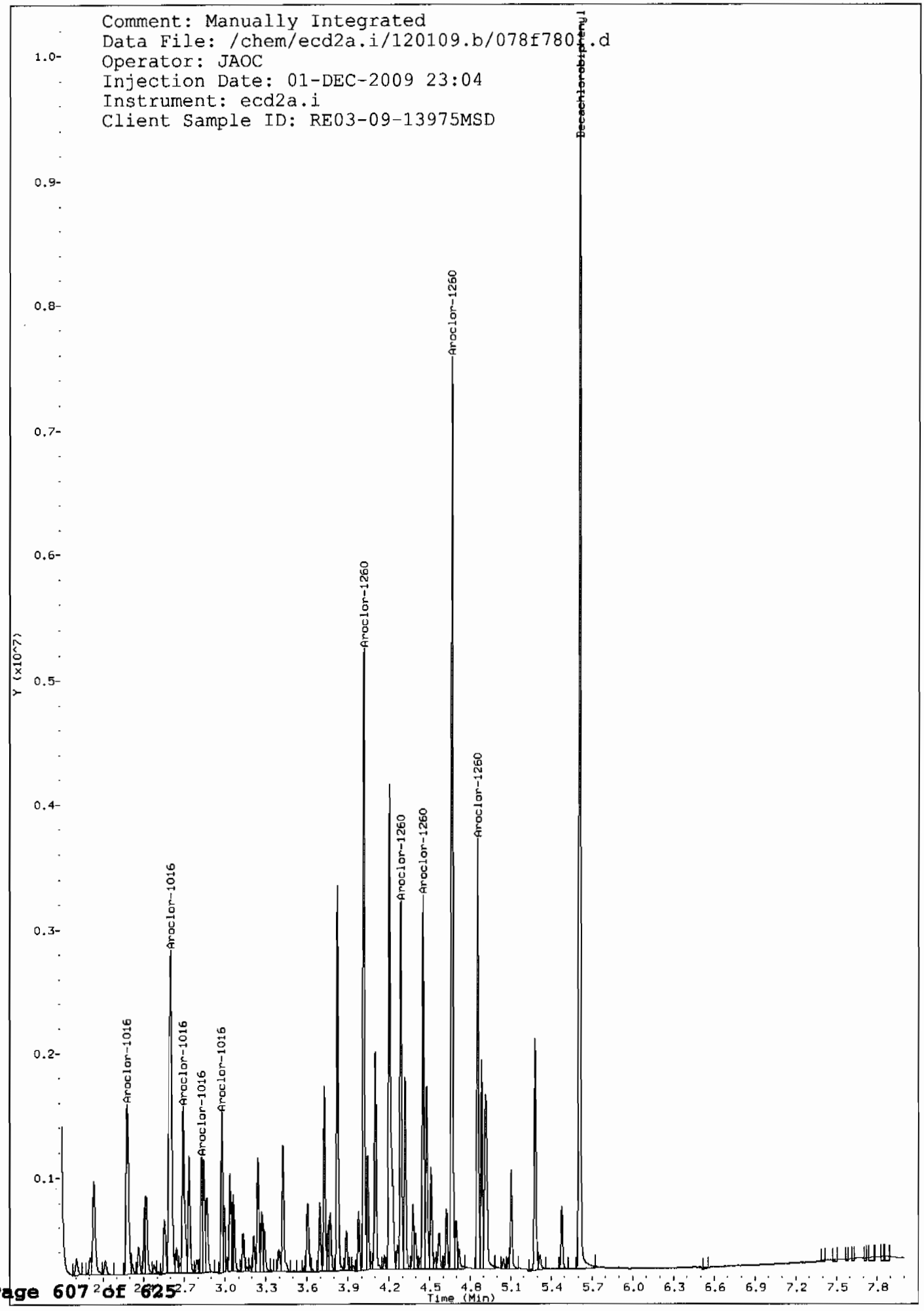
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120109.b/078f7801.d
Operator: JAOC
Injection Date: 01-DEC-2009 23:04
Instrument: ecd2a.i
Client Sample ID: RE03-09-13975MSD
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1
5.4
5.7
6.0
6.3
6.6
6.9
7.2
7.5
7.8
Time (Min)

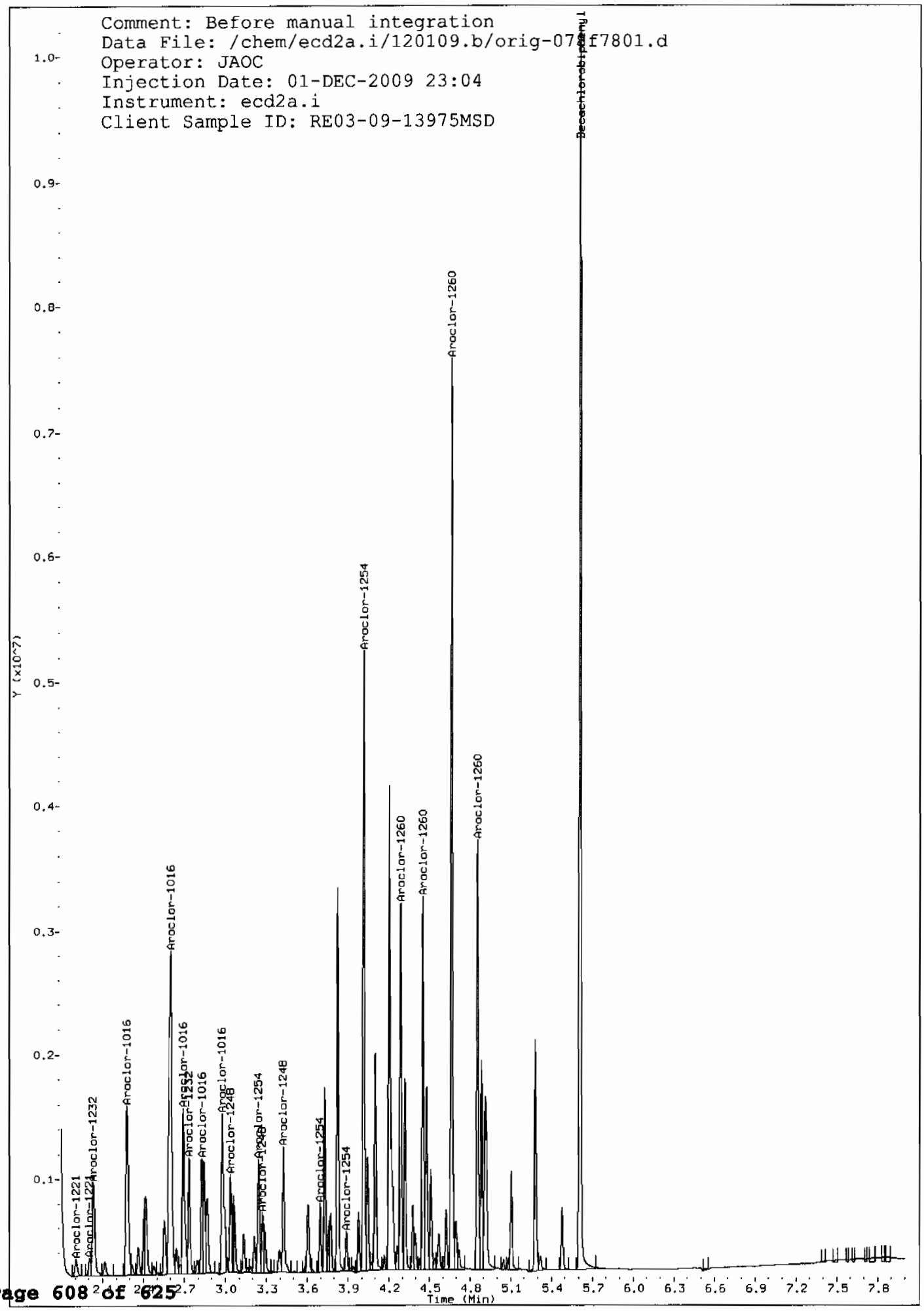
Comment: Before manual integration
Data File: /chem/ecd2a.i/120109.b/orig-07f7801.d
Operator: JAOC
Injection Date: 01-DEC-2009 23:04
Instrument: ecd2a.i
Client Sample ID: RE03-09-13975MSD
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1016
Aroclor-1248
Aroclor-1232
Aroclor-1221
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120109.b/078b7801.d
Lab Smp Id: 1201982134 Client Smp ID: RE03-09-13975MSD
Inj Date : 01-DEC-2009 23:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201982134|1|
Misc Info : |ECD82P_1S|927078|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120109.b/ECD2-B-8082-111209A.m
Meth Date : 02-Dec-2009 05:55 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 78 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-601.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	17.83110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	22204632	187.857	7.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.304	0.001	18424554	169.590	6.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3844236	902.816	36.4	80.00- 120.00	100.00
3.185	3.184	0.001	3138812	911.205	36.7	61.02- 101.02	81.65
3.337	3.335	0.002	1840162	929.616	37.5	26.72- 66.72	47.87
3.364	3.364	0.000	1741627	844.936	34.1	28.59- 68.59	45.30

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.522	3.522	0.000	2603131	945.160	38.1	46.09- 86.09	67.72
Average of Peak Concentrations =					36.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5751973	1043.41	42.1	80.00- 120.00	100.00
4.570	4.569	0.001	7494629	1050.85	42.4	107.33- 147.33	130.30
4.682	4.681	0.001	4944566	1045.06	42.1	63.39- 103.39	85.96
4.879	4.879	0.000	5855493	1009.45	40.7	78.36- 118.36	101.80
5.505	5.505	0.000	9330833	1032.09	41.6	131.09- 171.09	162.22
Average of Peak Concentrations =					41.8		

Data File: /chem/ecd2a.i/120109.b/078b7801.d
Date : 01-DEC-2009 23:04
Client ID: RE03-09-13975MSD
Sample Info: |120198213411|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

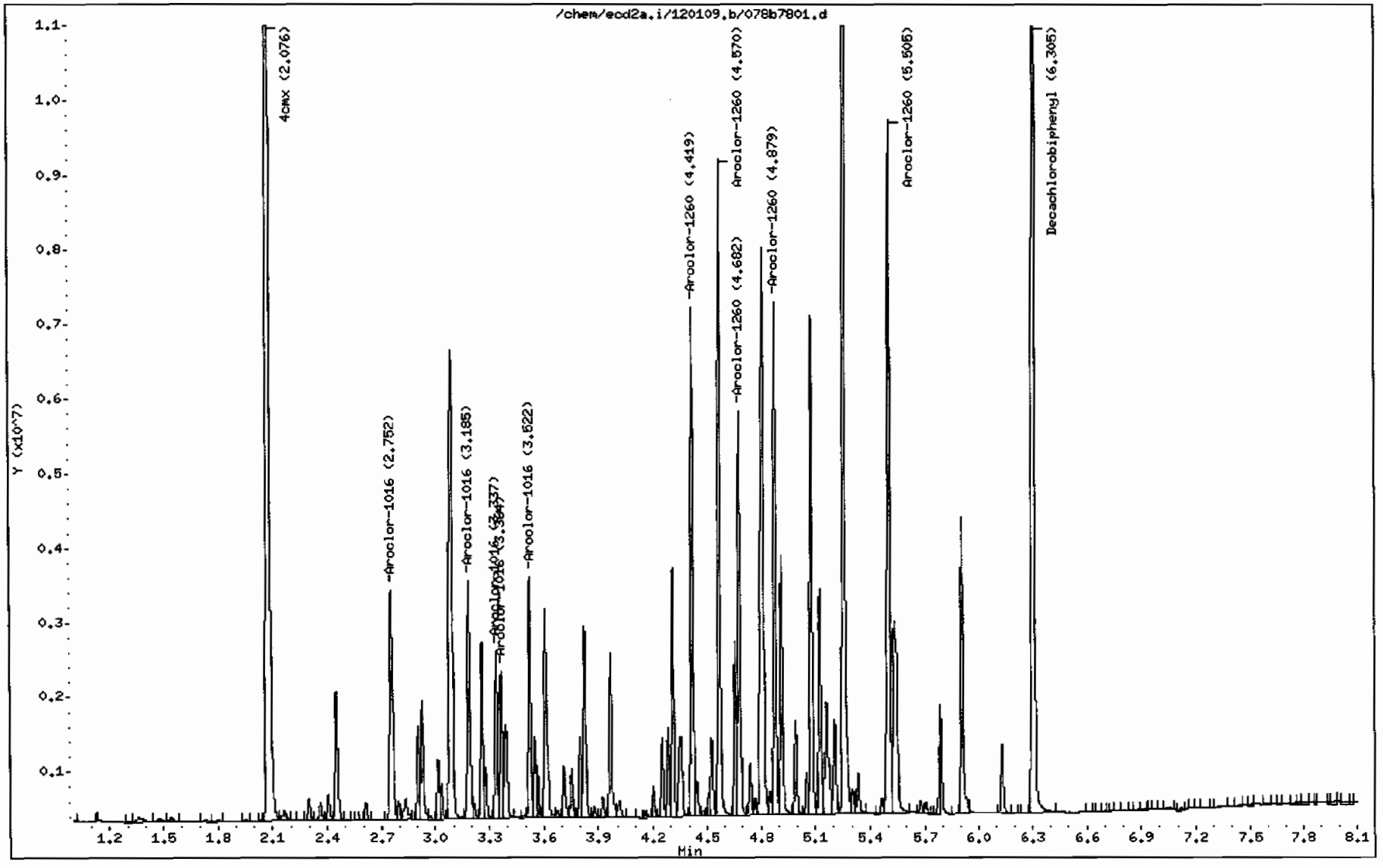

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0		DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0		CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0		CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809	1.0		PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0		DUSE
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0		1254 LEVEL 1
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0		1254 LEVEL 2
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0		1254 LEVEL 3
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0		1254 LEVEL 4
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0		1254 LEVEL 5
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0		1248 LEVEL 1
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0		1248 LEVEL 2
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0		1248 LEVEL 3
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0		1248 LEVEL 4
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0		1248 LEVEL 5

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0		DUSE

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18			113009a		1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29			113009a		1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40			113009a		1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51			113009a		1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02			113009a		1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13			113009a		1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25			113009a		1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399			1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399			1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399			200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399			200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399			200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36			113009a		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47			113009a		1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688			1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688			1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688			1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688			1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688			1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12			113009a		1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23			113009a		1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463			100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463			1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463			5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463			20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462		10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a		1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a		1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390		1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407		1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407		5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a		1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a		1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a	1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/02/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:120109 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	01-DEC-2009 08:08		120109	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	01-DEC-2009 08:19		120109	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	01-DEC-2009 08:30		120109	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	01-DEC-2009 08:41		120109	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	01-DEC-2009 08:53		120109	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	01-DEC-2009 09:04		120109	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	01-DEC-2009 09:15		120109	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	01-DEC-2009 09:26		120109	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	01-DEC-2009 09:37		120109	1.0		PATTERN ONLY
010f1001.d	WAR091027-48	JAOC	01-DEC-2009 09:48		120109	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091020-DDT	JAOC	01-DEC-2009 09:59		120109	1.0		DDT
012f1201.d	WAR090916-99 02	JAOC	01-DEC-2009 10:15		120109	1.0		CLEAN
013f1301.d	1201981445	JAOC	01-DEC-2009 10:26	926744	241365	1.0	QC A	UPLOAD BOTH, USE HIGHER
014f1401.d	1201981446	JAOC	01-DEC-2009 10:37	926744	241365	1.0	QC A	UPLOAD BOTH, USE HIGHER
015f1501.d	1201981447	JAOC	01-DEC-2009 10:48	926744	241365	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120109.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241365001	JAOC	01-DEC-2009 10:59	926744	241365	1.0	GELC	UPLOAD BOTH, USE HIGHER

017f1701.d	WAR091119-60 02	JAOC	01-DEC-2009 11:14		120109		1.0		PASSES BOTH COLUMNS
018f1801.d	WAR090916-99 03	JAOC	01-DEC-2009 11:36		120109		1.0		CLEAN
019f1901.d	1201982177	JAOC	01-DEC-2009 11:47	927102	236731		1.0	QC A	DUSE
020f2001.d	1201982180	JAOC	01-DEC-2009 11:58	927102	236731		1.0	QC A	DUSE
021f2101.d	236731002	JAOC	01-DEC-2009 12:09	927102	236731		5.0	SLAC	DUSE
022f2201.d	1201982178	JAOC	01-DEC-2009 12:25	927102	236731		5.0	QC A	DUSE
023f2301.d	1201982179	JAOC	01-DEC-2009 12:40	927102	236731		5.0	QC A	DUSE
024f2401.d	WAR091119-60 03	JAOC	01-DEC-2009 12:56		120109		1.0		PASSES BOTH COLUMNS
025f2501.d	WAR090916-99 04	JAOC	01-DEC-2009 13:07		120109		1.0		CLEAN
026f2601.d	1201980544	JAOC	01-DEC-2009 13:18	926313	241238		1.0	QC A	UPLOAD BOTH, USE HIGHER
027f2701.d	1201980547	JAOC	01-DEC-2009 13:29	926313	241238		1.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	241238004	JAOC	01-DEC-2009 13:40	926313	241238		1.0	GEEL	UPLOAD BOTH, USE HIGHER
029f2901.d	1201980545	JAOC	01-DEC-2009 13:52	926313	241238		1.0	QC A	UPLOAD BOTH, USE HIGHER
030f3001.d	1201980546	JAOC	01-DEC-2009 14:03	926313	241238		1.0	QC A	UPLOAD BOTH, USE HIGHER
031f3101.d	241238005	JAOC	01-DEC-2009 14:14	926313	241238		1.0	GEEL	UPLOAD BOTH, USE HIGHER
032f3201.d	241238006	JAOC	01-DEC-2009 14:25	926313	241238		1.0	GEEL	UPLOAD BOTH, USE HIGHER
033f3301.d	241240005	JAOC	01-DEC-2009 14:36	926313	241240		1.0	GEEL	UPLOAD BOTH, USE HIGHER
034f3401.d	241240006	JAOC	01-DEC-2009 14:47	926313	241240		1.0	GEEL	UPLOAD BOTH, USE HIGHER
035f3501.d	241240007	JAOC	01-DEC-2009 14:58	926313	241240		1.0	GEEL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 04	JAOC	01-DEC-2009 15:14		120109		1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 05	JAOC	01-DEC-2009 15:25		120109		1.0		CLEAN
038f3801.d	241367003	JAOC	01-DEC-2009 15:36	926313	241367		1.0	GEEL	UPLOAD BOTH, USE HIGHER
039f3901.d	241367004	JAOC	01-DEC-2009 15:47	926313	241367		1.0	GEEL	UPLOAD BOTH, USE HIGHER
040f4001.d	1201980420	JAOC	01-DEC-2009 15:58	926251	10-589		1.0	QC A	UPLOAD BOTH, USE HIGHER
041f4101.d	1201980423	JAOC	01-DEC-2009 16:09	926251	10-589		1.0	QC A	UPLOAD BOTH, USE HIGHER

042f4201.d	241503002	JAOC	01-DEC-2009 16:20	926251	10-589		1.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	1201980421	JAOC	01-DEC-2009 16:31	926251	10-589		1.0	QC A	UPLOAD BOTH, USE HIGHER
044f4401.d	1201980422	JAOC	01-DEC-2009 16:42	926251	10-589		1.0	QC A	UPLOAD BOTH, USE HIGHER
045f4501.d	241503003	JAOC	01-DEC-2009 16:54	926251	10-589		1.0	LANL	UPLOAD BOTH, USE HIGHER
046f4601.d	241503004	JAOC	01-DEC-2009 17:05	926251	10-589		1.0	LANL	UPLOAD BOTH, USE HIGHER
047f4701.d	WAR091119-60 05	JAOC	01-DEC-2009 17:20		120109		1.0		PASSES BOTH COLUMNS
048f4801.d	WAR090916-99 06	JAOC	01-DEC-2009 17:31		120109		1.0		CLEAN
049f4901.d	1201980309	JAOC	01-DEC-2009 17:42	926197	10-466		1.0	QC A	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980312	JAOC	01-DEC-2009 17:54	926197	10-466		1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	241051001	JAOC	01-DEC-2009 18:05	926197	10-466		1.0	LANL	DUSE, RE-RUN AT 5X
052f5201.d	241051002	JAOC	01-DEC-2009 18:16	926197	10-466		1.0	LANL	DUSE, RE-RUN AT 5X
053f5301.d	241051003	JAOC	01-DEC-2009 18:27	926197	10-466		1.0	LANL	DUSE, RE-RUN AT 5X
054f5401.d	241051004	JAOC	01-DEC-2009 18:38	926197	10-466		5.0	LANL	DUSE, AFTER OVERRANGE
055f5501.d	241051005	JAOC	01-DEC-2009 18:49	926197	10-466		1.0	LANL	DUSE, RE-RUN AT 5X

Instrument Batch: /chem/ecd2a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241051006	JAOC	01-DEC-2009 19:00	926197	10-466		1.0	LANL	DUSE, AFTER OVERRANGE
057f5701.d	241051007	JAOC	01-DEC-2009 19:11	926197	10-466		1.0	LANL	DUSE, RE-RUN AT 5X
058f5801.d	241051008	JAOC	01-DEC-2009 19:22	926197	10-466		1.0	LANL	DUSE, RE-RUN AT 5X
059f5901.d	WAR091119-60 06	JAOC	01-DEC-2009 19:33		120109		1.0		PASSES BOTH COLUMNS, DCB LOW
060f6001.d	WAR090916-99 07	JAOC	01-DEC-2009 19:44		120109		1.0		CLEAN
061f6101.d	241051009	JAOC	01-DEC-2009 19:56	926197	10-466		1.0	LANL	UPLOAD BOTH, USE HIGHER
062f6201.d	241051010	JAOC	01-DEC-2009 20:07	926197	10-466		1.0	LANL	UPLOAD BOTH, USE HIGHER
063f6301.d	241051011	JAOC	01-DEC-2009 20:18	926197	10-466		1.0	LANL	UPLOAD BOTH, USE HIGHER
064f6401.d	1201980310	JAOC	01-DEC-2009 20:29	926197	10-466		1.0	QC A	UPLOAD BOTH, USE HIGHER
065f6501.d	1201980311	JAOC	01-DEC-2009 20:40	926197	10-466		1.0	QC A	UPLOAD BOTH, USE HIGHER

066f6601.d	241051012	JAOC	01-DEC-2009 20:51	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
067f6701.d	241051013	JAOC	01-DEC-2009 21:02	926197	10-466	1.0	LANL	DUSE, RE-RUN AT 5X
068f6801.d	241051014	JAOC	01-DEC-2009 21:13	926197	10-466	1.0	LANL	DUSE, AFTER OVERRANGE
069f6901.d	241059004	JAOC	01-DEC-2009 21:24	926197	10-469	1.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241059005	JAOC	01-DEC-2009 21:35	926197	10-469	1.0	LANL	DUSE, RE-RUN AT 10X
071f7101.d	WAR091119-60 07	JAOC	01-DEC-2009 21:47		120109	1.0		PASSES BOTH COLUMNS
072f7201.d	WAR090916-99 08	JAOC	01-DEC-2009 21:58		120109	1.0		CLEAN
073f7301.d	241059006	JAOC	01-DEC-2009 22:09	926197	10-469	1.0	LANL	DUSE, RE-RUN AT 10X
074f7401.d	1201982132	JAOC	01-DEC-2009 22:20	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER
075f7501.d	1201982135	JAOC	01-DEC-2009 22:31	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241534001	JAOC	01-DEC-2009 22:42	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	1201982133	JAOC	01-DEC-2009 22:53	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER
078f7801.d	1201982134	JAOC	01-DEC-2009 23:04	927078	10-601	1.0	QC A	UPLOAD BOTH, USE HIGHER
079f7901.d	241534002	JAOC	01-DEC-2009 23:16	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241534003	JAOC	01-DEC-2009 23:27	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241534004	JAOC	01-DEC-2009 23:38	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241534005	JAOC	01-DEC-2009 23:49	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	WAR091119-60 08	JAOC	02-DEC-2009 00:00		120109	1.0		PASSES BOTH COLUMNS
084f8401.d	WAR090916-99 09	JAOC	02-DEC-2009 00:11		120109	1.0		CLEAN
085f8501.d	241534006	JAOC	02-DEC-2009 00:23	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
086f8601.d	241534008	JAOC	02-DEC-2009 00:34	927078	10-601	1.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	241539001	JAOC	02-DEC-2009 00:45	927078	10-603	5.0	LANL	UPLOAD BOTH, USE HIGHER
088f8801.d	241539002	JAOC	02-DEC-2009 00:56	927078	10-603	5.0	LANL	UPLOAD BOTH, USE HIGHER
089f8901.d	241539003	JAOC	02-DEC-2009 01:07	927078	10-603	25.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	241539004	JAOC	02-DEC-2009 01:18	927078	10-603	5.0	LANL	UPLOAD BOTH, USE HIGHER

091f9101.d	WAR091119-60 09	JAOC	02-DEC-2009 01:29		120109	1.0	PASSES BOTH COLUMNS
092f9201.d	WAR090916-99 10	JAOC	02-DEC-2009 01:40		120109	1.0	CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927077 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982132 MB	29-NOV-2009 15:56:52	30	H2SO4/KMn2		2	9	1	0.03333
1201982135 LCS	29-NOV-2009 15:56:52	30	H2SO4/KMn2		2	9	1	0.03333
241534001	29-NOV-2009 15:56:52	30.04	H2SO4/KMn2		2	9	1	0.03329
1201982133 MS (241534001)	29-NOV-2009 15:56:52	30.08	H2SO4/KMn2		2	9	1	0.03324
1201982134 MSD (241534001)	29-NOV-2009 15:56:52	30.19	H2SO4/KMn2		2	9	1	0.03312
241534002	29-NOV-2009 15:56:52	30.17	H2SO4/KMn2		2	9	1	0.03315
241534003	29-NOV-2009 15:56:52	30.18	H2SO4/KMn2		2	9	1	0.03313
241534004	29-NOV-2009 15:56:52	30.11	H2SO4/KMn2		2	9	1	0.03321
241534005	29-NOV-2009 15:56:52	30.05	H2SO4/KMn2		2	9	1	0.03328
241534006	29-NOV-2009 15:56:52	30.08	H2SO4/KMn2		2	9	1	0.03324
241534008	29-NOV-2009 15:56:52	30.13	H2SO4/KMn2		2	9	1	0.03319
241539001	29-NOV-2009 15:56:52	30.19	H2SO4/KMn2		2	9	1	0.03312
241539002	29-NOV-2009 15:56:52	30.08	H2SO4/KMn2		2	9	1	0.03324
241539003	29-NOV-2009 15:56:52	30.18	H2SO4/KMn2		2	9	1	0.03313
241539004	29-NOV-2009 15:56:52	30.19	H2SO4/KMn2		2	9	1	0.03312

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982135	PCB Laboratory Control	WE091113-07	1	mL
MS	1201982133	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201982134	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/29/09

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

Thursday, November 19, 2009

REQUEST NUMBER: 10-600

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-600

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	WST03-10-2132	R	11/18/2009	
	HASL-300:ISOPU	1	WST03-10-2132	R	11/18/2009	
	HASL-300:ISOU	1	WST03-10-2132	R	11/18/2009	
	SW-846:6010B	1	WST03-10-2132	R	11/18/2009	
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2132	R	11/18/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2132	R	11/18/2009	
		2	WST03-10-2132	R	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-600

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2132	R	11/18/2009	
	SW-846:8081A_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8082	1	WST03-10-2132	R	11/18/2009	
	SW-846:8151A	1	WST03-10-2132	R	11/18/2009	
	SW-846:8151A_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8260B	1	WST03-10-2132	R	11/18/2009	
		2	WST03-10-2132	R	11/18/2009	
		1	WST03-10-2186	S	11/18/2009	
	SW-846:8260B_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8270C	1	WST03-10-2132	R	11/18/2009	
	SW-846:8270C_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:9012A	1	WST03-10-2132	R	11/18/2009	

Final Page of REQUEST NUMBER 10-600

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-600

REQUEST NUMBER: 10-600

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2186	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2132	1	GLASS	8081A+8151A	Ice	R
WST03-10-2132	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2132	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2132	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2132	1	POLY	AM-241+ISOPU+ISOU+SR90	None	R
WST03-10-2132	1	POLY	H3	Ice	R
WST03-10-2132	1	POLY	TAL metals + TCLP metals	Ice	R
WST03-10-2132	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2132	1	POLY	TCN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
		11/19/09	1410				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2132 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1450	SUB-MEDIA:	OTHER	
PRS ID:	03-0091	MW 103-608191	SAMPLE TECH CODE:	HA	
LOCATION ID:	WST-600902	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	WST	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	R		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8081A+8151A	500 ML GLASS	Ice	Y	
2		8260B+TPH-GRO	125 ML GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU+SR90	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		TAL metals + TCLP metals	1 LITER POLY	Ice	Y	
1		TCLP ORGANICS P/H/S/V	500 ML AMBER GLASS	Ice	Y	
1		TCN	125 ML POLY	Ice	Y	

SAMPLE DESC: NA

SAMPLE COMMENTS: ~~10~~ 15 DAY TURNAROUND NA
MA 11/18/09

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time
M. Nauck	11-18-09 1630	Sherri Sherwood	11-18-09 1630

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2186 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-18-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1450	SUB-MEDIA:	SOIL	
PRS ID:		03-009.'	SAMPLE TECH CODE:	DC	
LOCATION ID:	WST-600902	03-608191	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 ~~2~~	MW 11-18-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice		

SAMPLE DESC: QC Sample of WST03-10-2132

SAMPLE COMMENTS: ~~10~~ 15 DAY TURNAROUND MW 11-18-09

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Vanek

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M Vanek	11-18-09 1630	(Printed Name) Sherri Sherwood	11-18-09 1630
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS VOCs (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV %Ds were >20% for acetone; 2-butanone; and 2-hexanone. The %Ds were >20% for bromochloromethane and 1,2-dibromo3-chloropropane in the CCV associated with the non-TCLP samples. All associated sample results were NDs and, thus, were qualified UJ,V7c.
2. It should be noted that the non-TCLP and the TCLP MS/MSD analyses were performed on LANL samples from other RNs, and trichlorotrifluoroethane was not represented in the non-TCLP MS/MSD analyses. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: DATE: 01/08/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☒	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1947

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☐	☒	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☐	☒	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241524002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:30**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n330.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07	
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07	
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33	
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33	
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07	

MLD 01/08/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241524002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:30**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n330.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07	
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13	
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07	
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07	
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07	
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07	
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07	
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07	
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07	
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07	
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07	
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07	
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07	
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07	
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07	
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07	
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07	
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07	
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.71	5.33	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07	
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

MLD 01/08/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241524001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2186**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:00**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n329.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

MLD 01/08/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241524001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2186**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:00**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n329.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00	
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00	
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00	
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00	
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00	
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00	
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00	
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00	
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00	
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

MLD 01/08/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241527001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 18:02**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o419.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010	
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010	
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050	UJ,V7c
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010	
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010	
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010	
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010	
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010	
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010	
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010	
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010	

MLD 01/08/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS SVOC (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The %Ds were >20% for pyridine; bis(2-chloroisopropyl)ether; hexachlorocyclopentadiene; 3-nitroaniline; and 4-nitroaniline in the ICV/CCV associated with the non-TCLP sample. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The CCV associated with the non-TCLP sample was not analyzed at the appropriate method frequency for all analytes except 3,3'-dichlorobenzidine. The associated sample results for phenanthrene; anthracene; fluoranthene; pyrene; benzo(a)anthracene; chrysene; and benzo(a)pyrene were detects and, thus, were qualified J,SV7d. The remaining associated sample results were NDs and, thus, were qualified UJ,SV7d.
3. The non-TCLP MSD %R was < the laboratory LAL but >10% for 2,4-dinitrophenol, and the non-TCLP MS/MSD RPDs were > laboratory acceptance limits for hexachlorocyclopentadiene; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; and benzo(g,h,i)perylene. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: DATE: 01/08/10

DATA VALIDATION COVER SHEET	
5115-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943
Form 5115-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☒	☐	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2132	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 19:35	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2919.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.8	354	UJ,SV7d
108-95-2	Phenol	U	354	ug/kg	70.8	354	
95-57-8	2-Chlorophenol	U	354	ug/kg	70.8	354	
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.8	354	
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.8	354	
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.8	354	
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4	
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354	
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354	
87-86-5	Pentachlorophenol	U	354	ug/kg	88.5	354	
129-00-0	Pyrene		59.8	ug/kg	10.6	35.4	J,SV7d
110-86-1	Pyridine	U	354	ug/kg	70.8	354	UJ,SV7c
62-53-3	Aniline	U	354	ug/kg	106	354	UJ,SV7d
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.8	354	
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.8	354	
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354	
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.8	354	
108-60-1	bis(2-Chloroisopropyl)ether	U	354	ug/kg	70.8	354	UJ,SV7c
95-48-7	o-Cresol	U	354	ug/kg	70.8	354	UJ,SV7d
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354	
67-72-1	Hexachloroethane	U	354	ug/kg	70.8	354	
98-95-3	Nitrobenzene	U	354	ug/kg	70.8	354	
78-59-1	Isophorone	U	354	ug/kg	70.8	354	
88-75-5	2-Nitrophenol	U	354	ug/kg	70.8	354	
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354	
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.8	354	
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.8	354	
65-85-0	Benzoic acid	U	708	ug/kg	177	708	
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4	
106-47-8	4-Chloroaniline	U	354	ug/kg	70.8	354	
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.8	354	
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.08	35.4	
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.8	354	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.8	354	UJ,SV7d
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.8	354	
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	354	ug/kg	70.8	354	
99-09-2	3-Nitroaniline	U	354	ug/kg	70.8	354	UJ,SV7c

MLD 01/08/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2132	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 19:35	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2919.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	354	ug/kg	70.8	354	UJ,SV7d
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354	
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4	
51-28-5	2,4-Dinitrophenol	U	708	ug/kg	135	708	
132-64-9	Dibenzofuran	U	354	ug/kg	70.8	354	
84-66-2	Diethylphthalate	U	354	ug/kg	70.8	354	
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4	
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.8	354	
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.8	354	
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	354	ug/kg	70.8	354	UJ,SV7d
122-66-7	Azobenzene	U	354	ug/kg	70.8	354	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	354	ug/kg	70.8	354	
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.8	354	
85-01-8	Phenanthrene		61.1	ug/kg	10.6	35.4	J,SV7d
120-12-7	Anthracene	J	14.7	ug/kg	7.08	35.4	J,SV7d
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.8	354	UJ,SV7d
206-44-0	Fluoranthene		64.8	ug/kg	10.6	35.4	J,SV7d
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.8	354	UJ,SV7d
56-55-3	Benzo(a)anthracene	J	29.5	ug/kg	10.6	35.4	J,SV7d
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354	
218-01-9	Chrysene	J	26.2	ug/kg	10.6	35.4	J,SV7d
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.8	354	UJ,SV7d
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.8	354	
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4	
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4	
50-32-8	Benzo(a)pyrene	J	16.9	ug/kg	10.6	35.4	J,SV7d
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4	UJ,SV7d
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4	
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4	
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.8	354	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	272	ug/kg		JA

MLD 01/08/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241527001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s610218.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

MLD 01/08/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/08/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2132	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 17:02	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	70.9	mg/kg	23.0	70.9

MLD 01/08/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☒ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/08/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/25/2009 00:43	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200010.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	53.3	ug/kg	11.9	53.3

MLD 01/08/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality /associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Organochlorine Pesticides (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The %Ds were >15% on one column only for gamma-BHC; methoxychlor; and Endrin ketone in bracketing CCVs associated with the non-TCLP sample. The %Ds were >15% on one column only for methoxychlor and gamma-BHC in bracketing CCVs associated with the TCLP sample. The associated sample results were NDs and, thus, were not qualified.
2. The 4-cmx and decachlorobiphenyl surrogate %Rs were > the laboratory UAL on one column only in the non-TCLP LCS. Since the outliers occurred in a QC sample, no sample data were qualified.
3. The TCLP MS/MSD RPD was > the laboratory acceptance limit for toxaphene. It should be noted that the non-TCLP and TCLP MS/MSD analyses were performed on LANL samples from other RNs, the parent sample raw data were not included in the data package, and toxaphene was not represented in the non-TCLP MS/MSD. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/08/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☒	☐	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☒	☐	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2132	Method:	SW846 8081A	SOP Ref:	GL-OA-E-041
Batch ID:	926807	Inst:	ECD5A.I	Dilution:	10
Run Date:	11/30/2009 00:08	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	11/27/2009 10:04	Aliquot:	30.02 g	Final Volume:	5 mL
Data File:	031f3101.d	Column:	1 CLP-1	Level:	LOW
	031b3101.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.11	ug/kg	1.78	7.11	1
58-89-9	gamma-BHC (Lindane)	U	7.11	ug/kg	1.78	7.11	1
319-85-7	beta-BHC	U	7.11	ug/kg	1.78	7.11	1
319-86-8	delta-BHC	U	7.11	ug/kg	1.78	7.11	1
76-44-8	Heptachlor	U	7.11	ug/kg	1.78	7.11	1
309-00-2	Aldrin	U	7.11	ug/kg	1.78	7.11	1
1024-57-3	Heptachlor epoxide	U	7.11	ug/kg	2.22	7.11	1
5103-74-2	gamma-Chlordane	U	7.11	ug/kg	1.78	7.11	1
5103-71-9	alpha-Chlordane	U	7.11	ug/kg	1.78	7.11	1
959-98-8	Endosulfan I	U	7.11	ug/kg	1.78	7.11	1
72-55-9	4,4'-DDE	U	14.2	ug/kg	3.55	14.2	1
60-57-1	Dieldrin	U	14.2	ug/kg	3.55	14.2	1
72-20-8	Endrin	U	14.2	ug/kg	3.55	14.2	1
72-54-8	4,4'-DDD	U	14.2	ug/kg	3.55	14.2	1
33213-65-9	Endosulfan II	U	14.2	ug/kg	3.55	14.2	1
7421-93-4	Endrin aldehyde	U	14.2	ug/kg	3.55	14.2	1
50-29-3	4,4'-DDT	J	6.92	ug/kg	3.55	14.2	1
1031-07-8	Endosulfan sulfate	U	14.2	ug/kg	3.55	14.2	1
72-43-5	Methoxychlor	U	71.1	ug/kg	17.8	71.1	1
53494-70-5	Endrin ketone	U	14.2	ug/kg	3.55	14.2	1
8001-35-2	Toxaphene	U	178	ug/kg	59.2	178	1

MLD 01/08/10

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-600-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241527001	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/08/2009 03:12	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	049f4901.d	**Column:**	1 CLP-1	**Level:**	LOW
	049b4901.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

MLD 01/08/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: DATE: 01/08/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/03/2009 22:25	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	078f7801.d	**Column:**	1 CLP1	**Level:**	LOW
	078b7801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.7	ug/kg	5.89	17.7	1
11104-28-2	Aroclor-1221	U	17.7	ug/kg	5.89	17.7	1
11141-16-5	Aroclor-1232	U	17.7	ug/kg	5.89	17.7	1
53469-21-9	Aroclor-1242	U	17.7	ug/kg	5.89	17.7	1
12672-29-6	Aroclor-1248	U	17.7	ug/kg	5.89	17.7	1
11097-69-1	Aroclor-1254	P	18.7	ug/kg	5.89	17.7	1
11096-82-5	Aroclor-1260		29.2	ug/kg	5.89	17.7	1

MLD 01/08/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): Herbicides (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The %Ds were >15% on both columns for 2,4-D; 2,4,5-T; dinoseb; MCPP; 2,4,5-TP; and 2,4-DB in CCVs bracketing the non-TCLP sample. The associated sample results were NDs and, thus, were qualified UJ,P7c. The %Ds were >15% on one column only for dichlorprop and dicamba in CCVs bracketing the non-TCLP sample. The associated sample results were NDs and, thus, were not qualified.
2. The non-TCLP MS/MSD %Rs were > the laboratory UALs for MCPP; MCPA; and 2,4-DB, and the non-TCLP MS/MSD RPD was > laboratory acceptance limits for MCPP. The TCLP MSD %R was > the laboratory UAL for 2,4-D. It should be noted that the non-TCLP MS/MSD analyses were performed on a LANL sample from another RN, and parent sample raw data were not included in the data package. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/08/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☒	☐	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☐	☒	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2132	Method:	SW846 8151A	SOP Ref:	GL-OA-E-011
Batch ID:	927148	Inst:	ECD6A.I	Dilution:	20
Run Date:	12/02/2009 03:52	Analyst:	RXE1	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:11	Aliquot:	50.02 g	Final Volume:	10 mL
Data File:	034f3401.d	Column:	1 Rtx-CLP	Level:	LOW
	034b3401.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column	
75-99-0	Dalapon	U	2130	ug/kg	426	2130	1	
1918-00-9	Dicamba	U	107	ug/kg	35.4	107	1	
93-65-2	MCPP	U	21300	ug/kg	4260	21300	1	UJ,P7c
94-74-6	MCPA	U	21300	ug/kg	4900	21300	1	
120-36-5	Dichlorprop	U	107	ug/kg	35.4	107	1	
94-75-7	2,4-D	U	107	ug/kg	35.4	107	1	UJ,P7c
93-72-1	2,4,5-TP	U	107	ug/kg	35.4	107	1	
93-76-5	2,4,5-T	U	107	ug/kg	35.4	107	1	
94-82-6	2,4-DB	U	107	ug/kg	35.4	107	1	
88-85-7	Dinoseb	U	107	ug/kg	35.4	107	1	

MLD 01/08/10

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–600–1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241527001	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2132	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 15:57	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	059f5901.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	059b5901.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.050	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP	U	0.050	mg/L	0.0166	0.050	1

MLD 01/08/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): TCLP and non-TCLP metals

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Target analyte Sb was detected in the non-TCLP MB. The associated sample result was an ND and, thus, was not qualified.
2. The non-TCLP MS %Rs were > the laboratory UAL for Al, Ca, Mg, K, Na, and Ni. The associated sample results were detects and, thus, were qualified J+,I6b. The non-TCLP MS %R was < the laboratory LAL but ≥10% for Fe. The parent sample Fe concentration was >4X the spike concentration; thus, the associated Fe result was not qualified based on professional judgment. The TCLP MS %R was < the laboratory LAL but ≥10% for Hg. The associated sample result was an ND and, thus, was qualified UJ,I6a.
3. The non-TCLP sample and duplicate results were >5X the PQL, and the RPD was >35% for Ba. The associated sample result was a detect and, thus, was qualified J,I10a.
4. It should be noted that all matrix QC analyses were performed on LANL samples from other RNs, and the ICP-AES and ICP-MS parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/08/10

DATA VALIDATION COVER SHEET	
5118-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☐	☒	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☐	☒	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-600 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241524002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: WST03-10-2132 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	5760000	ug/kg		6340	18600	18600	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-36-0	Antimony	932	ug/kg	U	308	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-38-2	Arsenic	1580	ug/kg		196	980	980	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-39-3	Barium J,I10a	71300	ug/kg		93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-41-7	Beryllium	629	ug/kg		19.6	98	98	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-43-9	Cadmium	134	ug/kg	J	93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-70-2	Calcium J+,I6b	2520000	ug/kg		7460	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-47-3	Chromium	6990	ug/kg		140	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-48-4	Cobalt	3000	ug/kg		140	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-50-8	Copper	5590	ug/kg		280	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-89-6	Iron	9240000	ug/kg		7460	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-92-1	Lead	9510	ug/kg		233	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-95-4	Magnesium J+,I6b	1170000	ug/kg		7920	28000	28000	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-96-5	Manganese	273000	ug/kg		186	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-97-6	Mercury	9.91	ug/kg	J	4.26	12.5	12.5	1	AV	JXL1	12/07/09 13:43	120709S1-12	925623
7440-02-0	Nickel J+,I6b	6260	ug/kg		98	392	392	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-09-7	Potassium J+,I6b	808000	ug/kg		5970	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7782-49-2	Selenium	980	ug/kg	U	490	980	980	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-22-4	Silver	179	ug/kg	J	93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-23-5	Sodium J+,I6b	106000	ug/kg		6530	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-28-0	Thallium	126	ug/kg	J	58.8	196	196	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-62-2	Vanadium	12600	ug/kg		93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-66-6	Zinc	30200	ug/kg		308	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.572	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.544	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.511	g	30	mL	12/04/09	TXB3

MLD 01/08/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-600-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241527001 **BASIS:** As Received **DATE COLLECTED** 18-NOV-09

CLIENT ID: WST03-10-2132 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: TCLP **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-38-2	Arsenic	0.050	mg/L	U	0.016	0.05	0.05	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-39-3	Barium	0.775	mg/L		0.006	0.02	0.02	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-43-9	Cadmium	0.010	mg/L	U	0.0011	0.01	0.01	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-47-3	Chromium	0.10	mg/L	U	0.02	0.1	0.1	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7439-92-1	Lead	0.020	mg/L	U	0.005	0.02	0.02	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7439-97-6	Mercury UJ,I6a	0.002	mg/L	U	0.00066	0.002	0.002	1	AV	JXL1	12/01/09 12:19	120109W3-2	927419
7782-49-2	Selenium	0.050	mg/L	U	0.01	0.05	0.05	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-22-4	Silver	0.010	mg/L	U	0.002	0.01	0.01	1	MS	BAJ	12/04/09 03:19	091203-1	927298

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
927298	927297	SW846 3010A	5	mL	50	mL	12/01/09	AXG2
927419	927418	SW846 7470A Prep	2	mL	20	mL	11/30/09	TXB3

MLD 01/08/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Total cyanide only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Total cyanide was detected in the ICB. The associated sample result was an ND and, thus, was not qualified.
2. The matrix QC analyses were performed on LANL samples from other RNs for total cyanide. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/08/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 **General Chemistry Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1942

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-600

Client Sample ID:	WST03-10-2132	Project:	LANL01004
Sample ID:	241524002	Client ID:	LANL010
Matrix:	R		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.23%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2 11/27/09	1044	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MLD 01/08/10

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-600 VALIDATION DATE: 01/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☒ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. An MS analysis was not performed for tritium. An LCS was analyzed, and met QC acceptance criteria. No sample data were qualified as a result.
2. It should be noted that the matrix QC analyses were performed on LANL samples from other RNs for alpha spec iso-Am, -Pu, and –U. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/10/10

VALIDATOR'S SIGNATURE: DATE: 01/08/10

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☐	☒	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☐	☒	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☒	☐	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☒	☐	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☒	☐	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☐	☒	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID:	WST03-10-2132	Project:	LANL01004
Sample ID:	241524002	Client ID:	LANL010
Matrix:	R		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.23%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000502	0.0261	+/-0.00252	0.050	pCi/g		MXE1	12/10/09	1239	928304	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00788	0.0183	+/-0.00492	0.050	pCi/g		MXE1	12/11/09	1157	928305	3
Plutonium-239/240	U	-1.07E-09	0.0206	+/-0.00477	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.821	0.103	+/-0.0776	0.100	pCi/g		MXE1	12/14/09	1208	931796	4
Uranium-235/236	U	0.0588	0.0627	+/-0.0162	0.100	pCi/g						
Uranium-238		0.775	0.057	+/-0.0744	0.100	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	0.0285	0.233	+/-0.066	0.500	pCi/g		JXR1	12/04/09	1422	926904	6
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium	U	-55.7	100	+/-27.8	250	pCi/L		KXK2	12/05/09	1550	927653	7

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, U-02-RC Modified
5	DOE EML HASL-300, U-02-RC Modified
6	EPA 905.0 Modified
7	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	79.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	101	(50%-105%)

MLD 01/08/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-600

REQUEST NUMBER: 10-600

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241524, 241527

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2186	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2132	1	GLASS	8081A+8151A	Ice	R
WST03-10-2132	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2132	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2132	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2132	1	POLY	AM-241+ISOPU+ISOU+SR90	None	R
WST03-10-2132	1	POLY	H3	Ice	R
WST03-10-2132	1	POLY	TAL metals + TCLP metals	Ice	R
WST03-10-2132	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2132	1	POLY	TCN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/19/09	1700	Patricia Dover-Dent	[illegible]	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-600

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-600
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	WST03-10-2132	R	11/18/2009	
	HASL-300:ISOPU	1	WST03-10-2132	R	11/18/2009	
	HASL-300:ISOU	1	WST03-10-2132	R	11/18/2009	
	SW-846:6010B	1	WST03-10-2132	R	11/18/2009	
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2132	R	11/18/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2132	R	11/18/2009	
		2	WST03-10-2132	R	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-600

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2132	R	11/18/2009	
	SW-846:8081A_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8082	1	WST03-10-2132	R	11/18/2009	
	SW-846:8151A	1	WST03-10-2132	R	11/18/2009	
	SW-846:8151A_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8260B	1	WST03-10-2132	R	11/18/2009	
		2	WST03-10-2132	R	11/18/2009	
		1	WST03-10-2188	S	11/18/2009	
	SW-846:8260B_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8270C	1	WST03-10-2132	R	11/18/2009	
	SW-846:8270C_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:9012A	1	WST03-10-2132	R	11/18/2009	

Final Page of REQUEST NUMBER 10-600

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241524 241527
SDG: 10-600

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile Herbicide, GC Semivolatile PCB, GC Semivolatile Pesticide, GC Volatiles (GRO), GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-600
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241524 and 241527
SDG: 10-600

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QC Summary 572
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Quality Control Summary 1965
Sample Data 1972
Standards Data 1980
Quality Control Data 2068
Miscellaneous Data 2094

GC Semivolatile Pesticide Analysis 613
Sample Data Summary 624
Quality Control Summary 626
Sample Data 638
Standards Data 644
Quality Control Data 819
Miscellaneous Data 853

GC Semivolatile PCB Analysis 907
Sample Data Summary 913
Quality Control Summary 915
Sample Data 921
Standards Data 931
Quality Control Data 1029
Miscellaneous Data 1044

GC Semivolatile Herbicide Analysis 1069
Sample Data Summary 1075
Quality Control Summary 1077
Sample Data 1083

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Quality Control Data 1152
Miscellaneous Data 1165

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Sample Data Summary 1189
Quality Control Summary 1191
Sample Data 1197
Standards Data 1203
Quality Control Data 1267
Miscellaneous Data 1302

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Sample Data Summary 1317
Quality Control Summary 1319
Standards 1361
Raw Data 1373
Miscellaneous 1563

Metals Analysis 1600
Case Narrative 1601
Sample Data Summary 1606
Quality Control Summary 1608
Standards 1630
Raw Data 1634
Miscellaneous 1718

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Runlogs 1950

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241524 and 241527
SDG # : 10-600

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. The container for radiochemistry were received at 15C temperature. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241524001	WST03-10-2186
241524002	WST03-10-2132
241527001	WST03-10-2132

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile Herbicide, GC Semivolatile PCB, GC Semivolatile Pesticide, GC Volatiles (GRO), GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for Francis

Valerie Davis

Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-600

REQUEST NUMBER: 10-600

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241524, 241527

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2186	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2132	1	GLASS	8081A+8151A	Ice	R
WST03-10-2132	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2132	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2132	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2132	1	POLY	AM-241+ISOPU+ISOU+SR90	None	R
WST03-10-2132	1	POLY	H3	Ice	R
WST03-10-2132	1	POLY	TAL metals + TCLP metals	Ice	R
WST03-10-2132	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2132	1	POLY	TCN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/19/09	1510	Patricia Dover-Dent	P.D.-Dent	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-600

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-600

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	WST03-10-2132	R	11/18/2009	
	HASL-300:ISOPU	1	WST03-10-2132	R	11/18/2009	
	HASL-300:ISOU	1	WST03-10-2132	R	11/18/2009	
	SW-846:6010B	1	WST03-10-2132	R	11/18/2009	
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2132	R	11/18/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2132	R	11/18/2009	
		2	WST03-10-2132	R	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-600

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2132	R	11/18/2009	
	SW-846:8081A_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8082	1	WST03-10-2132	R	11/18/2009	
	SW-846:8151A	1	WST03-10-2132	R	11/18/2009	
	SW-846:8151A_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8260B	1	WST03-10-2132	R	11/18/2009	
		2	WST03-10-2132	R	11/18/2009	
		1	WST03-10-2186	S	11/18/2009	
	SW-846:8260B_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:8270C	1	WST03-10-2132	R	11/18/2009	
	SW-846:8270C_TCLP	1	WST03-10-2132	R	11/18/2009	
	SW-846:9012A	1	WST03-10-2132	R	11/18/2009	

Final Page of REQUEST NUMBER 10-600

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-600**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:**40 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **1-5,15**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 2C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PMA) review: Initials [illegible] Date 11/23/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

1c

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2 of 2
MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
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CHS

XX CHSA

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

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2 of 2
MPS# 0263 7209 7848 9855
Mstr# 7209 7848 9844 0201

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Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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(843)556-8171
REF: 6B010AMR1A015AGWL0

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TRK# 0201 7209 7848 9796
MASTER

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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

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2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

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SC-US
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XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

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1 of 2

TRK# 0201 7209 7848 9844

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PRIORITY OVERNIGHT

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CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 46.0 LB MAN
CAD: 0014176/CAFE2434

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GENERAL ENGINEERING LAB
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(843)556-8171
REF: 6B010AWEPR1315W200

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RadioActive Samples

TRK# 0201 7209 7848 9877

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PRIORITY OVERNIGHT

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CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

3c

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1 of 2

TRK# 0201 7209 7848 9822

FRI - 20NOV A1
PRIORITY OVERNIGHT

MASTER

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29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4c

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PRIORITY OVERNIGHT

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LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

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3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9798 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

5c

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TRK# 0201 7209 7848 9866

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PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

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2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
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CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

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3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer**
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	926739
Prep Batch Number:	926738

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241524001	WST03-10-2186
241524002	WST03-10-2132
1201981430	241417001(RE03-09-13812) Post Spike (PS)
1201981431	241417001(RE03-09-13812) Post Spike Duplicate (PSD)
1201983208	Method Blank (MB)
1201983209	Laboratory Control Sample (LCS)
1201983210	Laboratory Control Sample (LCS)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 241524 002 in this SDG were analyzed on an "dry weight" basis. Samples 241524 001 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS recoveries were not all within the acceptance limits. See NCR# 763414.

QC Sample Designation
Sample 241417001 (RE03-09-13812) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Methanol Dilutions
None of the samples in this batch required a dilution using a methanol extract procedure.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 763414

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/14/09

Roadmap for LANL 10-600 VOA

This roadmap was analyzed by ron01469 on 11-30-2009, 13:46.
This roadmap was reviewed by sar00518 on 12-01-2009, 17:07.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112509v1/1n329.d	241524001	WST03-10-2186	25-NOV-2009	23:00	10-600.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n330.d	241524002	WST03-10-2132	25-NOV-2009	23:30	10-600.sub	1	926739	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
■	N	/chem/VOA1.i/112509v1/1n323.d	1201981430	RE03-09-13812MS	ms	25-NOV-2009	19:58	10-575.sub	1	926739	
■	N	/chem/VOA1.i/112509v1/1n324.d	1201981431	RE03-09-13812MSD	msd	25-NOV-2009	20:29	10-575.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n326LA.d	1201983209	LCS	lcs	25-NOV-2009	21:29	all.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n327sLA.d	1201983210	LCS	lcs	25-NOV-2009	21:59	all.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n328BA.d	1201983208	BLANK	mb	25-NOV-2009	22:30	all.sub	1	926739	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 23:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n330.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 23:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n330.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.71	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241524001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2186**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:00**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n329.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241524001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2186**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:00**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n329.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-600

Matrix Type: SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201983209	LCS for batch 926738	125	109	98
1201983210	LCS for batch 926738	104	106	93
1201983208	MB for batch 926738	107	109	96
241524001	WST03-10-2186	109	108	96
241524002	WST03-10-2132	110	111	101

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: RE03-09-13812PS
Lab Sample ID: 1201981430
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 19:58
Prep Batch ID: 926738
Batch ID: 926739
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	42.4	85	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	48.1	96	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	47.5	95	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	50.7	101	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	56.2	112	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	55.6	111	51-151
67-64-1	PS	Acetone	250	0.00	U	167	67	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	48.3	97	61-125
74-88-4	PS	Iodomethane	250	0.00	U	225	90	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	42.5	85	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	265	106	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	50.7	101	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	50.9	102	62-125
78-93-3	PS	2-Butanone	250	0.00	U	178	71	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	52.6	105	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	49.4	99	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	49.9	100	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	56.1	112	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	50.5	101	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	49.2	98	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	51.3	103	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	48.8	98	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	10-600	Sample Type:	Post Spike
Client ID:	RE03-09-13812PS	Matrix:	SOIL
Lab Sample ID:	1201981430	%Moisture:	7.1
Instrument:	VOA1.I	Analysis Date:	11/25/2009 19:58
Analyst:	RXM4	Prep Batch ID:	926738
Purge Vol:	5 mL	Batch ID:	926739

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	50.2	100	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	50.1	100	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	51.2	102	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	52.1	104	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	52.1	104	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	165	66	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	45.6	91	54-133
108-88-3	PS	Toluene	50.0	0.00	U	46.1	92	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	42.6	85	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	47.8	96	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	105	42	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	46.9	94	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	47.1	94	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	49.6	99	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	47.0	94	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	46.3	93	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	42.9	86	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	89.4	89	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	45.9	92	52-127
100-42-5	PS	Styrene	50.0	0.00	U	45.0	90	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	50.3	101	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	47.1	94	63-127

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-600

Client ID: RE03-09-13812PS

Lab Sample ID: 1201981430

Instrument: VOA1.I

Analyst: RXM4

Purge Vol: 5 mL

Sample Type: Post Spike

Matrix: SOIL

%Moisture: 7.1

Analysis Date: 11/25/2009 19:58

Dilution: 1

Prep Batch ID: 926738

Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	43.8	88	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	46.5	93	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	40.6	81	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	41.4	83	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	42.0	84	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	41.6	83	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	41.0	82	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	41.7	83	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	40.8	82	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	39.3	79	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	35.7	71	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	43.3	87	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	42.8	86	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	46.4	93	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	47.1	94	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	43.2	86	43-129

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	38.6	77	25-149	9	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	45.0	90	39-140	7	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	43.5	87	47-129	9	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	48.3	97	31-135	5	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	54.6	109	53-128	3	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	51.0	102	51-151	9	0-25
67-64-1	PSD	Acetone	250	0.00	U	163	65	21-153	3	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	45.3	91	61-125	6	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	216	87	53-142	4	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	41.9	84	59-136	1	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	257	103	46-129	3	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	49.3	99	56-126	3	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	47.9	96	62-125	6	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	175	70	26-152	2	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	50.5	101	60-130	4	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	47.0	94	55-135	5	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	47.4	95	60-127	5	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	54.4	109	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	47.3	95	59-131	7	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	46.9	94	57-128	5	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	47.5	95	58-136	8	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	45.3	91	58-126	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	48.7	97	56-123	3	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	47.7	95	51-137	5	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	49.8	100	60-126	3	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	48.5	97	55-138	7	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	49.6	99	60-132	5	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	170	68	58-136	3	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	44.1	88	54-133	3	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	45.8	92	52-128	1	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	42.2	84	53-137	1	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	48.4	97	59-130	1	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	111	45	31-148	6	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	47.7	95	57-127	2	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	47.2	94	51-128	0	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	50.1	100	59-139	1	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	47.7	95	57-133	2	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	46.4	93	53-122	0	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	42.9	86	51-125	0	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	87.8	88	50-126	2	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	45.7	91	52-127	0	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	43.8	88	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	51.1	102	57-149	2	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	48.1	96	63-127	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	45.1	90	57-149	3	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	47.7	95	49-131	3	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	41.4	83	40-136	2	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	42.0	84	44-135	1	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	42.3	85	44-140	1	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	42.3	85	42-140	2	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	41.6	83	44-132	2	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	42.8	86	42-142	3	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	41.6	83	43-137	2	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	39.8	80	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	36.6	73	38-145	2	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	43.2	86	43-129	0	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	43.5	87	44-125	2	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	47.7	95	47-151	3	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	46.2	92	59-131	2	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	41.5	83	43-129	4	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926738
Lab Sample ID: 1201983209
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 21:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	45.3	91	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	51.2	102	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	49.0	98	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	59.6	119	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	59.9	120	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	57.2	114	67-151
67-64-1	LCS	Acetone	250	0.0	207	83	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	51.1	102	70-125
74-88-4	LCS	Iodomethane	250	0.0	293	117	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	45.6	91	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	300	120	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	55.0	110	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	51.6	103	75-120
78-93-3	LCS	2-Butanone	250	0.0	219	88	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	56.4	113	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	51.4	103	74-135
67-66-3	LCS	Chloroform	50.0	0.0	52.5	105	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	61.2	122	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	52.7	105	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	53.4	107	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	54.4	109	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	50.7	101	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926738
Lab Sample ID: 1201983209
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 21:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	54.5	109	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	54.8	110	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	55.6	111	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	54.6	109	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	54.8	110	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	248	99	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	56.1	112	80-125
108-88-3	LCS	Toluene	50.0	0.0	53.3	107	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.7	107	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	54.3	109	76-120
591-78-6	LCS	2-Hexanone	250	0.0	213	85	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	53.3	107	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	56.7	113	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	56.6	113	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	56.2	112	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	55.2	110	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	51.2	102	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	110	110	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	55.8	112	74-120
100-42-5	LCS	Styrene	50.0	0.0	55.0	110	76-125
75-25-2	LCS	Bromoform	50.0	0.0	60.1	120	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	55.4	111	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926738 **Matrix:** SOIL

Lab Sample ID: 1201983209

Instrument: VOA1.I **Analysis Date:** 11/25/2009 21:29 **Dilution:** 1

Analyst: RXM4 **Prep Batch ID:** 926738

Purge Vol: 5 mL **Batch ID:** 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	51.1	102	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	58.2	116	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	52.3	105	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	52.3	105	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	53.1	106	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	53.2	106	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	52.3	105	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	53.4	107	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	52.1	104	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	53.8	108	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	54.3	109	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	55.6	111	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	55.3	111	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	52.4	105	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	61.9	124	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	55.6	111	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	57.4	115	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926738
Lab Sample ID: 1201983210
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 21:59
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	245	98	52-139

Method Blank Summary

SDG Number:	10-600	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926738	Instrument ID:	VOA1.I	Data File:	1n328BA.d
Lab Sample ID:	1201983208	Prep Date:	11/25/2009 12:30	Analyzed:	11/25/09 22:30
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926738	1201983209	1n326LA.d	11/25/09	2129
02 LCS for batch 926738	1201983210	1n327sLA.d	11/25/09	2159
03 WST03-10-2186	241524001	1n329.d	11/25/09	2300
04 WST03-10-2132	241524002	1n330.d	11/25/09	2330

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-600

Instrument ID: VOA1.I **Injection Date/Time:** 13-NOV-09 22:17

Column Description: RTX-Volatiles **Lab File ID** /111309v1/11507.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	59
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.1
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W1VM091113-05	/111309v1/11509.d	13-NOV-09 23:18
VSTD001	W1VM091113-07	/111309v1/11511.d	14-NOV-09 00:18
VSTD002	W1VM091113-08	/111309v1/11512.d	14-NOV-09 00:48
VSTD005	W1VM091113-09	/111309v1/11513.d	14-NOV-09 01:19
VSTD010	W1VM091113-10	/111309v1/11514.d	14-NOV-09 01:49
VSTD020	W1VM091113-11	/111309v1/11515.d	14-NOV-09 02:19
VSTD050	W1VM091113-12	/111309v1/11516.d	14-NOV-09 02:49
VSTD100	W1VM091113-13	/111309v1/11517.d	14-NOV-09 03:19
VSTD005S	W1VM091113-14	/111309v1/11519.d	14-NOV-09 04:20
VSTD010S	W1VM091113-15	/111309v1/11520.d	14-NOV-09 04:50
VSTD025S	W1VM091113-16	/111309v1/11521.d	14-NOV-09 05:20
VSTD050S	W1VM091113-17	/111309v1/11522.d	14-NOV-09 05:50
VSTD100S	W1VM091113-18	/111309v1/11523.d	14-NOV-09 06:20
VSTD250S	W1VM091113-19	/111309v1/11524.d	14-NOV-09 06:51
VSTD500S	W1VM091113-20	/111309v1/11525.d	14-NOV-09 07:21
SHORTICV	W1VM091113-19	/111309v1/11528.d	14-NOV-09 08:52

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-600

Instrument ID: VOA1.I **Injection Date/Time:** 16-NOV-09 14:01

Column Description: RTX-Volatiles **Lab File ID** /111609v1/1m108BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	55
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050/LICV	W1VM091116-05	/111609v1/1m108.d	16-NOV-09 14:01

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-600

Instrument ID: VOA1.I **Injection Date/Time:** 25-NOV-09 20:59

Column Description: RTX-Volatiles **Lab File ID** /112509v1/1n325.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	54.3
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.8
174	50.0 - 100.0% of mass 95	71.3
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	96.3
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091125-03	/112509v1/1n326.d	25-NOV-09 21:29
LCS	1201983209	/112509v1/1n326LA.d	25-NOV-09 21:29
VSTD250S	UVM091118-08A	/112509v1/1n327.d	25-NOV-09 21:59
LCS	1201983210	/112509v1/1n327sLA.d	25-NOV-09 21:59
BLANK	1201983208	/112509v1/1n328BA.d	25-NOV-09 22:30
WST03-10-2186	241524001	/112509v1/1n329.d	25-NOV-09 23:00
WST03-10-2132	241524002	/112509v1/1n330.d	25-NOV-09 23:30

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-600

STD Analysis Time: 25-NOV-09 21:29

Data File: 1n326.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	843693		13.7	715370		17.2	404551		19.6
Upper Limit	1687386		14.2	1430740		17.7	809102		20.1
Lower Limit	421847		13.2	357685		16.7	202276		19.1
Sample ID									
BLK01LCS	843693		13.7	715370		17.2	404551		19.6
BLK01SLCS	953791		13.7	788014		17.2	446241		19.6
BLK01	918725		13.7	752644		17.2	415755		19.6
WST03-10-2186	848666		13.7	696236		17.2	383810		19.6
WST03-10-2132	853669		13.7	662548		17.2	342780		19.6

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 23:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n330.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.71	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 23:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n330.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.71	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n330.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 25-NOV-2009 23:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241524002|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	888800.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.682	13.686	(1.000)	853669	50.0000	
* 76 Chlorobenzene-d5	117	17.161	17.162	(1.000)	662548	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	342780	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.336	13.337	(0.975)	581907	54.8018	54.8
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1497884	55.5480	55.5
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	583345	50.6849	50.7

ION RATIO REPORT

VOA REPORT

Data file: 1n330.d
Report Date: 11/27/2009 05:02
Lab. ID: 241524002 SampleType: SAMPLE
Injection Date: 25-NOV-2009 23:30
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241524002|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-600
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane				CAS#: 107-06-2		
62	15837	13.68	13.44	80-120	100	(T)
64	2528	13.68	13.44	2- 62	16	(T)
47 Benzene				CAS#: 71-43-2		
78	860	13.34	13.33	80-120	100	( )
77	17463	13.68	13.34	0- 53	2030	(QT)
51	179852	13.34	13.34	4- 64	20911	(Q)
64 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	14424	15.52	15.36	80-120	100	(T)
43	7326	15.51	15.36	218-278	51	(QT)
100	936673	15.52	15.36	1- 61	6493	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n330.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 25-NOV-2009 23:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241524002|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n330.d

Date : 25-NOV-2009 23:30

Client ID: WST03-10-2132

Sample Info: |2415240021926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

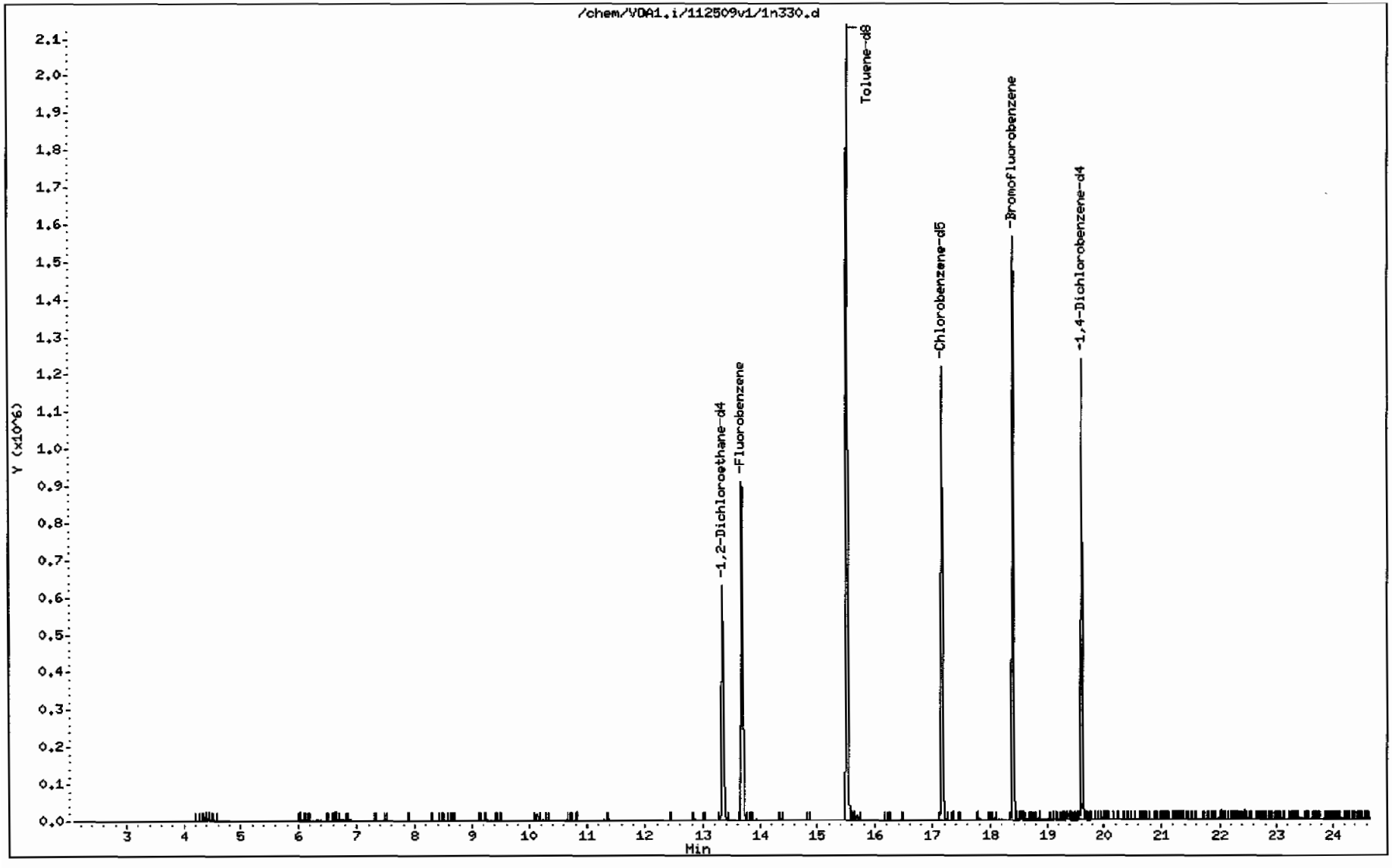

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241524001	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2186	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 23:00	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n329.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241524001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2186**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:00**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n329.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n329.d
Lab Smp Id: 241524001 Client Smp ID: WST03-10-2186
Inj Date : 25-NOV-2009 23:00
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241524001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	848666	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.162	(1.000)	696236	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	383810	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	577255	54.6842	54.7
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1536903	54.2373	54.2
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	619446	48.0680	48.1

ION RATIO REPORT

VOA REPORT

Data file: 1n329.d
Report Date: 11/27/2009 05:02
Lab. ID: 241524001 SampleType: SAMPLE
Injection Date: 25-NOV-2009 23:00
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241524001|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-600
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14907	13.68	13.44	80-120	100	(T)
64	1869	13.68	13.44	2- 62	13	(T)
47 Benzene			CAS#: 71-43-2			
78	22757	13.33	13.33	80-120	100	( )
77	5706	13.33	13.34	0- 53	25	( )
51	184490	13.34	13.34	4- 64	811	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14626	15.52	15.36	80-120	100	(T)
43	7497	15.52	15.36	218-278	51	(QT)
100	963535	15.52	15.36	1- 61	6587	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n329.d
Lab Smp Id: 241524001 Client Smp ID: WST03-10-2186
Inj Date : 25-NOV-2009 23:00
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241524001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n329.d

Date : 25-NOV-2009 23:00

Client ID: WST03-10-2186

Sample Info: |241524001|926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

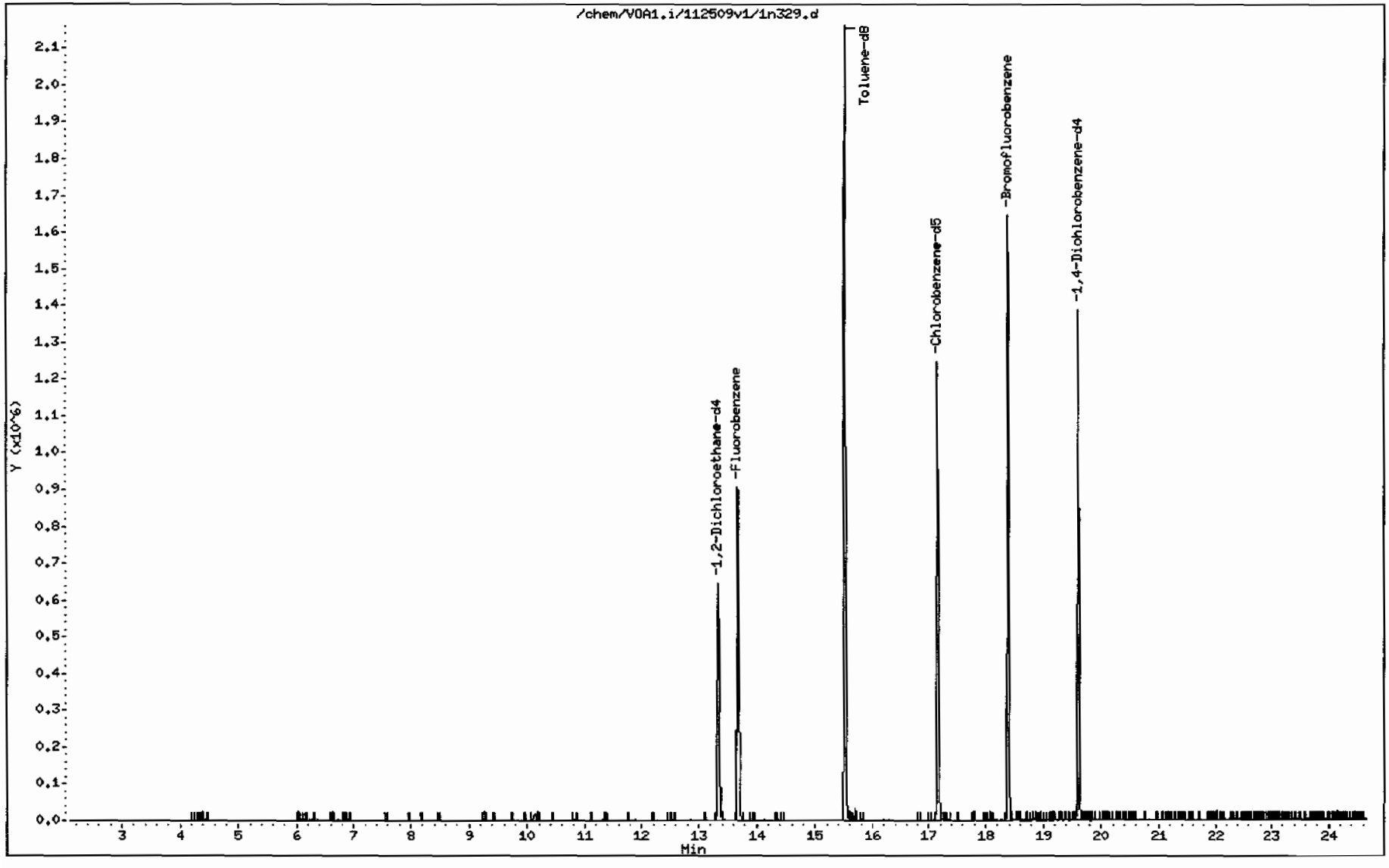

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 25-Nov-2009 08:26

Calibration History

Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Start Cal Date: 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 04:20	ICALsubS	/chem/VOA1.i/111309v1/11519.d
14-NOV-2009 00:18	CALsubL+	/chem/VOA1.i/111309v1/11511.d
Cal Level: 2 , Cal Amount: 2.00000		
14-NOV-2009 04:50	ICALsubS	/chem/VOA1.i/111309v1/11520.d
14-NOV-2009 00:48	CALsubL+	/chem/VOA1.i/111309v1/11512.d
Cal Level: 3 , Cal Amount: 5.00000		
14-NOV-2009 05:20	ICALsubS	/chem/VOA1.i/111309v1/11521.d
14-NOV-2009 01:19	CALsubL+	/chem/VOA1.i/111309v1/11513.d
Cal Level: 4 , Cal Amount: 10.00000		
14-NOV-2009 05:50	ICALsubS	/chem/VOA1.i/111309v1/11522.d
14-NOV-2009 01:49	CALsubL+	/chem/VOA1.i/111309v1/11514.d
Cal Level: 5 , Cal Amount: 20.00000		
14-NOV-2009 06:20	ICALsubS	/chem/VOA1.i/111309v1/11523.d
14-NOV-2009 02:19	CALsubL+	/chem/VOA1.i/111309v1/11515.d
Cal Level: 6 , Cal Amount: 50.00000		
14-NOV-2009 06:51	ICALsubS	/chem/VOA1.i/111309v1/11524.d
14-NOV-2009 02:49	CALsubL+	/chem/VOA1.i/111309v1/11516.d
Cal Level: 7 , Cal Amount: 100.00000		
14-NOV-2009 07:21	ICALsubS	/chem/VOA1.i/111309v1/11525.d
14-NOV-2009 03:19	CALsubL+	/chem/VOA1.i/111309v1/11517.d
Cal Level: 8 , Cal Amount: 200.00000		
13-NOV-2009 23:18	BENZENE+	/chem/VOA1.i/111309v1/11509.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Calibration File Names:
Level 1: /chem/VOA1.i/111309v1/11519.d
Level 2: /chem/VOA1.i/111309v1/11520.d
Level 3: /chem/VOA1.i/111309v1/11521.d
Level 4: /chem/VOA1.i/111309v1/11522.d
Level 5: /chem/VOA1.i/111309v1/11523.d
Level 6: /chem/VOA1.i/111309v1/11524.d
Level 7: /chem/VOA1.i/111309v1/11525.d
Level 8: /chem/VOA1.i/111309v1/11509.d

Compound	1 Level 1 / 100 Level 7	2 Level 2 / 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M 1 Xylenes (total)	0.81227	0.73137	0.78894	0.72498	0.74753	0.76443					
	0.83207	+++++					AVRG		0.77166		5.29958
M 2 1,2-Dichloroethylene (total)	0.34833	0.34223	0.35784	0.33479	0.33448	0.33077					
	0.34829	+++++					AVRG		0.34239		2.83215
M 3 1,3-Dichloropropylene	0.70586	0.72835	0.78706	0.78242	0.78994	0.81396					
	0.86766	+++++					AVRG		0.78218		6.82978
4 Chlorotrifluoroethylene	0.13485	0.14655	0.15206	0.14935	0.17832	0.16711					
	0.16995	+++++					AVRG		0.15688		9.76231
5 Dichlorodifluoromethane	0.38136	0.29154	0.34309	0.34840	0.34284	0.32399					
	0.30590	+++++					AVRG		0.33388		8.90427

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Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
6 Chloromethane	0.36352	0.41180	0.43566	0.42653	0.42921	0.41976					
	0.40514	+++++					AVRG		0.41309		5.86079
7 Vinyl chloride	0.37166	0.41882	0.39367	0.36887	0.36084	0.34024					
	0.32820	+++++					AVRG		0.36890		8.32266
8 2-Chloro-1,1,1-trifluoroethan	+++++	0.33998	0.31048	0.30901	0.32578	0.34040					
	0.34703	+++++					AVRG		0.32878		4.95745
9 Bromomethane	0.21690	0.22761	0.23531	0.22897	0.22468	0.21559					
	0.20365	+++++					AVRG		0.22182		4.75715
10 Chloroethane	0.19204	0.24536	0.23794	0.23300	0.23259	0.23061					
	0.22732	+++++					AVRG		0.22841		7.46771
11 Trichlorofluoromethane	0.43608	0.52008	0.53827	0.53954	0.53870	0.53853					
	0.52430	+++++					AVRG		0.51936		7.23277
12 Ethyl Ether	13883	16946	33985	58858	108474	271086					
	556612	+++++					WLINR	-0.01699	0.31004		0.99399
13 Acrolein	0.05333	0.04888	0.04523	0.05392	0.05442	+++++					
	+++++	+++++					AVRG		0.05116		7.77888
14 Trichlorotrifluoroethane	0.38443	0.29919	0.26333	0.27368	0.28733	0.26637					
	0.27318	+++++					AVRG		0.29250		14.49372

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 1,1-Dichloroethylene	0.66544	0.72486	0.72849	0.75349	0.72602	0.70860					
	0.70169	+++++					AVRG		0.71551		3.85053
16 Acetone	0.27960	0.29041	0.29028	0.29519	0.28855	0.29877					
	0.28827	+++++					AVRG		0.29015		2.07413
17 Isopropyl Alcohol	+++++	0.01880	0.01931	0.02045	0.01791	0.02228					
	0.02251	+++++					AVRG		0.02021		9.32492
18 Iodomethane	0.47134	0.45473	0.46938	0.46784	0.46221	0.46114					
	0.45366	+++++					AVRG		0.46290		1.51011
19 Carbon disulfide	0.96269	0.92797	0.89305	0.94299	0.92514	0.93790					
	0.86070	+++++					AVRG		0.92149		3.70371
20 Allyl chloride	0.09501	0.09361	0.09290	0.10507	0.12042	0.13013					
	+++++	+++++					AVRG		0.10619		14.81176
21 Methyl acetate	0.26593	0.25494	0.25595	0.25694	0.24207	0.22786					
	0.23511	+++++					AVRG		0.24840		5.49716
22 Acetonitrile	0.03907	0.03505	0.03613	0.03588	0.03452	0.03371					
	0.03550	+++++					AVRG		0.03569		4.76986
23 Methylene chloride	+++++	24051	41818	70969	131447	316200					
	681164	+++++					LINR	-0.03083	0.35083		0.99980

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
24 tert-Butyl Alcohol	0.03736	0.03924	0.03623	0.04125	0.03045	0.04033					
	0.04086	+++++					AVRG		0.03796		9.99389
25 tert-Butyl methyl ether	1.02944	1.16134	1.14779	1.21755	1.11739	1.12980					
	1.16499	+++++					AVRG		1.13833		5.06877
26 trans-1,2-Dichloroethylene	0.34072	0.33605	0.34935	0.32977	0.32190	0.31967					
	0.32891	+++++					AVRG		0.33234		3.15938
27 Acrylonitrile	0.11445	0.10516	0.09582	0.09726	0.11027	0.10992					
	0.11442	+++++					AVRG		0.10676		7.18031
28 Isopropyl ether	+++++	1.14017	1.11343	1.15572	1.20439	1.22887					
	1.32967	+++++					AVRG		1.19537		6.54156
29 Vinyl acetate	0.47200	0.53409	0.59574	0.55445	0.52377	0.60780					
	0.57002	+++++					AVRG		0.55113		8.40353
30 1,1-Dichloroethane	0.71917	0.72889	0.80378	0.74289	0.72120	0.71174					
	0.74337	+++++					AVRG		0.73872		4.20348
31 2-Chloro-1,3-butadiene	0.65721	0.59215	0.56354	0.55911	0.62777	0.61361					
	0.65818	+++++					AVRG		0.61022		6.67178
32 Ethyl tert-butyl ether	+++++	1.12815	1.09366	1.08936	1.06318	1.18087					
	1.29073	+++++					AVRG		1.14099		7.34719

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
33 2,2-Dichloropropane	0.48989	0.52491	0.58120	0.54053	0.55119	0.53778					
	0.55150	+++++					AVRG		0.53957		5.18583
34 Ethyl acetate	0.33965	0.28932	0.26285	0.29260	0.27580	0.29649					
	0.28868	+++++					AVRG		0.29220		8.17282
35 2-Butanone	0.25793	0.27740	0.26965	0.27914	0.28942	0.30924					
	0.30740	+++++					AVRG		0.28431		6.68266
36 cis-1,2-Dichloroethylene	0.35593	0.34838	0.36631	0.33981	0.34705	0.34186					
	0.36768	+++++					AVRG		0.35243		3.18020
37 Propionitrile	0.04783	0.04230	0.03731	0.04306	0.04379	0.04424					
	0.04431	+++++					AVRG		0.04326		7.28248
38 Tetrahydrofuran	0.23152	0.20954	0.20440	0.19096	0.19197	0.21633					
	0.18821	+++++					AVRG		0.20471		7.72518
39 Bromochloromethane	0.13887	0.13222	0.13837	0.14209	0.13930	0.14049					
	0.14893	+++++					AVRG		0.14004		3.56145
40 Methacrylonitrile	0.24963	0.22678	0.21065	0.22890	0.23535	0.24087					
	0.23039	+++++					AVRG		0.23180		5.27167
41 Chloroform	0.74775	0.77887	0.82572	0.78772	0.78034	0.77383					
	0.81096	+++++					AVRG		0.78646		3.24006

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
42 Cyclohexane	0.66345	0.64389	0.63890	0.66407	0.64404	0.63011					
	0.64678	+++++					AVRG		0.64732		1.92383
43 1,1,1-Trichloroethane	0.54517	0.62302	0.63779	0.62522	0.62893	0.61320					
	0.63805	+++++					AVRG		0.61591		5.25541
44 Carbon tetrachloride	0.56294	0.58644	0.63641	0.63628	0.63185	0.62091					
	0.64429	+++++					AVRG		0.61702		4.94513
45 1,1-Dichloropropene	0.55100	0.55607	0.56975	0.55980	0.55465	0.55195					
	0.58405	+++++					AVRG		0.56104		2.12886
46 Isobutyl alcohol	0.01033	0.01111	0.01036	0.01037	0.00985	0.01223					
	0.01175	+++++					AVRG		0.01086		7.98726
47 Benzene	36755	49089	122794	236505	464924	1202457					
	2698240	23667					LINR	0.00708	1.40915		0.99937
49 Methyl tert-amyl ether	+++++	0.88273	0.85934	0.84815	0.87620	0.96177					
	1.02973	+++++					AVRG		0.90966		7.81866
50 Cyclohexene	0.53615	0.51960	0.53427	0.54352	0.53716	0.52183					
	0.54823	+++++					AVRG		0.53439		1.96596
51 1,2-Dichloroethane	0.63028	0.70033	0.72243	0.70806	0.70200	0.69617					
	0.69894	+++++					AVRG		0.69403		4.24176

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
53 n-Butyl alcohol	0.00840	0.00793	0.00871	0.00963	0.00810	0.00978					
	0.01083	+++++					AVRG		0.00905		11.70077
54 Trichloroethylene	0.38407	0.37942	0.39497	0.37726	0.38205	0.37012					
	0.39468	+++++					AVRG		0.38323		2.36496
55 Methylcyclohexane	0.61415	0.59438	0.58177	0.58292	0.58847	0.57365					
	0.60973	+++++					AVRG		0.59215		2.53002
56 Methyl methacrylate	0.21424	0.18730	0.18064	0.19254	0.19905	0.20650					
	0.20620	+++++					AVRG		0.19807		6.00920
57 1,2-Dichloropropane	0.39078	0.35768	0.35900	0.35500	0.35022	0.35218					
	0.37196	+++++					AVRG		0.36240		3.96416
58 1,4-Dioxane	0.00305	0.00245	0.00266	0.00286	0.00318	0.00288					
	0.00289	+++++					AVRG		0.00285		8.49652
59 Dibromomethane	0.20277	0.23410	0.23268	0.22085	0.21845	0.22248					
	0.23307	+++++					AVRG		0.22349		5.00706
60 Bromodichloromethane	0.51667	0.56051	0.62592	0.60782	0.59837	0.61544					
	0.63717	+++++					AVRG		0.59456		7.08633
61 2-Chloroethylvinyl ether	2224	2878	11313	21547	54379	210498					
	505362	+++++					LINR	0.39134	0.05430		0.99355

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
62 2-Nitropropane	0.10211	0.09608	0.09548	0.10761	0.11835	0.11732					
	0.11890	+++++					AVRG		0.10798		9.61347
63 cis-1,3-Dichloropropylene	0.56705	0.57716	0.62105	0.61985	0.62451	0.64527					
	0.67992	+++++					AVRG		0.61926		6.21449
64 4-Methyl-2-pentanone	0.15705	0.17262	0.17271	0.18512	0.18978	0.21108					
	0.20813	+++++					AVRG		0.18521		10.62392
66 Toluene	1.14017	1.06414	1.10843	1.06181	1.07135	1.08649					
	1.15420	+++++					AVRG		1.09808		3.39614
67 Ethyl methacrylate	0.52322	0.48434	0.48427	0.53223	0.51154	0.52546					
	0.51582	+++++					AVRG		0.51098		3.79655
68 trans-1,3-Dichloropropylene	0.69838	0.72713	0.78298	0.78308	0.78831	0.81706					
	0.87099	+++++					AVRG		0.78113		7.23969
69 1,1,2-Trichloroethane	0.31590	0.30169	0.29945	0.29278	0.30402	0.30261					
	0.32301	+++++					AVRG		0.30563		3.37459
70 Tetrachloroethylene	0.34151	0.33330	0.33889	0.32547	0.32471	0.32346					
	0.34458	+++++					AVRG		0.33313		2.62174
71 2-Hexanone	0.42866	0.44990	0.45866	0.46921	0.50138	0.56178					
	0.55722	+++++					AVRG		0.48954		10.73922

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
72 1,3-Dichloropropane	0.67890	0.68207	0.69734	0.65590	0.66618	0.66440					
	0.71069	+++++					AVRG		0.67935		2.85695
73 Dibromochloromethane	0.38469	0.38394	0.44512	0.43782	0.44944	0.47113					
	0.49706	+++++					AVRG		0.43846		9.55461
74 1,2-Dibromoethane	0.34045	0.34527	0.36316	0.35106	0.36203	0.36864					
	0.38538	+++++					AVRG		0.35943		4.26461
75 1-Chlorohexane	+++++	0.39312	0.39282	0.32524	0.40104	0.42060					
	0.43305	+++++					AVRG		0.39431		9.49685
77 Chlorobenzene	1.21373	1.15844	1.14111	1.07587	1.08040	1.10429					
	1.17692	+++++					AVRG		1.13582		4.54042
78 Ethylbenzene	2.40687	2.33669	2.47268	2.23463	2.29813	2.32214					
	2.46303	+++++					AVRG		2.36203		3.74714
79 1,1,1,2-Tetrachloroethane	0.42049	0.43141	0.45326	0.42496	0.43613	0.44494					
	0.47082	+++++					AVRG		0.44029		3.98244
80 m,p-Xylenes	0.80780	0.74989	0.79953	0.72779	0.75646	0.76931					
	0.84008	+++++					AVRG		0.77870		4.98818
81 o-Xylene	0.82120	0.69429	0.76774	0.71936	0.72965	0.75467					
	0.81606	+++++					AVRG		0.75757		6.33656

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
82 Styrene	1.30914	1.18192	1.31601	1.23212	1.27501	1.34034					
	1.43319	+++++					AVRG		1.29825		6.19894
83 Bromoform	0.42221	0.45244	0.46276	0.49988	0.51775	0.53547					
	0.59142	+++++					AVRG		0.49742		11.48564
84 Isopropylbenzene	3.92962	3.81106	4.36021	3.96245	4.03248	4.02489					
	4.35218	+++++					AVRG		4.06756		5.17225
85 cis-1,4-Dichloro-2-butene	0.30225	0.29462	0.29877	0.29084	0.32781	0.32850					
	0.31209	+++++					AVRG		0.30784		4.99910
86 Cyclohexanone	12846	23538	58910	150579	381845	+++++					
	+++++	+++++					LINR	0.49988	0.04909		0.99135
88 1,1,2,2-Tetrachloroethane	0.75610	0.74369	0.81649	0.79419	0.78783	0.79158					
	0.86202	+++++					AVRG		0.79313		4.92083
89 n-Propylbenzene	4.79404	4.78851	5.23968	4.82134	4.89570	4.92964					
	5.21295	+++++					AVRG		4.95455		3.89310
90 trans-1,4-Dichloro-2-butene	0.29812	0.31352	0.28782	0.26998	0.31695	0.31835					
	0.29727	+++++					AVRG		0.30029		5.87400
91 Bromobenzene	0.85156	0.84147	0.85882	0.81020	0.81428	0.82700					
	0.88455	+++++					AVRG		0.84112		3.13963

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	100 Level 7	200 Level 8									
92 1,2,3-Trichloropropane	0.28022	0.26897	0.25372	0.25204	0.25423	0.25360					
	0.26290	+++++					AVRG		0.26081		4.05216
93 1,3,5-Trimethylbenzene	3.43446	3.49218	3.68233	3.44662	3.56449	3.59826					
	3.86366	+++++					AVRG		3.58314		4.23441
94 2-Chlorotoluene	3.47821	3.57761	3.79930	3.46640	3.52829	3.52154					
	3.75641	+++++					AVRG		3.58968		3.73610
95 4-Chlorotoluene	3.35203	3.17426	3.34752	3.10435	3.16879	3.17490					
	3.33681	+++++					AVRG		3.23695		3.22667
96 tert-Butylbenzene	2.87089	2.74977	2.84522	2.66297	2.72776	2.70387					
	2.96377	+++++					AVRG		2.78918		3.84011
97 1,2,4-Trimethylbenzene	3.70191	3.60410	3.79540	3.52090	3.56225	3.61987					
	3.87066	+++++					AVRG		3.66787		3.47855
98 Pentachloroethane	0.32060	0.31703	0.32398	0.24876	0.30297	0.37777					
	0.29193	+++++					AVRG		0.31186		12.45420
99 sec-Butylbenzene	4.44800	4.34644	4.60966	4.23567	4.42485	4.37976					
	4.71803	+++++					AVRG		4.45177		3.66292
100 4-Isopropyltoluene	3.36328	3.22054	3.51684	3.17589	3.32966	3.36325					
	3.58839	+++++					AVRG		3.36541		4.38795

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
101 1,3-Dichlorobenzene	1.67374	1.55428	1.66831	1.53164	1.55944	1.58328					
	1.67251	++++++					AVRG		1.60617		3.91972
103 1,4-Dichlorobenzene	1.76616	1.66887	1.68200	1.51979	1.57239	1.60865					
	1.70636	++++++					AVRG		1.64632		5.12085
104 Benzyl chloride	1.62969	1.55776	1.60390	1.34298	1.74375	1.69429					
	1.59116	++++++					AVRG		1.59479		8.02116
105 n-Butylbenzene	3.64538	3.69207	3.98159	3.55254	3.74217	3.76878					
	3.99375	++++++					AVRG		3.76804		4.39399
106 1,2-Dichlorobenzene	1.66043	1.49940	1.55636	1.46965	1.48387	1.49852					
	1.59506	++++++					AVRG		1.53761		4.53952
107 bis(2-Chloroisopropyl)ether	0.37106	0.36662	0.32099	0.32780	0.38946	0.39192					
	0.35359	++++++					AVRG		0.36021		7.73065
108 1,2-Dibromo-3-chloropropane	0.14172	0.13191	0.14045	0.15188	0.15917	0.15194					
	0.18132	++++++					AVRG		0.15120		10.62760
109 1,2,4-Trichlorobenzene	1.16045	1.14150	1.16560	1.09295	1.12242	1.11980					
	1.19388	++++++					AVRG		1.14237		2.96216
110 Hexachlorobutadiene	0.84192	0.81403	0.87311	0.75366	0.80851	0.77001					
	0.79946	++++++					AVRG		0.80867		5.02102

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
111 Naphthalene	2.12943	2.03059	1.99480	2.09592	2.16328	2.08234					
	2.33666	+++++					AVRG		2.11900		5.26088
112 1,2,3-Trichlorobenzene	0.93318	0.98133	0.98253	0.97572	0.96237	0.91436					
	0.97897	+++++					AVRG		0.96121		2.80673
$ 48 1,2-Dichloroethane-d4	0.52359	0.62803	0.63025	0.66045	0.64311	0.66027					
	0.60778	+++++					AVRG		0.62193		7.59277
$ 65 Toluene-d8	1.93610	2.03435	2.05225	2.06640	2.00752	2.08350					
	2.06482	+++++					AVRG		2.03499		2.46206
$ 87 Bromofluorobenzene	1.60564	1.67611	1.67667	1.73493	1.66503	1.69222					
	1.70106	+++++					AVRG		1.67881		2.35520

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INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/VOA1.i/111309v1/11528.d
Report Date: 18-Nov-2009 11:01

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 11528.d
Analysis Type: WATER
Lab Sample ID: W1VM091113-19
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

Injection Date: 14-NOV-2009 08:52
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.14763	0.14763	0.010	-5.90175	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.36322	0.36322	0.010	10.47439	30.00000	Averaged
13 Acrolein	0.05116	0.04667	0.04667	0.001	-8.77636	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.27186	0.27186	0.030	-7.05527	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02305	0.02305	0.000	14.05893	40.00000	Averaged
20 Allyl chloride	0.10619	0.13404	0.13404	0.010	26.22620	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.04061	0.04061	0.010	6.98257	40.00000	Averaged
27 Acrylonitrile	0.10676	0.10533	0.10533	0.010	-1.33680	30.00000	Averaged
28 Isopropyl ether	1.19537	1.28737	1.28737	0.010	7.69603	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.60811	0.60811	0.010	-0.34717	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.22940	1.22940	0.010	7.74850	30.00000	Averaged
37 Propionitrile	0.04326	0.04095	0.04095	0.010	-5.34093	30.00000	Averaged
34 Ethyl acetate	0.29220	0.26253	0.26253	0.010	-10.15296	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.22054	0.22054	0.010	-4.85685	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.19333	0.19333	0.010	-5.55867	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01041	0.01041	0.001	-4.14907	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	0.98494	0.98494	0.010	8.27576	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.19115	0.19115	0.010	-3.48960	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.48311	0.48311	0.010	-5.45482	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.40080	0.40080	0.000	1.64453	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00267	0.00267	0.001	-6.48301	40.00000	Averaged
62 2-Nitropropane	0.10798	0.10490	0.10490	0.000	-2.85062	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.29808	0.29808	0.010	-3.17173	30.00000	Averaged
86 Cyclohexanone	555	1250	0.02080	0.010	-55.62459	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.28505	0.28505	0.010	-5.07396	30.00000	Averaged
98 Pentachloroethane	0.31186	0.25219	0.25219	0.010	-19.13515	30.00000	Averaged
104 Benzyl chloride	1.59479	1.35725	1.35725	0.010	-14.89504	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.35032	0.35032	0.010	-2.74499	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.54180	0.54180	0.010	-12.88362	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.03543	2.03543	0.010	0.02147	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.62823	1.62823	0.010	-3.01305	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 14-NOV-2009 08:52
Lab File ID: 11528.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091113-19 Quant Type: ISTD
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	8.75563
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111309v1/11528.d
Lab Smp Id: W1VM091113-19 Client Smp ID: SHORTICV
Inj Date : 14-NOV-2009 08:52
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091113-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091023-08A/UVM091105-02A
Comment :
Method : /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m
Meth Date : 18-Nov-2009 11:01 eh1 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	493699	150.000	141
8 2-Chloro-1,1,1-trifluoroethane	118	6.298	6.298	(0.460)	1214708	150.000	166
13 Acrolein	56	8.959	8.959	(0.655)	260116	250.000	228
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1515317	250.000	232
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1284719	2500.00	2850
20 Allyl chloride	76	9.856	9.856	(0.720)	747101	250.000	316
24 tert-Butyl Alcohol	59	10.202	10.202	(0.745)	2263586	2500.00	2670
27 Acrylonitrile	53	10.671	10.671	(0.780)	587086	250.000	247
28 Isopropyl ether	45	11.201	11.201	(0.818)	1435106	50.0000	53.8
31 2-Chloro-1,3-butadiene	53	11.399	11.399	(0.833)	677890	50.0000	49.8
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1370484	50.0000	53.9
37 Propionitrile	54	12.407	12.407	(0.906)	228260	250.000	237
34 Ethyl acetate	43	12.167	12.167	(0.889)	1463298	250.000	225
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1229233	250.000	238
38 Tetrahydrofuran	42	12.545	12.545	(0.640)	489608	250.000	236

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
46 Isobutyl alcohol	41	13.111	13.111	(0.958)	580033	2500.00	2400
49 Methyl tert-amyl ether	73	13.350	13.350	(0.975)	1097966	50.0000	54.1
56 Methyl methacrylate	69	14.441	14.441	(1.055)	1065456	250.000	241
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2164928	250.000	236
75 1-Chlorohexane	55	17.033	17.033	(1.244)	446791	50.0000	50.8
58 1,4-Dioxane	88	14.547	14.547	(1.063)	148599	2500.00	2340
62 2-Nitropropane	43	15.081	15.081	(1.102)	584679	250.000	243
85 cis-1,4-Dichloro-2-butene	53	18.275	18.275	(0.932)	754892	250.000	242
86 Cyclohexanone	55	18.386	18.386	(1.071)	466077	1250.00	555
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	721901	250.000	237
98 Pentachloroethane	167	19.201	19.201	(0.979)	638677	250.000	202
104 Benzyl chloride	91	19.776	19.776	(1.008)	3437283	250.000	213
107 bis(2-Chloroisopropyl)ether	45	20.167	20.167	(1.028)	887198	250.000	243
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1114758	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	896248	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	506508	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	603976	50.0000	43.6
$ 65 Toluene-d8	98	15.523	15.523	(0.904)	1824247	50.0000	50.0
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	824709	50.0000	48.5

Data File: /chem/VOA1.i/111309v1/11528.d
Date : 14-NOV-2009 08:52
Client ID: SHORTICV
Sample Info: IWLVM091113-19|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

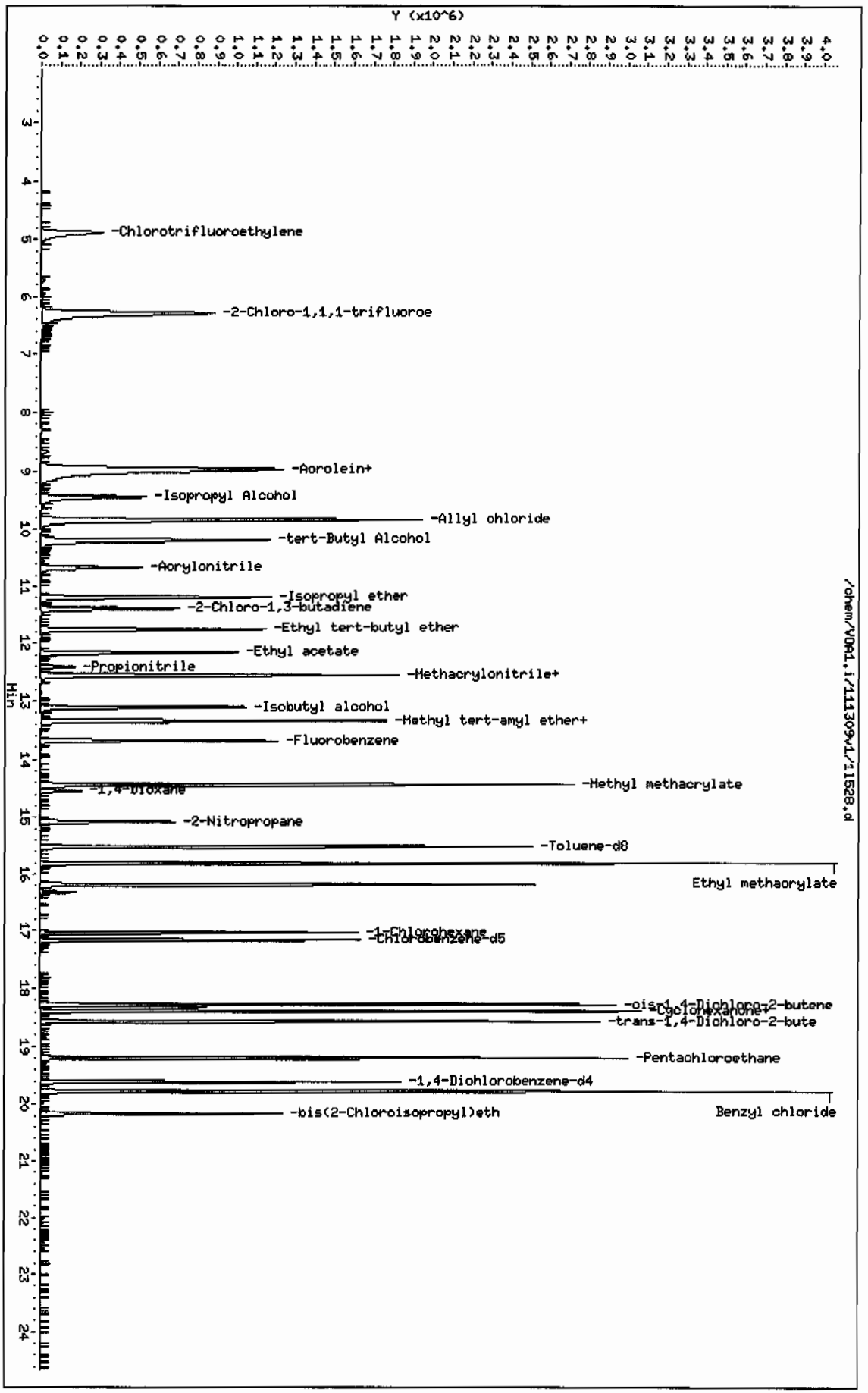

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.78659	0.78659	0.050	1.93501	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34829	0.34829	0.050	1.72438	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.76082	0.76082	0.050	-2.73046	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.28961	0.28961	0.050	-13.25713	30.00000	Averaged	
	6 Chloromethane	0.41309	0.34567	0.34567	0.100	-16.32056	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.30586	0.30586	0.050	-17.08914	20.00000	Averaged	ccc
	9 Bromomethane	0.22174	0.21949	0.21949	0.050	-1.01260	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24501	0.24501	0.050	7.27015	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.53920	0.53920	0.050	3.81924	30.00000	Averaged	
	12 Ethyl Ether	45.83993	50.00000	0.28952	0.010	-8.32014	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19861	0.19861	0.000	-31.55015	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03488	0.03488	0.010	-2.28372	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.66262	0.66262	0.050	-7.39264	20.00000	Averaged	ccc
	21 Methyl acetate	0.24838	0.21471	0.21471	0.010	-13.55590	40.00000	Averaged	
	18 Iodomethane	0.46290	0.47705	0.47705	0.050	3.05775	30.00000	Averaged	
	23 Methylene chloride	49.69453	50.00000	0.35951	0.000	-0.61094	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.06038	1.06038	0.050	15.07243	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.01424	1.01424	0.050	-10.90101	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.34226	0.34226	0.050	2.98628	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.66089	0.66089	0.010	19.91591	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.68036	0.68036	0.100	-7.89939	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.21356	0.21356	0.030	-24.88572	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.35432	0.35432	0.050	0.53641	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52117	0.52117	0.050	-3.41129	30.00000	Averaged	
	41 Chloroform	0.78646	0.70224	0.70224	0.010	-10.70855	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.14700	0.14700	0.010	4.97038	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.56828	0.56828	0.010	-7.73277	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.70592	0.70592	0.010	9.05253	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55571	0.55571	0.010	-0.95042	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00962	0.00962	0.001	6.25892	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.57859	0.57859	0.010	-6.22742	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62106	0.48336	0.48336	0.010	-22.17142	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.55944	0.55944	0.010	-19.39207	30.00000	Averaged	
	47 Benzene	50.28606	50.00000	1.40724	0.010	0.57211	30.00000	Linear	
	50 Cyclohexene	0.53439	0.52276	0.52276	0.010	-2.17678	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
54 Trichloroethylene	0.38323	0.37928	0.37928	0.010	-1.03062	30.00000	Averaged	
57 1,2-Dichloropropane	0.36240	0.35751	0.35751	0.010	-1.35037	20.00000	Averaged	ccc
55 Methylcyclohexane	0.59215	0.64311	0.64311	0.010	8.60482	30.00000	Averaged	
60 Bromodichloromethane	0.59456	0.53560	0.53560	0.010	-9.91614	30.00000	Averaged	
59 Dibromomethane	0.22349	0.20094	0.20094	0.010	-10.08947	30.00000	Averaged	
61 2-Chloroethylvinyl ether	197	250	0.03848	0.000	-21.31056	30.00000	Linear	
64 4-Methyl-2-pentanone	0.18521	0.16731	0.16731	0.010	-9.66493	40.00000	Averaged	
63 cis-1,3-Dichloropropylene	0.61926	0.60977	0.60977	0.010	-1.53290	30.00000	Averaged	
$ 65 Toluene-d8	2.03499	1.97166	1.97166	0.010	-3.11196	30.00000	Averaged	
66 Toluene	1.09808	1.09311	1.09311	0.010	-0.45345	20.00000	Averaged	ccc
68 trans-1,3-Dichloropropylene	0.78113	0.75103	0.75103	0.010	-3.85367	30.00000	Averaged	
69 1,1,2-Trichloroethane	0.30563	0.29722	0.29722	0.010	-2.75287	30.00000	Averaged	
71 2-Hexanone	0.48954	0.37565	0.37565	0.010	-23.26575	40.00000	Averaged	
72 1,3-Dichloropropane	0.67935	0.63720	0.63720	0.010	-6.20551	30.00000	Averaged	
70 Tetrachloroethylene	0.33313	0.34435	0.34435	0.010	3.36940	30.00000	Averaged	
73 Dibromochloromethane	0.43846	0.42649	0.42649	0.010	-2.73068	30.00000	Averaged	
74 1,2-Dibromoethane	0.35943	0.35320	0.35320	0.010	-1.73152	30.00000	Averaged	
77 Chlorobenzene	1.13582	1.16153	1.16153	0.300	2.26365	30.00000	Averaged	spcc
79 1,1,1,2-Tetrachloroethane	0.44029	0.42501	0.42501	0.010	-3.47076	30.00000	Averaged	
78 Ethylbenzene	2.36203	2.28751	2.28751	0.010	-3.15483	20.00000	Averaged	ccc
80 m,p-Xylenes	0.77870	0.80163	0.80163	0.010	2.94558	30.00000	Averaged	
81 o-Xylene	0.75757	0.75650	0.75650	0.010	-0.14143	30.00000	Averaged	
82 Styrene	1.29825	1.33826	1.33826	0.010	3.08236	30.00000	Averaged	
83 Bromoform	0.49742	0.51659	0.51659	0.100	3.85450	30.00000	Averaged	spcc
84 Isopropylbenzene	4.06756	4.09104	4.09104	0.010	0.57739	30.00000	Averaged	
88 1,1,2,2-Tetrachloroethane	0.79313	0.80201	0.80201	0.300	1.11984	30.00000	Averaged	spcc
$ 87 Bromofluorobenzene	1.67881	1.59852	1.59852	0.010	-4.78243	30.00000	Averaged	
92 1,2,3-Trichloropropane	0.26081	0.22267	0.22267	0.010	-14.62239	30.00000	Averaged	
91 Bromobenzene	0.84113	0.86234	0.86234	0.010	2.52236	30.00000	Averaged	
89 n-Propylbenzene	4.95455	4.95567	4.95567	0.010	0.02259	30.00000	Averaged	
94 2-Chlorotoluene	3.58968	3.47589	3.47589	0.010	-3.16985	30.00000	Averaged	
93 1,3,5-Trimethylbenzene	3.58314	3.53161	3.53161	0.010	-1.43822	30.00000	Averaged	
95 4-Chlorotoluene	3.23695	3.13706	3.13706	0.010	-3.08595	30.00000	Averaged	
96 tert-Butylbenzene	2.78918	2.83816	2.83816	0.010	1.75609	30.00000	Averaged	
97 1,2,4-Trimethylbenzene	3.66787	3.59991	3.59991	0.010	-1.85290	30.00000	Averaged	
99 sec-Butylbenzene	4.45177	4.49320	4.49320	0.010	0.93061	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1m108ICV.d
Analysis Type: WATER
Lab Sample ID: W1VM091116-05
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

Injection Date: 16-NOV-2009 14:01
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.51635	3.51635	0.010	4.48521	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.71300	1.71300	0.010	6.65131	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.70171	1.70171	0.010	3.36466	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.75570	3.75570	0.010	-0.32761	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.59378	1.59378	0.010	3.65299	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.16033	0.16033	0.010	6.03864	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20851	1.20851	0.010	5.78950	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.82340	0.82340	0.010	1.82157	30.00000	Averaged
111 Naphthalene	2.11900	2.27355	2.27355	0.010	7.29312	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.98434	0.98434	0.010	2.40643	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.36236
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111609v1/1m108ICV.d
Lab Smp Id: W1VM091116-05 Client Smp ID: ICV
Inj Date : 16-NOV-2009 14:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091116-05|CCV/LCS/ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m
Meth Date : 01-Dec-2009 16:53 slg Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2088100	150.000	153
M 2 1,2-Dichloroethylene (total)	96				778988	100.000	102
M 3 1,3-Dichloropropylene	75				1346471	100.000	97.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	323873	50.0000	43.4
6 Chloromethane	50	5.550	5.550	(0.405)	386561	50.0000	41.8
7 Vinyl chloride	62	5.923	5.923	(0.433)	342039	50.0000	41.4
9 Bromomethane	96	6.948	6.948	(0.508)	245458	50.0000	49.5
10 Chloroethane	64	7.215	7.215	(0.527)	273997	50.0000	53.6
11 Trichlorofluoromethane	101	7.836	7.836	(0.573)	602979	50.0000	51.9
12 Ethyl Ether	59	8.476	8.476	(0.619)	323763	50.0000	45.8
16 Acetone	43	9.254	9.254	(0.676)	1110521	250.000	171
22 Acetonitrile	41	9.976	9.976	(0.729)	975078	1250.00	1220
15 1,1-Dichloroethylene	61	9.093	9.093	(0.664)	741002	50.0000	46.3
21 Methyl acetate	43	9.838	9.838	(0.719)	1200537	250.000	216
18 Iodomethane	142	9.470	9.470	(0.692)	2667438	250.000	258

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
23 Methylene chloride	84	10.137	10.137	(0.741)	402034	50.0000	49.7
19 Carbon disulfide	76	9.571	9.571	(0.699)	5929090	250.000	288
25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1134219	50.0000	44.5
26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	382752	50.0000	51.5
29 Vinyl acetate	43	11.297	11.297	(0.825)	3695328	250.000	300
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	760846	50.0000	46.0
35 2-Butanone	43	12.186	12.186	(0.890)	1194107	250.000	188
36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	396236	50.0000	50.3
33 2,2-Dichloropropane	77	12.158	12.158	(0.888)	582817	50.0000	48.3
41 Chloroform	83	12.614	12.614	(0.922)	785308	50.0000	44.6
39 Bromochloromethane	128	12.559	12.559	(0.918)	164387	50.0000	52.5
43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	635509	50.0000	46.1
42 Cyclohexane	56	12.839	12.839	(0.938)	789422	50.0000	54.5
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	621443	50.0000	49.5
53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1075626	5000.00	5310
44 Carbon tetrachloride	117	13.024	13.024	(0.952)	647037	50.0000	46.9
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	540540	50.0000	38.9
51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	625621	50.0000	40.3
47 Benzene	78	13.337	13.337	(0.974)	1573713	50.0000	50.3
50 Cyclohexene	54	13.396	13.396	(0.979)	584602	50.0000	48.9
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1118294	50.0000	
54 Trichloroethylene	95	14.119	14.119	(1.032)	424142	50.0000	49.5
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	399800	50.0000	49.3
55 Methylcyclohexane	83	14.285	14.285	(1.044)	719182	50.0000	54.3
60 Bromodichloromethane	83	14.754	14.754	(1.078)	598959	50.0000	45.0
59 Dibromomethane	93	14.621	14.621	(1.068)	224707	50.0000	45.0
61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	215138	250.000	197
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	740258	250.000	226
63 cis-1,3-Dichloropropylene	75	15.261	15.261	(1.115)	681900	50.0000	49.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1744680	50.0000	48.4
66 Toluene	92	15.597	15.597	(0.909)	967265	50.0000	49.8
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	664571	50.0000	48.1
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	263004	50.0000	48.6
71 2-Hexanone	43	16.269	16.269	(0.948)	1662015	250.000	192
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	563840	50.0000	46.9
70 Tetrachloroethylene	164	16.195	16.195	(0.944)	304712	50.0000	51.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	377389	50.0000	48.6
74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	312543	50.0000	49.1
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	884878	50.0000	
77 Chlorobenzene	112	17.194	17.194	(1.002)	1027816	50.0000	51.1
79 1,1,1,2-Tetrachloroethane	131	17.263	17.263	(1.006)	376079	50.0000	48.3
78 Ethylbenzene	91	17.222	17.222	(1.003)	2024165	50.0000	48.4
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1418694	100.000	103
81 o-Xylene	106	17.783	17.783	(1.036)	669406	50.0000	49.9
82 Styrene	104	17.806	17.806	(1.038)	1184200	50.0000	51.5
83 Bromoform	173	18.105	18.105	(0.923)	253734	50.0000	51.9
84 Isopropylbenzene	105	18.133	18.133	(0.924)	2009401	50.0000	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.510	18.510	(0.944)	393924	50.0000	50.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	785147	50.0000	47.6
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	109371	50.0000	42.7
91 Bromobenzene	156	18.593	18.593	(0.948)	423557	50.0000	51.3
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2434081	50.0000	50.0
94 2-Chlorotoluene	91	18.745	18.745	(0.956)	1707258	50.0000	48.4
93 1,3,5-Trimethylbenzene	105	18.722	18.722	(0.954)	1734624	50.0000	49.3
95 4-Chlorotoluene	91	18.856	18.856	(0.961)	1540833	50.0000	48.4
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1394021	50.0000	50.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1768170	50.0000	49.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2206931	50.0000	50.5
100 4-Isopropyltoluene	119	19.426	19.426	(0.990)	1727131	50.0000	52.2
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.996)	841377	50.0000	53.3
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.615	(1.000)	491171	50.0000	
103 1,4-Dichlorobenzene	146	19.643	19.643	(1.001)	835831	50.0000	51.7
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1844689	50.0000	49.8
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	782819	50.0000	51.8
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78748	50.0000	53.0
109 1,2,4-Trichlorobenzene	180	22.027	22.027	(1.123)	593584	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	404431	50.0000	50.9
111 Naphthalene	128	22.441	22.441	(1.144)	1116700	50.0000	53.6
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	483479	50.0000	51.2

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Date : 16-NOV-2009 14:01
Client ID: ICV
Sample Info: IW1VW091116-06ICV/LCS/ICV1ILVOAF1I1
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

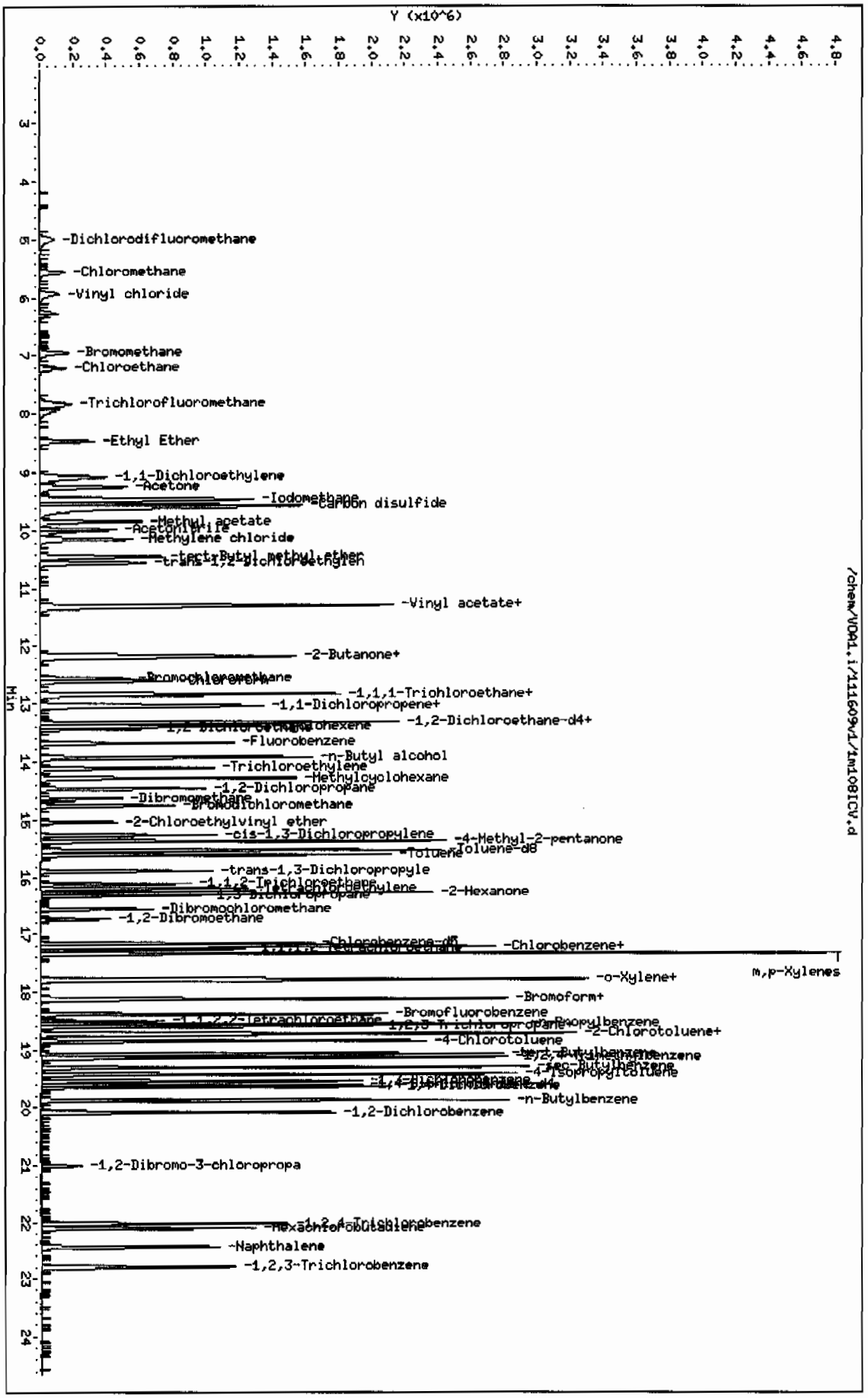

Page 1

Data File: /chem/VOA1.i/112509v1/1n326.d
Report Date: 02-Dec-2009 14:03

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 21:29
Lab File ID: 1n326.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091125-03 Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.85095	0.85095	0.050	10.27635	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.38155	0.38155	0.050	11.43646	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.82965	0.82965	0.050	6.06900	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.30238	0.30238	0.050	-9.43335	30.00000	Averaged	
	6 Chloromethane	0.41309	0.42333	0.42333	0.100	2.47883	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.36183	0.36183	0.050	-1.91528	20.00000	Averaged	ccc
	9 Bromomethane	0.22182	0.26448	0.26448	0.050	19.23426	30.00000	Averaged	
	10 Chloroethane	0.22841	0.27369	0.27369	0.050	19.82687	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.59447	0.59447	0.050	14.46302	30.00000	Averaged	
	12 Ethyl Ether	53.93183	50.00000	0.33969	0.010	7.86366	30.00000	Wt Linear	
	16 Acetone	0.29015	0.24068	0.24068	0.000	-17.05072	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.04158	0.04158	0.010	16.50539	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.73124	0.73124	0.050	2.19739	20.00000	Averaged	ccc
	21 Methyl acetate	0.24840	0.26241	0.26241	0.010	5.64062	40.00000	Averaged	
	18 Iodomethane	0.46290	0.54274	0.54274	0.050	17.24705	30.00000	Averaged	
	23 Methylene chloride	55.71024	50.00000	0.40172	0.000	11.42048	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.10586	1.10586	0.050	20.00830	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.18293	1.18293	0.050	3.91814	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.36549	0.36549	0.050	9.97583	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.67630	0.67630	0.010	22.71200	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.76177	0.76177	0.100	3.12032	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.24940	0.24940	0.030	-12.27906	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.39760	0.39760	0.050	12.81597	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.55424	0.55424	0.050	2.71743	30.00000	Averaged	
	41 Chloroform	0.78646	0.82509	0.82509	0.010	4.91225	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.17154	0.17154	0.010	22.49703	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.64878	0.64878	0.010	5.33599	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.72594	0.72594	0.010	12.14591	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.59965	0.59965	0.010	6.88156	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.01110	0.01110	0.001	22.66045	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.67137	0.67137	0.010	8.80905	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62193	0.77771	0.77771	0.010	25.04845	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.70364	0.70364	0.010	1.38507	30.00000	Averaged	
	47 Benzene	54.48742	50.00000	1.52565	0.010	8.97484	30.00000	Linear	
	50 Cyclohexene	0.53439	0.55235	0.55235	0.010	3.35991	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 21:29
Lab File ID: 1n326.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091125-03 Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
54 Trichloroethylene	0.38323	0.41965	0.41965	0.010	9.50482	30.00000	Averaged	
57 1,2-Dichloropropane	0.36240	0.40305	0.40305	0.010	11.21650	20.00000	Averaged	ccc
55 Methylcyclohexane	0.59215	0.66018	0.66018	0.010	11.48808	30.00000	Averaged	
60 Bromodichloromethane	0.59456	0.64963	0.64963	0.010	9.26279	30.00000	Averaged	
59 Dibromomethane	0.22349	0.24480	0.24480	0.010	9.53780	30.00000	Averaged	
61 2-Chloroethylvinyl ether	267	250	0.05367	0.000	6.67769	30.00000	Linear	
64 4-Methyl-2-pentanone	0.18521	0.18369	0.18369	0.010	-0.82516	40.00000	Averaged	
63 cis-1,3-Dichloropropylene	0.61926	0.69517	0.69517	0.010	12.25884	30.00000	Averaged	
$ 65 Toluene-d8	2.03499	2.22463	2.22463	0.010	9.31916	30.00000	Averaged	
66 Toluene	1.09808	1.17007	1.17007	0.010	6.55517	20.00000	Averaged	ccc
68 trans-1,3-Dichloropropylene	0.78113	0.83943	0.83943	0.010	7.46241	30.00000	Averaged	
69 1,1,2-Trichloroethane	0.30563	0.33179	0.33179	0.010	8.55879	30.00000	Averaged	
71 2-Hexanone	0.48954	0.41743	0.41743	0.010	-14.73064	40.00000	Averaged	
72 1,3-Dichloropropane	0.67935	0.72405	0.72405	0.010	6.57996	30.00000	Averaged	
70 Tetrachloroethylene	0.33313	0.37799	0.37799	0.010	13.46711	30.00000	Averaged	
73 Dibromochloromethane	0.43846	0.49601	0.49601	0.010	13.12562	30.00000	Averaged	
74 1,2-Dibromoethane	0.35943	0.40411	0.40411	0.010	12.43111	30.00000	Averaged	
77 Chlorobenzene	1.13582	1.25430	1.25430	0.300	10.43060	30.00000	Averaged	spcc
79 1,1,1,2-Tetrachloroethane	0.44029	0.48965	0.48965	0.010	11.21082	30.00000	Averaged	
78 Ethylbenzene	2.36203	2.41785	2.41785	0.010	2.36346	20.00000	Averaged	ccc
80 m,p-Xylenes	0.77870	0.85385	0.85385	0.010	9.65160	30.00000	Averaged	
81 o-Xylene	0.75757	0.84516	0.84516	0.010	11.56181	30.00000	Averaged	
82 Styrene	1.29825	1.42748	1.42748	0.010	9.95456	30.00000	Averaged	
83 Bromoform	0.49742	0.59790	0.59790	0.100	20.20105	30.00000	Averaged	spcc
84 Isopropylbenzene	4.06756	4.31764	4.31764	0.010	6.14815	30.00000	Averaged	
88 1,1,2,2-Tetrachloroethane	0.79313	0.87939	0.87939	0.300	10.87641	30.00000	Averaged	spcc
$ 87 Bromofluorobenzene	1.67881	1.64689	1.64689	0.010	-1.90154	30.00000	Averaged	
92 1,2,3-Trichloropropane	0.26081	0.26653	0.26653	0.010	2.19171	30.00000	Averaged	
91 Bromobenzene	0.84112	0.97879	0.97879	0.010	16.36638	30.00000	Averaged	
89 n-Propylbenzene	4.95455	5.18147	5.18147	0.010	4.58003	30.00000	Averaged	
94 2-Chlorotoluene	3.58968	3.75140	3.75140	0.010	4.50503	30.00000	Averaged	
93 1,3,5-Trimethylbenzene	3.58314	3.81369	3.81369	0.010	6.43436	30.00000	Averaged	
95 4-Chlorotoluene	3.23695	3.38843	3.38843	0.010	4.67974	30.00000	Averaged	
96 tert-Butylbenzene	2.78918	2.97709	2.97709	0.010	6.73734	30.00000	Averaged	
97 1,2,4-Trimethylbenzene	3.66787	3.82455	3.82455	0.010	4.27174	30.00000	Averaged	
99 sec-Butylbenzene	4.45177	4.79391	4.79391	0.010	7.68538	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n326.d
Analysis Type: SOIL
Lab Sample ID: W1VM091125-03
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

Injection Date: 25-NOV-2009 21:29
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.65416	3.65416	0.010	8.57995	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.78637	1.78637	0.010	11.21924	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.81935	1.81935	0.010	10.51038	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.94714	3.94714	0.010	4.75316	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.76484	1.76484	0.010	14.77796	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.18714	0.18714	0.010	23.76942	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.22916	1.22916	0.010	7.59776	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.84873	0.84873	0.010	4.95348	30.00000	Averaged
111 Naphthalene	2.11900	2.42917	2.42917	0.010	14.63720	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	1.07914	1.07914	0.010	12.26880	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 10.00539
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n326.d
Lab Smp Id: W1VM091125-03 Client Smp ID: VSTD050
Inj Date : 25-NOV-2009 21:29
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091125-03|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				1826239	150.000	165
M 2 1,2-Dichloroethylene (total)	96				643816	100.000	111
M 3 1,3-Dichloropropylene	75				1187014	100.000	110
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	255116	50.0000	45.3
6 Chloromethane	50	5.542	5.542	(0.405)	357159	50.0000	51.2
7 Vinyl chloride	62	5.922	5.922	(0.433)	305277	50.0000	49.0
9 Bromomethane	96	6.948	6.948	(0.508)	223141	50.0000	59.6
10 Chloroethane	64	7.219	7.219	(0.527)	230914	50.0000	59.9
11 Trichlorofluoromethane	101	7.845	7.845	(0.573)	501553	50.0000	57.2
12 Ethyl Ether	59	8.480	8.480	(0.620)	286596	50.0000	53.9
16 Acetone	43	9.254	9.254	(0.676)	1015303	250.000	207
22 Acetonitrile	41	9.976	9.976	(0.729)	877096	1250.00	1460

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
15 1,1-Dichloroethylene	61	9.083	9.083	(0.664)	616939	50.0000	51.1
21 Methyl acetate	43	9.834	9.834	(0.718)	1106970	250.000	264
18 Iodomethane	142	9.465	9.465	(0.692)	2289520	250.000	293
23 Methylene chloride	84	10.142	10.142	(0.741)	338926	50.0000	55.7
19 Carbon disulfide	76	9.576	9.576	(0.700)	4665056	250.000	300
25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	998031	50.0000	52.0
26 trans-1,2-Dichloroethylene	96	10.542	10.542	(0.770)	308364	50.0000	55.0
29 Vinyl acetate	43	11.293	11.293	(0.825)	2852936	250.000	307
30 1,1-Dichloroethane	63	11.325	11.325	(0.827)	642698	50.0000	51.6
35 2-Butanone	43	12.186	12.186	(0.890)	1052090	250.000	219
36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	335451	50.0000	56.4
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	467604	50.0000	51.4
41 Chloroform	83	12.609	12.609	(0.921)	696121	50.0000	52.4
39 Bromochloromethane	128	12.559	12.559	(0.918)	144728	50.0000	61.2
43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	547368	50.0000	52.7
42 Cyclohexane	56	12.839	12.839	(0.938)	612471	50.0000	56.1
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	505918	50.0000	53.4
53 n-Butyl alcohol	56	13.930	13.930	(1.018)	936762	5000.00	6130
44 Carbon tetrachloride	117	13.028	13.028	(0.952)	566431	50.0000	54.4
$ 48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.974)	656149	50.0000	62.5
51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	593658	50.0000	50.7
47 Benzene	78	13.332	13.332	(0.974)	1287183	50.0000	54.5
50 Cyclohexene	54	13.396	13.396	(0.979)	466014	50.0000	51.7
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	843693	50.0000	
54 Trichloroethylene	95	14.114	14.114	(1.031)	354056	50.0000	54.8
57 1,2-Dichloropropane	63	14.455	14.455	(1.056)	340052	50.0000	55.6
55 Methylcyclohexane	83	14.280	14.280	(1.043)	556989	50.0000	55.7
60 Bromodichloromethane	83	14.750	14.750	(1.078)	548089	50.0000	54.6
59 Dibromomethane	93	14.625	14.625	(1.069)	206537	50.0000	54.8
61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	226421	250.000	267
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	657015	250.000	248
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	586514	50.0000	56.1
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1591436	50.0000	54.6
66 Toluene	92	15.597	15.597	(0.909)	837030	50.0000	53.3
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	600499	50.0000	53.7
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	237354	50.0000	54.3
71 2-Hexanone	43	16.269	16.269	(0.948)	1493090	250.000	213
72 1,3-Dichloropropane	76	16.305	16.305	(0.950)	517966	50.0000	53.3
70 Tetrachloroethylene	164	16.190	16.190	(0.943)	270405	50.0000	56.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	354831	50.0000	56.6
74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	289087	50.0000	56.2
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	715370	50.0000	
77 Chlorobenzene	112	17.194	17.194	(1.002)	897286	50.0000	55.2
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	350279	50.0000	55.6
78 Ethylbenzene	91	17.221	17.221	(1.003)	1729658	50.0000	51.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1221640	100.000	110
81 o-Xylene	106	17.783	17.783	(1.036)	604598	50.0000	55.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
82 Styrene	104	17.806	17.806	(1.038)	1021178	50.0000	55.0
83 Bromoform	173	18.105	18.105	(0.923)	241881	50.0000	60.1
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1746705	50.0000	53.1
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	355759	50.0000	55.4
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	666249	50.0000	49.0
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	107823	50.0000	51.1
91 Bromobenzene	156	18.593	18.593	(0.948)	395969	50.0000	58.2
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2096170	50.0000	52.3
94 2-Chlorotoluene	91	18.741	18.741	(0.956)	1517632	50.0000	52.2
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1542835	50.0000	53.2
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1370794	50.0000	52.3
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1204387	50.0000	53.4
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1547226	50.0000	52.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1939382	50.0000	53.8
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1478294	50.0000	54.3
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.997)	722678	50.0000	55.6
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	404551	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	736021	50.0000	55.2
105 n-Butylbenzene	91	19.873	19.873	(1.013)	1596821	50.0000	52.4
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	713968	50.0000	57.4
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	75706	50.0000	61.9
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	497260	50.0000	53.8
110 Hexachlorobutadiene	225	22.105	22.105	(1.127)	343354	50.0000	52.5
111 Naphthalene	128	22.437	22.437	(1.144)	982722	50.0000	57.3
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	436566	50.0000	56.1

Data File: /chem/VOA1.i/112509v1/1n326.d
Date : 25-NOV-2009 21:29
Client ID: VSTD050
Sample Info: IW1VW091125-031CCV/LCS1|1|VOAF1|1|
Column Phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

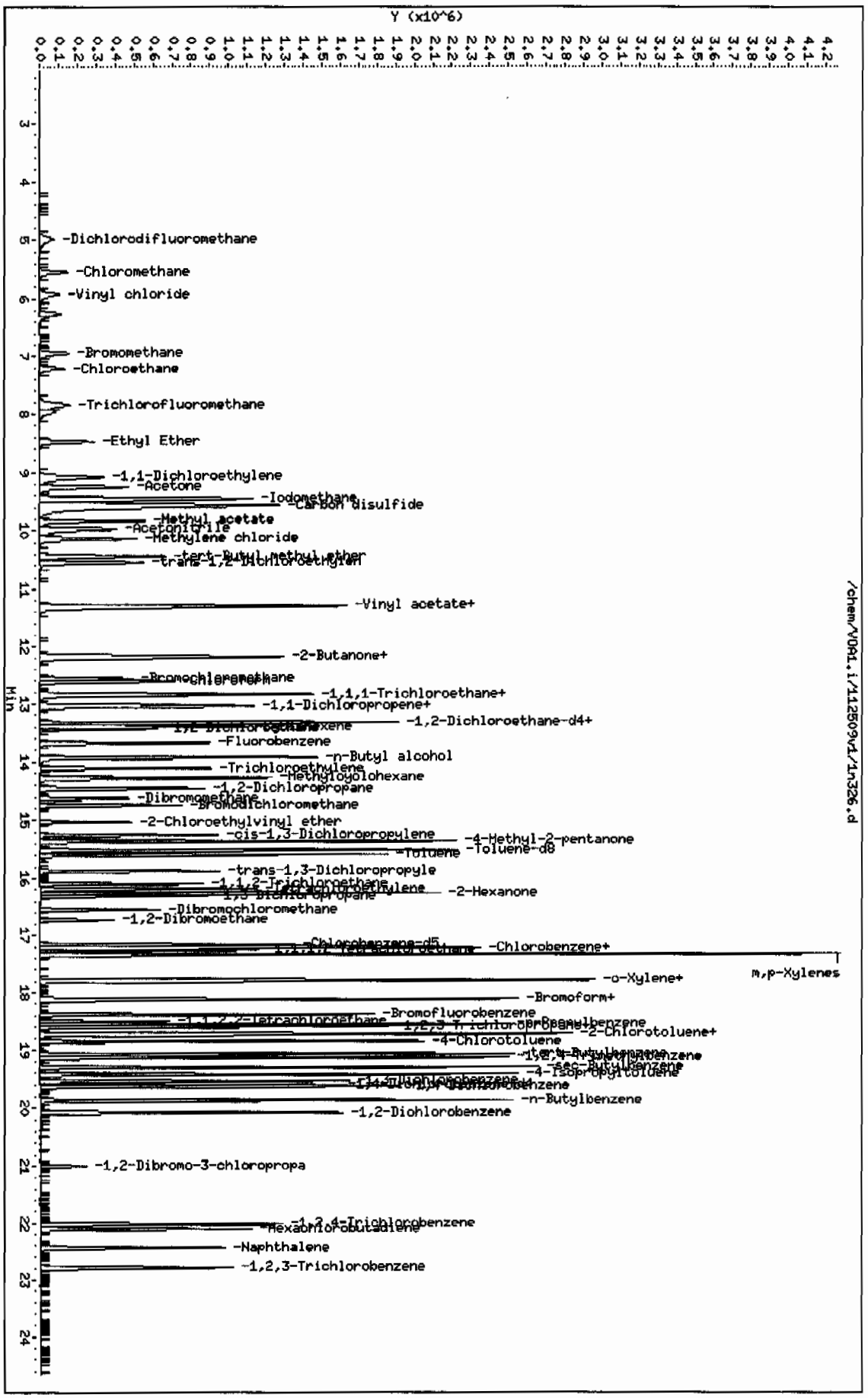

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 21:59
Lab File ID: 1n327.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.13858	0.13858	0.010	-11.66861	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.31196	0.31196	0.010	-5.11696	30.00000	Averaged
13 Acrolein	0.05116	0.06154	0.06154	0.001	20.29995	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.28628	0.28628	0.030	-2.12632	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02392	0.02392	0.000	18.36149	40.00000	Averaged
20 Allyl chloride	0.10619	0.13526	0.13526	0.010	27.37955	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.04274	0.04274	0.010	12.59066	40.00000	Averaged
27 Acrylonitrile	0.10676	0.11744	0.11744	0.010	10.00458	30.00000	Averaged
28 Isopropyl ether	1.19537	1.16413	1.16413	0.010	-2.61404	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.60616	0.60616	0.010	-0.66522	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.17279	1.17279	0.010	2.78721	30.00000	Averaged
37 Propionitrile	0.04326	0.04557	0.04557	0.010	5.34149	30.00000	Averaged
34 Ethyl acetate	0.29220	0.29414	0.29414	0.010	0.66596	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.24733	0.24733	0.010	6.69986	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.20987	0.20987	0.010	2.52253	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01151	0.01151	0.001	6.01251	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	1.01007	1.01007	0.010	11.03910	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.21706	0.21706	0.010	9.59116	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.52890	0.52890	0.010	3.50672	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.34978	0.34978	0.000	-11.29250	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00286	0.00286	0.001	0.25017	40.00000	Averaged
62 2-Nitropropane	0.10798	0.11524	0.11524	0.000	6.72394	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.31957	0.31957	0.010	3.80994	30.00000	Averaged
86 Cyclohexanone	753	1250	0.02859	0.010	-39.76143	40.00000	Linear
90 trans-1,4-Dichloro-2-butene	0.30029	0.30471	0.30471	0.010	1.47253	30.00000	Averaged
98 Pentachloroethane	0.31186	0.33631	0.33631	0.010	7.83875	30.00000	Averaged
104 Benzyl chloride	1.59479	1.60878	1.60878	0.010	0.87720	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.38850	0.38850	0.010	7.85585	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.64951	0.64951	0.010	4.43515	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.16065	2.16065	0.010	6.17477	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.56763	1.56763	0.010	-6.62229	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n327.d
Analysis Type: SOIL
Lab Sample ID: UVM091118-08A
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

Injection Date: 25-NOV-2009 21:59
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

Average %D / Drift Results.	
Calculated Average %D/Drift =	8.26156
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n327.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 25-NOV-2009 21:59
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 27-Nov-2009 09:16 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	396523	150.000	132
8 2-Chloro-1,1,1-trifluoroethane	118	6.289	6.289	(0.460)	892630	150.000	142
13 Acrolein	56	8.954	8.954	(0.654)	293493	250.000	301
14 Trichlorotrifluoroethane	101	8.978	8.978	(0.656)	1365266	250.000	245
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1140675	2500.00	2960
20 Allyl chloride	76	9.848	9.848	(0.720)	645063	250.000	318
24 tert-Butyl Alcohol	59	10.197	10.197	(0.745)	2038257	2500.00	2810
27 Acrylonitrile	53	10.671	10.671	(0.780)	560054	250.000	275
28 Isopropyl ether	45	11.196	11.196	(0.818)	1110333	50.0000	48.7
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	578154	50.0000	49.7
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1118599	50.0000	51.4
37 Propionitrile	54	12.402	12.402	(0.906)	217340	250.000	263
34 Ethyl acetate	43	12.167	12.167	(0.889)	1402763	250.000	252

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1179487	250.000	267
38 Tetrahydrofuran	42	12.540	12.540	(0.639)	468262	250.000	256
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	548891	2500.00	2650
49 Methyl tert-amyl ether	73	13.350	13.350	(0.976)	963399	50.0000	55.5
56 Methyl methacrylate	69	14.437	14.437	(1.055)	1035165	250.000	274
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2083907	250.000	259
75 1-Chlorohexane	55	17.028	17.028	(1.245)	333621	50.0000	44.4(H)
58 1,4-Dioxane	88	14.543	14.543	(1.063)	136296	2500.00	2510
62 2-Nitropropane	43	15.081	15.081	(1.102)	549556	250.000	267
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	713025	250.000	260
86 Cyclohexanone	55	18.386	18.386	(1.071)	563195	1250.00	753
90 trans-1,4-Dichloro-2-butene	53	18.566	18.566	(0.947)	679867	250.000	254
98 Pentachloroethane	167	19.196	19.196	(0.979)	750377	250.000	270(A)
104 Benzyl chloride	91	19.772	19.772	(1.008)	3589522	250.000	252
107 bis(2-Chloroisopropyl)ether	45	20.163	20.163	(1.028)	866833	250.000	270
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	953791	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	788014	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.611	(1.000)	446241	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	619497	50.0000	52.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1702619	50.0000	53.1
$ 87 Bromofluorobenzene	95	18.386	18.386	(0.938)	699542	50.0000	46.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: /chem/VOA1.i/112509v1/1n327.d
Date : 25-NOV-2009 21:59
Client ID: VSTD250S
Sample Info: IUVH091118-08A|SHORT|1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

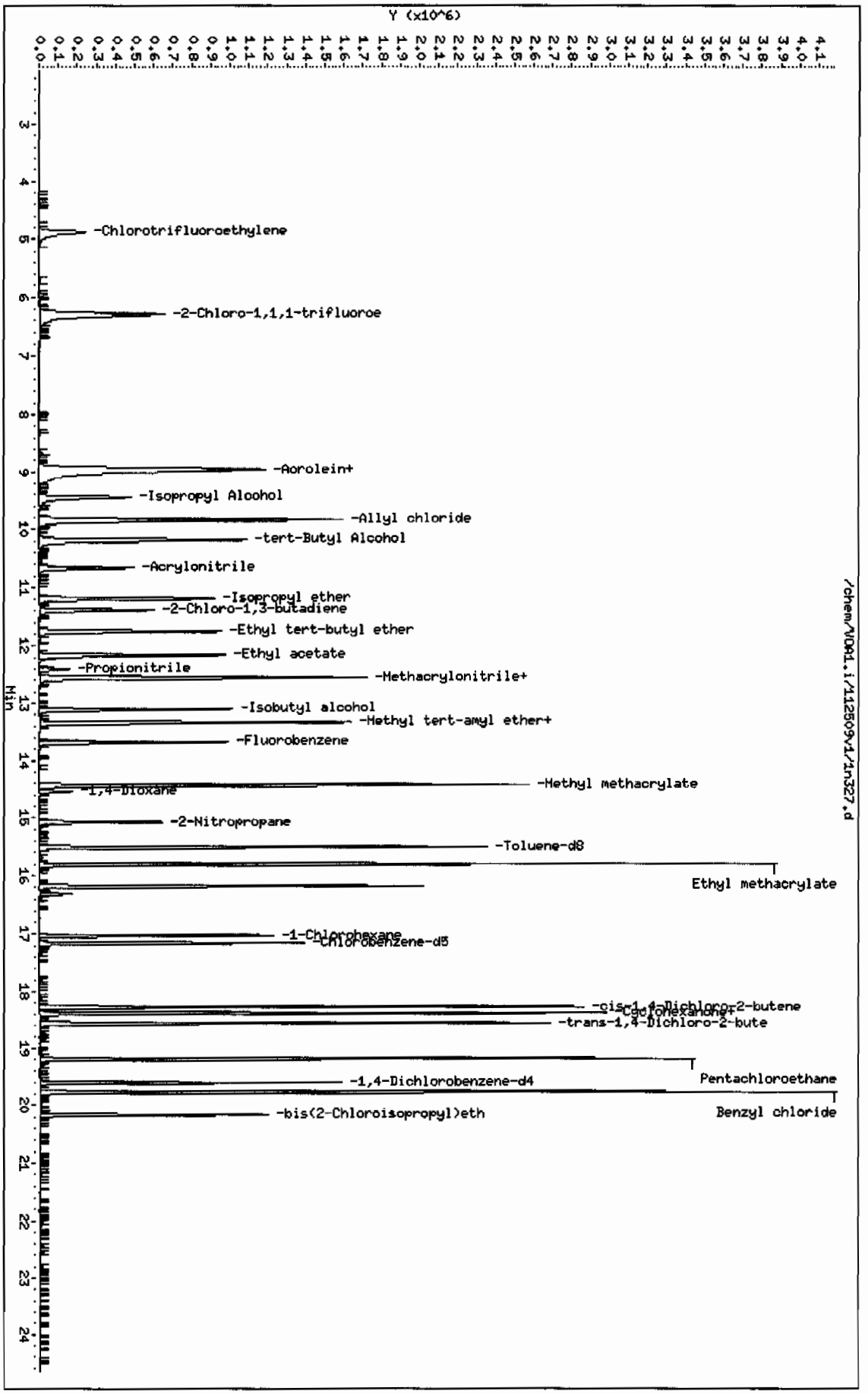

Page 1

QC Data

Data File: /chem/VOA1.i/111309v1/11507.d

Page 1

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

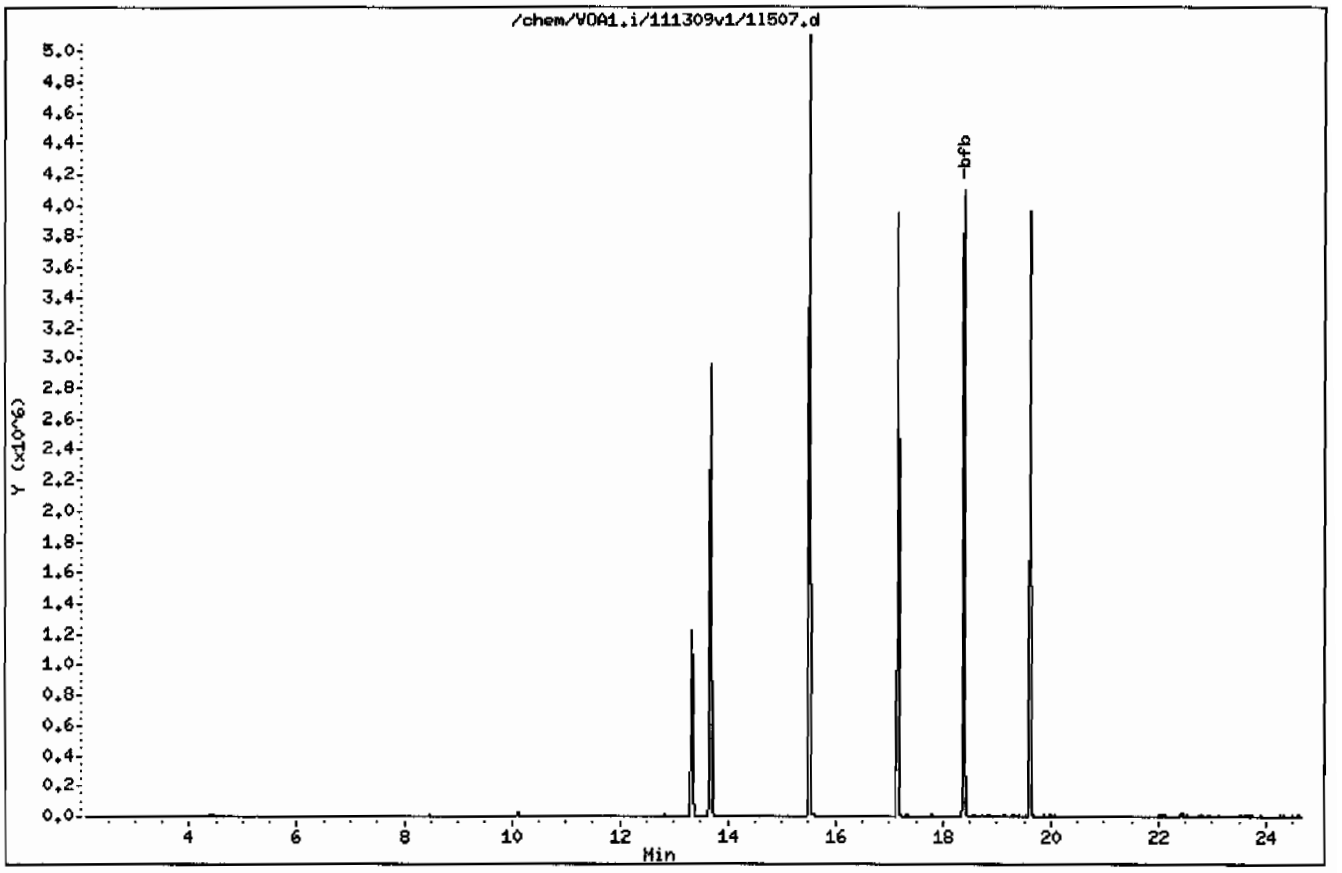

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

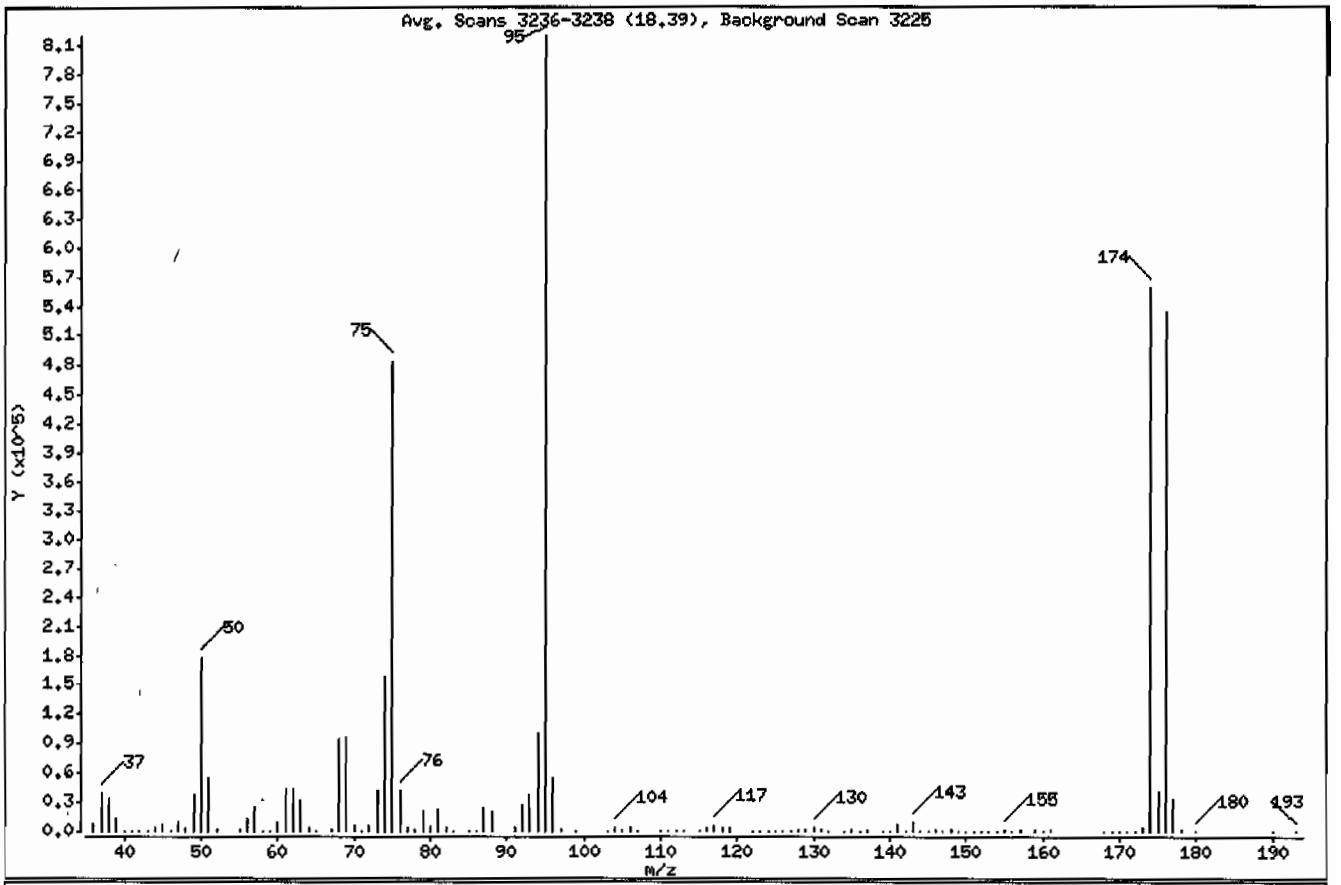

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.72
75	30.00 - 60.00% of mass 95	59.02
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.49 (0.72)
174	50.00 - 100.00% of mass 95	68.14
175	5.00 - 9.00% of mass 174	4.99 (7.33)
176	95.00 - 101.00% of mass 174	65.07 (95.50)
177	5.00 - 9.00% of mass 176	4.22 (6.48)

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 11507.d

Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7225	70.00	6120	110.00	479	146.00	1188
37.00	39360	71.00	217	111.00	606	147.00	494
38.00	33392	72.00	5094	112.00	379	148.00	1977
39.00	13646	73.00	41472	113.00	584	149.00	463
40.00	251	74.00	158400	115.00	797	150.00	811
41.00	50	75.00	483904	116.00	2966	151.00	74
42.00	138	76.00	42152	117.00	5025	152.00	425
43.00	423	77.00	4070	118.00	2850	153.00	568
44.00	4049	78.00	2614	119.00	3829	154.00	504
45.00	7085	79.00	20536	122.00	323	155.00	1883
46.00	389	80.00	5933	123.00	301	156.00	430
47.00	8871	81.00	21704	124.00	508	157.00	1202
48.00	4657	82.00	3708	125.00	172	159.00	1015
49.00	37544	83.00	554	126.00	282	160.00	117
50.00	178048	85.00	50	127.00	21	161.00	1118
51.00	55256	86.00	546	128.00	2650	168.00	58
52.00	2192	87.00	24184	129.00	1544	169.00	60
55.00	2170	88.00	20208	130.00	3040	170.00	440
56.00	12658	91.00	3132	131.00	1311	171.00	182
57.00	24424	92.00	25640	132.00	121	172.00	596
58.00	905	93.00	38600	134.00	219	173.00	4037
59.00	131	94.00	99912	135.00	1394	174.00	558656
60.00	8890	95.00	819904	136.00	360	175.00	40952
61.00	42584	96.00	54800	137.00	1272	176.00	533504
62.00	42856	97.00	1967	139.00	373	177.00	34584
63.00	32200	99.00	52	140.00	657	178.00	987
64.00	3117	103.00	491	141.00	8405	180.00	56
65.00	197	104.00	3451	142.00	877	190.00	52
67.00	2068	105.00	1217	143.00	9022	193.00	80
68.00	94512	106.00	3389	144.00	613		
69.00	96344	107.00	757	145.00	540		

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Page 1

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

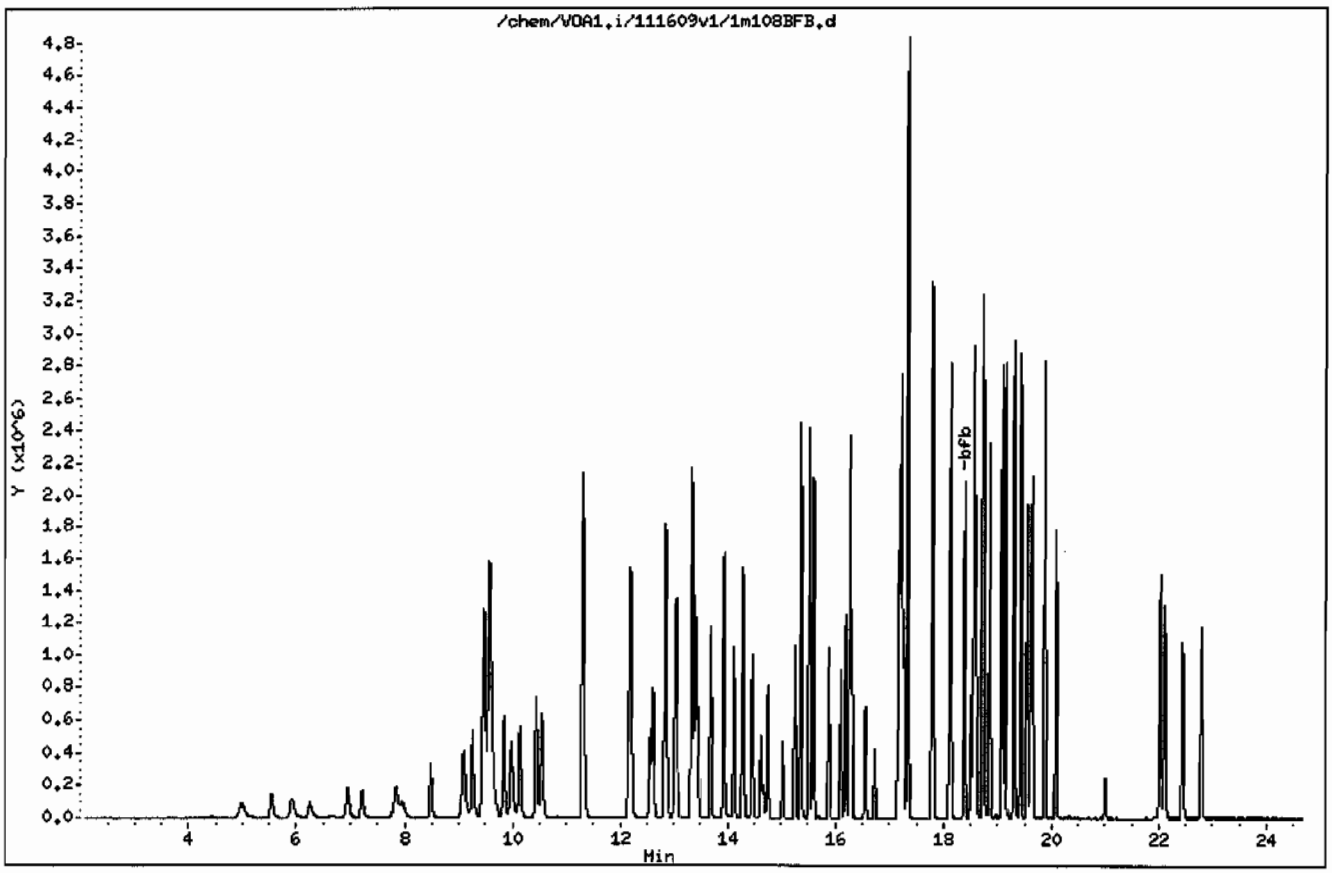

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

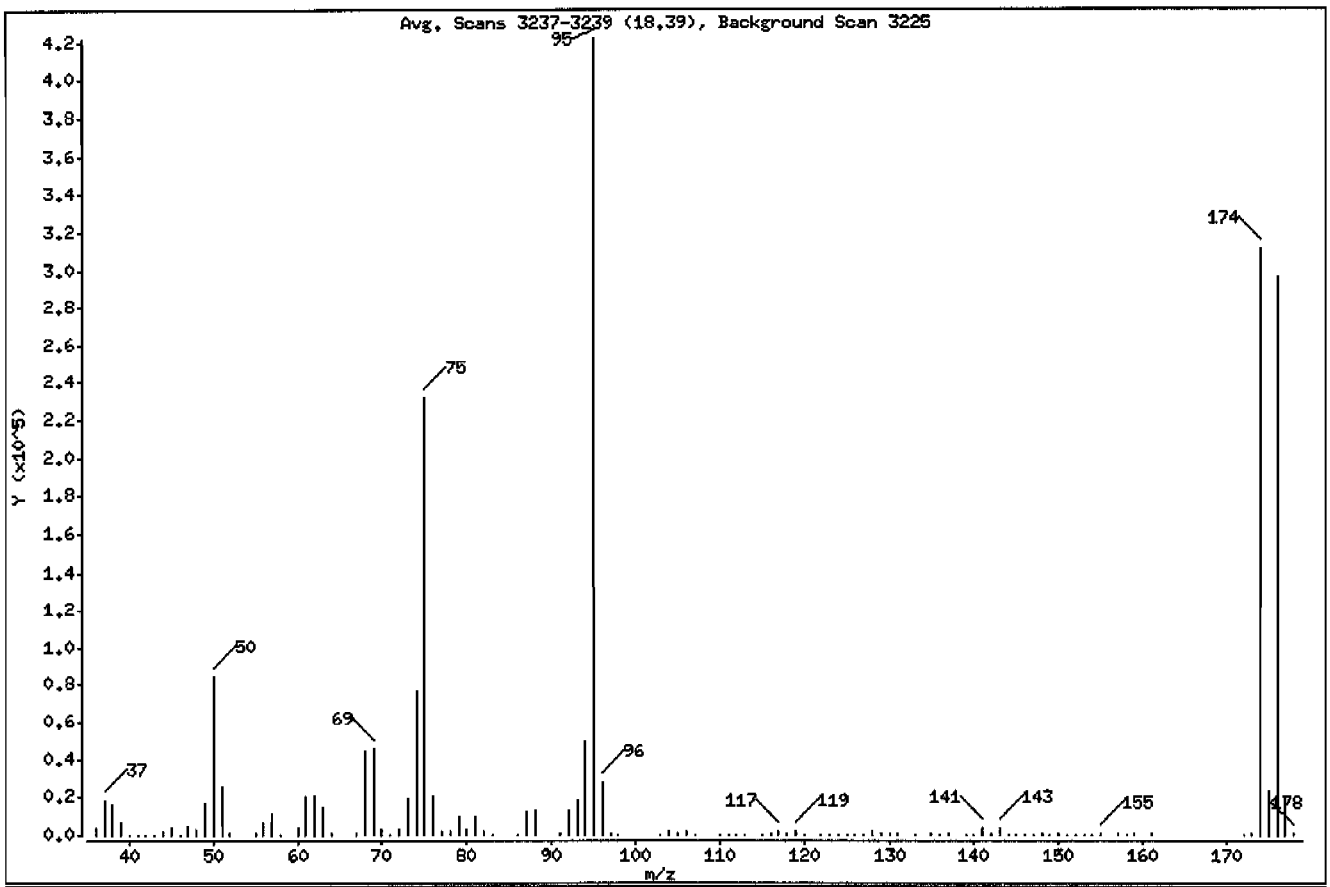

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.06
75	30.00 - 60.00% of mass 95	55.05
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.24 (0.33)
174	50.00 - 100.00% of mass 95	73.77
175	5.00 - 9.00% of mass 174	5.55 (7.52)
176	95.00 - 101.00% of mass 174	70.16 (95.10)
177	5.00 - 9.00% of mass 176	4.80 (6.85)

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VH091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1m108BFB.d

Spectrum: Avg. Scans 3237-3239 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3659	69.00	45424	105.00	693	140.00	369
37.00	18736	70.00	3367	106.00	1646	141.00	4255
38.00	16169	71.00	52	107.00	372	142.00	516
39.00	6393	72.00	2726	110.00	174	143.00	4228
40.00	197	73.00	19232	111.00	270	144.00	219
41.00	211	74.00	76640	112.00	131	145.00	352
42.00	88	75.00	232128	113.00	343	146.00	482
43.00	101	76.00	20048	115.00	393	147.00	319
44.00	1967	77.00	2016	116.00	1253	148.00	958
45.00	3625	78.00	1571	117.00	2412	149.00	257
46.00	225	79.00	9321	118.00	1200	150.00	553
47.00	4876	80.00	2593	119.00	2051	151.00	69
48.00	2650	81.00	10141	120.00	65	152.00	268
49.00	16864	82.00	1900	122.00	51	153.00	303
50.00	84536	83.00	304	123.00	52	154.00	398
51.00	25456	86.00	357	124.00	134	155.00	1157
52.00	1092	87.00	13023	125.00	172	157.00	819
55.00	1440	88.00	12376	126.00	137	158.00	66
56.00	6484	91.00	1301	127.00	134	159.00	539
57.00	11568	92.00	12794	128.00	1472	161.00	538
58.00	395	93.00	18184	129.00	873	172.00	156
60.00	4192	94.00	49672	130.00	1342	173.00	1032
61.00	20288	95.00	421696	131.00	645	174.00	311104
62.00	19928	96.00	28576	133.00	54	175.00	23400
63.00	14761	97.00	689	135.00	775	176.00	295872
64.00	1430	98.00	65	136.00	53	177.00	20256
67.00	1159	103.00	156	137.00	650	178.00	602
68.00	44552	104.00	1551	139.00	58		

Data File: /chem/VOA1.i/112509v1/1n325.d

Page 1

Date : 25-NOV-2009 20:59

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

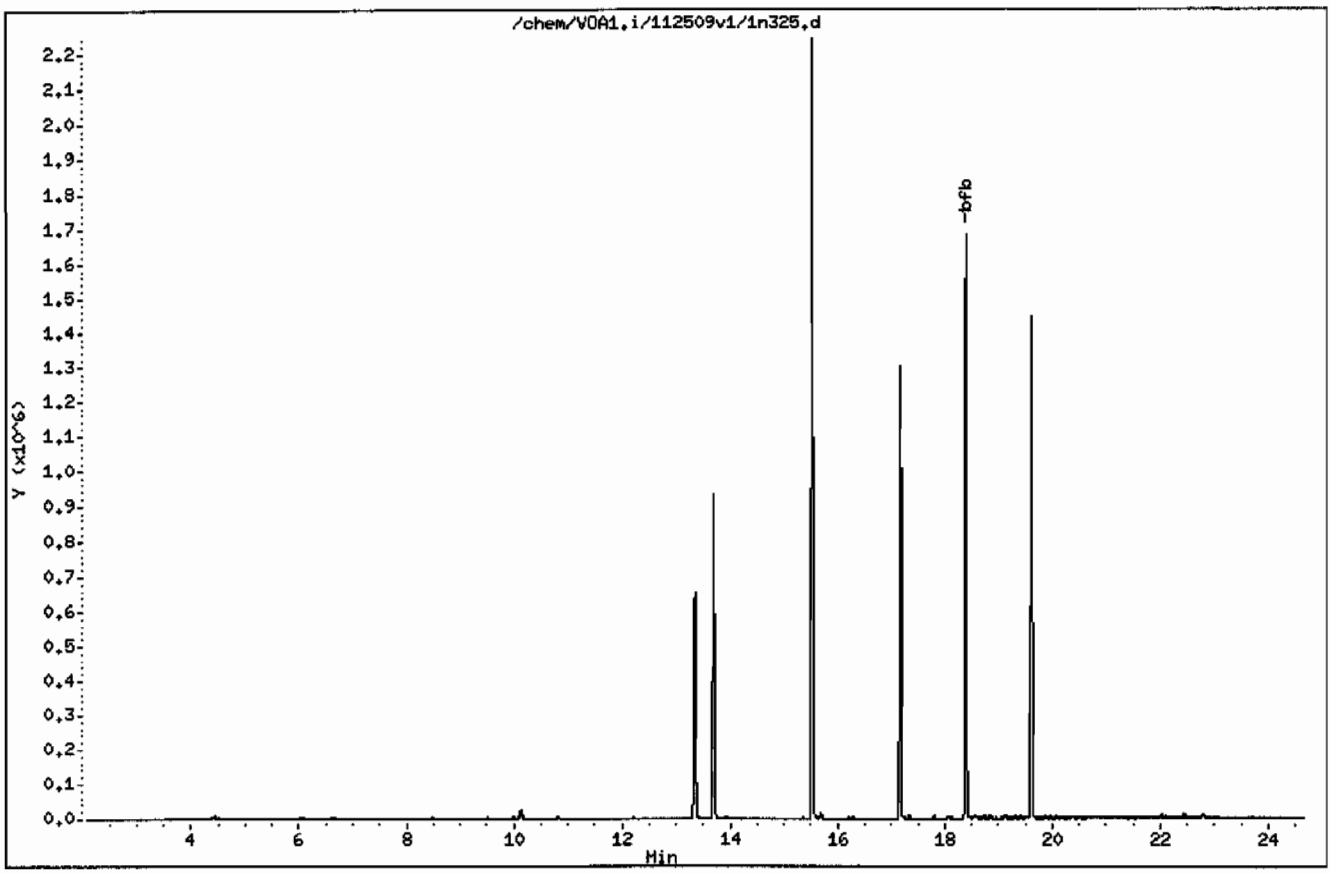

Data File: /chem/VOA1.i/112509v1/1n325.d

Date : 25-NOV-2009 20:59

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

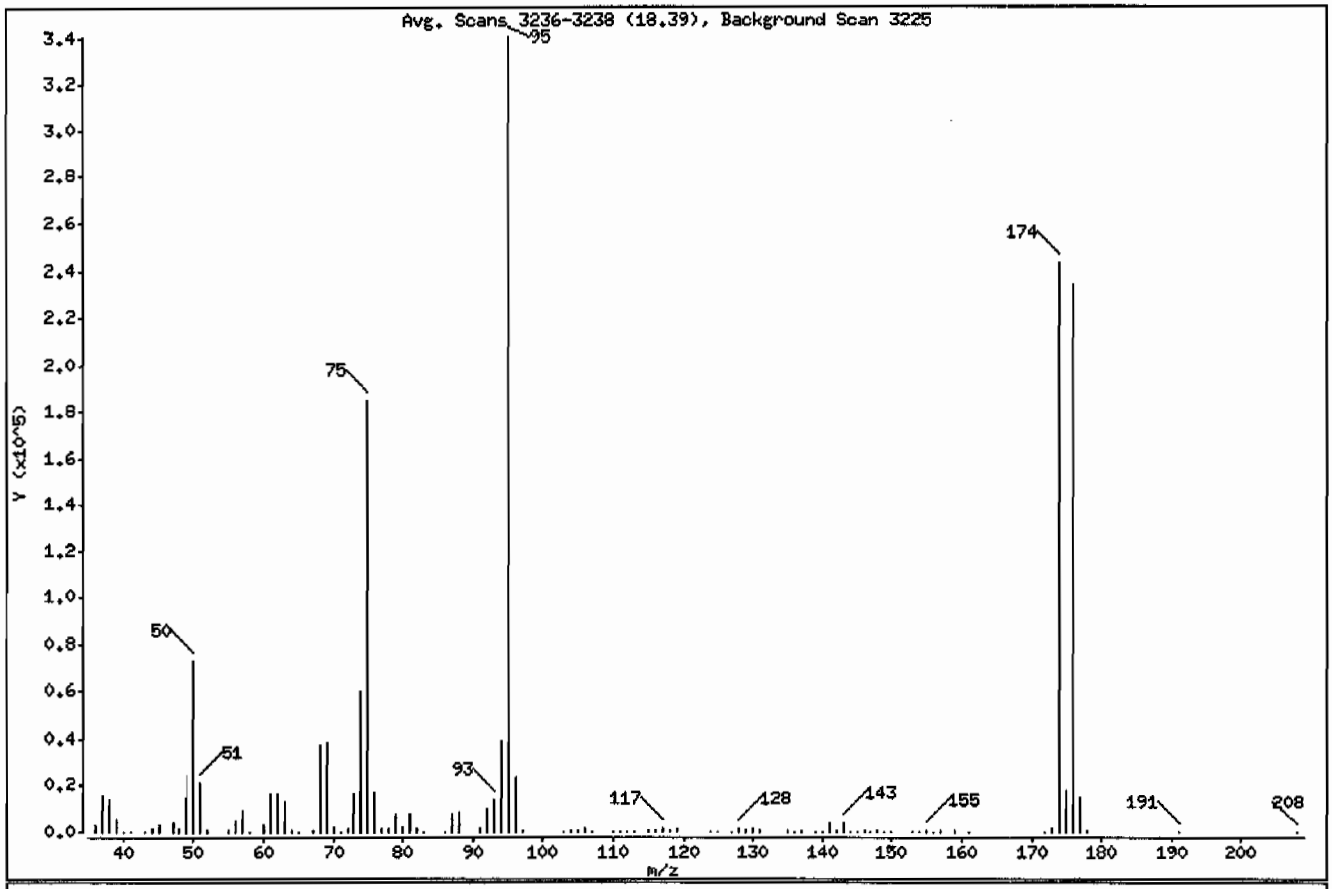

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.30
75	30.00 - 60.00% of mass 95	54.26
96	5.00 - 9.00% of mass 95	6.94
173	Less than 2.00% of mass 174	0.56 (0.79)
174	50.00 - 100.00% of mass 95	71.26
175	5.00 - 9.00% of mass 174	5.21 (7.31)
176	95.00 - 101.00% of mass 174	68.59 (96.26)
177	5.00 - 9.00% of mass 176	4.45 (6.49)

Data File: /chem/VOA1.i/112509v1/1n325.d

Date : 25-NOV-2009 20:59

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1n325.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2759	69.00	38208	105.00	430	144.00	192
37.00	15396	70.00	2468	106.00	1373	145.00	338
38.00	13827	71.00	50	107.00	334	146.00	392
39.00	5196	72.00	1815	110.00	118	147.00	302
40.00	317	73.00	16259	111.00	285	148.00	887
41.00	53	74.00	59952	112.00	183	149.00	175
43.00	131	75.00	184832	113.00	257	150.00	373
44.00	1656	76.00	17216	115.00	406	153.00	233
45.00	3268	77.00	1594	116.00	1109	154.00	318
47.00	3540	78.00	1181	117.00	1936	155.00	740
48.00	1820	79.00	8076	118.00	1162	156.00	124
49.00	15077	80.00	2408	119.00	1325	157.00	640
50.00	72568	81.00	7927	124.00	138	159.00	664
51.00	20920	82.00	1650	125.00	124	161.00	384
52.00	932	83.00	218	127.00	124	172.00	327
55.00	944	86.00	157	128.00	1232	173.00	1918
56.00	4816	87.00	8068	129.00	487	174.00	242752
57.00	9482	88.00	8521	130.00	1194	175.00	17752
58.00	211	91.00	1316	131.00	549	176.00	233664
60.00	3454	92.00	10073	135.00	572	177.00	15164
61.00	16296	93.00	14303	136.00	50	178.00	503
62.00	16792	94.00	38968	137.00	598	191.00	84
63.00	13135	95.00	340672	139.00	57	208.00	55
64.00	1161	96.00	23632	140.00	197		
65.00	137	97.00	596	141.00	3563		
67.00	914	103.00	205	142.00	455		
68.00	37368	104.00	1156	143.00	3676		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600			**Matrix:**	SOIL
Lab Sample ID:	1201983208				
Client Sample:	QC for batch 926738	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926738	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 22:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 12:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n328BA.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201983208**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 22:30**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n328BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n328BA.d
Lab Smp Id: 1201983208 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 22:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201983208|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 28 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	611927	53.5482	53.5
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	918725	50.0000	
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1675769	54.7057	54.7
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	752644	50.0000	
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	672053	48.1432	48.1
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	415755	50.0000	
111 Naphthalene	128	22.432	22.437	(1.144)	5778	0.32793	0.33(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n328BA.d
Lab Smp Id: 1201983208 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 22:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201983208|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 28 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n328BA.d
Date : 25-NOV-2009 22:30
Client ID: BLANK
Sample Info: |120198320819267391|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

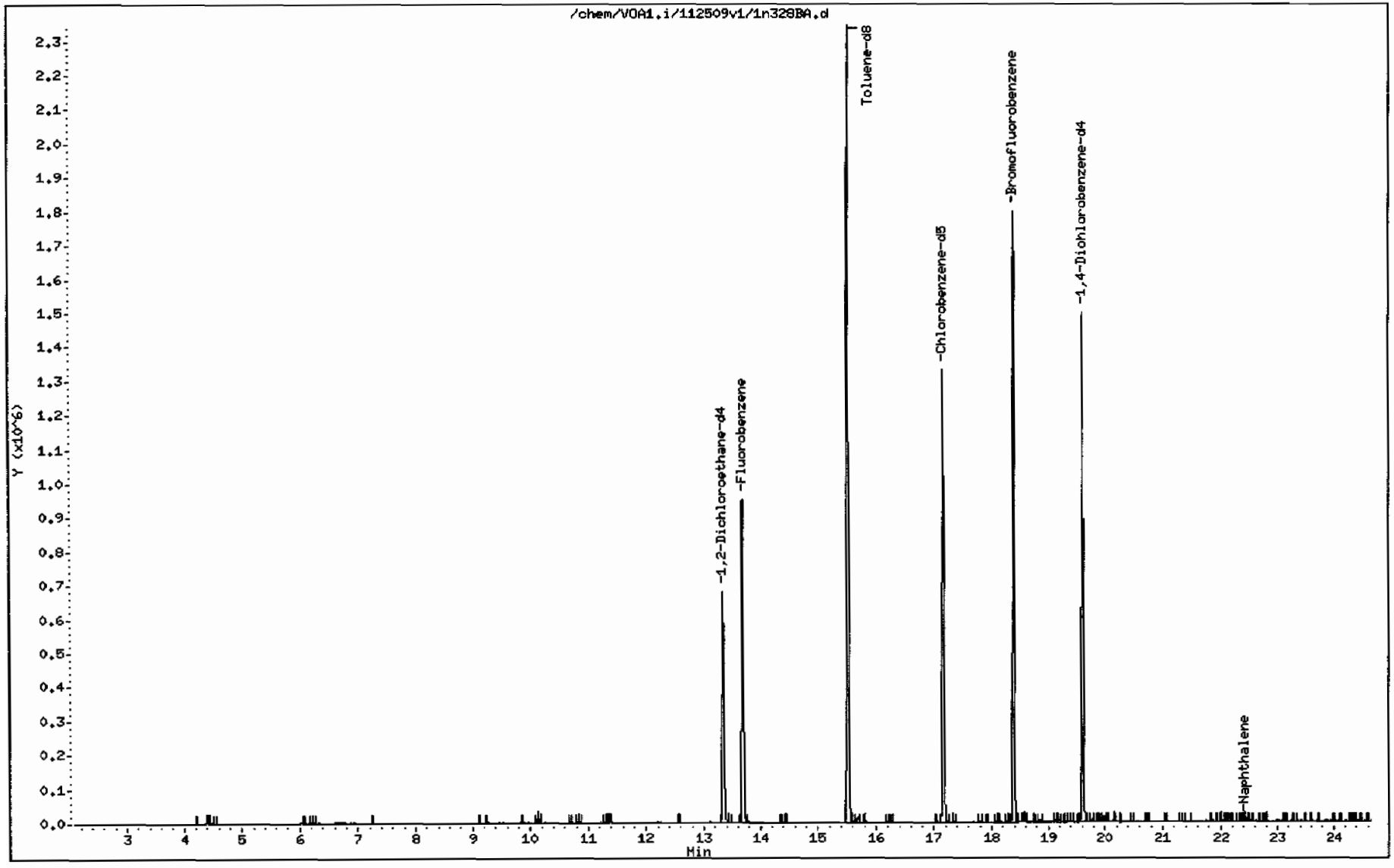

Data File: /chem/VOA1.i/112509v1/1n328BA.d

Date : 25-NOV-2009 22:30

Client ID: BLANK

Instrument: VOA1.i

Sample Info: |120198320819267391|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

111 Naphthalene

Concentration: 0.33 ug/Kg

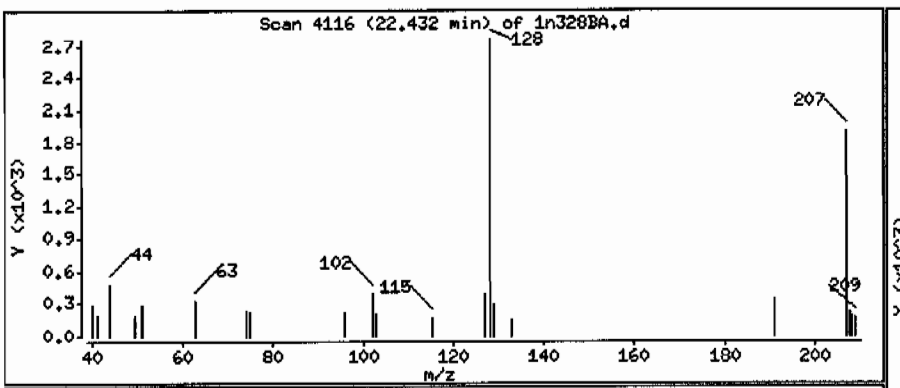

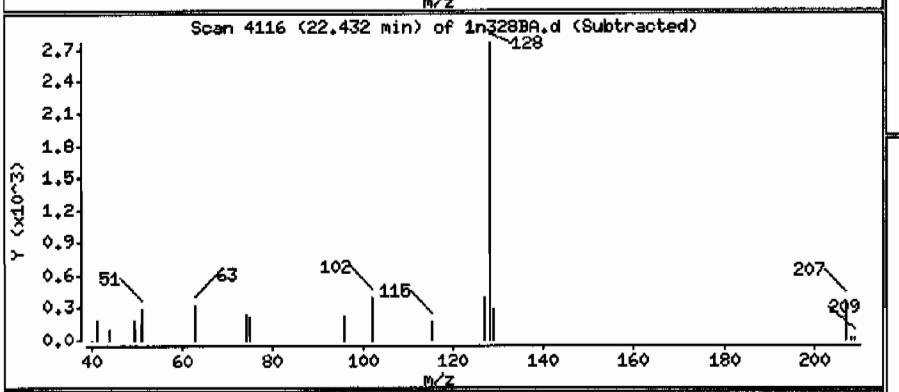

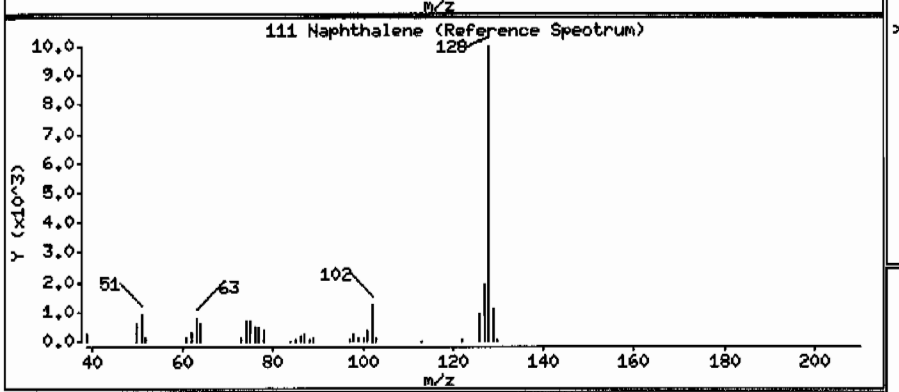

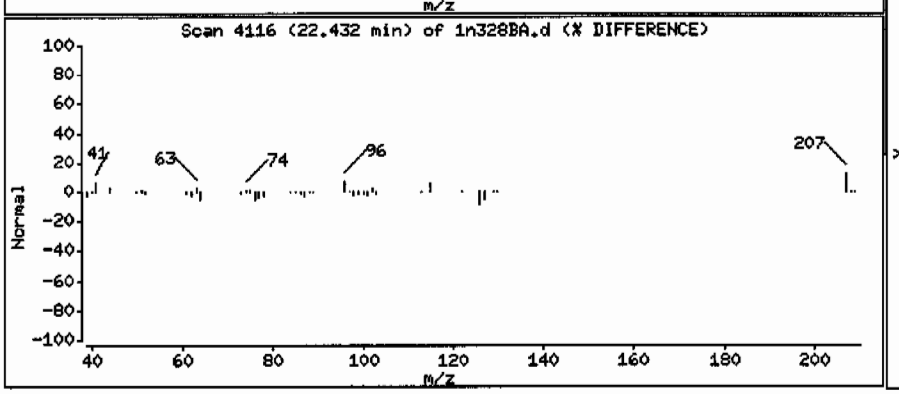

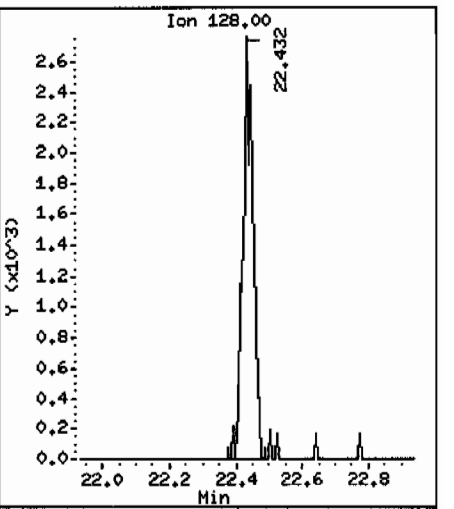

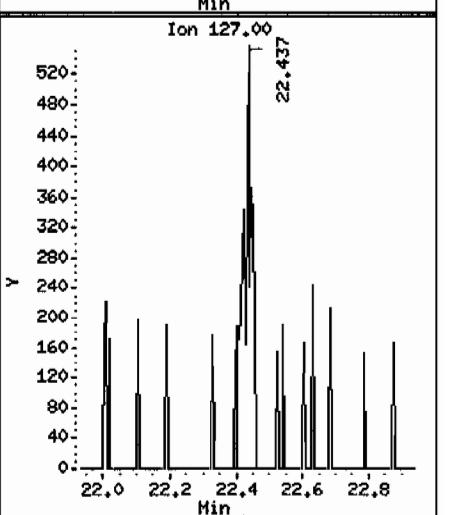

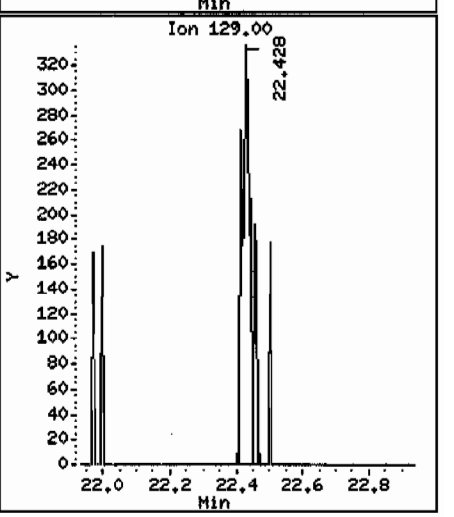

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600			Matrix:	SOIL
Lab Sample ID:	1201983209				
Client Sample:	QC for batch 926738	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926738	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 21:29	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 12:31	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n326LA.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		45.3	ug/kg	0.340	1.00
74-87-3	Chloromethane		51.2	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		49.0	ug/kg	0.300	1.00
74-83-9	Bromomethane		59.6	ug/kg	0.300	1.00
75-00-3	Chloroethane		59.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		57.2	ug/kg	0.300	1.00
67-64-1	Acetone		207	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		51.1	ug/kg	0.300	1.00
74-88-4	Iodomethane		293	ug/kg	1.60	5.00
75-09-2	Methylene chloride		45.6	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		300	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		55.0	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		51.6	ug/kg	0.300	1.00
78-93-3	2-Butanone		219	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		56.4	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		51.4	ug/kg	0.300	1.00
67-66-3	Chloroform		52.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		61.2	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		52.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		53.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		54.4	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		50.7	ug/kg	0.300	1.00
71-43-2	Benzene		54.5	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		54.8	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		55.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		54.6	ug/kg	0.300	1.00
74-95-3	Dibromomethane		54.8	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		248	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		56.1	ug/kg	0.300	1.00
108-88-3	Toluene		53.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.7	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		54.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		213	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		53.3	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		56.7	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		56.6	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		56.2	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		55.2	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201983209**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:29**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n326LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.2	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		110	ug/kg	0.300	2.00
95-47-6	o-Xylene		55.8	ug/kg	0.300	1.00
100-42-5	Styrene		55.0	ug/kg	0.300	1.00
75-25-2	Bromoform		60.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		55.4	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		51.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		58.2	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		52.3	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		52.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		53.1	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		53.2	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		52.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		53.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		52.1	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		53.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		54.3	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		55.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		55.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		52.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		61.9	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		55.6	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		57.4	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n326LA.d
Lab Smp Id: 1201983209 Client Smp ID: LCS
Inj Date : 25-NOV-2009 21:29
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201983209|926739|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 26 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				1826239	165.433	165
M 2 1,2-Dichloroethylene (total)	96				643816	111.396	111
M 3 1,3-Dichloropropylene	75				1187014	109.861	110
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	255116	45.2833	45.3
6 Chloromethane	50	5.542	5.542	(0.405)	357159	51.2394	51.2
7 Vinyl chloride	62	5.922	5.922	(0.433)	305277	49.0424	49.0
9 Bromomethane	96	6.948	6.948	(0.508)	223141	59.6171	59.6
10 Chloroethane	64	7.219	7.219	(0.527)	230914	59.9134	59.9
11 Trichlorofluoromethane	101	7.845	7.845	(0.573)	501553	57.2315	57.2
12 Ethyl Ether	59	8.480	8.480	(0.620)	286596	53.9318	53.9
16 Acetone	43	9.254	9.254	(0.676)	1015303	207.373	207
22 Acetonitrile	41	9.976	9.976	(0.729)	877096	1456.32	1460

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
15 1,1-Dichloroethylene	61	9.083	9.083	(0.664)	616939	51.0987	51.1
21 Methyl acetate	43	9.834	9.834	(0.718)	1106970	264.102	264
18 Iodomethane	142	9.465	9.465	(0.692)	2289520	293.118	293
23 Methylene chloride	84	10.142	10.142	(0.741)	338926	55.7102	55.7
19 Carbon disulfide	76	9.576	9.576	(0.700)	4665056	300.021	300
25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	998031	51.9591	52.0
26 trans-1,2-Dichloroethylene	96	10.542	10.542	(0.770)	308364	54.9879	55.0
29 Vinyl acetate	43	11.293	11.293	(0.825)	2852936	306.780	307
30 1,1-Dichloroethane	63	11.325	11.325	(0.827)	642698	51.5602	51.6
35 2-Butanone	43	12.186	12.186	(0.890)	1052090	219.302	219
36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	335451	56.4080	56.4
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	467604	51.3587	51.4
41 Chloroform	83	12.609	12.609	(0.921)	696121	52.4561	52.4
39 Bromochloromethane	128	12.559	12.559	(0.918)	144728	61.2485	61.2(R)
43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	547368	52.6680	52.7
42 Cyclohexane	56	12.839	12.839	(0.938)	612471	56.0730	56.1
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	505918	53.4408	53.4
53 n-Butyl alcohol	56	13.930	13.930	(1.018)	936762	6133.02	6130
44 Carbon tetrachloride	117	13.028	13.028	(0.952)	566431	54.4045	54.4
$ 48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.974)	656149	62.5242	62.5
51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	593658	50.6925	50.7
47 Benzene	78	13.332	13.332	(0.974)	1287183	54.4874	54.5
50 Cyclohexene	54	13.396	13.396	(0.979)	466014	51.6800	51.7
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	843693	50.0000	
54 Trichloroethylene	95	14.114	14.114	(1.031)	354056	54.7524	54.8
57 1,2-Dichloropropane	63	14.455	14.455	(1.056)	340052	55.6083	55.6
55 Methylcyclohexane	83	14.280	14.280	(1.043)	556989	55.7440	55.7
60 Bromodichloromethane	83	14.750	14.750	(1.078)	548089	54.6314	54.6
59 Dibromomethane	93	14.625	14.625	(1.069)	206537	54.7689	54.8
61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	226421	266.694	267
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	657015	247.937	248
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	586514	56.1294	56.1
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1591436	54.6596	54.6
66 Toluene	92	15.597	15.597	(0.909)	837030	53.2776	53.3
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	600499	53.7312	53.7
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	237354	54.2794	54.3
71 2-Hexanone	43	16.269	16.269	(0.948)	1493090	213.173	213
72 1,3-Dichloropropane	76	16.305	16.305	(0.950)	517966	53.2900	53.3
70 Tetrachloroethylene	164	16.190	16.190	(0.943)	270405	56.7336	56.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	354831	56.5628	56.6
74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	289087	56.2156	56.2
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	715370	50.0000	
77 Chlorobenzene	112	17.194	17.194	(1.002)	897286	55.2153	55.2
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	350279	55.6054	55.6
78 Ethylbenzene	91	17.221	17.221	(1.003)	1729658	51.1817	51.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1221640	109.652	110
81 o-Xylene	106	17.783	17.783	(1.036)	604598	55.7809	55.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
82 Styrene	104	17.806	17.806	(1.038)	1021178	54.9773	55.0
83 Bromoform	173	18.105	18.105	(0.923)	241881	60.1005	60.1
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1746705	53.0741	53.1
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	355759	55.4382	55.4
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	666249	49.0492	49.0
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	107823	51.0959	51.1
91 Bromobenzene	156	18.593	18.593	(0.948)	395969	58.1832	58.2
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2096170	52.2900	52.3
94 2-Chlorotoluene	91	18.741	18.741	(0.956)	1517632	52.2525	52.2
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1542835	53.2172	53.2
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1370794	52.3399	52.3
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1204387	53.3687	53.4
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1547226	52.1359	52.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1939382	53.8427	53.8
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1478294	54.2900	54.3
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.997)	722678	55.6096	55.6
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	404551	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	736021	55.2552	55.2
105 n-Butylbenzene	91	19.873	19.873	(1.013)	1596821	52.3766	52.4
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	713968	57.3890	57.4
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	75706	61.8847	61.9
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	497260	53.7989	53.8
110 Hexachlorobutadiene	225	22.105	22.105	(1.127)	343354	52.4767	52.5
111 Naphthalene	128	22.437	22.437	(1.144)	982722	57.3186	57.3
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	436566	56.1344	56.1

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112509v1/1n326LA.d
Date : 25-NOV-2009 21:29
Client ID: LCS
Sample Info: 1120198320919267391 1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

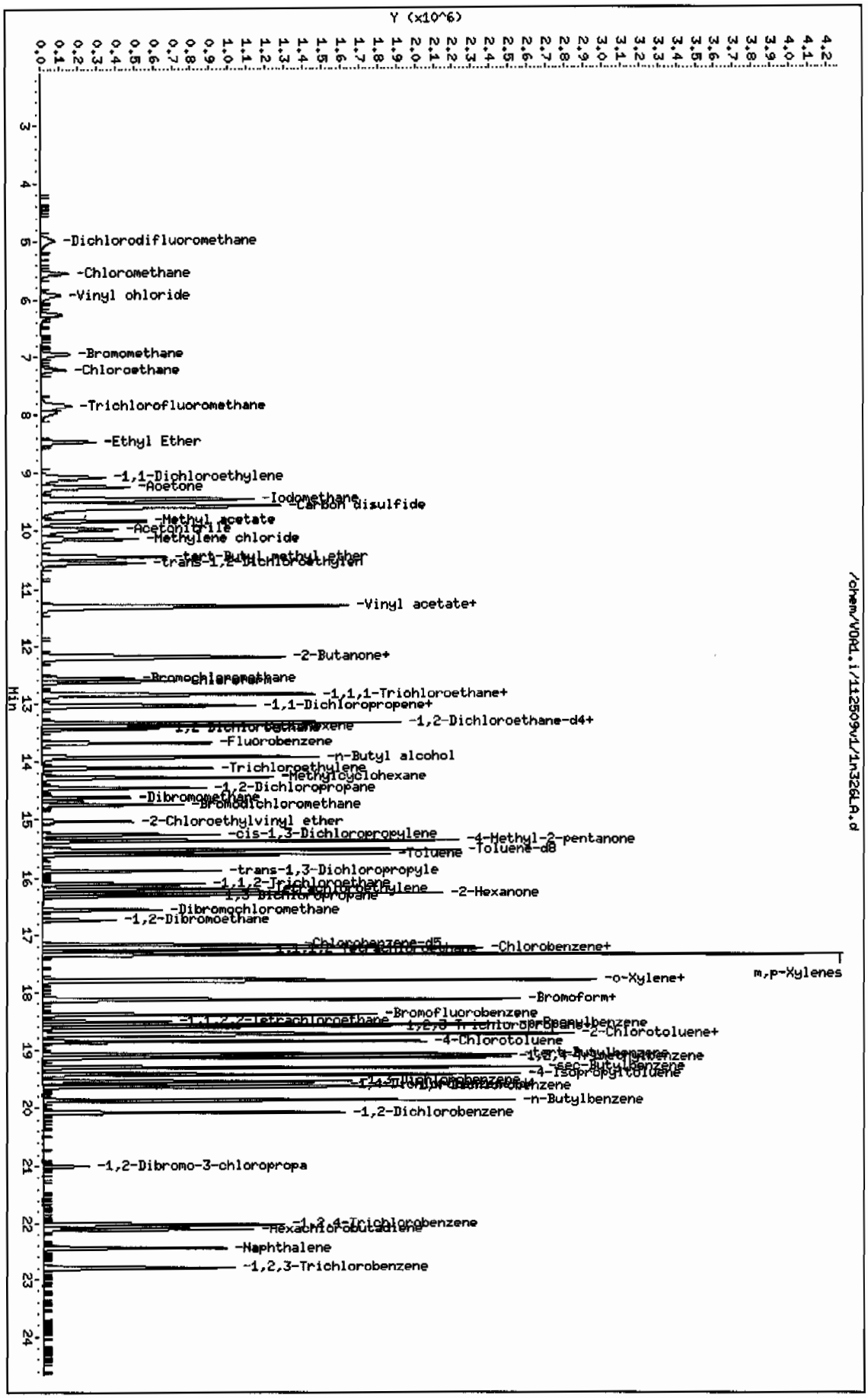

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201983210**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1,I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:59**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:32**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n327sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201983210**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:59**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 12:32**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n327sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		245	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n327sLA.d
Lab Smp Id: 1201983210 Client Smp ID: LCS
Inj Date : 25-NOV-2009 21:59
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201983210|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 27-Nov-2009 09:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 27 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	396523	132.497	132
8 2-Chloro-1,1,1-trifluoroethane	118	6.289	6.289	(0.460)	892630	142.325	142
13 Acrolein	56	8.954	8.954	(0.654)	293493	300.750	301(A)
14 Trichlorotrifluoroethane	101	8.978	8.978	(0.656)	1365266	244.684	245
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1140675	2959.04	2960
20 Allyl chloride	76	9.848	9.848	(0.720)	645063	318.449	318(AR)
24 tert-Butyl Alcohol	59	10.197	10.197	(0.745)	2038257	2814.77	2810
27 Acrylonitrile	53	10.671	10.671	(0.780)	560054	275.011	275
28 Isopropyl ether	45	11.196	11.196	(0.818)	1110333	48.6930	48.7
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	578154	49.6674	49.7
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1118599	51.3936	51.4
34 Ethyl acetate	43	12.167	12.167	(0.889)	1402763	251.665	252

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
37 Propionitrile	54	12.402	12.402	(0.906)	217340	263.354	263
38 Tetrahydrofuran	42	12.540	12.540	(0.639)	468262	256.306	256
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1179487	266.750	267
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	548891	2650.31	2650
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	619497	52.2176	52.2
49 Methyl tert-amyl ether	73	13.350	13.350	(0.976)	963399	55.5195	55.5
* 52 Fluorobenzene	96	13.682	13.686	(1.000)	953791	50.0000	
56 Methyl methacrylate	69	14.437	14.437	(1.055)	1035165	273.978	274
58 1,4-Dioxane	88	14.543	14.543	(1.063)	136296	2506.25	2510
62 2-Nitropropane	43	15.081	15.081	(1.102)	549556	266.810	267
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1702619	53.0874	53.1
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2083907	258.767	259
75 1-Chlorohexane	55	17.028	17.028	(1.245)	333621	44.3538	44.4(QH)
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	788014	50.0000	
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	713025	259.525	260
86 Cyclohexanone	55	18.386	18.386	(1.071)	563195	752.982	753
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	699542	46.6889	46.7
90 trans-1,4-Dichloro-2-butene	53	18.566	18.566	(0.947)	679867	253.681	254
98 Pentachloroethane	167	19.196	19.196	(0.979)	750377	269.597	270(A)
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	446241	50.0000	
104 Benzyl chloride	91	19.772	19.772	(1.008)	3589522	252.193	252
107 bis(2-Chloroisopropyl)ether	45	20.163	20.163	(1.028)	866833	269.640	270

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: /chem/VOA1.i/112509v1/1n327sLA.d
Date : 25-NOV-2009 21:59
Client ID: LCS
Sample Info: |120198321019267391|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

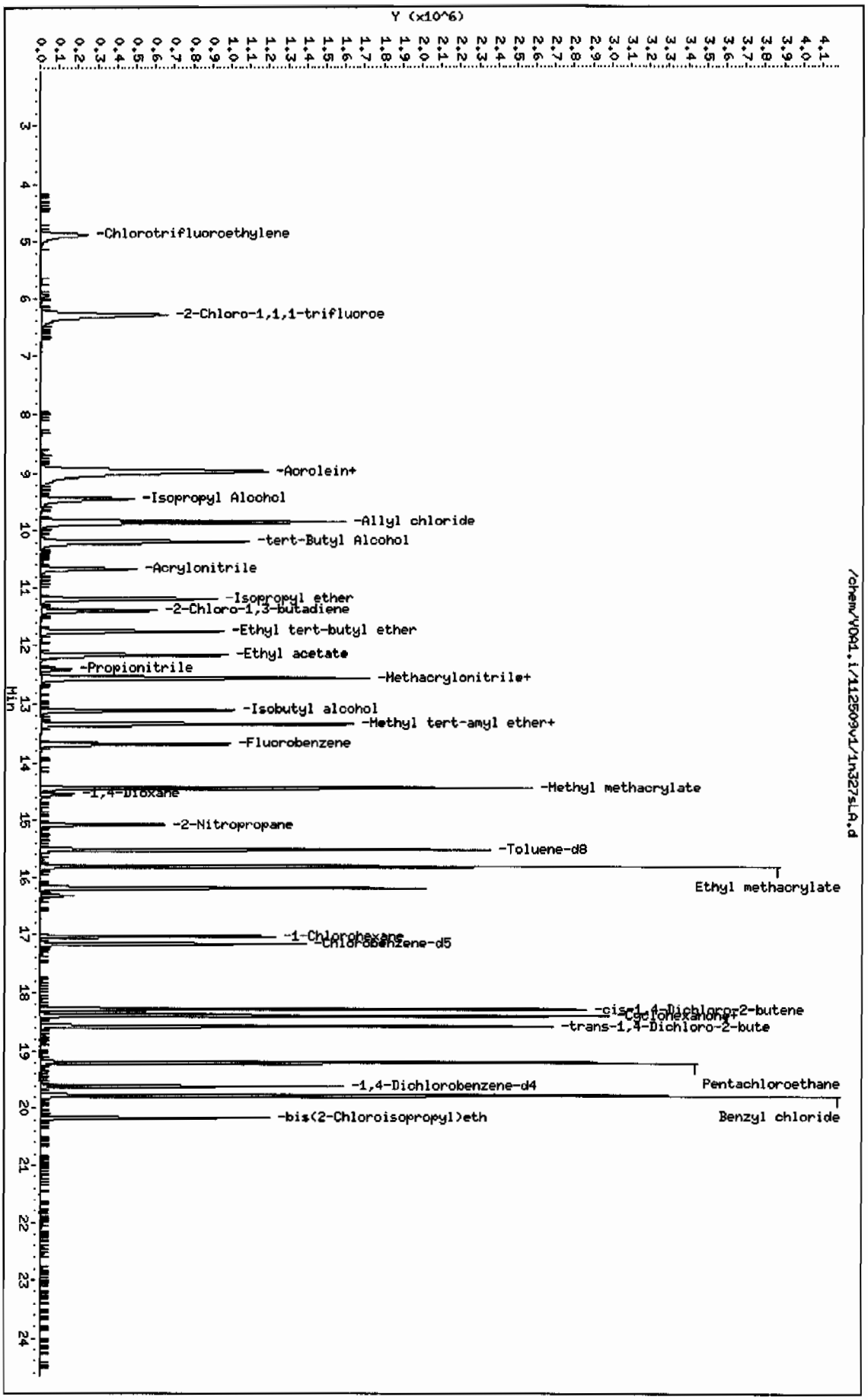

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926738** Verified by: _____

Analyst: Ronda Eagle
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201981429 MB	25-NOV-2009 07:00:00	Soil	5	5	1	
1201981432 LCS	25-NOV-2009 07:01:00	Soil	5	5	1	
1201981433 LCS	25-NOV-2009 07:02:00	Soil	5	5	1	
1201983208 MB	25-NOV-2009 12:30:00	Soil	5	5	1	
1201983209 LCS	25-NOV-2009 12:31:00	Soil	5	5	1	
1201983210 LCS	25-NOV-2009 12:32:00	Soil	5	5	1	
241714001	25-NOV-2009 13:54:00	Soil	5	5	1	
241714002	25-NOV-2009 13:55:00	Soil	5	5	1	
241417001	25-NOV-2009 13:56:00	Soil	5	5	1	
241417002	25-NOV-2009 13:57:00	Soil	5	5	1	
241423001	25-NOV-2009 13:58:00	Soil	5	5	1	
241423003	25-NOV-2009 13:59:00	Soil	5	5	1	
241423004	25-NOV-2009 14:00:00	Soil	5	5	1	
241423005	25-NOV-2009 14:01:00	Soil	5	5	1	
241503001	25-NOV-2009 14:02:00	Soil	5	5	1	
241503002	25-NOV-2009 14:03:00	Soil	5	5	1	
241503003	25-NOV-2009 14:04:00	Soil	5	5	1	
241503004	25-NOV-2009 14:05:00	Soil	5	5	1	
241524001	25-NOV-2009 14:06:00	Soil	5	5	1	
241524002	25-NOV-2009 14:07:00	Soil	5	5	1	
1201981430 PS (241417001)	25-NOV-2009 14:08:00	Soil	5	5	1	
1201981431 PSD (241417001)	25-NOV-2009 14:09:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/13/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111309v1

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
ICV	W1VM091113-18		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
BFB	UVM090821-02				1
SHORT ICV	W1VM091113-19		5+5	5+5	

Purge Amount

5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/13/2009 22:17	1L507.D	UVM090821-02	GEL	BFB2	5ML	1	N/A	1	W	ACJ	N/A	O	Passed.
11/13/2009 22:47	1L508.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
11/13/2009 23:18	1L509.D	W1VM091113-05	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM090911-01B/UVM091012-01D
11/13/2009 23:48	1L510.D	W1VM091113-06	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	N/A	X	UVM090911-02B/UVM091012-02D: See 1L511
11/14/2009 0:18	1L511.D	W1VM091113-07	GEL	VSTD001	5ML	1	N/A	5	W	ACJ	N/A	O	UVM090911-02B/UVM091012-02D
11/14/2009 0:48	1L512.D	W1VM091113-08	GEL	VSTD002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM090911-03B/UVM091012-03D
11/14/2009 1:19	1L513.D	W1VM091113-09	GEL	VSTD005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM090911-04B/UVM091012-04D
11/14/2009 1:49	1L514.D	W1VM091113-10	GEL	VSTD010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM090911-05B/UVM091012-05D
11/14/2009 2:19	1L515.D	W1VM091113-11	GEL	VSTD020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM090911-06B/UVM091012-06D
11/14/2009 2:49	1L516.D	W1VM091113-12	GEL	VSTD050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM090911-07B/UVM091012-07D
11/14/2009 3:19	1L517.D	W1VM091113-13	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM090911-08B/UVM091012-08D
11/14/2009 3:50	1L518.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	Rinse
11/14/2009 4:20	1L519.D	W1VM091113-14	GEL	VSTD005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091023-01/UVM091110-01E
11/14/2009 4:50	1L520.D	W1VM091113-15	GEL	VSTD010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091023-02/UVM091110-02E
11/14/2009 5:20	1L521.D	W1VM091113-16	GEL	VSTD025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091023-03/UVM091110-03E
11/14/2009 5:50	1L522.D	W1VM091113-17	GEL	VSTD050S	5ML	1	N/A	16	W	ACJ	N/A	O	UVM091023-04/UVM091110-04E
11/14/2009 6:20	1L523.D	W1VM091113-18	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091023-05/UVM091110-05E
11/14/2009 6:51	1L524.D	W1VM091113-19	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091023-06/UVM091110-06E
11/14/2009 7:21	1L525.D	W1VM091113-20	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091023-07/UVM091110-07E
11/14/2009 7:51	1L526.D	12019---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	Rinse
11/14/2009 8:21	1L527.D	W1VM091113-18	GEL	ICV	5ML	1	N/A	21	W	ACJ	N/A	X	UVM091111-01A/IVM091111-01; Vinyl Chloride low. See 11/16/09
11/14/2009 8:52	1L528.D	W1VM091113-19	GEL	SHORT ICV	5ML	1	N/A	22	W	ACJ	N/A	O	UVM091023-08A/UVM091105-02B

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard

	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount

5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/16/2009 9:04	1M101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	Passed. See 1M108
11/16/2009 9:35	1M102.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	RXM4	N/A	X	
11/16/2009 10:14	1M103.D	W1VM091116-01	GEL	CCV/LCS/ICV	5ML	1	N/A	3	W	RXM4	N/A	X	
11/16/2009 10:45	1M104.D	W1VM091116-02	GEL	LCSD	5ML	1	N/A	4	W	RXM4	N/A	X	
11/16/2009 12:25	1M105.D	W1VM091116-03	GEL	SHORTICV	5ML	1	N/A	5	W	RXM4	N/A	X	Decreased multiplier
11/16/2009 13:00	1M106.D	UVM090821-02	GEL	BFB	5ML	1	N/A	6	W	RXM4	N/A	X	See 1M108
11/16/2009 13:30	1M107.D	W1VM091116-04	GEL	CCV/LCS/ICV	5ML	1	N/A	7	W	RXM4	N/A	X	UVM091111-01A/IVM0901111-01
11/16/2009 14:01	**1M108.D**	**W1VM091116-05**	**GEL**	**BFB/CCV/LCS/ICV**	**5ML**	**1**	**N/A**	**8**	**W**	**RXM4**	**N/A**	**O**	UVM091111-01B/IVM0901111-01
11/16/2009 14:48	1M109.D	W1VM091116-06	GEL	SHORT	5ML	1	N/A	9	W	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 15:20	1M110.D	W1VM091116-07	GEL	LCS	5G	1	N/A	10	S	RXM4	N/A	O	UVM091111-01B/IVM0901111-01
11/16/2009 15:51	1M111.D	W1VM091116-08	GEL	SHORT	5G	1	N/A	11	S	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:21	1M112.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	RXM4	N/A	X	waters were not analyzed. Not needed.
11/16/2009 16:51	1M113.D	12019---	GEL	BLANK	5G	1	N/A	13	S	RXM4	N/A	O	
11/16/2009 17:22	1M114.D	240630001	LANL	923274	5G	1	N/A	14	S	RXM4	N/A	O	
11/16/2009 17:52	1M115.D	240630002	LANL	923274	5G	1	N/A	15	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 18:22	1M116.D	240630003	LANL	923274	5G	1	N/A	16	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 18:52	1M117.D	240630004	LANL	923274	5G	1	N/A	17	S	RXM4	N/A	O	
11/16/2009 19:23	1M118.D	240630005	LANL	923274	5G	1	N/A	18	S	RXM4	N/A	O	
11/16/2009 19:53	1M119.D	240630006	LANL	923274	5G	1	N/A	19	S	RXM4	N/A	O	
11/16/2009 20:23	1M120.D	240630007	LANL	923274	5G	1	N/A	20	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 20:53	1M121.D	240630008	LANL	923274	5G	1	N/A	21	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:23	1M122.D	240630009	LANL	923274	5G	1	N/A	22	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:54	1M123.D	240630010	LANL	923274	5G	1	N/A	23	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 22:24	1M124.D	240630011	LANL	923274	5G	1	N/A	24	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 22:55	1M125.D	240634001	LANL	923274	5G	1	N/A	25	S	RXM4	N/A	O	
11/16/2009 23:25	1M126.D	240634002	LANL	923274	5G	1	N/A	26	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 23:55	1M127.D	240634003	LANL	923274	5G	1	N/A	27	S	RXM4	N/A	O	
11/17/2009 0:25	1M128.D	240634004	LANL	923274	5G	1	N/A	28	S	RXM4	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/17/2009 0:55	1M129.D	240634005	LANL	923274	5G	1	N/A	29	S	RXM4	N/A	O	
11/17/2009 1:25	1M130.D	240634006	LANL	923274	5G	1	N/A	30	S	RXM4	N/A	O	
11/17/2009 1:56	1M131.D	1201973574	LANL	923274	5G	1	N/A	31	S	RXM4	N/A	X	MS 240630001; See 11/17/09
11/17/2009 2:26	1M132.D	1201973575	LANL	923274	5G	1	N/A	32	S	RXM4	N/A	X	MSD 240630001; out of tune. See 11/17/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/25/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 112509v1 PM

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091125-03		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091125-03			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091125-04		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/25/2009 20:59	1N325.D	UVM090821-02	GEL	BFB	5ML	1	N/A	25	W	RXM4	N/A	O	
11/25/2009 21:29	1N326.D	W1VM091125-03	GEL	CCV/LCS	5G	1	N/A	26	S	RXM4	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 21:59	1N327.D	W1VM091125-04	GEL	SHORT	5G	1	N/A	27	S	RXM4	N/A	O	UVM091118-08A/UVM091105-02C
11/25/2009 22:30	1N328.D	12019---	GEL	BLANK	5G	1	N/A	28	S	RXM4	N/A	O	
11/25/2009 23:00	1N329.D	241524001	LANL	926739	5G	1	N/A	29	S	RXM4	N/A	O	
11/25/2009 23:30	1N330.D	241524002	LANL	926739	5G	1	N/A	30	S	RXM4	N/A	O	
11/26/2009 0:00	1N331.D	241540001	LANL	926743	5G	1	N/A	31	S	RXM4	N/A	O	
11/26/2009 0:30	1N332.D	241540002	LANL	926743	5G	1	N/A	32	S	RXM4	N/A	O	
11/26/2009 1:01	1N333.D	241540003	LANL	926743	5G	1	N/A	33	S	RXM4	N/A	O	
11/26/2009 1:31	1N334.D	241540004	LANL	926743	5G	1	N/A	34	S	RXM4	N/A	O	
11/26/2009 2:01	1N335.D	241540005	LANL	926743	5G	1	N/A	35	S	RXM4	N/A	O	
11/26/2009 2:31	1N336.D	241540006	LANL	926743	5G	1	N/A	36	S	RXM4	N/A	O	
11/26/2009 3:02	1N337.D	241540007	LANL	926743	5G	1	N/A	37	S	RXM4	N/A	X	ISTD failure. See 11/27/09
11/26/2009 3:32	1N338.D	241540008	LANL	926743	5G	1	N/A	38	S	RXM4	N/A	O	
11/26/2009 4:02	1N339.D	241540009	LANL	926743	5G	1	N/A	39	S	RXM4	N/A	O	
11/26/2009 4:32	1N340.D	241540010	LANL	926743	5G	1	N/A	40	S	RXM4	N/A	O	
11/26/2009 5:03	1N341.D	241540011	LANL	926743	5G	1	N/A	41	S	RXM4	N/A	O	
11/26/2009 5:32	1N342.D	241540012	LANL	926743	5G	1	N/A	42	S	RXM4	N/A	O	
11/26/2009 6:03	1N343.D	241540013	LANL	926743	5G	1	N/A	43	S	RXM4	N/A	O	
11/26/2009 6:33	1N344.D	241540014	LANL	926743	5G	1	N/A	44	S	RXM4	N/A	O	
11/26/2009 7:03	1N345.D	241540015	LANL	926743	5G	1	N/A	45	S	RXM4	N/A	O	
11/26/2009 7:33	1N346.D	241540016	LANL	926743	5G	1	N/A	46	S	RXM4	N/A	X	IS/SS failure. See CF 11/27/09
11/26/2009 8:03	1N347.D	241540017	LANL	926743	5G	1	N/A	47	S	RXM4	N/A	O	
11/26/2009 8:34	1N348.D	241540018	LANL	926743	5G	1	N/A	48	S	RXM4	N/A	O	
11/26/2009 9:04	1N349.D	1201981439	LANL	926743	5G	1	N/A	49	S	RXM4	N/A	X	MS 241540001 high SS rec. See 11/27/09
11/26/2009 9:34	1N350.D	1201981440	LANL	926743	5G	1	N/A	50	S	RXM4	N/A	X	MSD 241540001 See 11/27/09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
926739	See Below		

Potentially affected work order(s)(SDG): 241417(10-575),241423(10-578),241503(10-589),241524(10-600),241714(10-650)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. LCS 1201981432 did not meet the spike recovery acceptance criteria for the following compound: n-Butylbenzene 70.45% (71.50%-128.40%). 2. LCS 1201983209 did not meet the spike recovery acceptance criteria for the following compound: Bromochloromethane 122.5% (76.00%-121.60%).	1/2. The total number of unnaceptable spike recoveries is within the client required 5% of the total requested analytes. The results are reported.

Originator's Name:

Ronda Eagle 30-NOV-09

Data Validator/Group Leader:

Sarah Kozlik 30-NOV-09

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n313.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 25-NOV-2009 14:56
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	897693	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	715437	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	379941	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	597356	53.4978	57.6
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1571628	53.9742	58.1
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	623950	48.9105	52.6

ION RATIO REPORT

VOA REPORT

Data file: 1n313.d
Report Date: 11/27/2009 04:54
Lab. ID: 241417001 SampleType: SAMPLE
Injection Date: 25-NOV-2009 14:56
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241417001|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-575
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	15863	13.68	13.44	80-120	100	(T)
64	2693	13.69	13.44	3- 63	17	(T)
47 Benzene			CAS#: 71-43-2			
78	467	13.33	13.33	80-120	100	( )
77	18073	13.68	13.34	0- 53	3870	(QT)
51	185997	13.34	13.34	6- 66	39828	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	15674	15.51	15.36	80-120	100	(T)
43	8470	15.51	15.36	214-274	54	(QT)
100	985612	15.52	15.36	1- 61	6288	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n313.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 25-NOV-2009 14:56
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n313.d

Date : 25-NOV-2009 14:56

Client ID: RE03-09-13812

Sample Info: |24141700|926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

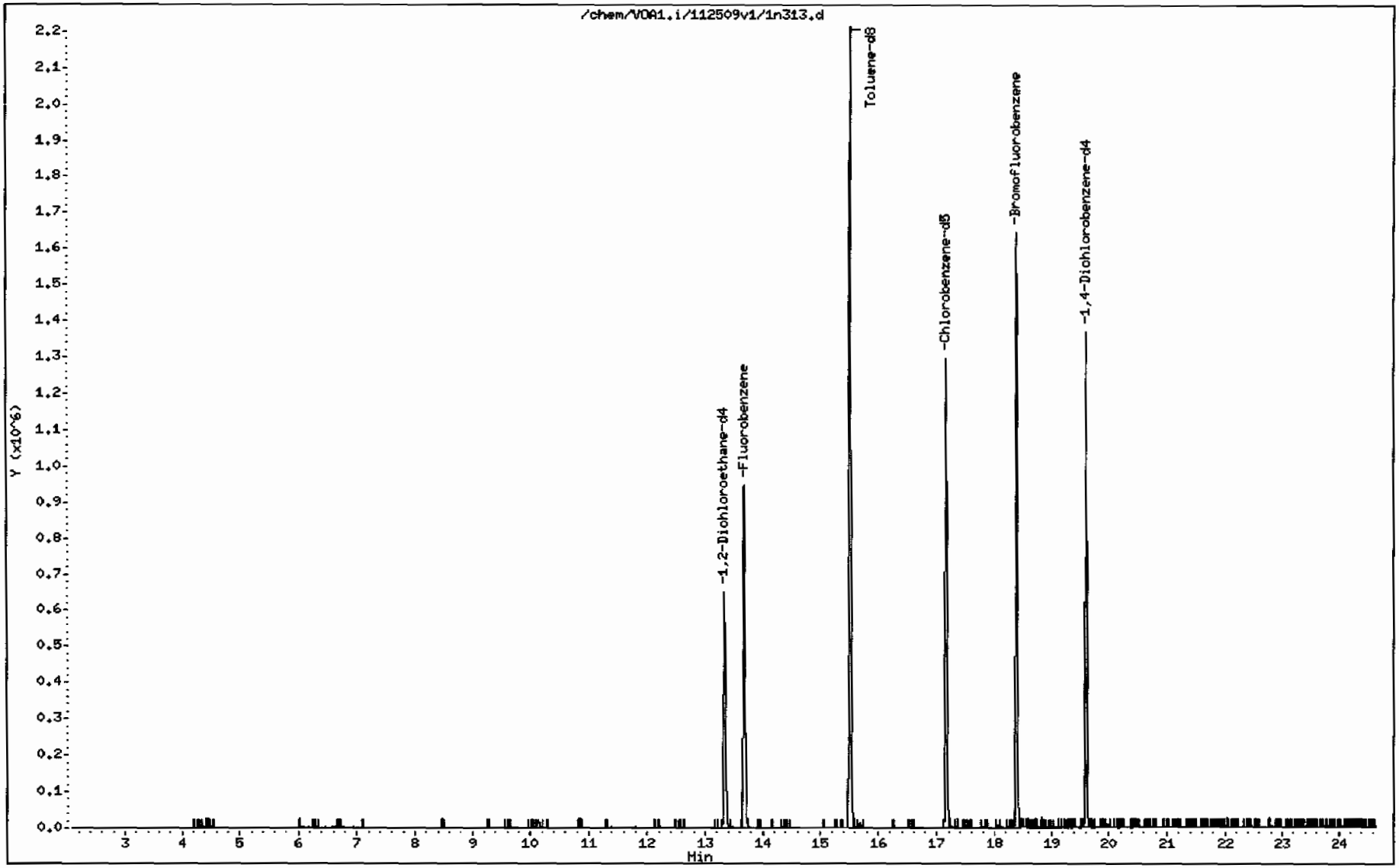

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n323.d
Lab Smp Id: 1201981430 Client Smp ID: RE03-09-13812MS
Inj Date : 25-NOV-2009 19:58
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981430|926739|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241417001
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	796819	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	694339	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	395865	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	582393	58.7607	63.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1465311	51.8521	55.8
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	608664	45.7930	49.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	225650	42.4092	45.6
6 Chloromethane	50	5.550	5.542	(0.405)	316917	48.1407	51.8
7 Vinyl chloride	62	5.922	5.922	(0.433)	278970	47.4525	51.1
9 Bromomethane	96	6.943	6.947	(0.507)	179262	50.7111	54.6
10 Chloroethane	64	7.219	7.214	(0.527)	204517	56.1861	60.5
11 Trichlorofluoromethane	101	7.845	7.850	(0.573)	459945	55.5711	59.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.254	9.249	(0.676)	771650	166.879	180
15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	551194	48.3389	52.0
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	557652	42.7831	46.0
18 Iodomethane	142	9.465	9.470	(0.692)	1660218	225.055	242
23 Methylene chloride	84	10.137	10.137	(0.741)	297934	51.7465	55.7
19 Carbon disulfide	76	9.576	9.571	(0.700)	3898567	265.476	286
26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	268636	50.7215	54.6
30 1,1-Dichloroethane	63	11.325	11.320	(0.827)	599262	50.9036	54.8
35 2-Butanone	43	12.190	12.186	(0.891)	806964	178.102	192
36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	295362	52.5884	56.6
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	550405	43.2826	46.6
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	425131	49.4405	53.2
41 Chloroform	83	12.614	12.609	(0.922)	624845	49.8550	53.7
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	526339	43.2356	46.5
39 Bromochloromethane	128	12.563	12.559	(0.918)	125301	56.1461	60.4
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	496144	50.5475	54.4
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	440252	49.2401	53.0
44 Carbon tetrachloride	117	13.024	13.023	(0.952)	504581	51.3149	55.2
51 1,2-Dichloroethane	62	13.442	13.438	(0.982)	539636	48.7903	52.5
47 Benzene	78	13.336	13.332	(0.974)	1118506	50.1608	54.0
54 Trichloroethylene	95	14.119	14.114	(1.032)	305821	50.0753	53.9
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	295843	51.2248	55.1
60 Bromodichloromethane	83	14.754	14.750	(1.078)	493567	52.0909	56.1
59 Dibromomethane	93	14.625	14.625	(1.069)	185725	52.1471	56.1
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	423248	164.558	177
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	450482	45.6472	49.1
66 Toluene	92	15.597	15.597	(0.909)	703335	46.1238	49.6
68 trans-1,3-Dichloropropylene	75	15.882	15.877	(0.925)	462433	42.6306	45.9
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	202866	47.7975	51.4
71 2-Hexanone	43	16.269	16.269	(0.948)	712740	104.842	113
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	442403	46.8944	50.5
70 Tetrachloroethylene	164	16.190	16.190	(0.943)	217864	47.0944	50.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	301804	49.5671	53.4
74 1,2-Dibromoethane	107	16.729	16.724	(0.975)	234574	46.9966	50.6
77 Chlorobenzene	112	17.194	17.194	(1.002)	729551	46.2534	49.8
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	288225	47.1404	50.7
78 Ethylbenzene	91	17.217	17.221	(1.003)	1407256	42.9029	46.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	966903	89.4157	96.2
81 o-Xylene	106	17.783	17.788	(1.036)	482800	45.8928	49.4
82 Styrene	104	17.806	17.801	(1.038)	810950	44.9816	48.4
83 Bromoform	173	18.105	18.110	(0.923)	198202	50.3281	54.2
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	295510	47.0600	50.6
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	90405	43.7814	47.1(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	309977	46.5470	50.1
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1593664	40.6271	43.7
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1177582	41.4341	44.6
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1351226	41.9583	45.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1180536	41.6139	44.8
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1050035	40.9723	44.1
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	921473	41.7282	44.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1185810	40.8342	44.0
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1385994	39.3234	42.3
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	951885	35.7248	38.4
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1093810	36.6648	39.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	55577	46.4274	50.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112509v1/1n323.d

Date : 25-NOV-2009 19:58

Client ID: RE03-09-13812HS

Sample Info: |12019814301926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

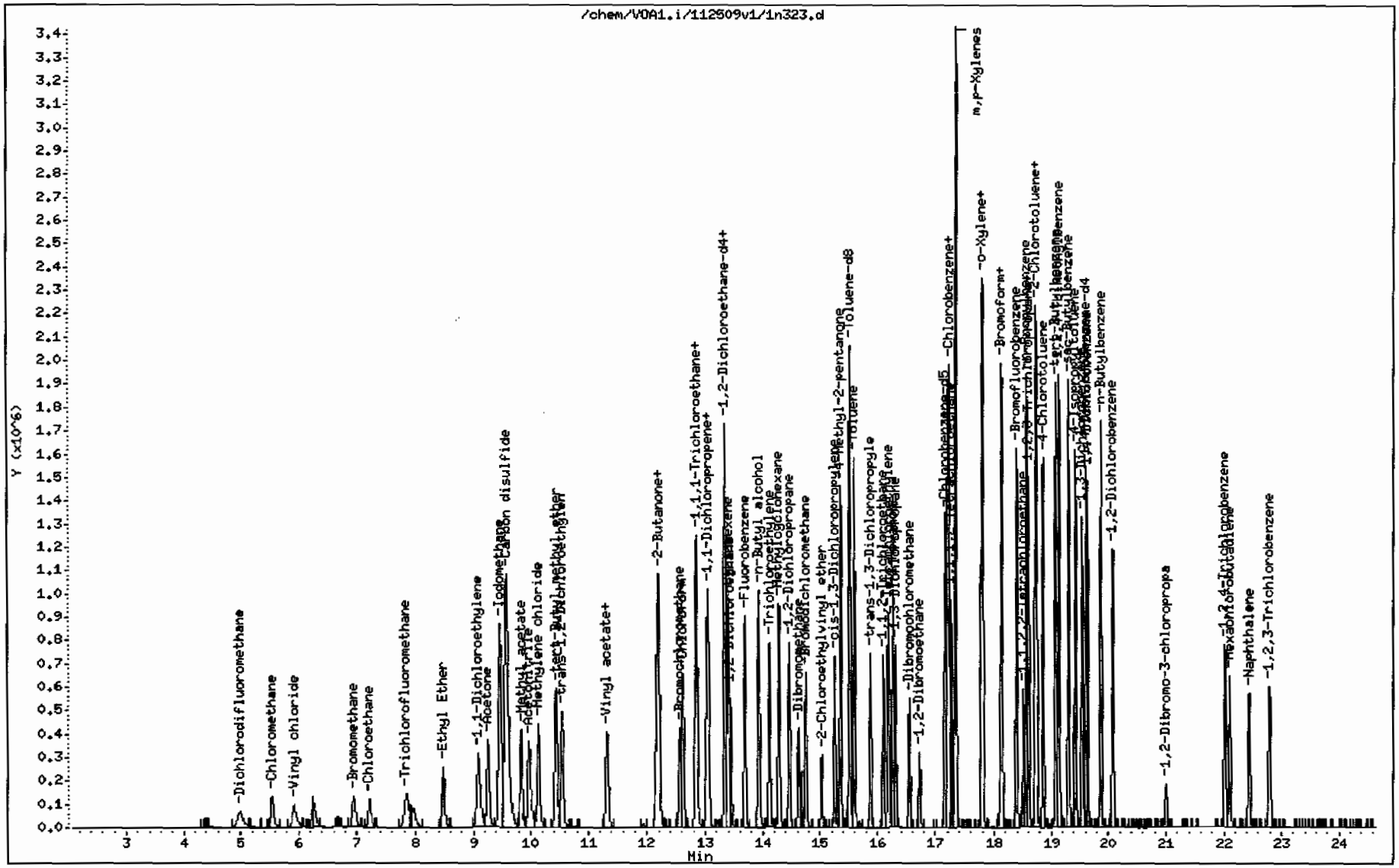

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n324.d
Lab Smp Id: 1201981431 Client Smp ID: RE03-09-13812MSD
Inj Date : 25-NOV-2009 20:29
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981431|926739|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241417001
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	883949	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	731041	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	400251	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	621155	56.4942	60.8
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1580652	53.1254	57.2
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	641032	47.6998	51.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	228108	38.6454	41.6
6 Chloromethane	50	5.550	5.542	(0.405)	328977	45.0469	48.5
7 Vinyl chloride	62	5.922	5.922	(0.433)	283964	43.5409	46.9
9 Bromomethane	96	6.947	6.947	(0.508)	189335	48.2813	52.0
10 Chloroethane	64	7.219	7.214	(0.527)	220402	54.5817	58.8
11 Trichlorofluoromethane	101	7.854	7.850	(0.574)	467915	50.9616	54.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.254	9.249	(0.676)	834590	162.700	175
15 1,1-Dichloroethylene	61	9.083	9.088	(0.664)	573262	45.3188	48.8
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	572697	43.4559	46.8
18 Iodomethane	142	9.470	9.470	(0.692)	1770014	216.288	233
23 Methylene chloride	84	10.142	10.137	(0.741)	326393	51.0823	55.0
19 Carbon disulfide	76	9.576	9.571	(0.700)	4194096	257.449	277
26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	289433	49.2616	53.0
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	625975	47.9315	51.6
35 2-Butanone	43	12.186	12.186	(0.890)	877174	174.515	188
36 cis-1,2-Dichloroethylene	96	12.200	12.204	(0.891)	314559	50.4859	54.3
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	555729	43.2224	46.5
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	447948	46.9592	50.5
41 Chloroform	83	12.614	12.609	(0.922)	659599	47.4404	51.1
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	510475	41.4730	44.6
39 Bromochloromethane	128	12.563	12.559	(0.918)	134612	54.3728	58.5
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	515171	47.3125	50.9
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	465171	46.8989	50.5
44 Carbon tetrachloride	117	13.028	13.023	(0.952)	517864	47.4746	51.1
51 1,2-Dichloroethane	62	13.442	13.438	(0.982)	555482	45.2726	48.7
47 Benzene	78	13.336	13.332	(0.974)	1204370	48.6980	52.4
54 Trichloroethylene	95	14.114	14.114	(1.031)	322891	47.6589	51.3
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	318782	49.7560	53.6
60 Bromodichloromethane	83	14.754	14.750	(1.078)	510161	48.5351	52.2
59 Dibromomethane	93	14.625	14.625	(1.069)	195930	49.5899	53.4
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	461238	170.326	183
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	482829	44.1024	47.5
66 Toluene	92	15.597	15.597	(0.909)	734986	45.7795	49.3
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	482379	42.2368	45.5
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.939)	216219	48.3860	52.1
71 2-Hexanone	43	16.269	16.269	(0.948)	796706	111.310	120
72 1,3-Dichloropropane	76	16.310	16.310	(0.951)	473670	47.6880	51.3
70 Tetrachloroethylene	164	16.190	16.190	(0.944)	230013	47.2244	50.8
73 Dibromochloromethane	129	16.545	16.549	(0.964)	320927	50.0616	53.9
74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	250720	47.7095	51.4
77 Chlorobenzene	112	17.194	17.194	(1.002)	770102	46.3731	49.9
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	297713	46.2476	49.8
78 Ethylbenzene	91	17.221	17.221	(1.004)	1482021	42.9139	46.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	999274	87.7698	94.5
81 o-Xylene	106	17.783	17.788	(1.036)	506521	45.7304	49.2
82 Styrene	104	17.806	17.801	(1.038)	832185	43.8420	47.2
83 Bromoform	173	18.105	18.110	(0.923)	203441	51.0923	55.0
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	305520	48.1209	51.8
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	94154	45.0973	48.5(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	321477	47.7449	51.4
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1642875	41.4227	44.6
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1206813	41.9973	45.2
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1378153	42.3254	45.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1213997	42.3244	45.6
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1078344	41.6159	44.8
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	956541	42.8415	46.1
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1221687	41.6087	44.8
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1418697	39.8102	42.8
100 4-Isopropyltoluene	119	19.426	19.422	(0.991)	985658	36.5869	39.4
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1107311	36.7106	39.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	57733	47.7000	51.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112509v1/1n324.d
Date : 25-NOV-2009 20:29
Client ID: REO3-09-13812MSD
Sample Info: 1120198143119267391|1|VOAF1|1
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

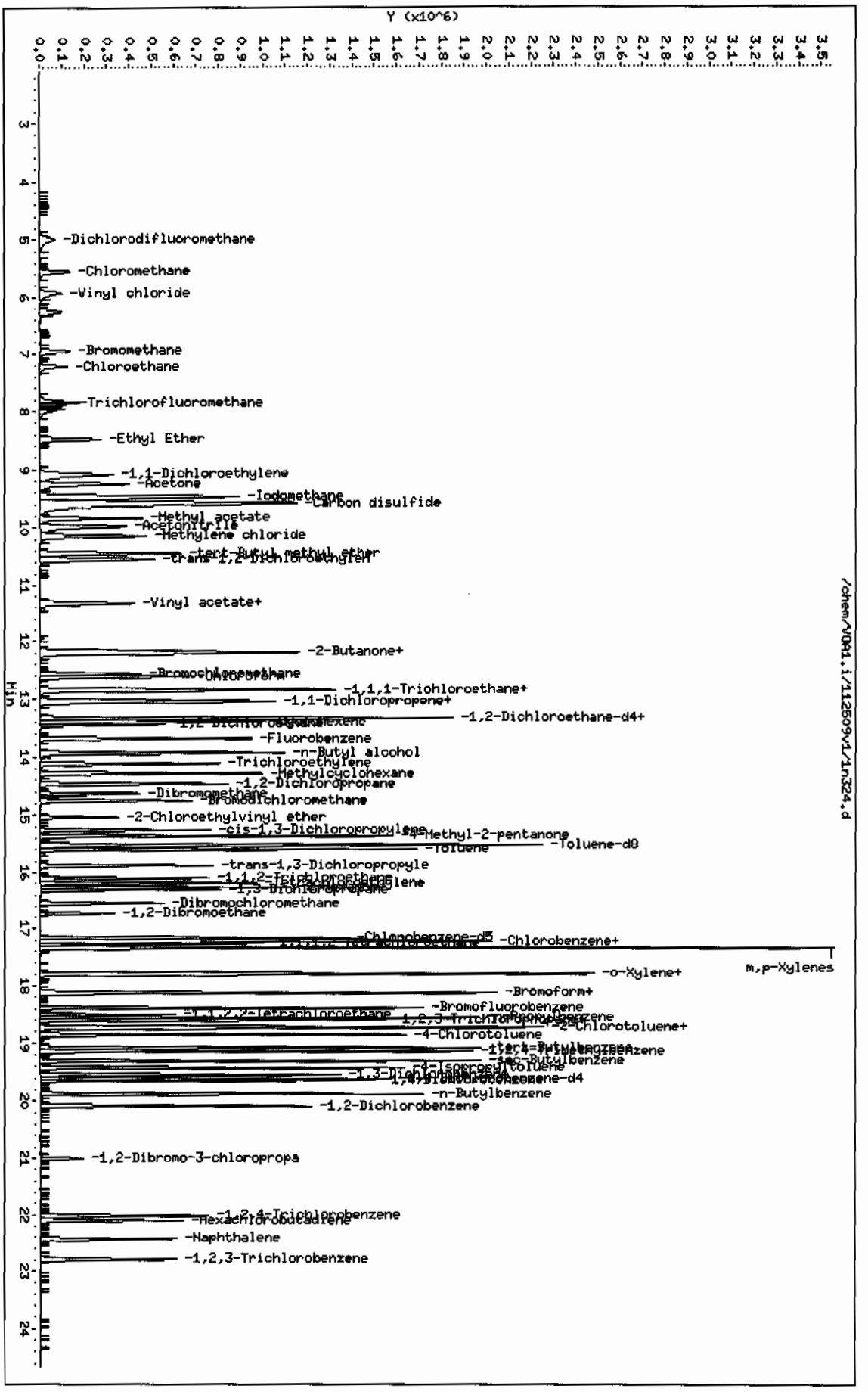

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-600-1

Method/Analysis Information

Procedure:	**Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer**
Analytical Method:	SW846 8260B
Prep Method:	SW846 1311
Analytical Batch Number:	928862
Prep Batch Number:	926094

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241527001	WST03-10-2132
1201980071	Tumbling Blank (TB)
1201986405	Method Blank (MB)
1201986408	Laboratory Control Sample (LCS)
1201986406	241424001(WST03-10-2131) Post Spike (PS)
1201986407	241424001(WST03-10-2131) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241424001 (WST03-10-2131) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
Due to problems associated with the nature of the TCLP matrix, volatile extracts are routinely diluted before analysis. The dilution factor does not increase detection limits above the regulatory limits required by the client.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Methanol Dilutions
None of the samples in this batch required a dilution using a methanol extract procedure.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/14/09

Roadmap for LANL 10-600-1 VOA

This roadmap was analyzed by ron01469 on 12-07-2009, 10:04.
This roadmap was reviewed by sar00518 on 12-10-2009, 22:02.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/120309v1/1o419.d	241527001	WST03-10-2132	03-DEC-2009	18:02	10-600-1.sub	10	928862	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/120309v1/1o404TLB.d	1201986408	LCS	lcs	03-DEC-2009	10:11	all.sub	1	928862	
☐	N	/chem/VOA1.i/120309v1/1o406TBB.d	1201986405	BLANK	mb	03-DEC-2009	11:15	all.sub	1	928862	
☐	N	/chem/VOA1.i/120309v1/1o411.d	1201980071	TCLPBLANK	tb	03-DEC-2009	13:58	all.sub	10	928862	
■	N	/chem/VOA1.i/120309v1/1o422.d	1201986406	WST03-10-2131MS	ms	03-DEC-2009	19:34	10-578-1.sub	10	928862	
■	N	/chem/VOA1.i/120309v1/1o423.d	1201986407	WST03-10-2131MSD	msd	03-DEC-2009	20:05	10-578-1.sub	10	928862	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241527001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 18:02**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o419.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-600-1

Matrix Type: TCLP SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC		TOL %REC		BFB %REC	
1201986408	LCS for batch 928862	96		102		90	
1201986405	MB for batch 928862	92		101		89	
1201980071	TB for batch 926094	95	D	108	D	96	D
241527001	WST03-10-2132	105	D	108	D	98	D

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(59%-130%)
TOL	= Toluene-d8	(76%-129%)
BFB	= Bromofluorobenzene	(71%-126%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Sample Type: Post Spike
Client ID: WST03-10-2131PS
Matrix: TCLP S
Lab Sample ID: 1201986406
Instrument: VOA1.I
Analysis Date: 12/03/2009 19:34
Dilution: 10
Analyst: RXM4
Prep Batch ID: 926094
Purge Vol: 5 mL
Batch ID: 928862

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
75-01-4	PS	Vinyl chloride	0.050	0.00	U	0.0442	88	51-134
75-35-4	PS	1,1-Dichloroethylene	0.050	0.00	U	0.0431	86	61-129
78-93-3	PS	2-Butanone	0.250	0.00	U	0.118	47	11-151
67-66-3	PS	Chloroform	0.050	0.00	U	0.0462	92	70-126
56-23-5	PS	Carbon tetrachloride	0.050	0.00	U	0.0451	90	66-138
107-06-2	PS	1,2-Dichloroethane	0.050	0.00	U	0.0407	81	65-129
71-43-2	PS	Benzene	0.050	0.00	U	0.0495	99	66-121
79-01-6	PS	Trichloroethylene	0.050	0.00	U	0.0483	97	66-127
127-18-4	PS	Tetrachloroethylene	0.050	0.00	U	0.0541	108	63-126
108-90-7	PS	Chlorobenzene	0.050	0.00	U	0.0529	106	69-120
106-46-7	PS	1,4-Dichlorobenzene	0.050	0.00	U	0.0509	102	64-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Client ID: WST03-10-2131PSD
Lab Sample ID: 1201986407
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/03/2009 20:05
Dilution: 10
Prep Batch ID: 926094
Batch ID: 928862

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-01-4	PSD	Vinyl chloride	0.050	0.00	U	0.0424	85	51-134	4	0-20
75-35-4	PSD	1,1-Dichloroethylene	0.050	0.00	U	0.0424	85	61-129	2	0-20
78-93-3	PSD	2-Butanone	0.250	0.00	U	0.115	46	11-151	2	0-20
67-66-3	PSD	Chloroform	0.050	0.00	U	0.0455	91	70-126	2	0-20
56-23-5	PSD	Carbon tetrachloride	0.050	0.00	U	0.0447	89	66-138	1	0-20
107-06-2	PSD	1,2-Dichloroethane	0.050	0.00	U	0.0405	81	65-129	0	0-20
71-43-2	PSD	Benzene	0.050	0.00	U	0.0507	101	66-121	2	0-20
79-01-6	PSD	Trichloroethylene	0.050	0.00	U	0.0488	98	66-127	1	0-20
127-18-4	PSD	Tetrachloroethylene	0.050	0.00	U	0.0506	101	63-126	7	0-20
108-90-7	PSD	Chlorobenzene	0.050	0.00	U	0.0512	102	69-120	3	0-20
106-46-7	PSD	1,4-Dichlorobenzene	0.050	0.00	U	0.0487	97	64-120	4	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Client ID: LCS for batch 928862
Lab Sample ID: 1201986408
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 10:11
Dilution: 1
Prep Batch ID: 926094
Batch ID: 928862

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
75-01-4	LCS	Vinyl chloride	0.050	0.0	0.051	102	61-131
75-35-4	LCS	1,1-Dichloroethylene	0.050	0.0	0.0508	102	70-128
78-93-3	LCS	2-Butanone	0.250	0.0	0.208	83	31-160
67-66-3	LCS	Chloroform	0.050	0.0	0.049	98	76-121
56-23-5	LCS	Carbon tetrachloride	0.050	0.0	0.0528	106	75-139
107-06-2	LCS	1,2-Dichloroethane	0.050	0.0	0.0411	82	70-123
71-43-2	LCS	Benzene	0.050	0.0	0.0553	111	72-120
79-01-6	LCS	Trichloroethylene	0.050	0.0	0.0561	112	76-123
127-18-4	LCS	Tetrachloroethylene	0.050	0.0	0.0597	119	72-126
108-90-7	LCS	Chlorobenzene	0.050	0.0	0.0549	110	76-120
106-46-7	LCS	1,4-Dichlorobenzene	0.050	0.0	0.056	112	74-120

Method Blank Summary

SDG Number:	10-600-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 928862	Instrument ID:	VOA1.I	Data File:	1o406TBB.d
Lab Sample ID:	1201986405	Prep Date:	12/03/2009 11:15	Analyzed:	12/03/09 11:15
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928862	1201986408	1o404TLB.d	12/03/09	1011
02 TB for batch 926094	1201980071	1o411.d	12/03/09	1358
03 WST03-10-2132	241527001	1o419.d	12/03/09	1802

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-600-1

Instrument ID: VOA1.I **Injection Date/Time:** 03-DEC-09 10:11

Column Description: RTX-Volatiles **Lab File ID** /120309v1/1o404BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	52.1
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	77.8
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	96.9
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091203-03	/120309v1/1o404.d	03-DEC-09 10:11
LCS	1201986408	/120309v1/1o404TLB.d	03-DEC-09 10:11
BLANK	1201986405	/120309v1/1o406TBB.d	03-DEC-09 11:15
TCLPBLANK	1201980071	/120309v1/1o411.d	03-DEC-09 13:58
WST03-10-2132	241527001	/120309v1/1o419.d	03-DEC-09 18:02

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-600-1

Instrument ID: VOA1.I **Injection Date/Time:** 13-NOV-09 22:17

Column Description: RTX-Volatiles **Lab File ID** /111309v1/11507.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	59
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.1
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W1VM091113-05	/111309v1/11509.d	13-NOV-09 23:18
VSTD001	W1VM091113-07	/111309v1/11511.d	14-NOV-09 00:18
VSTD002	W1VM091113-08	/111309v1/11512.d	14-NOV-09 00:48
VSTD005	W1VM091113-09	/111309v1/11513.d	14-NOV-09 01:19
VSTD010	W1VM091113-10	/111309v1/11514.d	14-NOV-09 01:49
VSTD020	W1VM091113-11	/111309v1/11515.d	14-NOV-09 02:19
VSTD050	W1VM091113-12	/111309v1/11516.d	14-NOV-09 02:49
VSTD100	W1VM091113-13	/111309v1/11517.d	14-NOV-09 03:19

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-600-1

Instrument ID: VOA1.I **Injection Date/Time:** 16-NOV-09 14:01

Column Description: RTX-Volatiles **Lab File ID** /111609v1/1m108BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	55
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050/LICV	W1VM091116-05	/111609v1/1m108.d	16-NOV-09 14:01

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-600-1

STD Analysis Time: 03-DEC-09 10:11

Data File: 1o404.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1050992		13.7	906319		17.2	507977		19.6
Upper Limit	2101984		14.2	1812638		17.7	1015954		20.1
Lower Limit	525496		13.2	453160		16.7	253989		19.1
Sample ID									
BLK01LCS	1050992		13.7	906319		17.2	507977		19.6
BLK01	1049253		13.7	885491		17.2	488664		19.6
TBLK01	1027921		13.7	874455		17.2	477083		19.6
WST03-10-2132	860064		13.7	735935		17.2	394345		19.6

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241527001	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928862	**Inst:**	VOA1.I	**Dilution:**	10
Run Date:	12/03/2009 18:02	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 16:30				
Data File:	1o419.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o419.d
Lab Smp Id: 241527001 Client Smp ID: WST03-10-2132
Inj Date : 03-DEC-2009 18:02
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241527001|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 19
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-600-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	860064	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	735935	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.606	(1.000)	394345	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.336	13.327	(0.975)	563452	52.7428	0.053
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1619135	54.0569	0.054
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	649835	49.0790	0.049

ION RATIO REPORT

VOA REPORT

Data file: 1o419.d
Report Date: 12/04/2009 07:31
Lab. ID: 241527001 SampleType: SAMPLE
Injection Date: 03-DEC-2009 18:02
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241527001|928862|10|VOAF|1|
Miscellaneous Info: LANL 500uL N/A
Comment:
Method used: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Dilution Factor= 10.0
Integrator: HP RTE Compound Sublist: 10-600-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14730	13.68	13.42	80-120	100	(T)
64	2529	13.69	13.42	2- 62	17	(T)
47 Benzene			CAS#: 71-43-2			
78	288	13.34	13.32	80-120	100	( )
77	16519	13.68	13.32	0- 53	5730	(QT)
51	177219	13.34	13.32	1- 61	61467	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/VOA1.i/120309v1/1o419.d
Date : 03-DEC-2009 18:02
Client ID: WST03-10-2132
Sample Info: |241527001|928862|10|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

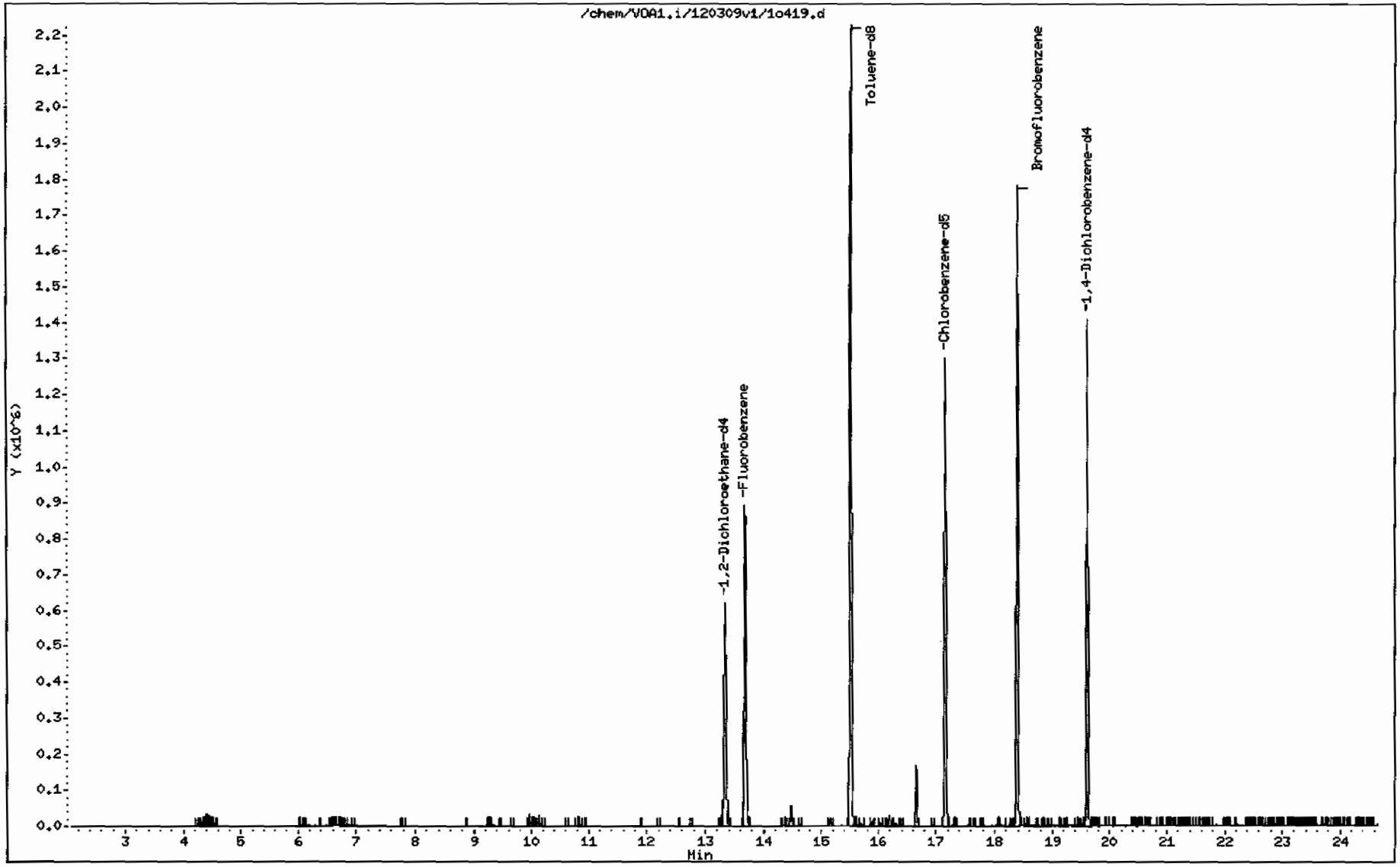

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 03-Dec-2009 13:09

Calibration History

Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Start Cal Date: 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 04:20	ICALsubS	/chem/VOA1.i/111309v1/11519.d
14-NOV-2009 00:18	CALsubL+	/chem/VOA1.i/111309v1/11511.d
Cal Level: 2 , Cal Amount: 2.00000		
14-NOV-2009 04:50	ICALsubS	/chem/VOA1.i/111309v1/11520.d
14-NOV-2009 00:48	CALsubL+	/chem/VOA1.i/111309v1/11512.d
Cal Level: 3 , Cal Amount: 5.00000		
14-NOV-2009 05:20	ICALsubS	/chem/VOA1.i/111309v1/11521.d
14-NOV-2009 01:19	CALsubL+	/chem/VOA1.i/111309v1/11513.d
Cal Level: 4 , Cal Amount: 10.00000		
14-NOV-2009 05:50	ICALsubS	/chem/VOA1.i/111309v1/11522.d
14-NOV-2009 01:49	CALsubL+	/chem/VOA1.i/111309v1/11514.d
Cal Level: 5 , Cal Amount: 20.00000		
14-NOV-2009 06:20	ICALsubS	/chem/VOA1.i/111309v1/11523.d
14-NOV-2009 02:19	CALsubL+	/chem/VOA1.i/111309v1/11515.d
Cal Level: 6 , Cal Amount: 50.00000		
14-NOV-2009 06:51	ICALsubS	/chem/VOA1.i/111309v1/11524.d
14-NOV-2009 02:49	CALsubL+	/chem/VOA1.i/111309v1/11516.d
Cal Level: 7 , Cal Amount: 100.00000		
14-NOV-2009 07:21	ICALsubS	/chem/VOA1.i/111309v1/11525.d
14-NOV-2009 03:19	CALsubL+	/chem/VOA1.i/111309v1/11517.d
Cal Level: 8 , Cal Amount: 200.00000		
13-NOV-2009 23:18	BENZENE+	/chem/VOA1.i/111309v1/11509.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0
03-DEC-2009 10:11 | CALsubL+ | /chem/VOA1.i/120309v1/1o404.d
Ccal Level: 6 , Ccal Amount: 50.0
03-DEC-2009 08:44 | CALsubL+ | /chem/VOA1.i/120309v1/1o402.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Calibration File Names:
Level 1: /chem/VOA1.i/111309v1/11519.d
Level 2: /chem/VOA1.i/111309v1/11520.d
Level 3: /chem/VOA1.i/111309v1/11521.d
Level 4: /chem/VOA1.i/111309v1/11522.d
Level 5: /chem/VOA1.i/111309v1/11523.d
Level 6: /chem/VOA1.i/111309v1/11524.d
Level 7: /chem/VOA1.i/111309v1/11525.d
Level 8: /chem/VOA1.i/111309v1/11509.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.81227	0.73137	0.78894	0.72498	0.74753	0.76443					
	0.83207	+++++					AVRG		0.77166		5.29959
M 2 1,2-Dichloroethylene (total)	0.34833	0.34223	0.35784	0.33479	0.33448	0.33077					
	0.34829	+++++					AVRG		0.34239		2.83217
M 3 1,3-Dichloropropylene	0.70586	0.72835	0.78706	0.78242	0.78994	0.81396					
	0.86766	+++++					AVRG		0.78218		6.82978
4 Chlorotrifluoroethylene	0.13485	0.14655	0.15206	0.14935	0.17832	0.16711					
	0.16995	+++++					AVRG		0.15688		9.76231
5 Dichlorodifluoromethane	0.38136	0.29154	0.34309	0.34840	0.34284	0.32399					
	0.30590	+++++					AVRG		0.33388		8.90428

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
6 Chloromethane	0.36352	0.41180	0.43566	0.42653	0.42921	0.41976					
	0.40514	+++++					AVRG		0.41309		5.86079
7 Vinyl chloride	0.37166	0.41882	0.39367	0.36887	0.36084	0.34024					
	0.32820	+++++					AVRG		0.36890		8.32269
8 2-Chloro-1,1,1-trifluoroethan	+++++	0.33998	0.31048	0.30901	0.32578	0.34040					
	0.34703	+++++					AVRG		0.32878		4.95744
9 Bromomethane	0.21690	0.22761	0.23531	0.22897	0.22468	0.21504					
	0.20365	+++++					AVRG		0.22174		4.78408
10 Chloroethane	0.19204	0.24536	0.23794	0.23300	0.23259	0.23061					
	0.22732	+++++					AVRG		0.22841		7.46771
11 Trichlorofluoromethane	0.43608	0.52008	0.53827	0.53954	0.53870	0.53854					
	0.52430	+++++					AVRG		0.51936		7.23293
12 Ethyl Ether	13883	16946	33985	58858	108474	271086					
	556612	+++++					WLINR	-0.01699	0.31004		0.99399
13 Acrolein	0.05333	0.04888	0.04523	0.05392	0.05442	+++++					
	+++++	+++++					AVRG		0.05116		7.77888
14 Trichlorotrifluoroethane	0.38443	0.29919	0.26333	0.27368	0.28733	0.26637					
	0.27318	+++++					AVRG		0.29250		14.49372

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
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Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
15 1,1-Dichloroethylene	0.66544	0.72486	0.72849	0.75349	0.72602	0.70860					
	0.70169	+++++					AVRG		0.71551		3.85053
16 Acetone	0.27960	0.29041	0.29028	0.29519	0.28855	0.29877					
	0.28827	+++++					AVRG		0.29015		2.07413
17 Isopropyl Alcohol	+++++	0.01880	0.01931	0.02045	0.01791	0.02228					
	0.02251	+++++					AVRG		0.02021		9.32490
18 Iodomethane	0.47134	0.45473	0.46938	0.46784	0.46221	0.46114					
	0.45366	+++++					AVRG		0.46290		1.51011
19 Carbon disulfide	0.96269	0.92797	0.89305	0.94299	0.92514	0.93790					
	0.86070	+++++					AVRG		0.92149		3.70371
20 Allyl chloride	0.09501	0.09361	0.09290	0.10507	0.12042	0.13013					
	+++++	+++++					AVRG		0.10619		14.81176
21 Methyl acetate	0.26593	0.25494	0.25595	0.25694	0.24207	0.22771					
	0.23511	+++++					AVRG		0.24838		5.51213
22 Acetonitrile	0.03907	0.03505	0.03613	0.03588	0.03452	0.03371					
	0.03550	+++++					AVRG		0.03569		4.76987
23 Methylene chloride	+++++	24051	41818	70969	131447	316200					
	681164	+++++					LINR	-0.03083	0.35083		0.99980

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
24 tert-Butyl Alcohol	0.03736	0.03924	0.03623	0.04125	0.03045	0.04033					
	0.04086	+++++					AVRG		0.03796		9.99389
25 tert-Butyl methyl ether	1.02944	1.16134	1.14779	1.21755	1.11739	1.12980					
	1.16499	+++++					AVRG		1.13833		5.06877
26 trans-1,2-Dichloroethylene	0.34072	0.33605	0.34935	0.32977	0.32190	0.31967					
	0.32891	+++++					AVRG		0.33234		3.15938
27 Acrylonitrile	0.11445	0.10516	0.09582	0.09726	0.11027	0.10992					
	0.11442	+++++					AVRG		0.10676		7.18030
28 Isopropyl ether	+++++	1.14017	1.11343	1.15572	1.20439	1.22887					
	1.32967	+++++					AVRG		1.19537		6.54154
29 Vinyl acetate	0.47200	0.53409	0.59574	0.55445	0.52377	0.60780					
	0.57002	+++++					AVRG		0.55113		8.40354
30 1,1-Dichloroethane	0.71917	0.72889	0.80378	0.74289	0.72120	0.71174					
	0.74337	+++++					AVRG		0.73872		4.20349
31 2-Chloro-1,3-butadiene	0.65721	0.59215	0.56354	0.55911	0.62777	0.61361					
	0.65818	+++++					AVRG		0.61022		6.67177
32 Ethyl tert-butyl ether	+++++	1.12815	1.09366	1.08936	1.06318	1.18087					
	1.29073	+++++					AVRG		1.14099		7.34717

GEL Laboratories LLC

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Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
33 2,2-Dichloropropane	0.48989	0.52491	0.58120	0.54053	0.55119	0.53778					
	0.55150	+++++					AVRG		0.53957		5.18583
34 Ethyl acetate	0.33965	0.28932	0.26285	0.29260	0.27580	0.29649					
	0.28868	+++++					AVRG		0.29220		8.17282
35 2-Butanone	0.25793	0.27740	0.26965	0.27914	0.28942	0.30924					
	0.30740	+++++					AVRG		0.28431		6.68268
36 cis-1,2-Dichloroethylene	0.35593	0.34838	0.36631	0.33981	0.34705	0.34186					
	0.36768	+++++					AVRG		0.35243		3.18022
37 Propionitrile	0.04783	0.04230	0.03731	0.04306	0.04379	0.04424					
	0.04431	+++++					AVRG		0.04326		7.28248
38 Tetrahydrofuran	0.23152	0.20954	0.20440	0.19096	0.19197	0.21633					
	0.18821	+++++					AVRG		0.20471		7.72518
39 Bromochloromethane	0.13887	0.13222	0.13837	0.14209	0.13930	0.14049					
	0.14893	+++++					AVRG		0.14004		3.56145
40 Methacrylonitrile	0.24963	0.22678	0.21065	0.22890	0.23535	0.24087					
	0.23039	+++++					AVRG		0.23180		5.27167
41 Chloroform	0.74775	0.77887	0.82572	0.78772	0.78034	0.77383					
	0.81096	+++++					AVRG		0.78646		3.24006

GEL Laboratories LLC

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Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
42 Cyclohexane	0.66345	0.64389	0.63890	0.66407	0.64404	0.63011					
	0.64678	+++++					AVRG		0.64732		1.92383
43 1,1,1-Trichloroethane	0.54517	0.62302	0.63779	0.62522	0.62893	0.61320					
	0.63805	+++++					AVRG		0.61591		5.25541
44 Carbon tetrachloride	0.56294	0.58644	0.63641	0.63628	0.63185	0.62091					
	0.64429	+++++					AVRG		0.61702		4.94513
45 1,1-Dichloropropene	0.55100	0.55607	0.56975	0.55980	0.55465	0.55195					
	0.58405	+++++					AVRG		0.56104		2.12886
46 Isobutyl alcohol	0.01033	0.01111	0.01036	0.01037	0.00985	0.01223					
	0.01175	+++++					AVRG		0.01086		7.98726
47 Benzene	36755	49089	122794	236505	464924	1202457					
	2698240	23667					LINR	0.00708	1.40915		0.99937
49 Methyl tert-amyl ether	+++++	0.88273	0.85934	0.84815	0.87620	0.96177					
	1.02973	+++++					AVRG		0.90966		7.81864
50 Cyclohexene	0.53615	0.51960	0.53427	0.54352	0.53716	0.52183					
	0.54823	+++++					AVRG		0.53439		1.96596
51 1,2-Dichloroethane	0.63028	0.70033	0.72243	0.70806	0.70200	0.69617					
	0.69894	+++++					AVRG		0.69403		4.24176

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
53 n-Butyl alcohol	0.00840	0.00793	0.00871	0.00963	0.00810	0.00978					
	0.01083	+++++					AVRG		0.00905		11.70077
54 Trichloroethylene	0.38407	0.37942	0.39497	0.37726	0.38205	0.37012					
	0.39468	+++++					AVRG		0.38323		2.36495
55 Methylcyclohexane	0.61415	0.59438	0.58177	0.58292	0.58847	0.57365					
	0.60973	+++++					AVRG		0.59215		2.53004
56 Methyl methacrylate	0.21424	0.18730	0.18064	0.19254	0.19905	0.20650					
	0.20620	+++++					AVRG		0.19807		6.00920
57 1,2-Dichloropropane	0.39078	0.35768	0.35900	0.35500	0.35022	0.35218					
	0.37196	+++++					AVRG		0.36240		3.96417
58 1,4-Dioxane	0.00305	0.00245	0.00266	0.00286	0.00318	0.00288					
	0.00289	+++++					AVRG		0.00285		8.49653
59 Dibromomethane	0.20277	0.23410	0.23268	0.22085	0.21845	0.22248					
	0.23307	+++++					AVRG		0.22349		5.00707
60 Bromodichloromethane	0.51667	0.56051	0.62592	0.60782	0.59837	0.61544					
	0.63717	+++++					AVRG		0.59456		7.08632
61 2-Chloroethylvinyl ether	2224	2878	11313	21547	54379	210480					
	505362	+++++					LINR	0.39138	0.05430		0.99354

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 / 100 Level 7	2 Level 2 / 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
62 2-Nitropropane	0.10211	0.09608	0.09548	0.10761	0.11835	0.11732					
	0.11890	+++++					AVRG		0.10798		9.61347
63 cis-1,3-Dichloropropylene	0.56705	0.57716	0.62105	0.61985	0.62451	0.64527					
	0.67992	+++++					AVRG		0.61926		6.21448
64 4-Methyl-2-pentanone	0.15705	0.17262	0.17271	0.18512	0.18978	0.21108					
	0.20813	+++++					AVRG		0.18521		10.62391
66 Toluene	1.14017	1.06414	1.10843	1.06181	1.07135	1.08649					
	1.15420	+++++					AVRG		1.09808		3.39614
67 Ethyl methacrylate	0.52322	0.48434	0.48427	0.53223	0.51154	0.52546					
	0.51582	+++++					AVRG		0.51098		3.79655
68 trans-1,3-Dichloropropylene	0.69838	0.72713	0.78298	0.78308	0.78831	0.81706					
	0.87099	+++++					AVRG		0.78113		7.23969
69 1,1,2-Trichloroethane	0.31590	0.30169	0.29945	0.29278	0.30402	0.30261					
	0.32301	+++++					AVRG		0.30563		3.37461
70 Tetrachloroethylene	0.34151	0.33330	0.33889	0.32547	0.32471	0.32346					
	0.34458	+++++					AVRG		0.33313		2.62178
71 2-Hexanone	0.42866	0.44990	0.45866	0.46921	0.50138	0.56178					
	0.55722	+++++					AVRG		0.48954		10.73922

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
72 1,3-Dichloropropane	0.67890	0.68207	0.69734	0.65590	0.66618	0.66440					
	0.71069	+++++					AVRG		0.67935		2.85695
73 Dibromochloromethane	0.38469	0.38394	0.44512	0.43782	0.44944	0.47113					
	0.49706	+++++					AVRG		0.43846		9.55461
74 1,2-Dibromoethane	0.34045	0.34527	0.36316	0.35106	0.36203	0.36864					
	0.38538	+++++					AVRG		0.35943		4.26460
75 1-Chlorohexane	+++++	0.39312	0.39282	0.32524	0.40104	0.42060					
	0.43305	+++++					AVRG		0.39431		9.49684
77 Chlorobenzene	1.21373	1.15844	1.14111	1.07587	1.08040	1.10429					
	1.17692	+++++					AVRG		1.13582		4.54042
78 Ethylbenzene	2.40687	2.33669	2.47268	2.23463	2.29813	2.32214					
	2.46303	+++++					AVRG		2.36203		3.74714
79 1,1,1,2-Tetrachloroethane	0.42049	0.43141	0.45326	0.42496	0.43613	0.44494					
	0.47082	+++++					AVRG		0.44029		3.98243
80 m,p-Xylenes	0.80780	0.74989	0.79953	0.72779	0.75646	0.76931					
	0.84008	+++++					AVRG		0.77870		4.98818
81 o-Xylene	0.82120	0.69429	0.76774	0.71936	0.72965	0.75467					
	0.81606	+++++					AVRG		0.75757		6.33656

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
82 Styrene	1.30914	1.18192	1.31601	1.23212	1.27501	1.34034					
	1.43319	+++++					AVRG		1.29825		6.19894
83 Bromoform	0.42221	0.45244	0.46276	0.49988	0.51775	0.53547					
	0.59142	+++++					AVRG		0.49742		11.48565
84 Isopropylbenzene	3.92962	3.81106	4.36021	3.96245	4.03248	4.02489					
	4.35218	+++++					AVRG		4.06756		5.17225
85 cis-1,4-Dichloro-2-butene	0.30225	0.29462	0.29877	0.29084	0.32781	0.32850					
	0.31209	+++++					AVRG		0.30784		4.99910
86 Cyclohexanone	12846	23538	58910	150579	381845	+++++					
	+++++	+++++					LINR	0.49988	0.04909		0.99135
88 1,1,2,2-Tetrachloroethane	0.75610	0.74369	0.81649	0.79419	0.78783	0.79158					
	0.86202	+++++					AVRG		0.79313		4.92083
89 n-Propylbenzene	4.79404	4.78851	5.23968	4.82134	4.89570	4.92964					
	5.21295	+++++					AVRG		4.95455		3.89310
90 trans-1,4-Dichloro-2-butene	0.29812	0.31352	0.28782	0.26998	0.31695	0.31835					
	0.29727	+++++					AVRG		0.30029		5.87400
91 Bromobenzene	0.85156	0.84147	0.85882	0.81020	0.81428	0.82700					
	0.88455	+++++					AVRG		0.84113		3.13962

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
92 1,2,3-Trichloropropane	0.28022	0.26897	0.25372	0.25204	0.25423	0.25360					
	0.26290	+++++					AVRG		0.26081		4.05222
93 1,3,5-Trimethylbenzene	3.43446	3.49218	3.68233	3.44662	3.56449	3.59826					
	3.86366	+++++					AVRG		3.58314		4.23441
94 2-Chlorotoluene	3.47821	3.57761	3.79930	3.46640	3.52829	3.52154					
	3.75641	+++++					AVRG		3.58968		3.73608
95 4-Chlorotoluene	3.35203	3.17426	3.34752	3.10435	3.16879	3.17490					
	3.33681	+++++					AVRG		3.23695		3.22666
96 tert-Butylbenzene	2.87089	2.74977	2.84522	2.66297	2.72776	2.70387					
	2.96377	+++++					AVRG		2.78918		3.84009
97 1,2,4-Trimethylbenzene	3.70191	3.60410	3.79540	3.52090	3.56225	3.61987					
	3.87066	+++++					AVRG		3.66787		3.47854
98 Pentachloroethane	0.32060	0.31703	0.32398	0.24876	0.30297	0.37777					
	0.29193	+++++					AVRG		0.31186		12.45420
99 sec-Butylbenzene	4.44800	4.34644	4.60966	4.23567	4.42485	4.37976					
	4.71803	+++++					AVRG		4.45177		3.66291
100 4-Isopropyltoluene	3.36328	3.22054	3.51684	3.17589	3.32966	3.36325					
	3.58839	+++++					AVRG		3.36541		4.38795

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
101 1,3-Dichlorobenzene	1.67374	1.55428	1.66831	1.53164	1.55944	1.58328					
	1.67251	+++++					AVRG		1.60617		3.91971
103 1,4-Dichlorobenzene	1.76616	1.66887	1.68200	1.51979	1.57239	1.60865					
	1.70636	+++++					AVRG		1.64632		5.12085
104 Benzyl chloride	1.62969	1.55776	1.60390	1.34298	1.74375	1.69429					
	1.59116	+++++					AVRG		1.59479		8.02116
105 n-Butylbenzene	3.64538	3.69207	3.98159	3.55254	3.74217	3.76878					
	3.99375	+++++					AVRG		3.76804		4.39399
106 1,2-Dichlorobenzene	1.66043	1.49940	1.55636	1.46965	1.48387	1.49852					
	1.59506	+++++					AVRG		1.53761		4.53951
107 bis(2-Chloroisopropyl)ether	0.37106	0.36662	0.32099	0.32780	0.38946	0.39192					
	0.35359	+++++					AVRG		0.36021		7.73065
108 1,2-Dibromo-3-chloropropane	0.14172	0.13191	0.14045	0.15188	0.15917	0.15194					
	0.18132	+++++					AVRG		0.15120		10.62761
109 1,2,4-Trichlorobenzene	1.16045	1.14150	1.16560	1.09295	1.12242	1.11980					
	1.19388	+++++					AVRG		1.14237		2.96215
110 Hexachlorobutadiene	0.84192	0.81403	0.87311	0.75366	0.80851	0.77001					
	0.79946	+++++					AVRG		0.80867		5.02104

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
111 Naphthalene	2.12943	2.03059	1.99480	2.09592	2.16328	2.08234					
	2.33666	+++++					AVRG		2.11900		5.26088
112 1,2,3-Trichlorobenzene	0.93318	0.98133	0.98253	0.97572	0.96237	0.91436					
	0.97897	+++++					AVRG		0.96121		2.80674
$ 48 1,2-Dichloroethane-d4	0.52359	0.62803	0.63025	0.66045	0.64311	0.65420					
	0.60778	+++++					AVRG		0.62106		7.47894
$ 65 Toluene-d8	1.93610	2.03435	2.05225	2.06640	2.00752	2.08350					
	2.06482	+++++					AVRG		2.03499		2.46206
$ 87 Bromofluorobenzene	1.60564	1.67611	1.67667	1.73493	1.66503	1.69222					
	1.70106	+++++					AVRG		1.67881		2.35521

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Report Date: 01-Dec-2009 16:53

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.78659	0.78659	0.050	1.93501	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34829	0.34829	0.050	1.72438	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.76082	0.76082	0.050	-2.73046	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.28961	0.28961	0.050	-13.25713	30.00000	Averaged	
	6 Chloromethane	0.41309	0.34567	0.34567	0.100	-16.32056	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.30586	0.30586	0.050	-17.08914	20.00000	Averaged	ccc
	9 Bromomethane	0.22174	0.21949	0.21949	0.050	-1.01260	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24501	0.24501	0.050	7.27015	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.53920	0.53920	0.050	3.81924	30.00000	Averaged	
	12 Ethyl Ether	45.83993	50.00000	0.28952	0.010	-8.32014	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19861	0.19861	0.000	-31.55015	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03488	0.03488	0.010	-2.28372	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.66262	0.66262	0.050	-7.39264	20.00000	Averaged	ccc
	21 Methyl acetate	0.24838	0.21471	0.21471	0.010	-13.55590	40.00000	Averaged	
	18 Iodomethane	0.46290	0.47705	0.47705	0.050	3.05775	30.00000	Averaged	
	23 Methylene chloride	49.69453	50.00000	0.35951	0.000	-0.61094	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.06038	1.06038	0.050	15.07243	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.01424	1.01424	0.050	-10.90101	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.34226	0.34226	0.050	2.98628	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.66089	0.66089	0.010	19.91591	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.68036	0.68036	0.100	-7.89939	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.21356	0.21356	0.030	-24.88572	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.35432	0.35432	0.050	0.53641	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52117	0.52117	0.050	-3.41129	30.00000	Averaged	
	41 Chloroform	0.78646	0.70224	0.70224	0.010	-10.70855	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.14700	0.14700	0.010	4.97038	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.56828	0.56828	0.010	-7.73277	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.70592	0.70592	0.010	9.05253	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55571	0.55571	0.010	-0.95042	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00962	0.00962	0.001	6.25892	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.57859	0.57859	0.010	-6.22742	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62106	0.48336	0.48336	0.010	-22.17142	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.55944	0.55944	0.010	-19.39207	30.00000	Averaged	
	47 Benzene	50.28606	50.00000	1.40724	0.010	0.57211	30.00000	Linear	
	50 Cyclohexene	0.53439	0.52276	0.52276	0.010	-2.17678	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.37928	0.37928	0.010	-1.03062	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.35751	0.35751	0.010	-1.35037	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.64311	0.64311	0.010	8.60482	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.53560	0.53560	0.010	-9.91614	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20094	0.20094	0.010	-10.08947	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	197	250	0.03848	0.000	-21.31056	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.16731	0.16731	0.010	-9.66493	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.60977	0.60977	0.010	-1.53290	30.00000	Averaged	
$	65 Toluene-d8	2.03499	1.97166	1.97166	0.010	-3.11196	30.00000	Averaged	
	66 Toluene	1.09808	1.09311	1.09311	0.010	-0.45345	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.75103	0.75103	0.010	-3.85367	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.29722	0.29722	0.010	-2.75287	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.37565	0.37565	0.010	-23.26575	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.63720	0.63720	0.010	-6.20551	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34435	0.34435	0.010	3.36940	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.42649	0.42649	0.010	-2.73068	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.35320	0.35320	0.010	-1.73152	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.16153	1.16153	0.300	2.26365	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.42501	0.42501	0.010	-3.47076	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.28751	2.28751	0.010	-3.15483	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.80163	0.80163	0.010	2.94558	30.00000	Averaged	
	81 o-Xylene	0.75757	0.75650	0.75650	0.010	-0.14143	30.00000	Averaged	
	82 Styrene	1.29825	1.33826	1.33826	0.010	3.08236	30.00000	Averaged	
	83 Bromoform	0.49742	0.51659	0.51659	0.100	3.85450	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	4.09104	4.09104	0.010	0.57739	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.80201	0.80201	0.300	1.11984	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.59852	1.59852	0.010	-4.78243	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.22267	0.22267	0.010	-14.62239	30.00000	Averaged	
	91 Bromobenzene	0.84113	0.86234	0.86234	0.010	2.52236	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.95567	4.95567	0.010	0.02259	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.47589	3.47589	0.010	-3.16985	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.53161	3.53161	0.010	-1.43822	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.13706	3.13706	0.010	-3.08595	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.83816	2.83816	0.010	1.75609	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.59991	3.59991	0.010	-1.85290	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.49320	4.49320	0.010	0.93061	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.51635	3.51635	0.010	4.48521	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.71300	1.71300	0.010	6.65131	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.70171	1.70171	0.010	3.36466	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.75570	3.75570	0.010	-0.32761	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.59378	1.59378	0.010	3.65299	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.16033	0.16033	0.010	6.03864	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20851	1.20851	0.010	5.78950	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.82340	0.82340	0.010	1.82157	30.00000	Averaged
111 Naphthalene	2.11900	2.27355	2.27355	0.010	7.29312	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.98434	0.98434	0.010	2.40643	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.36236
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111609v1/1m108ICV.d
Lab Smp Id: W1VM091116-05 Client Smp ID: ICV
Inj Date : 16-NOV-2009 14:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091116-05|CCV/LCS/ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m
Meth Date : 01-Dec-2009 16:53 slg Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2088100	150.000	153
M 2 1,2-Dichloroethylene (total)	96				778988	100.000	102
M 3 1,3-Dichloropropylene	75				1346471	100.000	97.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	323873	50.0000	43.4
6 Chloromethane	50	5.550	5.550	(0.405)	386561	50.0000	41.8
7 Vinyl chloride	62	5.923	5.923	(0.433)	342039	50.0000	41.4
9 Bromomethane	96	6.948	6.948	(0.508)	245458	50.0000	49.5
10 Chloroethane	64	7.215	7.215	(0.527)	273997	50.0000	53.6
11 Trichlorofluoromethane	101	7.836	7.836	(0.573)	602979	50.0000	51.9
12 Ethyl Ether	59	8.476	8.476	(0.619)	323763	50.0000	45.8
16 Acetone	43	9.254	9.254	(0.676)	1110521	250.000	171
22 Acetonitrile	41	9.976	9.976	(0.729)	975078	1250.00	1220
15 1,1-Dichloroethylene	61	9.093	9.093	(0.664)	741002	50.0000	46.3
21 Methyl acetate	43	9.838	9.838	(0.719)	1200537	250.000	216
18 Iodomethane	142	9.470	9.470	(0.692)	2667438	250.000	258

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	23 Methylene chloride	84	10.137	10.137	(0.741)	402034	50.0000	49.7
	19 Carbon disulfide	76	9.571	9.571	(0.699)	5929090	250.000	288
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1134219	50.0000	44.5
	26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	382752	50.0000	51.5
	29 Vinyl acetate	43	11.297	11.297	(0.825)	3695328	250.000	300
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	760846	50.0000	46.0
	35 2-Butanone	43	12.186	12.186	(0.890)	1194107	250.000	188
	36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	396236	50.0000	50.3
	33 2,2-Dichloropropane	77	12.158	12.158	(0.888)	582817	50.0000	48.3
	41 Chloroform	83	12.614	12.614	(0.922)	785308	50.0000	44.6
	39 Bromochloromethane	128	12.559	12.559	(0.918)	164387	50.0000	52.5
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	635509	50.0000	46.1
	42 Cyclohexane	56	12.839	12.839	(0.938)	789422	50.0000	54.5
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	621443	50.0000	49.5
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1075626	5000.00	5310
	44 Carbon tetrachloride	117	13.024	13.024	(0.952)	647037	50.0000	46.9
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	540540	50.0000	38.9
	51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	625621	50.0000	40.3
	47 Benzene	78	13.337	13.337	(0.974)	1573713	50.0000	50.3
	50 Cyclohexene	54	13.396	13.396	(0.979)	584602	50.0000	48.9
*	52 Fluorobenzene	96	13.686	13.686	(1.000)	1118294	50.0000	
	54 Trichloroethylene	95	14.119	14.119	(1.032)	424142	50.0000	49.5
	57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	399800	50.0000	49.3
	55 Methylcyclohexane	83	14.285	14.285	(1.044)	719182	50.0000	54.3
	60 Bromodichloromethane	83	14.754	14.754	(1.078)	598959	50.0000	45.0
	59 Dibromomethane	93	14.621	14.621	(1.068)	224707	50.0000	45.0
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	215138	250.000	197
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	740258	250.000	226
	63 cis-1,3-Dichloropropylene	75	15.261	15.261	(1.115)	681900	50.0000	49.2
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1744680	50.0000	48.4
	66 Toluene	92	15.597	15.597	(0.909)	967265	50.0000	49.8
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	664571	50.0000	48.1
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	263004	50.0000	48.6
	71 2-Hexanone	43	16.269	16.269	(0.948)	1662015	250.000	192
	72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	563840	50.0000	46.9
	70 Tetrachloroethylene	164	16.195	16.195	(0.944)	304712	50.0000	51.7
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	377389	50.0000	48.6
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	312543	50.0000	49.1
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	884878	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	1027816	50.0000	51.1
	79 1,1,1,2-Tetrachloroethane	131	17.263	17.263	(1.006)	376079	50.0000	48.3
	78 Ethylbenzene	91	17.222	17.222	(1.003)	2024165	50.0000	48.4
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1418694	100.000	103
	81 o-Xylene	106	17.783	17.783	(1.036)	669406	50.0000	49.9
	82 Styrene	104	17.806	17.806	(1.038)	1184200	50.0000	51.5
	83 Bromoform	173	18.105	18.105	(0.923)	253734	50.0000	51.9
	84 Isopropylbenzene	105	18.133	18.133	(0.924)	2009401	50.0000	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.510	18.510	(0.944)	393924	50.0000	50.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	785147	50.0000	47.6
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	109371	50.0000	42.7
91 Bromobenzene	156	18.593	18.593	(0.948)	423557	50.0000	51.3
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2434081	50.0000	50.0
94 2-Chlorotoluene	91	18.745	18.745	(0.956)	1707258	50.0000	48.4
93 1,3,5-Trimethylbenzene	105	18.722	18.722	(0.954)	1734624	50.0000	49.3
95 4-Chlorotoluene	91	18.856	18.856	(0.961)	1540833	50.0000	48.4
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1394021	50.0000	50.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1768170	50.0000	49.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2206931	50.0000	50.5
100 4-Isopropyltoluene	119	19.426	19.426	(0.990)	1727131	50.0000	52.2
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.996)	841377	50.0000	53.3
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.615	(1.000)	491171	50.0000	
103 1,4-Dichlorobenzene	146	19.643	19.643	(1.001)	835831	50.0000	51.7
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1844689	50.0000	49.8
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	782819	50.0000	51.8
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78748	50.0000	53.0
109 1,2,4-Trichlorobenzene	180	22.027	22.027	(1.123)	593584	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	404431	50.0000	50.9
111 Naphthalene	128	22.441	22.441	(1.144)	1116700	50.0000	53.6
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	483479	50.0000	51.2

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Date : 16-NOV-2009 14:01
Client ID: ICV
Sample Info: IW:VH091116-05ICCV/LCS/ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

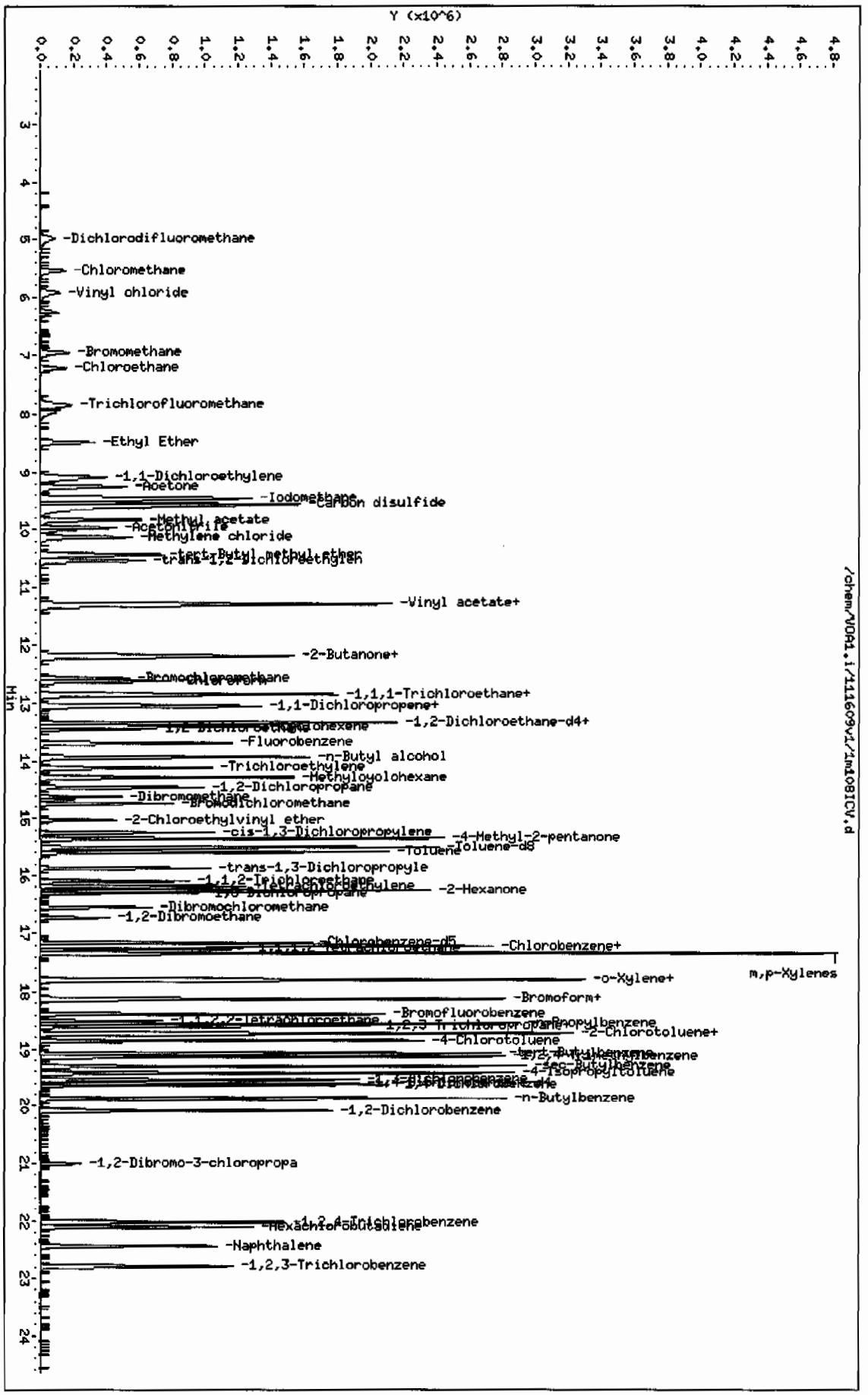

Page 1

Data File: /chem/VOA1.i/120309v1/1o404.d
Report Date: 03-Dec-2009 15:05

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 03-DEC-2009 10:11
Lab File ID: 1o404.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091203-03 Quant Type: ISTD
Method: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.85467	0.85467	0.050	10.75866	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.39831	0.39831	0.050	16.33372	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.76670	0.76670	0.050	-1.97867	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.34588	0.34588	0.050	3.59618	30.00000	Averaged	
	6 Chloromethane	0.41309	0.41168	0.41168	0.100	-0.33984	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.37611	0.37611	0.050	1.95348	20.00000	Averaged	ccc
	9 Bromomethane	0.22174	0.27341	0.27341	0.050	23.30301	30.00000	Averaged	
	10 Chloroethane	0.22841	0.28884	0.28884	0.050	26.45778	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.62256	0.62256	0.050	19.87009	30.00000	Averaged	
	12 Ethyl Ether	49.09385	50.00000	0.30969	0.010	-1.81230	30.00000	Wt Linear	
	16 Acetone	0.29015	0.22291	0.22291	0.000	-23.17672	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03962	0.03962	0.010	11.01026	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.72704	0.72704	0.050	1.61030	20.00000	Averaged	ccc
	21 Methyl acetate	0.24838	0.23298	0.23298	0.010	-6.20131	40.00000	Averaged	
	18 Iodomethane	0.46290	0.55782	0.55782	0.050	20.50595	30.00000	Averaged	
	23 Methylene chloride	55.97463	50.00000	0.40357	0.000	11.94927	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.18714	1.18714	0.050	28.82779	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.08107	1.08107	0.050	-5.02995	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.39162	0.39162	0.050	17.83788	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.71177	0.71177	0.010	29.14873	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.74899	0.74899	0.100	1.39064	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.23622	0.23622	0.030	-16.91573	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.40501	0.40501	0.050	14.91759	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.56448	0.56448	0.050	4.61535	30.00000	Averaged	
	41 Chloroform	0.78646	0.77105	0.77105	0.010	-1.95890	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.16908	0.16908	0.010	20.73711	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.62330	0.62330	0.010	1.19951	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.75868	0.75868	0.010	17.20379	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.61093	0.61093	0.010	8.89208	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.01095	0.01095	0.001	20.98801	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.65202	0.65202	0.010	5.67284	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62106	0.59453	0.59453	0.010	-4.27223	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.57027	0.57027	0.010	-17.83161	30.00000	Averaged	
	47 Benzene	55.26553	50.00000	1.54758	0.010	10.53107	30.00000	Linear	
	50 Cyclohexene	0.53439	0.56109	0.56109	0.010	4.99587	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1o404.d
Analysis Type: WATER
Lab Sample ID: W1VM091203-03
Method: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m

Injection Date: 03-DEC-2009 10:11
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
54 Trichloroethylene	0.38323	0.43001	0.43001	0.010	12.20902	30.00000	Averaged
57 1,2-Dichloropropane	0.36240	0.37833	0.37833	0.010	4.39589	20.00000	Averaged ccc
55 Methylcyclohexane	0.59215	0.72646	0.72646	0.010	22.68155	30.00000	Averaged
60 Bromodichloromethane	0.59456	0.58406	0.58406	0.010	-1.76533	30.00000	Averaged
59 Dibromomethane	0.22349	0.22910	0.22910	0.010	2.51043	30.00000	Averaged
61 2-Chloroethylvinyl ether	238	250	0.04748	0.000	-4.72224	30.00000	Linear
64 4-Methyl-2-pentanone	0.18521	0.17204	0.17204	0.010	-7.11502	40.00000	Averaged
63 cis-1,3-Dichloropropylene	0.61926	0.67420	0.67420	0.010	8.87191	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.07455	2.07455	0.010	1.94410	30.00000	Averaged
66 Toluene	1.09808	1.18296	1.18296	0.010	7.72953	20.00000	Averaged ccc
68 trans-1,3-Dichloropropylene	0.78113	0.75158	0.75158	0.010	-3.78280	30.00000	Averaged
69 1,1,2-Trichloroethane	0.30563	0.31145	0.31145	0.010	1.90419	30.00000	Averaged
71 2-Hexanone	0.48954	0.37477	0.37477	0.010	-23.44455	40.00000	Averaged
72 1,3-Dichloropropane	0.67935	0.64608	0.64608	0.010	-4.89728	30.00000	Averaged
70 Tetrachloroethylene	0.33313	0.39744	0.39744	0.010	19.30332	30.00000	Averaged
73 Dibromochloromethane	0.43846	0.45325	0.45325	0.010	3.37389	30.00000	Averaged
74 1,2-Dibromoethane	0.35943	0.37908	0.37908	0.010	5.46707	30.00000	Averaged
77 Chlorobenzene	1.13582	1.24739	1.24739	0.300	9.82214	30.00000	Averaged spcc
79 1,1,1,2-Tetrachloroethane	0.44029	0.44843	0.44843	0.010	1.84822	30.00000	Averaged
78 Ethylbenzene	2.36203	2.39927	2.39927	0.010	1.57670	20.00000	Averaged ccc
80 m,p-Xylenes	0.77870	0.86247	0.86247	0.010	10.75845	30.00000	Averaged
81 o-Xylene	0.75757	0.83908	0.83908	0.010	10.76024	30.00000	Averaged
82 Styrene	1.29825	1.44467	1.44467	0.010	11.27878	30.00000	Averaged
83 Bromoform	0.49742	0.54926	0.54926	0.100	10.42225	30.00000	Averaged spcc
84 Isopropylbenzene	4.06756	4.32240	4.32240	0.010	6.26523	30.00000	Averaged
88 1,1,2,2-Tetrachloroethane	0.79313	0.85696	0.85696	0.300	8.04825	30.00000	Averaged spcc
$ 87 Bromofluorobenzene	1.67881	1.51562	1.51562	0.010	-9.72076	30.00000	Averaged
92 1,2,3-Trichloropropane	0.26081	0.24669	0.24669	0.010	-5.41299	30.00000	Averaged
91 Bromobenzene	0.84113	0.94245	0.94245	0.010	12.04601	30.00000	Averaged
89 n-Propylbenzene	4.95455	5.16161	5.16161	0.010	4.17918	30.00000	Averaged
94 2-Chlorotoluene	3.58968	3.56730	3.56730	0.010	-0.62360	30.00000	Averaged
93 1,3,5-Trimethylbenzene	3.58314	3.70598	3.70598	0.010	3.42812	30.00000	Averaged
95 4-Chlorotoluene	3.23695	3.25188	3.25188	0.010	0.46123	30.00000	Averaged
96 tert-Butylbenzene	2.78918	2.98594	2.98594	0.010	7.05465	30.00000	Averaged
97 1,2,4-Trimethylbenzene	3.66787	3.73402	3.73402	0.010	1.80354	30.00000	Averaged
99 sec-Butylbenzene	4.45177	4.80755	4.80755	0.010	7.99188	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1o404.d
Analysis Type: WATER
Lab Sample ID: W1VM091203-03
Method: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m

Injection Date: 03-DEC-2009 10:11
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.71284	3.71284	0.010	10.32359	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.81966	1.81966	0.010	13.29180	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.84531	1.84531	0.010	12.08723	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.92666	3.92666	0.010	4.20968	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.69903	1.69903	0.010	10.49791	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.17567	0.17567	0.010	16.18659	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.33685	1.33685	0.010	17.02427	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.84326	0.84326	0.010	4.27767	30.00000	Averaged
111 Naphthalene	2.11900	2.45813	2.45813	0.010	16.00412	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	1.15407	1.15407	0.010	20.06420	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.84459
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o404.d
Lab Smp Id: W1VM091203-03 Client Smp ID: VSTD050
Inj Date : 03-DEC-2009 10:11
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091203-03|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091129-01A/IVM091130-01
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2323824	150.000	166
M 2 1,2-Dichloroethylene (total)	96				837249	100.000	116
M 3 1,3-Dichloropropylene	75				1389755	100.000	102
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	363519	50.0000	51.8
6 Chloromethane	50	5.535	5.535	(0.405)	432677	50.0000	49.8
7 Vinyl chloride	62	5.908	5.908	(0.432)	395284	50.0000	51.0
9 Bromomethane	96	6.934	6.934	(0.507)	287352	50.0000	61.6
10 Chloroethane	64	7.196	7.196	(0.526)	303568	50.0000	63.2
11 Trichlorofluoromethane	101	7.818	7.818	(0.572)	654302	50.0000	59.9
12 Ethyl Ether	59	8.462	8.462	(0.619)	325484	50.0000	49.1
16 Acetone	43	9.235	9.235	(0.675)	1171360	250.000	192
22 Acetonitrile	41	9.953	9.953	(0.728)	1041067	1250.00	1390
15 1,1-Dichloroethylene	61	9.065	9.065	(0.663)	764108	50.0000	50.8
21 Methyl acetate	43	9.815	9.815	(0.718)	1224279	250.000	234
18 Iodomethane	142	9.447	9.447	(0.691)	2931336	250.000	301

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
23 Methylene chloride	84	10.119	10.119	(0.740)	424151	50.0000	56.0
19 Carbon disulfide	76	9.562	9.562	(0.699)	6238351	250.000	322
25 tert-Butyl methyl ether	73	10.423	10.423	(0.762)	1136198	50.0000	47.5
26 trans-1,2-Dichloroethylene	96	10.529	10.529	(0.770)	411591	50.0000	58.9
29 Vinyl acetate	43	11.279	11.279	(0.825)	3740329	250.000	323
30 1,1-Dichloroethane	63	11.307	11.307	(0.827)	787182	50.0000	50.7
35 2-Butanone	43	12.167	12.167	(0.890)	1241318	250.000	208
36 cis-1,2-Dichloroethylene	96	12.186	12.186	(0.891)	425657	50.0000	57.4
33 2,2-Dichloropropane	77	12.144	12.144	(0.888)	593259	50.0000	52.3
41 Chloroform	83	12.595	12.595	(0.921)	810367	50.0000	49.0
39 Bromochloromethane	128	12.545	12.545	(0.918)	177698	50.0000	60.4
43 1,1,1-Trichloroethane	97	12.830	12.830	(0.938)	655082	50.0000	50.6
42 Cyclohexane	56	12.830	12.830	(0.938)	797367	50.0000	58.6
45 1,1-Dichloropropene	75	13.037	13.037	(0.954)	642078	50.0000	54.4
53 n-Butyl alcohol	56	13.921	13.921	(1.018)	1151017	5000.00	6050
44 Carbon tetrachloride	117	13.010	13.010	(0.952)	685267	50.0000	52.8
$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	624841	50.0000	47.9
51 1,2-Dichloroethane	62	13.424	13.424	(0.982)	599351	50.0000	41.1
47 Benzene	78	13.318	13.318	(0.974)	1626496	50.0000	55.3
50 Cyclohexene	54	13.378	13.378	(0.978)	589703	50.0000	52.5
* 52 Fluorobenzene	96	13.673	13.673	(1.000)	1050992	50.0000	
54 Trichloroethylene	95	14.105	14.105	(1.032)	451940	50.0000	56.1
57 1,2-Dichloropropane	63	14.446	14.446	(1.057)	397625	50.0000	52.2
55 Methylcyclohexane	83	14.271	14.271	(1.044)	763506	50.0000	61.3
60 Bromodichloromethane	83	14.740	14.740	(1.078)	613844	50.0000	49.1
59 Dibromomethane	93	14.616	14.616	(1.069)	240778	50.0000	51.2
61 2-Chloroethylvinyl ether	63	15.021	15.021	(1.099)	249521	250.000	238
64 4-Methyl-2-pentanone	58	15.353	15.353	(0.895)	779596	250.000	232
63 cis-1,3-Dichloropropylene	75	15.247	15.247	(1.115)	708580	50.0000	54.4
$ 65 Toluene-d8	98	15.514	15.514	(0.904)	1880206	50.0000	51.0
66 Toluene	92	15.587	15.587	(0.909)	1072140	50.0000	53.9
68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	681175	50.0000	48.1
69 1,1,2-Trichloroethane	83	16.094	16.094	(0.938)	282276	50.0000	51.0
71 2-Hexanone	43	16.264	16.264	(0.948)	1698320	250.000	191
72 1,3-Dichloropropane	76	16.301	16.301	(0.950)	585557	50.0000	47.6
70 Tetrachloroethylene	164	16.181	16.181	(0.943)	360203	50.0000	59.6
73 Dibromochloromethane	129	16.540	16.540	(0.964)	410791	50.0000	51.7
74 1,2-Dibromoethane	107	16.720	16.720	(0.975)	343565	50.0000	52.7
* 76 Chlorobenzene-d5	117	17.152	17.152	(1.000)	906319	50.0000	
77 Chlorobenzene	112	17.185	17.185	(1.002)	1130528	50.0000	54.9
79 1,1,1,2-Tetrachloroethane	131	17.254	17.254	(1.006)	406416	50.0000	50.9
78 Ethylbenzene	91	17.212	17.212	(1.003)	2174501	50.0000	50.8
80 m,p-Xylenes	106	17.332	17.332	(1.010)	1563347	100.000	111
81 o-Xylene	106	17.779	17.779	(1.036)	760476	50.0000	55.4
82 Styrene	104	17.797	17.797	(1.038)	1309335	50.0000	55.6
83 Bromoform	173	18.101	18.101	(0.923)	279011	50.0000	55.2
84 Isopropylbenzene	105	18.124	18.124	(0.924)	2195679	50.0000	53.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.501	18.501	(0.944)	435316	50.0000	54.0
$ 87 Bromofluorobenzene	95	18.381	18.381	(0.938)	769897	50.0000	45.1
92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	125314	50.0000	47.3
91 Bromobenzene	156	18.589	18.589	(0.948)	478741	50.0000	56.0
89 n-Propylbenzene	91	18.556	18.556	(0.946)	2621979	50.0000	52.1
94 2-Chlorotoluene	91	18.736	18.736	(0.956)	1812104	50.0000	49.7
93 1,3,5-Trimethylbenzene	105	18.713	18.713	(0.954)	1882551	50.0000	51.7
95 4-Chlorotoluene	91	18.851	18.851	(0.961)	1651880	50.0000	50.2
96 tert-Butylbenzene	119	19.072	19.072	(0.973)	1516791	50.0000	53.5
97 1,2,4-Trimethylbenzene	105	19.132	19.132	(0.976)	1896797	50.0000	50.9
99 sec-Butylbenzene	105	19.297	19.297	(0.984)	2442127	50.0000	54.0
100 4-Isopropyltoluene	119	19.417	19.417	(0.990)	1886037	50.0000	55.2
101 1,3-Dichlorobenzene	146	19.537	19.537	(0.996)	924345	50.0000	56.6
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	507977	50.0000	
103 1,4-Dichlorobenzene	146	19.634	19.634	(1.001)	937376	50.0000	56.0
105 n-Butylbenzene	91	19.864	19.864	(1.013)	1994654	50.0000	52.1
106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	863067	50.0000	55.2
108 1,2-Dibromo-3-chloropropane	157	20.996	20.996	(1.071)	89236	50.0000	58.1
109 1,2,4-Trichlorobenzene	180	22.018	22.018	(1.123)	679089	50.0000	58.5
110 Hexachlorobutadiene	225	22.101	22.101	(1.127)	428358	50.0000	52.1
111 Naphthalene	128	22.437	22.437	(1.144)	1248675	50.0000	58.0
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	586239	50.0000	60.0

Data File: /chem/VOA1.i/120309v1/1o404.d
Date : 03-DEC-2009 10:11
Client ID: VSTD050
Sample Info: IW1VH091203-03ICCV/LCS1I1VOAF1I1
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

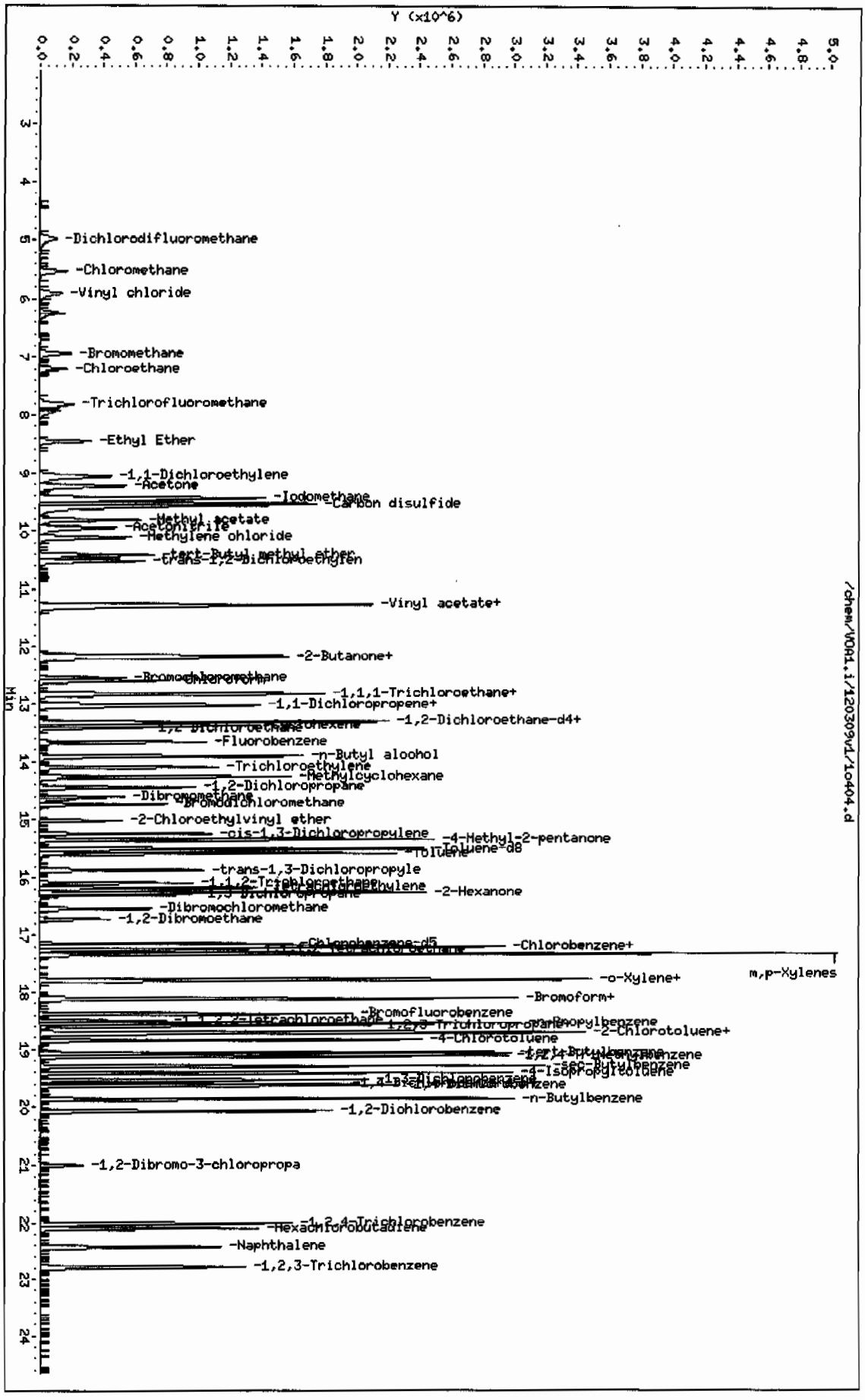

Page 1

QC Data

Data File: /chem/VOA1.i/111309v1/11507.d

Page 1

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

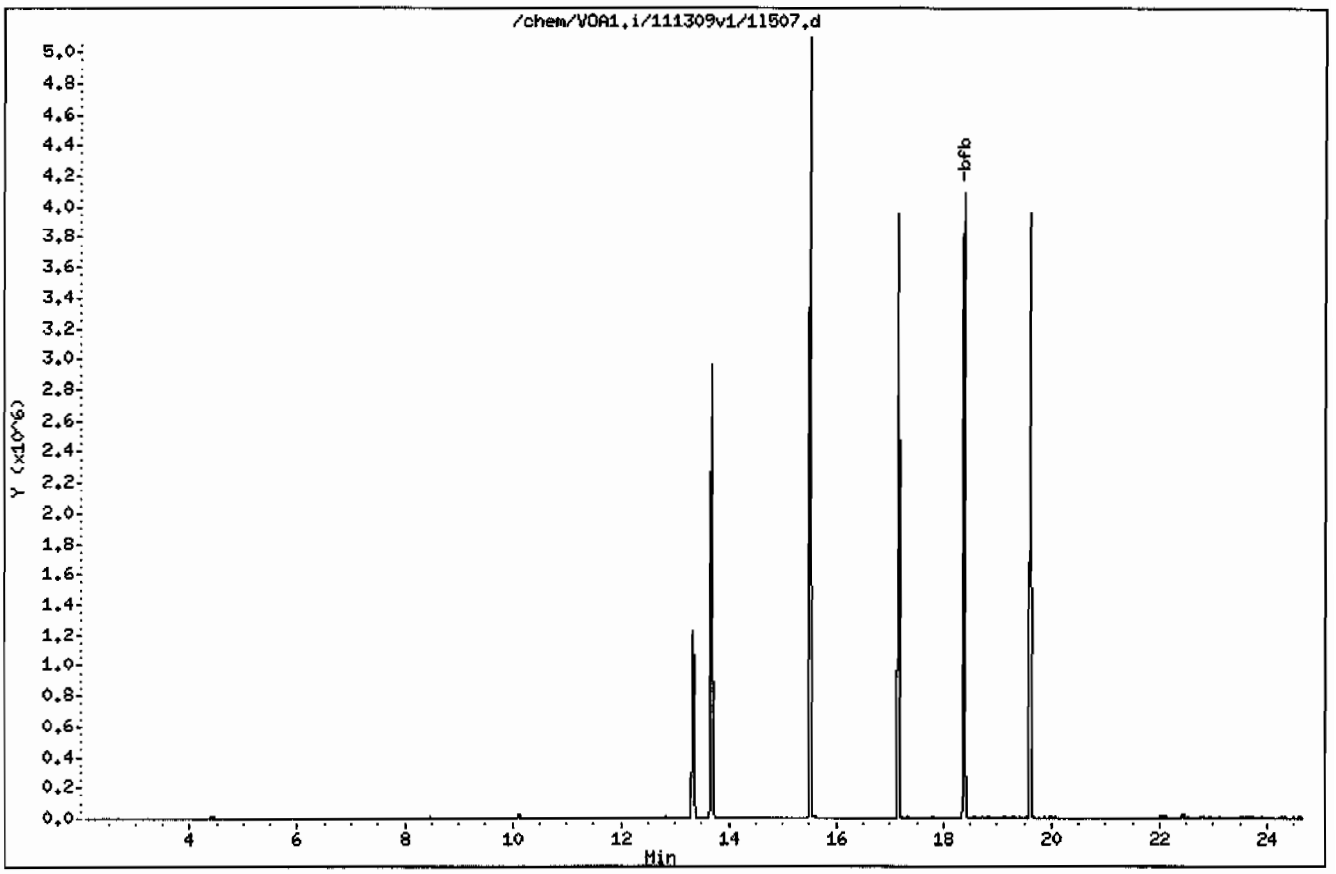

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

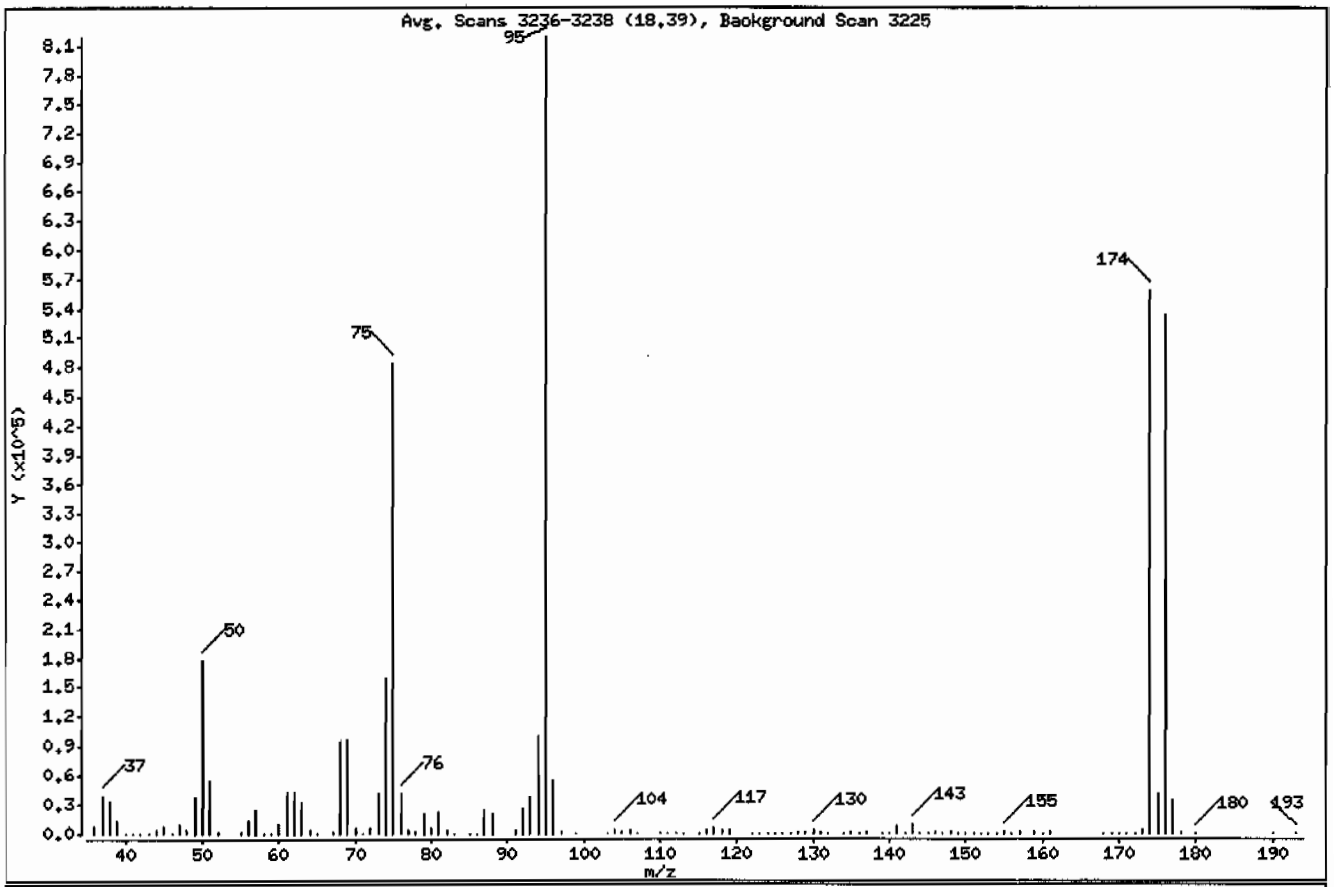

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.72
75	30.00 - 60.00% of mass 95	59.02
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.49 (0.72)
174	50.00 - 100.00% of mass 95	68.14
175	5.00 - 9.00% of mass 174	4.99 (7.33)
176	95.00 - 101.00% of mass 174	65.07 (95.50)
177	5.00 - 9.00% of mass 176	4.22 (6.48)

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 11507.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7225	70.00	6120	110.00	479	146.00	1188
37.00	39360	71.00	217	111.00	606	147.00	494
38.00	33392	72.00	5094	112.00	379	148.00	1977
39.00	13646	73.00	41472	113.00	584	149.00	463
40.00	251	74.00	158400	115.00	797	150.00	811
41.00	50	75.00	483904	116.00	2966	151.00	74
42.00	138	76.00	42152	117.00	5025	152.00	425
43.00	423	77.00	4070	118.00	2850	153.00	568
44.00	4049	78.00	2614	119.00	3829	154.00	504
45.00	7085	79.00	20536	122.00	323	155.00	1883
46.00	389	80.00	5933	123.00	301	156.00	430
47.00	8871	81.00	21704	124.00	508	157.00	1202
48.00	4657	82.00	3708	125.00	172	159.00	1015
49.00	37544	83.00	554	126.00	282	160.00	117
50.00	178048	85.00	50	127.00	21	161.00	1118
51.00	55256	86.00	546	128.00	2650	168.00	58
52.00	2192	87.00	24184	129.00	1544	169.00	60
55.00	2170	88.00	20208	130.00	3040	170.00	440
56.00	12658	91.00	3132	131.00	1311	171.00	182
57.00	24424	92.00	25640	132.00	121	172.00	596
58.00	905	93.00	38600	134.00	219	173.00	4037
59.00	131	94.00	99912	135.00	1394	174.00	558656
60.00	8890	95.00	819904	136.00	360	175.00	40952
61.00	42584	96.00	54800	137.00	1272	176.00	533504
62.00	42856	97.00	1967	139.00	373	177.00	34584
63.00	32200	99.00	52	140.00	657	178.00	987
64.00	3117	103.00	491	141.00	8405	180.00	56
65.00	197	104.00	3451	142.00	877	190.00	52
67.00	2068	105.00	1217	143.00	9022	193.00	80
68.00	94512	106.00	3389	144.00	613		
69.00	96344	107.00	757	145.00	540		

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Page 1

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

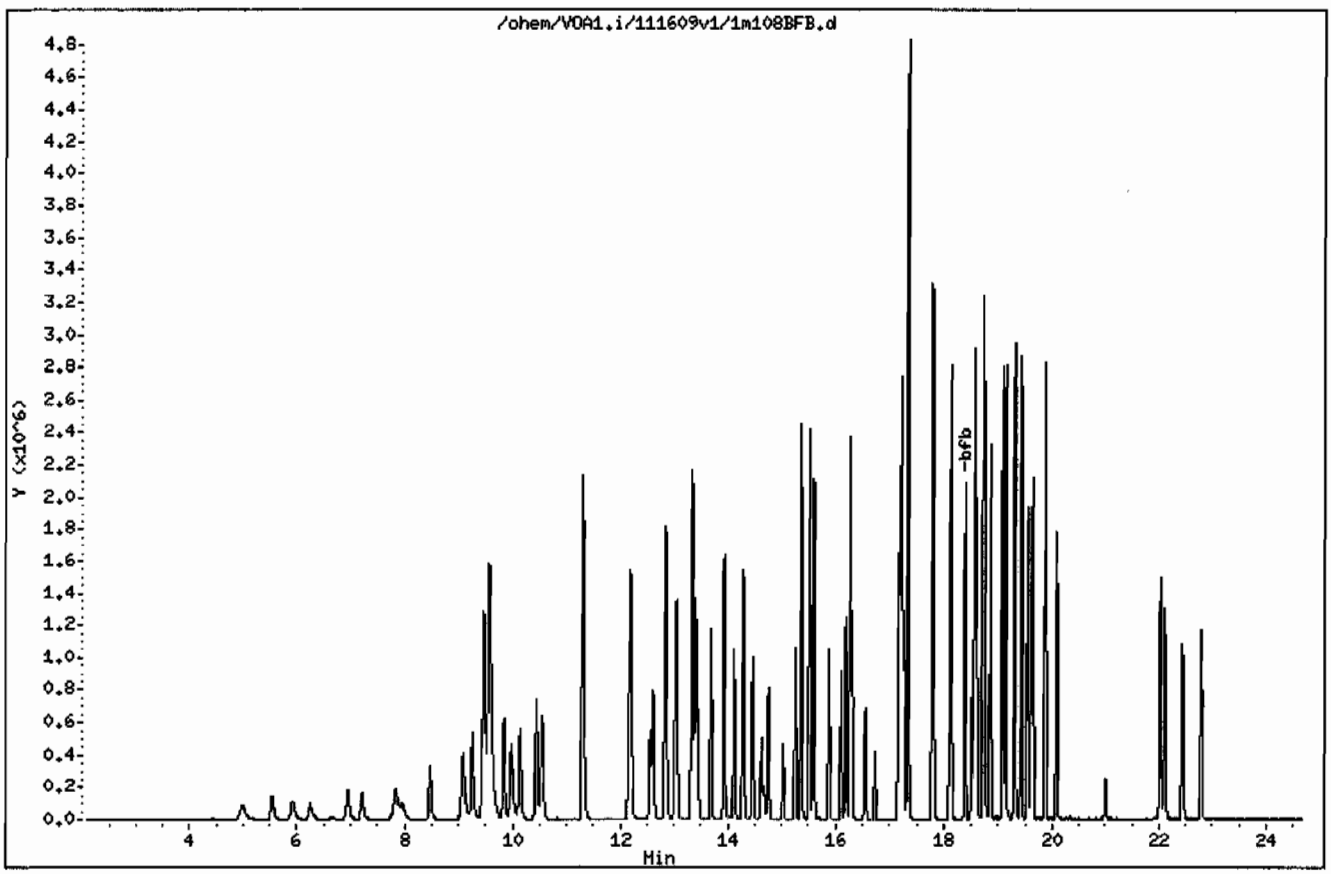

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

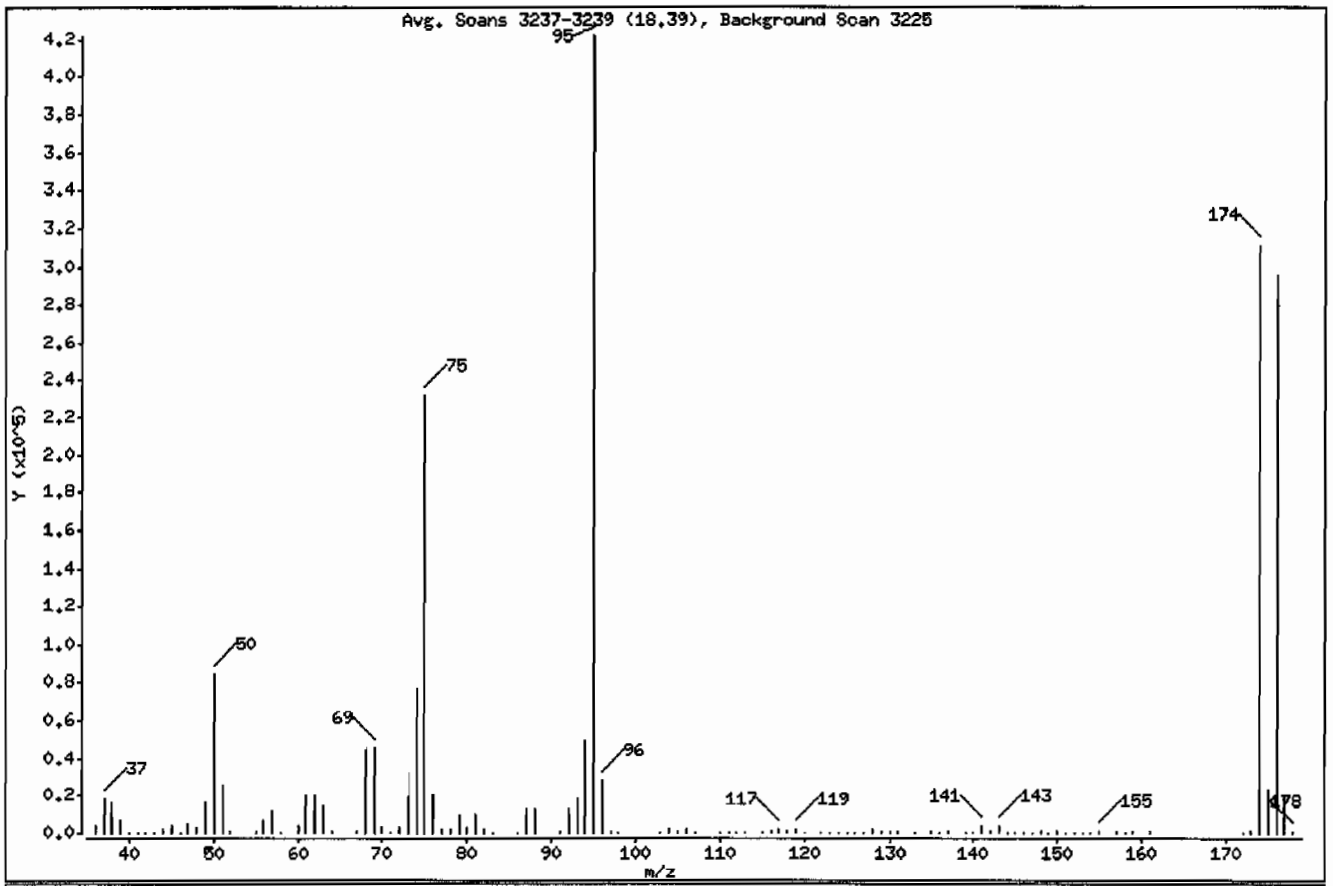

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.05
75	30.00 - 60.00% of mass 95	55.05
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.24 (0.33)
174	50.00 - 100.00% of mass 95	73.77
175	5.00 - 9.00% of mass 174	5.55 (7.52)
176	95.00 - 101.00% of mass 174	70.16 (95.10)
177	5.00 - 9.00% of mass 176	4.80 (6.85)

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1m108BFB.d
Spectrum: Avg. Scans 3237-3239 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3659	69.00	45424	105.00	693	140.00	369
37.00	18736	70.00	3367	106.00	1646	141.00	4255
38.00	16169	71.00	52	107.00	372	142.00	516
39.00	6393	72.00	2726	110.00	174	143.00	4228
40.00	197	73.00	19232	111.00	270	144.00	219
41.00	211	74.00	76640	112.00	131	145.00	352
42.00	88	75.00	232128	113.00	343	146.00	482
43.00	101	76.00	20048	115.00	393	147.00	319
44.00	1967	77.00	2016	116.00	1253	148.00	958
45.00	3625	78.00	1571	117.00	2412	149.00	257
46.00	225	79.00	9321	118.00	1200	150.00	553
47.00	4876	80.00	2593	119.00	2051	151.00	69
48.00	2650	81.00	10141	120.00	65	152.00	268
49.00	16864	82.00	1900	122.00	51	153.00	303
50.00	84536	83.00	304	123.00	52	154.00	398
51.00	25456	86.00	357	124.00	134	155.00	1157
52.00	1092	87.00	13023	125.00	172	157.00	819
55.00	1440	88.00	12376	126.00	137	158.00	66
56.00	6484	91.00	1301	127.00	134	159.00	539
57.00	11568	92.00	12794	128.00	1472	161.00	538
58.00	395	93.00	18184	129.00	873	172.00	156
60.00	4192	94.00	49672	130.00	1342	173.00	1032
61.00	20288	95.00	421696	131.00	645	174.00	311104
62.00	19928	96.00	28576	133.00	54	175.00	23400
63.00	14761	97.00	689	135.00	775	176.00	295872
64.00	1430	98.00	65	136.00	53	177.00	20256
67.00	1159	103.00	156	137.00	650	178.00	602
68.00	44552	104.00	1551	139.00	58		

Data File: /chem/VOA1.i/120309v1/1o404BFB.d

Page 1

Date : 03-DEC-2009 10:11

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091203-03|CCV/LCS|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

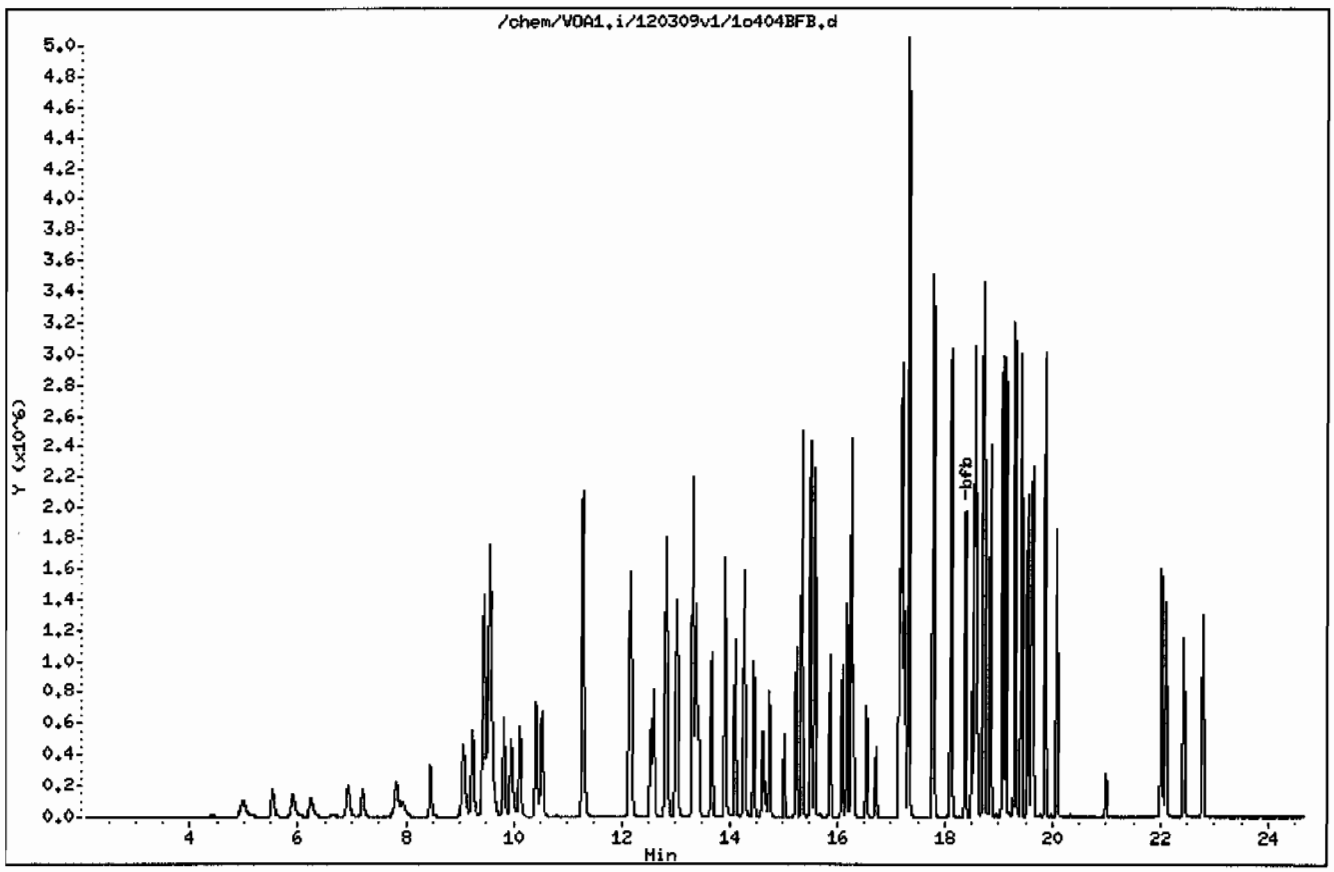

Data File: /chem/VOA1.i/120309v1/1o404BFB.d

Date : 03-DEC-2009 10:11

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091203-03|CCV/LCS|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

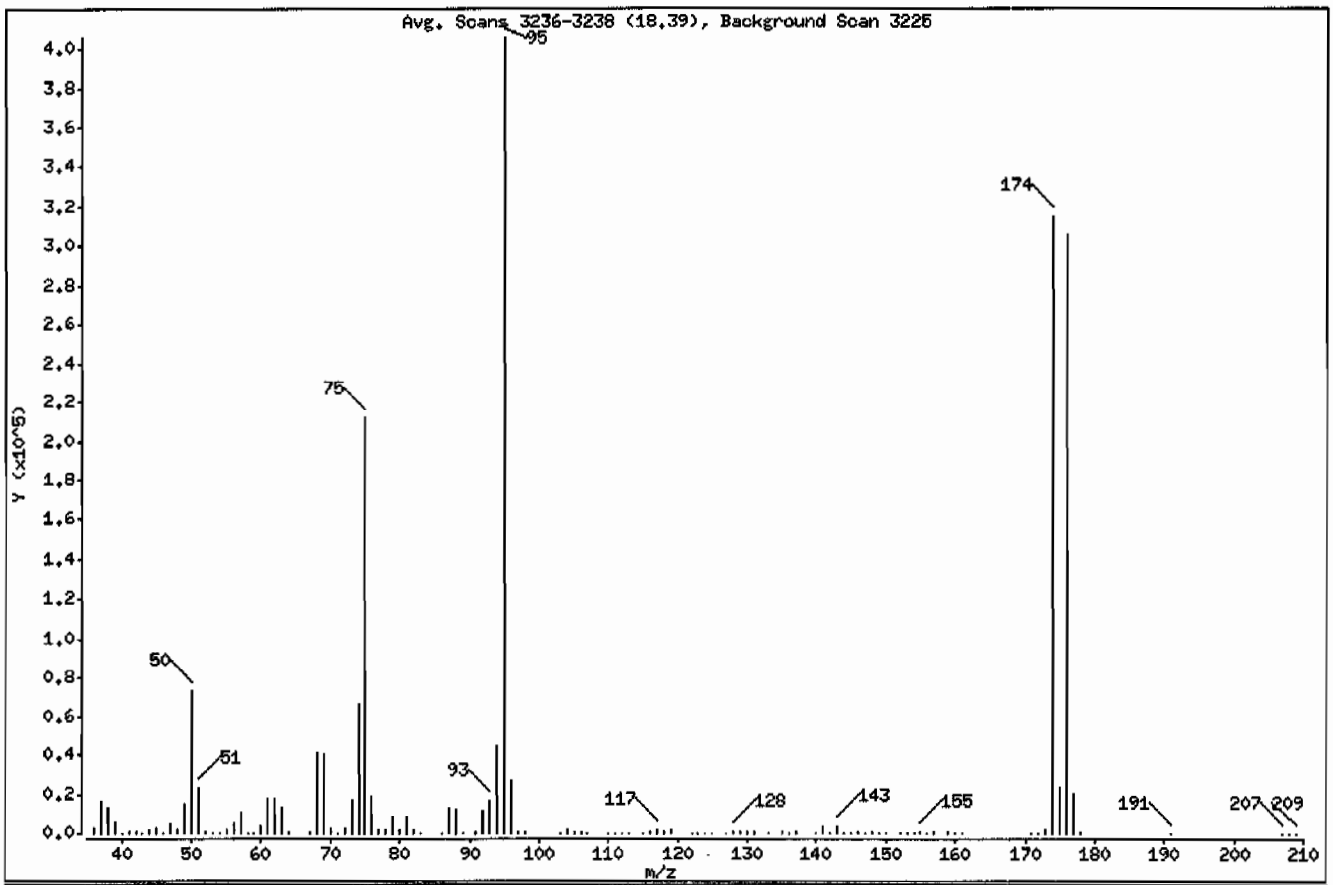

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.11
75	30.00 - 60.00% of mass 95	52.12
96	5.00 - 9.00% of mass 95	6.61
173	Less than 2.00% of mass 174	0.48 (0.61)
174	50.00 - 100.00% of mass 95	77.80
175	5.00 - 9.00% of mass 174	5.71 (7.34)
176	95.00 - 101.00% of mass 174	75.37 (96.88)
177	5.00 - 9.00% of mass 176	5.08 (6.74)

Data File: /chem/VOA1.i/120309v1/1o404BFB.d

Date : 03-DEC-2009 10:11

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091203-03|CCV/LCS|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1o404BFB.d

Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2843	68.00	40736	105.00	565	145.00	229
37.00	16246	69.00	40568	106.00	1124	146.00	665
38.00	13215	70.00	3126	107.00	447	147.00	243
39.00	5991	71.00	141	110.00	72	148.00	832
40.00	243	72.00	2505	111.00	272	149.00	274
41.00	554	73.00	16592	112.00	105	150.00	442
42.00	817	74.00	66424	113.00	319	152.00	224
43.00	7	75.00	211456	115.00	410	153.00	314
44.00	1934	76.00	18200	116.00	1180	154.00	237
45.00	2946	77.00	1898	117.00	2062	155.00	1060
46.00	307	78.00	1432	118.00	1285	156.00	86
47.00	4321	79.00	8147	119.00	2034	157.00	727
48.00	1986	80.00	2311	122.00	57	159.00	530
49.00	14471	81.00	8005	123.00	53	160.00	57
50.00	73488	82.00	1675	124.00	148	161.00	339
51.00	22864	83.00	294	125.00	113	171.00	53
52.00	798	86.00	310	127.00	284	172.00	203
53.00	87	87.00	12609	128.00	1389	173.00	1940
54.00	126	88.00	12375	129.00	525	174.00	315648
55.00	2153	89.00	148	130.00	1272	175.00	23168
56.00	5194	91.00	1246	131.00	519	176.00	305792
57.00	9942	92.00	11158	133.00	52	177.00	20624
58.00	376	93.00	16920	135.00	624	178.00	597
59.00	62	94.00	45136	136.00	185	191.00	89
60.00	3883	95.00	405760	137.00	598	207.00	418
61.00	17544	96.00	26824	140.00	324	208.00	85
62.00	18136	97.00	1004	141.00	3626	209.00	82
63.00	13351	98.00	503	142.00	445		
64.00	1214	103.00	56	143.00	3659		
67.00	1033	104.00	1517	144.00	228		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201980071**				
Client Sample:	**QC for batch 926094**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 926094**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 13:58**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o411.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o411.d
Lab Smp Id: 1201980071 Client Smp ID: TCLPBLANK
Inj Date : 03-DEC-2009 13:58
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201980071|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A TCLP BLANK
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 11 QC Sample: TB
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
16 Acetone	43	9.258	9.235	(0.677)	12217	2.04808	0.020(a)
22 Acetonitrile	41	9.972	9.953	(0.729)	11982	16.3291	0.16(a)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.327	(0.975)	603911	47.2988	0.047
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	1027921	50.0000	
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1929963	54.2275	0.054
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	874455	50.0000	
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	764993	47.7565	0.048
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	477083	50.0000	
111 Naphthalene	128	22.432	22.437	(1.144)	5390	0.26658	0.0027(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA1.i/120309v1/1o411.d

Date : 03-DEC-2009 13:58

Client ID: TCLPBLANK

Sample Info: |1201980071|928862|10|VOAF|1|

Purge Volume: 5.0

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

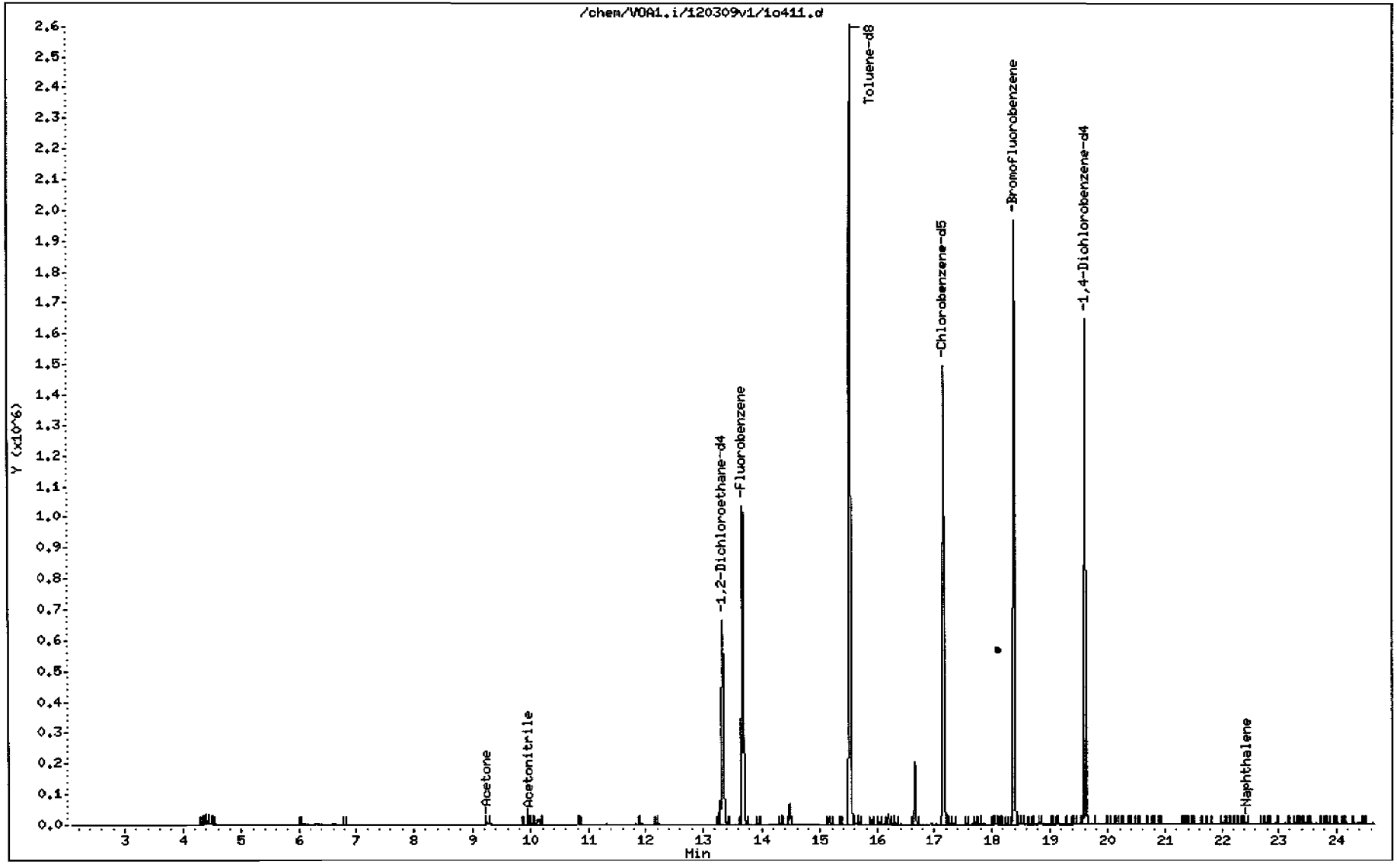

Data File: /chem/VOA1.i/120309v1/1o411.d

Date : 03-DEC-2009 13:58

Client ID: TCLPBLANK

Instrument: VOA1.i

Sample Info: |1201980071|928862|10|VOAF|1|

Purge Volume: 5.0

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 0.020 mg/l

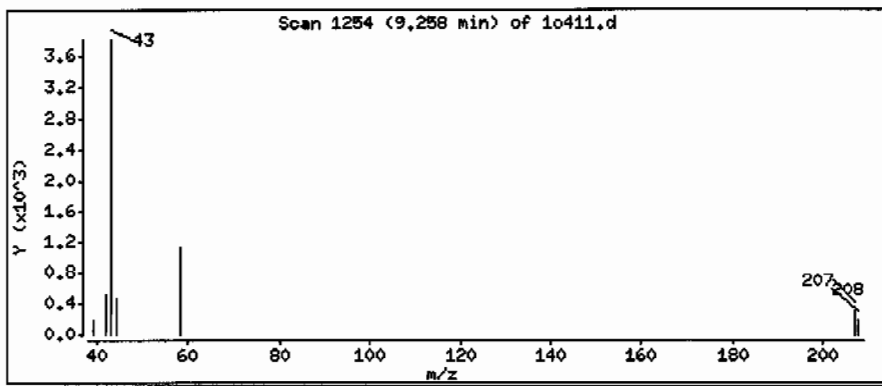

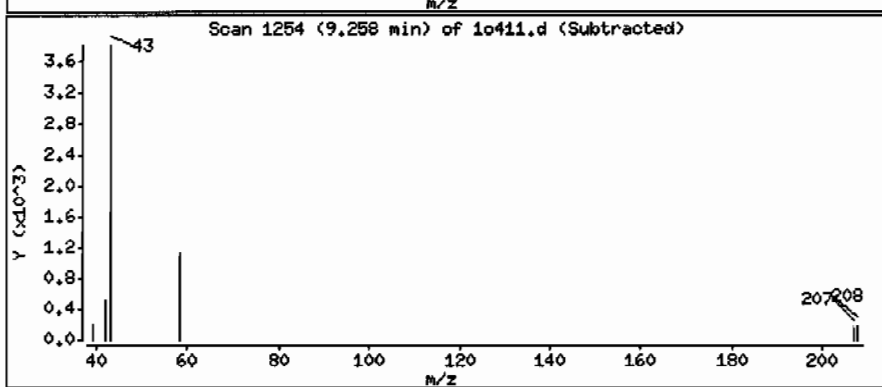

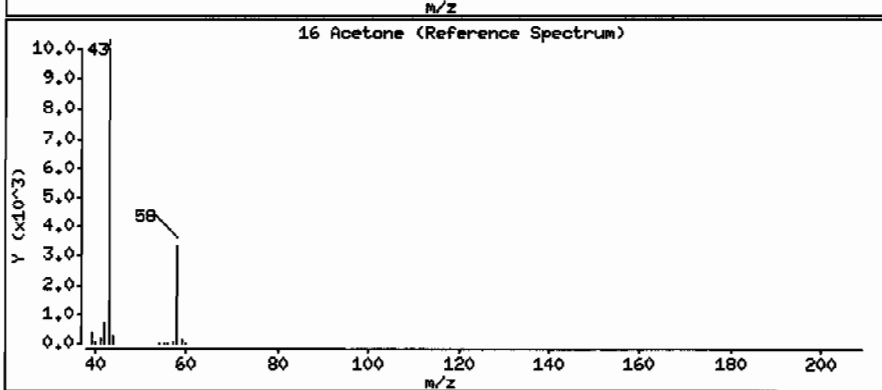

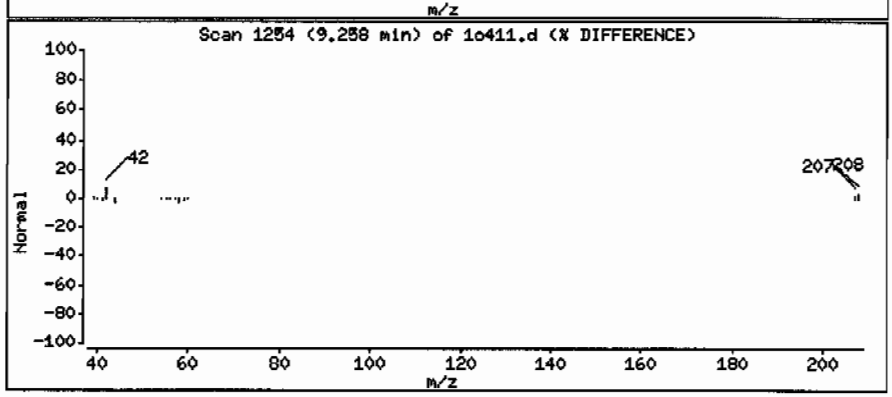

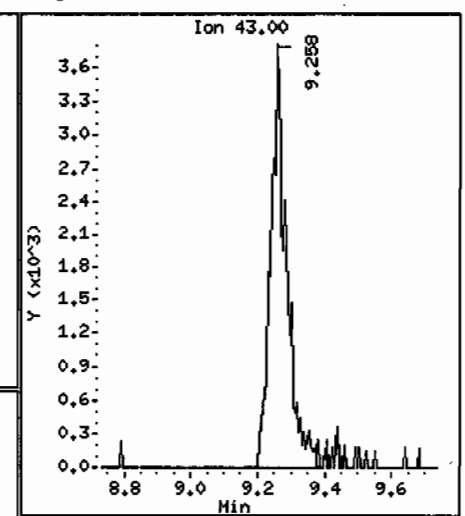

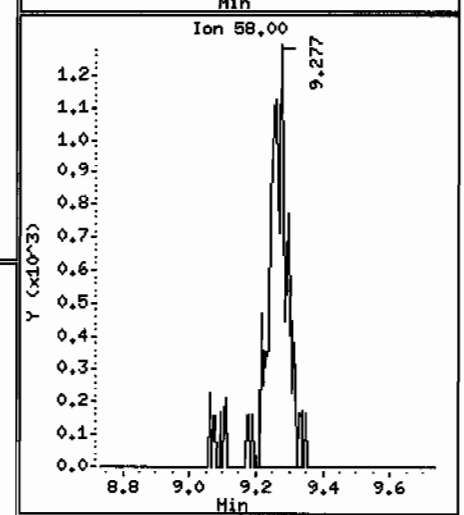

Data File: /chem/VOA1.i/120309v1/1o411.d

Date : 03-DEC-2009 13:58

Client ID: TCLPBLANK

Instrument: VOA1.i

Sample Info: |120198007|928862|10|VOAF|1|

Purge Volume: 5.0

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

22 Acetonitrile

Concentration: 0.16 mg/l

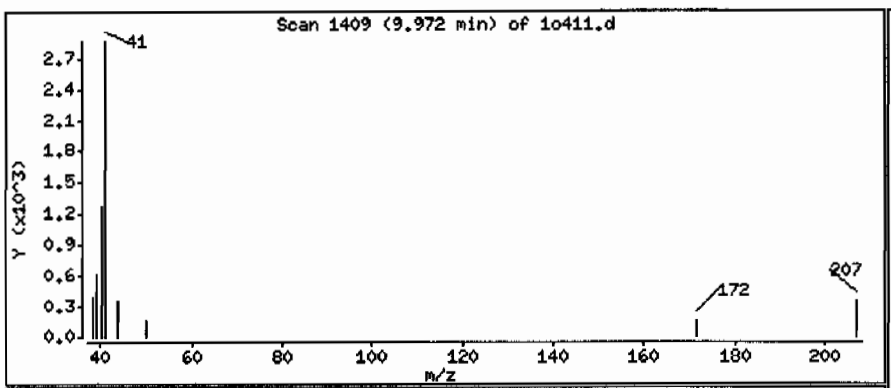

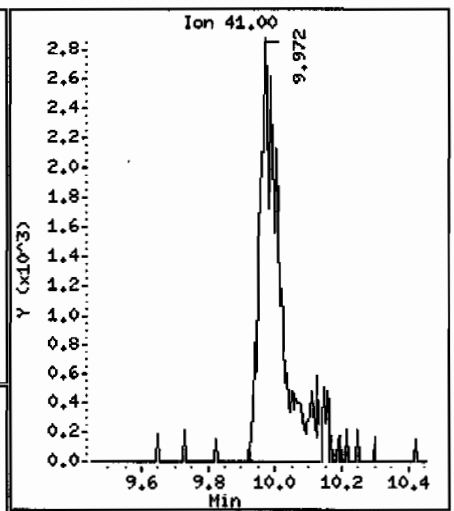

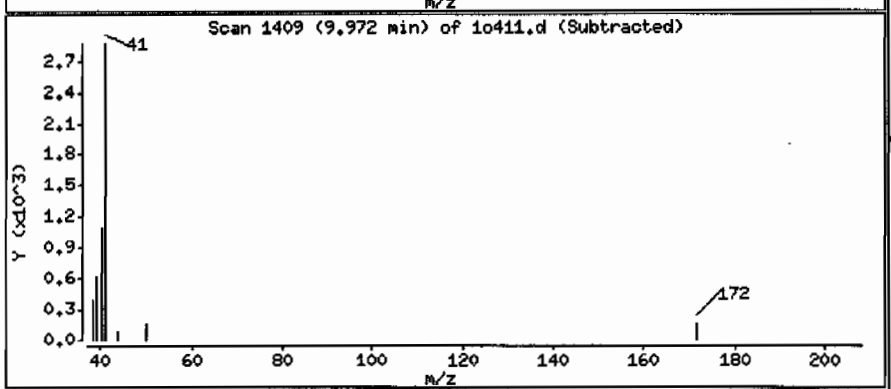

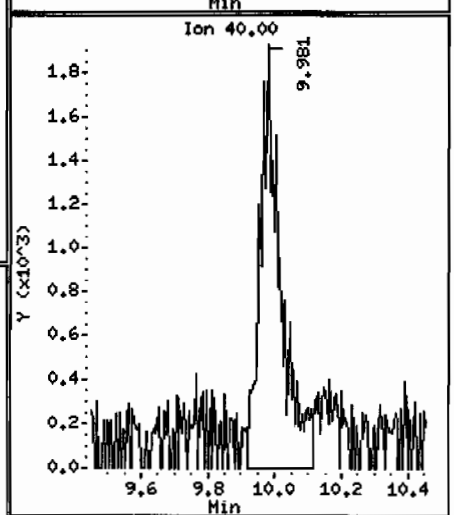

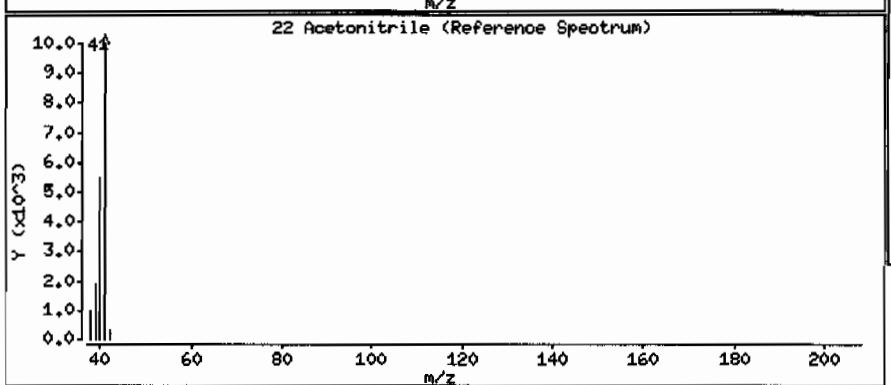

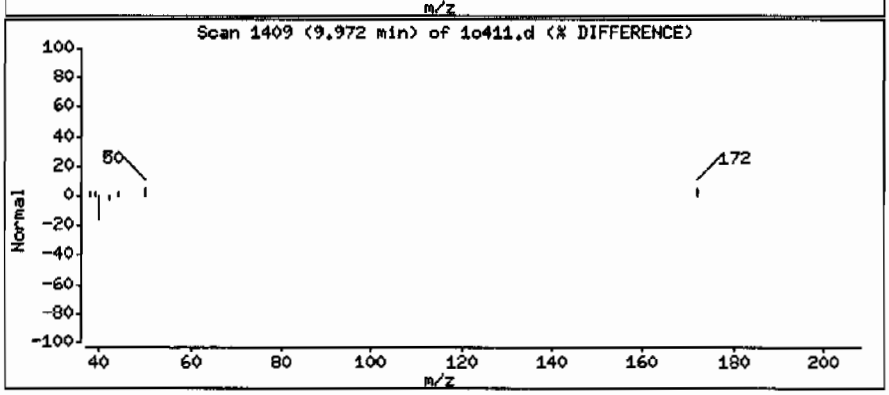

Data File: /chem/VOA1.i/120309v1/1o411.d

Date : 03-DEC-2009 13:58

Client ID: TCLPBLANK

Instrument: VOA1.i

Sample Info: |120198007|928862|10|VOAF|1|

Purge Volume: 5.0

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

111 Naphthalene

Concentration: 0.0027 mg/l

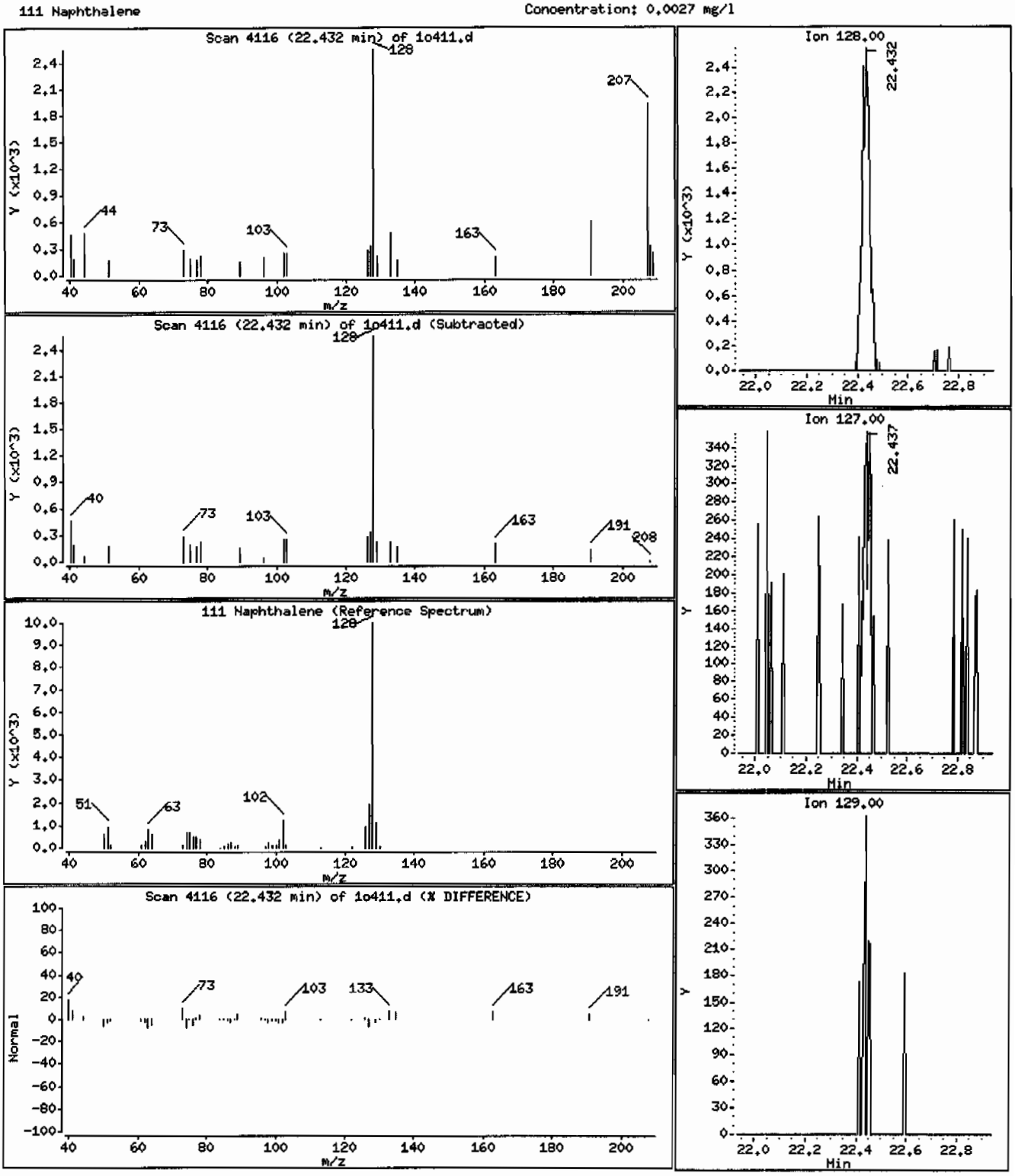

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201986405**				
Client Sample:	**QC for batch 928862**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928862**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 11:15**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 11:15**				
Data File:	**1o406TBB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.001	mg/L	0.0005	0.001
75-35-4	1,1-Dichloroethylene	U	0.001	mg/L	0.0003	0.001
78-93-3	2-Butanone	U	0.005	mg/L	0.00125	0.005
67-66-3	Chloroform	U	0.001	mg/L	0.00025	0.001
56-23-5	Carbon tetrachloride	U	0.001	mg/L	0.0003	0.001
107-06-2	1,2-Dichloroethane	U	0.001	mg/L	0.00025	0.001
71-43-2	Benzene	U	0.001	mg/L	0.0003	0.001
79-01-6	Trichloroethylene	U	0.001	mg/L	0.00025	0.001
127-18-4	Tetrachloroethylene	U	0.001	mg/L	0.0003	0.001
108-90-7	Chlorobenzene	U	0.001	mg/L	0.00025	0.001
106-46-7	1,4-Dichlorobenzene	U	0.001	mg/L	0.00025	0.001

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o406TBB.d
Lab Smp Id: 1201986405 Client Smp ID: BLANK
Inj Date : 03-DEC-2009 11:15
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986405|928862|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
$ 48 1,2-Dichloroethane-d4	65	13.332	13.327	(0.975)	600245	46.0559	0.046
* 52 Fluorobenzene	96	13.677	13.673	(1.000)	1049253	50.0000	
$ 65 Toluene-d8	98	15.514	15.514	(0.904)	1827778	50.7162	0.051
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	885491	50.0000	
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	728855	44.4222	0.044
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	488664	50.0000	
111 Naphthalene	128	22.437	22.437	(1.144)	7819	0.37755	0.00038(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA1.i/120309v1/1o406TBB.d

Date : 03-DEC-2009 11:15

Client ID: BLANK

Sample Info: |1201986405|928862|1|VOAF|1|

Purge Volume: 5.0

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

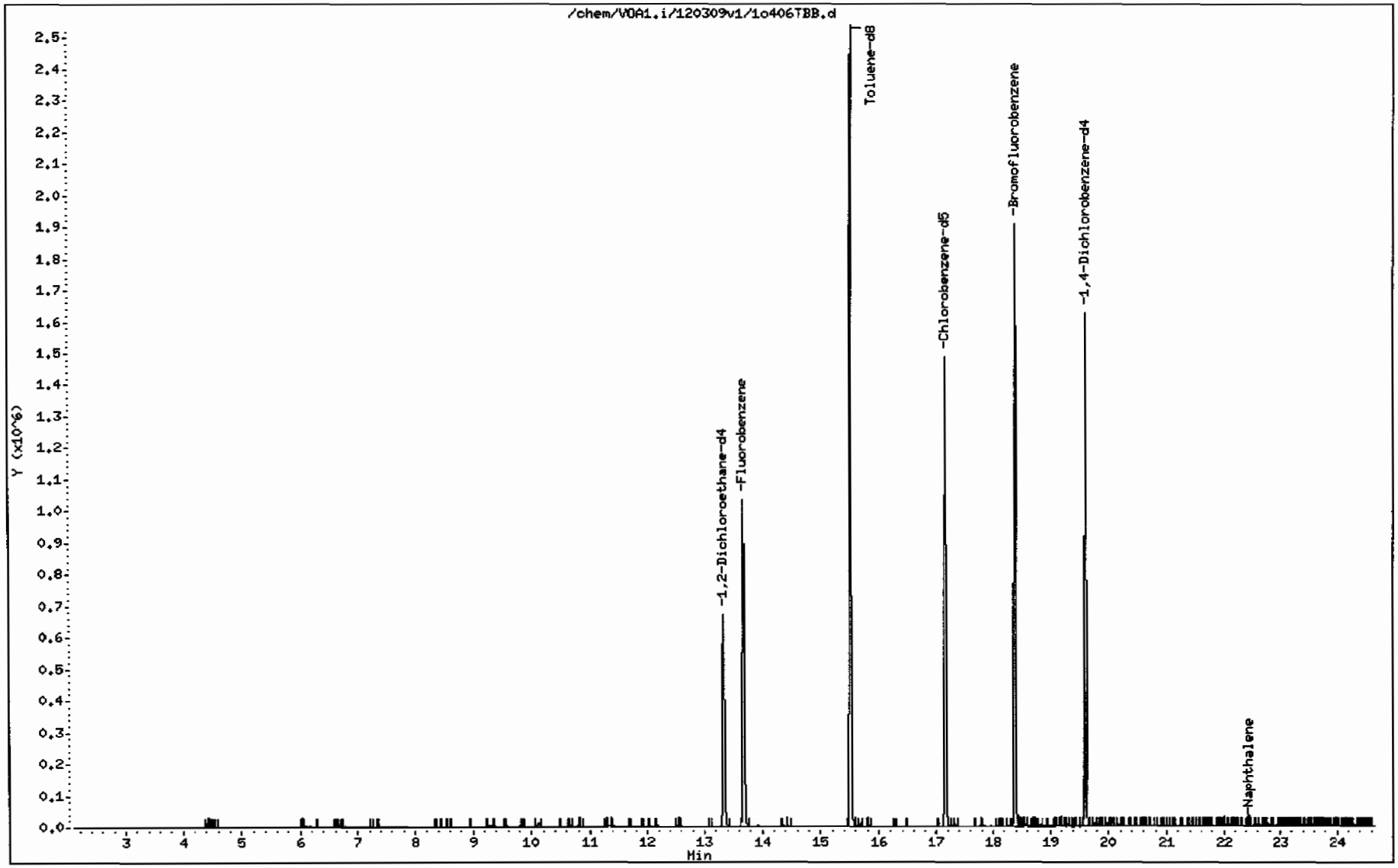

Data File: /chem/VOA1.i/120309v1/1o406TBB.d

Date : 03-DEC-2009 11:15

Client ID: BLANK

Instrument: VOA1.i

Sample Info: |1201986405|928862|1|VOAF|1|

Purge Volume: 5.0

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

111 Naphthalene

Concentration: 0.00038 mg/l

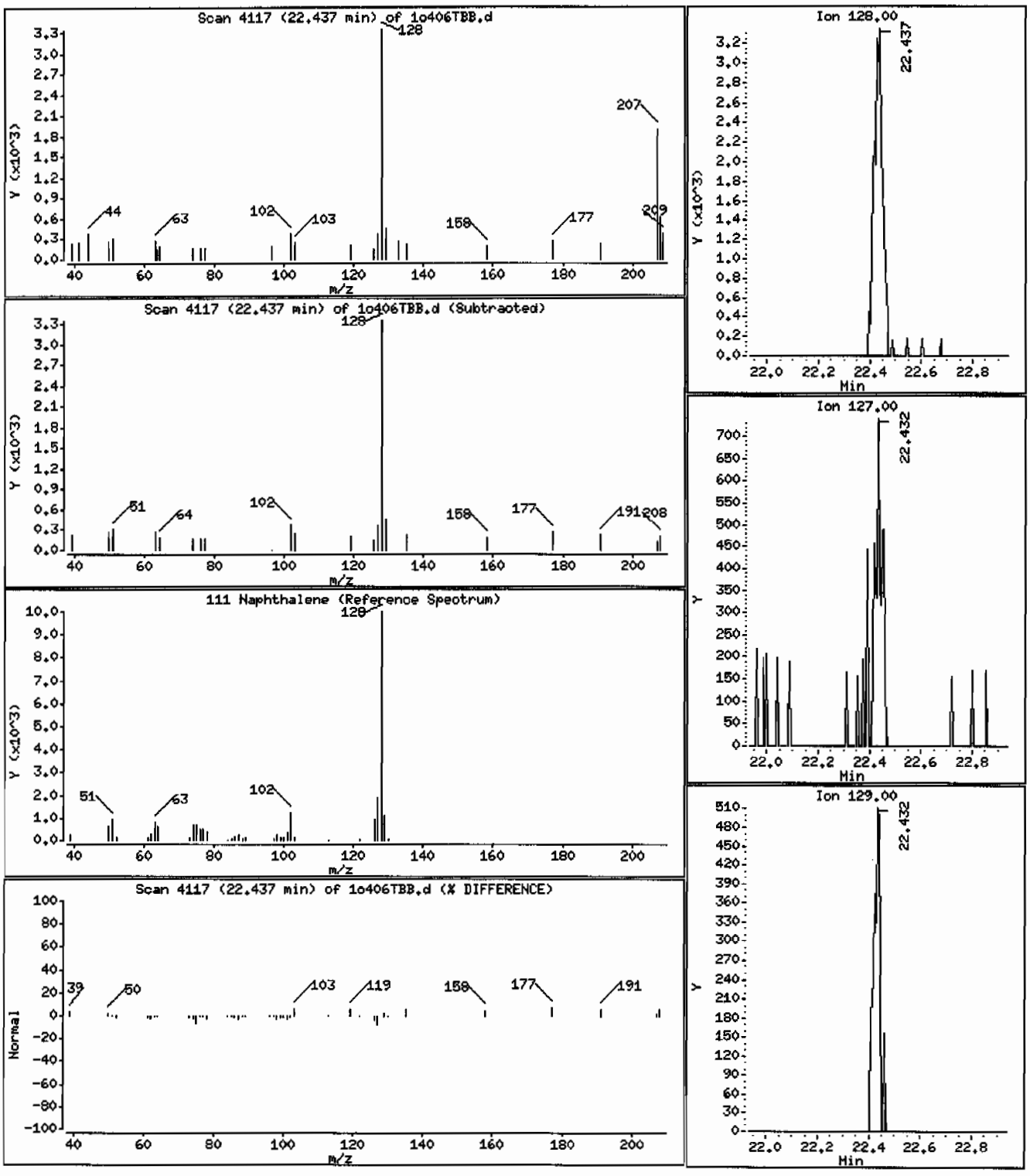

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201986408**				
Client Sample:	**QC for batch 928862**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928862**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 10:11**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 10:11**				
Data File:	**1o404TLB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride		0.051	mg/L	0.0005	0.001
75-35-4	1,1-Dichloroethylene		0.0508	mg/L	0.0003	0.001
78-93-3	2-Butanone		0.208	mg/L	0.00125	0.005
67-66-3	Chloroform		0.049	mg/L	0.00025	0.001
56-23-5	Carbon tetrachloride		0.0528	mg/L	0.0003	0.001
107-06-2	1,2-Dichloroethane		0.0411	mg/L	0.00025	0.001
71-43-2	Benzene		0.0553	mg/L	0.0003	0.001
79-01-6	Trichloroethylene		0.0561	mg/L	0.00025	0.001
127-18-4	Tetrachloroethylene		0.0597	mg/L	0.0003	0.001
108-90-7	Chlorobenzene		0.0549	mg/L	0.00025	0.001
106-46-7	1,4-Dichlorobenzene		0.056	mg/L	0.00025	0.001

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o404TLB.d
Lab Smp Id: 1201986408 Client Smp ID: LCS
Inj Date : 03-DEC-2009 10:11
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986408|928862|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091129-01A/IVM091130-01
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
M 1 Xylenes (total)	106				2323823	166.138	0.17
M 2 1,2-Dichloroethylene (total)	96				837431	116.402	0.12
M 3 1,3-Dichloropropylene	75				1389755	102.545	0.10
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	363519	51.7980	0.052
6 Chloromethane	50	5.535	5.535	(0.405)	432677	49.8300	0.050
7 Vinyl chloride	62	5.908	5.908	(0.432)	395284	50.9767	0.051
9 Bromomethane	96	6.934	6.934	(0.507)	287932	61.7759	0.062
10 Chloroethane	64	7.196	7.196	(0.526)	303568	63.2289	0.063
11 Trichlorofluoromethane	101	7.818	7.818	(0.572)	654302	59.9350	0.060
12 Ethyl Ether	59	8.462	8.462	(0.619)	325484	49.0938	0.049
15 1,1-Dichloroethylene	61	9.065	9.065	(0.663)	764108	50.8051	0.051
16 Acetone	43	9.235	9.235	(0.675)	1171360	192.058	0.19
18 Iodomethane	142	9.447	9.447	(0.691)	2931336	301.265	0.30
19 Carbon disulfide	76	9.562	9.562	(0.699)	6238351	322.070	0.32
21 Methyl acetate	43	9.815	9.815	(0.718)	1217425	233.184	0.23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
	22 Acetonitrile	41	9.953	9.953	(0.728)	1040717	1387.16	1.4
	23 Methylene chloride	84	10.119	10.119	(0.740)	424151	55.9746	0.056
	25 tert-Butyl methyl ether	73	10.423	10.423	(0.762)	1136301	47.4893	0.047
	26 trans-1,2-Dichloroethylene	96	10.529	10.529	(0.770)	411591	58.9189	0.059
	29 Vinyl acetate	43	11.279	11.279	(0.825)	3740419	322.880	0.32
	30 1,1-Dichloroethane	63	11.307	11.307	(0.827)	787182	50.6953	0.051
	33 2,2-Dichloropropane	77	12.144	12.144	(0.888)	593259	52.3076	0.052
	35 2-Butanone	43	12.167	12.167	(0.890)	1241318	207.711	0.21
	36 cis-1,2-Dichloroethylene	96	12.186	12.186	(0.891)	425840	57.4834	0.057
	39 Bromochloromethane	128	12.545	12.545	(0.918)	177698	60.3682	0.060
	41 Chloroform	83	12.595	12.595	(0.921)	810367	49.0205	0.049
	42 Cyclohexane	56	12.830	12.830	(0.938)	797597	58.6188	0.059
	43 1,1,1-Trichloroethane	97	12.830	12.830	(0.938)	655082	50.5997	0.050
	44 Carbon tetrachloride	117	13.010	13.010	(0.952)	685267	52.8364	0.053
	45 1,1-Dichloropropene	75	13.037	13.037	(0.954)	642078	54.4460	0.054
	47 Benzene	78	13.318	13.318	(0.974)	1626563	55.2678	0.055
$	48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	624841	47.8638	0.048
	50 Cyclohexene	54	13.378	13.378	(0.978)	589703	52.4979	0.052
	51 1,2-Dichloroethane	62	13.424	13.424	(0.982)	599351	41.0841	0.041
*	52 Fluorobenzene	96	13.673	13.673	(1.000)	1050992	50.0000	
	53 n-Butyl alcohol	56	13.921	13.921	(1.018)	1151017	6049.40	6.0
	54 Trichloroethylene	95	14.105	14.105	(1.032)	451940	56.1044	0.056
	55 Methylcyclohexane	83	14.271	14.271	(1.044)	763506	61.3408	0.061
	57 1,2-Dichloropropane	63	14.446	14.446	(1.057)	397625	52.1979	0.052
	59 Dibromomethane	93	14.616	14.616	(1.069)	240778	51.2551	0.051
	60 Bromodichloromethane	83	14.740	14.740	(1.078)	613844	49.1173	0.049
	61 2-Chloroethylvinyl ether	63	15.021	15.021	(1.099)	250268	238.848	0.24
	63 cis-1,3-Dichloropropylene	75	15.247	15.247	(1.115)	708580	54.4360	0.054
	64 4-Methyl-2-pentanone	58	15.353	15.353	(0.895)	779596	232.212	0.23
$	65 Toluene-d8	98	15.514	15.514	(0.904)	1880206	50.9721	0.051
	66 Toluene	92	15.587	15.587	(0.909)	1072140	53.8647	0.054
	68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	681175	48.1086	0.048
	69 1,1,2-Trichloroethane	83	16.094	16.094	(0.938)	282276	50.9519	0.051
	70 Tetrachloroethylene	164	16.181	16.181	(0.943)	360203	59.6516	0.060
	71 2-Hexanone	43	16.264	16.264	(0.948)	1698320	191.389	0.19
	72 1,3-Dichloropropane	76	16.301	16.301	(0.950)	585557	47.5514	0.048
	73 Dibromochloromethane	129	16.540	16.540	(0.964)	410791	51.6868	0.052
	74 1,2-Dibromoethane	107	16.720	16.720	(0.975)	343565	52.7334	0.053
*	76 Chlorobenzene-d5	117	17.152	17.152	(1.000)	906319	50.0000	
	77 Chlorobenzene	112	17.185	17.185	(1.002)	1130528	54.9110	0.055
	78 Ethylbenzene	91	17.212	17.212	(1.003)	2174501	50.7883	0.051
	79 1,1,1,2-Tetrachloroethane	131	17.254	17.254	(1.006)	406416	50.9240	0.051
	80 m,p-Xylenes	106	17.332	17.332	(1.010)	1563347	110.758	0.11
	81 o-Xylene	106	17.779	17.779	(1.036)	760476	55.3801	0.055
	82 Styrene	104	17.797	17.797	(1.038)	1309335	55.6394	0.056
	83 Bromoform	173	18.101	18.101	(0.923)	279011	55.2111	0.055
	84 Isopropylbenzene	105	18.124	18.124	(0.924)	2195679	53.1326	0.053

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
$ 87 Bromofluorobenzene	95	18.381	18.381	(0.938)	769897	45.1396	0.045
88 1,1,2,2-Tetrachloroethane	83	18.501	18.501	(0.944)	435316	54.0241	0.054
89 n-Propylbenzene	91	18.556	18.556	(0.946)	2621979	52.0896	0.052
91 Bromobenzene	156	18.589	18.589	(0.948)	478741	56.0230	0.056
92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	125314	47.2934	0.047
93 1,3,5-Trimethylbenzene	105	18.713	18.713	(0.954)	1882551	51.7141	0.052
94 2-Chlorotoluene	91	18.736	18.736	(0.956)	1812804	49.7074	0.050
95 4-Chlorotoluene	91	18.851	18.851	(0.961)	1651880	50.2306	0.050
96 tert-Butylbenzene	119	19.072	19.072	(0.973)	1516791	53.5273	0.054
97 1,2,4-Trimethylbenzene	105	19.132	19.132	(0.976)	1896797	50.9018	0.051
99 sec-Butylbenzene	105	19.297	19.297	(0.984)	2442413	54.0023	0.054
100 4-Isopropyltoluene	119	19.417	19.417	(0.990)	1886129	55.1645	0.055
101 1,3-Dichlorobenzene	146	19.537	19.537	(0.996)	924345	56.6459	0.057
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	507977	50.0000	
103 1,4-Dichlorobenzene	146	19.634	19.634	(1.001)	937376	56.0436	0.056
105 n-Butylbenzene	91	19.864	19.864	(1.013)	1995284	52.1213	0.052
106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	863067	55.2489	0.055
108 1,2-Dibromo-3-chloropropane	157	20.996	20.996	(1.071)	89236	58.0929	0.058
109 1,2,4-Trichlorobenzene	180	22.018	22.018	(1.123)	679089	58.5121	0.058
110 Hexachlorobutadiene	225	22.101	22.101	(1.127)	428358	52.1388	0.052
111 Naphthalene	128	22.437	22.437	(1.144)	1248675	58.0021	0.058
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	586239	60.0320	0.060

Data File: /chem/VOA1.i/120309v1/1c404TLB.d
Date : 03-DEC-2009 10:11
Client ID: LCS
Sample Info: !120198640819288862!1!VOAF!1!
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

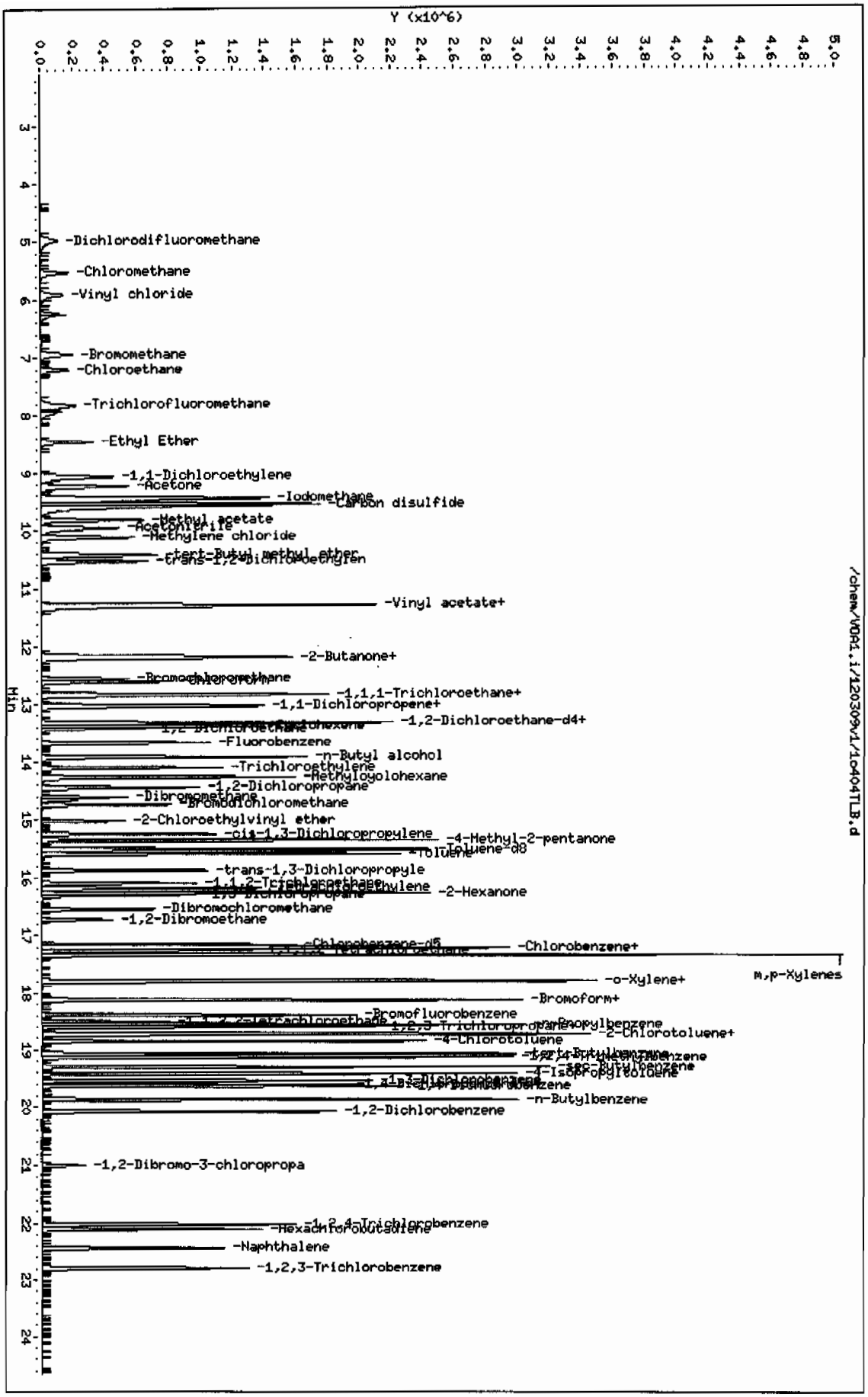

Page 1

Miscellaneous Data

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926094 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #105

Sample ID Analysis Start Date	1201980071 TB 24-NOV-2009 16:30:16	241424001 24-NOV-2009 16:30:16	241424002 24-NOV-2009 16:30:16	241527001 24-NOV-2009 16:30:16
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		25	25	25
Initial pH (su)	4.91			
Final pH (su)	4.91			
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	500	500	500	500
Filtrate Volume (mL)	40	40	40	40
VOA Positive Pressure Y/N	y	y	y	y
ZHE Vessle ID	2	18	21	16

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1017549ZHE	500	mL

Comments:

Extration End Date: 25-NOV-09 09:30:15
Filtration End Date: 25-NOV-09 13:30:15
Bottle Lot Number: B-9-195-01VB
Filter Lot Number: 130101
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/13/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111309v1

Daily Standard

	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
ICV	W1VM091113-18		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
BFB	UVM090821-02				1
SHORT ICV	W1VM091113-19		5+5	5+5	

Purge Amount

5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/13/2009 22:17	1L507.D	UVM090821-02	GEL	BFB2	5ML	1	N/A	1	W	ACJ	N/A	O	Passed.
11/13/2009 22:47	1L508.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
11/13/2009 23:18	1L509.D	W1VM091113-05	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM090911-01B/UVM091012-01D
11/13/2009 23:48	1L510.D	W1VM091113-06	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	N/A	X	UVM090911-02B/UVM091012-02D: See 1L511
11/14/2009 0:18	1L511.D	W1VM091113-07	GEL	VSTD001	5ML	1	N/A	5	W	ACJ	N/A	O	UVM090911-02B/UVM091012-02D
11/14/2009 0:48	1L512.D	W1VM091113-08	GEL	VSTD002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM090911-03B/UVM091012-03D
11/14/2009 1:19	1L513.D	W1VM091113-09	GEL	VSTD005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM090911-04B/UVM091012-04D
11/14/2009 1:49	1L514.D	W1VM091113-10	GEL	VSTD010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM090911-05B/UVM091012-05D
11/14/2009 2:19	1L515.D	W1VM091113-11	GEL	VSTD020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM090911-06B/UVM091012-06D
11/14/2009 2:49	1L516.D	W1VM091113-12	GEL	VSTD050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM090911-07B/UVM091012-07D
11/14/2009 3:19	1L517.D	W1VM091113-13	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM090911-08B/UVM091012-08D
11/14/2009 3:50	1L518.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	Rinse
11/14/2009 4:20	1L519.D	W1VM091113-14	GEL	VSTD005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091023-01/UVM091110-01E
11/14/2009 4:50	1L520.D	W1VM091113-15	GEL	VSTD010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091023-02/UVM091110-02E
11/14/2009 5:20	1L521.D	W1VM091113-16	GEL	VSTD025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091023-03/UVM091110-03E
11/14/2009 5:50	1L522.D	W1VM091113-17	GEL	VSTD050S	5ML	1	N/A	16	W	ACJ	N/A	O	UVM091023-04/UVM091110-04E
11/14/2009 6:20	1L523.D	W1VM091113-18	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091023-05/UVM091110-05E
11/14/2009 6:51	1L524.D	W1VM091113-19	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091023-06/UVM091110-06E
11/14/2009 7:21	1L525.D	W1VM091113-20	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091023-07/UVM091110-07E
11/14/2009 7:51	1L526.D	12019---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	Rinse
11/14/2009 8:21	1L527.D	W1VM091113-18	GEL	ICV	5ML	1	N/A	21	W	ACJ	N/A	X	UVM091111-01A/IVM091111-01; Vinyl Chloride low. See 11/16/09
11/14/2009 8:52	1L528.D	W1VM091113-19	GEL	SHORT ICV	5ML	1	N/A	22	W	ACJ	N/A	O	UVM091023-08A/UVM091105-02B

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/16/2009 9:04	1M101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	Passed. See 1M108
11/16/2009 9:35	1M102.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	RXM4	N/A	X	
11/16/2009 10:14	1M103.D	W1VM091116-01	GEL	CCV/LCS/ICV	5ML	1	N/A	3	W	RXM4	N/A	X	
11/16/2009 10:45	1M104.D	W1VM091116-02	GEL	LCSD	5ML	1	N/A	4	W	RXM4	N/A	X	
11/16/2009 12:25	1M105.D	W1VM091116-03	GEL	SHORTICV	5ML	1	N/A	5	W	RXM4	N/A	X	Decreased multiplier
11/16/2009 13:00	1M106.D	UVM090821-02	GEL	BFB	5ML	1	N/A	6	W	RXM4	N/A	X	See 1M108
11/16/2009 13:30	1M107.D	W1VM091116-04	GEL	CCV/LCS/ICV	5ML	1	N/A	7	W	RXM4	N/A	X	UVM091111-01A/IVM0901111-01
11/16/2009 14:01	**1M108.D**	**W1VM091116-05**	**GEL**	**BFB/CCV/LCS/ICV**	**5ML**	**1**	**N/A**	**8**	**W**	**RXM4**	**N/A**	**O**	UVM091111-01B/IVM0901111-01
11/16/2009 14:48	1M109.D	W1VM091116-06	GEL	SHORT	5ML	1	N/A	9	W	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 15:20	1M110.D	W1VM091116-07	GEL	LCS	5G	1	N/A	10	S	RXM4	N/A	O	UVM091111-01B/IVM0901111-01
11/16/2009 15:51	1M111.D	W1VM091116-08	GEL	SHORT	5G	1	N/A	11	S	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:21	1M112.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	RXM4	N/A	X	waters were not analyzed. Not needed.
11/16/2009 16:51	1M113.D	12019---	GEL	BLANK	5G	1	N/A	13	S	RXM4	N/A	O	
11/16/2009 17:22	1M114.D	240630001	LANL	923274	5G	1	N/A	14	S	RXM4	N/A	O	
11/16/2009 17:52	1M115.D	240630002	LANL	923274	5G	1	N/A	15	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 18:22	1M116.D	240630003	LANL	923274	5G	1	N/A	16	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 18:52	1M117.D	240630004	LANL	923274	5G	1	N/A	17	S	RXM4	N/A	O	
11/16/2009 19:23	1M118.D	240630005	LANL	923274	5G	1	N/A	18	S	RXM4	N/A	O	
11/16/2009 19:53	1M119.D	240630006	LANL	923274	5G	1	N/A	19	S	RXM4	N/A	O	
11/16/2009 20:23	1M120.D	240630007	LANL	923274	5G	1	N/A	20	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 20:53	1M121.D	240630008	LANL	923274	5G	1	N/A	21	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:23	1M122.D	240630009	LANL	923274	5G	1	N/A	22	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:54	1M123.D	240630010	LANL	923274	5G	1	N/A	23	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 22:24	1M124.D	240630011	LANL	923274	5G	1	N/A	24	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 22:55	1M125.D	240634001	LANL	923274	5G	1	N/A	25	S	RXM4	N/A	O	
11/16/2009 23:25	1M126.D	240634002	LANL	923274	5G	1	N/A	26	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 23:55	1M127.D	240634003	LANL	923274	5G	1	N/A	27	S	RXM4	N/A	O	
11/17/2009 0:25	1M128.D	240634004	LANL	923274	5G	1	N/A	28	S	RXM4	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/17/2009 0:55	1M129.D	240634005	LANL	923274	5G	1	N/A	29	S	RXM4	N/A	O	
11/17/2009 1:25	1M130.D	240634006	LANL	923274	5G	1	N/A	30	S	RXM4	N/A	O	
11/17/2009 1:56	1M131.D	1201973574	LANL	923274	5G	1	N/A	31	S	RXM4	N/A	X	MS 240630001; See 11/17/09
11/17/2009 2:26	1M132.D	1201973575	LANL	923274	5G	1	N/A	32	S	RXM4	N/A	X	MSD 240630001; out of tune. See 11/17/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 12/3/2009 Method 8260B/624 Operator: RJM

REVIEWED BY:
DATE:

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 120309v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091203-03		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091203-03			5+5	
BFB	UVM090821-02				1
SHORT	UVM091118-08A		5	5	

Purge Amount	
5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
3 Dec 2009 08:14	1O401.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	See 1O404
3 Dec 2009 08:44	1O402.D	W1VM091203-01	GEL	CCV/LCS	5ML	1	N/A	2	W	RXM4	N/A	X	UVM091129-01A/IVM091130-01
3 Dec 2009 09:15	1O403.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	3	W	RXM4	N/A	X	UVM091118-08A
3 Dec 2009 10:11	1O404.D	W1VM091203-03	GEL	BFB/CCV/LCS	5ML	1	N/A	4	W	RXM4	N/A	O	UVM091129-01A/IVM091130-01 adjusted multiplier
3 Dec 2009 10:42	1O405.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	5	W	RXM4	N/A	O	UVM091118-08A
3 Dec 2009 11:15	1O406.D	12019---	GEL	BLANK	5ML	1	N/A	6	W	RXM4	N/A	O	
3 Dec 2009 11:46	1O407.D	1201984938	SNLS	928279	5ML	1	PH2	7	W	RXM4	N	O	MS 241781001
3 Dec 2009 12:16	1O408.D	1201984939	SNLS	928279	5ML	1	PH2	8	W	RXM4	N	O	MSD 241781001
3 Dec 2009 12:47	1O409.D	12019---	GEL	BLANK	5ML	1	N/A	9	W	RXM4	N/A	X	
3 Dec 2009 13:27	1O410.D	1201983838	LANL	928860	500uL	10	N/A	10	W	RXM4	N/A	O	TCLP BLANK
3 Dec 2009 13:58	1O411.D	1201980071	LANL	928862	500uL	10	N/A	11	W	RXM4	N/A	O	TCLP BLANK
3 Dec 2009 14:29	1O412.D	241904001	LANL	928860	500uL	10	N/A	12	W	RXM4	N/A	O	
3 Dec 2009 14:59	1O413.D	241908001	LANL	928860	500uL	10	N/A	13	W	RXM4	N/A	O	
3 Dec 2009 15:30	1O414.D	241908002	LANL	928860	500uL	10	N/A	14	W	RXM4	N/A	O	
3 Dec 2009 16:00	1O415.D	241912001	LANL	928860	500uL	10	N/A	15	W	RXM4	N/A	O	
3 Dec 2009 16:30	1O416.D	241912002	LANL	928860	500uL	10	N/A	16	W	RXM4	N/A	O	
3 Dec 2009 17:01	1O417.D	241424001	LANL	928862	500uL	10	N/A	17	W	RXM4	N/A	O	
3 Dec 2009 17:31	1O418.D	241424002	LANL	928862	500uL	10	N/A	18	W	RXM4	N/A	O	
3 Dec 2009 18:02	1O419.D	241527001	LANL	928862	500uL	10	N/A	19	W	RXM4	N/A	O	
3 Dec 2009 18:32	1O420.D	1201986243	LANL	928860	500uL	10	N/A	20	W	RXM4	N/A	O	MS 241904001
3 Dec 2009 19:03	1O421.D	1201986244	LANL	928860	500uL	10	N/A	21	W	RXM4	N/A	O	MSD 241904001
3 Dec 2009 19:34	1O422.D	1201986406	LANL	928860	500uL	10	N/A	22	W	RXM4	N/A	O	MS 241424001
3 Dec 2009 20:05	1O423.D	1201986407	LANL	928860	500uL	10	N/A	23	W	RXM4	N/A	O	MSD 241424001

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o417.d
Lab Smp Id: 241424001 Client Smp ID: WST03-10-2131
Inj Date : 03-DEC-2009 17:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241424001|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 17
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	884431	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	758898	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.606	(1.000)	430104	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.336	13.327	(0.975)	560872	51.0549	0.051
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1630739	52.7969	0.053
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	652369	45.1740	0.045

ION RATIO REPORT

VOA REPORT

Data file: 1o417.d
Report Date: 12/04/2009 07:30
Lab. ID: 241424001 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:01
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241424001|928862|10|VOAF|1|
Miscellaneous Info: LANL 500uL N/A
Comment:
Method used: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Dilution Factor= 10.0
Integrator: HP RTE Compound Sublist: 10-578-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14655	13.68	13.42	80-120	100	(T)
64	2347	13.68	13.42	2- 62	16	(T)
47 Benzene			CAS#: 71-43-2			
78	416	13.32	13.32	80-120	100	( )
77	17152	13.68	13.32	0- 53	4115	(QT)
51	177570	13.34	13.32	1- 61	42597	(Q)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

Data File: /chem/VOA1.i/120309v1/1o417.d
Date : 03-DEC-2009 17:01
Client ID: WST03-10-2131
Sample Info: |241424001|928862|10|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

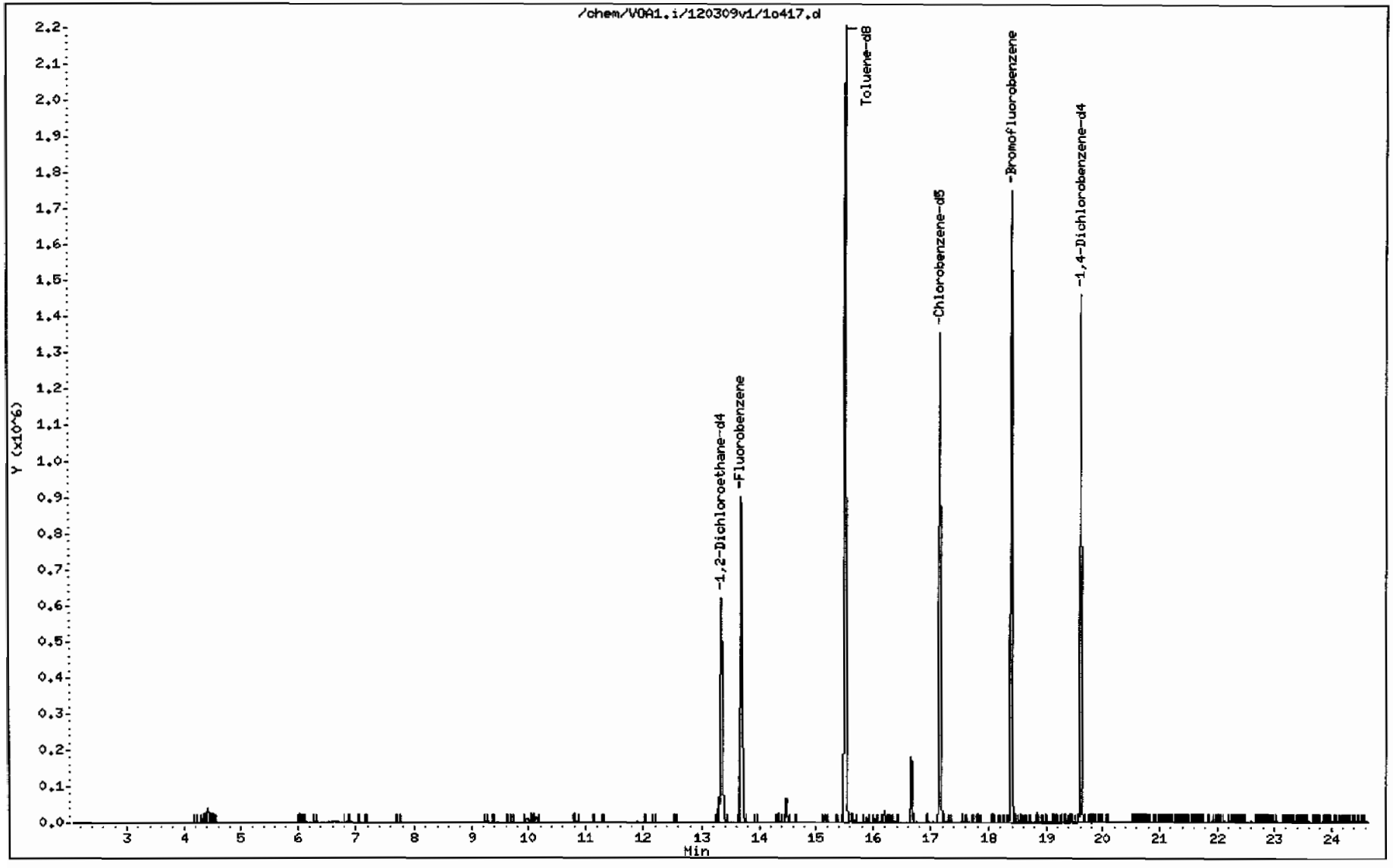

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o422.d
Lab Smp Id: 1201986406 Client Smp ID: WST03-10-2131MS
Inj Date : 03-DEC-2009 19:34
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986406|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A MS 241424001
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 22 QC Sample: MS
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	996436	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	795058	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.606	(1.000)	466394	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.327	(0.975)	653216	52.7770	0.053
$ 65 Toluene-d8	98	15.514	15.514	(0.904)	1829581	56.5406	0.056
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	724744	46.2808	0.046
7 Vinyl chloride	62	5.915	5.908	(0.432)	324902	44.1941	0.44
15 1,1-Dichloroethylene	61	9.083	9.065	(0.664)	614756	43.1127	0.43
103 1,4-Dichlorobenzene	146	19.634	19.634	(1.001)	781056	50.8611	0.51
35 2-Butanone	43	12.181	12.167	(0.890)	668965	118.067	1.2
41 Chloroform	83	12.609	12.595	(0.922)	724461	46.2234	0.46
44 Carbon tetrachloride	117	13.019	13.010	(0.952)	554108	45.0628	0.45
51 1,2-Dichloroethane	62	13.438	13.424	(0.982)	562239	40.6503	0.41
47 Benzene	78	13.332	13.318	(0.974)	1381384	49.5438	0.50
54 Trichloroethylene	95	14.115	14.105	(1.032)	369230	48.3463	0.48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
70 Tetrachloroethylene	164	16.186	16.181	(0.943)	286824	54.1468	0.54
77 Chlorobenzene	112	17.185	17.185	(1.002)	955351	52.8961	0.53

Data File: /chem/VOA1.i/120309v1/1o422.d
Date : 03-DEC-2009 19:34
Client ID: WST03-10-2131WS
Sample Info: I120198640619288862I101VOAF1I1
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

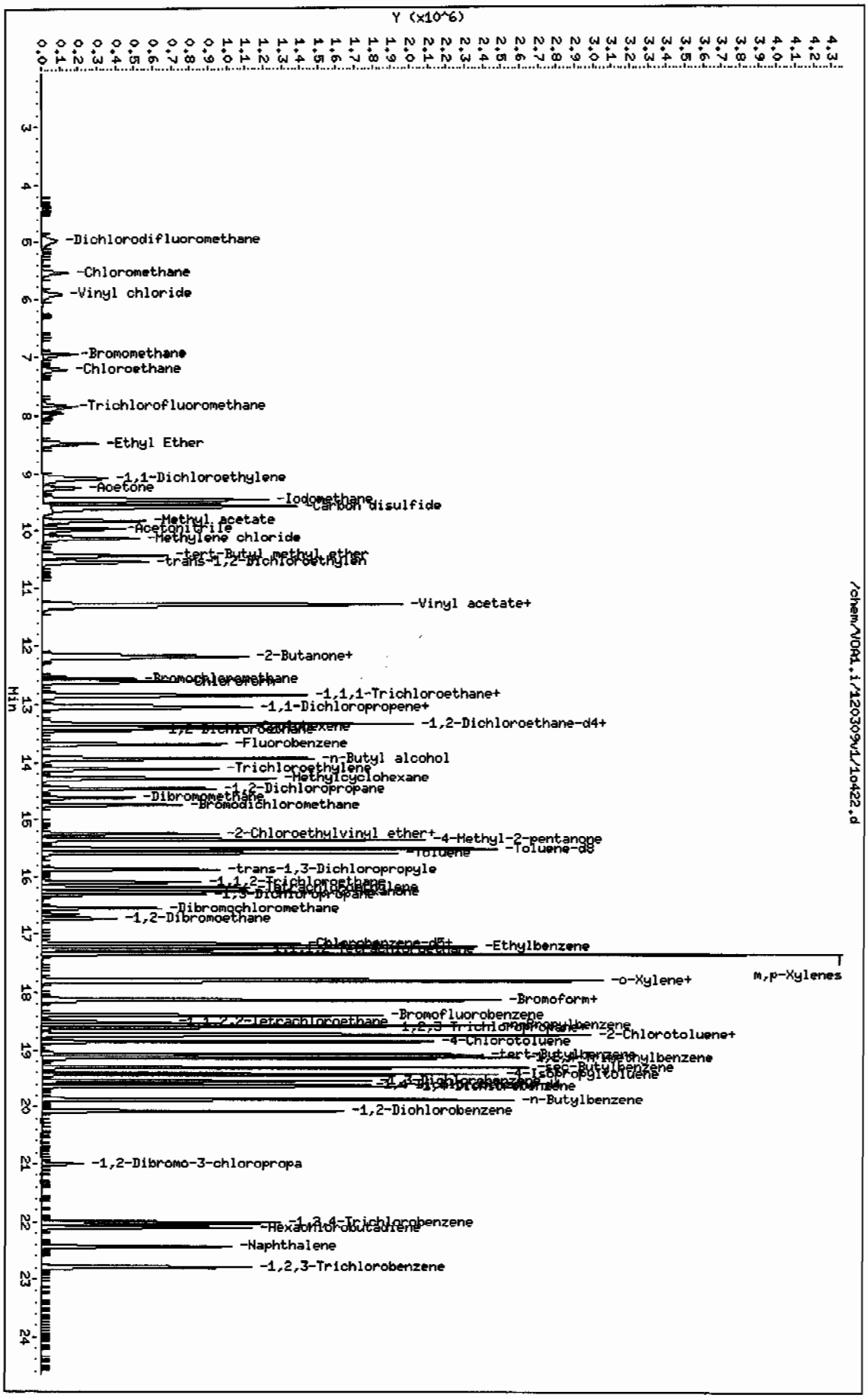

/chem/VOA1.i/120309v1/1o422.d

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GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o423.d
Lab Smp Id: 1201986407 Client Smp ID: WST03-10-2131MSD
Inj Date : 03-DEC-2009 20:05
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986407|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A MSD 241424001
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	1031385	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.152	(1.000)	872908	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	500769	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.337	13.327	(0.975)	635653	49.6177	0.050
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1870533	52.6508	0.053
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	743505	44.2196	0.044
7 Vinyl chloride	62	5.922	5.908	(0.433)	322839	42.4255	0.42
15 1,1-Dichloroethylene	61	9.079	9.065	(0.664)	625832	42.4023	0.42
103 1,4-Dichlorobenzene	146	19.638	19.634	(1.002)	802380	48.6630	0.49
35 2-Butanone	43	12.181	12.167	(0.890)	676693	115.384	1.2
41 Chloroform	83	12.609	12.595	(0.922)	737814	45.4802	0.45
44 Carbon tetrachloride	117	13.019	13.010	(0.952)	568943	44.7014	0.45
51 1,2-Dichloroethane	62	13.438	13.424	(0.982)	580445	40.5446	0.40
47 Benzene	78	13.332	13.318	(0.974)	1463359	50.6971	0.51
54 Trichloroethylene	95	14.114	14.105	(1.032)	385446	48.7594	0.49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
70 Tetrachloroethylene	164	16.186	16.181	(0.943)	294225	50.5903	0.50
77 Chlorobenzene	112	17.189	17.185	(1.002)	1014337	51.1532	0.51

Data File: /chem/VOA1.i/120309v1/1o423.d
Date : 03-DEC-2009 20:05
Client ID: WSTO3-10-2134MSD
Sample Info: 1120198640719288621101VOAF141
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

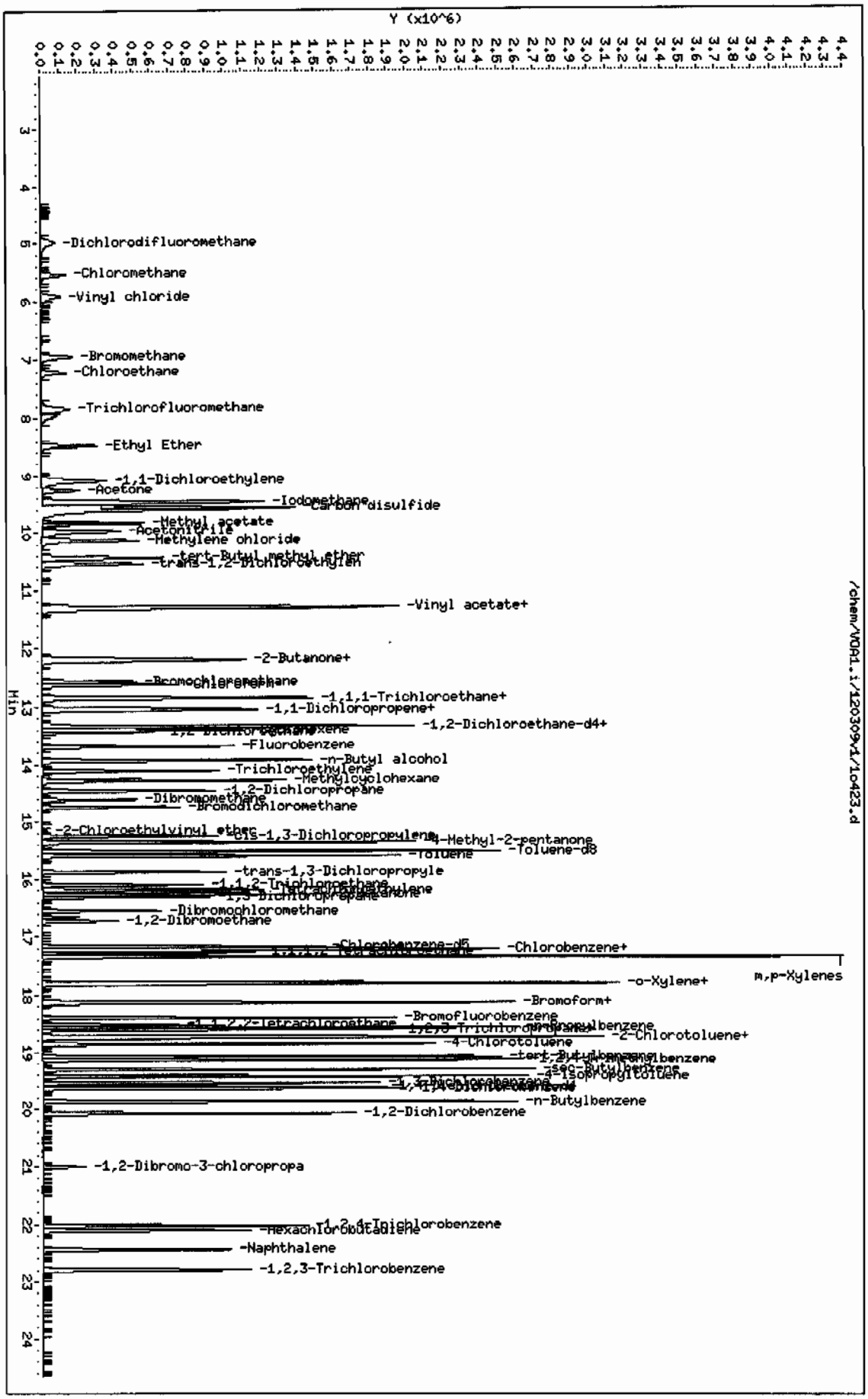

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GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	926126
Prep Batch Number:	926121

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241524002	WST03-10-2132
1201980154	Method Blank (MB)
1201980155	241524002(WST03-10-2132) Matrix Spike (MS)
1201980156	241524002(WST03-10-2132) Matrix Spike Duplicate (MSD)
1201980157	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241524002 (WST03-10-2132) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD(1201980156) recovered 2,4-Dinitrophenol at 21%. The limits are 25%-104%. Since the MS displayed a similar low (but passing) recovery to the MSD, the failure was attributed to matrix interference and the data results have been reported.

MS/MSD Relative Percent Difference (RPD) Statement
Multiple MS(1201980155)/MSD(1201980156) RPD values were outside of the established acceptance limits. Please see the QC Summary Report for specific failures. Since the analytes were all individually within the acceptance limits for the MS and MSD (with the exception of 2,4-Dinitrophenol), the data results have been reported. The 2,4-Dinitrophenol RPD failure was attributed to matrix interference and the data results have been reported (see MSD recovery statement above).

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 763864. It is located in the Miscellaneous Section of the data report.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration
The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD1.I	HP 5973 Mass Spectrometer	HP6890/HP5973	ZB-5ms	25m x 0.2mm, 0.33um (5% Polysilarylene-95% Polydimethylsiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: _____ **Date:** 12-14-09

Roadmap for LANL 10-600 SVOA

This roadmap was analyzed by amy01291 on 12-01-2009, 12:13.
This roadmap was reviewed by bar00895 on 12-01-2009, 14:31.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2919.d	241524002	29-NOV-2009	19:35	10-600.sub	WST03-10-2132	1	926126	REPORT

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2912-2.d	1201980154	mb	29-NOV-2009	16:50	10-600.sub	SBLK01	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2913-2.d	1201980157	lcs	29-NOV-2009	17:14	10-600.sub	SBLK01LCS	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2920.d	1201980155	ms	29-NOV-2009	19:59	10-600.sub	WST03-10-2132MS	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2921.d	1201980156	msd	29-NOV-2009	20:22	10-600.sub	WST03-10-2132MSD	1	926126	REPORT

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 19:35	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2919.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.8	354
108-95-2	Phenol	U	354	ug/kg	70.8	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.8	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.8	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.8	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.8	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.5	354
129-00-0	Pyrene		59.8	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.8	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.8	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.8	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.8	354
108-60-1	bis(2-Chloroisopropyl)ether	U	354	ug/kg	70.8	354
95-48-7	o-Cresol	U	354	ug/kg	70.8	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.8	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.8	354
78-59-1	Isophorone	U	354	ug/kg	70.8	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.8	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.8	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.8	354
65-85-0	Benzoic acid	U	708	ug/kg	177	708
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.8	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.8	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.08	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.8	354
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.8	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.8	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline	U	354	ug/kg	70.8	354
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	354	ug/kg	70.8	354

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 19:35	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2919.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	354	ug/kg	70.8	354
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	U	708	ug/kg	135	708
132-64-9	Dibenzofuran	U	354	ug/kg	70.8	354
84-66-2	Diethylphthalate	U	354	ug/kg	70.8	354
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.8	354
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.8	354
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354
	p-Nitroaniline					
122-39-4	Diphenylamine	U	354	ug/kg	70.8	354
122-66-7	Azobenzene	U	354	ug/kg	70.8	354
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	354	ug/kg	70.8	354
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.8	354
85-01-8	Phenanthrene		61.1	ug/kg	10.6	35.4
120-12-7	Anthracene	J	14.7	ug/kg	7.08	35.4
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.8	354
206-44-0	Fluoranthene		64.8	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.8	354
56-55-3	Benzo(a)anthracene	J	29.5	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354
218-01-9	Chrysene	J	26.2	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.8	354
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.8	354
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene	J	16.9	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.8	354

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	272	ug/kg		JA

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-600

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201980154	MB for batch 926121	80	76	85	91	92	97
1201980157	LCS for batch 926121	79	75	79	89	100	97
241524002	WST03-10-2132	69	70	74	83	92	94
1201980155	WST03-10-2132MS	71	70	70	82	91	100
1201980156	WST03-10-2132MSD	67	65	66	75	82	95

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1770	0.00	U	1150	65	32-90
108-95-2	MS	Phenol	1770	0.00	U	1200	68	32-105
95-57-8	MS	2-Chlorophenol	1770	0.00	U	1170	66	33-106
106-46-7	MS	1,4-Dichlorobenzene	1770	0.00	U	1060	60	33-95
621-64-7	MS	N-Nitrosodipropylamine	1770	0.00	U	1120	63	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1770	0.00	U	1230	70	38-119
83-32-9	MS	Acenaphthene	1770	0.00	U	1210	68	39-100
121-14-2	MS	2,4-Dinitrotoluene	1770	0.00	U	1140	64	42-107
100-02-7	MS	4-Nitrophenol	1770	0.00	U	1160	65	24-120
87-86-5	MS	Pentachlorophenol	1770	0.00	U	1250	70	26-121
129-00-0	MS	Pyrene	1770	59.8		1460	79	34-120
110-86-1	MS	Pyridine	1770	0.00	U	786	44	30-95
62-53-3	MS	Aniline	1770	0.00	U	949	54	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1770	0.00	U	1110	63	34-101
541-73-1	MS	1,3-Dichlorobenzene	1770	0.00	U	1010	57	31-97
100-51-6	MS	Benzyl alcohol	1770	0.00	U	908	51	17-120
95-50-1	MS	1,2-Dichlorobenzene	1770	0.00	U	1090	62	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1770	0.00	U	1100	62	32-113
95-48-7	MS	o-Cresol	1770	0.00	U	1630	92	31-119
65794-96-9	MS	m,p-Cresols	1770	0.00	U	1360	77	35-125
67-72-1	MS	Hexachloroethane	1770	0.00	U	996	56	30-100
98-95-3	MS	Nitrobenzene	1770	0.00	U	1220	69	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1770	0.00	U	1310	74	34-110
88-75-5	MS	2-Nitrophenol	1770	0.00	U	1120	63	32-108
105-67-9	MS	2,4-Dimethylphenol	1770	0.00	U	1230	69	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1770	0.00	U	1120	63	35-108
120-83-2	MS	2,4-Dichlorophenol	1770	0.00	U	1160	65	38-110
65-85-0	MS	Benzoic acid	3540	0.00	U	1170	33	18-134
91-20-3	MS	Naphthalene	1770	0.00	U	1140	64	31-105
106-47-8	MS	4-Chloroaniline	1770	0.00	U	1010	57	29-123
87-68-3	MS	Hexachlorobutadiene	1770	0.00	U	1150	65	31-109
91-57-6	MS	2-Methylnaphthalene	1770	0.00	U	1190	67	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1770	0.00	U	1580	89	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1770	0.00	U	1390	78	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1770	0.00	U	1440	81	37-116
91-58-7	MS	2-Chloronaphthalene	1770	0.00	U	1190	67	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1110	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	980	55	39-117
131-11-3	MS	Dimethylphthalate	1770	0.00	U	1330	75	41-105
606-20-2	MS	2,6-Dinitrotoluene	1770	0.00	U	1230	69	41-103
208-96-8	MS	Acenaphthylene	1770	0.00	U	1240	70	41-103
51-28-5	MS	2,4-Dinitrophenol	1770	0.00	U	513	29	25-104
132-64-9	MS	Dibenzofuran	1770	0.00	U	1450	82	40-114
84-66-2	MS	Diethylphthalate	1770	0.00	U	1410	80	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1770	0.00	U	1280	72	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1770	0.00	U	1380	78	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1770	0.00	U	647	37	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	1040	59	35-139
122-39-4	MS	Diphenylamine	1770	0.00	U	1290	73	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1310	74	37-118
101-55-3	MS	4-Bromophenylphenylether	1770	0.00	U	1540	87	39-112
118-74-1	MS	Hexachlorobenzene	1770	0.00	U	1230	70	38-113
85-01-8	MS	Phenanthrene	1770	61.1		1300	70	38-110
120-12-7	MS	Anthracene	1770	14.7	J	1240	69	38-112
84-74-2	MS	Di-n-butylphthalate	1770	0.00	U	1480	84	42-119
206-44-0	MS	Fluoranthene	1770	64.8		1270	68	38-119
85-68-7	MS	Butylbenzylphthalate	1770	0.00	U	1710	97	39-126
56-55-3	MS	Benzo(a)anthracene	1770	29.5	J	1290	71	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1770	0.00	U	1070	61	35-106
218-01-9	MS	Chrysene	1770	26.2	J	1160	64	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1770	0.00	U	1560	88	40-125
117-84-0	MS	Di-n-octylphthalate	1770	0.00	U	1850	104	30-147
205-99-2	MS	Benzo(b)fluoranthene	1770	0.00	U	1530	86	38-117
207-08-9	MS	Benzo(k)fluoranthene	1770	0.00	U	1220	69	39-120
50-32-8	MS	Benzo(a)pyrene	1770	16.9	J	1280	71	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1770	0.00	U	1000	57	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-600**	**Sample Type:**	**Matrix Spike**
Client ID:	**WST03-10-2132MS**	**Matrix:**	**R**
Lab Sample ID:	**1201980155**	**%Moisture:**	**6.2**
Instrument:	**MSD1.I**	**Analysis Date:**	**11/29/2009 19:59**
Analyst:	**AMY**	**Prep Batch ID**	**926121**
Inj. Vol:	**.5 uL**	**Batch ID:**	**926126**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1770	0.00	U	1030	58	32-124
191-24-2	MS	Benzo(ghi)perylene	1770	0.00	U	942	53	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1770	0.00	U	1130	64	31-105

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22 **Dilution:** 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1770	0.00	U	1120	63	32-90	3	0-30
108-95-2	MSD Phenol	1770	0.00	U	1120	63	32-105	7	0-30
95-57-8	MSD 2-Chlorophenol	1770	0.00	U	1120	63	33-106	4	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1770	0.00	U	1020	58	33-95	4	0-30
621-64-7	MSD N-Nitrosodipropylamine	1770	0.00	U	1010	57	31-109	10	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1770	0.00	U	1150	65	38-119	7	0-30
83-32-9	MSD Acenaphthene	1770	0.00	U	1130	64	39-100	6	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1770	0.00	U	1030	59	42-107	9	0-30
100-02-7	MSD 4-Nitrophenol	1770	0.00	U	1090	62	24-120	6	0-30
87-86-5	MSD Pentachlorophenol	1770	0.00	U	1030	58	26-121	19	0-30
129-00-0	MSD Pyrene	1770	59.8		1410	76	34-120	4	0-30
110-86-1	MSD Pyridine	1770	0.00	U	826	47	30-95	5	0-30
62-53-3	MSD Aniline	1770	0.00	U	944	53	34-111	1	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1770	0.00	U	1080	61	34-101	3	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1770	0.00	U	981	55	31-97	3	0-30
100-51-6	MSD Benzyl alcohol	1770	0.00	U	723	41	17-120	23	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1770	0.00	U	1050	60	32-102	4	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1770	0.00	U	1070	60	32-113	3	0-30
95-48-7	MSD o-Cresol	1770	0.00	U	1530	87	31-119	6	0-30
65794-96-9	MSD m,p-Cresols	1770	0.00	U	1280	72	35-125	6	0-30
67-72-1	MSD Hexachloroethane	1770	0.00	U	914	52	30-100	9	0-30
98-95-3	MSD Nitrobenzene	1770	0.00	U	1160	66	33-108	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22 **Dilution:** 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1770	0.00	U	1230	70	34-110	6	0-30
88-75-5	MSD 2-Nitrophenol	1770	0.00	U	1010	57	32-108	11	0-30
105-67-9	MSD 2,4-Dimethylphenol	1770	0.00	U	1140	65	32-115	7	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1770	0.00	U	1070	60	35-108	4	0-30
120-83-2	MSD 2,4-Dichlorophenol	1770	0.00	U	1090	62	38-110	6	0-30
65-85-0	MSD Benzoic acid	3540	0.00	U	1310	37	18-134	11	0-30
91-20-3	MSD Naphthalene	1770	0.00	U	1070	61	31-105	6	0-30
106-47-8	MSD 4-Chloroaniline	1770	0.00	U	973	55	29-123	4	0-30
87-68-3	MSD Hexachlorobutadiene	1770	0.00	U	1090	62	31-109	5	0-30
91-57-6	MSD 2-Methylnaphthalene	1770	0.00	U	1120	64	32-110	6	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1770	0.00	U	1040	59	21-122	41 *	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1770	0.00	U	1250	71	37-108	11	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1770	0.00	U	1330	75	37-116	8	0-30
91-58-7	MSD 2-Chloronaphthalene	1770	0.00	U	1090	62	37-103	8	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1010	57	36-115	9	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	920	52	39-117	6	0-30
131-11-3	MSD Dimethylphthalate	1770	0.00	U	1230	70	41-105	8	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1770	0.00	U	1100	62	41-103	11	0-30
208-96-8	MSD Acenaphthylene	1770	0.00	U	1140	64	41-103	8	0-30
51-28-5	MSD 2,4-Dinitrophenol	1770	0.00	U	364	21 *	25-104	34 *	0-30
132-64-9	MSD Dibenzofuran	1770	0.00	U	1350	76	40-114	7	0-30
84-66-2	MSD Diethylphthalate	1770	0.00	U	1320	75	43-110	7	0-30

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22 **Dilution:** 1
Prep Batch ID 926121
Batch ID: 926126

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD Fluorene	1770	0.00	U	1190	68	48-99	7	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1770	0.00	U	1300	74	42-111	6	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1770	0.00	U	433	25	19-118	40 *	0-30
100-01-6	MSD 4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	948	54	35-139	9	0-30
122-39-4	MSD Diphenylamine	1770	0.00	U	1170	66	41-112	9	0-30
122-66-7	MSD Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1200	68	37-118	9	0-30
101-55-3	MSD 4-Bromophenylphenylether	1770	0.00	U	1430	81	39-112	8	0-30
118-74-1	MSD Hexachlorobenzene	1770	0.00	U	1130	64	38-113	9	0-30
85-01-8	MSD Phenanthrene	1770	61.1		1190	64	38-110	9	0-30
120-12-7	MSD Anthracene	1770	14.7	J	1150	64	38-112	7	0-30
84-74-2	MSD Di-n-butylphthalate	1770	0.00	U	1360	77	42-119	9	0-30
206-44-0	MSD Fluoranthene	1770	64.8		1130	60	38-119	11	0-30
85-68-7	MSD Butylbenzylphthalate	1770	0.00	U	1600	90	39-126	7	0-30
56-55-3	MSD Benzo(a)anthracene	1770	29.5	J	1140	63	39-110	13	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1770	0.00	U	1030	58	35-106	4	0-30
218-01-9	MSD Chrysene	1770	26.2	J	1080	60	39-109	7	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1770	0.00	U	1460	82	40-125	7	0-30
117-84-0	MSD Di-n-octylphthalate	1770	0.00	U	2020	114	30-147	9	0-30
205-99-2	MSD Benzo(b)fluoranthene	1770	0.00	U	1270	72	38-117	19	0-30
207-08-9	MSD Benzo(k)fluoranthene	1770	0.00	U	1370	77	39-120	12	0-30
50-32-8	MSD Benzo(a)pyrene	1770	16.9	J	1160	65	40-115	10	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1770	0.00	U	742	42	32-120	30	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1770	0.00	U	790	45	32-124	26	0-30
191-24-2	MSD Benzo(ghi)perylene	1770	0.00	U	686	39	28-119	31 *	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1770	0.00	U	1070	61	31-105	5	0-30

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1230	74	31-95
108-95-2	LCS	Phenol	1670	0.0	1220	73	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1210	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1180	71	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1130	68	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1230	74	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1280	77	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1230	74	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1170	70	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1390	84	38-116
129-00-0	LCS	Pyrene	1670	0.0	1370	82	43-108
110-86-1	LCS	Pyridine	1670	0.0	927	56	13-129
62-53-3	LCS	Aniline	1670	0.0	1020	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1180	71	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1130	68	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1220	73	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1200	72	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1160	70	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1360	82	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1350	81	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1140	68	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1280	77	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926121 **Matrix:** SOIL

Lab Sample ID: 1201980157

Instrument: MSD1.I **Analysis Date:** 11/29/2009 17:14 **Dilution:** 1

Analyst: AMY **Prep Batch ID:** 926121

Inj. Vol: .5 uL **Batch ID:** 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1330	80	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1190	71	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1210	73	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1140	68	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1160	70	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	2170	65	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1190	71	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1020	61	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1230	74	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1250	75	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	2090	126	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1340	81	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1430	86	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1210	73	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1130	68	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	986	59	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1340	81	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1250	75	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1280	77	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1350	81	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1470	88	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1410	85	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1300	78	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1390	83	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1200	72	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1110	67	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1240	75	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1290	77	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1520	91	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1330	80	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1290	78	45-107
120-12-7	LCS	Anthracene	1670	0.0	1280	77	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1510	91	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1360	82	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1510	91	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1220	73	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1190	71	45-98
218-01-9	LCS	Chrysene	1670	0.0	1230	74	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1450	87	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1490	89	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1240	74	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1380	83	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1290	77	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1180	71	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1160	70	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1220	73	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1220	73	36-109

Method Blank Summary

SDG Number:	10-600	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926121	Instrument ID:	MSD1.I	Data File:	s1k2912-1.d
Lab Sample ID:	1201980154	Prep Date:	11/25/2009 21:20	Analyzed:	11/29/09 16:50
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926121	1201980157	s1k2913-1.d	11/29/09	1714
02 WST03-10-2132	241524002	s1k2919.d	11/29/09	1935
03 WST03-10-2132MS	1201980155	s1k2920.d	11/29/09	1959
04 WST03-10-2132MSD	1201980156	s1k2921.d	11/29/09	2022

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-600

Instrument ID: MSD1.I **Injection Date/Time:** 14-NOV-09 17:38

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.3
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	36.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	77.4
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091111-16	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:22
MEGA010	WBN091111-15	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:51
MEGA020	WBN091111-14	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:21
MEGA040	WBN091111-13.1	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:50
MEGA050	WBN091111-12	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:19
MEGA080	WBN091111-11	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:47
MEGA100	WBN091111-10	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 21:16
MEGA120	WBN091111-09	/chem/MSD1.i/s111409.b/s1k121	14-NOV-09 21:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-600

Instrument ID: MSD1.I **Injection Date/Time:** 15-NOV-09 14:50

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1213.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	39.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.2
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	72.7
442	Greater than 40% of mass 198	70.7
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP010	WBN091111-01	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:28
AP020	WBN091111-02	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:51
AP040	WBN091111-03.1	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:14
AP050	WBN091111-04	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:38
AP080	WBN091111-05	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 17:01
AP100	WBN091111-06	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:24
AP120	WBN091111-07	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:47
APICV	WBN091111-08.1	/chem/MSD1.i/s111409.b/s1k123	15-NOV-09 23:17

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-600

Instrument ID: MSD1.I **Injection Date/Time:** 17-NOV-09 15:48

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1259.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.2
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.5
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	72.4
442	Greater than 40% of mass 198	78.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091027-09.3	/chem/MSD1.i/s111409.b/s1k126	17-NOV-09 16:27

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-600

Instrument ID: MSD1.I **Injection Date/Time:** 29-NOV-09 15:00

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s112909.b/s1k2907.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.7
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	42.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	52.9
197	0 - 1% of mass 198	1
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	74.6
442	Greater than 40% of mass 198	69.8
443	17 - 23% of mass 442	18.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-03.5	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:16
APCVS	WBN091111-03.3	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:40
SBLK01	1201980154	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 16:50
SBLK01LCS	1201980157	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 17:14
WST03-10-2132	241524002	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 19:35
WST03-10-2132MS	1201980155	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 19:59
WST03-10-2132MSD	1201980156	/chem/MSD1.i/s112909.b/s1k292	29-NOV-09 20:22

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD1.I

GC Column: J&W DB-5MS

Client SDG: 10-600

STD Analysis Time: 29-NOV-09 15:16

Data File: s1k2908.d

	1,4-Dichlorobenzene-d4				Naphthalene-d8				Acenaphthene-d10				Phenanthrene-d10				Chrysene-d12				Perylene-d12			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	531725		3.83		2194392		4.69		1110069		5.94		1851790		6.92		1672748		8.56		1414560		9.95	
Upper Limit	1063450		4.33		4388784		5.19		2220138		6.44		3703580		7.42		3345496		9.06		2829120		10.5	
Lower Limit	265863		3.33		1097196		4.19		555035		5.44		925895		6.42		836374		8.06		707280		9.45	
Sample ID																								
BLK01	582567		3.83		2290441		4.69		1227579		5.93		2026415		6.92		1690866		8.55		1420003		9.94	
BLK01LCS	617030		3.83		2615814		4.69		1327800		5.93		2222627		6.92		1876046		8.56		1522701		9.95	
WST03-10-2132	633351		3.83		2509125		4.69		1361732		5.93		2298884		6.92		1876512		8.55		1311579		9.95	
WST03-10-2132MS	699947		3.83		2934133		4.69		1463731		5.93		2363993		6.92		1684742		8.56		1120190		9.95	
WST03-10-2132MSD	615056		3.83		2554313		4.69		1300161		5.93		2151794		6.92		1447390		8.56		806048		9.95	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241524002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 19:35**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2919.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.8	354
108-95-2	Phenol	U	354	ug/kg	70.8	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.8	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.8	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.8	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.8	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.5	354
129-00-0	Pyrene		59.8	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.8	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.8	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.8	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.8	354
108-60-1	bis(2-Chloroisopropyl)ether	U	354	ug/kg	70.8	354
95-48-7	o-Cresol	U	354	ug/kg	70.8	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.8	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.8	354
78-59-1	Isophorone	U	354	ug/kg	70.8	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.8	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.8	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.8	354
65-85-0	Benzoic acid	U	708	ug/kg	177	708
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.8	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.8	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.08	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.8	354
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.8	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.8	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	354	ug/kg	70.8	354
99-09-2	3-Nitroaniline	U	354	ug/kg	70.8	354

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241524002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 19:35**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2919.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	354	ug/kg	70.8	354
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	U	708	ug/kg	135	708
132-64-9	Dibenzofuran	U	354	ug/kg	70.8	354
84-66-2	Diethylphthalate	U	354	ug/kg	70.8	354
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.8	354
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.8	354
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354
	p-Nitroaniline					
122-39-4	Diphenylamine	U	354	ug/kg	70.8	354
122-66-7	Azobenzene	U	354	ug/kg	70.8	354
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	354	ug/kg	70.8	354
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.8	354
85-01-8	Phenanthrene		61.1	ug/kg	10.6	35.4
120-12-7	Anthracene	J	14.7	ug/kg	7.08	35.4
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.8	354
206-44-0	Fluoranthene		64.8	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.8	354
56-55-3	Benzo(a)anthracene	J	29.5	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354
218-01-9	Chrysene	J	26.2	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.8	354
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.8	354
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene	J	16.9	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.8	354

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	272	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2919.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 29-NOV-2009 19:35
Operator : AMY Inst ID: MSD1.i
Smp Info : |241524002|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	633351	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2509125	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1361732	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2298884	40.0000	
* 91 Chrysene-d12	240	8.551	8.557	(1.000)	1876512	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1311579	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1137005	68.7308	2430
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1408707	70.0630	2480
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	608033	36.7717	1300
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1348592	41.3508	1460
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	348366	91.6164	3240
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1381714	46.9088	1660

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.781	7.787	(0.910)	84287	1.69030	59.8
68 Phenanthrene	178	6.934	6.940	(1.002)	90217	1.72684	61.1
69 Anthracene	178	6.963	6.969	(1.006)	22092	0.41580	14.7(a)
76 Fluoranthene	202	7.639	7.645	(1.104)	92298	1.83024	64.8
89 Benzo(a)anthracene	228	8.539	8.545	(0.999)	37465	0.83262	29.5(a)
92 Chrysene	228	8.569	8.581	(1.002)	31114	0.73982	26.2(a)
97 Benzo(a)pyrene	252	9.875	9.886	(0.993)	18014	0.47732	16.9(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s1k2919.d
Report Date: 11/30/2009 08:46
Lab. ID: 241524002 SampleType: SAMPLE
Injection Date: 29-NOV-2009 19:35
Operator: AMY Instrument: MSD1.i
Sample Info: |241524002|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-600
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	69091	3.56	3.63	80-120	100	(T)
93	197	3.56	3.63	408-468	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	80406	4.19	4.08	80-120	100	(T)
42	53181	4.19	4.08	48-108	66	(T)
22 Isophorone		CAS#: 78-59-1				
82	608033	4.19	4.37	80-120	100	(T)
138	143	4.61	4.37	0- 50	0	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	239953	5.93	5.72	80-120	100	(T)
164	1361732	5.93	5.72	0- 40	567	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	174979	5.93	5.76	80-120	100	(T)
63	2131	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	174414	5.93	6.05	80-120	100	(T)
89	2199	5.93	6.05	40-100	1	(QT)
63	2131	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	22354	6.47	6.31	80-120	100	(T)
165	23995	6.47	6.31	65-125	107	(T)
167	7196	6.47	6.31	0- 43	32	(T)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	20575	6.47	6.62	80-120	100	(T)
141	135149	6.47	6.62	62-122	657	(QT)
250	42289	6.47	6.62	66-126	206	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	90217	6.93	6.94	80-120	100	( )
179	15459	6.93	6.94	0- 45	17	( )
176	16134	6.93	6.94	0- 48	18	( )
69 Anthracene			CAS#: 120-12-7			
178	22092	6.96	6.97	80-120	100	( )
179	4207	6.96	6.97	0- 45	19	( )
176	3897	6.96	6.97	0- 48	18	( )
76 Fluoranthene			CAS#: 206-44-0			
202	92298	7.64	7.65	80-120	100	( )
203	15561	7.64	7.65	0- 47	17	( )
101	13210	7.64	7.65	0- 43	14	( )
79 Pyrene			CAS#: 129-00-0			
202	84287	7.78	7.79	80-120	100	( )
200	17067	7.78	7.79	0- 51	20	( )
101	13741	7.78	7.79	0- 45	16	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	37465	8.54	8.55	80-120	100	( )
226	9359	8.54	8.55	0- 55	25	( )
229	10176	8.54	8.55	0- 49	27	( )
92 Chrysene			CAS#: 218-01-9			
228	31114	8.57	8.58	80-120	100	( )
229	7181	8.57	8.58	0- 49	23	( )
226	9506	8.57	8.58	0- 58	31	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	35647	9.50	9.51	80-120	100	( )
253	7370	9.50	9.51	0- 51	21	( )
125	5774	9.50	9.50	0- 44	16	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	35647	9.50	9.53	80-120	100	( )
253	9435	9.50	9.53	0- 51	26	( )
125	7060	9.50	9.53	0- 43	20	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	18014	9.87	9.89	80-120	100	( )
253	3914	9.87	9.89	0- 52	22	( )
125	5132	9.87	9.89	0- 48	28	( )
101 Benzo(ghi)perylene			CAS#: 191-24-2			
276	11065	11.96	11.98	80-120	100	( )
138	3071	11.96	11.98	7- 67	28	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2919.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 29-NOV-2009 19:35
Operator : AMY Inst ID: MSD1.i
Smp Info : |241524002|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3788880	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.875	728986	7.69606185	272	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2919.d
Date : 29-NOV-2009 19:35
Client ID: WST03-10-2132
Sample Info: |2415240021926126|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

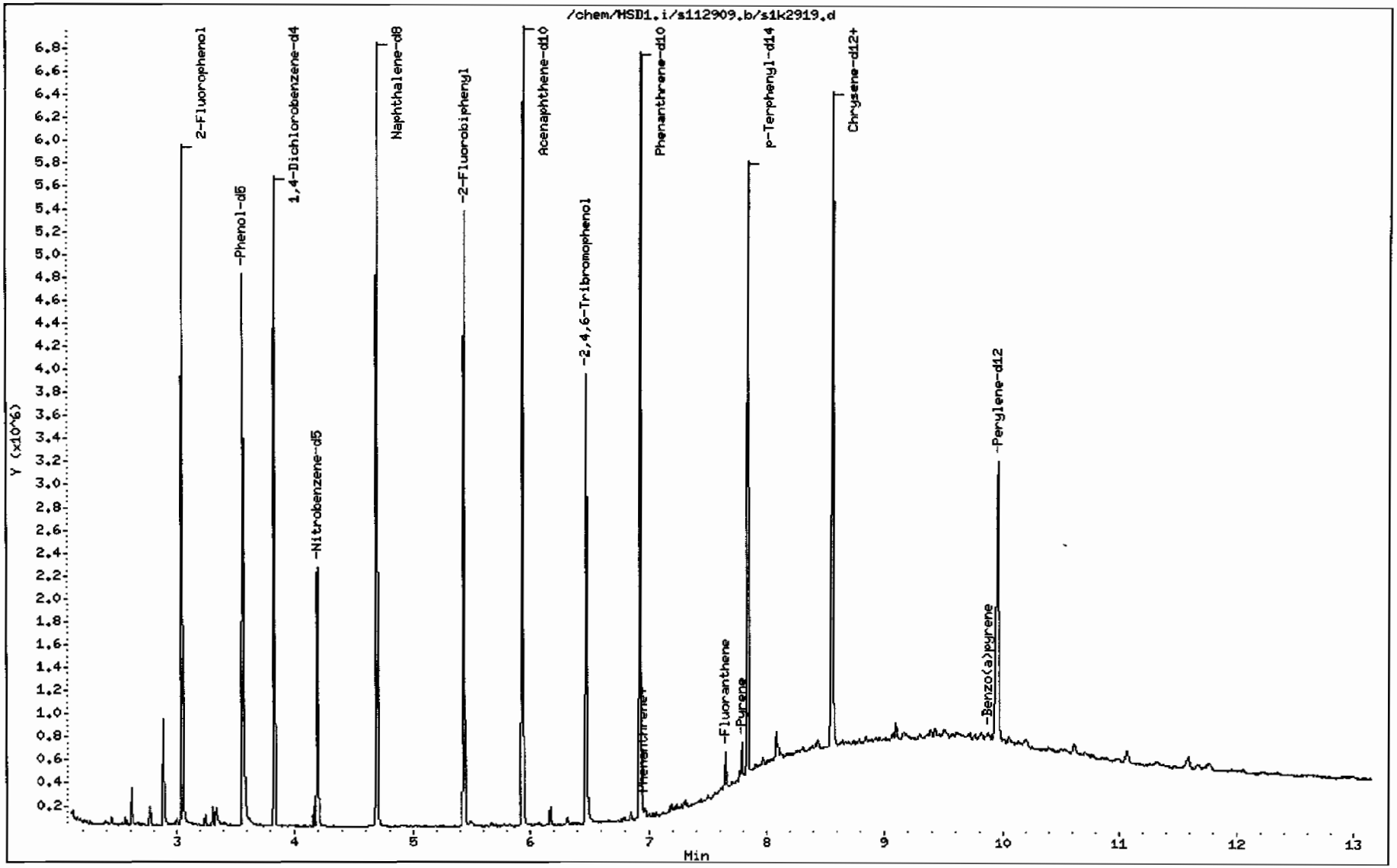

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132

Instrument: MSD1.i

Sample Info: |2415240021926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 59.8 ug/Kg

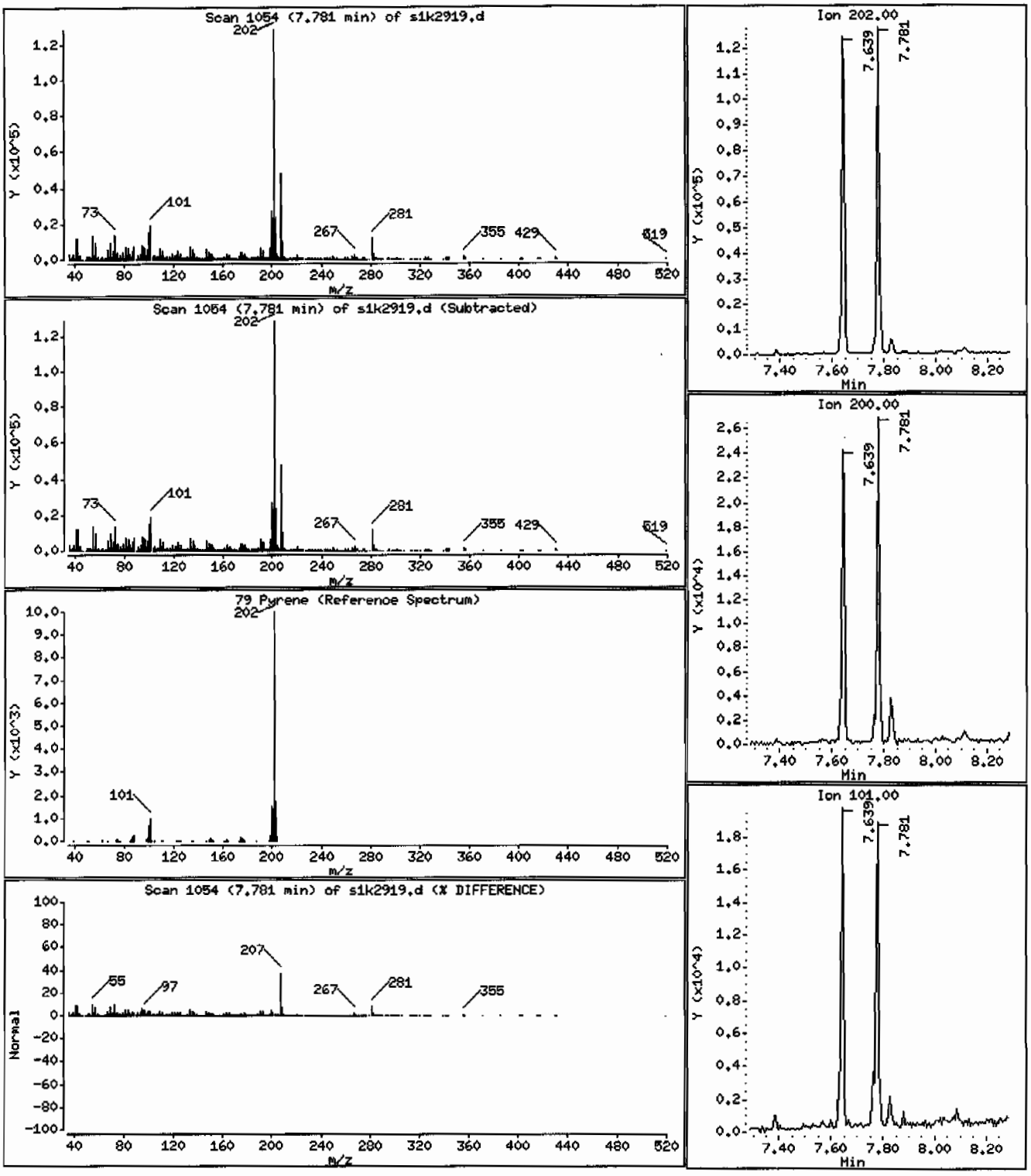

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132 Instrument: MSD1.i

Sample Info: |24152400219261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

68 Phenanthrene Concentration: 61.1 ug/Kg

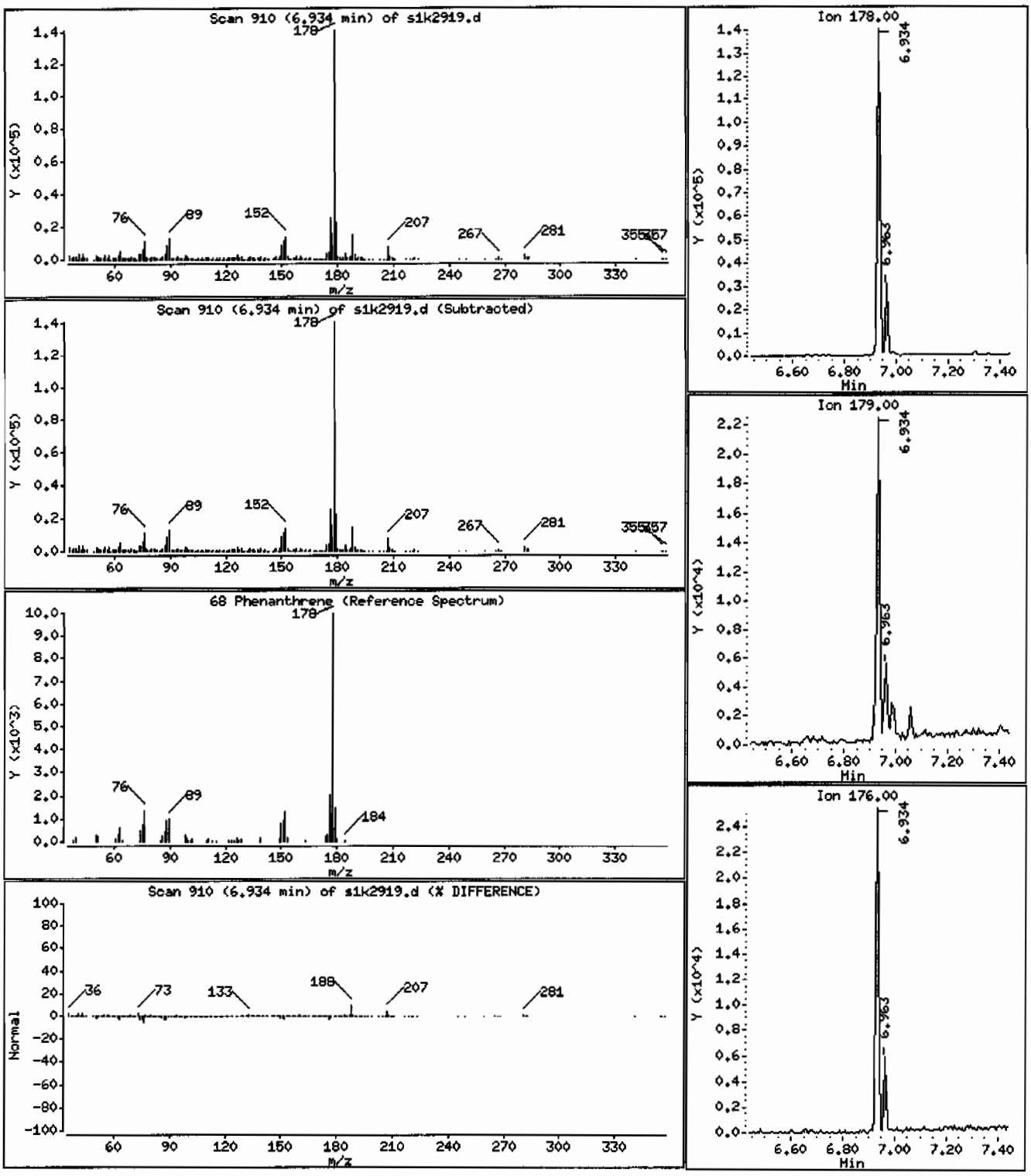

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132 Instrument: MSD1.i

Sample Info: |241524002|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

69 Anthracene Concentration: 14.7 ug/Kg

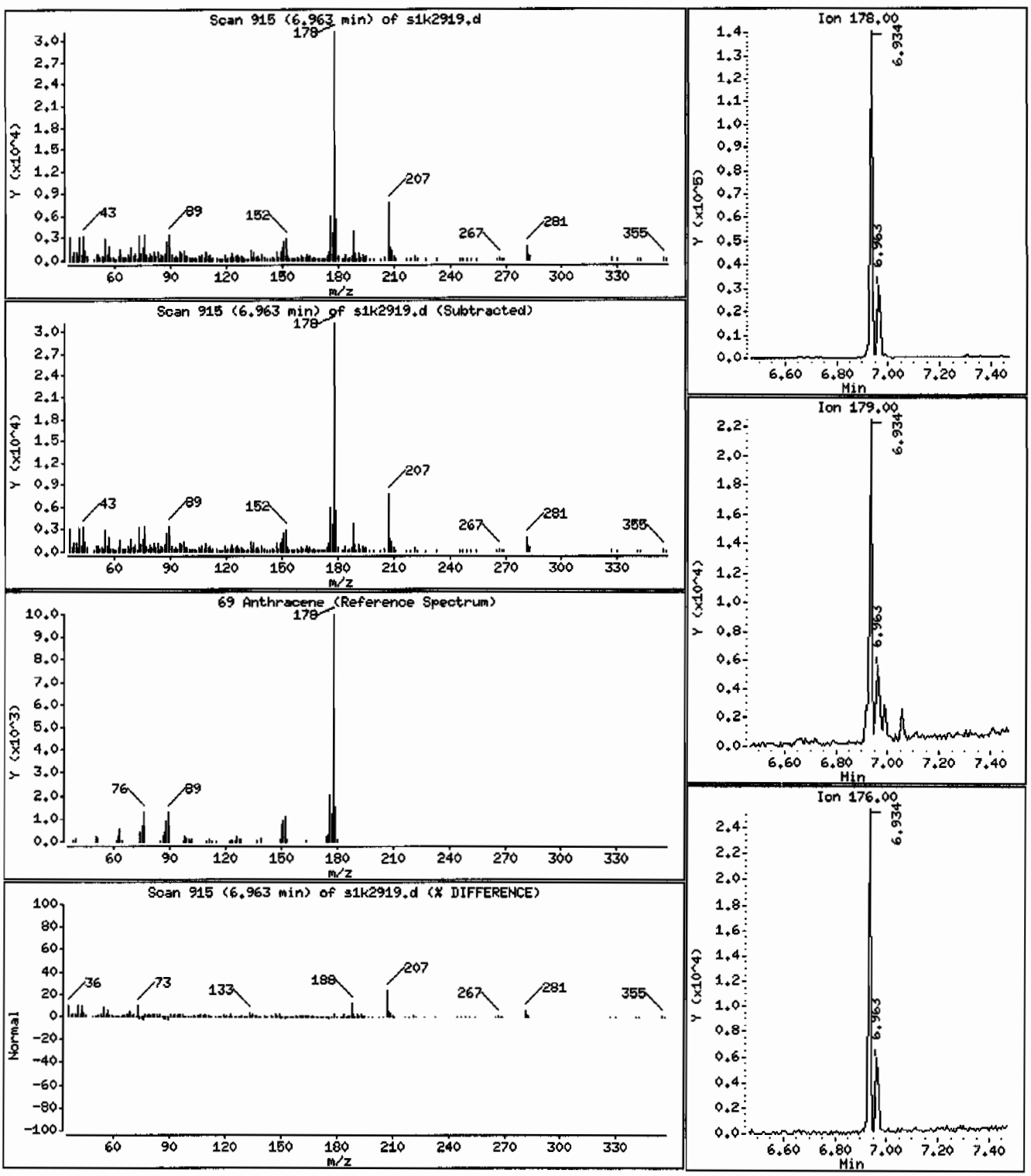

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132

Instrument: MSD1.i

Sample Info: |24152400219261261|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 64.8 ug/Kg

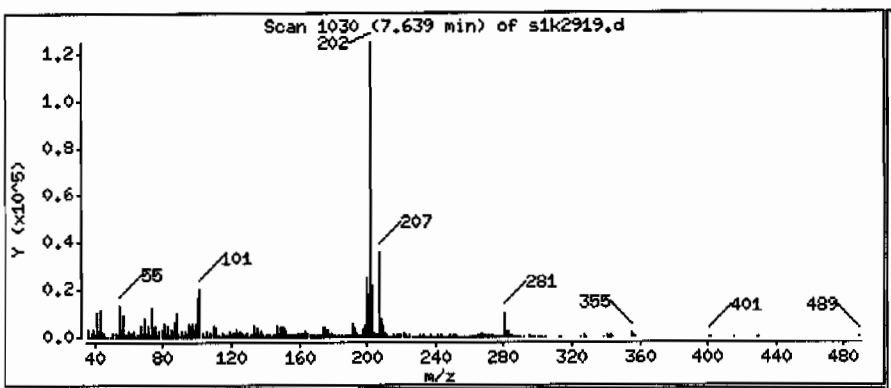

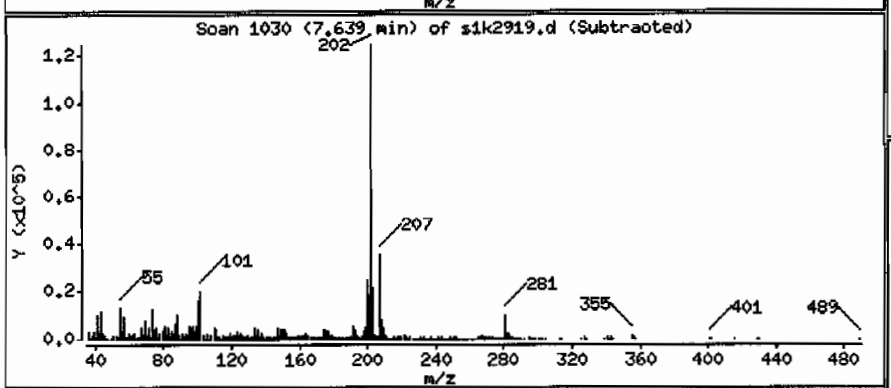

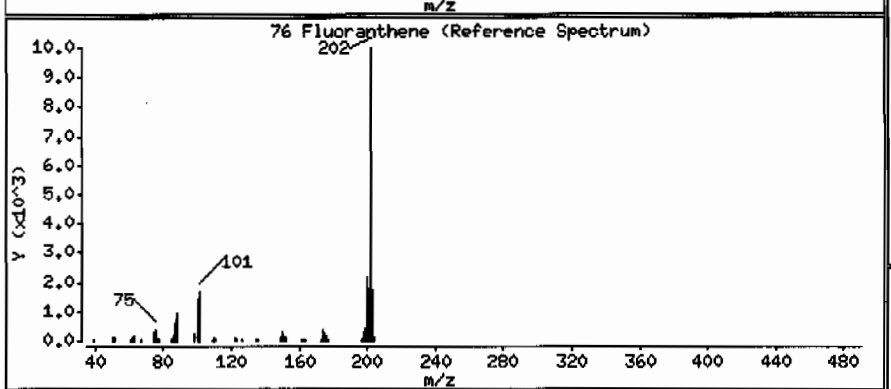

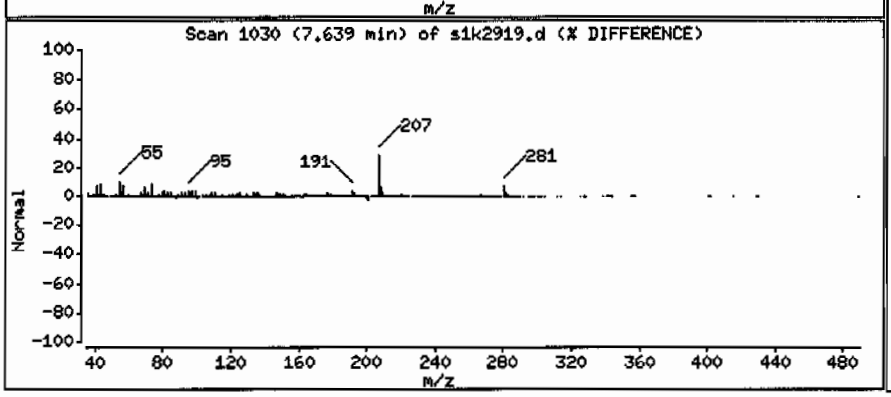

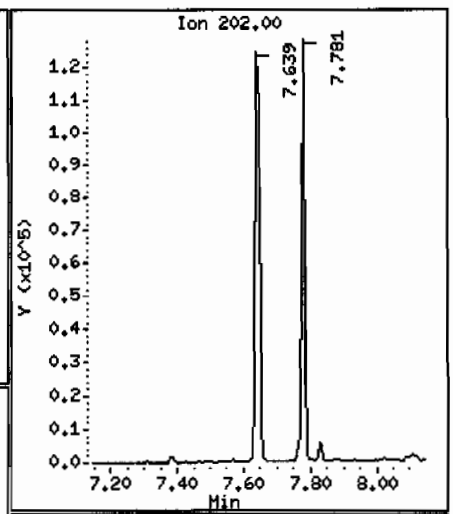

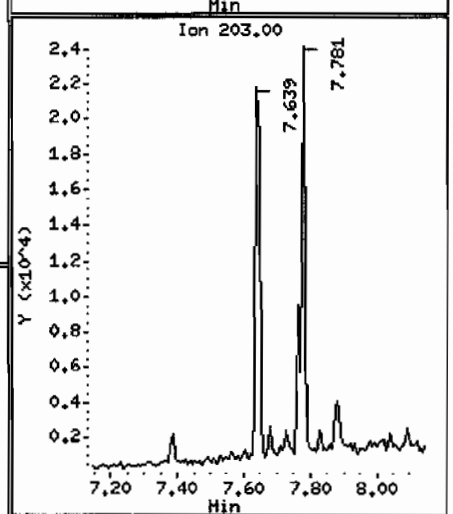

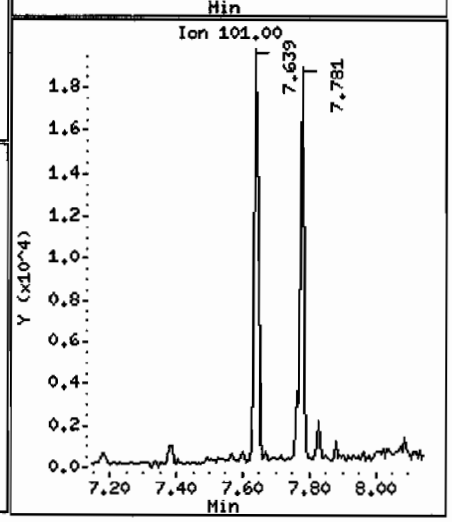

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132

Instrument: MSD1.i

Sample Info: 1241524002|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 29.5 ug/Kg

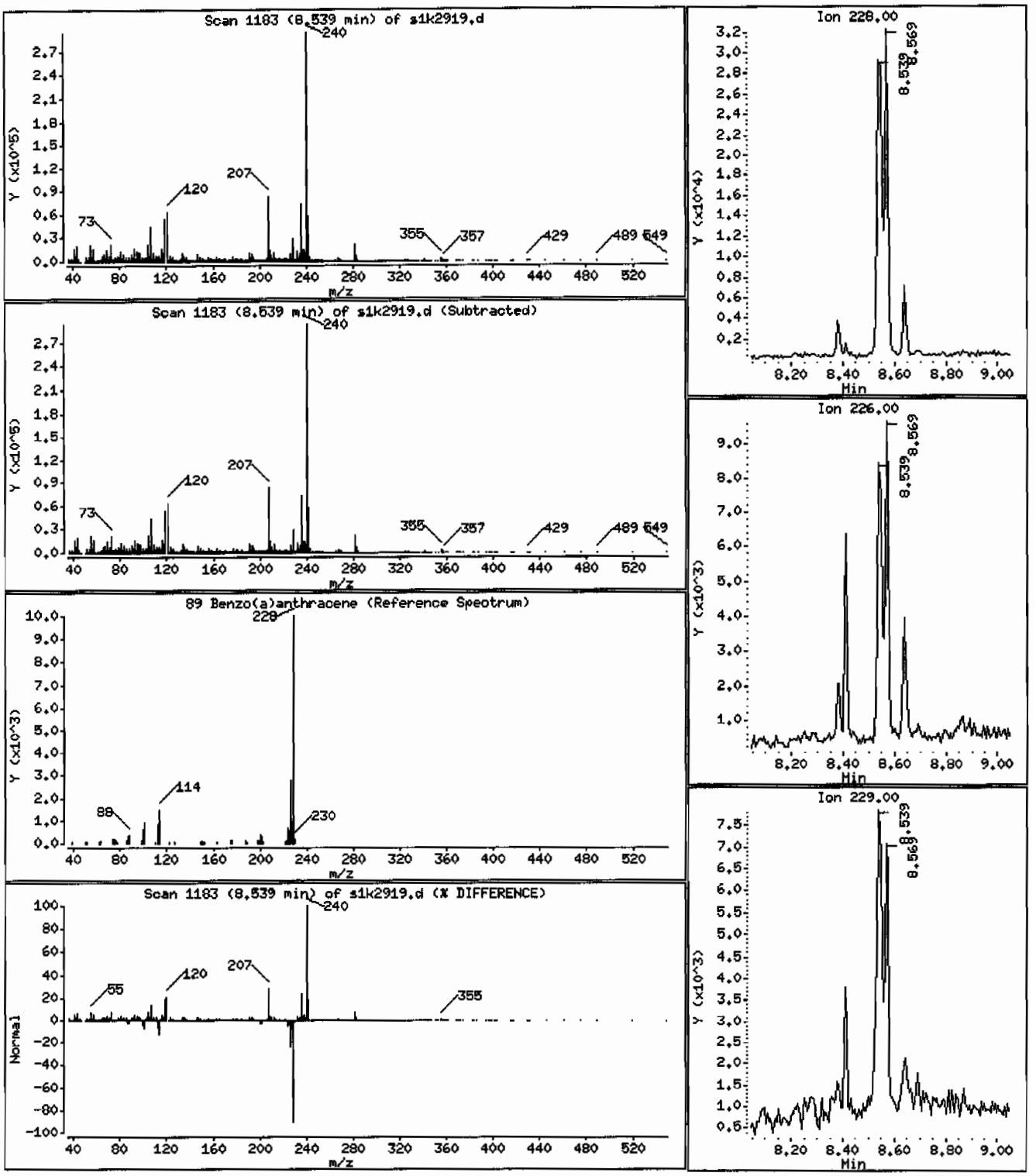

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132 Instrument: MSD1.i

Sample Info: |241524002|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

92 Chrysene Concentration: 26.2 ug/Kg

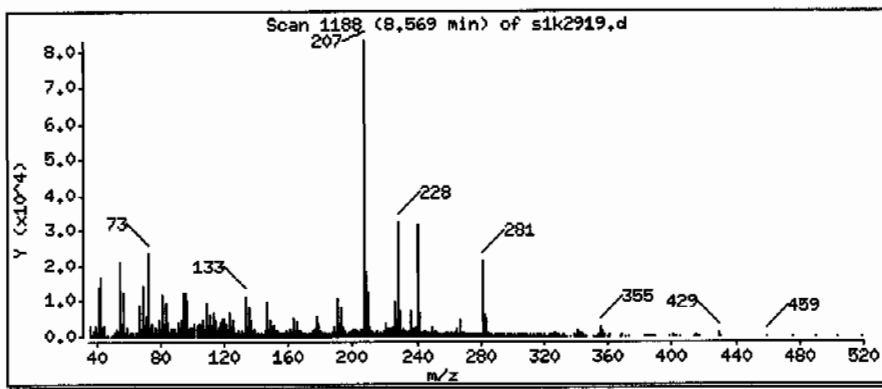

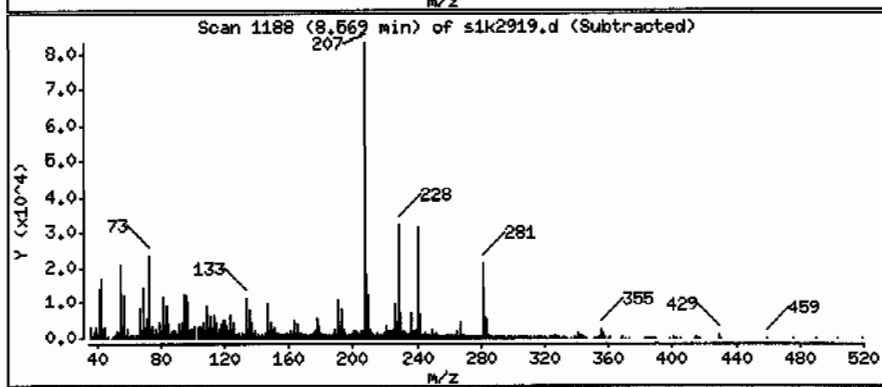

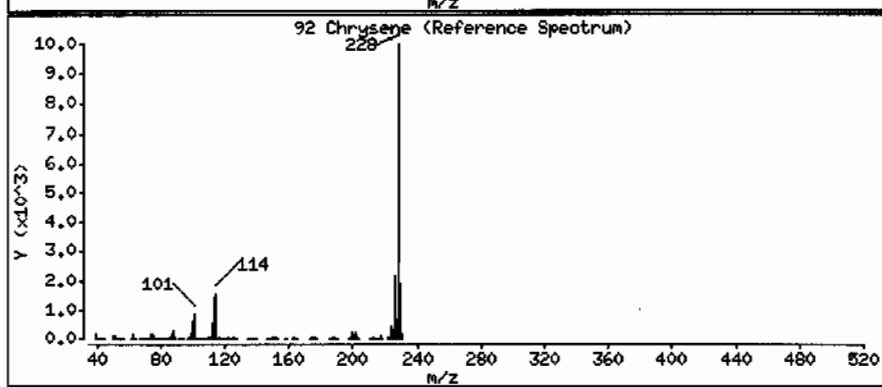

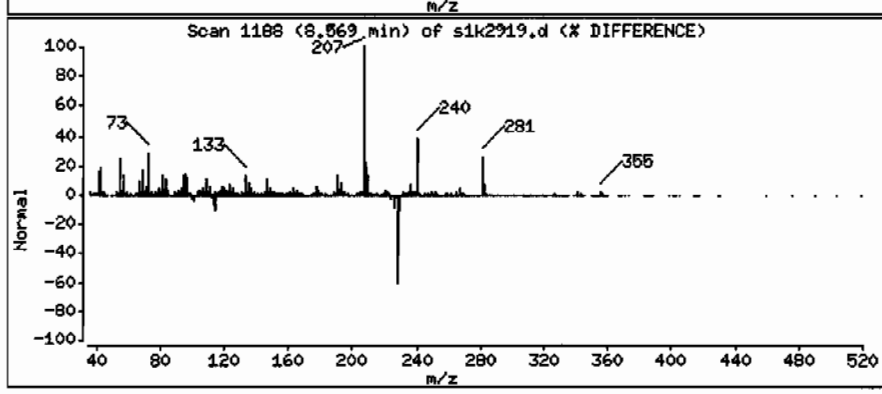

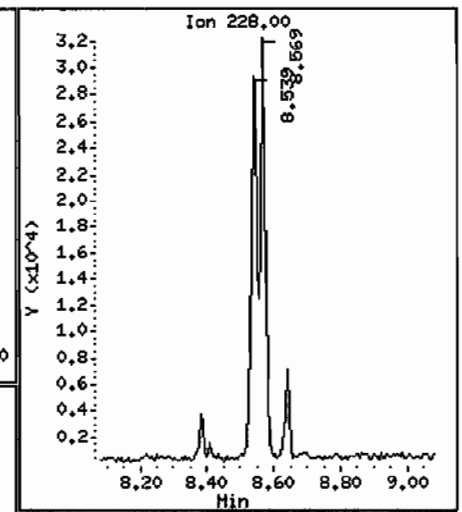

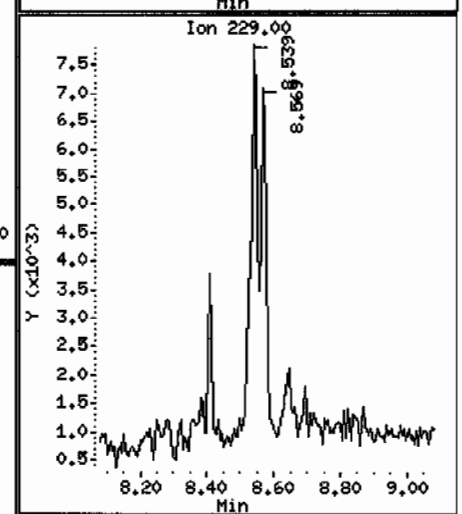

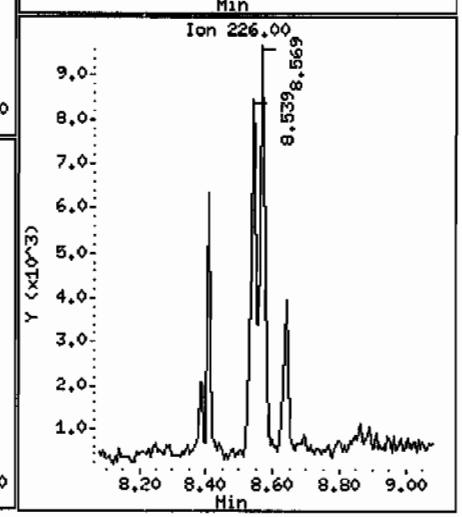

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132

Instrument: MSD1.i

Sample Info: |24152400219261261|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 16.9 ug/Kg

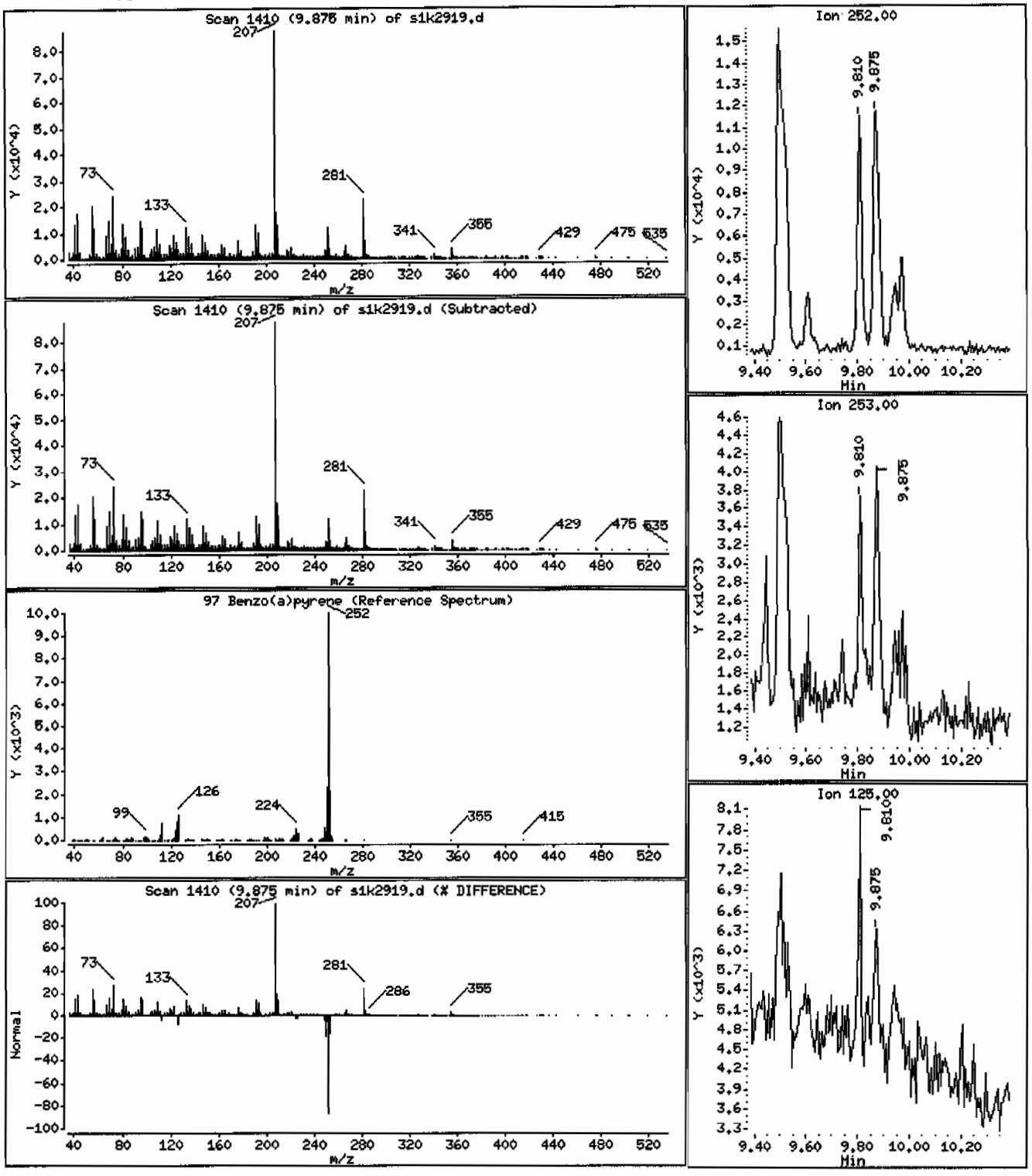

Data File: /chem/MSD1.i/s112909.b/s1k2919.d

Date : 29-NOV-2009 19:35

Client ID: WST03-10-2132

Instrument: MSD1.i

Sample Info: 1241524002|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

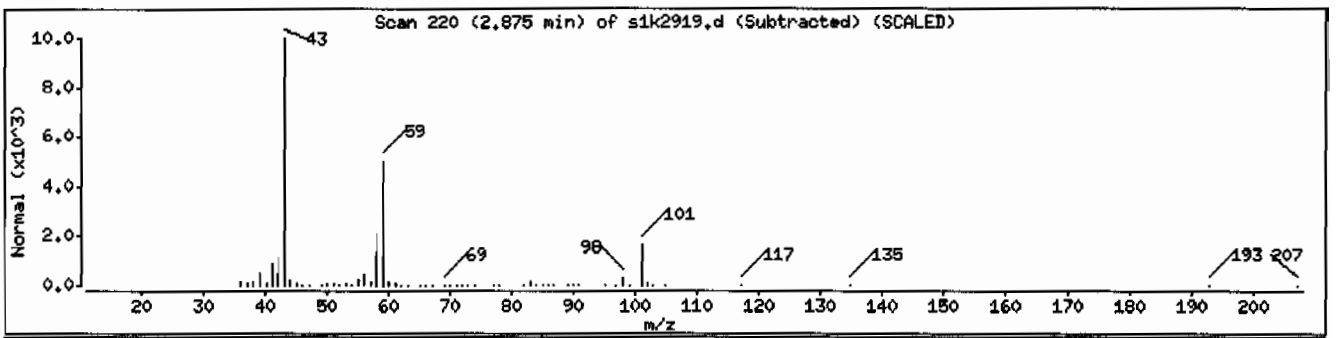

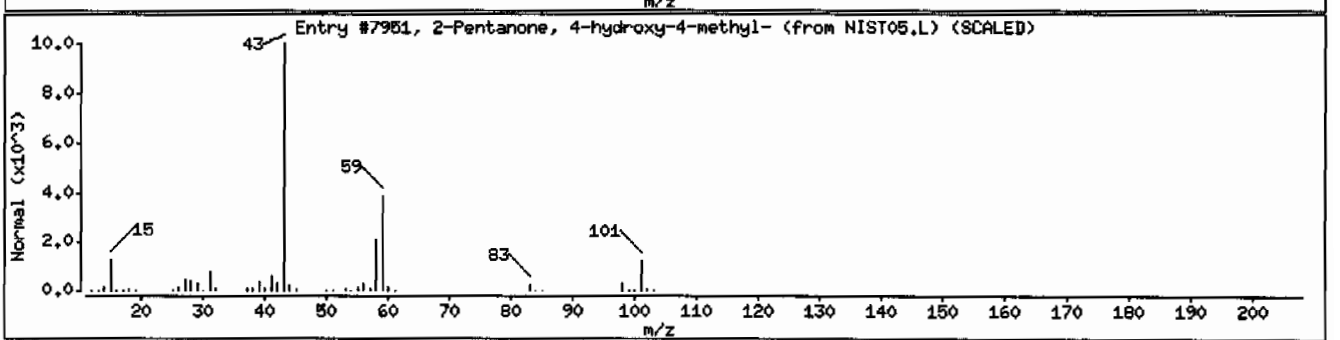

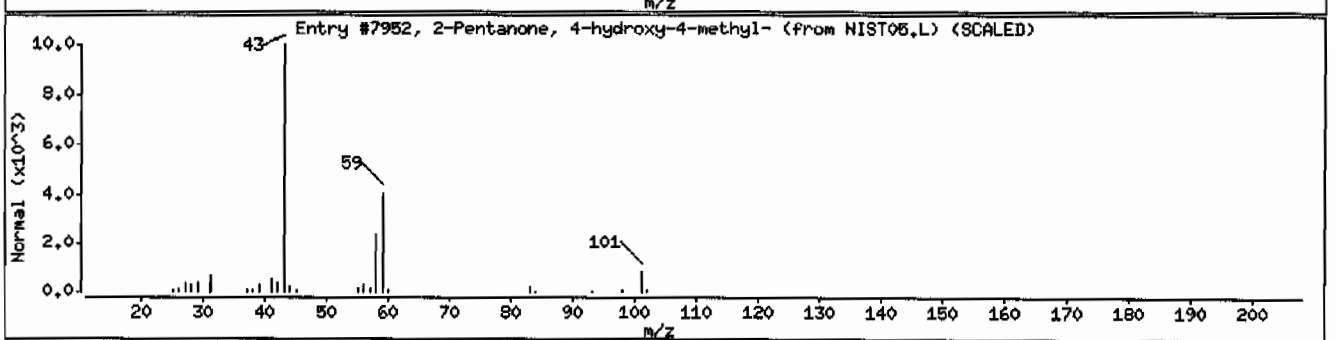

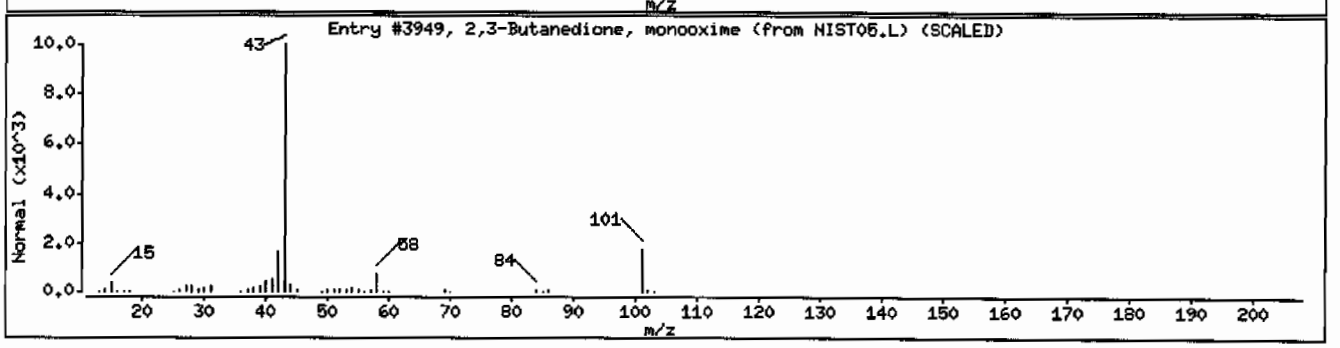

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 30-Nov-2009 09:10

Calibration History

Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Start Cal Date: 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 18:22	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1203.d

Cal Level: 2 , Cal Amount: 10.00000		
17-NOV-2009 16:56	nev	/chem/MSD1.i/s111409.b/s1k1262.d
15-NOV-2009 20:55	hex	/chem/MSD1.i/s111409.b/s1k1229.d
15-NOV-2009 18:11	pest	/chem/MSD1.i/s111409.b/s1k1222.d
15-NOV-2009 15:28	ap12	/chem/MSD1.i/s111409.b/s1k1215.d
14-NOV-2009 18:51	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1204.d

Cal Level: 3 , Cal Amount: 20.00000		
17-NOV-2009 17:19	nev	/chem/MSD1.i/s111409.b/s1k1263.d
15-NOV-2009 21:18	hex	/chem/MSD1.i/s111409.b/s1k1230.d
15-NOV-2009 18:35	pest	/chem/MSD1.i/s111409.b/s1k1223.d
15-NOV-2009 15:51	ap12	/chem/MSD1.i/s111409.b/s1k1216.d
14-NOV-2009 19:21	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1205.d

Cal Level: 4 , Cal Amount: 40.00000		
17-NOV-2009 17:42	nev	/chem/MSD1.i/s111409.b/s1k1264.d
15-NOV-2009 21:42	hex	/chem/MSD1.i/s111409.b/s1k1231.d
15-NOV-2009 18:58	pest	/chem/MSD1.i/s111409.b/s1k1224.d
15-NOV-2009 16:14	ap12	/chem/MSD1.i/s111409.b/s1k1217.d
14-NOV-2009 19:50	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1206.d

Cal Level: 5 , Cal Amount: 50.00000		
17-NOV-2009 18:05	nev	/chem/MSD1.i/s111409.b/s1k1265.d
15-NOV-2009 22:06	hex	/chem/MSD1.i/s111409.b/s1k1232.d
15-NOV-2009 19:21	pest	/chem/MSD1.i/s111409.b/s1k1225.d
15-NOV-2009 16:38	ap12	/chem/MSD1.i/s111409.b/s1k1218.d
14-NOV-2009 20:19	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1207.d

Cal Level: 6 , Cal Amount: 80.00000		
17-NOV-2009 18:28	nev	/chem/MSD1.i/s111409.b/s1k1266.d
15-NOV-2009 22:30	hex	/chem/MSD1.i/s111409.b/s1k1233.d
15-NOV-2009 19:45	pest	/chem/MSD1.i/s111409.b/s1k1226.d
15-NOV-2009 17:01	ap12	/chem/MSD1.i/s111409.b/s1k1219.d
14-NOV-2009 20:47	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1208.d

Cal Level: 7 , Cal Amount: 100.00000		

17-NOV-2009 18:52	nev	/chem/MSD1.i/s111409.b/s1k1267.d
15-NOV-2009 22:53	hex	/chem/MSD1.i/s111409.b/s1k1234.d
15-NOV-2009 20:09	pest	/chem/MSD1.i/s111409.b/s1k1227.d
15-NOV-2009 17:24	ap12	/chem/MSD1.i/s111409.b/s1k1220.d
14-NOV-2009 21:16	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1209.d

Cal Level: 8 , Cal Amount: 120.00000		
17-NOV-2009 19:15	nev	/chem/MSD1.i/s111409.b/s1k1268.d
15-NOV-2009 20:31	pest	/chem/MSD1.i/s111409.b/s1k1228.d
15-NOV-2009 17:47	ap12	/chem/MSD1.i/s111409.b/s1k1221.d
14-NOV-2009 21:45	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1210.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 15:16	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2908.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 16:27	pest	/chem/MSD1.i/s112909.b/s1k2911.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 16:04	nev	/chem/MSD1.i/s112909.b/s1k2910.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 15:40	ap12	/chem/MSD1.i/s112909.b/s1k2909.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 13:43	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2906.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 11:23	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2904.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-NOV-2009 10:50	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2903.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Calibration File Names:
Level 1: /chem/MSD1.i/s111409.b/s1k1203.d
Level 2: /chem/MSD1.i/s111409.b/s1k1262.d
Level 3: /chem/MSD1.i/s111409.b/s1k1263.d
Level 4: /chem/MSD1.i/s111409.b/s1k1264.d
Level 5: /chem/MSD1.i/s111409.b/s1k1265.d
Level 6: /chem/MSD1.i/s111409.b/s1k1266.d
Level 7: /chem/MSD1.i/s111409.b/s1k1267.d
Level 8: /chem/MSD1.i/s111409.b/s1k1268.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.54039	0.59425	0.56483	0.56773	0.57115					
	0.58358	0.54985					AVRG		0.56740		3.25055
2 Pyridine	+++++	0.93895	1.06231	1.03607	0.88870	0.86312					
	1.01434	0.86615					AVRG		0.95281		8.83991
4 Aniline	+++++	0.52437	0.56877	0.55954	0.56752	0.56439					
	0.57920	0.54312					AVRG		0.55813		3.31324
209 Benzaldehyde	+++++	0.85863	0.89515	0.82459	0.84178	+++++					
	0.78498	0.73887					AVRG		0.82400		6.72378
6 Phenol	+++++	1.30044	1.37922	1.37450	1.34330	1.33206					
	1.36293	1.27353					AVRG		1.33800		2.93989

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	0.97066	0.92013	0.97374	0.95071	0.94120	0.92474					
	0.92138	0.84393					AVRG		0.93081		4.39644
8 2-Chlorophenol	+++++	1.10018	1.18374	1.15316	1.14675	1.13425					
	1.15576	1.08633					AVRG		1.13717		2.96542
203 n-Decane	+++++	1.60577	1.68138	1.52755	1.45137	1.35767					
	1.27260	1.12485					AVRG		1.43160		13.59167
9 1,3-Dichlorobenzene	+++++	1.34153	1.44138	1.36782	1.35778	1.32788					
	1.29449	1.20929					AVRG		1.33431		5.33878
11 1,4-Dichlorobenzene	+++++	1.33212	1.41388	1.35420	1.32607	1.29299					
	1.26993	1.16675					AVRG		1.30799		5.91221
12 Benzyl alcohol	+++++	0.65002	0.69243	0.70051	0.67929	0.68651					
	0.73179	0.69932					AVRG		0.69141		3.57264
13 1,2-Dichlorobenzene	+++++	1.29605	1.34639	1.26381	1.21944	1.15866					
	1.13607	1.03545					AVRG		1.20798		8.78247
14 bis(2-Chloroisopropyl)ether	+++++	2.32509	2.42028	2.31148	2.26329	2.15456					
	2.11135	1.93355					AVRG		2.21709		7.35350
15 o-Cresol	+++++	0.90774	0.91911	0.87727	0.85502	0.81471					
	0.80779	0.74384					AVRG		0.84650		7.32849

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.16435	1.20208	1.12556	1.15316	+++++					
	1.08411	1.04352					AVRG		1.12880		5.09017
17 N-Nitrosodipropylamine	0.81293	0.75653	0.80116	0.77693	0.78822	0.71050					
	0.77452	0.67823					AVRG		0.76238		6.05014
18 m,p-Cresols	+++++	1.13181	1.16963	1.17353	1.13669	1.14618					
	1.18516	1.11948					AVRG		1.15179		2.12873
19 Hexachloroethane	+++++	0.47556	0.50281	0.48245	0.48088	0.46955					
	0.46206	0.42193					AVRG		0.47075		5.31168
21 Nitrobenzene	+++++	0.28437	0.30442	0.28298	0.28351	0.27052					
	0.25822	0.23858					AVRG		0.27466		7.74785
22 Isophorone	+++++	0.49709	0.51707	0.49540	0.49196	0.47802					
	0.46730	0.41658					AVRG		0.48049		6.70733
23 2-Nitrophenol	+++++	0.14839	0.15989	0.15609	0.15578	0.14421					
	0.13558	0.12065					AVRG		0.14580		9.49803
24 2,4-Dimethylphenol	+++++	0.25377	0.24260	0.23030	0.24361	0.23323					
	0.21824	0.21248					AVRG		0.23346		6.25831
25 bis(2-Chloroethoxy)methane	+++++	0.32659	0.33857	0.32017	0.31630	0.30271					
	0.29085	0.27012					AVRG		0.30933		7.51487

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.21991	0.23451	0.22671	0.22578	0.22138					
	0.21025	0.19507					AVRG		0.21909		5.89795
27 Benzoic acid	+++++	+++++	0.12652	0.15647	0.17043	0.17939					
	0.17420	0.15820					AVRG		0.16087		11.85426
28 1,2,4-Trichlorobenzene	+++++	0.25324	0.26639	0.25283	0.25336	0.23817					
	0.22476	0.20597					AVRG		0.24210		8.56147
30 Naphthalene	1.00192	0.89427	0.93446	0.86563	0.83102	0.76369					
	0.73215	0.65539					AVRG		0.83482		13.59329
204 alpha-Terpineol	+++++	0.21791	0.22387	0.20802	0.18690	0.18694					
	0.18377	0.16707					AVRG		0.19635		10.50339
31 4-Chloroaniline	+++++	0.39677	0.40757	0.39487	0.39324	0.37614					
	0.36195	0.33806					AVRG		0.38123		6.35973
189 Caprolactam	+++++	0.06846	0.07656	0.07363	0.07653	+++++					
	0.06782	0.06711					AVRG		0.07169		6.15581
32 Hexachlorobutadiene	+++++	0.13511	0.14100	0.13045	0.12864	0.12021					
	0.11205	0.10277					AVRG		0.12432		10.80535
33 4-Chloro-3-methylphenol	+++++	0.21530	0.22699	0.22627	0.22610	0.21202					
	0.21204	0.17967					AVRG		0.21406		7.75567

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.63189	0.59091	0.61031	0.56805	0.55492	0.51261					
	0.47801	0.44368					AVRG		0.54880		11.97650
35 1-Methylnaphthalene	0.57039	0.52594	0.54774	0.50754	0.49716	0.46294					
	0.43668	0.39804					AVRG		0.49330		11.71827
36 Hexachlorocyclopentadiene	+++++	0.10604	0.13033	0.13014	0.13942	0.12687					
	0.11688	0.10523					AVRG		0.12213		10.70285
208 1,1'-Biphenyl	+++++	1.17951	1.24377	1.14549	1.13585	+++++					
	1.04839	0.97002					AVRG		1.12050		8.68804
205 2,3-Dichloroaniline	+++++	0.46645	0.48933	0.47427	0.46997	0.44649					
	0.43405	0.39749					AVRG		0.45401		6.79831
37 2,4,6-Trichlorophenol	+++++	0.26977	0.29094	0.27785	0.27904	0.25743					
	0.25024	0.23713					AVRG		0.26606		7.03474
38 2,4,5-Trichlorophenol	+++++	0.26905	0.31036	0.32159	0.23043	0.31171					
	0.26900	0.26816					AVRG		0.28290		11.57703
40 2-Chloronaphthalene	1.06866	1.01017	1.06218	1.02382	1.00740	0.95458					
	0.92971	0.84336					AVRG		0.98748		7.61587
42 o-Nitroaniline	+++++	0.29397	0.31274	0.31408	0.31185	0.30784					
	0.31350	0.28932					AVRG		0.30619		3.33957

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.27156	0.28234	0.28082	0.27143	0.25979					
	0.28219	0.24573					AVRG		0.27055		5.03620
43 Dimethylphthalate	+++++	1.09522	1.14427	1.12702	1.11254	1.08188					
	1.07235	0.99634					AVRG		1.08995		4.43176
44 2,6-Dinitrotoluene	+++++	0.26660	0.28518	0.28098	0.27933	0.27123					
	0.26992	0.24768					AVRG		0.27156		4.59036
45 Acenaphthylene	1.62784	1.60004	1.67564	1.59865	1.57380	1.47905					
	1.44269	1.32968					AVRG		1.54092		7.42836
47 Acenaphthene	1.00456	0.99034	1.02942	0.97302	0.94853	0.86787					
	0.82882	0.73816					AVRG		0.92259		10.97291
48 2,4-Dinitrophenol	+++++	+++++	0.08843	0.11349	0.11534	0.11082					
	0.11305	0.10198					AVRG		0.10718		9.63049
49 Dibenzofuran	+++++	1.40383	1.45777	1.40759	1.36431	1.30285					
	1.24923	1.15395					AVRG		1.33422		7.92638
50 2,4-Dinitrotoluene	+++++	0.34056	0.36497	0.37079	0.37131	0.36633					
	0.36565	0.33990					AVRG		0.35993		3.80091
51 Diethylphthalate	+++++	1.04278	1.09197	1.06193	1.04018	0.99480					
	0.99307	0.88837					AVRG		1.01616		6.53371

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INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	0.13809	0.17287	0.18777	0.19477	0.20369					
	0.21665	0.20716					AVRG		0.18871		14.01343
53 Fluorene	1.22796	1.15355	1.19493	1.10753	1.06188	0.99894					
	0.97721	0.88428					AVRG		1.07578		10.93658
54 4-Chlorophenylphenylether	+++++	0.47537	0.49720	0.47503	0.46785	0.44264					
	0.43218	0.38915					AVRG		0.45420		7.92169
55 2-Methyl-4,6-dinitrophenol	+++++	0.08375	0.09608	0.10582	0.10320	0.10771					
	0.10908	0.10272					AVRG		0.10120		8.67983
56 p-Nitroaniline	+++++	0.24392	0.26348	0.26430	0.28144	0.26774					
	0.27465	0.25651					AVRG		0.26458		4.60021
133 Diphenylamine	+++++	0.55588	0.57977	0.55886	0.54789	0.52659					
	0.50269	0.46310					AVRG		0.53354		7.43632
58 1,2-Diphenylhydrazine	+++++	0.69850	0.71486	0.68099	0.66427	0.63670					
	0.61324	0.54832					AVRG		0.65098		8.77582
59 Tributylphosphate	+++++	1.22698	1.16066	1.10479	1.12684	1.06119					
	1.01440	0.96114					AVRG		1.09371		8.21068
61 4-Bromophenylphenylether	+++++	0.13960	0.14381	0.14105	0.13893	0.13903					
	0.13474	0.12486					AVRG		0.13743		4.49074

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
63 Hexachlorobenzene	+++++	0.18056	0.18610	0.17775	0.16888	0.16686					
	0.15868	0.14199					AVRG		0.16869		8.86819
207 Atrazine	+++++	0.04275	0.04402	0.04191	0.04036	+++++					
	0.03698	0.03447					AVRG		0.04008		9.14364
65 Pentachlorophenol	+++++	0.08713	0.10123	0.10564	0.10198	0.10716					
	0.10688	0.09814					AVRG		0.10117		6.93558
206 n-Octadecane	+++++	0.49445	0.50531	0.45683	0.42873	0.36788					
	0.34975	+++++					AVRG		0.43383		14.85243
68 Phenanthrene	1.08140	0.97577	0.96718	0.91676	0.90684	0.85016					
	0.82329	0.75087					AVRG		0.90903		11.26824
69 Anthracene	1.05572	0.98071	1.00934	0.97561	0.92329	0.88140					
	0.83261	0.73707					AVRG		0.92447		11.24280
72 Di-n-butylphthalate	+++++	1.06714	1.12314	1.06117	1.02135	0.94081					
	0.88726	0.80148					AVRG		0.98605		11.57265
76 Fluoranthene	0.94603	0.94387	0.96313	0.92832	0.88364	0.83514					
	0.79976	0.71979					AVRG		0.87746		9.80038
77 Benzidine	+++++	0.28582	0.36970	0.35152	0.36897	+++++					
	0.43187	0.36504					AVRG		0.36215		12.90005

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	1.12921	1.08043	1.13184	1.09423	1.03887	1.05677					
	1.02924	0.94284					AVRG		1.06293		5.79953
85 Butylbenzylphthalate	+++++	0.53253	0.56219	0.50335	0.46569	0.43331					
	0.40529	+++++					AVRG		0.48372		12.38419
89 Benzo(a)anthracene	1.00602	0.91134	0.98073	0.96992	0.98002	0.96903					
	0.95763	0.89850					AVRG		0.95915		3.79585
90 3,3'-Dichlorobenzidine	+++++	0.24634	0.28908	0.28847	0.28710	+++++					
	0.28231	0.25909					AVRG		0.27540		6.60230
92 Chrysene	0.98731	0.93210	0.94599	0.88032	0.86729	0.85456					
	0.87955	0.82465					AVRG		0.89647		6.00506
93 bis(2-Ethylhexyl)phthalate	0.57061	0.72394	0.78180	0.75934	0.74451	0.72196					
	0.68855	0.63132					AVRG		0.70275		10.02985
94 Di-n-octylphthalate	+++++	1.17035	1.39716	1.40560	1.36840	1.34274					
	1.30766	1.16752					AVRG		1.30849		7.70640
95 Benzo(b)fluoranthene	21625	340509	730849	1739197	2305837	3304287					
	3978698	5127789					LINR	0.06661	1.08695		0.99870
96 Benzo(k)fluoranthene	1.03711	1.06722	1.12263	1.01575	1.02623	1.00211					
	0.97020	0.78256					AVRG		1.00298		9.96839

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	20918	319721	688146	1504125	2094282	2912657					
	3398226	3934490					LINR	-0.00385	0.87033		0.99612
99 Indeno(1,2,3-cd)pyrene	21578	336515	700258	1580353	2201480	3025334					
	3523403	4020592					LINR	-0.01092	0.89653		0.99431
100 Dibenzo(a,h)anthracene	16162	268427	581631	1325626	1846286	2532762					
	2946699	3397425					LINR	-0.00445	0.75511		0.99519
101 Benzo(ghi)perylene	0.56462	0.70452	0.77602	0.81299	0.83023	0.80394					
	0.79303	0.72783					AVRG		0.75165		11.54879
102 1,4-Dioxane	+++++	0.32550	0.33716	0.30934	0.31455	+++++					
	0.30805	0.28861					AVRG		0.31387		5.27573
103 Methyl methacrylate	+++++	0.17774	0.19107	0.17805	0.17495	+++++					
	0.17326	0.16336					AVRG		0.17640		5.08144
104 Ethyl methacrylate	+++++	0.73346	0.76622	0.70794	0.70643	+++++					
	0.69714	0.66675					AVRG		0.71299		4.73943
105 2-Picoline	+++++	1.18802	1.23130	1.15065	1.15312	+++++					
	1.12223	1.07774					AVRG		1.15384		4.58113
106 N-Nitrosomethylethylamine	+++++	0.42951	0.48460	0.44623	0.45222	+++++					
	0.46395	0.44906					AVRG		0.45426		4.08577

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.43204	0.45674	0.42468	0.43227	+++++					
	0.41648	0.39202					AVRG		0.42570		5.00242
108 N-Nitrosodiethylamine	+++++	0.47915	0.50719	0.47065	0.48068	+++++					
	0.47830	0.46128					AVRG		0.47954		3.20356
109 Ethyl Methanesulfonate	+++++	0.59343	0.63202	0.58286	0.59990	+++++					
	0.59568	0.57362					AVRG		0.59625		3.34808
110 Pentachloroethane	+++++	0.30094	0.30775	0.28811	0.28717	+++++					
	0.28774	0.27522					AVRG		0.29115		3.95122
111 N-Nitrosopyrrolidine	+++++	0.47773	0.52978	0.49561	0.51566	+++++					
	0.41369	0.41806					AVRG		0.47509		10.34926
113 N-Nitrosomorpholine	+++++	0.63587	0.69755	0.63481	0.65791	+++++					
	0.54487	0.53392					AVRG		0.61749		10.47980
114 o-Toluidine	+++++	1.64551	1.76888	1.61850	1.65178	+++++					
	1.65679	1.57817					AVRG		1.65327		3.85302
115 N-Nitrosopiperidine	+++++	0.12931	0.13922	0.12850	0.13280	+++++					
	0.13244	0.12709					AVRG		0.13156		3.32124
116 a,a-Dimethylphenethylamine	+++++	0.70597	0.78545	0.76293	0.79408	+++++					
	0.79335	0.76628					AVRG		0.76801		4.32000

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117 Triethylphosphorothioate	+++++	0.12812	0.12428	0.12751	0.12901	0.12488						
	0.12021	0.11633					AVRG		0.12433		3.70966	
118 2,6-Dichlorophenol	+++++	0.18796	0.20530	0.19528	0.20193	+++++						
	0.20014	0.19147					AVRG		0.19701		3.35416	
119 Hexachloropropene	+++++	0.07891	0.09539	0.09133	0.09091	+++++						
	0.09225	0.08492					AVRG		0.08895		6.72708	
120 p-Phenylenediamine	+++++	0.17417	0.23091	0.21919	0.22009	+++++						
	0.19257	0.17231					AVRG		0.20154		12.55674	
121 N-Nitrosodi-n-butylamine	+++++	0.16926	0.19309	0.16843	0.17454	+++++						
	0.16640	0.15862					AVRG		0.17172		6.79719	
122 Safrole	+++++	0.18021	0.18852	0.17847	0.18253	+++++						
	0.17443	0.16766					AVRG		0.17864		3.98501	
123 1,2,4,5-Tetrachlorobenzene	+++++	0.38048	0.40351	0.37295	0.37017	+++++						
	0.35065	0.32500					AVRG		0.36713		7.29953	
124 Isosafrole	+++++	0.32136	0.34935	0.32718	0.32927	+++++						
	0.32898	0.30952					AVRG		0.32761		3.96520	
125 1,4-Naphthoquinone	+++++	0.37346	0.38046	0.31457	0.30180	+++++						
	0.18844	0.22186					AVRG		0.29676		26.34996	<-

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.17349	0.18721	0.19120	0.19440	0.19057					
	0.19238	0.17644					AVRG		0.18653		4.41251
127 Pentachlorobenzene	+++++	0.32992	0.34557	0.31675	0.31835	+++++					
	0.29677	0.27972					AVRG		0.31451		7.45207
128 1-Naphthylamine	+++++	0.82636	0.98891	0.93384	0.93443	+++++					
	0.87178	0.80990					AVRG		0.89420		7.80762
129 2-Naphthylamine	+++++	0.96588	1.05556	1.00159	1.00599	+++++					
	0.94403	0.87535					AVRG		0.97473		6.34557
130 2,3,4,6-Tetrachlorophenol	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
131 5-Nitro-o-toluidine	+++++	0.25535	0.29363	0.28574	0.29496	+++++					
	0.29982	0.28219					AVRG		0.28528		5.60973
132 Thionazin	+++++	0.16358	0.16364	0.16630	0.16880	0.16339					
	0.15554	0.14821					AVRG		0.16135		4.38820
134 Sulfotepp	+++++	0.08562	0.08304	0.08303	0.08467	0.07953					
	0.07427	0.07214					AVRG		0.08033		6.54838
135 Phorate	+++++	0.36567	0.35586	0.35721	0.36683	0.34385					
	0.32742	0.31541					AVRG		0.34747		5.65187

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	0.10196	0.12348	0.12395	0.12006	+++++					
	0.11894	0.10898					AVRG		0.11623		7.60291
137 Phenacetin	+++++	0.22684	0.26317	0.26291	0.26441	+++++					
	0.26599	0.25918					AVRG		0.25708		5.83046
138 Diallate	+++++	0.24760	0.24927	0.23322	0.23010	+++++					
	0.21802	0.20853					AVRG		0.23112		6.94549
139 Dimethoate	+++++	0.21461	0.21994	0.23007	0.23724	0.23858					
	0.23513	0.22967					AVRG		0.22932		3.92960
140 4-Aminobiphenyl	+++++	0.53696	0.55369	0.57677	0.59426	+++++					
	0.49840	0.45674					AVRG		0.53614		9.53476
141 Pentachloronitrobenzene	+++++	0.05720	0.06067	0.05490	0.05533	+++++					
	0.04673	0.04463					AVRG		0.05324		11.71339
142 Pronamide	+++++	0.24822	0.26125	0.24154	0.23765	+++++					
	0.17973	+++++					AVRG		0.23368		13.46482
143 Dinoseb	+++++	0.10297	0.12216	0.13126	0.12950	0.13024					
	0.13017	0.12500					AVRG		0.12447		8.06727
144 Disulfoton	+++++	0.32280	0.31415	0.31231	0.32231	0.30214					
	0.27306	0.26345					AVRG		0.30146		7.92046

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	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.18413	0.18908	0.19611	0.20206	0.20472					
	0.19613	0.19053					AVRG		0.19468		3.74715
146 4-Nitroquinoline-1-oxide	+++++	0.00831	0.00998	0.00800	0.01074	+++++					
	0.01133	0.01046					AVRG		0.00980		13.77700
147 Methapyrilene	+++++	0.36466	0.38869	0.39386	0.38311	+++++					
	0.36077	0.31821					AVRG		0.36822		7.55340
148 Isodrin	+++++	0.09085	0.09372	0.08925	0.08743	+++++					
	0.07960	0.07570					AVRG		0.08609		8.09255
149 Aramite	+++++	0.04141	0.04570	0.04371	0.04272	+++++					
	0.04204	0.03972					AVRG		0.04255		4.79399
150 Kepone	+++++	0.06055	0.06732	0.06349	0.06380	+++++					
	0.06458	0.05876					AVRG		0.06308		4.80408
151 p-(Dimethylamino)azobenzene	+++++	0.29782	0.31583	0.29702	0.29097	+++++					
	0.26535	0.24656					AVRG		0.28392		8.62091
152 Chlorobenzilate	+++++	0.21991	0.23787	0.22800	0.23044	+++++					
	0.20814	0.19524					AVRG		0.21994		7.17760
153 3,3'-Dimethylbenzidine	+++++	0.45675	0.51768	0.48413	0.48879	+++++					
	0.49372	0.43564					AVRG		0.47945		6.05117

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	100 Level 7	120 Level 8									
154 Famphur	+++++	0.29819	0.30032	0.31780	0.33430	0.32440					
	0.30595	0.30061					AVRG		0.31165		4.49495
155 2-Acetylaminofluorene	+++++	0.23107	0.30345	0.31881	0.32045	+++++					
	0.34822	0.32608					AVRG		0.30801		13.11206
157 7,12Dimethylbenz(a)anthracene	+++++	0.41118	0.44192	0.42666	0.43253	+++++					
	0.40970	0.40537					AVRG		0.42123		3.47443
158 3-Methylcholanthrene	+++++	0.29680	0.36865	0.37932	0.38459	+++++					
	0.39125	0.38204					AVRG		0.36711		9.59696
26 Phthalic anhydride	+++++	30283	90214	245905	320454	497228					
	555160	687649					LINR	0.08413	0.10332		0.99692
173 Carbazole	0.90246	0.82255	0.80875	0.81414	0.83946	0.78812					
	0.78058	0.70109					AVRG		0.80714		7.06036
174 Hexachlorophene	+++++	0.03640	0.04820	0.05180	0.05353	0.05136					
	0.04905	+++++					AVRG		0.04839		12.77621
179 Dibenzo(a,e)pyrene	+++++	117900	312429	817402	1225621	1557621					
	1812574	+++++					LINR	0.07449	0.50549		0.99368
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	2462	14132	46568	48315	83536					
	96111	113764					LINR	0.17192	0.08067		0.99223
191 Parathion	+++++	0.06169	0.06089	0.06449	0.06621	0.06308					
	0.06173	0.06112					AVRG		0.06274		3.14637
192 Methoxychlor	+++++	0.32535	0.36631	0.33959	0.33867	0.27894					
	0.25594	+++++					AVRG		0.31747		13.10686
210 m-Toluidine	+++++	0.77272	0.88703	0.90355	0.94226	1.01524					
	0.94351	+++++					AVRG		0.91072		8.87324
211 p-Toluidine	+++++	0.69169	0.70617	0.72166	0.71562	0.68688					
	+++++	+++++					AVRG		0.70440		2.12367
212 Cis Diallate	+++++	0.23437	0.24880	0.23465	0.23944	+++++					
	0.24434	0.23833					AVRG		0.23999		2.35508
213 Trans Diallate	+++++	0.29129	0.29326	0.27438	0.27070	+++++					
	0.25649	0.24533					AVRG		0.27191		6.94549
214 1,4-Dinitrobenzene	+++++	0.16000	0.17119	0.17754	0.17866	0.17639					
	0.17966	0.16860					AVRG		0.17315		4.08379
215 2-Ethoxyethanol	+++++	0.57555	0.62918	0.65385	0.56961	0.58718					
	0.62071	0.58595					AVRG		0.60315		5.24047

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.11447	0.12909	0.13171	0.13536	0.13420					
	0.13376	0.12587					AVRG		0.12921		5.63660
229 2,2'-Dichlorobenzil	+++++	0.67948	0.77608	0.71487	+++++	0.73565					
	+++++	0.63422					AVRG		0.70806		7.63914
230 4-Chlorothioanisole	+++++	0.23155	0.23520	0.23685	+++++	0.23140					
	+++++	0.22159					AVRG		0.23132		2.56050
231 4-Chlorothiophenol	+++++	0.15409	0.17482	0.19368	+++++	0.19893					
	+++++	0.19703					AVRG		0.18371		10.41669
232 bis(p-Chlorophenyl)sulfone	+++++	0.39430	0.43698	0.38579	+++++	0.39600					
	+++++	0.34721					AVRG		0.39206		8.15529
233 bis(p-Chlorophenyl)disulfide	+++++	0.10045	0.11150	0.11707	+++++	0.12020					
	+++++	0.10635					AVRG		0.11111		7.18003
234 Diphenyl disulfide	+++++	0.17804	0.18209	0.18631	+++++	0.17491					
	+++++	0.16341					AVRG		0.17695		4.91531
235 Diphenyl sulfide	+++++	0.71955	0.73103	0.70874	+++++	0.65333					
	+++++	0.61709					AVRG		0.68595		7.09988
236 Phenyl sulfone	+++++	0.43275	0.44078	0.42799	+++++	0.41905					
	+++++	0.39177					AVRG		0.42247		4.46830

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
237 Hydroxymethyl phthalimide	+++++	0.12384	0.15720	0.10384	+++++	0.13032					
	+++++	0.12669					AVRG		0.12838		14.88299
238 Phthalic acid	+++++	24604	70600	163991	+++++	411903					
	+++++	634014					LINR	0.25540	0.11087		0.99102
239 Thiophenol	+++++	0.94048	1.03561	1.08365	+++++	1.12900					
	+++++	1.09332					AVRG		1.05641		6.89893
240 bis(Chloromethyl)ether	+++++	0.78790	0.79417	0.76917	+++++	0.75455					
	+++++	0.73576					AVRG		0.76831		3.12263
241 Octachlorostyrene	+++++	0.06103	0.06315	0.05827	+++++	0.05420					
	+++++	0.04861					AVRG		0.05705		10.14342
M 225 Trichlorophenols	+++++	0.26941	0.30065	0.29972	0.25473	0.28457					
	0.25962	0.25265					AVRG		0.27448		7.49129
M 226 Tetrachlorophenols	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
M 227 Benzo(b,k)fluoranthene	0.78278	0.93887	1.02131	1.01324	1.00976	1.01479					
	1.00963	0.93381					AVRG		0.96552		8.47131
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
$ 3 2-Fluorophenol	+++++	0.97776	1.06271	1.06423	1.06306	1.07281						
	1.07136	1.00157					AVRG		1.04478		3.68308	
$ 5 Phenol-d5	+++++	1.21974	1.33050	1.28249	1.27680	1.26954						
	1.29216	1.21764					AVRG		1.26984		3.15351	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27426	0.28571	0.27066	0.27231	0.25884						
	0.24945	0.23400					AVRG		0.26360		6.62019	
$ 39 2-Fluorobiphenyl	+++++	0.99823	1.04801	1.00239	0.98618	0.93991						
	0.91199	0.81928					AVRG		0.95800		7.87748	
$ 60 2,4,6-Tribromophenol	+++++	0.10924	0.11530	0.11503	0.10898	0.11186						
	0.11271	0.10874					AVRG		0.11169		2.51418	
$ 81 p-Terphenyl-d14	+++++	0.64452	0.67675	0.65301	0.63863	0.61256						
	0.60853	0.56112					AVRG		0.62787		5.98666	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1235.d
Analysis Type:
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 15-NOV-2009 23:17
Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Init. Cal. Times: 18:22 22:53

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.71239	0.71239	0.000	-13.54468	60.00000	Averaged
16 Acetophenone	1.12880	1.15012	1.15012	0.000	1.88924	60.00000	Averaged
189 Caprolactam	0.07169	0.08295	0.08295	0.000	15.71078	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.24126	1.24126	0.000	10.77724	60.00000	Averaged
207 Atrazine	0.04008	0.04737	0.04737	0.000	18.18184	60.00000	Averaged
77 Benzidine	0.36215	0.33951	0.33951	0.000	-6.25196	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.29917	0.29917	0.000	8.63115	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.37981	0.37981	0.000	21.00923	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.20821	0.20821	0.000	18.03005	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.86659	0.86659	0.000	21.54329	60.00000	Averaged
105 2-Picoline	1.15384	1.13306	1.13306	0.000	-1.80140	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.46463	0.46463	0.000	2.28123	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48978	0.48978	0.000	15.05276	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.49102	0.49102	0.000	2.39384	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.74183	0.74183	0.000	24.41607	60.00000	Averaged
110 Pentachloroethane	0.29115	0.40985	0.40985	0.000	40.76840	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.50932	0.50932	0.000	7.20593	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.67896	0.67896	0.000	9.95518	60.00000	Averaged
114 o-Toluidine	1.65327	1.64031	1.64031	0.000	-0.78415	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.13273	0.13273	0.000	0.88789	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.79273	0.79273	0.000	3.21891	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.21797	0.21797	0.000	10.63653	60.00000	Averaged
119 Hexachloropropene	0.08895	0.13367	0.13367	0.000	50.27176	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.18980	0.18980	0.000	-5.82557	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.17829	0.17829	0.000	3.82057	60.00000	Averaged
122 Safrole	0.17864	0.21665	0.21665	0.000	21.27785	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.42376	0.42376	0.000	15.42574	60.00000	Averaged
124 Isosafrole	0.32761	0.46202	0.46202	0.000	41.02664	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.32067	0.32067	0.000	8.05637	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.35074	0.35074	0.000	11.51805	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.98926	0.98926	0.000	10.62991	60.00000	Averaged
129 2-Naphthylamine	0.97473	1.09077	1.09077	0.000	11.90459	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.30775	0.30775	0.000	7.87638	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.15168	0.15168	0.000	30.50015	60.00000	Averaged
137 Phenacetin	0.25708	0.29576	0.29576	0.000	15.04579	60.00000	Averaged
138 Diallate	0.23112	0.23284	0.23284	0.000	0.74457	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 15-NOV-2009 23:17
Lab File ID: s1k1235.d Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 22:53
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.31739	0.31739	0.000	32.25095	60.00000	Averaged
213 Trans Diallate	0.27191	0.27393	0.27393	0.000	0.74457	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.62569	0.62569	0.000	16.70322	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06215	0.06215	0.000	16.73283	60.00000	Averaged
142 Pronamide	0.23368	0.26726	0.26726	0.000	14.37225	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.00923	0.00923	0.000	-5.86960	60.00000	Averaged
147 Methapyrilene	0.36822	0.29090	0.29090	0.000	-20.99905	60.00000	Averaged
148 Isodrin	0.08609	0.08812	0.08812	0.000	2.35297	60.00000	Averaged
149 Aramite	0.04255	0.04327	0.04327	0.000	1.67534	60.00000	Averaged
150 Kepone	0.06308	0.07178	0.07178	0.000	13.77677	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.29411	0.29411	0.000	3.58893	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.24578	0.24578	0.000	11.75217	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.47257	0.47257	0.000	-1.43591	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.33042	0.33042	0.000	7.27461	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.42978	0.42978	0.000	2.03140	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40048	0.40048	0.000	9.08958	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1235.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: APICV
Inj Date : 15-NOV-2009 23:17
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091111-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 10:44 nat00999 Quant Type: ISTD
Cal Date : 15-NOV-2009 21:42 Cal File: s1k1231.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.957	3.940	(1.000)	601939	40.0000		
* 29 Naphthalene-d8	136	4.828	4.810	(1.000)	2374945	40.0000		
* 46 Acenaphthene-d10	164	6.075	6.057	(1.000)	1270499	40.0000		
* 67 Phenanthrene-d10	188	7.057	7.040	(1.000)	2114263	40.0000		
* 91 Chrysene-d12	240	8.739	8.722	(1.000)	1927170	40.0000		
* 98 Perylene-d12	264	10.251	10.222	(1.000)	1696025	40.0000		(H)
209 Benzaldehyde	77	3.681	3.681	(0.930)	428816	40.0000	34.6	
16 Acetophenone	105	4.210	4.210	(1.064)	692304	40.0000	40.8	
189 Caprolactam	113	5.104	5.122	(1.057)	197001	40.0000	46.3	
208 1,1'-Biphenyl	154	5.646	5.651	(0.929)	1577025	40.0000	44.3	
207 Atrazine	173	6.822	6.834	(0.967)	100151	40.0000	47.3	
77 Benzidine	184	7.828	7.834	(0.896)	654298	40.0000	37.5	
90 3,3'-Dichlorobenzidine	252	8.663	8.669	(0.991)	576557	40.0000	43.4	
102 1,4-Dioxane	88	2.281	2.287	(0.576)	228622	40.0000	48.4	
103 Methyl methacrylate	100	2.275	2.275	(0.575)	125330	40.0000	47.2	
104 Ethyl methacrylate	69	2.652	2.652	(0.670)	521635	40.0000	48.6	
105 2-Picoline	93	2.846	2.846	(0.719)	682032	40.0000	39.3	
106 N-Nitrosomethylethylamine	88	2.887	2.893	(0.729)	279676	40.0000	40.9	
107 Methyl methanesulfonate	80	3.046	3.052	(0.770)	294820	40.0000	46.0	
108 N-Nitrosodiethylamine	102	3.281	3.287	(0.829)	295564	40.0000	41.0	
109 Ethyl Methanesulfonate	79	3.440	3.446	(0.869)	446538	40.0000	49.8	
110 Pentachloroethane	167	3.781	3.781	(0.955)	246707	40.0000	56.3	
111 N-Nitrosopyrrolidine	100	4.199	4.216	(1.061)	306582	40.0000	42.9	
113 N-Nitrosomorpholine	56	4.216	4.228	(1.065)	408692	40.0000	44.0	
114 o-Toluidine	106	4.234	4.246	(1.070)	987365	40.0000	39.7	
115 N-Nitrosopiperidine	114	4.434	4.446	(0.918)	315224	40.0000	40.4	
116 a,a-Dimethylphenethylamine	58	4.681	4.681	(0.970)	1882697	40.0000	41.3	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.869	4.875	(1.009)	517655	40.0000	44.2
119 Hexachloropropene	213	4.899	4.898	(1.015)	317465	40.0000	60.1
120 p-Phenylenediamine	108	5.104	5.116	(1.057)	450756	40.0000	37.7
121 N-Nitrosodi-n-butylamine	84	5.069	5.075	(1.050)	423419	40.0000	41.5(T)
122 Safrole	162	5.234	5.240	(1.084)	514526	40.0000	48.5
123 1,2,4,5-Tetrachlorobenzene	216	5.440	5.446	(0.895)	538386	40.0000	46.2
124 Isosafrole	162	5.604	5.610	(0.923)	586994	40.0000	56.4
125 1,4-Naphthoquinone	158	5.793	5.793	(0.954)	407413	40.0000	43.2
127 Pentachlorobenzene	250	6.181	6.187	(1.017)	445615	40.0000	44.6
128 1-Naphthylamine	143	6.263	6.269	(1.031)	1256848	40.0000	44.2
129 2-Naphthylamine	143	6.316	6.322	(1.040)	1385825	40.0000	44.8
131 5-Nitro-o-toluidine	152	6.434	6.445	(1.059)	390998	40.0000	43.2
136 1,3,5-Trinitrobenzene	75	6.645	6.651	(0.942)	320686	40.0000	52.2
137 Phenacetin	108	6.687	6.698	(0.947)	625324	40.0000	46.0
138 Diallate	86	6.669	6.675	(0.945)	492291	40.0000	40.3
212 Cis Diallate	86	6.734	6.734	(0.954)	100656	6.00000	7.9
213 Trans Diallate	86	6.669	6.675	(0.945)	492291	34.0000	34.2
140 4-Aminobiphenyl	169	6.910	6.916	(0.979)	1322873	40.0000	46.7
141 Pentachloronitrobenzene	237	6.934	6.940	(0.982)	131405	40.0000	46.7
142 Pronamide	173	6.922	6.928	(0.981)	565063	40.0000	45.7
146 4-Nitroquinoline-1-oxide	101	7.516	7.522	(1.065)	19512	40.0000	37.6
147 Methapyrilene	58	7.534	7.539	(1.067)	615031	40.0000	31.6
148 Isodrin	193	7.692	7.692	(1.090)	186303	40.0000	40.9
149 Aramite	185	7.916	7.916	(1.122)	91474	40.0000	40.7
150 Kepone	272	8.351	8.363	(1.183)	151752	40.0000	45.5
151 p-(Dimethylamino)azobenzene	120	8.045	8.051	(0.921)	566806	40.0000	41.4
152 Chlorobenzilate	251	8.057	8.063	(0.922)	473667	40.0000	44.7
153 3,3'-Dimethylbenzidine	212	8.257	8.263	(0.945)	910722	40.0000	39.4
155 2-Acetylaminofluorene	181	8.445	8.457	(0.966)	636774	40.0000	42.9
157 7,12Dimethylbenz(a)anthracene	256	9.733	9.745	(0.945)	728922	40.0000	40.8
158 3-Methylcholanthrene	268	10.622	10.639	(1.031)	679223	40.0000	43.6

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1235.d
Date : 15-NOV-2009 23:17
Client ID: APICV
Sample Info: WBN091111-08,1|40 PPM|1|SVMF|1|APICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

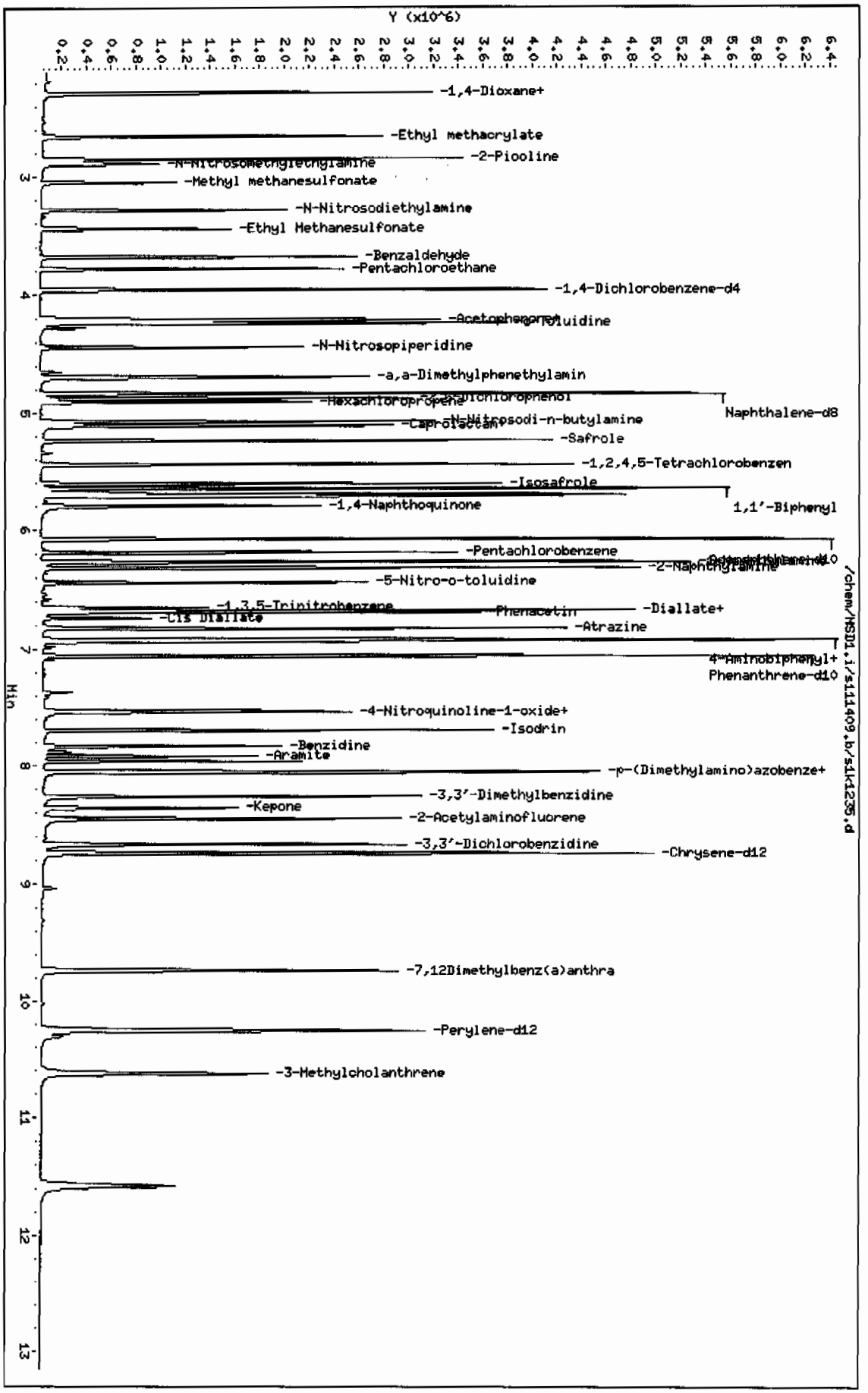

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.04478	0.92701	0.92701	0.000	-11.27306	60.00000	Averaged
$ 5 Phenol-d5	1.26984	1.11829	1.11829	0.000	-11.93416	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.26360	0.25882	0.25882	0.000	-1.81289	60.00000	Averaged
$ 39 2-Fluorobiphenyl	0.95800	0.95545	0.95545	0.000	-0.26619	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11169	0.11397	0.11397	0.000	2.04032	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.62787	0.61091	0.61091	0.000	-2.70233	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.56740	0.52259	0.52259	0.000	-7.89719	60.00000	Averaged
2 Pyridine	0.95281	0.72054	0.72054	0.000	-24.37721	60.00000	Averaged
4 Aniline	0.55813	0.46069	0.46069	0.000	-17.45935	60.00000	Averaged
6 Phenol	1.33800	1.13102	1.13102	0.001	-15.46941	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.93081	0.78725	0.78725	0.000	-15.42323	60.00000	Averaged
8 2-Chlorophenol	1.13717	0.96631	0.96631	0.000	-15.02517	60.00000	Averaged
203 n-Decane	1.43160	1.33489	1.33489	0.000	-6.75532	60.00000	Averaged
9 1,3-Dichlorobenzene	1.33431	1.14485	1.14485	0.000	-14.19930	60.00000	Averaged
11 1,4-Dichlorobenzene	1.30799	1.12905	1.12905	0.001	-13.68038	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.20798	1.02631	1.02631	0.000	-15.03923	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.21709	1.93928	1.93928	0.000	-12.53006	60.00000	Averaged
12 Benzyl alcohol	0.69141	0.59629	0.59629	0.000	-13.75808	60.00000	Averaged
15 o-Cresol	0.84650	0.72216	0.72216	0.000	-14.68816	60.00000	Averaged
18 m,p-Cresols	1.15179	1.00178	1.00178	0.000	-13.02332	60.00000	Averaged
17 N-Nitrosodipropylamine	0.76238	0.61385	0.61385	0.050	-19.48192	60.00000	Averaged spcc
19 Hexachloroethane	0.47075	0.38923	0.38923	0.000	-17.31682	60.00000	Averaged
21 Nitrobenzene	0.27466	0.23975	0.23975	0.000	-12.70858	60.00000	Averaged
22 Isophorone	0.48049	0.42824	0.42824	0.000	-10.87384	60.00000	Averaged
23 2-Nitrophenol	0.14580	0.12443	0.12443	0.001	-14.65471	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.23346	0.23407	0.23407	0.000	0.25935	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30933	0.25445	0.25445	0.000	-17.74126	60.00000	Averaged
26 2,4-Dichlorophenol	0.21909	0.18847	0.18847	0.001	-13.97781	20.00000	Averaged ccc
27 Benzoic acid	0.16087	0.16553	0.16553	0.000	2.89975	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24210	0.21218	0.21218	0.000	-12.36169	60.00000	Averaged
30 Naphthalene	0.83482	0.76679	0.76679	0.000	-8.14910	60.00000	Averaged
204 alpha-Terpineol	0.19635	0.19249	0.19249	0.000	-1.96852	60.00000	Averaged
31 4-Chloroaniline	0.38123	0.34324	0.34324	0.000	-9.96471	60.00000	Averaged
32 Hexachlorobutadiene	0.12432	0.10582	0.10582	0.001	-14.87841	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.21406	0.17276	0.17276	0.001	-19.29025	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.54880	0.51972	0.51972	0.000	-5.29812	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.49330	0.47920	0.47920	0.000	-2.85884	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.12213	0.12462	0.12462	0.050	2.03810	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.45401	0.44519	0.44519	0.000	-1.94238	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.26606	0.24935	0.24935	0.001	-6.28041	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.28290	0.25595	0.25595	0.000	-9.52679	60.00000	Averaged	
40 2-Chloronaphthalene	0.98748	0.82050	0.82050	0.000	-16.91018	60.00000	Averaged	
42 o-Nitroaniline	0.30619	0.24946	0.24946	0.000	-18.52571	60.00000	Averaged	
41 m-Nitroaniline	0.27055	0.22438	0.22438	0.000	-17.06469	60.00000	Averaged	
43 Dimethylphthalate	1.08995	0.95932	0.95932	0.000	-11.98438	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.27156	0.22271	0.22271	0.000	-17.99006	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.35993	0.29440	0.29440	0.000	-18.20706	60.00000	Averaged	
45 Acenaphthylene	1.54092	1.46812	1.46812	0.000	-4.72441	60.00000	Averaged	
47 Acenaphthene	0.92259	0.85781	0.85781	0.001	-7.02192	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	0.10718	0.09229	0.09229	0.050	-13.89853	60.00000	Averaged	spcc
49 Dibenzofuran	1.33422	1.12564	1.12564	0.000	-15.63294	60.00000	Averaged	
51 Diethylphthalate	1.01616	0.93320	0.93320	0.000	-8.16403	60.00000	Averaged	
52 4-Nitrophenol	0.18871	0.18660	0.18660	0.050	-1.12202	60.00000	Averaged	spcc
53 Fluorene	1.07578	0.99783	0.99783	0.000	-7.24582	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.45420	0.42578	0.42578	0.000	-6.25867	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	0.10120	0.09844	0.09844	0.000	-2.71965	60.00000	Averaged	
56 p-Nitroaniline	0.26458	0.21819	0.21819	0.000	-17.53206	60.00000	Averaged	
133 Diphenylamine	0.53354	0.46493	0.46493	0.001	-12.85961	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.65098	0.55777	0.55777	0.000	-14.31896	60.00000	Averaged	
61 4-Bromophenylphenylether	0.13743	0.14126	0.14126	0.000	2.79050	60.00000	Averaged	
63 Hexachlorobenzene	0.16869	0.14433	0.14433	0.000	-14.43782	60.00000	Averaged	
65 Pentachlorophenol	0.10117	0.09042	0.09042	0.001	-10.61921	20.00000	Averaged	ccc
206 n-Octadecane	0.43383	0.42570	0.42570	0.000	-1.87309	60.00000	Averaged	
68 Phenanthrene	0.90903	0.83581	0.83581	0.000	-8.05558	60.00000	Averaged	
69 Anthracene	0.92447	0.85110	0.85110	0.000	-7.93592	60.00000	Averaged	
72 Di-n-butylphthalate	0.98605	0.95396	0.95396	0.000	-3.25457	60.00000	Averaged	
76 Fluoranthene	0.87746	0.81704	0.81704	0.001	-6.88555	20.00000	Averaged	ccc
79 Pyrene	1.06293	0.98267	0.98267	0.000	-7.55079	60.00000	Averaged	
85 Butylbenzylphthalate	0.48372	0.46739	0.46739	0.000	-3.37649	60.00000	Averaged	
89 Benzo(a)anthracene	0.95915	0.87571	0.87571	0.000	-8.69930	60.00000	Averaged	
92 Chrysene	0.89647	0.82199	0.82199	0.000	-8.30767	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	0.70275	0.65271	0.65271	0.000	-7.12169	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.19375	1.19375	0.001	-8.76858	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	34.69168	40.00000	0.87030	0.000	-13.27080	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	0.95633	0.95633	0.000	-4.65112	60.00000	Averaged	
	97 Benzo(a)pyrene	37.92700	40.00000	0.82858	0.001	-5.18249	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	35.83759	40.00000	0.81303	0.000	-10.40601	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	35.09981	40.00000	0.66597	0.000	-12.25048	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.69836	0.69836	0.000	-7.08991	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15696	0.15696	0.000	-15.84920	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
	143 Dinoseb	0.12447	0.10965	0.10965	0.000	-11.90708	60.00000	Averaged	
	173 Carbazole	0.80714	0.69773	0.69773	0.000	-13.55506	60.00000	Averaged	
	184 p-Benzoquinone	40.49777	40.00000	0.06781	0.000	1.24442	60.00000	Linear	
	192 Methoxychlor	0.31747	0.36177	0.36177	0.000	13.95477	60.00000	Averaged	
	211 p-Toluidine	0.70440	0.95402	0.95402	0.000	35.43664	60.00000	Averaged	
	210 m-Toluidine	0.91072	0.95200	0.95200	0.000	4.53333	60.00000	Averaged	
	26 Phthalic anhydride	42.71723	40.00000	0.10164	0.000	6.79306	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	24.88814	40.00000	0.27687	0.000	-37.77964	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14504	0.14504	0.000	-16.23762	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.59707	0.59707	0.000	-1.00765	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.12373	0.12373	0.000	-4.23543	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.25265	0.25265	0.000	-7.95340	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	0.91331	0.91331	0.000	-5.40733	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1261.d
Lab Smp Id: WBN091027-09.3 Client Smp ID: MEGAICV
Inj Date : 17-NOV-2009 16:27
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091027-09.3|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 16:47 llo00884 Quant Type: ISTD
Cal Date : 17-NOV-2009 12:38 Cal File: s1k1256.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.928	3.928	(1.000)	530038	40.0000		
* 29 Naphthalene-d8	136	4.793	4.793	(1.000)	2205306	40.0000		
* 46 Acenaphthene-d10	164	6.040	6.040	(1.000)	1135267	40.0000		
* 67 Phenanthrene-d10	188	7.022	7.022	(1.000)	1874551	40.0000		(H)
* 91 Chrysene-d12	240	8.704	8.704	(1.000)	1621760	40.0000		
* 98 Perylene-d12	264	10.198	10.198	(1.000)	1481649	40.0000		
$ 3 2-Fluorophenol	112	3.104	3.104	(0.790)	491348	40.0000	35.5	
$ 5 Phenol-d5	99	3.640	3.640	(0.927)	592737	40.0000	35.2	
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	570788	40.0000	39.3	
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.916)	1084689	40.0000	39.9	
$ 60 2,4,6-Tribromophenol	329	6.575	6.575	(1.089)	129390	40.0000	40.8	
$ 81 p-Terphenyl-d14	244	7.939	7.939	(0.912)	990744	40.0000	38.9	
1 N-Methyl-N-nitrosomethylamine	74	2.410	2.410	(0.614)	276992	40.0000	36.8	
2 Pyridine	79	2.446	2.446	(0.623)	381913	40.0000	30.2	
4 Aniline	66	3.710	3.710	(0.945)	244181	40.0000	33.0	
6 Phenol	94	3.646	3.646	(0.928)	599483	40.0000	33.8	
7 bis(2-Chloroethyl) ether	63	3.722	3.722	(0.948)	417273	40.0000	33.8	
8 2-Chlorophenol	128	3.787	3.787	(0.964)	512179	40.0000	34.0	
203 n-Decane	43	3.775	3.775	(0.961)	707542	40.0000	37.3	
9 1,3-Dichlorobenzene	146	3.893	3.893	(0.991)	606813	40.0000	34.3	
11 1,4-Dichlorobenzene	146	3.934	3.934	(1.001)	598440	40.0000	34.5	
13 1,2-Dichlorobenzene	146	4.040	4.040	(1.028)	543984	40.0000	34.0	
14 bis(2-Chloroisopropyl)ether	45	4.069	4.069	(1.036)	1027894	40.0000	35.0	
12 Benzyl alcohol	108	3.993	3.993	(1.016)	316054	40.0000	34.5	
15 o-Cresol	107	4.040	4.040	(1.028)	382773	40.0000	34.1	
18 m,p-Cresols	107	4.146	4.146	(1.055)	530984	40.0000	34.8	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.163	4.163	(1.060)	325364	40.0000	32.2
19 Hexachloroethane	117	4.269	4.269	(1.087)	206306	40.0000	33.1
21 Nitrobenzene	77	4.304	4.304	(0.898)	528723	40.0000	34.9
22 Isophorone	82	4.457	4.457	(0.930)	944401	40.0000	35.6
23 2-Nitrophenol	139	4.516	4.516	(0.942)	274410	40.0000	34.1
24 2,4-Dimethylphenol	122	4.504	4.504	(0.940)	516190	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.575	4.575	(0.955)	561140	40.0000	32.9
26 2,4-Dichlorophenol	162	4.681	4.681	(0.977)	415624	40.0000	34.4
27 Benzoic acid	105	4.575	4.575	(0.955)	365053	40.0000	41.2
28 1,2,4-Trichlorobenzene	180	4.745	4.745	(0.990)	467914	40.0000	35.0
30 Naphthalene	128	4.810	4.810	(1.004)	1690998	40.0000	36.7
204 alpha-Terpineol	59	4.787	4.787	(0.999)	424496	40.0000	39.2
31 4-Chloroaniline	127	4.822	4.822	(1.006)	756952	40.0000	36.0
32 Hexachlorobutadiene	225	4.875	4.875	(1.017)	233369	40.0000	34.0
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	380998	40.0000	32.3
34 2-Methylnaphthalene	142	5.293	5.293	(1.104)	1146146	40.0000	37.9
35 1-Methylnaphthalene	142	5.363	5.363	(1.119)	1056787	40.0000	38.8
36 Hexachlorocyclopentadiene	237	5.393	5.393	(0.893)	141475	40.0000	40.8
205 2,3-Dichloroaniline	161	5.487	5.487	(0.908)	505408	40.0000	39.2
37 2,4,6-Trichlorophenol	196	5.475	5.475	(0.906)	283075	40.0000	37.5(H)
38 2,4,5-Trichlorophenol	196	5.504	5.504	(0.911)	290570	40.0000	36.2
40 2-Chloronaphthalene	162	5.645	5.645	(0.935)	931485	40.0000	33.2
42 o-Nitroaniline	65	5.698	5.698	(0.944)	283207	40.0000	32.6
41 m-Nitroaniline	138	5.992	5.992	(0.992)	254734	40.0000	33.2
43 Dimethylphthalate	163	5.810	5.810	(0.962)	1089088	40.0000	35.2
44 2,6-Dinitrotoluene	165	5.863	5.863	(0.971)	252831	40.0000	32.8
50 2,4-Dinitrotoluene	165	6.145	6.145	(1.018)	334220	40.0000	32.7
45 Acenaphthylene	152	5.945	5.945	(0.984)	1666713	40.0000	38.1
47 Acenaphthene	154	6.063	6.063	(1.004)	973838	40.0000	37.2
48 2,4-Dinitrophenol	184	6.057	6.057	(1.003)	104771	40.0000	34.4(Q)
49 Dibenzofuran	168	6.181	6.181	(1.023)	1277902	40.0000	33.7
51 Diethylphthalate	149	6.287	6.287	(1.041)	1059428	40.0000	36.7
52 4-Nitrophenol	139	6.075	6.075	(1.006)	211838	40.0000	39.6
53 Fluorene	166	6.416	6.416	(1.062)	1132809	40.0000	37.1
54 4-Chlorophenylphenylether	204	6.392	6.392	(1.058)	483371	40.0000	37.5
55 2-Methyl-4,6-dinitrophenol	198	6.428	6.428	(0.911)	184539	40.0000	38.9
56 p-Nitroaniline	138	6.410	6.410	(1.061)	247705	40.0000	33.0
133 Diphenylamine	169	6.469	6.469	(0.917)	871532	40.0000	34.8
58 1,2-Diphenylhydrazine	77	6.498	6.498	(0.921)	1045567	40.0000	34.3
61 4-Bromophenylphenylether	248	6.716	6.716	(0.952)	264808	40.0000	41.1(H)
63 Hexachlorobenzene	284	6.775	6.775	(0.960)	270561	40.0000	34.2
65 Pentachlorophenol	266	6.892	6.892	(0.977)	169503	40.0000	35.8
206 n-Octadecane	57	6.869	6.869	(0.973)	797995	40.0000	39.2
68 Phenanthrene	178	7.039	7.039	(0.997)	1566761	40.0000	36.8
69 Anthracene	178	7.069	7.069	(1.002)	1595437	40.0000	36.8
72 Di-n-butylphthalate	149	7.310	7.310	(1.036)	1788243	40.0000	38.7
76 Fluoranthene	202	7.751	7.751	(1.098)	1531590	40.0000	37.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.892	7.892	(0.907)	1593654	40.0000	37.0
85 Butylbenzylphthalate	149	8.204	8.204	(0.943)	757996	40.0000	38.6
89 Benzo(a)anthracene	228	8.692	8.692	(0.999)	1420191	40.0000	36.5(H)
92 Chrysene	228	8.728	8.728	(1.003)	1333078	40.0000	36.7
93 bis(2-Ethylhexyl)phthalate	149	8.569	8.569	(0.984)	1058534	40.0000	37.2(H)
94 Di-n-octylphthalate	149	9.110	9.110	(0.893)	1768724	40.0000	36.5
95 Benzo(b)fluoranthene	252	9.716	9.716	(0.953)	1289484	40.0000	34.7(H)
96 Benzo(k)fluoranthene	252	9.745	9.745	(0.956)	1416940	40.0000	38.1
97 Benzo(a)pyrene	252	10.122	10.122	(0.992)	1227658	40.0000	37.9
99 Indeno(1,2,3-cd)pyrene	276	11.863	11.863	(1.163)	1204623	40.0000	35.8(H)
100 Dibenzo(a,h)anthracene	278	11.863	11.863	(1.163)	986733	40.0000	35.1
101 Benzo(ghi)perylene	276	12.380	12.380	(1.214)	1034720	40.0000	37.2
126 m-Dinitrobenzene	168	5.845	5.845	(0.968)	178196	40.0000	33.7
130 2,3,4,6-Tetrachlorophenol	232	6.251	6.251	(1.035)	223733	40.0000	36.5
143 Dinoseb	211	6.981	6.981	(0.989)	205546	40.0000	35.2
173 Carbazole	167	7.151	7.151	(1.013)	1307938	40.0000	34.6
184 p-Benzoquinone	54	3.404	3.404	(0.867)	35940	40.0000	40.5
192 Methoxychlor	227	8.557	8.557	(0.983)	586700	40.0000	45.6
211 p-Toluidine	106	4.204	4.204	(1.070)	505668	40.0000	54.2(H)
210 m-Toluidine	106	4.228	4.228	(1.076)	504598	40.0000	41.8
26 Phthalic anhydride	104	5.322	5.322	(1.110)	224154	40.0000	42.7
179 Dibenzo(a,e)pyrene	302	16.327	16.327	(1.601)	410219	40.0000	24.9(H)
214 1,4-Dinitrobenzene	168	5.787	5.787	(0.958)	164654	40.0000	33.5
215 2-Ethoxyethanol	59	2.257	2.257	(0.575)	316469	40.0000	39.6
216 Methylenebis(2-chloroaniline)	231	8.622	8.622	(0.991)	200666	40.0000	38.3
M 225 Trichlorophenols	196				573645	80.0000	73.6
M 226 Tetrachlorophenols	232				223733	40.0000	36.5
M 227 Benzo(b,k)fluoranthene	252				2706424	80.0000	75.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1261.d
Date : 17-NOV-2009 16:27
Client ID: MEGAICV
Sample Info: IWBN091027-09,3140 PPM|1|SVHF|1|MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

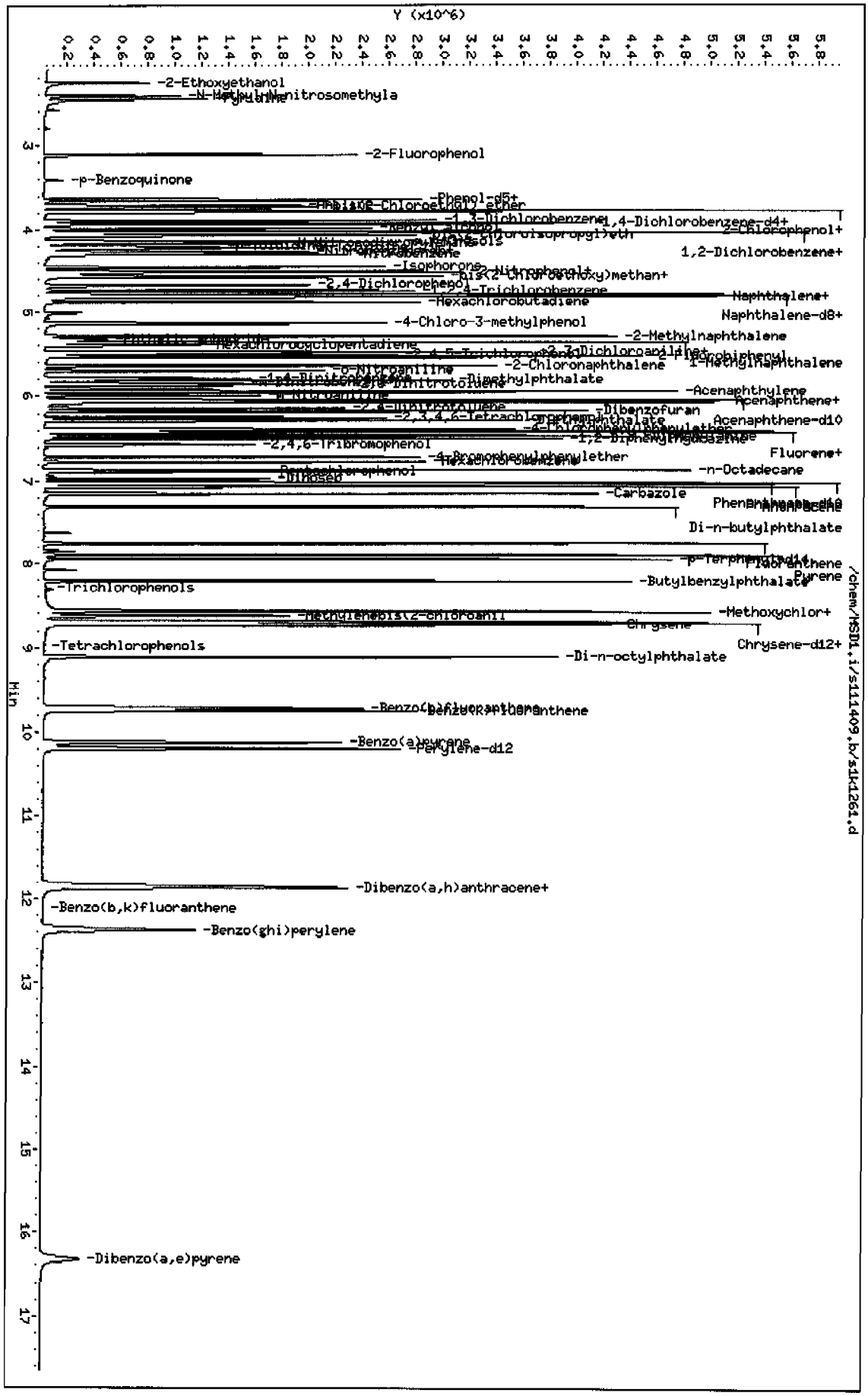

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k2908.d
Analysis Type:
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

Injection Date: 29-NOV-2009 15:16
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	1.04478	0.93534	0.93534	0.000	-10.47542	60.00000	Averaged	
$	5 Phenol-d5	1.26984	1.10416	1.10416	0.000	-13.04738	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.26360	0.25055	0.25055	0.000	-4.95183	60.00000	Averaged	
$	39 2-Fluorobiphenyl	0.95800	1.05400	1.05400	0.000	10.02136	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.11169	0.12797	0.12797	0.000	14.57528	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.62787	0.69462	0.69462	0.000	10.62981	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.56740	0.49062	0.49062	0.000	-13.53082	60.00000	Averaged	
	2 Pyridine	0.95281	0.62500	0.62500	0.000	-34.40414	60.00000	Averaged	
	4 Aniline	0.55813	0.45585	0.45585	0.000	-18.32607	60.00000	Averaged	
	6 Phenol	1.33800	1.14177	1.14177	0.001	-14.66627	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.93081	0.79196	0.79196	0.000	-14.91692	60.00000	Averaged	
	8 2-Chlorophenol	1.13717	1.01207	1.01207	0.000	-11.00062	60.00000	Averaged	
	203 n-Decane	1.43160	1.34530	1.34530	0.000	-6.02780	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.33431	1.17510	1.17510	0.000	-11.93236	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.30799	1.17800	1.17800	0.001	-9.93823	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.20798	1.11925	1.11925	0.000	-7.34571	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	2.21709	1.72913	1.72913	0.000	-22.00911	60.00000	Averaged	
	12 Benzyl alcohol	0.69141	0.59324	0.59324	0.000	-14.19871	60.00000	Averaged	
	15 o-Cresol	0.84650	0.74615	0.74615	0.000	-11.85443	60.00000	Averaged	
	18 m,p-Cresols	1.15179	1.01215	1.01215	0.000	-12.12379	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.76238	0.62107	0.62107	0.050	-18.53430	60.00000	Averaged	spcc
	19 Hexachloroethane	0.47075	0.42894	0.42894	0.000	-8.88187	60.00000	Averaged	
	21 Nitrobenzene	0.27466	0.26056	0.26056	0.000	-5.13308	60.00000	Averaged	
	22 Isophorone	0.48049	0.43538	0.43538	0.000	-9.38891	60.00000	Averaged	
	23 2-Nitrophenol	0.14580	0.12807	0.12807	0.001	-12.15608	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.23346	0.21295	0.21295	0.000	-8.78609	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.30933	0.25463	0.25463	0.000	-17.68395	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.21909	0.19606	0.19606	0.001	-10.51358	20.00000	Averaged	ccc
	27 Benzoic acid	0.16087	0.14918	0.14918	0.000	-7.26607	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24210	0.22426	0.22426	0.000	-7.36864	60.00000	Averaged	
	30 Naphthalene	0.83482	0.79378	0.79378	0.000	-4.91550	60.00000	Averaged	
	204 alpha-Terpineol	0.19635	0.19582	0.19582	0.000	-0.27040	60.00000	Averaged	
	31 4-Chloroaniline	0.38123	0.33848	0.33848	0.000	-11.21420	60.00000	Averaged	
	32 Hexachlorobutadiene	0.12432	0.12097	0.12097	0.001	-2.68941	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.21406	0.20208	0.20208	0.001	-5.59590	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.54880	0.55002	0.55002	0.000	0.22355	60.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:16
Lab File ID: s1k2908.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.49330	0.50931	0.50931	0.000	3.24506	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.12213	0.17063	0.17063	0.050	39.71345	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.45401	0.47182	0.47182	0.000	3.92390	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.26606	0.26941	0.26941	0.001	1.26039	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.28290	0.29203	0.29203	0.000	3.22560	60.00000	Averaged	
40 2-Chloronaphthalene	0.98748	0.89344	0.89344	0.000	-9.52396	60.00000	Averaged	
42 o-Nitroaniline	0.30619	0.25914	0.25914	0.000	-15.36408	60.00000	Averaged	
41 m-Nitroaniline	0.27055	0.21032	0.21032	0.000	-22.26231	60.00000	Averaged	
43 Dimethylphthalate	1.08995	1.05973	1.05973	0.000	-2.77241	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.27156	0.23667	0.23667	0.000	-12.84701	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.35993	0.30949	0.30949	0.000	-14.01501	60.00000	Averaged	
45 Acenaphthylene	1.54092	1.53763	1.53763	0.000	-0.21389	60.00000	Averaged	
47 Acenaphthene	0.92259	0.95527	0.95527	0.001	3.54259	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	0.10718	0.12010	0.12010	0.050	12.05024	60.00000	Averaged	spcc
49 Dibenzofuran	1.33422	1.18008	1.18008	0.000	-11.55280	60.00000	Averaged	
51 Diethylphthalate	1.01616	1.07013	1.07013	0.000	5.31178	60.00000	Averaged	
52 4-Nitrophenol	0.18871	0.17717	0.17717	0.050	-6.11858	60.00000	Averaged	spcc
53 Fluorene	1.07578	1.10537	1.10537	0.000	2.75033	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.45420	0.45002	0.45002	0.000	-0.92213	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	0.10120	0.12048	0.12048	0.000	19.05454	60.00000	Averaged	
56 p-Nitroaniline	0.26458	0.18690	0.18690	0.000	-29.36053	60.00000	Averaged	
133 Diphenylamine	0.53354	0.47781	0.47781	0.001	-10.44542	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.65098	0.58501	0.58501	0.000	-10.13455	60.00000	Averaged	
61 4-Bromophenylphenylether	0.13743	0.14843	0.14843	0.000	8.00692	60.00000	Averaged	
63 Hexachlorobenzene	0.16869	0.15850	0.15850	0.000	-6.03827	60.00000	Averaged	
65 Pentachlorophenol	0.10117	0.10563	0.10563	0.001	4.40818	20.00000	Averaged	ccc
206 n-Octadecane	0.43383	0.43789	0.43789	0.000	0.93605	60.00000	Averaged	
68 Phenanthrene	0.90903	0.92186	0.92186	0.000	1.41141	60.00000	Averaged	
69 Anthracene	0.92447	0.92361	0.92361	0.000	-0.09333	60.00000	Averaged	
72 Di-n-butylphthalate	0.98605	1.13002	1.13002	0.000	14.60116	60.00000	Averaged	
76 Fluoranthene	0.87746	0.96605	0.96605	0.001	10.09605	20.00000	Averaged	ccc
79 Pyrene	1.06293	1.12001	1.12001	0.000	5.37036	60.00000	Averaged	
85 Butylbenzylphthalate	0.48372	0.55218	0.55218	0.000	14.15240	60.00000	Averaged	
89 Benzo(a)anthracene	0.95915	0.91088	0.91088	0.000	-5.03296	60.00000	Averaged	
92 Chrysene	0.89647	0.84644	0.84644	0.000	-5.58054	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	0.70275	0.78551	0.78551	0.000	11.77612	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k2908.d
Analysis Type:
Lab Sample ID: WBN091111-03.5
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

Injection Date: 29-NOV-2009 15:16
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.50858	1.50858	0.001	15.29192	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	40.03695	40.00000	1.01555	0.000	0.09238	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	1.01457	1.01457	0.000	1.15574	60.00000	Averaged	
	97 Benzo(a)pyrene	39.54204	40.00000	0.86372	0.001	-1.14489	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	36.77191	40.00000	0.83397	0.000	-8.07024	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	36.10091	40.00000	0.68487	0.000	-9.74773	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.72206	0.72206	0.000	-3.93684	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15928	0.15928	0.000	-14.60839	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
	143 Dinoseb	0.12447	0.13803	0.13803	0.000	10.88892	60.00000	Averaged	
	173 Carbazole	0.80714	0.65601	0.65601	0.000	-18.72500	60.00000	Averaged	
	184 p-Benzoquinone	47.43522	40.00000	0.08180	0.000	18.58805	60.00000	Linear	
	192 Methoxychlor	0.31747	0.50861	0.50861	0.000	60.20967	60.00000	Averaged	<-
	211 p-Toluidine	0.70440	0.85962	0.85962	0.000	22.03509	60.00000	Averaged	
	210 m-Toluidine	0.91072	1.22068	1.22068	0.000	34.03536	60.00000	Averaged	
	26 Phthalic anhydride	52.14166	40.00000	0.12599	0.000	30.35416	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14690	0.14690	0.000	-15.16088	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.51251	0.51251	0.000	-15.02672	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.11982	0.11982	0.000	-7.26553	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.28072	0.28072	0.000	2.27314	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	1.01506	1.01506	0.000	5.13058	60.00000	Averaged	

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Data file : /chem/MSD1.i/s112909.b/s1k2908.d
Lab Smp Id: WBN091111-03.5 Client Smp ID: MEGACVS
Inj Date : 29-NOV-2009 15:16
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.5|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	531725	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2194392	40.0000	
* 46 Acenaphthene-d10	164	5.940	5.940	(1.000)	1110069	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	1851790	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1672748	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1414560	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	497343	40.0000	35.8
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	587107	40.0000	34.8
$ 20 Nitrobenzene-d5	82	4.199	4.199	(0.895)	549806	40.0000	38.0
$ 39 2-Fluorobiphenyl	172	5.434	5.434	(0.915)	1170016	40.0000	44.0
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.090)	142060	40.0000	45.8
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1161917	40.0000	44.2
1 N-Methyl-N-nitrosomethylamine	74	2.352	2.352	(0.614)	260877	40.0000	34.6
2 Pyridine	79	2.410	2.410	(0.630)	332329	40.0000	26.2
4 Aniline	66	3.628	3.628	(0.948)	242386	40.0000	32.7
6 Phenol	94	3.575	3.575	(0.934)	607105	40.0000	34.1
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	421107	40.0000	34.0
8 2-Chlorophenol	128	3.704	3.704	(0.968)	538144	40.0000	35.6
203 n-Decane	43	3.675	3.675	(0.960)	715332	40.0000	37.6
9 1,3-Dichlorobenzene	146	3.799	3.799	(0.992)	624828	40.0000	35.2
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	626371	40.0000	36.0
13 1,2-Dichlorobenzene	146	3.946	3.946	(1.031)	595132	40.0000	37.1
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	919419	40.0000	31.2
12 Benzyl alcohol	108	3.910	3.910	(1.022)	315440	40.0000	34.3
15 o-Cresol	107	3.963	3.963	(1.035)	396746	40.0000	35.2
18 m,p-Cresols	107	4.063	4.063	(1.061)	538183	40.0000	35.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	330241	40.0000	32.6
19 Hexachloroethane	117	4.169	4.169	(1.089)	228076	40.0000	36.4
21 Nitrobenzene	77	4.210	4.210	(0.897)	571764	40.0000	37.9
22 Isophorone	82	4.369	4.369	(0.931)	955384	40.0000	36.2
23 2-Nitrophenol	139	4.422	4.422	(0.942)	281046	40.0000	35.1
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	467295	40.0000	36.5
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	558752	40.0000	32.9
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	430222	40.0000	35.8
27 Benzoic acid	105	4.499	4.499	(0.959)	327360	40.0000	37.1
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	492125	40.0000	37.0
30 Naphthalene	128	4.710	4.710	(1.004)	1741866	40.0000	38.0(Q)
204 alpha-Terpineol	59	4.687	4.687	(0.999)	429712	40.0000	39.9
31 4-Chloroaniline	127	4.734	4.734	(1.009)	742753	40.0000	35.5
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	265466	40.0000	38.9
33 4-Chloro-3-methylphenol	107	5.051	5.051	(1.076)	443438	40.0000	37.8
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1206970	40.0000	40.1
35 1-Methylnaphthalene	142	5.257	5.257	(1.120)	1117632	40.0000	41.3
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.890)	189412	40.0000	55.9
205 2,3-Dichloroaniline	161	5.387	5.387	(0.907)	523755	40.0000	41.6
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.906)	299063	40.0000	40.5
38 2,4,5-Trichlorophenol	196	5.410	5.410	(0.911)	324168	40.0000	41.3
40 2-Chloronaphthalene	162	5.540	5.540	(0.933)	991776	40.0000	36.2
42 o-Nitroaniline	65	5.604	5.604	(0.944)	287667	40.0000	33.8
41 m-Nitroaniline	138	5.898	5.898	(0.993)	233470	40.0000	31.1
43 Dimethylphthalate	163	5.716	5.716	(0.962)	1176372	40.0000	38.9
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.970)	262723	40.0000	34.9
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.019)	343551	40.0000	34.4
45 Acenaphthylene	152	5.840	5.840	(0.983)	1706873	40.0000	39.9
47 Acenaphthene	154	5.957	5.957	(1.003)	1060418	40.0000	41.4
48 2,4-Dinitrophenol	184	5.963	5.963	(1.004)	133320	40.0000	44.8(Q)
49 Dibenzofuran	168	6.075	6.075	(1.023)	1309968	40.0000	35.4
51 Diethylphthalate	149	6.198	6.198	(1.044)	1187921	40.0000	42.1
52 4-Nitrophenol	139	6.004	6.004	(1.011)	196669	40.0000	37.6
53 Fluorene	166	6.310	6.310	(1.062)	1227039	40.0000	41.1
54 4-Chlorophenylphenylether	204	6.293	6.293	(1.059)	499549	40.0000	39.6
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	223102	40.0000	47.6
56 p-Nitroaniline	138	6.328	6.328	(1.065)	207467	40.0000	28.2
133 Diphenylamine	169	6.369	6.369	(0.920)	884802	40.0000	35.8
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1083314	40.0000	35.9
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	274868	40.0000	43.2
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	293514	40.0000	37.6
65 Pentachlorophenol	266	6.792	6.792	(0.981)	195597	40.0000	41.8
206 n-Octadecane	57	6.769	6.769	(0.978)	810873	40.0000	40.4
68 Phenanthrene	178	6.940	6.940	(1.003)	1707099	40.0000	40.6
69 Anthracene	178	6.969	6.969	(1.007)	1710324	40.0000	40.0
72 Di-n-butylphthalate	149	7.216	7.216	(1.042)	2092568	40.0000	45.8
76 Fluoranthene	202	7.645	7.645	(1.105)	1788923	40.0000	44.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.787	7.787	(0.910)	1873498	40.0000	42.1
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	923662	40.0000	45.7
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1523665	40.0000	38.0
92 Chrysene	228	8.581	8.581	(1.003)	1415885	40.0000	37.8
93 bis(2-Ethylhexyl)phthalate	149	8.434	8.434	(0.986)	1313964	40.0000	44.7
94 Di-n-octylphthalate	149	8.939	8.939	(0.898)	2133981	40.0000	46.1
95 Benzo(b)fluoranthene	252	9.510	9.510	(0.956)	1436562	40.0000	40.0
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	1435167	40.0000	40.5
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	1221778	40.0000	39.5
99 Indeno(1,2,3-cd)pyrene	276	11.504	11.504	(1.156)	1179700	40.0000	36.8
100 Dibenzo(a,h)anthracene	278	11.498	11.498	(1.155)	968787	40.0000	36.1
101 Benzo(ghi)perylene	276	11.980	11.980	(1.204)	1021393	40.0000	38.4
126 m-Dinitrobenzene	168	5.751	5.751	(0.968)	176810	40.0000	34.2
130 2,3,4,6-Tetrachlorophenol	232	6.157	6.157	(1.037)	249214	40.0000	41.6
143 Dinoseb	211	6.881	6.881	(0.994)	255594	40.0000	44.4
173 Carbazole	167	7.057	7.057	(1.020)	1214784	40.0000	32.5
184 p-Benzoquinone	54	3.334	3.334	(0.871)	43494	40.0000	47.4
192 Methoxychlor	227	8.428	8.428	(0.985)	850778	40.0000	64.1
211 p-Toluidine	106	4.116	4.116	(1.075)	457082	40.0000	48.8
210 m-Toluidine	106	4.140	4.140	(1.081)	649068	40.0000	53.6
26 Phthalic anhydride	104	5.240	5.240	(1.117)	276462	40.0000	52.1
214 1,4-Dinitrobenzene	168	5.693	5.693	(0.958)	163069	40.0000	33.9
215 2-Ethoxyethanol	59	2.205	2.205	(0.576)	272516	40.0000	34.0
216 Methylenebis(2-chloroaniline)	231	8.486	8.486	(0.992)	200426	40.0000	37.1
M 225 Trichlorophenols	196				623231	80.0000	81.8
M 226 Tetrachlorophenols	232				249214	40.0000	41.6
M 227 Benzo(b,k)fluoranthene	252				2871729	80.0000	84.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2908.d
Date : 29-NOV-2009 15:16
Client ID: MEGACVS
Sample Info: IWBN091111-03,5140 PPM1I1SVMF1I1MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

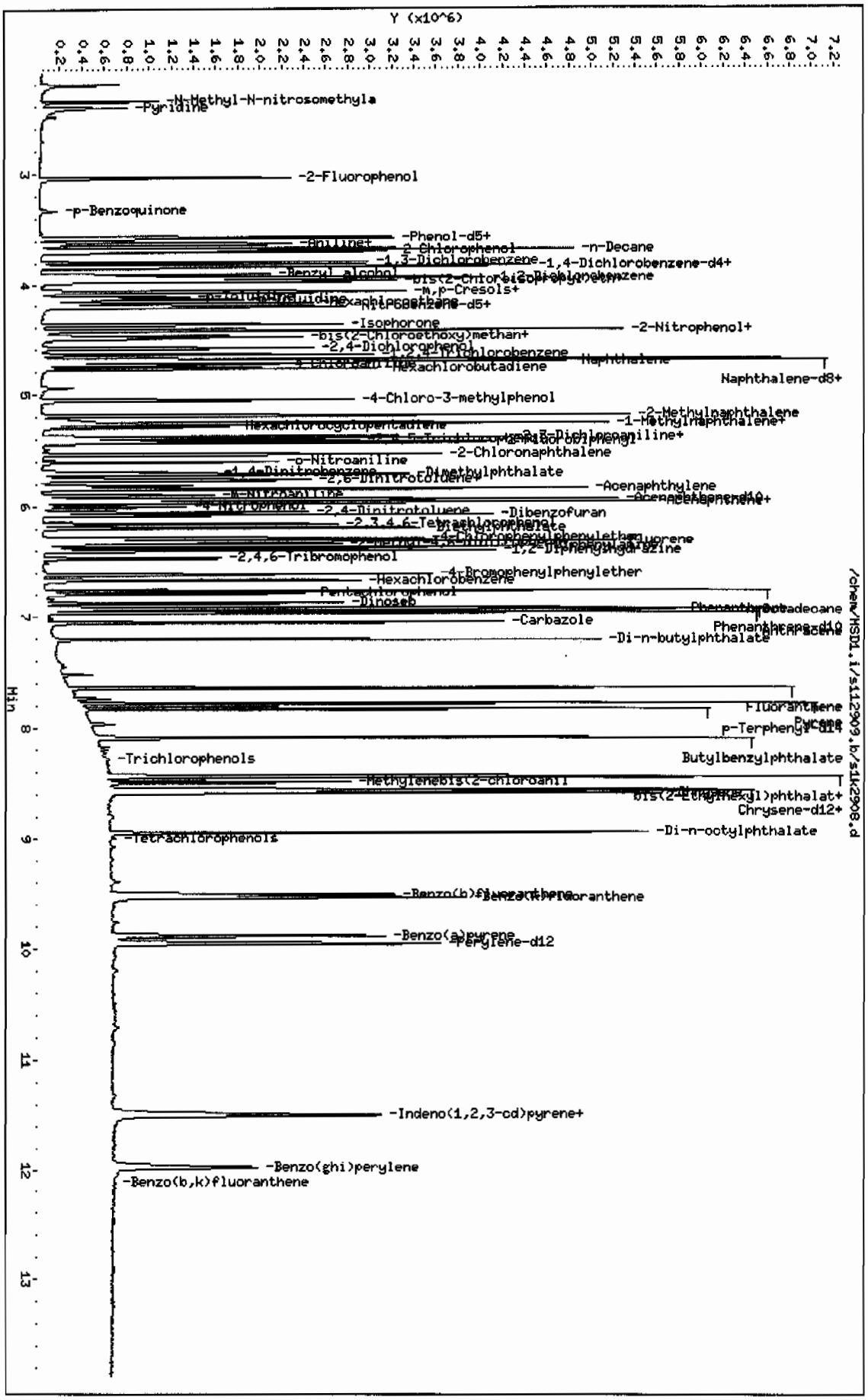

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k2909.d
Analysis Type:
Lab Sample ID: WBN091111-03.3
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

Injection Date: 29-NOV-2009 15:40
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.83285	0.83285	0.000	1.07424	60.00000	Averaged
16 Acetophenone	1.12880	1.17413	1.17413	0.000	4.01561	60.00000	Averaged
189 Caprolactam	0.07169	0.06992	0.06992	0.000	-2.46899	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.19952	1.19952	0.000	7.05141	60.00000	Averaged
207 Atrazine	0.04008	0.03858	0.03858	0.000	-3.74021	60.00000	Averaged
77 Benzidine	0.36215	0.28557	0.28557	0.000	-21.14800	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.26579	0.26579	0.000	-3.49092	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.32551	0.32551	0.000	3.71012	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.18209	0.18209	0.000	3.22239	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.73877	0.73877	0.000	3.61556	60.00000	Averaged
105 2-Picoline	1.15384	1.17090	1.17090	0.000	1.47854	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.43981	0.43981	0.000	-3.18151	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48596	0.48596	0.000	14.15516	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.45100	0.45100	0.000	-5.95154	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.58421	0.58421	0.000	-2.01938	60.00000	Averaged
110 Pentachloroethane	0.29115	0.32136	0.32136	0.000	10.37514	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.46474	0.46474	0.000	-2.17748	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.66176	0.66176	0.000	7.16931	60.00000	Averaged
114 o-Toluidine	1.65327	1.66011	1.66011	0.000	0.41384	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.12196	0.12196	0.000	-7.29855	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.67623	0.67623	0.000	-11.95066	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.19074	0.19074	0.000	-3.18439	60.00000	Averaged
119 Hexachloropropene	0.08895	0.10078	0.10078	0.000	13.29710	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.16507	0.16507	0.000	-18.09275	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.15467	0.15467	0.000	-9.93437	60.00000	Averaged
122 Safrole	0.17864	0.18418	0.18418	0.000	3.10262	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.40592	0.40592	0.000	10.56556	60.00000	Averaged
124 Isosafrole	0.32761	0.32754	0.32754	0.000	-0.02086	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.27300	0.27300	0.000	-8.00801	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.33822	0.33822	0.000	7.53761	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.87935	0.87935	0.000	-1.66142	60.00000	Averaged
129 2-Naphthylamine	0.97473	0.86505	0.86505	0.000	-11.25277	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.26430	0.26430	0.000	-7.35350	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.13606	0.13606	0.000	17.06678	60.00000	Averaged
137 Phenacetin	0.25708	0.25386	0.25386	0.000	-1.25486	60.00000	Averaged
138 Diallate	0.23112	0.21973	0.21973	0.000	-4.92775	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:40
Lab File ID: s1k2909.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.3 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.21402	0.21402	0.000	-10.82059	60.00000	Averaged
213 Trans Diallate	0.27191	0.25851	0.25851	0.000	-4.92775	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.50169	0.50169	0.000	-6.42545	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06382	0.06382	0.000	19.86535	60.00000	Averaged
142 Pronamide	0.23368	0.26093	0.26093	0.000	11.66162	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.01142	0.01142	0.000	16.48447	60.00000	Averaged
147 Methapyrilene	0.36822	0.41116	0.41116	0.000	11.66210	60.00000	Averaged
148 Isodrin	0.08609	0.09797	0.09797	0.000	13.79210	60.00000	Averaged
149 Aramite	0.04255	0.04739	0.04739	0.000	11.36229	60.00000	Averaged
150 Kepone	0.06308	0.06796	0.06796	0.000	7.73416	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.31425	0.31425	0.000	10.68260	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.30459	0.30459	0.000	38.48914	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.46482	0.46482	0.000	-3.05232	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.34018	0.34018	0.000	10.44468	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.47473	0.47473	0.000	12.70311	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40587	0.40587	0.000	10.55824	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2909.d
Lab Smp Id: WBN091111-03.3 Client Smp ID: APCVS
Inj Date : 29-NOV-2009 15:40
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.3|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:21 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: apl2.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	598729	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2366758	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.934	(1.000)	1267857	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2141696	40.0000	
* 91 Chrysene-d12	240	8.551	8.551	(1.000)	1838470	40.0000	
* 98 Perylene-d12	264	9.939	9.939	(1.000)	1489902	40.0000	
209 Benzaldehyde	77	3.563	3.563	(0.931)	498652	40.0000	40.4
16 Acetophenone	105	4.087	4.087	(1.068)	702983	40.0000	41.6(H)
189 Caprolactam	113	5.004	5.004	(1.066)	165477	40.0000	39.0
208 1,1'-Biphenyl	154	5.510	5.510	(0.929)	1520815	40.0000	42.8(H)
207 Atrazine	173	6.698	6.698	(0.968)	82632	40.0000	38.5
77 Benzidine	184	7.704	7.704	(0.901)	525004	40.0000	31.5
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.993)	488644	40.0000	38.6(H)
102 1,4-Dioxane	88	2.199	2.199	(0.574)	194894	40.0000	41.5
103 Methyl methacrylate	100	2.187	2.187	(0.571)	109022	40.0000	41.3
104 Ethyl methacrylate	69	2.552	2.552	(0.667)	442322	40.0000	41.4
105 2-Picoline	93	2.769	2.769	(0.723)	701054	40.0000	40.6
106 N-Nitrosomethylethylamine	88	2.793	2.793	(0.730)	263327	40.0000	38.7
107 Methyl methanesulfonate	80	2.952	2.952	(0.771)	290960	40.0000	45.7
108 N-Nitrosodiethylamine	102	3.175	3.175	(0.829)	270027	40.0000	37.6
109 Ethyl Methanesulfonate	79	3.334	3.334	(0.871)	349784	40.0000	39.2
110 Pentachloroethane	167	3.657	3.657	(0.955)	192409	40.0000	44.2
111 N-Nitrosopyrrolidine	100	4.087	4.087	(1.068)	278256	40.0000	39.1
113 N-Nitrosomorpholine	56	4.099	4.099	(1.071)	396213	40.0000	42.9(H)
114 o-Toluidine	106	4.110	4.110	(1.074)	993958	40.0000	40.2
115 N-Nitrosopiperidine	114	4.316	4.316	(0.920)	288647	40.0000	37.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.557	4.557	(0.971)	1600470	40.0000	35.2(H)
118 2,6-Dichlorophenol	162	4.740	4.740	(1.010)	451427	40.0000	38.7
119 Hexachloropropene	213	4.757	4.757	(1.014)	238527	40.0000	45.3(H)
120 p-Phenylenediamine	108	4.987	4.987	(1.063)	390689	40.0000	32.8(H)
121 N-Nitrosodi-n-butylamine	84	4.940	4.940	(1.053)	366055	40.0000	36.0(TH)
122 Safrole	162	5.104	5.104	(1.088)	435909	40.0000	41.2
123 1,2,4,5-Tetrachlorobenzene	216	5.304	5.304	(0.894)	514644	40.0000	44.2(H)
124 Isosafrole	162	5.469	5.469	(0.922)	415277	40.0000	40.0(H)
125 1,4-Naphthoquinone	158	5.663	5.663	(0.954)	346123	40.0000	36.8
127 Pentachlorobenzene	250	6.046	6.046	(1.019)	428816	40.0000	43.0(H)
128 1-Naphthylamine	143	6.134	6.134	(1.034)	1114885	40.0000	39.3(H)
129 2-Naphthylamine	143	6.187	6.187	(1.043)	1096759	40.0000	35.5
131 5-Nitro-o-toluidine	152	6.310	6.310	(1.063)	335099	40.0000	37.0(H)
136 1,3,5-Trinitrobenzene	75	6.528	6.528	(0.943)	291408	40.0000	46.8(H)
137 Phenacetin	108	6.569	6.569	(0.949)	543687	40.0000	39.5
138 Diallate	86	6.540	6.540	(0.945)	470601	40.0000	38.0(H)
212 Cis Diallate	86	6.604	6.604	(0.954)	68755	6.00000	5.4
213 Trans Diallate	86	6.540	6.540	(0.945)	470601	34.0000	32.3(H)
140 4-Aminobiphenyl	169	6.787	6.787	(0.980)	1074464	40.0000	37.4(H)
141 Pentachloronitrobenzene	237	6.798	6.798	(0.982)	136682	40.0000	47.9
142 Pronamide	173	6.798	6.798	(0.982)	558829	40.0000	44.7(H)
146 4-Nitroquinoline-1-oxide	101	7.392	7.392	(1.068)	24459	40.0000	46.6
147 Methapyrilene	58	7.404	7.404	(1.070)	880581	40.0000	44.7(H)
148 Isodrin	193	7.557	7.557	(1.092)	209812	40.0000	45.5
149 Aramite	185	7.787	7.787	(1.125)	101489	40.0000	44.5(H)
150 Kepone	272	8.192	8.192	(1.184)	145557	40.0000	43.1(H)
151 p-(Dimethylamino)azobenzene	120	7.904	7.904	(0.924)	577746	40.0000	44.3
152 Chlorobenzilate	251	7.922	7.922	(0.926)	559976	40.0000	55.4(H)
153 3,3'-Dimethylbenzidine	212	8.110	8.110	(0.948)	854557	40.0000	38.8(H)
155 2-Acetylaminofluorene	181	8.292	8.292	(0.970)	625417	40.0000	44.2
157 7,12Dimethylbenz(a)anthracene	256	9.469	9.469	(0.953)	707308	40.0000	45.1(H)
158 3-Methylcholanthrene	268	10.281	10.281	(1.034)	604708	40.0000	44.2(H)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s112909.b/s1k2909.d
Date : 29-NOV-2009 15:40
Client ID: APCVS
Sample Info: IWBN091111-03,3140 PPM1I1ISVHFI1IAPCVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AHY
Column diameter: 0.20

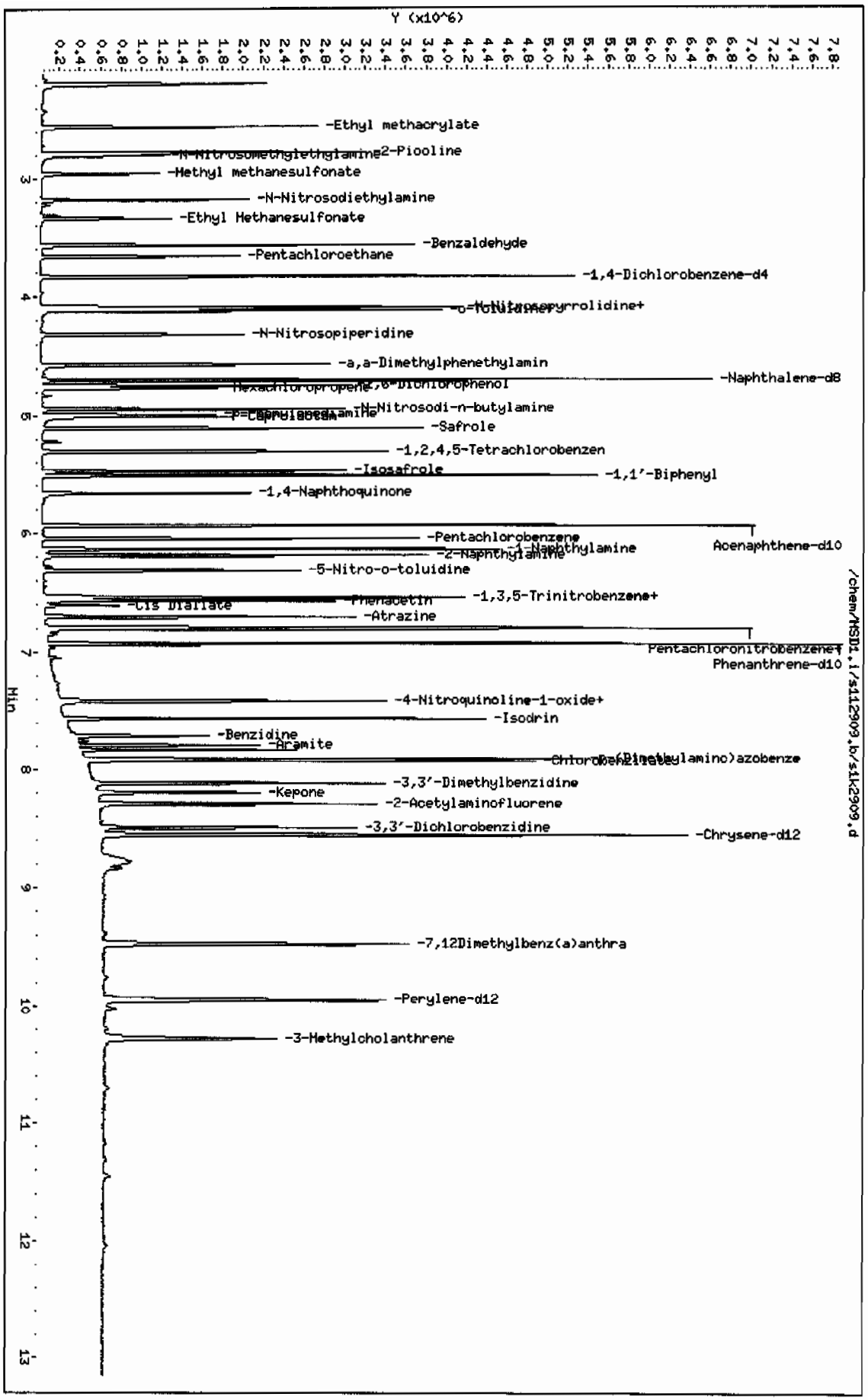

Page 1

QC Data

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Page 1

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

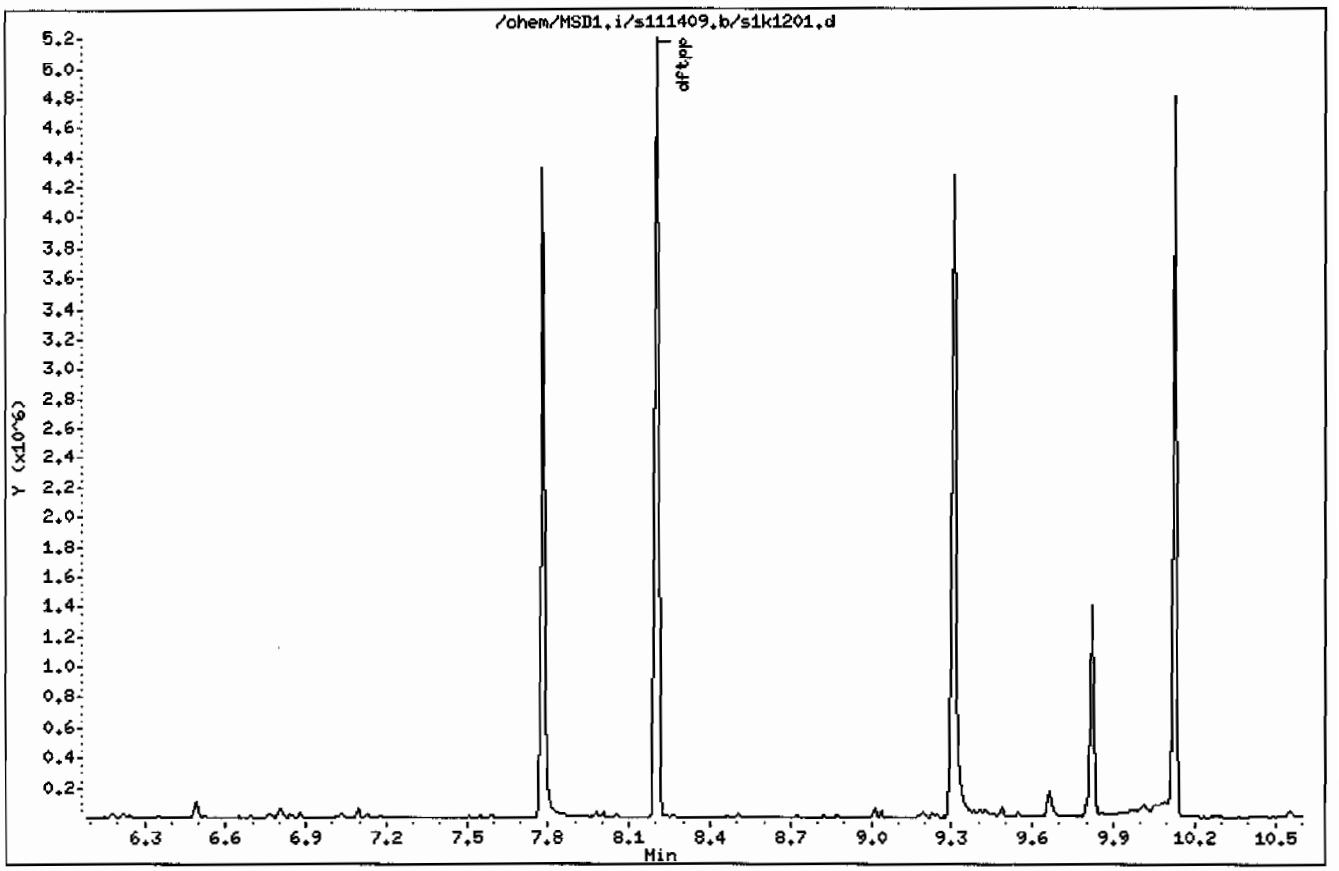

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

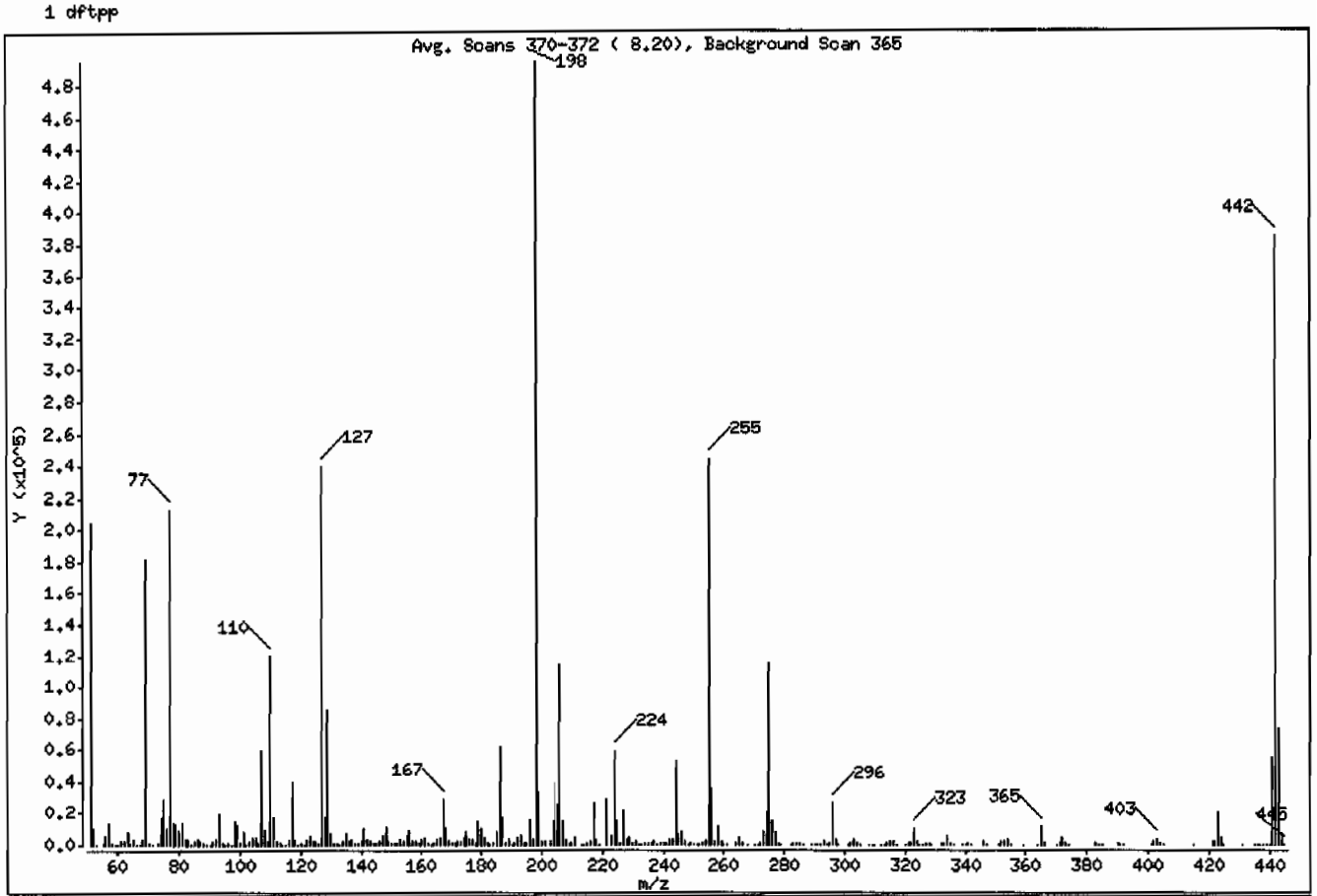

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.33
68	Less than 2.00% of mass 69	0.66 (1.81)
69	Mass 69 relative abundance	36.68
70	Less than 2.00% of mass 69	0.20 (0.55)
127	40.00 - 60.00% of mass 198	48.32
197	Less than 1.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.23
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	77.37
443	17.00 - 23.00% of mass 442	14.83 (19.16)

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	204544	132.00	849	213.00	322	304.00	857
52.00	10058	133.00	398	214.00	81	305.00	126
53.00	476	134.00	2213	215.00	1065	308.00	339
55.00	808	135.00	6445	216.00	2209	309.00	249
56.00	5675	136.00	2682	217.00	25976	310.00	361
57.00	13163	137.00	3409	218.00	3600	312.00	52
58.00	676	138.00	864	219.00	390	313.00	288
59.00	142	139.00	1285	221.00	28416	314.00	1372
60.00	58	140.00	1711	223.00	5970	315.00	2833
61.00	2414	141.00	10495	224.00	59288	316.00	1731
62.00	2627	142.00	3783	225.00	15318	317.00	279
63.00	7561	143.00	2378	226.00	1533	320.00	54
64.00	1048	144.00	706	227.00	21184	321.00	903
65.00	3902	145.00	666	228.00	3165	322.00	596
66.00	253	146.00	1908	229.00	4804	323.00	9908
67.00	264	147.00	5356	230.00	759	324.00	1942
68.00	3280	148.00	10849	231.00	2133	325.00	119
69.00	181568	149.00	2326	232.00	408	326.00	93
70.00	999	150.00	640	233.00	450	327.00	1701
71.00	119	151.00	1554	234.00	1483	328.00	891
73.00	1219	152.00	808	235.00	1658	329.00	88
74.00	17536	153.00	3187	236.00	1183	332.00	578
75.00	28056	154.00	2701	237.00	1728	333.00	865
76.00	9746	155.00	5991	238.00	324	334.00	5817
77.00	212736	156.00	9066	239.00	813	335.00	1475
78.00	13840	157.00	1942	240.00	775	336.00	75
79.00	12099	158.00	1971	241.00	1214	339.00	62
80.00	9416	159.00	1574	242.00	3186	340.00	77
81.00	13432	160.00	3233	243.00	3508	341.00	1027
82.00	3448	161.00	4832	244.00	51832	342.00	243
83.00	3440	162.00	1519	245.00	6691	346.00	2015
84.00	276	163.00	414	246.00	8221	347.00	283
85.00	2469	164.00	763	247.00	1725	351.00	182
86.00	3499	165.00	3823	248.00	403	352.00	2745
87.00	1914	166.00	4542	249.00	1698	353.00	2043

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	945	167.00	28056	250.00	338	354.00	3347
89.00	408	168.00	9882	251.00	378	355.00	568
90.00	81	169.00	1949	252.00	461	359.00	68
91.00	2811	170.00	666	253.00	965	364.00	82
92.00	3305	171.00	868	254.00	2194	365.00	11049
93.00	19392	172.00	1736	255.00	243712	366.00	1525
94.00	1530	173.00	2151	256.00	34792	370.00	312
95.00	401	174.00	4365	257.00	2654	371.00	749
96.00	1021	175.00	8331	258.00	11699	372.00	5103
97.00	481	176.00	2950	259.00	1976	373.00	1317
98.00	14829	177.00	3734	260.00	354	374.00	211
99.00	12143	178.00	1429	261.00	488	383.00	1475
100.00	1081	179.00	14903	264.00	588	384.00	413
101.00	7582	180.00	10676	265.00	4651	385.00	112
102.00	501	181.00	5074	266.00	630	390.00	664
103.00	2806	182.00	848	268.00	97	391.00	481
104.00	4764	183.00	484	270.00	316	392.00	349
105.00	4470	184.00	1118	271.00	565	401.00	323
106.00	1531	185.00	7578	272.00	574	402.00	2059
107.00	58720	186.00	61632	273.00	7763	403.00	3027
108.00	9198	187.00	16824	274.00	20360	404.00	981
109.00	1983	188.00	1678	275.00	115400	405.00	157
110.00	119360	189.00	3368	276.00	14998	415.00	61
111.00	17336	190.00	542	277.00	8371	421.00	2728
112.00	2224	191.00	1652	278.00	1328	422.00	2498
113.00	793	192.00	4637	279.00	337	423.00	19928
114.00	277	193.00	5425	282.00	172	424.00	3991
115.00	405	194.00	1196	283.00	908	425.00	403
116.00	3276	195.00	960	284.00	671	431.00	50
117.00	39312	196.00	15938	285.00	1513	435.00	182
118.00	2868	197.00	3428	286.00	245	436.00	64
119.00	376	198.00	494976	289.00	275	437.00	123
120.00	724	199.00	32528	290.00	365	438.00	300
121.00	279	200.00	2387	291.00	237	439.00	370
122.00	3763	201.00	2747	292.00	481	440.00	354

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	6008	203.00	2693	293.00	2054	441.00	54440
124.00	2602	204.00	14604	294.00	532	442.00	382976
125.00	2647	205.00	25208	295.00	657	443.00	73384
126.00	904	206.00	113680	296.00	26240	444.00	6543
127.00	239168	207.00	14454	297.00	3789	445.00	363
128.00	17576	208.00	3160	298.00	253		
129.00	85072	209.00	1021	301.00	417		
130.00	7156	210.00	801	302.00	580		
131.00	1445	211.00	4362	303.00	3041		

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Page 1

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

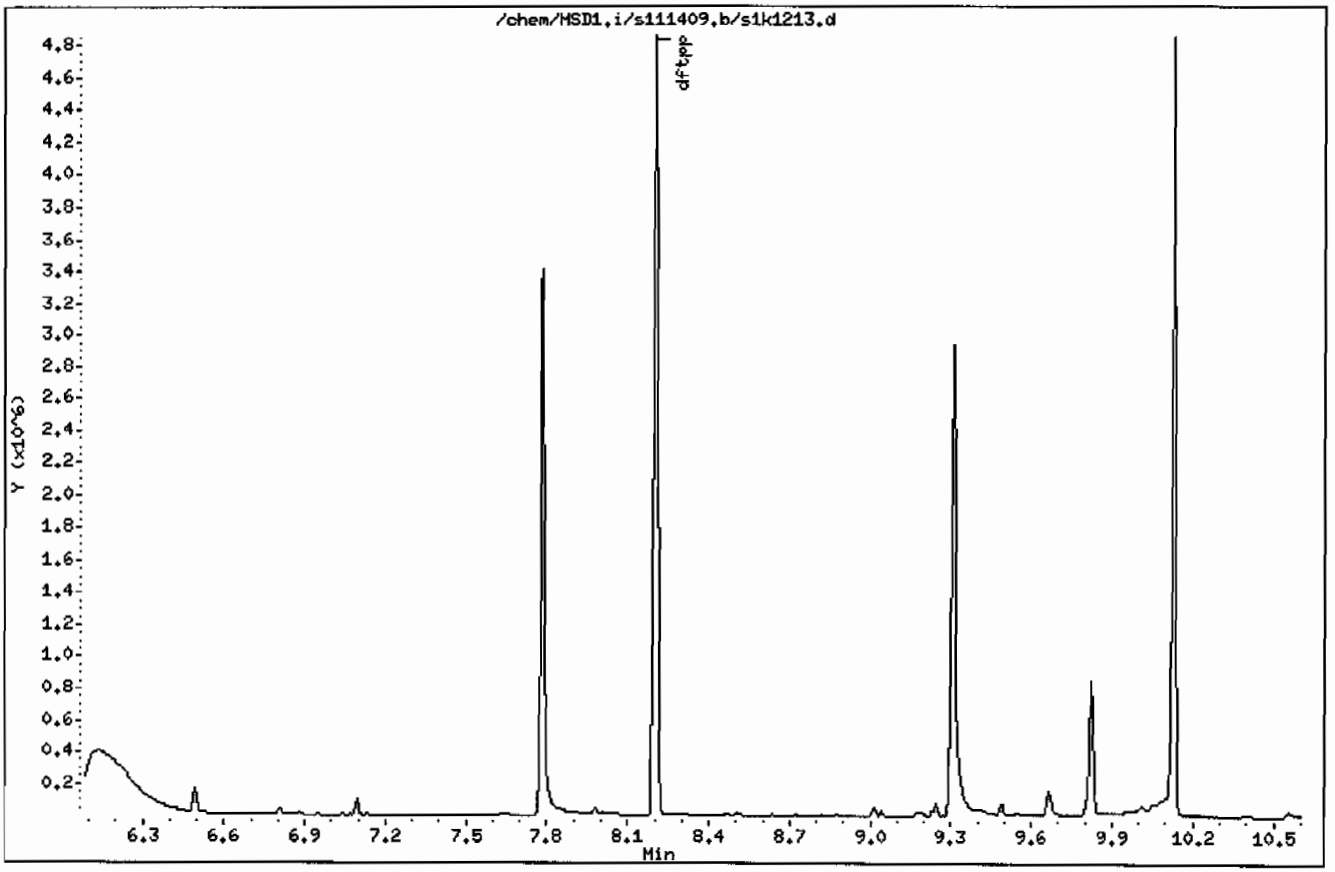

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

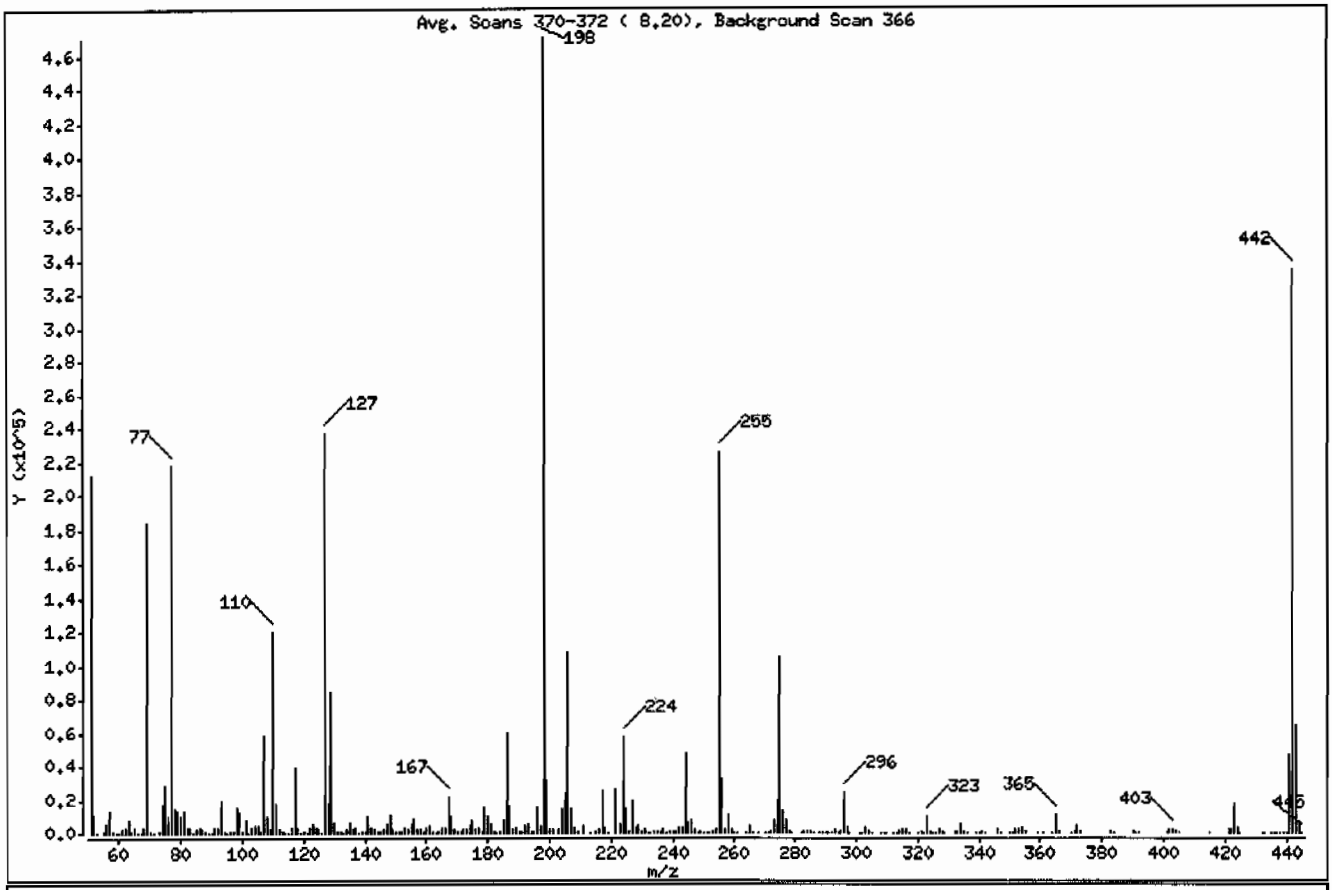

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	48.07
68	Less than 2.00% of mass 69	0.69 (1.77)
69	Mass 69 relative abundance	39.06
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	50.24
197	Less than 1.00% of mass 198	0.94
199	5.00 - 9.00% of mass 198	6.64
275	10.00 - 30.00% of mass 198	22.36
365	Greater than 1.00% of mass 198	2.27
441	Present, but less than mass 443	9.91
442	Greater than 40.00% of mass 198	70.70
443	17.00 - 23.00% of mass 442	13.63 (19.28)

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	212096	132.00	898	215.00	1069	305.00	54
52.00	10563	133.00	158	216.00	2175	308.00	369
53.00	539	134.00	2246	217.00	25096	309.00	234
55.00	827	135.00	6673	218.00	3427	310.00	330
56.00	5710	136.00	2589	219.00	310	312.00	53
57.00	13040	137.00	3388	221.00	26264	313.00	225
58.00	622	138.00	481	223.00	5732	314.00	1148
59.00	197	139.00	738	224.00	57128	315.00	2673
60.00	264	140.00	1183	225.00	14268	316.00	1636
61.00	2458	141.00	10022	226.00	1583	317.00	257
62.00	2719	142.00	3500	227.00	19912	320.00	120
63.00	7568	143.00	2527	228.00	3016	321.00	868
64.00	1100	144.00	604	229.00	4436	322.00	443
65.00	3684	145.00	642	230.00	645	323.00	9348
66.00	306	146.00	1966	231.00	2162	324.00	1574
67.00	172	147.00	5499	232.00	373	325.00	117
68.00	3246	148.00	10590	233.00	410	326.00	63
69.00	183808	149.00	2267	234.00	1277	327.00	1667
70.00	937	150.00	711	235.00	1617	328.00	859
71.00	201	151.00	1389	236.00	1067	329.00	66
73.00	1312	152.00	1009	237.00	1713	332.00	666
74.00	16976	153.00	3123	238.00	252	333.00	761
75.00	27896	154.00	2582	239.00	815	334.00	5270
76.00	9904	155.00	5732	240.00	635	335.00	1342
77.00	217344	156.00	8806	241.00	1337	336.00	127
78.00	14484	157.00	1860	242.00	2922	339.00	65
79.00	12543	158.00	1872	243.00	3255	340.00	61
80.00	9582	159.00	1459	244.00	47840	341.00	1023
81.00	13483	160.00	3146	245.00	6361	342.00	289
82.00	3494	161.00	4861	246.00	7662	346.00	1844
83.00	3404	162.00	1440	247.00	1632	347.00	399
84.00	268	163.00	441	248.00	425	350.00	54
85.00	2429	164.00	756	249.00	1557	351.00	146
86.00	3717	165.00	3644	250.00	323	352.00	2683
87.00	1777	166.00	3330	251.00	376	353.00	1903

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	858	167.00	21384	252.00	497	354.00	2848
89.00	353	168.00	9329	253.00	1026	355.00	645
90.00	52	169.00	1925	254.00	2307	359.00	128
91.00	2960	170.00	698	255.00	224896	361.00	54
92.00	3280	171.00	771	256.00	32856	364.00	139
93.00	19472	172.00	1741	257.00	2457	365.00	10703
94.00	1413	173.00	2444	258.00	11321	366.00	1552
95.00	284	174.00	4219	259.00	1877	370.00	274
96.00	1152	175.00	8099	260.00	305	371.00	720
97.00	591	176.00	2630	261.00	356	372.00	4645
98.00	14679	177.00	3711	264.00	230	373.00	1151
99.00	12313	178.00	1199	265.00	4470	383.00	1268
100.00	1108	179.00	14622	266.00	429	384.00	380
101.00	7679	180.00	10168	268.00	129	390.00	651
102.00	505	181.00	5015	270.00	325	391.00	487
103.00	2879	182.00	784	271.00	443	392.00	279
104.00	4625	183.00	540	272.00	688	401.00	276
105.00	4311	184.00	1176	273.00	7045	402.00	1862
106.00	1512	185.00	7084	274.00	19240	403.00	2656
107.00	58544	186.00	59904	275.00	105256	404.00	848
108.00	9265	187.00	16158	276.00	13094	405.00	140
109.00	1897	188.00	1716	277.00	7627	415.00	133
110.00	119952	189.00	3108	278.00	1312	421.00	2323
111.00	16904	190.00	572	279.00	308	422.00	2190
112.00	2240	191.00	1592	282.00	136	423.00	16944
113.00	758	192.00	4599	283.00	867	424.00	3191
114.00	126	193.00	5084	284.00	734	425.00	414
115.00	267	194.00	1198	285.00	1299	432.00	51
116.00	3229	195.00	880	286.00	172	433.00	63
117.00	38800	196.00	15085	288.00	53	435.00	138
118.00	2837	197.00	4415	289.00	263	436.00	193
119.00	448	198.00	470656	290.00	271	437.00	144
120.00	769	199.00	31248	291.00	161	438.00	208
121.00	319	200.00	2323	292.00	403	439.00	422
122.00	3761	201.00	2603	293.00	1958	440.00	420

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	5880	203.00	2606	294.00	491	441.00	46632
124.00	2783	204.00	13871	295.00	593	442.00	332736
125.00	2563	205.00	24136	296.00	24248	443.00	64136
126.00	365	206.00	107936	297.00	3568	444.00	5493
127.00	236480	207.00	13718	298.00	201	445.00	305
128.00	17448	208.00	3264	301.00	372		
129.00	84656	209.00	932	302.00	462		
130.00	6942	211.00	4014	303.00	2821		
131.00	1354	213.00	308	304.00	785		

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Page 1

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

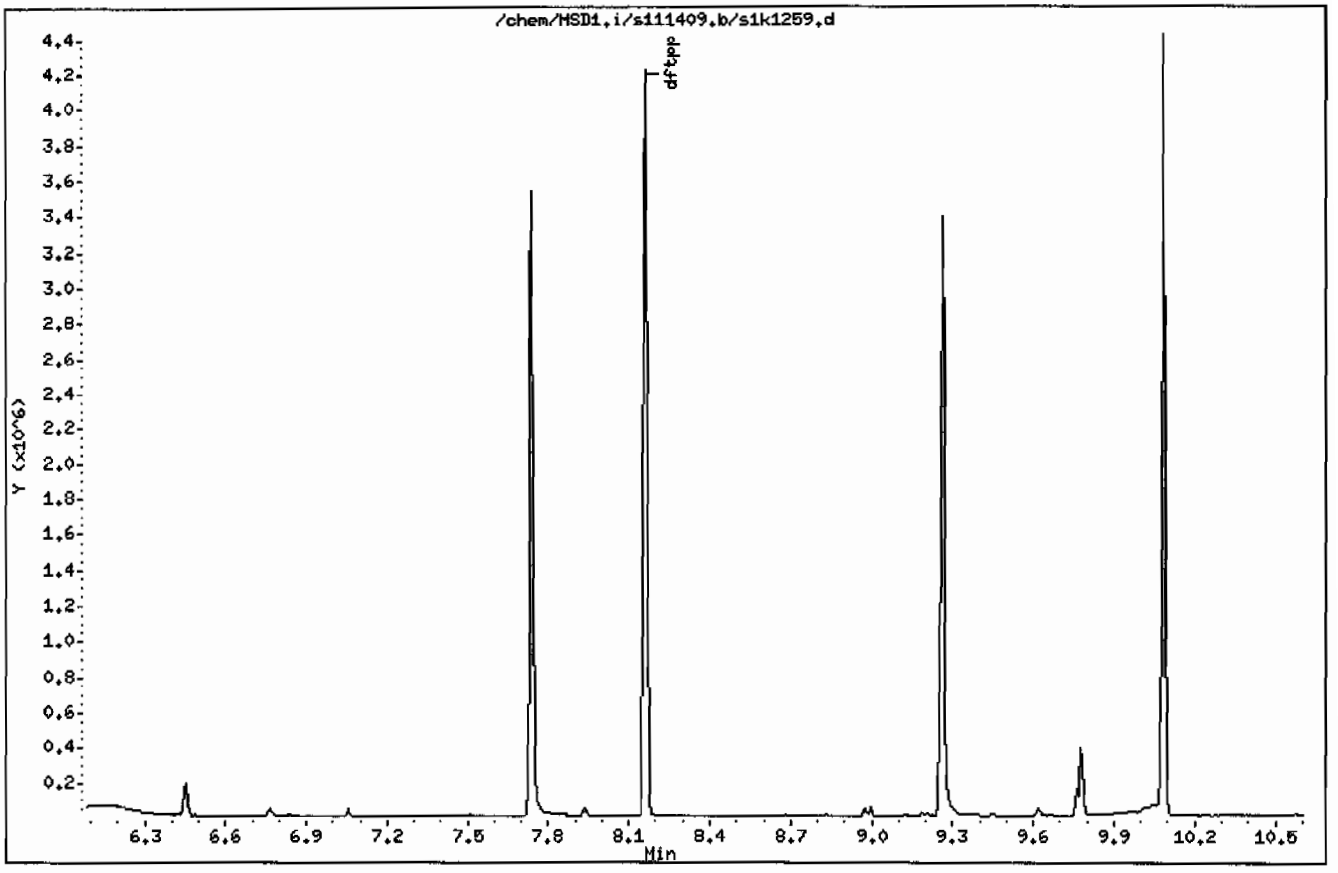

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

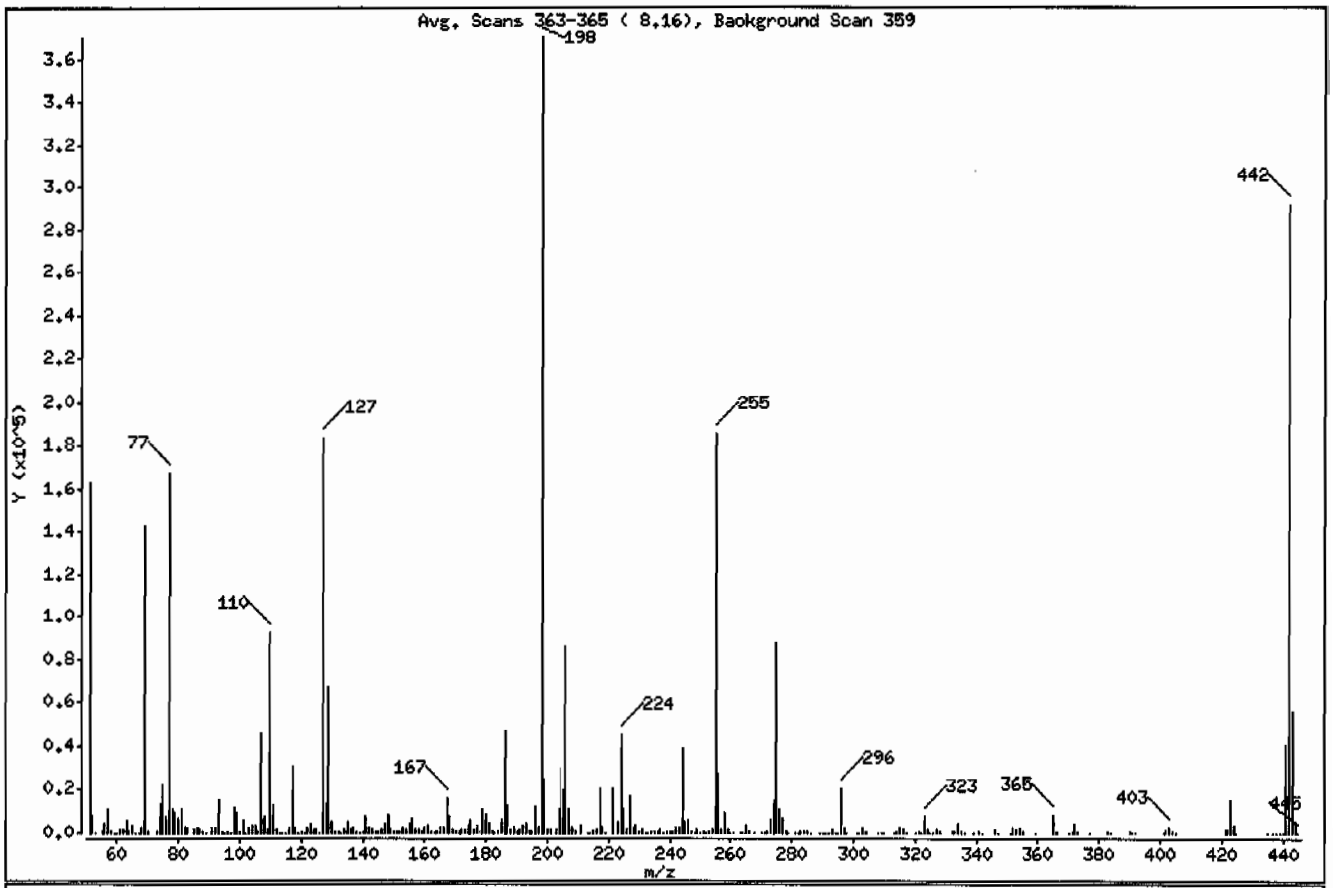

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.19
68	Less than 2.00% of mass 69	0.70 (1.82)
69	Mass 69 relative abundance	38.52
70	Less than 2.00% of mass 69	0.22 (0.58)
127	40.00 - 60.00% of mass 198	49.61
197	Less than 1.00% of mass 198	0.73
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	23.76
365	Greater than 1.00% of mass 198	2.39
441	Present, but less than mass 443	10.94
442	Greater than 40.00% of mass 198	78.91
443	17.00 - 23.00% of mass 442	15.11 (19.15)

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	163520	132.00	696	209.00	894	295.00	409
52.00	8218	133.00	165	211.00	3176	296.00	20504
53.00	278	134.00	1736	213.00	157	297.00	2961
55.00	768	135.00	5284	214.00	60	298.00	242
56.00	4517	136.00	1990	215.00	896	301.00	228
57.00	10646	137.00	2882	216.00	1633	302.00	377
58.00	485	138.00	608	217.00	20280	303.00	2440
59.00	173	139.00	322	218.00	2791	304.00	779
60.00	130	140.00	728	219.00	287	308.00	333
61.00	1880	141.00	8017	221.00	20640	309.00	180
62.00	1926	142.00	2864	223.00	4752	310.00	288
63.00	5930	143.00	1765	224.00	45496	313.00	172
64.00	771	144.00	446	225.00	11459	314.00	1000
65.00	3009	145.00	462	226.00	1320	315.00	2189
66.00	190	146.00	1638	227.00	16640	316.00	1304
67.00	147	147.00	4131	228.00	2433	317.00	255
68.00	2590	148.00	8419	229.00	3596	320.00	58
69.00	142592	149.00	1752	230.00	541	321.00	701
70.00	823	150.00	512	231.00	1631	322.00	395
73.00	1236	151.00	1272	232.00	323	323.00	7827
74.00	13875	152.00	886	233.00	236	324.00	1465
75.00	21824	153.00	2474	234.00	1059	325.00	55
76.00	7905	154.00	2034	235.00	1215	326.00	117
77.00	167296	155.00	4599	236.00	846	327.00	1319
78.00	11034	156.00	6876	237.00	1279	328.00	683
79.00	9492	157.00	1450	238.00	168	332.00	545
80.00	7131	158.00	1509	239.00	670	333.00	652
81.00	10804	159.00	1113	240.00	518	334.00	4627
82.00	2610	160.00	2655	241.00	1019	335.00	1148
83.00	2719	161.00	3658	242.00	2369	336.00	50
85.00	1896	162.00	1109	243.00	2744	339.00	57
86.00	2616	163.00	339	244.00	39256	341.00	855
87.00	1519	164.00	493	245.00	4982	342.00	192
88.00	684	165.00	2904	246.00	6349	346.00	1554
89.00	219	166.00	2427	247.00	1255	347.00	356

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	2379	167.00	16175	248.00	341	351.00	56
92.00	2447	168.00	7387	249.00	1305	352.00	2339
93.00	14969	169.00	1311	250.00	210	353.00	1624
94.00	1153	170.00	539	251.00	450	354.00	2500
95.00	287	171.00	706	252.00	278	355.00	434
96.00	810	172.00	1473	253.00	769	359.00	83
97.00	388	173.00	1748	254.00	1972	365.00	8863
98.00	11810	174.00	3414	255.00	185216	366.00	1195
99.00	9686	175.00	6350	256.00	27176	370.00	215
100.00	914	176.00	2063	257.00	2039	371.00	581
101.00	5933	177.00	3047	258.00	9022	372.00	4002
102.00	375	178.00	995	259.00	1444	373.00	996
103.00	2163	179.00	11274	260.00	214	377.00	51
104.00	3736	180.00	8159	261.00	279	383.00	974
105.00	3394	181.00	4009	263.00	55	384.00	323
106.00	1190	182.00	670	264.00	157	390.00	592
107.00	46232	183.00	413	265.00	3712	391.00	375
108.00	7538	184.00	909	266.00	481	392.00	323
109.00	1503	185.00	5852	268.00	53	401.00	231
110.00	92872	186.00	47008	270.00	282	402.00	1478
111.00	12963	187.00	12615	271.00	380	403.00	2390
112.00	1503	188.00	1316	272.00	540	404.00	821
113.00	406	189.00	2602	273.00	5676	405.00	134
114.00	121	190.00	427	274.00	15599	421.00	2054
115.00	133	191.00	1281	275.00	87936	422.00	1867
116.00	2637	192.00	3712	276.00	11240	423.00	15373
117.00	30336	193.00	4225	277.00	6439	424.00	3047
118.00	2397	194.00	901	278.00	950	425.00	291
119.00	332	195.00	603	279.00	182	435.00	71
120.00	620	196.00	12028	281.00	60	437.00	71
121.00	175	197.00	2717	282.00	68	438.00	134
122.00	2801	198.00	370176	283.00	713	439.00	238
123.00	4622	199.00	24728	284.00	493	440.00	191
124.00	2083	200.00	1826	285.00	1250	441.00	40480
125.00	1949	201.00	2072	286.00	254	442.00	292096

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8,16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	135	203.00	2082	289.00	243	443.00	55944
127.00	183616	204.00	10956	290.00	235	444.00	5034
128.00	13544	205.00	19552	291.00	131	445.00	311
129.00	66872	206.00	85904	292.00	339		
130.00	5516	207.00	10725	293.00	1482		
131.00	1048	208.00	2576	294.00	389		

Data File: /ohem/MSD1.i/s112909.b/s1k2907.d

Page 1

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

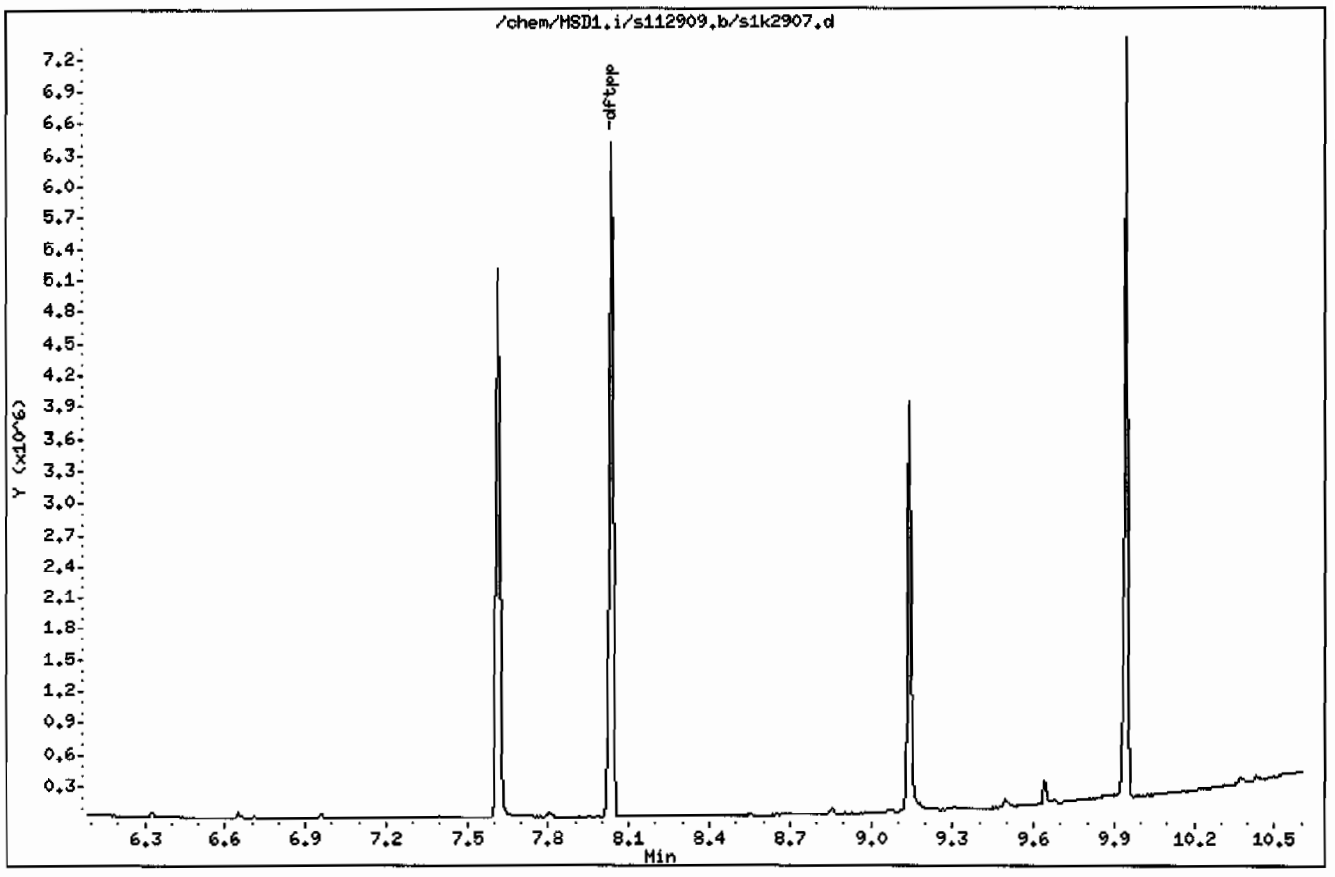

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

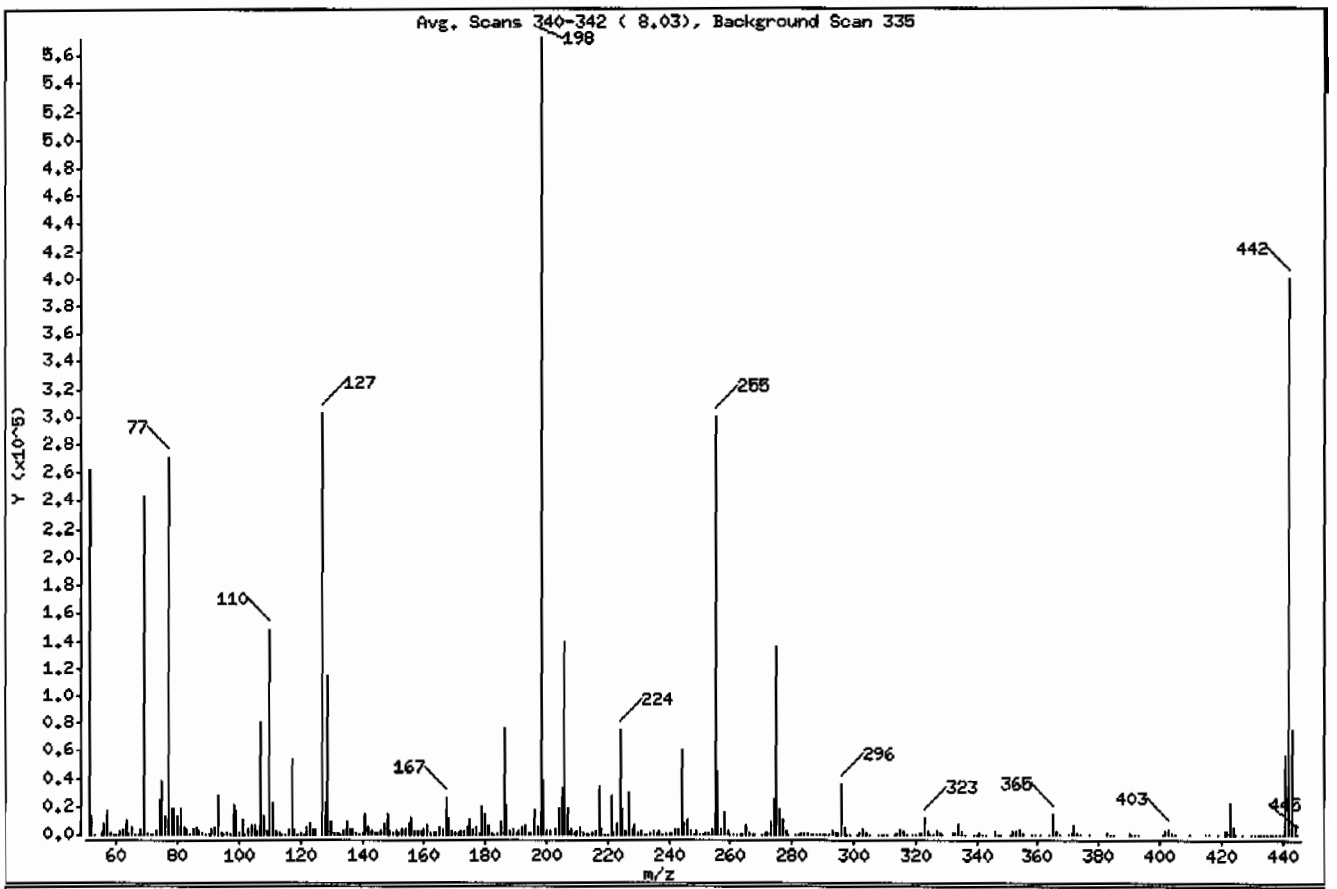

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.73
68	Less than 2.00% of mass 69	0.80 (1.89)
69	Mass 69 relative abundance	42.62
70	Less than 2.00% of mass 69	0.22 (0.51)
127	40.00 - 60.00% of mass 198	52.85
197	Less than 1.00% of mass 198	0.97
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.78
365	Greater than 1.00% of mass 198	2.52
441	Present, but less than mass 443	9.80
442	Greater than 40.00% of mass 198	69.82
443	17.00 - 23.00% of mass 442	13.14 (18.81)

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	261568	138.00	1011	224.00	74344	315.00	3766
52.00	13053	139.00	525	225.00	18856	316.00	2257
53.00	546	140.00	1213	226.00	2157	317.00	486
55.00	1276	141.00	13910	227.00	29936	319.00	124
56.00	7361	142.00	4991	228.00	4406	320.00	122
57.00	17608	143.00	3037	229.00	6070	321.00	1364
58.00	859	144.00	875	230.00	793	322.00	724
59.00	186	145.00	933	231.00	2539	323.00	12258
60.00	263	146.00	2317	232.00	343	324.00	2267
61.00	3281	147.00	7337	233.00	584	325.00	276
62.00	3450	148.00	14197	234.00	1971	326.00	277
63.00	9977	149.00	3063	235.00	2107	327.00	2299
64.00	1410	150.00	959	236.00	1359	328.00	1374
65.00	4855	151.00	1996	237.00	2622	329.00	176
66.00	354	152.00	1456	238.00	390	332.00	714
67.00	343	153.00	4354	239.00	1056	333.00	1069
68.00	4596	154.00	3352	240.00	998	334.00	7531
69.00	243776	155.00	7645	241.00	1606	335.00	2168
70.00	1241	156.00	11790	242.00	3920	336.00	184
71.00	129	157.00	2594	243.00	4517	339.00	161
72.00	199	158.00	2349	244.00	59896	340.00	194
73.00	2063	159.00	2070	245.00	7845	341.00	1320
74.00	24384	160.00	4131	246.00	10789	342.00	355
75.00	38152	161.00	6758	247.00	2026	343.00	153
76.00	12974	162.00	1653	248.00	636	346.00	2491
77.00	271360	163.00	701	249.00	2240	347.00	542
78.00	18368	164.00	926	250.00	436	348.00	50
79.00	17928	165.00	5065	251.00	641	351.00	193
80.00	13399	166.00	4101	252.00	720	352.00	3193
81.00	18440	167.00	25808	253.00	1512	353.00	2434
82.00	4915	168.00	12341	254.00	3754	354.00	3882
83.00	4045	169.00	2508	255.00	299840	355.00	737
84.00	487	170.00	906	256.00	44336	358.00	63
85.00	3384	171.00	1170	257.00	3929	359.00	186
86.00	5076	172.00	2281	258.00	15933	361.00	56

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d

Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	2450	173.00	2934	259.00	2669	364.00	187
88.00	896	174.00	5759	260.00	449	365.00	14431
89.00	560	175.00	10393	261.00	575	366.00	2213
90.00	52	176.00	3562	262.00	64	367.00	258
91.00	4069	177.00	4928	263.00	78	370.00	280
92.00	4877	178.00	1696	264.00	532	371.00	909
93.00	27096	179.00	19400	265.00	6513	372.00	6291
94.00	1944	180.00	14536	266.00	1163	373.00	1495
95.00	588	181.00	6593	267.00	245	374.00	151
96.00	1550	182.00	1216	268.00	277	377.00	175
97.00	606	183.00	567	270.00	481	383.00	1569
98.00	20592	184.00	1573	271.00	711	384.00	388
99.00	17440	185.00	9262	272.00	1001	385.00	151
100.00	1594	186.00	76128	273.00	9247	390.00	761
101.00	10170	187.00	21496	274.00	24496	391.00	516
102.00	520	188.00	2625	275.00	136000	392.00	400
103.00	3750	189.00	4538	276.00	18096	393.00	62
104.00	6276	190.00	825	277.00	10425	401.00	375
105.00	6355	191.00	2089	278.00	2137	402.00	2479
106.00	2176	192.00	5816	279.00	353	403.00	3482
107.00	79800	193.00	6494	281.00	500	404.00	1163
108.00	12799	194.00	1326	282.00	275	405.00	207
109.00	2573	195.00	1041	283.00	1191	410.00	170
110.00	148544	196.00	17744	284.00	981	415.00	200
111.00	22320	197.00	5562	285.00	1943	416.00	51
112.00	2828	198.00	571968	286.00	288	419.00	51
113.00	1025	199.00	37560	287.00	61	421.00	3008
114.00	180	200.00	2980	288.00	103	422.00	2724
115.00	250	201.00	2509	289.00	376	423.00	22240
116.00	4436	203.00	3664	290.00	418	424.00	5666
117.00	54352	204.00	18912	291.00	326	425.00	618
118.00	4423	205.00	32640	292.00	471	427.00	128
119.00	380	206.00	138880	293.00	2634	430.00	90
120.00	1253	207.00	17984	294.00	732	431.00	144
121.00	446	208.00	4448	295.00	933	432.00	114

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	5609	209.00	1626	296.00	35128	433.00	194
123.00	7700	210.00	1988	297.00	4998	434.00	130
124.00	3542	211.00	4936	298.00	403	435.00	213
125.00	3500	212.00	675	299.00	96	436.00	289
127.00	302272	213.00	424	301.00	479	437.00	282
128.00	22824	214.00	214	302.00	742	438.00	198
129.00	114216	215.00	1361	303.00	4244	439.00	300
130.00	9428	216.00	2918	304.00	1082	440.00	326
131.00	1699	217.00	34040	305.00	158	441.00	56056
132.00	1008	218.00	4578	308.00	544	442.00	399360
133.00	415	219.00	558	309.00	411	443.00	75136
134.00	3137	220.00	130	310.00	539	444.00	6738
135.00	8896	221.00	27264	311.00	71	445.00	344
136.00	3689	222.00	1274	313.00	282		
137.00	4593	223.00	8318	314.00	1642		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980154**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 16:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2912-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980154**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 16:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2912-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	316	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2912-2.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	582567	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2290441	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1227579	40.0000	
* 67 Phenanthrene-d10	188	6.916	6.922	(1.000)	2026415	40.0000	
* 91 Chrysene-d12	240	8.551	8.557	(1.000)	1690866	40.0000	
* 98 Perylene-d12	264	9.939	9.951	(1.000)	1420003	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1213962	79.7797	2660
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1404929	75.9663	2530
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	640323	42.4217	1410
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1337726	45.5002	1520
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	315669	92.0898	3070
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1290910	48.6378	1620

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2912-2.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3529801	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.881	836229	9.47621609	316	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2912-2.d
Date : 29-NOV-2009 16:50
Client ID: SBLK01
Sample Info: |1201980154|926126|1|SVMF|1|SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

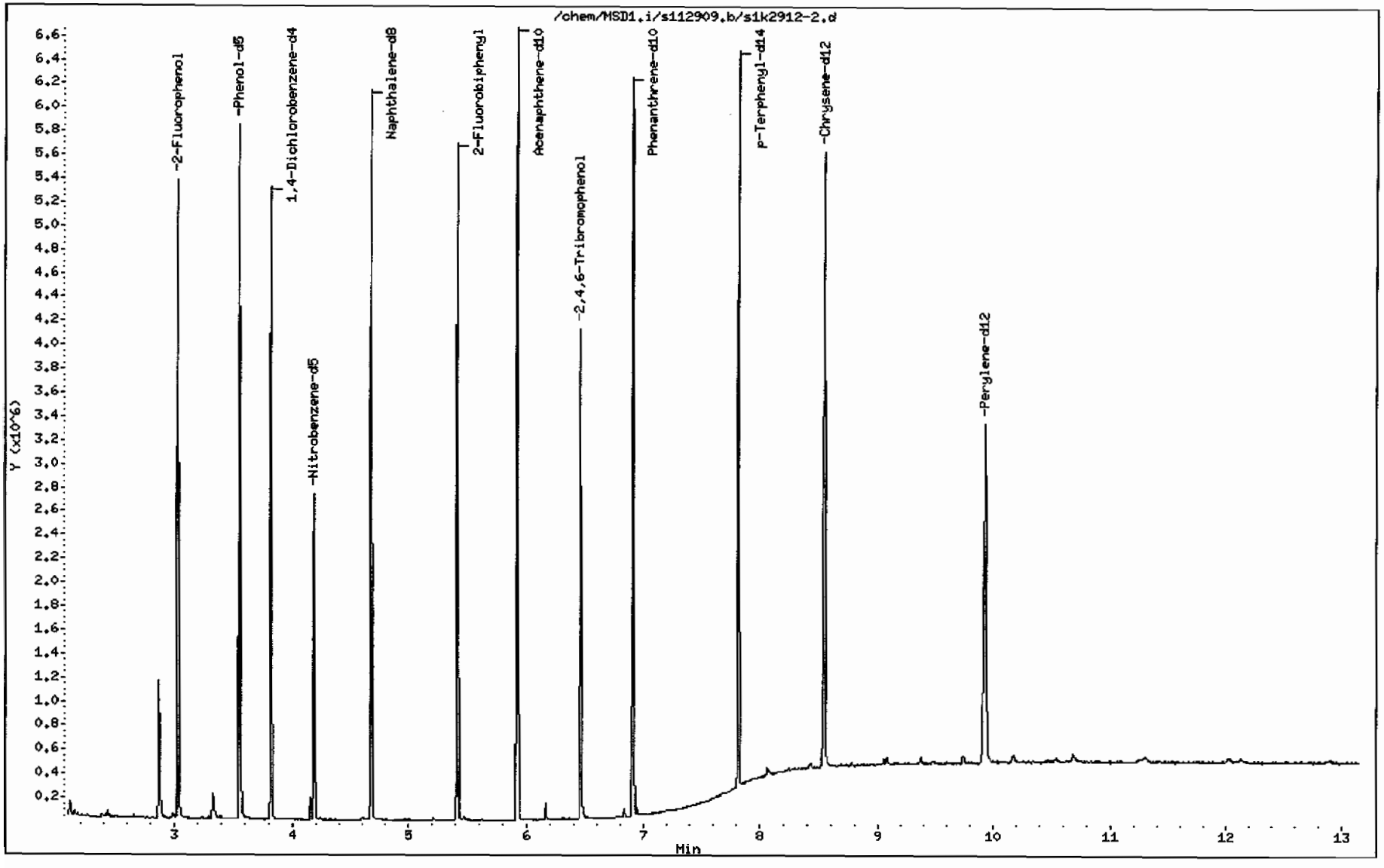

Data File: /chem/MSD1.i/s112909.b/s1k2912-2.d

Date : 29-NOV-2009 16:50

Client ID: SBLK01

Instrument: MSD1.i

Sample Info: 1120198015419261261 1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1,3,5-Pentanetriol, 3-methyl-	7564-64-9	NIST05.L	14621	39	C6H14O3	134

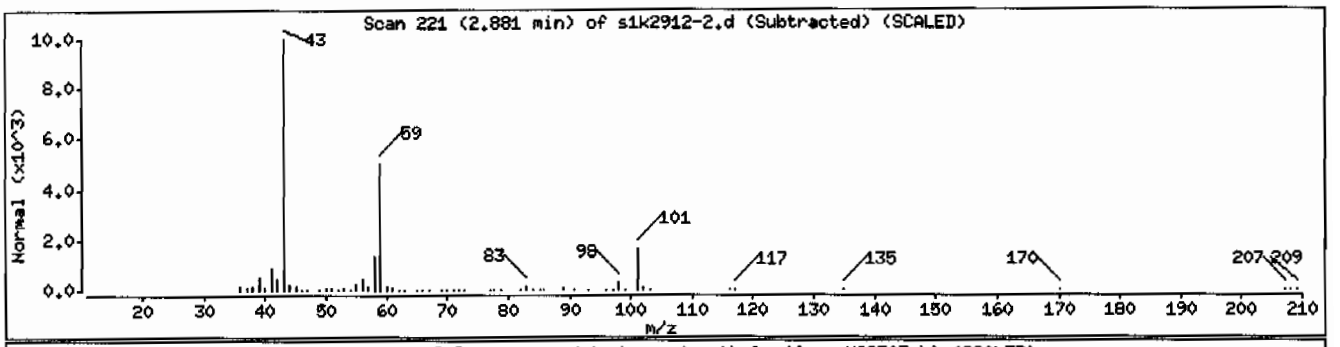

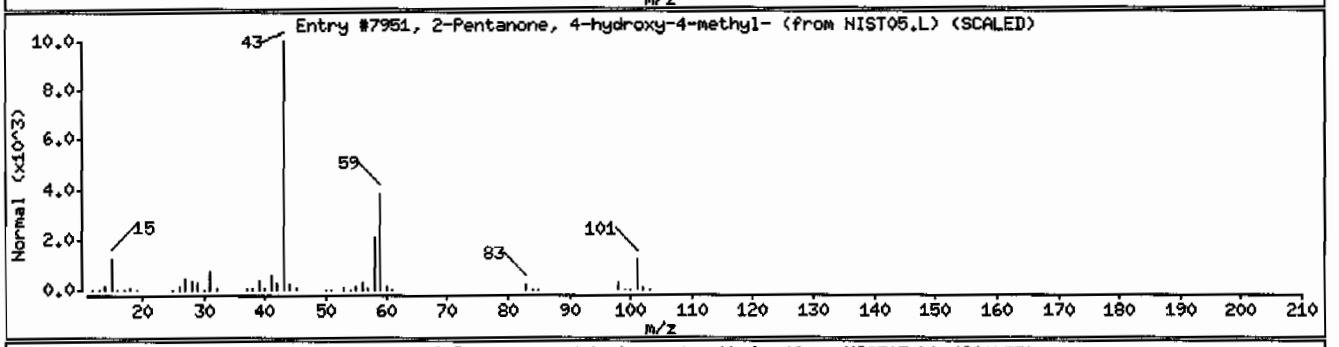

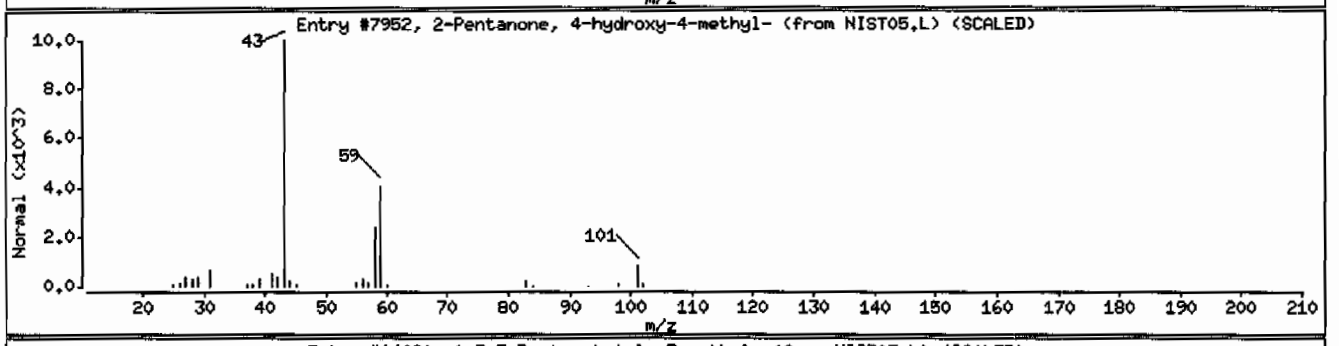

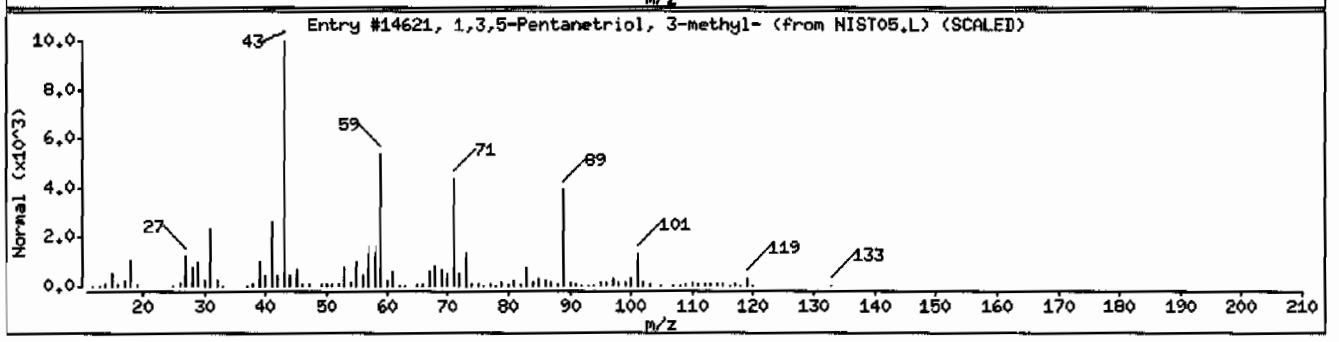

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600			Matrix:	SOIL
Lab Sample ID:	1201980157				
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926121	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:14	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1k2913-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1230	ug/kg	66.7	333
108-95-2	Phenol		1220	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1210	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1180	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1130	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1230	ug/kg	66.7	333
83-32-9	Acenaphthene		1280	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1230	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1170	ug/kg	110	333
87-86-5	Pentachlorophenol		1390	ug/kg	83.3	333
129-00-0	Pyrene		1370	ug/kg	10.0	33.3
110-86-1	Pyridine		927	ug/kg	66.7	333
62-53-3	Aniline		1020	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1180	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1130	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1220	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1200	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1160	ug/kg	66.7	333
95-48-7	o-Cresol		1360	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1350	ug/kg	100	333
67-72-1	Hexachloroethane		1140	ug/kg	66.7	333
98-95-3	Nitrobenzene		1280	ug/kg	66.7	333
78-59-1	Isophorone		1330	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1190	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1210	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1140	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1160	ug/kg	66.7	333
65-85-0	Benzoic acid		2170	ug/kg	167	667
91-20-3	Naphthalene		1190	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1020	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1230	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1250	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		2090	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1340	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1430	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1210	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1130	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		986	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980157**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 17:14**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2913-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1340	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1250	ug/kg	33.3	333
208-96-8	Acenaphthylene		1280	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1350	ug/kg	127	667
132-64-9	Dibenzofuran		1470	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1300	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1390	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1200	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1110	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1240	ug/kg	66.7	333
122-66-7	Azobenzene		1290	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1520	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1330	ug/kg	66.7	333
85-01-8	Phenanthrene		1290	ug/kg	10.0	33.3
120-12-7	Anthracene		1280	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1510	ug/kg	66.7	333
206-44-0	Fluoranthene		1360	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1510	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1220	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1190	ug/kg	100	333
218-01-9	Chrysene		1230	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1450	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1490	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1240	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1380	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1290	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1180	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1160	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1220	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1220	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2913-2.d
Lab Smp Id: 1201980157 Client Smp ID: SBLK01LCS
Inj Date : 29-NOV-2009 17:14
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980157|926126|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	617030	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2615814	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1327800	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2222627	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1876046	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1522701	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1271871	78.9169	2630
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1461421	74.6073	2490
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	684430	39.7037	1320
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1416944	44.5569	1480
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	371535	100.207	3340
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1434844	48.7247	1620

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	752654	36.4664	1220
8 2-Chlorophenol	128	3.704	3.704	(0.968)	639061	36.4310	1210
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	713236	35.3495	1180
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	399043	33.9316	1130(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	577162	36.4542	1220
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	516096	36.8685	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1174835	38.3615	1280
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	440376	36.8581	1230
52 4-Nitrophenol	139	6.010	6.004	(1.013)	220683	35.2282	1170
65 Pentachlorophenol	266	6.798	6.792	(0.982)	235029	41.8099	1390
79 Pyrene	202	7.781	7.787	(0.909)	2047657	41.0742	1370
2 Pyridine	79	2.428	2.410	(0.634)	408899	27.8205	927
4 Aniline	66	3.622	3.628	(0.946)	263031	30.5509	1020
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510398	35.5468	1180
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	696923	33.8596	1130
12 Benzyl alcohol	108	3.910	3.910	(1.022)	390042	36.5704	1220
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	672531	36.0915	1200
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1191956	34.8523	1160
15 o-Cresol	107	3.963	3.963	(1.035)	534295	40.9176	1360
18 m,p-Cresols	107	4.063	4.063	(1.061)	719000	40.4679	1350
19 Hexachloroethane	117	4.169	4.169	(1.089)	248216	34.1819	1140
21 Nitrobenzene	77	4.210	4.210	(0.897)	691613	38.5060	1280
22 Isophorone	82	4.363	4.369	(0.930)	1252978	39.8762	1330
23 2-Nitrophenol	139	4.422	4.422	(0.942)	340801	35.7439	1190
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	554549	36.3226	1210
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	691571	34.1877	1140
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	497973	34.7566	1160
27 Benzoic acid	105	4.516	4.499	(0.962)	683711	64.9910	2170
30 Naphthalene	128	4.704	4.710	(1.002)	1951439	35.7452	1190(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	763147	30.6108	1020
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	299492	36.8387	1230
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349146	37.5924	1250
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	254671	62.8185	2090
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	356012	40.3106	1340
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	403669	42.9853	1430
40 2-Chloronaphthalene	162	5.540	5.540	(0.934)	1190080	36.3056	1210
42 o-Nitroaniline	65	5.604	5.604	(0.944)	343985	33.8440	1130
41 m-Nitroaniline	138	5.898	5.898	(0.994)	265638	29.5780	986
43 Dimethylphthalate	163	5.710	5.716	(0.962)	1456615	40.2594	1340
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	338062	37.5023	1250
45 Acenaphthylene	152	5.840	5.840	(0.984)	1959446	38.3071	1280
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	144123	40.5068	1350(Q)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1952785	44.0915	1470
51 Diethylphthalate	149	6.192	6.198	(1.044)	1428178	42.3398	1410
53 Fluorene	166	6.310	6.310	(1.063)	1390645	38.9420	1300
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	628903	41.7119	1390
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	202018	35.9267	1200

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	292736	33.3313	1110
133 Diphenylamine	169	6.369	6.369	(0.920)	1105073	37.2750	1240
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1396329	38.6021	1290
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	348687	45.6613	1520
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	375137	40.0219	1330
68 Phenanthrene	178	6.939	6.940	(1.003)	1960363	38.8105	1290
69 Anthracene	178	6.969	6.969	(1.007)	1974619	38.4401	1280
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2486060	45.3739	1510
76 Fluoranthene	202	7.645	7.645	(1.105)	1989736	40.8094	1360
85 Butylbenzylphthalate	149	8.086	8.092	(0.945)	1030539	45.4238	1510
89 Benzo(a)anthracene	228	8.539	8.545	(0.998)	1649744	36.6730	1220
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	461604	35.7370	1190
92 Chrysene	228	8.575	8.581	(1.002)	1554454	36.9708	1230
93 bis(2-Ethylhexyl)phthalate	149	8.428	8.434	(0.985)	1434232	43.5143	1450
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	2221573	44.6001	1490
95 Benzo(b)fluoranthene	252	9.498	9.510	(0.955)	1426222	37.1329	1240
96 Benzo(k)fluoranthene	252	9.528	9.533	(0.958)	1583032	41.4615	1380
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	1285249	38.6386	1290
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	1223235	35.4050	1180
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	1008016	34.8891	1160
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	1046013	36.5568	1220
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	323215	36.9282	1230

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2913-2.d
Date : 29-NOV-2009 17:14
Client ID: SBLK01LCS
Sample Info: 1120198015719261261|SWMF1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AHY
Column diameter: 0.20

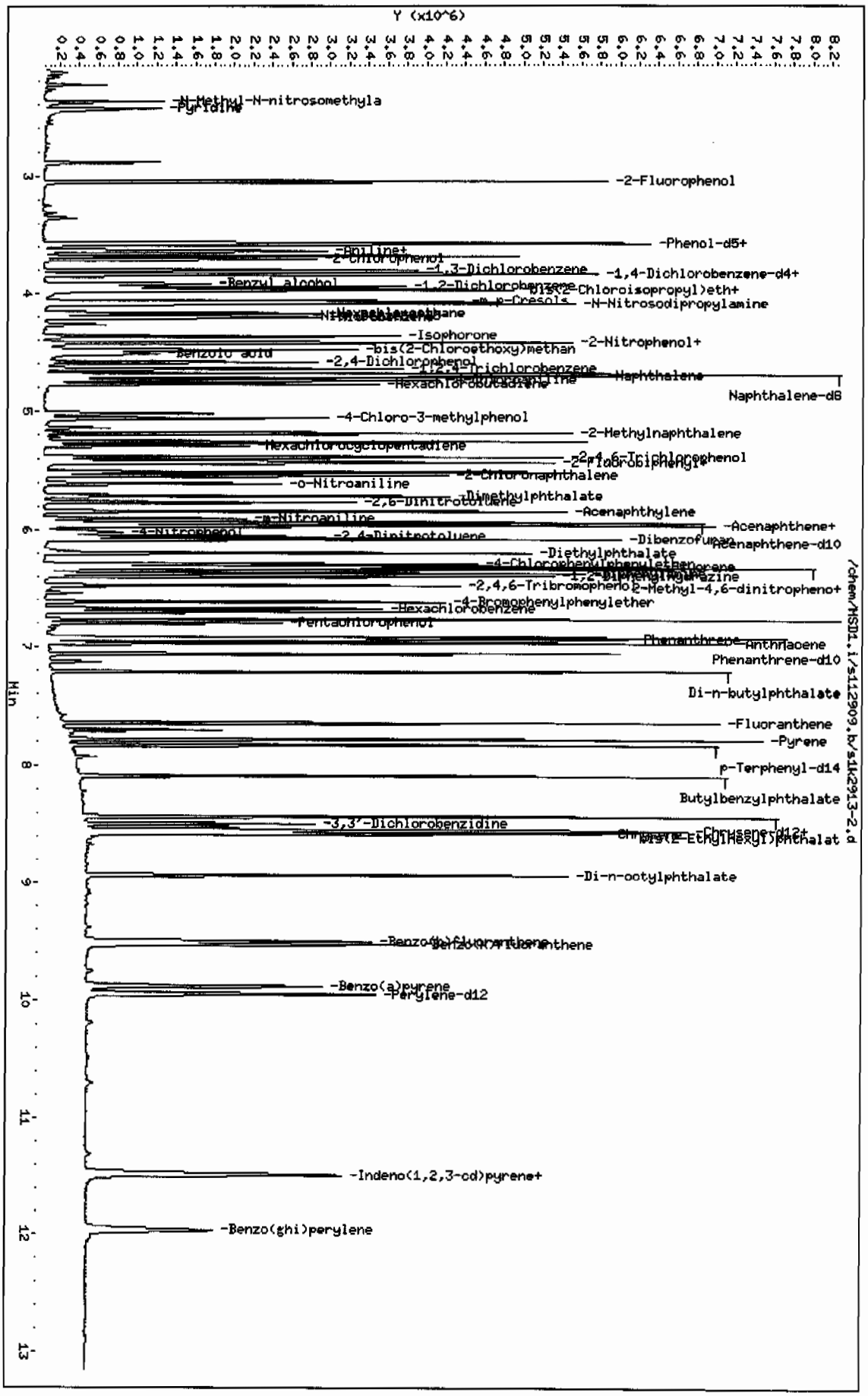

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201980155	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
Client Sample:	QC for batch 926121	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2132MS	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 19:59	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s1k2920.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1150	ug/kg	70.8	354
108-95-2	Phenol		1200	ug/kg	70.8	354
95-57-8	2-Chlorophenol		1170	ug/kg	70.8	354
106-46-7	1,4-Dichlorobenzene		1060	ug/kg	70.8	354
621-64-7	N-Nitrosodipropylamine		1120	ug/kg	70.8	354
59-50-7	4-Chloro-3-methylphenol		1230	ug/kg	70.8	354
83-32-9	Acenaphthene		1210	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene		1140	ug/kg	35.4	354
100-02-7	4-Nitrophenol		1160	ug/kg	117	354
87-86-5	Pentachlorophenol		1250	ug/kg	88.5	354
129-00-0	Pyrene		1460	ug/kg	10.6	35.4
110-86-1	Pyridine		786	ug/kg	70.8	354
62-53-3	Aniline		949	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether		1110	ug/kg	70.8	354
541-73-1	1,3-Dichlorobenzene		1010	ug/kg	70.8	354
100-51-6	Benzyl alcohol		908	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene		1090	ug/kg	70.8	354
108-60-1	bis(2-Chloroisopropyl)ether		1100	ug/kg	70.8	354
95-48-7	o-Cresol		1630	ug/kg	70.8	354
65794-96-9	m,p-Cresols		1360	ug/kg	106	354
67-72-1	Hexachloroethane		996	ug/kg	70.8	354
98-95-3	Nitrobenzene		1220	ug/kg	70.8	354
78-59-1	Isophorone		1310	ug/kg	70.8	354
88-75-5	2-Nitrophenol		1120	ug/kg	70.8	354
105-67-9	2,4-Dimethylphenol		1230	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane		1120	ug/kg	70.8	354
120-83-2	2,4-Dichlorophenol		1160	ug/kg	70.8	354
65-85-0	Benzoic acid		1170	ug/kg	177	708
91-20-3	Naphthalene		1140	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline		1010	ug/kg	70.8	354
87-68-3	Hexachlorobutadiene		1150	ug/kg	70.8	354
91-57-6	2-Methylnaphthalene		1190	ug/kg	7.08	35.4
77-47-4	Hexachlorocyclopentadiene		1580	ug/kg	70.8	354
88-06-2	2,4,6-Trichlorophenol		1390	ug/kg	70.8	354
95-95-4	2,4,5-Trichlorophenol		1440	ug/kg	70.8	354
91-58-7	2-Chloronaphthalene		1190	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline		1110	ug/kg	70.8	354
	o-Nitroaniline					
99-09-2	3-Nitroaniline		980	ug/kg	70.8	354

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201980155	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
Client Sample:	QC for batch 926121	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2132MS	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 19:59	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s1k2920.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1330	ug/kg	70.8	354
606-20-2	2,6-Dinitrotoluene		1230	ug/kg	35.4	354
208-96-8	Acenaphthylene		1240	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	J	513	ug/kg	135	708
132-64-9	Dibenzofuran		1450	ug/kg	70.8	354
84-66-2	Diethylphthalate		1410	ug/kg	70.8	354
86-73-7	Fluorene		1280	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether		1380	ug/kg	70.8	354
534-52-1	2-Methyl-4,6-dinitrophenol		647	ug/kg	70.8	354
100-01-6	4-Nitroaniline		1040	ug/kg	106	354
	p-Nitroaniline					
122-39-4	Diphenylamine		1290	ug/kg	70.8	354
122-66-7	Azobenzene		1310	ug/kg	70.8	354
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1540	ug/kg	70.8	354
118-74-1	Hexachlorobenzene		1230	ug/kg	70.8	354
85-01-8	Phenanthrene		1300	ug/kg	10.6	35.4
120-12-7	Anthracene		1240	ug/kg	7.08	35.4
84-74-2	Di-n-butylphthalate		1480	ug/kg	70.8	354
206-44-0	Fluoranthene		1270	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate		1710	ug/kg	70.8	354
56-55-3	Benzo(a)anthracene		1290	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine		1070	ug/kg	106	354
218-01-9	Chrysene		1160	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate		1560	ug/kg	70.8	354
117-84-0	Di-n-octylphthalate		1850	ug/kg	70.8	354
205-99-2	Benzo(b)fluoranthene		1530	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene		1220	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene		1280	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene		1000	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene		1030	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene		942	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene		1130	ug/kg	70.8	354

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2920.d
Lab Smp Id: 1201980155 Client Smp ID: WST03-10-2132MS
Inj Date : 29-NOV-2009 19:59
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980155|926126|1|SVMF|1|MS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	699947	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2934133	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1463731	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2363993	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1684742	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1120190	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1289380	70.5260	2500
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1547686	69.6514	2470
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	673013	34.8059	1230
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1433542	40.8925	1450
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	370034	90.5336	3200
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1328013	50.2177	1780

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	796747	34.0298	1200
8 2-Chlorophenol	128	3.704	3.704	(0.968)	656662	32.9999	1170
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	685652	29.9567	1060
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	420390	31.5122	1120(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	566160	31.8799	1130
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	545668	34.7521	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1149404	34.0458	1200
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	422299	32.0627	1140
52 4-Nitrophenol	139	6.016	6.004	(1.014)	225669	32.6788	1160(Q)
65 Pentachlorophenol	266	6.798	6.792	(0.982)	210344	35.1811	1240
79 Pyrene	202	7.786	7.787	(0.910)	1850873	41.3427	1460
2 Pyridine	79	2.422	2.410	(0.633)	370227	22.2054	786
4 Aniline	66	3.622	3.628	(0.946)	261857	26.8116	949
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510651	31.3514	1110
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	668790	28.6436	1010
12 Benzyl alcohol	108	3.916	3.910	(1.023)	310221	25.6408	908
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	652552	30.8709	1090
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1201535	30.9706	1100
15 o-Cresol	107	3.969	3.963	(1.037)	683532	46.1455	1630
18 m,p-Cresols	107	4.063	4.063	(1.061)	772494	38.3282	1360
19 Hexachloroethane	117	4.169	4.169	(1.089)	231829	28.1433	996
21 Nitrobenzene	77	4.204	4.210	(0.896)	695598	34.5264	1220
22 Isophorone	82	4.363	4.369	(0.930)	1299945	36.8827	1300
23 2-Nitrophenol	139	4.422	4.422	(0.942)	337453	31.5531	1120
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	592642	34.6064	1220
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	715403	31.5291	1120
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	524523	32.6380	1160
27 Benzoic acid	105	4.498	4.499	(0.959)	390090	33.0577	1170
30 Naphthalene	128	4.704	4.710	(1.002)	1963373	32.0621	1140(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	797874	28.5317	1010
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	297235	32.5947	1150
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349639	33.5263	1190
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	199168	44.5657	1580
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	381472	39.1822	1390
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	421700	40.7352	1440
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	1212305	33.5491	1190
42 o-Nitroaniline	65	5.604	5.604	(0.944)	350257	31.2609	1110
41 m-Nitroaniline	138	5.898	5.898	(0.994)	274130	27.6889	980
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1500237	37.6143	1330
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	344190	34.6363	1230
45 Acenaphthylene	152	5.839	5.840	(0.984)	1966987	34.8834	1240
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	56861	14.4972	513(aQ)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1996093	40.8839	1450
51 Diethylphthalate	149	6.192	6.198	(1.044)	1481999	39.8553	1410
53 Fluorene	166	6.310	6.310	(1.063)	1421709	36.1147	1280
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	646361	38.8886	1380
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	109209	18.2603	646

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	284762	29.4123	1040
133 Diphenylamine	169	6.369	6.369	(0.920)	1145372	36.3240	1290
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1426823	37.0863	1310
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	354319	43.6242	1540
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	346909	34.7972	1230
68 Phenanthrene	178	6.939	6.940	(1.003)	1975120	36.7644	1300
69 Anthracene	178	6.969	6.969	(1.007)	1913297	35.0190	1240
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2440805	41.8840	1480
76 Fluoranthene	202	7.645	7.645	(1.105)	1854236	35.7562	1270
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	984368	48.3155	1710
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1477404	36.5712	1290
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	350925	30.2533	1070
92 Chrysene	228	8.575	8.581	(1.002)	1231772	32.6228	1160
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1306621	44.1441	1560
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1909554	52.1111	1840
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.955)	1234751	43.2281	1530
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	964822	34.3499	1220
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	883640	36.1004	1280
99 Indeno(1,2,3-cd)pyrene	276	11.492	11.504	(1.155)	722470	28.3387	1000
100 Dibenzo(a,h)anthracene	278	11.492	11.498	(1.155)	615954	28.9496	1020
101 Benzo(ghi)perylene	276	11.974	11.980	(1.203)	559720	26.5904	942
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	321743	32.4054	1150

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /ohem/MSD1.i/s112909.b/s1k2920.d
Date : 29-NOV-2009 19:59
Client ID: WST03-10-2132MS
Sample Info: |1201980155|926126|1|SVHF/1|MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

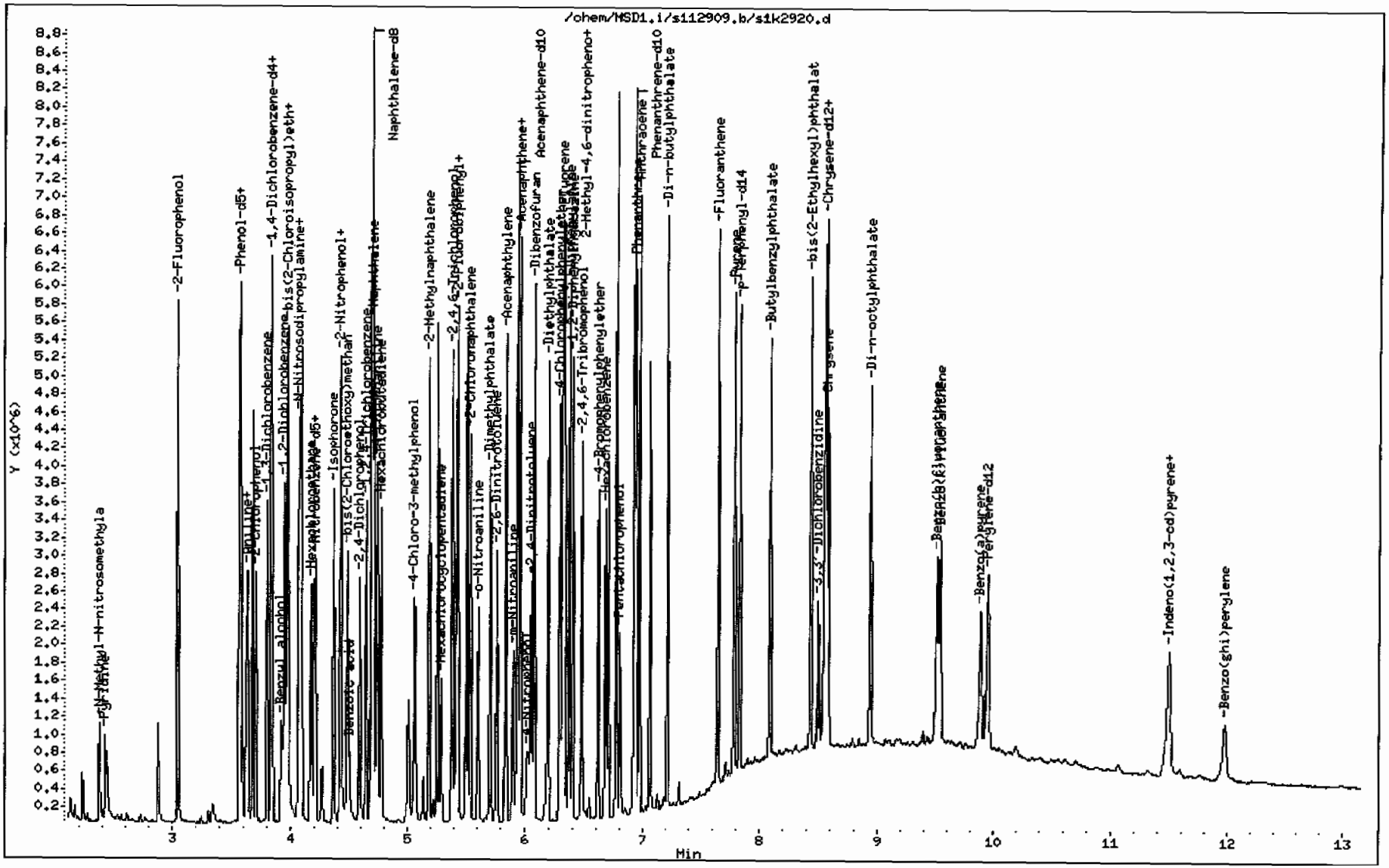

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	1201980156	Date Received:	11/20/2009 08:50	%Moisture:	6.2
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	WST03-10-2132MSD	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:22	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.16 g	Final Volume:	1 mL
Data File:	s1k2921.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1120	ug/kg	70.7	354
108-95-2	Phenol		1120	ug/kg	70.7	354
95-57-8	2-Chlorophenol		1120	ug/kg	70.7	354
106-46-7	1,4-Dichlorobenzene		1020	ug/kg	70.7	354
621-64-7	N-Nitrosodipropylamine		1010	ug/kg	70.7	354
59-50-7	4-Chloro-3-methylphenol		1150	ug/kg	70.7	354
83-32-9	Acenaphthene		1130	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene		1030	ug/kg	35.4	354
100-02-7	4-Nitrophenol		1090	ug/kg	117	354
87-86-5	Pentachlorophenol		1030	ug/kg	88.4	354
129-00-0	Pyrene		1410	ug/kg	10.6	35.4
110-86-1	Pyridine		826	ug/kg	70.7	354
62-53-3	Aniline		944	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether		1080	ug/kg	70.7	354
541-73-1	1,3-Dichlorobenzene		981	ug/kg	70.7	354
100-51-6	Benzyl alcohol		723	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene		1050	ug/kg	70.7	354
108-60-1	bis(2-Chloroisopropyl)ether		1070	ug/kg	70.7	354
95-48-7	o-Cresol		1530	ug/kg	70.7	354
65794-96-9	m,p-Cresols		1280	ug/kg	106	354
67-72-1	Hexachloroethane		914	ug/kg	70.7	354
98-95-3	Nitrobenzene		1160	ug/kg	70.7	354
78-59-1	Isophorone		1230	ug/kg	70.7	354
88-75-5	2-Nitrophenol		1010	ug/kg	70.7	354
105-67-9	2,4-Dimethylphenol		1140	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane		1070	ug/kg	70.7	354
120-83-2	2,4-Dichlorophenol		1090	ug/kg	70.7	354
65-85-0	Benzoic acid		1310	ug/kg	177	707
91-20-3	Naphthalene		1070	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline		973	ug/kg	70.7	354
87-68-3	Hexachlorobutadiene		1090	ug/kg	70.7	354
91-57-6	2-Methylnaphthalene		1120	ug/kg	7.07	35.4
77-47-4	Hexachlorocyclopentadiene		1040	ug/kg	70.7	354
88-06-2	2,4,6-Trichlorophenol		1250	ug/kg	70.7	354
95-95-4	2,4,5-Trichlorophenol		1330	ug/kg	70.7	354
91-58-7	2-Chloronaphthalene		1090	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline *o-Nitroaniline*		1010	ug/kg	70.7	354
99-09-2	3-Nitroaniline		920	ug/kg	70.7	354

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	1201980156	Date Received:	11/20/2009 08:50	%Moisture:	6.2
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	WST03-10-2132MSD	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 20:22	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.16 g	Final Volume:	1 mL
Data File:	s1k2921.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1230	ug/kg	70.7	354
606-20-2	2,6-Dinitrotoluene		1100	ug/kg	35.4	354
208-96-8	Acenaphthylene		1140	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	J	364	ug/kg	134	707
132-64-9	Dibenzofuran		1350	ug/kg	70.7	354
84-66-2	Diethylphthalate		1320	ug/kg	70.7	354
86-73-7	Fluorene		1190	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether		1300	ug/kg	70.7	354
534-52-1	2-Methyl-4,6-dinitrophenol		433	ug/kg	70.7	354
100-01-6	4-Nitroaniline		948	ug/kg	106	354
	p-Nitroaniline					
122-39-4	Diphenylamine		1170	ug/kg	70.7	354
122-66-7	Azobenzene		1200	ug/kg	70.7	354
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1430	ug/kg	70.7	354
118-74-1	Hexachlorobenzene		1130	ug/kg	70.7	354
85-01-8	Phenanthrene		1190	ug/kg	10.6	35.4
120-12-7	Anthracene		1150	ug/kg	7.07	35.4
84-74-2	Di-n-butylphthalate		1360	ug/kg	70.7	354
206-44-0	Fluoranthene		1130	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate		1600	ug/kg	70.7	354
56-55-3	Benzo(a)anthracene		1140	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine		1030	ug/kg	106	354
218-01-9	Chrysene		1080	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate		1460	ug/kg	70.7	354
117-84-0	Di-n-octylphthalate		2020	ug/kg	70.7	354
205-99-2	Benzo(b)fluoranthene		1270	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene		1370	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene		1160	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene		742	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene		790	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene		686	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene		1070	ug/kg	70.7	354

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2921.d
Lab Smp Id: 1201980156 Client Smp ID: WST03-10-2132MSD
Inj Date : 29-NOV-2009 20:22
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980156|926126|1|SVMF|1|MSD
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.16000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	615056	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2554313	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1300161	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2151794	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1447390	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	806048	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1069314	66.5616	2350
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1262977	64.6835	2290
$ 20 Nitrobenzene-d5	82	4.192	4.199	(0.893)	552216	32.8053	1160
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1174801	37.7279	1330
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	298226	82.1443	2900
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1075352	47.3318	1670

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	651465	31.6651	1120
8 2-Chlorophenol	128	3.704	3.704	(0.968)	553085	31.6310	1120
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	582464	28.9608	1020
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	333817	28.4764	1010(Q)
28 1,2,4-Trichlorobenzene	180	4.639	4.640	(0.989)	469632	30.3767	1070
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	442703	32.3870	1140
47 Acenaphthene	154	5.957	5.957	(1.004)	961549	32.0646	1130
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	342426	29.2692	1030
52 4-Nitrophenol	139	6.016	6.004	(1.014)	189174	30.8403	1090
65 Pentachlorophenol	266	6.798	6.792	(0.982)	158486	29.1215	1030
79 Pyrene	202	7.786	7.787	(0.910)	1531042	39.8068	1410
2 Pyridine	79	2.416	2.410	(0.631)	342320	23.3654	826
4 Aniline	66	3.622	3.628	(0.946)	229123	26.6979	944
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	435483	30.4267	1080
9 1,3-Dichlorobenzene	146	3.792	3.799	(0.991)	569061	27.7362	981
12 Benzyl alcohol	108	3.916	3.910	(1.023)	217397	20.4486	723
13 1,2-Dichlorobenzene	146	3.945	3.946	(1.031)	553673	29.8084	1050
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1027417	30.1377	1060
15 o-Cresol	107	3.963	3.963	(1.035)	564636	43.3800	1530
18 m,p-Cresols	107	4.063	4.063	(1.061)	640140	36.1451	1280
19 Hexachloroethane	117	4.169	4.169	(1.089)	187184	25.8600	914
21 Nitrobenzene	77	4.204	4.210	(0.896)	575076	32.7886	1160
22 Isophorone	82	4.363	4.369	(0.930)	1071543	34.9231	1230
23 2-Nitrophenol	139	4.422	4.422	(0.942)	264819	28.4435	1000
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	481800	32.3175	1140
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	596951	30.2207	1070
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	431087	30.8127	1090
27 Benzoic acid	105	4.492	4.499	(0.957)	380487	37.0385	1310
30 Naphthalene	128	4.704	4.710	(1.002)	1617437	30.3405	1070(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	670092	27.5254	973
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	245534	30.9288	1090
34 2-Methylnaphthalene	142	5.186	5.187	(1.105)	1113411	31.7709	1120
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	116360	29.3123	1040
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	305116	35.2822	1250
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	345638	37.5882	1330
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	992781	30.9305	1090
42 o-Nitroaniline	65	5.604	5.604	(0.944)	284051	28.5413	1010
41 m-Nitroaniline	138	5.898	5.898	(0.994)	228764	26.0137	920
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1233662	34.8220	1230
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	273916	31.0324	1100
45 Acenaphthylene	152	5.839	5.840	(0.984)	1610084	32.1462	1140
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	35859	10.2927	364(aQR)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1650486	38.0582	1340
51 Diethylphthalate	149	6.192	6.198	(1.044)	1231486	37.2848	1320
53 Fluorene	166	6.310	6.310	(1.063)	1181344	33.7842	1190
54 4-Chlorophenylphenylether	204	6.292	6.293	(1.060)	542687	36.7587	1300
55 2-Methyl-4,6-dinitrophenol	198	6.333	6.334	(0.915)	66699	12.2522	433

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.322	6.328	(1.065)	230458	26.7980	948
133 Diphenylamine	169	6.369	6.369	(0.920)	953629	33.2255	1170
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1185255	33.8455	1200
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	299469	40.5070	1430
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	288959	31.8427	1120
68 Phenanthrene	178	6.939	6.940	(1.003)	1651328	33.7686	1190
69 Anthracene	178	6.969	6.969	(1.007)	1620434	32.5836	1150
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2043329	38.5211	1360
76 Fluoranthene	202	7.645	7.645	(1.105)	1511208	32.0151	1130
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	791858	45.2402	1600
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1120091	32.2732	1140
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	289961	29.0969	1030
92 Chrysene	228	8.575	8.581	(1.002)	992111	30.5843	1080
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1048714	41.2409	1460
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1507003	57.1534	2020
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.956)	727997	35.9011	1270
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.959)	781492	38.6663	1370
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	578752	32.8455	1160
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	387228	20.9970	742
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	342583	22.3360	790
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	293979	19.4089	686
1 N-Methyl-N-nitrosomethylamine	74	2.363	2.352	(0.617)	275353	31.5608	1120

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/HSD1.i/s112909.b/s1k2921.d
Date : 29-NOV-2009 20:22
Client ID: WSTO3-10-2132HSD
Sample Info: 1120198015619261261!!SVHF!!!HSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5HS

Instrument: HSD1.i
Operator: AMY
Column diameter: 0.20

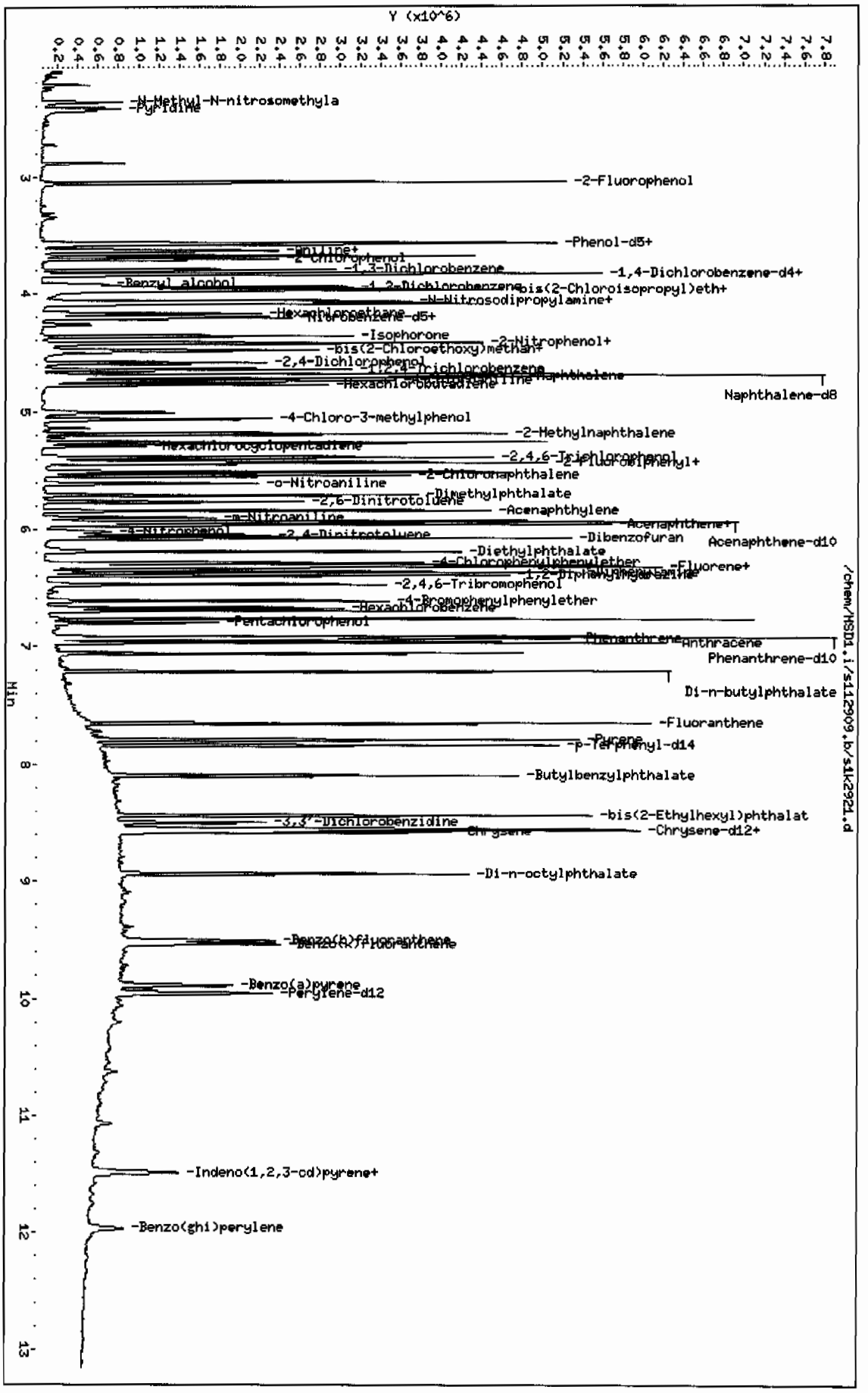

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926121 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201980154 MB	25-NOV-2009 21:20:56	30	1	0.03333
1201980157 LCS	25-NOV-2009 21:20:56	30	1	0.03333
241423004	25-NOV-2009 21:20:56	30.13	1	0.03319
241423005	25-NOV-2009 21:20:56	30.13	1	0.03319
241503002	25-NOV-2009 21:20:56	30.13	1	0.03319
241503003	25-NOV-2009 21:20:56	30.12	1	0.0332
241503004	25-NOV-2009 21:20:56	30.06	1	0.03327
241524002	25-NOV-2009 21:20:56	30.13	1	0.03319
1201980155 MS (241524002)	25-NOV-2009 21:20:56	30.12	1	0.0332
1201980156 MSD (241524002)	25-NOV-2009 21:20:56	30.16	1	0.03316
241534001	25-NOV-2009 21:20:56	30.17	1	0.03315
241534002	25-NOV-2009 21:20:56	30.13	1	0.03319
241534003	25-NOV-2009 21:20:56	30.04	1	0.03329
241534004	25-NOV-2009 21:20:56	30.13	1	0.03319
241534005	25-NOV-2009 21:20:56	30.13	1	0.03319
241534006	25-NOV-2009 21:20:56	30.13	1	0.03319
241534008	25-NOV-2009 21:20:56	30.07	1	0.03326
241539001	25-NOV-2009 21:20:56	30.01	1	0.03332
241539002	25-NOV-2009 21:20:56	30.13	1	0.03319
241539003	25-NOV-2009 21:20:56	30.13	1	0.03319
241539004	25-NOV-2009 21:20:56	30.04	1	0.03329

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201980157	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201980157	BENZIDINE LCS	UE091117-20	1	mL
MS	1201980155	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201980155	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201980156	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201980156	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/14/2009 METHOD: See raw data OPERATOR: AMY REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:116462-D
Multiplier Voltage: 1400 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091006-01 Internal Std ID: WBN091024-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s111409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k1201-D.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1201.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1202.d	INST BLK	amy	14-NOV-2009 17:53	-----	s111409	1.0	INST BLK	
s1k1203.d	WBN091111-16	amy	14-NOV-2009 18:22	1 PPM	s111409	1.0	MEGA001	
s1k1204.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	
s1k1204MRQ.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	pass linearity for c26 and c184
s1k1205.d	WBN091111-14	amy	14-NOV-2009 19:21	20 PPM	s111409	1.0	MEGA020	
s1k1206.d	WBN091111-13.1	amy	14-NOV-2009 19:50	40 PPM	s111409	1.0	MEGA040	
s1k1207.d	WBN091111-12	amy	14-NOV-2009 20:19	50 PPM	s111409	1.0	MEGA050	
s1k1208.d	WBN091111-11	amy	14-NOV-2009 20:47	80 PPM	s111409	1.0	MEGA080	
s1k1209.d	WBN091111-10	amy	14-NOV-2009 21:16	100 PPM	s111409	1.0	MEGA100	
s1k1210.d	WBN091111-09	amy	14-NOV-2009 21:45	120 PPM	s111409	1.0	MEGA120	
s1k1211.d	INST BLK	amy	14-NOV-2009 22:14	-----	s111409	1.0	INST BLK	
s1k1212-BOE.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212-D.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE: fails c65
s1k1213-D.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1213.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1214.d	INST BLK	amy	15-NOV-2009 15:05	-----	s111409	1.0	INST BLK	

s1k1215.d	WBN091111-01	amy	15-NOV-2009 15:28	10 PPM	s111409	1.0	AP010	
s1k1216.d	WBN091111-02	amy	15-NOV-2009 15:51	20 PPM	s111409	1.0	AP020	
s1k1217.d	WBN091111-03.1	amy	15-NOV-2009 16:14	40 PPM	s111409	1.0	AP040	
s1k1218.d	WBN091111-04	amy	15-NOV-2009 16:38	50 PPM	s111409	1.0	AP050	
s1k1219.d	WBN091111-05	amy	15-NOV-2009 17:01	80 PPM	s111409	1.0	AP080	
s1k1220.d	WBN091111-06	amy	15-NOV-2009 17:24	100 PPM	s111409	1.0	AP100	
s1k1221.d	WBN091111-07	amy	15-NOV-2009 17:47	120 PPM	s111409	1.0	AP120	
s1k1222.d	WBN091029-25	amy	15-NOV-2009 18:11	10 PPM	s111409	1.0	PEST010	
s1k1223.d	WBN091029-24	amy	15-NOV-2009 18:35	20 PPM	s111409	1.0	PEST020	
s1k1224.d	WBN091029-23.1	amy	15-NOV-2009 18:58	40 PPM	s111409	1.0	PEST040	
s1k1225.d	WBN091029-22	amy	15-NOV-2009 19:21	50 PPM	s111409	1.0	PEST050	
s1k1226.d	WBN091029-21	amy	15-NOV-2009 19:45	80 PPM	s111409	1.0	PEST080	
s1k1227.d	WBN091029-20	amy	15-NOV-2009 20:09	100 PPM	s111409	1.0	PEST100	
s1k1228.d	WBN091029-19	amy	15-NOV-2009 20:31	120 PPM	s111409	1.0	PEST120	
s1k1229.d	WBN091016-16	amy	15-NOV-2009 20:55	500 PPM	s111409	1.0	HEX500	
s1k1230.d	WBN091016-15	amy	15-NOV-2009 21:18	1000 PPM	s111409	1.0	HEX1000	
s1k1231.d	WBN091016-14	amy	15-NOV-2009 21:42	1250 PPM	s111409	1.0	HEX1250	
s1k1232.d	WBN091016-13	amy	15-NOV-2009 22:06	1500 PPM	s111409	1.0	HEX503	
s1k1233.d	WBN091016-12	amy	15-NOV-2009 22:30	1750 PPM	s111409	1.0	HEX504	
s1k1234.d	UBN090825-02.4	amy	15-NOV-2009 22:53	2000 PPM	s111409	1.0	HEX2000	
s1k1235-D.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1235.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1236-D.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1236.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1237-D.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1237.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1238-D.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown

s1k1238.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown
s1k1239.d	INST BLK	amy	16-NOV-2009 00:43	-----	s111409	1.0	INST BLK	
s1k1240.d	UBN090924-01	amy	16-NOV-2009 01:05	10 PPM	s111409	1.0	NEV010	DUSE
s1k1241.d	UBN090924-02	amy	16-NOV-2009 01:28	20 PPM	s111409	1.0	NEV020	DUSE
s1k1242.d	UBN090924-03	amy	16-NOV-2009 01:51	40 PPM	s111409	1.0	NEV040	DUSE
s1k1243.d	UBN090924-04	amy	16-NOV-2009 02:14	50 PPM	s111409	1.0	NEV050	DUSE
s1k1244.d	UBN090924-05	amy	16-NOV-2009 02:38	80 PPM	s111409	1.0	NEV080	DUSE
s1k1245.d	UBN090924-06	amy	16-NOV-2009 03:01	100 PPM	s111409	1.0	NEV100	DUSE
s1k1246.d	UBN090924-07	amy	16-NOV-2009 03:23	120 PPM	s111409	1.0	NEV120	DUSE
s1k1247-D.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1247.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1248.d	INST BLK	amy	17-NOV-2009 09:20	-----	s111409	1.0	INST BLK	
s1k1249.d	WBN091027-09.2	amy	17-NOV-2009 09:48	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails
s1k1250.d	UBN090924-01	amy	17-NOV-2009 10:17	10 PPM	s111409	1.0	NEV010	DUSE
s1k1251.d	UBN090924-02	amy	17-NOV-2009 10:41	20 PPM	s111409	1.0	NEV020	DUSE
s1k1252.d	UBN090924-03	amy	17-NOV-2009 11:04	40 PPM	s111409	1.0	NEV040	DUSE
s1k1253.d	UBN090924-04	amy	17-NOV-2009 11:27	50 PPM	s111409	1.0	NEV050	DUSE
s1k1254.d	UBN090924-05	amy	17-NOV-2009 11:50	80 PPM	s111409	1.0	NEV080	DUSE
s1k1255.d	UBN090924-06	amy	17-NOV-2009 12:14	100 PPM	s111409	1.0	NEV100	DUSE
s1k1256.d	UBN090924-07	amy	17-NOV-2009 12:38	120 PPM	s111409	1.0	NEV120	DUSE
s1k1257.d	WBN091027-09.1	amy	17-NOV-2009 13:02	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails /clean inj port
s1k1259-D.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1259.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1260.d	INST BLK	amy	17-NOV-2009 16:04	-----	s111409	1.0	INST BLK	
s1k1261-BOE.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261-D.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	pass 530038

s1k1262.d	UBN091117-01	amy	17-NOV-2009 16:56	10 PPM	s111409	1.0	NEV010	
s1k1263.d	UBN091117-02	amy	17-NOV-2009 17:19	20 PPM	s111409	1.0	NEV020	
s1k1264.d	UBN091117-03	amy	17-NOV-2009 17:42	40 PPM	s111409	1.0	NEV040	
s1k1265.d	UBN091117-04	amy	17-NOV-2009 18:05	50 PPM	s111409	1.0	NEV050	DUSE
s1k1266.d	UBN091117-05	amy	17-NOV-2009 18:28	80 PPM	s111409	1.0	NEV080	
s1k1267.d	UBN091117-06	amy	17-NOV-2009 18:52	100 PPM	s111409	1.0	NEV100	DUSE
s1k1268.d	UBN091117-07	amy	17-NOV-2009 19:15	120 PPM	s111409	1.0	NEV120	

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/29/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1318 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k2901.d	WBN091101-01	AMY	29-NOV-2009 10:14	50 PPM	s112909	1.0	DFTPP	DUSE-tune failed
s1k2902.d	WBN091101-01	AMY	29-NOV-2009 10:34	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2903.d	WBN091106-05.5	AMY	29-NOV-2009 10:50	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2904.d	WBN091106-05.5	AMY	29-NOV-2009 11:23	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2905.d	WBN091101-01	AMY	29-NOV-2009 13:27	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2906.d	WBN091111-03.5	AMY	29-NOV-2009 13:43	40 PPM	s112909	1.0	MEGACVS	DUSE-megacheck failed
s1k2907.d	WBN091101-01	AMY	29-NOV-2009 15:00	50 PPM	s112909	1.0	DFTPP	PASSING
s1k2908.d	WBN091111-03.5	AMY	29-NOV-2009 15:16	40 PPM	MEGAIICARE	1.0	MEGACVS	PASSING
s1k2909.d	WBN091111-03.3	AMY	29-NOV-2009 15:40	40 PPM	ap12	1.0	APCVS	PASSING
s1k2910.d	WBN091117-08.1	AMY	29-NOV-2009 16:04	40 PPM	nev	1.0	NEVCVS	DUSE-not needed
s1k2911.d	WBN091029-23.3	AMY	29-NOV-2009 16:27	40 PPM	pest	1.0	PESTCVS	DUSE-not needed
s1k2912-1.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-589	1.0	SBLK01	REPORT
s1k2912-2.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-600	1.0	SBLK01	REPORT
s1k2912-3.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-601	1.0	SBLK01	REPORT
s1k2912-4.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-603	1.0	SBLK01	REPORT
s1k2912.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-578	1.0	SBLK01	REPORT
s1k2913-1.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-589	1.0	SBLK01LCS	REPORT
s1k2913-2.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-600	1.0	SBLK01LCS	REPORT
s1k2913-3.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-601	1.0	SBLK01LCS	REPORT

s1k2913-4.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-603		1.0	SBLK01LCS	REPORT
s1k2913.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-578		1.0	SBLK01LCS	REPORT
s1k2914.d	241423004	AMY	29-NOV-2009 17:37	926126	10-578		1.0	LANL	REPORT
s1k2915.d	241423005	AMY	29-NOV-2009 18:01	926126	10-578		1.0	LANL	REPORT
s1k2916.d	241503002	AMY	29-NOV-2009 18:24	926126	10-589		1.0	LANL	REPORT
s1k2917.d	241503003	AMY	29-NOV-2009 18:48	926126	10-589		1.0	LANL	REPORT
s1k2918.d	241503004	AMY	29-NOV-2009 19:11	926126	10-589		1.0	LANL	REPORT
s1k2919.d	241524002	AMY	29-NOV-2009 19:35	926126	10-600		1.0	LANL	REPORT
s1k2920.d	1201980155	AMY	29-NOV-2009 19:59	926126	10-600		1.0	MS	REPORT
s1k2921.d	1201980156	AMY	29-NOV-2009 20:22	926126	10-600		1.0	MSD	REPORT
s1k2922.d	241534001	AMY	29-NOV-2009 20:46	926126	10-601		1.0	LANL	REPORT
s1k2923.d	241534002	AMY	29-NOV-2009 21:09	926126	10-601		1.0	LANL	REPORT
s1k2924.d	241534003	AMY	29-NOV-2009 21:32	926126	10-601		1.0	LANL	REPORT
s1k2925.d	241534004	AMY	29-NOV-2009 21:56	926126	10-601		1.0	LANL	REPORT
s1k2926.d	241534005	AMY	29-NOV-2009 22:19	926126	10-601		1.0	LANL	REPORT
s1k2927.d	241534006	AMY	29-NOV-2009 22:42	926126	10-601		1.0	LANL	REPORT
s1k2928.d	241534008	AMY	29-NOV-2009 23:06	926126	10-601		1.0	LANL	REPORT
s1k2929.d	241539001	AMY	29-NOV-2009 23:29	926126	10-603		4.0	LANL	REPORT
s1k2930.d	241539002	AMY	29-NOV-2009 23:52	926126	10-603		1.0	LANL	REPORT
s1k2931.d	241539003	AMY	30-NOV-2009 00:15	926126	10-603		4.0	LANL	REPORT
s1k2932.d	241539004	AMY	30-NOV-2009 00:39	926126	10-603		4.0	LANL	REPORT

Instrument Batch: /chem/MSD1.i/s112909.b

Page: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
01-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
926126	See Below		

Potentially affected work order(s)(SDG): 241423(10-578),241503(10-589),241524(10-600),241534(10-601),241539(10-603)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The MSD(1201980156) recovered 2,4-Dinitrophenol at 21%. The limits are 25%-104%.	1. Since the MS displayed a similar low (but passing) recovery to the MSD, the failure was attributed to matrix interference and the data results have been reported.
2. Multiple MS(1201980155)/MSD(1201980156) RPD values were outside of the established acceptance limits. Please see the QC Summary Report for specific failures.	2. Since the analytes were all individually within the acceptance limits for the MS and MSD (with the exception of 2,4-Dinitrophenol), the data results have been reported. The 2,4-Dinitrophenol RPD failure was attributed to matrix interference and the data results have been reported (see item #1 of this NCR).

Originator's Name:

Amy Carroll 01-DEC-09

Data Validator/Group Leader:

Daniel Beacham 03-DEC-09

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600-1

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3510C
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	927064
Prep Batch Number:	927063
TCLP Prep Batch Number:	926091

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241527001	WST03-10-2132
1201980055	TCLP Blank (TB)
1201982116	Method Blank (MB)
1201982117	241424001(WST03-10-2131) Matrix Spike (MS)
1201982118	241424001(WST03-10-2131) Matrix Spike Duplicate (MSD)
1201982119	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various

calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241424001 (WST03-10-2131) not associated with this SDG, was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beuchum **Date:** 12-15-09

Roadmap for LANL 10-600-1 SVOA

This roadmap was analyzed by nat00999 on 12-03-2009, 10:14.
This roadmap was reviewed by dan01134 on 12-04-2009, 08:10.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD6.i/s120209.b/s6l0218.d	241527001	02-DEC-2009	17:45	10-600-1.sub	WST03-10-2132	1	927064	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	Y	/chem/MSD6.i/s120209.b/s6l0206-1.d	1201980055	tb	02-DEC-2009	11:59	10-600-1.sub	TCLPBALNK	1.00000	927064	
☐	Y	/chem/MSD6.i/s120209.b/s6l0207-1.d	1201982116	mb	02-DEC-2009	12:28	10-578-1.sub	SBLK01	1.00000	927064	
☐	Y	/chem/MSD6.i/s120209.b/s6l0208-1.d	1201982119	lcs	02-DEC-2009	12:56	10-600-1.sub	SBLK01LCS	1.00000	927064	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241527001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0218.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-600-1

Matrix Type: TCLP SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201980055	TB for batch 926091	36	23	59	57	67	78
1201982116	MB for batch 927063	50	31	81	78	82	101
1201982119	LCS for batch 927063	43	26	72	70	87	93
241527001	WST03-10-2132	44	27	73	71	82	90

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(25%-92%)
PHL	= Phenol-d5	(15%-73%)
NBZ	= Nitrobenzene-d5	(40%-112%)
FBP	= 2-Fluorobiphenyl	(35%-100%)
TBP	= 2,4,6-Tribromophenol	(39%-115%)
TPH	= p-Terphenyl-d14	(46%-130%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-600-1 **Sample Type:** Matrix Spike

Client ID: WST03-10-2131MS **Matrix:** TCLP S

Lab Sample ID: 1201982117

Instrument: MSD6.I **Analysis Date:** 12/02/2009 16:17 **Dilution:** 1

Analyst: NAG1 **Prep Batch ID:** 927063

Inj. Vol: .5 uL **Batch ID:** 927064

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
106-46-7	MS	1,4-Dichlorobenzene	0.500	0.00	U	0.307	61	37-91
121-14-2	MS	2,4-Dinitrotoluene	0.500	0.00	U	0.409	82	50-109
87-86-5	MS	Pentachlorophenol	0.500	0.00	U	0.436	87	38-131
110-86-1	MS	Pyridine	0.500	0.00	U	0.383	77	28-110
95-48-7	MS	o-Cresol	0.500	0.00	U	0.318	64	37-105
65794-96-9	MS	m,p-Cresols	0.500	0.00	U	0.315	63	33-110
67-72-1	MS	Hexachloroethane	0.500	0.00	U	0.277	55	34-95
98-95-3	MS	Nitrobenzene	0.500	0.00	U	0.367	73	43-118
87-68-3	MS	Hexachlorobutadiene	0.500	0.00	U	0.305	61	31-106
88-06-2	MS	2,4,6-Trichlorophenol	0.500	0.00	U	0.422	84	46-114
95-95-4	MS	2,4,5-Trichlorophenol	0.500	0.00	U	0.444	89	46-117
118-74-1	MS	Hexachlorobenzene	0.500	0.00	U	0.432	86	47-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Client ID: WST03-10-2131MSD
Lab Sample ID: 1201982118
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/02/2009 16:46
Dilution: 1
Prep Batch ID: 927063
Batch ID: 927064

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
106-46-7	MSD 1,4-Dichlorobenzene	0.500	0.00	U	0.326	65	37-91	6	0-25
121-14-2	MSD 2,4-Dinitrotoluene	0.500	0.00	U	0.416	83	50-109	2	0-25
87-86-5	MSD Pentachlorophenol	0.500	0.00	U	0.412	82	38-131	6	0-25
110-86-1	MSD Pyridine	0.500	0.00	U	0.362	72	28-110	6	0-25
95-48-7	MSD o-Cresol	0.500	0.00	U	0.314	63	37-105	1	0-25
65794-96-9	MSD m,p-Cresols	0.500	0.00	U	0.300	60	33-110	5	0-25
67-72-1	MSD Hexachloroethane	0.500	0.00	U	0.301	60	34-95	8	0-25
98-95-3	MSD Nitrobenzene	0.500	0.00	U	0.375	75	43-118	2	0-25
87-68-3	MSD Hexachlorobutadiene	0.500	0.00	U	0.331	66	31-106	8	0-25
88-06-2	MSD 2,4,6-Trichlorophenol	0.500	0.00	U	0.437	87	46-114	3	0-25
95-95-4	MSD 2,4,5-Trichlorophenol	0.500	0.00	U	0.442	88	46-117	0	0-25
118-74-1	MSD Hexachlorobenzene	0.500	0.00	U	0.429	86	47-120	1	0-25

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Client ID: LCS for batch 927063
Lab Sample ID: 1201982119
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/02/2009 12:56
Dilution: 1
Prep Batch ID: 927063
Batch ID: 927064

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
106-46-7	LCS	1,4-Dichlorobenzene	0.100	0.0	0.0585	58	38-88
121-14-2	LCS	2,4-Dinitrotoluene	0.100	0.0	0.0783	78	55-108
87-86-5	LCS	Pentachlorophenol	0.100	0.0	0.0759	76	44-121
110-86-1	LCS	Pyridine	0.100	0.0	0.0628	63	26-103
95-48-7	LCS	o-Cresol	0.100	0.0	0.059	59	41-94
65794-96-9	LCS	m,p-Cresols	0.100	0.0	0.0599	60	38-96
67-72-1	LCS	Hexachloroethane	0.100	0.0	0.0527	53	35-92
98-95-3	LCS	Nitrobenzene	0.100	0.0	0.0681	68	48-112
87-68-3	LCS	Hexachlorobutadiene	0.100	0.0	0.0568	57	33-98
88-06-2	LCS	2,4,6-Trichlorophenol	0.100	0.0	0.0773	77	54-111
95-95-4	LCS	2,4,5-Trichlorophenol	0.100	0.0	0.077	77	50-111
118-74-1	LCS	Hexachlorobenzene	0.100	0.0	0.0791	79	53-115

Method Blank Summary

SDG Number:	10-600-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 927063	Instrument ID:	MSD6.I	Data File:	s6l0207-1.d
Lab Sample ID:	1201982116	Prep Date:	12/01/2009 17:09	Analyzed:	12/02/09 12:28
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 TB for batch 926091	1201980055	s6l0206-1.d	12/02/09	1159
02 LCS for batch 927063	1201982119	s6l0208-1.d	12/02/09	1256
05 WST03-10-2132	241527001	s6l0218.d	12/02/09	1745

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-600-1

Instrument ID: MSD6.I **Injection Date/Time:** 02-DEC-09 09:54

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120209.b/s6l0202.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.4
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	39.8
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	49.3
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	23.2
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.2
442	Greater than 40% of mass 198	78.2
443	17 - 23% of mass 442	19.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD6.i/s120209.b/s6l0203	02-DEC-09 10:08
TCLPBALNK	1201980055	/chem/MSD6.i/s120209.b/s6l0206	02-DEC-09 11:59
SBLK01	1201982116	/chem/MSD6.i/s120209.b/s6l0207	02-DEC-09 12:28
SBLK01LCS	1201982119	/chem/MSD6.i/s120209.b/s6l0208	02-DEC-09 12:56
WST03-10-2132	241527001	/chem/MSD6.i/s120209.b/s6l0218	02-DEC-09 17:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-600-1

Instrument ID: MSD6.I **Injection Date/Time:** 09-NOV-09 18:00

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0911.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.7
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.9
442	Greater than 40% of mass 198	77.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL	WBN091106-08	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 18:53
MEGAICAL	WBN091106-07	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 19:31
MEGAICAL	WBN091106-06	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:09
MEGAICAL	WBN091106-05.1	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:46
MEGAICAL	WBN091106-04	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 21:25
MEGAICAL	WBN091106-03	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:01
MEGAICAL	WBN091106-02	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:39
MEGAICAL	WBN091106-01	/chem/MSD6.i/s110909.b/s6k092	09-NOV-09 23:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-600-1

Instrument ID: MSD6.I **Injection Date/Time:** 10-NOV-09 11:07

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0921.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	72.6
442	Greater than 40% of mass 198	76
443	17 - 23% of mass 442	19.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091106-09.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 20:29

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD6.I

GC Column: J&W DB-5MS

Client SDG: 10-600-1

STD Analysis Time: 02-DEC-09 10:08

Data File: s6l0203.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	222113		4.79	909547		6.06	465946		7.93	825539		9.54	702789		12.6	620321		14.9
Upper Limit	444226		5.29	1819094		6.56	931892		8.43	1651078		10.0	1405578		13.1	1240642		15.4
Lower Limit	111057		4.29	454774		5.56	232973		7.43	412770		9.04	351395		12.1	310161		14.4
Sample ID																		
TBLK01	249871		4.79	934540		6.05	504510		7.92	858736		9.54	661689		12.5	503879		14.9
BLK01	240512		4.79	900254		6.05	490744		7.92	823213		9.54	613554		12.5	436716		14.9
BLK01LCS	233217		4.79	903849		6.06	502849		7.92	874679		9.54	685622		12.5	534290		14.9
WST03-10-2132	241812		4.79	884756		6.05	475493		7.92	798719		9.53	652354		12.5	517102		14.9

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241527001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0218.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610218.d
Lab Smp Id: 241527001 Client Smp ID: WST03-10-2132
Inj Date : 02-DEC-2009 17:45
Operator : nagl Inst ID: MSD6.i
Smp Info : |241527001|927064|1|SVMF|1|LANL
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.785	4.788	(1.000)	241812	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	884756	40.0000	
* 46 Acenaphthene-d10	164	7.922	7.927	(1.000)	475493	40.0000	
* 67 Phenanthrene-d10	188	9.535	9.540	(1.000)	798719	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	652354	40.0000	
* 98 Perylene-d12	264	14.855	14.863	(1.000)	517102	40.0000	
$ 3 2-Fluorophenol	112	3.636	3.636	(0.760)	263792	43.5623	0.22
$ 5 Phenol-d5	99	4.395	4.406	(0.919)	203642	26.6446	0.13
$ 20 Nitrobenzene-d5	82	5.315	5.320	(0.878)	227379	36.3299	0.18
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	435557	35.5446	0.18
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	113824	82.0155	0.41
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	474263	45.0808	0.22

ION RATIO REPORT

SV REPORT

Data file: s610218.d
Report Date: 12/03/2009 09:10
Lab. ID: 241527001 SampleType: SAMPLE
Injection Date: 02-DEC-2009 17:45
Operator: nagl Instrument: MSD6.i
Sample Info: |241527001|927064|1|SVMF|1|LANL
Miscellaneous Info: |MSDTCLP_LF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-600-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	62331	7.92	8.12	80-120	100	(T)
89	734	7.92	8.12	39- 99	1	(QT)
63	847	7.92	8.12	16- 76	1	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s120209.b/s610218.d
Date : 02-DEC-2009 17:45
Client ID: WST03-10-2132
Sample Info: |2415270011927064|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

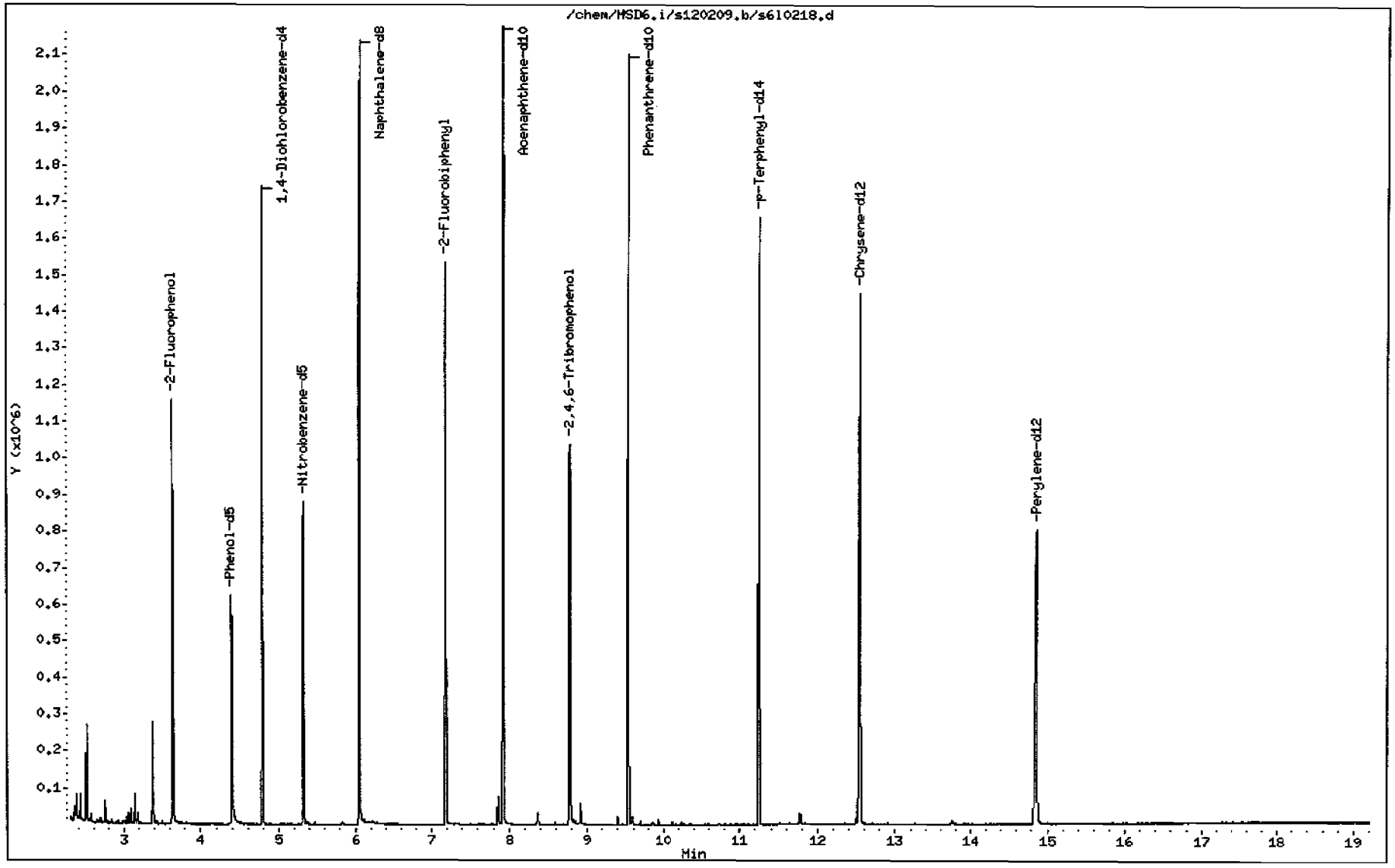

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghl)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 02-Dec-2009 16:34

Calibration History

Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Start Cal Date: 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
09-NOV-2009 18:53	MEGA	/chem/MSD6.i/s110909.b/s6k0913.d
Cal Level: 2 , Cal Amount: 10.00000		
11-NOV-2009 01:47	NEV	/chem/MSD6.i/s110909.b/s6k0948.d
10-NOV-2009 22:55	HEX	/chem/MSD6.i/s110909.b/s6k0942.d
10-NOV-2009 16:20	PEST	/chem/MSD6.i/s110909.b/s6k0930.d
10-NOV-2009 11:59	AP12	/chem/MSD6.i/s110909.b/s6k0923.d
09-NOV-2009 19:31	MEGA	/chem/MSD6.i/s110909.b/s6k0914.d
Cal Level: 3 , Cal Amount: 20.00000		
11-NOV-2009 02:16	NEV	/chem/MSD6.i/s110909.b/s6k0949.d
10-NOV-2009 23:24	HEX	/chem/MSD6.i/s110909.b/s6k0943.d
10-NOV-2009 16:56	PEST	/chem/MSD6.i/s110909.b/s6k0931.d
10-NOV-2009 12:36	AP12	/chem/MSD6.i/s110909.b/s6k0924.d
09-NOV-2009 20:09	MEGA	/chem/MSD6.i/s110909.b/s6k0915.d
Cal Level: 4 , Cal Amount: 40.00000		
11-NOV-2009 02:44	NEV	/chem/MSD6.i/s110909.b/s6k0950.d
10-NOV-2009 23:53	HEX	/chem/MSD6.i/s110909.b/s6k0944.d
10-NOV-2009 17:33	PEST	/chem/MSD6.i/s110909.b/s6k0932.d
10-NOV-2009 13:13	AP12	/chem/MSD6.i/s110909.b/s6k0925.d
09-NOV-2009 20:46	MEGA	/chem/MSD6.i/s110909.b/s6k0916.d
Cal Level: 5 , Cal Amount: 50.00000		
11-NOV-2009 03:12	NEV	/chem/MSD6.i/s110909.b/s6k0951.d
11-NOV-2009 00:21	HEX	/chem/MSD6.i/s110909.b/s6k0945.d
10-NOV-2009 18:09	PEST	/chem/MSD6.i/s110909.b/s6k0933.d
10-NOV-2009 13:51	AP12	/chem/MSD6.i/s110909.b/s6k0926.d
09-NOV-2009 21:25	MEGA	/chem/MSD6.i/s110909.b/s6k0917.d
Cal Level: 6 , Cal Amount: 80.00000		
11-NOV-2009 03:41	NEV	/chem/MSD6.i/s110909.b/s6k0952.d
11-NOV-2009 00:50	HEX	/chem/MSD6.i/s110909.b/s6k0946.d
10-NOV-2009 18:45	PEST	/chem/MSD6.i/s110909.b/s6k0934.d
10-NOV-2009 14:30	AP12	/chem/MSD6.i/s110909.b/s6k0927.d
09-NOV-2009 22:01	MEGA	/chem/MSD6.i/s110909.b/s6k0918.d
Cal Level: 7 , Cal Amount: 100.00000		

11-NOV-2009 04:10	NEV	/chem/MSD6.i/s110909.b/s6k0953.d
11-NOV-2009 01:18	HEX	/chem/MSD6.i/s110909.b/s6k0947.d
10-NOV-2009 19:21	PEST	/chem/MSD6.i/s110909.b/s6k0935.d
10-NOV-2009 15:06	AP12	/chem/MSD6.i/s110909.b/s6k0928.d
09-NOV-2009 22:39	MEGA	/chem/MSD6.i/s110909.b/s6k0919.d

Cal Level: 8 , Cal Amount: 120.00000		
11-NOV-2009 04:38	NEV	/chem/MSD6.i/s110909.b/s6k0954.d
10-NOV-2009 19:58	PEST	/chem/MSD6.i/s110909.b/s6k0936.d
10-NOV-2009 15:43	AP12	/chem/MSD6.i/s110909.b/s6k0929.d
09-NOV-2009 23:16	MEGA	/chem/MSD6.i/s110909.b/s6k0920.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
02-DEC-2009 10:58	AP12	/chem/MSD6.i/s120209.b/s610204.d
Ccal Level: 4 , Ccal Amount: 40.0		
02-DEC-2009 10:08	MEGA	/chem/MSD6.i/s120209.b/s610203.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Calibration File Names:
Level 1: /chem/MSD6.i/s110909.b/s6k0913.d
Level 2: /chem/MSD6.i/s110909.b/s6k0948.d
Level 3: /chem/MSD6.i/s110909.b/s6k0949.d
Level 4: /chem/MSD6.i/s110909.b/s6k0950.d
Level 5: /chem/MSD6.i/s110909.b/s6k0951.d
Level 6: /chem/MSD6.i/s110909.b/s6k0952.d
Level 7: /chem/MSD6.i/s110909.b/s6k0953.d
Level 8: /chem/MSD6.i/s110909.b/s6k0954.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.62711	0.72014	0.69994	0.71294	0.67761					
	0.66245	0.66663					AVRG		0.68098		4.78734
2 Pyridine	+++++	0.78506	0.84345	0.94451	0.94132	0.77430					
	0.82190	0.82246					AVRG		0.84757		8.16958
4 Aniline	+++++	0.51792	0.56281	0.52949	0.53182	0.51964					
	0.51849	0.51247					AVRG		0.52752		3.21865
209 Benzaldehyde	+++++	0.94297	0.91161	0.92064	0.86617	0.84259					
	0.79828	0.74667					AVRG		0.86127		8.23824
6 Phenol	+++++	1.29580	1.38609	1.27955	1.27629	1.24279					
	1.20107	1.21677					AVRG		1.27120		4.82676

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.93365	0.90056	0.92748	0.85273	0.86174	0.82247					
	0.79075	0.79709					AVRG		0.86081		6.48811
8 2-Chlorophenol	+++++	1.05270	1.10343	1.04994	1.05384	0.99340					
	0.95375	0.94058					AVRG		1.02109		5.85808
203 n-Decane	+++++	1.57696	1.59018	1.40648	1.36249	1.17658					
	+++++	+++++					AVRG		1.42254		11.98709
9 1,3-Dichlorobenzene	+++++	1.22415	1.27608	1.20806	1.21136	1.14335					
	1.08668	1.07881					AVRG		1.17550		6.31837
11 1,4-Dichlorobenzene	+++++	1.27202	1.32037	1.21925	1.20743	1.15141					
	1.09639	1.07447					AVRG		1.19162		7.54222
12 Benzyl alcohol	+++++	0.60900	0.65716	0.63043	0.62465	0.64143					
	0.63021	0.64767					AVRG		0.63436		2.50657
13 1,2-Dichlorobenzene	+++++	1.16666	1.21707	1.13327	1.12016	1.08966					
	1.03460	1.02472					AVRG		1.11231		6.21300
14 bis(2-Chloroisopropyl)ether	+++++	2.07635	2.13325	1.99088	1.97675	1.86028					
	1.72252	1.69272					AVRG		1.92182		8.81925
15 o-Cresol	+++++	0.82992	0.88629	0.84024	0.85639	0.80893					
	0.80386	0.79407					AVRG		0.83139		3.92027

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INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.20921	1.17591	1.21168	1.15285	1.16925					
	1.13524	1.12939					AVRG		1.16908		2.80572
17 N-Nitrosodipropylamine	0.65638	0.74117	0.78851	0.72893	0.73002	0.72328					
	0.70725	0.59369					AVRG		0.70865		8.34285
18 m,p-Cresols	+++++	1.03591	1.12590	1.04958	1.05532	1.04720					
	1.02399	1.03632					AVRG		1.05346		3.18987
19 Hexachloroethane	+++++	0.45806	0.49524	0.47390	0.46960	0.45628					
	0.43995	0.43396					AVRG		0.46100		4.53111
21 Nitrobenzene	+++++	0.31691	0.32516	0.29885	0.29715	0.27038					
	0.24823	0.23966					AVRG		0.28519		11.62250
22 Isophorone	+++++	0.55891	0.57824	0.53268	0.53266	0.49425					
	0.45829	0.38358					AVRG		0.50552		13.23015
23 2-Nitrophenol	+++++	0.13453	0.14214	0.13601	0.13806	0.12888					
	0.12072	0.12047					AVRG		0.13154		6.43934
24 2,4-Dimethylphenol	+++++	0.23987	0.22536	0.21067	0.20421	0.21065					
	0.21868	0.21622					AVRG		0.21795		5.40955
25 bis(2-Chloroethoxy)methane	+++++	0.33208	0.34147	0.30906	0.30442	0.28195					
	0.26036	0.25310					AVRG		0.29749		11.40063

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19875	0.21444	0.20921	0.20622	0.19391					
	0.18142	0.17985					AVRG		0.19769		6.80078
27 Benzoic acid	+++++	+++++	0.10585	0.12338	0.14032	0.14157					
	0.15049	0.14556					AVRG		0.13453		12.46641
28 1,2,4-Trichlorobenzene	+++++	0.27809	0.27557	0.25214	0.25046	0.22876					
	0.21050	0.20278					AVRG		0.24261		12.25857
30 Naphthalene	0.93577	0.85146	0.85267	0.76017	0.74029	0.64713					
	+++++	+++++					AVRG		0.79792		12.82401
204 alpha-Terpineol	+++++	0.23577	0.25490	0.22003	0.21987	0.20427					
	0.17723	+++++					AVRG		0.21868		12.15593
31 4-Chloroaniline	+++++	0.26389	0.28196	0.26991	0.26064	0.24995					
	0.23771	0.23114					AVRG		0.25646		7.00922
189 Caprolactam	+++++	0.06766	0.07272	0.08214	0.08102	0.07115					
	0.07075	0.07172					AVRG		0.07388		7.43636
32 Hexachlorobutadiene	+++++	0.14265	0.14557	0.13182	0.13097	0.11864					
	0.10931	0.10542					AVRG		0.12634		12.40746
33 4-Chloro-3-methylphenol	+++++	0.20824	0.22585	0.20971	0.20633	0.19424					
	0.17957	0.17303					AVRG		0.19957		9.25582

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.56779	0.53746	0.54769	0.49857	0.47476	0.43707					
	0.39981	0.38884					AVRG		0.48150		14.15789
35 1-Methylnaphthalene	0.55872	0.52838	0.53208	0.48366	0.46920	0.42612					
	0.38935	0.38051					AVRG		0.47100		14.29869
36 Hexachlorocyclopentadiene	+++++	0.13520	0.17775	0.15114	0.16219	0.15378					
	0.18308	0.16783					AVRG		0.16157		10.19735
208 1,1'-Biphenyl	+++++	1.32152	1.23439	1.25731	1.19710	1.16580					
	1.12776	1.10528					AVRG		1.20131		6.32036
205 2,3-Dichloroaniline	+++++	0.51880	0.53286	0.48272	0.49159	0.46096					
	0.42997	0.43664					AVRG		0.47908		8.16477
37 2,4,6-Trichlorophenol	+++++	0.27570	0.29634	0.28058	0.28008	0.26989					
	0.25242	0.25556					AVRG		0.27294		5.58990
38 2,4,5-Trichlorophenol	+++++	0.28031	0.30282	0.29443	0.29832	0.29160					
	0.28523	0.28197					AVRG		0.29067		2.92500
40 2-Chloronaphthalene	0.91208	0.94921	0.97975	0.90835	0.91949	0.87198					
	0.81926	0.82647					AVRG		0.89832		6.24992
42 o-Nitroaniline	+++++	0.28653	0.32807	0.30812	0.31848	0.31056					
	0.29539	0.30412					AVRG		0.30732		4.50651

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	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.19029	0.23187	0.23025	0.23197	0.23511					
	0.22216	0.23314					AVRG		0.22497		7.03906
43 Dimethylphthalate	+++++	1.10253	1.11895	1.05121	1.05401	1.01311					
	0.95493	0.88796					AVRG		1.02610		7.97599
44 2,6-Dinitrotoluene	+++++	0.24859	0.25869	0.24751	0.24771	0.24514					
	0.22903	0.23656					AVRG		0.24475		3.87474
45 Acenaphthylene	1.45077	1.53234	1.59736	1.47314	1.47686	1.41153					
	1.30118	1.31187					AVRG		1.44438		7.03164
47 Acenaphthene	0.97754	0.93463	0.97051	0.90906	0.90733	0.85875					
	0.82122	0.83304					AVRG		0.90151		6.58830
48 2,4-Dinitrophenol	+++++	+++++	15920	45695	60199	121040					
	185455	+++++					LINR	0.36255	0.13077		0.99262
49 Dibenzofuran	+++++	1.31036	1.35172	1.24091	1.23630	1.17505					
	1.09035	1.11352					AVRG		1.21689		7.96140
50 2,4-Dinitrotoluene	+++++	0.28688	0.32526	0.31392	0.31582	0.31468					
	0.30077	0.30301					AVRG		0.30862		4.09740
51 Diethylphthalate	+++++	1.08427	1.13193	1.06273	1.05585	1.00787					
	0.93441	0.95637					AVRG		1.03335		6.84784

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	12277	40572	90802	114423	208122					
	294363	379687					LINR	0.18209	0.20146		0.99664
53 Fluorene	1.06940	1.05468	1.10259	1.00777	1.00699	0.94775					
	0.89677	0.90440					AVRG		0.99879		7.65829
54 4-Chlorophenylphenylether	+++++	0.49941	0.52344	0.48539	0.48490	0.45443					
	0.43029	0.42560					AVRG		0.47192		7.71070
55 2-Methyl-4,6-dinitrophenol	+++++	9251	34357	85168	107219	199515					
	279188	346834					LINR	0.17722	0.10780		0.99957
56 p-Nitroaniline	+++++	18297	49968	114446	144020	267165					
	377942	477974					LINR	0.17663	0.25514		0.99741
133 Diphenylamine	+++++	0.51235	0.51279	0.48995	0.49110	0.46341					
	0.45142	0.45392					AVRG		0.48213		5.41113
58 1,2-Diphenylhydrazine	+++++	0.65288	0.67935	0.62730	0.62752	0.58724					
	0.56393	0.55466					AVRG		0.61327		7.55575
59 Tributylphosphate	+++++	1.19922	1.25332	1.24022	1.27997	1.24188					
	1.19433	1.14050					AVRG		1.22135		3.81011
61 4-Bromophenylphenylether	+++++	0.16321	0.16758	0.15949	0.16092	0.15366					
	0.14977	0.15022					AVRG		0.15784		4.30183

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	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.17072	0.17525	0.16702	0.16690	0.16190					
	0.15730	0.15822					AVRG		0.16533		3.97990
207 Atrazine	+++++	0.04466	0.04316	0.04336	0.04050	0.04104					
	0.03746	0.03425					AVRG		0.04063		9.04410
65 Pentachlorophenol	+++++	12427	38945	80211	100581	192628					
	259470	326879					LINR	0.13427	0.09964		0.99838
206 n-Octadecane	+++++	0.51627	0.51598	0.45832	0.46068	0.40718					
	0.37377	0.35992					AVRG		0.44173		14.37986
68 Phenanthrene	0.95060	0.88603	0.89746	0.83221	0.81673	0.77346					
	0.73349	0.72773					AVRG		0.82721		9.72714
69 Anthracene	0.87683	0.86194	0.90534	0.83970	0.83829	0.78921					
	0.75133	0.75196					AVRG		0.82682		6.91971
72 Di-n-butylphthalate	+++++	1.00113	1.04654	0.99105	0.98676	0.92173					
	0.85606	0.84350					AVRG		0.94954		8.15043
76 Fluoranthene	0.78392	0.79487	0.87026	0.82674	0.81613	0.77420					
	0.73596	0.73727					AVRG		0.79242		5.73137
77 Benzidine	+++++	0.35813	0.40641	0.39242	0.37729	0.37701					
	0.39765	0.44234					AVRG		0.39304		6.85454

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	100 Level 7	120 Level 8									
79 Pyrene	1.12114	1.31021	1.22539	1.10007	1.11660	1.02083					
	0.96007	0.94734					AVRG		1.10021		11.38295
85 Butylbenzylphthalate	+++++	0.52543	0.54028	0.51608	0.52406	0.49119					
	0.46906	0.45845					AVRG		0.50351		6.16544
89 Benzo(a)anthracene	0.94221	0.85505	0.89830	0.85692	0.85716	0.83423					
	0.82127	0.83891					AVRG		0.86301		4.55256
90 3,3'-Dichlorobenzidine	+++++	0.23529	0.28074	0.29290	0.29384	0.28532					
	0.28779	0.30173					AVRG		0.28252		7.74710
92 Chrysene	0.87195	0.83557	0.87346	0.82487	0.82639	0.80729					
	0.78155	0.79409					AVRG		0.82690		4.03552
93 bis(2-Ethylhexyl)phthalate	7340	107837	270739	551016	645048	1078889					
	1389660	1700943					WLINR	0.01019	0.70092		0.99014
94 Di-n-octylphthalate	+++++	1.19610	1.35485	1.31605	1.35770	1.25055					
	1.27306	1.15060					AVRG		1.27127		6.18607
95 Benzo(b)fluoranthene	0.74161	0.85750	0.94279	0.90432	0.93361	0.89239					
	0.89332	0.91506					AVRG		0.88507		7.19928
96 Benzo(k)fluoranthene	0.73172	0.86857	0.95518	0.92430	0.92244	0.89945					
	0.88010	0.85909					AVRG		0.88011		7.72381

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.54179	0.70605	0.81133	0.81358	0.82559	0.80913					
	0.80179	0.80647					AVRG		0.76447		12.74919
99 Indeno(1,2,3-cd)pyrene	5888	60939	200863	402882	510813	1012558					
	1348903	1889688					LINR	0.07592	0.78768		0.99752
100 Dibenzo(a,h)anthracene	3385	46770	157194	361792	411532	815285					
	1094612	1529825					LINR	0.06768	0.63666		0.99908
101 Benzo(ghi)perylene	0.41694	0.53228	0.60870	0.60962	0.60436	0.63133					
	0.62968	0.63931					AVRG		0.58403		12.88683
102 1,4-Dioxane	+++++	0.37671	0.37043	0.39061	0.37803	0.36375					
	0.35237	0.33052					AVRG		0.36606		5.38827
103 Methyl methacrylate	+++++	0.19626	0.19646	0.20436	0.20625	0.18540					
	0.18964	0.17876					AVRG		0.19388		5.13081
104 Ethyl methacrylate	+++++	0.79650	0.81191	0.84398	0.82898	0.80568					
	0.79571	0.75648					AVRG		0.80561		3.45659
105 2-Picoline	+++++	1.39124	1.31746	1.36987	1.31904	1.28927					
	1.27506	1.19912					AVRG		1.30872		4.85814
106 N-Nitrosomethylethylamine	+++++	0.50512	0.48970	0.52453	0.49928	0.51969					
	0.51463	0.52429					AVRG		0.51104		2.61826

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.56429	0.53321	0.56316	0.50377	0.53102					
	0.50923	0.49498					AVRG		0.52852		5.24900
108 N-Nitrosodiethylamine	+++++	0.50310	0.47987	0.51154	0.48534	0.49862					
	0.49304	0.49722					AVRG		0.49553		2.15019
109 Ethyl Methanesulfonate	+++++	0.65808	0.64977	0.67344	0.62747	0.66045					
	0.64399	0.64860					AVRG		0.65169		2.21442
110 Pentachloroethane	+++++	0.32209	0.31386	0.33094	0.32010	0.31614					
	0.31148	0.30303					AVRG		0.31681		2.78134
111 N-Nitrosopyrrolidine	+++++	0.44182	0.46376	0.50830	0.47779	0.50143					
	0.49385	0.44600					AVRG		0.47614		5.57640
113 N-Nitrosomorpholine	+++++	0.71032	0.67134	0.71256	0.65887	0.68726					
	0.65974	0.65547					AVRG		0.67936		3.58698
114 o-Toluidine	+++++	1.74797	1.65530	1.71709	1.64005	1.64679					
	1.58070	1.58178					AVRG		1.65281		3.79762
115 N-Nitrosopiperidine	+++++	0.13834	0.13623	0.14736	0.13885	0.14290					
	0.13997	0.14373					AVRG		0.14105		2.69891
116 a,a-Dimethylphenethylamine	+++++	0.78770	0.81587	0.88476	0.87463	0.88336					
	0.86623	0.87565					AVRG		0.85546		4.44785

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.14741	0.14492	0.13783	0.14116	0.13439					
	0.12857	0.12370					AVRG		0.13685		6.28357
118 2,6-Dichlorophenol	+++++	0.19682	0.19992	0.21240	0.20960	0.21251					
	0.20568	0.21118					AVRG		0.20687		3.05257
119 Hexachloropropene	+++++	0.08644	0.09499	0.10791	0.10350	0.10830					
	0.10654	0.11112					AVRG		0.10269		8.60612
120 p-Phenylenediamine	+++++	0.19714	0.24091	0.25567	0.24421	0.23168					
	0.22043	0.21678					AVRG		0.22955		8.57933
121 N-Nitrosodi-n-butylamine	+++++	0.22447	0.22501	0.22216	0.21154	0.19839					
	0.19348	0.19524					AVRG		0.21004		6.76180
122 Safrole	+++++	0.18675	0.18585	0.19677	0.19040	0.18675					
	0.17956	0.17958					AVRG		0.18653		3.22597
123 1,2,4,5-Tetrachlorobenzene	+++++	0.45393	0.42422	0.44255	0.41650	0.41676					
	0.40609	0.40229					AVRG		0.42319		4.45863
124 Isosafrole	+++++	0.34011	0.33198	0.35164	0.33779	0.34233					
	0.33627	0.33702					AVRG		0.33959		1.83025
125 1,4-Naphthoquinone	+++++	0.30018	0.32824	0.34894	0.32634	0.29745					
	0.28366	0.26235					AVRG		0.30674		9.65282

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.15441	0.17500	0.17160	0.17355	0.17392					
	0.16754	0.16904					AVRG		0.16929		4.19006
127 Pentachlorobenzene	+++++	0.38426	0.36575	0.37736	0.36552	0.35674					
	0.35182	0.35035					AVRG		0.36454		3.50537
128 1-Naphthylamine	+++++	0.90674	0.92102	0.95184	0.91692	0.90718					
	0.86367	0.88454					AVRG		0.90742		3.07978
129 2-Naphthylamine	+++++	0.96578	1.00999	1.02440	0.99125	0.97953					
	0.93471	0.95520					AVRG		0.98012		3.19024
130 2,3,4,6-Tetrachlorophenol	+++++	0.20640	0.23481	0.21862	0.21374	0.22201					
	0.21460	0.22254					AVRG		0.21896		4.07356
131 5-Nitro-o-toluidine	+++++	0.22084	0.26615	0.28994	0.29013	0.29251					
	0.28841	0.30508					AVRG		0.27901		10.07623
132 Thionazin	+++++	0.16760	0.17396	0.17237	0.17849	0.17822					
	0.16987	0.16398					AVRG		0.17207		3.11896
134 Sulfotepp	+++++	0.08934	0.08802	0.08507	0.08886	0.08655					
	0.08265	0.08005					AVRG		0.08579		4.00843
135 Phorate	+++++	0.38230	0.38968	0.37391	0.38904	0.37359					
	0.35020	0.32660					AVRG		0.36933		6.25438

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Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	14861	45341	104071	130665	222134					
	265730	408609					LINR	0.09141	0.12978		0.99734
137 Phenacetin	+++++	0.21732	0.25812	0.27209	0.26902	0.27044					
	0.26738	0.28241					AVRG		0.26240		8.05167
138 Diallate	+++++	0.26191	0.24374	0.25182	0.23998	0.23522					
	0.22716	0.22410					AVRG		0.24056		5.55643
139 Dimethoate	+++++	0.18955	0.19806	0.21061	0.22946	0.23158					
	0.22398	0.21950					AVRG		0.21468		7.45885
140 4-Aminobiphenyl	+++++	0.50489	0.50584	0.54599	0.56556	0.56494					
	0.53276	0.52934					AVRG		0.53562		4.66298
141 Pentachloronitrobenzene	+++++	0.06195	0.06081	0.06546	0.06329	0.06151					
	0.06084	0.05959					AVRG		0.06192		3.12402
142 Pronamide	+++++	0.26962	0.26582	0.27431	0.26759	0.26151					
	0.25173	0.25174					AVRG		0.26319		3.31411
143 Dinoseb	+++++	11996	47856	123552	154632	280906					
	375481	479562					LINR	0.15482	0.14736		0.99949
144 Disulfoton	+++++	0.31933	0.32969	0.31920	0.32975	0.31125					
	0.29624	0.27823					AVRG		0.31196		6.02930

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Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
145 Methyl parathion	+++++	0.14493	0.15978	0.17270	0.18140	0.18775					
	0.18141	0.17864					AVRG		0.17237		8.70434
146 4-Nitroquinoline-1-oxide	+++++	0.02012	0.03296	0.02700	0.02533	0.02224					
	0.01930	0.01750					AVRG		0.02349		22.76469 <-
147 Methapyrilene	+++++	0.40623	0.42209	0.41103	0.39768	0.37937					
	0.35132	0.33430					AVRG		0.38600		8.45747
148 Isodrin	+++++	0.10136	0.09753	0.10130	0.09757	0.09481					
	0.09122	0.09037					AVRG		0.09631		4.58453
149 Aramite	+++++	0.03841	0.04251	0.04600	0.04566	0.04690					
	0.04564	0.04428					AVRG		0.04420		6.60357
150 Kepone	+++++	0.05674	0.06191	0.06311	0.06098	0.06085					
	0.06194	0.06656					AVRG		0.06173		4.75009
151 p-(Dimethylamino)azobenzene	+++++	0.31224	0.31378	0.33288	0.32474	0.31931					
	0.31446	0.30396					AVRG		0.31734		2.95033
152 Chlorobenzilate	+++++	0.30009	0.27506	0.30295	0.29512	0.29377					
	0.29203	0.28006					AVRG		0.29130		3.50189
153 3,3'-Dimethylbenzidine	+++++	0.49489	0.52397	0.53487	0.52482	0.53397					
	0.53619	0.54473					AVRG		0.52763		3.04743

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Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
154 Famphur	+++++	0.28850	0.33742	0.33640	0.36516	0.37704						
	0.35655	0.33317					AVRG		0.34203		8.41381	
155 2-Acetylaminofluorene	+++++	23996	98558	217618	290992	478700						
	598627	953419					LINR	0.12414	0.37309		0.99874	
157 7,12Dimethylbenz(a)anthracene	+++++	0.45745	0.44941	0.48919	0.48420	0.49542						
	0.49422	0.48353					AVRG		0.47906		3.80416	
158 3-Methylcholanthrene	+++++	0.29343	0.35502	0.37871	0.37695	0.38953						
	0.38995	0.40328					AVRG		0.36955		9.94080	
26 Phthalic anhydride	+++++	10939	40864	83487	108159	203846						
	306459	+++++					LINR	0.14938	0.09004		0.99590	
173 Carbazole	0.68572	0.63216	0.65059	0.65023	0.64669	0.65901						
	0.65208	0.65947					AVRG		0.65449		2.32370	
174 Hexachlorophene	+++++	0.04700	0.06194	0.06687	0.06701	0.06606						
	+++++	+++++					AVRG		0.06178		13.78238	
179 Dibenzo(a,e)pyrene	+++++	21397	67635	183254	214017	467062						
	+++++	+++++					LINR	0.16800	0.36891		0.99459	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	0.09983	0.11502	0.14598	0.13665	0.14571					
	0.12211	0.12583					AVRG		0.12730		13.25929
191 Parathion	+++++	0.05089	0.05709	0.06102	0.06360	0.06315					
	0.06253	0.06173					AVRG		0.06000		7.60183
192 Methoxychlor	+++++	0.54663	0.59527	0.57022	0.57190	0.55995					
	0.49223	0.53082					AVRG		0.55243		6.05482
210 m-Toluidine	+++++	1.07152	1.09862	1.08267	1.09477	1.19760					
	1.39731	0.92523					AVRG		1.12396		12.87193
211 p-Toluidine	+++++	0.98878	1.01175	0.93629	0.93823	0.84629					
	0.67790	+++++					AVRG		0.89987		13.64283
212 Cis Diallate	+++++	0.25680	0.24216	0.25774	0.25015	0.25647					
	0.24871	0.25860					AVRG		0.25295		2.41779
213 Trans Diallate	+++++	0.30813	0.28675	0.29626	0.28232	0.27673					
	0.26725	0.26364					AVRG		0.28301		5.55643
214 1,4-Dinitrobenzene	+++++	0.15465	0.18602	0.18671	0.19154	0.19074					
	0.18381	0.19324					AVRG		0.18382		7.23195
215 2-Ethoxyethanol	+++++	0.69474	0.75708	0.72314	0.72734	0.69576					
	0.68979	0.68463					AVRG		0.71035		3.71426

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Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	11622	37526	94270	117296	226774					
	306702	394688					LINR	0.14094	0.14618		0.99920
229 2,2'-Dichlorobenzil	+++++	0.65548	0.70788	0.67278	+++++	0.85557					
	0.79635	+++++					AVRG		0.73761		11.58274
230 4-Chlorothioanisole	+++++	65505	120100	275307	+++++	727615					
	828249	+++++					LINR	0.13623	0.30665		0.99347
231 4-Chlorothiophenol	+++++	14955	49890	195788	+++++	593706					
	683100	+++++					LINR	0.29380	0.27176		0.99219
232 bis(p-Chlorophenyl)sulfone	+++++	0.41911	0.42098	0.38909	+++++	0.48605					
	0.44832	+++++					AVRG		0.43271		8.42306
233 bis(p-Chlorophenyl)disulfide	+++++	0.19644	0.20913	0.18244	+++++	0.22594					
	0.20806	+++++					AVRG		0.20440		7.90920
234 Diphenyl disulfide	+++++	0.20078	0.21401	0.19911	+++++	0.24759					
	0.23595	+++++					AVRG		0.21949		9.81334
235 Diphenyl sulfide	+++++	0.77537	0.76082	0.73538	+++++	0.86393					
	0.82035	+++++					AVRG		0.79117		6.45415
236 Phenyl sulfone	+++++	0.43220	0.43102	0.40994	+++++	0.50304					
	0.47114	+++++					AVRG		0.44947		8.28032

GEL Laboratories LLC

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Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.14671	0.15531	0.12673	+++++	0.19818						
	0.17963	+++++					AVRG		0.16131		17.36813	<-
238 Phthalic acid	+++++	13646	40994	115933	+++++	343308						
	402020	+++++					LINR	0.25337	0.15547		0.99358	
239 Thiophenol	+++++	41092	104698	327879	+++++	922601						
	1046955	+++++					LINR	0.23456	1.46946		0.99364	
240 bis(Chloromethyl)ether	+++++	1.01755	1.00429	0.94829	+++++	1.10480						
	1.05711	+++++					AVRG		1.02641		5.71407	
241 Octachlorostyrene	+++++	0.06097	0.06109	0.05953	+++++	0.07399						
	0.07072	+++++					AVRG		0.06526		10.12747	
M 225 Trichlorophenols	+++++	0.27800	0.29958	0.28751	0.28920	0.28074						
	0.26883	0.26877					AVRG		0.28180		3.98593	
M 226 Tetrachlorophenols	+++++	0.20640	0.23481	0.21862	0.21374	0.22201						
	0.21460	0.22254					AVRG		0.21896		4.07356	
M 227 Benzo(b,k)fluoranthene	0.73667	0.86303	0.94898	0.91431	0.92802	0.89592						
	0.88671	0.88707					AVRG		0.88259		7.33906	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.98202	1.07204	1.02934	1.03017	0.98830						
	0.95348	0.95648					AVRG		1.00169		4.36295	
$ 5 Phenol-d5	+++++	1.23734	1.34586	1.27212	1.28456	1.26316						
	1.22407	1.22277					AVRG		1.26427		3.41674	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.30745	0.31426	0.29453	0.29315	0.27101						
	0.25359	0.24671					AVRG		0.28296		9.27927	
$ 39 2-Fluorobiphenyl	+++++	1.11512	1.14628	1.04977	1.05601	0.99136						
	0.92488	0.93239					AVRG		1.03083		8.29816	
$ 60 2,4,6-Tribromophenol	+++++	0.10485	0.11685	0.11180	0.11267	0.12310						
	0.12190	0.12607					AVRG		0.11675		6.41378	
$ 81 p-Terphenyl-d14	+++++	0.71309	0.69797	0.64349	0.66522	0.61764						
	0.59401	0.58404					AVRG		0.64507		7.73004	

GEL Laboratories LLC

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Cal Date : 02-Dec-2009 11:54 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Report Date: 11-Nov-2009 10:50

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.00169	1.03466	1.03466	0.000	3.29147	60.00000	Averaged
$ 5 Phenol-d5	1.26427	1.24245	1.24245	0.000	-1.72556	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28296	0.29902	0.29902	0.000	5.67523	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.03083	1.08174	1.08174	0.000	4.93820	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11675	0.12945	0.12945	0.000	10.88297	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.64507	0.72359	0.72359	0.000	12.17316	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.64081	0.64081	0.000	-5.89855	60.00000	Averaged
2 Pyridine	0.84757	0.77144	0.77144	0.000	-8.98267	60.00000	Averaged
4 Aniline	0.52752	0.51930	0.51930	0.000	-1.55765	60.00000	Averaged
6 Phenol	1.27120	1.23489	1.23489	0.001	-2.85632	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.80936	0.80936	0.000	-5.97614	60.00000	Averaged
8 2-Chlorophenol	1.02109	1.01772	1.01772	0.000	-0.32996	60.00000	Averaged
203 n-Decane	1.42254	1.44155	1.44155	0.000	1.33631	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.19665	1.19665	0.000	1.79939	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.18877	1.18877	0.001	-0.23932	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.12583	1.12583	0.000	1.21558	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.94108	1.94108	0.000	1.00230	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.65075	0.65075	0.000	2.58272	60.00000	Averaged
15 o-Cresol	0.83139	0.83798	0.83798	0.000	0.79318	60.00000	Averaged
18 m,p-Cresols	1.05346	1.05662	1.05662	0.000	0.29972	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.69204	0.69204	0.050	-2.34415	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.44650	0.44650	0.000	-3.14409	60.00000	Averaged
21 Nitrobenzene	0.28519	0.29957	0.29957	0.000	5.04113	60.00000	Averaged
22 Isophorone	0.50552	0.52435	0.52435	0.000	3.72478	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13639	0.13639	0.001	3.68222	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.23088	0.23088	0.000	5.93159	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.30276	0.30276	0.000	1.77222	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.20590	0.20590	0.001	4.15386	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.14567	0.14567	0.000	8.28081	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.24953	0.24953	0.000	2.85087	60.00000	Averaged
30 Naphthalene	0.79792	0.83170	0.83170	0.000	4.23406	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.21801	0.21801	0.000	-0.30655	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51176	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.13489	0.13489	0.001	6.77038	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.20148	0.20148	0.001	0.96147	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.55976	0.55976	0.000	16.25394	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.47100	0.53047	0.53047	0.000	12.62514	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16157	0.12441	0.12441	0.050	-22.99690	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.47908	0.48878	0.48878	0.000	2.02564	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.27294	0.27425	0.27425	0.001	0.48093	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.29067	0.30912	0.30912	0.000	6.34737	60.00000	Averaged	
40 2-Chloronaphthalene	0.89832	0.89821	0.89821	0.000	-0.01212	60.00000	Averaged	
42 o-Nitroaniline	0.30732	0.29883	0.29883	0.000	-2.76487	60.00000	Averaged	
41 m-Nitroaniline	0.22497	0.22544	0.22544	0.000	0.20968	60.00000	Averaged	
43 Dimethylphthalate	1.02610	1.07233	1.07233	0.000	4.50566	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.24475	0.24571	0.24571	0.000	0.39287	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.30862	0.32387	0.32387	0.000	4.94261	60.00000	Averaged	
45 Acenaphthylene	1.44438	1.60997	1.60997	0.000	11.46448	60.00000	Averaged	
47 Acenaphthene	0.90151	0.96315	0.96315	0.001	6.83729	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	35.88405	40.00000	0.06990	0.050	-10.28987	60.00000	Linear	spcc
49 Dibenzofuran	1.21689	1.24464	1.24464	0.000	2.28092	60.00000	Averaged	
51 Diethylphthalate	1.03335	1.08103	1.08103	0.000	4.61479	60.00000	Averaged	
52 4-Nitrophenol	37.16907	40.00000	0.15052	0.050	-7.07733	60.00000	Linear	spcc
53 Fluorene	0.99879	1.09503	1.09503	0.000	9.63571	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.47192	0.49481	0.49481	0.000	4.84948	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	44.79678	40.00000	0.10162	0.000	11.99194	60.00000	Linear	
56 p-Nitroaniline	37.18126	40.00000	0.19210	0.000	-7.04684	60.00000	Linear	
133 Diphenylamine	0.48213	0.48382	0.48382	0.001	0.34977	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.61327	0.61966	0.61966	0.000	1.04277	60.00000	Averaged	
61 4-Bromophenylphenylether	0.15784	0.15705	0.15705	0.000	-0.50023	60.00000	Averaged	
63 Hexachlorobenzene	0.16533	0.16268	0.16268	0.000	-1.60406	60.00000	Averaged	
65 Pentachlorophenol	41.23337	40.00000	0.08933	0.001	3.08343	20.00000	Linear	ccc
206 n-Octadecane	0.44173	0.45929	0.45929	0.000	3.97491	60.00000	Averaged	
68 Phenanthrene	0.82721	0.88585	0.88585	0.000	7.08867	60.00000	Averaged	
69 Anthracene	0.82682	0.90991	0.90991	0.000	10.04830	60.00000	Averaged	
72 Di-n-butylphthalate	0.94954	1.02135	1.02135	0.000	7.56331	60.00000	Averaged	
76 Fluoranthene	0.79242	0.90654	0.90654	0.001	14.40110	20.00000	Averaged	ccc
79 Pyrene	1.10021	1.20816	1.20816	0.000	9.81213	60.00000	Averaged	
85 Butylbenzylphthalate	0.50351	0.54090	0.54090	0.000	7.42706	60.00000	Averaged	
89 Benzo(a)anthracene	0.86301	0.92157	0.92157	0.000	6.78546	60.00000	Averaged	
92 Chrysene	0.82690	0.90169	0.90169	0.000	9.04505	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	41.60196	40.00000	0.72185	0.000	4.00491	60.00000	Wt Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.35676	1.35676	0.001	6.72426	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.99154	0.99154	0.000	12.02912	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	1.01364	1.01364	0.000	15.17242	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.88080	0.88080	0.001	15.21790	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	40.05227	40.00000	0.72891	0.000	0.13069	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	37.95723	40.00000	0.56106	0.000	-5.10692	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.61594	0.61594	0.000	5.46367	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17081	0.17081	0.000	0.89311	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
	143 Dinoseb	37.88463	40.00000	0.11675	0.000	-5.28842	60.00000	Linear	
	173 Carbazole	0.65449	0.70032	0.70032	0.000	7.00193	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.14364	0.14364	0.000	12.83157	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.57593	0.57593	0.000	4.25434	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.90823	0.90823	0.000	0.92871	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.11262	1.11262	0.000	-1.00903	60.00000	Averaged	
	26 Phthalic anhydride	71.32284	40.00000	0.14710	0.000	78.30709	60.00000	Linear	<-
	179 Dibenzo(a,e)pyrene	23.04060	40.00000	0.15052	0.000	-42.39851	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17485	0.17485	0.000	-4.87689	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.75383	0.75383	0.000	6.12038	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.25405	40.00000	0.11920	0.000	-4.36487	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.29168	0.29168	0.000	3.50642	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	1.00259	1.00259	0.000	13.59635	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s110909.b/s6k0937.d
Lab Smp Id: WBN091106-09.1 Client Smp ID: MEGAICV
Inj Date : 10-NOV-2009 20:29
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091106-09.1|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 10:50 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	267857	40.0000	
* 29 Naphthalene-d8	136	6.116	6.116	(1.000)	1007489	40.0000	
* 46 Acenaphthene-d10	164	7.986	7.986	(1.000)	511035	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	891521	40.0000	
* 91 Chrysene-d12	240	12.618	12.618	(1.000)	688764	40.0000	
* 98 Perylene-d12	264	14.955	14.955	(1.000)	524055	40.0000	
$ 3 2-Fluorophenol	112	3.646	3.646	(0.754)	277141	40.0000	41.3
$ 5 Phenol-d5	99	4.431	4.431	(0.917)	332800	40.0000	39.3
$ 20 Nitrobenzene-d5	82	5.371	5.371	(0.878)	301256	40.0000	42.3
$ 39 2-Fluorobiphenyl	172	7.242	7.242	(0.907)	552805	40.0000	42.0
$ 60 2,4,6-Tribromophenol	329	8.834	8.834	(1.106)	66156	40.0000	44.4
$ 81 p-Terphenyl-d14	244	11.306	11.306	(0.896)	498384	40.0000	44.9
1 N-Methyl-N-nitrosomethylamine	74	2.663	2.663	(0.551)	171645	40.0000	37.6
2 Pyridine	79	2.701	2.701	(0.559)	206635	40.0000	36.4
4 Aniline	66	4.518	4.518	(0.935)	139099	40.0000	39.4
6 Phenol	94	4.444	4.444	(0.919)	330773	40.0000	38.8
7 bis(2-Chloroethyl) ether	63	4.559	4.559	(0.943)	216794	40.0000	37.6
8 2-Chlorophenol	128	4.633	4.633	(0.958)	272604	40.0000	39.9
203 n-Decane	43	4.643	4.643	(0.960)	386128	40.0000	40.5
9 1,3-Dichlorobenzene	146	4.783	4.783	(0.989)	320531	40.0000	40.7
11 1,4-Dichlorobenzene	146	4.852	4.852	(1.004)	318420	40.0000	39.9
13 1,2-Dichlorobenzene	146	5.002	5.002	(1.035)	301561	40.0000	40.5
14 bis(2-Chloroisopropyl)ether	45	5.068	5.068	(1.048)	519933	40.0000	40.4
12 Benzyl alcohol	108	4.941	4.941	(1.022)	174307	40.0000	41.0
15 o-Cresol	107	5.025	5.025	(1.040)	224459	40.0000	40.3
18 m,p-Cresols	107	5.180	5.180	(1.072)	283022	40.0000	40.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.206	5.206	(1.077)	185368	40.0000	39.1
19 Hexachloroethane	117	5.338	5.338	(1.104)	119599	40.0000	38.7
21 Nitrobenzene	77	5.392	5.392	(0.882)	301811	40.0000	42.0
22 Isophorone	82	5.626	5.626	(0.920)	528272	40.0000	41.5
23 2-Nitrophenol	139	5.708	5.708	(0.933)	137410	40.0000	41.5
24 2,4-Dimethylphenol	122	5.718	5.718	(0.935)	232609	40.0000	42.4
25 bis(2-Chloroethoxy)methane	93	5.825	5.825	(0.952)	305032	40.0000	40.7
26 2,4-Dichlorophenol	162	5.950	5.950	(0.973)	207439	40.0000	41.7
27 Benzoic acid	105	5.812	5.812	(0.950)	146760	40.0000	43.3(H)
28 1,2,4-Trichlorobenzene	180	6.047	6.047	(0.989)	251400	40.0000	41.1
30 Naphthalene	128	6.138	6.138	(1.004)	837929	40.0000	41.7
204 alpha-Terpineol	59	6.123	6.123	(1.001)	219641	40.0000	39.9
31 4-Chloroaniline	127	6.172	6.172	(1.009)	267452	40.0000	41.4
32 Hexachlorobutadiene	225	6.251	6.251	(1.022)	135904	40.0000	42.7
33 4-Chloro-3-methylphenol	107	6.653	6.653	(1.088)	202993	40.0000	40.4
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	563953	40.0000	46.5
35 1-Methylnaphthalene	142	6.969	6.969	(1.140)	534441	40.0000	45.0
36 Hexachlorocyclopentadiene	237	7.020	7.020	(0.879)	63579	40.0000	30.8
205 2,3-Dichloroaniline	161	7.155	7.155	(0.896)	249785	40.0000	40.8
37 2,4,6-Trichlorophenol	196	7.147	7.147	(0.895)	140152	40.0000	40.2
38 2,4,5-Trichlorophenol	196	7.183	7.183	(0.899)	157970	40.0000	42.5
40 2-Chloronaphthalene	162	7.384	7.384	(0.925)	459019	40.0000	40.0
42 o-Nitroaniline	65	7.479	7.479	(0.936)	152711	40.0000	38.9
41 m-Nitroaniline	138	7.922	7.922	(0.992)	115209	40.0000	40.1
43 Dimethylphthalate	163	7.670	7.670	(0.960)	548000	40.0000	41.8
44 2,6-Dinitrotoluene	165	7.739	7.739	(0.969)	125566	40.0000	40.2
50 2,4-Dinitrotoluene	165	8.172	8.172	(1.023)	165511	40.0000	42.0
45 Acenaphthylene	152	7.835	7.835	(0.981)	822752	40.0000	44.6
47 Acenaphthene	154	8.024	8.024	(1.005)	492203	40.0000	42.7
48 2,4-Dinitrophenol	184	8.029	8.029	(1.005)	35722	40.0000	35.9
49 Dibenzofuran	168	8.205	8.205	(1.027)	636057	40.0000	40.9
51 Diethylphthalate	149	8.424	8.424	(1.055)	552446	40.0000	41.8
52 4-Nitrophenol	139	8.070	8.070	(1.011)	76920	40.0000	37.2
53 Fluorene	166	8.577	8.577	(1.074)	559601	40.0000	43.8
54 4-Chlorophenylphenylether	204	8.564	8.564	(1.072)	252864	40.0000	41.9
55 2-Methyl-4,6-dinitrophenol	198	8.613	8.613	(0.897)	90597	40.0000	44.8
56 p-Nitroaniline	138	8.582	8.582	(1.075)	98168	40.0000	37.2
133 Diphenylamine	169	8.689	8.689	(0.905)	431336	40.0000	40.1
58 1,2-Diphenylhydrazine	77	8.738	8.738	(0.910)	552443	40.0000	40.4
61 4-Bromophenylphenylether	248	9.094	9.094	(0.947)	140012	40.0000	39.8
63 Hexachlorobenzene	284	9.173	9.173	(0.956)	145031	40.0000	39.4
65 Pentachlorophenol	266	9.375	9.375	(0.977)	79644	40.0000	41.2
206 n-Octadecane	57	9.431	9.431	(0.982)	409467	40.0000	41.6
68 Phenanthrene	178	9.624	9.624	(1.003)	789756	40.0000	42.8
69 Anthracene	178	9.680	9.680	(1.008)	811200	40.0000	44.0
72 Di-n-butylphthalate	149	10.190	10.190	(1.062)	910557	40.0000	43.0
76 Fluoranthene	202	10.914	10.914	(1.137)	808196	40.0000	45.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	11.166	11.166	(0.885)	832137	40.0000	43.9
85 Butylbenzylphthalate	149	11.841	11.841	(0.938)	372553	40.0000	43.0
89 Benzo(a)anthracene	228	12.598	12.598	(0.998)	634741	40.0000	42.7
92 Chrysene	228	12.654	12.654	(1.003)	621053	40.0000	43.6
93 bis(2-Ethylhexyl)phthalate	149	12.570	12.570	(0.996)	497186	40.0000	41.6
94 Di-n-octylphthalate	149	13.561	13.561	(0.907)	711015	40.0000	42.7
95 Benzo(b)fluoranthene	252	14.275	14.275	(0.954)	519622	40.0000	44.8
96 Benzo(k)fluoranthene	252	14.326	14.326	(0.958)	531203	40.0000	46.1
97 Benzo(a)pyrene	252	14.853	14.853	(0.993)	461589	40.0000	46.1
99 Indeno(1,2,3-cd)pyrene	276	16.945	16.945	(1.133)	381990	40.0000	40.0
100 Dibenzo(a,h)anthracene	278	16.978	16.978	(1.135)	294025	40.0000	38.0
101 Benzo(ghi)perylene	276	17.460	17.460	(1.167)	322785	40.0000	42.2
126 m-Dinitrobenzene	168	7.708	7.708	(0.965)	87288	40.0000	40.4
130 2,3,4,6-Tetrachlorophenol	232	8.325	8.325	(1.042)	119161	40.0000	42.6
143 Dinoseb	211	9.561	9.561	(0.996)	104085	40.0000	37.9
173 Carbazole	167	9.841	9.841	(1.025)	624352	40.0000	42.8
184 p-Benzoquinone	54	4.085	4.085	(0.845)	38475	40.0000	45.1
192 Methoxychlor	227	12.468	12.468	(0.988)	396683	40.0000	41.7
211 p-Toluidine	106	5.252	5.252	(1.086)	243276	40.0000	40.4
210 m-Toluidine	106	5.285	5.285	(1.093)	298023	40.0000	39.6
26 Phthalic anhydride	104	6.911	6.911	(1.130)	148201	40.0000	71.3
179 Dibenzo(a,e)pyrene	302	21.182	21.182	(1.416)	78881	40.0000	23.0
214 1,4-Dinitrobenzene	75	7.624	7.624	(0.955)	89355	40.0000	38.0
215 2-Ethoxyethanol	59	2.454	2.454	(0.508)	201919	40.0000	42.4
216 Methylenebis(2-chloroaniline)	231	12.539	12.539	(0.994)	82098	40.0000	38.2
M 225 Trichlorophenols	196				298122	80.0000	82.8
M 226 Tetrachlorophenols	232				119161	40.0000	42.6
M 227 Benzo(b,k)fluoranthene	252				1050825	80.0000	90.9

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Date : 10-NOV-2009 20:29
Client ID: MECAICV
Sample Info: IWBN091106-09.1l40 PPM1l1SVHF11MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: JMB3
Column diameter: 0.20

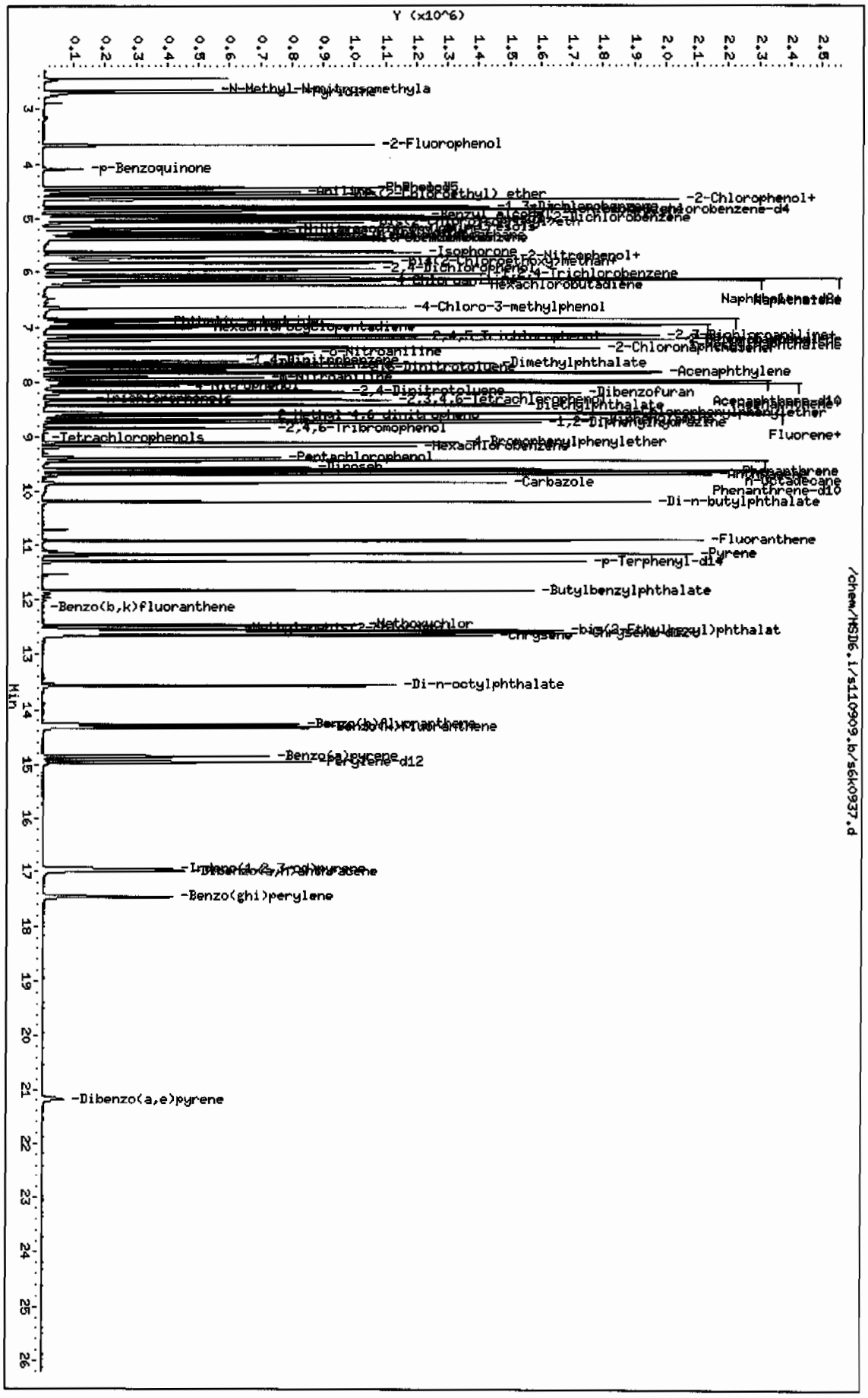

/chem/MSD6.i/s110909.b/s6k0937.d

Page 1

Data File: /chem/MSD6.i/s120209.b/s610203.d
Report Date: 02-Dec-2009 16:43

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610203.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m

Injection Date: 02-DEC-2009 10:08
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	1.00169	1.06108	1.06108	0.000	5.92913	60.00000	Averaged	
$	5 Phenol-d5	1.26427	1.41611	1.41611	0.000	12.00996	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.28296	0.28738	0.28738	0.000	1.56404	60.00000	Averaged	
$	39 2-Fluorobiphenyl	1.03083	1.08004	1.08004	0.000	4.77381	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.11675	0.13820	0.13820	0.000	18.37577	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.64507	0.65640	0.65640	0.000	1.75741	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.68098	0.70636	0.70636	0.000	3.72709	60.00000	Averaged	
	2 Pyridine	0.84757	0.84549	0.84549	0.000	-0.24532	60.00000	Averaged	
	4 Aniline	0.52752	0.54563	0.54563	0.000	3.43343	60.00000	Averaged	
	6 Phenol	1.27120	1.39658	1.39658	0.001	9.86327	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.86081	0.86555	0.86555	0.000	0.55043	60.00000	Averaged	
	8 2-Chlorophenol	1.02109	1.09997	1.09997	0.000	7.72466	60.00000	Averaged	
	203 n-Decane	1.42254	1.32221	1.32221	0.000	-7.05262	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.17550	1.28400	1.28400	0.000	9.23065	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.19162	1.28818	1.28818	0.001	8.10302	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.11231	1.22732	1.22732	0.000	10.34012	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	1.92182	1.97771	1.97771	0.000	2.90829	60.00000	Averaged	
	12 Benzyl alcohol	0.63436	0.13511	0.13511	0.000	-78.70124	60.00000	Averaged	<-
	15 o-Cresol	0.83139	0.96235	0.96235	0.000	15.75220	60.00000	Averaged	
	18 m,p-Cresols	1.05346	1.17465	1.17465	0.000	11.50456	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.70865	0.77869	0.77869	0.050	9.88304	60.00000	Averaged	spcc
	19 Hexachloroethane	0.46100	0.48353	0.48353	0.000	4.88751	60.00000	Averaged	
	21 Nitrobenzene	0.28519	0.28639	0.28639	0.000	0.41969	60.00000	Averaged	
	22 Isophorone	0.50552	0.54231	0.54231	0.000	7.27867	60.00000	Averaged	
	23 2-Nitrophenol	0.13154	0.15083	0.15083	0.001	14.65889	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.21795	0.21900	0.21900	0.000	0.48198	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.29749	0.31757	0.31757	0.000	6.74827	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.19769	0.21922	0.21922	0.001	10.89228	20.00000	Averaged	ccc
	27 Benzoic acid	0.13453	0.14756	0.14756	0.000	9.68987	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24261	0.26250	0.26250	0.000	8.19442	60.00000	Averaged	
	30 Naphthalene	0.79792	0.77167	0.77167	0.000	-3.28963	60.00000	Averaged	
	204 alpha-Terpineol	0.21868	0.23956	0.23956	0.000	9.54680	60.00000	Averaged	
	31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51093	60.00000	Averaged	
	32 Hexachlorobutadiene	0.12634	0.13163	0.13163	0.001	4.18560	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.19957	0.23498	0.23498	0.001	17.74627	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.48150	0.52762	0.52762	0.000	9.57894	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 02-DEC-2009 10:08
Lab File ID: s610203.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.47100	0.51136	0.51136	0.000	8.56821	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16157	0.20559	0.20559	0.050	27.24975	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.47908	0.49953	0.49953	0.000	4.26989	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.27294	0.28777	0.28777	0.001	5.43373	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.29067	0.32519	0.32519	0.000	11.87753	60.00000	Averaged	
40 2-Chloronaphthalene	0.89832	0.95464	0.95464	0.000	6.26917	60.00000	Averaged	
42 o-Nitroaniline	0.30732	0.30223	0.30223	0.000	-1.65604	60.00000	Averaged	
41 m-Nitroaniline	0.22497	0.23391	0.23391	0.000	3.97215	60.00000	Averaged	
43 Dimethylphthalate	1.02610	1.08668	1.08668	0.000	5.90335	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.24475	0.25874	0.25874	0.000	5.71629	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.30862	0.33057	0.33057	0.000	7.11379	60.00000	Averaged	
45 Acenaphthylene	1.44438	1.54363	1.54363	0.000	6.87104	60.00000	Averaged	
47 Acenaphthene	0.90151	0.92574	0.92574	0.001	2.68818	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	52.18576	40.00000	0.12319	0.050	30.46441	60.00000	Linear	spcc
49 Dibenzofuran	1.21689	1.30097	1.30097	0.000	6.90995	60.00000	Averaged	
51 Diethylphthalate	1.03335	1.08750	1.08750	0.000	5.24092	60.00000	Averaged	
52 4-Nitrophenol	45.56272	40.00000	0.19279	0.050	13.90681	60.00000	Linear	spcc
53 Fluorene	0.99879	1.07170	1.07170	0.000	7.29979	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.47192	0.52527	0.52527	0.000	11.30515	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	44.28532	40.00000	0.10024	0.000	10.71331	60.00000	Linear	
56 p-Nitroaniline	40.62783	40.00000	0.21408	0.000	1.56958	60.00000	Linear	
133 Diphenylamine	0.48213	0.50735	0.50735	0.001	5.23103	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.61327	0.61678	0.61678	0.000	0.57181	60.00000	Averaged	
61 4-Bromophenylphenylether	0.15784	0.17032	0.17032	0.000	7.91055	60.00000	Averaged	
63 Hexachlorobenzene	0.16533	0.17644	0.17644	0.000	6.71899	60.00000	Averaged	
65 Pentachlorophenol	41.74129	40.00000	0.09060	0.001	4.35322	20.00000	Linear	ccc
206 n-Octadecane	0.44173	0.46852	0.46852	0.000	6.06473	60.00000	Averaged	
68 Phenanthrene	0.82721	0.85240	0.85240	0.000	3.04462	60.00000	Averaged	
69 Anthracene	0.82682	0.86617	0.86617	0.000	4.75839	60.00000	Averaged	
72 Di-n-butylphthalate	0.94954	1.03888	1.03888	0.000	9.40886	60.00000	Averaged	
76 Fluoranthene	0.79242	0.86589	0.86589	0.001	9.27234	20.00000	Averaged	ccc
79 Pyrene	1.10021	1.07300	1.07300	0.000	-2.47304	60.00000	Averaged	
85 Butylbenzylphthalate	0.50351	0.52499	0.52499	0.000	4.26757	60.00000	Averaged	
89 Benzo(a)anthracene	0.86301	0.90649	0.90649	0.000	5.03859	60.00000	Averaged	
92 Chrysene	0.82690	0.86715	0.86715	0.000	4.86750	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	43.08219	40.00000	0.74779	0.000	7.70547	60.00000	Wt Linear	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 02-DEC-2009 10:08
Lab File ID: s610203.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.40728	1.40728	0.001	10.69834	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.94247	0.94247	0.000	6.48468	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	0.93614	0.93614	0.000	6.36719	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.85825	0.85825	0.001	12.26811	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	43.44918	40.00000	0.79580	0.000	8.62296	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	43.95827	40.00000	0.65657	0.000	9.89569	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.65673	0.65673	0.000	12.44856	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.18706	0.18706	0.000	10.49414	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.24795	0.24795	0.000	13.23830	60.00000	Averaged	
	143 Dinoseb	45.01616	40.00000	0.14302	0.000	12.54039	60.00000	Linear	
	173 Carbazole	0.65449	0.65354	0.65354	0.000	-0.14531	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.03539	0.03539	0.000	-72.20264	60.00000	Averaged	<-
	192 Methoxychlor	0.55243	0.58487	0.58487	0.000	5.87124	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.94552	0.94552	0.000	5.07288	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.15363	1.15363	0.000	2.64001	60.00000	Averaged	
	26 Phthalic anhydride	32.49883	40.00000	0.05971	0.000	-18.75291	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.18581	0.18581	0.000	1.08338	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.51480	0.51480	0.000	-27.52904	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	40.96370	40.00000	0.12910	0.000	2.40925	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.30648	0.30648	0.000	8.75698	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.24795	0.24795	0.000	13.23830	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	0.93931	0.93931	0.000	6.42610	60.00000	Averaged	

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Data file : /chem/MSD6.i/s120209.b/s610203.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 02-DEC-2009 10:08
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 11o00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	222113	40.0000	
* 29 Naphthalene-d8	136	6.059	6.059	(1.000)	909547	40.0000	
* 46 Acenaphthene-d10	164	7.927	7.927	(1.000)	465946	40.0000	
* 67 Phenanthrene-d10	188	9.540	9.540	(1.000)	825539	40.0000	
* 91 Chrysene-d12	240	12.549	12.549	(1.000)	702789	40.0000	
* 98 Perylene-d12	264	14.863	14.863	(1.000)	620321	40.0000	
$ 3 2-Fluorophenol	112	3.636	3.636	(0.759)	235680	40.0000	42.4
$ 5 Phenol-d5	99	4.406	4.406	(0.920)	314536	40.0000	44.8
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.878)	261389	40.0000	40.6
$ 39 2-Fluorobiphenyl	172	7.183	7.183	(0.906)	503241	40.0000	41.9
$ 60 2,4,6-Tribromophenol	329	8.778	8.778	(1.107)	64395	40.0000	47.4
$ 81 p-Terphenyl-d14	244	11.250	11.250	(0.896)	461313	40.0000	40.7
1 N-Methyl-N-nitrosomethylamine	74	2.691	2.691	(0.562)	156891	40.0000	41.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.734	2.734	(0.571)	187795	40.0000	39.9
4 Aniline	66	4.477	4.477	(0.935)	121192	40.0000	41.4
6 Phenol	94	4.418	4.418	(0.923)	310198	40.0000	43.9
7 bis(2-Chloroethyl) ether	63	4.515	4.515	(0.943)	192249	40.0000	40.2
8 2-Chlorophenol	128	4.592	4.592	(0.959)	244317	40.0000	43.1
203 n-Decane	43	4.597	4.597	(0.960)	293680	40.0000	37.2
9 1,3-Dichlorobenzene	146	4.737	4.737	(0.989)	285194	40.0000	43.7
11 1,4-Dichlorobenzene	146	4.803	4.803	(1.003)	286121	40.0000	43.2
13 1,2-Dichlorobenzene	146	4.951	4.951	(1.034)	272604	40.0000	44.1
14 bis(2-Chloroisopropyl)ether	45	5.017	5.017	(1.048)	439276	40.0000	41.2
12 Benzyl alcohol	108	4.900	4.900	(1.023)	30010	40.0000	8.5
15 o-Cresol	107	4.987	4.987	(1.042)	213750	40.0000	46.3
18 m,p-Cresols	107	5.140	5.140	(1.073)	260906	40.0000	44.6
17 N-Nitrosodipropylamine	70	5.157	5.157	(1.077)	172957	40.0000	44.0
19 Hexachloroethane	117	5.282	5.282	(1.103)	107398	40.0000	42.0
21 Nitrobenzene	77	5.341	5.341	(0.881)	260483	40.0000	40.2
22 Isophorone	82	5.578	5.578	(0.921)	493257	40.0000	42.9
23 2-Nitrophenol	139	5.657	5.657	(0.934)	137185	40.0000	45.9
24 2,4-Dimethylphenol	122	5.675	5.675	(0.936)	199193	40.0000	40.2
25 bis(2-Chloroethoxy)methane	93	5.771	5.771	(0.952)	288843	40.0000	42.7
26 2,4-Dichlorophenol	162	5.904	5.904	(0.974)	199389	40.0000	44.4
27 Benzoic acid	105	5.779	5.779	(0.954)	134217	40.0000	43.9
28 1,2,4-Trichlorobenzene	180	5.991	5.991	(0.989)	238752	40.0000	43.3
30 Naphthalene	128	6.082	6.082	(1.004)	701868	40.0000	38.7
204 alpha-Terpineol	59	6.072	6.072	(1.002)	217887	40.0000	43.8
31 4-Chloroaniline	127	6.121	6.121	(1.010)	241450	40.0000	41.4
32 Hexachlorobutadiene	225	6.189	6.189	(1.021)	119722	40.0000	41.7
33 4-Chloro-3-methylphenol	107	6.612	6.612	(1.091)	213726	40.0000	47.1
34 2-Methylnaphthalene	142	6.803	6.803	(1.123)	479896	40.0000	43.8
35 1-Methylnaphthalene	142	6.910	6.910	(1.140)	465106	40.0000	43.4
36 Hexachlorocyclopentadiene	237	6.961	6.961	(0.878)	95796	40.0000	50.9
205 2,3-Dichloroaniline	161	7.099	7.099	(0.896)	232756	40.0000	41.7
37 2,4,6-Trichlorophenol	196	7.094	7.094	(0.895)	134085	40.0000	42.2
38 2,4,5-Trichlorophenol	196	7.137	7.137	(0.900)	151522	40.0000	44.8
40 2-Chloronaphthalene	162	7.326	7.326	(0.924)	444811	40.0000	42.5
42 o-Nitroaniline	65	7.428	7.428	(0.937)	140825	40.0000	39.3
41 m-Nitroaniline	138	7.874	7.874	(0.993)	108988	40.0000	41.6
43 Dimethylphthalate	163	7.616	7.616	(0.961)	506332	40.0000	42.4
44 2,6-Dinitrotoluene	165	7.685	7.685	(0.969)	120558	40.0000	42.3
50 2,4-Dinitrotoluene	165	8.123	8.123	(1.025)	154030	40.0000	42.8
45 Acenaphthylene	152	7.777	7.777	(0.981)	719246	40.0000	42.7
47 Acenaphthene	154	7.963	7.963	(1.004)	431347	40.0000	41.1
48 2,4-Dinitrophenol	184	7.983	7.983	(1.007)	57402	40.0000	52.2
49 Dibenzofuran	168	8.146	8.146	(1.028)	606184	40.0000	42.8
51 Diethylphthalate	149	8.368	8.368	(1.056)	506718	40.0000	42.1
52 4-Nitrophenol	139	8.047	8.047	(1.015)	89831	40.0000	45.6
53 Fluorene	166	8.518	8.518	(1.075)	499356	40.0000	42.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.503	8.503	(1.073)	244749	40.0000	44.5
55 2-Methyl-4,6-dinitrophenol	198	8.564	8.564	(0.898)	82754	40.0000	44.3
56 p-Nitroaniline	138	8.534	8.534	(1.077)	99750	40.0000	40.6
133 Diphenylamine	169	8.633	8.633	(0.905)	418841	40.0000	42.1
58 1,2-Diphenylhydrazine	77	8.679	8.679	(0.910)	509172	40.0000	40.2
61 4-Bromophenylphenylether	248	9.036	9.036	(0.947)	140609	40.0000	43.2
63 Hexachlorobenzene	284	9.112	9.112	(0.955)	145657	40.0000	42.7
65 Pentachlorophenol	266	9.321	9.321	(0.977)	74794	40.0000	41.7
206 n-Octadecane	57	9.372	9.372	(0.982)	386783	40.0000	42.4
68 Phenanthrene	178	9.566	9.566	(1.003)	703689	40.0000	41.2
69 Anthracene	178	9.622	9.622	(1.009)	715055	40.0000	41.9
72 Di-n-butylphthalate	149	10.131	10.131	(1.062)	857633	40.0000	43.8
76 Fluoranthene	202	10.855	10.855	(1.138)	714830	40.0000	43.7
79 Pyrene	202	11.107	11.107	(0.885)	754091	40.0000	39.0
85 Butylbenzylphthalate	149	11.780	11.780	(0.939)	368959	40.0000	41.7
89 Benzo(a)anthracene	228	12.529	12.529	(0.998)	637071	40.0000	42.0
92 Chrysene	228	12.585	12.585	(1.003)	609422	40.0000	41.9
93 bis(2-Ethylhexyl)phthalate	149	12.498	12.498	(0.996)	525539	40.0000	43.1
94 Di-n-octylphthalate	149	13.477	13.477	(0.907)	872964	40.0000	44.3
95 Benzo(b)fluoranthene	252	14.190	14.190	(0.955)	584633	40.0000	42.6
96 Benzo(k)fluoranthene	252	14.239	14.239	(0.958)	580710	40.0000	42.5
97 Benzo(a)pyrene	252	14.761	14.761	(0.993)	532392	40.0000	44.9
99 Indeno(1,2,3-cd)pyrene	276	16.843	16.843	(1.133)	493654	40.0000	43.4
100 Dibenzo(a,h)anthracene	278	16.874	16.874	(1.135)	407286	40.0000	44.0
101 Benzo(ghi)perylene	276	17.353	17.353	(1.167)	407384	40.0000	45.0
126 m-Dinitrobenzene	168	7.662	7.662	(0.967)	87160	40.0000	44.2
130 2,3,4,6-Tetrachlorophenol	232	8.271	8.271	(1.043)	115529	40.0000	45.3
143 Dinoseb	211	9.504	9.504	(0.996)	118070	40.0000	45.0
173 Carbazole	167	9.785	9.785	(1.026)	539526	40.0000	39.9
184 p-Benzoquinone	54	4.054	4.054	(0.847)	7860	40.0000	11.1
192 Methoxychlor	227	12.402	12.402	(0.988)	411038	40.0000	42.3
211 p-Toluidine	106	5.203	5.203	(1.087)	210013	40.0000	42.0
210 m-Toluidine	106	5.239	5.239	(1.094)	256237	40.0000	41.0
26 Phthalic anhydride	104	6.862	6.862	(1.132)	54305	40.0000	32.5
214 1,4-Dinitrobenzene	75	7.576	7.576	(0.956)	86576	40.0000	40.4
215 2-Ethoxyethanol	59	2.495	2.495	(0.521)	114344	40.0000	29.0
216 Methylenebis(2-chloroaniline)	231	12.476	12.476	(0.994)	90729	40.0000	41.0(Q)
M 225 Trichlorophenols	196				285607	80.0000	87.0
M 226 Tetrachlorophenols	232				115529	40.0000	45.3
M 227 Benzo(b,k)fluoranthene	252				1165343	80.0000	85.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120209.b/s610203.d
Date : 02-DEC-2009 10:08
Client ID: HEGACVS
Sample Info: IWBN091106-05.3140 PPM111SVHF11!HEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

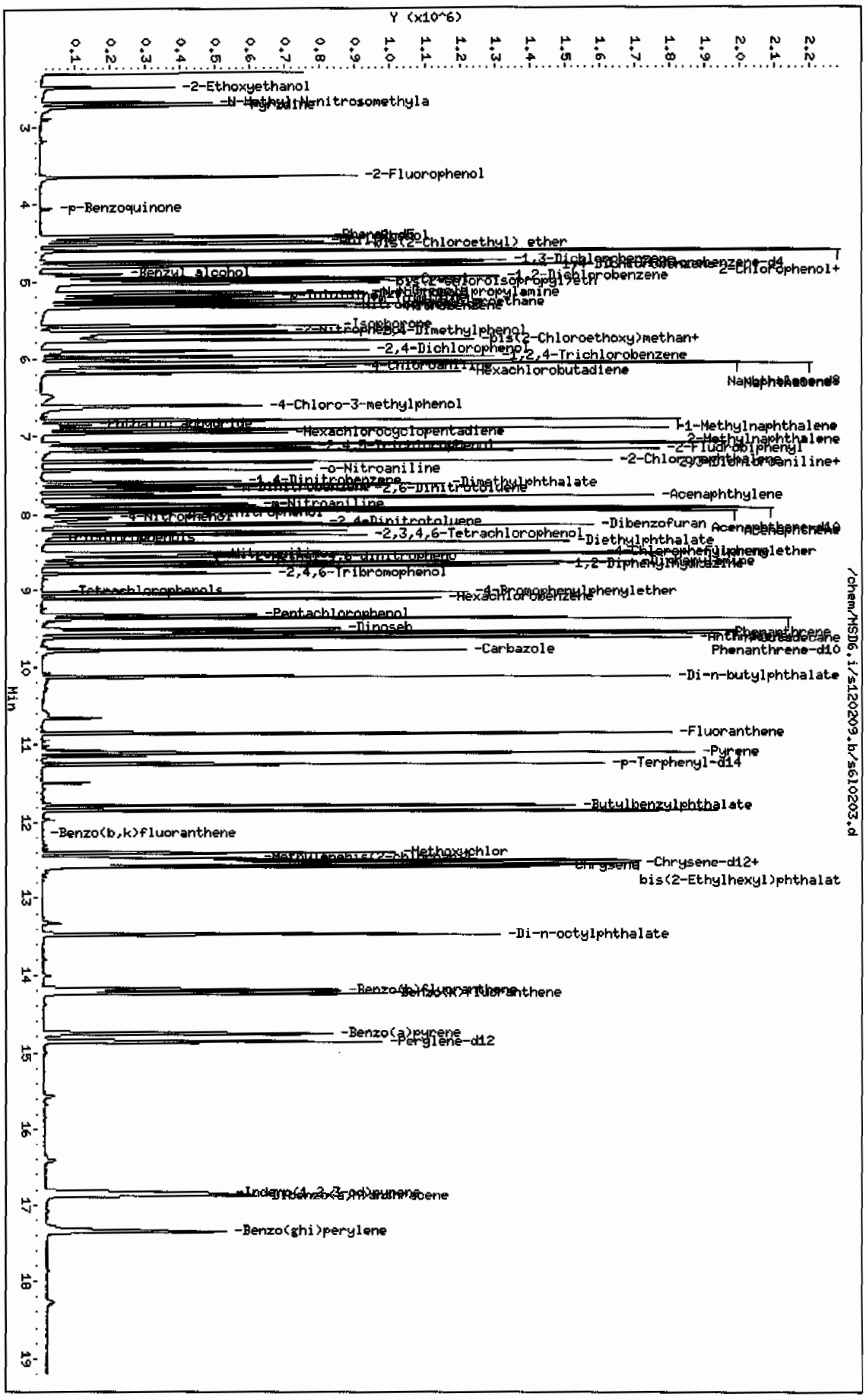

Page 1

QC Data

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

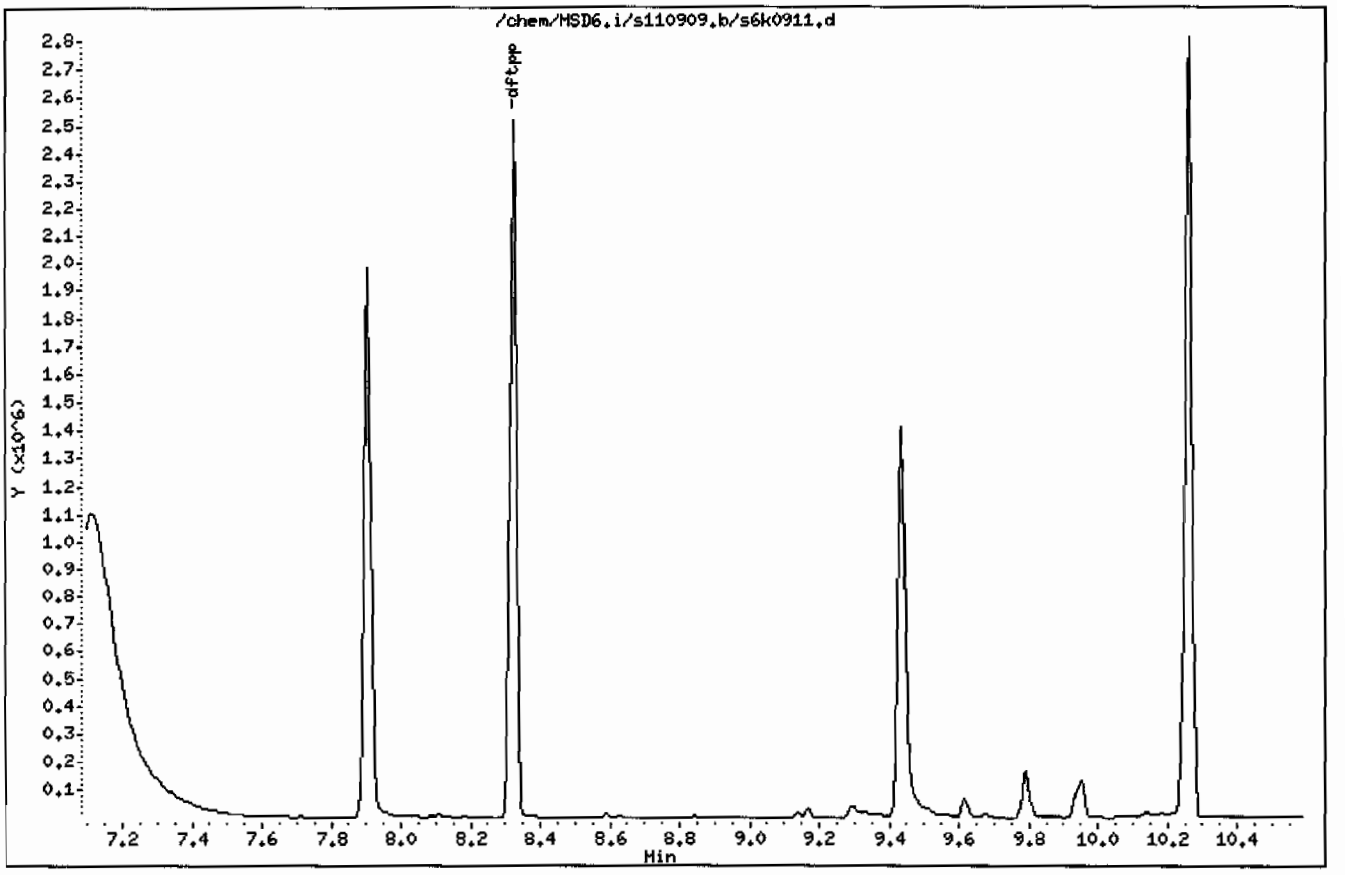

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

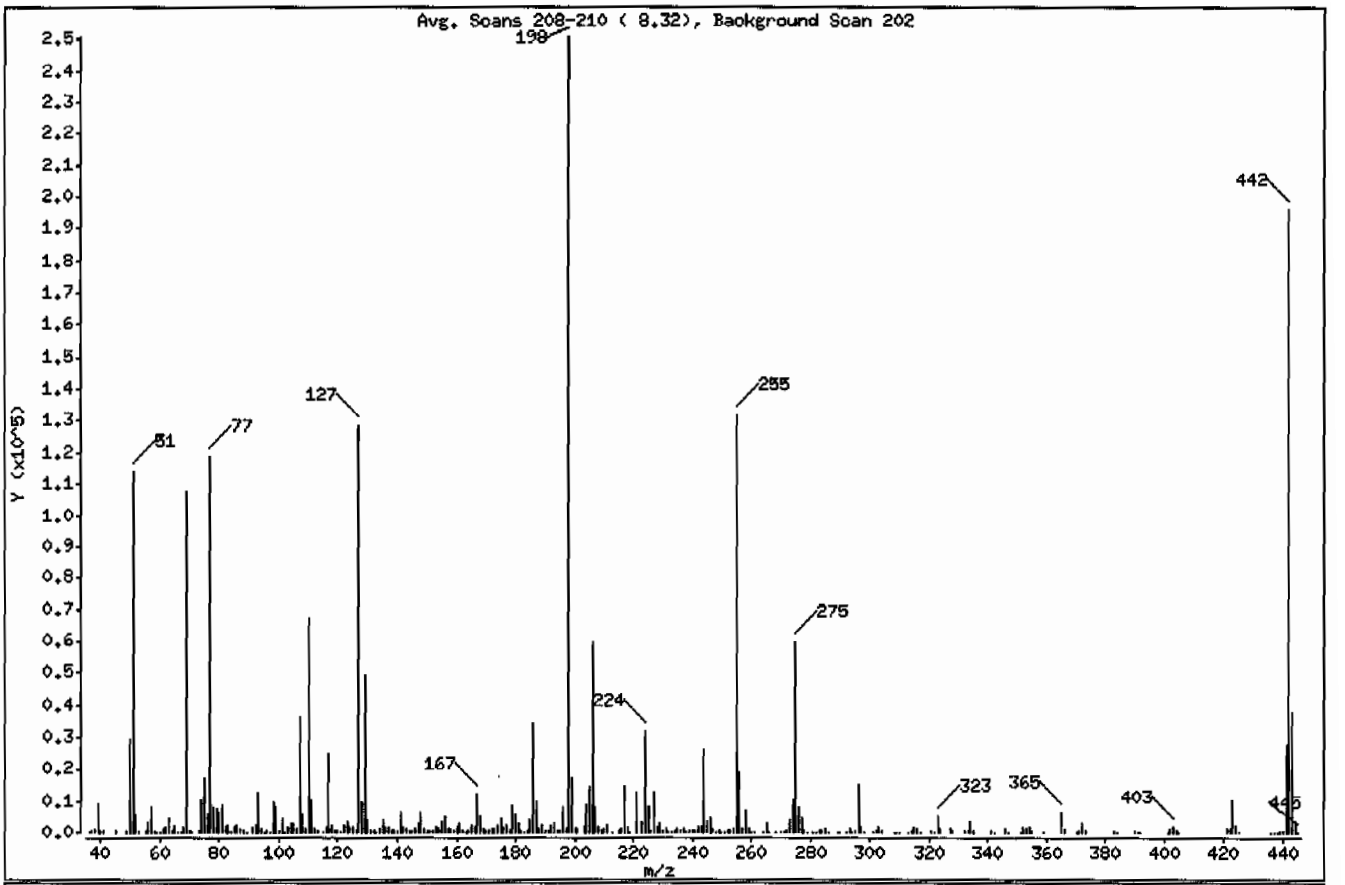

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.40
68	Less than 2.00% of mass 69	0.67 (1.56)
69	Mass 69 relative abundance	42.98
70	Less than 2.00% of mass 69	0.23 (0.53)
127	40.00 - 60.00% of mass 198	51.37
197	Less than 1.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 30.00% of mass 198	23.67
365	Greater than 1.00% of mass 198	2.45
441	Present, but less than mass 443	11.05
442	Greater than 40.00% of mass 198	77.94
443	17.00 - 23.00% of mass 442	14.94 (19.17)

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8	122.00	2302	198.00	250752	284.00	336
37.00	393	123.00	3695	199.00	17344	285.00	937
38.00	1200	124.00	1621	200.00	1195	286.00	170
39.00	9016	125.00	1448	201.00	1207	289.00	255
40.00	406	126.00	632	203.00	1659	290.00	159
41.00	292	127.00	128832	204.00	8363	292.00	259
45.00	305	128.00	9787	205.00	14289	293.00	1083
49.00	640	129.00	49280	206.00	59576	294.00	255
50.00	29544	130.00	4085	207.00	7878	295.00	324
51.00	113864	131.00	795	208.00	1898	296.00	14712
52.00	5719	132.00	464	209.00	609	297.00	1998
53.00	291	133.00	153	210.00	1016	298.00	48
55.00	556	134.00	1412	211.00	2089	301.00	220
56.00	3212	135.00	3908	213.00	96	302.00	374
57.00	7977	136.00	1509	215.00	674	303.00	1716
58.00	306	137.00	2002	216.00	1188	304.00	518
59.00	43	138.00	459	217.00	14324	308.00	142
60.00	144	139.00	392	218.00	1841	309.00	104
61.00	1384	140.00	751	219.00	194	310.00	127
62.00	1579	141.00	6116	221.00	12869	313.00	98
63.00	4522	142.00	1931	223.00	3368	314.00	758
64.00	592	143.00	1380	224.00	31752	315.00	1571
65.00	2251	144.00	329	225.00	7987	316.00	915
66.00	47	145.00	339	226.00	839	317.00	119
67.00	98	146.00	1032	227.00	12952	321.00	481
68.00	1681	147.00	3100	228.00	1848	322.00	229
69.00	107792	148.00	6347	229.00	2774	323.00	5178
70.00	566	149.00	1410	230.00	478	324.00	998
71.00	154	150.00	411	231.00	1257	327.00	960
73.00	818	151.00	692	232.00	280	328.00	487
74.00	10556	152.00	489	233.00	226	332.00	397
75.00	17208	153.00	1814	234.00	759	333.00	430
76.00	5735	154.00	1411	235.00	1001	334.00	3299
77.00	118792	155.00	3187	236.00	589	335.00	849
78.00	8119	156.00	5061	237.00	1093	341.00	644

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	7616	157.00	1047	238.00	176	342.00	184
80.00	6053	158.00	1005	239.00	483	346.00	1112
81.00	8741	159.00	819	240.00	449	347.00	197
82.00	1932	160.00	1690	241.00	776	351.00	99
83.00	2188	161.00	2737	242.00	1684	352.00	1491
84.00	232	162.00	809	243.00	1819	353.00	1169
85.00	1461	163.00	190	244.00	25832	354.00	1725
86.00	2130	164.00	335	245.00	3598	355.00	318
87.00	1162	165.00	2034	246.00	4786	359.00	103
88.00	449	166.00	1979	247.00	980	365.00	6134
89.00	268	167.00	12360	248.00	210	366.00	872
91.00	1835	168.00	5121	249.00	829	370.00	96
92.00	2163	169.00	1038	250.00	174	371.00	434
93.00	12786	170.00	446	251.00	238	372.00	2651
94.00	908	171.00	470	252.00	289	373.00	754
95.00	251	172.00	1064	253.00	569	383.00	711
96.00	626	173.00	1291	254.00	1047	384.00	268
97.00	236	174.00	2515	255.00	131328	390.00	402
98.00	9808	175.00	4789	256.00	18784	391.00	259
99.00	8032	176.00	1446	257.00	1424	392.00	153
100.00	745	177.00	2269	258.00	6873	401.00	116
101.00	4358	178.00	802	259.00	1148	402.00	1140
102.00	258	179.00	8475	260.00	228	403.00	1594
103.00	1616	180.00	5994	261.00	261	404.00	514
104.00	3096	181.00	2983	264.00	141	405.00	98
105.00	2795	182.00	429	265.00	2620	421.00	1430
106.00	910	183.00	259	266.00	251	422.00	1234
107.00	36184	184.00	679	268.00	180	423.00	10131
108.00	5604	185.00	3929	270.00	163	424.00	2144
109.00	997	186.00	34256	271.00	257	425.00	193
110.00	66656	187.00	9747	272.00	290	436.00	45
111.00	10177	188.00	1146	273.00	3906	437.00	191
112.00	1133	189.00	2105	274.00	10561	438.00	232
113.00	472	190.00	292	275.00	59368	439.00	301
115.00	217	191.00	815	276.00	7967	440.00	309

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1841	192.00	2423	277.00	4641	441.00	27712
117.00	25072	193.00	3008	278.00	676	442.00	195456
118.00	2060	194.00	699	279.00	175	443.00	37472
119.00	345	195.00	448	281.00	87	444.00	3400
120.00	476	196.00	7876	282.00	46	445.00	197
121.00	165	197.00	1433	283.00	505		

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

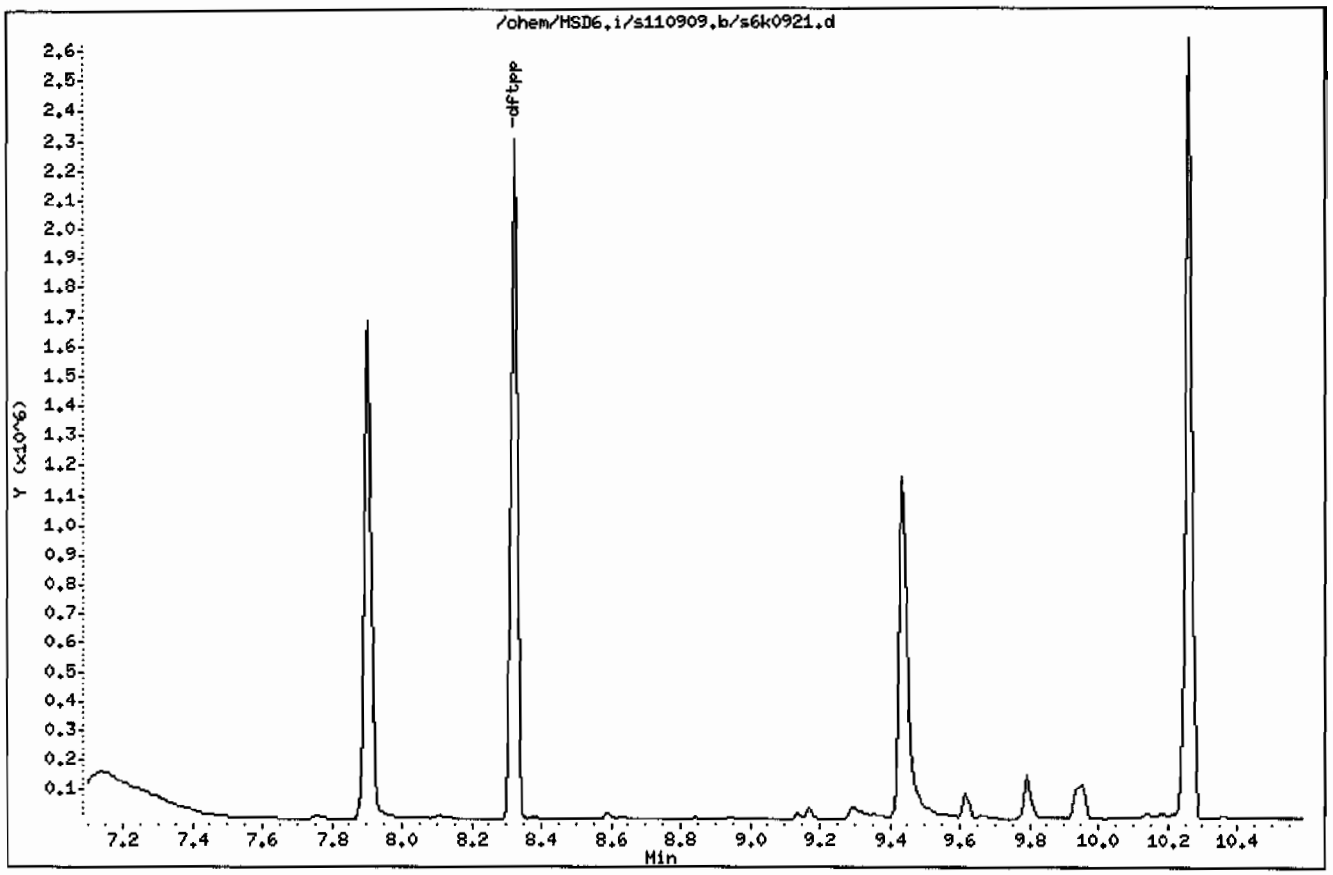

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

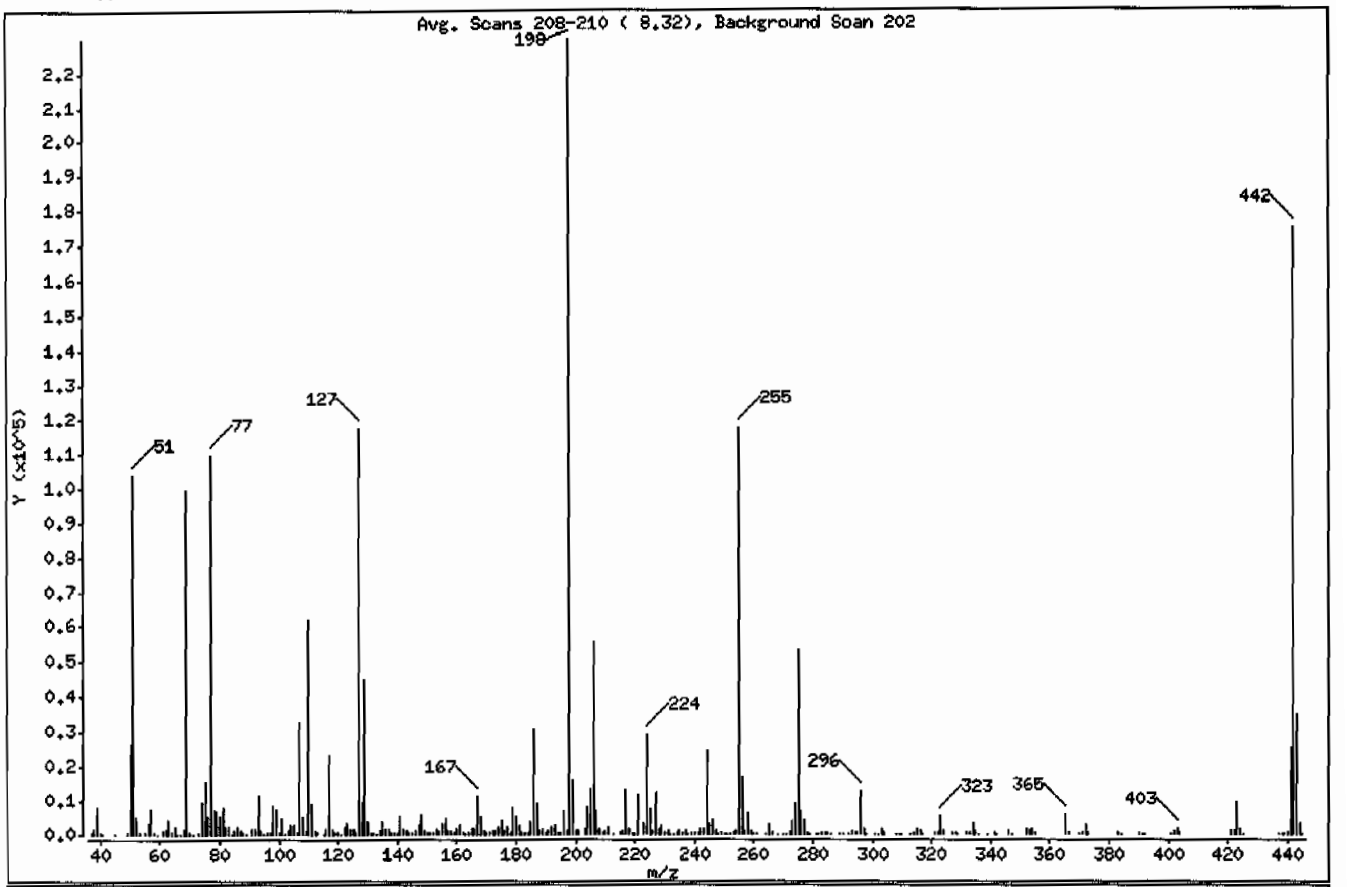

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.09
68	Less than 2.00% of mass 69	0.69 (1.59)
69	Mass 69 relative abundance	43.13
70	Less than 2.00% of mass 69	0.21 (0.50)
127	40.00 - 60.00% of mass 198	50.95
197	Less than 1.00% of mass 198	0.38
199	5.00 - 9.00% of mass 198	7.01
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.61
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	76.04
443	17.00 - 23.00% of mass 442	15.14 (19.92)

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	446	124.00	1597	200.00	1296	285.00	727
38.00	1364	125.00	1527	201.00	1130	286.00	93
39.00	8081	126.00	500	203.00	1398	289.00	109
40.00	429	127.00	117112	204.00	7870	290.00	48
41.00	123	128.00	9305	205.00	12990	292.00	179
45.00	232	129.00	44864	206.00	55704	293.00	996
49.00	676	130.00	3877	207.00	6919	294.00	284
50.00	26328	131.00	762	208.00	1589	295.00	295
51.00	103656	132.00	413	209.00	492	296.00	12743
52.00	5217	133.00	83	210.00	869	297.00	1758
53.00	281	134.00	1179	211.00	2059	298.00	106
55.00	508	135.00	3584	213.00	155	301.00	200
56.00	3141	136.00	1380	215.00	501	302.00	236
57.00	7300	137.00	1770	216.00	1098	303.00	1828
58.00	351	138.00	422	217.00	13179	304.00	578
59.00	89	139.00	313	218.00	1725	308.00	164
61.00	1282	140.00	577	219.00	178	309.00	120
62.00	1522	141.00	5319	220.00	48	310.00	179
63.00	4035	142.00	1826	221.00	11795	313.00	116
64.00	709	143.00	1268	223.00	3181	314.00	633
65.00	2010	144.00	322	224.00	29056	315.00	1462
66.00	201	145.00	315	225.00	7532	316.00	903
67.00	136	146.00	853	226.00	796	317.00	97
68.00	1576	147.00	2856	227.00	12169	321.00	535
69.00	99128	148.00	5895	228.00	1834	322.00	301
70.00	492	149.00	1137	229.00	2389	323.00	5031
71.00	87	150.00	371	230.00	448	324.00	932
73.00	640	151.00	713	231.00	1077	327.00	782
74.00	9704	152.00	430	232.00	217	328.00	460
75.00	15458	153.00	1634	233.00	234	329.00	92
76.00	5031	154.00	1294	234.00	764	332.00	329
77.00	109208	155.00	2977	235.00	895	333.00	541
78.00	7381	156.00	4520	236.00	588	334.00	3026
79.00	6803	157.00	931	237.00	934	335.00	912
80.00	5387	158.00	937	238.00	52	336.00	92

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	7979	159.00	792	239.00	457	339.00	88
82.00	2000	160.00	1501	240.00	364	341.00	550
83.00	1851	161.00	2637	241.00	638	342.00	176
84.00	203	162.00	756	242.00	1412	346.00	1020
85.00	1319	163.00	204	243.00	1572	347.00	119
86.00	1985	164.00	328	244.00	24152	352.00	1335
87.00	1000	165.00	1810	245.00	3200	353.00	950
88.00	412	166.00	1695	246.00	4314	354.00	1475
89.00	260	167.00	10891	247.00	844	355.00	296
91.00	1676	168.00	5136	248.00	166	365.00	5995
92.00	1806	169.00	973	249.00	748	366.00	747
93.00	11677	170.00	306	250.00	170	370.00	103
94.00	892	171.00	442	251.00	190	371.00	323
95.00	199	172.00	897	252.00	210	372.00	2543
96.00	636	173.00	1105	253.00	472	373.00	611
97.00	286	174.00	2178	254.00	899	383.00	675
98.00	8556	175.00	4297	255.00	117320	384.00	156
99.00	7312	176.00	1290	256.00	16728	390.00	314
100.00	595	177.00	2105	257.00	1320	391.00	189
101.00	4548	178.00	636	258.00	6484	392.00	157
102.00	251	179.00	8002	259.00	1064	401.00	199
103.00	1289	180.00	5191	260.00	200	402.00	1090
104.00	2626	181.00	2701	261.00	212	403.00	1396
105.00	2533	182.00	448	264.00	192	404.00	427
106.00	724	183.00	312	265.00	2469	421.00	1265
107.00	33008	184.00	599	266.00	401	422.00	1145
108.00	5264	185.00	3797	268.00	43	423.00	9473
109.00	994	186.00	30448	270.00	167	424.00	1846
110.00	61616	187.00	8914	271.00	186	425.00	183
111.00	9026	188.00	970	272.00	329	437.00	54
112.00	1057	189.00	1726	273.00	3492	438.00	170
113.00	367	190.00	298	274.00	9124	439.00	228
115.00	227	191.00	976	275.00	53576	440.00	294
116.00	1610	192.00	2282	276.00	7126	441.00	25272
117.00	23152	193.00	2535	277.00	3970	442.00	174784

Date : 10-NOV-2009 11:07

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1681	194.00	518	278.00	653	443.00	34808
119.00	280	195.00	333	279.00	140	444.00	3177
120.00	427	196.00	6863	281.00	140	445.00	129
121.00	176	197.00	878	282.00	42		
122.00	2199	198.00	229824	283.00	507		
123.00	3315	199.00	16104	284.00	294		

Data File: /chem/MSD6.i/s120209.b/s610202.d

Page 1

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

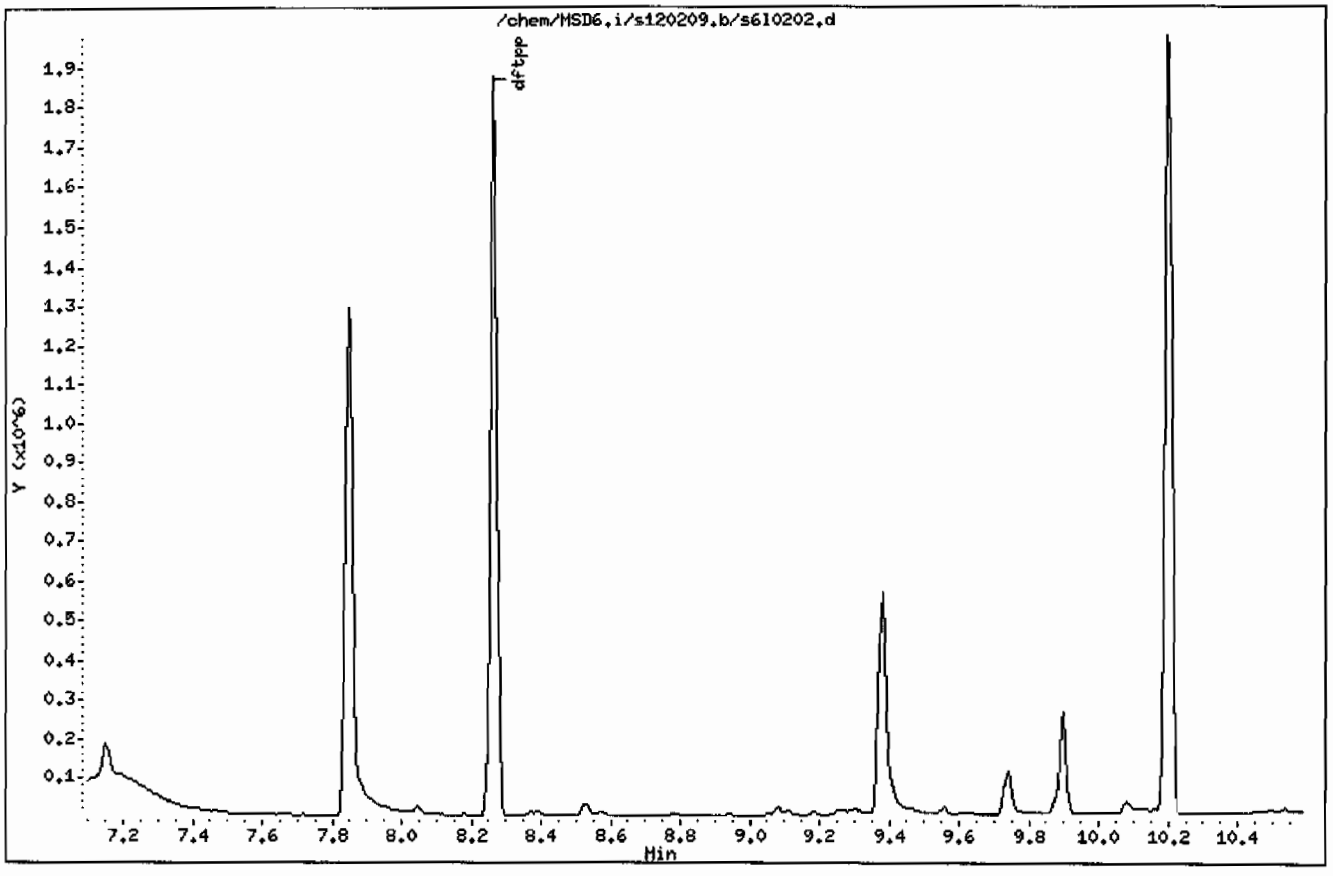

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVHF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

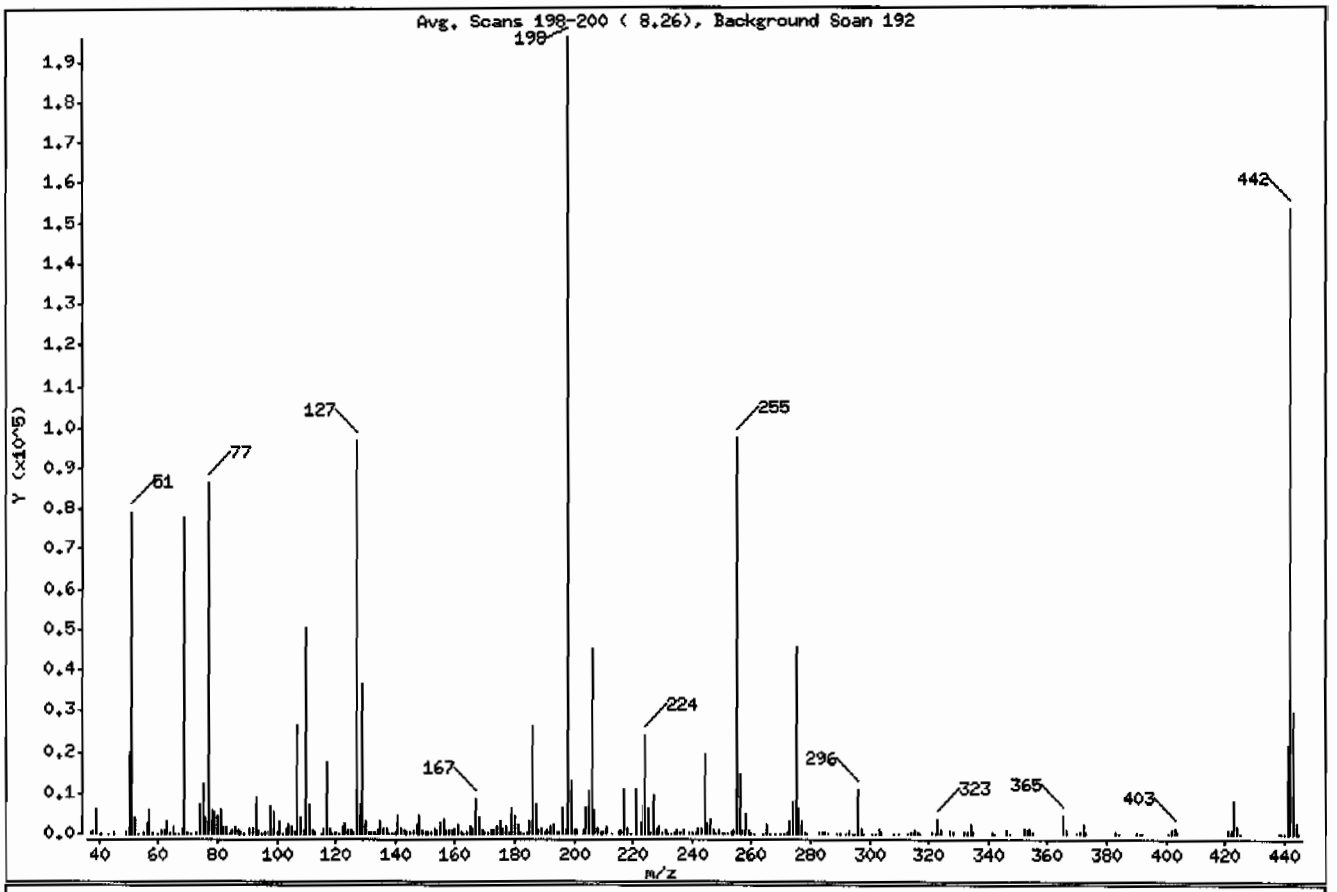

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.39
68	Less than 2.00% of mass 69	0.60 (1.50)
69	Mass 69 relative abundance	39.82
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	49.32
197	Less than 1.00% of mass 198	0.48
199	5.00 - 9.00% of mass 198	6.76
275	10.00 - 30.00% of mass 198	23.23
365	Greater than 1.00% of mass 198	2.36
441	Present, but less than mass 443	11.13
442	Greater than 40.00% of mass 198	78.16
443	17.00 - 23.00% of mass 442	15.20 (19.45)

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5HS

Column diameter: 0.20

Data File: s610202.d
Spectrum: Avg. Scans 198-200 (8.26), Background Scan 192
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	303	121.00	91	195.00	314	279.00	90
38.00	968	122.00	1654	196.00	6285	283.00	375
39.00	6157	123.00	2697	197.00	934	284.00	283
40.00	138	124.00	1073	198.00	195712	285.00	668
41.00	123	125.00	1079	199.00	13229	286.00	85
43.00	59	126.00	345	200.00	1047	289.00	103
45.00	226	127.00	96552	201.00	1042	290.00	43
49.00	599	128.00	7078	203.00	1064	292.00	190
50.00	20000	129.00	36256	204.00	6323	293.00	754
51.00	79056	130.00	3234	205.00	10520	294.00	218
52.00	4078	131.00	660	206.00	44920	295.00	190
53.00	187	132.00	338	207.00	5816	296.00	10847
55.00	330	133.00	229	208.00	1489	297.00	1471
56.00	2483	134.00	1022	209.00	480	298.00	43
57.00	5817	135.00	3045	210.00	561	301.00	174
58.00	250	136.00	1168	211.00	1689	302.00	214
60.00	95	137.00	1311	213.00	95	303.00	1398
61.00	950	138.00	196	215.00	421	304.00	346
62.00	1092	139.00	218	216.00	888	308.00	188
63.00	3057	140.00	426	217.00	10593	310.00	113
64.00	397	141.00	4581	218.00	1432	313.00	96
65.00	1664	142.00	1446	219.00	190	314.00	573
66.00	43	143.00	1014	221.00	10732	315.00	1094
67.00	178	144.00	291	223.00	2495	316.00	649
68.00	1172	145.00	312	224.00	23904	317.00	97
69.00	77936	146.00	850	225.00	6261	321.00	401
70.00	399	147.00	2263	226.00	632	322.00	160
71.00	41	148.00	4637	227.00	9332	323.00	3761
73.00	497	149.00	1016	228.00	1351	324.00	753
74.00	7327	150.00	335	229.00	1957	327.00	696
75.00	12020	151.00	555	230.00	296	328.00	348
76.00	3999	152.00	397	231.00	952	332.00	288
77.00	86520	153.00	1342	232.00	171	333.00	338
78.00	5999	154.00	1082	233.00	210	334.00	2440
79.00	5296	155.00	2498	234.00	595	335.00	649

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610202.d
Spectrum: Avg. Scans 198-200 (8.26), Background Scan 192
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	4369	156.00	3768	235.00	687	341.00	473
81.00	6015	157.00	801	236.00	463	342.00	102
82.00	1716	158.00	877	237.00	826	346.00	816
83.00	1607	159.00	691	239.00	421	347.00	108
84.00	207	160.00	1273	240.00	311	352.00	1162
85.00	1073	161.00	2026	241.00	488	353.00	819
86.00	1714	162.00	569	242.00	1349	354.00	1287
87.00	807	163.00	183	243.00	1271	355.00	337
88.00	294	164.00	276	244.00	19408	365.00	4617
89.00	156	165.00	1664	245.00	2601	366.00	710
91.00	1442	166.00	1275	246.00	3419	370.00	99
92.00	1501	167.00	8454	247.00	690	371.00	328
93.00	8963	168.00	3829	248.00	155	372.00	2143
94.00	681	169.00	761	249.00	702	373.00	515
95.00	102	170.00	294	250.00	100	383.00	581
96.00	526	171.00	378	251.00	109	384.00	166
97.00	235	172.00	773	252.00	206	390.00	332
98.00	6771	173.00	916	253.00	423	391.00	200
99.00	5495	174.00	1699	254.00	737	392.00	98
100.00	471	175.00	3321	255.00	97304	401.00	112
101.00	3151	176.00	1190	256.00	14566	402.00	861
102.00	217	177.00	1588	257.00	1091	403.00	1220
103.00	1127	178.00	518	258.00	5100	404.00	403
104.00	2081	179.00	6361	259.00	760	421.00	1019
105.00	1951	180.00	4460	260.00	111	422.00	992
106.00	668	181.00	2194	261.00	194	423.00	7956
107.00	26328	182.00	336	264.00	91	424.00	1694
108.00	4257	183.00	176	265.00	2140	425.00	123
109.00	726	184.00	514	266.00	218	438.00	45
110.00	50568	185.00	3001	268.00	27	439.00	98
111.00	7298	186.00	25880	270.00	94	440.00	118
112.00	941	187.00	7123	271.00	112	441.00	21784
113.00	305	188.00	763	272.00	235	442.00	152960
115.00	43	189.00	1450	273.00	3040	443.00	29752
116.00	1374	190.00	312	274.00	7787	444.00	2861

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610202.d
Spectrum: Avg. Scans 198-200 (8.26), Background Scan 192
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	17528	191.00	697	275.00	45464	445.00	118
118.00	1296	192.00	1948	276.00	6085		
119.00	221	193.00	2310	277.00	3305		
120.00	305	194.00	475	278.00	499		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201980055**				
Client Sample:	**QC for batch 926091**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 926091**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 11:59**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s610206-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

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Data file : /chem/MSD6.i/s120209.b/s610206-1.d
Lab Smp Id: 1201980055 Client Smp ID: TCLPBALNK
Inj Date : 02-DEC-2009 11:59
Operator : nag1 Inst ID: MSD6.i
Smp Info : |1201980055|927064|1|SVMF|1|TBLK01
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 5 QC Sample: TB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	249871	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	934540	40.0000	
* 46 Acenaphthene-d10	164	7.925	7.927	(1.000)	504510	40.0000	
* 67 Phenanthrene-d10	188	9.538	9.540	(1.000)	858736	40.0000	
* 91 Chrysene-d12	240	12.542	12.549	(1.000)	661689	40.0000	
* 98 Perylene-d12	264	14.858	14.863	(1.000)	503879	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	228171	36.4646	0.18
$ 5 Phenol-d5	99	4.401	4.406	(0.919)	179098	22.6775	0.11
$ 20 Nitrobenzene-d5	82	5.315	5.320	(0.878)	194666	29.4463	0.15
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	369321	28.4058	0.14
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	98605	66.9631	0.33
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	414291	38.8246	0.19

Data File: /chem/MSD6.i/s120209.b/s610206-1.d
Date : 02-DEC-2009 11:59
Client ID: TCLPBALNK
Sample Info: |1201980055192706411|SVMF|1|TBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

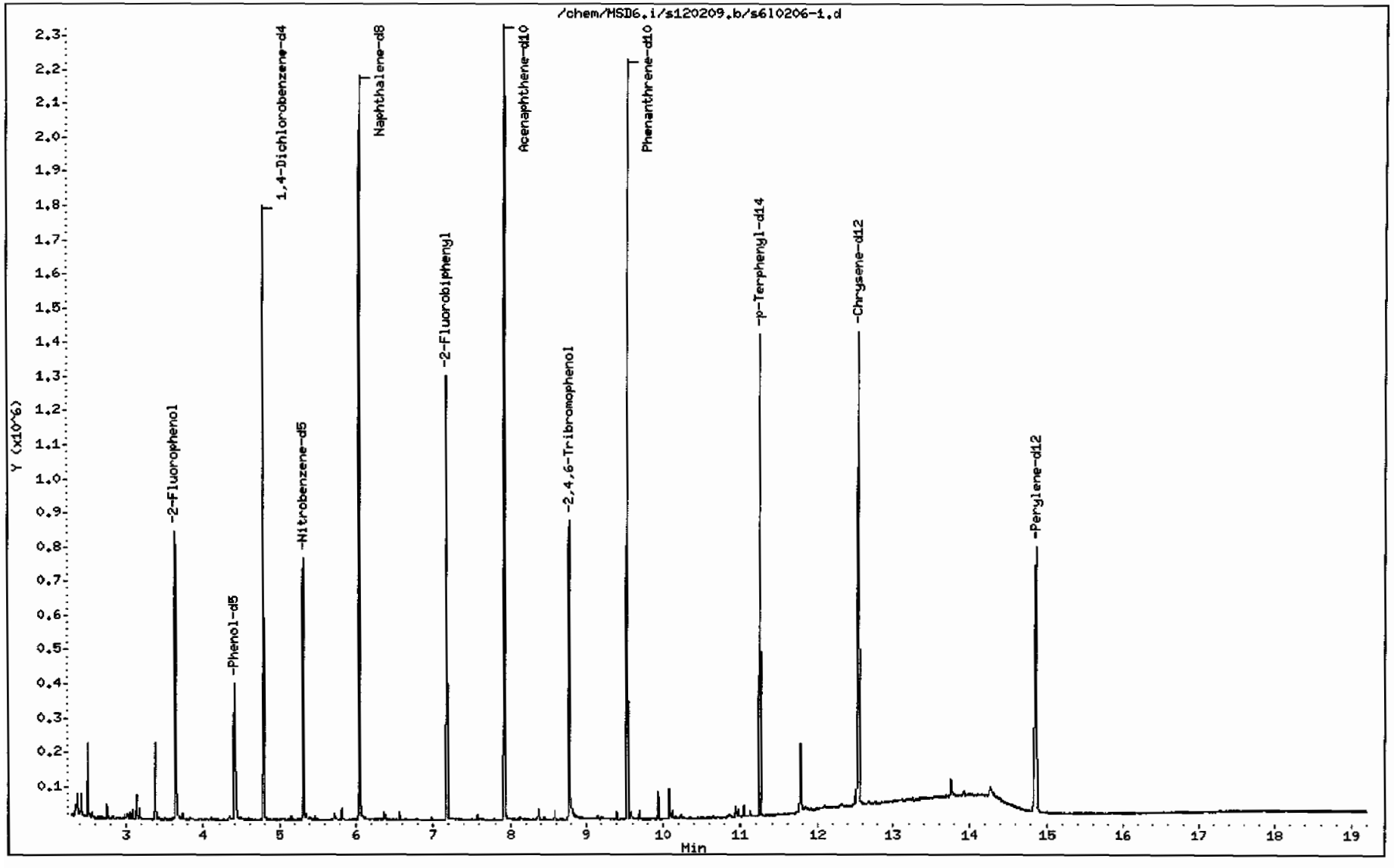

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982116**				
Client Sample:	**QC for batch 927063**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927063**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 12:28**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s610207-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene	U	0.010	mg/L	0.002	0.010
87-86-5	Pentachlorophenol	U	0.010	mg/L	0.002	0.010
110-86-1	Pyridine	U	0.010	mg/L	0.003	0.010
95-48-7	o-Cresol	U	0.010	mg/L	0.002	0.010
65794-96-9	m,p-Cresols	U	0.010	mg/L	0.003	0.010
67-72-1	Hexachloroethane	U	0.010	mg/L	0.002	0.010
98-95-3	Nitrobenzene	U	0.010	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene	U	0.010	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol	U	0.010	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol	U	0.010	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene	U	0.010	mg/L	0.002	0.010

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610207-1.d
Lab Smp Id: 1201982116 Client Smp ID: SBLK01
Inj Date : 02-DEC-2009 12:28
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201982116|927064|1|SVMF|1|SBLK01
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 11o00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	240512	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	900254	40.0000	
* 46 Acenaphthene-d10	164	7.925	7.927	(1.000)	490744	40.0000	
* 67 Phenanthrene-d10	188	9.535	9.540	(1.000)	823213	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	613554	40.0000	
* 98 Perylene-d12	264	14.853	14.863	(1.000)	436716	40.0000	
$ 3 2-Fluorophenol	112	3.636	3.636	(0.759)	298922	49.6304	0.050
$ 5 Phenol-d5	99	4.396	4.406	(0.918)	233356	30.6975	0.031
$ 20 Nitrobenzene-d5	82	5.315	5.320	(0.878)	258757	40.6317	0.041
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	494175	39.0749	0.039
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	117995	82.3787	0.082
$ 81 p-Terphenyl-d14	244	11.250	11.250	(0.897)	498281	50.3590	0.050

Data File: /chem/MSD6.i/s120209.b/s610207-1.d
Date : 02-DEC-2009 12:28
Client ID: SBLK01
Sample Info: 1120198211619270641 1 SVMF 1 1 SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

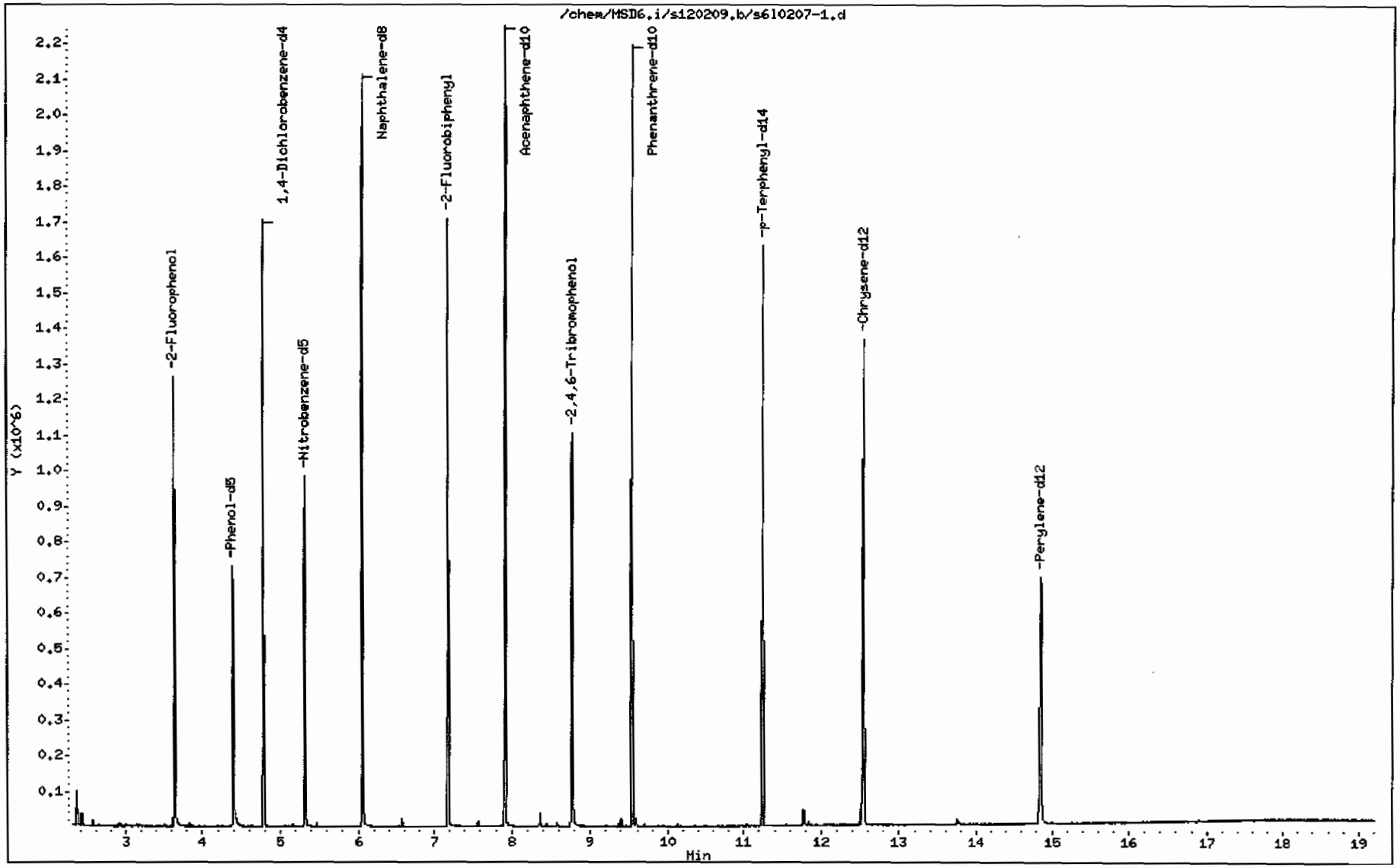

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982119**				
Client Sample:	**QC for batch 927063**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927063**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 12:56**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0208-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene		0.0585	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene		0.0783	mg/L	0.002	0.010
87-86-5	Pentachlorophenol		0.0759	mg/L	0.002	0.010
110-86-1	Pyridine		0.0628	mg/L	0.003	0.010
95-48-7	o-Cresol		0.059	mg/L	0.002	0.010
65794-96-9	m,p-Cresols		0.0599	mg/L	0.003	0.010
67-72-1	Hexachloroethane		0.0527	mg/L	0.002	0.010
98-95-3	Nitrobenzene		0.0681	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene		0.0568	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol		0.0773	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol		0.077	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene		0.0791	mg/L	0.002	0.010

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610208-1.d
Lab Smp Id: 1201982119 Client Smp ID: SBLK01LCS
Inj Date : 02-DEC-2009 12:56
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201982119|927064|1|SVMF|1|SBLK01LCS
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	233217	40.0000	
* 29 Naphthalene-d8	136	6.057	6.059	(1.000)	903849	40.0000	
* 46 Acenaphthene-d10	164	7.925	7.927	(1.000)	502849	40.0000	
* 67 Phenanthrene-d10	188	9.538	9.540	(1.000)	874679	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	685622	40.0000	
* 98 Perylene-d12	264	14.855	14.863	(1.000)	534290	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	252749	43.2769	0.043
$ 5 Phenol-d5	99	4.396	4.406	(0.918)	193260	26.2181	0.026
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.878)	231395	36.1906	0.036
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	454377	35.0632	0.035
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	127787	87.0674	0.087
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	513716	46.4615	0.046
11 1,4-Dichlorobenzene	146	4.806	4.803	(1.004)	406280	58.4773	0.058

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	8.118	8.123	(1.024)	303935	78.3391	0.078
65 Pentachlorophenol	266	9.321	9.321	(0.977)	153713	75.9182	0.076
2 Pyridine	79	2.734	2.734	(0.571)	310148	62.7613	0.063
15 o-Cresol	107	4.984	4.987	(1.041)	286055	59.0128	0.059
18 m,p-Cresols	107	5.134	5.140	(1.072)	367671	59.8607	0.060
19 Hexachloroethane	117	5.282	5.282	(1.103)	141626	52.6920	0.053
21 Nitrobenzene	77	5.343	5.341	(0.882)	439159	68.1476	0.068
32 Hexachlorobutadiene	225	6.189	6.189	(1.022)	162163	56.8035	0.057
37 2,4,6-Trichlorophenol	196	7.094	7.094	(0.895)	265334	77.3304	0.077
38 2,4,5-Trichlorophenol	196	7.135	7.137	(0.900)	281455	77.0254	0.077
63 Hexachlorobenzene	284	9.115	9.112	(0.956)	286023	79.1152	0.079

Data File: /chem/MSD6.i/s120209.b/s610208-1.d
Date : 02-DEC-2009 12:56
Client ID: SBLK01LCS
Sample Info: |120198211|927064|1|SVMF|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

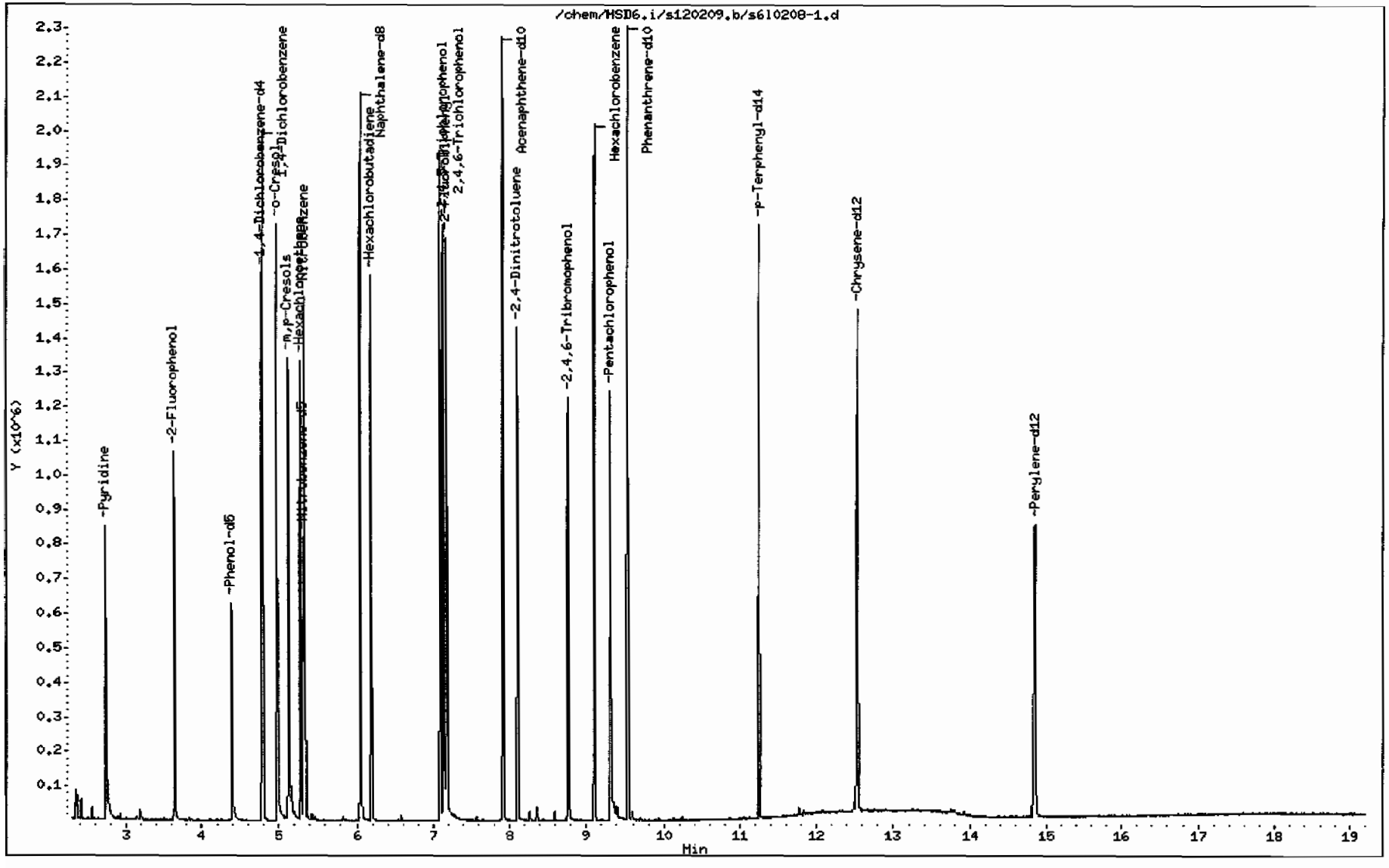

Miscellaneous Data

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926091 **Verified by:** _____

Analyst: Clifford Postell

Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13

Instrument: TCLP Tumbler #106

Sample ID Analysis Start Date	1201980055 TB 24-NOV-2009 16:30:47	241424001 24-NOV-2009 16:30:47	241424002 24-NOV-2009 16:30:47	241527001 24-NOV-2009 16:30:47
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.91	7.16	8.21	7.89
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.92	5	5	5
Final pH (su)	4.92	1.85	1.91	2.04
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	1000	1000	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:45
Filtration End Date: 25-NOV-09 13:30:45
Bottle Lot Number: H929301DB
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 927063 **Verified by:** _____

Analyst: Jesse Craig

Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 21

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Sec Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201980055 TB	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
1201982116 MB	01-DEC-2009 17:09:37	1000	5	1	13	1	0.001
1201982119 LCS	01-DEC-2009 17:09:37	1000	5	1	13	1	0.001
241424001	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
1201982117 MS (241424001)	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
1201982118 MSD (241424001)	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
241424002	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
241527001	01-DEC-2009 17:09:37	200	5	1	13	1	0.005

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982119	8270 TCLP Spiking Solution	UE091121-16	1	mL
MS	1201982117	8270 TCLP Spiking Solution	UE091121-16	1	mL
MSD	1201982118	8270 TCLP Spiking Solution	UE091121-16	1	mL
SURR	All	BNA for all Surrogate	UE091117-10	1	mL
REGNT	All	Sulfuric Acid Sol., 1:1	1228597	2	mL
REGNT	All	Methylene Chloride	1231728-D	360	mL
REGNT	All	10 N Sodium Hydroxide Solution	1233279	10	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

All samples became emulsive during the basic phase of the extraction. However, no additional methylene chloride was necessary to break the emulsion.

Verified By: SJ

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/02/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610201.d	WBN091128-01	AMY	02-DEC-2009 08:08	50 PPM	s120209	1.0	DFTPP	DUSE
s610202.d	WBN091128-01	nagl	02-DEC-2009 09:54	50 PPM	s120209	1.0	DFTPP	222113
s610203.d	WBN091106-05.3	nagl	02-DEC-2009 10:08	40 PPM	s120209	1.0	MEGACVS	
s610204.d	WBN091111-03.4	nagl	02-DEC-2009 10:58	40 PPM	s120209	1.0	APCVS	
s610205.d	WBN091029-23.4	nagl	02-DEC-2009 11:26	40 PPM	s120209	1.0	PESTCVS	
s610206.d	1201980055	nagl	02-DEC-2009 11:59	927064	10-578-1	1.0	TBLK01	
s610207.d	1201982116	nagl	02-DEC-2009 12:28	927064	10-578-1	1.0	SBLK01	
s610208.d	1201982119	nagl	02-DEC-2009 12:56	927064	10-578-1	1.0	SBLK01LCS	
s610209.d	1201980841	nagl	02-DEC-2009 13:24	927714	10-648-1	1.0	TBLK01	
s610210.d	1201983692	nagl	02-DEC-2009 13:53	927714	10-648-1	1.0	SBLK01	
s610211.d	1201983693	nagl	02-DEC-2009 14:21	927714	10-648-1	1.0	SBLK01LCS	
s610212.d	1201981831	nagl	02-DEC-2009 14:50	926929	241779	1.0	SBLK01	DUSE
s610213.d	1201981834	nagl	02-DEC-2009 15:19	926929	241779	1.0	SBLK01LCS	DUSE
s610214.d	241424001	nagl	02-DEC-2009 15:48	927064	10-578-1	1.0	LANL	
s610215.d	1201982117	nagl	02-DEC-2009 16:17	927064	10-578-1	1.0	LANL001MS	
s610216.d	1201982118	nagl	02-DEC-2009 16:46	927064	10-578-1	1.0	LANL001MSD	
s610217.d	241424002	nagl	02-DEC-2009 17:16	927064	10-578-1	1.0	LANL	
s610218.d	241527001	nagl	02-DEC-2009 17:45	927064	10-600-1	1.0	LANL	
s610219.d	241704001	nagl	02-DEC-2009 18:14	927714	10-648-1	1.0	LANL	

s610220.d	1201983694	nag1	02-DEC-2009 18:44	927714	10-648-1		1.0	LANL001MS	
s610221.d	1201983695	nag1	02-DEC-2009 19:14	927714	10-648-1		1.0	LANL001MSD	
s610222.d	241704002	nag1	02-DEC-2009 19:43	927714	10-648-1		1.0	LANL	
s610223.d	241837001	nag1	02-DEC-2009 20:13	926941	241837		1.0	NREA	USE - failed surr - sample consumed - rr of s610129
s610224.d	241842008	nag1	02-DEC-2009 20:43	926941	241842		40.0	NREA	USE - failed surr - diluted - rr of s610130

Instrument Batch: /chem/MSD6.i/s120209.b

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 11/09/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1198658-D
Multiplier Voltage: 1565 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s110909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6k0901.d	WBN091101-01	JMB3	09-NOV-2009 11:20	50 PPM	s110909	1.0	DFTPP	DUSE
s6k0902.d	inst blk	JMB3	09-NOV-2009 11:35	--------	s110909	1.0	INST BLK	DUSE
s6k0903.d	WBN091106-08	JMB3	09-NOV-2009 12:23	1 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0904.d	WBN091106-07	JMB3	09-NOV-2009 13:00	10 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0905.d	WBN091106-06	JMB3	09-NOV-2009 13:36	20 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0906.d	WBN091106-05.1	JMB3	09-NOV-2009 14:14	40 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0907.d	WBN091106-04	JMB3	09-NOV-2009 14:52	50 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0908.d	WBN091106-03	JMB3	09-NOV-2009 15:30	80 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0909.d	WBN091106-02	JMB3	09-NOV-2009 16:06	100 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0910.d	WBN091106-01	JMB3	09-NOV-2009 16:43	120 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0911-D.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0912.d	inst blk	JMB3	09-NOV-2009 18:15	--------	s110909	1.0	INST BLK	
s6k0913.d	WBN091106-08	JMB3	09-NOV-2009 18:53	1 PPM	s110909	1.0	MEGAICAL	
s6k0914.d	WBN091106-07	JMB3	09-NOV-2009 19:31	10 PPM	s110909	1.0	MEGAICAL	
s6k0915.d	WBN091106-06	JMB3	09-NOV-2009 20:09	20 PPM	s110909	1.0	MEGAICAL	
s6k0916.d	WBN091106-05.1	JMB3	09-NOV-2009 20:46	40 PPM	s110909	1.0	MEGAICAL	
s6k0917.d	WBN091106-04	JMB3	09-NOV-2009 21:25	50 PPM	s110909	1.0	MEGAICAL	
s6k0918.d	WBN091106-03	JMB3	09-NOV-2009 22:01	80 PPM	s110909	1.0	MEGAICAL	

s6k0919.d	WBN091106-02	JMB3	09-NOV-2009 22:39	100 PPM	s110909	1.0	MEGAICAL	
s6k0920.d	WBN091106-01	JMB3	09-NOV-2009 23:16	120 PPM	s110909	1.0	MEGAICAL	
s6k0921-D.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0921.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0922.d	inst blk	JMB3	10-NOV-2009 11:21	--------	s110909	1.0	INST BLK	
s6k0923.d	WBN091016-01	JMB3	10-NOV-2009 11:59	10 PPM	s110909	1.0	AP12ICAL	
s6k0924.d	WBN091016-02	JMB3	10-NOV-2009 12:36	20 PPM	s110909	1.0	AP12ICAL	
s6k0925.d	WBN091016-03	JMB3	10-NOV-2009 13:13	40 PPM	s110909	1.0	AP12ICAL	
s6k0926.d	WBN091016-04	JMB3	10-NOV-2009 13:51	50 PPM	s110909	1.0	AP12ICAL	
s6k0927.d	WBN091016-05	JMB3	10-NOV-2009 14:30	80 PPM	s110909	1.0	AP12ICAL	
s6k0928.d	WBN091016-06	JMB3	10-NOV-2009 15:06	100 PPM	s110909	1.0	AP12ICAL	
s6k0929.d	WBN091016-07	JMB3	10-NOV-2009 15:43	120 PPM	s110909	1.0	AP12ICAL	
s6k0930.d	WBN091029-25	JMB3	10-NOV-2009 16:20	10 PPM	s110909	1.0	PESTICAL	
s6k0931.d	WBN091029-24	JMB3	10-NOV-2009 16:56	20 PPM	s110909	1.0	PESTICAL	
s6k0932.d	WBN091029-23.1	JMB3	10-NOV-2009 17:33	40 PPM	s110909	1.0	PESTICAL	
s6k0933.d	WBN091029-22	JMB3	10-NOV-2009 18:09	50 PPM	s110909	1.0	PESTICAL	
s6k0934.d	WBN091029-21	JMB3	10-NOV-2009 18:45	80 PPM	s110909	1.0	PESTICAL	
s6k0935.d	WBN091029-20	JMB3	10-NOV-2009 19:21	100 PPM	s110909	1.0	PESTICAL	
s6k0936.d	WBN091029-19	JMB3	10-NOV-2009 19:58	120 PPM	s110909	1.0	PESTICAL	
s6k0937-D.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	FAILED SC 8270D
s6k0937.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	
s6k0938-D.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0938.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0939-D.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0939.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0940-D.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	
s6k0940.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	

s6k0941.d	inst blk	JMB3	10-NOV-2009 22:26	--------	s110909	1.0	INST BLK	
s6k0942.d	WBN091016-16	JMB3	10-NOV-2009 22:55	500 PPM	s110909	1.0	HEXICAL	
s6k0943.d	WBN091016-15	JMB3	10-NOV-2009 23:24	1000 PPM	s110909	1.0	HEXICAL	
s6k0944.d	WBN091016-14	JMB3	10-NOV-2009 23:53	1250 PPM	s110909	1.0	HEXICAL	
s6k0945.d	WBN091016-13	JMB3	11-NOV-2009 00:21	1500 PPM	s110909	1.0	HEXICAL	
s6k0946.d	WBN091016-12	JMB3	11-NOV-2009 00:50	1750 PPM	s110909	1.0	HEXICAL	
s6k0947.d	UBN090828-02.4-16	JMB3	11-NOV-2009 01:18	500 PPM	s110909	1.0	HEXICAL	
s6k0948.d	UBN090924-01	JMB3	11-NOV-2009 01:47	10 PPM	s110909	1.0	NEVICAL	
s6k0949.d	UBN090924-02	JMB3	11-NOV-2009 02:16	20 PPM	s110909	1.0	NEVICAL	
s6k0950.d	UBN090924-03	JMB3	11-NOV-2009 02:44	40 PPM	s110909	1.0	NEVICAL	
s6k0951.d	UBN090924-04	JMB3	11-NOV-2009 03:12	50 PPM	s110909	1.0	NEVICAL	
s6k0952.d	UBN090924-05	JMB3	11-NOV-2009 03:41	80 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0953.d	UBN090924-06	JMB3	11-NOV-2009 04:10	100 PPM	s110909	1.0	NEVICAL	
s6k0954.d	UBN090924-07	JMB3	11-NOV-2009 04:38	120 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0955-D.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	DUSE - failed >70%-130%
s6k0955.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610215.d
Lab Smp Id: 1201982117 Client Smp ID: WST03-10-2131MS
Inj Date : 02-DEC-2009 16:17
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201982117|927064|1|SVMF|1|LANL001MS
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	225538	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	841485	40.0000	
* 46 Acenaphthene-d10	164	7.922	7.927	(1.000)	455444	40.0000	
* 67 Phenanthrene-d10	188	9.537	9.540	(1.000)	784435	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	646881	40.0000	
* 98 Perylene-d12	264	14.855	14.863	(1.000)	512844	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	275632	48.8019	0.24
$ 5 Phenol-d5	99	4.395	4.406	(0.918)	215441	30.2224	0.15
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.879)	233189	39.1741	0.20
$ 39 2-Fluorobiphenyl	172	7.183	7.183	(0.907)	456063	38.8564	0.19
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	125023	94.0505	0.47
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	518541	49.7066	0.25
11 1,4-Dichlorobenzene	146	4.806	4.803	(1.004)	412963	61.4630	0.31

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	8.118	8.123	(1.025)	287695	81.8715	0.41
65 Pentachlorophenol	266	9.321	9.321	(0.977)	159828	87.1635	0.44
2 Pyridine	79	2.742	2.734	(0.573)	365710	76.5245	0.38
15 o-Cresol	107	4.984	4.987	(1.041)	297806	63.5288	0.32
18 m,p-Cresols	107	5.134	5.140	(1.072)	374050	62.9727	0.31
19 Hexachloroethane	117	5.282	5.282	(1.103)	144080	55.4301	0.28
21 Nitrobenzene	77	5.343	5.341	(0.883)	440807	73.4728	0.37
32 Hexachlorobutadiene	225	6.189	6.189	(1.022)	162160	61.0121	0.30
37 2,4,6-Trichlorophenol	196	7.091	7.094	(0.895)	262468	84.4571	0.42
38 2,4,5-Trichlorophenol	196	7.135	7.137	(0.901)	293631	88.7217	0.44
63 Hexachlorobenzene	284	9.114	9.112	(0.956)	280062	86.3784	0.43

Data File: /chem/MSD6.i/s120209.b/s610215.d

Date : 02-DEC-2009 16:17

Client ID: WST03-10-2131MS

Sample Info: |1201982117|927064|1|SVMF|1|LANL001MS

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nagi

Column diameter: 0.20

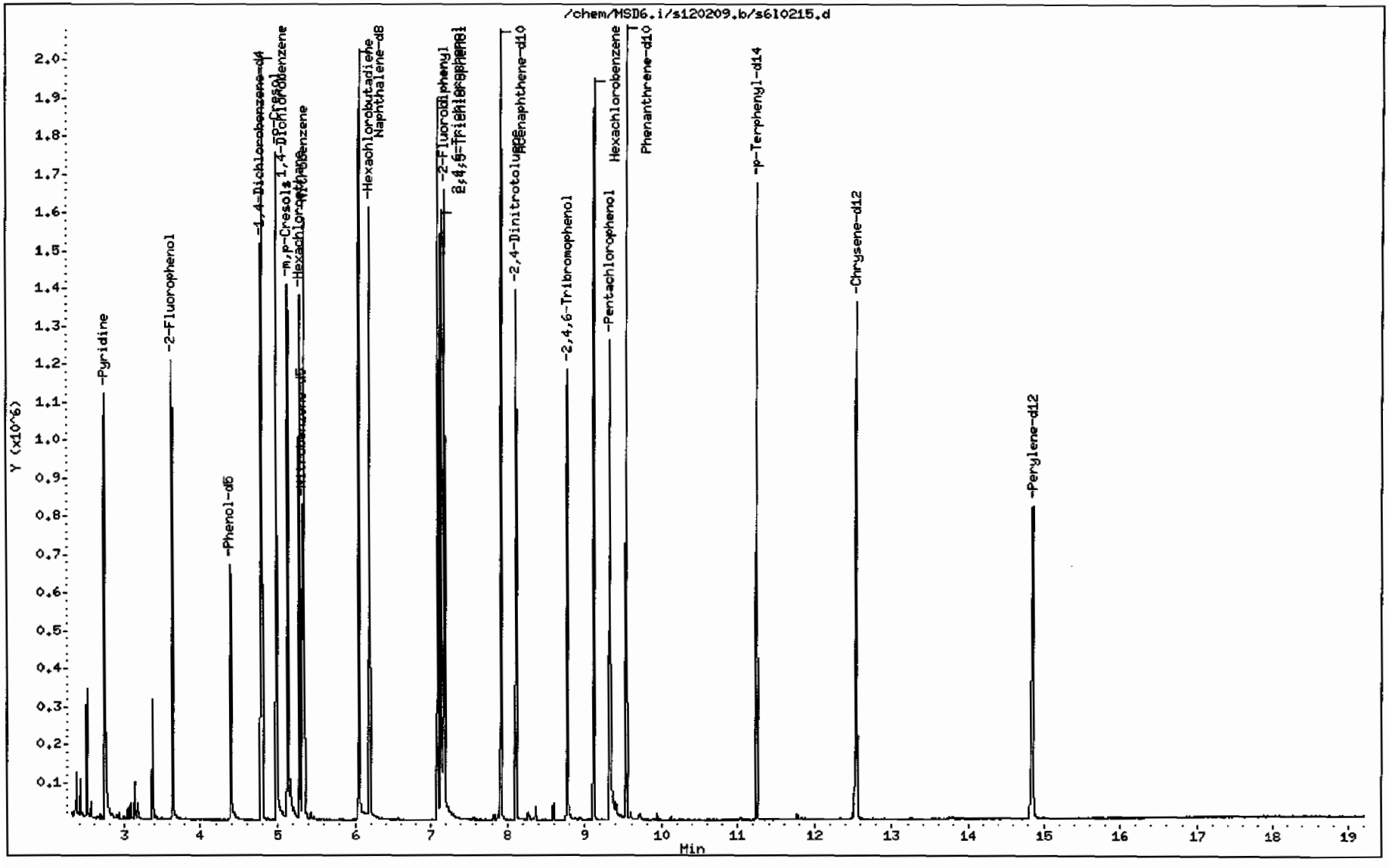

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610216.d
Lab Smp Id: 1201982118 Client Smp ID: WST03-10-2131MSD
Inj Date : 02-DEC-2009 16:46
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201982118|927064|1|SVMF|1|LANL001MSD
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	226840	40.0000	
* 29 Naphthalene-d8	136	6.057	6.059	(1.000)	848203	40.0000	
* 46 Acenaphthene-d10	164	7.922	7.927	(1.000)	464376	40.0000	
* 67 Phenanthrene-d10	188	9.537	9.540	(1.000)	807366	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	646296	40.0000	
* 98 Perylene-d12	264	14.853	14.863	(1.000)	491283	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	265293	46.7017	0.23
$ 5 Phenol-d5	99	4.395	4.406	(0.918)	206890	28.8563	0.14
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.878)	237561	39.5925	0.20
$ 39 2-Fluorobiphenyl	172	7.183	7.183	(0.907)	469735	39.2514	0.20
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	131202	96.8004	0.48
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	515979	49.5058	0.25
11 1,4-Dichlorobenzene	146	4.806	4.803	(1.004)	440208	65.1419	0.32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	8.121	8.123	(1.025)	298155	83.2162	0.42
65 Pentachlorophenol	266	9.321	9.321	(0.977)	154836	82.3583	0.41
2 Pyridine	79	2.739	2.734	(0.572)	348044	72.4099	0.36
15 o-Cresol	107	4.984	4.987	(1.041)	295897	62.7593	0.31
18 m,p-Cresols	107	5.134	5.140	(1.072)	358346	59.9826	0.30
19 Hexachloroethane	117	5.282	5.282	(1.103)	157435	60.2203	0.30
21 Nitrobenzene	77	5.343	5.341	(0.882)	453225	74.9443	0.37
32 Hexachlorobutadiene	225	6.189	6.189	(1.022)	177322	66.1884	0.33
37 2,4,6-Trichlorophenol	196	7.094	7.094	(0.895)	276654	87.3096	0.44
38 2,4,5-Trichlorophenol	196	7.135	7.137	(0.901)	298293	88.3967	0.44
63 Hexachlorobenzene	284	9.114	9.112	(0.956)	286041	85.7168	0.43

Data File: /chem/MSD6.i/s120209.b/s610216.d
Date : 02-DEC-2009 16:46
Client ID: WST03-10-2131MSD
Sample Info: |120198211819270641|1|SVMF|1|LAML001MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

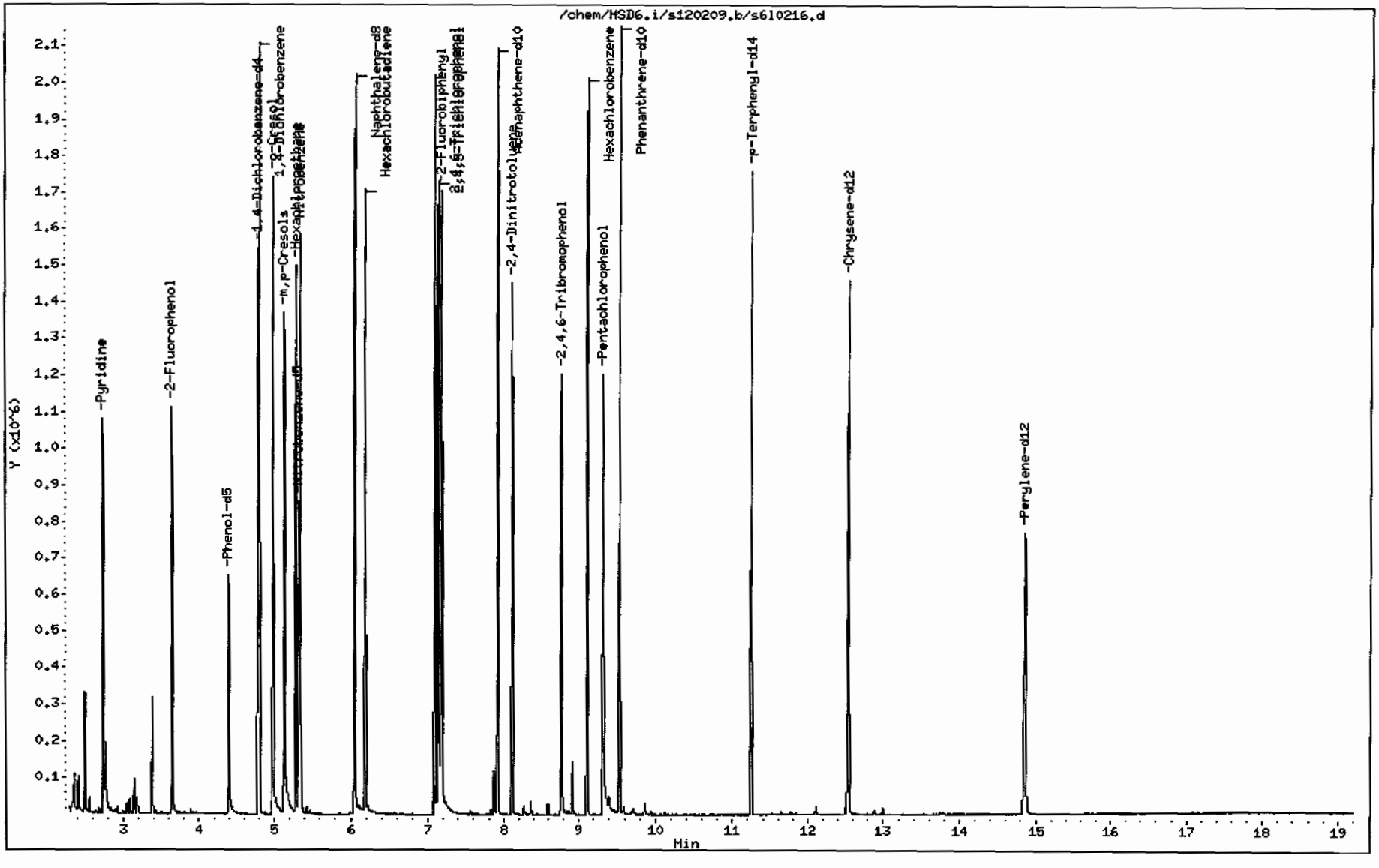

GC SEMIVOLATILE DRO ANALYSIS

DRO Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Analysis of Diesel Range Organics by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	926871
Prep Batch Number:	926870

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241524002	WST03-10-2132
1201981721	Method Blank (MB)
1201981724	Laboratory Control Sample (LCS)
1201981722	241417001(RE03-09-13812) Matrix Spike (MS)
1201981723	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-575) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241524002 (WST03-10-2132) was diluted at 1:10 due to thick and oily matrix of the extract.

Sample Re-extraction/Re-analysis
Re-extractions were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned

and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao **Date:** 12/14/09

Roadmap for LANL 10-600 DRO

This roadmap was analyzed by kev01577 on 12-02-2009, 01:55.
This roadmap was reviewed by jim01140 on 12-02-2009, 08:49.
This roadmap was packaged by yml on 12-12-2009, 07:48.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/fid5.i/113009dr/018f1801.d	241524002	01-DEC-2009	03:03	10-600.sub	WST03-10-2132	10.00000	926871	DUSE, INSTRUMENT SHUTDOWN
□	N	/chem/fid5.i/120109dr/008f0801.d	241524002	01-DEC-2009	17:02	10-600.sub	WST03-10-2132	10.00000	926871	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/fid5.i/113009dr/005f0501.d	1201981721	mb	30-NOV-2009	18:43	all.sub	DBLK01	1.00000	926871	USE
□	N	/chem/fid5.i/113009dr/006f0601.d	1201981724	lcs	30-NOV-2009	19:21	all.sub	DBLK01LCS	1.00000	926871	USE
■	N	/chem/fid5.i/113009dr/008f0801.d	1201981722	ms	30-NOV-2009	20:38	10-575.sub	RE03-09-13812MS	1.00000	926871	USE
■	N	/chem/fid5.i/113009dr/009f0901.d	1201981723	msd	30-NOV-2009	21:17	10-575.sub	RE03-09-13812MSD	1.00000	926871	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2132	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 17:02	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	70.9	mg/kg	23.0	70.9

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10–600

Matrix Type: SOLID

CAP Column (1) : DB–5MS

Sample ID	Client ID	OTP %REC	
1201981721	MB for batch 926870	59	
1201981724	LCS for batch 926870	83	
241524002	WST03–10–2132	52	D

Surrogate	Acceptance Limits
OTP = o–Terphenyl	(24%–124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10–600
Client ID: LCS for batch 926870
Lab Sample ID: 1201981724
Instrument: FID5.I
Analyst: KXR2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 19:21
Dilution: 1
Prep Batch ID: 926870
Batch ID: 926871

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	27.7	83	53–114

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**	
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**	
Lab Sample ID:	**1201981722**	**%Moisture:**	**7.1**	
Instrument:	**FID5.I**	**Analysis Date:**	**11/30/2009 20:38**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID:**	**926870**	
Inj. Vol:	**1 uL**	**Batch ID:**	**926871**	

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	35.7	3.19	J	28.1	70	21-122

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13812MSD**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981723**	**%Moisture:**	**7.1**
Instrument:	**FID5.I**	**Analysis Date:**	**11/30/2009 21:17**
Analyst:	**KXR2**	**Prep Batch ID:**	**926870**
Inj. Vol:	**1 uL**	**Batch ID:**	**926871**

Dilution: 1

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	35.7	3.19	J	28.0	70	21-122	0	0-30

Method Blank Summary

SDG Number:	10–600	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926870	Instrument ID:	FID5.I	Data File:	005f0501.d
Lab Sample ID:	1201981721	Prep Date:	11/29/2009 20:04	Analyzed:	11/30/09 18:43
Column:	DB–5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926870	1201981724	006f0601.d	11/30/09	1921
04 WST03–10–2132	241524002	008f0801.d	12/01/09	1702

SAMPLE
DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2132	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	10
Run Date:	12/01/2009 17:02	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	70.9	mg/kg	23.0	70.9

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/008f0801.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 01-DEC-2009 17:02
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241524002|10|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 8
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weigth of sample extracted (g)
M	6.23420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.132	14.143	-0.011	223170	1.04984	0.37

Data File: /chem/fid5.i/120109dr/008f0801.d
Date : 01-DEC-2009 17:02
Client ID: WST03-10-2132
Sample Info: [2415240021101]
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i
Operator: KXR2
Column diameter: 0.25

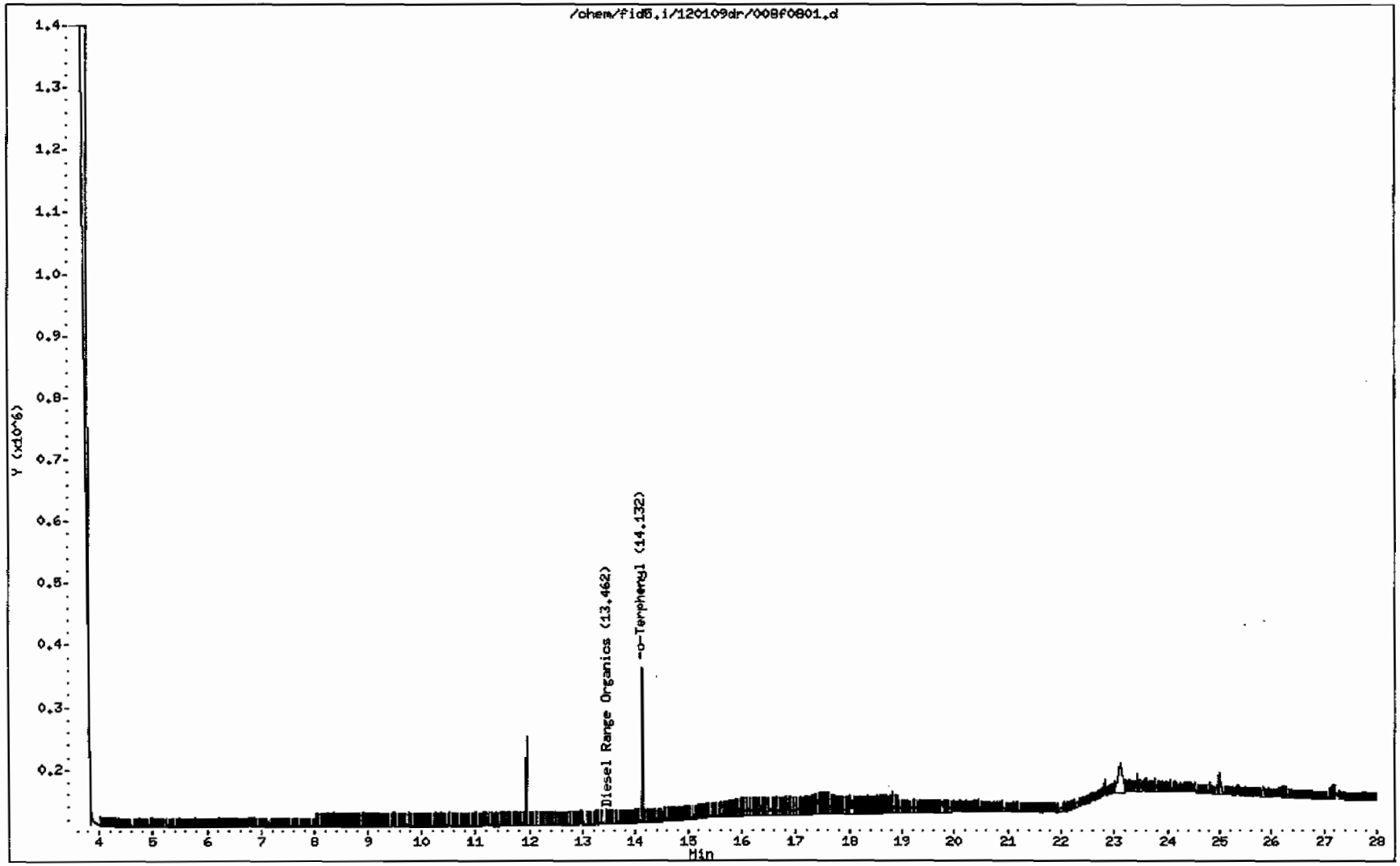

STANDARDS DATA

Report Date: 02-Dec-2009 01:12

Calibration History

Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 23:51	dro	/chem/fid5.i/113009dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 17:28	dro	/chem/fid5.i/113009dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 01-Dec-2009 09:57 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

		Compound	RT	RT Window	RF
	3	Decane (C10)	8.032	8.002-8.062	
S	1	Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2	o-Terphenyl	14.145	14.115-14.175	2.126e+05
	4	Octacosane (C28)	18.867	18.837-18.897	
S	75	JP-4	6.750	3.500-10.000	
S	76	Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Cal Date : 01-Dec-2009 09:57 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

Report Date: 02-Dec-2009 01:25

Calibration History

Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 20:14	dro	/chem/fid5.i/120109dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 13:52	dro	/chem/fid5.i/120109dr/003f0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 02-Dec-2009 00:58 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

		Compound	RT	RT Window	RF
	3	Decane (C10)	8.030	8.000-8.060	
S	1	Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2	o-Terphenyl	14.143	14.113-14.173	2.126e+05
	4	Octacosane (C28)	18.876	18.846-18.906	
S	75	JP-4	6.750	3.500-10.000	
S	76	Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Cal Date : 02-Dec-2009 00:58 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 1728

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	141780.20	0.01	5.3	15.0
o-Terphenyl	212576.33	208247.31	0.01	-2.0	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 2351

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	152520.07	0.01	13.3	15.0
o-Terphenyl	212576.33	223357.08	0.01	5.1	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: FID5 Calibration Date: 12/01/09 Time: 1352

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	125736.25	0.01	-6.6	15.0
o-Terphenyl	212576.33	183804.11	0.01	-13.5	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: FID5 Calibration Date: 12/01/09 Time: 2014

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	130427.81	0.01	-3.1	15.0
o-Terphenyl	212576.33	190301.73	0.01	-10.5	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 30-NOV-2009 17:28
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
$ 1 Diesel Range Organics					CAS #:
8.008- 18.916			141780197	1000.00	1050
$ 2 o-Terphenyl					CAS #: 84-15-1
14.145	14.145	0.000	5206182	25.0000	24.5

Data File: /chem/fid5.i/113009dr/003f0301.d
Date : 30-NOV-2009 17:28
Client ID: DSTD01
Sample Info: IUFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

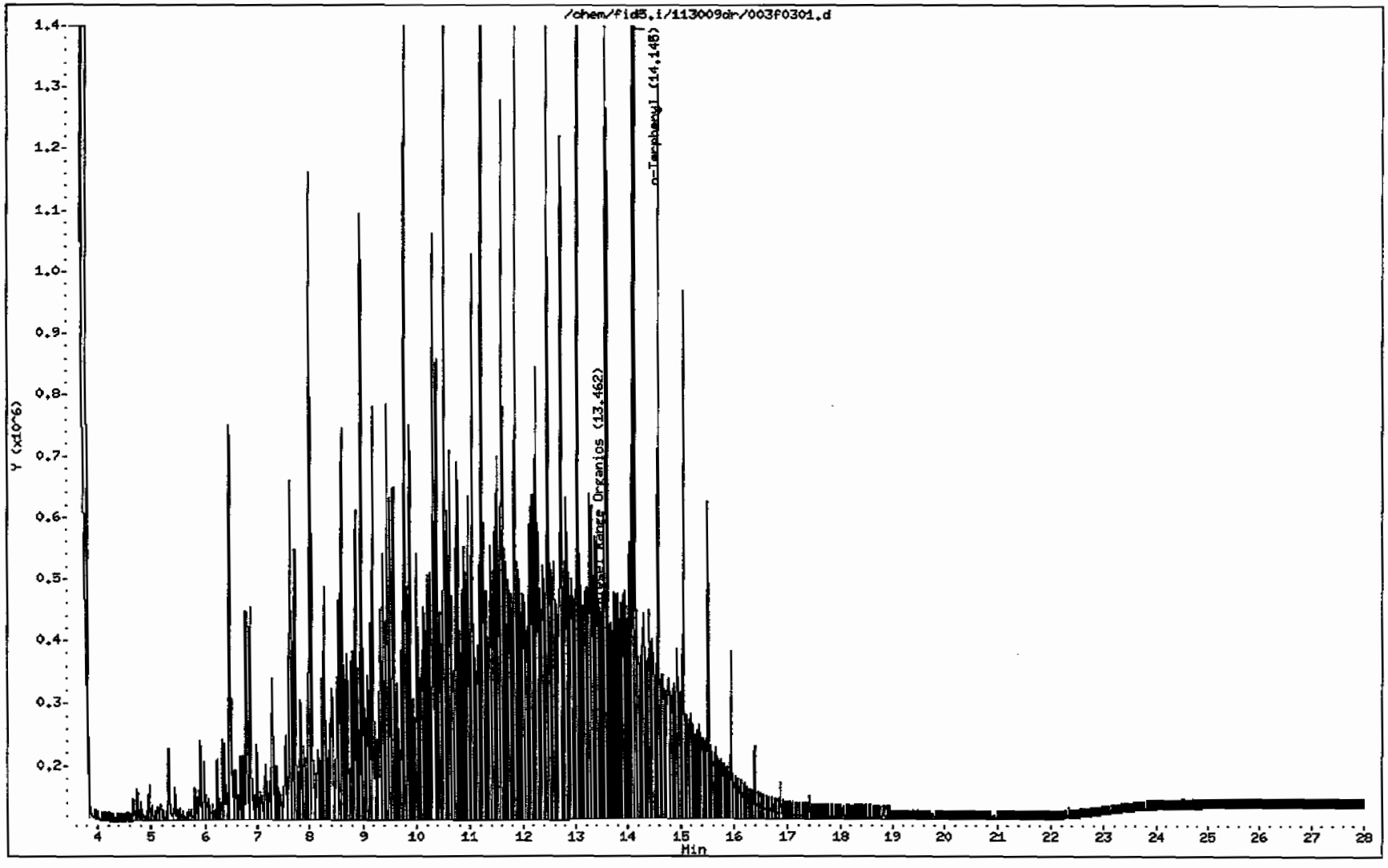

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 30-NOV-2009 23:51
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S 1 Diesel Range Organics					CAS #:
8.008~ 18.916			152520070	1000.00	1130
$ 2 o-Terphenyl					CAS #: 84-15-1
14.146	14.145	0.001	5583926	25.0000	26.3

Data File: /chem/fid5.i/113009dr/013f1301.d
Date : 30-NOV-2009 23:51
Client ID: DSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

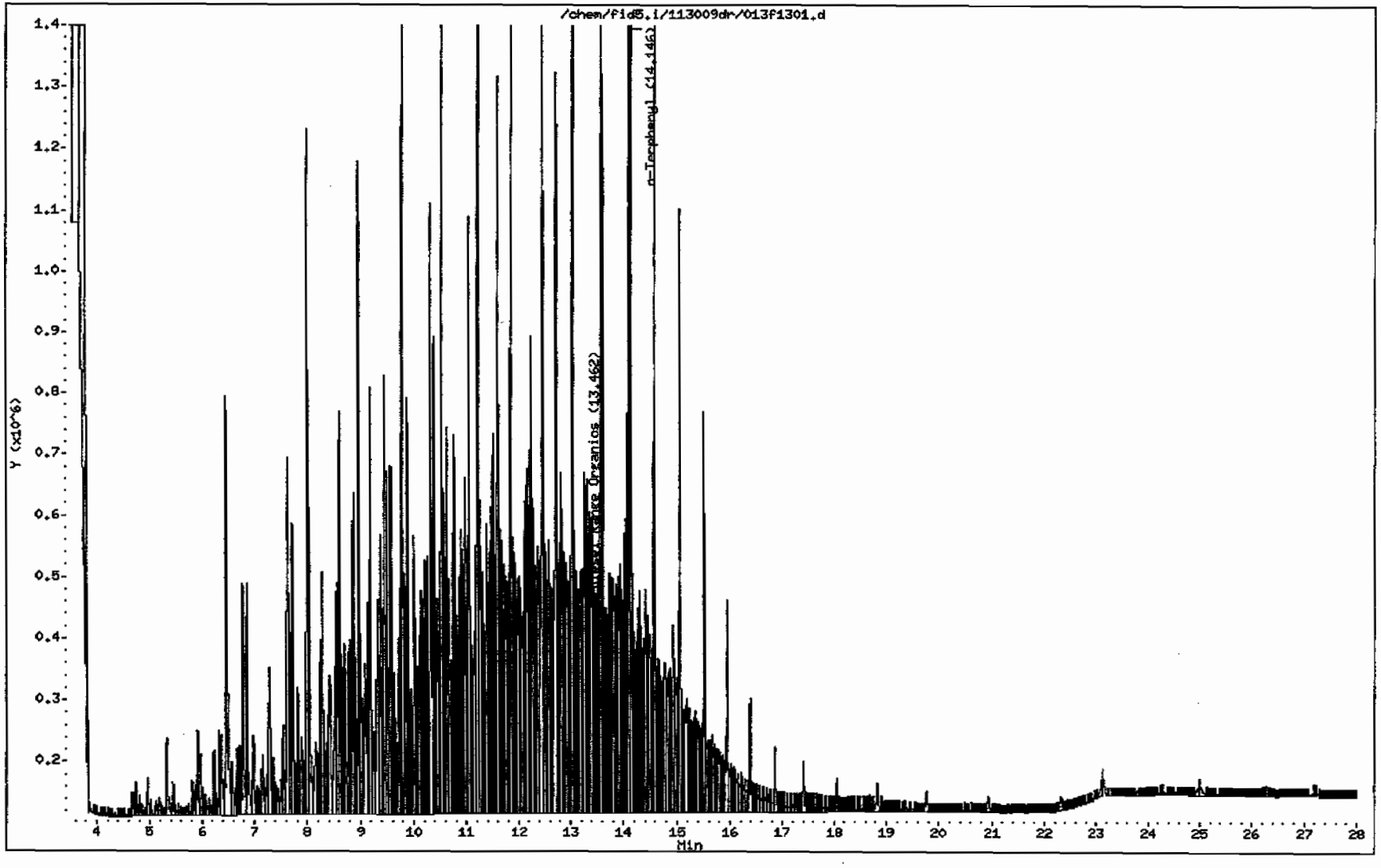

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 01-DEC-2009 13:52
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	ON-COL (mg/L)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			125736252	1000.00	934
$ 2 o-Terphenyl					CAS #: 84-15-1
14.143	14.143	0.000	4595102	25.0000	21.6

Data File: /chem/fid5.i/120109dr/003f0301.d
Date : 01-DEC-2009 13:52
Client ID: DSTD01
Sample Info: IUFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

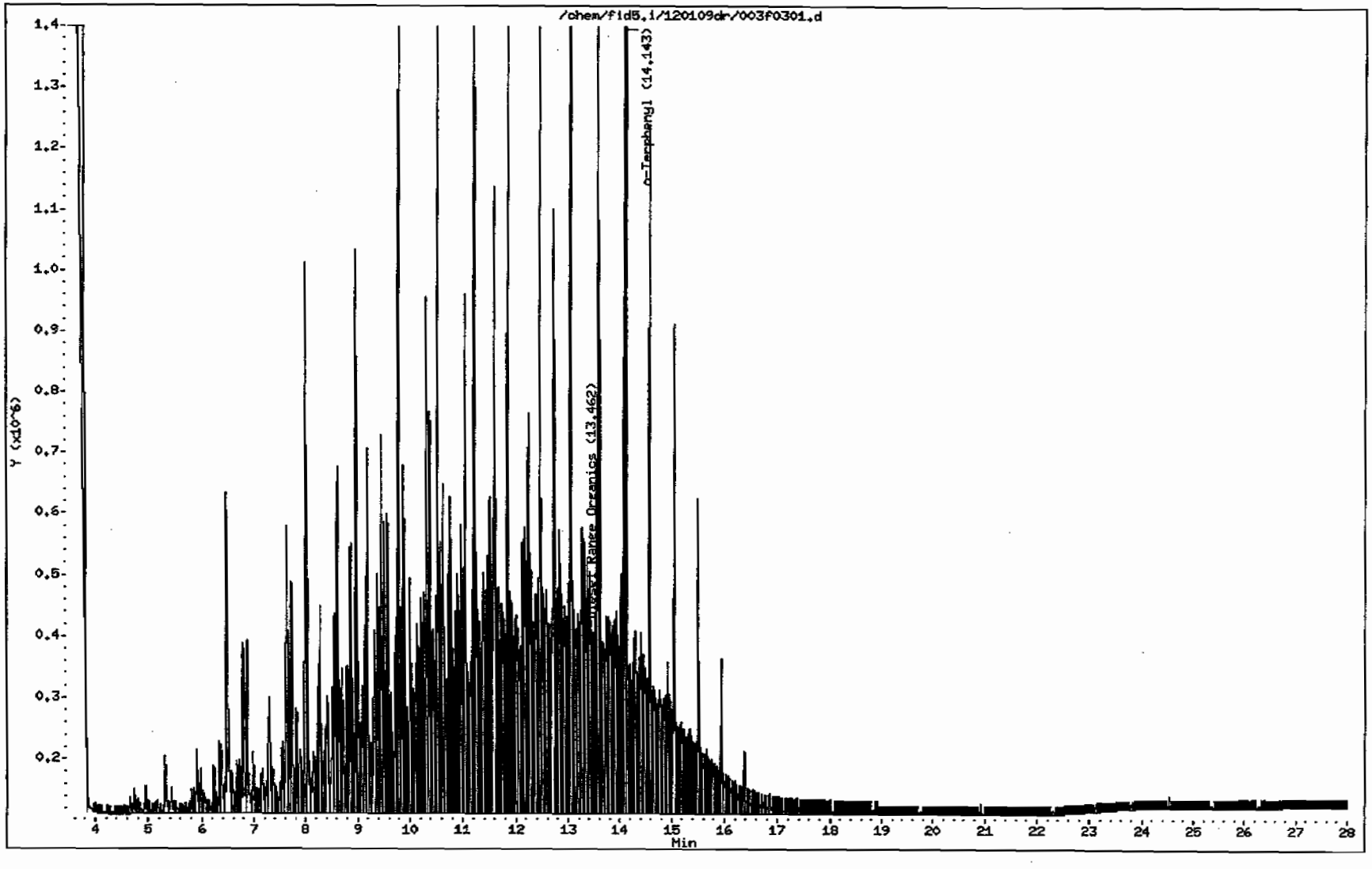

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120109dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 01-DEC-2009 20:14
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120109dr/FID5a.i_b_DRO_111709.m
Meth Date : 02-Dec-2009 00:58 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			130427807	1000.00	969
$	2 o-Terphenyl					CAS #: 84-15-1
	14.143	14.143	0.000	4757543	25.0000	22.4

Data File: /ohem/fid5.i/120109dr/013f1301.d
Date : 01-DEC-2009 20:14
Client ID: DSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

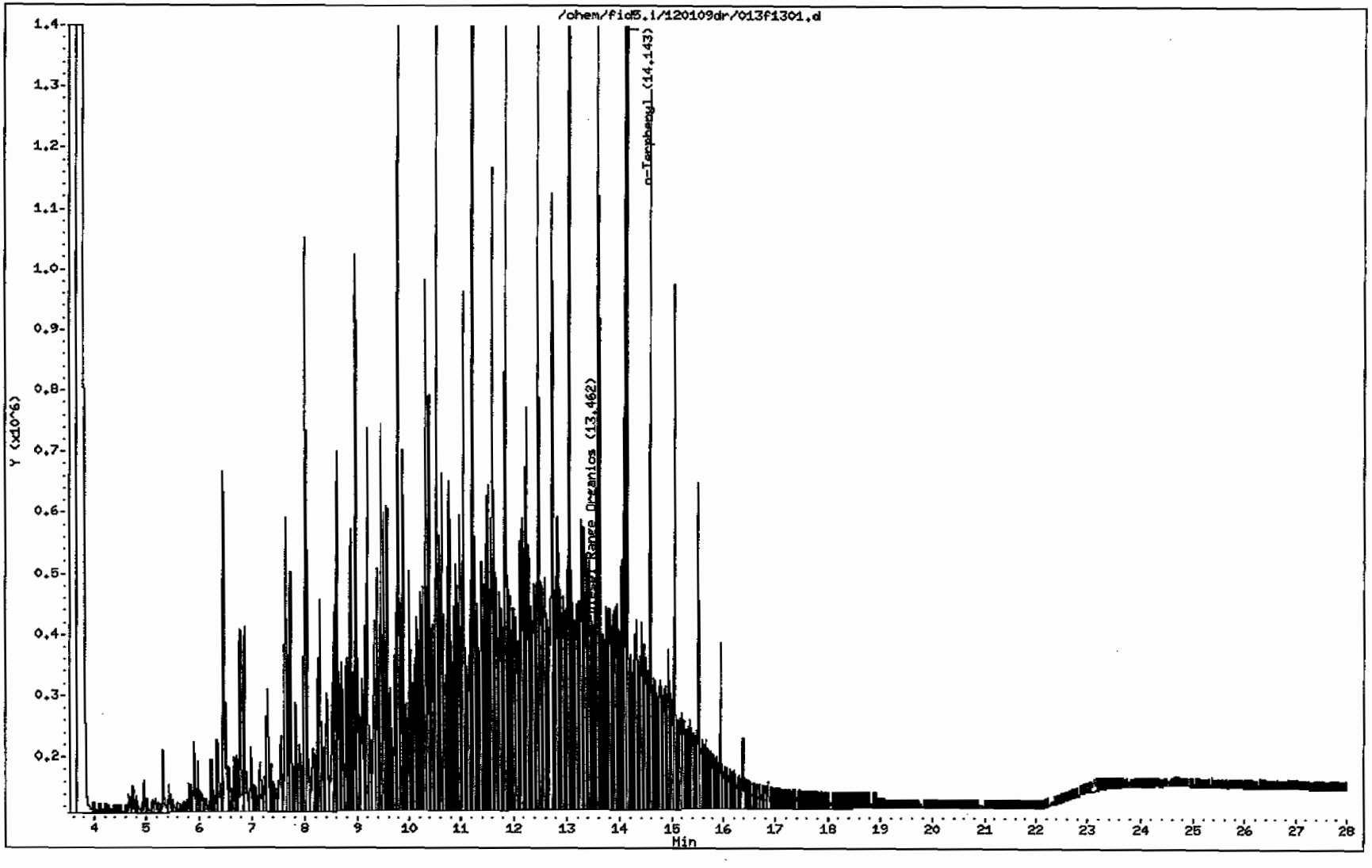

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT
01	DIBLK01	WFI091130-06	11/30/09	1612	14.14		
02	RTMARKER	UFI091013-03	11/30/09	1649			
03	DSTD01	UFI091118-01	11/30/09	1728	14.15		
04	DIBLK02	WFI091130-06	11/30/09	1805	14.14		
05	DBLK01	1201981721	11/30/09	1843	14.14		
06	DBLK01LCS	1201981724	11/30/09	1921	14.14		
07	ZZZZZ	ZZZZZ	11/30/09	2000	14.14		
08	ZZZZZ	ZZZZZ	11/30/09	2038	14.14		
09	ZZZZZ	ZZZZZ	11/30/09	2117	14.14		
10	ZZZZZ	ZZZZZ	11/30/09	2155	14.14		
11	ZZZZZ	ZZZZZ	11/30/09	2234	14.14		
12	ZZZZZ	ZZZZZ	11/30/09	2313	14.14		
13	DSTD02	UFI091118-01	11/30/09	2351	14.15		
14	DIBLK03	WFI091130-06	12/01/09	0029	14.14		
15	ZZZZZ	ZZZZZ	12/01/09	0107	14.14		
16	ZZZZZ	ZZZZZ	12/01/09	0145	14.14		
17	ZZZZZ	ZZZZZ	12/01/09	0224	14.14		
18	ZZZZZ	ZZZZZ	12/01/09	0303	14.13		
19	ZZZZZ	ZZZZZ	12/01/09	0341			
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.14

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT
01	DIBLK01	WFI091130-06	12/01/09	1236	14.14		
02	RTMARKER	UFI091013-03	12/01/09	1314			
03	DSTD01	UFI091118-01	12/01/09	1352	14.14		
04	DIBLK02	WFI091130-06	12/01/09	1430	14.14		
05	ZZZZZ	ZZZZZ	12/01/09	1508	14.14		
06	ZZZZZ	ZZZZZ	12/01/09	1545	14.14		
07	ZZZZZ	ZZZZZ	12/01/09	1623	14.14		
08	WST03-10-2132	241524002	12/01/09	1702	14.13		
09	ZZZZZ	ZZZZZ	12/01/09	1740	14.14		
10	ZZZZZ	ZZZZZ	12/01/09	1819	14.14		
11	ZZZZZ	ZZZZZ	12/01/09	1857	14.13		
12	ZZZZZ	ZZZZZ	12/01/09	1935	14.13		
13	DSTD02	UFI091118-01	12/01/09	2014	14.14		
14	DIBLK03	WFI091130-06	12/01/09	2052	14.14		
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–600			Matrix:	SOIL
Lab Sample ID:	1201981721				
Client Sample:	QC for batch 926870	Client:	LANL010	Project:	QC
Client ID:	MB for batch 926870	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 18:43	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30 g	Final Volume:	1 mL
Data File:	005f0501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/005f0501.d
Lab Smp Id: 1201981721 Client Smp ID: DBLK01
Inj Date : 30-NOV-2009 18:43
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981721|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2500731	11.7639	0.39

Data File: /chem/fid5.i/113009dr/005f0501.d
Date : 30-NOV-2009 18:43
Client ID: DBLK01
Sample Info: |120198172|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

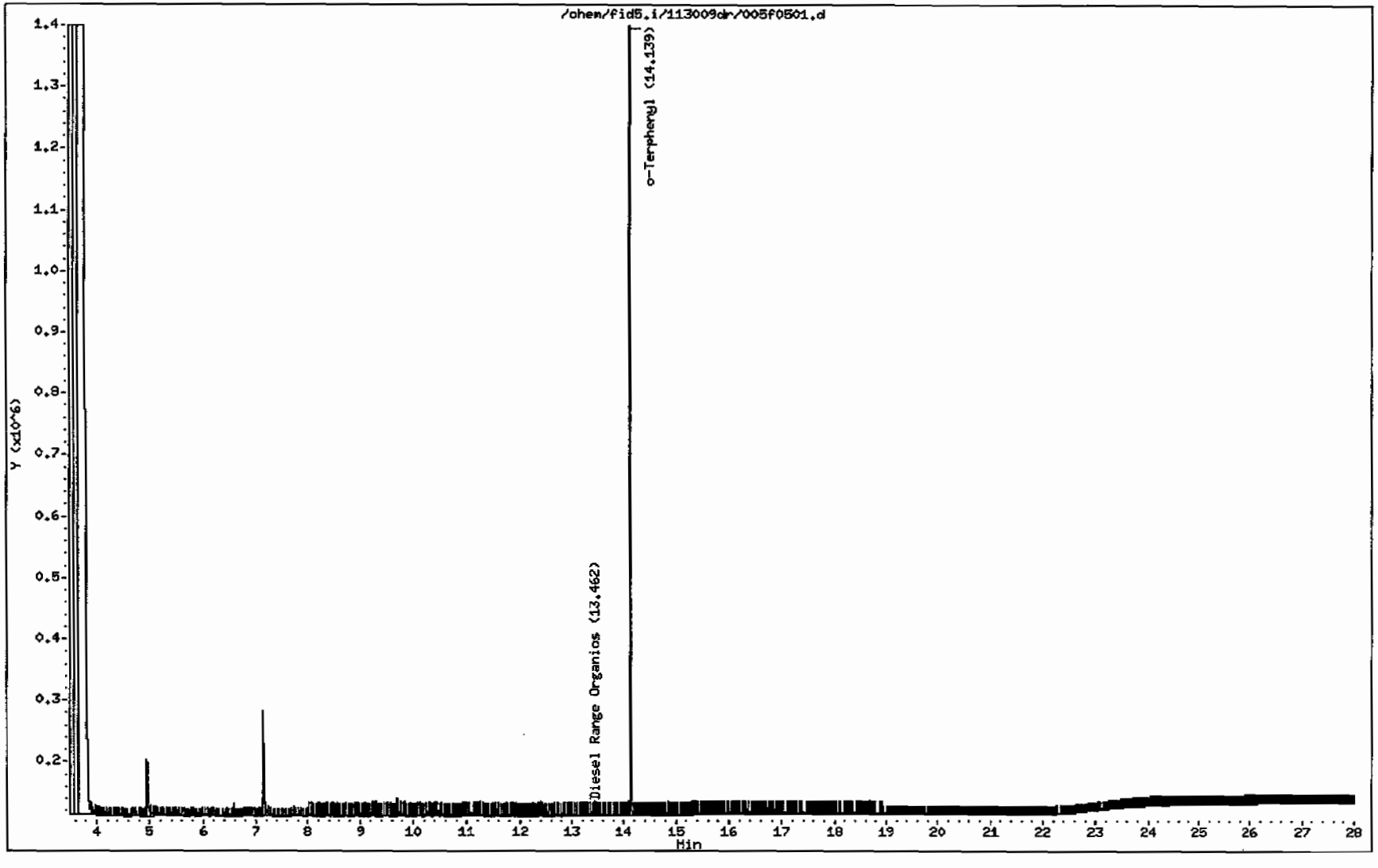

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-600			Matrix:	SOIL
Lab Sample ID:	1201981724				
Client Sample:	QC for batch 926870	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926870	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 19:21	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		27.7	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/006f0601.d
Lab Smp Id: 1201981724 Client Smp ID: DBLK01LCS
Inj Date : 30-NOV-2009 19:21
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981724|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			112073366	832.429	27.7
$ 2 o-Terphenyl					CAS #: 84-15-1
14.143	14.145	-0.002	3523785	16.5766	0.55

Data File: /chem/fid5.i/113009dr/006f0601.d
Date : 30-NOV-2009 19:21
Client ID: DBLK01LCS
Sample Info: |1201981724|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

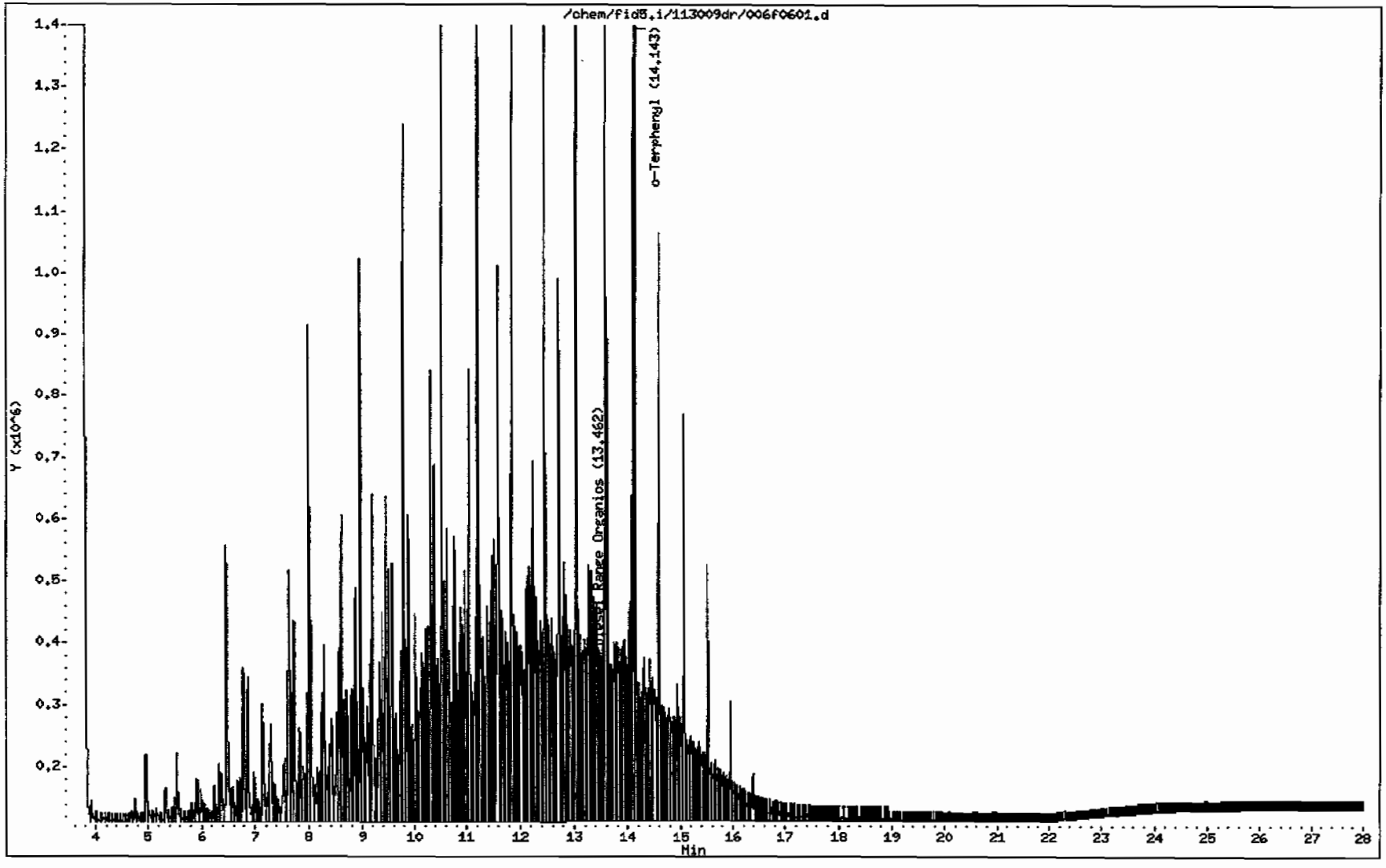

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORH	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MBSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359		1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359		1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359		1.0	LANL	USE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359		1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359		1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359		1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359		1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359		1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08		SDGa26875		1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46		SDGa26875		1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359		1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359		1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359		1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359		1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359		1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359		1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875	1.0		CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359	1.0	LANL	USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359	1.0	LANL	USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359	1.0	LANL	USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359	1.0	LANL	USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406	1.0	LANL	USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406		1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406		1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875		1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875		1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875		1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385		1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385		1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385		1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385		1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385		1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385		1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385		1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385		1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385		1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42		SDGa26875		1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20		SDGa26875		1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58		SDGa26875		1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35		SDGa26875		1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 12/01/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:113009DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	30-NOV-2009 16:12		SDGa01714	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	30-NOV-2009 16:49		SDGa01714	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	30-NOV-2009 17:28		SDGa01714	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	30-NOV-2009 18:05		SDGa01714	1.0		CLEAN
005f0501.d	1201981721	KXR2	30-NOV-2009 18:43	926871	SDGa01714	1.0	MB	USE
006f0601.d	1201981724	KXR2	30-NOV-2009 19:21	926871		1.0	LCS	USE
007f0701.d	241417001	KXR2	30-NOV-2009 20:00	926871	10-575	1.0	LANL	USE
008f0801.d	1201981722	KXR2	30-NOV-2009 20:38	926871	10-575	1.0	MS	USE
009f0901.d	1201981723	KXR2	30-NOV-2009 21:17	926871	10-575	1.0	MSD	USE
010f1001.d	241417002	KXR2	30-NOV-2009 21:55	926871	10-575	1.0	LANL	USE
011f1101.d	241423004	KXR2	30-NOV-2009 22:34	926871	10-578	1.0	LANL	USE
012f1201.d	241423005	KXR2	30-NOV-2009 23:13	926871	10-578	1.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	30-NOV-2009 23:51		SDGa01714	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	01-DEC-2009 00:29		SDGa01714	1.0		CLEAN
015f1501.d	241503002	KXR2	01-DEC-2009 01:07	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

Instrument Batch: /chem/fid5.i/113009dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241503003	KXR2	01-DEC-2009 01:45	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

017f1701.d	241503004	KXR2	01-DEC-2009 02:24	926871	10-589		1.0	LANL	DUSE,INSTRUMENT SHUTDOWN
018f1801.d	241524002	KXR2	01-DEC-2009 03:03	926871	10-600		10.0	LANL	DUSE,INSTRUMENT SHUTDOWN
019f1901.d	241539001	KXR2	01-DEC-2009 03:41	926871	10-603		1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.1

DATE: 12/02/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GID analysis of GEL SOP:GL-OA-E-003

Sequence Number:120109DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	01-DEC-2009 12:36		SDGa19497	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	01-DEC-2009 13:14		SDGa19497	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	01-DEC-2009 13:52		SDGa19497	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	01-DEC-2009 14:30		SDGa19497	1.0		CLEAN
005f0501.d	241503002	KXR2	01-DEC-2009 15:08	926871	10-589	1.0	LANL	USE
006f0601.d	241503003	KXR2	01-DEC-2009 15:45	926871	10-589	1.0	LANL	USE
007f0701.d	241503004	KXR2	01-DEC-2009 16:23	926871	10-589	1.0	LANL	USE
008f0801.d	241524002	KXR2	01-DEC-2009 17:02	926871	10-600	10.0	LANL	USE
009f0901.d	241539001	KXR2	01-DEC-2009 17:40	926871	10-603	1.0	LANL	USE
010f1001.d	241539002	KXR2	01-DEC-2009 18:19	926871	10-603	1.0	LANL	USE
011f1101.d	241539003	KXR2	01-DEC-2009 18:57	926871	10-603	10.0	LANL	USE
012f1201.d	241539004	KXR2	01-DEC-2009 19:35	926871	10-603	10.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	01-DEC-2009 20:14		SDGa19497	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	01-DEC-2009 20:52		SDGa19497	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926870 **Verified by:** _____
Analyst: Alberto Velasco
Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18
Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981721 MB	29–NOV–2009 20:04:50	30	1	0.03333
1201981724 LCS	29–NOV–2009 20:04:50	30	1	0.03333
241417001	29–NOV–2009 20:04:50	30.17	1	0.03315
1201981722 MS (241417001)	29–NOV–2009 20:04:50	30.13	1	0.03319
1201981723 MSD (241417001)	29–NOV–2009 20:04:50	30.17	1	0.03315
241417002	29–NOV–2009 20:04:50	30.18	1	0.03313
241423004	29–NOV–2009 20:04:50	30.18	1	0.03313
241423005	29–NOV–2009 20:04:50	30.04	1	0.03329
241503002	29–NOV–2009 20:04:50	30.11	1	0.03321
241503003	29–NOV–2009 20:04:50	30.1	1	0.03322
241503004	29–NOV–2009 20:04:50	30.19	1	0.03312
241524002	29–NOV–2009 20:04:50	30.09	1	0.03323
241539001	29–NOV–2009 20:04:50	30.02	1	0.03331
241539002	29–NOV–2009 20:04:50	30.05	1	0.03328
241539003	29–NOV–2009 20:04:50	30.03	1	0.0333
241539004	29–NOV–2009 20:04:50	30.03	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981724	TPH DRO LCS	UE091030–08	1	mL
MS	1201981722	TPH DRO LCS	UE091030–08	1	mL
MSD	1201981723	TPH DRO LCS	UE091030–08	1	mL
SURR	All	20 ppm surrogate	WE091121–04	1	mL
REGNT	All	Methylene Chloride	1234878–D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS
Final Solvent: CH2Cl2

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/008f0801.d
Lab Smp Id: 1201981722 Client Smp ID: RE03-09-13812MS
Inj Date : 30-NOV-2009 20:38
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981722|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			105879710	786.426	28.1	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.142	14.145	-0.003	2871765	13.5093	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/008f0801.d
Date : 30-NOV-2009 20:38
Client ID: RE03-09-13812MS
Sample Info: |1201981722|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

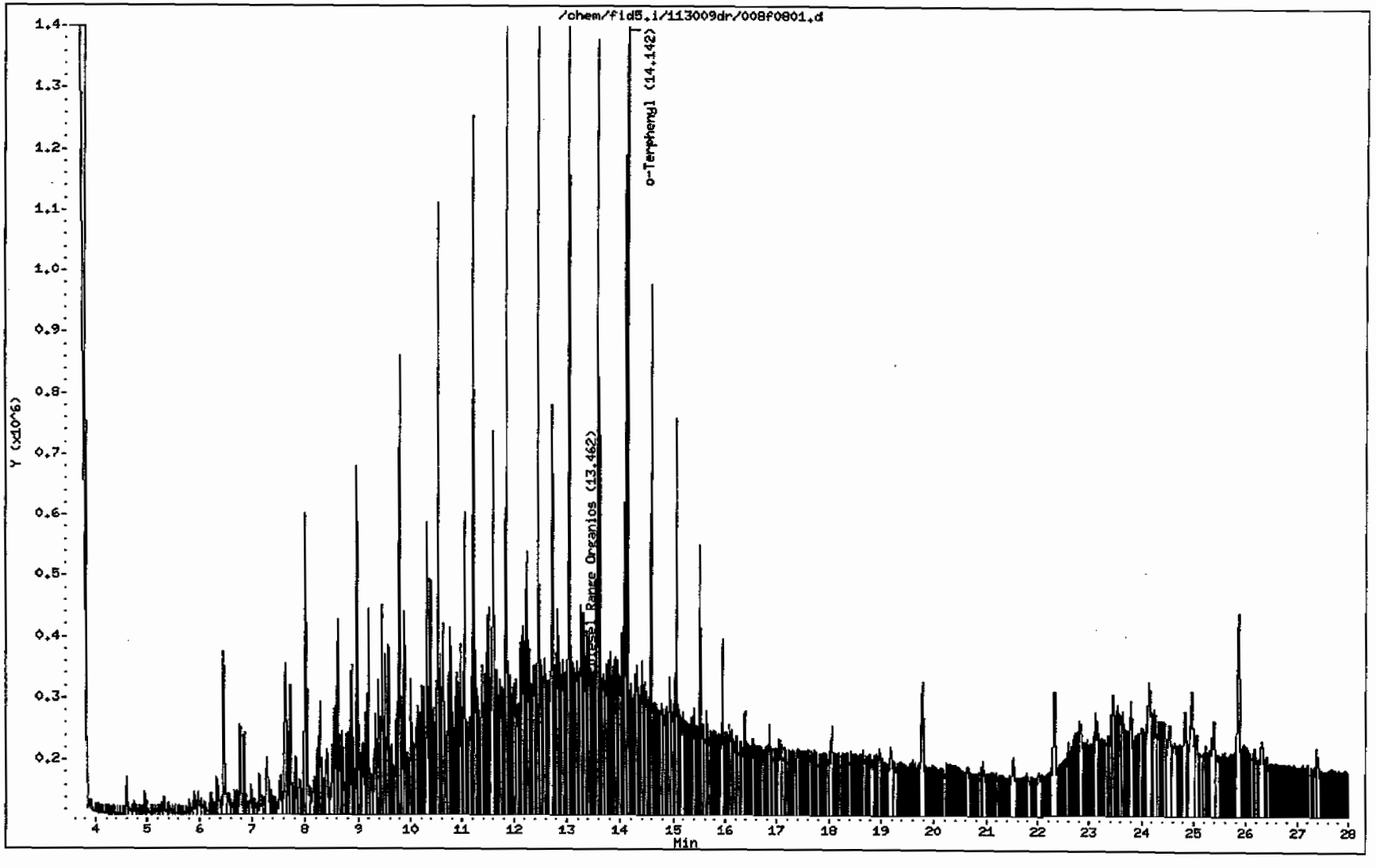

Data File: /chem/fid5.i/113009dr/008f0801.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

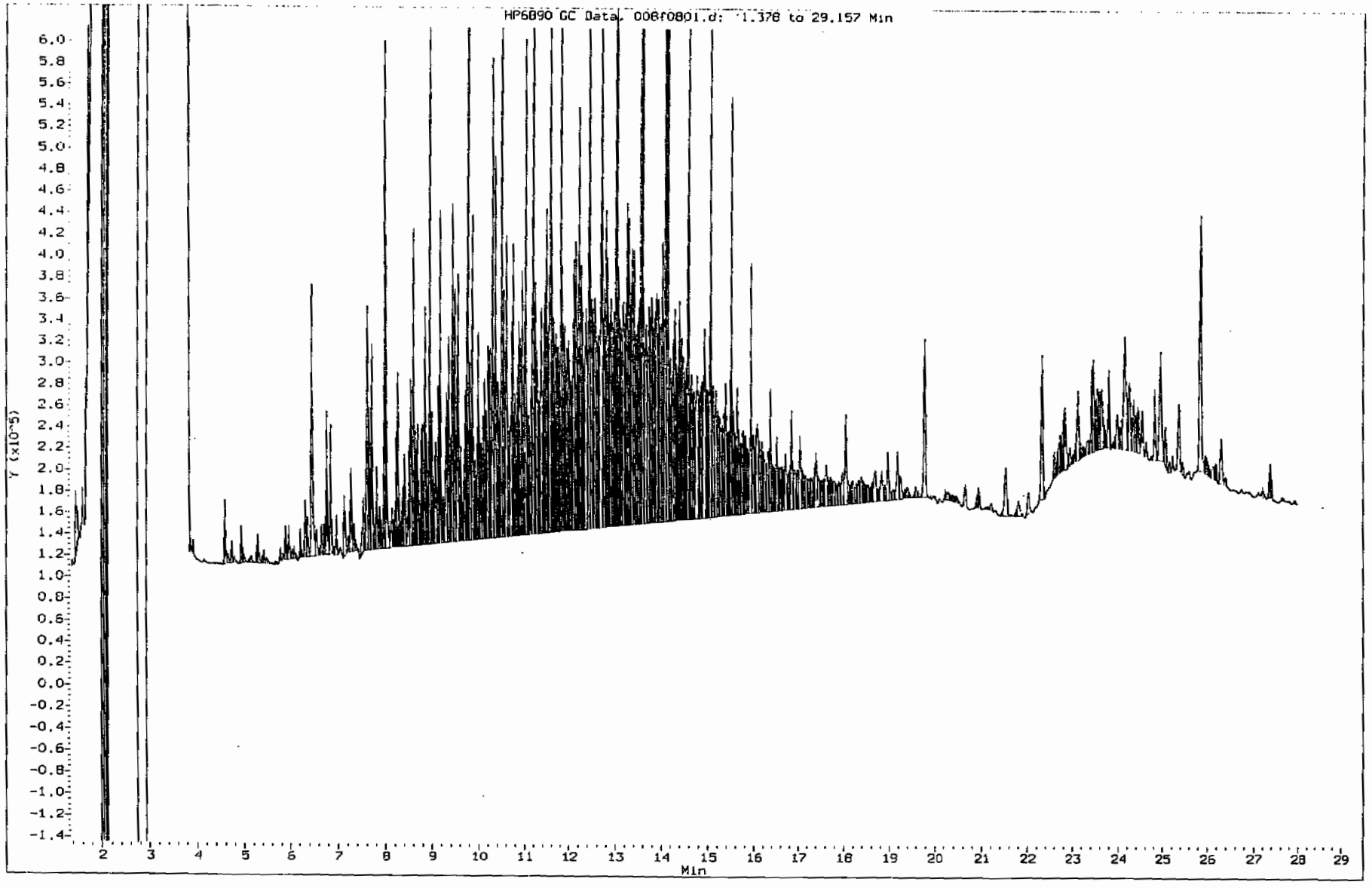

Data File: /chem/fid5.i/113009dr/008f0001.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

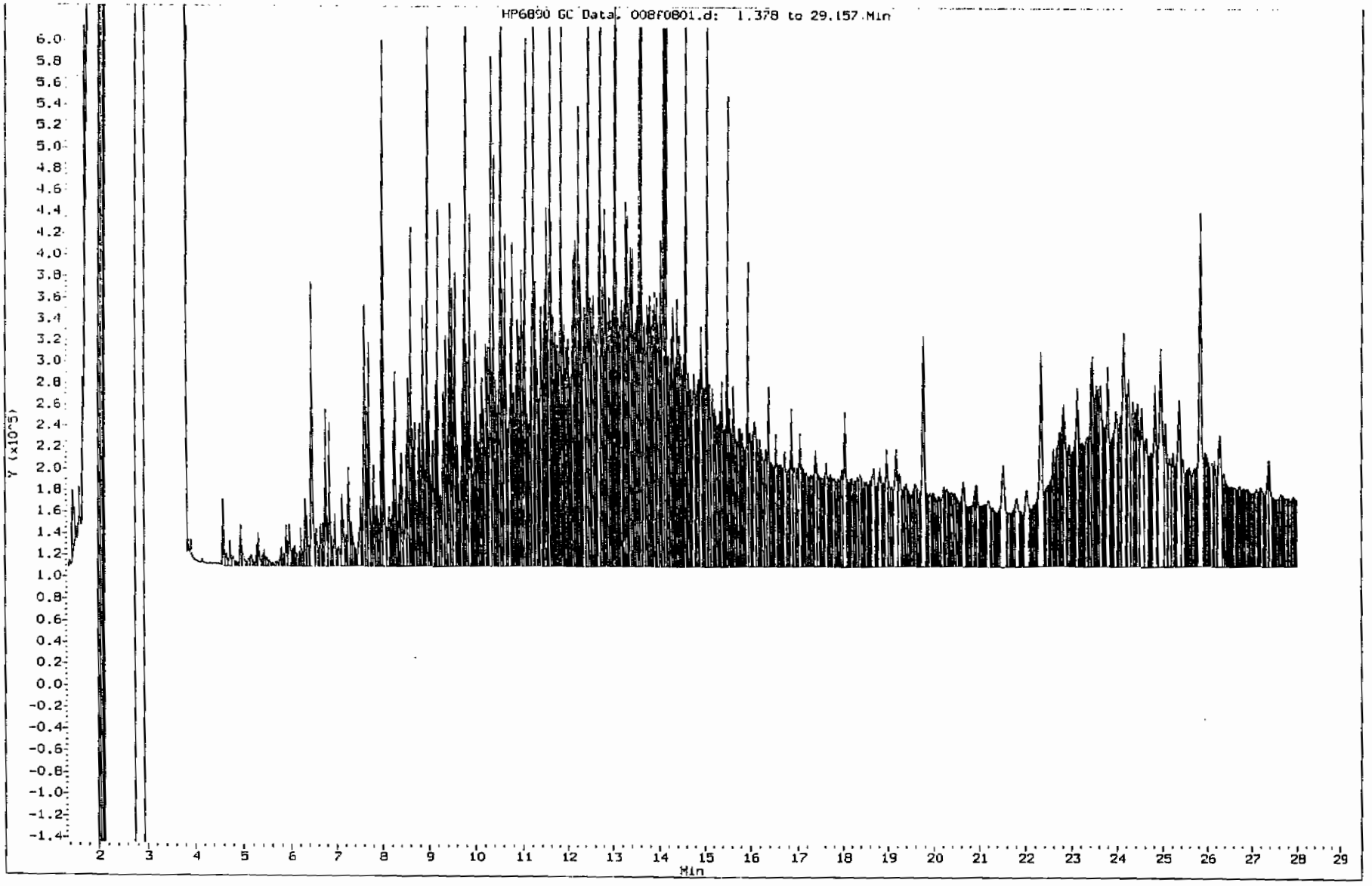

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/009f0901.d
Lab Smp Id: 1201981723 Client Smp ID: RE03-09-13812MSD
Inj Date : 30-NOV-2009 21:17
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981723|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			105621807	784.510	28.0	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.141	14.145	-0.004	2830842	13.3168	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/009f0901.d
Date : 30-NOV-2009 21:17
Client ID: RE03-09-13812MSD
Sample Info: |1201981723|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

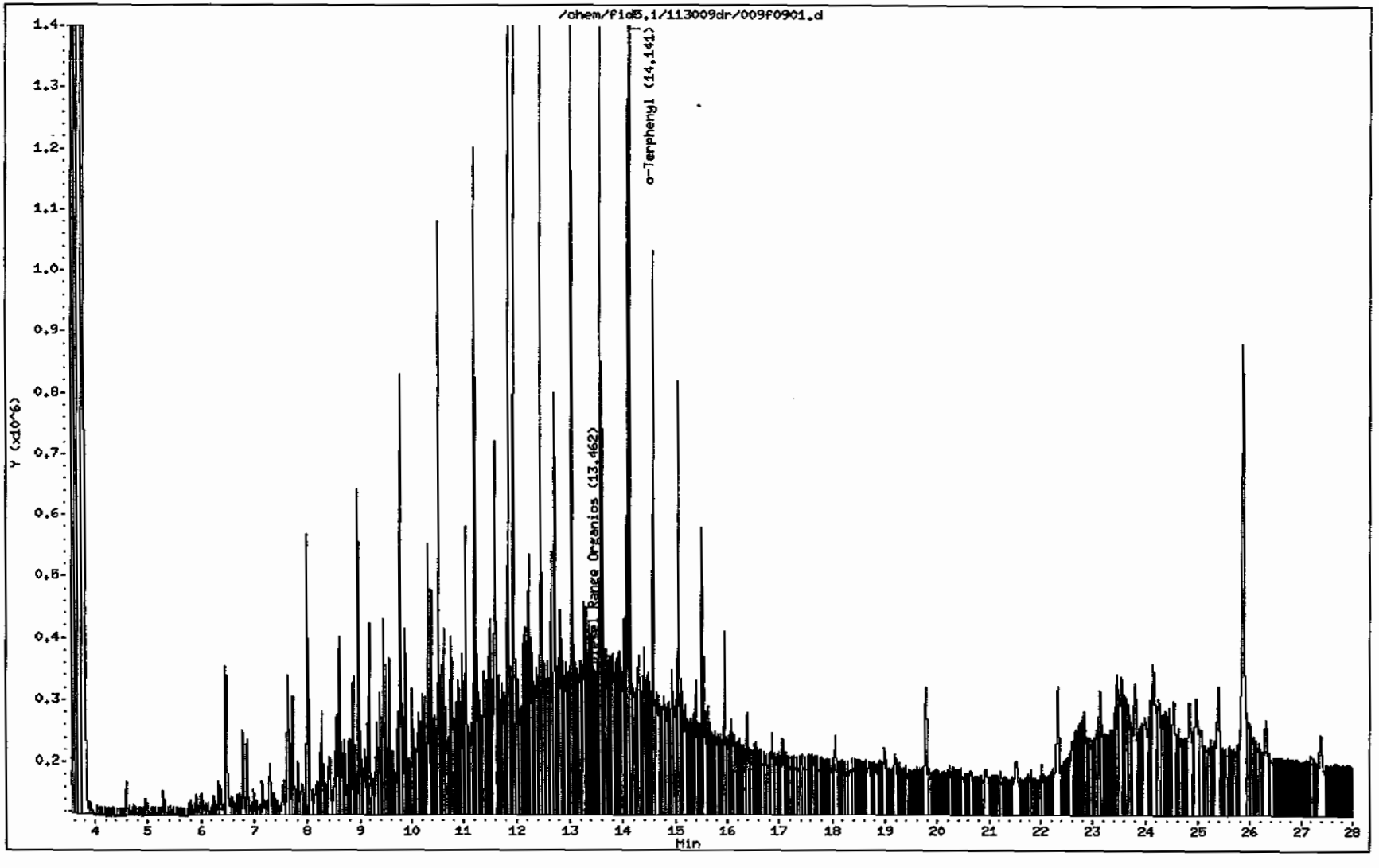

Data File: /chem/fid5.i/113009dr/009f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

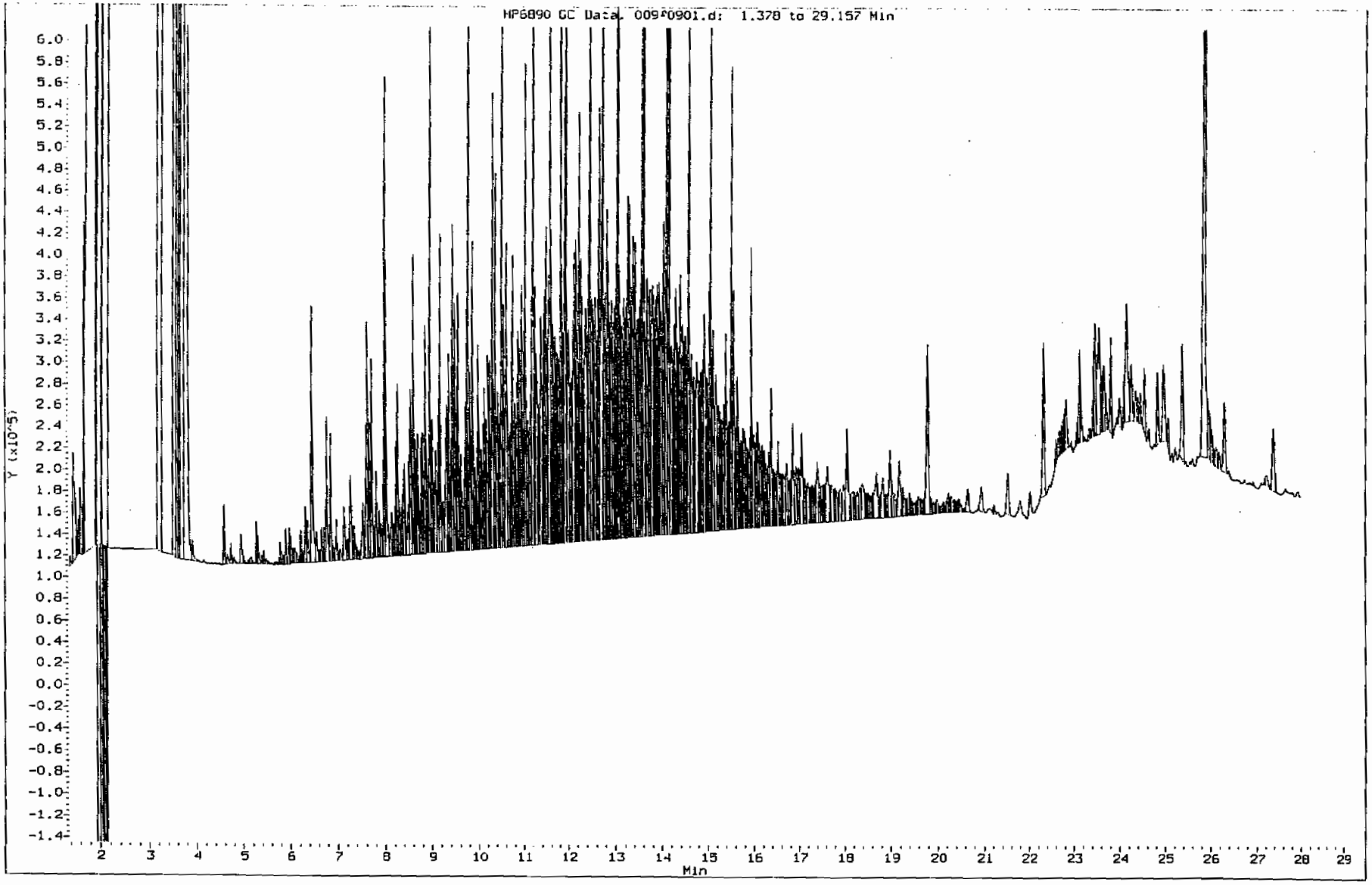

Data File: /chem/fid5.i/113009dr/0090f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

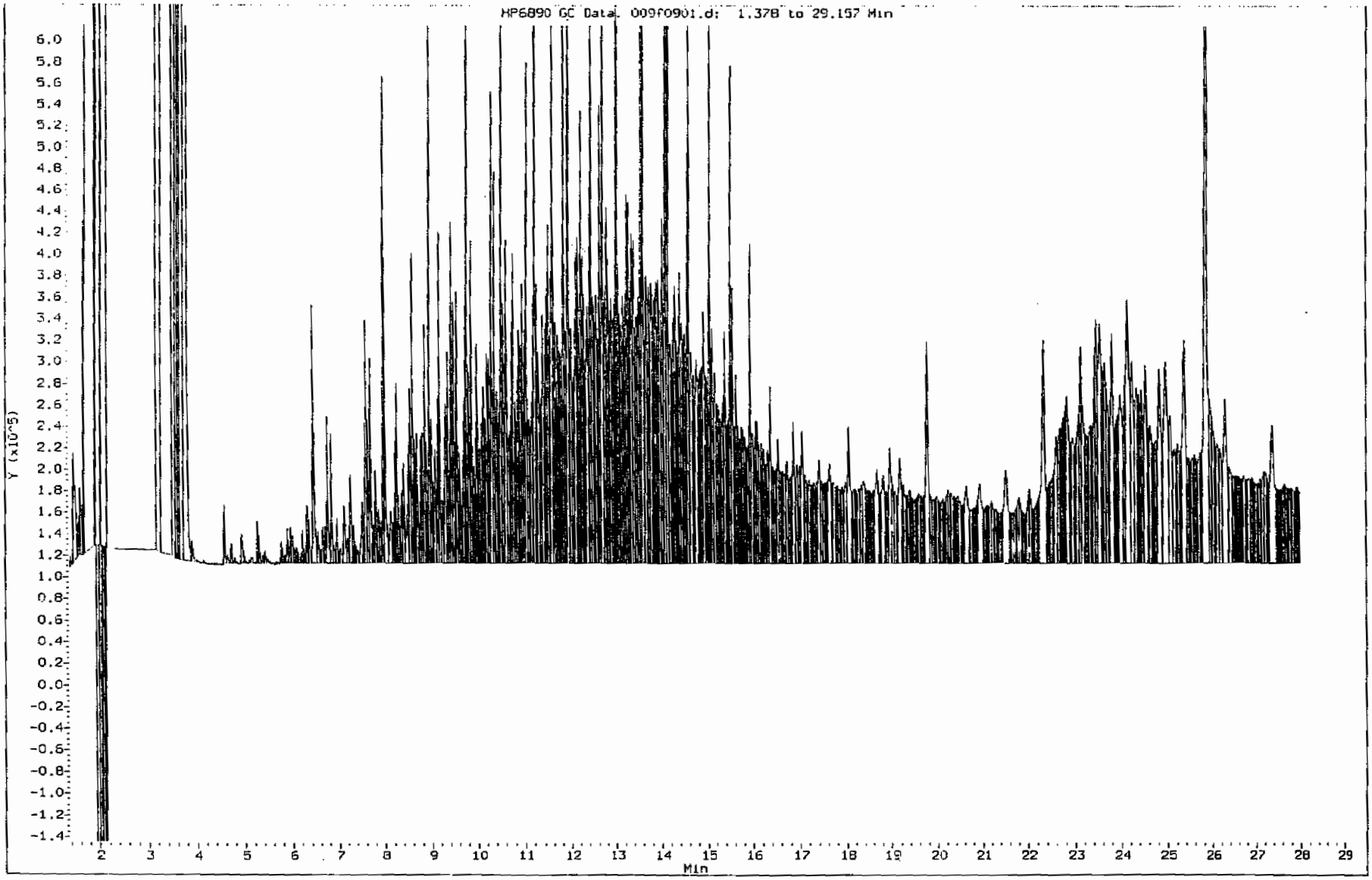

GC Volatile GRO Analysis

GC Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B VOC
Prep Method:	SW846 8015A/B PREP
Analytical Batch Number:	922251
Prep Batch Number:	922250

Sample Analysis

The following client and quality control samples were analyzed to complete this sample delivery group/work order using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241524002	WST03-10-2132
1201980891	Method Blank (MB)
1201980895	Laboratory Control Sample (LCS)
1201980892	241423004(WST03-10-2131) Post Spike (PS)
1201980893	241423004(WST03-10-2131) Post Spike Duplicate (PSD)

The samples in this SDG were analyzed on a "dry weight" basis.

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Gasoline Range Organics will be designated as GRO throughout this case narrative.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 20.2.6.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-004 REV# 18.

Calibration Information

Due to the limited capacity of software, all of the current initial calibration files may not be displayed. If necessary, a calibration history report was inserted, prior to the appropriate Form 6, in the Standards section in the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries, in all samples and quality control samples, were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241423004 (WST03-10-2131) was selected for analysis as the matrix spike.

Matrix Spike (PS) Recovery Statement
The GRO recovery was within the acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The GRO recovery was within the acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD between the matrix spike pair met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A NCR was not required for this sample delivery group/work order.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check(s), and samples may have been manually integrated to correct misidentification of peaks by the integration software.

Additional Comments
Additional comments were not required for this SDG.

System Configuration

The GRO Organics analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOC4A.I	Agilent 6890N FID	HP6890N GC/FID	DB-624	0.53mm x 3.0u x 15m	Tekmar #1

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/14/09

Roadmap for LANL 10-600 GRO

This roadmap was analyzed by ACJ on 11-27-2009, 16:28.
This roadmap was reviewed by kel00587 on 11-30-2009, 15:00.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/voc4a.i/112409/4m200010.d	241524002	25-NOV-2009	00:43	GRO.sub	WST03-10-2132	1	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	comment
☐	Y	/chem/voc4a.i/112409/4m200003L.d	1201980895	lcs	24-NOV-2009	21:03	GRO.sub	LCS	1.00000	
☐	Y	/chem/voc4a.i/112409/4m200004B.d	1201980891	mb	24-NOV-2009	21:33	GRO.sub	BLANK	1.00000	

Sample Data Summary

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/25/2009 00:43	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200010.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	53.3	ug/kg	11.9	53.3

QC Summary

GC Volatiles (GRO)

Surrogate Recovery Report

SDG Number: 10-600

Matrix Type: SOLID

CAP Column (1) : Rtx-Volatiles

Sample ID	Client ID	BFB %REC
1201980895	LCS for batch 922250	96
1201980891	MB for batch 922250	98
241524002	WST03-10-2132	65

Surrogate	Acceptance Limits
BFB = Bromofluorobenzene	(26%-143%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-600**	**Sample Type:**	**Post Spike**	
Client ID:	**WST03-10-2131PS**	**Matrix:**	**R**	
Lab Sample ID:	**1201980892**	**%Moisture:**	**7.9**	
Instrument:	**VOC4A.I**	**Analysis Date:**	**11/25/2009 01:13**	**Dilution: 1**
Analyst:	**ACJ**	**Prep Batch ID:**	**922250**	
Aliquot:	**5 mL**	**Batch ID:**	**922251**	

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
	PS	Gasoline Range Organics	500	0.00	U	348	70	5-138

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number:	10-600	**Sample Type:**	Post Spike Duplicate	
Client ID:	WST03-10-2131PSD	**Matrix:**	R	
Lab Sample ID:	1201980893	**%Moisture:**	7.9	
Instrument:	VOC4A.I	**Analysis Date:**	11/25/2009 01:42	**Dilution:** 1
Analyst:	ACJ	**Prep Batch ID**	922250	
Aliquot:	5 mL	**Batch ID:**	922251	

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
PSD	Gasoline Range Organics	500	0.00	U	405	81	5-138	15	0-30

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number: 10-600

Client ID: LCS for batch 922250

Lab Sample ID: 1201980895

Instrument: VOC4A.I

Analyst: ACJ

Aliquot: 5 mL

Sample Type: Laboratory Control Sample

Matrix: SOIL

Analysis Date: 11/24/2009 21:03

Dilution: 1

Prep Batch ID: 922250

Batch ID: 922251

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
	LCS	Gasoline Range Organics	500	0.0	512	102	85-123

Method Blank Summary

SDG Number:	10-600	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 922250	Instrument ID:	VOC4A.I	Data File:	4m200004B.d
Lab Sample ID:	1201980891	Prep Date:	11/24/2009 20:00	Analyzed:	11/24/09 21:33
Column:	Rtx-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 922250	1201980895	4m200003L.d	11/24/09	2103
02 WST03-10-2132	241524002	4m200010.d	11/25/09	0043

Sample Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/25/2009 00:43	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200010.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	53.3	ug/kg	11.9	53.3

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Data file : /chem/voc4a.i/112409/4m200010.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 25-NOV-2009 00:43
Operator : ACJ Inst ID: voc4a.i
Smp Info : |241524002|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.23000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	30125607	32.6033	34.8

Data File: /chem/voc4a.i/112409/4m200010.d
Date : 25-NOV-2009 00:43
Client ID: WST03-10-2132
Sample Info: |241524002|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

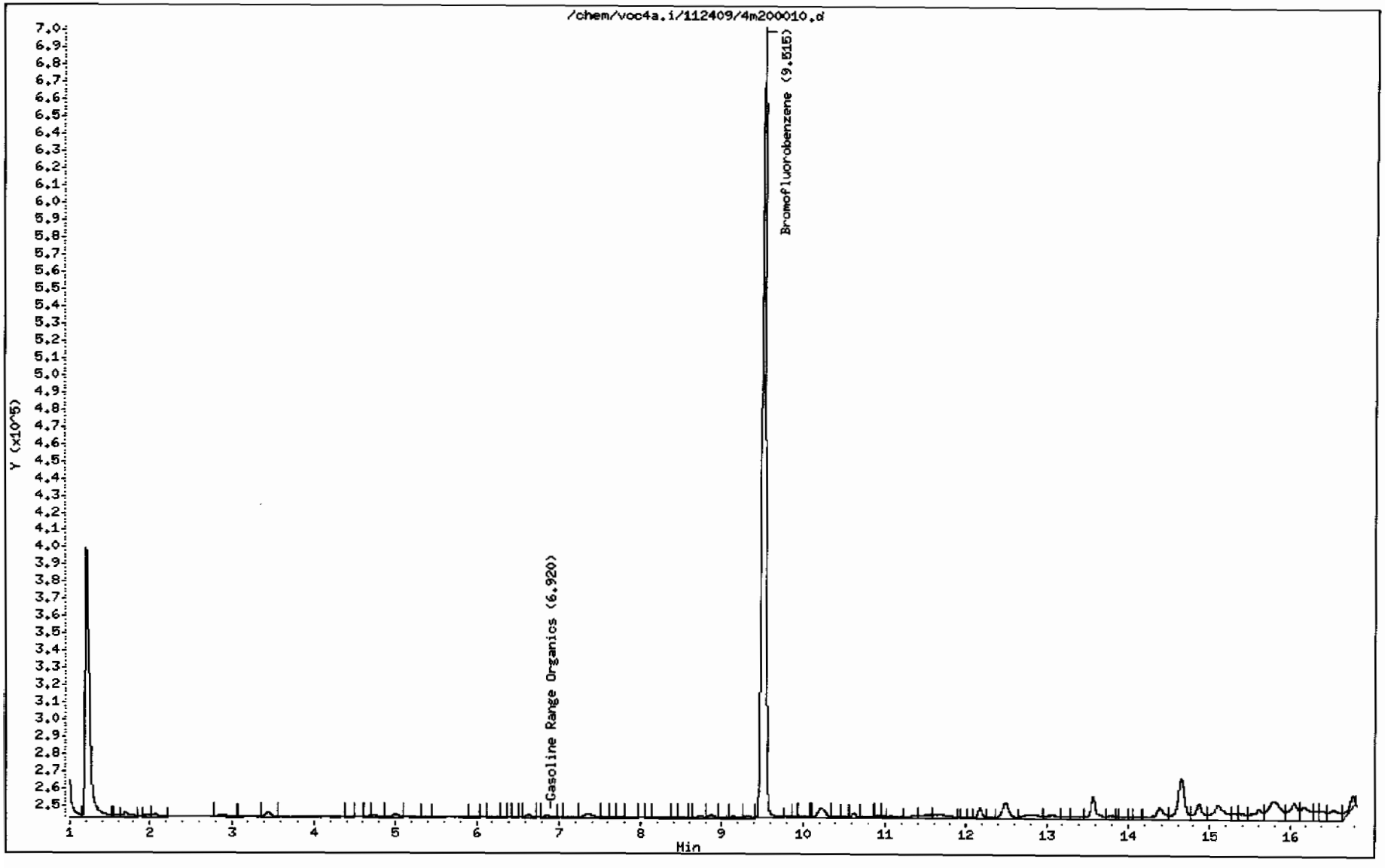

Standard Data

Report Date: 27-Nov-2009 15:58

Calibration History

Method : /chem/voc4a.i/112409/8015GRO-111909.m
Start Cal Date: 19-NOV-2009 23:12
End Cal Date : 20-NOV-2009 02:10

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 50.00000		
19-NOV-2009 23:12	GRO	/chem/voc4a.i/111909/41400011.d
Cal Level: 2 , Cal Amount: 100.00000		
19-NOV-2009 23:42	GRO	/chem/voc4a.i/111909/41400012.d
Cal Level: 3 , Cal Amount: 250.00000		
20-NOV-2009 00:12	GRO	/chem/voc4a.i/111909/41400013.d
Cal Level: 4 , Cal Amount: 500.00000		
20-NOV-2009 00:42	GRO	/chem/voc4a.i/111909/41400014.d
Cal Level: 5 , Cal Amount: 750.00000		
20-NOV-2009 01:11	GRO	/chem/voc4a.i/111909/41400015.d
Cal Level: 6 , Cal Amount: 1000.00000		
20-NOV-2009 01:41	GRO	/chem/voc4a.i/111909/41400016.d
Cal Level: 7 , Cal Amount: 2000.00000		
20-NOV-2009 02:10	GRO	/chem/voc4a.i/111909/41400017.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 500		
25-NOV-2009 02:12	GRO	/chem/voc4a.i/112409/4m200013.d
Ccal Level: 4 , Ccal Amount: 500		
24-NOV-2009 20:33	GRO	/chem/voc4a.i/112409/4m200002.d

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INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 23:12
End Cal Date : 20-NOV-2009 02:10
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem/voc4a.i/112409/8015GRO-111909.m
Cal Date : 25-Nov-2009 15:34 amj
Curve Type : Average

Calibration File Names:
Level 1: /chem/voc4a.i/111909/41400011.d
Level 2: /chem/voc4a.i/111909/41400012.d
Level 3: /chem/voc4a.i/111909/41400013.d
Level 4: /chem/voc4a.i/111909/41400014.d
Level 5: /chem/voc4a.i/111909/41400015.d
Level 6: /chem/voc4a.i/111909/41400016.d
Level 7: /chem/voc4a.i/111909/41400017.d

Compound	50.000 Level 1	100.000 Level 2	250.000 Level 3	500.000 Level 4	750.000 Level 5	1000.000 Level 6	2000.000 Level 7	RRF	% RSD
S 1 Gasoline Range Organics	1255205	1274066	1246296	1312469	1288300	1298519	1299511	1282052	1.911
2 2-Methylpentane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
4 1,2,4-Trimethylbenzene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
$ 3 Bromofluorobenzene	++++++	992384	952106	929271	921927	925641	822707	924006	6.076

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i Injection Date: 20-NOV-2009 03:10
Lab File ID: 41400019.d Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:12 02:10
Lab Sample ID: GROICV Quant Type: ESTD
Method: /chem/voc4a.i/111909/8015GRO-111909.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1304800	0.010	1.77435	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	927628	0.010	0.39196	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/111909/41400019.d
Lab Smp Id: GROICV Client Smp ID: VSTD0500
Inj Date : 20-NOV-2009 03:10
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROICV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/111909/8015GRO-111909.m
Meth Date : 20-Nov-2009 11:25 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

				AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
RT	EXP RT	DLT RT	RESPONSE			
S 1 Gasoline Range Organics						CAS #:
2.888-	10.945		652400203	500.000		509
$ 3 Bromofluorobenzene						CAS #: 460-00-4
9.513	9.513	0.000	46381387	50.0000		50.2

Data File: /chem/voc4a.i/111909/41400019.d
Date : 20-NOV-2009 03:10
Client ID: VSTD0500
Sample Info: |GROICV|
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

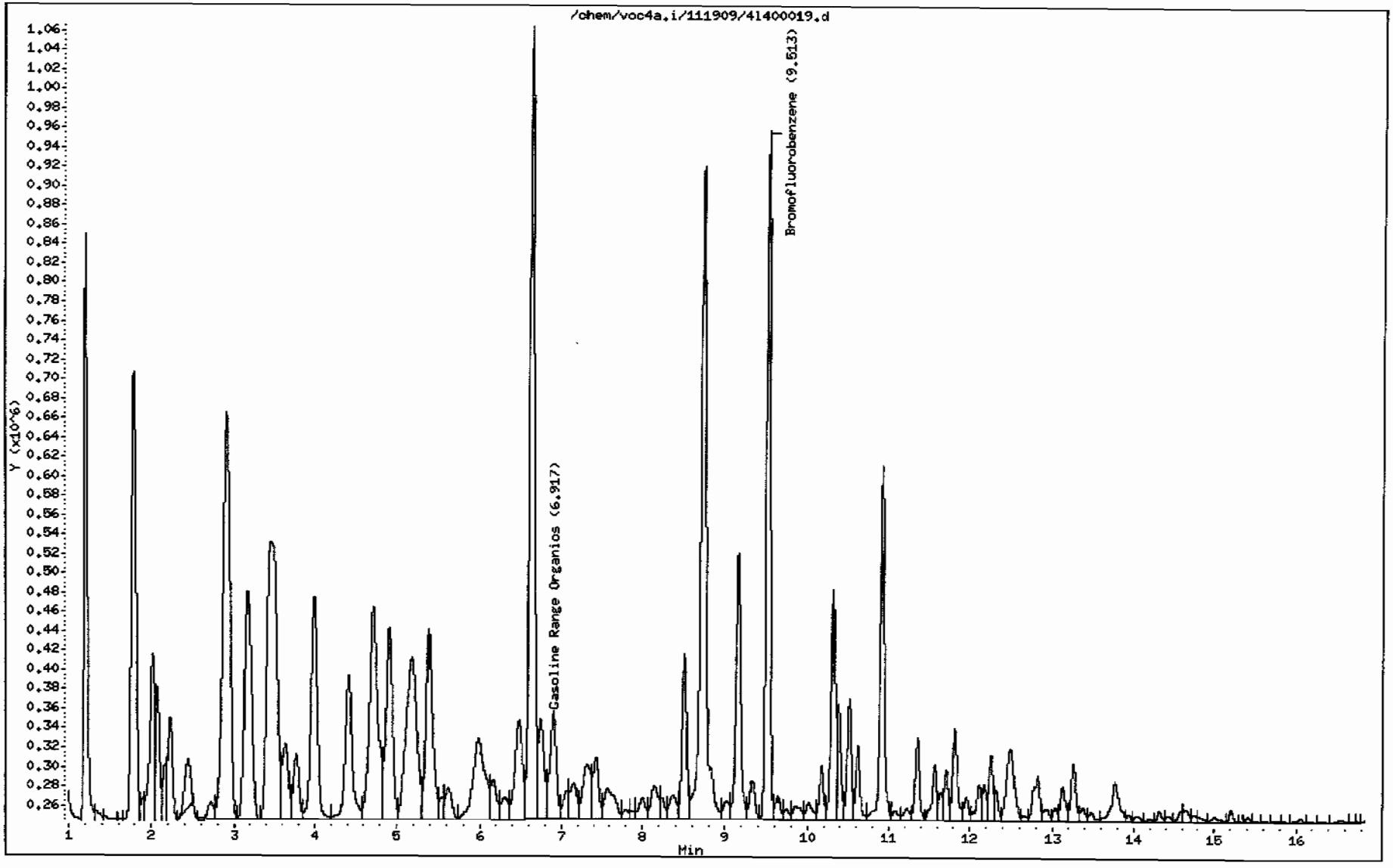

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i
Lab File ID: 4m200002.d
Analysis Type: WATER
Lab Sample ID: GROCCV
Method: /chem/voc4a.i/112409/8015GRO-111909.m

Injection Date: 24-NOV-2009 20:33
Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Init. Cal. Times: 23:12 02:10
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1375526	0.010	7.29096	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	956311	0.010	3.49620	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200002.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 24-NOV-2009 20:33
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 Gasoline Range Organics					CAS #:
	2.896-	10.944		687763070	500.000	536
$	3 Bromofluorobenzene					CAS #: 460-00-4
	9.513	9.513	0.000	47815555	50.0000	51.7

Data File: /chem/voc4a.i/112409/4m200002.d

Date : 24-NOV-2009 20:33

Client ID: VSTD0500

Sample Info: IGROCCVI

Purge Volume: 5.0

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

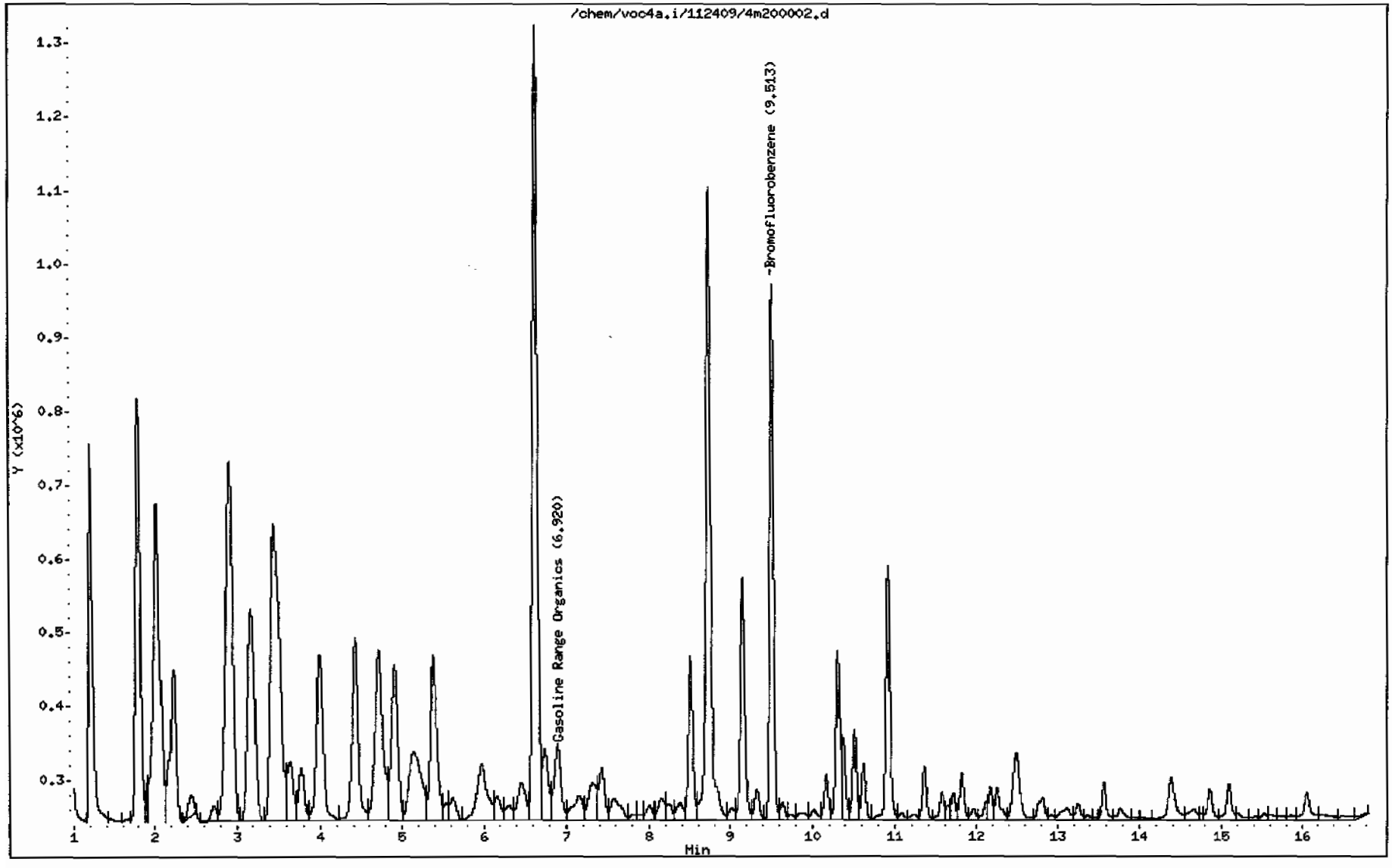

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i
Lab File ID: 4m200013.d
Analysis Type: WATER
Lab Sample ID: GROCCV
Method: /chem/voc4a.i/112409/8015GRO-111909.m

Injection Date: 25-NOV-2009 02:12
Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Init. Cal. Times: 23:12 02:10
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1242413	0.010	-3.09185	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	899576	0.010	-2.64391	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200013.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 25-NOV-2009 02:12
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics					CAS #:
2.896-	10.944		621206542	500.000	484
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	44978809	50.0000	48.7

Data File: /chem/voc4a.i/112409/4m200013.d
Date : 25-NOV-2009 02:12
Client ID: VSTD0500
Sample Info: ICROCCVI
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i
Operator: ACJ
Column diameter: 0.25

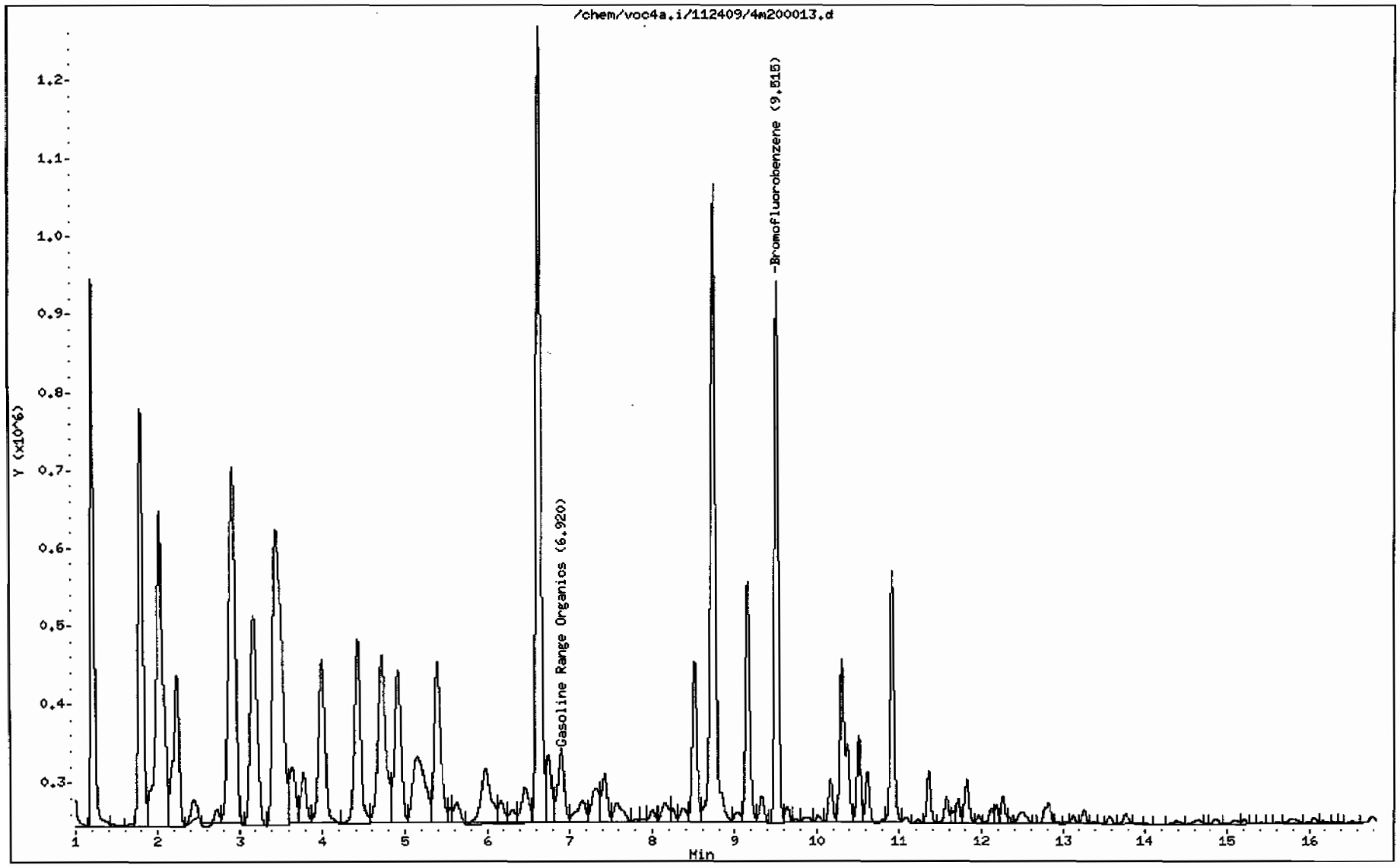

Analytical Sequence

Lab Name: GEL Laboratories LLC **Client SDG:** 10-600

GC Column: Rtx-Volatiles **Init. Calibration Dates:**19-NOV-09 23:12 - 20-NOV-09 02:1

Instrument ID: VOC4A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

	Mean Surrogate RT From Initial Calibration:			9.51
	RT Range Based on Calibration Verification:			9.48 9.54 #
	Sample Number	**Lab Sample ID**	**Analysis Date**	**Bromofluorobenzene**
1	VSTD0500	GROCCV	24-NOV-09 20:33	9.51
2	BLK01LCS	1201980895	24-NOV-09 21:03	9.51
3	BLANK	1201980891	24-NOV-09 21:33	9.51
4	ZZZZZZZ	ZZZZZZZ	24-NOV-09 22:15	9.51
5	ZZZZZZZ	ZZZZZZZ	24-NOV-09 22:45	9.51
6	ZZZZZZZ	ZZZZZZZ	24-NOV-09 23:14	9.52
7	ZZZZZZZ	ZZZZZZZ	24-NOV-09 23:44	9.51
8	ZZZZZZZ	ZZZZZZZ	25-NOV-09 00:13	9.52
9	WST03-10-2132	241524002	25-NOV-09 00:43	9.52
10	WST03-10-2131PS	1201980892	25-NOV-09 01:13	9.51
11	WST03-10-2131PSD	1201980893	25-NOV-09 01:42	9.51
12	VSTD0500	GROCCV	25-NOV-09 02:12	9.51

Column used to flag retention time values with an asterisk.

Analytical Sequence

Lab Name: GEL Laboratories LLC **Client SDG:** 10-600

GC Column: Rtx-Volatiles **Init. Calibration Dates:** 19-NOV-09 23:12 - 20-NOV-09 02:10

Instrument ID: VOC4A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

	Mean Surrogate RT From Initial Calibration:			9.51
	RT Range Based on Calibration Verification:			9.48 9.54 #
	Sample Number	**Lab Sample ID**	**Analysis Date**	**Bromofluorobenzene**
1	VSTD0050	VSTD0050	19-NOV-09 23:12	9.51
2	VSTD0100	VSTD0100	19-NOV-09 23:42	9.51
3	VSTD0250	VSTD0250	20-NOV-09 00:12	9.51
4	VSTD0500	VSTD0500	20-NOV-09 00:42	9.51
5	VSTD0750	VSTD0750	20-NOV-09 01:11	9.51
6	VSTD1000	VSTD1000	20-NOV-09 01:41	9.51
7	VSTD2000	VSTD2000	20-NOV-09 02:10	9.51
8	VSTD0500	GROICV	20-NOV-09 03:10	9.51

Column used to flag retention time values with an asterisk.

QC Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-600			**Matrix:**	SOIL
Lab Sample ID:	1201980891				
Client Sample:	QC for batch 922250	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 922250	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/24/2009 21:33	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 20:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200004B.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	50.0	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200004B.d
Lab Smp Id: 1201980891 Client Smp ID: BLANK
Inj Date : 24-NOV-2009 21:33
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980891|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.514	9.513	0.001	45064534	48.7708	48.8

Data File: /ohem/voc4a.i/112409/4m200004B.d
Date : 24-NOV-2009 21:33
Client ID: BLANK
Sample Info: |1201980891|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

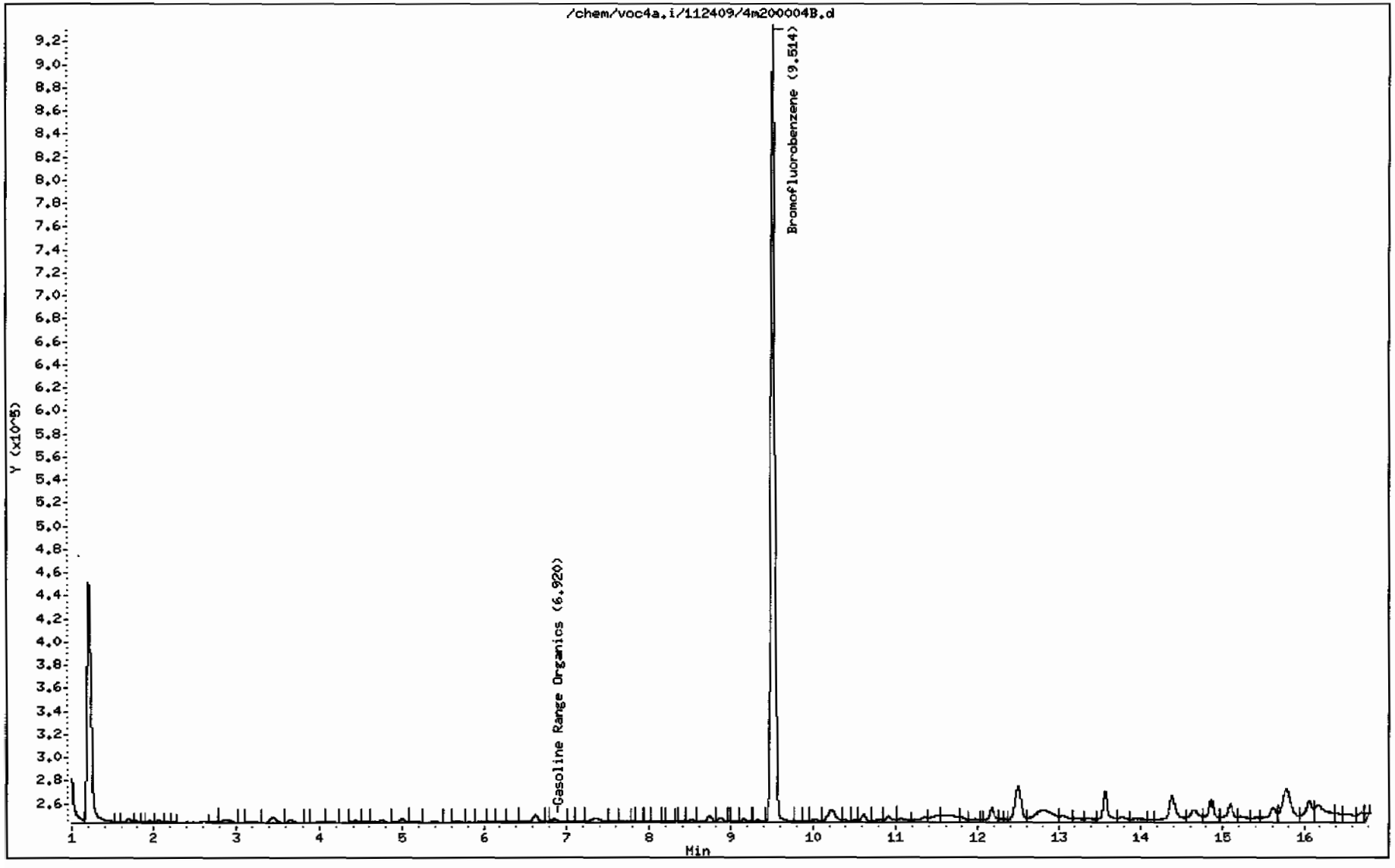

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-600			**Matrix:**	SOIL
Lab Sample ID:	1201980895				
Client Sample:	QC for batch 922250	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 922250	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/24/2009 21:03	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 19:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200003L.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		512	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200003L.d
Lab Smp Id: 1201980895 Client Smp ID: LCS
Inj Date : 24-NOV-2009 21:03
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980895|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.896- 10.944			656813672	512.314	512
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.514	9.513	0.001	44227544	47.8650	47.9

Data File: /chem/voc4a.i/112409/4m200003L.d

Date : 24-NOV-2009 21:03

Client ID: LCS

Sample Info: !120198089511!

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

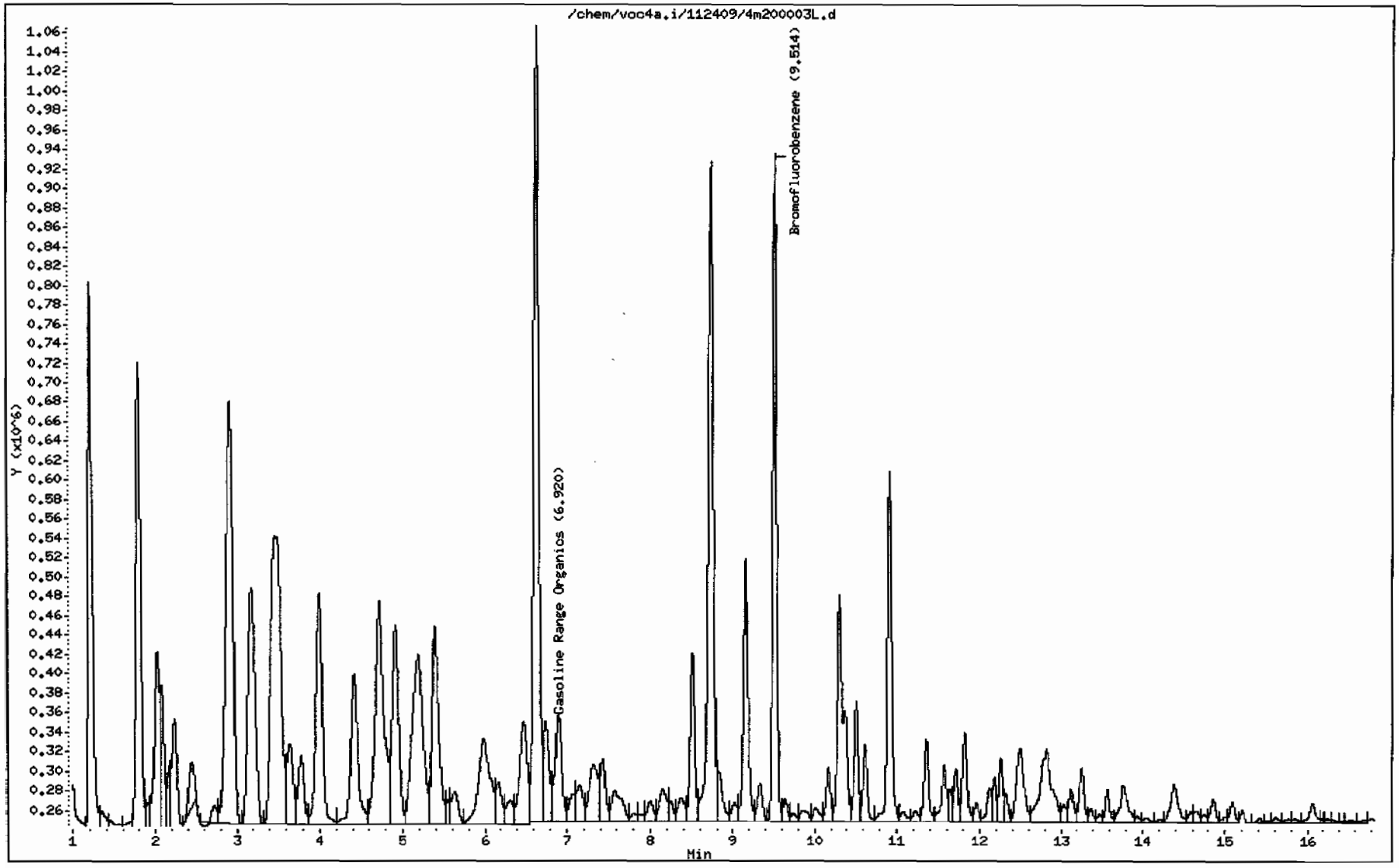

Miscellaneous Data

Prep Logbook

Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector

Batch ID: **922250** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Amy Jamison
Method: SW846 8015A/B PREP
Lab SOP: GL-OA-E-004 REV# 18
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201970909 LCS	12-NOV-2009 16:00:00	Soil	5	5	1	
1201970906 MB	12-NOV-2009 16:30:00	Soil	5	5	1	
240216002	12-NOV-2009 21:50:00	Soil	5	5	1	
240230002	12-NOV-2009 21:53:00	Soil	5	5	1	
1201980894 LCS	21-NOV-2009 11:30:00	Soil	5	5	1	
1201980890 MB	21-NOV-2009 12:00:00	Soil	5	5	1	
241038002	21-NOV-2009 12:10:00	Soil	5	5	1	
1201980895 LCS	24-NOV-2009 19:30:00	Soil	5	5	1	
1201980891 MB	24-NOV-2009 20:00:00	Soil	5	5	1	
241423004	24-NOV-2009 21:05:00	Soil	5	5	1	
1201980892 PS (241423004)	24-NOV-2009 21:06:00	Soil	5	5	1	
1201980893 PSD (241423004)	24-NOV-2009 21:07:00	Soil	5	5	1	
241423005	24-NOV-2009 21:08:00	Soil	5	5	1	
241503002	24-NOV-2009 21:09:00	Soil	5	5	1	
241503003	24-NOV-2009 21:10:00	Soil	5	5	1	
241503004	24-NOV-2009 21:11:00	Soil	5	5	1	
241524002	24-NOV-2009 21:12:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 11/19/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009

(See pg. 118 for ICAL Std. Scl. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: VOC4A 111909

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG090714-02E		5		
IS	N/A				
SS	UVG091022-01C	2.5	2.5	2.5	2.5
LCS/MS	UVG090714-02E			5	
RTCHECK	WVG09119-02				5+5
C5/C12 RTCHECK	N/A				5

Purge Amount	
5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
11/19/2009 16:30	4L400001.D	WVG091119-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	X	UVG090909-01A/UVG081212-02B
11/19/2009 17:00	4L400002.D	UVG090915-01B	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	X	
11/19/2009 17:30	4L400003.D	UVG090714-02E	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	X	
11/19/2009 17:59	4L400004.D	BLANK	GEL	BLANK	5G	1	N/A	4	S	ACJ	N/A	X	
11/19/2009 19:46	4L400005.D	240862002	LANL	923800	4.9G	1	N/A	5	S	ACJ	N/A	X	
11/19/2009 20:13	4L400006.D	1201974683	LANL	923800	5G	1	N/A	6	S	ACJ	N/A	X	
11/19/2009 20:43	4L400007.D	1201974684	LANL	923800	5G	1	N/A	7	S	ACJ	N/A	X	
11/19/2009 21:13	4L400008.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	8	W	ACJ	N/A	X	
11/19/2009 21:48	4L400009.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	9	W	ACJ	N/A	X	
11/19/2009 22:43	4L400010.D	WVG091119-02	GEL	RTCHECK	5ML	1	N/A	10	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
11/19/2009 23:12	4L400011.D	VSTD0050	GEL	ICAL	5ML	1	N/A	11	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/19/2009 23:42	4L400012.D	VSTD0100	GEL	ICAL	5ML	1	N/A	12	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 0:12	4L400013.D	VSTD0250	GEL	ICAL	5ML	1	N/A	13	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 0:42	4L400014.D	VSTD0500	GEL	ICAL	5ML	1	N/A	14	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 1:11	4L400015.D	VSTD0750	GEL	ICAL	5ML	1	N/A	15	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 1:41	4L400016.D	VSTD1000	GEL	ICAL	5ML	1	N/A	16	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 2:10	4L400017.D	VSTD2000	GEL	ICAL	5ML	1	N/A	17	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 2:40	4L400018.D	BLANK	GEL	BLANK	5ML	1	N/A	18	W	ACJ	N/A	X	
11/20/2009 3:10	4L400019.D	UVG090714-02E	GEL	ICV/CCV	5ML	1	N/A	19	W	ACJ	N/A	O	
11/20/2009 3:40	4L400020.D	UVG090714-02E	GEL	LCS	5G	1	N/A	20	S	ACJ	N/A	O	
11/20/2009 4:09	4L400021.D	BLANK	GEL	BLANK	5G	1	N/A	21	S	ACJ	N/A	O	
11/20/2009 4:39	4L400022.D	1201974683	LANL	923800	5G	1	N/A	22	S	ACJ	N/A	O	
11/20/2009 5:08	4L400023.D	1201974684	LANL	923800	5G	1	N/A	23	S	ACJ	N/A	O	
11/20/2009 5:38	4L400024.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	24	W	ACJ	N/A	O	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 11/24/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009

(See pg. 118 for ICAL Std. Scl. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: VOC4A 112409

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG090915-01B		5		
IS	N/A				
SS	UVG091022-01C	2.5	2.5	2.5	2.5
LCS/MS	UVG090714-02E			5	
RTCHECK	WVG091124-01				5+5
C5/C12 RTCHECK	N/A				5

Purge Amount

5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
11/24/2009 20:04	4M200001.D	WVG091124-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
11/24/2009 20:33	4M200002.D	UVG090915-01B	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	O	
11/24/2009 21:03	4M200003.D	UVG090714-02E	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	
11/24/2009 21:33	4M200004.D	BLANK	GEL	BLANK	5G	1	N/A	4	S	ACJ	N/A	O	
11/24/2009 22:15	4M200005.D	241423004	LANL	922251	5G	1	N/A	5	S	ACJ	N/A	O	
11/24/2009 22:45	4M200006.D	241423005	LANL	922251	5G	1	N/A	6	S	ACJ	N/A	O	
11/24/2009 23:14	4M200007.D	241503002	LANL	922251	5G	1	N/A	7	S	ACJ	N/A	O	
11/24/2009 23:44	4M200008.D	241503003	LANL	922251	5G	1	N/A	8	S	ACJ	N/A	O	
11/25/2009 0:13	4M200009.D	241503004	LANL	922251	5G	1	N/A	9	S	ACJ	N/A	O	
11/25/2009 0:43	4M200010.D	241524002	LANL	922251	5G	1	N/A	10	S	ACJ	N/A	O	
11/25/2009 1:13	4M200011.D	1201980892	LANL	922251	5G	1	N/A	11	S	ACJ	N/A	O	
11/25/2009 1:42	4M200012.D	1201980893	LANL	922251	5G	1	N/A	12	S	ACJ	N/A	O	
11/25/2009 2:12	4M200013.D	UVG090915-01B	GEL	CCV	5ML	1	N/A	13	W	ACJ	N/A	O	

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200005.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 24-NOV-2009 22:15
Operator : ACJ Inst ID: voc4a.i
Smp Info : |241423004|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.92250	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	39471228	42.7175	46.4

Data File: /chem/voc4a.i/112409/4m200005.d
Date : 24-NOV-2009 22:15
Client ID: WST03-10-2131
Sample Info: |241423004|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

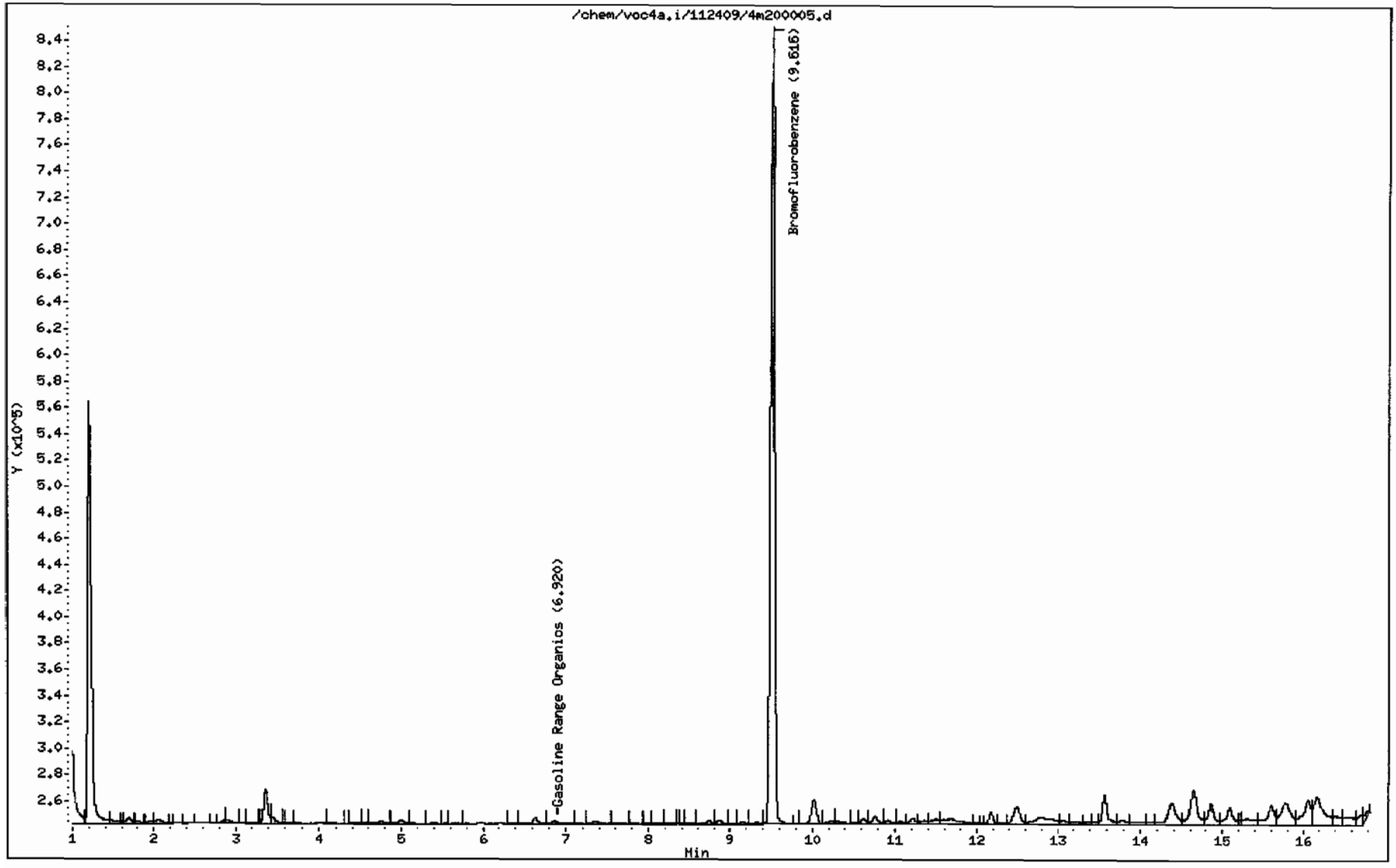

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200011.d
Lab Smp Id: 1201980892 Client Smp ID: WST03-10-2131MS
Inj Date : 25-NOV-2009 01:13
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980892|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.92250	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.896- 10.944			446634168	348.374	378
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	33215037	35.9468	39.0

Data File: /chem/voc4a.i/112409/4m200011.d
Date : 25-NOV-2009 01:13
Client ID: WST03-10-2131MS
Sample Info: |120198089211|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

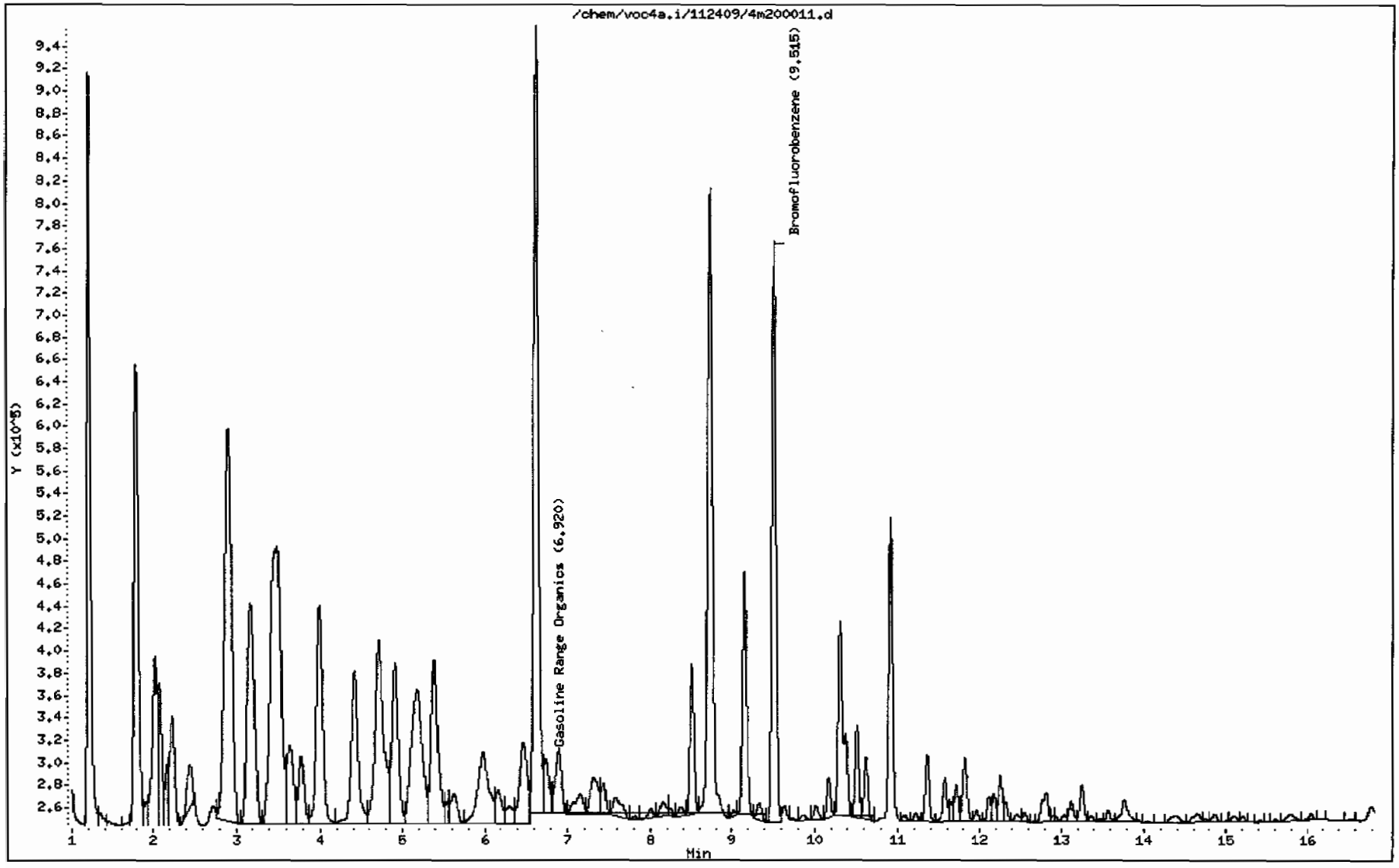

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200012.d
Lab Smp Id: 1201980893 Client Smp ID: WST03-10-2131MSD
Inj Date : 25-NOV-2009 01:42
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980893|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.92250	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.896-	10.944		519074681	404.878	440
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	34506927	37.3449	40.6

Data File: /chem/voc4a.i/112409/4m200012.d

Date : 25-NOV-2009 01:42

Client ID: WST03-10-2131MSD

Sample Info: |120198089311|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

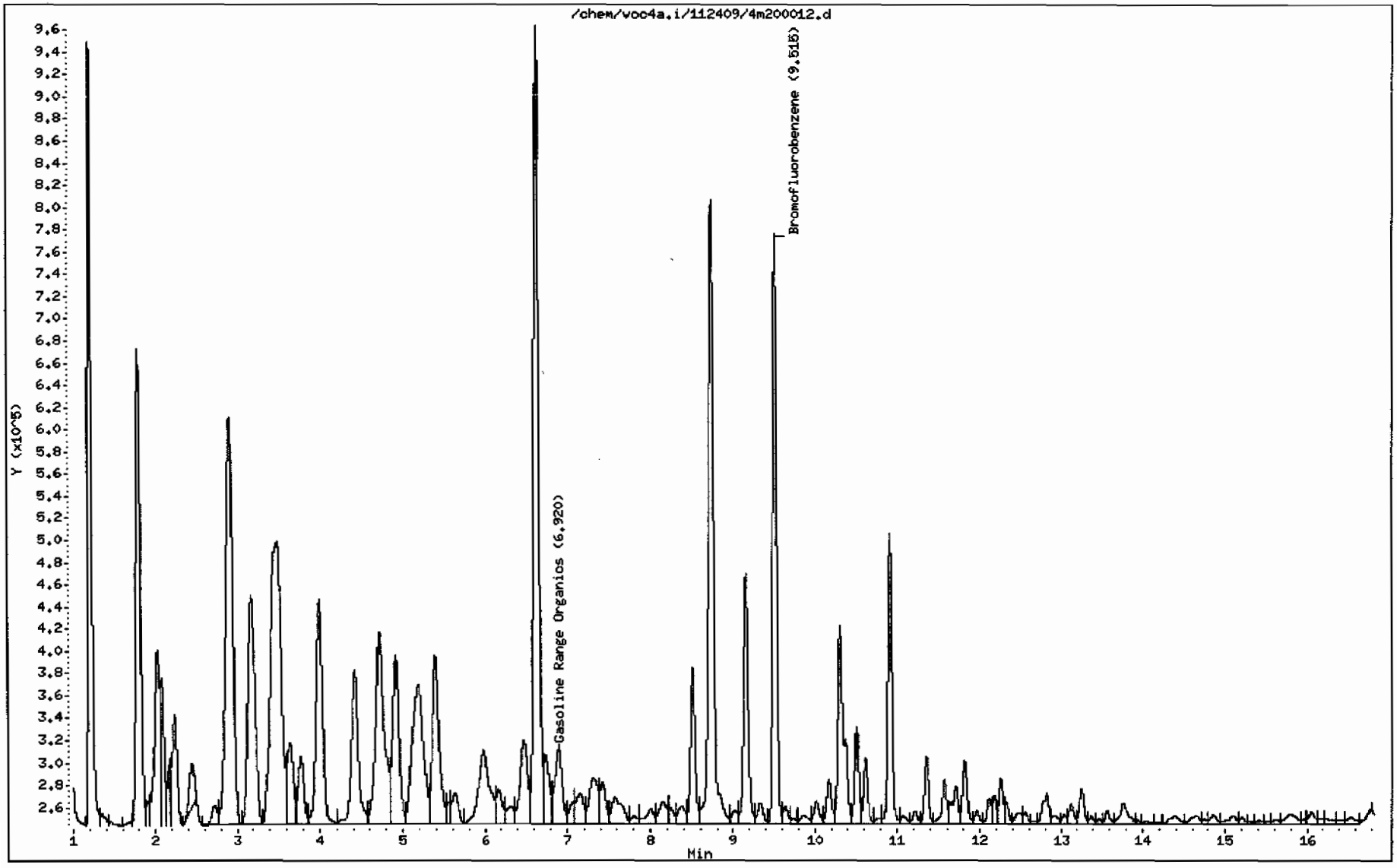

GC SEMIVOLATILE PESTICIDE ANALYSIS

Pesticide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600-1

Method/Analysis Information

Procedure:	**Analysis of Organochlorine Pesticides and Chlorinated Hydrocarbons by ECD**
Analytical Method:	SW846 8081A
Prep Method:	SW846 3510C
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	927116
Prep Batch Number:	927115
TCLP Prep Batch Number:	926091

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8081A:

Sample ID	**Client ID**
241527001	WST03-10-2132
1201980055	TCLP Blank (TB)
1201982197	Method Blank (MB)
1201982204	Laboratory Control Sample (LCS)
1201982205	Laboratory Control Sample (LCS)-Toxaphene LCS Only
1201982206	Laboratory Control Sample (LCS)-Chlordane (tech.) LCS Only
1201982198	241720001(WST49-10-5425) Matrix Spike (MS)
1201982199	241720001(WST49-10-5425) Matrix Spike (MS)-Toxaphene MS Only
1201982200	241720001(WST49-10-5425) Matrix Spike (MS)-Chlordane (tech.) MS Only
1201982201	241720001(WST49-10-5425) Matrix Spike Duplicate (MSD)
1201982202	241720001(WST49-10-5425) Matrix Spike Duplicate (MSD)-Toxaphene MSD Only
1201982203	241720001(WST49-10-5425) Matrix Spike Duplicate (MSD)-Chlordane (tech.) MSD Only

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 10.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

One of the five quantified peaks did not meet the acceptance criteria in Toxaphene standard analyzed for this SDG; however, the average concentration of the five peaks met the acceptance criteria.

Several target analytes failed to meet the acceptance criteria with positive or negative bias on one analytical column in the standards bracketing sample 241527001 (WST03-10-2132) in this SDG. However, this non-compliance had no adverse effects on the data as there were no target analytes detected on either of the columns in the samples.

The CCV standard bracketing the QC samples TB, MB and LCS failed to meet the acceptance criteria with negative bias; however this is not likely to affect the data as all QC samples met surrogate and spike recovery acceptance criteria. See NCR#767434 in the Miscellaneous Data section.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-653-1) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD did not meet the acceptance limits for Toxaphene MSD due to relatively higher spike recovery in the MS.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241527001 (WST03-10-2132) was diluted at 1:10 due to historical data and a strong acidic odor.

Sample Re-extraction/Re-analysis
Re-extraction was not performed for the sample in this SDG.

Miscellaneous Information:

Electronic Package Comment

This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR#767434 was generated for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The lower results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD5A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD5A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/16/09

Roadmap for LANL 10-600-1 PEST

This roadmap was analyzed by cla01575 on 12-08-2009, 15:15.
This roadmap was reviewed by yml on 12-15-2009, 08:35.
This roadmap was packaged by yml on 12-15-2009, 15:57.
This roadmap was validated by jim01140 on 12-16-2009, 11:16.
This roadmap was validated by jim01140 on 12-16-2009, 11:23.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd5a.i/120209.b/073f7301.d	241527001	sample	03-DEC-2009	05:48	10-600-1.sub	WST03-10-2132	10.00000	927116	DUSE - see sequence 120709a.b
□	N	/chem/ecd5a.i/120709a.b/049f4901.d	241527001	sample	08-DEC-2009	03:12	10-600-1.sub	WST03-10-2132	10.00000	927116	USE - uploaded both columns, reporting lower result

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd5a.i/120209.b/073b7301.d	241527001	sample	03-DEC-2009	05:48	10-600-1.sub	WST03-10-2132	10.00000	927116	DUSE see sequence 120709a.b
□	N	/chem/ecd5a.i/120709a.b/049b4901.d	241527001	sample	08-DEC-2009	03:12	10-600-1.sub	WST03-10-2132	10.00000	927116	USE - uploaded both columns, reporting lower result

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd5a.i/120209.b/062f6201-600.d	1201980055	tb	03-DEC-2009	03:36	10-600-1.sub	TBLK01	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/064f6401-600.d	1201982197	mb	03-DEC-2009	04:00	10-600-1.sub	PBLK01	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/065f6501-600.d	1201982204	lcs	03-DEC-2009	04:12	10-600-1.sub	PBLK01LCS	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/066f6601-600.d	1201982205	lcs	03-DEC-2009	04:24	10-600-1.sub	PBLK01TLCS	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/067f6701-600.d	1201982206	lcs	03-DEC-2009	04:36	10-600-1.sub	PBLK01CLCS	1.00000	927116	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd5a.i/120209.b/062b6201-600.d	1201980055	tb	03-DEC-2009	03:36	10-600-1.sub	TBLK01	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/064b6401-600.d	1201982197	mb	03-DEC-2009	04:00	10-600-1.sub	PBLK01	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/065b6501-600.d	1201982204	lcs	03-DEC-2009	04:12	10-600-1.sub	PBLK01LCS	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/066b6601-600.d	1201982205	lcs	03-DEC-2009	04:24	10-600-1.sub	PBLK01TLCS	1.00000	927116	
□	N	/chem/ecd5a.i/120209.b/067b6701-600.d	1201982206	lcs	03-DEC-2009	04:36	10-600-1.sub	PBLK01CLCS	1.00000	927116	

SAMPLE DATA SUMMARY

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-600-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241527001	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/08/2009 03:12	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	049f4901.d	**Column:**	1 CLP-1	**Level:**	LOW
	049b4901.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

QUALITY CONTROL SUMMARY

Pesticide

Surrogate Recovery Report

SDG Number: 10–600–1

Matrix Type: TCLP SOLID

CAP Column (1) : CLP–1 **CAP Column (2) : CLP–2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201980055	TB for batch 926091	76		64		78		64	
1201982197	MB for batch 927115	74		62		80		59	
1201982204	LCS for batch 927115	57		47		64		44	
1201982205	LCS for batch 927115	63		48		75		53	
1201982206	LCS for batch 927115	71		64		73		62	
241527001	WST03–10–2132	70	D	75	D	100	D	82	D

Surrogate	Acceptance Limits
4CMX = 4cmx	(29%–103%)
DCB = Decachlorobiphenyl	(34%–118%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Client ID: LCS for batch 927115
Lab Sample ID: 1201982206
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 04:36
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 1

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
57-74-9	LCS Chlordane (tech.)	0.100	0.0	0.0683	68	38-131

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–600–1
Client ID: LCS for batch 927115
Lab Sample ID: 1201982204
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 04:12
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 1

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
58–89–9	LCS	gamma–BHC (Lindane)	0.005	0.0	0.00288	58	49–138
76–44–8	LCS	Heptachlor	0.005	0.0	0.00288	58	38–132
1024–57–3	LCS	Heptachlor epoxide	0.005	0.0	0.00268	54	49–134
72–20–8	LCS	Endrin	0.005	0.0	0.00315	63	56–145
72–43–5	LCS	Methoxychlor	0.050	0.0	0.0357	71	53–151

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–600–1
Client ID: LCS for batch 927115
Lab Sample ID: 1201982205
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 04:24
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 1

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
8001–35–2	LCS Toxaphene	0.100	0.0	0.0731	73	41–143

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MS
Lab Sample ID: 1201982200
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP S
Analysis Date: 12/08/2009 02:00
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
57-74-9	MS	Chlordane (tech.)	0.100	0.00	U	0.0662	66	38-134

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MSD
Lab Sample ID: 1201982203
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/08/2009 02:12
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
57-74-9	MSD Chlordane (tech.)	0.100	0.00	U	0.0573	57	38--134	14	0-30

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–653–1
Client ID: WST49–10–5425MS
Lab Sample ID: 1201982198
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP S
Analysis Date: 12/08/2009 01:12
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
58–89–9	MS	gamma–BHC (Lindane)	0.005	0.00	U	0.00355	71	46–132
76–44–8	MS	Heptachlor	0.005	0.00	U	0.00409	82	37–127
1024–57–3	MS	Heptachlor epoxide	0.005	0.00	U	0.0038	76	44–129
72–20–8	MS	Endrin	0.005	0.00	U	0.00421	84	48–145
72–43–5	MS	Methoxychlor	0.050	0.00	U	0.0488	98	47–156

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MSD
Lab Sample ID: 1201982201
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/08/2009 01:24
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
58-89-9	MSD gamma-BHC (Lindane)	0.005	0.00	U	0.00418	84	46-132	16	0-30
76-44-8	MSD Heptachlor	0.005	0.00	U	0.00423	85	37-127	3	0-30
1024-57-3	MSD Heptachlor epoxide	0.005	0.00	U	0.00415	83	44-129	9	0-30
72-20-8	MSD Endrin	0.005	0.00	U	0.00445	89	48-145	6	0-30
72-43-5	MSD Methoxychlor	0.050	0.00	U	0.053	106	47-156	8	0-30

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MS
Lab Sample ID: 1201982199
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP S
Analysis Date: 12/08/2009 01:36
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
8001-35-2	MS	Toxaphene	0.100	0.00	U	0.110	110	38-138

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MSD
Lab Sample ID: 1201982202
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/08/2009 01:48
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
8001-35-2	MSD Toxaphene	0.100	0.00	U	0.0791	79	38-138	33 *	0-30

Method Blank Summary

SDG Number:	10-600-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 927115	Instrument ID:	ECD5A.I_2 ECD5A.I_1	Data File:	064b6401-600.d 064f6401-600.d
Lab Sample ID:	1201982197				
Column:	CLP-2 CLP-1	Prep Date:	12/01/2009 18:05	Analyzed:	12/03/09 04:00
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 TB for batch 926091	1201980055	062f6201-600.d 062b6201-600.d	12/03/09	0336
02 LCS for batch 927115	1201982204	065f6501-600.d 065b6501-600.d	12/03/09	0412
03 LCS for batch 927115	1201982205	066f6601-600.d 066b6601-600.d	12/03/09	0424
04 LCS for batch 927115	1201982206	067f6701-600.d 067b6701-600.d	12/03/09	0436
11 WST03-10-2132	241527001	049f4901.d 049b4901.d	12/08/09	0312

SAMPLE
DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241527001**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**10**
Run Date:	**12/08/2009 03:12**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**049f4901.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	049b4901.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/049f4901.d
Lab Smp Id: 241527001 Client Smp ID: WST03-10-2132
Inj Date : 08-DEC-2009 03:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |241527001|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 49
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	6167243	13.9339	0.00697	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	5273956	20.0700	0.0100	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/049f4901.d

Date : 08-DEC-2009 03:12

Client ID: WST03-10-2132

Sample Info: |241527001|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

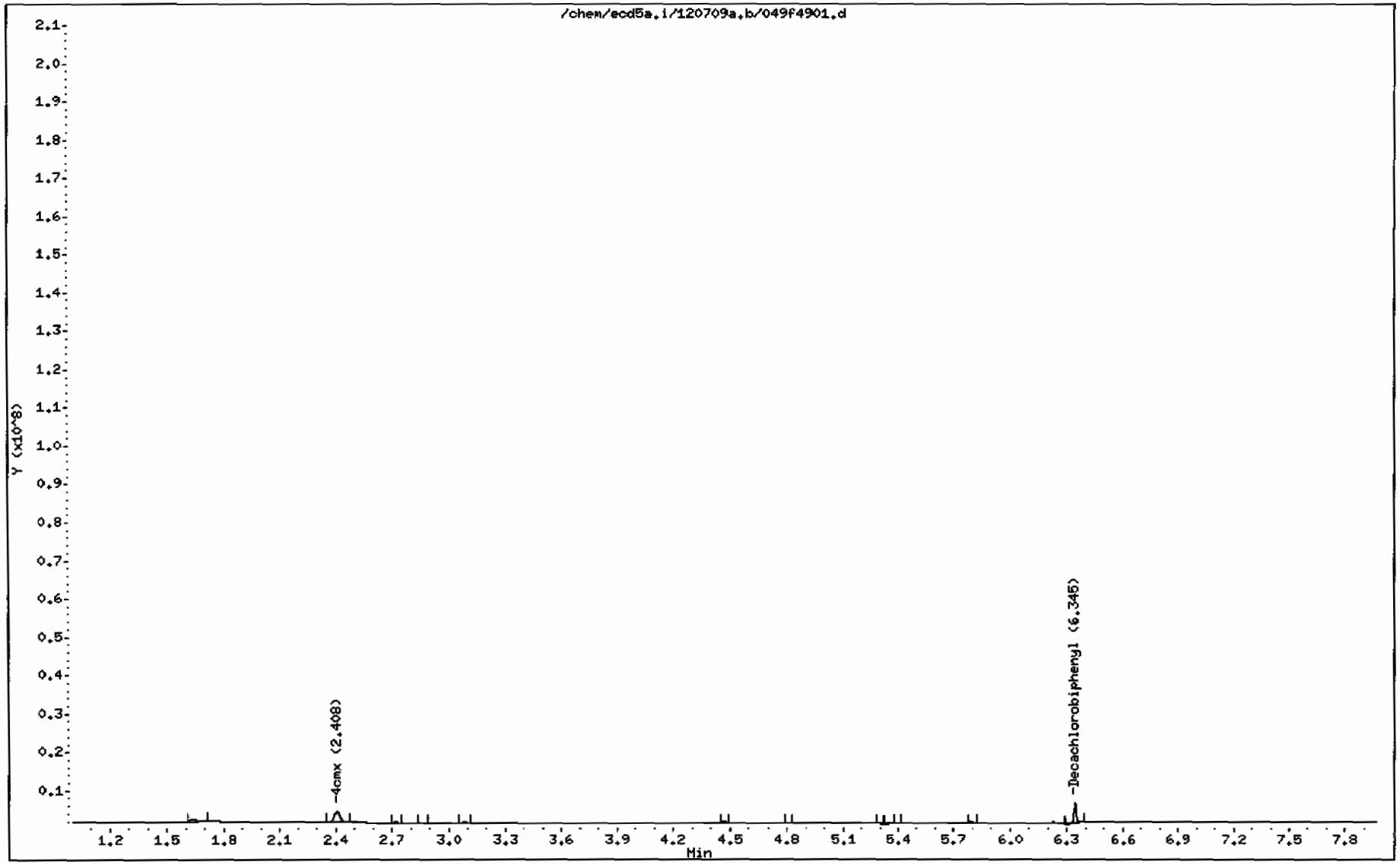

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/049b4901.d
Lab Smp Id: 241527001 Client Smp ID: WST03-10-2132
Inj Date : 08-DEC-2009 03:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |241527001|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 49
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.062	2.064	-0.002	74732009	15.0070	0.00750	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	45580891	16.4307	0.00822	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/049b4901.d
Date : 08-DEC-2009 03:12
Client ID: WST03-10-2132
Sample Info: |241527001|10|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

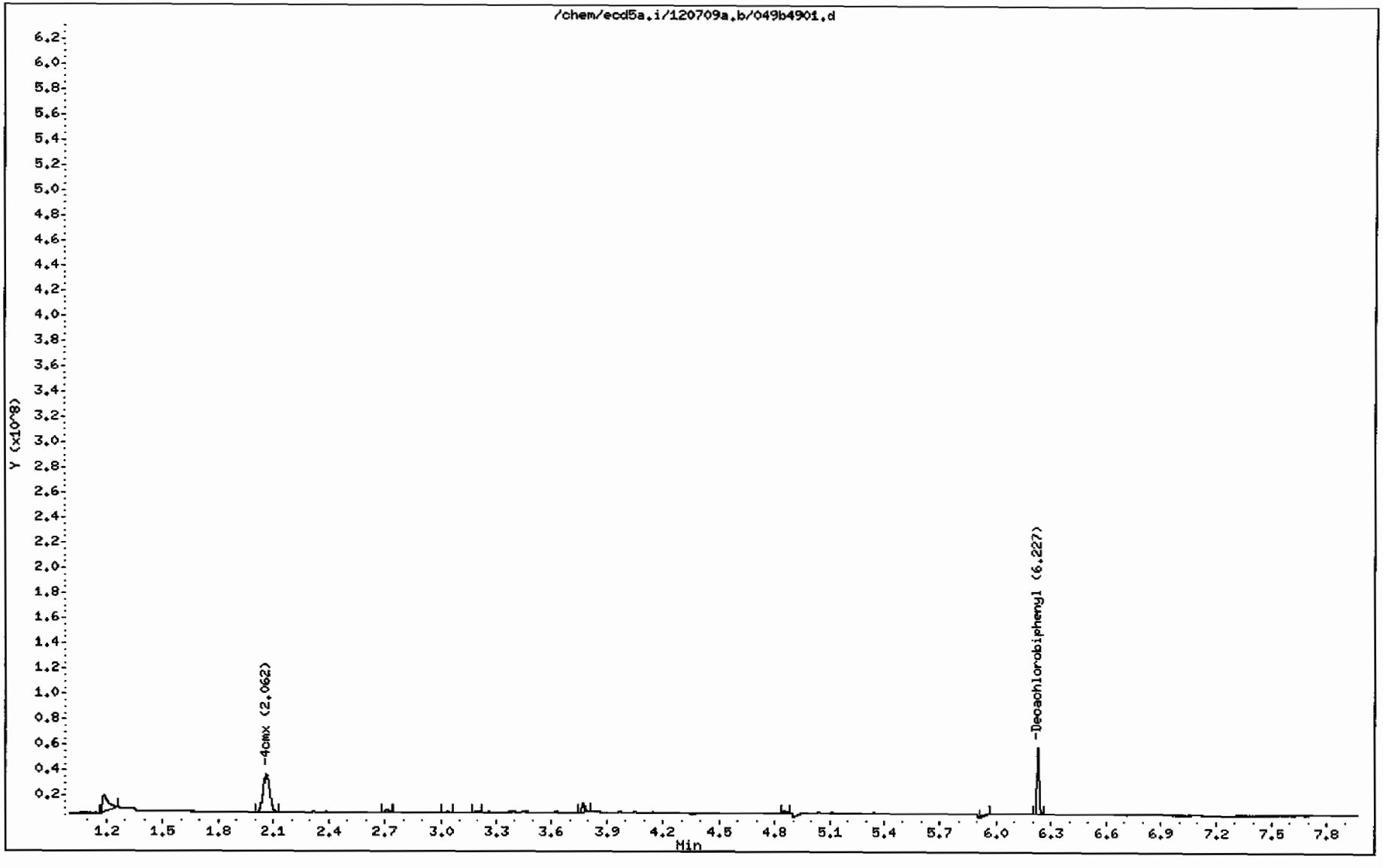

STANDARDS DATA

Report Date: 08-Dec-2009 12:15

Calibration History

Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
30-NOV-2009 16:51	gapa	/chem/ecd5a.i/113009.b/013f1301.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006f0601.d
30-NOV-2009 15:29	chlor	/chem/ecd5a.i/113009.b/007f0701.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010f1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006f0601.d

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 10.00000		
30-NOV-2009 17:03	gapa	/chem/ecd5a.i/113009.b/014f1401.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007f0701.d
30-NOV-2009 15:41	chlor	/chem/ecd5a.i/113009.b/008f0801.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011f1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007f0701.d

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 50.00000		
30-NOV-2009 17:15	gapa	/chem/ecd5a.i/113009.b/015f1501.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008f0801.d
30-NOV-2009 15:53	chlor	/chem/ecd5a.i/113009.b/009f0901.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012f1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008f0801.d

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 100.00000		
30-NOV-2009 17:27	gapa	/chem/ecd5a.i/113009.b/016f1601.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024f2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023f2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022f2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015f1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013f1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009f0901.d
30-NOV-2009 16:05	chlor	/chem/ecd5a.i/113009.b/010f1001.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013f1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009f0901.d

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 200.00000		
30-NOV-2009 17:39	gapa	/chem/ecd5a.i/113009.b/017f1701.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010f1001.d
30-NOV-2009 16:28	chlor	/chem/ecd5a.i/113009.b/011f1101.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014f1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010f1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:39	2,4,5-TCP	/chem/ecd5a.i/120209.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 11:18	indab	/chem/ecd5a.i/120209.b/099f9901.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:04	chlor	/chem/ecd5a.i/120209.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:52	tox	/chem/ecd5a.i/120209.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 10:23	indab	/chem/ecd5a.i/120209.b/096f9601.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 07:48	indab	/chem/ecd5a.i/120209.b/083f8301.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 05:24	indab	/chem/ecd5a.i/120209.b/071f7101.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 03:12	indab	/chem/ecd5a.i/120209.b/060f6001.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 01:13	indab	/chem/ecd5a.i/120209.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 23:37	indab	/chem/ecd5a.i/120209.b/042f4201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 22:49	indab	/chem/ecd5a.i/120209.b/038f3801.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 21:38	indab	/chem/ecd5a.i/120209.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 19:14	indab	/chem/ecd5a.i/120209.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:19	gapa	/chem/ecd5a.i/120209.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:40	indab	/chem/ecd5a.i/120209.b/003f0301.d

Report Date: 08-Dec-2009 12:15

Calibration History

Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
30-NOV-2009 16:51	gapa	/chem/ecd5a.i/113009.b/013b1301.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006b0601.d
30-NOV-2009 15:29	chlor	/chem/ecd5a.i/113009.b/007b0701.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010b1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006b0601.d
Cal Level: 2 , Cal Amount: 10.00000		
30-NOV-2009 17:03	gapa	/chem/ecd5a.i/113009.b/014b1401.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007b0701.d
30-NOV-2009 15:41	chlor	/chem/ecd5a.i/113009.b/008b0801.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011b1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007b0701.d
Cal Level: 3 , Cal Amount: 50.00000		
30-NOV-2009 17:15	gapa	/chem/ecd5a.i/113009.b/015b1501.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008b0801.d
30-NOV-2009 15:53	chlor	/chem/ecd5a.i/113009.b/009b0901.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012b1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008b0801.d
Cal Level: 4 , Cal Amount: 100.00000		
30-NOV-2009 17:27	gapa	/chem/ecd5a.i/113009.b/016b1601.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024b2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023b2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022b2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015b1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013b1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009b0901.d
30-NOV-2009 16:05	chlor	/chem/ecd5a.i/113009.b/010b1001.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013b1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009b0901.d
Cal Level: 5 , Cal Amount: 200.00000		
30-NOV-2009 17:39	gapa	/chem/ecd5a.i/113009.b/017b1701.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010b1001.d
30-NOV-2009 16:28	chlor	/chem/ecd5a.i/113009.b/011b1101.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014b1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010b1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 11:18	indab	/chem/ecd5a.i/120209.b/099b9901.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 10:23	indab	/chem/ecd5a.i/120209.b/096b9601.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:04	chlor	/chem/ecd5a.i/120209.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 07:48	indab	/chem/ecd5a.i/120209.b/083b8301.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 05:24	indab	/chem/ecd5a.i/120209.b/071b7101.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 01:13	indab	/chem/ecd5a.i/120209.b/050b5001.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 03:12	indab	/chem/ecd5a.i/120209.b/060b6001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 23:37	indab	/chem/ecd5a.i/120209.b/042b4201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 22:49	indab	/chem/ecd5a.i/120209.b/038b3801.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 21:38	indab	/chem/ecd5a.i/120209.b/032b3201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 19:14	indab	/chem/ecd5a.i/120209.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:19	gapa	/chem/ecd5a.i/120209.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:52	tox	/chem/ecd5a.i/120209.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:40	indab	/chem/ecd5a.i/120209.b/003b0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 11:29 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.573	2.543-2.603	4.127e+05
63 2,4,5-Trichlorophenol	0.740	0.640-0.840	
59 Hexachlorobenzene	2.997	2.897-3.097	4.053e+05
2 Aroclor-1221	2.631	2.601-2.661	5.910e+03
	2.767	2.736-2.796	3.363e+03
	2.802	2.772-2.832	1.422e+04
3 Aroclor-1016	3.102	3.072-3.132	1.760e+04
	3.460	3.430-3.490	2.200e+04
	3.686	3.656-3.716	8.402e+03
	3.702	3.672-3.732	8.144e+03
	3.839	3.809-3.869	1.168e+04
4 Aroclor-1232	3.104	3.074-3.134	7.998e+03
	3.248	3.218-3.278	2.167e+03
	3.459	3.430-3.490	1.042e+04
	3.555	3.525-3.585	6.943e+03
	4.119	4.089-4.149	4.959e+03
5 alpha-BHC	3.163	3.133-3.193	5.337e+05
6 Aroclor-1242	3.103	3.003-3.203	1.426e+04
	3.460	3.360-3.560	1.830e+04
	3.600	3.500-3.700	7.474e+03
	4.118	4.018-4.218	9.828e+03
	4.137	4.037-4.237	9.417e+03
7 gamma-BHC (Lindane)	3.447	3.417-3.477	4.666e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.763	3.663-3.863	1.521e+04
	4.422	4.322-4.522	8.885e+03
	4.546	4.446-4.646	4.838e+04
	4.631	4.531-4.731	7.431e+04
	4.766	4.666-4.866	3.988e+03
9 Aroclor-1248	3.686	3.586-3.786	1.281e+04
	3.839	3.739-3.939	1.679e+04
	3.897	3.797-3.997	1.095e+04
	4.119	4.019-4.219	2.029e+04
	4.509	4.409-4.609	9.814e+03
10 Heptachlor	3.824	3.794-3.854	4.090e+05
11 Aldrin	4.044	4.014-4.074	4.406e+05
12 beta-BHC	3.525	3.495-3.555	2.122e+05
13 delta-BHC	3.666	3.636-3.696	4.909e+05
14 Heptachlor epoxide	4.464	4.434-4.494	3.972e+05
15 Aroclor-1254	4.090	4.060-4.120	1.481e+04
	4.257	4.227-4.287	2.571e+04
	4.509	4.479-4.539	2.679e+04
	4.679	4.649-4.709	2.010e+04
	4.960	4.930-4.990	2.920e+04
16 Endosulfan I	4.720	4.690-4.750	3.588e+05
17 gamma-Chlordane	4.546	4.516-4.576	3.909e+05
18 alpha-Chlordane	4.632	4.602-4.662	3.796e+05
19 4,4'-DDE	4.681	4.651-4.711	3.941e+05
20 Dieldrin	4.872	4.842-4.902	3.839e+05
21 Aroclor-1260	4.621	4.521-4.721	2.245e+04
	4.788	4.688-4.888	3.535e+04
	4.866	4.766-4.966	1.482e+04
	4.960	4.860-5.060	3.945e+04
	5.358	5.258-5.458	4.235e+04
22 Endrin	5.017	4.987-5.047	3.283e+05
23 Toxaphene	4.660	4.630-4.690	2.144e+03
	4.875	4.845-4.905	5.628e+03
	4.931	4.901-4.961	5.158e+03
	4.967	4.937-4.997	6.906e+03
	5.149	5.119-5.179	1.145e+04
24 Endosulfan II	5.154	5.124-5.184	3.108e+05
25 4,4'-DDD	5.051	5.021-5.081	3.085e+05
26 4,4'-DDT	5.219	5.189-5.249	2.459e+05
27 Endrin aldehyde	5.408	5.378-5.438	2.729e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.503	5.473-5.533	1.181e+05
	29 Endosulfan sulfate	5.668	5.638-5.698	2.955e+05
	30 Aroclor-1268	5.050	4.950-5.150	
		5.067	4.967-5.167	
		5.185	5.085-5.285	
		5.378	5.278-5.478	
		5.531	5.431-5.631	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	5.839	5.809-5.869	3.247e+05
	51 Mirex	5.611	5.581-5.641	2.509e+05
	52 C-Nonachlor	5.039	5.009-5.069	4.150e+05
	53 O-Chlordane	4.400	4.370-4.430	3.312e+05
	54 T-Nonachlor	4.625	4.595-4.655	3.518e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.464	4.434-4.494	2.324e+05
	58 2,4-DDD	4.794	4.764-4.824	2.045e+05
	57 2,4-DDT	4.950	4.920-4.980	1.826e+05
$	32 Decachlorobiphenyl	6.422	6.392-6.452	1.695e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 11:29 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	92700.000000
Initial:End Threshold	46350.000000
Initial:Area Threshold	927000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.121	2.091-2.151	4.515e+06
61 2,4,5-Trichlorophenol	1.631	1.531-1.731	
59 Hexachlorobenzene	2.637	2.607-2.667	4.473e+06
2 Aroclor-1221	3.136	3.107-3.167	3.819e+04
	3.255	3.225-3.285	2.282e+04
	3.304	3.274-3.334	7.878e+04
3 Aroclor-1016	3.947	3.917-3.977	1.293e+05
	4.040	4.010-4.070	8.559e+04
	4.110	4.080-4.140	5.407e+04
	4.171	4.141-4.201	5.109e+04
	4.351	4.321-4.381	6.850e+04
4 Aroclor-1232	3.304	3.275-3.334	5.230e+04
	3.949	3.919-3.979	5.701e+04
	4.040	4.010-4.070	3.929e+04
	4.350	4.320-4.380	3.045e+04
	4.622	4.592-4.652	3.317e+04
5 alpha-BHC	2.793	2.763-2.823	6.310e+06
6 Aroclor-1242	3.618	3.588-3.648	8.644e+04
	4.040	4.010-4.070	6.791e+04
	4.109	4.079-4.139	4.340e+04
	4.350	4.320-4.380	5.437e+04
	4.430	4.400-4.460	5.974e+04
7 gamma-BHC (Lindane)	3.106	3.076-3.136	5.481e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.334	3.304-3.364	1.963e+05
	4.050	4.020-4.080	1.071e+05
	4.194	4.164-4.224	4.886e+05
	4.288	4.258-4.318	3.826e+05
	4.438	4.408-4.468	4.103e+04
9 Aroclor-1248	4.172	4.142-4.202	7.431e+04
	4.351	4.321-4.381	9.433e+04
	4.431	4.401-4.461	1.002e+05
	4.592	4.562-4.622	1.083e+05
	4.768	4.738-4.798	1.138e+05
10 Heptachlor	3.444	3.414-3.474	4.460e+06
11 Aldrin	3.675	3.645-3.705	4.984e+06
12 beta-BHC	3.186	3.156-3.216	2.438e+06
13 delta-BHC	3.410	3.380-3.440	5.431e+06
14 Heptachlor epoxide	4.070	4.040-4.100	4.197e+06
15 Aroclor-1254	4.619	4.589-4.649	9.484e+04
	4.734	4.704-4.764	1.078e+05
	5.023	4.993-5.053	1.477e+05
	5.158	5.128-5.188	1.045e+05
	5.481	5.451-5.511	1.267e+05
16 Endosulfan I	4.320	4.290-4.350	3.848e+06
17 gamma-Chlordane	4.194	4.164-4.224	4.466e+06
18 alpha-Chlordane	4.288	4.258-4.318	4.307e+06
19 4,4'-DDE	4.401	4.371-4.431	4.093e+06
20 Dieldrin	4.493	4.463-4.523	4.057e+06
21 Aroclor-1260	5.043	5.013-5.073	6.157e+04
	5.140	5.110-5.170	1.370e+05
	5.261	5.231-5.291	1.523e+05
	5.481	5.451-5.511	1.467e+05
	6.079	6.049-6.109	1.563e+05
22 Endrin	4.679	4.649-4.709	3.533e+06
23 Toxaphene	4.553	4.523-4.583	3.946e+04
	4.782	4.752-4.812	5.053e+04
	4.802	4.772-4.832	7.541e+04
	4.861	4.831-4.891	1.327e+05
	5.018	4.988-5.048	7.494e+04
24 Endosulfan II	4.809	4.779-4.839	3.350e+06
25 4,4'-DDD	4.754	4.724-4.784	3.483e+06
26 4,4'-DDT	4.940	4.910-4.970	2.564e+06
27 Endrin aldehyde	5.013	4.983-5.043	2.760e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
28 Methoxychlor	5.346	5.316-5.376	8.575e+05
29 Endosulfan sulfate	5.176	5.146-5.206	3.045e+06
30 Aroclor-1268	5.217	5.187-5.247	
	5.596	5.566-5.626	
	5.628	5.598-5.658	
	5.769	5.739-5.799	
	6.149	6.119-6.179	
60 Aroclor-1262	4.689	4.589-4.789	
	4.779	4.679-4.879	
	5.074	4.974-5.174	
	5.224	5.124-5.324	
	5.396	5.296-5.496	
31 Endrin ketone	5.492	5.462-5.522	3.461e+06
51 Mirex	5.470	5.440-5.500	2.725e+06
52 C-Nonachlor	4.735	4.705-4.765	4.601e+06
53 O-Chlordane	4.011	3.981-4.041	3.689e+06
54 T-Nonachlor	4.256	4.226-4.286	4.007e+06
55 1,2-Dichlorobenzene	6.619	6.589-6.649	
56 2,4-DDE	4.204	4.174-4.234	2.557e+06
58 2,4-DDD	4.525	4.495-4.555	2.313e+06
57 2,4-DDT	4.710	4.680-4.740	1.910e+06
$ 32 Decachlorobiphenyl	6.214	6.184-6.244	3.204e+06

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/113009.b/013f1301.d
Level 2: /chem/ecd5a.i/113009.b/014f1401.d
Level 3: /chem/ecd5a.i/113009.b/015f1501.d
Level 4: /chem/ecd5a.i/113009.b/016f1601.d
Level 5: /chem/ecd5a.i/113009.b/017f1701.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	459493	404841	390998	387075	383854	405252	7.738
2 Aroclor-1221(1)	+++++	+++++	+++++	5910	+++++	5910	0.000
(2)	+++++	+++++	+++++	3363	+++++	3363	0.000
(3)	+++++	+++++	+++++	14218	+++++	14218	0.000
3 Aroclor-1016(1)	18316	18455	17930	17404	15906	17602	5.863
(2)	21725	22828	22310	22663	20456	21996	4.360
(3)	8841	8543	8438	8235	7951	8402	3.973
(4)	8274	8363	8182	8166	7736	8144	2.968
(5)	11759	11851	11816	11833	11120	11676	2.678
4 Aroclor-1232(1)	+++++	+++++	+++++	7998	+++++	7998	0.000
(2)	+++++	+++++	+++++	2167	+++++	2167	0.000
(3)	+++++	+++++	+++++	10425	+++++	10425	0.000
(4)	+++++	+++++	+++++	6943	+++++	6943	0.000
(5)	+++++	+++++	+++++	4959	+++++	4959	0.000
5 alpha-BHC	491739	508089	538268	551826	578483	533681	6.472
6 Aroclor-1242(1)	+++++	+++++	+++++	14263	+++++	14263	0.000
(2)	+++++	+++++	+++++	18303	+++++	18303	0.000
(3)	+++++	+++++	+++++	7474	+++++	7474	0.000
(4)	+++++	+++++	+++++	9828	+++++	9828	0.000
(5)	+++++	+++++	+++++	9417	+++++	9417	0.000
7 gamma-BHC (Lindane)	434473	449351	470116	477498	501412	466570	5.540
8 Chlordane (tech.)(1)	14752	15409	14812	14855	16225	15211	4.110
(2)	8428	8540	8998	8860	9600	8885	5.195
(3)	46010	46727	49533	49062	50586	48384	4.004
(4)	71000	72641	76714	74554	76618	74305	3.358
(5)	4495	4292	3645	3545	3960	3988	10.216

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	12812	+++++	12812	0.000
(2)	+++++	+++++	+++++	16794	+++++	16794	0.000
(3)	+++++	+++++	+++++	10955	+++++	10955	0.000
(4)	+++++	+++++	+++++	20294	+++++	20294	0.000
(5)	+++++	+++++	+++++	9814	+++++	9814	0.000
10 Heptachlor	401838	409045	409978	403588	420372	408964	1.775
11 Aldrin	417768	429626	447022	449900	458668	440597	3.757
12 beta-BHC	216642	213028	206845	207774	216729	212204	2.225
13 delta-BHC	451379	466994	496935	508937	530192	490887	6.473
14 Heptachlor epoxide	393287	397980	398351	396957	399183	397152	0.580
15 Aroclor-1254(1)	+++++	+++++	+++++	14812	+++++	14812	0.000
(2)	+++++	+++++	+++++	25713	+++++	25713	0.000
(3)	+++++	+++++	+++++	26786	+++++	26786	0.000
(4)	+++++	+++++	+++++	20102	+++++	20102	0.000
(5)	+++++	+++++	+++++	29201	+++++	29201	0.000
16 Endosulfan I	353738	358685	360703	358983	361922	358806	0.871
17 gamma-Chlordane	383840	380376	389568	394798	405930	390903	2.569
18 alpha-Chlordane	359872	365634	385024	390477	396857	379573	4.227
19 4,4'-DDE	382759	400641	404947	394450	387652	394090	2.307
20 Dieldrin	374922	389692	392394	384495	378232	383947	1.926
21 Aroclor-1260(1)	22983	23321	22940	22516	20469	22446	5.085
(2)	35726	36888	36310	35624	32213	35352	5.167
(3)	14778	14965	14903	14964	14487	14820	1.354
(4)	39548	40617	40289	39914	36902	39454	3.756
(5)	42946	43953	43513	42694	38645	42350	5.027
22 Endrin	326619	336344	333566	325148	319734	328282	2.035
23 Toxaphene(1)	2264	2121	2189	2025	2123	2144	4.138
(2)	6590	5395	5422	5385	5348	5628	9.569
(3)	5804	4927	4976	5029	5056	5158	7.061
(4)	7353	6689	6859	6817	6814	6906	3.735
(5)	12002	11128	11116	11290	11735	11454	3.456
24 Endosulfan II	290780	301637	325836	322726	312862	310768	4.711
25 4,4'-DDD	296756	310832	315715	311519	307886	308541	2.320

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
	26 4,4'-DDT	231690	251563	248827	237254	260211	245909	4.646
	27 Endrin aldehyde	281843	279990	271328	266247	265173	272916	2.819
	28 Methoxychlor	127039	129131	114263	107759	112493	118137	7.971
	29 Endosulfan sulfate	301362	300700	292392	289061	294158	295535	1.809
	30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	61 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	31 Endrin ketone	328518	338793	324847	313038	318073	324654	3.054
	51 Mirex	276112	254438	244918	240590	238507	250913	6.122
	52 C-Nonachlor	421270	417494	422663	412053	401499	414996	2.070
	53 O-Chlordane	355903	337510	331033	320915	310452	331162	5.200
	54 T-Nonachlor	364861	350405	356422	348915	338327	351786	2.784
	55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	56 2,4-DDE	252099	239483	233093	224192	212897	232353	6.407
	58 2,4-DDD	219182	208752	203714	198828	192041	204503	5.021
	57 2,4-DDT	170177	170308	191010	188986	192485	182593	6.212
M	62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	1 4cmx	415446	413069	409897	408925	416029	412673	0.774
$	32 Decachlorobiphenyl	189589	175166	157954	158782	165921	169482	7.787

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Calibration File Names:
Level 1: /chem/ecd5a.i/113009.b/013b1301.d
Level 2: /chem/ecd5a.i/113009.b/014b1401.d
Level 3: /chem/ecd5a.i/113009.b/015b1501.d
Level 4: /chem/ecd5a.i/113009.b/016b1601.d
Level 5: /chem/ecd5a.i/113009.b/017b1701.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	5610501	4622923	4063658	4013116	4054497	AVRG		4472939		15.28852
2 Aroclor-1221(1)	+++++	+++++	+++++	38194	+++++	AVRG		38194		0.000e+00
(2)	+++++	+++++	+++++	22822	+++++	AVRG		22822		0.000e+00
(3)	+++++	+++++	+++++	78778	+++++	AVRG		78778		0.000e+00
3 Aroclor-1016(1)	135228	136032	131291	128421	115286	AVRG		129252		6.49152
(2)	94115	91053	86081	82205	74492	AVRG		85590		9.00075
(3)	59100	56752	54061	51882	48540	AVRG		54067		7.61842
(4)	56717	54302	51105	48729	44616	AVRG		51094		9.25654
(5)	75245	71571	68782	66056	60864	AVRG		68504		7.97140
4 Aroclor-1232(1)	+++++	+++++	+++++	52302	+++++	AVRG		52302		0.000e+00
(2)	+++++	+++++	+++++	57011	+++++	AVRG		57011		0.000e+00
(3)	+++++	+++++	+++++	39294	+++++	AVRG		39294		0.000e+00
(4)	+++++	+++++	+++++	30449	+++++	AVRG		30449		0.000e+00
(5)	+++++	+++++	+++++	33167	+++++	AVRG		33167		0.000e+00
5 alpha-BHC	6838675	6514616	5966818	5953702	6277942	AVRG		6310351		5.96694
6 Aroclor-1242(1)	+++++	+++++	+++++	86436	+++++	AVRG		86436		0.000e+00
(2)	+++++	+++++	+++++	67908	+++++	AVRG		67908		0.000e+00
(3)	+++++	+++++	+++++	43403	+++++	AVRG		43403		0.000e+00
(4)	+++++	+++++	+++++	54366	+++++	AVRG		54366		0.000e+00
(5)	+++++	+++++	+++++	59740	+++++	AVRG		59740		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	5956503	5680115	5177596	5150340	5441473	AVRG		5481205		6.24514
8 Chlordane (tech.) (1)	223157	217277	191001	177203	172778	AVRG		196283		11.69392
(2)	122737	128933	99386	86820	97497	AVRG		107075		16.73380
(3)	548498	538775	462818	440251	452770	AVRG		488622		10.43118
(4)	442662	422594	355466	340415	351822	AVRG		382592		12.16875
(5)	47866	49080	35942	33298	38950	AVRG		41027		17.30065
9 Aroclor-1248 (1)	+++++	+++++	+++++	74311	+++++	AVRG		74311		0.000e+00
(2)	+++++	+++++	+++++	94327	+++++	AVRG		94327		0.000e+00
(3)	+++++	+++++	+++++	100218	+++++	AVRG		100218		0.000e+00
(4)	+++++	+++++	+++++	108276	+++++	AVRG		108276		0.000e+00
(5)	+++++	+++++	+++++	113831	+++++	AVRG		113831		0.000e+00
10 Heptachlor	5149048	4797406	4251158	4014001	4089869	AVRG		4460296		11.03009
11 Aldrin	5677312	5304074	4731628	4606988	4599689	AVRG		4983938		9.70928
12 beta-BHC	2878486	2677456	2248224	2156766	2231469	AVRG		2438480		13.11538
13 delta-BHC	5804273	5440206	5129371	5241565	5538336	AVRG		5430750		4.85266
14 Heptachlor epoxide	4885668	4389663	3997179	3934738	3778905	AVRG		4197231		10.62092
15 Aroclor-1254 (1)	+++++	+++++	+++++	94842	+++++	AVRG		94842		0.000e+00
(2)	+++++	+++++	+++++	107760	+++++	AVRG		107760		0.000e+00
(3)	+++++	+++++	+++++	147710	+++++	AVRG		147710		0.000e+00
(4)	+++++	+++++	+++++	104486	+++++	AVRG		104486		0.000e+00
(5)	+++++	+++++	+++++	126738	+++++	AVRG		126738		0.000e+00
16 Endosulfan I	4610162	4233166	3599394	3427182	3370183	AVRG		3848018		14.21280
17 gamma-Chlordane	5032525	4703285	4197236	4143836	4252527	AVRG		4465882		8.66406
18 alpha-Chlordane	4910798	4568637	4032258	3968194	4053295	AVRG		4306636		9.62764

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	4632294	4324470	3955249	3808388	3745219	AVRG		4093124		9.18486
20 Dieldrin	4747158	4382405	3906755	3691581	3559389	AVRG		4057458		12.23597
21 Aroclor-1260(1)	67909	63594	61133	58501	56721	AVRG		61572		7.14408
(2)	154760	142644	136554	130696	120581	AVRG		137047		9.34993
(3)	163780	157424	151415	148508	140329	AVRG		152291		5.84087
(4)	154736	148501	147397	143879	139185	AVRG		146740		3.92572
(5)	161375	159022	154521	152918	153834	AVRG		156334		2.34679
22 Endrin	4221086	3965357	3399432	3101165	2980147	AVRG		3533437		15.30850
23 Toxaphene(1)	6785796	24879794	45282173	83261070	122239904	LINR	-111	39464		0.99938
(2)	10918417	28773691	52336549	103429953	156813371	LINR	-74.20418	50534		0.99913
(3)	13788450	44397334	80246614	159783502	231242827	LINR	-84.19422	75411		0.99965
(4)	23787638	84302296	154527900	270829136	415826281	LINR	-110	132744		0.99822
(5)	10034600	41699252	74815893	149107018	228852094	LINR	-26.40626	74942		0.99931
24 Endosulfan II	3948644	3652790	3191531	3006518	2948819	AVRG		3349660		12.96230
25 4,4'-DDD	3923519	3713531	3334579	3215108	3228910	AVRG		3483129		9.14170
26 4,4'-DDT	2766420	2988879	2464778	2150060	2450778	AVRG		2564183		12.56926
27 Endrin aldehyde	3439834	3095732	2579920	2392309	2294032	AVRG		2760365		17.74426
28 Methoxychlor	52389891	130752199	487589182	847132898	1.757e+09	LINR	-35.80872	857542		0.99845
29 Endosulfan sulfate	3689590	3378872	2880276	2670674	2603092	AVRG		3044501		15.48914
30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	4283164	4001243	3287755	2903228	2829611	AVRG		3461000		18.87819
51 Mirex	3287453	2804690	2510722	2485250	2535232	AVRG		2724669		12.47467
52 C-Nonachlor	5384255	4663008	4379519	4318696	4261847	AVRG		4601465		10.08329
53 O-Chlordane	4601588	3834809	3445674	3315954	3245580	AVRG		3688721		15.14911
54 T-Nonachlor	4758367	4054458	3771384	3707291	3744505	AVRG		4007201		11.02726
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	3317388	2792740	2388656	2221962	2064777	AVRG		2557105		19.71535
58 2,4-DDD	2911841	2456928	2157155	2059524	1978481	AVRG		2312786		16.46118
57 2,4-DDT	2002256	1920256	1906555	1843254	1875424	AVRG		1909549		3.12874
$ 1 4cmx	5226176	4849317	4202259	4106647	4191288	AVRG		4515137		11.00102
$ 32 Decachlorobiphenyl	3539718	3281064	3038738	3054648	3106952	AVRG		3204224		6.57760

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

Report Date: 08-Dec-2009 10:55

Calibration History

Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
05-DEC-2009 02:40	gapa	/chem/ecd5a.i/120409b.b/021f2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006f0601.d
07-DEC-2009 20:50	chlor	/chem/ecd5a.i/120709a.b/017f1701.d
07-DEC-2009 18:38	tox	/chem/ecd5a.i/120709a.b/009f0901.d
07-DEC-2009 17:26	indab	/chem/ecd5a.i/120709a.b/003f0301.d
Cal Level: 2 , Cal Amount: 10.00000		
05-DEC-2009 02:52	gapa	/chem/ecd5a.i/120409b.b/022f2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007f0701.d
07-DEC-2009 21:02	chlor	/chem/ecd5a.i/120709a.b/018f1801.d
07-DEC-2009 18:50	tox	/chem/ecd5a.i/120709a.b/010f1001.d
07-DEC-2009 17:38	indab	/chem/ecd5a.i/120709a.b/004f0401.d
Cal Level: 3 , Cal Amount: 50.00000		
05-DEC-2009 03:04	gapa	/chem/ecd5a.i/120409b.b/023f2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008f0801.d
07-DEC-2009 21:14	chlor	/chem/ecd5a.i/120709a.b/019f1901.d
07-DEC-2009 20:02	tox	/chem/ecd5a.i/120709a.b/013f1301.d
07-DEC-2009 17:50	indab	/chem/ecd5a.i/120709a.b/005f0501.d
Cal Level: 4 , Cal Amount: 100.00000		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024f2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024f2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023f2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022f2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015f1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013f1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009f0901.d
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020f2001.d
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014f1401.d
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006f0601.d
Cal Level: 5 , Cal Amount: 200.00000		
05-DEC-2009 03:28	gapa	/chem/ecd5a.i/120409b.b/025f2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010f1001.d
07-DEC-2009 21:38	chlor	/chem/ecd5a.i/120709a.b/021f2101.d
07-DEC-2009 20:26	tox	/chem/ecd5a.i/120709a.b/015f1501.d
07-DEC-2009 18:14	indab	/chem/ecd5a.i/120709a.b/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 05:35	indab	/chem/ecd5a.i/120709a.b/061f6101.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 03:36	indab	/chem/ecd5a.i/120709a.b/051f5101.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 02:24	indab	/chem/ecd5a.i/120709a.b/045f4501.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 00:25	indab	/chem/ecd5a.i/120709a.b/035f3501.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:49	chlor	/chem/ecd5a.i/120709a.b/022f2201.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:38	tox	/chem/ecd5a.i/120709a.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:26	indab	/chem/ecd5a.i/120709a.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006f0601.d

Report Date: 08-Dec-2009 10:55

Calibration History

Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
05-DEC-2009 02:40	gapa	/chem/ecd5a.i/120409b.b/021b2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006b0601.d
07-DEC-2009 20:50	chlor	/chem/ecd5a.i/120709a.b/017b1701.d
07-DEC-2009 18:38	tox	/chem/ecd5a.i/120709a.b/009b0901.d
07-DEC-2009 17:26	indab	/chem/ecd5a.i/120709a.b/003b0301.d
Cal Level: 2 , Cal Amount: 10.00000		
05-DEC-2009 02:52	gapa	/chem/ecd5a.i/120409b.b/022b2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007b0701.d
07-DEC-2009 21:02	chlor	/chem/ecd5a.i/120709a.b/018b1801.d
07-DEC-2009 18:50	tox	/chem/ecd5a.i/120709a.b/010b1001.d
07-DEC-2009 17:38	indab	/chem/ecd5a.i/120709a.b/004b0401.d
Cal Level: 3 , Cal Amount: 50.00000		
05-DEC-2009 03:04	gapa	/chem/ecd5a.i/120409b.b/023b2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008b0801.d
07-DEC-2009 21:14	chlor	/chem/ecd5a.i/120709a.b/019b1901.d
07-DEC-2009 20:02	tox	/chem/ecd5a.i/120709a.b/013b1301.d
07-DEC-2009 17:50	indab	/chem/ecd5a.i/120709a.b/005b0501.d
Cal Level: 4 , Cal Amount: 100.00000		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024b2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024b2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023b2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022b2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015b1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013b1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009b0901.d
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020b2001.d
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014b1401.d
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006b0601.d
Cal Level: 5 , Cal Amount: 200.00000		
05-DEC-2009 03:28	gapa	/chem/ecd5a.i/120409b.b/025b2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010b1001.d
07-DEC-2009 21:38	chlor	/chem/ecd5a.i/120709a.b/021b2101.d
07-DEC-2009 20:26	tox	/chem/ecd5a.i/120709a.b/015b1501.d
07-DEC-2009 18:14	indab	/chem/ecd5a.i/120709a.b/007b0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 03:36	indab	/chem/ecd5a.i/120709a.b/051b5101.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 02:24	indab	/chem/ecd5a.i/120709a.b/045b4501.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 00:25	indab	/chem/ecd5a.i/120709a.b/035b3501.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 05:35	indab	/chem/ecd5a.i/120709a.b/061b6101.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:49	chlor	/chem/ecd5a.i/120709a.b/022b2201.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:38	tox	/chem/ecd5a.i/120709a.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:26	indab	/chem/ecd5a.i/120709a.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006b0601.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Quant Method : ESTD Target Version : 3.50
Last Update : 08-Dec-2009 10:08 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.409	2.379-2.439	4.426e+05
63 2,4,5-Trichlorophenol	1.476	1.376-1.576	
59 Hexachlorobenzene	3.159	3.059-3.259	3.882e+05
2 Aroclor-1221	2.631	2.601-2.661	5.910e+03
	2.767	2.736-2.796	3.363e+03
	2.802	2.772-2.832	1.422e+04
3 Aroclor-1016	3.102	3.072-3.132	1.760e+04
	3.460	3.430-3.490	2.200e+04
	3.686	3.656-3.716	8.402e+03
	3.702	3.672-3.732	8.144e+03
	3.839	3.809-3.869	1.168e+04
4 Aroclor-1232	3.104	3.074-3.134	7.998e+03
	3.248	3.218-3.278	2.167e+03
	3.459	3.430-3.490	1.042e+04
	3.555	3.525-3.585	6.943e+03
	4.119	4.089-4.149	4.959e+03
5 alpha-BHC	3.050	3.020-3.080	5.658e+05
6 Aroclor-1242	3.103	3.003-3.203	1.426e+04
	3.460	3.360-3.560	1.830e+04
	3.600	3.500-3.700	7.474e+03
	4.118	4.018-4.218	9.828e+03
	4.137	4.037-4.237	9.417e+03
7 gamma-BHC (Lindane)	3.350	3.320-3.380	4.727e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.677	3.577-3.777	1.970e+04
	4.071	3.971-4.171	1.873e+04
	4.350	4.250-4.450	1.267e+04
	4.475	4.375-4.575	5.742e+04
	5.044	4.944-5.144	9.295e+03
9 Aroclor-1248	3.686	3.586-3.786	1.281e+04
	3.839	3.739-3.939	1.679e+04
	3.897	3.797-3.997	1.095e+04
	4.119	4.019-4.219	2.029e+04
	4.509	4.409-4.609	9.814e+03
10 Heptachlor	3.740	3.710-3.770	3.948e+05
11 Aldrin	3.966	3.936-3.996	4.770e+05
12 beta-BHC	3.433	3.403-3.463	2.358e+05
13 delta-BHC	3.577	3.547-3.607	5.191e+05
14 Heptachlor epoxide	4.392	4.362-4.422	4.305e+05
15 Aroclor-1254	4.090	4.060-4.120	1.481e+04
	4.257	4.227-4.287	2.571e+04
	4.509	4.479-4.539	2.679e+04
	4.679	4.649-4.709	2.010e+04
	4.960	4.930-4.990	2.920e+04
16 Endosulfan I	4.650	4.620-4.680	3.875e+05
17 gamma-Chlordane	4.475	4.445-4.505	4.222e+05
18 alpha-Chlordane	4.562	4.532-4.592	4.065e+05
19 4,4'-DDE	4.614	4.584-4.644	4.159e+05
20 Dieldrin	4.802	4.772-4.832	4.095e+05
21 Aroclor-1260	4.621	4.521-4.721	2.245e+04
	4.788	4.688-4.888	3.535e+04
	4.866	4.766-4.966	1.482e+04
	4.960	4.860-5.060	3.945e+04
	5.358	5.258-5.458	4.235e+04
22 Endrin	4.947	4.917-4.977	3.460e+05
23 Toxaphene	4.737	4.707-4.767	4.191e+03
	4.807	4.777-4.837	7.478e+03
	4.862	4.832-4.892	6.953e+03
	4.963	4.933-4.993	1.500e+04
	5.079	5.049-5.109	1.466e+04
24 Endosulfan II	5.086	5.056-5.116	3.636e+05
25 4,4'-DDD	4.985	4.955-5.015	3.472e+05
26 4,4'-DDT	5.153	5.123-5.183	1.645e+05
27 Endrin aldehyde	5.339	5.309-5.369	3.006e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.436	5.406-5.466	9.789e+04
	29 Endosulfan sulfate	5.597	5.567-5.627	3.141e+05
	30 Aroclor-1268	5.050	4.950-5.150	
		5.067	4.967-5.167	
		5.185	5.085-5.285	
		5.378	5.278-5.478	
		5.531	5.431-5.631	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	5.767	5.737-5.797	2.834e+05
	51 Mirex	5.805	5.775-5.835	2.290e+05
	52 C-Nonachlor	5.228	5.198-5.258	3.943e+05
	53 O-Chlordane	4.586	4.556-4.616	3.128e+05
	54 T-Nonachlor	4.811	4.781-4.841	3.369e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.647	4.617-4.677	2.204e+05
	58 2,4-DDD	4.979	4.949-5.008	1.978e+05
	57 2,4-DDT	5.136	5.106-5.166	1.547e+05
$	32 Decachlorobiphenyl	6.344	6.314-6.374	2.628e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Quant Method : ESTD Target Version : 3.50
Last Update : 08-Dec-2009 10:03 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	92700.000000
Initial:End Threshold	46350.000000
Initial:Area Threshold	927000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.064	2.034-2.094	4.980e+06
61 2,4,5-Trichlorophenol	1.631	1.531-1.731	
59 Hexachlorobenzene	2.657	2.627-2.687	4.557e+06
2 Aroclor-1221	3.136	3.107-3.167	3.819e+04
	3.255	3.225-3.285	2.282e+04
	3.304	3.274-3.334	7.878e+04
3 Aroclor-1016	3.947	3.917-3.977	1.293e+05
	4.040	4.010-4.070	8.559e+04
	4.110	4.080-4.140	5.407e+04
	4.171	4.141-4.201	5.109e+04
	4.351	4.321-4.381	6.850e+04
4 Aroclor-1232	3.304	3.275-3.334	5.230e+04
	3.949	3.919-3.979	5.701e+04
	4.040	4.010-4.070	3.929e+04
	4.350	4.320-4.380	3.045e+04
	4.622	4.592-4.652	3.317e+04
5 alpha-BHC	2.781	2.751-2.811	6.966e+06
6 Aroclor-1242	3.618	3.588-3.648	8.644e+04
	4.040	4.010-4.070	6.791e+04
	4.109	4.079-4.139	4.340e+04
	4.350	4.320-4.380	5.437e+04
	4.430	4.400-4.460	5.974e+04
7 gamma-BHC (Lindane)	3.107	3.077-3.137	6.086e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.340	3.310-3.370	1.842e+05
	4.067	4.037-4.097	8.885e+04
	4.211	4.181-4.241	4.608e+05
	4.306	4.276-4.336	3.741e+05
	4.855	4.825-4.885	1.221e+05
9 Aroclor-1248	4.172	4.142-4.202	7.431e+04
	4.351	4.321-4.381	9.433e+04
	4.431	4.401-4.461	1.002e+05
	4.592	4.562-4.622	1.083e+05
	4.768	4.738-4.798	1.138e+05
10 Heptachlor	3.453	3.423-3.483	4.980e+06
11 Aldrin	3.687	3.657-3.717	5.504e+06
12 beta-BHC	3.191	3.161-3.221	2.282e+06
13 delta-BHC	3.420	3.390-3.450	6.064e+06
14 Heptachlor epoxide	4.088	4.058-4.118	4.774e+06
15 Aroclor-1254	4.619	4.589-4.649	9.484e+04
	4.734	4.704-4.764	1.078e+05
	5.023	4.993-5.053	1.477e+05
	5.158	5.128-5.188	1.045e+05
	5.481	5.451-5.511	1.267e+05
16 Endosulfan I	4.338	4.308-4.368	4.209e+06
17 gamma-Chlordane	4.211	4.181-4.241	4.889e+06
18 alpha-Chlordane	4.306	4.276-4.336	4.706e+06
19 4,4'-DDE	4.419	4.389-4.449	4.432e+06
20 Dieldrin	4.511	4.481-4.541	4.365e+06
21 Aroclor-1260	5.043	5.013-5.073	6.157e+04
	5.140	5.110-5.170	1.370e+05
	5.261	5.231-5.291	1.523e+05
	5.481	5.451-5.511	1.467e+05
	6.079	6.049-6.109	1.563e+05
22 Endrin	4.698	4.668-4.728	3.776e+06
23 Toxaphene	4.499	4.469-4.529	7.464e+04
	4.570	4.540-4.600	4.424e+04
	4.682	4.652-4.712	7.738e+04
	4.819	4.789-4.849	1.022e+05
	4.879	4.849-4.909	1.835e+05
24 Endosulfan II	4.827	4.797-4.857	3.583e+06
25 4,4'-DDD	4.771	4.741-4.801	3.758e+06
26 4,4'-DDT	4.958	4.928-4.988	2.751e+06
27 Endrin aldehyde	5.031	5.001-5.061	2.973e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m

Compound	RT	RT Window	RF
28 Methoxychlor	5.363	5.333-5.393	1.106e+06
29 Endosulfan sulfate	5.194	5.164-5.224	3.353e+06
30 Aroclor-1268	5.217	5.187-5.247	
	5.596	5.566-5.626	
	5.628	5.598-5.658	
	5.769	5.739-5.799	
	6.149	6.119-6.179	
60 Aroclor-1262	4.689	4.589-4.789	
	4.779	4.679-4.879	
	5.074	4.974-5.174	
	5.224	5.124-5.324	
	5.396	5.296-5.496	
31 Endrin ketone	5.509	5.479-5.539	3.016e+06
51 Mirex	5.518	5.488-5.548	2.494e+06
52 C-Nonachlor	4.782	4.752-4.812	4.546e+06
53 O-Chlordane	4.058	4.028-4.088	3.680e+06
54 T-Nonachlor	4.303	4.274-4.333	3.953e+06
55 1,2-Dichlorobenzene	6.619	6.589-6.649	
56 2,4-DDE	4.251	4.221-4.281	2.053e+06
58 2,4-DDD	4.572	4.542-4.602	2.283e+06
57 2,4-DDT	4.757	4.727-4.787	2.076e+06
$ 32 Decachlorobiphenyl	6.226	6.196-6.256	2.774e+06

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Cal Date : 08-Dec-2009 10:08 cla01575
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/120409b.b/021f2101.d
Level 2: /chem/ecd5a.i/120409b.b/022f2201.d
Level 3: /chem/ecd5a.i/120409b.b/023f2301.d
Level 4: /chem/ecd5a.i/120409b.b/024f2401.d
Level 5: /chem/ecd5a.i/120409b.b/025f2501.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	451162	387986	367027	366085	368958	388243	9.351
2 Aroclor-1221(1)	+++++	+++++	+++++	5910	+++++	5910	0.000
(2)	+++++	+++++	+++++	3363	+++++	3363	0.000
(3)	+++++	+++++	+++++	14218	+++++	14218	0.000
3 Aroclor-1016(1)	18316	18455	17930	17404	15906	17602	5.863
(2)	21725	22828	22310	22663	20456	21996	4.360
(3)	8841	8543	8438	8235	7951	8402	3.973
(4)	8274	8363	8182	8166	7736	8144	2.968
(5)	11759	11851	11816	11833	11120	11676	2.678
4 Aroclor-1232(1)	+++++	+++++	+++++	7998	+++++	7998	0.000
(2)	+++++	+++++	+++++	2167	+++++	2167	0.000
(3)	+++++	+++++	+++++	10425	+++++	10425	0.000
(4)	+++++	+++++	+++++	6943	+++++	6943	0.000
(5)	+++++	+++++	+++++	4959	+++++	4959	0.000
5 alpha-BHC	569252	539806	557588	571567	590609	565764	3.311
6 Aroclor-1242(1)	+++++	+++++	+++++	14263	+++++	14263	0.000
(2)	+++++	+++++	+++++	18303	+++++	18303	0.000
(3)	+++++	+++++	+++++	7474	+++++	7474	0.000
(4)	+++++	+++++	+++++	9828	+++++	9828	0.000
(5)	+++++	+++++	+++++	9417	+++++	9417	0.000
7 gamma-BHC (Lindane)	477505	447910	461996	475445	500583	472688	4.147
8 Chlordane (tech.)(1)	22711	21228	18273	18324	17957	19699	10.879
(2)	23163	20836	17013	16572	16063	18729	16.629
(3)	14911	13966	11651	11527	11284	12668	13.069
(4)	63200	59677	55131	55291	53784	57417	6.829
(5)	10636	8938	8403	8221	10276	9295	11.831

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Cal Date : 08-Dec-2009 10:08 cla01575
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	___ RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	12812	+++++	12812	0.000
(2)	+++++	+++++	+++++	16794	+++++	16794	0.000
(3)	+++++	+++++	+++++	10955	+++++	10955	0.000
(4)	+++++	+++++	+++++	20294	+++++	20294	0.000
(5)	+++++	+++++	+++++	9814	+++++	9814	0.000
10 Heptachlor	414706	379772	381456	385424	412845	394841	4.412
11 Aldrin	497502	470197	473861	474916	468619	477019	2.461
12 beta-BHC	276310	245967	219579	217109	220153	235824	10.815
13 delta-BHC	520947	494617	514899	526439	538406	519062	3.117
14 Heptachlor epoxide	466930	437186	422744	417654	407784	430460	5.339
15 Aroclor-1254(1)	+++++	+++++	+++++	14812	+++++	14812	0.000
(2)	+++++	+++++	+++++	25713	+++++	25713	0.000
(3)	+++++	+++++	+++++	26786	+++++	26786	0.000
(4)	+++++	+++++	+++++	20102	+++++	20102	0.000
(5)	+++++	+++++	+++++	29201	+++++	29201	0.000
16 Endosulfan I	420027	394544	378839	374982	369208	387520	5.279
17 gamma-Chlordane	448010	417063	414575	416079	415058	422157	3.431
18 alpha-Chlordane	421751	408767	406548	401642	393789	406499	2.530
19 4,4'-DDE	427151	421670	424861	413274	392303	415852	3.409
20 Dieldrin	425167	416166	414760	402907	388354	409471	3.471
21 Aroclor-1260(1)	22983	23321	22940	22516	20469	22446	5.085
(2)	35726	36888	36310	35624	32213	35352	5.167
(3)	14778	14965	14903	14964	14487	14820	1.354
(4)	39548	40617	40289	39914	36902	39454	3.756
(5)	42946	43953	43513	42694	38645	42350	5.027
22 Endrin	368262	354051	347841	334746	325275	346035	4.836
23 Toxaphene(1)	4930	3991	4017	4019	4001	4191	9.851
(2)	8661	7072	7386	7157	7112	7478	8.995
(3)	7771	6793	6812	6553	6834	6953	6.781
(4)	16003	14256	14562	14867	15335	15005	4.570
(5)	16042	14248	13567	14706	14752	14663	6.179
24 Endosulfan II	389323	381961	362958	356514	327065	363564	6.715
25 4,4'-DDD	357934	361064	354630	338783	323795	347241	4.511

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Cal Date : 08-Dec-2009 10:08 cla01575
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
	26 4,4'-DDT	139124	138181	156701	170122	218233	164472	19.972
	27 Endrin aldehyde	332760	312846	295803	286851	274872	300626	7.545
	28 Methoxychlor	98700	95927	96706	95132	102996	97892	3.214
	29 Endosulfan sulfate	343304	319960	305095	303203	299161	314145	5.761
	30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	61 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	31 Endrin ketone	291410	276226	277261	278292	293897	283417	3.002
	51 Mirex	259962	231947	216366	218180	218649	229021	8.025
	52 C-Nonachlor	409160	392847	392123	390875	386731	394347	2.184
	53 O-Chlordane	343864	315598	305572	301977	297134	312829	5.954
	54 T-Nonachlor	358283	334318	332927	330171	328873	336914	3.603
	55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	56 2,4-DDE	240672	221856	219006	214175	206476	220437	5.772
	58 2,4-DDD	206130	201318	196461	194071	191092	197814	3.017
	57 2,4-DDT	143151	148792	152919	162534	166019	154683	6.141
M	62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	1 4cmx	486358	446184	428038	426732	425718	442606	5.844
$	32 Decachlorobiphenyl	304028	280053	261635	252863	215310	262778	12.553

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Calibration File Names:
Level 1: /chem/ecd5a.i/120409b.b/021b2101.d
Level 2: /chem/ecd5a.i/120409b.b/022b2201.d
Level 3: /chem/ecd5a.i/120409b.b/023b2301.d
Level 4: /chem/ecd5a.i/120409b.b/024b2401.d
Level 5: /chem/ecd5a.i/120409b.b/025b2501.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	5845652	4719180	4103250	4027456	4087067	AVRG		4556521		16.97872
2 Aroclor-1221(1)	+++++	+++++	+++++	38194	+++++	AVRG		38194		0.000e+00
(2)	+++++	+++++	+++++	22822	+++++	AVRG		22822		0.000e+00
(3)	+++++	+++++	+++++	78778	+++++	AVRG		78778		0.000e+00
3 Aroclor-1016(1)	135228	136032	131291	128421	115286	AVRG		129252		6.49152
(2)	94115	91053	86081	82205	74492	AVRG		85590		9.00075
(3)	59100	56752	54061	51882	48540	AVRG		54067		7.61842
(4)	56717	54302	51105	48729	44616	AVRG		51094		9.25654
(5)	75245	71571	68782	66056	60864	AVRG		68504		7.97140
4 Aroclor-1232(1)	+++++	+++++	+++++	52302	+++++	AVRG		52302		0.000e+00
(2)	+++++	+++++	+++++	57011	+++++	AVRG		57011		0.000e+00
(3)	+++++	+++++	+++++	39294	+++++	AVRG		39294		0.000e+00
(4)	+++++	+++++	+++++	30449	+++++	AVRG		30449		0.000e+00
(5)	+++++	+++++	+++++	33167	+++++	AVRG		33167		0.000e+00
5 alpha-BHC	7935734	7247488	6521093	6475422	6650823	AVRG		6966112		8.95782
6 Aroclor-1242(1)	+++++	+++++	+++++	86436	+++++	AVRG		86436		0.000e+00
(2)	+++++	+++++	+++++	67908	+++++	AVRG		67908		0.000e+00
(3)	+++++	+++++	+++++	43403	+++++	AVRG		43403		0.000e+00
(4)	+++++	+++++	+++++	54366	+++++	AVRG		54366		0.000e+00
(5)	+++++	+++++	+++++	59740	+++++	AVRG		59740		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	7051230	6360380	5681190	5605835	5732111	AVRG		6086149		10.15063
8 Chlordane (tech.) (1)	15105108	27732388	109956303	202317339	561578348	LINR	-65.37562	184190		0.99938
(2)	8039884	14525451	53283661	102573463	271361548	LINR	-82.43634	88852		0.99858
(3)	36540822	66351571	262209824	510957868	1.400e+09	LINR	-58.02060	460764		0.99931
(4)	29041806	52032371	203386498	393736855	1.135e+09	LINR	-39.49092	374094		0.99994
(5)	8618579	15807644	64321505	117714352	369370040	LINR	-13.45257	122069		0.99948
9 Aroclor-1248 (1)	+++++	+++++	+++++	74311	+++++	AVRG		74311		0.000e+00
(2)	+++++	+++++	+++++	94327	+++++	AVRG		94327		0.000e+00
(3)	+++++	+++++	+++++	100218	+++++	AVRG		100218		0.000e+00
(4)	+++++	+++++	+++++	108276	+++++	AVRG		108276		0.000e+00
(5)	+++++	+++++	+++++	113831	+++++	AVRG		113831		0.000e+00
10 Heptachlor	6115995	5417410	4639800	4393509	4333138	AVRG		4979970		15.42392
11 Aldrin	6575227	5885262	5198089	5007450	4853822	AVRG		5503970		13.02508
12 beta-BHC	13907521	30688700	124667036	234231748	463311364	LINR	-3.18477	2281527		0.99986
13 delta-BHC	7060371	6350085	5782430	5723732	5401914	AVRG		6063707		10.77652
14 Heptachlor epoxide	5892559	5271747	4558666	4261222	3885170	AVRG		4773873		16.88263
15 Aroclor-1254 (1)	+++++	+++++	+++++	94842	+++++	AVRG		94842		0.000e+00
(2)	+++++	+++++	+++++	107760	+++++	AVRG		107760		0.000e+00
(3)	+++++	+++++	+++++	147710	+++++	AVRG		147710		0.000e+00
(4)	+++++	+++++	+++++	104486	+++++	AVRG		104486		0.000e+00
(5)	+++++	+++++	+++++	126738	+++++	AVRG		126738		0.000e+00
16 Endosulfan I	5287232	4658103	3931764	3683550	3485721	AVRG		4209274		17.77962
17 gamma-Chlordane	5767437	5190161	4595028	4476270	4416867	AVRG		4889153		11.84722
18 alpha-Chlordane	5660860	5001083	4392463	4248855	4226627	AVRG		4705978		13.16752

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	5149117	4647073	4307619	4100232	3955132	AVRG		4431835		10.78277
20 Dieldrin	5280413	4704566	4191970	3939224	3711196	AVRG		4365474		14.45126
21 Aroclor-1260 (1)	67909	63594	61133	58501	56721	AVRG		61572		7.14408
(2)	154760	142644	136554	130696	120581	AVRG		137047		9.34993
(3)	163780	157424	151415	148508	140329	AVRG		152291		5.84087
(4)	154736	148501	147397	143879	139185	AVRG		146740		3.92572
(5)	161375	159022	154521	152918	153834	AVRG		156334		2.34679
22 Endrin	4877405	4152543	3558138	3237311	3056341	AVRG		3776347		19.68507
23 Toxaphene (1)	13648226	50640338	87452430	161315151	232166275	LINR	-141	74640		0.99873
(2)	7773013	28548416	53714021	95719310	136829836	LINR	-138	44238		0.99776
(3)	13917215	50897027	86113441	173423223	235620922	LINR	-127	77377		0.99583
(4)	14960305	58211640	108297119	210039120	312383522	LINR	-57.44536	102202		0.99995
(5)	26975184	102163244	197954953	372572397	562294030	LINR	-55.21826	183529		0.99976
24 Endosulfan II	4451839	3915771	3401737	3150780	2993833	AVRG		3582792		16.70250
25 4,4'-DDD	4499088	3919743	3575614	3431361	3363283	AVRG		3757818		12.41870
26 4,4'-DDT	2974056	2769082	2639859	2575692	2795402	AVRG		2750818		5.60640
27 Endrin aldehyde	3810044	3304780	2779985	2569706	2401636	AVRG		2973230		19.44553
28 Methoxychlor	1364486	1224466	1035207	964322	943223	AVRG		1106341		16.44650
29 Endosulfan sulfate	4142419	3661790	3182799	2956560	2819439	AVRG		3352601		16.26461
30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	37328035	81723507	348430646	643584294	1.223e+09	LINR	-9.14682	3016477		0.99905
51 Mirex	3034376	2586762	2271014	2269682	2306378	AVRG		2493642		13.23750
52 C-Nonachlor	5434147	4569347	4237619	4239635	4247988	AVRG		4545747		11.36243
53 O-Chlordane	4621772	3807865	3391569	3315709	3261404	AVRG		3679664		15.45956
54 T-Nonachlor	4810064	4005490	3650418	3617452	3681149	AVRG		3952915		12.74570
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	13446243	55335831	233676302	440290648	828617791	LINR	-8.28053	2052994		0.99881
58 2,4-DDD	2867792	2442281	2094342	2052175	1958044	AVRG		2282927		16.41635
57 2,4-DDT	2385124	2200116	1922405	1948754	1925922	AVRG		2076464		10.02315
$ 1 4cmx	6049049	5370754	4593324	4457884	4427988	AVRG		4979800		14.27878
$ 32 Decachlorobiphenyl	3245440	2836003	2545029	2518445	2725693	AVRG		2774122		10.60447

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
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Quant Method : ESTD
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Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/02/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1528

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.04	4.01	4.07	126	100	26.0
4,4'-DDE						
Endrin	5.02	4.99	5.05	118	100	18.0
4,4'-DDD						
4,4'-DDT	5.22	5.19	5.25	88.6	100	-11.4
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 4.70 Endrin % breakdown (1): 2.20

Combined % breakdown (1): 6.90

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/02/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1528

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.67	3.65	3.71	120	100	20.0
4,4'-DDE						
Endrin	4.68	4.65	4.71	116	100	16.0
4,4'-DDD						
4,4'-DDT	4.94	4.91	4.97	97.4	100	-2.6
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 5.50 Endrin % breakdown (1): 2.80

Combined % breakdown (1): 8.30

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1714

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.97	3.94	4.00	119	100	19.0
4,4'-DDE						
Endrin	4.95	4.92	4.98	110	100	10.0
4,4'-DDD						
4,4'-DDT	5.15	5.12	5.18	83.8	100	-16.2
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 8.00 Endrin % breakdown (1): 2.80

Combined % breakdown (1): 10.80

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1714

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D
Aldrin	3.69	3.66	3.72	114	100	14.0
4,4'-DDE						
Endrin	4.70	4.67	4.73	110	100	10.0
4,4'-DDD						
4,4'-DDT	4.96	4.93	4.99	98.6	100	-1.4
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 4.80 Endrin % breakdown (1): 4.50

Combined % breakdown (1): 9.30

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2201

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.96	3.94	4.00	118	100	18.0
4,4'-DDE						
Endrin	4.95	4.92	4.98	107	100	7.0
4,4'-DDD						
4,4'-DDT	5.15	5.12	5.18	80.5	100	-19.5
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 11.70 Endrin % breakdown (1): 4.40

Combined % breakdown (1): 16.10

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2201

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.69	3.66	3.72	114	100	14.0
4,4'-DDE						
Endrin	4.70	4.67	4.73	108	100	8.0
4,4'-DDD						
4,4'-DDT	4.96	4.93	4.99	91.5	100	-8.5
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 8.60 Endrin % breakdown (1): 6.50

Combined % breakdown (1): 15.10

FORM VII PEST-1 OLM03.0

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1540

Lab File ID: 003F0301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
gamma-BHC (Lindane)	466570.17	526352.01	0.01	12.8	15.0
Heptachlor	408964.18	411860.70	0.01	0.7	15.0
Heptachlor epoxide	397151.66	419239.05	0.01	5.6	15.0
Endrin	328282.24	357248.19	0.01	8.8	15.0
Methoxychlor	118137.10	113070.75	0.01	-4.3	15.0
4cmx	412673.21	420769.41	0.01	2.0	15.0
Decachlorobiphenyl	169482.15	163126.23	0.01	-3.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1540

Lab File ID: 003B0301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	106	100	AVRG	6.0	15.0
Heptachlor	95.4	100	AVRG	-4.6	15.0
Heptachlor epoxide	99.2	100	AVRG	-0.8	15.0
Endrin	195	200	AVRG	-2.5	15.0
Methoxychlor	1070	1000	LINR	7.0	15.0
4cmx	195	200	AVRG	-2.5	15.0
Decachlorobiphenyl	186	200	AVRG	-7.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1552

Lab File ID: 004F0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Toxaphene	2144.404	2367.347	0.01	10.4	15.0
(2)	5627.754	5877.268	0.01	4.4	15.0
(3)	5158.097	5788.473	0.01	12.2	15.0
(4)	6906.286	7422.360	0.01	7.5	15.0
(5)	11454.281	12740.281	0.01	11.2	15.0
4cmx	412673.21	409077.16	0.01	-0.9	15.0
Decachlorobiphenyl	169482.15	155594.40	0.01	-8.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1552

Lab File ID: 004B0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Toxaphene	2200	2000	LINR	10.0	15.0
(2)	2060	2000	LINR	3.0	15.0
(3)	2120	2000	LINR	6.0	15.0
(4)	2170	2000	LINR	8.5	15.0
(5)	2020	2000	LINR	1.0	15.0
4cmx	189	200	AVRG	-5.5	15.0
Decachlorobiphenyl	172	200	AVRG	-14.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1604

Lab File ID: 005F0501 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 1529 1628

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	15210.604	15364.576	0.01	1.0	15.0
(2)	8884.890	9209.103	0.01	3.6	15.0
(3)	48383.574	49482.743	0.01	2.3	15.0
(4)	74305.410	72104.076	0.01	-3.0	15.0
(5)	3987.623	3592.907	0.01	-9.9	15.0
4cmx	412673.21	416153.30	0.01	0.8	15.0
Decachlorobiphenyl	169482.15	161053.49	0.01	-5.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1604

Lab File ID: 005B0501 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 1529 1628

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	196283.19	193503.41	0.01	-1.4	15.0
(2)	107074.75	99637.259	0.01	-6.9	15.0
(3)	488622.36	464182.88	0.01	-5.0	15.0
(4)	382591.70	363813.73	0.01	-4.9	15.0
(5)	41027.143	41512.379	0.01	1.2	15.0
4cmx	4515137.1	4454374.7	0.01	-1.3	15.0
Decachlorobiphenyl	3204224.0	2784181.2	0.01	-13.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0312

Lab File ID: 060F6001 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
gamma-BHC (Lindane)	466570.17	552178.80	0.01	18.3	15.0	<-
Heptachlor	408964.18	429523.01	0.01	5.0	15.0	
Heptachlor epoxide	397151.66	450912.68	0.01	13.5	15.0	
Endrin	328282.24	380456.12	0.01	15.9	15.0	<-
Methoxychlor	118137.10	111847.01	0.01	-5.3	15.0	
4cmx	412673.21	449655.59	0.01	9.0	15.0	
Decachlorobiphenyl	169482.15	182277.69	0.01	7.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0312

Lab File ID: 060B6001 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	107	100	AVRG	7.0	15.0
Heptachlor	93.6	100	AVRG	-6.4	15.0
Heptachlor epoxide	102	100	AVRG	2.0	15.0
Endrin	198	200	AVRG	-1.0	15.0
Methoxychlor	895	1000	LINR	-10.5	15.0
4cmx	200	200	AVRG	0.0	15.0
Decachlorobiphenyl	205	200	AVRG	2.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0524

Lab File ID: 071F7101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D	
gamma-BHC (Lindane)	466570.17	497127.41	0.01	6.5	15.0	
Heptachlor	408964.18	190957.76	0.01	-53.3	15.0	<-
Heptachlor epoxide	397151.66	429497.49	0.01	8.1	15.0	
Endrin	328282.24	350569.66	0.01	6.8	15.0	
Methoxychlor	118137.10	54160.636	0.01	-54.2	15.0	<-
4cmx	412673.21	435582.69	0.01	5.6	15.0	
Decachlorobiphenyl	169482.15	176179.61	0.01	4.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0524

Lab File ID: 071B7101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	94.7	100	AVRG	-5.3	15.0	
Heptachlor	31.3	100	AVRG	-68.7	15.0	<-
Heptachlor epoxide	94.1	100	AVRG	-5.9	15.0	
Endrin	170	200	AVRG	-15.0	15.0	
Methoxychlor	124	1000	LINR	-87.6	15.0	<-
4cmx	197	200	AVRG	-1.5	15.0	
Decachlorobiphenyl	189	200	AVRG	-5.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 1826

Lab File ID: 008F0801 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
gamma-BHC (Lindane)	472687.72	493662.89	0.01	4.4	15.0
Heptachlor	394840.62	369551.66	0.01	-6.4	15.0
Heptachlor epoxide	430459.53	417642.13	0.01	-3.0	15.0
Endrin	346034.88	351466.21	0.01	1.6	15.0
Methoxychlor	97891.983	96492.687	0.01	-1.4	15.0
4cmx	442605.72	434891.46	0.01	-1.7	15.0
Decachlorobiphenyl	262777.87	253810.48	0.01	-3.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 1826

Lab File ID: 008B0801 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	96.2	100	AVRG	-3.8	15.0
Heptachlor	85.0	100	AVRG	-15.0	15.0
Heptachlor epoxide	90.5	100	AVRG	-9.5	15.0
Endrin	181	200	AVRG	-9.5	15.0
Methoxychlor	887	1000	AVRG	-11.3	15.0
4cmx	183	200	AVRG	-8.5	15.0
Decachlorobiphenyl	184	200	AVRG	-8.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2038

Lab File ID: 016F1601 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1838 2026

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Toxaphene	4191.401	4315.237	0.01	3.0	15.0
(2)	7477.678	7266.342	0.01	-2.8	15.0
(3)	6952.564	7006.073	0.01	0.8	15.0
(4)	15004.500	13475.367	0.01	-10.2	15.0
(5)	14662.834	13921.410	0.01	-5.0	15.0
4cmx	442605.72	440101.66	0.01	-0.6	15.0
Decachlorobiphenyl	262777.87	251947.58	0.01	-4.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2038

Lab File ID: 016B1601 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1838 2026

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
Toxaphene	2080	2000	LINR	4.0	15.0	
(2)	2050	2000	LINR	2.5	15.0	
(3)	2030	2000	LINR	1.5	15.0	
(4)	1740	2000	LINR	-13.0	15.0	
(5)	1630	2000	LINR	-18.5	15.0	<-
4cmx	184	200	AVRG	-8.0	15.0	
Decachlorobiphenyl	179	200	AVRG	-10.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2149

Lab File ID: 022F2201 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 2050 2138

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	19698.628	17964.062	0.01	-8.8	15.0
(2)	18729.358	18560.193	0.01	-0.9	15.0
(3)	12667.811	11247.133	0.01	-11.2	15.0
(4)	57416.696	51913.882	0.01	-9.6	15.0
(5)	9294.755	9019.172	0.01	-3.0	15.0
4cmx	442605.72	440469.46	0.01	-0.5	15.0
Decachlorobiphenyl	262777.87	255449.05	0.01	-2.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2149

Lab File ID: 022B2201 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 2050 2138

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Chlordane (tech.)	1040	1000	LINR	4.0	15.0
(2)	1040	1000	LINR	4.0	15.0
(3)	975	1000	LINR	-2.5	15.0
(4)	984	1000	LINR	-1.6	15.0
(5)	1090	1000	LINR	9.0	15.0
4cmx	189	200	AVRG	-5.5	15.0
Decachlorobiphenyl	186	200	AVRG	-7.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0224

Lab File ID: 045F4501 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
gamma-BHC (Lindane)	472687.72	528129.71	0.01	11.7	15.0
Heptachlor	394840.62	399453.57	0.01	1.2	15.0
Heptachlor epoxide	430459.53	440961.42	0.01	2.4	15.0
Endrin	346034.88	362574.04	0.01	4.8	15.0
Methoxychlor	97891.983	102973.14	0.01	5.2	15.0
4cmx	442605.72	455468.67	0.01	2.9	15.0
Decachlorobiphenyl	262777.87	251649.15	0.01	-4.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0224

Lab File ID: 045B4501 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	98.9	100	AVRG	-1.1	15.0	
Heptachlor	86.6	100	AVRG	-13.4	15.0	
Heptachlor epoxide	92.1	100	AVRG	-7.9	15.0	
Endrin	178	200	AVRG	-11.0	15.0	
Methoxychlor	810	1000	AVRG	-19.0	15.0	<-
4cmx	190	200	AVRG	-5.0	15.0	
Decachlorobiphenyl	202	200	AVRG	1.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0336

Lab File ID: 051F5101 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
gamma-BHC (Lindane)	472687.72	573964.45	0.01	21.4	15.0	<-
Heptachlor	394840.62	435888.81	0.01	10.4	15.0	
Heptachlor epoxide	430459.53	476602.95	0.01	10.7	15.0	
Endrin	346034.88	398475.56	0.01	15.2	15.0	<-
Methoxychlor	97891.983	111886.30	0.01	14.3	15.0	
4cmx	442605.72	495623.82	0.01	12.0	15.0	
Decachlorobiphenyl	262777.87	264064.49	0.01	0.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0336

Lab File ID: 051B5101 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
alpha-BHC	106	100	AVRG	6.0	15.0
beta-BHC	112	100	LINR	12.0	15.0
delta-BHC	107	100	AVRG	7.0	15.0
gamma-BHC (Lindane)	108	100	AVRG	8.0	15.0
Heptachlor	95.2	100	AVRG	-4.8	15.0
Aldrin	100	100	AVRG	0.0	15.0
Heptachlor epoxide	100	100	AVRG	0.0	15.0
Endosulfan I	102	100	AVRG	2.0	15.0
Dieldrin	200	200	AVRG	0.0	15.0
4,4'-DDE	210	200	AVRG	5.0	15.0
Endrin	197	200	AVRG	-1.5	15.0
Endosulfan II	196	200	AVRG	-2.0	15.0
4,4'-DDD	202	200	AVRG	1.0	15.0
Endosulfan sulfate	196	200	AVRG	-2.0	15.0
4,4'-DDT	196	200	AVRG	-2.0	15.0
Methoxychlor	879	1000	AVRG	-12.1	15.0
Endrin ketone	216	200	LINR	8.0	15.0
Endrin aldehyde	187	200	AVRG	-6.5	15.0
gamma-Chlordane	108	100	AVRG	8.0	15.0
alpha-Chlordane	94.7	100	AVRG	-5.3	15.0
4cmx	206	200	AVRG	3.0	15.0
Decachlorobiphenyl	220	200	AVRG	10.0	15.0

FORM VII PEST

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 02-DEC-2009 15:28
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.045	4.044	0.001	55672680	126.357	126	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.682	4.681	0.001	145166	0.36836	0.368	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.018	5.017	0.001	38811293	118.225	118	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
5.052	5.051	0.001	918691	2.97753	2.98	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.410	5.408	0.002	194416	0.71237	0.712	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.221	5.219	0.002	21775873	88.5526	88.6	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.841	5.839	0.002	688841	2.12177	2.12	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	88466427	214.374	214	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.422	6.422	0.000	33580282	198.135	198	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/002f0201.d

Date : 02-DEC-2009 15:28

Client ID: PEM01

Sample Info: IWPE091109-99DC

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

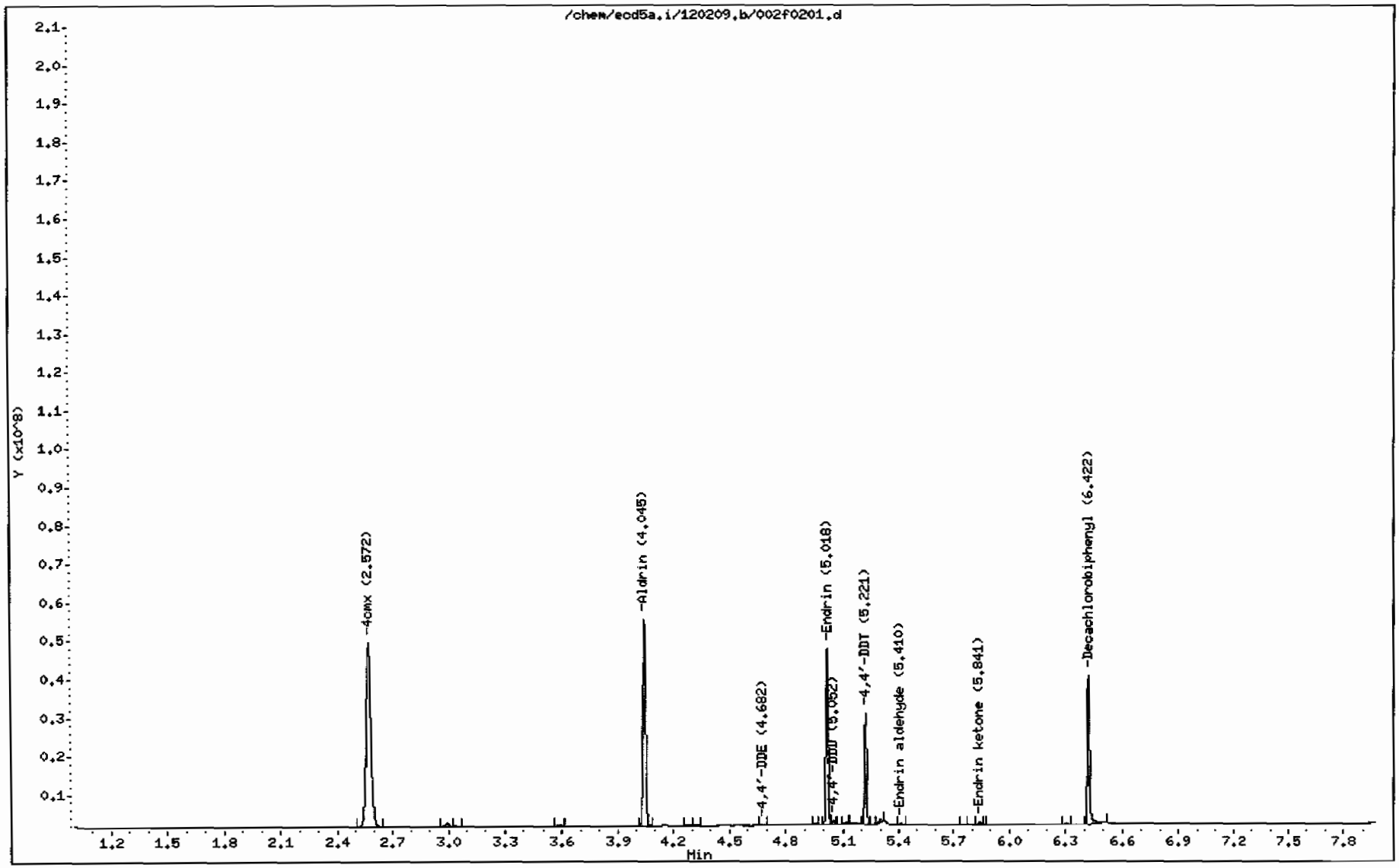

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 02-DEC-2009 15:28
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	596071838	119.599	120	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.402	4.401	0.001	2175030	0.53139	0.531	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.680	4.679	0.001	410733637	116.242	116	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.754	4.754	0.000	12261386	3.52022	3.52	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.013	5.013	0.000	1904947	0.69011	0.690	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.941	4.940	0.001	249806781	97.4216	97.4	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.493	5.492	0.001	9850834	2.84624	2.85	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.120	2.121	-0.001	920696808	203.913	204	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.213	6.214	-0.001	607655019	189.642	190	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/002b0201.d

Date : 02-DEC-2009 15:28

Client ID: PEM01

Sample Info: !WPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

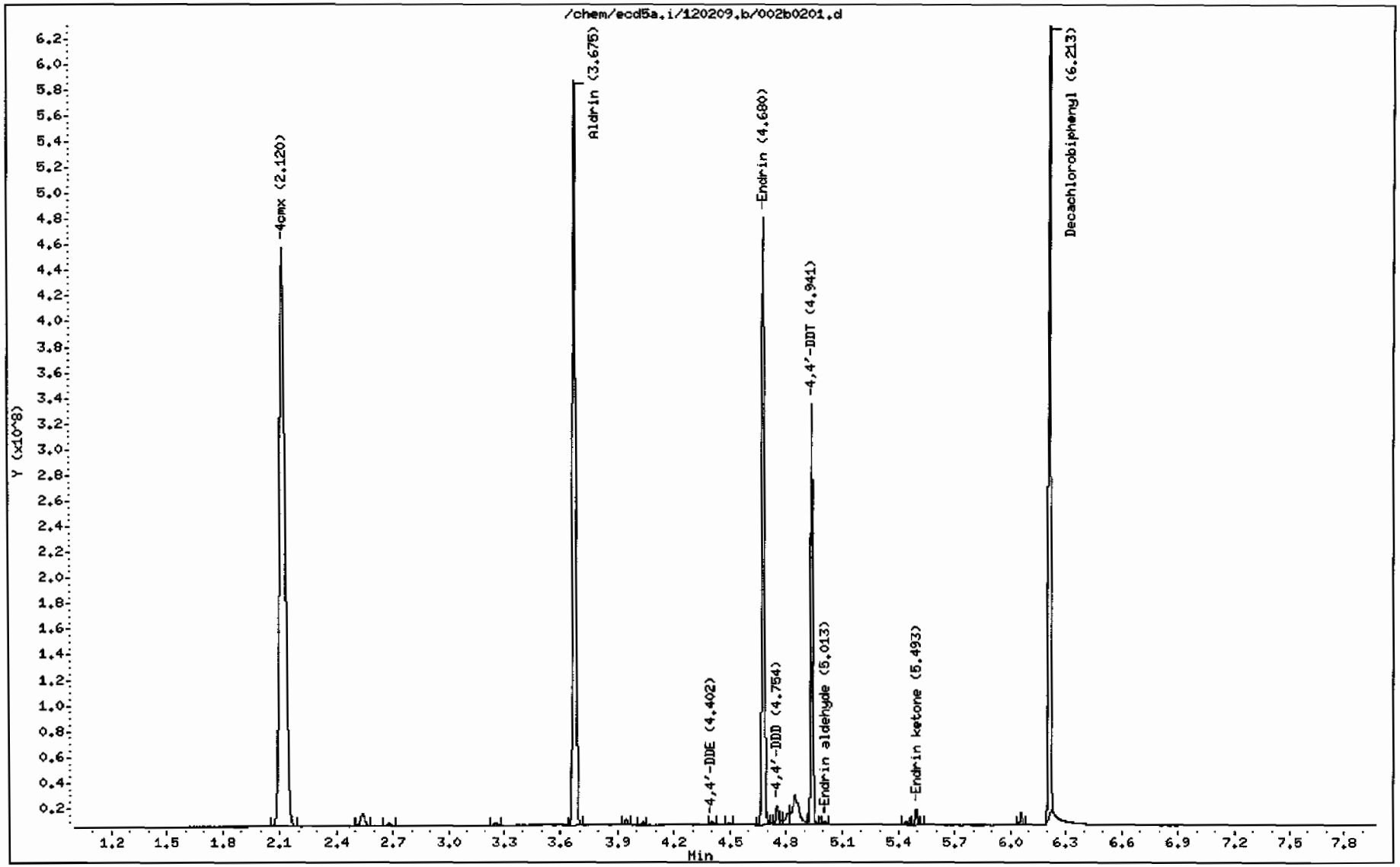

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 07-DEC-2009 17:14
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.967	3.966	0.001	56800739	119.074	119	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.616	4.614	0.002	186889	0.44941	0.449	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.948	4.947	0.001	37939943	109.642	110	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.987	4.985	0.002	1004596	2.89308	2.89	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.342	5.339	0.003	292928	0.97439	0.974	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.154	5.153	0.001	13784492	83.8104	83.8	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.771	5.767	0.004	791135	2.79142	2.79	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	91088055	205.800	206	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.350	6.344	0.006	52821000	201.010	201	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/002f0201.d
Date : 07-DEC-2009 17:14
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

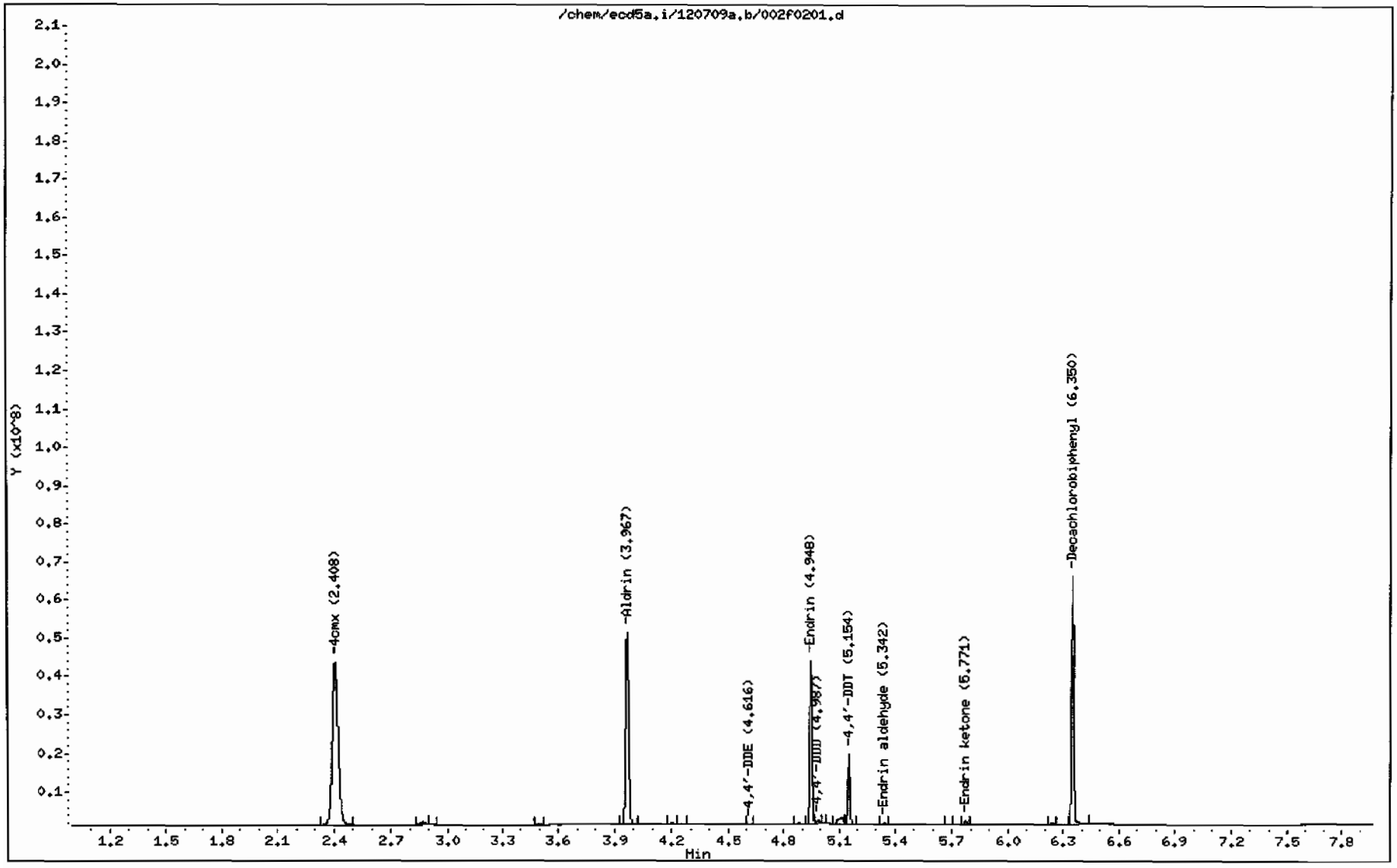

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 07-DEC-2009 17:14
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.686	3.687	-0.001	626265059	113.784	114	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.698	4.698	0.000	415838637	110.117	110	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.772	4.771	0.001	11151374	2.96751	2.97	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.958	4.958	0.000	271263527	98.6119	98.6	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.058	2.064	-0.006	948940593	190.558	190	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.236	6.226	0.010	540939803	194.995	195	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/002b0201.d

Date : 07-DEC-2009 17:14

Client ID: PEM01

Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

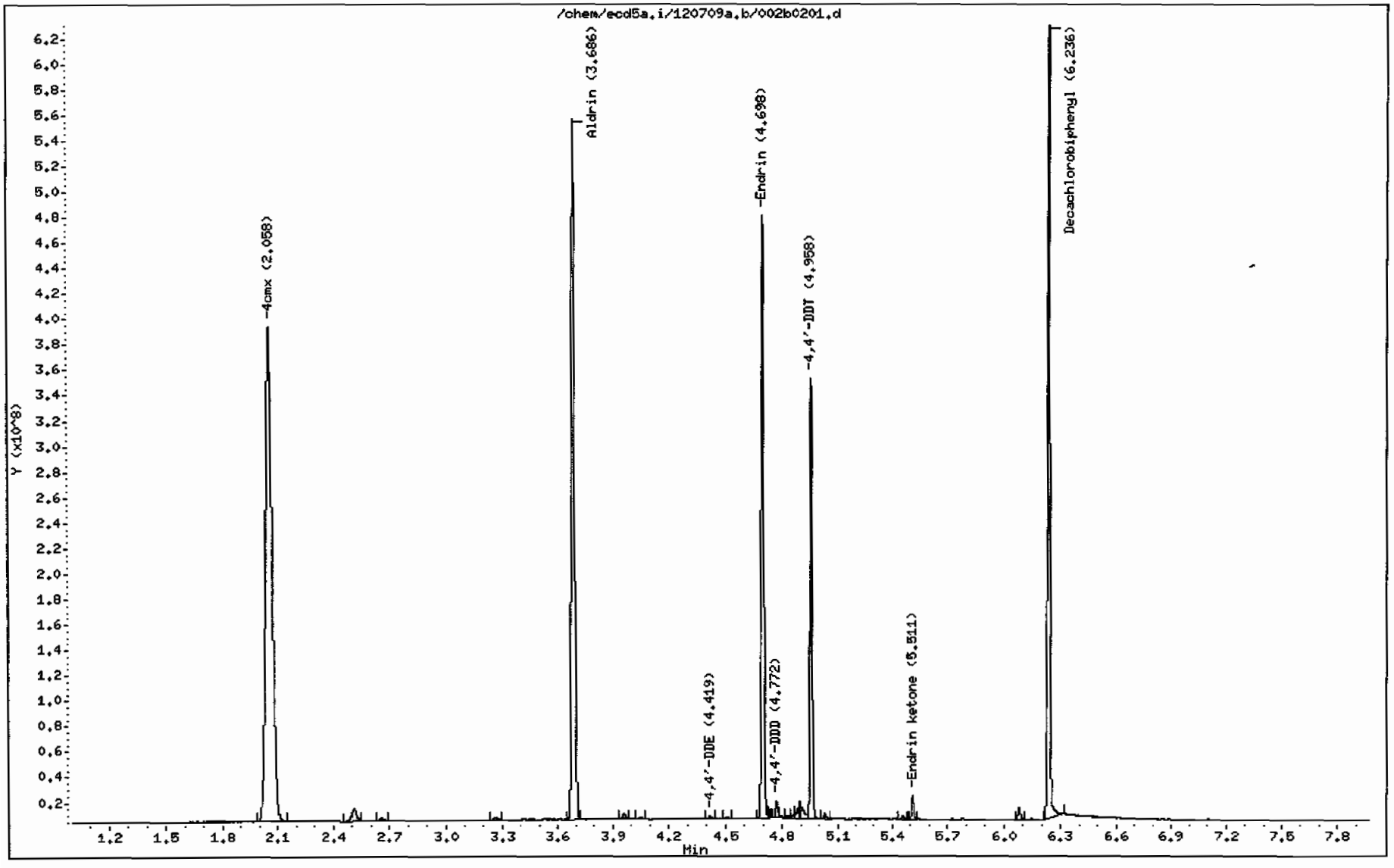

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/023f2301.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 07-DEC-2009 22:01
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 23 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.964	3.966	-0.002	56499355	118.443	118	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.613	4.614	-0.001	212759	0.51162	0.512	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	37122028	107.278	107	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.984	4.985	-0.001	1543436	4.44485	4.44	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.339	5.339	0.000	477813	1.58939	1.59	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.153	5.153	0.000	13238887	80.4931	80.5	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.768	5.767	0.001	1226694	4.32823	4.33	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.409	-0.004	90798881	205.146	205	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.343	6.344	-0.001	52322131	199.112	199	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/023f2301.d
Date : 07-DEC-2009 22:01
Client ID: PEM02
Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

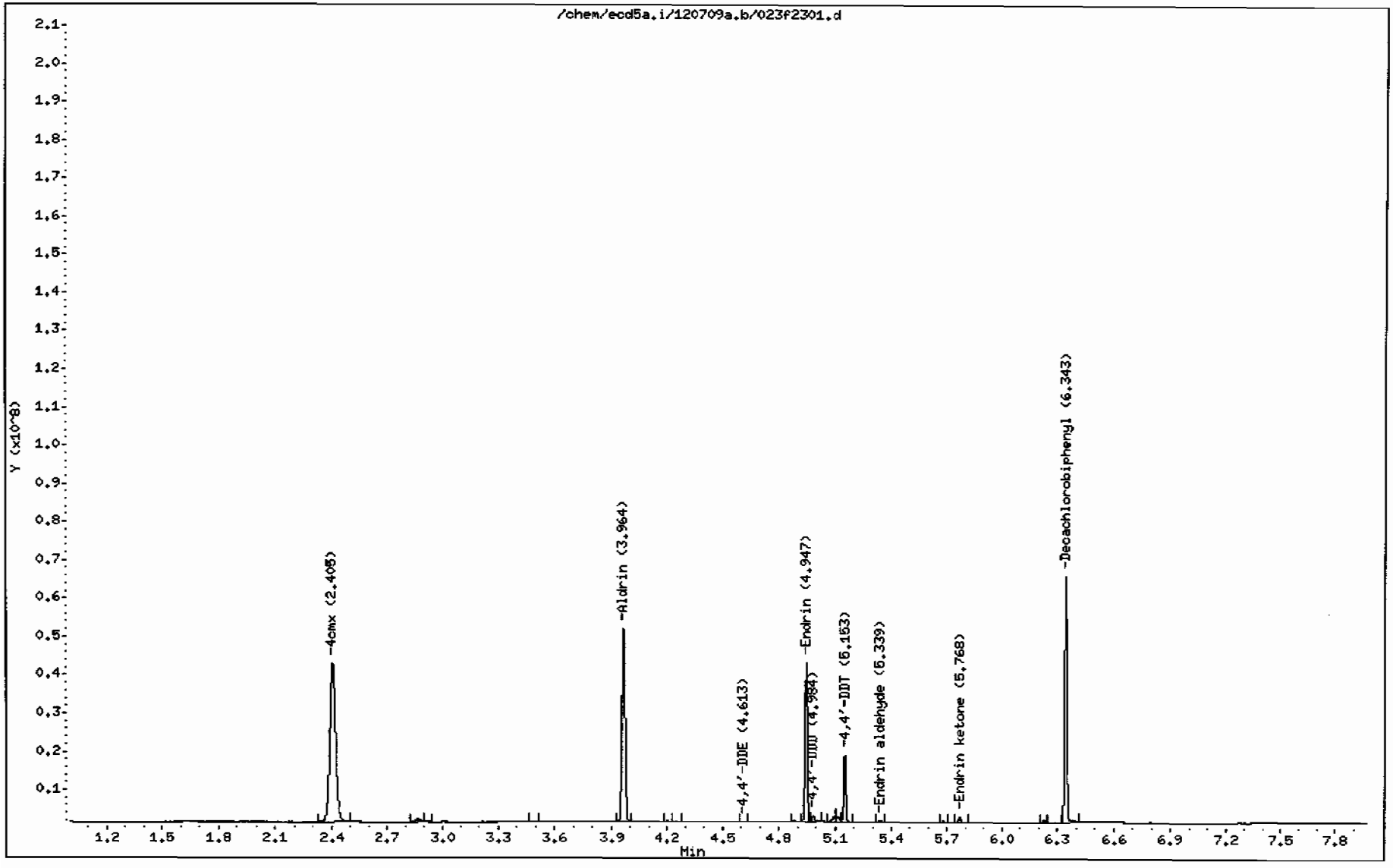

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/023b2301.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 07-DEC-2009 22:01
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 23 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.686	3.687	-0.001	630432688	114.541	114	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.417	4.419	-0.002	2718238	0.61334	0.613	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	406277295	107.585	108	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.769	4.771	-0.002	21078404	5.60921	5.61	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.030	5.031	-0.001	5823020	1.95848	1.96	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.958	4.958	0.000	251598203	91.4630	91.5	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	22235235			80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.060	2.064	-0.004	955394490	191.854	192	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	547754698	197.452	197	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/023b2301.d

Date : 07-DEC-2009 22:01

Client ID: PEM02

Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

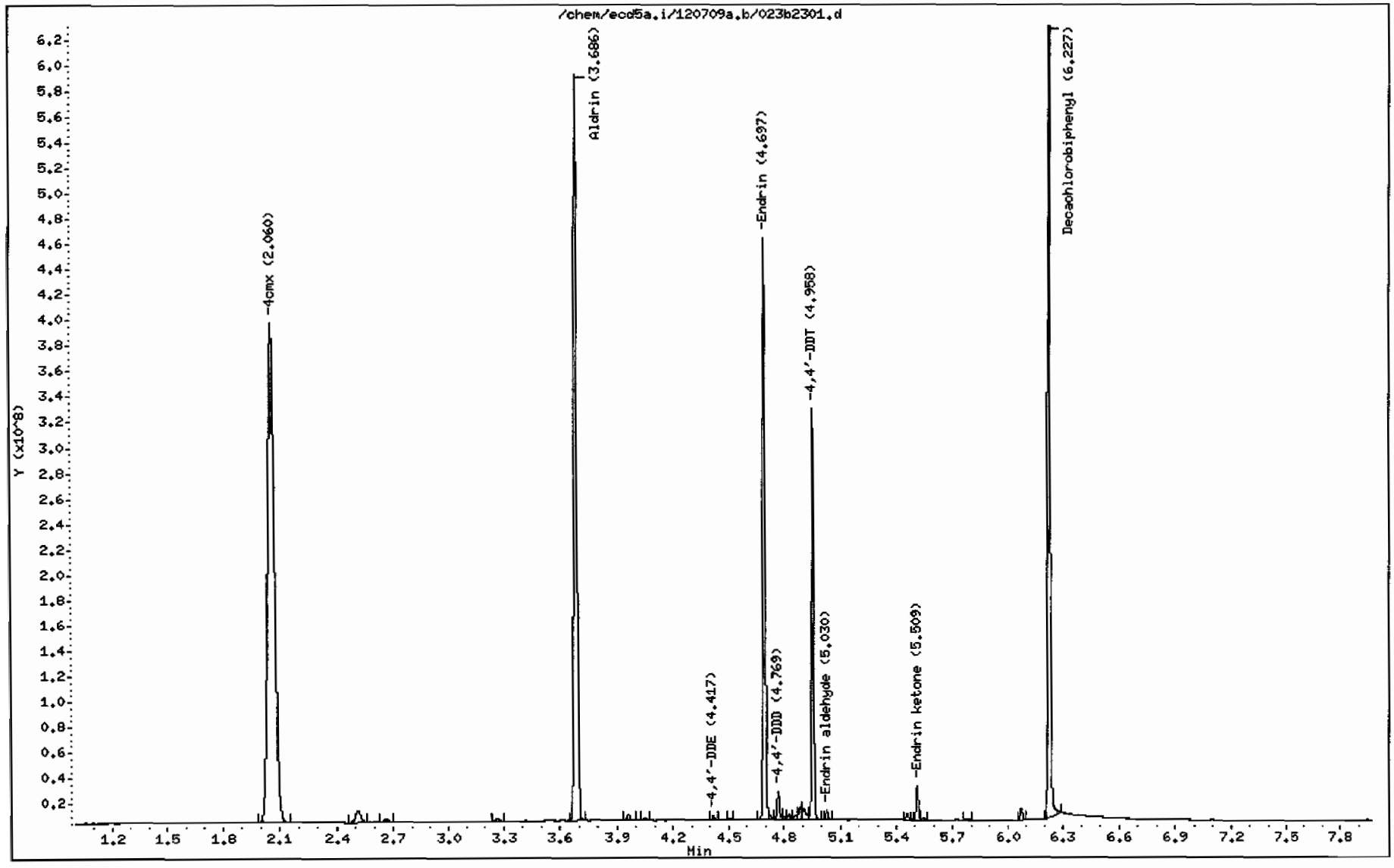

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/003f0301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 02-DEC-2009 15:40
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.163	3.163	0.000	58956664	100.000	110	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.447	3.447	0.000	52635201	100.000	113	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.525	3.525	0.000	22318471	100.000	105	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	41186070	100.000	101	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.666	3.666	0.000	53300538	100.000	108	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.044	4.044	0.000	45563520	100.000	103	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.464	4.464	0.000	41923905	100.000	106	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.546	4.546	0.000	43383185	100.000	111	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.632	4.632	0.000	37752003	100.000	99.4	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.720	4.720	0.000	39085811	100.000	109	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.681	4.681	0.000	80325859	200.000	204	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.872	4.872	0.000	79839420	200.000	208	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.017	5.017	0.000	71449638	200.000	218	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.051	5.051	0.000	66275363	200.000	215	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.154	5.154	0.000	68150087	200.000	219	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.408	5.408	0.000	55019606	200.000	202	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.219	5.219	0.000	47779642	200.000	194	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.668	5.668	0.000	60433582	200.000	204	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.503	5.503	0.000	113070746	1000.00	957	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.839	5.839	0.000	63651572	200.000	196	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.573	2.573	0.000	84153881	200.000	204	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.422	6.422	0.000	32625247	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/003f0301.d
Date : 02-DEC-2009 15:40
Client ID: INDAB01
Sample Info: IWPE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

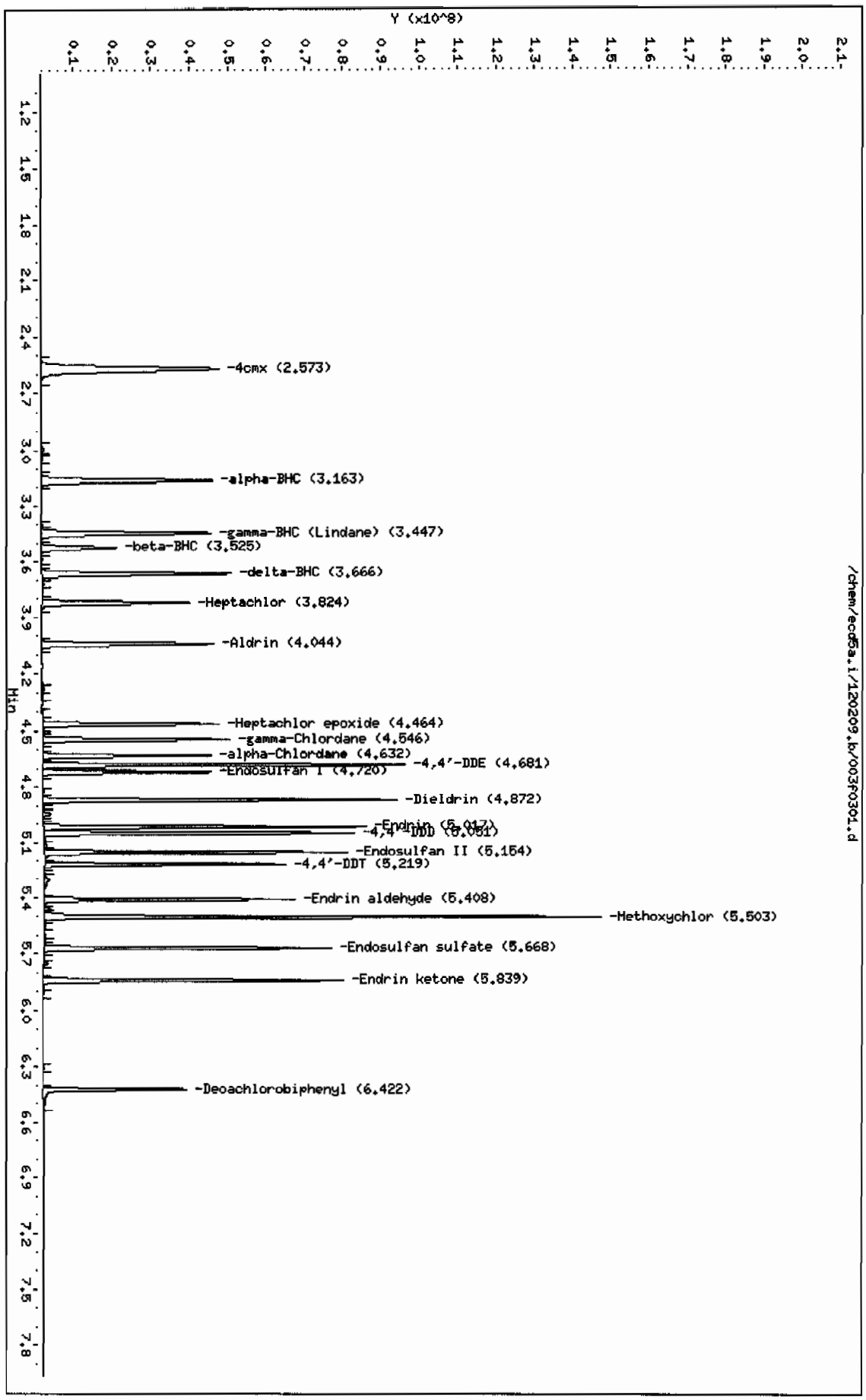

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/003b0301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 02-DEC-2009 15:40
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.793	2.793	0.000	649332933	100.000	103	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.106	3.106	0.000	583506868	100.000	106	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.186	3.186	0.000	236379782	100.000	96.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	425539022	100.000	95.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.410	3.410	0.000	556747239	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	473820542	100.000	95.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.070	4.070	0.000	416202881	100.000	99.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.194	4.194	0.000	455630668	100.000	102	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.288	4.288	0.000	386564798	100.000	89.8	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.320	4.320	0.000	371282334	100.000	96.5	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.401	4.401	0.000	799512405	200.000	195	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.493	4.493	0.000	770651831	200.000	190	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.679	4.679	0.000	689362715	200.000	195	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.754	4.754	0.000	676252878	200.000	194	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.809	4.809	0.000	644672835	200.000	192	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.013	5.013	0.000	489051340	200.000	177	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.940	4.940	0.000	489858877	200.000	191	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.176	5.176	0.000	559134872	200.000	184	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.346	5.346	0.000	945610623	1000.00	1070	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.492	5.492	0.000	606974029	200.000	175	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	881797515	200.000	195	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	594615566	200.000	186	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/003b0301.d
Date : 02-DEC-2009 15:40
Client ID: INDAB01
Sample Info: IWPE091123-10AB
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

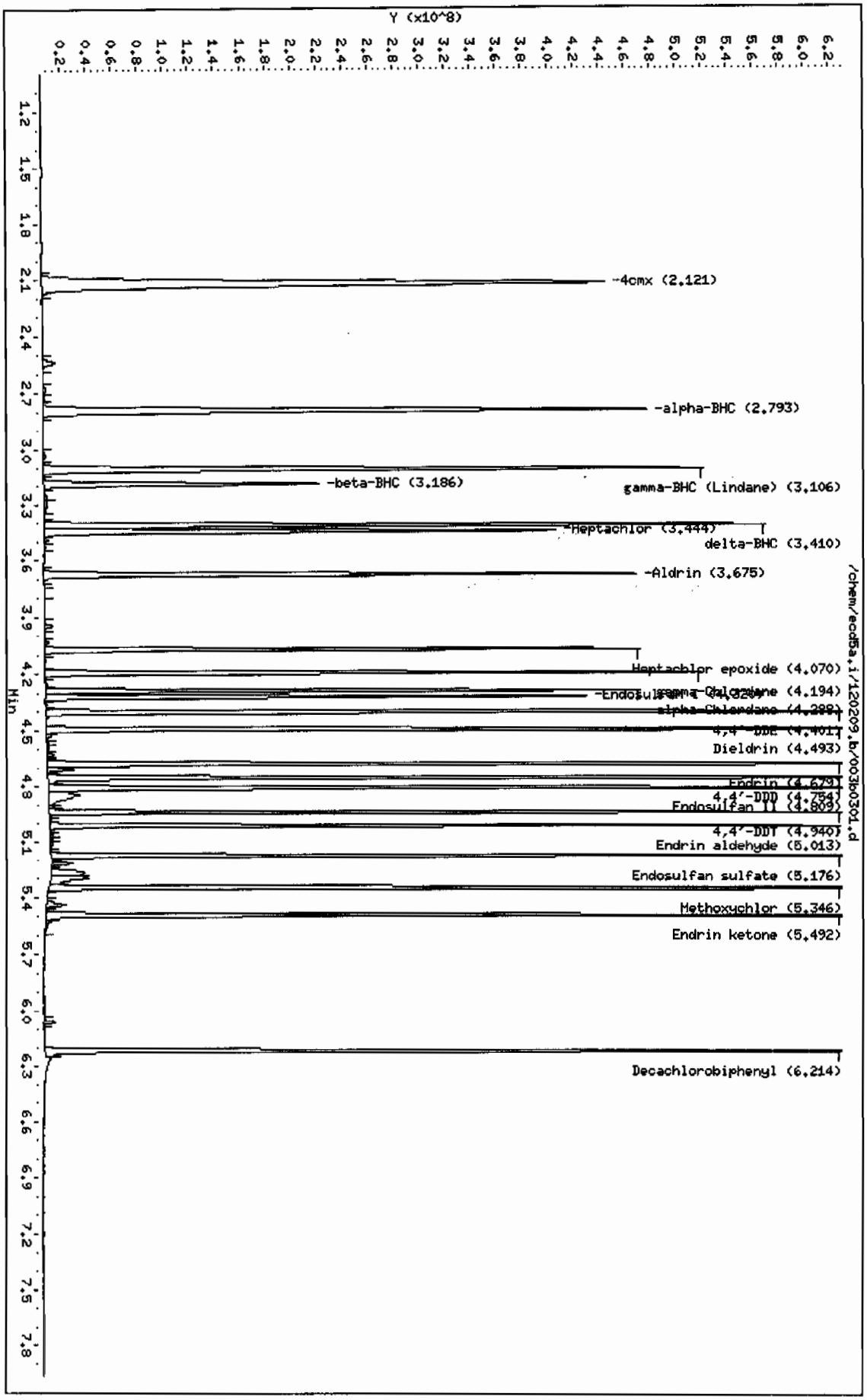

Page 1

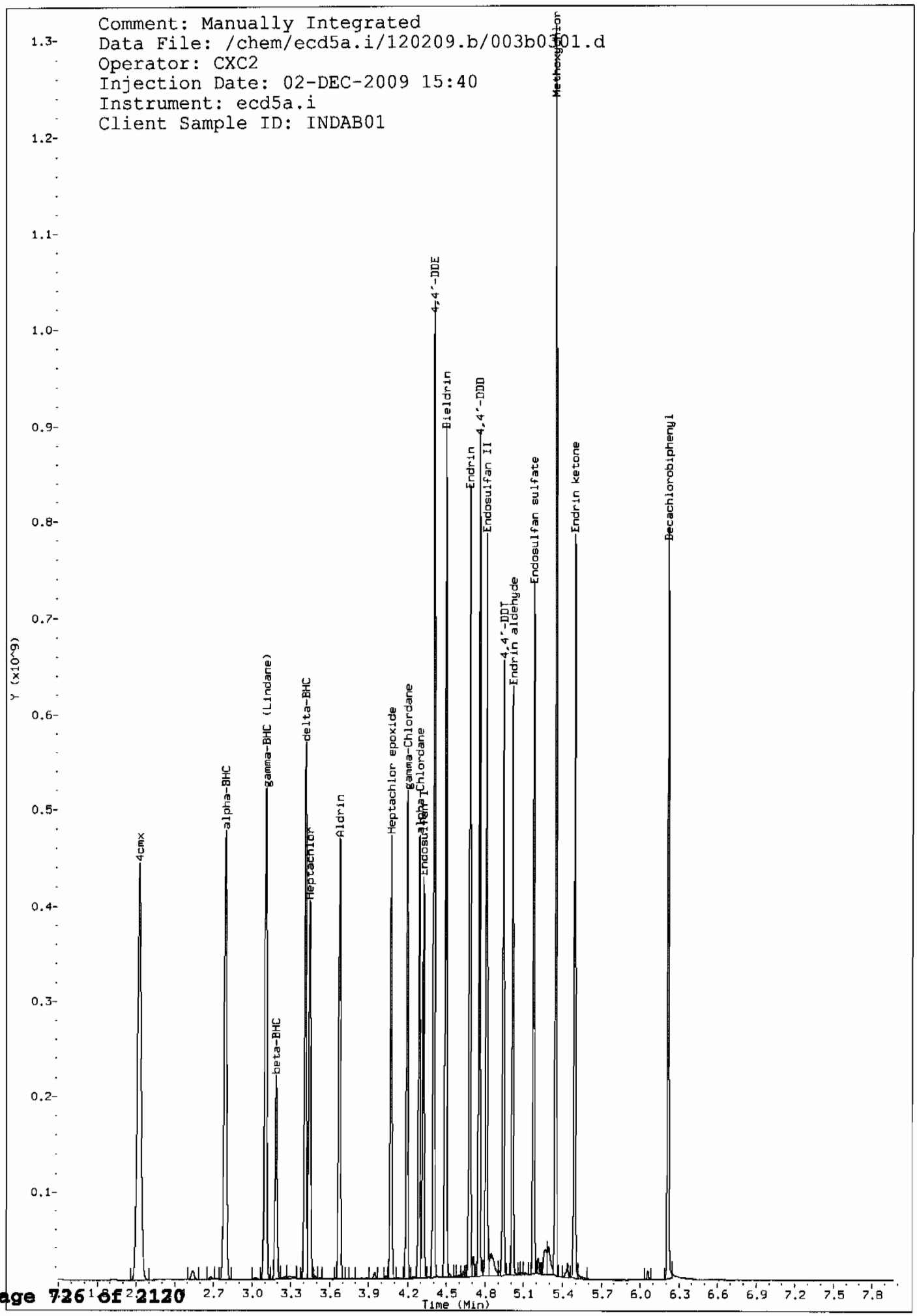
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Operator: CXC2
Injection Date: 02-DEC-2009 15:40
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

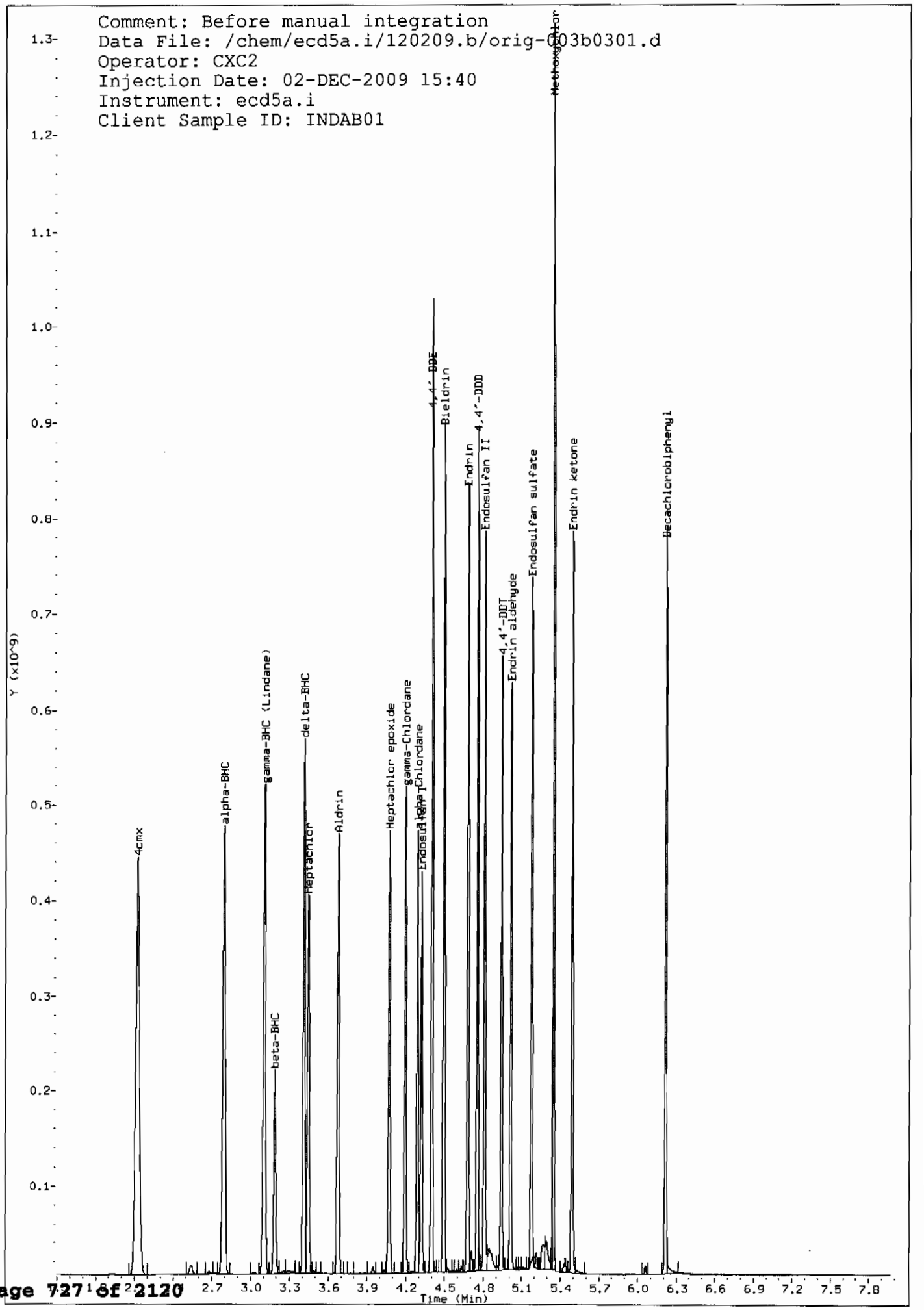
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Operator: CXC2
Injection Date: 02-DEC-2009 15:40
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/004f0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 02-DEC-2009 15:52
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.660	4.660	0.000	4734694	2000.00	2210	80.00- 120.00	100.00(M)
4.875	4.875	0.000	11754537	2000.00	2090	228.26- 268.26	248.26
4.931	4.931	0.000	11576946	2000.00	2240	224.51- 264.51	244.51
4.967	4.967	0.000	14844720	2000.00	2150	293.53- 333.53	313.53
5.149	5.149	0.000	25480562	2000.00	2220	518.17- 558.17	538.17
Average of Peak Amounts =					2.18e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	81815431	200.000	198	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	31118880	200.000	184	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/004f0401.d
Date : 02-DEC-2009 15:52
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

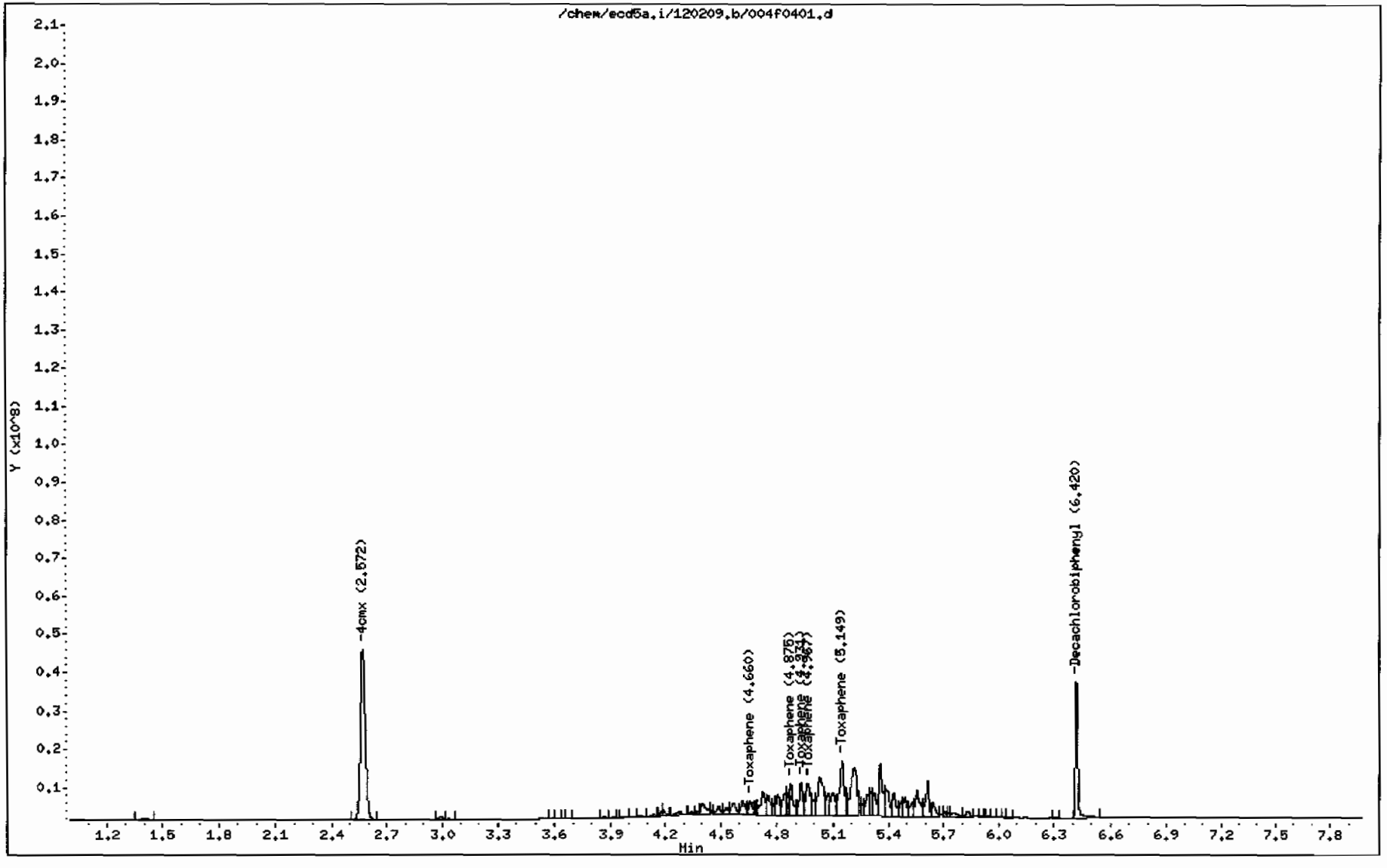

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/004f0401.d
Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

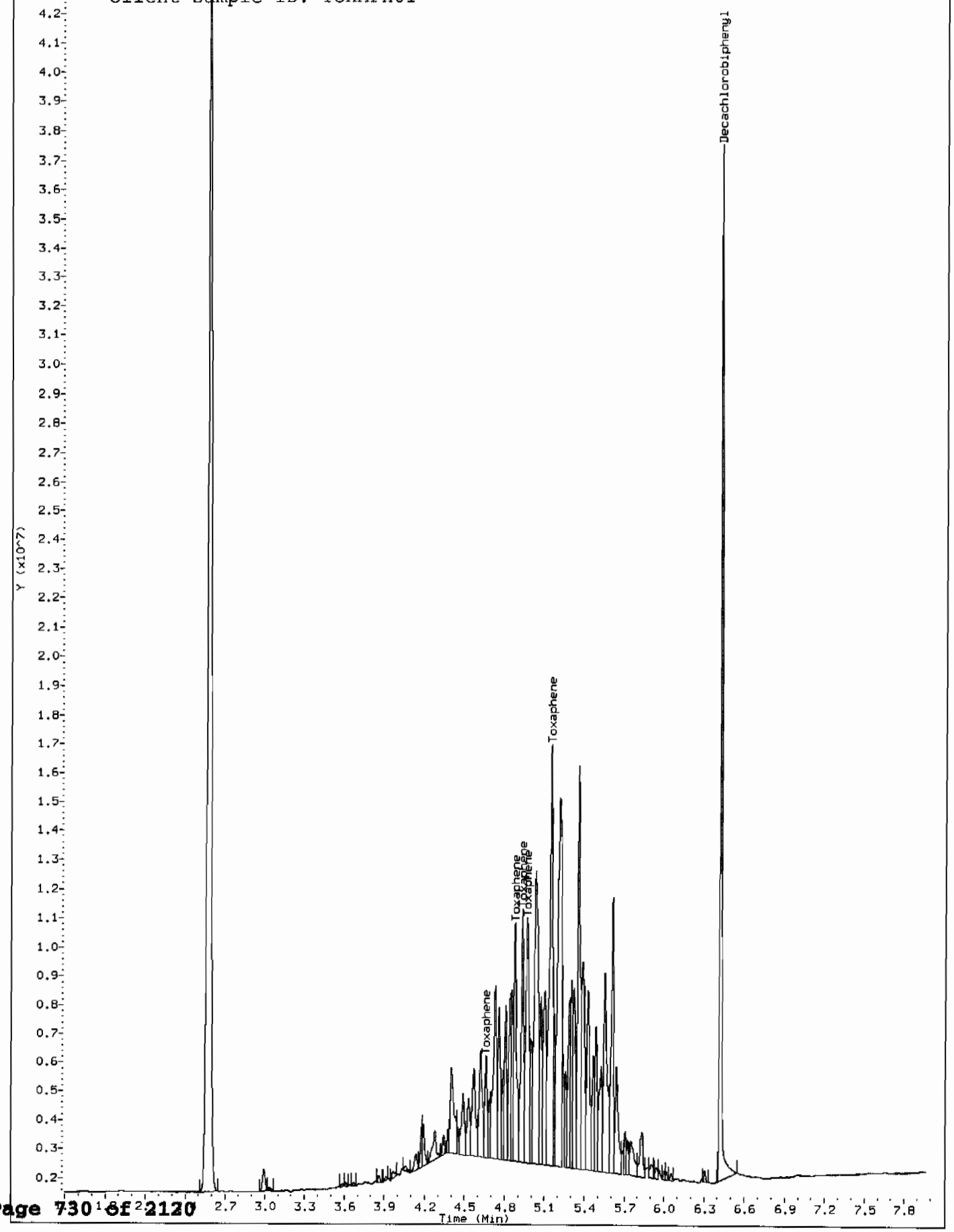

Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-004f0401.d
Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

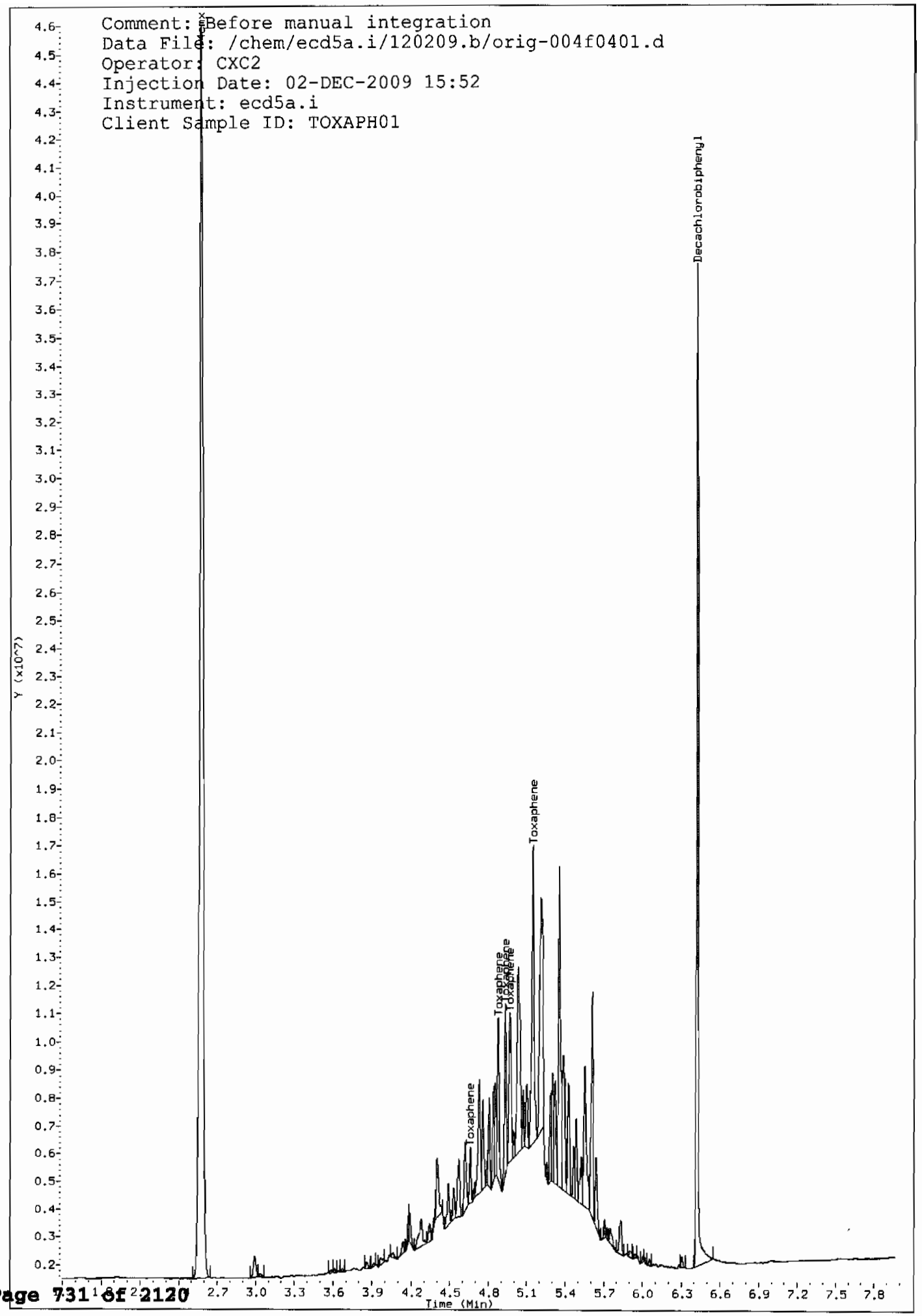

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/004b0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 02-DEC-2009 15:52
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.553	4.553	0.000	91250322	2000.00	2200	80.00- 120.00	100.00(M)
4.782	4.782	0.000	108065665	2000.00	2060	98.43- 138.43	118.43
4.802	4.802	0.000	166107339	2000.00	2120	162.03- 202.03	182.03
4.861	4.861	0.000	302629321	2000.00	2170	311.65- 351.65	331.65
5.018	5.018	0.000	153195922	2000.00	2020	147.89- 187.89	167.89
Average of Peak Amounts =					2.11e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	853288452	200.000	189	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	552902413	200.000	172	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/004b0401.d
Date : 02-DEC-2009 15:52
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

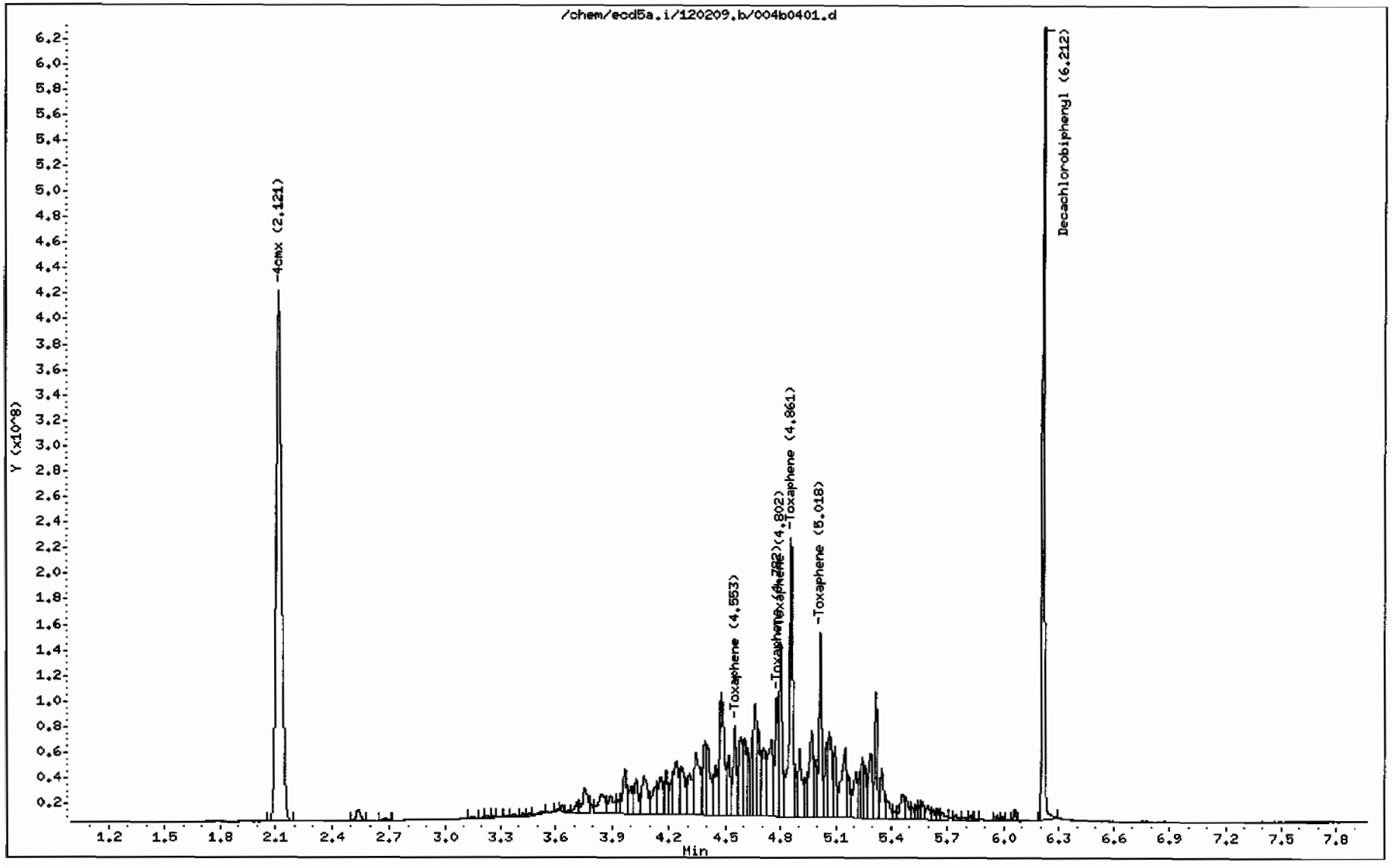

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/004b0401.d
Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

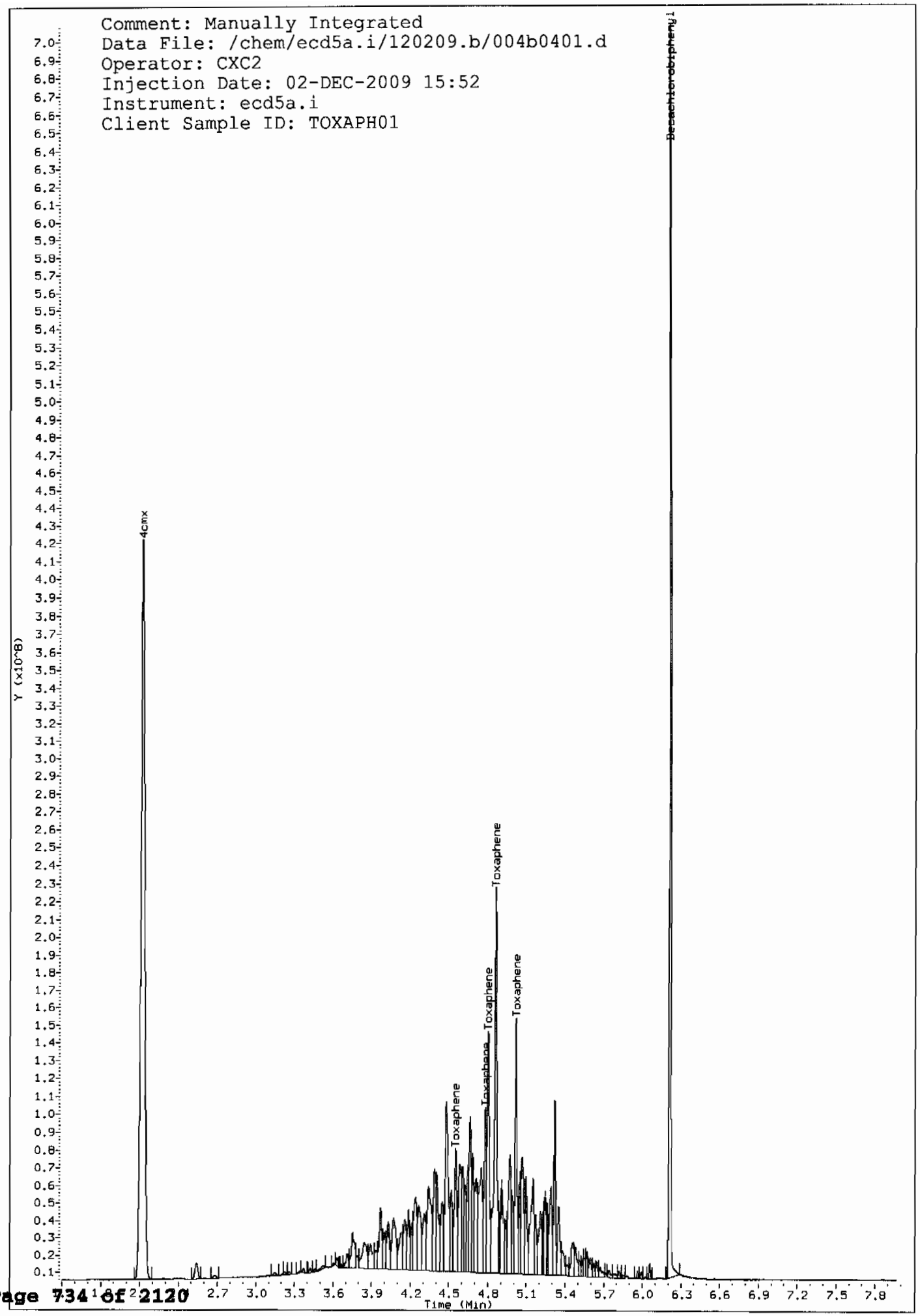

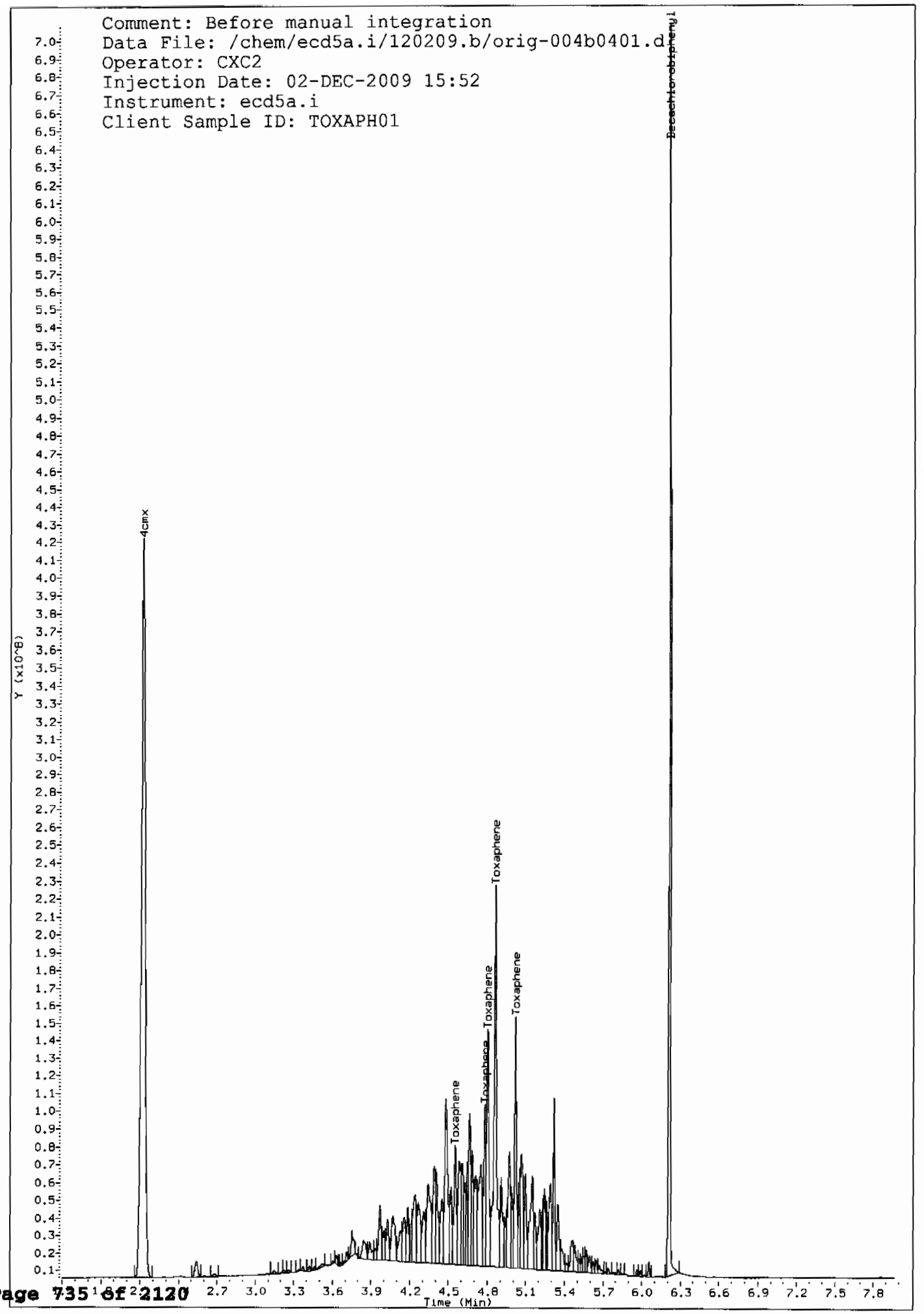
Comment: Before manual integration
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Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/005f0501.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 02-DEC-2009 16:04
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.763	3.763	0.000	15364576	1000.00	1010	80.00- 120.00	100.00
4.422	4.422	0.000	9209103	1000.00	1040	39.94- 79.94	59.94
4.546	4.546	0.000	49482743	1000.00	1020	302.06- 342.06	322.06
4.631	4.631	0.000	72104076	1000.00	970	449.29- 489.29	469.29
4.766	4.766	0.000	3592907	1000.00	901	3.38- 43.38	23.38
Average of Peak Amounts =					988		
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	83230660	200.000	202	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.421	6.422	-0.001	32210699	200.000	190	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/005f0501.d

Date : 02-DEC-2009 16:04

Client ID: CHLOR01

Sample Info: IWPE091021-00CL

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

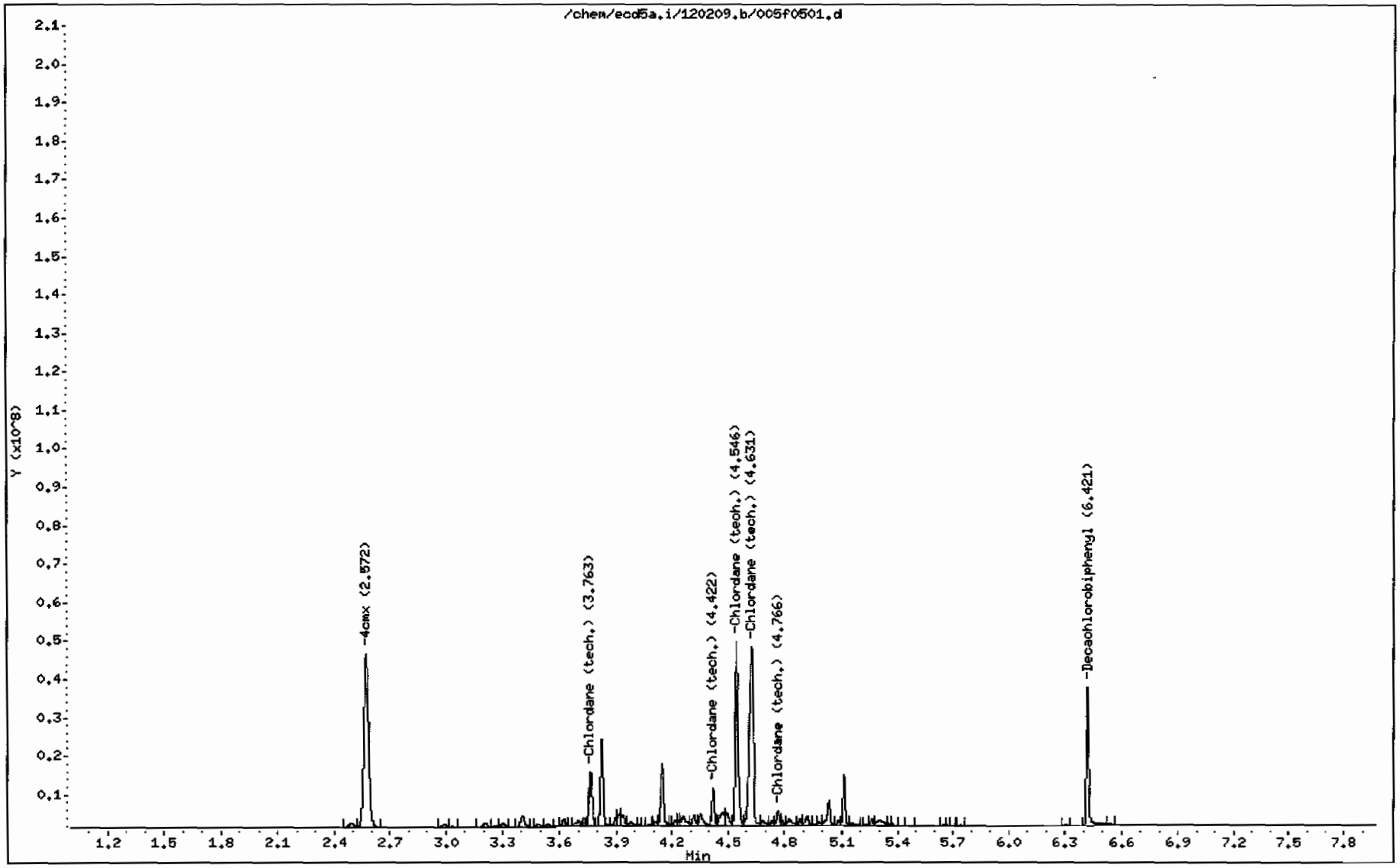

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/005b0501.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 02-DEC-2009 16:04
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.334	3.334	0.000	193503412	1000.00	986	80.00- 120.00	100.00(M)
4.050	4.050	0.000	99637259	1000.00	930	31.49- 71.49	51.49
4.194	4.194	0.000	464182876	1000.00	950	219.88- 259.88	239.88
4.288	4.288	0.000	363813733	1000.00	951	168.01- 208.01	188.01
4.438	4.438	0.000	41512379	1000.00	1010	1.45- 41.45	21.45
Average of Peak Amounts =					966		
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	890874931	200.000	197	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	556836240	200.000	174	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/0055b0501.d
Date : 02-DEC-2009 16:04
Client ID: CHLOR01
Sample Info: IWPE091021-00CL
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

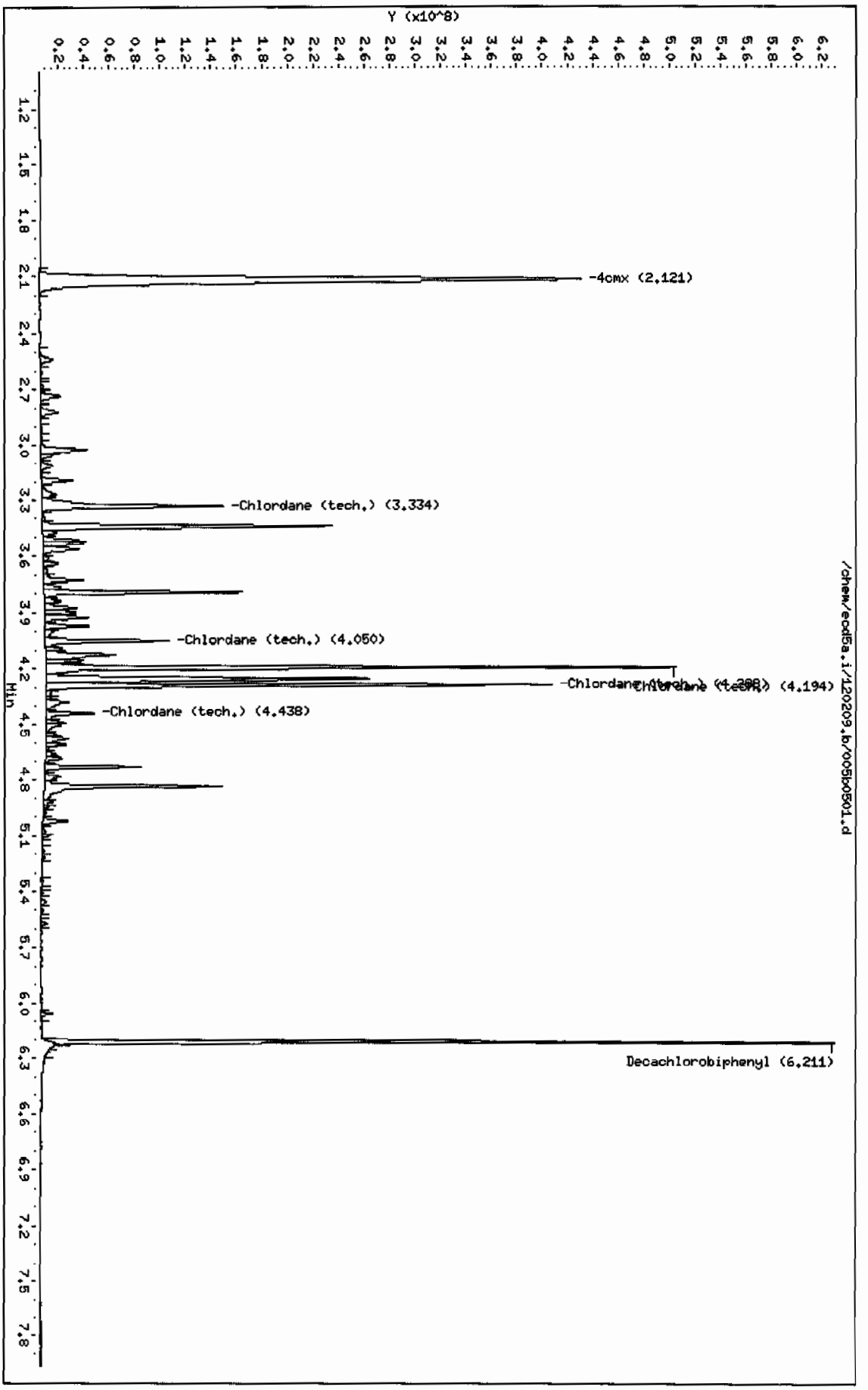

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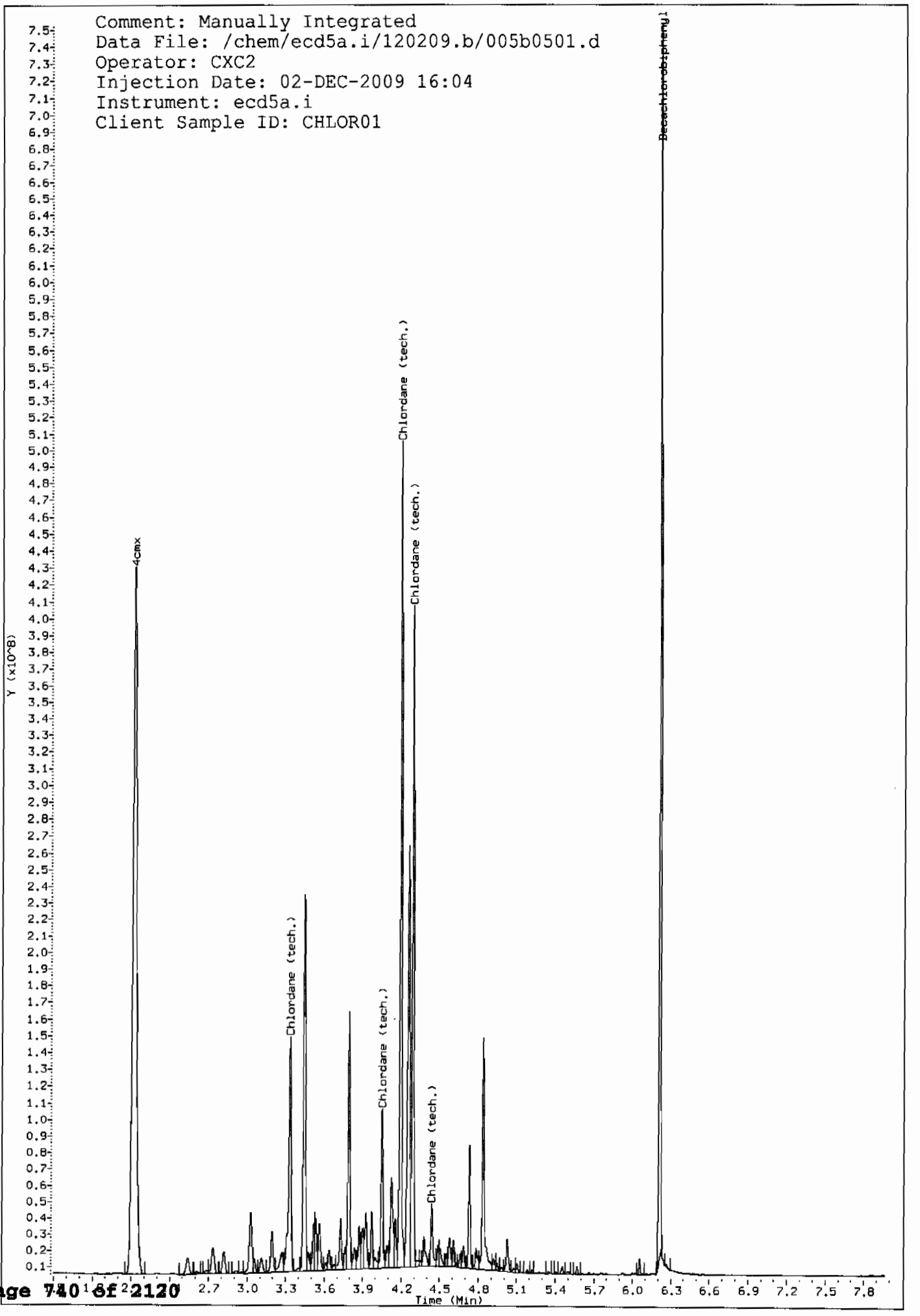
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/005b0501.d
Operator: CXC2
Injection Date: 02-DEC-2009 16:04
Instrument: ecd5a.i
Client Sample ID: CHLOR01
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

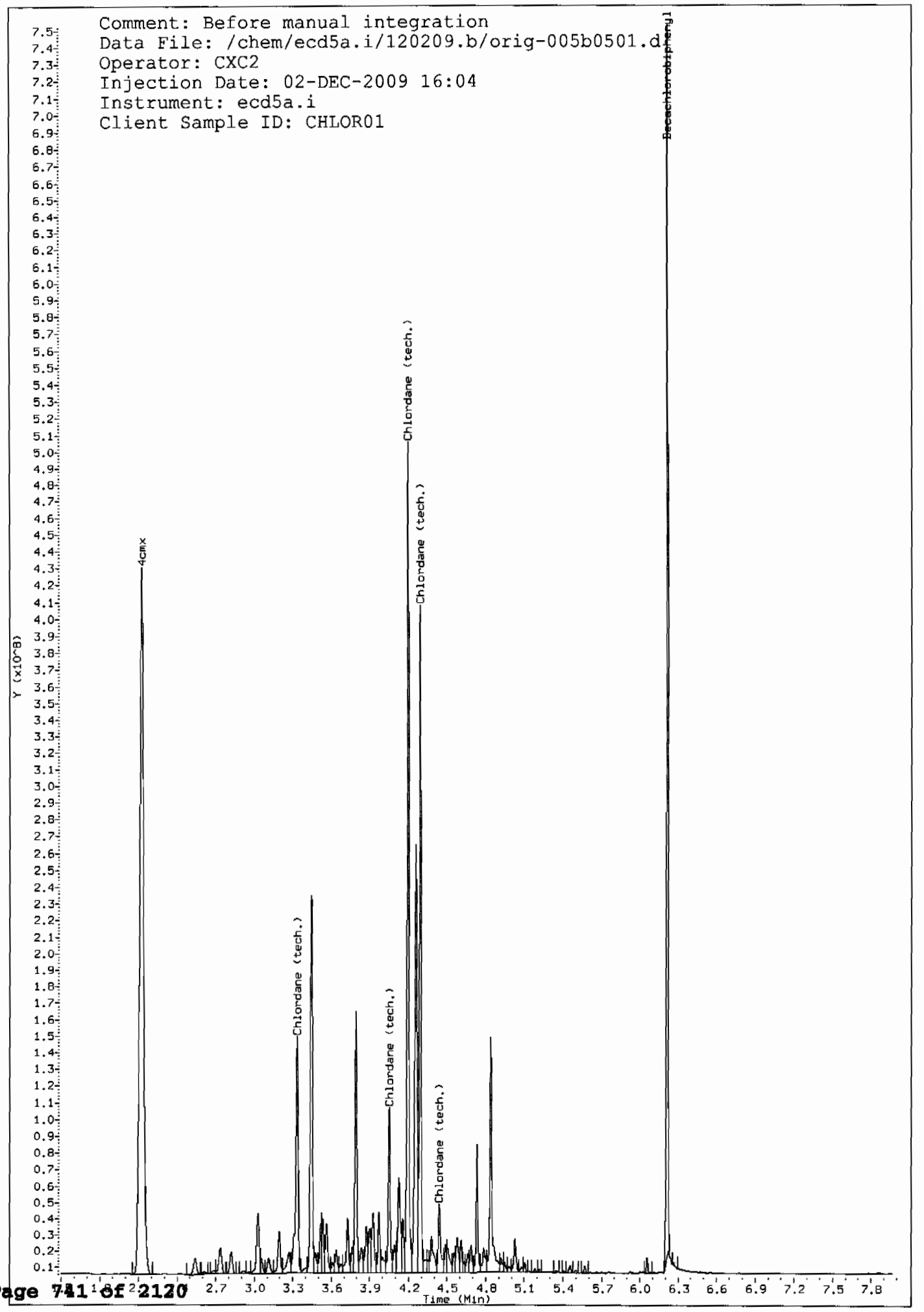
Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-005b0501.d
Operator: CXC2
Injection Date: 02-DEC-2009 16:04
Instrument: ecd5a.i
Client Sample ID: CHLOR01
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/060f6001.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB07
Inj Date : 03-DEC-2009 03:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.163	3.163	0.000	62545679	100.000	117	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.447	3.447	0.000	55217880	100.000	118	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.526	3.525	0.001	23669621	100.000	112	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	42952300	100.000	105	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.667	3.666	0.001	56884332	100.000	116	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.045	4.044	0.001	49107023	100.000	111	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.465	4.464	0.001	45091268	100.000	114	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.546	4.546	0.000	46787979	100.000	120	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.632	4.632	0.000	40673912	100.000	107	80.00- 120.00	100.00

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
	16 Endosulfan I					CAS #: 959-98-8		
	4.720	4.720	0.000	42067281	100.000	117	80.00- 120.00	100.00
	19 4,4'-DDE					CAS #: 72-55-9		
	4.682	4.681	0.001	85842740	200.000	218	80.00- 120.00	100.00
	20 Dieldrin					CAS #: 60-57-1		
	4.872	4.872	0.000	85909045	200.000	224	80.00- 120.00	100.00
	22 Endrin					CAS #: 72-20-8		
	5.017	5.017	0.000	76091223	200.000	232	80.00- 120.00	100.00
	25 4,4'-DDD					CAS #: 72-54-8		
	5.052	5.051	0.001	75663327	200.000	245	80.00- 120.00	100.00
	24 Endosulfan II					CAS #: 33213-65-9		
	5.155	5.154	0.001	75466945	200.000	243	80.00- 120.00	100.00
	27 Endrin aldehyde					CAS #: 7421-93-4		
	5.407	5.408	-0.001	59678040	200.000	219	80.00- 120.00	100.00
	26 4,4'-DDT					CAS #: 50-29-3		
	5.220	5.219	0.001	44200351	200.000	180	80.00- 120.00	100.00
	29 Endosulfan sulfate					CAS #: 1031-07-8		
	5.667	5.668	-0.001	65348895	200.000	221	80.00- 120.00	100.00
	28 Methoxychlor					CAS #: 72-43-5		
	5.502	5.503	-0.001	111847007	1000.00	947	80.00- 120.00	100.00
	31 Endrin ketone					CAS #: 53494-70-5		
	5.838	5.839	-0.001	66635689	200.000	205	80.00- 120.00	100.00
$	1 4cmx					CAS #: 877-09-8		
	2.574	2.573	0.001	89931118	200.000	218	80.00- 120.00	100.00
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	6.420	6.422	-0.002	36455538	200.000	215	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/060f6001.d
Date : 03-DEC-2009 03:12
Client ID: INDAB07
Sample Info: IWPE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

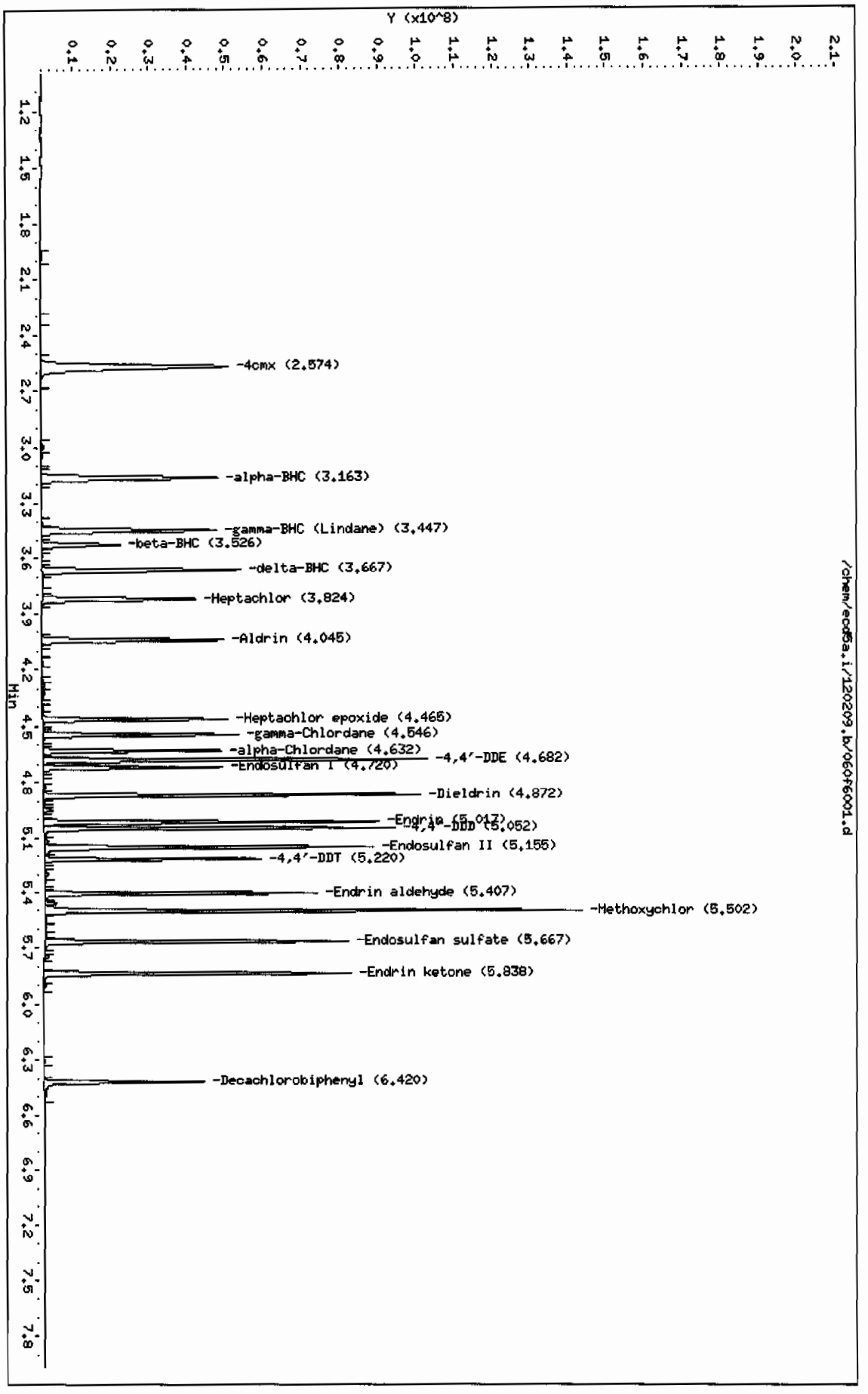

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GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/060b6001.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB07
Inj Date : 03-DEC-2009 03:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.793	2.793	0.000	661613804	100.000	105	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.106	0.001	586656106	100.000	107	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.187	3.186	0.001	240201767	100.000	98.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	417733807	100.000	93.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.411	3.410	0.001	578928542	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	490492864	100.000	98.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	428604686	100.000	102	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.195	4.194	0.001	462926176	100.000	104	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.288	4.288	0.000	397355472	100.000	92.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.322	4.320	0.002	378089612	100.000	98.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.402	4.401	0.001	828117854	200.000	202	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.493	4.493	0.000	794730501	200.000	196	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.680	4.679	0.001	699570533	200.000	198	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.753	4.754	-0.001	732443990	200.000	210	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.809	4.809	0.000	689538309	200.000	206	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.012	5.013	-0.001	522620489	200.000	189	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.940	4.940	0.000	391862142	200.000	153	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.177	5.176	0.001	591443330	200.000	194	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.347	5.346	0.001	797983703	1000.00	895	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.492	5.492	0.000	604155716	200.000	174	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.122	2.121	0.001	903965048	200.000	200	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	657434641	200.000	205	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/060b6001.d
Date : 03-DEC-2009 03:12
Client ID: INDAB07
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

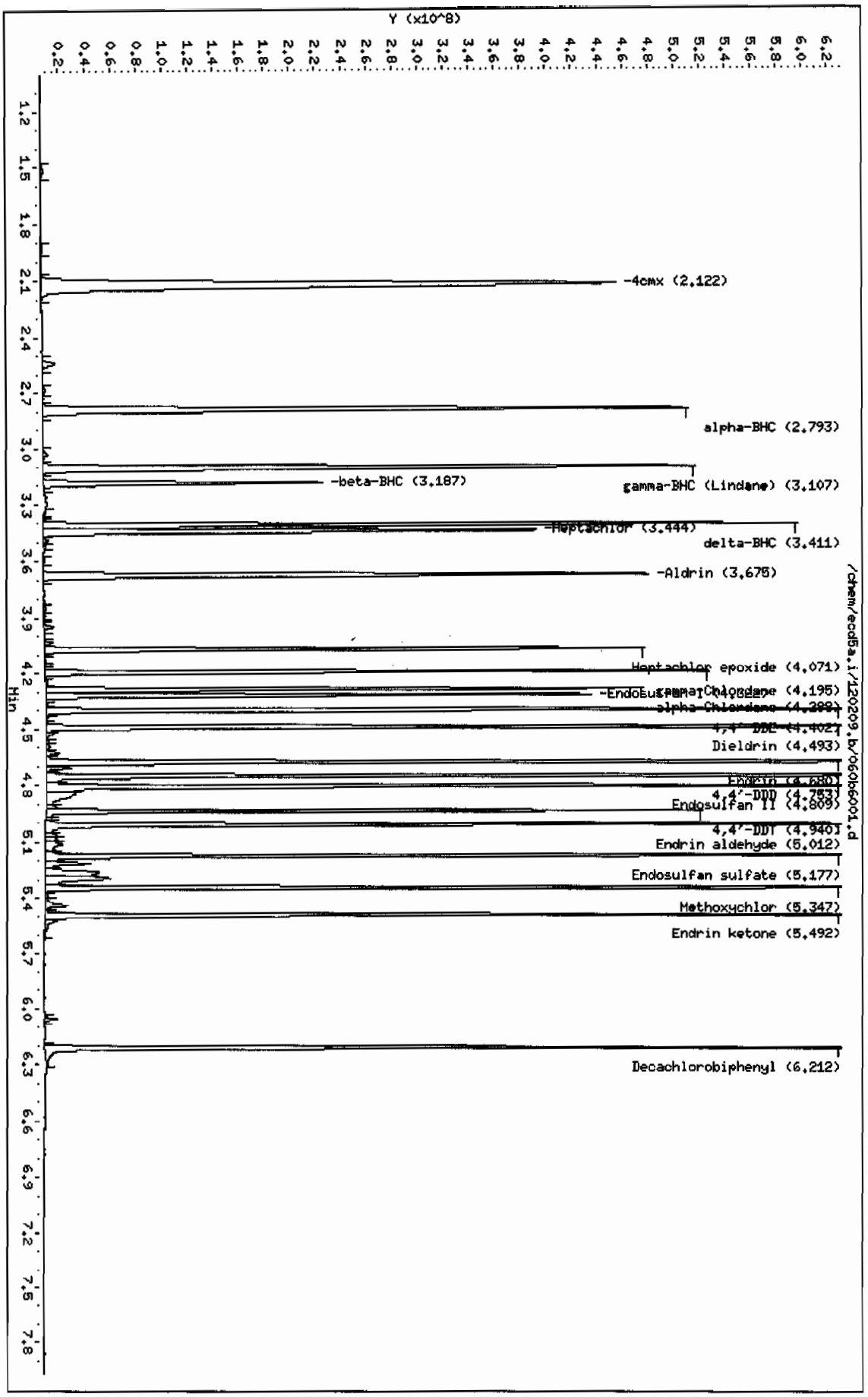

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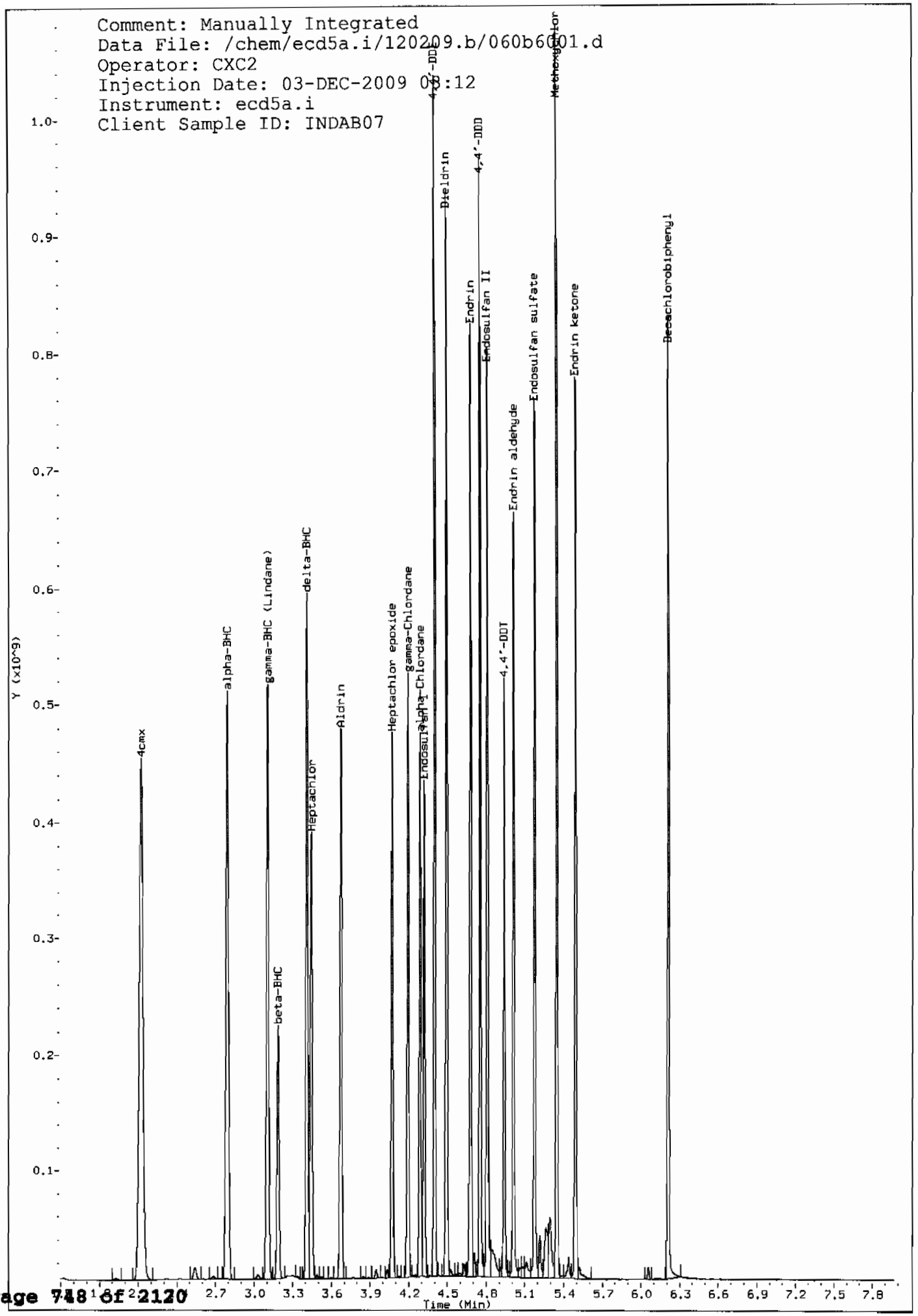
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Operator: CXC2
Injection Date: 03-DEC-2009 08:12
Instrument: ecd5a.i
Client Sample ID: INDAB07
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

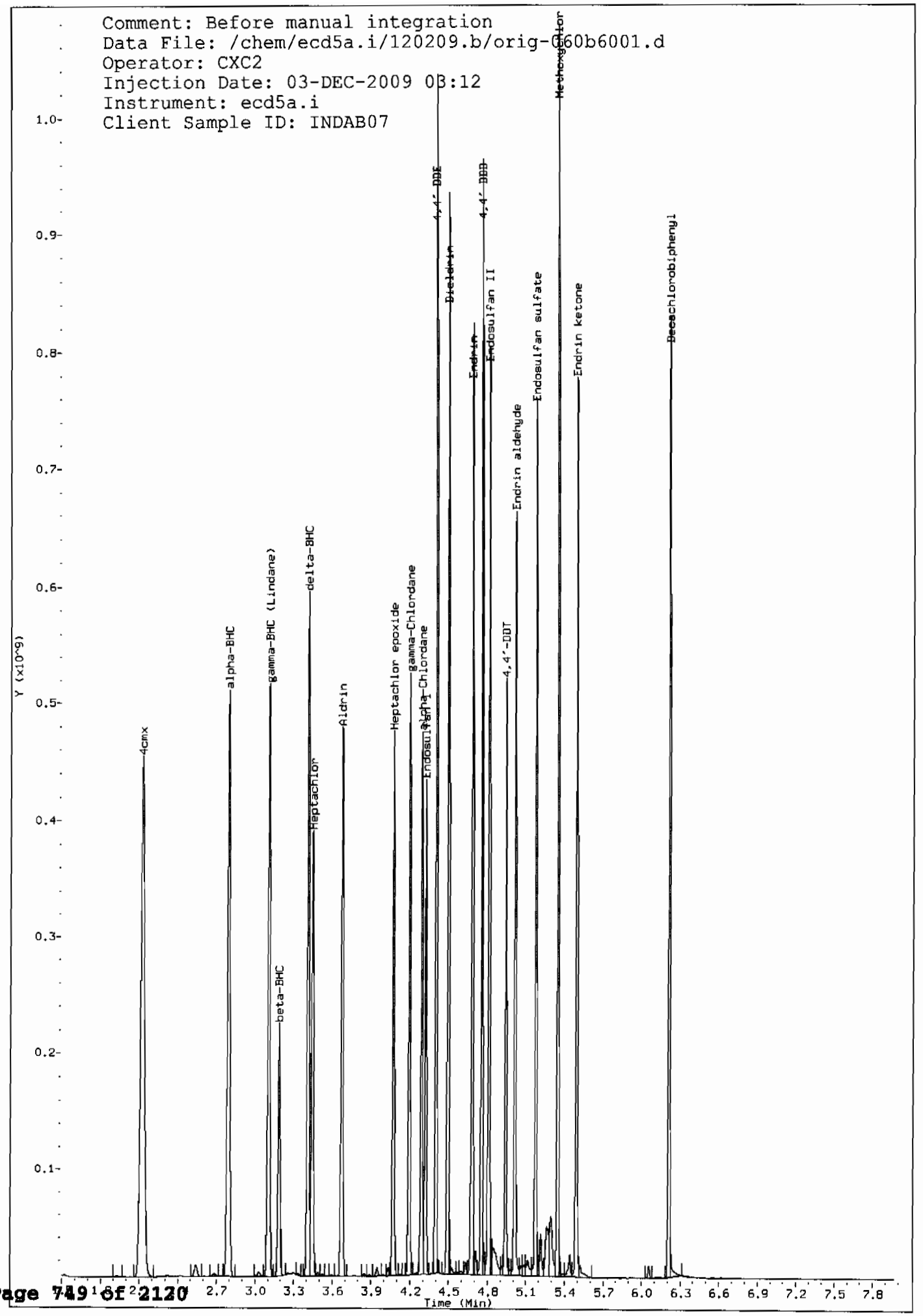
Comment: Before manual integration
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Operator: CXC2
Injection Date: 03-DEC-2009 03:12
Instrument: ecd5a.i
Client Sample ID: INDAB07
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/120209.b/071f7101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB08
Inj Date : 03-DEC-2009 05:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.163	3.163	0.000	60358891	100.000	113	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.447	3.447	0.000	49712741	100.000	106	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.526	3.525	0.001	22311330	100.000	105	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	19095776	100.000	46.7	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.666	3.666	0.000	54481648	100.000	111	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.045	4.044	0.001	47372033	100.000	108	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.465	4.464	0.001	42949748	100.000	108	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.546	4.546	0.000	43416424	100.000	111	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.632	4.632	0.000	38123650	100.000	100	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.721	4.720	0.001	39364498	100.000	110	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.681	4.681	0.000	81753513	200.000	207	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.871	4.872	-0.001	80882287	200.000	211	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.017	5.017	0.000	70113932	200.000	214	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.051	5.051	0.000	68602541	200.000	222	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.155	5.154	0.001	68346401	200.000	220	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.408	5.408	0.000	57184459	200.000	210	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.220	5.219	0.001	5882180	200.000	23.9	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.667	5.668	-0.001	58943147	200.000	199	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.501	5.503	-0.002	54160636	1000.00	458	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.838	5.839	-0.001	34572298	200.000	106	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	87116538	200.000	211	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.419	6.422	-0.003	35235923	200.000	208	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/071f7101.d
Date : 03-DEC-2009 05:24
Client ID: INDAB08
Sample Info: IWPE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

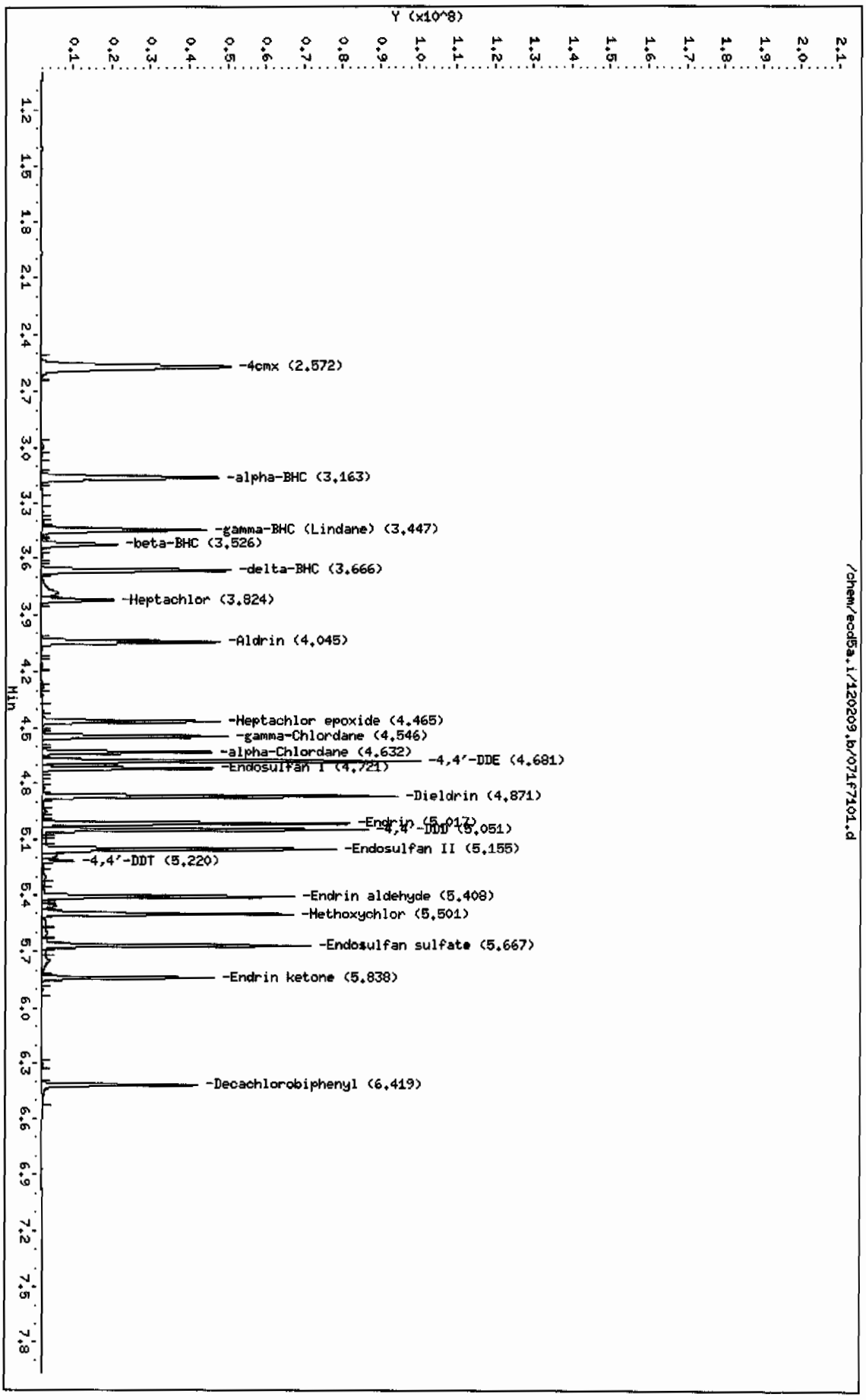

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CLP-2

Data file : /chem/ecd5a.i/120209.b/071b7101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB08
Inj Date : 03-DEC-2009 05:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 c1a01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.792	2.793	-0.001	635136023	100.000	101	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.106	3.106	0.000	519050611	100.000	94.7	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.186	3.186	0.000	223715794	100.000	91.7	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	139678599	100.000	31.3	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.411	3.410	0.001	528987072	100.000	97.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	453864292	100.000	91.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	395038471	100.000	94.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.195	4.194	0.001	419515487	100.000	93.9	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.289	4.288	0.001	361971549	100.000	84.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.321	4.320	0.001	346746119	100.000	90.1	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.401	4.401	0.000	768696497	200.000	188	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.493	4.493	0.000	717886947	200.000	177	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.679	4.679	0.000	602753065	200.000	170	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.753	4.754	-0.001	603600173	200.000	173	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.809	4.809	0.000	570209610	200.000	170	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.011	5.013	-0.002	465323427	200.000	168	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.940	4.940	0.000	8847792	200.000	3.45	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.176	5.176	0.000	488657713	200.000	160	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.346	5.346	0.000	136702912	1000.00	124	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.491	5.492	-0.001	247617139	200.000	71.5	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	888385091	200.000	197	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	607066317	200.000	189	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/071b7101.d
Date : 03-DEC-2009 05:24
Client ID: INDAB08
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

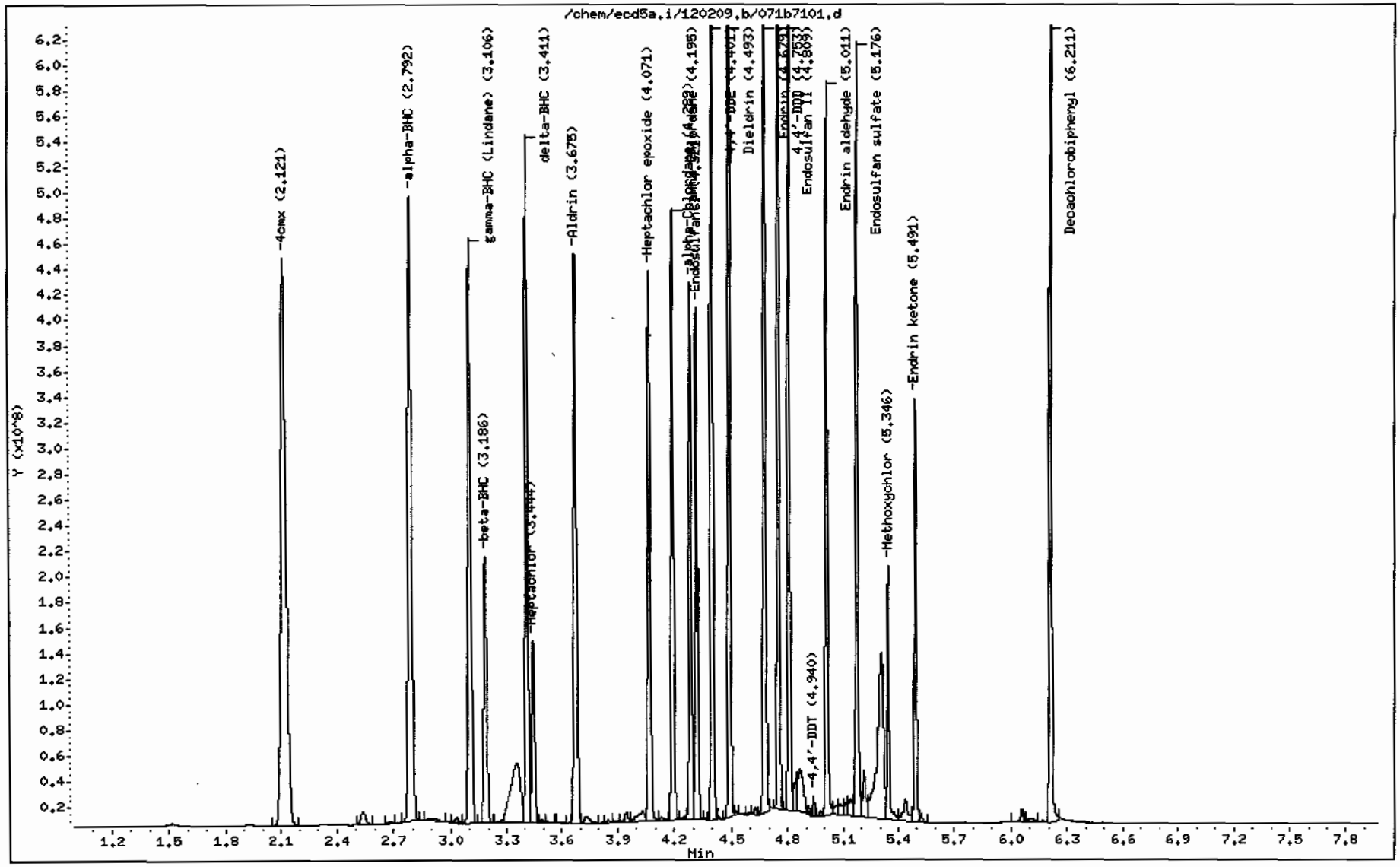

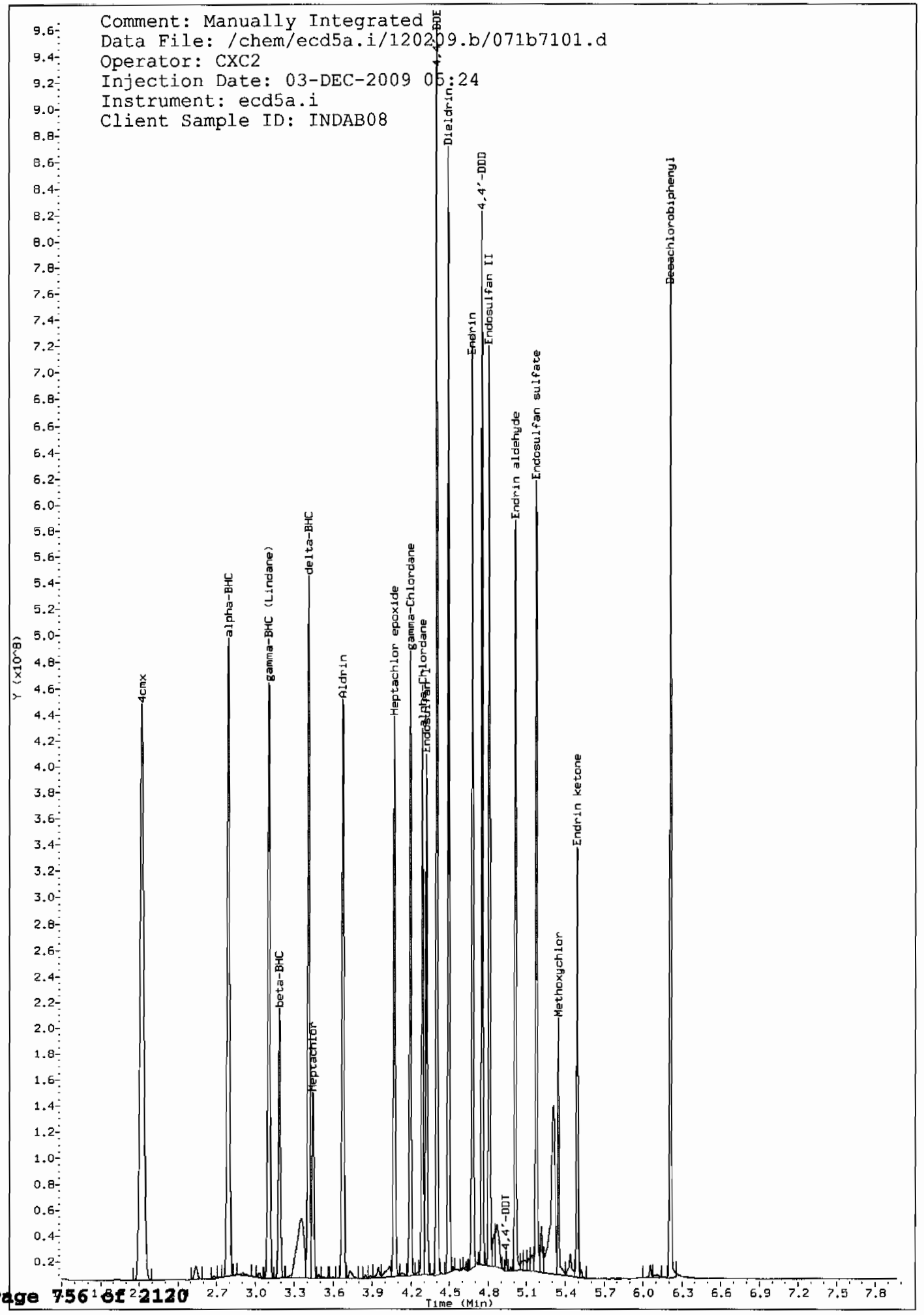
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Operator: CXC2
Injection Date: 03-DEC-2009 05:24
Instrument: ecd5a.i
Client Sample ID: INDAB08
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

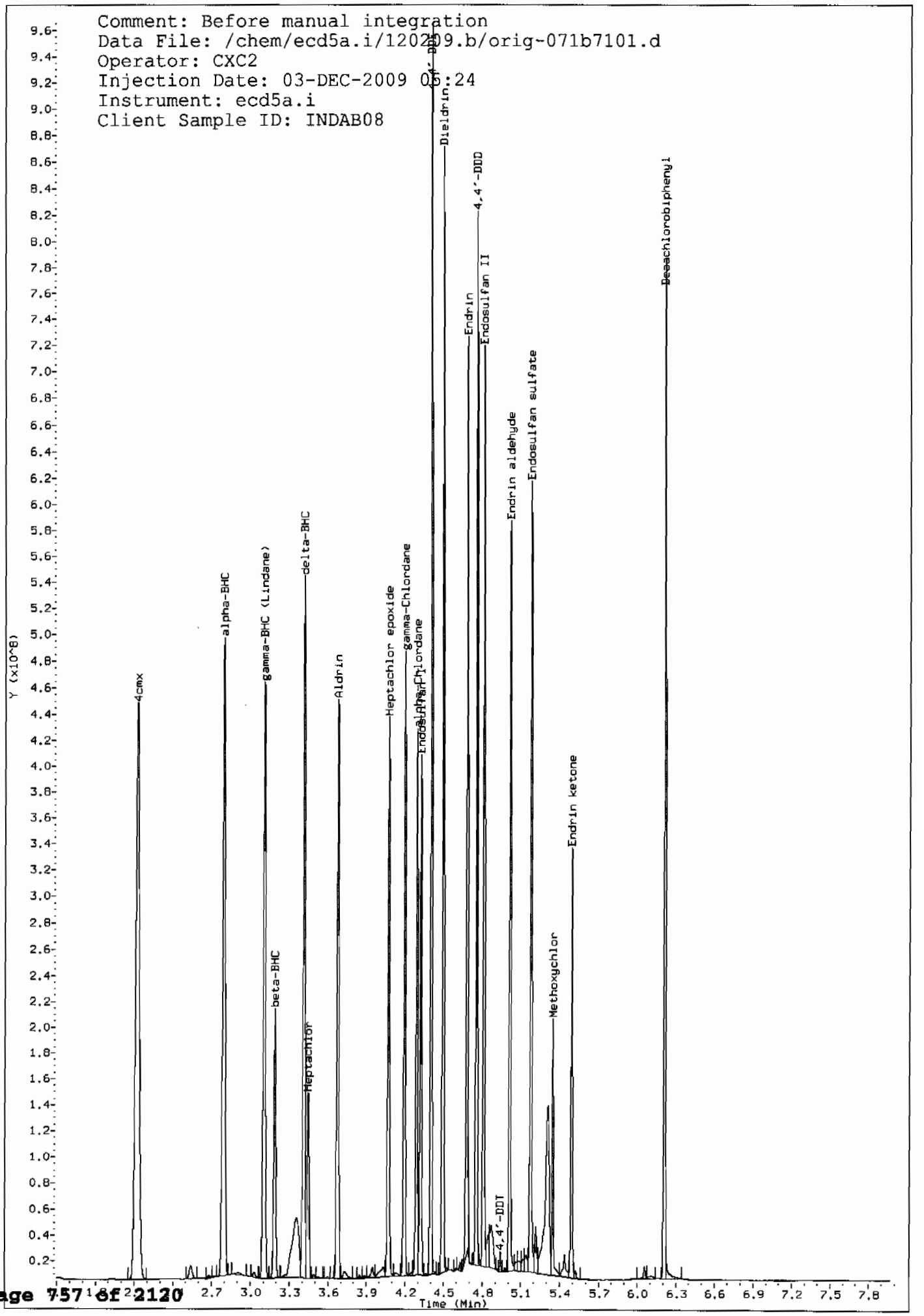
Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-071b7101.d
Operator: CXC2
Injection Date: 03-DEC-2009 05:24
Instrument: ecd5a.i
Client Sample ID: INDAB08
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
4,4'-DDE
Endrin
Endosulfan II
4,4'-DDD
Endrin aldehyde
Endosulfan sulfate
4,4'-DDT
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/008f0801.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB01
Inj Date : 07-DEC-2009 18:26
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.050	3.050	0.000	57687264	100.000	102	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.350	3.350	0.000	49366289	100.000	104	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.433	3.433	0.000	21830933	100.000	92.6	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.740	3.740	0.000	36955166	100.000	93.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.577	3.577	0.000	52258277	100.000	101	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.966	3.966	0.000	45804775	100.000	96.0	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	41764213	100.000	97.0	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.475	4.475	0.000	43645118	100.000	103	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.562	4.562	0.000	37859563	100.000	93.1	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.650	4.650	0.000	39048367	100.000	101	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.614	4.614	0.000	82821698	200.000	199	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.802	4.802	0.000	80472849	200.000	196	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	70293241	200.000	203	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.985	4.985	0.000	67712484	200.000	195	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.086	5.086	0.000	72823660	200.000	200	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.339	5.339	0.000	55735649	200.000	185	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.153	5.153	0.000	36790169	200.000	224	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.597	5.597	0.000	59498289	200.000	189	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.436	5.436	0.000	96492687	1000.00	986	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.767	5.767	0.000	54907645	200.000	194	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.409	2.409	0.000	86978291	200.000	196	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	50762096	200.000	193	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/008f0801.d
Date : 07-DEC-2009 18:26
Client ID: INDAB01
Sample Info: IWPE091207-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

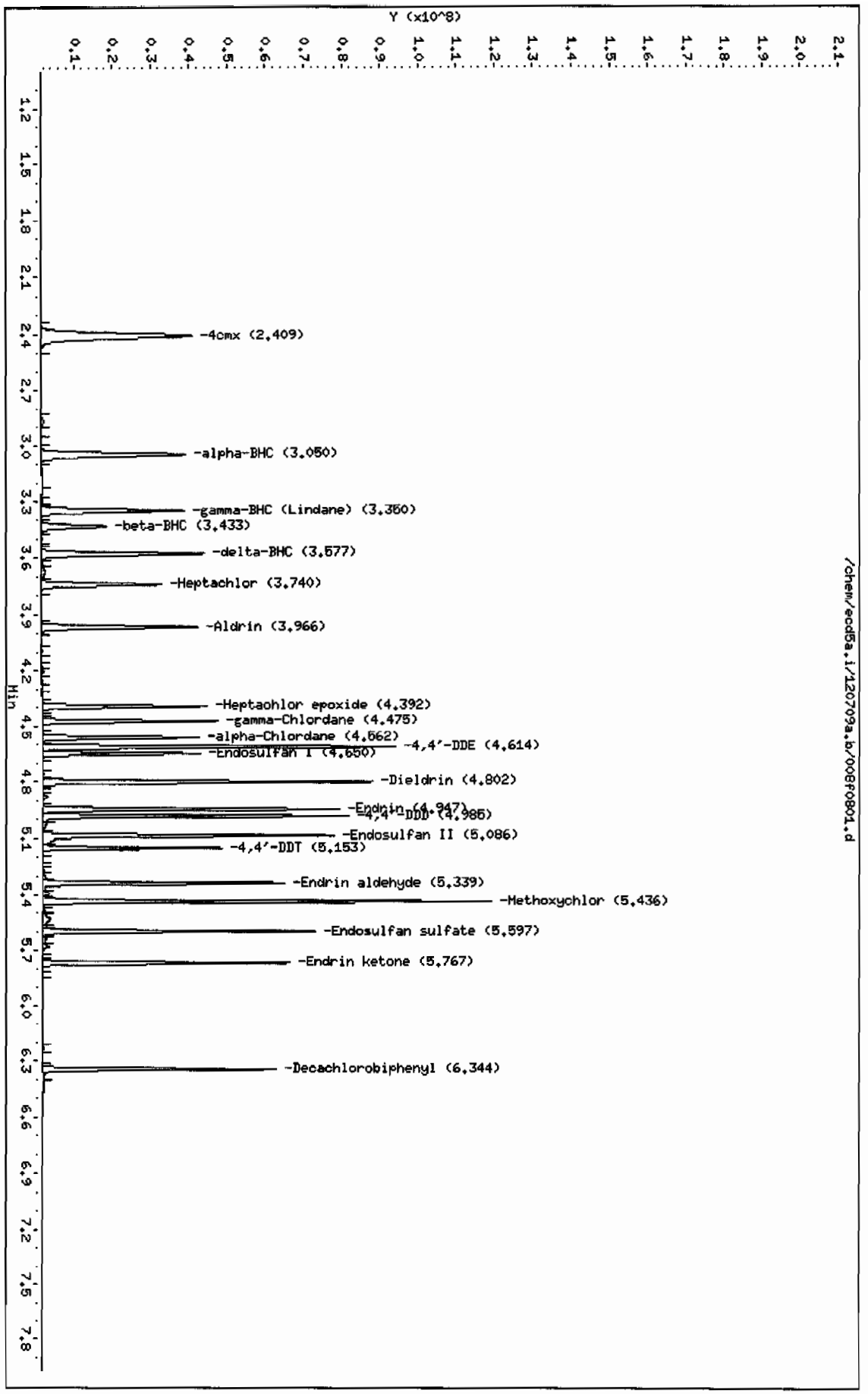

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/008b0801.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB01
Inj Date : 07-DEC-2009 18:26
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.781	2.781	0.000	655840329	100.000	94.1	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.107	0.000	585681220	100.000	96.2	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.191	3.191	0.000	236514108	100.000	100	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.453	3.453	0.000	423595293	100.000	85.0	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.420	3.420	0.000	569081844	100.000	93.8	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.687	3.687	0.000	484291214	100.000	88.0	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.088	4.088	0.000	432182498	100.000	90.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.211	4.211	0.000	471990690	100.000	96.5	80.00- 120.00	100.00(M)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.306	4.306	0.000	400577737	100.000	85.1	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.338	4.338	0.000	384375664	100.000	91.3	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
4.419	4.419	0.000	827368123	200.000	187	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.511	4.511	0.000	783258974	200.000	179	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.698	4.698	0.000	684188081	200.000	181	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.771	4.771	0.000	695115426	200.000	185	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.827	4.827	0.000	651076648	200.000	182	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.031	5.031	0.000	507506413	200.000	171	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.958	4.958	0.000	550261233	200.000	200	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.194	5.194	0.000	601194205	200.000	179	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.363	5.363	0.000	981670687	1000.00	887	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	634214708	200.000	201	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	912532366	200.000	183	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	510047305	200.000	184	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/008b0801.d
Date : 07-DEC-2009 18:26
Client ID: INDAB01
Sample Info: IWPE091207-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

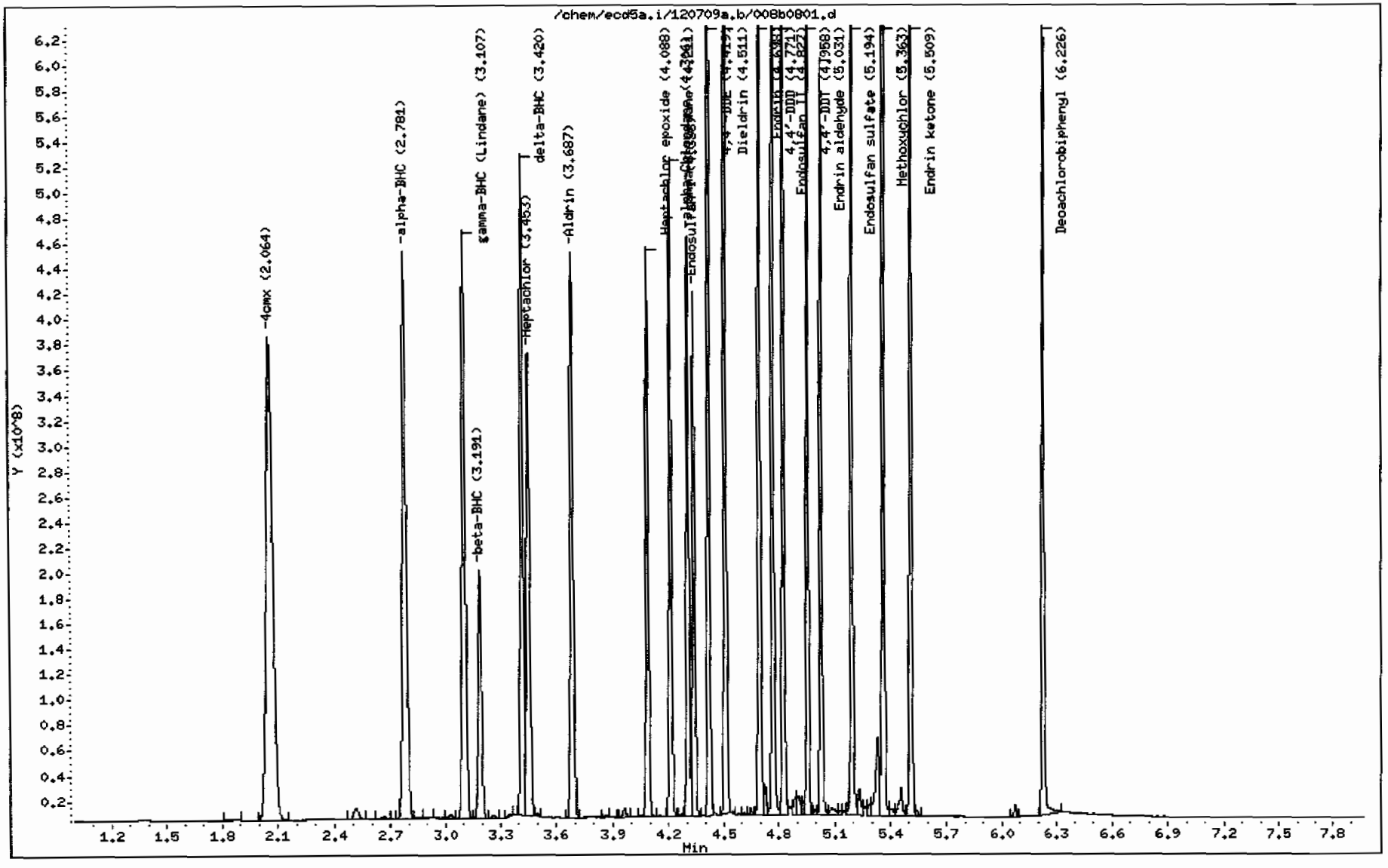

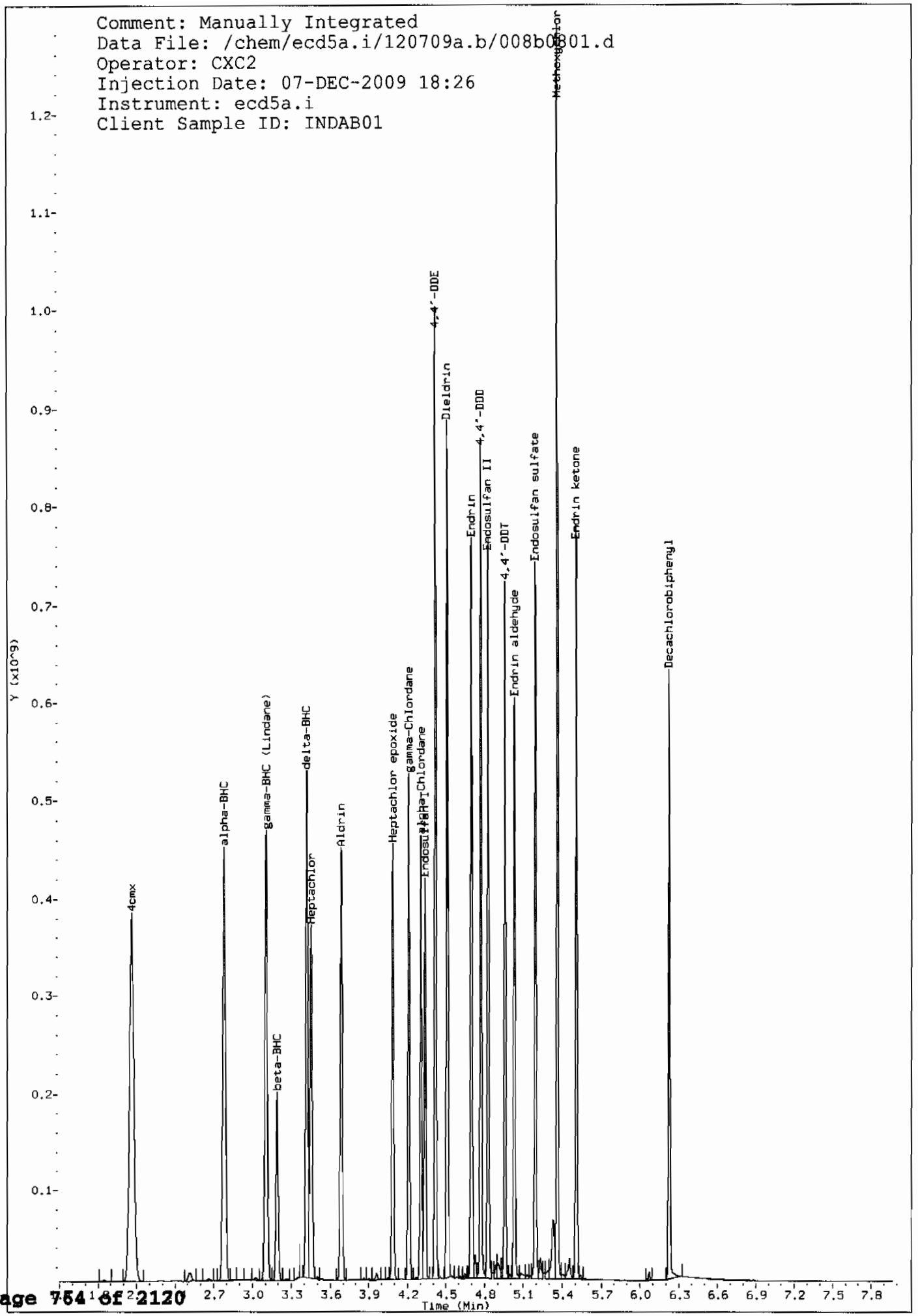
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/008b0801.d
Operator: CXC2
Injection Date: 07-DEC-2009 18:26
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

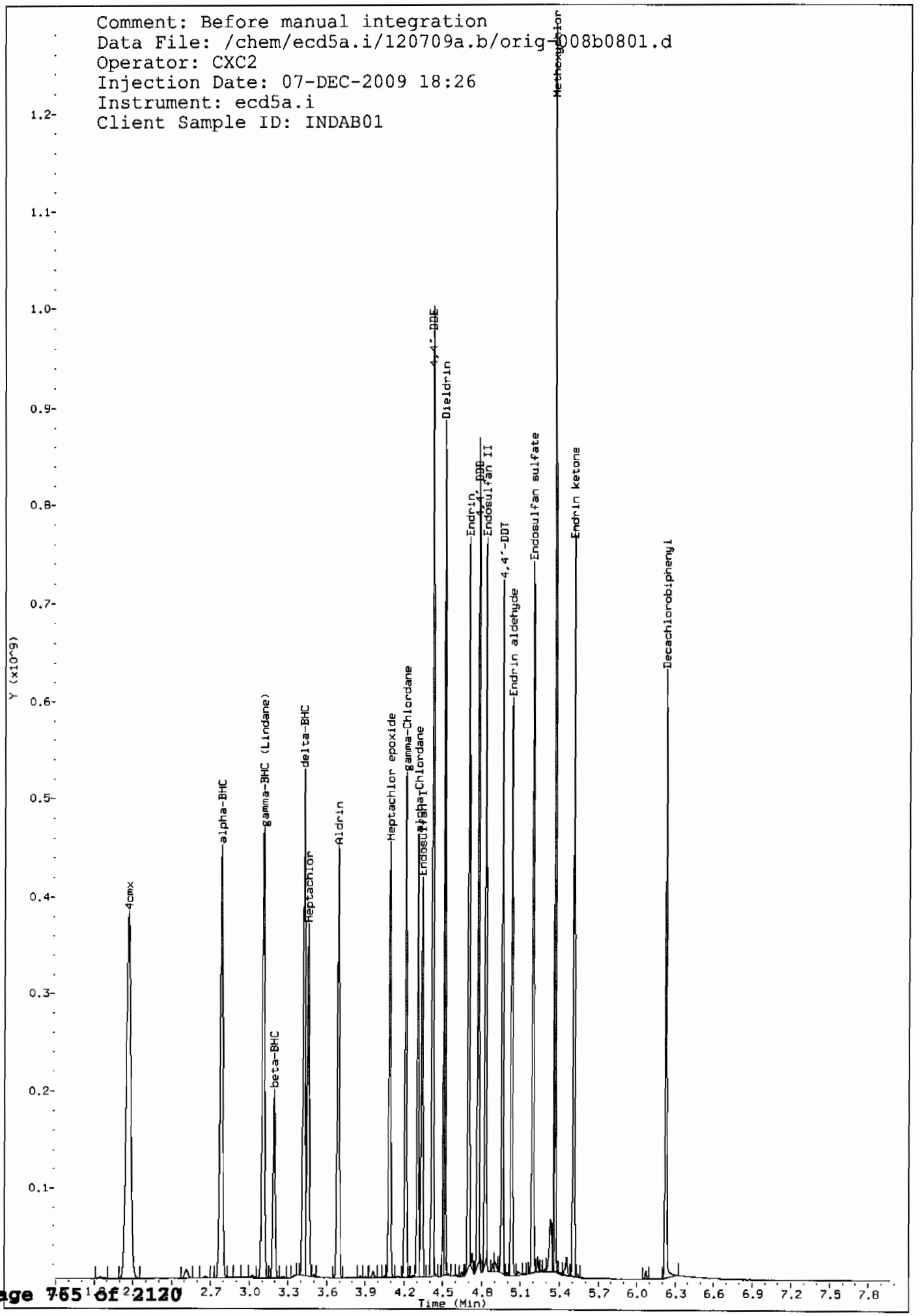
Comment: Before manual integration
Data File: /chem/ecd5a.i/120709a.b/orig-008b0801.d
Operator: CXC2
Injection Date: 07-DEC-2009 18:26
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/016f1601.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 07-DEC-2009 20:38
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.737	4.737	0.000	8630474	2000.00	2060	80.00- 120.00	100.00(M)
4.807	4.807	0.000	14532684	2000.00	1940	148.39- 188.39	168.39
4.862	4.862	0.000	14012146	2000.00	2020	142.36- 182.36	162.36
4.963	4.963	0.000	26950734	2000.00	1800	292.27- 332.27	312.27
5.079	5.079	0.000	27842820	2000.00	1900	302.61- 342.61	322.61
Average of Peak Amounts =					1.94e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	88020333	200.000	199	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	50389517	200.000	192	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/016f1601.d
Date : 07-DEC-2009 20:38
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

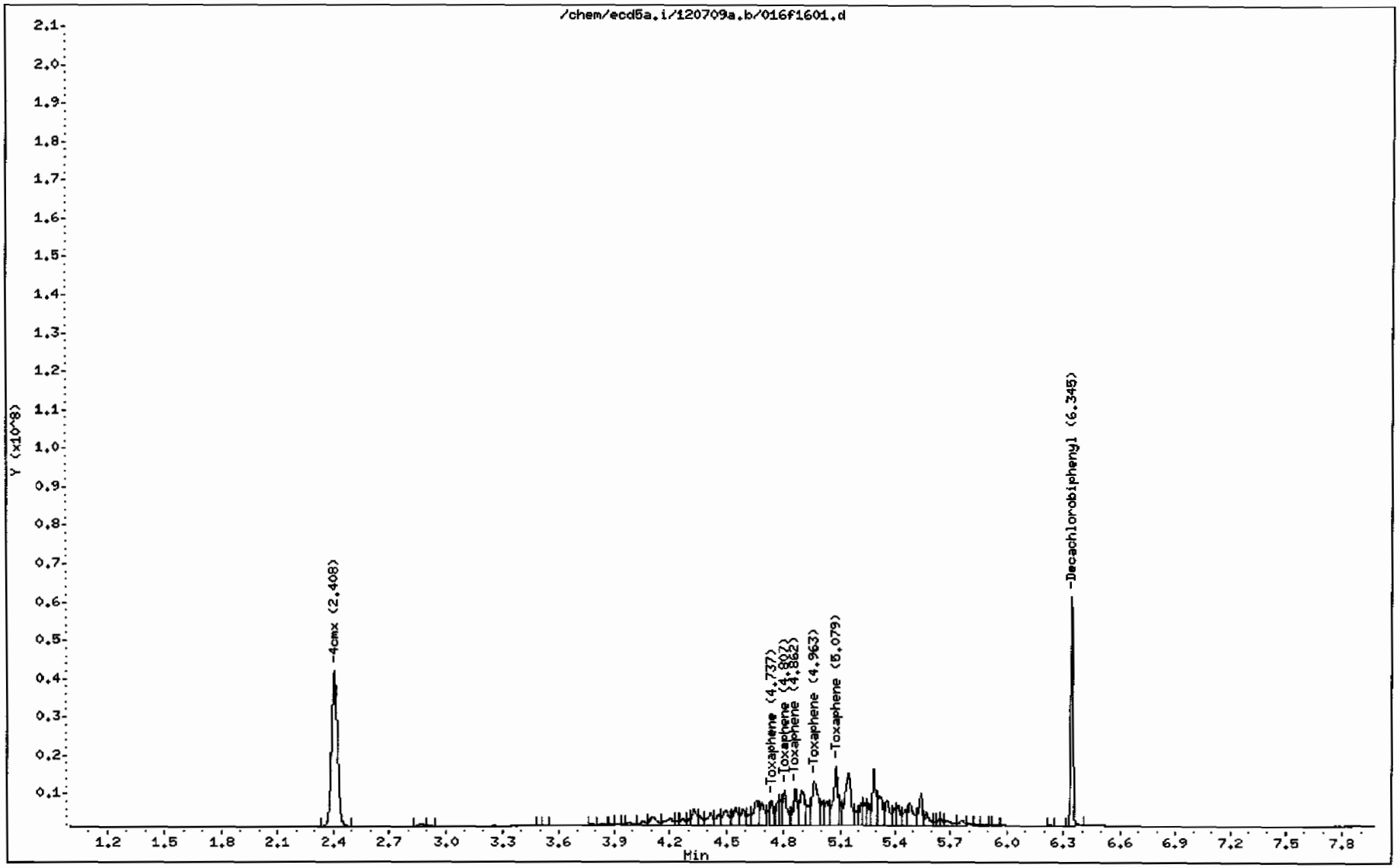

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/016f1601.d
Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

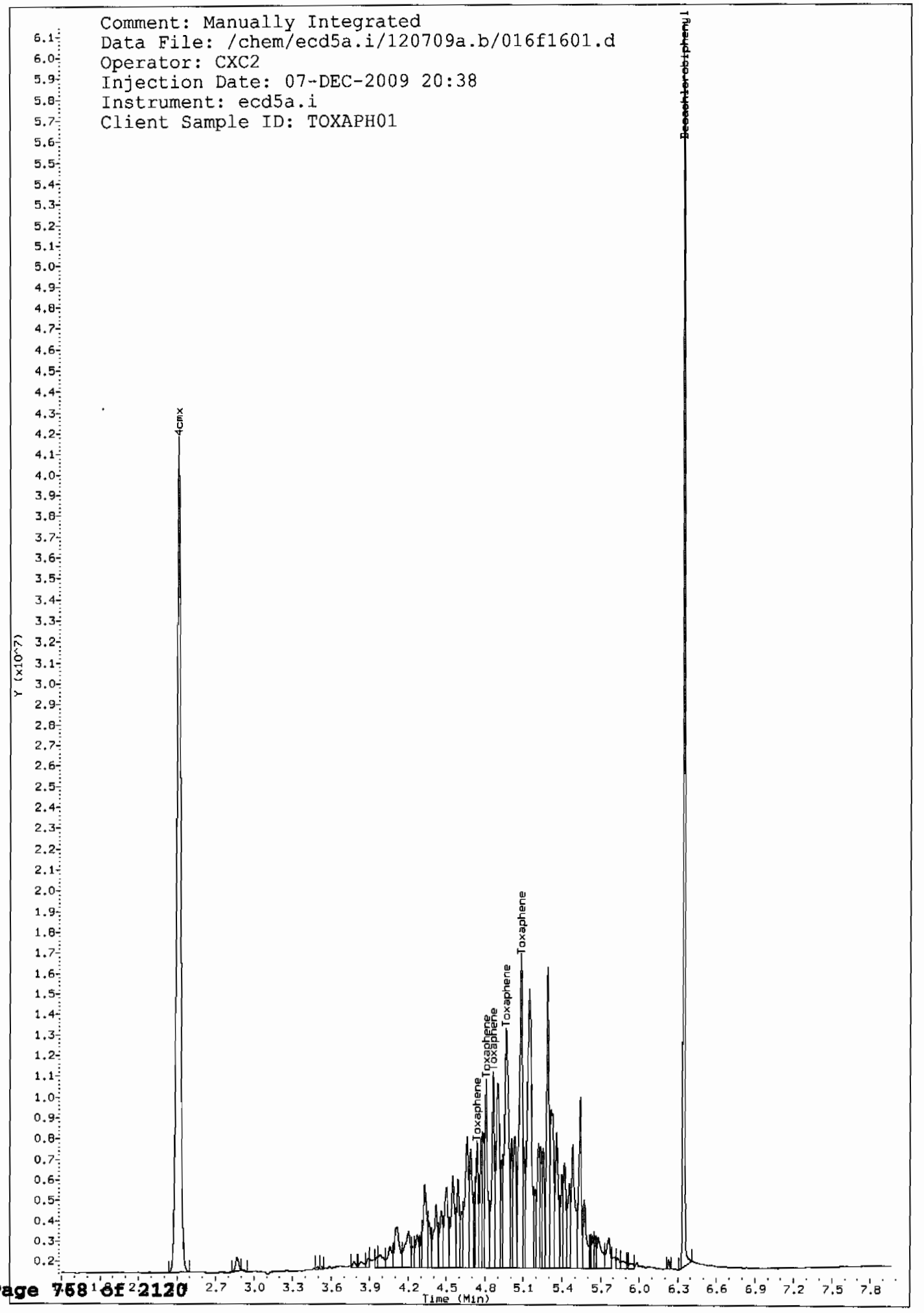

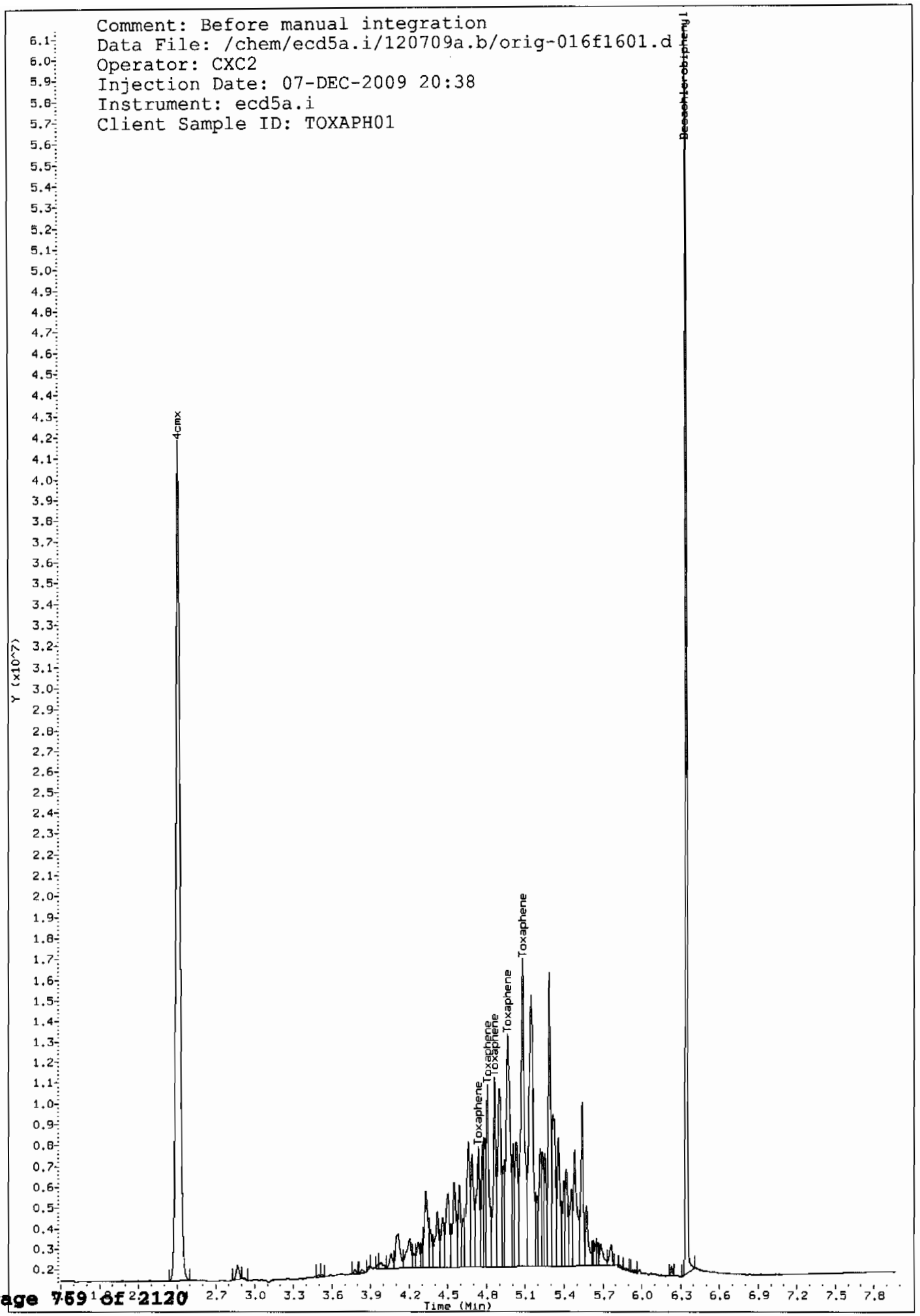
Comment: Before manual integration
Data File: /chem/ecd5a.i/120709a.b/orig-016f1601.d
Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/016b1601.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 07-DEC-2009 20:38
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 c1a01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.499	4.499	0.000	165851487	2000.00	2080	80.00- 120.00	100.00(M)
4.570	4.570	0.000	96758970	2000.00	2050	38.34- 78.34	58.34
4.682	4.682	0.000	167218850	2000.00	2030	80.82- 120.82	100.82
4.819	4.819	0.000	183991758	2000.00	1740	90.94- 130.94	110.94
4.879	4.879	0.000	309094032	2000.00	1630	166.37- 206.37	186.37
Average of Peak Amounts =					1.91e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	917954345	200.000	184	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	497270187	200.000	179	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/016b1601.d
Date : 07-DEC-2009 20:38
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

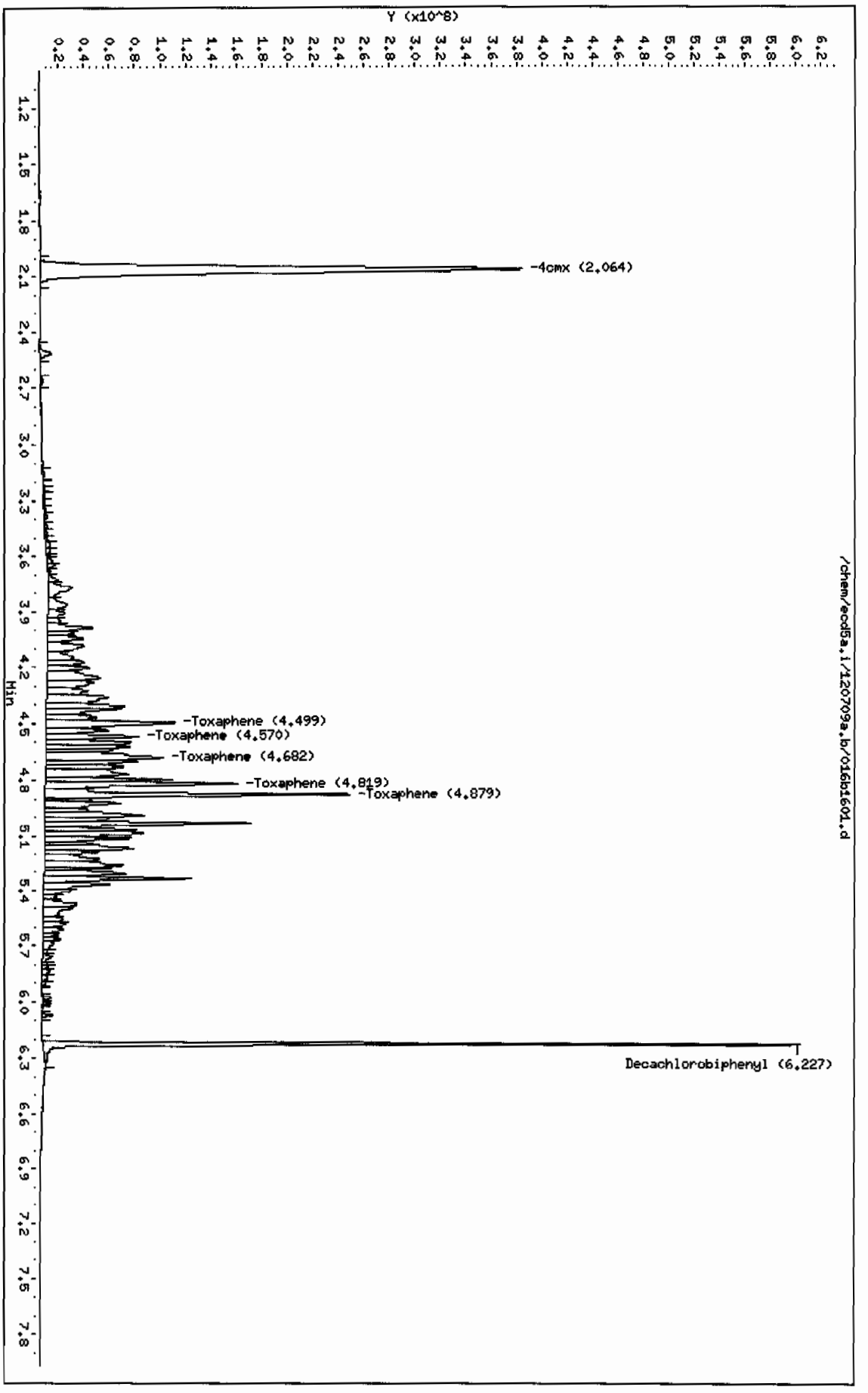

Page 1

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/016b1601.d
Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

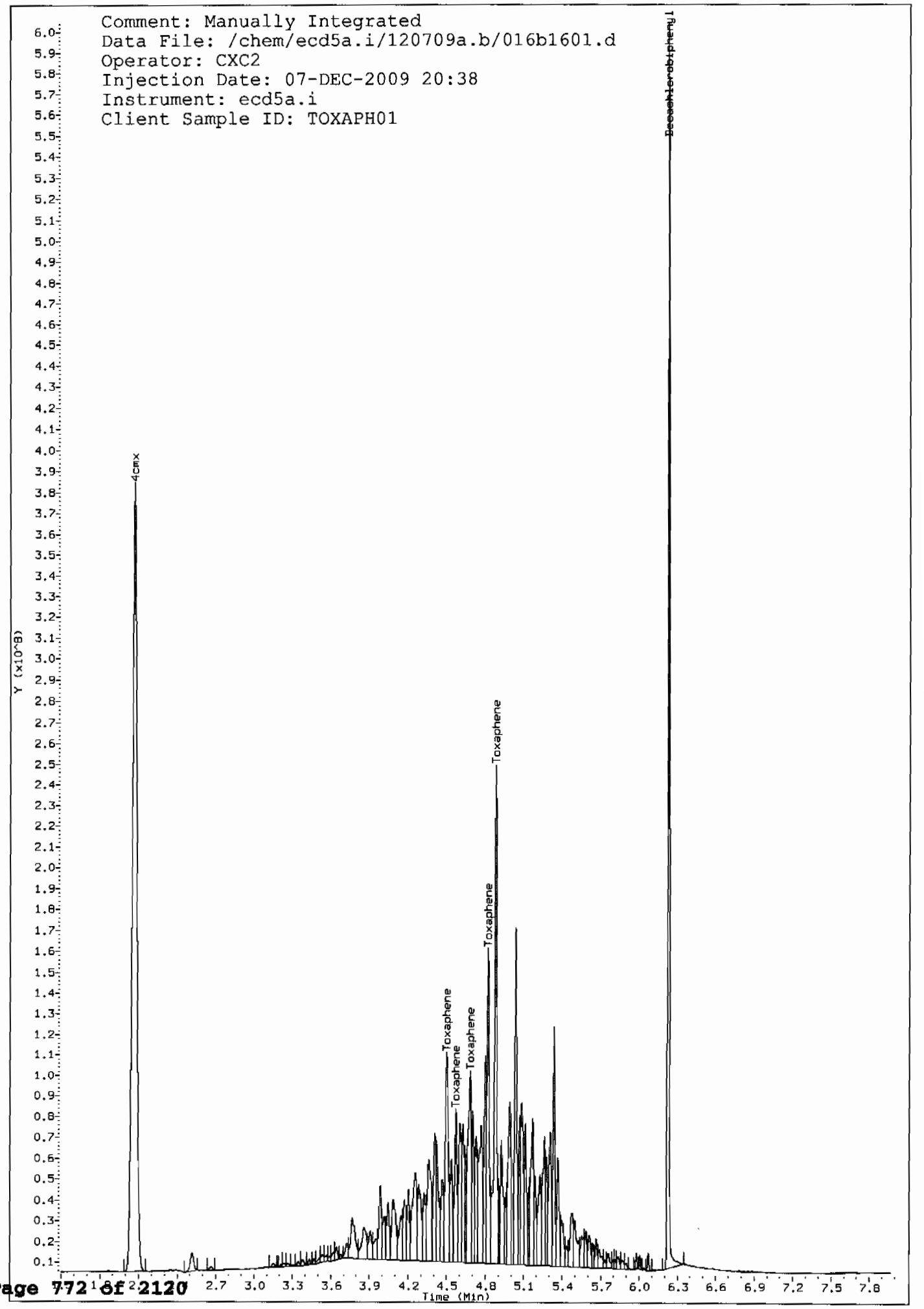

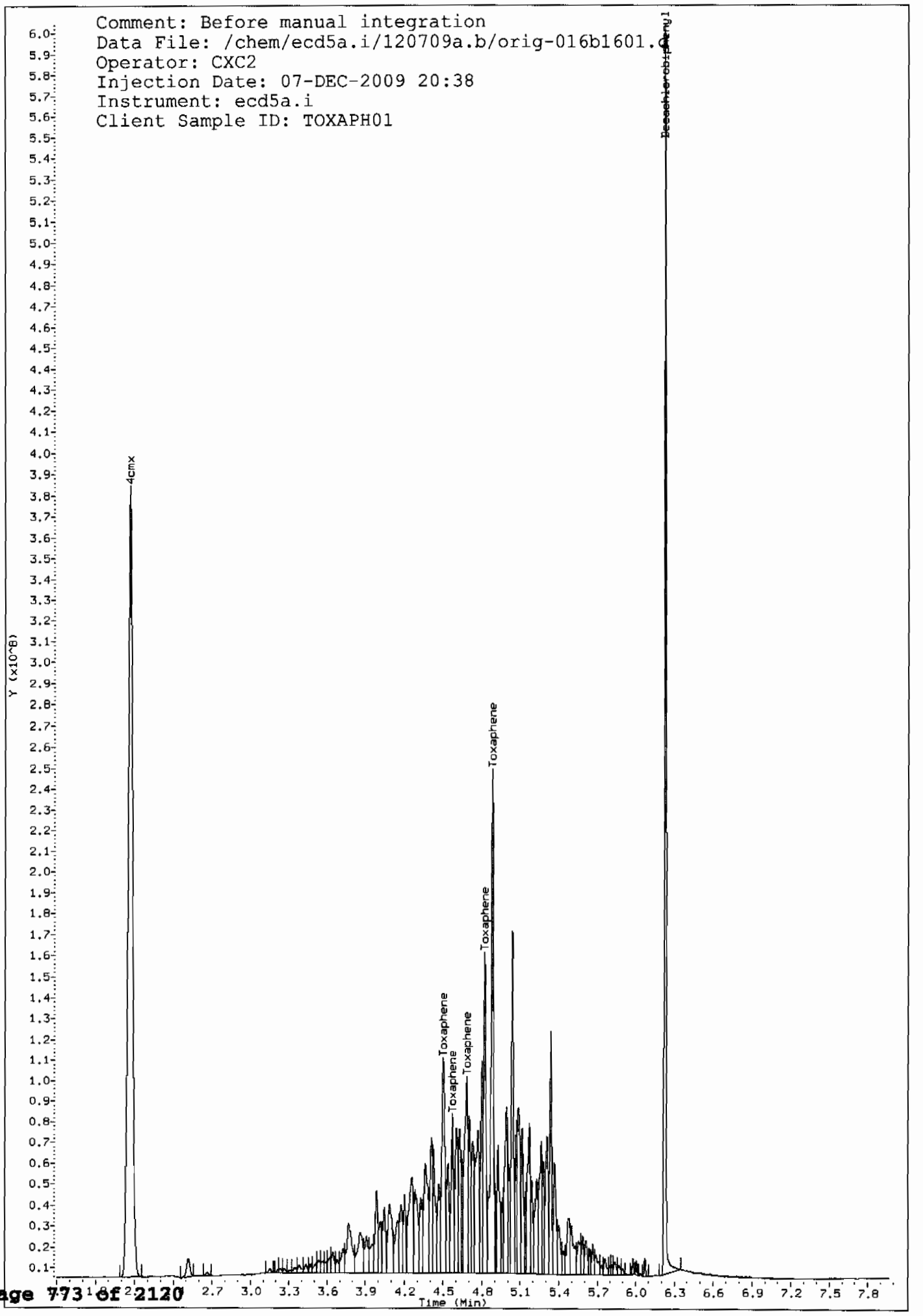
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Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/022f2201.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 07-DEC-2009 21:49
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.677	3.677	0.000	17964062	1000.00	912	80.00- 120.00	100.00
4.071	4.071	0.000	18560193	1000.00	991	83.32- 123.32	103.32
4.350	4.350	0.000	11247133	1000.00	888	42.61- 82.61	62.61
4.475	4.475	0.000	51913882	1000.00	904	268.99- 308.99	288.99
5.044	5.044	0.000	9019172	1000.00	970	30.21- 70.21	50.21
Average of Peak Amounts =					933		
$ 1 4cmx					CAS #: 877-09-8		
2.404	2.409	-0.005	88093892	200.000	199	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	51089810	200.000	194	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/022f2201.d

Date : 07-DEC-2009 21:49

Client ID: CHLOR01

Sample Info: IWPE091021-00CL

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

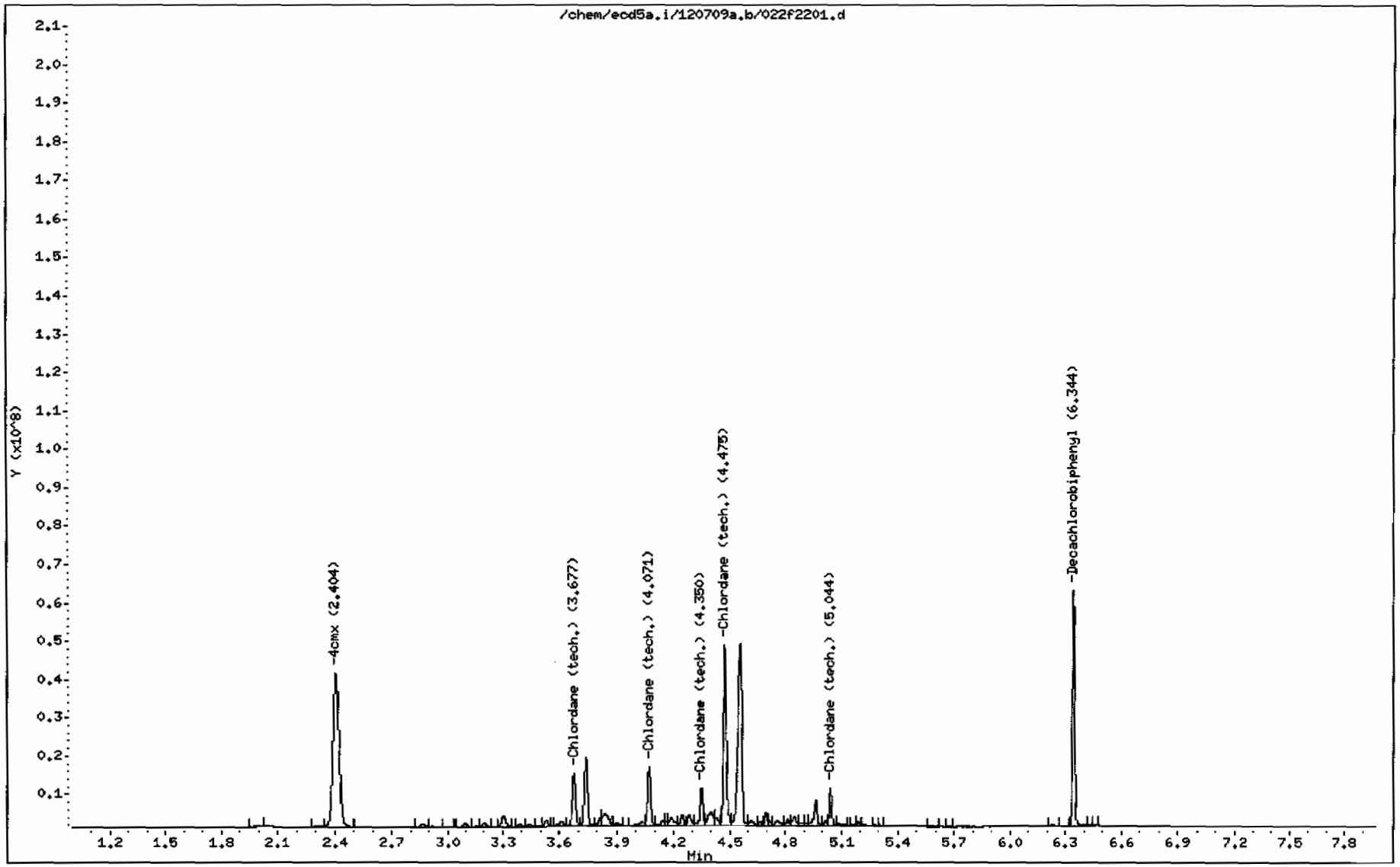

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/022b2201.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 07-DEC-2009 21:49
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.340	3.340	0.000	202773524	1000.00	1040	80.00- 120.00	100.00(M)
4.067	4.067	0.000	106455121	1000.00	1040	32.50- 72.50	52.50
4.211	4.211	0.000	492888151	1000.00	975	223.07- 263.07	243.07
4.306	4.306	0.000	388313074	1000.00	984	171.50- 211.50	191.50
4.855	4.855	0.000	134584862	1000.00	1090	46.37- 86.37	66.37
Average of Peak Amounts =					1.02e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.062	2.064	-0.002	940173324	200.000	189	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	516237397	200.000	186	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/022b2201.d
Date : 07-DEC-2009 21:49
Client ID: CHLOR01
Sample Info: IWPE091021-00CL

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

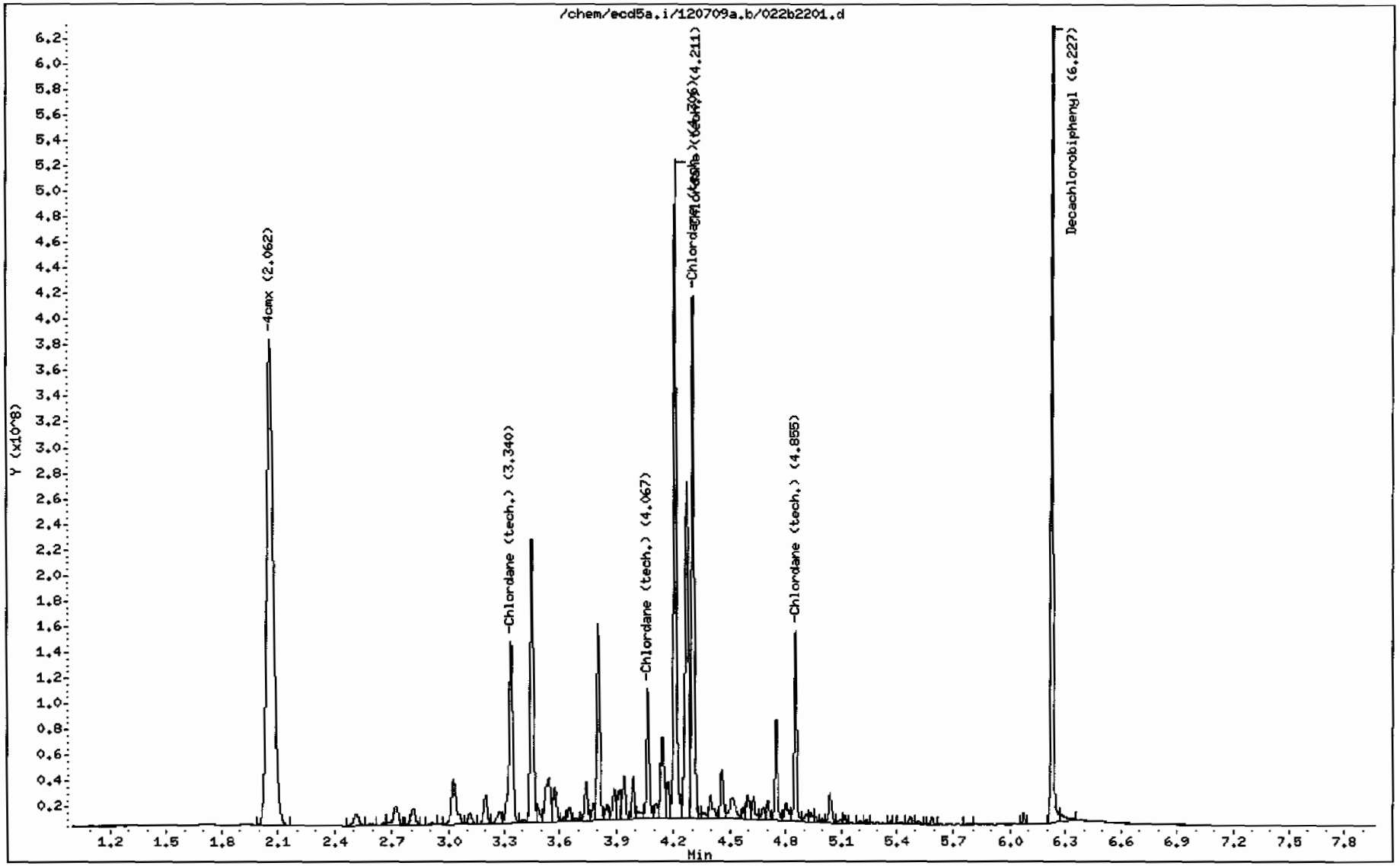

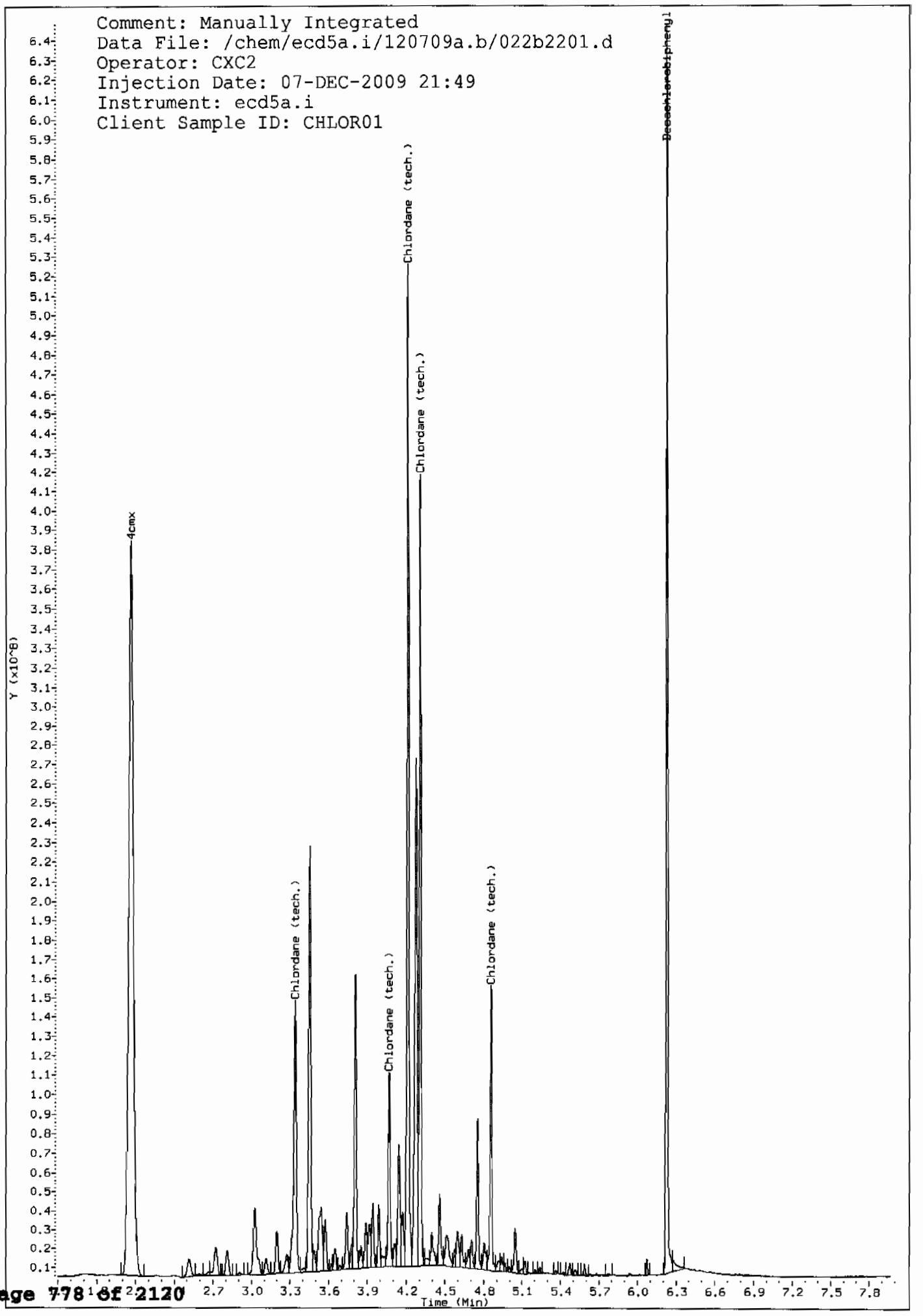
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/022b2201.d
Operator: CXC2
Injection Date: 07-DEC-2009 21:49
Instrument: ecd5a.i
Client Sample ID: CHLOR01
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

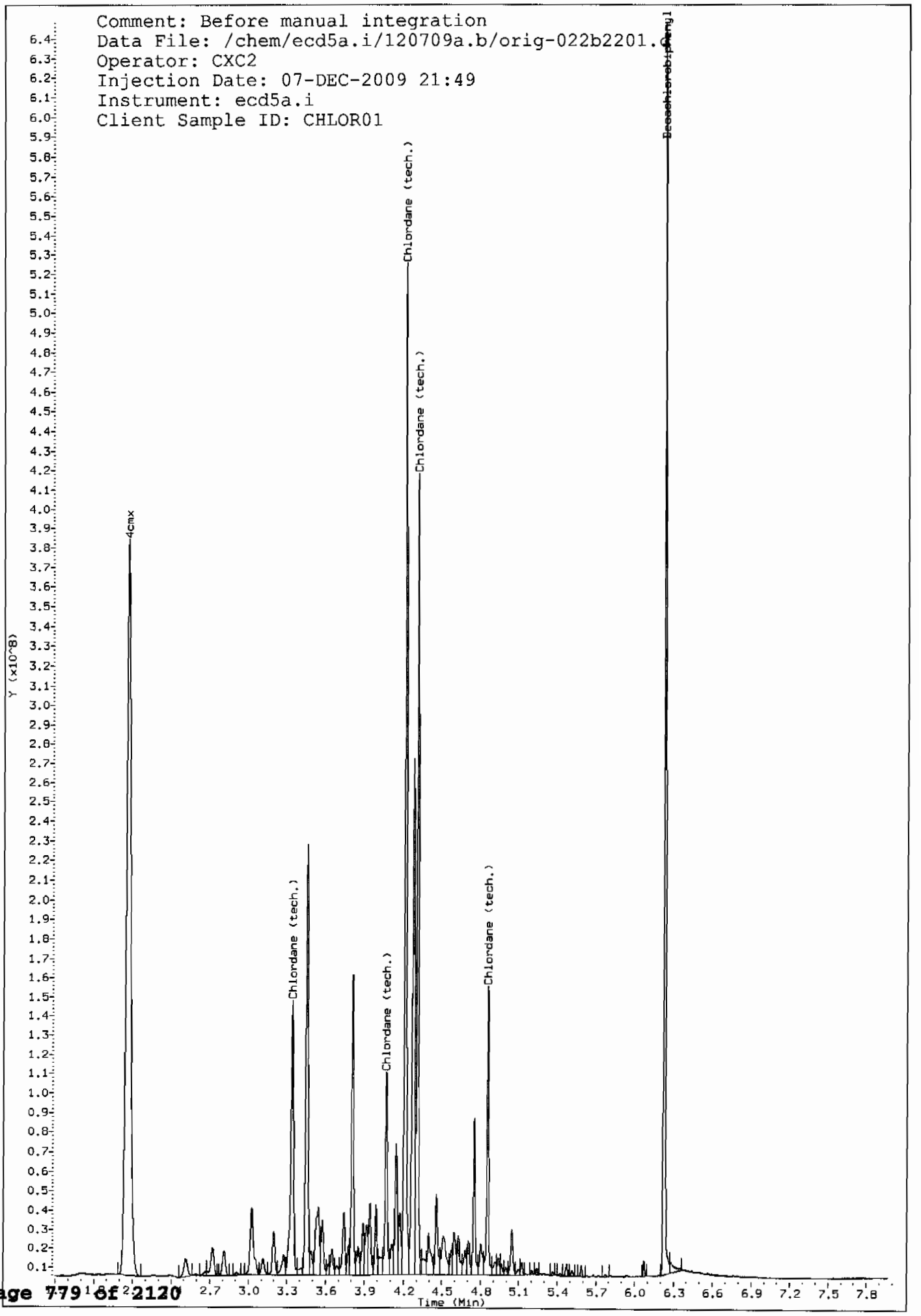
Comment: Before manual integration
Data File: /chem/ecd5a.i/120709a.b/orig-022b2201.d
Operator: CXC2
Injection Date: 07-DEC-2009 21:49
Instrument: ecd5a.i
Client Sample ID: CHLOR01
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/045f4501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 08-DEC-2009 02:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.049	3.050	-0.001	60927756	100.000	108	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	52812971	100.000	112	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.433	3.433	0.000	22900769	100.000	97.1	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.739	3.740	-0.001	39945356	100.000	101	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.577	3.577	0.000	55334140	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.964	3.966	-0.002	48769052	100.000	102	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	44096142	100.000	102	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.474	4.475	-0.001	45747817	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.561	4.562	-0.001	39771433	100.000	97.8	80.00- 120.00	100.00

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
	16 Endosulfan I					CAS #: 959-98-8		
	4.649	4.650	-0.001	41188852	100.000	106	80.00- 120.00	100.00
	19 4,4'-DDE					CAS #: 72-55-9		
	4.614	4.614	0.000	86560322	200.000	208	80.00- 120.00	100.00
	20 Dieldrin					CAS #: 60-57-1		
	4.801	4.802	-0.001	84303888	200.000	206	80.00- 120.00	100.00
	22 Endrin					CAS #: 72-20-8		
	4.947	4.947	0.000	72514807	200.000	210	80.00- 120.00	100.00
	25 4,4'-DDD					CAS #: 72-54-8		
	4.984	4.985	-0.001	71515003	200.000	206	80.00- 120.00	100.00
	24 Endosulfan II					CAS #: 33213-65-9		
	5.085	5.086	-0.001	75707071	200.000	208	80.00- 120.00	100.00
	27 Endrin aldehyde					CAS #: 7421-93-4		
	5.338	5.339	-0.001	58567071	200.000	195	80.00- 120.00	100.00
	26 4,4'-DDT					CAS #: 50-29-3		
	5.152	5.153	-0.001	41853630	200.000	254	80.00- 120.00	100.00
	29 Endosulfan sulfate					CAS #: 1031-07-8		
	5.597	5.597	0.000	63509409	200.000	202	80.00- 120.00	100.00
	28 Methoxychlor					CAS #: 72-43-5		
	5.436	5.436	0.000	102973136	1000.00	1050	80.00- 120.00	100.00
	31 Endrin ketone					CAS #: 53494-70-5		
	5.767	5.767	0.000	60962223	200.000	215	80.00- 120.00	100.00
$	1 4cmx					CAS #: 877-09-8		
	2.406	2.409	-0.003	91093734	200.000	206	80.00- 120.00	100.00
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	6.344	6.344	0.000	50329831	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/045f4501.d
Date : 08-DEC-2009 02:24
Client ID: INDAB03
Sample Info: INPE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

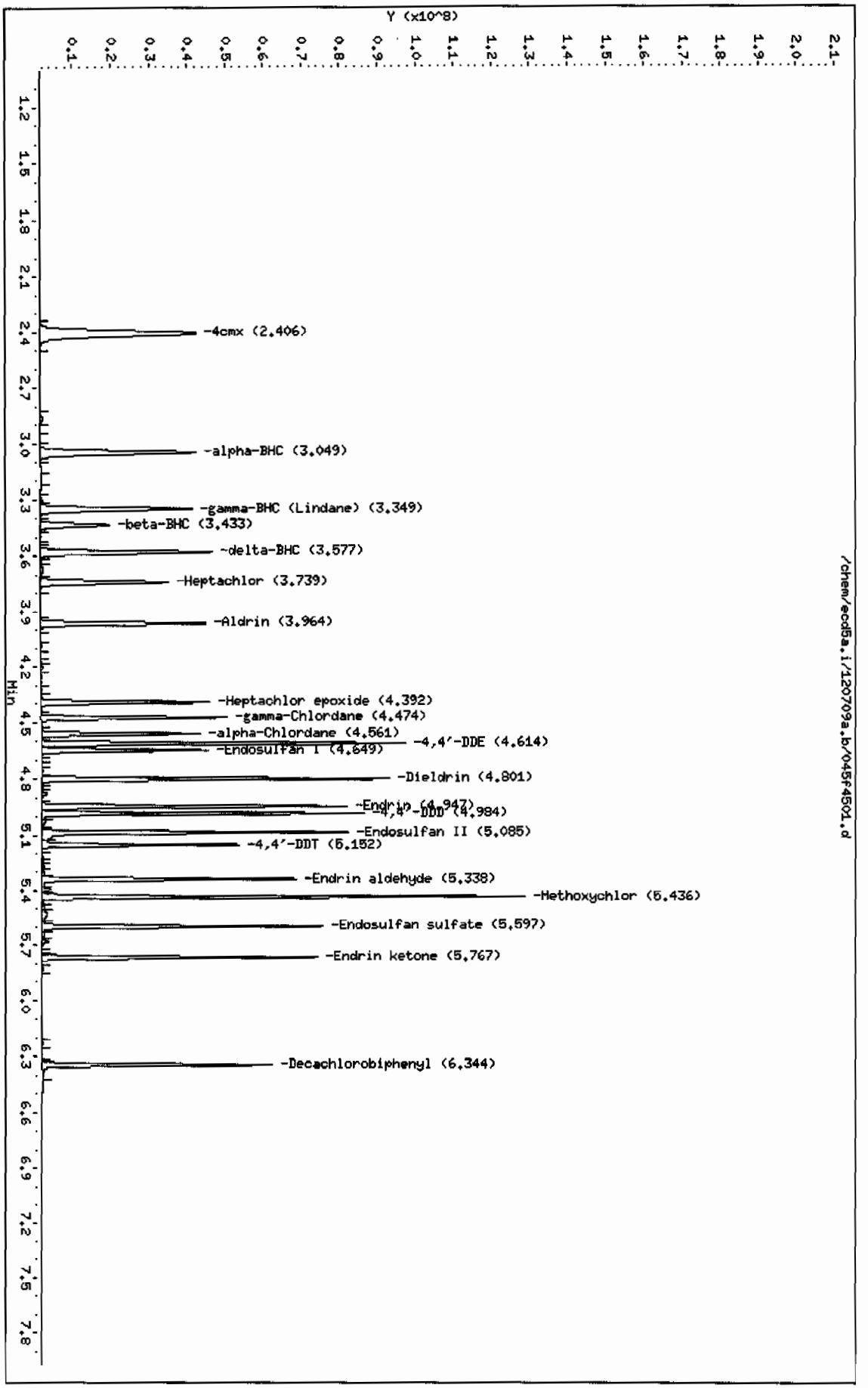

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GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/045b4501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 08-DEC-2009 02:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.779	2.781	-0.002	680528774	100.000	97.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.105	3.107	-0.002	601853972	100.000	98.9	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.190	3.191	-0.001	244042089	100.000	104	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.452	3.453	-0.001	431479381	100.000	86.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.419	3.420	-0.001	596051948	100.000	98.3	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.687	3.687	0.000	507058848	100.000	92.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.086	4.088	-0.002	439522443	100.000	92.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.210	4.211	-0.001	484192092	100.000	99.0	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.304	4.306	-0.002	404627153	100.000	86.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.337	4.338	-0.001	388090065	100.000	92.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.419	4.419	0.000	854494609	200.000	193	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.510	4.511	-0.001	804635751	200.000	184	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	673636715	200.000	178	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.770	4.771	-0.001	699214174	200.000	186	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.826	4.827	-0.001	650911245	200.000	182	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.029	5.031	-0.002	517164006	200.000	174	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.957	4.958	-0.001	487959272	200.000	177	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.194	5.194	0.000	613539909	200.000	183	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	896748208	1000.00	810	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	631765208	200.000	200	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.062	2.064	-0.002	945752140	200.000	190	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	561825397	200.000	202	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/045b4501.d
Date : 08-DEC-2009 02:24
Client ID: INDAB03
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

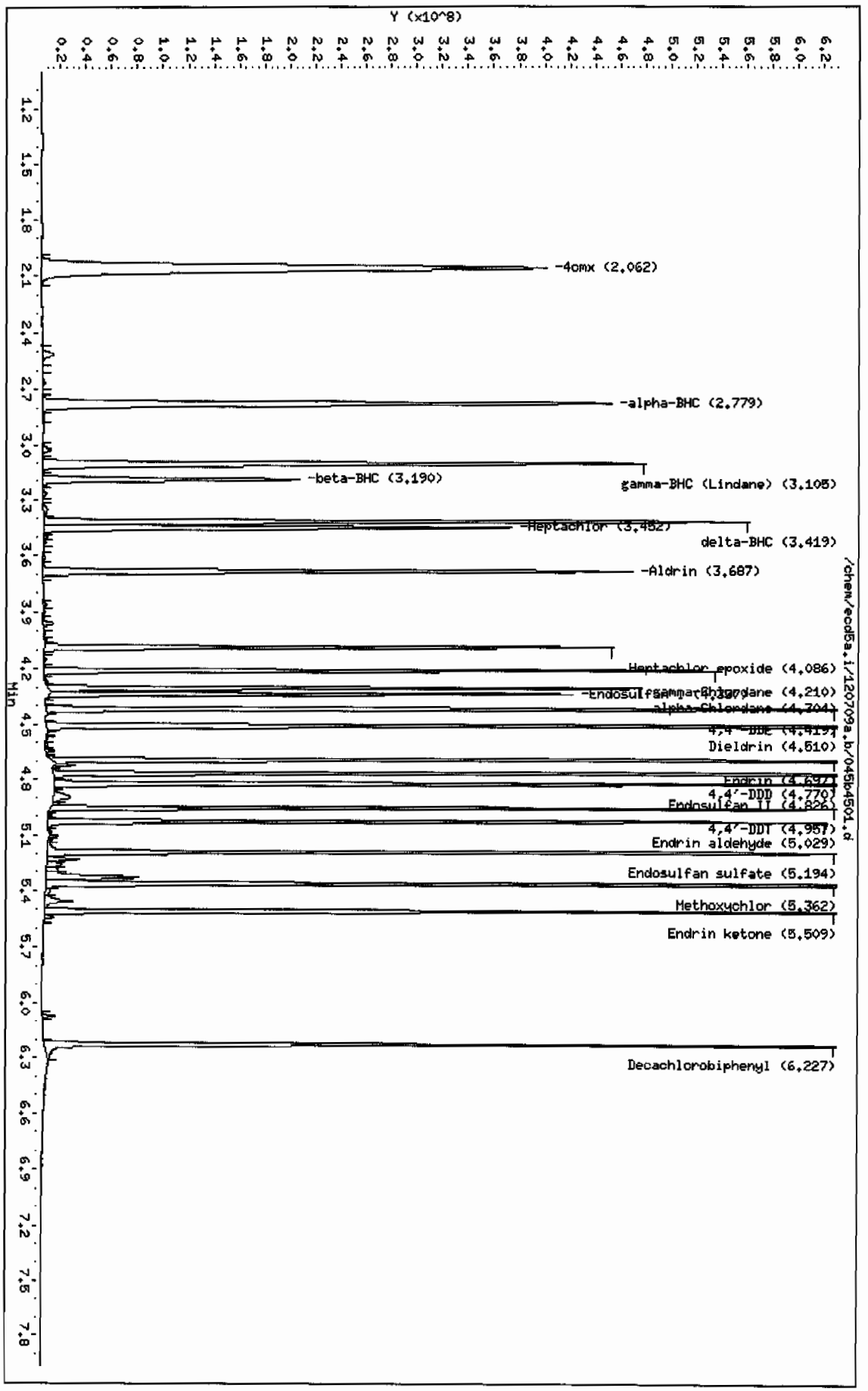

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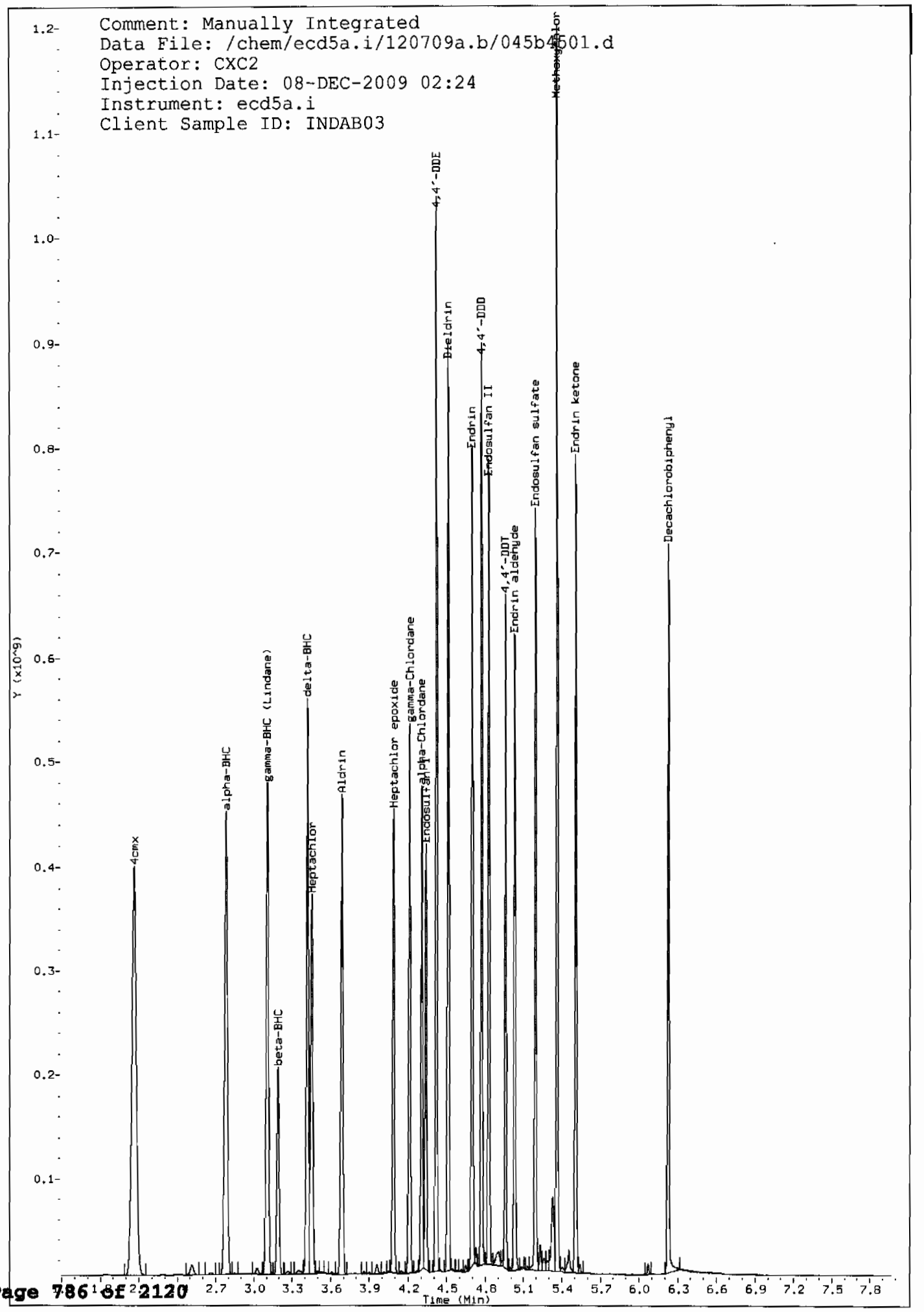
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Operator: CXC2
Injection Date: 08-DEC-2009 02:24
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

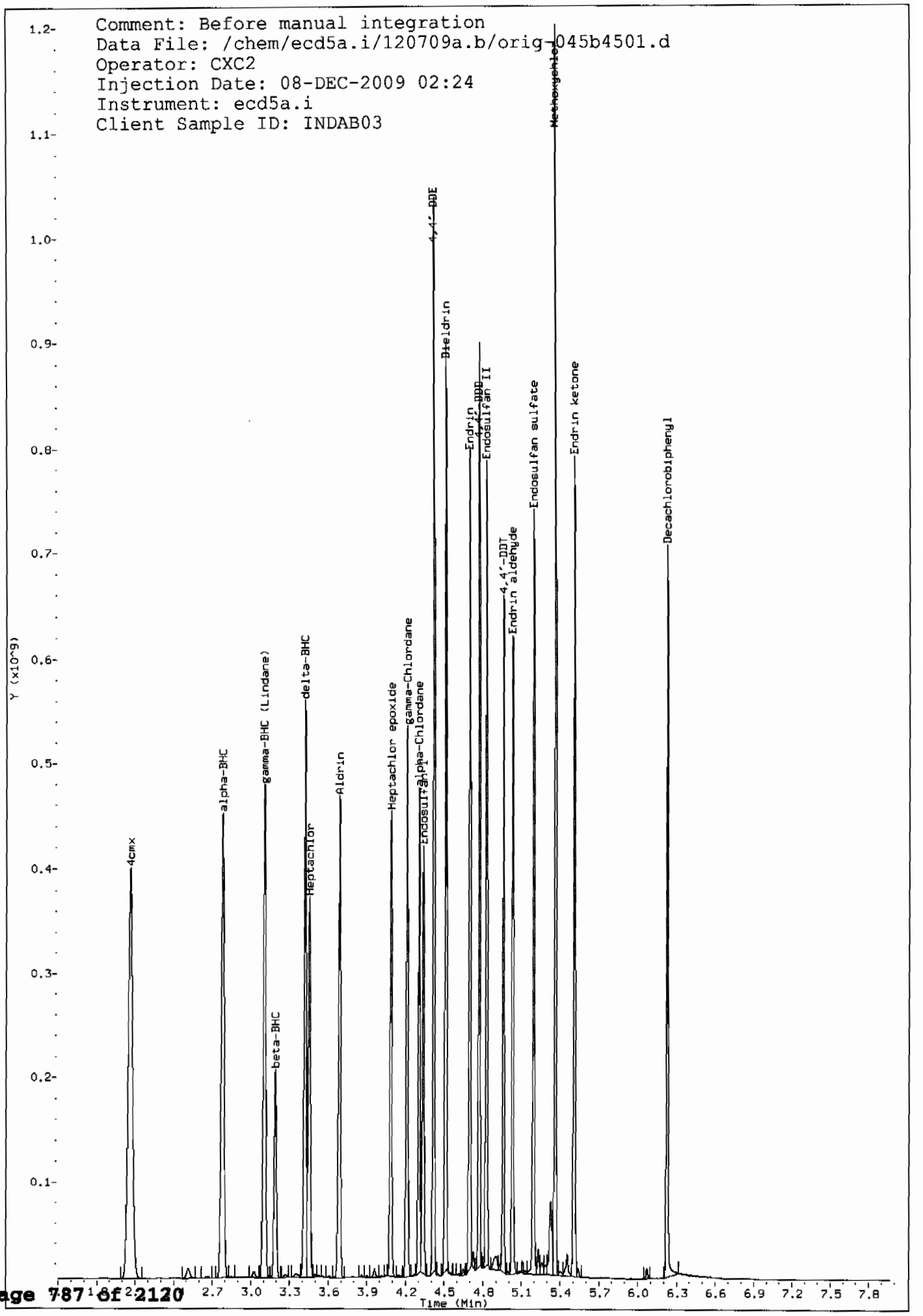
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Operator: CXC2
Injection Date: 08-DEC-2009 02:24
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/051f5101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 08-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.049	3.050	-0.001	66913659	100.000	118	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	57396445	100.000	121	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.432	3.433	-0.001	24800459	100.000	105	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.739	3.740	-0.001	43588881	100.000	110	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.577	3.577	0.000	59956078	100.000	116	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.965	3.966	-0.001	52682363	100.000	110	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	47660294	100.000	111	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.475	4.475	0.000	49575212	100.000	117	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.561	4.562	-0.001	42777372	100.000	105	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.649	4.650	-0.001	44635127	100.000	115	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.614	4.614	0.000	93380464	200.000	224	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.802	4.802	0.000	91329834	200.000	223	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	79695111	200.000	230	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.985	4.985	0.000	77455788	200.000	223	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.085	5.086	-0.001	80941603	200.000	223	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.338	5.339	-0.001	63324511	200.000	211	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.153	5.153	0.000	45472842	200.000	276	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.597	5.597	0.000	68734163	200.000	219	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.436	5.436	0.000	111886298	1000.00	1140	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.767	5.767	0.000	65893982	200.000	232	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	99124763	200.000	224	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.346	6.344	0.002	52812899	200.000	201	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/051f5101.d
Date : 08-DEC-2009 03:36
Client ID: INDAB04
Sample Info: IWPE091123-10AB

Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

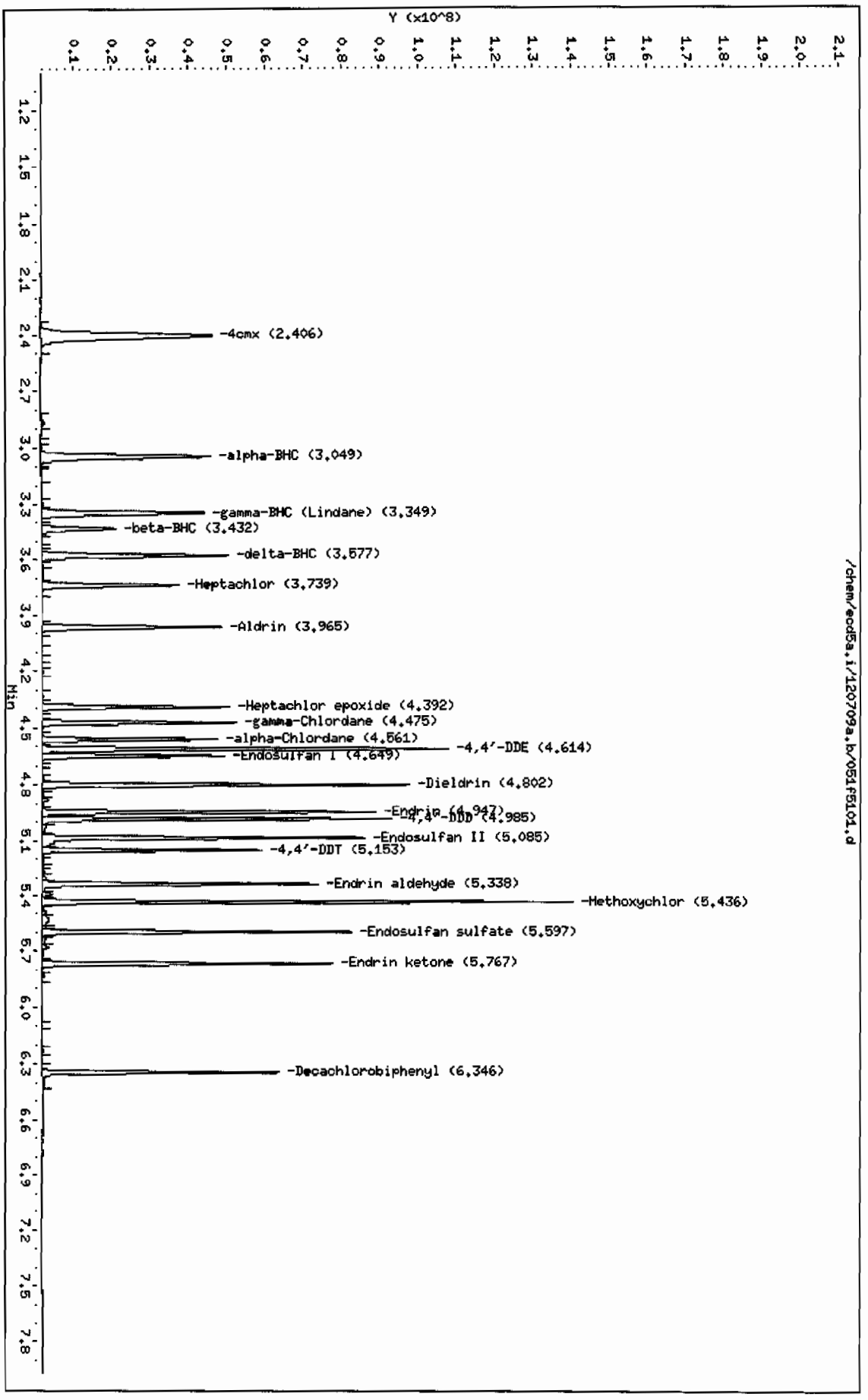

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GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/051b5101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 08-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.781	2.781	0.000	741390788	100.000	106	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.106	3.107	-0.001	656253278	100.000	108	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.191	3.191	0.000	263676080	100.000	112	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.452	3.453	-0.001	474220702	100.000	95.2	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.419	3.420	-0.001	649581400	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.687	3.687	0.000	550337260	100.000	100	80.00- 120.00	100.00(M)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.086	4.088	-0.002	478351567	100.000	100	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.211	4.211	0.000	528204486	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.305	4.306	-0.001	445878067	100.000	94.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.338	4.338	0.000	428195704	100.000	102	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.418	4.419	-0.001	929609553	200.000	210	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.511	4.511	0.000	873422209	200.000	200	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	745248628	200.000	197	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.771	4.771	0.000	760650410	200.000	202	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.826	4.827	-0.001	703980681	200.000	196	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.030	5.031	-0.001	555911500	200.000	187	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.957	4.958	-0.001	539882040	200.000	196	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.194	5.194	0.000	655436760	200.000	196	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	972685735	1000.00	879	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	680537285	200.000	216	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.061	2.064	-0.003	1027928732	200.000	206	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.228	6.226	0.002	610525903	200.000	220	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/051b5101.d
Date : 08-DEC-2009 03:36
Client ID: INDAB04
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

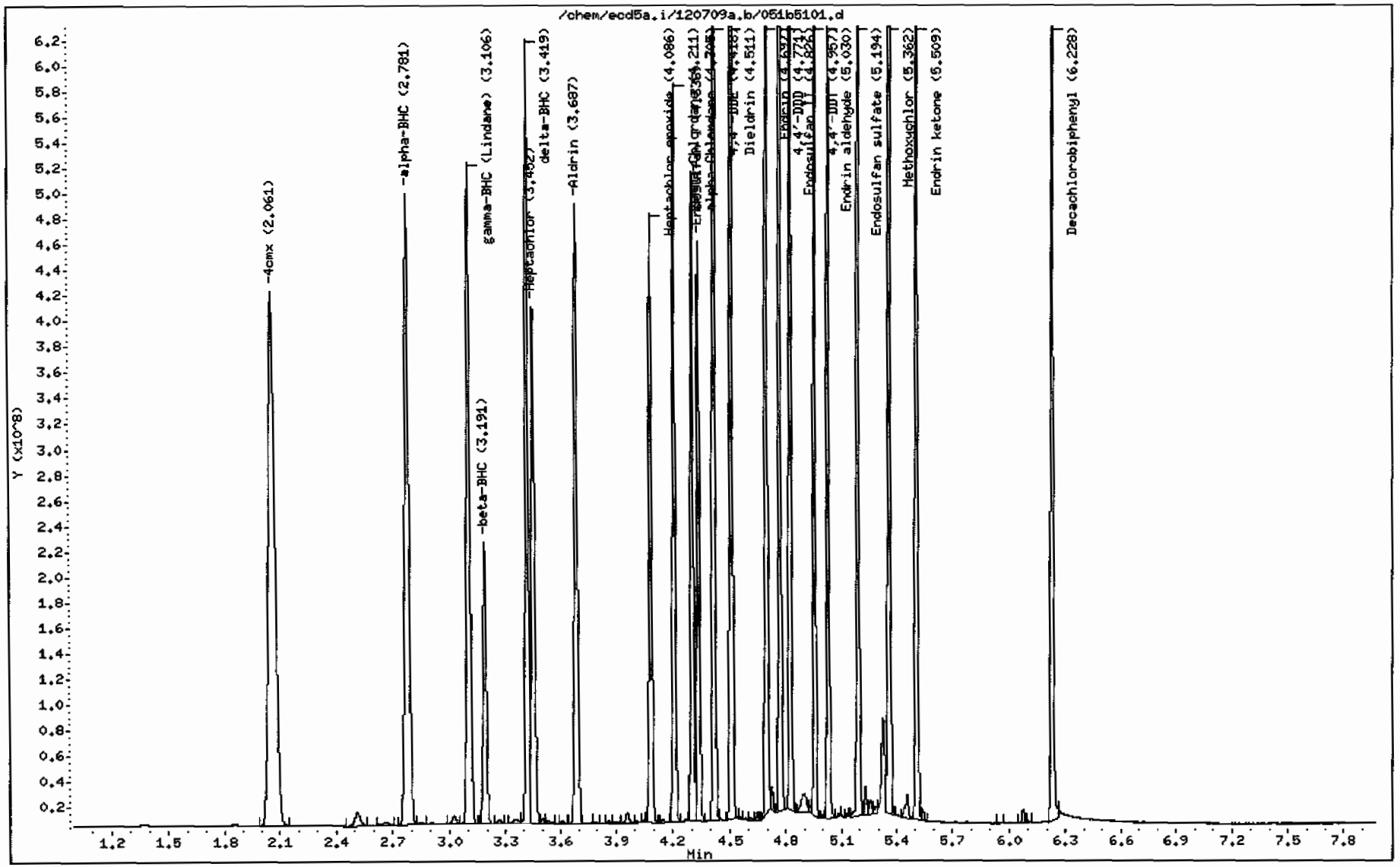

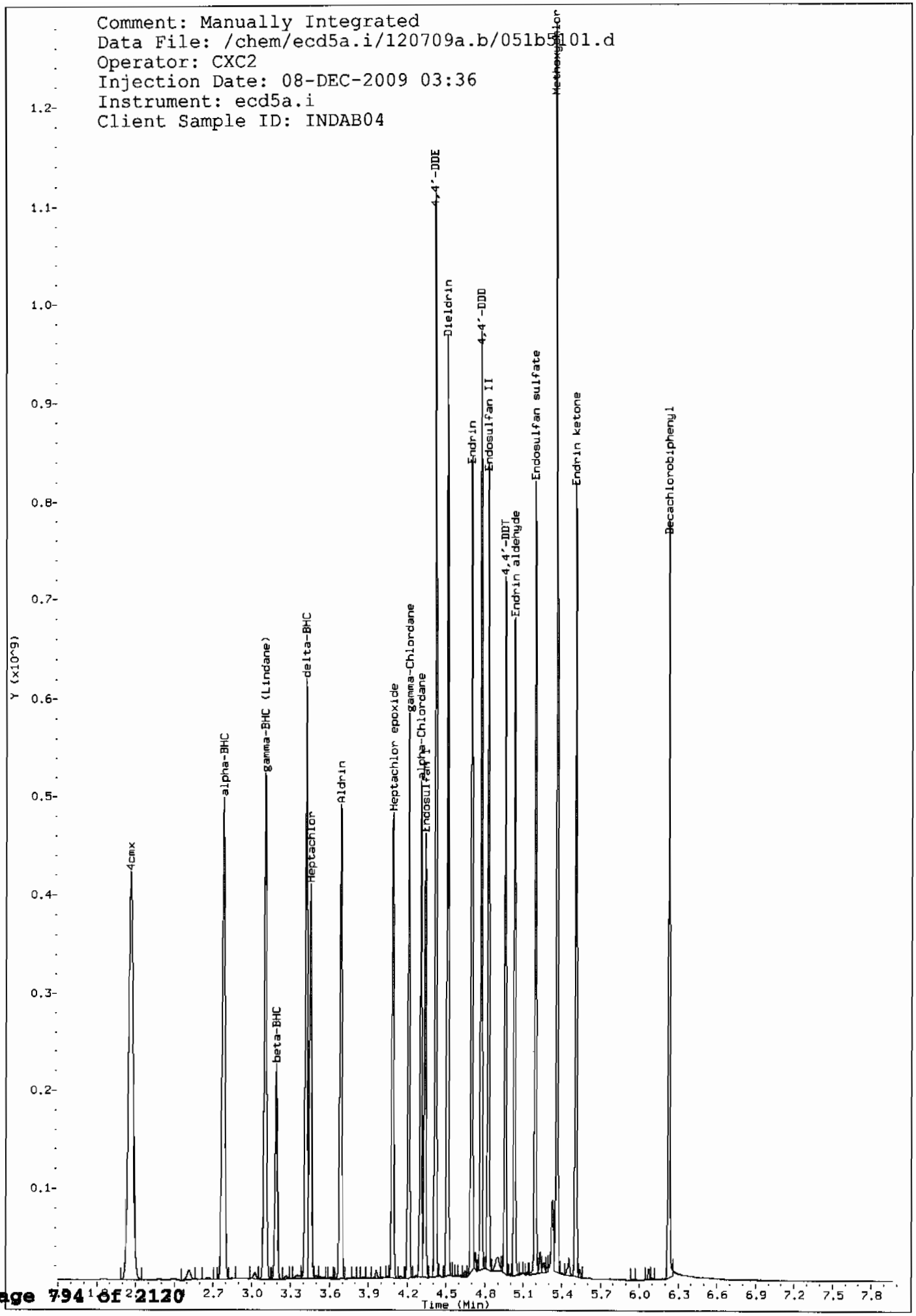
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/051b5101.d
Operator: CXC2
Injection Date: 08-DEC-2009 03:36
Instrument: ecd5a.i
Client Sample ID: INDAB04
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

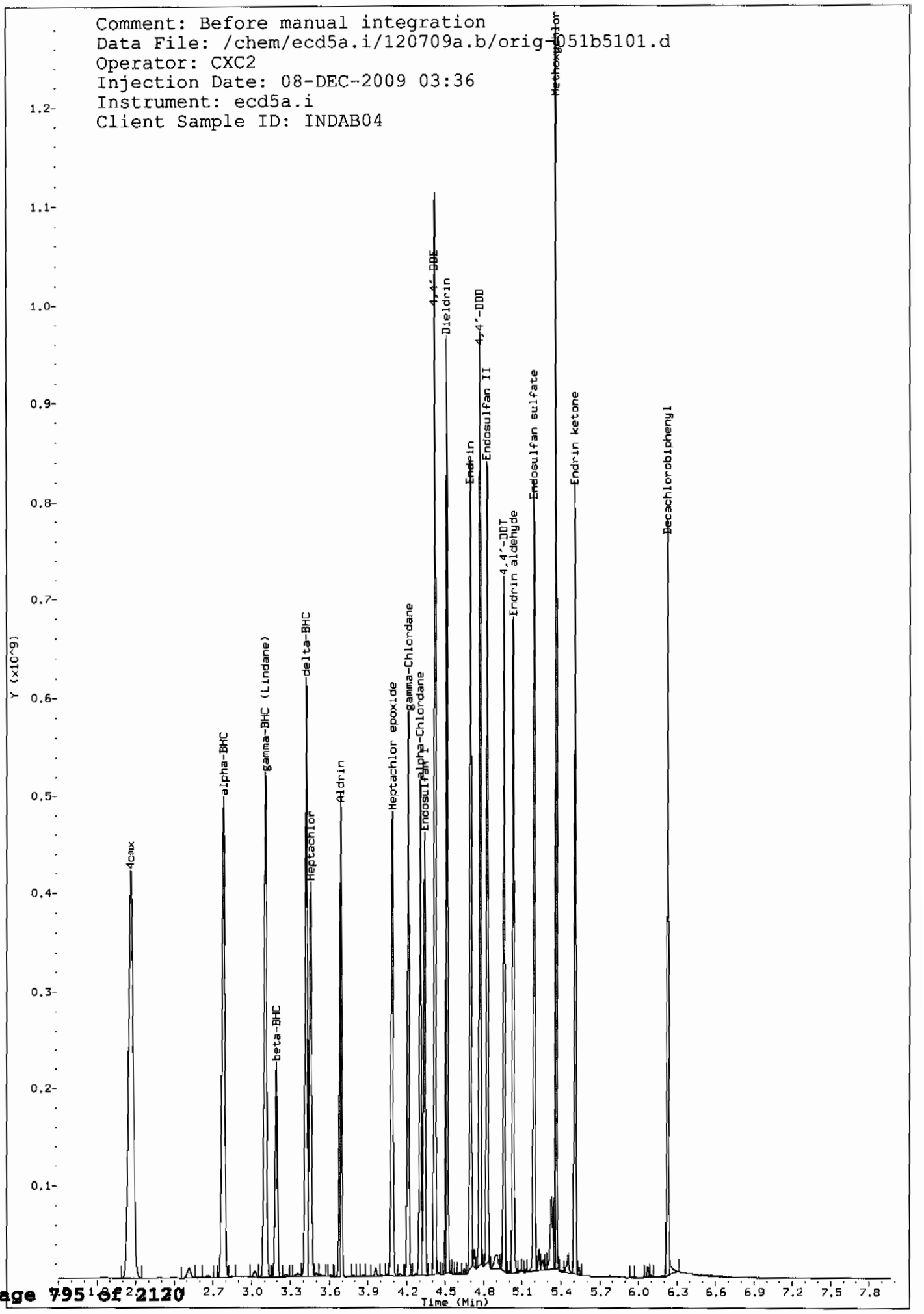
Comment: Before manual integration
Data File: /chem/ecd5a.i/120709a.b/orig-051b5101.d
Operator: CXC2
Injection Date: 08-DEC-2009 03:36
Instrument: ecd5a.i
Client Sample ID: INDAB04
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
4,4'-DDD
Endosulfan II
Endrin
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.59	6.45
02	PEM01	WPE091109-99	11/28/09	1208	2.58	6.43
03	ZZZZZ	ZZZZZ	11/28/09	1235		
04	INDAB01	WPE091128-01	11/28/09	1247	2.58	6.43
05	INDAB02	WPE091128-02	11/28/09	1258	2.58	6.43
06	INDAB03	WPE091128-03	11/28/09	1310	2.58	6.43
07	INDAB04	WPE091128-04	11/28/09	1322	2.58	6.43
08	INDAB05	IPE091128-02	11/28/09	1334	2.58	6.43
09	INDAB01	WPE091123-10	11/28/09	1346	2.58	6.43
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.59	6.45
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.58	6.43
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.58	6.43
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.58	6.43
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.58	6.43
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.58	6.43
16	CHLOR01	WPE091124-21	11/28/09	1527	2.58	6.43
17	CHLOR02	WPE091124-22	11/28/09	1539	2.58	6.43
18	CHLOR03	WPE091124-23	11/28/09	1551	2.58	6.43
19	CHLOR04	WPE091124-24	11/28/09	1603	2.58	6.43
20	CHLOR05	IPE091029-06	11/28/09	1615	2.58	6.43
21	CHLOR01	WPE091021-00	11/28/09	1627	2.58	6.43
22	PEM02	WPE091109-99	11/28/09	1639	2.58	6.43
23	PIBLK02	WAR090914-99	11/28/09	1651	2.58	6.43
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.58	6.43
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.58	6.43
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.58	6.43
27	INDAB02	WPE091123-10	11/28/09	1738	2.58	6.43
28	PIBLK03	WAR090914-99	11/28/09	1750	2.58	6.43
29	ZZZZZ	ZZZZZ	11/28/09	1802	2.59	6.43
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.58	6.43
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.59	6.43
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.58	6.43

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.13 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.12	6.24
02	PEM01	WPE091109-99	11/28/09	1208	2.13	6.22
03	ZZZZZ	ZZZZZ	11/28/09	1235		6.24
04	INDAB01	WPE091128-01	11/28/09	1247	2.12	6.22
05	INDAB02	WPE091128-02	11/28/09	1258	2.12	6.22
06	INDAB03	WPE091128-03	11/28/09	1310	2.13	6.22
07	INDAB04	WPE091128-04	11/28/09	1322	2.12	6.22
08	INDAB05	IPE091128-02	11/28/09	1334	2.13	6.22
09	INDAB01	WPE091123-10	11/28/09	1346	2.13	6.22
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.12	6.24
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.12	6.22
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.12	6.22
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.12	6.22
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.13	6.22
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.13	6.22
16	CHLOR01	WPE091124-21	11/28/09	1527	2.12	6.22
17	CHLOR02	WPE091124-22	11/28/09	1539	2.12	6.22
18	CHLOR03	WPE091124-23	11/28/09	1551	2.13	6.22
19	CHLOR04	WPE091124-24	11/28/09	1603	2.13	6.22
20	CHLOR05	IPE091029-06	11/28/09	1615	2.13	6.22
21	CHLOR01	WPE091021-00	11/28/09	1627	2.12	6.22
22	PEM02	WPE091109-99	11/28/09	1639	2.13	6.22
23	PIBLK02	WAR090914-99	11/28/09	1651	2.13	6.22
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.13	6.22
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.13	6.22
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.13	6.22
27	INDAB02	WPE091123-10	11/28/09	1738	2.13	6.22
28	PIBLK03	WAR090914-99	11/28/09	1750	2.13	6.22
29	ZZZZZ	ZZZZZ	11/28/09	1802	2.13	6.22
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.13	6.22
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.13	6.22
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.13	6.22

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/29/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.57	6.42
02	PEM01	WPE091109-99	11/29/09	1817	2.57	6.42
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.58	6.43
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.58	6.43
05	CHLOR01	WPE091021-00	11/29/09	1853	2.58	6.43
06	INDAB01	WPE091128-01	11/29/09	1905	2.58	6.43
07	INDAB02	WPE091128-02	11/29/09	1917	2.58	6.43
08	INDAB03	WPE091128-03	11/29/09	1929	2.58	6.43
09	INDAB04	WPE091128-04	11/29/09	1941	2.58	6.43
10	INDAB05	IPE091128-02	11/29/09	1953	2.58	6.43
11	INDAB01	WPE091123-10	11/29/09	2005	2.58	6.43
12	PIBLK02	WAR090914-99	11/29/09	2017	2.58	6.43
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.58	6.43
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.58	6.43
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.58	6.43
16	INDAB02	WPE091123-10	11/29/09	2106	2.58	6.43
17	PIBLK03	WAR090914-99	11/29/09	2120	2.58	6.43
18	ZZZZZ	ZZZZZ	11/29/09	2132	2.58	6.43
19	ZZZZZ	ZZZZZ	11/29/09	2144	2.58	6.43
20	ZZZZZ	ZZZZZ	11/29/09	2156	2.58	6.43
21	ZZZZZ	ZZZZZ	11/29/09	2208	2.58	6.43
22	ZZZZZ	ZZZZZ	11/29/09	2220	2.58	6.43
23	ZZZZZ	ZZZZZ	11/29/09	2232	2.58	6.43
24	PIBLK04	WAR090914-99	11/29/09	2244	2.58	6.43
25	INDAB03	WPE091123-10	11/29/09	2256	2.58	6.43
26	PIBLK05	WAR090914-99	11/29/09	2308	2.58	6.43
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.58	6.43
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.58	6.43
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.58	6.43
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.58	6.43
31	ZZZZZ	ZZZZZ	11/30/09	0008	2.58	6.43
32	ZZZZZ	ZZZZZ	11/30/09	0020	2.58	6.43

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/29/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.12	6.21
02	PEM01	WPE091109-99	11/29/09	1817	2.12	6.21
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.12	6.21
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.12	6.21
05	CHLOR01	WPE091021-00	11/29/09	1853	2.12	6.22
06	INDAB01	WPE091128-01	11/29/09	1905	2.13	6.22
07	INDAB02	WPE091128-02	11/29/09	1917	2.13	6.21
08	INDAB03	WPE091128-03	11/29/09	1929	2.12	6.22
09	INDAB04	WPE091128-04	11/29/09	1941	2.12	6.22
10	INDAB05	IPE091128-02	11/29/09	1953	2.13	6.22
11	INDAB01	WPE091123-10	11/29/09	2005	2.13	6.21
12	PIBLK02	WAR090914-99	11/29/09	2017	2.12	6.21
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.12	6.21
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.12	6.21
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.12	6.22
16	INDAB02	WPE091123-10	11/29/09	2106	2.12	6.22
17	PIBLK03	WAR090914-99	11/29/09	2120	2.12	6.22
18	ZZZZZ	ZZZZZ	11/29/09	2132	2.12	6.21
19	ZZZZZ	ZZZZZ	11/29/09	2144	2.12	6.22
20	ZZZZZ	ZZZZZ	11/29/09	2156	2.13	6.21
21	ZZZZZ	ZZZZZ	11/29/09	2208	2.13	6.22
22	ZZZZZ	ZZZZZ	11/29/09	2220	2.12	6.21
23	ZZZZZ	ZZZZZ	11/29/09	2232	2.13	6.22
24	PIBLK04	WAR090914-99	11/29/09	2244	2.13	6.21
25	INDAB03	WPE091123-10	11/29/09	2256	2.13	6.22
26	PIBLK05	WAR090914-99	11/29/09	2308	2.13	6.22
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.12	6.21
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.12	6.21
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.12	6.21
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.12	6.21
31	ZZZZZ	ZZZZZ	11/30/09	0008	2.12	6.21
32	ZZZZZ	ZZZZZ	11/30/09	0020	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/30/09	1354	2.58	6.44
02	PEM01	WPE091109-99	11/30/09	1406	2.58	6.42
03	INDAB01	WPE091123-10	11/30/09	1418	2.58	6.43
04	ZZZZZ	ZZZZZ	11/30/09	1430	2.58	6.42
05	ZZZZZ	ZZZZZ	11/30/09	1442	2.58	6.42
06	TOXAPH01	WPE091104-52	11/30/09	1454	2.58	6.42
07	CHLOR01	WPE091130-21	11/30/09	1529	2.58	6.45
08	CHLOR02	WPE091130-22	11/30/09	1541	2.58	6.43
09	CHLOR03	WPE091130-23	11/30/09	1553	2.58	6.43
10	CHLOR04	WPE091130-24	11/30/09	1605	2.58	6.42
11	CHLOR05	IPE091029-06	11/30/09	1628	2.58	6.44
12	CHLOR01	WPE091021-00	11/30/09	1639	2.58	6.42
13	GAPA01	WPE091130-31	11/30/09	1651	2.58	6.42
14	GAPA02	WPE091130-32	11/30/09	1703	2.58	6.42
15	GAPA03	WPE091130-33	11/30/09	1715	2.58	6.42
16	GAPA04	WPE091130-34	11/30/09	1727	2.58	6.42
17	GAPA05	IPE091110-01	11/30/09	1739	2.58	6.42
18	GAPA01	WPE091021-05	11/30/09	1751	2.58	6.42
19	PEM02	WPE091109-99	11/30/09	1803	2.58	6.42
20	PIBLK02	WAR090914-99	11/30/09	1815	2.58	6.42
21	ZZZZZ	ZZZZZ	11/30/09	1827	2.58	6.42
22	ZZZZZ	ZZZZZ	11/30/09	1839	2.58	6.42
23	ZZZZZ	ZZZZZ	11/30/09	1851	2.58	6.42
24	ZZZZZ	ZZZZZ	11/30/09	1903	2.58	6.42
25	ZZZZZ	ZZZZZ	11/30/09	1915	2.58	6.42
26	ZZZZZ	ZZZZZ	11/30/09	1927	2.58	6.42
27	ZZZZZ	ZZZZZ	11/30/09	1939	2.58	6.42
28	INDAB02	WPE091123-10	11/30/09	1951	2.58	6.42
29	PIBLK03	WAR090914-99	11/30/09	2003	2.58	6.43
30	ZZZZZ	ZZZZZ	11/30/09	2015	2.58	6.42
31	ZZZZZ	ZZZZZ	11/30/09	2027	2.58	6.42
32	ZZZZZ	ZZZZZ	11/30/09	2038	2.58	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/30/09	1354	2.12	6.24
02	PEM01	WPE091109-99	11/30/09	1406	2.12	6.22
03	INDAB01	WPE091123-10	11/30/09	1418	2.12	6.22
04	ZZZZZ	ZZZZZ	11/30/09	1430	2.13	6.22
05	ZZZZZ	ZZZZZ	11/30/09	1442	2.13	6.22
06	TOXAPH01	WPE091104-52	11/30/09	1454	2.13	6.22
07	CHLOR01	WPE091130-21	11/30/09	1529	2.12	6.24
08	CHLOR02	WPE091130-22	11/30/09	1541	2.12	6.22
09	CHLOR03	WPE091130-23	11/30/09	1553	2.12	6.22
10	CHLOR04	WPE091130-24	11/30/09	1605	2.12	6.22
11	CHLOR05	IPE091029-06	11/30/09	1628	2.12	6.23
12	CHLOR01	WPE091021-00	11/30/09	1639	2.12	6.22
13	GAPA01	WPE091130-31	11/30/09	1651	2.12	6.22
14	GAPA02	WPE091130-32	11/30/09	1703	2.12	6.22
15	GAPA03	WPE091130-33	11/30/09	1715	2.12	6.22
16	GAPA04	WPE091130-34	11/30/09	1727	2.12	6.22
17	GAPA05	IPE091110-01	11/30/09	1739	2.12	6.21
18	GAPA01	WPE091021-05	11/30/09	1751	2.13	6.22
19	PEM02	WPE091109-99	11/30/09	1803	2.13	6.22
20	PIBLK02	WAR090914-99	11/30/09	1815	2.12	6.22
21	ZZZZZ	ZZZZZ	11/30/09	1827	2.13	6.22
22	ZZZZZ	ZZZZZ	11/30/09	1839	2.13	6.22
23	ZZZZZ	ZZZZZ	11/30/09	1851	2.13	6.21
24	ZZZZZ	ZZZZZ	11/30/09	1903	2.13	6.21
25	ZZZZZ	ZZZZZ	11/30/09	1915	2.13	6.21
26	ZZZZZ	ZZZZZ	11/30/09	1927	2.13	6.22
27	ZZZZZ	ZZZZZ	11/30/09	1939	2.13	6.22
28	INDAB02	WPE091123-10	11/30/09	1951	2.13	6.21
29	PIBLK03	WAR090914-99	11/30/09	2003	2.13	6.22
30	ZZZZZ	ZZZZZ	11/30/09	2015	2.13	6.21
31	ZZZZZ	ZZZZZ	11/30/09	2027	2.13	6.21
32	ZZZZZ	ZZZZZ	11/30/09	2038	2.12	6.21

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.57 DCB: 6.42

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/02/09	1516	2.58	6.43
02	PEM01	WPE091109-99	12/02/09	1528	2.57	6.42
03	INDAB01	WPE091123-10	12/02/09	1540	2.57	6.42
04	TOXAPH01	WPE091104-52	12/02/09	1552	2.57	6.42
05	CHLOR01	WPE091021-00	12/02/09	1604	2.57	6.42
06	GAPA01	WPE091021-05	12/02/09	1619	2.58	6.42
07	ZZZZZ	ZZZZZ	12/02/09	1639		
08	ZZZZZ	ZZZZZ	12/02/09	1651	2.57	6.43
09	PIBLK02	WAR090914-99	12/02/09	1703	2.57	6.42
10	ZZZZZ	ZZZZZ	12/02/09	1715	2.57	6.42
11	ZZZZZ	ZZZZZ	12/02/09	1727	2.57	6.42
12	ZZZZZ	ZZZZZ	12/02/09	1739	2.57	6.42
13	ZZZZZ	ZZZZZ	12/02/09	1751	2.57	6.42
14	ZZZZZ	ZZZZZ	12/02/09	1802	2.57	6.42
15	ZZZZZ	ZZZZZ	12/02/09	1814	2.58	6.42
16	ZZZZZ	ZZZZZ	12/02/09	1826	2.57	6.42
17	ZZZZZ	ZZZZZ	12/02/09	1838	2.57	6.42
18	ZZZZZ	ZZZZZ	12/02/09	1850	2.57	6.42
19	ZZZZZ	ZZZZZ	12/02/09	1902	2.57	6.42
20	INDAB02	WPE091123-10	12/02/09	1914	2.57	6.42
21	PIBLK03	WAR090914-99	12/02/09	1926	2.57	6.42
22	ZZZZZ	ZZZZZ	12/02/09	1938	2.58	6.42
23	ZZZZZ	ZZZZZ	12/02/09	1950	2.57	6.42
24	ZZZZZ	ZZZZZ	12/02/09	2002	2.57	6.42
25	ZZZZZ	ZZZZZ	12/02/09	2014	2.57	6.42
26	ZZZZZ	ZZZZZ	12/02/09	2026	2.57	6.42
27	ZZZZZ	ZZZZZ	12/02/09	2038	2.58	6.42
28	ZZZZZ	ZZZZZ	12/02/09	2050	2.57	6.42
29	ZZZZZ	ZZZZZ	12/02/09	2102	2.57	6.42
30	ZZZZZ	ZZZZZ	12/02/09	2114	2.57	6.42
31	ZZZZZ	ZZZZZ	12/02/09	2126	2.57	6.42
32	INDAB03	WPE091123-10	12/02/09	2138	2.57	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.57 DCB: 6.42

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK04	WAR090914-99	12/02/09	2150	2.57	6.42
02	ZZZZZ	ZZZZZ	12/02/09	2202	2.57	6.42
03	ZZZZZ	ZZZZZ	12/02/09	2214	2.57	6.42
04	ZZZZZ	ZZZZZ	12/02/09	2226	2.57	6.42
05	ZZZZZ	ZZZZZ	12/02/09	2238	2.57	6.42
06	INDAB04	WPE091123-10	12/02/09	2249	2.57	6.42
07	PIBLK05	WAR090914-99	12/02/09	2301	2.57	6.42
08	ZZZZZ	ZZZZZ	12/02/09	2313	2.57	6.42
09	ZZZZZ	ZZZZZ	12/02/09	2325	2.57	6.42
10	IDNAB05	WPE091123-10	12/02/09	2337	2.57	6.42
11	PIBLK06	WAR090914-99	12/02/09	2349	2.57	6.42
12	ZZZZZ	ZZZZZ	12/03/09	0001	2.57	6.42
13	ZZZZZ	ZZZZZ	12/03/09	0013	2.58	6.42
14	ZZZZZ	ZZZZZ	12/03/09	0025	2.58	6.42
15	ZZZZZ	ZZZZZ	12/03/09	0037	2.58	6.42
16	ZZZZZ	ZZZZZ	12/03/09	0049	2.57	6.42
17	PIBLK07	WAR090914-99	12/03/09	0101	2.57	6.42
18	INDAB06	WPE091123-10	12/03/09	0113	2.57	6.42
19	PIBLK08	WAR090914-99	12/03/09	0125	2.57	6.42
20	ZZZZZ	ZZZZZ	12/03/09	0137	2.58	6.42
21	ZZZZZ	ZZZZZ	12/03/09	0149	2.58	6.42
22	ZZZZZ	ZZZZZ	12/03/09	0201	2.58	6.42
23	ZZZZZ	ZZZZZ	12/03/09	0212	2.58	6.42
24	ZZZZZ	ZZZZZ	12/03/09	0225	2.58	6.42
25	ZZZZZ	ZZZZZ	12/03/09	0236	2.58	6.42
26	ZZZZZ	ZZZZZ	12/03/09	0248	2.58	6.42
27	PIBLK09	WAR090914-99	12/03/09	0300	2.57	6.42
28	INDAB07	WPE091123-10	12/03/09	0312	2.57	6.42
29	PIBLK10	WAR090914-99	12/03/09	0324	2.57	6.42
30	TBLK01	1201980055	12/03/09	0336	2.58	6.42
31	ZZZZZ	ZZZZZ	12/03/09	0348	2.58	6.42
32	PBLK01	1201982197	12/03/09	0400	2.57	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.57 DCB: 6.42

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PBLK01LCS	1201982204	12/03/09	0412	2.58	6.42
02	PBLK01TLCS	1201982205	12/03/09	0424	2.58	6.42
03	PBLK01CLCS	1201982206	12/03/09	0436	2.57	6.42
04	ZZZZZ	ZZZZZ	12/03/09	0448	2.57	6.42
05	ZZZZZ	ZZZZZ	12/03/09	0500	2.57	6.42
06	PIBLK11	WAR090914-99	12/03/09	0512	2.57	6.42
07	INDAB08	WPE091123-10	12/03/09	0524	2.57	6.42
08	PIBLK12	WAR090914-99	12/03/09	0536	2.57	6.42
09	ZZZZZ	ZZZZZ	12/03/09	0548	2.57	6.42
10	ZZZZZ	ZZZZZ	12/03/09	0600	2.57	6.42
11	ZZZZZ	ZZZZZ	12/03/09	0612	2.57	6.42
12	ZZZZZ	ZZZZZ	12/03/09	0624	2.57	6.42
13	ZZZZZ	ZZZZZ	12/03/09	0636	2.57	6.42
14	ZZZZZ	ZZZZZ	12/03/09	0648	2.57	6.42
15	ZZZZZ	ZZZZZ	12/03/09	0700	2.57	6.42
16	ZZZZZ	ZZZZZ	12/03/09	0712	2.57	6.42
17	ZZZZZ	ZZZZZ	12/03/09	0724	2.57	6.42
18	PIBLK13	WAR090914-99	12/03/09	0736	2.57	6.42
19	INDAB09	WPE091123-10	12/03/09	0748	2.57	6.42
20	PIBLK14	WAR090914-99	12/03/09	0759	2.57	6.42
21	ZZZZZ	ZZZZZ	12/03/09	0811	2.58	6.42
22	ZZZZZ	ZZZZZ	12/03/09	0823	2.57	6.42
23	ZZZZZ	ZZZZZ	12/03/09	0835	2.57	6.42
24	ZZZZZ	ZZZZZ	12/03/09	0847	2.57	6.42
25	ZZZZZ	ZZZZZ	12/03/09	0859	2.57	6.42
26	ZZZZZ	ZZZZZ	12/03/09	0911	2.57	6.42
27	ZZZZZ	ZZZZZ	12/03/09	0923	2.57	6.42
28	ZZZZZ	ZZZZZ	12/03/09	0935	2.57	6.42
29	ZZZZZ	ZZZZZ	12/03/09	0947	2.57	6.42
30	ZZZZZ	ZZZZZ	12/03/09	0959	2.57	6.42
31	PIBLK15	WAR090914-99	12/03/09	1011	2.57	6.42
32	INDAB10	WPE091123-10	12/03/09	1023	2.57	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/02/09	1516	2.12	6.23
02	PEM01	WPE091109-99	12/02/09	1528	2.12	6.21
03	INDAB01	WPE091123-10	12/02/09	1540	2.12	6.21
04	TOXAPH01	WPE091104-52	12/02/09	1552	2.12	6.21
05	CHLOR01	WPE091021-00	12/02/09	1604	2.12	6.21
06	GAPA01	WPE091021-05	12/02/09	1619	2.12	6.22
07	ZZZZZ	ZZZZZ	12/02/09	1639		
08	ZZZZZ	ZZZZZ	12/02/09	1651	2.12	6.22
09	PIBLK02	WAR090914-99	12/02/09	1703	2.12	6.21
10	ZZZZZ	ZZZZZ	12/02/09	1715	2.12	6.22
11	ZZZZZ	ZZZZZ	12/02/09	1727	2.12	6.21
12	ZZZZZ	ZZZZZ	12/02/09	1739	2.12	6.22
13	ZZZZZ	ZZZZZ	12/02/09	1751	2.12	6.21
14	ZZZZZ	ZZZZZ	12/02/09	1802	2.12	6.21
15	ZZZZZ	ZZZZZ	12/02/09	1814	2.12	6.21
16	ZZZZZ	ZZZZZ	12/02/09	1826	2.12	6.21
17	ZZZZZ	ZZZZZ	12/02/09	1838	2.12	6.21
18	ZZZZZ	ZZZZZ	12/02/09	1850	2.12	6.21
19	ZZZZZ	ZZZZZ	12/02/09	1902	2.12	6.21
20	INDAB02	WPE091123-10	12/02/09	1914	2.12	6.21
21	PIBLK03	WAR090914-99	12/02/09	1926	2.12	6.21
22	ZZZZZ	ZZZZZ	12/02/09	1938	2.12	6.21
23	ZZZZZ	ZZZZZ	12/02/09	1950	2.12	6.21
24	ZZZZZ	ZZZZZ	12/02/09	2002	2.12	6.21
25	ZZZZZ	ZZZZZ	12/02/09	2014	2.12	6.21
26	ZZZZZ	ZZZZZ	12/02/09	2026	2.12	6.21
27	ZZZZZ	ZZZZZ	12/02/09	2038	2.13	6.21
28	ZZZZZ	ZZZZZ	12/02/09	2050	2.12	6.21
29	ZZZZZ	ZZZZZ	12/02/09	2102	2.12	6.21
30	ZZZZZ	ZZZZZ	12/02/09	2114	2.12	6.21
31	ZZZZZ	ZZZZZ	12/02/09	2126	2.12	6.21
32	INDAB03	WPE091123-10	12/02/09	2138	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK04	WAR090914-99	12/02/09	2150	2.12	6.21
02	ZZZZZ	ZZZZZ	12/02/09	2202	2.12	6.21
03	ZZZZZ	ZZZZZ	12/02/09	2214	2.12	6.21
04	ZZZZZ	ZZZZZ	12/02/09	2226	2.12	6.21
05	ZZZZZ	ZZZZZ	12/02/09	2238	2.12	6.21
06	INDAB04	WPE091123-10	12/02/09	2249	2.12	6.21
07	PIBLK05	WAR090914-99	12/02/09	2301	2.12	6.21
08	ZZZZZ	ZZZZZ	12/02/09	2313	2.12	6.21
09	ZZZZZ	ZZZZZ	12/02/09	2325	2.12	6.21
10	INDAB05	WPE091123-10	12/02/09	2337	2.12	6.21
11	PIBLK06	WAR090914-99	12/02/09	2349	2.12	6.21
12	ZZZZZ	ZZZZZ	12/03/09	0001	2.12	6.21
13	ZZZZZ	ZZZZZ	12/03/09	0013	2.13	6.21
14	ZZZZZ	ZZZZZ	12/03/09	0025	2.13	6.21
15	ZZZZZ	ZZZZZ	12/03/09	0037	2.12	6.21
16	ZZZZZ	ZZZZZ	12/03/09	0049	2.12	6.21
17	PIBLK07	WAR090914-99	12/03/09	0101	2.12	6.21
18	INDAB06	WPE091123-10	12/03/09	0113	2.12	6.21
19	PIBLK08	WAR090914-99	12/03/09	0125	2.12	6.21
20	ZZZZZ	ZZZZZ	12/03/09	0137	2.12	6.21
21	ZZZZZ	ZZZZZ	12/03/09	0149	2.12	6.21
22	ZZZZZ	ZZZZZ	12/03/09	0201	2.12	6.21
23	ZZZZZ	ZZZZZ	12/03/09	0212	2.13	6.21
24	ZZZZZ	ZZZZZ	12/03/09	0225	2.12	6.21
25	ZZZZZ	ZZZZZ	12/03/09	0236	2.12	6.21
26	ZZZZZ	ZZZZZ	12/03/09	0248	2.13	6.21
27	PIBLK09	WAR090914-99	12/03/09	0300	2.12	6.21
28	INDAB07	WPE091123-10	12/03/09	0312	2.12	6.21
29	PIBLK10	WAR090914-99	12/03/09	0324	2.12	6.21
30	TBLK01	1201980055	12/03/09	0336	2.12	6.21
31	ZZZZZ	ZZZZZ	12/03/09	0348	2.13	6.21
32	PBLK01	1201982197	12/03/09	0400	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PBLK01LCS	1201982204	12/03/09	0412	2.12	6.21
02	PBLK01TLCS	1201982205	12/03/09	0424	2.13	6.21
03	PBLK01CLCS	1201982206	12/03/09	0436	2.12	6.21
04	ZZZZZ	ZZZZZ	12/03/09	0448	2.12	6.21
05	ZZZZZ	ZZZZZ	12/03/09	0500	2.12	6.21
06	PIBLK11	WAR090914-99	12/03/09	0512	2.12	6.21
07	INDAB08	WPE091123-10	12/03/09	0524	2.12	6.21
08	PIBLK12	WAR090914-99	12/03/09	0536	2.12	6.21
09	ZZZZZ	ZZZZZ	12/03/09	0548	2.12	6.21
10	ZZZZZ	ZZZZZ	12/03/09	0600	2.12	6.21
11	ZZZZZ	ZZZZZ	12/03/09	0612	2.12	6.21
12	ZZZZZ	ZZZZZ	12/03/09	0624	2.12	6.21
13	ZZZZZ	ZZZZZ	12/03/09	0636	2.12	6.21
14	ZZZZZ	ZZZZZ	12/03/09	0648	2.12	6.21
15	ZZZZZ	ZZZZZ	12/03/09	0700	2.12	6.21
16	ZZZZZ	ZZZZZ	12/03/09	0712	2.12	6.21
17	ZZZZZ	ZZZZZ	12/03/09	0724	2.12	6.21
18	PIBLK13	WAR090914-99	12/03/09	0736	2.12	6.21
19	INDAB09	WPE091123-10	12/03/09	0748	2.12	6.21
20	PIBLK14	WAR090914-99	12/03/09	0759	2.12	6.21
21	ZZZZZ	ZZZZZ	12/03/09	0811	2.12	6.21
22	ZZZZZ	ZZZZZ	12/03/09	0823	2.12	6.21
23	ZZZZZ	ZZZZZ	12/03/09	0835	2.12	6.21
24	ZZZZZ	ZZZZZ	12/03/09	0847	2.12	6.21
25	ZZZZZ	ZZZZZ	12/03/09	0859	2.12	6.21
26	ZZZZZ	ZZZZZ	12/03/09	0911	2.12	6.21
27	ZZZZZ	ZZZZZ	12/03/09	0923	2.12	6.21
28	ZZZZZ	ZZZZZ	12/03/09	0935	2.12	6.21
29	ZZZZZ	ZZZZZ	12/03/09	0947	2.12	6.21
30	ZZZZZ	ZZZZZ	12/03/09	0959	2.12	6.21
31	PIBLKK15	WAR090914-99	12/03/09	1011	2.12	6.21
32	INDAB10	WPE091123-10	12/03/09	1023	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.41 DCB: 6.34

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/07/09	1656	2.41	6.35
02	PEM01	WPE091109-99	12/07/09	1714	2.41	6.35
03	INDAB01	WPE091207-01	12/07/09	1726	2.40	6.34
04	INDAB02	WPE091207-02	12/07/09	1738	2.40	6.34
05	INDAB03	WPE091207-03	12/07/09	1750	2.40	6.34
06	INDAB04	WPE091207-04	12/07/09	1802	2.40	6.34
07	INDAB05	IPE091128-02	12/07/09	1814	2.40	6.34
08	INDAB01	WPE091207-10	12/07/09	1826	2.41	6.34
09	TOXAPH01	WPE091207-11	12/07/09	1838	2.41	6.34
10	TOXAPH02	WPE091207-12	12/07/09	1850	2.41	6.35
11	ZZZZZ	ZZZZZ	12/07/09	1938	2.41	6.35
12	ZZZZZ	ZZZZZ	12/07/09	1950	2.41	6.35
13	TOXAPH03	WPE091207-13	12/07/09	2002	2.41	6.35
14	TOXAPH04	WPE091207-14	12/07/09	2014	2.41	6.34
15	TOXAPH05	IPE091121-40	12/07/09	2026	2.40	6.34
16	TOXAPH01	WPE091104-52	12/07/09	2038	2.41	6.35
17	CHLOR01	WPE091207-21	12/07/09	2050	2.41	6.34
18	CHLOR02	WPE091207-22	12/07/09	2102	2.41	6.35
19	CHLOR03	WPE091207-23	12/07/09	2114	2.41	6.35
20	CHLOR04	WPE091207-24	12/07/09	2126	2.41	6.35
21	CHLOR05	IPE091029-06	12/07/09	2138	2.41	6.35
22	CHLOR01	WPE091021-00	12/07/09	2149	2.40	6.34
23	PEM02	WPE091109-99	12/07/09	2201	2.41	6.34
24	PIBLK02	WAR090914-99	12/07/09	2213	2.41	6.34
25	ZZZZZ	ZZZZZ	12/07/09	2225	2.41	6.34
26	ZZZZZ	ZZZZZ	12/07/09	2237	2.41	6.34
27	ZZZZZ	ZZZZZ	12/07/09	2249	2.41	6.35
28	ZZZZZ	ZZZZZ	12/07/09	2301	2.41	6.35
29	ZZZZZ	ZZZZZ	12/07/09	2313	2.41	6.34
30	ZZZZZ	ZZZZZ	12/07/09	2325	2.41	6.34
31	ZZZZZ	ZZZZZ	12/07/09	2337	2.41	6.34
32	ZZZZZ	ZZZZZ	12/07/09	2349	2.41	6.34

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.41 DCB: 6.34

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/08/09	0001	2.41	6.34
02	ZZZZZ	ZZZZZ	12/08/09	0013	2.41	6.35
03	INDAB02	WPE091123-10	12/08/09	0025	2.41	6.34
04	PIBLK03	WAR090914-99	12/08/09	0037	2.41	6.34
05	ZZZZZ	ZZZZZ	12/08/09	0049	2.41	6.34
06	ZZZZZ	ZZZZZ	12/08/09	0100	2.41	6.35
07	ZZZZZ	ZZZZZ	12/08/09	0112	2.41	6.34
08	ZZZZZ	ZZZZZ	12/08/09	0124	2.41	6.34
09	ZZZZZ	ZZZZZ	12/08/09	0136	2.41	6.34
10	ZZZZZ	ZZZZZ	12/08/09	0148	2.41	6.34
11	ZZZZZ	ZZZZZ	12/08/09	0200	2.41	6.34
12	ZZZZZ	ZZZZZ	12/08/09	0212	2.41	6.35
13	INDAB03	WPE091123-10	12/08/09	0224	2.41	6.34
14	PIBLK04	WAR090914-99	12/08/09	0236	2.41	6.34
15	ZZZZZ	ZZZZZ	12/08/09	0248	2.41	6.35
16	ZZZZZ	ZZZZZ	12/08/09	0300	2.40	6.34
17	WST03-10-2132	241527001	12/08/09	0312	2.41	6.34
18	PIBLK05	WAR090914-99	12/08/09	0324	2.41	6.34
19	INDAB04	WPE091123-10	12/08/09	0336	2.41	6.35
20	PIBLK06	WAR090914-99	12/08/09	0348	2.41	6.34
21	ZZZZZ	ZZZZZ	12/08/09	0411	2.41	6.34
22	ZZZZZ	ZZZZZ	12/08/09	0423	2.41	6.34
23	ZZZZZ	ZZZZZ	12/08/09	0435	2.41	6.34
24	ZZZZZ	ZZZZZ	12/08/09	0447	2.41	6.34
25	ZZZZZ	ZZZZZ	12/08/09	0459	2.41	6.34
26	ZZZZZ	ZZZZZ	12/08/09	0511	2.41	6.34
27	PIBLK07	WAR090914-99	12/08/09	0523	2.41	6.34
28	INDAB05	WPE091123-10	12/08/09	0535	2.41	6.34
29	PIBLK08	WAR090914-99	12/08/09	0547	2.41	6.34
30	ZZZZZ	ZZZZZ	12/08/09	0559	2.41	6.34
31	ZZZZZ	ZZZZZ	12/08/09	0611	2.41	6.34
32	ZZZZZ	ZZZZZ	12/08/09	0623	2.41	6.34

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.06 DCB: 6.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/07/09	1656	2.06	6.23
02	PEM01	WPE091109-99	12/07/09	1714	2.06	6.24
03	INDAB01	WPE091207-01	12/07/09	1726	2.06	6.23
04	INDAB02	WPE091207-02	12/07/09	1738	2.06	6.23
05	INDAB03	WPE091207-03	12/07/09	1750	2.06	6.23
06	INDAB04	WPE091207-04	12/07/09	1802	2.06	6.23
07	INDAB05	IPE091128-02	12/07/09	1814	2.06	6.23
08	INDAB01	WPE091207-10	12/07/09	1826	2.06	6.23
09	TOXAPH01	WPE091207-11	12/07/09	1838	2.06	6.23
10	TOXAPH02	WPE091207-12	12/07/09	1850	2.06	6.23
11	ZZZZZ	ZZZZZ	12/07/09	1938	2.06	6.24
12	ZZZZZ	ZZZZZ	12/07/09	1950	2.06	6.23
13	TOXAPH03	WPE091207-13	12/07/09	2002	2.06	6.23
14	TOXAPH04	WPE091207-14	12/07/09	2014	2.06	6.23
15	TOXAPH05	IPE091121-40	12/07/09	2026	2.07	6.23
16	TOXAPH01	WPE091104-52	12/07/09	2038	2.06	6.23
17	CHLOR01	WPE091207-21	12/07/09	2050	2.06	6.23
18	CHLOR02	WPE091207-22	12/07/09	2102	2.06	6.23
19	CHLOR03	WPE091207-23	12/07/09	2114	2.06	6.23
20	CHLOR04	WPE091207-24	12/07/09	2126	2.06	6.23
21	CHLOR05	IPE091029-06	12/07/09	2138	2.06	6.23
22	CHLOR01	WPE091021-00	12/07/09	2149	2.06	6.23
23	PEM02	WPE091109-99	12/07/09	2201	2.06	6.23
24	PIBLK02	WAR090914-99	12/07/09	2213	2.06	6.23
25	ZZZZZ	ZZZZZ	12/07/09	2225	2.06	6.23
26	ZZZZZ	ZZZZZ	12/07/09	2237	2.06	6.23
27	ZZZZZ	ZZZZZ	12/07/09	2249	2.06	6.23
28	ZZZZZ	ZZZZZ	12/07/09	2301	2.06	6.23
29	ZZZZZ	ZZZZZ	12/07/09	2313	2.06	6.23
30	ZZZZZ	ZZZZZ	12/07/09	2325	2.06	6.23
31	ZZZZZ	ZZZZZ	12/07/09	2337	2.06	6.22
32	ZZZZZ	ZZZZZ	12/07/09	2349	2.06	6.23

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.06 DCB: 6.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/08/09	0001	2.06	6.23
02	ZZZZZ	ZZZZZ	12/08/09	0013	2.06	6.23
03	INDAB02	WPE091123-10	12/08/09	0025	2.06	6.23
04	PIBLK03	WAR090914-99	12/08/09	0037	2.06	6.23
05	ZZZZZ	ZZZZZ	12/08/09	0049	2.06	6.23
06	ZZZZZ	ZZZZZ	12/08/09	0100	2.06	6.23
07	ZZZZZ	ZZZZZ	12/08/09	0112	2.06	6.23
08	ZZZZZ	ZZZZZ	12/08/09	0124	2.06	6.23
09	ZZZZZ	ZZZZZ	12/08/09	0136	2.06	6.23
10	ZZZZZ	ZZZZZ	12/08/09	0148	2.06	6.23
11	ZZZZZ	ZZZZZ	12/08/09	0200	2.06	6.23
12	ZZZZZ	ZZZZZ	12/08/09	0212	2.06	6.23
13	INDAB03	WPE091123-10	12/08/09	0224	2.06	6.23
14	PIBLK04	WAR090914-99	12/08/09	0236	2.06	6.23
15	ZZZZZ	ZZZZZ	12/08/09	0248	2.06	6.23
16	ZZZZZ	ZZZZZ	12/08/09	0300	2.06	6.23
17	WST03-10-2132	241527001	12/08/09	0312	2.06	6.23
18	PIBLK05	WAR090914-99	12/08/09	0324	2.06	6.23
19	INDAB04	WPE091123-10	12/08/09	0336	2.06	6.23
20	PIBLK06	WAR090914-99	12/08/09	0348	2.06	6.23
21	ZZZZZ	ZZZZZ	12/08/09	0411	2.06	6.23
22	ZZZZZ	ZZZZZ	12/08/09	0423	2.06	6.23
23	ZZZZZ	ZZZZZ	12/08/09	0435	2.06	6.23
24	ZZZZZ	ZZZZZ	12/08/09	0447	2.06	6.23
25	ZZZZZ	ZZZZZ	12/08/09	0459	2.06	6.23
26	ZZZZZ	ZZZZZ	12/08/09	0511	2.06	6.22
27	PIBLK07	WAR090914-99	12/08/09	0523	2.06	6.23
28	INDAB05	WPE091123-10	12/08/09	0535	2.06	6.23
29	PIBLK08	WAR090914-99	12/08/09	0547	2.06	6.23
30	ZZZZZ	ZZZZZ	12/08/09	0559	2.06	6.23
31	ZZZZZ	ZZZZZ	12/08/09	0611	2.06	6.23
32	ZZZZZ	ZZZZZ	12/08/09	0623	2.06	6.23

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 2 of 2

FORM VIII SV OLM03.0

Identification Summary

SDG Number: 10–600–1 **Client ID:** LCS for batch 927115

Lab Sample ID: 1201982204

Data File:	065f6501.d	**Data File:**	065b6501.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	03–DEC–09 04:12	**Analyzed:**	03–DEC–09 04:12

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
gamma–BHC (Lindane)							24
Column 1	1	3.45	3.42 – 3.48	.00366		mg/L	
Column 2	1	3.11	3.08 – 3.14	.00288		mg/L	
Heptachlor							28.7
Column 1	1	3.82	3.79 – 3.85	.00384		mg/L	
Column 2	1	3.44	3.41 – 3.47	.00288		mg/L	
Heptachlor epoxide							23
Column 1	1	4.47	4.43 – 4.49	.00338		mg/L	
Column 2	1	4.07	4.04 – 4.1	.00268		mg/L	
Endrin							5.02
Column 1	1	5.02	4.99 – 5.05	.00331		mg/L	
Column 2	1	4.68	4.65 – 4.71	.00315		mg/L	
Methoxychlor							3.81
Column 1	1	5.5	5.47 – 5.53	.0371		mg/L	
Column 2	1	5.34	5.32 – 5.38	.0357		mg/L	

Identification Summary

SDG Number: 10–600–1 **Client ID:** LCS for batch 927115

Lab Sample ID: 1201982206

Data File:	067f6701.d	**Data File:**	067b6701.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	03–DEC–09 04:36	**Analyzed:**	03–DEC–09 04:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Chlordane (tech.)							5.39
Column 1	1	3.76	3.66 – 3.86	.0888		mg/L	
	2	4.42	4.32 – 4.52	.0775		mg/L	
	3	4.55	4.45 – 4.65	.0683		mg/L	
	4	4.63	4.53 – 4.73	.0676		mg/L	
	5	4.77	4.67 – 4.87	.0582		mg/L	
					.0721		
Column 2	1	3.33	3.3 – 3.36	.0771		mg/L	
	2	4.05	4.02 – 4.08	.0577		mg/L	
	3	4.19	4.16 – 4.22	.0639		mg/L	
	4	4.29	4.26 – 4.32	.0653		mg/L	
	5	4.44	4.41 – 4.47	.0775		mg/L	
					.0683		

Identification Summary

SDG Number: 10-600-1 **Client ID:** LCS for batch 927115

Lab Sample ID: 1201982205

Data File:	066f6601.d	**Data File:**	066b6601.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	03-DEC-09 04:24	**Analyzed:**	03-DEC-09 04:24

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							16.1
Column 1	1	4.66	4.63 – 4.69	.0755		mg/L	
	2	4.88	4.85 – 4.91	.076		mg/L	
	3	4.93	4.9 – 4.96	.0856		mg/L	
	4	4.97	4.94 – 5	.0919		mg/L	
	5	5.15	5.12 – 5.18	.1		mg/L	
					.0858		
Column 2	1	4.55	4.52 – 4.58	.0783		mg/L	
	2	4.78	4.75 – 4.81	.059		mg/L	
	3	4.8	4.77 – 4.83	.0762		mg/L	
	4	4.86	4.83 – 4.89	.0735		mg/L	
	5	5.02	4.99 – 5.05	.0784		mg/L	
					.0731		

QUALITY CONTROL DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201980055**				
Client Sample:	**QC for batch 926091**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 926091**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:36**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**062f6201-600.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	062b6201-600.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/062f6201-600.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK01
Inj Date : 03-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201980055|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 62 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.575	2.573	0.002	62780491	152.131	0.00761	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	26540591	156.598	0.00783	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/062f6201-600.d

Date : 03-DEC-2009 03:36

Client ID: TBLK01

Sample Info: |1201980055|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

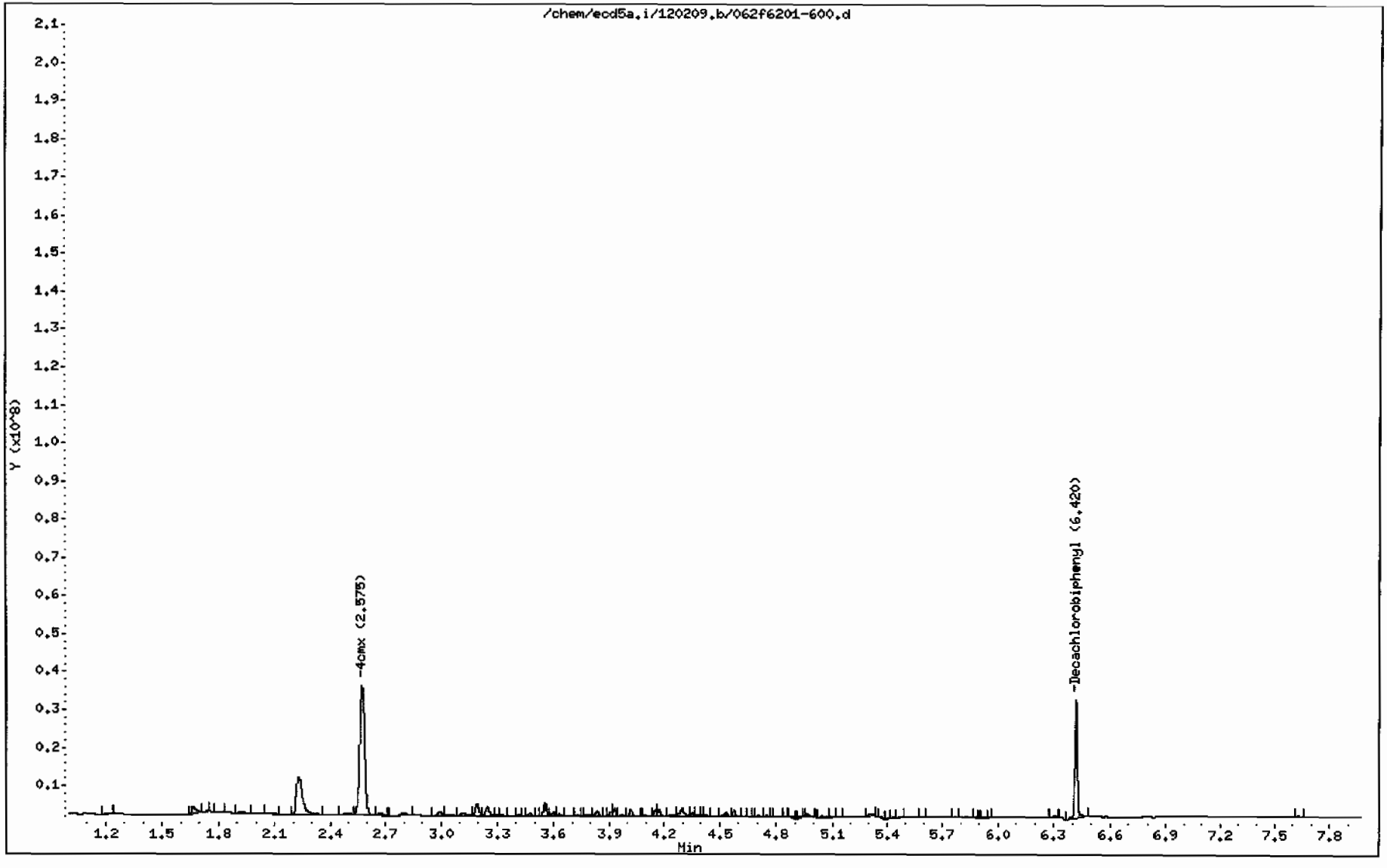

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/062b6201-600.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK01
Inj Date : 03-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201980055|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 62 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.121	0.003	576528679	127.688	0.00638	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	409689172	127.859	0.00639	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/062b6201-600.d

Date : 03-DEC-2009 03:36

Client ID: TBLK01

Sample Info: |1201980055|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

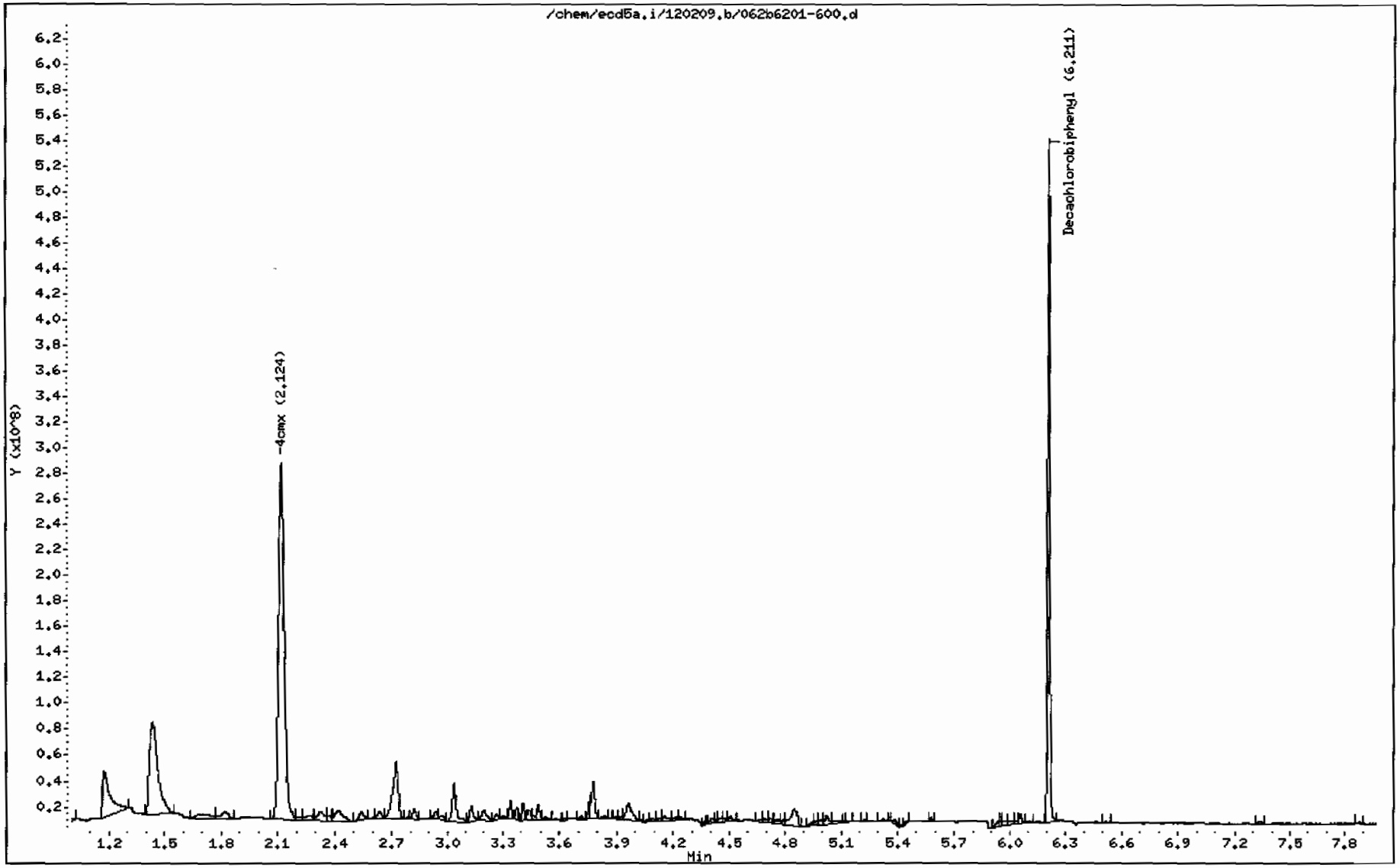

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982197**				
Client Sample:	**QC for batch 927115**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927115**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 04:00**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**064f6401-600.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	064b6401-600.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/064f6401-600.d
Lab Smp Id: 1201982197 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 04:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982197|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 64 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.575	2.573	0.002	61060351	147.963	0.00740	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.419	6.422	-0.003	27244870	160.754	0.00804	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/064f6401-600.d

Date : 03-DEC-2009 04:00

Client ID: PBLK01

Sample Info: |120198219711|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

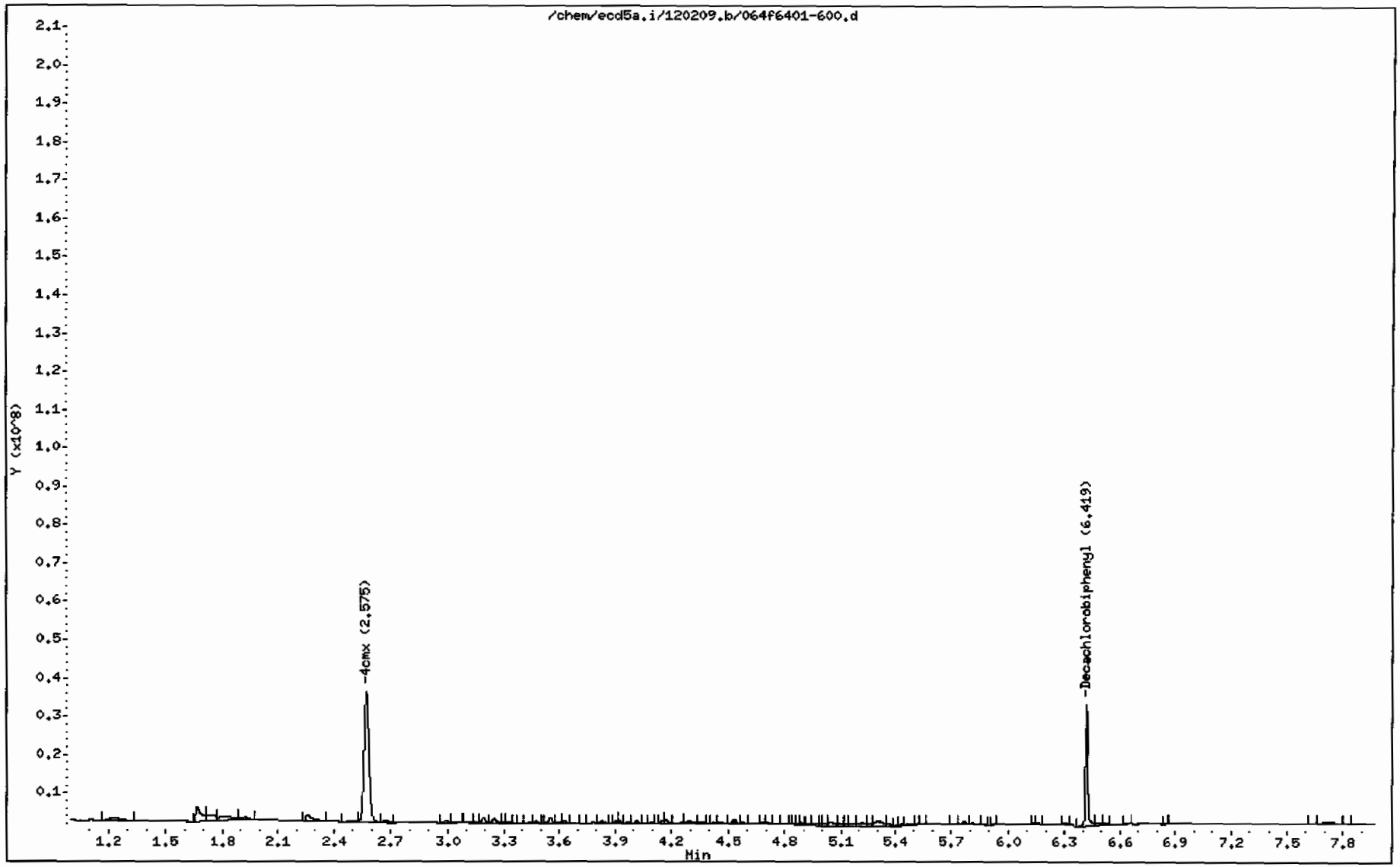

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/064b6401-600.d
Lab Smp Id: 1201982197 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 04:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982197|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 64 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.122	2.121	0.001	556868757	123.334	0.00617	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	379601299	118.469	0.00592	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/064b6401-600.d

Date : 03-DEC-2009 04:00

Client ID: PBLK01

Sample Info: |120198219711|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

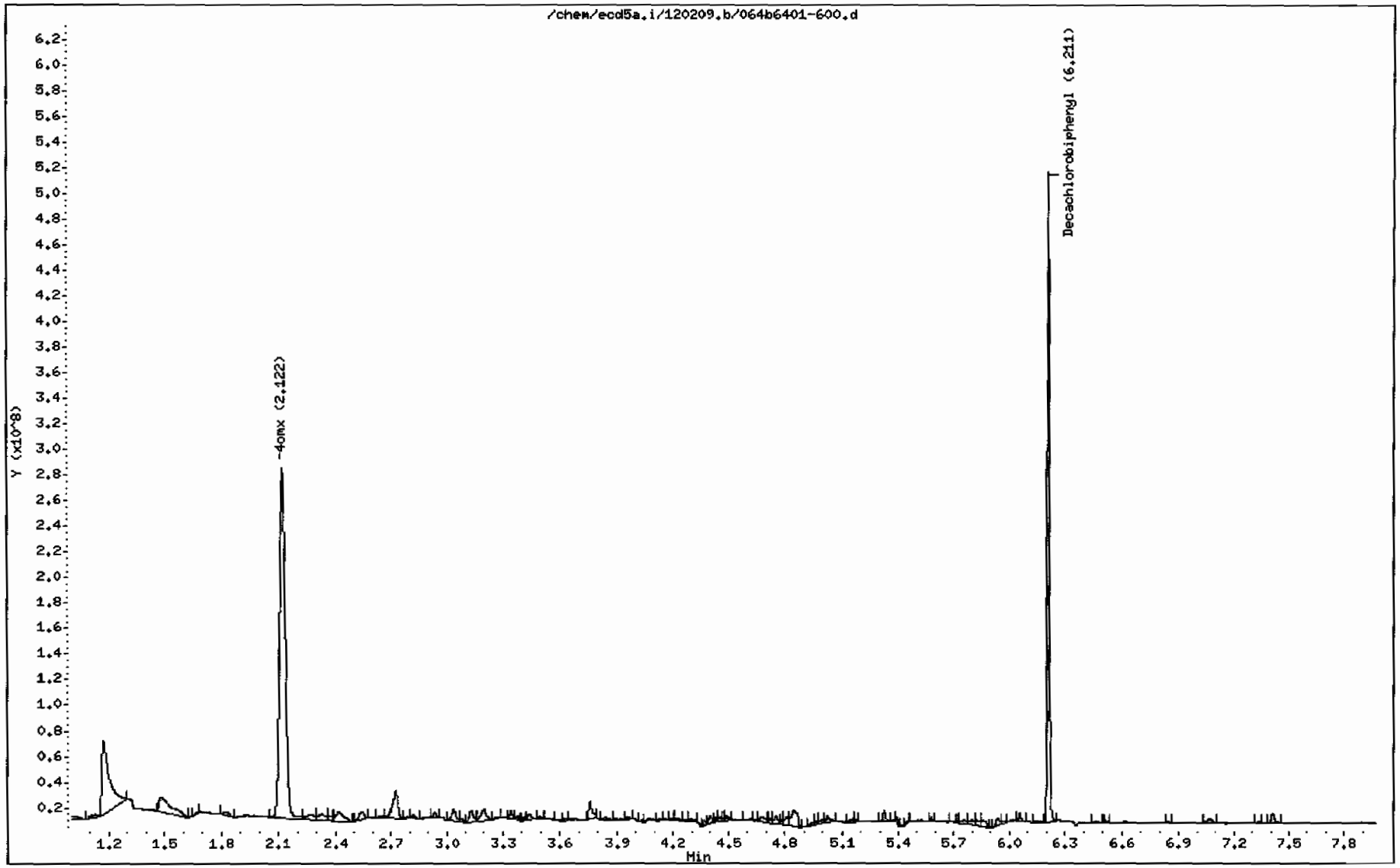

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982206**				
Client Sample:	**QC for batch 927115**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927115**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 04:36**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**067f6701-600.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	067b6701-600.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)		0.0683	mg/L	0.000765	0.0025	2
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd5a.i/120209.b/067f6701-600.d
Lab Smp Id: 1201982206 Client Smp ID: PBLK01CLCS
Inj Date : 03-DEC-2009 04:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982206|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|CLCS|SOIL|CLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 67 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.573	2.573	0.000	58882665	142.686	0.00713	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	24861060	146.688	0.00733	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.763	3.763	0.000	27004993	1775.41	0.0888	80.00- 120.00	100.00
4.423	4.422	0.001	13773257	1550.19	0.0775	39.94- 79.94	51.00
4.546	4.546	0.000	66076716	1365.68	0.0683	302.06- 342.06	244.68
4.631	4.631	0.000	100502774	1352.56	0.0676	449.29- 489.29	372.16
4.766	4.766	0.000	4640793	1163.80	0.0582	3.38- 43.38	17.18
			Average of Peak Concentrations =		0.0721		

Data File: /chem/ecd5a.i/120209.b/067f6701-600.d

Date : 03-DEC-2009 04:36

Client ID: PBLK01CLCS

Sample Info: |1201982206|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

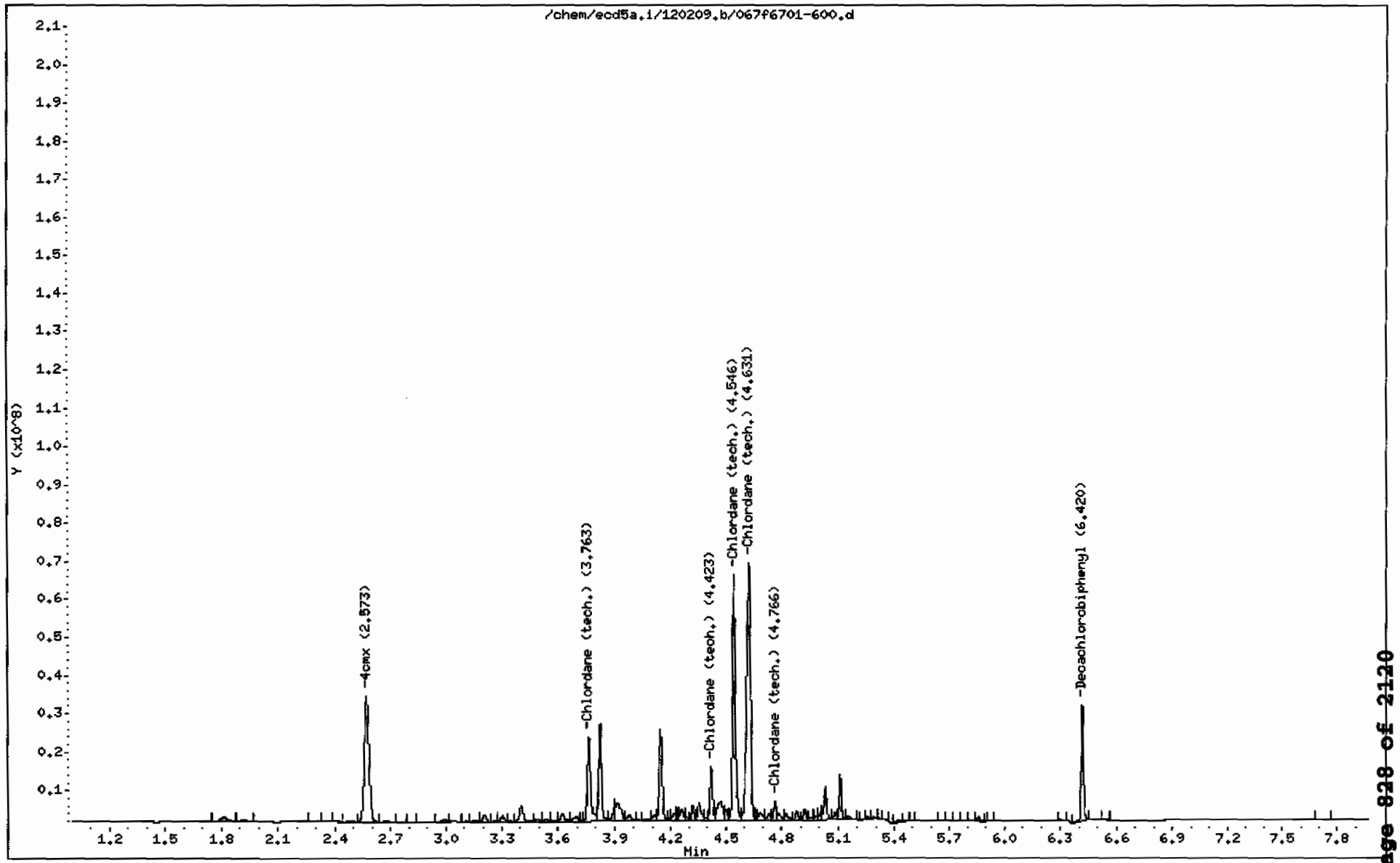

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CLP-2

Data file : /chem/ecd5a.i/120209.b/067b6701-600.d
Lab Smp Id: 1201982206 Client Smp ID: PBLK01CLCS
Inj Date : 03-DEC-2009 04:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982206|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|CLCS|SOIL|CLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 67 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	577536521	127.911	0.00640	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	395183325	123.332	0.00617	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.335	3.334	0.001	302786537	1542.60	0.0771	80.00- 120.00	100.00
4.051	4.050	0.001	123462224	1153.05	0.0576	31.49- 71.49	40.78
4.195	4.194	0.001	624699662	1278.49	0.0639	219.88- 259.88	206.32
4.289	4.288	0.001	499401112	1305.31	0.0653	168.01- 208.01	164.94
4.440	4.438	0.002	63590121	1549.95	0.0775	1.45- 41.45	21.00
			Average of Peak Concentrations =		0.0683		

Data File: /chem/ecd5a.i/120209.b/067b6701-600.d

Date : 03-DEC-2009 04:36

Client ID: PBLK01CLCS

Sample Info: |1201982206|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

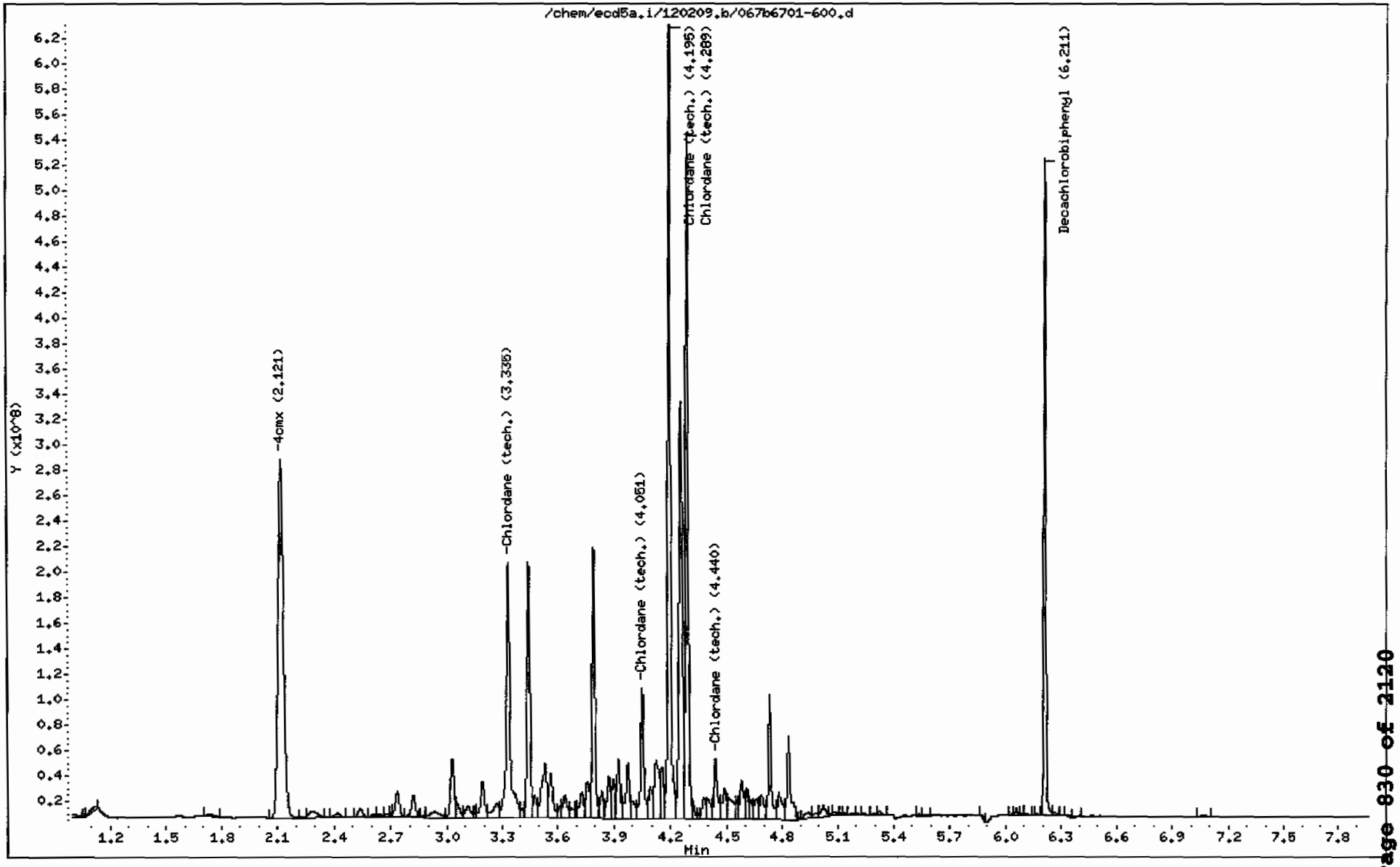

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982204**				
Client Sample:	**QC for batch 927115**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927115**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 04:12**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**065f6501-600.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	065b6501-600.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)		0.00288	mg/L	0.00005	0.0002	2
76-44-8	Heptachlor		0.00288	mg/L	0.00005	0.0002	2
1024-57-3	Heptachlor epoxide		0.00268	mg/L	0.00005	0.0002	2
72-20-8	Endrin		0.00315	mg/L	0.0001	0.0004	2
72-43-5	Methoxychlor		0.0357	mg/L	0.0005	0.002	2
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd5a.i/120209.b/065f6501-600.d
Lab Smp Id: 1201982204 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 04:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982204|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 65 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.576	2.573	0.003	47299346	114.617	0.00573	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.419	6.422	-0.003	21751726	128.342	0.00642	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.448	3.447	0.001	34197886	73.2963	0.00366	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	31421994	76.8331	0.00384	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.465	4.464	0.001	26865138	67.6445	0.00338	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.017	5.017	0.000	21760331	66.2854	0.00331	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.503	5.503	0.000	87588960	741.418	0.0371	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/065f6501-600.d
Date : 03-DEC-2009 04:12
Client ID: PBLK01LCS
Sample Info: |120198220411|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

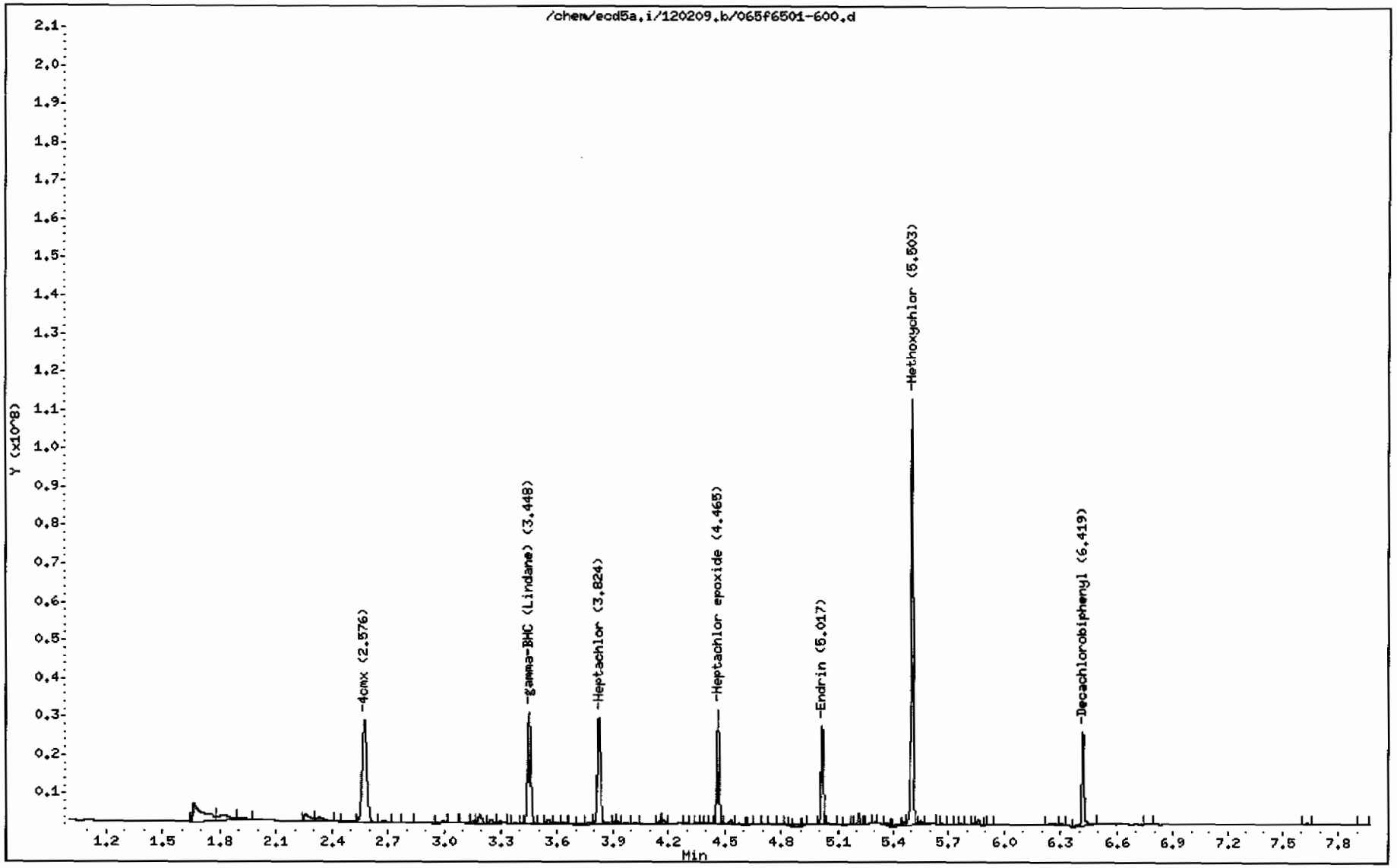

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CLP-2

Data file : /chem/ecd5a.i/120209.b/065b6501-600.d
Lab Smp Id: 1201982204 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 04:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982204|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 65 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.121	0.003	428445008	94.8908	0.00474	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	284574727	88.8124	0.00444	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.106	0.001	315611209	57.5806	0.00288	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	256697854	57.5517	0.00288	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	225304932	53.6794	0.00268	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.679	4.679	0.000	222738983	63.0375	0.00315	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.344	5.346	-0.002	642763173	713.732	0.0357	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/065b6501-600.d
Date : 03-DEC-2009 04:12
Client ID: PBLK01LCS
Sample Info: |120198220411|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

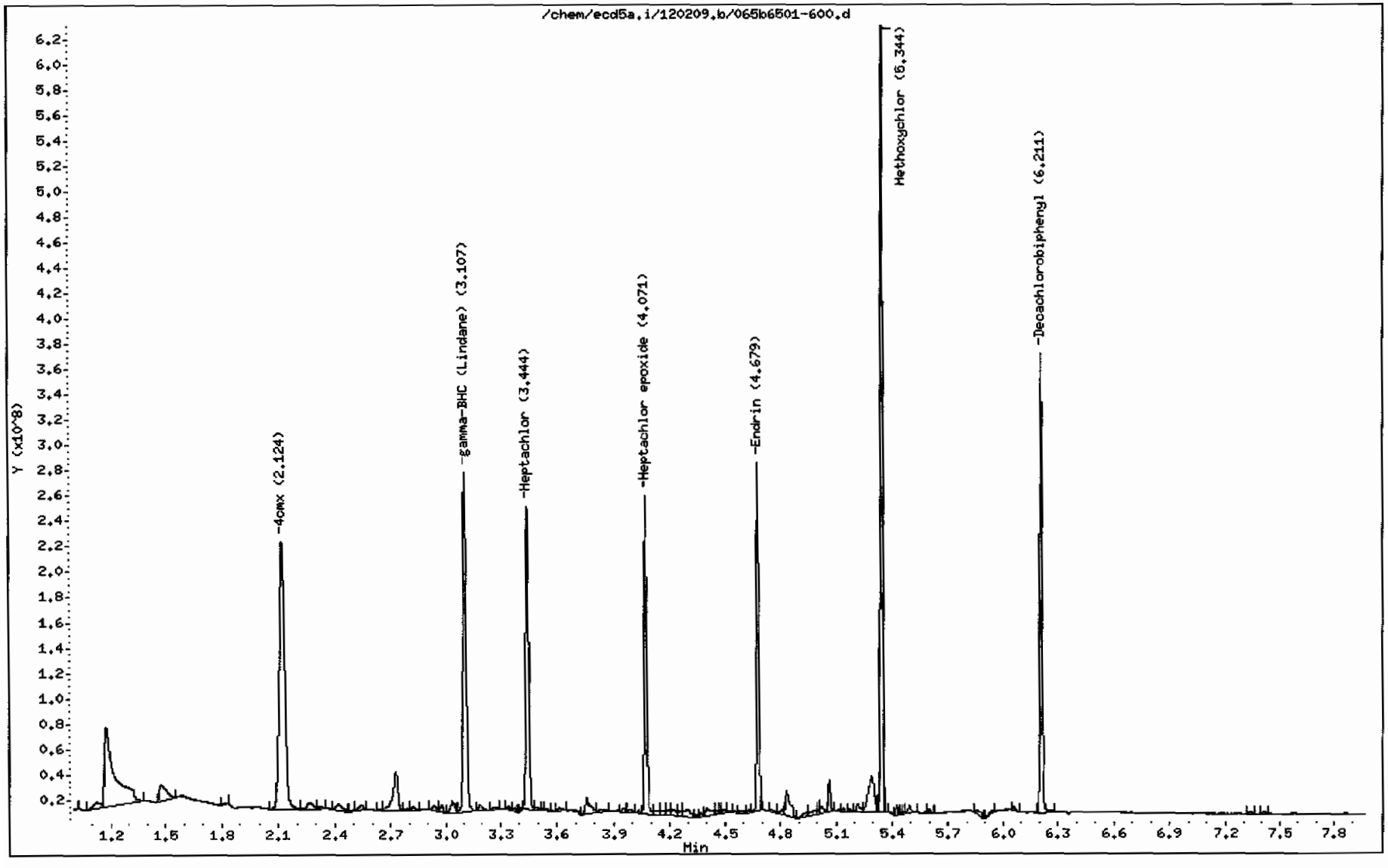

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982205**				
Client Sample:	**QC for batch 927115**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927115**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 04:24**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**066f6601-600.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	066b6601-600.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene		0.0731	mg/L	0.0015	0.005	2

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/066f6601-600.d
Lab Smp Id: 1201982205 Client Smp ID: PBLK01TLCS
Inj Date : 03-DEC-2009 04:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982205|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 66 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.573	0.006	51977341	125.953	0.00630	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	25486428	150.378	0.00752	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.660	4.660	0.000	3238371	1510.15	0.0755	80.00- 120.00	100.00(M)
4.876	4.875	0.001	8556929	1520.49	0.0760	228.26- 268.26	264.24
4.930	4.931	-0.001	8833826	1712.61	0.0856	224.51- 264.51	272.79
4.969	4.967	0.002	12690301	1837.50	0.0919	293.53- 333.53	391.87
5.149	5.149	0.000	22936754	2002.46	0.100	518.17- 558.17	708.28

Average of Peak Concentrations = 0.0858

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/066f6601-600.d
Date : 03-DEC-2009 04:24
Client ID: PBLK01TLCS
Sample Info: |120198220511|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

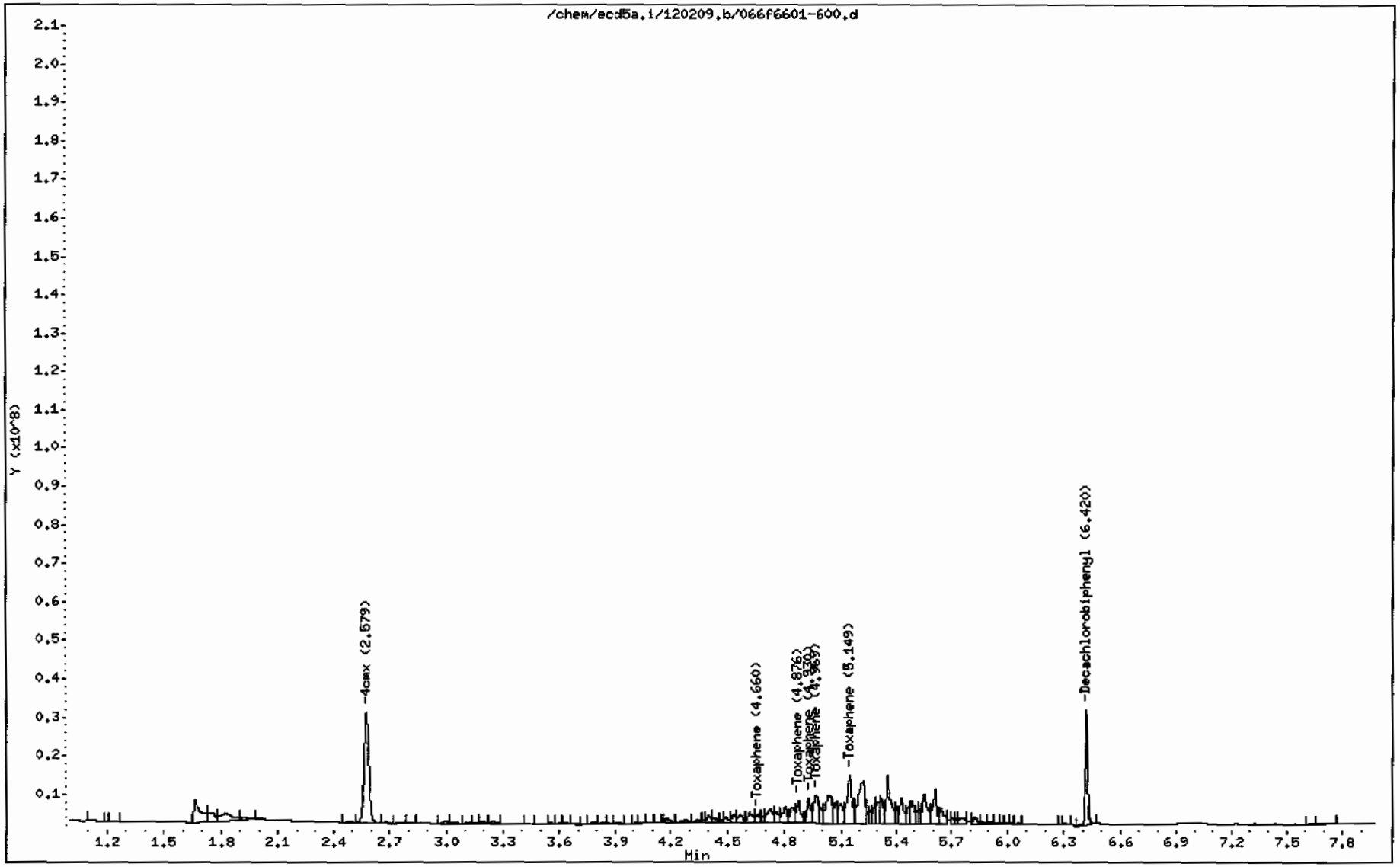

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/066f6601-600.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

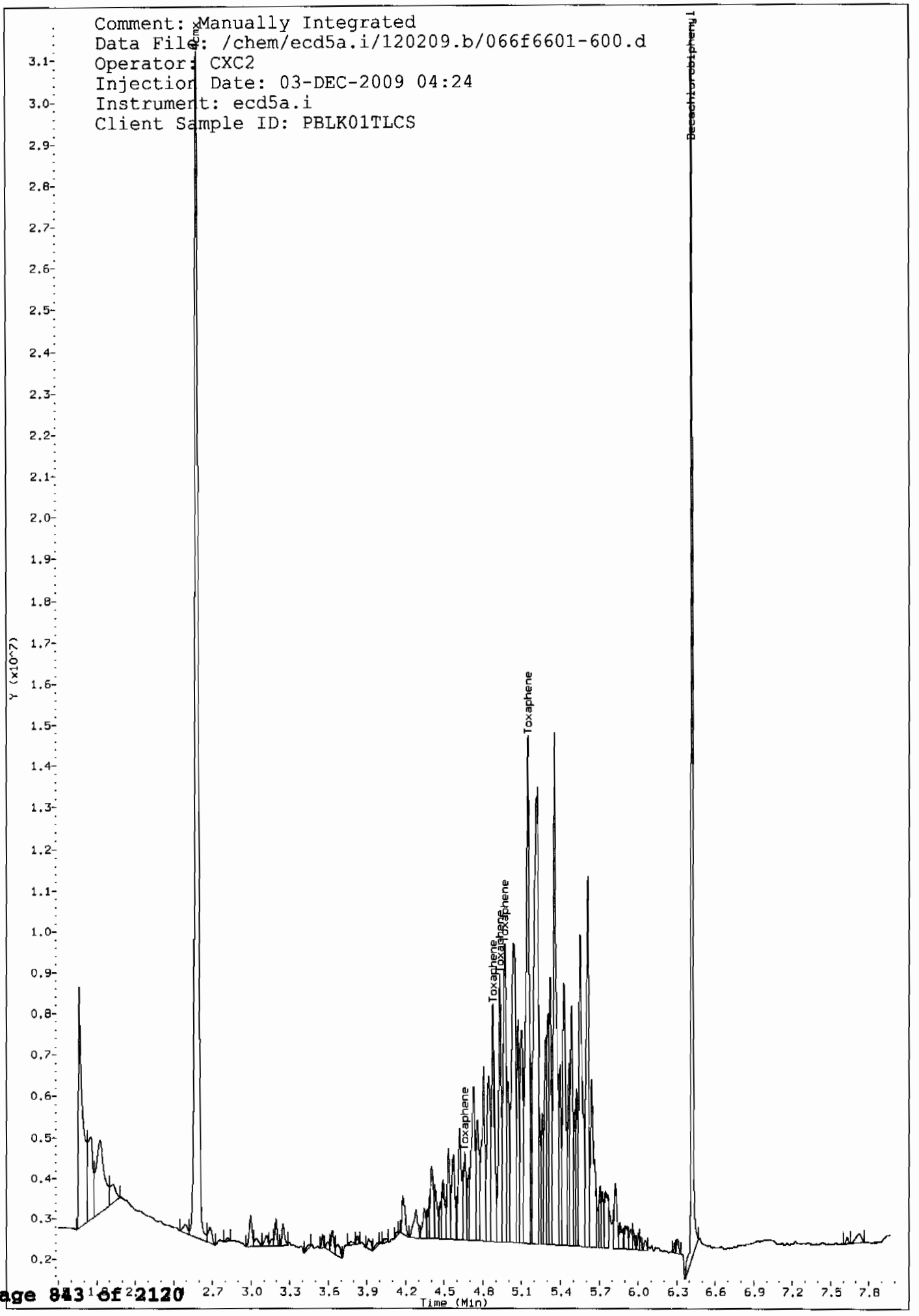

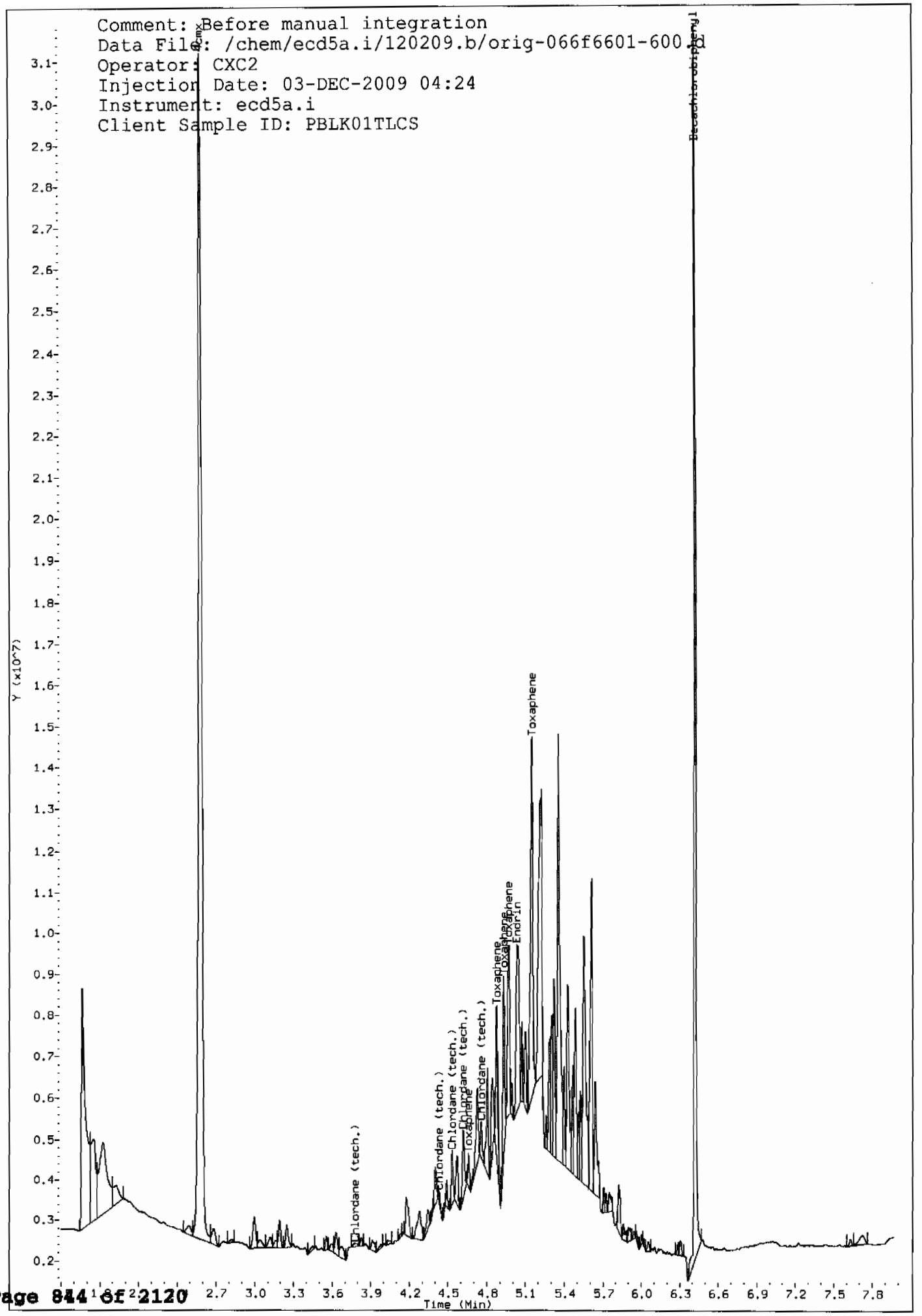
Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-066f6601-600.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
Decachlorobiphenyl
Toxaphene
Endrin
Chlordane (tech.)
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/066b6601-600.d
Lab Smp Id: 1201982205 Client Smp ID: PBLK01TLCS
Inj Date : 03-DEC-2009 04:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982205|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 66 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.128	2.121	0.007	434239123	96.1741	0.00481	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.210	6.214	-0.004	340178961	106.166	0.00531	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.553	4.553	0.000	66208285	1566.26	0.0783	80.00- 120.00	100.00(M)
4.783	4.782	0.001	63360438	1179.62	0.0590	98.43- 138.43	95.70
4.801	4.802	-0.001	121319779	1524.59	0.0762	162.03- 202.03	183.24
4.860	4.861	-0.001	209772902	1470.05	0.0735	311.65- 351.65	316.84
5.016	5.018	-0.002	119414584	1567.03	0.0784	147.89- 187.89	180.36

Average of Peak Concentrations = 0.0731

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/066b6601-600.d
Date : 03-DEC-2009 04:24
Client ID: PBLK01TLCS
Sample Info: |120198220511|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

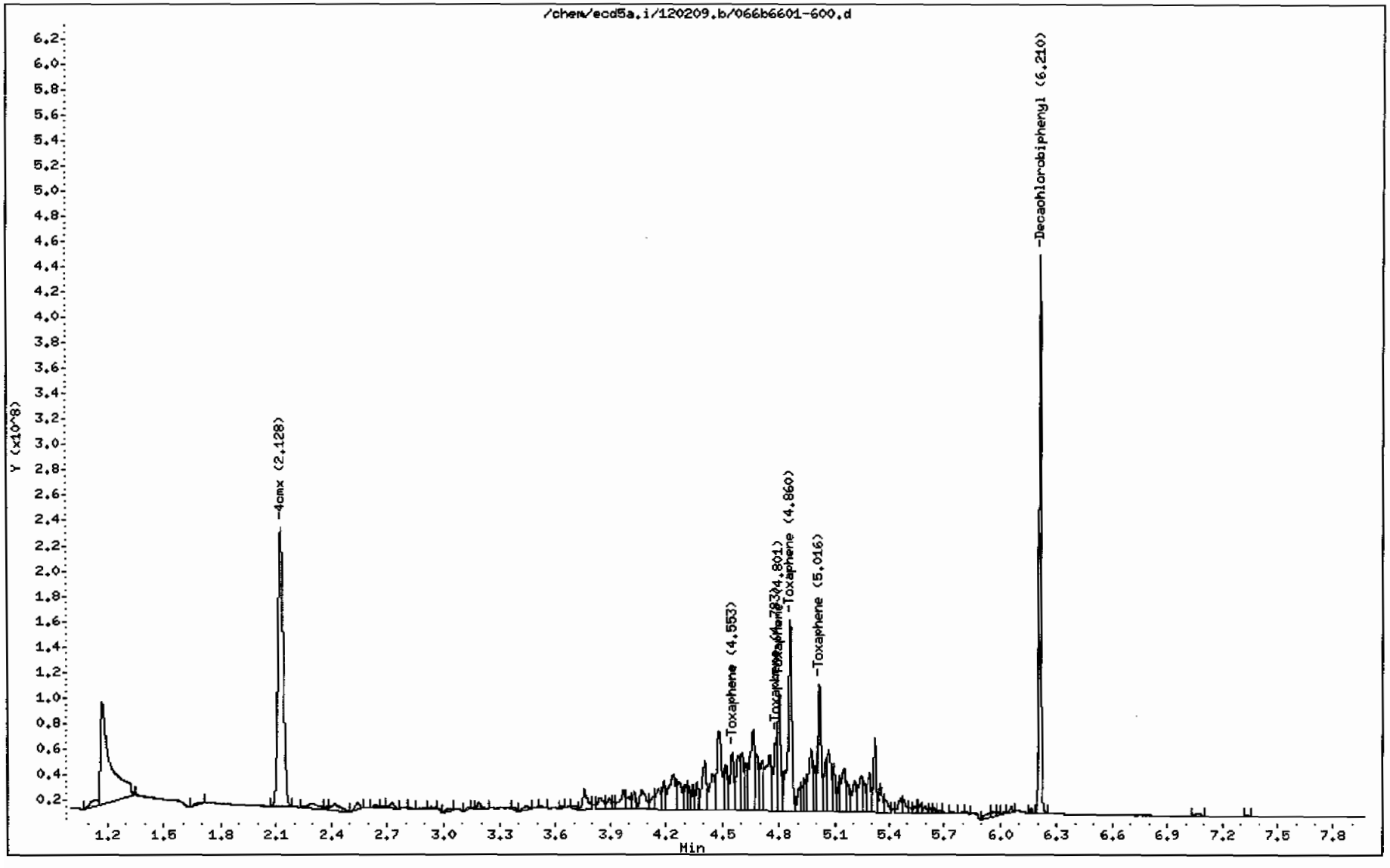

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/066b6601-600.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

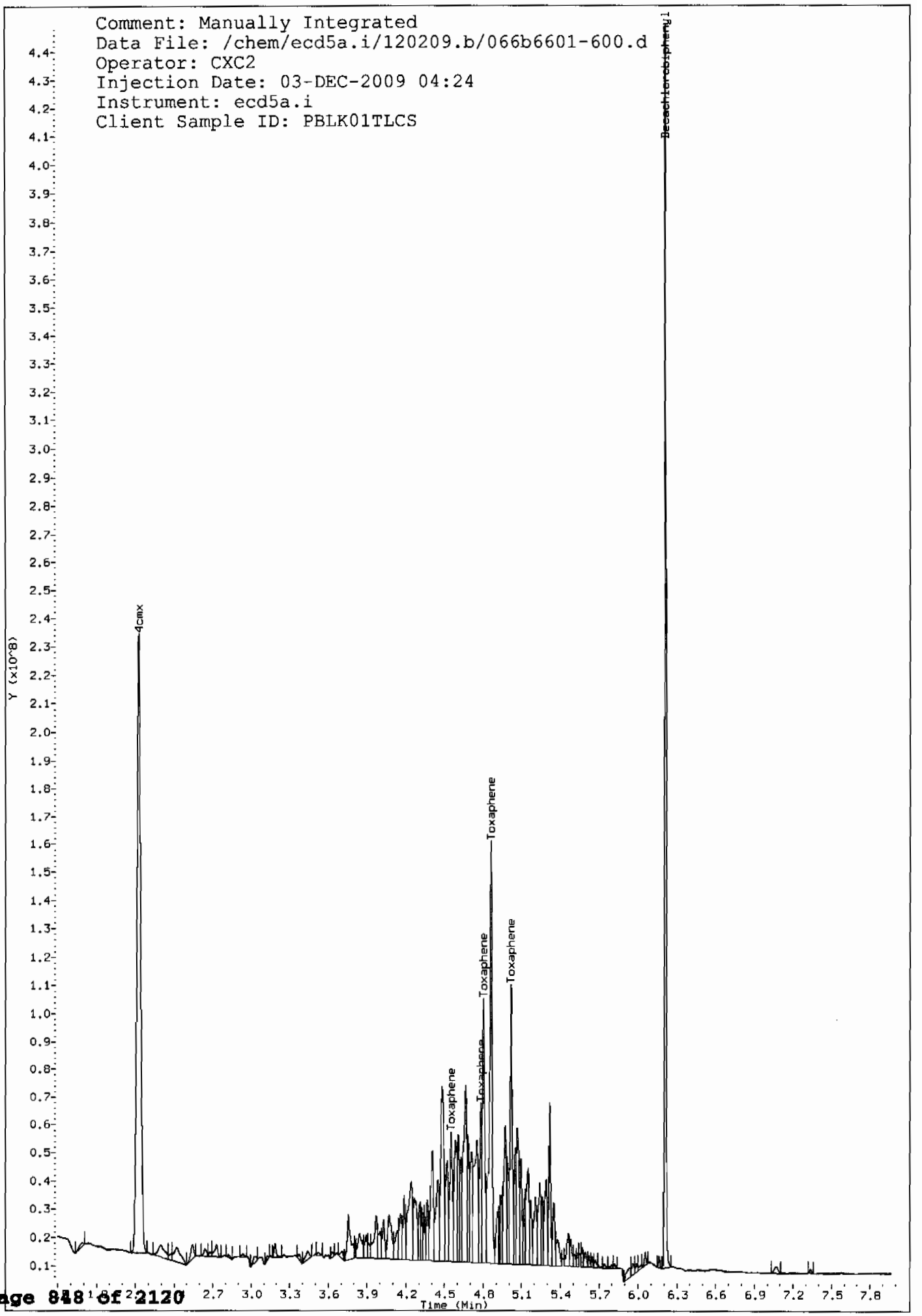

Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-066b6601-6[illegible]0.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

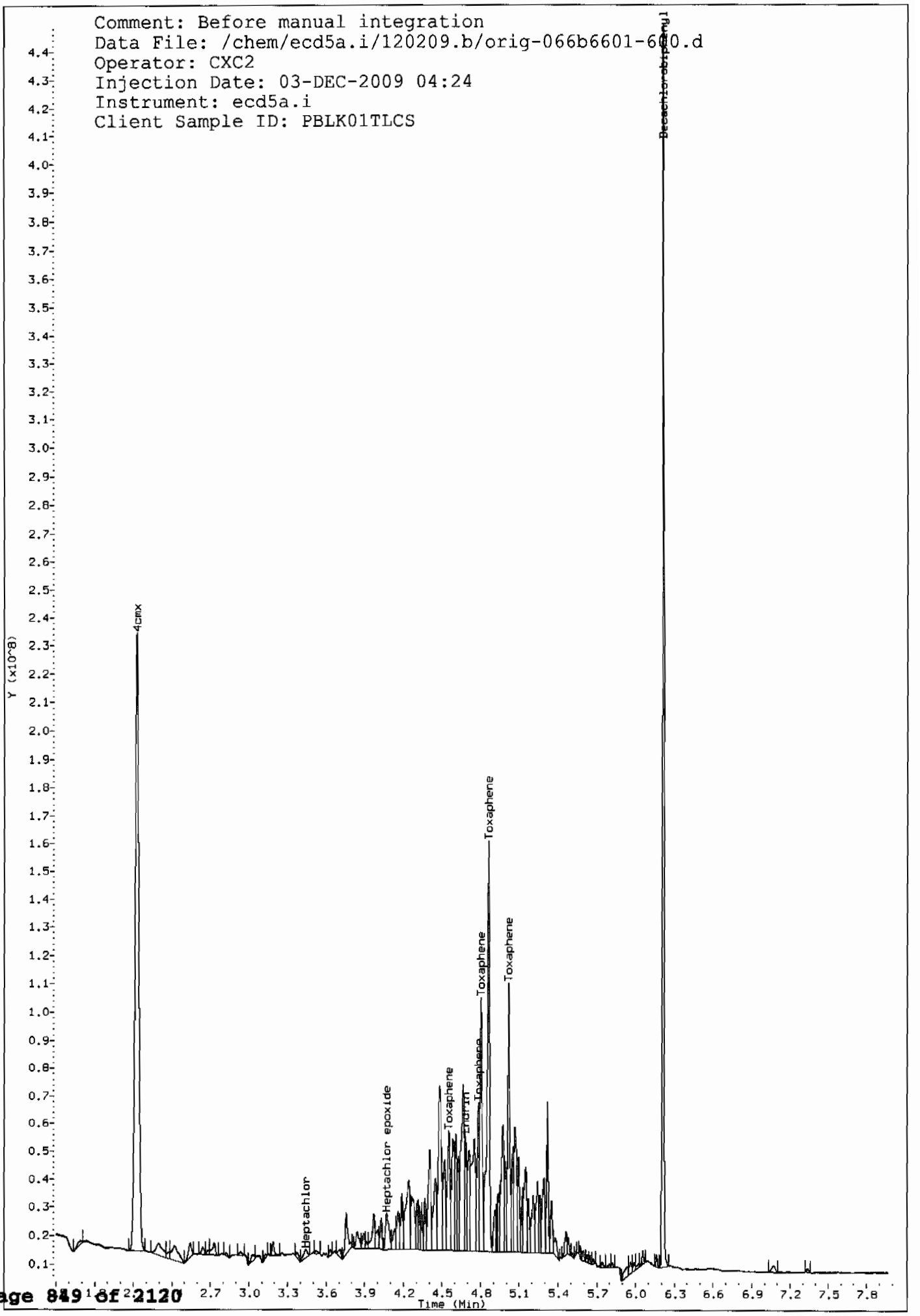

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 11/29/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ600
MERCURY LOT 906110-AS

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112809.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	28-NOV-2009 11:56		112809	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	28-NOV-2009 12:08		112809	1.0		(b) DDT 8.1%, Endrin 6.6%; (f) DDT 7.9%, Endrin 5.5%
003b0301.d	WPE091128-01AB	CXC2	28-NOV-2009 12:35		112809	1.0		DUSE
004b0401.d	WPE091128-01AB	CXC2	28-NOV-2009 12:47		112809	1.0		INDAB ICAL level 1
005b0501.d	WPE091128-02AB	CXC2	28-NOV-2009 12:58		112809	1.0		INDAB ICAL level 2
006b0601.d	WPE091128-03AB	CXC2	28-NOV-2009 13:10		112809	1.0		INDAB ICAL level 3
007b0701.d	WPE091128-04AB	CXC2	28-NOV-2009 13:22		112809	1.0		INDAB ICAL level 4
008b0801.d	IPE091128-02AB	CXC2	28-NOV-2009 13:34		112809	1.0		INDAB ICAL level 5
009b0901.d	WPE091123-10AB	CXC2	28-NOV-2009 13:46		112809	1.0		All okay
010b1001.d	WPE091124-11TX	CXC2	28-NOV-2009 14:15		112809	1.0		TOXAPH ICAL level 1
011b1101.d	WPE091124-12TX	CXC2	28-NOV-2009 14:27		112809	1.0		TOXAPH ICAL level 2
012b1201.d	WPE091124-13TX	CXC2	28-NOV-2009 14:39		112809	1.0		TOXAPH ICAL level 3
013b1301.d	WPE091124-14TX	CXC2	28-NOV-2009 14:51		112809	1.0		TOXAPH ICAL level 4
014b1401.d	IPE091121-40TX	CXC2	28-NOV-2009 15:03		112809	1.0		TOXAPH ICAL level 5
015b1501.d	WPE091104-52TX	CXC2	28-NOV-2009 15:15		112809	1.0		All okay

Instrument Batch: /chem/ecd5a.i/112809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091124-21CL	CXC2	28-NOV-2009 15:27		112809	1.0		CHLOR ICAL level 1

017b1701.d	WPE091124-22CL	CXC2	28-NOV-2009 15:39		112809		1.0		CHLOR ICAL level 2
018b1801.d	WPE091124-23CL	CXC2	28-NOV-2009 15:51		112809		1.0		CHLOR ICAL level 3
019b1901.d	WPE091124-24CL	CXC2	28-NOV-2009 16:03		112809		1.0		CHLOR ICAL level 4
020b2001.d	IPE091029-06CL	CXC2	28-NOV-2009 16:15		112809		1.0		CHLOR ICAL level 5
021b2101.d	WPE091021-00CL	CXC2	28-NOV-2009 16:27		112809		1.0		All okay
022b2201.d	WPE091109-99DG	CXC2	28-NOV-2009 16:39		112809		1.0		(b) DDT 9.4%, Endrin 7.5%; (f) DDT 6.4%, Endrin 7.0%
023b2301.d	WAR090914-99IB	CXC2	28-NOV-2009 16:51		112809		1.0		Clean
024b2401.d	1201978233	CXC2	28-NOV-2009 17:03	925346	112809		1.0	MB	DUSE - 4cmx, DCB still low - sent for re-extraction
025b2501.d	1201978234	CXC2	28-NOV-2009 17:14	925346	112809		1.0	LCS	DUSE - 4cmx, DCB still low - sent for re-extraction
026b2601.d	241549001	CXC2	28-NOV-2009 17:26	925346	112809		1.0	LANL	DUSE - 4cmx, DCB still low - sent for re-extraction
027b2701.d	WPE091123-10AB	CXC2	28-NOV-2009 17:38		112809		1.0		(b) alphaCHL low, DDT elevated; (f) gamma-BHC, Endrin, Endosulfan II, DDT, Methoxyclor elevated
028b2801.d	WAR090914-99IB	CXC2	28-NOV-2009 17:50		112809		1.0		Clean
029b2901.d	1201978540	CXC2	28-NOV-2009 18:02	926319	241358		1.0	TB	USE, uploaded both columns, reporting higher result
030b3001.d	1201980556	CXC2	28-NOV-2009 18:14	926319	241358		1.0	MB	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC
031b3101.d	1201980563	CXC2	28-NOV-2009 18:26	926319	112809		1.0	LCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
032b3201.d	1201980564	CXC2	28-NOV-2009 18:38	926319	241358		1.0	TLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
033b3301.d	1201980565	CXC2	28-NOV-2009 18:50	926319	241358		1.0	CLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
034b3401.d	WAR090914-99IB	CXC2	28-NOV-2009 19:02		112809		1.0		Clean
035b3501.d	WPE091123-10AB	CXC2	28-NOV-2009 19:14		112809		1.0		(b) DCB elevated; (f) DDE, Endrin, DDT, Methoxychlor elevated

Instrument Batch: /chem/ecd5a.i/112809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	28-NOV-2009 19:26		112809		1.0		Clean
037b3701.d	241358001	CXC2	28-NOV-2009 19:38	926319	241358		5.0	MECP	USE, uploaded both columns, reporting higher result
038b3801.d	1201980557	CXC2	28-NOV-2009 19:50	926319	241358		5.0	MS	USE, uploaded both columns, reporting higher result

039b3901.d	1201980560	CXC2	28-NOV-2009 20:02	926319	241358		5.0	MSD	USE, uploaded both columns, reporting higher result
040b4001.d	1201980558	CXC2	28-NOV-2009 20:13	926319	241358		5.0	TMS	USE, uploaded both columns, reporting higher result
041b4101.d	1201980561	CXC2	28-NOV-2009 20:25	926319	241358		5.0	TMSD	USE, uploaded both columns, reporting higher result
042b4201.d	1201980559	CXC2	28-NOV-2009 20:37	926319	241358		5.0	CMS	USE, uploaded both columns, reporting higher result
043b4301.d	1201980562	CXC2	28-NOV-2009 20:49	926319	241358		5.0	CMSD	USE, uploaded both columns, reporting higher result
044b4401.d	WPE091123-10AB	CXC2	28-NOV-2009 21:01		112809		1.0		(b) All okay; (f) Multiple analytes elevated
045b4501.d	WAR090914-99IB	CXC2	28-NOV-2009 21:13		112809		1.0		Clean
046b4601.d	1201978549	CXC2	28-NOV-2009 21:25	926342	10-589-1		1.0	TB	USE, uploaded both columns, reporting lower result
047b4701.d	1201980615	CXC2	28-NOV-2009 21:37	926342	10-589-1		1.0	MB	USE, uploaded both columns, reporting lower result
048b4801.d	1201980622	CXC2	28-NOV-2009 21:49	926342	10-589-1		1.0	LCS	USE, uploaded both columns, reporting lower result
049b4901.d	1201980623	CXC2	28-NOV-2009 22:01	926342	10-589-1		1.0	TLCS	USE, uploaded both columns, reporting lower result
050b5001.d	1201980624	CXC2	28-NOV-2009 22:13	926342	10-589-1		1.0	CLCS	USE, uploaded both columns, reporting lower result
051b5101.d	WPE091123-10AB	CXC2	28-NOV-2009 22:25		112809		1.0		(b) DDT, Methoxychlor elevated; (f) Multiple analtyes elevated
052b5201.d	WAR090914-99IB	CXC2	28-NOV-2009 22:37		112809		1.0		Clean
053b5301.d	241504001	CXC2	28-NOV-2009 22:49	926342	10-589-1		1.0	LANL	USE, uploaded both columns, reporting lower result
054b5401.d	241504002	CXC2	28-NOV-2009 23:01	926342	10-589-1		1.0	LANL	USE, uploaded both columns, reporting lower result
055b5501.d	1201980616	CXC2	28-NOV-2009 23:13	926342	10-589-1		1.0	MS	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201980619	CXC2	28-NOV-2009 23:25	926342	10-589-1		1.0	MSD	USE, uploaded both columns, reporting lower result
057b5701.d	1201980617	CXC2	28-NOV-2009 23:37	926342	10-589-1		1.0	TMS	USE, uploaded both columns, reporting lower result
058b5801.d	1201980620	CXC2	28-NOV-2009 23:49	926342	10-589-1		1.0	TMSD	USE, uploaded both columns, reporting lower result
059b5901.d	1201980618	CXC2	29-NOV-2009 00:00	926342	10-589-1		1.0	CMS	USE, uploaded both columns, reporting lower result
060b6001.d	1201980621	CXC2	29-NOV-2009 00:12	926342	10-589-1		1.0	CMSD	USE, uploaded both columns, reporting lower result
061b6101.d	241504003	CXC2	29-NOV-2009 00:24	926342	10-589-1		1.0	LANL	USE, uploaded both columns, reporting lower result
062b6201.d	WPE091123-10AB	CXC2	29-NOV-2009 00:36		112809		1.0		(b) DDT elevated; (f) Multiple analtyes elevated (including DCB)

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/01/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:HXJ1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A
B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112909.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	HXJ1	29-NOV-2009 18:05		112909	1.0		Clean
002b0201.d	WPE091109-99DG	HXJ1	29-NOV-2009 18:17		112909	1.0		(B) DDT 4.2% Endrin 1.4% (F) DDT 1.7% Endrin 1.4%
003b0301.d	WPE091123-10AB	HXJ1	29-NOV-2009 18:29		112909	1.0		DUSE - multiple analyte elevated
004b0401.d	WPE091104-52TX	HXJ1	29-NOV-2009 18:41		112909	1.0		(B) All OK (F) Passes on average/ All OK DODQSM & 8081B
005b0501.d	WPE091021-00CL	HXJ1	29-NOV-2009 18:53		112909	1.0		Elevated - Not target
006b0601.d	WPE091128-01AB	HXJ1	29-NOV-2009 19:05		112909	1.0		INDAB ICAL LEVEL 1
007b0701.d	WPE091128-02AB	HXJ1	29-NOV-2009 19:17		112909	1.0		INDAB ICAL LEVEL 2
008b0801.d	WPE091128-03AB	HXJ1	29-NOV-2009 19:29		112909	1.0		INDAB ICAL LEVEL 3
009b0901.d	WPE091128-04AB	HXJ1	29-NOV-2009 19:41		112909	1.0		INDAB ICAL LEVEL 4
010b1001.d	IPE091128-02AB	HXJ1	29-NOV-2009 19:53		112909	1.0		INDAB ICAL LEVEL 5
011b1101.d	WPE091123-10AB	HXJ1	29-NOV-2009 20:05		112909	1.0		All OK
012b1201.d	WAR090914-99IB	HXJ1	29-NOV-2009 20:17		112909	1.0		Clean
013b1301.d	1201978233	HXJ1	29-NOV-2009 20:28	925346	10-613	1.0	MB	DUSE - DCB low
014b1401.d	1201978234	HXJ1	29-NOV-2009 20:40	925346	10-613	1.0	LCS	DUSE - DCB low
015b1501.d	24I549001	HXJ1	29-NOV-2009 20:52	925346	10-613	1.0	LANL	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112909.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016b1601.d	WPE091123-10AB	HXJ1	29-NOV-2009 21:06		112909		1.0		(B) Heptachlor epoxide & gamma-CHL low; Methoyxchlor elevated (F) DDT elevated - CCV failure confirmed in sequence 112809.b
017b1701.d	WAR090914-99IB	HXJ1	29-NOV-2009 21:20		112909		1.0		Clean
018b1801.d	1201981581	HXJ1	29-NOV-2009 21:32	926807	10-578		1.0	MB	USE - uploaded both columns, reporting lower result
019b1901.d	1201981584	HXJ1	29-NOV-2009 21:44	926807	10-578		1.0	LCS	USE - uploaded both columns, reporting lower result (F) 4CMX elevated
020b2001.d	1201981585	HXJ1	29-NOV-2009 21:56	926807	10-578		1.0	TLCS	USE - uploaded both columns, reporting lower result (F) surrogates elevated
021b2101.d	241423004	HXJ1	29-NOV-2009 22:08	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result - Aroclor
022b2201.d	1201981582	HXJ1	29-NOV-2009 22:20	926807	10-578		10.0	MS	USE - uploaded both columns, reporting lower result - Aroclor
023b2301.d	1201981583	HXJ1	29-NOV-2009 22:32	926807	10-578		10.0	MSD	USE - uploaded both columns, reporting lower result - Aroclor
024b2401.d	WAR090914-99IB	HXJ1	29-NOV-2009 22:44		112909		1.0		Clean
025b2501.d	WPE091123-10AB	HXJ1	29-NOV-2009 22:56		112909		1.0		(B) Methoxychlor elevated (F) All OK
026b2601.d	WAR090914-99IB	HXJ1	29-NOV-2009 23:08		112909		1.0		Clean
027b2701.d	241423005	HXJ1	29-NOV-2009 23:20	926807	10-578		10.0	LANL	DUSE - still has sulfur - see re-cleaned vial at 32
028b2801.d	241503002	HXJ1	29-NOV-2009 23:32	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
029b2901.d	241503003	HXJ1	29-NOV-2009 23:44	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result ** hit of DDT below PQL
030b3001.d	241503004	HXJ1	29-NOV-2009 23:56	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
031b3101.d	241524002	HXJ1	30-NOV-2009 00:08	926807	10-600		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
032b3201.d	241423005	HXJ1	30-NOV-2009 00:20	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
033b3301.d	WPE091123-10AB	HXJ1	30-NOV-2009 00:35		112909		1.0		(B) Endrin ketone low (F) gamma-BHC elevated - B&F All OK 8081B
034b3401.d	WAR090914-99IB	HXJ1	30-NOV-2009 00:47		112909		1.0		Clean
035b3501.d	1201979436	HXJ1	30-NOV-2009 00:59	925818	241227		1.0	MB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

Instrument Batch: /chem/ecd5a.i/112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	1201979439	HXJ1	30-NOV-2009 01:11	925818	241227	1.0	LCS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

037b3701.d	241227001	HXJ1	30-NOV-2009 01:23	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
038b3801.d	241227002	HXJ1	30-NOV-2009 01:35	925818	241227	20.0	WSRB	DUSE - surrogates elevated see re-analysis 113009 **HITS gamma- & alpha-CHL, DDE & DDT
039b3901.d	241227003	HXJ1	30-NOV-2009 01:47	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
040b4001.d	241227004	HXJ1	30-NOV-2009 01:59	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
041b4101.d	1201979437	HXJ1	30-NOV-2009 02:11	925818	241227	20.0	MS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
042b4201.d	1201979438	HXJ1	30-NOV-2009 02:23	925818	241227	20.0	MSD	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
043b4301.d	WPE091123-10AB	HXJ1	30-NOV-2009 02:34		112909	1.0		(B) All OK (F) gamma-BHC, gamma-CHL and EndoII elevated for 81A
044b4401.d	WAR090914-99IB	HXJ1	30-NOV-2009 02:46		112909	1.0		Clean
045b4501.d	241227005	HXJ1	30-NOV-2009 02:58	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
046b4601.d	241227006	HXJ1	30-NOV-2009 03:10	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
047b4701.d	241227007	HXJ1	30-NOV-2009 03:22	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
048b4801.d	241227008	HXJ1	30-NOV-2009 03:34	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, DDE & DDD
049b4901.d	241227009	HXJ1	30-NOV-2009 03:46	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
050b5001.d	WPE091123-10AB	HXJ1	30-NOV-2009 03:58		112909	1.0		(B) All OK (F) gamma-BHC & gamma-CHL elevated for 8081A
051b5101.d	WAR090914-99IB	HXJ1	30-NOV-2009 04:10		112909	1.0		Clean
052b5201.d	1201981522	HXJ1	30-NOV-2009 04:22	926780	241451	1.0	MB	DUSE - CCV failure confirmed, reporting analysis 120109.b
053b5301.d	1201981525	HXJ1	30-NOV-2009 04:34	926780	241451	1.0	LCS	DUSE - CCV failure confirmed, reporting analysis 120109.b

054b5401.d	241451001	HXJ1	30-NOV-2009 04:46	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
055b5501.d	241451002	HXJ1	30-NOV-2009 04:58	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b

Instrument Batch: /chem/ecd5a.i/112909.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	241451003	HXJ1	30-NOV-2009 05:10	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
057b5701.d	1201981523	HXJ1	30-NOV-2009 05:22	926780	241451	1.0	MS	DUSE - CCV failure confirmed, reporting analysis 120109.b
058b5801.d	1201981524	HXJ1	30-NOV-2009 05:34	926780	241451	1.0	MSD	DUSE - CCV failure confirmed, reporting analysis 120109.b
059b5901.d	WPE091123-10AB	HXJ1	30-NOV-2009 05:45		112909	1.0		(B)DDT, Meth & E.ketone low for DODQSM; Several analytes low for 8081A (F) DDT & Methoxychlor low for DOD QSM; E.ketone low for 8081A
060b6001.d	WAR090914-99IB	HXJ1	30-NOV-2009 05:57		112909	1.0		Clean
061b6101.d	1201982218	HXJ1	30-NOV-2009 06:09	927124	241358	1.0	MB	DUSE - surrogate failure confirmed, reporting first instance
062b6201.d	1201982219	HXJ1	30-NOV-2009 06:21	927124	241358	1.0	LCS	DUSE - surrogate failure confirmed, reporting first instance
063b6301.d	1201982220	HXJ1	30-NOV-2009 06:33	927124	241358	1.0	LCSD	DUSE - surrogate failure confirmed, reporting first instance
064b6401.d	241358001	HXJ1	30-NOV-2009 06:45	927124	241358	2.0	MECP	DUSE - surrogate failure confirmed, reporting first instance
065b6501.d	WPE091123-10AB	HXJ1	30-NOV-2009 06:57		112909	1.0		Almost every analyte on low both columns
066b6601.d	WAR090914-99IB	HXJ1	30-NOV-2009 07:09		112909	1.0		Matrix carryover
067b1001.d	WPE091123-10AB	CXC2	30-NOV-2009 13:28		112909	1.0		DUSE - for reference only

Instrument Batch: /chem/ecd5a.i/112909.b Page: 4

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/01/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ600
MERCURY LOT 906110-AS

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/113009.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	30-NOV-2009 13:54		113009	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	30-NOV-2009 14:06		113009	1.0		(b) DDT 5.4%, Endrin 3.4%; (f) DDT 3.9%, Endrin 3.0%
003b0301.d	WPE091123-10AB	CXC2	30-NOV-2009 14:18		113009	1.0		All okay
004b0401.d	WPE091104-52TX	CXC2	30-NOV-2009 14:30		113009	1.0		DUSE
005b0501.d	WPE091021-00CL	CXC2	30-NOV-2009 14:42		113009	1.0		DUSE
006b0601.d	WPE091104-52TX	CXC2	30-NOV-2009 14:54		113009	1.0		(b) Passes on average; (f) All okay
007b0701.d	WPE091130-21CL	CXC2	30-NOV-2009 15:29		113009	1.0		CHLOR ICAL level 1
008b0801.d	WPE091130-22CL	CXC2	30-NOV-2009 15:41		113009	1.0		CHLOR ICAL level 2
009b0901.d	WPE091130-23CL	CXC2	30-NOV-2009 15:53		113009	1.0		CHLOR ICAL level 3
010b1001.d	WPE091130-24CL	CXC2	30-NOV-2009 16:05		113009	1.0		CHLOR ICAL level 4
011b1101.d	IPE091029-06CL	CXC2	30-NOV-2009 16:28		113009	1.0		CHLOR ICAL level 5
012b1201.d	WPE091021-00CL	CXC2	30-NOV-2009 16:39		113009	1.0		All okay
013b1301.d	WPE091130-31GA	CXC2	30-NOV-2009 16:51		113009	1.0		GAPA ICAL level 1
014b1401.d	WPE091130-32GA	CXC2	30-NOV-2009 17:03		113009	1.0		GAPA ICAL level 2
015b1501.d	WPE091130-33GA	CXC2	30-NOV-2009 17:15		113009	1.0		GAPA ICAL level 3

Instrument Batch: /chem/ecd5a.i/113009.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091130-34GA	CXC2	30-NOV-2009 17:27		113009	1.0		GAPA ICAL level 4

017b1701.d	IPE091110-01GA	CXC2	30-NOV-2009 17:39		113009		1.0		GAPA ICAL level 5
018b1801.d	WPE091021-05GA	CXC2	30-NOV-2009 17:51		113009		1.0		All okay
019b1901.d	WPE091109-99DG	CXC2	30-NOV-2009 18:03		113009		1.0		(b) DDT 2.4%, Endrin 5.1%; (f) DDT 2.2%, Endrin 4.2%
020b2001.d	WAR090914-99IB	CXC2	30-NOV-2009 18:15		113009		1.0		Clean
021b2101.d	241227002	CXC2	30-NOV-2009 18:27	925818	241227		20.0	WSRB	USE, uploaded both columns, reporting higher result
022b2201.d	1201978233PF	CXC2	30-NOV-2009 18:39	925346	113009		1.0	MB	DUSE - surrogate low in preFlorisil screen - sent for re-extract
023b2301.d	1201978234PF	CXC2	30-NOV-2009 18:51	925346	113009		1.0	LCS	DUSE - surrogate low in preFlorisil screen - sent for re-extract
024b2401.d	1201981547	CXC2	30-NOV-2009 19:03	926791	241691		1.0	MB	USE, uploaded both columns, reporting higher result
025b2501.d	1201981548	CXC2	30-NOV-2009 19:15	926791	241691		1.0	LCS	USE, uploaded both columns, reporting higher result
026b2601.d	1201981549	CXC2	30-NOV-2009 19:27	926791	241691		1.0	LCSD	USE, uploaded both columns, reporting higher result
027b2701.d	241691001	CXC2	30-NOV-2009 19:39	926791	241691		1.0	GEEL	USE, uploaded both columns, reporting higher result
028b2801.d	WPE091123-10AB	CXC2	30-NOV-2009 19:51		113009		1.0		All okay
029b2901.d	WAR090914-99IB	CXC2	30-NOV-2009 20:03		113009		1.0		Clean
030b3001.d	1201977986	CXC2	30-NOV-2009 20:15	925220	241238		1.0	MB	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in samples, matrix QC, and LCS
031b3101.d	1201977987	CXC2	30-NOV-2009 20:27	925220	241238		1.0	LCS	USE, uploaded both columns, reporting higher result
032b3201.d	241238004	CXC2	30-NOV-2009 20:38	925220	241238		10.0	GEEL	USE, uploaded both columns, reporting higher result
033b3301.d	1201977988	CXC2	30-NOV-2009 20:50	925220	241238		10.0	MS	USE, uploaded both columns, reporting higher result
034b3401.d	1201977989	CXC2	30-NOV-2009 21:02	925220	241238		10.0	MSD	USE, uploaded both columns, reporting higher result
035b3501.d	WPE091123-10AB	CXC2	30-NOV-2009 21:14		113009		1.0		(b) DDT, Endrin ketone low for 8081A (Passes 8081B); (f) All okay

Instrument Batch: /chem/ecd5a.i/113009.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	30-NOV-2009 21:26		113009	1.0		Clean
037b3701.d	241238005	CXC2	30-NOV-2009 21:38	925220	241238	10.0	GEEL	USE, uploaded both columns, reporting higher result
038b3801.d	241238006	CXC2	30-NOV-2009 21:50	925220	241238	10.0	GEEL	USE, uploaded both columns, reporting higher result
039b3901.d	241240005	CXC2	30-NOV-2009 22:02	925220	241240	10.0	GEEL	USE, uploaded both columns, reporting higher result
040b4001.d	241240006	CXC2	30-NOV-2009 22:14	925220	241240	10.0	GEEL	USE, uploaded both columns, reporting higher result

041b4101.d	241240007	CXC2	30-NOV-2009 22:26	925220	241240		10.0	GEEL	DUSE - still has sulfur - re-cleaned/re-analyzed vial 44
042b4201.d	241367003	CXC2	30-NOV-2009 22:38	925220	241367		10.0	GEEL	USE, uploaded both columns, reporting higher result
043b4301.d	241367004	CXC2	30-NOV-2009 22:50	925220	241367		10.0	GEEL	DUSE - no surrogates? Sample was re-diluted/re-cleaned/re-analyzed vial 49
044b4401.d	241240007	CXC2	30-NOV-2009 23:02	925220	241240		10.0	GEEL	USE, uploaded both columns, reporting higher result
045b4501.d	WPE091123-10AB	CXC2	30-NOV-2009 23:14		113009		1.0		(b) All okay; (f) Endosulfan II elevated - Passes 8081B
046b4601.d	WAR090914-99IB	CXC2	30-NOV-2009 23:26		113009		1.0		Clean
047b4701.d	WPE091123-10AB	CXC2	30-NOV-2009 23:38		113009		1.0		(b) DDT low - Passes 8081B; (f) All okay
048b4801.d	WAR090914-99IB	CXC2	30-NOV-2009 23:50		113009		1.0		Clean
049b4901.d	241367004	CXC2	01-DEC-2009 00:02	925220	241367		10.0	GEEL	**STILL NO SURROGATES**
050b5001.d	1201979176	CXC2	01-DEC-2009 00:14	926767	10-462-1		1.0	TB	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
051b5101.d	1201981489	CXC2	01-DEC-2009 00:26	926767	10-462-1		1.0	MB	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
052b5201.d	1201981496	CXC2	01-DEC-2009 00:38	926767	10-462-1		1.0	LCS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
053b5301.d	1201981497	CXC2	01-DEC-2009 00:50	926767	10-462-1		1.0	TLCS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
054b5401.d	1201981498	CXC2	01-DEC-2009 01:02	926767	10-462-1		1.0	CLCS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
055b5501.d	WAR090914-99IB	CXC2	01-DEC-2009 01:14		113009		1.0		Clean

Instrument Batch: /chem/ecd5a.i/113009.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	WPE091123-10AB	CXC2	01-DEC-2009 01:26		113009		1.0		(b) DDT, Endrin ketone low; (f) gamma-BHC elevated
057b5701.d	WAR090914-99IB	CXC2	01-DEC-2009 01:37		113009		1.0		Clean
058b5801.d	241040001	CXC2	01-DEC-2009 01:49	926767	10-462-1		1.0	LANL	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
059b5901.d	1201981490	CXC2	01-DEC-2009 02:01	926767	10-462-1		1.0	MS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
060b6001.d	1201981493	CXC2	01-DEC-2009 02:13	926767	10-462-1		1.0	MSD	DUSE - 4cmx low in all batch QC, and on back column in sample

								SENT FOR RE-EXTRACTION
061b6101.d	1201981491	CXC2	01-DEC-2009 02:25	926767	10-462-1	1.0	TMS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
062b6201.d	1201981494	CXC2	01-DEC-2009 02:37	926767	10-462-1	1.0	TMSD	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
063b6301.d	1201981492	CXC2	01-DEC-2009 02:49	926767	10-462-1	1.0	CMS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
064b6401.d	1201981495	CXC2	01-DEC-2009 03:01	926767	10-462-1	1.0	CMSD	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
065b6501.d	WPE091123-10AB	CXC2	01-DEC-2009 03:13		113009	1.0		(b) DDT, Endrin ketone low; (f) gamma-BHC elevated
066b6601.d	WAR090914-99IB	CXC2	01-DEC-2009 03:25		113009	1.0		Clean
067b6701.d	1201981522	CXC2	01-DEC-2009 03:37	926780	241451	1.0	MB	DUSE - CCV failure DID NOT confirm - re-analyze
068b6801.d	1201981525	CXC2	01-DEC-2009 07:05	926780	241451	1.0	SAIC	DUSE - CCV failure DID NOT confirm - re-analyze
069b6901.d	241451001	CXC2	01-DEC-2009 07:17	926780	241451	1.0	SAIC	DUSE - CCV failure DID NOT confirm - re-analyze
070b7001.d	241451002	CXC2	01-DEC-2009 07:29	926780	241451	1.0	SAIC	DUSE - CCV failure DID NOT confirm - re-analyze
071b7101.d	241451003	CXC2	01-DEC-2009 07:41	926780	241451	1.0	MS	DUSE - CCV failure DID NOT confirm - re-analyze
072b7201.d	1201981523	CXC2	01-DEC-2009 07:53	926780	241451	1.0	MSD	DUSE - CCV failure DID NOT confirm - re-analyze
073b7301.d	1201981524	CXC2	01-DEC-2009 08:05		241451	1.0		(b) alpha-CHL, DDT, Endrin ketone, DCB low; (f) All okay for 8081B
074b7401.d	WPE091123-10AB	CXC2	01-DEC-2009 08:17		113009	1.0		Clean
075b7501.d	WPE091123-10AB	CXC2	01-DEC-2009 13:49		113009	1.0		FOR REFERENCE ONLY

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/03/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A/B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/120209.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	02-DEC-2009 15:16		120209	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	02-DEC-2009 15:28		120209	1.0		(B) DDT 5.5% Endrin 2.8% (F) DDT 4.7% Endrin 2.2%
003b0301.d	WPE091123-10AB	CXC2	02-DEC-2009 15:40		120209	1.0		All OK
004b0401.d	WPE091104-52TX	CXC2	02-DEC-2009 15:52		120209	1.0		All OK
005b0501.d	WPE091021-00CL	CXC2	02-DEC-2009 16:04		120209	1.0		All OK
006b0601.d	WPE091021-05GA	CXC2	02-DEC-2009 16:19		120209	1.0		(B) All OK (F) DDT elevated, passes 8081B
007b0701.d	245TCP	CXC2	02-DEC-2009 16:39		120209	1.0		DUSE - for reference only
008b0801.d	FlorCartH16553	CXC2	02-DEC-2009 16:51		120209	1.0		DUSE - for reference only
009b0901.d	WAR090914-99IB	CXC2	02-DEC-2009 17:03		120209	1.0		Clean
010b1001.d	1201982313	CXC2	02-DEC-2009 17:15	927192	10-648	1.0	MB	USE - uploaded both columns, reporting the lower result
011b1101.d	1201982316	CXC2	02-DEC-2009 17:27	927192	10-648	1.0	LCS	USE - uploaded both columns, reporting the lower result
012b1201.d	1201982317	CXC2	02-DEC-2009 17:39	927192	10-648	1.0	TLCS	USE - uploaded both columns, reporting the lower result
013b1301.d	241697003	CXC2	02-DEC-2009 17:51	927192	10-648	1.0	LANL	USE - uploaded both columns, reporting the lower result
014b1401.d	241697004	CXC2	02-DEC-2009 18:02	927192	10-648	1.0	LANL	USE - uploaded both columns, reporting the lower result
015b1501.d	241714002	CXC2	02-DEC-2009 18:14	927192	10-650	1.0	LANL	USE - uploaded both columns, reporting the lower result

Instrument Batch: /chem/ecd5a.i/120209.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	1201982314	CXC2	02-DEC-2009 18:26	927192	10-650	1.0	MS	USE - uploaded both columns, reporting the lower result

017b1701.d	1201982315	CXC2	02-DEC-2009 18:38	927192	10-650		1.0	MSD	USE - uploaded both columns, reporting the lower result
018b1801.d	241718001	CXC2	02-DEC-2009 18:50	927192	10-653		1.0	LANL	USE - uploaded both columns, reporting the lower result
019b1901.d	241728002	CXC2	02-DEC-2009 19:02	927192	10-654		1.0	LANL	USE - uploaded both columns, reporting the lower result
020b2001.d	WPE091123-10AB	CXC2	02-DEC-2009 19:14		120209		1.0		(B) alpha-CHL,E.aldehyde,DDT,Endosulfan sulfate,E.ketone,DCB low (F) Endrin ketone low
021b2101.d	WAR090914-99IB	CXC2	02-DEC-2009 19:26		120209		1.0		Clean
022b2201.d	241750002	CXC2	02-DEC-2009 19:38	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
023b2301.d	241750003	CXC2	02-DEC-2009 19:50	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
024b2401.d	241750004	CXC2	02-DEC-2009 20:02	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
025b2501.d	241750005	CXC2	02-DEC-2009 20:14	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
026b2601.d	241750006	CXC2	02-DEC-2009 20:26	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
027b2701.d	241750007	CXC2	02-DEC-2009 20:38	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
028b2801.d	241750008	CXC2	02-DEC-2009 20:50	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
029b2901.d	241750009	CXC2	02-DEC-2009 21:02	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
030b3001.d	241750010	CXC2	02-DEC-2009 21:14	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
031b3101.d	241750011	CXC2	02-DEC-2009 21:26	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
032b3201.d	WPE091123-10AB	CXC2	02-DEC-2009 21:38		120209		1.0		(B) All OK (F) Endrin ketone low for 8081B
033b3301.d	WAR090914-99IB	CXC2	02-DEC-2009 21:50		120209		1.0		Clean
034b3401.d	1201984481	CXC2	02-DEC-2009 22:02	928117	241367		1.0	MB	DUSE - sulfur still in sample after Copper clean up at 10X
035b3501.d	1201984482	CXC2	02-DEC-2009 22:14	928117	241367		1.0	LCS	DUSE - sulfur still in sample after Copper clean up at 10X

Instrument Batch: /chem/ecd5a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	1201984483	CXC2	02-DEC-2009 22:26	928117	241367	1.0	QCLSD	DUSE - sulfur still in sample after Copper clean up at 10X
037b3701.d	241367004	CXC2	02-DEC-2009 22:38	928117	241367	10.0	GEEL	DUSE - sulfur still in sample after Copper clean up at 10X
038b3801.d	WPE091123-10AB	CXC2	02-DEC-2009 22:49		120209	1.0		All OK
039b3901.d	WAR090914-99IB	CXC2	02-DEC-2009 23:01		120209	1.0		Clean
040b4001.d	240472006	CXC2	02-DEC-2009 23:13	921633	240472	1.0	WSRB	DUSE - 4CMX still low - report first instance

041b4101.d	240472007	CXC2	02-DEC-2009 23:25	921633	240472		1.0	WSRB	DUSE - 4CMX still low - report first instance
042b4201.d	WPE091123-10AB	CXC2	02-DEC-2009 23:37		120209		1.0		(B) DDT low for 8081B (F) DDT & Endrin ketone low for 8081B
043b4301.d	WAR090914-99IB	CXC2	02-DEC-2009 23:49		120209		1.0		Clean
044b4401.d	1201979176	CXC2	03-DEC-2009 00:01	927942	10-462-1		1.0	TB	USE - uploaded both columns, reporting lower result
045b4501.d	1201984152	CXC2	03-DEC-2009 00:13	927942	10-462-1		1.0	MB	USE - uploaded both columns, reporting lower result
046b4601.d	1201984159	CXC2	03-DEC-2009 00:25	927942	10-462-1		1.0	LCS	USE - uploaded both columns, reporting lower result
047b4701.d	1201984160	CXC2	03-DEC-2009 00:37	927942	10-462-1		1.0	TLCS	USE - uploaded both columns, reporting lower result
048b4801.d	1201984161	CXC2	03-DEC-2009 00:49	927942	10-462-1		1.0	CLCS	USE - uploaded both columns, reporting lower result
049b4901.d	WAR090914-99IB	CXC2	03-DEC-2009 01:01		120209		1.0		Clean
050b5001.d	WPE091123-10AB	CXC2	03-DEC-2009 01:13		120209		1.0		All OK for TLCP (B)DDT, E.ketone low (F)DDD&EndoII elevated; DDT low
051b5101.d	WAR090914-99IB	CXC2	03-DEC-2009 01:25		120209		1.0		Clean
052b5201.d	241040001	CXC2	03-DEC-2009 01:37	927942	10-462-1		1.0	LANL	USE - uploaded both columns, reporting lower result
053b5301.d	1201984153	CXC2	03-DEC-2009 01:49	927942	10-462-1		1.0	MS	USE - uploaded both columns, reporting lower result
054b5401.d	1201984156	CXC2	03-DEC-2009 02:01	927942	10-462-1		1.0	MSD	USE - uploaded both columns, reporting lower result
055b5501.d	1201984154	CXC2	03-DEC-2009 02:12	927942	10-462-1		1.0	TMS	USE - uploaded both columns, reporting lower resul

Instrument Batch: /chem/ecd5a.i/120209.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201984157	CXC2	03-DEC-2009 02:25	927942	10-462-1		1.0	TMSD	USE - uploaded both columns, reporting lower result
057b5701.d	1201984155	CXC2	03-DEC-2009 02:36	927942	10-462-1		1.0	CMS	USE - uploaded both columns, reporting lower result
058b5801.d	1201984158	CXC2	03-DEC-2009 02:48	927942	10-462-1		1.0	CMSD	USE - uploaded both columns, reporting lower result
059b5901.d	WAR090914-99IB	CXC2	03-DEC-2009 03:00		120209		1.0		Clean
060b6001.d	WPE091123-10AB	CXC2	03-DEC-2009 03:12		120209		1.0		(B) DDT low at -23.5% drift (F) several elevated including gamma-BHC and Endrin
061b6101.d	WAR090914-99IB	CXC2	03-DEC-2009 03:24		120209		1.0		Clean
062b6201.d	1201980055	CXC2	03-DEC-2009 03:36	927116	10-578-1		1.0	TB	USE - uploaded both columns, reporting lower result
063b6301.d	1201980750	CXC2	03-DEC-2009 03:48	927116	10-653-1		1.0	TB	USE - uploaded both columns, reporting lower result
064b6401.d	1201982197	CXC2	03-DEC-2009 04:00	927116	10-578-1		1.0	MB	USE - uploaded both columns, reporting lower result

065b6501.d	1201982204	CXC2	03-DEC-2009 04:12	927116	10-578-1	1.0	LCS	USE - uploaded both columns, reporting lower result
066b6601.d	1201982205	CXC2	03-DEC-2009 04:24	927116	10-578-1	1.0	TLCS	USE - uploaded both columns, reporting lower result
067b6701.d	1201982206	CXC2	03-DEC-2009 04:36	927116	10-578-1	1.0	CLCS	USE - uploaded both columns, reporting lower result
068b6801.d	241424001	CXC2	03-DEC-2009 04:48	927116	10-578-1	10.0	LANL	DUSE - see sequence 120709a.b
069b6901.d	241424002	CXC2	03-DEC-2009 05:00	927116	10-578-1	10.0	LANL	DUSE - see sequence 120709a.b
070b7001.d	WAR090914-99IB	CXC2	03-DEC-2009 05:12		120209	1.0		Clean
071b7101.d	WPE091123-10AB	CXC2	03-DEC-2009 05:24		120209	1.0		(B) Several low, including: Heptachlor, DDT and Methoxychlor which had on column ppb of 31, 3.5, 124 respectively (F) Heptachlor, DDT, Methoxychlor and Endrin ketone very low
072b7201.d	WAR090914-99IB	CXC2	03-DEC-2009 05:36		120209	1.0		Clean
073b7301.d	241527001	CXC2	03-DEC-2009 05:48	927116	10-600-1	10.0	LANL	DUSE - see sequence 120709a.b
074b7401.d	241720001	CXC2	03-DEC-2009 06:00	927116	10-653-1	10.0	LANL	DUSE - see sequence 120709a.b
075b7501.d	1201982198	CXC2	03-DEC-2009 06:12	927116	10-653-1	10.0	MS	DUSE - see sequence 120709a.b

Instrument Batch: /chem/ecd5a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076b7601.d	1201982201	CXC2	03-DEC-2009 06:24	927116	10-653-1	10.0	MSD	DUSE - see sequence 120709a.b
077b7701.d	1201982199	CXC2	03-DEC-2009 06:36	927116	10-653-1	10.0	TMS	DUSE - see sequence 120709a.b
078b7801.d	1201982202	CXC2	03-DEC-2009 06:48	927116	10-653-1	10.0	TMSD	DUSE - see sequence 120709a.b
079b7901.d	1201982200	CXC2	03-DEC-2009 07:00	927116	10-653-1	10.0	CMS	DUSE - see sequence 120709a.b
080b8001.d	1201982203	CXC2	03-DEC-2009 07:12	927116	10-653-1	10.0	CMSD	DUSE - see sequence 120709a.b
081b8101.d	241732001	CXC2	03-DEC-2009 07:24	927116	10-654-1	10.0	LANL	DUSE - see sequence 120709a.b
082b8201.d	WAR090914-99IB	CXC2	03-DEC-2009 07:36		120209	1.0		Clean
083b8301.d	WPE091123-10AB	CXC2	03-DEC-2009 07:48		120209	1.0		(B) Heptachlor, DDT, Meth, & E.ketone low at on column ppb of 35, 9, 213 and 88 respectively (F) Heptachlor, DDT, Methoxychlor and Endrin ketone very low
084b8401.d	WAR090914-99IB	CXC2	03-DEC-2009 07:59		120209	1.0		Clean
085b8501.d	241751001	CXC2	03-DEC-2009 08:11	927116	10-655-1	10.0	LANL	DUSE - see sequence 120709a.b
086b8601.d	241751002	CXC2	03-DEC-2009 08:23	927116	10-655-1	10.0	LANL	DUSE - see sequence 120709a.b

087b8701.d	241751003	CXC2	03-DEC-2009 08:35	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
088b8801.d	241751004	CXC2	03-DEC-2009 08:47	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
089b8901.d	241751005	CXC2	03-DEC-2009 08:59	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
090b9001.d	241751006	CXC2	03-DEC-2009 09:11	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
091b9101.d	241751007	CXC2	03-DEC-2009 09:23	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
092b9201.d	241751008	CXC2	03-DEC-2009 09:35	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
093b9301.d	241751009	CXC2	03-DEC-2009 09:47	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
094b9401.d	241751010	CXC2	03-DEC-2009 09:59	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
095b9501.d	WAR090914-99IB	CXC2	03-DEC-2009 10:11		120209		1.0		Clean

Instrument Batch: /chem/ecd5a.i/120209.b Page: 5

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
096b9601.d	WPE091123-10AB	CXC2	03-DEC-2009 10:23		120209	1.0		(B) Heptachlor, DDT, Meth, & E.ketone low at on column ppb of 45, 17, 263, and 106 respectively (F) DDT, Methoxychlor and Endrin ketone low
097b9701.d	240472006	CXC2	03-DEC-2009 10:35	921633	240472	1.0	WSRB	DUSE
098b9801.d	240472007	CXC2	03-DEC-2009 10:47	921633	240472	1.0	WSRB	DUSE
099b9901.d	WPE091123-10AB	CXC2	03-DEC-2009 11:18		120209	1.0		DUSE

Instrument Batch: /chem/ecd5a.i/120209.b Page: 6

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/08/2009 METHOD: ECD5-B-8081-120709a.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A/B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/120709a.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	07-DEC-2009 16:56		120709a	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	07-DEC-2009 17:14		120709a	1.0		(B) DDT 4.8% Endrin 4.5% (F) DDT 8.0% Endrin 2.8%
003b0301.d	WPE091207-01AB	CXC2	07-DEC-2009 17:26		120709a	1.0		INDAB ICAL level 1
004b0401.d	WPE091207-02AB	CXC2	07-DEC-2009 17:38		120709a	1.0		INDAB ICAL level 2
005b0501.d	WPE091207-03AB	CXC2	07-DEC-2009 17:50		120709a	1.0		INDAB ICAL level 3
006b0601.d	WPE091207-04AB	CXC2	07-DEC-2009 18:02		120709a	1.0		INDAB ICAL level 4
007b0701.d	IPE091128-02AB	CXC2	07-DEC-2009 18:14		120709a	1.0		INDAB ICAL level 5
008b0801.d	WPE091207-10AB	CXC2	07-DEC-2009 18:26		120709a	1.0		All OK
009b0901.d	WPE091207-11TX	CXC2	07-DEC-2009 18:38		120709a	1.0		TOXAPH ICAL level 1
010b1001.d	WPE091207-12TX	CXC2	07-DEC-2009 18:50		120709a	1.0		TOXAPH ICAL level 2
011b1101.d	WAR090914-99IB	CXC2	07-DEC-2009 19:38		120709a	1.0		DUSE - misinjection
012b1201.d	WAR090914-99IB	CXC2	07-DEC-2009 19:50		120709a	1.0		DUSE
013b1301.d	WPE091207-13TX	CXC2	07-DEC-2009 20:02		120709a	1.0		TOXAPH ICAL level 3
014b1401.d	WPE091207-14TX	CXC2	07-DEC-2009 20:14		120709a	1.0		TOXAPH ICAL level 4
015b1501.d	IPE091121-40TX	CXC2	07-DEC-2009 20:26		120709a	1.0		TOXAPH ICAL level 5

Instrument Batch: /chem/ecd5a.i/120709a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091104-52TX	CXC2	07-DEC-2009 20:38		120709a	1.0		(B) Passes on average (F) All OK

017b1701.d	WPE091207-21CL	CXC2	07-DEC-2009 20:50		120709a	1.0		CHLOR ICAL level 1
018b1801.d	WPE091207-22CL	CXC2	07-DEC-2009 21:02		120709a	1.0		CHLOR ICAL level 2
019b1901.d	WPE091207-23CL	CXC2	07-DEC-2009 21:14		120709a	1.0		CHLOR ICAL level 3
020b2001.d	WPE091207-24CL	CXC2	07-DEC-2009 21:26		120709a	1.0		CHLOR ICAL level 4
021b2101.d	IPE091029-06CL	CXC2	07-DEC-2009 21:38		120709a	1.0		CHLOR ICAL level 5
022b2201.d	WPE091021-00CL	CXC2	07-DEC-2009 21:49		120709a	1.0		All OK
023b2301.d	WPE091109-99DG	CXC2	07-DEC-2009 22:01		120709a	1.0		(B) DDT 8.6% Endrin 6.5% (F) DDT 11.7% Endrin 4.4%
024b2401.d	WAR090914-99IB	CXC2	07-DEC-2009 22:13		120709a	1.0		Clean
025b2501.d	241751001	CXC2	07-DEC-2009 22:25	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
026b2601.d	241751002	CXC2	07-DEC-2009 22:37	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
027b2701.d	241751003	CXC2	07-DEC-2009 22:49	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
028b2801.d	241751004	CXC2	07-DEC-2009 23:01	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
029b2901.d	241751005	CXC2	07-DEC-2009 23:13	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
030b3001.d	241751006	CXC2	07-DEC-2009 23:25	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
031b3101.d	241751007	CXC2	07-DEC-2009 23:37	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
032b3201.d	241751008	CXC2	07-DEC-2009 23:49	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
033b3301.d	241751009	CXC2	08-DEC-2009 00:01	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
034b3401.d	241751010	CXC2	08-DEC-2009 00:13	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
035b3501.d	WPE091123-10AB	CXC2	08-DEC-2009 00:25		120709a	1.0		(B) Heptachlor, alpha-CHL, E.aldehyde & Meth low (F) DDT high

Instrument Batch: /chem/ecd5a.i/120709a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	08-DEC-2009 00:37		120709a	1.0		Clean
037b3701.d	241732001	CXC2	08-DEC-2009 00:49	927116	10-654-1	10.0	LANL	USE - uploaded both columns, reporting lower result
038b3801.d	241720001	CXC2	08-DEC-2009 01:00	927116	10-653-1	10.0	LANL	USE - uploaded both columns, reporting lower result
039b3901.d	1201982198	CXC2	08-DEC-2009 01:12	927116	10-653-1	10.0	MS	USE - uploaded both columns, reporting lower result
040b4001.d	1201982201	CXC2	08-DEC-2009 01:24	927116	10-653-1	10.0	MSD	USE - uploaded both columns, reporting lower result

041b4101.d	1201982199	CXC2	08-DEC-2009 01:36	927116	10-653-1		10.0	TMS	USE - uploaded both columns, reporting lower result
042b4201.d	1201982202	CXC2	08-DEC-2009 01:48	927116	10-653-1		10.0	TMSD	USE - uploaded both columns, reporting lower result
043b4301.d	1201982200	CXC2	08-DEC-2009 02:00	927116	10-653-1		10.0	CMS	USE - uploaded both columns, reporting lower result
044b4401.d	1201982203	CXC2	08-DEC-2009 02:12	927116	10-653-1		10.0	CMSD	USE - uploaded both columns, reporting lower result
045b4501.d	WPE091123-10AB	CXC2	08-DEC-2009 02:24		120709a		1.0		(B) Methoxychlor low (F) DDT elevated
046b4601.d	WAR090914-99IB	CXC2	08-DEC-2009 02:36		120709a		1.0		Clean
047b4701.d	241424001	CXC2	08-DEC-2009 02:48	927116	10-578-1		10.0	LANL	USE - uploaded both columns, reporting lower result
048b4801.d	241424002	CXC2	08-DEC-2009 03:00	927116	10-578-1		10.0	LANL	USE - uploaded both columns, reporting lower result
049b4901.d	241527001	CXC2	08-DEC-2009 03:12	927116	10-600-1		10.0	LANL	USE - uploaded both columns, reporting lower result
050b5001.d	WAR090914-99IB	CXC2	08-DEC-2009 03:24		120709a		1.0		Clean
051b5101.d	WPE091123-10AB	CXC2	08-DEC-2009 03:36		120709a		1.0		(B) All OK (F) Several elevated
052b5201.d	WAR090914-99IB	CXC2	08-DEC-2009 03:48		120709a		1.0		Clean
053b5301.d	1201984162	CXC2	08-DEC-2009 04:00	927944	241451		1.0	MB	USE - uploaded both columns, reporting lower result
054b5401.d	1201984163	CXC2	08-DEC-2009 04:11	927944	241451		1.0	LCS	USE - uploaded both columns, reporting lower result
055b5501.d	241451004	CXC2	08-DEC-2009 04:23	927944	241451		1.0	SAIC	USE - uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/120709a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	241591001	CXC2	08-DEC-2009 04:35	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
057b5701.d	241591002	CXC2	08-DEC-2009 04:47	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
058b5801.d	241591003	CXC2	08-DEC-2009 04:59	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
059b5901.d	241591004	CXC2	08-DEC-2009 05:11	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
060b6001.d	WAR090914-99IB	CXC2	08-DEC-2009 05:23		120709a		1.0		Clean
061b6101.d	WPE091123-10AB	CXC2	08-DEC-2009 05:35		120709a		1.0		(b) Multiple analytes low; (f) DCB low
062b6201.d	WAR090914-99IB	CXC2	08-DEC-2009 05:47		120709a		1.0		Clean
063b6301.d	241616001	CXC2	08-DEC-2009 05:59	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b
064b6401.d	241616002	CXC2	08-DEC-2009 06:11	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b
065b6501.d	241616003	CXC2	08-DEC-2009 06:23	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b

066b6601.d	241616005	CXC2	08-DEC-2009 08:06	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/039b3901.d
Lab Smp Id: 1201982198 Client Smp ID: WST49-10-5425MS
Inj Date : 08-DEC-2009 01:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982198|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 39 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.063	2.064	-0.001	74317147	14.9237	0.00746	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	42570625	15.3456	0.00767	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.107	0.000	51938809	8.53394	0.00427	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.452	3.453	-0.001	43203677	8.67549	0.00434	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.088	4.088	0.000	32443974	6.79615	0.00340	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	38902977	10.3017	0.00515	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	100653601	90.9788	0.0455	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/039b3901.d

Date : 08-DEC-2009 01:12

Client ID: WST49-10-5425(24172

Sample Info: |1201982198|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

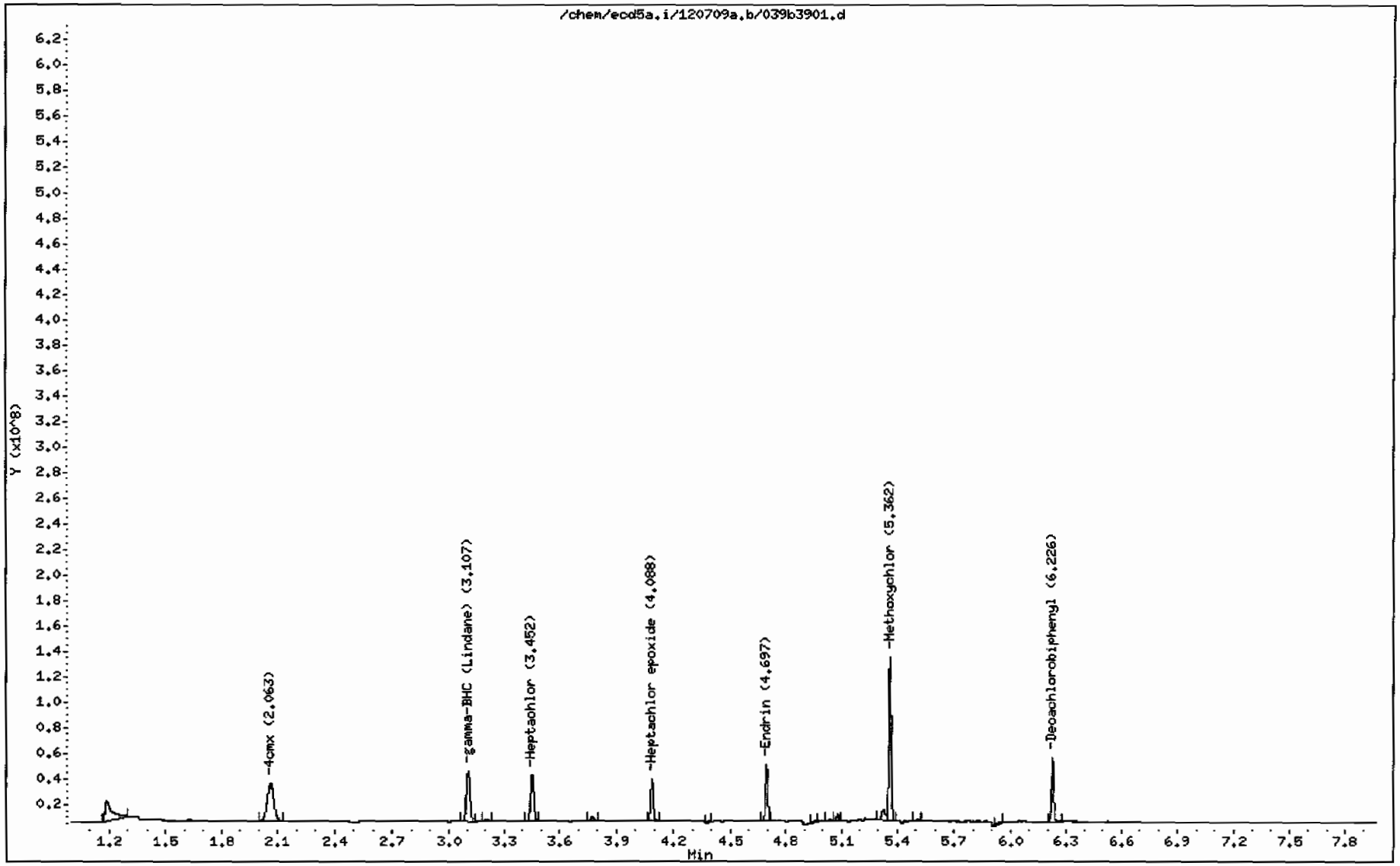

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/039f3901.d
Lab Smp Id: 1201982198 Client Smp ID: WST49-10-5425MS
Inj Date : 08-DEC-2009 01:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982198|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 39 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	6134807	13.8607	0.00693	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	4652549	17.7053	0.00885	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	3356748	7.10141	0.00355	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.739	3.740	-0.001	3228711	8.17725	0.00409	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	3274926	7.60798	0.00380	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	2911826	8.41483	0.00421	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.436	5.436	0.000	9554080	97.5982	0.0488	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/039f3901.d

Date : 08-DEC-2009 01:12

Client ID: WST49-10-5425(24172

Sample Info: |1201982198|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

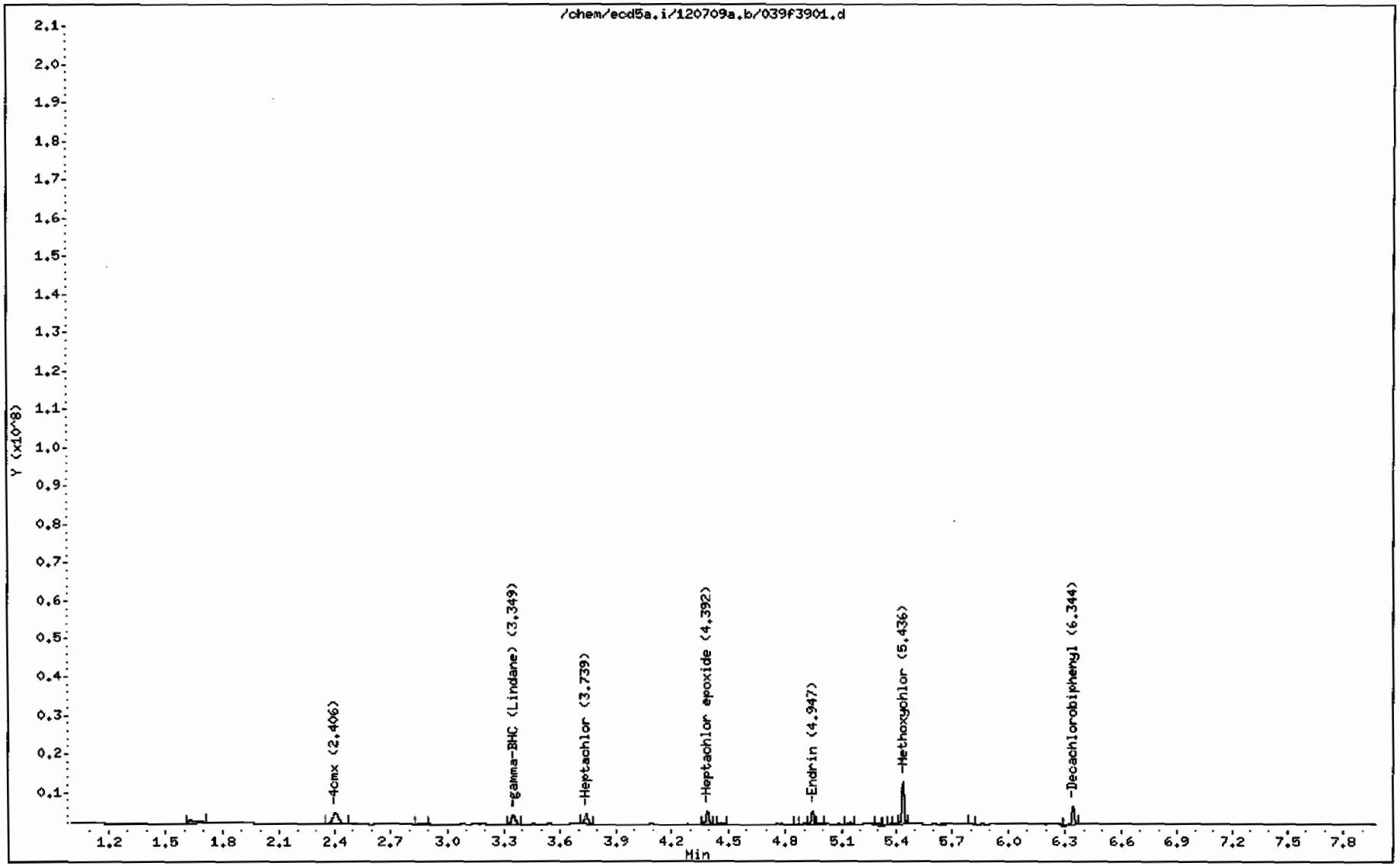

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CLP-2

Data file : /chem/ecd5a.i/120709a.b/040b4001.d
Lab Smp Id: 1201982201 Client Smp ID: WST49-10-5425MSD
Inj Date : 08-DEC-2009 01:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982201|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 40 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	73849208	14.8298	0.00741	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	40932625	14.7552	0.00738	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.108	3.107	0.001	52721352	8.66251	0.00433	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.453	3.453	0.000	44967956	9.02976	0.00451	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.087	4.088	-0.001	39745388	8.32561	0.00416	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.698	4.698	0.000	40675992	10.7713	0.00538	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	105797003	95.6279	0.0478	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/040b4001.d

Date : 08-DEC-2009 01:24

Client ID: WST49-10-5425MSD

Sample Info: |1201982201|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

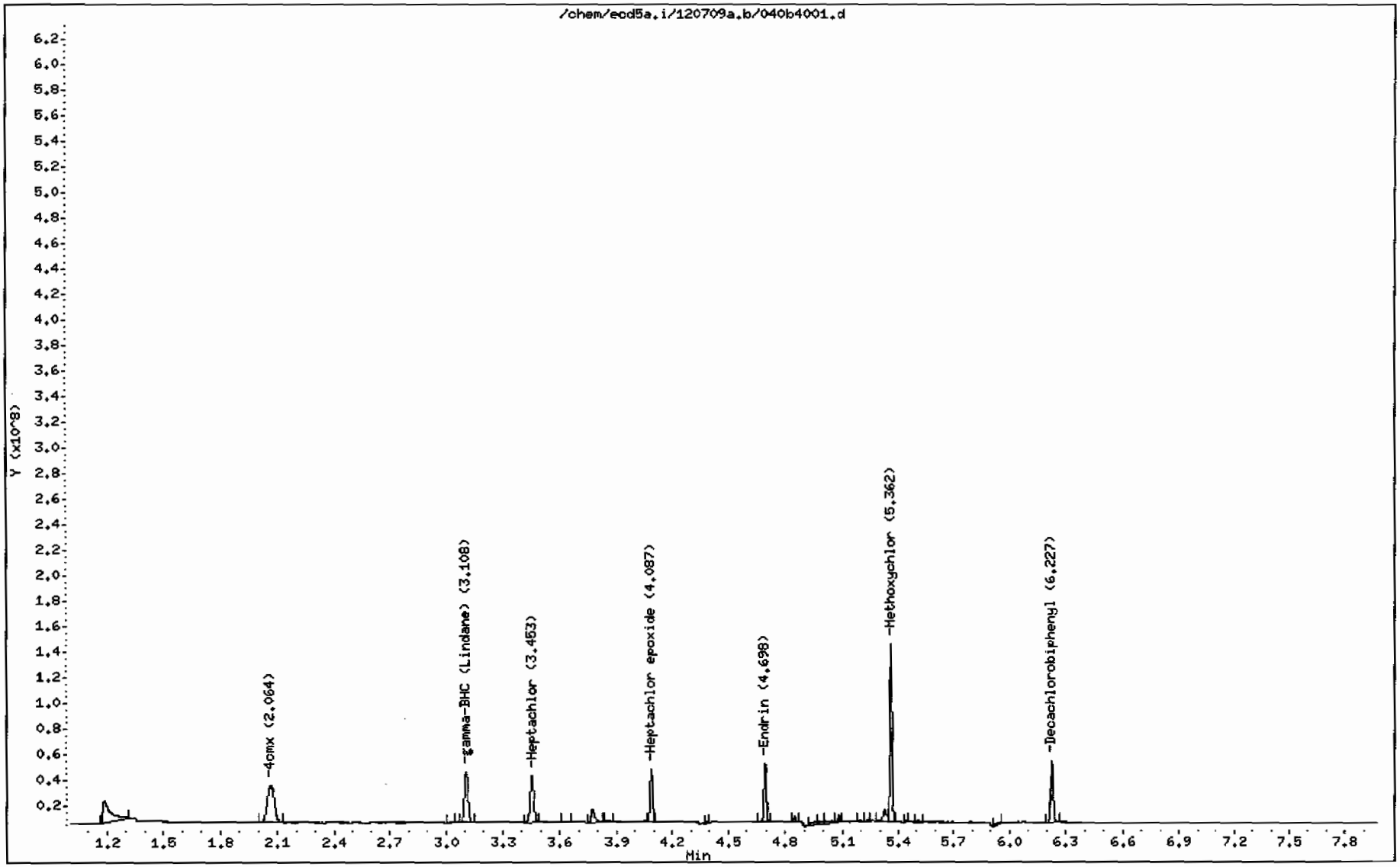

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/040f4001.d
Lab Smp Id: 1201982201 Client Smp ID: WST49-10-5425MSD
Inj Date : 08-DEC-2009 01:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982201|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 40 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.410	2.409	0.001	6161382	13.9207	0.00696	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	4639148	17.6543	0.00883	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	3947504	8.35119	0.00418	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.741	3.740	0.001	3337977	8.45399	0.00423	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	3576683	8.30899	0.00415	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	3082343	8.90761	0.00445	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.437	5.436	0.001	10377220	106.007	0.0530	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/040f4001.d

Date : 08-DEC-2009 01:24

Client ID: WST49-10-5425MSD

Sample Info: |1201982201|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

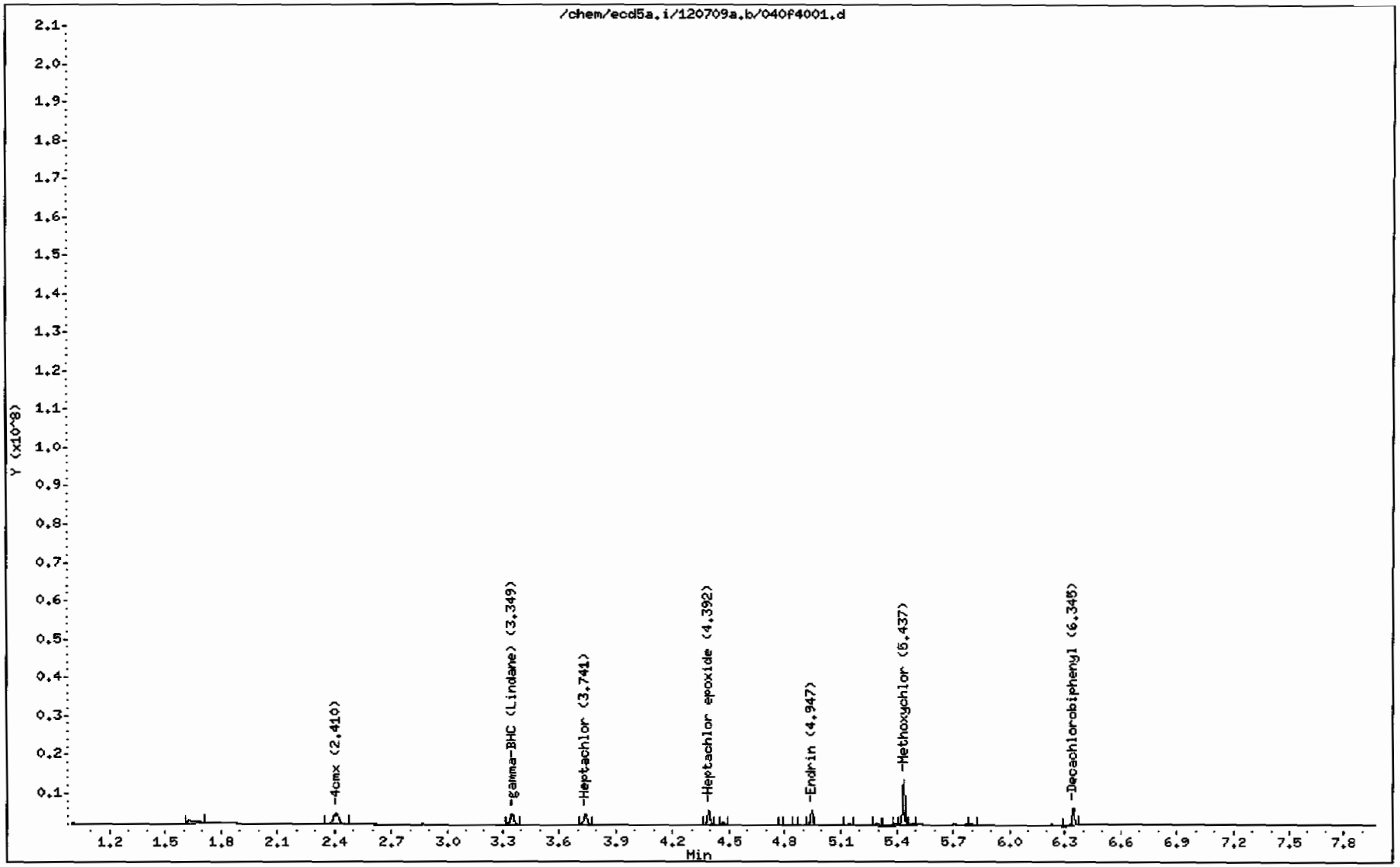

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CLP-2

Data file : /chem/ecd5a.i/120709a.b/041b4101.d
Lab Smp Id: 1201982199 Client Smp ID: WST49-10-5425TMS
Inj Date : 08-DEC-2009 01:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982199|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 41 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.063	2.064	-0.001	62797043	12.6104	0.00630	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	37186024	13.4046	0.00670	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.497	4.499	-0.002	22936602	166.351	0.0832	80.00- 120.00	100.00
4.570	4.570	0.000	14204449	182.683	0.0913	38.34- 78.34	61.93
4.680	4.682	-0.002	23699812	178.911	0.0894	80.82- 120.82	103.33
4.819	4.819	0.000	24255122	179.879	0.0899	90.94- 130.94	105.75
4.878	4.879	-0.001	43836511	183.636	0.0918	166.37- 206.37	191.12

Average of Peak Concentrations = 0.0891

Data File: /chem/ecd5a.i/120709a.b/041b4101.d

Date : 08-DEC-2009 01:36

Client ID: WST49-10-5425TMS

Sample Info: |12019821991101

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

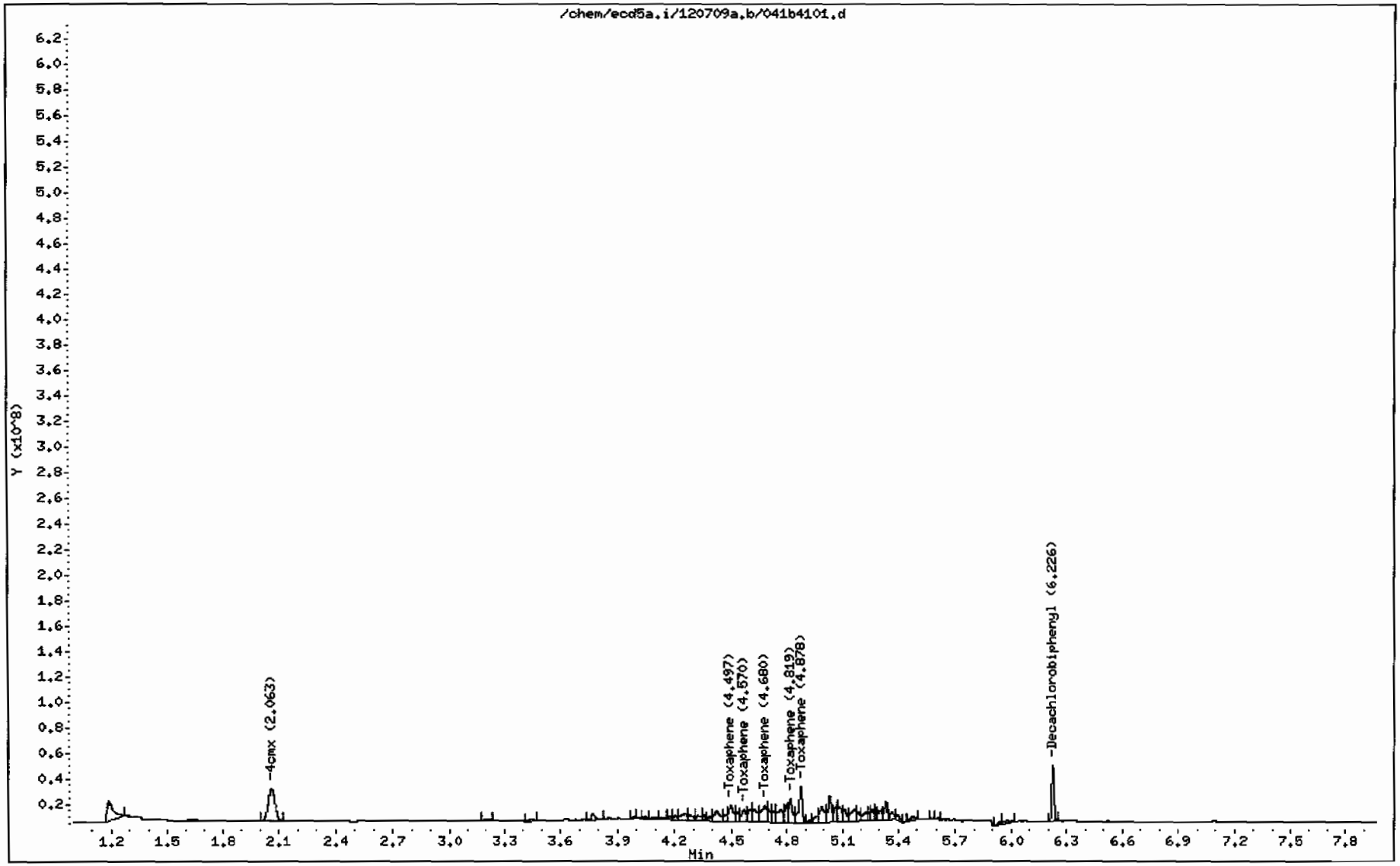

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/041f4101.d
Lab Smp Id: 1201982199 Client Smp ID: WST49-10-5425TMS
Inj Date : 08-DEC-2009 01:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982199|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 41 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.409	-0.004	5197268	11.7424	0.00587	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	4226517	16.0840	0.00804	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.735	4.737	-0.002	1345561	321.029	0.160	80.00- 120.00	100.00(M)
4.805	4.807	-0.002	1478069	197.664	0.0988	148.39- 188.39	109.85
4.861	4.862	-0.001	1167512	167.925	0.0840	142.36- 182.36	86.77
4.973	4.963	0.010	2636140	175.690	0.0878	292.27- 332.27	195.91
5.078	5.079	-0.001	3448332	235.175	0.118	302.61- 342.61	256.27
Average of Peak Concentrations =					0.110		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/041f4101.d

Date : 08-DEC-2009 01:36

Client ID: WST49-10-5425THS

Sample Info: |1201982199|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

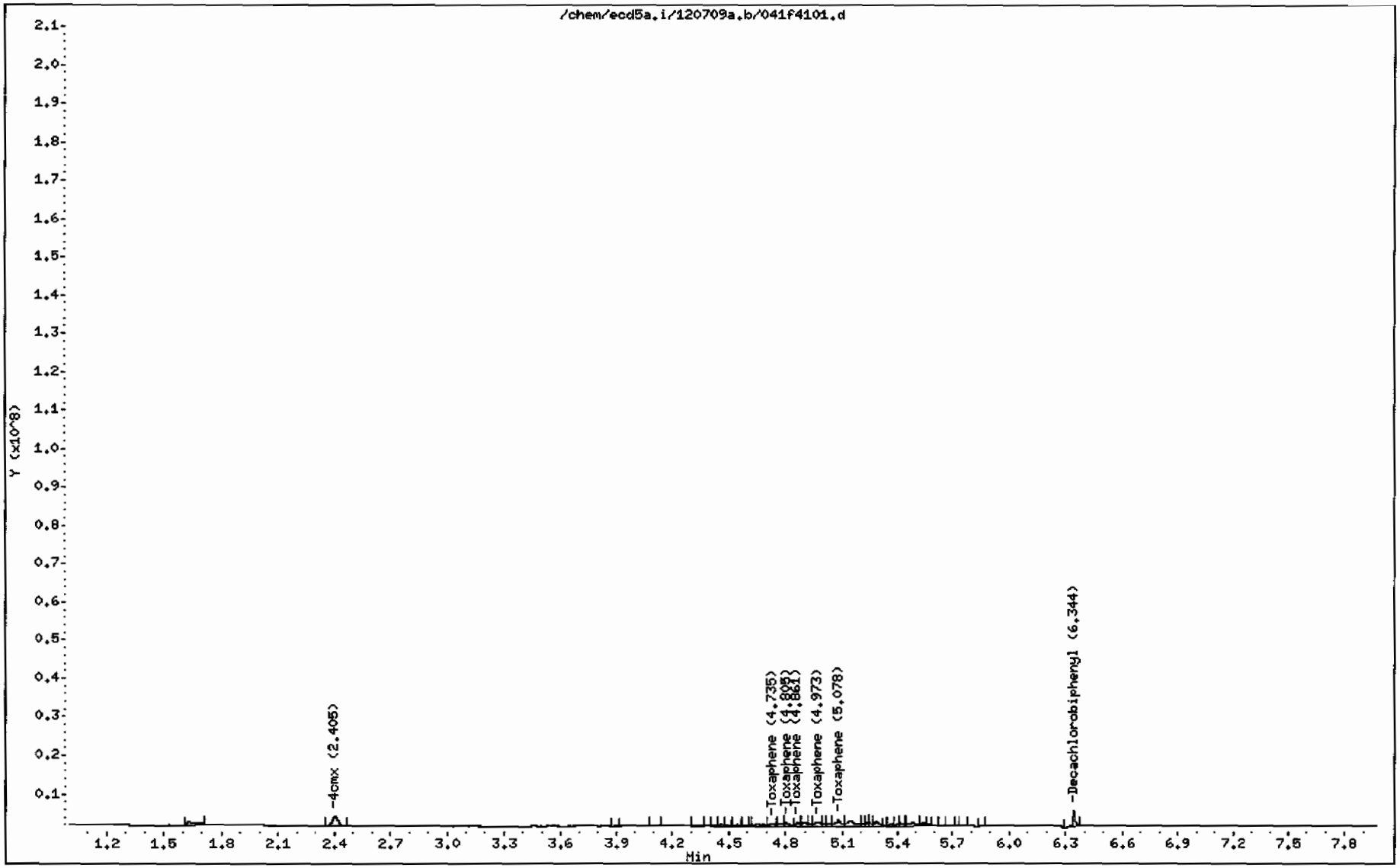

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/042b4201.d
Lab Smp Id: 1201982202 Client Smp ID: WST49-10-5425TMSD
Inj Date : 08-DEC-2009 01:48
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982202|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 42 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	67671579	13.5892	0.00679	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	37511776	13.5220	0.00676	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.499	4.499	0.000	19760123	123.793	0.0619	80.00- 120.00	100.00(M)
4.569	4.570	-0.001	12571787	145.776	0.0729	38.34- 78.34	63.62
4.680	4.682	-0.002	20304377	135.030	0.0675	80.82- 120.82	102.75
4.819	4.819	0.000	24383055	181.131	0.0906	90.94- 130.94	123.40
4.878	4.879	-0.001	40649094	166.268	0.0831	166.37- 206.37	205.71

Average of Peak Concentrations = 0.0752

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/042b4201.d

Date : 08-DEC-2009 01:48

Client ID: WST49-10-5425(24172

Sample Info: |12019822021101

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

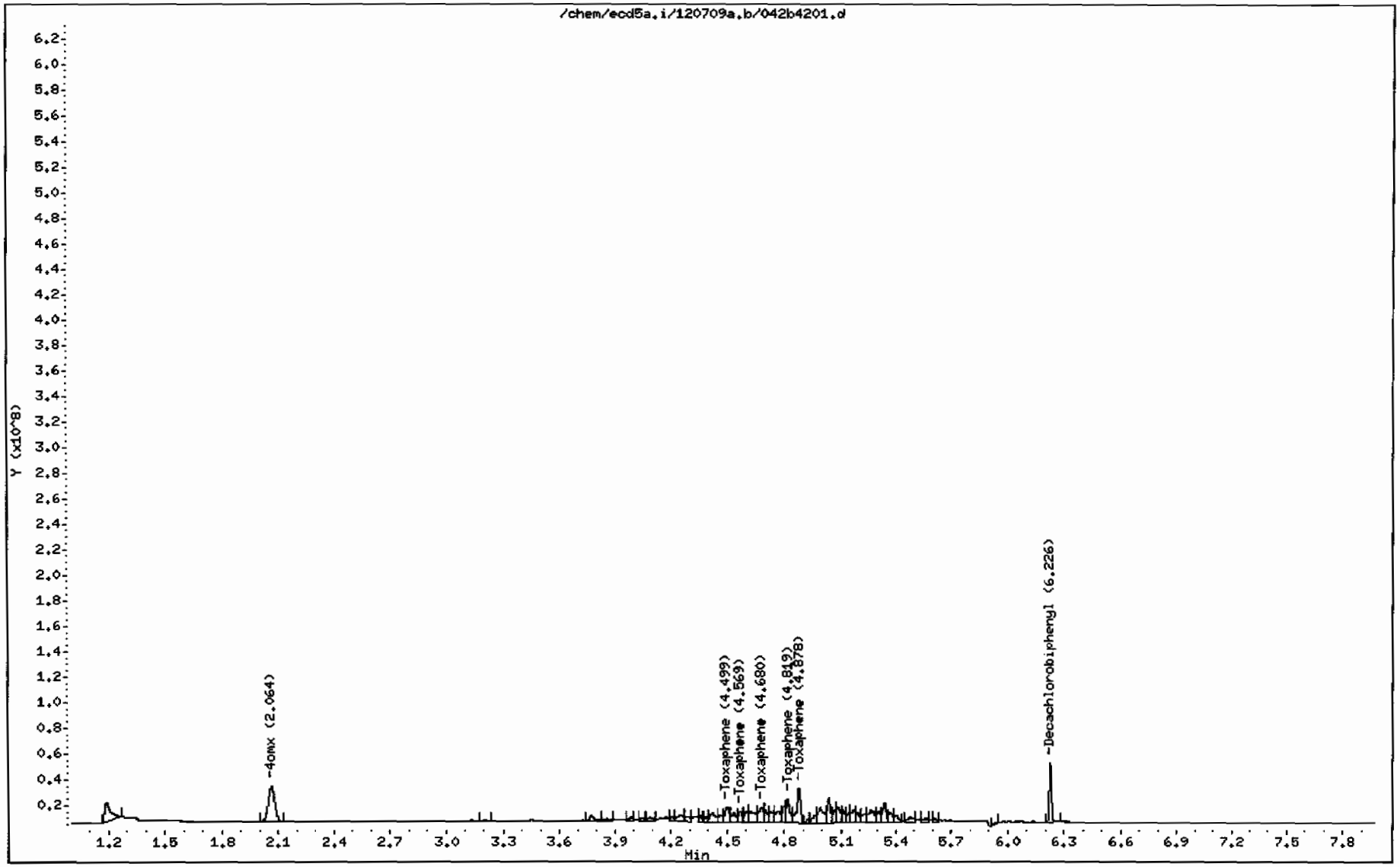

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/042f4201.d
Lab Smp Id: 1201982202 Client Smp ID: WST49-10-5425TMSD
Inj Date : 08-DEC-2009 01:48
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982202|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 42 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	5589339	12.6283	0.00631	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	4436103	16.8816	0.00844	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.735	4.737	-0.002	665520	158.782	0.0794	80.00- 120.00	100.00(M)
4.806	4.807	-0.001	1207985	161.545	0.0808	148.39- 188.39	181.51
4.861	4.862	-0.001	879645	126.521	0.0633	142.36- 182.36	132.17
4.973	4.963	0.010	2258081	150.494	0.0752	292.27- 332.27	339.30
5.079	5.079	0.000	2842319	193.845	0.0969	302.61- 342.61	427.08

Average of Peak Concentrations = 0.0791

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/042f4201.d
Date : 08-DEC-2009 01:48
Client ID: WST49-10-5425(24172
Sample Info: |1201982202|10|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

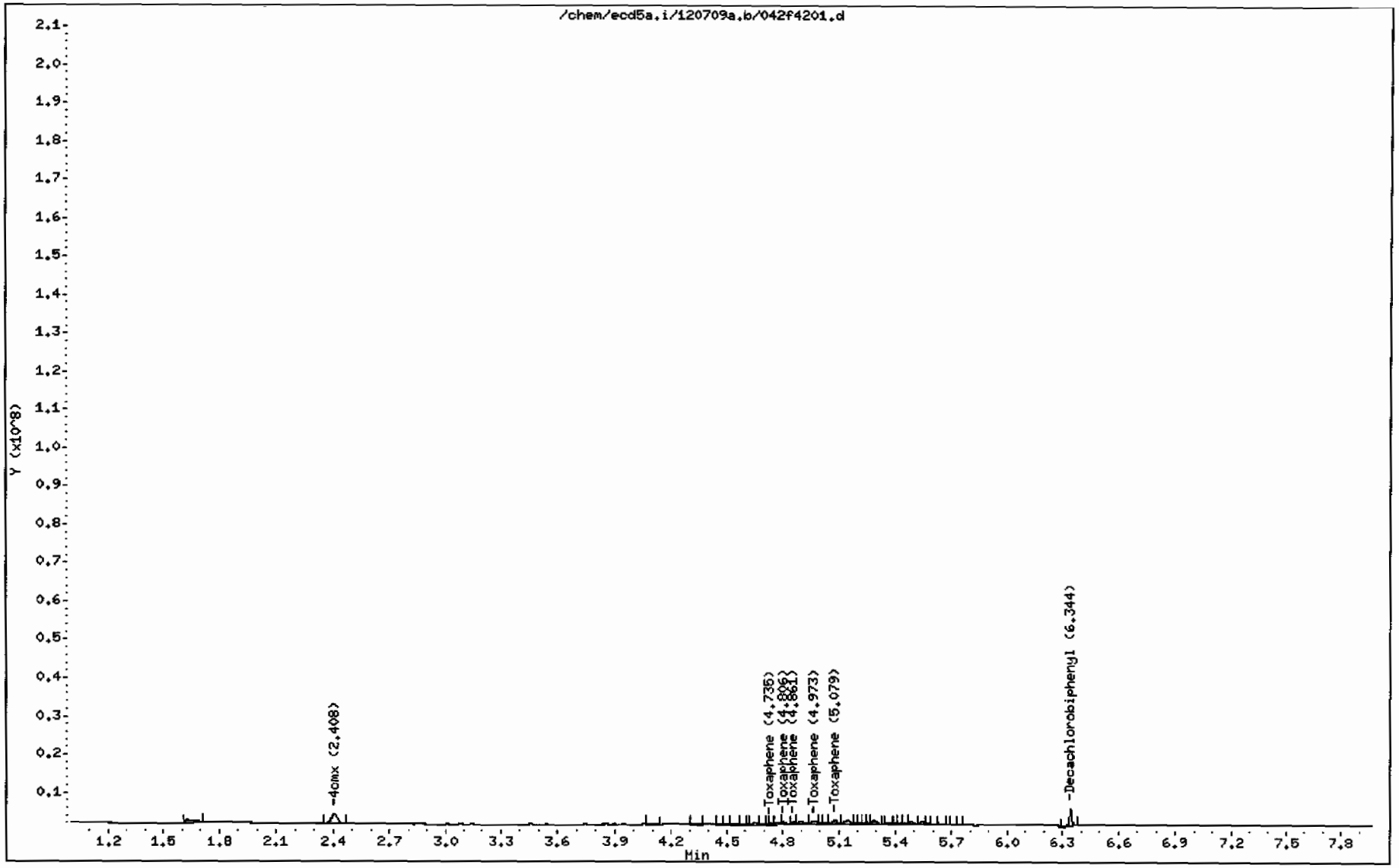

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/043b4301.d
Lab Smp Id: 1201982200 Client Smp ID: WST49-10-5425CMS
Inj Date : 08-DEC-2009 02:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982200|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 43 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.062	2.064	-0.002	60678767	12.1850	0.00609	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	37484503	13.5122	0.00676	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.341	3.340	0.001	31297334	104.543	0.0523	80.00- 120.00	100.00
4.066	4.067	-0.001	15508967	117.323	0.0587	32.50- 72.50	49.55
4.210	4.211	-0.001	75794361	120.025	0.0600	223.07- 263.07	242.18
4.305	4.306	-0.001	61564301	130.406	0.0652	171.50- 211.50	196.71
4.855	4.855	0.000	36046364	281.842	0.141	46.37- 86.37	115.17

Average of Peak Concentrations = 0.0754

Data File: /chem/ecd5a.i/120709a.b/043b4301.d

Date : 08-DEC-2009 02:00

Client ID: WST49-10-5425(24172

Sample Info: |1201982200|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

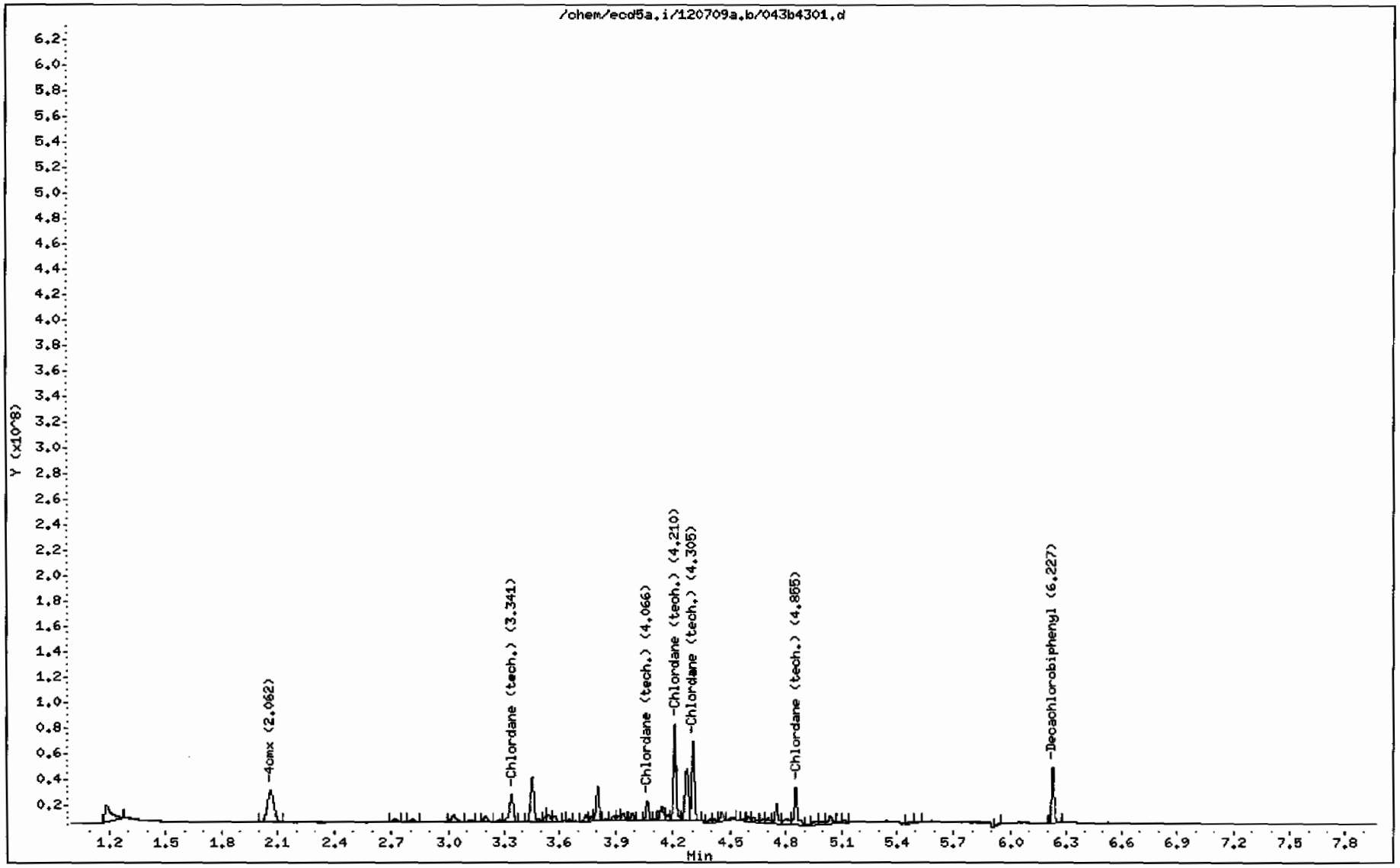

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/043f4301.d
Lab Smp Id: 1201982200 Client Smp ID: WST49-10-5425CMS
Inj Date : 08-DEC-2009 02:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982200|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 43 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	4890276	11.0488	0.00552	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	4242900	16.1463	0.00807	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.677	3.677	0.000	2197300	111.546	0.0558	80.00- 120.00	100.00
4.071	4.071	0.000	2579823	137.742	0.0689	83.32- 123.32	117.41
4.350	4.350	0.000	1448747	114.364	0.0572	42.61- 82.61	65.93
4.475	4.475	0.000	7010418	122.097	0.0610	268.99- 308.99	319.05
5.044	5.044	0.000	1638197	176.250	0.0881	30.21- 70.21	74.55

Average of Peak Concentrations = 0.0662

Data File: /chem/ecd5a.i/120709a.b/043f4301.d

Date : 08-DEC-2009 02:00

Client ID: WST49-10-5425(24172

Sample Info: |120198220010|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

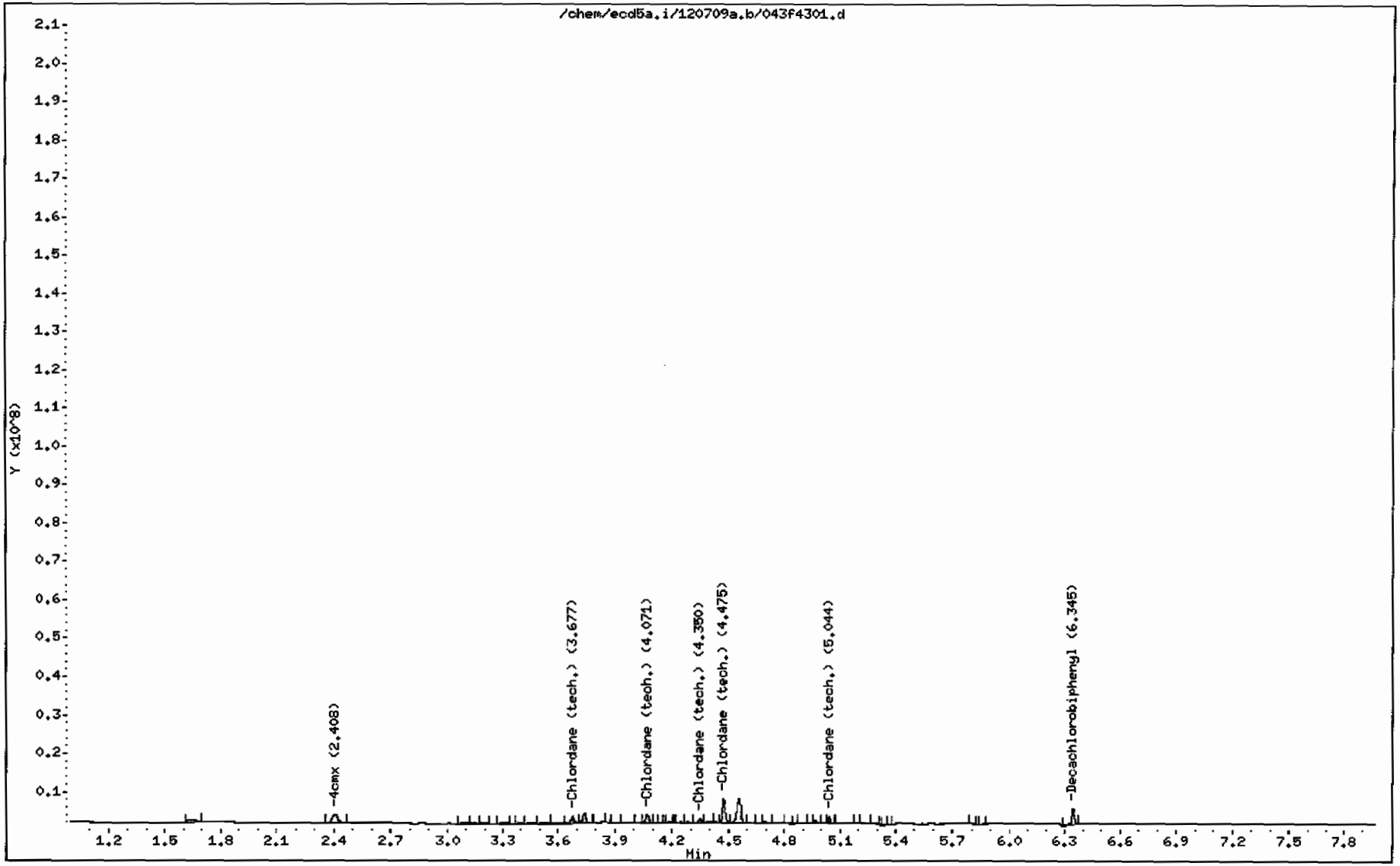

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/044b4401.d
Lab Smp Id: 1201982203 Client Smp ID: WST49-10-5425CMSD
Inj Date : 08-DEC-2009 02:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982203|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.063	2.064	-0.001	55428111	11.1306	0.00556	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.228	6.226	0.002	32600236	11.7516	0.00588	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.340	3.340	0.000	27527123	84.0743	0.0420	80.00- 120.00	100.00
4.067	4.067	0.000	14148550	103.515	0.0518	32.50- 72.50	51.40
4.211	4.211	0.000	66862004	101.717	0.0508	223.07- 263.07	242.89
4.305	4.306	-0.001	54386794	111.664	0.0558	171.50- 211.50	197.58
4.854	4.855	-0.001	19137389	143.322	0.0717	46.37- 86.37	69.52

Average of Peak Concentrations = 0.0544

Data File: /chem/ecd5a.i/120709a.b/044b4401.d

Date : 08-DEC-2009 02:12

Client ID: WST49-10-5425(24172

Sample Info: |1201982203|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

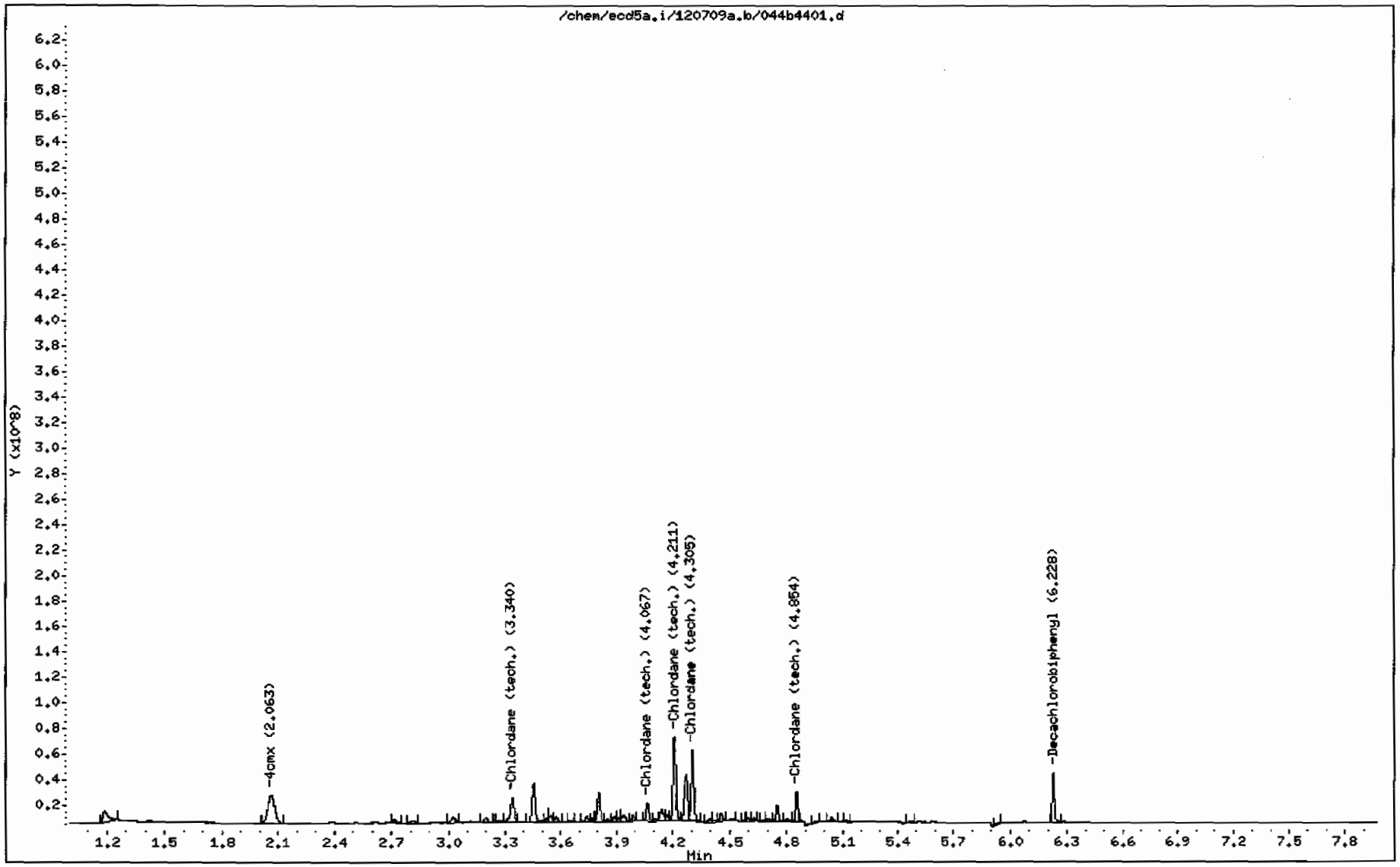

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/044f4401.d
Lab Smp Id: 1201982203 Client Smp ID: WST49-10-5425CMSD
Inj Date : 08-DEC-2009 02:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982203|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	4431695	10.0127	0.00501	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	3826876	14.5632	0.00728	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.677	3.677	0.000	1942608	98.6164	0.0493	80.00- 120.00	100.00
4.071	4.071	0.000	2243305	119.775	0.0599	83.32- 123.32	115.48
4.350	4.350	0.000	1273751	100.550	0.0503	42.61- 82.61	65.57
4.475	4.475	0.000	6087793	106.028	0.0530	268.99- 308.99	313.38
5.044	5.044	0.000	1376322	148.075	0.0740	30.21- 70.21	70.85

Average of Peak Concentrations = 0.0573

Data File: /chem/ecd5a.i/120709a.b/044f4401.d
Date : 08-DEC-2009 02:12
Client ID: WST49-10-5425(24172
Sample Info: |1201982203|10|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

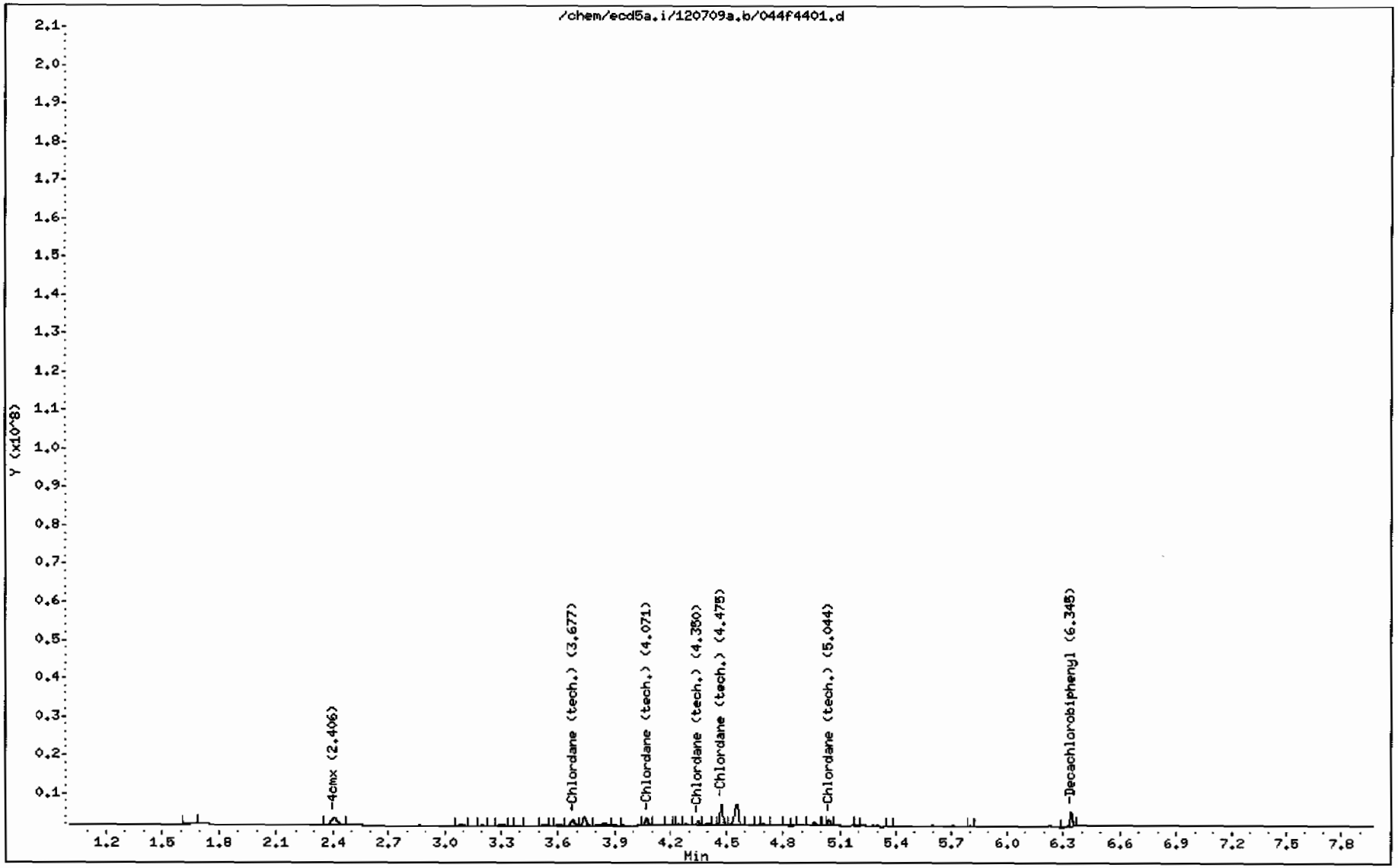

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 927115 **Verified by:** _____

Analyst: Terry Allison

Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 21

Instrument: Semi-Volatiles Manual
Volatiles Manual Instrument

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201980750 TB	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982197 MB	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982204 LCS	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982205 LCS	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982206 LCS	01-DEC-2009 18:05:48	20	5	5	1	0.05
241424001	01-DEC-2009 18:05:48	20	5	5	1	0.05
241424002	01-DEC-2009 18:05:48	20	5	5	1	0.05
241527001	01-DEC-2009 18:05:48	20	6	6	1	0.05
241720001	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982198 MS (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982201 MSD (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982199 MS (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982202 MSD (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982200 MS (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982203 MSD (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
241732001	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751001	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751002	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751003	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751004	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751005	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751006	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751007	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751008	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751009	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751010	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201980055 TB	01-DEC-2009 18:05:48	20	5	5	1	0.05

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982204	PESTICIDE TCLP LCS	UE091009-06	1	mL
LCS	1201982205	Toxaphene TCLP LCS	WE091028-11	1	mL
LCS	1201982206	Chlordane TCLP LCS	WE091111-04	1	mL
MS	1201982198	PESTICIDE TCLP LCS	UE091009-06	1	mL
MS	1201982199	Toxaphene TCLP LCS	WE091028-11	1	mL
MS	1201982200	Chlordane TCLP LCS	WE091111-04	1	mL
MSD	1201982201	PESTICIDE TCLP LCS	UE091009-06	1	mL
MSD	1201982202	Toxaphene TCLP LCS	WE091028-11	1	mL

Comments:

Verified By: RLC
Final Solvent: Hexane

Prep Logbook

Batch ID: 927115 **Verified by:** _____

Analyst: Terry Allison

Method: SW846 3510C

Lab SOP: GL–OA–E–013 REV# 21

Instrument: Semi–Volatiles Manual
Volatiles Manual Instrument

Sample ID		Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
MSD	1201982203	Chlordane TCLP LCS		WE091111–04	1	mL	
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L		UE091114–15	1	mL	
REGNT	All	Methylene Chloride		1233148–D	180	mL	
REGNT	All	Hexane		1233925–B2	5	mL	
SOURC	All	SODIUM SULFATE		1236563	30	g	

TCLP LOGBOOK

Report run on: December 15, 2009 9:21 AM

Batch Id: **926091**
Employee ID: **Clifford Postell**
Sop ID: **GL-LB-E-006**
Method: **SW846 1311**
Extraction Start Date: **24-NOV-09 16:30:47 @ 23 C**
Extraction Stop Date: **25-NOV-09 09:30:45 @ 23 C**
Filtration Complete Date: **25-NOV-09 13:30:45 @ 23 C**

Reagent / Spike ID	Amount	Units	Description
1202901	3.5	mL	1N HCl for pH testing
1017923	2000	mL	TCLP EXTRACTION FLUID 1

Sample Id	Matrix	Inst. ID	Inst. Speed	Sample Properties	Aliquot	Weight of Container	Weight of Filter Cake	Initial Ph	pH Temp C	2nd pH	20 X % wet solid X wt.sample	Volume of Filtrate	pH of Filtrate	Positive Pressure (Y/N)	Extraction Vessel number
241424001	S	T 106	28		2000g	N/A	N/A	N/A	50	N/A	N/A	N/A	N/A	N/A	N/A
241424002	S	T 106	28		2000g	N/A	N/A	N/A	50	N/A	N/A	N/A	N/A	N/A	N/A
241527001	S	T 106	28		2000g	N/A	N/A	N/A	50	N/A	N/A	N/A	N/A	N/A	N/A
1201980055 TB	S	T 106	28		2000g	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Bottle Lot Number: H929301DB

Filter Lot Number: 9045002

Note: The aliquot for metals matrix QC is taken from the parent sample filtrate.

NCR Report No.: 767434
Revision No.: 3

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
08-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8081A	Solid	LANL
Batch ID:	**Sample Numbers:**		
927116	See Below		

Potentially affected work order(s)(SDG): 241424(10-578-1),241527(10-600-1),241720(10-653-1),241732(10-654-1),241751(10-655-1)

Application Issues:

Failed CCV or CCB

Failed RPD for MS/MSD, or PS/PSD

Failed Yield for Surrogates

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The RPD between the MS and MSD did not meet the acceptance criteria for Toxaphene.	1. The RPD values were not all within the acceptance limits. The MS/MSD pairs passed spike recoveries for all analytes. The results are reported.
2. Sample 241720001 yielded above the acceptance range for surrogates.	2. Despite this positive bias, no target analytes were detected in the sample. Therefore, this non-conformance has no adverse effect on the reported data.
3. The CCV standard bracketing QC samples TB, MB and LCS failed to meet the acceptance criteria with negative bias for several target analytes on both analytical columns.	3. All QC samples met surrogate and spike recovery acceptance criteria. All LANL samples in this batch were bracketed by the CCV standards with acceptance recovery. The data were reported.

Originator's Name:

Clairette Campbell 08-DEC-09

Data Validator/Group Leader:

Jimin Cao 16-DEC-09

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	926729
Prep Batch Number:	926728

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241524002	WST03-10-2132
1201981410	Method Blank (MB)
1201981413	Laboratory Control Sample (LCS)
1201981411	241418003(RE03-09-13959) Matrix Spike (MS)
1201981412	241418003(RE03-09-13959) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria for the Aroclors.

Surrogate recovery did not meet the acceptance criteria in Aroclor-1248 standard analyzed for this SDG; however this had no adverse effects on the data as all samples associated with this SDG met surrogate recovery acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-576) was selected for the matrix spike and matrix spike duplicate analysis for this batch.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241524002 (WST03-10-2132) was diluted at 1:5 prior to analysis due to the oily matrix of the extract.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/17/09

Roadmap for LANL 10-600 PCB

This roadmap was analyzed by jen01212 on 12-04-2009, 11:58.
This roadmap was reviewed by jim01140 on 12-07-2009, 09:31.
This roadmap was packaged by sha01289 on 12-16-2009, 12:03.
This roadmap was validated by jim01140 on 12-17-2009, 11:20.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/078f7801.d	241524002	sample	03-DEC-2009	22:25	10-600.sub	WST03-10-2132	5.00000	926729	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/078b7801.d	241524002	sample	03-DEC-2009	22:25	10-600.sub	WST03-10-2132	5.00000	926729	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/051f5101-3.d	1201981410	mb	03-DEC-2009	17:25	10-600.sub	PBLK01	1.00000	926729	
☐	N	/chem/ecd2a.i/120309.b/052f5201-3.d	1201981413	lcs	03-DEC-2009	17:36	10-600.sub	PBLK01LCS	1.00000	926729	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/051b5101-3.d	1201981410	mb	03-DEC-2009	17:25	10-600.sub	PBLK01	1.00000	926729	
☐	N	/chem/ecd2a.i/120309.b/052b5201-3.d	1201981413	lcs	03-DEC-2009	17:36	10-600.sub	PBLK01LCS	1.00000	926729	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–600	Date Collected:	11/18/2009 12:00	Matrix:	R
Lab Sample ID:	241524002	Date Received:	11/20/2009 08:50	%Moisture:	6.2
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03–10–2132	Method:	SW846 8082	SOP Ref:	GL–OA–E–040
Batch ID:	926729	Inst:	ECD2A.I	Dilution:	5
Run Date:	12/03/2009 22:25	Analyst:	JAOC	Inj. Vol:	1 uL
Prep Date:	11/27/2009 21:14	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	078f7801.d	Column:	1 CLP1	Level:	LOW
	078b7801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.7	ug/kg	5.89	17.7	1
11104–28–2	Aroclor–1221	U	17.7	ug/kg	5.89	17.7	1
11141–16–5	Aroclor–1232	U	17.7	ug/kg	5.89	17.7	1
53469–21–9	Aroclor–1242	U	17.7	ug/kg	5.89	17.7	1
12672–29–6	Aroclor–1248	U	17.7	ug/kg	5.89	17.7	1
11097–69–1	Aroclor–1254	P	18.7	ug/kg	5.89	17.7	1
11096–82–5	Aroclor–1260		29.2	ug/kg	5.89	17.7	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-600

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201981410	MB for batch 926728	94	100	74	77
1201981413	LCS for batch 926728	96	103	80	82
241524002	WST03-10-2132	55 D	56 D	41 D	40 D

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–600
Client ID: LCS for batch 926728
Lab Sample ID: 1201981413
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 17:36
Dilution: 1
Prep Batch ID: 926728
Batch ID: 926729

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	LCS	Aroclor–1016	33.3	0.0	31.6	95	41–110
11096–82–5	LCS	Aroclor–1260	33.3	0.0	33.7	101	48–110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13959MS
Lab Sample ID: 1201981411
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 17.7
Analysis Date: 12/03/2009 18:42
Prep Batch ID: 926728
Batch ID: 926729
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	40.3	0.00	U	37.1	92	23-117
11096-82-5	MS	Aroclor-1260	40.3	0.00	U	39.3	98	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13959MSD
Lab Sample ID: 1201981412
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 17.7
Analysis Date: 12/03/2009 18:54
Prep Batch ID: 926728
Batch ID: 926729
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	40.4	0.00	U	33.6	83	23-117	10	0-30
11096-82-5	MSD Aroclor-1260	40.4	0.00	U	36.2	90	27-116	8	0-30

Method Blank Summary

SDG Number:	10–600	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926728	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	051b5101–1.d 051f5101–1.d
Lab Sample ID:	1201981410				
Column:	CLP2 CLP1	Prep Date:	11/27/2009 21:14	Analyzed:	12/03/09 17:25
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926728	1201981413	052f5201–1.d 052b5201–1.d	12/03/09	1736
04 WST03–10–2132	241524002	078f7801.d 078b7801.d	12/03/09	2225

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241524002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03–10–2132**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**12/03/2009 22:25**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**078f7801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	078b7801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.7	ug/kg	5.89	17.7	1
11104–28–2	Aroclor–1221	U	17.7	ug/kg	5.89	17.7	1
11141–16–5	Aroclor–1232	U	17.7	ug/kg	5.89	17.7	1
53469–21–9	Aroclor–1242	U	17.7	ug/kg	5.89	17.7	1
12672–29–6	Aroclor–1248	U	17.7	ug/kg	5.89	17.7	1
11097–69–1	Aroclor–1254	P	18.7	ug/kg	5.89	17.7	1
11096–82–5	Aroclor–1260		29.2	ug/kg	5.89	17.7	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/078f7801.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 03-DEC-2009 22:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241524002|5|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 78
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	6.23420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	1271733	22.0362	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	906651	16.5359	2.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.238	3.245	-0.007	312753	150.359	26.6	80.00- 120.00	100.00
3.429	3.428	0.001	78708	28.3926	5.0	113.78- 153.78	25.17
3.698	3.697	0.001	311735	83.2982	14.7	164.17- 204.17	99.67
3.889	3.888	0.001	77660	27.9081	4.9	117.36- 157.36	24.83
4.018	4.018	0.000	657839	238.344	42.2	110.08- 150.08	210.34
			Average of Peak Concentrations =		18.7		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	657839	161.759	28.6	80.00- 120.00	100.00
4.290	4.288	0.002	385193	152.352	27.0	40.91- 80.91	58.55
4.456	4.454	0.002	533524	206.536	36.6	42.71- 82.71	81.10
4.667	4.665	0.002	825067	136.689	24.2	125.86- 165.86	125.42
4.856	4.855	0.001	488146	167.636	29.7	49.52- 89.52	74.20
			Average of Peak Concentrations =		29.2		

Data File: /chem/ecd2a.i/120309.b/078f7801.d
Date : 03-DEC-2009 22:25
Client ID: WST03-10-2132
Sample Info: |241524002|5|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

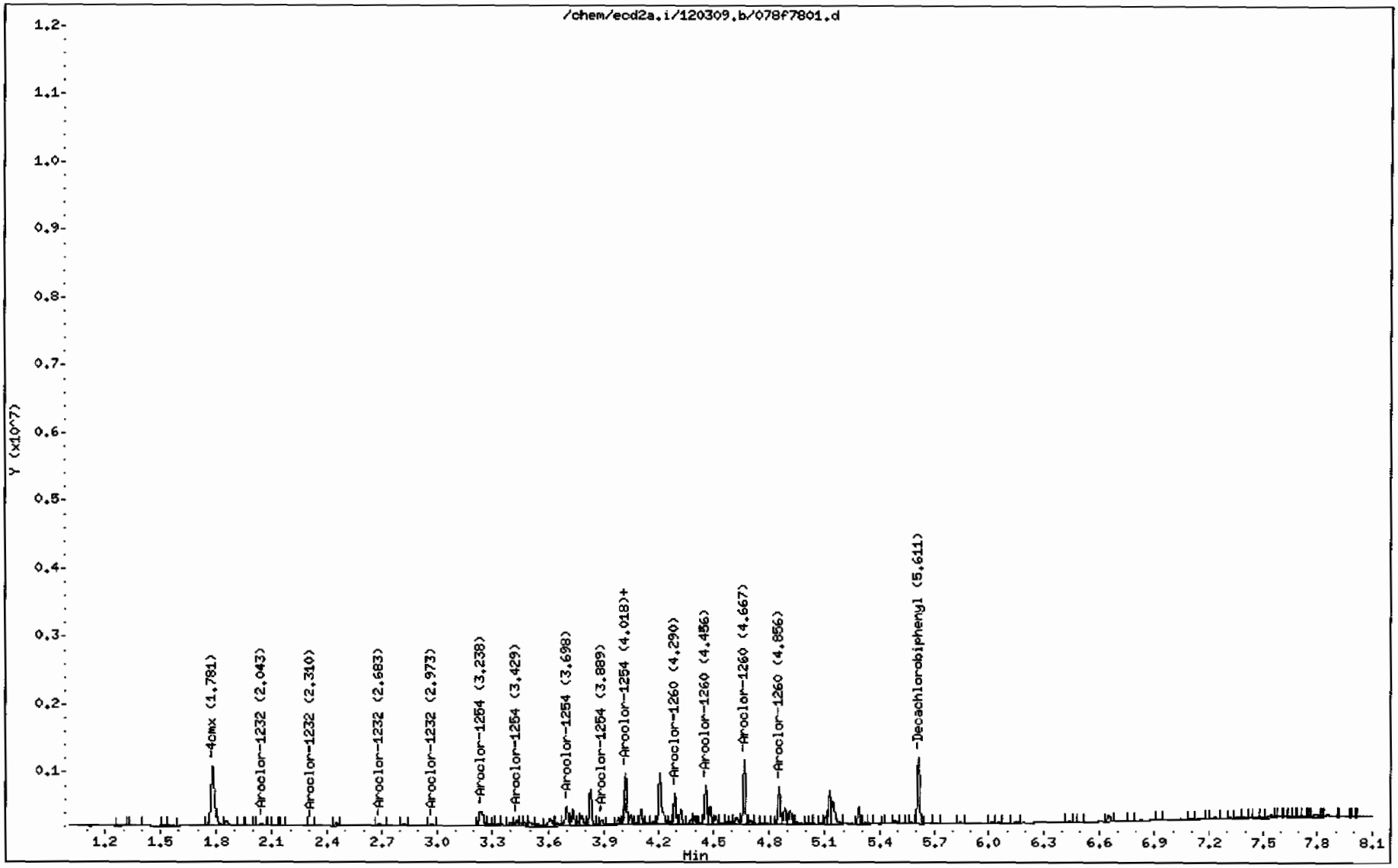

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/078b7801.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 03-DEC-2009 22:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241524002|5|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 78
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	6.23420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	2653887	22.4525	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	1743202	16.0454	2.8	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.822	0.001	258488	51.8502	9.2	80.00- 120.00	100.00(aM)
3.965	3.963	0.002	360665	62.1950	11.0	96.19- 136.19	139.53
4.199	4.200	-0.001	231553	57.5575	10.2	61.63- 101.63	89.58
4.280	4.280	0.000	583971	75.5328	13.4	137.40- 177.40	225.92
4.443	4.443	0.000	192662	34.3530	6.1	90.70- 130.70	74.53

Average of Peak Concentrations = 10.0

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	994184	180.346	31.9	80.00- 120.00	100.00(M)
4.570	4.569	0.001	1035197	145.149	25.7	107.13- 147.13	104.13
4.682	4.680	0.002	631287	133.426	23.6	64.21- 104.21	63.50
4.879	4.878	0.001	848650	146.303	25.9	80.11- 120.11	85.36
5.505	5.504	0.001	1320231	146.032	25.8	135.13- 175.13	132.80
		Average of Peak Concentrations =			26.6		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/078b7801.d
Date : 03-DEC-2009 22:25
Client ID: WST03-10-2132
Sample Info: |241524002|5|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

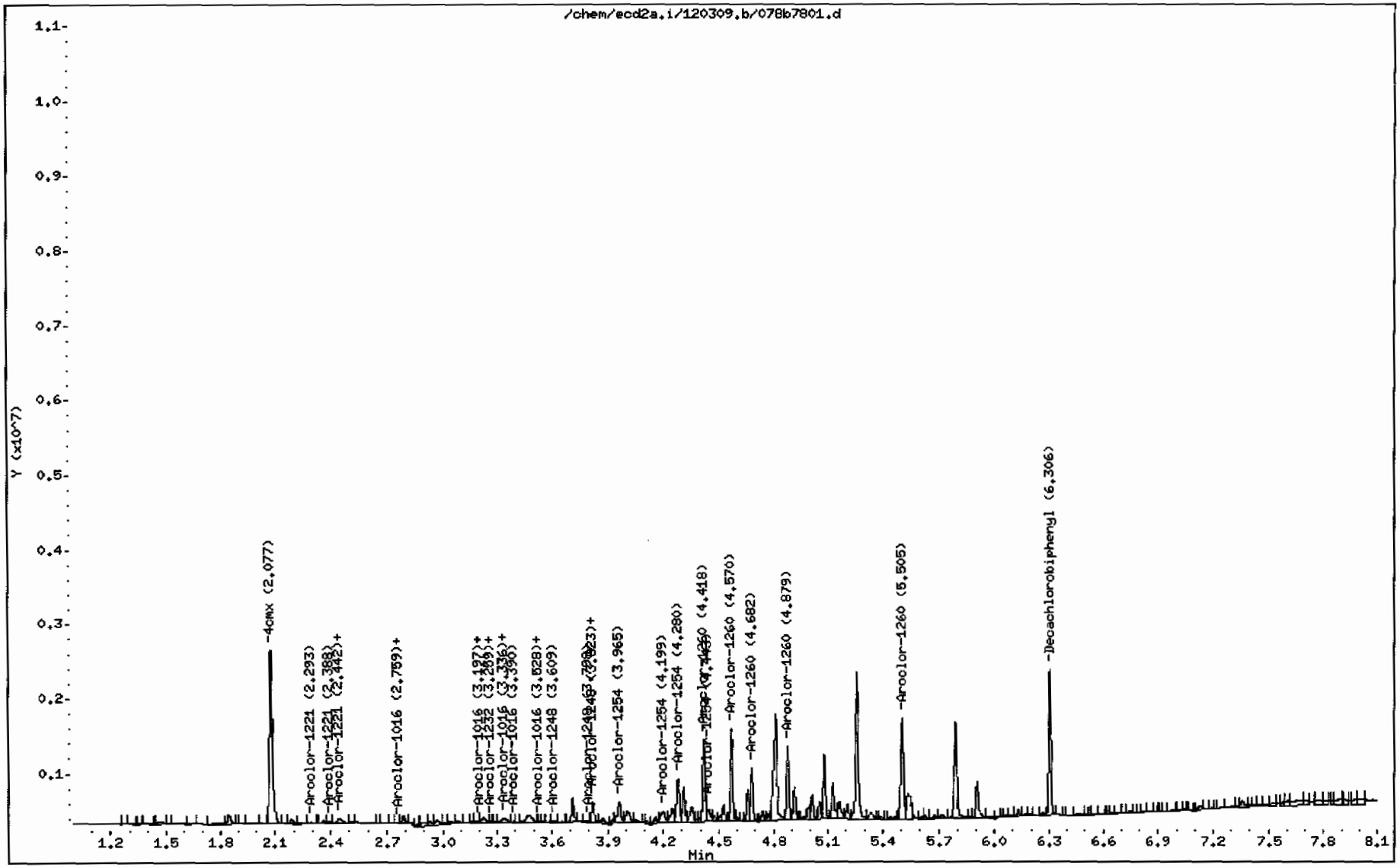

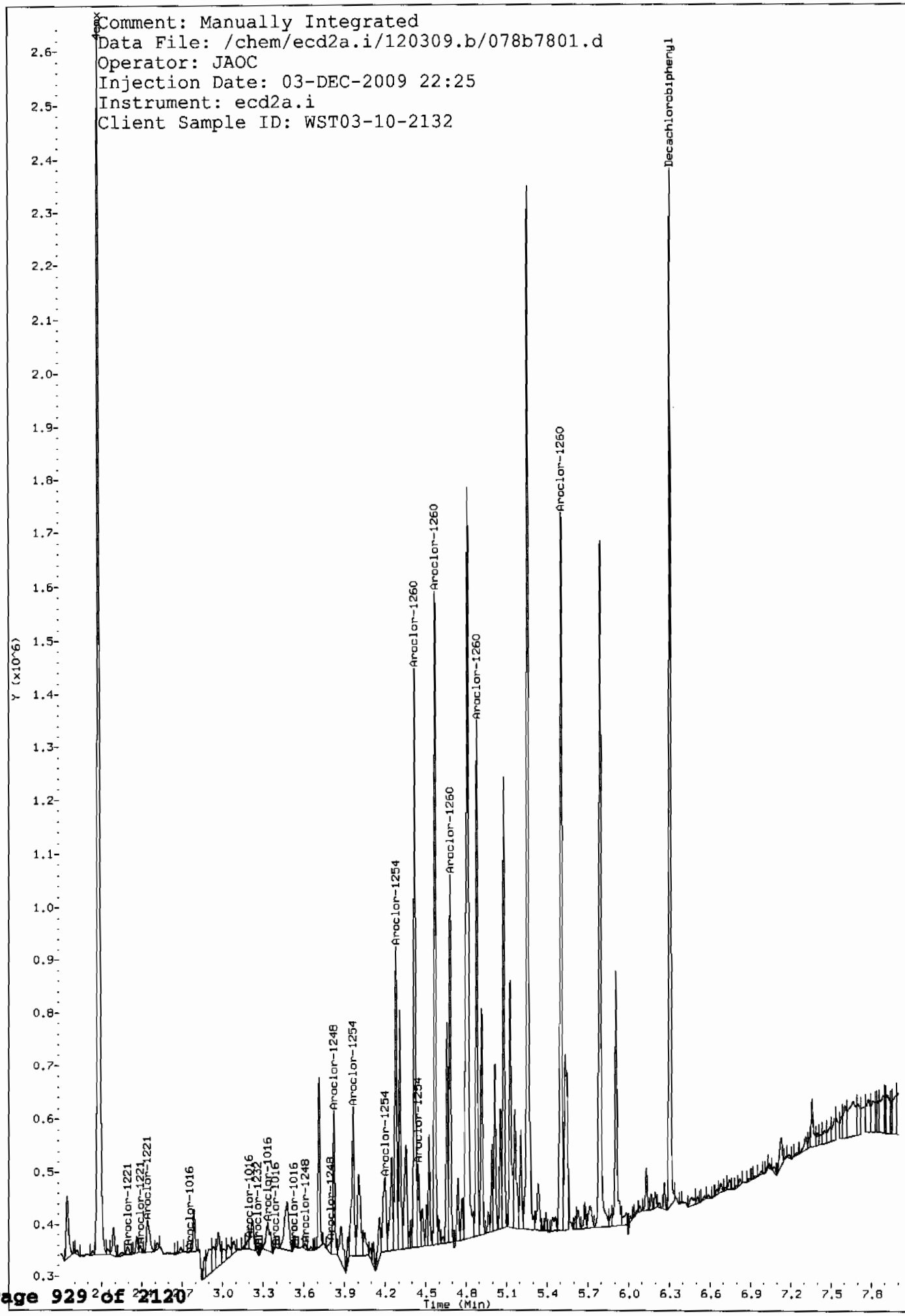
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/078b7801.d
Operator: JAOC
Injection Date: 03-DEC-2009 22:25
Instrument: ecd2a.i
Client Sample ID: WST03-10-2132
Y (x10^6)
Time (Min)
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1248
Aroclor-1221
Aroclor-1016

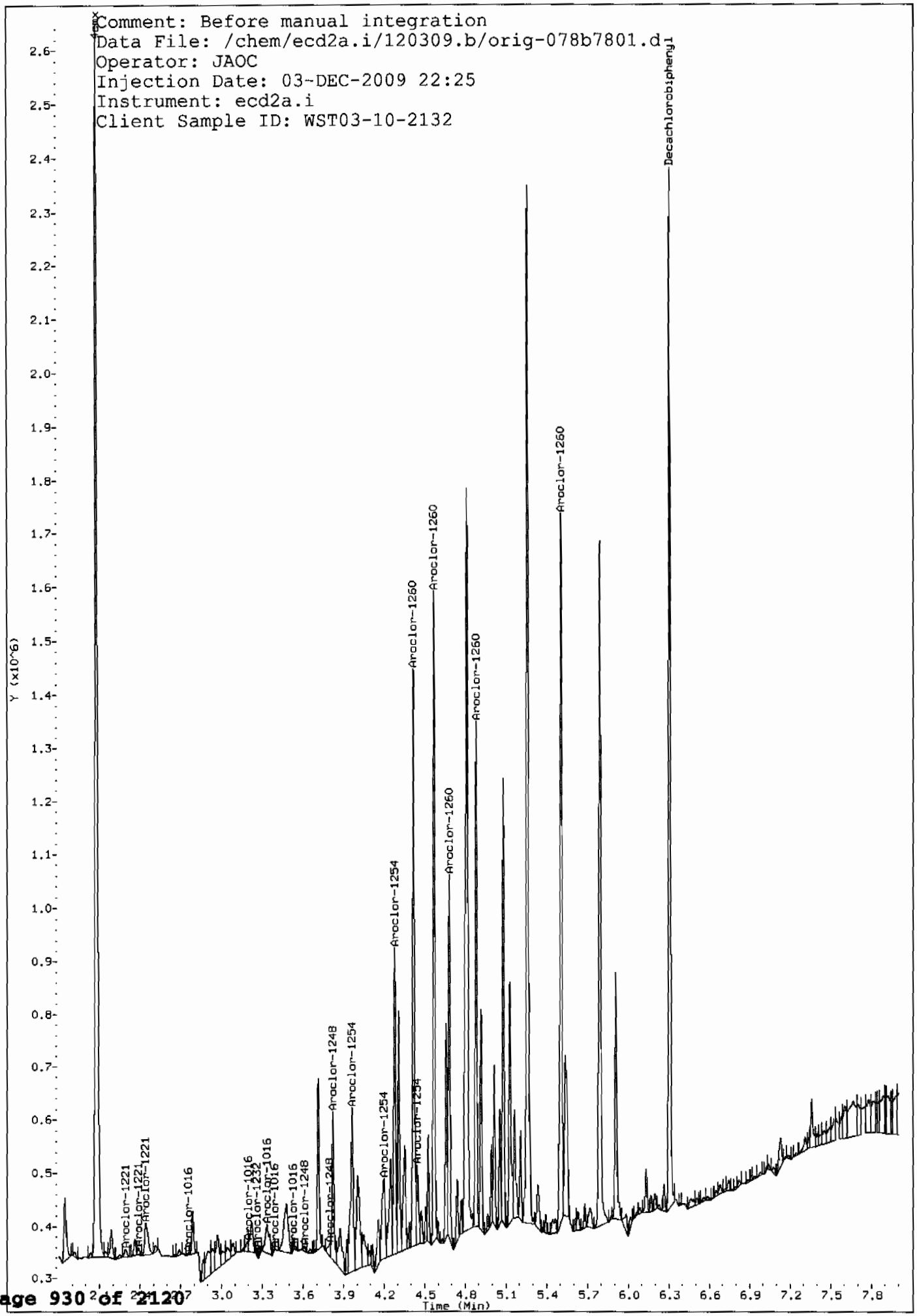
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-078b7801.d
Operator: JAOC
Injection Date: 03-DEC-2009 22:25
Instrument: ecd2a.i
Client Sample ID: WST03-10-2132
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1221
Aroclor-1221
Aroclor-1221
Y (x10^6)
Time (Min)

STANDARDS DATA

Report Date: 09-Dec-2009 07:15

Calibration History

Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d

12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 14:05	AR1660	/chem/ecd2a.i/120309.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 00:16	AR1660	/chem/ecd2a.i/120309.b/088f8801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 22:36	AR1660	/chem/ecd2a.i/120309.b/079f7901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 20:23	AR1660	/chem/ecd2a.i/120309.b/067f6701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 18:09	AR1660	/chem/ecd2a.i/120309.b/055f5501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 16:18	AR1660	/chem/ecd2a.i/120309.b/045f4501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:17	AR1221	/chem/ecd2a.i/120309.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 11:52	AR1660	/chem/ecd2a.i/120309.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:39	AR1268	/chem/ecd2a.i/120309.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:28	AR1262	/chem/ecd2a.i/120309.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:54	AR1248	/chem/ecd2a.i/120309.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:05	AR1232	/chem/ecd2a.i/120309.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:43	AR1242	/chem/ecd2a.i/120309.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:32	AR1254	/chem/ecd2a.i/120309.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:21	AR1660	/chem/ecd2a.i/120309.b/002f0201.d

Report Date: 03-Dec-2009 12:34

Calibration History

Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 11:52	AR1660	/chem/ecd2a.i/120309.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:39	AR1268	/chem/ecd2a.i/120309.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:28	AR1262	/chem/ecd2a.i/120309.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:17	AR1221	/chem/ecd2a.i/120309.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:05	AR1232	/chem/ecd2a.i/120309.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:54	AR1248	/chem/ecd2a.i/120309.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:43	AR1242	/chem/ecd2a.i/120309.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:32	AR1254	/chem/ecd2a.i/120309.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:21	AR1660	/chem/ecd2a.i/120309.b/002b0201.d

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COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 12:17 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.280	2.250-2.310	2.100e+03
	2.601	2.571-2.631	4.505e+03
	2.692	2.662-2.722	1.820e+03
	2.827	2.797-2.857	9.329e+02
	2.978	2.948-3.008	1.378e+03
2 Aroclor-1221	1.446	1.416-1.476	4.641e+02
	1.905	1.875-1.935	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.033	2.003-2.063	1.165e+03
	2.280	2.250-2.310	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.736	2.706-2.766	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.979	2.949-3.009	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
		3.428	3.398-3.458	2.772e+03
		3.697	3.667-3.727	3.742e+03
		3.888	3.858-3.918	2.783e+03
		4.018	3.988-4.048	2.760e+03
	7 Aroclor-1260	4.016	3.986-4.046	4.067e+03
		4.288	4.258-4.318	2.528e+03
		4.454	4.424-4.484	2.583e+03
		4.665	4.635-4.695	6.036e+03
		4.855	4.825-4.885	2.912e+03
	8 Aroclor-1262	3.827	3.797-3.857	2.273e+03
		4.018	3.988-4.048	3.072e+03
		4.289	4.259-4.319	4.004e+03
		4.455	4.425-4.485	3.573e+03
		4.857	4.827-4.887	2.501e+03
	9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
		4.912	4.882-4.942	9.361e+03
		5.045	5.015-5.075	7.073e+03
		5.283	5.253-5.313	3.056e+03
		5.480	5.450-5.510	2.201e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.779	1.749-1.809	5.771e+04
$	12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
	13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
	14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
	15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 12:15 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.750	2.720-2.780	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.335	3.305-3.365	1.979e+03
	3.364	3.334-3.394	2.061e+03
	3.521	3.491-3.551	2.754e+03
2 Aroclor-1221	2.299	2.269-2.329	1.263e+03
	2.404	2.374-2.434	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.448	2.418-2.478	2.061e+03
	2.751	2.721-2.781	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.257	3.227-3.287	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.751	2.721-2.781	3.445e+03
	3.185	3.155-3.215	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.335	3.305-3.365	1.508e+03
	3.522	3.492-3.552	2.145e+03
5 Aroclor-1248	3.336	3.306-3.366	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.797	3.767-3.827	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.822	3.792-3.852	4.985e+03
	3.963	3.933-3.993	5.799e+03
	4.200	4.170-4.230	4.023e+03
	4.280	4.250-4.310	7.731e+03
	4.443	4.413-4.473	5.608e+03
7 Aroclor-1260	4.418	4.388-4.448	5.513e+03
	4.569	4.539-4.599	7.132e+03
	4.680	4.650-4.710	4.731e+03
	4.878	4.848-4.908	5.801e+03
	5.504	5.474-5.534	9.041e+03
8 Aroclor-1262	4.418	4.388-4.448	4.703e+03
	4.570	4.540-4.600	5.853e+03
	4.879	4.849-4.909	8.946e+03
	5.079	5.049-5.109	7.772e+03
	5.258	5.228-5.288	1.672e+04
9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
	5.535	5.505-5.565	2.018e+04
	5.707	5.677-5.737	1.496e+04
	5.907	5.877-5.937	6.438e+03
	6.131	6.101-6.161	4.409e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.075	2.045-2.105	1.182e+05
$ 12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Cal Date : 03-Dec-2009 12:17 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008f0801.d
Level 2: /chem/ecd2a.i/120209.b/009f0901.d
Level 3: /chem/ecd2a.i/120209.b/010f1001.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/120209.b/012f1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	$\overline{RRF}$	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Cal Date : 03-Dec-2009 12:17 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
(2)	2598	2539	2501	2535	2469	2528	1.903
(3)	2625	2577	2548	2609	2557	2583	1.287
(4)	5914	5894	5999	6196	6179	6036	2.381
(5)	2944	2846	2851	2940	2978	2912	2.044
8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
(2)	3295	3066	3031	3051	2917	3072	4.482
(3)	4237	3997	3977	3997	3815	4004	3.763
(4)	3754	3532	3556	3594	3430	3573	3.295
(5)	2578	2453	2481	2538	2454	2501	2.217
9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
(2)	9332	9272	9238	9197	9765	9361	2.470
(3)	6985	6923	6953	6984	7523	7073	3.568
(4)	3112	3015	2984	2964	3207	3056	3.331
(5)	21397	21592	21760	21851	23464	22013	3.767
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$ 11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$ 12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Cal Date : 03-Dec-2009 12:15 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008b0801.d
Level 2: /chem/ecd2a.i/120209.b/009b0901.d
Level 3: /chem/ecd2a.i/120209.b/010b1001.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/120209.b/012b1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Cal Date : 03-Dec-2009 12:15 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0821

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2085.253	0.01	-0.7	15.0
(2)	4504.513	4285.927	0.01	-4.8	15.0
(3)	1820.211	1728.701	0.01	-5.0	15.0
(4)	932.883	835.835	0.01	-10.4	15.0
(5)	1378.125	1268.162	0.01	-8.0	15.0
Aroclor-1260	4066.794	4077.459	0.01	0.3	15.0
(2)	2528.317	2528.986	0.01	0.0	15.0
(3)	2583.202	2589.227	0.01	0.2	15.0
(4)	6036.106	6066.223	0.01	0.5	15.0
(5)	2911.947	2891.295	0.01	-0.7	15.0
4cmx	57711.247	61240.300	0.01	6.1	15.0
Decachlorobiphenyl	54829.246	49462.440	0.01	-9.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0821

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4174.215	0.01	-2.0	15.0
(2)	3444.681	3357.939	0.01	-2.5	15.0
(3)	1979.487	1949.046	0.01	-1.5	15.0
(4)	2061.253	2027.884	0.01	-1.6	15.0
(5)	2754.170	2756.943	0.01	0.1	15.0
Aroclor-1260	5512.644	5813.745	0.01	5.5	15.0
(2)	7131.968	7474.901	0.01	4.8	15.0
(3)	4731.365	5007.399	0.01	5.8	15.0
(4)	5800.657	5946.667	0.01	2.5	15.0
(5)	9040.681	9360.400	0.01	3.5	15.0
4cmx	118199.83	131354.53	0.01	11.1	15.0
Decachlorobiphenyl	108641.52	103854.55	0.01	-4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0832

Lab File ID: 003F0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1969.624	0.01	-5.3	15.0
(2)	2772.138	2634.906	0.01	-5.0	15.0
(3)	3742.400	3627.492	0.01	-3.1	15.0
(4)	2782.705	2705.422	0.01	-2.8	15.0
(5)	2760.043	2562.087	0.01	-7.2	15.0
4cmx	57711.247	64723.850	0.01	12.2	15.0
Decachlorobiphenyl	54829.246	53425.320	0.01	-2.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0832

Lab File ID: 003B0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4956.809	0.01	-0.6	15.0	
(2)	5798.946	5759.379	0.01	-0.7	15.0	
(3)	4022.990	4046.006	0.01	0.6	15.0	
(4)	7731.372	7802.109	0.01	0.9	15.0	
(5)	5608.308	5487.038	0.01	-2.2	15.0	
4cmx	118199.83	139202.25	0.01	17.8	15.0	<-
Decachlorobiphenyl	108641.52	112202.84	0.01	3.3	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1618

Lab File ID: 045F4501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2030.518	0.01	-3.3	15.0	
(2)	4504.513	4356.685	0.01	-3.3	15.0	
(3)	1820.211	1743.924	0.01	-4.2	15.0	
(4)	932.883	854.233	0.01	-8.4	15.0	
(5)	1378.125	1309.544	0.01	-5.0	15.0	
Aroclor-1260	4066.794	4096.006	0.01	0.7	15.0	
(2)	2528.317	2491.202	0.01	-1.5	15.0	
(3)	2583.202	2554.375	0.01	-1.1	15.0	
(4)	6036.106	5937.904	0.01	-1.6	15.0	
(5)	2911.947	2831.785	0.01	-2.8	15.0	
4cmx	57711.247	62043.470	0.01	7.5	15.0	
Decachlorobiphenyl	54829.246	44093.980	0.01	-19.6	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1618

Lab File ID: 045B4501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4216.212	0.01	-1.0	15.0	
(2)	3444.681	3405.549	0.01	-1.1	15.0	
(3)	1979.487	1963.953	0.01	-0.8	15.0	
(4)	2061.253	2065.526	0.01	0.2	15.0	
(5)	2754.170	2798.242	0.01	1.6	15.0	
Aroclor-1260	5512.644	5729.480	0.01	3.9	15.0	
(2)	7131.968	7299.919	0.01	2.4	15.0	
(3)	4731.365	4829.058	0.01	2.1	15.0	
(4)	5800.657	5716.115	0.01	-1.4	15.0	
(5)	9040.681	8826.543	0.01	-2.4	15.0	
4cmx	118199.83	132813.10	0.01	12.4	15.0	
Decachlorobiphenyl	108641.52	86887.570	0.01	-20.0	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1809

Lab File ID: 055F5501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2047.399	0.01	-2.5	15.0
(2)	4504.513	4384.029	0.01	-2.7	15.0
(3)	1820.211	1759.330	0.01	-3.3	15.0
(4)	932.883	883.630	0.01	-5.3	15.0
(5)	1378.125	1281.466	0.01	-7.0	15.0
Aroclor-1260	4066.794	4145.972	0.01	1.9	15.0
(2)	2528.317	2544.535	0.01	0.6	15.0
(3)	2583.202	2603.734	0.01	0.8	15.0
(4)	6036.106	6101.061	0.01	1.1	15.0
(5)	2911.947	2916.980	0.01	0.2	15.0
4cmx	57711.247	62578.520	0.01	8.4	15.0
Decachlorobiphenyl	54829.246	47400.040	0.01	-13.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1809

Lab File ID: 055B5501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4268.280	0.01	0.2	15.0
(2)	3444.681	3465.346	0.01	0.6	15.0
(3)	1979.487	2011.970	0.01	1.6	15.0
(4)	2061.253	2064.024	0.01	0.1	15.0
(5)	2754.170	2847.951	0.01	3.4	15.0
Aroclor-1260	5512.644	5893.238	0.01	6.9	15.0
(2)	7131.968	7495.996	0.01	5.1	15.0
(3)	4731.365	4978.184	0.01	5.2	15.0
(4)	5800.657	5877.103	0.01	1.3	15.0
(5)	9040.681	9056.734	0.01	0.2	15.0
4cmx	118199.83	134094.29	0.01	13.4	15.0
Decachlorobiphenyl	108641.52	94981.590	0.01	-12.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2023

Lab File ID: 067F6701 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2088.114	0.01	-0.6	15.0
(2)	4504.513	4342.596	0.01	-3.6	15.0
(3)	1820.211	1732.922	0.01	-4.8	15.0
(4)	932.883	872.123	0.01	-6.5	15.0
(5)	1378.125	1313.386	0.01	-4.7	15.0
Aroclor-1260	4066.794	4128.392	0.01	1.5	15.0
(2)	2528.317	2539.399	0.01	0.4	15.0
(3)	2583.202	2583.337	0.01	0.0	15.0
(4)	6036.106	6075.361	0.01	0.6	15.0
(5)	2911.947	2892.782	0.01	-0.6	15.0
4cmx	57711.247	61636.100	0.01	6.8	15.0
Decachlorobiphenyl	54829.246	46671.790	0.01	-14.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2023

Lab File ID: 067B6701 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4241.952	0.01	-0.4	15.0
(2)	3444.681	3445.004	0.01	0.0	15.0
(3)	1979.487	1997.782	0.01	0.9	15.0
(4)	2061.253	2077.037	0.01	0.8	15.0
(5)	2754.170	2827.729	0.01	2.7	15.0
Aroclor-1260	5512.644	5876.310	0.01	6.6	15.0
(2)	7131.968	7499.077	0.01	5.1	15.0
(3)	4731.365	4987.524	0.01	5.4	15.0
(4)	5800.657	5914.224	0.01	2.0	15.0
(5)	9040.681	9320.682	0.01	3.1	15.0
4cmx	118199.83	133280.74	0.01	12.8	15.0
Decachlorobiphenyl	108641.52	95441.990	0.01	-12.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2236

Lab File ID: 079F7901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	1978.981	0.01	-5.8	15.0	
(2)	4504.513	4303.790	0.01	-4.4	15.0	
(3)	1820.211	1712.863	0.01	-5.9	15.0	
(4)	932.883	871.419	0.01	-6.6	15.0	
(5)	1378.125	1292.053	0.01	-6.2	15.0	
Aroclor-1260	4066.794	4099.995	0.01	0.8	15.0	
(2)	2528.317	2500.052	0.01	-1.1	15.0	
(3)	2583.202	2561.308	0.01	-0.8	15.0	
(4)	6036.106	6022.736	0.01	-0.2	15.0	
(5)	2911.947	2873.424	0.01	-1.3	15.0	
4cmx	57711.247	61586.860	0.01	6.7	15.0	
Decachlorobiphenyl	54829.246	45808.580	0.01	-16.4	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2236

Lab File ID: 079B7901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4227.852	0.01	-0.7	15.0
(2)	3444.681	3405.204	0.01	-1.1	15.0
(3)	1979.487	1957.926	0.01	-1.1	15.0
(4)	2061.253	2034.358	0.01	-1.3	15.0
(5)	2754.170	2793.974	0.01	1.4	15.0
Aroclor-1260	5512.644	5796.324	0.01	5.1	15.0
(2)	7131.968	7372.925	0.01	3.4	15.0
(3)	4731.365	4864.948	0.01	2.8	15.0
(4)	5800.657	5761.960	0.01	-0.7	15.0
(5)	9040.681	9007.180	0.01	-0.4	15.0
4cmx	118199.83	133357.02	0.01	12.8	15.0
Decachlorobiphenyl	108641.52	92491.590	0.01	-14.9	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 08:21
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6124030	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	4946244	100.000	90.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2085253	1000.00	993	80.00- 120.00	100.00(M)
2.601	2.601	0.000	4285927	1000.00	951	185.54- 225.54	205.54
2.692	2.692	0.000	1728701	1000.00	950	62.90- 102.90	82.90
2.827	2.827	0.000	835835	1000.00	896	20.08- 60.08	40.08
2.978	2.978	0.000	1268162	1000.00	920	40.82- 80.82	60.82
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.016	0.000	4077459	1000.00	1000	80.00- 120.00	100.00
4.288	4.288	0.000	2528986	1000.00	1000	42.02- 82.02	62.02
4.454	4.454	0.000	2589227	1000.00	1000	43.50- 83.50	63.50
4.665	4.665	0.000	6066223	1000.00	1000	128.77- 168.77	148.77
4.855	4.855	0.000	2891295	1000.00	993	50.91- 90.91	70.91
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/002f0201.d
Date : 03-DEC-2009 08:21
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

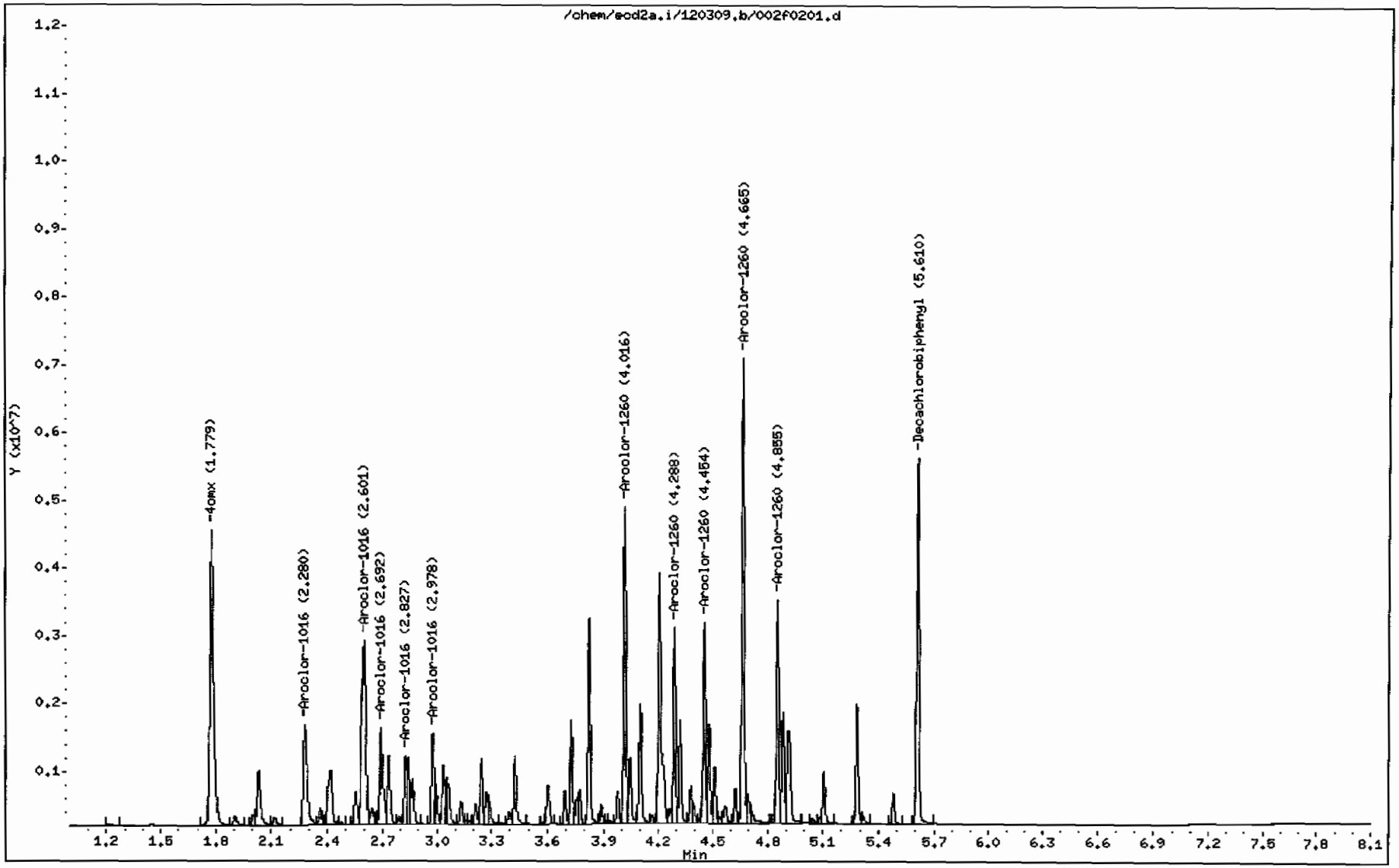

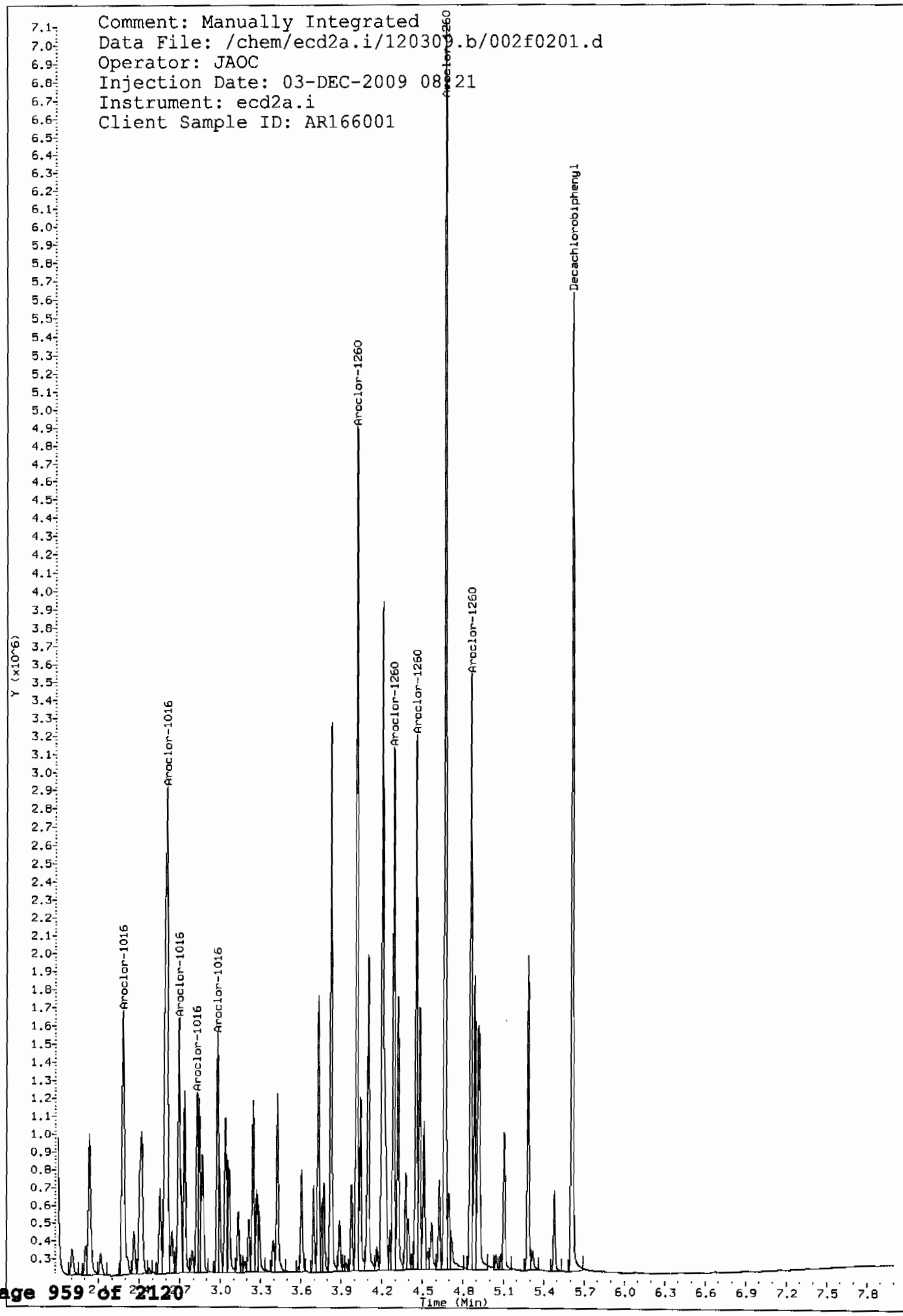
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/002f0201.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:21
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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Decachlorobiphenyl
Y (x10^6)
Time (Min)

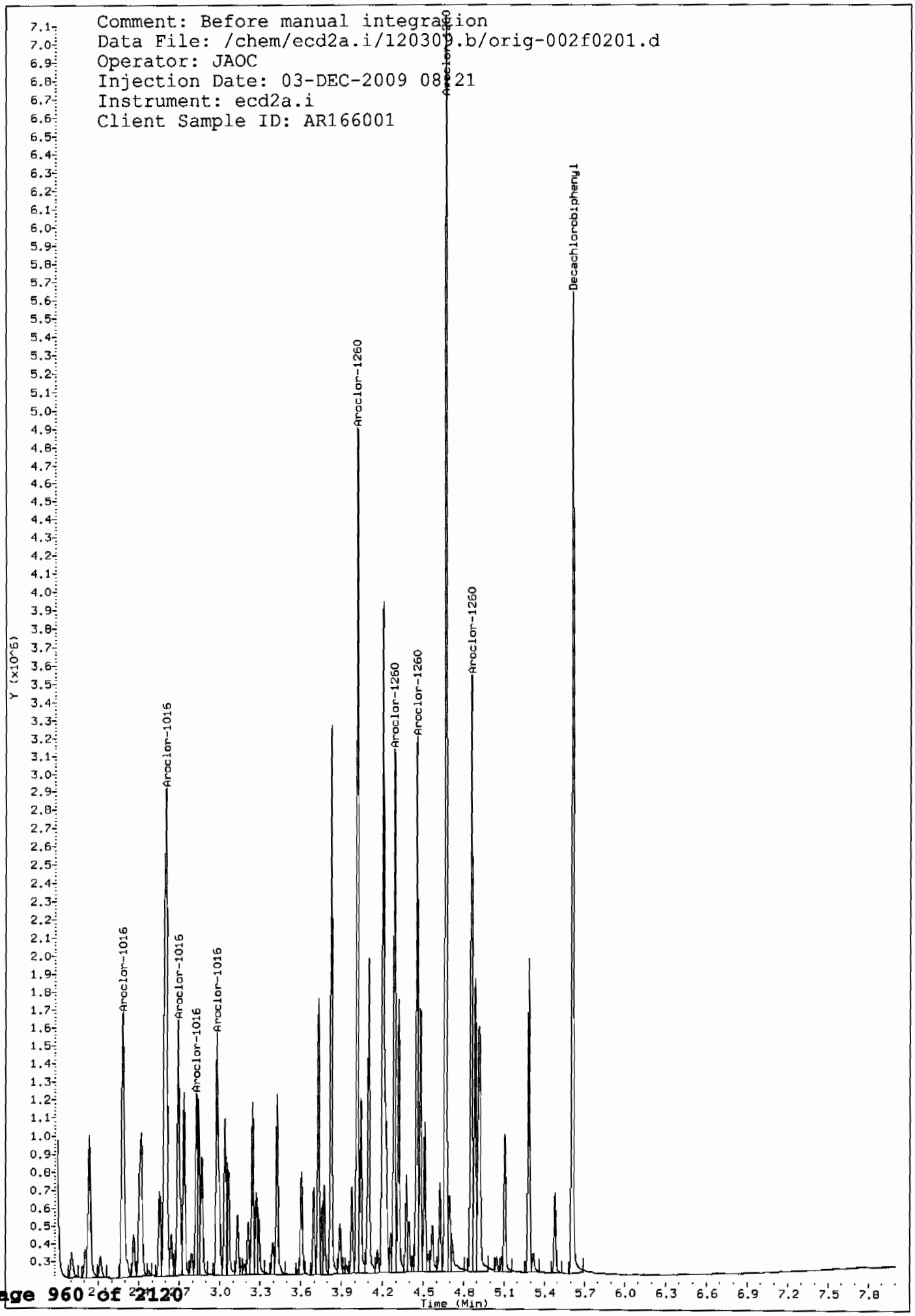
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-002f0201.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:21
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 08:21
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13135453	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10385455	100.000	95.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.750	0.000	4174215	1000.00	980	80.00- 120.00	100.00
3.185	3.185	0.000	3357939	1000.00	975	60.44- 100.44	80.44
3.335	3.335	0.000	1949045	1000.00	985	26.69- 66.69	46.69
3.364	3.364	0.000	2027883	1000.00	984	28.58- 68.58	48.58
3.521	3.521	0.000	2756942	1000.00	1000	46.05- 86.05	66.05
Average of Peak Amounts =					985		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5813745	1000.00	1050	80.00- 120.00	100.00
4.569	4.569	0.000	7474901	1000.00	1050	108.57- 148.57	128.57
4.680	4.680	0.000	5007398	1000.00	1060	66.13- 106.13	86.13
4.878	4.878	0.000	5946667	1000.00	1020	82.29- 122.29	102.29
5.504	5.504	0.000	9360400	1000.00	1040	141.00- 181.00	161.00
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/002b0201.d
Date : 03-DEC-2009 08:21
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

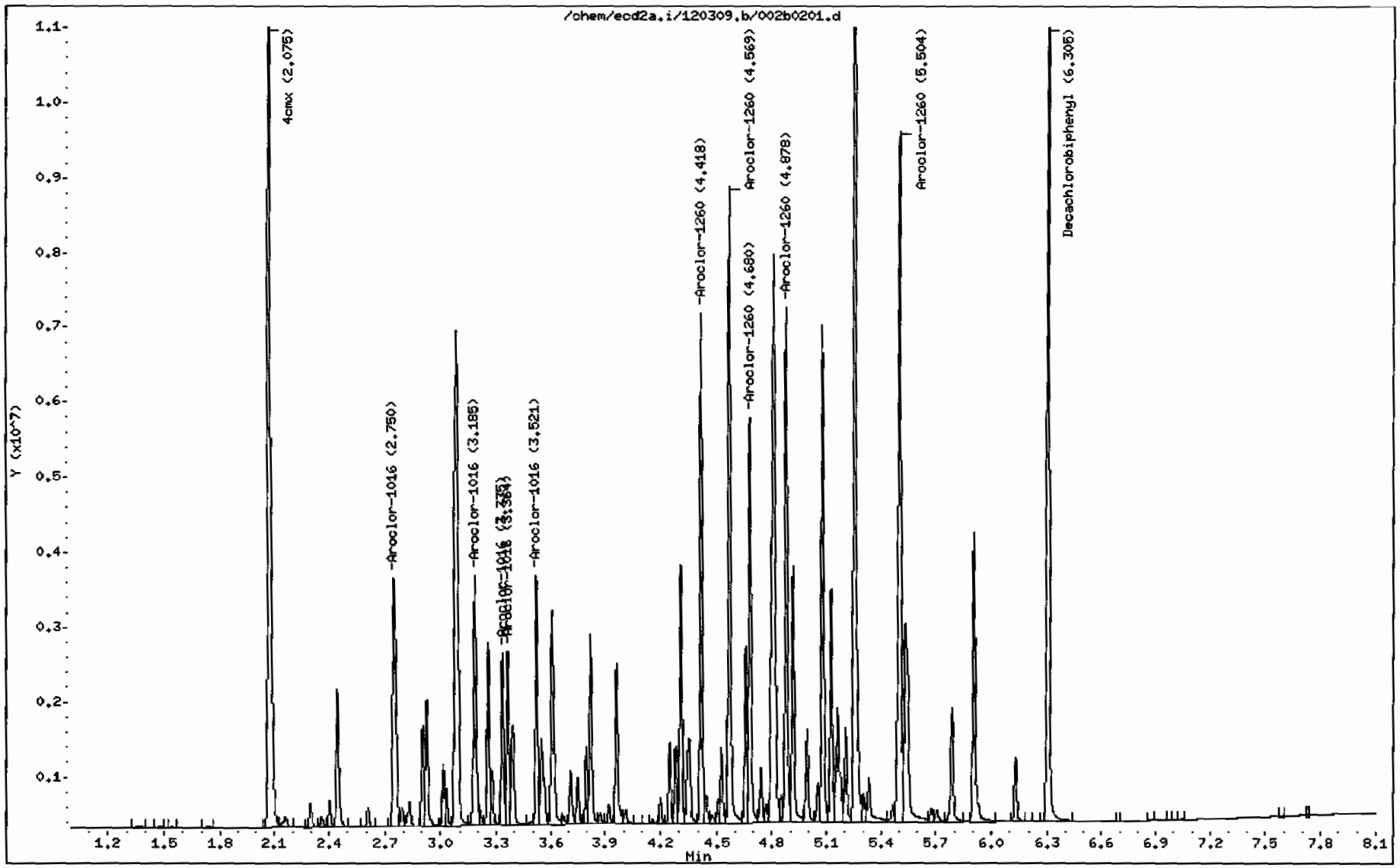

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 08:32
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	6472385	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5342532	100.000	97.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1969623	1000.00	947	80.00- 120.00	100.00
3.428	3.428	0.000	2634906	1000.00	950	113.78- 153.78	133.78
3.697	3.697	0.000	3627492	1000.00	969	164.17- 204.17	184.17
3.888	3.888	0.000	2705421	1000.00	972	117.36- 157.36	137.36
4.018	4.018	0.000	2562087	1000.00	928	110.08- 150.08	130.08
Average of Peak Amounts =					953		

Data File: /chem/ecd2a.i/120309.b/003f0301.d
Date : 03-DEC-2009 08:32
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

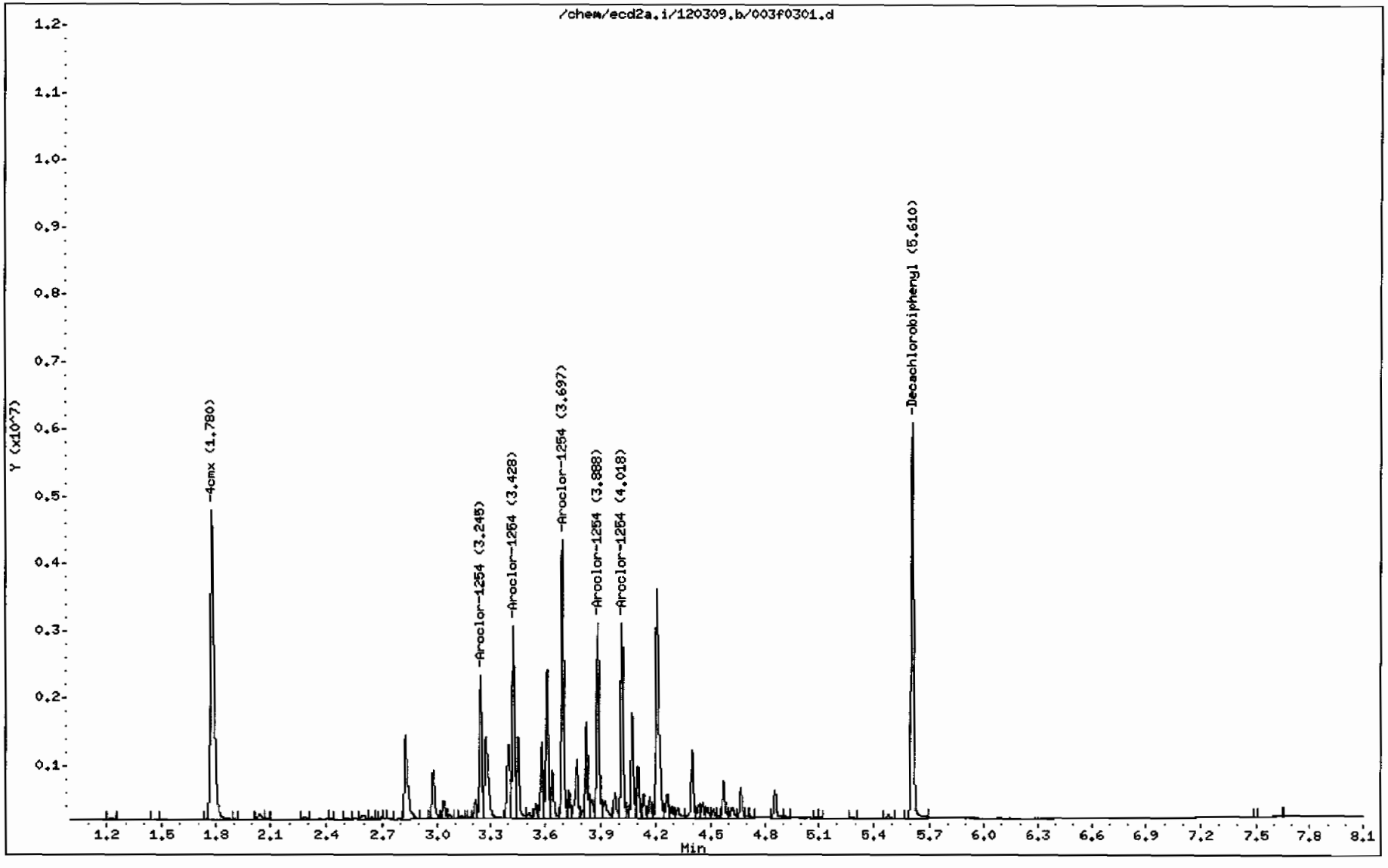

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 08:32
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13920225	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	11220284	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	4956808	1000.00	994	80.00- 120.00	100.00
3.963	3.963	0.000	5759378	1000.00	993	96.19- 136.19	116.19
4.200	4.200	0.000	4046006	1000.00	1000	61.63- 101.63	81.63
4.280	4.280	0.000	7802109	1000.00	1010	137.40- 177.40	157.40
4.443	4.443	0.000	5487038	1000.00	978	90.70- 130.70	110.70
Average of Peak Amounts =					996		

Data File: /chem/ecd2a.i/120309.b/003b0301.d
Date : 03-DEC-2009 08:32
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

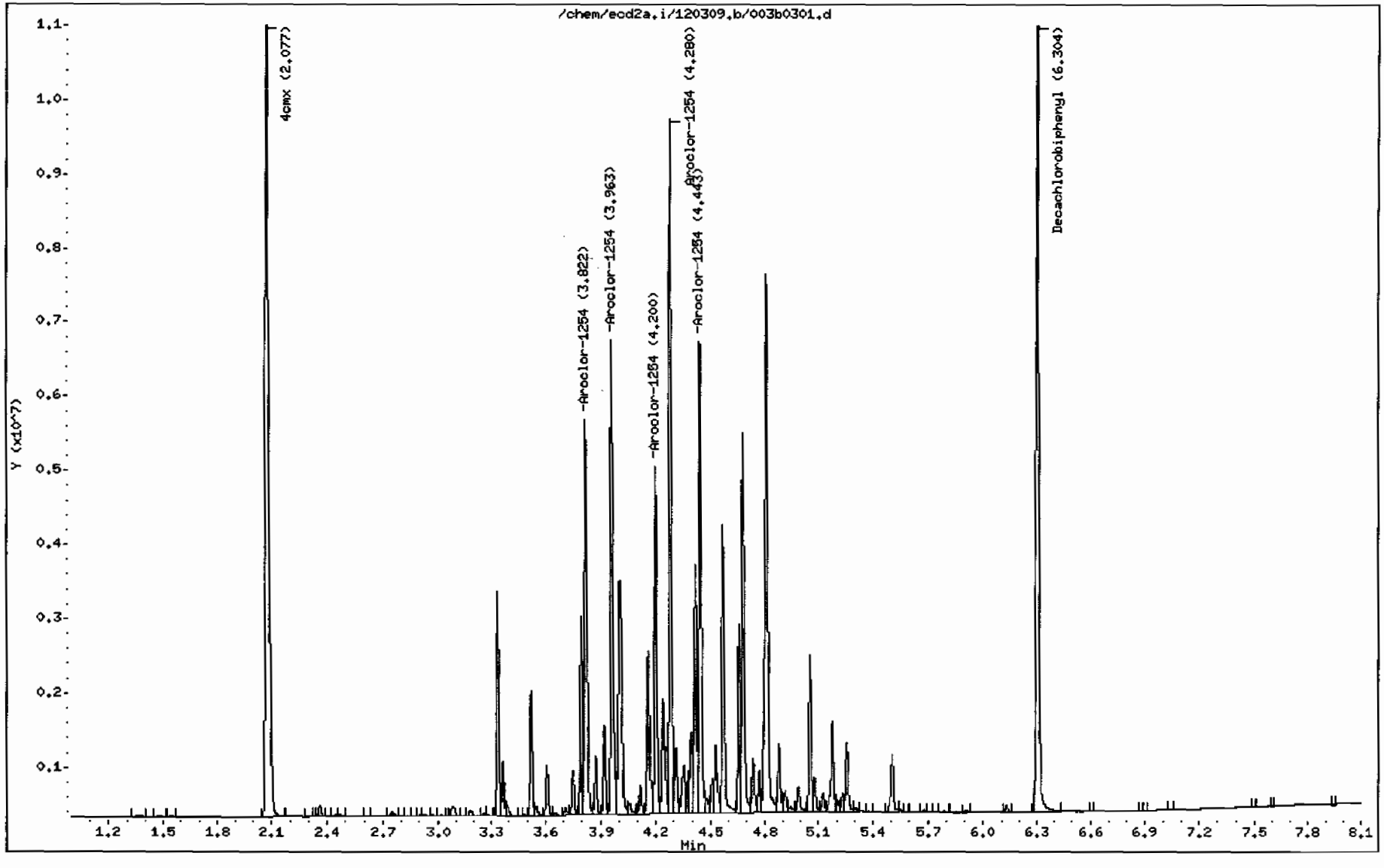

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 08:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6537650	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5242004	100.000	95.6	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1864718	1000.00	1080	80.00- 120.00	100.00(M)
2.693	2.693	0.000	1512911	1000.00	1020	61.13- 101.13	81.13
2.736	2.736	0.000	946427	1000.00	1040	30.75- 70.75	50.75
2.828	2.828	0.000	758891	1000.00	1040	20.70- 60.70	40.70
2.979	2.979	0.000	1214381	1000.00	1080	45.12- 85.12	65.12

Average of Peak Amounts = 1.05e+03

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/004f0401.d
Date : 03-DEC-2009 08:43
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

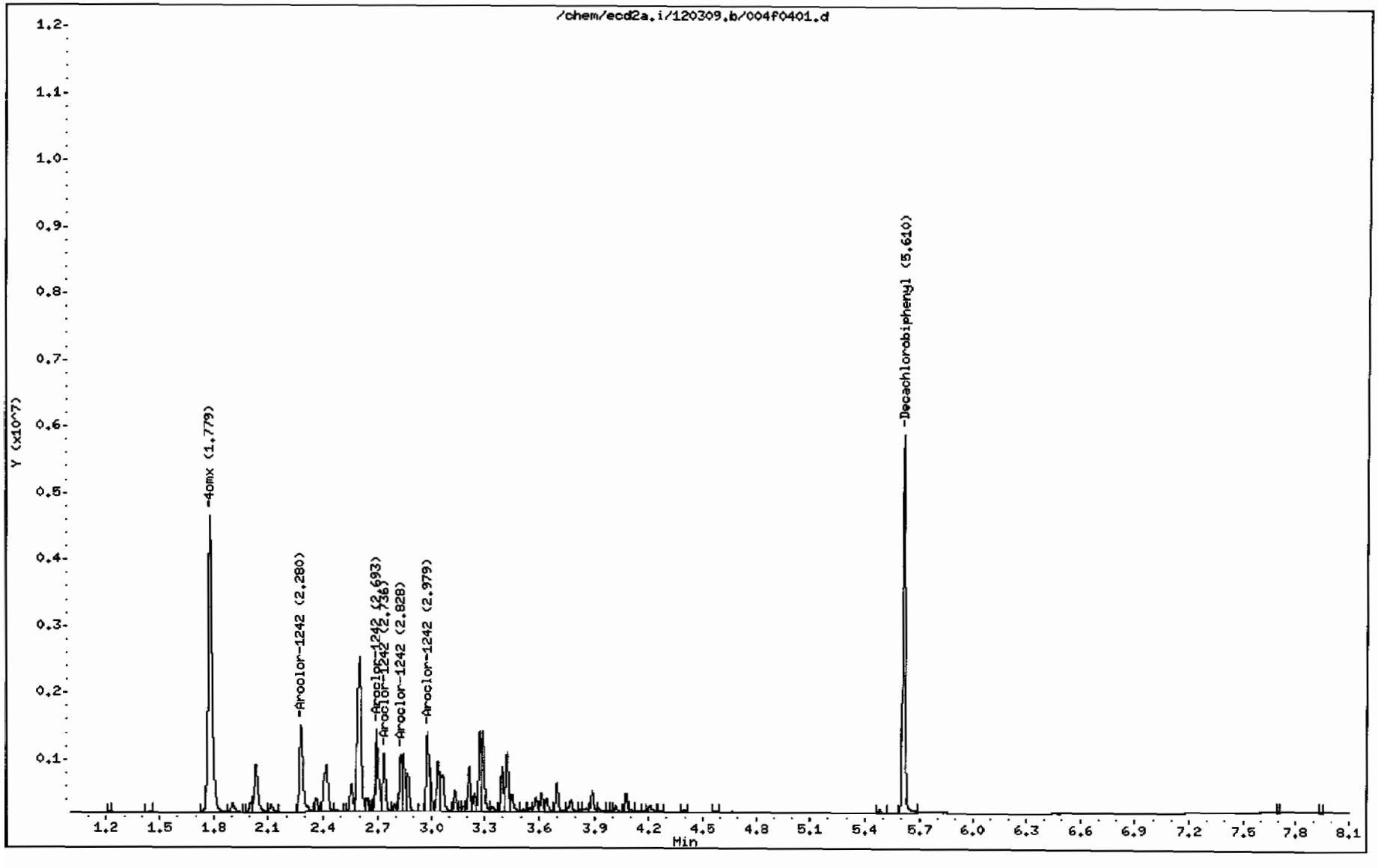

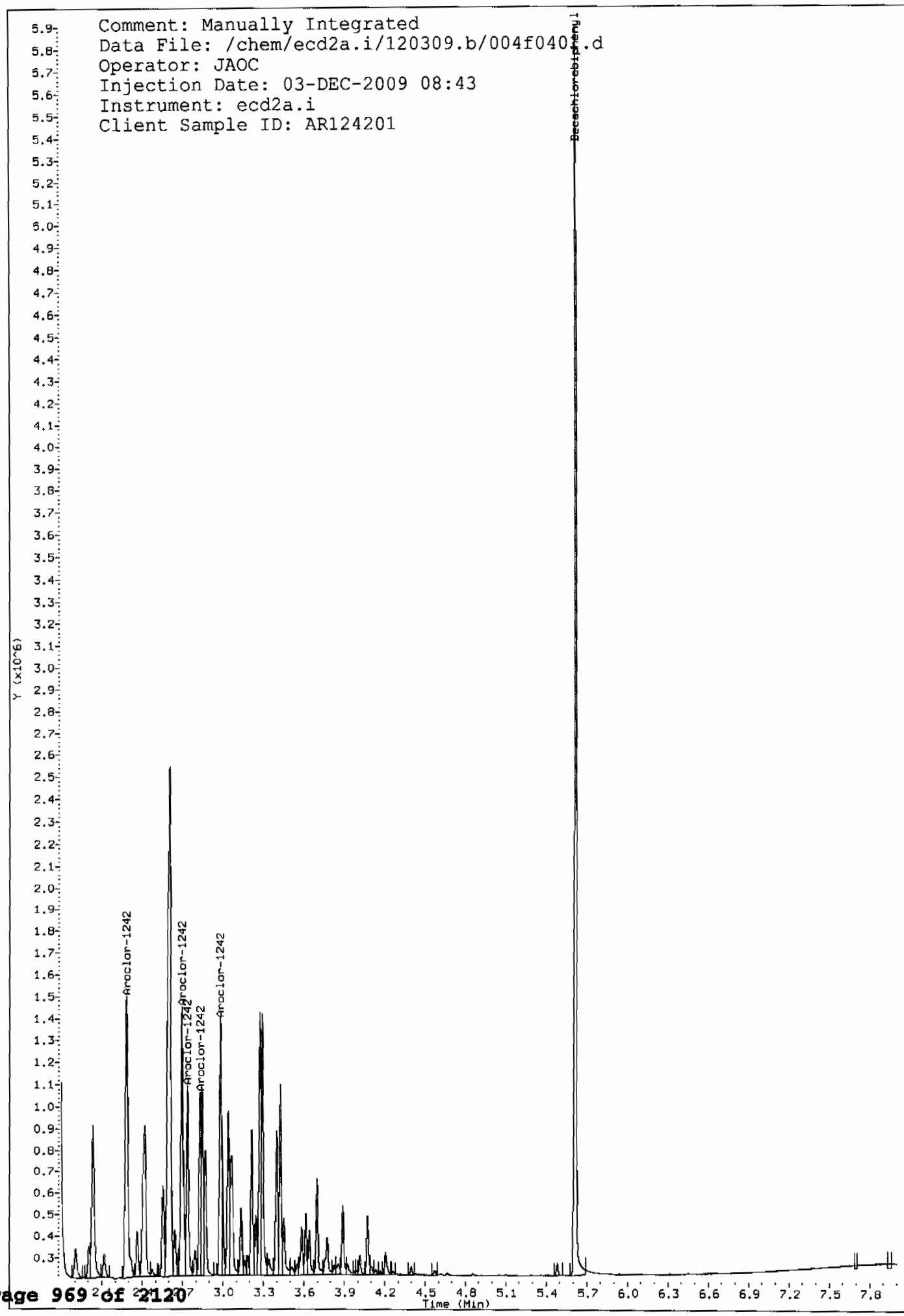
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/004f0401.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:43
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-00[illegible]f0401.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:43
Instrument: ecd2a.i
Client Sample ID: AR124201

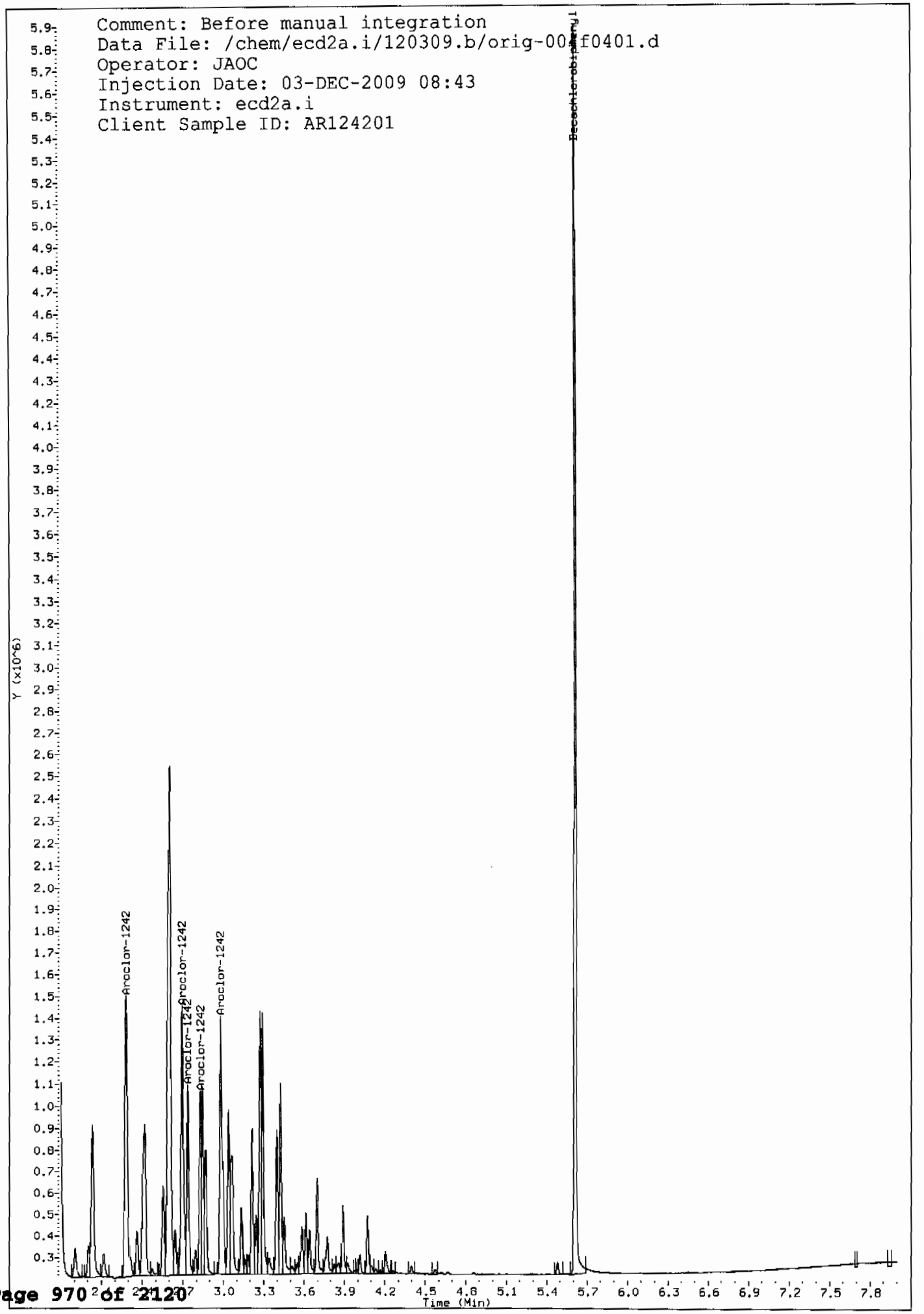

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 08:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	14014463	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11008738	100.000	101	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.751	2.751	0.000	3664129	1000.00	1060	80.00- 120.00	100.00
3.185	3.185	0.000	2696371	1000.00	1000	53.59- 93.59	73.59
3.257	3.257	0.000	1635174	1000.00	999	24.63- 64.63	44.63
3.335	3.335	0.000	1531191	1000.00	1020	21.79- 61.79	41.79
3.522	3.522	0.000	2292877	1000.00	1070	42.58- 82.58	62.58

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecd2a.i/120309.b/004b0401.d
Date : 03-DEC-2009 08:43
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

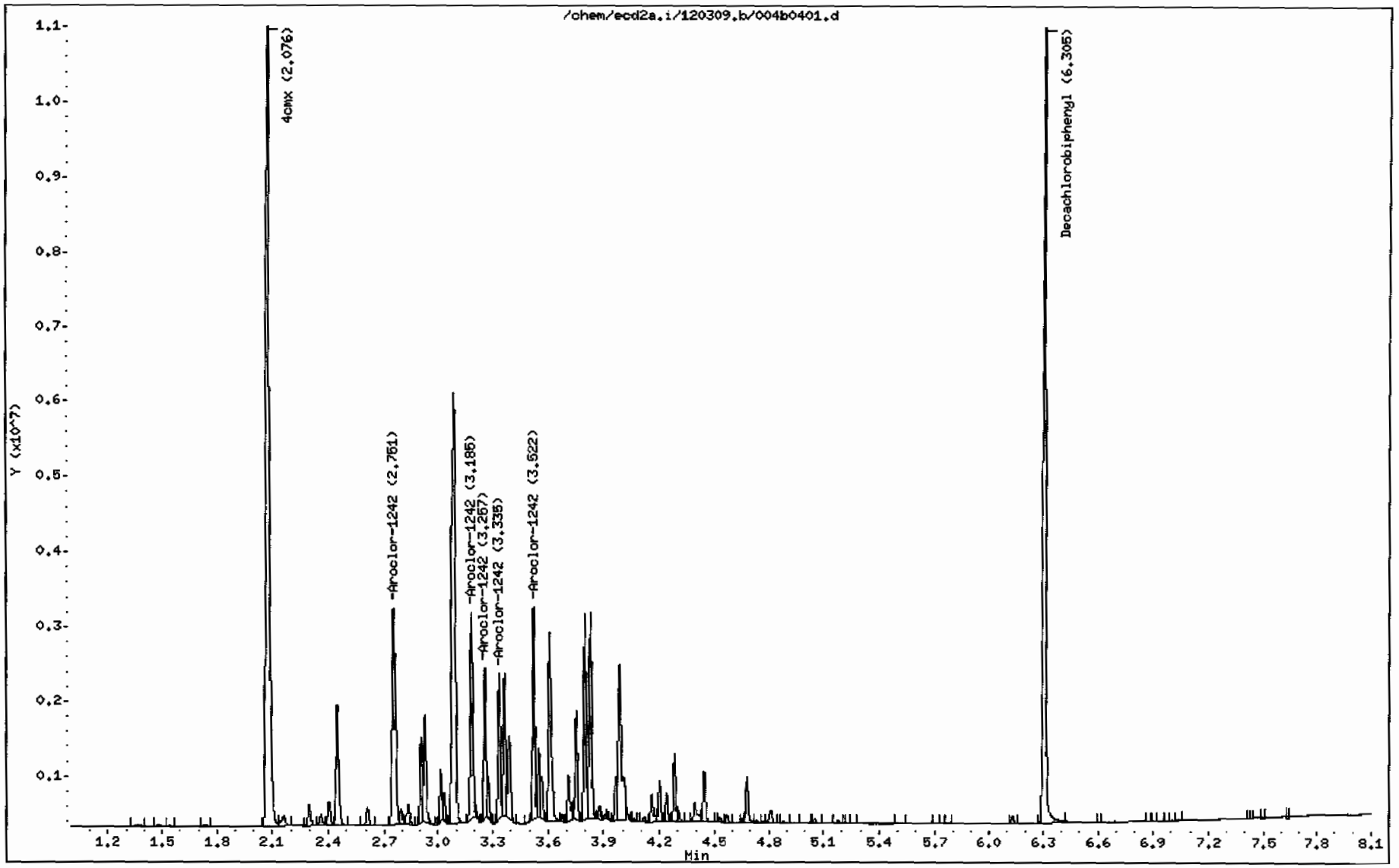

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 08:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx						CAS #: 877-09-8		
	1.779	1.779	0.000	7176948	100.000	124	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
	5.611	5.610	0.001	5927719	100.000	108	80.00- 120.00	100.00
5 Aroclor-1248						CAS #: 12672-29-6		
	2.827	2.827	0.000	1474555	1000.00	966	80.00- 120.00	100.00(M)
	2.979	2.979	0.000	2023657	1000.00	998	117.24- 157.24	181.85
	3.038	3.038	0.000	1560950	1000.00	994	85.86- 125.86	105.86
	3.272	3.272	0.000	2192176	1000.00	988	128.67- 168.67	148.67
	3.425	3.425	0.000	1904865	1000.00	996	109.18- 149.18	129.18
			Average of Peak Amounts =			988		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/005f0501.d
Date : 03-DEC-2009 08:54
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

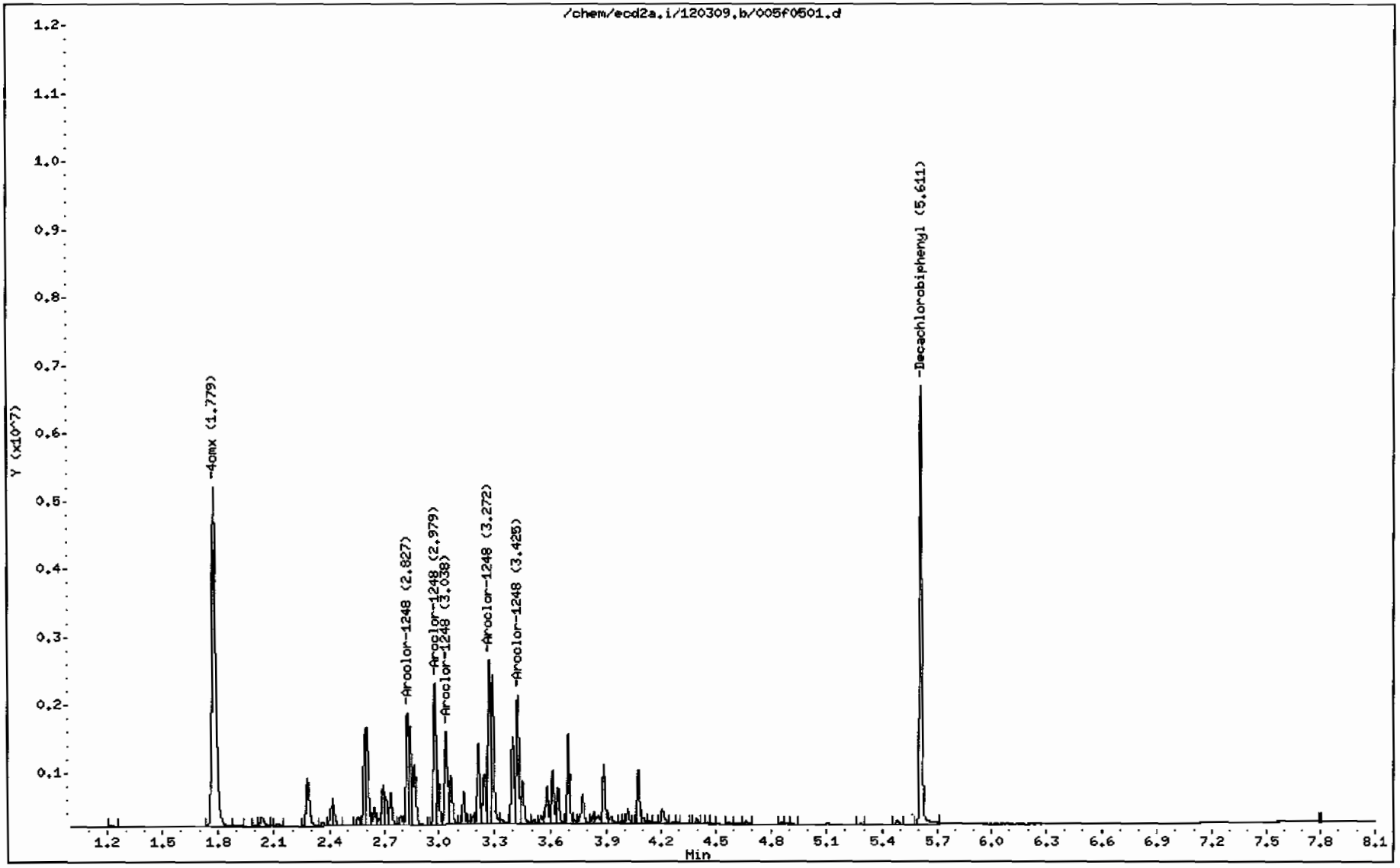

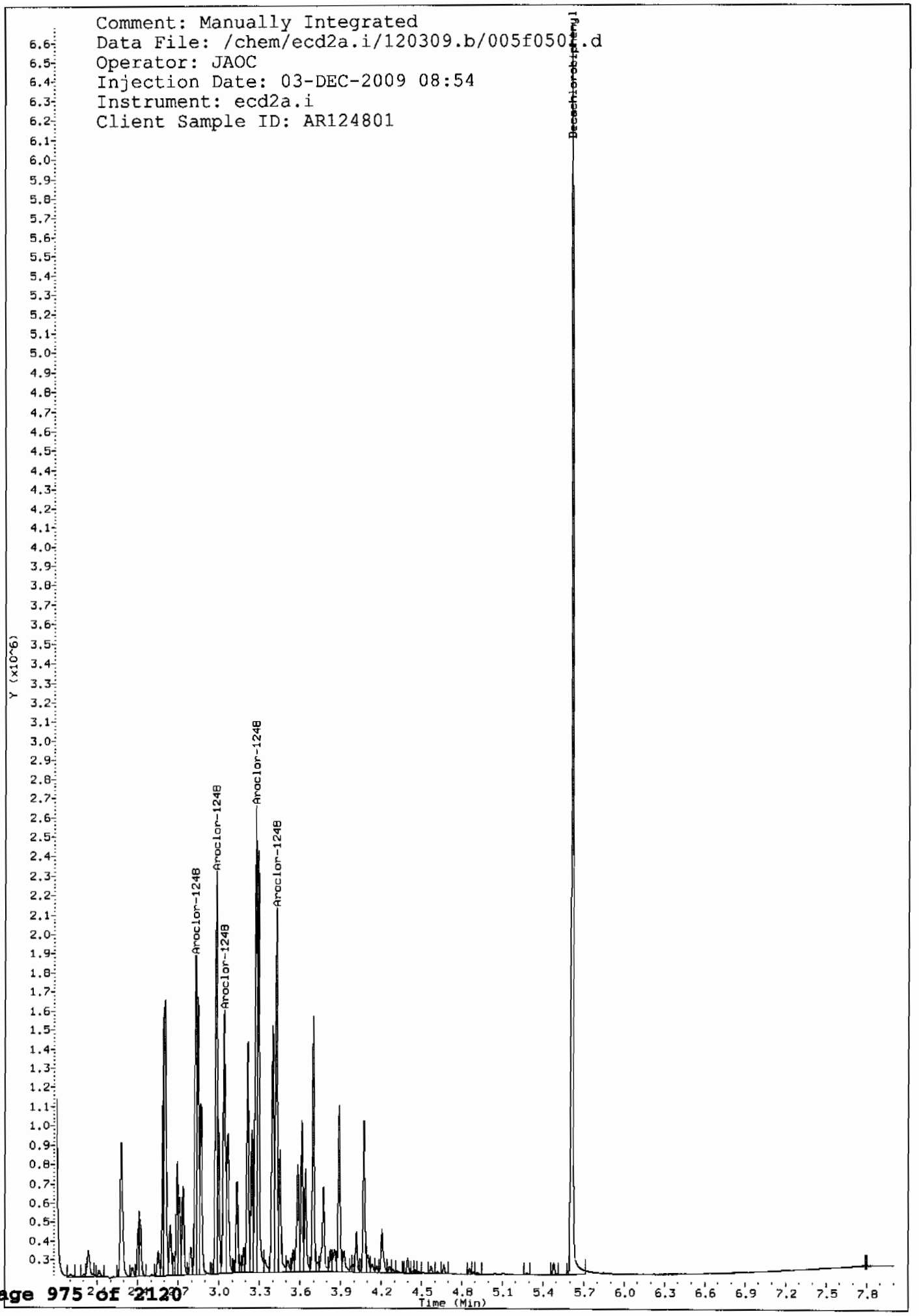
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/005f0501.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:54
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

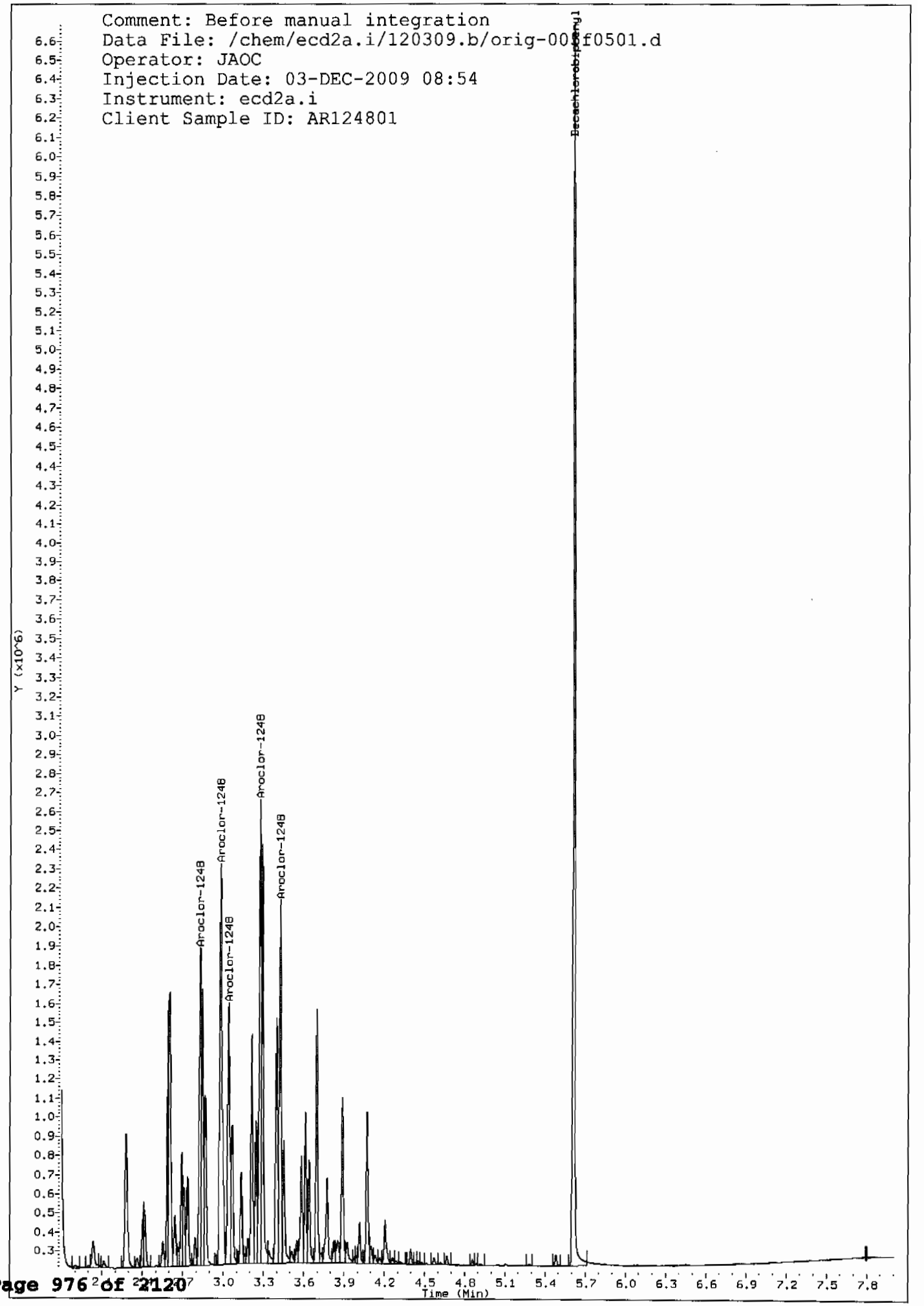
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-005f0501.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:54
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 08:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	15468032	100.000	131	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	12416332	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	3372417	1000.00	1030	80.00- 120.00	100.00
3.522	3.522	0.000	4325187	1000.00	1030	108.25- 148.25	128.25
3.609	3.609	0.000	4583011	1000.00	1030	115.90- 155.90	135.90
3.797	3.797	0.000	4814880	1000.00	1020	122.77- 162.77	142.77
3.827	3.827	0.000	5549978	1000.00	1030	144.57- 184.57	164.57

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecd2a.i/120309.b/005b0501.d
Date : 03-DEC-2009 08:54
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

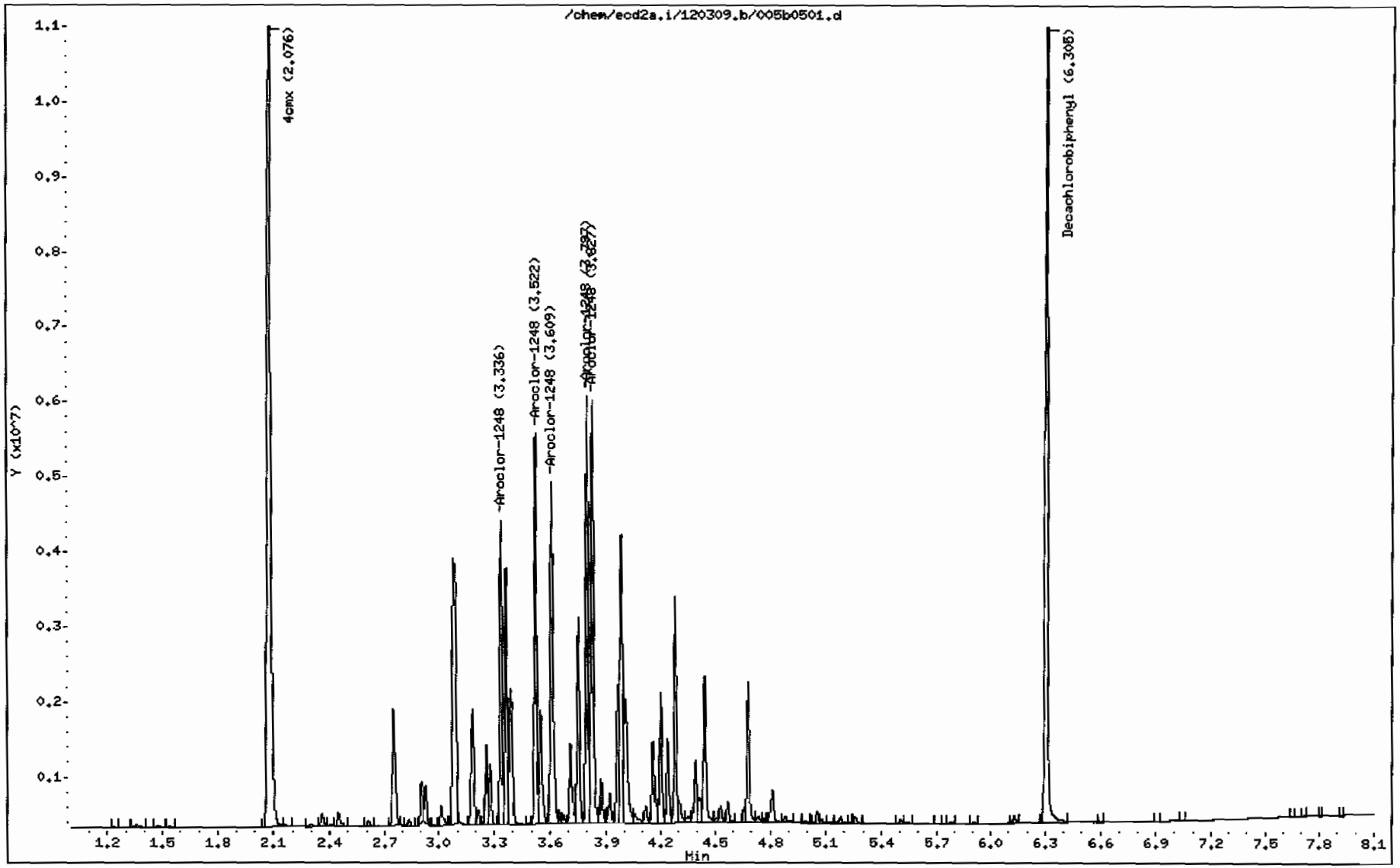

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 09:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	8484289	100.000	147	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6989603	100.000	127	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.033	2.033	0.000	1401667	1000.00	1200	80.00- 120.00	100.00(M)
2.280	2.280	0.000	1108261	1000.00	1190	59.07- 99.07	79.07
2.694	2.694	0.000	963768	1000.00	1200	48.76- 88.76	68.76
2.736	2.736	0.000	622142	1000.00	1220	24.39- 64.39	44.39
2.979	2.979	0.000	680049	1000.00	1160	28.52- 68.52	48.52

Average of Peak Amounts = 1.2e+03

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/006f0601.d
Date : 03-DEC-2009 09:05
Client ID: AR123201
Sample Info: !WAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

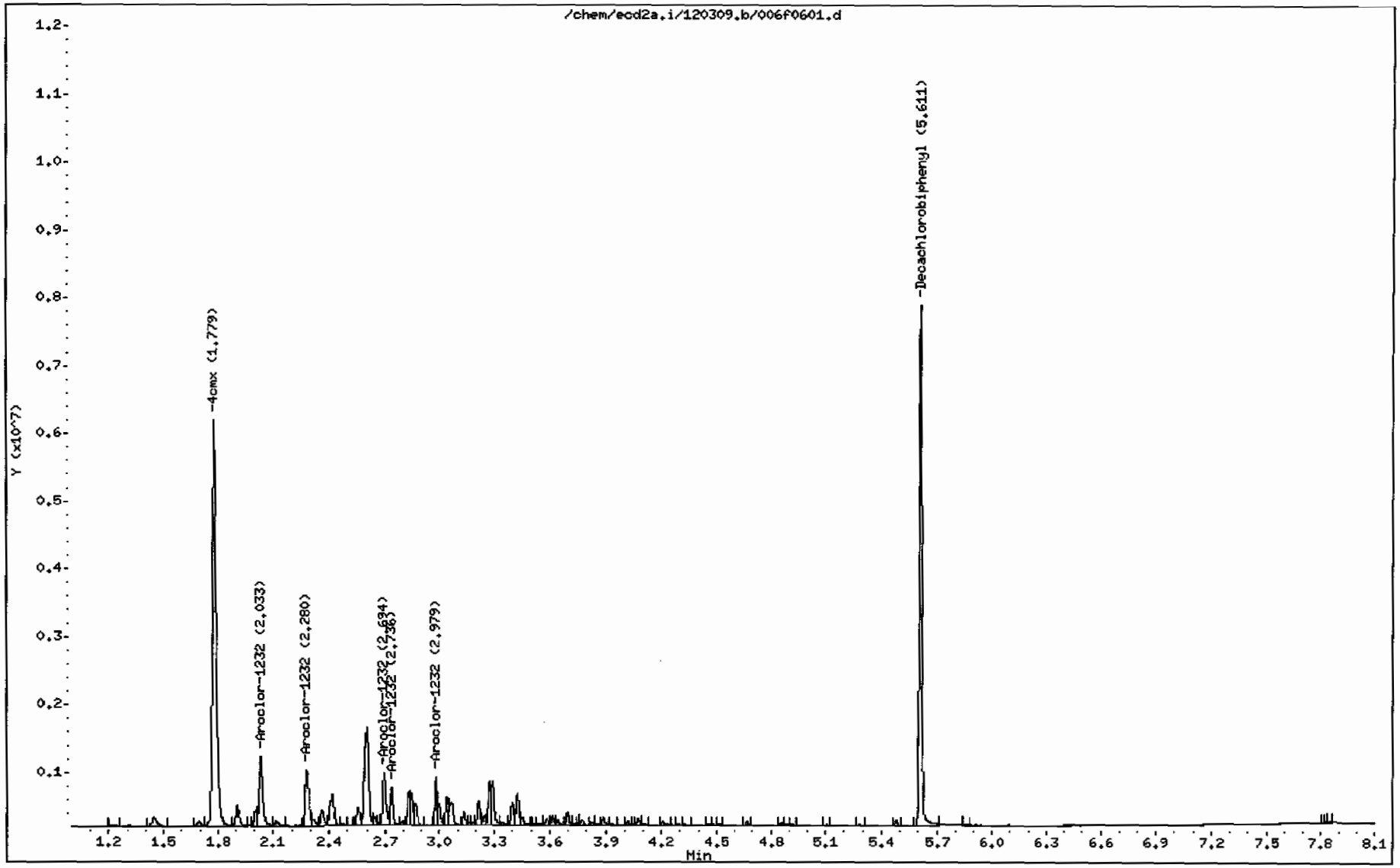

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/006f0601.d
Operator: JAOC
Injection Date: 03-DEC-2009 09:05
Instrument: ecd2a.i
Client Sample ID: AR123201

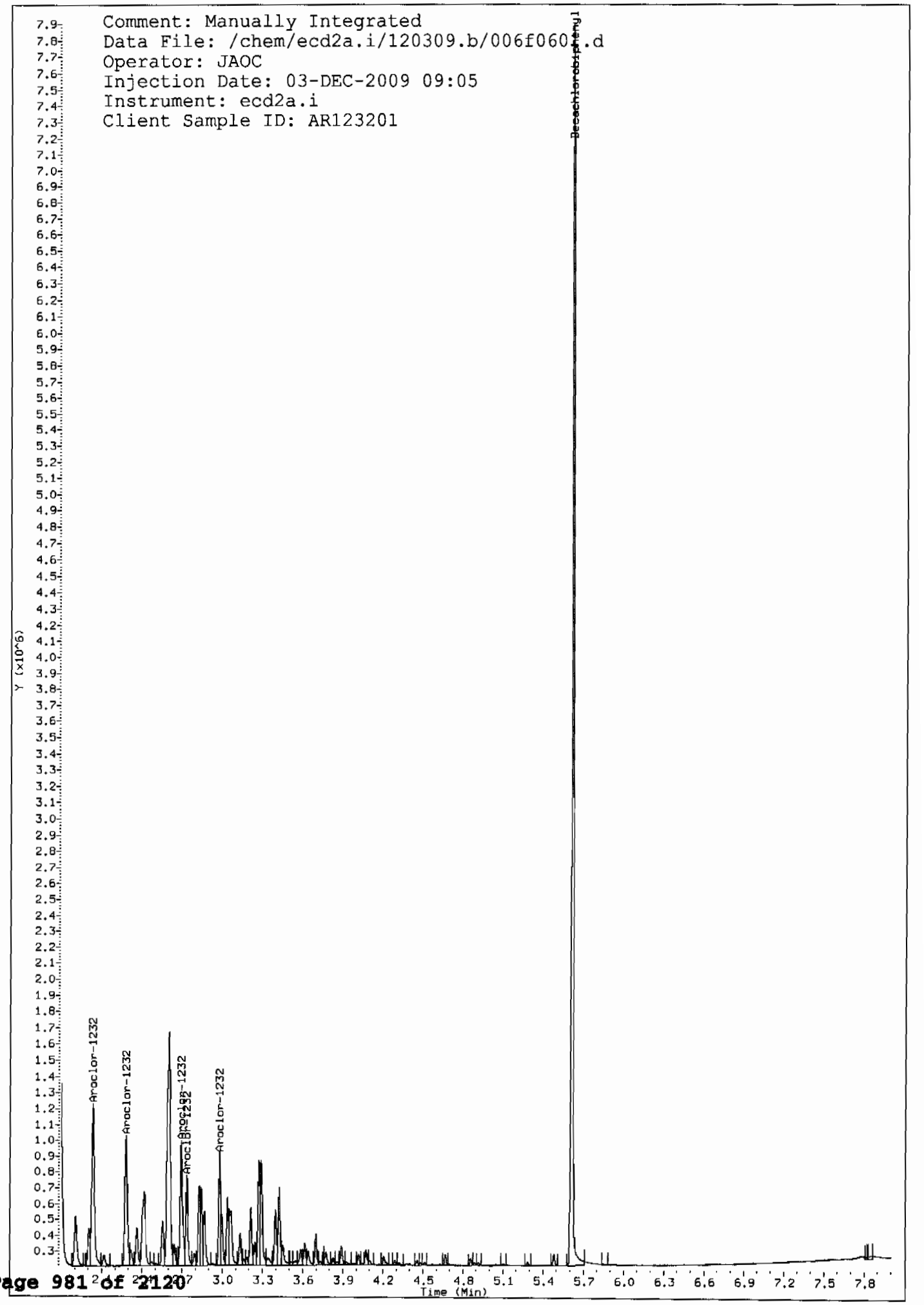

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-00[illegible]f0601.d
Operator: JAOC
Injection Date: 03-DEC-2009 09:05
Instrument: ecd2a.i
Client Sample ID: AR123201

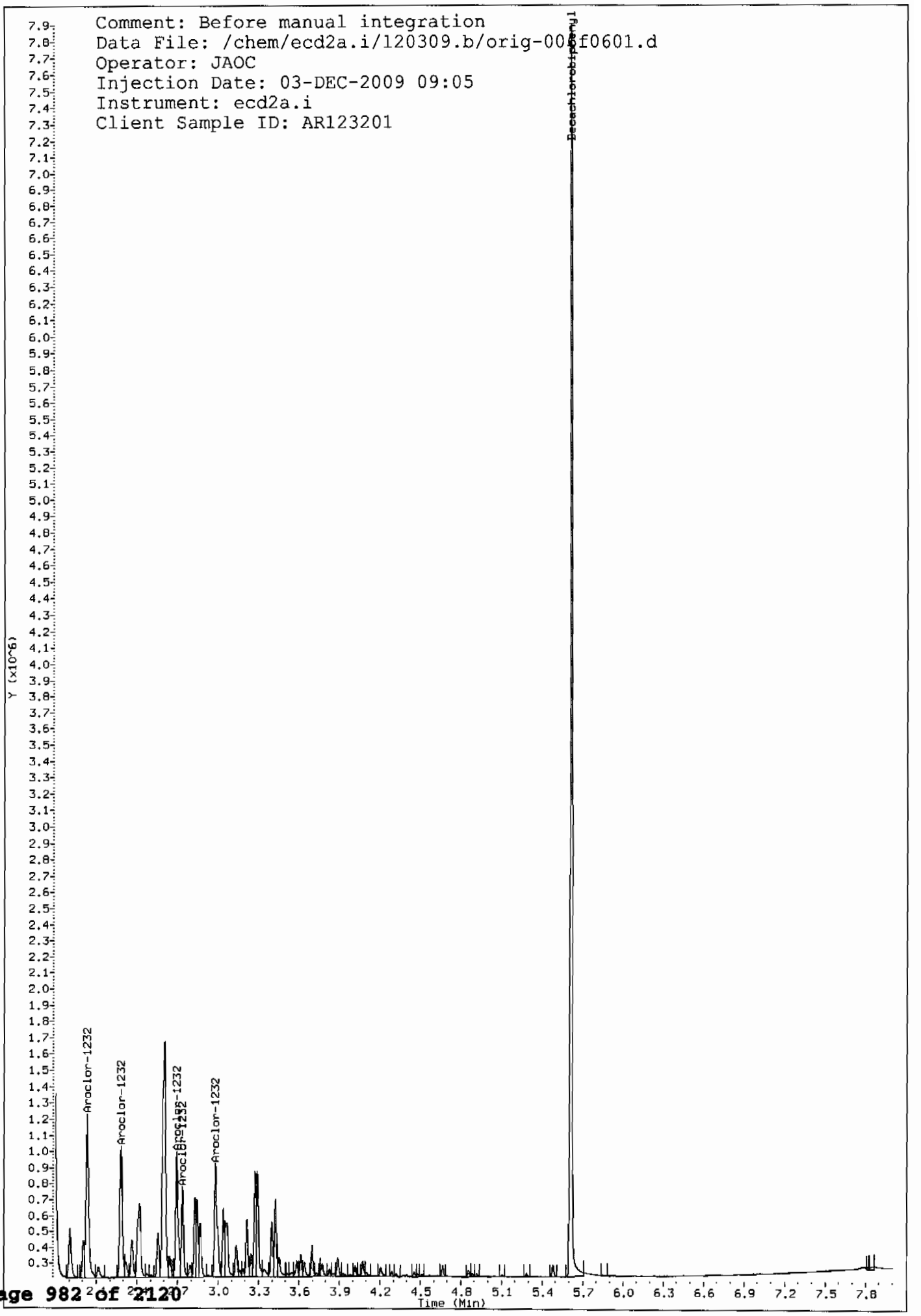

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 09:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	18213495	100.000	154	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	14777154	100.000	136	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.448	2.448	0.000	2404157	1000.00	1170	80.00- 120.00	100.00
2.751	2.751	0.000	2312538	1000.00	1180	76.19- 116.19	96.19
3.185	3.185	0.000	1872182	1000.00	1250	57.87- 97.87	77.87
3.257	3.257	0.000	1095454	1000.00	1180	25.57- 65.57	45.57
3.523	3.523	0.000	1342494	1000.00	1210	35.84- 75.84	55.84

Average of Peak Amounts = 1.2e+03

Data File: /chem/ecd2a.i/120309.b/006b0601.d

Date : 03-DEC-2009 09:05

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

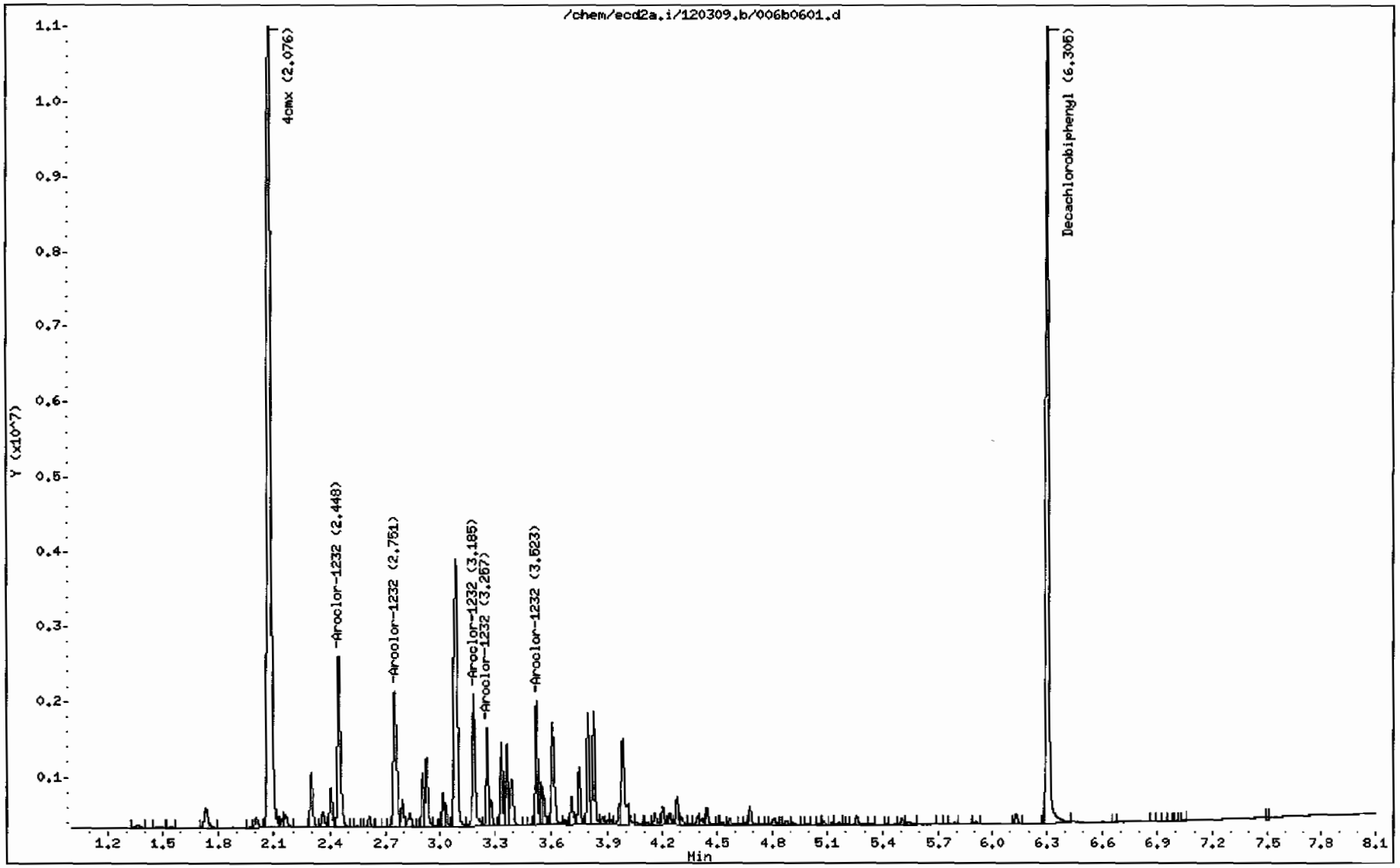

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 09:17
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 13:23 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6537929	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5224914	100.000	95.3	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	545550	1000.00	1180	80.00- 120.00	100.00
1.904	1.904	0.000	770872	1000.00	1170	121.30- 161.30	141.30
2.004	2.004	0.000	388905	1000.00	1120	51.29- 91.29	71.29

Average of Peak Amounts = 1.16e+03

Data File: /chem/ecd2a.i/120309.b/007f0701.d

Date : 03-DEC-2009 09:17

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

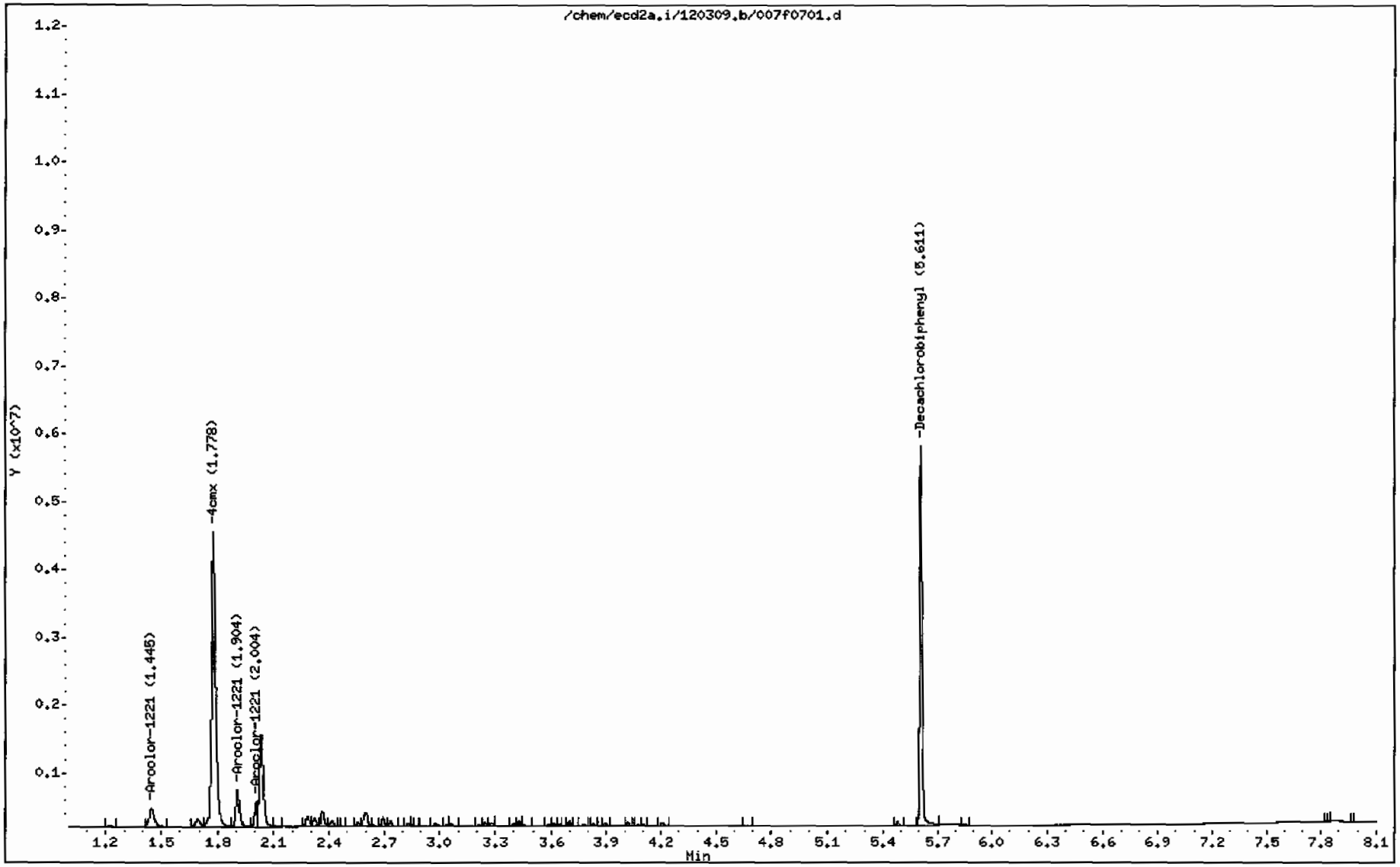

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 09:17
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13792010	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10908463	100.000	100	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.299	2.299	0.000	1396907	1000.00	1100	80.00- 120.00	100.00
2.404	2.404	0.000	852382	1000.00	1100	41.02- 81.02	61.02
2.448	2.448	0.000	3384246	1000.00	1110	222.27- 262.27	242.27

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd2a.i/120309.b/007b0701.d

Date : 03-DEC-2009 09:17

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

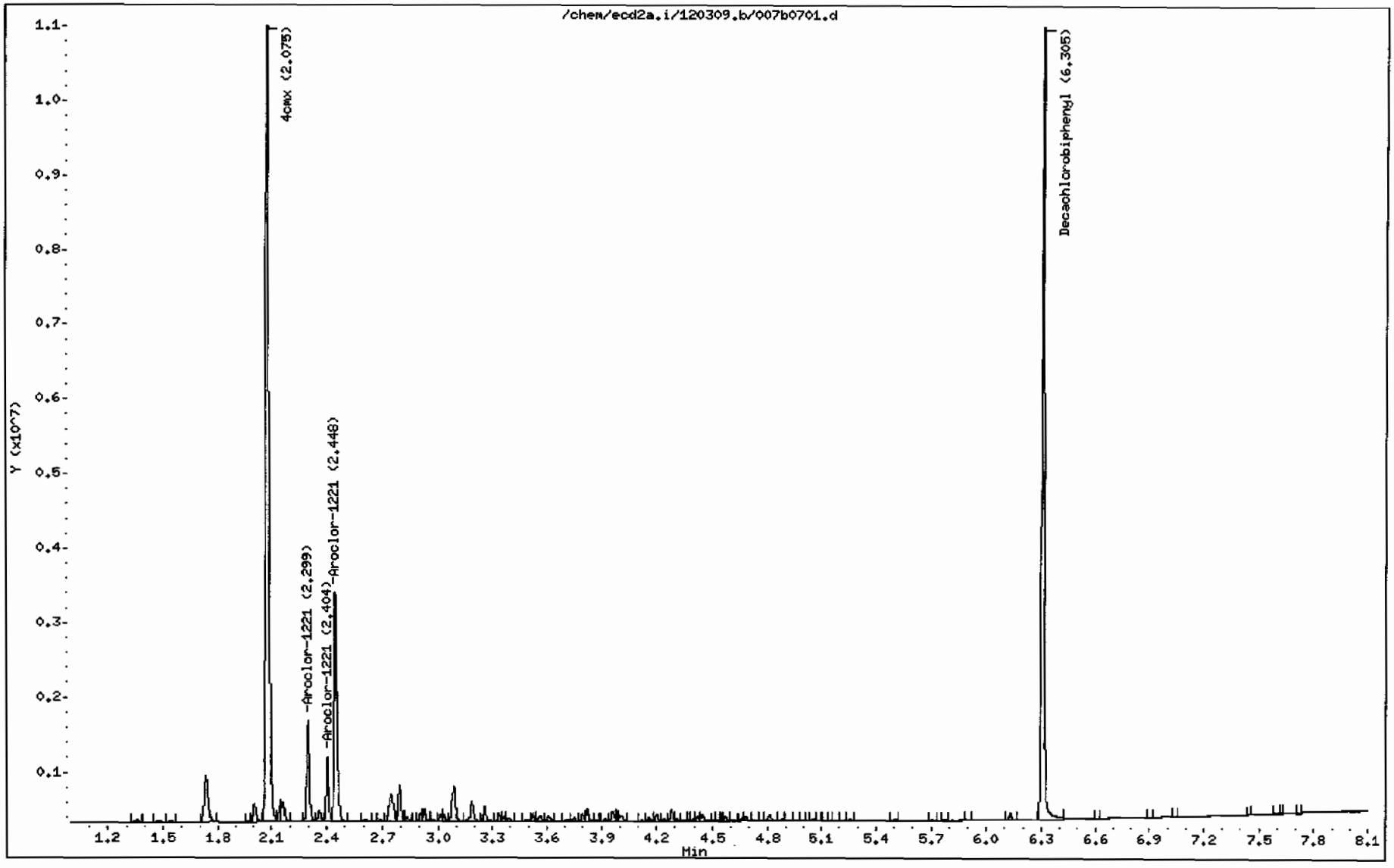

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/045f4501.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 03-DEC-2009 16:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 04
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	6204347	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4409398	100.000	80.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.280	0.002	2030518	1000.00	967	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4356685	1000.00	967	191.91- 231.91	214.56
2.694	2.692	0.002	1743924	1000.00	958	65.28- 105.28	85.89
2.829	2.827	0.002	854233	1000.00	916	23.06- 63.06	42.07
2.980	2.978	0.002	1309544	1000.00	950	41.11- 81.11	64.49
Average of Peak Amounts =					952		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4096006	1000.00	1010	80.00- 120.00	100.00
4.290	4.288	0.002	2491202	1000.00	985	40.91- 80.91	60.82
4.455	4.454	0.001	2554375	1000.00	989	42.71- 82.71	62.36
4.668	4.665	0.003	5937904	1000.00	984	125.86- 165.86	144.97
4.856	4.855	0.001	2831785	1000.00	972	49.52- 89.52	69.14
Average of Peak Amounts =					988		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/045f4501.d
Date : 03-DEC-2009 16:18
Client ID: AR166004
Sample Info: IWAR091119-60 04

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

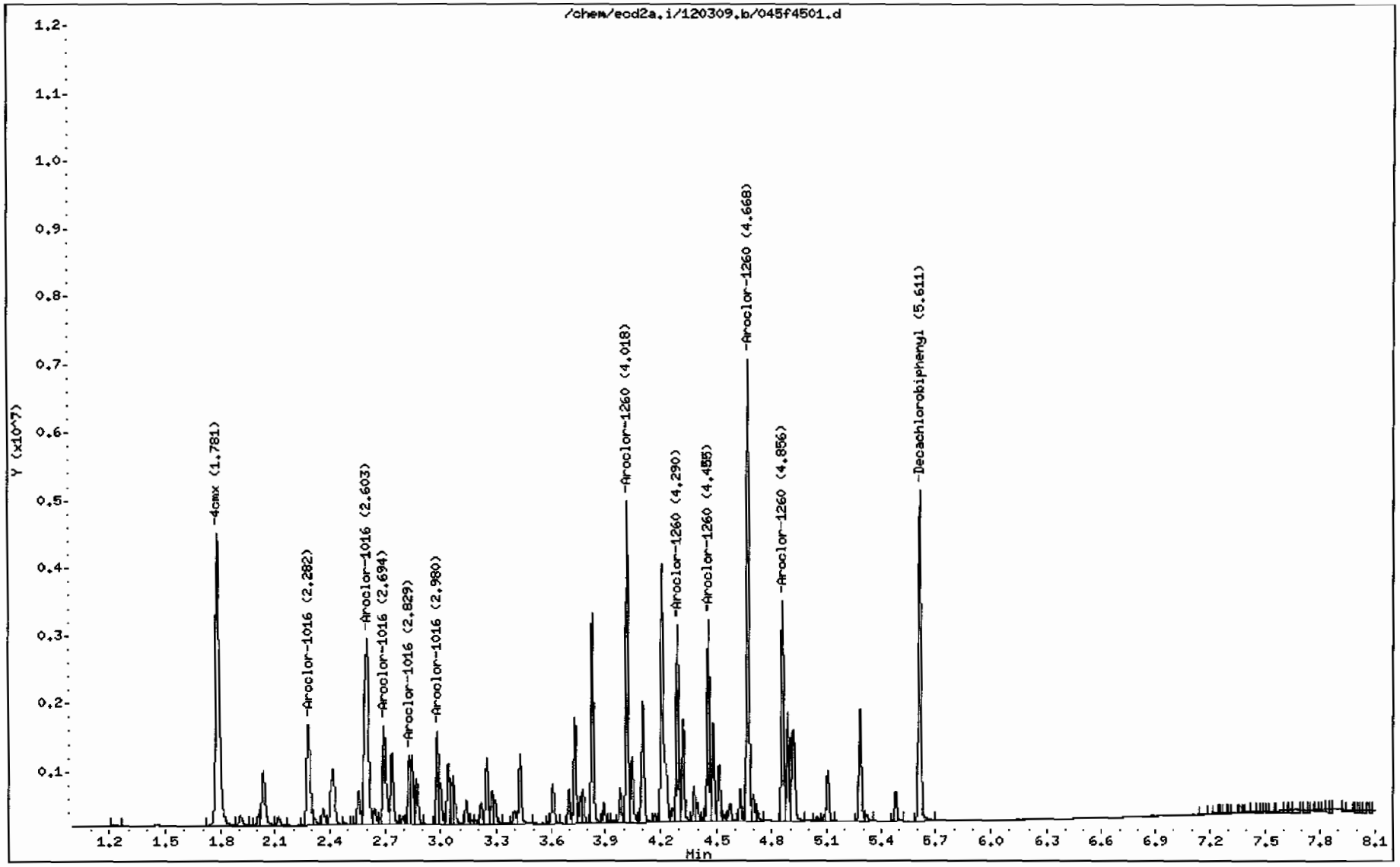

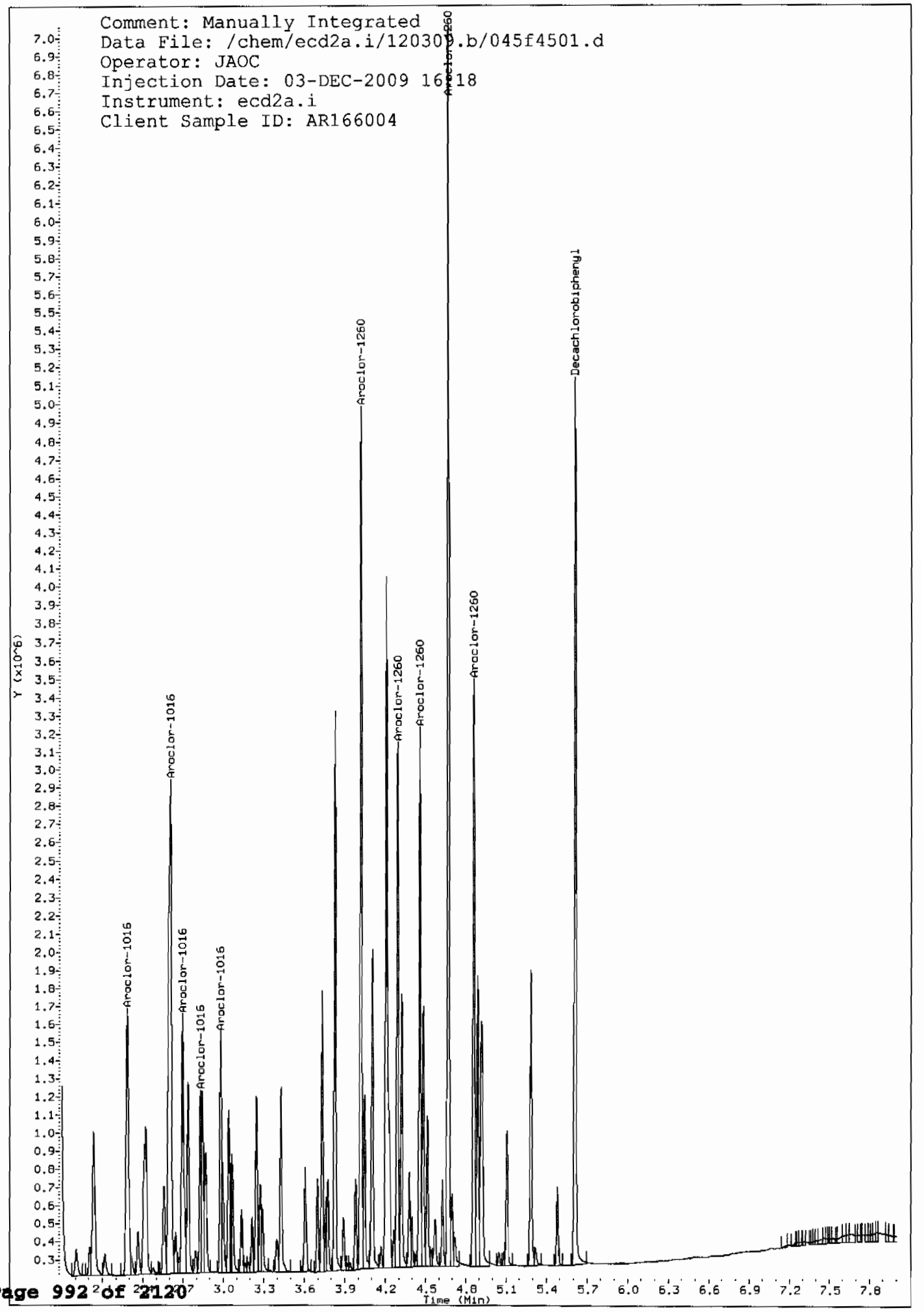
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/045f4501.d
Operator: JAOC
Injection Date: 03-DEC-2009 16:18
Instrument: ecd2a.i
Client Sample ID: AR166004
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-045f4501.d
Operator: JAOC
Injection Date: 03-DEC-2009 16:18
Instrument: ecd2a.i
Client Sample ID: AR166004

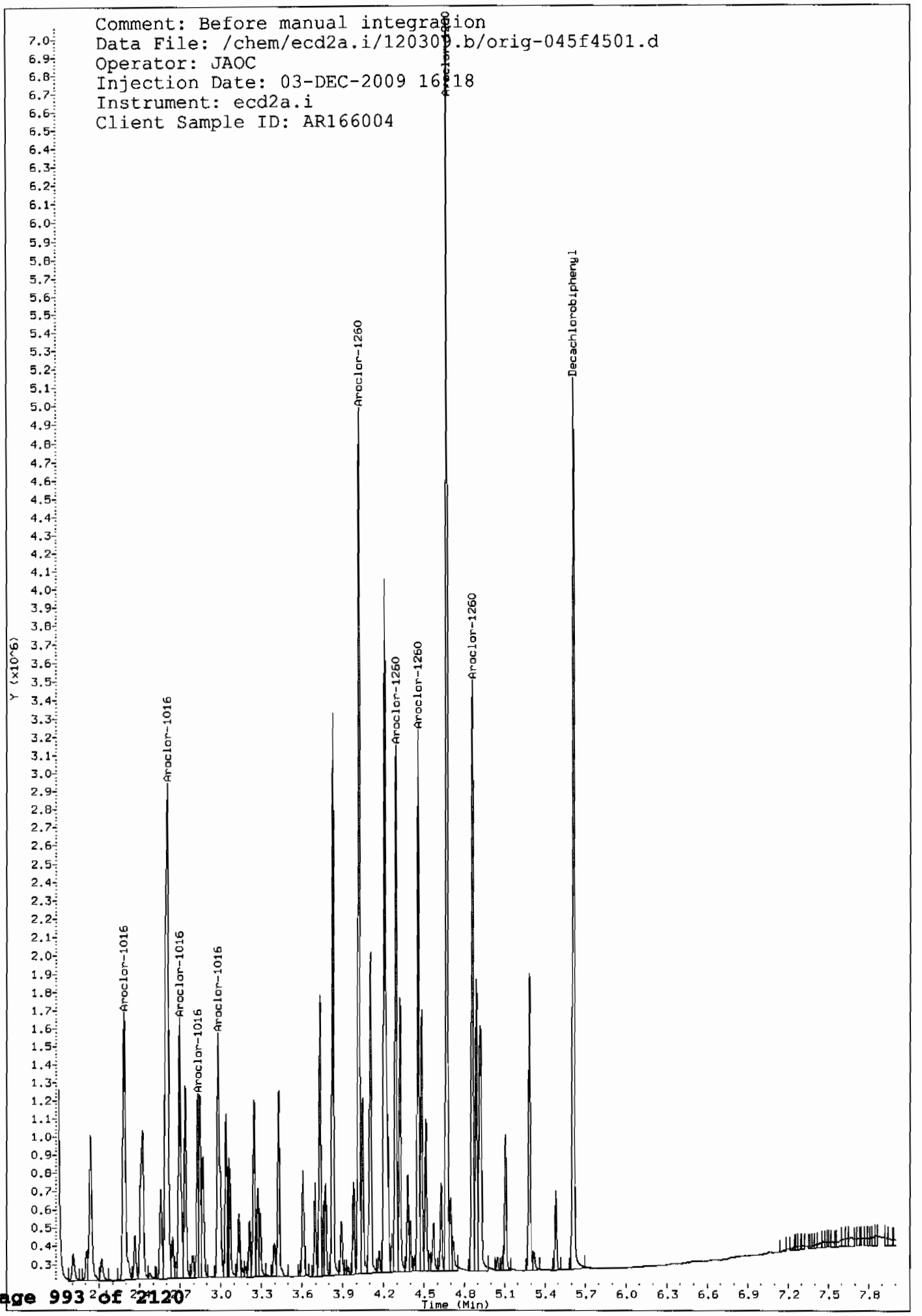

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/045b4501.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 03-DEC-2009 16:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 04
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13281310	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	8688757	100.000	80.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4216212	1000.00	990	80.00- 120.00	100.00
3.185	3.185	0.000	3405548	1000.00	989	61.21- 101.21	80.77
3.336	3.335	0.001	1963953	1000.00	992	26.96- 66.96	46.58
3.365	3.364	0.001	2065526	1000.00	1000	28.74- 68.74	48.99
3.523	3.521	0.002	2798242	1000.00	1020	46.95- 86.95	66.37
Average of Peak Amounts =					998		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5729480	1000.00	1040	80.00- 120.00	100.00
4.570	4.569	0.001	7299919	1000.00	1020	107.13- 147.13	127.41
4.682	4.680	0.002	4829057	1000.00	1020	64.21- 104.21	84.28
4.880	4.878	0.002	5716115	1000.00	985	80.11- 120.11	99.77
5.505	5.504	0.001	8826542	1000.00	976	135.13- 175.13	154.05
Average of Peak Amounts =					1.01e+03		

Data File: /chem/ecd2a.i/120309.b/045b4501.d

Date : 03-DEC-2009 16:18

Client ID: AR166004

Sample Info: IWAR091119-60 04

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

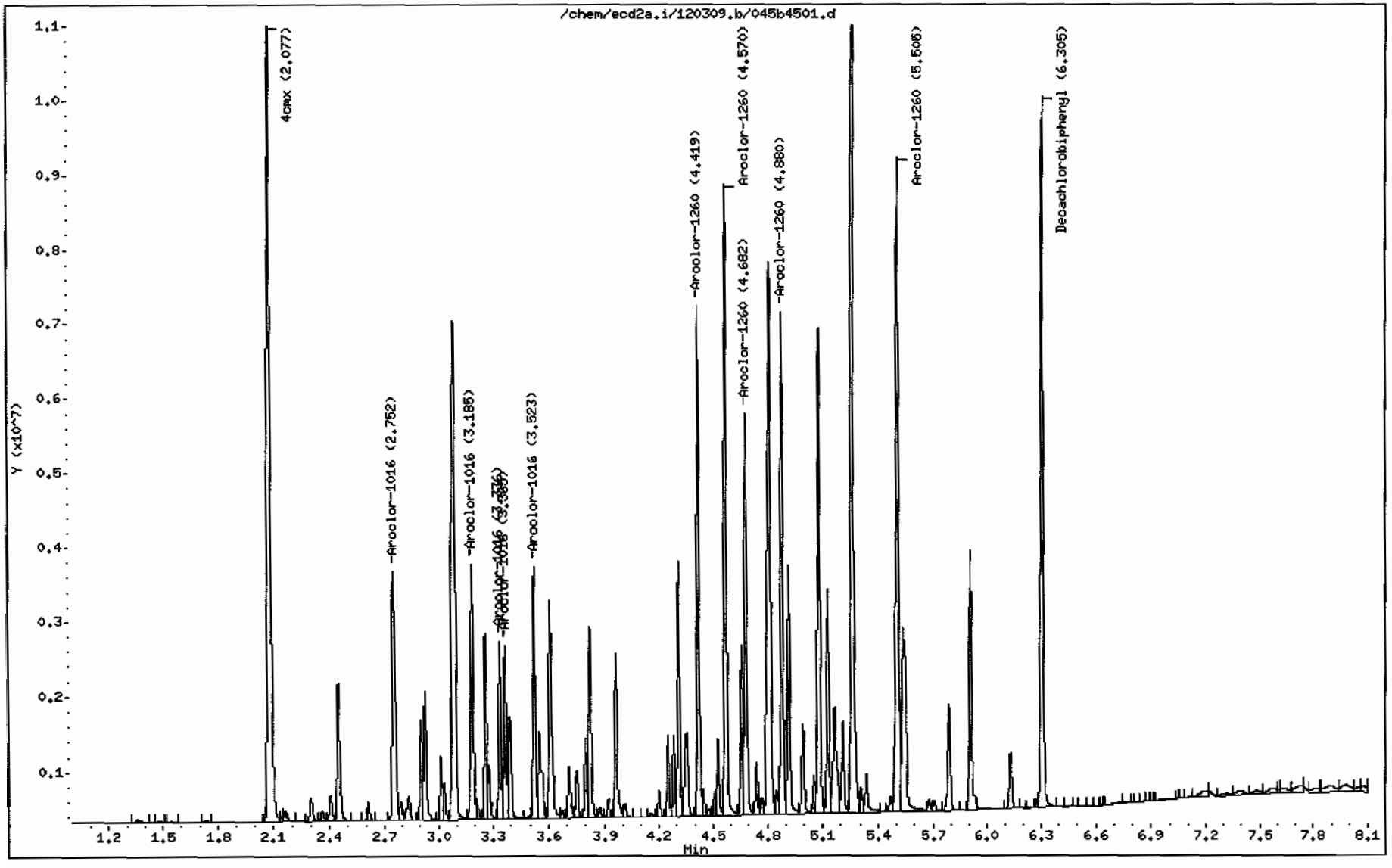

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/055f5501.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 18:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 05
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 55 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6257852	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4740004	100.000	86.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2047399	1000.00	975	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4384029	1000.00	973	191.91- 231.91	214.13
2.693	2.692	0.001	1759330	1000.00	966	65.28- 105.28	85.93
2.828	2.827	0.001	883630	1000.00	947	23.06- 63.06	43.16
2.979	2.978	0.001	1281466	1000.00	930	41.11- 81.11	62.59
Average of Peak Amounts =					958		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4145972	1000.00	1020	80.00- 120.00	100.00
4.289	4.288	0.001	2544535	1000.00	1010	40.91- 80.91	61.37
4.455	4.454	0.001	2603734	1000.00	1010	42.71- 82.71	62.80
4.668	4.665	0.003	6101061	1000.00	1010	125.86- 165.86	147.16
4.857	4.855	0.002	2916980	1000.00	1000	49.52- 89.52	70.36
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/055f5501.d

Date : 03-DEC-2009 18:09

Client ID: AR166005

Sample Info: IWAR091119-60 05

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

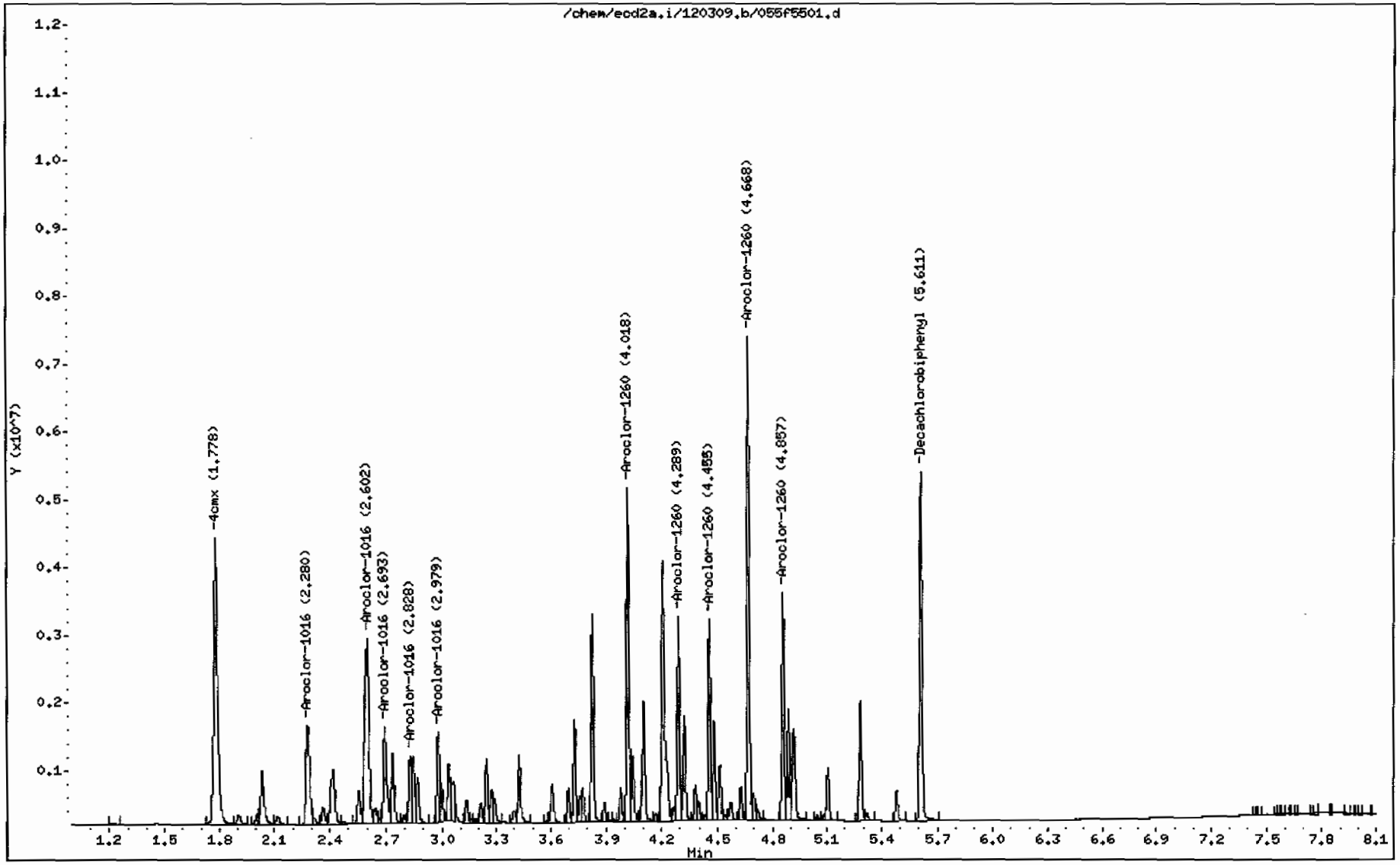

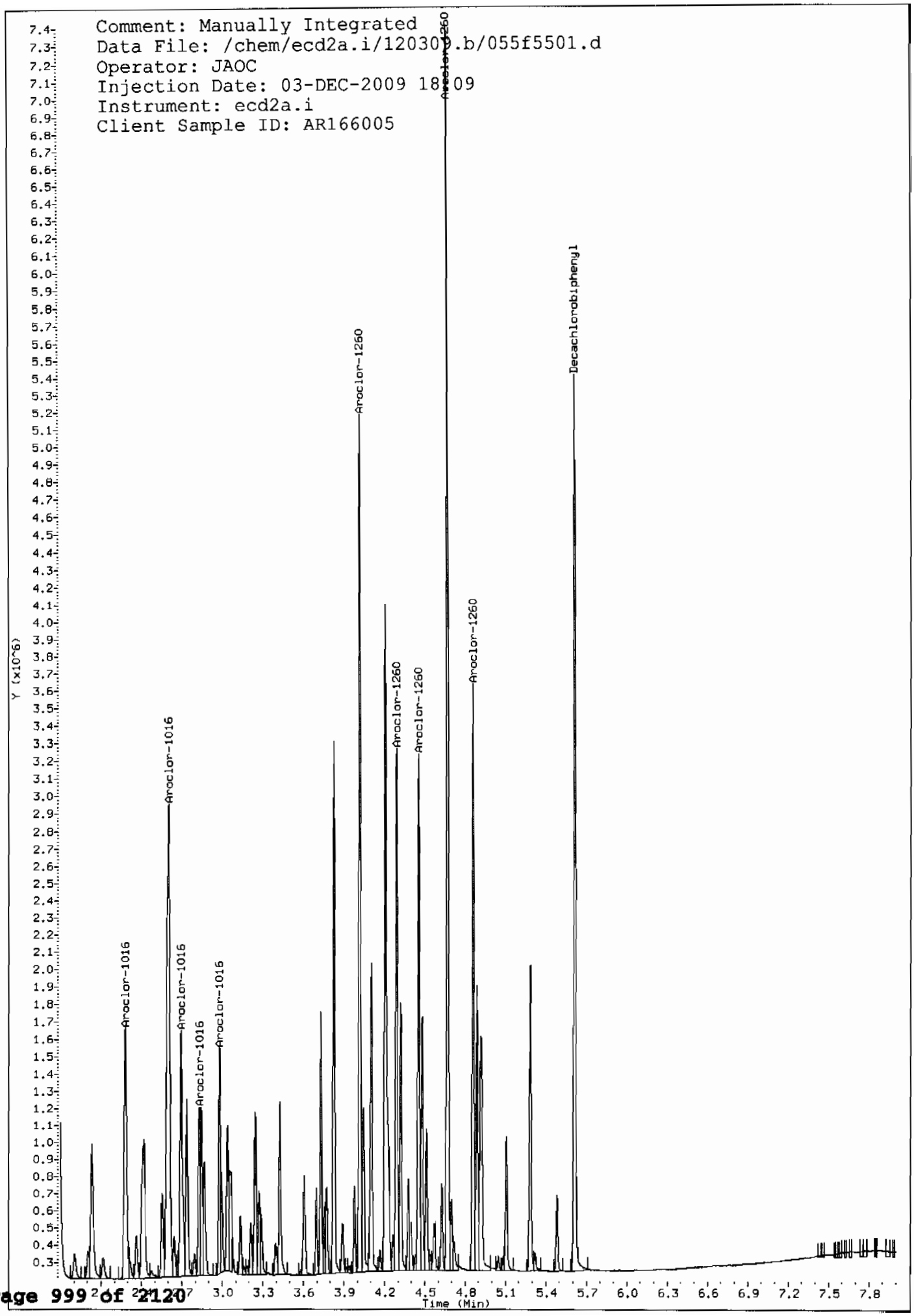
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/055f5501.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:09
Instrument: ecd2a.i
Client Sample ID: AR166005
Aroclor-1016
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Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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Decachlorobiphenyl
Y (x10^6)
Time (Min)

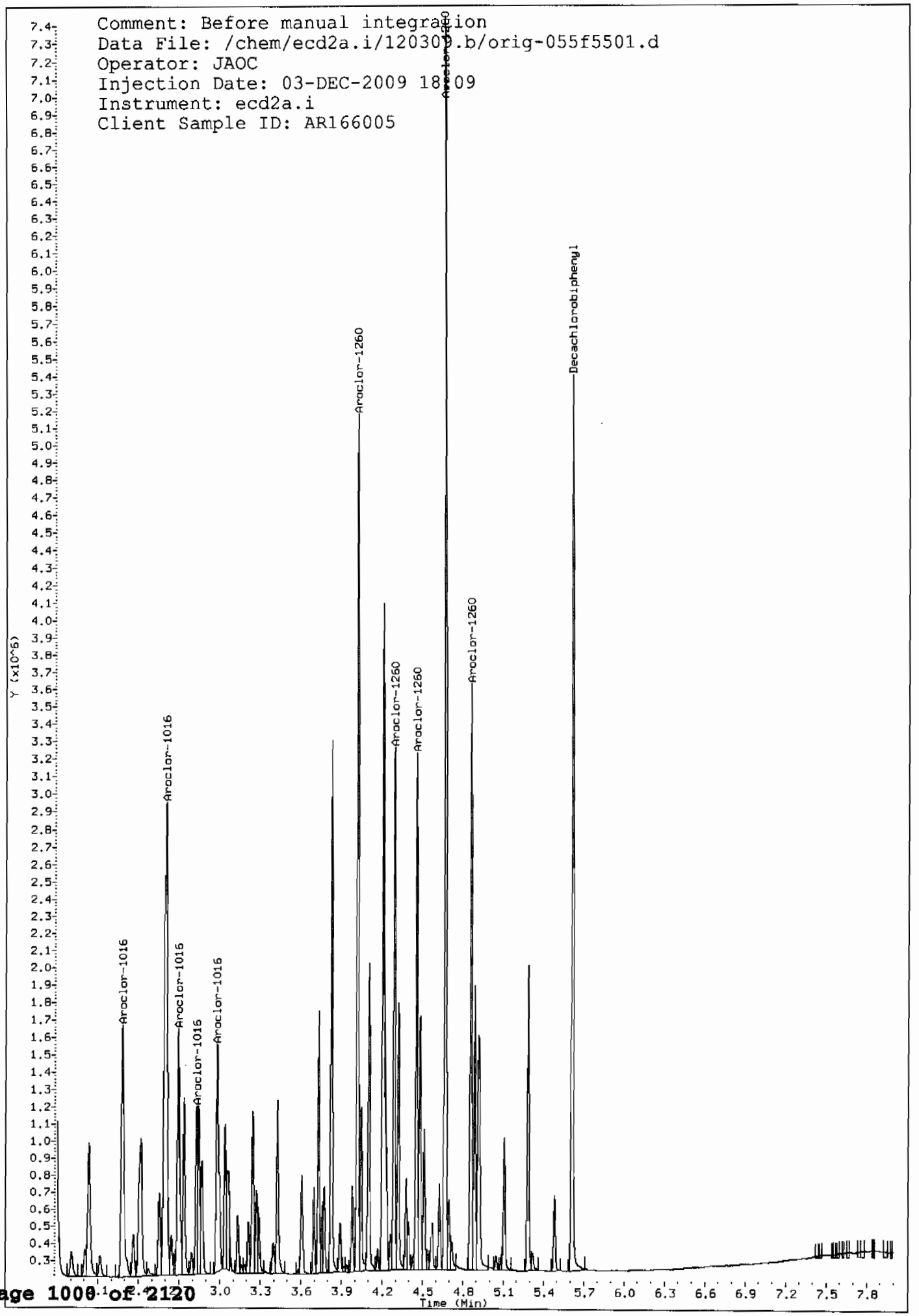
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-055f5501.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:09
Instrument: ecd2a.i
Client Sample ID: AR166005
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/055b5501.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 18:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 05
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 55 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13409429	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9498159	100.000	87.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4268280	1000.00	1000	80.00- 120.00	100.00
3.185	3.185	0.000	3465345	1000.00	1000	61.21- 101.21	81.19
3.336	3.335	0.001	2011969	1000.00	1020	26.96- 66.96	47.14
3.364	3.364	0.000	2064024	1000.00	1000	28.74- 68.74	48.36
3.523	3.521	0.002	2847950	1000.00	1030	46.95- 86.95	66.72
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5893238	1000.00	1070	80.00- 120.00	100.00
4.570	4.569	0.001	7495996	1000.00	1050	107.13- 147.13	127.20
4.682	4.680	0.002	4978183	1000.00	1050	64.21- 104.21	84.47
4.879	4.878	0.001	5877103	1000.00	1010	80.11- 120.11	99.73
5.505	5.504	0.001	9056734	1000.00	1000	135.13- 175.13	153.68
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/055b5501.d
Date : 03-DEC-2009 18:09
Client ID: AR166005
Sample Info: IWAR091119-60 05

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

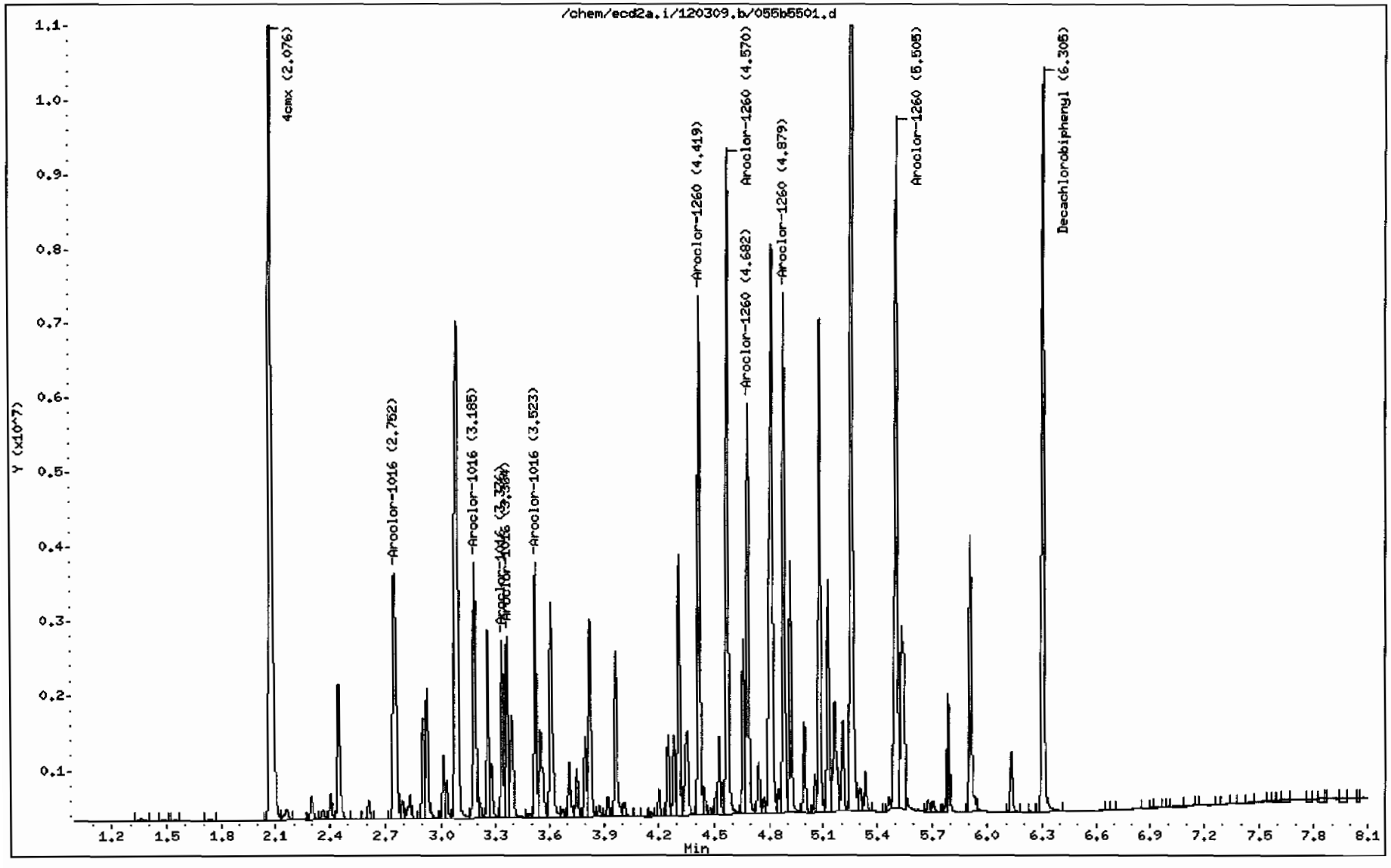

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/067f6701.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 03-DEC-2009 20:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 67 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6163610	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4667179	100.000	85.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2088114	1000.00	994	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4342596	1000.00	964	191.91- 231.91	207.97
2.693	2.692	0.001	1732922	1000.00	952	65.28- 105.28	82.99
2.828	2.827	0.001	872123	1000.00	935	23.06- 63.06	41.77
2.979	2.978	0.001	1313386	1000.00	953	41.11- 81.11	62.90
Average of Peak Amounts =					960		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4128392	1000.00	1020	80.00- 120.00	100.00
4.289	4.288	0.001	2539399	1000.00	1000	40.91- 80.91	61.51
4.455	4.454	0.001	2583337	1000.00	1000	42.71- 82.71	62.57
4.668	4.665	0.003	6075361	1000.00	1010	125.86- 165.86	147.16
4.857	4.855	0.002	2892782	1000.00	993	49.52- 89.52	70.07
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/067f6701.d
Date : 03-DEC-2009 20:23
Client ID: AR166006
Sample Info: IWAR091119-60 06

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

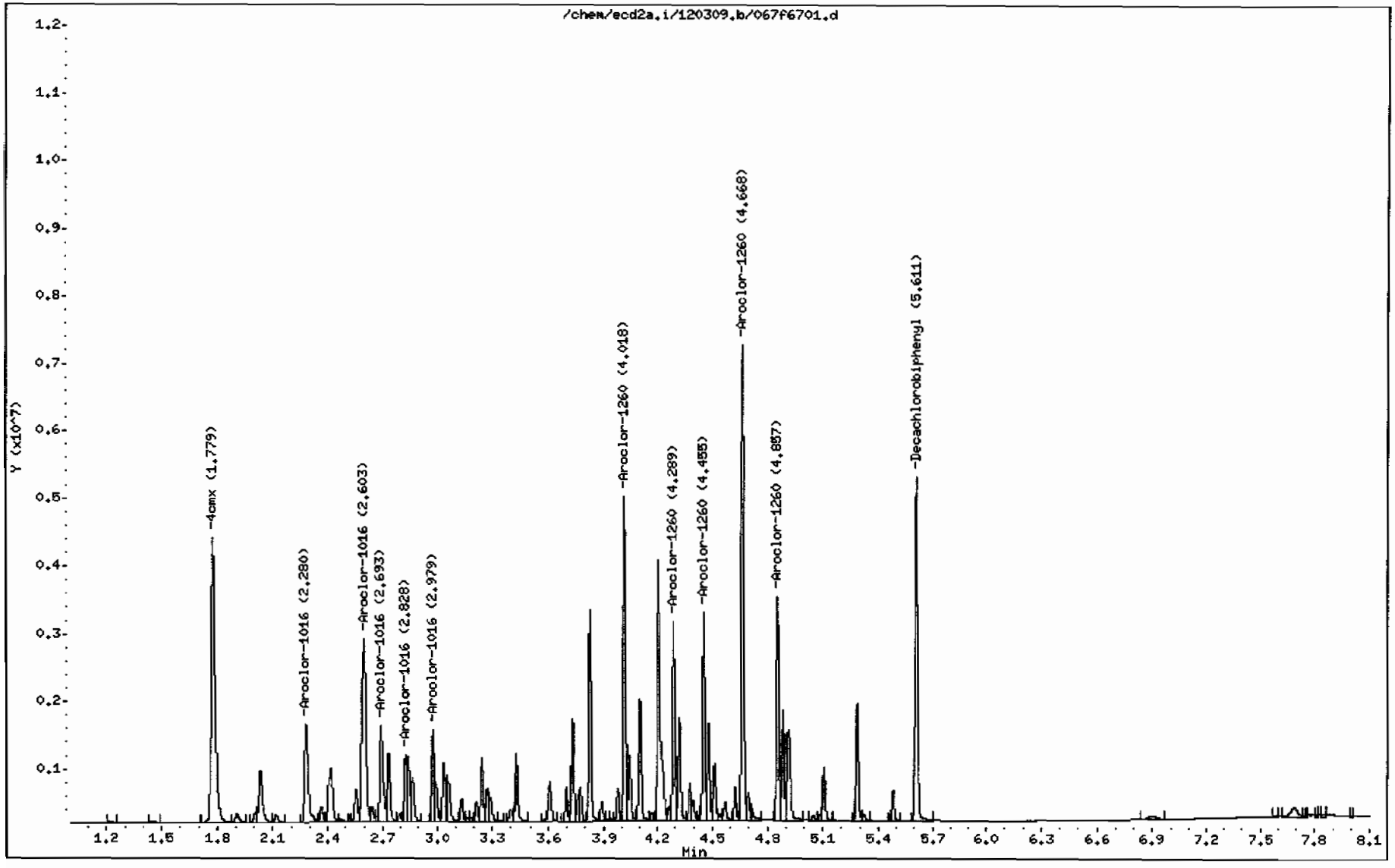

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/067f6701.d
Operator: JAOC
Injection Date: 03-DEC-2009 20:23
Instrument: ecd2a.i
Client Sample ID: AR166006

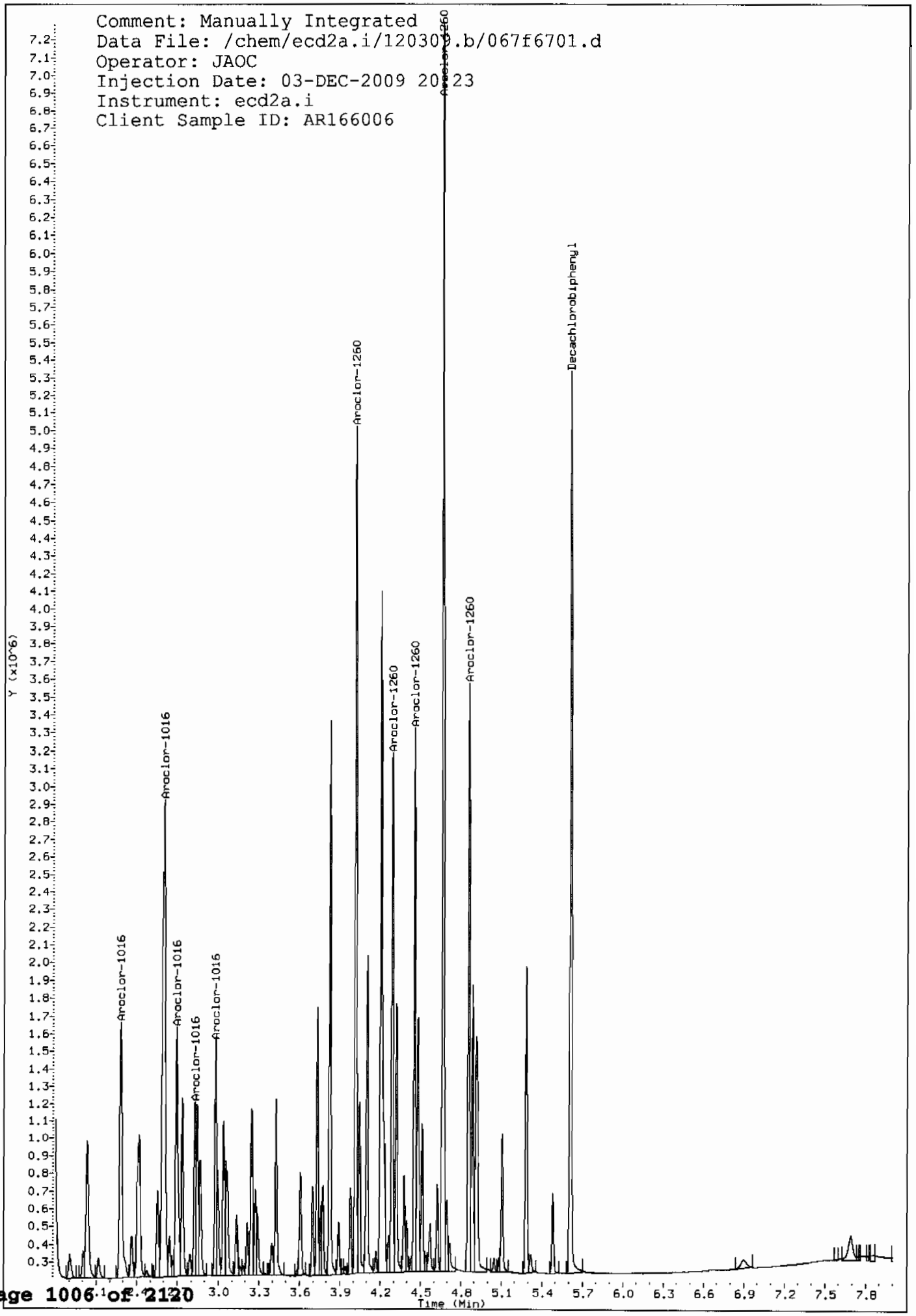

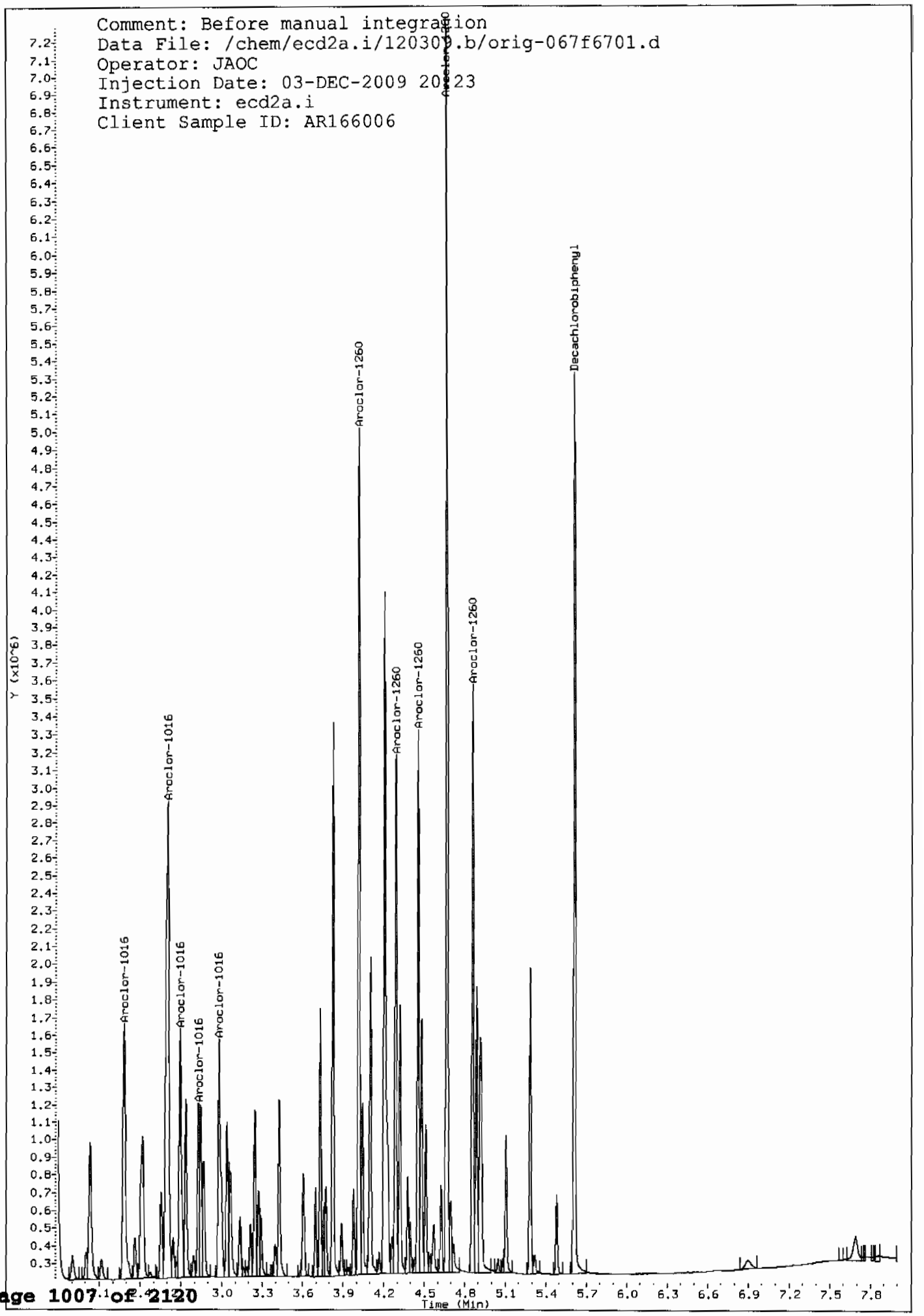
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-067f6701.d
Operator: JAOC
Injection Date: 03-DEC-2009 20:23
Instrument: ecd2a.i
Client Sample ID: AR166006
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/067b6701.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 03-DEC-2009 20:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 67 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13328074	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	9544199	100.000	87.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.750	0.001	4241951	1000.00	996	80.00- 120.00	100.00
3.185	3.185	0.000	3445004	1000.00	1000	61.21- 101.21	81.21
3.336	3.335	0.001	1997782	1000.00	1010	26.96- 66.96	47.10
3.364	3.364	0.000	2077036	1000.00	1010	28.74- 68.74	48.96
3.523	3.521	0.002	2827729	1000.00	1030	46.95- 86.95	66.66
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5876309	1000.00	1060	80.00- 120.00	100.00
4.570	4.569	0.001	7499076	1000.00	1050	107.13- 147.13	127.62
4.683	4.680	0.003	4987524	1000.00	1050	64.21- 104.21	84.88
4.880	4.878	0.002	5914224	1000.00	1020	80.11- 120.11	100.65
5.505	5.504	0.001	9320682	1000.00	1030	135.13- 175.13	158.61
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/067b6701.d
Date : 03-DEC-2009 20:23
Client ID: AR166006
Sample Info: IWAR091119-60 06

Column phase: CLP2

Page 1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

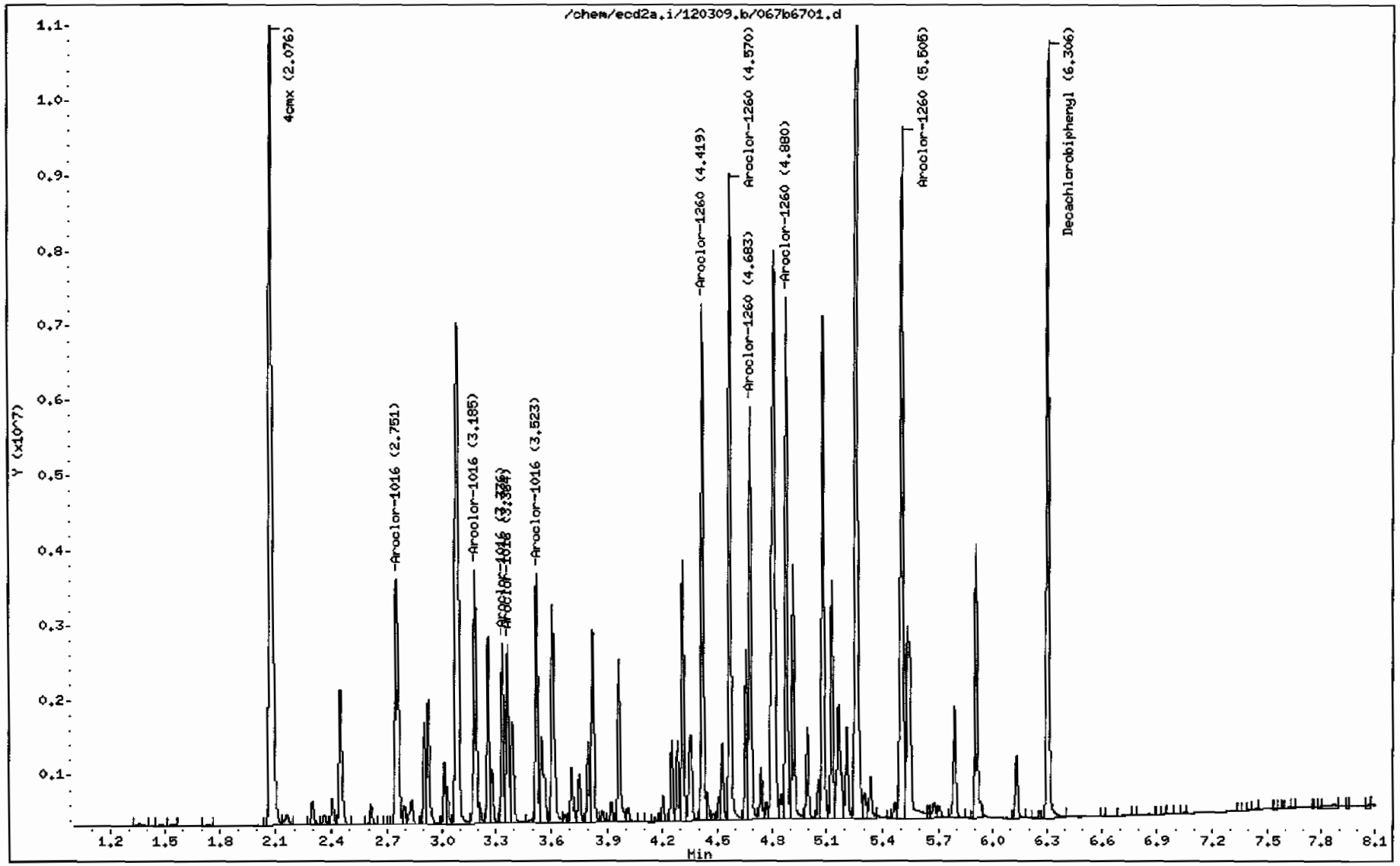

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/079f7901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 03-DEC-2009 22:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 79 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6158686	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4580858	100.000	83.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	1978981	1000.00	942	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4303790	1000.00	955	191.91- 231.91	217.48
2.694	2.692	0.002	1712863	1000.00	941	65.28- 105.28	86.55
2.828	2.827	0.001	871419	1000.00	934	23.06- 63.06	44.03
2.980	2.978	0.002	1292053	1000.00	938	41.11- 81.11	65.29
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4099995	1000.00	1010	80.00- 120.00	100.00
4.290	4.288	0.002	2500052	1000.00	989	40.91- 80.91	60.98
4.456	4.454	0.002	2561308	1000.00	992	42.71- 82.71	62.47
4.668	4.665	0.003	6022736	1000.00	998	125.86- 165.86	146.90
4.857	4.855	0.002	2873424	1000.00	987	49.52- 89.52	70.08
Average of Peak Amounts =					995		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/079f7901.d

Date : 03-DEC-2009 22:36

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

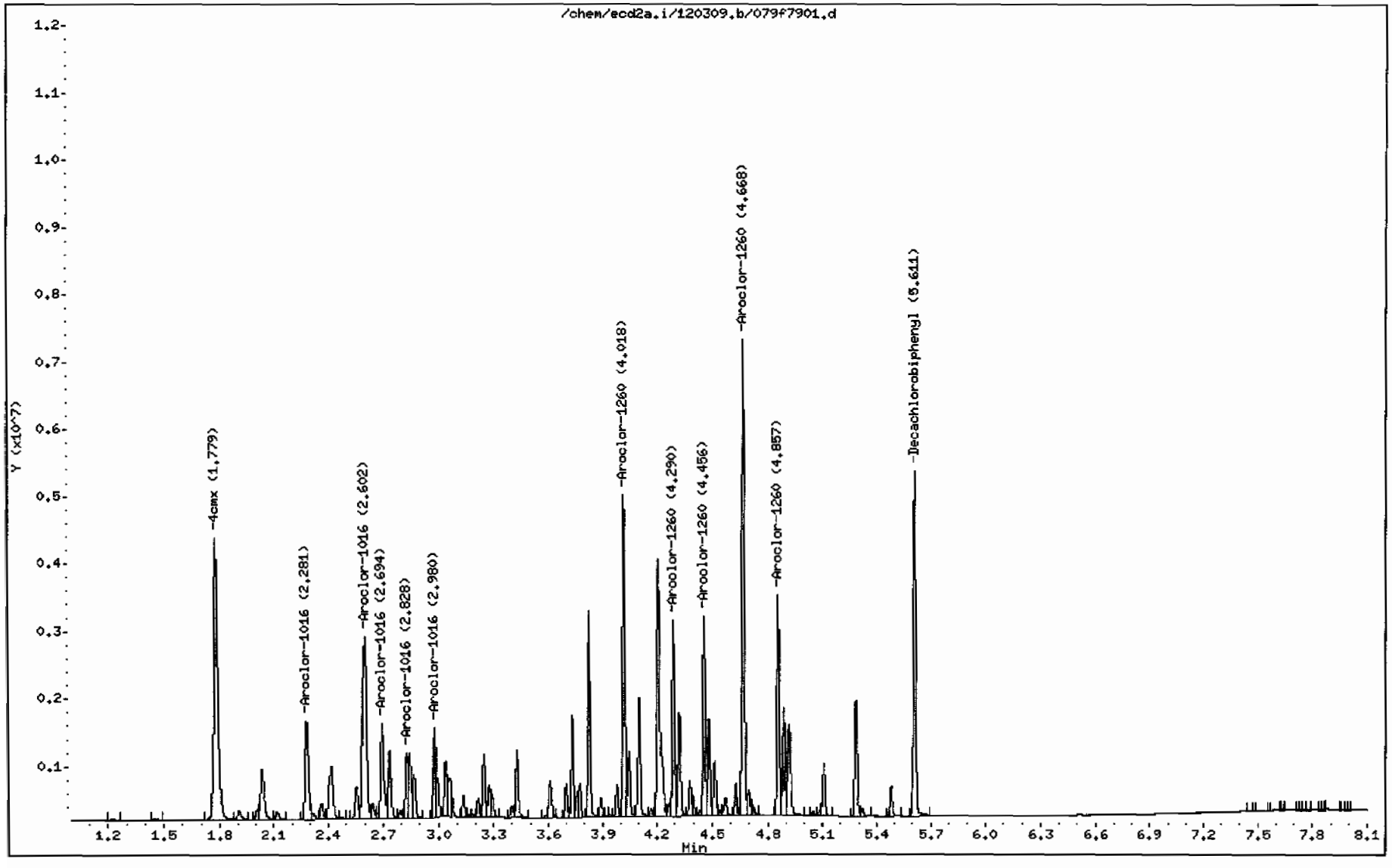

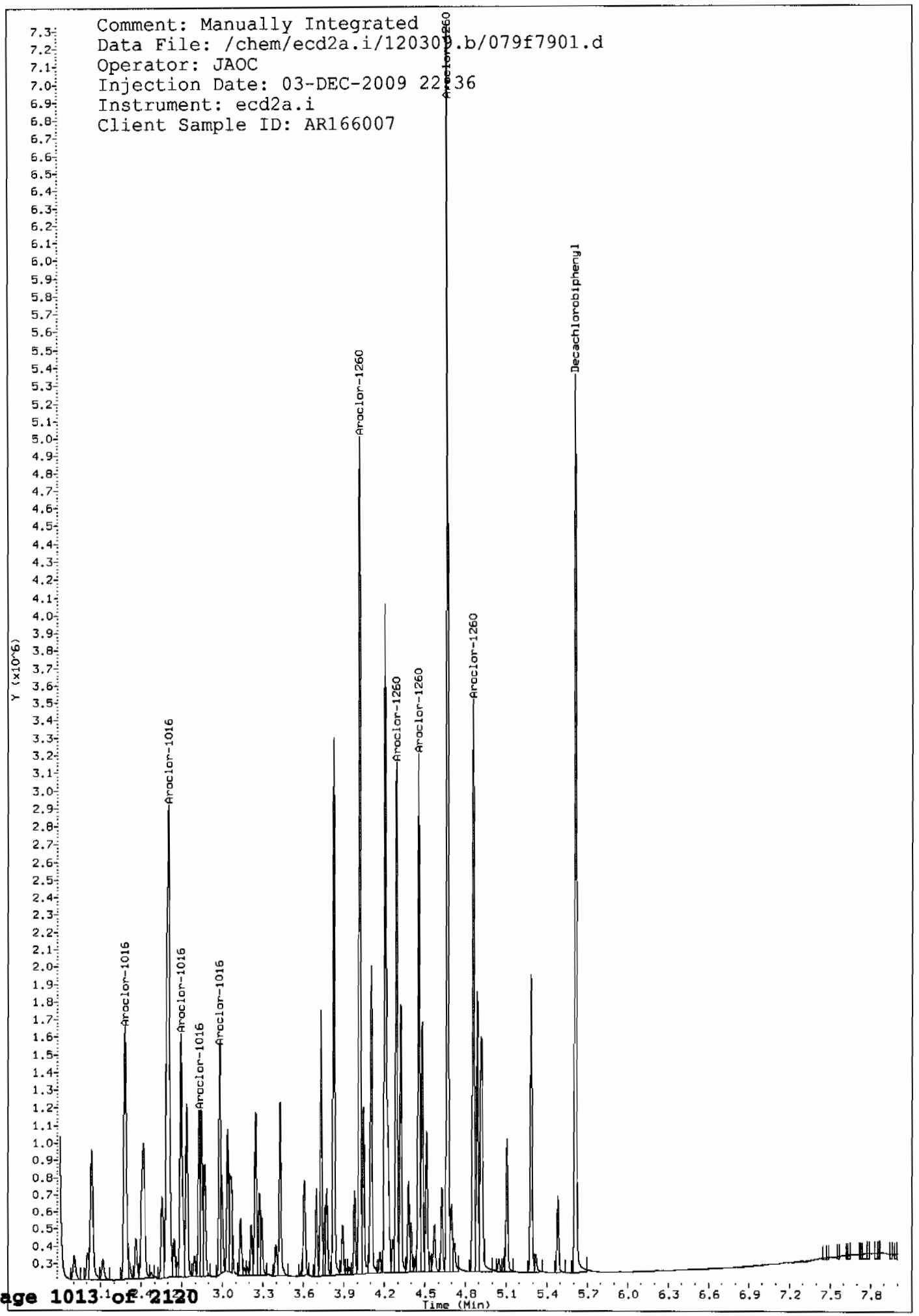
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Operator: JAOC
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Instrument: ecd2a.i
Client Sample ID: AR166007
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Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

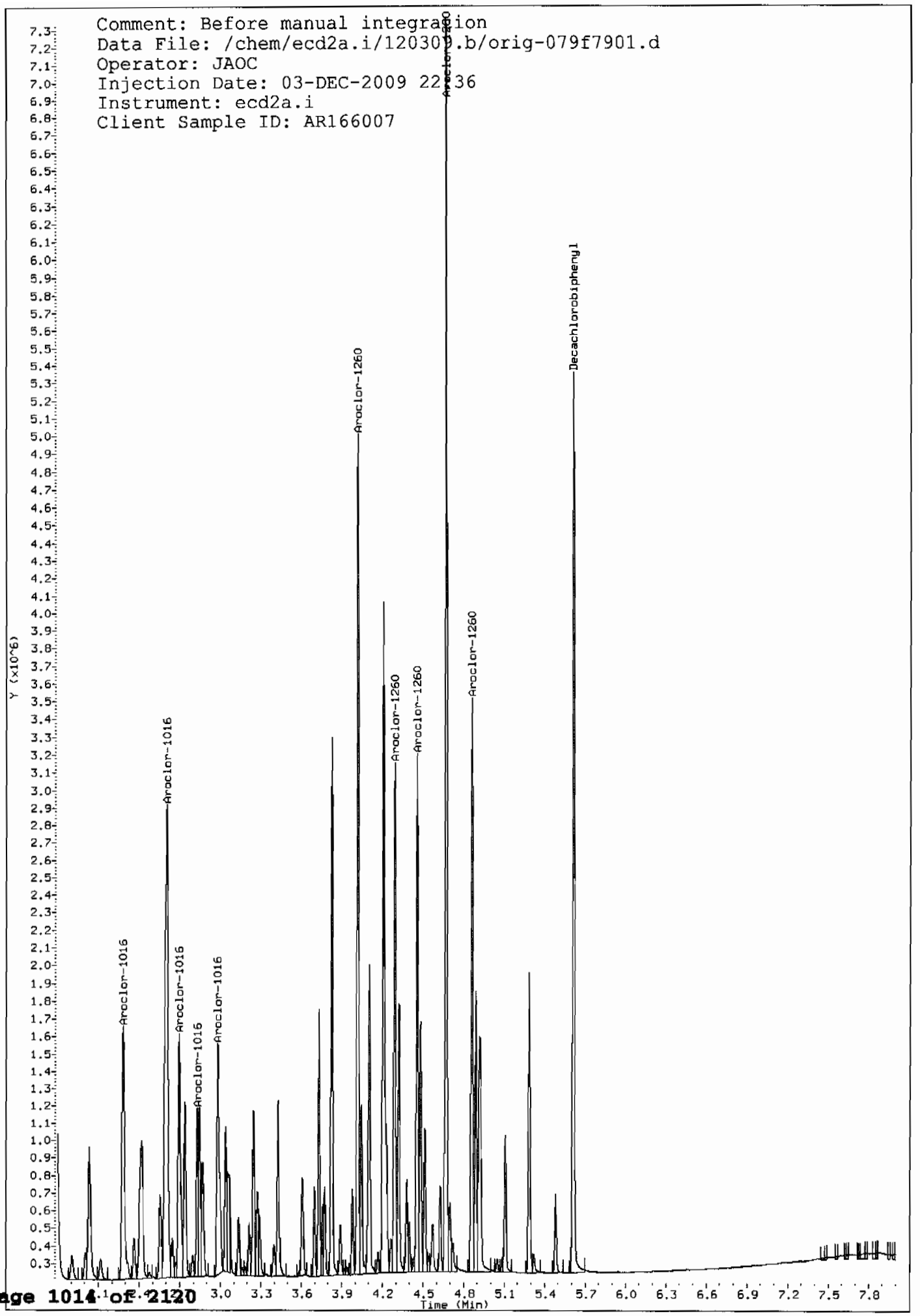
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Operator: JAOC
Injection Date: 03-DEC-2009 22:36
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
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Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/079b7901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 03-DEC-2009 22:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 79 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13335702	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	9249159	100.000	85.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4227851	1000.00	993	80.00- 120.00	100.00
3.186	3.185	0.001	3405204	1000.00	988	61.21- 101.21	80.54
3.337	3.335	0.002	1957925	1000.00	989	26.96- 66.96	46.31
3.365	3.364	0.001	2034357	1000.00	987	28.74- 68.74	48.12
3.523	3.521	0.002	2793974	1000.00	1010	46.95- 86.95	66.08
Average of Peak Amounts =					994		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5796323	1000.00	1050	80.00- 120.00	100.00
4.571	4.569	0.002	7372924	1000.00	1030	107.13- 147.13	127.20
4.683	4.680	0.003	4864947	1000.00	1030	64.21- 104.21	83.93
4.880	4.878	0.002	5761959	1000.00	993	80.11- 120.11	99.41
5.505	5.504	0.001	9007179	1000.00	996	135.13- 175.13	155.39
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd2a.i/120309.b/079b7901.d
Date : 03-DEC-2009 22:36
Client ID: AR166007
Sample Info: IWAR091119-60 07

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

Column phase: CLP2

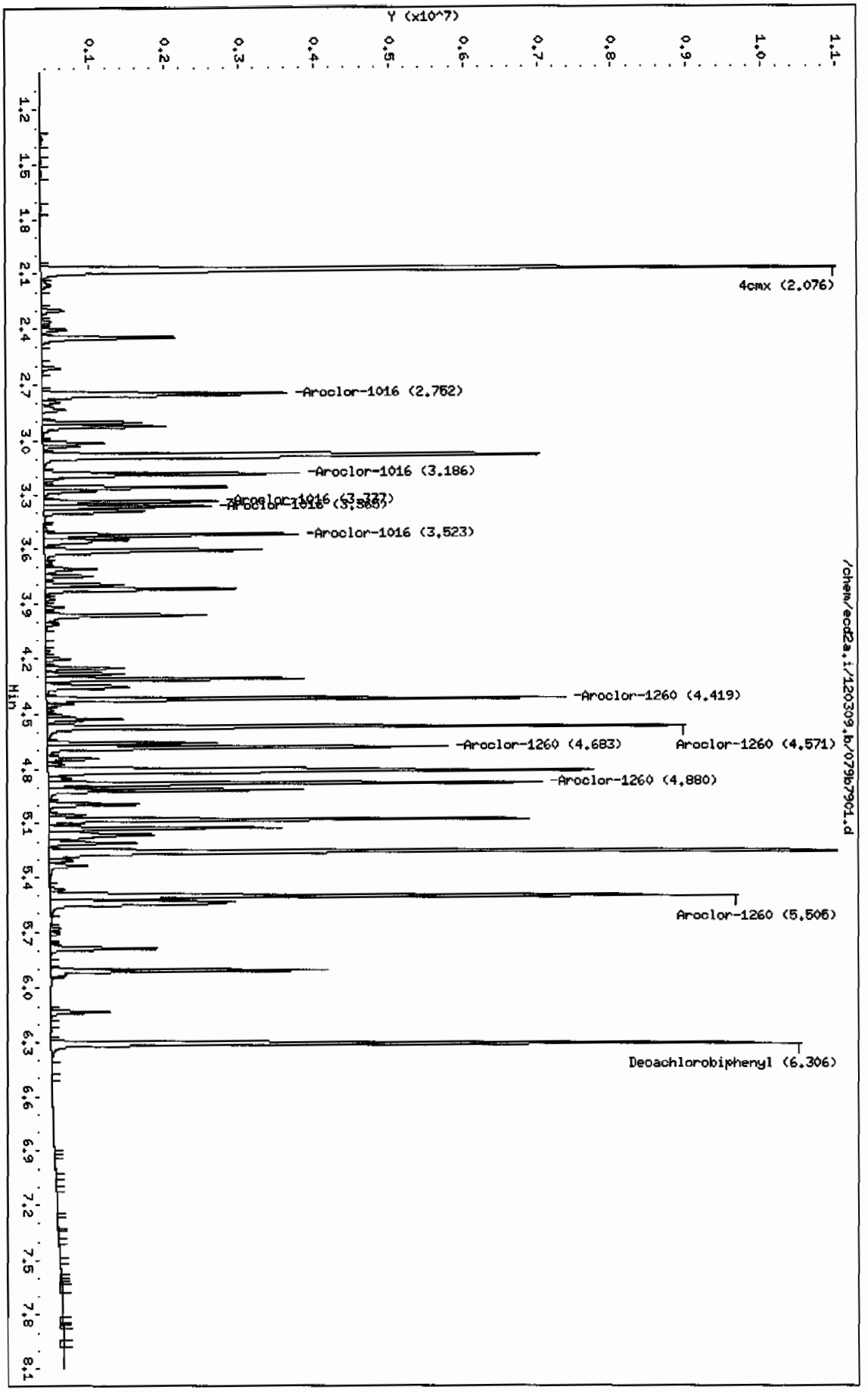

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8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	AR166001	WAR091119-60	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	AR124801	WAR091027-48	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobipheny1 (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	AR166001	WAR091119-60	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	AR124801	WAR091027-48	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0810	1.77	5.61
02	AR166001	WAR091119-60	12/03/09	0821	1.78	5.61
03	AR125401	WAR091102-54	12/03/09	0832	1.78	5.61
04	AR124201	WAR091102-42	12/03/09	0843	1.78	5.61
05	AR124801	WAR091027-48	12/03/09	0854	1.78	5.61
06	AR123201	WAR090930-32	12/03/09	0905	1.78	5.61
07	AR122101	WAR091111-21	12/03/09	0917	1.78	5.61
08	AR126201	WAR091111-62	12/03/09	0928	1.78	5.61
09	AR126801	WAR091106-68	12/03/09	0939	1.78	5.61
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0950		
11	PIBLK02	WAR090916-99	12/03/09	1001	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	1012	1.78	5.61
13	ZZZZZ	ZZZZZ	12/03/09	1023	1.78	5.61
14	ZZZZZ	ZZZZZ	12/03/09	1034	1.78	5.61
15	ZZZZZ	ZZZZZ	12/03/09	1045	1.78	5.61
16	ZZZZZ	ZZZZZ	12/03/09	1057	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	1108	1.78	5.61
18	ZZZZZ	ZZZZZ	12/03/09	1119	1.78	5.61
19	ZZZZZ	ZZZZZ	12/03/09	1130	1.78	5.61
20	ZZZZZ	ZZZZZ	12/03/09	1141	1.78	5.61
21	AR166002	WAR091119-60	12/03/09	1152	1.78	5.61
22	PIBLK03	WAR090916-99	12/03/09	1203	1.78	5.61
23	ZZZZZ	ZZZZZ	12/03/09	1214	1.78	5.61
24	ZZZZZ	ZZZZZ	12/03/09	1225	1.78	5.61
25	ZZZZZ	ZZZZZ	12/03/09	1236	1.78	5.61
26	ZZZZZ	ZZZZZ	12/03/09	1247	1.78	5.61
27	ZZZZZ	ZZZZZ	12/03/09	1258	1.78	5.61
28	ZZZZZ	ZZZZZ	12/03/09	1309	1.78	5.61
29	ZZZZZ	ZZZZZ	12/03/09	1321	1.78	5.61
30	ZZZZZ	ZZZZZ	12/03/09	1332	1.78	5.61
31	ZZZZZ	ZZZZZ	12/03/09	1343	1.78	5.61
32	ZZZZZ	ZZZZZ	12/03/09	1354	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166003	WAR091119-60	12/03/09	1405	1.78	5.61
02	PIBLK04	WAR090916-99	12/03/09	1416	1.78	5.61
03	ZZZZZ	ZZZZZ	12/03/09	1427	1.78	5.61
04	ZZZZZ	ZZZZZ	12/03/09	1438	1.78	5.61
05	ZZZZZ	ZZZZZ	12/03/09	1449	1.78	5.61
06	ZZZZZ	ZZZZZ	12/03/09	1500	1.78	5.61
07	ZZZZZ	ZZZZZ	12/03/09	1512	1.78	5.62
08	ZZZZZ	ZZZZZ	12/03/09	1523	1.78	5.61
09	ZZZZZ	ZZZZZ	12/03/09	1534	1.78	5.61
10	ZZZZZ	ZZZZZ	12/03/09	1545	1.78	5.61
11	ZZZZZ	ZZZZZ	12/03/09	1556	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	1607	1.78	5.61
13	AR166004	WAR091119-60	12/03/09	1618	1.78	5.61
14	PIBLK05	WAR090916-99	12/03/09	1629	1.78	5.61
15	ZZZZZ	ZZZZZ	12/03/09	1640	1.78	5.61
16	ZZZZZ	ZZZZZ	12/03/09	1651	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	1703	1.78	5.62
18	ZZZZZ	ZZZZZ	12/03/09	1714	1.78	5.61
19	PBLK01	1201981410	12/03/09	1725	1.78	5.61
20	PBLK01LCS	1201981413	12/03/09	1736	1.78	5.61
21	ZZZZZ	ZZZZZ	12/03/09	1747	1.78	5.61
22	ZZZZZ	ZZZZZ	12/03/09	1758	1.78	5.61
23	AR166005	WAR091119-60	12/03/09	1809	1.78	5.61
24	PIBLK06	WAR090916-99	12/03/09	1820	1.78	5.61
25	ZZZZZ	ZZZZZ	12/03/09	1831	1.78	5.61
26	ZZZZZ	ZZZZZ	12/03/09	1842	1.78	5.61
27	ZZZZZ	ZZZZZ	12/03/09	1854	1.78	5.61
28	ZZZZZ	ZZZZZ	12/03/09	1905	1.78	5.61
29	ZZZZZ	ZZZZZ	12/03/09	1916	1.78	5.61
30	ZZZZZ	ZZZZZ	12/03/09	1927	1.78	5.61
31	ZZZZZ	ZZZZZ	12/03/09	1938	1.78	5.61
32	ZZZZZ	ZZZZZ	12/03/09	1949	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/03/09	2000	1.78	5.61
02	ZZZZZ	ZZZZZ	12/03/09	2011	1.78	5.61
03	AR166006	WAR091119-60	12/03/09	2023	1.78	5.61
04	PIBLK07	WAR090916-99	12/03/09	2034	1.78	5.61
05	ZZZZZ	ZZZZZ	12/03/09	2045	1.78	5.61
06	ZZZZZ	ZZZZZ	12/03/09	2056	1.78	5.61
07	ZZZZZ	ZZZZZ	12/03/09	2107	1.78	5.61
08	ZZZZZ	ZZZZZ	12/03/09	2118	1.78	5.61
09	ZZZZZ	ZZZZZ	12/03/09	2129	1.78	5.61
10	ZZZZZ	ZZZZZ	12/03/09	2140	1.78	5.61
11	ZZZZZ	ZZZZZ	12/03/09	2151	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	2202	1.78	5.61
13	ZZZZZ	ZZZZZ	12/03/09	2214	1.78	5.61
14	WST03-10-2132	241524002	12/03/09	2225	1.78	5.61
15	AR166007	WAR091119-60	12/03/09	2236	1.78	5.61
16	PIBLK08	WAR090916-99	12/03/09	2247	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	2258	1.78	5.61
18	ZZZZZ	ZZZZZ	12/03/09	2309	1.78	5.61
19	ZZZZZ	ZZZZZ	12/03/09	2320	1.78	5.61
20	ZZZZZ	ZZZZZ	12/03/09	2331	1.78	5.61
21	ZZZZZ	ZZZZZ	12/03/09	2343	1.78	5.61
22	ZZZZZ	ZZZZZ	12/03/09	2354	1.78	5.61
23	ZZZZZ	ZZZZZ	12/04/09	0005	1.78	5.61
24	AR166008	WAR091119-60	12/04/09	0016	1.78	5.61
25	PIBLK09	WAR090916-99	12/04/09	0027	1.78	5.61
26						
27						
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0810	2.07	6.30
02	AR166001	WAR091119-60	12/03/09	0821	2.08	6.30
03	AR125401	WAR091102-54	12/03/09	0832	2.08	6.30
04	AR124201	WAR091102-42	12/03/09	0843	2.08	6.30
05	AR124801	WAR091027-48	12/03/09	0854	2.08	6.30
06	AR123201	WAR090930-32	12/03/09	0905	2.08	6.31
07	AR122101	WAR091111-21	12/03/09	0917	2.08	6.31
08	AR126201	WAR091111-62	12/03/09	0928	2.08	6.31
09	AR126801	WAR091106-68	12/03/09	0939	2.08	6.30
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0950		
11	PIBLK02	WAR090916-99	12/03/09	1001	2.08	6.30
12	ZZZZZ	ZZZZZ	12/03/09	1012	2.08	6.31
13	ZZZZZ	ZZZZZ	12/03/09	1023	2.08	6.30
14	ZZZZZ	ZZZZZ	12/03/09	1034	2.08	6.31
15	ZZZZZ	ZZZZZ	12/03/09	1045	2.08	6.31
16	ZZZZZ	ZZZZZ	12/03/09	1057	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	1108	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	1119	2.08	6.30
19	ZZZZZ	ZZZZZ	12/03/09	1130	2.08	6.30
20	ZZZZZ	ZZZZZ	12/03/09	1141	2.08	6.30
21	AR166002	WAR091119-60	12/03/09	1152	2.08	6.30
22	PIBLK03	WAR090916-99	12/03/09	1203	2.08	6.30
23	ZZZZZ	ZZZZZ	12/03/09	1214	2.08	6.31
24	ZZZZZ	ZZZZZ	12/03/09	1225	2.08	6.30
25	ZZZZZ	ZZZZZ	12/03/09	1236	2.08	6.30
26	ZZZZZ	ZZZZZ	12/03/09	1247	2.08	6.31
27	ZZZZZ	ZZZZZ	12/03/09	1258	2.08	6.30
28	ZZZZZ	ZZZZZ	12/03/09	1309	2.08	6.30
29	ZZZZZ	ZZZZZ	12/03/09	1321	2.08	6.30
30	ZZZZZ	ZZZZZ	12/03/09	1332	2.08	6.30
31	ZZZZZ	ZZZZZ	12/03/09	1343	2.08	6.30
32	ZZZZZ	ZZZZZ	12/03/09	1354	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166003	WAR091119-60	12/03/09	1405	2.08	6.30
02	PIBLK04	WAR090916-99	12/03/09	1416	2.08	6.30
03	ZZZZZ	ZZZZZ	12/03/09	1427	2.08	6.31
04	ZZZZZ	ZZZZZ	12/03/09	1438	2.08	6.31
05	ZZZZZ	ZZZZZ	12/03/09	1449	2.08	6.31
06	ZZZZZ	ZZZZZ	12/03/09	1500	2.08	6.31
07	ZZZZZ	ZZZZZ	12/03/09	1512	2.08	6.31
08	ZZZZZ	ZZZZZ	12/03/09	1523	2.08	6.30
09	ZZZZZ	ZZZZZ	12/03/09	1534	2.08	6.31
10	ZZZZZ	ZZZZZ	12/03/09	1545	2.08	6.31
11	ZZZZZ	ZZZZZ	12/03/09	1556	2.08	6.30
12	ZZZZZ	ZZZZZ	12/03/09	1607	2.08	6.31
13	AR166004	WAR091119-60	12/03/09	1618	2.08	6.31
14	PIBLK05	WAR090916-99	12/03/09	1629	2.08	6.31
15	ZZZZZ	ZZZZZ	12/03/09	1640	2.08	6.31
16	ZZZZZ	ZZZZZ	12/03/09	1651	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	1703	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	1714	2.08	6.31
19	PBLK01	1201981410	12/03/09	1725	2.08	6.31
20	PBLK01LCS	1201981413	12/03/09	1736	2.08	6.31
21	ZZZZZ	ZZZZZ	12/03/09	1747	2.08	6.30
22	ZZZZZ	ZZZZZ	12/03/09	1758	2.08	6.30
23	AR166005	WAR091119-60	12/03/09	1809	2.08	6.31
24	PIBLK06	WAR090916-99	12/03/09	1820	2.08	6.31
25	ZZZZZ	ZZZZZ	12/03/09	1831	2.08	6.31
26	ZZZZZ	ZZZZZ	12/03/09	1842	2.08	6.30
27	ZZZZZ	ZZZZZ	12/03/09	1854	2.08	6.31
28	ZZZZZ	ZZZZZ	12/03/09	1905	2.08	6.31
29	ZZZZZ	ZZZZZ	12/03/09	1916	2.08	6.31
30	ZZZZZ	ZZZZZ	12/03/09	1927	2.08	6.31
31	ZZZZZ	ZZZZZ	12/03/09	1938	2.08	6.31
32	ZZZZZ	ZZZZZ	12/03/09	1949	2.08	6.31

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/03/09	2000	2.08	6.30
02	ZZZZZ	ZZZZZ	12/03/09	2011	2.08	6.30
03	AR166006	WAR091119-60	12/03/09	2023	2.08	6.31
04	PIBLK07	WAR090916-99	12/03/09	2034	2.08	6.30
05	ZZZZZ	ZZZZZ	12/03/09	2045	2.08	6.30
06	ZZZZZ	ZZZZZ	12/03/09	2056	2.08	6.31
07	ZZZZZ	ZZZZZ	12/03/09	2107	2.08	6.31
08	ZZZZZ	ZZZZZ	12/03/09	2118	2.08	6.31
09	ZZZZZ	ZZZZZ	12/03/09	2129	2.08	6.30
10	ZZZZZ	ZZZZZ	12/03/09	2140	2.08	6.31
11	ZZZZZ	ZZZZZ	12/03/09	2151	2.08	6.31
12	ZZZZZ	ZZZZZ	12/03/09	2202	2.08	6.31
13	ZZZZZ	ZZZZZ	12/03/09	2214	2.08	6.30
14	WST03-10-2132	241524002	12/03/09	2225	2.08	6.31
15	AR166007	WAR091119-60	12/03/09	2236	2.08	6.31
16	PIBLK08	WAR090916-99	12/03/09	2247	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	2258	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	2309	2.08	6.31
19	ZZZZZ	ZZZZZ	12/03/09	2320	2.08	6.31
20	ZZZZZ	ZZZZZ	12/03/09	2331	2.08	6.31
21	ZZZZZ	ZZZZZ	12/03/09	2343	2.08	6.31
22	ZZZZZ	ZZZZZ	12/03/09	2354	2.08	6.31
23	ZZZZZ	ZZZZZ	12/04/09	0005	2.08	6.31
24	AR166008	WAR091119-60	12/04/09	0016	2.08	6.30
25	PIBLK09	WAR090916-99	12/04/09	0027	2.08	6.31
26						
27						
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–600 **Client ID:** LCS for batch 926728

Lab Sample ID: 1201981413

Data File:	052f5201.d	**Data File:**	052b5201.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 17:36	**Analyzed:**	03–DEC–09 17:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							2.37
Column 1	1	2.28	2.25 – 2.31	32.1		ug/kg	
	2	2.6	2.57 – 2.63	30.6		ug/kg	
	3	2.69	2.66 – 2.72	30.4		ug/kg	
	4	2.83	2.8 – 2.86	30.4		ug/kg	
	5	2.98	2.95 – 3.01	30.8		ug/kg	
					30.9		
Column 2	1	2.75	2.72 – 2.78	31.3		ug/kg	
	2	3.19	3.15 – 3.21	31.5		ug/kg	
	3	3.34	3.3 – 3.36	31.7		ug/kg	
	4	3.37	3.33 – 3.39	31		ug/kg	
	5	3.52	3.49 – 3.55	32.4		ug/kg	
					31.6		
Aroclor–1260							1.56
Column 1	1	4.02	3.99 – 4.05	33.3		ug/kg	
	2	4.29	4.26 – 4.32	32.9		ug/kg	
	3	4.46	4.42 – 4.48	33.1		ug/kg	
	4	4.67	4.64 – 4.7	33.4		ug/kg	
	5	4.86	4.83 – 4.89	33.1		ug/kg	
					33.2		
Column 2	1	4.42	4.39 – 4.45	34.3		ug/kg	
	2	4.57	4.54 – 4.6	34.1		ug/kg	
	3	4.68	4.65 – 4.71	33.8		ug/kg	
	4	4.88	4.85 – 4.91	32.7		ug/kg	
	5	5.51	5.47 – 5.53	33.4		ug/kg	
					33.7		

Identification Summary

SDG Number: 10–600 **Client ID:** WST03–10–2132

Lab Sample ID: 241524002

Data File:	078f7801.d	**Data File:**	078b7801.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 22:25	**Analyzed:**	03–DEC–09 22:25

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							61
Column 1	1	3.24	3.22 – 3.28	26.6		ug/kg	
	2	3.43	3.4 – 3.46	5.03		ug/kg	
	3	3.7	3.67 – 3.73	14.7		ug/kg	
	4	3.89	3.86 – 3.92	4.94		ug/kg	
	5	4.02	3.99 – 4.05	42.2		ug/kg	
					18.7		
Column 2	1	3.82	3.79 – 3.85	9.18		ug/kg	
	2	3.97	3.93 – 3.99	11		ug/kg	
	3	4.2	4.17 – 4.23	10.2		ug/kg	
	4	4.28	4.25 – 4.31	13.4		ug/kg	
	5	4.44	4.41 – 4.47	6.08		ug/kg	
					9.96		
Aroclor–1260							9.35
Column 1	1	4.02	3.99 – 4.05	28.6		ug/kg	
	2	4.29	4.26 – 4.32	27		ug/kg	
	3	4.46	4.42 – 4.48	36.6		ug/kg	
	4	4.67	4.64 – 4.7	24.2		ug/kg	
	5	4.86	4.83 – 4.89	29.7		ug/kg	
					29.2		
Column 2	1	4.42	4.39 – 4.45	31.9		ug/kg	
	2	4.57	4.54 – 4.6	25.7		ug/kg	
	3	4.68	4.65 – 4.71	23.6		ug/kg	
	4	4.88	4.85 – 4.91	25.9		ug/kg	
	5	5.51	5.47 – 5.53	25.8		ug/kg	
					26.6		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–600			**Matrix:**	SOIL
Lab Sample ID:	1201981410				
Client Sample:	QC for batch 926728	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926728	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 17:25	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	051f5101–1.d	**Column:**	1 CLP1	**Level:**	LOW
	051b5101–1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/051f5101-3.d
Lab Smp Id: 1201981410 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 17:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981410|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 51 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10836896	187.778	6.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8102321	147.774	4.9	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/051f5101-3.d

Date : 03-DEC-2009 17:25

Client ID: PBLK01

Sample Info: |120198141011|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

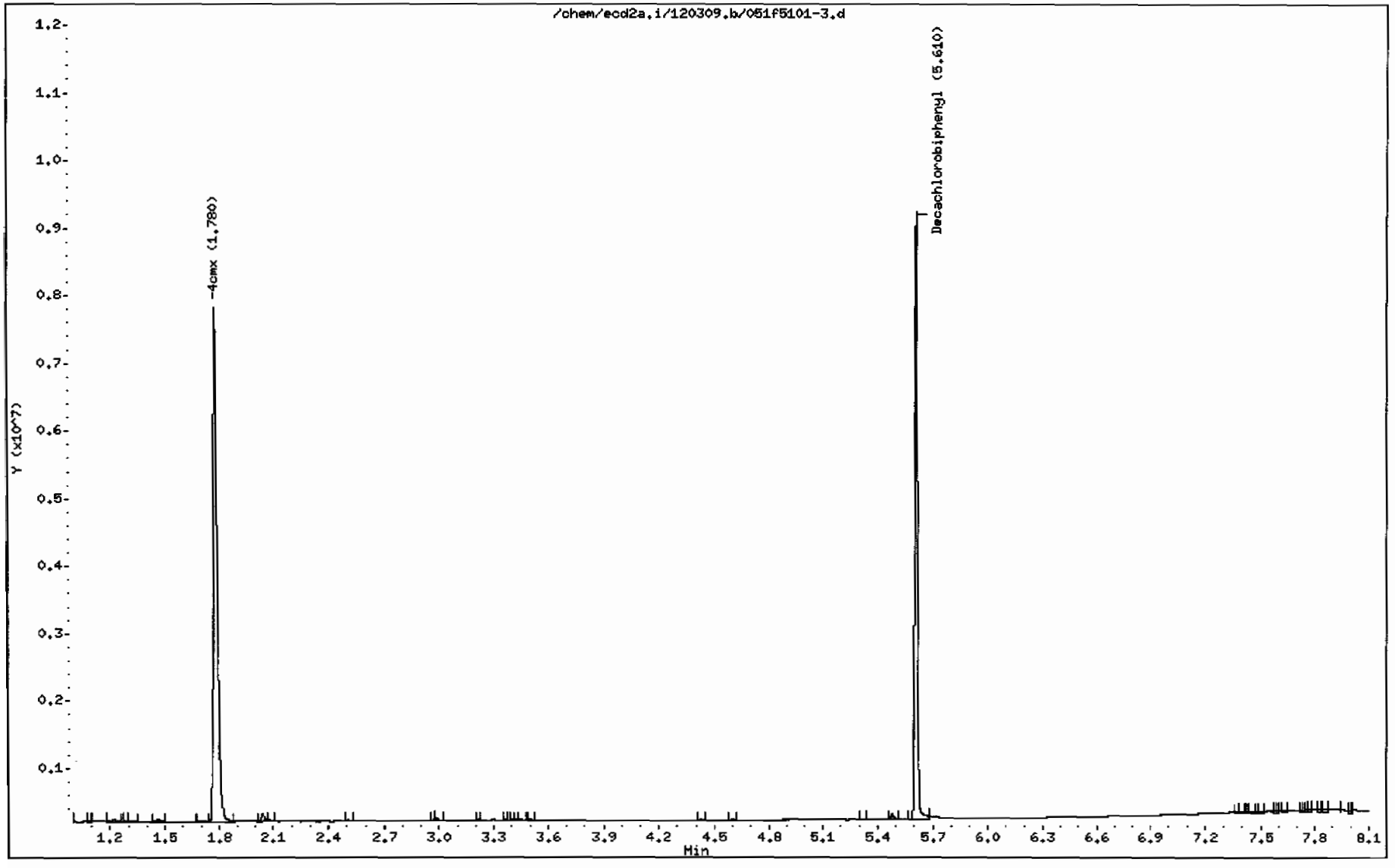

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/051b5101-3.d
Lab Smp Id: 1201981410 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 17:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981410|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 51 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	23746407	200.901	6.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	16767718	154.340	5.1	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/051b5101-3.d

Date : 03-DEC-2009 17:25

Client ID: PBLK01

Sample Info: |120198141011|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

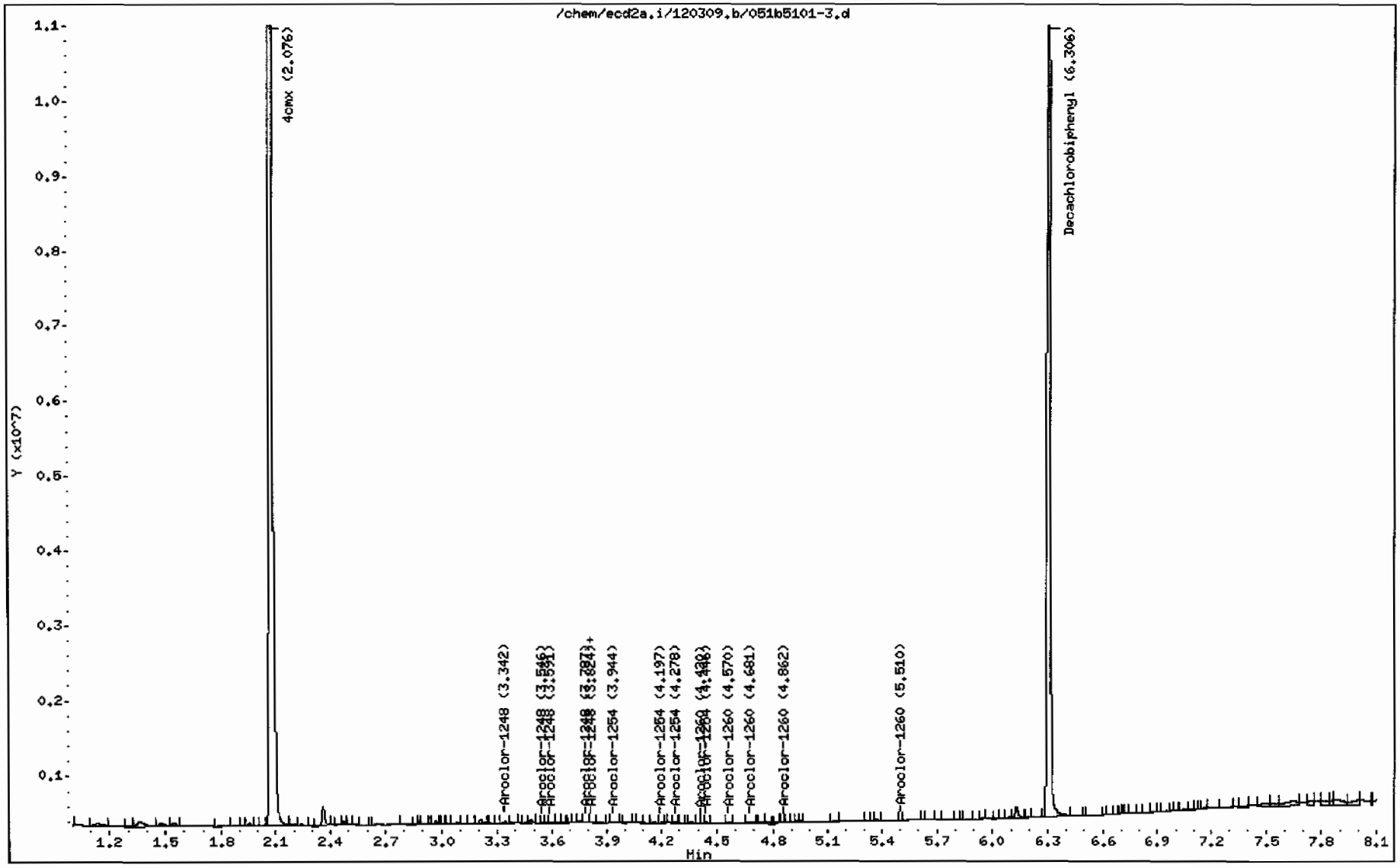

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981413**				
Client Sample:	**QC for batch 926728**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926728**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:36**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**052f5201–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	052b5201–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		31.6	ug/kg	1.11	3.33	2
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		33.7	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/052f5201-3.d
Lab Smp Id: 1201981413 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 17:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981413|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	11046764	191.414	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	8822798	160.914	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	2020219	962.099	32.1	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4137433	918.508	30.6	191.91- 231.91	204.80
2.694	2.692	0.002	1661377	912.739	30.4	65.28- 105.28	82.24
2.829	2.827	0.002	849541	910.662	30.4	23.06- 63.06	42.05

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.980	2.978	0.002	1274883	925.085	30.8	41.11- 81.11	63.11
Average of Peak Concentrations =					30.9		
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.016	0.003	4068365	1000.39	33.3	80.00- 120.00	100.00
4.289	4.288	0.001	2494673	986.693	32.9	40.91- 80.91	61.32
4.455	4.454	0.001	2563289	992.291	33.1	42.71- 82.71	63.01
4.668	4.665	0.003	6048225	1002.01	33.4	125.86- 165.86	148.66
4.857	4.855	0.002	2892043	993.165	33.1	49.52- 89.52	71.09
Average of Peak Concentrations =					33.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/052f5201-3.d

Date : 03-DEC-2009 17:36

Client ID: PBLK01LCS

Sample Info: |1201981413|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

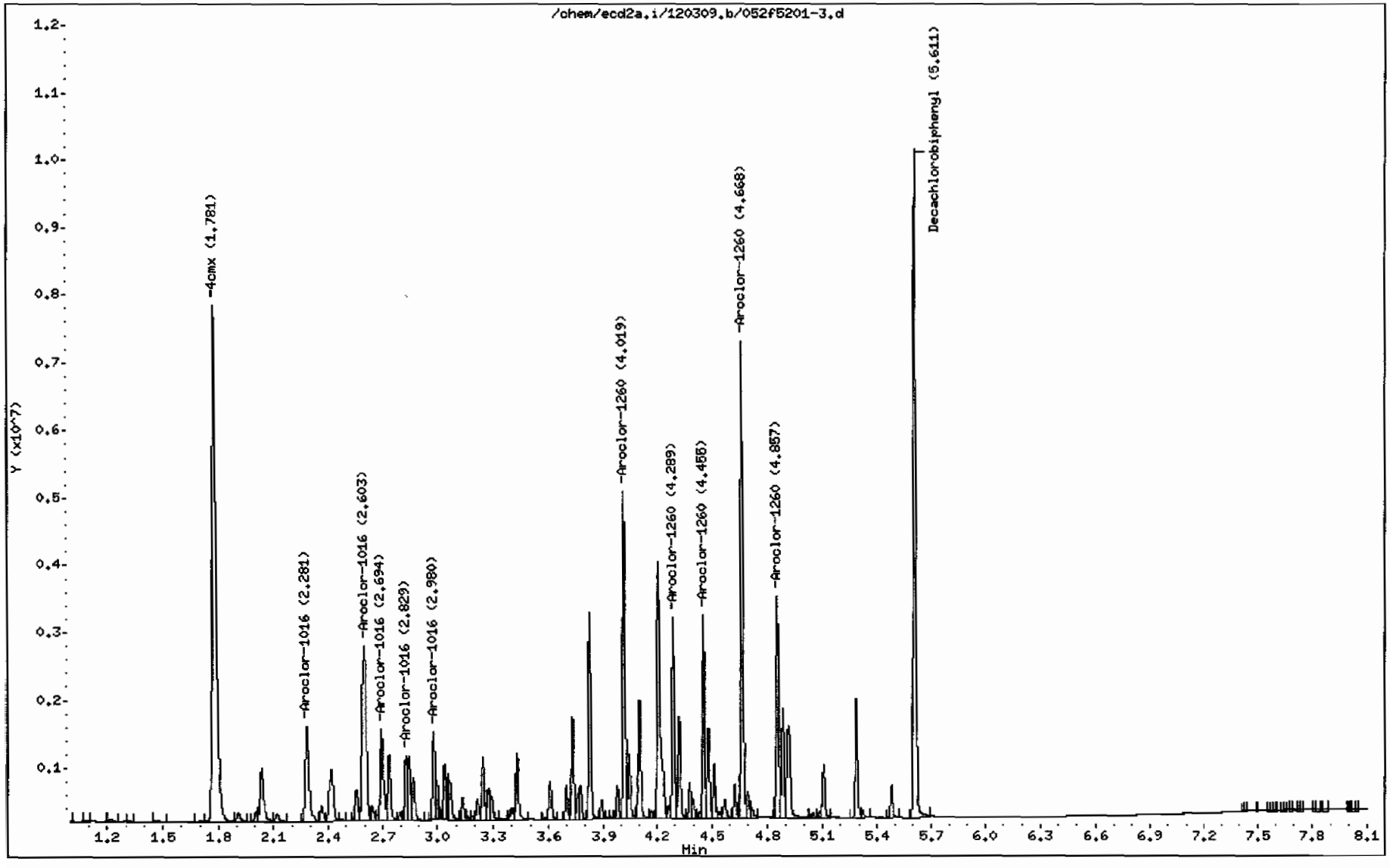

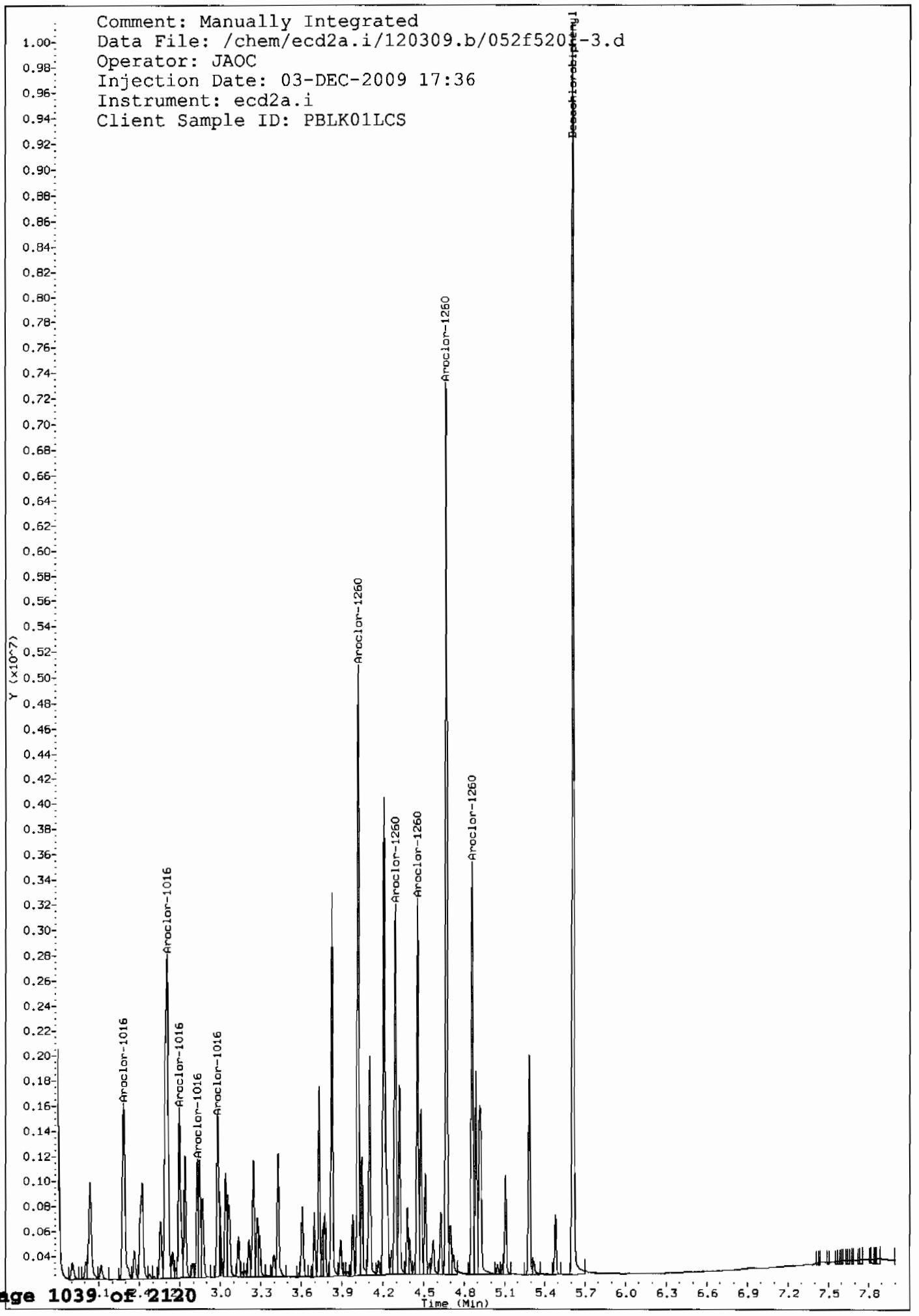
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/052f5201-3.d
Operator: JAOC
Injection Date: 03-DEC-2009 17:36
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
Time (Min)

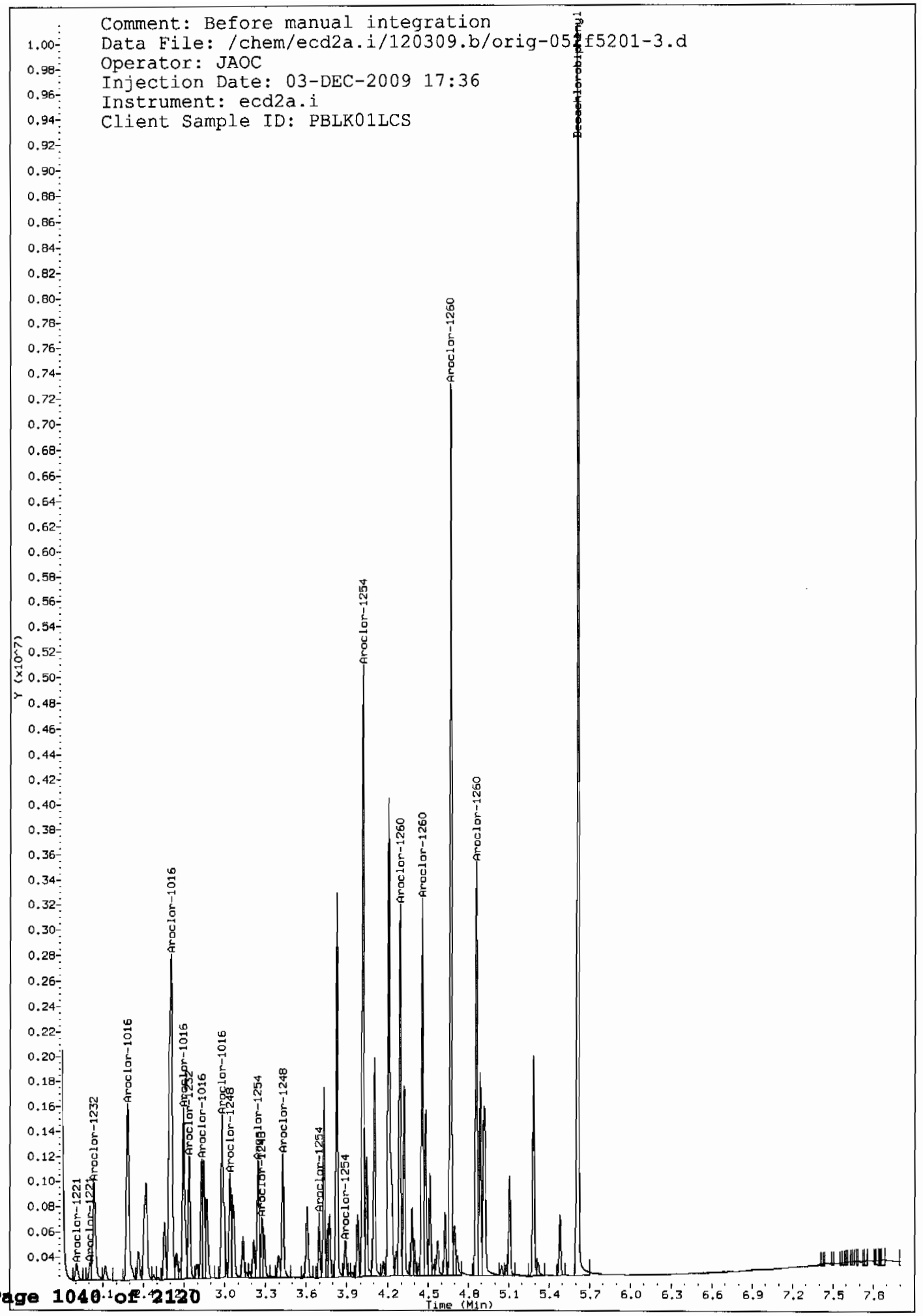
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-05lf5201-3.d
Operator: JAOC
Injection Date: 03-DEC-2009 17:36
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1248
Aroclor-1232
Aroclor-1221
Aroclor-1221
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/052b5201-3.d
Lab Smp Id: 1201981413 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 17:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981413|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	24233942	205.025	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17883484	164.610	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.753	2.750	0.003	4003522	940.224	31.3	80.00- 120.00	100.00
3.186	3.185	0.001	3259724	946.306	31.5	61.21- 101.21	81.42
3.337	3.335	0.002	1882499	951.004	31.7	26.96- 66.96	47.02
3.365	3.364	0.001	1920231	931.584	31.0	28.74- 68.74	47.96

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.524	3.521	0.003	2673806	970.821	32.4	46.95- 86.95	66.79
Average of Peak Concentrations =					31.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5678453	1030.08	34.3	80.00- 120.00	100.00
4.570	4.569	0.001	7303724	1024.08	34.1	107.13- 147.13	128.62
4.682	4.680	0.002	4796067	1013.68	33.8	64.21- 104.21	84.46
4.879	4.878	0.001	5693991	981.611	32.7	80.11- 120.11	100.27
5.505	5.504	0.001	9072806	1003.55	33.4	135.13- 175.13	159.78
Average of Peak Concentrations =					33.7		

Data File: /chem/ecd2a.i/120309.b/052b5201-3.d
Date : 03-DEC-2009 17:36
Client ID: PBLK01LCS
Sample Info: |1201981413111|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

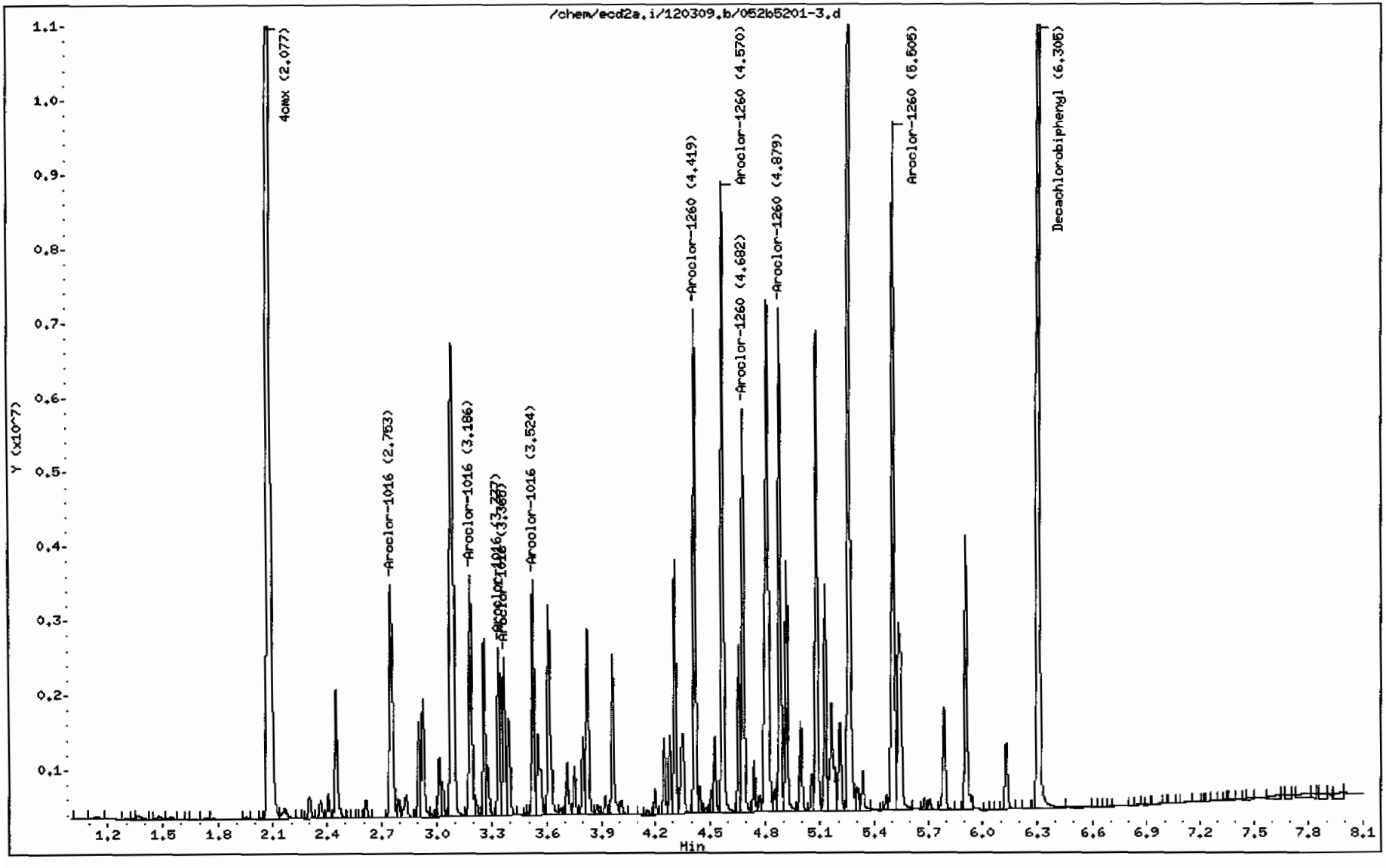

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0		DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0		CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0		CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809	1.0		PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0		DUSE
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0		1254 LEVEL 1
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0		1254 LEVEL 2
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0		1254 LEVEL 3
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0		1254 LEVEL 4
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0		1254 LEVEL 5
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0		1248 LEVEL 1
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0		1248 LEVEL 2
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0		1248 LEVEL 3
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0		1248 LEVEL 4
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0		1248 LEVEL 5

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0		DUSE

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18			113009a	1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29			113009a	1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40			113009a	1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51			113009a	1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02			113009a	1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13			113009a	1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25			113009a	1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399		200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36			113009a	1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47			113009a	1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12		113009a	1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23		113009a	1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463	1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463	5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463	20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462		10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a		1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a		1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390		1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407		1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407		5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a		1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a		1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a	1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/04/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number: Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	03-DEC-2009 08:10		120309	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	03-DEC-2009 08:21		120309	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	03-DEC-2009 08:32		120309	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	03-DEC-2009 08:43		120309	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	03-DEC-2009 08:54		120309	1.0		PASSES BOTH COLUMNS
006f0601.d	WAR090930-32	JAOC	03-DEC-2009 09:05		120309	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	03-DEC-2009 09:17		120309	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	03-DEC-2009 09:28		120309	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	03-DEC-2009 09:39		120309	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	JAOC	03-DEC-2009 09:50		120309	1.0		DDT
011f1101.d	WAR090916-99 02	JAOC	03-DEC-2009 10:01		120309	1.0		CLEAN
012f1201.d	241175006	JAOC	03-DEC-2009 10:12	926702	10-516	10.0	LANL	UPLOAD BOTH, USE HIGHER
013f1301.d	241175007	JAOC	03-DEC-2009 10:23	926702	10-516	1.0	LANL	DUSE, RE-VIAL
014f1401.d	1201984412	JAOC	03-DEC-2009 10:34	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER
015f1501.d	1201984413	JAOC	03-DEC-2009 10:45	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120309.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1201984416	JAOC	03-DEC-2009 10:57	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER

017f1701.d	241626001	JAOC	03-DEC-2009 11:08	928081	EUI-7398P	50.0	CARE	UPLOAD BOTH, USE HIGHER
018f1801.d	1201984414	JAOC	03-DEC-2009 11:19	928081	EUI-7398P	50.0	QC A	UPLOAD BOTH, USE HIGHER
019f1901.d	1201984415	JAOC	03-DEC-2009 11:30	928081	EUI-7398P	50.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	241175007	JAOC	03-DEC-2009 11:41	926702	10-516	1.0	LANL	UPLOAD BOTH, USE HIGHER
021f2101.d	WAR091119-60 02	JAOC	03-DEC-2009 11:52	1660	120309	1.0	CVS	PASSES BOTH COLUMNS
022f2201.d	WAR090916-99 03	JAOC	03-DEC-2009 12:03	SOLV	120309	1.0	IB	CLEAN
023f2301.d	1201978766	JAOC	03-DEC-2009 12:14	925544	10-457	1.0	QC A	UPLOAD BOTH, USE HIGHER
024f2401.d	1201978769	JAOC	03-DEC-2009 12:25	925544	10-457	1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	241027001	JAOC	03-DEC-2009 12:36	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	241027002	JAOC	03-DEC-2009 12:47	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	241027003	JAOC	03-DEC-2009 12:58	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	241027004	JAOC	03-DEC-2009 13:09	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	241027005	JAOC	03-DEC-2009 13:21	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
030f3001.d	241027006	JAOC	03-DEC-2009 13:32	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
031f3101.d	241027007	JAOC	03-DEC-2009 13:43	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	241027008	JAOC	03-DEC-2009 13:54	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
033f3301.d	WAR091119-60 03	JAOC	03-DEC-2009 14:05		120309	1.0		PASSES BOTH COLUMNS
034f3401.d	WAR090916-99 04	JAOC	03-DEC-2009 14:16	SOLV	120309	1.0	IB	CLEAN
035f3501.d	241027009	JAOC	03-DEC-2009 14:27	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241027010	JAOC	03-DEC-2009 14:38	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
037f3701.d	241027011	JAOC	03-DEC-2009 14:49	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
038f3801.d	241027012	JAOC	03-DEC-2009 15:00	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241027013	JAOC	03-DEC-2009 15:12	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241027015	JAOC	03-DEC-2009 15:23	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241033001	JAOC	03-DEC-2009 15:34	925544	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	1201978767	JAOC	03-DEC-2009 15:45	925544	10-460		1.0	QC A	UPLOAD BOTH, USE HIGHER
043f4301.d	1201978768	JAOC	03-DEC-2009 15:56	925544	10-460		1.0	QC A	UPLOAD BOTH, USE HIGHER
044f4401.d	241033002	JAOC	03-DEC-2009 16:07	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	03-DEC-2009 16:18		120309		1.0		PASSES BOTH COLUMNS, DCB LOW
046f4601.d	WAR090916-99 05	JAOC	03-DEC-2009 16:29		120309		1.0		CLEAN
047f4701.d	241033003	JAOC	03-DEC-2009 16:40	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
048f4801.d	241033004	JAOC	03-DEC-2009 16:51	925544	10-460		1.0	LANL	DUSE, LOOKS LIKE NO SURROGATE WAS ADDED
049f4901.d	241033005	JAOC	03-DEC-2009 17:03	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	241033006	JAOC	03-DEC-2009 17:14	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
051f5101.d	1201981410	JAOC	03-DEC-2009 17:25	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	1201981413	JAOC	03-DEC-2009 17:36	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
053f5301.d	241418001	JAOC	03-DEC-2009 17:47	926729	10-576		5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	241418002	JAOC	03-DEC-2009 17:58	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
055f5501.d	WAR091119-60 05	JAOC	03-DEC-2009 18:09		120309		1.0		PASSES BOTH COLUMNS

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 06	JAOC	03-DEC-2009 18:20		120309		1.0	CLEAN
057f5701.d	241418003	JAOC	03-DEC-2009 18:31	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
058f5801.d	1201981411	JAOC	03-DEC-2009 18:42	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
059f5901.d	1201981412	JAOC	03-DEC-2009 18:54	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
060f6001.d	241418004	JAOC	03-DEC-2009 19:05	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
061f6101.d	241418005	JAOC	03-DEC-2009 19:16	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
062f6201.d	241418006	JAOC	03-DEC-2009 19:27	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
063f6301.d	241418007	JAOC	03-DEC-2009 19:38	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
064f6401.d	241418008	JAOC	03-DEC-2009 19:49	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241418009	JAOC	03-DEC-2009 20:00	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241418010	JAOC	03-DEC-2009 20:11	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	WAR091119-60 06	JAOC	03-DEC-2009 20:23		120309		1.0		PASSES BOTH COLUMNS
068f6801.d	WAR090916-99 07	JAOC	03-DEC-2009 20:34		120309		1.0		CLEAN
069f6901.d	241418011	JAOC	03-DEC-2009 20:45	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241418012	JAOC	03-DEC-2009 20:56	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241418013	JAOC	03-DEC-2009 21:07	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	241418014	JAOC	03-DEC-2009 21:18	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
073f7301.d	241418015	JAOC	03-DEC-2009 21:29	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
074f7401.d	241418016	JAOC	03-DEC-2009 21:40	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241423004	JAOC	03-DEC-2009 21:51	926729	10-578		5.0	LANL	DUSE OVERRANGE, RE-RUN AT 10X

Instrument Batch: /chem/ecd2a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241423005	JAOC	03-DEC-2009 22:02	926729	10-578	1.0	LANL	DUSE, AFTER OVERRANGE
077f7701.d	241512001	JAOC	03-DEC-2009 22:14	926729	10-598	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241524002	JAOC	03-DEC-2009 22:25	926729	10-600	5.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	WAR091119-60 07	JAOC	03-DEC-2009 22:36		120309	1.0		PASSES BOTH COLUMNS, DCB LOW
080f8001.d	WAR090916-99 08	JAOC	03-DEC-2009 22:47		120309	1.0		CLEAN
081f8101.d	1201984424	JAOC	03-DEC-2009 22:58	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
082f8201.d	1201984423	JAOC	03-DEC-2009 23:09	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
083f8301.d	241994001	JAOC	03-DEC-2009 23:20	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
084f8401.d	1201984425	JAOC	03-DEC-2009 23:31	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
085f8501.d	1201984426	JAOC	03-DEC-2009 23:43	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
086f8601.d	241994002	JAOC	03-DEC-2009 23:54	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
087f8701.d	241994003	JAOC	04-DEC-2009 00:05	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
088f8801.d	WAR091119-60 08	JAOC	04-DEC-2009 00:16		120309	1.0		PASSES BOTH COLUMNS
089f8901.d	WAR090916-99 09	JAOC	04-DEC-2009 00:27		120309	1.0		CLEAN

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/058b5801.d
Lab Smp Id: 1201981411 Client Smp ID: RE03-09-13959MS
Inj Date : 03-DEC-2009 18:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981411|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 58 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22668773	191.783	7.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17899895	164.761	6.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3846513	903.351	36.4	80.00- 120.00	100.00
3.185	3.185	0.000	3201334	929.356	37.4	61.21- 101.21	83.23
3.336	3.335	0.001	1865837	942.586	38.0	26.96- 66.96	48.51
3.364	3.364	0.000	1833001	889.266	35.8	28.74- 68.74	47.65
3.522	3.521	0.001	2639029	958.194	38.6	46.95- 86.95	68.61
			Average of Peak Concentrations =		37.2		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5631456	1021.55	41.2	80.00- 120.00	100.00
4.570	4.569	0.001	7415776	1039.79	41.9	107.13- 147.13	131.68
4.682	4.680	0.002	4859421	1027.07	41.4	64.21- 104.21	86.29
4.879	4.878	0.001	5641638	972.586	39.2	80.11- 120.11	100.18
5.505	5.504	0.001	8865808	980.657	39.5	135.13- 175.13	157.43
		Average of Peak Concentrations =			40.6		

Data File: /chem/ecd2a.i/120309.b/058b5801.d
Date : 03-DEC-2009 18:42
Client ID: RE03-09-13959MS
Sample Info: |120198141111|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

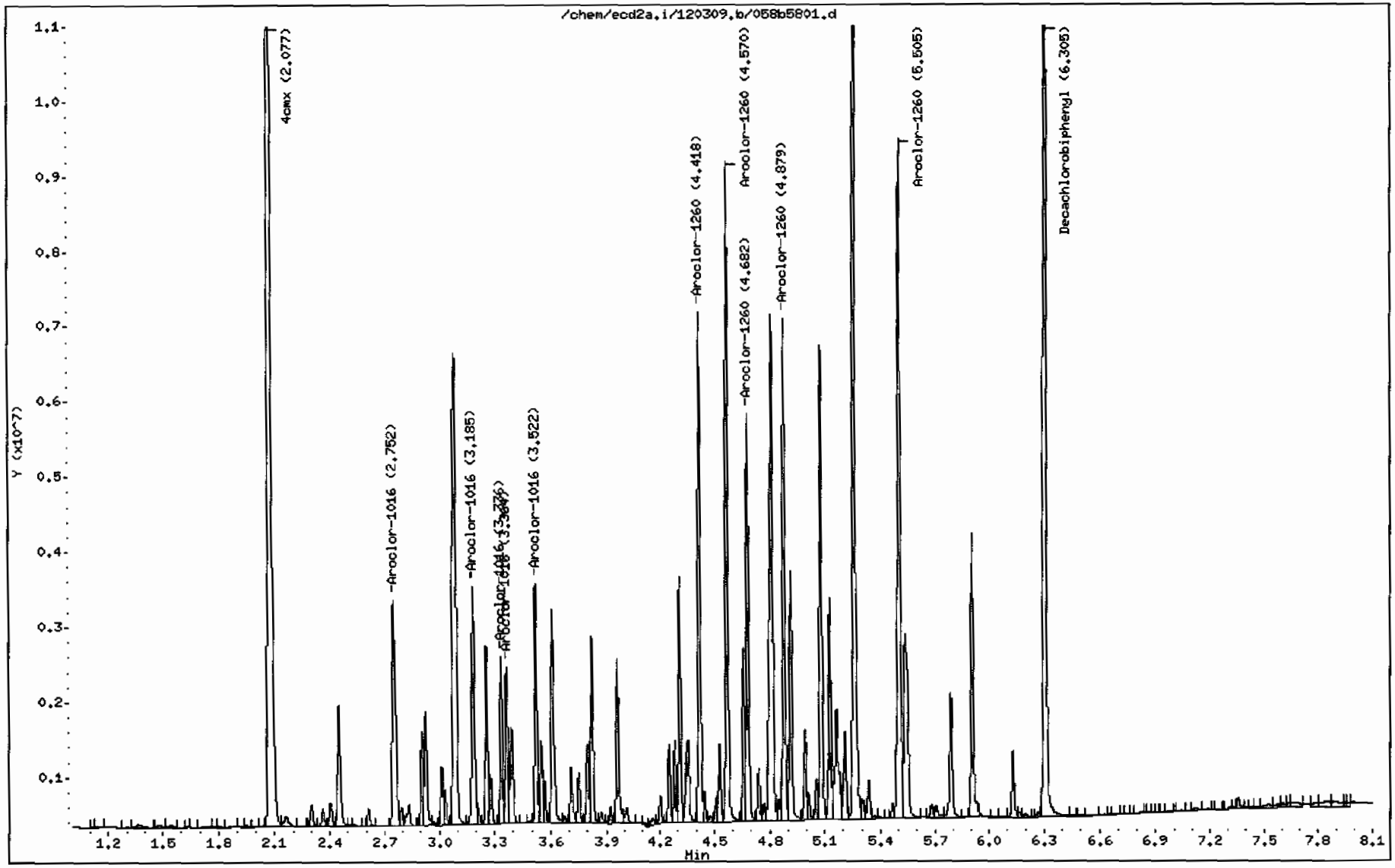

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/058f5801.d
Lab Smp Id: 1201981411 Client Smp ID: RE03-09-13959MS
Inj Date : 03-DEC-2009 18:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981411|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 58 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10377798	179.823	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7838476	142.962	5.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	1851046	881.533	35.5	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4107570	911.879	36.7	191.91- 231.91	211.49
2.693	2.692	0.001	1661339	912.718	36.8	65.28- 105.28	85.54
2.828	2.827	0.001	842546	903.164	36.4	23.06- 63.06	43.38
2.980	2.978	0.002	1367720	992.450	40.0	41.11- 81.11	92.19
			Average of Peak Concentrations =		37.1		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	4090607	1005.86	40.5	80.00- 120.00	100.00
4.289	4.288	0.001	2464320	974.688	39.3	40.91- 80.91	60.24
4.454	4.454	0.000	2615893	1012.66	40.8	42.71- 82.71	63.95
4.667	4.665	0.002	5388781	892.758	36.0	125.86- 165.86	131.74
4.856	4.855	0.001	2869499	985.423	39.7	49.52- 89.52	70.15
			Average of Peak Concentrations =		39.3		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/058f5801.d
Date : 03-DEC-2009 18:42
Client ID: RE03-09-13959MS
Sample Info: |120198141|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

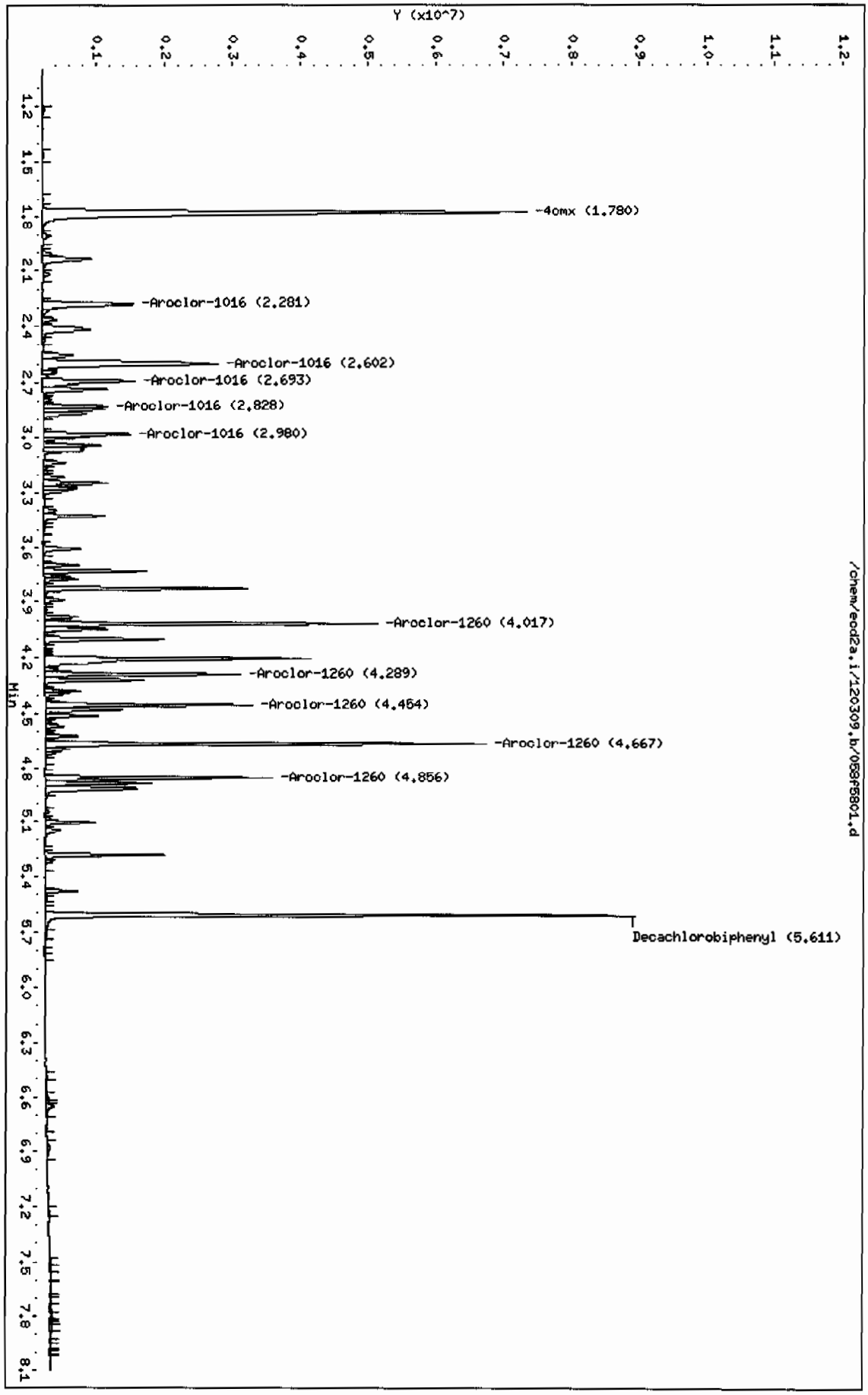

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/059b5901.d
Lab Smp Id: 1201981412 Client Smp ID: RE03-09-13959MSD
Inj Date : 03-DEC-2009 18:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981412|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 59 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21314209	180.324	7.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	16061504	147.839	6.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3594121	844.076	34.1	80.00- 120.00	100.00
3.185	3.185	0.000	3116444	904.712	36.6	61.21- 101.21	86.71
3.336	3.335	0.001	1815558	917.186	37.1	26.96- 66.96	50.51
3.365	3.364	0.001	1744732	846.443	34.2	28.74- 68.74	48.54
3.523	3.521	0.002	2543042	923.342	37.3	46.95- 86.95	70.76
			Average of Peak Concentrations =		35.9		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5133233	931.174	37.6	80.00- 120.00	100.00
4.570	4.569	0.001	6838854	958.901	38.8	107.13- 147.13	133.23
4.682	4.680	0.002	4482339	947.367	38.3	64.21- 104.21	87.32
4.880	4.878	0.002	5107909	880.574	35.6	80.11- 120.11	99.51
5.505	5.504	0.001	7986869	883.437	35.7	135.13- 175.13	155.59
			Average of Peak Concentrations =		37.2		

Data File: /chem/ecd2a.i/120309.b/059b5901.d
Date : 03-DEC-2009 18:54
Client ID: RE03-09-13959MSD
Sample Info: |1201981412|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

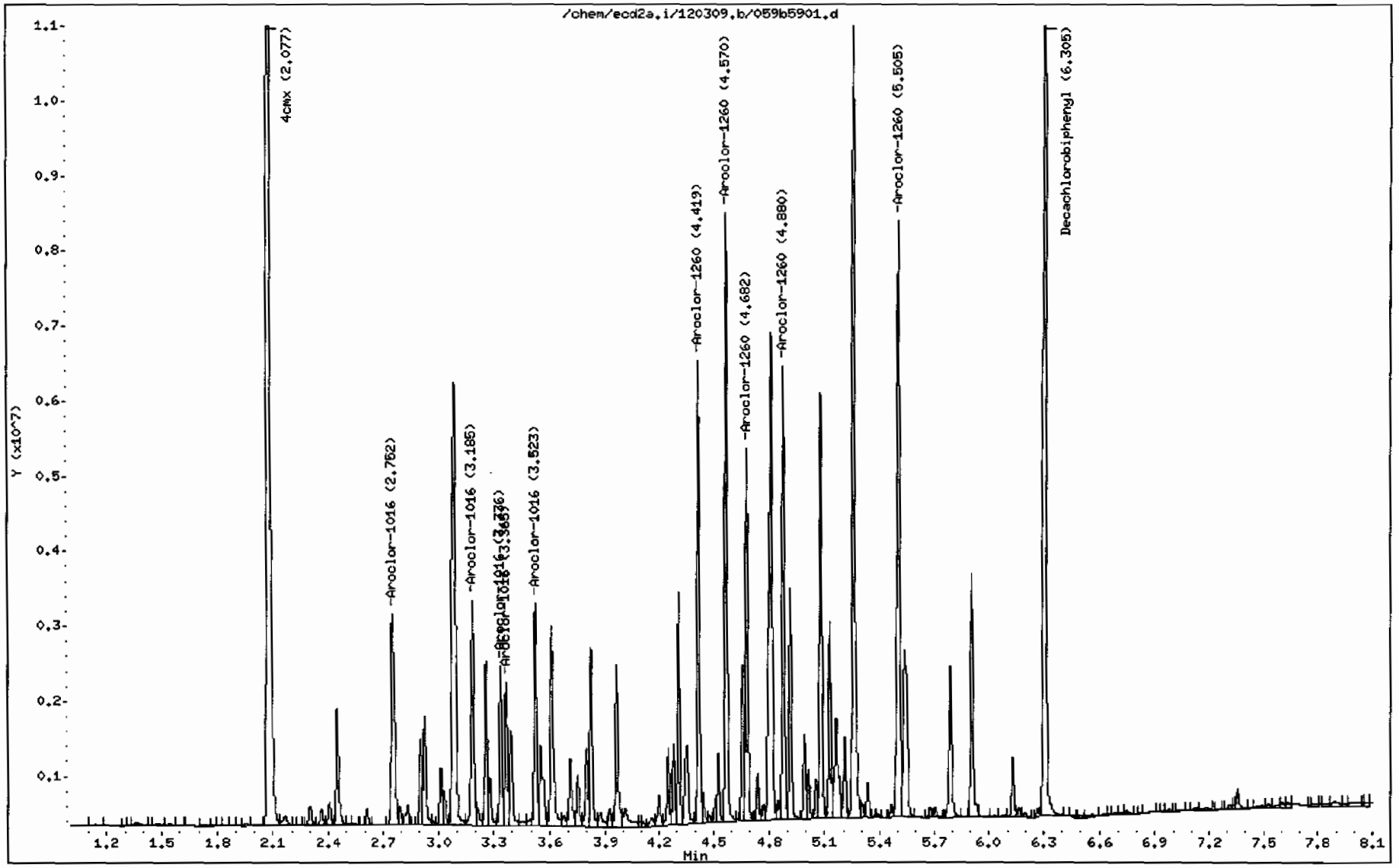

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/059f5901.d
Lab Smp Id: 1201981412 Client Smp ID: RE03-09-13959MSD
Inj Date : 03-DEC-2009 18:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981412|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 59 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9780999	169.482	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6799121	124.005	5.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.280	0.002	1700945	810.049	32.8	80.00- 120.00	100.00(M)
2.604	2.601	0.003	3792957	842.035	34.0	191.91- 231.91	216.09
2.695	2.692	0.003	1515325	832.500	33.7	65.28- 105.28	86.33
2.830	2.827	0.003	758013	812.549	32.8	23.06- 63.06	43.19
2.980	2.978	0.002	1180025	856.254	34.6	41.11- 81.11	92.67

Average of Peak Concentrations = 33.6

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.016	0.003	3774236	928.062	37.5	80.00- 120.00	100.00
4.290	4.288	0.002	2266393	896.404	36.2	40.91- 80.91	60.05
4.455	4.454	0.001	2549369	986.903	39.9	42.71- 82.71	67.55
4.668	4.665	0.003	4606247	763.116	30.8	125.86- 165.86	122.04
4.857	4.855	0.002	2633534	904.389	36.6	49.52- 89.52	69.78
			Average of Peak Concentrations =		36.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/059f5901.d
Date : 03-DEC-2009 18:54
Client ID: RE03-09-13959MSD
Sample Info: |120198141211|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

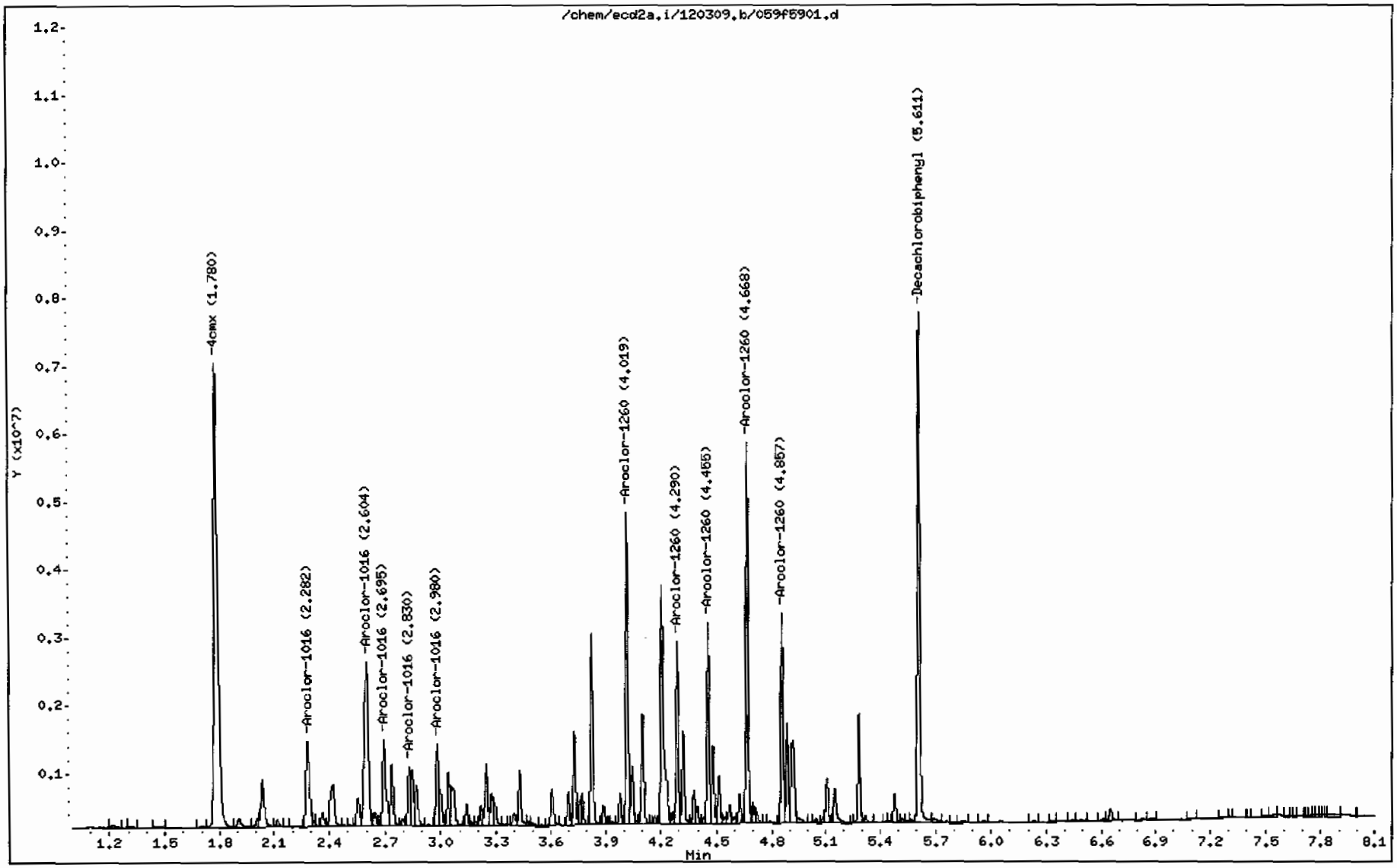

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926728 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981410 MB	27-NOV-2009 21:14:34	30	H2SO4/KMn2		2	9	1	0.03333
1201981413 LCS	27-NOV-2009 21:14:34	30	H2SO4/KMn2		2	9	1	0.03333
241418001	27-NOV-2009 21:14:34	30.09	H2SO4/KMn2		2	9	1	0.03323
241418002	27-NOV-2009 21:14:34	30.07	H2SO4/KMn2		2	9	1	0.03326
241418003	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
1201981411 MS (241418003)	27-NOV-2009 21:14:34	30.15	H2SO4/KMn2		2	9	1	0.03317
1201981412 MSD (241418003)	27-NOV-2009 21:14:34	30.04	H2SO4/KMn2		2	9	1	0.03329
241418004	27-NOV-2009 21:14:34	30.07	H2SO4/KMn2		2	9	1	0.03326
241418005	27-NOV-2009 21:14:34	30.08	H2SO4/KMn2		2	9	1	0.03324
241418006	27-NOV-2009 21:14:34	30.04	H2SO4/KMn2		2	9	1	0.03329
241418007	27-NOV-2009 21:14:34	30.12	H2SO4/KMn2		2	9	1	0.0332
241418008	27-NOV-2009 21:14:34	30.01	H2SO4/KMn2		2	9	1	0.03332
241418009	27-NOV-2009 21:14:34	30.14	H2SO4/KMn2		2	9	1	0.03318
241418010	27-NOV-2009 21:14:34	30.17	H2SO4/KMn2		2	9	1	0.03315
241418011	27-NOV-2009 21:14:34	30.02	H2SO4/KMn2		2	9	1	0.03331
241418012	27-NOV-2009 21:14:34	30.08	H2SO4/KMn2		2	9	1	0.03324
241418013	27-NOV-2009 21:14:34	30.17	H2SO4/KMn2		2	9	1	0.03315
241418014	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
241418015	27-NOV-2009 21:14:34	30.15	H2SO4/KMn2		2	9	1	0.03317
241418016	27-NOV-2009 21:14:34	30.18	H2SO4/KMn2		2	9	1	0.03313
241423004	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
241423005	27-NOV-2009 21:14:34	30.01	H2SO4/KMn2		2	9	1	0.03332
241512001	27-NOV-2009 21:14:34	30.13	H2SO4/KMn2		2	9	1	0.03319
241524002	27-NOV-2009 21:14:34	30.13	H2SO4/KMn2		2	9	1	0.03319

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981413	PCB Laboratory Control	WE091113-07	1	mL
MS	1201981411	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201981412	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

HERBICIDE ANALYSIS

Herbicide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Analysis of Chlorophenoxy Acid Herbicides by ECD**
Analytical Method:	SW846 8151A
Prep Method:	SW846 8151A
Analytical Batch Number:	927148
Prep Batch Number:	927147

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8151A:

Sample ID	Client ID
241524002	WST03-10-2132
1201982252	Method Blank (MB)
1201982255	Laboratory Control Sample (LCS)
1201982253	241423004(WST03-10-2131) Matrix Spike (MS)
1201982254	241423004(WST03-10-2131) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-011 REV# 18.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 21.7.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

Several target analytes failed to meet the acceptance criteria with positive bias in the standards bracketing the samples in this SDG. The positive bias for the analytical data is a result of instrument response increasing after the initial calibration. These target analytes were not detected in the samples; therefore, the non-compliance has no adverse effects on the data.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this had no adverse effects on the data as the surrogate recovery was well within the acceptance range in the sample in this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-578) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries were not within the acceptance limits due to sample matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the acceptance limits due to sample matrix interference.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD did not meet the acceptance limits due to sample matrix interference.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241524002 (WST03-10-2132) was diluted at 1:20 due to the viscous nature of the matrix.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates

are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Report (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this Herbicide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-HERB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD6A.I_1	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD6A.I_2	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/15/09

Roadmap for LANL 10-600 HERB

This roadmap was analyzed by reb01393 on 12-02-2009, 15:45.
This roadmap was reviewed by jcb on 12-03-2009, 09:41.
This roadmap was packaged by yml on 12-14-2009, 19:39.
This roadmap was validated by jim01140 on 12-15-2009, 13:25.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/034f3401.d	241524002	sample	02-DEC-2009	03:52	10-600.sub	WST03-10-2132	20.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/034b3401.d	241524002	sample	02-DEC-2009	03:52	10-600.sub	WST03-10-2132	20.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/023f2301c.d	1201982252	mb	01-DEC-2009	22:41	10-600.sub	HBLK01	1.00000	927148	
☐	N	/chem/ecd6a.i/120109.b/024f2401c.d	1201982255	lcs	01-DEC-2009	23:09	10-600.sub	HBLK01LCS	1.00000	927148	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/023b2301c.d	1201982252	mb	01-DEC-2009	22:41	10-600.sub	HBLK01	1.00000	927148	
☐	N	/chem/ecd6a.i/120109.b/024b2401c.d	1201982255	lcs	01-DEC-2009	23:09	10-600.sub	HBLK01LCS	1.00000	927148	

SAMPLE DATA SUMMARY

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241524002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2132**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**927148**	**Inst:**	**ECD6A.I**	**Dilution:**	**20**
Run Date:	**12/02/2009 03:52**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:11**	**Aliquot:**	**50.02 g**	**Final Volume:**	**10 mL**
Data File:	**034f3401.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	034b3401.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75-99-0	Dalapon	U	2130	ug/kg	426	2130	1
1918-00-9	Dicamba	U	107	ug/kg	35.4	107	1
93-65-2	MCPP	U	21300	ug/kg	4260	21300	1
94-74-6	MCPA	U	21300	ug/kg	4900	21300	1
120-36-5	Dichlorprop	U	107	ug/kg	35.4	107	1
94-75-7	2,4-D	U	107	ug/kg	35.4	107	1
93-72-1	2,4,5-TP	U	107	ug/kg	35.4	107	1
93-76-5	2,4,5-T	U	107	ug/kg	35.4	107	1
94-82-6	2,4-DB	U	107	ug/kg	35.4	107	1
88-85-7	Dinoseb	U	107	ug/kg	35.4	107	1

QUALITY CONTROL SUMMARY

Herbicide

Surrogate Recovery Report

SDG Number: 10-600

Matrix Type: SOLID

CAP Column (1) : Rtx-CLP **CAP Column (2) : Rtx-CLPII**

Sample ID	Client ID	DCAA 1 %REC #		DCAA 2 %REC #	
1201982252	MB for batch 927147	62		61	
1201982255	LCS for batch 927147	94		90	
241524002	WST03-10-2132	45	D	53	D

Surrogate	Acceptance Limits
DCAA = 2,4-Dichlorophenylacetic acid	(30%-126%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–600
Client ID: LCS for batch 927147
Lab Sample ID: 1201982255
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 23:09
Dilution: 1
Prep Batch ID: 927147
Batch ID: 927148

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75–99–0	LCS	Dalapon	400	0.0	216	54	30–96
1918–00–9	LCS	Dicamba	40.0	0.0	36.0	90	51–105
93–65–2	LCS	MCPP	4000	0.0	3700	93	49–127
94–74–6	LCS	MCPA	4000	0.0	3370	84	47–125
120–36–5	LCS	Dichlorprop	40.0	0.0	39.1	98	56–109
94–75–7	LCS	2,4–D	40.0	0.0	39.2	98	39–125
93–72–1	LCS	2,4,5–TP	40.0	0.0	39.7	99	48–120
93–76–5	LCS	2,4,5–T	40.0	0.0	40.3	101	42–127
94–82–6	LCS	2,4–DB	40.0	0.0	41.4	104	56–128
88–85–7	LCS	Dinoseb	40.0	0.0	46.5	116	30–121

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2131MS
Lab Sample ID: 1201982253
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 7.9
Analysis Date: 12/02/2009 00:06
Prep Batch ID: 927147
Batch ID: 927148

Dilution: 2

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-99-0	MS	Dalapon	434	0.00	U	275	63	30-94
1918-00-9	MS	Dicamba	43.4	0.00	U	36.7	85	30-100
93-65-2	MS	MCPP	4340	0.00	U	25600	591 *	30-111
94-74-6	MS	MCPA	4340	0.00	U	5320	123 *	30-109
120-36-5	MS	Dichlorprop	43.4	0.00	U	40.3	93	30-111
94-75-7	MS	2,4-D	43.4	0.00	U	40.9	94	30-148
93-72-1	MS	2,4,5-TP	43.4	0.00	U	35.8	82	30-118
93-76-5	MS	2,4,5-T	43.4	0.00	U	29.3	68	30-123
94-82-6	MS	2,4-DB	43.4	0.00	U	67.0	154 *	30-119
88-85-7	MS	Dinoseb	43.4	0.00	U	50.0	115	30-140

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–578
Client ID: WST03–10–2131MSD
Lab Sample ID: 1201982254
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 7.9
Analysis Date: 12/02/2009 00:35
Prep Batch ID: 927147
Batch ID: 927148
Dilution: 2

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75–99–0	MSD Dalapon	434	0.00	U	277	64	30–94	1	0–25
1918–00–9	MSD Dicamba	43.4	0.00	U	35.9	83	30–100	2	0–25
93–65–2	MSD MCPP	4340	0.00	U	9210	212 *	30–111	94 *	0–25
94–74–6	MSD MCPA	4340	0.00	U	5140	118 *	30–109	3	0–25
120–36–5	MSD Dichlorprop	43.4	0.00	U	39.9	92	30–111	1	0–25
94–75–7	MSD 2,4–D	43.4	0.00	U	40.9	94	30–148	0	0–25
93–72–1	MSD 2,4,5–TP	43.4	0.00	U	36.9	85	30–118	3	0–25
93–76–5	MSD 2,4,5–T	43.4	0.00	U	30.3	70	30–123	3	0–25
94–82–6	MSD 2,4–DB	43.4	0.00	U	67.5	156 *	30–119	1	0–25
88–85–7	MSD Dinoseb	43.4	0.00	U	43.4	100	30–140	14	0–25

Method Blank Summary

SDG Number:	10-600	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927147	Instrument ID:	ECD6A.I_2 ECD6A.I_1	Data File:	023b2301.d 023f2301.d
Lab Sample ID:	1201982252				
Column:	Rtx-CLPII Rtx-CLP	Prep Date:	11/30/2009 11:11	Analyzed:	12/01/09 22:41
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927147	1201982255	024f2401.d 024b2401.d	12/01/09	2309
04 WST03-10-2132	241524002	034f3401.d 034b3401.d	12/02/09	0352

SAMPLE
DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–600**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241524002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03–10–2132**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**927148**	**Inst:**	**ECD6A.I**	**Dilution:**	**20**
Run Date:	**12/02/2009 03:52**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:11**	**Aliquot:**	**50.02 g**	**Final Volume:**	**10 mL**
Data File:	**034f3401.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	034b3401.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon	U	2130	ug/kg	426	2130	1
1918–00–9	Dicamba	U	107	ug/kg	35.4	107	1
93–65–2	MCPP	U	21300	ug/kg	4260	21300	1
94–74–6	MCPA	U	21300	ug/kg	4900	21300	1
120–36–5	Dichlorprop	U	107	ug/kg	35.4	107	1
94–75–7	2,4–D	U	107	ug/kg	35.4	107	1
93–72–1	2,4,5–TP	U	107	ug/kg	35.4	107	1
93–76–5	2,4,5–T	U	107	ug/kg	35.4	107	1
94–82–6	2,4–DB	U	107	ug/kg	35.4	107	1
88–85–7	Dinoseb	U	107	ug/kg	35.4	107	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/034f3401.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 02-DEC-2009 03:52
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241524002|20|
Misc Info : |ECD51H_1SF|927148|SVHF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 34
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	20.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.02000	Weight of sample extracted (g)
M	6.23420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.740	10.698	0.042	1189505	11.1953	47.7

Data File: /chem/eod6a.i/120109.b/034f3401.d

Date : 02-DEC-2009 03:52

Client ID: WST03-10-2132

Sample Info: 12415240021201

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: eod6a.i

Operator: RXE1

Column diameter: 0.25

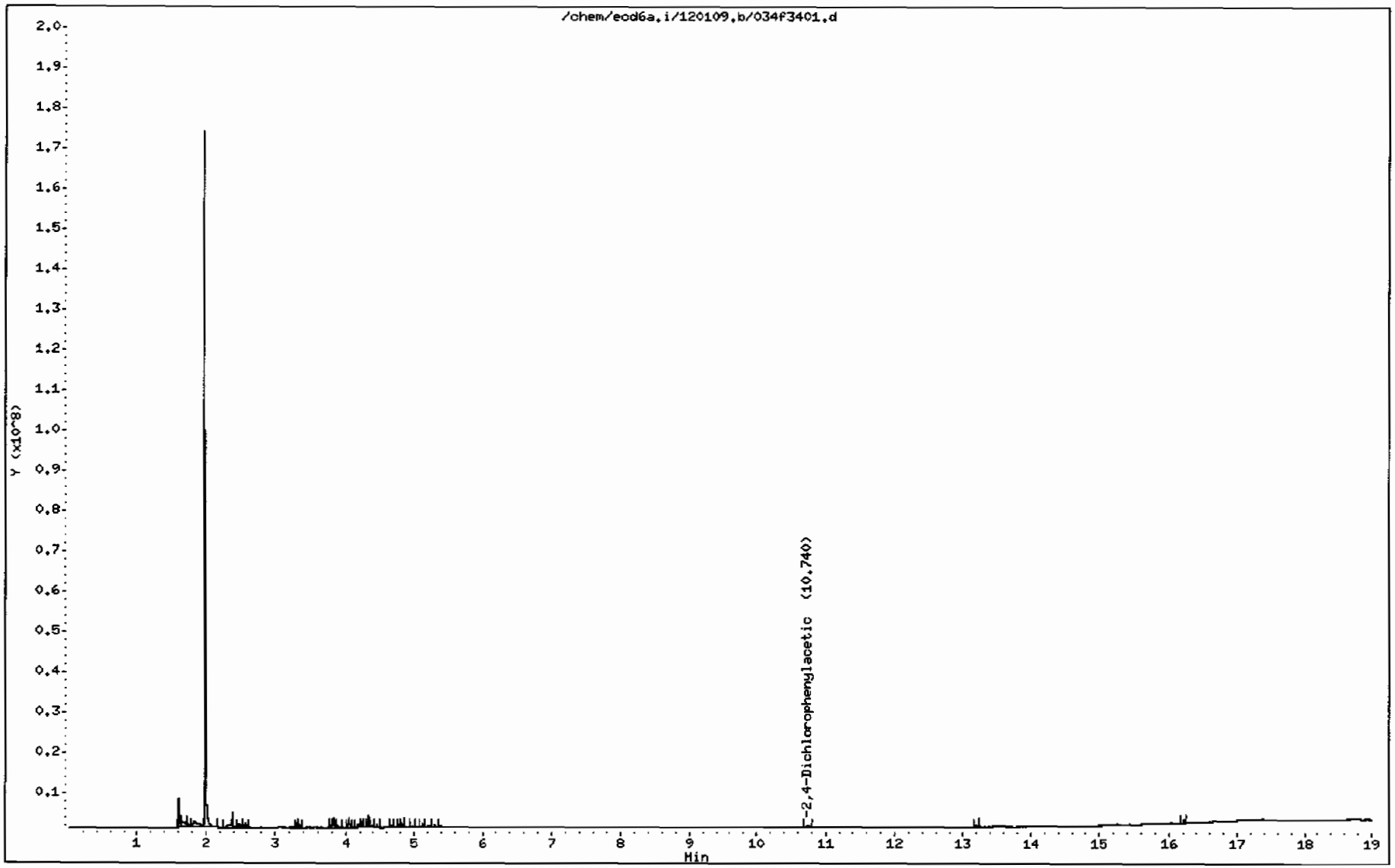

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/034b3401.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 02-DEC-2009 03:52
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241524002|20|
Misc Info : |ECD51H_1SF|927148|SVHF|LANL|SOIL|WST03-10-2132|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 34
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	20.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.02000	Weight of sample extracted (g)
M	6.23420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.734	11.717	0.017	1578021	13.2685	56.6

Data File: /chem/ecd6a.i/120109.b/034b3401.d

Date : 02-DEC-2009 03:52

Client ID: WST03-10-2132

Sample Info: 1241524002|201

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

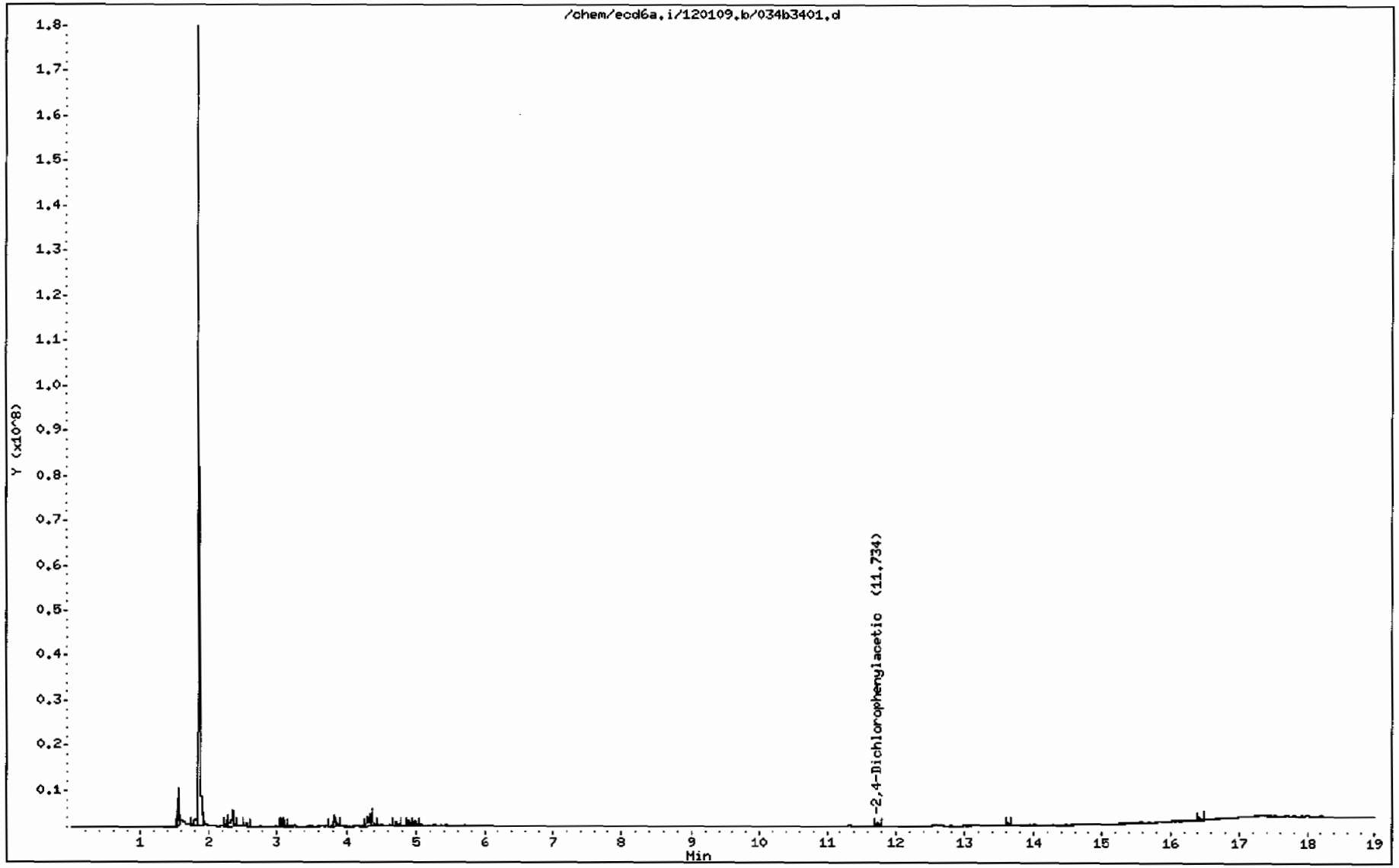

STANDARDS DATA

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002f0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003f0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004f0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005f0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007f0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008f0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084f8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074f7401.d

Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054f5401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 09:32	all	/chem/ecd6a.i/120109.b/046f4601.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 18:16	all	/chem/ecd6a.i/120109.b/064f6401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 01:02	all	/chem/ecd6a.i/120109.b/028f2801.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 05:45	all	/chem/ecd6a.i/120109.b/038f3801.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 21:44	all	/chem/ecd6a.i/120109.b/021f2101.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 16:08	all	/chem/ecd6a.i/120109.b/009f0901.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002b0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003b0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004b0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005b0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006b0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007b0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008b0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084b8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074b7401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054b5401.d

Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 09:32 | all | /chem/ecd6a.i/120109.b/046b4601.d
Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 18:16 | all | /chem/ecd6a.i/120109.b/064b6401.d
Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 01:02 | all | /chem/ecd6a.i/120109.b/028b2801.d
Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 05:45 | all | /chem/ecd6a.i/120109.b/038b3801.d
Ccal Level: 5 , Ccal Amount: 200
01-DEC-2009 21:44 | all | /chem/ecd6a.i/120109.b/021b2101.d
Ccal Level: 5 , Ccal Amount: 200
01-DEC-2009 16:08 | all | /chem/ecd6a.i/120109.b/009b0901.d
Ccal Level: 5 , Ccal Amount: 200
01-DEC-2009 14:45 | all | /chem/ecd6a.i/120109.b/006b0601.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	72858.000000
Initial:End Threshold	36429.000000
Initial:Area Threshold	728580.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	20.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000

	Compound	RT	RT Window	RF
	1 Dalapon	4.000	3.970-4.030	8.358e+04
$	2 2,4-Dichlorophenylacetic a	10.698	10.638-10.758	1.063e+05
	3 Dicamba	11.214	11.154-11.274	3.984e+05
	4 MCPP	11.729	11.669-11.789	3.485e+02
	5 MCPA	11.999	11.939-12.059	6.488e+02
	6 Dichlorprop	12.512	12.452-12.572	9.811e+04
	7 2,4-D	12.775	12.715-12.835	9.981e+04
	43 Pentachlorophenol	12.924	12.904-12.944	1.050e+06
	8 2,4,5-TP	13.512	13.482-13.542	4.822e+05
	9 2,4,5-T	13.715	13.675-13.755	4.163e+05
	10 2,4-DB	14.061	14.021-14.101	4.697e+04
	11 Dinoseb	14.638	14.608-14.668	2.191e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	105244.000000
Initial:End Threshold	52622.000000
Initial:Area Threshold	1052440.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	25.000000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

	Compound	RT	RT Window	RF
	1 Dalapon	3.963	3.933-3.993	1.101e+05
$	2 2,4-Dichlorophenylacetic a	11.717	11.657-11.777	1.189e+05
	3 MCPP	12.246	12.186-12.306	3.863e+02
	4 Dicamba	12.000	11.940-12.060	4.475e+05
	5 MCPA	12.552	12.492-12.612	7.632e+02
	6 Dichlorprop	12.927	12.867-12.987	1.222e+05
	7 2,4-D	13.216	13.156-13.276	1.466e+05
	43 Pentachlorophenol	13.487	13.467-13.507	1.348e+06
	8 2,4,5-TP	13.825	13.795-13.855	5.770e+05
	9 2,4,5-T	14.065	14.035-14.095	4.771e+05
	10 Dinoseb	14.519	14.489-14.549	2.304e+05
	11 2,4-DB	14.354	14.314-14.394	6.662e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002f0201.d
Level 2: /chem/ecd6a.i/120109.b/003f0301.d
Level 3: /chem/ecd6a.i/120109.b/004f0401.d
Level 4: /chem/ecd6a.i/120109.b/005f0501.d
Level 5: /chem/ecd6a.i/120109.b/006f0601.d
Level 6: /chem/ecd6a.i/120109.b/007f0701.d
Level 7: /chem/ecd6a.i/120109.b/008f0801.d

Compound	25.000 Level 1 400.000 Level 7	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
1 Dalapon	+++++ 86440	79759	77099	90101	84329	83743	83578	5.558
3 Dicamba	410356 378101	419146	401802	405456	394767	379418	398435	3.861
4 MCPP	+++++ 368	319	339	352	359	354	349	4.922
5 MCPA	+++++ 629	675	642	661	653	633	649	2.685
6 Dichlorprop	104713 93769	103611	97122	98110	96912	92561	98114	4.669
7 2,4-D	88737 105356	98217	95724	105038	103064	102557	99813	6.040
43 Pentachlorophenol	1087173 1002014	1110429	1048940	1060478	1045628	997069	1050247	3.939

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	400.000 Level 7	RRF	% RSD
8 2,4,5-TP	492919	495515	472258	491705	487675	468321	466963	482194	2.590
9 2,4,5-T	394661	408706	384612	438870	433931	422814	430258	416265	4.989
10 2,4-DB	39162	43417	44875	49575	51111	50418	50206	46966	9.690
11 Dinoseb	230101	225942	216507	213886	224921	210402	211879	219091	3.552
$ 2 2,4-Dichlorophenylacetic acid	108080	110960	107596	110113	106225	101270	99510	106251	4.075

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002b0201.d
Level 2: /chem/ecd6a.i/120109.b/003b0301.d
Level 3: /chem/ecd6a.i/120109.b/004b0401.d
Level 4: /chem/ecd6a.i/120109.b/005b0501.d
Level 5: /chem/ecd6a.i/120109.b/006b0601.d
Level 6: /chem/ecd6a.i/120109.b/007b0701.d
Level 7: /chem/ecd6a.i/120109.b/008b0801.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
1 Dalapon	+++++	98106	96954	119992	111692	113951		
	119890						110098	9.331
3 MCPP	+++++	350	365	386	397	399		
	421						386	6.595
4 Dicamba	449422	446473	430565	448713	449180	449025		
	458911						447470	1.888
5 MCPA	+++++	819	738	774	762	746		
	740						763	4.015
6 Dichlorprop	135168	131720	115878	119926	118099	115406		
	119363						122223	6.468
7 2,4-D	152343	149276	135359	148967	143733	146310		
	150228						146602	3.874
43 Pentachlorophenol	1280880	1326050	1301780	1352765	1381520	1367964		
	1423708						1347810	3.635

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
8 2,4,5-TP	528143	568958	555456	578704	602748	597990		
	606932						576990	4.962
9 2,4,5-T	424544	438865	442454	497147	497302	508185		
	531119						477088	8.608
10 Dinoseb	207093	212167	211025	232955	251099	243499		
	254885						230389	8.784
11 2,4-DB	69154	66396	63869	66342	65984	66319		
	68302						66624	2.559
$ 2 2,4-Dichlorophenylacetic acid	122147	120666	115303	119536	117395	116524		
	120941						118930	2.146

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009F0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
Dalapon	83578.428	82576.474	0.005	-1.2	15.0
MCPA	648.828	658.314	0.005	1.5	15.0
2,4-D	99813.291	103435.11	0.005	3.6	15.0
2,4,5-T	416264.72	429851.16	0.005	3.3	15.0
Dinoseb	219091.19	218374.44	0.005	-0.3	15.0
MCPP	348.505	359.196	0.01	3.1	15.0
Dichlorprop	98114.076	97091.000	0.01	-1.0	15.0
2,4,5-TP	482193.63	489200.79	0.01	1.4	15.0
Dicamba	398435.16	399654.07	0.01	0.3	15.0
2,4-DB	46966.168	49375.945	0.01	5.1	15.0
Pentachlorophenol	1050247.3	1044090.6	0.01	-0.6	15.0
2,4-Dichlorophenylacetic aci	106250.60	110571.95	0.01	4.1	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009B0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D
Dalapon	110097.67	109424.62	0.005	-0.6	15.0
MCPA	763.211	729.702	0.005	-4.4	15.0
2,4-D	146602.25	146157.23	0.005	-0.3	15.0
2,4,5-T	477088.18	502040.23	0.005	5.2	15.0
Dinoseb	230388.97	242178.58	0.005	5.1	15.0
MCPP	386.296	394.629	0.01	2.2	15.0
Dichlorprop	122222.86	115798.72	0.01	-5.2	15.0
2,4,5-TP	576990.28	605274.08	0.01	4.9	15.0
Dicamba	447469.94	450987.37	0.01	0.8	15.0
2,4-DB	66623.779	66159.482	0.01	-0.7	15.0
Pentachlorophenol	1347809.8	1381780.3	0.01	2.5	15.0
2,4-Dichlorophenylacetic aci	118930.17	122553.87	0.01	3.0	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 2144

Lab File ID: 021F2101 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	83578.428	90111.674	0.005	7.8	15.0	
MCPA	648.828	642.190	0.005	-1.0	15.0	
2,4-D	99813.291	121442.60	0.005	21.7	15.0	<-
2,4,5-T	416264.72	453989.92	0.005	9.1	15.0	
Dinoseb	219091.19	264197.15	0.005	20.6	15.0	<-
MCPP	348.505	381.481	0.01	9.5	15.0	
Dichlorprop	98114.076	108751.79	0.01	10.8	15.0	
2,4,5-TP	482193.63	523827.84	0.01	8.6	15.0	
Dicamba	398435.16	428722.52	0.01	7.6	15.0	
2,4-DB	46966.168	82691.642	0.01	76.1	15.0	<-
Pentachlorophenol	1050247.3	1129351.7	0.01	7.5	15.0	
2,4-Dichlorophenylacetic aci	106250.60	117863.42	0.01	10.9	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 2144

Lab File ID: 021B2101 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	110097.67	116338.53	0.005	5.7	15.0	
MCPA	763.211	681.722	0.005	-10.7	15.0	
2,4-D	146602.25	161163.40	0.005	9.9	15.0	
2,4,5-T	477088.18	540297.60	0.005	13.2	15.0	
Dinoseb	230388.97	342339.69	0.005	48.6	15.0	<-
MCPP	386.296	408.230	0.01	5.7	15.0	
Dichlorprop	122222.86	119676.19	0.01	-2.1	15.0	
2,4,5-TP	576990.28	612505.82	0.01	6.2	15.0	
Dicamba	447469.94	483032.42	0.01	7.9	15.0	
2,4-DB	66623.779	71887.585	0.01	7.9	15.0	
Pentachlorophenol	1347809.8	1380536.3	0.01	2.4	15.0	
2,4-Dichlorophenylacetic aci	118930.17	125392.04	0.01	5.4	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0102

Lab File ID: 028F2801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	83578.428	91037.404	0.005	8.9	15.0	
MCPA	648.828	721.793	0.005	11.2	15.0	
2,4-D	99813.291	133807.20	0.005	34.0	15.0	<-
2,4,5-T	416264.72	519166.24	0.005	24.7	15.0	<-
Dinoseb	219091.19	268156.51	0.005	22.4	15.0	<-
MCPP	348.505	421.951	0.01	21.1	15.0	<-
Dichlorprop	98114.076	117963.10	0.01	20.2	15.0	<-
2,4,5-TP	482193.63	579540.14	0.01	20.2	15.0	<-
Dicamba	398435.16	452680.34	0.01	13.6	15.0	
2,4-DB	46966.168	66013.165	0.01	40.6	15.0	<-
Pentachlorophenol	1050247.3	1223969.6	0.01	16.5	15.0	<-
2,4-Dichlorophenylacetic aci	106250.60	123075.77	0.01	15.8	15.0	<-

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0102

Lab File ID: 028B2801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	110097.67	119205.39	0.005	8.3	15.0	
MCPA	763.211	784.059	0.005	2.7	15.0	
2,4-D	146602.25	170105.36	0.005	16.0	15.0	<-
2,4,5-T	477088.18	561702.70	0.005	17.7	15.0	<-
Dinoseb	230388.97	346762.25	0.005	50.5	15.0	<-
MCPP	386.296	469.900	0.01	21.6	15.0	<-
Dichlorprop	122222.86	135534.71	0.01	10.9	15.0	
2,4,5-TP	576990.28	681630.17	0.01	18.1	15.0	<-
Dicamba	447469.94	527722.68	0.01	17.9	15.0	<-
2,4-DB	66623.779	78799.720	0.01	18.3	15.0	<-
Pentachlorophenol	1347809.8	1587406.0	0.01	17.8	15.0	<-
2,4-Dichlorophenylacetic aci	118930.17	136029.60	0.01	14.4	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0545

Lab File ID: 038F3801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	83578.428	90244.016	0.005	8.0	15.0	
MCPA	648.828	705.772	0.005	8.8	15.0	
2,4-D	99813.291	127900.23	0.005	28.1	15.0	<-
2,4,5-T	416264.72	506201.61	0.005	21.6	15.0	<-
Dinoseb	219091.19	250678.87	0.005	14.4	15.0	
MCPP	348.505	409.240	0.01	17.4	15.0	<-
Dichlorprop	98114.076	114610.43	0.01	16.8	15.0	<-
2,4,5-TP	482193.63	566812.91	0.01	17.5	15.0	<-
Dicamba	398435.16	442333.98	0.01	11.0	15.0	
2,4-DB	46966.168	65122.074	0.01	38.6	15.0	<-
Pentachlorophenol	1050247.3	1199753.4	0.01	14.2	15.0	
2,4-Dichlorophenylacetic aci	106250.60	120387.03	0.01	13.3	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0545

Lab File ID: 038B3801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	110097.67	117425.02	0.005	6.6	15.0	
MCPA	763.211	770.898	0.005	1.0	15.0	
2,4-D	146602.25	167162.07	0.005	14.0	15.0	
2,4,5-T	477088.18	546351.88	0.005	14.5	15.0	
Dinoseb	230388.97	299846.98	0.005	30.1	15.0	<-
MCPP	386.296	465.616	0.01	20.5	15.0	<-
Dichlorprop	122222.86	131248.08	0.01	7.4	15.0	
2,4,5-TP	576990.28	662519.89	0.01	14.8	15.0	
Dicamba	447469.94	512831.17	0.01	14.6	15.0	
2,4-DB	66623.779	77965.990	0.01	17.0	15.0	<-
Pentachlorophenol	1347809.8	1559565.4	0.01	15.7	15.0	<-
2,4-Dichlorophenylacetic aci	118930.17	135264.70	0.01	13.7	15.0	

FORM VII HERBICIDE

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/009f0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	4.000	4.000	0.000	165152948	2000.00	1980	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.698	10.698	0.000	55285977	500.000	520	(M)
	3 Dicamba					CAS #: 6597-78-0	
	11.214	11.214	0.000	79930813	200.000	201	(M)
	4 MCPP					CAS #: 7085-19-0	
	11.729	11.729	0.000	7183913	20000.0	20600	(M)
	5 MCPA					CAS #: 94-74-6	
	11.999	11.999	0.000	13166275	20000.0	20300	(M)
	6 Dichlorprop					CAS #: 120-36-5	
	12.512	12.512	0.000	19418200	200.000	198	(M)
	7 2,4-D					CAS #: 94-75-7	
	12.775	12.775	0.000	20687022	200.000	207	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.924	12.924	0.000	208818126	200.000	199	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.512	13.512	0.000	97840159	200.000	203	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.715	13.715	0.000	85970231	200.000	206	(M)
10 2,4-DB					CAS #: 94-82-6	
14.064	14.064	0.000	9875189	200.000	210	(M)
11 Dinoseb					CAS #: 88-85-7	
14.638	14.638	0.000	43674888	200.000	199	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009f0901.d
Date : 01-DEC-2009 16:08
Client ID: HSTD01
Sample Info: IWHB091030-12
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

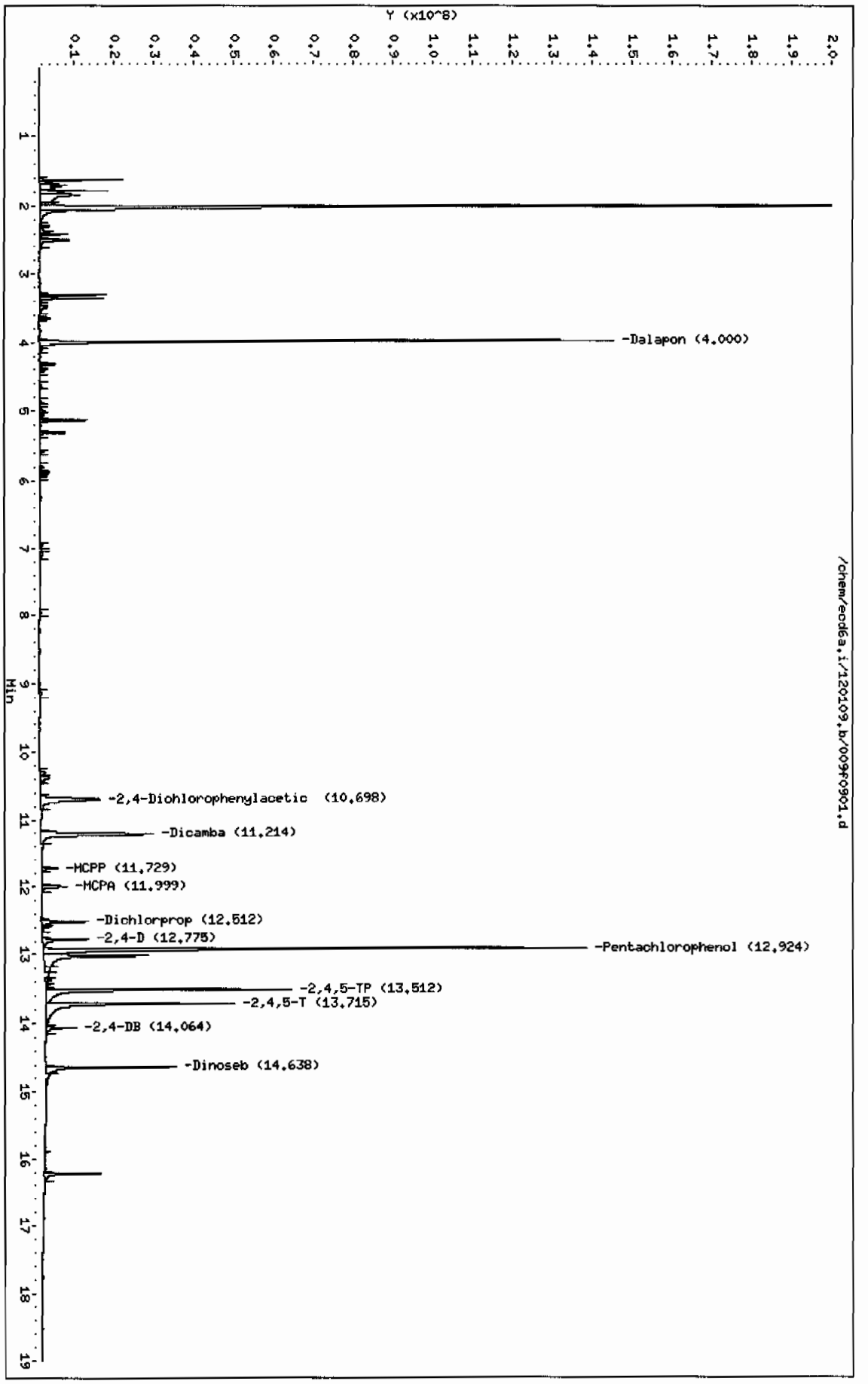

Page 1

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

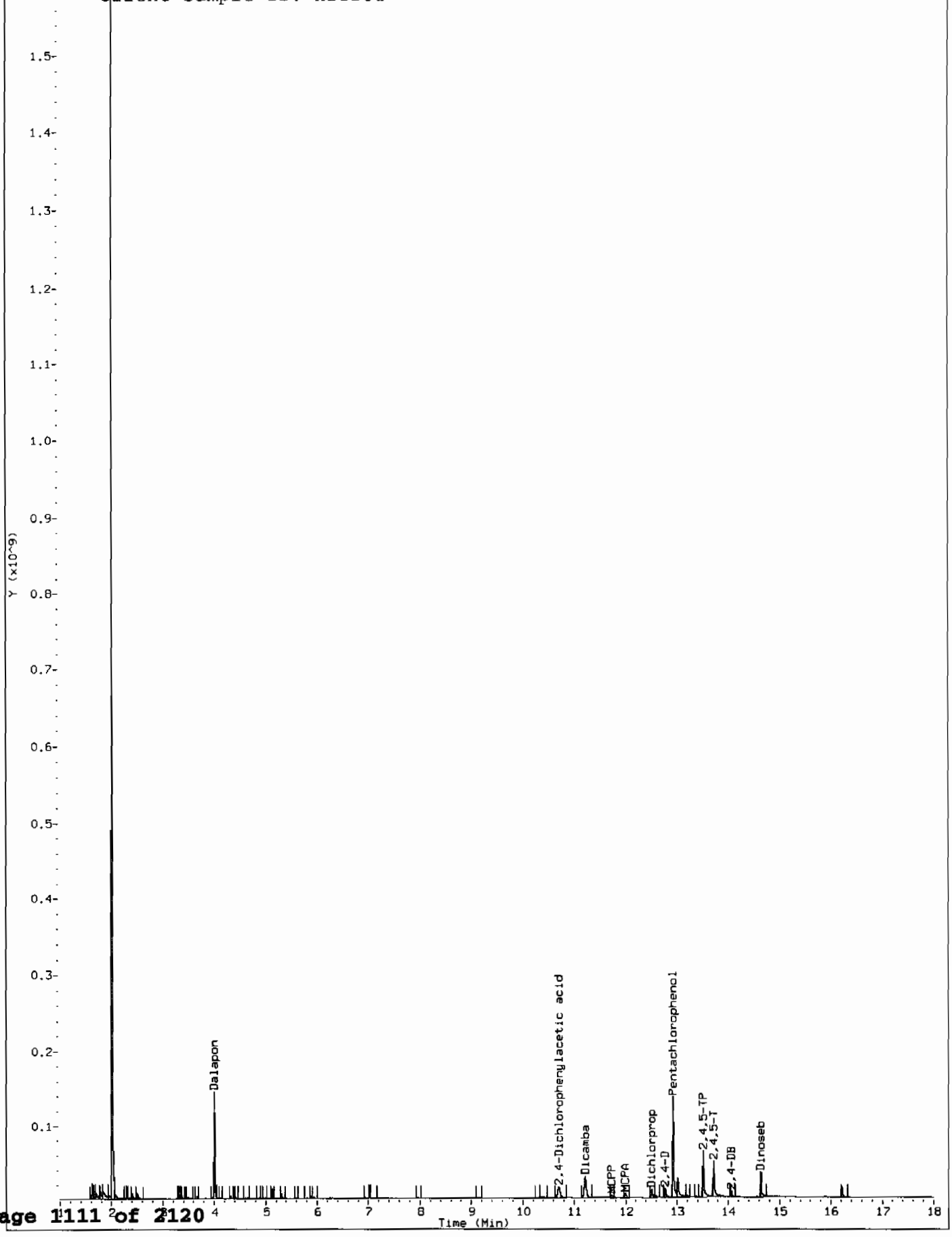

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

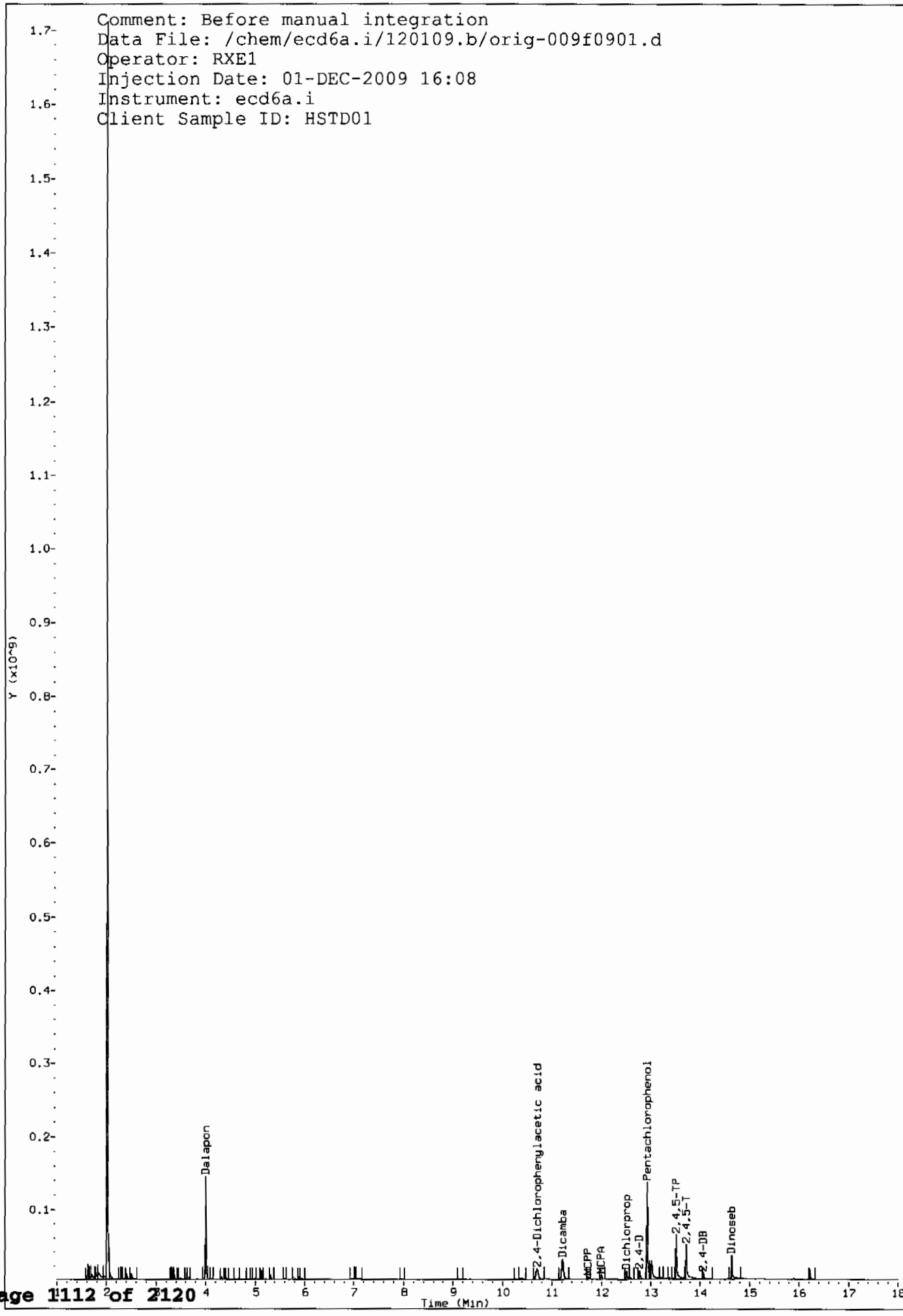

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/009b0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 88-85-7	
	3.963	3.963	0.000	218849243	2000.00	1990	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	11.717	11.717	0.000	61276933	500.000	515	(M)
	3 MCPP					CAS #: 7085-19-0	
	12.246	12.246	0.000	7892573	20000.0	20400	(M)
	4 Dicamba					CAS #: 6597-78-0	
	12.000	12.000	0.000	90197474	200.000	202	(M)
	5 MCPA					CAS #: 94-74-6	
	12.552	12.552	0.000	14594046	20000.0	19100	(M)
	6 Dichlorprop					CAS #: 120-36-5	
	12.927	12.927	0.000	23159743	200.000	189	(M)
	7 2,4-D					CAS #: 94-75-7	
	13.216	13.216	0.000	29231447	200.000	199	
	43 Pentachlorophenol					CAS #: 87-86-5	
	13.487	13.487	0.000	276356059	200.000	205	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.825	13.825	0.000	121054815	200.000	210	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.065	14.065	0.000	100408046	200.000	210		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	48435715	200.000	210		(M)
11 2,4-DB					CAS #: 94-82-6		
14.354	14.354	0.000	13231896	200.000	199		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009b0901.d

Date : 01-DEC-2009 16:08

Client ID: HSTD01

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

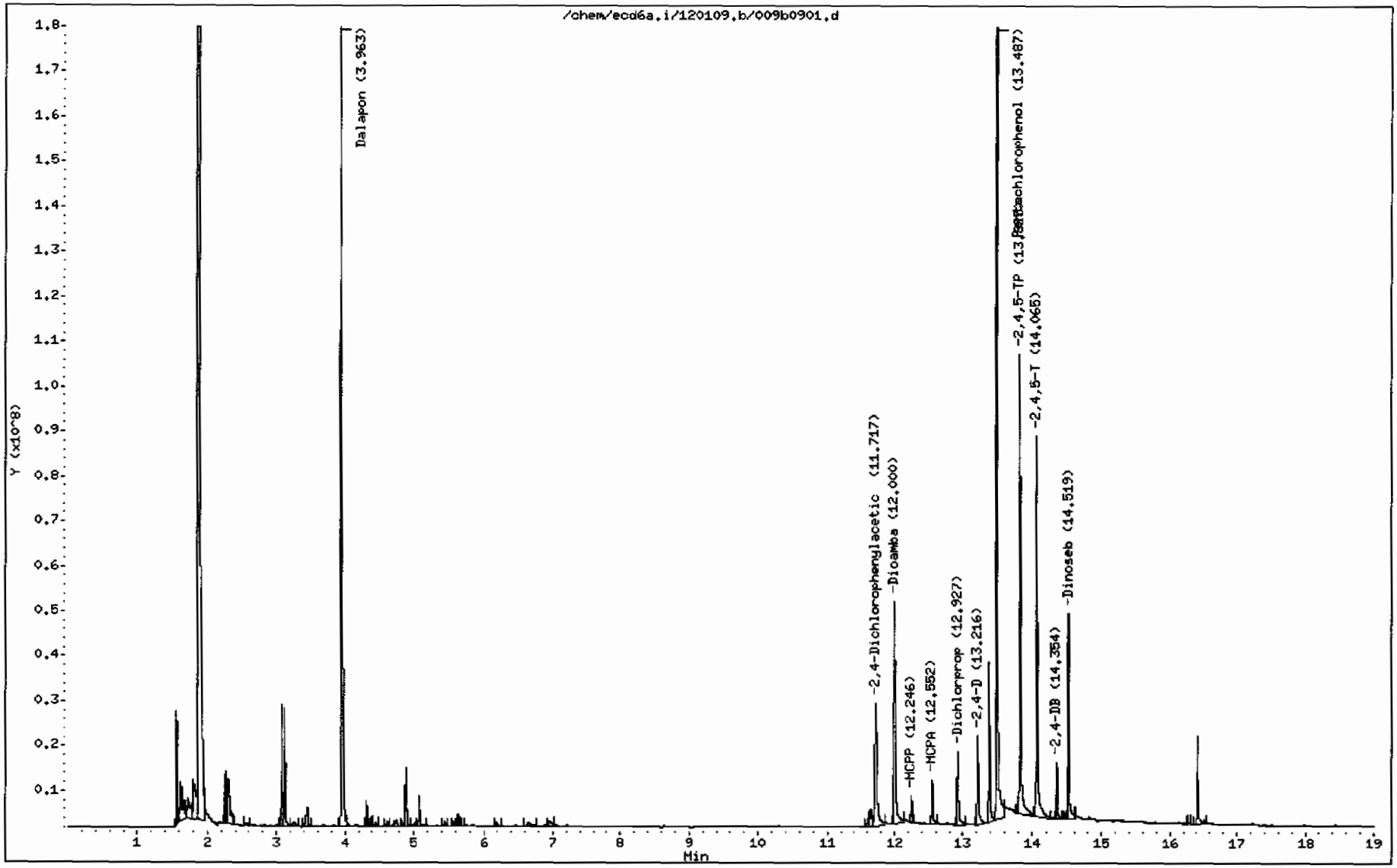

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

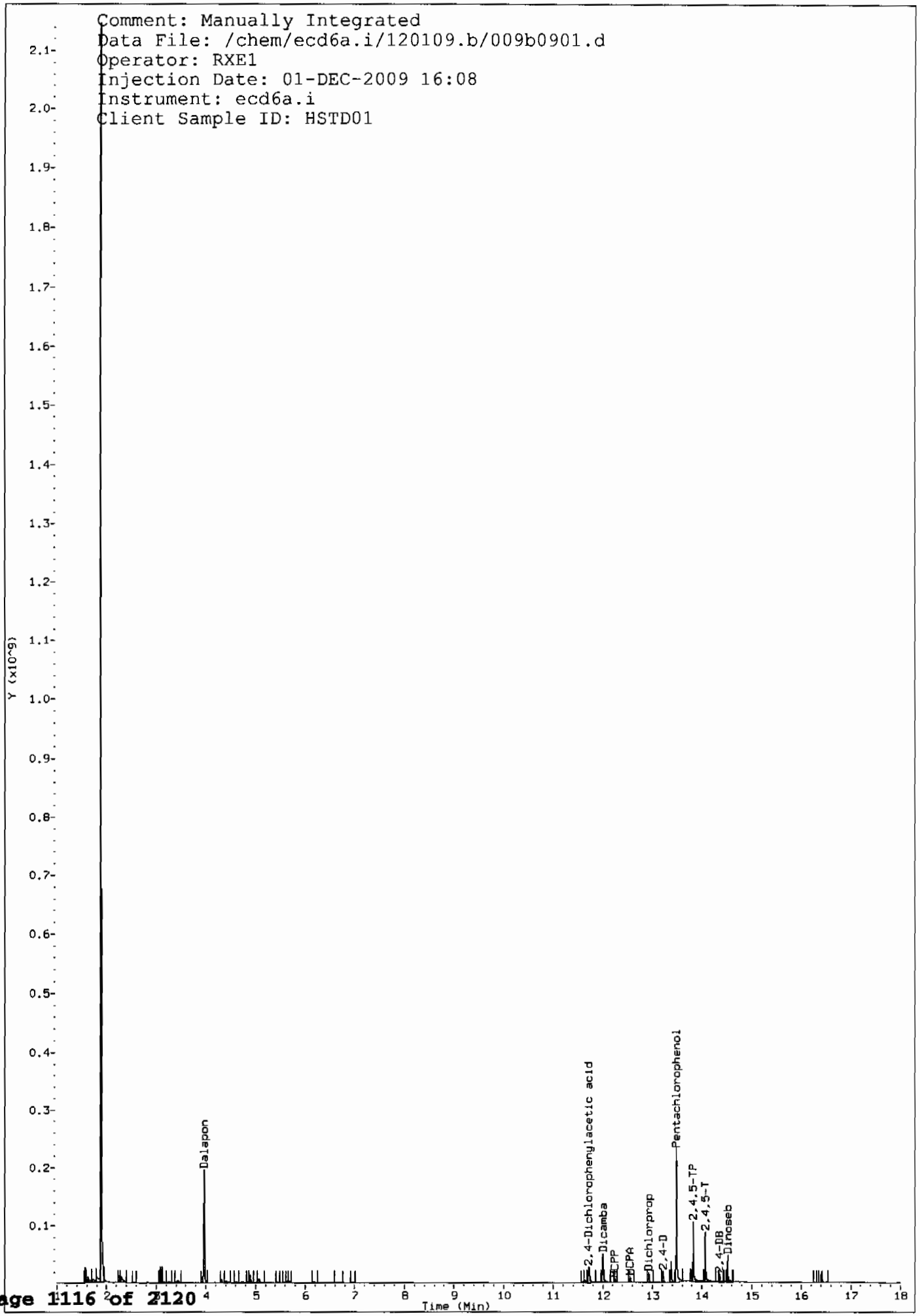

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

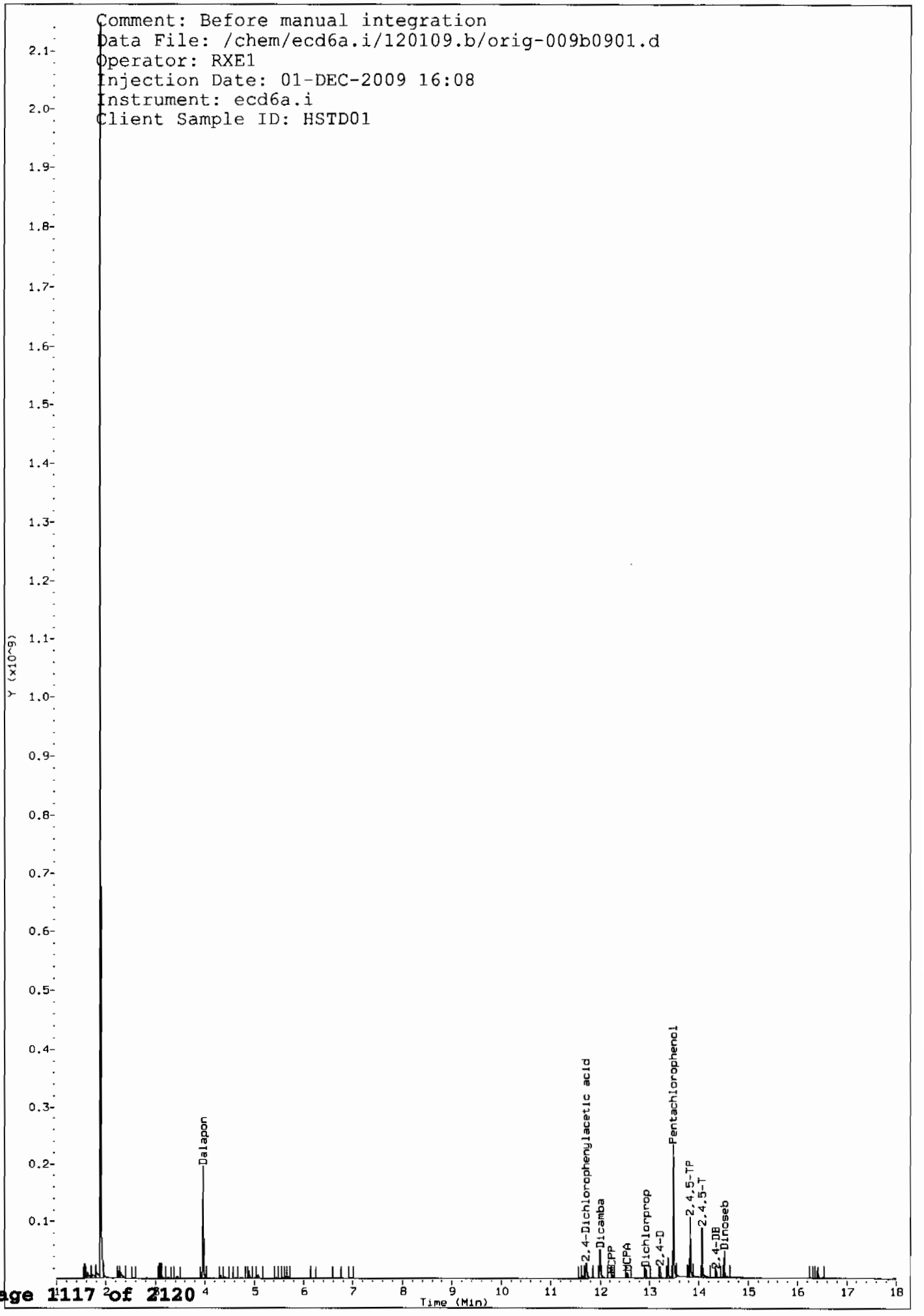

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/021f2101.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD02
Inj Date : 01-DEC-2009 21:44
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 09:16 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
1 Dalapon					CAS #: 75-99-0	
3.995	4.000	-0.005	180223347	2000.00	2160	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.690	10.698	-0.008	58931710	500.000	555	
3 Dicamba					CAS #: 6597-78-0	
11.207	11.214	-0.007	85744504	200.000	215	
4 MCPP					CAS #: 7085-19-0	
11.724	11.729	-0.005	7629618	20000.0	21900	
5 MCPA					CAS #: 94-74-6	
11.997	11.999	-0.002	12843803	20000.0	19800	
6 Dichlorprop					CAS #: 120-36-5	
12.507	12.512	-0.005	21750358	200.000	222	
7 2,4-D					CAS #: 94-75-7	
12.771	12.775	-0.004	24288519	200.000	243	
43 Pentachlorophenol					CAS #: 87-86-5	
12.923	12.924	-0.001	225870339	200.000	215	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.509	13.512	-0.003	104765568	200.000	217	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.712	13.715	-0.003	90797983	200.000	218	(M)
10 2,4-DB					CAS #: 94-82-6	
14.061	14.064	-0.003	16538328	200.000	352	(M)
11 Dinoseb					CAS #: 88-85-7	
14.638	14.638	0.000	52839430	200.000	241	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/021f2101.d

Date : 01-DEC-2009 21:44

Client ID: HSTD02

Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

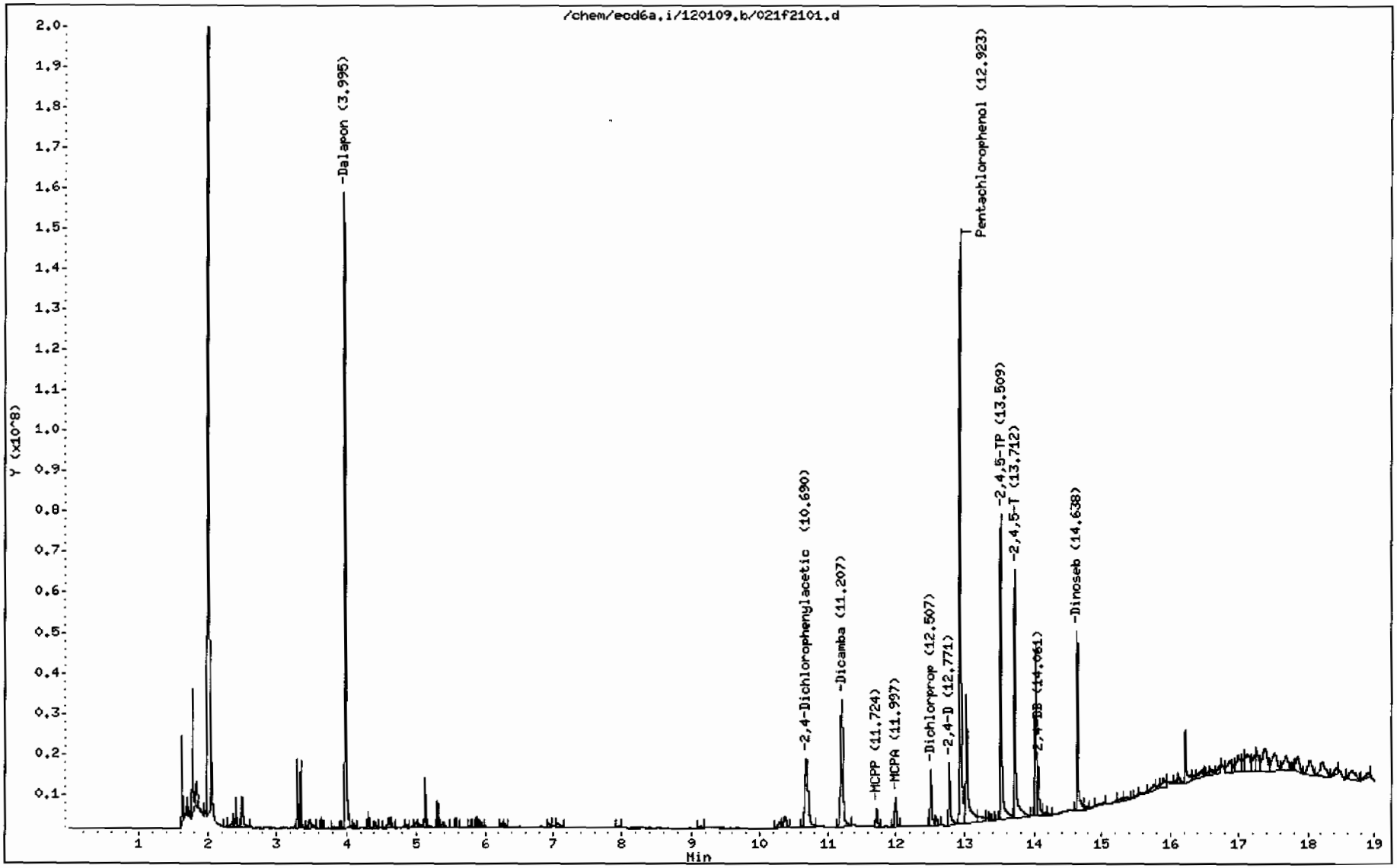

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/021b2101.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD02
Inj Date : 01-DEC-2009 21:44
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 09:14 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dalapon					CAS #: 88-85-7
	3.958	3.963	-0.005	232677055	2000.00	2110
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
	11.710	11.717	-0.007	62696020	500.000	527
	3 MCPP					CAS #: 7085-19-0
	12.245	12.246	-0.001	8164601	20000.0	21100
	4 Dicamba					CAS #: 6597-78-0
	11.996	12.000	-0.004	96606484	200.000	216
	5 MCPA					CAS #: 94-74-6
	12.550	12.552	-0.002	13634450	20000.0	17900
	6 Dichlorprop					CAS #: 120-36-5
	12.923	12.927	-0.004	23935238	200.000	196
	7 2,4-D					CAS #: 94-75-7
	13.213	13.216	-0.003	32232681	200.000	220
	43 Pentachlorophenol					CAS #: 87-86-5
	13.479	13.487	-0.008	276107268	200.000	205
	8 2,4,5-TP					CAS #: 93-72-1
	13.823	13.825	-0.002	122501164	200.000	212

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.063	14.065	-0.002	108059520	200.000	226		
10 Dinoseb					CAS #: 88-85-7		
14.518	14.519	-0.001	68467937	200.000	297		(M)
11 2,4-DB					CAS #: 94-82-6		
14.351	14.354	-0.003	14377517	200.000	216		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/021b2101.d

Date : 01-DEC-2009 21:44

Client ID: HSTD02

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

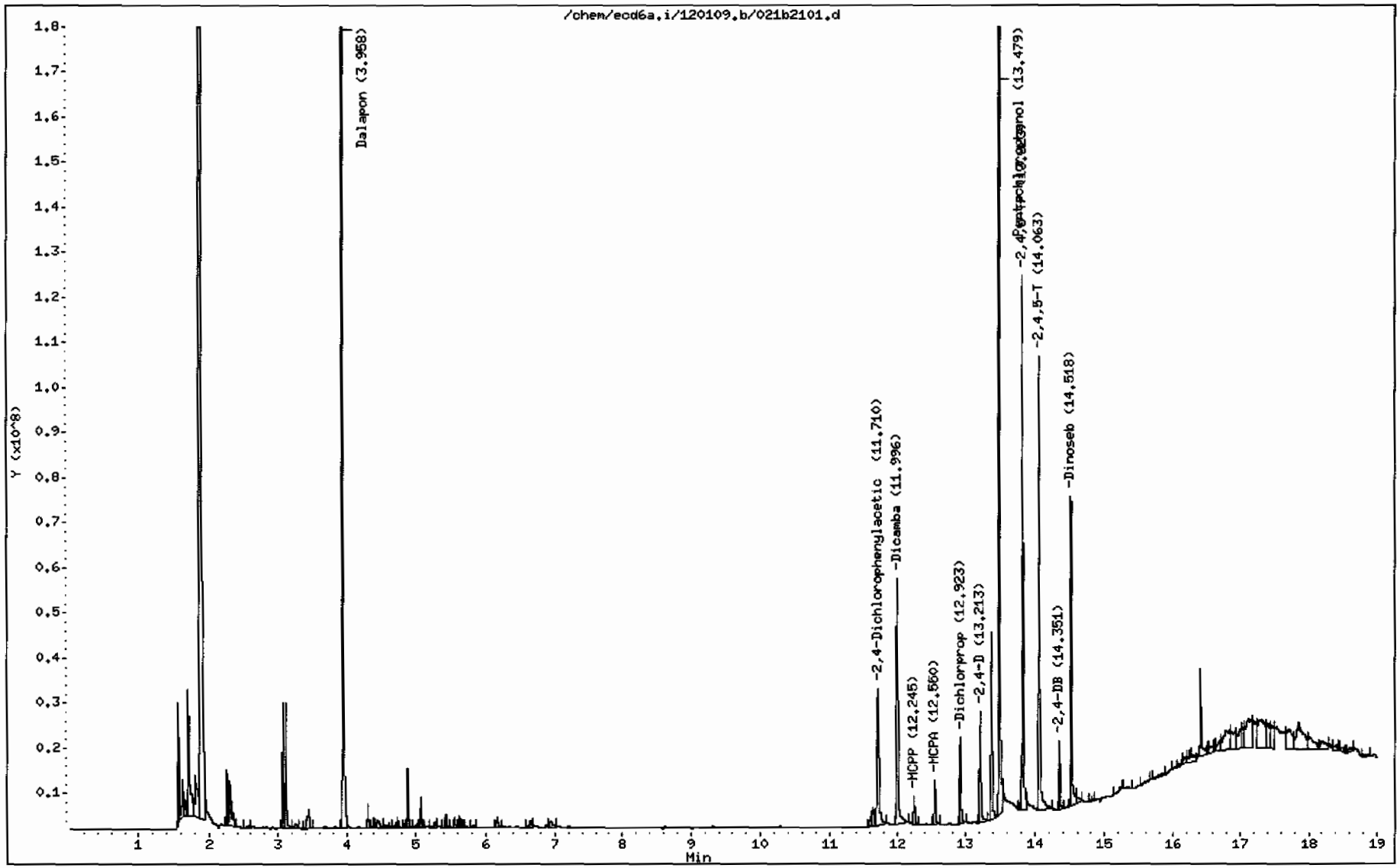

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/021b2101.d
Operator: RXE1
Injection Date: 01-DEC-2009 21:44
Instrument: ecd6a.i
Client Sample ID: HSTD02

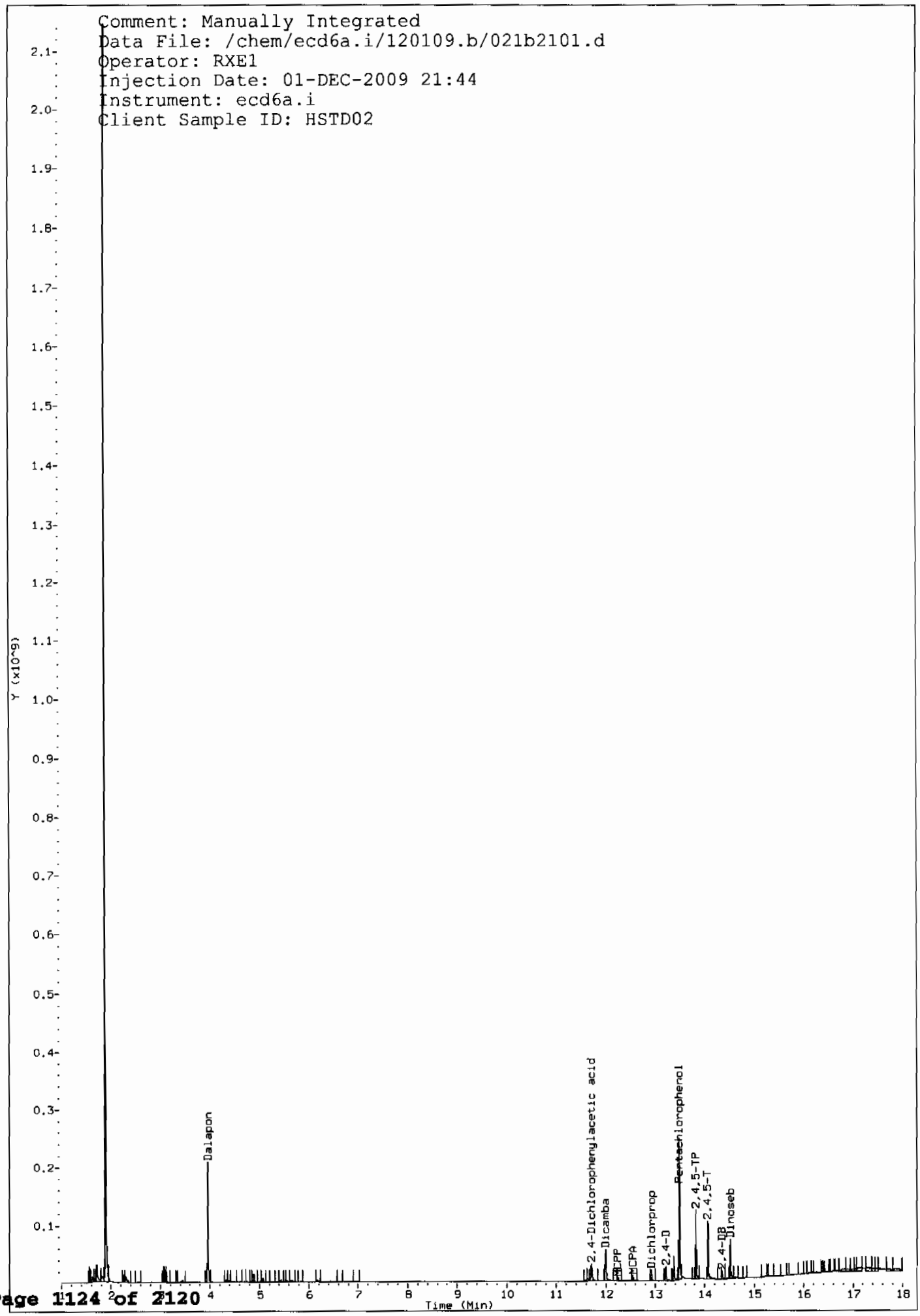

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-021b2101.d
Operator: RXE1
Injection Date: 01-DEC-2009 21:44
Instrument: ecd6a.i
Client Sample ID: HSTD02

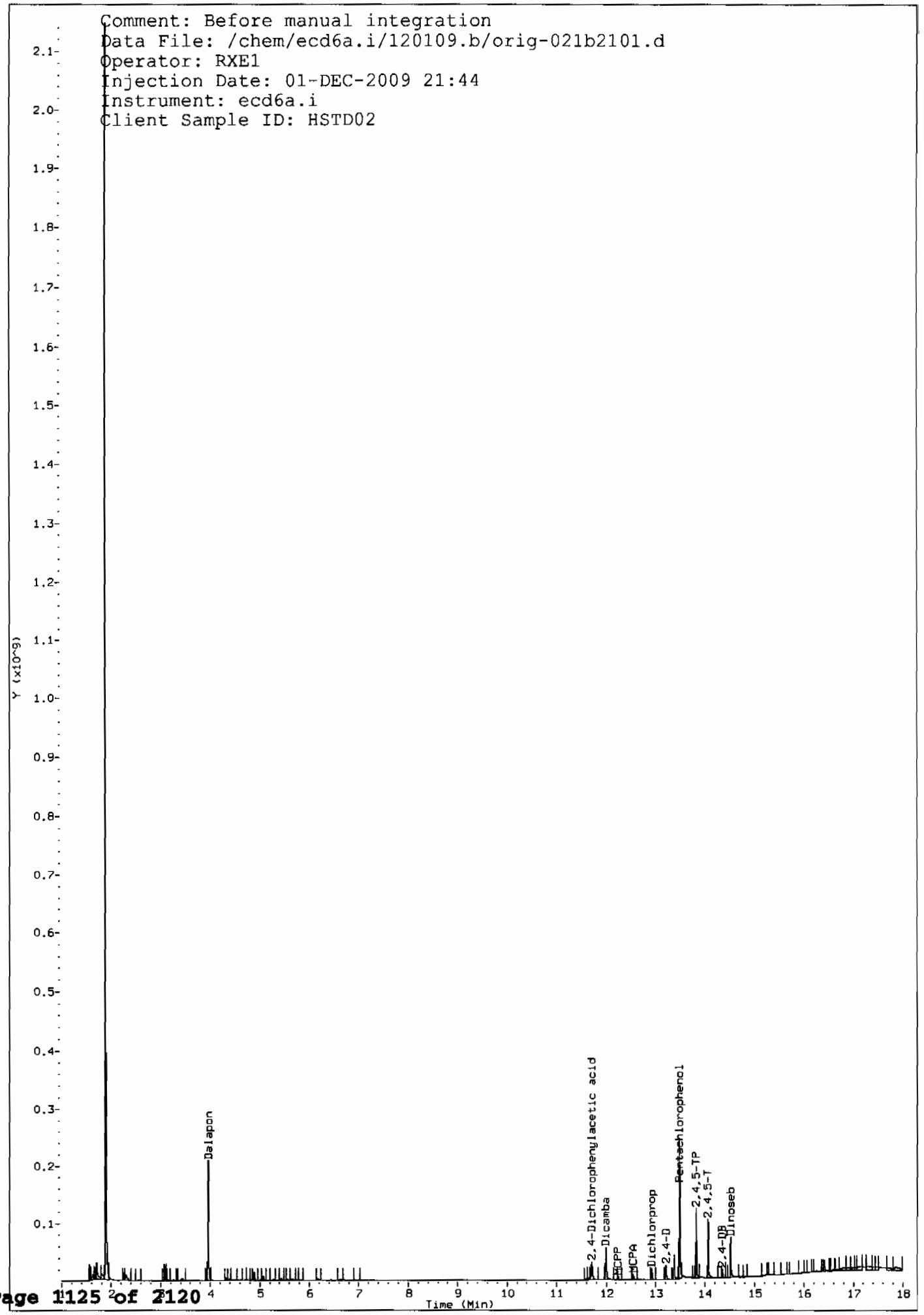

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/028f2801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD03
Inj Date : 02-DEC-2009 01:02
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
	1 Dalapon						CAS #: 75-99-0	
	3.992	4.000	-0.008	182074807	2000.00	2180		
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9	
	10.692	10.698	-0.006	61537884	500.000	579		
	3 Dicamba						CAS #: 6597-78-0	
	11.211	11.214	-0.003	90536067	200.000	227		
	4 MCPP						CAS #: 7085-19-0	
	11.727	11.729	-0.002	8439016	20000.0	24200		
	5 MCPA						CAS #: 94-74-6	
	11.997	11.999	-0.002	14435858	20000.0	22200		
	6 Dichlorprop						CAS #: 120-36-5	
	12.508	12.512	-0.004	23592620	200.000	240		
	7 2,4-D						CAS #: 94-75-7	
	12.773	12.775	-0.002	26761440	200.000	268		
	43 Pentachlorophenol						CAS #: 87-86-5	
	12.925	12.924	0.001	244793917	200.000	233		(M)
	8 2,4,5-TP						CAS #: 93-72-1	
	13.511	13.512	-0.001	115908028	200.000	240		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.713	13.715	-0.002	103833249	200.000	249	(M)
10 2,4-DB					CAS #: 94-82-6	
14.063	14.064	-0.001	13202633	200.000	281	(M)
11 Dinoseb					CAS #: 88-85-7	
14.639	14.638	0.001	53631302	200.000	245	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/028f2801.d
Date : 02-DEC-2009 01:02
Client ID: HSTD03
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

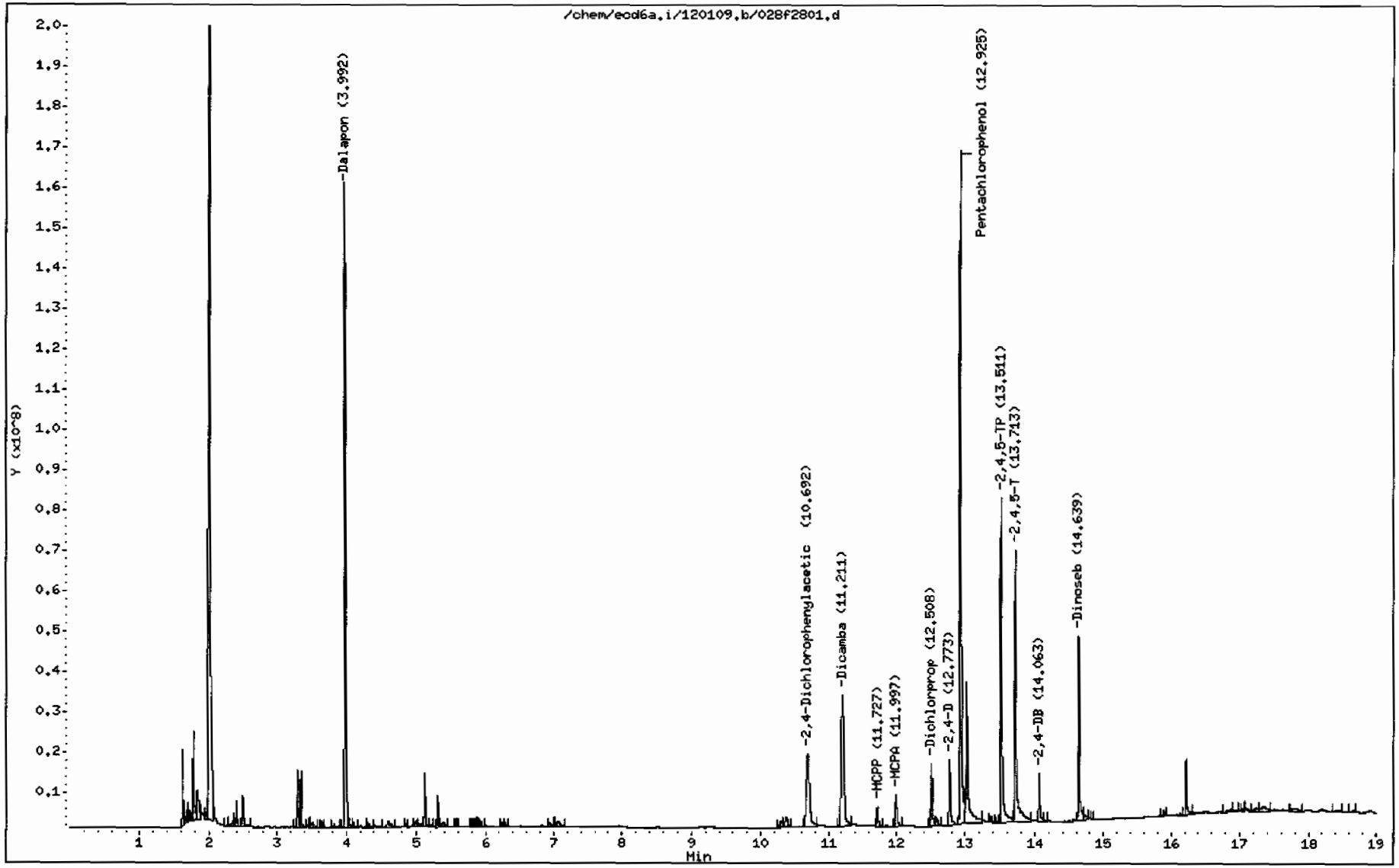

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/028f2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

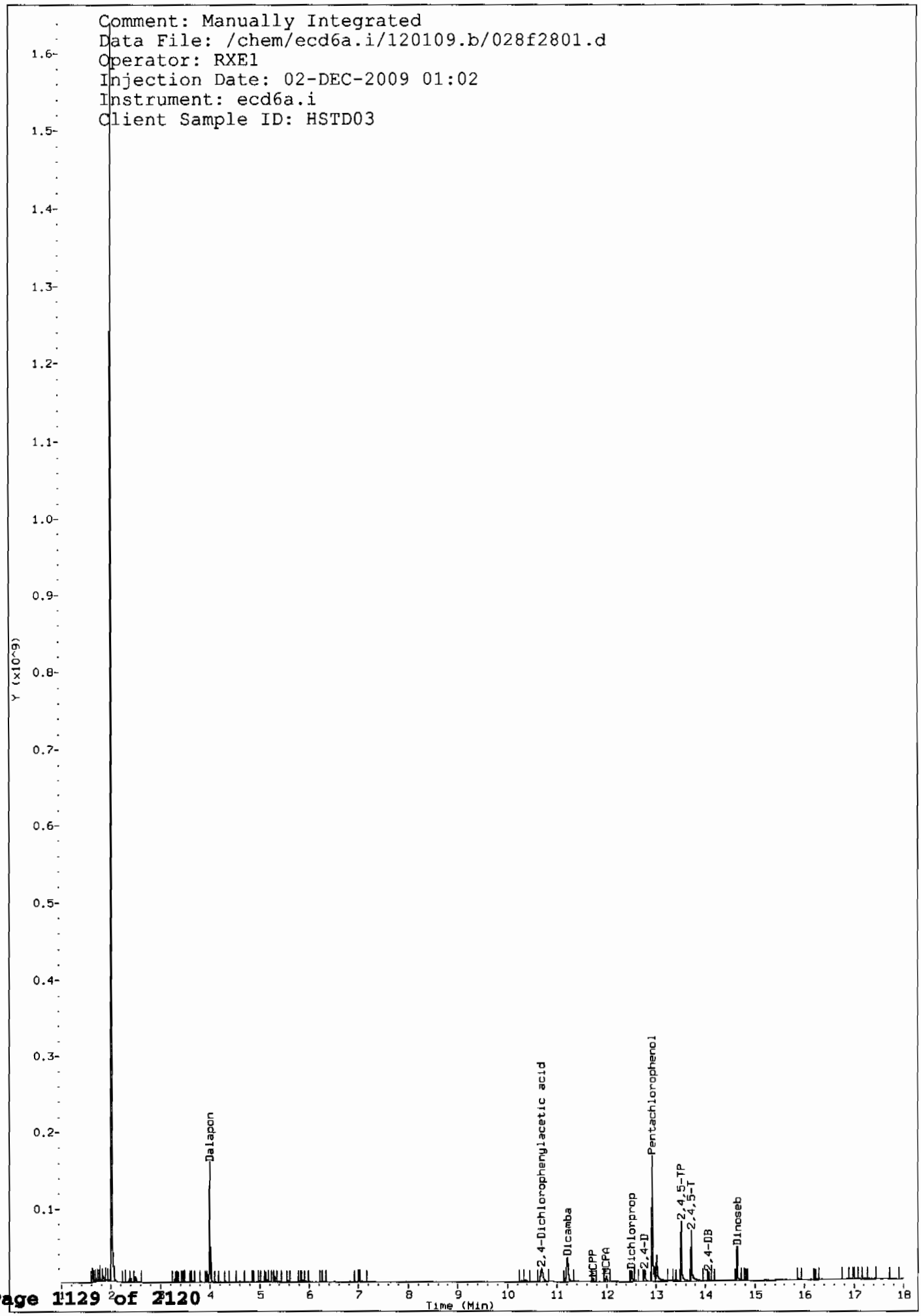

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-028f2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

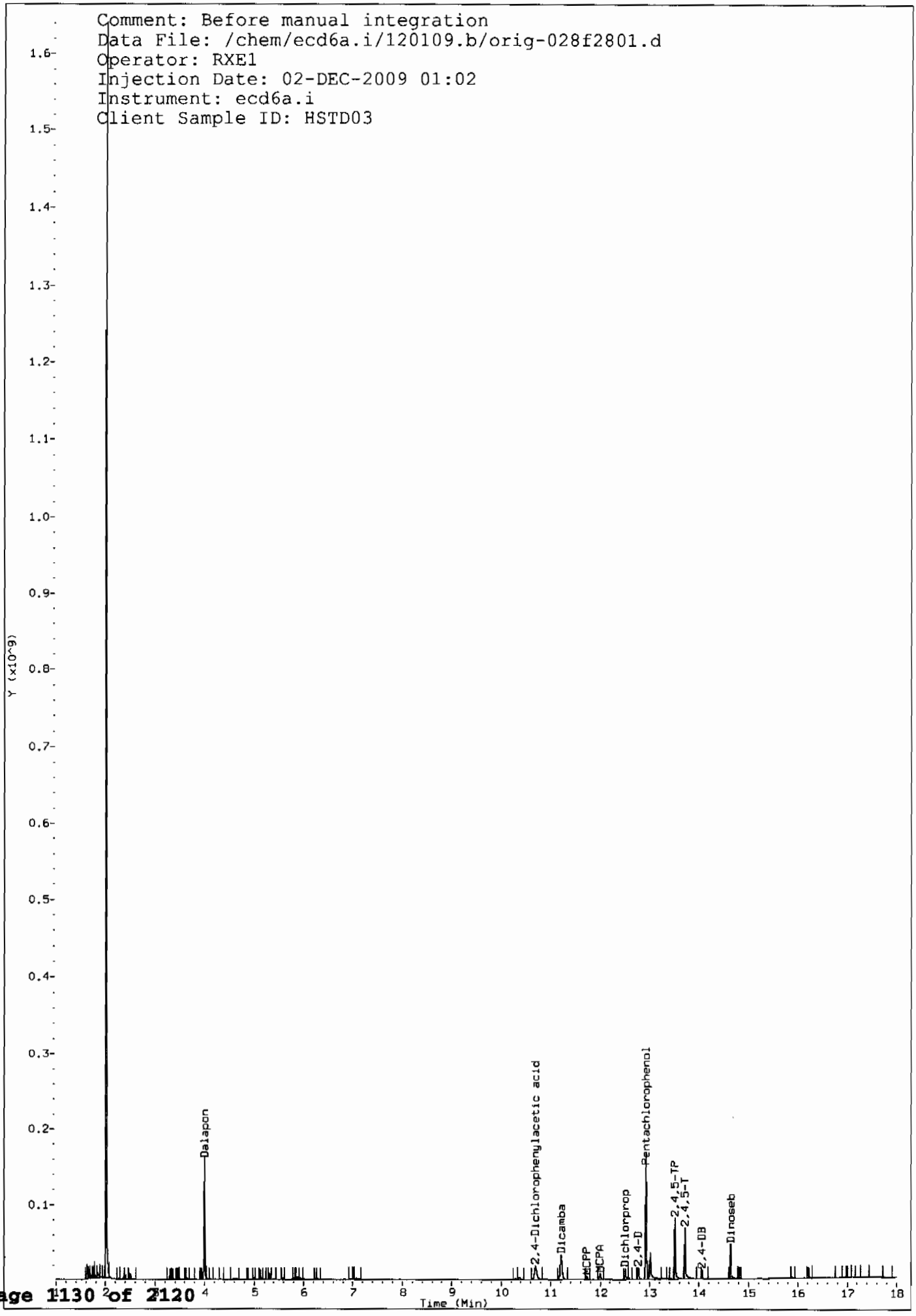

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/028b2801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD03
Inj Date : 02-DEC-2009 01:02
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 88-85-7	
	3.957	3.963	-0.006	238410775	2000.00	2160	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	11.712	11.717	-0.005	68014801	500.000	572	(M)
	3 MCPP					CAS #: 7085-19-0	
	12.246	12.246	0.000	9397997	20000.0	24300	(M)
	4 Dicamba					CAS #: 6597-78-0	
	11.998	12.000	-0.002	105544535	200.000	236	
	5 MCPA					CAS #: 94-74-6	
	12.552	12.552	0.000	15681173	20000.0	20500	
	6 Dichlorprop					CAS #: 120-36-5	
	12.925	12.927	-0.002	27106942	200.000	222	
	7 2,4-D					CAS #: 94-75-7	
	13.214	13.216	-0.002	34021071	200.000	232	
	43 Pentachlorophenol					CAS #: 87-86-5	
	13.483	13.487	-0.004	317481192	200.000	236	
	8 2,4,5-TP					CAS #: 93-72-1	
	13.825	13.825	0.000	136326034	200.000	236	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.064	14.065	-0.001	112340541	200.000	235		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	69352450	200.000	301		(M)
11 2,4-DB					CAS #: 94-82-6		
14.352	14.354	-0.002	15759944	200.000	236		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/028b2801.d
Date : 02-DEC-2009 01:02
Client ID: HSTD03
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

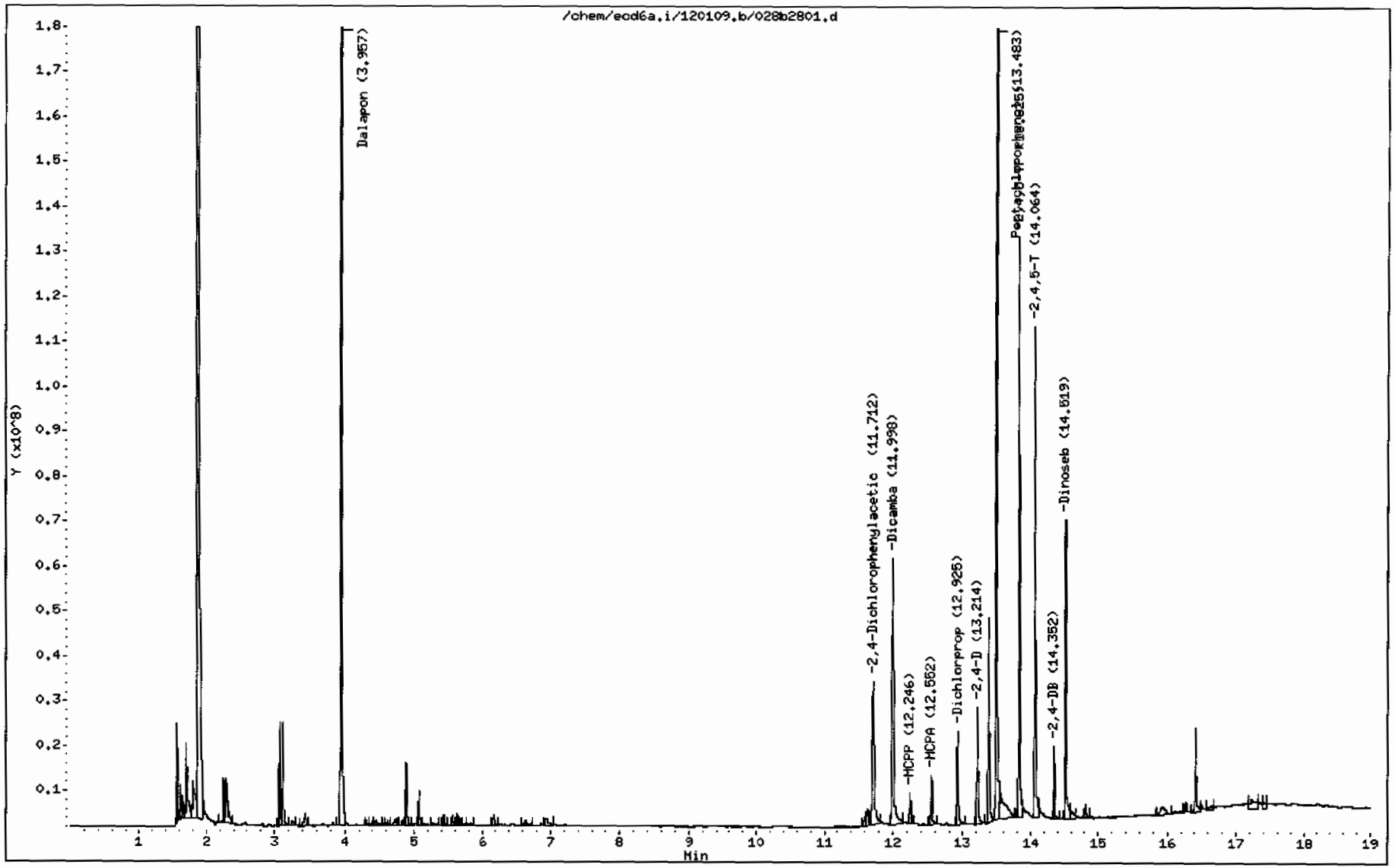

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/028b2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

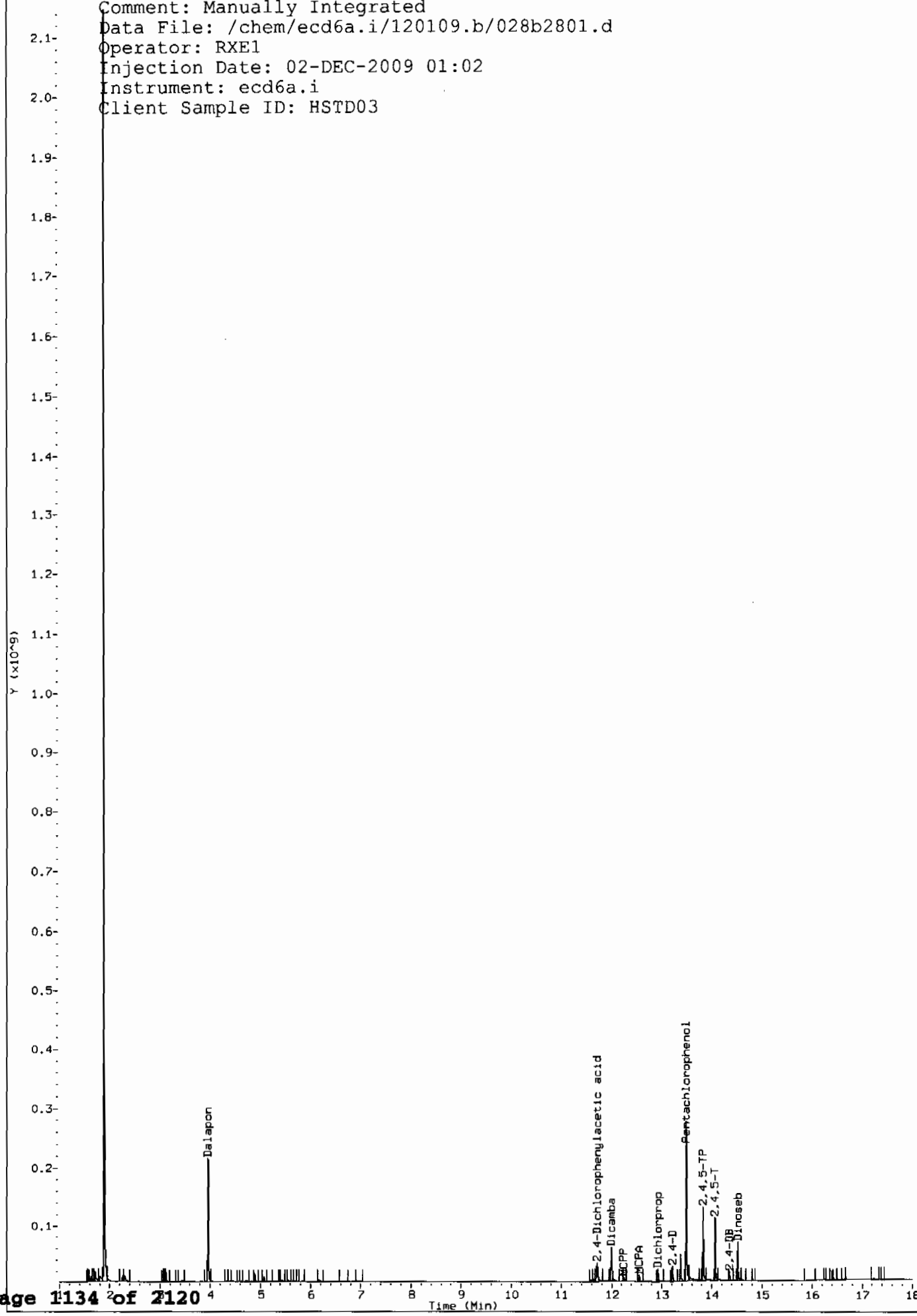

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-028b2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

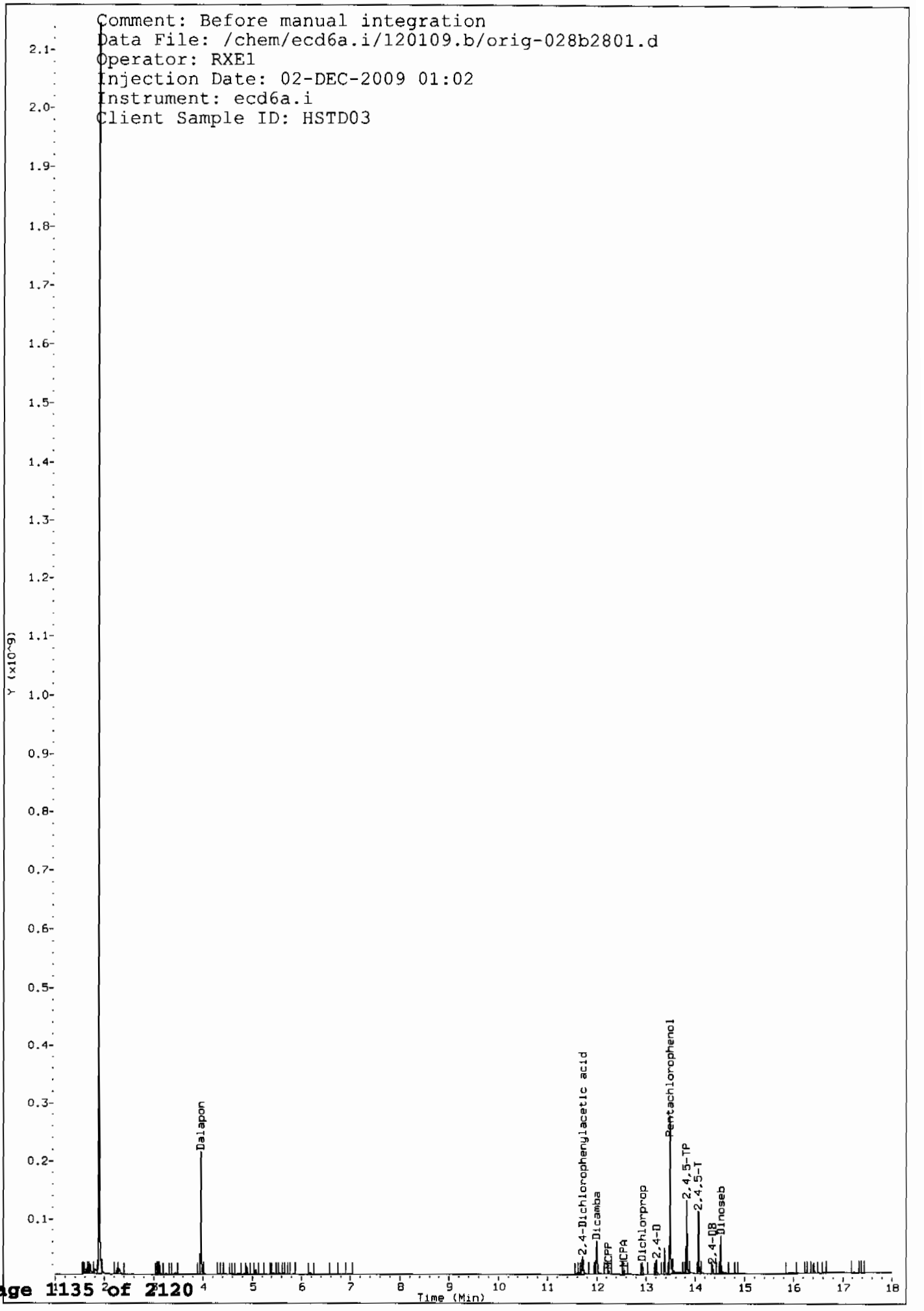

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/038f3801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD04
Inj Date : 02-DEC-2009 05:45
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.991	4.000	-0.009	180488032	2000.00	2160	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.690	10.698	-0.008	60193515	500.000	566	
	3 Dicamba					CAS #: 6597-78-0	
	11.208	11.214	-0.006	88466796	200.000	222	
	4 MCPP					CAS #: 7085-19-0	
	11.727	11.729	-0.002	8184804	20000.0	23500	
	5 MCPA					CAS #: 94-74-6	
	11.996	11.999	-0.003	14115451	20000.0	21800	
	6 Dichlorprop					CAS #: 120-36-5	
	12.507	12.512	-0.005	22922087	200.000	234	
	7 2,4-D					CAS #: 94-75-7	
	12.772	12.775	-0.003	25580046	200.000	256	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.925	12.924	0.001	239950682	200.000	228	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.510	13.512	-0.002	113362582	200.000	235	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.713	13.715	-0.002	101240321	200.000	243	(M)
10 2,4-DB					CAS #: 94-82-6	
14.063	14.064	-0.001	13024414	200.000	277	(M)
11 Dinoseb					CAS #: 88-85-7	
14.639	14.638	0.001	50135774	200.000	229	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/038f3801.d
Date : 02-DEC-2009 05:45
Client ID: HSTD04
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

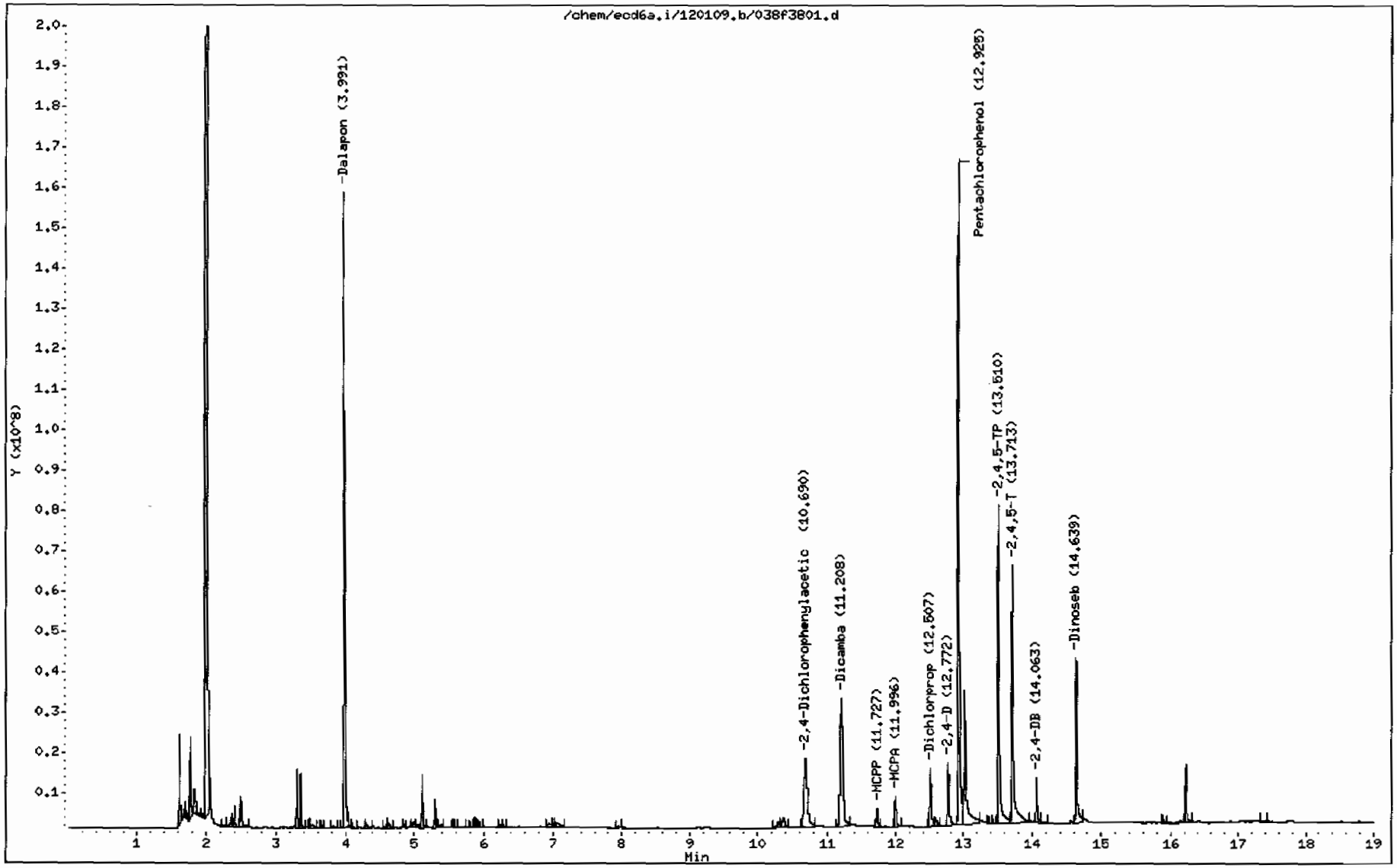

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/038f3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

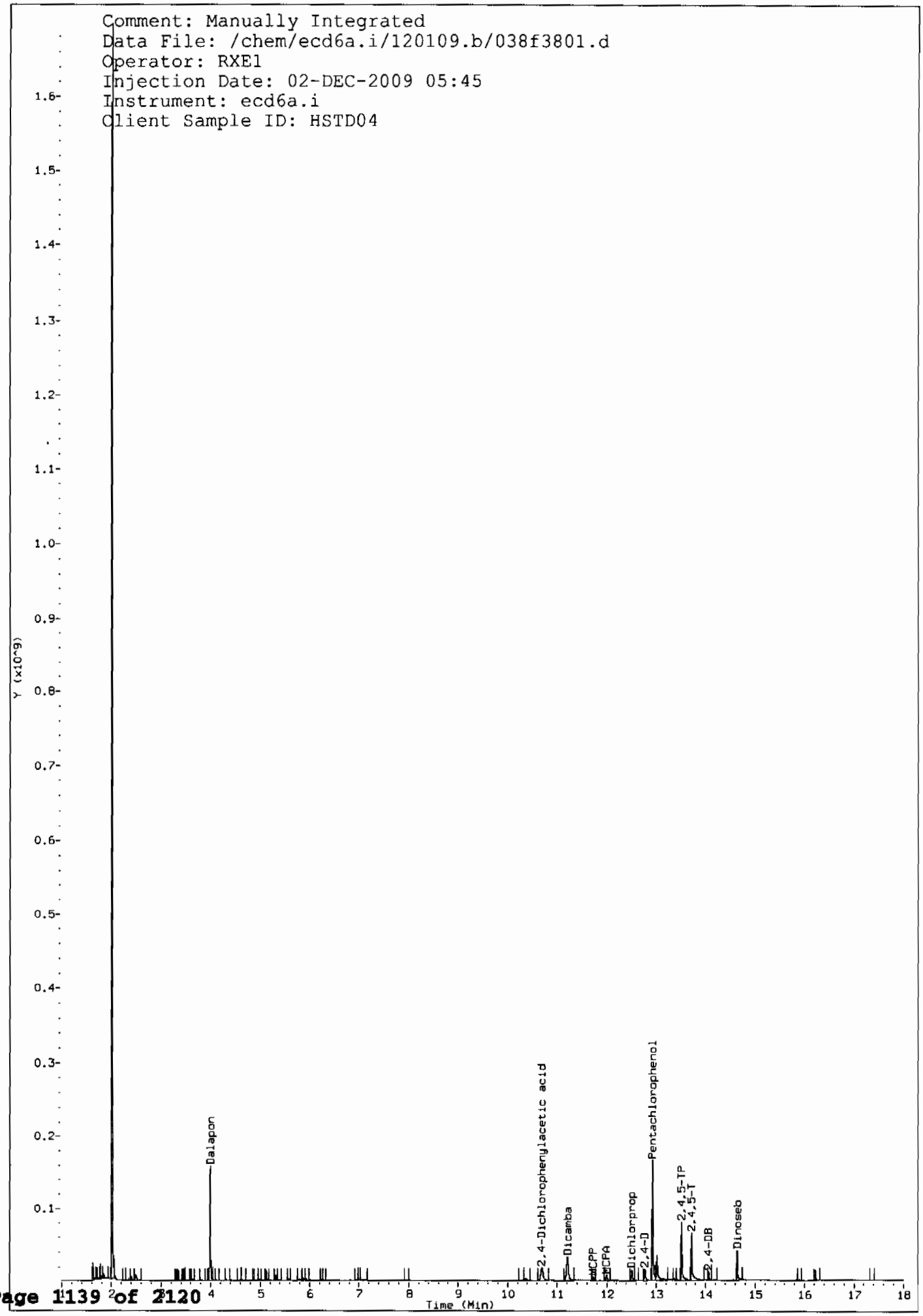

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-038f3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

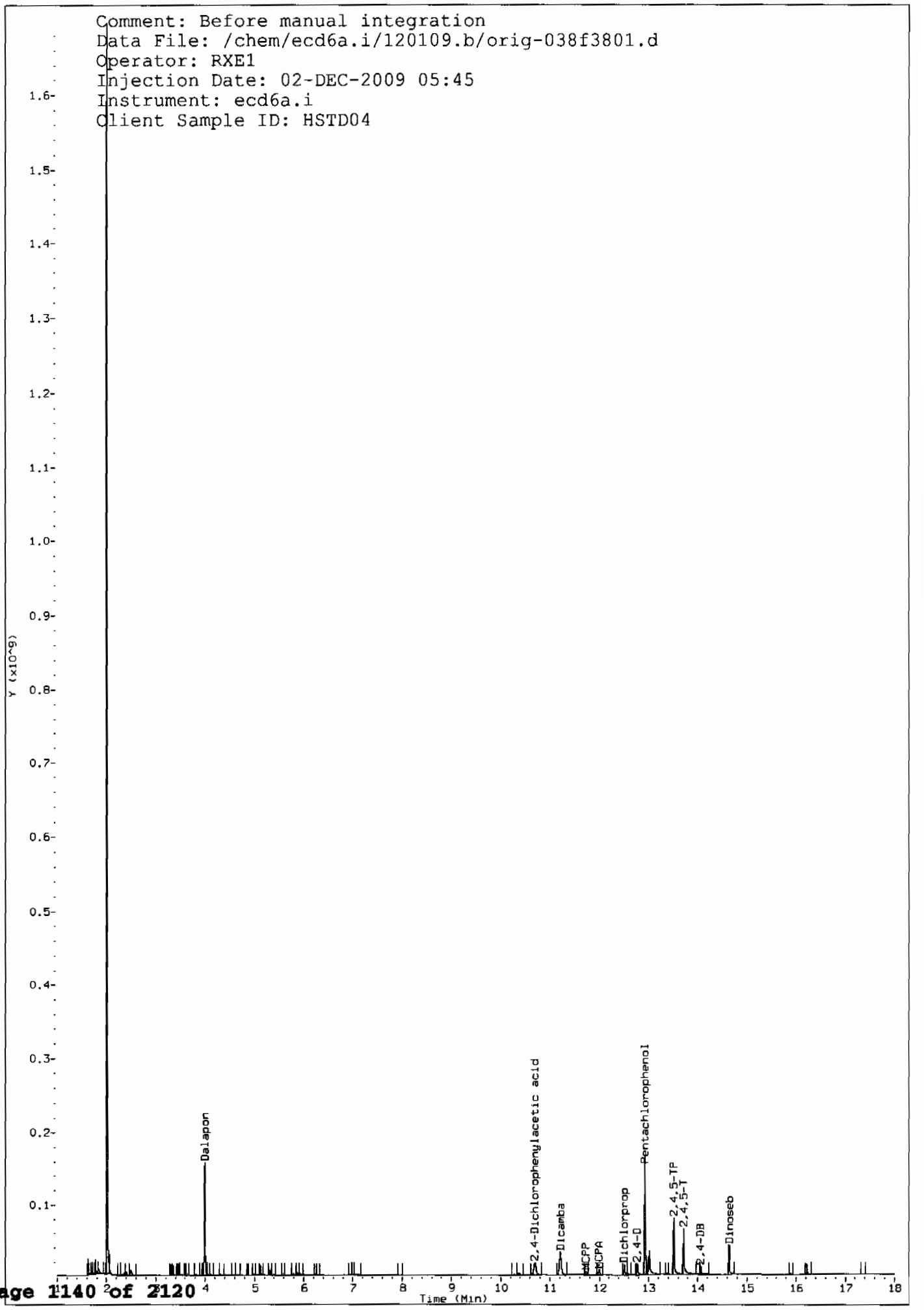

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/038b3801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD04
Inj Date : 02-DEC-2009 05:45
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
1 Dalapon					CAS #: 88-85-7	
3.948	3.963	-0.015	234850038	2000.00	2130	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.709	11.717	-0.008	67632352	500.000	569	
3 MCPP					CAS #: 7085-19-0	
12.243	12.246	-0.003	9312312	20000.0	24100	(M)
4 Dicamba					CAS #: 6597-78-0	
11.997	12.000	-0.003	102566235	200.000	229	
5 MCPA					CAS #: 94-74-6	
12.551	12.552	-0.001	15417957	20000.0	20200	
6 Dichlorprop					CAS #: 120-36-5	
12.924	12.927	-0.003	26249615	200.000	215	
7 2,4-D					CAS #: 94-75-7	
13.213	13.216	-0.003	33432414	200.000	228	
43 Pentachlorophenol					CAS #: 87-86-5	
13.486	13.487	-0.001	311913073	200.000	231	
8 2,4,5-TP					CAS #: 93-72-1	
13.825	13.825	0.000	132503977	200.000	230	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.064	14.065	-0.001	109270376	200.000	229		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	59969396	200.000	260		(M)
11 2,4-DB					CAS #: 94-82-6		
14.353	14.354	-0.001	15593198	200.000	234		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/038b3801.d

Date : 02-DEC-2009 05:45

Client ID: HSTD04

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

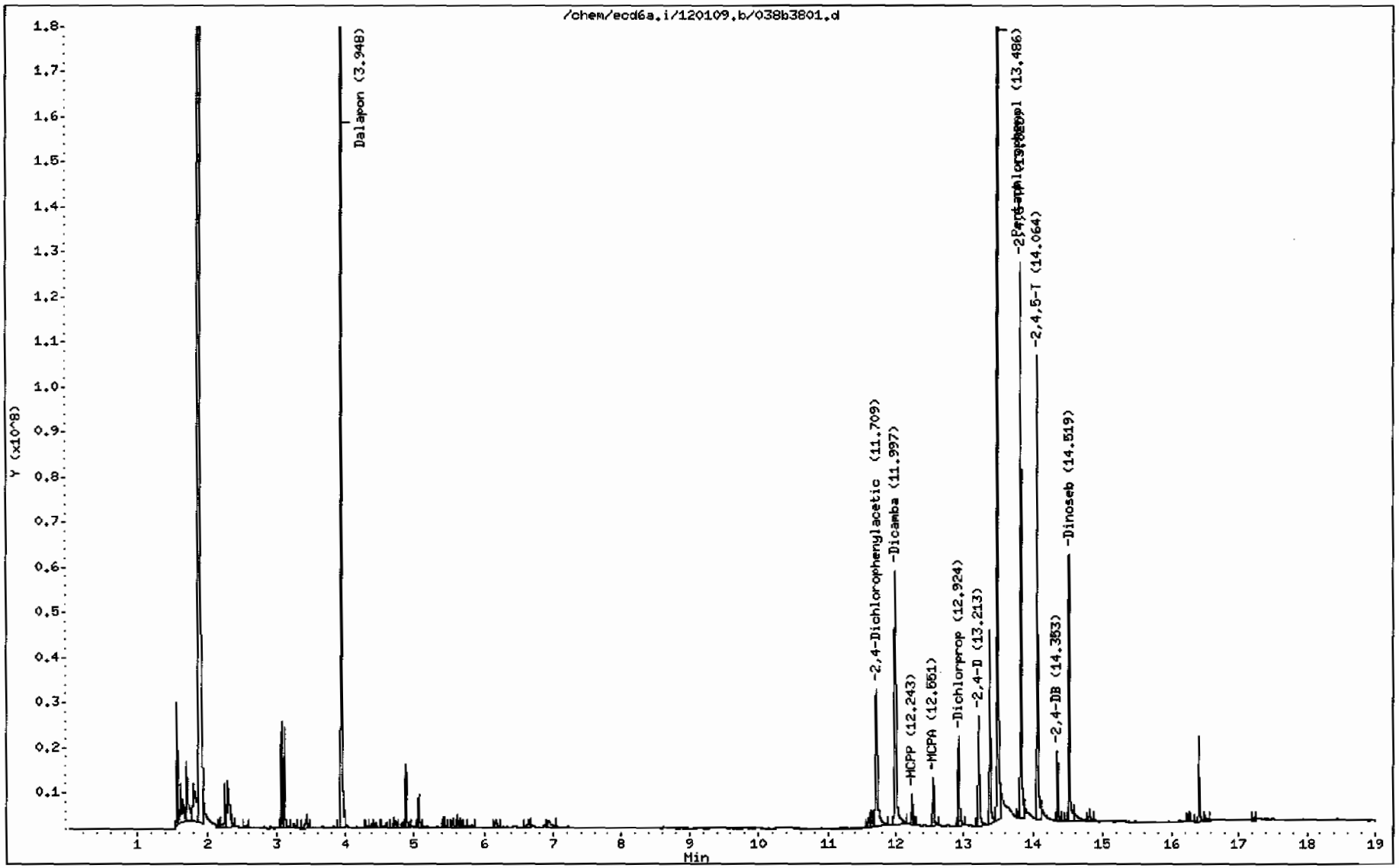

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/038b3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

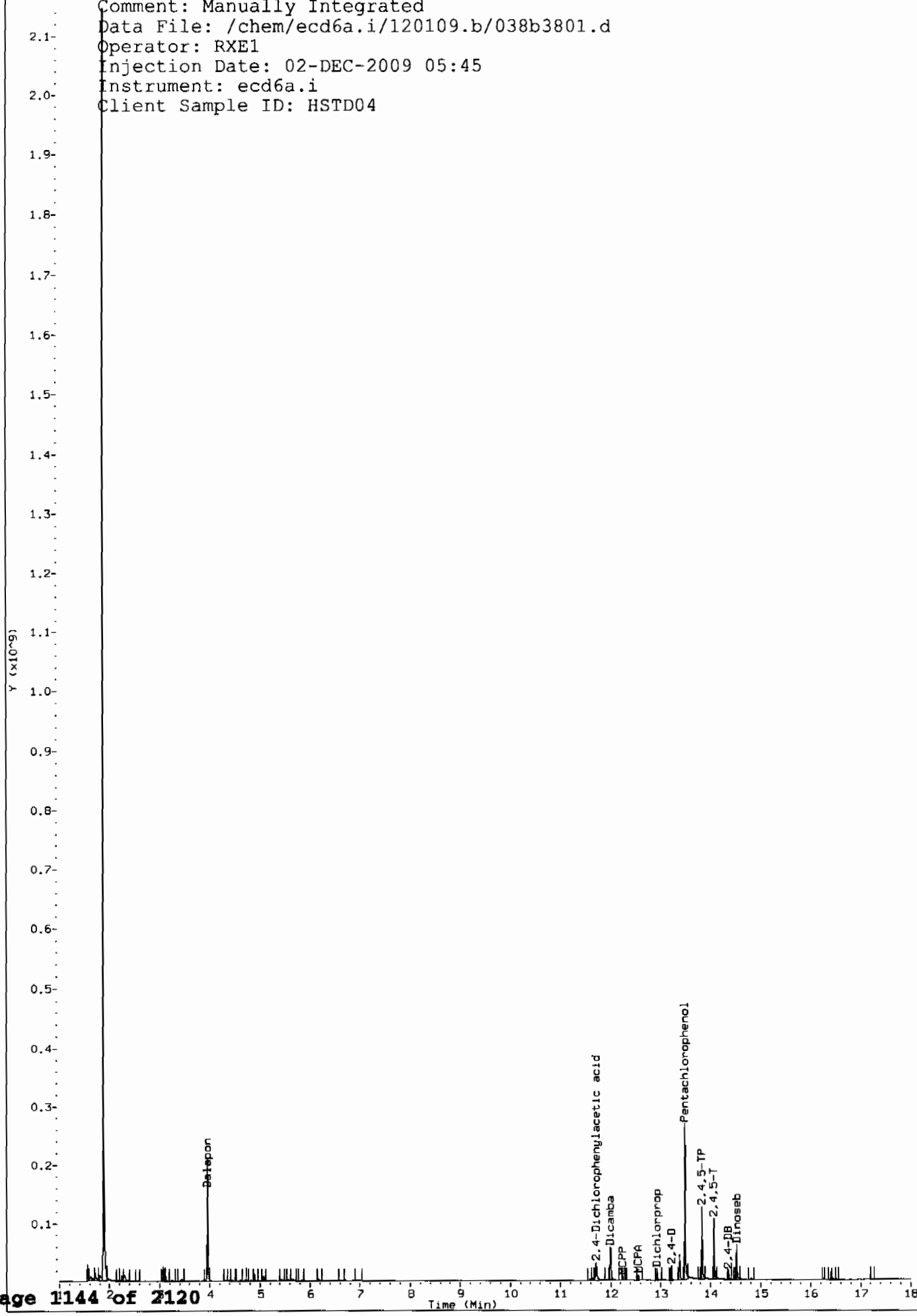

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-038b3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

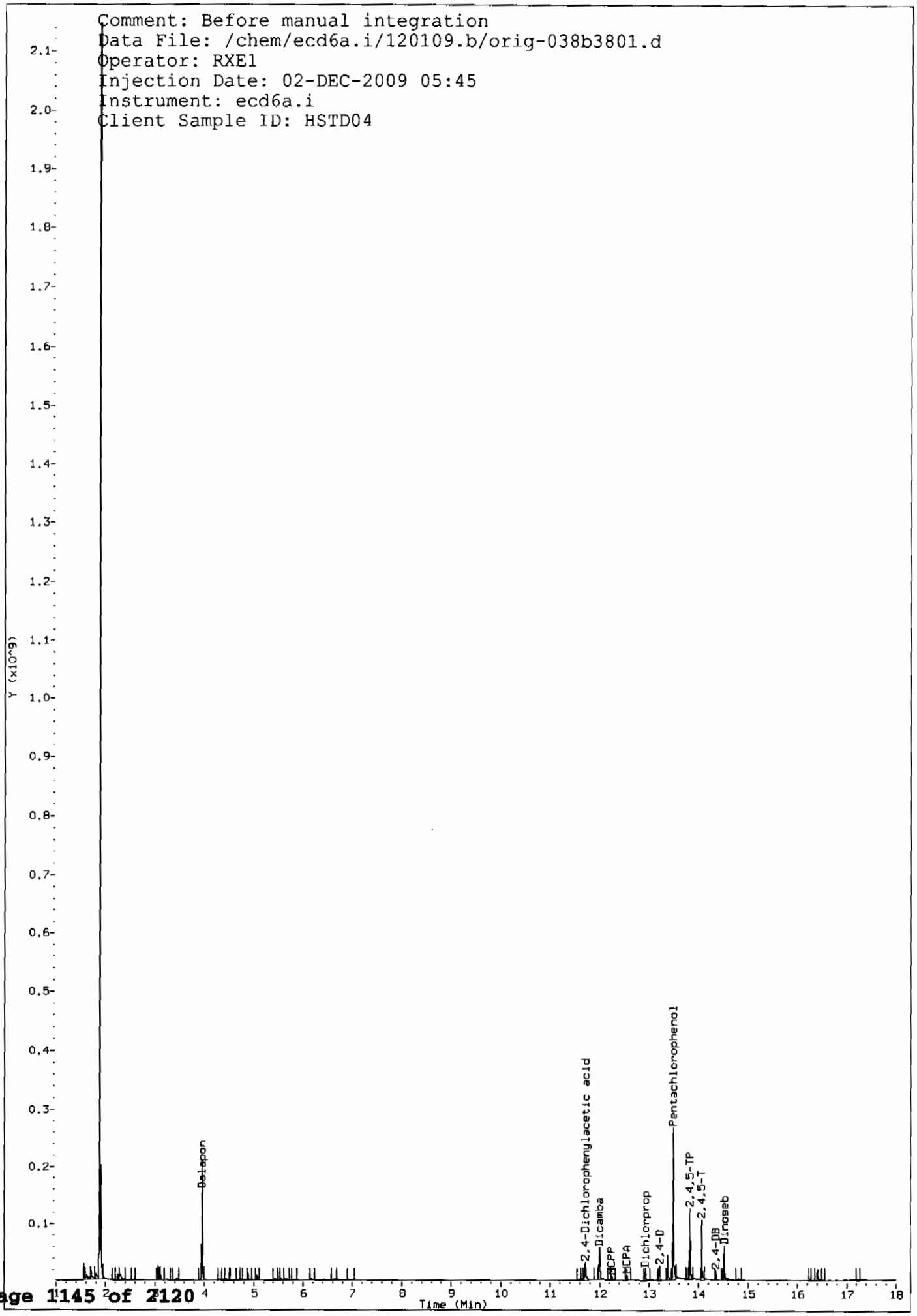

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	10.74	
02	HSTD01	WHB091030-01	12/01/09	1250	10.74	
03	HSTD02	WHB091030-02	12/01/09	1320	10.73	
04	HSTD03	WHB091030-03	12/01/09	1348	10.71	
05	HSTD04	WHB091030-04	12/01/09	1416	10.70	
06	HSTD05	WHB091030-05	12/01/09	1445	10.70	
07	HSTD06	WHB091030-06	12/01/09	1512	10.69	
08	HSTD07	WHB091030-07	12/01/09	1540	10.68	
09	HSTD01	WHB091030-12	12/01/09	1608	10.70	
10	HIBLK02	WHB091117-02	12/01/09	1635	10.74	
11	ZZZZZ	ZZZZZ	12/01/09	1704	10.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	10.70	
13	ZZZZZ	ZZZZZ	12/01/09	1800	10.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	10.70	
15	ZZZZZ	ZZZZZ	12/01/09	1856	10.70	
16	ZZZZZ	ZZZZZ	12/01/09	1925	10.69	
17	ZZZZZ	ZZZZZ	12/01/09	1952	10.68	
18	ZZZZZ	ZZZZZ	12/01/09	2020	10.69	
19	ZZZZZ	ZZZZZ	12/01/09	2048	10.71	
20	ZZZZZ	ZZZZZ	12/01/09	2116	10.68	
21	HSTD02	WHB091030-12	12/01/09	2144	10.69	
22	HIBLK03	WHB091117-02	12/01/09	2212	10.73	
23	HBLK01	1201982252	12/01/09	2241	10.73	
24	HBLK01LCS	1201982255	12/01/09	2309	10.69	
25	ZZZZZ	ZZZZZ	12/01/09	2338	10.73	
26	ZZZZZ	ZZZZZ	12/02/09	0006	10.70	
27	ZZZZZ	ZZZZZ	12/02/09	0035	10.70	
28	HSTD03	WHB091030-12	12/02/09	0102	10.69	
29	HIBLK04	WHB091117-02	12/02/09	0131	10.73	
30	ZZZZZ	ZZZZZ	12/02/09	0159	10.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	10.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	10.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	10.73	
02	WST03-10-2132	241524002	12/02/09	0352	10.74	
03	ZZZZZ	ZZZZZ	12/02/09	0421	10.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	10.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	10.72	
06	HSTD04	WHB091030-12	12/02/09	0545	10.69	
07	HIBLK05	WHB091117-02	12/02/09	0613	10.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	10.74	
09	ZZZZZ	ZZZZZ	12/02/09	0710	10.69	
10	ZZZZZ	ZZZZZ	12/02/09	0739	10.74	
11	ZZZZZ	ZZZZZ	12/02/09	0808	10.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	10.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	10.72	
14	HSTD05	WHB091030-12	12/02/09	0932	10.68	
15	HIBLK06	WHB091117-02	12/02/09	1000	10.73	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	10.72	
18	ZZZZZ	ZZZZZ	12/02/09	1131	10.70	
19	ZZZZZ	ZZZZZ	12/02/09	1159	10.71	
20	ZZZZZ	ZZZZZ	12/02/09	1227	10.71	
21	ZZZZZ	ZZZZZ	12/02/09	1255	10.68	
22	HSTD06	WHB091030-12	12/02/09	1335	10.69	
23	HIBLK07	WHB091117-02	12/02/09	1404	10.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	10.71	
25	ZZZZZ	ZZZZZ	12/02/09	1501	10.72	
26	ZZZZZ	ZZZZZ	12/02/09	1529	10.72	
27	ZZZZZ	ZZZZZ	12/02/09	1557	10.72	
28	ZZZZZ	ZZZZZ	12/02/09	1625	10.69	
29	ZZZZZ	ZZZZZ	12/02/09	1653	10.69	
30	ZZZZZ	ZZZZZ	12/02/09	1721	10.71	
31	ZZZZZ	ZZZZZ	12/02/09	1748	10.71	
32	HSTD07	WHB091030-12	12/02/09	1816	10.69	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	11.73	
02	HSTD01	WHB091030-01	12/01/09	1250	11.73	
03	HSTD02	WHB091030-02	12/01/09	1320	11.73	
04	HSTD03	WHB091030-03	12/01/09	1348	11.72	
05	HSTD04	WHB091030-04	12/01/09	1416	11.72	
06	HSTD05	WHB091030-05	12/01/09	1445	11.72	
07	HSTD06	WHB091030-06	12/01/09	1512	11.71	
08	HSTD07	WHB091030-07	12/01/09	1540	11.71	
09	HSTD01	WHB091030-12	12/01/09	1608	11.72	
10	HIBLK02	WHB091117-02	12/01/09	1635	11.73	
11	ZZZZZ	ZZZZZ	12/01/09	1704	11.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	11.72	
13	ZZZZZ	ZZZZZ	12/01/09	1800	11.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	11.72	
15	ZZZZZ	ZZZZZ	12/01/09	1856	11.72	
16	ZZZZZ	ZZZZZ	12/01/09	1925	11.71	
17	ZZZZZ	ZZZZZ	12/01/09	1952	11.71	
18	ZZZZZ	ZZZZZ	12/01/09	2020	11.71	
19	ZZZZZ	ZZZZZ	12/01/09	2048	11.72	
20	ZZZZZ	ZZZZZ	12/01/09	2116	11.71	
21	HSTD02	WHB091030-12	12/01/09	2144	11.71	
22	HIBLK03	WHB091117-02	12/01/09	2212	11.73	
23	HBLK01	1201982252	12/01/09	2241	11.73	
24	HBLK01LCS	1201982255	12/01/09	2309	11.71	
25	ZZZZZ	ZZZZZ	12/01/09	2338	11.73	
26	ZZZZZ	ZZZZZ	12/02/09	0006	11.72	
27	ZZZZZ	ZZZZZ	12/02/09	0035	11.72	
28	HSTD03	WHB091030-12	12/02/09	0102	11.71	
29	HIBLK04	WHB091117-02	12/02/09	0131	11.73	
30	ZZZZZ	ZZZZZ	12/02/09	0159	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	11.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	11.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	11.73	
02	WST03-10-2132	241524002	12/02/09	0352	11.73	
03	ZZZZZ	ZZZZZ	12/02/09	0421	11.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	11.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	11.73	
06	HSTD04	WHB091030-12	12/02/09	0545	11.71	
07	HIBLK05	WHB091117-02	12/02/09	0613	11.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	11.73	
09	ZZZZZ	ZZZZZ	12/02/09	0710	11.71	
10	ZZZZZ	ZZZZZ	12/02/09	0739	11.73	
11	ZZZZZ	ZZZZZ	12/02/09	0808	11.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	11.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	11.72	
14	HSTD05	WHB091030-12	12/02/09	0932	11.71	
15	HIBLK06	WHB091117-02	12/02/09	1000	11.72	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	11.72	
18	ZZZZZ	ZZZZZ	12/02/09	1131	11.72	
19	ZZZZZ	ZZZZZ	12/02/09	1159	11.72	
20	ZZZZZ	ZZZZZ	12/02/09	1227	11.72	
21	ZZZZZ	ZZZZZ	12/02/09	1255	11.70	
22	HSTD06	WHB091030-12	12/02/09	1335	11.71	
23	HIBLK07	WHB091117-02	12/02/09	1404	11.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	11.72	
25	ZZZZZ	ZZZZZ	12/02/09	1501	11.72	
26	ZZZZZ	ZZZZZ	12/02/09	1529	11.72	
27	ZZZZZ	ZZZZZ	12/02/09	1557	11.73	
28	ZZZZZ	ZZZZZ	12/02/09	1625	11.71	
29	ZZZZZ	ZZZZZ	12/02/09	1653	11.71	
30	ZZZZZ	ZZZZZ	12/02/09	1721	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	1748	11.72	
32	HSTD07	WHB091030-12	12/02/09	1816	11.71	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

Identification Summary

SDG Number: 10–600 **Client ID:** LCS for batch 927147

Lab Sample ID: 1201982255

Data File:	024f2401.d	**Data File:**	024b2401.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	01–DEC–09 23:09	**Analyzed:**	01–DEC–09 23:09

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dalapon								5.61
	Column 1	1	4	3.97 – 4.03	204		ug/kg	
	Column 2	1	3.96	3.93 – 3.99	216		ug/kg	
Dicamba								2.22
	Column 1	1	11.21	11.15 – 11.27	35.2		ug/kg	
	Column 2	1	12	11.94 – 12.06	36		ug/kg	
MCPP								40.7
	Column 1	1	11.73	11.67 – 11.79	3700		ug/kg	
	Column 2	1	12.25	12.19 – 12.31	2450		ug/kg	
MCPA								11.2
	Column 1	1	12	11.94 – 12.06	3370		ug/kg	
	Column 2	1	12.55	12.49 – 12.61	3020		ug/kg	
Dichlorprop								9.37
	Column 1	1	12.51	12.45 – 12.57	39.1		ug/kg	
	Column 2	1	12.92	12.87 – 12.99	35.6		ug/kg	

Identification Summary

SDG Number: 10–600 **Client ID:** LCS for batch 927147

Lab Sample ID: 1201982255

Data File:	024f2401.d	**Data File:**	024b2401.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	01–DEC–09 23:09	**Analyzed:**	01–DEC–09 23:09

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								9.79
	Column 1	1	12.77	12.71 – 12.83	39.2		ug/kg	
	Column 2	1	13.21	13.16 – 13.28	35.5		ug/kg	
2,4,5–TP								2.94
	Column 1	1	13.51	13.48 – 13.54	39.7		ug/kg	
	Column 2	1	13.82	13.8 – 13.86	38.5		ug/kg	
2,4,5–T								4.76
	Column 1	1	13.71	13.67 – 13.75	38.4		ug/kg	
	Column 2	1	14.06	14.04 – 14.1	40.3		ug/kg	
2,4–DB								4.22
	Column 1	1	14.06	14.02 – 14.1	41.4		ug/kg	
	Column 2	1	14.35	14.31 – 14.39	39.7		ug/kg	
Dinoseb								17.9
	Column 1	1	14.64	14.61 – 14.67	38.9		ug/kg	
	Column 2	1	14.52	14.49 – 14.55	46.5		ug/kg	

QUALITY CONTROL DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982252**				
Client Sample:	**QC for batch 927147**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927147**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**927148**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:41**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:11**	**Aliquot:**	**50 g**	**Final Volume:**	**10 mL**
Data File:	**023f2301.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	023b2301.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75-99-0	Dalapon	U	100	ug/kg	20.0	100	1
1918-00-9	Dicamba	U	5.00	ug/kg	1.66	5.00	1
93-65-2	MCPP	U	1000	ug/kg	200	1000	1
94-74-6	MCPA	U	1000	ug/kg	230	1000	1
120-36-5	Dichlorprop	U	5.00	ug/kg	1.66	5.00	1
94-75-7	2,4-D	U	5.00	ug/kg	1.66	5.00	1
93-72-1	2,4,5-TP	U	5.00	ug/kg	1.66	5.00	1
93-76-5	2,4,5-T	U	5.00	ug/kg	1.66	5.00	1
94-82-6	2,4-DB	U	5.00	ug/kg	1.66	5.00	1
88-85-7	Dinoseb	U	5.00	ug/kg	1.66	5.00	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/023f2301c.d
Lab Smp Id: 1201982252 Client Smp ID: HBLK01
Inj Date : 01-DEC-2009 22:41
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982252|1|
Misc Info : |ECD51H_1SF|927148|SVHF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 14:36 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 23 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.732	10.698	0.034	32892147	309.571	61.9

Data File: /chem/ecd6a.i/120109.b/023f2301c.d

Date : 01-DEC-2009 22:41

Client ID: HBLK01

Sample Info: |120198225211|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

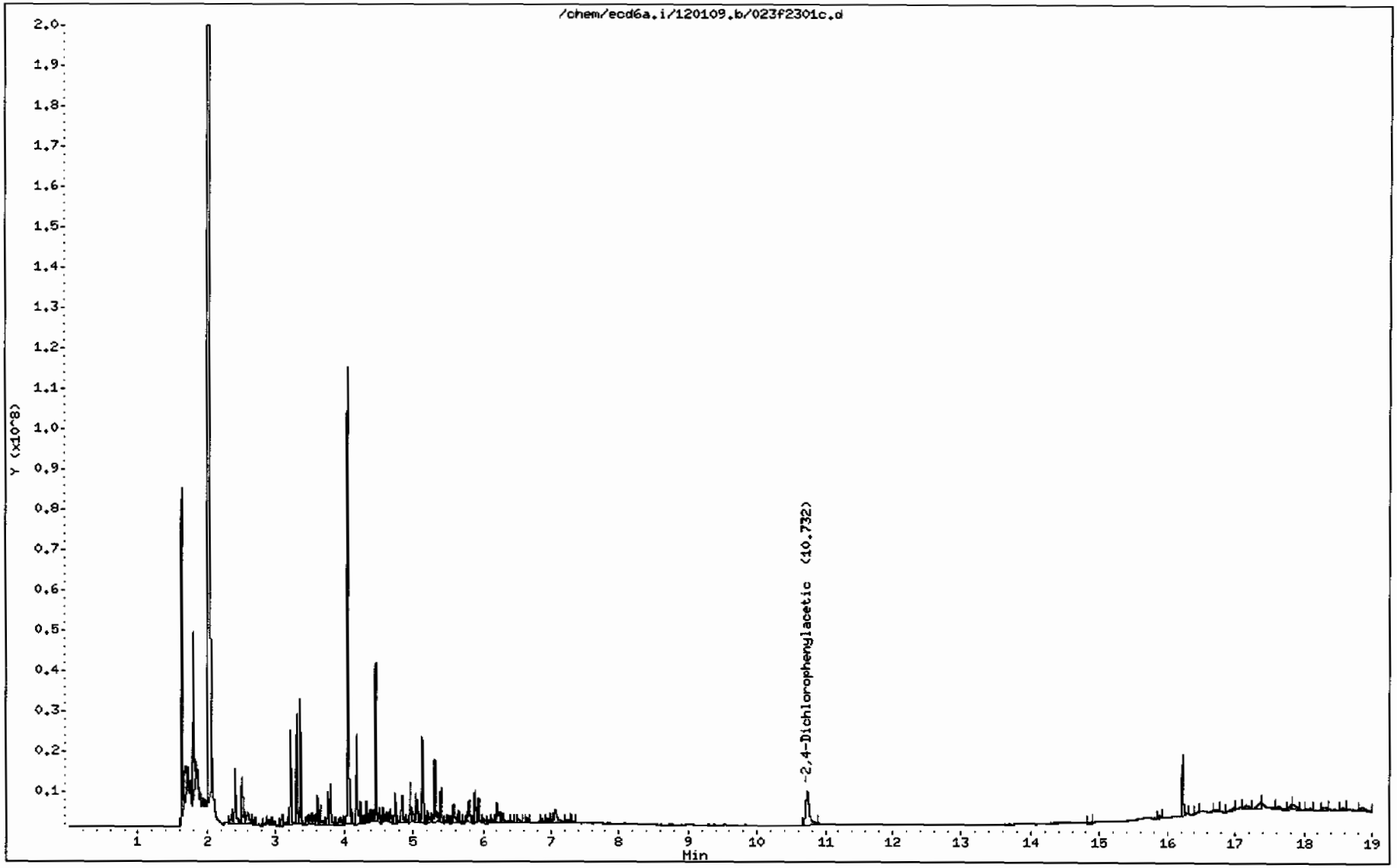

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/023b2301c.d
Lab Smp Id: 1201982252 Client Smp ID: HBLK01
Inj Date : 01-DEC-2009 22:41
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982252|1|
Misc Info : |ECD51H_1SF|927148|SVHF|MB|SOIL|MB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 14:33 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 23 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.729	11.717	0.012	36360699	305.731	61.1

Data File: /chem/ecd6a.i/120109.b/023b2301c.d

Date : 01-DEC-2009 22:41

Client ID: HBLK01

Sample Info: |1201982252|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

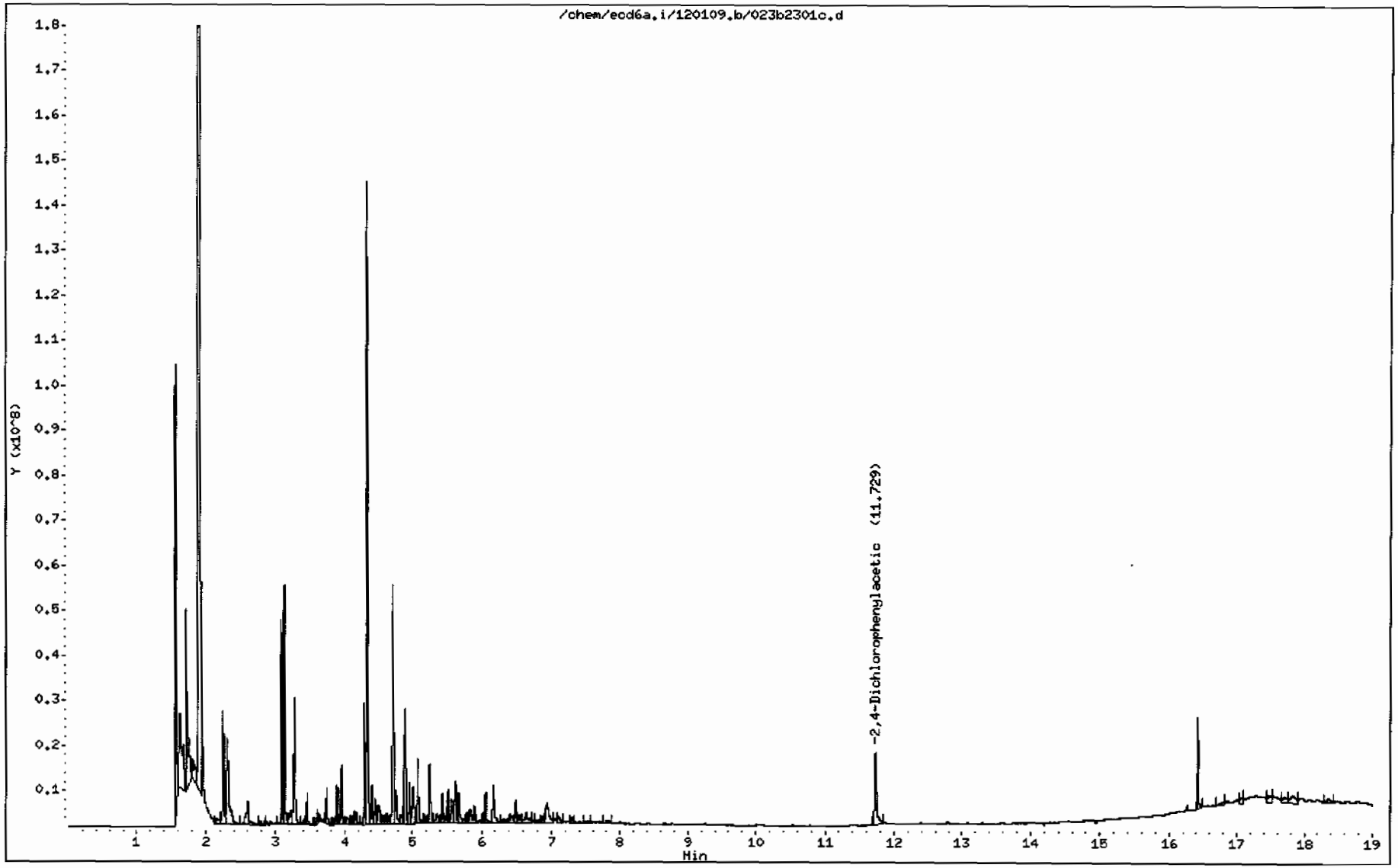

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982255**				
Client Sample:	**QC for batch 927147**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927147**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**927148**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:09**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:11**	**Aliquot:**	**50 g**	**Final Volume:**	**10 mL**
Data File:	**024f2401.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	024b2401.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon		216	ug/kg	20.0	100	2
1918–00–9	Dicamba		36.0	ug/kg	1.66	5.00	2
93–65–2	MCPP	P	3700	ug/kg	200	1000	1
94–74–6	MCPA		3370	ug/kg	230	1000	1
120–36–5	Dichlorprop		39.1	ug/kg	1.66	5.00	1
94–75–7	2,4–D		39.2	ug/kg	1.66	5.00	1
93–72–1	2,4,5–TP		39.7	ug/kg	1.66	5.00	1
93–76–5	2,4,5–T		40.3	ug/kg	1.66	5.00	2
94–82–6	2,4–DB		41.4	ug/kg	1.66	5.00	1
88–85–7	Dinoseb		46.5	ug/kg	1.66	5.00	2

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/024f2401c.d
Lab Smp Id: 1201982255 Client Smp ID: HBLK01LCS
Inj Date : 01-DEC-2009 23:09
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982255|1|
Misc Info : |ECD51H_1SF|927148|SVHF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 14:36 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 24 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	10.693	10.698	-0.005	50138509	471.889	94.4
1 Dalapon						CAS #: 75-99-0
	3.999	4.000	-0.001	85158329	1018.90	204
3 Dicamba						CAS #: 6597-78-0
	11.210	11.214	-0.004	70202384	176.195	35.2
4 MCPP						CAS #: 7085-19-0
	11.728	11.729	-0.001	6453383	18517.3	3700

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
5 MCPA					CAS #: 94-74-6
11.998	11.999	-0.001	10946016	16870.4	3370
6 Dichlorprop					CAS #: 120-36-5
12.510	12.512	-0.002	19202727	195.718	39.1
7 2,4-D					CAS #: 94-75-7
12.772	12.775	-0.003	19562272	195.989	39.2
8 2,4,5-TP					CAS #: 93-72-1
13.510	13.512	-0.002	95641175	198.346	39.7
9 2,4,5-T					CAS #: 93-76-5
13.713	13.715	-0.002	79958571	192.086	38.4
10 2,4-DB					CAS #: 94-82-6
14.062	14.061	0.001	9727464	207.116	41.4
11 Dinoseb					CAS #: 88-85-7
14.638	14.638	0.000	42588835	194.389	38.9

Data File: /chem/ecd6a.i/120109.b/024f2401c.d
Date : 01-DEC-2009 23:09
Client ID: HBLK01LCS
Sample Info: |120198225511|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

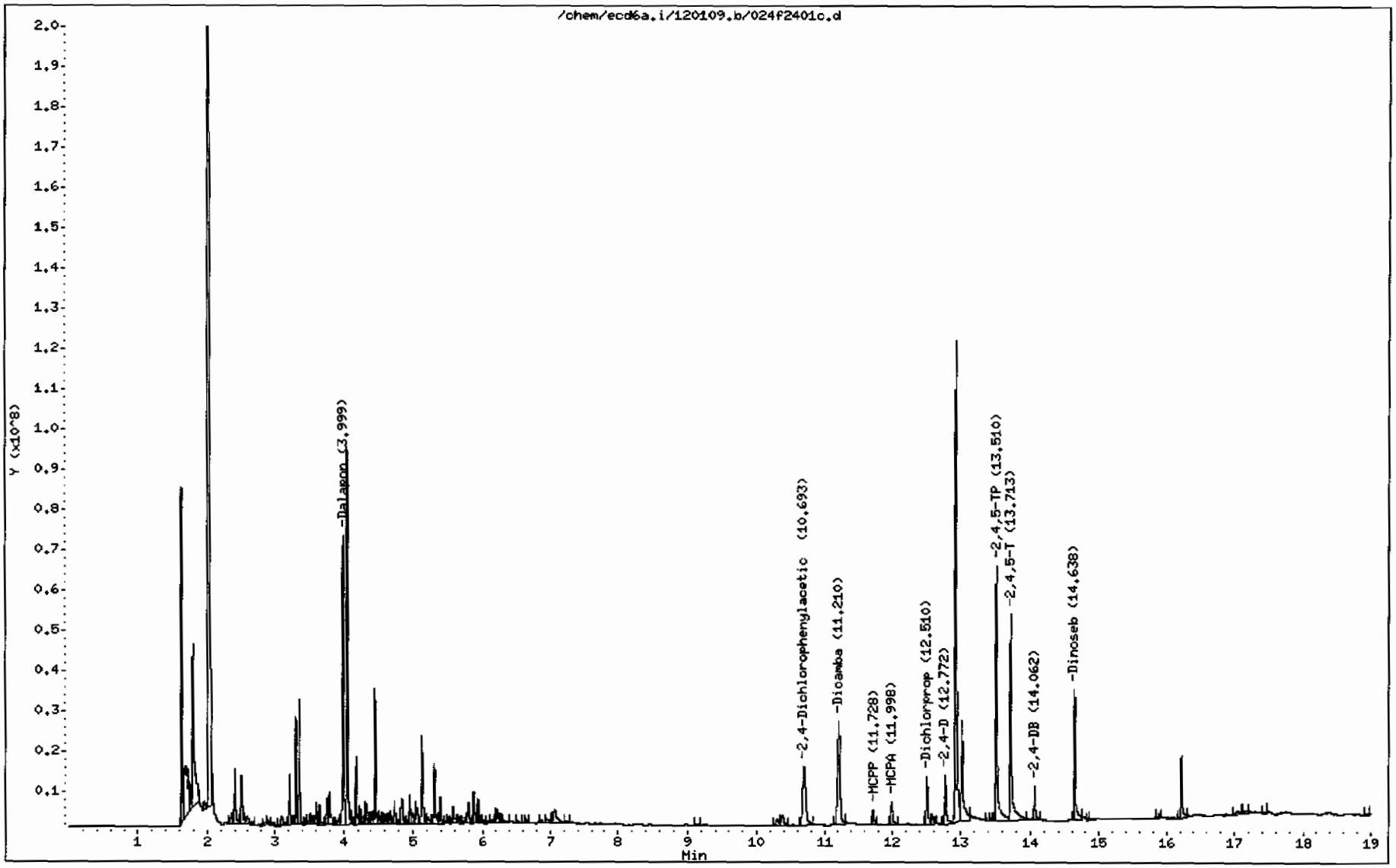

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/024b2401c.d
Lab Smp Id: 1201982255 Client Smp ID: HBLK01LCS
Inj Date : 01-DEC-2009 23:09
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982255|1|
Misc Info : |ECD51H_1SF|927148|SVHF|LCS|SOIL|LCS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 24 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.713	11.717	-0.004	53505360	449.889	90.0
1 Dalapon					CAS #: 88-85-7
3.961	3.963	-0.002	118653276	1077.71	216
4 Dicamba					CAS #: 6597-78-0
12.000	12.000	0.000	80613357	180.154	36.0
3 MCPP					CAS #: 7085-19-0
12.246	12.246	0.000	4733218	12252.8	2450

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
5 MCPA					CAS #: 94-74-6
12.551	12.552	-0.001	11508761	15079.4	3020
6 Dichlorprop					CAS #: 120-36-5
12.925	12.927	-0.002	21781081	178.208	35.6
7 2,4-D					CAS #: 94-75-7
13.214	13.216	-0.002	26051024	177.699	35.5
8 2,4,5-TP					CAS #: 93-72-1
13.824	13.825	-0.001	111130910	192.604	38.5
9 2,4,5-T					CAS #: 93-76-5
14.064	14.065	-0.001	96105926	201.443	40.3
11 2,4-DB					CAS #: 94-82-6
14.352	14.354	-0.002	13228531	198.556	39.7
10 Dinoseb					CAS #: 88-85-7
14.518	14.519	-0.001	53612531	232.704	46.5

Data File: /chem/ecd6a.i/120109.b/024b2401c.d

Date : 01-DEC-2009 23:09

Client ID: HBLK01LCS

Sample Info: |1201982255|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

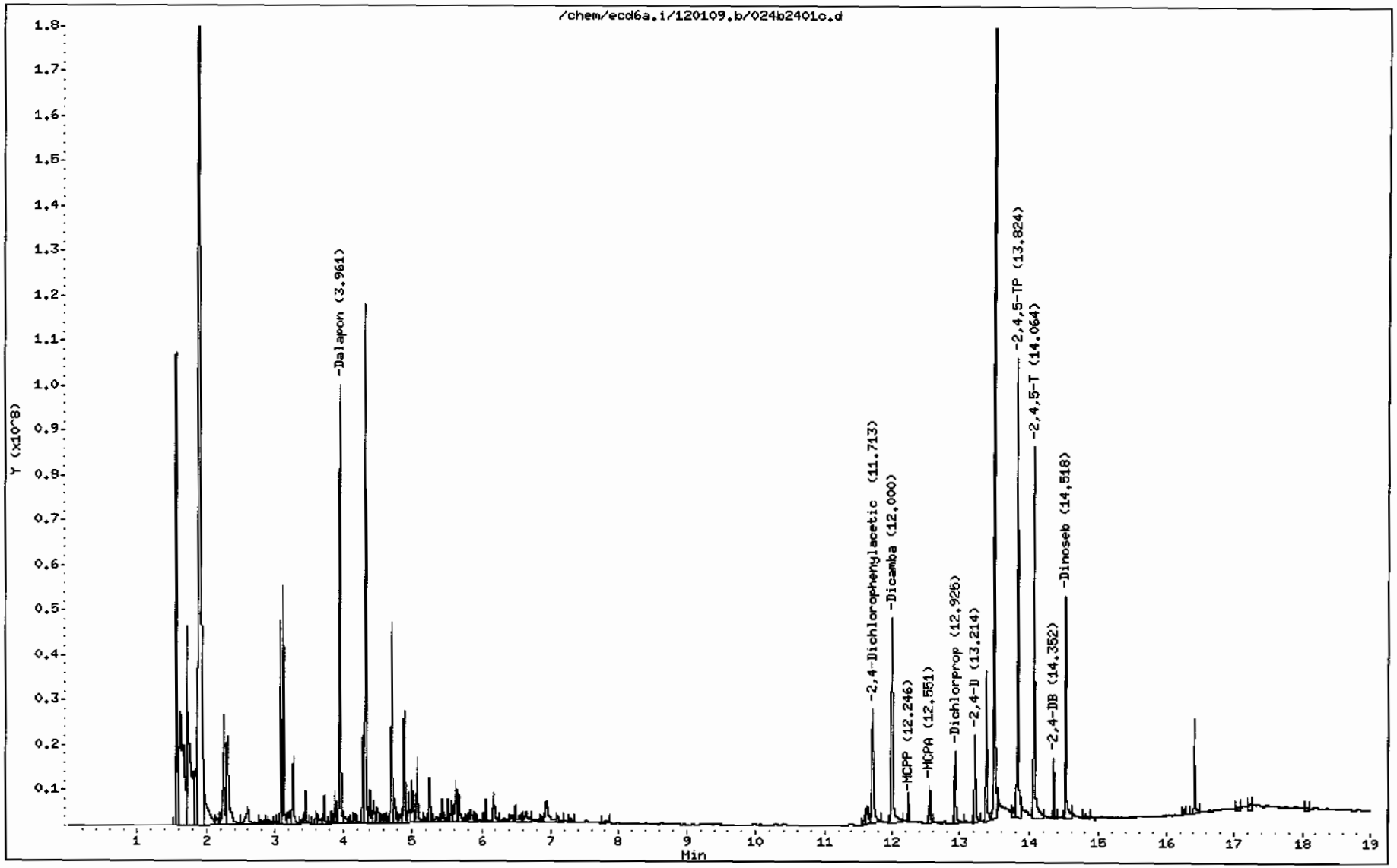

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD6

DATE: 12/02/2009 METHOD: ECD6-F-8151A-120109.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-011 Analysis of Chlorophenoxy Herbicides by ECD
EPA Method: 8151A Chlorinated Herbicides by GC Using Derivation
Sequence Number:120109 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WHB091117-02	RXE1	01-DEC-2009 12:22		120109	1.0	INSTBLK	CLEAN
002f0201.d	WHB091030-01	RXE1	01-DEC-2009 12:50		120109	1.0	HSTD01	ICAL LVL 1
003f0301.d	WHB091030-02	RXE1	01-DEC-2009 13:20		120109	1.0	HSTD02	ICAL LVL 2
004f0401.d	WHB091030-03	RXE1	01-DEC-2009 13:48		120109	1.0	HSTD03	ICAL LVL 3
005f0501.d	WHB091030-04	RXE1	01-DEC-2009 14:16		120109	1.0	HSTD04	ICAL LVL 4
006f0601.d	WHB091030-05	RXE1	01-DEC-2009 14:45		120109	1.0	HSTD05	ICAL LVL 5
007f0701.d	WHB091030-06	RXE1	01-DEC-2009 15:12		120109	1.0	HSTD06	ICAL LVL 6
008f0801.d	WHB091030-07	RXE1	01-DEC-2009 15:40		120109	1.0	HSTD07	ICAL LVL 7
009f0901.d	WHB091030-12	RXE1	01-DEC-2009 16:08		120109	1.0	HSTD01	USE. ICV. ALL ANALYTES PASSING BOTH COLUMNS.
010f1001.d	WHB091117-02	RXE1	01-DEC-2009 16:35		120109	1.0	INSTBLK	CLEAN
011f1101.d	1201982244	RXE1	01-DEC-2009 17:04	927142	10-671	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
012f1201.d	1201982247	RXE1	01-DEC-2009 17:32	927142	10-671	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
013f1301.d	241813006	RXE1	01-DEC-2009 18:00	927142	10-671	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
014f1401.d	1201982245	RXE1	01-DEC-2009 18:28	927142	10-671	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
015f1501.d	1201982246	RXE1	01-DEC-2009 18:56	927142	10-671	1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241895002	RXE1	01-DEC-2009 19:25	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
017f1701.d	241895005	RXE1	01-DEC-2009 19:52	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

018f1801.d	241895008	RXE1	01-DEC-2009 20:20	927142	10-698		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
019f1901.d	241895011	RXE1	01-DEC-2009 20:48	927142	10-698		1.0	LANL	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
020f2001.d	241918005	RXE1	01-DEC-2009 21:16	927142	10-701		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
021f2101.d	WHB091030-12	RXE1	01-DEC-2009 21:44		120109		1.0	HSTD02	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
022f2201.d	WHB091117-02	RXE1	01-DEC-2009 22:12		120109		1.0	INSTBLK	CLEAN
023f2301.d	1201982252	RXE1	01-DEC-2009 22:41	927148	10-578		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
024f2401.d	1201982255	RXE1	01-DEC-2009 23:09	927148	10-578		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
025f2501.d	241423004	RXE1	01-DEC-2009 23:38	927148	10-578		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
026f2601.d	1201982253	RXE1	02-DEC-2009 00:06	927148	10-578		2.0	MS	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MSD.
027f2701.d	1201982254	RXE1	02-DEC-2009 00:35	927148	10-578		2.0	MSD	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MS.
028f2801.d	WHB091030-12	RXE1	02-DEC-2009 01:02		120109		1.0	HSTD03	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
029f2901.d	WHB091117-02	RXE1	02-DEC-2009 01:31		120109		1.0	INSTBLK	CLEAN
030f3001.d	241423005	RXE1	02-DEC-2009 01:59	927148	10-578		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
031f3101.d	241503002	RXE1	02-DEC-2009 02:27	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
032f3201.d	241503003	RXE1	02-DEC-2009 02:55	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
033f3301.d	241503004	RXE1	02-DEC-2009 03:24	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
034f3401.d	241524002	RXE1	02-DEC-2009 03:52	927148	10-600		20.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
035f3501.d	241697003	RXE1	02-DEC-2009 04:21	927148	10-648		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241697004	RXE1	02-DEC-2009 04:48	927148	10-648		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
037f3701.d	241714002	RXE1	02-DEC-2009 05:16	927148	10-650		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
038f3801.d	WHB091030-12	RXE1	02-DEC-2009 05:45		120109		1.0	HSTD04	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
039f3901.d	WHB091117-02	RXE1	02-DEC-2009 06:13		120109		1.0	INSTBLK	CLEAN
040f4001.d	1201982248	RXE1	02-DEC-2009 06:42	927145	241437		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
041f4101.d	1201982251	RXE1	02-DEC-2009 07:10	927145	241437		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

042f4201.d	241437003	RXE1	02-DEC-2009 07:39	927145	241437		1.0	PCGE	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
043f4301.d	241437009	RXE1	02-DEC-2009 08:08	927145	241437		1.0	PCGE	USE. $ LOW BOTH, CONFIRMED BY MS/MSD.
044f4401.d	1201982249	RXE1	02-DEC-2009 08:36	927145	241437		1.0	MS	USE. $/SPIKES LOW BOTH, CONFIRMED BY MSD.
045f4501.d	1201982250	RXE1	02-DEC-2009 09:04	927145	241437		1.0	MSD	USE. $/SPIKES LOW BOTH, CONFIRMED BY MS.
046f4601.d	WHB091030-12	RXE1	02-DEC-2009 09:32		120109		1.0	HSTD05	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
047f4701.d	WHB091117-02	RXE1	02-DEC-2009 10:00		120109		1.0	INSTBLK	CLEAN
048f4801.d	WE091201-02	RXE1	02-DEC-2009 10:28		120109		1.0	SCREEN	DUSE
049f4901.d	1201979176	RXE1	02-DEC-2009 11:03	927402	10-462-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
050f5001.d	1201980055	RXE1	02-DEC-2009 11:31	927402	10-578-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
051f5101.d	1201980841	RXE1	02-DEC-2009 11:59	927402	10-648-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
052f5201.d	1201982751	RXE1	02-DEC-2009 12:27	927402	10-600-1		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
053f5301.d	1201982752	RXE1	02-DEC-2009 12:55	927402	10-600-1		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
054f5401.d	WHB091030-12	RXE1	02-DEC-2009 13:35		120109		1.0	HSTD06	USE. CCV. DAL LOW (B), DB HI (F).
055f5501.d	WHB091117-02	RXE1	02-DEC-2009 14:04		120109		1.0	INSTBLK	CLEAN
056f5601.d	241040001	RXE1	02-DEC-2009 14:32	927402	10-462-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
057f5701.d	241424001	RXE1	02-DEC-2009 15:01	927402	10-578-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
058f5801.d	241424002	RXE1	02-DEC-2009 15:29	927402	10-578-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
059f5901.d	241527001	RXE1	02-DEC-2009 15:57	927402	10-600-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
060f6001.d	1201982753	RXE1	02-DEC-2009 16:25	927402	10-600-1		1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
061f6101.d	1201982754	RXE1	02-DEC-2009 16:53	927402	10-600-1		1.0	MSD	USE. D SLIGHT HI (F), PASSING (B).
062f6201.d	241704001	RXE1	02-DEC-2009 17:21	927402	10-648-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
063f6301.d	241704002	RXE1	02-DEC-2009 17:48	927402	10-648-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
064f6401.d	WHB091030-12	RXE1	02-DEC-2009 18:16		120109		1.0	HSTD07	USE. CCV. D/DB HI (F), PASSING (B).
065f6501.d	WHB091117-02	RXE1	02-DEC-2009 18:45		120109		1.0	INSTBLK	CLEAN
066f6601.d	1201983560	RXE1	02-DEC-2009 19:14	927672	10-653		1.0	MB	DUSE

10H

Instrument Batch: /chem/ecd6a.i/120109.b Page: 4

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

067f6701.d	1201983561	RXE1	02-DEC-2009 19:43	927672	10-653		1.0	LCS	DUSE
068f6801.d	241718001	RXE1	02-DEC-2009 20:11	927672	10-653		1.0	LANL	DUSE
069f6901.d	241728002	RXE1	02-DEC-2009 20:40	927672	10-654		1.0	LANL	DUSE
070f7001.d	241750002	RXE1	02-DEC-2009 21:08	927672	10-655		1.0	LANL	DUSE
071f7101.d	241750003	RXE1	02-DEC-2009 21:36	927672	10-655		1.0	LANL	DUSE
072f7201.d	1201983562	RXE1	02-DEC-2009 22:05	927672	10-655		1.0	MS	DUSE
073f7301.d	1201983563	RXE1	02-DEC-2009 22:33	927672	10-655		1.0	MSD	DUSE
074f7401.d	WHB091030-12	RXE1	02-DEC-2009 23:02		120109		1.0	HSTD08	USE. CCV. DB HI (F), PASSING (B).
075f7501.d	WHB091117-02	RXE1	02-DEC-2009 23:29		120109		1.0	INSTBLK	CLEAN
076f7601.d	241750004	RXE1	02-DEC-2009 23:58	927672	10-655		1.0	LANL	DUSE
077f7701.d	241750005	RXE1	03-DEC-2009 00:25	927672	10-655		1.0	LANL	DUSE
078f7801.d	241750006	RXE1	03-DEC-2009 00:54	927672	10-655		1.0	LANL	DUSE
079f7901.d	241750007	RXE1	03-DEC-2009 01:22	927672	10-655		1.0	LANL	DUSE
080f8001.d	241750008	RXE1	03-DEC-2009 01:50	927672	10-655		1.0	LANL	DUSE
081f8101.d	241750009	RXE1	03-DEC-2009 02:19	927672	10-655		1.0	LANL	DUSE
082f8201.d	241750010	RXE1	03-DEC-2009 02:47	927672	10-655		1.0	LANL	DUSE
083f8301.d	241750011	RXE1	03-DEC-2009 03:15	927672	10-655		1.0	LANL	DUSE
084f8401.d	WHB091030-12	RXE1	03-DEC-2009 03:44		120109		1.0	HSTD09	USE. CCV. DB HI (F), PASSING (B).
085f8501.d	WHB091117-02	RXE1	03-DEC-2009 04:12		120109		1.0	INSTBLK	CLEAN

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/026b2601.d
Lab Smp Id: 1201982253 Client Smp ID: WST03-10-2131MS
Inj Date : 02-DEC-2009 00:06
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982253|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MS|SOIL|MS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 26 QC Sample: MS
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.09000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.718	11.717	0.001	26800170	225.344	97.7	
1 Dalapon					CAS #: 88-85-7	
3.957	3.963	-0.006	72939226	662.496	287	
4 Dicamba					CAS #: 6597-78-0	
12.002	12.000	0.002	34785252	77.7376	33.7	
3 MCPP					CAS #: 7085-19-0	
12.246	12.246	0.000	2319629	6004.80	2600	(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.520	12.552	-0.032	31412726	41158.6	17800	(ARM)
6 Dichlorprop					CAS #: 120-36-5	
12.923	12.927	-0.004	8299195	67.9022	29.4	(M)
7 2,4-D					CAS #: 94-75-7	
13.215	13.216	-0.001	28922863	197.288	85.6	(RM)
8 2,4,5-TP					CAS #: 93-72-1	
13.823	13.825	-0.002	47229926	81.8557	35.5	(M)
9 2,4,5-T					CAS #: 93-76-5	
14.063	14.065	-0.002	36612866	76.7423	33.3	(M)
11 2,4-DB					CAS #: 94-82-6	
14.340	14.354	-0.014	11535343	173.142	75.1	(RM)
10 Dinoseb					CAS #: 88-85-7	
14.517	14.519	-0.002	27320806	118.586	51.4	(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/026b2601.d

Date : 02-DEC-2009 00:06

Client ID: WST03-10-2131MS

Sample Info: |120198225312|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

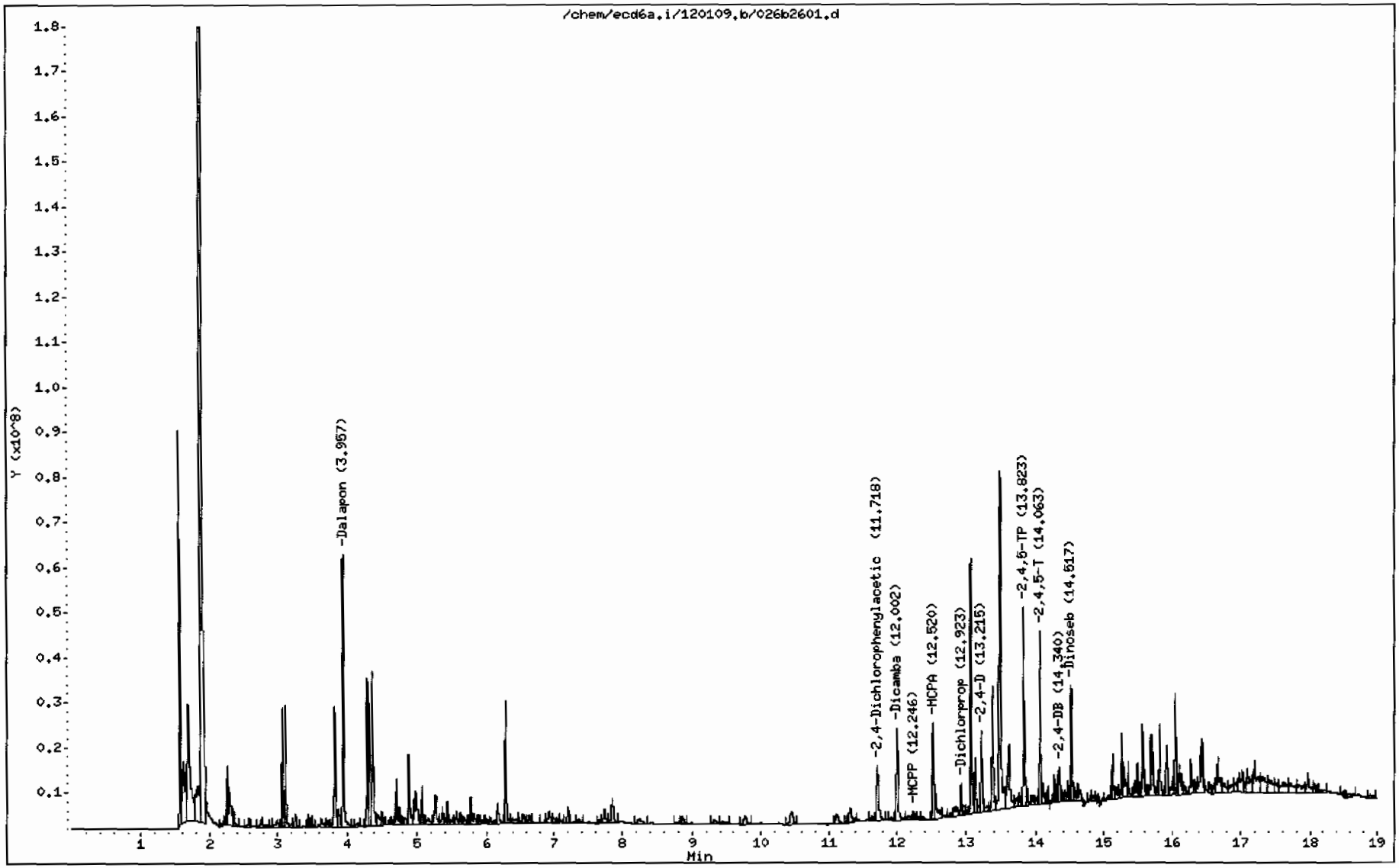

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/026f2601.d
Lab Smp Id: 1201982253 Client Smp ID: WST03-10-2131MS
Inj Date : 02-DEC-2009 00:06
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982253|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 26 QC Sample: MS
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.09000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.699	10.698	0.001	29065320	273.554	119	
1 Dalapon					CAS #: 75-99-0	
3.995	4.000	-0.005	53013799	634.300	275	
3 Dicamba					CAS #: 6597-78-0	
11.218	11.214	0.004	33703055	84.5886	36.7	(M)
4 MCPP					CAS #: 7085-19-0	
11.746	11.729	0.017	20608691	59134.5	25600	(ARM)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
11.995	11.999	-0.004	7961193	12270.1	5320	(RM)
6 Dichlorprop					CAS #: 120-36-5	
12.506	12.512	-0.006	9124464	92.9985	40.3	(M)
7 2,4-D					CAS #: 94-75-7	
12.769	12.775	-0.006	9407759	94.2536	40.9	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.507	13.512	-0.005	39765872	82.4687	35.8	(M)
9 2,4,5-T					CAS #: 93-76-5	
13.710	13.715	-0.005	28165891	67.6634	29.3	(M)
10 2,4-DB					CAS #: 94-82-6	
14.055	14.061	-0.006	7251772	154.404	67.0	(RM)
11 Dinoseb					CAS #: 88-85-7	
14.637	14.638	-0.001	25240175	115.204	50.0	(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/026f2601.d

Page 1

Date : 02-DEC-2009 00:06

Client ID: WST03-10-2131MS

Instrument: ecd6a.i

Sample Info: |1201982253|2|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLP

Column diameter: 0.25

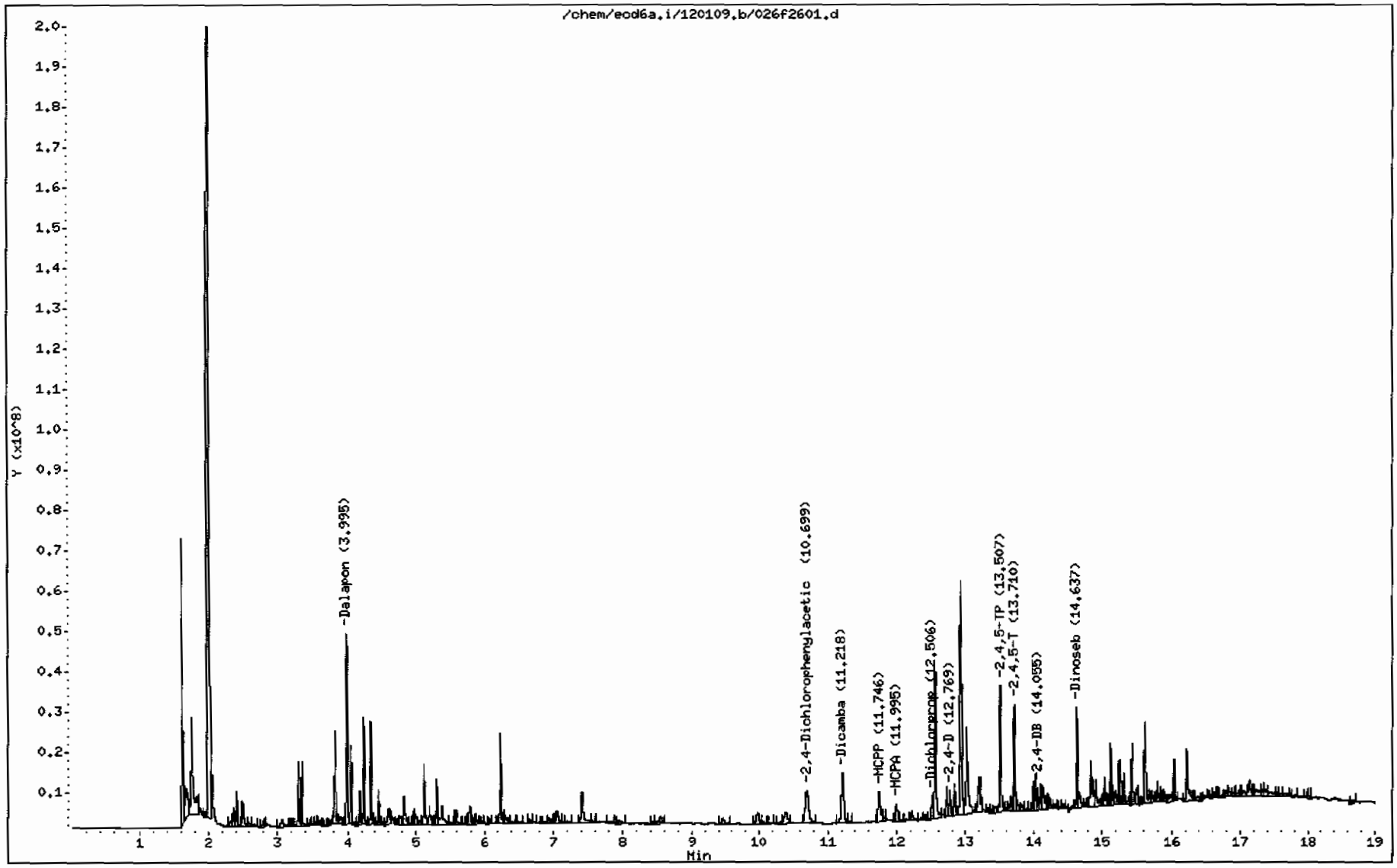

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/027b2701.d
Lab Smp Id: 1201982254 Client Smp ID: WST03-10-2131MSD
Inj Date : 02-DEC-2009 00:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982254|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MSD|SOIL|MSD|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 27 QC Sample: MSD
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.04000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.717	11.717	0.000	25643400	215.617	93.6	
1 Dalapon					CAS #: 88-85-7	
3.958	3.963	-0.005	70767571	642.771	279	
4 Dicamba					CAS #: 6597-78-0	
12.002	12.000	0.002	34307228	76.6693	33.3	
3 MCPP					CAS #: 7085-19-0	
12.247	12.246	0.001	2382639	6167.91	2680	(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.521	12.552	-0.031	12811558	16786.4	7290	(RM)
6 Dichlorprop					CAS #: 120-36-5	
12.923	12.927	-0.004	8306764	67.9641	29.5	(M)
7 2,4-D					CAS #: 94-75-7	
13.213	13.216	-0.003	17164718	117.084	50.8	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.823	13.825	-0.002	47920986	83.0534	36.0	(M)
9 2,4,5-T					CAS #: 93-76-5	
14.062	14.065	-0.003	36521007	76.5498	33.2	(M)
11 2,4-DB					CAS #: 94-82-6	
14.339	14.354	-0.015	12465341	187.100	81.2	(RM)
10 Dinoseb					CAS #: 88-85-7	
14.516	14.519	-0.003	23937459	103.900	45.1	(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/027b2701.d
Date : 02-DEC-2009 00:35
Client ID: WST03-10-2131MSD
Sample Info: |120198225412|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

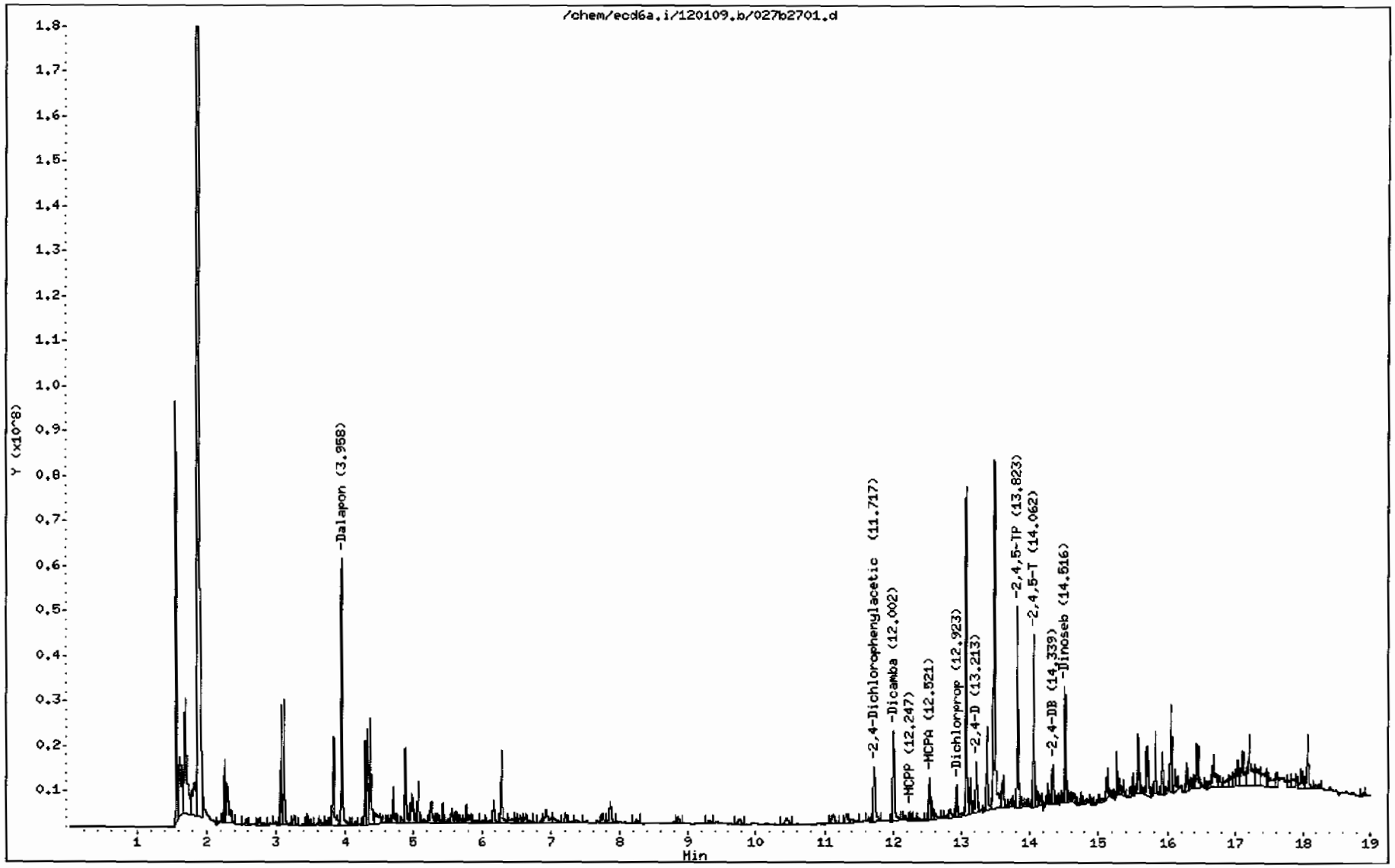

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/027f2701.d
Lab Smp Id: 1201982254 Client Smp ID: WST03-10-2131MSD
Inj Date : 02-DEC-2009 00:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982254|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 27 QC Sample: MSD
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.04000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.702	10.698	0.004	28004902	263.574	114	
1 Dalapon					CAS #: 75-99-0	
3.995	4.000	-0.005	53425384	639.225	277	
3 Dicamba					CAS #: 6597-78-0	
11.218	11.214	0.004	32915108	82.6110	35.8	
4 MCPP					CAS #: 7085-19-0	
11.741	11.729	0.012	7397727	21227.0	9210	(R)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
11.998	11.999	-0.001	7684540	11843.7	5140	(RM)
6 Dichlorprop					CAS #: 120-36-5	
12.505	12.512	-0.007	9011275	91.8449	39.9	(M)
7 2,4-D					CAS #: 94-75-7	
12.769	12.775	-0.006	9395563	94.1314	40.8	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.508	13.512	-0.004	40977161	84.9807	36.9	(M)
9 2,4,5-T					CAS #: 93-76-5	
13.710	13.715	-0.005	29033488	69.7477	30.3	(M)
10 2,4-DB					CAS #: 94-82-6	
14.055	14.061	-0.006	7304282	155.522	67.5	(RM)
11 Dinoseb					CAS #: 88-85-7	
14.637	14.638	-0.001	21889537	99.9106	43.4	(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/027f2701.d

Date : 02-DEC-2009 00:35

Client ID: WST03-10-2131MSD

Sample Info: |1201982254|2|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

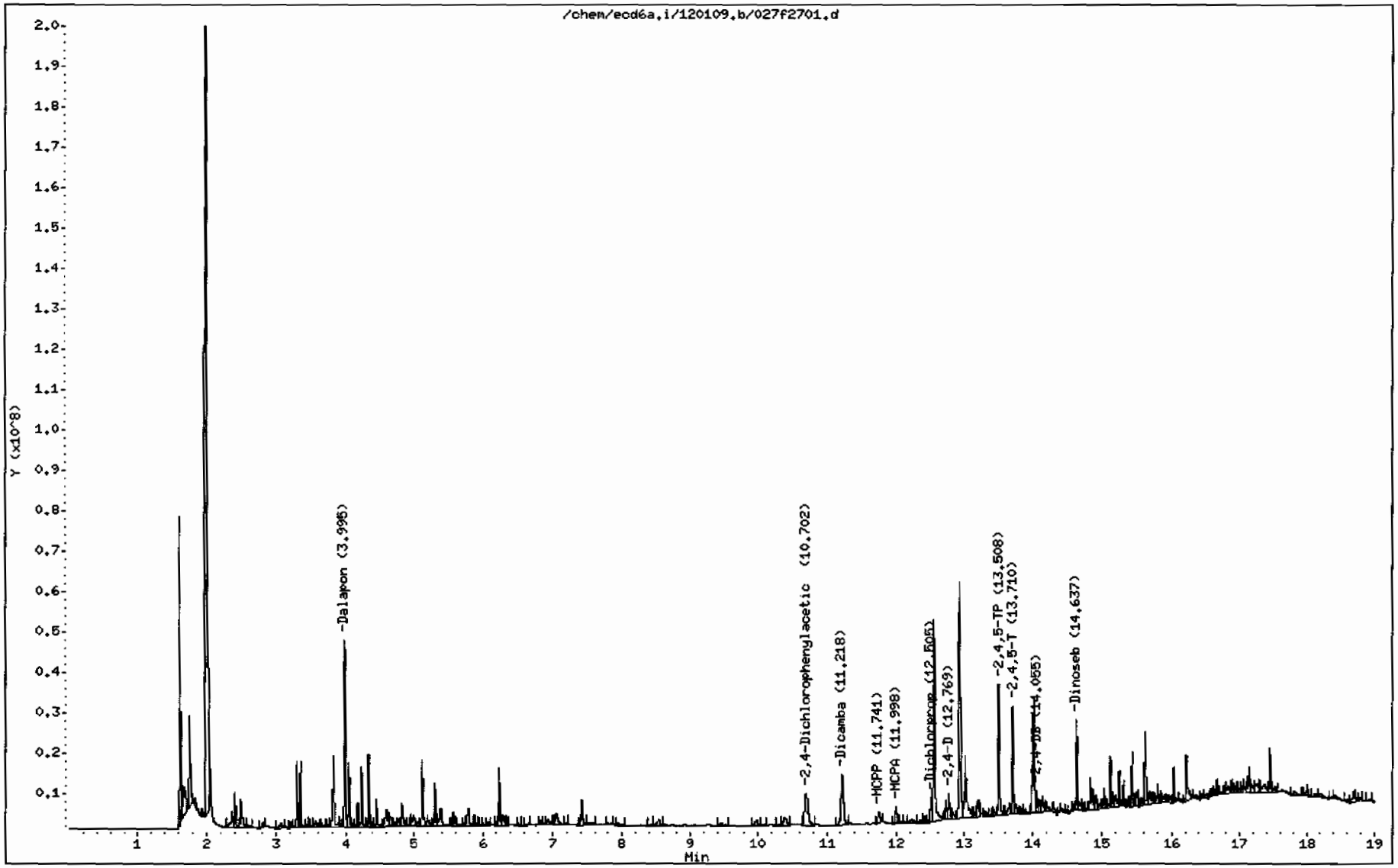

Prep Logbook

The Extraction of Herbicides from Soil and Sludge Samples

Batch ID: 927147 **Verified by:** _____

Analyst: Robin Hunt

Method: SW846 8151A

Lab SOP: GL-OA-E-027 REV# 8

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982252 MB	30-NOV-2009 11:11:04	50	10	0.2
1201982255 LCS	30-NOV-2009 11:11:04	50	10	0.2
241423004	30-NOV-2009 11:11:04	50	10	0.2
1201982253 MS (241423004)	30-NOV-2009 11:11:04	50.09	10	0.19964
1201982254 MSD (241423004)	30-NOV-2009 11:11:04	50.04	10	0.19984
241423005	30-NOV-2009 11:11:04	50.09	10	0.19964
241503002	30-NOV-2009 11:11:04	50	10	0.2
241503003	30-NOV-2009 11:11:04	50	10	0.2
241503004	30-NOV-2009 11:11:04	50.01	10	0.19996
241524002	30-NOV-2009 11:11:04	50.02	10	0.19992
241697003	30-NOV-2009 11:11:04	50	10	0.2
241697004	30-NOV-2009 11:11:04	50.07	10	0.19972
241714002	30-NOV-2009 11:11:04	50	10	0.2

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982255	HERBICIDE LCS	WE091110-02	1	mL
MS	1201982253	HERBICIDE LCS	WE091110-02	1	mL
MSD	1201982254	HERBICIDE LCS	WE091110-02	1	mL
SURR	All	HERBICIDE SURROGATE	WE091110-03	.05	mL
REGNT	All	Methanol	091117-C	.5	mL
REGNT	All	Iso-octane	1106542-A	1	mL
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Hexane	1233925-B2	50	mL
REGNT	All	N-METHYL-N-NITROSO-P-TOLUENESULFON-AMIDE	1234528A	2	mL
REGNT	All	Methylene Chloride	1234878-D	150	mL
SOURC	All	SODIUM SULFATE	1233923	50	g

Comments:

Verified By: JAM

Final Solvent: Hexane

HERBICIDE ANALYSIS

Herbicide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600-1

Method/Analysis Information

Procedure:	**Analysis of Chlorophenoxy Acid Herbicides by ECD**
Analytical Method:	SW846 8151A
Prep Method:	SW846 8151A Prep
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	927402
Prep Batch Number:	927399
TCLP Prep Batch Number:	926091

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8151A:

Sample ID	Client ID
241527001	WST03-10-2132
1201980055	TCLP Blank (TB)
1201982751	Method Blank (MB)
1201982752	Laboratory Control Sample (LCS)
1201982753	241527001(WST03-10-2132) Matrix Spike (MS)
1201982754	241527001(WST03-10-2132) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-011 REV# 18.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 21.7.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to

account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

The standards, analyzed for this SDG, failed to meet the acceptance criteria; however this non-compliance had no adverse effects on the data as there were no target analytes detected in the associated samples.

Surrogate recovery did not meet the acceptance criteria in the standards analyzed for this SDG; however, this had no adverse effects on the data as the surrogate recovery was well within the acceptance range in the sample in this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241527001 (WST03-10-2132) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were not within the established acceptance limits for 2,4-D and was slightly above the limits; however, this non-conformance had no adverse effects on the data, as there were no target analytes detected in the associated samples. The MS and MSD had similar spike recoveries. See NCR #765208 located in the Miscellaneous Data section.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Report (NCR) Documentation

Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR # 765208 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

Manual Integration

Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this Herbicide fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-HERB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD6A.I_1	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD6A.I_2	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/15/09

Roadmap for LANL 10-600-1 HERB

This roadmap was analyzed by reb01393 on 12-03-2009, 11:28.
This roadmap was reviewed by jim01140 on 12-04-2009, 08:31.
This roadmap was validated by yml on 12-14-2009, 19:19.
This roadmap was validated by jim01140 on 12-15-2009, 13:52.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/059f5901.d	241527001	sample	02-DEC-2009	15:57	10-600-1.sub	WST03-10-2132	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/059b5901.d	241527001	sample	02-DEC-2009	15:57	10-600-1.sub	WST03-10-2132	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/0505f5001a.d	1201980055	tb	02-DEC-2009	11:31	10-600-1.sub	TBLK02	1.00000	927402	
☐	N	/chem/ecd6a.i/120109.b/052f5201.d	1201982751	mb	02-DEC-2009	12:27	10-600-1.sub	HBLK01	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/053f5301.d	1201982752	lcs	02-DEC-2009	12:55	10-600-1.sub	HBLK01LCS	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/0606f6001.d	1201982753	ms	02-DEC-2009	16:25	10-600-1.sub	WST03-10-2132MS	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/0611f6101.d	1201982754	msd	02-DEC-2009	16:53	10-600-1.sub	WST03-10-2132MSD	1.00000	927402	USE. D SLIGHT HI (F), PASSING (B).

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/050b5001a.d	1201980055	tb	02-DEC-2009	11:31	10-600-1.sub	TBLK02	1.00000	927402	
☐	N	/chem/ecd6a.i/120109.b/052b5201.d	1201982751	mb	02-DEC-2009	12:27	10-600-1.sub	HBLK01	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/053b5301.d	1201982752	lcs	02-DEC-2009	12:55	10-600-1.sub	HBLK01LCS	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/060b6001.d	1201982753	ms	02-DEC-2009	16:25	10-600-1.sub	WST03-10-2132MS	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/061b6101.d	1201982754	msd	02-DEC-2009	16:53	10-600-1.sub	WST03-10-2132MSD	1.00000	927402	USE. D SLIGHT HI (F), PASSING (B).

SAMPLE DATA SUMMARY

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-600-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241527001	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8151A	**SOP Ref:**	GL-OA-E-011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 15:57	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	059f5901.d	**Column:**	1 Rtx-CLP	**Level:**	LOW
	059b5901.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

QUALITY CONTROL SUMMARY

Herbicide

Surrogate Recovery Report

SDG Number: 10-600-1

Matrix Type: TCLP SOLID

CAP Column (1) : Rtx-CLP **CAP Column (2) : Rtx-CLPII**

Sample ID	Client ID	DCAA 1 %REC #	DCAA 2 %REC #
1201980055	TB for batch 926091	119	114
1201982751	MB for batch 927399	104	97
1201982752	LCS for batch 927399	118	111
241527001	WST03-10-2132	101	96
1201982753	WST03-10-2132MS	107	104
1201982754	WST03-10-2132MSD	112	110

Surrogate	Acceptance Limits
DCAA = 2,4-Dichlorophenylacetic acid	(47%-122%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Client ID: LCS for batch 927399
Lab Sample ID: 1201982752
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/02/2009 12:55
Dilution: 1
Prep Batch ID: 927399
Batch ID: 927402

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
94-75-7	LCS 2,4-D	0.002	0.0	0.00256	128	43-131
93-72-1	LCS 2,4,5-TP	0.002	0.0	0.0023	115	41-122

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Sample Type: Matrix Spike
Client ID: WST03-10-2132MS
Matrix: TCLP R
Lab Sample ID: 1201982753
Instrument: ECD6A.I
Analysis Date: 12/02/2009 16:25
Dilution: 1
Analyst: RXE1
Prep Batch ID: 927399
Inj. Vol: 1 uL
Batch ID: 927402

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
94-75-7	MS	2,4-D	0.400	0.00	U	0.501	125	48-125
93-72-1	MS	2,4,5-TP	0.400	0.00	U	0.438	110	24-131

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–600–1
Client ID: WST03–10–2132MSD
Lab Sample ID: 1201982754
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP R
Analysis Date: 12/02/2009 16:53
Prep Batch ID: 927399
Batch ID: 927402
Dilution: 1

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
94–75–7	MSD 2,4–D	0.400	0.00	U	0.503	126 *	48–125	0	0–20
93–72–1	MSD 2,4,5–TP	0.400	0.00	U	0.451	113	24–131	3	0–20

Method Blank Summary

SDG Number:	10-600-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 927399	Instrument ID:	ECD6A.I_2 ECD6A.I_1	Data File:	052b5201.d 052f5201.d
Lab Sample ID:	1201982751				
Column:	Rtx-CLPII Rtx-CLP	Prep Date:	12/01/2009 16:23	Analyzed:	12/02/09 12:27
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	TB for batch 926091	1201980055	050f5001.d 050b5001.d	12/02/09	1131
02	LCS for batch 927399	1201982752	053f5301.d 053b5301.d	12/02/09	1255
03	WST03-10-2132	241527001	059f5901.d 059b5901.d	12/02/09	1557
04	WST03-10-2132MS	1201982753	060f6001.d 060b6001.d	12/02/09	1625
05	WST03-10-2132MSD	1201982754	061f6101.d 061b6101.d	12/02/09	1653

SAMPLE
DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-600-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241527001	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8151A	**SOP Ref:**	GL-OA-E-011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 15:57	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	059f5901.d	**Column:**	1 Rtx-CLP	**Level:**	LOW
	059b5901.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/059f5901.d
Lab Smp Id: 241527001 Client Smp ID: WST03-10-2132
Inj Date : 02-DEC-2009 15:57
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241527001|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.721	10.698	0.023	53525981	503.771	1.0

Data File: /chem/ecd6a.i/120109.b/059f5901.d
Date : 02-DEC-2009 15:57
Client ID: WST03-10-2132
Sample Info: |241527001|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

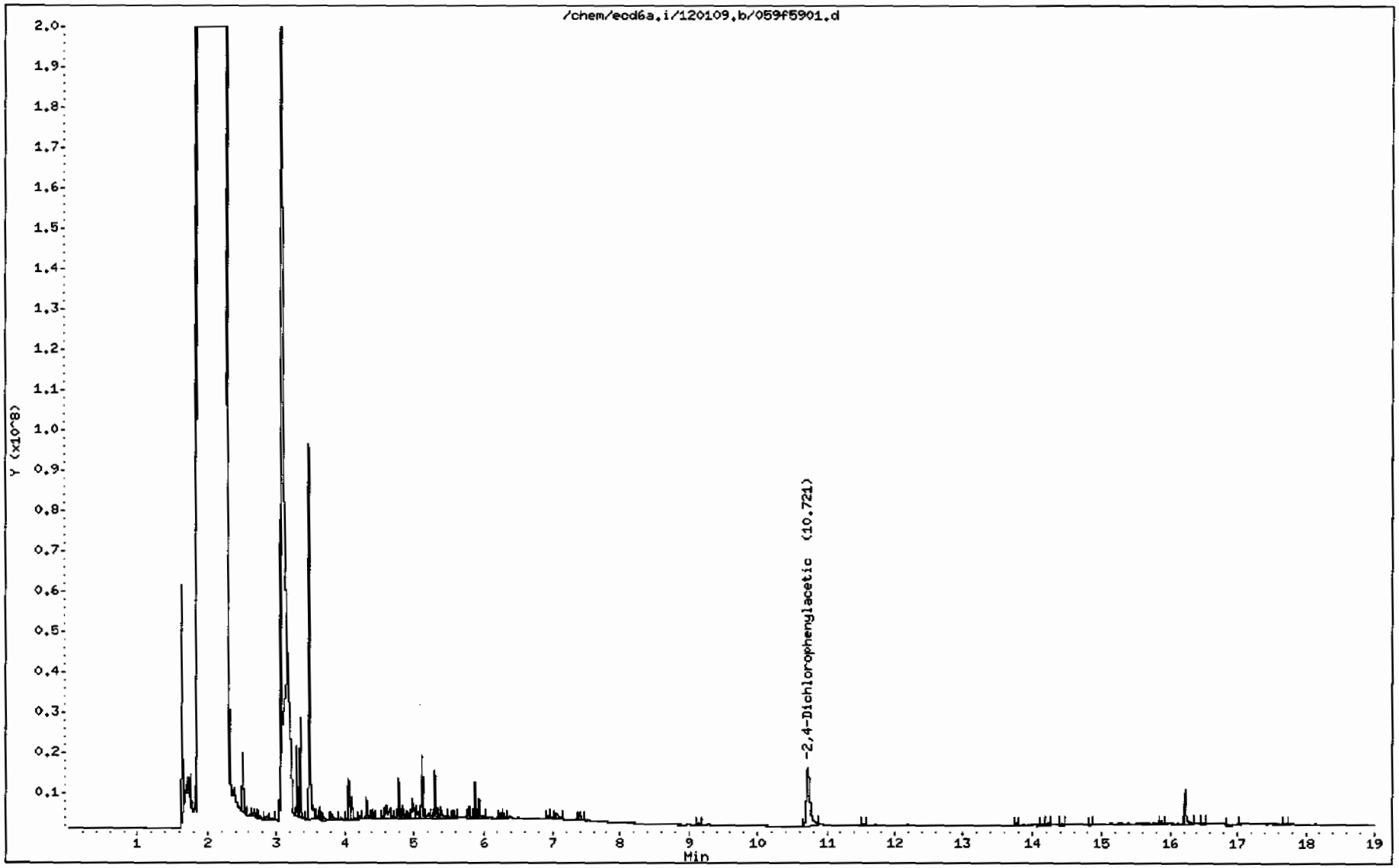

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/059b5901.d
Lab Smp Id: 241527001 Client Smp ID: WST03-10-2132
Inj Date : 02-DEC-2009 15:57
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241527001|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LANL|SOIL|WST03-10-2132|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.725	11.717	0.008	56992437	479.209	0.96

Data File: /chem/ecd6a.i/120109.b/059b5901.d

Page 1

Date : 02-DEC-2009 15:57

Client ID: WST03-10-2132

Instrument: ecd6a.i

Sample Info: |241527001|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLPII

Column diameter: 0.25

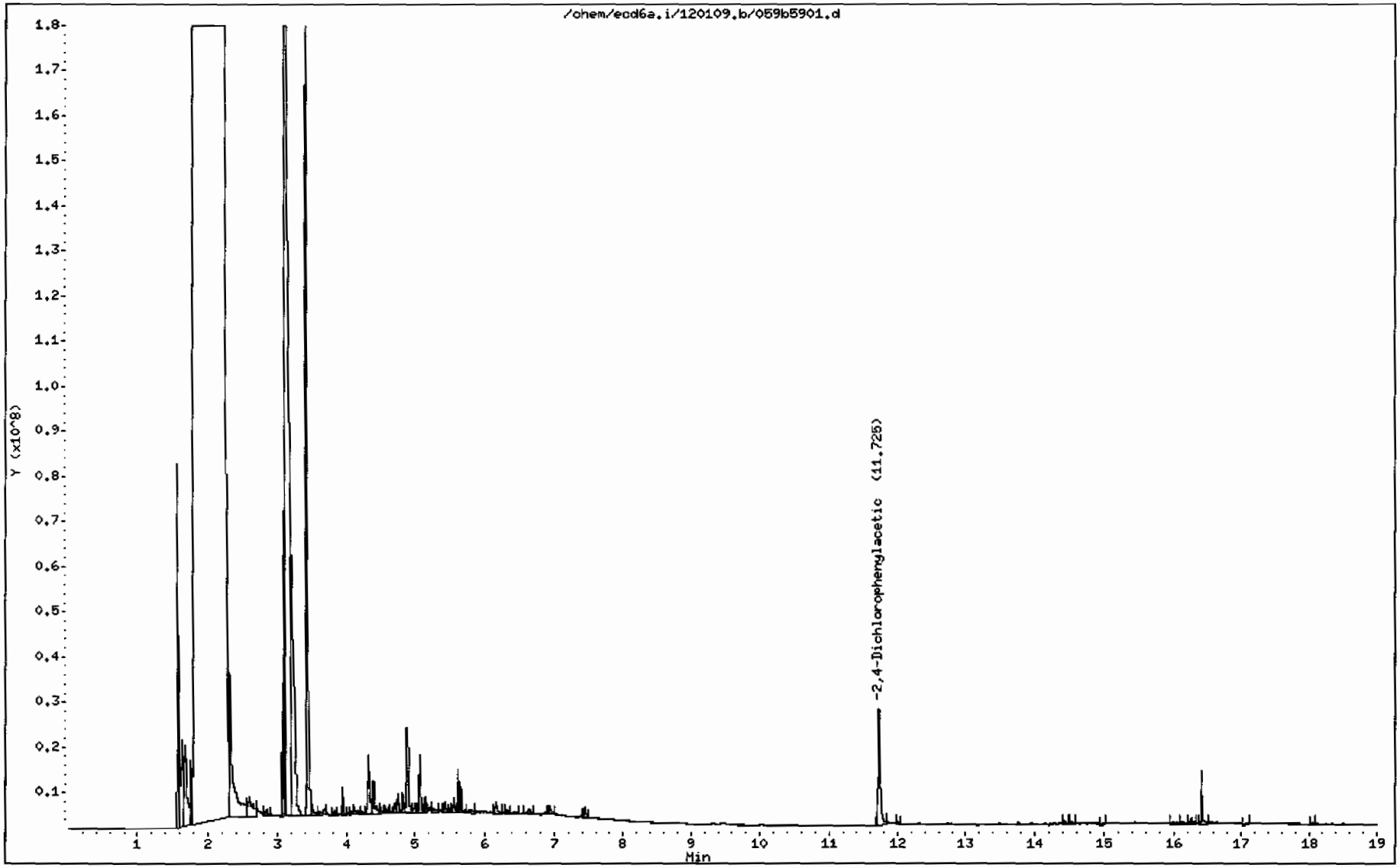

STANDARDS DATA

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002f0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003f0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004f0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005f0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007f0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008f0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084f8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074f7401.d

Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054f5401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 09:32	all	/chem/ecd6a.i/120109.b/046f4601.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 18:16	all	/chem/ecd6a.i/120109.b/064f6401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 01:02	all	/chem/ecd6a.i/120109.b/028f2801.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 05:45	all	/chem/ecd6a.i/120109.b/038f3801.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 21:44	all	/chem/ecd6a.i/120109.b/021f2101.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 16:08	all	/chem/ecd6a.i/120109.b/009f0901.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002b0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003b0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004b0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005b0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006b0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007b0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008b0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084b8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074b7401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054b5401.d

```
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|02-DEC-2009 09:32 |all              |/chem/ecd6a.i/120109.b/046b4601.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|02-DEC-2009 18:16 |all              |/chem/ecd6a.i/120109.b/064b6401.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|02-DEC-2009 01:02 |all              |/chem/ecd6a.i/120109.b/028b2801.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|02-DEC-2009 05:45 |all              |/chem/ecd6a.i/120109.b/038b3801.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|01-DEC-2009 21:44 |all              |/chem/ecd6a.i/120109.b/021b2101.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|01-DEC-2009 16:08 |all              |/chem/ecd6a.i/120109.b/009b0901.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|01-DEC-2009 14:45 |all              |/chem/ecd6a.i/120109.b/006b0601.d            |
+------------------+-----------------+---------------------------------------------+
```

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COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	72858.000000
Initial:End Threshold	36429.000000
Initial:Area Threshold	728580.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	20.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000

	Compound	RT	RT Window	RF
	1 Dalapon	4.000	3.970-4.030	8.358e+04
$	2 2,4-Dichlorophenylacetic a	10.698	10.638-10.758	1.063e+05
	3 Dicamba	11.214	11.154-11.274	3.984e+05
	4 MCPP	11.729	11.669-11.789	3.485e+02
	5 MCPA	11.999	11.939-12.059	6.488e+02
	6 Dichlorprop	12.512	12.452-12.572	9.811e+04
	7 2,4-D	12.775	12.715-12.835	9.981e+04
	43 Pentachlorophenol	12.924	12.904-12.944	1.050e+06
	8 2,4,5-TP	13.512	13.482-13.542	4.822e+05
	9 2,4,5-T	13.715	13.675-13.755	4.163e+05
	10 2,4-DB	14.061	14.021-14.101	4.697e+04
	11 Dinoseb	14.638	14.608-14.668	2.191e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	105244.000000
Initial:End Threshold	52622.000000
Initial:Area Threshold	1052440.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	25.000000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

	Compound	RT	RT Window	RF
	1 Dalapon	3.963	3.933-3.993	1.101e+05
$	2 2,4-Dichlorophenylacetic a	11.717	11.657-11.777	1.189e+05
	3 MCPP	12.246	12.186-12.306	3.863e+02
	4 Dicamba	12.000	11.940-12.060	4.475e+05
	5 MCPA	12.552	12.492-12.612	7.632e+02
	6 Dichlorprop	12.927	12.867-12.987	1.222e+05
	7 2,4-D	13.216	13.156-13.276	1.466e+05
	43 Pentachlorophenol	13.487	13.467-13.507	1.348e+06
	8 2,4,5-TP	13.825	13.795-13.855	5.770e+05
	9 2,4,5-T	14.065	14.035-14.095	4.771e+05
	10 Dinoseb	14.519	14.489-14.549	2.304e+05
	11 2,4-DB	14.354	14.314-14.394	6.662e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002f0201.d
Level 2: /chem/ecd6a.i/120109.b/003f0301.d
Level 3: /chem/ecd6a.i/120109.b/004f0401.d
Level 4: /chem/ecd6a.i/120109.b/005f0501.d
Level 5: /chem/ecd6a.i/120109.b/006f0601.d
Level 6: /chem/ecd6a.i/120109.b/007f0701.d
Level 7: /chem/ecd6a.i/120109.b/008f0801.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
1 Dalapon	+++++	79759	77099	90101	84329	83743		
	86440						83578	5.558
3 Dicamba	410356	419146	401802	405456	394767	379418		
	378101						398435	3.861
4 MCPP	+++++	319	339	352	359	354		
	368						349	4.922
5 MCPA	+++++	675	642	661	653	633		
	629						649	2.685
6 Dichlorprop	104713	103611	97122	98110	96912	92561		
	93769						98114	4.669
7 2,4-D	88737	98217	95724	105038	103064	102557		
	105356						99813	6.040
43 Pentachlorophenol	1087173	1110429	1048940	1060478	1045628	997069		
	1002014						1050247	3.939

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INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
8 2,4,5-TP	492919	495515	472258	491705	487675	468321		
	466963						482194	2.590
9 2,4,5-T	394661	408706	384612	438870	433931	422814		
	430258						416265	4.989
10 2,4-DB	39162	43417	44875	49575	51111	50418		
	50206						46966	9.690
11 Dinoseb	230101	225942	216507	213886	224921	210402		
	211879						219091	3.552
$ 2 2,4-Dichlorophenylacetic acid	108080	110960	107596	110113	106225	101270		
	99510						106251	4.075

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INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002b0201.d
Level 2: /chem/ecd6a.i/120109.b/003b0301.d
Level 3: /chem/ecd6a.i/120109.b/004b0401.d
Level 4: /chem/ecd6a.i/120109.b/005b0501.d
Level 5: /chem/ecd6a.i/120109.b/006b0601.d
Level 6: /chem/ecd6a.i/120109.b/007b0701.d
Level 7: /chem/ecd6a.i/120109.b/008b0801.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
1 Dalapon	+++++	98106	96954	119992	111692	113951		
	119890						110098	9.331
3 MCPP	+++++	350	365	386	397	399		
	421						386	6.595
4 Dicamba	449422	446473	430565	448713	449180	449025		
	458911						447470	1.888
5 MCPA	+++++	819	738	774	762	746		
	740						763	4.015
6 Dichlorprop	135168	131720	115878	119926	118099	115406		
	119363						122223	6.468
7 2,4-D	152343	149276	135359	148967	143733	146310		
	150228						146602	3.874
43 Pentachlorophenol	1280880	1326050	1301780	1352765	1381520	1367964		
	1423708						1347810	3.635

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INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	400.000 Level 7	$\overline{RRF}$	% RSD
8 2,4,5-TP	528143	568958	555456	578704	602748	597990	606932	576990	4.962
9 2,4,5-T	424544	438865	442454	497147	497302	508185	531119	477088	8.608
10 Dinoseb	207093	212167	211025	232955	251099	243499	254885	230389	8.784
11 2,4-DB	69154	66396	63869	66342	65984	66319	68302	66624	2.559
$ 2 2,4-Dichlorophenylacetic acid	122147	120666	115303	119536	117395	116524	120941	118930	2.146

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009F0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	99813.291	103435.11	0.005	3.6	15.0
2,4,5-TP	482193.63	489200.79	0.01	1.4	15.0
2,4-Dichlorophenylacetic aci	106250.60	110571.95	0.01	4.1	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009B0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D
2,4-D	146602.25	146157.23	0.005	-0.3	15.0
2,4,5-TP	576990.28	605274.08	0.01	4.9	15.0
2,4-Dichlorophenylacetic aci	118930.17	122553.87	0.01	3.0	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0932

Lab File ID: 046F4601 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
2,4-D	99813.291	132088.64	0.005	32.3	15.0	<-
2,4,5-TP	482193.63	585480.53	0.01	21.4	15.0	<-
2,4-Dichlorophenylacetic aci	106250.60	125661.08	0.01	18.3	15.0	<-

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0932

Lab File ID: 046B4601 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
2,4-D	146602.25	175181.39	0.005	19.5	15.0	<-
2,4,5-TP	576990.28	684291.13	0.01	18.6	15.0	<-
2,4-Dichlorophenylacetic aci	118930.17	140312.93	0.01	18.0	15.0	<-

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1335

Lab File ID: 054F5401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	99813.291	113160.65	0.005	13.4	15.0
2,4,5-TP	482193.63	530954.20	0.01	10.1	15.0
2,4-Dichlorophenylacetic aci	106250.60	114564.34	0.01	7.8	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1335

Lab File ID: 054B5401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D
2,4-D	146602.25	145863.24	0.005	-0.5	15.0
2,4,5-TP	576990.28	627390.18	0.01	8.7	15.0
2,4-Dichlorophenylacetic aci	118930.17	127369.27	0.01	7.1	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1816

Lab File ID: 064F6401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
2,4-D	99813.291	114963.48	0.005	15.2	15.0	<-
2,4,5-TP	482193.63	543102.29	0.01	12.6	15.0	
2,4-Dichlorophenylacetic aci	106250.60	116700.79	0.01	9.8	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1816

Lab File ID: 064B6401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	146602.25	148472.53	0.005	1.3	15.0
2,4,5-TP	576990.28	614706.64	0.01	6.5	15.0
2,4-Dichlorophenylacetic aci	118930.17	121096.87	0.01	1.8	15.0

FORM VII HERBICIDE

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/009f0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	4.000	4.000	0.000	165152948	2000.00	1980	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.698	10.698	0.000	55285977	500.000	520	(M)
	3 Dicamba					CAS #: 6597-78-0	
	11.214	11.214	0.000	79930813	200.000	201	(M)
	4 MCPP					CAS #: 7085-19-0	
	11.729	11.729	0.000	7183913	20000.0	20600	(M)
	5 MCPA					CAS #: 94-74-6	
	11.999	11.999	0.000	13166275	20000.0	20300	(M)
	6 Dichlorprop					CAS #: 120-36-5	
	12.512	12.512	0.000	19418200	200.000	198	(M)
	7 2,4-D					CAS #: 94-75-7	
	12.775	12.775	0.000	20687022	200.000	207	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.924	12.924	0.000	208818126	200.000	199	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.512	13.512	0.000	97840159	200.000	203	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.715	13.715	0.000	85970231	200.000	206		(M)
10 2,4-DB					CAS #: 94-82-6		
14.064	14.064	0.000	9875189	200.000	210		(M)
11 Dinoseb					CAS #: 88-85-7		
14.638	14.638	0.000	43674888	200.000	199		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009f0901.d
Date : 01-DEC-2009 16:08
Client ID: HSTD01
Sample Info: IWHB091030-12
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

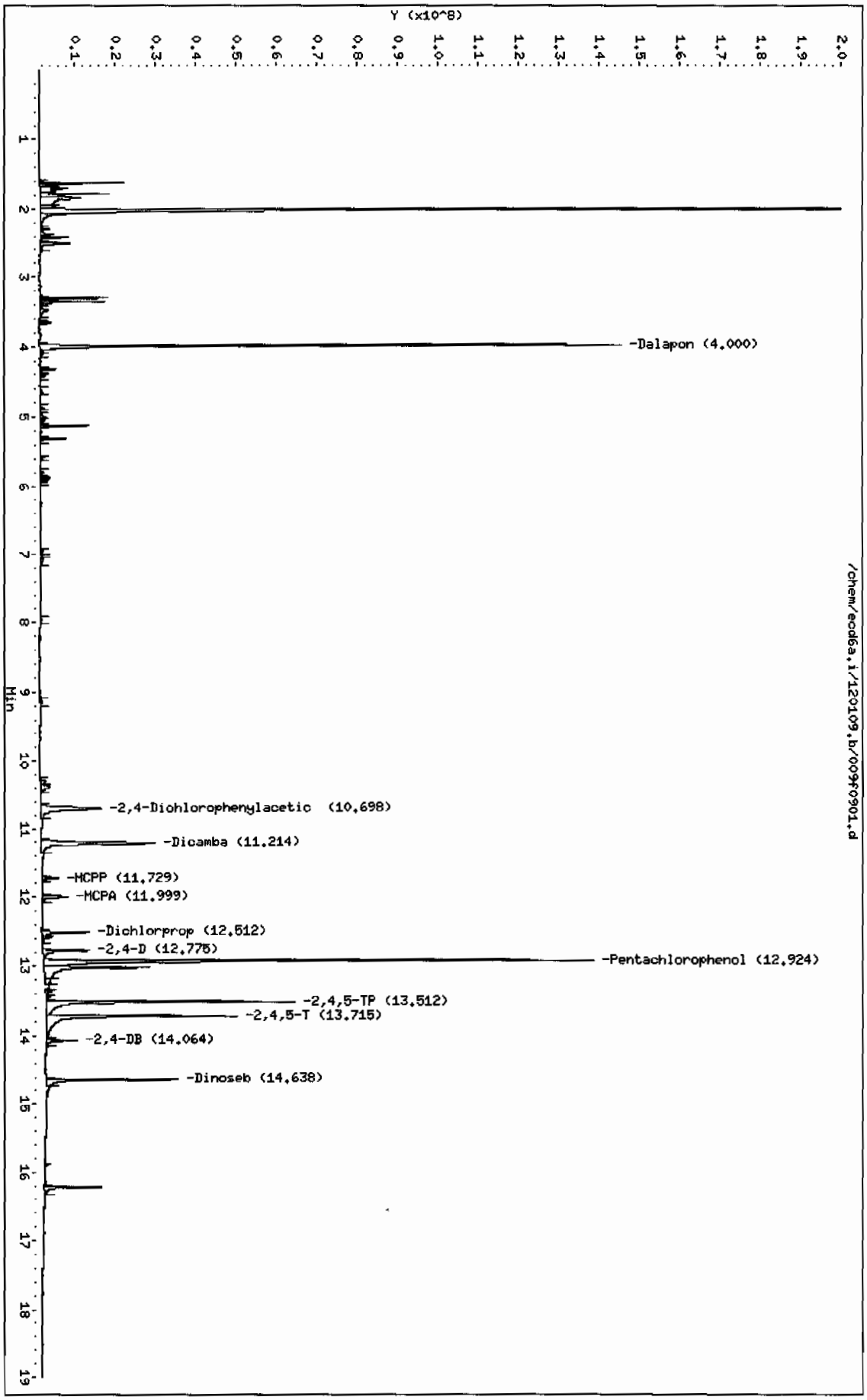

Page 1

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

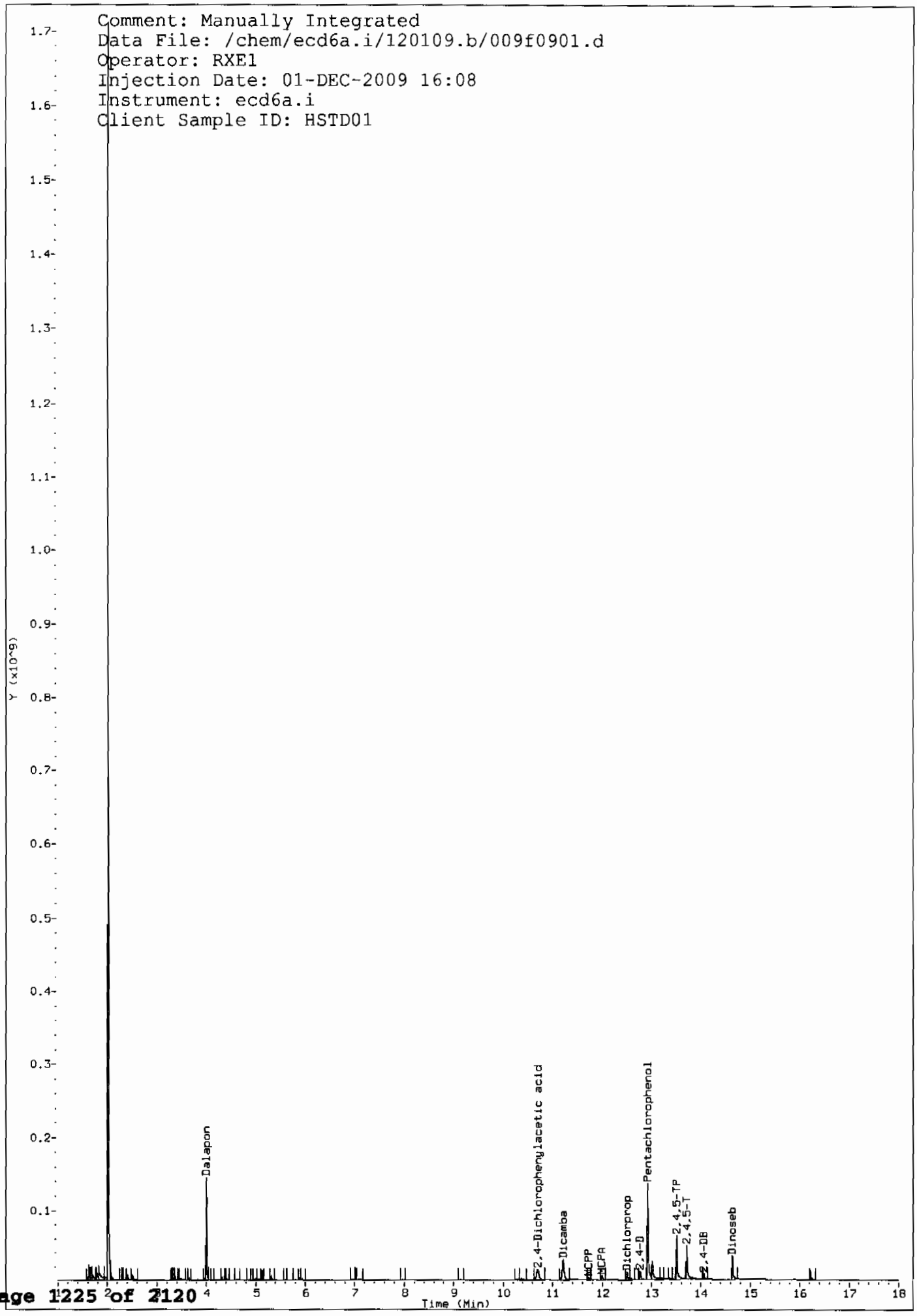

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

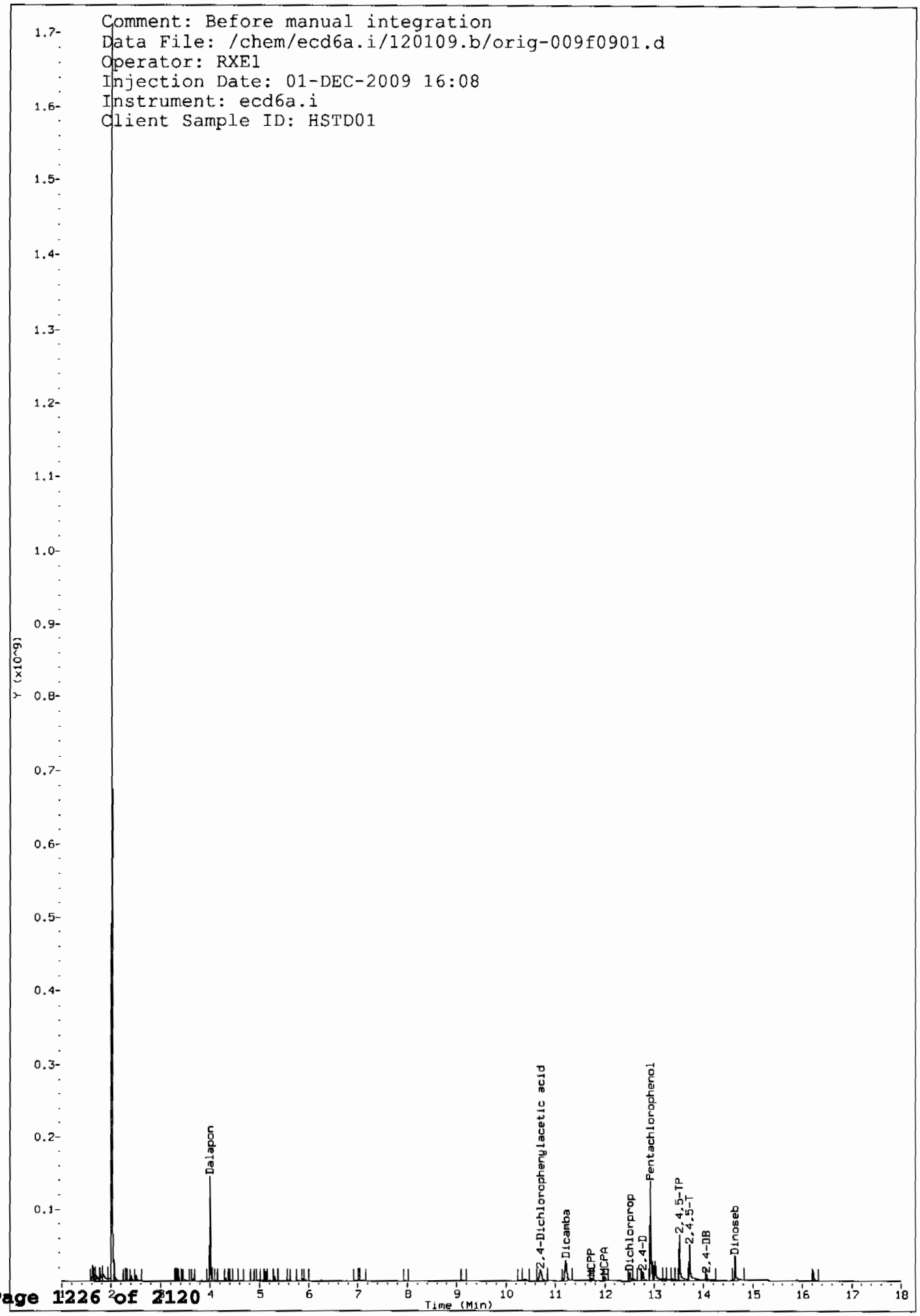

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/009b0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)		
	1 Dalapon					CAS #: 88-85-7		
	3.963	3.963	0.000	218849243	2000.00	1990		
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9		
	11.717	11.717	0.000	61276933	500.000	515		(M)
	3 MCPP					CAS #: 7085-19-0		
	12.246	12.246	0.000	7892573	20000.0	20400		(M)
	4 Dicamba					CAS #: 6597-78-0		
	12.000	12.000	0.000	90197474	200.000	202		(M)
	5 MCPA					CAS #: 94-74-6		
	12.552	12.552	0.000	14594046	20000.0	19100		(M)
	6 Dichlorprop					CAS #: 120-36-5		
	12.927	12.927	0.000	23159743	200.000	189		(M)
	7 2,4-D					CAS #: 94-75-7		
	13.216	13.216	0.000	29231447	200.000	199		
	43 Pentachlorophenol					CAS #: 87-86-5		
	13.487	13.487	0.000	276356059	200.000	205		(M)
	8 2,4,5-TP					CAS #: 93-72-1		
	13.825	13.825	0.000	121054815	200.000	210		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.065	14.065	0.000	100408046	200.000	210		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	48435715	200.000	210		(M)
11 2,4-DB					CAS #: 94-82-6		
14.354	14.354	0.000	13231896	200.000	199		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009b0901.d

Date : 01-DEC-2009 16:08

Client ID: HSTD01

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

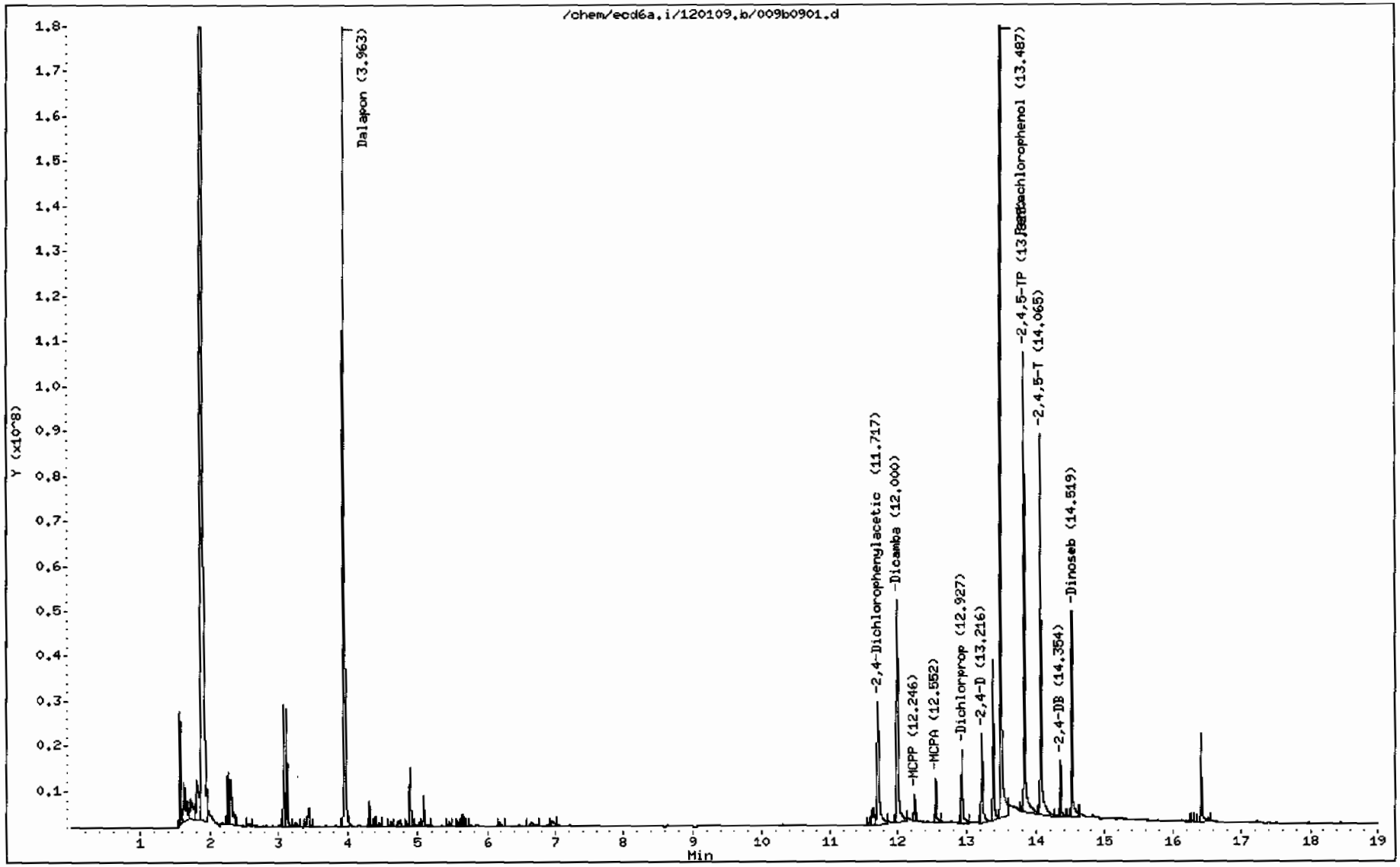

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

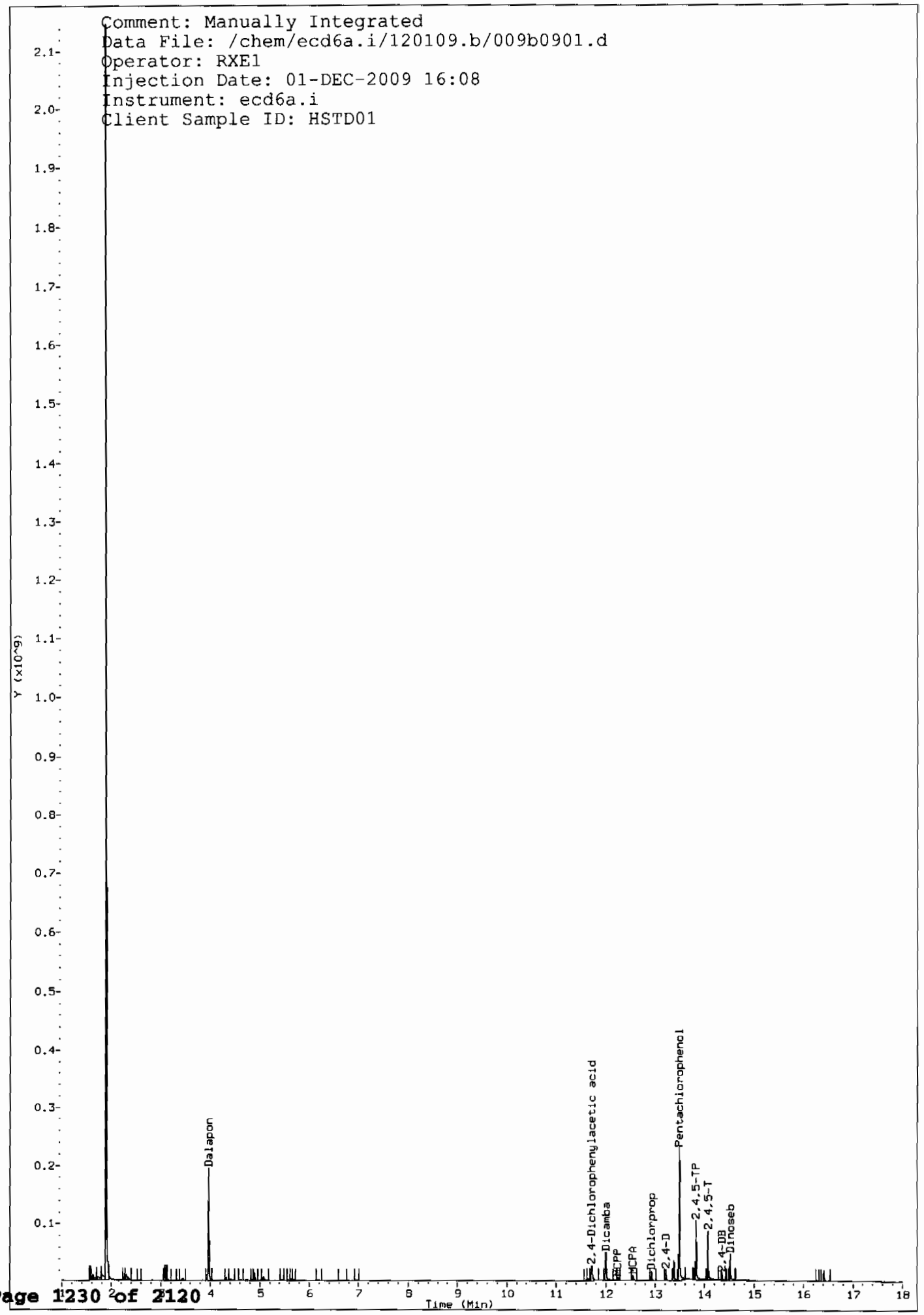

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

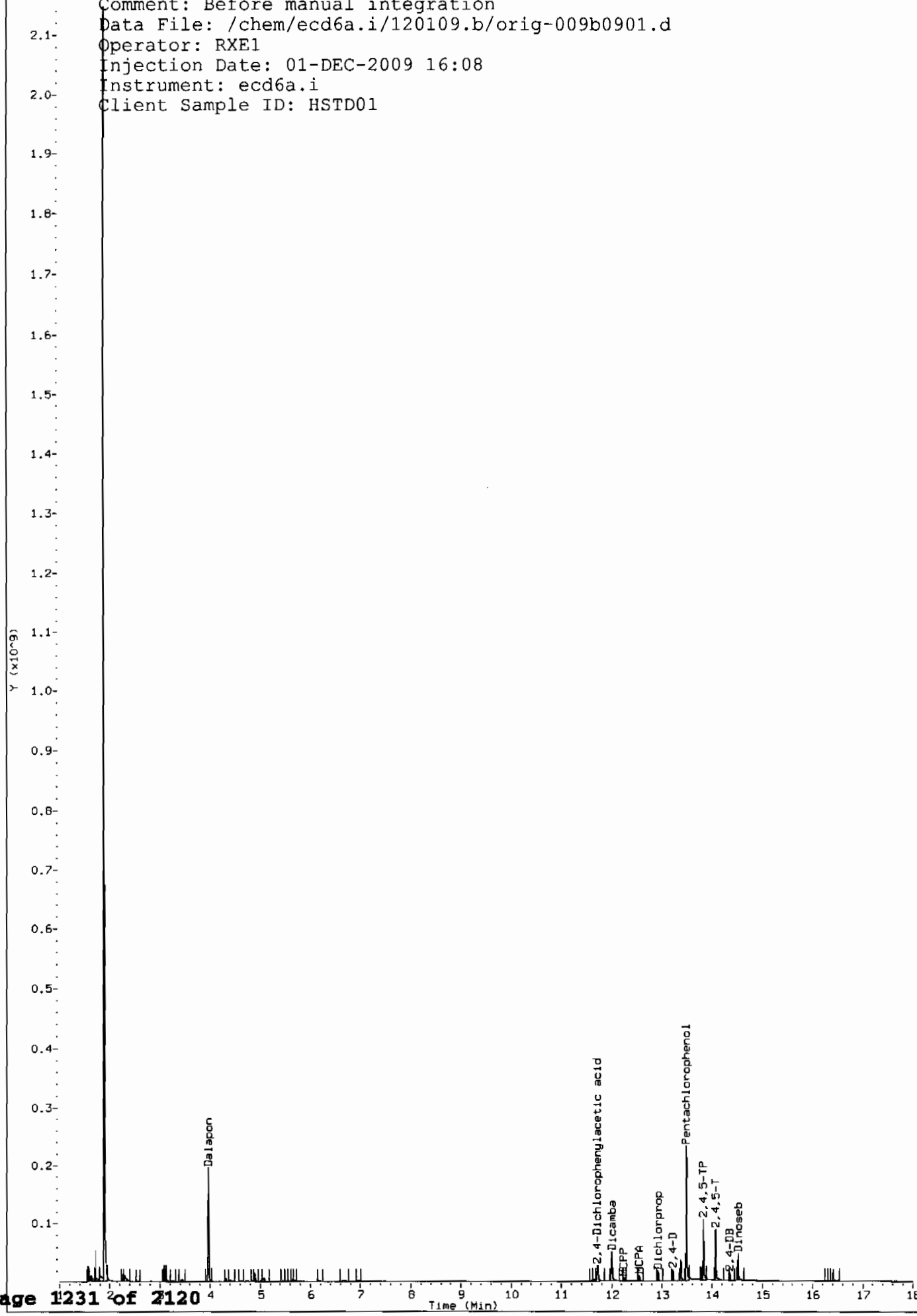

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/046f4601.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD05
Inj Date : 02-DEC-2009 09:32
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 46 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.988	4.000	-0.012	185832745	2000.00	2220	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.683	10.698	-0.015	62830540	500.000	591	
	3 Dicamba					CAS #: 6597-78-0	
	11.203	11.214	-0.011	91808390	200.000	230	
	4 MCPP					CAS #: 7085-19-0	
	11.721	11.729	-0.008	8523580	20000.0	24400	
	5 MCPA					CAS #: 94-74-6	
	11.993	11.999	-0.006	14567167	20000.0	22400	
	6 Dichlorprop					CAS #: 120-36-5	
	12.506	12.512	-0.006	23566167	200.000	240	
	7 2,4-D					CAS #: 94-75-7	
	12.769	12.775	-0.006	26417729	200.000	265	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.922	12.924	-0.002	247295202	200.000	235	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.508	13.512	-0.004	117096105	200.000	243	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.711	13.715	-0.004	104921186	200.000	252		(M)
10 2,4-DB					CAS #: 94-82-6		
14.061	14.061	0.000	13090632	200.000	279		(M)
11 Dinoseb					CAS #: 88-85-7		
14.637	14.638	-0.001	51334752	200.000	234		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/046f4601.d
Date : 02-DEC-2009 09:32
Client ID: HSTD05
Sample Info: IWHB091030-12
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

Page 1

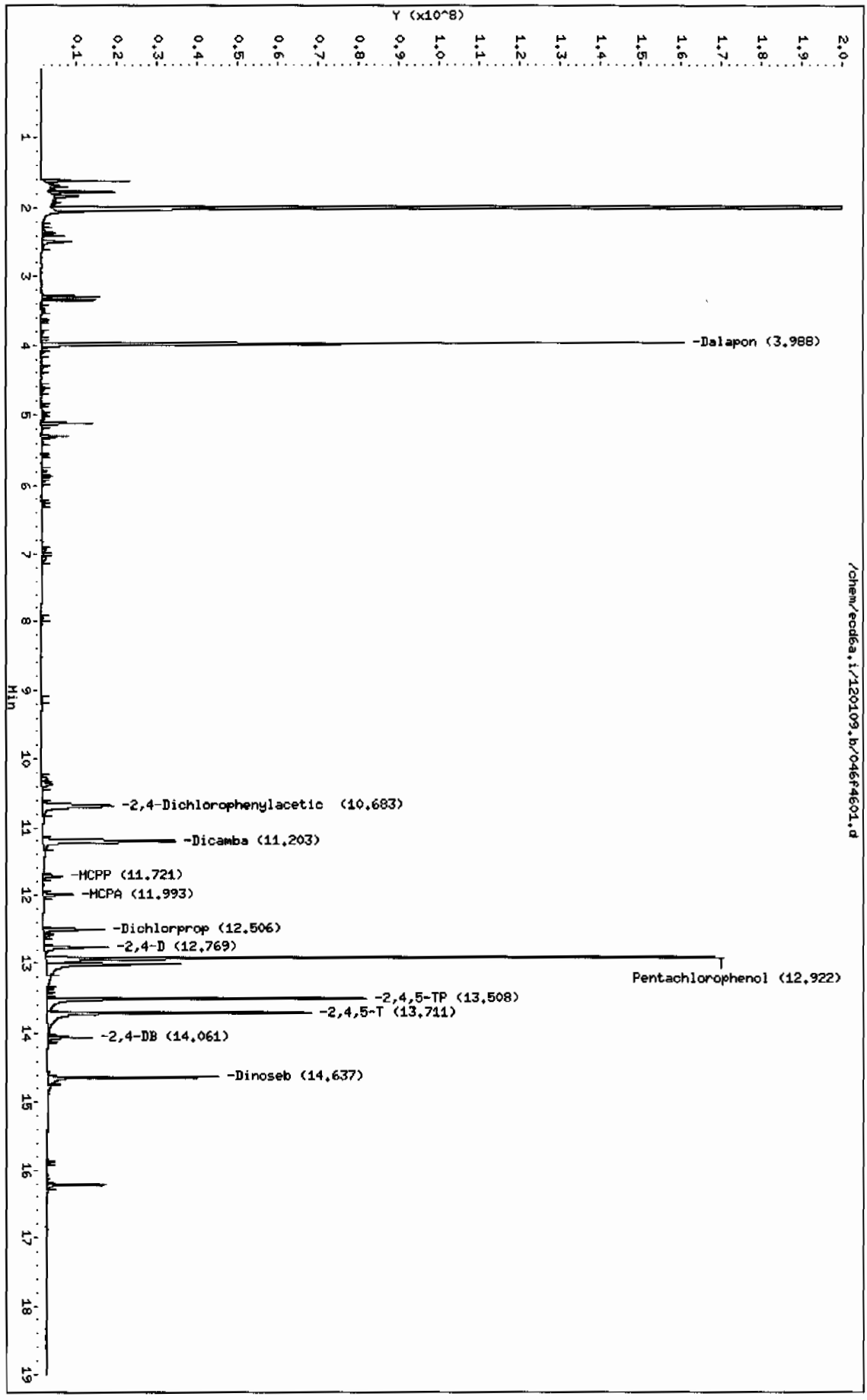

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/046f4601.d
Operator: RXE1
Injection Date: 02-DEC-2009 09:32
Instrument: ecd6a.i
Client Sample ID: HSTD05

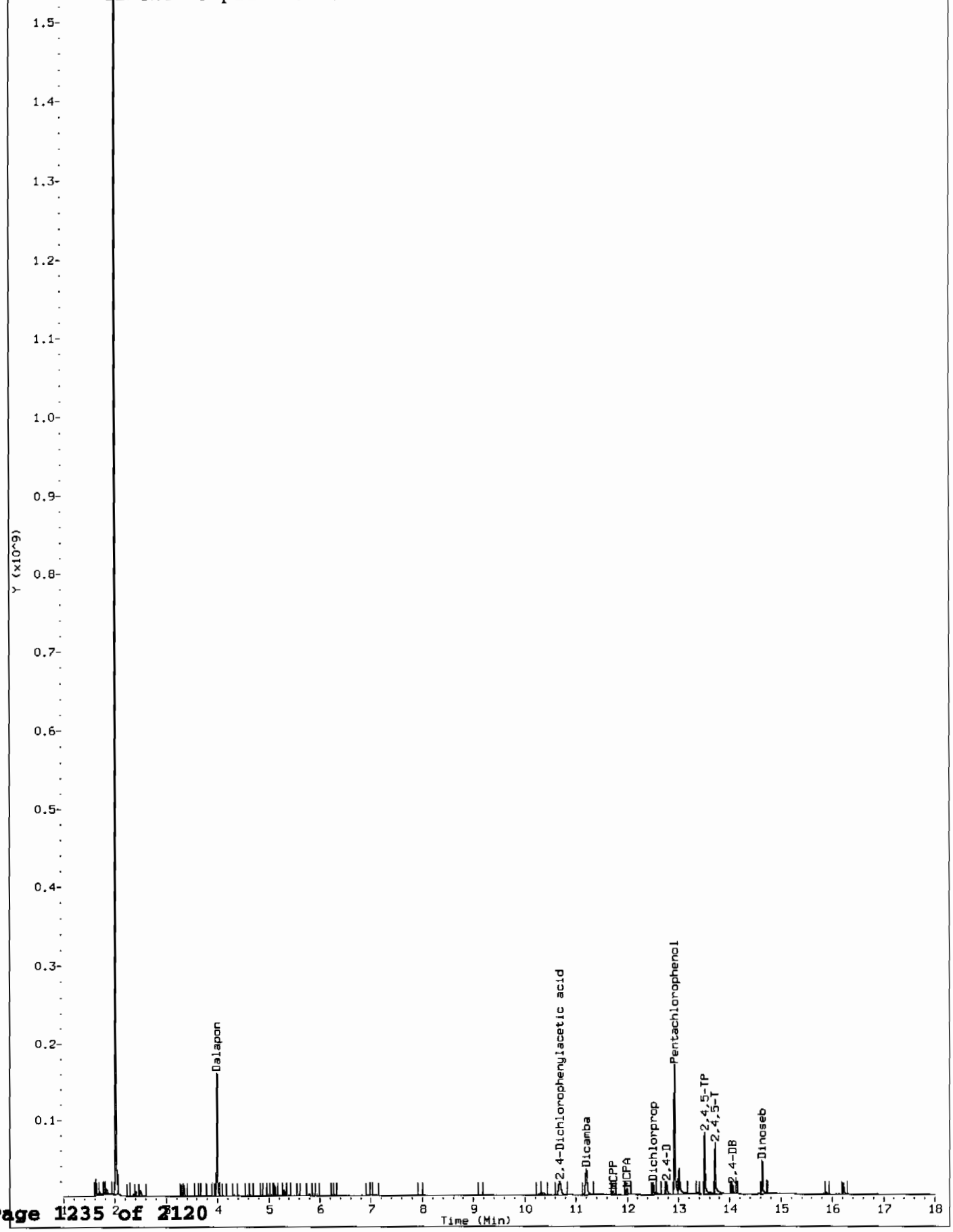

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-046f4601.d
Operator: RXE1
Injection Date: 02-DEC-2009 09:32
Instrument: ecd6a.i
Client Sample ID: HSTD05

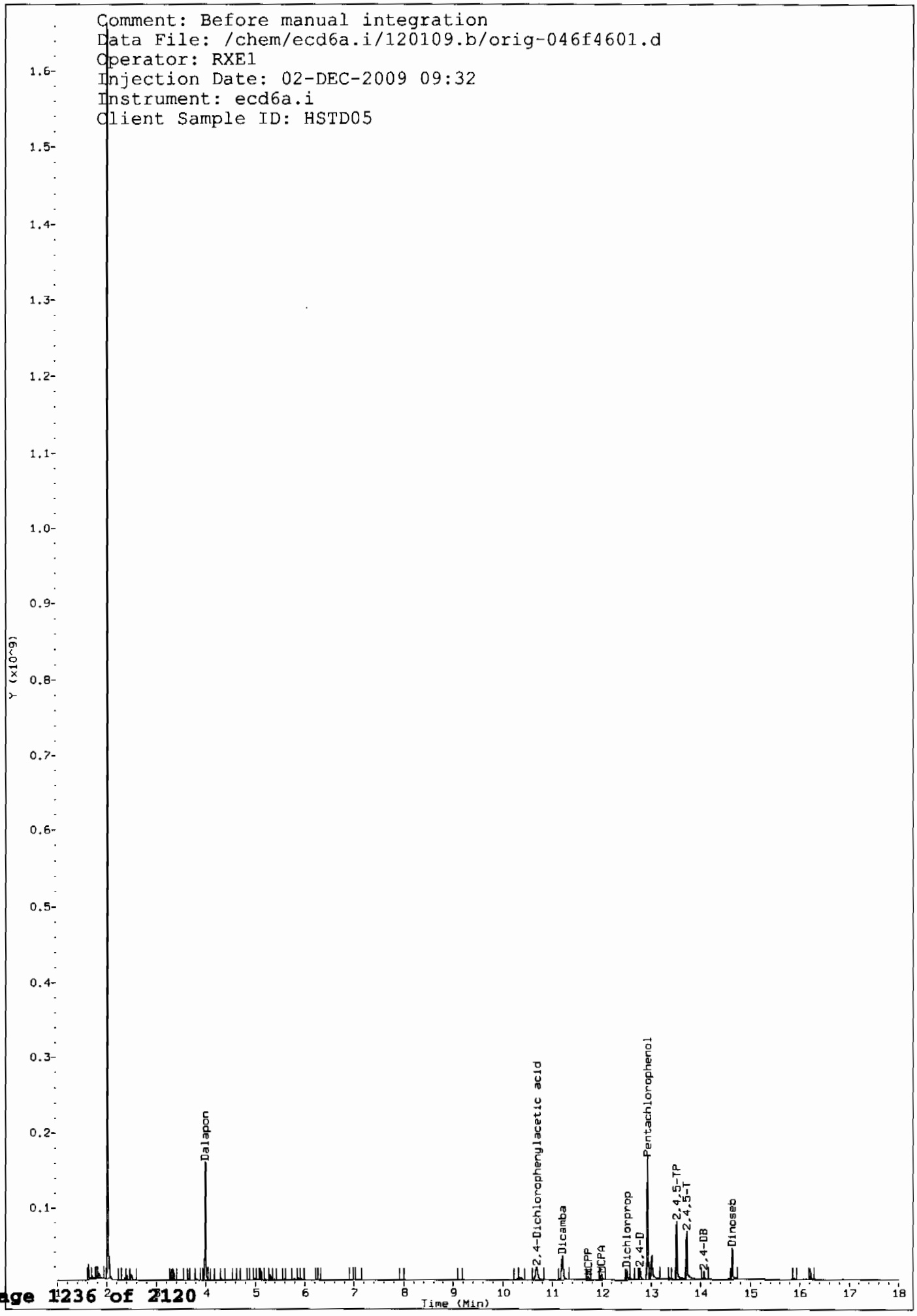

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/046b4601.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD05
Inj Date : 02-DEC-2009 09:32
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 46 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon						CAS #: 88-85-7
	3.947	3.963	-0.016	244034296	2000.00	2220	
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.705	11.717	-0.012	70156467	500.000	590	
	3 MCPP						CAS #: 7085-19-0
	12.240	12.246	-0.006	9609298	20000.0	24900	
	4 Dicamba						CAS #: 6597-78-0
	11.993	12.000	-0.007	107381522	200.000	240	
	5 MCPA						CAS #: 94-74-6
	12.548	12.552	-0.004	16162526	20000.0	21200	
	6 Dichlorprop						CAS #: 120-36-5
	12.921	12.927	-0.006	27396917	200.000	224	
	7 2,4-D						CAS #: 94-75-7
	13.212	13.216	-0.004	35036277	200.000	239	
	43 Pentachlorophenol						CAS #: 87-86-5
	13.480	13.487	-0.007	321100785	200.000	238	
	8 2,4,5-TP						CAS #: 93-72-1
	13.822	13.825	-0.003	136858226	200.000	237	

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
9 2,4,5-T					CAS #: 93-76-5
14.062	14.065	-0.003	111363599	200.000	233
10 Dinoseb					CAS #: 88-85-7
14.517	14.519	-0.002	67341377	200.000	292
11 2,4-DB					CAS #: 94-82-6
14.351	14.354	-0.003	16091654	200.000	242

Data File: /chem/ecd6a.i/120109.b/046b4601.d

Date : 02-DEC-2009 09:32

Client ID: HSTD05

Sample Info: WHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

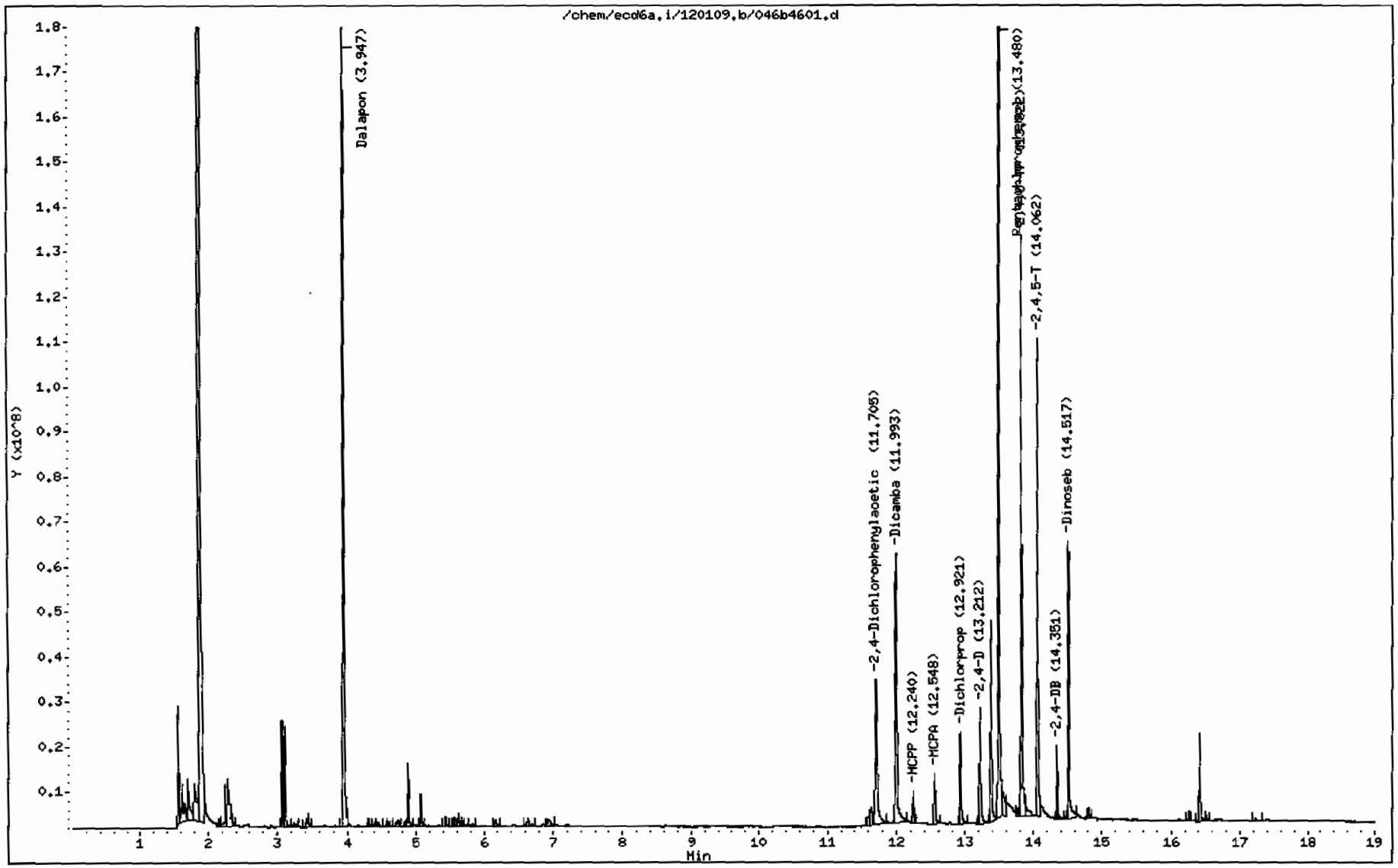

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/054f5401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD06
Inj Date : 02-DEC-2009 13:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 08:51 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 54 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.987	4.000	-0.013	143542393	2000.00	1720	(M)
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.687	10.698	-0.011	57282168	500.000	539	(M)
	3 Dicamba					CAS #: 6597-78-0	
	11.206	11.214	-0.008	82460922	200.000	207	(M)
	4 MCPP					CAS #: 7085-19-0	
	11.725	11.729	-0.004	7297051	20000.0	20900	(M)
	5 MCPA					CAS #: 94-74-6	
	11.994	11.999	-0.005	12863607	20000.0	19800	(M)
	6 Dichlorprop					CAS #: 120-36-5	
	12.508	12.512	-0.004	21553730	200.000	220	(M)
	7 2,4-D					CAS #: 94-75-7	
	12.773	12.775	-0.002	22632130	200.000	227	(M)
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.923	12.924	-0.001	224095918	200.000	213	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.511	13.512	-0.001	106190840	200.000	220	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.713	13.715	-0.002	89814416	200.000	216		(M)
10 2,4-DB					CAS #: 94-82-6		
14.062	14.061	0.001	11400228	200.000	243		(M)
11 Dinoseb					CAS #: 88-85-7		
14.639	14.638	0.001	43329429	200.000	198		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/054f5401.d

Date : 02-DEC-2009 13:35

Client ID: HSTD06

Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

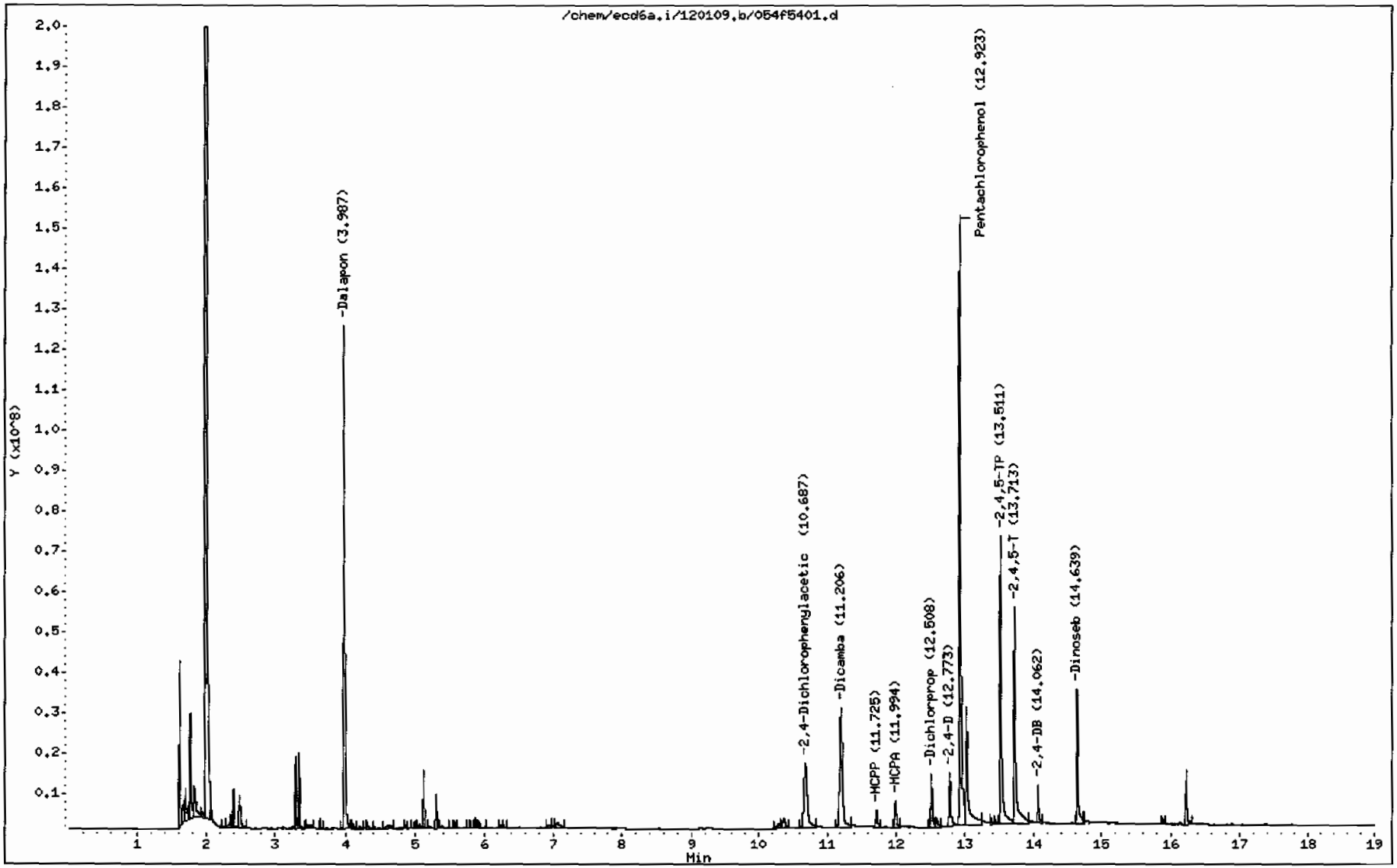

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/054f5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06

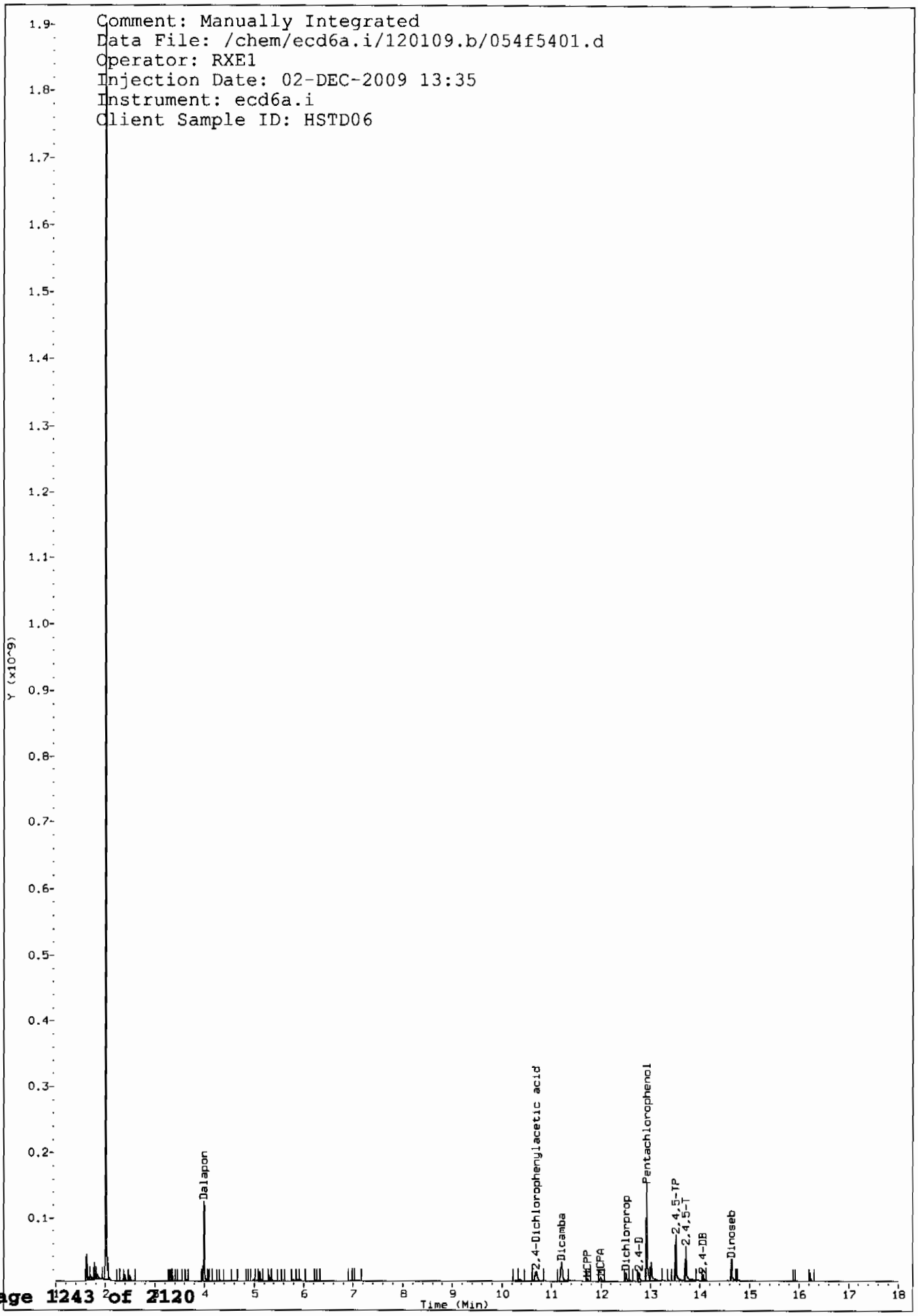

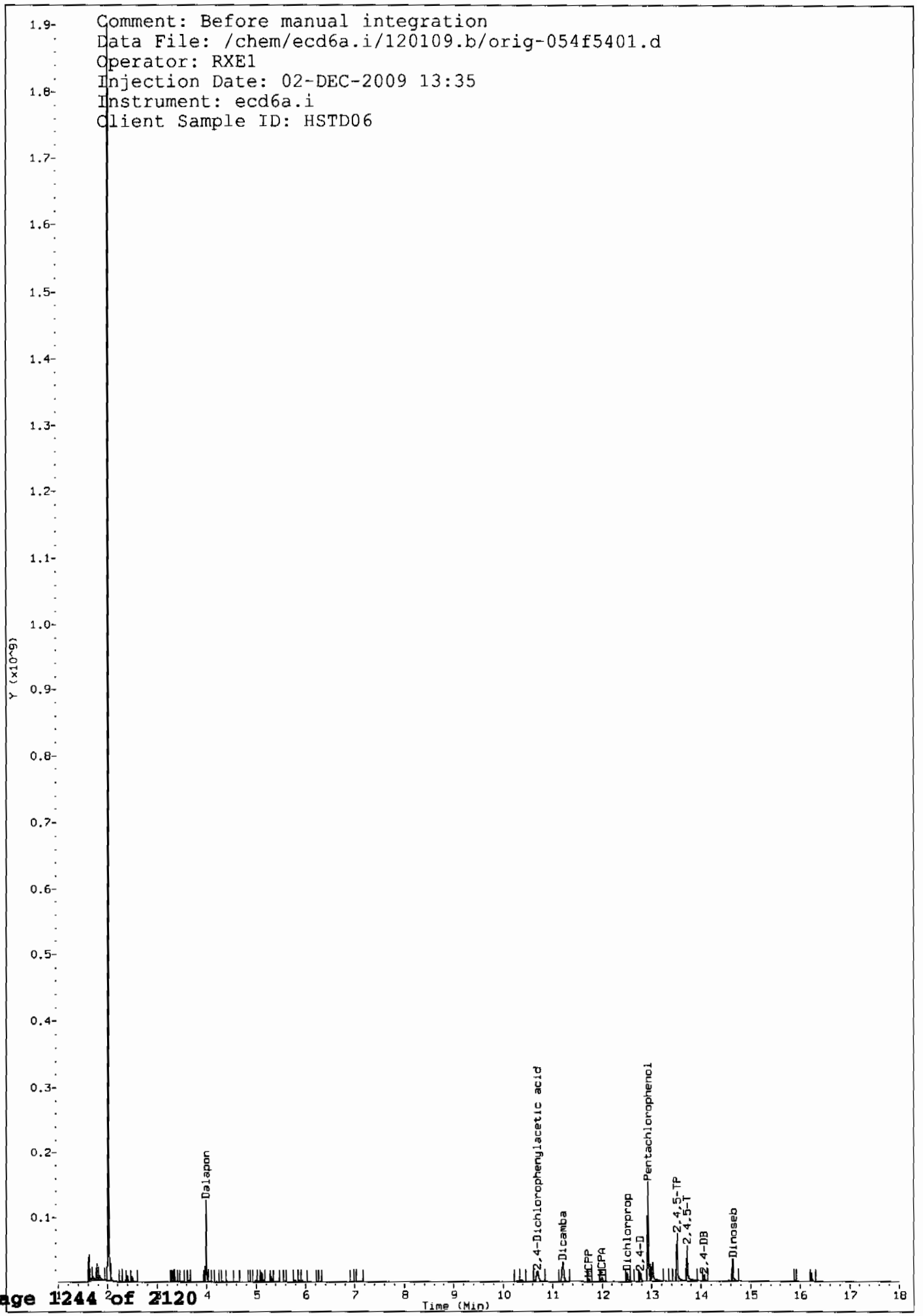
Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-054f5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06
Y (x10^9)
Time (Min)
Dalapon
2,4-Dichlorophenylacetic acid
Dicamba
MCPP
MCPA
Dichlorprop
2,4-D
Pentachlorophenol
2,4,5-TP
2,4,5-T
2,4-DB
Dinoseb

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/054b5401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD06
Inj Date : 02-DEC-2009 13:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:23 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 54 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
1 Dalapon						CAS #: 88-85-7	
3.949	3.963	-0.014	186952303	2000.00	1700		(M)
$ 2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9	
11.707	11.717	-0.010	63684634	500.000	535		(M)
3 MCPP						CAS #: 7085-19-0	
12.242	12.246	-0.004	7776769	20000.0	20100		(M)
4 Dicamba						CAS #: 6597-78-0	
11.994	12.000	-0.006	95444465	200.000	213		(M)
5 MCPA						CAS #: 94-74-6	
12.548	12.552	-0.004	13686453	20000.0	17900		(M)
6 Dichlorprop						CAS #: 120-36-5	
12.922	12.927	-0.005	24926533	200.000	204		(M)
7 2,4-D						CAS #: 94-75-7	
13.213	13.216	-0.003	29172648	200.000	199		(M)
43 Pentachlorophenol						CAS #: 87-86-5	
13.485	13.487	-0.002	297450227	200.000	221		(M)
8 2,4,5-TP						CAS #: 93-72-1	
13.824	13.825	-0.001	125478035	200.000	217		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.063	14.065	-0.002	100308736	200.000	210		(M)
10 Dinoseb					CAS #: 88-85-7		
14.517	14.519	-0.002	49753776	200.000	216		(M)
11 2,4-DB					CAS #: 94-82-6		
14.352	14.354	-0.002	14248376	200.000	214		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/054b5401.d

Date : 02-DEC-2009 13:35

Client ID: HSTD06

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

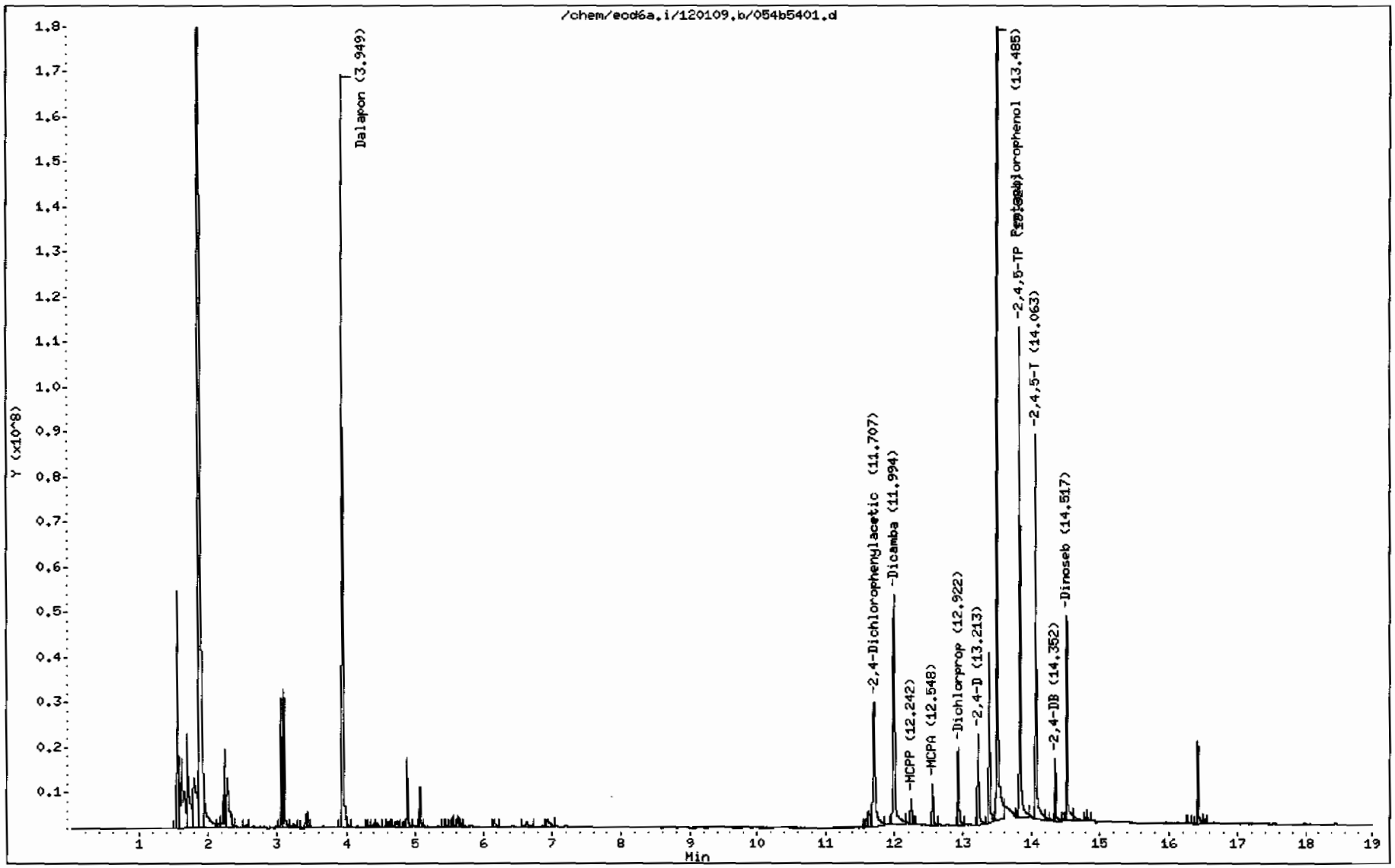

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/054b5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06

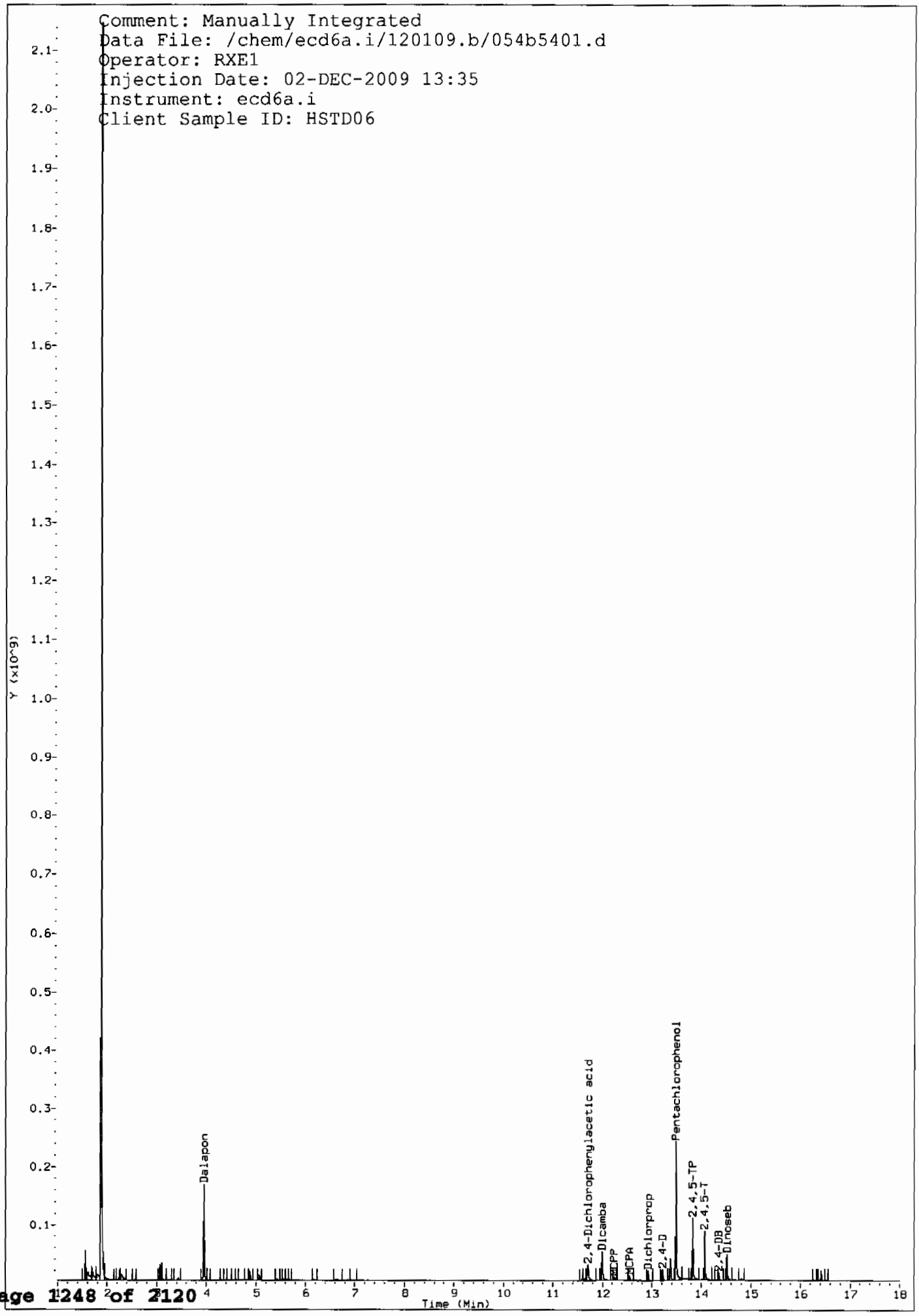

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-054b5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06

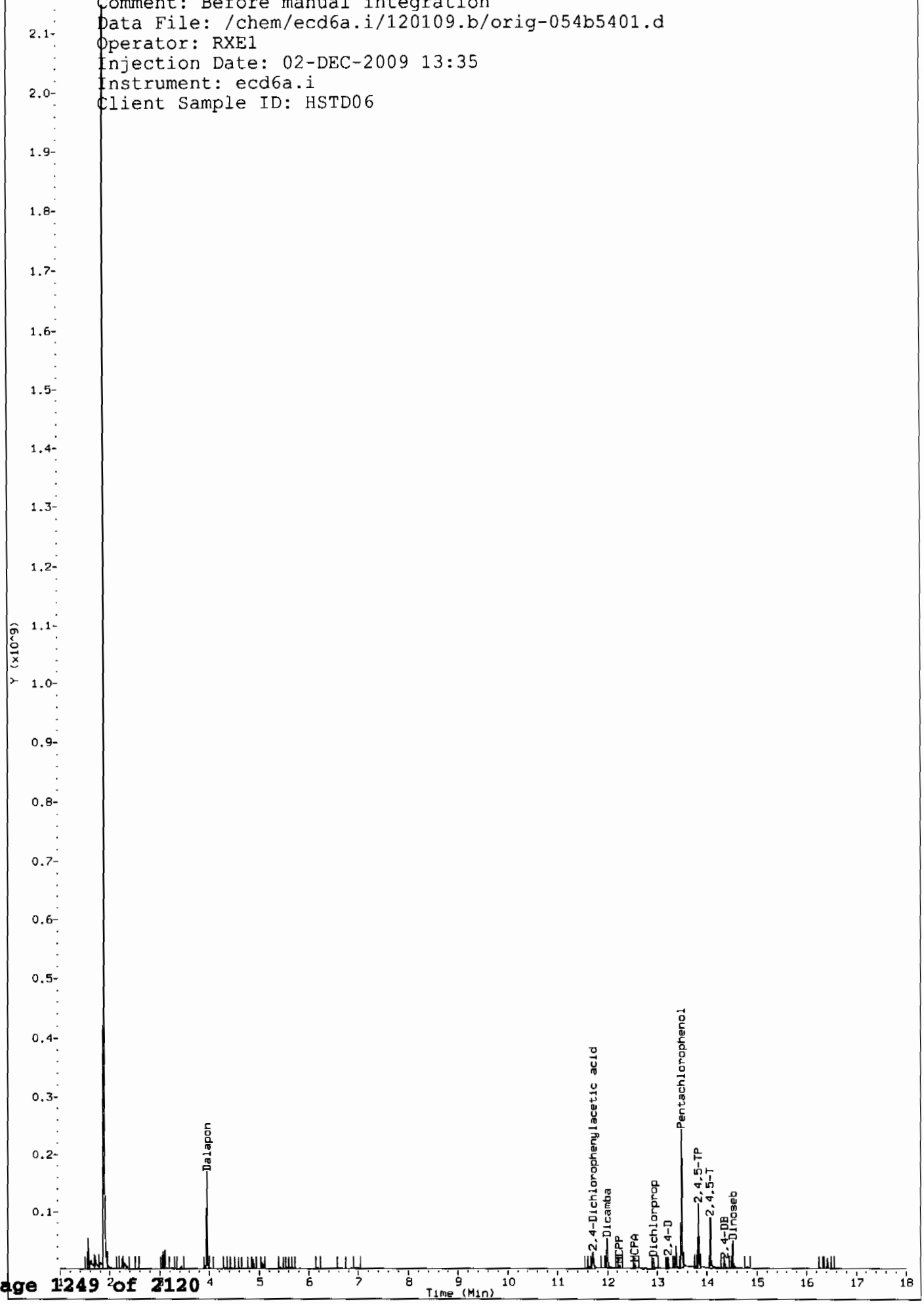

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/064f6401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD07
Inj Date : 02-DEC-2009 18:16
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 08:51 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 64 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.990	4.000	-0.010	146943601	2000.00	1760	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.689	10.698	-0.009	58350393	500.000	549	
	3 Dicamba					CAS #: 6597-78-0	
	11.205	11.214	-0.009	84731034	200.000	213	
	4 MCPP					CAS #: 7085-19-0	
	11.723	11.729	-0.006	7401102	20000.0	21200	
	5 MCPA					CAS #: 94-74-6	
	11.996	11.999	-0.003	12583043	20000.0	19400	
	6 Dichlorprop					CAS #: 120-36-5	
	12.507	12.512	-0.005	21509725	200.000	219	
	7 2,4-D					CAS #: 94-75-7	
	12.771	12.775	-0.004	22992695	200.000	230	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.922	12.924	-0.002	227042775	200.000	216	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.510	13.512	-0.002	108620457	200.000	225	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.714	13.715	-0.001	91626946	200.000	220		(M)
10 2,4-DB					CAS #: 94-82-6		
14.062	14.061	0.001	11146569	200.000	237		(M)
11 Dinoseb					CAS #: 88-85-7		
14.638	14.638	0.000	45247718	200.000	206		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/064f6401.d
Date : 02-DEC-2009 18:16
Client ID: HSTD07
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

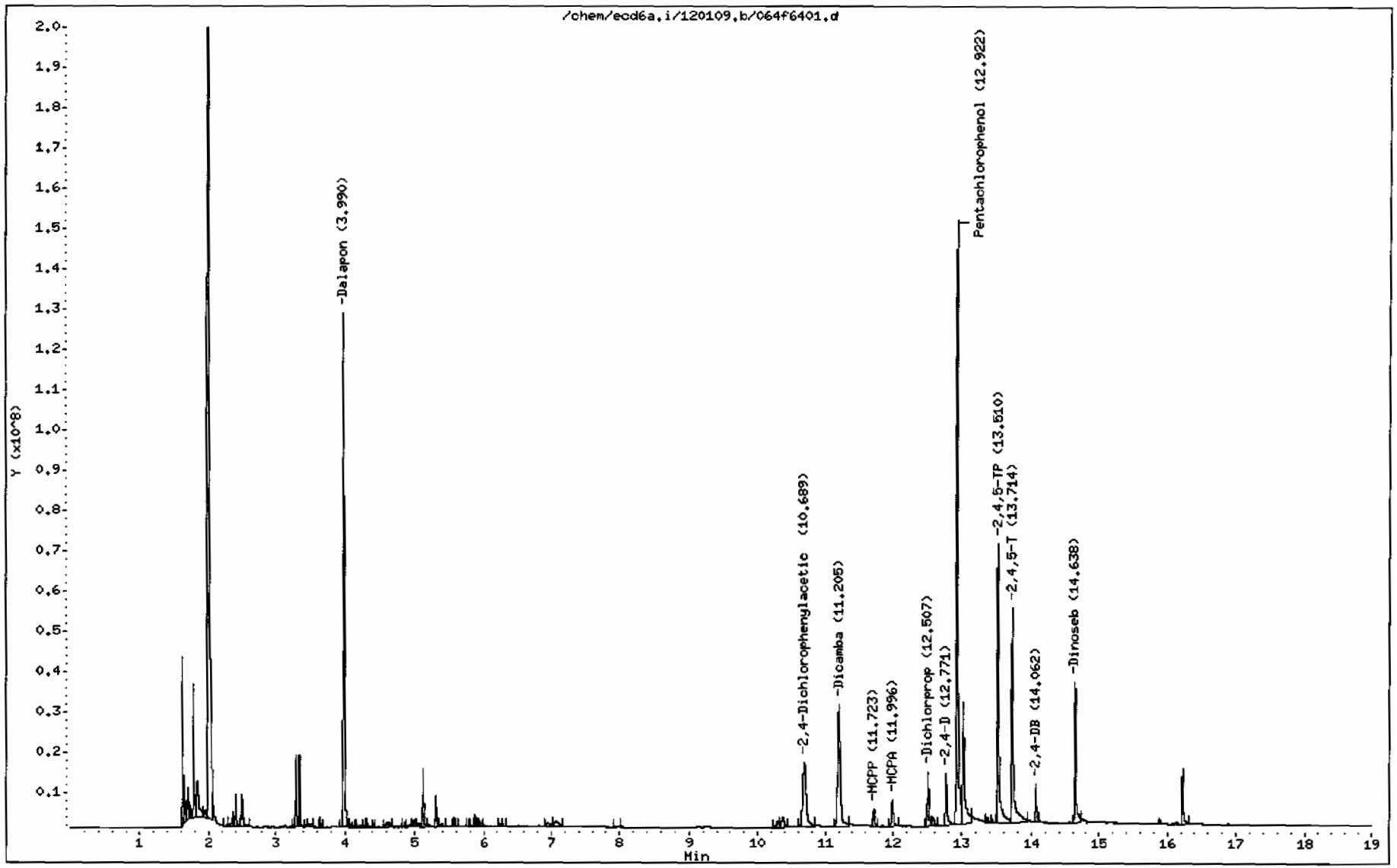

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/064f6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07

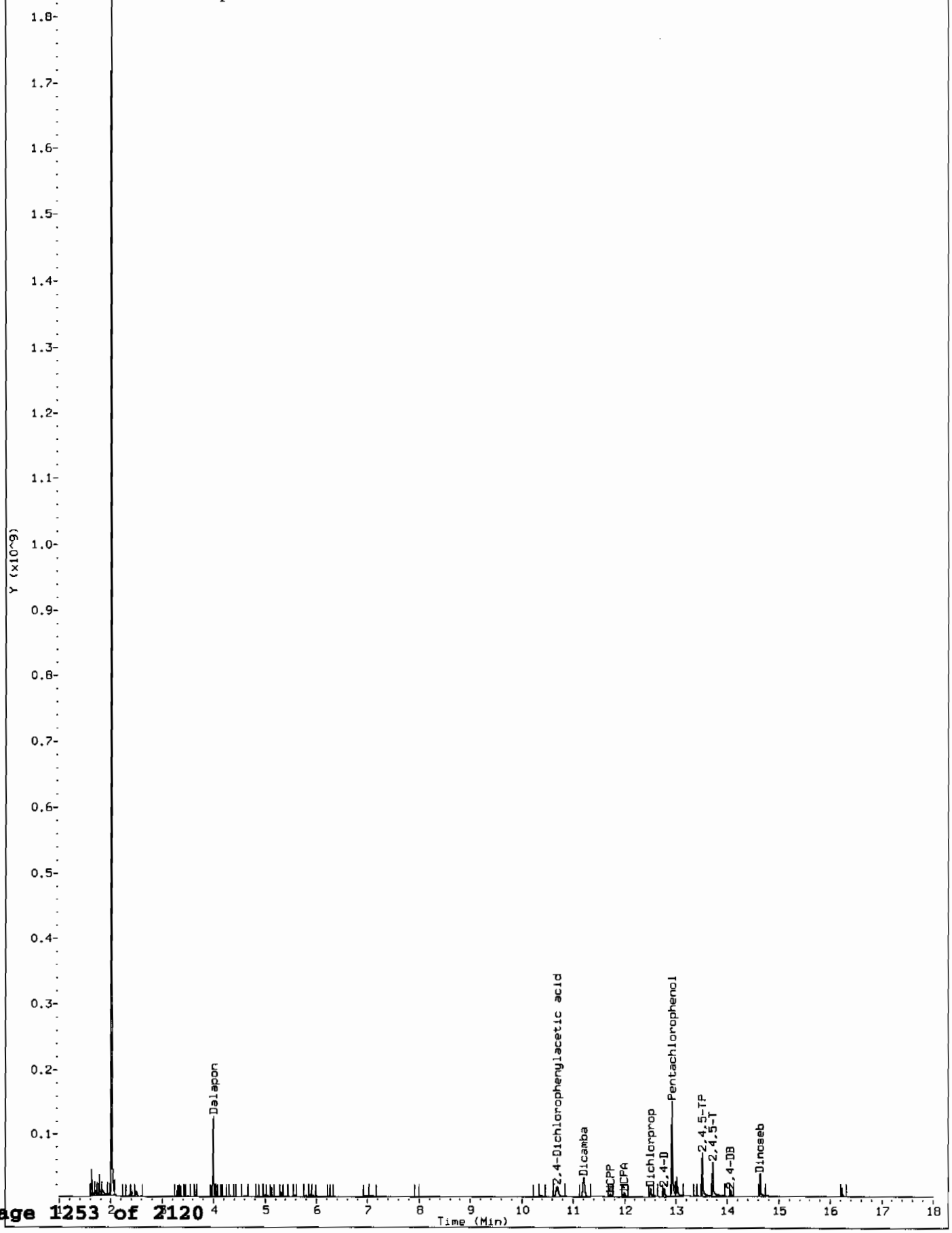

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-064f6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07

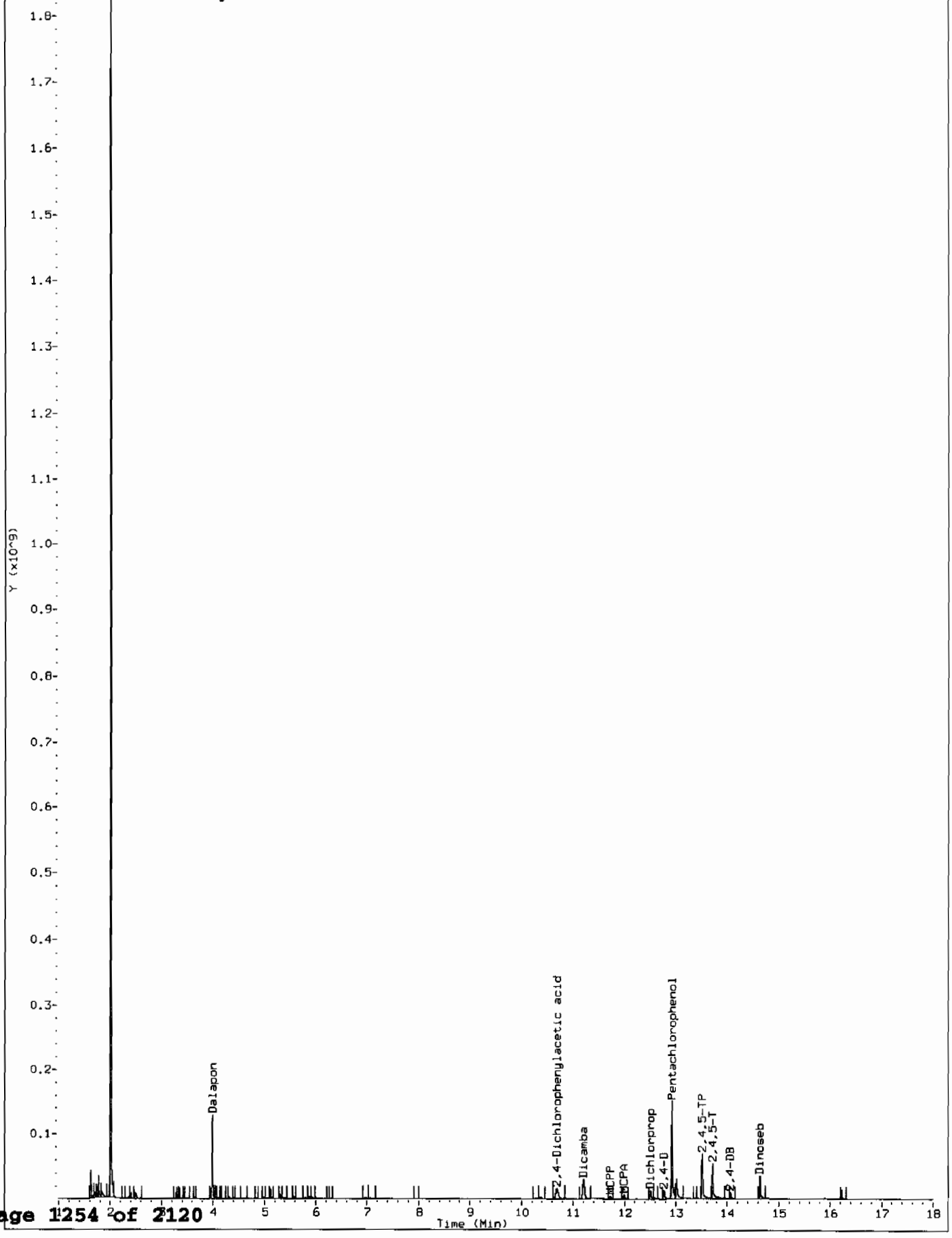

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/064b6401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD07
Inj Date : 02-DEC-2009 18:16
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 08:49 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 64 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	1 Dalapon						CAS #: 88-85-7
	3.954	3.963	-0.009	189551047	2000.00	1720	
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.708	11.717	-0.009	60548437	500.000	509	
	3 MCPP						CAS #: 7085-19-0
	12.242	12.246	-0.004	7731987	20000.0	20000	
	4 Dicamba						CAS #: 6597-78-0
	11.996	12.000	-0.004	94531197	200.000	211	
	5 MCPA						CAS #: 94-74-6
	12.549	12.552	-0.003	13054565	20000.0	17100	
	6 Dichlorprop						CAS #: 120-36-5
	12.922	12.927	-0.005	24183707	200.000	198	
	7 2,4-D						CAS #: 94-75-7
	13.213	13.216	-0.003	29694506	200.000	202	
	43 Pentachlorophenol						CAS #: 87-86-5
	13.483	13.487	-0.004	279993830	200.000	208	
	8 2,4,5-TP						CAS #: 93-72-1
	13.824	13.825	-0.001	122941327	200.000	213	

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
14.064	14.065	-0.001	105723314	200.000	222	
10 Dinoseb					CAS #: 88-85-7	
14.518	14.519	-0.001	51038579	200.000	222	(M)
11 2,4-DB					CAS #: 94-82-6	
14.352	14.354	-0.002	14156715	200.000	212	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/064b6401.d

Date : 02-DEC-2009 18:16

Client ID: HSTD07

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

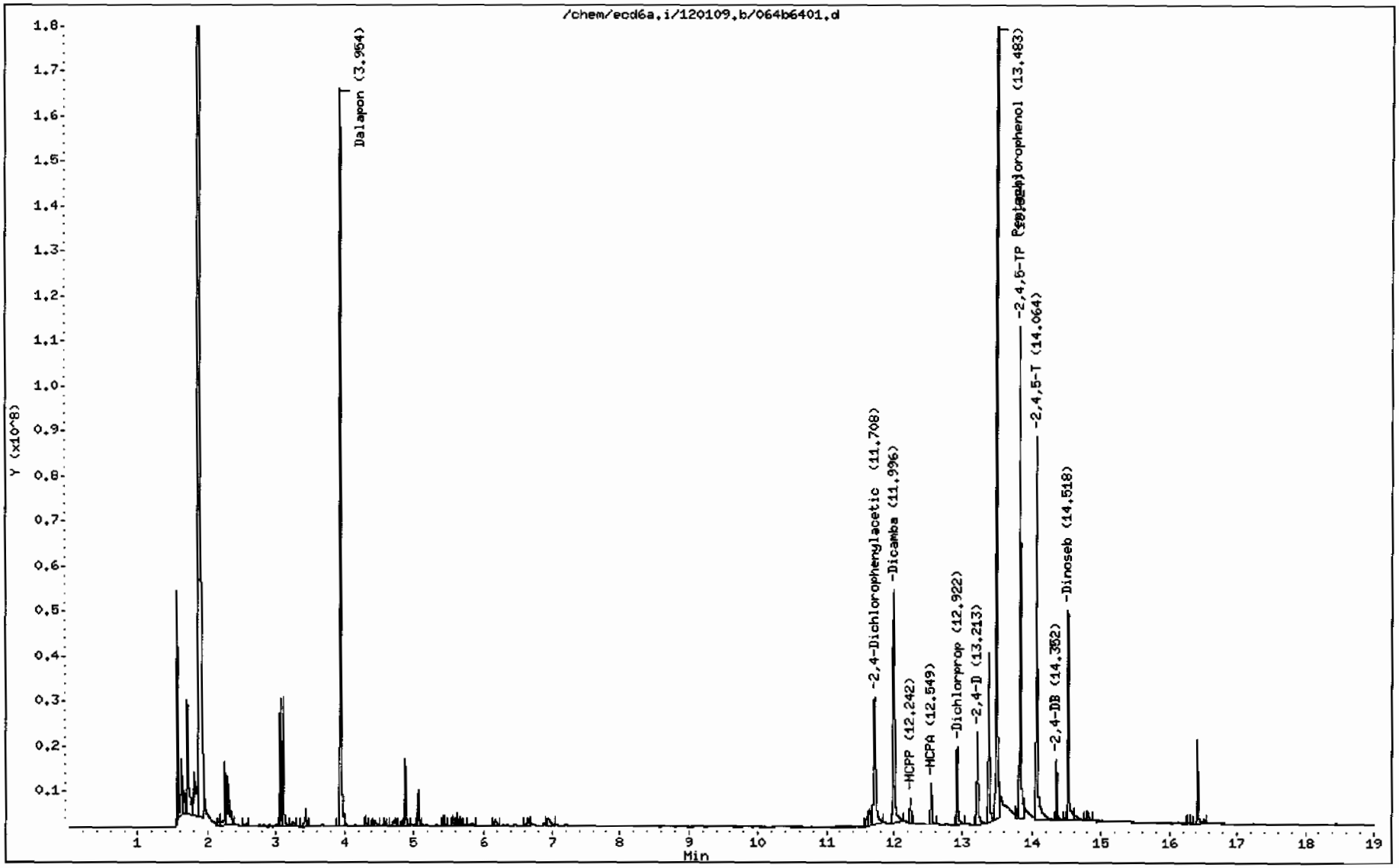

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/064b6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07

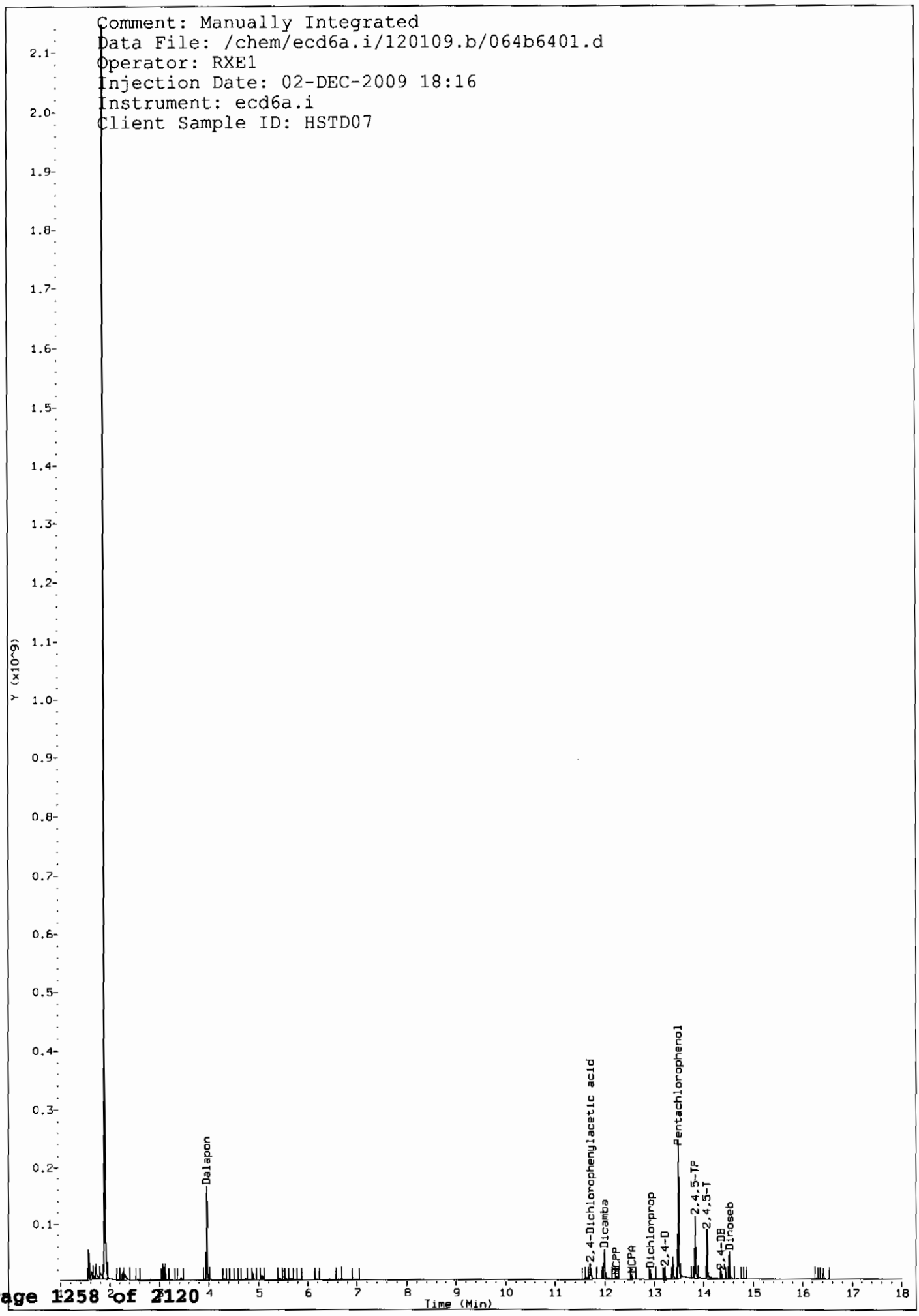

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-064b6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07

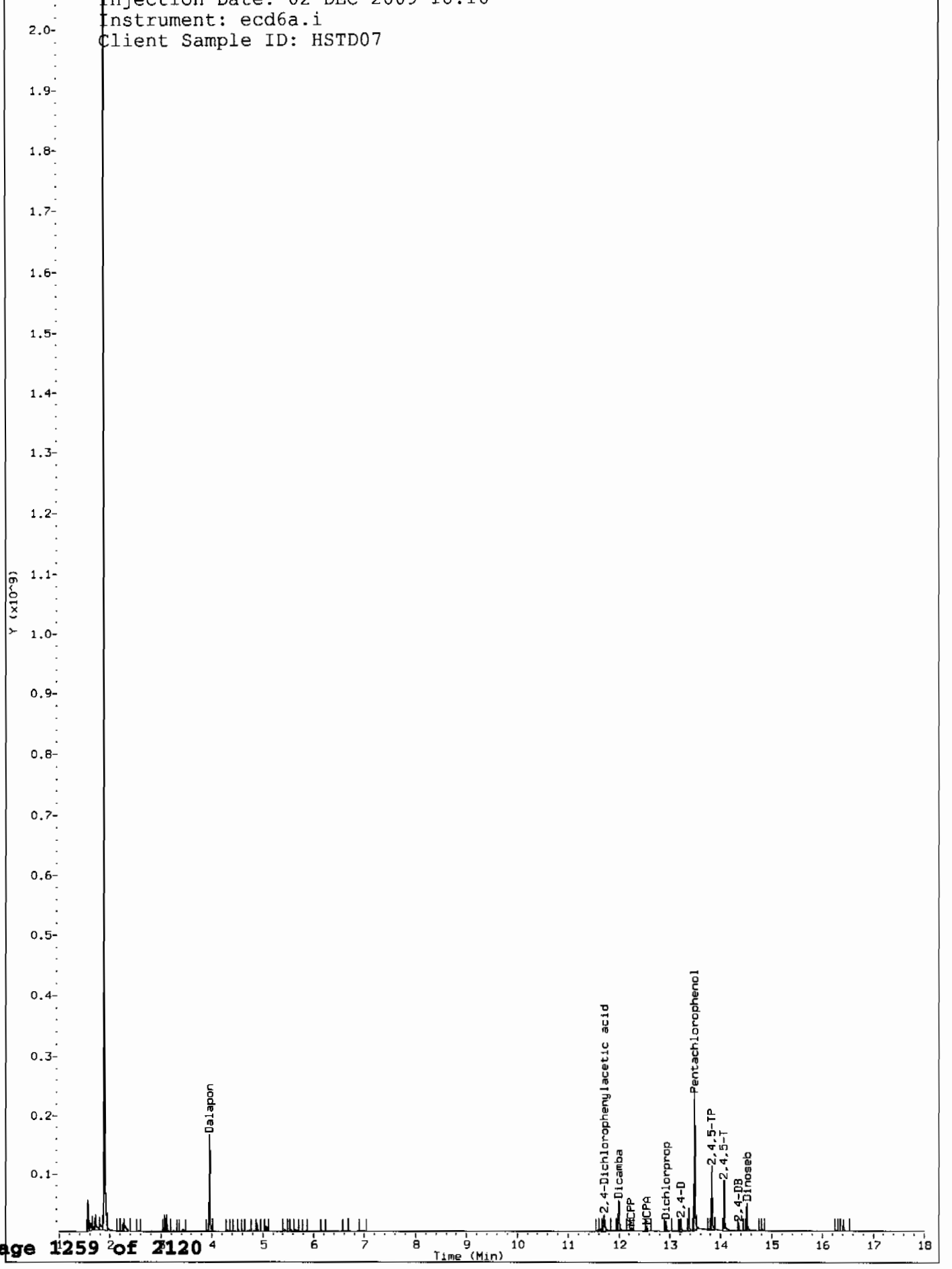

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	10.74	
02	HSTD01	WHB091030-01	12/01/09	1250	10.74	
03	HSTD02	WHB091030-02	12/01/09	1320	10.73	
04	HSTD03	WHB091030-03	12/01/09	1348	10.71	
05	HSTD04	WHB091030-04	12/01/09	1416	10.70	
06	HSTD05	WHB091030-05	12/01/09	1445	10.70	
07	HSTD06	WHB091030-06	12/01/09	1512	10.69	
08	HSTD07	WHB091030-07	12/01/09	1540	10.68	
09	HSTD01	WHB091030-12	12/01/09	1608	10.70	
10	HIBLK02	WHB091117-02	12/01/09	1635	10.74	
11	ZZZZZ	ZZZZZ	12/01/09	1704	10.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	10.70	
13	ZZZZZ	ZZZZZ	12/01/09	1800	10.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	10.70	
15	ZZZZZ	ZZZZZ	12/01/09	1856	10.70	
16	ZZZZZ	ZZZZZ	12/01/09	1925	10.69	
17	ZZZZZ	ZZZZZ	12/01/09	1952	10.68	
18	ZZZZZ	ZZZZZ	12/01/09	2020	10.69	
19	ZZZZZ	ZZZZZ	12/01/09	2048	10.71	
20	ZZZZZ	ZZZZZ	12/01/09	2116	10.68	
21	HSTD02	WHB091030-12	12/01/09	2144	10.69	
22	HIBLK03	WHB091117-02	12/01/09	2212	10.73	
23	ZZZZZ	ZZZZZ	12/01/09	2241	10.73	
24	ZZZZZ	ZZZZZ	12/01/09	2309	10.69	
25	ZZZZZ	ZZZZZ	12/01/09	2338	10.73	
26	ZZZZZ	ZZZZZ	12/02/09	0006	10.70	
27	ZZZZZ	ZZZZZ	12/02/09	0035	10.70	
28	HSTD03	WHB091030-12	12/02/09	0102	10.69	
29	HIBLK04	WHB091117-02	12/02/09	0131	10.73	
30	ZZZZZ	ZZZZZ	12/02/09	0159	10.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	10.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	10.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 2

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	10.73	
02	ZZZZZ	ZZZZZ	12/02/09	0352	10.74	
03	ZZZZZ	ZZZZZ	12/02/09	0421	10.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	10.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	10.72	
06	HSTD04	WHB091030-12	12/02/09	0545	10.69	
07	HIBLK05	WHB091117-02	12/02/09	0613	10.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	10.74	
09	ZZZZZ	ZZZZZ	12/02/09	0710	10.69	
10	ZZZZZ	ZZZZZ	12/02/09	0739	10.74	
11	ZZZZZ	ZZZZZ	12/02/09	0808	10.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	10.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	10.72	
14	HSTD05	WHB091030-12	12/02/09	0932	10.68	
15	HIBLK06	WHB091117-02	12/02/09	1000	10.73	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	10.72	
18	TBLK01	1201980055	12/02/09	1131	10.70	
19	ZZZZZ	ZZZZZ	12/02/09	1159	10.71	
20	HBLK01	1201982751	12/02/09	1227	10.71	
21	HBLK01LCS	1201982752	12/02/09	1255	10.68	
22	HSTD06	WHB091030-12	12/02/09	1335	10.69	
23	HIBLK07	WHB091117-02	12/02/09	1404	10.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	10.71	
25	ZZZZZ	ZZZZZ	12/02/09	1501	10.72	
26	ZZZZZ	ZZZZZ	12/02/09	1529	10.72	
27	WST03-10-2132	241527001	12/02/09	1557	10.72	
28	WST03-10-2132MS	1201982753	12/02/09	1625	10.69	
29	WST03-10-2132MSD	1201982754	12/02/09	1653	10.69	
30	ZZZZZ	ZZZZZ	12/02/09	1721	10.71	
31	ZZZZZ	ZZZZZ	12/02/09	1748	10.71	
32	HSTD07	WHB091030-12	12/02/09	1816	10.69	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	11.73	
02	HSTD01	WHB091030-01	12/01/09	1250	11.73	
03	HSTD02	WHB091030-02	12/01/09	1320	11.73	
04	HSTD03	WHB091030-03	12/01/09	1348	11.72	
05	HSTD04	WHB091030-04	12/01/09	1416	11.72	
06	HSTD05	WHB091030-05	12/01/09	1445	11.72	
07	HSTD06	WHB091030-06	12/01/09	1512	11.71	
08	HSTD07	WHB091030-07	12/01/09	1540	11.71	
09	HSTD01	WHB091030-12	12/01/09	1608	11.72	
10	HIBLK02	WHB091117-02	12/01/09	1635	11.73	
11	ZZZZZ	ZZZZZ	12/01/09	1704	11.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	11.72	
13	ZZZZZ	ZZZZZ	12/01/09	1800	11.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	11.72	
15	ZZZZZ	ZZZZZ	12/01/09	1856	11.72	
16	ZZZZZ	ZZZZZ	12/01/09	1925	11.71	
17	ZZZZZ	ZZZZZ	12/01/09	1952	11.71	
18	ZZZZZ	ZZZZZ	12/01/09	2020	11.71	
19	ZZZZZ	ZZZZZ	12/01/09	2048	11.72	
20	ZZZZZ	ZZZZZ	12/01/09	2116	11.71	
21	HSTD02	WHB091030-12	12/01/09	2144	11.71	
22	HIBLK03	WHB091117-02	12/01/09	2212	11.73	
23	ZZZZZ	ZZZZZ	12/01/09	2241	11.73	
24	ZZZZZ	ZZZZZ	12/01/09	2309	11.71	
25	ZZZZZ	ZZZZZ	12/01/09	2338	11.73	
26	ZZZZZ	ZZZZZ	12/02/09	0006	11.72	
27	ZZZZZ	ZZZZZ	12/02/09	0035	11.72	
28	HSTD03	WHB091030-12	12/02/09	0102	11.71	
29	HIBLK04	WHB091117-02	12/02/09	0131	11.73	
30	ZZZZZ	ZZZZZ	12/02/09	0159	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	11.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	11.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	11.73	
02	ZZZZZ	ZZZZZ	12/02/09	0352	11.73	
03	ZZZZZ	ZZZZZ	12/02/09	0421	11.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	11.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	11.73	
06	HSTD04	WHB091030-12	12/02/09	0545	11.71	
07	HIBLK05	WHB091117-02	12/02/09	0613	11.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	11.73	
09	ZZZZZ	ZZZZZ	12/02/09	0710	11.71	
10	ZZZZZ	ZZZZZ	12/02/09	0739	11.73	
11	ZZZZZ	ZZZZZ	12/02/09	0808	11.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	11.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	11.72	
14	HSTD05	WHB091030-12	12/02/09	0932	11.71	
15	HIBLK06	WHB091117-02	12/02/09	1000	11.72	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	11.72	
18	TBLK01	1201980055	12/02/09	1131	11.72	
19	ZZZZZ	ZZZZZ	12/02/09	1159	11.72	
20	HBLK01	1201982751	12/02/09	1227	11.72	
21	HBLK01LCS	1201982752	12/02/09	1255	11.70	
22	HSTD06	WHB091030-12	12/02/09	1335	11.71	
23	HIBLK07	WHB091117-02	12/02/09	1404	11.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	11.72	
25	ZZZZZ	ZZZZZ	12/02/09	1501	11.72	
26	ZZZZZ	ZZZZZ	12/02/09	1529	11.72	
27	WST03-10-2132	241527001	12/02/09	1557	11.73	
28	WST03-10-2132MS	1201982753	12/02/09	1625	11.71	
29	WST03-10-2132MSD	1201982754	12/02/09	1653	11.71	
30	ZZZZZ	ZZZZZ	12/02/09	1721	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	1748	11.72	
32	HSTD07	WHB091030-12	12/02/09	1816	11.71	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

Identification Summary

SDG Number: 10–600–1 **Client ID:** LCS for batch 927399

Lab Sample ID: 1201982752

Data File:	053f5301.d	**Data File:**	053b5301.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	02–DEC–09 12:55	**Analyzed:**	02–DEC–09 12:55

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								12.5
	Column 1	1	12.77	12.71 – 12.83	.00256		mg/L	
	Column 2	1	13.21	13.16 – 13.28	.00226		mg/L	
2,4,5–TP								1.53
	Column 1	1	13.51	13.48 – 13.54	.0023		mg/L	
	Column 2	1	13.82	13.8 – 13.86	.00227		mg/L	

Identification Summary

SDG Number: 10-600-1 **Client ID:** WST03-10-2132MS

Lab Sample ID: 1201982753

Data File:	060f6001.d	**Data File:**	060b6001.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx-CLP	**Column:**	Rtx-CLPII
Analyzed:	02-DEC-09 16:25	**Analyzed:**	02-DEC-09 16:25

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4-D							22.5
Column 1	1	12.77	12.71 – 12.83	.501		mg/L	
Column 2	1	13.21	13.16 – 13.28	.399		mg/L	
2,4,5-TP							1.84
Column 1	1	13.51	13.48 – 13.54	.438		mg/L	
Column 2	1	13.82	13.8 – 13.86	.43		mg/L	

Identification Summary

SDG Number: 10–600–1 **Client ID:** WST03–10–2132MSD

Lab Sample ID: 1201982754

Data File:	061f6101.d	**Data File:**	061b6101.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	02–DEC–09 16:53	**Analyzed:**	02–DEC–09 16:53

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								21.1
	Column 1	1	12.77	12.71 – 12.83	.503		mg/L	
	Column 2	1	13.21	13.16 – 13.28	.407		mg/L	
2,4,5–TP								5.89
	Column 1	1	13.51	13.48 – 13.54	.451		mg/L	
	Column 2	1	13.82	13.8 – 13.86	.425		mg/L	

QUALITY CONTROL DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201980055**				
Client Sample:	**QC for batch 926091**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 926091**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**927402**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 11:31**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 16:23**	**Aliquot:**	**5 mL**	**Final Volume:**	**10 mL**
Data File:	**050f5001.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	050b5001.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/050f5001a.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK02
Inj Date : 02-DEC-2009 11:31
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201980055|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 50 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.704	10.698	0.006	63031355	593.233	1.2

Data File: /chem/ecd6a.i/120109.b/050f5001a.d

Date : 02-DEC-2009 11:31

Client ID: TBLK02

Sample Info: !120198005511!

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

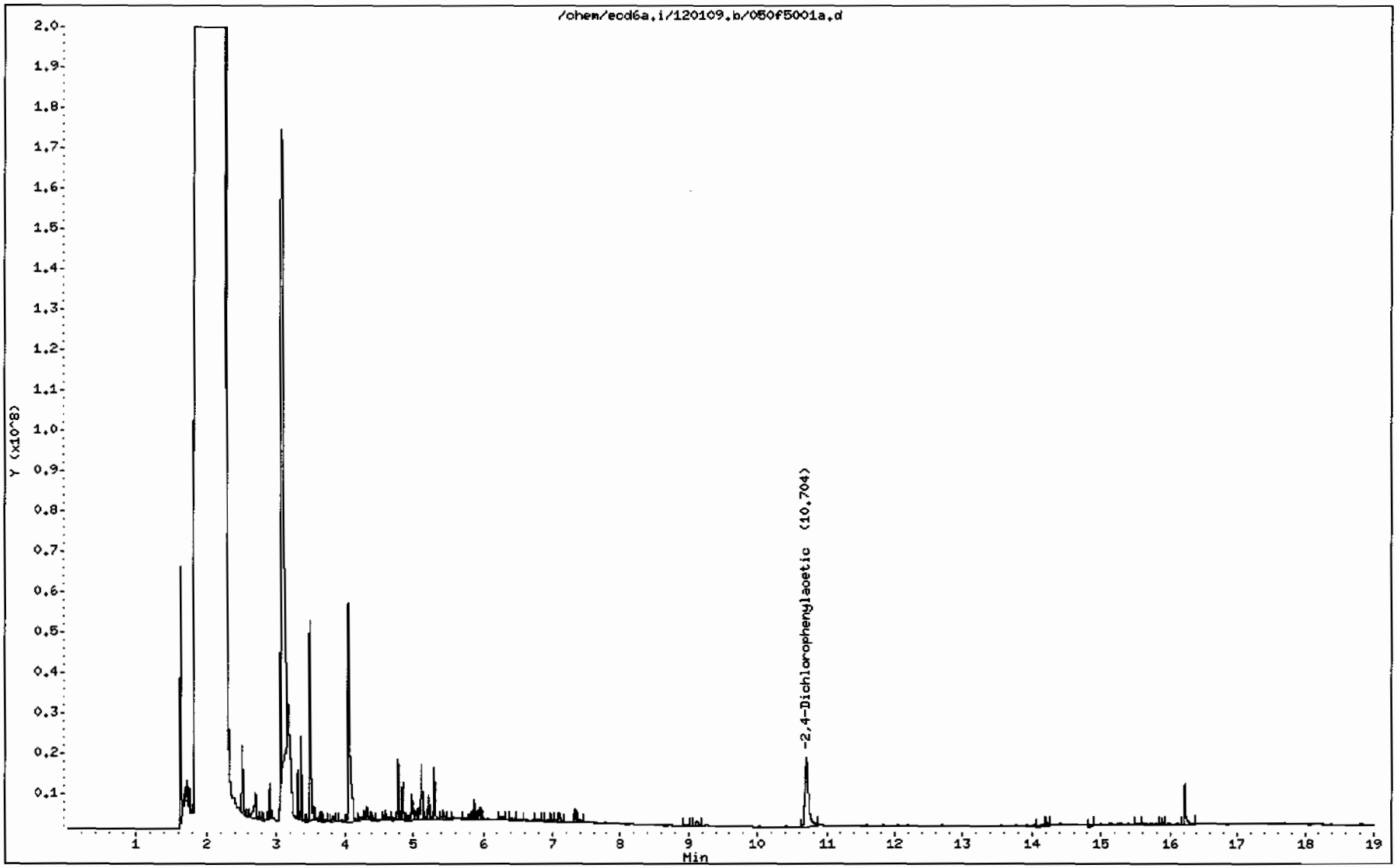

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/050b5001a.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK02
Inj Date : 02-DEC-2009 11:31
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201980055|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|TB|SOIL|TB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 50 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.716	11.717	-0.001	68073887	572.385	1.1

Data File: /chem/ecd6a.i/120109.b/050b5001a.d

Date : 02-DEC-2009 11:31

Client ID: TBLK02

Sample Info: |120198005|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

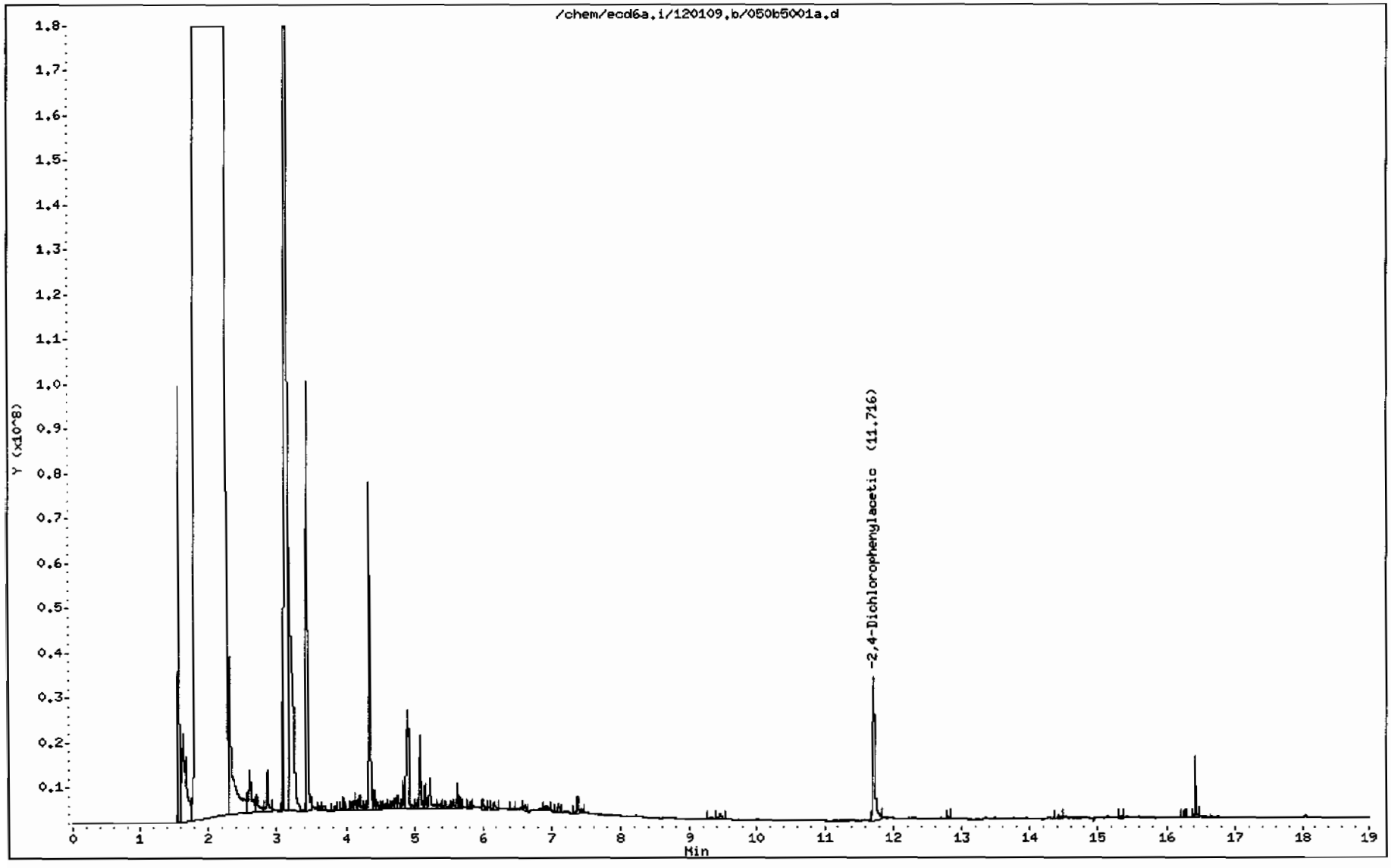

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–600–1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982751**				
Client Sample:	**QC for batch 927399**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927399**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**927402**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 12:27**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 16:23**	**Aliquot:**	**1000 mL**	**Final Volume:**	**10 mL**
Data File:	**052f5201.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	052b5201.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.00025	mg/L	0.000083	0.00025	1
93–72–1	2,4,5–TP	U	0.00025	mg/L	0.000083	0.00025	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/052f5201.d
Lab Smp Id: 1201982751 Client Smp ID: HBLK01
Inj Date : 02-DEC-2009 12:27
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982751|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 52 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.711	10.698	0.013	54986755	517.520	0.0052

Data File: /chem/ecd6a.i/120109.b/052f5201.d

Date : 02-DEC-2009 12:27

Client ID: HBLK01

Sample Info: |120198275|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

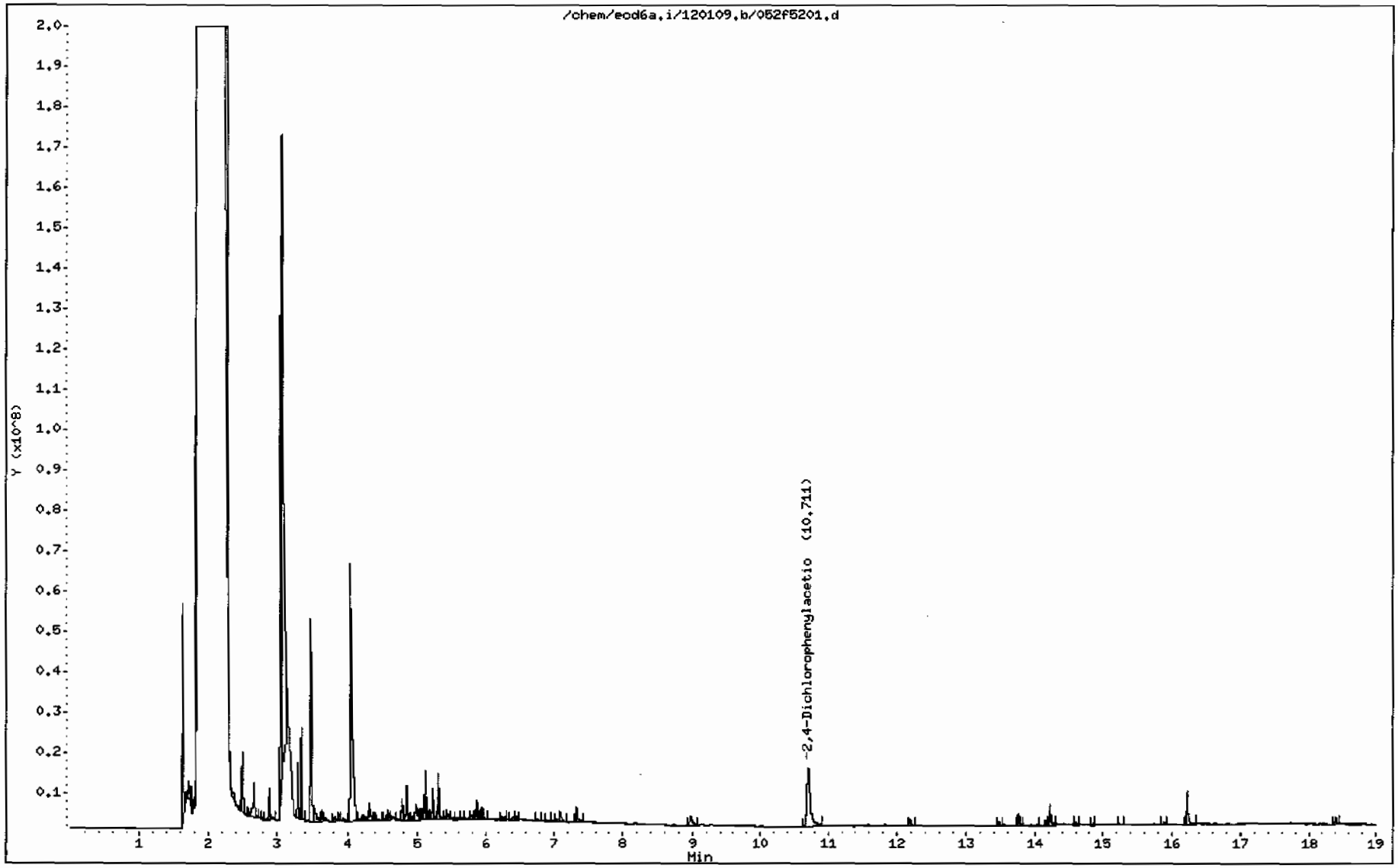

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/052b5201.d
Lab Smp Id: 1201982751 Client Smp ID: HBLK01
Inj Date : 02-DEC-2009 12:27
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982751|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MB|SOIL|MB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 52 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.719	11.717	0.002	57933009	487.118	0.0049

Data File: /chem/ecd6a.i/120109.b/052b5201.d

Page 1

Date : 02-DEC-2009 12:27

Client ID: HBLK01

Instrument: ecd6a.i

Sample Info: |120198275|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLPII

Column diameter: 0.25

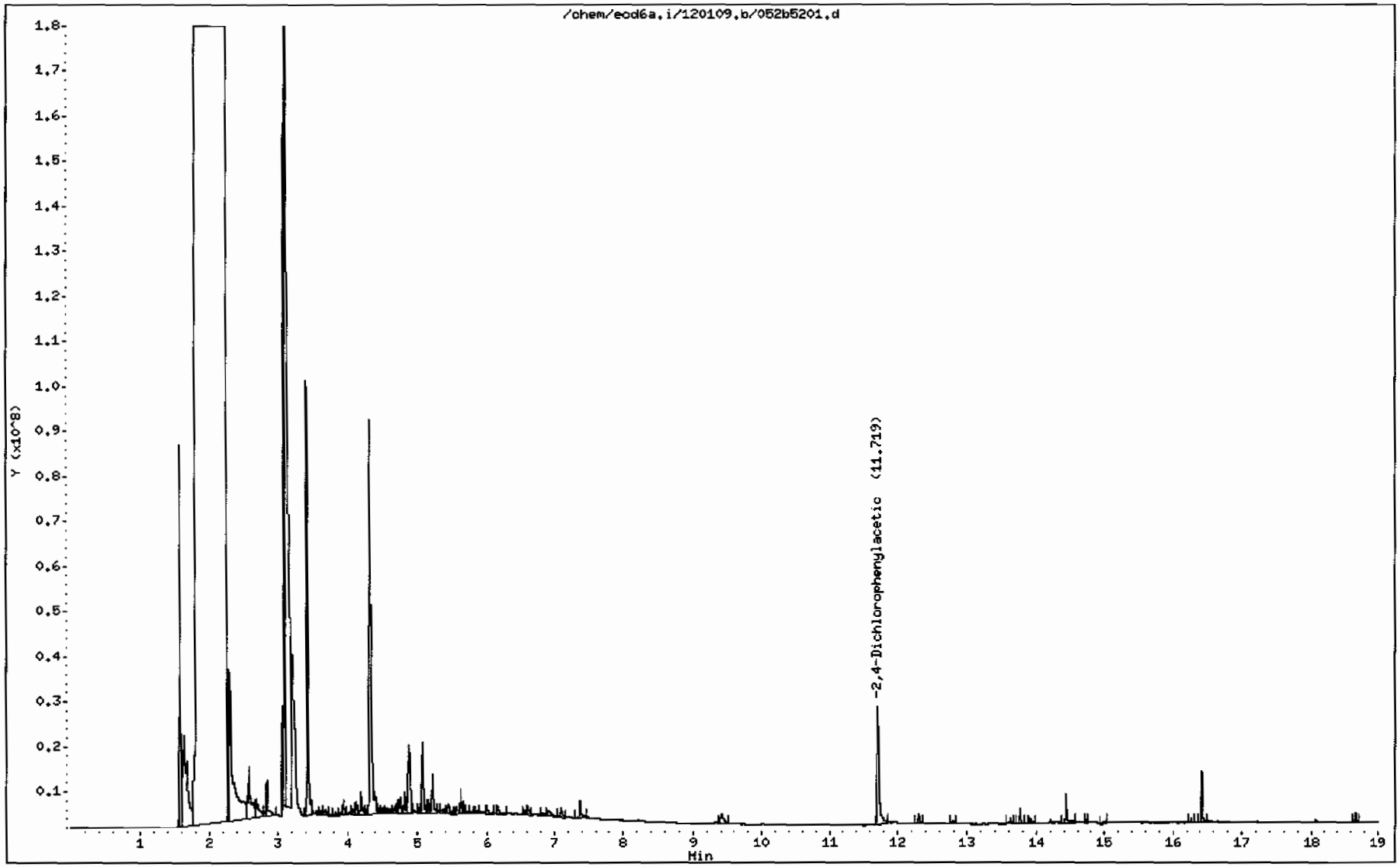

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-600-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982752**				
Client Sample:	**QC for batch 927399**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927399**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**927402**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 12:55**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 16:23**	**Aliquot:**	**1000 mL**	**Final Volume:**	**10 mL**
Data File:	**053f5301.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	053b5301.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D		0.00256	mg/L	0.000083	0.00025	1
93-72-1	2,4,5-TP		0.0023	mg/L	0.000083	0.00025	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/053f5301.d
Lab Smp Id: 1201982752 Client Smp ID: HBLK01LCS
Inj Date : 02-DEC-2009 12:55
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982752|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 53 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.682	10.698	-0.016	62440302	587.670	0.0059	
7 2,4-D					CAS #: 94-75-7	
12.767	12.775	-0.008	25558601	256.064	0.0026	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.505	13.512	-0.007	110918552	230.029	0.0023	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/053f5301.d

Date : 02-DEC-2009 12:55

Client ID: HBLK01LCS

Sample Info: |1201982752|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

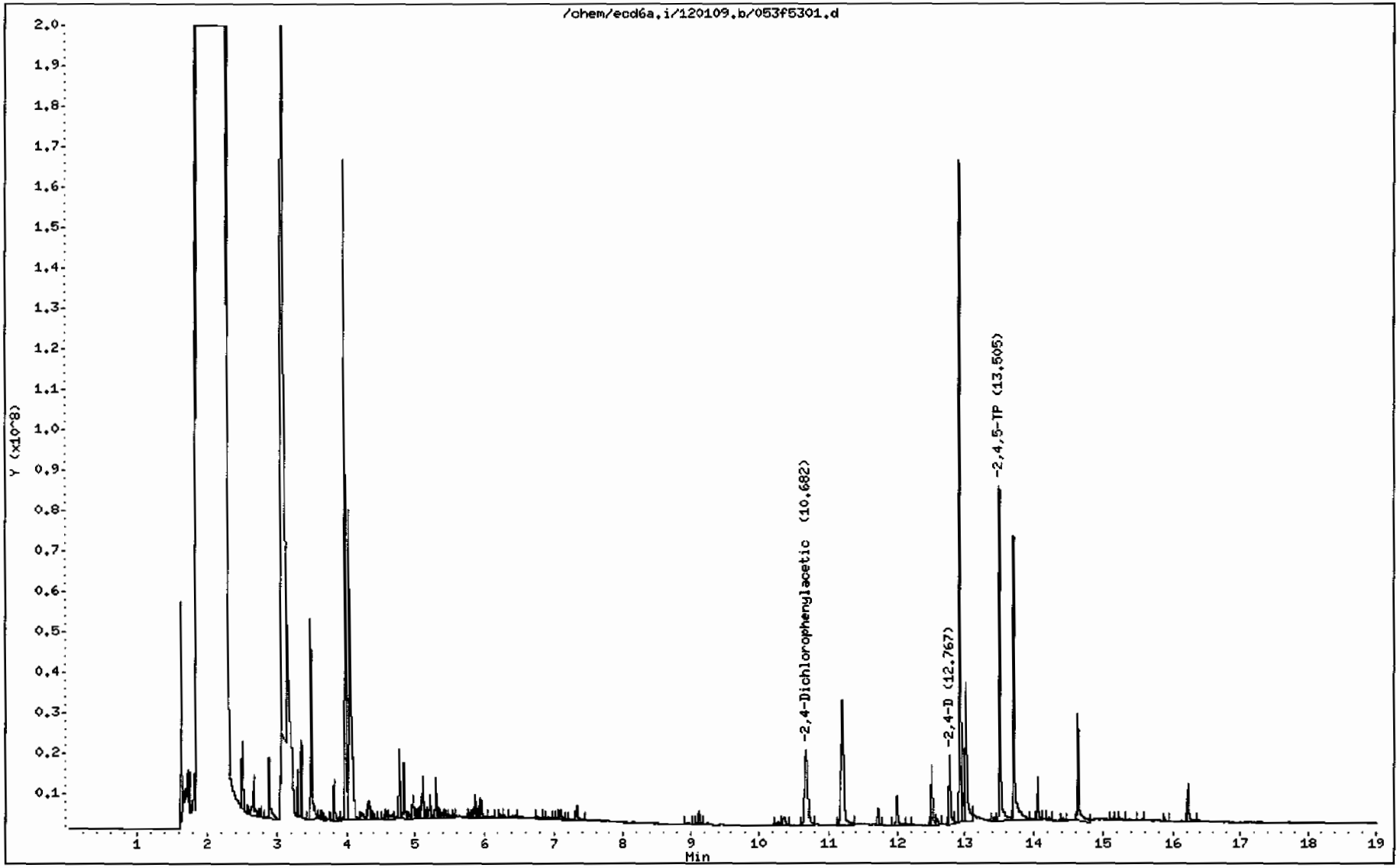

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/053f5301.d
Operator: RXE1
Injection Date: 02-DEC-2009 12:55
Instrument: ecd6a.i
Client Sample ID: HBLK01LCS

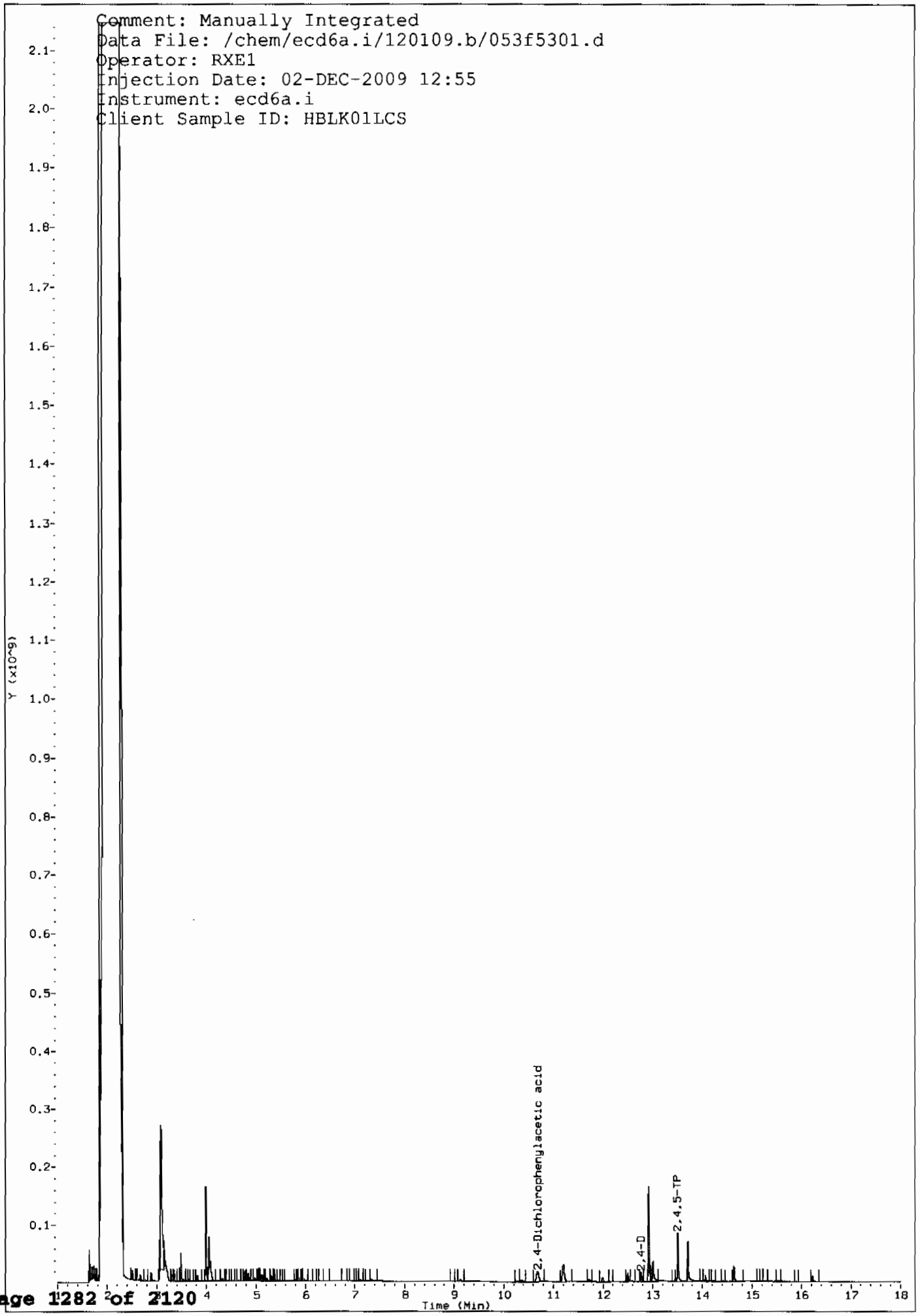

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-053f5301.d
Operator: RXE1
Injection Date: 02-DEC-2009 12:55
Instrument: ecd6a.i
Client Sample ID: HBLK01LCS

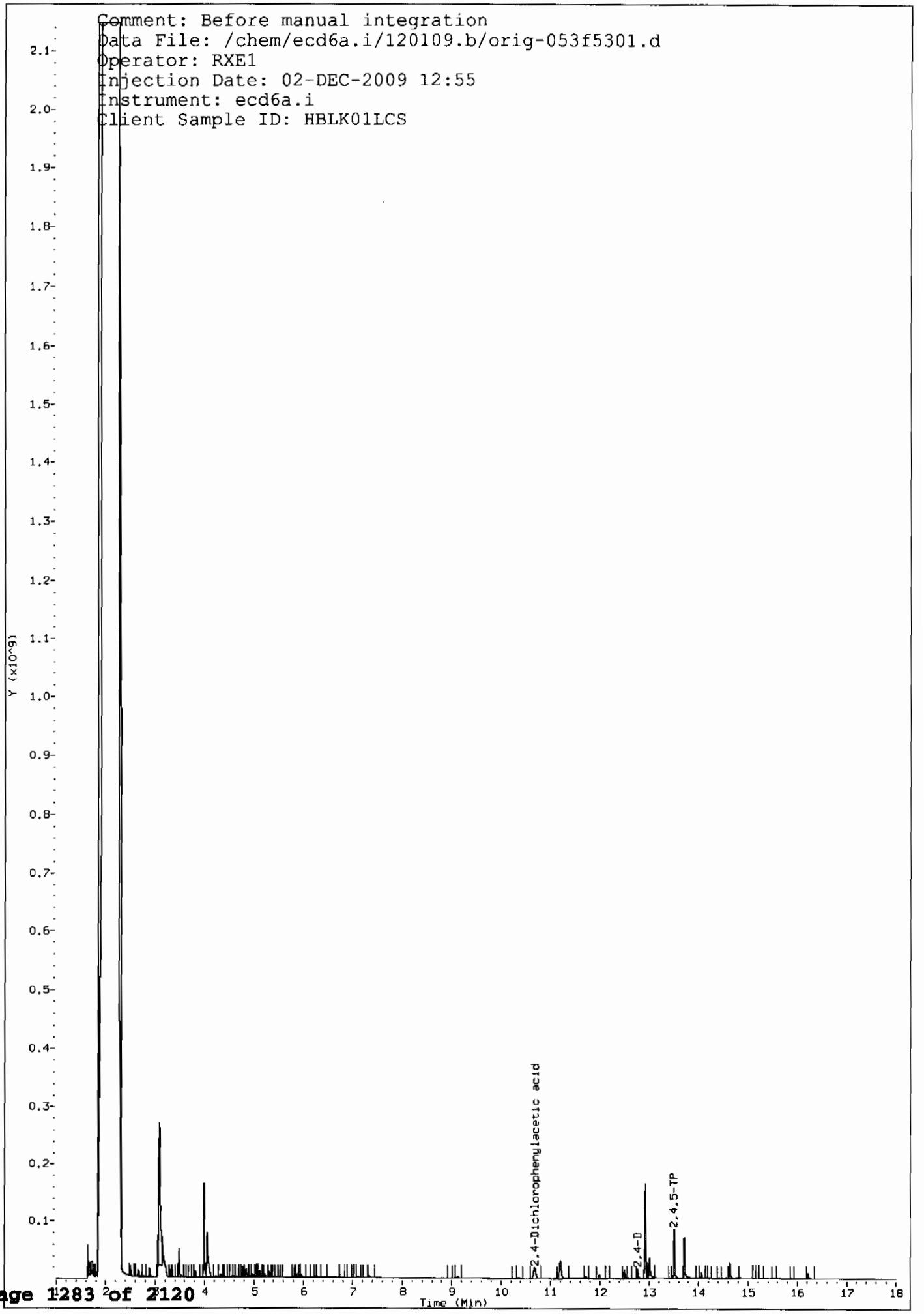

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/053b5301.d
Lab Smp Id: 1201982752 Client Smp ID: HBLK01LCS
Inj Date : 02-DEC-2009 12:55
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982752|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LCS|SOIL|LCS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 53 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.704	11.717	-0.013	66286040	557.353	0.0056
7 2,4-D					CAS #: 94-75-7
13.210	13.216	-0.006	33114049	225.877	0.0022
8 2,4,5-TP					CAS #: 93-72-1
13.820	13.825	-0.005	130705740	226.530	0.0023

Data File: /chem/ecd6a.i/120109.b/053b5301.d
Date : 02-DEC-2009 12:55
Client ID: HBLK01LCS
Sample Info: |1201982752|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

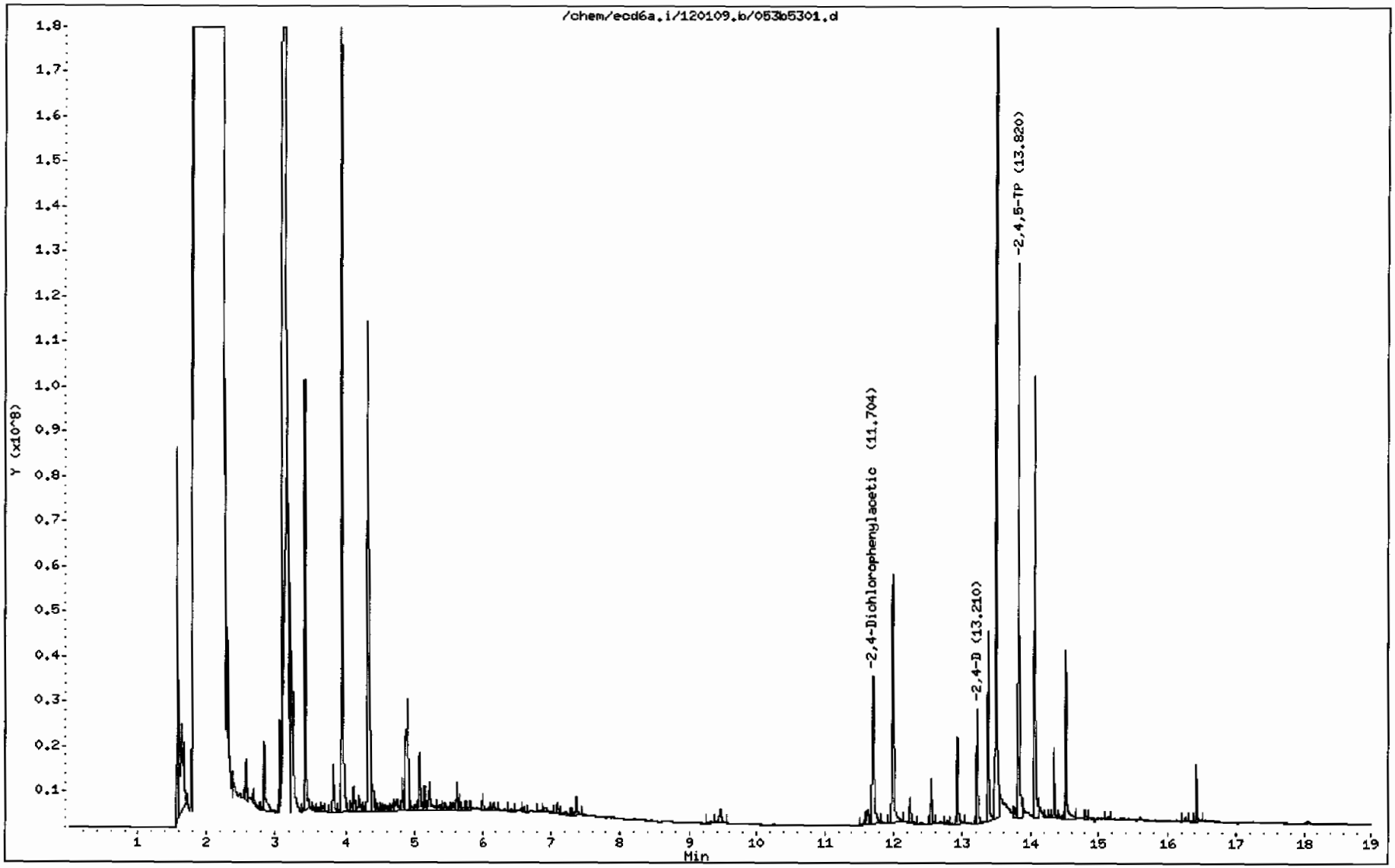

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-600-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201982753	**Date Received:**	11/20/2009 08:50		
Client Sample:	QC for batch 927399	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2132MS	**Method:**	SW846 8151A	**SOP Ref:**	GL-OA-E-011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 16:25	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	060f6001.d	**Column:**	1 Rtx-CLP	**Level:**	LOW
	060b6001.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D		0.501	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP		0.438	mg/L	0.0166	0.050	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/060f6001.d
Lab Smp Id: 1201982753 Client Smp ID: WST03-10-2132MS
Inj Date : 02-DEC-2009 16:25
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982753|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 60 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.686	10.698	-0.012	56850236	535.058	1.1	
7 2,4-D					CAS #: 94-75-7	
12.769	12.775	-0.006	24986099	250.328	0.50	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.507	13.512	-0.005	105654823	219.113	0.44	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/060f6001.d

Date : 02-DEC-2009 16:25

Client ID: WST03-10-2132MS

Sample Info: |1201982753111

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

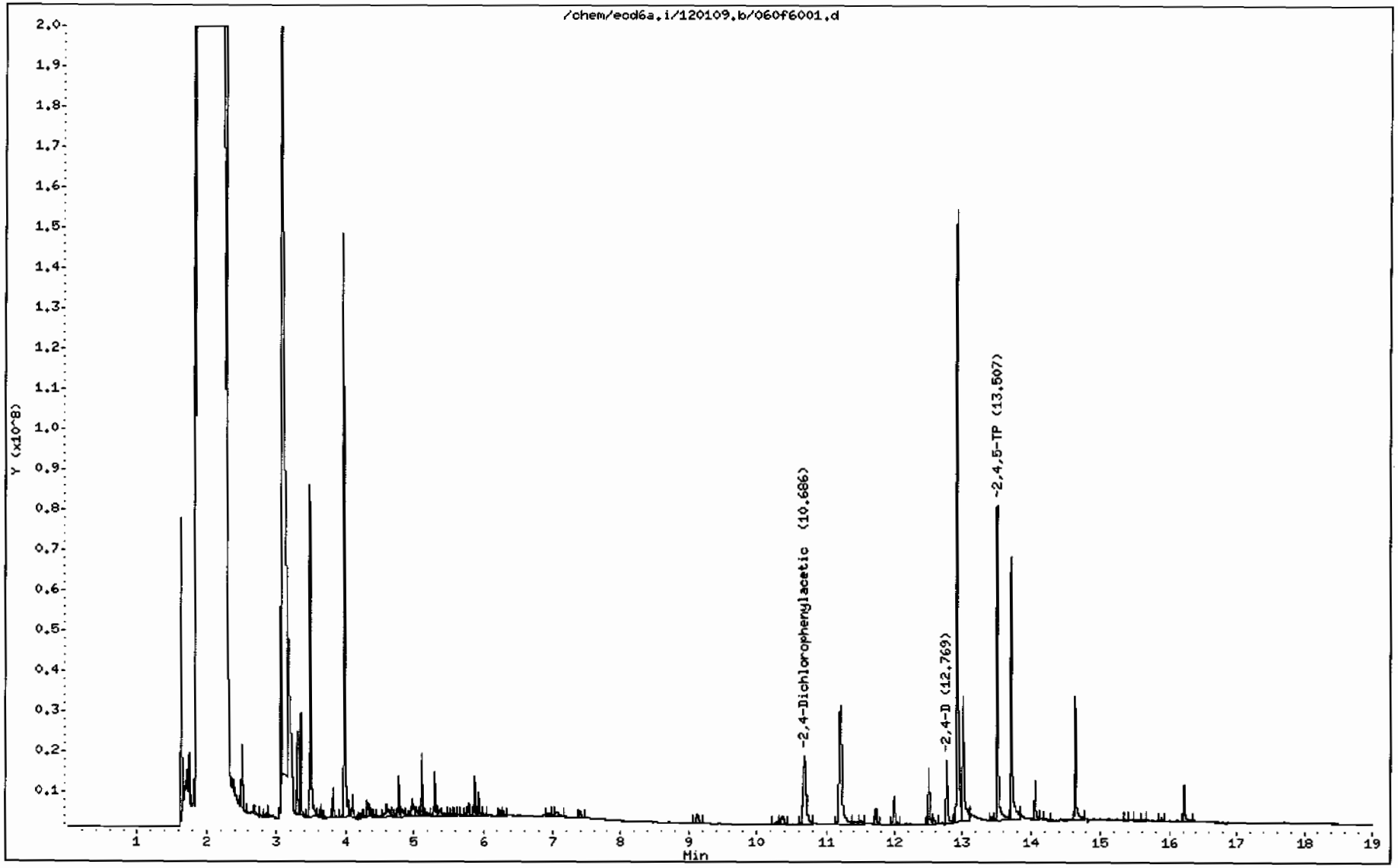

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/060f6001.d
Operator: RXE1
Injection Date: 02-DEC-2009 16:25
Instrument: ecd6a.i
Client Sample ID: WST03-10-2132MS

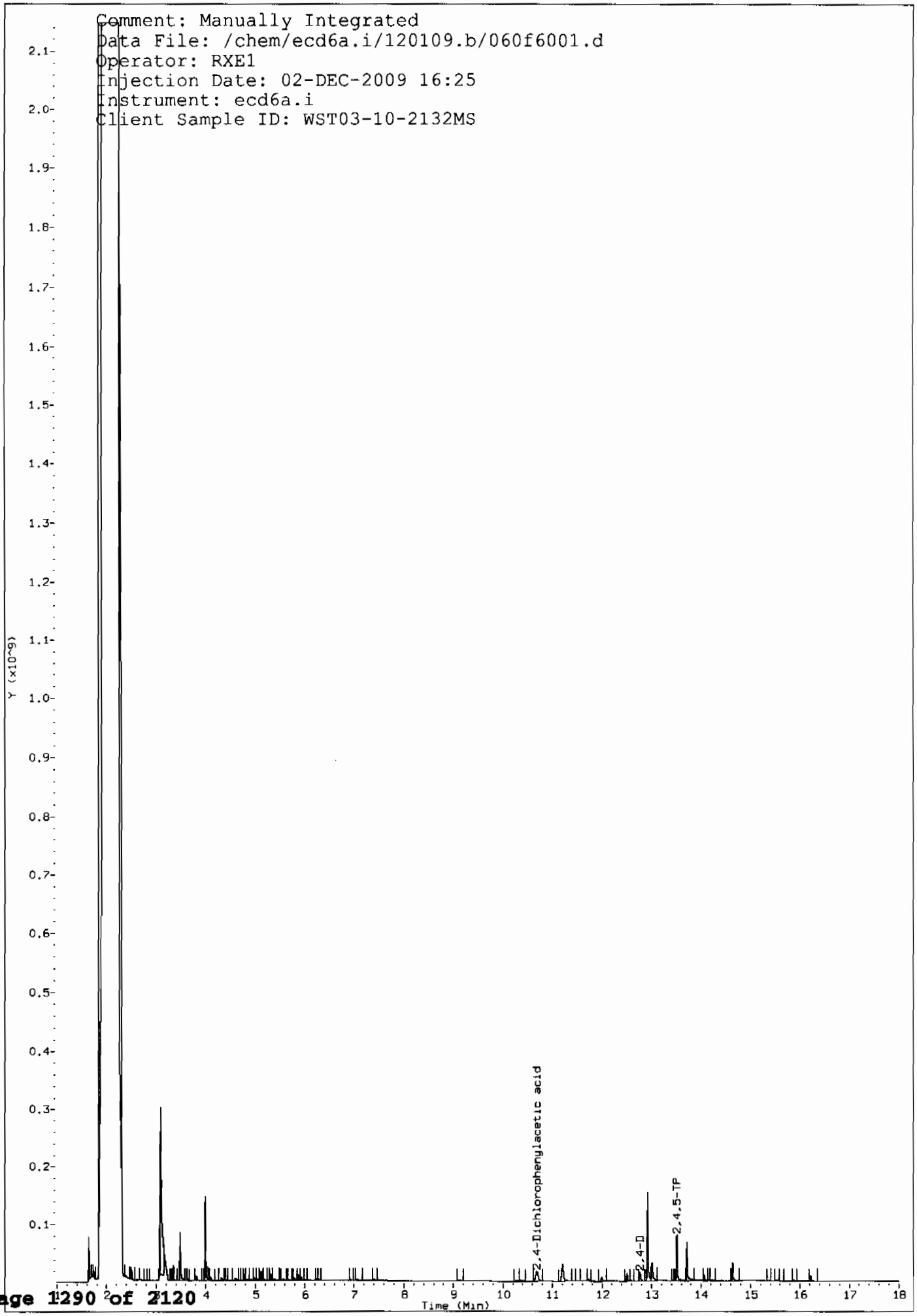

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-060f6001.d
Operator: RXE1
Injection Date: 02-DEC-2009 16:25
Instrument: ecd6a.i
Client Sample ID: WST03-10-2132MS

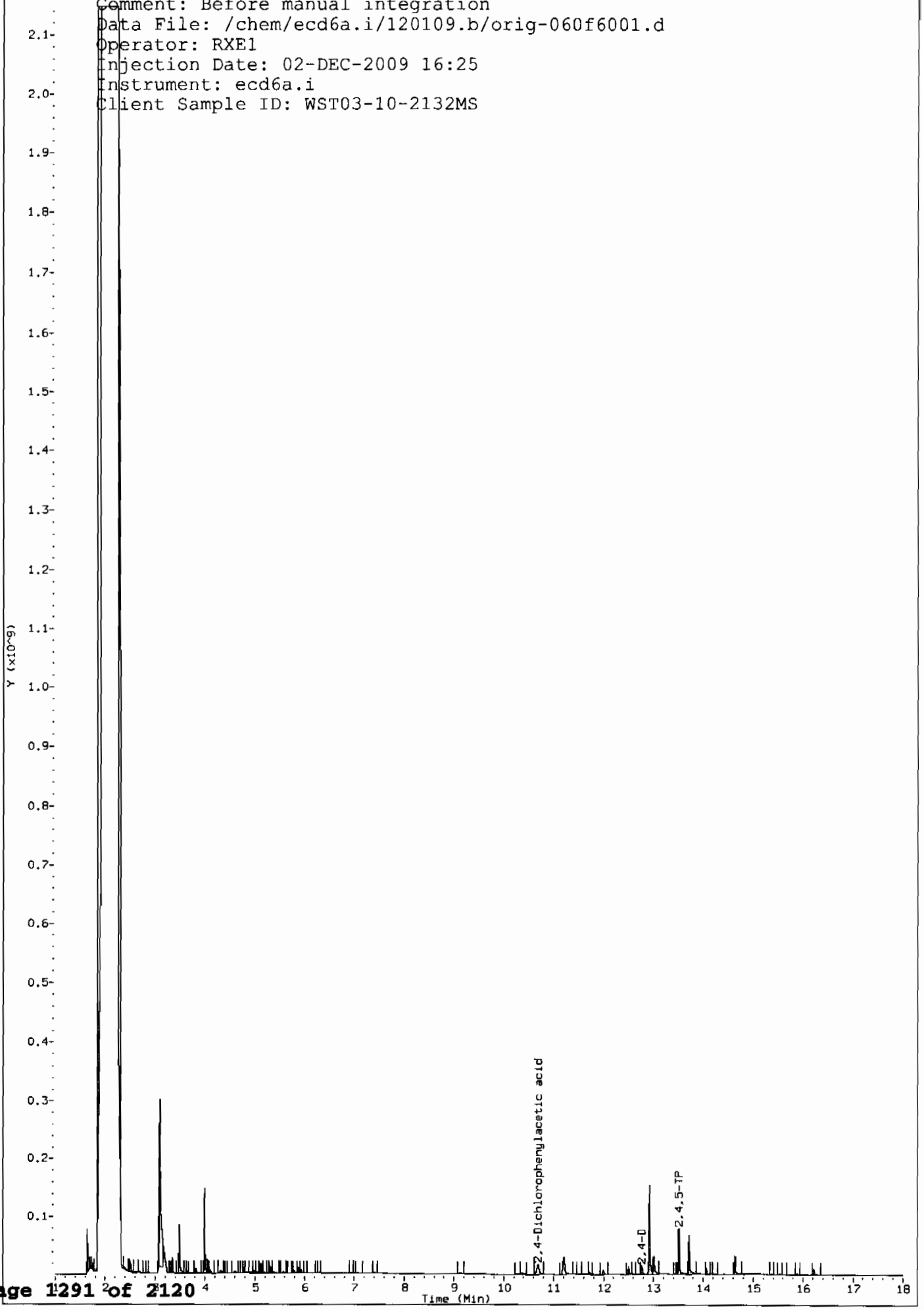

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/060b6001.d
Lab Smp Id: 1201982753 Client Smp ID: WST03-10-2132MS
Inj Date : 02-DEC-2009 16:25
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982753|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MS|SOIL|MS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 60 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.709	11.717	-0.008	61799465	519.628	1.0
7 2,4-D					CAS #: 94-75-7
13.212	13.216	-0.004	29270149	199.657	0.40
8 2,4,5-TP					CAS #: 93-72-1
13.822	13.825	-0.003	124117327	215.112	0.43

Data File: /chem/ecd6a.i/120109.b/060b6001.d

Page 1

Date : 02-DEC-2009 16:25

Client ID: WST03-10-2132MS

Instrument: ecd6a.i

Sample Info: |1201982753|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLPII

Column diameter: 0.25

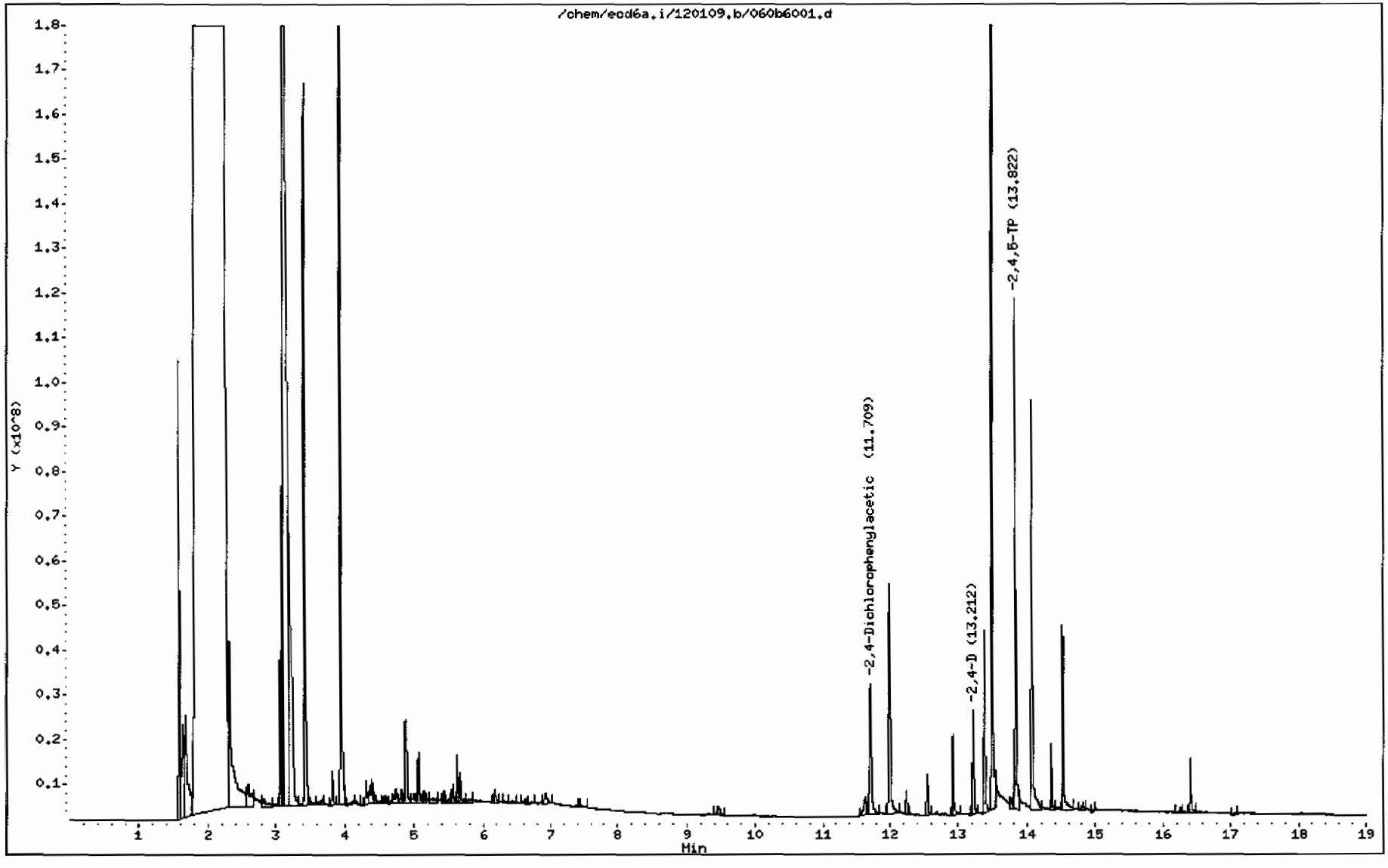

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–600–1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201982754	**Date Received:**	11/20/2009 08:50		
Client Sample:	QC for batch 927399	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2132MSD	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 16:53	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	061f6101.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	061b6101.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D		0.503	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP		0.451	mg/L	0.0166	0.050	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/061f6101.d
Lab Smp Id: 1201982754 Client Smp ID: WST03-10-2132MSD
Inj Date : 02-DEC-2009 16:53
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982754|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 61 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.689	10.698	-0.009	59688565	561.772	1.1	
7 2,4-D					CAS #: 94-75-7	
12.770	12.775	-0.005	25104912	251.519	0.50	(RM)
8 2,4,5-TP					CAS #: 93-72-1	
13.508	13.512	-0.004	108767047	225.567	0.45	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/061f6101.d

Date : 02-DEC-2009 16:53

Client ID: WST03-10-2132MSD

Sample Info: |1201982754|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

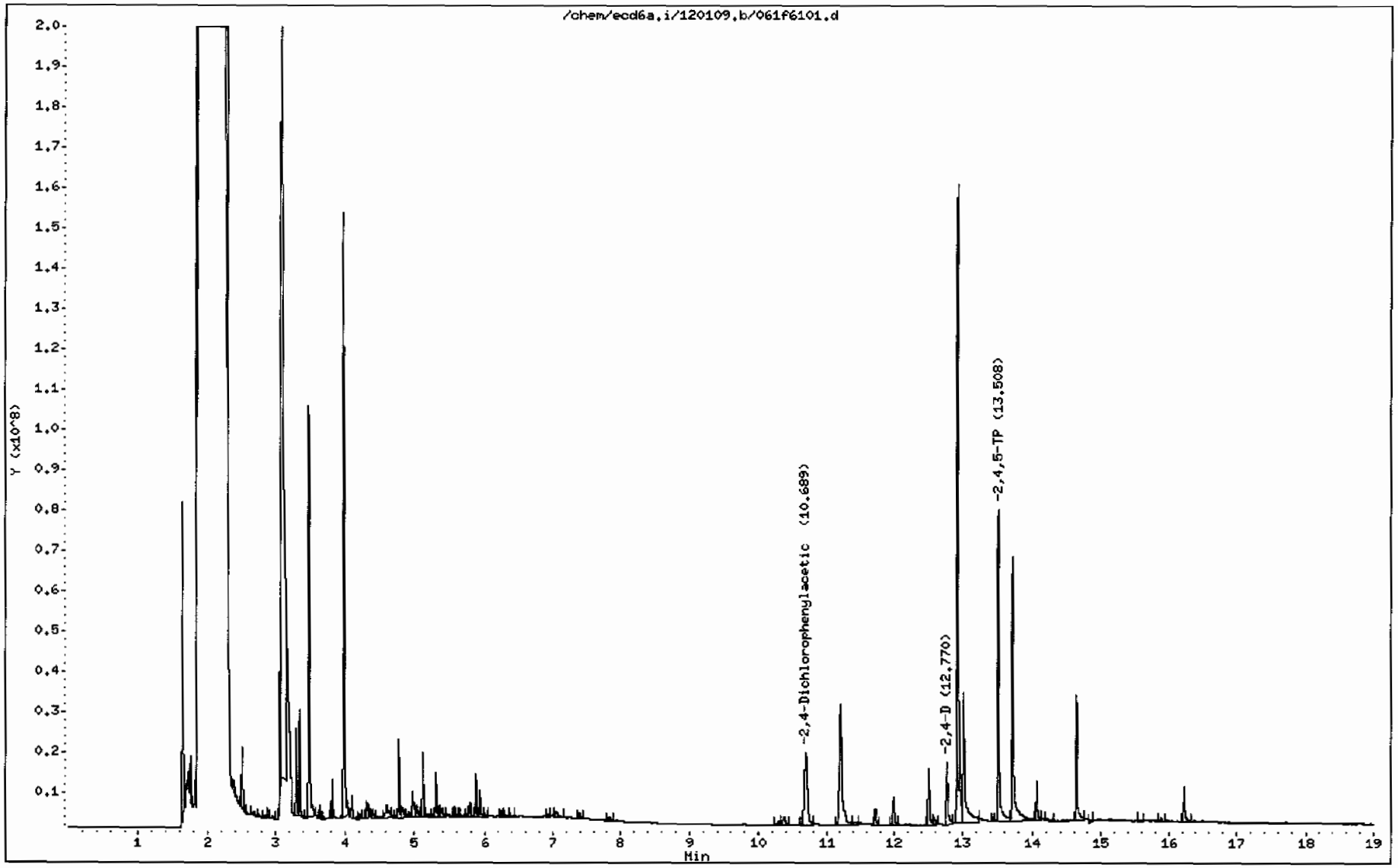

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/061f6101.d
Operator: RXE1
Injection Date: 02-DEC-2009 16:53
Instrument: ecd6a.i
Client Sample ID: WST03-10-2132MSD

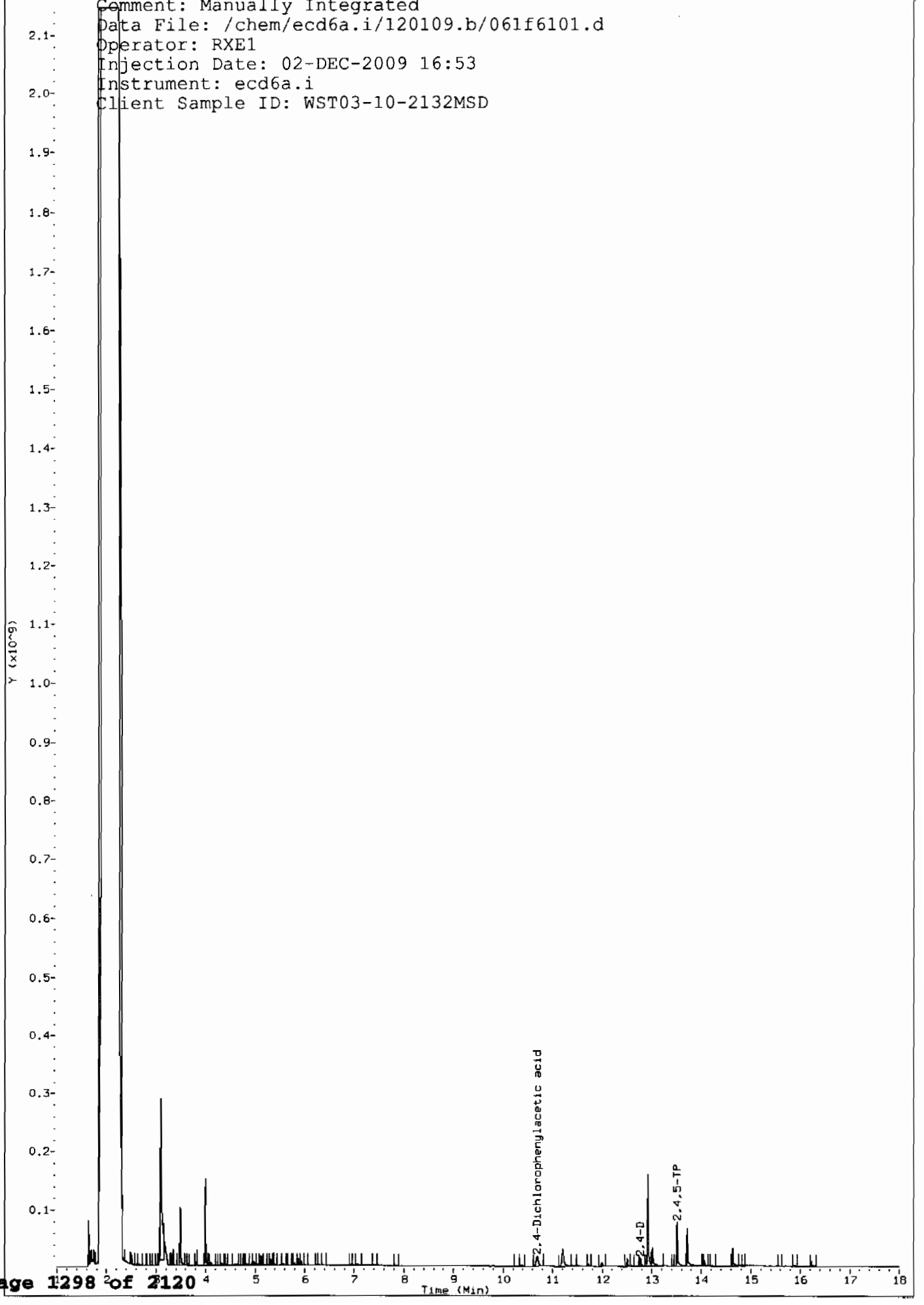

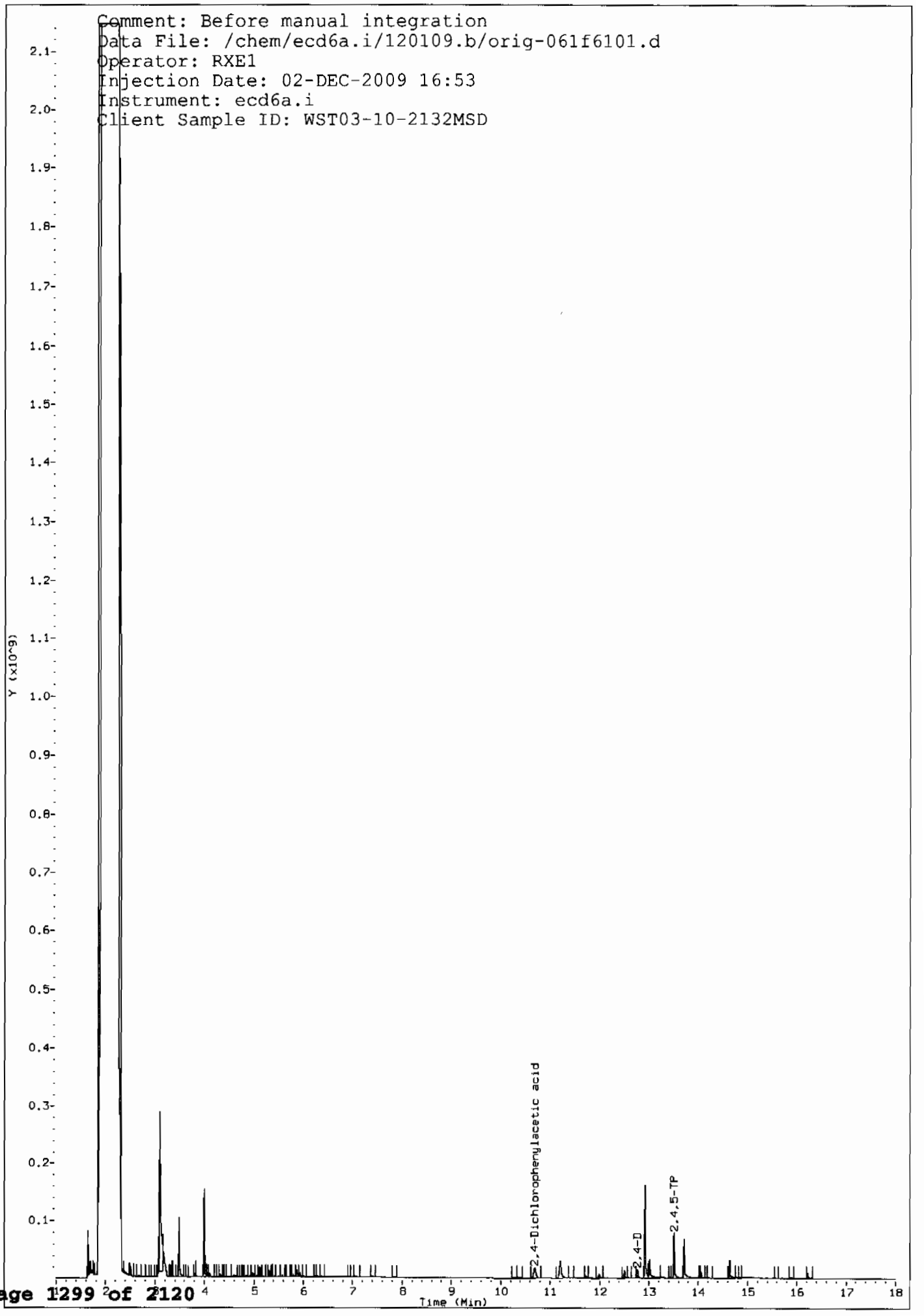
Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-061f6101.d
Operator: RXE1
Injection Date: 02-DEC-2009 16:53
Instrument: ecd6a.i
Client Sample ID: WST03-10-2132MSD
Y (x10^9)
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
2,4-Dichlorophenylacetic acid
2,4-D
2,4,5-TP
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
Time (Min)

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/061b6101.d
Lab Smp Id: 1201982754 Client Smp ID: WST03-10-2132MSD
Inj Date : 02-DEC-2009 16:53
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982754|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MSD|SOIL|MSD|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 61 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.711	11.717	-0.006	65542873	551.104	1.1
7 2,4-D						CAS #: 94-75-7
	13.212	13.216	-0.004	29839394	203.540	0.41
8 2,4,5-TP						CAS #: 93-72-1
	13.823	13.825	-0.002	122703440	212.661	0.42

Data File: /chem/ecd6a.i/120109.b/061b6101.d

Date : 02-DEC-2009 16:53

Client ID: WST03-10-2132MSD

Sample Info: |120198275411|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

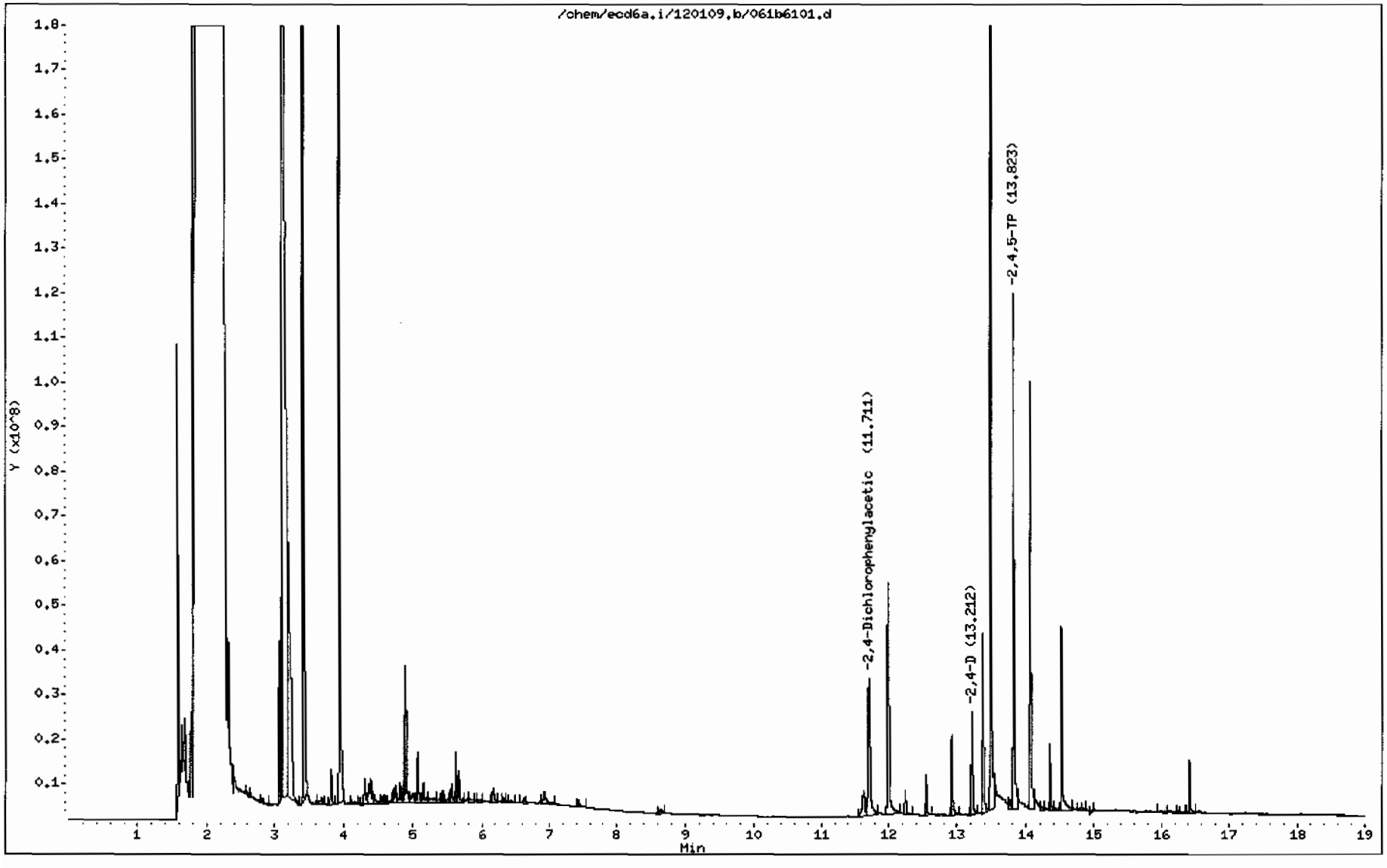

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD6

DATE: 12/02/2009 METHOD: ECD6-F-8151A-120109.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-011 Analysis of Chlorophenoxy Herbicides by ECD
EPA Method: 8151A Chlorinated Herbicides by GC Using Derivation
Sequence Number:120109 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WHB091117-02	RXE1	01-DEC-2009 12:22		120109	1.0	INSTBLK	CLEAN
002f0201.d	WHB091030-01	RXE1	01-DEC-2009 12:50		120109	1.0	HSTD01	ICAL LVL 1
003f0301.d	WHB091030-02	RXE1	01-DEC-2009 13:20		120109	1.0	HSTD02	ICAL LVL 2
004f0401.d	WHB091030-03	RXE1	01-DEC-2009 13:48		120109	1.0	HSTD03	ICAL LVL 3
005f0501.d	WHB091030-04	RXE1	01-DEC-2009 14:16		120109	1.0	HSTD04	ICAL LVL 4
006f0601.d	WHB091030-05	RXE1	01-DEC-2009 14:45		120109	1.0	HSTD05	ICAL LVL 5
007f0701.d	WHB091030-06	RXE1	01-DEC-2009 15:12		120109	1.0	HSTD06	ICAL LVL 6
008f0801.d	WHB091030-07	RXE1	01-DEC-2009 15:40		120109	1.0	HSTD07	ICAL LVL 7
009f0901.d	WHB091030-12	RXE1	01-DEC-2009 16:08		120109	1.0	HSTD01	USE. ICV. ALL ANALYTES PASSING BOTH COLUMNS.
010f1001.d	WHB091117-02	RXE1	01-DEC-2009 16:35		120109	1.0	INSTBLK	CLEAN
011f1101.d	1201982244	RXE1	01-DEC-2009 17:04	927142	10-671	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
012f1201.d	1201982247	RXE1	01-DEC-2009 17:32	927142	10-671	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
013f1301.d	241813006	RXE1	01-DEC-2009 18:00	927142	10-671	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
014f1401.d	1201982245	RXE1	01-DEC-2009 18:28	927142	10-671	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
015f1501.d	1201982246	RXE1	01-DEC-2009 18:56	927142	10-671	1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241895002	RXE1	01-DEC-2009 19:25	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
017f1701.d	241895005	RXE1	01-DEC-2009 19:52	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

018f1801.d	241895008	RXE1	01-DEC-2009 20:20	927142	10-698		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
019f1901.d	241895011	RXE1	01-DEC-2009 20:48	927142	10-698		1.0	LANL	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
020f2001.d	241918005	RXE1	01-DEC-2009 21:16	927142	10-701		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
021f2101.d	WHB091030-12	RXE1	01-DEC-2009 21:44		120109		1.0	HSTD02	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
022f2201.d	WHB091117-02	RXE1	01-DEC-2009 22:12		120109		1.0	INSTBLK	CLEAN
023f2301.d	1201982252	RXE1	01-DEC-2009 22:41	927148	10-578		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
024f2401.d	1201982255	RXE1	01-DEC-2009 23:09	927148	10-578		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
025f2501.d	241423004	RXE1	01-DEC-2009 23:38	927148	10-578		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
026f2601.d	1201982253	RXE1	02-DEC-2009 00:06	927148	10-578		2.0	MS	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MSD.
027f2701.d	1201982254	RXE1	02-DEC-2009 00:35	927148	10-578		2.0	MSD	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MS.
028f2801.d	WHB091030-12	RXE1	02-DEC-2009 01:02		120109		1.0	HSTD03	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
029f2901.d	WHB091117-02	RXE1	02-DEC-2009 01:31		120109		1.0	INSTBLK	CLEAN
030f3001.d	241423005	RXE1	02-DEC-2009 01:59	927148	10-578		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
031f3101.d	241503002	RXE1	02-DEC-2009 02:27	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
032f3201.d	241503003	RXE1	02-DEC-2009 02:55	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
033f3301.d	241503004	RXE1	02-DEC-2009 03:24	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
034f3401.d	241524002	RXE1	02-DEC-2009 03:52	927148	10-600		20.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
035f3501.d	241697003	RXE1	02-DEC-2009 04:21	927148	10-648		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241697004	RXE1	02-DEC-2009 04:48	927148	10-648		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
037f3701.d	241714002	RXE1	02-DEC-2009 05:16	927148	10-650		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
038f3801.d	WHB091030-12	RXE1	02-DEC-2009 05:45		120109		1.0	HSTD04	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
039f3901.d	WHB091117-02	RXE1	02-DEC-2009 06:13		120109		1.0	INSTBLK	CLEAN
040f4001.d	1201982248	RXE1	02-DEC-2009 06:42	927145	241437		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
041f4101.d	1201982251	RXE1	02-DEC-2009 07:10	927145	241437		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

042f4201.d	241437003	RXE1	02-DEC-2009 07:39	927145	241437		1.0	PCGE	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
043f4301.d	241437009	RXE1	02-DEC-2009 08:08	927145	241437		1.0	PCGE	USE. $ LOW BOTH, CONFIRMED BY MS/MSD.
044f4401.d	1201982249	RXE1	02-DEC-2009 08:36	927145	241437		1.0	MS	USE. $/SPIKES LOW BOTH, CONFIRMED BY MSD.
045f4501.d	1201982250	RXE1	02-DEC-2009 09:04	927145	241437		1.0	MSD	USE. $/SPIKES LOW BOTH, CONFIRMED BY MS.
046f4601.d	WHB091030-12	RXE1	02-DEC-2009 09:32		120109		1.0	HSTD05	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
047f4701.d	WHB091117-02	RXE1	02-DEC-2009 10:00		120109		1.0	INSTBLK	CLEAN
048f4801.d	WE091201-02	RXE1	02-DEC-2009 10:28		120109		1.0	SCREEN	DUSE
049f4901.d	1201979176	RXE1	02-DEC-2009 11:03	927402	10-462-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
050f5001.d	1201980055	RXE1	02-DEC-2009 11:31	927402	10-578-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
051f5101.d	1201980841	RXE1	02-DEC-2009 11:59	927402	10-648-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
052f5201.d	1201982751	RXE1	02-DEC-2009 12:27	927402	10-600-1		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
053f5301.d	1201982752	RXE1	02-DEC-2009 12:55	927402	10-600-1		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
054f5401.d	WHB091030-12	RXE1	02-DEC-2009 13:35		120109		1.0	HSTD06	USE. CCV. DAL LOW (B), DB HI (F).
055f5501.d	WHB091117-02	RXE1	02-DEC-2009 14:04		120109		1.0	INSTBLK	CLEAN
056f5601.d	241040001	RXE1	02-DEC-2009 14:32	927402	10-462-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
057f5701.d	241424001	RXE1	02-DEC-2009 15:01	927402	10-578-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
058f5801.d	241424002	RXE1	02-DEC-2009 15:29	927402	10-578-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
059f5901.d	241527001	RXE1	02-DEC-2009 15:57	927402	10-600-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
060f6001.d	1201982753	RXE1	02-DEC-2009 16:25	927402	10-600-1		1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
061f6101.d	1201982754	RXE1	02-DEC-2009 16:53	927402	10-600-1		1.0	MSD	USE. D SLIGHT HI (F), PASSING (B).
062f6201.d	241704001	RXE1	02-DEC-2009 17:21	927402	10-648-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
063f6301.d	241704002	RXE1	02-DEC-2009 17:48	927402	10-648-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
064f6401.d	WHB091030-12	RXE1	02-DEC-2009 18:16		120109		1.0	HSTD07	USE. CCV. D/DB HI (F), PASSING (B).
065f6501.d	WHB091117-02	RXE1	02-DEC-2009 18:45		120109		1.0	INSTBLK	CLEAN
066f6601.d	1201983560	RXE1	02-DEC-2009 19:14	927672	10-653		1.0	MB	DUSE

10H

Instrument Batch: /chem/ecd6a.i/120109.b Page: 4

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

067f6701.d	1201983561	RXE1	02-DEC-2009 19:43	927672	10-653	1.0	LCS	DUSE
068f6801.d	241718001	RXE1	02-DEC-2009 20:11	927672	10-653	1.0	LANL	DUSE
069f6901.d	241728002	RXE1	02-DEC-2009 20:40	927672	10-654	1.0	LANL	DUSE
070f7001.d	241750002	RXE1	02-DEC-2009 21:08	927672	10-655	1.0	LANL	DUSE
071f7101.d	241750003	RXE1	02-DEC-2009 21:36	927672	10-655	1.0	LANL	DUSE
072f7201.d	1201983562	RXE1	02-DEC-2009 22:05	927672	10-655	1.0	MS	DUSE
073f7301.d	1201983563	RXE1	02-DEC-2009 22:33	927672	10-655	1.0	MSD	DUSE
074f7401.d	WHB091030-12	RXE1	02-DEC-2009 23:02		120109	1.0	HSTD08	USE. CCV. DB HI (F), PASSING (B).
075f7501.d	WHB091117-02	RXE1	02-DEC-2009 23:29		120109	1.0	INSTBLK	CLEAN
076f7601.d	241750004	RXE1	02-DEC-2009 23:58	927672	10-655	1.0	LANL	DUSE
077f7701.d	241750005	RXE1	03-DEC-2009 00:25	927672	10-655	1.0	LANL	DUSE
078f7801.d	241750006	RXE1	03-DEC-2009 00:54	927672	10-655	1.0	LANL	DUSE
079f7901.d	241750007	RXE1	03-DEC-2009 01:22	927672	10-655	1.0	LANL	DUSE
080f8001.d	241750008	RXE1	03-DEC-2009 01:50	927672	10-655	1.0	LANL	DUSE
081f8101.d	241750009	RXE1	03-DEC-2009 02:19	927672	10-655	1.0	LANL	DUSE
082f8201.d	241750010	RXE1	03-DEC-2009 02:47	927672	10-655	1.0	LANL	DUSE
083f8301.d	241750011	RXE1	03-DEC-2009 03:15	927672	10-655	1.0	LANL	DUSE
084f8401.d	WHB091030-12	RXE1	03-DEC-2009 03:44		120109	1.0	HSTD09	USE. CCV. DB HI (F), PASSING (B).
085f8501.d	WHB091117-02	RXE1	03-DEC-2009 04:12		120109	1.0	INSTBLK	CLEAN

Prep Logbook

The Extraction of Herbicides from Groundwater, Wastewater and Other Aqueous Samples

Batch ID: 927399 **Verified by:** _____

Analyst: Sophia Cox

Method: SW846 8151A Prep

Lab SOP: GL–OA–E–015 REV# 12

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201979176 TB	01–DEC–2009 16:23:35	5	13	1	10	2
1201980055 TB	01–DEC–2009 16:23:35	5	13	1	10	2
1201980841 TB	01–DEC–2009 16:23:35	5	13	1	10	2
1201982751 MB	01–DEC–2009 16:23:35	1000	13	1	10	0.01
1201982752 LCS	01–DEC–2009 16:23:35	1000	13	1	10	0.01
241040001	01–DEC–2009 16:23:35	5	13	1	10	2
241424001	01–DEC–2009 16:23:35	5	13	1	10	2
241424002	01–DEC–2009 16:23:35	5	13	1	10	2
241527001	01–DEC–2009 16:23:35	5	13	1	10	2
1201982753 MS (241527001)	01–DEC–2009 16:23:35	5	13	1	10	2
1201982754 MSD (241527001)	01–DEC–2009 16:23:35	5	13	1	10	2
241704001	01–DEC–2009 16:23:35	5	13	1	10	2
241704002	01–DEC–2009 16:23:35	5	13	1	10	2

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982752	HERBICIDE LCS	WE091110–02	1	mL
MS	1201982753	HERBICIDE LCS	WE091110–02	1	mL
MSD	1201982754	HERBICIDE LCS	WE091110–02	1	mL
SURR	All	HERBICIDE SURROGATE	WE091110–03	.05	mL
REGNT	All	Methanol	091117–C	.5	mL
REGNT	All	Iso–octane	1106542–A	1	mL
REGNT	All	Methylene Chloride	1233148–D	180	mL
REGNT	All	Hexane	1233925–B2	4	mL
REGNT	All	Sodium hydroxide sol., 6N	1235843	17	mL
REGNT	All	Sulfuric Acid Sol., 12N For Herbicides	1235845	17	mL
REGNT	All	N–METHYL–N–NITROSO–P–TOLUENESULFON–AMIDE	1236127A	2	mL
REGNT	All	Ethyl ether	UN1233192a	240	mL

Comments:

Verified By: JAM

Final Solvent: Hexane

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926091 **Verified by:** _____

Analyst: Clifford Postell

Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13

Instrument: TCLP Tumbler #106

Sample ID Analysis Start Date	1201980055 TB 24-NOV-2009 16:30:47	241424001 24-NOV-2009 16:30:47	241424002 24-NOV-2009 16:30:47	241527001 24-NOV-2009 16:30:47
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.91	7.16	8.21	7.89
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.92	5	5	5
Final pH (su)	4.92	1.85	1.91	2.04
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	1000	1000	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:45
Filtration End Date: 25-NOV-09 13:30:45
Bottle Lot Number: H929301DB
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

NCR Report No.: 765208
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
03-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8151A	Solid	LANL
Batch ID:	**Sample Numbers:**		
927402	See Below		

Potentially affected work order(s)(SDG): 241040(10-462-1),241424(10-578-1),241527(10-600-1),241704(10-648-1)

Application Issues:

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. QC sample 1201982754(MSD) failed to meet spike recovery acceptance criteria with positive bias for 2,4,5-TP.	1. This non-compliance had no adverse effects on the data as 2,4,5-TP was not detected in the parent sample. Furthermore, the MS and MSD has similar spike recovery. The data were reported.

Originator's Name:

Rebecca Enzor 03-DEC-09

Data Validator/Group Leader:

Jimin Cao 03-DEC-09

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Sample Analysis

Sample ID	Client ID
241524002	WST03-10-2132
1201978571	Method Blank (MB) **ICP**
1201978576	Laboratory Control Sample (LCS)
1201978573	241512001(CALA-10-4848L) Serial Dilution (SD)
1201978572	241512001(CALA-10-4848D) Sample Duplicate (DUP)
1201978574	241512001(CALA-10-4848S) Matrix Spike (MS)
1201978575	241512001(CALA-10-4848SD) Matrix Spike Duplicate (MSD)
1201978577	Method Blank (MB) **ICP-MS**
1201978582	Laboratory Control Sample (LCS)
1201978579	241512001(CALA-10-4848L) Serial Dilution (SD)
1201978578	241512001(CALA-10-4848D) Sample Duplicate (DUP)
1201978580	241512001(CALA-10-4848S) Matrix Spike (MS)
1201978581	241512001(CALA-10-4848SD) Matrix Spike Duplicate (MSD)
1201978936	Method Blank (MB) **CVAA**
1201978937	Laboratory Control Sample (LCS)
1201978940	241536001(RE03-09-13975L) Serial Dilution (SD)
1201978938	241536001(RE03-09-13975D) Sample Duplicate (DUP)
1201978939	241536001(RE03-09-13975S) Matrix Spike (MS)
1201978941	241536001(RE03-09-13975SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925470, 925472 and 925623
Prep Batch :	925469, 925471 and 925622
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits with the exception of iron, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The laboratory control sample (LCS) met the recommended acceptance criteria.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241512001 and 241536001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of aluminum, calcium, magnesium, potassium, sodium and nickel, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of aluminum, potassium, sodium and nickel, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of iron, as indicated by the "*" qualifier.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of barium and mercury, as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 764399, 766802 and 767860. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson **Date:** 12/16/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-600 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241524002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: WST03-10-2132 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5760000	ug/kg		6340	18600	18600	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-36-0	Antimony	932	ug/kg	U	308	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-38-2	Arsenic	1580	ug/kg		196	980	980	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-39-3	Barium	71300	ug/kg		93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-41-7	Beryllium	629	ug/kg		19.6	98	98	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-43-9	Cadmium	134	ug/kg	J	93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-70-2	Calcium	2520000	ug/kg		7460	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-47-3	Chromium	6990	ug/kg		140	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-48-4	Cobalt	3000	ug/kg		140	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-50-8	Copper	5590	ug/kg		280	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-89-6	Iron	9240000	ug/kg		7460	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-92-1	Lead	9510	ug/kg		233	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-95-4	Magnesium	1170000	ug/kg		7920	28000	28000	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-96-5	Manganese	273000	ug/kg		186	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470
7439-97-6	Mercury	9.91	ug/kg	J	4.26	12.5	12.5	1	AV	JXL1	12/07/09 13:43	120709S1-12	925623
7440-02-0	Nickel	6260	ug/kg		98	392	392	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-09-7	Potassium	808000	ug/kg		5970	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7782-49-2	Selenium	980	ug/kg	U	490	980	980	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-22-4	Silver	179	ug/kg	J	93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-23-5	Sodium	106000	ug/kg		6530	23300	23300	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-28-0	Thallium	126	ug/kg	J	58.8	196	196	2	MS	BAJ	12/01/09 04:32	091130-2	925472
7440-62-2	Vanadium	12600	ug/kg		93.2	466	466	1	P	HSC	12/08/09 11:43	120809-1	925470
7440-66-6	Zinc	30200	ug/kg		308	932	932	1	P	HSC	12/08/09 11:43	120809-1	925470

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925470	925469	SW846 3050B	0.572	g	50	mL	11/24/09	BXA1
925472	925471	SW846 3050B	0.544	g	50	mL	11/24/09	BXA1
925623	925622	SW846 7471A Prep	0.511	g	30	mL	12/04/09	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-600

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	48.7	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	01-DEC-09 01:58	091130-2
	Beryllium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	01-DEC-09 01:58	091130-2
	Nickel	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	01-DEC-09 01:58	091130-2
	Selenium	49.9	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	01-DEC-09 01:58	091130-2
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	01-DEC-09 01:58	091130-2
	Mercury	5.19	ug/L	5	ug/L	103.8	90.0 – 110.0	AV	07-DEC-09 10:07	120709S1-12
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Antimony	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Cadmium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Calcium	4840	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Chromium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Manganese	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Potassium	2440	ug/L	2500	ug/L	97.7	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Silver	258	ug/L	250	ug/L	103.4	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Sodium	2370	ug/L	2500	ug/L	94.8	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
	Zinc	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 08:01	120809-1
CCV01										
	Arsenic	47.4	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	01-DEC-09 02:29	091130-2
	Beryllium	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	01-DEC-09 02:29	091130-2
	Nickel	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	01-DEC-09 02:29	091130-2
	Selenium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	01-DEC-09 02:29	091130-2
	Thallium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	01-DEC-09 02:29	091130-2
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	07-DEC-09 10:13	120709S1-12

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–600

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Cadmium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Potassium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Sodium	9150	ug/L	10000	ug/L	91.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
	Zinc	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 08:47	120809–1
CCV02										
	Arsenic	48.6	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	01–DEC–09 02:47	091130–2
	Beryllium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	01–DEC–09 02:47	091130–2
	Nickel	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	01–DEC–09 02:47	091130–2
	Selenium	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	01–DEC–09 02:47	091130–2
	Thallium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	01–DEC–09 02:47	091130–2
	Mercury	5.38	ug/L	5	ug/L	107.7	80.0 – 120.0	AV	07–DEC–09 10:37	120709S1–12
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Antimony	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Barium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08–DEC–09 09:11	120809–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–600

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Lead	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Silver	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Sodium	9430	ug/L	10000	ug/L	94.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
CCV03										
	Arsenic	47.1	ug/L	50	ug/L	94.3	90.0 – 110.0	MS	01–DEC–09 03:48	091130–2
	Beryllium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	01–DEC–09 03:48	091130–2
	Nickel	48.1	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	01–DEC–09 03:48	091130–2
	Selenium	49.9	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	01–DEC–09 03:48	091130–2
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	01–DEC–09 03:48	091130–2
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	07–DEC–09 11:01	120709S1–12
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Cobalt	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 09:52	120809–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-600

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	08-DEC-09 09:52	120809-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	08-DEC-09 09:52	120809-1
	Sodium	9300	ug/L	10000	ug/L	93	90.0 - 110.0	P	08-DEC-09 09:52	120809-1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	08-DEC-09 09:52	120809-1
	Zinc	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	08-DEC-09 09:52	120809-1
CCV04										
	Arsenic	47.3	ug/L	50	ug/L	94.5	90.0 - 110.0	MS	01-DEC-09 04:44	091130-2
	Beryllium	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	01-DEC-09 04:44	091130-2
	Nickel	49.3	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	01-DEC-09 04:44	091130-2
	Selenium	48.4	ug/L	50	ug/L	96.9	90.0 - 110.0	MS	01-DEC-09 04:44	091130-2
	Thallium	50.4	ug/L	50	ug/L	100.7	90.0 - 110.0	MS	01-DEC-09 04:44	091130-2
	Mercury	5.79	ug/L	5	ug/L	115.9	80.0 - 120.0	AV	07-DEC-09 11:24	120709S1-12
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Antimony	505	ug/L	500	ug/L	101	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Cadmium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Calcium	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Chromium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Copper	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Iron	5060	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Lead	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Manganese	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Potassium	5130	ug/L	5000	ug/L	102.5	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Silver	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Sodium	9450	ug/L	10000	ug/L	94.5	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	08-DEC-09 10:55	120809-1
	Zinc	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	08-DEC-09 10:55	120809-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-600

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Mercury	5.49	ug/L	5	ug/L	109.7	80.0 – 120.0	AV	07-DEC-09 11:48	120709S1-12
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Cadmium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Chromium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Lead	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Manganese	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Sodium	9490	ug/L	10000	ug/L	94.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Vanadium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
CCV06										
	Mercury	5.57	ug/L	5	ug/L	111.4	80.0 – 120.0	AV	07-DEC-09 12:12	120709S1-12
CCV07										
	Mercury	5.54	ug/L	5	ug/L	110.8	80.0 – 120.0	AV	07-DEC-09 12:35	120709S1-12
CCV08										
	Mercury	5.68	ug/L	5	ug/L	113.6	80.0 – 120.0	AV	07-DEC-09 12:59	120709S1-12
CCV09										
	Mercury	5.48	ug/L	5	ug/L	109.5	80.0 – 120.0	AV	07-DEC-09 13:21	120709S1-12
CCV10										
	Mercury	5.19	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	07-DEC-09 13:47	120709S1-12

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-600

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV11										
	Mercury	5.39	ug/L	5	ug/L	107.9	80.0 - 120.0	AV	07-DEC-09 14:11	120709S1-12

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–600

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.16	ug/L	2	ug/L	107.8	70.0 – 130.0	MS	01–DEC–09 02:10	091130–2
	Thallium	1.17	ug/L	1	ug/L	116.6	70.0 – 130.0	MS	01–DEC–09 02:10	091130–2
	Arsenic	5.84	ug/L	5	ug/L	116.8	70.0 – 130.0	MS	01–DEC–09 02:10	091130–2
	Beryllium	.531	ug/L	.5	ug/L	106.2	70.0 – 130.0	MS	01–DEC–09 02:10	091130–2
	Selenium	5.48	ug/L	5	ug/L	109.5	70.0 – 130.0	MS	01–DEC–09 02:10	091130–2
	Mercury	.155	ug/L	.2	ug/L	77.4	70.0 – 130.0	AV	07–DEC–09 10:11	120709S1–12
PQL01										
	Aluminum	196	ug/L	200	ug/L	97.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Iron	132	ug/L	100	ug/L	131.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Lead	9.88	ug/L	10	ug/L	98.8	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Magnesium	317	ug/L	300	ug/L	105.7	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Manganese	10.3	ug/L	10	ug/L	102.8	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Potassium	161	ug/L	150	ug/L	107.2	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Silver	5.13	ug/L	5	ug/L	102.5	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Sodium	274	ug/L	300	ug/L	91.4	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Antimony	9.93	ug/L	10	ug/L	99.3	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Barium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Cadmium	4.96	ug/L	5	ug/L	99.2	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Chromium	4.82	ug/L	5	ug/L	96.4	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Cobalt	4.76	ug/L	5	ug/L	95.3	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Copper	9.87	ug/L	10	ug/L	98.7	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Vanadium	5.23	ug/L	5	ug/L	104.5	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Zinc	10.1	ug/L	10	ug/L	100.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Calcium	204	ug/L	200	ug/L	102.1	70.0 – 130.0	P	08–DEC–09 08:15	120809–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–600

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	01–DEC–09 02:04	091130–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	01–DEC–09 02:04	091130–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	01–DEC–09 02:04	091130–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	01–DEC–09 02:04	091130–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	01–DEC–09 02:04	091130–2
	Mercury	–0.096	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:09	120709S1–12
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 08:08	120809–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 08:08	120809–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 08:08	120809–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 08:08	120809–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 08:08	120809–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 08:08	120809–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 08:08	120809–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 08:08	120809–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 08:08	120809–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 08:08	120809–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 08:08	120809–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 08:08	120809–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 08:08	120809–1
CCB01										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	01–DEC–09 02:35	091130–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	01–DEC–09 02:35	091130–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	01–DEC–09 02:35	091130–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	01–DEC–09 02:35	091130–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	01–DEC–09 02:35	091130–2
	Mercury	–0.098	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:15	120709S1–12
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 08:54	120809–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-600

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	7.4	+/-10	J	3.3	10.0	SOL	P	08-DEC-09 08:54	120809-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:54	120809-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:54	120809-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:54	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 08:54	120809-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:54	120809-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 08:54	120809-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 08:54	120809-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 08:54	120809-1
	Potassium	138.07	+/-250	J	64.0	250	SOL	P	08-DEC-09 08:54	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 08:54	120809-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 08:54	120809-1
CCB02										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	01-DEC-09 02:53	091130-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	01-DEC-09 02:53	091130-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	01-DEC-09 02:53	091130-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	01-DEC-09 02:53	091130-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	01-DEC-09 02:53	091130-2
	Mercury	-0.091	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:39	120709S1-12
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 09:18	120809-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 09:18	120809-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:18	120809-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:18	120809-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 09:18	120809-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 09:18	120809-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 09:18	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 09:18	120809-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-600

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 09:18	120809-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 09:18	120809-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 09:18	120809-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 09:18	120809-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 09:18	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:18	120809-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 09:18	120809-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:18	120809-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 09:18	120809-1
CCB03										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	01-DEC-09 03:55	091130-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	01-DEC-09 03:55	091130-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	01-DEC-09 03:55	091130-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	01-DEC-09 03:55	091130-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	01-DEC-09 03:55	091130-2
	Mercury	-0.117	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 11:03	120709S1-12
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 09:59	120809-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 09:59	120809-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 09:59	120809-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 09:59	120809-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 09:59	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 09:59	120809-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 09:59	120809-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 09:59	120809-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 09:59	120809-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 09:59	120809-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 09:59	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 09:59	120809-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–600

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:59	120809–1
CCB04										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	01–DEC–09 04:50	091130–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	01–DEC–09 04:50	091130–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	01–DEC–09 04:50	091130–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	01–DEC–09 04:50	091130–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	01–DEC–09 04:50	091130–2
	Mercury	–0.136	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:26	120709S1–12
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 11:02	120809–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 11:02	120809–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 11:02	120809–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 11:02	120809–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 11:02	120809–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 11:02	120809–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 11:02	120809–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 11:02	120809–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 11:02	120809–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 11:02	120809–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 11:02	120809–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 11:02	120809–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 11:02	120809–1
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 11:50	120709S1–12
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 12:04	120809–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 12:04	120809–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–600

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 12:04	120809–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 12:04	120809–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 12:04	120809–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 12:04	120809–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 12:04	120809–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 12:04	120809–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 12:04	120809–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 12:04	120809–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 12:04	120809–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 12:04	120809–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 12:04	120809–1
CCB06	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:14	120709S1–12
CCB07	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:38	120709S1–12
CCB08	Mercury	–0.081	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:01	120709S1–12
CCB09	Mercury	–0.071	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:23	120709S1–12
CCB10	Mercury	–0.086	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:49	120709S1–12
CCB11	Mercury	–0.106	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 14:13	120709S1–12

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–600

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978571								
	Aluminum	6720	ug/kg	+/–19762.846	U	P	6720	19800
	Antimony	521	ug/kg	+/–988.142	J	P	326	988
	Barium	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Cadmium	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Calcium	7910	ug/kg	+/–24703.557	U	P	7910	24700
	Chromium	148	ug/kg	+/–494.071	U	P	148	494
	Cobalt	148	ug/kg	+/–494.071	U	P	148	494
	Copper	296	ug/kg	+/–988.142	U	P	296	988
	Iron	7910	ug/kg	+/–24703.557	U	P	7910	24700
	Lead	247	ug/kg	+/–988.142	U	P	247	988
	Magnesium	8400	ug/kg	+/–29644.269	U	P	8400	29600
	Manganese	198	ug/kg	+/–988.142	U	P	198	988
	Potassium	6320	ug/kg	+/–24703.557	U	P	6320	24700
	Silver	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Sodium	6920	ug/kg	+/–24703.557	U	P	6920	24700
	Vanadium	98.8	ug/kg	+/–494.071	U	P	98.8	494
	Zinc	326	ug/kg	+/–988.142	U	P	326	988
1201978577								
	Arsenic	190	ug/kg	+/–950.57	U	MS	190	951
	Beryllium	19	ug/kg	+/–95.057	U	MS	19	95.1
	Nickel	95.1	ug/kg	+/–380.228	U	MS	95.1	380
	Selenium	475	ug/kg	+/–950.57	U	MS	475	951
	Thallium	57	ug/kg	+/–190.114	U	MS	57	190
1201978936								
	Mercury	–6.73	ug/kg	+/–11.342	J	AV	3.86	11.3

METALS
–4–
Interference Check Sample

SDG No: 10–600

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 – 120.0	08–DEC–09 08:22	120809–1
	Antimony	2.47	ug/L					08–DEC–09 08:22	120809–1
	Barium	2.42	ug/L					08–DEC–09 08:22	120809–1
	Cadmium	2.22	ug/L					08–DEC–09 08:22	120809–1
	Calcium	481000	ug/L	500000	ug/L	96.1	80.0 – 120.0	08–DEC–09 08:22	120809–1
	Chromium	1.17	ug/L					08–DEC–09 08:22	120809–1
	Cobalt	–1.69	ug/L					08–DEC–09 08:22	120809–1
	Copper	3.23	ug/L					08–DEC–09 08:22	120809–1
	Iron	183000	ug/L	200000	ug/L	91.5	80.0 – 120.0	08–DEC–09 08:22	120809–1
	Lead	–0.012	ug/L					08–DEC–09 08:22	120809–1
	Magnesium	486000	ug/L	500000	ug/L	97.1	80.0 – 120.0	08–DEC–09 08:22	120809–1
	Manganese	8.2	ug/L					08–DEC–09 08:22	120809–1
	Potassium	36.8	ug/L					08–DEC–09 08:22	120809–1
	Silver	–2.89	ug/L					08–DEC–09 08:22	120809–1
	Sodium	12.2	ug/L					08–DEC–09 08:22	120809–1
	Vanadium	–1.05	ug/L					08–DEC–09 08:22	120809–1
	Zinc	–4.58	ug/L					08–DEC–09 08:22	120809–1
ICSAB01									
	Aluminum	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Antimony	517	ug/L	500	ug/L	103	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Barium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Cadmium	448	ug/L	500	ug/L	89.7	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Calcium	461000	ug/L	500000	ug/L	92.1	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Chromium	472	ug/L	500	ug/L	94.4	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Cobalt	433	ug/L	500	ug/L	86.5	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Copper	544	ug/L	500	ug/L	109	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Iron	180000	ug/L	200000	ug/L	90	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Lead	452	ug/L	500	ug/L	90.3	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Magnesium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	08–DEC–09 08:28	120809–1

METALS
–4–
Interference Check Sample

SDG No: 10–600

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Manganese	479	ug/L	500	ug/L	95.8	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Potassium	5370	ug/L	5000	ug/L	107	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Silver	270	ug/L	250	ug/L	108	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Sodium	5100	ug/L	5000	ug/L	102	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Vanadium	496	ug/L	500	ug/L	99.2	80.0 – 120.0	08–DEC–09 08:28	120809–1
	Zinc	476	ug/L	500	ug/L	95.2	80.0 – 120.0	08–DEC–09 08:28	120809–1

METALS
-4-
Interference Check Sample

SDG No: 10-600

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	-0.13	ug/L					01-DEC-09 02:16	091130-2
	Beryllium	0.046	ug/L					01-DEC-09 02:16	091130-2
	Nickel	3.49	ug/L					01-DEC-09 02:16	091130-2
	Selenium	-1.24	ug/L					01-DEC-09 02:16	091130-2
	Thallium	0.028	ug/L					01-DEC-09 02:16	091130-2
ICSAB01									
	Arsenic	21.4	ug/L	20	ug/L	107	80.0 - 120.0	01-DEC-09 02:22	091130-2
	Beryllium	20.2	ug/L	20	ug/L	101	80.0 - 120.0	01-DEC-09 02:22	091130-2
	Nickel	22.8	ug/L	22.7	ug/L	100	80.0 - 120.0	01-DEC-09 02:22	091130-2
	Selenium	20.4	ug/L	20	ug/L	102	80.0 - 120.0	01-DEC-09 02:22	091130-2
	Thallium	21.3	ug/L	20	ug/L	107	80.0 - 120.0	01-DEC-09 02:22	091130-2

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-600 **Client ID** CALA-10-4848S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978574

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg	75-125	3640000		1830000		518000	349	N	P
Antimony	ug/kg	75-125	51700		339	U	51800	99.8		P
Barium	ug/kg	75-125	80500		21000		51800	115		P
Cadmium	ug/kg	75-125	52800		103	U	51800	102		P
Calcium	ug/kg	75-125	2500000		1760000		518000	142	N	P
Chromium	ug/kg	75-125	54300		3030		51800	99		P
Cobalt	ug/kg	75-125	52400		1440		51800	98.3		P
Copper	ug/kg	75-125	56600		2600		51800	104		P
Iron	ug/kg		4760000		4620000		518000	26.8	N/A	P
Lead	ug/kg	75-125	55100		2450		51800	102		P
Magnesium	ug/kg	75-125	1540000		881000		518000	127	N	P
Manganese	ug/kg	75-125	140000		96400		51800	84.7		P
Potassium	ug/kg	75-125	1070000		379000		518000	133	N	P
Silver	ug/kg	75-125	54600		149	J	51800	105		P
Vanadium	ug/kg	75-125	59700		10300		51800	95.2		P
Zinc	ug/kg	75-125	63300		13000		51800	97.1		P
Sodium	ug/kg	75-125	879000		127000		518000	145	N	P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–600 **Client ID** CALA–10–4848SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978575

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg	75–125	3580000		1830000		470000	373	N	P
Antimony	ug/kg	75–125	47400		339	U	47000	101		P
Barium	ug/kg	75–125	75400		21000		47000	116		P
Cadmium	ug/kg	75–125	49100		103	U	47000	104		P
Calcium	ug/kg	75–125	2310000		1760000		470000	117		P
Chromium	ug/kg	75–125	53500		3030		47000	107		P
Cobalt	ug/kg	75–125	49000		1440		47000	101		P
Copper	ug/kg	75–125	53200		2600		47000	107		P
Iron	ug/kg		5990000		4620000		470000	292	N/A	P
Lead	ug/kg	75–125	51700		2450		47000	105		P
Magnesium	ug/kg	75–125	1450000		881000		470000	122		P
Manganese	ug/kg	75–125	155000		96400		47000	124		P
Potassium	ug/kg	75–125	981000		379000		470000	128	N	P
Silver	ug/kg	75–125	51000		149	J	47000	108		P
Sodium	ug/kg	75–125	800000		127000		470000	143	N	P
Vanadium	ug/kg	75–125	59200		10300		47000	104		P
Zinc	ug/kg	75–125	62200		13000		47000	105		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-600 **Client ID** CALA-10-4848S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978580

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/kg	75-125	8030		348	J	7720	99.5		MS
Beryllium	ug/kg	75-125	5110		105		4830	104		MS
Nickel	ug/kg	75-125	12000		2500		4830	197	N	MS
Selenium	ug/kg	75-125	1780		482	U	1930	91		MS
Thallium	ug/kg	75-125	10400		57.8	U	9650	107		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–600 **Client ID** CALA–10–4848SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 96.4

Sample ID: 241512001 **Spike ID:** 1201978581

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/kg	75–125	8170		348	J	8130	96.2		MS
Beryllium	ug/kg	75–125	5160		105		5080	99.5		MS
Nickel	ug/kg	75–125	10300		2500		5080	153	N	MS
Selenium	ug/kg	75–125	1850		482	U	2030	89.8		MS
Thallium	ug/kg	75–125	10600		57.8	U	10200	104		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–600 **Client ID** RE03–09–13975S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241536001 **Spike ID:** 1201978939

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	196		43.9		133	115		AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–600 **Client ID** RE03–09–13975SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241536001 **Spike ID:** 1201978941

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	207		43.9		136	119		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–600

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA–10–4848D

Sample ID: 241512001 **Duplicate ID:** 1201978572 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/–20%	1830000		1760000		3.82		P
Antimony	ug/kg		339	U	332	U			P
Barium	ug/kg	+/–20%	21000		32300		42.3	*	P
Cadmium	ug/kg		103	U	101	U			P
Calcium	ug/kg	+/–20%	1760000		1910000		8.16		P
Chromium	ug/kg	+/–20%	3030		2900		4.41		P
Cobalt	ug/kg	+/–503	1440		1340		7.18		P
Copper	ug/kg	+/–1010	2600		2160		18.4		P
Iron	ug/kg	+/–20%	4620000		4890000		5.79		P
Lead	ug/kg	+/–1010	2450		2550		4.22		P
Magnesium	ug/kg	+/–20%	881000		997000		12.3		P
Manganese	ug/kg	+/–20%	96400		91000		5.66		P
Potassium	ug/kg	+/–20%	379000		374000		1.31		P
Silver	ug/kg	+/–503	149	J	193	J	25.5		P
Sodium	ug/kg	+/–20%	127000		135000		6.33		P
Vanadium	ug/kg	+/–20%	10300		9000		13.7		P
Zinc	ug/kg	+/–20%	13000		13400		3.2		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-600

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA-10-4848SD

Sample ID: 1201978574 **Duplicate ID:** 1201978575 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20	3640000		3580000		1.52		P
Antimony	ug/kg	+/-20	51700		47400		8.65		P
Barium	ug/kg	+/-20	80500		75400		6.53		P
Cadmium	ug/kg	+/-20	52800		49100		7.22		P
Calcium	ug/kg	+/-20	2500000		2310000		7.69		P
Chromium	ug/kg	+/-20	54300		53500		1.54		P
Cobalt	ug/kg	+/-20	52400		49000		6.67		P
Copper	ug/kg	+/-20	56600		53200		6.18		P
Iron	ug/kg	+/-20	4760000		5990000		23	*	P
Lead	ug/kg	+/-20	55100		51700		6.29		P
Magnesium	ug/kg	+/-20	1540000		1450000		5.82		P
Manganese	ug/kg	+/-20	140000		155000		9.67		P
Potassium	ug/kg	+/-20	1070000		981000		8.63		P
Silver	ug/kg	+/-20	54600		51000		6.93		P
Sodium	ug/kg	+/-20	879000		800000		9.4		P
Vanadium	ug/kg	+/-20	59700		59200		.83		P
Zinc	ug/kg	+/-20	63300		62200		1.88		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–600

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA–10–4848D

Sample ID: 241512001 **Duplicate ID:** 1201978578 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/–1000	348	J	425	J	20		MS
Beryllium	ug/kg	+/–100	105		131		22.1		MS
Nickel	ug/kg	+/–20%	2500		2960		16.7		MS
Selenium	ug/kg		482	U	500	U			MS
Thallium	ug/kg		57.8	U	60.1	U			MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–600

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** CALA–10–4848SD

Sample ID: 1201978580 **Duplicate ID:** 1201978581 **Percent Solids for Dup:** 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/–20	8030		8170		1.72		MS
Beryllium	ug/kg	+/–20	5110		5160		.894		MS
Nickel	ug/kg	+/–20	12000		10300		15.5		MS
Selenium	ug/kg	+/–20	1780		1850		3.8		MS
Thallium	ug/kg	+/–20	10400		10600		2.24		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-600

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13975D

Sample ID: 241536001 **Duplicate ID:** 1201978938 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-13.6	43.9		18.5		81.4	*	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–600

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13975SD

Sample ID: 1201978939 **Duplicate ID:** 1201978941 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	196		207		5.25		AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-600

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978576								
	Aluminum	ug/kg	7240000	7590000		105	63.5-118	P
	Antimony	ug/kg	120000	98300		81.9	39.1-132.1	P
	Barium	ug/kg	471000	477000		101	82-110.6	P
	Cadmium	ug/kg	115000	118000		102	77.9-115.2	P
	Calcium	ug/kg	3690000	3710000		101	77.4-111.7	P
	Chromium	ug/kg	83300	78100		93.7	66.6-116.5	P
	Cobalt	ug/kg	82300	81400		98.9	79-113.9	P
	Copper	ug/kg	104000	103000		99.3	77.6-112	P
	Iron	ug/kg	19800000	18900000		95.6	51.5-145.5	P
	Lead	ug/kg	160000	166000		104	83.1-114.7	P
	Magnesium	ug/kg	2960000	3010000		102	81-114.3	P
	Manganese	ug/kg	395000	367000		92.9	76.6-106.6	P
	Potassium	ug/kg	2370000	2390000		101	72.2-111.1	P
	Silver	ug/kg	132000	133000		101	81.7-115.7	P
	Sodium	ug/kg	609000	521000		85.6	71.5-109.3	P
	Vanadium	ug/kg	165000	151000		91.7	65-118.6	P
	Zinc	ug/kg	193000	197000		102	82.8-111.9	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-600

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978582								
	Beryllium	ug/kg	86400	95100		110	81.2-126.8	MS
	Nickel	ug/kg	101000	108000		107	83.3-121.4	MS
	Selenium	ug/kg	171000	183000		107	80.2-125.9	MS
	Thallium	ug/kg	203000	216000		106	78-123.2	MS
	Arsenic	ug/kg	255000	265000		104	83-120	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–600

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978937								
	Mercury	ug/kg	5150	6390		124	71.6–128.3	AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–600 **Client ID** CALA–10–4848L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241512001 **Serial Dilution ID:** 1201978573

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	17800		17800		.281		10	P
Antimony	3.3	U	16.5	U				P
Barium	205		209		1.95		10	P
Cadmium	1	U	5	U				P
Calcium	17100		17100		.292		10	P
Chromium	29.4		30.6		4.08			P
Cobalt	14		13.8	J	1.43			P
Copper	25.3		25	J	1.19			P
Iron	44900		44200		1.56		10	P
Lead	23.8		28.7	J	20.6			P
Magnesium	8560		9250		8.06		10	P
Manganese	937		975		4.06		10	P
Potassium	3690		3750		1.49		10	P
Silver	1.45	J	5	U	100			P
Sodium	1230		1250		1.63			P
Vanadium	100		102		1.5		10	P
Zinc	126		130		2.78			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-600 **Client ID** CALA-10-4848L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241512001 **Serial Dilution ID:** 1201978579

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	1.81	J	5	U	100			MS
Beryllium	.546		.57	J	4.4			MS
Nickel	13		13.5		3.85			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.3	U	1.5	U				MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-600 **Client ID** RE03-09-13975L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241536001 **Serial Dilution ID:** 1201978940

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.697		.34	U	100			AV

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 01-DEC-09 **End Date:** 01-DEC-09

Client Sdg: 10-600
Method MS
Data File: 091130-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	01:40			X		X											X		X			X		
S10	1	01:46			X		X											X		X			X		
S100	1	01:52			X		X											X		X			X		
ICV01	1	01:58			X		X											X		X			X		
ICB01	1	02:04			X		X											X		X			X		
CRDL01	1	02:10			X		X											X		X			X		
ICSA01	1	02:16			X		X											X		X			X		
ICSAB01	1	02:22			X		X											X		X			X		
CCV01	1	02:29			X		X											X		X			X		
CCB01	1	02:35			X		X											X		X			X		
LR01	1	02:41			X		X											X		X			X		
CCV02	1	02:47			X		X											X		X			X		
CCB02	1	02:53			X		X											X		X			X		
1201978577	2	02:59			X		X											X		X			X		
ZZZZZZ	20	03:05																							
1201978582	40	03:11			X		X											X		X			X		
ZZZZZZ	2	03:18																							
1201978578	2	03:24			X		X											X		X			X		
1201978580	2	03:30			X		X											X		X			X		
1201978581	2	03:36			X		X											X		X			X		
1201978579	10	03:42			X		X											X		X			X		
CCV03	1	03:48			X		X											X		X			X		
CCB03	1	03:55			X		X											X		X			X		
ZZZZZZ	2	04:01																							
ZZZZZZ	2	04:07																							
ZZZZZZ	2	04:13																							
ZZZZZZ	2	04:19																							
ZZZZZZ	2	04:25																							
241524002	2	04:32			X		X											X		X			X		
ZZZZZZ	2	04:38																							
CCV04	1	04:44			X		X											X		X			X		
CCB04	1	04:50			X		X											X		X			X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–600
Method P
Data File: 120809–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	07:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S0.1	1	07:35		X		X		X		X	X	X		X		X			X		X			X	X
S0.5	1	07:41	X	X		X		X	X	X	X	X		X	X	X			X		X			X	X
SCAL	1	07:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S10	1	07:55	X						X				X		X							X			
ICV01	1	08:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICB01	1	08:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
PQL01	1	08:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSA01	1	08:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSAB01	1	08:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR01	1	08:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR02	1	08:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV01	1	08:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB01	1	08:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR03	1	09:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV02	1	09:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB02	1	09:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	20	09:25																							
ZZZZZZ	20	09:32																							
ZZZZZZ	20	09:38																							
ZZZZZZ	20	09:45																							
CCV03	1	09:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB03	1	09:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1201978571	1	10:06	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1201978576	2	10:13	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	10:20																							
1201978572	1	10:27	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1201978574	1	10:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1201978575	1	10:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1201978573	5	10:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV04	1	10:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB04	1	11:02	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	11:09																							
ZZZZZZ	1	11:15																							
ZZZZZZ	1	11:23																							
ZZZZZZ	1	11:30																							
ZZZZZZ	1	11:36																							
241524002	1	11:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	11:50																							
CCV05	1	11:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																							
CCB05	1	12:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–600
Method AV
Data File: 120709S1–12

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	09:55															X								
S0.2	1	09:57															X								
S0.5	1	09:59															X								
S2.0	1	10:01															X								
S5.0	1	10:03															X								
S10	1	10:05															X								
ICV01	1	10:07															X								
ICB01	1	10:09															X								
CRDL01	1	10:11															X								
CCV01	1	10:13															X								
CCB01	1	10:15															X								
ZZZZZZ	1	10:17																							
ZZZZZZ	10	10:19																							
ZZZZZZ	1	10:21																							
ZZZZZZ	1	10:23																							
ZZZZZZ	1	10:25																							
ZZZZZZ	1	10:27																							
ZZZZZZ	1	10:29																							
ZZZZZZ	1	10:31																							
ZZZZZZ	5	10:33																							
ZZZZZZ	1	10:35																							
CCV02	1	10:37															X								
CCB02	1	10:39															X								
ZZZZZZ	1	10:41																							
ZZZZZZ	10	10:43																							
ZZZZZZ	1	10:45																							
ZZZZZZ	1	10:47																							
ZZZZZZ	1	10:49																							
ZZZZZZ	1	10:51																							
ZZZZZZ	1	10:53																							
ZZZZZZ	1	10:55																							
ZZZZZZ	1	10:57																							
ZZZZZZ	1	10:59																							
CCV03	1	11:01															X								
CCB03	1	11:03															X								
ZZZZZZ	1	11:05																							
ZZZZZZ	1	11:07																							
ZZZZZZ	1	11:09																							
ZZZZZZ	1	11:10																							
ZZZZZZ	1	11:12																							

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																						
ZZZZZZ	1	11:14																						
ZZZZZZ	1	11:16																						
ZZZZZZ	1	11:18																						
ZZZZZZ	1	11:20																						
ZZZZZZ	1	11:22																						
CCV04	1	11:24													X									
CCB04	1	11:26													X									
ZZZZZZ	1	11:28																						
ZZZZZZ	1	11:30																						
ZZZZZZ	1	11:32																						
ZZZZZZ	1	11:34																						
ZZZZZZ	5	11:36																						
ZZZZZZ	1	11:38																						
ZZZZZZ	1	11:40																						
ZZZZZZ	10	11:42																						
ZZZZZZ	1	11:44																						
ZZZZZZ	1	11:46																						
CCV05	1	11:48													X									
CCB05	1	11:50													X									
ZZZZZZ	1	11:52																						
ZZZZZZ	1	11:54																						
ZZZZZZ	1	11:56																						
ZZZZZZ	1	11:58																						
ZZZZZZ	1	12:00																						
ZZZZZZ	1	12:02																						
ZZZZZZ	5	12:04																						
ZZZZZZ	1	12:06																						
ZZZZZZ	1	12:08																						
ZZZZZZ	1	12:10																						
CCV06	1	12:12													X									
CCB06	1	12:14													X									
ZZZZZZ	1	12:16																						
ZZZZZZ	1	12:18																						
ZZZZZZ	1	12:20																						
ZZZZZZ	1	12:22																						
ZZZZZZ	1	12:24																						
ZZZZZZ	1	12:26																						
ZZZZZZ	1	12:28																						
ZZZZZZ	1	12:30																						
ZZZZZZ	1	12:31																						

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
ZZZZZZ	1	12:33																							
CCV07	1	12:35															X								
CCB07	1	12:38															X								
ZZZZZZ	1	12:40																							
ZZZZZZ	1	12:41																							
ZZZZZZ	1	12:43																							
ZZZZZZ	10	12:45																							
ZZZZZZ	1	12:47																							
ZZZZZZ	1	12:49																							
ZZZZZZ	1	12:51																							
ZZZZZZ	1	12:53																							
ZZZZZZ	1	12:55																							
ZZZZZZ	1	12:57																							
CCV08	1	12:59															X								
CCB08	1	13:01															X								
ZZZZZZ	5	13:03																							
ZZZZZZ	1	13:05																							
ZZZZZZ	1	13:07																							
ZZZZZZ	1	13:09																							
ZZZZZZ	1	13:11																							
ZZZZZZ	1	13:13																							
ZZZZZZ	1	13:15																							
ZZZZZZ	1	13:17																							
ZZZZZZ	1	13:19																							
CCV09	1	13:21															X								
CCB09	1	13:23															X								
1201978936	1	13:27															X								
1201978937	10	13:29															X								
ZZZZZZ	1	13:31																							
ZZZZZZ	1	13:33																							
ZZZZZZ	1	13:35																							
ZZZZZZ	1	13:37																							
ZZZZZZ	1	13:39																							
ZZZZZZ	1	13:41																							
241524002	1	13:43															X								
ZZZZZZ	1	13:45																							
CCV10	1	13:47															X								
CCB10	1	13:49															X								
1201978938	1	13:51															X								
1201978939	1	13:53															X								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																						
1201978941	1	13:55														X								
1201978940	5	13:57														X								
ZZZZZZ	1	13:59																						
ZZZZZZ	1	14:01																						
ZZZZZZ	1	14:03																						
ZZZZZZ	1	14:05																						
ZZZZZZ	1	14:07																						
ZZZZZZ	1	14:09																						
CCV11	1	14:11														X								
CCB11	1	14:13														X								

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-600

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-600

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-600

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–600
Effective Dates: 01–NOV–09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	–0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	–0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	–0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	–0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	–0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	–0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	–0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-600
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-600
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-600
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-600
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-600
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-600

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-600

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

Raw Data

Method: Hg_ReAlign
Result: 121109

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

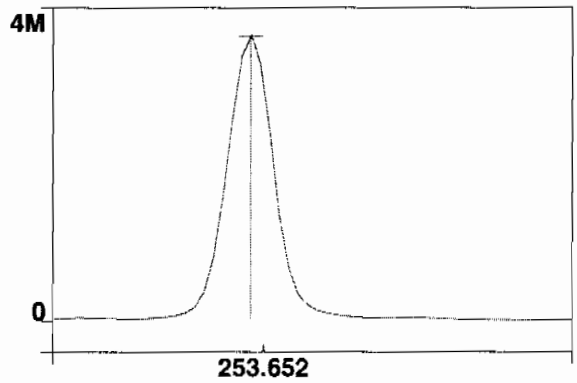

Intensity: 3630000.1 cps
Conc:

1

12/8/2009 07:27:56 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 2

Analysis Begun

Start Time: 12/8/2009 07:28:37 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/7/2009 08:20:00**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/8/2009 07:28:38**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5745.6	5745.6	98.3	%	07:30:31
1	Y RADIAL	6211.7	6211.7	98.79	%	07:30:31
1	Al 396.153Radial†	-19.0	-19.3	[0.00]	ug/L	07:30:31
1	Ca 317.933Radial†	15.5	15.8	[0.00]	ug/L	07:30:51
1	Fe 238.204 Radial†	5.3	5.4	[0.00]	ug/L	07:30:51
1	K 766.490 Radial†	2457.5	2499.5	[0.00]	ug/L	07:30:31
1	Mg 279.077 IEC†	0.5	0.5	[0.00]	ug/L	07:30:51
1	Na 589.592 Radial†	-1085.4	-1103.9	[0.00]	ug/L	07:30:31
1	Sr 421.552†	-7.0	-7.1	[0.00]	ug/L	07:30:31
1	Sc 361.383	900693.7	900693.7	99.937	%	07:31:48
1	Y 371.029	750994.5	750994.5	99.988	%	07:31:48
1	Ag 328.068†	258.4	258.6	[0.00]	ug/L	07:31:48
1	As 188.979†	-20.1	-20.1	[0.00]	ug/L	07:32:08
1	B 249.677†	-538.8	-539.2	[0.00]	ug/L	07:32:08
1	Ba 233.527†	-14.2	-14.2	[0.00]	ug/L	07:32:08
1	Be 313.107†	-5056.8	-5060.0	[0.00]	ug/L	07:31:48
1	Cd 226.502†	-193.9	-194.0	[0.00]	ug/L	07:32:08
1	Co 228.616†	-62.5	-62.5	[0.00]	ug/L	07:32:08
1	Cr 267.716†	74.9	74.9	[0.00]	ug/L	07:32:08
1	Cu 324.752†	6750.3	6754.6	[0.00]	ug/L	07:31:48
1	Mn 257.610†	418.2	418.5	[0.00]	ug/L	07:32:08
1	Mo 202.031†	24.3	24.3	[0.00]	ug/L	07:32:08
1	Ni 231.604†	82.5	82.6	[0.00]	ug/L	07:32:08
1	P 214.914†	227.9	228.1	[0.00]	ug/L	07:32:08
1	Pb 220.353†	-62.4	-62.5	[0.00]	ug/L	07:32:08
1	S 181.975 Axial†	41.2	41.3	[0.00]	ug/L	07:32:08
1	Sb 206.836†	33.6	33.6	[0.00]	ug/L	07:32:08
1	Se 196.026†	-24.2	-24.2	[0.00]	ug/L	07:32:08
1	Si 251.611†	437.2	437.5	[0.00]	ug/L	07:32:08
1	Sn 189.927†	-2.2	-2.2	[0.00]	ug/L	07:32:08
1	Ti 334.940†	-1030.7	-1031.3	[0.00]	ug/L	07:31:48
1	Tl 190.801†	-27.6	-27.6	[0.00]	ug/L	07:32:08
1	U 409.014†	-2346.9	-2348.4	[0.00]	ug/L	07:31:48
1	V 292.402†	-1372.8	-1373.7	[0.00]	ug/L	07:31:48
1	Zn 213.857†	625.8	626.2	[0.00]	ug/L	07:32:08
1	SiO2†	455.0	455.3	[0.00]	ug/L	07:33:04
2	Sc Radial	5922.7	5922.7	101	%	07:30:56
2	Y RADIAL	6350.2	6350.2	101.0	%	07:30:56
2	Al 396.153Radial†	-27.2	-26.9	[0.00]	ug/L	07:30:56
2	Ca 317.933Radial†	15.9	15.6	[0.00]	ug/L	07:31:16
2	Fe 238.204 Radial†	8.7	8.6	[0.00]	ug/L	07:31:16
2	K 766.490 Radial†	2256.7	2226.7	[0.00]	ug/L	07:30:56
2	Mg 279.077 IEC†	1.4	1.4	[0.00]	ug/L	07:31:16
2	Na 589.592 Radial†	-1070.6	-1056.4	[0.00]	ug/L	07:30:56
2	Sr 421.552†	-29.3	-28.9	[0.00]	ug/L	07:30:56
2	Sc 361.383	897080.5	897080.5	99.536	%	07:32:13
2	Y 371.029	746552.6	746552.6	99.397	%	07:32:13
2	Ag 328.068†	238.8	240.0	[0.00]	ug/L	07:32:13
2	As 188.979†	-23.4	-23.5	[0.00]	ug/L	07:32:33
2	B 249.677†	-533.8	-536.2	[0.00]	ug/L	07:32:33
2	Ba 233.527†	0.1	0.1	[0.00]	ug/L	07:32:33
2	Be 313.107†	-5169.1	-5193.2	[0.00]	ug/L	07:32:13
2	Cd 226.502†	-185.9	-186.8	[0.00]	ug/L	07:32:33
2	Co 228.616†	-67.4	-67.7	[0.00]	ug/L	07:32:33
2	Cr 267.716†	72.6	72.9	[0.00]	ug/L	07:32:33
2	Cu 324.752†	6796.2	6827.9	[0.00]	ug/L	07:32:13
2	Mn 257.610†	427.5	429.5	[0.00]	ug/L	07:32:33
2	Mo 202.031†	14.6	14.7	[0.00]	ug/L	07:32:33
2	Ni 231.604†	86.6	87.0	[0.00]	ug/L	07:32:33
2	P 214.914†	222.0	223.0	[0.00]	ug/L	07:32:33
2	Pb 220.353†	-69.2	-69.5	[0.00]	ug/L	07:32:33
2	S 181.975 Axial†	41.0	41.2	[0.00]	ug/L	07:32:33
2	Sb 206.836†	36.1	36.3	[0.00]	ug/L	07:32:33
2	Se 196.026†	-32.4	-32.6	[0.00]	ug/L	07:32:33
2	Si 251.611†	455.6	457.8	[0.00]	ug/L	07:32:33
2	Sn 189.927†	9.9	10.0	[0.00]	ug/L	07:32:33
2	Ti 334.940†	-1182.5	-1188.0	[0.00]	ug/L	07:32:13
2	Tl 190.801†	-32.3	-32.4	[0.00]	ug/L	07:32:33
2	U 409.014†	-2442.7	-2454.1	[0.00]	ug/L	07:32:13
2	V 292.402†	-1362.6	-1369.0	[0.00]	ug/L	07:32:13

2	Zn 213.857†	620.7	623.6	[0.00]	ug/L	07:32:33
2	SiO2†	500.9	503.3	[0.00]	ug/L	07:33:09
3	Sc Radial	5863.5	5863.5	100	%	07:31:21
3	Y RADIAL	6301.5	6301.5	100.2	%	07:31:21
3	Al 396.153Radial†	-15.1	-15.0	[0.00]	ug/L	07:31:21
3	Ca 317.933Radial†	15.4	15.3	[0.00]	ug/L	07:31:41
3	Fe 238.204 Radial†	6.4	6.4	[0.00]	ug/L	07:31:41
3	K 766.490 Radial†	2336.7	2328.9	[0.00]	ug/L	07:31:21
3	Mg 279.077 IEC†	1.6	1.6	[0.00]	ug/L	07:31:41
3	Na 589.592 Radial†	-1107.2	-1103.5	[0.00]	ug/L	07:31:21
3	Sr 421.552†	-46.2	-46.0	[0.00]	ug/L	07:31:21
3	Sc 361.383	906018.4	906018.4	100.53	%	07:32:38
3	Y 371.029	755705.3	755705.3	100.62	%	07:32:38
3	Ag 328.068†	381.7	379.7	[0.00]	ug/L	07:32:38
3	As 188.979†	-29.1	-29.0	[0.00]	ug/L	07:32:58
3	B 249.677†	-519.4	-516.6	[0.00]	ug/L	07:32:58
3	Ba 233.527†	-11.3	-11.2	[0.00]	ug/L	07:32:58
3	Be 313.107†	-5112.7	-5085.8	[0.00]	ug/L	07:32:38
3	Cd 226.502†	-205.6	-204.5	[0.00]	ug/L	07:32:58
3	Co 228.616†	-66.3	-66.0	[0.00]	ug/L	07:32:58
3	Cr 267.716†	88.6	88.1	[0.00]	ug/L	07:32:58
3	Cu 324.752†	6722.9	6687.6	[0.00]	ug/L	07:32:38
3	Mn 257.610†	421.2	419.0	[0.00]	ug/L	07:32:58
3	Mo 202.031†	16.1	16.0	[0.00]	ug/L	07:32:58
3	Ni 231.604†	90.6	90.1	[0.00]	ug/L	07:32:58
3	P 214.914†	220.6	219.4	[0.00]	ug/L	07:32:58
3	Pb 220.353†	-73.8	-73.4	[0.00]	ug/L	07:32:58
3	S 181.975 Axial†	42.5	42.2	[0.00]	ug/L	07:32:58
3	Sb 206.836†	33.0	32.8	[0.00]	ug/L	07:32:58
3	Se 196.026†	-29.8	-29.7	[0.00]	ug/L	07:32:58
3	Si 251.611†	456.1	453.7	[0.00]	ug/L	07:32:58
3	Sn 189.927†	7.3	7.2	[0.00]	ug/L	07:32:58
3	Ti 334.940†	-1131.4	-1125.5	[0.00]	ug/L	07:32:38
3	Tl 190.801†	-37.6	-37.4	[0.00]	ug/L	07:32:58
3	U 409.014†	-2415.7	-2403.0	[0.00]	ug/L	07:32:38
3	V 292.402†	-1339.4	-1332.4	[0.00]	ug/L	07:32:38
3	Zn 213.857†	618.9	615.7	[0.00]	ug/L	07:32:58
3	SiO2†	446.1	443.8	[0.00]	ug/L	07:33:14

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	901264.2	4496.20	0.50%	100.00	%
Sc Radial	5843.9	90.14	1.54%	100	%
Y 371.029	751084.2	4577.00	0.61%	100.00	%
Y RADIAL	6287.8	70.25	1.12%	100.0	%
Ag 328.068†	292.7	75.86	25.92%	[0.00]	ug/L
Al 396.153Radial†	-20.4	5.98	29.32%	[0.00]	ug/L
As 188.979†	-24.2	4.49	18.59%	[0.00]	ug/L
B 249.677†	-530.7	12.25	2.31%	[0.00]	ug/L
Ba 233.527†	-8.5	7.54	89.18%	[0.00]	ug/L
Be 313.107†	-5113.0	70.64	1.38%	[0.00]	ug/L
Ca 317.933Radial†	15.6	0.26	1.66%	[0.00]	ug/L
Cd 226.502†	-195.1	8.91	4.57%	[0.00]	ug/L
Co 228.616†	-65.4	2.64	4.04%	[0.00]	ug/L
Cr 267.716†	78.7	8.27	10.52%	[0.00]	ug/L
Cu 324.752†	6756.7	70.20	1.04%	[0.00]	ug/L
Fe 238.204 Radial†	6.8	1.66	24.44%	[0.00]	ug/L
K 766.490 Radial†	2351.7	137.81	5.86%	[0.00]	ug/L
Mg 279.077 IEC†	1.2	0.61	52.53%	[0.00]	ug/L
Mn 257.610†	422.3	6.23	1.47%	[0.00]	ug/L
Mo 202.031†	18.3	5.20	28.34%	[0.00]	ug/L
Na 589.592 Radial†	-1087.9	27.36	2.52%	[0.00]	ug/L
Ni 231.604†	86.6	3.79	4.38%	[0.00]	ug/L
P 214.914†	223.5	4.34	1.94%	[0.00]	ug/L
Pb 220.353†	-68.5	5.55	8.11%	[0.00]	ug/L
S 181.975 Axial†	41.6	0.57	1.37%	[0.00]	ug/L
Sb 206.836†	34.2	1.82	5.32%	[0.00]	ug/L
Se 196.026†	-28.8	4.23	14.66%	[0.00]	ug/L
Si 251.611†	449.7	10.73	2.39%	[0.00]	ug/L

Sn 189.927†	5.0	6.41	128.46%	[0.00]	ug/L
Sr 421.552†	-27.4	19.51	71.35%	[0.00]	ug/L
Ti 334.940†	-1114.9	78.85	7.07%	[0.00]	ug/L
Tl 190.801†	-32.5	4.90	15.07%	[0.00]	ug/L
U 409.014†	-2401.8	52.87	2.20%	[0.00]	ug/L
V 292.402†	-1358.4	22.59	1.66%	[0.00]	ug/L
Zn 213.857†	621.8	5.49	0.88%	[0.00]	ug/L
SiO2†	467.5	31.54	6.75%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/8/2009 07:35:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5765.8	5765.8	98.7	%	07:37:21
1	Y RADIAL	6189.1	6189.1	98.43	%	07:37:21
1	K 766.490 Radial†	8010.4	5767.1	[1000]	ug/L	07:37:16
1	Sr 421.552†	15682.7	15922.4	[100]	ug/L	07:37:21
1	Sc 361.383	914536.7	914536.7	101.47	%	07:37:48
1	Y 371.029	754661.2	754661.2	100.48	%	07:37:48
1	Ag 328.068†	21843.7	21234.0	[100]	ug/L	07:37:53
1	As 188.979†	227.9	248.8	[100]	ug/L	07:38:13
1	B 249.677†	3929.5	4403.2	[100]	ug/L	07:37:53
1	Ba 233.527†	13325.8	13140.9	[100]	ug/L	07:37:53
1	Be 313.107†	260898.9	262225.5	[100]	ug/L	07:37:48
1	Cd 226.502†	9200.0	9261.6	[100]	ug/L	07:37:53
1	Co 228.616†	5047.2	5039.4	[100]	ug/L	07:38:13
1	Cr 267.716†	9428.4	9212.9	[100]	ug/L	07:37:53
1	Cu 324.752†	40509.5	33164.9	[100]	ug/L	07:37:53
1	Mn 257.610†	93021.3	91249.0	[100]	ug/L	07:37:53
1	Mo 202.031†	1542.1	1501.4	[100]	ug/L	07:38:13
1	Ni 231.604†	4280.0	4131.4	[100]	ug/L	07:38:13
1	P 214.914†	1053.7	814.9	[500]	ug/L	07:38:13
1	Pb 220.353†	819.7	876.2	[100]	ug/L	07:38:13
1	S 181.975 Axial†	175.1	130.9	[200]	ug/L	07:38:13
1	Sb 206.836†	334.6	295.5	[100]	ug/L	07:38:13
1	Se 196.026†	142.3	169.1	[100]	ug/L	07:38:13
1	Si 251.611†	16559.7	15869.7	[500]	ug/L	07:37:53
1	Sn 189.927†	576.8	563.4	[100]	ug/L	07:38:13
1	Ti 334.940†	59872.4	60118.4	[100]	ug/L	07:37:53
1	Tl 190.801†	319.5	347.4	[100]	ug/L	07:38:13
1	U 409.014†	1213.1	3597.3	[100]	ug/L	07:37:48
1	V 292.402†	13311.9	14477.1	[100]	ug/L	07:37:53
1	Zn 213.857†	11943.1	11147.9	[100]	ug/L	07:37:53
1	SiO2†	16722.0	16011.9	[1069.5]	ug/L	07:39:19
2	Sc Radial	5769.0	5769.0	98.7	%	07:37:31
2	Y RADIAL	6129.7	6129.7	97.49	%	07:37:31
2	K 766.490 Radial†	7990.0	5742.1	[1000]	ug/L	07:37:26
2	Sr 421.552†	15612.4	15842.5	[100]	ug/L	07:37:31
2	Sc 361.383	915362.8	915362.8	101.56	%	07:38:18
2	Y 371.029	757053.4	757053.4	100.79	%	07:38:18
2	Ag 328.068†	22010.2	21378.4	[100]	ug/L	07:38:23
2	As 188.979†	219.9	240.7	[100]	ug/L	07:38:43
2	B 249.677†	3929.3	4399.5	[100]	ug/L	07:38:23
2	Ba 233.527†	13353.9	13156.7	[100]	ug/L	07:38:23
2	Be 313.107†	261281.3	262369.9	[100]	ug/L	07:38:18
2	Cd 226.502†	9245.9	9298.6	[100]	ug/L	07:38:23
2	Co 228.616†	5066.0	5053.3	[100]	ug/L	07:38:43
2	Cr 267.716†	9513.3	9288.1	[100]	ug/L	07:38:23
2	Cu 324.752†	40726.1	33342.1	[100]	ug/L	07:38:23
2	Mn 257.610†	93398.3	91537.5	[100]	ug/L	07:38:23
2	Mo 202.031†	1547.3	1505.1	[100]	ug/L	07:38:43
2	Ni 231.604†	4269.5	4117.2	[100]	ug/L	07:38:43
2	P 214.914†	1060.5	820.7	[500]	ug/L	07:38:43
2	Pb 220.353†	815.7	871.6	[100]	ug/L	07:38:43
2	S 181.975 Axial†	174.2	129.9	[200]	ug/L	07:38:43
2	Sb 206.836†	333.9	294.5	[100]	ug/L	07:38:43
2	Se 196.026†	147.7	174.2	[100]	ug/L	07:38:43
2	Si 251.611†	16619.4	15913.7	[500]	ug/L	07:38:23
2	Sn 189.927†	602.2	587.9	[100]	ug/L	07:38:43
2	Ti 334.940†	60122.7	60311.6	[100]	ug/L	07:38:23
2	Tl 190.801†	325.1	352.6	[100]	ug/L	07:38:43
2	U 409.014†	1005.2	3391.5	[100]	ug/L	07:38:18

2	V 292.402†	13412.6	14564.3	[100]	ug/L	07:38:23
2	Zn 213.857†	11968.2	11162.1	[100]	ug/L	07:38:23
2	SiO2†	16537.0	15814.9	[1069.5]	ug/L	07:39:24
3	Sc Radial	5875.5	5875.5	101	%	07:37:41
3	Y RADIAL	6269.8	6269.8	99.71	%	07:37:41
3	K 766.490 Radial†	7932.9	5538.6	[1000]	ug/L	07:37:36
3	Sr 421.552†	15938.0	15879.7	[100]	ug/L	07:37:41
3	Sc 361.383	919222.5	919222.5	101.99	%	07:38:49
3	Y 371.029	759136.1	759136.1	101.07	%	07:38:49
3	Ag 328.068†	22234.4	21507.3	[100]	ug/L	07:38:54
3	As 188.979†	225.1	244.9	[100]	ug/L	07:39:14
3	B 249.677†	4040.0	4491.7	[100]	ug/L	07:38:54
3	Ba 233.527†	13560.3	13303.8	[100]	ug/L	07:38:54
3	Be 313.107†	261887.7	261884.4	[100]	ug/L	07:38:49
3	Cd 226.502†	9334.1	9346.9	[100]	ug/L	07:38:54
3	Co 228.616†	5039.9	5006.8	[100]	ug/L	07:39:14
3	Cr 267.716†	9582.2	9316.3	[100]	ug/L	07:38:54
3	Cu 324.752†	40945.3	33388.7	[100]	ug/L	07:38:54
3	Mn 257.610†	94457.9	92190.2	[100]	ug/L	07:38:54
3	Mo 202.031†	1552.8	1504.1	[100]	ug/L	07:39:14
3	Ni 231.604†	4263.2	4093.4	[100]	ug/L	07:39:14
3	P 214.914†	1052.4	808.3	[500]	ug/L	07:39:14
3	Pb 220.353†	818.7	871.2	[100]	ug/L	07:39:14
3	S 181.975 Axial†	175.0	130.0	[200]	ug/L	07:39:14
3	Sb 206.836†	329.8	289.1	[100]	ug/L	07:39:14
3	Se 196.026†	150.6	176.5	[100]	ug/L	07:39:14
3	Si 251.611†	16850.5	16071.6	[500]	ug/L	07:38:54
3	Sn 189.927†	596.2	579.5	[100]	ug/L	07:39:14
3	Ti 334.940†	60935.8	60860.2	[100]	ug/L	07:38:54
3	Tl 190.801†	315.6	342.0	[100]	ug/L	07:39:14
3	U 409.014†	972.6	3355.4	[100]	ug/L	07:38:49
3	V 292.402†	13503.5	14598.0	[100]	ug/L	07:38:54
3	Zn 213.857†	12098.0	11239.8	[100]	ug/L	07:38:54
3	SiO2†	16521.2	15731.0	[1069.5]	ug/L	07:39:29

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	916374.0	2501.23	0.27%	101.68	%
Sc Radial	5803.4	62.41	1.08%	99.3	%
Y 371.029	756950.2	2239.21	0.30%	100.78	%
Y RADIAL	6196.2	70.31	1.13%	98.54	%
Ag 328.068†	21373.3	136.74	0.64%	[100]	ug/L
As 188.979†	244.8	4.02	1.64%	[100]	ug/L
B 249.677†	4431.5	52.22	1.18%	[100]	ug/L
Ba 233.527†	13200.4	89.86	0.68%	[100]	ug/L
Be 313.107†	262159.9	249.34	0.10%	[100]	ug/L
Cd 226.502†	9302.4	42.77	0.46%	[100]	ug/L
Co 228.616†	5033.2	23.87	0.47%	[100]	ug/L
Cr 267.716†	9272.4	53.46	0.58%	[100]	ug/L
Cu 324.752†	33298.6	118.07	0.35%	[100]	ug/L
K 766.490 Radial†	5682.6	125.36	2.21%	[1000]	ug/L
Mn 257.610†	91658.9	482.19	0.53%	[100]	ug/L
Mo 202.031†	1503.6	1.93	0.13%	[100]	ug/L
Ni 231.604†	4114.0	19.19	0.47%	[100]	ug/L
P 214.914†	814.6	6.21	0.76%	[500]	ug/L
Pb 220.353†	873.0	2.80	0.32%	[100]	ug/L
S 181.975 Axial†	130.3	0.57	0.43%	[200]	ug/L
Sb 206.836†	293.0	3.44	1.17%	[100]	ug/L
Se 196.026†	173.3	3.78	2.18%	[100]	ug/L
Si 251.611†	15951.7	106.20	0.67%	[500]	ug/L
Sn 189.927†	576.9	12.46	2.16%	[100]	ug/L
Sr 421.552†	15881.5	39.96	0.25%	[100]	ug/L
Ti 334.940†	60430.1	384.83	0.64%	[100]	ug/L
Tl 190.801†	347.3	5.29	1.52%	[100]	ug/L
U 409.014†	3448.1	130.52	3.79%	[100]	ug/L
V 292.402†	14546.5	62.44	0.43%	[100]	ug/L
Zn 213.857†	11183.3	49.46	0.44%	[100]	ug/L
SiO2†	15852.6	144.20	0.91%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/8/2009 07:41:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5755.3	5755.3	98.5	%	07:43:33
1	Y RADIAL	6135.8	6135.8	97.58	%	07:43:33
1	Al 396.153Radial†	6940.6	7067.9	[5000]	ug/L	07:43:33
1	Ca 317.933Radial†	3383.4	3419.9	[5000]	ug/L	07:43:53
1	K 766.490 Radial†	30250.2	28364.4	[5000]	ug/L	07:43:33
1	Mg 279.077 IEC†	149.6	150.7	[5000]	ug/L	07:43:53
1	Sr 421.552†	79566.2	80818.9	[500]	ug/L	07:43:33
1	Sc 361.383	902007.9	902007.9	100.08	%	07:44:50
1	Y 371.029	736818.6	736818.6	98.101	%	07:44:50
1	Ag 328.068†	110404.5	110020.7	[500]	ug/L	07:44:55
1	As 188.979†	1227.6	1250.8	[500]	ug/L	07:45:15
1	B 249.677†	22624.2	23136.2	[500]	ug/L	07:44:55
1	Ba 233.527†	66321.3	66275.0	[500]	ug/L	07:44:55
1	Be 313.107†	1344073.3	1348078.1	[500]	ug/L	07:44:50
1	Cd 226.502†	46481.0	46637.8	[500]	ug/L	07:44:55
1	Co 228.616†	25957.4	26001.4	[500]	ug/L	07:44:55
1	Cr 267.716†	46880.7	46763.4	[500]	ug/L	07:44:55
1	Cu 324.752†	176748.5	169846.1	[500]	ug/L	07:44:55
1	Mn 257.610†	463225.0	462420.8	[500]	ug/L	07:44:50
1	Mo 202.031†	7863.2	7838.4	[500]	ug/L	07:45:15
1	Ni 231.604†	21487.8	21383.5	[500]	ug/L	07:44:55
1	P 214.914†	4473.1	4245.9	[2500]	ug/L	07:45:15
1	Pb 220.353†	4294.6	4359.5	[500]	ug/L	07:45:15
1	S 181.975 Axial†	761.5	719.3	[1000]	ug/L	07:45:15
1	Sb 206.836†	1615.7	1580.1	[500]	ug/L	07:45:15
1	Se 196.026†	818.6	846.7	[500]	ug/L	07:45:15
1	Si 251.611†	82564.9	82047.1	[2500]	ug/L	07:44:55
1	Sn 189.927†	3040.6	3033.1	[500]	ug/L	07:45:15
1	Ti 334.940†	310662.0	311520.8	[500]	ug/L	07:44:55
1	Tl 190.801†	1746.7	1777.8	[500]	ug/L	07:45:15
1	U 409.014†	15499.0	17888.0	[500]	ug/L	07:44:55
1	V 292.402†	72745.3	74043.7	[500]	ug/L	07:44:55
1	Zn 213.857†	56861.0	56192.3	[500]	ug/L	07:44:55
1	SiO2†	83677.9	83141.4	[5347.5]	ug/L	07:46:23
2	Sc Radial	5753.2	5753.2	98.4	%	07:43:58
2	Y RADIAL	6098.6	6098.6	96.99	%	07:43:58
2	Al 396.153Radial†	7008.5	7139.3	[5000]	ug/L	07:43:58
2	Ca 317.933Radial†	3357.1	3394.4	[5000]	ug/L	07:44:18
2	K 766.490 Radial†	30376.3	28503.4	[5000]	ug/L	07:43:58
2	Mg 279.077 IEC†	145.0	146.2	[5000]	ug/L	07:44:18
2	Sr 421.552†	80143.3	81433.9	[500]	ug/L	07:43:58
2	Sc 361.383	897050.9	897050.9	99.533	%	07:45:21
2	Y 371.029	733930.5	733930.5	97.716	%	07:45:21
2	Ag 328.068†	111157.6	111387.0	[500]	ug/L	07:45:26
2	As 188.979†	1224.7	1254.7	[500]	ug/L	07:45:46
2	B 249.677†	22833.2	23471.2	[500]	ug/L	07:45:26
2	Ba 233.527†	66766.7	67088.7	[500]	ug/L	07:45:26
2	Be 313.107†	1337696.5	1349092.5	[500]	ug/L	07:45:21
2	Cd 226.502†	46562.9	46976.7	[500]	ug/L	07:45:26
2	Co 228.616†	26072.6	26260.5	[500]	ug/L	07:45:26
2	Cr 267.716†	47094.3	47236.9	[500]	ug/L	07:45:26
2	Cu 324.752†	179116.2	173200.8	[500]	ug/L	07:45:26
2	Mn 257.610†	460045.0	461783.5	[500]	ug/L	07:45:21
2	Mo 202.031†	7897.3	7916.1	[500]	ug/L	07:45:46
2	Ni 231.604†	21502.8	21517.2	[500]	ug/L	07:45:26
2	P 214.914†	4483.7	4281.3	[2500]	ug/L	07:45:46
2	Pb 220.353†	4299.8	4388.4	[500]	ug/L	07:45:46
2	S 181.975 Axial†	755.4	717.4	[1000]	ug/L	07:45:46
2	Sb 206.836†	1616.8	1590.2	[500]	ug/L	07:45:46

2	Se 196.026†	835.3	868.1	[500]	ug/L	07:45:46
2	Si 251.611†	83146.9	83087.8	[2500]	ug/L	07:45:26
2	Sn 189.927†	3056.2	3065.6	[500]	ug/L	07:45:46
2	Ti 334.940†	313337.6	315924.2	[500]	ug/L	07:45:26
2	Tl 190.801†	1732.8	1773.5	[500]	ug/L	07:45:46
2	U 409.014†	15713.5	18189.1	[500]	ug/L	07:45:26
2	V 292.402†	73060.5	74762.0	[500]	ug/L	07:45:26
2	Zn 213.857†	57384.3	57032.0	[500]	ug/L	07:45:26
2	SiO2†	82111.0	82029.2	[5347.5]	ug/L	07:46:28
3	Sc Radial	5658.5	5658.5	96.8	%	07:44:23
3	Y RADIAL	6000.3	6000.3	95.43	%	07:44:23
3	Al 396.153Radial†	7008.2	7258.2	[5000]	ug/L	07:44:23
3	Ca 317.933Radial†	3379.5	3474.7	[5000]	ug/L	07:44:43
3	K 766.490 Radial†	30355.1	28998.2	[5000]	ug/L	07:44:23
3	Mg 279.077 IEC†	146.2	149.8	[5000]	ug/L	07:44:43
3	Sr 421.552†	80169.9	82824.7	[500]	ug/L	07:44:23
3	Sc 361.383	903673.3	903673.3	100.27	%	07:45:52
3	Y 371.029	738349.2	738349.2	98.304	%	07:45:52
3	Ag 328.068†	111866.7	111275.7	[500]	ug/L	07:45:57
3	As 188.979†	1213.8	1234.8	[500]	ug/L	07:46:17
3	B 249.677†	23191.3	23660.2	[500]	ug/L	07:45:57
3	Ba 233.527†	67179.0	67008.4	[500]	ug/L	07:45:57
3	Be 313.107†	1348404.0	1349922.3	[500]	ug/L	07:45:52
3	Cd 226.502†	47083.0	47152.6	[500]	ug/L	07:45:57
3	Co 228.616†	26298.3	26293.6	[500]	ug/L	07:45:57
3	Cr 267.716†	47483.6	47278.4	[500]	ug/L	07:45:57
3	Cu 324.752†	179916.3	172680.0	[500]	ug/L	07:45:57
3	Mn 257.610†	464824.3	463162.8	[500]	ug/L	07:45:52
3	Mo 202.031†	7859.2	7820.0	[500]	ug/L	07:46:17
3	Ni 231.604†	21680.2	21535.9	[500]	ug/L	07:45:57
3	P 214.914†	4444.9	4209.6	[2500]	ug/L	07:46:17
3	Pb 220.353†	4302.0	4359.0	[500]	ug/L	07:46:17
3	S 181.975 Axial†	750.3	706.7	[1000]	ug/L	07:46:17
3	Sb 206.836†	1605.1	1566.6	[500]	ug/L	07:46:17
3	Se 196.026†	826.7	853.3	[500]	ug/L	07:46:17
3	Si 251.611†	83765.2	83092.2	[2500]	ug/L	07:45:57
3	Sn 189.927†	3059.4	3046.2	[500]	ug/L	07:46:17
3	Ti 334.940†	315390.3	315664.4	[500]	ug/L	07:45:57
3	Tl 190.801†	1716.4	1744.4	[500]	ug/L	07:46:17
3	U 409.014†	15674.1	18034.2	[500]	ug/L	07:45:57
3	V 292.402†	73603.1	74765.2	[500]	ug/L	07:45:57
3	Zn 213.857†	57834.5	57058.5	[500]	ug/L	07:45:57
3	SiO2†	81804.4	81118.8	[5347.5]	ug/L	07:46:33

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	900910.7	3444.89	0.38%	99.961	%
Sc Radial	5722.3	55.31	0.97%	97.9	%
Y 371.029	736366.1	2243.84	0.30%	98.040	%
Y RADIAL	6078.3	70.01	1.15%	96.67	%
Ag 328.068†	110894.5	758.70	0.68%	[500]	ug/L
Al 396.153Radial†	7155.2	96.14	1.34%	[5000]	ug/L
As 188.979†	1246.7	10.54	0.85%	[500]	ug/L
B 249.677†	23422.5	265.36	1.13%	[500]	ug/L
Ba 233.527†	66790.7	448.39	0.67%	[500]	ug/L
Be 313.107†	1349030.9	923.63	0.07%	[500]	ug/L
Ca 317.933Radial†	3429.7	41.02	1.20%	[5000]	ug/L
Cd 226.502†	46922.4	261.67	0.56%	[500]	ug/L
Co 228.616†	26185.2	159.97	0.61%	[500]	ug/L
Cr 267.716†	47092.9	286.09	0.61%	[500]	ug/L
Cu 324.752†	171909.0	1805.36	1.05%	[500]	ug/L
K 766.490 Radial†	28622.0	333.13	1.16%	[5000]	ug/L
Mg 279.077 IEC†	148.9	2.41	1.62%	[5000]	ug/L
Mn 257.610†	462455.7	690.31	0.15%	[500]	ug/L
Mo 202.031†	7858.1	51.01	0.65%	[500]	ug/L
Ni 231.604†	21478.9	83.11	0.39%	[500]	ug/L
P 214.914†	4245.6	35.86	0.84%	[2500]	ug/L
Pb 220.353†	4369.0	16.86	0.39%	[500]	ug/L
S 181.975 Axial†	714.5	6.78	0.95%	[1000]	ug/L

Sb 206.836†	1579.0	11.84	0.75%	[500]	ug/L
Se 196.026†	856.0	10.93	1.28%	[500]	ug/L
Si 251.611†	82742.4	602.11	0.73%	[2500]	ug/L
Sn 189.927†	3048.3	16.37	0.54%	[500]	ug/L
Sr 421.552†	81692.5	1027.61	1.26%	[500]	ug/L
Ti 334.940†	314369.8	2470.75	0.79%	[500]	ug/L
Tl 190.801†	1765.2	18.18	1.03%	[500]	ug/L
U 409.014†	18037.1	150.54	0.83%	[500]	ug/L
V 292.402†	74523.6	415.67	0.56%	[500]	ug/L
Zn 213.857†	56760.9	492.63	0.87%	[500]	ug/L
SiO2†	82096.5	1012.97	1.23%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/8/2009 07:48:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5727.6	5727.6	98.0	%	07:50:36
1	Y RADIAL	6092.4	6092.4	96.89	%	07:50:36
1	Al 396.153Radial†	13699.9	13998.6	[10000]	ug/L	07:50:36
1	Ca 317.933Radial†	6656.5	6776.1	[10000]	ug/L	07:50:36
1	Fe 238.204 Radial†	1055.7	1070.4	[10000]	ug/L	07:50:56
1	K 766.490 Radial†	57301.4	56113.4	[10000]	ug/L	07:50:36
1	Mg 279.077 IEC†	286.7	291.4	[10000]	ug/L	07:50:56
1	Na 589.592 Radial†	26952.5	28587.8	[10000]	ug/L	07:50:36
1	Sr 421.552†	156642.7	159851.3	[1000]	ug/L	07:50:36
1	Sc 361.383	866703.8	866703.8	96.165	%	07:51:59
1	Y 371.029	725126.9	725126.9	96.544	%	07:51:59
1	Ag 328.068†	212191.8	220360.3	[1000]	ug/L	07:51:59
1	As 188.979†	2413.4	2533.8	[1000]	ug/L	07:52:19
1	B 249.677†	45434.2	47776.6	[1000]	ug/L	07:51:59
1	Ba 233.527†	129842.7	135028.7	[1000]	ug/L	07:51:59
1	Be 313.107†	2636643.4	2746894.1	[1000]	ug/L	07:51:54
1	Cd 226.502†	90744.2	94557.8	[1000]	ug/L	07:51:59
1	Co 228.616†	50574.3	52656.4	[1000]	ug/L	07:51:59
1	Cr 267.716†	91836.0	95419.4	[1000]	ug/L	07:51:59
1	Cu 324.752†	343293.5	350225.9	[1000]	ug/L	07:51:59
1	Mn 257.610†	901280.3	936797.1	[1000]	ug/L	07:51:54
1	Mo 202.031†	15191.7	15779.1	[1000]	ug/L	07:52:19
1	Ni 231.604†	41580.1	43151.6	[1000]	ug/L	07:51:59
1	P 214.914†	8615.8	8735.8	[5000]	ug/L	07:52:19
1	Pb 220.353†	8464.2	8870.1	[1000]	ug/L	07:52:19
1	S 181.975 Axial†	1409.9	1424.5	[2000]	ug/L	07:52:19
1	Sb 206.836†	3070.7	3158.9	[1000]	ug/L	07:52:19
1	Se 196.026†	1640.1	1734.3	[1000]	ug/L	07:52:19
1	Si 251.611†	161079.4	167052.8	[5000]	ug/L	07:51:59
1	Sn 189.927†	5873.8	6103.0	[1000]	ug/L	07:52:19
1	Ti 334.940†	600269.7	625320.7	[1000]	ug/L	07:51:59
1	Tl 190.801†	3419.3	3588.1	[1000]	ug/L	07:52:19
1	U 409.014†	32652.6	36356.5	[1000]	ug/L	07:51:59
1	V 292.402†	144700.9	151829.2	[1000]	ug/L	07:51:59
1	Zn 213.857†	110773.1	114568.4	[1000]	ug/L	07:51:59
1	SiO2†	162097.8	168094.0	[10695]	ug/L	07:53:28
2	Sc Radial	5706.1	5706.1	97.6	%	07:51:01
2	Y RADIAL	6044.1	6044.1	96.12	%	07:51:01
2	Al 396.153Radial†	13658.2	14008.6	[10000]	ug/L	07:51:01
2	Ca 317.933Radial†	6641.4	6786.2	[10000]	ug/L	07:51:01
2	Fe 238.204 Radial†	1051.8	1070.4	[10000]	ug/L	07:51:21
2	K 766.490 Radial†	57341.9	56375.2	[10000]	ug/L	07:51:01
2	Mg 279.077 IEC†	284.9	290.6	[10000]	ug/L	07:51:21
2	Na 589.592 Radial†	26942.8	28681.5	[10000]	ug/L	07:51:01
2	Sr 421.552†	156508.0	160315.7	[1000]	ug/L	07:51:01
2	Sc 361.383	870985.3	870985.3	96.640	%	07:52:31
2	Y 371.029	731540.9	731540.9	97.398	%	07:52:31
2	Ag 328.068†	213845.0	220986.4	[1000]	ug/L	07:52:31
2	As 188.979†	2432.4	2541.1	[1000]	ug/L	07:52:51
2	B 249.677†	46010.4	48140.5	[1000]	ug/L	07:52:31
2	Ba 233.527†	130856.3	135413.9	[1000]	ug/L	07:52:31
2	Be 313.107†	2666787.9	2764609.1	[1000]	ug/L	07:52:25
2	Cd 226.502†	91618.2	94998.3	[1000]	ug/L	07:52:31
2	Co 228.616†	51055.4	52895.7	[1000]	ug/L	07:52:31
2	Cr 267.716†	92533.4	95671.6	[1000]	ug/L	07:52:31
2	Cu 324.752†	346989.1	352295.1	[1000]	ug/L	07:52:31
2	Mn 257.610†	910927.9	942173.1	[1000]	ug/L	07:52:25
2	Mo 202.031†	15202.7	15712.9	[1000]	ug/L	07:52:51
2	Ni 231.604†	42023.0	43397.4	[1000]	ug/L	07:52:31

2	P 214.914†	8619.1	8695.2	[5000]	ug/L	07:52:51
2	Pb 220.353†	8484.9	8848.3	[1000]	ug/L	07:52:51
2	S 181.975 Axial†	1414.8	1422.4	[2000]	ug/L	07:52:51
2	Sb 206.836†	3088.5	3161.7	[1000]	ug/L	07:52:51
2	Se 196.026†	1638.9	1724.7	[1000]	ug/L	07:52:51
2	Si 251.611†	162691.4	167897.5	[5000]	ug/L	07:52:31
2	Sn 189.927†	5905.9	6106.2	[1000]	ug/L	07:52:51
2	Ti 334.940†	605448.6	627611.3	[1000]	ug/L	07:52:31
2	Tl 190.801†	3427.2	3578.8	[1000]	ug/L	07:52:51
2	U 409.014†	32852.3	36396.2	[1000]	ug/L	07:52:31
2	V 292.402†	145972.5	152405.4	[1000]	ug/L	07:52:31
2	Zn 213.857†	111675.6	114936.0	[1000]	ug/L	07:52:31
2	SiO2†	162732.6	167922.3	[10695]	ug/L	07:53:33
3	Sc Radial	5835.4	5835.4	99.9	%	07:51:26
3	Y RADIAL	6153.0	6153.0	97.86	%	07:51:26
3	Al 396.153Radial†	13935.7	13976.5	[10000]	ug/L	07:51:26
3	Ca 317.933Radial†	6750.2	6744.5	[10000]	ug/L	07:51:26
3	Fe 238.204 Radial†	1062.5	1057.3	[10000]	ug/L	07:51:46
3	K 766.490 Radial†	58299.6	56033.1	[10000]	ug/L	07:51:26
3	Mg 279.077 IEC†	286.1	285.3	[10000]	ug/L	07:51:46
3	Na 589.592 Radial†	27504.4	28632.6	[10000]	ug/L	07:51:26
3	Sr 421.552†	159231.4	159491.6	[1000]	ug/L	07:51:26
3	Sc 361.383	870659.7	870659.7	96.604	%	07:53:02
3	Y 371.029	729400.6	729400.6	97.113	%	07:53:02
3	Ag 328.068†	213245.6	220448.6	[1000]	ug/L	07:53:02
3	As 188.979†	2437.9	2547.8	[1000]	ug/L	07:53:22
3	B 249.677†	45730.3	47868.4	[1000]	ug/L	07:53:02
3	Ba 233.527†	130842.6	135450.2	[1000]	ug/L	07:53:02
3	Be 313.107†	2658103.6	2756651.3	[1000]	ug/L	07:52:57
3	Cd 226.502†	91430.2	94839.1	[1000]	ug/L	07:53:02
3	Co 228.616†	50994.1	52852.0	[1000]	ug/L	07:53:02
3	Cr 267.716†	92409.5	95579.1	[1000]	ug/L	07:53:02
3	Cu 324.752†	345135.9	350511.0	[1000]	ug/L	07:53:02
3	Mn 257.610†	911726.2	943351.9	[1000]	ug/L	07:52:57
3	Mo 202.031†	15254.9	15772.8	[1000]	ug/L	07:53:22
3	Ni 231.604†	41851.4	43236.0	[1000]	ug/L	07:53:02
3	P 214.914†	8647.5	8728.0	[5000]	ug/L	07:53:22
3	Pb 220.353†	8535.4	8903.9	[1000]	ug/L	07:53:22
3	S 181.975 Axial†	1428.8	1437.4	[2000]	ug/L	07:53:22
3	Sb 206.836†	3094.4	3169.0	[1000]	ug/L	07:53:22
3	Se 196.026†	1655.8	1742.8	[1000]	ug/L	07:53:22
3	Si 251.611†	162249.9	167503.4	[5000]	ug/L	07:53:02
3	Sn 189.927†	5928.4	6131.8	[1000]	ug/L	07:53:22
3	Ti 334.940†	603756.8	626094.3	[1000]	ug/L	07:53:02
3	Tl 190.801†	3424.4	3577.2	[1000]	ug/L	07:53:22
3	U 409.014†	32820.6	36376.1	[1000]	ug/L	07:53:02
3	V 292.402†	145449.4	151920.4	[1000]	ug/L	07:53:02
3	Zn 213.857†	111377.9	114671.1	[1000]	ug/L	07:53:02
3	SiO2†	161107.2	166302.8	[10695]	ug/L	07:53:38

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	869449.6	2383.48	0.27%	96.470	%
Sc Radial	5756.4	69.28	1.20%	98.5	%
Y 371.029	728689.4	3265.57	0.45%	97.018	%
Y RADIAL	6096.5	54.59	0.90%	96.96	%
Ag 328.068†	220598.4	338.87	0.15%	[1000]	ug/L
Al 396.153Radial†	13994.5	16.43	0.12%	[10000]	ug/L
As 188.979†	2540.9	6.99	0.28%	[1000]	ug/L
B 249.677†	47928.5	189.28	0.39%	[1000]	ug/L
Ba 233.527†	135297.6	233.59	0.17%	[1000]	ug/L
Be 313.107†	2756051.5	8872.70	0.32%	[1000]	ug/L
Ca 317.933Radial†	6768.9	21.76	0.32%	[10000]	ug/L
Cd 226.502†	94798.4	223.05	0.24%	[1000]	ug/L
Co 228.616†	52801.4	127.43	0.24%	[1000]	ug/L
Cr 267.716†	95556.7	127.57	0.13%	[1000]	ug/L
Cu 324.752†	351010.6	1121.46	0.32%	[1000]	ug/L
Fe 238.204 Radial†	1066.0	7.56	0.71%	[10000]	ug/L
K 766.490 Radial†	56173.9	178.89	0.32%	[10000]	ug/L

Mg 279.077 IEC†	289.1	3.30	1.14%	[10000]	ug/L
Mn 257.610†	940774.0	3494.17	0.37%	[1000]	ug/L
Mo 202.031†	15754.9	36.54	0.23%	[1000]	ug/L
Na 589.592 Radial†	28634.0	46.86	0.16%	[10000]	ug/L
Ni 231.604†	43261.7	124.89	0.29%	[1000]	ug/L
P 214.914†	8719.7	21.52	0.25%	[5000]	ug/L
Pb 220.353†	8874.1	28.01	0.32%	[1000]	ug/L
S 181.975 Axial†	1428.1	8.14	0.57%	[2000]	ug/L
Sb 206.836†	3163.2	5.19	0.16%	[1000]	ug/L
Se 196.026†	1733.9	9.04	0.52%	[1000]	ug/L
Si 251.611†	167484.6	422.65	0.25%	[5000]	ug/L
Sn 189.927†	6113.7	15.78	0.26%	[1000]	ug/L
Sr 421.552†	159886.2	413.17	0.26%	[1000]	ug/L
Ti 334.940†	626342.1	1165.23	0.19%	[1000]	ug/L
Tl 190.801†	3581.4	5.88	0.16%	[1000]	ug/L
U 409.014†	36376.3	19.85	0.05%	[1000]	ug/L
V 292.402†	152051.7	309.69	0.20%	[1000]	ug/L
Zn 213.857†	114725.2	189.70	0.17%	[1000]	ug/L
SiO2†	167439.7	988.35	0.59%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/8/2009 07:55:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5634.4	5634.4	96.4	%	07:58:03
1	Y RADIAL	5976.9	5976.9	95.06	%	07:58:03
1	Al 396.153Radial†	70118.2	72745.8	[50000]	ug/L	07:57:43
1	Ca 317.933Radial†	33119.0	34334.9	[50000]	ug/L	07:57:43
1	Fe 238.204 Radial†	2068.2	2138.3	[20000]	ug/L	07:58:03
1	Mg 279.077 IEC†	1367.9	1417.6	[50000]	ug/L	07:58:03
1	Na 589.592 Radial†	57661.4	60893.3	[20000]	ug/L	07:57:43
1	Sc 361.383	873678.1	873678.1	96.939	%	07:59:00
1	Y 371.029	712440.2	712440.2	94.855	%	07:59:00
2	Sc Radial	5657.2	5657.2	96.8	%	07:58:28
2	Y RADIAL	5981.2	5981.2	95.12	%	07:58:28
2	Al 396.153Radial†	69017.3	71315.7	[50000]	ug/L	07:58:08
2	Ca 317.933Radial†	32519.9	33577.7	[50000]	ug/L	07:58:08
2	Fe 238.204 Radial†	2074.1	2135.7	[20000]	ug/L	07:58:28
2	Mg 279.077 IEC†	1366.8	1410.8	[50000]	ug/L	07:58:28
2	Na 589.592 Radial†	56539.3	59493.5	[20000]	ug/L	07:58:08
2	Sc 361.383	887334.1	887334.1	98.454	%	07:59:05
2	Y 371.029	723198.7	723198.7	96.287	%	07:59:05
3	Sc Radial	5603.7	5603.7	95.9	%	07:58:53
3	Y RADIAL	5935.7	5935.7	94.40	%	07:58:53
3	Al 396.153Radial†	69152.0	72137.0	[50000]	ug/L	07:58:33
3	Ca 317.933Radial†	32476.7	33853.5	[50000]	ug/L	07:58:33
3	Fe 238.204 Radial†	2056.8	2138.2	[20000]	ug/L	07:58:53
3	Mg 279.077 IEC†	1360.7	1417.9	[50000]	ug/L	07:58:53
3	Na 589.592 Radial†	56639.2	60155.3	[20000]	ug/L	07:58:33
3	Sc 361.383	876437.1	876437.1	97.245	%	07:59:11
3	Y 371.029	715214.6	715214.6	95.224	%	07:59:11

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	879149.8	7220.84	0.82%	97.546	%
Sc Radial	5631.8	26.85	0.48%	96.4	%
Y 371.029	716951.2	5585.53	0.78%	95.456	%
Y RADIAL	5964.6	25.13	0.42%	94.86	%
Al 396.153Radial†	72066.2	717.65	1.00%	[50000]	ug/L
Ca 317.933Radial†	33922.0	383.22	1.13%	[50000]	ug/L
Fe 238.204 Radial†	2137.4	1.46	0.07%	[20000]	ug/L
Mg 279.077 IEC†	1415.5	4.03	0.28%	[50000]	ug/L
Na 589.592 Radial†	60180.7	700.27	1.16%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	220.8	0.00000	0.999994	
Al 396.153Radial	3	Lin Thru 0	0.0	1.440	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	2.531	0.00000	0.999968	
B 249.677	3	Lin Thru 0	0.0	47.68	0.00000	0.999939	
Ba 233.527	3	Lin Thru 0	0.0	134.9	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	2743	0.00000	0.999957	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6785	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	94.60	0.00000	0.999991	
Co 228.616	3	Lin Thru 0	0.0	52.70	0.00000	0.999987	
Cr 267.716	3	Lin Thru 0	0.0	95.26	0.00000	0.999981	
Cu 324.752	3	Lin Thru 0	0.0	349.4	0.00000	0.999958	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1068	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.639	0.00000	0.999971	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0283	0.00000	0.999979
Mn 257.610	3	Lin Thru 0	0.0	937.4	0.00000	0.999975
Mo 202.031	3	Lin Thru 0	0.0	15.74	0.00000	0.999991
Na 589.592 Radia	2	Lin Thru 0	0.0	2.980	0.00000	0.999809
Ni 231.604	3	Lin Thru 0	0.0	43.18	0.00000	0.999987
P 214.914	3	Lin Thru 0	0.0	1.734	0.00000	0.999930
Pb 220.353	3	Lin Thru 0	0.0	8.846	0.00000	0.999981
S 181.975 Axial	3	Lin Thru 0	0.0	0.7136	0.00000	0.999970
Sb 206.836	3	Lin Thru 0	0.0	3.160	0.00000	0.999979
Se 196.026	3	Lin Thru 0	0.0	1.730	0.00000	0.999987
Si 251.611	3	Lin Thru 0	0.0	33.40	0.00000	0.999981
Sn 189.927	3	Lin Thru 0	0.0	6.108	0.00000	0.999987
Sr 421.552	3	Lin Thru 0	0.0	160.6	0.00000	0.999962
Ti 334.940	3	Lin Thru 0	0.0	626.6	0.00000	0.999994
Tl 190.801	3	Lin Thru 0	0.0	3.570	0.00000	0.999981
U 409.014	3	Lin Thru 0	0.0	36.30	0.00000	0.999984
V 292.402	3	Lin Thru 0	0.0	151.4	0.00000	0.999963
Zn 213.857	3	Lin Thru 0	0.0	114.5	0.00000	0.999989
SiO2	3	Lin Thru 0	0.0	15.59	0.00000	0.999960

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/8/2009 08:01:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	6009.6	6009.6	103	%			08:03:14
1	Y RADIAL	6456.4	6456.4	102.7	%			08:03:14
1	Al 396.153Radial†	7067.2	6892.7	4765.0	ug/L	4765.0	ppb	08:03:14
1	Ca 317.933Radial†	3331.3	3223.9	4751.8	ug/L	4751.8	ppb	08:03:35
1	Fe 238.204 Radial†	542.1	520.4	4887.1	ug/L	4887.1	ppb	08:03:35
1	K 766.490 Radial†	16331.3	13529.3	2394.0	ug/L	2394.0	ppb	08:03:14
1	Mg 279.077 IEC†	148.3	143.1	5053.8	ug/L	5053.8	ppb	08:03:35
1	Na 589.592 Radial†	6072.0	6992.5	2346.6	ug/L	2346.6	ppb	08:03:14
1	Sr 421.552†	83886.5	81601.2	508.15	ug/L	508.15	ppb	08:03:14
1	Sc 361.383	912453.5	912453.5	101.24	%			08:04:32
1	Y 371.029	752091.5	752091.5	100.13	%			08:04:32
1	Ag 328.068†	57656.7	56656.9	259.65	ug/L	259.65	ppb	08:04:32
1	As 188.979†	1167.3	1177.2	469.45	ug/L	469.45	ppb	08:04:52
1	B 249.677†	23906.7	24144.2	504.43	ug/L	504.43	ppb	08:04:32
1	Ba 233.527†	68424.2	67593.6	502.25	ug/L	502.25	ppb	08:04:32
1	Be 313.107†	705987.4	702442.9	257.03	ug/L	257.03	ppb	08:04:32
1	Cd 226.502†	47081.6	46699.3	493.50	ug/L	493.50	ppb	08:04:32
1	Co 228.616†	26273.8	26017.0	494.03	ug/L	494.03	ppb	08:04:52
1	Cr 267.716†	46520.1	45871.0	482.33	ug/L	482.33	ppb	08:04:32
1	Cu 324.752†	183044.9	174043.5	498.31	ug/L	498.31	ppb	08:04:32
1	Mn 257.610†	477045.7	470773.4	502.59	ug/L	502.59	ppb	08:04:32
1	Mo 202.031†	8517.1	8394.4	533.61	ug/L	533.61	ppb	08:04:52
1	Ni 231.604†	21479.4	21129.4	488.97	ug/L	488.97	ppb	08:04:52
1	P 214.914†	4554.6	4275.2	2390.8	ug/L	2390.8	ppb	08:04:52
1	Pb 220.353†	4364.0	4378.9	496.61	ug/L	496.61	ppb	08:04:52
1	S 181.975 Axial†	1818.9	1755.0	2458.3	ug/L	2458.3	ppb	08:04:52
1	Sb 206.836†	1586.3	1532.6	494.01	ug/L	494.01	ppb	08:04:52
1	Se 196.026†	4375.9	4351.0	2533.6	ug/L	2533.6	ppb	08:04:52
1	Si 251.611†	160353.0	157937.0	4716.2	ug/L	4716.2	ppb	08:04:32
1	Sn 189.927†	3306.2	3260.6	534.43	ug/L	534.43	ppb	08:04:52
1	Ti 334.940†	317801.3	315019.0	502.58	ug/L	502.58	ppb	08:04:32
1	Tl 190.801†	1838.8	1848.8	521.06	ug/L	521.06	ppb	08:04:52
1	U 409.014†	14870.6	17090.1	469.24	ug/L	469.24	ppb	08:04:32
1	V 292.402†	74687.1	75129.5	503.39	ug/L	503.39	ppb	08:04:32
1	Zn 213.857†	58836.0	57492.6	497.92	ug/L	497.92	ppb	08:04:32
1	SiO2†	158439.0	156028.6	9983.3	ug/L	9983.3	ppb	08:05:50
2	Sc Radial	5793.2	5793.2	99.1	%			08:03:40
2	Y RADIAL	6177.7	6177.7	98.25	%			08:03:40
2	Al 396.153Radial†	7001.0	7082.7	4896.9	ug/L	4896.9	ppb	08:03:40
2	Ca 317.933Radial†	3313.6	3327.0	4903.8	ug/L	4903.8	ppb	08:04:00
2	Fe 238.204 Radial†	539.7	537.6	5048.4	ug/L	5048.4	ppb	08:04:00
2	K 766.490 Radial†	16265.1	14055.7	2487.4	ug/L	2487.4	ppb	08:03:40
2	Mg 279.077 IEC†	149.3	149.4	5277.4	ug/L	5277.4	ppb	08:04:00
2	Na 589.592 Radial†	5957.8	7097.9	2381.9	ug/L	2381.9	ppb	08:03:40
2	Sr 421.552†	83562.4	84321.3	525.09	ug/L	525.09	ppb	08:03:40
2	Sc 361.383	907490.4	907490.4	100.69	%			08:04:58
2	Y 371.029	745986.1	745986.1	99.321	%			08:04:58
2	Ag 328.068†	56982.2	56298.5	258.07	ug/L	258.07	ppb	08:04:58
2	As 188.979†	1163.4	1179.6	470.43	ug/L	470.43	ppb	08:05:18
2	B 249.677†	23675.8	24044.1	502.30	ug/L	502.30	ppb	08:04:58
2	Ba 233.527†	67850.0	67393.0	500.76	ug/L	500.76	ppb	08:04:58
2	Be 313.107†	697546.8	697874.0	255.36	ug/L	255.36	ppb	08:04:58
2	Cd 226.502†	46668.9	46543.8	491.84	ug/L	491.84	ppb	08:04:58
2	Co 228.616†	26211.1	26096.7	495.55	ug/L	495.55	ppb	08:05:18
2	Cr 267.716†	46057.8	45663.2	480.15	ug/L	480.15	ppb	08:04:58
2	Cu 324.752†	181224.7	173224.6	495.98	ug/L	495.98	ppb	08:04:58
2	Mn 257.610†	473022.1	469354.4	501.08	ug/L	501.08	ppb	08:04:58
2	Mo 202.031†	8509.7	8433.0	536.07	ug/L	536.07	ppb	08:05:18
2	Ni 231.604†	21412.6	21179.1	490.12	ug/L	490.12	ppb	08:05:18

2	P 214.914†	4536.6	4281.9	2394.9	ug/L	2394.9 ppb	08:05:18
2	Pb 220.353†	4334.8	4373.6	496.03	ug/L	496.03 ppb	08:05:18
2	S 181.975 Axial†	1822.1	1768.0	2476.4	ug/L	2476.4 ppb	08:05:18
2	Sb 206.836†	1605.6	1560.3	502.85	ug/L	502.85 ppb	08:05:18
2	Se 196.026†	4352.9	4351.8	2534.6	ug/L	2534.6 ppb	08:05:18
2	Si 251.611†	158990.5	157450.0	4701.6	ug/L	4701.6 ppb	08:04:58
2	Sn 189.927†	3284.1	3256.6	533.79	ug/L	533.79 ppb	08:05:18
2	Ti 334.940†	314891.7	313846.1	500.72	ug/L	500.72 ppb	08:04:58
2	Tl 190.801†	1828.3	1848.3	520.91	ug/L	520.91 ppb	08:05:18
2	U 409.014†	14835.2	17135.3	470.47	ug/L	470.47 ppb	08:04:58
2	V 292.402†	73950.2	74801.2	501.24	ug/L	501.24 ppb	08:04:58
2	Zn 213.857†	58273.9	57252.3	495.79	ug/L	495.79 ppb	08:04:58
2	SiO2†	160101.9	158536.0	10144	ug/L	10144 ppb	08:05:55
3	Sc Radial	5889.1	5889.1	101	%		08:04:05
3	Y RADIAL	6279.1	6279.1	99.86	%		08:04:05
3	Al 396.153Radial†	7083.1	7049.2	4873.9	ug/L	4873.9 ppb	08:04:05
3	Ca 317.933Radial†	3333.3	3292.1	4852.4	ug/L	4852.4 ppb	08:04:25
3	Fe 238.204 Radial†	542.0	531.1	4987.3	ug/L	4987.3 ppb	08:04:25
3	K 766.490 Radial†	16313.1	13836.3	2448.5	ug/L	2448.5 ppb	08:04:05
3	Mg 279.077 IEC†	149.3	147.0	5193.5	ug/L	5193.5 ppb	08:04:25
3	Na 589.592 Radial†	6061.0	7102.5	2383.5	ug/L	2383.5 ppb	08:04:05
3	Sr 421.552†	83836.6	83221.2	518.23	ug/L	518.23 ppb	08:04:05
3	Sc 361.383	911772.7	911772.7	101.17	%		08:05:24
3	Y 371.029	751267.0	751267.0	100.02	%		08:05:24
3	Ag 328.068†	57151.9	56200.5	257.60	ug/L	257.60 ppb	08:05:24
3	As 188.979†	1153.3	1164.1	464.30	ug/L	464.30 ppb	08:05:44
3	B 249.677†	23705.7	23963.1	500.63	ug/L	500.63 ppb	08:05:24
3	Ba 233.527†	68150.6	67373.6	500.61	ug/L	500.61 ppb	08:05:24
3	Be 313.107†	702427.5	699444.7	255.93	ug/L	255.93 ppb	08:05:24
3	Cd 226.502†	46920.7	46575.1	492.18	ug/L	492.18 ppb	08:05:24
3	Co 228.616†	25964.5	25730.7	488.58	ug/L	488.58 ppb	08:05:44
3	Cr 267.716†	46302.7	45690.4	480.44	ug/L	480.44 ppb	08:05:24
3	Cu 324.752†	181422.2	172574.6	494.11	ug/L	494.11 ppb	08:05:24
3	Mn 257.610†	475160.7	469262.0	500.98	ug/L	500.98 ppb	08:05:24
3	Mo 202.031†	8439.4	8323.8	529.13	ug/L	529.13 ppb	08:05:44
3	Ni 231.604†	21253.5	20922.0	484.17	ug/L	484.17 ppb	08:05:44
3	P 214.914†	4499.7	4224.3	2362.0	ug/L	2362.0 ppb	08:05:44
3	Pb 220.353†	4320.0	4338.7	492.07	ug/L	492.07 ppb	08:05:44
3	S 181.975 Axial†	1804.6	1742.3	2440.4	ug/L	2440.4 ppb	08:05:44
3	Sb 206.836†	1602.0	1549.3	499.13	ug/L	499.13 ppb	08:05:44
3	Se 196.026†	4323.5	4302.5	2505.8	ug/L	2505.8 ppb	08:05:44
3	Si 251.611†	159550.9	157262.3	4696.1	ug/L	4696.1 ppb	08:05:24
3	Sn 189.927†	3266.4	3223.7	528.40	ug/L	528.40 ppb	08:05:44
3	Ti 334.940†	315966.4	313439.7	500.07	ug/L	500.07 ppb	08:05:24
3	Tl 190.801†	1822.4	1833.9	516.90	ug/L	516.90 ppb	08:05:44
3	U 409.014†	14891.2	17121.4	470.10	ug/L	470.10 ppb	08:05:24
3	V 292.402†	74284.8	74787.0	501.05	ug/L	501.05 ppb	08:05:24
3	Zn 213.857†	58572.4	57275.5	496.05	ug/L	496.05 ppb	08:05:24
3	SiO2†	157929.4	155641.7	9958.7	ug/L	9958.7 ppb	08:06:00

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	910572.2	101.03	%	0.299				0.30%
Sc Radial	5897.3	101	%	1.9				1.84%
Y 371.029	749781.5	99.827	%	0.4411				0.44%
Y RADIAL	6304.4	100.3	%	2.24				2.24%
Ag 328.068†	56385.3	258.44	ug/L	1.073	258.44	ppb	1.073	0.42%
QC value within limits for Ag 328.068 Recovery = 103.38%								
Al 396.153Radial†	7008.2	4845.3	ug/L	70.45	4845.3	ppb	70.45	1.45%
QC value within limits for Al 396.153Radial Recovery = 96.91%								
As 188.979†	1173.6	468.06	ug/L	3.291	468.06	ppb	3.291	0.70%
QC value within limits for As 188.979 Recovery = 93.61%								
B 249.677†	24050.5	502.45	ug/L	1.903	502.45	ppb	1.903	0.38%
QC value within limits for B 249.677 Recovery = 100.49%								
Ba 233.527†	67453.4	501.21	ug/L	0.903	501.21	ppb	0.903	0.18%
QC value within limits for Ba 233.527 Recovery = 100.24%								
Be 313.107†	699920.5	256.11	ug/L	0.848	256.11	ppb	0.848	0.33%
QC value within limits for Be 313.107 Recovery = 102.44%								
Ca 317.933Radial†	3281.0	4836.0	ug/L	77.30	4836.0	ppb	77.30	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.72%
Cd 226.502†            46606.1      492.51 ug/L         0.878      492.51 ppb          0.878   0.18%
   QC value within limits for Cd 226.502  Recovery = 98.50%
Co 228.616†            25948.1      492.72 ug/L         3.661      492.72 ppb          3.661   0.74%
   QC value within limits for Co 228.616  Recovery = 98.54%
Cr 267.716†            45741.5      480.97 ug/L         1.187      480.97 ppb          1.187   0.25%
   QC value within limits for Cr 267.716  Recovery = 96.19%
Cu 324.752†           173280.9      496.13 ug/L         2.104      496.13 ppb          2.104   0.42%
   QC value within limits for Cu 324.752  Recovery = 99.23%
Fe 238.204 Radial†       529.7      4974.3 ug/L        81.47      4974.3 ppb         81.47   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.49%
K 766.490 Radial†      13807.1      2443.3 ug/L        46.90      2443.3 ppb         46.90   1.92%
   QC value within limits for K 766.490 Radial  Recovery = 97.73%
Mg 279.077 IEC†          146.5      5174.9 ug/L       112.95      5174.9 ppb        112.95   2.18%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           469796.6      501.55 ug/L         0.898      501.55 ppb          0.898   0.18%
   QC value within limits for Mn 257.610  Recovery = 100.31%
Mo 202.031†             8383.7      532.94 ug/L         3.519      532.94 ppb          3.519   0.66%
   QC value within limits for Mo 202.031  Recovery = 106.59%
Na 589.592 Radial†      7064.3      2370.6 ug/L        20.88      2370.6 ppb         20.88   0.88%
   QC value within limits for Na 589.592 Radial  Recovery = 94.83%
Ni 231.604†            21076.9      487.75 ug/L         3.155      487.75 ppb          3.155   0.65%
   QC value within limits for Ni 231.604  Recovery = 97.55%
P 214.914†              4260.5      2382.6 ug/L        17.95      2382.6 ppb         17.95   0.75%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4363.7      494.90 ug/L         2.468      494.90 ppb          2.468   0.50%
   QC value within limits for Pb 220.353  Recovery = 98.98%
S 181.975 Axial†        1755.1      2458.4 ug/L        18.02      2458.4 ppb         18.02   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 98.33%
Sb 206.836†             1547.4      498.66 ug/L         4.442      498.66 ppb          4.442   0.89%
   QC value within limits for Sb 206.836  Recovery = 99.73%
Se 196.026†             4335.1      2524.7 ug/L        16.33      2524.7 ppb         16.33   0.65%
   QC value within limits for Se 196.026  Recovery = 100.99%
Si 251.611†           157549.8      4704.6 ug/L        10.40      4704.6 ppb         10.40   0.22%
   QC value within limits for Si 251.611  Recovery = 94.09%
Sn 189.927†             3247.0      532.21 ug/L         3.311      532.21 ppb          3.311   0.62%
   QC value within limits for Sn 189.927  Recovery = 106.44%
Sr 421.552†            83047.9      517.16 ug/L         8.521      517.16 ppb          8.521   1.65%
   QC value within limits for Sr 421.552  Recovery = 103.43%
Ti 334.940†           314101.6      501.12 ug/L         1.305      501.12 ppb          1.305   0.26%
   QC value within limits for Ti 334.940  Recovery = 100.22%
Tl 190.801†             1843.6      519.62 ug/L         2.361      519.62 ppb          2.361   0.45%
   QC value within limits for Tl 190.801  Recovery = 103.92%
U 409.014†             17115.6      469.94 ug/L         0.630      469.94 ppb          0.630   0.13%
   QC value within limits for U 409.014  Recovery = 93.99%
V 292.402†             74905.9      501.89 ug/L         1.297      501.89 ppb          1.297   0.26%
   QC value within limits for V 292.402  Recovery = 100.38%
Zn 213.857†            57340.1      496.59 ug/L         1.162      496.59 ppb          1.162   0.23%
   QC value within limits for Zn 213.857  Recovery = 99.32%
SiO2†                 156735.4       10029 ug/L         100.6       10029 ppb          100.6   1.00%
   QC value within limits for SiO2  Recovery = 93.77%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/8/2009 08:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5863.4	5863.4	100	%			08:10:04
1	Y RADIAL	6302.2	6302.2	100.2	%			08:10:04
1	Al 396.153Radial†	-13.8	6.7	4.5878	ug/L	4.5878	ppb	08:10:04
1	Ca 317.933Radial†	19.2	3.6	5.2688	ug/L	5.2688	ppb	08:10:24
1	Fe 238.204 Radial†	8.0	1.2	11.415	ug/L	11.415	ppb	08:10:24
1	K 766.490 Radial†	2488.1	128.1	22.724	ug/L	22.724	ppb	08:10:04
1	Mg 279.077 IEC†	2.3	1.1	38.489	ug/L	38.489	ppb	08:10:24
1	Na 589.592 Radial†	-1113.9	-22.2	-7.4610	ug/L	-7.4610	ppb	08:10:04
1	Sr 421.552†	-33.7	-6.3	-0.0391	ug/L	-0.0391	ppb	08:10:04
1	Sc 361.383	917080.9	917080.9	101.75	%			08:11:21
1	Y 371.029	764417.3	764417.3	101.78	%			08:11:21
1	Ag 328.068†	348.3	49.5	0.2333	ug/L	0.2333	ppb	08:11:26
1	As 188.979†	-22.9	1.6	0.6456	ug/L	0.6456	ppb	08:11:46
1	B 249.677†	-334.1	202.3	4.2414	ug/L	4.2414	ppb	08:11:46
1	Ba 233.527†	-12.6	-4.0	-0.0287	ug/L	-0.0287	ppb	08:11:46
1	Be 313.107†	-4947.4	250.9	0.0916	ug/L	0.0916	ppb	08:11:26
1	Cd 226.502†	-181.7	16.5	0.1736	ug/L	0.1736	ppb	08:11:46
1	Co 228.616†	-63.4	3.1	0.0612	ug/L	0.0612	ppb	08:11:46
1	Cr 267.716†	66.2	-13.6	-0.1409	ug/L	-0.1409	ppb	08:11:46
1	Cu 324.752†	6717.4	-155.2	-0.4435	ug/L	-0.4435	ppb	08:11:26
1	Mn 257.610†	419.5	-10.1	-0.0103	ug/L	-0.0103	ppb	08:11:46
1	Mo 202.031†	32.0	13.1	0.8345	ug/L	0.8345	ppb	08:11:46
1	Ni 231.604†	83.7	-4.3	-0.0992	ug/L	-0.0992	ppb	08:11:46
1	P 214.914†	209.3	-17.8	-10.216	ug/L	-10.216	ppb	08:11:46
1	Pb 220.353†	-65.1	4.5	0.5114	ug/L	0.5114	ppb	08:11:46
1	S 181.975 Axial†	40.0	-2.3	-3.1993	ug/L	-3.1993	ppb	08:11:46
1	Sb 206.836†	39.9	5.0	1.5899	ug/L	1.5899	ppb	08:11:46
1	Se 196.026†	-24.9	4.4	2.5561	ug/L	2.5561	ppb	08:11:46
1	Si 251.611†	479.1	21.1	0.6112	ug/L	0.6112	ppb	08:11:46
1	Sn 189.927†	4.3	-0.8	-0.1275	ug/L	-0.1275	ppb	08:11:46
1	Ti 334.940†	-1091.9	41.9	0.0697	ug/L	0.0697	ppb	08:11:26
1	Tl 190.801†	-35.8	-2.6	-0.7368	ug/L	-0.7368	ppb	08:11:46
1	U 409.014†	-2659.8	-212.1	-5.8431	ug/L	-5.8431	ppb	08:11:21
1	V 292.402†	-1367.8	14.2	0.0934	ug/L	0.0934	ppb	08:11:26
1	Zn 213.857†	672.2	38.8	0.3379	ug/L	0.3379	ppb	08:11:46
1	SiO2†	486.6	10.7	0.6409	ug/L	0.6409	ppb	08:12:52
2	Sc Radial	5788.1	5788.1	99.0	%			08:10:29
2	Y RADIAL	6221.9	6221.9	98.95	%			08:10:29
2	Al 396.153Radial†	-45.4	-25.4	-17.699	ug/L	-17.699	ppb	08:10:29
2	Ca 317.933Radial†	19.1	3.7	5.5102	ug/L	5.5102	ppb	08:10:49
2	Fe 238.204 Radial†	8.1	1.4	13.251	ug/L	13.251	ppb	08:10:49
2	K 766.490 Radial†	2366.7	37.8	6.7059	ug/L	6.7059	ppb	08:10:29
2	Mg 279.077 IEC†	0.6	-0.5	-18.604	ug/L	-18.604	ppb	08:10:49
2	Na 589.592 Radial†	-1117.3	-40.2	-13.477	ug/L	-13.477	ppb	08:10:29
2	Sr 421.552†	-26.1	1.0	0.0061	ug/L	0.0061	ppb	08:10:29
2	Sc 361.383	921030.5	921030.5	102.19	%			08:11:51
2	Y 371.029	765704.1	765704.1	101.95	%			08:11:51
2	Ag 328.068†	345.6	45.5	0.2119	ug/L	0.2119	ppb	08:11:56
2	As 188.979†	-20.9	3.7	1.4577	ug/L	1.4577	ppb	08:12:17
2	B 249.677†	-369.6	169.0	3.5417	ug/L	3.5417	ppb	08:12:17
2	Ba 233.527†	4.8	13.1	0.0982	ug/L	0.0982	ppb	08:12:17
2	Be 313.107†	-4999.5	220.8	0.0806	ug/L	0.0806	ppb	08:11:56
2	Cd 226.502†	-187.8	11.3	0.1186	ug/L	0.1186	ppb	08:12:17
2	Co 228.616†	-68.1	-1.2	-0.0205	ug/L	-0.0205	ppb	08:12:17
2	Cr 267.716†	69.1	-11.0	-0.1148	ug/L	-0.1148	ppb	08:12:17
2	Cu 324.752†	6713.4	-187.4	-0.5357	ug/L	-0.5357	ppb	08:11:56
2	Mn 257.610†	439.8	8.1	0.0103	ug/L	0.0103	ppb	08:12:17
2	Mo 202.031†	36.4	17.3	1.1000	ug/L	1.1000	ppb	08:12:17
2	Ni 231.604†	100.8	12.1	0.2799	ug/L	0.2799	ppb	08:12:17

2	P 214.914†	201.9	-26.0	-14.897	ug/L	-14.897 ppb	08:12:17
2	Pb 220.353†	-58.2	11.5	1.2990	ug/L	1.2990 ppb	08:12:17
2	S 181.975 Axial†	32.1	-10.2	-14.223	ug/L	-14.223 ppb	08:12:17
2	Sb 206.836†	32.9	-2.0	-0.6113	ug/L	-0.6113 ppb	08:12:17
2	Se 196.026†	-24.0	5.4	3.1479	ug/L	3.1479 ppb	08:12:17
2	Si 251.611†	484.7	24.6	0.7154	ug/L	0.7154 ppb	08:12:17
2	Sn 189.927†	5.4	0.3	0.0478	ug/L	0.0478 ppb	08:12:17
2	Ti 334.940†	-1097.3	41.2	0.0666	ug/L	0.0666 ppb	08:11:56
2	Tl 190.801†	-38.7	-5.4	-1.5059	ug/L	-1.5059 ppb	08:12:17
2	U 409.014†	-2499.4	-43.9	-1.2109	ug/L	-1.2109 ppb	08:11:51
2	V 292.402†	-1362.2	25.3	0.1783	ug/L	0.1783 ppb	08:11:56
2	Zn 213.857†	657.7	21.7	0.1879	ug/L	0.1879 ppb	08:12:17
2	SiO2†	477.7	-0.0	-0.0471	ug/L	-0.0471 ppb	08:12:57
3	Sc Radial	5801.4	5801.4	99.3	%		08:10:54
3	Y RADIAL	6256.3	6256.3	99.50	%		08:10:54
3	Al 396.153Radial†	-3.8	16.6	11.493	ug/L	11.493 ppb	08:10:54
3	Ca 317.933Radial†	21.4	6.0	8.8051	ug/L	8.8051 ppb	08:11:15
3	Fe 238.204 Radial†	7.9	1.2	11.147	ug/L	11.147 ppb	08:11:15
3	K 766.490 Radial†	2292.2	-42.7	-7.5763	ug/L	-7.5763 ppb	08:10:54
3	Mg 279.077 IEC†	1.9	0.8	26.566	ug/L	26.566 ppb	08:11:15
3	Na 589.592 Radial†	-1095.1	-15.2	-5.1014	ug/L	-5.1014 ppb	08:10:54
3	Sr 421.552†	-24.4	2.8	0.0174	ug/L	0.0174 ppb	08:10:54
3	Sc 361.383	917281.5	917281.5	101.78	%		08:12:22
3	Y 371.029	764497.1	764497.1	101.79	%		08:12:22
3	Ag 328.068†	371.5	72.2	0.3336	ug/L	0.3336 ppb	08:12:27
3	As 188.979†	-26.0	-1.4	-0.5580	ug/L	-0.5580 ppb	08:12:47
3	B 249.677†	-364.7	172.3	3.6127	ug/L	3.6127 ppb	08:12:47
3	Ba 233.527†	3.5	11.9	0.0885	ug/L	0.0885 ppb	08:12:47
3	Be 313.107†	-4952.6	246.9	0.0901	ug/L	0.0901 ppb	08:12:27
3	Cd 226.502†	-187.5	10.8	0.1139	ug/L	0.1139 ppb	08:12:47
3	Co 228.616†	-63.4	3.1	0.0586	ug/L	0.0586 ppb	08:12:47
3	Cr 267.716†	63.9	-15.9	-0.1653	ug/L	-0.1653 ppb	08:12:47
3	Cu 324.752†	6714.5	-159.4	-0.4557	ug/L	-0.4557 ppb	08:12:27
3	Mn 257.610†	459.3	28.9	0.0315	ug/L	0.0315 ppb	08:12:47
3	Mo 202.031†	20.1	1.4	0.0900	ug/L	0.0900 ppb	08:12:47
3	Ni 231.604†	116.1	27.5	0.6373	ug/L	0.6373 ppb	08:12:47
3	P 214.914†	209.1	-18.1	-10.383	ug/L	-10.383 ppb	08:12:47
3	Pb 220.353†	-61.8	7.7	0.8752	ug/L	0.8752 ppb	08:12:47
3	S 181.975 Axial†	37.7	-4.5	-6.3631	ug/L	-6.3631 ppb	08:12:47
3	Sb 206.836†	36.0	1.1	0.3524	ug/L	0.3524 ppb	08:12:47
3	Se 196.026†	-23.5	5.7	3.3461	ug/L	3.3461 ppb	08:12:47
3	Si 251.611†	486.9	28.7	0.8618	ug/L	0.8618 ppb	08:12:47
3	Sn 189.927†	0.7	-4.3	-0.7058	ug/L	-0.7058 ppb	08:12:47
3	Ti 334.940†	-1114.9	19.5	0.0330	ug/L	0.0330 ppb	08:12:27
3	Tl 190.801†	-24.6	8.3	2.3260	ug/L	2.3260 ppb	08:12:47
3	U 409.014†	-2560.9	-114.4	-3.1511	ug/L	-3.1511 ppb	08:12:22
3	V 292.402†	-1372.0	10.3	0.0621	ug/L	0.0621 ppb	08:12:27
3	Zn 213.857†	632.6	-0.3	-0.0081	ug/L	-0.0081 ppb	08:12:47
3	SiO2†	481.9	6.1	0.3958	ug/L	0.3958 ppb	08:13:02

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918464.3	101.91	%	0.247				0.24%
Sc Radial	5817.6	99.6	%	0.69				0.69%
Y 371.029	764872.8	101.84	%	0.096				0.09%
Y RADIAL	6260.2	99.56	%	0.641				0.64%
Ag 328.068†	55.8	0.2596	ug/L	0.06495	0.2596	ppb	0.06495	25.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.5396	ug/L	15.25647	-0.5396	ppb	15.25647	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5151	ug/L	1.01417	0.5151	ppb	1.01417	196.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	181.2	3.7986	ug/L	0.38512	3.7986	ppb	0.38512	10.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0527	ug/L	0.07066	0.0527	ppb	0.07066	134.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	239.5	0.0874	ug/L	0.00595	0.0874	ppb	0.00595	6.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.4	6.5280	ug/L	1.97572	6.5280	ppb	1.97572	30.27%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.9      0.1354 ug/L       0.03318      0.1354 ppb        0.03318  24.51%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.7      0.0331 ug/L       0.04646      0.0331 ppb        0.04646 140.40%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -13.5     -0.1403 ug/L       0.02526     -0.1403 ppb        0.02526  18.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -167.4     -0.4783 ug/L       0.05006     -0.4783 ppb        0.05006  10.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      11.938 ug/L        1.1452      11.938 ppb         1.1452   9.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          41.0      7.2846 ug/L      15.15852      7.2846 ppb       15.15852 208.09%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.4      15.484 ug/L       30.1170      15.484 ppb        30.1170 194.51%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 9.0      0.0105 ug/L       0.02090      0.0105 ppb        0.02090 199.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                10.6      0.6748 ug/L       0.52359      0.6748 ppb        0.52359  77.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -25.9     -8.6799 ug/L       4.31890     -8.6799 ppb        4.31890  49.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.8      0.2727 ug/L       0.36830      0.2727 ppb        0.36830 135.08%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -20.6     -11.832 ug/L        2.6556     -11.832 ppb         2.6556  22.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8952 ug/L       0.39415      0.8952 ppb        0.39415  44.03%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -5.7     -7.9284 ug/L       5.67605     -7.9284 ppb        5.67605  71.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.4      0.4437 ug/L       1.10344      0.4437 ppb        1.10344 248.71%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.1      3.0167 ug/L       0.41103      3.0167 ppb        0.41103  13.63%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.8      0.7294 ug/L       0.12588      0.7294 ppb        0.12588  17.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.6     -0.2618 ug/L       0.39435     -0.2618 ppb        0.39435 150.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.8     -0.0052 ug/L       0.02993     -0.0052 ppb        0.02993 575.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                34.2      0.0564 ug/L       0.02032      0.0564 ppb        0.02032  36.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.1      0.0278 ug/L       2.02711      0.0278 ppb        2.02711 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -123.4     -3.4017 ug/L       2.32626     -3.4017 ppb        2.32626  68.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                16.6      0.1113 ug/L       0.06011      0.1113 ppb        0.06011  54.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               20.1      0.1726 ug/L       0.17351      0.1726 ppb        0.17351 100.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      5.6      0.3299 ug/L       0.34869      0.3299 ppb        0.34869 105.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/8/2009 08:15:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5940.5	5940.5	102	%			08:17:06
1	Y RADIAL	6395.2	6395.2	101.7	%			08:17:06
1	Al 396.153Radial†	260.7	276.9	191.93	ug/L	191.93	ppb	08:17:06
1	Ca 317.933Radial†	153.9	135.9	200.25	ug/L	200.25	ppb	08:17:26
1	Fe 238.204 Radial†	20.4	13.3	124.24	ug/L	124.24	ppb	08:17:26
1	K 766.490 Radial†	3305.8	900.3	159.44	ug/L	159.44	ppb	08:17:06
1	Mg 279.077 IEC†	7.2	5.9	209.88	ug/L	209.88	ppb	08:17:26
1	Na 589.592 Radial†	-237.5	854.3	286.69	ug/L	286.69	ppb	08:17:06
1	Sr 421.552†	769.9	784.8	4.8854	ug/L	4.8854	ppb	08:17:06
1	Sc 361.383	901641.8	901641.8	100.04	%			08:18:23
1	Y 371.029	753823.3	753823.3	100.36	%			08:18:23
1	Ag 328.068†	1343.5	1050.2	4.7669	ug/L	4.7669	ppb	08:18:23
1	As 188.979†	48.4	72.6	28.705	ug/L	28.705	ppb	08:18:43
1	B 249.677†	1835.1	2365.0	49.569	ug/L	49.569	ppb	08:18:23
1	Ba 233.527†	676.8	684.9	5.0920	ug/L	5.0920	ppb	08:18:43
1	Be 313.107†	8490.6	13600.1	4.9675	ug/L	4.9675	ppb	08:18:23
1	Cd 226.502†	271.5	466.4	4.9219	ug/L	4.9219	ppb	08:18:43
1	Co 228.616†	190.1	255.4	4.8605	ug/L	4.8605	ppb	08:18:43
1	Cr 267.716†	535.1	456.2	4.7826	ug/L	4.7826	ppb	08:18:43
1	Cu 324.752†	10202.8	3441.8	9.8558	ug/L	9.8558	ppb	08:18:23
1	Mn 257.610†	10097.5	9670.9	10.325	ug/L	10.325	ppb	08:18:23
1	Mo 202.031†	173.7	155.3	9.8742	ug/L	9.8742	ppb	08:18:43
1	Ni 231.604†	315.7	229.0	5.2994	ug/L	5.2994	ppb	08:18:43
1	P 214.914†	456.1	232.4	132.55	ug/L	132.55	ppb	08:18:43
1	Pb 220.353†	25.9	94.4	10.717	ug/L	10.717	ppb	08:18:43
1	S 181.975 Axial†	110.1	68.5	95.956	ug/L	95.956	ppb	08:18:43
1	Sb 206.836†	69.5	35.3	11.434	ug/L	11.434	ppb	08:18:43
1	Se 196.026†	33.0	61.8	36.168	ug/L	36.168	ppb	08:18:43
1	Si 251.611†	3632.7	3181.5	94.983	ug/L	94.983	ppb	08:18:43
1	Sn 189.927†	68.9	63.9	10.481	ug/L	10.481	ppb	08:18:43
1	Ti 334.940†	2173.8	3287.9	5.2317	ug/L	5.2317	ppb	08:18:23
1	Tl 190.801†	39.9	72.4	20.346	ug/L	20.346	ppb	08:18:43
1	U 409.014†	-441.2	1960.8	53.991	ug/L	53.991	ppb	08:18:23
1	V 292.402†	-596.4	762.2	5.2581	ug/L	5.2581	ppb	08:18:23
1	Zn 213.857†	1785.0	1162.4	10.091	ug/L	10.091	ppb	08:18:43
1	SiO2†	3760.9	3291.8	210.60	ug/L	210.60	ppb	08:19:40
2	Sc Radial	5778.3	5778.3	98.9	%			08:17:31
2	Y RADIAL	6209.6	6209.6	98.76	%			08:17:31
2	Al 396.153Radial†	262.1	285.5	197.91	ug/L	197.91	ppb	08:17:31
2	Ca 317.933Radial†	154.9	141.0	207.90	ug/L	207.90	ppb	08:17:52
2	Fe 238.204 Radial†	20.3	13.7	128.46	ug/L	128.46	ppb	08:17:52
2	K 766.490 Radial†	3191.9	876.4	155.21	ug/L	155.21	ppb	08:17:31
2	Mg 279.077 IEC†	10.5	9.5	335.33	ug/L	335.33	ppb	08:17:52
2	Na 589.592 Radial†	-280.7	804.1	269.83	ug/L	269.83	ppb	08:17:31
2	Sr 421.552†	760.1	796.1	4.9557	ug/L	4.9557	ppb	08:17:31
2	Sc 361.383	901543.3	901543.3	100.03	%			08:18:49
2	Y 371.029	753311.9	753311.9	100.30	%			08:18:49
2	Ag 328.068†	1410.9	1117.8	5.0769	ug/L	5.0769	ppb	08:18:49
2	As 188.979†	51.1	75.3	29.767	ug/L	29.767	ppb	08:19:09
2	B 249.677†	1816.1	2346.2	49.173	ug/L	49.173	ppb	08:18:49
2	Ba 233.527†	673.4	681.6	5.0677	ug/L	5.0677	ppb	08:19:09
2	Be 313.107†	8482.4	13592.8	4.9644	ug/L	4.9644	ppb	08:18:49
2	Cd 226.502†	284.4	479.4	5.0588	ug/L	5.0588	ppb	08:19:09
2	Co 228.616†	174.4	239.8	4.5649	ug/L	4.5649	ppb	08:19:09
2	Cr 267.716†	547.3	468.5	4.9130	ug/L	4.9130	ppb	08:19:09
2	Cu 324.752†	10227.0	3467.1	9.9285	ug/L	9.9285	ppb	08:18:49
2	Mn 257.610†	10053.3	9627.9	10.277	ug/L	10.277	ppb	08:18:49
2	Mo 202.031†	176.8	158.4	10.073	ug/L	10.073	ppb	08:19:09
2	Ni 231.604†	319.1	232.5	5.3801	ug/L	5.3801	ppb	08:19:09

2	P 214.914†	470.3	246.6	140.77 ug/L	140.77 ppb	08:19:09
2	Pb 220.353†	11.6	80.1	9.1052 ug/L	9.1052 ppb	08:19:09
2	S 181.975 Axial†	109.3	67.7	94.849 ug/L	94.849 ppb	08:19:09
2	Sb 206.836†	66.3	32.0	10.412 ug/L	10.412 ppb	08:19:09
2	Se 196.026†	28.9	57.7	33.851 ug/L	33.851 ppb	08:19:09
2	Si 251.611†	3618.6	3167.8	94.570 ug/L	94.570 ppb	08:19:09
2	Sn 189.927†	71.4	66.3	10.886 ug/L	10.886 ppb	08:19:09
2	Ti 334.940†	2003.5	3117.8	4.9622 ug/L	4.9622 ppb	08:18:49
2	Tl 190.801†	32.8	65.3	18.347 ug/L	18.347 ppb	08:19:09
2	U 409.014†	-563.6	1838.4	50.616 ug/L	50.616 ppb	08:18:49
2	V 292.402†	-605.8	752.7	5.1946 ug/L	5.1946 ppb	08:18:49
2	Zn 213.857†	1781.3	1158.9	10.054 ug/L	10.054 ppb	08:19:09
2	SiO2†	3752.2	3283.5	210.06 ug/L	210.06 ppb	08:19:45
3	Sc Radial	5805.0	5805.0	99.3 %		08:17:57
3	Y RADIAL	6273.9	6273.9	99.78 %		08:17:57
3	Al 396.153Radial†	262.7	284.9	197.48 ug/L	197.48 ppb	08:17:57
3	Ca 317.933Radial†	153.3	138.7	204.49 ug/L	204.49 ppb	08:18:17
3	Fe 238.204 Radial†	21.8	15.2	142.16 ug/L	142.16 ppb	08:18:17
3	K 766.490 Radial†	3276.4	946.6	167.66 ug/L	167.66 ppb	08:17:57
3	Mg 279.077 IEC†	12.6	11.5	405.90 ug/L	405.90 ppb	08:18:17
3	Na 589.592 Radial†	-294.2	791.8	265.71 ug/L	265.71 ppb	08:17:57
3	Sr 421.552†	792.6	825.2	5.1374 ug/L	5.1374 ppb	08:17:57
3	Sc 361.383	905114.1	905114.1	100.43 %		08:19:14
3	Y 371.029	758310.9	758310.9	100.96 %		08:19:14
3	Ag 328.068†	1518.1	1218.9	5.5368 ug/L	5.5368 ppb	08:19:14
3	As 188.979†	45.6	69.5	27.505 ug/L	27.505 ppb	08:19:34
3	B 249.677†	1844.8	2367.6	49.620 ug/L	49.620 ppb	08:19:14
3	Ba 233.527†	684.6	690.2	5.1316 ug/L	5.1316 ppb	08:19:34
3	Be 313.107†	8549.0	13625.7	4.9766 ug/L	4.9766 ppb	08:19:14
3	Cd 226.502†	270.4	464.4	4.8984 ug/L	4.8984 ppb	08:19:34
3	Co 228.616†	191.0	255.6	4.8644 ug/L	4.8644 ppb	08:19:34
3	Cr 267.716†	535.3	454.3	4.7632 ug/L	4.7632 ppb	08:19:34
3	Cu 324.752†	10231.8	3431.6	9.8274 ug/L	9.8274 ppb	08:19:14
3	Mn 257.610†	10048.0	9582.9	10.229 ug/L	10.229 ppb	08:19:14
3	Mo 202.031†	175.0	155.9	9.9140 ug/L	9.9140 ppb	08:19:34
3	Ni 231.604†	317.8	229.9	5.3208 ug/L	5.3208 ppb	08:19:34
3	P 214.914†	462.6	237.2	135.29 ug/L	135.29 ppb	08:19:34
3	Pb 220.353†	18.1	86.5	9.8297 ug/L	9.8297 ppb	08:19:34
3	S 181.975 Axial†	109.9	67.8	95.025 ug/L	95.025 ppb	08:19:34
3	Sb 206.836†	58.7	24.2	7.9299 ug/L	7.9299 ppb	08:19:34
3	Se 196.026†	37.1	65.8	38.547 ug/L	38.547 ppb	08:19:34
3	Si 251.611†	3618.1	3153.0	94.127 ug/L	94.127 ppb	08:19:34
3	Sn 189.927†	69.7	64.5	10.576 ug/L	10.576 ppb	08:19:34
3	Ti 334.940†	2093.8	3199.8	5.0916 ug/L	5.0916 ppb	08:19:14
3	Tl 190.801†	40.4	72.7	20.436 ug/L	20.436 ppb	08:19:34
3	U 409.014†	-456.0	1947.7	53.628 ug/L	53.628 ppb	08:19:14
3	V 292.402†	-603.6	757.3	5.2280 ug/L	5.2280 ppb	08:19:14
3	Zn 213.857†	1787.2	1157.7	10.041 ug/L	10.041 ppb	08:19:34
3	SiO2†	3771.9	3288.4	210.37 ug/L	210.37 ppb	08:19:50

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902766.4	100.17	%	0.226				0.23%
Sc Radial	5841.3	100.0	%	1.49				1.49%
Y 371.029	755148.7	100.54	%	0.366				0.36%
Y RADIAL	6292.9	100.1	%	1.50				1.50%
Ag 328.068†	1128.9	5.1269	ug/L	0.38740	5.1269	ppb	0.38740	7.56%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	282.5	195.77	ug/L	3.334	195.77	ppb	3.334	1.70%
QC value within limits for Al 396.153Radial Recovery = 97.89%								
As 188.979†	72.5	28.659	ug/L	1.1313	28.659	ppb	1.1313	3.95%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2359.6	49.454	ug/L	0.2442	49.454	ppb	0.2442	0.49%
QC value within limits for B 249.677 Recovery = 98.91%								
Ba 233.527†	685.6	5.0971	ug/L	0.03226	5.0971	ppb	0.03226	0.63%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	13606.2	4.9695	ug/L	0.00635	4.9695	ppb	0.00635	0.13%
QC value within limits for Be 313.107 Recovery = 99.39%								
Ca 317.933Radial†	138.5	204.21	ug/L	3.830	204.21	ppb	3.830	1.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.11%
Cd 226.502†              470.1      4.9597 ug/L       0.08663      4.9597 ppb        0.08663   1.75%
   QC value within limits for Cd 226.502  Recovery = 99.19%
Co 228.616†              250.3      4.7633 ug/L       0.17179      4.7633 ppb        0.17179   3.61%
   QC value within limits for Co 228.616  Recovery = 95.27%
Cr 267.716†              459.7      4.8196 ug/L       0.08146      4.8196 ppb        0.08146   1.69%
   QC value within limits for Cr 267.716  Recovery = 96.39%
Cu 324.752†             3446.8      9.8706 ug/L       0.05214      9.8706 ppb        0.05214   0.53%
   QC value within limits for Cu 324.752  Recovery = 98.71%
Fe 238.204 Radial†        14.0      131.62 ug/L         9.372      131.62 ppb          9.372   7.12%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 131.62%
K 766.490 Radial†        907.8      160.77 ug/L         6.329      160.77 ppb          6.329   3.94%
   QC value within limits for K 766.490 Radial  Recovery = 107.18%
Mg 279.077 IEC†           9.0      317.04 ug/L        99.282      317.04 ppb         99.282  31.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.68%
Mn 257.610†             9627.3      10.277 ug/L        0.0479      10.277 ppb         0.0479   0.47%
   QC value within limits for Mn 257.610  Recovery = 102.77%
Mo 202.031†              156.5      9.9537 ug/L       0.10505      9.9537 ppb        0.10505   1.06%
   QC value within limits for Mo 202.031  Recovery = 99.54%
Na 589.592 Radial†       816.7      274.08 ug/L        11.114      274.08 ppb         11.114   4.05%
   QC value within limits for Na 589.592 Radial  Recovery = 91.36%
Ni 231.604†              230.5      5.3334 ug/L       0.04181      5.3334 ppb        0.04181   0.78%
   QC value within limits for Ni 231.604  Recovery = 106.67%
P 214.914†               238.7      136.20 ug/L         4.184      136.20 ppb          4.184   3.07%
   QC value within limits for P 214.914  Recovery = 90.80%
Pb 220.353†               87.0      9.8839 ug/L       0.80722      9.8839 ppb        0.80722   8.17%
   QC value within limits for Pb 220.353  Recovery = 98.84%
S 181.975 Axial†          68.0      95.277 ug/L        0.5949      95.277 ppb         0.5949   0.62%
   QC value within limits for S 181.975 Axial  Recovery = 95.28%
Sb 206.836†               30.5      9.9256 ug/L       1.80229      9.9256 ppb        1.80229  18.16%
   QC value within limits for Sb 206.836  Recovery = 99.26%
Se 196.026†               61.8      36.189 ug/L        2.3479      36.189 ppb         2.3479   6.49%
   QC value within limits for Se 196.026  Recovery = 120.63%
Si 251.611†             3167.4      94.560 ug/L        0.4282      94.560 ppb         0.4282   0.45%
   QC value within limits for Si 251.611  Recovery = 94.56%
Sn 189.927†               64.9      10.648 ug/L        0.2117      10.648 ppb         0.2117   1.99%
   QC value within limits for Sn 189.927  Recovery = 106.48%
Sr 421.552†              802.0      4.9928 ug/L       0.13002      4.9928 ppb        0.13002   2.60%
   QC value within limits for Sr 421.552  Recovery = 99.86%
Ti 334.940†             3201.8      5.0952 ug/L       0.13476      5.0952 ppb        0.13476   2.64%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†               70.1      19.710 ug/L        1.1813      19.710 ppb         1.1813   5.99%
   QC value within limits for Tl 190.801  Recovery = 98.55%
U 409.014†              1915.6      52.745 ug/L        1.8523      52.745 ppb         1.8523   3.51%
   QC value within limits for U 409.014  Recovery = 105.49%
V 292.402†               757.4      5.2269 ug/L       0.03179      5.2269 ppb        0.03179   0.61%
   QC value within limits for V 292.402  Recovery = 104.54%
Zn 213.857†             1159.7      10.062 ug/L        0.0256      10.062 ppb         0.0256   0.25%
   QC value within limits for Zn 213.857  Recovery = 100.62%
SiO2†                   3287.9      210.35 ug/L         0.271      210.35 ppb          0.271   0.13%
   QC value within limits for SiO2  Recovery = 98.75%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/8/2009 08:22:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5189.8	5189.8	88.8	%			08:23:59
1	Y RADIAL	5590.3	5590.3	88.91	%			08:23:59
1	Al 396.153Radial†	669734.8	754172.3	523870	ug/L	523870	ppb	08:23:54
1	Ca 317.933Radial†	291928.0	328708.7	484500	ug/L	484500	ppb	08:23:54
1	Fe 238.204 Radial†	17643.1	19860.1	185930	ug/L	185930	ppb	08:23:59
1	K 766.490 Radial†	2220.3	148.4	42.540	ug/L	42.540	ppb	08:23:59
1	Mg 279.077 IEC†	12418.2	13982.3	493110	ug/L	493110	ppb	08:23:59
1	Na 589.592 Radial†	-979.9	-15.4	-5.1754	ug/L	-5.1754	ppb	08:23:59
1	Sr 421.552†	535.4	630.3	-0.5657	ug/L	-0.5657	ppb	08:23:59
1	Sc 361.383	776307.7	776307.7	86.135	%			08:24:26
1	Y 371.029	629776.0	629776.0	83.849	%			08:24:26
1	Ag 328.068†	-9607.7	-11447.0	0.2578	ug/L	0.2578	ppb	08:24:26
1	As 188.979†	-78.4	-66.9	2.0669	ug/L	2.0669	ppb	08:24:46
1	B 249.677†	446.4	1048.9	-2.6705	ug/L	-2.6705	ppb	08:24:26
1	Ba 233.527†	-463.0	-529.1	3.0093	ug/L	3.0093	ppb	08:24:46
1	Be 313.107†	-5475.2	-1243.6	-0.5072	ug/L	-0.5072	ppb	08:24:26
1	Cd 226.502†	1417.2	1840.4	0.8697	ug/L	0.8697	ppb	08:24:46
1	Co 228.616†	-13.4	49.8	-1.6911	ug/L	-1.6911	ppb	08:24:46
1	Cr 267.716†	-127.7	-226.9	0.9593	ug/L	0.9593	ppb	08:24:46
1	Cu 324.752†	3902.7	-2225.8	3.1148	ug/L	3.1148	ppb	08:24:26
1	Mn 257.610†	-402.3	-889.3	8.4088	ug/L	8.4088	ppb	08:24:26
1	Mo 202.031†	-211.4	-263.7	-3.5634	ug/L	-3.5634	ppb	08:24:46
1	Ni 231.604†	221.2	170.3	3.9419	ug/L	3.9419	ppb	08:24:46
1	P 214.914†	179.5	-15.1	18.966	ug/L	18.966	ppb	08:24:46
1	Pb 220.353†	-791.2	-850.1	6.1602	ug/L	6.1602	ppb	08:24:46
1	S 181.975 Axial†	83.0	54.8	-26.290	ug/L	-26.290	ppb	08:24:46
1	Sb 206.836†	63.7	39.7	-0.1476	ug/L	-0.1476	ppb	08:24:46
1	Se 196.026†	-1063.9	-1206.3	-16.785	ug/L	-16.785	ppb	08:24:46
1	Si 251.611†	453.6	76.9	2.8018	ug/L	2.8018	ppb	08:24:46
1	Sn 189.927†	-361.1	-424.2	-16.384	ug/L	-16.384	ppb	08:24:46
1	Ti 334.940†	-15761.9	-17184.0	-2.1640	ug/L	-2.1640	ppb	08:24:26
1	Tl 190.801†	-85.3	-66.6	-4.5522	ug/L	-4.5522	ppb	08:24:46
1	U 409.014†	-1013.4	1225.3	10.365	ug/L	10.365	ppb	08:24:26
1	V 292.402†	867.1	2365.0	-1.6778	ug/L	-1.6778	ppb	08:24:46
1	Zn 213.857†	3296.5	3205.3	-6.6524	ug/L	-6.6524	ppb	08:24:46
1	SiO2†	440.3	43.7	3.8863	ug/L	3.8863	ppb	08:25:43
2	Sc Radial	5172.2	5172.2	88.5	%			08:24:09
2	Y RADIAL	5524.2	5524.2	87.86	%			08:24:09
2	Al 396.153Radial†	671985.1	759276.6	527410	ug/L	527410	ppb	08:24:04
2	Ca 317.933Radial†	292632.2	330620.9	487320	ug/L	487320	ppb	08:24:04
2	Fe 238.204 Radial†	17633.3	19916.5	186450	ug/L	186450	ppb	08:24:09
2	K 766.490 Radial†	2182.2	113.9	36.591	ug/L	36.591	ppb	08:24:09
2	Mg 279.077 IEC†	12395.4	14004.0	493880	ug/L	493880	ppb	08:24:09
2	Na 589.592 Radial†	-942.9	22.6	7.5962	ug/L	7.5962	ppb	08:24:09
2	Sr 421.552†	494.0	585.5	-0.8709	ug/L	-0.8709	ppb	08:24:09
2	Sc 361.383	703840.2	703840.2	78.095	%			08:24:52
2	Y 371.029	571920.7	571920.7	76.146	%			08:24:52
2	Ag 328.068†	-9831.3	-12881.6	-6.1038	ug/L	-6.1038	ppb	08:24:52
2	As 188.979†	-85.5	-85.3	-5.1682	ug/L	-5.1682	ppb	08:25:12
2	B 249.677†	361.2	993.2	-3.9085	ug/L	-3.9085	ppb	08:24:52
2	Ba 233.527†	-536.2	-678.2	1.9266	ug/L	1.9266	ppb	08:25:12
2	Be 313.107†	-5405.9	-1809.3	-0.7211	ug/L	-0.7211	ppb	08:24:52
2	Cd 226.502†	1474.1	2082.7	3.3788	ug/L	3.3788	ppb	08:25:12
2	Co 228.616†	-20.8	38.8	-1.9097	ug/L	-1.9097	ppb	08:25:12
2	Cr 267.716†	-87.7	-191.0	1.3502	ug/L	1.3502	ppb	08:25:12
2	Cu 324.752†	3771.0	-1927.9	3.9942	ug/L	3.9942	ppb	08:24:52
2	Mn 257.610†	-522.6	-1091.4	8.2316	ug/L	8.2316	ppb	08:24:52
2	Mo 202.031†	-238.1	-323.2	-7.3030	ug/L	-7.3030	ppb	08:25:12
2	Ni 231.604†	205.0	175.9	4.0727	ug/L	4.0727	ppb	08:25:12

2	P 214.914†	142.8	-40.6	4.8366	ug/L	4.8366 ppb	08:25:12
2	Pb 220.353†	-811.4	-970.5	-6.7096	ug/L	-6.7096 ppb	08:25:12
2	S 181.975 Axial†	82.5	64.0	-14.051	ug/L	-14.051 ppb	08:25:12
2	Sb 206.836†	80.0	68.2	8.6688	ug/L	8.6688 ppb	08:25:12
2	Se 196.026†	-1075.3	-1348.1	-96.472	ug/L	-96.472 ppb	08:25:12
2	Si 251.611†	393.7	54.5	2.2031	ug/L	2.2031 ppb	08:25:12
2	Sn 189.927†	-335.1	-434.1	-17.705	ug/L	-17.705 ppb	08:25:12
2	Ti 334.940†	-16209.8	-19641.7	-5.9362	ug/L	-5.9362 ppb	08:24:52
2	Tl 190.801†	-76.2	-65.1	-4.0711	ug/L	-4.0711 ppb	08:25:12
2	U 409.014†	-1109.0	981.8	3.5914	ug/L	3.5914 ppb	08:24:52
2	V 292.402†	911.5	2525.6	-0.7433	ug/L	-0.7433 ppb	08:25:12
2	Zn 213.857†	3324.6	3635.3	-2.9743	ug/L	-2.9743 ppb	08:25:12
2	SiO2†	494.5	165.8	11.879	ug/L	11.879 ppb	08:25:48
3	Sc Radial	5341.1	5341.1	91.4	%		08:24:20
3	Y RADIAL	5696.8	5696.8	90.60	%		08:24:20
3	Al 396.153Radial†	668773.5	731756.6	508300	ug/L	508300 ppb	08:24:14
3	Ca 317.933Radial†	291429.1	318850.6	469970	ug/L	469970 ppb	08:24:14
3	Fe 238.204 Radial†	17266.5	18885.3	176800	ug/L	176800 ppb	08:24:20
3	K 766.490 Radial†	2229.6	87.8	31.346	ug/L	31.346 ppb	08:24:20
3	Mg 279.077 IEC†	12175.8	13320.9	469790	ug/L	469790 ppb	08:24:20
3	Na 589.592 Radial†	-901.3	101.7	34.145	ug/L	34.145 ppb	08:24:20
3	Sr 421.552†	505.0	579.9	-0.7448	ug/L	-0.7448 ppb	08:24:20
3	Sc 361.383	766708.2	766708.2	85.070	%		08:25:17
3	Y 371.029	621737.7	621737.7	82.779	%		08:25:17
3	Ag 328.068†	-9560.5	-11531.1	-2.8107	ug/L	-2.8107 ppb	08:25:17
3	As 188.979†	-93.2	-85.4	-6.6566	ug/L	-6.6566 ppb	08:25:37
3	B 249.677†	425.5	1030.8	-1.8388	ug/L	-1.8388 ppb	08:25:17
3	Ba 233.527†	-496.6	-575.2	2.3293	ug/L	2.3293 ppb	08:25:37
3	Be 313.107†	-5346.4	-1171.7	-0.4819	ug/L	-0.4819 ppb	08:25:17
3	Cd 226.502†	1451.3	1901.1	2.4241	ug/L	2.4241 ppb	08:25:37
3	Co 228.616†	-9.2	54.7	-1.4754	ug/L	-1.4754 ppb	08:25:37
3	Cr 267.716†	-93.8	-188.9	1.1967	ug/L	1.1967 ppb	08:25:37
3	Cu 324.752†	3834.9	-2248.8	2.5836	ug/L	2.5836 ppb	08:25:17
3	Mn 257.610†	-380.3	-869.3	7.9544	ug/L	7.9544 ppb	08:25:17
3	Mo 202.031†	-241.1	-301.8	-6.6288	ug/L	-6.6288 ppb	08:25:37
3	Ni 231.604†	204.1	153.3	3.5498	ug/L	3.5498 ppb	08:25:37
3	P 214.914†	162.7	-32.3	11.143	ug/L	11.143 ppb	08:25:37
3	Pb 220.353†	-803.2	-875.7	0.5132	ug/L	0.5132 ppb	08:25:37
3	S 181.975 Axial†	75.6	47.3	-33.723	ug/L	-33.723 ppb	08:25:37
3	Sb 206.836†	59.7	36.0	-1.1159	ug/L	-1.1159 ppb	08:25:37
3	Se 196.026†	-1060.8	-1218.2	-55.253	ug/L	-55.253 ppb	08:25:37
3	Si 251.611†	410.8	33.3	1.5399	ug/L	1.5399 ppb	08:25:37
3	Sn 189.927†	-354.6	-421.8	-17.629	ug/L	-17.629 ppb	08:25:37
3	Ti 334.940†	-15808.1	-17467.5	-3.3724	ug/L	-3.3724 ppb	08:25:17
3	Tl 190.801†	-85.2	-67.6	-5.2665	ug/L	-5.2665 ppb	08:25:37
3	U 409.014†	-1140.9	1060.7	6.9789	ug/L	6.9789 ppb	08:25:17
3	V 292.402†	872.8	2384.3	-0.7314	ug/L	-0.7314 ppb	08:25:37
3	Zn 213.857†	3339.7	3304.0	-4.1173	ug/L	-4.1173 ppb	08:25:37
3	SiO2†	414.5	19.8	2.4542	ug/L	2.4542 ppb	08:25:53

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	748952.0	83.100	%	4.3674				5.26%
Sc Radial	5234.3	89.6	%	1.59				1.77%
Y 371.029	607811.5	80.925	%	4.1728				5.16%
Y RADIAL	5603.8	89.12	%	1.385				1.55%
Ag 328.068†	-11953.2	-2.8856	ug/L	3.18143	-2.8856	ppb	3.18143	110.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	748401.9	519860	ug/L	10168.8	519860	ppb	10168.8	1.96%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	-79.2	-3.2526	ug/L	4.66656	-3.2526	ppb	4.66656	143.47%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1024.3	-2.8059	ug/L	1.04145	-2.8059	ppb	1.04145	37.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-594.2	2.4218	ug/L	0.54724	2.4218	ppb	0.54724	22.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1408.2	-0.5701	ug/L	0.13141	-0.5701	ppb	0.13141	23.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	326060.1	480590	ug/L	9310.0	480590	ppb	9310.0	1.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.12%
Cd 226.502†            1941.4      2.2242 ug/L       1.26642      2.2242 ppb        1.26642  56.94%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              47.8     -1.6920 ug/L       0.21716     -1.6920 ppb        0.21716  12.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -202.3      1.1687 ug/L       0.19695      1.1687 ppb        0.19695  16.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2134.2      3.2308 ug/L       0.71244      3.2308 ppb        0.71244  22.05%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    19554.0      183060 ug/L        5428.0      183060 ppb         5428.0   2.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.53%
K 766.490 Radial†       116.7      36.826 ug/L        5.6005      36.826 ppb         5.6005  15.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       13769.1      485590 ug/L       13692.7      485590 ppb        13692.7   2.82%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.12%
Mn 257.610†            -950.0      8.1983 ug/L       0.22901      8.1983 ppb        0.22901   2.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -296.2     -5.8318 ug/L       1.99315     -5.8318 ppb        1.99315  34.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       36.3      12.189 ug/L       20.0583      12.189 ppb        20.0583 164.57%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             166.5      3.8548 ug/L       0.27213      3.8548 ppb        0.27213   7.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -29.3      11.648 ug/L        7.0781      11.648 ppb         7.0781  60.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -898.8     -0.0121 ug/L       6.45097     -0.0121 ppb        6.45097 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         55.4     -24.688 ug/L        9.9331     -24.688 ppb         9.9331  40.23%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              48.0      2.4684 ug/L       5.39148      2.4684 ppb        5.39148 218.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1257.5     -56.170 ug/L       39.8514     -56.170 ppb        39.8514  70.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              54.9      2.1816 ug/L       0.63120      2.1816 ppb        0.63120  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -426.7     -17.239 ug/L        0.7416     -17.239 ppb         0.7416   4.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             598.5     -0.7271 ug/L       0.15335     -0.7271 ppb        0.15335  21.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -18097.7     -3.8242 ug/L       1.92624     -3.8242 ppb        1.92624  50.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -66.4     -4.6299 ug/L       0.60148     -4.6299 ppb        0.60148  12.99%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1089.2      6.9786 ug/L       3.38696      6.9786 ppb        3.38696  48.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2425.0     -1.0508 ug/L       0.54301     -1.0508 ppb        0.54301  51.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            3381.5     -4.5813 ug/L       1.88241     -4.5813 ppb        1.88241  41.09%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    76.4      6.0733 ug/L       5.07889      6.0733 ppb        5.07889  83.63%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/8/2009 08:28:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5678.5	5678.5	97.2	%			08:30:02
1	Y RADIAL	6082.3	6082.3	96.73	%			08:30:02
1	Al 396.153Radial†	666388.7	685819.7	476370	ug/L	476370	ppb	08:29:57
1	Ca 317.933Radial†	290269.6	298709.0	440280	ug/L	440280	ppb	08:29:57
1	Fe 238.204 Radial†	17682.4	18190.6	170310	ug/L	170310	ppb	08:30:02
1	K 766.490 Radial†	30306.4	28837.4	5122.4	ug/L	5122.4	ppb	08:29:57
1	Mg 279.077 IEC†	12380.2	12739.7	449300	ug/L	449300	ppb	08:30:02
1	Na 589.592 Radial†	12920.7	14385.0	4827.3	ug/L	4827.3	ppb	08:30:02
1	Sr 421.552†	73414.3	75580.0	466.61	ug/L	466.61	ppb	08:29:57
1	Sc 361.383	798852.1	798852.1	88.637	%			08:30:29
1	Y 371.029	647271.7	647271.7	86.178	%			08:30:29
1	Ag 328.068†	42822.1	48019.2	266.81	ug/L	266.81	ppb	08:30:29
1	As 188.979†	1018.7	1173.4	493.46	ug/L	493.46	ppb	08:30:50
1	B 249.677†	21666.1	24974.3	500.05	ug/L	500.05	ppb	08:30:29
1	Ba 233.527†	57014.2	64331.8	484.23	ug/L	484.23	ppb	08:30:29
1	Be 313.107†	576364.8	655367.2	239.84	ug/L	239.84	ppb	08:30:29
1	Cd 226.502†	38769.0	43934.3	447.70	ug/L	447.70	ppb	08:30:50
1	Co 228.616†	20156.9	22806.4	430.59	ug/L	430.59	ppb	08:30:50
1	Cr 267.716†	39430.2	44406.4	469.93	ug/L	469.93	ppb	08:30:29
1	Cu 324.752†	171408.3	186626.0	542.76	ug/L	542.76	ppb	08:30:29
1	Mn 257.610†	389330.6	438820.1	476.72	ug/L	476.72	ppb	08:30:29
1	Mo 202.031†	6497.4	7312.0	476.58	ug/L	476.58	ppb	08:30:50
1	Ni 231.604†	16695.5	18749.2	433.89	ug/L	433.89	ppb	08:30:50
1	P 214.914†	3977.5	4263.9	2403.3	ug/L	2403.3	ppb	08:30:50
1	Pb 220.353†	2698.9	3113.3	445.59	ug/L	445.59	ppb	08:30:50
1	S 181.975 Axial†	1732.0	1912.5	2586.2	ug/L	2586.2	ppb	08:30:50
1	Sb 206.836†	1484.7	1640.8	514.93	ug/L	514.93	ppb	08:30:50
1	Se 196.026†	2736.6	3116.2	2426.1	ug/L	2426.1	ppb	08:30:50
1	Si 251.611†	152690.0	171815.1	5132.3	ug/L	5132.3	ppb	08:30:29
1	Sn 189.927†	2275.0	2561.6	467.67	ug/L	467.67	ppb	08:30:50
1	Ti 334.940†	268963.2	304558.9	508.60	ug/L	508.60	ppb	08:30:29
1	Tl 190.801†	1347.6	1552.8	451.07	ug/L	451.07	ppb	08:30:50
1	U 409.014†	13644.1	17795.1	467.88	ug/L	467.88	ppb	08:30:29
1	V 292.402†	66527.3	76414.4	495.81	ug/L	495.81	ppb	08:30:29
1	Zn 213.857†	52450.8	58553.1	476.49	ug/L	476.49	ppb	08:30:29
1	SiO2†	152506.2	171589.9	10983	ug/L	10983	ppb	08:31:47
2	Sc Radial	5253.3	5253.3	89.9	%			08:30:12
2	Y RADIAL	5660.3	5660.3	90.02	%			08:30:12
2	Al 396.153Radial†	669134.5	744386.3	517050	ug/L	517050	ppb	08:30:07
2	Ca 317.933Radial†	291040.4	323746.7	477180	ug/L	477180	ppb	08:30:07
2	Fe 238.204 Radial†	17943.6	19954.2	186820	ug/L	186820	ppb	08:30:12
2	K 766.490 Radial†	30260.5	31311.0	5562.1	ug/L	5562.1	ppb	08:30:07
2	Mg 279.077 IEC†	12561.2	13972.3	492770	ug/L	492770	ppb	08:30:12
2	Na 589.592 Radial†	13114.0	15676.3	5260.7	ug/L	5260.7	ppb	08:30:12
2	Sr 421.552†	73629.2	81934.7	505.84	ug/L	505.84	ppb	08:30:07
2	Sc 361.383	796712.5	796712.5	88.399	%			08:30:55
2	Y 371.029	643552.7	643552.7	85.683	%			08:30:55
2	Ag 328.068†	42735.7	48051.2	271.67	ug/L	271.67	ppb	08:30:55
2	As 188.979†	1015.2	1172.6	495.72	ug/L	495.72	ppb	08:31:16
2	B 249.677†	21486.0	24836.2	494.95	ug/L	494.95	ppb	08:30:55
2	Ba 233.527†	57186.8	64699.9	487.57	ug/L	487.57	ppb	08:30:55
2	Be 313.107†	575113.2	655697.7	239.96	ug/L	239.96	ppb	08:30:55
2	Cd 226.502†	38833.6	44124.8	448.06	ug/L	448.06	ppb	08:31:16
2	Co 228.616†	20227.1	22946.9	433.02	ug/L	433.02	ppb	08:31:16
2	Cr 267.716†	39521.6	44629.3	472.56	ug/L	472.56	ppb	08:30:55
2	Cu 324.752†	171480.3	187226.7	545.32	ug/L	545.32	ppb	08:30:55
2	Mn 257.610†	391057.2	441952.9	480.90	ug/L	480.90	ppb	08:30:55
2	Mo 202.031†	6536.7	7376.1	481.83	ug/L	481.83	ppb	08:31:16
2	Ni 231.604†	16709.6	18815.9	435.43	ug/L	435.43	ppb	08:31:16

2	P 214.914†	3949.7	4244.6	2392.4 ug/L	2392.4 ppb	08:31:16
2	Pb 220.353†	2735.7	3163.2	459.01 ug/L	459.01 ppb	08:31:16
2	S 181.975 Axial†	1746.4	1934.0	2608.4 ug/L	2608.4 ppb	08:31:16
2	Sb 206.836†	1494.1	1656.0	518.97 ug/L	518.97 ppb	08:31:16
2	Se 196.026†	2715.8	3101.0	2476.7 ug/L	2476.7 ppb	08:31:16
2	Si 251.611†	153211.3	172867.4	5163.6 ug/L	5163.6 ppb	08:30:55
2	Sn 189.927†	2278.8	2572.8	473.58 ug/L	473.58 ppb	08:31:16
2	Ti 334.940†	269939.9	306478.8	513.59 ug/L	513.59 ppb	08:30:55
2	Tl 190.801†	1329.2	1536.1	447.53 ug/L	447.53 ppb	08:31:16
2	U 409.014†	13777.1	17986.9	471.08 ug/L	471.08 ppb	08:30:55
2	V 292.402†	66665.8	76772.6	496.71 ug/L	496.71 ppb	08:30:55
2	Zn 213.857†	52594.9	58875.0	476.22 ug/L	476.22 ppb	08:30:55
2	SiO2†	151895.1	171360.7	10968 ug/L	10968 ppb	08:31:52
3	Sc Radial	5329.5	5329.5	91.2 %		08:30:22
3	Y RADIAL	5716.9	5716.9	90.92 %		08:30:22
3	Al 396.153Radial†	656419.4	719803.9	499970 ug/L	499970 ppb	08:30:17
3	Ca 317.933Radial†	287241.2	314952.9	464220 ug/L	464220 ppb	08:30:17
3	Fe 238.204 Radial†	17841.4	19556.9	183100 ug/L	183100 ppb	08:30:22
3	K 766.490 Radial†	29973.6	30515.2	5420.2 ug/L	5420.2 ppb	08:30:17
3	Mg 279.077 IEC†	12509.3	13715.6	483720 ug/L	483720 ppb	08:30:22
3	Na 589.592 Radial†	13157.8	15515.9	5206.8 ug/L	5206.8 ppb	08:30:22
3	Sr 421.552†	72231.6	79231.4	489.13 ug/L	489.13 ppb	08:30:17
3	Sc 361.383	790190.3	790190.3	87.676 %		08:31:21
3	Y 371.029	639607.1	639607.1	85.158 %		08:31:21
3	Ag 328.068†	42287.3	47938.8	270.17 ug/L	270.17 ppb	08:31:21
3	As 188.979†	1035.6	1205.4	508.07 ug/L	508.07 ppb	08:31:42
3	B 249.677†	21305.2	24830.6	495.33 ug/L	495.33 ppb	08:31:21
3	Ba 233.527†	56590.8	64554.0	486.35 ug/L	486.35 ppb	08:31:21
3	Be 313.107†	570088.1	655336.1	239.83 ug/L	239.83 ppb	08:31:21
3	Cd 226.502†	38615.9	44239.1	449.65 ug/L	449.65 ppb	08:31:42
3	Co 228.616†	20126.4	23020.9	434.49 ug/L	434.49 ppb	08:31:42
3	Cr 267.716†	39221.0	44655.5	472.77 ug/L	472.77 ppb	08:31:21
3	Cu 324.752†	169737.3	186839.9	544.02 ug/L	544.02 ppb	08:31:21
3	Mn 257.610†	386530.2	440441.0	479.09 ug/L	479.09 ppb	08:31:21
3	Mo 202.031†	6526.6	7425.7	484.71 ug/L	484.71 ppb	08:31:42
3	Ni 231.604†	16652.9	18907.1	437.54 ug/L	437.54 ppb	08:31:42
3	P 214.914†	3959.3	4292.4	2417.3 ug/L	2417.3 ppb	08:31:42
3	Pb 220.353†	2673.5	3117.8	450.36 ug/L	450.36 ppb	08:31:42
3	S 181.975 Axial†	1725.8	1926.8	2601.6 ug/L	2601.6 ppb	08:31:42
3	Sb 206.836†	1474.2	1647.1	516.57 ug/L	516.57 ppb	08:31:42
3	Se 196.026†	2692.7	3100.1	2461.3 ug/L	2461.3 ppb	08:31:42
3	Si 251.611†	151474.4	172316.8	5147.1 ug/L	5147.1 ppb	08:31:21
3	Sn 189.927†	2237.1	2546.5	467.87 ug/L	467.87 ppb	08:31:42
3	Ti 334.940†	267030.2	305680.5	511.64 ug/L	511.64 ppb	08:31:21
3	Tl 190.801†	1335.4	1555.6	452.50 ug/L	452.50 ppb	08:31:42
3	U 409.014†	13591.7	17904.1	469.27 ug/L	469.27 ppb	08:31:21
3	V 292.402†	65923.7	76548.7	495.64 ug/L	495.64 ppb	08:31:21
3	Zn 213.857†	51997.0	58684.2	475.21 ug/L	475.21 ppb	08:31:21
3	SiO2†	151961.7	172854.8	11064 ug/L	11064 ppb	08:31:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	795251.6	88.237	%	0.5006				0.57%
Sc Radial	5420.4	92.8	%	3.88				4.18%
Y 371.029	643477.2	85.673	%	0.5103				0.60%
Y RADIAL	5819.8	92.56	%	3.643				3.94%
Ag 328.068†	48003.0	269.55	ug/L	2.490	269.55	ppb	2.490	0.92%
QC value within limits for Ag 328.068 Recovery = 107.82%								
Al 396.153Radial†	716670.0	497800	ug/L	20427.9	497800	ppb	20427.9	4.10%
QC value within limits for Al 396.153Radial Recovery = 99.56%								
As 188.979†	1183.8	499.08	ug/L	7.867	499.08	ppb	7.867	1.58%
QC value within limits for As 188.979 Recovery = 99.82%								
B 249.677†	24880.4	496.78	ug/L	2.839	496.78	ppb	2.839	0.57%
QC value within limits for B 249.677 Recovery = 99.36%								
Ba 233.527†	64528.6	486.05	ug/L	1.693	486.05	ppb	1.693	0.35%
QC value within limits for Ba 233.527 Recovery = 97.21%								
Be 313.107†	655467.0	239.88	ug/L	0.075	239.88	ppb	0.075	0.03%
QC value within limits for Be 313.107 Recovery = 95.95%								
Ca 317.933Radial†	312469.5	460560	ug/L	18722.4	460560	ppb	18722.4	4.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 92.11%
Cd 226.502†            44099.4      448.47 ug/L        1.035      448.47 ppb         1.035   0.23%
   QC value within limits for Cd 226.502  Recovery = 89.69%
Co 228.616†            22924.7      432.70 ug/L        1.971      432.70 ppb         1.971   0.46%
   QC value within limits for Co 228.616  Recovery = 86.54%
Cr 267.716†            44563.7      471.75 ug/L        1.586      471.75 ppb         1.586   0.34%
   QC value within limits for Cr 267.716  Recovery = 94.35%
Cu 324.752†           186897.5      544.03 ug/L        1.281      544.03 ppb         1.281   0.24%
   QC value within limits for Cu 324.752  Recovery = 108.81%
Fe 238.204 Radial†     19233.9      180080 ug/L       8660.4      180080 ppb        8660.4   4.81%
   QC value within limits for Fe 238.204 Radial  Recovery = 90.04%
K 766.490 Radial†      30221.2      5368.2 ug/L       224.43      5368.2 ppb        224.43   4.18%
   QC value within limits for K 766.490 Radial  Recovery = 107.36%
Mg 279.077 IEC†        13475.9      475260 ug/L      22935.4      475260 ppb       22935.4   4.83%
   QC value within limits for Mg 279.077 IEC  Recovery = 95.05%
Mn 257.610†           440404.7      478.90 ug/L        2.095      478.90 ppb         2.095   0.44%
   QC value within limits for Mn 257.610  Recovery = 95.78%
Mo 202.031†             7371.3      481.04 ug/L        4.122      481.04 ppb         4.122   0.86%
   QC value within limits for Mo 202.031  Recovery = 96.21%
Na 589.592 Radial†     15192.4      5098.3 ug/L       236.19      5098.3 ppb        236.19   4.63%
   QC value within limits for Na 589.592 Radial  Recovery = 101.97%
Ni 231.604†            18824.1      435.62 ug/L        1.834      435.62 ppb         1.834   0.42%
   QC value within limits for Ni 231.604  Recovery = 87.12%
P 214.914†              4266.9      2404.3 ug/L        12.48      2404.3 ppb         12.48   0.52%
   QC value within limits for P 214.914  Recovery = 96.17%
Pb 220.353†             3131.4      451.66 ug/L        6.802      451.66 ppb         6.802   1.51%
   QC value within limits for Pb 220.353  Recovery = 90.33%
S 181.975 Axial†        1924.4      2598.7 ug/L        11.39      2598.7 ppb         11.39   0.44%
   QC value within limits for S 181.975 Axial  Recovery = 103.95%
Sb 206.836†             1648.0      516.82 ug/L        2.030      516.82 ppb         2.030   0.39%
   QC value within limits for Sb 206.836  Recovery = 103.36%
Se 196.026†             3105.8      2454.7 ug/L        25.95      2454.7 ppb         25.95   1.06%
   QC value within limits for Se 196.026  Recovery = 98.19%
Si 251.611†           172333.1      5147.7 ug/L        15.65      5147.7 ppb         15.65   0.30%
   QC value within limits for Si 251.611  Recovery = 102.95%
Sn 189.927†             2560.3      469.70 ug/L        3.357      469.70 ppb         3.357   0.71%
   QC value within limits for Sn 189.927  Recovery = 93.94%
Sr 421.552†            78915.4      487.20 ug/L       19.688      487.20 ppb        19.688   4.04%
   QC value within limits for Sr 421.552  Recovery = 97.44%
Ti 334.940†           305572.7      511.28 ug/L        2.512      511.28 ppb         2.512   0.49%
   QC value within limits for Ti 334.940  Recovery = 102.26%
Tl 190.801†             1548.2      450.37 ug/L        2.558      450.37 ppb         2.558   0.57%
   QC value within limits for Tl 190.801  Recovery = 90.07%
U 409.014†             17895.4      469.41 ug/L        1.606      469.41 ppb         1.606   0.34%
   QC value within limits for U 409.014  Recovery = 93.88%
V 292.402†             76578.6      496.05 ug/L        0.577      496.05 ppb         0.577   0.12%
   QC value within limits for V 292.402  Recovery = 99.21%
Zn 213.857†            58704.1      475.97 ug/L        0.675      475.97 ppb         0.675   0.14%
   QC value within limits for Zn 213.857  Recovery = 95.19%
SiO2†                 171935.1       11005 ug/L         51.5       11005 ppb          51.5   0.47%
   QC value within limits for SiO2  Recovery = 102.90%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/8/2009 08:34:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5000.9	5000.9	85.6	%			08:36:06
1	Y RADIAL	5375.7	5375.7	85.49	%			08:36:06
1	Al 396.153Radial†	649764.4	759313.3	527440	ug/L	527440	ppb	08:36:01
1	Ca 317.933Radial†	281096.4	328464.2	484140	ug/L	484140	ppb	08:36:01
1	Fe 238.204 Radial†	39476.3	46123.9	431800	ug/L	431800	ppb	08:36:06
1	K 766.490 Radial†	3503.5	1742.3	121.03	ug/L	121.03	ppb	08:36:06
1	Mg 279.077 IEC†	11841.5	13836.5	487760	ug/L	487760	ppb	08:36:06
1	Na 589.592 Radial†	1231875.6	1440616.5	483440	ug/L	483440	ppb	08:36:01
1	Sr 421.552†	695.9	840.5	0.7472	ug/L	0.7472	ppb	08:36:06
1	Sc 361.383	771300.7	771300.7	85.580	%			08:36:34
1	Y 371.029	626017.5	626017.5	83.349	%			08:36:34
1	Ag 328.068†	-22719.5	-26840.4	-3.2200	ug/L	-3.2200	ppb	08:36:34
1	As 188.979†	-207.8	-218.6	-19.790	ug/L	-19.790	ppb	08:36:54
1	B 249.677†	1415.1	2184.2	-11.491	ug/L	-11.491	ppb	08:36:34
1	Ba 233.527†	-1526.8	-1775.6	2.9110	ug/L	2.9110	ppb	08:36:54
1	Be 313.107†	-11993.9	-8901.9	-3.2741	ug/L	-3.2741	ppb	08:36:34
1	Cd 226.502†	3639.7	4448.1	3.8564	ug/L	3.8564	ppb	08:36:54
1	Co 228.616†	198.8	297.7	-0.5794	ug/L	-0.5794	ppb	08:36:54
1	Cr 267.716†	123.2	65.3	3.8985	ug/L	3.8985	ppb	08:36:54
1	Cu 324.752†	1091.9	-5480.9	6.3424	ug/L	6.3424	ppb	08:36:34
1	Mn 257.610†	-25668.8	-30416.2	1.5267	ug/L	1.5267	ppb	08:36:34
1	Mo 202.031†	-493.2	-594.6	-7.1425	ug/L	-7.1425	ppb	08:36:54
1	Ni 231.604†	283.8	245.0	5.6702	ug/L	5.6702	ppb	08:36:54
1	P 214.914†	594.9	471.6	103.98	ug/L	103.98	ppb	08:36:54
1	Pb 220.353†	-558.6	-584.3	16.782	ug/L	16.782	ppb	08:36:54
1	S 181.975 Axial†	112.6	90.0	22.368	ug/L	22.368	ppb	08:36:54
1	Sb 206.836†	65.0	41.7	3.7037	ug/L	3.7037	ppb	08:36:54
1	Se 196.026†	-2484.6	-2874.4	-206.03	ug/L	-206.03	ppb	08:36:54
1	Si 251.611†	-583.5	-1131.5	-33.075	ug/L	-33.075	ppb	08:36:54
1	Sn 189.927†	-400.0	-472.4	-21.025	ug/L	-21.025	ppb	08:36:54
1	Ti 334.940†	-8964.2	-9359.7	4.0726	ug/L	4.0726	ppb	08:36:34
1	Tl 190.801†	-104.9	-90.1	-11.168	ug/L	-11.168	ppb	08:36:54
1	U 409.014†	437392.5	513494.5	14091	ug/L	14091	ppb	08:36:34
1	V 292.402†	2035.5	3736.8	-3.0468	ug/L	-3.0468	ppb	08:36:54
1	Zn 213.857†	6171.5	6589.6	-0.3854	ug/L	-0.3854	ppb	08:36:54
1	SiO2†	-667.1	-1247.0	-78.271	ug/L	-78.271	ppb	08:37:51
2	Sc Radial	5047.1	5047.1	86.4	%			08:36:16
2	Y RADIAL	5379.7	5379.7	85.56	%			08:36:16
2	Al 396.153Radial†	648919.6	751395.2	521940	ug/L	521940	ppb	08:36:11
2	Ca 317.933Radial†	280281.3	324518.2	478320	ug/L	478320	ppb	08:36:11
2	Fe 238.204 Radial†	39267.0	45459.9	425590	ug/L	425590	ppb	08:36:16
2	K 766.490 Radial†	3384.7	1567.4	92.631	ug/L	92.631	ppb	08:36:16
2	Mg 279.077 IEC†	11734.0	13585.5	478910	ug/L	478910	ppb	08:36:16
2	Na 589.592 Radial†	1226896.0	1421693.4	477090	ug/L	477090	ppb	08:36:11
2	Sr 421.552†	705.7	844.5	0.8257	ug/L	0.8257	ppb	08:36:16
2	Sc 361.383	760812.5	760812.5	84.416	%			08:36:59
2	Y 371.029	617644.0	617644.0	82.234	%			08:36:59
2	Ag 328.068†	-22429.0	-26862.3	-5.1840	ug/L	-5.1840	ppb	08:36:59
2	As 188.979†	-197.3	-209.6	-17.174	ug/L	-17.174	ppb	08:37:19
2	B 249.677†	1451.0	2249.6	-9.2958	ug/L	-9.2958	ppb	08:36:59
2	Ba 233.527†	-1497.0	-1764.9	2.7630	ug/L	2.7630	ppb	08:37:19
2	Be 313.107†	-11778.7	-8840.1	-3.2506	ug/L	-3.2506	ppb	08:36:59
2	Cd 226.502†	3625.7	4490.2	4.9226	ug/L	4.9226	ppb	08:37:19
2	Co 228.616†	200.5	302.9	-0.4003	ug/L	-0.4003	ppb	08:37:19
2	Cr 267.716†	67.3	1.1	3.1242	ug/L	3.1242	ppb	08:37:19
2	Cu 324.752†	1131.9	-5415.9	6.2112	ug/L	6.2112	ppb	08:36:59
2	Mn 257.610†	-25098.4	-30154.0	1.3513	ug/L	1.3513	ppb	08:36:59
2	Mo 202.031†	-524.4	-639.6	-10.441	ug/L	-10.441	ppb	08:37:19
2	Ni 231.604†	280.4	245.7	5.6851	ug/L	5.6851	ppb	08:37:19

2	P 214.914†	587.8	472.7	107.76	ug/L	107.76 ppb	08:37:19
2	Pb 220.353†	-552.6	-586.2	15.843	ug/L	15.843 ppb	08:37:19
2	S 181.975 Axial†	102.3	79.6	8.8127	ug/L	8.8127 ppb	08:37:19
2	Sb 206.836†	51.5	26.8	-0.9806	ug/L	-0.9806 ppb	08:37:19
2	Se 196.026†	-2486.1	-2916.3	-250.79	ug/L	-250.79 ppb	08:37:19
2	Si 251.611†	-513.5	-1058.0	-30.818	ug/L	-30.818 ppb	08:37:19
2	Sn 189.927†	-389.4	-466.3	-20.709	ug/L	-20.709 ppb	08:37:19
2	Ti 334.940†	-8570.3	-9037.5	4.2951	ug/L	4.2951 ppb	08:36:59
2	Tl 190.801†	-106.2	-93.3	-12.214	ug/L	-12.214 ppb	08:37:19
2	U 409.014†	430645.6	512547.8	14066	ug/L	14066 ppb	08:36:59
2	V 292.402†	2197.4	3961.4	-0.9096	ug/L	-0.9096 ppb	08:37:19
2	Zn 213.857†	6159.1	6674.3	1.2507	ug/L	1.2507 ppb	08:37:19
2	SiO2†	-605.6	-1184.9	-74.162	ug/L	-74.162 ppb	08:37:56
3	Sc Radial	5165.7	5165.7	88.4	%		08:36:27
3	Y RADIAL	5522.4	5522.4	87.83	%		08:36:27
3	Al 396.153Radial†	642891.5	727321.1	505220	ug/L	505220 ppb	08:36:21
3	Ca 317.933Radial†	278315.4	314841.6	464060	ug/L	464060 ppb	08:36:21
3	Fe 238.204 Radial†	39710.3	44917.3	420510	ug/L	420510 ppb	08:36:27
3	K 766.490 Radial†	3439.3	1539.1	94.417	ug/L	94.417 ppb	08:36:27
3	Mg 279.077 IEC†	11899.8	13461.0	474520	ug/L	474520 ppb	08:36:27
3	Na 589.592 Radial†	1210113.3	1370084.6	459770	ug/L	459770 ppb	08:36:21
3	Sr 421.552†	717.5	839.1	0.9243	ug/L	0.9243 ppb	08:36:27
3	Sc 361.383	772776.7	772776.7	85.744	%		08:37:25
3	Y 371.029	625753.3	625753.3	83.313	%		08:37:25
3	Ag 328.068†	-22889.6	-26988.2	-7.1932	ug/L	-7.1932 ppb	08:37:25
3	As 188.979†	-196.3	-204.7	-16.043	ug/L	-16.043 ppb	08:37:45
3	B 249.677†	1532.1	2317.5	-7.1964	ug/L	-7.1964 ppb	08:37:25
3	Ba 233.527†	-1572.7	-1825.8	2.1229	ug/L	2.1229 ppb	08:37:45
3	Be 313.107†	-12043.2	-8932.6	-3.2847	ug/L	-3.2847 ppb	08:37:25
3	Cd 226.502†	3599.9	4393.5	4.4090	ug/L	4.4090 ppb	08:37:45
3	Co 228.616†	199.7	298.3	-0.4121	ug/L	-0.4121 ppb	08:37:45
3	Cr 267.716†	74.0	7.7	3.0910	ug/L	3.0910 ppb	08:37:45
3	Cu 324.752†	1115.2	-5456.1	5.8371	ug/L	5.8371 ppb	08:37:25
3	Mn 257.610†	-25593.9	-30271.7	0.8010	ug/L	0.8010 ppb	08:37:25
3	Mo 202.031†	-517.6	-622.0	-9.6842	ug/L	-9.6842 ppb	08:37:45
3	Ni 231.604†	292.4	254.5	5.8899	ug/L	5.8899 ppb	08:37:45
3	P 214.914†	577.1	449.5	92.795	ug/L	92.795 ppb	08:37:45
3	Pb 220.353†	-556.8	-581.0	13.099	ug/L	13.099 ppb	08:37:45
3	S 181.975 Axial†	91.4	65.0	-8.2624	ug/L	-8.2624 ppb	08:37:45
3	Sb 206.836†	35.6	7.3	-6.7597	ug/L	-6.7597 ppb	08:37:45
3	Se 196.026†	-2465.4	-2846.5	-229.50	ug/L	-229.50 ppb	08:37:45
3	Si 251.611†	-520.1	-1056.3	-30.784	ug/L	-30.784 ppb	08:37:45
3	Sn 189.927†	-398.3	-469.5	-22.789	ug/L	-22.789 ppb	08:37:45
3	Ti 334.940†	-8828.6	-9181.6	3.3055	ug/L	3.3055 ppb	08:37:25
3	Tl 190.801†	-95.8	-79.2	-8.7262	ug/L	-8.7262 ppb	08:37:45
3	U 409.014†	438523.0	513836.9	14102	ug/L	14102 ppb	08:37:25
3	V 292.402†	2204.3	3929.2	-0.3636	ug/L	-0.3636 ppb	08:37:45
3	Zn 213.857†	6143.8	6543.5	0.7426	ug/L	0.7426 ppb	08:37:45
3	SiO2†	-603.9	-1171.7	-73.351	ug/L	-73.351 ppb	08:38:01

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	768296.6	85.247	%	0.7238				0.85%
Sc Radial	5071.2	86.8	%	1.45				1.68%
Y 371.029	623138.3	82.965	%	0.6338				0.76%
Y RADIAL	5425.9	86.29	%	1.329				1.54%
Ag 328.068†	-26897.0	-5.1991	ug/L	1.98666	-5.1991	ppb	1.98666	38.21%
Al 396.153Radial†	746009.9	518200	ug/L	11573.9	518200	ppb	11573.9	2.23%
QC value within limits for Al 396.153Radial Recovery = 103.64%								
As 188.979†	-211.0	-17.669	ug/L	1.9221	-17.669	ppb	1.9221	10.88%
B 249.677†	2250.4	-9.3278	ug/L	2.14768	-9.3278	ppb	2.14768	23.02%
Ba 233.527†	-1788.7	2.5990	ug/L	0.41885	2.5990	ppb	0.41885	16.12%
Be 313.107†	-8891.5	-3.2698	ug/L	0.01747	-3.2698	ppb	0.01747	0.53%
Ca 317.933Radial†	322608.0	475510	ug/L	10331.3	475510	ppb	10331.3	2.17%
QC value within limits for Ca 317.933Radial Recovery = 95.10%								
Cd 226.502†	4443.9	4.3960	ug/L	0.53322	4.3960	ppb	0.53322	12.13%
Co 228.616†	299.6	-0.4640	ug/L	0.10017	-0.4640	ppb	0.10017	21.59%
Cr 267.716†	24.7	3.3712	ug/L	0.45693	3.3712	ppb	0.45693	13.55%
Cu 324.752†	-5450.9	6.1302	ug/L	0.26219	6.1302	ppb	0.26219	4.28%

Fe 238.204 Radial†	45500.4	425970	ug/L	5657.7	425970	ppb	5657.7	1.33%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 85.19%								
K 766.490 Radial†	1616.3	102.69	ug/L	15.907	102.69	ppb	15.907	15.49%
Mg 279.077 IEC†	13627.6	480400	ug/L	6742.2	480400	ppb	6742.2	1.40%
QC value within limits for Mg 279.077 IEC Recovery = 96.08%								
Mn 257.610†	-30280.6	1.2263	ug/L	0.37865	1.2263	ppb	0.37865	30.88%
Mo 202.031†	-618.7	-9.0891	ug/L	1.72772	-9.0891	ppb	1.72772	19.01%
Na 589.592 Radial†	1410798.2	473440	ug/L	12250.8	473440	ppb	12250.8	2.59%
QC value within limits for Na 589.592 Radial Recovery = 94.69%								
Ni 231.604†	248.4	5.7484	ug/L	0.12280	5.7484	ppb	0.12280	2.14%
P 214.914†	464.6	101.51	ug/L	7.782	101.51	ppb	7.782	7.67%
Pb 220.353†	-583.8	15.241	ug/L	1.9138	15.241	ppb	1.9138	12.56%
S 181.975 Axial†	78.2	7.6395	ug/L	15.34901	7.6395	ppb	15.34901	200.92%
Sb 206.836†	25.3	-1.3456	ug/L	5.24120	-1.3456	ppb	5.24120	389.52%
Se 196.026†	-2879.1	-228.77	ug/L	22.392	-228.77	ppb	22.392	9.79%
Si 251.611†	-1081.9	-31.559	ug/L	1.3131	-31.559	ppb	1.3131	4.16%
Sn 189.927†	-469.4	-21.508	ug/L	1.1209	-21.508	ppb	1.1209	5.21%
Sr 421.552†	841.4	0.8324	ug/L	0.08875	0.8324	ppb	0.08875	10.66%
Ti 334.940†	-9192.9	3.8911	ug/L	0.51918	3.8911	ppb	0.51918	13.34%
Tl 190.801†	-87.5	-10.703	ug/L	1.7899	-10.703	ppb	1.7899	16.72%
U 409.014†	513293.1	14086	ug/L	18.5	14086	ppb	18.5	0.13%
QC value within limits for U 409.014 Recovery = 93.91%								
V 292.402†	3875.8	-1.4400	ug/L	1.41804	-1.4400	ppb	1.41804	98.48%
Zn 213.857†	6602.5	0.5360	ug/L	0.83740	0.5360	ppb	0.83740	156.24%
SiO2†	-1201.2	-75.261	ug/L	2.6374	-75.261	ppb	2.6374	3.50%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/8/2009 08:40:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5467.0	5467.0	93.5	%			08:42:08
1	Y RADIAL	5820.4	5820.4	92.57	%			08:42:08
1	Al 396.153Radial†	648.2	713.3	73.153	ug/L	73.153	ppb	08:42:08
1	Ca 317.933Radial†	40.2	27.3	40.294	ug/L	40.294	ppb	08:42:28
1	Fe 238.204 Radial†	-20.2	-28.4	30.402	ug/L	30.402	ppb	08:42:28
1	K 766.490 Radial†	1630640.1	1740720.3	308600	ug/L	308600	ppb	08:42:03
1	Mg 279.077 IEC†	-4.9	-6.4	-27.533	ug/L	-27.533	ppb	08:42:28
1	Na 589.592 Radial†	-395.2	665.5	223.32	ug/L	223.32	ppb	08:42:08
1	Sr 421.552†	1474708.6	1576416.5	9817.5	ug/L	9817.5	ppb	08:42:03
1	Sc 361.383	867124.6	867124.6	96.212	%			08:43:46
1	Y 371.029	701273.1	701273.1	93.368	%			08:43:46
1	Ag 328.068†	-7380.9	-7964.3	3.0125	ug/L	3.0125	ppb	08:43:51
1	As 188.979†	24239.3	25217.9	10051	ug/L	10051	ppb	08:43:51
1	B 249.677†	225599.7	235012.5	4904.6	ug/L	4904.6	ppb	08:43:46
1	Ba 233.527†	1819903.5	1891563.5	14041	ug/L	14041	ppb	08:43:46
1	Be 313.107†	7677022.8	7984388.4	2930.5	ug/L	2930.5	ppb	08:43:39
1	Cd 226.502†	883298.9	918270.4	9713.7	ug/L	9713.7	ppb	08:43:46
1	Co 228.616†	476506.8	495332.8	9401.0	ug/L	9401.0	ppb	08:43:51
1	Cr 267.716†	2192143.9	2278372.3	23934	ug/L	23934	ppb	08:43:46
1	Cu 324.752†	6813641.4	7075145.1	20247	ug/L	20247	ppb	08:43:39
1	Mn 257.610†	8511935.4	8846637.1	9437.0	ug/L	9437.0	ppb	08:43:39
1	Mo 202.031†	149411.9	155276.0	9864.1	ug/L	9864.1	ppb	08:43:51
1	Ni 231.604†	406202.4	422108.5	9768.5	ug/L	9768.5	ppb	08:43:46
1	P 214.914†	30887.7	31880.2	15285	ug/L	15285	ppb	08:43:51
1	Pb 220.353†	205565.7	213727.5	24170	ug/L	24170	ppb	08:43:51
1	S 181.975 Axial†	36410.6	37802.5	52971	ug/L	52971	ppb	08:43:51
1	Sb 206.836†	32057.5	33285.4	10343	ug/L	10343	ppb	08:43:51
1	Se 196.026†	16842.4	17534.3	10169	ug/L	10169	ppb	08:43:51
1	Si 251.611†	1547757.8	1608245.0	47837	ug/L	47837	ppb	08:43:46
1	Sn 189.927†	62087.1	64526.6	10565	ug/L	10565	ppb	08:43:51
1	Ti 334.940†	6182963.9	6427508.7	10249	ug/L	10249	ppb	08:43:39
1	Tl 190.801†	33155.5	34493.4	9723.9	ug/L	9723.9	ppb	08:43:51
1	U 409.014†	-1235.9	1117.3	-15.386	ug/L	-15.386	ppb	08:43:51
1	V 292.402†	1452120.7	1510650.6	10098	ug/L	10098	ppb	08:43:46
1	Zn 213.857†	1555331.3	1615944.6	14031	ug/L	14031	ppb	08:43:46
1	SiO2†	1561537.4	1622549.4	103410	ug/L	103410	ppb	08:44:38
2	Sc Radial	5444.5	5444.5	93.2	%			08:42:39
2	Y RADIAL	5757.5	5757.5	91.57	%			08:42:39
2	Al 396.153Radial†	634.7	701.7	68.198	ug/L	68.198	ppb	08:42:39
2	Ca 317.933Radial†	40.9	28.3	41.687	ug/L	41.687	ppb	08:42:59
2	Fe 238.204 Radial†	-21.6	-30.0	14.286	ug/L	14.286	ppb	08:42:59
2	K 766.490 Radial†	1678331.1	1799114.9	318960	ug/L	318960	ppb	08:42:34
2	Mg 279.077 IEC†	-4.3	-5.8	-5.8103	ug/L	-5.8103	ppb	08:42:59
2	Na 589.592 Radial†	-444.2	611.2	205.10	ug/L	205.10	ppb	08:42:39
2	Sr 421.552†	1524852.5	1636755.0	10193	ug/L	10193	ppb	08:42:34
2	Sc 361.383	875997.1	875997.1	97.196	%			08:44:05
2	Y 371.029	706892.2	706892.2	94.116	%			08:44:05
2	Ag 328.068†	-7542.1	-8052.4	2.5047	ug/L	2.5047	ppb	08:44:11
2	As 188.979†	24445.9	25175.2	10032	ug/L	10032	ppb	08:44:11
2	B 249.677†	227893.7	234997.7	4904.4	ug/L	4904.4	ppb	08:44:05
2	Ba 233.527†	1836991.3	1889985.5	14029	ug/L	14029	ppb	08:44:05
2	Be 313.107†	7606544.6	7831059.2	2874.2	ug/L	2874.2	ppb	08:43:59
2	Cd 226.502†	890702.9	916589.3	9695.9	ug/L	9695.9	ppb	08:44:05
2	Co 228.616†	478916.3	492795.5	9353.1	ug/L	9353.1	ppb	08:44:11
2	Cr 267.716†	2207826.3	2271429.7	23862	ug/L	23862	ppb	08:44:05
2	Cu 324.752†	6728151.8	6915460.5	19790	ug/L	19790	ppb	08:43:59
2	Mn 257.610†	8436455.1	8679372.2	9258.6	ug/L	9258.6	ppb	08:43:59
2	Mo 202.031†	149840.4	154144.1	9792.2	ug/L	9792.2	ppb	08:44:11
2	Ni 231.604†	409458.3	421182.0	9747.1	ug/L	9747.1	ppb	08:44:05

2	P 214.914†	31072.0	31744.7	15279	ug/L	15279	ppb	08:44:11
2	Pb 220.353†	206625.4	212653.7	24048	ug/L	24048	ppb	08:44:11
2	S 181.975 Axial†	36505.0	37516.4	52570	ug/L	52570	ppb	08:44:11
2	Sb 206.836†	32226.2	33121.5	10291	ug/L	10291	ppb	08:44:11
2	Se 196.026†	16905.3	17421.7	10103	ug/L	10103	ppb	08:44:11
2	Si 251.611†	1563796.3	1608452.5	47841	ug/L	47841	ppb	08:44:05
2	Sn 189.927†	62338.6	64131.7	10500	ug/L	10500	ppb	08:44:11
2	Ti 334.940†	6117371.6	6294934.8	10037	ug/L	10037	ppb	08:43:59
2	Tl 190.801†	33295.1	34288.0	9664.0	ug/L	9664.0	ppb	08:44:11
2	U 409.014†	-1090.5	1279.9	-10.764	ug/L	-10.764	ppb	08:44:11
2	V 292.402†	1463232.8	1506796.3	10072	ug/L	10072	ppb	08:44:05
2	Zn 213.857†	1567638.7	1612233.5	13999	ug/L	13999	ppb	08:44:05
2	SiO2†	1556021.4	1600435.5	101990	ug/L	101990	ppb	08:44:45
3	Sc Radial	5627.2	5627.2	96.3	%			08:43:09
3	Y RADIAL	5959.5	5959.5	94.78	%			08:43:09
3	Al 396.153Radial†	620.4	664.7	38.156	ug/L	38.156	ppb	08:43:09
3	Ca 317.933Radial†	43.5	29.6	43.629	ug/L	43.629	ppb	08:43:29
3	Fe 238.204 Radial†	-20.6	-28.2	34.402	ug/L	34.402	ppb	08:43:29
3	K 766.490 Radial†	1663829.2	1725552.7	305910	ug/L	305910	ppb	08:43:04
3	Mg 279.077 IEC†	-2.4	-3.7	71.666	ug/L	71.666	ppb	08:43:29
3	Na 589.592 Radial†	-505.0	563.5	189.12	ug/L	189.12	ppb	08:43:09
3	Sr 421.552†	1503489.9	1561417.6	9724.1	ug/L	9724.1	ppb	08:43:04
3	Sc 361.383	860972.2	860972.2	95.529	%			08:44:25
3	Y 371.029	693995.6	693995.6	92.399	%			08:44:25
3	Ag 328.068†	-7391.7	-8030.3	2.6685	ug/L	2.6685	ppb	08:44:30
3	As 188.979†	24137.2	25291.0	10079	ug/L	10079	ppb	08:44:30
3	B 249.677†	224130.1	235149.6	4907.3	ug/L	4907.3	ppb	08:44:25
3	Ba 233.527†	1812109.2	1896921.1	14081	ug/L	14081	ppb	08:44:25
3	Be 313.107†	7558719.3	7917566.9	2906.0	ug/L	2906.0	ppb	08:44:19
3	Cd 226.502†	877962.6	919244.8	9724.0	ug/L	9724.0	ppb	08:44:25
3	Co 228.616†	475940.9	498279.5	9457.1	ug/L	9457.1	ppb	08:44:30
3	Cr 267.716†	2176726.4	2278514.6	23936	ug/L	23936	ppb	08:44:25
3	Cu 324.752†	6705646.3	7012701.8	20068	ug/L	20068	ppb	08:44:19
3	Mn 257.610†	8434113.9	8828393.0	9417.6	ug/L	9417.6	ppb	08:44:19
3	Mo 202.031†	148782.4	155726.8	9892.7	ug/L	9892.7	ppb	08:44:30
3	Ni 231.604†	403751.5	422559.8	9778.9	ug/L	9778.9	ppb	08:44:25
3	P 214.914†	30822.4	32041.3	15407	ug/L	15407	ppb	08:44:30
3	Pb 220.353†	205278.5	214953.7	24308	ug/L	24308	ppb	08:44:30
3	S 181.975 Axial†	36042.6	37687.8	52810	ug/L	52810	ppb	08:44:30
3	Sb 206.836†	31930.0	33390.0	10378	ug/L	10378	ppb	08:44:30
3	Se 196.026†	16715.5	17526.6	10164	ug/L	10164	ppb	08:44:30
3	Si 251.611†	1540381.3	1612018.7	47950	ug/L	47950	ppb	08:44:25
3	Sn 189.927†	61948.9	64843.0	10617	ug/L	10617	ppb	08:44:30
3	Ti 334.940†	6107035.0	6393948.3	10195	ug/L	10195	ppb	08:44:19
3	Tl 190.801†	33080.3	34660.9	9770.0	ug/L	9770.0	ppb	08:44:30
3	U 409.014†	-984.4	1371.4	-8.3904	ug/L	-8.3904	ppb	08:44:30
3	V 292.402†	1440370.5	1509135.6	10089	ug/L	10089	ppb	08:44:25
3	Zn 213.857†	1547039.7	1618816.6	14056	ug/L	14056	ppb	08:44:25
3	SiO2†	1561660.1	1634275.6	104160	ug/L	104160	ppb	08:44:52

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868031.3	96.313	%	0.8381				0.87%
Sc Radial	5512.9	94.3	%	1.71				1.81%
Y 371.029	700720.3	93.295	%	0.8609				0.92%
Y RADIAL	5845.8	92.97	%	1.643				1.77%
Ag 328.068†	-8015.7	2.7286	ug/L	0.25915	2.7286	ppb	0.25915	9.50%
Al 396.153Radial†	693.2	59.836	ug/L	18.9377	59.836	ppb	18.9377	31.65%
As 188.979†	25228.0	10054	ug/L	23.7	10054	ppb	23.7	0.24%
QC value within limits for As 188.979 Recovery = 100.54%								
B 249.677†	235053.3	4905.5	ug/L	1.63	4905.5	ppb	1.63	0.03%
QC value within limits for B 249.677 Recovery = 98.11%								
Ba 233.527†	1892823.4	14050	ug/L	27.0	14050	ppb	27.0	0.19%
QC value within limits for Ba 233.527 Recovery = 93.67%								
Be 313.107†	7911004.8	2903.6	ug/L	28.23	2903.6	ppb	28.23	0.97%
QC value within limits for Be 313.107 Recovery = 96.79%								
Ca 317.933Radial†	28.4	41.870	ug/L	1.6750	41.870	ppb	1.6750	4.00%
Cd 226.502†	918034.8	9711.2	ug/L	14.21	9711.2	ppb	14.21	0.15%
QC value within limits for Cd 226.502 Recovery = 97.11%								

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Co 228.616†          495469.3      9403.8 ug/L        52.05      9403.8 ppb        52.05   0.55%
   QC value within limits for Co 228.616  Recovery = 94.04%
Cr 267.716†         2276105.6       23911 ug/L         42.5       23911 ppb         42.5   0.18%
   QC value within limits for Cr 267.716  Recovery = 95.64%
Cu 324.752†         7001102.5       20035 ug/L        230.3       20035 ppb        230.3   1.15%
   QC value within limits for Cu 324.752  Recovery = 100.18%
Fe 238.204 Radial†      -28.9      26.363 ug/L      10.6490      26.363 ppb      10.6490  40.39%
K 766.490 Radial†   1755129.3      311160 ug/L       6888.6      311160 ppb       6888.6   2.21%
   QC value within limits for K 766.490 Radial  Recovery = 103.72%
Mg 279.077 IEC†          -5.3      12.774 ug/L      52.1454      12.774 ppb      52.1454 408.21%
Mn 257.610†         8784800.8      9371.1 ug/L        97.88      9371.1 ppb        97.88   1.04%
   QC value within limits for Mn 257.610  Recovery = 93.71%
Mo 202.031†          155049.0      9849.6 ug/L        51.80      9849.6 ppb        51.80   0.53%
   QC value within limits for Mo 202.031  Recovery = 98.50%
Na 589.592 Radial†      613.4      205.85 ug/L       17.116      205.85 ppb       17.116   8.32%
Ni 231.604†          421950.1      9764.9 ug/L        16.23      9764.9 ppb        16.23   0.17%
   QC value within limits for Ni 231.604  Recovery = 97.65%
P 214.914†            31888.7       15324 ug/L         72.3       15324 ppb         72.3   0.47%
   QC value within limits for P 214.914  Recovery = 102.16%
Pb 220.353†          213778.3       24175 ug/L        130.1       24175 ppb        130.1   0.54%
   QC value within limits for Pb 220.353  Recovery = 96.70%
S 181.975 Axial†      37668.9       52784 ug/L        201.8       52784 ppb        201.8   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 105.57%
Sb 206.836†           33265.6       10337 ug/L         43.8       10337 ppb         43.8   0.42%
   QC value within limits for Sb 206.836  Recovery = 103.37%
Se 196.026†           17494.2       10145 ug/L         36.5       10145 ppb         36.5   0.36%
   QC value within limits for Se 196.026  Recovery = 101.45%
Si 251.611†         1609572.1       47876 ug/L         64.2       47876 ppb         64.2   0.13%
   QC value within limits for Si 251.611  Recovery = 95.75%
Sn 189.927†           64500.4       10561 ug/L         58.4       10561 ppb         58.4   0.55%
   QC value within limits for Sn 189.927  Recovery = 105.61%
Sr 421.552†         1591529.7      9911.6 ug/L       248.35      9911.6 ppb       248.35   2.51%
   QC value within limits for Sr 421.552  Recovery = 99.12%
Ti 334.940†         6372130.6       10160 ug/L        110.0       10160 ppb        110.0   1.08%
   QC value within limits for Ti 334.940  Recovery = 101.60%
Tl 190.801†           34480.7      9719.3 ug/L        53.15      9719.3 ppb        53.15   0.55%
   QC value within limits for Tl 190.801  Recovery = 97.19%
U 409.014†             1256.2     -11.514 ug/L       3.5577     -11.514 ppb       3.5577  30.90%
V 292.402†          1508860.8       10086 ug/L         13.3       10086 ppb         13.3   0.13%
   QC value within limits for V 292.402  Recovery = 100.86%
Zn 213.857†         1615664.9       14029 ug/L         28.5       14029 ppb         28.5   0.20%
   QC value within limits for Zn 213.857  Recovery = 93.53%
SiO2†               1619086.8      103190 ug/L       1105.0      103190 ppb       1105.0   1.07%
   QC value within limits for SiO2  Recovery = 96.44%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 08:47:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5782.1	5782.1	98.9	%			08:48:55
1	Y RADIAL	6146.7	6146.7	97.76	%			08:48:55
1	Al 396.153Radial†	7076.6	7172.7	4961.1	ug/L	4961.1	ppb	08:48:55
1	Ca 317.933Radial†	3407.2	3428.0	5052.7	ug/L	5052.7	ppb	08:49:15
1	Fe 238.204 Radial†	532.6	531.5	4991.6	ug/L	4991.6	ppb	08:49:15
1	K 766.490 Radial†	32409.0	30403.6	5383.4	ug/L	5383.4	ppb	08:48:55
1	Mg 279.077 IEC†	148.2	148.6	5249.8	ug/L	5249.8	ppb	08:49:15
1	Na 589.592 Radial†	25995.9	27361.6	9182.0	ug/L	9182.0	ppb	08:48:55
1	Sr 421.552†	78123.6	78985.8	491.86	ug/L	491.86	ppb	08:48:55
1	Sc 361.383	915700.9	915700.9	101.60	%			08:50:12
1	Y 371.029	748883.0	748883.0	99.707	%			08:50:12
1	Ag 328.068†	111463.9	109413.9	498.59	ug/L	498.59	ppb	08:50:17
1	As 188.979†	1317.5	1320.9	526.25	ug/L	526.25	ppb	08:50:37
1	B 249.677†	24216.2	24365.1	509.06	ug/L	509.06	ppb	08:50:17
1	Ba 233.527†	67026.7	65978.4	490.26	ug/L	490.26	ppb	08:50:17
1	Be 313.107†	1367141.0	1350700.0	493.30	ug/L	493.30	ppb	08:50:12
1	Cd 226.502†	47097.9	46550.5	491.92	ug/L	491.92	ppb	08:50:17
1	Co 228.616†	26192.0	25844.5	490.66	ug/L	490.66	ppb	08:50:17
1	Cr 267.716†	47478.6	46651.4	490.51	ug/L	490.51	ppb	08:50:17
1	Cu 324.752†	179450.2	169864.4	486.36	ug/L	486.36	ppb	08:50:17
1	Mn 257.610†	468544.1	460734.8	491.88	ug/L	491.88	ppb	08:50:12
1	Mo 202.031†	7937.6	7794.1	495.48	ug/L	495.48	ppb	08:50:37
1	Ni 231.604†	21717.3	21288.4	492.65	ug/L	492.65	ppb	08:50:17
1	P 214.914†	4496.1	4201.7	2349.8	ug/L	2349.8	ppb	08:50:37
1	Pb 220.353†	4339.1	4339.2	492.07	ug/L	492.07	ppb	08:50:37
1	S 181.975 Axial†	768.7	715.0	1001.0	ug/L	1001.0	ppb	08:50:37
1	Sb 206.836†	1660.7	1600.3	513.72	ug/L	513.72	ppb	08:50:37
1	Se 196.026†	829.5	845.2	506.85	ug/L	506.85	ppb	08:50:37
1	Si 251.611†	83963.3	82189.9	2448.4	ug/L	2448.4	ppb	08:50:17
1	Sn 189.927†	3091.0	3037.3	497.89	ug/L	497.89	ppb	08:50:37
1	Ti 334.940†	314148.2	310310.4	495.07	ug/L	495.07	ppb	08:50:17
1	Tl 190.801†	1753.9	1758.8	495.78	ug/L	495.78	ppb	08:50:37
1	U 409.014†	15497.7	17655.2	484.78	ug/L	484.78	ppb	08:50:17
1	V 292.402†	73683.2	73879.9	494.61	ug/L	494.61	ppb	08:50:17
1	Zn 213.857†	58008.6	56472.2	488.98	ug/L	488.98	ppb	08:50:17
1	SiO2†	84671.3	82869.0	5289.8	ug/L	5289.8	ppb	08:51:45
2	Sc Radial	5788.5	5788.5	99.1	%			08:49:20
2	Y RADIAL	6144.8	6144.8	97.73	%			08:49:20
2	Al 396.153Radial†	7103.7	7192.2	4974.5	ug/L	4974.5	ppb	08:49:20
2	Ca 317.933Radial†	3346.8	3363.2	4957.2	ug/L	4957.2	ppb	08:49:40
2	Fe 238.204 Radial†	527.8	526.1	4940.5	ug/L	4940.5	ppb	08:49:40
2	K 766.490 Radial†	32276.6	30234.0	5353.3	ug/L	5353.3	ppb	08:49:20
2	Mg 279.077 IEC†	146.4	146.7	5180.9	ug/L	5180.9	ppb	08:49:40
2	Na 589.592 Radial†	25876.0	27211.8	9131.8	ug/L	9131.8	ppb	08:49:20
2	Sr 421.552†	78170.1	78946.0	491.61	ug/L	491.61	ppb	08:49:20
2	Sc 361.383	916693.8	916693.8	101.71	%			08:50:43
2	Y 371.029	749698.1	749698.1	99.815	%			08:50:43
2	Ag 328.068†	111726.1	109552.8	499.21	ug/L	499.21	ppb	08:50:48
2	As 188.979†	1322.7	1324.7	527.73	ug/L	527.73	ppb	08:51:08
2	B 249.677†	24303.2	24424.8	510.31	ug/L	510.31	ppb	08:50:48
2	Ba 233.527†	67467.5	66340.4	492.94	ug/L	492.94	ppb	08:50:48
2	Be 313.107†	1368824.6	1350897.8	493.38	ug/L	493.38	ppb	08:50:43
2	Cd 226.502†	47404.8	46802.0	494.59	ug/L	494.59	ppb	08:50:48
2	Co 228.616†	26331.6	25953.8	492.74	ug/L	492.74	ppb	08:50:48
2	Cr 267.716†	47593.6	46713.8	491.16	ug/L	491.16	ppb	08:50:48
2	Cu 324.752†	179807.8	170024.6	486.81	ug/L	486.81	ppb	08:50:48
2	Mn 257.610†	469543.6	461218.1	492.39	ug/L	492.39	ppb	08:50:43
2	Mo 202.031†	8012.0	7858.8	499.59	ug/L	499.59	ppb	08:51:08
2	Ni 231.604†	21790.2	21336.9	493.77	ug/L	493.77	ppb	08:50:48

2	P 214.914†	4553.2	4253.0	2379.4	ug/L	2379.4 ppb	08:51:08
2	Pb 220.353†	4360.0	4355.1	493.88	ug/L	493.88 ppb	08:51:08
2	S 181.975 Axial†	776.7	722.1	1010.8	ug/L	1010.8 ppb	08:51:08
2	Sb 206.836†	1674.2	1611.8	517.49	ug/L	517.49 ppb	08:51:08
2	Se 196.026†	850.9	865.4	518.35	ug/L	518.35 ppb	08:51:08
2	Si 251.611†	84254.2	82386.4	2454.3	ug/L	2454.3 ppb	08:50:48
2	Sn 189.927†	3110.0	3052.7	500.40	ug/L	500.40 ppb	08:51:08
2	Ti 334.940†	315465.2	311270.3	496.60	ug/L	496.60 ppb	08:50:48
2	Tl 190.801†	1762.5	1765.4	497.62	ug/L	497.62 ppb	08:51:08
2	U 409.014†	15551.4	17691.4	485.78	ug/L	485.78 ppb	08:50:48
2	V 292.402†	73936.6	74050.4	495.80	ug/L	495.80 ppb	08:50:48
2	Zn 213.857†	58308.9	56705.6	491.02	ug/L	491.02 ppb	08:50:48
2	SiO2†	84289.9	82403.7	5259.8	ug/L	5259.8 ppb	08:51:50
3	Sc Radial	5847.4	5847.4	100	%		08:49:45
3	Y RADIAL	6208.4	6208.4	98.74	%		08:49:45
3	Al 396.153Radial†	7161.0	7177.2	4964.1	ug/L	4964.1 ppb	08:49:45
3	Ca 317.933Radial†	3361.4	3343.9	4928.7	ug/L	4928.7 ppb	08:50:05
3	Fe 238.204 Radial†	533.2	526.1	4940.8	ug/L	4940.8 ppb	08:50:05
3	K 766.490 Radial†	32465.1	30094.2	5328.5	ug/L	5328.5 ppb	08:49:45
3	Mg 279.077 IEC†	147.3	146.0	5157.2	ug/L	5157.2 ppb	08:50:05
3	Na 589.592 Radial†	26135.2	27207.7	9130.4	ug/L	9130.4 ppb	08:49:45
3	Sr 421.552†	79104.0	79084.6	492.47	ug/L	492.47 ppb	08:49:45
3	Sc 361.383	913157.2	913157.2	101.32	%		08:51:14
3	Y 371.029	746146.8	746146.8	99.343	%		08:51:14
3	Ag 328.068†	111949.4	110198.7	502.13	ug/L	502.13 ppb	08:51:19
3	As 188.979†	1322.9	1329.9	529.82	ug/L	529.82 ppb	08:51:39
3	B 249.677†	24230.2	24445.3	510.73	ug/L	510.73 ppb	08:51:19
3	Ba 233.527†	67345.5	66476.8	493.96	ug/L	493.96 ppb	08:51:19
3	Be 313.107†	1359749.2	1347152.8	492.02	ug/L	492.02 ppb	08:51:14
3	Cd 226.502†	47198.8	46779.2	494.35	ug/L	494.35 ppb	08:51:19
3	Co 228.616†	26403.8	26125.3	495.99	ug/L	495.99 ppb	08:51:19
3	Cr 267.716†	47416.6	46720.4	491.23	ug/L	491.23 ppb	08:51:19
3	Cu 324.752†	180362.3	171256.6	490.34	ug/L	490.34 ppb	08:51:19
3	Mn 257.610†	467972.0	461454.8	492.65	ug/L	492.65 ppb	08:51:14
3	Mo 202.031†	7964.6	7842.6	498.56	ug/L	498.56 ppb	08:51:39
3	Ni 231.604†	21690.8	21321.7	493.42	ug/L	493.42 ppb	08:51:19
3	P 214.914†	4511.2	4229.0	2365.0	ug/L	2365.0 ppb	08:51:39
3	Pb 220.353†	4333.2	4345.2	492.76	ug/L	492.76 ppb	08:51:39
3	S 181.975 Axial†	770.2	718.6	1005.9	ug/L	1005.9 ppb	08:51:39
3	Sb 206.836†	1648.3	1592.6	511.39	ug/L	511.39 ppb	08:51:39
3	Se 196.026†	837.6	855.5	512.64	ug/L	512.64 ppb	08:51:39
3	Si 251.611†	84314.0	82766.2	2465.7	ug/L	2465.7 ppb	08:51:19
3	Sn 189.927†	3099.7	3054.3	500.67	ug/L	500.67 ppb	08:51:39
3	Ti 334.940†	315905.7	312906.3	499.20	ug/L	499.20 ppb	08:51:19
3	Tl 190.801†	1760.2	1769.7	498.86	ug/L	498.86 ppb	08:51:39
3	U 409.014†	15741.3	17938.2	492.58	ug/L	492.58 ppb	08:51:19
3	V 292.402†	73739.7	74137.7	496.37	ug/L	496.37 ppb	08:51:19
3	Zn 213.857†	58213.2	56833.2	492.13	ug/L	492.13 ppb	08:51:19
3	SiO2†	84868.2	83295.4	5317.0	ug/L	5317.0 ppb	08:51:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915183.9	101.54	%	0.202				0.20%
Sc Radial	5806.0	99.4	%	0.62				0.62%
Y 371.029	748242.6	99.622	%	0.2477				0.25%
Y RADIAL	6166.6	98.07	%	0.575				0.59%
Ag 328.068†	109721.8	499.98	ug/L	1.891	499.98	ppb	1.891	0.38%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	7180.7	4966.6	ug/L	7.01	4966.6	ppb	7.01	0.14%
QC value within limits for Al 396.153Radial Recovery = 99.33%								
As 188.979†	1325.2	527.94	ug/L	1.794	527.94	ppb	1.794	0.34%
QC value within limits for As 188.979 Recovery = 105.59%								
B 249.677†	24411.7	510.03	ug/L	0.871	510.03	ppb	0.871	0.17%
QC value within limits for B 249.677 Recovery = 102.01%								
Ba 233.527†	66265.2	492.39	ug/L	1.910	492.39	ppb	1.910	0.39%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	1349583.6	492.90	ug/L	0.764	492.90	ppb	0.764	0.16%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	3378.4	4979.5	ug/L	64.94	4979.5	ppb	64.94	1.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.59%
Cd 226.502†            46710.6      493.62 ug/L         1.474      493.62 ppb          1.474   0.30%
   QC value within limits for Cd 226.502  Recovery = 98.72%
Co 228.616†            25974.5      493.13 ug/L         2.686      493.13 ppb          2.686   0.54%
   QC value within limits for Co 228.616  Recovery = 98.63%
Cr 267.716†            46695.2      490.97 ug/L         0.400      490.97 ppb          0.400   0.08%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†           170381.8      487.84 ug/L         2.179      487.84 ppb          2.179   0.45%
   QC value within limits for Cu 324.752  Recovery = 97.57%
Fe 238.204 Radial†       527.9      4957.6 ug/L         29.40      4957.6 ppb          29.40   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.15%
K 766.490 Radial†      30243.9      5355.1 ug/L         27.45      5355.1 ppb          27.45   0.51%
   QC value within limits for K 766.490 Radial  Recovery = 107.10%
Mg 279.077 IEC†          147.1      5195.9 ug/L         48.14      5195.9 ppb          48.14   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†           461135.9      492.31 ug/L         0.390      492.31 ppb          0.390   0.08%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             7831.8      497.88 ug/L         2.135      497.88 ppb          2.135   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     27260.4      9148.1 ug/L         29.43      9148.1 ppb          29.43   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 91.48%
Ni 231.604†            21315.7      493.28 ug/L         0.574      493.28 ppb          0.574   0.12%
   QC value within limits for Ni 231.604  Recovery = 98.66%
P 214.914†              4227.9      2364.7 ug/L         14.81      2364.7 ppb          14.81   0.63%
   QC value within limits for P 214.914  Recovery = 94.59%
Pb 220.353†             4346.5      492.90 ug/L         0.915      492.90 ppb          0.915   0.19%
   QC value within limits for Pb 220.353  Recovery = 98.58%
S 181.975 Axial†         718.6      1005.9 ug/L          4.92      1005.9 ppb           4.92   0.49%
   QC value within limits for S 181.975 Axial  Recovery = 100.59%
Sb 206.836†             1601.6      514.20 ug/L         3.082      514.20 ppb          3.082   0.60%
   QC value within limits for Sb 206.836  Recovery = 102.84%
Se 196.026†              855.4      512.61 ug/L         5.748      512.61 ppb          5.748   1.12%
   QC value within limits for Se 196.026  Recovery = 102.52%
Si 251.611†            82447.5      2456.1 ug/L          8.75      2456.1 ppb           8.75   0.36%
   QC value within limits for Si 251.611  Recovery = 98.24%
Sn 189.927†             3048.1      499.65 ug/L         1.532      499.65 ppb          1.532   0.31%
   QC value within limits for Sn 189.927  Recovery = 99.93%
Sr 421.552†            79005.5      491.98 ug/L         0.445      491.98 ppb          0.445   0.09%
   QC value within limits for Sr 421.552  Recovery = 98.40%
Ti 334.940†           311495.6      496.96 ug/L         2.090      496.96 ppb          2.090   0.42%
   QC value within limits for Ti 334.940  Recovery = 99.39%
Tl 190.801†             1764.6      497.42 ug/L         1.546      497.42 ppb          1.546   0.31%
   QC value within limits for Tl 190.801  Recovery = 99.48%
U 409.014†             17761.6      487.71 ug/L         4.243      487.71 ppb          4.243   0.87%
   QC value within limits for U 409.014  Recovery = 97.54%
V 292.402†             74022.7      495.60 ug/L         0.899      495.60 ppb          0.899   0.18%
   QC value within limits for V 292.402  Recovery = 99.12%
Zn 213.857†            56670.3      490.71 ug/L         1.599      490.71 ppb          1.599   0.33%
   QC value within limits for Zn 213.857  Recovery = 98.14%
SiO2†                  82856.0      5288.9 ug/L         28.64      5288.9 ppb          28.64   0.54%
   QC value within limits for SiO2  Recovery = 98.90%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 08:54:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.9	5848.9	100	%			08:55:57
1	Y RADIAL	6279.8	6279.8	99.87	%			08:55:57
1	Al 396.153Radial†	-26.0	-5.6	-3.9206	ug/L	-3.9206	ppb	08:55:57
1	Ca 317.933Radial†	21.0	5.4	7.9071	ug/L	7.9071	ppb	08:56:17
1	Fe 238.204 Radial†	5.7	-1.1	-10.330	ug/L	-10.330	ppb	08:56:17
1	K 766.490 Radial†	3182.5	828.1	146.83	ug/L	146.83	ppb	08:55:57
1	Mg 279.077 IEC†	2.1	1.0	34.534	ug/L	34.534	ppb	08:56:17
1	Na 589.592 Radial†	-941.9	146.9	49.290	ug/L	49.290	ppb	08:55:57
1	Sr 421.552†	15.9	43.3	0.2694	ug/L	0.2694	ppb	08:55:57
1	Sc 361.383	901425.1	901425.1	100.02	%			08:57:14
1	Y 371.029	753544.9	753544.9	100.33	%			08:57:14
1	Ag 328.068†	368.5	75.7	0.3398	ug/L	0.3398	ppb	08:57:14
1	As 188.979†	15.2	39.3	15.531	ug/L	15.531	ppb	08:57:34
1	B 249.677†	312.7	843.3	17.688	ug/L	17.688	ppb	08:57:34
1	Ba 233.527†	11.1	19.6	0.1457	ug/L	0.1457	ppb	08:57:34
1	Be 313.107†	-4890.2	223.7	0.0819	ug/L	0.0819	ppb	08:57:14
1	Cd 226.502†	-156.4	38.7	0.4107	ug/L	0.4107	ppb	08:57:34
1	Co 228.616†	-74.1	-8.7	-0.1627	ug/L	-0.1627	ppb	08:57:34
1	Cr 267.716†	79.8	1.2	0.0123	ug/L	0.0123	ppb	08:57:34
1	Cu 324.752†	6899.0	141.1	0.4032	ug/L	0.4032	ppb	08:57:14
1	Mn 257.610†	479.6	57.2	0.0593	ug/L	0.0593	ppb	08:57:34
1	Mo 202.031†	34.7	16.4	1.0403	ug/L	1.0403	ppb	08:57:34
1	Ni 231.604†	94.7	8.1	0.1884	ug/L	0.1884	ppb	08:57:34
1	P 214.914†	218.2	-5.3	-3.0892	ug/L	-3.0892	ppb	08:57:34
1	Pb 220.353†	-50.4	18.1	2.0453	ug/L	2.0453	ppb	08:57:34
1	S 181.975 Axial†	42.4	0.8	1.0843	ug/L	1.0843	ppb	08:57:34
1	Sb 206.836†	62.0	27.7	8.8422	ug/L	8.8422	ppb	08:57:34
1	Se 196.026†	-16.2	12.6	7.2774	ug/L	7.2774	ppb	08:57:34
1	Si 251.611†	602.0	152.3	4.4842	ug/L	4.4842	ppb	08:57:34
1	Sn 189.927†	18.6	13.6	2.2351	ug/L	2.2351	ppb	08:57:34
1	Ti 334.940†	-1003.7	111.4	0.1774	ug/L	0.1774	ppb	08:57:14
1	Tl 190.801†	-20.6	11.9	3.3333	ug/L	3.3333	ppb	08:57:34
1	U 409.014†	-2337.6	64.6	1.7809	ug/L	1.7809	ppb	08:57:14
1	V 292.402†	-1287.7	70.9	0.4890	ug/L	0.4890	ppb	08:57:14
1	Zn 213.857†	853.4	231.4	2.0199	ug/L	2.0199	ppb	08:57:34
1	SiO2†	567.6	100.0	6.2536	ug/L	6.2536	ppb	08:58:30
2	Sc Radial	5763.2	5763.2	98.6	%			08:56:22
2	Y RADIAL	6204.0	6204.0	98.67	%			08:56:22
2	Al 396.153Radial†	-35.2	-15.2	-10.645	ug/L	-10.645	ppb	08:56:22
2	Ca 317.933Radial†	18.1	2.8	4.1167	ug/L	4.1167	ppb	08:56:42
2	Fe 238.204 Radial†	8.3	1.6	14.665	ug/L	14.665	ppb	08:56:42
2	K 766.490 Radial†	3056.0	747.1	132.47	ug/L	132.47	ppb	08:56:22
2	Mg 279.077 IEC†	0.6	-0.6	-19.519	ug/L	-19.519	ppb	08:56:42
2	Na 589.592 Radial†	-945.8	128.9	43.263	ug/L	43.263	ppb	08:56:22
2	Sr 421.552†	-26.0	1.0	0.0062	ug/L	0.0062	ppb	08:56:22
2	Sc 361.383	904499.4	904499.4	100.36	%			08:57:39
2	Y 371.029	753447.4	753447.4	100.31	%			08:57:39
2	Ag 328.068†	351.8	57.8	0.2600	ug/L	0.2600	ppb	08:57:39
2	As 188.979†	11.6	35.7	14.109	ug/L	14.109	ppb	08:57:59
2	B 249.677†	271.6	801.3	16.804	ug/L	16.804	ppb	08:57:59
2	Ba 233.527†	-16.9	-8.4	-0.0622	ug/L	-0.0622	ppb	08:57:59
2	Be 313.107†	-5037.8	93.2	0.0338	ug/L	0.0338	ppb	08:57:39
2	Cd 226.502†	-148.0	47.6	0.5021	ug/L	0.5021	ppb	08:57:59
2	Co 228.616†	-75.2	-9.5	-0.1759	ug/L	-0.1759	ppb	08:57:59
2	Cr 267.716†	96.7	17.7	0.1836	ug/L	0.1836	ppb	08:57:59
2	Cu 324.752†	6834.9	53.7	0.1545	ug/L	0.1545	ppb	08:57:39
2	Mn 257.610†	476.0	52.0	0.0573	ug/L	0.0573	ppb	08:57:59
2	Mo 202.031†	41.2	22.7	1.4411	ug/L	1.4411	ppb	08:57:59
2	Ni 231.604†	102.3	15.4	0.3561	ug/L	0.3561	ppb	08:57:59

2	P 214.914†	217.8	-6.5	-3.7894	ug/L	-3.7894 ppb	08:57:59
2	Pb 220.353†	-42.2	26.4	2.9877	ug/L	2.9877 ppb	08:57:59
2	S 181.975 Axial†	42.4	0.7	0.9493	ug/L	0.9493 ppb	08:57:59
2	Sb 206.836†	61.2	26.7	8.5108	ug/L	8.5108 ppb	08:57:59
2	Se 196.026†	-30.8	-1.9	-1.0542	ug/L	-1.0542 ppb	08:57:59
2	Si 251.611†	599.3	147.4	4.3396	ug/L	4.3396 ppb	08:57:59
2	Sn 189.927†	15.2	10.1	1.6614	ug/L	1.6614 ppb	08:57:59
2	Ti 334.940†	-1183.0	-63.8	-0.1044	ug/L	-0.1044 ppb	08:57:39
2	Tl 190.801†	-30.7	1.9	0.5410	ug/L	0.5410 ppb	08:57:59
2	U 409.014†	-2192.6	217.1	5.9770	ug/L	5.9770 ppb	08:57:39
2	V 292.402†	-1417.6	-54.1	-0.3279	ug/L	-0.3279 ppb	08:57:39
2	Zn 213.857†	827.2	202.4	1.7647	ug/L	1.7647 ppb	08:57:59
2	SiO2†	578.3	108.8	6.8154	ug/L	6.8154 ppb	08:58:35
3	Sc Radial	5778.5	5778.5	98.9	%		08:56:47
3	Y RADIAL	6196.6	6196.6	98.55	%		08:56:47
3	Al 396.153Radial†	-13.1	7.2	4.9512	ug/L	4.9512 ppb	08:56:47
3	Ca 317.933Radial†	17.3	1.9	2.8636	ug/L	2.8636 ppb	08:57:07
3	Fe 238.204 Radial†	5.3	-1.4	-13.193	ug/L	-13.193 ppb	08:57:07
3	K 766.490 Radial†	3077.8	760.9	134.91	ug/L	134.91 ppb	08:56:47
3	Mg 279.077 IEC†	2.2	1.0	36.914	ug/L	36.914 ppb	08:57:07
3	Na 589.592 Radial†	-940.2	137.1	45.999	ug/L	45.999 ppb	08:56:47
3	Sr 421.552†	-14.7	12.4	0.0774	ug/L	0.0774 ppb	08:56:47
3	Sc 361.383	901678.2	901678.2	100.05	%		08:58:05
3	Y 371.029	751276.9	751276.9	100.03	%		08:58:05
3	Ag 328.068†	353.0	60.1	0.2640	ug/L	0.2640 ppb	08:58:05
3	As 188.979†	1.1	25.2	9.9656	ug/L	9.9656 ppb	08:58:25
3	B 249.677†	234.5	765.1	16.046	ug/L	16.046 ppb	08:58:25
3	Ba 233.527†	16.8	25.3	0.1861	ug/L	0.1861 ppb	08:58:25
3	Be 313.107†	-4967.7	147.6	0.0540	ug/L	0.0540 ppb	08:58:05
3	Cd 226.502†	-152.4	42.8	0.4533	ug/L	0.4533 ppb	08:58:25
3	Co 228.616†	-67.8	-2.4	-0.0438	ug/L	-0.0438 ppb	08:58:25
3	Cr 267.716†	87.7	9.0	0.0923	ug/L	0.0923 ppb	08:58:25
3	Cu 324.752†	6900.3	140.5	0.4013	ug/L	0.4013 ppb	08:58:05
3	Mn 257.610†	424.4	1.9	0.0000	ug/L	0.0000 ppb	08:58:25
3	Mo 202.031†	28.5	10.1	0.6413	ug/L	0.6413 ppb	08:58:25
3	Ni 231.604†	91.4	4.8	0.1114	ug/L	0.1114 ppb	08:58:25
3	P 214.914†	212.5	-11.1	-6.4313	ug/L	-6.4313 ppb	08:58:25
3	Pb 220.353†	-56.8	11.7	1.3264	ug/L	1.3264 ppb	08:58:25
3	S 181.975 Axial†	35.8	-5.8	-8.1206	ug/L	-8.1206 ppb	08:58:25
3	Sb 206.836†	49.5	15.2	4.8512	ug/L	4.8512 ppb	08:58:25
3	Se 196.026†	-26.0	2.9	1.6149	ug/L	1.6149 ppb	08:58:25
3	Si 251.611†	583.4	133.4	3.9342	ug/L	3.9342 ppb	08:58:25
3	Sn 189.927†	13.7	8.8	1.4330	ug/L	1.4330 ppb	08:58:25
3	Ti 334.940†	-1043.5	71.9	0.1135	ug/L	0.1135 ppb	08:58:05
3	Tl 190.801†	-33.7	-1.2	-0.3407	ug/L	-0.3407 ppb	08:58:25
3	U 409.014†	-2289.9	113.0	3.1135	ug/L	3.1135 ppb	08:58:05
3	V 292.402†	-1405.9	-46.9	-0.2917	ug/L	-0.2917 ppb	08:58:05
3	Zn 213.857†	837.0	214.7	1.8749	ug/L	1.8749 ppb	08:58:25
3	SiO2†	586.3	118.6	7.4719	ug/L	7.4719 ppb	08:58:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902534.2	100.14	%	0.189				0.19%
Sc Radial	5796.9	99.2	%	0.78				0.79%
Y 371.029	752756.4	100.22	%	0.171				0.17%
Y RADIAL	6226.8	99.03	%	0.732				0.74%
Ag 328.068†	64.5	0.2879	ug/L	0.04497	0.2879	ppb	0.04497	15.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.5	-3.2049	ug/L	7.82294	-3.2049	ppb	7.82294	244.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	33.4	13.202	ug/L	2.8916	13.202	ppb	2.8916	21.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	803.2	16.846	ug/L	0.8218	16.846	ppb	0.8218	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0899	ug/L	0.13323	0.0899	ppb	0.13323	148.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.8	0.0566	ug/L	0.02416	0.0566	ppb	0.02416	42.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9625	ug/L	2.62598	4.9625	ppb	2.62598	52.92%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                43.0      0.4554 ug/L       0.04576      0.4554 ppb        0.04576  10.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.9     -0.1275 ug/L       0.07277     -0.1275 ppb        0.07277  57.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 9.3      0.0961 ug/L       0.08574      0.0961 ppb        0.08574  89.25%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               111.8      0.3197 ug/L       0.14300      0.3197 ppb        0.14300  44.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.3     -2.9527 ug/L      15.32419     -2.9527 ppb       15.32419 518.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         778.7      138.07 ug/L         7.683      138.07 ppb          7.683   5.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.5      17.309 ug/L       31.9168      17.309 ppb        31.9168 184.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                37.0      0.0389 ug/L       0.03368      0.0389 ppb        0.03368  86.60%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                16.4      1.0409 ug/L       0.39988      1.0409 ppb        0.39988  38.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        137.6      46.184 ug/L        3.0177      46.184 ppb         3.0177   6.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.4      0.2186 ug/L       0.12512      0.2186 ppb        0.12512  57.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.6     -4.4366 ug/L       1.76250     -4.4366 ppb        1.76250  39.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                18.7      2.1198 ug/L       0.83315      2.1198 ppb        0.83315  39.30%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.4     -2.0290 ug/L       5.27591     -2.0290 ppb        5.27591 260.03%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                23.2      7.4014 ug/L       2.21472      7.4014 ppb        2.21472  29.92%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 4.5      2.6127 ug/L       4.25448      2.6127 ppb        4.25448 162.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               144.4      4.2527 ug/L       0.28511      4.2527 ppb        0.28511   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.8      1.7765 ug/L       0.41326      1.7765 ppb        0.41326  23.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.9      0.1177 ug/L       0.13614      0.1177 ppb        0.13614 115.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                39.8      0.0622 ug/L       0.14773      0.0622 ppb        0.14773 237.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.2      1.1779 ug/L       1.91799      1.1779 ppb        1.91799 162.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                131.5      3.6238 ug/L       2.14410      3.6238 ppb        2.14410  59.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -10.0     -0.0436 ug/L       0.46154     -0.0436 ppb        0.46154 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               216.2      1.8865 ug/L       0.12801      1.8865 ppb        0.12801   6.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     109.1      6.8470 ug/L       0.60978      6.8470 ppb        0.60978   8.91%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 09:04:46 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/8/2009 07:33:15**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 37**
Sample ID: LR1 **Date Collected: 12/8/2009 09:04:47**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5674.8	5674.8	97.1	%			09:06:40
1	Y RADIAL	6109.0	6109.0	97.16	%			09:06:40
1	Al 396.153Radial†	-44.6	-25.5	-16.605	ug/L	-16.605	ppb	09:06:40

1	Ca 317.933Radial†	48.4	34.2	50.475 ug/L	50.475 ppb	09:07:00
1	Fe 238.204 Radial†	39249.2	40411.8	378330 ug/L	378330 ppb	09:06:40
1	K 766.490 Radial†	2474.7	196.7	47.290 ug/L	47.290 ppb	09:06:40
1	Mg 279.077 IEC†	8.2	7.2	-68.508 ug/L	-68.508 ppb	09:07:00
1	Na 589.592 Radial†	-982.9	75.8	25.423 ug/L	25.423 ppb	09:06:40
1	Sr 421.552†	73.8	103.4	0.6433 ug/L	0.6433 ppb	09:06:40
1	Sc 361.383	897521.6	897521.6	99.585 %		09:07:58
1	Y 371.029	739294.0	739294.0	98.430 %		09:07:58
1	Ag 328.068†	-25481.6	-25880.6	3.3525 ug/L	3.3525 ppb	09:07:58
1	As 188.979†	-214.5	-191.2	-17.133 ug/L	-17.133 ppb	09:08:18
1	B 249.677†	2487.7	3028.7	13.314 ug/L	13.314 ppb	09:07:58
1	Ba 233.527†	-1770.5	-1769.5	1.0427 ug/L	1.0427 ppb	09:07:58
1	Be 313.107†	-4846.7	246.1	0.0894 ug/L	0.0894 ppb	09:07:58
1	Cd 226.502†	3574.9	3784.9	2.1903 ug/L	2.1903 ppb	09:07:58
1	Co 228.616†	211.8	278.1	-0.1855 ug/L	-0.1855 ppb	09:08:18
1	Cr 267.716†	-619.6	-700.8	-0.5095 ug/L	-0.5095 ppb	09:07:58
1	Cu 324.752†	21.2	-6735.4	0.0244 ug/L	0.0244 ppb	09:07:58
1	Mn 257.610†	-37238.4	-37815.9	-2.6165 ug/L	-2.6165 ppb	09:07:58
1	Mo 202.031†	-382.7	-402.6	1.2600 ug/L	1.2600 ppb	09:07:58
1	Ni 231.604†	208.3	122.6	2.8363 ug/L	2.8363 ppb	09:08:18
1	P 214.914†	753.0	532.6	5.1179 ug/L	5.1179 ppb	09:08:18
1	Pb 220.353†	220.4	289.7	1.6461 ug/L	1.6461 ppb	09:08:18
1	S 181.975 Axial†	53.1	11.7	16.442 ug/L	16.442 ppb	09:08:18
1	Sb 206.836†	31.2	-3.0	4.8987 ug/L	4.8987 ppb	09:08:18
1	Se 196.026†	-2121.3	-2101.3	-23.019 ug/L	-23.019 ppb	09:08:18
1	Si 251.611†	-704.3	-1156.9	-34.181 ug/L	-34.181 ppb	09:07:58
1	Sn 189.927†	-28.8	-33.9	-0.4826 ug/L	-0.4826 ppb	09:08:18
1	Ti 334.940†	-1214.7	-104.8	-0.1851 ug/L	-0.1851 ppb	09:07:58
1	Tl 190.801†	-43.3	-10.9	-3.4531 ug/L	-3.4531 ppb	09:08:18
1	U 409.014†	-505.7	1894.0	4.5915 ug/L	4.5915 ppb	09:07:58
1	V 292.402†	7050.4	8438.2	-2.0700 ug/L	-2.0700 ppb	09:07:58
1	Zn 213.857†	4885.8	4284.4	1.3044 ug/L	1.3044 ppb	09:08:18
1	SiO2†	-783.5	-1254.3	-79.480 ug/L	-79.480 ppb	09:09:15
2	Sc Radial	5859.6	5859.6	100 %		09:07:05
2	Y RADIAL	6268.0	6268.0	99.69 %		09:07:05
2	Al 396.153Radial†	-53.2	-32.6	-21.569 ug/L	-21.569 ppb	09:07:05
2	Ca 317.933Radial†	51.5	35.8	52.701 ug/L	52.701 ppb	09:07:25
2	Fe 238.204 Radial†	39706.4	39593.5	370670 ug/L	370670 ppb	09:07:05
2	K 766.490 Radial†	2416.7	58.5	22.531 ug/L	22.531 ppb	09:07:05
2	Mg 279.077 IEC†	7.2	6.0	-104.83 ug/L	-104.83 ppb	09:07:25
2	Na 589.592 Radial†	-981.9	108.7	36.480 ug/L	36.480 ppb	09:07:05
2	Sr 421.552†	69.0	96.2	0.5986 ug/L	0.5986 ppb	09:07:05
2	Sc 361.383	892276.6	892276.6	99.003 %		09:08:24
2	Y 371.029	734022.9	734022.9	97.728 %		09:08:24
2	Ag 328.068†	-25591.8	-26142.3	-0.2725 ug/L	-0.2725 ppb	09:08:24
2	As 188.979†	-212.9	-190.9	-18.162 ug/L	-18.162 ppb	09:08:44
2	B 249.677†	2371.1	2925.6	12.168 ug/L	12.168 ppb	09:08:24
2	Ba 233.527†	-1757.7	-1767.0	0.7774 ug/L	0.7774 ppb	09:08:24
2	Be 313.107†	-4974.3	88.6	0.0322 ug/L	0.0322 ppb	09:08:24
2	Cd 226.502†	3528.9	3759.6	2.6878 ug/L	2.6878 ppb	09:08:24
2	Co 228.616†	210.9	278.5	-0.0703 ug/L	-0.0703 ppb	09:08:44
2	Cr 267.716†	-604.4	-689.1	-0.5247 ug/L	-0.5247 ppb	09:08:24
2	Cu 324.752†	24.9	-6731.6	-0.3556 ug/L	-0.3556 ppb	09:08:24
2	Mn 257.610†	-37010.4	-37805.5	-3.3686 ug/L	-3.3686 ppb	09:08:24
2	Mo 202.031†	-385.1	-407.3	0.4165 ug/L	0.4165 ppb	09:08:24
2	Ni 231.604†	185.1	100.5	2.3228 ug/L	2.3228 ppb	09:08:44
2	P 214.914†	738.7	522.7	5.5558 ug/L	5.5558 ppb	09:08:44
2	Pb 220.353†	220.1	290.8	2.3945 ug/L	2.3945 ppb	09:08:44
2	S 181.975 Axial†	57.0	16.0	22.396 ug/L	22.396 ppb	09:08:44
2	Sb 206.836†	24.3	-9.7	2.6260 ug/L	2.6260 ppb	09:08:44
2	Se 196.026†	-2108.8	-2101.2	-47.131 ug/L	-47.131 ppb	09:08:44
2	Si 251.611†	-790.8	-1248.4	-36.906 ug/L	-36.906 ppb	09:08:24
2	Sn 189.927†	-30.1	-35.3	-0.8273 ug/L	-0.8273 ppb	09:08:44
2	Ti 334.940†	-1122.8	-19.2	-0.0494 ug/L	-0.0494 ppb	09:08:24
2	Tl 190.801†	-38.2	-6.0	-2.0739 ug/L	-2.0739 ppb	09:08:44
2	U 409.014†	-422.2	1975.4	7.7953 ug/L	7.7953 ppb	09:08:24
2	V 292.402†	7016.4	8445.5	-0.8577 ug/L	-0.8577 ppb	09:08:24
2	Zn 213.857†	4882.3	4309.7	2.2615 ug/L	2.2615 ppb	09:08:44
2	SiO2†	-749.4	-1224.4	-77.532 ug/L	-77.532 ppb	09:09:20
3	Sc Radial	5765.3	5765.3	98.7 %		09:07:30
3	Y RADIAL	6199.1	6199.1	98.59 %		09:07:30

3	Al 396.153Radial†	-80.6	-61.3	-41.455	ug/L	-41.455 ppb	09:07:30
3	Ca 317.933Radial†	48.2	33.3	49.051	ug/L	49.051 ppb	09:07:50
3	Fe 238.204 Radial†	39281.5	39810.2	372700	ug/L	372700 ppb	09:07:30
3	K 766.490 Radial†	2355.2	35.6	18.540	ug/L	18.540 ppb	09:07:30
3	Mg 279.077 IEC†	13.9	12.9	136.09	ug/L	136.09 ppb	09:07:50
3	Na 589.592 Radial†	-1033.0	40.9	13.709	ug/L	13.709 ppb	09:07:30
3	Sr 421.552†	60.1	88.3	0.5492	ug/L	0.5492 ppb	09:07:30
3	Sc 361.383	894183.3	894183.3	99.214	%		09:08:50
3	Y 371.029	735495.5	735495.5	97.925	%		09:08:50
3	Ag 328.068†	-25540.2	-26035.2	0.8586	ug/L	0.8586 ppb	09:08:50
3	As 188.979†	-218.4	-195.9	-19.849	ug/L	-19.849 ppb	09:09:10
3	B 249.677†	2406.5	2956.3	12.542	ug/L	12.542 ppb	09:08:50
3	Ba 233.527†	-1710.9	-1716.0	1.2281	ug/L	1.2281 ppb	09:08:50
3	Be 313.107†	-4932.6	141.3	0.0513	ug/L	0.0513 ppb	09:08:50
3	Cd 226.502†	3569.6	3793.0	2.8380	ug/L	2.8380 ppb	09:08:50
3	Co 228.616†	200.3	267.3	-0.3114	ug/L	-0.3114 ppb	09:09:10
3	Cr 267.716†	-627.3	-710.9	-0.7171	ug/L	-0.7171 ppb	09:08:50
3	Cu 324.752†	-29.6	-6786.5	-0.4093	ug/L	-0.4093 ppb	09:08:50
3	Mn 257.610†	-37288.3	-38005.9	-3.3844	ug/L	-3.3844 ppb	09:08:50
3	Mo 202.031†	-394.6	-416.1	0.0069	ug/L	0.0069 ppb	09:08:50
3	Ni 231.604†	174.2	89.0	2.0577	ug/L	2.0577 ppb	09:09:10
3	P 214.914†	751.9	534.3	10.658	ug/L	10.658 ppb	09:09:10
3	Pb 220.353†	253.9	324.4	6.0178	ug/L	6.0178 ppb	09:09:10
3	S 181.975 Axial†	58.5	17.4	24.396	ug/L	24.396 ppb	09:09:10
3	Sb 206.836†	22.0	-12.1	1.9004	ug/L	1.9004 ppb	09:09:10
3	Se 196.026†	-2099.6	-2087.5	-32.776	ug/L	-32.776 ppb	09:09:10
3	Si 251.611†	-792.9	-1248.9	-36.910	ug/L	-36.910 ppb	09:08:50
3	Sn 189.927†	-27.3	-32.5	-0.3349	ug/L	-0.3349 ppb	09:09:10
3	Ti 334.940†	-1172.2	-66.6	-0.1230	ug/L	-0.1230 ppb	09:08:50
3	Tl 190.801†	-37.5	-5.3	-1.8614	ug/L	-1.8614 ppb	09:09:10
3	U 409.014†	-595.4	1801.7	2.7559	ug/L	2.7559 ppb	09:08:50
3	V 292.402†	6887.9	8300.8	-2.1334	ug/L	-2.1334 ppb	09:08:50
3	Zn 213.857†	4888.1	4305.0	2.0203	ug/L	2.0203 ppb	09:09:10
3	SiO2†	-772.8	-1246.4	-78.924	ug/L	-78.924 ppb	09:09:25

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894660.5	99.267	%	0.2946				0.30%
Sc Radial	5766.6	98.7	%	1.58				1.60%
Y 371.029	736270.8	98.028	%	0.3621				0.37%
Y RADIAL	6192.0	98.48	%	1.269				1.29%
Ag 328.068†	-26019.4	1.3128	ug/L	1.85472	1.3128	ppb	1.85472	141.28%
Al 396.153Radial†	-39.8	-26.543	ug/L	13.1508	-26.543	ppb	13.1508	49.55%
As 188.979†	-192.7	-18.381	ug/L	1.3714	-18.381	ppb	1.3714	7.46%
B 249.677†	2970.2	12.675	ug/L	0.5842	12.675	ppb	0.5842	4.61%
Ba 233.527†	-1750.8	1.0161	ug/L	0.22652	1.0161	ppb	0.22652	22.29%
Be 313.107†	158.7	0.0576	ug/L	0.02910	0.0576	ppb	0.02910	50.48%
Ca 317.933Radial†	34.4	50.742	ug/L	1.8397	50.742	ppb	1.8397	3.63%
Cd 226.502†	3779.2	2.5720	ug/L	0.33898	2.5720	ppb	0.33898	13.18%
Co 228.616†	274.6	-0.1891	ug/L	0.12058	-0.1891	ppb	0.12058	63.77%
Cr 267.716†	-700.3	-0.5838	ug/L	0.11570	-0.5838	ppb	0.11570	19.82%
Cu 324.752†	-6751.2	-0.2468	ug/L	0.23640	-0.2468	ppb	0.23640	95.77%
Fe 238.204 Radial†	39938.5	373900	ug/L	3969.2	373900	ppb	3969.2	1.06%
K 766.490 Radial†	97.0	29.454	ug/L	15.5752	29.454	ppb	15.5752	52.88%
Mg 279.077 IEC†	8.7	-12.417	ug/L	129.8883	-12.417	ppb	129.8883	>999.9%
Mn 257.610†	-37875.8	-3.1232	ug/L	0.43887	-3.1232	ppb	0.43887	14.05%
Mo 202.031†	-408.7	0.5611	ug/L	0.63894	0.5611	ppb	0.63894	113.87%
Na 589.592 Radial†	75.1	25.204	ug/L	11.3872	25.204	ppb	11.3872	45.18%
Ni 231.604†	104.0	2.4056	ug/L	0.39584	2.4056	ppb	0.39584	16.45%
P 214.914†	529.9	7.1105	ug/L	3.07985	7.1105	ppb	3.07985	43.31%
Pb 220.353†	301.6	3.3528	ug/L	2.33809	3.3528	ppb	2.33809	69.74%
S 181.975 Axial†	15.0	21.078	ug/L	4.1374	21.078	ppb	4.1374	19.63%
Sb 206.836†	-8.2	3.1417	ug/L	1.56424	3.1417	ppb	1.56424	49.79%
Se 196.026†	-2096.7	-34.309	ug/L	12.1289	-34.309	ppb	12.1289	35.35%
Si 251.611†	-1218.1	-35.999	ug/L	1.5747	-35.999	ppb	1.5747	4.37%
Sn 189.927†	-33.9	-0.5483	ug/L	0.25266	-0.5483	ppb	0.25266	46.08%
Sr 421.552†	95.9	0.5970	ug/L	0.04707	0.5970	ppb	0.04707	7.88%
Ti 334.940†	-63.5	-0.1192	ug/L	0.06791	-0.1192	ppb	0.06791	56.99%
Tl 190.801†	-7.4	-2.4628	ug/L	0.86420	-2.4628	ppb	0.86420	35.09%

U 409.014†	1890.4	5.0475	ug/L	2.55046	5.0475	ppb	2.55046	50.53%
V 292.402†	8394.8	-1.6870	ug/L	0.71891	-1.6870	ppb	0.71891	42.61%
Zn 213.857†	4299.7	1.8621	ug/L	0.49779	1.8621	ppb	0.49779	26.73%
SiO2†	-1241.7	-78.646	ug/L	1.0035	-78.646	ppb	1.0035	1.28%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5760.8	5760.8	98.6	%			09:13:29
1	Y RADIAL	6116.4	6116.4	97.27	%			09:13:29
1	Al 396.153Radial†	7034.5	7156.4	4950.1	ug/L	4950.1	ppb	09:13:29
1	Ca 317.933Radial†	3364.6	3397.5	5007.8	ug/L	5007.8	ppb	09:13:49
1	Fe 238.204 Radial†	538.1	539.0	5061.5	ug/L	5061.5	ppb	09:13:49
1	K 766.490 Radial†	31007.5	29103.4	5152.6	ug/L	5152.6	ppb	09:13:29
1	Mg 279.077 IEC†	150.9	151.9	5364.4	ug/L	5364.4	ppb	09:13:49
1	Na 589.592 Radial†	26896.4	28372.6	9521.3	ug/L	9521.3	ppb	09:13:29
1	Sr 421.552†	79592.9	80769.1	502.96	ug/L	502.96	ppb	09:13:29
1	Sc 361.383	922734.0	922734.0	102.38	%			09:14:46
1	Y 371.029	754063.7	754063.7	100.40	%			09:14:46
1	Ag 328.068†	110965.4	108090.8	492.60	ug/L	492.60	ppb	09:14:51
1	As 188.979†	1231.3	1226.8	489.06	ug/L	489.06	ppb	09:15:12
1	B 249.677†	22929.7	22926.9	478.90	ug/L	478.90	ppb	09:14:51
1	Ba 233.527†	66920.1	65371.5	485.75	ug/L	485.75	ppb	09:14:51
1	Be 313.107†	1375184.7	1348300.4	492.42	ug/L	492.42	ppb	09:14:46
1	Cd 226.502†	46992.1	46093.8	487.09	ug/L	487.09	ppb	09:14:51
1	Co 228.616†	26129.9	25587.3	485.77	ug/L	485.77	ppb	09:14:51
1	Cr 267.716†	47317.9	46138.3	485.11	ug/L	485.11	ppb	09:14:51
1	Cu 324.752†	177843.4	166948.7	478.02	ug/L	478.02	ppb	09:14:51
1	Mn 257.610†	471345.6	459956.2	491.06	ug/L	491.06	ppb	09:14:46
1	Mo 202.031†	7882.8	7681.1	488.31	ug/L	488.31	ppb	09:15:12
1	Ni 231.604†	21715.5	21123.7	488.84	ug/L	488.84	ppb	09:14:51
1	P 214.914†	4481.1	4153.3	2323.1	ug/L	2323.1	ppb	09:15:12
1	Pb 220.353†	4313.2	4281.3	485.50	ug/L	485.50	ppb	09:15:12
1	S 181.975 Axial†	757.5	698.3	977.50	ug/L	977.50	ppb	09:15:12
1	Sb 206.836†	1596.8	1525.4	489.90	ug/L	489.90	ppb	09:15:12
1	Se 196.026†	838.3	847.6	508.44	ug/L	508.44	ppb	09:15:12
1	Si 251.611†	83061.3	80679.0	2403.4	ug/L	2403.4	ppb	09:14:51
1	Sn 189.927†	3071.2	2994.7	490.93	ug/L	490.93	ppb	09:15:12
1	Ti 334.940†	312506.5	306350.1	488.75	ug/L	488.75	ppb	09:14:51
1	Tl 190.801†	1729.6	1721.8	485.42	ug/L	485.42	ppb	09:15:12
1	U 409.014†	15419.3	17462.3	479.47	ug/L	479.47	ppb	09:14:51
1	V 292.402†	73201.8	72857.0	487.74	ug/L	487.74	ppb	09:14:51
1	Zn 213.857†	57549.1	55588.2	481.28	ug/L	481.28	ppb	09:14:51
1	SiO2†	83836.2	81418.0	5197.2	ug/L	5197.2	ppb	09:16:19
2	Sc Radial	5745.5	5745.5	98.3	%			09:13:54
2	Y RADIAL	6192.6	6192.6	98.49	%			09:13:54
2	Al 396.153Radial†	7003.1	7143.6	4941.1	ug/L	4941.1	ppb	09:13:54
2	Ca 317.933Radial†	3363.9	3406.0	5020.2	ug/L	5020.2	ppb	09:14:14
2	Fe 238.204 Radial†	533.2	535.5	5028.9	ug/L	5028.9	ppb	09:14:14
2	K 766.490 Radial†	30739.7	28914.8	5119.2	ug/L	5119.2	ppb	09:13:54
2	Mg 279.077 IEC†	147.9	149.3	5273.6	ug/L	5273.6	ppb	09:14:14
2	Na 589.592 Radial†	26537.9	28080.6	9423.3	ug/L	9423.3	ppb	09:13:54
2	Sr 421.552†	78795.9	80173.6	499.25	ug/L	499.25	ppb	09:13:54
2	Sc 361.383	918645.3	918645.3	101.93	%			09:15:17
2	Y 371.029	749404.0	749404.0	99.776	%			09:15:17
2	Ag 328.068†	111114.6	108719.5	495.44	ug/L	495.44	ppb	09:15:22
2	As 188.979†	1241.3	1241.9	495.05	ug/L	495.05	ppb	09:15:43
2	B 249.677†	22912.8	23009.9	480.64	ug/L	480.64	ppb	09:15:22
2	Ba 233.527†	66956.5	65698.1	488.17	ug/L	488.17	ppb	09:15:22
2	Be 313.107†	1358622.3	1338029.7	488.68	ug/L	488.68	ppb	09:15:17
2	Cd 226.502†	46897.3	46205.1	488.27	ug/L	488.27	ppb	09:15:22
2	Co 228.616†	26185.9	25755.9	488.97	ug/L	488.97	ppb	09:15:22
2	Cr 267.716†	47298.1	46324.5	487.07	ug/L	487.07	ppb	09:15:22
2	Cu 324.752†	178329.4	168198.6	481.59	ug/L	481.59	ppb	09:15:22
2	Mn 257.610†	468894.0	459600.0	490.68	ug/L	490.68	ppb	09:15:17
2	Mo 202.031†	7898.2	7730.5	491.44	ug/L	491.44	ppb	09:15:43
2	Ni 231.604†	21658.2	21161.9	489.72	ug/L	489.72	ppb	09:15:22

2	P 214.914†	4481.9	4173.6	2334.2 ug/L	2334.2 ppb	09:15:43
2	Pb 220.353†	4305.7	4292.7	486.80 ug/L	486.80 ppb	09:15:43
2	S 181.975 Axial†	742.6	687.0	961.68 ug/L	961.68 ppb	09:15:43
2	Sb 206.836†	1611.4	1546.7	496.65 ug/L	496.65 ppb	09:15:43
2	Se 196.026†	816.5	829.9	498.09 ug/L	498.09 ppb	09:15:43
2	Si 251.611†	83451.2	81422.6	2425.7 ug/L	2425.7 ppb	09:15:22
2	Sn 189.927†	3064.3	3001.3	492.00 ug/L	492.00 ppb	09:15:43
2	Ti 334.940†	313467.9	308651.9	492.42 ug/L	492.42 ppb	09:15:22
2	Tl 190.801†	1733.8	1733.5	488.68 ug/L	488.68 ppb	09:15:43
2	U 409.014†	15637.9	17743.9	487.22 ug/L	487.22 ppb	09:15:22
2	V 292.402†	73233.5	73206.2	490.11 ug/L	490.11 ppb	09:15:22
2	Zn 213.857†	57577.9	55866.6	483.71 ug/L	483.71 ppb	09:15:22
2	SiO2†	84539.8	82472.9	5264.8 ug/L	5264.8 ppb	09:16:24
3	Sc Radial	5870.9	5870.9	100 %		09:14:19
3	Y RADIAL	6265.4	6265.4	99.64 %		09:14:19
3	Al 396.153Radial†	7091.8	7079.6	4896.6 ug/L	4896.6 ppb	09:14:19
3	Ca 317.933Radial†	3390.8	3359.6	4951.9 ug/L	4951.9 ppb	09:14:39
3	Fe 238.204 Radial†	544.0	534.7	5021.2 ug/L	5021.2 ppb	09:14:39
3	K 766.490 Radial†	31070.1	28575.4	5059.1 ug/L	5059.1 ppb	09:14:19
3	Mg 279.077 IEC†	148.1	146.3	5165.6 ug/L	5165.6 ppb	09:14:39
3	Na 589.592 Radial†	26868.9	27833.2	9340.3 ug/L	9340.3 ppb	09:14:19
3	Sr 421.552†	79717.2	79377.6	494.30 ug/L	494.30 ppb	09:14:19
3	Sc 361.383	925667.8	925667.8	102.71 %		09:15:48
3	Y 371.029	756709.0	756709.0	100.75 %		09:15:48
3	Ag 328.068†	111245.2	108019.7	492.26 ug/L	492.26 ppb	09:15:53
3	As 188.979†	1236.1	1227.6	489.36 ug/L	489.36 ppb	09:16:14
3	B 249.677†	23103.8	23025.4	480.97 ug/L	480.97 ppb	09:15:53
3	Ba 233.527†	66683.4	64933.9	482.50 ug/L	482.50 ppb	09:15:53
3	Be 313.107†	1368635.9	1337667.3	488.54 ug/L	488.54 ppb	09:15:48
3	Cd 226.502†	46751.6	45714.1	483.07 ug/L	483.07 ppb	09:15:53
3	Co 228.616†	26093.7	25471.2	483.57 ug/L	483.57 ppb	09:15:53
3	Cr 267.716†	47245.6	45921.4	482.83 ug/L	482.83 ppb	09:15:53
3	Cu 324.752†	179081.9	167604.0	479.89 ug/L	479.89 ppb	09:15:53
3	Mn 257.610†	469661.4	456857.3	487.75 ug/L	487.75 ppb	09:15:48
3	Mo 202.031†	7946.8	7719.0	490.71 ug/L	490.71 ppb	09:16:14
3	Ni 231.604†	21620.0	20963.5	485.13 ug/L	485.13 ppb	09:15:53
3	P 214.914†	4497.4	4155.4	2324.0 ug/L	2324.0 ppb	09:16:14
3	Pb 220.353†	4343.4	4297.4	487.32 ug/L	487.32 ppb	09:16:14
3	S 181.975 Axial†	765.5	703.7	985.12 ug/L	985.12 ppb	09:16:14
3	Sb 206.836†	1633.4	1556.1	499.75 ug/L	499.75 ppb	09:16:14
3	Se 196.026†	833.8	840.6	504.26 ug/L	504.26 ppb	09:16:14
3	Si 251.611†	83304.0	80658.2	2402.8 ug/L	2402.8 ppb	09:15:53
3	Sn 189.927†	3097.9	3011.3	493.62 ug/L	493.62 ppb	09:16:14
3	Ti 334.940†	313165.7	306024.6	488.23 ug/L	488.23 ppb	09:15:53
3	Tl 190.801†	1748.1	1734.5	488.96 ug/L	488.96 ppb	09:16:14
3	U 409.014†	15443.1	17437.8	478.80 ug/L	478.80 ppb	09:15:53
3	V 292.402†	73192.0	72620.7	486.22 ug/L	486.22 ppb	09:15:53
3	Zn 213.857†	57567.6	55428.1	479.91 ug/L	479.91 ppb	09:15:53
3	SiO2†	83513.2	80844.1	5160.3 ug/L	5160.3 ppb	09:16:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922349.0	102.34	%	0.391				0.38%
Sc Radial	5792.4	99.1	%	1.17				1.18%
Y 371.029	753392.2	100.31	%	0.492				0.49%
Y RADIAL	6191.5	98.47	%	1.186				1.20%
Ag 328.068†	108276.7	493.43	ug/L	1.746	493.43	ppb	1.746	0.35%
QC value within limits for Ag 328.068 Recovery = 98.69%								
Al 396.153Radial†	7126.5	4929.3	ug/L	28.62	4929.3	ppb	28.62	0.58%
QC value within limits for Al 396.153Radial Recovery = 98.59%								
As 188.979†	1232.1	491.16	ug/L	3.377	491.16	ppb	3.377	0.69%
QC value within limits for As 188.979 Recovery = 98.23%								
B 249.677†	22987.4	480.17	ug/L	1.114	480.17	ppb	1.114	0.23%
QC value within limits for B 249.677 Recovery = 96.03%								
Ba 233.527†	65334.5	485.48	ug/L	2.846	485.48	ppb	2.846	0.59%
QC value within limits for Ba 233.527 Recovery = 97.10%								
Be 313.107†	1341332.5	489.88	ug/L	2.199	489.88	ppb	2.199	0.45%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	3387.7	4993.3	ug/L	36.39	4993.3	ppb	36.39	0.73%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.87%
Cd 226.502†            46004.4      486.14 ug/L        2.722      486.14 ppb          2.722   0.56%
   QC value within limits for Cd 226.502  Recovery = 97.23%
Co 228.616†            25604.8      486.10 ug/L        2.713      486.10 ppb          2.713   0.56%
   QC value within limits for Co 228.616  Recovery = 97.22%
Cr 267.716†            46128.1      485.01 ug/L        2.120      485.01 ppb          2.120   0.44%
   QC value within limits for Cr 267.716  Recovery = 97.00%
Cu 324.752†           167583.8      479.83 ug/L        1.788      479.83 ppb          1.788   0.37%
   QC value within limits for Cu 324.752  Recovery = 95.97%
Fe 238.204 Radial†       536.4      5037.2 ug/L       21.40      5037.2 ppb         21.40   0.42%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      28864.5      5110.3 ug/L       47.39      5110.3 ppb         47.39   0.93%
   QC value within limits for K 766.490 Radial  Recovery = 102.21%
Mg 279.077 IEC†          149.2      5267.9 ug/L       99.54      5267.9 ppb         99.54   1.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.36%
Mn 257.610†           458804.5      489.83 ug/L        1.809      489.83 ppb          1.809   0.37%
   QC value within limits for Mn 257.610  Recovery = 97.97%
Mo 202.031†             7710.2      490.15 ug/L        1.640      490.15 ppb          1.640   0.33%
   QC value within limits for Mo 202.031  Recovery = 98.03%
Na 589.592 Radial†     28095.5      9428.3 ug/L       90.60      9428.3 ppb         90.60   0.96%
   QC value within limits for Na 589.592 Radial  Recovery = 94.28%
Ni 231.604†            21083.0      487.90 ug/L        2.436      487.90 ppb          2.436   0.50%
   QC value within limits for Ni 231.604  Recovery = 97.58%
P 214.914†              4160.8      2327.1 ug/L        6.18      2327.1 ppb          6.18   0.27%
   QC value within limits for P 214.914  Recovery = 93.08%
Pb 220.353†             4290.5      486.54 ug/L        0.936      486.54 ppb          0.936   0.19%
   QC value within limits for Pb 220.353  Recovery = 97.31%
S 181.975 Axial†         696.3      974.77 ug/L       11.960      974.77 ppb         11.960   1.23%
   QC value within limits for S 181.975 Axial  Recovery = 97.48%
Sb 206.836†             1542.7      495.43 ug/L        5.037      495.43 ppb          5.037   1.02%
   QC value within limits for Sb 206.836  Recovery = 99.09%
Se 196.026†              839.4      503.59 ug/L        5.207      503.59 ppb          5.207   1.03%
   QC value within limits for Se 196.026  Recovery = 100.72%
Si 251.611†            80919.9      2410.6 ug/L       13.01      2410.6 ppb         13.01   0.54%
   QC value within limits for Si 251.611  Recovery = 96.43%
Sn 189.927†             3002.4      492.18 ug/L        1.357      492.18 ppb          1.357   0.28%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            80106.8      498.84 ug/L        4.348      498.84 ppb          4.348   0.87%
   QC value within limits for Sr 421.552  Recovery = 99.77%
Ti 334.940†           307008.9      489.80 ug/L        2.284      489.80 ppb          2.284   0.47%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†             1729.9      487.69 ug/L        1.971      487.69 ppb          1.971   0.40%
   QC value within limits for Tl 190.801  Recovery = 97.54%
U 409.014†             17548.0      481.83 ug/L        4.683      481.83 ppb          4.683   0.97%
   QC value within limits for U 409.014  Recovery = 96.37%
V 292.402†             72894.6      488.02 ug/L        1.960      488.02 ppb          1.960   0.40%
   QC value within limits for V 292.402  Recovery = 97.60%
Zn 213.857†            55627.6      481.63 ug/L        1.922      481.63 ppb          1.922   0.40%
   QC value within limits for Zn 213.857  Recovery = 96.33%
SiO2†                  81578.3      5207.4 ug/L       52.96      5207.4 ppb         52.96   1.02%
   QC value within limits for SiO2  Recovery = 97.38%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:18:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5673.3	5673.3	97.1	%			09:20:32
1	Y RADIAL	6094.3	6094.3	96.92	%			09:20:32
1	Al 396.153Radial†	-30.7	-11.2	-7.7882	ug/L	-7.7882	ppb	09:20:32
1	Ca 317.933Radial†	21.1	6.1	9.0265	ug/L	9.0265	ppb	09:20:52
1	Fe 238.204 Radial†	7.9	1.3	12.187	ug/L	12.187	ppb	09:20:52
1	K 766.490 Radial†	2609.3	336.1	59.601	ug/L	59.601	ppb	09:20:32
1	Mg 279.077 IEC†	2.8	1.7	61.423	ug/L	61.423	ppb	09:20:52
1	Na 589.592 Radial†	-1099.0	-44.1	-14.808	ug/L	-14.808	ppb	09:20:32
1	Sr 421.552†	0.7	28.1	0.1748	ug/L	0.1748	ppb	09:20:32
1	Sc 361.383	904057.2	904057.2	100.31	%			09:21:49
1	Y 371.029	754720.7	754720.7	100.48	%			09:21:49
1	Ag 328.068†	312.9	19.2	0.0919	ug/L	0.0919	ppb	09:21:49
1	As 188.979†	-23.0	1.2	0.4798	ug/L	0.4798	ppb	09:22:09
1	B 249.677†	-87.7	443.2	9.2934	ug/L	9.2934	ppb	09:22:09
1	Ba 233.527†	-11.7	-3.2	-0.0229	ug/L	-0.0229	ppb	09:22:09
1	Be 313.107†	-4874.0	254.1	0.0927	ug/L	0.0927	ppb	09:21:49
1	Cd 226.502†	-179.4	16.3	0.1714	ug/L	0.1714	ppb	09:22:09
1	Co 228.616†	-79.9	-14.3	-0.2709	ug/L	-0.2709	ppb	09:22:09
1	Cr 267.716†	68.7	-10.1	-0.1056	ug/L	-0.1056	ppb	09:22:09
1	Cu 324.752†	6725.9	-51.6	-0.1469	ug/L	-0.1469	ppb	09:21:49
1	Mn 257.610†	420.1	-3.5	-0.0036	ug/L	-0.0036	ppb	09:22:09
1	Mo 202.031†	18.8	0.4	0.0244	ug/L	0.0244	ppb	09:22:09
1	Ni 231.604†	113.9	27.0	0.6255	ug/L	0.6255	ppb	09:22:09
1	P 214.914†	226.0	1.7	1.0491	ug/L	1.0491	ppb	09:22:09
1	Pb 220.353†	-56.2	12.4	1.4025	ug/L	1.4025	ppb	09:22:09
1	S 181.975 Axial†	39.2	-2.5	-3.4623	ug/L	-3.4623	ppb	09:22:09
1	Sb 206.836†	40.8	6.4	2.0583	ug/L	2.0583	ppb	09:22:09
1	Se 196.026†	-27.6	1.3	0.7972	ug/L	0.7972	ppb	09:22:09
1	Si 251.611†	479.1	28.0	0.8114	ug/L	0.8114	ppb	09:22:09
1	Sn 189.927†	17.7	12.7	2.0783	ug/L	2.0783	ppb	09:22:09
1	Ti 334.940†	-1083.6	34.6	0.0561	ug/L	0.0561	ppb	09:21:49
1	Tl 190.801†	-28.5	4.1	1.1534	ug/L	1.1534	ppb	09:22:09
1	U 409.014†	-2434.0	-24.7	-0.6809	ug/L	-0.6809	ppb	09:21:49
1	V 292.402†	-1342.8	19.7	0.1285	ug/L	0.1285	ppb	09:21:49
1	Zn 213.857†	711.6	87.6	0.7583	ug/L	0.7583	ppb	09:22:09
1	SiO2†	526.8	57.7	3.6408	ug/L	3.6408	ppb	09:23:05
2	Sc Radial	5946.6	5946.6	102	%			09:20:57
2	Y RADIAL	6401.7	6401.7	101.8	%			09:20:57
2	Al 396.153Radial†	-7.9	12.7	8.7846	ug/L	8.7846	ppb	09:20:57
2	Ca 317.933Radial†	24.4	8.4	12.347	ug/L	12.347	ppb	09:21:17
2	Fe 238.204 Radial†	8.6	1.6	15.360	ug/L	15.360	ppb	09:21:17
2	K 766.490 Radial†	2552.1	156.3	27.714	ug/L	27.714	ppb	09:20:57
2	Mg 279.077 IEC†	0.8	-0.4	-14.689	ug/L	-14.689	ppb	09:21:17
2	Na 589.592 Radial†	-1075.1	31.4	10.531	ug/L	10.531	ppb	09:20:57
2	Sr 421.552†	-38.2	-10.2	-0.0635	ug/L	-0.0635	ppb	09:20:57
2	Sc 361.383	913109.6	913109.6	101.31	%			09:22:14
2	Y 371.029	762217.3	762217.3	101.48	%			09:22:14
2	Ag 328.068†	373.3	75.7	0.3473	ug/L	0.3473	ppb	09:22:14
2	As 188.979†	-22.0	2.5	0.9795	ug/L	0.9795	ppb	09:22:34
2	B 249.677†	-143.7	388.9	8.1531	ug/L	8.1531	ppb	09:22:34
2	Ba 233.527†	-8.4	0.2	0.0033	ug/L	0.0033	ppb	09:22:34
2	Be 313.107†	-4965.6	211.8	0.0770	ug/L	0.0770	ppb	09:22:14
2	Cd 226.502†	-173.3	24.0	0.2526	ug/L	0.2526	ppb	09:22:34
2	Co 228.616†	-67.4	-1.1	-0.0193	ug/L	-0.0193	ppb	09:22:34
2	Cr 267.716†	75.4	-4.2	-0.0439	ug/L	-0.0439	ppb	09:22:34
2	Cu 324.752†	6711.1	-132.7	-0.3789	ug/L	-0.3789	ppb	09:22:14
2	Mn 257.610†	437.1	9.1	0.0115	ug/L	0.0115	ppb	09:22:34
2	Mo 202.031†	27.1	8.4	0.5349	ug/L	0.5349	ppb	09:22:34
2	Ni 231.604†	93.1	5.4	0.1242	ug/L	0.1242	ppb	09:22:34

2	P 214.914†	209.0	-17.2	-9.8660	ug/L	-9.8660 ppb	09:22:34
2	Pb 220.353†	-64.7	4.6	0.5214	ug/L	0.5214 ppb	09:22:34
2	S 181.975 Axial†	41.5	-0.6	-0.8812	ug/L	-0.8812 ppb	09:22:34
2	Sb 206.836†	44.6	9.8	3.1149	ug/L	3.1149 ppb	09:22:34
2	Se 196.026†	-31.9	-2.7	-1.4810	ug/L	-1.4810 ppb	09:22:34
2	Si 251.611†	482.1	26.2	0.7650	ug/L	0.7650 ppb	09:22:34
2	Sn 189.927†	8.0	2.9	0.4693	ug/L	0.4693 ppb	09:22:34
2	Ti 334.940†	-1207.0	-76.4	-0.1226	ug/L	-0.1226 ppb	09:22:14
2	Tl 190.801†	-28.9	4.0	1.1274	ug/L	1.1274 ppb	09:22:34
2	U 409.014†	-2327.4	104.7	2.8810	ug/L	2.8810 ppb	09:22:14
2	V 292.402†	-1294.0	81.1	0.5465	ug/L	0.5465 ppb	09:22:14
2	Zn 213.857†	712.1	81.1	0.7069	ug/L	0.7069 ppb	09:22:34
2	SiO2†	494.8	20.9	1.2965	ug/L	1.2965 ppb	09:23:10
3	Sc Radial	5965.8	5965.8	102	%		09:21:22
3	Y RADIAL	6390.8	6390.8	101.6	%		09:21:22
3	Al 396.153Radial†	-18.0	2.8	1.8837	ug/L	1.8837 ppb	09:21:22
3	Ca 317.933Radial†	21.0	5.0	7.3675	ug/L	7.3675 ppb	09:21:42
3	Fe 238.204 Radial†	8.8	1.8	17.163	ug/L	17.163 ppb	09:21:42
3	K 766.490 Radial†	2654.1	248.2	44.012	ug/L	44.012 ppb	09:21:22
3	Mg 279.077 IEC†	2.7	1.5	51.921	ug/L	51.921 ppb	09:21:42
3	Na 589.592 Radial†	-1140.7	-29.5	-9.8839	ug/L	-9.8839 ppb	09:21:22
3	Sr 421.552†	-12.2	15.4	0.0956	ug/L	0.0956 ppb	09:21:22
3	Sc 361.383	916495.3	916495.3	101.69	%		09:22:39
3	Y 371.029	767046.2	767046.2	102.13	%		09:22:39
3	Ag 328.068†	305.8	8.0	0.0385	ug/L	0.0385 ppb	09:22:39
3	As 188.979†	-16.6	7.9	3.1139	ug/L	3.1139 ppb	09:22:59
3	B 249.677†	-153.3	379.9	7.9653	ug/L	7.9653 ppb	09:22:59
3	Ba 233.527†	-1.6	6.9	0.0519	ug/L	0.0519 ppb	09:22:59
3	Be 313.107†	-4926.0	268.9	0.0981	ug/L	0.0981 ppb	09:22:39
3	Cd 226.502†	-178.1	19.9	0.2092	ug/L	0.2092 ppb	09:22:59
3	Co 228.616†	-68.9	-2.4	-0.0426	ug/L	-0.0426 ppb	09:22:59
3	Cr 267.716†	77.8	-2.2	-0.0234	ug/L	-0.0234 ppb	09:22:59
3	Cu 324.752†	6814.0	-56.0	-0.1594	ug/L	-0.1594 ppb	09:22:39
3	Mn 257.610†	440.3	10.7	0.0122	ug/L	0.0122 ppb	09:22:59
3	Mo 202.031†	34.1	15.2	0.9654	ug/L	0.9654 ppb	09:22:59
3	Ni 231.604†	98.7	10.5	0.2430	ug/L	0.2430 ppb	09:22:59
3	P 214.914†	223.4	-3.8	-2.1956	ug/L	-2.1956 ppb	09:22:59
3	Pb 220.353†	-65.7	3.8	0.4307	ug/L	0.4307 ppb	09:22:59
3	S 181.975 Axial†	39.1	-3.1	-4.3810	ug/L	-4.3810 ppb	09:22:59
3	Sb 206.836†	43.6	8.7	2.7720	ug/L	2.7720 ppb	09:22:59
3	Se 196.026†	-25.3	3.9	2.3314	ug/L	2.3314 ppb	09:22:59
3	Si 251.611†	505.4	47.3	1.3841	ug/L	1.3841 ppb	09:22:59
3	Sn 189.927†	6.5	1.4	0.2312	ug/L	0.2312 ppb	09:22:59
3	Ti 334.940†	-1100.5	32.7	0.0506	ug/L	0.0506 ppb	09:22:39
3	Tl 190.801†	-31.0	2.0	0.5543	ug/L	0.5543 ppb	09:22:59
3	U 409.014†	-2281.5	158.3	4.3581	ug/L	4.3581 ppb	09:22:39
3	V 292.402†	-1351.2	29.6	0.2165	ug/L	0.2165 ppb	09:22:39
3	Zn 213.857†	707.0	73.4	0.6366	ug/L	0.6366 ppb	09:22:59
3	SiO2†	503.4	27.6	1.6973	ug/L	1.6973 ppb	09:23:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911220.7	101.10	%	0.714				0.71%
Sc Radial	5861.9	100	%	2.8				2.79%
Y 371.029	761328.0	101.36	%	0.827				0.82%
Y RADIAL	6295.6	100.1	%	2.77				2.77%
Ag 328.068†	34.3	0.1592	ug/L	0.16502	0.1592	ppb	0.16502	103.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.4	0.9600	ug/L	8.32490	0.9600	ppb	8.32490	867.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.9	1.5244	ug/L	1.39905	1.5244	ppb	1.39905	91.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	404.0	8.4706	ug/L	0.71870	8.4706	ppb	0.71870	8.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.3	0.0108	ug/L	0.03799	0.0108	ppb	0.03799	352.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	244.9	0.0893	ug/L	0.01098	0.0893	ppb	0.01098	12.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.5	9.5803	ug/L	2.53552	9.5803	ppb	2.53552	26.47%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              20.1      0.2111 ug/L       0.04065      0.2111 ppb        0.04065  19.26%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -5.9     -0.1109 ug/L       0.13905     -0.1109 ppb        0.13905 125.33%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -5.5     -0.0576 ug/L       0.04278     -0.0576 ppb        0.04278  74.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -80.1     -0.2284 ug/L       0.13050     -0.2284 ppb        0.13050  57.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.6      14.903 ug/L        2.5196      14.903 ppb         2.5196  16.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       246.8      43.776 ug/L       15.9447      43.776 ppb        15.9447  36.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.9      32.885 ug/L       41.4731      32.885 ppb        41.4731 126.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               5.5      0.0067 ug/L       0.00894      0.0067 ppb        0.00894 133.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.0      0.5082 ug/L       0.47108      0.5082 ppb        0.47108  92.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -14.1     -4.7202 ug/L      13.43550     -4.7202 ppb       13.43550 284.64%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              14.3      0.3309 ug/L       0.26193      0.3309 ppb        0.26193  79.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -6.4     -3.6708 ug/L       5.60512     -3.6708 ppb        5.60512 152.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.9      0.7849 ug/L       0.53682      0.7849 ppb        0.53682  68.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.1     -2.9082 ug/L       1.81452     -2.9082 ppb        1.81452  62.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.3      2.6484 ug/L       0.53904      2.6484 ppb        0.53904  20.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.9      0.5492 ug/L       1.91828      0.5492 ppb        1.91828 349.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              33.8      0.9868 ug/L       0.34483      0.9868 ppb        0.34483  34.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.6      0.9263 ug/L       1.00478      0.9263 ppb        1.00478 108.48%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              11.1      0.0690 ug/L       0.12137      0.0690 ppb        0.12137 175.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -3.0     -0.0053 ug/L       0.10161     -0.0053 ppb        0.10161 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.4      0.9450 ug/L       0.33865      0.9450 ppb        0.33865  35.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               79.4      2.1861 ug/L       2.59036      2.1861 ppb        2.59036 118.49%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               43.5      0.2972 ug/L       0.22039      0.2972 ppb        0.22039  74.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              80.7      0.7006 ug/L       0.06110      0.7006 ppb        0.06110   8.72%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    35.4      2.2115 ug/L       1.25386      2.2115 ppb        1.25386  56.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:52:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5798.3	5798.3	99.2	%			09:54:38
1	Y RADIAL	6170.9	6170.9	98.14	%			09:54:38
1	Al 396.153Radial†	7003.2	7078.7	4895.8	ug/L	4895.8	ppb	09:54:38
1	Ca 317.933Radial†	3348.4	3359.1	4951.2	ug/L	4951.2	ppb	09:54:58
1	Fe 238.204 Radial†	532.5	529.9	4976.0	ug/L	4976.0	ppb	09:54:58
1	K 766.490 Radial†	30386.2	28273.5	5005.6	ug/L	5005.6	ppb	09:54:38
1	Mg 279.077 IEC†	143.2	143.2	5056.6	ug/L	5056.6	ppb	09:54:58
1	Na 589.592 Radial†	26305.9	27600.8	9262.3	ug/L	9262.3	ppb	09:54:38
1	Sr 421.552†	78338.6	78982.3	491.84	ug/L	491.84	ppb	09:54:38
1	Sc 361.383	913291.3	913291.3	101.33	%			09:55:55
1	Y 371.029	746166.9	746166.9	99.345	%			09:55:55
1	Ag 328.068†	111619.8	109857.2	500.60	ug/L	500.60	ppb	09:56:00
1	As 188.979†	1235.9	1243.8	495.83	ug/L	495.83	ppb	09:56:20
1	B 249.677†	22935.9	23164.5	483.87	ug/L	483.87	ppb	09:56:00
1	Ba 233.527†	67190.5	66314.2	492.75	ug/L	492.75	ppb	09:56:00
1	Be 313.107†	1363119.3	1350281.4	493.16	ug/L	493.16	ppb	09:55:55
1	Cd 226.502†	47270.4	46843.0	495.02	ug/L	495.02	ppb	09:56:00
1	Co 228.616†	26329.1	26047.8	494.52	ug/L	494.52	ppb	09:56:00
1	Cr 267.716†	47557.2	46852.2	492.62	ug/L	492.62	ppb	09:56:00
1	Cu 324.752†	179106.7	169991.4	486.72	ug/L	486.72	ppb	09:56:00
1	Mn 257.610†	467768.4	461186.1	492.37	ug/L	492.37	ppb	09:55:55
1	Mo 202.031†	7951.8	7828.7	497.68	ug/L	497.68	ppb	09:56:20
1	Ni 231.604†	21776.8	21403.5	495.31	ug/L	495.31	ppb	09:56:00
1	P 214.914†	4496.3	4213.6	2356.6	ug/L	2356.6	ppb	09:56:20
1	Pb 220.353†	4324.7	4336.2	491.73	ug/L	491.73	ppb	09:56:20
1	S 181.975 Axial†	761.4	709.8	993.59	ug/L	993.59	ppb	09:56:20
1	Sb 206.836†	1610.3	1554.9	499.36	ug/L	499.36	ppb	09:56:20
1	Se 196.026†	830.1	847.9	508.36	ug/L	508.36	ppb	09:56:20
1	Si 251.611†	83663.7	82112.3	2446.2	ug/L	2446.2	ppb	09:56:00
1	Sn 189.927†	3087.2	3041.6	498.59	ug/L	498.59	ppb	09:56:20
1	Ti 334.940†	314687.5	311658.3	497.22	ug/L	497.22	ppb	09:56:00
1	Tl 190.801†	1737.0	1746.6	492.37	ug/L	492.37	ppb	09:56:20
1	U 409.014†	15597.8	17794.2	488.61	ug/L	488.61	ppb	09:56:00
1	V 292.402†	73648.2	74036.7	495.68	ug/L	495.68	ppb	09:56:00
1	Zn 213.857†	57897.4	56513.1	489.33	ug/L	489.33	ppb	09:56:00
1	SiO2†	82623.5	81068.0	5174.4	ug/L	5174.4	ppb	09:57:28
2	Sc Radial	5699.5	5699.5	97.5	%			09:55:03
2	Y RADIAL	6095.6	6095.6	96.94	%			09:55:03
2	Al 396.153Radial†	6983.8	7181.2	4967.1	ug/L	4967.1	ppb	09:55:03
2	Ca 317.933Radial†	3382.0	3452.1	5088.2	ug/L	5088.2	ppb	09:55:23
2	Fe 238.204 Radial†	536.3	543.1	5100.2	ug/L	5100.2	ppb	09:55:23
2	K 766.490 Radial†	30276.6	28692.1	5079.8	ug/L	5079.8	ppb	09:55:03
2	Mg 279.077 IEC†	148.2	150.8	5324.3	ug/L	5324.3	ppb	09:55:23
2	Na 589.592 Radial†	26033.4	27781.1	9322.8	ug/L	9322.8	ppb	09:55:03
2	Sr 421.552†	77942.2	79944.7	497.83	ug/L	497.83	ppb	09:55:03
2	Sc 361.383	917308.5	917308.5	101.78	%			09:56:26
2	Y 371.029	749645.7	749645.7	99.808	%			09:56:26
2	Ag 328.068†	112752.9	110488.1	503.50	ug/L	503.50	ppb	09:56:31
2	As 188.979†	1226.0	1228.7	489.90	ug/L	489.90	ppb	09:56:51
2	B 249.677†	23222.7	23347.2	487.68	ug/L	487.68	ppb	09:56:31
2	Ba 233.527†	68008.6	66827.5	496.57	ug/L	496.57	ppb	09:56:31
2	Be 313.107†	1371532.3	1352656.2	494.03	ug/L	494.03	ppb	09:56:26
2	Cd 226.502†	47576.1	46939.1	496.02	ug/L	496.02	ppb	09:56:31
2	Co 228.616†	26565.9	26166.7	496.75	ug/L	496.75	ppb	09:56:31
2	Cr 267.716†	48003.3	47085.1	495.07	ug/L	495.07	ppb	09:56:31
2	Cu 324.752†	181535.2	171603.3	491.34	ug/L	491.34	ppb	09:56:31
2	Mn 257.610†	470796.4	462139.6	493.39	ug/L	493.39	ppb	09:56:26
2	Mo 202.031†	7918.0	7761.2	493.40	ug/L	493.40	ppb	09:56:51
2	Ni 231.604†	21967.0	21496.2	497.46	ug/L	497.46	ppb	09:56:31

2	P 214.914†	4508.4	4206.0	2351.4 ug/L	2351.4 ppb	09:56:51
2	Pb 220.353†	4313.4	4306.4	488.35 ug/L	488.35 ppb	09:56:51
2	S 181.975 Axial†	750.8	696.1	974.45 ug/L	974.45 ppb	09:56:51
2	Sb 206.836†	1620.0	1557.5	499.99 ug/L	499.99 ppb	09:56:51
2	Se 196.026†	819.8	834.2	500.83 ug/L	500.83 ppb	09:56:51
2	Si 251.611†	84641.3	82711.1	2464.2 ug/L	2464.2 ppb	09:56:31
2	Sn 189.927†	3086.1	3027.1	496.23 ug/L	496.23 ppb	09:56:51
2	Ti 334.940†	318134.5	313685.0	500.46 ug/L	500.46 ppb	09:56:31
2	Tl 190.801†	1738.7	1740.8	490.77 ug/L	490.77 ppb	09:56:51
2	U 409.014†	15717.0	17843.9	489.96 ug/L	489.96 ppb	09:56:31
2	V 292.402†	74442.7	74499.0	498.66 ug/L	498.66 ppb	09:56:31
2	Zn 213.857†	58410.1	56766.6	491.50 ug/L	491.50 ppb	09:56:31
2	SiO2†	83428.0	81501.3	5202.4 ug/L	5202.4 ppb	09:57:33
3	Sc Radial	5781.7	5781.7	98.9 %		09:55:28
3	Y RADIAL	6134.2	6134.2	97.56 %		09:55:28
3	Al 396.153Radial†	7144.4	7241.7	5009.0 ug/L	5009.0 ppb	09:55:28
3	Ca 317.933Radial†	3390.8	3411.7	5028.7 ug/L	5028.7 ppb	09:55:48
3	Fe 238.204 Radial†	533.2	532.2	4997.9 ug/L	4997.9 ppb	09:55:48
3	K 766.490 Radial†	31003.1	28985.2	5131.8 ug/L	5131.8 ppb	09:55:28
3	Mg 279.077 IEC†	146.5	146.9	5189.7 ug/L	5189.7 ppb	09:55:48
3	Na 589.592 Radial†	26404.0	27776.3	9321.2 ug/L	9321.2 ppb	09:55:28
3	Sr 421.552†	79363.0	80245.0	499.70 ug/L	499.70 ppb	09:55:28
3	Sc 361.383	911611.3	911611.3	101.15 %		09:56:57
3	Y 371.029	745769.9	745769.9	99.292 %		09:56:57
3	Ag 328.068†	112067.6	110502.8	503.55 ug/L	503.55 ppb	09:57:02
3	As 188.979†	1237.5	1247.6	497.35 ug/L	497.35 ppb	09:57:22
3	B 249.677†	23101.5	23370.0	488.17 ug/L	488.17 ppb	09:57:02
3	Ba 233.527†	67671.0	66911.4	497.19 ug/L	497.19 ppb	09:57:02
3	Be 313.107†	1364038.9	1353669.5	494.40 ug/L	494.40 ppb	09:56:57
3	Cd 226.502†	47536.3	47191.8	498.71 ug/L	498.71 ppb	09:57:02
3	Co 228.616†	26480.7	26245.6	498.26 ug/L	498.26 ppb	09:57:02
3	Cr 267.716†	47913.3	47290.8	497.23 ug/L	497.23 ppb	09:57:02
3	Cu 324.752†	179727.3	170930.7	489.41 ug/L	489.41 ppb	09:57:02
3	Mn 257.610†	467403.8	461676.3	492.89 ug/L	492.89 ppb	09:56:57
3	Mo 202.031†	7909.1	7801.0	495.92 ug/L	495.92 ppb	09:57:22
3	Ni 231.604†	21876.1	21541.2	498.50 ug/L	498.50 ppb	09:57:02
3	P 214.914†	4487.9	4213.5	2356.1 ug/L	2356.1 ppb	09:57:22
3	Pb 220.353†	4324.6	4343.9	492.62 ug/L	492.62 ppb	09:57:22
3	S 181.975 Axial†	753.5	703.4	984.64 ug/L	984.64 ppb	09:57:22
3	Sb 206.836†	1616.8	1564.2	502.10 ug/L	502.10 ppb	09:57:22
3	Se 196.026†	830.8	850.1	509.72 ug/L	509.72 ppb	09:57:22
3	Si 251.611†	84048.4	82644.7	2462.1 ug/L	2462.1 ppb	09:57:02
3	Sn 189.927†	3062.7	3023.0	495.55 ug/L	495.55 ppb	09:57:22
3	Ti 334.940†	316195.2	313721.2	500.51 ug/L	500.51 ppb	09:57:02
3	Tl 190.801†	1738.8	1751.6	493.76 ug/L	493.76 ppb	09:57:22
3	U 409.014†	15569.6	17794.7	488.61 ug/L	488.61 ppb	09:57:02
3	V 292.402†	74329.4	74844.1	500.98 ug/L	500.98 ppb	09:57:02
3	Zn 213.857†	58136.8	56855.1	492.29 ug/L	492.29 ppb	09:57:02
3	SiO2†	82825.2	81417.6	5196.9 ug/L	5196.9 ppb	09:57:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	914070.4	101.42	%	0.325				0.32%
Sc Radial	5759.8	98.6	%	0.91				0.92%
Y 371.029	747194.2	99.482	%	0.2839				0.29%
Y RADIAL	6133.6	97.55	%	0.599				0.61%
Ag 328.068†	110282.7	502.55	ug/L	1.691	502.55	ppb	1.691	0.34%
QC value within limits for Ag 328.068 Recovery = 100.51%								
Al 396.153Radial†	7167.2	4957.3	ug/L	57.27	4957.3	ppb	57.27	1.16%
QC value within limits for Al 396.153Radial Recovery = 99.15%								
As 188.979†	1240.1	494.36	ug/L	3.935	494.36	ppb	3.935	0.80%
QC value within limits for As 188.979 Recovery = 98.87%								
B 249.677†	23293.9	486.57	ug/L	2.353	486.57	ppb	2.353	0.48%
QC value within limits for B 249.677 Recovery = 97.31%								
Ba 233.527†	66684.4	495.50	ug/L	2.403	495.50	ppb	2.403	0.49%
QC value within limits for Ba 233.527 Recovery = 99.10%								
Be 313.107†	1352202.4	493.86	ug/L	0.637	493.86	ppb	0.637	0.13%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	3407.6	5022.7	ug/L	68.70	5022.7	ppb	68.70	1.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.45%
Cd 226.502†            46991.3      496.58 ug/L         1.906      496.58 ppb          1.906   0.38%
   QC value within limits for Cd 226.502  Recovery = 99.32%
Co 228.616†            26153.3      496.51 ug/L         1.883      496.51 ppb          1.883   0.38%
   QC value within limits for Co 228.616  Recovery = 99.30%
Cr 267.716†            47076.0      494.97 ug/L         2.308      494.97 ppb          2.308   0.47%
   QC value within limits for Cr 267.716  Recovery = 98.99%
Cu 324.752†           170841.8      489.16 ug/L         2.320      489.16 ppb          2.320   0.47%
   QC value within limits for Cu 324.752  Recovery = 97.83%
Fe 238.204 Radial†       535.0      5024.7 ug/L        66.27      5024.7 ppb         66.27   1.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.49%
K 766.490 Radial†      28650.3      5072.4 ug/L        63.41      5072.4 ppb         63.41   1.25%
   QC value within limits for K 766.490 Radial  Recovery = 101.45%
Mg 279.077 IEC†          147.0      5190.2 ug/L       133.85      5190.2 ppb        133.85   2.58%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.80%
Mn 257.610†           461667.3      492.88 ug/L         0.512      492.88 ppb          0.512   0.10%
   QC value within limits for Mn 257.610  Recovery = 98.58%
Mo 202.031†             7797.0      495.67 ug/L         2.152      495.67 ppb          2.152   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.13%
Na 589.592 Radial†     27719.4      9302.1 ug/L        34.47      9302.1 ppb         34.47   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 93.02%
Ni 231.604†            21480.3      497.09 ug/L         1.625      497.09 ppb          1.625   0.33%
   QC value within limits for Ni 231.604  Recovery = 99.42%
P 214.914†              4211.0      2354.7 ug/L         2.87      2354.7 ppb          2.87   0.12%
   QC value within limits for P 214.914  Recovery = 94.19%
Pb 220.353†             4328.9      490.90 ug/L         2.250      490.90 ppb          2.250   0.46%
   QC value within limits for Pb 220.353  Recovery = 98.18%
S 181.975 Axial†         703.1      984.23 ug/L         9.577      984.23 ppb          9.577   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 98.42%
Sb 206.836†             1558.8      500.49 ug/L         1.436      500.49 ppb          1.436   0.29%
   QC value within limits for Sb 206.836  Recovery = 100.10%
Se 196.026†              844.1      506.30 ug/L         4.789      506.30 ppb          4.789   0.95%
   QC value within limits for Se 196.026  Recovery = 101.26%
Si 251.611†            82489.4      2457.5 ug/L         9.85      2457.5 ppb          9.85   0.40%
   QC value within limits for Si 251.611  Recovery = 98.30%
Sn 189.927†             3030.5      496.79 ug/L         1.593      496.79 ppb          1.593   0.32%
   QC value within limits for Sn 189.927  Recovery = 99.36%
Sr 421.552†            79724.0      496.45 ug/L         4.108      496.45 ppb          4.108   0.83%
   QC value within limits for Sr 421.552  Recovery = 99.29%
Ti 334.940†           313021.5      499.39 ug/L         1.886      499.39 ppb          1.886   0.38%
   QC value within limits for Ti 334.940  Recovery = 99.88%
Tl 190.801†             1746.4      492.30 ug/L         1.499      492.30 ppb          1.499   0.30%
   QC value within limits for Tl 190.801  Recovery = 98.46%
U 409.014†             17810.9      489.06 ug/L         0.779      489.06 ppb          0.779   0.16%
   QC value within limits for U 409.014  Recovery = 97.81%
V 292.402†             74459.9      498.44 ug/L         2.658      498.44 ppb          2.658   0.53%
   QC value within limits for V 292.402  Recovery = 99.69%
Zn 213.857†            56711.6      491.04 ug/L         1.532      491.04 ppb          1.532   0.31%
   QC value within limits for Zn 213.857  Recovery = 98.21%
SiO2†                  81329.0      5191.2 ug/L        14.79      5191.2 ppb         14.79   0.28%
   QC value within limits for SiO2  Recovery = 97.08%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5856.6	5856.6	100	%			10:01:40
1	Y RADIAL	6302.7	6302.7	100.2	%			10:01:40
1	Al 396.153Radial†	-34.9	-14.4	-10.047	ug/L	-10.047	ppb	10:01:40
1	Ca 317.933Radial†	25.4	9.8	14.456	ug/L	14.456	ppb	10:02:00
1	Fe 238.204 Radial†	10.4	3.5	33.153	ug/L	33.153	ppb	10:02:00
1	K 766.490 Radial†	2417.2	60.2	10.691	ug/L	10.691	ppb	10:01:40
1	Mg 279.077 IEC†	1.7	0.5	17.521	ug/L	17.521	ppb	10:02:00
1	Na 589.592 Radial†	-1131.4	-41.1	-13.778	ug/L	-13.778	ppb	10:01:40
1	Sr 421.552†	-11.1	16.3	0.1012	ug/L	0.1012	ppb	10:01:40
1	Sc 361.383	910453.7	910453.7	101.02	%			10:02:57
1	Y 371.029	761123.5	761123.5	101.34	%			10:02:57
1	Ag 328.068†	424.3	127.3	0.5854	ug/L	0.5854	ppb	10:02:57
1	As 188.979†	-20.3	4.1	1.6169	ug/L	1.6169	ppb	10:03:17
1	B 249.677†	-282.4	251.1	5.2624	ug/L	5.2624	ppb	10:03:17
1	Ba 233.527†	-10.7	-2.2	-0.0145	ug/L	-0.0145	ppb	10:03:17
1	Be 313.107†	-4984.1	179.2	0.0655	ug/L	0.0655	ppb	10:02:57
1	Cd 226.502†	-199.5	-2.4	-0.0279	ug/L	-0.0279	ppb	10:03:17
1	Co 228.616†	-71.1	-4.9	-0.0924	ug/L	-0.0924	ppb	10:03:17
1	Cr 267.716†	90.6	11.0	0.1154	ug/L	0.1154	ppb	10:03:17
1	Cu 324.752†	6722.7	-101.8	-0.2898	ug/L	-0.2898	ppb	10:02:57
1	Mn 257.610†	429.7	3.1	0.0062	ug/L	0.0062	ppb	10:03:17
1	Mo 202.031†	29.8	11.2	0.7111	ug/L	0.7111	ppb	10:03:17
1	Ni 231.604†	110.3	22.6	0.5242	ug/L	0.5242	ppb	10:03:17
1	P 214.914†	216.2	-9.5	-5.4823	ug/L	-5.4823	ppb	10:03:17
1	Pb 220.353†	-58.5	10.5	1.1878	ug/L	1.1878	ppb	10:03:17
1	S 181.975 Axial†	42.2	0.2	0.2210	ug/L	0.2210	ppb	10:03:17
1	Sb 206.836†	42.3	7.6	2.4420	ug/L	2.4420	ppb	10:03:17
1	Se 196.026†	-34.3	-5.1	-2.8713	ug/L	-2.8713	ppb	10:03:17
1	Si 251.611†	498.1	43.4	1.2818	ug/L	1.2818	ppb	10:03:17
1	Sn 189.927†	7.9	2.9	0.4713	ug/L	0.4713	ppb	10:03:17
1	Ti 334.940†	-1069.0	56.8	0.0901	ug/L	0.0901	ppb	10:02:57
1	Tl 190.801†	-32.9	-0.0	-0.0121	ug/L	-0.0121	ppb	10:03:17
1	U 409.014†	-2331.2	94.1	2.5885	ug/L	2.5885	ppb	10:02:57
1	V 292.402†	-1353.0	19.0	0.1359	ug/L	0.1359	ppb	10:02:57
1	Zn 213.857†	694.0	65.1	0.5621	ug/L	0.5621	ppb	10:03:17
1	SiO2†	465.2	-7.0	-0.4864	ug/L	-0.4864	ppb	10:04:13
2	Sc Radial	5902.5	5902.5	101	%			10:02:05
2	Y RADIAL	6366.5	6366.5	101.3	%			10:02:05
2	Al 396.153Radial†	-13.1	7.4	5.1522	ug/L	5.1522	ppb	10:02:05
2	Ca 317.933Radial†	20.3	4.5	6.7005	ug/L	6.7005	ppb	10:02:25
2	Fe 238.204 Radial†	5.6	-1.3	-11.735	ug/L	-11.735	ppb	10:02:25
2	K 766.490 Radial†	2448.0	72.0	12.773	ug/L	12.773	ppb	10:02:05
2	Mg 279.077 IEC†	2.0	0.9	30.205	ug/L	30.205	ppb	10:02:25
2	Na 589.592 Radial†	-1120.1	-21.0	-7.0524	ug/L	-7.0524	ppb	10:02:05
2	Sr 421.552†	-4.8	22.6	0.1409	ug/L	0.1409	ppb	10:02:05
2	Sc 361.383	906696.3	906696.3	100.60	%			10:03:22
2	Y 371.029	757143.8	757143.8	100.81	%			10:03:22
2	Ag 328.068†	460.3	164.8	0.7406	ug/L	0.7406	ppb	10:03:22
2	As 188.979†	-18.5	5.8	2.2924	ug/L	2.2924	ppb	10:03:42
2	B 249.677†	-286.2	246.2	5.1636	ug/L	5.1636	ppb	10:03:42
2	Ba 233.527†	-12.4	-3.8	-0.0285	ug/L	-0.0285	ppb	10:03:42
2	Be 313.107†	-4940.5	202.1	0.0737	ug/L	0.0737	ppb	10:03:22
2	Cd 226.502†	-189.0	7.3	0.0778	ug/L	0.0778	ppb	10:03:42
2	Co 228.616†	-61.9	3.9	0.0757	ug/L	0.0757	ppb	10:03:42
2	Cr 267.716†	76.6	-2.5	-0.0269	ug/L	-0.0269	ppb	10:03:42
2	Cu 324.752†	6780.8	-16.6	-0.0480	ug/L	-0.0480	ppb	10:03:22
2	Mn 257.610†	438.7	13.7	0.0129	ug/L	0.0129	ppb	10:03:42
2	Mo 202.031†	24.4	6.0	0.3775	ug/L	0.3775	ppb	10:03:42
2	Ni 231.604†	74.4	-12.6	-0.2911	ug/L	-0.2911	ppb	10:03:42

2	P 214.914†	211.6	-13.2	-7.5926 ug/L	-7.5926 ppb	10:03:42
2	Pb 220.353†	-63.4	5.4	0.6161 ug/L	0.6161 ppb	10:03:42
2	S 181.975 Axial†	45.7	3.9	5.4030 ug/L	5.4030 ppb	10:03:42
2	Sb 206.836†	42.8	8.3	2.6247 ug/L	2.6247 ppb	10:03:42
2	Se 196.026†	-24.4	4.6	2.6330 ug/L	2.6330 ppb	10:03:42
2	Si 251.611†	494.0	41.4	1.2271 ug/L	1.2271 ppb	10:03:42
2	Sn 189.927†	5.3	0.3	0.0474 ug/L	0.0474 ppb	10:03:42
2	Ti 334.940†	-1108.9	12.6	0.0192 ug/L	0.0192 ppb	10:03:22
2	Tl 190.801†	-30.9	1.8	0.5082 ug/L	0.5082 ppb	10:03:42
2	U 409.014†	-2307.9	107.7	2.9690 ug/L	2.9690 ppb	10:03:22
2	V 292.402†	-1348.2	18.2	0.1339 ug/L	0.1339 ppb	10:03:22
2	Zn 213.857†	689.0	63.0	0.5524 ug/L	0.5524 ppb	10:03:42
2	SiO2†	513.6	43.1	2.7395 ug/L	2.7395 ppb	10:04:18
3	Sc Radial	5922.3	5922.3	101 %		10:02:30
3	Y RADIAL	6371.5	6371.5	101.3 %		10:02:30
3	Al 396.153Radial†	-29.0	-8.2	-5.7155 ug/L	-5.7155 ppb	10:02:30
3	Ca 317.933Radial†	20.3	4.5	6.5597 ug/L	6.5597 ppb	10:02:50
3	Fe 238.204 Radial†	8.3	1.4	13.121 ug/L	13.121 ppb	10:02:50
3	K 766.490 Radial†	2353.1	-29.8	-5.2822 ug/L	-5.2822 ppb	10:02:30
3	Mg 279.077 IEC†	0.6	-0.6	-20.672 ug/L	-20.672 ppb	10:02:50
3	Na 589.592 Radial†	-1094.9	7.5	2.5235 ug/L	2.5235 ppb	10:02:30
3	Sr 421.552†	3.7	31.0	0.1931 ug/L	0.1931 ppb	10:02:30
3	Sc 361.383	902829.2	902829.2	100.17 %		10:03:47
3	Y 371.029	755411.0	755411.0	100.58 %		10:03:47
3	Ag 328.068†	358.0	64.7	0.2988 ug/L	0.2988 ppb	10:03:47
3	As 188.979†	-15.0	9.2	3.6283 ug/L	3.6283 ppb	10:04:07
3	B 249.677†	-300.1	231.1	4.8434 ug/L	4.8434 ppb	10:04:07
3	Ba 233.527†	-0.7	7.7	0.0580 ug/L	0.0580 ppb	10:04:07
3	Be 313.107†	-4892.1	229.3	0.0837 ug/L	0.0837 ppb	10:03:47
3	Cd 226.502†	-180.1	15.3	0.1610 ug/L	0.1610 ppb	10:04:07
3	Co 228.616†	-60.9	4.6	0.0881 ug/L	0.0881 ppb	10:04:07
3	Cr 267.716†	79.3	0.5	0.0064 ug/L	0.0064 ppb	10:04:07
3	Cu 324.752†	6709.2	-59.1	-0.1685 ug/L	-0.1685 ppb	10:03:47
3	Mn 257.610†	438.1	15.0	0.0177 ug/L	0.0177 ppb	10:04:07
3	Mo 202.031†	21.5	3.2	0.2015 ug/L	0.2015 ppb	10:04:07
3	Ni 231.604†	99.5	12.8	0.2969 ug/L	0.2969 ppb	10:04:07
3	P 214.914†	215.8	-8.1	-4.6716 ug/L	-4.6716 ppb	10:04:07
3	Pb 220.353†	-65.9	2.6	0.2959 ug/L	0.2959 ppb	10:04:07
3	S 181.975 Axial†	39.7	-2.0	-2.7906 ug/L	-2.7906 ppb	10:04:07
3	Sb 206.836†	32.3	-2.0	-0.6310 ug/L	-0.6310 ppb	10:04:07
3	Se 196.026†	-16.8	12.0	6.9843 ug/L	6.9843 ppb	10:04:07
3	Si 251.611†	489.0	38.5	1.1488 ug/L	1.1488 ppb	10:04:07
3	Sn 189.927†	6.7	1.7	0.2867 ug/L	0.2867 ppb	10:04:07
3	Ti 334.940†	-1078.5	38.3	0.0622 ug/L	0.0622 ppb	10:03:47
3	Tl 190.801†	-33.1	-0.6	-0.1545 ug/L	-0.1545 ppb	10:04:07
3	U 409.014†	-2470.8	-64.7	-1.7847 ug/L	-1.7847 ppb	10:03:47
3	V 292.402†	-1354.7	6.0	0.0363 ug/L	0.0363 ppb	10:03:47
3	Zn 213.857†	672.6	49.6	0.4309 ug/L	0.4309 ppb	10:04:07
3	SiO2†	501.7	33.4	2.1374 ug/L	2.1374 ppb	10:04:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906659.7	100.60	%	0.423				0.42%
Sc Radial	5893.8	101	%	0.6				0.57%
Y 371.029	757892.8	100.91	%	0.390				0.39%
Y RADIAL	6346.9	100.9	%	0.61				0.60%
Ag 328.068†	118.9	0.5416	ug/L	0.22414	0.5416	ppb	0.22414	41.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.1	-3.5369	ug/L	7.83042	-3.5369	ppb	7.83042	221.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.4	2.5125	ug/L	1.02361	2.5125	ppb	1.02361	40.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	242.8	5.0898	ug/L	0.21902	5.0898	ppb	0.21902	4.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.6	0.0050	ug/L	0.04645	0.0050	ppb	0.04645	932.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.5	0.0743	ug/L	0.00913	0.0743	ppb	0.00913	12.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	9.2388	ug/L	4.51901	9.2388	ppb	4.51901	48.91%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 6.7      0.0703 ug/L       0.09465      0.0703 ppb        0.09465 134.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.2      0.0238 ug/L       0.10080      0.0238 ppb        0.10080 423.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.0      0.0316 ug/L       0.07442      0.0316 ppb        0.07442 235.34%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -59.2     -0.1688 ug/L       0.12088     -0.1688 ppb        0.12088  71.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.2      11.513 ug/L       22.4868      11.513 ppb        22.4868 195.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          34.2      6.0606 ug/L       9.87817      6.0606 ppb        9.87817 162.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      9.0182 ug/L      26.48267      9.0182 ppb       26.48267 293.66%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.6      0.0123 ug/L       0.00577      0.0123 ppb        0.00577  46.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.8      0.4300 ug/L       0.25880      0.4300 ppb        0.25880  60.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -18.2     -6.1022 ug/L       8.19208     -6.1022 ppb        8.19208 134.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.6      0.1767 ug/L       0.42074      0.1767 ppb        0.42074 238.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -10.3     -5.9155 ug/L       1.50790     -5.9155 ppb        1.50790  25.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.2      0.7000 ug/L       0.45182      0.7000 ppb        0.45182  64.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.7      0.9445 ug/L       4.14441      0.9445 ppb        4.14441 438.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.6      1.4786 ug/L       1.82922      1.4786 ppb        1.82922 123.72%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.8      2.2487 ug/L       4.93905      2.2487 ppb        4.93905 219.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                41.1      1.2192 ug/L       0.06684      1.2192 ppb        0.06684   5.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.6      0.2684 ug/L       0.21256      0.2684 ppb        0.21256  79.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.3      0.1451 ug/L       0.04613      0.1451 ppb        0.04613  31.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                35.9      0.0572 ug/L       0.03572      0.0572 ppb        0.03572  62.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.4      0.1139 ug/L       0.34885      0.1139 ppb        0.34885 306.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 45.7      1.2576 ug/L       2.64158      1.2576 ppb        2.64158 210.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 14.4      0.1020 ug/L       0.05695      0.1020 ppb        0.05695  55.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                59.2      0.5151 ug/L       0.07311      0.5151 ppb        0.07311  14.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      23.2      1.4635 ug/L       1.71530      1.4635 ppb        1.71530 117.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 10:06:51
Plasma On Time: 12/7/2009 05:17:52
Logged In Analyst: Optima3
Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1
Autosampler Location: 38
Sample ID: 1201978571|925470|1
Date Collected: 12/8/2009 10:06:52
Analyst: HSC
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Replicate Data: 1201978571|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5972.3	5972.3	102	%			10:08:45
1	Y RADIAL	6378.6	6378.6	101.4	%			10:08:45
1	Al 396.153Radial†	-1.0	19.5	13.512	ug/L	13.512	ppb	10:08:45
1	Ca 317.933Radial†	26.4	10.3	15.121	ug/L	15.121	ppb	10:09:05
1	Fe 238.204 Radial†	13.5	6.4	59.842	ug/L	59.842	ppb	10:09:05
1	K 766.490 Radial†	2401.9	-1.5	-0.2754	ug/L	-0.2754	ppb	10:08:45
1	Mg 279.077 IEC†	0.2	-0.9	-33.145	ug/L	-33.145	ppb	10:09:05
1	Na 589.592 Radial†	-1041.1	69.2	23.220	ug/L	23.220	ppb	10:08:45
1	Sr 421.552†	-6.3	21.2	0.1319	ug/L	0.1319	ppb	10:08:45
1	Sc 361.383	904809.8	904809.8	100.39	%			10:10:02
1	Y 371.029	754363.5	754363.5	100.44	%			10:10:02
1	Ag 328.068†	259.7	-34.0	-0.1391	ug/L	-0.1391	ppb	10:10:02
1	As 188.979†	-2.9	21.3	8.4169	ug/L	8.4169	ppb	10:10:22
1	B 249.677†	-345.3	186.7	3.9079	ug/L	3.9079	ppb	10:10:22
1	Ba 233.527†	8.0	16.4	0.1243	ug/L	0.1243	ppb	10:10:22
1	Be 313.107†	-4984.6	147.9	0.0547	ug/L	0.0547	ppb	10:10:02
1	Cd 226.502†	-187.8	8.0	0.0792	ug/L	0.0792	ppb	10:10:22
1	Co 228.616†	-66.2	-0.6	-0.0117	ug/L	-0.0117	ppb	10:10:22
1	Cr 267.716†	152.1	72.9	0.7647	ug/L	0.7647	ppb	10:10:22
1	Cu 324.752†	6622.3	-160.4	-0.4559	ug/L	-0.4559	ppb	10:10:02
1	Mn 257.610†	959.4	533.3	0.5755	ug/L	0.5755	ppb	10:10:22
1	Mo 202.031†	24.9	6.5	0.4156	ug/L	0.4156	ppb	10:10:22
1	Ni 231.604†	101.8	14.8	0.3430	ug/L	0.3430	ppb	10:10:22
1	P 214.914†	211.3	-13.0	-7.4686	ug/L	-7.4686	ppb	10:10:22
1	Pb 220.353†	-54.6	14.1	1.5899	ug/L	1.5899	ppb	10:10:22
1	S 181.975 Axial†	40.9	-0.8	-1.1423	ug/L	-1.1423	ppb	10:10:22
1	Sb 206.836†	56.1	21.7	6.8702	ug/L	6.8702	ppb	10:10:22
1	Se 196.026†	-21.7	7.2	4.3809	ug/L	4.3809	ppb	10:10:22
1	Si 251.611†	767.5	314.8	9.4127	ug/L	9.4127	ppb	10:10:22
1	Sn 189.927†	14.8	9.7	1.5928	ug/L	1.5928	ppb	10:10:22
1	Ti 334.940†	-858.8	259.5	0.4121	ug/L	0.4121	ppb	10:10:02
1	Tl 190.801†	-36.8	-4.1	-1.1557	ug/L	-1.1557	ppb	10:10:22
1	U 409.014†	-2204.3	206.2	5.6703	ug/L	5.6703	ppb	10:10:02
1	V 292.402†	-1325.2	38.4	0.2597	ug/L	0.2597	ppb	10:10:02
1	Zn 213.857†	838.7	213.6	1.8596	ug/L	1.8596	ppb	10:10:22
1	SiO2†	814.0	343.3	21.999	ug/L	21.999	ppb	10:11:18
2	Sc Radial	5956.5	5956.5	102	%			10:09:10
2	Y RADIAL	6417.8	6417.8	102.1	%			10:09:10
2	Al 396.153Radial†	-23.9	-3.1	-2.1638	ug/L	-2.1638	ppb	10:09:10
2	Ca 317.933Radial†	27.7	11.6	17.027	ug/L	17.027	ppb	10:09:31
2	Fe 238.204 Radial†	14.7	7.6	71.370	ug/L	71.370	ppb	10:09:31
2	K 766.490 Radial†	2384.6	-12.2	-2.1904	ug/L	-2.1904	ppb	10:09:10
2	Mg 279.077 IEC†	2.7	1.5	51.476	ug/L	51.476	ppb	10:09:31
2	Na 589.592 Radial†	-1000.1	106.8	35.833	ug/L	35.833	ppb	10:09:10
2	Sr 421.552†	-20.0	7.7	0.0480	ug/L	0.0480	ppb	10:09:10
2	Sc 361.383	905516.1	905516.1	100.47	%			10:10:28
2	Y 371.029	756263.6	756263.6	100.69	%			10:10:28

2	Ag 328.068†	360.7	66.3	0.3222 ug/L	0.3222 ppb	10:10:28
2	As 188.979†	3.9	28.1	11.111 ug/L	11.111 ppb	10:10:48
2	B 249.677†	-357.0	175.3	3.6680 ug/L	3.6680 ppb	10:10:48
2	Ba 233.527†	15.6	23.9	0.1816 ug/L	0.1816 ppb	10:10:48
2	Be 313.107†	-4914.8	221.3	0.0811 ug/L	0.0811 ppb	10:10:28
2	Cd 226.502†	-178.0	17.9	0.1821 ug/L	0.1821 ppb	10:10:48
2	Co 228.616†	-74.5	-8.7	-0.1643 ug/L	-0.1643 ppb	10:10:48
2	Cr 267.716†	161.5	82.1	0.8633 ug/L	0.8633 ppb	10:10:48
2	Cu 324.752†	6717.1	-71.1	-0.1999 ug/L	-0.1999 ppb	10:10:28
2	Mn 257.610†	951.7	524.9	0.5661 ug/L	0.5661 ppb	10:10:48
2	Mo 202.031†	32.0	13.6	0.8660 ug/L	0.8660 ppb	10:10:48
2	Ni 231.604†	97.8	10.8	0.2505 ug/L	0.2505 ppb	10:10:48
2	P 214.914†	209.2	-15.3	-8.8401 ug/L	-8.8401 ppb	10:10:48
2	Pb 220.353†	-40.5	28.1	3.1734 ug/L	3.1734 ppb	10:10:48
2	S 181.975 Axial†	53.0	11.2	15.696 ug/L	15.696 ppb	10:10:48
2	Sb 206.836†	43.1	8.6	2.7738 ug/L	2.7738 ppb	10:10:48
2	Se 196.026†	-19.3	9.6	5.7826 ug/L	5.7826 ppb	10:10:48
2	Si 251.611†	777.5	324.2	9.6831 ug/L	9.6831 ppb	10:10:48
2	Sn 189.927†	20.2	15.1	2.4802 ug/L	2.4802 ppb	10:10:48
2	Ti 334.940†	-968.7	150.8	0.2395 ug/L	0.2395 ppb	10:10:28
2	Tl 190.801†	-44.1	-11.3	-3.1713 ug/L	-3.1713 ppb	10:10:48
2	U 409.014†	-2275.0	137.5	3.7783 ug/L	3.7783 ppb	10:10:28
2	V 292.402†	-1260.7	103.6	0.6935 ug/L	0.6935 ppb	10:10:28
2	Zn 213.857†	845.5	219.7	1.9097 ug/L	1.9097 ppb	10:10:48
2	SiO2†	773.5	302.4	19.351 ug/L	19.351 ppb	10:11:23
3	Sc Radial	5825.6	5825.6	99.7 %		10:09:36
3	Y RADIAL	6258.2	6258.2	99.53 %		10:09:36
3	Al 396.153Radial†	-25.0	-4.7	-3.2651 ug/L	-3.2651 ppb	10:09:36
3	Ca 317.933Radial†	24.0	8.5	12.542 ug/L	12.542 ppb	10:09:56
3	Fe 238.204 Radial†	11.4	4.6	43.106 ug/L	43.106 ppb	10:09:56
3	K 766.490 Radial†	2401.7	57.5	10.180 ug/L	10.180 ppb	10:09:36
3	Mg 279.077 IEC†	1.0	-0.2	-5.3751 ug/L	-5.3751 ppb	10:09:56
3	Na 589.592 Radial†	-980.4	104.4	35.043 ug/L	35.043 ppb	10:09:36
3	Sr 421.552†	-15.1	12.2	0.0757 ug/L	0.0757 ppb	10:09:36
3	Sc 361.383	910341.5	910341.5	101.01 %		10:10:53
3	Y 371.029	761914.4	761914.4	101.44 %		10:10:53
3	Ag 328.068†	426.9	129.9	0.6000 ug/L	0.6000 ppb	10:10:53
3	As 188.979†	-3.7	20.5	8.0981 ug/L	8.0981 ppb	10:11:13
3	B 249.677†	-365.5	168.8	3.5358 ug/L	3.5358 ppb	10:11:13
3	Ba 233.527†	4.8	13.2	0.1001 ug/L	0.1001 ppb	10:11:13
3	Be 313.107†	-4868.4	293.2	0.1073 ug/L	0.1073 ppb	10:10:53
3	Cd 226.502†	-190.7	6.3	0.0629 ug/L	0.0629 ppb	10:11:13
3	Co 228.616†	-82.0	-15.8	-0.3007 ug/L	-0.3007 ppb	10:11:13
3	Cr 267.716†	139.3	59.3	0.6223 ug/L	0.6223 ppb	10:11:13
3	Cu 324.752†	6858.7	33.6	0.0984 ug/L	0.0984 ppb	10:10:53
3	Mn 257.610†	966.5	534.6	0.5746 ug/L	0.5746 ppb	10:11:13
3	Mo 202.031†	20.4	1.8	0.1188 ug/L	0.1188 ppb	10:11:13
3	Ni 231.604†	115.9	28.2	0.6523 ug/L	0.6523 ppb	10:11:13
3	P 214.914†	211.2	-14.5	-8.3969 ug/L	-8.3969 ppb	10:11:13
3	Pb 220.353†	-59.2	9.8	1.1042 ug/L	1.1042 ppb	10:11:13
3	S 181.975 Axial†	40.5	-1.5	-2.0590 ug/L	-2.0590 ppb	10:11:13
3	Sb 206.836†	54.4	19.6	6.1873 ug/L	6.1873 ppb	10:11:13
3	Se 196.026†	-21.4	7.7	4.5726 ug/L	4.5726 ppb	10:11:13
3	Si 251.611†	744.9	287.8	8.6109 ug/L	8.6109 ppb	10:11:13
3	Sn 189.927†	4.9	-0.1	-0.0217 ug/L	-0.0217 ppb	10:11:13
3	Ti 334.940†	-986.0	138.8	0.2202 ug/L	0.2202 ppb	10:10:53
3	Tl 190.801†	-31.6	1.2	0.3461 ug/L	0.3461 ppb	10:11:13
3	U 409.014†	-2285.4	139.2	3.8285 ug/L	3.8285 ppb	10:10:53
3	V 292.402†	-1317.3	54.2	0.3597 ug/L	0.3597 ppb	10:10:53
3	Zn 213.857†	855.0	224.6	1.9542 ug/L	1.9542 ppb	10:11:13
3	SiO2†	769.3	294.2	18.861 ug/L	18.861 ppb	10:11:28

Mean Data: 1201978571|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	906889.1	100.62	%	0.334				0.33%
Sc Radial	5918.1	101	%	1.4				1.36%
Y 371.029	757513.9	100.86	%	0.523				0.52%
Y RADIAL	6351.5	101.0	%	1.32				1.31%
Ag 328.068†	54.1	0.2610	ug/L	0.37332	0.2610	ppb	0.37332	143.03%

Al 396.153Radial†	3.9	2.6943	ug/L	9.38443	2.6943	ppb	9.38443 348.31%
As 188.979†	23.3	9.2088	ug/L	1.65546	9.2088	ppb	1.65546 17.98%
B 249.677†	177.0	3.7039	ug/L	0.18864	3.7039	ppb	0.18864 5.09%
Ba 233.527†	17.8	0.1353	ug/L	0.04187	0.1353	ppb	0.04187 30.94%
Be 313.107†	220.8	0.0811	ug/L	0.02628	0.0811	ppb	0.02628 32.42%
Ca 317.933Radial†	10.1	14.897	ug/L	2.2509	14.897	ppb	2.2509 15.11%
Cd 226.502†	10.7	0.1081	ug/L	0.06464	0.1081	ppb	0.06464 59.80%
Co 228.616†	-8.3	-0.1589	ug/L	0.14461	-0.1589	ppb	0.14461 91.01%
Cr 267.716†	71.4	0.7501	ug/L	0.12118	0.7501	ppb	0.12118 16.15%
Cu 324.752†	-66.0	-0.1858	ug/L	0.27742	-0.1858	ppb	0.27742 149.28%
Fe 238.204 Radial†	6.2	58.106	ug/L	14.2119	58.106	ppb	14.2119 24.46%
K 766.490 Radial†	14.6	2.5715	ug/L	6.65854	2.5715	ppb	6.65854 258.94%
Mg 279.077 IEC†	0.1	4.3186	ug/L	43.13497	4.3186	ppb	43.13497 998.83%
Mn 257.610†	530.9	0.5721	ug/L	0.00519	0.5721	ppb	0.00519 0.91%
Mo 202.031†	7.3	0.4668	ug/L	0.37622	0.4668	ppb	0.37622 80.59%
Na 589.592 Radial†	93.5	31.365	ug/L	7.0652	31.365	ppb	7.0652 22.53%
Ni 231.604†	17.9	0.4152	ug/L	0.21045	0.4152	ppb	0.21045 50.68%
P 214.914†	-14.3	-8.2352	ug/L	0.69990	-8.2352	ppb	0.69990 8.50%
Pb 220.353†	17.3	1.9559	ug/L	1.08205	1.9559	ppb	1.08205 55.32%
S 181.975 Axial†	3.0	4.1649	ug/L	9.99672	4.1649	ppb	9.99672 240.02%
Sb 206.836†	16.6	5.2771	ug/L	2.19467	5.2771	ppb	2.19467 41.59%
Se 196.026†	8.2	4.9120	ug/L	0.75998	4.9120	ppb	0.75998 15.47%
Si 251.611†	309.0	9.2356	ug/L	0.55761	9.2356	ppb	0.55761 6.04%
Sn 189.927†	8.2	1.3504	ug/L	1.26842	1.3504	ppb	1.26842 93.93%
Sr 421.552†	13.7	0.0852	ug/L	0.04275	0.0852	ppb	0.04275 50.16%
Ti 334.940†	183.0	0.2906	ug/L	0.10566	0.2906	ppb	0.10566 36.36%
Tl 190.801†	-4.8	-1.3270	ug/L	1.76491	-1.3270	ppb	1.76491 133.00%
U 409.014†	161.0	4.4257	ug/L	1.07817	4.4257	ppb	1.07817 24.36%
V 292.402†	65.4	0.4377	ug/L	0.22715	0.4377	ppb	0.22715 51.90%
Zn 213.857†	219.3	1.9078	ug/L	0.04736	1.9078	ppb	0.04736 2.48%
SiO2†	313.3	20.070	ug/L	1.6879	20.070	ppb	1.6879 8.41%

Sequence No.: 2
Sample ID: 1201978576|925470|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 12/8/2009 10:13:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978576|925470|2

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5727.2	5727.2	98.0	%			10:15:51
1	Y RADIAL	6511.6	6511.6	103.6	%			10:15:51
1	Al 396.153Radial†	55254.6	56401.2	39159	ug/L	39159	ppb	10:15:31
1	Ca 317.933Radial†	12803.1	13048.5	19233	ug/L	19233	ppb	10:15:31
1	Fe 238.204 Radial†	10245.0	10447.0	97816	ug/L	97816	ppb	10:15:31
1	K 766.490 Radial†	70630.1	69718.0	12347	ug/L	12347	ppb	10:15:31
1	Mg 279.077 IEC†	430.0	437.6	15364	ug/L	15364	ppb	10:15:51
1	Na 589.592 Radial†	6853.7	8081.3	2711.9	ug/L	2711.9	ppb	10:15:31
1	Sr 421.552†	135014.9	137794.1	857.97	ug/L	857.97	ppb	10:15:31
1	Sc 361.383	924402.8	924402.8	102.57	%			10:16:51
1	Y 371.029	806556.5	806556.5	107.39	%			10:16:51
1	Ag 328.068†	146137.9	142187.2	678.04	ug/L	678.04	ppb	10:16:51
1	As 188.979†	3295.9	3237.6	1309.5	ug/L	1309.5	ppb	10:17:11
1	B 249.677†	33812.2	33496.5	688.42	ug/L	688.42	ppb	10:16:51
1	Ba 233.527†	335124.4	326744.4	2426.9	ug/L	2426.9	ppb	10:16:51
1	Be 313.107†	1288158.7	1261027.9	463.35	ug/L	463.35	ppb	10:16:51
1	Cd 226.502†	58835.9	57558.3	599.02	ug/L	599.02	ppb	10:16:51
1	Co 228.616†	22447.5	21951.1	413.21	ug/L	413.21	ppb	10:17:11
1	Cr 267.716†	38509.4	37466.8	396.47	ug/L	396.47	ppb	10:16:51
1	Cu 324.752†	193260.3	181666.1	524.87	ug/L	524.87	ppb	10:16:51
1	Mn 257.610†	1783255.4	1738196.6	1863.7	ug/L	1863.7	ppb	10:16:51
1	Mo 202.031†	6876.6	6686.1	431.68	ug/L	431.68	ppb	10:17:11
1	Ni 231.604†	22733.4	22077.8	510.98	ug/L	510.98	ppb	10:17:11
1	P 214.914†	6871.0	6475.5	3593.1	ug/L	3593.1	ppb	10:17:11
1	Pb 220.353†	7574.2	7453.1	843.94	ug/L	843.94	ppb	10:17:11
1	S 181.975 Axial†	803.1	741.4	1031.2	ug/L	1031.2	ppb	10:17:11
1	Sb 206.836†	1640.2	1564.9	501.63	ug/L	501.63	ppb	10:17:11
1	Se 196.026†	1057.8	1060.2	929.56	ug/L	929.56	ppb	10:17:11
1	Si 251.611†	524314.1	510740.3	15276	ug/L	15276	ppb	10:16:51
1	Sn 189.927†	3421.8	3331.2	548.74	ug/L	548.74	ppb	10:17:11
1	Ti 334.940†	1210688.1	1181498.4	1886.4	ug/L	1886.4	ppb	10:16:51
1	Tl 190.801†	3606.1	3548.4	1016.3	ug/L	1016.3	ppb	10:17:11
1	U 409.014†	-7806.7	-5209.4	-156.57	ug/L	-156.57	ppb	10:16:51
1	V 292.402†	119342.7	117713.8	766.52	ug/L	766.52	ppb	10:16:51
1	Zn 213.857†	120007.7	116382.0	1003.0	ug/L	1003.0	ppb	10:16:51
1	SiO2†	527243.5	513578.6	32916	ug/L	32916	ppb	10:18:11
2	Sc Radial	5761.0	5761.0	98.6	%			10:16:17
2	Y RADIAL	6548.3	6548.3	104.1	%			10:16:17
2	Al 396.153Radial†	54378.1	55180.8	38312	ug/L	38312	ppb	10:15:57
2	Ca 317.933Radial†	12525.5	12690.1	18705	ug/L	18705	ppb	10:15:57
2	Fe 238.204 Radial†	10043.4	10181.1	95327	ug/L	95327	ppb	10:15:57
2	K 766.490 Radial†	69232.1	67876.4	12020	ug/L	12020	ppb	10:15:57
2	Mg 279.077 IEC†	434.6	439.7	15438	ug/L	15438	ppb	10:16:17
2	Na 589.592 Radial†	6624.6	7807.8	2620.2	ug/L	2620.2	ppb	10:15:57
2	Sr 421.552†	132029.1	133956.0	834.07	ug/L	834.07	ppb	10:15:57
2	Sc 361.383	921250.2	921250.2	102.22	%			10:17:18
2	Y 371.029	806429.0	806429.0	107.37	%			10:17:18
2	Ag 328.068†	146370.5	142902.4	680.51	ug/L	680.51	ppb	10:17:18
2	As 188.979†	3300.2	3252.8	1315.2	ug/L	1315.2	ppb	10:17:38
2	B 249.677†	33783.8	33581.5	690.53	ug/L	690.53	ppb	10:17:18
2	Ba 233.527†	334806.8	327551.8	2432.8	ug/L	2432.8	ppb	10:17:18
2	Be 313.107†	1291593.4	1268686.0	466.15	ug/L	466.15	ppb	10:17:18
2	Cd 226.502†	58744.6	57665.3	600.40	ug/L	600.40	ppb	10:17:18
2	Co 228.616†	22542.9	22119.2	416.44	ug/L	416.44	ppb	10:17:38
2	Cr 267.716†	38472.2	37559.0	397.40	ug/L	397.40	ppb	10:17:18
2	Cu 324.752†	193381.7	182429.7	526.92	ug/L	526.92	ppb	10:17:18
2	Mn 257.610†	1781736.7	1742660.6	1868.2	ug/L	1868.2	ppb	10:17:18
2	Mo 202.031†	6891.7	6723.8	433.90	ug/L	433.90	ppb	10:17:38
2	Ni 231.604†	22808.0	22226.6	514.42	ug/L	514.42	ppb	10:17:38

2	P 214.914†	6865.2	6492.8	3604.5	ug/L	3604.5 ppb	10:17:38
2	Pb 220.353†	7599.3	7502.9	849.59	ug/L	849.59 ppb	10:17:38
2	S 181.975 Axial†	806.8	747.7	1040.2	ug/L	1040.2 ppb	10:17:38
2	Sb 206.836†	1630.5	1560.9	500.37	ug/L	500.37 ppb	10:17:38
2	Se 196.026†	1072.6	1078.1	931.96	ug/L	931.96 ppb	10:17:38
2	Si 251.611†	524266.8	512443.5	15327	ug/L	15327 ppb	10:17:18
2	Sn 189.927†	3412.1	3333.1	548.97	ug/L	548.97 ppb	10:17:38
2	Ti 334.940†	1210269.4	1185128.2	1892.1	ug/L	1892.1 ppb	10:17:18
2	Tl 190.801†	3612.9	3567.0	1021.6	ug/L	1021.6 ppb	10:17:38
2	U 409.014†	-7795.8	-5224.8	-156.68	ug/L	-156.68 ppb	10:17:18
2	V 292.402†	119341.8	118111.1	769.55	ug/L	769.55 ppb	10:17:18
2	Zn 213.857†	119987.8	116762.9	1006.5	ug/L	1006.5 ppb	10:17:18
2	SiO2†	524286.1	512444.6	32843	ug/L	32843 ppb	10:18:17
3	Sc Radial	5763.3	5763.3	98.6	%		10:16:42
3	Y RADIAL	6552.0	6552.0	104.2	%		10:16:42
3	Al 396.153Radial†	54496.5	55279.4	38380	ug/L	38380 ppb	10:16:22
3	Ca 317.933Radial†	12529.0	12688.8	18702	ug/L	18702 ppb	10:16:22
3	Fe 238.204 Radial†	10105.6	10240.1	95879	ug/L	95879 ppb	10:16:22
3	K 766.490 Radial†	69458.0	68078.0	12056	ug/L	12056 ppb	10:16:22
3	Mg 279.077 IEC†	426.0	430.8	15125	ug/L	15125 ppb	10:16:42
3	Na 589.592 Radial†	6649.6	7830.6	2627.8	ug/L	2627.8 ppb	10:16:22
3	Sr 421.552†	132330.1	134208.9	835.64	ug/L	835.64 ppb	10:16:22
3	Sc 361.383	918852.7	918852.7	101.95	%		10:17:45
3	Y 371.029	803866.9	803866.9	107.03	%		10:17:45
3	Ag 328.068†	145734.6	142652.2	679.55	ug/L	679.55 ppb	10:17:45
3	As 188.979†	3274.0	3235.5	1308.4	ug/L	1308.4 ppb	10:18:05
3	B 249.677†	33838.9	33721.8	693.40	ug/L	693.40 ppb	10:17:45
3	Ba 233.527†	333692.9	327313.9	2431.1	ug/L	2431.1 ppb	10:17:45
3	Be 313.107†	1288584.2	1269031.4	466.28	ug/L	466.28 ppb	10:17:45
3	Cd 226.502†	58656.2	57728.5	601.01	ug/L	601.01 ppb	10:17:45
3	Co 228.616†	22332.8	21970.7	413.61	ug/L	413.61 ppb	10:18:05
3	Cr 267.716†	38445.4	37630.9	398.16	ug/L	398.16 ppb	10:17:45
3	Cu 324.752†	192966.4	182516.0	527.20	ug/L	527.20 ppb	10:17:45
3	Mn 257.610†	1776731.9	1742299.8	1867.9	ug/L	1867.9 ppb	10:17:45
3	Mo 202.031†	6835.4	6686.3	431.55	ug/L	431.55 ppb	10:18:05
3	Ni 231.604†	22595.7	22076.6	510.95	ug/L	510.95 ppb	10:18:05
3	P 214.914†	6827.6	6473.4	3592.8	ug/L	3592.8 ppb	10:18:05
3	Pb 220.353†	7544.5	7468.5	845.67	ug/L	845.67 ppb	10:18:05
3	S 181.975 Axial†	806.4	749.4	1042.5	ug/L	1042.5 ppb	10:18:05
3	Sb 206.836†	1621.9	1556.6	498.87	ug/L	498.87 ppb	10:18:05
3	Se 196.026†	1066.5	1074.9	931.81	ug/L	931.81 ppb	10:18:05
3	Si 251.611†	522308.6	511861.0	15310	ug/L	15310 ppb	10:17:45
3	Sn 189.927†	3376.7	3307.0	544.71	ug/L	544.71 ppb	10:18:05
3	Ti 334.940†	1206018.0	1184047.6	1890.4	ug/L	1890.4 ppb	10:17:45
3	Tl 190.801†	3590.6	3554.3	1018.0	ug/L	1018.0 ppb	10:18:05
3	U 409.014†	-7749.2	-5199.1	-156.04	ug/L	-156.04 ppb	10:17:45
3	V 292.402†	119085.0	118163.9	769.77	ug/L	769.77 ppb	10:17:45
3	Zn 213.857†	119596.3	116685.2	1005.8	ug/L	1005.8 ppb	10:17:45
3	SiO2†	522590.8	512120.0	32823	ug/L	32823 ppb	10:18:22

Mean Data: 1201978576|925470|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	921501.9	102.25	%	0.309				0.30%
Sc Radial	5750.5	98.4	%	0.35				0.35%
Y 371.029	805617.5	107.26	%	0.202				0.19%
Y RADIAL	6537.3	104.0	%	0.36				0.34%
Ag 328.068†	142580.6	679.37	ug/L	1.243	679.37	ppb	1.243	0.18%
Al 396.153Radial†	55620.5	38617	ug/L	470.9	38617	ppb	470.9	1.22%
As 188.979†	3242.0	1311.1	ug/L	3.62	1311.1	ppb	3.62	0.28%
B 249.677†	33600.0	690.79	ug/L	2.500	690.79	ppb	2.500	0.36%
Ba 233.527†	327203.4	2430.3	ug/L	3.03	2430.3	ppb	3.03	0.12%
Be 313.107†	1266248.4	465.26	ug/L	1.655	465.26	ppb	1.655	0.36%
Ca 317.933Radial†	12809.1	18880	ug/L	305.5	18880	ppb	305.5	1.62%
Cd 226.502†	57650.7	600.15	ug/L	1.021	600.15	ppb	1.021	0.17%
Co 228.616†	22013.7	414.42	ug/L	1.758	414.42	ppb	1.758	0.42%
Cr 267.716†	37552.2	397.34	ug/L	0.848	397.34	ppb	0.848	0.21%
Cu 324.752†	182203.9	526.33	ug/L	1.275	526.33	ppb	1.275	0.24%
Fe 238.204 Radial†	10289.4	96341	ug/L	1307.0	96341	ppb	1307.0	1.36%
K 766.490 Radial†	68557.5	12141	ug/L	179.2	12141	ppb	179.2	1.48%

Mg 279.077 IEC†	436.0	15309	ug/L	163.8	15309	ppb	163.8	1.07%
Mn 257.610†	1741052.3	1866.6	ug/L	2.52	1866.6	ppb	2.52	0.13%
Mo 202.031†	6698.7	432.38	ug/L	1.321	432.38	ppb	1.321	0.31%
Na 589.592 Radial†	7906.6	2653.3	ug/L	50.93	2653.3	ppb	50.93	1.92%
Ni 231.604†	22127.0	512.12	ug/L	1.997	512.12	ppb	1.997	0.39%
P 214.914†	6480.6	3596.8	ug/L	6.65	3596.8	ppb	6.65	0.18%
Pb 220.353†	7474.8	846.40	ug/L	2.894	846.40	ppb	2.894	0.34%
S 181.975 Axial†	746.2	1038.0	ug/L	6.01	1038.0	ppb	6.01	0.58%
Sb 206.836†	1560.8	500.29	ug/L	1.381	500.29	ppb	1.381	0.28%
Se 196.026†	1071.1	931.11	ug/L	1.346	931.11	ppb	1.346	0.14%
Si 251.611†	511681.6	15304	ug/L	26.0	15304	ppb	26.0	0.17%
Sn 189.927†	3323.8	547.47	ug/L	2.395	547.47	ppb	2.395	0.44%
Sr 421.552†	135319.7	842.56	ug/L	13.366	842.56	ppb	13.366	1.59%
Ti 334.940†	1183558.0	1889.6	ug/L	2.96	1889.6	ppb	2.96	0.16%
Tl 190.801†	3556.6	1018.7	ug/L	2.68	1018.7	ppb	2.68	0.26%
U 409.014†	-5211.1	-156.43	ug/L	0.341	-156.43	ppb	0.341	0.22%
V 292.402†	117996.3	768.61	ug/L	1.819	768.61	ppb	1.819	0.24%
Zn 213.857†	116610.0	1005.1	ug/L	1.87	1005.1	ppb	1.87	0.19%
SiO2†	512714.4	32861	ug/L	49.0	32861	ppb	49.0	0.15%

Sequence No.: 4
Sample ID: 1201978572|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/8/2009 10:27:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978572|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5731.8	5731.8	98.1	%			10:29:14
1	Y RADIAL	6648.9	6648.9	105.7	%			10:29:14
1	Al 396.153Radial†	25027.5	25537.3	17739	ug/L	17739	ppb	10:29:14
1	Ca 317.933Radial†	12835.8	13071.3	19266	ug/L	19266	ppb	10:29:14
1	Fe 238.204 Radial†	5187.4	5282.0	49450	ug/L	49450	ppb	10:29:14
1	K 766.490 Radial†	23328.4	21432.9	3790.6	ug/L	3790.6	ppb	10:29:14
1	Mg 279.077 IEC†	286.5	291.0	10223	ug/L	10223	ppb	10:29:34
1	Na 589.592 Radial†	2895.5	4040.0	1355.8	ug/L	1355.8	ppb	10:29:14
1	Sr 421.552†	15362.6	15690.3	97.537	ug/L	97.537	ppb	10:29:14
1	Sc 361.383	912834.6	912834.6	101.28	%			10:30:31
1	Y 371.029	815124.4	815124.4	108.53	%			10:30:31
1	Ag 328.068†	-2679.2	-2937.9	2.6074	ug/L	2.6074	ppb	10:30:36
1	As 188.979†	-63.8	-38.8	15.363	ug/L	15.363	ppb	10:30:56
1	B 249.677†	305.6	832.4	10.846	ug/L	10.846	ppb	10:30:36
1	Ba 233.527†	43872.9	43325.2	323.15	ug/L	323.15	ppb	10:30:36
1	Be 313.107†	-18111.3	-12768.8	0.7525	ug/L	0.7525	ppb	10:30:36
1	Cd 226.502†	343.0	533.7	0.7243	ug/L	0.7243	ppb	10:30:56
1	Co 228.616†	1004.6	1057.2	13.639	ug/L	13.639	ppb	10:30:56
1	Cr 267.716†	2773.0	2659.2	29.001	ug/L	29.001	ppb	10:30:56
1	Cu 324.752†	13675.8	6745.8	21.827	ug/L	21.827	ppb	10:30:36
1	Mn 257.610†	861638.5	850294.7	911.78	ug/L	911.78	ppb	10:30:31
1	Mo 202.031†	-2.5	-20.8	2.1892	ug/L	2.1892	ppb	10:30:56
1	Ni 231.604†	1841.4	1731.5	40.083	ug/L	40.083	ppb	10:30:56
1	P 214.914†	4694.2	4411.2	2506.7	ug/L	2506.7	ppb	10:30:56
1	Pb 220.353†	157.8	224.3	25.256	ug/L	25.256	ppb	10:30:56
1	S 181.975 Axial†	157.1	113.6	155.65	ug/L	155.65	ppb	10:30:56
1	Sb 206.836†	54.2	19.3	-1.9644	ug/L	-1.9644	ppb	10:30:56
1	Se 196.026†	-289.3	-256.8	10.515	ug/L	10.515	ppb	10:30:56
1	Si 251.611†	635964.1	627453.4	18782	ug/L	18782	ppb	10:30:31
1	Sn 189.927†	-136.3	-139.5	-20.172	ug/L	-20.172	ppb	10:30:56
1	Ti 334.940†	1744730.5	1723730.5	2751.8	ug/L	2751.8	ppb	10:30:31
1	Tl 190.801†	-133.2	-99.0	-1.1286	ug/L	-1.1286	ppb	10:30:56
1	U 409.014†	-5242.8	-2774.5	-82.705	ug/L	-82.705	ppb	10:30:36
1	V 292.402†	14019.1	15199.7	89.894	ug/L	89.894	ppb	10:30:36
1	Zn 213.857†	16736.0	15902.0	133.57	ug/L	133.57	ppb	10:30:36
1	SiO2†	637326.7	628780.9	40332	ug/L	40332	ppb	10:32:04
2	Sc Radial	5846.4	5846.4	100	%			10:29:39
2	Y RADIAL	6795.3	6795.3	108.1	%			10:29:39
2	Al 396.153Radial†	24931.8	24941.8	17325	ug/L	17325	ppb	10:29:39
2	Ca 317.933Radial†	12792.5	12771.6	18825	ug/L	18825	ppb	10:29:39
2	Fe 238.204 Radial†	5157.1	5148.1	48196	ug/L	48196	ppb	10:29:39
2	K 766.490 Radial†	23261.9	20900.4	3696.2	ug/L	3696.2	ppb	10:29:39
2	Mg 279.077 IEC†	278.1	276.8	9723.8	ug/L	9723.8	ppb	10:29:59
2	Na 589.592 Radial†	2909.0	3995.7	1340.9	ug/L	1340.9	ppb	10:29:39
2	Sr 421.552†	15186.8	15207.8	94.536	ug/L	94.536	ppb	10:29:39
2	Sc 361.383	911373.6	911373.6	101.12	%			10:31:02
2	Y 371.029	816178.5	816178.5	108.67	%			10:31:02
2	Ag 328.068†	-2805.4	-3067.0	1.6287	ug/L	1.6287	ppb	10:31:07
2	As 188.979†	-64.1	-39.2	14.997	ug/L	14.997	ppb	10:31:27
2	B 249.677†	319.1	846.3	11.304	ug/L	11.304	ppb	10:31:07
2	Ba 233.527†	43619.2	43143.8	321.76	ug/L	321.76	ppb	10:31:07
2	Be 313.107†	-18209.0	-12894.1	0.7002	ug/L	0.7002	ppb	10:31:07
2	Cd 226.502†	337.3	528.7	0.7958	ug/L	0.7958	ppb	10:31:27
2	Co 228.616†	985.5	1040.0	13.336	ug/L	13.336	ppb	10:31:27
2	Cr 267.716†	2775.5	2666.1	29.049	ug/L	29.049	ppb	10:31:27
2	Cu 324.752†	13572.7	6665.4	21.533	ug/L	21.533	ppb	10:31:07
2	Mn 257.610†	857298.6	847366.7	908.55	ug/L	908.55	ppb	10:31:02
2	Mo 202.031†	-0.3	-18.6	2.2358	ug/L	2.2358	ppb	10:31:27
2	Ni 231.604†	1828.7	1721.9	39.860	ug/L	39.860	ppb	10:31:27

2	P 214.914†	4681.3	4405.9	2504.6	ug/L	2504.6	ppb	10:31:27
2	Pb 220.353†	156.5	223.3	25.153	ug/L	25.153	ppb	10:31:27
2	S 181.975 Axial†	154.0	110.7	151.70	ug/L	151.70	ppb	10:31:27
2	Sb 206.836†	60.1	25.1	-0.1324	ug/L	-0.1324	ppb	10:31:27
2	Se 196.026†	-275.4	-243.6	14.163	ug/L	14.163	ppb	10:31:27
2	Si 251.611†	633384.4	625908.9	18736	ug/L	18736	ppb	10:31:02
2	Sn 189.927†	-141.8	-145.2	-21.161	ug/L	-21.161	ppb	10:31:27
2	Ti 334.940†	1739815.8	1721631.9	2748.4	ug/L	2748.4	ppb	10:31:02
2	Tl 190.801†	-134.8	-100.8	-1.7083	ug/L	-1.7083	ppb	10:31:27
2	U 409.014†	-5305.3	-2844.6	-84.480	ug/L	-84.480	ppb	10:31:07
2	V 292.402†	13870.2	15074.7	89.250	ug/L	89.250	ppb	10:31:07
2	Zn 213.857†	16638.1	15831.7	133.10	ug/L	133.10	ppb	10:31:07
2	SiO2†	633070.0	625580.3	40127	ug/L	40127	ppb	10:32:10
3	Sc Radial	5804.9	5804.9	99.3	%			10:30:04
3	Y RADIAL	6719.1	6719.1	106.9	%			10:30:04
3	Al 396.153Radial†	24828.0	25015.2	17376	ug/L	17376	ppb	10:30:04
3	Ca 317.933Radial†	12739.4	12809.4	18880	ug/L	18880	ppb	10:30:04
3	Fe 238.204 Radial†	5117.7	5145.3	48169	ug/L	48169	ppb	10:30:04
3	K 766.490 Radial†	22967.3	20769.9	3673.2	ug/L	3673.2	ppb	10:30:04
3	Mg 279.077 IEC†	277.0	277.8	9757.3	ug/L	9757.3	ppb	10:30:24
3	Na 589.592 Radial†	2836.2	3943.2	1323.2	ug/L	1323.2	ppb	10:30:04
3	Sr 421.552†	15101.5	15230.3	94.676	ug/L	94.676	ppb	10:30:04
3	Sc 361.383	926753.2	926753.2	102.83	%			10:31:33
3	Y 371.029	827318.1	827318.1	110.15	%			10:31:33
3	Ag 328.068†	-2875.7	-3089.4	1.5126	ug/L	1.5126	ppb	10:31:38
3	As 188.979†	-56.6	-30.9	17.854	ug/L	17.854	ppb	10:31:58
3	B 249.677†	234.2	758.5	9.4672	ug/L	9.4672	ppb	10:31:38
3	Ba 233.527†	43961.4	42760.8	318.92	ug/L	318.92	ppb	10:31:38
3	Be 313.107†	-18232.7	-12618.3	0.7017	ug/L	0.7017	ppb	10:31:38
3	Cd 226.502†	327.9	513.9	0.6424	ug/L	0.6424	ppb	10:31:58
3	Co 228.616†	975.3	1013.9	12.947	ug/L	12.947	ppb	10:31:58
3	Cr 267.716†	2744.3	2590.1	28.249	ug/L	28.249	ppb	10:31:58
3	Cu 324.752†	13636.7	6504.9	21.072	ug/L	21.072	ppb	10:31:38
3	Mn 257.610†	856720.8	832735.7	892.93	ug/L	892.93	ppb	10:31:33
3	Mo 202.031†	-5.1	-23.3	1.9340	ug/L	1.9340	ppb	10:31:58
3	Ni 231.604†	1819.5	1682.9	38.957	ug/L	38.957	ppb	10:31:58
3	P 214.914†	4688.2	4335.7	2464.2	ug/L	2464.2	ppb	10:31:58
3	Pb 220.353†	164.0	228.0	25.700	ug/L	25.700	ppb	10:31:58
3	S 181.975 Axial†	144.1	98.5	134.66	ug/L	134.66	ppb	10:31:58
3	Sb 206.836†	62.0	26.0	0.2922	ug/L	0.2922	ppb	10:31:58
3	Se 196.026†	-284.4	-247.8	11.648	ug/L	11.648	ppb	10:31:58
3	Si 251.611†	632180.8	614343.9	18390	ug/L	18390	ppb	10:31:33
3	Sn 189.927†	-146.5	-147.5	-21.533	ug/L	-21.533	ppb	10:31:58
3	Ti 334.940†	1736702.1	1690051.6	2698.0	ug/L	2698.0	ppb	10:31:33
3	Tl 190.801†	-132.0	-95.9	-0.7909	ug/L	-0.7909	ppb	10:31:58
3	U 409.014†	-5212.7	-2667.5	-79.595	ug/L	-79.595	ppb	10:31:38
3	V 292.402†	14051.1	15023.0	88.974	ug/L	88.974	ppb	10:31:38
3	Zn 213.857†	16861.3	15775.8	132.62	ug/L	132.62	ppb	10:31:38
3	SiO2†	632376.8	614516.8	39417	ug/L	39417	ppb	10:32:15

Mean Data: 1201978572|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916987.1	101.74	%	0.942				0.93%
Sc Radial	5794.4	99.2	%	0.99				1.00%
Y 371.029	819540.4	109.11	%	0.900				0.82%
Y RADIAL	6721.1	106.9	%	1.16				1.09%
Ag 328.068†	-3031.4	1.9162	ug/L	0.60140	1.9162	ppb	0.60140	31.38%
Al 396.153Radial†	25164.8	17480	ug/L	225.6	17480	ppb	225.6	1.29%
As 188.979†	-36.3	16.071	ug/L	1.5550	16.071	ppb	1.5550	9.68%
B 249.677†	812.4	10.539	ug/L	0.9559	10.539	ppb	0.9559	9.07%
Ba 233.527†	43076.6	321.28	ug/L	2.158	321.28	ppb	2.158	0.67%
Be 313.107†	-12760.4	0.7181	ug/L	0.02975	0.7181	ppb	0.02975	4.14%
Ca 317.933Radial†	12884.1	18990	ug/L	240.5	18990	ppb	240.5	1.27%
Cd 226.502†	525.4	0.7209	ug/L	0.07679	0.7209	ppb	0.07679	10.65%
Co 228.616†	1037.0	13.308	ug/L	0.3468	13.308	ppb	0.3468	2.61%
Cr 267.716†	2638.5	28.766	ug/L	0.4484	28.766	ppb	0.4484	1.56%
Cu 324.752†	6638.7	21.478	ug/L	0.3804	21.478	ppb	0.3804	1.77%
Fe 238.204 Radial†	5191.8	48605	ug/L	731.6	48605	ppb	731.6	1.51%
K 766.490 Radial†	21034.4	3720.0	ug/L	62.21	3720.0	ppb	62.21	1.67%

Mg 279.077 IEC†	281.8	9901.3	ug/L	278.95	9901.3	ppb	278.95	2.82%
Mn 257.610†	843465.7	904.42	ug/L	10.079	904.42	ppb	10.079	1.11%
Mo 202.031†	-20.9	2.1197	ug/L	0.16247	2.1197	ppb	0.16247	7.66%
Na 589.592 Radial†	3993.0	1340.0	ug/L	16.27	1340.0	ppb	16.27	1.21%
Ni 231.604†	1712.1	39.633	ug/L	0.5958	39.633	ppb	0.5958	1.50%
P 214.914†	4384.2	2491.8	ug/L	23.94	2491.8	ppb	23.94	0.96%
Pb 220.353†	225.2	25.370	ug/L	0.2907	25.370	ppb	0.2907	1.15%
S 181.975 Axial†	107.6	147.34	ug/L	11.153	147.34	ppb	11.153	7.57%
Sb 206.836†	23.5	-0.6015	ug/L	1.19920	-0.6015	ppb	1.19920	199.36%
Se 196.026†	-249.4	12.108	ug/L	1.8670	12.108	ppb	1.8670	15.42%
Si 251.611†	622568.7	18636	ug/L	214.5	18636	ppb	214.5	1.15%
Sn 189.927†	-144.1	-20.955	ug/L	0.7031	-20.955	ppb	0.7031	3.36%
Sr 421.552†	15376.2	95.583	ug/L	1.6937	95.583	ppb	1.6937	1.77%
Ti 334.940†	1711804.7	2732.7	ug/L	30.12	2732.7	ppb	30.12	1.10%
Tl 190.801†	-98.6	-1.2092	ug/L	0.46400	-1.2092	ppb	0.46400	38.37%
U 409.014†	-2762.2	-82.260	ug/L	2.4727	-82.260	ppb	2.4727	3.01%
V 292.402†	15099.2	89.373	ug/L	0.4722	89.373	ppb	0.4722	0.53%
Zn 213.857†	15836.5	133.10	ug/L	0.478	133.10	ppb	0.478	0.36%
SiO2†	622959.3	39959	ug/L	480.1	39959	ppb	480.1	1.20%

Sequence No.: 5
Sample ID: 1201978574|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/8/2009 10:34:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978574|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5650.9	5650.9	96.7	%			10:36:38
1	Y RADIAL	6319.4	6319.4	100.5	%			10:36:38
1	Al 396.153Radial†	49662.7	51379.8	35668	ug/L	35668	ppb	10:36:18
1	Ca 317.933Radial†	16093.0	16627.2	24508	ug/L	24508	ppb	10:36:18
1	Fe 238.204 Radial†	4836.6	4995.0	46778	ug/L	46778	ppb	10:36:38
1	K 766.490 Radial†	59550.2	59233.0	10488	ug/L	10488	ppb	10:36:18
1	Mg 279.077 IEC†	419.2	432.4	15224	ug/L	15224	ppb	10:36:38
1	Na 589.592 Radial†	23752.1	25651.5	8608.2	ug/L	8608.2	ppb	10:36:18
1	Sr 421.552†	107820.0	111530.9	694.36	ug/L	694.36	ppb	10:36:18
1	Sc 361.383	905054.7	905054.7	100.42	%			10:37:37
1	Y 371.029	777157.0	777157.0	103.47	%			10:37:37
1	Ag 328.068†	113918.1	113148.2	528.93	ug/L	528.93	ppb	10:37:37
1	As 188.979†	1257.1	1276.0	531.21	ug/L	531.21	ppb	10:37:57
1	B 249.677†	24953.3	25379.4	524.73	ug/L	524.73	ppb	10:37:37
1	Ba 233.527†	105384.0	104951.1	780.85	ug/L	780.85	ppb	10:37:37
1	Be 313.107†	1485143.3	1484036.3	545.72	ug/L	545.72	ppb	10:37:37
1	Cd 226.502†	48890.5	48880.8	512.40	ug/L	512.40	ppb	10:37:37
1	Co 228.616†	26942.8	26895.3	506.00	ug/L	506.00	ppb	10:37:57
1	Cr 267.716†	50194.2	49905.3	525.59	ug/L	525.59	ppb	10:37:37
1	Cu 324.752†	197971.7	190385.9	547.22	ug/L	547.22	ppb	10:37:37
1	Mn 257.610†	1276478.9	1270710.5	1359.9	ug/L	1359.9	ppb	10:37:37
1	Mo 202.031†	7874.8	7823.5	500.31	ug/L	500.31	ppb	10:37:57
1	Ni 231.604†	22663.6	22482.1	520.28	ug/L	520.28	ppb	10:37:57
1	P 214.914†	3752.4	3513.2	1920.0	ug/L	1920.0	ppb	10:37:57
1	Pb 220.353†	4617.0	4666.1	532.45	ug/L	532.45	ppb	10:37:57
1	S 181.975 Axial†	3800.0	3742.5	5237.2	ug/L	5237.2	ppb	10:37:57
1	Sb 206.836†	1625.0	1584.0	502.57	ug/L	502.57	ppb	10:37:57
1	Se 196.026†	613.3	639.6	525.17	ug/L	525.17	ppb	10:37:57
1	Si 251.611†	895060.6	890862.2	26655	ug/L	26655	ppb	10:37:37
1	Sn 189.927†	3067.2	3049.3	502.46	ug/L	502.46	ppb	10:37:57
1	Ti 334.940†	1530510.5	1525215.4	2434.9	ug/L	2434.9	ppb	10:37:37
1	Tl 190.801†	1661.5	1687.0	496.16	ug/L	496.16	ppb	10:37:57
1	U 409.014†	13148.2	15495.0	419.95	ug/L	419.95	ppb	10:37:37
1	V 292.402†	86824.6	87819.4	578.31	ug/L	578.31	ppb	10:37:37
1	Zn 213.857†	72150.5	71226.5	613.30	ug/L	613.30	ppb	10:37:37
1	SiO2†	888438.0	884249.6	56693	ug/L	56693	ppb	10:38:58
2	Sc Radial	5781.9	5781.9	98.9	%			10:37:03
2	Y RADIAL	6434.5	6434.5	102.3	%			10:37:03
2	Al 396.153Radial†	49283.6	49832.6	34594	ug/L	34594	ppb	10:36:43
2	Ca 317.933Radial†	15968.6	16124.3	23766	ug/L	23766	ppb	10:36:43
2	Fe 238.204 Radial†	4781.9	4826.4	45200	ug/L	45200	ppb	10:37:03
2	K 766.490 Radial†	59259.7	57543.6	10189	ug/L	10189	ppb	10:36:43
2	Mg 279.077 IEC†	411.8	415.1	14616	ug/L	14616	ppb	10:37:03
2	Na 589.592 Radial†	23653.4	24995.0	8387.8	ug/L	8387.8	ppb	10:36:43
2	Sr 421.552†	107139.7	108316.2	674.34	ug/L	674.34	ppb	10:36:43
2	Sc 361.383	903333.2	903333.2	100.23	%			10:38:04
2	Y 371.029	777589.8	777589.8	103.53	%			10:38:04
2	Ag 328.068†	113109.4	112557.6	525.75	ug/L	525.75	ppb	10:38:04
2	As 188.979†	1272.4	1293.7	537.80	ug/L	537.80	ppb	10:38:24
2	B 249.677†	24775.3	25249.2	522.21	ug/L	522.21	ppb	10:38:04
2	Ba 233.527†	104381.4	104150.7	774.85	ug/L	774.85	ppb	10:38:04
2	Be 313.107†	1477546.1	1479274.9	543.94	ug/L	543.94	ppb	10:38:04
2	Cd 226.502†	48410.4	48494.6	508.47	ug/L	508.47	ppb	10:38:04
2	Co 228.616†	26968.6	26972.3	507.53	ug/L	507.53	ppb	10:38:24
2	Cr 267.716†	49957.3	49764.2	524.08	ug/L	524.08	ppb	10:38:04
2	Cu 324.752†	196378.5	189172.0	543.66	ug/L	543.66	ppb	10:38:04
2	Mn 257.610†	1264230.2	1260912.3	1349.3	ug/L	1349.3	ppb	10:38:04
2	Mo 202.031†	7888.3	7851.9	502.01	ug/L	502.01	ppb	10:38:24
2	Ni 231.604†	22694.1	22555.6	521.98	ug/L	521.98	ppb	10:38:24

2	P 214.914†	3749.6	3517.5	1924.0 ug/L	1924.0 ppb	10:38:24
2	Pb 220.353†	4615.1	4673.0	533.12 ug/L	533.12 ppb	10:38:24
2	S 181.975 Axial†	3814.9	3764.6	5268.4 ug/L	5268.4 ppb	10:38:24
2	Sb 206.836†	1606.9	1569.0	497.97 ug/L	497.97 ppb	10:38:24
2	Se 196.026†	602.7	630.1	514.54 ug/L	514.54 ppb	10:38:24
2	Si 251.611†	886484.9	884004.8	26450 ug/L	26450 ppb	10:38:04
2	Sn 189.927†	3067.7	3055.7	503.40 ug/L	503.40 ppb	10:38:24
2	Ti 334.940†	1515533.5	1513177.3	2415.6 ug/L	2415.6 ppb	10:38:04
2	Tl 190.801†	1672.1	1700.7	499.77 ug/L	499.77 ppb	10:38:24
2	U 409.014†	13220.0	15591.6	422.81 ug/L	422.81 ppb	10:38:04
2	V 292.402†	86060.9	87222.2	574.65 ug/L	574.65 ppb	10:38:04
2	Zn 213.857†	71552.8	70767.1	609.45 ug/L	609.45 ppb	10:38:04
2	SiO2†	886957.5	884458.5	56706 ug/L	56706 ppb	10:39:04
3	Sc Radial	5726.0	5726.0	98.0 %		10:37:28
3	Y RADIAL	6367.3	6367.3	101.3 %		10:37:28
3	Al 396.153Radial†	49329.8	50366.5	34965 ug/L	34965 ppb	10:37:08
3	Ca 317.933Radial†	15972.7	16286.1	24005 ug/L	24005 ppb	10:37:08
3	Fe 238.204 Radial†	4782.8	4874.6	45651 ug/L	45651 ppb	10:37:28
3	K 766.490 Radial†	59041.2	57905.8	10253 ug/L	10253 ppb	10:37:08
3	Mg 279.077 IEC†	411.6	418.9	14749 ug/L	14749 ppb	10:37:28
3	Na 589.592 Radial†	23528.3	25101.0	8423.4 ug/L	8423.4 ppb	10:37:08
3	Sr 421.552†	106907.0	109136.8	679.45 ug/L	679.45 ppb	10:37:08
3	Sc 361.383	914640.7	914640.7	101.48 %		10:38:32
3	Y 371.029	786513.5	786513.5	104.72 %		10:38:32
3	Ag 328.068†	114506.1	112538.7	525.80 ug/L	525.80 ppb	10:38:32
3	As 188.979†	1268.8	1274.4	530.28 ug/L	530.28 ppb	10:38:52
3	B 249.677†	25203.0	25365.1	524.59 ug/L	524.59 ppb	10:38:32
3	Ba 233.527†	105547.7	104012.5	773.84 ug/L	773.84 ppb	10:38:32
3	Be 313.107†	1493203.8	1476478.9	542.93 ug/L	542.93 ppb	10:38:32
3	Cd 226.502†	48885.1	48365.2	507.06 ug/L	507.06 ppb	10:38:32
3	Co 228.616†	27025.2	26695.3	502.24 ug/L	502.24 ppb	10:38:52
3	Cr 267.716†	50418.4	49602.4	522.39 ug/L	522.39 ppb	10:38:32
3	Cu 324.752†	199541.9	189866.9	545.67 ug/L	545.67 ppb	10:38:32
3	Mn 257.610†	1280048.9	1260906.1	1349.3 ug/L	1349.3 ppb	10:38:32
3	Mo 202.031†	7882.8	7749.2	495.52 ug/L	495.52 ppb	10:38:52
3	Ni 231.604†	22736.7	22317.7	516.47 ug/L	516.47 ppb	10:38:52
3	P 214.914†	3778.4	3499.6	1913.1 ug/L	1913.1 ppb	10:38:52
3	Pb 220.353†	4629.4	4630.1	528.30 ug/L	528.30 ppb	10:38:52
3	S 181.975 Axial†	3828.6	3731.0	5221.3 ug/L	5221.3 ppb	10:38:52
3	Sb 206.836†	1621.3	1563.3	495.95 ug/L	495.95 ppb	10:38:52
3	Se 196.026†	615.1	634.9	518.78 ug/L	518.78 ppb	10:38:52
3	Si 251.611†	899867.2	886257.1	26517 ug/L	26517 ppb	10:38:32
3	Sn 189.927†	3066.0	3016.2	496.97 ug/L	496.97 ppb	10:38:52
3	Ti 334.940†	1536162.6	1514811.4	2418.2 ug/L	2418.2 ppb	10:38:32
3	Tl 190.801†	1670.8	1678.9	493.71 ug/L	493.71 ppb	10:38:52
3	U 409.014†	13277.4	15485.0	419.82 ug/L	419.82 ppb	10:38:32
3	V 292.402†	86954.5	87041.1	573.28 ug/L	573.28 ppb	10:38:32
3	Zn 213.857†	72485.4	70803.5	609.76 ug/L	609.76 ppb	10:38:32
3	SiO2†	889594.1	876116.5	56171 ug/L	56171 ppb	10:39:10

Mean Data: 1201978574|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907676.2	100.71	%	0.676				0.67%
Sc Radial	5719.6	97.9	%	1.13				1.15%
Y 371.029	780420.1	103.91	%	0.703				0.68%
Y RADIAL	6373.8	101.4	%	0.92				0.91%
Ag 328.068†	112748.2	526.82	ug/L	1.824	526.82	ppb	1.824	0.35%
Al 396.153Radial†	50526.3	35075	ug/L	545.9	35075	ppb	545.9	1.56%
As 188.979†	1281.3	533.10	ug/L	4.099	533.10	ppb	4.099	0.77%
B 249.677†	25331.3	523.84	ug/L	1.419	523.84	ppb	1.419	0.27%
Ba 233.527†	104371.5	776.52	ug/L	3.789	776.52	ppb	3.789	0.49%
Be 313.107†	1479930.1	544.20	ug/L	1.411	544.20	ppb	1.411	0.26%
Ca 317.933Radial†	16345.9	24093	ug/L	378.4	24093	ppb	378.4	1.57%
Cd 226.502†	48580.2	509.31	ug/L	2.766	509.31	ppb	2.766	0.54%
Co 228.616†	26854.3	505.26	ug/L	2.720	505.26	ppb	2.720	0.54%
Cr 267.716†	49757.3	524.02	ug/L	1.606	524.02	ppb	1.606	0.31%
Cu 324.752†	189808.3	545.52	ug/L	1.782	545.52	ppb	1.782	0.33%
Fe 238.204 Radial†	4898.7	45876	ug/L	813.0	45876	ppb	813.0	1.77%
K 766.490 Radial†	58227.4	10310	ug/L	157.7	10310	ppb	157.7	1.53%

Mg 279.077 IEC†	422.1	14863	ug/L	319.6	14863	ppb	319.6	2.15%
Mn 257.610†	1264176.3	1352.8	ug/L	6.11	1352.8	ppb	6.11	0.45%
Mo 202.031†	7808.2	499.28	ug/L	3.367	499.28	ppb	3.367	0.67%
Na 589.592 Radial†	25249.2	8473.1	ug/L	118.28	8473.1	ppb	118.28	1.40%
Ni 231.604†	22451.8	519.58	ug/L	2.820	519.58	ppb	2.820	0.54%
P 214.914†	3510.1	1919.0	ug/L	5.55	1919.0	ppb	5.55	0.29%
Pb 220.353†	4656.4	531.29	ug/L	2.609	531.29	ppb	2.609	0.49%
S 181.975 Axial†	3746.1	5242.3	ug/L	23.97	5242.3	ppb	23.97	0.46%
Sb 206.836†	1572.1	498.83	ug/L	3.393	498.83	ppb	3.393	0.68%
Se 196.026†	634.9	519.50	ug/L	5.349	519.50	ppb	5.349	1.03%
Si 251.611†	887041.4	26541	ug/L	104.6	26541	ppb	104.6	0.39%
Sn 189.927†	3040.4	500.94	ug/L	3.473	500.94	ppb	3.473	0.69%
Sr 421.552†	109661.3	682.72	ug/L	10.399	682.72	ppb	10.399	1.52%
Ti 334.940†	1517734.7	2422.9	ug/L	10.44	2422.9	ppb	10.44	0.43%
Tl 190.801†	1688.9	496.54	ug/L	3.047	496.54	ppb	3.047	0.61%
U 409.014†	15523.8	420.86	ug/L	1.690	420.86	ppb	1.690	0.40%
V 292.402†	87360.9	575.41	ug/L	2.600	575.41	ppb	2.600	0.45%
Zn 213.857†	70932.4	610.84	ug/L	2.140	610.84	ppb	2.140	0.35%
SiO2†	881608.2	56523	ug/L	305.0	56523	ppb	305.0	0.54%

Sequence No.: 6
Sample ID: 1201978575|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 12/8/2009 10:41:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978575|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5750.2	5750.2	98.4	%			10:43:33
1	Y RADIAL	6538.4	6538.4	104.0	%			10:43:33
1	Al 396.153Radial†	54002.5	54902.6	38115	ug/L	38115	ppb	10:43:13
1	Ca 317.933Radial†	16444.6	16696.9	24610	ug/L	24610	ppb	10:43:13
1	Fe 238.204 Radial†	6665.1	6766.9	63367	ug/L	63367	ppb	10:43:33
1	K 766.490 Radial†	60071.0	58697.9	10391	ug/L	10391	ppb	10:43:13
1	Mg 279.077 IEC†	427.5	433.3	15242	ug/L	15242	ppb	10:43:33
1	Na 589.592 Radial†	23849.4	25325.9	8498.9	ug/L	8498.9	ppb	10:43:13
1	Sr 421.552†	109668.1	111482.0	694.05	ug/L	694.05	ppb	10:43:13
1	Sc 361.383	903923.7	903923.7	100.30	%			10:44:32
1	Y 371.029	793560.0	793560.0	105.66	%			10:44:32
1	Ag 328.068†	115367.7	114735.5	541.62	ug/L	541.62	ppb	10:44:32
1	As 188.979†	1274.3	1294.7	547.95	ug/L	547.95	ppb	10:44:52
1	B 249.677†	25810.9	26265.7	541.08	ug/L	541.08	ppb	10:44:32
1	Ba 233.527†	107628.9	107320.7	799.15	ug/L	799.15	ppb	10:44:32
1	Be 313.107†	1502003.1	1502696.9	554.10	ug/L	554.10	ppb	10:44:32
1	Cd 226.502†	49728.8	49777.6	520.23	ug/L	520.23	ppb	10:44:32
1	Co 228.616†	27771.6	27755.4	520.39	ug/L	520.39	ppb	10:44:52
1	Cr 267.716†	54020.1	53782.5	566.69	ug/L	566.69	ppb	10:44:32
1	Cu 324.752†	204130.6	196773.3	566.34	ug/L	566.34	ppb	10:44:32
1	Mn 257.610†	1534881.8	1529943.5	1638.1	ug/L	1638.1	ppb	10:44:32
1	Mo 202.031†	8043.9	8001.9	512.82	ug/L	512.82	ppb	10:44:52
1	Ni 231.604†	23222.4	23067.5	533.83	ug/L	533.83	ppb	10:44:52
1	P 214.914†	4666.1	4428.9	2432.8	ug/L	2432.8	ppb	10:44:52
1	Pb 220.353†	4761.1	4815.5	548.54	ug/L	548.54	ppb	10:44:52
1	S 181.975 Axial†	3973.3	3920.0	5485.5	ug/L	5485.5	ppb	10:44:52
1	Sb 206.836†	1629.6	1590.5	502.18	ug/L	502.18	ppb	10:44:52
1	Se 196.026†	526.3	553.5	528.16	ug/L	528.16	ppb	10:44:52
1	Si 251.611†	921241.7	918081.6	27470	ug/L	27470	ppb	10:44:32
1	Sn 189.927†	3123.9	3109.7	512.59	ug/L	512.59	ppb	10:44:52
1	Ti 334.940†	2035584.0	2030709.8	3241.5	ug/L	3241.5	ppb	10:44:32
1	Tl 190.801†	1680.4	1707.9	509.69	ug/L	509.69	ppb	10:44:52
1	U 409.014†	12621.4	14986.1	403.76	ug/L	403.76	ppb	10:44:32
1	V 292.402†	94752.5	95832.0	627.94	ug/L	627.94	ppb	10:44:32
1	Zn 213.857†	77575.1	76725.1	659.64	ug/L	659.64	ppb	10:44:32
1	SiO2†	934337.5	931121.0	59699	ug/L	59699	ppb	10:45:53
2	Sc Radial	5725.1	5725.1	98.0	%			10:43:58
2	Y RADIAL	6490.4	6490.4	103.2	%			10:43:58
2	Al 396.153Radial†	53127.2	54250.5	37662	ug/L	37662	ppb	10:43:38
2	Ca 317.933Radial†	16248.9	16570.6	24424	ug/L	24424	ppb	10:43:38
2	Fe 238.204 Radial†	6687.6	6819.6	63861	ug/L	63861	ppb	10:43:58
2	K 766.490 Radial†	59565.7	58450.6	10347	ug/L	10347	ppb	10:43:38
2	Mg 279.077 IEC†	434.1	441.9	15547	ug/L	15547	ppb	10:43:58
2	Na 589.592 Radial†	23448.4	25023.1	8397.3	ug/L	8397.3	ppb	10:43:38
2	Sr 421.552†	107778.8	110043.6	685.10	ug/L	685.10	ppb	10:43:38
2	Sc 361.383	906895.0	906895.0	100.62	%			10:44:59
2	Y 371.029	797130.0	797130.0	106.13	%			10:44:59
2	Ag 328.068†	115730.3	114719.0	541.71	ug/L	541.71	ppb	10:44:59
2	As 188.979†	1277.1	1293.4	547.51	ug/L	547.51	ppb	10:45:19
2	B 249.677†	25871.7	26241.8	540.52	ug/L	540.52	ppb	10:44:59
2	Ba 233.527†	108334.4	107670.3	801.76	ug/L	801.76	ppb	10:44:59
2	Be 313.107†	1510216.5	1505952.8	555.29	ug/L	555.29	ppb	10:44:59
2	Cd 226.502†	50057.9	49942.2	521.92	ug/L	521.92	ppb	10:44:59
2	Co 228.616†	27743.7	27636.8	518.13	ug/L	518.13	ppb	10:45:19
2	Cr 267.716†	54341.0	53925.0	568.19	ug/L	568.19	ppb	10:44:59
2	Cu 324.752†	204316.2	196291.0	564.99	ug/L	564.99	ppb	10:44:59
2	Mn 257.610†	1542988.6	1532986.1	1641.4	ug/L	1641.4	ppb	10:44:59
2	Mo 202.031†	8040.0	7971.8	510.95	ug/L	510.95	ppb	10:45:19
2	Ni 231.604†	23197.7	22967.1	531.50	ug/L	531.50	ppb	10:45:19

2	P 214.914†	4686.1	4433.5	2435.1 ug/L	2435.1 ppb	10:45:19
2	Pb 220.353†	4778.9	4817.7	548.64 ug/L	548.64 ppb	10:45:19
2	S 181.975 Axial†	3994.7	3928.3	5497.2 ug/L	5497.2 ppb	10:45:19
2	Sb 206.836†	1638.9	1594.5	503.33 ug/L	503.33 ppb	10:45:19
2	Se 196.026†	526.6	552.1	528.80 ug/L	528.80 ppb	10:45:19
2	Si 251.611†	923263.6	917081.6	27440 ug/L	27440 ppb	10:44:59
2	Sn 189.927†	3120.3	3095.9	510.31 ug/L	510.31 ppb	10:45:19
2	Ti 334.940†	2043377.2	2031805.1	3243.3 ug/L	3243.3 ppb	10:44:59
2	Tl 190.801†	1672.1	1694.2	505.88 ug/L	505.88 ppb	10:45:19
2	U 409.014†	12723.0	15045.8	405.35 ug/L	405.35 ppb	10:44:59
2	V 292.402†	95243.1	96010.1	629.02 ug/L	629.02 ppb	10:44:59
2	Zn 213.857†	77863.7	76758.5	659.90 ug/L	659.90 ppb	10:44:59
2	SiO2†	915619.3	909466.9	58310 ug/L	58310 ppb	10:45:59
3	Sc Radial	5717.4	5717.4	97.8 %		10:44:23
3	Y RADIAL	6492.9	6492.9	103.3 %		10:44:23
3	Al 396.153Radial†	54138.0	55356.0	38430 ug/L	38430 ppb	10:44:03
3	Ca 317.933Radial†	16422.9	16770.6	24719 ug/L	24719 ppb	10:44:03
3	Fe 238.204 Radial†	6674.3	6815.1	63819 ug/L	63819 ppb	10:44:23
3	K 766.490 Radial†	60489.6	59476.0	10529 ug/L	10529 ppb	10:44:03
3	Mg 279.077 IEC†	434.1	442.5	15567 ug/L	15567 ppb	10:44:23
3	Na 589.592 Radial†	24011.4	25630.5	8601.1 ug/L	8601.1 ppb	10:44:03
3	Sr 421.552†	110199.1	112664.1	701.41 ug/L	701.41 ppb	10:44:03
3	Sc 361.383	903228.5	903228.5	100.22 %		10:45:27
3	Y 371.029	792778.4	792778.4	105.55 %		10:45:27
3	Ag 328.068†	115246.0	114702.7	541.62 ug/L	541.62 ppb	10:45:27
3	As 188.979†	1282.2	1303.6	551.56 ug/L	551.56 ppb	10:45:47
3	B 249.677†	25853.0	26327.4	542.30 ug/L	542.30 ppb	10:45:27
3	Ba 233.527†	108177.1	107950.3	803.83 ug/L	803.83 ppb	10:45:27
3	Be 313.107†	1506533.6	1508370.2	556.18 ug/L	556.18 ppb	10:45:27
3	Cd 226.502†	50077.4	50163.6	524.26 ug/L	524.26 ppb	10:45:27
3	Co 228.616†	27948.0	27952.7	524.13 ug/L	524.13 ppb	10:45:47
3	Cr 267.716†	54388.7	54191.7	571.00 ug/L	571.00 ppb	10:45:27
3	Cu 324.752†	203169.3	195970.7	564.07 ug/L	564.07 ppb	10:45:27
3	Mn 257.610†	1542217.1	1538440.9	1647.2 ug/L	1647.2 ppb	10:45:27
3	Mo 202.031†	8102.9	8066.9	516.99 ug/L	516.99 ppb	10:45:47
3	Ni 231.604†	23317.8	23180.5	536.44 ug/L	536.44 ppb	10:45:47
3	P 214.914†	4716.2	4482.4	2463.8 ug/L	2463.8 ppb	10:45:47
3	Pb 220.353†	4789.3	4847.4	552.18 ug/L	552.18 ppb	10:45:47
3	S 181.975 Axial†	4026.0	3975.7	5563.5 ug/L	5563.5 ppb	10:45:47
3	Sb 206.836†	1643.2	1605.4	506.91 ug/L	506.91 ppb	10:45:47
3	Se 196.026†	542.7	570.3	539.38 ug/L	539.38 ppb	10:45:47
3	Si 251.611†	920935.3	918482.8	27481 ug/L	27481 ppb	10:45:27
3	Sn 189.927†	3139.8	3128.0	515.60 ug/L	515.60 ppb	10:45:47
3	Ti 334.940†	2038179.3	2034861.7	3248.2 ug/L	3248.2 ppb	10:45:27
3	Tl 190.801†	1698.5	1727.3	515.22 ug/L	515.22 ppb	10:45:47
3	U 409.014†	12570.5	14945.0	402.57 ug/L	402.57 ppb	10:45:27
3	V 292.402†	94934.3	96086.2	629.61 ug/L	629.61 ppb	10:45:27
3	Zn 213.857†	77827.7	77036.6	662.30 ug/L	662.30 ppb	10:45:27
3	SiO2†	918293.1	915828.5	58718 ug/L	58718 ppb	10:46:05

Mean Data: 1201978575|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904682.4	100.38	%	0.216				0.22%
Sc Radial	5730.9	98.1	%	0.29				0.30%
Y 371.029	794489.4	105.78	%	0.309				0.29%
Y RADIAL	6507.2	103.5	%	0.43				0.42%
Ag 328.068†	114719.1	541.65	ug/L	0.051	541.65	ppb	0.051	0.01%
Al 396.153Radial†	54836.4	38069	ug/L	385.9	38069	ppb	385.9	1.01%
As 188.979†	1297.2	549.00	ug/L	2.226	549.00	ppb	2.226	0.41%
B 249.677†	26278.3	541.30	ug/L	0.914	541.30	ppb	0.914	0.17%
Ba 233.527†	107647.1	801.58	ug/L	2.348	801.58	ppb	2.348	0.29%
Be 313.107†	1505673.3	555.19	ug/L	1.044	555.19	ppb	1.044	0.19%
Ca 317.933Radial†	16679.4	24584	ug/L	149.0	24584	ppb	149.0	0.61%
Cd 226.502†	49961.1	522.14	ug/L	2.028	522.14	ppb	2.028	0.39%
Co 228.616†	27781.6	520.88	ug/L	3.030	520.88	ppb	3.030	0.58%
Cr 267.716†	53966.4	568.63	ug/L	2.186	568.63	ppb	2.186	0.38%
Cu 324.752†	196345.0	565.13	ug/L	1.144	565.13	ppb	1.144	0.20%
Fe 238.204 Radial†	6800.5	63682	ug/L	273.7	63682	ppb	273.7	0.43%
K 766.490 Radial†	58874.8	10422	ug/L	94.8	10422	ppb	94.8	0.91%

Mg 279.077 IEC†	439.3	15452	ug/L	181.8	15452	ppb	181.8	1.18%
Mn 257.610†	1533790.1	1642.2	ug/L	4.61	1642.2	ppb	4.61	0.28%
Mo 202.031†	8013.5	513.58	ug/L	3.091	513.58	ppb	3.091	0.60%
Na 589.592 Radial†	25326.5	8499.1	ug/L	101.92	8499.1	ppb	101.92	1.20%
Ni 231.604†	23071.7	533.92	ug/L	2.470	533.92	ppb	2.470	0.46%
P 214.914†	4448.3	2443.9	ug/L	17.29	2443.9	ppb	17.29	0.71%
Pb 220.353†	4826.9	549.79	ug/L	2.076	549.79	ppb	2.076	0.38%
S 181.975 Axial†	3941.4	5515.4	ug/L	42.03	5515.4	ppb	42.03	0.76%
Sb 206.836†	1596.8	504.14	ug/L	2.464	504.14	ppb	2.464	0.49%
Se 196.026†	558.7	532.11	ug/L	6.298	532.11	ppb	6.298	1.18%
Si 251.611†	917882.0	27464	ug/L	21.5	27464	ppb	21.5	0.08%
Sn 189.927†	3111.2	512.83	ug/L	2.653	512.83	ppb	2.653	0.52%
Sr 421.552†	111396.6	693.52	ug/L	8.172	693.52	ppb	8.172	1.18%
Ti 334.940†	2032458.9	3244.3	ug/L	3.44	3244.3	ppb	3.44	0.11%
Tl 190.801†	1709.8	510.26	ug/L	4.695	510.26	ppb	4.695	0.92%
U 409.014†	14992.3	403.89	ug/L	1.393	403.89	ppb	1.393	0.34%
V 292.402†	95976.1	628.86	ug/L	0.845	628.86	ppb	0.845	0.13%
Zn 213.857†	76840.0	660.61	ug/L	1.465	660.61	ppb	1.465	0.22%
SiO2†	918805.5	58909	ug/L	713.9	58909	ppb	713.9	1.21%

Sequence No.: 7
Sample ID: 1201978573|925470|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 12/8/2009 10:48:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978573|925470|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5843.6	5843.6	100.0	%			10:50:08
1	Y RADIAL	6328.6	6328.6	100.6	%			10:50:08
1	Al 396.153Radial†	5035.3	5055.9	3512.0	ug/L	3512.0	ppb	10:50:08
1	Ca 317.933Radial†	2335.6	2320.1	3419.7	ug/L	3419.7	ppb	10:50:28
1	Fe 238.204 Radial†	954.6	947.9	8873.8	ug/L	8873.8	ppb	10:50:28
1	K 766.490 Radial†	6504.6	4153.2	734.32	ug/L	734.32	ppb	10:50:08
1	Mg 279.077 IEC†	56.7	55.5	1951.7	ug/L	1951.7	ppb	10:50:28
1	Na 589.592 Radial†	-337.5	750.5	251.84	ug/L	251.84	ppb	10:50:08
1	Sr 421.552†	2662.5	2690.0	16.721	ug/L	16.721	ppb	10:50:08
1	Sc 361.383	897166.6	897166.6	99.545	%			10:51:25
1	Y 371.029	751566.8	751566.8	100.06	%			10:51:25
1	Ag 328.068†	-269.7	-563.7	0.3214	ug/L	0.3214	ppb	10:51:25
1	As 188.979†	-22.4	1.7	5.3316	ug/L	5.3316	ppb	10:51:45
1	B 249.677†	-128.8	401.3	7.2283	ug/L	7.2283	ppb	10:51:25
1	Ba 233.527†	5567.5	5601.3	41.892	ug/L	41.892	ppb	10:51:25
1	Be 313.107†	-6416.4	-1332.7	0.2835	ug/L	0.2835	ppb	10:51:25
1	Cd 226.502†	-76.6	118.2	0.3673	ug/L	0.3673	ppb	10:51:45
1	Co 228.616†	126.1	192.1	2.7006	ug/L	2.7006	ppb	10:51:45
1	Cr 267.716†	646.8	571.1	6.1976	ug/L	6.1976	ppb	10:51:45
1	Cu 324.752†	8253.4	1534.4	4.8437	ug/L	4.8437	ppb	10:51:25
1	Mn 257.610†	181666.1	182073.5	195.07	ug/L	195.07	ppb	10:51:25
1	Mo 202.031†	8.9	-9.4	0.0345	ug/L	0.0345	ppb	10:51:45
1	Ni 231.604†	429.0	344.4	7.9736	ug/L	7.9736	ppb	10:51:45
1	P 214.914†	1035.2	816.4	464.08	ug/L	464.08	ppb	10:51:45
1	Pb 220.353†	-28.0	40.3	4.6079	ug/L	4.6079	ppb	10:51:45
1	S 181.975 Axial†	54.9	13.6	18.385	ug/L	18.385	ppb	10:51:45
1	Sb 206.836†	30.5	-3.6	-2.3766	ug/L	-2.3766	ppb	10:51:45
1	Se 196.026†	-75.0	-46.5	1.7154	ug/L	1.7154	ppb	10:51:45
1	Si 251.611†	127178.0	127309.2	3810.9	ug/L	3810.9	ppb	10:51:25
1	Sn 189.927†	-37.7	-42.9	-6.5464	ug/L	-6.5464	ppb	10:51:45
1	Ti 334.940†	243045.4	245270.4	391.59	ug/L	391.59	ppb	10:51:25
1	Tl 190.801†	-44.4	-12.1	0.7732	ug/L	0.7732	ppb	10:51:45
1	U 409.014†	-2946.4	-558.0	-16.500	ug/L	-16.500	ppb	10:51:25
1	V 292.402†	2004.2	3371.7	20.492	ug/L	20.492	ppb	10:51:25
1	Zn 213.857†	3702.8	3097.9	26.094	ug/L	26.094	ppb	10:51:45
1	SiO2†	127651.7	127767.2	8195.5	ug/L	8195.5	ppb	10:52:41
2	Sc Radial	5824.6	5824.6	99.7	%			10:50:33
2	Y RADIAL	6303.3	6303.3	100.2	%			10:50:33
2	Al 396.153Radial†	5134.5	5172.0	3592.6	ug/L	3592.6	ppb	10:50:33
2	Ca 317.933Radial†	2330.2	2322.4	3423.0	ug/L	3423.0	ppb	10:50:53
2	Fe 238.204 Radial†	950.4	946.8	8863.6	ug/L	8863.6	ppb	10:50:53
2	K 766.490 Radial†	6579.1	4249.3	751.37	ug/L	751.37	ppb	10:50:33
2	Mg 279.077 IEC†	54.9	54.0	1895.9	ug/L	1895.9	ppb	10:50:53
2	Na 589.592 Radial†	-351.1	735.7	246.88	ug/L	246.88	ppb	10:50:33
2	Sr 421.552†	2725.8	2762.2	17.171	ug/L	17.171	ppb	10:50:33
2	Sc 361.383	908946.8	908946.8	100.85	%			10:51:50
2	Y 371.029	761775.5	761775.5	101.42	%			10:51:50
2	Ag 328.068†	-294.3	-584.5	0.2202	ug/L	0.2202	ppb	10:51:50
2	As 188.979†	-31.1	-6.6	2.0370	ug/L	2.0370	ppb	10:52:10
2	B 249.677†	-68.7	462.5	8.5149	ug/L	8.5149	ppb	10:51:50
2	Ba 233.527†	5614.8	5575.8	41.702	ug/L	41.702	ppb	10:51:50
2	Be 313.107†	-6518.6	-1350.6	0.2777	ug/L	0.2777	ppb	10:51:50
2	Cd 226.502†	-81.3	114.5	0.3294	ug/L	0.3294	ppb	10:52:10
2	Co 228.616†	124.5	188.9	2.6406	ug/L	2.6406	ppb	10:52:10
2	Cr 267.716†	648.7	564.6	6.1276	ug/L	6.1276	ppb	10:52:10
2	Cu 324.752†	8418.3	1590.4	5.0034	ug/L	5.0034	ppb	10:51:50
2	Mn 257.610†	184081.5	182103.3	195.11	ug/L	195.11	ppb	10:51:50
2	Mo 202.031†	16.5	-2.0	0.5004	ug/L	0.5004	ppb	10:52:10
2	Ni 231.604†	445.4	355.1	8.2208	ug/L	8.2208	ppb	10:52:10

2	P 214.914†	1028.5	796.2	452.46 ug/L	452.46 ppb	10:52:10
2	Pb 220.353†	-9.2	59.3	6.7804 ug/L	6.7804 ppb	10:52:10
2	S 181.975 Axial†	56.7	14.6	19.799 ug/L	19.799 ppb	10:52:10
2	Sb 206.836†	38.4	3.8	-0.0258 ug/L	-0.0258 ppb	10:52:10
2	Se 196.026†	-79.8	-50.3	-0.5332 ug/L	-0.5332 ppb	10:52:10
2	Si 251.611†	128720.3	127182.6	3807.1 ug/L	3807.1 ppb	10:51:50
2	Sn 189.927†	-32.5	-37.2	-5.6229 ug/L	-5.6229 ppb	10:52:10
2	Ti 334.940†	246447.9	245479.8	391.92 ug/L	391.92 ppb	10:51:50
2	Tl 190.801†	-45.4	-12.5	0.6784 ug/L	0.6784 ppb	10:52:10
2	U 409.014†	-2852.8	-426.8	-12.885 ug/L	-12.885 ppb	10:51:50
2	V 292.402†	2007.2	3348.6	20.353 ug/L	20.353 ppb	10:51:50
2	Zn 213.857†	3700.9	3047.8	25.657 ug/L	25.657 ppb	10:52:10
2	SiO2†	127624.0	126077.8	8087.1 ug/L	8087.1 ppb	10:52:46
3	Sc Radial	5836.4	5836.4	99.9 %		10:50:58
3	Y RADIAL	6304.7	6304.7	100.3 %		10:50:58
3	Al 396.153Radial†	5092.8	5119.8	3556.3 ug/L	3556.3 ppb	10:50:58
3	Ca 317.933Radial†	2316.4	2303.9	3395.7 ug/L	3395.7 ppb	10:51:18
3	Fe 238.204 Radial†	942.2	936.6	8768.8 ug/L	8768.8 ppb	10:51:18
3	K 766.490 Radial†	6650.8	4307.7	761.74 ug/L	761.74 ppb	10:50:58
3	Mg 279.077 IEC†	49.8	48.7	1710.8 ug/L	1710.8 ppb	10:51:18
3	Na 589.592 Radial†	-340.5	747.0	250.68 ug/L	250.68 ppb	10:50:58
3	Sr 421.552†	2706.5	2737.4	17.016 ug/L	17.016 ppb	10:50:58
3	Sc 361.383	897195.8	897195.8	99.549 %		10:52:16
3	Y 371.029	751426.2	751426.2	100.05 %		10:52:16
3	Ag 328.068†	-291.4	-585.5	0.1854 ug/L	0.1854 ppb	10:52:16
3	As 188.979†	-23.3	0.8	4.9095 ug/L	4.9095 ppb	10:52:36
3	B 249.677†	-102.9	427.3	7.7879 ug/L	7.7879 ppb	10:52:16
3	Ba 233.527†	5536.9	5570.5	41.658 ug/L	41.658 ppb	10:52:16
3	Be 313.107†	-6495.7	-1412.1	0.2494 ug/L	0.2494 ppb	10:52:16
3	Cd 226.502†	-67.5	127.3	0.4743 ug/L	0.4743 ppb	10:52:36
3	Co 228.616†	137.8	203.8	2.9333 ug/L	2.9333 ppb	10:52:36
3	Cr 267.716†	632.3	556.5	6.0414 ug/L	6.0414 ppb	10:52:36
3	Cu 324.752†	8358.0	1639.2	5.1382 ug/L	5.1382 ppb	10:52:16
3	Mn 257.610†	181019.9	181418.4	194.37 ug/L	194.37 ppb	10:52:16
3	Mo 202.031†	23.4	5.1	0.9484 ug/L	0.9484 ppb	10:52:36
3	Ni 231.604†	449.1	364.6	8.4400 ug/L	8.4400 ppb	10:52:36
3	P 214.914†	1027.1	808.3	459.43 ug/L	459.43 ppb	10:52:36
3	Pb 220.353†	-17.5	50.9	5.8251 ug/L	5.8251 ppb	10:52:36
3	S 181.975 Axial†	53.0	11.6	15.610 ug/L	15.610 ppb	10:52:36
3	Sb 206.836†	35.6	1.5	-0.7280 ug/L	-0.7280 ppb	10:52:36
3	Se 196.026†	-66.1	-37.6	6.5458 ug/L	6.5458 ppb	10:52:36
3	Si 251.611†	126835.1	126960.6	3800.4 ug/L	3800.4 ppb	10:52:16
3	Sn 189.927†	-33.3	-38.5	-5.8299 ug/L	-5.8299 ppb	10:52:36
3	Ti 334.940†	241406.9	243616.4	388.95 ug/L	388.95 ppb	10:52:16
3	Tl 190.801†	-37.4	-5.1	2.7276 ug/L	2.7276 ppb	10:52:36
3	U 409.014†	-2855.7	-466.9	-13.975 ug/L	-13.975 ppb	10:52:16
3	V 292.402†	1920.3	3287.4	19.967 ug/L	19.967 ppb	10:52:16
3	Zn 213.857†	3700.5	3095.4	26.087 ug/L	26.087 ppb	10:52:36
3	SiO2†	128455.2	128570.2	8246.9 ug/L	8246.9 ppb	10:52:51

Mean Data: 1201978573|925470|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901103.1	99.982	%	0.7537				0.75%
Sc Radial	5834.8	99.8	%	0.16				0.16%
Y 371.029	754922.8	100.51	%	0.790				0.79%
Y RADIAL	6312.2	100.4	%	0.23				0.23%
Ag 328.068†	-577.9	0.2423	ug/L	0.07066	0.2423	ppb	0.07066	29.16%
Al 396.153Radial†	5115.9	3553.6	ug/L	40.37	3553.6	ppb	40.37	1.14%
As 188.979†	-1.4	4.0927	ug/L	1.79275	4.0927	ppb	1.79275	43.80%
B 249.677†	430.4	7.8437	ug/L	0.64511	7.8437	ppb	0.64511	8.22%
Ba 233.527†	5582.5	41.751	ug/L	0.1243	41.751	ppb	0.1243	0.30%
Be 313.107†	-1365.1	0.2702	ug/L	0.01825	0.2702	ppb	0.01825	6.75%
Ca 317.933Radial†	2315.4	3412.8	ug/L	14.88	3412.8	ppb	14.88	0.44%
Cd 226.502†	120.0	0.3903	ug/L	0.07514	0.3903	ppb	0.07514	19.25%
Co 228.616†	194.9	2.7582	ug/L	0.15462	2.7582	ppb	0.15462	5.61%
Cr 267.716†	564.1	6.1222	ug/L	0.07824	6.1222	ppb	0.07824	1.28%
Cu 324.752†	1588.0	4.9951	ug/L	0.14741	4.9951	ppb	0.14741	2.95%
Fe 238.204 Radial†	943.8	8835.4	ug/L	57.92	8835.4	ppb	57.92	0.66%
K 766.490 Radial†	4236.7	749.15	ug/L	13.846	749.15	ppb	13.846	1.85%

Mg 279.077 IEC†	52.7	1852.8	ug/L	126.06	1852.8	ppb	126.06	6.80%
Mn 257.610†	181865.1	194.85	ug/L	0.416	194.85	ppb	0.416	0.21%
Mo 202.031†	-2.1	0.4945	ug/L	0.45701	0.4945	ppb	0.45701	92.42%
Na 589.592 Radial†	744.4	249.80	ug/L	2.594	249.80	ppb	2.594	1.04%
Ni 231.604†	354.7	8.2115	ug/L	0.23335	8.2115	ppb	0.23335	2.84%
P 214.914†	807.0	458.66	ug/L	5.848	458.66	ppb	5.848	1.28%
Pb 220.353†	50.2	5.7378	ug/L	1.08885	5.7378	ppb	1.08885	18.98%
S 181.975 Axial†	13.3	17.932	ug/L	2.1309	17.932	ppb	2.1309	11.88%
Sb 206.836†	0.6	-1.0434	ug/L	1.20671	-1.0434	ppb	1.20671	115.65%
Se 196.026†	-44.8	2.5760	ug/L	3.61713	2.5760	ppb	3.61713	140.42%
Si 251.611†	127150.8	3806.1	ug/L	5.30	3806.1	ppb	5.30	0.14%
Sn 189.927†	-39.5	-5.9997	ug/L	0.48460	-5.9997	ppb	0.48460	8.08%
Sr 421.552†	2729.9	16.969	ug/L	0.2285	16.969	ppb	0.2285	1.35%
Ti 334.940†	244788.9	390.82	ug/L	1.630	390.82	ppb	1.630	0.42%
Tl 190.801†	-9.9	1.3931	ug/L	1.15672	1.3931	ppb	1.15672	83.03%
U 409.014†	-483.9	-14.453	ug/L	1.8545	-14.453	ppb	1.8545	12.83%
V 292.402†	3335.9	20.271	ug/L	0.2723	20.271	ppb	0.2723	1.34%
Zn 213.857†	3080.3	25.946	ug/L	0.2502	25.946	ppb	0.2502	0.96%
SiO2†	127471.7	8176.5	ug/L	81.60	8176.5	ppb	81.60	1.00%

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 10:55:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5836.7	5836.7	99.9	%			10:56:54
1	Y RADIAL	6210.2	6210.2	98.77	%			10:56:54
1	Al 396.153Radial†	7234.6	7264.0	5024.4	ug/L	5024.4	ppb	10:56:54
1	Ca 317.933Radial†	3402.4	3391.0	4998.2	ug/L	4998.2	ppb	10:57:14
1	Fe 238.204 Radial†	541.2	535.0	5024.5	ug/L	5024.5	ppb	10:57:14
1	K 766.490 Radial†	31171.5	28858.3	5109.2	ug/L	5109.2	ppb	10:56:54
1	Mg 279.077 IEC†	147.8	146.8	5185.7	ug/L	5185.7	ppb	10:57:14
1	Na 589.592 Radial†	26951.7	28073.0	9420.8	ug/L	9420.8	ppb	10:56:54
1	Sr 421.552†	80685.7	80812.9	503.24	ug/L	503.24	ppb	10:56:54
1	Sc 361.383	912942.5	912942.5	101.30	%			10:58:11
1	Y 371.029	746090.1	746090.1	99.335	%			10:58:11
1	Ag 328.068†	113045.6	111306.8	507.20	ug/L	507.20	ppb	10:58:16
1	As 188.979†	1243.0	1251.3	498.84	ug/L	498.84	ppb	10:58:36
1	B 249.677†	23351.6	23583.6	492.64	ug/L	492.64	ppb	10:58:16
1	Ba 233.527†	68082.7	67220.2	499.48	ug/L	499.48	ppb	10:58:16
1	Be 313.107†	1379726.6	1367190.1	499.33	ug/L	499.33	ppb	10:58:11
1	Cd 226.502†	47784.4	47368.2	500.57	ug/L	500.57	ppb	10:58:16
1	Co 228.616†	26603.3	26328.4	499.82	ug/L	499.82	ppb	10:58:16
1	Cr 267.716†	48114.7	47420.6	498.60	ug/L	498.60	ppb	10:58:16
1	Cu 324.752†	182183.4	173096.2	495.61	ug/L	495.61	ppb	10:58:16
1	Mn 257.610†	472775.1	466305.0	497.83	ug/L	497.83	ppb	10:58:11
1	Mo 202.031†	7944.6	7824.7	497.43	ug/L	497.43	ppb	10:58:36
1	Ni 231.604†	22018.7	21650.5	501.03	ug/L	501.03	ppb	10:58:16
1	P 214.914†	4530.0	4248.6	2375.4	ug/L	2375.4	ppb	10:58:36
1	Pb 220.353†	4336.0	4349.0	493.19	ug/L	493.19	ppb	10:58:36
1	S 181.975 Axial†	760.5	709.2	992.78	ug/L	992.78	ppb	10:58:36
1	Sb 206.836†	1628.6	1573.5	505.12	ug/L	505.12	ppb	10:58:36
1	Se 196.026†	832.9	851.0	510.32	ug/L	510.32	ppb	10:58:36
1	Si 251.611†	85003.3	83466.2	2486.7	ug/L	2486.7	ppb	10:58:16
1	Sn 189.927†	3093.2	3048.7	499.75	ug/L	499.75	ppb	10:58:36
1	Ti 334.940†	319189.1	316220.9	504.49	ug/L	504.49	ppb	10:58:16
1	Tl 190.801†	1748.6	1758.7	495.80	ug/L	495.80	ppb	10:58:36
1	U 409.014†	15769.5	17969.6	493.42	ug/L	493.42	ppb	10:58:16
1	V 292.402†	74759.8	75161.8	503.10	ug/L	503.10	ppb	10:58:16
1	Zn 213.857†	58554.3	57183.4	495.13	ug/L	495.13	ppb	10:58:16
1	SiO2†	84380.2	82833.4	5287.6	ug/L	5287.6	ppb	10:59:44
2	Sc Radial	5834.9	5834.9	99.8	%			10:57:19
2	Y RADIAL	6222.6	6222.6	98.96	%			10:57:19
2	Al 396.153Radial†	7203.7	7235.3	5004.3	ug/L	5004.3	ppb	10:57:19
2	Ca 317.933Radial†	3392.1	3381.8	4984.6	ug/L	4984.6	ppb	10:57:39
2	Fe 238.204 Radial†	535.4	529.4	4972.3	ug/L	4972.3	ppb	10:57:39
2	K 766.490 Radial†	31223.2	28919.9	5120.1	ug/L	5120.1	ppb	10:57:19
2	Mg 279.077 IEC†	147.2	146.2	5165.0	ug/L	5165.0	ppb	10:57:39
2	Na 589.592 Radial†	27037.9	28167.8	9452.6	ug/L	9452.6	ppb	10:57:19
2	Sr 421.552†	80750.8	80903.3	503.80	ug/L	503.80	ppb	10:57:19
2	Sc 361.383	909552.0	909552.0	100.92	%			10:58:42
2	Y 371.029	743255.5	743255.5	98.958	%			10:58:42
2	Ag 328.068†	112515.9	111198.0	506.69	ug/L	506.69	ppb	10:58:47
2	As 188.979†	1256.0	1268.7	505.70	ug/L	505.70	ppb	10:59:07
2	B 249.677†	23323.4	23641.6	493.86	ug/L	493.86	ppb	10:58:47
2	Ba 233.527†	67589.6	66982.2	497.72	ug/L	497.72	ppb	10:58:47
2	Be 313.107†	1376097.3	1368671.4	499.87	ug/L	499.87	ppb	10:58:42
2	Cd 226.502†	47400.4	47163.6	498.41	ug/L	498.41	ppb	10:58:47
2	Co 228.616†	26513.1	26336.9	500.00	ug/L	500.00	ppb	10:58:47
2	Cr 267.716†	47769.9	47256.0	496.86	ug/L	496.86	ppb	10:58:47
2	Cu 324.752†	181689.9	173277.6	496.12	ug/L	496.12	ppb	10:58:47
2	Mn 257.610†	471465.6	466747.3	498.30	ug/L	498.30	ppb	10:58:42
2	Mo 202.031†	7999.6	7908.4	502.74	ug/L	502.74	ppb	10:59:07
2	Ni 231.604†	21920.1	21633.9	500.64	ug/L	500.64	ppb	10:58:47

2	P 214.914†	4543.1	4278.2	2392.4 ug/L	2392.4 ppb	10:59:07
2	Pb 220.353†	4354.4	4383.1	497.06 ug/L	497.06 ppb	10:59:07
2	S 181.975 Axial†	764.8	716.3	1002.7 ug/L	1002.7 ppb	10:59:07
2	Sb 206.836†	1632.7	1583.6	508.54 ug/L	508.54 ppb	10:59:07
2	Se 196.026†	848.5	869.6	520.92 ug/L	520.92 ppb	10:59:07
2	Si 251.611†	84780.6	83558.4	2489.4 ug/L	2489.4 ppb	10:58:47
2	Sn 189.927†	3104.1	3070.8	503.38 ug/L	503.38 ppb	10:59:07
2	Ti 334.940†	317707.7	315927.7	504.03 ug/L	504.03 ppb	10:58:47
2	Tl 190.801†	1746.8	1763.4	497.13 ug/L	497.13 ppb	10:59:07
2	U 409.014†	15661.1	17920.2	492.07 ug/L	492.07 ppb	10:58:47
2	V 292.402†	74294.6	74976.0	501.96 ug/L	501.96 ppb	10:58:47
2	Zn 213.857†	58260.9	57108.1	494.48 ug/L	494.48 ppb	10:58:47
2	SiO2†	84649.4	83410.6	5324.4 ug/L	5324.4 ppb	10:59:49
3	Sc Radial	5661.5	5661.5	96.9 %		10:57:44
3	Y RADIAL	6036.7	6036.7	96.01 %		10:57:44
3	Al 396.153Radial†	7058.0	7305.9	5053.4 ug/L	5053.4 ppb	10:57:44
3	Ca 317.933Radial†	3401.0	3495.0	5151.4 ug/L	5151.4 ppb	10:58:04
3	Fe 238.204 Radial†	540.2	550.8	5172.0 ug/L	5172.0 ppb	10:58:04
3	K 766.490 Radial†	30464.0	29093.9	5150.9 ug/L	5150.9 ppb	10:57:44
3	Mg 279.077 IEC†	150.6	154.3	5450.5 ug/L	5450.5 ppb	10:58:04
3	Na 589.592 Radial†	26299.4	28234.8	9475.0 ug/L	9475.0 ppb	10:57:44
3	Sr 421.552†	78649.8	81211.4	505.72 ug/L	505.72 ppb	10:57:44
3	Sc 361.383	910135.6	910135.6	100.98 %		10:59:13
3	Y 371.029	743780.8	743780.8	99.028 %		10:59:13
3	Ag 328.068†	112947.9	111554.2	508.37 ug/L	508.37 ppb	10:59:18
3	As 188.979†	1238.3	1250.4	498.50 ug/L	498.50 ppb	10:59:38
3	B 249.677†	23406.9	23709.4	495.25 ug/L	495.25 ppb	10:59:18
3	Ba 233.527†	67980.8	67326.6	500.28 ug/L	500.28 ppb	10:59:18
3	Be 313.107†	1377213.7	1368902.5	499.96 ug/L	499.96 ppb	10:59:13
3	Cd 226.502†	47687.0	47417.3	501.07 ug/L	501.07 ppb	10:59:18
3	Co 228.616†	26599.4	26405.6	501.29 ug/L	501.29 ppb	10:59:18
3	Cr 267.716†	47962.8	47416.7	498.56 ug/L	498.56 ppb	10:59:18
3	Cu 324.752†	182088.2	173556.6	496.93 ug/L	496.93 ppb	10:59:18
3	Mn 257.610†	472502.0	467474.0	499.09 ug/L	499.09 ppb	10:59:13
3	Mo 202.031†	7966.0	7870.1	500.32 ug/L	500.32 ppb	10:59:38
3	Ni 231.604†	21954.6	21654.0	501.11 ug/L	501.11 ppb	10:59:18
3	P 214.914†	4524.4	4256.8	2379.8 ug/L	2379.8 ppb	10:59:38
3	Pb 220.353†	4326.4	4352.7	493.61 ug/L	493.61 ppb	10:59:38
3	S 181.975 Axial†	764.3	715.3	1001.3 ug/L	1001.3 ppb	10:59:38
3	Sb 206.836†	1612.5	1562.5	501.73 ug/L	501.73 ppb	10:59:38
3	Se 196.026†	836.6	857.2	514.39 ug/L	514.39 ppb	10:59:38
3	Si 251.611†	85020.0	83741.6	2494.9 ug/L	2494.9 ppb	10:59:18
3	Sn 189.927†	3089.6	3054.5	500.73 ug/L	500.73 ppb	10:59:38
3	Ti 334.940†	318560.4	316570.2	505.06 ug/L	505.06 ppb	10:59:18
3	Tl 190.801†	1744.8	1760.3	496.26 ug/L	496.26 ppb	10:59:38
3	U 409.014†	15645.4	17894.7	491.34 ug/L	491.34 ppb	10:59:18
3	V 292.402†	74546.6	75178.3	503.23 ug/L	503.23 ppb	10:59:18
3	Zn 213.857†	58671.4	57477.7	497.67 ug/L	497.67 ppb	10:59:18
3	SiO2†	83527.3	82245.7	5249.8 ug/L	5249.8 ppb	10:59:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	910876.7	101.07	%	0.201				0.20%
Sc Radial	5777.7	98.9	%	1.72				1.74%
Y 371.029	744375.4	99.107	%	0.2008				0.20%
Y RADIAL	6156.5	97.91	%	1.653				1.69%
Ag 328.068†	111353.0	507.42	ug/L	0.861	507.42	ppb	0.861	0.17%
QC value within limits for Ag 328.068 Recovery = 101.48%								
Al 396.153Radial†	7268.4	5027.4	ug/L	24.71	5027.4	ppb	24.71	0.49%
QC value within limits for Al 396.153Radial Recovery = 100.55%								
As 188.979†	1256.8	501.01	ug/L	4.064	501.01	ppb	4.064	0.81%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	23644.8	493.92	ug/L	1.308	493.92	ppb	1.308	0.26%
QC value within limits for B 249.677 Recovery = 98.78%								
Ba 233.527†	67176.3	499.16	ug/L	1.312	499.16	ppb	1.312	0.26%
QC value within limits for Ba 233.527 Recovery = 99.83%								
Be 313.107†	1368254.7	499.72	ug/L	0.339	499.72	ppb	0.339	0.07%
QC value within limits for Be 313.107 Recovery = 99.94%								
Ca 317.933Radial†	3422.6	5044.7	ug/L	92.67	5044.7	ppb	92.67	1.84%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.89%
Cd 226.502†            47316.4      500.02 ug/L         1.414      500.02 ppb          1.414   0.28%
   QC value within limits for Cd 226.502  Recovery = 100.00%
Co 228.616†            26357.0      500.37 ug/L         0.802      500.37 ppb          0.802   0.16%
   QC value within limits for Co 228.616  Recovery = 100.07%
Cr 267.716†            47364.4      498.01 ug/L         0.988      498.01 ppb          0.988   0.20%
   QC value within limits for Cr 267.716  Recovery = 99.60%
Cu 324.752†           173310.1      496.22 ug/L         0.668      496.22 ppb          0.668   0.13%
   QC value within limits for Cu 324.752  Recovery = 99.24%
Fe 238.204 Radial†       538.4      5056.3 ug/L        103.60      5056.3 ppb         103.60   2.05%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.13%
K 766.490 Radial†      28957.4      5126.7 ug/L         21.65      5126.7 ppb          21.65   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 102.53%
Mg 279.077 IEC†          149.1      5267.1 ug/L        159.20      5267.1 ppb         159.20   3.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.34%
Mn 257.610†           466842.1      498.40 ug/L         0.635      498.40 ppb          0.635   0.13%
   QC value within limits for Mn 257.610  Recovery = 99.68%
Mo 202.031†             7867.7      500.16 ug/L         2.660      500.16 ppb          2.660   0.53%
   QC value within limits for Mo 202.031  Recovery = 100.03%
Na 589.592 Radial†     28158.5      9449.5 ug/L         27.27      9449.5 ppb          27.27   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 94.49%
Ni 231.604†            21646.1      500.93 ug/L         0.249      500.93 ppb          0.249   0.05%
   QC value within limits for Ni 231.604  Recovery = 100.19%
P 214.914†              4261.2      2382.5 ug/L          8.85      2382.5 ppb           8.85   0.37%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4361.6      494.62 ug/L         2.124      494.62 ppb          2.124   0.43%
   QC value within limits for Pb 220.353  Recovery = 98.92%
S 181.975 Axial†         713.6      998.91 ug/L         5.360      998.91 ppb          5.360   0.54%
   QC value within limits for S 181.975 Axial  Recovery = 99.89%
Sb 206.836†             1573.2      505.13 ug/L         3.408      505.13 ppb          3.408   0.67%
   QC value within limits for Sb 206.836  Recovery = 101.03%
Se 196.026†              859.3      515.21 ug/L         5.347      515.21 ppb          5.347   1.04%
   QC value within limits for Se 196.026  Recovery = 103.04%
Si 251.611†            83588.8      2490.3 ug/L          4.17      2490.3 ppb           4.17   0.17%
   QC value within limits for Si 251.611  Recovery = 99.61%
Sn 189.927†             3058.0      501.29 ug/L         1.878      501.29 ppb          1.878   0.37%
   QC value within limits for Sn 189.927  Recovery = 100.26%
Sr 421.552†            80975.9      504.25 ug/L         1.300      504.25 ppb          1.300   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†           316239.6      504.53 ug/L         0.518      504.53 ppb          0.518   0.10%
   QC value within limits for Ti 334.940  Recovery = 100.91%
Tl 190.801†             1760.8      496.40 ug/L         0.673      496.40 ppb          0.673   0.14%
   QC value within limits for Tl 190.801  Recovery = 99.28%
U 409.014†             17928.2      492.28 ug/L         1.056      492.28 ppb          1.056   0.21%
   QC value within limits for U 409.014  Recovery = 98.46%
V 292.402†             75105.4      502.76 ug/L         0.701      502.76 ppb          0.701   0.14%
   QC value within limits for V 292.402  Recovery = 100.55%
Zn 213.857†            57256.4      495.76 ug/L         1.689      495.76 ppb          1.689   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.15%
SiO2†                  82829.9      5287.3 ug/L         37.32      5287.3 ppb          37.32   0.71%
   QC value within limits for SiO2  Recovery = 98.87%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 11:02:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5907.4	5907.4	101	%			11:03:56
1	Y RADIAL	6373.2	6373.2	101.4	%			11:03:56
1	Al 396.153Radial†	-16.4	4.2	2.8934	ug/L	2.8934	ppb	11:03:56
1	Ca 317.933Radial†	26.3	10.4	15.372	ug/L	15.372	ppb	11:04:16
1	Fe 238.204 Radial†	8.9	2.0	18.992	ug/L	18.992	ppb	11:04:16
1	K 766.490 Radial†	2487.0	108.5	19.254	ug/L	19.254	ppb	11:03:56
1	Mg 279.077 IEC†	1.8	0.6	20.816	ug/L	20.816	ppb	11:04:16
1	Na 589.592 Radial†	-1139.5	-39.4	-13.208	ug/L	-13.208	ppb	11:03:56
1	Sr 421.552†	-17.9	9.7	0.0600	ug/L	0.0600	ppb	11:03:56
1	Sc 361.383	921090.1	921090.1	102.20	%			11:05:13
1	Y 371.029	765057.3	765057.3	101.86	%			11:05:13
1	Ag 328.068†	422.5	120.7	0.5537	ug/L	0.5537	ppb	11:05:18
1	As 188.979†	-29.5	-4.7	-1.8629	ug/L	-1.8629	ppb	11:05:38
1	B 249.677†	-196.7	338.2	7.0890	ug/L	7.0890	ppb	11:05:38
1	Ba 233.527†	-11.6	-2.9	-0.0190	ug/L	-0.0190	ppb	11:05:38
1	Be 313.107†	-5013.6	207.3	0.0759	ug/L	0.0759	ppb	11:05:18
1	Cd 226.502†	-193.1	6.1	0.0631	ug/L	0.0631	ppb	11:05:38
1	Co 228.616†	-63.1	3.7	0.0701	ug/L	0.0701	ppb	11:05:38
1	Cr 267.716†	78.2	-2.2	-0.0219	ug/L	-0.0219	ppb	11:05:38
1	Cu 324.752†	6827.8	-75.9	-0.2162	ug/L	-0.2162	ppb	11:05:18
1	Mn 257.610†	450.5	18.5	0.0213	ug/L	0.0213	ppb	11:05:38
1	Mo 202.031†	27.3	8.4	0.5323	ug/L	0.5323	ppb	11:05:38
1	Ni 231.604†	89.4	0.9	0.0214	ug/L	0.0214	ppb	11:05:38
1	P 214.914†	211.9	-16.2	-9.3236	ug/L	-9.3236	ppb	11:05:38
1	Pb 220.353†	-64.3	5.6	0.6285	ug/L	0.6285	ppb	11:05:38
1	S 181.975 Axial†	41.5	-1.0	-1.3774	ug/L	-1.3774	ppb	11:05:38
1	Sb 206.836†	36.6	1.5	0.4904	ug/L	0.4904	ppb	11:05:38
1	Se 196.026†	-26.5	2.9	1.7419	ug/L	1.7419	ppb	11:05:38
1	Si 251.611†	653.6	189.9	5.6697	ug/L	5.6697	ppb	11:05:38
1	Sn 189.927†	2.2	-2.9	-0.4695	ug/L	-0.4695	ppb	11:05:38
1	Ti 334.940†	-1019.1	117.8	0.1879	ug/L	0.1879	ppb	11:05:18
1	Tl 190.801†	-30.7	2.5	0.6973	ug/L	0.6973	ppb	11:05:38
1	U 409.014†	-2386.4	66.7	1.8362	ug/L	1.8362	ppb	11:05:13
1	V 292.402†	-1272.8	113.0	0.7547	ug/L	0.7547	ppb	11:05:18
1	Zn 213.857†	691.1	54.4	0.4729	ug/L	0.4729	ppb	11:05:38
1	SiO2†	679.7	197.6	12.642	ug/L	12.642	ppb	11:06:44
2	Sc Radial	5763.9	5763.9	98.6	%			11:04:21
2	Y RADIAL	6194.3	6194.3	98.51	%			11:04:21
2	Al 396.153Radial†	4.4	24.8	17.233	ug/L	17.233	ppb	11:04:21
2	Ca 317.933Radial†	28.7	13.5	19.943	ug/L	19.943	ppb	11:04:41
2	Fe 238.204 Radial†	6.9	0.2	1.8678	ug/L	1.8678	ppb	11:04:41
2	K 766.490 Radial†	2548.3	232.0	41.140	ug/L	41.140	ppb	11:04:21
2	Mg 279.077 IEC†	3.6	2.5	86.967	ug/L	86.967	ppb	11:04:41
2	Na 589.592 Radial†	-1094.3	-21.6	-7.2337	ug/L	-7.2337	ppb	11:04:21
2	Sr 421.552†	-18.4	8.7	0.0542	ug/L	0.0542	ppb	11:04:21
2	Sc 361.383	926942.0	926942.0	102.85	%			11:05:43
2	Y 371.029	770672.4	770672.4	102.61	%			11:05:43
2	Ag 328.068†	401.4	97.5	0.4398	ug/L	0.4398	ppb	11:05:48
2	As 188.979†	-22.5	2.3	0.9165	ug/L	0.9165	ppb	11:06:08
2	B 249.677†	-182.2	353.5	7.4138	ug/L	7.4138	ppb	11:06:08
2	Ba 233.527†	-3.0	5.6	0.0422	ug/L	0.0422	ppb	11:06:08
2	Be 313.107†	-5006.2	245.5	0.0896	ug/L	0.0896	ppb	11:05:48
2	Cd 226.502†	-191.4	9.0	0.0952	ug/L	0.0952	ppb	11:06:08
2	Co 228.616†	-69.6	-2.2	-0.0411	ug/L	-0.0411	ppb	11:06:08
2	Cr 267.716†	63.2	-17.2	-0.1810	ug/L	-0.1810	ppb	11:06:08
2	Cu 324.752†	6828.8	-117.1	-0.3350	ug/L	-0.3350	ppb	11:05:48
2	Mn 257.610†	438.6	4.1	0.0030	ug/L	0.0030	ppb	11:06:08
2	Mo 202.031†	23.8	4.8	0.3045	ug/L	0.3045	ppb	11:06:08
2	Ni 231.604†	81.8	-7.1	-0.1636	ug/L	-0.1636	ppb	11:06:08

2	P 214.914†	205.3	-23.9	-13.726	ug/L	-13.726 ppb	11:06:08
2	Pb 220.353†	-62.5	7.7	0.8775	ug/L	0.8775 ppb	11:06:08
2	S 181.975 Axial†	41.7	-1.0	-1.4676	ug/L	-1.4676 ppb	11:06:08
2	Sb 206.836†	29.2	-5.9	-1.8352	ug/L	-1.8352 ppb	11:06:08
2	Se 196.026†	-22.1	7.4	4.2662	ug/L	4.2662 ppb	11:06:08
2	Si 251.611†	667.8	199.7	5.9570	ug/L	5.9570 ppb	11:06:08
2	Sn 189.927†	8.0	2.8	0.4656	ug/L	0.4656 ppb	11:06:08
2	Ti 334.940†	-1103.5	42.0	0.0662	ug/L	0.0662 ppb	11:05:48
2	Tl 190.801†	-29.8	3.5	0.9826	ug/L	0.9826 ppb	11:06:08
2	U 409.014†	-2304.3	161.3	4.4447	ug/L	4.4447 ppb	11:05:43
2	V 292.402†	-1330.3	64.9	0.4431	ug/L	0.4431 ppb	11:05:48
2	Zn 213.857†	694.5	53.4	0.4652	ug/L	0.4652 ppb	11:06:08
2	SiO2†	634.7	149.7	9.5550	ug/L	9.5550 ppb	11:06:49
3	Sc Radial	5852.5	5852.5	100	%		11:04:46
3	Y RADIAL	6294.3	6294.3	100.1	%		11:04:46
3	Al 396.153Radial†	-20.8	-0.3	-0.2076	ug/L	-0.2076 ppb	11:04:46
3	Ca 317.933Radial†	26.3	10.6	15.688	ug/L	15.688 ppb	11:05:06
3	Fe 238.204 Radial†	7.6	0.7	6.9508	ug/L	6.9508 ppb	11:05:06
3	K 766.490 Radial†	2526.5	171.1	30.334	ug/L	30.334 ppb	11:04:46
3	Mg 279.077 IEC†	-0.1	-1.2	-43.215	ug/L	-43.215 ppb	11:05:06
3	Na 589.592 Radial†	-1082.0	7.5	2.5188	ug/L	2.5188 ppb	11:04:46
3	Sr 421.552†	-35.5	-8.1	-0.0508	ug/L	-0.0508 ppb	11:04:46
3	Sc 361.383	926310.6	926310.6	102.78	%		11:06:13
3	Y 371.029	767982.9	767982.9	102.25	%		11:06:13
3	Ag 328.068†	331.6	29.9	0.1375	ug/L	0.1375 ppb	11:06:18
3	As 188.979†	-35.3	-10.2	-4.0182	ug/L	-4.0182 ppb	11:06:38
3	B 249.677†	-161.8	373.2	7.8261	ug/L	7.8261 ppb	11:06:38
3	Ba 233.527†	-5.2	3.4	0.0266	ug/L	0.0266 ppb	11:06:38
3	Be 313.107†	-5081.7	168.7	0.0619	ug/L	0.0619 ppb	11:06:18
3	Cd 226.502†	-185.5	14.6	0.1543	ug/L	0.1543 ppb	11:06:38
3	Co 228.616†	-67.0	0.2	0.0024	ug/L	0.0024 ppb	11:06:38
3	Cr 267.716†	86.4	5.4	0.0568	ug/L	0.0568 ppb	11:06:38
3	Cu 324.752†	6866.4	-75.9	-0.2170	ug/L	-0.2170 ppb	11:06:18
3	Mn 257.610†	434.6	0.6	0.0021	ug/L	0.0021 ppb	11:06:38
3	Mo 202.031†	13.3	-5.4	-0.3443	ug/L	-0.3443 ppb	11:06:38
3	Ni 231.604†	103.4	14.1	0.3264	ug/L	0.3264 ppb	11:06:38
3	P 214.914†	224.7	-4.9	-2.7834	ug/L	-2.7834 ppb	11:06:38
3	Pb 220.353†	-59.6	10.5	1.1836	ug/L	1.1836 ppb	11:06:38
3	S 181.975 Axial†	39.4	-3.2	-4.5029	ug/L	-4.5029 ppb	11:06:38
3	Sb 206.836†	24.5	-10.4	-3.3172	ug/L	-3.3172 ppb	11:06:38
3	Se 196.026†	-23.1	6.4	3.7104	ug/L	3.7104 ppb	11:06:38
3	Si 251.611†	645.3	178.2	5.3332	ug/L	5.3332 ppb	11:06:38
3	Sn 189.927†	1.3	-3.7	-0.6028	ug/L	-0.6028 ppb	11:06:38
3	Ti 334.940†	-1024.2	118.4	0.1890	ug/L	0.1890 ppb	11:06:18
3	Tl 190.801†	-28.7	4.6	1.2797	ug/L	1.2797 ppb	11:06:38
3	U 409.014†	-2403.5	63.3	1.7426	ug/L	1.7426 ppb	11:06:13
3	V 292.402†	-1333.5	61.0	0.3988	ug/L	0.3988 ppb	11:06:18
3	Zn 213.857†	675.7	35.6	0.3103	ug/L	0.3103 ppb	11:06:38
3	SiO2†	640.4	155.6	9.9788	ug/L	9.9788 ppb	11:06:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	924780.9	102.61	%	0.356				0.35%
Sc Radial	5841.3	100.0	%	1.24				1.24%
Y 371.029	767904.2	102.24	%	0.374				0.37%
Y RADIAL	6287.3	99.99	%	1.426				1.43%
Ag 328.068†	82.7	0.3770	ug/L	0.21509	0.3770	ppb	0.21509	57.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.6	6.6396	ug/L	9.30430	6.6396	ppb	9.30430	140.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.2	-1.6548	ug/L	2.47392	-1.6548	ppb	2.47392	149.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	355.0	7.4429	ug/L	0.36945	7.4429	ppb	0.36945	4.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0166	ug/L	0.03179	0.0166	ppb	0.03179	191.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	207.1	0.0758	ug/L	0.01388	0.0758	ppb	0.01388	18.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.5	17.001	ug/L	2.5526	17.001	ppb	2.5526	15.01%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.9      0.1042 ug/L       0.04626      0.1042 ppb        0.04626  44.41%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0104 ug/L       0.05605      0.0104 ppb        0.05605 536.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.7     -0.0487 ug/L       0.12113     -0.0487 ppb        0.12113 248.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -89.6     -0.2560 ug/L       0.06838     -0.2560 ppb        0.06838  26.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2701 ug/L       8.79450      9.2701 ppb        8.79450  94.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         170.5     30.243 ug/L       10.9433      30.243 ppb        10.9433  36.18%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6     21.522 ug/L       65.0937      21.522 ppb        65.0937 302.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.7      0.0088 ug/L       0.01083      0.0088 ppb        0.01083 123.29%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.6      0.1642 ug/L       0.45483      0.1642 ppb        0.45483 277.06%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -17.8     -5.9743 ug/L       7.93874     -5.9743 ppb        7.93874 132.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.7      0.0614 ug/L       0.24741      0.0614 ppb        0.24741 402.87%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.0     -8.6109 ug/L       5.50587     -8.6109 ppb        5.50587  63.94%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8965 ug/L       0.27803      0.8965 ppb        0.27803  31.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.7     -2.4493 ug/L       1.77904     -2.4493 ppb        1.77904  72.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.9     -1.5540 ug/L       1.91933     -1.5540 ppb        1.91933 123.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      3.2395 ug/L       1.32638      3.2395 ppb        1.32638  40.94%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               189.3      5.6533 ug/L       0.31226      5.6533 ppb        0.31226   5.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.2     -0.2022 ug/L       0.58216     -0.2022 ppb        0.58216 287.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 3.4      0.0211 ug/L       0.06241      0.0211 ppb        0.06241 295.14%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                92.7      0.1477 ug/L       0.07062      0.1477 ppb        0.07062  47.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.5      0.9865 ug/L       0.29122      0.9865 ppb        0.29122  29.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 97.1      2.6745 ug/L       1.53372      2.6745 ppb        1.53372  57.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 79.6      0.5322 ug/L       0.19394      0.5322 ppb        0.19394  36.44%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.4161 ug/L       0.09172      0.4161 ppb        0.09172  22.04%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     167.6     10.725 ug/L        1.6735     10.725 ppb         1.6735  15.60%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: 241524002|925470|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 12/8/2009 11:43:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241524002|925470|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5919.5	5919.5	101	%			11:46:03
1	Y RADIAL	7416.7	7416.7	118.0	%			11:46:03
1	Al 396.153Radial†	88469.2	87360.1	60682	ug/L	60682	ppb	11:45:43
1	Ca 317.933Radial†	18284.6	18035.6	26583	ug/L	26583	ppb	11:45:43
1	Fe 238.204 Radial†	10572.5	10430.7	97652	ug/L	97652	ppb	11:45:43
1	K 766.490 Radial†	51230.8	48225.1	8523.4	ug/L	8523.4	ppb	11:45:43
1	Mg 279.077 IEC†	357.4	351.7	12324	ug/L	12324	ppb	11:46:03
1	Na 589.592 Radial†	2258.7	3317.8	1113.4	ug/L	1113.4	ppb	11:45:43
1	Sr 421.552†	26013.5	25708.8	159.86	ug/L	159.86	ppb	11:45:43
1	Sc 361.383	923780.0	923780.0	102.50	%			11:47:00
1	Y 371.029	894314.0	894314.0	119.07	%			11:47:00
1	Ag 328.068†	-6576.8	-6709.2	1.1068	ug/L	1.1068	ppb	11:47:05
1	As 188.979†	-46.6	-21.3	31.760	ug/L	31.760	ppb	11:47:25
1	B 249.677†	958.2	1465.5	17.679	ug/L	17.679	ppb	11:47:05
1	Ba 233.527†	106526.2	103938.2	774.28	ug/L	774.28	ppb	11:47:05
1	Be 313.107†	-7220.2	-1931.3	5.1677	ug/L	5.1677	ppb	11:47:05
1	Cd 226.502†	910.5	1083.4	1.7263	ug/L	1.7263	ppb	11:47:25
1	Co 228.616†	2077.6	2092.4	32.282	ug/L	32.282	ppb	11:47:25
1	Cr 267.716†	7226.7	6971.9	75.281	ug/L	75.281	ppb	11:47:05
1	Cu 324.752†	26950.9	19537.3	60.892	ug/L	60.892	ppb	11:47:05
1	Mn 257.610†	2801998.0	2733281.2	2925.2	ug/L	2925.2	ppb	11:47:00
1	Mo 202.031†	27.7	8.7	7.4793	ug/L	7.4793	ppb	11:47:25
1	Ni 231.604†	2578.8	2429.4	56.232	ug/L	56.232	ppb	11:47:25
1	P 214.914†	6791.8	6402.7	3625.1	ug/L	3625.1	ppb	11:47:25
1	Pb 220.353†	806.5	855.3	102.25	ug/L	102.25	ppb	11:47:25
1	S 181.975 Axial†	396.5	345.3	471.89	ug/L	471.89	ppb	11:47:25
1	Sb 206.836†	72.6	36.6	1.5274	ug/L	1.5274	ppb	11:47:25
1	Se 196.026†	-596.4	-553.1	-1.1221	ug/L	-1.1221	ppb	11:47:25
1	Si 251.611†	979147.2	954832.3	28581	ug/L	28581	ppb	11:47:00
1	Sn 189.927†	-141.6	-143.1	-19.330	ug/L	-19.330	ppb	11:47:25
1	Ti 334.940†	1917569.1	1871946.1	2988.7	ug/L	2988.7	ppb	11:47:00
1	Tl 190.801†	-189.0	-151.9	-1.4251	ug/L	-1.4251	ppb	11:47:25
1	U 409.014†	-11046.5	-8375.4	-243.15	ug/L	-243.15	ppb	11:47:00
1	V 292.402†	22742.9	23546.9	137.19	ug/L	137.19	ppb	11:47:05
1	Zn 213.857†	40436.1	38828.7	329.05	ug/L	329.05	ppb	11:47:05
1	SiO2†	979918.8	955567.3	61291	ug/L	61291	ppb	11:48:34
2	Sc Radial	5826.5	5826.5	99.7	%			11:46:28
2	Y RADIAL	7314.9	7314.9	116.3	%			11:46:28
2	Al 396.153Radial†	88688.0	88973.3	61803	ug/L	61803	ppb	11:46:08
2	Ca 317.933Radial†	18325.0	18364.1	27068	ug/L	27068	ppb	11:46:08
2	Fe 238.204 Radial†	10559.5	10584.2	99088	ug/L	99088	ppb	11:46:08
2	K 766.490 Radial†	51204.1	49005.4	8661.8	ug/L	8661.8	ppb	11:46:08
2	Mg 279.077 IEC†	353.0	352.9	12364	ug/L	12364	ppb	11:46:28
2	Na 589.592 Radial†	2274.9	3369.7	1130.8	ug/L	1130.8	ppb	11:46:08
2	Sr 421.552†	26056.4	26161.6	162.68	ug/L	162.68	ppb	11:46:08
2	Sc 361.383	922439.5	922439.5	102.35	%			11:47:31
2	Y 371.029	893042.7	893042.7	118.90	%			11:47:31
2	Ag 328.068†	-6391.2	-6537.2	2.3251	ug/L	2.3251	ppb	11:47:36
2	As 188.979†	-43.9	-18.8	33.039	ug/L	33.039	ppb	11:47:56
2	B 249.677†	920.5	1430.1	16.745	ug/L	16.745	ppb	11:47:36
2	Ba 233.527†	103918.6	101541.5	756.56	ug/L	756.56	ppb	11:47:36
2	Be 313.107†	-7279.7	-1999.6	5.1583	ug/L	5.1583	ppb	11:47:36
2	Cd 226.502†	889.1	1063.8	1.3767	ug/L	1.3767	ppb	11:47:56
2	Co 228.616†	2069.8	2087.8	32.150	ug/L	32.150	ppb	11:47:56
2	Cr 267.716†	7164.4	6921.3	74.771	ug/L	74.771	ppb	11:47:36
2	Cu 324.752†	26288.4	18928.2	59.222	ug/L	59.222	ppb	11:47:36
2	Mn 257.610†	2804084.2	2739291.9	2931.8	ug/L	2931.8	ppb	11:47:31
2	Mo 202.031†	34.8	15.7	8.0256	ug/L	8.0256	ppb	11:47:56
2	Ni 231.604†	2613.5	2467.0	57.101	ug/L	57.101	ppb	11:47:56

2	P 214.914†	6739.0	6360.8	3600.4 ug/L	3600.4 ppb	11:47:56
2	Pb 220.353†	789.8	840.1	100.67 ug/L	100.67 ppb	11:47:56
2	S 181.975 Axial†	403.8	352.9	482.39 ug/L	482.39 ppb	11:47:56
2	Sb 206.836†	45.2	9.9	-6.9006 ug/L	-6.9006 ppb	11:47:56
2	Se 196.026†	-595.2	-552.7	3.8386 ug/L	3.8386 ppb	11:47:56
2	Si 251.611†	981211.0	958236.8	28683 ug/L	28683 ppb	11:47:31
2	Sn 189.927†	-132.1	-134.0	-17.776 ug/L	-17.776 ppb	11:47:56
2	Ti 334.940†	1919862.4	1876905.4	2996.7 ug/L	2996.7 ppb	11:47:31
2	Tl 190.801†	-178.7	-142.1	1.4699 ug/L	1.4699 ppb	11:47:56
2	U 409.014†	-11077.8	-8421.6	-244.60 ug/L	-244.60 ppb	11:47:31
2	V 292.402†	22229.1	23077.2	133.87 ug/L	133.87 ppb	11:47:36
2	Zn 213.857†	39440.4	37913.1	320.91 ug/L	320.91 ppb	11:47:36
2	SiO2†	987568.3	964430.5	61860 ug/L	61860 ppb	11:48:40
3	Sc Radial	5783.5	5783.5	99.0 %		11:46:53
3	Y RADIAL	7290.8	7290.8	116.0 %		11:46:53
3	Al 396.153Radial†	89689.7	90647.6	62966 ug/L	62966 ppb	11:46:33
3	Ca 317.933Radial†	18461.3	18638.7	27472 ug/L	27472 ppb	11:46:33
3	Fe 238.204 Radial†	10639.3	10743.7	100580 ug/L	100580 ppb	11:46:33
3	K 766.490 Radial†	51747.6	49936.8	8827.3 ug/L	8827.3 ppb	11:46:33
3	Mg 279.077 IEC†	363.5	366.1	12831 ug/L	12831 ppb	11:46:53
3	Na 589.592 Radial†	2318.4	3430.6	1151.2 ug/L	1151.2 ppb	11:46:33
3	Sr 421.552†	26302.3	26604.6	165.43 ug/L	165.43 ppb	11:46:33
3	Sc 361.383	923388.6	923388.6	102.45 %		11:48:02
3	Y 371.029	896645.5	896645.5	119.38 %		11:48:02
3	Ag 328.068†	-6501.7	-6638.7	2.3402 ug/L	2.3402 ppb	11:48:07
3	As 188.979†	-63.3	-37.6	25.783 ug/L	25.783 ppb	11:48:28
3	B 249.677†	923.7	1432.2	16.592 ug/L	16.592 ppb	11:48:07
3	Ba 233.527†	104795.8	102293.3	762.19 ug/L	762.19 ppb	11:48:07
3	Be 313.107†	-7222.2	-1936.2	5.1706 ug/L	5.1706 ppb	11:48:07
3	Cd 226.502†	888.4	1062.2	1.2102 ug/L	1.2102 ppb	11:48:28
3	Co 228.616†	2075.4	2091.1	32.206 ug/L	32.206 ppb	11:48:28
3	Cr 267.716†	7185.0	6934.2	74.935 ug/L	74.935 ppb	11:48:07
3	Cu 324.752†	26532.7	19140.2	59.905 ug/L	59.905 ppb	11:48:07
3	Mn 257.610†	2797017.4	2729578.5	2921.5 ug/L	2921.5 ppb	11:48:02
3	Mo 202.031†	31.2	12.1	7.9045 ug/L	7.9045 ppb	11:48:28
3	Ni 231.604†	2598.5	2449.7	56.701 ug/L	56.701 ppb	11:48:28
3	P 214.914†	6715.8	6331.4	3582.5 ug/L	3582.5 ppb	11:48:28
3	Pb 220.353†	812.3	861.3	103.20 ug/L	103.20 ppb	11:48:28
3	S 181.975 Axial†	399.2	348.1	475.36 ug/L	475.36 ppb	11:48:28
3	Sb 206.836†	62.3	26.5	-1.6523 ug/L	-1.6523 ppb	11:48:28
3	Se 196.026†	-590.5	-547.5	11.731 ug/L	11.731 ppb	11:48:28
3	Si 251.611†	978678.7	954779.8	28579 ug/L	28579 ppb	11:48:02
3	Sn 189.927†	-136.1	-137.8	-18.330 ug/L	-18.330 ppb	11:48:28
3	Ti 334.940†	1918294.0	1873446.5	2991.2 ug/L	2991.2 ppb	11:48:02
3	Tl 190.801†	-185.9	-148.9	-0.5156 ug/L	-0.5156 ppb	11:48:28
3	U 409.014†	-11141.1	-8472.3	-246.18 ug/L	-246.18 ppb	11:48:02
3	V 292.402†	22413.4	23234.7	134.69 ug/L	134.69 ppb	11:48:07
3	Zn 213.857†	39771.9	38197.2	323.23 ug/L	323.23 ppb	11:48:07
3	SiO2†	980227.7	956273.9	61336 ug/L	61336 ppb	11:48:46

Mean Data: 241524002|925470|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	923202.7	102.43	%	0.076				0.07%
Sc Radial	5843.2	100.0	%	1.19				1.19%
Y 371.029	894667.4	119.12	%	0.243				0.20%
Y RADIAL	7340.8	116.7	%	1.06				0.91%
Ag 328.068†	-6628.4	1.9240	ug/L	0.70775	1.9240	ppb	0.70775	36.78%
Al 396.153Radial†	88993.7	61817	ug/L	1141.8	61817	ppb	1141.8	1.85%
As 188.979†	-25.9	30.194	ug/L	3.8728	30.194	ppb	3.8728	12.83%
B 249.677†	1442.6	17.005	ug/L	0.5883	17.005	ppb	0.5883	3.46%
Ba 233.527†	102591.0	764.34	ug/L	9.052	764.34	ppb	9.052	1.18%
Be 313.107†	-1955.7	5.1655	ug/L	0.00640	5.1655	ppb	0.00640	0.12%
Ca 317.933Radial†	18346.1	27041	ug/L	445.0	27041	ppb	445.0	1.65%
Cd 226.502†	1069.8	1.4377	ug/L	0.26342	1.4377	ppb	0.26342	18.32%
Co 228.616†	2090.4	32.213	ug/L	0.0660	32.213	ppb	0.0660	0.20%
Cr 267.716†	6942.5	74.996	ug/L	0.2606	74.996	ppb	0.2606	0.35%
Cu 324.752†	19201.9	60.006	ug/L	0.8395	60.006	ppb	0.8395	1.40%
Fe 238.204 Radial†	10586.2	99107	ug/L	1465.2	99107	ppb	1465.2	1.48%
K 766.490 Radial†	49055.7	8670.8	ug/L	152.14	8670.8	ppb	152.14	1.75%

Mg 279.077 IEC†	356.9	12506	ug/L	282.0	12506	ppb	282.0	2.25%
Mn 257.610†	2734050.5	2926.2	ug/L	5.18	2926.2	ppb	5.18	0.18%
Mo 202.031†	12.2	7.8031	ug/L	0.28692	7.8031	ppb	0.28692	3.68%
Na 589.592 Radial†	3372.7	1131.8	ug/L	18.95	1131.8	ppb	18.95	1.67%
Ni 231.604†	2448.7	56.678	ug/L	0.4352	56.678	ppb	0.4352	0.77%
P 214.914†	6365.0	3602.7	ug/L	21.37	3602.7	ppb	21.37	0.59%
Pb 220.353†	852.3	102.04	ug/L	1.280	102.04	ppb	1.280	1.25%
S 181.975 Axial†	348.8	476.55	ug/L	5.346	476.55	ppb	5.346	1.12%
Sb 206.836†	24.4	-2.3418	ug/L	4.25612	-2.3418	ppb	4.25612	181.74%
Se 196.026†	-551.1	4.8158	ug/L	6.48186	4.8158	ppb	6.48186	134.60%
Si 251.611†	955949.7	28614	ug/L	59.3	28614	ppb	59.3	0.21%
Sn 189.927†	-138.3	-18.479	ug/L	0.7879	-18.479	ppb	0.7879	4.26%
Sr 421.552†	26158.3	162.66	ug/L	2.786	162.66	ppb	2.786	1.71%
Ti 334.940†	1874099.3	2992.2	ug/L	4.07	2992.2	ppb	4.07	0.14%
Tl 190.801†	-147.6	-0.1570	ug/L	1.48049	-0.1570	ppb	1.48049	943.27%
U 409.014†	-8423.1	-244.64	ug/L	1.519	-244.64	ppb	1.519	0.62%
V 292.402†	23286.3	135.25	ug/L	1.732	135.25	ppb	1.732	1.28%
Zn 213.857†	38313.0	324.40	ug/L	4.193	324.40	ppb	4.193	1.29%
SiO2†	958757.2	61496	ug/L	316.0	61496	ppb	316.0	0.51%

Sequence No.: 17
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 11:57:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5830.5	5830.5	99.8	%			11:59:41
1	Y RADIAL	6202.8	6202.8	98.65	%			11:59:41
1	Al 396.153Radial†	7094.2	7130.9	4932.0	ug/L	4932.0	ppb	11:59:41
1	Ca 317.933Radial†	3394.3	3386.6	4991.6	ug/L	4991.6	ppb	12:00:01
1	Fe 238.204 Radial†	542.6	537.1	5043.6	ug/L	5043.6	ppb	12:00:01
1	K 766.490 Radial†	30903.2	28622.7	5067.4	ug/L	5067.4	ppb	11:59:41
1	Mg 279.077 IEC†	148.5	147.6	5214.1	ug/L	5214.1	ppb	12:00:01
1	Na 589.592 Radial†	27223.4	28374.1	9521.8	ug/L	9521.8	ppb	11:59:41
1	Sr 421.552†	80201.0	80413.2	500.75	ug/L	500.75	ppb	11:59:41
1	Sc 361.383	918521.4	918521.4	101.91	%			12:00:59
1	Y 371.029	750066.3	750066.3	99.864	%			12:00:59
1	Ag 328.068†	112350.8	109947.2	501.03	ug/L	501.03	ppb	12:01:04
1	As 188.979†	1247.6	1248.3	497.63	ug/L	497.63	ppb	12:01:24
1	B 249.677†	22959.7	23059.0	481.64	ug/L	481.64	ppb	12:01:04
1	Ba 233.527†	67958.6	66690.2	495.54	ug/L	495.54	ppb	12:01:04
1	Be 313.107†	1373495.7	1352803.5	494.08	ug/L	494.08	ppb	12:00:59
1	Cd 226.502†	47617.2	46917.7	495.80	ug/L	495.80	ppb	12:01:04
1	Co 228.616†	26557.5	26124.0	495.96	ug/L	495.96	ppb	12:01:04
1	Cr 267.716†	47889.0	46910.6	493.23	ug/L	493.23	ppb	12:01:04
1	Cu 324.752†	180614.2	170464.1	488.08	ug/L	488.08	ppb	12:01:04
1	Mn 257.610†	472034.3	462743.4	494.03	ug/L	494.03	ppb	12:00:59
1	Mo 202.031†	8022.2	7853.2	499.24	ug/L	499.24	ppb	12:01:24
1	Ni 231.604†	21931.5	21432.9	495.99	ug/L	495.99	ppb	12:01:04
1	P 214.914†	4554.7	4245.6	2374.8	ug/L	2374.8	ppb	12:01:24
1	Pb 220.353†	4352.0	4338.7	492.01	ug/L	492.01	ppb	12:01:24
1	S 181.975 Axial†	765.9	710.0	993.87	ug/L	993.87	ppb	12:01:24
1	Sb 206.836†	1635.2	1570.2	504.25	ug/L	504.25	ppb	12:01:24
1	Se 196.026†	844.2	857.1	513.90	ug/L	513.90	ppb	12:01:24
1	Si 251.611†	84702.9	82661.8	2462.6	ug/L	2462.6	ppb	12:01:04
1	Sn 189.927†	3110.9	3047.4	499.55	ug/L	499.55	ppb	12:01:24
1	Ti 334.940†	317360.8	312513.2	498.58	ug/L	498.58	ppb	12:01:04
1	Tl 190.801†	1776.2	1775.3	500.42	ug/L	500.42	ppb	12:01:24
1	U 409.014†	15668.6	17776.0	488.10	ug/L	488.10	ppb	12:01:04
1	V 292.402†	74306.5	74268.8	497.23	ug/L	497.23	ppb	12:01:04
1	Zn 213.857†	58266.2	56549.7	489.63	ug/L	489.63	ppb	12:01:04
1	SiO2†	83444.8	81409.6	5196.2	ug/L	5196.2	ppb	12:02:31
2	Sc Radial	5836.0	5836.0	99.9	%			12:00:06
2	Y RADIAL	6237.9	6237.9	99.21	%			12:00:06
2	Al 396.153Radial†	7113.8	7143.8	4941.2	ug/L	4941.2	ppb	12:00:06
2	Ca 317.933Radial†	3379.1	3368.1	4964.4	ug/L	4964.4	ppb	12:00:26
2	Fe 238.204 Radial†	541.4	535.4	5027.5	ug/L	5027.5	ppb	12:00:26
2	K 766.490 Radial†	30922.1	28612.4	5065.6	ug/L	5065.6	ppb	12:00:06
2	Mg 279.077 IEC†	145.0	144.1	5087.7	ug/L	5087.7	ppb	12:00:26
2	Na 589.592 Radial†	27104.4	28229.2	9473.2	ug/L	9473.2	ppb	12:00:06
2	Sr 421.552†	79988.6	80124.7	498.95	ug/L	498.95	ppb	12:00:06
2	Sc 361.383	915777.4	915777.4	101.61	%			12:01:29
2	Y 371.029	747914.5	747914.5	99.578	%			12:01:29
2	Ag 328.068†	112273.2	110201.2	502.17	ug/L	502.17	ppb	12:01:35
2	As 188.979†	1226.2	1230.9	490.75	ug/L	490.75	ppb	12:01:55
2	B 249.677†	22927.2	23094.5	482.39	ug/L	482.39	ppb	12:01:35
2	Ba 233.527†	67534.9	66473.1	493.93	ug/L	493.93	ppb	12:01:35
2	Be 313.107†	1367741.0	1351178.1	493.49	ug/L	493.49	ppb	12:01:29
2	Cd 226.502†	47330.6	46775.6	494.30	ug/L	494.30	ppb	12:01:35
2	Co 228.616†	26423.0	26069.6	494.91	ug/L	494.91	ppb	12:01:35
2	Cr 267.716†	47634.4	46800.8	492.08	ug/L	492.08	ppb	12:01:35
2	Cu 324.752†	181101.5	171474.7	490.97	ug/L	490.97	ppb	12:01:35
2	Mn 257.610†	470818.6	462934.8	494.24	ug/L	494.24	ppb	12:01:29
2	Mo 202.031†	7886.3	7742.9	492.23	ug/L	492.23	ppb	12:01:55
2	Ni 231.604†	21779.2	21347.5	494.02	ug/L	494.02	ppb	12:01:35

2	P 214.914†	4507.0	4212.1	2354.9 ug/L	2354.9 ppb	12:01:55
2	Pb 220.353†	4296.6	4297.0	487.28 ug/L	487.28 ppb	12:01:55
2	S 181.975 Axial†	749.8	696.4	974.83 ug/L	974.83 ppb	12:01:55
2	Sb 206.836†	1600.2	1540.6	494.60 ug/L	494.60 ppb	12:01:55
2	Se 196.026†	823.5	839.3	503.52 ug/L	503.52 ppb	12:01:55
2	Si 251.611†	84593.1	82802.8	2467.0 ug/L	2467.0 ppb	12:01:35
2	Sn 189.927†	3046.2	2993.0	490.63 ug/L	490.63 ppb	12:01:55
2	Ti 334.940†	316972.8	313064.4	499.46 ug/L	499.46 ppb	12:01:35
2	Tl 190.801†	1733.2	1738.2	490.05 ug/L	490.05 ppb	12:01:55
2	U 409.014†	15918.3	18067.9	496.14 ug/L	496.14 ppb	12:01:35
2	V 292.402†	74100.8	74284.8	497.25 ug/L	497.25 ppb	12:01:35
2	Zn 213.857†	58044.3	56502.6	489.23 ug/L	489.23 ppb	12:01:35
2	SiO2†	84324.6	82520.8	5267.8 ug/L	5267.8 ppb	12:02:36
3	Sc Radial	5884.4	5884.4	101 %		12:00:31
3	Y RADIAL	6270.2	6270.2	99.72 %		12:00:31
3	Al 396.153Radial†	7158.7	7129.8	4931.4 ug/L	4931.4 ppb	12:00:31
3	Ca 317.933Radial†	3409.0	3370.0	4967.2 ug/L	4967.2 ppb	12:00:51
3	Fe 238.204 Radial†	545.2	534.7	5021.0 ug/L	5021.0 ppb	12:00:51
3	K 766.490 Radial†	31146.7	28580.5	5059.9 ug/L	5059.9 ppb	12:00:31
3	Mg 279.077 IEC†	147.8	145.7	5144.4 ug/L	5144.4 ppb	12:00:51
3	Na 589.592 Radial†	27319.4	28219.2	9469.8 ug/L	9469.8 ppb	12:00:31
3	Sr 421.552†	80838.8	80309.4	500.10 ug/L	500.10 ppb	12:00:31
3	Sc 361.383	916763.4	916763.4	101.72 %		12:02:00
3	Y 371.029	750219.5	750219.5	99.885 %		12:02:00
3	Ag 328.068†	112532.6	110337.4	502.79 ug/L	502.79 ppb	12:02:06
3	As 188.979†	1232.9	1236.2	492.84 ug/L	492.84 ppb	12:02:26
3	B 249.677†	22961.7	23104.2	482.60 ug/L	482.60 ppb	12:02:06
3	Ba 233.527†	67633.9	66498.9	494.13 ug/L	494.13 ppb	12:02:06
3	Be 313.107†	1372957.1	1354858.4	494.83 ug/L	494.83 ppb	12:02:00
3	Cd 226.502†	47315.4	46710.6	493.61 ug/L	493.61 ppb	12:02:06
3	Co 228.616†	26421.4	26040.1	494.36 ug/L	494.36 ppb	12:02:06
3	Cr 267.716†	47764.7	46878.6	492.90 ug/L	492.90 ppb	12:02:06
3	Cu 324.752†	181442.5	171618.3	491.38 ug/L	491.38 ppb	12:02:06
3	Mn 257.610†	470737.9	462357.1	493.62 ug/L	493.62 ppb	12:02:00
3	Mo 202.031†	7937.8	7785.2	494.92 ug/L	494.92 ppb	12:02:26
3	Ni 231.604†	21824.4	21368.9	494.51 ug/L	494.51 ppb	12:02:06
3	P 214.914†	4510.5	4210.8	2354.1 ug/L	2354.1 ppb	12:02:26
3	Pb 220.353†	4325.6	4321.0	490.00 ug/L	490.00 ppb	12:02:26
3	S 181.975 Axial†	761.3	706.8	989.49 ug/L	989.49 ppb	12:02:26
3	Sb 206.836†	1624.9	1563.2	501.88 ug/L	501.88 ppb	12:02:26
3	Se 196.026†	832.2	846.9	507.93 ug/L	507.93 ppb	12:02:26
3	Si 251.611†	84649.0	82768.2	2465.9 ug/L	2465.9 ppb	12:02:06
3	Sn 189.927†	3082.7	3025.6	495.96 ug/L	495.96 ppb	12:02:26
3	Ti 334.940†	317453.6	313201.5	499.68 ug/L	499.68 ppb	12:02:06
3	Tl 190.801†	1745.8	1748.8	493.00 ug/L	493.00 ppb	12:02:26
3	U 409.014†	15926.1	18058.6	495.88 ug/L	495.88 ppb	12:02:06
3	V 292.402†	74332.9	74434.6	498.28 ug/L	498.28 ppb	12:02:06
3	Zn 213.857†	58061.6	56458.2	488.84 ug/L	488.84 ppb	12:02:06
3	SiO2†	84953.7	83050.0	5301.7 ug/L	5301.7 ppb	12:02:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	917020.7	101.75	%	0.154				0.15%
Sc Radial	5850.3	100	%	0.5				0.51%
Y 371.029	749400.1	99.776	%	0.1716				0.17%
Y RADIAL	6237.0	99.19	%	0.536				0.54%
Ag 328.068†	110161.9	502.00	ug/L	0.892	502.00	ppb	0.892	0.18%
QC value within limits for Ag 328.068 Recovery = 100.40%								
Al 396.153Radial†	7134.9	4934.8	ug/L	5.53	4934.8	ppb	5.53	0.11%
QC value within limits for Al 396.153Radial Recovery = 98.70%								
As 188.979†	1238.5	493.74	ug/L	3.525	493.74	ppb	3.525	0.71%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	23085.9	482.21	ug/L	0.502	482.21	ppb	0.502	0.10%
QC value within limits for B 249.677 Recovery = 96.44%								
Ba 233.527†	66554.1	494.54	ug/L	0.879	494.54	ppb	0.879	0.18%
QC value within limits for Ba 233.527 Recovery = 98.91%								
Be 313.107†	1352946.7	494.13	ug/L	0.673	494.13	ppb	0.673	0.14%
QC value within limits for Be 313.107 Recovery = 98.83%								
Ca 317.933Radial†	3374.9	4974.4	ug/L	14.97	4974.4	ppb	14.97	0.30%

QC value within limits for Ca 317.933Radial Recovery = 99.49%

Cd 226.502†	46801.3	494.57 ug/L	1.119	494.57 ppb	1.119	0.23%
QC value within limits for Cd 226.502 Recovery = 98.91%						
Co 228.616†	26077.9	495.08 ug/L	0.815	495.08 ppb	0.815	0.16%
QC value within limits for Co 228.616 Recovery = 99.02%						
Cr 267.716†	46863.3	492.74 ug/L	0.594	492.74 ppb	0.594	0.12%
QC value within limits for Cr 267.716 Recovery = 98.55%						
Cu 324.752†	171185.7	490.14 ug/L	1.800	490.14 ppb	1.800	0.37%
QC value within limits for Cu 324.752 Recovery = 98.03%						
Fe 238.204 Radial†	535.7	5030.7 ug/L	11.65	5030.7 ppb	11.65	0.23%
QC value within limits for Fe 238.204 Radial Recovery = 100.61%						
K 766.490 Radial†	28605.2	5064.3 ug/L	3.89	5064.3 ppb	3.89	0.08%
QC value within limits for K 766.490 Radial Recovery = 101.29%						
Mg 279.077 IEC†	145.8	5148.7 ug/L	63.35	5148.7 ppb	63.35	1.23%
QC value within limits for Mg 279.077 IEC Recovery = 102.97%						
Mn 257.610†	462678.4	493.96 ug/L	0.315	493.96 ppb	0.315	0.06%
QC value within limits for Mn 257.610 Recovery = 98.79%						
Mo 202.031†	7793.8	495.46 ug/L	3.533	495.46 ppb	3.533	0.71%
QC value within limits for Mo 202.031 Recovery = 99.09%						
Na 589.592 Radial†	28274.2	9488.3 ug/L	29.09	9488.3 ppb	29.09	0.31%
QC value within limits for Na 589.592 Radial Recovery = 94.88%						
Ni 231.604†	21383.1	494.84 ug/L	1.030	494.84 ppb	1.030	0.21%
QC value within limits for Ni 231.604 Recovery = 98.97%						
P 214.914†	4222.8	2361.3 ug/L	11.71	2361.3 ppb	11.71	0.50%
QC value within limits for P 214.914 Recovery = 94.45%						
Pb 220.353†	4318.9	489.76 ug/L	2.373	489.76 ppb	2.373	0.48%
QC value within limits for Pb 220.353 Recovery = 97.95%						
S 181.975 Axial†	704.4	986.06 ug/L	9.972	986.06 ppb	9.972	1.01%
QC value within limits for S 181.975 Axial Recovery = 98.61%						
Sb 206.836†	1558.0	500.24 ug/L	5.028	500.24 ppb	5.028	1.01%
QC value within limits for Sb 206.836 Recovery = 100.05%						
Se 196.026†	847.8	508.45 ug/L	5.213	508.45 ppb	5.213	1.03%
QC value within limits for Se 196.026 Recovery = 101.69%						
Si 251.611†	82744.3	2465.2 ug/L	2.27	2465.2 ppb	2.27	0.09%
QC value within limits for Si 251.611 Recovery = 98.61%						
Sn 189.927†	3022.0	495.38 ug/L	4.487	495.38 ppb	4.487	0.91%
QC value within limits for Sn 189.927 Recovery = 99.08%						
Sr 421.552†	80282.4	499.93 ug/L	0.910	499.93 ppb	0.910	0.18%
QC value within limits for Sr 421.552 Recovery = 99.99%						
Ti 334.940†	312926.3	499.24 ug/L	0.579	499.24 ppb	0.579	0.12%
QC value within limits for Ti 334.940 Recovery = 99.85%						
Tl 190.801†	1754.1	494.49 ug/L	5.347	494.49 ppb	5.347	1.08%
QC value within limits for Tl 190.801 Recovery = 98.90%						
U 409.014†	17967.5	493.37 ug/L	4.573	493.37 ppb	4.573	0.93%
QC value within limits for U 409.014 Recovery = 98.67%						
V 292.402†	74329.4	497.58 ug/L	0.600	497.58 ppb	0.600	0.12%
QC value within limits for V 292.402 Recovery = 99.52%						
Zn 213.857†	56503.5	489.23 ug/L	0.395	489.23 ppb	0.395	0.08%
QC value within limits for Zn 213.857 Recovery = 97.85%						
SiO2†	82326.8	5255.2 ug/L	53.83	5255.2 ppb	53.83	1.02%
QC value within limits for SiO2 Recovery = 98.27%						

All analyte(s) passed QC.

Sequence No.: 18
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 12:04:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5943.6	5943.6	102	%			12:06:44
1	Y RADIAL	6397.8	6397.8	101.7	%			12:06:44
1	Al 396.153Radial†	-36.7	-15.7	-10.945	ug/L	-10.945	ppb	12:06:44
1	Ca 317.933Radial†	31.9	15.8	23.253	ug/L	23.253	ppb	12:07:04
1	Fe 238.204 Radial†	6.4	-0.5	-5.0186	ug/L	-5.0186	ppb	12:07:04
1	K 766.490 Radial†	2423.9	31.5	5.5818	ug/L	5.5818	ppb	12:06:44
1	Mg 279.077 IEC†	1.9	0.7	26.364	ug/L	26.364	ppb	12:07:04
1	Na 589.592 Radial†	-1049.6	55.9	18.772	ug/L	18.772	ppb	12:06:44
1	Sr 421.552†	-27.7	0.1	0.0002	ug/L	0.0002	ppb	12:06:44
1	Sc 361.383	904747.1	904747.1	100.39	%			12:08:01
1	Y 371.029	752940.7	752940.7	100.25	%			12:08:01
1	Ag 328.068†	351.0	57.0	0.2560	ug/L	0.2560	ppb	12:08:01
1	As 188.979†	-22.3	2.0	0.7794	ug/L	0.7794	ppb	12:08:21
1	B 249.677†	-384.4	147.8	3.0992	ug/L	3.0992	ppb	12:08:21
1	Ba 233.527†	-10.1	-1.6	-0.0110	ug/L	-0.0110	ppb	12:08:21
1	Be 313.107†	-4990.4	141.8	0.0518	ug/L	0.0518	ppb	12:08:01
1	Cd 226.502†	-182.7	13.1	0.1395	ug/L	0.1395	ppb	12:08:21
1	Co 228.616†	-62.0	3.6	0.0702	ug/L	0.0702	ppb	12:08:21
1	Cr 267.716†	81.3	2.4	0.0248	ug/L	0.0248	ppb	12:08:21
1	Cu 324.752†	6819.0	36.1	0.1029	ug/L	0.1029	ppb	12:08:01
1	Mn 257.610†	447.6	23.6	0.0241	ug/L	0.0241	ppb	12:08:21
1	Mo 202.031†	28.1	9.7	0.6137	ug/L	0.6137	ppb	12:08:21
1	Ni 231.604†	95.1	8.2	0.1888	ug/L	0.1888	ppb	12:08:21
1	P 214.914†	211.1	-13.3	-7.6724	ug/L	-7.6724	ppb	12:08:21
1	Pb 220.353†	-64.7	4.0	0.4526	ug/L	0.4526	ppb	12:08:21
1	S 181.975 Axial†	39.4	-2.3	-3.2083	ug/L	-3.2083	ppb	12:08:21
1	Sb 206.836†	34.8	0.4	0.1241	ug/L	0.1241	ppb	12:08:21
1	Se 196.026†	-25.1	3.8	2.1663	ug/L	2.1663	ppb	12:08:21
1	Si 251.611†	725.9	273.4	8.1744	ug/L	8.1744	ppb	12:08:21
1	Sn 189.927†	0.5	-4.5	-0.7298	ug/L	-0.7298	ppb	12:08:21
1	Ti 334.940†	-1079.7	39.4	0.0632	ug/L	0.0632	ppb	12:08:01
1	Tl 190.801†	-37.9	-5.2	-1.4600	ug/L	-1.4600	ppb	12:08:21
1	U 409.014†	-2334.6	76.2	2.1001	ug/L	2.1001	ppb	12:08:01
1	V 292.402†	-1295.7	67.6	0.4609	ug/L	0.4609	ppb	12:08:01
1	Zn 213.857†	678.6	54.1	0.4711	ug/L	0.4711	ppb	12:08:21
1	SiO2†	563.1	93.5	5.9727	ug/L	5.9727	ppb	12:09:17
2	Sc Radial	5877.5	5877.5	101	%			12:07:09
2	Y RADIAL	6301.1	6301.1	100.2	%			12:07:09
2	Al 396.153Radial†	-30.4	-9.8	-6.7942	ug/L	-6.7942	ppb	12:07:09
2	Ca 317.933Radial†	29.5	13.7	20.250	ug/L	20.250	ppb	12:07:29
2	Fe 238.204 Radial†	8.5	1.6	15.144	ug/L	15.144	ppb	12:07:29
2	K 766.490 Radial†	2420.9	55.3	9.8013	ug/L	9.8013	ppb	12:07:09
2	Mg 279.077 IEC†	0.3	-0.9	-30.512	ug/L	-30.512	ppb	12:07:29
2	Na 589.592 Radial†	-1064.0	30.1	10.092	ug/L	10.092	ppb	12:07:09
2	Sr 421.552†	-6.2	21.2	0.1316	ug/L	0.1316	ppb	12:07:09
2	Sc 361.383	915787.5	915787.5	101.61	%			12:08:26
2	Y 371.029	763840.5	763840.5	101.70	%			12:08:26
2	Ag 328.068†	373.0	74.4	0.3355	ug/L	0.3355	ppb	12:08:26
2	As 188.979†	-22.8	1.8	0.7053	ug/L	0.7053	ppb	12:08:46
2	B 249.677†	-358.0	178.3	3.7375	ug/L	3.7375	ppb	12:08:46
2	Ba 233.527†	16.7	24.9	0.1859	ug/L	0.1859	ppb	12:08:46
2	Be 313.107†	-5092.2	101.6	0.0371	ug/L	0.0371	ppb	12:08:26
2	Cd 226.502†	-198.1	0.2	0.0002	ug/L	0.0002	ppb	12:08:46
2	Co 228.616†	-66.9	-0.4	-0.0071	ug/L	-0.0071	ppb	12:08:46
2	Cr 267.716†	95.7	15.5	0.1608	ug/L	0.1608	ppb	12:08:46
2	Cu 324.752†	6866.8	1.2	0.0042	ug/L	0.0042	ppb	12:08:26
2	Mn 257.610†	453.6	24.1	0.0278	ug/L	0.0278	ppb	12:08:46
2	Mo 202.031†	21.7	3.0	0.1917	ug/L	0.1917	ppb	12:08:46
2	Ni 231.604†	90.0	2.1	0.0479	ug/L	0.0479	ppb	12:08:46

2	P 214.914†	213.6	-13.3	-7.6526 ug/L	-7.6526 ppb	12:08:46
2	Pb 220.353†	-68.6	0.9	0.1004 ug/L	0.1004 ppb	12:08:46
2	S 181.975 Axial†	40.1	-2.1	-2.9631 ug/L	-2.9631 ppb	12:08:46
2	Sb 206.836†	38.8	3.9	1.2504 ug/L	1.2504 ppb	12:08:46
2	Se 196.026†	-16.0	13.1	7.5950 ug/L	7.5950 ppb	12:08:46
2	Si 251.611†	678.6	218.2	6.5230 ug/L	6.5230 ppb	12:08:46
2	Sn 189.927†	9.9	4.8	0.7858 ug/L	0.7858 ppb	12:08:46
2	Ti 334.940†	-1103.3	29.1	0.0434 ug/L	0.0434 ppb	12:08:26
2	Tl 190.801†	-37.2	-4.1	-1.1582 ug/L	-1.1582 ppb	12:08:46
2	U 409.014†	-2106.4	328.8	9.0562 ug/L	9.0562 ppb	12:08:26
2	V 292.402†	-1307.0	72.1	0.4934 ug/L	0.4934 ppb	12:08:26
2	Zn 213.857†	689.6	56.9	0.4960 ug/L	0.4960 ppb	12:08:46
2	SiO2†	577.4	100.8	6.4452 ug/L	6.4452 ppb	12:09:22
3	Sc Radial	5765.2	5765.2	98.7 %		12:07:34
3	Y RADIAL	6230.6	6230.6	99.09 %		12:07:34
3	Al 396.153Radial†	-30.3	-10.3	-7.1552 ug/L	-7.1552 ppb	12:07:34
3	Ca 317.933Radial†	31.8	16.7	24.546 ug/L	24.546 ppb	12:07:54
3	Fe 238.204 Radial†	6.9	0.1	1.3209 ug/L	1.3209 ppb	12:07:54
3	K 766.490 Radial†	2425.1	106.5	18.876 ug/L	18.876 ppb	12:07:34
3	Mg 279.077 IEC†	0.7	-0.5	-16.193 ug/L	-16.193 ppb	12:07:54
3	Na 589.592 Radial†	-1040.0	33.8	11.341 ug/L	11.341 ppb	12:07:34
3	Sr 421.552†	0.5	27.8	0.1730 ug/L	0.1730 ppb	12:07:34
3	Sc 361.383	904812.9	904812.9	100.39 %		12:08:51
3	Y 371.029	754674.2	754674.2	100.48 %		12:08:51
3	Ag 328.068†	311.7	17.7	0.0780 ug/L	0.0780 ppb	12:08:51
3	As 188.979†	-26.5	-2.2	-0.8622 ug/L	-0.8622 ppb	12:09:11
3	B 249.677†	-375.9	156.2	3.2768 ug/L	3.2768 ppb	12:09:11
3	Ba 233.527†	-9.4	-1.0	-0.0062 ug/L	-0.0062 ppb	12:09:11
3	Be 313.107†	-4986.8	145.8	0.0531 ug/L	0.0531 ppb	12:08:51
3	Cd 226.502†	-180.6	15.3	0.1612 ug/L	0.1612 ppb	12:09:11
3	Co 228.616†	-73.7	-8.0	-0.1515 ug/L	-0.1515 ppb	12:09:11
3	Cr 267.716†	75.4	-3.5	-0.0376 ug/L	-0.0376 ppb	12:09:11
3	Cu 324.752†	6811.0	27.6	0.0790 ug/L	0.0790 ppb	12:08:51
3	Mn 257.610†	443.6	19.6	0.0213 ug/L	0.0213 ppb	12:09:11
3	Mo 202.031†	20.5	2.1	0.1318 ug/L	0.1318 ppb	12:09:11
3	Ni 231.604†	90.4	3.4	0.0800 ug/L	0.0800 ppb	12:09:11
3	P 214.914†	205.7	-18.7	-10.767 ug/L	-10.767 ppb	12:09:11
3	Pb 220.353†	-57.3	11.3	1.2803 ug/L	1.2803 ppb	12:09:11
3	S 181.975 Axial†	42.1	0.4	0.5027 ug/L	0.5027 ppb	12:09:11
3	Sb 206.836†	31.3	-3.1	-0.9572 ug/L	-0.9572 ppb	12:09:11
3	Se 196.026†	-28.5	0.4	0.2427 ug/L	0.2427 ppb	12:09:11
3	Si 251.611†	587.0	135.0	4.0314 ug/L	4.0314 ppb	12:09:11
3	Sn 189.927†	7.7	2.6	0.4341 ug/L	0.4341 ppb	12:09:11
3	Ti 334.940†	-1138.7	-19.4	-0.0317 ug/L	-0.0317 ppb	12:08:51
3	Tl 190.801†	-40.8	-8.1	-2.2771 ug/L	-2.2771 ppb	12:09:11
3	U 409.014†	-2241.4	169.2	4.6600 ug/L	4.6600 ppb	12:08:51
3	V 292.402†	-1304.3	59.2	0.4013 ug/L	0.4013 ppb	12:08:51
3	Zn 213.857†	688.0	63.4	0.5539 ug/L	0.5539 ppb	12:09:11
3	SiO2†	579.7	110.0	7.0334 ug/L	7.0334 ppb	12:09:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908449.2	100.80	%	0.705				0.70%
Sc Radial	5862.1	100	%	1.5				1.54%
Y 371.029	757151.8	100.81	%	0.780				0.77%
Y RADIAL	6309.8	100.4	%	1.34				1.33%
Ag 328.068†	49.7	0.2232	ug/L	0.13185	0.2232	ppb	0.13185	59.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.9	-8.2981	ug/L	2.29928	-8.2981	ppb	2.29928	27.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.2075	ug/L	0.92711	0.2075	ppb	0.92711	446.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.8	3.3712	ug/L	0.32948	3.3712	ppb	0.32948	9.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.4	0.0562	ug/L	0.11232	0.0562	ppb	0.11232	199.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	129.7	0.0473	ug/L	0.00887	0.0473	ppb	0.00887	18.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.4	22.683	ug/L	2.2037	22.683	ppb	2.2037	9.72%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.5      0.1003 ug/L       0.08734      0.1003 ppb        0.08734  87.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.6     -0.0295 ug/L       0.11254     -0.0295 ppb        0.11254 381.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                4.8      0.0494 ug/L       0.10145      0.0494 ppb        0.10145 205.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               21.6      0.0621 ug/L       0.05151      0.0621 ppb        0.05151  83.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.4      3.8155 ug/L      10.31030      3.8155 ppb       10.31030 270.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         64.4      11.420 ug/L        6.7935      11.420 ppb        6.7935  59.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.2     -6.7803 ug/L      29.58356     -6.7803 ppb       29.58356 436.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               22.4      0.0244 ug/L       0.00323      0.0244 ppb        0.00323  13.22%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.3124 ug/L       0.26266      0.3124 ppb        0.26266  84.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        39.9      13.402 ug/L        4.6928      13.402 ppb        4.6928  35.02%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                4.6      0.1056 ug/L       0.07387      0.1056 ppb        0.07387  69.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.1     -8.6973 ug/L       1.79249     -8.6973 ppb        1.79249  20.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.4      0.6111 ug/L       0.60572      0.6111 ppb        0.60572  99.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -1.3     -1.8896 ug/L       2.07538     -1.8896 ppb        2.07538 109.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.4      0.1391 ug/L       1.10385      0.1391 ppb        1.10385 793.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.7      3.3347 ug/L       3.81286      3.3347 ppb        3.81286 114.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              208.9      6.2429 ug/L       2.08565      6.2429 ppb        2.08565  33.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.0      0.1634 ug/L       0.79323      0.1634 ppb        0.79323 485.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               16.3      0.1016 ug/L       0.09020      0.1016 ppb        0.09020  88.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               16.4      0.0250 ug/L       0.05004      0.0250 ppb        0.05004 200.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -5.8     -1.6318 ug/L       0.57888     -1.6318 ppb        0.57888  35.48%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               191.4      5.2721 ug/L       3.51825      5.2721 ppb        3.51825  66.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                66.3      0.4518 ug/L       0.04670      0.4518 ppb        0.04670  10.33%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               58.1      0.5070 ug/L       0.04248      0.5070 ppb        0.04248   8.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    101.4      6.4838 ug/L       0.53137      6.4838 ppb        0.53137   8.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, November 30, 2009 11:18:16
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1367
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5395.4	5395.419	120.784	2.2
	Mg	24.0	42997.0	42997.018	572.720	1.3
	Co	58.9	77073.0	77072.963	701.412	0.9
	Rh	102.9	138167.4	138167.357	744.527	0.5
	In	114.9	194228.7	194228.655	2720.554	1.4
	Pb	208.0	161213.0	161212.973	1206.377	0.7
⌈>	Ba	137.9	176680.9	176680.937	1795.539	1.0
⌊	Ba++	69.0	2059.5	0.012	0.000	1.5
⌈>	Ce	139.9	216810.1	216810.068	1002.787	0.5
⌊	CeO	155.9	5672.6	0.026	0.001	2.1
	Bkgd	220.0	9.6	9.600	2.485	25.9

Current Optimization File Data

Current Value	Description
0.81	Nebulizer Gas Flow
4.50	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	4.3	5232.6
Co	59	13	4.5	72500.5
In	115	13	5.0	171657.2

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	612	2050	0.637
Be	9.0	9.0	2062	2055	0.653
Mg	24.0	24.0	5687	2055	0.611
Mg	25.0	25.0	5951	2070	0.623
Mg	26.0	26.0	6175	2060	0.607
Co	58.9	58.9	14190	2085	0.623
Rh	102.9	102.9	24886	2140	0.637
In	114.9	114.9	27800	2170	0.625
Ce	139.9	139.9	33872	2190	0.609
Pb	206.0	206.0	49948	2265	0.632
Pb	207.0	207.0	50171	2250	0.634
Pb	208.0	208.0	50439	2255	0.662
U	238.1	238.0	57726	2260	0.721

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 01, 2009 01:40:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\Blank.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		189	
	Be	9		ug/L		14	
	B	11		ug/L		869	
	Na	23		ug/L		31368	
	Mg	24		ug/L		6668	
	Al	27		ug/L		8336	
	P	31		ug/L		7728	
	K	39		ug/L		652225	
	Ca	43		ug/L		166	
>	Sc	45		ug/L		966415	
	Ti	47		ug/L		373	
	V	51		ug/L		-4150	
	Cr	52		ug/L		-56	
	Cr	53		ug/L		60459	
	Mn	55		ug/L		2766	
	Fe	57		ug/L		5553	
	Co	59		ug/L		172	
	Ni	60		ug/L		100	
	Cu	63		ug/L		237	
	Cu	65		ug/L		75	
	Zn	66		ug/L		202	
	Zn	67		ug/L		7286	
	Zn	68		ug/L		1172	
>	Ge	74		ug/L		305972	
	As	75		ug/L		-353	
	Se	77		ug/L		3368	
	Se	82		ug/L		-44	
	Kr	83		ug/L		101	
	Sr	88		ug/L		207	
	Y	89		ug/L		98	
	Mo	98		ug/L		108	
	Ag	107		ug/L		69	
	Cd	111		ug/L		31	
	Cd	114		ug/L		53	
>	In	115		ug/L		189548	
	Sn	120		ug/L		377	
	Sb	121		ug/L		600	
	Sb	123		ug/L		462	
	Ba	135		ug/L		48	
	Ba	137		ug/L		83	
	Ho	165		ug/L		31	
>	Lu	175		ug/L		293289	
	Tl	205		ug/L		606	
	Pb	208		ug/L		776	
	Bi	209		ug/L		195	
	Th	232		ug/L		2314	
	U	238		ug/L		496	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 01, 2009 01:46:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\Standard 1.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.568	23286	0.024
	Be	9	10.000	ug/L	2.545	4851	0.005
	B	11	20.000	ug/L	3.304	9989	0.009
	Na	23	1000.000	ug/L	6.776	4264054	4.335
	Mg	24	1000.000	ug/L	6.216	3247574	3.320
	Al	27	1000.000	ug/L	1.380	3538593	3.616
	P	31	1000.000	ug/L	2.243	225651	0.223
	K	39	1000.000	ug/L	3.228	5389860	4.845
	Ca	43	1000.000	ug/L	0.458	12395	0.013
>	Sc	45		ug/L		976314	976314.089
	Ti	47	10.000	ug/L	3.395	5902	0.006
	V	51	10.000	ug/L	3.357	52658	0.058
	Cr	52	10.000	ug/L	0.682	43168	0.044
	Cr	53		ug/L		65576	0.005
	Mn	55	10.000	ug/L	2.547	79614	0.079
	Fe	57	1000.000	ug/L	3.069	161683	0.160
	Co	59	10.000	ug/L	2.648	56897	0.058
	Ni	60	10.000	ug/L	3.355	11769	0.012
	Cu	63		ug/L		26899	0.027
	Cu	65	10.000	ug/L	1.878	12538	0.013
	Zn	66	10.000	ug/L	1.461	8982	0.029
	Zn	67		ug/L		8633	0.004
	Zn	68		ug/L		7356	0.020
>	Ge	74		ug/L		306895	306894.573
	As	75	10.000	ug/L	2.305	9000	0.030
	Se	77		ug/L		4171	0.003
	Se	82	10.000	ug/L	7.311	833	0.003
	Kr	83		ug/L		102	0.000
	Sr	88	10.000	ug/L	1.294	102843	0.532
	Y	89		ug/L		101	0.000
	Mo	98	10.000	ug/L	2.593	24868	0.128
	Ag	107	10.000	ug/L	0.142	43697	0.226
	Cd	111	10.000	ug/L	1.503	11004	0.057
	Cd	114		ug/L		25700	0.133
>	In	115		ug/L		192748	192748.481
	Sn	120	10.000	ug/L	1.231	43760	0.225
	Sb	121	10.000	ug/L	9.977	32943	0.168
	Sb	123		ug/L		25108	0.128
	Ba	135		ug/L		10842	0.037
	Ba	137	10.000	ug/L	1.365	19007	0.065
	Ho	165		ug/L		30	-0.000
>	Lu	175		ug/L		293110	293110.161
	Tl	205	10.000	ug/L	1.606	141152	0.479
	Pb	208	10.000	ug/L	1.481	199971	0.680
	Bi	209		ug/L		201	0.000
	Th	232	10.000	ug/L	2.342	235824	0.797
	U	238	10.000	ug/L	1.844	251405	0.856

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 01, 2009 01:52:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\Standard 2.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.978**	ug/L	0.754	220436	0.231
	Be	9	**99.995**	ug/L	0.830	46944	0.049
	B	11	**200.041**	ug/L	2.005	91606	0.095
	Na	23	**10008.955**	ug/L	6.119	45406538	47.656
	Mg	24	**10005.114**	ug/L	7.969	33316041	35.003
	Al	27	**10012.701**	ug/L	6.866	39498563	41.477
	P	31	**9989.994**	ug/L	1.261	1937194	2.027
	K	39	**10004.975**	ug/L	4.036	49203139	51.015
	Ca	43	**9998.840**	ug/L	1.171	118035	0.124
>	Sc	45		ug/L		952185	952184.638
	Ti	47	**100.011**	ug/L	0.748	54862	0.057
	V	51	**99.950**	ug/L	1.986	523668	0.554
	Cr	52	**99.962**	ug/L	1.710	406037	0.427
	Cr	53		ug/L		110476	0.053
	Mn	55	**99.952**	ug/L	0.865	717706	0.751
	Fe	57	**9988.864**	ug/L	0.566	1373975	1.437
	Co	59	**99.954**	ug/L	1.588	528761	0.555
	Ni	60	**99.986**	ug/L	1.243	112309	0.118
	Cu	63		ug/L		255679	0.268
	Cu	65	**99.986**	ug/L	0.493	119879	0.126
	Zn	66	**100.005**	ug/L	1.497	85162	0.288
	Zn	67		ug/L		20634	0.046
	Zn	68		ug/L		60011	0.199
>	Ge	74		ug/L		295537	295537.143
	As	75	**99.963**	ug/L	2.166	86505	0.294
	Se	77		ug/L		10536	0.025
	Se	82	**100.049**	ug/L	2.261	8845	0.030
	Kr	83		ug/L		122	0.000
	Sr	88	**99.972**	ug/L	1.932	953172	5.181
	Y	89		ug/L		154	0.000
	Mo	98	**100.008**	ug/L	1.761	238331	1.295
	Ag	107	**99.967**	ug/L	2.330	403158	2.191
	Cd	111	**99.999**	ug/L	1.258	104672	0.569
	Cd	114		ug/L		242305	1.317
>	In	115		ug/L		183969	183968.877
	Sn	120	**99.987**	ug/L	0.489	409173	2.222
	Sb	121	**100.049**	ug/L	7.404	325337	1.765
	Sb	123		ug/L		253819	1.377
	Ba	135		ug/L		104700	0.372
	Ba	137	**100.002**	ug/L	2.054	182236	0.647
	Ho	165		ug/L		29	-0.000
>	Lu	175		ug/L		281487	281486.855
	Tl	205	**99.895**	ug/L	1.650	1220580	4.335
	Pb	208	**99.941**	ug/L	1.921	1805171	6.412
	Bi	209		ug/L		311	0.000
	Th	232	**99.855**	ug/L	0.813	1957695	6.948
	U	238	**99.789**	ug/L	2.049	1985750	7.054

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 01, 2009 01:58:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 1.152

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.267**	ug/L	0.949	110795	0.116
	Be	9	**51.461**	ug/L	0.186	24136	0.025
	B	11	**107.277**	ug/L	3.113	49463	0.051
	Na	23	**5209.883**	ug/L	2.572	23623672	24.806
	Mg	24	**4661.247**	ug/L	6.280	15511196	16.308
	Al	27	**4559.273**	ug/L	3.796	17967857	18.887
	P	31	**5260.089**	ug/L	2.689	1022359	1.067
	K	39	**5177.878**	ug/L	9.636	25747879	26.402
	Ca	43	**4942.223**	ug/L	0.534	58357	0.061
>	Sc	45		ug/L		951040	951039.703
	Ti	47	**49.112**	ug/L	0.901	27095	0.028
	V	51	**51.710**	ug/L	3.441	268612	0.287
	Cr	52	**52.638**	ug/L	1.655	213535	0.225
	Cr	53		ug/L		88397	0.030
	Mn	55	**52.901**	ug/L	1.087	380665	0.397
	Fe	57	**5251.471**	ug/L	0.781	724068	0.756
	Co	59	**50.387**	ug/L	1.934	266320	0.280
	Ni	60	**50.288**	ug/L	0.842	56470	0.059
	Cu	63		ug/L		132811	0.139
	Cu	65	**51.786**	ug/L	0.686	62054	0.065
	Zn	66	**50.483**	ug/L	1.363	43171	0.145
	Zn	67		ug/L		14112	0.024
	Zn	68		ug/L		31128	0.101
>	Ge	74		ug/L		296108	296108.330
	As	75	**48.656**	ug/L	1.978	42014	0.143
	Se	77		ug/L		7373	0.014
	Se	82	**49.925**	ug/L	0.664	4401	0.015
	Kr	83		ug/L		108	0.000
	Sr	88	**50.326**	ug/L	0.180	483308	2.608
	Y	89		ug/L		95	-0.000
	Mo	98	**49.863**	ug/L	1.509	119715	0.646
	Ag	107	**51.316**	ug/L	0.757	208454	1.125
	Cd	111	**50.013**	ug/L	0.187	52732	0.284
	Cd	114		ug/L		121904	0.658
>	In	115		ug/L		185243	185243.227
	Sn	120	**50.856**	ug/L	1.973	209733	1.130
	Sb	121	**51.518**	ug/L	6.210	168905	0.909
	Sb	123		ug/L		130339	0.701
	Ba	135		ug/L		52124	0.183
	Ba	137	**49.807**	ug/L	2.081	91876	0.322
	Ho	165		ug/L		59	0.000
>	Lu	175		ug/L		284779	284778.867
	Tl	205	**50.581**	ug/L	1.358	625675	2.195
	Pb	208	**51.932**	ug/L	2.074	949415	3.332
	Bi	209		ug/L		231	0.000
	Th	232	**55.015**	ug/L	0.605	1092258	3.828
	U	238	**57.277**	ug/L	2.432	1153386	4.049

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.534				
	Be	9	102.921				
	B	11	107.277				
	Na	23	104.198				
	Mg	24	93.225				
	Al	27	90.283				
	P	31	105.202				
	K	39	103.558				
	Ca	43	98.844				
>	Sc	45		98.4			
	Ti	47	98.225				
	V	51	103.419				
	Cr	52	105.276				
	Cr	53					
	Mn	55	105.802				
	Fe	57	105.029				
	Co	59	100.774				
	Ni	60	100.576				
	Cu	63					
	Cu	65	103.573				
	Zn	66	100.965				
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75	97.311				
	Se	77					
	Se	82	99.851				
	Kr	83					
	Sr	88	100.653				
	Y	89					
	Mo	98	99.725				
	Ag	107	102.633				
	Cd	111	100.026				
	Cd	114					
>	In	115		97.7			
	Sn	120	101.711				
	Sb	121	103.037				
	Sb	123					
	Ba	135					
	Ba	137	99.614				
	Ho	165					
>	Lu	175		97.1			
	Tl	205	101.163				
	Pb	208	103.864				
	Bi	209					
	Th	232	110.029				
	U	238	114.554				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Th	232	ICV is out of limits (+/- 10%)
QC Std 1	U	238	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 01, 2009 02:04:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 2.153

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.018**	ug/L	36.705	231	0.000
	Be	9	**0.009**	ug/L	91.589	18	0.000
	B	11	**4.248**	ug/L	17.186	2827	0.002
	Na	23	**0.204**	ug/L	114.737	32370	0.001
	Mg	24	**2.635**	ug/L	88.435	15677	0.009
	Al	27	**1.992**	ug/L	37.349	16343	0.008
	P	31	**1.264**	ug/L	115.774	7989	0.000
	K	39	**-1.901**	ug/L	378.618	644250	-0.010
	Ca	43	**3.743**	ug/L	56.933	211	0.000
>	Sc	45		ug/L		968009	968009.115
	Ti	47	**0.100**	ug/L	24.099	429	0.000
	V	51	**-0.208**	ug/L	269.502	-5301	-0.001
	Cr	52	**0.033**	ug/L	40.894	78	0.000
	Cr	53		ug/L		61604	0.001
	Mn	55	**-0.087**	ug/L	8.740	2138	-0.001
	Fe	57	**1.648**	ug/L	60.698	5793	0.000
	Co	59	**0.016**	ug/L	51.981	260	0.000
	Ni	60	**0.000**	ug/L	8661.368	100	0.000
	Cu	63		ug/L		320	0.000
	Cu	65	**0.010**	ug/L	42.198	88	0.000
	Zn	66	**0.021**	ug/L	36.496	218	0.000
	Zn	67		ug/L		7087	-0.000
	Zn	68		ug/L		1148	-0.000
>	Ge	74		ug/L		303224	303224.314
	As	75	**0.481**	ug/L	34.159	80	0.001
	Se	77		ug/L		3685	0.001
	Se	82	**0.201**	ug/L	57.341	-25	0.000
	Kr	83		ug/L		100	-0.000
	Sr	88	**0.011**	ug/L	32.904	318	0.001
	Y	89		ug/L		91	-0.000
	Mo	98	**0.082**	ug/L	34.440	308	0.001
	Ag	107	**0.012**	ug/L	33.318	118	0.000
	Cd	111	**0.011**	ug/L	28.160	43	0.000
	Cd	114		ug/L		83	0.000
>	In	115		ug/L		188839	188839.204
	Sn	120	**0.374**	ug/L	15.115	1942	0.008
	Sb	121	**1.371**	ug/L	22.841	5157	0.024
	Sb	123		ug/L		4032	0.019
	Ba	135		ug/L		60	0.000
	Ba	137	**0.009**	ug/L	45.110	99	0.000
	Ho	165		ug/L		30	-0.000
>	Lu	175		ug/L		287812	287811.527
	Tl	205	**0.151**	ug/L	15.235	2478	0.007
	Pb	208	**0.011**	ug/L	50.526	964	0.001
	Bi	209		ug/L		178	-0.000
	Th	232	**0.581**	ug/L	21.892	13905	0.040
	U	238	**0.030**	ug/L	19.507	1093	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 01, 2009 02:10:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 3.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.063**	ug/L	1.143	24835	0.026
	Be	9	**0.531**	ug/L	1.188	266	0.000
	B	11	**17.645**	ug/L	1.980	8962	0.008
	Na	23	**250.092**	ug/L	7.636	1177779	1.191
	Mg	24	**15.873**	ug/L	14.828	60128	0.056
	Al	27	**36.408**	ug/L	24.485	153516	0.151
	P	31	**56.526**	ug/L	2.900	18743	0.011
	K	39	**296.536**	ug/L	8.260	2105644	1.512
	Ca	43	**213.907**	ug/L	1.948	2716	0.003
>	Sc	45		ug/L		962927	962927.013
	Ti	47	**8.256**	ug/L	0.934	4921	0.005
	V	51	**11.260**	ug/L	2.974	55995	0.062
	Cr	52	**10.851**	ug/L	3.260	44526	0.046
	Cr	53		ug/L		66259	0.006
	Mn	55	**5.704**	ug/L	2.630	44014	0.043
	Fe	57	**116.849**	ug/L	3.081	21723	0.017
	Co	59	**1.076**	ug/L	2.941	5926	0.006
	Ni	60	**2.156**	ug/L	1.958	2546	0.003
	Cu	63		ug/L		3201	0.003
	Cu	65	**1.098**	ug/L	3.998	1405	0.001
	Zn	66	**10.754**	ug/L	2.405	9590	0.031
	Zn	67		ug/L		8763	0.005
	Zn	68		ug/L		7596	0.021
>	Ge	74		ug/L		303749	303748.544
	As	75	**5.841**	ug/L	6.442	4868	0.017
	Se	77		ug/L		3942	0.002
	Se	82	**5.475**	ug/L	3.700	457	0.002
	Kr	83		ug/L		97	-0.000
	Sr	88	**11.315**	ug/L	1.659	110425	0.586
	Y	89		ug/L		81	-0.000
	Mo	98	**0.521**	ug/L	1.462	1374	0.007
	Ag	107	**1.056**	ug/L	1.785	4418	0.023
	Cd	111	**1.069**	ug/L	2.617	1174	0.006
	Cd	114		ug/L		2697	0.014
>	In	115		ug/L		187979	187979.099
	Sn	120	**5.341**	ug/L	2.304	22686	0.119
	Sb	121	**3.193**	ug/L	7.653	11178	0.056
	Sb	123		ug/L		8574	0.043
	Ba	135		ug/L		2213	0.008
	Ba	137	**2.070**	ug/L	2.097	3945	0.013
	Ho	165		ug/L		30	-0.000
>	Lu	175		ug/L		288309	288308.809
	Tl	205	**1.166**	ug/L	2.341	15184	0.051
	Pb	208	**2.211**	ug/L	0.882	41652	0.142
	Bi	209		ug/L		174	-0.000
	Th	232	**1.348**	ug/L	1.575	29310	0.094
	U	238	**0.249**	ug/L	3.672	5565	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.630				
	Be	9	106.213				
	B	11	117.631				
	Na	23	100.037				
	Mg	24	105.823				
	Al	27	121.361				
	P	31	113.051				
	K	39	98.845				
	Ca	43	106.953				
>	Sc	45		99.6			
	Ti	47	82.561				
	V	51	112.602				
	Cr	52	108.511				
	Cr	53					
	Mn	55	114.080				
	Fe	57	116.849				
	Co	59	107.589				
	Ni	60	107.789				
	Cu	63					
	Cu	65	109.792				
	Zn	66	107.539				
	Zn	67					
	Zn	68					
>	Ge	74		99.3			
	As	75	116.816				
	Se	77					
	Se	82	109.510				
	Kr	83					
	Sr	88	113.154				
	Y	89					
	Mo	98	104.111				
	Ag	107	105.570				
	Cd	111	106.905				
	Cd	114					
>	In	115		99.2			
	Sn	120	106.822				
	Sb	121	106.434				
	Sb	123					
	Ba	135					
	Ba	137	103.524				
	Ho	165					
>	Lu	175		98.3			
	Tl	205	116.620				
	Pb	208	110.541				
	Bi	209					
	Th	232	134.798				
	U	238	124.594				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Th	232CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 01, 2009 02:16:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 4.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.139**	**ug/L**	10.112	427	0.000
	Be	9	**0.046**	**ug/L**	25.014	31	0.000
	B	11	**1.830**	**ug/L**	11.441	1465	0.001
	Na	23	**97383.353**	**ug/L**	4.392	383347766	463.673
	Mg	24	**96485.152**	**ug/L**	3.862	279042987	337.557
	Al	27	**90628.619**	**ug/L**	6.307	310296567	375.427
	P	31	**103538.510**	**ug/L**	2.374	17371594	21.005
	K	39	**103774.050**	**ug/L**	1.409	438066660	529.140
	Ca	43	**92680.651**	**ug/L**	2.002	948805	1.148
>	Sc	45		**ug/L**		826823	826823.035
	Ti	47	**1403.523**	**ug/L**	1.636	664332	0.803
	V	51	**0.183**	**ug/L**	219.505	-2702	0.001
	Cr	52	**2.225**	**ug/L**	3.199	7804	0.009
	Cr	53		**ug/L**		54332	0.003
	Mn	55	**5.851**	**ug/L**	2.249	38700	0.044
	Fe	57	**108296.302**	**ug/L**	0.928	12888024	15.583
	Co	59	**0.431**	**ug/L**	4.499	2128	0.002
	Ni	60	**3.489**	**ug/L**	1.625	3485	0.004
	Cu	63		**ug/L**		9534	0.011
	Cu	65	**6.785**	**ug/L**	2.245	7124	0.009
	Zn	66	**4.869**	**ug/L**	4.915	3686	0.014
	Zn	67		**ug/L**		6855	0.003
	Zn	68		**ug/L**		1478	0.002
>	Ge	74		**ug/L**		251473	251473.288
	As	75	**-0.130**	**ug/L**	265.358	-386	-0.000
	Se	77		**ug/L**		5587	0.011
	Se	82	**-1.236**	**ug/L**	14.236	-130	-0.000
	Kr	83		**ug/L**		253	0.001
	Sr	88	**1.252**	**ug/L**	2.231	10616	0.065
	Y	89		**ug/L**		356	0.002
	Mo	98	**1920.808**	**ug/L**	1.717	4002121	24.874
	Ag	107	**0.069**	**ug/L**	4.405	300	0.002
	Cd	111	**0.452**	**ug/L**	16.525	440	0.003
	Cd	114		**ug/L**		7468	0.046
>	In	115		**ug/L**		160909	160908.635
	Sn	120	**0.280**	**ug/L**	5.847	1322	0.006
	Sb	121	**0.403**	**ug/L**	24.538	1652	0.007
	Sb	123		**ug/L**		1282	0.006
	Ba	135		**ug/L**		714	0.003
	Ba	137	**0.721**	**ug/L**	2.096	1233	0.005
	Ho	165		**ug/L**		633	0.002
>	Lu	175		**ug/L**		249211	249211.428
	Tl	205	**0.028**	**ug/L**	7.527	814	0.001
	Pb	208	**0.182**	**ug/L**	1.901	3563	0.012
	Bi	209		**ug/L**		684	0.002
	Th	232	**0.493**	**ug/L**	32.452	10523	0.034
	U	238	**-0.001**	**ug/L**	105.427	409	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	97.383				
	Mg	24	96.485				
	Al	27	90.629				
	P	31	103.539				
	K	39	103.774				
	Ca	43	92.681				
>	Sc	45		85.6			
	Ti	47	70.176				
	V	51					
	Cr	52	60.141				
	Cr	53					
	Mn	55	100.875				
	Fe	57	108.296				
	Co	59	172.467				
	Ni	60	129.227				
	Cu	63					
	Cu	65	233.959				
	Zn	66	135.250				
	Zn	67					
	Zn	68					
>	Ge	74		82.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	104.342				
	Y	89					
	Mo	98	96.040				
	Ag	107					
	Cd	111	113.107				
	Cd	114					
>	In	115		84.9			
	Sn	120					
	Sb	121	402.805				
	Sb	123					
	Ba	135					
	Ba	137	107.566				
	Ho	165					
>	Lu	175		85.0			
	Tl	205					
	Pb	208	90.824				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 01, 2009 02:22:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 5.156

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.290**	ug/L	1.312	40804	0.049
	Be	9	**20.241**	ug/L	1.701	8244	0.010
	B	11	**21.013**	ug/L	0.725	9004	0.010
	Na	23	**98622.107**	ug/L	1.323	387489579	469.571
	Mg	24	**97486.139**	ug/L	5.829	281410625	341.059
	Al	27	**93311.594**	ug/L	3.943	318920708	386.541
	P	31	**103320.538**	ug/L	1.245	17301592	20.961
	K	39	**101667.693**	ug/L	4.040	428367117	518.400
	Ca	43	**92944.801**	ug/L	1.631	949686	1.151
>	Sc	45		ug/L		825153	825152.937
	Ti	47	**1407.314**	ug/L	0.835	664845	0.805
	V	51	**21.694**	ug/L	0.891	95731	0.120
	Cr	52	**23.105**	ug/L	1.319	81299	0.099
	Cr	53		ug/L		61069	0.011
	Mn	55	**26.604**	ug/L	0.677	167268	0.200
	Fe	57	**108137.356**	ug/L	1.150	12843619	15.560
	Co	59	**20.460**	ug/L	1.417	93918	0.114
	Ni	60	**22.804**	ug/L	3.626	22262	0.027
	Cu	63		ug/L		52030	0.063
	Cu	65	**26.116**	ug/L	1.037	27183	0.033
	Zn	66	**24.580**	ug/L	0.924	18038	0.071
	Zn	67		ug/L		9028	0.012
	Zn	68		ug/L		11345	0.041
>	Ge	74		ug/L		252867	252867.202
	As	75	**21.404**	ug/L	2.228	15622	0.063
	Se	77		ug/L		6455	0.015
	Se	82	**20.377**	ug/L	5.110	1513	0.006
	Kr	83		ug/L		241	0.001
	Sr	88	**23.688**	ug/L	1.191	198718	1.228
	Y	89		ug/L		356	0.002
	Mo	98	**1935.508**	ug/L	0.432	4054037	25.064
	Ag	107	**19.302**	ug/L	2.254	68489	0.423
	Cd	111	**20.107**	ug/L	1.998	18524	0.114
	Cd	114		ug/L		49727	0.307
>	In	115		ug/L		161746	161746.357
	Sn	120	**20.695**	ug/L	0.805	74711	0.460
	Sb	121	**23.455**	ug/L	1.323	67430	0.414
	Sb	123		ug/L		51731	0.317
	Ba	135		ug/L		19606	0.079
	Ba	137	**21.284**	ug/L	1.131	34373	0.138
	Ho	165		ug/L		666	0.003
>	Lu	175		ug/L		249009	249009.318
	Tl	205	**21.306**	ug/L	1.672	230752	0.925
	Pb	208	**21.164**	ug/L	0.756	338741	1.358
	Bi	209		ug/L		958	0.003
	Th	232	**24.194**	ug/L	0.982	421135	1.683
	U	238	**24.955**	ug/L	0.711	439710	1.764

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	106.450				
	Be	9	101.205				
	B	11	105.064				
	Na	23	98.622				
	Mg	24	97.486				
	Al	27	93.312				
	P	31	103.321				
	K	39	101.668				
	Ca	43	92.945				
>	Sc	45		85.4			
	Ti	47	70.366				
	V	51	108.470				
	Cr	52	97.489				
	Cr	53					
	Mn	55	103.118				
	Fe	57	108.137				
	Co	59	101.037				
	Ni	60	100.458				
	Cu	63					
	Cu	65	114.043				
	Zn	66	104.153				
	Zn	67					
	Zn	68					
>	Ge	74		82.6			
	As	75	107.020				
	Se	77					
	Se	82	101.884				
	Kr	83					
	Sr	88	111.734				
	Y	89					
	Mo	98	96.775				
	Ag	107	96.508				
	Cd	111	98.566				
	Cd	114					
>	In	115		85.3			
	Sn	120	103.473				
	Sb	121	116.691				
	Sb	123					
	Ba	135					
	Ba	137	102.970				
	Ho	165					
>	Lu	175		84.9			
	Tl	205	106.532				
	Pb	208	104.771				
	Bi	209					
	Th	232	120.969				
	U	238	124.776				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	Th	232	ICSAB is out of limits
QC Std 5	U	238	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 01, 2009 02:29:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 6.157

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.724**	ug/L	1.437	111497	0.115
	Be	9	**49.559**	ug/L	2.261	23647	0.024
	B	11	**98.867**	ug/L	2.397	46451	0.047
	Na	23	**4751.399**	ug/L	13.237	21936267	22.623
	Mg	24	**4521.264**	ug/L	0.855	15313012	15.818
	Al	27	**4902.141**	ug/L	9.552	19671125	20.307
	P	31	**5087.543**	ug/L	1.880	1006334	1.032
	K	39	**5302.626**	ug/L	6.011	26806011	27.038
	Ca	43	**4837.638**	ug/L	0.529	58122	0.060
>	Sc	45		ug/L		967625	967625.202
	Ti	47	**51.326**	ug/L	2.038	28791	0.029
	V	51	**51.284**	ug/L	2.509	270996	0.284
	Cr	52	**51.383**	ug/L	1.793	212074	0.219
	Cr	53		ug/L		86697	0.027
	Mn	55	**51.729**	ug/L	1.958	378719	0.389
	Fe	57	**5190.051**	ug/L	2.949	728023	0.747
	Co	59	**49.629**	ug/L	1.283	266891	0.276
	Ni	60	**49.296**	ug/L	1.370	56323	0.058
	Cu	63		ug/L		131949	0.136
	Cu	65	**51.130**	ug/L	0.671	62333	0.064
	Zn	66	**49.633**	ug/L	3.167	43393	0.143
	Zn	67		ug/L		14016	0.022
	Zn	68		ug/L		31303	0.100
>	Ge	74		ug/L		302777	302777.044
	As	75	**47.372**	ug/L	3.789	41810	0.139
	Se	77		ug/L		7189	0.013
	Se	82	**49.672**	ug/L	1.478	4477	0.015
	Kr	83		ug/L		74	-0.000
	Sr	88	**49.587**	ug/L	1.309	486072	2.570
	Y	89		ug/L		199	0.001
	Mo	98	**48.955**	ug/L	1.674	119974	0.634
	Ag	107	**50.125**	ug/L	1.394	207828	1.099
	Cd	111	**49.091**	ug/L	2.028	52827	0.279
	Cd	114		ug/L		122719	0.649
>	In	115		ug/L		189103	189102.826
	Sn	120	**49.485**	ug/L	0.184	208357	1.100
	Sb	121	**49.169**	ug/L	6.159	164703	0.867
	Sb	123		ug/L		126444	0.666
	Ba	135		ug/L		52110	0.181
	Ba	137	**49.287**	ug/L	1.845	91711	0.319
	Ho	165		ug/L		63	0.000
>	Lu	175		ug/L		287275	287275.264
	Tl	205	**49.237**	ug/L	1.014	614345	2.137
	Pb	208	**51.009**	ug/L	1.021	940777	3.273
	Bi	209		ug/L		239	0.000
	Th	232	**54.260**	ug/L	1.482	1086788	3.775
	U	238	**56.296**	ug/L	1.841	1143585	3.980

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	99.449				
	Be	9	99.117				
	B	11	98.867				
	Na	23	95.028				
	Mg	24	90.425				
	Al	27	97.072				
	P	31	101.751				
	K	39	106.053				
	Ca	43	96.753				
>	Sc	45		100.1			
	Ti	47	102.652				
	V	51	102.567				
	Cr	52	102.766				
	Cr	53					
	Mn	55	103.457				
	Fe	57	103.801				
	Co	59	99.257				
	Ni	60	98.591				
	Cu	63					
	Cu	65	102.260				
	Zn	66	99.266				
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75	94.744				
	Se	77					
	Se	82	99.344				
	Kr	83					
	Sr	88	99.174				
	Y	89					
	Mo	98	97.909				
	Ag	107	100.251				
	Cd	111	98.181				
	Cd	114					
>	In	115		99.8			
	Sn	120	98.971				
	Sb	121	98.339				
	Sb	123					
	Ba	135					
	Ba	137	98.575				
	Ho	165					
>	Lu	175		97.9			
	Tl	205	98.473				
	Pb	208	102.018				
	Bi	209					
	Th	232	108.521				
	U	238	112.592				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 01, 2009 02:35:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 7.158

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.062**	ug/L	5.041	330	0.000
	Be	9	**0.006**	ug/L	159.759	17	0.000
	B	11	**2.535**	ug/L	19.083	2054	0.001
	Na	23	**5.796**	ug/L	67.204	58460	0.028
	Mg	24	**4.402**	ug/L	63.495	21685	0.015
	Al	27	**1.717**	ug/L	71.191	15342	0.007
	P	31	**-0.336**	ug/L	505.648	7730	-0.000
	K	39	**-3.517**	ug/L	301.638	640433	-0.018
	Ca	43	**3.137**	ug/L	40.310	205	0.000
>	Sc	45		ug/L		974945	974944.515
	Ti	47	**0.732**	ug/L	7.356	785	0.000
	V	51	**-0.230**	ug/L	134.295	-5423	-0.001
	Cr	52	**0.011**	ug/L	474.752	-11	0.000
	Cr	53		ug/L		60757	-0.000
	Mn	55	**-0.176**	ug/L	6.617	1501	-0.001
	Fe	57	**3.587**	ug/L	1.256	6105	0.001
	Co	59	**0.010**	ug/L	22.930	227	0.000
	Ni	60	**-0.004**	ug/L	214.705	96	-0.000
	Cu	63		ug/L		290	0.000
	Cu	65	**0.017**	ug/L	66.693	97	0.000
	Zn	66	**0.001**	ug/L	2527.784	204	0.000
	Zn	67		ug/L		7085	-0.001
	Zn	68		ug/L		1110	-0.000
>	Ge	74		ug/L		308135	308135.407
	As	75	**0.474**	ug/L	44.406	75	0.001
	Se	77		ug/L		3655	0.001
	Se	82	**0.412**	ug/L	35.438	-6	0.000
	Kr	83		ug/L		67	-0.000
	Sr	88	**0.005**	ug/L	43.560	262	0.000
	Y	89		ug/L		61	-0.000
	Mo	98	**0.215**	ug/L	3.920	642	0.003
	Ag	107	**0.006**	ug/L	76.126	96	0.000
	Cd	111	**0.008**	ug/L	38.977	40	0.000
	Cd	114		ug/L		68	0.000
>	In	115		ug/L		190944	190944.469
	Sn	120	**0.290**	ug/L	15.276	1610	0.006
	Sb	121	**0.929**	ug/L	24.504	3738	0.016
	Sb	123		ug/L		2918	0.013
	Ba	135		ug/L		60	0.000
	Ba	137	**0.014**	ug/L	6.039	108	0.000
	Ho	165		ug/L		28	-0.000
>	Lu	175		ug/L		289654	289653.904
	Tl	205	**0.155**	ug/L	23.788	2546	0.007
	Pb	208	**0.005**	ug/L	53.384	858	0.000
	Bi	209		ug/L		175	-0.000
	Th	232	**0.433**	ug/L	29.365	11020	0.030
	U	238	**0.017**	ug/L	7.538	838	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 01, 2009 02:41:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 10.159

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**909.750**	ug/L	1.389	1803162	2.105
	Be	9	**955.593**	ug/L	0.928	403477	0.471
	B	11	**1.289**	ug/L	18.540	1297	0.001
	Na	23	**47689.406**	ug/L	2.233	194511792	227.064
	Mg	24	**46836.251**	ug/L	4.090	140367078	163.858
	Al	27	**49496.115**	ug/L	5.286	175587496	205.036
	P	31	**25872.223**	ug/L	1.804	4502491	5.249
	K	39	**53409.058**	ug/L	1.300	233847179	272.331
	Ca	43	**47654.640**	ug/L	1.682	505525	0.590
>	Sc	45		ug/L		856663	856662.714
	Ti	47	**53.348**	ug/L	0.637	26482	0.031
	V	51	**917.845**	ug/L	2.537	4355963	5.090
	Cr	52	**918.993**	ug/L	2.452	3358462	3.921
	Cr	53		ug/L		486658	0.506
	Mn	55	**943.010**	ug/L	0.416	6070850	7.084
	Fe	57	**55262.971**	ug/L	1.321	6816124	7.952
	Co	59	**850.597**	ug/L	2.285	4046966	4.725
	Ni	60	**887.387**	ug/L	2.049	895986	1.046
	Cu	63		ug/L		1837027	2.144
	Cu	65	**885.262**	ug/L	0.089	954427	1.114
	Zn	66	**2127.038**	ug/L	0.943	1599717	6.115
	Zn	67		ug/L		274415	1.025
	Zn	68		ug/L		1136486	4.341
>	Ge	74		ug/L		261562	261562.416
	As	75	**906.304**	ug/L	1.174	696651	2.665
	Se	77		ug/L		32790	0.114
	Se	82	**489.305**	ug/L	0.927	38434	0.147
	Kr	83		ug/L		209	0.000
	Sr	88	**1005.199**	ug/L	1.201	8548102	52.090
	Y	89		ug/L		303	0.001
	Mo	98	**869.307**	ug/L	2.668	1846990	11.257
	Ag	107	**240.049**	ug/L	0.591	863655	5.262
	Cd	111	**901.014**	ug/L	1.517	841053	5.125
	Cd	114		ug/L		1772323	10.801
>	In	115		ug/L		164127	164127.147
	Sn	120	**967.356**	ug/L	4.072	3526862	21.500
	Sb	121	**244.630**	ug/L	11.605	707453	4.315
	Sb	123		ug/L		550308	3.357
	Ba	135		ug/L		863521	3.387
	Ba	137	**868.403**	ug/L	0.433	1432988	5.621
	Ho	165		ug/L		206	0.001
>	Lu	175		ug/L		254929	254929.415
	Tl	205	**488.330**	ug/L	0.364	5402583	21.191
	Pb	208	**4668.190**	ug/L	0.153	76349280	299.488
	Bi	209		ug/L		2160	0.008
	Th	232	**2609.701**	ug/L	0.295	46291407	181.575
	U	238	**5496.098**	ug/L	0.348	99050491	388.540

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	90.975				
	Be	9	95.559				
	B	11					
	Na	23	95.379				
	Mg	24	93.673				
	Al	27	98.992				
	P	31	103.489				
	K	39	106.818				
	Ca	43	95.309				
>	Sc	45		88.6			
	Ti	47					
	V	51	91.785				
	Cr	52	91.899				
	Cr	53					
	Mn	55	94.301				
	Fe	57	110.526				
	Co	59	85.060				
	Ni	60	88.739				
	Cu	63					
	Cu	65	88.526				
	Zn	66	85.082				
	Zn	67					
	Zn	68					
>	Ge	74		85.5			
	As	75	90.630				
	Se	77					
	Se	82	97.861				
	Kr	83					
	Sr	88	100.520				
	Y	89					
	Mo	98	86.931				
	Ag	107	96.020				
	Cd	111	90.101				
	Cd	114					
>	In	115		86.6			
	Sn	120	96.736				
	Sb	121	97.852				
	Sb	123					
	Ba	135					
	Ba	137	86.840				
	Ho	165					
>	Lu	175		86.9			
	Tl	205	97.666				
	Pb	208	93.364				
	Bi	209					
	Th	232	104.388				
	U	238	109.922				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 01, 2009 02:47:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 11.160

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.516**	ug/L	1.284	112352	0.119
	Be	9	**52.210**	ug/L	1.686	24231	0.026
	B	11	**101.697**	ug/L	1.465	46457	0.048
	Na	23	**5026.118**	ug/L	2.901	22549869	23.931
	Mg	24	**4767.830**	ug/L	2.138	15706738	16.680
	Al	27	**4697.333**	ug/L	3.695	18318213	19.459
	P	31	**5221.077**	ug/L	1.915	1004305	1.059
	K	39	**5417.928**	ug/L	8.800	26629656	27.626
	Ca	43	**4990.578**	ug/L	2.273	58322	0.062
>	Sc	45		ug/L		941191	941190.604
	Ti	47	**49.535**	ug/L	1.960	27037	0.028
	V	51	**51.834**	ug/L	2.781	266489	0.287
	Cr	52	**52.255**	ug/L	1.810	209774	0.223
	Cr	53		ug/L		85975	0.029
	Mn	55	**53.367**	ug/L	2.552	379940	0.401
	Fe	57	**5321.746**	ug/L	2.776	725960	0.766
	Co	59	**50.118**	ug/L	1.837	262141	0.278
	Ni	60	**50.498**	ug/L	1.711	56113	0.060
	Cu	63		ug/L		131744	0.140
	Cu	65	**52.146**	ug/L	1.881	61827	0.066
	Zn	66	**50.749**	ug/L	1.202	43246	0.146
	Zn	67		ug/L		13838	0.023
	Zn	68		ug/L		31046	0.101
>	Ge	74		ug/L		295067	295066.720
	As	75	**48.643**	ug/L	0.765	41858	0.143
	Se	77		ug/L		6975	0.013
	Se	82	**50.459**	ug/L	3.089	4433	0.015
	Kr	83		ug/L		96	-0.000
	Sr	88	**50.554**	ug/L	0.622	485029	2.620
	Y	89		ug/L		81	-0.000
	Mo	98	**50.272**	ug/L	0.413	120591	0.651
	Ag	107	**51.349**	ug/L	0.427	208386	1.126
	Cd	111	**50.215**	ug/L	0.700	52894	0.286
	Cd	114		ug/L		122205	0.660
>	In	115		ug/L		185071	185070.721
	Sn	120	**55.944**	ug/L	1.135	230466	1.243
	Sb	121	**54.994**	ug/L	4.738	180107	0.970
	Sb	123		ug/L		138390	0.745
	Ba	135		ug/L		52085	0.185
	Ba	137	**50.095**	ug/L	2.045	91295	0.324
	Ho	165		ug/L		55	0.000
>	Lu	175		ug/L		281334	281334.476
	Tl	205	**50.552**	ug/L	0.987	617698	2.194
	Pb	208	**52.129**	ug/L	0.789	941596	3.344
	Bi	209		ug/L		217	0.000
	Th	232	**59.142**	ug/L	2.098	1159790	4.115
	U	238	**57.852**	ug/L	1.624	1150957	4.090

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	103.032				
	Be	9	104.419				
	B	11	101.697				
	Na	23	100.522				
	Mg	24	95.357				
	Al	27	93.016				
	P	31	104.422				
	K	39	108.359				
	Ca	43	99.812				
>	Sc	45		97.4			
	Ti	47	99.069				
	V	51	103.668				
	Cr	52	104.510				
	Cr	53					
	Mn	55	106.734				
	Fe	57	106.435				
	Co	59	100.236				
	Ni	60	100.997				
	Cu	63					
	Cu	65	104.293				
	Zn	66	101.499				
	Zn	67					
	Zn	68					
>	Ge	74		96.4			
	As	75	97.286				
	Se	77					
	Se	82	100.919				
	Kr	83					
	Sr	88	101.108				
	Y	89					
	Mo	98	100.545				
	Ag	107	102.697				
	Cd	111	100.429				
	Cd	114					
>	In	115		97.6			
	Sn	120	111.887				
	Sb	121	109.988				
	Sb	123					
	Ba	135					
	Ba	137	100.190				
	Ho	165					
>	Lu	175		95.9			
	Tl	205	101.104				
	Pb	208	104.258				
	Bi	209					
	Th	232	118.284				
	U	238	115.703				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 01, 2009 02:53:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 12.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.136**	ug/L	6.956	491	0.000
	Be	9	**0.027**	ug/L	28.820	27	0.000
	B	11	**2.710**	ug/L	20.293	2104	0.001
	Na	23	**2.013**	ug/L	130.792	40394	0.010
	Mg	24	**1.892**	ug/L	53.918	13006	0.007
	Al	27	**2.172**	ug/L	87.114	17012	0.009
	P	31	**-1.133**	ug/L	81.731	7466	-0.000
	K	39	**-3.511**	ug/L	63.553	631667	-0.018
	Ca	43	**3.437**	ug/L	22.021	206	0.000
>	Sc	45		ug/L		961466	961465.976
	Ti	47	**0.170**	ug/L	14.091	465	0.000
	V	51	**-0.163**	ug/L	320.923	-4985	-0.001
	Cr	52	**-0.059**	ug/L	61.093	-297	-0.000
	Cr	53		ug/L		60685	0.001
	Mn	55	**-0.144**	ug/L	7.531	1710	-0.001
	Fe	57	**2.287**	ug/L	32.069	5842	0.000
	Co	59	**0.072**	ug/L	11.871	556	0.000
	Ni	60	**0.074**	ug/L	22.017	183	0.000
	Cu	63		ug/L		408	0.000
	Cu	65	**0.046**	ug/L	22.995	131	0.000
	Zn	66	**0.073**	ug/L	23.003	259	0.000
	Zn	67		ug/L		7130	0.000
	Zn	68		ug/L		1131	-0.000
>	Ge	74		ug/L		297708	297708.442
	As	75	**0.319**	ug/L	73.808	-64	0.001
	Se	77		ug/L		3519	0.001
	Se	82	**0.410**	ug/L	18.208	-6	0.000
	Kr	83		ug/L		79	-0.000
	Sr	88	**0.028**	ug/L	45.785	474	0.001
	Y	89		ug/L		60	-0.000
	Mo	98	**0.219**	ug/L	19.538	633	0.003
	Ag	107	**0.017**	ug/L	28.754	136	0.000
	Cd	111	**0.027**	ug/L	58.674	59	0.000
	Cd	114		ug/L		123	0.000
>	In	115		ug/L		186252	186251.777
	Sn	120	**1.675**	ug/L	11.585	7297	0.037
	Sb	121	**2.185**	ug/L	17.541	7758	0.039
	Sb	123		ug/L		5911	0.029
	Ba	135		ug/L		96	0.000
	Ba	137	**0.045**	ug/L	19.154	163	0.000
	Ho	165		ug/L		26	-0.000
>	Lu	175		ug/L		283723	283722.980
	Tl	205	**0.219**	ug/L	20.827	3285	0.010
	Pb	208	**0.117**	ug/L	37.440	2881	0.008
	Bi	209		ug/L		169	-0.000
	Th	232	**1.161**	ug/L	19.755	25142	0.081
	U	238	**0.203**	ug/L	23.913	4563	0.014

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Th	232	CCB is out of limits (+/- PQL)
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978577
Sample Date/Time: Tuesday, December 01, 2009 02:59:38
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978577.162

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.027**	**ug/L**	47.053	257	0.000
	Be	9	**-0.004**	**ug/L**	163.615	13	-0.000
	B	11	**0.778**	**ug/L**	9.011	1267	0.000
	Na	23	**1.195**	**ug/L**	224.023	38054	0.006
	Mg	24	**-0.639**	**ug/L**	91.638	4668	-0.002
	Al	27	**0.173**	**ug/L**	483.058	9337	0.001
	P	31	**23.677**	**ug/L**	18.957	12775	0.005
	K	39	**-11.779**	**ug/L**	48.091	613580	-0.060
	Ca	43	**4.581**	**ug/L**	27.543	228	0.000
>	Sc	45		**ug/L**		998184	998184.188
	Ti	47	**0.317**	**ug/L**	14.878	566	0.000
	V	51	**0.324**	**ug/L**	40.531	-2494	0.002
	Cr	52	**0.366**	**ug/L**	12.162	1500	0.002
	Cr	53		**ug/L**		47337	-0.015
	Mn	55	**-0.069**	**ug/L**	8.968	2342	-0.001
	Fe	57	**10.027**	**ug/L**	11.135	7175	0.001
	Co	59	**0.017**	**ug/L**	9.176	273	0.000
	Ni	60	**0.028**	**ug/L**	54.932	136	0.000
	Cu	63		**ug/L**		616	0.000
	Cu	65	**0.118**	**ug/L**	11.012	226	0.000
	Zn	66	**0.982**	**ug/L**	2.674	1063	0.003
	Zn	67		**ug/L**		5851	-0.005
	Zn	68		**ug/L**		1523	0.001
>	Ge	74		**ug/L**		305159	305158.514
	As	75	**0.573**	**ug/L**	55.924	161	0.002
	Se	77		**ug/L**		2486	-0.003
	Se	82	**0.269**	**ug/L**	75.296	-19	0.000
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**0.001**	**ug/L**	153.681	225	0.000
	Y	89		**ug/L**		69	-0.000
	Mo	98	**0.087**	**ug/L**	12.699	327	0.001
	Ag	107	**-0.005**	**ug/L**	25.473	48	-0.000
	Cd	111	**-0.001**	**ug/L**	839.165	30	-0.000
	Cd	114		**ug/L**		41	-0.000
>	In	115		**ug/L**		193309	193308.583
	Sn	120	**0.649**	**ug/L**	5.459	3169	0.014
	Sb	121	**0.965**	**ug/L**	13.984	3898	0.017
	Sb	123		**ug/L**		3027	0.013
	Ba	135		**ug/L**		56	0.000
	Ba	137	**0.009**	**ug/L**	42.856	100	0.000
	Ho	165		**ug/L**		29	-0.000
>	Lu	175		**ug/L**		294362	294362.181
	Tl	205	**0.075**	**ug/L**	14.193	1569	0.003
	Pb	208	**0.005**	**ug/L**	35.415	867	0.000
	Bi	209		**ug/L**		175	-0.000
	Th	232	**0.823**	**ug/L**	15.125	19198	0.057
	U	238	**0.046**	**ug/L**	13.616	1462	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978582
Sample Date/Time: Tuesday, December 01, 2009 03:11:59
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925472|40|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978582.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.214**	ug/L	0.665	5181	0.005
	Be	9	**23.914**	ug/L	0.389	11497	0.012
	B	11	**38.373**	ug/L	3.000	18685	0.018
	Na	23	**155.425**	ug/L	5.059	752691	0.740
	Mg	24	**849.204**	ug/L	9.123	2898770	2.971
	Al	27	**2548.737**	ug/L	2.210	10292372	10.558
	P	31	**206.968**	ug/L	2.611	48687	0.042
	K	39	**659.705**	ug/L	8.980	3934928	3.364
	Ca	43	**959.877**	ug/L	3.207	11742	0.012
>	Sc	45		ug/L		974201	974201.206
	Ti	47	**63.137**	ug/L	0.865	35571	0.036
	V	51	**34.475**	ug/L	3.461	182027	0.191
	Cr	52	**18.397**	ug/L	2.972	76399	0.078
	Cr	53		ug/L		67370	0.007
	Mn	55	**97.295**	ug/L	1.745	714702	0.731
	Fe	57	**3067.090**	ug/L	3.023	435426	0.441
	Co	59	**22.529**	ug/L	2.933	122056	0.125
	Ni	60	**27.201**	ug/L	1.609	31334	0.032
	Cu	63		ug/L		69193	0.071
	Cu	65	**26.250**	ug/L	0.885	32256	0.033
	Zn	66	**53.443**	ug/L	0.724	46971	0.154
	Zn	67		ug/L		14378	0.023
	Zn	68		ug/L		34997	0.111
>	Ge	74		ug/L		304384	304384.051
	As	75	**66.546**	ug/L	1.548	59202	0.196
	Se	77		ug/L		6541	0.010
	Se	82	**46.111**	ug/L	1.977	4175	0.014
	Kr	83		ug/L		93	-0.000
	Sr	88	**45.055**	ug/L	0.644	436968	2.335
	Y	89		ug/L		36269	0.193
	Mo	98	**21.747**	ug/L	2.598	52781	0.282
	Ag	107	**5.569**	ug/L	1.447	22905	0.122
	Cd	111	**31.109**	ug/L	1.170	33134	0.177
	Cd	114		ug/L		78223	0.418
>	In	115		ug/L		187076	187075.685
	Sn	120	**12.407**	ug/L	2.383	51948	0.276
	Sb	121	**8.660**	ug/L	1.357	29167	0.153
	Sb	123		ug/L		22361	0.117
	Ba	135		ug/L		130448	0.457
	Ba	137	**123.227**	ug/L	1.147	227667	0.798
	Ho	165		ug/L		2433	0.008
>	Lu	175		ug/L		285360	285360.267
	Tl	205	**54.245**	ug/L	1.880	672262	2.354
	Pb	208	**46.546**	ug/L	1.009	852838	2.986
	Bi	209		ug/L		1596	0.005
	Th	232	**3.802**	ug/L	3.320	77716	0.265
	U	238	**0.510**	ug/L	2.161	10767	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978578
Sample Date/Time: Tuesday, December 01, 2009 03:24:17
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978578.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**18.597**	ug/L	1.423	42476	0.043
	Be	9	**0.656**	ug/L	2.509	332	0.000
	B	11	**3.487**	ug/L	3.937	2516	0.002
	Na	23	**379.617**	ug/L	5.521	1807718	1.807
	Mg	24	**3715.953**	ug/L	3.557	12784185	13.000
	Al	27	**9066.827**	ug/L	7.369	36911320	37.559
	P	31	**824.899**	ug/L	2.150	172296	0.167
	K	39	**2207.065**	ug/L	6.555	11724874	11.254
	Ca	43	**7423.256**	ug/L	1.249	90484	0.092
>	Sc	45		ug/L		982701	982700.649
	Ti	47	**517.375**	ug/L	1.499	291307	0.296
	V	51	**25.491**	ug/L	1.609	134692	0.141
	Cr	52	**11.082**	ug/L	2.498	46407	0.047
	Cr	53		ug/L		48818	-0.013
	Mn	55	**342.192**	ug/L	1.783	2528728	2.571
	Fe	57	**13070.795**	ug/L	1.408	1853842	1.881
	Co	59	**5.231**	ug/L	0.930	28725	0.029
	Ni	60	**14.764**	ug/L	1.753	17202	0.017
	Cu	63		ug/L		26077	0.026
	Cu	65	**10.325**	ug/L	1.353	12844	0.013
	Zn	66	**46.918**	ug/L	1.302	39935	0.135
	Zn	67		ug/L		11616	0.016
	Zn	68		ug/L		29970	0.098
>	Ge	74		ug/L		294616	294616.226
	As	75	**2.125**	ug/L	7.226	1501	0.006
	Se	77		ug/L		2502	-0.003
	Se	82	**0.275**	ug/L	70.518	-18	0.000
	Kr	83		ug/L		111	0.000
	Sr	88	**35.569**	ug/L	1.028	340790	1.843
	Y	89		ug/L		221471	1.198
	Mo	98	**0.613**	ug/L	2.087	1571	0.008
	Ag	107	**0.171**	ug/L	4.492	760	0.004
	Cd	111	**0.558**	ug/L	2.861	617	0.003
	Cd	114		ug/L		184	0.001
>	In	115		ug/L		184783	184783.055
	Sn	120	**0.922**	ug/L	0.683	4152	0.020
	Sb	121	**0.206**	ug/L	15.237	1257	0.004
	Sb	123		ug/L		978	0.003
	Ba	135		ug/L		147813	0.508
	Ba	137	**137.811**	ug/L	1.668	259711	0.892
	Ho	165		ug/L		14322	0.049
>	Lu	175		ug/L		291080	291079.820
	Tl	205	**0.150**	ug/L	5.678	2501	0.007
	Pb	208	**10.721**	ug/L	1.036	200963	0.688
	Bi	209		ug/L		3272	0.011
	Th	232	**7.702**	ug/L	1.540	158293	0.536
	U	238	**1.003**	ug/L	1.052	21139	0.071

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978580
Sample Date/Time: Tuesday, December 01, 2009 03:30:27
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978580.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**73.537**	ug/L	1.069	164376	0.170
	Be	9	**26.490**	ug/L	1.860	12614	0.013
	B	11	**55.471**	ug/L	3.482	26373	0.026
	Na	23	**4166.964**	ug/L	9.376	19175058	19.840
	Mg	24	**11322.003**	ug/L	5.917	38220433	39.610
	Al	27	**30577.579**	ug/L	7.236	122290309	126.667
	P	31	**3271.201**	ug/L	1.123	648166	0.664
	K	39	**3480.120**	ug/L	0.832	17776067	17.745
	Ca	43	**20090.847**	ug/L	1.127	240247	0.249
>	Sc	45		ug/L		965095	965094.935
	Ti	47	**767.242**	ug/L	1.767	424070	0.439
	V	51	**66.527**	ug/L	2.682	351878	0.369
	Cr	52	**42.345**	ug/L	1.985	174299	0.181
	Cr	53		ug/L		62047	0.002
	Mn	55	**543.668**	ug/L	1.765	3943783	4.084
	Fe	57	**26690.018**	ug/L	2.170	3711590	3.840
	Co	59	**42.289**	ug/L	1.941	226849	0.235
	Ni	60	**62.256**	ug/L	1.260	70916	0.073
	Cu	63		ug/L		111757	0.116
	Cu	65	**44.169**	ug/L	1.845	53714	0.056
	Zn	66	**105.668**	ug/L	0.746	86967	0.304
	Zn	67		ug/L		19229	0.044
	Zn	68		ug/L		64544	0.222
>	Ge	74		ug/L		285641	285640.571
	As	75	**41.609**	ug/L	1.806	34613	0.122
	Se	77		ug/L		3207	0.000
	Se	82	**9.205**	ug/L	6.540	749	0.003
	Kr	83		ug/L		144	0.000
	Sr	88	**343.231**	ug/L	0.982	3203217	17.787
	Y	89		ug/L		272531	1.513
	Mo	98	**24.957**	ug/L	2.567	58291	0.323
	Ag	107	**26.185**	ug/L	0.320	103446	0.574
	Cd	111	**6.328**	ug/L	3.424	6510	0.036
	Cd	114		ug/L		12736	0.070
>	In	115		ug/L		180097	180097.317
	Sn	120	**22.914**	ug/L	2.134	92054	0.509
	Sb	121	**74.120**	ug/L	1.456	235980	1.307
	Sb	123		ug/L		183019	1.014
	Ba	135		ug/L		320239	1.136
	Ba	137	**305.998**	ug/L	2.338	558507	1.981
	Ho	165		ug/L		17486	0.062
>	Lu	175		ug/L		282010	282009.664
	Tl	205	**53.610**	ug/L	3.197	656438	2.326
	Pb	208	**115.839**	ug/L	1.221	2096252	7.432
	Bi	209		ug/L		4277	0.014
	Th	232	**38.811**	ug/L	1.520	763643	2.700
	U	238	**33.022**	ug/L	1.940	658672	2.334

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			93.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978581
Sample Date/Time: Tuesday, December 01, 2009 03:36:38
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978581.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.008**	ug/L	0.869	103003	0.106
	Be	9	**25.384**	ug/L	3.308	12097	0.013
	B	11	**53.638**	ug/L	0.217	25556	0.026
	Na	23	**1448.051**	ug/L	3.808	6689698	6.895
	Mg	24	**6402.576**	ug/L	5.351	21646971	22.400
	Al	27	**12927.167**	ug/L	3.724	51744842	53.550
	P	31	**1826.269**	ug/L	1.323	365566	0.370
	K	39	**3300.559**	ug/L	3.607	16908068	16.829
	Ca	43	**8284.657**	ug/L	0.909	99242	0.103
>	Sc	45		ug/L		965918	965917.524
	Ti	47	**557.431**	ug/L	1.003	308480	0.319
	V	51	**52.981**	ug/L	1.448	279632	0.294
	Cr	52	**39.532**	ug/L	2.544	162862	0.169
	Cr	53		ug/L		61180	0.001
	Mn	55	**283.149**	ug/L	4.792	2057680	2.127
	Fe	57	**14103.144**	ug/L	0.850	1965577	2.029
	Co	59	**31.135**	ug/L	1.850	167203	0.173
	Ni	60	**50.600**	ug/L	1.787	57707	0.060
	Cu	63		ug/L		89237	0.092
	Cu	65	**34.954**	ug/L	1.027	42561	0.044
	Zn	66	**66.658**	ug/L	1.600	56108	0.192
	Zn	67		ug/L		13960	0.024
	Zn	68		ug/L		40868	0.136
>	Ge	74		ug/L		291787	291787.280
	As	75	**40.204**	ug/L	1.238	34154	0.118
	Se	77		ug/L		3012	-0.001
	Se	82	**9.081**	ug/L	5.349	755	0.003
	Kr	83		ug/L		115	0.000
	Sr	88	**65.168**	ug/L	1.246	622663	3.377
	Y	89		ug/L		230673	1.251
	Mo	98	**24.820**	ug/L	1.493	59351	0.321
	Ag	107	**25.197**	ug/L	1.993	101871	0.552
	Cd	111	**5.773**	ug/L	0.708	6083	0.033
	Cd	114		ug/L		12443	0.067
>	In	115		ug/L		184341	184341.405
	Sn	120	**23.682**	ug/L	0.909	97385	0.526
	Sb	121	**75.805**	ug/L	0.709	247063	1.337
	Sb	123		ug/L		190351	1.030
	Ba	135		ug/L		136651	0.477
	Ba	137	**129.726**	ug/L	1.112	240597	0.840
	Ho	165		ug/L		14751	0.051
>	Lu	175		ug/L		286440	286440.046
	Tl	205	**52.070**	ug/L	0.930	647809	2.260
	Pb	208	**108.179**	ug/L	0.190	1988738	6.940
	Bi	209		ug/L		4360	0.015
	Th	232	**36.391**	ug/L	0.741	727542	2.532
	U	238	**31.155**	ug/L	1.221	631329	2.202

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978579
Sample Date/Time: Tuesday, December 01, 2009 03:42:49
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925472|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\1201978579.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.571**	ug/L	1.430	8125	0.008
	Be	9	**0.114**	ug/L	24.320	68	0.000
	B	11	**2.161**	ug/L	12.241	1852	0.001
	Na	23	**90.726**	ug/L	5.248	446204	0.432
	Mg	24	**669.246**	ug/L	12.936	2256036	2.341
	Al	27	**1747.088**	ug/L	3.249	6961298	7.237
	P	31	**169.969**	ug/L	2.976	40811	0.034
	K	39	**399.246**	ug/L	6.591	2603997	2.036
	Ca	43	**1382.834**	ug/L	3.097	16614	0.017
>	Sc	45		ug/L		960817	960817.173
	Ti	47	**85.486**	ug/L	0.938	47371	0.049
	V	51	**5.548**	ug/L	7.509	25432	0.031
	Cr	52	**2.016**	ug/L	5.545	8209	0.009
	Cr	53		ug/L		52959	-0.007
	Mn	55	**57.902**	ug/L	0.128	420664	0.435
	Fe	57	**2587.290**	ug/L	0.705	363216	0.372
	Co	59	**0.900**	ug/L	1.756	4973	0.005
	Ni	60	**2.697**	ug/L	1.976	3154	0.003
	Cu	63		ug/L		5049	0.005
	Cu	65	**1.913**	ug/L	3.972	2389	0.002
	Zn	66	**8.411**	ug/L	2.046	7421	0.024
	Zn	67		ug/L		7106	-0.000
	Zn	68		ug/L		6145	0.017
>	Ge	74		ug/L		298734	298734.492
	As	75	**0.628**	ug/L	37.986	206	0.002
	Se	77		ug/L		3070	-0.001
	Se	82	**0.236**	ug/L	79.385	-22	0.000
	Kr	83		ug/L		83	-0.000
	Sr	88	**6.888**	ug/L	0.192	66979	0.357
	Y	89		ug/L		39937	0.213
	Mo	98	**0.104**	ug/L	2.826	358	0.001
	Ag	107	**0.018**	ug/L	3.587	142	0.000
	Cd	111	**0.060**	ug/L	10.257	95	0.000
	Cd	114		ug/L		57	0.000
>	In	115		ug/L		187074	187074.092
	Sn	120	**0.295**	ug/L	10.601	1598	0.007
	Sb	121	**0.534**	ug/L	15.127	2354	0.009
	Sb	123		ug/L		1772	0.007
	Ba	135		ug/L		20168	0.070
	Ba	137	**18.981**	ug/L	1.375	35458	0.123
	Ho	165		ug/L		2581	0.009
>	Lu	175		ug/L		287942	287941.548
	Tl	205	**0.048**	ug/L	20.394	1191	0.002
	Pb	208	**1.942**	ug/L	0.756	36638	0.125
	Bi	209		ug/L		853	0.002
	Th	232	**1.827**	ug/L	0.951	38867	0.127
	U	238	**0.196**	ug/L	1.211	4474	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 01, 2009 03:48:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 8.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.442**	**ug/L**	0.881	109504	0.117
	Be	9	**50.878**	**ug/L**	1.186	23506	0.025
	B	11	**98.628**	**ug/L**	2.027	44864	0.047
	Na	23	**5253.095**	**ug/L**	7.742	23470271	25.012
	Mg	24	**4469.788**	**ug/L**	3.895	14652399	15.638
	Al	27	**4292.527**	**ug/L**	3.112	16668846	17.782
	P	31	**5058.766**	**ug/L**	0.562	968911	1.026
	K	39	**4999.762**	**ug/L**	2.630	24513392	25.494
	Ca	43	**4855.488**	**ug/L**	1.282	56473	0.060
>	Sc	45		**ug/L**		936789	936788.565
	Ti	47	**49.203**	**ug/L**	0.914	26736	0.028
	V	51	**50.655**	**ug/L**	0.665	259130	0.281
	Cr	52	**50.986**	**ug/L**	1.418	203762	0.218
	Cr	53		**ug/L**		80353	0.023
	Mn	55	**51.601**	**ug/L**	1.168	365782	0.388
	Fe	57	**5166.101**	**ug/L**	1.947	701655	0.743
	Co	59	**48.448**	**ug/L**	1.898	252244	0.269
	Ni	60	**48.131**	**ug/L**	0.354	53245	0.057
	Cu	63		**ug/L**		125305	0.134
	Cu	65	**50.344**	**ug/L**	1.753	59417	0.063
	Zn	66	**49.257**	**ug/L**	1.990	41680	0.142
	Zn	67		**ug/L**		12992	0.021
	Zn	68		**ug/L**		30240	0.099
>	Ge	74		**ug/L**		292993	292992.525
	As	75	**47.141**	**ug/L**	2.064	40265	0.139
	Se	77		**ug/L**		6685	0.012
	Se	82	**49.925**	**ug/L**	1.477	4355	0.015
	Kr	83		**ug/L**		87	-0.000
	Sr	88	**49.280**	**ug/L**	1.255	466434	2.554
	Y	89		**ug/L**		188	0.001
	Mo	98	**48.541**	**ug/L**	0.528	114870	0.629
	Ag	107	**49.700**	**ug/L**	1.721	198969	1.089
	Cd	111	**48.739**	**ug/L**	0.287	50649	0.277
	Cd	114		**ug/L**		118209	0.647
>	In	115		**ug/L**		182574	182574.270
	Sn	120	**49.132**	**ug/L**	0.170	199726	1.092
	Sb	121	**49.256**	**ug/L**	6.949	159182	0.869
	Sb	123		**ug/L**		121913	0.665
	Ba	135		**ug/L**		49643	0.179
	Ba	137	**48.542**	**ug/L**	1.346	87226	0.314
	Ho	165		**ug/L**		60	0.000
>	Lu	175		**ug/L**		277394	277394.241
	Tl	205	**49.704**	**ug/L**	2.903	598764	2.157
	Pb	208	**51.169**	**ug/L**	1.534	911240	3.283
	Bi	209		**ug/L**		245	0.000
	Th	232	**54.277**	**ug/L**	1.601	1049726	3.776
	U	238	**56.618**	**ug/L**	1.996	1110606	4.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.884				
	Be	9	101.756				
	B	11	98.628				
	Na	23	105.062				
	Mg	24	89.396				
	Al	27	85.001				
	P	31	101.175				
	K	39	99.995				
	Ca	43	97.110				
>	Sc	45		96.9			
	Ti	47	98.406				
	V	51	101.310				
	Cr	52	101.972				
	Cr	53					
	Mn	55	103.203				
	Fe	57	103.322				
	Co	59	96.897				
	Ni	60	96.263				
	Cu	63					
	Cu	65	100.687				
	Zn	66	98.513				
	Zn	67					
	Zn	68					
>	Ge	74		95.8			
	As	75	94.281				
	Se	77					
	Se	82	99.849				
	Kr	83					
	Sr	88	98.561				
	Y	89					
	Mo	98	97.082				
	Ag	107	99.399				
	Cd	111	97.478				
	Cd	114					
>	In	115		96.3			
	Sn	120	98.264				
	Sb	121	98.511				
	Sb	123					
	Ba	135					
	Ba	137	97.084				
	Ho	165					
>	Lu	175		94.6			
	Tl	205	99.409				
	Pb	208	102.337				
	Bi	209					
	Th	232	108.554				
	U	238	113.235				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)
QC Std 8	Al	27	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 01, 2009 03:55:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 9.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.024**	ug/L	16.012	235	0.000
	Be	9	**0.010**	ug/L	42.584	18	0.000
	B	11	**2.686**	ug/L	20.454	2041	0.001
	Na	23	**0.433**	ug/L	240.293	32371	0.002
	Mg	24	**0.573**	ug/L	65.007	8336	0.002
	Al	27	**0.840**	ug/L	48.624	11338	0.003
	P	31	**-3.795**	ug/L	37.334	6771	-0.001
	K	39	**-4.244**	ug/L	117.281	612194	-0.022
	Ca	43	**3.826**	ug/L	8.263	205	0.000
>	Sc	45		ug/L		936956	936956.251
	Ti	47	**0.130**	ug/L	48.238	431	0.000
	V	51	**0.172**	ug/L	147.017	-3140	0.001
	Cr	52	**0.025**	ug/L	175.856	47	0.000
	Cr	53		ug/L		56472	-0.002
	Mn	55	**-0.171**	ug/L	3.096	1478	-0.001
	Fe	57	**-0.691**	ug/L	75.106	5290	-0.000
	Co	59	**0.016**	ug/L	43.744	251	0.000
	Ni	60	**0.002**	ug/L	562.667	98	0.000
	Cu	63		ug/L		384	0.000
	Cu	65	**0.013**	ug/L	30.540	88	0.000
	Zn	66	**-0.009**	ug/L	111.841	187	-0.000
	Zn	67		ug/L		6571	-0.002
	Zn	68		ug/L		1032	-0.000
>	Ge	74		ug/L		295590	295589.905
	As	75	**0.252**	ug/L	49.406	-122	0.001
	Se	77		ug/L		3300	0.000
	Se	82	**0.243**	ug/L	85.931	-21	0.000
	Kr	83		ug/L		81	-0.000
	Sr	88	**0.007**	ug/L	42.899	264	0.000
	Y	89		ug/L		71	-0.000
	Mo	98	**0.070**	ug/L	23.915	271	0.001
	Ag	107	**0.006**	ug/L	80.324	90	0.000
	Cd	111	**0.006**	ug/L	216.403	36	0.000
	Cd	114		ug/L		73	0.000
>	In	115		ug/L		183757	183756.606
	Sn	120	**0.348**	ug/L	13.687	1787	0.008
	Sb	121	**1.095**	ug/L	24.161	4133	0.019
	Sb	123		ug/L		3166	0.015
	Ba	135		ug/L		61	0.000
	Ba	137	**0.018**	ug/L	22.435	112	0.000
	Ho	165		ug/L		32	0.000
>	Lu	175		ug/L		280743	280743.449
	Tl	205	**0.137**	ug/L	20.410	2244	0.006
	Pb	208	**0.012**	ug/L	13.881	953	0.001
	Bi	209		ug/L		180	-0.000
	Th	232	**0.504**	ug/L	27.267	12042	0.035
	U	238	**0.021**	ug/L	14.965	897	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			97.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241524002
Sample Date/Time: Tuesday, December 01, 2009 04:32:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925472|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\241524002.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.232**	ug/L	1.523	115085	0.121
	Be	9	**3.210**	ug/L	3.462	1518	0.002
	B	11	**14.783**	ug/L	1.773	7552	0.007
	Na	23	**1576.145**	ug/L	1.982	7166678	7.505
	Mg	24	**8538.319**	ug/L	6.100	28411650	29.872
	Al	27	**54078.113**	ug/L	4.737	213016265	224.017
	P	31	**2353.400**	ug/L	1.357	461525	0.477
	K	39	**6598.778**	ug/L	4.843	32625738	33.647
	Ca	43	**17316.061**	ug/L	0.730	204004	0.214
>	Sc	45		ug/L		950787	950787.324
	Ti	47	**1152.029**	ug/L	1.122	627130	0.659
	V	51	**79.119**	ug/L	1.042	413078	0.439
	Cr	52	**43.843**	ug/L	0.510	177809	0.187
	Cr	53		ug/L		59211	-0.000
	Mn	55	**1163.546**	ug/L	1.071	8312699	8.740
	Fe	57	**52892.422**	ug/L	1.778	7241072	7.611
	Co	59	**15.621**	ug/L	0.590	82669	0.087
	Ni	60	**31.941**	ug/L	1.808	35895	0.038
	Cu	63		ug/L		89554	0.094
	Cu	65	**36.167**	ug/L	0.851	43346	0.046
	Zn	66	**168.354**	ug/L	1.254	129201	0.484
	Zn	67		ug/L		25189	0.071
	Zn	68		ug/L		93618	0.347
>	Ge	74		ug/L		266578	266578.078
	As	75	**8.038**	ug/L	5.687	5995	0.024
	Se	77		ug/L		2385	-0.002
	Se	82	**0.164**	ug/L	48.427	-25	0.000
	Kr	83		ug/L		237	0.001
	Sr	88	**128.515**	ug/L	1.475	1135794	6.660
	Y	89		ug/L		845463	4.958
	Mo	98	**3.103**	ug/L	0.897	6950	0.040
	Ag	107	**0.477**	ug/L	2.364	1845	0.010
	Cd	111	**2.101**	ug/L	1.919	2066	0.012
	Cd	114		ug/L		868	0.005
>	In	115		ug/L		170539	170538.809
	Sn	120	**1.544**	ug/L	3.928	6187	0.034
	Sb	121	**0.173**	ug/L	5.723	1060	0.003
	Sb	123		ug/L		851	0.003
	Ba	135		ug/L		404392	1.458
	Ba	137	**387.619**	ug/L	1.786	695932	2.509
	Ho	165		ug/L		55314	0.199
>	Lu	175		ug/L		277376	277376.119
	Tl	205	**0.642**	ug/L	1.702	8305	0.028
	Pb	208	**49.162**	ug/L	0.942	875537	3.154
	Bi	209		ug/L		19456	0.069
	Th	232	**28.420**	ug/L	0.608	550645	1.977
	U	238	**3.198**	ug/L	1.852	63170	0.226

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 01, 2009 04:44:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 8.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.748**	ug/L	0.422	99386	0.113
	Be	9	**50.688**	ug/L	1.222	21989	0.025
	B	11	**98.950**	ug/L	1.628	42265	0.047
	Na	23	**5266.935**	ug/L	13.673	22089667	25.078
	Mg	24	**4672.958**	ug/L	2.294	14385512	16.349
	Al	27	**4660.677**	ug/L	1.726	16989556	19.307
	P	31	**5264.463**	ug/L	2.415	946455	1.068
	K	39	**5178.054**	ug/L	9.840	23807971	26.403
	Ca	43	**4803.033**	ug/L	1.037	52460	0.059
>	Sc	45		ug/L		879686	879686.216
	Ti	47	**50.035**	ug/L	1.401	25525	0.029
	V	51	**51.232**	ug/L	2.172	246121	0.284
	Cr	52	**51.925**	ug/L	1.991	194831	0.222
	Cr	53		ug/L		76510	0.024
	Mn	55	**51.817**	ug/L	0.820	344937	0.389
	Fe	57	**5199.336**	ug/L	1.599	663108	0.748
	Co	59	**49.434**	ug/L	1.805	241678	0.275
	Ni	60	**49.328**	ug/L	1.254	51236	0.058
	Cu	63		ug/L		121273	0.138
	Cu	65	**51.482**	ug/L	0.742	57058	0.065
	Zn	66	**49.917**	ug/L	1.200	39361	0.144
	Zn	67		ug/L		12054	0.020
	Zn	68		ug/L		28243	0.100
>	Ge	74		ug/L		273014	273013.824
	As	75	**47.263**	ug/L	2.968	37623	0.139
	Se	77		ug/L		6309	0.012
	Se	82	**48.425**	ug/L	1.691	3935	0.015
	Kr	83		ug/L		86	-0.000
	Sr	88	**49.330**	ug/L	0.592	433119	2.556
	Y	89		ug/L		215	0.001
	Mo	98	**49.010**	ug/L	0.607	107579	0.635
	Ag	107	**50.815**	ug/L	0.348	188708	1.114
	Cd	111	**49.118**	ug/L	0.863	47347	0.279
	Cd	114		ug/L		109004	0.643
>	In	115		ug/L		169355	169354.664
	Sn	120	**49.565**	ug/L	0.707	186891	1.102
	Sb	121	**48.881**	ug/L	7.788	146576	0.862
	Sb	123		ug/L		112779	0.663
	Ba	135		ug/L		47570	0.182
	Ba	137	**49.271**	ug/L	0.281	83284	0.319
	Ho	165		ug/L		67	0.000
>	Lu	175		ug/L		260919	260919.472
	Tl	205	**50.359**	ug/L	0.579	570731	2.185
	Pb	208	**51.208**	ug/L	0.529	857861	3.285
	Bi	209		ug/L		231	0.000
	Th	232	**54.280**	ug/L	1.635	987492	3.777
	U	238	**55.407**	ug/L	0.486	1022430	3.917

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.497				
	Be	9	101.376				
	B	11	98.950				
	Na	23	105.339				
	Mg	24	93.459				
	Al	27	92.291				
	P	31	105.289				
	K	39	103.561				
	Ca	43	96.061				
>	Sc	45		91.0			
	Ti	47	100.071				
	V	51	102.463				
	Cr	52	103.850				
	Cr	53					
	Mn	55	103.634				
	Fe	57	103.987				
	Co	59	98.869				
	Ni	60	98.656				
	Cu	63					
	Cu	65	102.965				
	Zn	66	99.834				
	Zn	67					
	Zn	68					
>	Ge	74		89.2			
	As	75	94.525				
	Se	77					
	Se	82	96.850				
	Kr	83					
	Sr	88	98.661				
	Y	89					
	Mo	98	98.019				
	Ag	107	101.629				
	Cd	111	98.236				
	Cd	114					
>	In	115		89.3			
	Sn	120	99.130				
	Sb	121	97.762				
	Sb	123					
	Ba	135					
	Ba	137	98.541				
	Ho	165					
>	Lu	175		89.0			
	Tl	205	100.718				
	Pb	208	102.415				
	Bi	209					
	Th	232	108.560				
	U	238	110.813				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 01, 2009 04:50:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\dataset\091130\QC Std 9.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.031**	ug/L	22.231	242	0.000
	Be	9	**0.009**	ug/L	26.508	17	0.000
	B	11	**2.710**	ug/L	20.528	1982	0.001
	Na	23	**0.448**	ug/L	161.050	31368	0.002
	Mg	24	**2.122**	ug/L	48.737	13006	0.007
	Al	27	**2.972**	ug/L	60.927	19014	0.012
	P	31	**-4.314**	ug/L	48.023	6450	-0.001
	K	39	**-3.378**	ug/L	115.285	595845	-0.017
	Ca	43	**1.693**	ug/L	21.733	175	0.000
>	Sc	45		ug/L		906084	906084.107
	Ti	47	**0.179**	ug/L	70.003	442	0.000
	V	51	**0.380**	ug/L	82.638	-1973	0.002
	Cr	52	**-0.010**	ug/L	264.266	-93	-0.000
	Cr	53		ug/L		55457	-0.001
	Mn	55	**-0.063**	ug/L	2.993	2161	-0.000
	Fe	57	**1.026**	ug/L	103.200	5339	0.000
	Co	59	**0.008**	ug/L	47.363	200	0.000
	Ni	60	**-0.009**	ug/L	131.043	84	-0.000
	Cu	63		ug/L		179	-0.000
	Cu	65	**-0.002**	ug/L	382.043	69	-0.000
	Zn	66	**-0.001**	ug/L	1407.946	186	-0.000
	Zn	67		ug/L		6296	-0.002
	Zn	68		ug/L		934	-0.001
>	Ge	74		ug/L		283432	283432.272
	As	75	**0.347**	ug/L	100.040	-37	0.001
	Se	77		ug/L		3397	0.001
	Se	82	**0.278**	ug/L	42.063	-17	0.000
	Kr	83		ug/L		72	-0.000
	Sr	88	**0.007**	ug/L	34.297	249	0.000
	Y	89		ug/L		69	-0.000
	Mo	98	**0.051**	ug/L	34.587	213	0.001
	Ag	107	**0.004**	ug/L	46.622	77	0.000
	Cd	111	**0.008**	ug/L	33.629	36	0.000
	Cd	114		ug/L		61	0.000
>	In	115		ug/L		173816	173815.968
	Sn	120	**0.271**	ug/L	24.821	1392	0.006
	Sb	121	**0.908**	ug/L	30.514	3332	0.016
	Sb	123		ug/L		2564	0.012
	Ba	135		ug/L		66	0.000
	Ba	137	**0.018**	ug/L	23.353	107	0.000
	Ho	165		ug/L		24	-0.000
>	Lu	175		ug/L		266265	266265.485
	Tl	205	**0.115**	ug/L	29.504	1876	0.005
	Pb	208	**0.008**	ug/L	24.330	845	0.001
	Bi	209		ug/L		167	-0.000
	Th	232	**0.381**	ug/L	33.500	9163	0.027
	U	238	**0.014**	ug/L	24.919	720	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			90.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/07/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120709S1.SIF Results Data Set Name: 120709S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/07/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0043	09:54:40	No
2			0.0044	0.0044	09:55:15	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.5786			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/07/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0056	09:56:37	No
2			0.0017	0.0060	09:57:13	No
Mean:			0.0014			
SD :			0.0003			
%RSD:			21.7220			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00720
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/07/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0041	0.0085	09:58:35	No
2			0.0040	0.0084	09:59:11	No
Mean:			0.0041			
SD :			0.0001			
%RSD:			1.6133			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99849 Slope: 0.00824
Intercept : -0.00008

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/07/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0165	0.0209	10:00:35	No
2			0.0168	0.0211	10:01:10	No
Mean:			0.0166			
SD :			0.0002			
%RSD:			1.1765			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99992 Slope: 0.00837
Intercept : -0.00010

==========
Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/07/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0406	0.0449	10:02:36	No
2			0.0407	0.0451	10:03:10	No
Mean:			0.0406			
SD :			0.0001			
%RSD:			0.2535			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99993 Slope: 0.00815
Intercept : 0.00001

==========
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/07/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0801	0.0845	10:04:36	No
2			0.0817	0.0860	10:05:11	No
Mean:			0.0809			
SD :			0.0011			
%RSD:			1.3799			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00809
Intercept : 0.00008

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0014	0.200	0.168	0.0003	21.7
S0.5	0.0041	0.500	0.497	0.0001	1.6
S2.0	0.0166	2.000	2.047	0.0002	1.2
S5.0	0.0406	5.000	5.011	0.0001	0.3
S10	0.0809	10.000	9.986	0.0011	1.4
Calib Blank	0.0044	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00809 Intercept: 0.0001

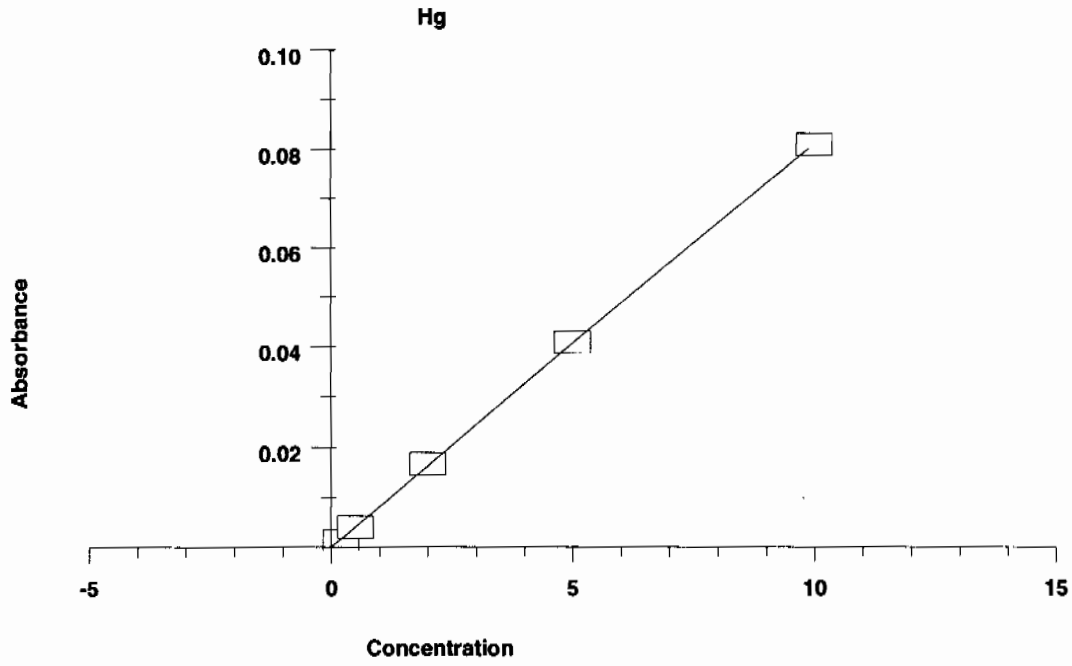

==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/07/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0421	0.0465	10:06:40	No
2	5.181	5.181	0.0420	0.0464	10:07:15	No
Mean:	5.188	5.188	0.0421			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.2	0.2	0.2028			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/07/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:08:38	No
2	-0.104	-0.104	-0.0008	0.0036	10:09:13	No
Mean:	-0.096	-0.096	-0.0007			
SD :	0.0124	0.0124	0.0001			
%RSD:	13.0	13.0	14.4602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/07/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0014	0.0057	10:10:35	No
2	0.148	0.148	0.0013	0.0056	10:11:10	No
Mean:	0.155	0.155	0.0013			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.9	5.9	5.5112			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0420	0.0463	10:12:35	No
2	5.181	5.181	0.0420	0.0464	10:13:09	No
Mean:	5.178	5.178	0.0420			
SD :	0.0040	0.0040	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0006	0.0037	10:14:37	No
2	-0.106	-0.106	-0.0008	0.0036	10:15:12	No
Mean:	-0.098	-0.098	-0.0007			
SD :	0.0123	0.0123	0.0001			
%RSD:	12.5	12.5	13.8998			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978905|i||925609|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0039	10:16:38	No
2	-0.093	-0.093	-0.0007	0.0037	10:17:13	No
Mean:	-0.077	-0.077	-0.0005			
SD :	0.0218	0.0218	0.0002			
%RSD:	28.2	28.2	32.1293			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978906|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.940	3.940	0.0320	0.0363	10:18:37	No
2	3.939	3.939	0.0319	0.0363	10:19:12	No
Mean:	3.939	3.939	0.0320			
SD :	0.0008	0.0008	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241604001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0057	10:20:38	No
2	0.157	0.157	0.0014	0.0057	10:21:14	No
Mean:	0.158	0.158	0.0014			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.5109			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241604002|i|||

%RSD: 7.6 7.6 8.0893

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/07/2009
Sample ID: 241608002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0013	0.0057	10:34:28	No
2	0.136	0.136	0.0012	0.0055	10:35:03	No
Mean:	0.143	0.143	0.0012			
SD :	0.0106	0.0106	0.0001			
%RSD:	7.4	7.4	6.9743			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.376	5.376	0.0436	0.0479	10:36:28	No
2	5.389	5.389	0.0437	0.0481	10:37:02	No
Mean:	5.383	5.383	0.0436			
SD :	0.0096	0.0096	0.0001			
%RSD:	0.2	0.2	0.1786			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:38:30	No
2	-0.095	-0.095	-0.0007	0.0037	10:39:04	No
Mean:	-0.091	-0.091	-0.0007			
SD :	0.0058	0.0058	0.0000			
%RSD:	6.4	6.4	7.1360			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201977155|i||924862|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0038	10:40:29	No
2	-0.083	-0.083	-0.0006	0.0038	10:41:04	No
Mean:	-0.083	-0.083	-0.0006			
SD :	0.0010	0.0010	0.0000			
%RSD:	1.2	1.2	1.4027			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201977156|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.825	3.825	0.0310	0.0354	10:42:28	No
2	3.817	3.817	0.0310	0.0353	10:43:02	No
Mean:	3.821	3.821	0.0310			
SD :	0.0054	0.0054	0.0000			
%RSD:	0.1	0.1	0.1420			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/07/2009
Sample ID: 241417001|i|||

```
%RSD:       1.9        1.9    1.8136

==========================================================================================
Element: Hg    Seq. No.: 32       AS Loc.: 30   Date: 12/07/2009
Sample ID: 241419005|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.410     0.410    0.0034     0.0078   10:56:30  No
 2        0.392     0.392    0.0033     0.0076   10:57:05  No
Mean:     0.401     0.401    0.0033
SD  :    0.0126    0.0126    0.0001
%RSD:       3.1        3.1    3.0692

==========================================================================================
Element: Hg    Seq. No.: 33       AS Loc.: 31   Date: 12/07/2009
Sample ID: 241419006|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.446     0.446    0.0037     0.0080   10:58:33  No
 2        0.430     0.430    0.0036     0.0079   10:59:07  No
Mean:     0.438     0.438    0.0036
SD  :    0.0109    0.0109    0.0001
%RSD:       2.5        2.5    2.4393

==========================================================================================
Element: Hg    Seq. No.: 34       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.212     5.212    0.0423     0.0466   11:00:33  No
 2        5.240     5.240    0.0425     0.0468   11:01:08  No
Mean:     5.226     5.226    0.0424
SD  :    0.0193    0.0193    0.0002
%RSD:       0.4        0.4    0.3682
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 35       AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.122    -0.122   -0.0009     0.0035   11:02:36  No
 2       -0.111    -0.111   -0.0008     0.0035   11:03:10  No
Mean:    -0.116    -0.116   -0.0009
SD  :    0.0079    0.0079    0.0001
%RSD:       6.8        6.8    7.3534
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 36       AS Loc.: 32   Date: 12/07/2009
Sample ID: 241419007|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.387     0.387    0.0032     0.0076   11:04:34  No
 2        0.368     0.368    0.0031     0.0074   11:05:09  No
Mean:     0.377     0.377    0.0031
SD  :    0.0133    0.0133    0.0001
%RSD:       3.5        3.5    3.4418

==========================================================================================
Element: Hg    Seq. No.: 37       AS Loc.: 33   Date: 12/07/2009
Sample ID: 241419008|i|||
```

%RSD: 1.8 1.8 1.7307

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/07/2009
Sample ID: 241419014|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0000	0.0043	11:18:08	No
2	-0.016	-0.016	-0.0001	0.0043	11:18:43	No
Mean:	-0.015	-0.015	0.0000			
SD :	0.0014	0.0014	0.0000			
%RSD:	9.3	9.3	24.9239			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/07/2009
Sample ID: 241419015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.432	0.432	0.0036	0.0079	11:20:06	No
2	0.415	0.415	0.0034	0.0078	11:20:41	No
Mean:	0.423	0.423	0.0035			
SD :	0.0118	0.0118	0.0001			
%RSD:	2.8	2.8	2.7227			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/07/2009
Sample ID: 241419016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0045	11:22:05	No
2	0.006	0.006	0.0001	0.0045	11:22:40	No
Mean:	0.004	0.004	0.0001			
SD :	0.0027	0.0027	0.0000			
%RSD:	70.3	70.3	20.4054			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.803	5.803	0.0470	0.0514	11:24:05	No
2	5.786	5.786	0.0469	0.0513	11:24:40	No
Mean:	5.795	5.795	0.0470			
SD :	0.0123	0.0123	0.0001			
%RSD:	0.2	0.2	0.2123			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0009	0.0034	11:26:08	No
2	-0.150	-0.150	-0.0011	0.0032	11:26:43	No
Mean:	-0.136	-0.136	-0.0010			
SD :	0.0186	0.0186	0.0002			
%RSD:	13.6	13.6	14.6683			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/07/2009
Sample ID: 241425001|i|||

%RSD: 0.9 0.9 0.9205

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/07/2009
Sample ID: 1201978947|i||925629|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0007	0.0036	11:40:13	No
2	-0.115	-0.115	-0.0009	0.0035	11:40:47	No
Mean:	-0.107	-0.107	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	10.2	10.2	11.2501			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/07/2009
Sample ID: 1201978948|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.055	4.055	0.0329	0.0373	11:42:08	No
2	4.065	4.065	0.0330	0.0373	11:42:43	No
Mean:	4.060	4.060	0.0329			
SD :	0.0066	0.0066	0.0001			
%RSD:	0.2	0.2	0.1622			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/07/2009
Sample ID: 241539001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.375	0.375	0.0031	0.0075	11:44:03	No
2	0.392	0.392	0.0032	0.0076	11:44:38	No
Mean:	0.383	0.383	0.0032			
SD :	0.0119	0.0119	0.0001			
%RSD:	3.1	3.1	3.0346			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/07/2009
Sample ID: 241539002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0012	0.0056	11:45:59	No
2	0.120	0.120	0.0010	0.0054	11:46:34	No
Mean:	0.132	0.132	0.0011			
SD :	0.0167	0.0167	0.0001			
%RSD:	12.7	12.7	11.8118			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.520	5.520	0.0447	0.0491	11:47:58	No
2	5.454	5.454	0.0442	0.0486	11:48:33	No
Mean:	5.487	5.487	0.0445			
SD :	0.0470	0.0470	0.0004			
%RSD:	0.9	0.9	0.8544			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0043	11:50:01	No
2	-0.023	-0.023	-0.0001	0.0042	11:50:36	No
Mean:	-0.022	-0.022	-0.0001			
SD :	0.0019	0.0019	0.0000			
%RSD:	8.7	8.7	15.3097			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/07/2009
Sample ID: 241539003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.086	0.086	0.0008	0.0051	11:52:01	No
2	0.084	0.084	0.0008	0.0051	11:52:37	No
Mean:	0.085	0.085	0.0008			
SD :	0.0009	0.0009	0.0000			
%RSD:	1.1	1.1	0.9509			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/07/2009
Sample ID: 241539004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.221	0.221	0.0019	0.0062	11:53:59	No
2	0.209	0.209	0.0018	0.0061	11:54:34	No
Mean:	0.215	0.215	0.0018			
SD :	0.0083	0.0083	0.0001			
%RSD:	3.8	3.8	3.6864			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/07/2009
Sample ID: 241541001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.546	0.546	0.0045	0.0089	11:55:56	No
2	0.545	0.545	0.0045	0.0089	11:56:31	No
Mean:	0.546	0.546	0.0045			
SD :	0.0002	0.0002	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/07/2009
Sample ID: 1201978949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.487	0.487	0.0040	0.0084	11:57:54	No
2	0.483	0.483	0.0040	0.0083	11:58:29	No
Mean:	0.485	0.485	0.0040			
SD :	0.0026	0.0026	0.0000			
%RSD:	0.5	0.5	0.5236			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/07/2009
Sample ID: 1201978950|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	11:59:52	No
2	3.254	3.254	0.0264	0.0308	12:00:27	No
Mean:	3.240	3.240	0.0263			
SD :	0.0199	0.0199	0.0002			

%RSD: 0.6 0.6 0.6129

==========

Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 12/07/2009
Sample ID: 1201978952|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.158	3.158	0.0256	0.0300	12:01:51	No
2	3.162	3.162	0.0257	0.0300	12:02:27	No
Mean:	3.160	3.160	0.0256			
SD :	0.0032	0.0032	0.0000			
%RSD:	0.1	0.1	0.1021			

==========

Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 12/07/2009
Sample ID: 1201978951|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0003	0.0040	12:03:50	No
2	-0.044	-0.044	-0.0003	0.0041	12:04:26	No
Mean:	-0.046	-0.046	-0.0003			
SD :	0.0026	0.0026	0.0000			
%RSD:	5.6	5.6	7.1103			

==========

Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 12/07/2009
Sample ID: 241541002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.289	0.289	0.0024	0.0068	12:05:49	No
2	0.275	0.275	0.0023	0.0067	12:06:24	No
Mean:	0.282	0.282	0.0024			
SD :	0.0100	0.0100	0.0001			
%RSD:	3.6	3.6	3.4438			

==========

Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 12/07/2009
Sample ID: 241541003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.449	0.449	0.0037	0.0081	12:07:49	No
2	0.441	0.441	0.0036	0.0080	12:08:24	No
Mean:	0.445	0.445	0.0037			
SD :	0.0062	0.0062	0.0001			
%RSD:	1.4	1.4	1.3659			

==========

Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 12/07/2009
Sample ID: 241541004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.301	0.301	0.0025	0.0069	12:09:50	No
2	0.274	0.274	0.0023	0.0067	12:10:25	No
Mean:	0.287	0.287	0.0024			
SD :	0.0190	0.0190	0.0002			
%RSD:	6.6	6.6	6.4003			

==========

Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Time	Peak

#	µg/L	µg/L	Signal	Height		Stored
1	5.542	5.542	0.0449	0.0493	12:11:51	No
2	5.592	5.592	0.0453	0.0497	12:12:25	No
Mean:	5.567	5.567	0.0451			
SD :	0.0353	0.0353	0.0003			
%RSD:	0.6	0.6	0.6332			

QC value within specified limits.

==========

Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0045	12:13:53	No
2	-0.005	-0.005	0.0000	0.0044	12:14:27	No
Mean:	-0.001	-0.001	0.0001			
SD :	0.0060	0.0060	0.0000			
%RSD:	918.9	918.9	67.3940			

QC value within specified limits.

==========

Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 12/07/2009
Sample ID: 241541005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0046	12:15:55	No
2	0.006	0.006	0.0001	0.0045	12:16:29	No
Mean:	0.010	0.010	0.0002			
SD :	0.0064	0.0064	0.0001			
%RSD:	63.0	63.0	32.5458			

==========

Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 12/07/2009
Sample ID: 241541006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.373	2.373	0.0193	0.0236	12:17:52	No
2	2.365	2.365	0.0192	0.0236	12:18:27	No
Mean:	2.369	2.369	0.0192			
SD :	0.0056	0.0056	0.0000			
%RSD:	0.2	0.2	0.2355			

==========

Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 12/07/2009
Sample ID: 241541007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.314	0.314	0.0026	0.0070	12:19:46	No
2	0.309	0.309	0.0026	0.0069	12:20:21	No
Mean:	0.312	0.312	0.0026			
SD :	0.0032	0.0032	0.0000			
%RSD:	1.0	1.0	0.9999			

==========

Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 12/07/2009
Sample ID: 241541008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.619	0.619	0.0051	0.0094	12:21:41	No
2	0.621	0.621	0.0051	0.0095	12:22:16	No
Mean:	0.620	0.620	0.0051			
SD :	0.0014	0.0014	0.0000			

#	µg/L	µg/L	Signal	Height		Stored
1	0.416	0.416	0.0034	0.0078	12:33:22	No
2	0.409	0.409	0.0034	0.0077	12:33:57	No
Mean:	0.412	0.412	0.0034			
SD :	0.0047	0.0047	0.0000			
%RSD:	1.1	1.1	1.1031			

==========

Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.554	5.554	0.0450	0.0494	12:35:22	No
2	5.529	5.529	0.0448	0.0492	12:35:57	No
Mean:	5.541	5.541	0.0449			
SD :	0.0183	0.0183	0.0001			
%RSD:	0.3	0.3	0.3293			

QC value within specified limits.

==========

Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0002	0.0042	12:37:25	No
2	-0.042	-0.042	-0.0003	0.0041	12:38:00	No
Mean:	-0.036	-0.036	-0.0002			
SD :	0.0078	0.0078	0.0001			
%RSD:	21.5	21.5	29.1602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 12/07/2009
Sample ID: 241541015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.317	0.317	0.0026	0.0070	12:39:26	No
2	0.302	0.302	0.0025	0.0069	12:40:01	No
Mean:	0.309	0.309	0.0026			
SD :	0.0107	0.0107	0.0001			
%RSD:	3.4	3.4	3.3438			

==========

Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 12/07/2009
Sample ID: 241541016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0036	0.0080	12:41:25	No
2	0.437	0.437	0.0036	0.0080	12:41:59	No
Mean:	0.438	0.438	0.0036			
SD :	0.0022	0.0022	0.0000			
%RSD:	0.5	0.5	0.4829			

==========

Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 12/07/2009
Sample ID: 1201978959|i||925634|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.055	-0.055	-0.0004	0.0040	12:43:23	No
2	-0.103	-0.103	-0.0008	0.0036	12:43:58	No
Mean:	-0.079	-0.079	-0.0006			
SD :	0.0336	0.0336	0.0003			

#	µg/L	µg/L	Signal	Height		Stored
1	2.691	2.691	0.0219	0.0262	12:55:11	No
2	2.692	2.692	0.0219	0.0262	12:55:46	No
Mean:	2.692	2.692	0.0219			
SD :	0.0005	0.0005	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 93 AS Loc.: 81 Date: 12/07/2009
Sample ID: 1201978964|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.666	2.666	0.0217	0.0260	12:57:06	No
2	2.667	2.667	0.0217	0.0260	12:57:40	No
Mean:	2.667	2.667	0.0217			
SD :	0.0007	0.0007	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 94 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.672	5.672	0.0460	0.0503	12:59:04	No
2	5.684	5.684	0.0461	0.0504	12:59:39	No
Mean:	5.678	5.678	0.0460			
SD :	0.0086	0.0086	0.0001			
%RSD:	0.2	0.2	0.1509			

QC value within specified limits.

==========

Element: Hg Seq. No.: 95 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.077	-0.077	-0.0005	0.0038	13:01:07	No
2	-0.085	-0.085	-0.0006	0.0037	13:01:41	No
Mean:	-0.081	-0.081	-0.0006			
SD :	0.0061	0.0061	0.0000			
%RSD:	7.6	7.6	8.5833			

QC value within specified limits.

==========

Element: Hg Seq. No.: 96 AS Loc.: 82 Date: 12/07/2009
Sample ID: 1201978963|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.196	-0.196	-0.0015	0.0029	13:03:06	No
2	-0.201	-0.201	-0.0015	0.0028	13:03:41	No
Mean:	-0.198	-0.198	-0.0015			
SD :	0.0033	0.0033	0.0000			
%RSD:	1.7	1.7	1.7580			

==========

Element: Hg Seq. No.: 97 AS Loc.: 83 Date: 12/07/2009
Sample ID: 241611002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.059	0.059	0.0006	0.0049	13:05:02	No
2	0.043	0.043	0.0004	0.0048	13:05:37	No
Mean:	0.051	0.051	0.0005			
SD :	0.0118	0.0118	0.0001			

#	µg/L	µg/L	Signal	Height		Stored
1	0.283	0.283	0.0024	0.0067	13:16:50	No
2	0.301	0.301	0.0025	0.0069	13:17:25	No
Mean:	0.292	0.292	0.0024			
SD :	0.0125	0.0125	0.0001			
%RSD:	4.3	4.3	4.1354			

==========

Element: Hg Seq. No.: 104 AS Loc.: 90 Date: 12/07/2009
Sample ID: 241611009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.275	0.275	0.0023	0.0067	13:18:50	No
2	0.287	0.287	0.0024	0.0068	13:19:25	No
Mean:	0.281	0.281	0.0023			
SD :	0.0084	0.0084	0.0001			
%RSD:	3.0	3.0	2.8894			

==========

Element: Hg Seq. No.: 105 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.484	5.484	0.0445	0.0488	13:20:51	No
2	5.468	5.468	0.0443	0.0487	13:21:26	No
Mean:	5.476	5.476	0.0444			
SD :	0.0108	0.0108	0.0001			
%RSD:	0.2	0.2	0.1963			

QC value within specified limits.

==========

Element: Hg Seq. No.: 106 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.070	-0.070	-0.0005	0.0039	13:22:54	No
2	-0.072	-0.072	-0.0005	0.0039	13:23:30	No
Mean:	-0.071	-0.071	-0.0005			
SD :	0.0013	0.0013	0.0000			
%RSD:	1.8	1.8	2.0491			

QC value within specified limits.

Element: Hg Seq. No.: 107 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978936|i||925623|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.128	-0.128	-0.0010	0.0034	13:27:17	No
2	-0.109	-0.109	-0.0008	0.0036	13:27:52	No
Mean:	-0.119	-0.119	-0.0009			
SD :	0.0139	0.0139	0.0001			
%RSD:	11.7	11.7	12.7130			

Element: Hg Seq. No.: 108 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978937|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.279	4.279	0.0347	0.0391	13:29:15	No
2	4.322	4.322	0.0351	0.0394	13:29:50	No
Mean:	4.300	4.300	0.0349			
SD :	0.0307	0.0307	0.0002			
%RSD:	0.7	0.7	0.7124			

Element: Hg Seq. No.: 109 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241512001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0007	0.0037	13:31:16	No
2	-0.076	-0.076	-0.0005	0.0038	13:31:51	No
Mean:	-0.084	-0.084	-0.0006			
SD :	0.0109	0.0109	0.0001			
%RSD:	13.0	13.0	14.6074			

Element: Hg Seq. No.: 110 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241512002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0003	0.0046	13:33:18	No
2	0.008	0.008	0.0001	0.0045	13:33:52	No
Mean:	0.015	0.015	0.0002			
SD :	0.0107	0.0107	0.0001			
%RSD:	70.4	70.4	43.2809			

Element: Hg Seq. No.: 111 AS Loc.: 16 Date: 12/07/2009
Sample ID: 241512003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0045	13:35:20	No
2	-0.019	-0.019	-0.0001	0.0043	13:35:55	No
Mean:	-0.007	-0.007	0.0000			
SD :	0.0164	0.0164	0.0001			
%RSD:	236.2	236.2	640.8807			

Element: Hg Seq. No.: 112 AS Loc.: 17 Date: 12/07/2009
Sample ID: 241512004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0004	0.0047	13:37:19	No
2	0.030	0.030	0.0003	0.0047	13:37:54	No
Mean:	0.033	0.033	0.0003			

```
SD  :    0.0040    0.0040    0.0000
%RSD:      12.1       12.1    9.3787

==========================================================================
Element: Hg    Seq. No.: 113      AS Loc.: 18   Date: 12/07/2009
Sample ID: 241512005|i|||
--------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.256     0.256    0.0021     0.0065   13:39:15  No
 2        0.255     0.255    0.0021     0.0065   13:39:50  No
Mean:     0.255     0.255    0.0021
SD  :    0.0002    0.0002    0.0000
%RSD:

==========================================================================
Element: Hg    Seq. No.: 114      AS Loc.: 19   Date: 12/07/2009
Sample ID: 241512006|i|||
--------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.165     0.165    0.0014     0.0058   13:41:11  No
 2        0.174     0.174    0.0015     0.0058   13:41:45  No
Mean:     0.170     0.170    0.0014
SD  :    0.0059    0.0059    0.0000
%RSD:       3.5       3.5    3.3110

==========================================================================
Element: Hg    Seq. No.: 115      AS Loc.: 20   Date: 12/07/2009
Sample ID: 241524002|i|||
--------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.159     0.159    0.0014     0.0057   13:43:07  No
 2        0.158     0.158    0.0014     0.0057   13:43:42  No
Mean:     0.158     0.158    0.0014
SD  :    0.0007    0.0007    0.0000
%RSD:       0.4       0.4    0.4216

==========================================================================
Element: Hg    Seq. No.: 116      AS Loc.: 21   Date: 12/07/2009
Sample ID: 241536001|i|||
--------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.703     0.703    0.0058     0.0101   13:45:04  No
 2        0.690     0.690    0.0057     0.0100   13:45:39  No
Mean:     0.697     0.697    0.0057
SD  :    0.0091    0.0091    0.0001
%RSD:       1.3       1.3    1.2881

==========================================================================
Element: Hg    Seq. No.: 117      AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
--------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.181     5.181    0.0420     0.0464   13:47:04  No
 2        5.190     5.190    0.0421     0.0464   13:47:39  No
Mean:     5.185     5.185    0.0420
SD  :    0.0066    0.0066    0.0001
%RSD:       0.1       0.1    0.1267
QC value within specified limits.

==========================================================================
Element: Hg    Seq. No.: 118      AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
```

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.080	-0.080	-0.0006	0.0038	13:49:07	No
2	-0.092	-0.092	-0.0007	0.0037	13:49:42	No
Mean:	-0.086	-0.086	-0.0006			
SD :	0.0085	0.0085	0.0001			
%RSD:	9.9	9.9	11.1567			

QC value within specified limits.

Element: Hg Seq. No.: 119 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201978938|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.264	0.264	0.0022	0.0066	13:51:07	No
2	0.278	0.278	0.0023	0.0067	13:51:42	No
Mean:	0.271	0.271	0.0023			
SD :	0.0098	0.0098	0.0001			
%RSD:	3.6	3.6	3.5143			

Element: Hg Seq. No.: 120 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201978939|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.949	2.949	0.0239	0.0283	13:53:06	No
2	2.956	2.956	0.0240	0.0284	13:53:40	No
Mean:	2.953	2.953	0.0240			
SD :	0.0045	0.0045	0.0000			
%RSD:	0.2	0.2	0.1522			

Element: Hg Seq. No.: 121 AS Loc.: 24 Date: 12/07/2009
Sample ID: 1201978941|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.032	3.032	0.0246	0.0290	13:55:04	No
2	3.033	3.033	0.0246	0.0290	13:55:39	No
Mean:	3.032	3.032	0.0246			
SD :	0.0008	0.0008	0.0000			
%RSD:						

Element: Hg Seq. No.: 122 AS Loc.: 25 Date: 12/07/2009
Sample ID: 1201978940|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.078	-0.078	-0.0006	0.0038	13:57:04	No
2	-0.078	-0.078	-0.0006	0.0038	13:57:38	No
Mean:	-0.078	-0.078	-0.0006			
SD :	0.0003	0.0003	0.0000			
%RSD:	0.4	0.4	0.3994			

Element: Hg Seq. No.: 123 AS Loc.: 26 Date: 12/07/2009
Sample ID: 241536002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.442	0.442	0.0037	0.0080	13:59:03	No
2	0.436	0.436	0.0036	0.0080	13:59:38	No
Mean:	0.439	0.439	0.0036			

SD :	0.0042	0.0042	0.0000
%RSD:	1.0	1.0	0.9419

==========

Element: Hg Seq. No.: 124 AS Loc.: 27 Date: 12/07/2009
Sample ID: 241536003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.287	0.287	0.0024	0.0068	14:01:03	No
2	0.281	0.281	0.0024	0.0067	14:01:38	No
Mean:	0.284	0.284	0.0024			
SD :	0.0045	0.0045	0.0000			
%RSD:	1.6	1.6	1.5473			

==========

Element: Hg Seq. No.: 125 AS Loc.: 28 Date: 12/07/2009
Sample ID: 241536004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.257	0.257	0.0022	0.0065	14:03:04	No
2	0.232	0.232	0.0020	0.0063	14:03:39	No
Mean:	0.244	0.244	0.0021			
SD :	0.0173	0.0173	0.0001			
%RSD:	7.1	7.1	6.8206			

==========

Element: Hg Seq. No.: 126 AS Loc.: 29 Date: 12/07/2009
Sample ID: 241536005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.534	0.534	0.0044	0.0088	14:05:05	No
2	0.511	0.511	0.0042	0.0086	14:05:40	No
Mean:	0.523	0.523	0.0043			
SD :	0.0162	0.0162	0.0001			
%RSD:	3.1	3.1	3.0432			

==========

Element: Hg Seq. No.: 127 AS Loc.: 30 Date: 12/07/2009
Sample ID: 241536006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.283	0.283	0.0024	0.0067	14:07:07	No
2	0.264	0.264	0.0022	0.0066	14:07:42	No
Mean:	0.274	0.274	0.0023			
SD :	0.0136	0.0136	0.0001			
%RSD:	4.9	4.9	4.7832			

==========

Element: Hg Seq. No.: 128 AS Loc.: 31 Date: 12/07/2009
Sample ID: 241536007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.207	0.207	0.0018	0.0061	14:09:10	No
2	0.202	0.202	0.0017	0.0061	14:09:45	No
Mean:	0.205	0.205	0.0017			
SD :	0.0038	0.0038	0.0000			
%RSD:	1.8	1.8	1.7583			

==========

Element: Hg Seq. No.: 129 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.378	5.378	0.0436	0.0480	14:11:12	No
2	5.407	5.407	0.0438	0.0482	14:11:47	No
Mean:	5.393	5.393	0.0437			
SD :	0.0209	0.0209	0.0002			
%RSD:	0.4	0.4	0.3861			

QC value within specified limits.

==========

Element: Hg Seq. No.: 130 AS Loc.: 8 Date: 12/07/2009

Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0007	0.0036	14:13:15	No
2	-0.112	-0.112	-0.0008	0.0035	14:13:50	No
Mean:	-0.106	-0.106	-0.0008			
SD :	0.0079	0.0079	0.0001			
%RSD:	7.4	7.4	8.1684			

QC value within specified limits.

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925471

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978582	UI647733-01	.503	g
MS	1201978580	UI090611-A	.5	mL
MS	1201978580	UI090611-B	.5	mL
MSD	1201978581	UI090611-A	.5	mL
MSD	1201978581	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978577		SW846 3050B	24-NOV-2009 19:04	0.526 g	50 mL	95.05703	SOIL
LCS	1201978582		SW846 3050B	24-NOV-2009 19:04	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241512001		SW846 3050B	24-NOV-2009 19:04	0.538 g	50 mL	92.9368	SOIL
DUP	1201978578	241512001	SW846 3050B	24-NOV-2009 19:04	0.518 g	50 mL	96.5251	SOIL
SDILT	1201978579	241512001	SW846 3050B	24-NOV-2009 19:04	0.538 g	50 mL	92.9368	SOIL
MS	1201978580	241512001	SW846 3050B	24-NOV-2009 19:04	0.537 g	50 mL	93.10987	SOIL
MSD	1201978581	241512001	SW846 3050B	24-NOV-2009 19:04	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241512002		SW846 3050B	24-NOV-2009 19:04	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241512003		SW846 3050B	24-NOV-2009 19:04	0.532 g	50 mL	93.98496	SOIL
SAMPLE	241512004		SW846 3050B	24-NOV-2009 19:04	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241512005		SW846 3050B	24-NOV-2009 19:04	0.547 g	50 mL	91.40768	SOIL
SAMPLE	241512006		SW846 3050B	24-NOV-2009 19:04	0.569 g	50 mL	87.87346	SOIL
SAMPLE	241524002		SW846 3050B	24-NOV-2009 19:04	0.544 g	50 mL	91.91176	SOIL
SAMPLE	241536001		SW846 3050B	24-NOV-2009 19:04	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241536002		SW846 3050B	24-NOV-2009 19:04	0.562 g	50 mL	88.96797	SOIL
SAMPLE	241536003		SW846 3050B	24-NOV-2009 19:04	0.582 g	50 mL	85.91065	SOIL
SAMPLE	241536004		SW846 3050B	24-NOV-2009 19:04	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241536005		SW846 3050B	24-NOV-2009 19:04	0.534 g	50 mL	93.63296	SOIL
SAMPLE	241536006		SW846 3050B	24-NOV-2009 19:04	0.535 g	50 mL	93.45794	SOIL
SAMPLE	241536007		SW846 3050B	24-NOV-2009 19:04	0.513 g	50 mL	97.46589	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: sample#241512001 is a moist sand.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925469

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978576	UI652380	.505	g
MS	1201978574	UI091119-01	.25	mL
MS	1201978574	UI091119-06	.25	mL
MSD	1201978575	UI091119-01	.25	mL
MSD	1201978575	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978571		SW846 3050B	24-NOV-2009 19:14	0.506 g	50 mL	98.81423	SOIL
LCS	1201978576		SW846 3050B	24-NOV-2009 19:14	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241512001		SW846 3050B	24-NOV-2009 19:14	0.504 g	50 mL	99.20635	SOIL
DUP	1201978572	241512001	SW846 3050B	24-NOV-2009 19:14	0.515 g	50 mL	97.08738	SOIL
SDILT	1201978573	241512001	SW846 3050B	24-NOV-2009 19:14	0.504 g	50 mL	99.20635	SOIL
MS	1201978574	241512001	SW846 3050B	24-NOV-2009 19:14	0.5 g	50 mL	100	SOIL
MSD	1201978575	241512001	SW846 3050B	24-NOV-2009 19:14	0.551 g	50 mL	90.7441	SOIL
SAMPLE	241512002		SW846 3050B	24-NOV-2009 19:14	0.542 g	50 mL	92.25092	SOIL
SAMPLE	241512003		SW846 3050B	24-NOV-2009 19:14	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241512004		SW846 3050B	24-NOV-2009 19:14	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241512005		SW846 3050B	24-NOV-2009 19:14	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241512006		SW846 3050B	24-NOV-2009 19:14	0.572 g	50 mL	87.41259	SOIL
SAMPLE	241524002		SW846 3050B	24-NOV-2009 19:14	0.572 g	50 mL	87.41259	SOIL
SAMPLE	241536001		SW846 3050B	24-NOV-2009 19:14	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241536002		SW846 3050B	24-NOV-2009 19:14	0.577 g	50 mL	86.65511	SOIL
SAMPLE	241536003		SW846 3050B	24-NOV-2009 19:14	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241536004		SW846 3050B	24-NOV-2009 19:14	0.546 g	50 mL	91.57509	SOIL
SAMPLE	241536005		SW846 3050B	24-NOV-2009 19:14	0.559 g	50 mL	89.44544	SOIL
SAMPLE	241536006		SW846 3050B	24-NOV-2009 19:14	0.562 g	50 mL	88.96797	SOIL
SAMPLE	241536007		SW846 3050B	24-NOV-2009 19:14	0.504 g	50 mL	99.20635	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1100721TCLP	1.25 mL	Nitric Acid CONC.

Comments: sample#241512001 is a moist sand.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925622

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978937	UI031809A	.202	g
MS	1201978939	WHG091204-14	.3	mL
MSD	1201978941	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978936		SW846 7471A Prep	04-DEC-2009 10:35	0.529 g	30 mL	56.71078	SOIL
LCS	1201978937		SW846 7471A Prep	04-DEC-2009 10:35	0.202 g	30 mL	148.51485	SOIL
SAMPLE	241512001		SW846 7471A Prep	04-DEC-2009 10:35	0.556 g	30 mL	53.95683	SOIL
SAMPLE	241512002		SW846 7471A Prep	04-DEC-2009 10:35	0.508 g	30 mL	59.05512	SOIL
SAMPLE	241512003		SW846 7471A Prep	04-DEC-2009 10:35	0.544 g	30 mL	55.14706	SOIL
SAMPLE	241512004		SW846 7471A Prep	04-DEC-2009 10:35	0.596 g	30 mL	50.33557	SOIL
SAMPLE	241512005		SW846 7471A Prep	04-DEC-2009 10:35	0.514 g	30 mL	58.36576	SOIL
SAMPLE	241512006		SW846 7471A Prep	04-DEC-2009 10:35	0.574 g	30 mL	52.26481	SOIL
SAMPLE	241524002		SW846 7471A Prep	04-DEC-2009 10:35	0.511 g	30 mL	58.70841	SOIL
SAMPLE	241536001		SW846 7471A Prep	04-DEC-2009 10:35	0.58 g	30 mL	51.72414	SOIL
DUP	1201978938	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.535 g	30 mL	56.07477	SOIL
MS	1201978939	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.549 g	30 mL	54.64481	SOIL
MSD	1201978941	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.535 g	30 mL	56.07477	SOIL
SDILT	1201978940	241536001	SW846 7471A Prep	04-DEC-2009 10:35	0.58 g	30 mL	51.72414	SOIL
SAMPLE	241536002		SW846 7471A Prep	04-DEC-2009 10:35	0.523 g	30 mL	57.36138	SOIL
SAMPLE	241536003		SW846 7471A Prep	04-DEC-2009 10:35	0.552 g	30 mL	54.34783	SOIL
SAMPLE	241536004		SW846 7471A Prep	04-DEC-2009 10:35	0.558 g	30 mL	53.76344	SOIL
SAMPLE	241536005		SW846 7471A Prep	04-DEC-2009 10:35	0.553 g	30 mL	54.24955	SOIL
SAMPLE	241536006		SW846 7471A Prep	04-DEC-2009 10:35	0.554 g	30 mL	54.15162	SOIL
SAMPLE	241536007		SW846 7471A Prep	04-DEC-2009 10:35	0.564 g	30 mL	53.19149	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments: Sample 241536001 is a brown rocky soil.
Digestion Start Date: 04-DEC-09 10:35
Digestion End Date: 04-DEC-09 11:05

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925472	See Below		

Potentially affected work order(s)(SDG): 241512(10-598),241524(10-600),241536(10-602)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978580MS	The matrix spike recovery failed outside of the control limits for Li and Ni due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
2. Failed RPD for MS/MSD, or PS/PSD: QC 1201978581MSD	The matrix spike duplicate recovery failed outside of the control limits for Ni due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
3. Failed Recovery for MSD/PSD: QC 1201978581MSD	The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Li due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Elizabeth Janssen 05-DEC-09

Data Validator/Group Leader:
Rose Jenkins 07-DEC-09

NCR Report No.: 766802
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal		Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7471A	Solid	LANL
Batch ID:	**Sample Numbers:**		
925623	1201978938		

Potentially affected work order(s)(SDG): 241512(10-598),241524(10-600),241536(10-602)

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201978938DUP	1. The sample and sample duplicate % RPD failed outside the control limits for Hg due to possible sample non-homogeneity and/or matrix interference. Sample is a rocky, brown soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jason Loy 07-DEC-09

Data Validator/Group Leader:

Eric Lawson 08-DEC-09

NCR Report No.: 767860
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925470	See Below		

Potentially affected work order(s)(SDG): 241512(10-598),241524(10-600),241536(10-602)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978574MS 2. Failed RPD for DUP: QC 1201978572DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1201978575MSD 4. Failed Recovery for MSD/PSD: QC 1201978575MSD	1. The matrix spike recovery failed outside of the control limits for aluminum,calcium,magnesium,potassium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for barium and titanium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for iron due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 4. The matrix spike duplicate recovery failed outside of the control limits for aluminum,potassium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 11-DEC-09

Data Validator/Group Leader:

Bryan Davis 11-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Carnello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L

Analyte	Concentration	Analyte	Concentration
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L

Analyte	Concentration	Analyte	Concentration
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Standard Logbook

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Standard Logbook

Serial ID: UMS090929-01 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 29-SEP-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-31CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090929-02 **Opened:** 29-SEP-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 29-SEP-09 **Lot Number :** 19-174JB
Type: Source Material **Expires:** 29-SEP-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090929-03 **Opened:** 29-SEP-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 29-SEP-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-30CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Standard Logbook

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Standard Logbook

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091208-42 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091208-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091208-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091208-43 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091208-44 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091208-45 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091208-46 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091208-47 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091130-04 **Opened:** 30-NOV-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 30-NOV-09 **Balance Id :** 4025216
Type: Working **Expires:** 01-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091130-04A **Opened:** 30-NOV-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 30-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091130-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091130-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091130-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091130-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091130-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091130-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091130-05 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 30-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091130-06 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 30-NOV-09 **Pipet Id :** 3820544
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS091130-07 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 30-NOV-09 **Lot Number :** 1010773
Type: Working **Expires:** 01-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091130-08 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 30-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091130-70 **Opened:** 30-NOV-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 30-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 01-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL

Standard Logbook

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600-1

Sample Analysis

Sample ID	Client ID
241527001	WST03-10-2132
1201980091	Tumbling Blank (TB)
1201982488	Method Blank (MB) **ICP-MS**
1201982489	Laboratory Control Sample (LCS)
1201982492	241191001(WST16-10-4667L) Serial Dilution (SD)
1201982490	241191001(WST16-10-4667D) Sample Duplicate (DUP)
1201980089	241191001(WST16-10-4667S) Matrix Spike (MS)
1201980094	Tumbling Blank (TB)
1201982787	Method Blank (MB) **CVAA**
1201982788	Laboratory Control Sample (LCS)
1201982806	241191001(WST16-10-4667L) Serial Dilution (SD)
1201982789	241191001(WST16-10-4667D) Sample Duplicate (DUP)
1201980092	241191001(WST16-10-4667S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	927298 and 927419
Prep Batch :	927297 and 927418
TCLP Prep Batch :	926100 and 926103
Standard Operating Procedures:	GL-MA-E-014 REV# 20, GL-MA-E-008 REV# 13, GL-LB-E-006 REV# 13 and GL-MA-E-010 REV# 23

Analytical Method: SW846 3010/6020 and SW846 7470A

Prep Method : SW846 3010A and SW846 7470A Prep

TCLP Prep Method : SW846 1311

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 241191001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of barium and mercury, as indicated by the "N" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples and associated matrix QC were prepared at a 10x factor for ICP/ICPMS to minimize potential interferences arising from the high sodium content in the TCLP leaching solution. The samples and associated matrix QC were prepared at a 10x factor for CVAA analysis because larger volumes of this matrix consume excessive amounts of potassium permanganate.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 764023 and 766112. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Brown **Date:** 12/16/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-600-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241527001 **BASIS:** As Received **DATE COLLECTED** 18-NOV-09

CLIENT ID: WST03-10-2132 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: TCLP **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-38-2	Arsenic	0.050	mg/L	U	0.016	0.05	0.05	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-39-3	Barium	0.775	mg/L		0.006	0.02	0.02	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-43-9	Cadmium	0.010	mg/L	U	0.0011	0.01	0.01	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-47-3	Chromium	0.10	mg/L	U	0.02	0.1	0.1	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7439-92-1	Lead	0.020	mg/L	U	0.005	0.02	0.02	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7439-97-6	Mercury	0.002	mg/L	U	0.00066	0.002	0.002	1	AV	JXL1	12/01/09 12:19	120109W3-2	927419
7782-49-2	Selenium	0.050	mg/L	U	0.01	0.05	0.05	1	MS	BAJ	12/04/09 03:19	091203-1	927298
7440-22-4	Silver	0.010	mg/L	U	0.002	0.01	0.01	1	MS	BAJ	12/04/09 03:19	091203-1	927298

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
927298	927297	SW846 3010A	5	mL	50	mL	12/01/09	AXG2
927419	927418	SW846 7470A Prep	2	mL	20	mL	11/30/09	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-600-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.09	ug/L	5	ug/L	101.8	90.0 - 110.0	AV	01-DEC-09 09:50	120109W3-2
	Arsenic	48.2	ug/L	50	ug/L	96.3	90.0 - 110.0	MS	04-DEC-09 02:24	091203-1
	Barium	49.3	ug/L	50	ug/L	98.6	90.0 - 110.0	MS	04-DEC-09 02:24	091203-1
	Cadmium	49.7	ug/L	50	ug/L	99.3	90.0 - 110.0	MS	04-DEC-09 02:24	091203-1
	Chromium	51.7	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	04-DEC-09 02:24	091203-1
	Lead	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	04-DEC-09 02:24	091203-1
	Selenium	49.6	ug/L	50	ug/L	99.3	90.0 - 110.0	MS	04-DEC-09 02:24	091203-1
	Silver	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	04-DEC-09 02:24	091203-1
CCV01										
	Mercury	4.87	ug/L	5	ug/L	97.4	80.0 - 120.0	AV	01-DEC-09 09:56	120109W3-2
	Arsenic	47.7	ug/L	50	ug/L	95.3	90.0 - 110.0	MS	04-DEC-09 02:40	091203-1
	Barium	49.1	ug/L	50	ug/L	98.2	90.0 - 110.0	MS	04-DEC-09 02:40	091203-1
	Cadmium	49.4	ug/L	50	ug/L	98.9	90.0 - 110.0	MS	04-DEC-09 02:40	091203-1
	Chromium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	04-DEC-09 02:40	091203-1
	Lead	51.8	ug/L	50	ug/L	103.7	90.0 - 110.0	MS	04-DEC-09 02:40	091203-1
	Selenium	48.5	ug/L	50	ug/L	97	90.0 - 110.0	MS	04-DEC-09 02:40	091203-1
	Silver	51.1	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	04-DEC-09 02:40	091203-1
CCV02										
	Mercury	4.88	ug/L	5	ug/L	97.6	80.0 - 120.0	AV	01-DEC-09 10:19	120109W3-2
	Arsenic	47.6	ug/L	50	ug/L	95.2	90.0 - 110.0	MS	04-DEC-09 02:50	091203-1
	Barium	48.1	ug/L	50	ug/L	96.2	90.0 - 110.0	MS	04-DEC-09 02:50	091203-1
	Cadmium	48.3	ug/L	50	ug/L	96.5	90.0 - 110.0	MS	04-DEC-09 02:50	091203-1
	Chromium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	04-DEC-09 02:50	091203-1
	Lead	51	ug/L	50	ug/L	102	90.0 - 110.0	MS	04-DEC-09 02:50	091203-1
	Selenium	48.5	ug/L	50	ug/L	97.1	90.0 - 110.0	MS	04-DEC-09 02:50	091203-1
	Silver	49.8	ug/L	50	ug/L	99.5	90.0 - 110.0	MS	04-DEC-09 02:50	091203-1
CCV03										
	Mercury	5.05	ug/L	5	ug/L	101	80.0 - 120.0	AV	01-DEC-09 10:42	120109W3-2
	Arsenic	47.8	ug/L	50	ug/L	95.7	90.0 - 110.0	MS	04-DEC-09 03:22	091203-1
	Barium	49	ug/L	50	ug/L	98	90.0 - 110.0	MS	04-DEC-09 03:22	091203-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-600-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	04-DEC-09 03:22	091203-1
	Chromium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	04-DEC-09 03:22	091203-1
	Lead	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	04-DEC-09 03:22	091203-1
	Selenium	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	04-DEC-09 03:22	091203-1
	Silver	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	04-DEC-09 03:22	091203-1
CCV04										
	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	01-DEC-09 11:06	120109W3-2
CCV05										
	Mercury	4.86	ug/L	5	ug/L	97.3	80.0 – 120.0	AV	01-DEC-09 11:29	120109W3-2
CCV06										
	Mercury	4.95	ug/L	5	ug/L	99	80.0 – 120.0	AV	01-DEC-09 11:52	120109W3-2
CCV07										
	Mercury	4.89	ug/L	5	ug/L	97.7	80.0 – 120.0	AV	01-DEC-09 12:15	120109W3-2
CCV08										
	Mercury	4.9	ug/L	5	ug/L	97.9	80.0 – 120.0	AV	01-DEC-09 12:38	120109W3-2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-600-1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.203	ug/L	.2	ug/L	101.5	70.0 - 130.0	AV	01-DEC-09 09:54	120109W3-2
	Lead	2.24	ug/L	2	ug/L	111.9	70.0 - 130.0	MS	04-DEC-09 02:31	091203-1
	Silver	1.05	ug/L	1	ug/L	104.8	70.0 - 130.0	MS	04-DEC-09 02:31	091203-1
	Arsenic	5.51	ug/L	5	ug/L	110.2	70.0 - 130.0	MS	04-DEC-09 02:31	091203-1
	Barium	2.07	ug/L	2	ug/L	103.3	70.0 - 130.0	MS	04-DEC-09 02:31	091203-1
	Cadmium	1.07	ug/L	1	ug/L	106.8	70.0 - 130.0	MS	04-DEC-09 02:31	091203-1
	Chromium	11	ug/L	10	ug/L	109.7	70.0 - 130.0	MS	04-DEC-09 02:31	091203-1
	Selenium	5.38	ug/L	5	ug/L	107.6	70.0 - 130.0	MS	04-DEC-09 02:31	091203-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–600–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 09:52	120109W3–2
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	04–DEC–09 02:28	091203–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	04–DEC–09 02:28	091203–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	04–DEC–09 02:28	091203–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	04–DEC–09 02:28	091203–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	04–DEC–09 02:28	091203–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	04–DEC–09 02:28	091203–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	04–DEC–09 02:28	091203–1
CCB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 09:58	120109W3–2
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	04–DEC–09 02:44	091203–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	04–DEC–09 02:44	091203–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	04–DEC–09 02:44	091203–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	04–DEC–09 02:44	091203–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	04–DEC–09 02:44	091203–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	04–DEC–09 02:44	091203–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	04–DEC–09 02:44	091203–1
CCB02										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 10:21	120109W3–2
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	04–DEC–09 02:53	091203–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	04–DEC–09 02:53	091203–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	04–DEC–09 02:53	091203–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	04–DEC–09 02:53	091203–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	04–DEC–09 02:53	091203–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	04–DEC–09 02:53	091203–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	04–DEC–09 02:53	091203–1
CCB03										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 10:44	120109W3–2
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	04–DEC–09 03:25	091203–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	04–DEC–09 03:25	091203–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	04–DEC–09 03:25	091203–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–600–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	04–DEC–09 03:25	091203–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	04–DEC–09 03:25	091203–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	04–DEC–09 03:25	091203–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	04–DEC–09 03:25	091203–1
CCB04	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 11:07	120109W3–2
CCB05	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 11:31	120109W3–2
CCB06	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 11:54	120109W3–2
CCB07	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 12:17	120109W3–2
CCB08	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	01–DEC–09 12:40	120109W3–2

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-600-1

Contract: LANL01004

Matrix: TCLP

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201980091								
	Arsenic	0.016	mg/L	+/-0.05	U	MS	0.016	0.05
	Barium	0.006	mg/L	+/-0.02	U	MS	0.006	0.02
	Cadmium	-0.00151	mg/L	+/-0.01	J	MS	0.0011	0.01
	Chromium	0.02	mg/L	+/-0.1	U	MS	0.02	0.1
	Lead	0.005	mg/L	+/-0.02	U	MS	0.005	0.02
	Selenium	0.01	mg/L	+/-0.05	U	MS	0.01	0.05
	Silver	0.002	mg/L	+/-0.01	U	MS	0.002	0.01
1201980094								
	Mercury	0.00066	mg/L	+/-0.002	U	AV	0.00066	0.002
1201982488								
	Arsenic	0.016	mg/L	+/-0.05	U	MS	0.016	0.05
	Barium	0.006	mg/L	+/-0.02	U	MS	0.006	0.02
	Cadmium	0.0011	mg/L	+/-0.01	U	MS	0.0011	0.01
	Chromium	0.02	mg/L	+/-0.1	U	MS	0.02	0.1
	Lead	0.005	mg/L	+/-0.02	U	MS	0.005	0.02
	Selenium	0.01	mg/L	+/-0.05	U	MS	0.01	0.05
	Silver	0.002	mg/L	+/-0.01	U	MS	0.002	0.01
1201982787								
	Mercury	0.00066	mg/L	+/-0.002	U	AV	0.00066	0.002

METALS
-4-
Interference Check Sample

SDG No: 10-600-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	-0.085	ug/L					04-DEC-09 02:34	091203-1
	Barium	0.659	ug/L					04-DEC-09 02:34	091203-1
	Cadmium	0.437	ug/L					04-DEC-09 02:34	091203-1
	Chromium	2.69	ug/L					04-DEC-09 02:34	091203-1
	Lead	0.162	ug/L					04-DEC-09 02:34	091203-1
	Selenium	-1.21	ug/L					04-DEC-09 02:34	091203-1
	Silver	0.083	ug/L					04-DEC-09 02:34	091203-1
ICSAB01									
	Arsenic	20.5	ug/L	20	ug/L	103	80.0 - 120.0	04-DEC-09 02:37	091203-1
	Barium	21.0	ug/L	20.67	ug/L	102	80.0 - 120.0	04-DEC-09 02:37	091203-1
	Cadmium	20.0	ug/L	20.4	ug/L	98.3	80.0 - 120.0	04-DEC-09 02:37	091203-1
	Chromium	24.1	ug/L	23.7	ug/L	102	80.0 - 120.0	04-DEC-09 02:37	091203-1
	Lead	21.2	ug/L	20.5	ug/L	103	80.0 - 120.0	04-DEC-09 02:37	091203-1
	Selenium	18.9	ug/L	20	ug/L	94.4	80.0 - 120.0	04-DEC-09 02:37	091203-1
	Silver	19.4	ug/L	20	ug/L	97.2	80.0 - 120.0	04-DEC-09 02:37	091203-1

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-600-1 **Client ID** WST16-10-4667S

Contract: LANL01004 **Level:** Low

Matrix: TCLP **% Solids:**

Sample ID: 241191001 **Spike ID:** 1201980089

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/L	75-125	4.68		0.016	U	5.26	88.9		MS
Barium	mg/L	75-125	8.48		0.597		10.5	74.9	N	MS
Cadmium	mg/L	75-125	.979		0.0011	U	1.05	93		MS
Chromium	mg/L	75-125	4.15		0.0302	J	5.26	78.2		MS
Lead	mg/L	75-125	4		0.005	U	5.26	76		MS
Selenium	mg/L	75-125	.963		0.01	U	1.05	91.4		MS
Silver	mg/L	75-125	.469		0.002	U	.526	89.1		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–600–1 **Client ID** WST16–10–4667S

Contract: LANL01004 **Level:** Low

Matrix: TCLP **% Solids:**

Sample ID: 241191001 **Spike ID:** 1201980092

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/L	75–125	.0115		0.00066	U	.02	57.3	N	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–600–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: TCLP **Level:** Low **Client ID:** WST16–10–4667D

Sample ID: 241191001 **Duplicate ID:** 1201982490 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/L		0.016	U	0.016	U			MS
Barium	mg/L	+/–20%	0.597		0.599		.221		MS
Cadmium	mg/L		0.0011	U	0.0011	U			MS
Chromium	mg/L	+/–.1	0.0302	J	0.032	J	6.05		MS
Lead	mg/L		0.005	U	0.005	U			MS
Selenium	mg/L		0.01	U	0.01	U			MS
Silver	mg/L		0.002	U	0.002	U			MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-600-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: TCLP **Level:** Low **Client ID:** WST16-10-4667D

Sample ID: 241191001 **Duplicate ID:** 1201982789 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/L		0.00066	U	0.00066	U			AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-600-1

Contract: LANL01004

Aqueous LCS Source:O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201982489								
	Arsenic	mg/L	.5	.488		97.6	80-120	MS
	Barium	mg/L	.5	.498		99.5	80-120	MS
	Cadmium	mg/L	.5	.503		101	80-120	MS
	Chromium	mg/L	.5	.511		102	80-120	MS
	Lead	mg/L	.5	.525		105	80-120	MS
	Selenium	mg/L	.5	.486		97.1	80-120	MS
	Silver	mg/L	.5	.522		104	80-120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-600-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201982788								
	Mercury	mg/L	.02	.0193		96.7	80-120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-600-1 **Client ID** WST16-10-4667L

Contract: LANL01004

Matrix: TCLP **Level:** Low

Sample ID: 241191001 **Serial Dilution ID:** 1201982492

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	1.6	U	8	U				MS
Barium	59.7		61		2.18			MS
Cadmium	.11	U	.55	U				MS
Chromium	3.02	J	10	U	100			MS
Lead	.5	U	2.5	U				MS
Selenium	1	U	5	U				MS
Silver	.2	U	1	U				MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–600–1 **Client ID** WST16–10–4667L

Contract: LANL01004

Matrix: TCLP **Level:** Low

Sample ID: 241191001 **Serial Dilution ID:** 1201982806

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-600-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	927297						
1201982488	MB for batch 927297	MB	TCLP	01-DEC-09	5mL	50mL	
1201980091	TB for batch 926100	TB	TCLP	01-DEC-09	5mL	50mL	
1201982489	LCS for batch 927297	LCS	TCLP	01-DEC-09	5mL	50mL	
1201980089	WST16-10-4667S	MS	TCLP	01-DEC-09	5mL	50mL	
1201982490	WST16-10-4667D	DUP	TCLP	01-DEC-09	5mL	50mL	
241527001	WST03-10-2132	SAMPLE	TCLP	01-DEC-09	5mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-600-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	927418						
1201982787	MB for batch 927418	MB	TCLP	30-NOV-09	2mL	20mL	
1201980094	TB for batch 926103	TB	TCLP	30-NOV-09	2mL	20mL	
1201982788	LCS for batch 927418	LCS	TCLP	30-NOV-09	2mL	20mL	
1201980092	WST16-10-4667S	MS	TCLP	30-NOV-09	2mL	20mL	
1201982789	WST16-10-4667D	DUP	TCLP	30-NOV-09	2mL	20mL	
241527001	WST03-10-2132	SAMPLE	TCLP	30-NOV-09	2mL	20mL	

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 04-DEC-09 **End Date:** 04-DEC-09

Client Sdg: 10-600-1
Method MS
Data File: 091203-1

Samp No.	D/F	Run Time	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
S0.0	1	02:15	X	X	X	X	X		X	X
S10	1	02:18	X	X	X	X	X		X	X
S100	1	02:21	X	X	X	X	X		X	X
ICV01	1	02:24	X	X	X	X	X		X	X
ICB01	1	02:28	X	X	X	X	X		X	X
CRDL01	1	02:31	X	X	X	X	X		X	X
ICSA01	1	02:34	X	X	X	X	X		X	X
ICSAB01	1	02:37	X	X	X	X	X		X	X
CCV01	1	02:40	X	X	X	X	X		X	X
CCB01	1	02:44	X	X	X	X	X		X	X
LR01	1	02:47	X	X	X	X	X		X	X
CCV02	1	02:50	X	X	X	X	X		X	X
CCB02	1	02:53	X	X	X	X	X		X	X
1201980091	1	02:56	X	X	X	X	X		X	X
1201982488	1	02:59	X	X	X	X	X		X	X
1201982489	1	03:03	X	X	X	X	X		X	X
ZZZZZZ	1	03:06								
1201982490	1	03:09	X	X	X	X	X		X	X
1201980089	1	03:12	X	X	X	X	X		X	X
1201982492	5	03:15	X	X	X	X	X		X	X
241527001	1	03:19	X	X	X	X	X		X	X
CCV03	1	03:22	X	X	X	X	X		X	X
CCB03	1	03:25	X	X	X	X	X		X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 01-DEC-09 **End Date:** 01-DEC-09

Client Sdg: 10-600-1
Method AV
Data File: 120109W3-2

Samp No.	D/F	Run Time	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
S0.0	1	09:39						X		
S0.2	1	09:41						X		
S0.5	1	09:43						X		
S2.0	1	09:45						X		
S5.0	1	09:47						X		
S10.0	1	09:49						X		
ICV01	1	09:50						X		
ICB01	1	09:52						X		
CRDL01	1	09:54						X		
CCV01	1	09:56						X		
CCB01	1	09:58						X		
ZZZZZZ	1	10:00								
ZZZZZZ	1	10:02								
ZZZZZZ	1	10:04								
ZZZZZZ	1	10:06								
ZZZZZZ	1	10:08								
ZZZZZZ	5	10:10								
ZZZZZZ	1	10:12								
ZZZZZZ	1	10:14								
ZZZZZZ	1	10:15								
ZZZZZZ	1	10:17								
CCV02	1	10:19						X		
CCB02	1	10:21						X		
ZZZZZZ	1	10:23								
ZZZZZZ	1	10:25								
ZZZZZZ	1	10:27								
ZZZZZZ	5	10:29								
ZZZZZZ	1	10:31								
ZZZZZZ	1	10:33								
ZZZZZZ	1	10:35								
ZZZZZZ	1	10:37								
ZZZZZZ	1	10:39								
ZZZZZZ	1	10:40								
CCV03	1	10:42						X		
CCB03	1	10:44						X		
ZZZZZZ	1	10:46								
ZZZZZZ	1	10:48								
ZZZZZZ	1	10:50								
ZZZZZZ	1	10:52								
ZZZZZZ	1	10:54								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time								
ZZZZZZ	1	10:56								
ZZZZZZ	1	10:58								
ZZZZZZ	1	11:00								
ZZZZZZ	1	11:02								
ZZZZZZ	1	11:04								
CCV04	1	11:06						X		
CCB04	1	11:07						X		
ZZZZZZ	1	11:09								
ZZZZZZ	1	11:11								
ZZZZZZ	5	11:13								
ZZZZZZ	1	11:15								
ZZZZZZ	1	11:17								
ZZZZZZ	1	11:19								
ZZZZZZ	1	11:21								
ZZZZZZ	1	11:23								
ZZZZZZ	1	11:25								
ZZZZZZ	1	11:27								
CCV05	1	11:29						X		
CCB05	1	11:31						X		
ZZZZZZ	1	11:33								
ZZZZZZ	1	11:34								
ZZZZZZ	1	11:36								
ZZZZZZ	1	11:38								
ZZZZZZ	1	11:40								
ZZZZZZ	1	11:42								
ZZZZZZ	1	11:44								
ZZZZZZ	1	11:46								
ZZZZZZ	1	11:48								
ZZZZZZ	1	11:50								
CCV06	1	11:52						X		
CCB06	1	11:54						X		
ZZZZZZ	1	11:56								
ZZZZZZ	5	11:58								
ZZZZZZ	1	12:00								
1201980094	1	12:01						X		
1201982787	1	12:03						X		
1201982788	1	12:05						X		
ZZZZZZ	1	12:07								
1201980092	1	12:09						X		
1201982789	1	12:11						X		

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
1201982806	5	12:13						X		
CCV07	1	12:15						X		
CCB07	1	12:17						X		
241527001	1	12:19						X		
ZZZZZZ	1	12:21								
ZZZZZZ	1	12:23								
ZZZZZZ	1	12:25								
ZZZZZZ	1	12:27								
ZZZZZZ	1	12:29								
ZZZZZZ	1	12:31								
ZZZZZZ	5	12:32								
ZZZZZZ	1	12:34								
ZZZZZZ	1	12:36								
CCV08	1	12:38						X		
CCB08	1	12:40						X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-600-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Arsenic		1.6	5
	Barium		0.6	2
	Cadmium		0.11	1
	Chromium		2.0	10
	Lead		0.5	2
	Selenium		1.0	5
	Silver		0.2	1

METALS
–10–
Instrument Detection Limits

SDG NO. 10–600–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Mercury		0.066	.2

METALS
–12–
Linear Ranges

SDG NO. 10–600–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Barium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09

Raw Data

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, December 03, 2009 09:59:14
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1385
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5499.9	5499.859	78.867	1.4
	Mg	24.0	38658.0	38658.041	454.705	1.2
	Co	58.9	88191.4	88191.396	684.613	0.8
	Rh	102.9	168201.6	168201.639	889.988	0.5
	In	114.9	218917.1	218917.058	1336.731	0.6
	Pb	208.0	146778.0	146778.003	933.285	0.6
⌈>	Ba	137.9	208317.2	208317.216	1743.709	0.8
⌊	Ba++	69.0	4386.9	0.021	0.001	2.5
⌈>	Ce	139.9	260912.2	260912.211	2270.597	0.9
⌊	CeO	155.9	5627.2	0.022	0.000	1.2
	Bkgd	220.0	18.3	18.300	1.924	10.5

Current Optimization File Data

Current Value	Description
0.81	Nebulizer Gas Flow
4.50	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	7	6.3	5812.8
Co	59	7	6.5	92222.7
In	115	7	6.8	229189.8

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	595	2075	0.603
Be	9.0	9.1	2053	2090	0.618
Mg	24.0	24.0	5683	2080	0.622
Mg	25.0	24.9	5923	2095	0.609
Mg	26.0	26.0	6172	2085	0.610
Co	58.9	58.9	14186	2110	0.624
Rh	102.9	102.9	24878	2175	0.593
In	114.9	114.9	27792	2195	0.596
Ce	139.9	139.9	33864	2210	0.626
Pb	206.0	206.0	49948	2290	0.659
Pb	207.0	206.9	50147	2270	0.643
Pb	208.0	208.0	50451	2280	0.688
U	238.1	238.1	57733	2295	0.727

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Friday, December 04, 2009 02:15:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\Blank.323

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		373360	
	Cr	52		ug/L		-4546	
	Cr	53		ug/L		157757	
>	Ge	74		ug/L		361914	
	As	75		ug/L		271	
	Se	77		ug/L		10127	
	Se	82		ug/L		-35	
	Kr	83		ug/L		131	
	Ag	107		ug/L		97	
	Cd	111		ug/L		49	
	Cd	114		ug/L		89	
>	In	115		ug/L		208448	
	Ba	135		ug/L		51	
	Ba	137		ug/L		76	
>	Lu	175		ug/L		310310	
	Pb	208		ug/L		1185	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Lu	175	Linear Thru Zero	
Pb	208	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45					
	Cr	52					
	Cr	53					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Ba	135					
	Ba	137					
>	Lu	175					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Friday, December 04, 2009 02:18:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\Standard 1.324

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		372534	372534.157
	Cr	52	10.000	ug/L	3.204	41899	0.125
	Cr	53		ug/L		162562	0.014
>	Ge	74		ug/L		361318	361318.458
	As	75	10.000	ug/L	8.203	10397	0.028
	Se	77		ug/L		10723	0.002
	Se	82	10.000	ug/L	2.424	953	0.003
	Kr	83		ug/L		124	-0.000
	Ag	107	10.000	ug/L	2.172	49228	0.235
	Cd	111	10.000	ug/L	4.896	11776	0.056
	Cd	114		ug/L		27828	0.133
>	In	115		ug/L		208943	208943.047
	Ba	135		ug/L		12643	0.040
	Ba	137	10.000	ug/L	2.725	22410	0.071
>	Lu	175		ug/L		312723	312723.036
	Pb	208	10.000	ug/L	0.982	208264	0.662

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45					
	Cr	52					
	Cr	53					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Ba	135					
	Ba	137					
>	Lu	175					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Friday, December 04, 2009 02:21:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\Standard 2.325

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		365551	365550.848
	Cr	52	99.981	ug/L	3.096	442577	1.223
	Cr	53		ug/L		180675	0.072
>	Ge	74		ug/L		357029	357029.379
	As	75	100.066	ug/L	1.687	107650	0.301
	Se	77		ug/L		15334	0.015
	Se	82	100.003	ug/L	2.501	9757	0.027
	Kr	83		ug/L		134	0.000
	Ag	107	99.973	ug/L	0.936	468158	2.291
	Cd	111	100.014	ug/L	1.547	116424	0.570
	Cd	114		ug/L		274412	1.343
>	In	115		ug/L		204352	204351.825
	Ba	135		ug/L		124372	0.401
	Ba	137	99.991	ug/L	0.674	219403	0.708
>	Lu	175		ug/L		309838	309837.559
	Pb	208	99.930	ug/L	1.684	1916889	6.184

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45					
|	Cr	52					
⌊	Cr	53					
⌈>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
⌊>	In	115					
⌈	Ba	135					
|	Ba	137					
|>	Lu	175					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Friday, December 04, 2009 02:24:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 1.326

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		359644	359644.275
	Cr	52	**51.735**	ug/L	3.461	223159	0.633
	Cr	53		ug/L		154387	0.007
>	Ge	74		ug/L		359048	359047.699
	As	75	**48.169**	ug/L	0.862	52258	0.145
	Se	77		ug/L		11494	0.004
	Se	82	**49.624**	ug/L	3.029	4853	0.014
	Kr	83		ug/L		135	0.000
	Ag	107	**50.876**	ug/L	3.492	239761	1.166
	Cd	111	**49.668**	ug/L	1.447	58218	0.283
	Cd	114		ug/L		138933	0.675
>	In	115		ug/L		205697	205696.985
	Ba	135		ug/L		62439	0.199
	Ba	137	**49.276**	ug/L	1.798	109470	0.349
>	Lu	175		ug/L		313656	313656.004
	Pb	208	**52.083**	ug/L	2.796	1011712	3.223

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		96.3			
	Cr	52	103.469				
	Cr	53					
>	Ge	74		99.2			
	As	75	96.338				
	Se	77					
	Se	82	99.247				
	Kr	83					
	Ag	107	101.753				
	Cd	111	99.336				
	Cd	114					
>	In	115		98.7			
	Ba	135					
	Ba	137	98.551				
>	Lu	175		101.1			
	Pb	208	104.166				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Friday, December 04, 2009 02:28:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 2.327

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		367821	367821.150
	Cr	52	**0.160**	ug/L	35.882	-3757	0.002
	Cr	53		ug/L		147665	-0.021
>	Ge	74		ug/L		357839	357839.212
	As	75	**-0.272**	ug/L	185.821	-27	-0.001
	Se	77		ug/L		9464	-0.002
	Se	82	**0.146**	ug/L	237.205	-20	0.000
	Kr	83		ug/L		119	-0.000
	Ag	107	**0.008**	ug/L	13.910	133	0.000
	Cd	111	**0.004**	ug/L	266.086	53	0.000
	Cd	114		ug/L		102	0.000
>	In	115		ug/L		203509	203508.507
	Ba	135		ug/L		65	0.000
	Ba	137	**0.005**	ug/L	10.922	86	0.000
>	Lu	175		ug/L		309579	309579.457
	Pb	208	**0.005**	ug/L	72.140	1282	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		98.5			
	Cr	52					
	Cr	53					
>	Ge	74		98.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.6			
	Ba	135					
	Ba	137					
>	Lu	175		99.8			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Friday, December 04, 2009 02:31:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 3.328

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		359118	359117.517
	Cr	52	**10.968**	ug/L	0.888	43822	0.134
	Cr	53		ug/L		151494	-0.001
>	Ge	74		ug/L		355301	355301.410
	As	75	**5.512**	ug/L	10.639	6154	0.017
	Se	77		ug/L		9480	-0.001
	Se	82	**5.382**	ug/L	5.432	491	0.001
	Kr	83		ug/L		118	-0.000
	Ag	107	**1.048**	ug/L	2.141	4932	0.024
	Cd	111	**1.068**	ug/L	2.393	1273	0.006
	Cd	114		ug/L		2957	0.014
>	In	115		ug/L		201531	201531.090
	Ba	135		ug/L		2572	0.008
	Ba	137	**2.066**	ug/L	2.134	4568	0.015
>	Lu	175		ug/L		307240	307239.994
	Pb	208	**2.238**	ug/L	3.357	43702	0.138

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		96.2			
	Cr	52	109.677				
	Cr	53					
>	Ge	74		98.2			
	As	75	110.232				
	Se	77					
	Se	82	107.635				
	Kr	83					
	Ag	107	104.764				
	Cd	111	106.801				
	Cd	114					
>	In	115		96.7			
	Ba	135					
	Ba	137	103.312				
>	Lu	175		99.0			
	Pb	208	111.891				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Friday, December 04, 2009 02:34:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 4.329

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		337461	337461.089
	Cr	52	**2.689**	ug/L	2.608	6994	0.033
	Cr	53		ug/L		104771	-0.112
>	Ge	74		ug/L		335287	335287.452
	As	75	**-0.085**	ug/L	406.049	168	-0.000
	Se	77		ug/L		8171	-0.004
	Se	82	**-1.211**	ug/L	16.887	-144	-0.000
	Kr	83		ug/L		307	0.001
	Ag	107	**0.083**	ug/L	6.147	455	0.002
	Cd	111	**0.437**	ug/L	44.916	522	0.002
	Cd	114		ug/L		7595	0.039
>	In	115		ug/L		192301	192300.715
	Ba	135		ug/L		833	0.003
	Ba	137	**0.659**	ug/L	1.264	1433	0.005
>	Lu	175		ug/L		292146	292145.928
	Pb	208	**0.162**	ug/L	1.113	4049	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		90.4			
	Cr	52	72.670				
	Cr	53					
>	Ge	74		92.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111	109.176				
	Cd	114					
>	In	115		92.3			
	Ba	135					
	Ba	137	98.293				
>	Lu	175		94.1			
	Pb	208	81.144				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, December 04, 2009 02:37:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 5.330

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		338469	338468.924
	Cr	52	**24.076**	ug/L	2.158	95580	0.295
	Cr	53		ug/L		128204	-0.044
>	Ge	74		ug/L		339660	339660.424
	As	75	**20.502**	ug/L	5.064	21183	0.062
	Se	77		ug/L		10954	0.004
	Se	82	**18.878**	ug/L	5.006	1725	0.005
	Kr	83		ug/L		331	0.001
	Ag	107	**19.435**	ug/L	1.190	86109	0.445
	Cd	111	**20.044**	ug/L	3.117	22095	0.114
	Cd	114		ug/L		58950	0.305
>	In	115		ug/L		193174	193174.010
	Ba	135		ug/L		24953	0.085
	Ba	137	**20.985**	ug/L	2.773	43611	0.149
>	Lu	175		ug/L		293083	293082.826
	Pb	208	**21.148**	ug/L	0.382	384683	1.309

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		90.7			
|	Cr	52	101.584				
⌊	Cr	53					
⌈>	Ge	74		93.9			
|	As	75	102.511				
|	Se	77					
|	Se	82	94.388				
⌊	Kr	83					
⌈	Ag	107	97.176				
|	Cd	111	98.253				
|	Cd	114					
⌊>	In	115		92.7			
⌈	Ba	135					
|	Ba	137	101.522				
|>	Lu	175		94.4			
⌊	Pb	208	104.693				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 04, 2009 02:40:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.331

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		351035	351034.815
	Cr	52	**52.011**	ug/L	2.887	219083	0.636
	Cr	53		ug/L		146998	-0.004
>	Ge	74		ug/L		352423	352423.171
	As	75	**47.650**	ug/L	3.403	50728	0.143
	Se	77		ug/L		10651	0.002
	Se	82	**48.519**	ug/L	1.399	4655	0.013
	Kr	83		ug/L		125	-0.000
	Ag	107	**51.131**	ug/L	3.495	234903	1.171
	Cd	111	**49.431**	ug/L	1.279	56495	0.282
	Cd	114		ug/L		133759	0.667
>	In	115		ug/L		200554	200554.470
	Ba	135		ug/L		62051	0.201
	Ba	137	**49.099**	ug/L	3.230	107080	0.348
>	Lu	175		ug/L		307987	307987.345
	Pb	208	**51.827**	ug/L	2.648	988566	3.207

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		94.0			
	Cr	52	104.021				
	Cr	53					
>	Ge	74		97.4			
	As	75	95.301				
	Se	77					
	Se	82	97.038				
	Kr	83					
	Ag	107	102.261				
	Cd	111	98.863				
	Cd	114					
>	In	115		96.2			
	Ba	135					
	Ba	137	98.198				
>	Lu	175		99.3			
	Pb	208	103.655				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 04, 2009 02:44:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.332

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		357983	357983.169
	Cr	52	0.003	ug/L	2603.528	-4346	0.000
	Cr	53		ug/L		137917	-0.037
>	Ge	74		ug/L		356466	356466.152
	As	75	-0.159	ug/L	221.285	95	-0.000
	Se	77		ug/L		8635	-0.004
	Se	82	0.086	ug/L	196.945	-26	0.000
	Kr	83		ug/L		114	-0.000
	Ag	107	0.010	ug/L	28.853	140	0.000
	Cd	111	0.009	ug/L	86.018	58	0.000
	Cd	114		ug/L		89	0.000
>	In	115		ug/L		204037	204037.249
	Ba	135		ug/L		64	0.000
	Ba	137	0.008	ug/L	40.913	93	0.000
>	Lu	175		ug/L		308464	308463.850
	Pb	208	0.004	ug/L	84.230	1261	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		95.9			
|	Cr	52					
⌊	Cr	53					
⌈>	Ge	74		98.5			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
⌊>	In	115		97.9			
⌈	Ba	135					
|	Ba	137					
|>	Lu	175		99.4			
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Friday, December 04, 2009 02:47:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 10.333

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		**ug/L**		342984	342984.103
	Cr	52	**838.810**	**ug/L**	2.081	3515237	10.264
	Cr	53		**ug/L**		606269	1.345
>	Ge	74		**ug/L**		338224	338224.359
	As	75	**861.868**	**ug/L**	0.888	876485	2.591
	Se	77		**ug/L**		42170	0.097
	Se	82	**478.426**	**ug/L**	2.940	44338	0.131
	Kr	83		**ug/L**		199	0.000
	Ag	107	**239.680**	**ug/L**	0.330	1043269	5.491
	Cd	111	**890.448**	**ug/L**	2.055	963125	5.071
	Cd	114		**ug/L**		2127976	11.202
>	In	115		**ug/L**		189957	189957.304
	Ba	135		**ug/L**		1064861	3.555
	Ba	137	**820.201**	**ug/L**	1.488	1739348	5.807
>	Lu	175		**ug/L**		299525	299525.461
	Pb	208	**3933.621**	**ug/L**	1.888	72910817	243.428

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		91.9			
	Cr	52	83.881				
	Cr	53					
>	Ge	74		93.5			
	As	75	86.187				
	Se	77					
	Se	82	95.685				
	Kr	83					
	Ag	107	95.872				
	Cd	111	89.045				
	Cd	114					
>	In	115		91.1			
	Ba	135					
	Ba	137	82.020				
>	Lu	175		96.5			
	Pb	208	78.672				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Cd	111	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)
QC Std 10	Pb	208	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Friday, December 04, 2009 02:50:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 11.334

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		360282	360281.841
	Cr	52	**52.013**	ug/L	2.389	224936	0.636
	Cr	53		ug/L		149276	-0.008
>	Ge	74		ug/L		363395	363395.166
	As	75	**47.619**	ug/L	2.872	52282	0.143
	Se	77		ug/L		10508	0.001
	Se	82	**48.543**	ug/L	2.552	4804	0.013
	Kr	83		ug/L		142	0.000
	Ag	107	**49.768**	ug/L	4.496	235627	1.140
	Cd	111	**48.270**	ug/L	3.411	56836	0.275
	Cd	114		ug/L		134659	0.651
>	In	115		ug/L		206666	206665.822
	Ba	135		ug/L		61712	0.194
	Ba	137	**48.108**	ug/L	3.022	108611	0.341
>	Lu	175		ug/L		318651	318650.845
	Pb	208	**50.973**	ug/L	0.577	1006348	3.154

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		96.5			
	Cr	52	104.027				
	Cr	53					
>	Ge	74		100.4			
	As	75	95.238				
	Se	77					
	Se	82	97.087				
	Kr	83					
	Ag	107	99.536				
	Cd	111	96.540				
	Cd	114					
>	In	115		99.1			
	Ba	135					
	Ba	137	96.216				
>	Lu	175		102.7			
	Pb	208	101.945				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Friday, December 04, 2009 02:53:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 12.335

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		359298	359297.803
	Cr	52	**0.093**	ug/L	33.878	-3965	0.001
	Cr	53		ug/L		140148	-0.032
>	Ge	74		ug/L		350412	350412.411
	As	75	**0.325**	ug/L	107.321	608	0.001
	Se	77		ug/L		8268	-0.004
	Se	82	**0.139**	ug/L	137.801	-20	0.000
	Kr	83		ug/L		118	-0.000
	Ag	107	**0.018**	ug/L	34.485	177	0.000
	Cd	111	**0.051**	ug/L	54.484	104	0.000
	Cd	114		ug/L		161	0.000
>	In	115		ug/L		199580	199580.189
	Ba	135		ug/L		88	0.000
	Ba	137	**0.036**	ug/L	54.572	152	0.000
>	Lu	175		ug/L		305770	305769.601
	Pb	208	**0.173**	ug/L	58.005	4466	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		96.2			
	Cr	52					
	Cr	53					
>	Ge	74		96.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.7			
	Ba	135					
	Ba	137					
>	Lu	175		98.5			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201980091
Sample Date/Time: Friday, December 04, 2009 02:56:45
Sample Type:
Sample Description: LANL 6020 TB
Number of Replicates: 3
Batch ID: 927298|1|baj
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\1201980091.336

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		373924	373924.086
	Cr	52	**0.682**	ug/L	20.843	-1425	0.008
	Cr	53		ug/L		225016	0.179
>	Ge	74		ug/L		349078	349077.751
	As	75	**-0.303**	ug/L	73.734	-59	-0.001
	Se	77		ug/L		15373	0.016
	Se	82	**-0.034**	ug/L	29.854	-37	-0.000
	Kr	83		ug/L		132	0.000
	Ag	107	**-0.005**	ug/L	63.827	70	-0.000
	Cd	111	**-0.151**	ug/L	19.818	-122	-0.001
	Cd	114		ug/L		49	-0.000
>	In	115		ug/L		193689	193689.324
	Ba	135		ug/L		249	0.001
	Ba	137	**0.168**	ug/L	9.763	435	0.001
>	Lu	175		ug/L		304210	304209.672
	Pb	208	**0.027**	ug/L	99.669	1674	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		100.2			
	Cr	52					
	Cr	53					
>	Ge	74		96.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.9			
	Ba	135					
	Ba	137					
>	Lu	175		98.0			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201982488
Sample Date/Time: Friday, December 04, 2009 02:59:55
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 927298|1|baj
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\1201982488.337

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		372523	372522.901
|	Cr	52	**-0.168**	ug/L	74.808	-5304	-0.002
⌊	Cr	53		ug/L		230549	0.196
⌈>	Ge	74		ug/L		354986	354985.788
|	As	75	**-0.112**	ug/L	101.185	147	-0.000
|	Se	77		ug/L		14998	0.014
|	Se	82	**0.188**	ug/L	125.255	-16	0.000
⌊	Kr	83		ug/L		118	-0.000
⌈	Ag	107	**-0.010**	ug/L	2.843	47	-0.000
|	Cd	111	**-0.008**	ug/L	118.598	38	-0.000
|	Cd	114		ug/L		41	-0.000
⌊>	In	115		ug/L		200783	200782.579
⌈	Ba	135		ug/L		48	-0.000
|	Ba	137	**0.000**	ug/L	1951.196	76	0.000
|>	Lu	175		ug/L		308292	308291.790
⌊	Pb	208	**-0.021**	ug/L	3.516	781	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		99.8			
	Cr	52					
	Cr	53					
>	Ge	74		98.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.3			
	Ba	135					
	Ba	137					
>	Lu	175		99.3			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201982489
Sample Date/Time: Friday, December 04, 2009 03:03:05
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 927298|1|baj
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\1201982489.338

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		377811	377811.349
	Cr	52	**51.082**	ug/L	3.597	231459	0.625
	Cr	53		ug/L		259608	0.265
>	Ge	74		ug/L		359006	359006.298
	As	75	**48.782**	ug/L	4.643	52889	0.147
	Se	77		ug/L		18475	0.023
	Se	82	**48.568**	ug/L	0.928	4748	0.013
	Kr	83		ug/L		151	0.000
	Ag	107	**52.195**	ug/L	2.105	240568	1.196
	Cd	111	**50.295**	ug/L	2.378	57648	0.286
	Cd	114		ug/L		135763	0.675
>	In	115		ug/L		201130	201129.565
	Ba	135		ug/L		62405	0.201
	Ba	137	**49.763**	ug/L	1.422	109334	0.352
>	Lu	175		ug/L		310140	310139.759
	Pb	208	**52.530**	ug/L	1.333	1009268	3.251

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Sc	45		101.2			
Cr	52					
Cr	53					
Ge	74		99.2			
As	75					
Se	77					
Se	82					
Kr	83					
Ag	107					
Cd	111					
Cd	114					
In	115		96.5			
Ba	135					
Ba	137					
Lu	175		99.9			
Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201982490
Sample Date/Time: Friday, December 04, 2009 03:09:28
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 927298|1|baj
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\1201982490.340

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		358687	358686.620
	Cr	52	**3.204**	ug/L	7.664	9688	0.039
	Cr	53		ug/L		209689	0.163
>	Ge	74		ug/L		334383	334382.872
	As	75	**-1.330**	ug/L	105.437	-1082	-0.004
	Se	77		ug/L		16338	0.021
	Se	82	**-0.195**	ug/L	89.580	-50	-0.000
	Kr	83		ug/L		150	0.000
	Ag	107	**-0.008**	ug/L	17.595	56	-0.000
	Cd	111	**-0.102**	ug/L	42.848	-67	-0.001
	Cd	114		ug/L		63	-0.000
>	In	115		ug/L		191607	191607.127
	Ba	135		ug/L		73459	0.242
	Ba	137	**59.873**	ug/L	1.545	128477	0.424
>	Lu	175		ug/L		302933	302933.331
	Pb	208	**0.016**	ug/L	5.134	1452	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		96.1			
|	Cr	52					
⌊	Cr	53					
⌈>	Ge	74		92.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
⌊>	In	115		91.9			
⌈	Ba	135					
|	Ba	137					
|>	Lu	175		97.6			
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201980089
Sample Date/Time: Friday, December 04, 2009 03:12:41
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 927298|1|baj
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\1201980089.341

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		367394	367394.188
	Cr	52	**414.778**	ug/L	1.868	1859810	5.075
	Cr	53		ug/L		461799	0.835
>	Ge	74		ug/L		340301	340300.699
	As	75	**468.065**	ug/L	2.512	478948	1.407
	Se	77		ug/L		22200	0.037
	Se	82	**96.256**	ug/L	1.836	8952	0.026
	Kr	83		ug/L		184	0.000
	Ag	107	**46.904**	ug/L	1.726	206355	1.075
	Cd	111	**97.875**	ug/L	1.495	107033	0.557
	Cd	114		ug/L		251868	1.312
>	In	115		ug/L		191971	191970.781
	Ba	135		ug/L		1131378	3.708
	Ba	137	**847.942**	ug/L	1.161	1831913	6.003
>	Lu	175		ug/L		305151	305151.118
	Pb	208	**400.073**	ug/L	1.467	7555629	24.758

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		98.4			
	Cr	52					
	Cr	53					
>	Ge	74		94.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.1			
	Ba	135					
	Ba	137					
>	Lu	175		98.3			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201982492
Sample Date/Time: Friday, December 04, 2009 03:15:52
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 927298|5|baj
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\1201982492.342

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		356280	356279.831
|	Cr	52	**0.473**	ug/L	1.673	-2274	0.006
⌊	Cr	53		ug/L		147825	-0.007
⌈>	Ge	74		ug/L		348786	348786.193
|	As	75	**0.289**	ug/L	80.877	561	0.001
|	Se	77		ug/L		7837	-0.006
|	Se	82	**0.187**	ug/L	87.204	-15	0.000
⌊	Kr	83		ug/L		123	-0.000
⌈	Ag	107	**0.002**	ug/L	107.724	103	0.000
|	Cd	111	**0.019**	ug/L	91.734	70	0.000
|	Cd	114		ug/L		76	-0.000
⌊>	In	115		ug/L		204654	204654.033
⌈	Ba	135		ug/L		15413	0.049
|	Ba	137	**12.211**	ug/L	3.047	27139	0.086
|>	Lu	175		ug/L		313200	313200.315
⌊	Pb	208	**0.031**	ug/L	19.925	1798	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		95.4			
	Cr	52					
	Cr	53					
>	Ge	74		96.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.2			
	Ba	135					
	Ba	137					
>	Lu	175		100.9			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241527001
Sample Date/Time: Friday, December 04, 2009 03:19:02
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 927298|1|ba|
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\241527001.343

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		364342	364342.120
	Cr	52	**0.735**	ug/L	13.892	-1163	0.009
	Cr	53		ug/L		216209	0.171
>	Ge	74		ug/L		343258	343258.064
	As	75	**-0.272**	ug/L	334.017	-19	-0.001
	Se	77		ug/L		13856	0.012
	Se	82	**-0.044**	ug/L	437.253	-37	-0.000
	Kr	83		ug/L		139	0.000
	Ag	107	**0.001**	ug/L	108.975	94	0.000
	Cd	111	**-0.061**	ug/L	70.782	-22	-0.000
	Cd	114		ug/L		221	0.001
>	In	115		ug/L		192885	192885.478
	Ba	135		ug/L		97337	0.317
	Ba	137	**77.515**	ug/L	2.499	168614	0.549
>	Lu	175		ug/L		307293	307292.752
	Pb	208	**0.110**	ug/L	5.932	3256	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		97.6			
	Cr	52					
	Cr	53					
>	Ge	74		94.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.5			
	Ba	135					
	Ba	137					
>	Lu	175		99.0			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 04, 2009 03:22:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.344

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		355538	355538.144
	Cr	52	**52.032**	ug/L	1.874	222032	0.637
	Cr	53		ug/L		163157	0.036
>	Ge	74		ug/L		357358	357357.981
	As	75	**47.840**	ug/L	3.112	51660	0.144
	Se	77		ug/L		10547	0.002
	Se	82	**49.287**	ug/L	1.903	4797	0.014
	Kr	83		ug/L		132	0.000
	Ag	107	**50.648**	ug/L	2.114	237982	1.160
	Cd	111	**49.193**	ug/L	1.944	57480	0.280
	Cd	114		ug/L		135150	0.659
>	In	115		ug/L		205082	205082.036
	Ba	135		ug/L		62310	0.199
	Ba	137	**48.993**	ug/L	0.909	108383	0.347
>	Lu	175		ug/L		312239	312239.267
	Pb	208	**51.520**	ug/L	1.957	996592	3.188

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		95.2			
	Cr	52	104.064				
	Cr	53					
>	Ge	74		98.7			
	As	75	95.680				
	Se	77					
	Se	82	98.575				
	Kr	83					
	Ag	107	101.297				
	Cd	111	98.387				
	Cd	114					
>	In	115		98.4			
	Ba	135					
	Ba	137	97.987				
>	Lu	175		100.6			
	Pb	208	103.040				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 04, 2009 03:25:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tclp.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.345

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		358823	358822.528
	Cr	52	**-0.183**	ug/L	29.491	-5169	-0.002
	Cr	53		ug/L		145786	-0.016
>	Ge	74		ug/L		352873	352872.830
	As	75	**-0.405**	ug/L	40.658	-166	-0.001
	Se	77		ug/L		7990	-0.005
	Se	82	**0.262**	ug/L	52.462	-9	0.000
	Kr	83		ug/L		114	-0.000
	Ag	107	**0.010**	ug/L	58.991	143	0.000
	Cd	111	**0.002**	ug/L	1013.182	50	0.000
	Cd	114		ug/L		90	0.000
>	In	115		ug/L		206130	206129.730
	Ba	135		ug/L		64	0.000
	Ba	137	**0.009**	ug/L	43.100	98	0.000
>	Lu	175		ug/L		314488	314487.865
	Pb	208	**0.005**	ug/L	65.837	1293	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		96.1			
	Cr	52					
	Cr	53					
>	Ge	74		97.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.9			
	Ba	135					
	Ba	137					
>	Lu	175		101.3			
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Analysis Begun

Logged In Analyst: Administrator
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\120109W1.SIF
Batch ID:
Results Data Set: 120109W3
Results Library: C:\data-AA\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank
Date Collected: 12/1/2009 09:37:52
Analyst:
Data Type: Original

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0005	0.0044	0.0005	09:38:53	Yes
2		[0.00]	0.0003	0.0016	0.0003	09:39:27	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0002				
%RSD:		0.00	39.44				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: S0.2
Date Collected: 12/1/2009 09:39:46
Analyst:
Data Type: Original

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0021	0.0097	0.0025	09:40:46	Yes
2		[0.2]	0.0021	0.0103	0.0025	09:41:21	Yes
Mean:		[0.2]	0.0021				
SD:		0.0	0.0000				
%RSD:		0.0	1.98				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01052 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: S0.5
Date Collected: 12/1/2009 09:41:40
Analyst:
Data Type: Original

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0058	0.0269	0.0062	09:42:41	Yes
2		[0.5]	0.0057	0.0252	0.0061	09:43:16	Yes
Mean:		[0.5]	0.0057				
SD:		0.0	0.0001				
%RSD:		0.0	1.48				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999290 Slope: 0.01153 Intercept: -0.00008

Sequence No.: 4
Autosampler Location: 4
Sample ID: S2.0
Date Collected: 12/1/2009 09:43:36
Analyst:
Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[2.0]	0.0234	0.1023	0.0238	09:44:37	Yes
2	[2.0]	0.0235	0.1023	0.0239	09:45:12	Yes
Mean:	[2.0]	0.0234				
SD:	0.0	0.0000				
%RSD:	0.0	0.04				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999953 Slope: 0.01178 Intercept: -0.00013

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/1/2009 09:45:32**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0549	0.2399	0.0553	09:46:34	Yes
2		[5.0]	0.0549	0.2388	0.0553	09:47:09	Yes
Mean:		[5.0]	0.0549				
SD:		0.0	0.0000				
%RSD:		0.0	0.07				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999591 Slope: 0.01101 Intercept: 0.00028

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/1/2009 09:47:29**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1094	0.4788	0.1098	09:48:30	Yes
2		[10.0]	0.1090	0.4747	0.1094	09:49:05	Yes
Mean:		[10.0]	0.1092				
SD:		0.0	0.0003				
%RSD:		0.0	0.24				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999891 Slope: 0.01090 Intercept: 0.00040

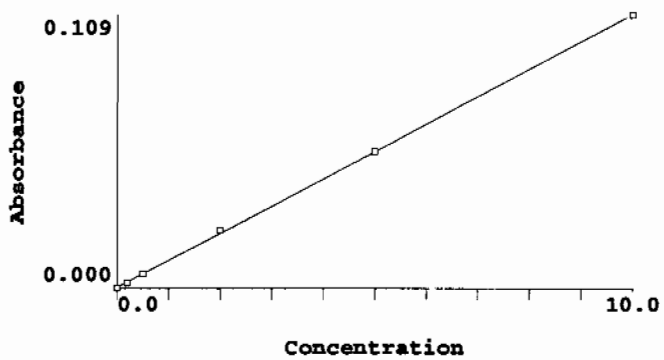

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.037	0.00	39.4
S0.2	0.0021	0.2	0.156	0.00	2.0
S0.5	0.0057	0.5	0.489	0.00	1.5
S2.0	0.0234	2.0	2.114	0.00	0.0
S5.0	0.0549	5.0	4.998	0.00	0.1
S10.0	0.1092	10.0	9.979	0.00	0.2

Correlation Coef.: 0.999891 Slope: 0.01090 Intercept: 0.00040

Sequence No.: 7
Sample ID: ICV
Analyst:

Autosampler Location: 9
Date Collected: 12/1/2009 09:49:23
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.088	5.088	0.0559	0.2442	0.0563	09:50:25	Yes
2	5.094	5.094	0.0559	0.2438	0.0563	09:50:59	Yes
Mean:	5.091	5.091	0.0559				
SD:	0.004	0.004	0.0000				
%RSD:	0.084	0.084	0.08				

QC value within limits for Hg 253.7 Recovery = 101.82%
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICB
Analyst:

Autosampler Location: 10
Date Collected: 12/1/2009 09:51:19
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0001	0.0022	0.0003	09:52:20	Yes
2	-0.031	-0.031	0.0001	0.0036	0.0005	09:52:55	Yes
Mean:	-0.037	-0.037	0.0000				
SD:	0.008	0.008	0.0001				
%RSD:	21.51	21.51	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CRDL
Analyst:

Autosampler Location: 11
Date Collected: 12/1/2009 09:53:15
Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.197	0.197	0.0026	0.0148	0.0029	09:54:16	Yes
2	0.208	0.208	0.0027	0.0148	0.0031	09:54:51	Yes
Mean:	0.203	0.203	0.0026				
SD:	0.008	0.008	0.0001				
%RSD:	3.842	3.842	3.25				

QC value within limits for Hg 253.7 Recovery = 101.31%
All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 12/1/2009 09:55:11
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.874	4.874	0.0535	0.2344	0.0539	09:56:12	Yes
2	4.866	4.866	0.0534	0.2324	0.0538	09:56:47	Yes
Mean:	4.870	4.870	0.0535				
SD:	0.006	0.006	0.0001				
%RSD:	0.125	0.125	0.12				

QC value within limits for Hg 253.7 Recovery = 97.40%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 12/1/2009 09:57:05
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0001	0.0011	0.0003	09:58:07	Yes
2	-0.048	-0.048	-0.0001	0.0013	0.0003	09:58:41	Yes
Mean:	-0.048	-0.048	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.254	0.254	1.11				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 1201981647|926843|1 **Date Collected: 12/1/2009 09:59:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981647|926843|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0001	0.0013	0.0003	10:00:02	Yes
2	-0.038	-0.038	-0.0000	0.0019	0.0004	10:00:37	Yes
Mean:	-0.040	-0.040	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	7.570	7.570	102.21				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 1201981648|926843|1 **Date Collected: 12/1/2009 10:00:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981648|926843|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.496	2.496	0.0276	0.1183	0.0280	10:02:00	Yes
2	2.495	2.495	0.0276	0.1179	0.0280	10:02:34	Yes
Mean:	2.496	2.496	0.0276				
SD:	0.001	0.001	0.0000				
%RSD:	0.036	0.036	0.04				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 241813005|926843|1 **Date Collected: 12/1/2009 10:02:55**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241813005|926843|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	-0.0001	0.0011	0.0003	10:03:55	Yes
2	-0.041	-0.041	-0.0000	0.0023	0.0004	10:04:30	Yes
Mean:	-0.043	-0.043	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	7.177	7.177	51.80				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 1201981649|926843|1 **Date Collected: 12/1/2009 10:04:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981649|926843|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0001	0.0017	0.0003	10:05:50	Yes
2	-0.038	-0.038	-0.0000	0.0026	0.0004	10:06:24	Yes
Mean:	-0.040	-0.040	-0.0000				
SD:	0.004	0.004	0.0000				

1	-0.043	-0.043	-0.0001	0.0019	0.0003	10:15:22	Yes
2	-0.045	-0.045	-0.0001	0.0017	0.0003	10:15:57	Yes
Mean:	-0.044	-0.044	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.550	2.550	15.78				

==========

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1201982808|927423|1 **Date Collected: 12/1/2009 10:16:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982808|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.943	1.943	0.0216	0.0948	0.0220	10:17:17	Yes
2	1.935	1.935	0.0215	0.0944	0.0219	10:17:52	Yes
Mean:	1.939	1.939	0.0215				
SD:	0.006	0.006	0.0001				
%RSD:	0.292	0.292	0.29				

==========

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/1/2009 10:18:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.892	4.892	0.0537	0.2325	0.0541	10:19:12	Yes
2	4.870	4.870	0.0535	0.2311	0.0539	10:19:47	Yes
Mean:	4.881	4.881	0.0536				
SD:	0.016	0.016	0.0002				
%RSD:	0.318	0.318	0.32				

QC value within limits for Hg 253.7 Recovery = 97.61%
All analyte(s) passed QC.

==========

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/1/2009 10:20:06**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0001	0.0011	0.0003	10:21:07	Yes
2	-0.042	-0.042	-0.0001	0.0010	0.0003	10:21:42	Yes
Mean:	-0.044	-0.044	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	5.767	5.767	35.34				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 241087001|927423|1 **Date Collected: 12/1/2009 10:22:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087001|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	-0.0001	0.0010	0.0003	10:23:03	Yes
2	-0.041	-0.041	-0.0000	0.0015	0.0003	10:23:38	Yes
Mean:	-0.043	-0.043	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.757	5.757	39.86				

==========

SD:	0.004	0.004	0.0000
%RSD:	7.840	7.840	45.46

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 241087004|927423|1 **Date Collected: 12/1/2009 10:33:38**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087004|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	0.0007	0.0003	10:34:38	Yes
2	-0.043	-0.043	-0.0001	0.0014	0.0003	10:35:13	Yes
Mean:	-0.046	-0.046	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	9.541	9.541	47.12				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 241087005|927423|1 **Date Collected: 12/1/2009 10:35:32**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087005|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0001	0.0010	0.0003	10:36:33	Yes
2	-0.048	-0.048	-0.0001	0.0015	0.0003	10:37:08	Yes
Mean:	-0.048	-0.048	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.927	0.927	3.95				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 241087006|927423|1 **Date Collected: 12/1/2009 10:37:27**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087006|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	-0.0001	0.0011	0.0003	10:38:28	Yes
2	-0.039	-0.039	-0.0000	0.0015	0.0004	10:39:02	Yes
Mean:	-0.041	-0.041	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	7.560	7.560	70.07				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 241087007|927423|1 **Date Collected: 12/1/2009 10:39:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087007|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	0.0007	0.0003	10:40:23	Yes
2	-0.052	-0.052	-0.0002	0.0007	0.0002	10:40:57	Yes
Mean:	-0.051	-0.051	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	2.253	2.253	8.19				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/1/2009 10:41:17**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.051	5.051	0.0555	0.2481	0.0559	10:42:17	Yes
2	5.052	5.052	0.0555	0.2460	0.0559	10:42:52	Yes
Mean:	5.051	5.051	0.0555				
SD:	0.001	0.001	0.0000				
%RSD:	0.022	0.022	0.02				

QC value within limits for Hg 253.7 Recovery = 101.03%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/1/2009 10:43:11**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0001	0.0014	0.0003	10:44:12	Yes
2	-0.049	-0.049	-0.0001	0.0008	0.0003	10:44:47	Yes
Mean:	-0.047	-0.047	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.283	3.283	14.89				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 241087008|927423|1 **Date Collected: 12/1/2009 10:45:06**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087008|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0001	0.0011	0.0003	10:46:07	Yes
2	-0.043	-0.043	-0.0001	0.0018	0.0003	10:46:43	Yes
Mean:	-0.046	-0.046	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	10.58	10.58	53.98				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 241087009|927423|1 **Date Collected: 12/1/2009 10:47:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087009|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0002	0.0004	0.0002	10:48:03	Yes
2	-0.050	-0.050	-0.0001	0.0010	0.0003	10:48:38	Yes
Mean:	-0.051	-0.051	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	2.616	2.616	9.63				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 241087010|927423|1 **Date Collected: 12/1/2009 10:48:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087010|927423|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0001	0.0011	0.0003	10:49:59	Yes
2	-0.050	-0.050	-0.0001	0.0010	0.0003	10:50:34	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.472	4.472	18.78				

Mean:	-0.048	-0.048	-0.0001
SD:	0.002	0.002	0.0000
%RSD:	3.944	3.944	16.73

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1201982731|927392|1 **Date Collected: 12/1/2009 11:00:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982731|927392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.028	2.028	0.0225	0.1011	0.0229	11:01:35	Yes
2	2.022	2.022	0.0224	0.1008	0.0228	11:02:10	Yes
Mean:	2.025	2.025	0.0225				
SD:	0.004	0.004	0.0000				
%RSD:	0.209	0.209	0.21				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 241715001|927392|1 **Date Collected: 12/1/2009 11:02:30**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241715001|927392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0001	0.0011	0.0003	11:03:31	Yes
2	-0.052	-0.052	-0.0002	0.0006	0.0002	11:04:05	Yes
Mean:	-0.051	-0.051	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.853	3.853	14.28				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/1/2009 11:04:25**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.999	4.999	0.0549	0.2442	0.0553	11:05:25	Yes
2	4.976	4.976	0.0546	0.2429	0.0550	11:06:00	Yes
Mean:	4.988	4.988	0.0548				
SD:	0.017	0.017	0.0002				
%RSD:	0.333	0.333	0.33				

QC value within limits for Hg 253.7 Recovery = 99.75%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/1/2009 11:06:19**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0002	0.0005	0.0002	11:07:20	Yes
2	-0.054	-0.054	-0.0002	0.0004	0.0002	11:07:55	Yes
Mean:	-0.053	-0.053	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	4.057	4.057	13.59				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 48 **Autosampler Location: 42**
Sample ID: 1201980752|927392|1 **Date Collected: 12/1/2009 11:08:14**

2	-0.050	-0.050	-0.0001	0.0009	0.0003	11:27:16	Yes
Mean:	-0.048	-0.048	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.354	6.354	27.69				

==========

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/1/2009 11:27:36**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.868	4.868	0.0535	0.2371	0.0539	11:28:36	Yes
2	4.859	4.859	0.0534	0.2360	0.0538	11:29:11	Yes
Mean:	4.864	4.864	0.0534				
SD:	0.006	0.006	0.0001				
%RSD:	0.131	0.131	0.13				

QC value within limits for Hg 253.7 Recovery = 97.28%
All analyte(s) passed QC.

==========

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/1/2009 11:29:30**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0001	0.0011	0.0003	11:30:30	Yes
2	-0.051	-0.051	-0.0002	0.0009	0.0002	11:31:05	Yes
Mean:	-0.050	-0.050	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.942	4.942	19.38				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 241757006|927392|1 **Date Collected: 12/1/2009 11:31:25**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241757006|927392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0002	0.0014	0.0002	11:32:26	Yes
2	-0.018	-0.018	0.0002	0.0055	0.0006	11:33:00	Yes
Mean:	-0.035	-0.035	0.0000				
SD:	0.023	0.023	0.0003				
%RSD:	66.76	66.76	>999.9%				

==========

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 241757007|927392|1 **Date Collected: 12/1/2009 11:33:20**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241757007|927392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0001	0.0011	0.0002	11:34:21	Yes
2	-0.047	-0.047	-0.0001	0.0015	0.0003	11:34:56	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.054	5.054	20.90				

==========

Sequence No.: 62 **Autosampler Location: 54**

%RSD:	7.607	7.607	33.04

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 1201982743|927398|1 **Date Collected: 12/1/2009 11:44:54**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982743|927398|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.995	1.995	0.0222	0.0994	0.0226	11:45:56	Yes
2	2.008	2.008	0.0223	0.1009	0.0227	11:46:30	Yes
Mean:	2.002	2.002	0.0222				
SD:	0.009	0.009	0.0001				
%RSD:	0.460	0.460	0.45				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241704001|927398|1 **Date Collected: 12/1/2009 11:46:50**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241704001|927398|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0002	0.0010	0.0002	11:47:52	Yes
2	-0.051	-0.051	-0.0001	0.0013	0.0002	11:48:27	Yes
Mean:	-0.051	-0.051	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	2.469	2.469	8.76				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201980849|927398|1 **Date Collected: 12/1/2009 11:48:48**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201980849|927398|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.303	1.303	0.0146	0.0658	0.0150	11:49:49	Yes
2	1.298	1.298	0.0146	0.0658	0.0150	11:50:24	Yes
Mean:	1.301	1.301	0.0146				
SD:	0.003	0.003	0.0000				
%RSD:	0.254	0.254	0.25				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/1/2009 11:50:45**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.976	4.976	0.0547	0.2390	0.0551	11:51:45	Yes
2	4.924	4.924	0.0541	0.2361	0.0545	11:52:20	Yes
Mean:	4.950	4.950	0.0544				
SD:	0.037	0.037	0.0004				
%RSD:	0.741	0.741	0.74				

QC value within limits for Hg 253.7 Recovery = 99.01%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/1/2009 11:52:39**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0002	0.0007	0.0002	11:53:40	Yes
2	-0.048	-0.048	-0.0001	0.0012	0.0003	11:54:14	Yes
Mean:	-0.050	-0.050	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.847	3.847	15.00				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 72 **Autosampler Location: 62**
Sample ID: 1201982744|927398|1 **Date Collected: 12/1/2009 11:54:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982744|927398|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0001	0.0012	0.0003	11:55:35	Yes
2	-0.049	-0.049	-0.0001	0.0014	0.0003	11:56:10	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.841	0.841	3.48				

==========

Sequence No.: 73 **Autosampler Location: 63**
Sample ID: 1201982747|927398|5 **Date Collected: 12/1/2009 11:56:30**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982747|927398|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	-0.0002	0.0008	0.0002	11:57:31	Yes
2	-0.050	-0.050	-0.0001	0.0012	0.0003	11:58:06	Yes
Mean:	-0.052	-0.052	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	4.920	4.920	17.17				

==========

Sequence No.: 74 **Autosampler Location: 64**
Sample ID: 241704002|927398|1 **Date Collected: 12/1/2009 11:58:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241704002|927398|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0002	0.0013	0.0002	11:59:27	Yes
2	-0.054	-0.054	-0.0002	0.0007	0.0002	12:00:02	Yes
Mean:	-0.052	-0.052	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	3.503	3.503	11.89				

==========

Sequence No.: 75 **Autosampler Location: 65**
Sample ID: 1201980094|927419|1 **Date Collected: 12/1/2009 12:00:21**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201980094|927419|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.056	-0.056	-0.0002	0.0005	0.0002	12:01:23	Yes
2	-0.057	-0.057	-0.0002	0.0002	0.0002	12:01:58	Yes
Mean:	-0.056	-0.056	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.885	1.885	5.49				

==========

Sequence No.: 76
Sample ID: 1201982787|927419|1
Analyst: JXL1
Autosampler Location: 66
Date Collected: 12/1/2009 12:02:17
Data Type: Original

Replicate Data: 1201982787|927419|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0002	0.0011	0.0002	12:03:19	Yes
2	-0.055	-0.055	-0.0002	0.0009	0.0002	12:03:54	Yes
Mean:	-0.053	-0.053	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	3.146	3.146	10.20				

Sequence No.: 77
Sample ID: 1201982788|927419|1
Analyst: JXL1
Autosampler Location: 67
Date Collected: 12/1/2009 12:04:14
Data Type: Original

Replicate Data: 1201982788|927419|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.955	1.955	0.0217	0.0960	0.0221	12:05:15	Yes
2	1.913	1.913	0.0213	0.0927	0.0217	12:05:51	Yes
Mean:	1.934	1.934	0.0215				
SD:	0.030	0.030	0.0003				
%RSD:	1.558	1.558	1.53				

Sequence No.: 78
Sample ID: 241191001|927419|1
Analyst: JXL1
Autosampler Location: 68
Date Collected: 12/1/2009 12:06:10
Data Type: Original

Replicate Data: 241191001|927419|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0002	0.0011	0.0002	12:07:12	Yes
2	-0.055	-0.055	-0.0002	0.0006	0.0002	12:07:46	Yes
Mean:	-0.054	-0.054	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	4.081	4.081	13.22				

Sequence No.: 79
Sample ID: 1201980092|927419|1
Analyst: JXL1
Autosampler Location: 69
Date Collected: 12/1/2009 12:08:06
Data Type: Original

Replicate Data: 1201980092|927419|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.149	1.149	0.0129	0.0577	0.0133	12:09:08	Yes
2	1.142	1.142	0.0129	0.0575	0.0133	12:09:42	Yes
Mean:	1.146	1.146	0.0129				
SD:	0.005	0.005	0.0001				
%RSD:	0.428	0.428	0.41				

Sequence No.: 80
Sample ID: 1201982789|927419|1
Analyst: JXL1
Autosampler Location: 70
Date Collected: 12/1/2009 12:10:02
Data Type: Original

Replicate Data: 1201982789|927419|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0002	0.0010	0.0002	12:11:04	Yes
2	-0.051	-0.051	-0.0001	0.0011	0.0002	12:11:38	Yes
Mean:	-0.051	-0.051	-0.0002				

SD:	0.001	0.001	0.0000
%RSD:	1.426	1.426	5.13

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201982806|927419|5 **Date Collected: 12/1/2009 12:11:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982806|927419|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.055	-0.055	-0.0002	0.0007	0.0002	12:13:00	Yes
2	-0.049	-0.049	-0.0001	0.0014	0.0003	12:13:34	Yes
Mean:	-0.052	-0.052	-0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	7.955	7.955	28.02				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/1/2009 12:13:54**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.913	4.913	0.0540	0.2348	0.0544	12:14:55	Yes
2	4.860	4.860	0.0534	0.2326	0.0538	12:15:30	Yes
Mean:	4.886	4.886	0.0537				
SD:	0.037	0.037	0.0004				
%RSD:	0.767	0.767	0.76				

QC value within limits for Hg 253.7 Recovery = 97.72%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/1/2009 12:15:49**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	0.0012	0.0003	12:16:49	Yes
2	-0.048	-0.048	-0.0001	0.0011	0.0003	12:17:25	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.262	3.262	13.26				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 241527001|927419|1 **Date Collected: 12/1/2009 12:17:44**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241527001|927419|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0002	0.0012	0.0002	12:18:46	Yes
2	-0.057	-0.057	-0.0002	0.0002	0.0002	12:19:22	Yes
Mean:	-0.054	-0.054	-0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	6.878	6.878	21.90				

==========

Sequence No.: 85 **Autosampler Location: 73**
Sample ID: 1201980141|927470|1 **Date Collected: 12/1/2009 12:19:42**
Analyst: JXL1 **Data Type: Original**

Sequence No.: 90
Sample ID: 1201980140|927470|1
Analyst: JXL1
Autosampler Location: 78
Date Collected: 12/1/2009 12:29:25
Data Type: Original

Replicate Data: 1201980140|927470|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.667	1.667	0.0186	0.0832	0.0190	12:30:27	Yes
2	1.671	1.671	0.0186	0.0827	0.0190	12:31:01	Yes
Mean:	1.669	1.669	0.0186				
SD:	0.003	0.003	0.0000				
%RSD:	0.164	0.164	0.16				

Sequence No.: 91
Sample ID: 1201982956|927470|5
Analyst: JXL1
Autosampler Location: 79
Date Collected: 12/1/2009 12:31:21
Data Type: Original

Replicate Data: 1201982956|927470|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0001	0.0016	0.0003	12:32:23	Yes
2	-0.046	-0.046	-0.0001	0.0015	0.0003	12:32:58	Yes
Mean:	-0.046	-0.046	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.758	0.758	3.94				

Sequence No.: 92
Sample ID: 241596002|927470|1
Analyst: JXL1
Autosampler Location: 80
Date Collected: 12/1/2009 12:33:18
Data Type: Original

Replicate Data: 241596002|927470|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	-0.0002	0.0008	0.0002	12:34:19	Yes
2	-0.050	-0.050	-0.0001	0.0016	0.0003	12:34:54	Yes
Mean:	-0.052	-0.052	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	6.274	6.274	21.89				

Sequence No.: 93
Sample ID: 1201980052|927466|1
Analyst: JXL1
Autosampler Location: 81
Date Collected: 12/1/2009 12:35:14
Data Type: Original

Replicate Data: 1201980052|927466|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0001	0.0014	0.0003	12:36:16	Yes
2	-0.043	-0.043	-0.0001	0.0014	0.0003	12:36:50	Yes
Mean:	-0.043	-0.043	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.144	0.144	1.08				

Sequence No.: 94
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/1/2009 12:37:10
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.903	4.903	0.0539	0.2358	0.0542	12:38:11	Yes
2	4.889	4.889	0.0537	0.2341	0.0541	12:38:46	Yes

Mean:	4.896	4.896	0.0538
SD:	0.010	0.010	0.0001
%RSD:	0.204	0.204	0.20

QC value within limits for Hg 253.7 Recovery = 97.91%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/1/2009 12:39:05**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	0.0010	0.0002	12:40:06	Yes
2	-0.049	-0.049	-0.0001	0.0014	0.0003	12:40:40	Yes
Mean:	-0.050	-0.050	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.480	2.480	9.76				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 1201982941|927466|1 **Date Collected: 12/1/2009 12:41:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982941|927466|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	0.0016	0.0003	12:42:01	Yes
2	-0.053	-0.053	-0.0002	0.0010	0.0002	12:42:36	Yes
Mean:	-0.052	-0.052	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	4.976	4.976	17.54				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 1201982942|927466|1 **Date Collected: 12/1/2009 12:42:56**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201982942|927466|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.955	1.955	0.0217	0.0963	0.0221	12:43:58	Yes
2	1.882	1.882	0.0209	0.0924	0.0213	12:44:33	Yes
Mean:	1.919	1.919	0.0213				
SD:	0.051	0.051	0.0006				
%RSD:	2.666	2.666	2.62				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 241438001|927466|1 **Date Collected: 12/1/2009 12:44:53**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241438001|927466|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	-0.0002	0.0009	0.0002	12:45:55	Yes
2	-0.051	-0.051	-0.0002	0.0011	0.0002	12:46:29	Yes
Mean:	-0.052	-0.052	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	3.418	3.418	11.65				

Sequence No.: 99 **Autosampler Location: 85**
Sample ID: 1201980049|927466|1 **Date Collected: 12/1/2009 12:46:49**

Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 927418

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982788	WHG091130-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
TB	1201980094		SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL
MB	1201982787		SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL
LCS	1201982788		SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL
SAMPLE	241191001		SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL
MS	1201980092	241191001	SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL
DUP	1201982789	241191001	SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL
SDILT	1201982806	241191001	SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL
SAMPLE	241527001		SW846 7470A Prep	30-NOV-2009 12:45	<2	2 mL	20 mL	10	SOIL

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1214179-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091130-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091130-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091130-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091130-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091130-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091130-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments: Digestion Start Date: 30-NOV-09 12:45
Digestion End Date: 30-NOV-09 14:45

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 927297

Lab SOP: GL-MA-E-008 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982489	UI091119-A00	.5	mL
LCS	1201982489	UI091119-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
TB	1201980091		SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL
MB	1201982488		SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL
LCS	1201982489		SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL
SAMPLE	241191001		SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL
MS	1201980089	241191001	SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL
DUP	1201982490	241191001	SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL
SDILT	1201982492	241191001	SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL
SAMPLE	241527001		SW846 3010A	01-DEC-2009 07:00	<2	5 mL	50 mL	10	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	3 mL	Nitric Acid CONC.

Comments

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926100.0 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #106

Sample ID Analysis Start Date	1201980091 TB 24-NOV-2009 16:30:34	241191001 24-NOV-2009 16:30:34	1201980089 MS (241191001) 24-NOV-2009 16:30:34	1201980090 MSD (241191001) 24-NOV-2009 16:30:34
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot 1=G-H (g)		100	100	100
Initial pH (su)	4.91	10.01	10.01	10.01
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.91	5	5	5
Final pH (su)	4.91	1.82	1.82	1.82
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	500	250	95	95

Type	Sample Id	Description		Spike Amt	Units
MS	1201980089	TCLP PREP SPIKE REG METALS	1017626	5	mL
MSD	1201980090	TCLP PREP SPIKE REG METALS	1017626	5	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:02
Filtration End Date: 25-NOV-09 13:30:02
Bottle Lot Number: C901201R
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926100.0 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #106

Sample ID	241527001
Analysis Start Date	24-NOV-2009 16:30:34

100% Solid Y/N	y
(I) Sub Sample Aliquot I=G-H (g)	100
Initial pH (su)	9.57
pH Temperature (celsius)	50
Filtrate pH (su)	5
Final pH (su)	1.76
Tumbler Speed	28
Sample Properties <>/= Water	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000
Filtrate Volume (mL)	250

Type	Sample Id	Description	Serial Number	Spike Amt	Units
MS	1201980089	TCLP PREP SPIKE REG METALS	1017626	5	mL
MSD	1201980090	TCLP PREP SPIKE REG METALS	1017626	5	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:02
Filtration End Date: 25-NOV-09 13:30:02
Bottle Lot Number: C901201R
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926103.0 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #106

Sample ID Analysis Start Date	1201980094 TB 24-NOV-2009 16:30:49	241191001 24-NOV-2009 16:30:49	1201980092 MS (241191001) 24-NOV-2009 16:30:49	1201980093 MSD (241191001) 24-NOV-2009 16:30:49
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.91	10.01	10.01	10.01
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.91	7	7	7
Final pH (su)	4.91	1.82	1.82	1.82
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	500	250	50	50

Type	Sample Id	Description		Spike Amt	Units
MS	1201980092	TCLP PREP MERCURY SPIKE	1017820	1	mL
MSD	1201980093	TCLP PREP MERCURY SPIKE	1017820	1	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:00
Filtration End Date: 25-NOV-09 13:30:00
Bottle Lot Number: C901201R
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926103.0 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #106

Sample ID	241527001
Analysis Start Date	24-NOV-2009 16:30:49

100% Solid Y/N	y
(I) Sub Sample Aliquot I=G-H (g)	100
Initial pH (su)	9.57
pH Temperature (celsius)	50
Filtrate pH (su)	7
Final pH (su)	1.76
Tumbler Speed	28
Sample Properties <>/= Water	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000
Filtrate Volume (mL)	250

Type	Sample Id	Description	Serial Number	Spike Amt	Units
MS	1201980092	TCLP PREP MERCURY SPIKE	1017820	1	mL
MSD	1201980093	TCLP PREP MERCURY SPIKE	1017820	1	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:00
Filtration End Date: 25-NOV-09 13:30:00
Bottle Lot Number: C901201R
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

NCR Report No.: 764023
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
01-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7470A	Solid	LANL
Batch ID:	**Sample Numbers:**		
927419	See Below		

Potentially affected work order(s)(SDG): 241191(10-500-1),241527(10-600-1)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201980092MS	1. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jason Loy 01-DEC-09

Data Validator/Group Leader:

Eric Lawson 02-DEC-09

NCR Report No.: 766112
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
04-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3010/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
927298	See Below		

Potentially affected work order(s)(SDG): 241191(10-500-1),241527(10-600-1)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201980089MS	The matrix spike recovery failed outside of the control limits for Ba due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Elizabeth Janssen 08-DEC-09

Data Validator/Group Leader:

Samantha Jacobs 08-DEC-09

Standard Logbook

Serial ID: 1017626 **Opened:** 21-OCT-09 **Amount :** 5 mL
Name: TCLP PREP SPIKE **Received:** 20-OCT-09 **Catalog Number :** 160062-01
Type: Source Material **Expires:** 21-OCT-10 **Lot Number :** 1017626
Employee: Richard Dollinger **Verified:** 02-AUG-08
Supplier: O2SI
Description: TCLP PREP SPIKE REG METALS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Antimony	40 mg/L
Arsenic	100 mg/L	Barium	200 mg/L
Beryllium	40 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Calcium	100 mg/L
Chromium	100 mg/L	Cobalt	40 mg/L
Copper	40 mg/L	Iron	40 mg/L
Lead	100 mg/L	Lithium	20 mg/L
Magnesium	40 mg/L	Manganese	40 mg/L
Molybdenum	40 mg/L	Nickel	40 mg/L
Potassium	100 mg/L	Selenium	20 mg/L
Silver	10 mg/L	Sodium	100 mg/L
Strontium	40 mg/L	Thallium	40 mg/L
Thorium	40 mg/L	Tin	40 mg/L
Total Uranium	20 mg/L	Uranium	20 mg/L
Uranium-235	.144 mg/L	Uranium-238	19.856 mg/L
Vanadium	40 mg/L	Zinc	40 mg/L
Zirconium	40 mg/L		

Serial ID: 1017820 **Opened:** 10-NOV-09 **Amount :** 1 mg/L
Name: TCLP PREP Hg SPIKE **Received:** 10-NOV-09 **Catalog Number :** 160060-02
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1017820
Employee: Monifa Morant-Basdeo **Verified:** 10-NOV-09 **Solvent :** mercury
Supplier: O2S1
Description: TCLP PREP MERCURY SPIKE
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1 mg/L		

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Standard Logbook

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-A00 **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091119-B **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si

Standard Logbook

Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UMS090929-01 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 29-SEP-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-31CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090929-02 **Opened:** 29-SEP-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 29-SEP-09 **Lot Number :** 19-174JB
Type: Source Material **Expires:** 29-SEP-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090929-03 **Opened:** 29-SEP-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 29-SEP-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-30CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091130-01 **Opened:** 30-NOV-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 30-NOV-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 01-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091130-02 **Opened:** 30-NOV-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 01-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091130-01 **Opened:** 30-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091130-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Standard Logbook

Serial ID: WHG091130-02 **Opened:** 30-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091130-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091130-03 **Opened:** 30-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 05-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091130-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091130-04 **Opened:** 30-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 05-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091130-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091130-05 **Opened:** 30-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 05-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091130-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Standard Logbook

Serial ID: WHG091130-06 **Opened:** 30-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091130-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091130-13 **Opened:** 30-NOV-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 30-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 05-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WMS091203-04 **Opened:** 03-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 03-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 04-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091203-04A **Opened:** 03-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 03-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091203-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091203-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091203-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091203-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091203-05 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 03-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091203-06 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 03-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091203-07 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 03-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 04-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091203-08 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 03-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091203-70 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 03-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1017549ZHE **Opened:** 09-OCT-09 **Lot Number :** 1017549
Name: TCLP1 **Received:** 09-OCT-09
Type: Reagent/Solvent **Expires:** 09-OCT-10
Employee: Monifa Morant-Basdeo **Verified:** 08-AUG-07
Supplier: O2SI
Description: TCLP EXTRACTION FLUID 1
Comments: None

Serial ID: 1017923 **Opened:** 16-NOV-09 **Lot Number :** 1017923
Name: TCLP1 **Received:** 16-NOV-09
Type: Reagent/Solvent **Expires:** 16-NOV-10
Employee: Richard Dollinger **Verified:** 08-AUG-07
Supplier: O2SI
Description: TCLP EXTRACTION FLUID 1

Comments: None

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1202901 **Opened:** 14-OCT-09
Name: 1N HCl- TCLP **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Monifa Morant-Basdeo
Supplier: GEL
Description: 1N HCl for pH testing
Comments: None

Standard Logbook

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1214179-C **Opened:** 03-NOV-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 03-NOV-09
Type: Reagent/Solvent **Expires:** 03-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID

Standard Logbook

Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	924909	**Method:**	SW846 9012A
Prep Batch :	924908	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241524002	WST03-10-2132
1201977256	Method Blank (MB)
1201977257	241419006(RE03-09-13969) Sample Duplicate (DUP)
1201977258	241419007(RE03-09-13967) Sample Duplicate (DUP)
1201977259	241419006(RE03-09-13969) Matrix Spike (MS)
1201977260	241419007(RE03-09-13967) Matrix Spike (MS)
1201977261	241419006(RE03-09-13969) Matrix Spike Duplicate (MSD)
1201977262	241419007(RE03-09-13967) Matrix Spike Duplicate (MSD)
1201977263	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within

acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241419006 (RE03-09-13969) and 241419007 (RE03-09-13967).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201977257 (RE03-09-13969) and 1201977258 (RE03-09-13967).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201977263 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 16Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-600 GEL Work Order: 241524

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-600

Client Sample ID:	WST03-10-2132	Project:	LANL01004
Sample ID:	241524002	Client ID:	LANL010
Matrix:	R		
Collect Date:	18-NOV-09 12:00		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.23%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2 11/27/09	1044	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: November 27, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241524

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis												
Batch 924909												
QC1201977257 241419006 DUP												
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	11/27/09	10:18
QC1201977258 241419007 DUP												
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				11/27/09	10:21
QC1201977263 LCS												
Cyanide, Total	67900				64000	ug/kg		94.3	(46%-145%)		11/27/09	10:16
QC1201977256 MB												
Cyanide, Total				U	250	ug/kg					11/27/09	10:15
QC1201977259 241419006 MS												
Cyanide, Total	5330	U	ND		4920	ug/kg		92.3	(50%-130%)		11/27/09	10:19
QC1201977260 241419007 MS												
Cyanide, Total	5860	U	ND		5530	ug/kg		94.1	(50%-130%)		11/27/09	10:22
QC1201977261 241419006 MSD												
Cyanide, Total	5540	U	ND		6320	ug/kg	24.8	114	(0%-30%)		11/27/09	10:20
QC1201977262 241419007 MSD												
Cyanide, Total	5340	U	ND		5050	ug/kg	9.07	94.1	(0%-30%)		11/27/09	10:23

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor

QC Summary

Workorder: **241524**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Ul	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 27-NOV-2009 22:07

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-600**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**27-NOV-2009 10:10:16**	**OM_11-27-2009_10-01-36**	**136**	**150**	**91**	**(90%-110%)**	**Yes**
CCV	27-NOV-2009 10:24:34	OM_11-27-2009_10-01-36	102	100	102	(90%-110%)	Yes
CCV	27-NOV-2009 10:36:59	OM_11-27-2009_10-01-36	101	100	101	(90%-110%)	Yes
CCV	27-NOV-2009 10:47:37	OM_11-27-2009_10-01-36	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**27-NOV-2009 10:12:07**	**OM_11-27-2009_10-01-36**	**2.2**	**5**	**Yes**
CCB	27-NOV-2009 10:26:23	OM_11-27-2009_10-01-36	1.61	5	Yes
CCB	27-NOV-2009 10:38:49	OM_11-27-2009_10-01-36	0.566	5	Yes
CCB	27-NOV-2009 10:49:28	OM_11-27-2009_10-01-36	1.36	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 924908

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977263	URF1200957-01	.25	g
MS	1201977259	URF1184831-02	.025	mL
MS	1201977260	URF1184831-02	.025	mL
MSD	1201977261	URF1184831-02	.025	mL
MSD	1201977262	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977256		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
LCS	1201977263		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241419006		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201977257	241419006	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.55 g	25 mL	45.45455	SOIL
MS	1201977259	241419006	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.54 g	25 mL	46.2963	SOIL
MSD	1201977261	241419006	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419007		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL
DUP	1201977258	241419007	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
MS	1201977260	241419007	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
MSD	1201977262	241419007	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419008		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241419009		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419010		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419011		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419012		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419013		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419014		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419015		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419016		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241425001		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241425002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241506001		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	241506002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241506003		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241524002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241620001		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241620002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241620003		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/27/2009 10:03:07	OM_11-27-2009_10-01-36
150 ppb		1	axc2	11/27/2009 10:03:59	OM_11-27-2009_10-01-36
100 ppb		1	axc2	11/27/2009 10:04:51	OM_11-27-2009_10-01-36
50 ppb		1	axc2	11/27/2009 10:05:44	OM_11-27-2009_10-01-36
10 ppb		1	axc2	11/27/2009 10:06:38	OM_11-27-2009_10-01-36
CRDL 5.0 ppb		1	axc2	11/27/2009 10:07:31	OM_11-27-2009_10-01-36
ICAL-00		1	axc2	11/27/2009 10:08:25	OM_11-27-2009_10-01-36
ICV		1	axc2	11/27/2009 10:10:16	OM_11-27-2009_10-01-36
ICB		1	axc2	11/27/2009 10:12:07	OM_11-27-2009_10-01-36
CRDL		1	axc2	11/27/2009 10:13:56	OM_11-27-2009_10-01-36
1201977256	924909	1	axc2	11/27/2009 10:15:46	OM_11-27-2009_10-01-36
1201977263	924909	25	axc2	11/27/2009 10:16:39	OM_11-27-2009_10-01-36
241419006	924909	1	axc2	11/27/2009 10:17:32	OM_11-27-2009_10-01-36
1201977257	924909	1	axc2	11/27/2009 10:18:25	OM_11-27-2009_10-01-36
1201977259	924909	1	axc2	11/27/2009 10:19:18	OM_11-27-2009_10-01-36
1201977261	924909	1	axc2	11/27/2009 10:20:11	OM_11-27-2009_10-01-36
241419007	924909	1	axc2	11/27/2009 10:21:03	OM_11-27-2009_10-01-36
1201977258	924909	1	axc2	11/27/2009 10:21:56	OM_11-27-2009_10-01-36
1201977260	924909	1	axc2	11/27/2009 10:22:49	OM_11-27-2009_10-01-36
1201977262	924909	1	axc2	11/27/2009 10:23:41	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:24:34	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:26:23	OM_11-27-2009_10-01-36
241419008	924909	1	axc2	11/27/2009 10:28:12	OM_11-27-2009_10-01-36
241419009	924909	1	axc2	11/27/2009 10:29:03	OM_11-27-2009_10-01-36
241419010	924909	1	axc2	11/27/2009 10:29:55	OM_11-27-2009_10-01-36
241419011	924909	1	axc2	11/27/2009 10:30:47	OM_11-27-2009_10-01-36
241419012	924909	1	axc2	11/27/2009 10:31:38	OM_11-27-2009_10-01-36
241419013	924909	1	axc2	11/27/2009 10:32:32	OM_11-27-2009_10-01-36
241419014	924909	1	axc2	11/27/2009 10:33:26	OM_11-27-2009_10-01-36
241419015	924909	1	axc2	11/27/2009 10:34:20	OM_11-27-2009_10-01-36
241419016	924909	1	axc2	11/27/2009 10:35:12	OM_11-27-2009_10-01-36
241425001	924909	1	axc2	11/27/2009 10:36:06	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:36:59	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:38:49	OM_11-27-2009_10-01-36
241425002	924909	1	axc2	11/27/2009 10:40:38	OM_11-27-2009_10-01-36
241506001	924909	1	axc2	11/27/2009 10:41:31	OM_11-27-2009_10-01-36
241506002	924909	1	axc2	11/27/2009 10:42:24	OM_11-27-2009_10-01-36
241506003	924909	1	axc2	11/27/2009 10:43:16	OM_11-27-2009_10-01-36
241524002	924909	1	axc2	11/27/2009 10:44:08	OM_11-27-2009_10-01-36
241620001	924909	1	axc2	11/27/2009 10:45:01	OM_11-27-2009_10-01-36
241620002	924909	1	axc2	11/27/2009 10:45:53	OM_11-27-2009_10-01-36
241620003	924909	1	axc2	11/27/2009 10:46:45	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:47:37	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:49:28	OM_11-27-2009_10-01-36

Author: axc2 Date : 11/27/2009

Original Run Filename: OM_11-27-2009_10-01-36.OMN created 11/27/2009 10:01:36
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-27-2009_10-01-36.OMN last modified 11/27/2009 10:50:33
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091127-01	1	S1	200	5.88	11/27/2009@10:03:07			200 ppb
WCN091127-02	1	S2	150	4.51	11/27/2009@10:03:59			150 ppb
WCN091127-03	1	S3	100	3.08	11/27/2009@10:04:51			100 ppb
WCN091127-04	1	S4	50.0	1.57	11/27/2009@10:05:44			50 ppb
WCN091127-05	1	S5	10.0	0.412	11/27/2009@10:06:38			10 ppb
WCN091127-06	1	S6	5.00	0.234	11/27/2009@10:07:31			CRDL 5.0 ppb
WCN091127-08	1	S7	0.00	0.0432	11/27/2009@10:08:25			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99982 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091127-07	1	S8	136	4.06	11/27/2009@10:10:16			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-9.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-9.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091127-08	1	S7	2.20	0.162	11/27/2009@10:12:07			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091127-06	1	S6	3.74	0.207	11/27/2009@10:13:56			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.74 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.74 > 2.50					
		Message	Pass					
		Action	None					
1201977256|924909|MB	1	1	-1.74	0.0468	11/27/2009@10:15:46			
1201977263||LCS	1	2	25.6	0.844	11/27/2009@10:16:39		25.00	
241419006	1	3	-0.168	0.0926	11/27/2009@10:17:32			
1201977257||DUP	1	4	-1.37	0.0576	11/27/2009@10:18:25			
1201977259||MS	1	5	92.3	2.79	11/27/2009@10:19:18			
1201977261||MSD	1	6	114	3.43	11/27/2009@10:20:11			
241419007	1	7	0.444	0.110	11/27/2009@10:21:03			
1201977258||DUP	1	8	-1.07	0.0662	11/27/2009@10:21:56			
1201977260||MS	1	9	94.5	2.86	11/27/2009@10:22:49			
1201977262||MSD	1	10	94.6	2.86	11/27/2009@10:23:41			
WCN091127-03	1	S3	102	3.08	11/27/2009@10:24:34			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.1 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	1.61	0.145	11/27/2009@10:26:23			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241419008	1	11	-1.21	0.0622	11/27/2009@10:28:12			
241419009	1	12	-1.78	0.0454	11/27/2009@10:29:03			
241419010	1	13	-0.932	0.0703	11/27/2009@10:29:55			
241419011	1	14	-0.480	0.0835	11/27/2009@10:30:47			
241419012	1	15	-0.681	0.0776	11/27/2009@10:31:38			
241419013	1	16	-0.600	0.0800	11/27/2009@10:32:32			
241419014	1	17	-1.90	0.0420	11/27/2009@10:33:26			
241419015	1	18	-0.00651	0.0973	11/27/2009@10:34:20			
241419016	1	19	35.2	1.13	11/27/2009@10:35:12			
241425001	1	20	50.3	1.57	11/27/2009@10:36:06			
WCN091127-03	1	S3	101	3.05	11/27/2009@10:36:59			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	0.566	0.114	11/27/2009@10:38:49			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.566 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.566 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241425002	1	21	2.41	0.168	11/27/2009@10:40:38			
241506001	1	22	-1.73	0.0471	11/27/2009@10:41:31			
241506002	1	23	-0.925	0.0705	11/27/2009@10:42:24			
241506003	1	24	-1.33	0.0588	11/27/2009@10:43:16			
241524002	1	25	-1.12	0.0647	11/27/2009@10:44:08			
241620001	1	26	-2.08	0.0366	11/27/2009@10:45:01			
241620002	1	27	-1.34	0.0584	11/27/2009@10:45:53			
241620003	1	28	-1.61	0.0505	11/27/2009@10:46:45			
WCN091127-03	1	S3	101	3.04	11/27/2009@10:47:37			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	1.36	0.137	11/27/2009@10:49:28			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.36 < 5.00					

Author: axc2 Date : 11/27/2009

Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.36 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-27-2009_10-01-36.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

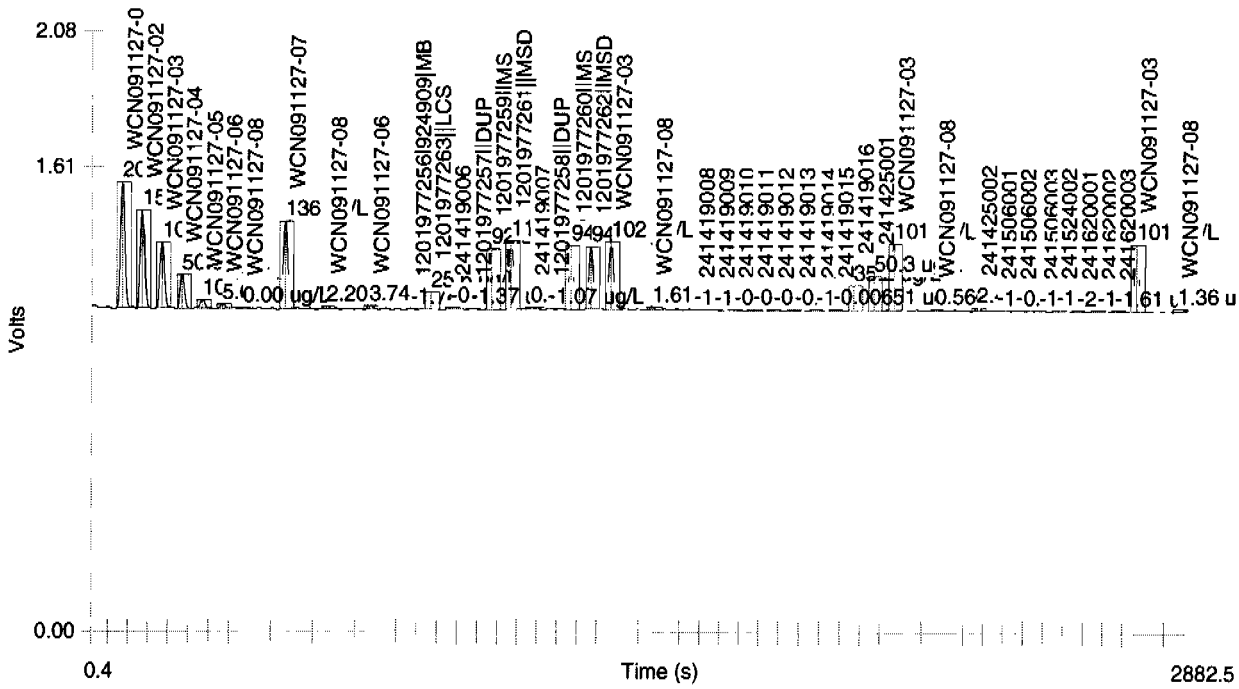

Author: axc2 Date : 11/27/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	5.88	0.431	1.0	11/27/2009	10:04:10
2	150	1	4.51	0.335	-0.8	11/27/2009	10:05:02
3	100	1	3.08	0.224	-1.9	11/27/2009	10:05:54
4	50.0	1	1.57	0.116	-0.6	11/27/2009	10:06:47
5	10.0	1	0.412	0.0289	-5.6	11/27/2009	10:07:41
6	5.00	1	0.234	0.0149	4.2	11/27/2009	10:08:34
7	0.00	1	0.0432	0.00308		11/27/2009	10:09:28

Figure 1: TCYANIDE

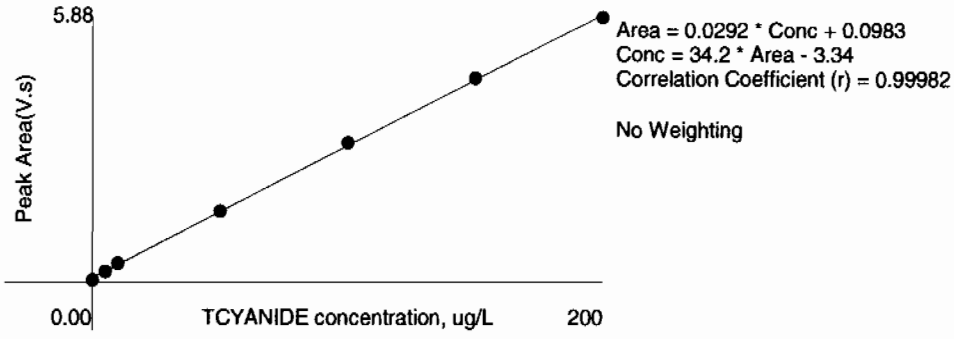

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Dry Weight-Percent Moisture**
Analytical Method:	
Analytical Batch Number:	925839

Sample ID	Client ID
241524002	WST03-10-2132
1201979470	241512001(CALA-10-4848) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 9.

Calibration Information:

Quality Control (QC) Information:

Designated QC
The following sample was used for QC: 241512001 (CALA-10-4848). The QC was from LANL work order 241512.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU. Not Applicable.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
The data for this batch was transferred from batch 925822.

Blank Decision Level
Not Applicable. The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**AM241**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928304
Prep Batch Number:	925822

Sample ID	Client ID
241524002	WST03-10-2132
1201984982	Method Blank (MB)
1201984983	241610009(RE03-10-7033) Sample Duplicate (DUP)
1201984984	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201984982 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241610009 (RE03-10-7033). The QC was from LANL work order 241610.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOPU**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928305
Prep Batch Number:	925822

Sample ID	Client ID
241524002	WST03-10-2132
1201984985	Method Blank (MB)
1201984986	241610009(RE03-10-7033) Sample Duplicate (DUP)
1201984987	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201984985 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241610009 (RE03-10-7033). The QC was from LANL work order 241610.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOU**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	931796
Prep Batch Number:	925822

Sample ID	Client ID
241524002	WST03-10-2132
1201993214	Method Blank (MB)
1201993215	241610009(RE03-10-7033) Sample Duplicate (DUP)
1201993216	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201993214 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241610009 (RE03-10-7033). The QC was from LANL work order 241610.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The U235 blank result is greater than 1.65 times the CSU but less than the MDC.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Samples were reprepped due to high carrier/tracer yield.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**SR90**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	926904
Prep Batch Number:	925822

Sample ID	Client ID
241524002	WST03-10-2132
1201981803	Method Blank (MB)
1201981804	241524002(WST03-10-2132) Sample Duplicate (DUP)
1201981805	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 13.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. The initial Calibration was performed in January 2009.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquots for samples 1201981803 (MB) and 1201981805 (LCS) were changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241524002 (WST03-10-2132). The QC was from LANL work order 241524.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**H3**
Analytical Method:	GL-RAD-A-002
Analytical Batch Number:	927653

Sample ID	Client ID
241524002	WST03-10-2132
1201983508	Method Blank (MB)
1201983509	241524002(WST03-10-2132) Sample Duplicate (DUP)
1201983510	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. The initial Calibration was performed in July 2009.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 241524002 (WST03-10-2132). The QC was from LANL work order 241524.

QC Information

All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Sample 1201983508 (MB) was recounted due to a suspected false positive.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: Pamela Wells 12/15/09

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-600 GEL Work Order: 241524

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID:	WST03-10-2132	Project:	LANL01004
Sample ID:	241524002	Client ID:	LANL010
Matrix:	R		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.23%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000502	0.0261	+/-0.00252	0.050	pCi/g		MXE1	12/10/09	1239	928304	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00788	0.0183	+/-0.00492	0.050	pCi/g		MXE1	12/11/09	1157	928305	3
Plutonium-239/240	U	-1.07E-09	0.0206	+/-0.00477	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.821	0.103	+/-0.0776	0.100	pCi/g		MXE1	12/14/09	1208	931796	4
Uranium-235/236	U	0.0588	0.0627	+/-0.0162	0.100	pCi/g						
Uranium-238		0.775	0.057	+/-0.0744	0.100	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	0.0285	0.233	+/-0.066	0.500	pCi/g		JXR1	12/04/09	1422	926904	6
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium	U	-55.7	100	+/-27.8	250	pCi/L		KXK2	12/05/09	1550	927653	7

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, U-02-RC Modified
5	DOE EML HASL-300, U-02-RC Modified
6	EPA 905.0 Modified
7	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	79.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	101	(50%-105%)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID: WST03-10-2132 Project: LANL01004
Sample ID: 241524002 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Uranium-232 Tracer		ISOU "Dry Weight Corrected"		104	(50%-105%)							
Strontium Carrier		SR90 "Dry Weight Corrected"		73.9	(50%-105%)							

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d 5-day BOD--The 2:1 depletion requirement was not met for this sample
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 15, 2009

Client : Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241524

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 928304										
QC1201984983 241610009 DUP										
Americium-241	U	-0.00979	U	3.39E-05	pCi/g	0.799		(0-1)	MXE1	12/10/0912:39
	TPU:	+/-0.00351		+/-0.00264						
	Yield:	73.7		54.4						
QC1201984984 LCS										
Americium-241	33.2			29.8	pCi/g		89.7	(75%-125%)		
	TPU:			+/-2.12						
	Yield:			83.8						
QC1201984982 MB										
Americium-241			U	-0.00361	pCi/g					
	TPU:			+/-0.00266						
	Yield:			101						
Batch 928305										
QC1201984986 241610009 DUP										
Plutonium-238	U	-0.00213	U	-0.00331	pCi/g	0.0308		(0-1)	MXE1	12/11/0909:39
	TPU:	+/-0.0133		+/-0.00573						
	Yield:	46.9		66.4						
Plutonium-239/240	U	-0.0107	U	0.00496	pCi/g	0.725		(0-1)		
	TPU:	+/-0.00708		+/-0.0037						
	Yield:	46.9		66.4						
QC1201984987 LCS										
Plutonium-238				6.73	pCi/g			(75%-125%)		
	TPU:			+/-0.500						
	Yield:			93.4						
Plutonium-239/240	41.8			37.6	pCi/g		90	(75%-125%)		
	TPU:			+/-2.30						
	Yield:			93.4						
QC1201984985 MB										
Plutonium-238			U	-0.00885	pCi/g					
	TPU:			+/-0.0039						
	Yield:			93.6						
Plutonium-239/240			U	-0.00295	pCi/g					
	TPU:			+/-0.00256						
	Yield:			93.6						
Batch 931796										
QC1201993215 241610009 DUP										
Uranium-233/234		1.02		1.13	pCi/g	0.308		(0-1)	MXE1	12/14/0912:21
	TPU:	+/-0.0845		+/-0.0925						
	Yield:	103		95.9						
Uranium-235/236		0.0822		0.121	pCi/g	0.516		(0-1)		
	TPU:	+/-0.017		+/-0.0208						
	Yield:	103		95.9						
Uranium-238		1.03		1.13	pCi/g	0.266		(0-1)		
	TPU:	+/-0.0856		+/-0.0928						

QC Summary

Workorder: 241524

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 931796										
	Yield:	103		95.9						
QC1201993216 LCS										
Uranium-233/234				6.06	pCi/g			(75%-125%)		12/14/0912:07
	TPU:			+/-0.560						
	Yield:			97.5						
Uranium-235/236				0.404	pCi/g			(75%-125%)		
	TPU:			+/-0.0975						
	Yield:			97.5						
Uranium-238	5.75			6.10	pCi/g		106	(75%-125%)		
	TPU:			+/-0.563						
	Yield:			97.5						
QC1201993214 MB										
Uranium-233/234			U	0.00466	pCi/g					12/14/0912:21
	TPU:			+/-0.00499						
	Yield:			100						
Uranium-235/236			U	0.00871	pCi/g					
	TPU:			+/-0.00463						
	Yield:			100						
Uranium-238			U	0.00235	pCi/g					
	TPU:			+/-0.0047						
	Yield:			100						
Rad Gas Flow										
Batch 926904										
QC1201981804 241524002 DUP										
Strontium-90	U	0.0285	U	-0.0188	pCi/g	0.192		(0-1)	JXR1	12/04/0914:22
	TPU:	+/-0.066		+/-0.0572						
	Yield:	73.9		73.9						
QC1201981805 LCS										
Strontium-90	19.3			19.3	pCi/g		99.9	(75%-125%)		12/04/0914:22
	TPU:			+/-2.07						
	Yield:			89.6						
QC1201981803 MB										
Strontium-90			U	-0.0623	pCi/g					12/04/0914:22
	TPU:			+/-0.0969						
	Yield:			89.6						
Rad Liquid Scintillation										
Batch 927653										
QC1201983509 241524002 DUP										
Tritium	U	-55.7	U	8.43	pCi/L	0.530		(0-1)	KXK2	12/08/0919:40
	TPU:	+/-27.8		+/-32.8						
QC1201983510 LCS										
Tritium	5620			5940	pCi/L		106	(75%-125%)		12/06/0900:01
	TPU:			+/-425						
QC1201983508 MB										
Tritium			U	-9.9	pCi/L					12/08/0918:37
	TPU:			+/-31.3						

QC Summary

Workorder: 241524

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

Notes:
The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 9

Batch# 928304 Product: AM Date: 12/14/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria	✓		
Tracer yield is 15-125%. Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples. < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analyses.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature] 12/14/09

Secondary Review Performed By: [signature] 12/14/09

Am/Cm Que Sheet

04-DEC-09

PJ

Batch #: 928304 | Analyst: MXE1 | First Client Due Date: 18-DEC-09 | Internal Due Date07-DEC-09 | Comments:

Tracer(s): Am243/Cm244 | Tracer Code: 445-96-2-55 | Expiration Date: 5/11/10 | Vol: 0.1

LCS Isotope(s): Am241/Cm244 | LCS Code(s): — / — | Expiration Date: — / — | Vol(s): — / —

Spike Isotope(s): Am241/Cm244 | Spike Code(s): — / — | Expiration Date: — / — | Vol(s): — / —

Prep Date: 12/4/9 | Initials: ME | Pipet ID: 44197063 | Balance ID: 50410272 | Witness: 12/4/09 cmm

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/f)	Am/Cm Det #
241518001-1	CALA-10-4848	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	1	1	1.300	93
241518002-1	CABG-10-4888	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	2	2	1.253	94
241518003-1	CABG-10-4889	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	3	3	1.256	95
241518004-1	CABG-10-4886	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	4	4	1.252	96
241518005-1	CABG-10-4890	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	5	5	1.252	97
241518006-1	CABG-10-4887	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	6	6	1.242	98
241524002-1	WST03-10-2132	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	7	7	1.250	99
241559001-1	RE03-10-6903	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	8	8	1.254	~~100~~ 209
241559002-1	RE03-10-6902	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	9	9	1.249	101
241610001-1	RE03-09-13919	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	10	10	1.247	102
241610002-1	RE03-09-13916	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	11	11	1.242	103
241610003-1	RE03-09-13920	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	12	12	1.25	104
241610004-1	RE03-09-13914	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	13	13	1.254	105
241610005-1	RE03-09-13915	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	14	14	1.250	107
241610006-1	RE03-09-13918	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	15	15	1.256	112
241610007-1	RE03-09-13921	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	16	16	1.246	221
241610008-1	RE03-09-13917	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	17	17	1.253	222
241610009-1	RE03-10-7033	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	18	18	1.246	223
1201984982-1	MB for batch 928304	MB		.05 pCi/g	SOIL	QC ACCOUNT		19	19	~~1.300~~	108
1201984983-1	RE03-10-7033(241610009DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	19-NOV-09	20	20	1.253	109
1201984984-1	LCS for batch 928304	LCS		.05 pCi/g	SOIL	QC ACCOUNT		21	21	0.103	111

12/11/09

SRM 0244-B Exp 4/30/20 0.103 g

Choose SOP Used: GL-RAD-A-011 / GL-RAD-A-036 / GL-RAD-A-045

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: JJPL 12/14/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 928304

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201984983	DUP	Americium-241	1.25 g	3.39E-05	0.00264	0.0366	-.002888	pCi/g	NO
1201984984	LCS	Americium-241	0.103 g	29.8	2.12	0.290	-.03504854	pCi/g	NO
1201984982	MB	Americium-241	1.00 g	-0.00361	0.00266	0.0263	-.00361	pCi/g	NO
241518001	CALA-10-4848	Americium-241	1.30 g	0.00505	0.00242	0.0224	-.00277692	pCi/g	NO
241518002	CABG-10-4888	Americium-241	1.25 g	0.00491	0.00375	0.0332	-.002888	pCi/g	NO
241518003	CABG-10-4889	Americium-241	1.26 g	0.00479	0.00893	0.0261	-.00286508	pCi/g	NO
241518004	CABG-10-4886	Americium-241	1.25 g	0.00512	0.00551	0.0274	-.002888	pCi/g	NO
241518005	CABG-10-4890	Americium-241	1.25 g	-0.0053	0.00715	0.0343	-.002888	pCi/g	NO
241518006	CABG-10-4887	Americium-241	1.24 g	0.000839	0.00476	0.0264	-.00291129	pCi/g	NO
241524002	WST03-10-2132	Americium-241	1.25 g	-0.000502	0.00252	0.0261	-.002888	pCi/g	NO
241559001	RE03-10-6903	Americium-241	1.25 g	-0.00182	0.00189	0.0215	-.002888	pCi/g	NO
241559002	RE03-10-6902	Americium-241	1.25 g	0.000991	0.00141	0.0278	-.002888	pCi/g	NO
241610001	RE03-09-13919	Americium-241	1.25 g	0.000993	0.00306	0.0278	-.002888	pCi/g	NO
241610002	RE03-09-13916	Americium-241	1.24 g	0.000815	0.00285	0.0262	-.00291129	pCi/g	NO
241610003	RE03-09-13920	Americium-241	1.25 g	0.00136	0.0016	0.0315	-.002888	pCi/g	NO
241610004	RE03-09-13914	Americium-241	1.25 g	0.00218	0.00317	0.0263	-.002888	pCi/g	NO
241610005	RE03-09-13915	Americium-241	1.25 g	0.00572	0.00296	0.0298	-.002888	pCi/g	NO
241610006	RE03-09-13918	Americium-241	1.26 g	-0.00182	0.00244	0.0278	-.00286508	pCi/g	NO
241610007	RE03-09-13921	Americium-241	1.25 g	0.00183	0.00229	0.0241	-.002888	pCi/g	NO
241610008	RE03-09-13917	Americium-241	1.25 g	-0.00182	0.0024	0.0225	-.002888	pCi/g	NO
241610009	RE03-10-7033	Americium-241	1.25 g	-0.00979	0.00351	0.0261	-.002888	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241524002_AM SAMPLE QTY: 1.250 G
DETECTOR NUMBER :70317 AVERAGE %EFFICIENCY :34.4553 % YIELD : 78.985	COUNT DATE:10-DEC-2009 12:39:01 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.30371 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B099.CNF;656 BKG DATE : 6-DEC-2009 EFF FILE : W099.CNF;189 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	2.000	2.000	4.8778	100.0000	2.65E-03	3.26E-03	1.50E-02	3.36E-02	3.25E-03
CM-5/6	5386.000	2.000	1.000	1.000	19.8796	86.09000	1.54E-03	2.67E-03	7.11E-02	1.46E-01	2.66E-03
AM-241	5479.150	3.000	-0.379	2.000	3.6563	99.94000	-5.02E-04	2.52E-03	1.13E-02	2.61E-02	2.52E-03
CM-242	6102.000	2.000	2.000	0.000	3.7846	100.0000	2.92E-03	2.07E-03	1.17E-02	2.69E-02	2.06E-03
AM243	5270.000	800.000	792.000	8.000	2.8284	99.78000	1.05E+00	7.44E-02	8.73E-03	2.11E-02	3.77E-02
CM-247	4946.000	6.000	-3.000	9.000	18.5713	79.30000	-5.01E-03	6.47E-03	7.21E-02	1.49E-01	6.47E-03
CM-248	5078.600	5.000	-1.000	6.000	26.3889	91.00000	-1.46E-03	4.83E-03	8.93E-02	1.83E-01	4.83E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

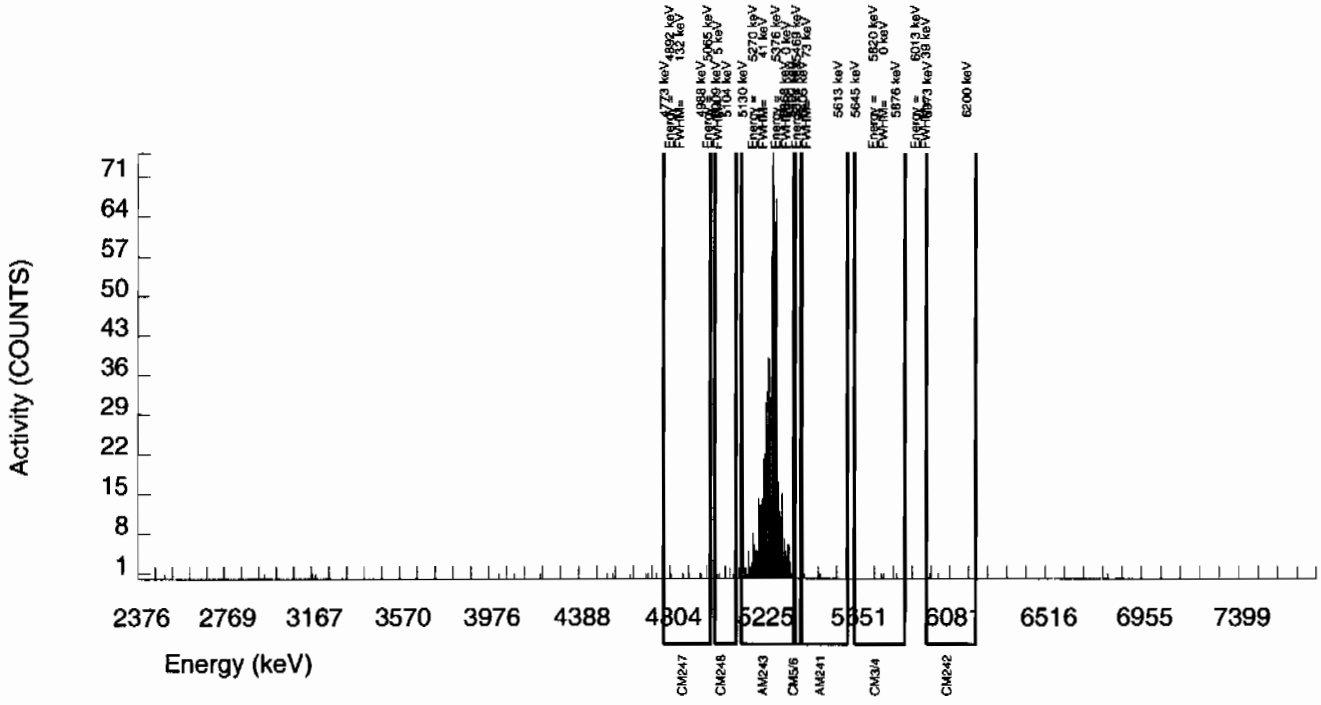

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S0241610009_AM SAMPLE QTY: 1.246 G
DETECTOR NUMBER :79416 AVERAGE %EFFICIENCY :37.0420 % YIELD : 73.655	COUNT DATE:10-DEC-2009 12:42:06 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.14825 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B223.CNF;60 BKG DATE : 6-DEC-2009 EFF FILE : W223.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	-4.000	6.000	4.8778	100.0000	-5.31E-03	3.76E-03	1.50E-02	3.37E-02	3.76E-03
CM-5/6	5386.000	11.000	11.000	0.000	19.8796	86.09000	1.69E-02	5.21E-03	7.12E-02	1.47E-01	5.10E-03
AM-241	5479.150	0.000	-7.382	6.000	3.6563	99.94000	-9.79E-03	3.51E-03	1.13E-02	2.61E-02	3.51E-03
CM-242	6102.000	2.000	2.000	0.000	3.7846	100.0000	2.91E-03	2.06E-03	1.17E-02	2.69E-02	2.06E-03
AM243	5270.000	797.000	794.000	3.000	1.7321	99.78000	1.05E+00	7.42E-02	5.35E-03	1.43E-02	3.76E-02
CM-247	4946.000	14.000	12.000	2.000	18.5713	79.30000	2.01E-02	6.79E-03	7.22E-02	1.49E-01	6.68E-03
CM-248	5078.600	19.000	19.000	0.000	26.3889	91.00000	2.77E-02	6.57E-03	8.94E-02	1.83E-01	6.35E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

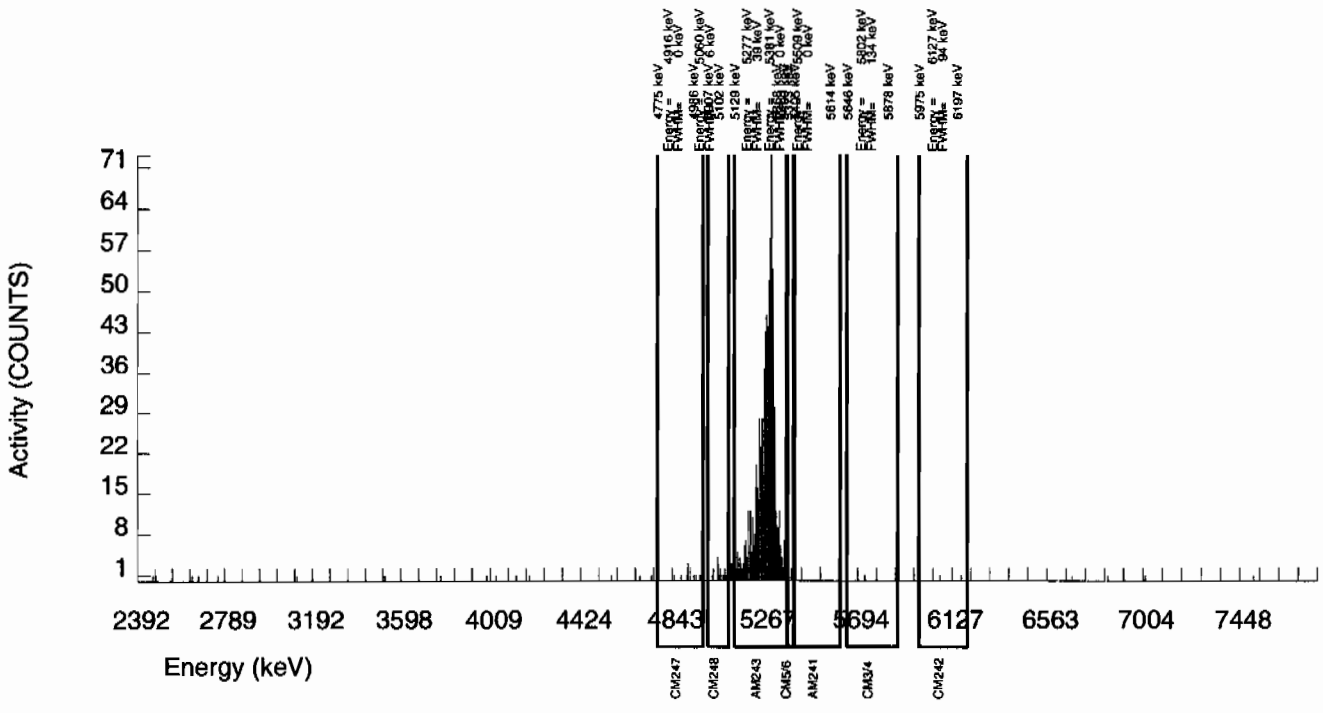

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984982_AM SAMPLE QTY: 1.000 G
DETECTOR NUMBER :78778 AVERAGE %EFFICIENCY :33.5822 % YIELD : 100.787	COUNT DATE:10-DEC-2009 12:39:03 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91661 dpm RESULTS : 2.93957 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B108.CNF;660 BKG DATE : 6-DEC-2009 EFF FILE : W108.CNF;209 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	2.000	0.000	4.8778	100.0000	2.66E-03	1.89E-03	1.51E-02	3.38E-02	1.88E-03
CM-5/6	5386.000	8.000	8.000	0.000	19.8796	86.09000	1.24E-02	4.43E-03	7.15E-02	1.47E-01	4.37E-03
AM-241	5479.150	2.000	-2.715	3.000	3.6563	99.94000	-3.61E-03	2.66E-03	1.13E-02	2.63E-02	2.66E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	6.85E-03	3.09E-03	1.17E-02	2.70E-02	3.06E-03
AM243	5270.000	988.000	985.000	3.000	1.7321	99.78000	1.31E+00	8.79E-02	5.37E-03	1.44E-02	4.20E-02
CM-247	4946.000	7.000	5.000	2.000	18.5713	79.30000	8.39E-03	5.06E-03	7.25E-02	1.50E-01	5.03E-03
CM-248	5078.600	16.000	16.000	0.000	26.3889	91.00000	2.34E-02	6.01E-03	8.98E-02	1.84E-01	5.85E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

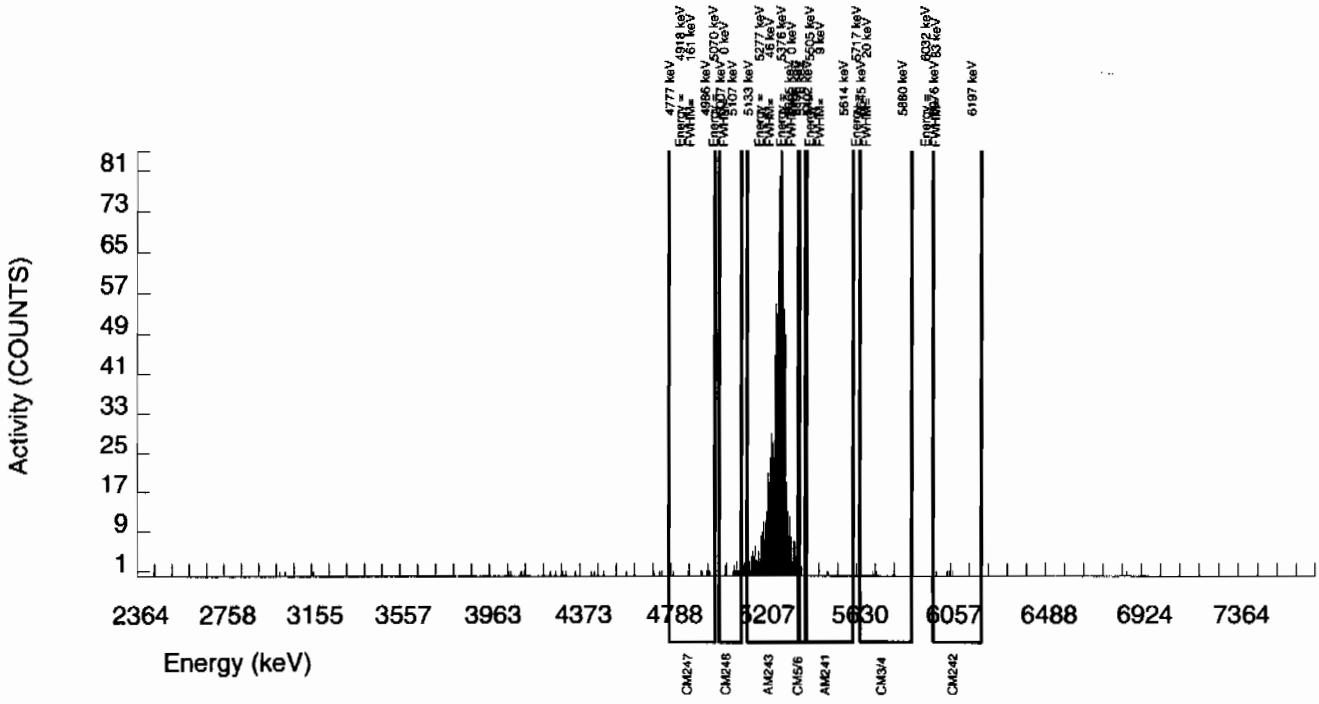

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S1201984983_AM SAMPLE QTY: 1.253 G
DETECTOR NUMBER :79463 AVERAGE %EFFICIENCY :35.6057 % YIELD : 54.430	COUNT DATE:10-DEC-2009 12:39:03 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 1.58752 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B109.CNF;658 BKG DATE : 6-DEC-2009 EFF FILE : W109.CNF;190 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	1.000	1.000	4.8778	100.0000	1.86E-03	3.22E-03	2.10E-02	4.71E-02	3.22E-03
CM-5/6	5386.000	6.000	6.000	0.000	19.8796	86.09000	1.29E-02	5.34E-03	9.96E-02	2.05E-01	5.28E-03
AM-241	5479.150	2.000	0.018	1.000	3.6563	99.94000	3.39E-05	2.64E-03	1.58E-02	3.66E-02	2.64E-03
CM-242	6102.000	5.000	4.000	1.000	3.7846	100.0000	8.14E-03	5.01E-03	1.63E-02	3.77E-02	4.99E-03
AM243	5270.000	568.000	564.000	4.000	2.0000	99.78000	1.05E+00	8.14E-02	8.65E-03	2.23E-02	4.45E-02
CM-247	4946.000	4.000	-3.000	7.000	18.5713	79.30000	-7.02E-03	7.76E-03	1.01E-01	2.08E-01	7.76E-03
CM-248	5078.600	7.000	7.000	0.000	26.3889	91.00000	1.43E-02	5.47E-03	1.25E-01	2.56E-01	5.39E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

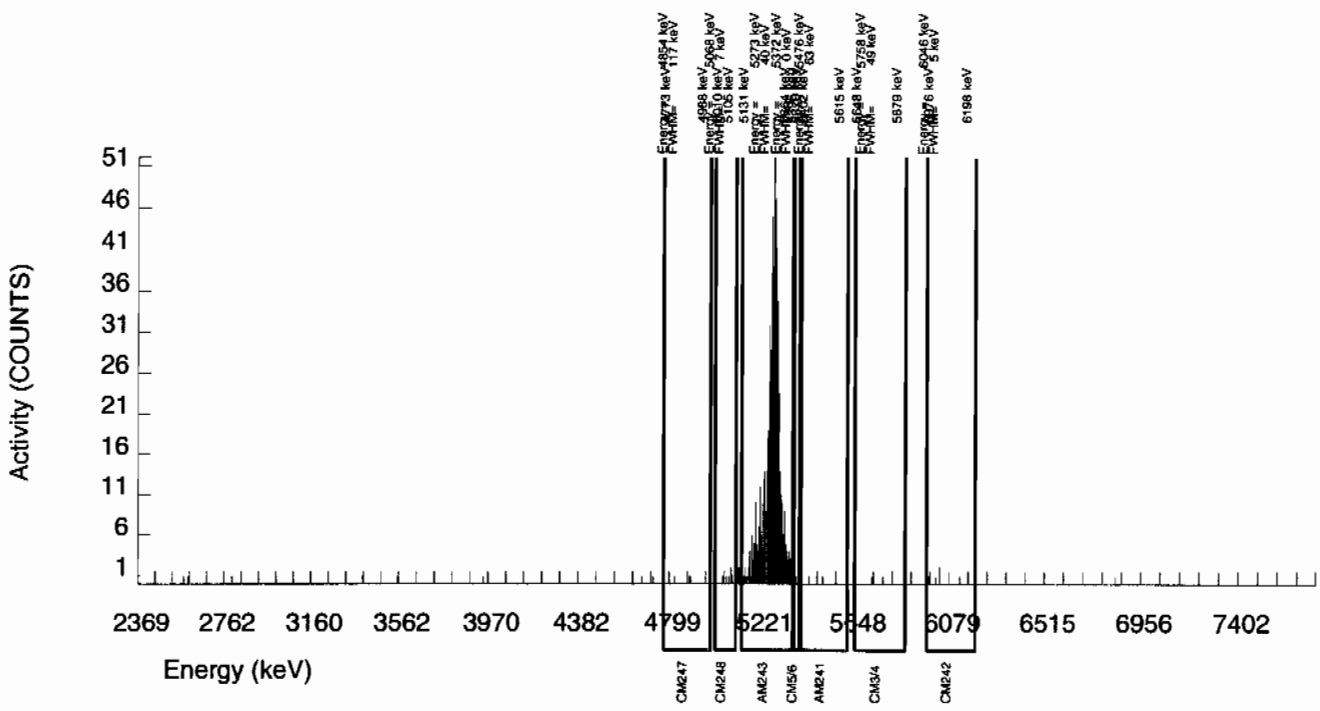

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984984_AM SAMPLE QTY: 0.103 G
DETECTOR NUMBER :79462 AVERAGE %EFFICIENCY :35.5462 % YIELD : 83.812	COUNT DATE:10-DEC-2009 12:39:03 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91661 dpm RESULTS : 2.44446 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B111.CNF;657 BKG DATE : 6-DEC-2009 EFF FILE : W111.CNF;205 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	3.000	1.000	4.8778	100.0000	4.41E-02	3.30E-02	1.67E-01	3.73E-01	3.28E-02
CM-5/6	5386.000	65.000	65.000	0.000	19.8796	86.09000	1.11E+00	1.57E-01	7.89E-01	1.62E+00	1.37E-01
AM-241	5479.150	2028.000	2025.491	1.000	3.6563	99.94000	2.98E+01	2.12E+00	1.25E-01	2.90E-01	6.61E-01
CM-242	6102.000	2.000	2.000	0.000	3.7846	100.0000	3.02E-02	2.15E-02	1.29E-01	2.98E-01	2.14E-02
AM243	5270.000	873.000	867.000	6.000	2.4495	99.78000	1.28E+01	9.67E-01	8.38E-02	2.08E-01	4.36E-01
CM-247	4946.000	10.000	4.000	6.000	18.5713	79.30000	7.40E-02	7.42E-02	8.00E-01	1.65E+00	7.40E-02
CM-248	5078.600	19.000	19.000	0.000	26.3889	91.00000	3.06E-01	7.33E-02	9.90E-01	2.02E+00	7.03E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

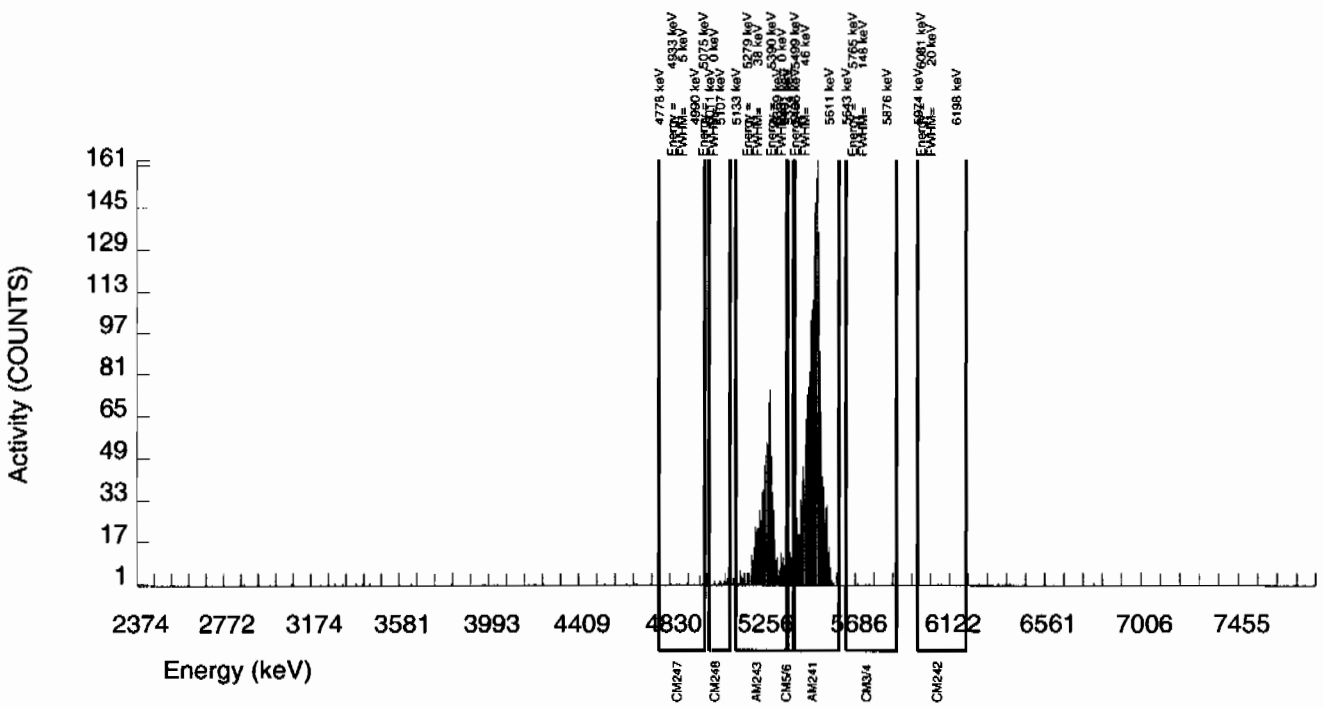

Radiochemistry Batch Checklist, Rev 9

Batch# 928305 Product: Pu Date: 12/12/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay	✓		
Instrument source check is within limits. Instrument blkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		case narrative
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature] 12/12/09

Secondary Review Performed By: [signature] 12/14/09

LANL

p1

Plutonium Que Sheet

02-DEC-09

Batch #: 928305 Analyst: MXE1 First Client Due Date: 18-DEC-09 Internal Due Date: 07-DEC-09

Tracer Isotope(s): Pu-242/Pu-238 Tracer Code: 1373-A Expiration Date: 10/27/10 Vol: 0.1

LCS Isotope(s): Pu-239/Pu-238 LCS Code: — Expiration Date: — Vol: —

Spike Isotope(s): Pu-239/Pu-238 Spike Code: — Expiration Date: — Vol: —

Prep Date: 12/4/09 Initials: MC Pipet ID: 44971063 Balance ID: 50410272 Witness: 12/4/09 CMM

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/f)	Pu Det #
~~241518001-1~~	~~CABA-10-4848~~	~~SAMPLE~~		~~.05 pCi/g~~	~~SOIL~~	~~LANL010~~	~~18-NOV-09~~	~~1~~	1	~~1.300~~	43
241518002-1	CABG-10-4888	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	2	2	1.253	44
241518003-1	CABG-10-4889	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	3	3	1.256	45
241518004-1	CABG-10-4886	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	4	4	1.252	46
241518005-1	CABG-10-4890	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	5	5	1.252	47
241518006-1	CABG-10-4887	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	6	6	1.242	48
241524002-1	WST03-10-2132	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	7	7	1.250	71
241559001-1	RE03-10-6903	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	8	8	1.254	72
241559002-1	RE03-10-6902	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	9	9	1.249	73
241610001-1	RE03-09-13919	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	10	10	1.247	74
241610002-1	RE03-09-13916	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	11	11	1.242	76
241610003-1	RE03-09-13920	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	12	12	1.252	31
241610004-1	RE03-09-13914	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	13	13	1.254	33
241610005-1	RE03-09-13915	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	14	14	1.250	35
241610006-1	RE03-09-13918	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	15	15	1.256	36
241610007-1	RE03-09-13921	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	16	16	1.246	37
241610008-1	RE03-09-13917	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	17	17	1.253	38
241610009-1	RE03-10-7033	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	18	18	1.246	39
1201984985-1	MB for batch 928305	MB		.05 pCi/g	SOIL	QC ACCOUNT		19	19	1.300	40
1201984986-1	RE03-10-7033(241610009DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	19-NOV-09	20	20	1.253	41
1201984987-1	LCS for batch 928305	LCS		.05 pCi/g	SOIL	QC ACCOUNT		21	21	0.103	42

SRM 0244-B exp 4/30/20 0.103 g

Choose SOP Used: GL-RAD-A-011 GL-RAD-A-045 GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION Circle One

Data Reviewed By: 12/12/09

Blank Correction Report

Batch ID 928305

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201984986	DUP	Plutonium-238	1.25 g	-0.00331	0.00573	0.0268	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00496	0.0037	0.0302	-.00236	pCi/g	NO
1201984987	LCS	Plutonium-238	0.103 g	6.73	0.500	0.234	-.08592233	pCi/g	NO
		Plutonium-239/240	0.103 g	37.6	2.30	0.263	-.02864078	pCi/g	NO
1201984985	MB	Plutonium-238	1.00 g	-0.00885	0.0039	0.024	-.00885	pCi/g	NO
		Plutonium-239/240	1.00 g	-0.00295	0.00256	0.027	-.00295	pCi/g	NO
241518002	CABG-10-4888	Plutonium-238	1.25 g	-0.00242	0.0042	0.0197	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00121	0.00363	0.0222	-.00236	pCi/g	NO
241518003	CABG-10-4889	Plutonium-238	1.26 g	-0.00468	0.00287	0.019	-.00702381	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00	0.00287	0.0214	-.00234127	pCi/g	NO
241518004	CABG-10-4886	Plutonium-238	1.25 g	0.00477	0.00293	0.0194	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00119	0.00358	0.0218	-.00236	pCi/g	NO
241518005	CABG-10-4890	Plutonium-238	1.25 g	-0.0116	0.00725	0.027	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00332	0.00526	0.0304	-.00236	pCi/g	NO
241518006	CABG-10-4887	Plutonium-238	1.24 g	0.00184	0.00883	0.0299	-.00713710	pCi/g	NO
		Plutonium-239/240	1.24 g	0.0147	0.00693	0.0336	-.00237903	pCi/g	NO
241524002	WST03-10-2132	Plutonium-238	1.25 g	0.00788	0.00492	0.0183	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-1.07E-09	0.00477	0.0206	-.00236	pCi/g	NO
241559001	RE03-10-6903	Plutonium-238	1.25 g	-0.0154	0.0102	0.0312	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00767	0.00608	0.0351	-.00236	pCi/g	NO
241559002	RE03-10-6902	Plutonium-238	1.25 g	-2.84E-10	0.00239	0.0194	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00835	0.00432	0.0218	-.00236	pCi/g	NO
241610001	RE03-09-13919	Plutonium-238	1.25 g	-0.00238	0.00584	0.0193	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00357	0.00315	0.0218	-.00236	pCi/g	NO
241610002	RE03-09-13916	Plutonium-238	1.24 g	-0.00256	0.00221	0.0207	-.00713710	pCi/g	NO
		Plutonium-239/240	1.24 g	-0.00128	0.00424	0.0234	-.00237903	pCi/g	NO
241610003	RE03-09-13920	Plutonium-238	1.25 g	-4.35E-10	0.00365	0.0296	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00547	0.00605	0.0333	-.00236	pCi/g	NO
241610004	RE03-09-13914	Plutonium-238	1.25 g	-0.00123	0.00326	0.020	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00493	0.00303	0.0225	-.00236	pCi/g	NO
241610005	RE03-09-13915	Plutonium-238	1.25 g	-0.00255	0.00403	0.0207	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-1.22E-09	0.0057	0.0233	-.00236	pCi/g	NO
241610006	RE03-09-13918	Plutonium-238	1.26 g	0.00262	0.00586	0.0213	-.00702381	pCi/g	NO
		Plutonium-239/240	1.26 g	-0.00131	0.00472	0.024	-.00234127	pCi/g	NO
241610007	RE03-09-13921	Plutonium-238	1.25 g	-0.00615	0.00825	0.020	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0086	0.00478	0.0225	-.00236	pCi/g	NO
241610008	RE03-09-13917	Plutonium-238	1.25 g	0.00737	0.00627	0.0199	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-5.86E-10	0.00301	0.0225	-.00236	pCi/g	NO
241610009	RE03-10-7033	Plutonium-238	1.25 g	-0.00213	0.0133	0.0346	-.00708	pCi/g	NO

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241610009	RE03-10-7033	Plutonium-239/240	1.25 g	-0.0107	0.00708	0.039	-.00236	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241524002_PU SAMPLE QTY: 1.250 G
DETECTOR NUMBER :64259 AVERAGE %EFFICIENCY :31.7421 % YIELD : 101.062	COUNT DATE:11-DEC-2009 11:57:38 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 4.26563 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B071.CNF;1079 BKG DATE : 6-DEC-2009 EFF FILE : W071.CNF;282 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	0.000	9.000	3.3488	99.90000	-1.07E-09	4.77E-03	8.76E-03	2.06E-02	4.77E-03
PU-236	5749.000	9.000	1.000	8.000	2.0294	100.0000	1.14E-03	4.71E-03	5.30E-03	1.37E-02	4.71E-03
PU-238	5499.000	13.000	7.000	6.000	2.9082	99.90000	7.88E-03	4.92E-03	7.61E-03	1.83E-02	4.90E-03
PU242	4890.000	1363.000	1354.000	9.000	3.0000	100.0000	1.52E+00	8.43E-02	7.84E-03	1.87E-02	4.16E-02
PU-244	4589.000	3.000	0.000	3.000	6.8218	99.90000	-5.36E-10	2.75E-03	1.78E-02	3.87E-02	2.75E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

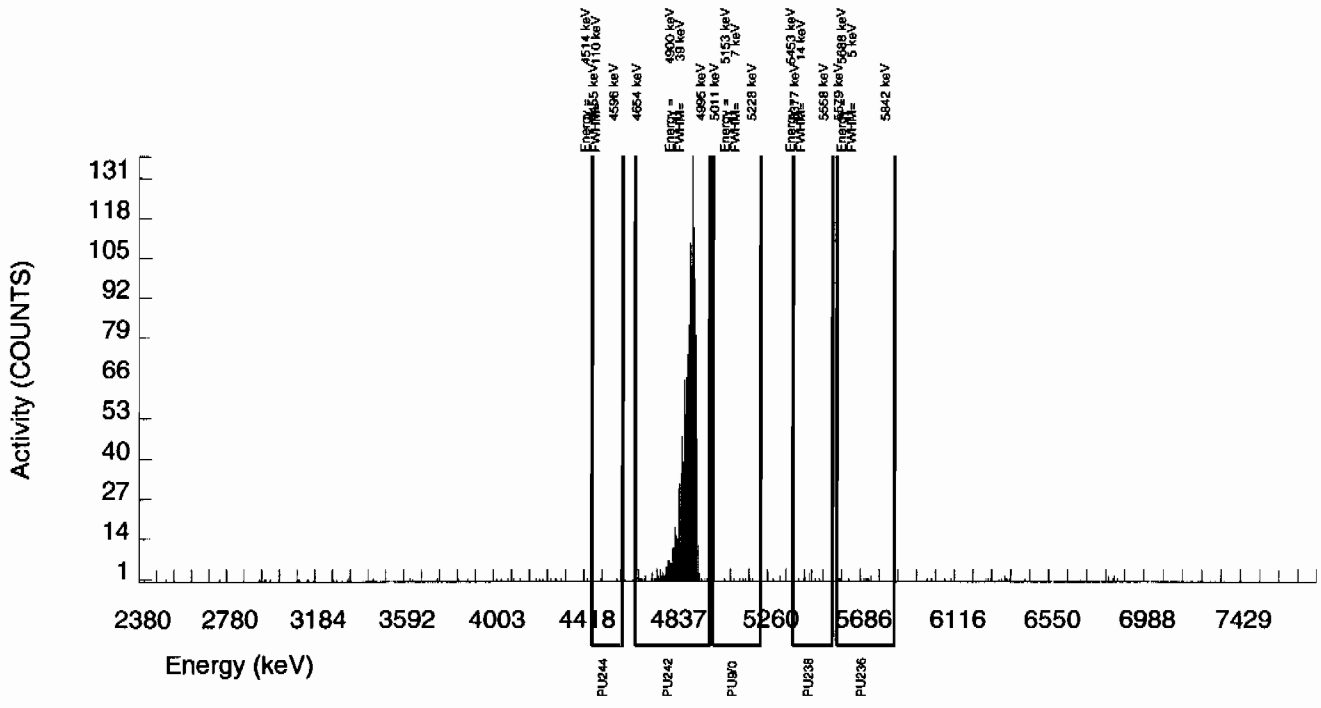

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S0241610009_PU SAMPLE QTY: 1.246 G
DETECTOR NUMBER :45-149BB2 AVERAGE %EFFICIENCY :36.2064 % YIELD : 46.852	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 1.97755 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B039.CNF;1091 BKG DATE : 9-DEC-2009 EFF FILE : W039.CNF;294 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	-5.000	8.000	3.3488	99.90000	-1.07E-02	7.08E-03	1.66E-02	3.90E-02	7.08E-03
PU-236	5749.000	59.000	12.000	47.000	2.0294	100.0000	2.60E-02	2.23E-02	1.01E-02	2.59E-02	2.23E-02
PU-238	5499.000	19.000	-1.000	20.000	2.9082	99.90000	-2.13E-03	1.33E-02	1.44E-02	3.46E-02	1.33E-02
PU242	4890.000	725.000	716.000	9.000	3.0000	100.0000	1.53E+00	1.02E-01	1.49E-02	3.55E-02	5.77E-02
PU-244	4589.000	11.000	7.000	4.000	6.8218	99.90000	1.49E-02	8.30E-03	3.39E-02	7.35E-02	8.26E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

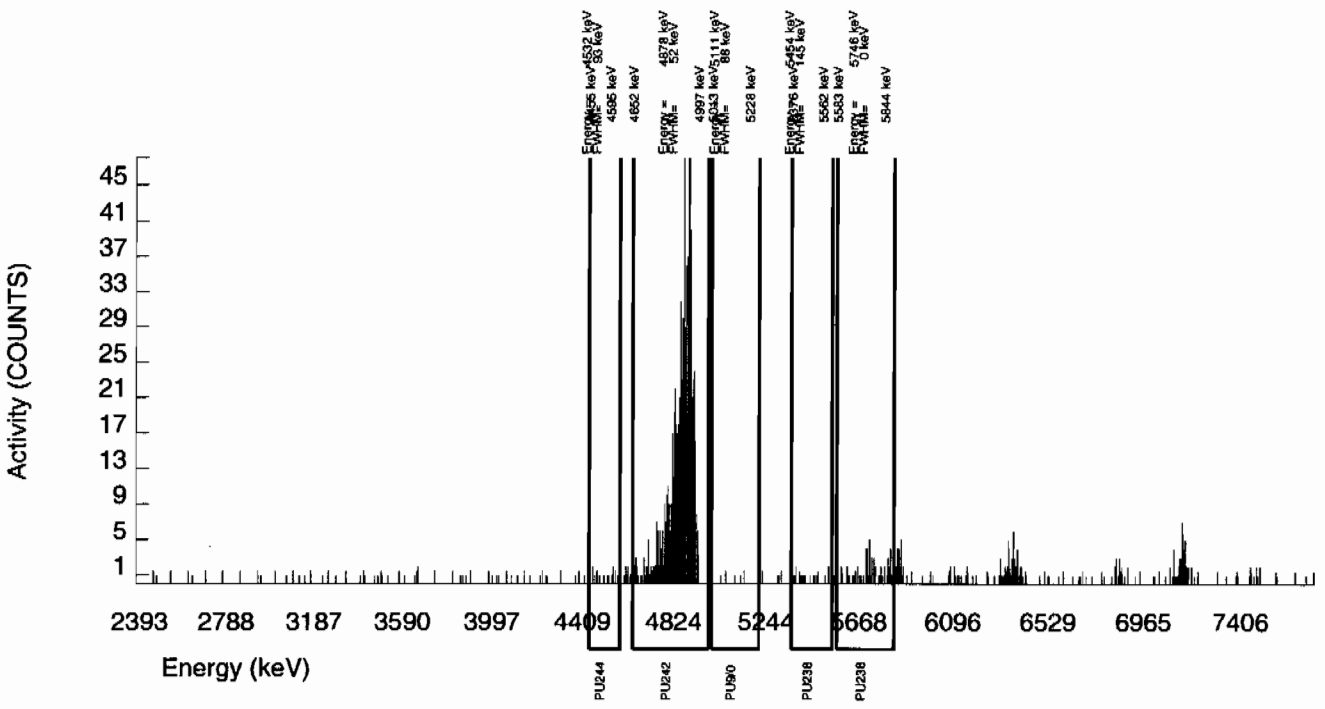

Alpha Spectroscopy Software Version 2.0
effective date: 03-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984985_PU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :78773 AVERAGE %EFFICIENCY :32.6597 % YIELD : 93.580	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.94982 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B040.CNF;1094 BKG DATE : 9-DEC-2009 EFF FILE : W040.CNF;313 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	0.000	-2.000	2.000	3.3488	99.90000	-2.95E-03	2.56E-03	1.15E-02	2.70E-02	2.56E-03
PU-236	5749.000	33.000	-4.000	37.000	2.0294	100.0000	-5.93E-03	1.24E-02	6.96E-03	1.79E-02	1.24E-02
PU-238	5499.000	0.000	-6.000	6.000	2.9082	99.90000	-8.85E-03	3.90E-03	9.98E-03	2.40E-02	3.90E-03
PU242	4890.000	1298.000	1290.000	8.000	2.8284	100.0000	1.90E+00	1.07E-01	9.70E-03	2.34E-02	5.33E-02
PU-244	4589.000	1.000	1.000	0.000	6.8218	99.90000	1.48E-03	1.48E-03	2.34E-02	5.08E-02	1.48E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA) .

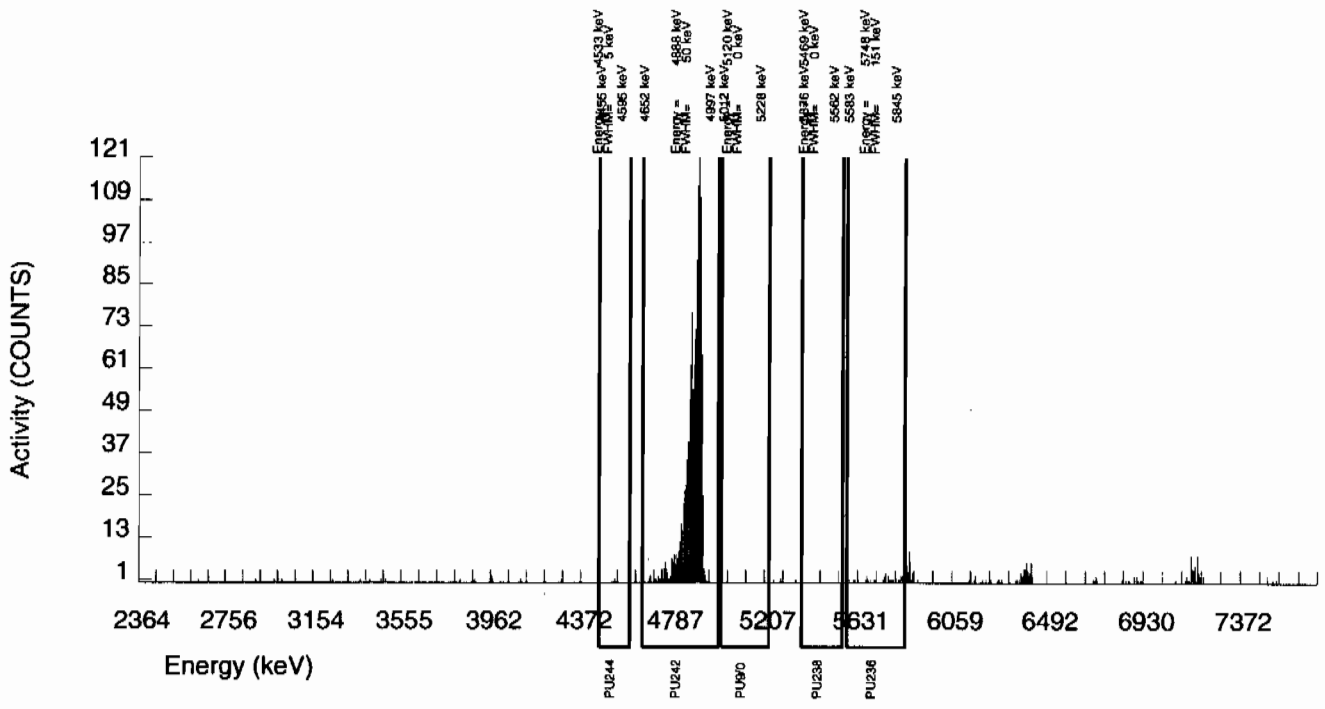

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S1201984986_PU SAMPLE QTY: 1.253 G
DETECTOR NUMBER :78205 AVERAGE %EFFICIENCY :32.7900 % YIELD : 66.401	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 2.80268 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B041.CNF;1087 BKG DATE : 9-DEC-2009 EFF FILE : W041.CNF;317 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	4.000	3.000	1.000	3.3488	99.90000	4.96E-03	3.70E-03	1.29E-02	3.02E-02	3.70E-03
PU-236	5749.000	36.000	-3.000	39.000	2.0294	100.0000	-5.03E-03	1.45E-02	7.80E-03	2.01E-02	1.45E-02
PU-238	5499.000	5.000	-2.000	7.000	2.9082	99.90000	-3.31E-03	5.73E-03	1.12E-02	2.68E-02	5.73E-03
PU242	4890.000	926.000	919.000	7.000	2.6458	100.0000	1.52E+00	9.34E-02	1.02E-02	2.48E-02	5.04E-02
PU-244	4589.000	9.000	8.000	1.000	6.8218	99.90000	1.32E-02	5.27E-03	2.62E-02	5.69E-02	5.23E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

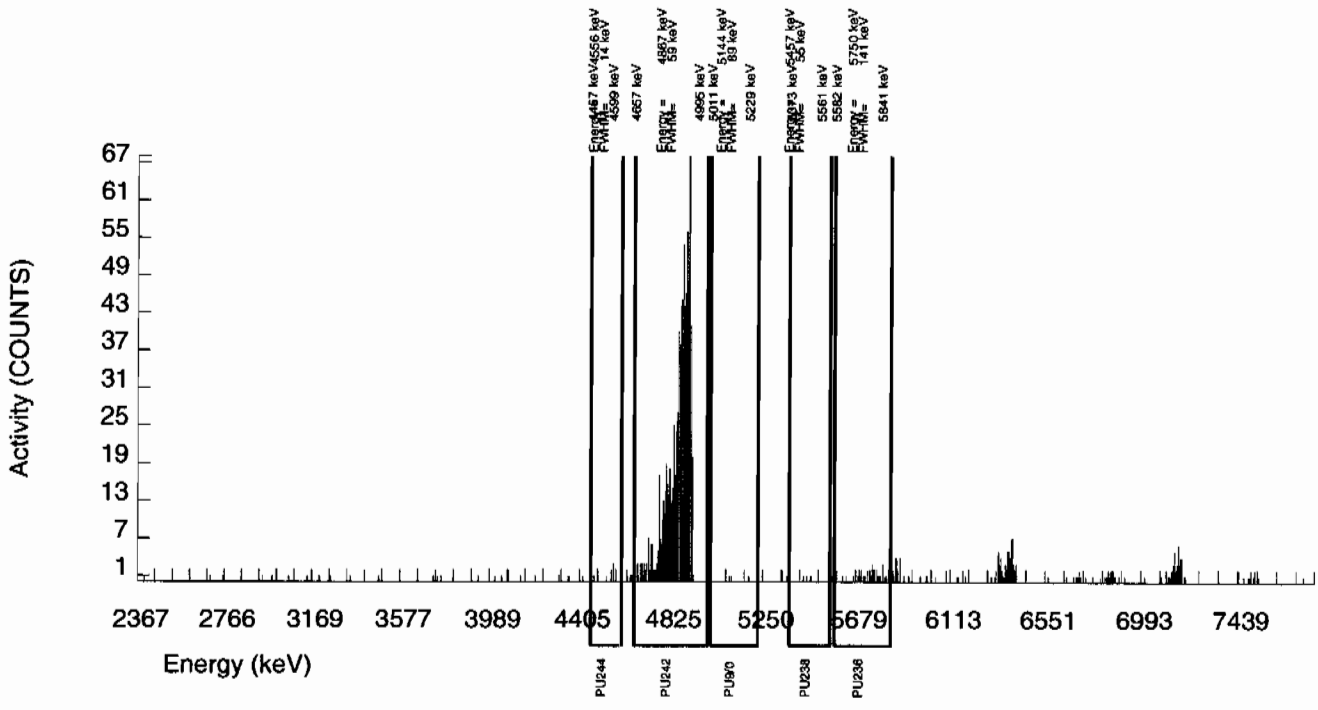

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984987_PU SAMPLE QTY: 0.103 G
DETECTOR NUMBER :78793 AVERAGE %EFFICIENCY :32.5347 % YIELD : 93.429	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.94348 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B042.CNF;1086 BKG DATE : 9-DEC-2009 EFF FILE : W042.CNF;290 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2615.000	2612.000	3.000	3.3488	99.90000	3.76E+01	2.30E+00	1.12E-01	2.63E-01	7.37E-01
PU-236	5749.000	27.000	-5.000	32.000	2.0294	100.0000	-7.23E-02	1.11E-01	6.79E-02	1.75E-01	1.11E-01
PU-238	5499.000	471.000	467.000	4.000	2.9082	99.90000	6.73E+00	5.00E-01	9.74E-02	2.34E-01	3.14E-01
PU242	4890.000	1292.000	1283.000	9.000	3.0000	100.0000	1.85E+01	1.19E+00	1.00E-01	2.40E-01	5.19E-01
PU-244	4589.000	13.000	11.000	2.000	6.8218	99.90000	1.58E-01	5.65E-02	2.29E-01	4.96E-01	5.58E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

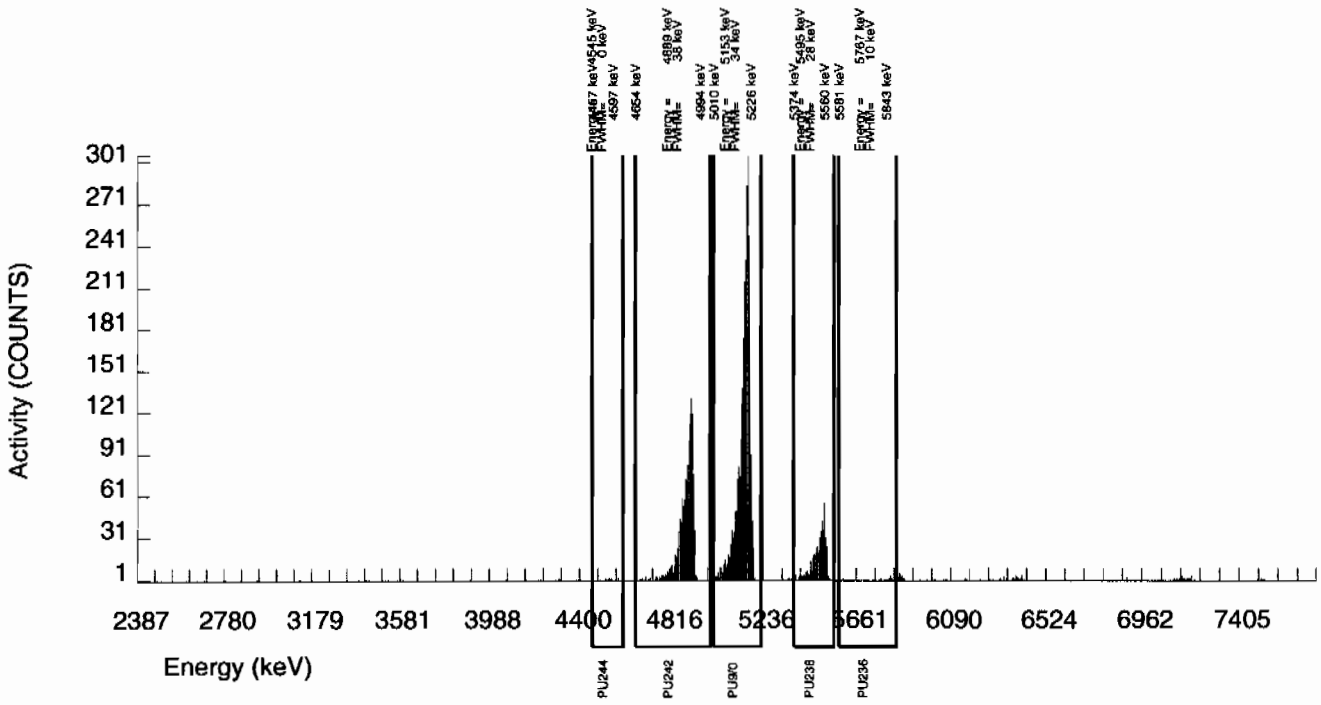

Radiochemistry Batch Checklist, Rev 9

Batch# 931796 Product: U Date: 12/15/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		~~N/A~~ JDN 12/15/09
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		case narrative
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analyses.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [illegible] 12/15/09

Secondary Review Performed By: [illegible] 12/15/09

12/12 12/18

Uranium Que Sheet

11-DEC-09

Batch #: 931796 Analyst: MXE1 First Client Due Date:18-DEC-09 Internal Due Date:12-DEC-09

Tracer Isotope: U-232/U-236 Tracer Code: 1283-E Expiration Date: 01/15/10 Vol: 0.1

LCS Isotope: U-238 LCS Code: 0244-A Expiration Date: 10/31/10 Vol: * SRM

Spike Isotope: U-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/11/09 Initials: gmo Pipet ID: 4497063 Balance ID: 19350208 Witness: SF 12-11-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/ml/l)	U Det #
241518001-2	CALA-10-4848	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	1	1	0.508	153
241518002-3	CABG-10-4888	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	2	2	0.508	154
241518003-2	CABG-10-4889	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	3	3	0.502	155
241518004-2	CABG-10-4886	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	4	4	0.509	156
241518005-2	CABG-10-4890	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	5	5	0.509	157
241518006-2	CABG-10-4887	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	6	6	0.508	158
241524002-2	WST03-10-2132	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	7	7	0.502	159
241559001-2	RE03-10-6903	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	8	8	0.506	160
241559002-2	RE03-10-6902	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	9	9	0.501	161
241610001-2	RE03-09-13919	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	10	10	0.502	162
241610002-2	RE03-09-13916	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	11	11	0.509	163
241610003-2	RE03-09-13920	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	12	12	0.509	164
241610004-2	RE03-09-13914	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	13	13	0.505	165
241610005-2	RE03-09-13915	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	14	14	0.503	166
241610006-2	RE03-09-13918	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	15	15	0.504	167
241610007-3	RE03-09-13921	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	16	16	0.507	168
241610008-2	RE03-09-13917	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	17	17	0.503	169
241610009-2	RE03-10-7033	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	18	18	0.502	170
1201993214-1	MB for batch 931796	MB		UCF pCi/g to pCi/	SOIL	QC ACCOUNT		19	19	1.00	171
1201993215-2	RE03-10-7033(241610009DUP)	DUP		.1 pCi/g	SOIL	QC ACCOUNT	19-NOV-09	20	20	0.504	172
1201993216-1	LCS for batch 931796	LCS		UCF pCi/g to pCi/	SOIL	QC ACCOUNT		21	~~20~~ 21	0.110	152

*SRM: 0244-A exp: 10/31/20 0.110 g

gmo 12-14-09

Choose SOP used: GL-RAD-A-011
GL-RAD-A-038
GL-RAD-A-045
GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: J. L. M. 12/15/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 931796

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201993215	DUP	Uranium-233/234	0.504 g	1.13	0.0925	0.0744	.009246032	pCi/g	NO
		Uranium-235/236	0.504 g	0.121	0.0208	0.0452	.017281746	pCi/g	NO
		Uranium-238	0.504 g	1.13	0.0928	0.0411	.004662698	pCi/g	NO
1201993216	LCS	Uranium-233/234	0.110 g	6.06	0.560	0.522	.042363636	pCi/g	NO
		Uranium-235/236	0.110 g	0.404	0.0975	0.317	.079181818	pCi/g	NO
		Uranium-238	0.110 g	6.10	0.563	0.288	.021363636	pCi/g	NO
1201993214	MB	Uranium-233/234	1.00 g	0.00466	0.00499	0.0356	.00466	pCi/g	YES
		Uranium-235/236	1.00 g	0.00871	0.00463	0.0217	.00871	pCi/g	YES
		Uranium-238	1.00 g	0.00235	0.0047	0.0197	.00235	pCi/g	YES
241518001	CALA-10-4848	Uranium-233/234	0.508 g	0.573	0.0656	0.138	.009173228	pCi/g	NO
		Uranium-235/236	0.508 g	0.0506	0.0172	0.0839	.017145669	pCi/g	YES
		Uranium-238	0.508 g	0.541	0.0631	0.0762	.004625984	pCi/g	NO
241518002	CABG-10-4888	Uranium-233/234	0.508 g	0.838	0.0813	0.113	.009173228	pCi/g	NO
		Uranium-235/236	0.508 g	0.0645	0.0178	0.0688	.017145669	pCi/g	YES
		Uranium-238	0.508 g	0.865	0.0831	0.0625	.004625984	pCi/g	NO
241518003	CABG-10-4889	Uranium-233/234	0.502 g	0.806	0.0783	0.111	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0635	0.0197	0.0676	.017350598	pCi/g	YES
		Uranium-238	0.502 g	0.697	0.0701	0.0615	.004681275	pCi/g	NO
241518004	CABG-10-4886	Uranium-233/234	0.509 g	0.856	0.0818	0.110	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.0583	0.0178	0.067	.017111984	pCi/g	YES
		Uranium-238	0.509 g	0.791	0.0771	0.0609	.004616896	pCi/g	NO
241518005	CABG-10-4890	Uranium-233/234	0.509 g	0.982	0.0906	0.109	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.089	0.0208	0.0664	.017111984	pCi/g	NO
		Uranium-238	0.509 g	1.08	0.0979	0.0603	.004616896	pCi/g	NO
241518006	CABG-10-4887	Uranium-233/234	0.508 g	1.56	0.133	0.112	.009173228	pCi/g	NO
		Uranium-235/236	0.508 g	0.0913	0.0214	0.0681	.017145669	pCi/g	NO
		Uranium-238	0.508 g	1.58	0.134	0.0619	.004625984	pCi/g	NO
241524002	WST03-10-2132	Uranium-233/234	0.502 g	0.821	0.0776	0.103	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0588	0.0162	0.0627	.017350598	pCi/g	YES
		Uranium-238	0.502 g	0.775	0.0744	0.057	.004681275	pCi/g	NO
241559001	RE03-10-6903	Uranium-233/234	0.506 g	0.929	0.0876	0.113	.009209486	pCi/g	NO
		Uranium-235/236	0.506 g	0.0646	0.0178	0.0689	.017213439	pCi/g	YES
		Uranium-238	0.506 g	1.07	0.0979	0.0626	.004644269	pCi/g	NO
241559002	RE03-10-6902	Uranium-233/234	0.501 g	0.610	0.0569	0.0755	.009301397	pCi/g	NO
		Uranium-235/236	0.501 g	0.0615	0.0144	0.0459	.017385230	pCi/g	YES
		Uranium-238	0.501 g	0.629	0.0584	0.0417	.004690619	pCi/g	NO
241610001	RE03-09-13919	Uranium-233/234	0.502 g	1.03	0.086	0.0739	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0663	0.0148	0.0449	.017350598	pCi/g	YES
		Uranium-238	0.502 g	0.987	0.0828	0.0408	.004681275	pCi/g	NO
241610002	RE03-09-13916	Uranium-233/234	0.509 g	0.782	0.0686	0.0736	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.042	0.0123	0.0448	.017111984	pCi/g	YES

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241610002	RE03-09-13916	Uranium-238	0.509 g	0.786	0.069	0.0407	.004616896	pCi/g	NO
241610003	RE03-09-13920	Uranium-233/234	0.509 g	1.08	0.0891	0.0741	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.0936	0.019	0.0451	.017111984	pCi/g	NO
		Uranium-238	0.509 g	1.04	0.0869	0.041	.004616896	pCi/g	NO
241610004	RE03-09-13914	Uranium-233/234	0.505 g	0.842	0.0722	0.0714	.009227723	pCi/g	NO
		Uranium-235/236	0.505 g	0.0989	0.0182	0.0434	.017247525	pCi/g	NO
		Uranium-238	0.505 g	0.967	0.0809	0.0394	.004653465	pCi/g	NO
241610005	RE03-09-13915	Uranium-233/234	0.503 g	1.04	0.0857	0.0713	.009264414	pCi/g	NO
		Uranium-235/236	0.503 g	0.108	0.0191	0.0434	.017316103	pCi/g	NO
		Uranium-238	0.503 g	0.969	0.0809	0.0394	.004671968	pCi/g	NO
241610006	RE03-09-13918	Uranium-233/234	0.504 g	0.987	0.0833	0.0762	.009246032	pCi/g	NO
		Uranium-235/236	0.504 g	0.0434	0.0128	0.0463	.017281746	pCi/g	YES
		Uranium-238	0.504 g	0.946	0.0805	0.0421	.004662698	pCi/g	NO
241610007	RE03-09-13921	Uranium-233/234	0.507 g	1.00	0.0836	0.0734	.009191321	pCi/g	NO
		Uranium-235/236	0.507 g	0.0896	0.0175	0.0446	.017179487	pCi/g	NO
		Uranium-238	0.507 g	1.02	0.0856	0.0405	.004635108	pCi/g	NO
241610008	RE03-09-13917	Uranium-233/234	0.503 g	1.09	0.0894	0.0712	.009264414	pCi/g	NO
		Uranium-235/236	0.503 g	0.0667	0.0146	0.0433	.017316103	pCi/g	YES
		Uranium-238	0.503 g	1.21	0.0976	0.0393	.004671968	pCi/g	NO
241610009	RE03-10-7033	Uranium-233/234	0.502 g	1.02	0.0845	0.072	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0822	0.017	0.0438	.017350598	pCi/g	YES
		Uranium-238	0.502 g	1.03	0.0856	0.0398	.004681275	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241524002_UU SAMPLE QTY: 0.502 G
DETECTOR NUMBER :76225 AVERAGE %EFFICIENCY :25.4259 % YIELD : 103.825	COUNT DATE:14-DEC-2009 12:08:00 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 5.44728 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B159.CNF;352 BKG DATE : 13-DEC-2009 EFF FILE : W159.CNF;100 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	243.000	241.602	0.000	5.9398	100.0000	8.21E-01	7.76E-02	4.70E-02	1.03E-01	5.28E-02
U232	5302.100	1390.000	1384.000	6.000	2.4495	100.0000	4.71E+00	3.50E-01	1.94E-02	4.80E-02	1.27E-01
U-235	4391.000	14.000	14.000	0.000	2.6249	80.90000	5.88E-02	1.62E-02	2.57E-02	6.27E-02	1.57E-02
U-238	4184.730	229.000	228.000	1.000	3.0201	100.0000	7.75E-01	7.44E-02	2.39E-02	5.70E-02	5.15E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

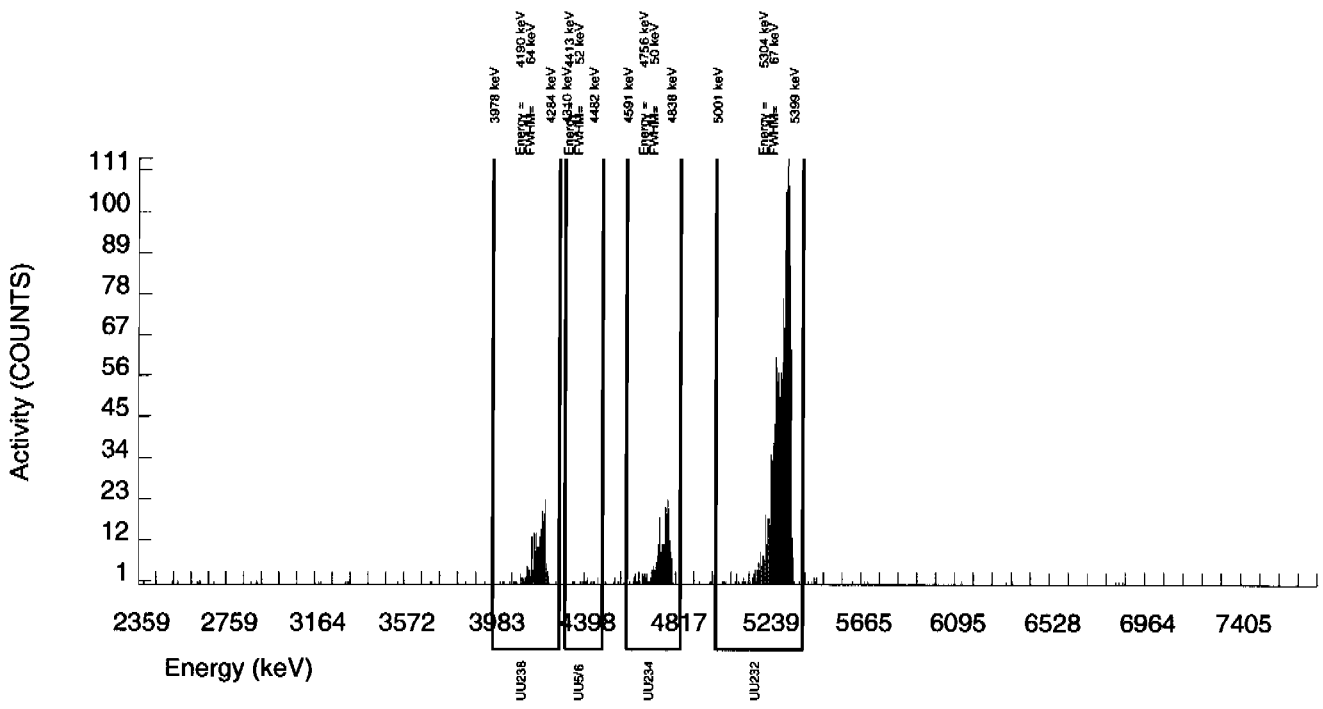

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S0241610009_UU SAMPLE QTY: 0.502 G
DETECTOR NUMBER :72549 AVERAGE %EFFICIENCY :36.8583 % YIELD : 102.568	COUNT DATE:14-DEC-2009 12:21:09 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24647 dpm RESULTS : 5.38118 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B170.CNF;151 BKG DATE : 13-DEC-2009 EFF FILE : W170.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	433.000	427.998	3.000	5.9398	100.0000	1.02E+00	8.45E-02	3.28E-02	7.20E-02	4.94E-02
U232	5302.100	1988.000	1982.000	6.000	2.4495	100.0000	4.71E+00	3.35E-01	1.35E-02	3.35E-02	1.06E-01
U-235	4391.000	29.000	28.000	1.000	2.6249	80.90000	8.21E-02	1.70E-02	1.79E-02	4.38E-02	1.61E-02
U-238	4184.730	436.000	436.000	0.000	3.0201	100.0000	1.03E+00	8.56E-02	1.67E-02	3.98E-02	4.96E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

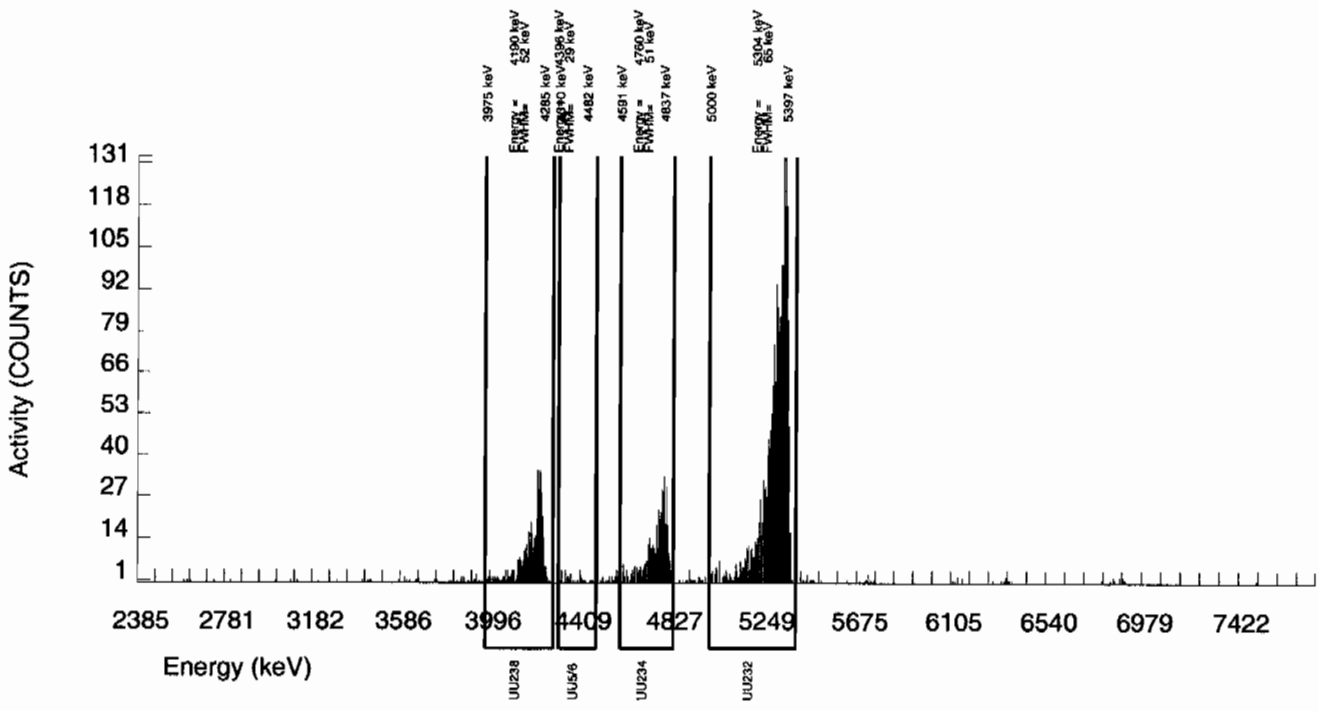

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 11-DEC-2009 00:00:00	SAMPLE ID : S1201993214_UU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :78260 AVERAGE %EFFICIENCY :38.3924 % YIELD : 99.960	COUNT DATE:14-DEC-2009 12:21:11 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24329 dpm RESULTS : 5.24117 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B171.CNF;157 BKG DATE : 13-DEC-2009 EFF FILE : W171.CNF;65 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	13.000	3.967	7.000	5.9398	100.0000	4.66E-03	4.99E-03	1.62E-02	3.56E-02	4.98E-03
U232	5302.100	2021.000	2012.000	9.000	3.0000	100.0000	2.36E+00	1.67E-01	8.19E-03	1.96E-02	5.29E-02
U-235	4391.000	8.000	6.000	2.000	2.6249	80.90000	8.71E-03	4.63E-03	8.86E-03	2.17E-02	4.59E-03
U-238	4184.730	9.000	2.000	7.000	3.0201	100.0000	2.35E-03	4.70E-03	8.25E-03	1.97E-02	4.70E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

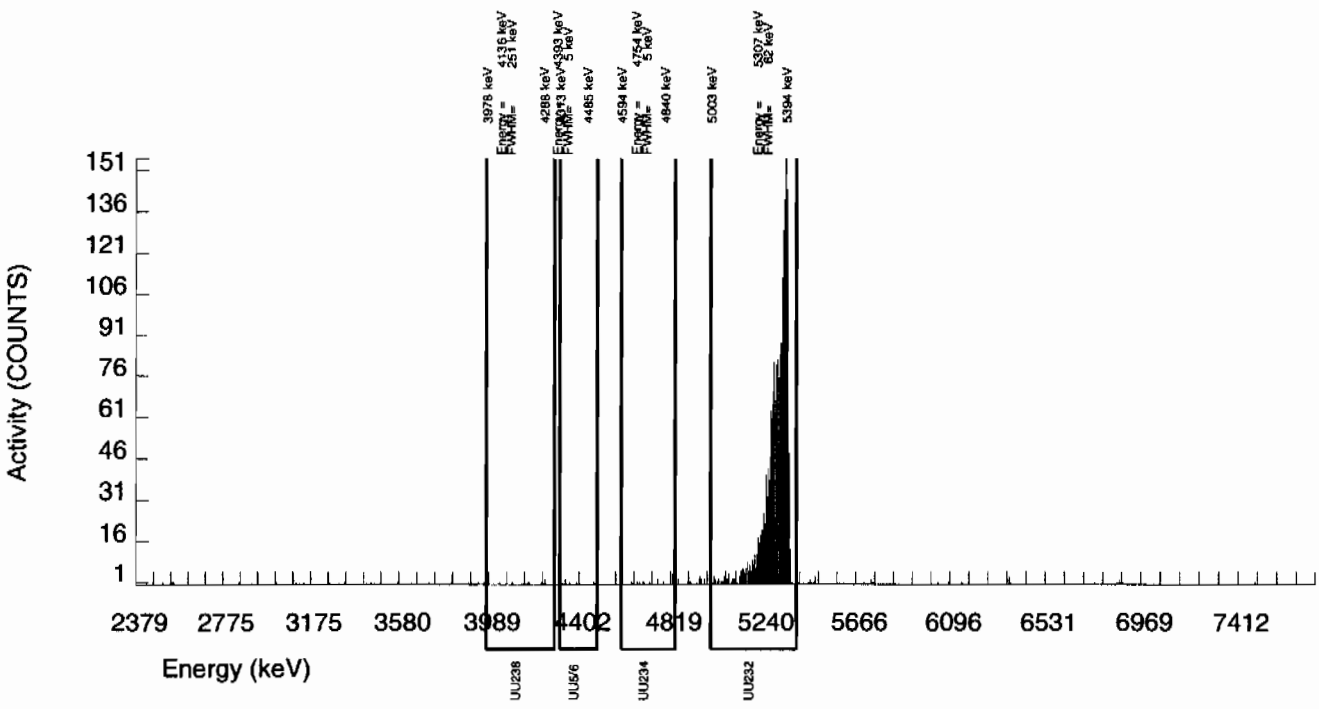

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S1201993215_UU SAMPLE QTY: 0.504 G
DETECTOR NUMBER :78772 AVERAGE %EFFICIENCY :38.0111 % YIELD : 95.944	COUNT DATE:14-DEC-2009 12:21:13 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24647 dpm RESULTS : 5.03368 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B172.CNF;155 BKG DATE : 13-DEC-2009 EFF FILE : W172.CNF;58 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	462.000	459.068	1.000	5.9398	100.0000	1.13E+00	9.25E-02	3.39E-02	7.44E-02	5.26E-02
U232	5302.100	1915.000	1912.000	3.000	1.7321	100.0000	4.69E+00	3.35E-01	9.87E-03	2.64E-02	1.07E-01
U-235	4391.000	40.000	40.000	0.000	2.6249	80.90000	1.21E-01	2.08E-02	1.85E-02	4.52E-02	1.92E-02
U-238	4184.730	462.000	461.000	1.000	3.0201	100.0000	1.13E+00	9.28E-02	1.72E-02	4.11E-02	5.27E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

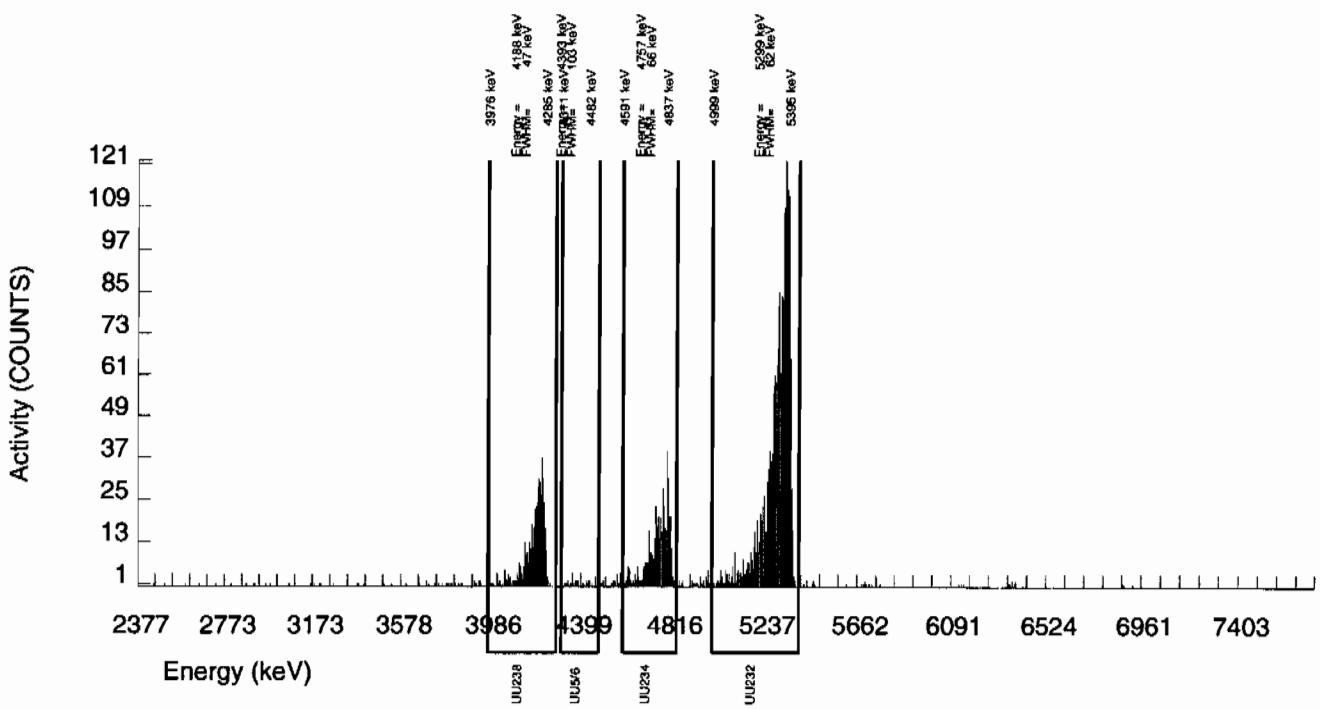

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 11-DEC-2009 00:00:00	SAMPLE ID : S1201993216_UU SAMPLE QTY: 0.110 G
DETECTOR NUMBER :76222 AVERAGE %EFFICIENCY :24.4246 % YIELD : 97.539	COUNT DATE:14-DEC-2009 12:07:42 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24329 dpm RESULTS : 5.11424 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B152.CNF;373 BKG DATE : 13-DEC-2009 EFF FILE : W152.CNF;101 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	354.000	352.738	0.000	5.9398	100.0000	6.06E+00	5.60E-01	2.38E-01	5.22E-01	3.23E-01
U232	5302.100	1251.000	1249.000	2.000	1.4142	100.0000	2.15E+01	1.73E+00	5.66E-02	1.60E-01	6.09E-01
U-235	4391.000	19.000	19.000	0.000	2.6249	80.90000	4.04E-01	9.75E-02	1.30E-01	3.17E-01	9.26E-02
U-238	4184.730	355.000	355.000	0.000	3.0201	100.0000	6.10E+00	5.63E-01	1.21E-01	2.88E-01	3.24E-01

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

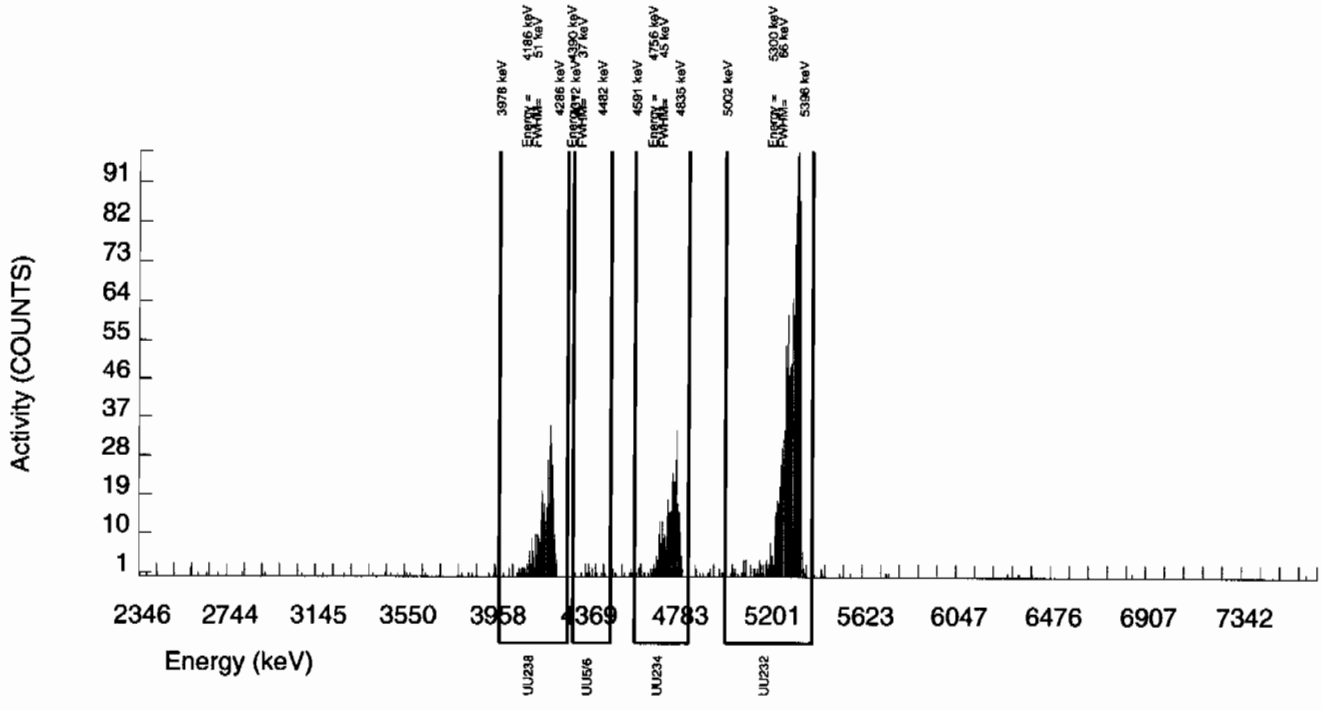

Radiochemistry Batch Checklist, Rev 9

Batch# 926904 Product: SR Date: 12/4/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)			N/A
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			N/A
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: 12/4/09

Secondary Review Performed By:

Strontium 90 Que Sheet

11/25/09

Batch #: 926904 Analyst: JXRI First Client Due Date: 12/18/2009 Internal Due Date:12/07/2009 Comments

Sr-90 Spike Code: ~~Expiration Date:~~ ~~Vol:~~ Sr Sep. Date/time: 12-2-09 / 0937

Sr-90 LCS Code: 1D67-C Expiration Date: 6-17-10 Vol: 0.1

Sr Carrier Code: 1194590 Exp Date: 3-19-10 Vol: 0.5 Sdt Wt: 8.93

Prep Date: 11-30-09 Initials: JLR Pipet ID: 1795419 Balance #: 19350208 Analytical Scale #: 38110047 Witness: 11/30/09

Sample ID	Client Description	Type	RDL	Collection Date	Matrh	Client	Rad	Pos. #	Wet/Dry Aliquot (mL) or (g)	Det # 1 & 2	Initial Sr wt (g)	Final Sr wt (g)	Net Sr wt (mg)
241518001-1	CALA-10-4848	SAMPLE	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	LANL010		1	2.010	H3	0.0258	0.0331	7.3
241518002-1	CABG-10-4888	SAMPLE	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	LANL010		2	2.013	H4	0.0259	0.0324	6.5
241518003-1	CABG-10-4889	SAMPLE	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	LANL010		3	2.007	G1	0.0257	0.0318	6.1
241518004-1	CABG-10-4886	SAMPLE	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	LANL010		4	2.038	G2	0.0260	0.0320	6.0
241518005-1	CABG-10-4890	SAMPLE	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	LANL010		5	2.042	G3	0.0259	0.0313	5.4
241518006-1	CABG-10-4887	SAMPLE	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	LANL010		6	2.027	G4	0.0258	0.0316	5.8
241524002-1	WST03-10-2132	SAMPLE	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	LANL010		7	2.014	H1	0.0256	0.0322	6.6
1201981803-1	MB for batch 926904	MB	.5 pCi/g		SOIL	QC ACCOUNT		8 1.D	~~2.042~~*	H2	0.0257	0.0337	8.0
1201981804-1	WST03-10-2132(241524002DUP)	DUP	.5 pCi/g	NOV-18-09 12:00 PM	SOIL	QC ACCOUNT		9	2.004	H3	0.0260	0.0326	6.6
1201981805-1	LCS for batch 926904	LCS	.5 pCi/g		SOIL	QC ACCOUNT		10 1.D	~~2.042~~*	H4	0.0260	0.0340	8.0

* el 12/4/09 Sr ✓ WTS.

• 925141

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One) Data Reviewed By: 12/4/09

Blank Correction Report

Batch ID 926904

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201981804	DUP	Strontium-90	2.00 g	-0.0188	0.0572	0.212	-.03115	pCi/g	NO
1201981805	LCS	Strontium-90	1.00 g	19.3	2.07	0.366	-.0623	pCi/g	NO
1201981803	MB	Strontium-90	1.00 g	-0.0623	0.0969	0.365	-.0623	pCi/g	NO
241518001	CALA-10-4848	Strontium-90	2.01 g	-0.0909	0.0478	0.194	-.03099502	pCi/g	NO
241518002	CABG-10-4888	Strontium-90	2.01 g	-0.0656	0.0575	0.223	-.03099502	pCi/g	NO
241518003	CABG-10-4889	Strontium-90	2.01 g	-0.0335	0.0769	0.281	-.03099502	pCi/g	NO
241518004	CABG-10-4886	Strontium-90	2.04 g	0.120	0.0765	0.251	-.03053922	pCi/g	NO
241518005	CABG-10-4890	Strontium-90	2.04 g	-0.0575	0.077	0.287	-.03053922	pCi/g	NO
241518006	CABG-10-4887	Strontium-90	2.03 g	-0.17	0.0598	0.252	-.03068966	pCi/g	YES
241524002	WST03-10-2132	Strontium-90	2.01 g	0.0285	0.066	0.233	-.03099502	pCi/g	NO

Strontium-90 Solid

Filename : SR90.XLS
File type : Excel
Version # : 1.2.9

Spike S/N : N/A
Spike Exp Date : N/A
Spike Activity (dpm/ml): N/A
Spike Volume Added: N/A

Batch : 926904
Analyst : JXR1
Prep Date : 11/30/2009

LCS S/N : 1067-C
LCS Exp Date : 6/17/2010
LCS Activity (dpm/ml): 429.44
LCS Volume Added: 0.10

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Sr-90 Abundance : 1
Method Uncertainty : 0.1005

Procedure Code : GFC90SRS
Parmname : Strontium-90
Required MDC : 0.5 pCi/G
Halflife of Sr-90 : 28.90 years
Halflife of Y-90 : 64.053 hours

Geometry: Tuffryn Filter

Carrier S/N : 1194590
Carrier Exp Date : 3/19/2010
Carrier Volume Added: 0.50
Carrier Weight (mg/ml): 17.85
Carrier Weight StDev.: 0.06

Sample Characteristics					Carrier Calculations				
Pos.	Sample ID	Sample Aliquot G	Sample Aliquot StDev. G	Sample Date/Time	Carrier Weight (mg) (Standard)	Net Weight (mg) (Sample)	Net Weight StDev. (mg)	Carrier Aliquot (mL)	Carrier Aliquot StDev. (mL)
1	241518001.1	2.0100	3.4282E-03	11/18/2009 12:00	17.85	7.30	0.038705	0.5	0.002564
2	241518002.1	2.0130	3.4285E-03	11/18/2009 12:00	17.85	6.50	0.035267	0.5	0.002564
3	241518003.1	2.0070	3.4279E-03	11/18/2009 12:00	17.85	6.10	0.033548	0.5	0.002564
4	241518004.1	2.0380	3.4311E-03	11/18/2009 12:00	17.85	6.00	0.033118	0.5	0.002564
5	241518005.1	2.0420	3.4315E-03	11/18/2009 12:00	17.85	5.40	0.030539	0.5	0.002564
6	241518006.1	2.0270	3.4299E-03	11/18/2009 12:00	17.85	5.80	0.032258	0.5	0.002564
7	241524002.1	2.0140	3.4286E-03	11/18/2009 12:00	17.85	6.60	0.035697	0.5	0.002564
8	1201981803.1	1.0000	3.3233E-03	11/30/2009 0:00	17.85	8.00	0.041714	0.5	0.002564
9	1201981804.1	2.0040	3.4276E-03	11/18/2009 12:00	17.85	6.60	0.035697	0.5	0.002564
10	1201981805.1	1.0000	3.3233E-03	11/30/2009 0:00	17.85	8.00	0.041714	0.5	0.002564

Count Raw Data

Pos.	Detector ID	Counting Time (min.)	Gross Counts Alpha	Gross Counts Beta	Gross Beta CPM	Count Start Date/Time	Strontium Separation Date/Time	Yttrium Ingrowth	Sr-90 Decay	Calculated Sample Recovery %	Sample Recovery Error %
1	H3	60	4	52	0.865	12/4/2009 12:33	12/2/2009 9:39	0.427	0.999	81.79%	0.97%
2	H4	60	8	59	0.980	12/4/2009 12:33	12/2/2009 9:39	0.427	0.999	72.83%	0.98%
3	G1	60	3	90	1.499	12/4/2009 14:22	12/2/2009 9:39	0.438	0.999	68.35%	0.99%
4	G2	60	4	96	1.598	12/4/2009 14:22	12/2/2009 9:39	0.438	0.999	67.23%	0.99%
5	G3	60	4	82	1.364	12/4/2009 14:22	12/2/2009 9:39	0.438	0.999	60.50%	1.01%
6	G4	60	3	53	0.882	12/4/2009 14:22	12/2/2009 9:39	0.438	0.999	64.99%	1.00%
7	H1	60	2	79	1.315	12/4/2009 14:22	12/2/2009 9:39	0.438	0.999	73.95%	0.98%
8	H2	60	1	63	1.050	12/4/2009 14:22	12/2/2009 9:39	0.438	1.000	89.64%	0.98%
9	H3	60	7	64	1.064	12/4/2009 14:22	12/2/2009 9:39	0.438	0.999	73.95%	0.98%
10	H4	60	3	1743	29.049	12/4/2009 14:22	12/2/2009 9:39	0.438	1.000	89.64%	0.96%

Calibration Data								Weekly Bkg	
Pos.	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm) Sr-90	Detector Efficiency (cpm/dpm) Y-90	Detector Efficiency Error (cpm/dpm)	Alpha X-Talk	CPM	Count Time (min.)
1	LB4100	1/12/2009	1/31/2010	0.4813	0.6054	0.01564	0.02607	1.110	500
2	LB4100	1/12/2009	1/31/2010	0.4779	0.5917	0.01752	0.02295	1.136	500
3	LB4100	1/12/2009	1/31/2010	0.4579	0.5918	0.01162	0.02348	1.572	500
4	LB4100	1/12/2009	1/31/2010	0.4839	0.5975	0.01093	0.02760	1.326	500
5	LB4100	1/12/2009	1/31/2010	0.4952	0.6053	0.01200	0.03499	1.484	500
6	LB4100	1/12/2009	1/31/2010	0.4886	0.6006	0.01264	0.02250	1.256	500
7	LB4100	1/12/2009	1/31/2010	0.4586	0.5908	0.02167	0.03797	1.248	500
8	LB4100	1/12/2009	1/31/2010	0.4669	0.5997	0.01656	0.02236	1.140	500
9	LB4100	1/12/2009	1/31/2010	0.4863	0.6054	0.01564	0.02607	1.110	500
10	LB4100	1/12/2009	1/31/2010	0.4672	0.5917	0.01752	0.02348	1.136	500

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDC for 1201981804.1

Results Pos.	Decision Level pCi/G	Critical Level pCi/G	Required MDC pCi/G	MDC pCi/G	Sample Act. Conc. pCi/G	Sample Act. Error pCi/G	Net Count Rate CPM	Net Count Rate Error CPM	1 SIGMA Counting Uncertainty pCi/G	1 SIGMA Total Prop. Uncertainty pCi/G	Sample QC	Sample Type	RPD	RER	Nominal pCi/G	Recovery
1	0.1244	0.0878	0.5	0.1942	-0.0909	0.5266	-0.2451	0.1290	0.0478	0.0478		SAMPLE				
2	0.1429	0.1009	0.5	0.2228	-0.0656	0.8762	-0.1557	0.1364	0.0574	0.0575		SAMPLE				
3	0.1830	0.1292	0.5	0.2813	-0.0335	2.2919	-0.0732	0.1677	0.0769	0.0769		SAMPLE				
4	0.1618	0.1142	0.5	0.2506	0.1201	0.6290	0.2722	0.1711	0.0755	0.0765		SAMPLE				
5	0.1862	0.1314	0.5	0.2869	-0.0575	1.3399	-0.1197	0.1603	0.0770	0.0770		SAMPLE				
6	0.1625	0.1147	0.5	0.2522	-0.1702	0.3514	-0.3738	0.1312	0.0598	0.0598		SAMPLE				
7	0.1501	0.1060	0.5	0.2331	0.0285	2.3186	0.0674	0.1563	0.0660	0.0660		SAMPLE				
8	0.2342	0.1654	0.5	0.3652	-0.0623	1.5561	-0.0904	0.1406	0.0969	0.0969		MB				
9	0.1358	0.0959	0.5	0.2120	-0.0188	3.0456	-0.0464	0.1412	0.0572	0.0572	241524002.1	DUP	0.0%	0.1916		
10	0.2348	0.1658	0.5	0.3662	19.3204	0.0322	27.9128	0.6974	0.4827	2.0666		LCS			19.3441	99.9%

926904

SampleID	Instr	Time (min.)	Alpha Counts	Beta Counts	Count Start Time	Count End Time	Machine
241518001	H3	60	4	52	12/4/2009 12:33	12/4/2009 13:33	LB4100
241518002	H4	60	8	59	12/4/2009 12:33	12/4/2009 13:33	LB4100
241518003	G1	60	3	90	12/4/2009 14:22	12/4/2009 15:22	LB4100
241518004	G2	60	4	96	12/4/2009 14:22	12/4/2009 15:22	LB4100
241518005	G3	60	4	82	12/4/2009 14:22	12/4/2009 15:22	LB4100
241518006	G4	60	3	53	12/4/2009 14:22	12/4/2009 15:22	LB4100
241524002	H1	60	2	79	12/4/2009 14:22	12/4/2009 15:22	LB4100
1201981803	H2	60	1	63	12/4/2009 14:22	12/4/2009 15:22	LB4100
1201981804	H3	60	7	64	12/4/2009 14:22	12/4/2009 15:22	LB4100
1201981805	H4	60	3	1743	12/4/2009 14:22	12/4/2009 15:22	LB4100

Radiochemistry Batch Checklist, Rev 9

Batch# 927053 Product: H3 Date: 12/10/2009

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)			N/A
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Nancy Marie Kent

Secondary Review Performed By: [illegible] 12/10/09

Tritium Que Sheet

120 Orange

03-DEC-09

Batch #: 927653 **Analyst:** KXK2 **First Client Due Date** 11-DEC-09 **Internal Due Date:** 27-NOV-09

Spike Isotope: Hydrogen-3 **Spike Code:** ——— **Expiration Date:** ——— **Vol:** ———

LCS Isotope: Hydrogen-3 **LCS Code:** 0134-K **Expiration Date:** 3/27/10 **Vol:** 0.1

Prep Date: 12/2/09 **Initials:** KXKJ **Pipet ID:** 29709168 **Witness:** AW 12/3/09

Sample ID	Client Samp ID	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Total Moisture Dist Vol (mL) KXKJ 12/2/09
241301001-1	CACH-10-4838	SAMPLE		.25 pCi/mL	SOIL	LANL010	16-NOV-09	10	5	1		570.70	517.62	53.08
241336001-1	RE03-09-13770	SAMPLE		.25 pCi/mL	SOIL	LANL010	16-NOV-09	10	6	2		447.32	403.04	44.28
241336002-1	RE03-10-5897	SAMPLE		.25 pCi/mL	SOIL	LANL010	16-NOV-09	10	7	3		693.91	646.03	47.88
241425001-1	WST03-10-2131	SAMPLE		.25 pCi/mL	SOIL	LANL010	17-NOV-09	10	8	4		525.14	483.65	41.49
241425002-1	WST03-10-2130	SAMPLE		.25 pCi/mL	SOIL	LANL010	17-NOV-09	10	9	5		541.26	488.22	53.04
241518001-1	CALA-10-4848	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	10	6		740.51	714.59	25.92
241518002-1	CABG-10-4888	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	11	7		510.68	321.73	188.95
241518003-1	CABG-10-4889	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	~~12~~ 42	8		630.35	442.51	187.84
241518004-1	CABG-10-4886	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	~~13~~ 43	9		674.01	494.72	179.29
241518005-1	CABG-10-4890	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	14	10	12/3/09	556.77	325.15	231.62
241518006-1	CABG-10-4887	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	~~15~~ 44	11	KXKJ	635.35	343.09	292.26
241524002-1	WST03-10-2132	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	16	12		630.64	591.54	39.10
241909001-1	WST49-10-6924	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	5	17	13		482.63	469.60	13.03
241909002-1	WST49-10-6923	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	5	~~18~~ 46	14		591.15	584.65	6.50
1201983508-1	MB for batch 927653	MB		.25 pCi/mL	SOIL	QC ACCOUNT		10	~~19~~ 47	15		20.00	0	20.00
1201983509-1	WST03-10-2132(241524002DUP)	DUP		.25 pCi/mL	SOIL	QC ACCOUNT	18-NOV-09	10	~~20~~ 48	12		630.64	591.54	39.10
1201983510-1	LCS for batch 927653	LCS		.25 pCi/mL	SOIL	QC ACCOUNT		10	21	16		20.00		20.00

17

Bkg Rack #: 4

KXKJ 12/2/09

Comments:

Bkg prepared with dead water? Yes/No

Instrument Used (circle as appropriate): *LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4040127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299, Purple 7069123, Silver 7060656*

ORANGE

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly vial; Ecoscint Ultra (10 mL sample/13 mL Ecoscint Ultra)*

Data Reviewed By:

GEL Laboratories LLC, Radiochemistry Division

DATE	12/1/2009	INITIALS	KXK2		BATCH NUMBER	927653

Sample #	Sample Wet (g)	% Moisture of Sample (Balance Interface using % Moisture Batch)	Total Moisture in Sample (mL)	Sample Dry (g)	mLs aliquoted into LSC vial	Collection Tube Number
241301001	570.70	0.093	53.08	517.62	10	23
241336001	447.32	0.099	44.28	403.04	10	914
241336002	693.91	0.069	47.88	646.03	10	902
241425001	525.14	0.079	41.49	483.65	10	10
241425002	541.26	0.098	53.04	488.22	10	8
241518001	740.51	0.035	25.92	714.59	10	912
241518002	510.68	0.370	188.95	321.73	10	OVEN
241518003	630.35	0.298	187.84	442.51	10	OVEN
241518004	674.01	0.266	179.29	494.72	10	OVEN
241518005	556.77	0.416	231.62	325.15	10	OVEN
241518006	635.35	0.460	292.26	343.09	10	OVEN
241524002	630.64	0.062	39.10	591.54	10	801
241909001	482.63	0.027	13.03	469.60	5	49
241909002	591.15	0.011	6.50	584.65	5	532
MB			0.00	0.00	10	1
LCS			0.00	0.00	10	2

T927653R2

Tritium Solid

Filename : H3VAC.XLS
File type : Excel
Version # : 1.2.5

Batch : 927653
Analyst : KXK2
Prep Date : 12/2/2009

Spike S/N : N/A
Spike Exp Date : N/A
Spike Activity (dpm/ml): N/A
Spike Volume Added: N/A

LCS S/N : 0134-K
LCS Exp Date : 3/27/2010
LCS Activity (dpm/ml): 2495.34
LCS Volume Added: 0.10

H-3 Abundance : 1
Method Uncertainty : 0.0691
Geometry: 10mL DW/13mL Ecoscint Ultra

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1.0 ml Stdev : +/- 0.005480 ml
Pipet, 5.0 ml Stdev : +/- 0.025729 ml

Procedure Code : LSC_VH3S
Parmname : Tritium
Required MDC : 250 pCi/L
Halflife of Tritium : 12.28 years

Sample Characteristics

Pos.	Sample ID	Wet Sample Weight (g)	Total Moisture L	Sample Aliquot in Vial L	Sample Aliquot Stdev. L	Dry Sample Weight (g)	% Moisture of Sample	Rig number	Sample Date/Time
1	241301001.1	570.70	0.0531	0.0100	2.5729E-05	517.62	9.30%	1	11/16/2009 12:00
2	241336001.1	447.32	0.0443	0.0100	2.5729E-05	403.04	9.90%	2	11/16/2009 12:00
3	241336002.1	693.91	0.0479	0.0100	2.5729E-05	646.03	6.90%	3	11/16/2009 12:00
4	241425001.1	525.14	0.0415	0.0100	2.5729E-05	483.65	7.90%	4	11/17/2009 12:00
5	241425002.1	541.26	0.0530	0.0100	2.5729E-05	488.22	9.80%	5	11/17/2009 12:00
6	241518001.1	740.51	0.0259	0.0100	2.5729E-05	714.59	3.50%	6	11/18/2009 12:00
7	241518002.1	510.68	0.1890	0.0100	2.5729E-05	321.73	37.00%	7	11/18/2009 12:00
8	241518003.1	630.35	0.1878	0.0100	2.5729E-05	442.51	29.80%	8	11/18/2009 12:00
9	241518004.1	674.01	0.1793	0.0100	2.5729E-05	494.72	26.60%	9	11/18/2009 12:00
10	241518005.1	556.77	0.2316	0.0100	2.5729E-05	325.15	41.60%	10	11/18/2009 12:00
11	241518006.1	635.35	0.2923	0.0100	2.5729E-05	343.09	46.00%	11	11/18/2009 12:00
12	241524002.1	630.64	0.0391	0.0100	2.5729E-05	591.54	6.20%	12	11/18/2009 12:00
13	241909001.1	482.63	0.0130	0.0050	2.5729E-05	469.60	2.70%	13	11/24/2009 12:00
14	241909002.1	591.15	0.0065	0.0050	2.5729E-05	584.65	1.10%	14	11/24/2009 12:00
15	1201983508.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	15	12/2/2009 0:00
16	1201983509.1	630.64	0.0391	0.0100	2.5729E-05	591.54	6.20%	12	11/18/2009 12:00
17	1201983510.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	16	12/2/2009 0:00

T927653R2

Count raw Data					Background				Calibration Data					Backgrounds	
Pos.	Rack Position #	Counting Time (min.)	Quench#	Gross cpm	cpm	Count Time (min.)	Count Start Date/Time	Sample Decay	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Efficiency Error (cpm/dpm)	Rack Position #	Count Start Date/Time
1	5	120.03	761	1.8	1.79	120	12/4/2009 14:36	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2727	0.00792	4	12/4/2009 12:34
2	6	120.03	757.94	1.88	1.79	120	12/4/2009 16:39	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2677	0.00792	4	12/4/2009 12:34
3	7	120.03	758.32	1.4	1.79	120	12/4/2009 18:41	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2683	0.00792	4	12/4/2009 12:34
4	8	120.03	752.87	1.55	1.79	120	12/4/2009 20:44	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2593	0.00792	4	12/4/2009 12:34
5	9	120.03	763.19	1.38	1.79	120	12/4/2009 22:46	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2762	0.00792	4	12/4/2009 12:34
6	10	120.03	762.82	1.38	1.79	120	12/5/2009 0:49	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2757	0.00792	4	12/4/2009 12:34
7	11	120.03	759.29	1.35	1.79	120	12/5/2009 4:07	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2699	0.00792	4	12/4/2009 12:34
8	42	60.0297	759.54	1	1.33	90	12/8/2009 13:57	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2703	0.00792	41	12/8/2009 12:25
9	43	60.0297	760.05	0.85	1.33	90	12/8/2009 15:00	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2712	0.00792	41	12/8/2009 12:25
10	14	120.03	761.62	10.38	1.79	120	12/5/2009 10:14	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2737	0.00792	4	12/4/2009 12:34
11	44	60.0297	760.29	1.1	1.33	90	12/8/2009 16:02	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2716	0.00792	41	12/8/2009 12:25
12	16	120.03	757.93	1.46	1.79	120	12/5/2009 15:50	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2677	0.00792	4	12/4/2009 12:34
13	17	120.03	757.81	1.42	1.79	120	12/5/2009 17:52	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2672	0.00792	4	12/4/2009 12:34
14	45	90.0297	760.85	1.01	1.33	90	12/8/2009 17:05	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2725	0.00792	41	12/8/2009 12:25
15	46	60.013	761.33	1.27	1.33	90	12/8/2009 18:37	0.999	LSCORANGE	7/23/2009	7/31/2010	0.2732	0.00792	41	12/8/2009 12:25
16	47	60.0297	758.11	1.38	1.33	90	12/8/2009 19:40	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2680	0.00792	41	12/8/2009 12:25
17	21	120.03	759.16	37.35	1.79	120	12/6/2009 0:01	0.999	LSCORANGE	7/23/2009	7/31/2010	0.2697	0.00792	4	12/4/2009 12:34

T927653R2

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDC for 1201983509.1

Results

Pos.	Decision Level pCi/L	Critical Level pCi/L	Required MDC pCi/L	MDC pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error pCi/L	Net Count Rate CPM	Net Count Rate Error CPM	1 SIGMA Counting Uncertainty pCi/L	1 SIGMA Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
1	66.6523	47.0571	250	98.2541	**1.6564**	17.294	0.010	0.173	28.6460	28.6463		SAMPLE				
2	67.8954	47.9348	250	100.0867	**15.1855**	1.943	0.090	0.175	29.5037	29.5226		SAMPLE				
3	67.7388	47.8242	250	99.8558	**-65.6522**	0.418	-0.390	0.163	27.4432	27.4434		SAMPLE				
4	70.0797	49.4769	250	103.3066	**-41.7975**	0.695	-0.240	0.167	29.0515	29.0516		SAMPLE				
5	65.7920	46.4497	250	96.9860	**-67.0354**	0.396	-0.410	0.163	26.5709	26.5710		SAMPLE				
6	65.9249	46.5435	250	97.1818	**-67.1707**	0.396	-0.410	0.163	26.6245	26.6247		SAMPLE				
7	67.3242	47.5315	250	99.2446	**-73.6158**	0.368	-0.440	0.162	27.0607	27.0609		SAMPLE				
8	74.8389	52.8369	250	114.0269	**-55.1574**	0.537	-0.330	0.177	29.6327	29.6334		SAMPLE				
9	74.6102	52.6754	250	113.6784	**-79.9838**	0.354	-0.480	0.170	28.3435	28.3442		SAMPLE				
10	66.3955	46.8758	250	97.8756	**1417.3560**	0.038	8.590	0.318	52.5396	111.8263		SAMPLE				
11	74.5034	52.6000	250	113.5157	**-38.2707**	0.791	-0.230	0.182	30.2715	30.2721		SAMPLE				
12	67.8887	47.9300	250	100.0768	**-55.6748**	0.499	-0.330	0.165	27.7614	27.7616		SAMPLE				
13	135.9199	95.9606	250	200.3636	**-124.9775**	0.442	-0.370	0.164	55.2380	55.2384		SAMPLE				
14	132.7154	93.6982	250	198.4385	**-106.0394**	0.504	-0.320	0.161	53.4235	53.4241		SAMPLE				
15	73.8962	52.1714	250	112.5922	**-9.9015**	3.159	-0.060	0.190	31.2829	31.2835		MB				
16	75.4944	53.2997	250	115.0256	**8.4304**	3.886	0.050	0.194	32.7644	32.7696	241524002.1	DUP	0.0%	0.5295		
17	67.2454	47.4758	250	99.1284	**5942.5265**	0.018	35.560	0.571	95.4279	424.7410		LCS			5620.1427	105.7%

REGISTRY

TUE 8 DEC 2009 12:23

*** DIRECTORY PATH :S:\LSC\O\DA\927653A3 ***

PARAMETER GROUP: 8
ID: H-3 (2)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	41	BKG	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	42	241518003	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	43	241518004	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	44	241518006	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	45	241909002	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	46	1201983508	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	47	1201983509	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q014101N.001	8 DEC 2009 13:56					
41	BKG	90:01.780	762.31	1.33	2.68	6.91
Q024201N.001	8 DEC 2009 14:58					
42	241518003	60:01.780	759.54	1.00	2.28	7.00
Q034301N.001	8 DEC 2009 16:01					
43	241518004	60:01.780	760.05	.85	2.08	6.27
Q044401N.001	8 DEC 2009 17:03					
44	241518006	60:01.780	760.29	1.10	2.72	7.26

REGISTRY

Q054501N.001 8 DEC 2009 18:36						
45	241909002	90:01.780	760.85	1.01	2.42	7.13
Q064601N.001 8 DEC 2009 19:38						
46	1201983508	60:00.780	761.33	1.27	2.57	6.99
Q074701N.001 8 DEC 2009 20:41						
47	1201983509	60:01.779	758.11	1.38	2.96	7.97

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ014101N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, BKG, 90.02966:
Quench:	762.31
Start, End, X-Axis	50-175

Channel Counts

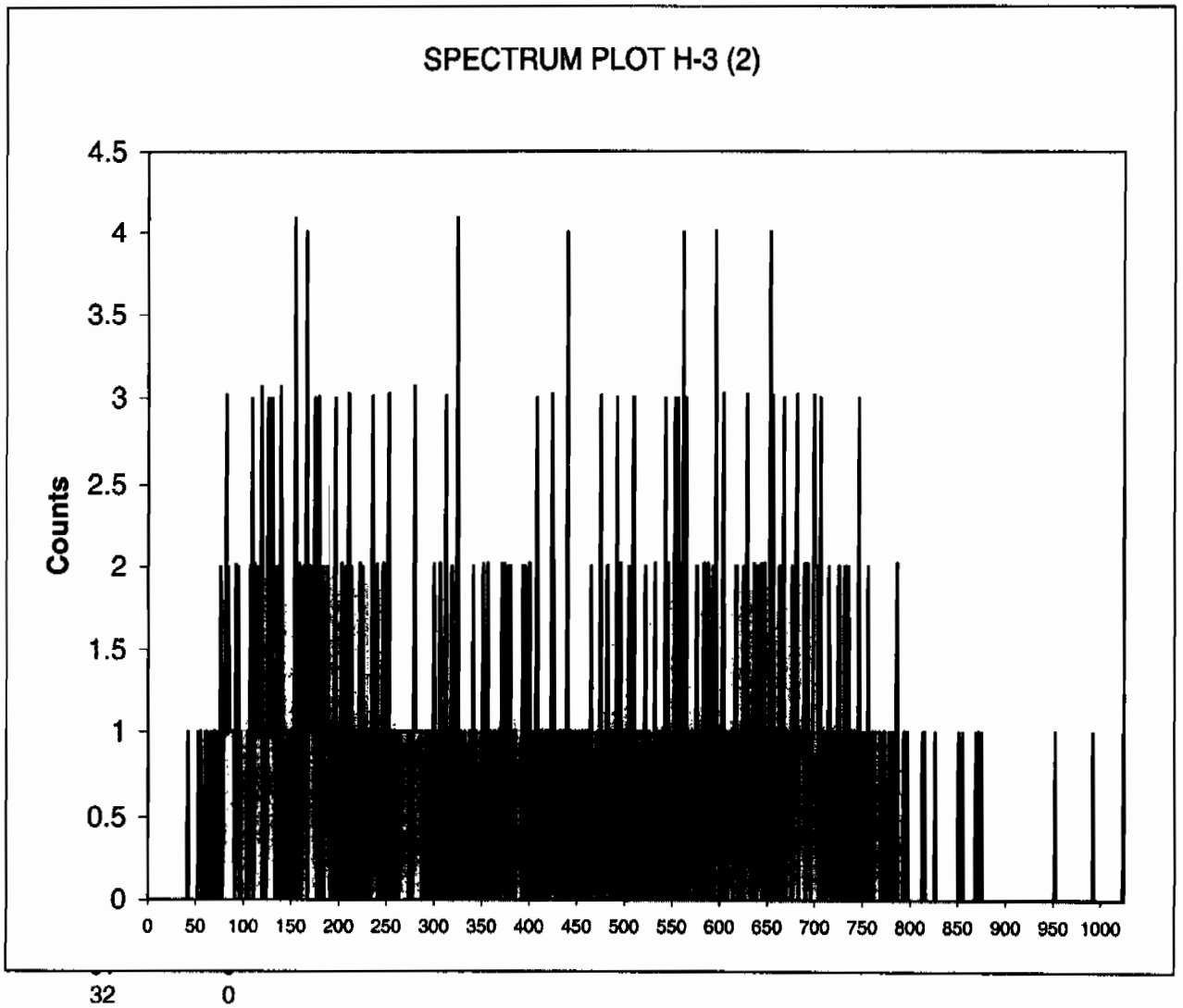

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ024201N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241518003, 60.02967:
Quench:	759.54
Start, End, X-Axis	50-175

Channel Counts

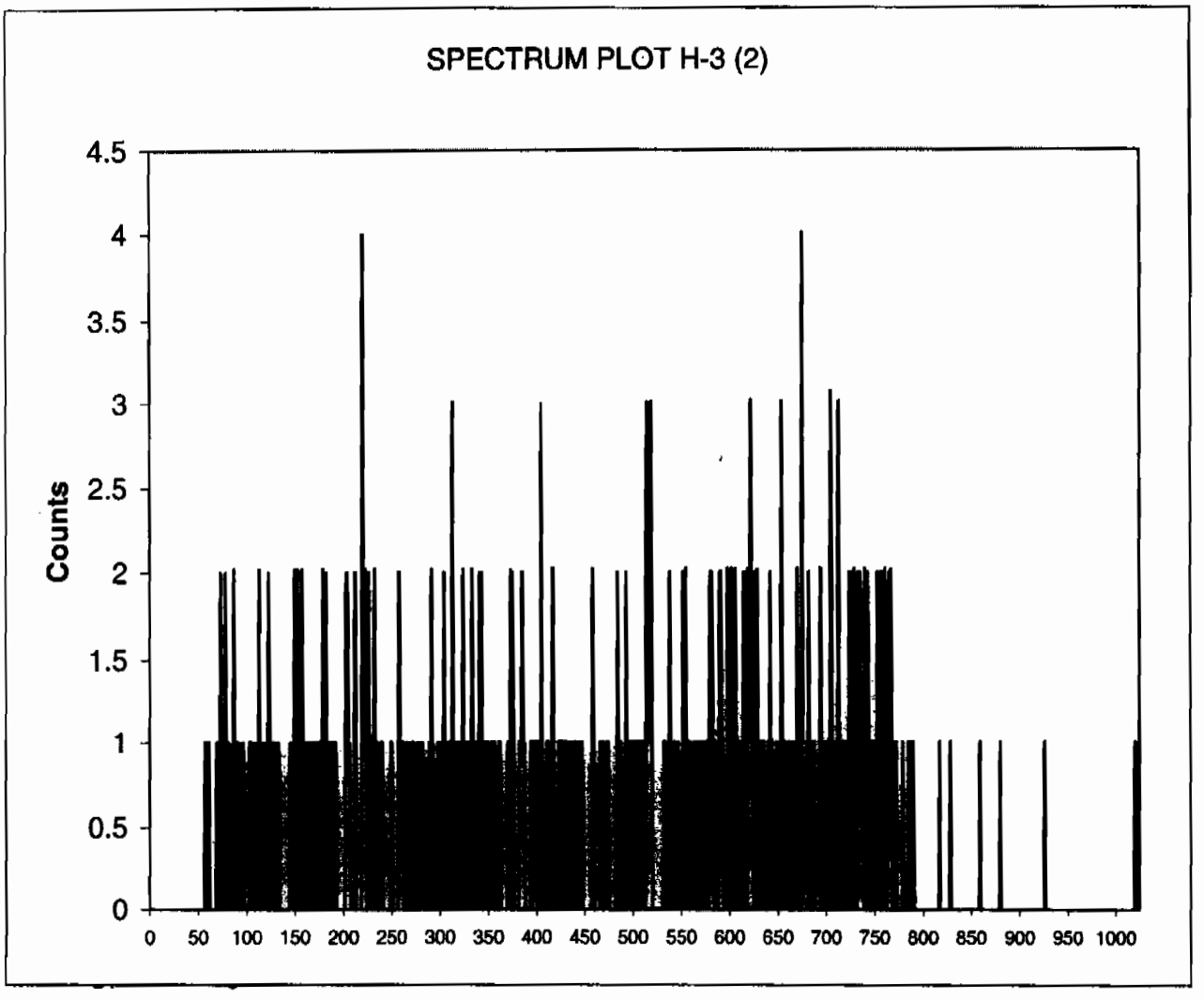

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ034301N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241518004, 60.02967:
Quench:	760.05
Start, End, X-Axis	50-175

Channel Counts

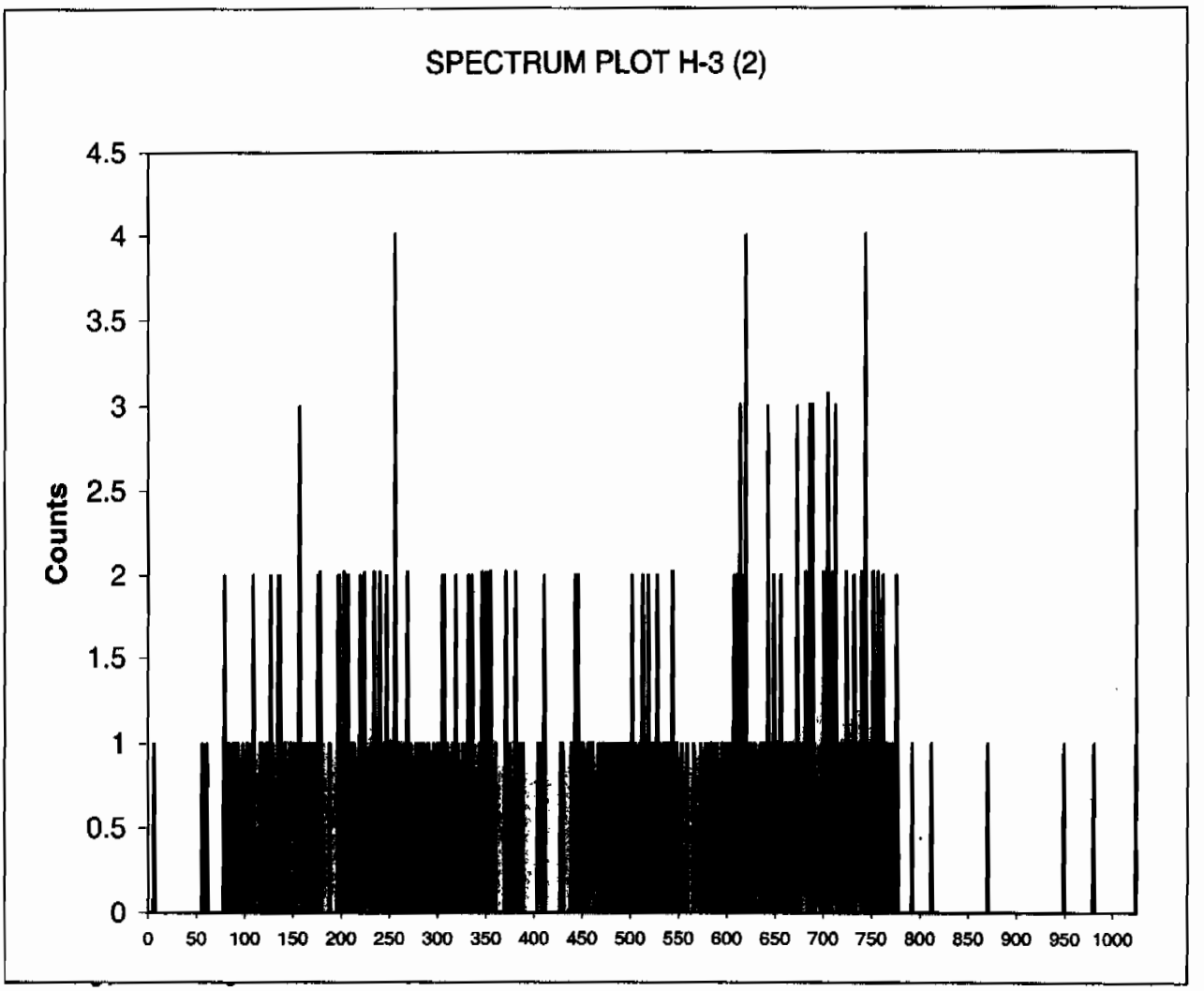

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ044401N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241518006, 60.02967:
Quench:	760.29
Start, End, X-Axis	50-175

Channel Counts

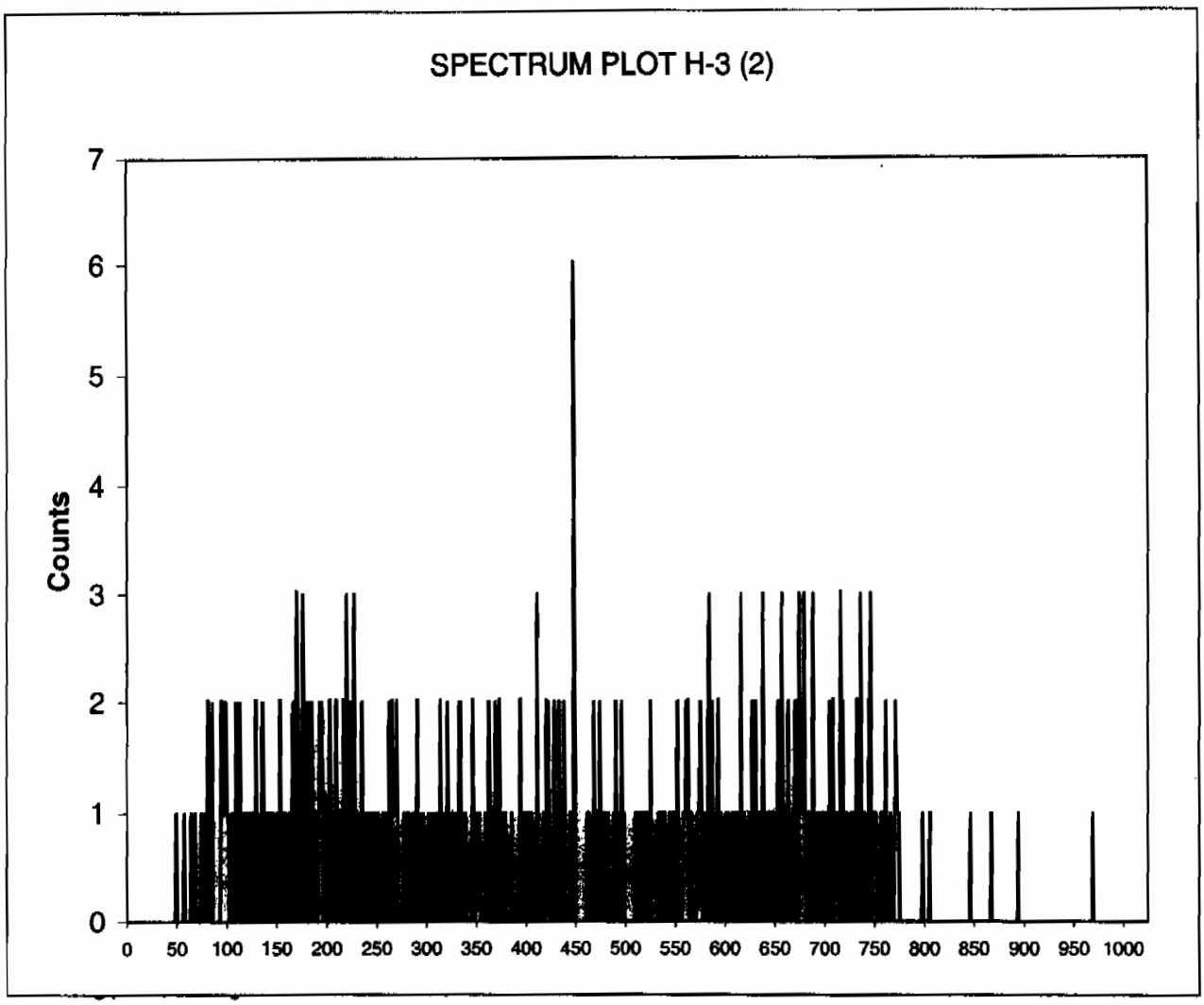

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ054501N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls

ID:	H-3 (2)
Comments:	ORANGE

Sample, Rack-Pos, Time:	5, 241909002, 90.02966:
Quench:	760.85
Start, End, X-Axis	50-175

Channel Counts

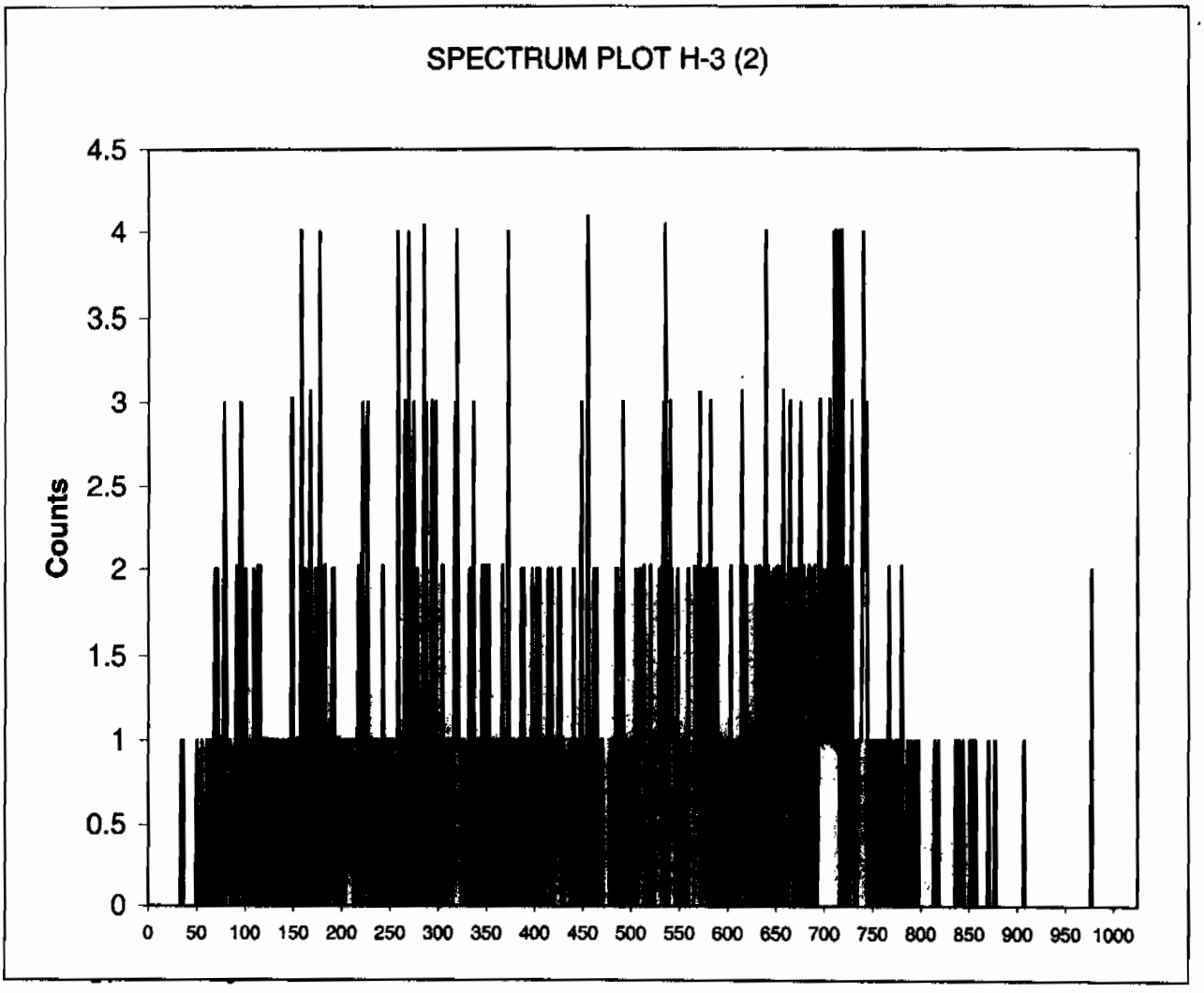

32	0
33	0
34	1
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ064601N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	6, 1201983508, 60.013:
Quench:	761.33
Start, End, X-Axis	50-175

Channel Counts

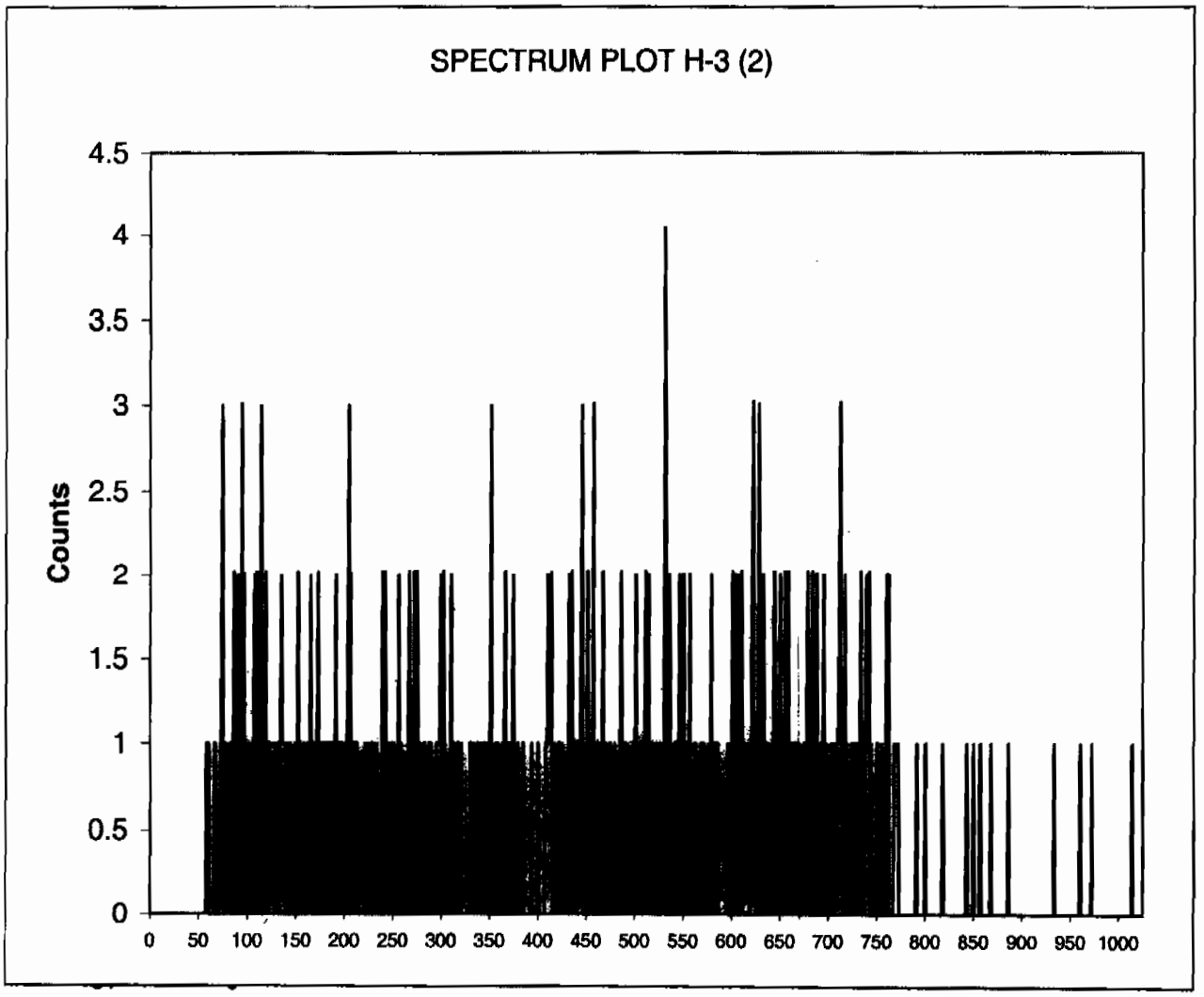

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ074701N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	7, 1201983509, 60.02965:
Quench:	758.11
Start, End, X-Axis	50-175

Channel Counts

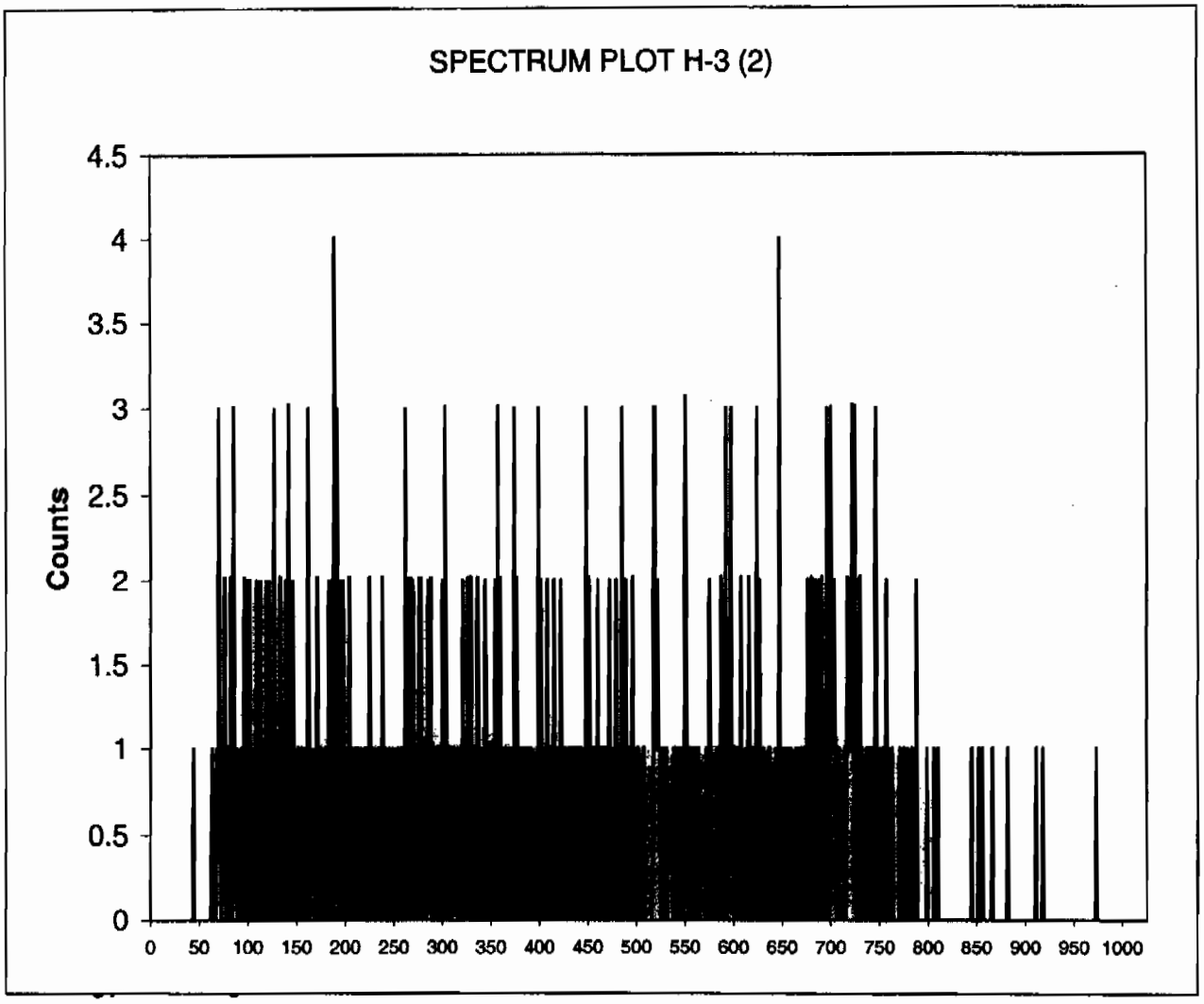

32	0
33	0
34	0
35	0

REGISTRY

FRI 4 DEC 2009 12:32

*** DIRECTORY PATH :S:\LSC\O\DA\927653A0 ***

PARAMETER GROUP: 8
ID: H-3 (1)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	4	BKG	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	5	241301001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	6	241336001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	7	241336002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	8	241425001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	9	241425002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	10	241518001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q010401N.001 4 DEC 2009 14:35						
4	BKG	120:01.780	766.24	1.79	3.06	8.09
Q020501N.001 4 DEC 2009 16:37						
5	241301001	120:01.780	761.00	1.80	3.07	8.07
Q030601N.001 4 DEC 2009 18:40						
6	241336001	120:01.780	757.94	1.88	3.18	7.79
Q040701N.001 4 DEC 2009 20:42						
7	241336002	120:01.780	758.32	1.40	2.76	7.63

```
Q050801N.001  4 DEC 2009 22:45
   8        241425001   120:01.780  752.87       1.55       3.01       7.58
Q060901N.001  5 DEC 2009  0:47
   9        241425002   120:01.773  763.19       1.38       2.73       7.47
Q071001N.001  5 DEC 2009  2:50
  10        241518001   120:01.773  762.82       1.38       2.68       6.85
```

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ010401N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, BKG, 120.0297:
Quench:	766.24
Start, End, X-Axis	50-175

Channel	Counts

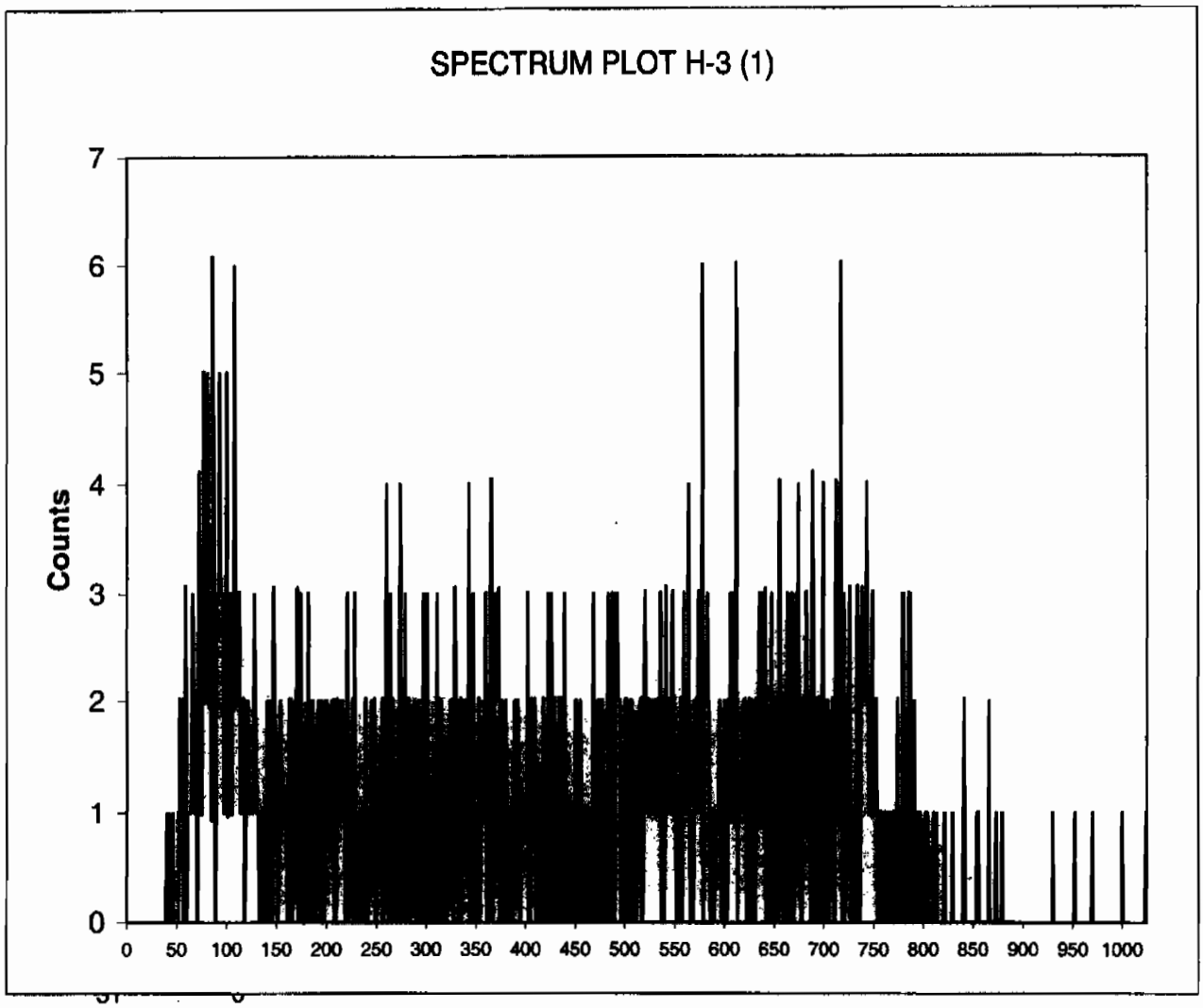

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ020501N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241301001, 120.0297:
Quench:	761
Start, End, X-Axis	50-175

Channel Counts

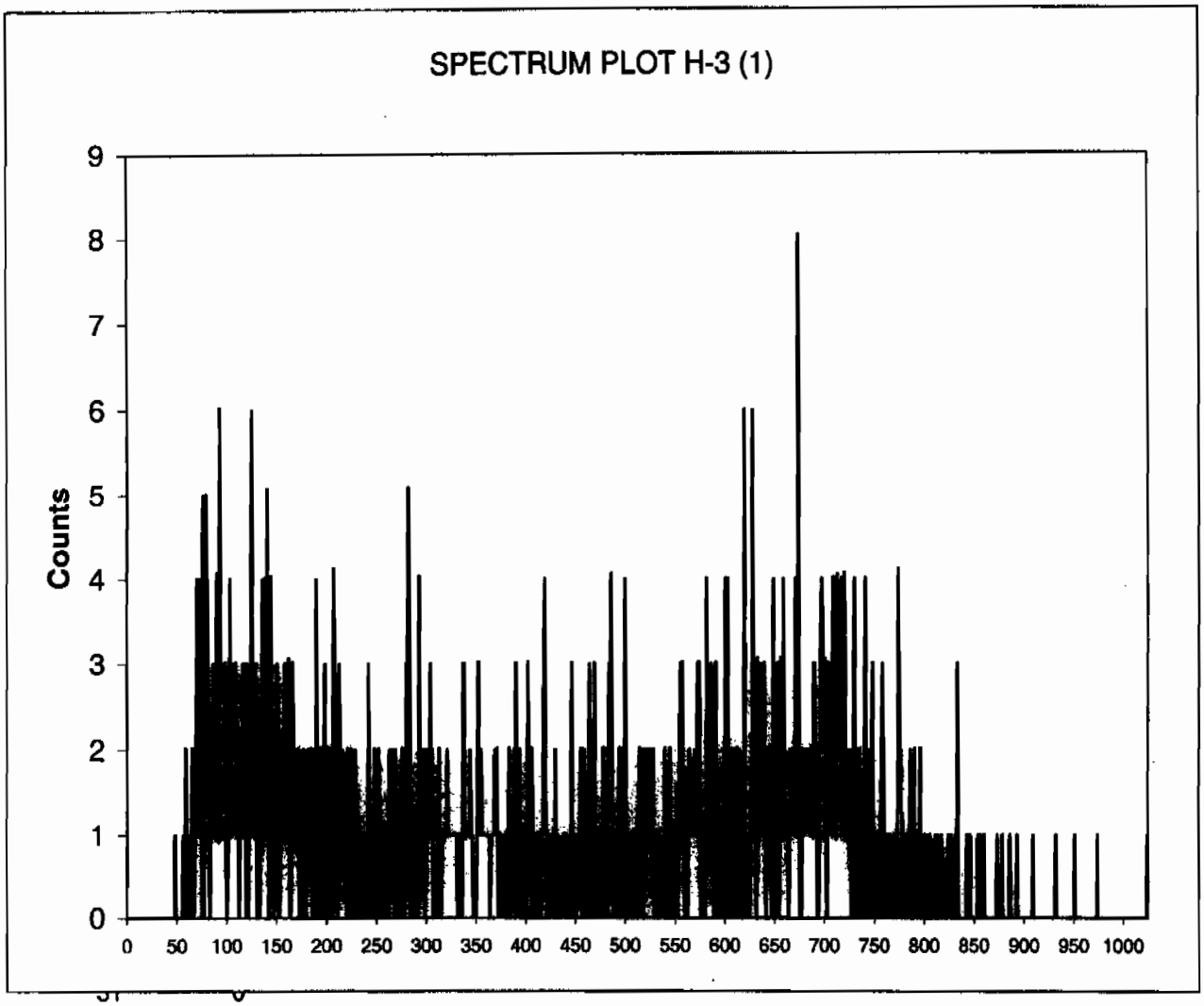

31	0
32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ030601N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241336001, 120.0297:
Quench:	757.94
Start, End, X-Axis	50-175

Channel Counts

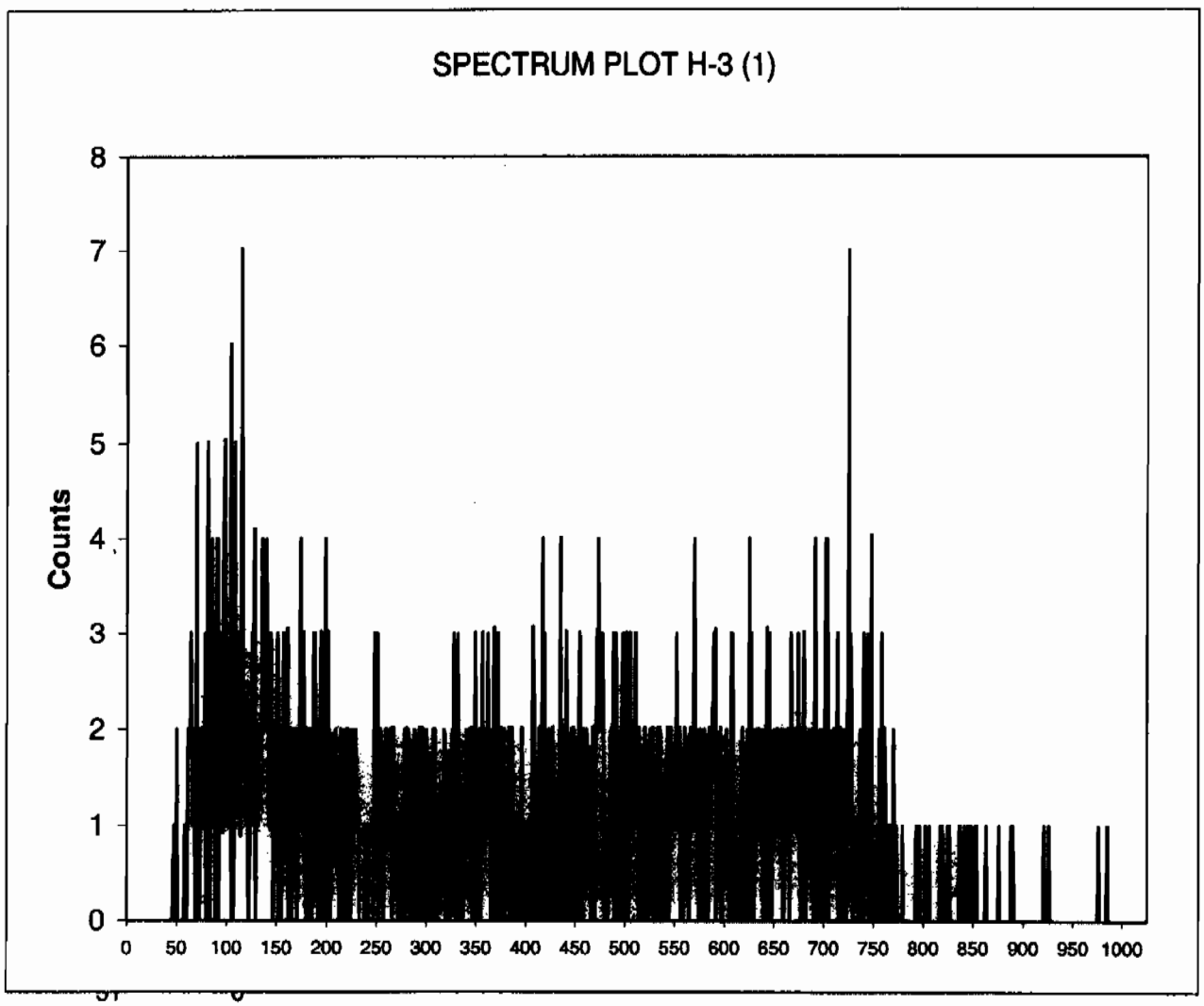

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ040701N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241336002, 120.0297:
Quench:	758.32
Start, End, X-Axis	50-175

Channel Counts

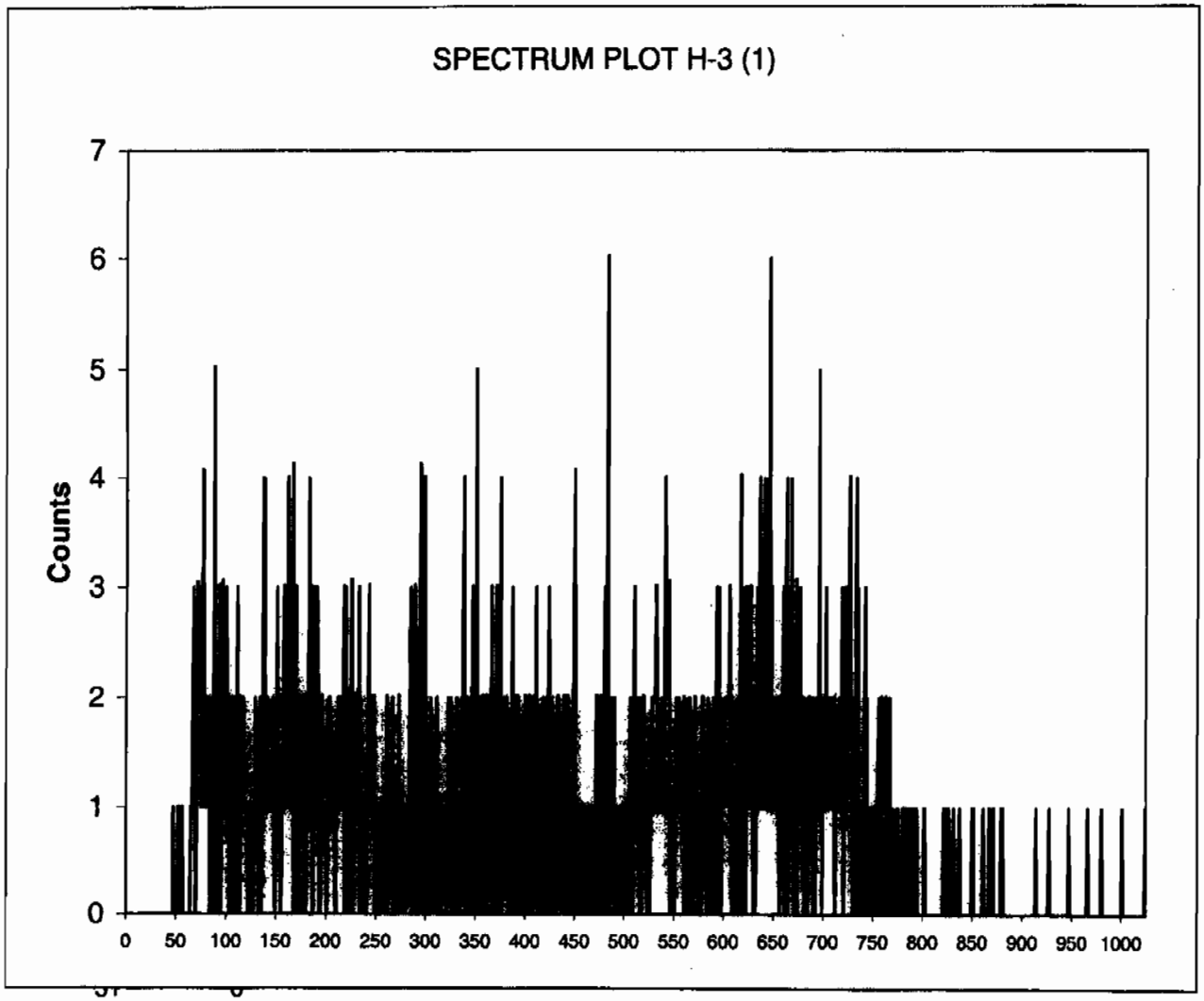

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ050801N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	5, 241425001, 120.0297:
Quench:	752.87
Start, End, X-Axis	50-175

Channel Counts

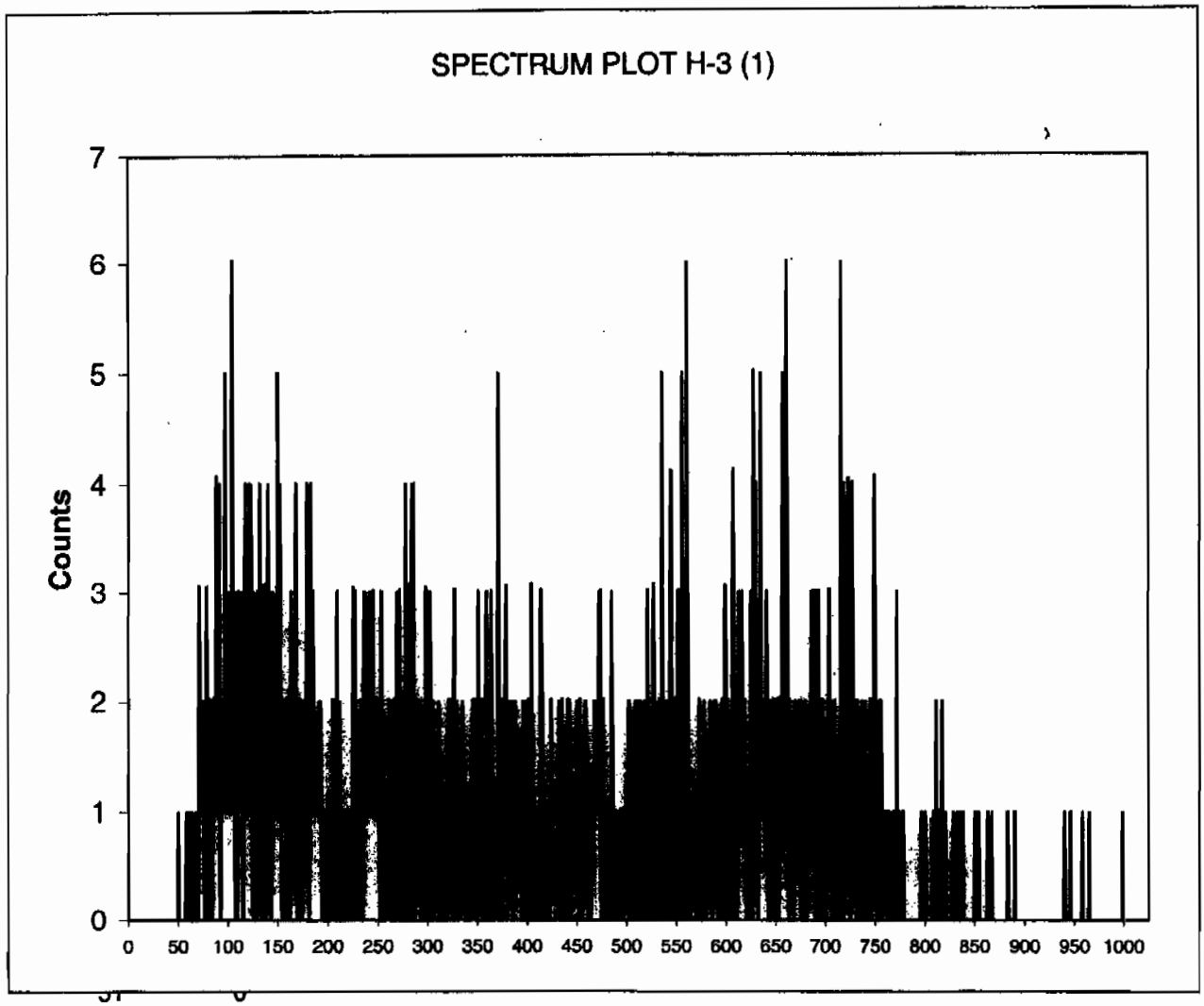

31	0
32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ060901N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	6, 241425002, 120.0295:
Quench:	763.19
Start, End, X-Axis	50-175

Channel Counts

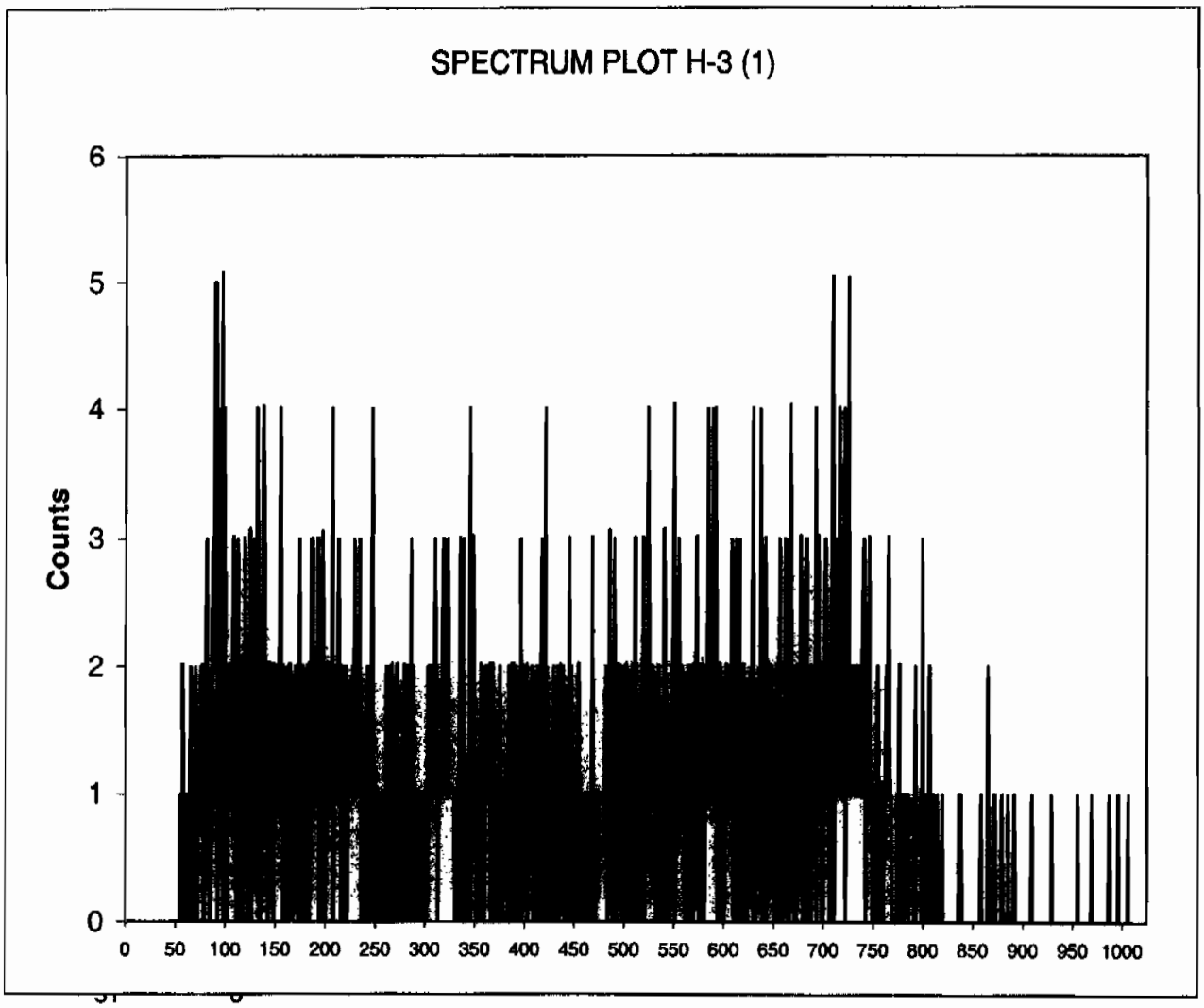

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ071001N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls

ID:	H-3 (1)
Comments:	ORANGE

Sample, Rack-Pos, Time:	7, 241518001, 120.0295:
Quench:	762.82
Start, End, X-Axis	50-175

Channel Counts

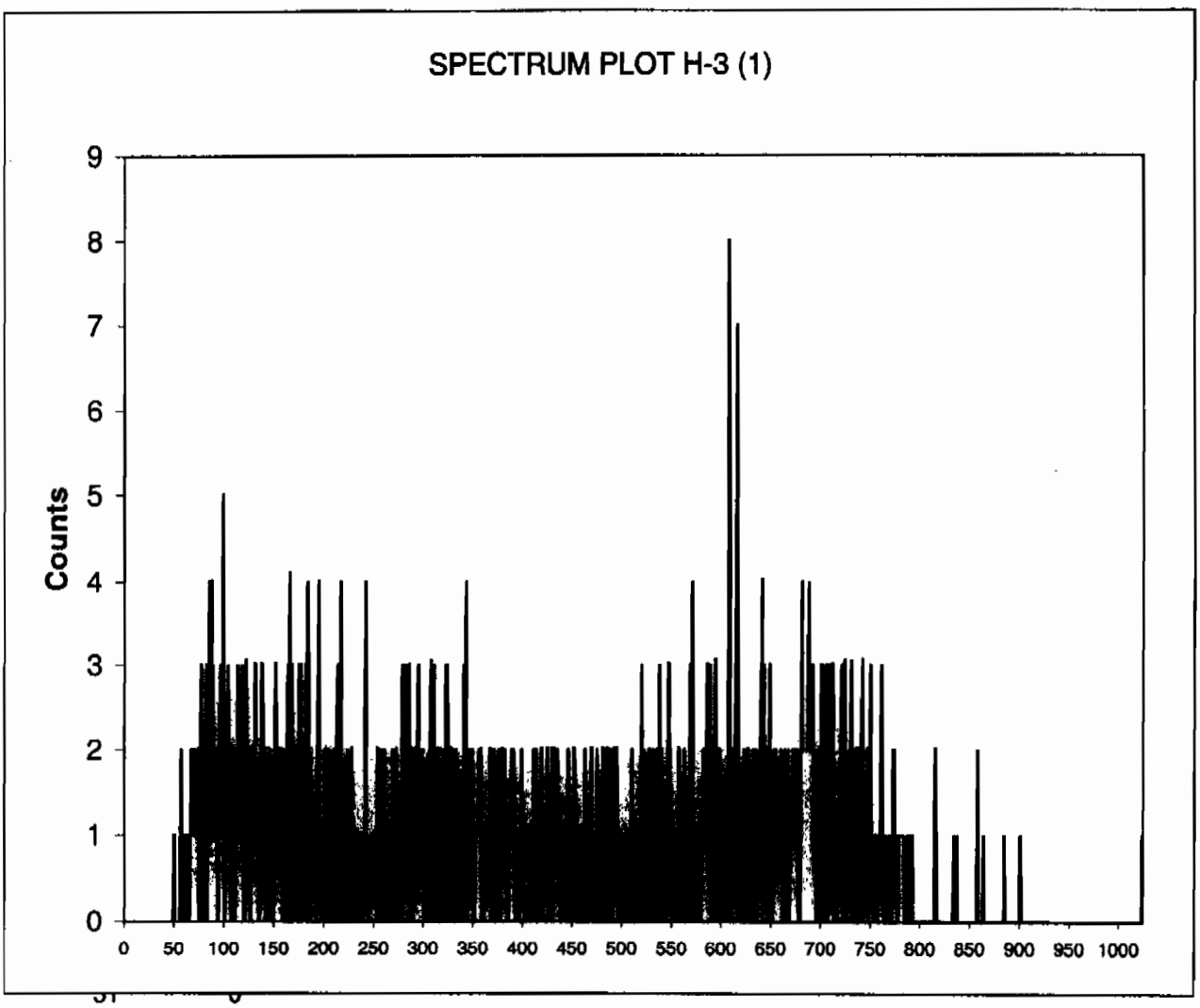

32	0
33	0
34	0
35	0

REGISTRY

SAT 5 DEC 2009 4:05

*** DIRECTORY PATH :S:\LSC\O\DA\927653A1 ***

PARAMETER GROUP: 8
ID: H-3 (2)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	11	241518002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	12	241518003	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	13	241518004	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	14	241518005	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	15	241518006	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	16	241524002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	17	241909001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
8	18	241909002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
9	19	1201983508	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
10	20	1201983509	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
11	21	1201983510	15:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q011101N.001 5 DEC 2009 6:08						
11	241518002	120:01.780	759.29	1.35	2.65	7.25
Q021201N.001 5 DEC 2009 8:10						
12	241518003	120:01.780	763.21	1.15	2.49	7.22

REGISTRY

~~Q031301N.001~~	~~5 DEC 2009 10:13~~						
~~13~~	~~241518004~~	~~120:01.780~~	~~763.10~~	~~1.04~~	~~2.24~~	~~7.05~~	Lh.12/10/09
Q041401N.001	5 DEC 2009 12:15						
14	241518005	120:01.780	761.62	10.38	12.46	17.37	
~~Q051501N.001~~	~~5 DEC 2009 14:18~~						
~~15~~	~~241518006~~	~~120:01.780~~	~~761.61~~	~~1.30~~	~~2.90~~	~~7.39~~	
Q061601N.001	5 DEC 2009 14:32						
16	241524002	10:55.773	756.20	1.68	3.27	~~8.42~~	

Lh.12/10/09

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927653A1\SQ011101N.001.xls
File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, 241518002, 120.0297:
Quench:	759.29
Start, End, X-Axis	50-175

Channel Counts

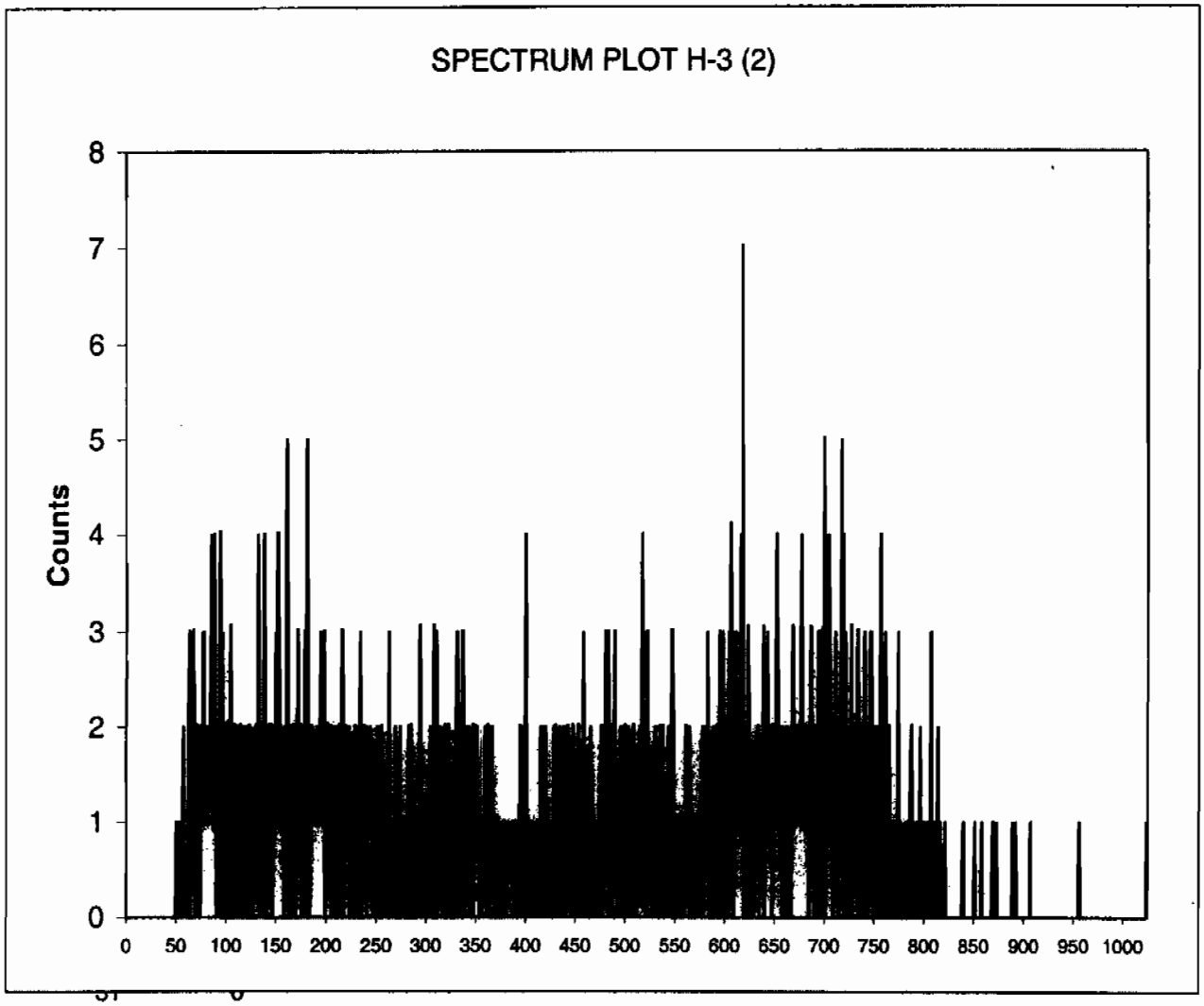

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927653A1\SQ021201N.001.xls
File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241518003, 120.0297:
Quench:	763.21
Start, End, X-Axis	50-175

Channel Counts

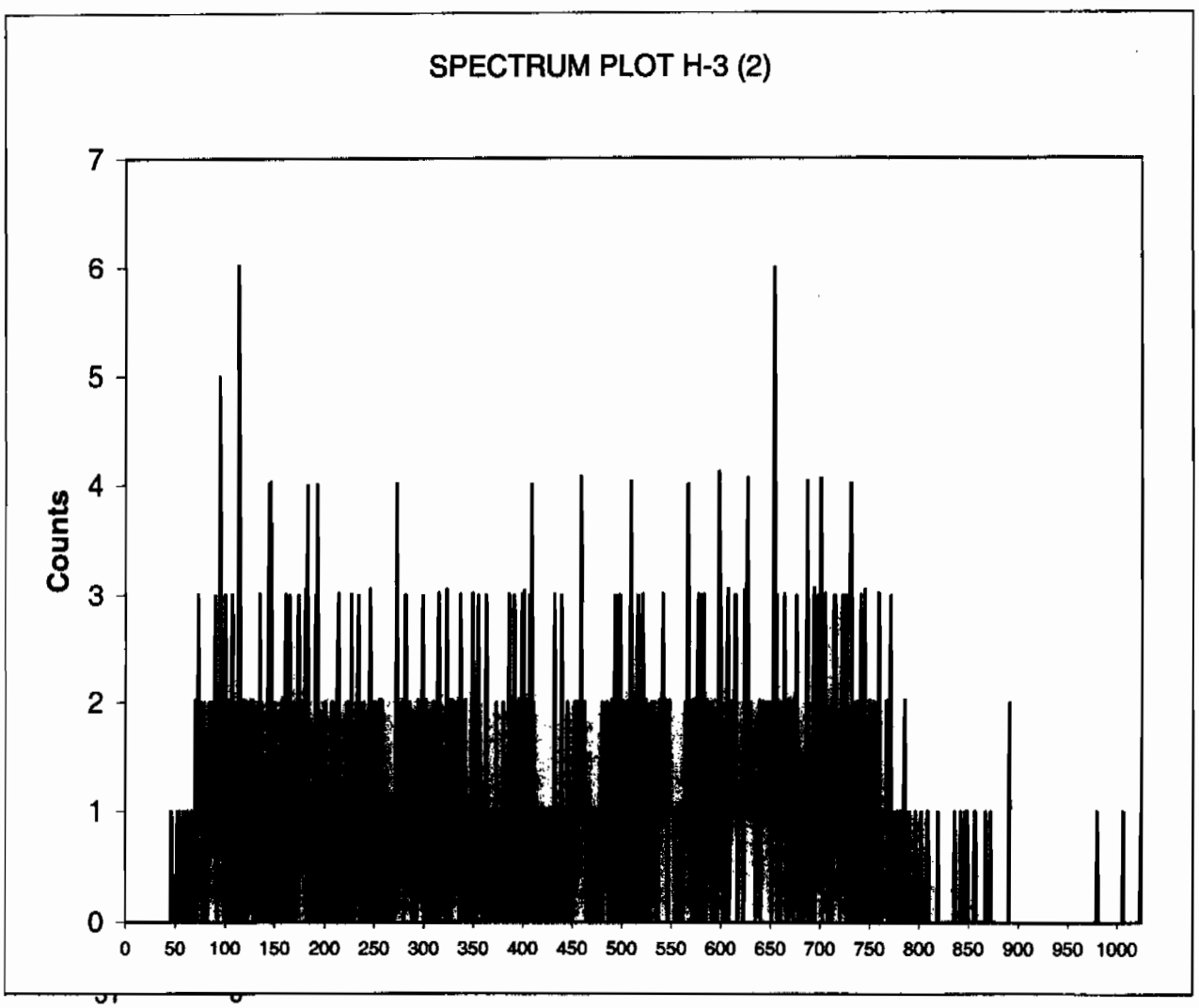

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927653A1\SQ031301N.001.xls
File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241518004, 120.0297:
Quench:	763.1
Start, End, X-Axis	50-175

Channel Counts

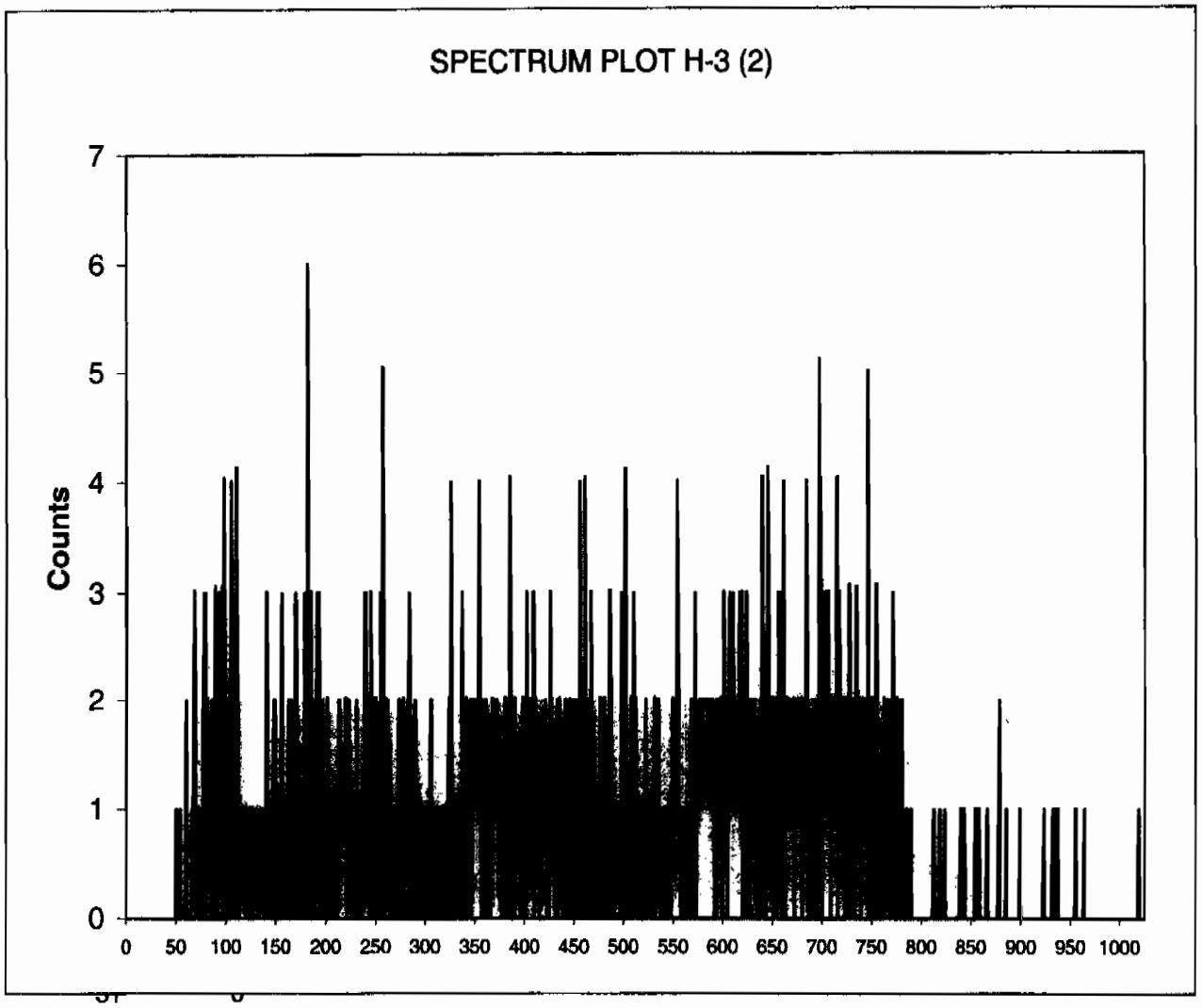

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
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File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241518005, 120.0297:
Quench:	761.62
Start, End, X-Axis	50-175

Channel Counts

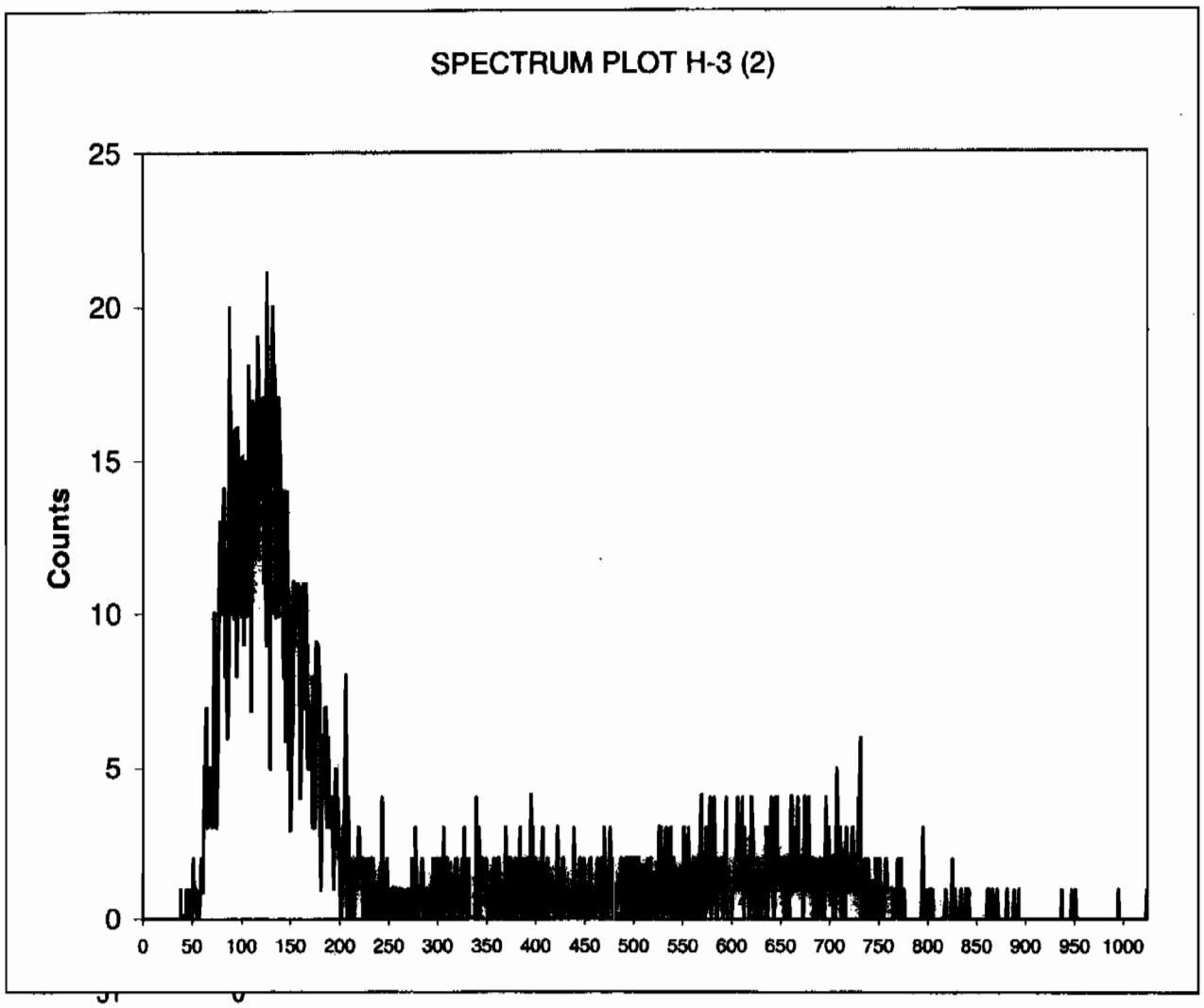

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
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File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	5, 241518006, 120.0297:
Quench:	761.61
Start, End, X-Axis	50-175

Channel Counts

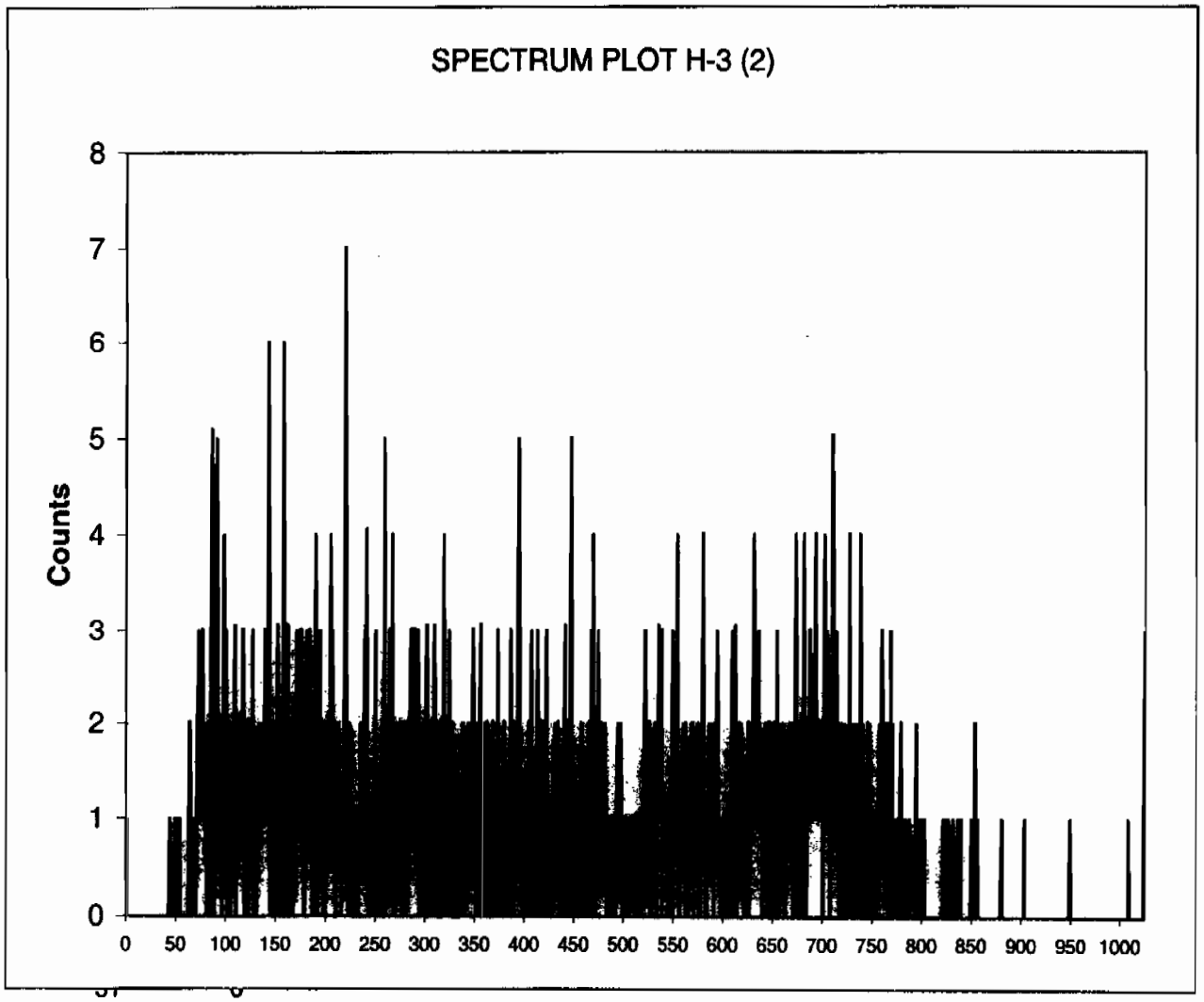

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927653A1\SQ061601N.001.xls
File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	6, 241524002, 10.92955:
Quench:	756.2
Start, End, X-Axis	50-175

Channel Counts

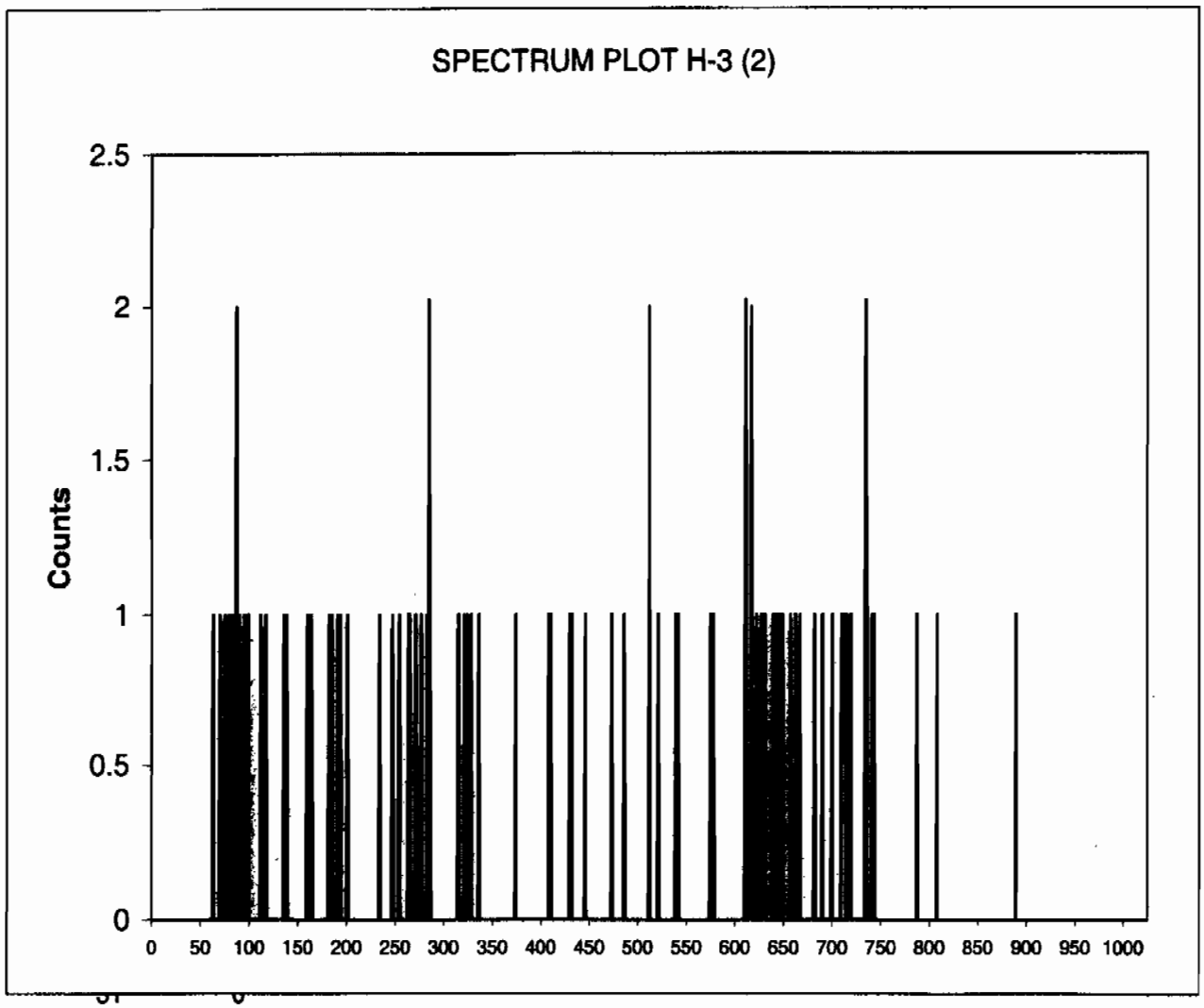

32	0
33	0
34	0
35	0

REGISTRY

SAT 5 DEC 2009 15:48

*** DIRECTORY PATH :S:\LSC\O\DA\927653A2 ***

PARAMETER GROUP: 8
ID: H-3 (2)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	16	241524002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	17	241909001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	18	241909002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	19	1201983508	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	21	1201983509	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	22	1201983510	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q011601N.001 5 DEC 2009 17:51						
16	241524002	120:01.780	757.93	1.46	2.90	7.64
Q021701N.001 5 DEC 2009 19:53						
17	241909001	120:01.780	757.61	1.42	2.92	7.74
Q031801N.001 5 DEC 2009 21:56						
18	241909002	120:01.780	760.13	1.20	2.63	7.81
Q041901N.001 5 DEC 2009 23:58						
19	1201983508	120:01.780	757.59	1.13	2.35	6.71
Q052101N.001 6 DEC 2009 2:02						

REGISTRY

LCS 21 1201983509 120:01.780 759.16 37.35 41.38 45.63

~~Q062201N.001 6 DEC 2009 4:04~~

~~22 1201983510 120:01.773 758.62 1.20 2.67 7.77~~

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
FileName:	s:\lsc\files\orange\927653A2\SQ011601N.001.xls
File Info:	s:\lsc\files\orange\927653A2\U927653A2.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, 241524002, 120.0297:
Quench:	757.93
Start, End, X-Axis	50-175

Channel Counts

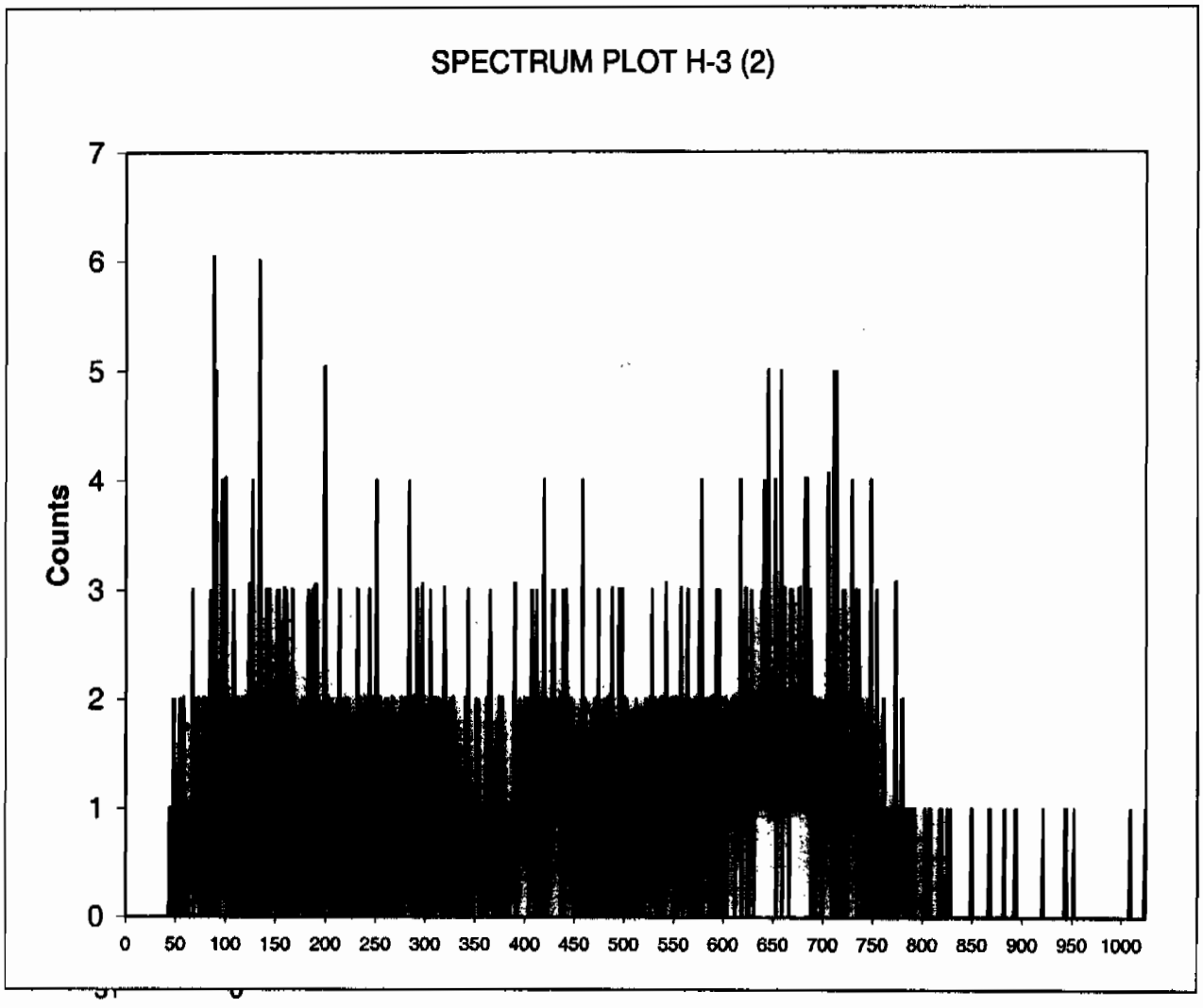

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
FileName:	s:\lsc\files\orange\927653A2\SQ021701N.001.xls
File Info:	s:\lsc\files\orange\927653A2\U927653A2.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241909001, 120.0297:
Quench:	757.61
Start, End, X-Axis	50-175

Channel Counts

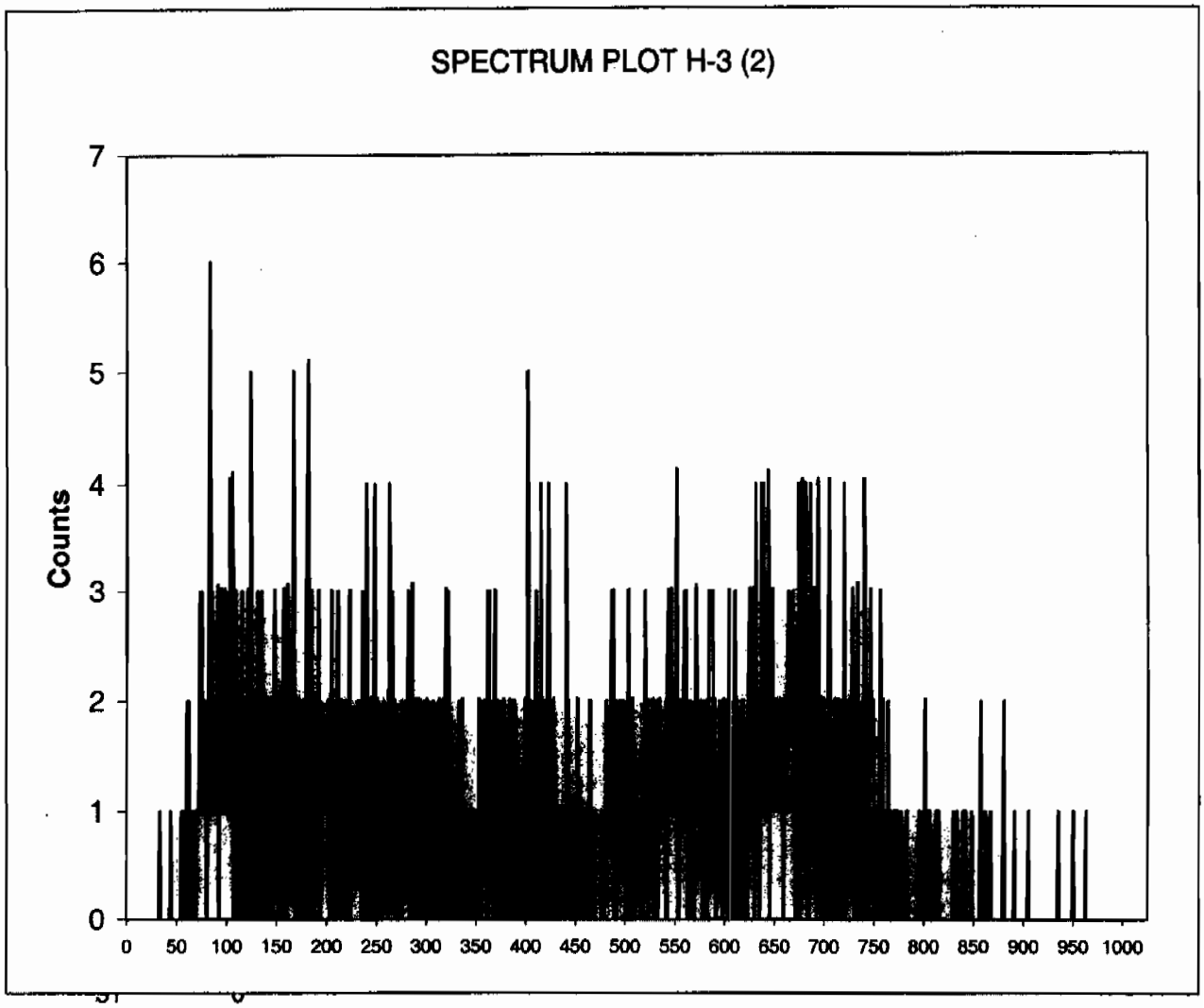

32	0
33	1
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
FileName:	s:\lsc\files\orange\927653A2\SQ031801N.001.xls
File Info:	s:\lsc\files\orange\927653A2\U927653A2.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241909002, 120.0297:
Quench:	760.13
Start, End, X-Axis	50-175

Channel Counts

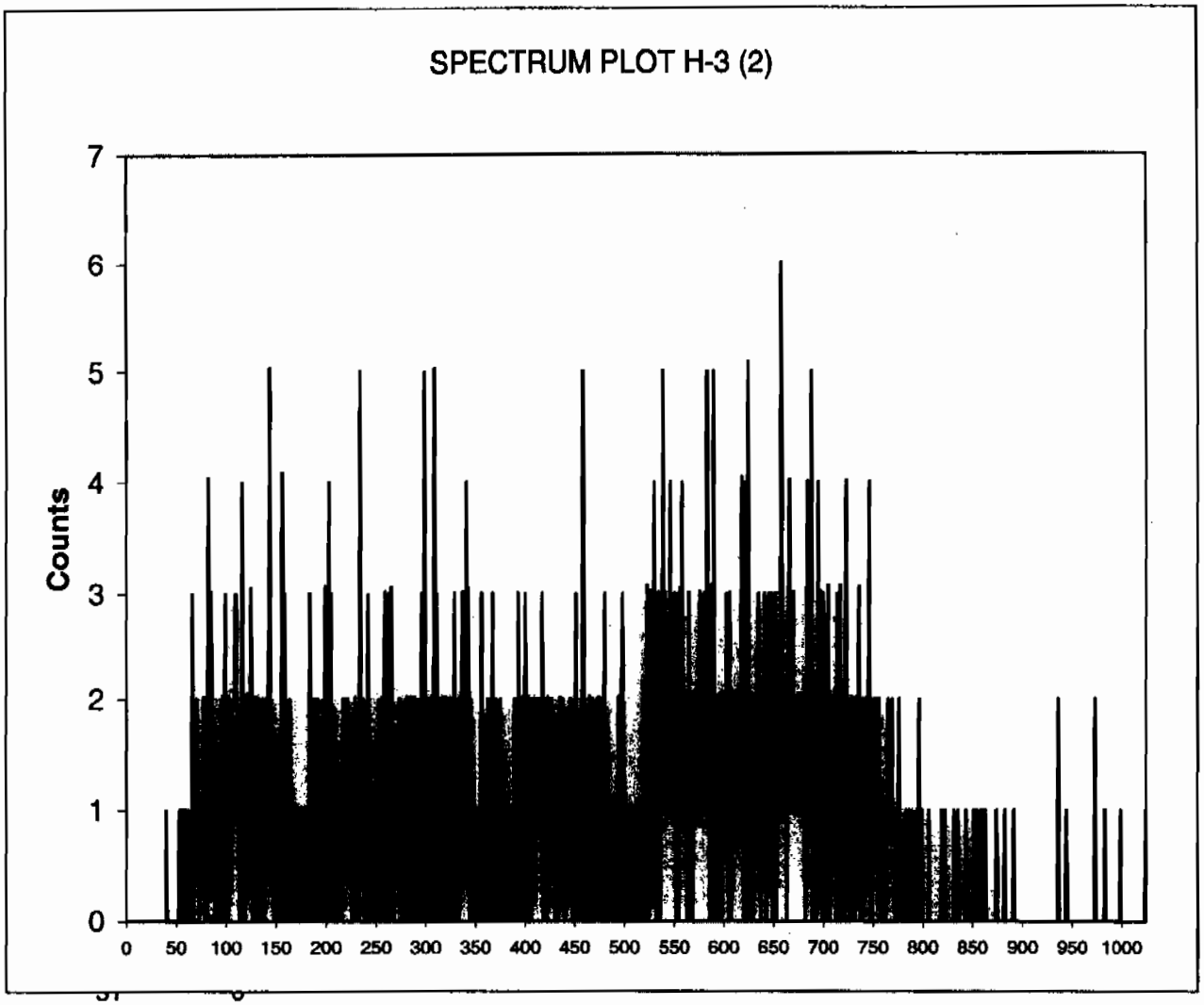

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
FileName:	s:\lsc\files\orange\927653A2\SQ041901N.001.xls
File Info:	s:\lsc\files\orange\927653A2\U927653A2.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 1201983508, 120.0297:
Quench:	757.59
Start, End, X-Axis	50-175

Channel	Counts

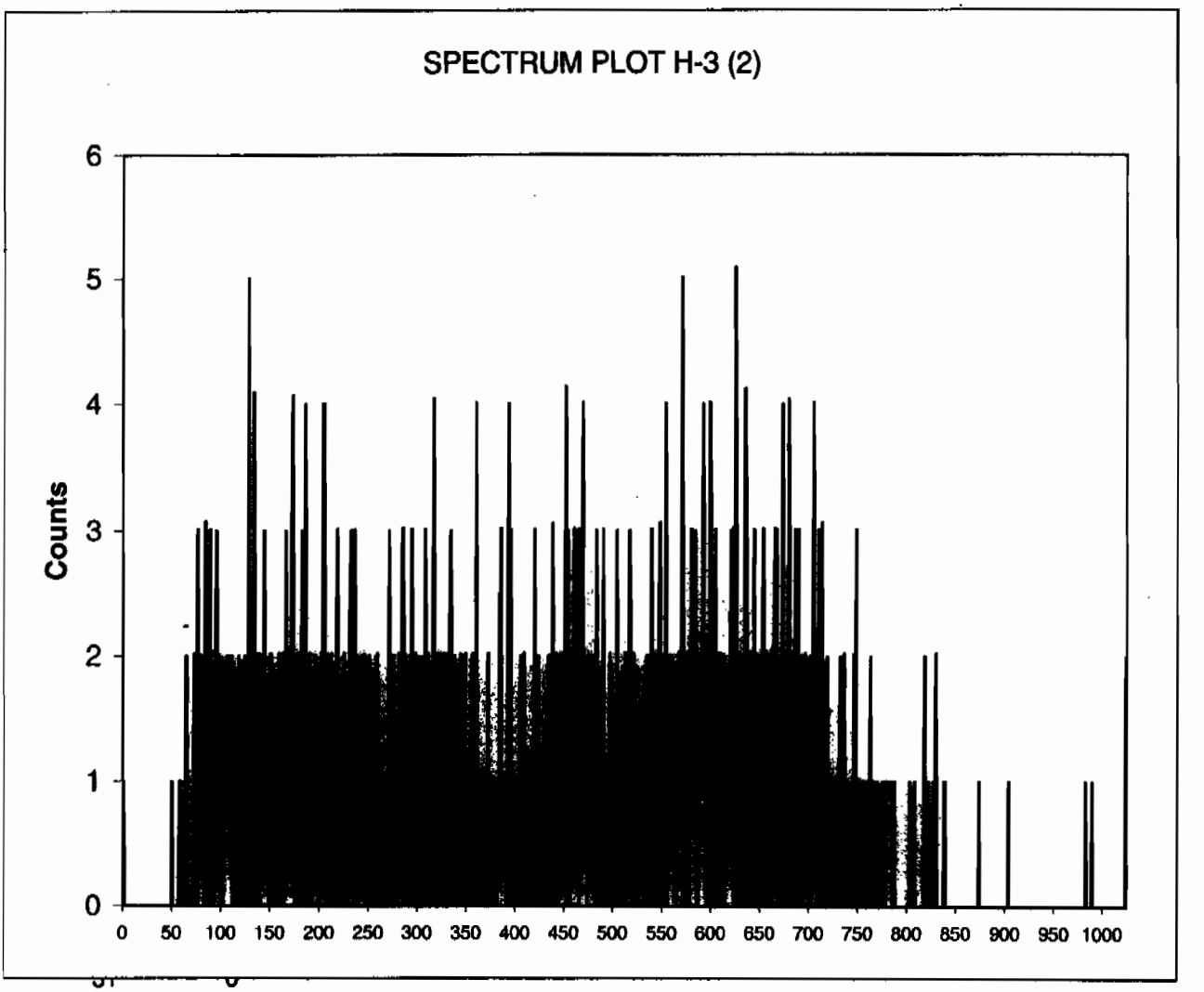

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33	0
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35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
FileName:	s:\lsc\files\orange\927653A2\SQ052101N.001.xls
File Info:	s:\lsc\files\orange\927653A2\U927653A2.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	5, 1201983509, 120.0297:
Quench:	759.16
Start, End, X-Axis	50-175

Channel Counts

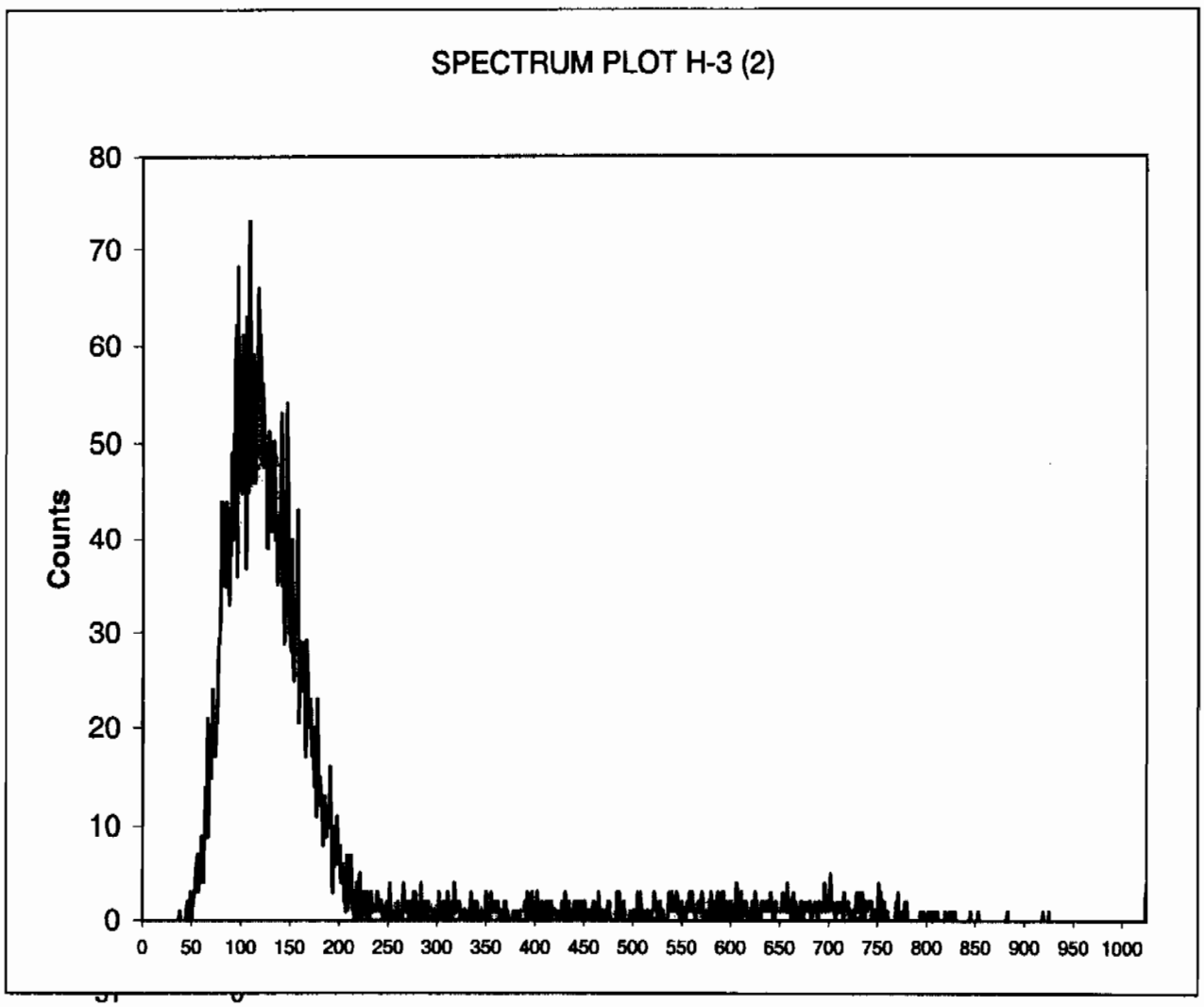

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33	0
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35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
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File Info:	s:\lsc\files\orange\927653A2\U927653A2.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	6, 1201983510, 120.0295:
Quench:	758.62
Start, End, X-Axis	50-175

Channel Counts

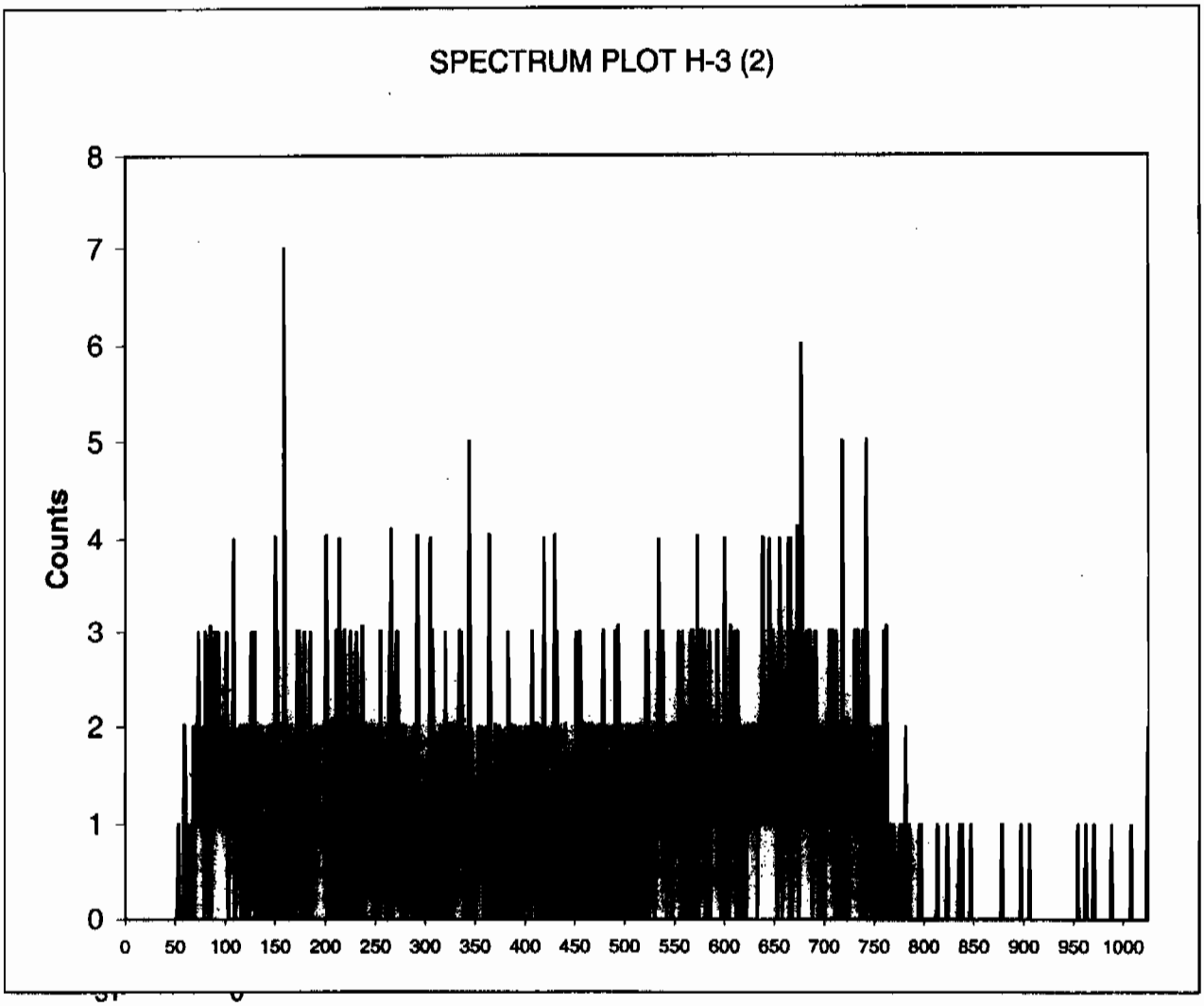

32	0
33	0
34	0
35	0

BACKGROUND AND EFFICIENCY DATA

Generated 12/04/2009

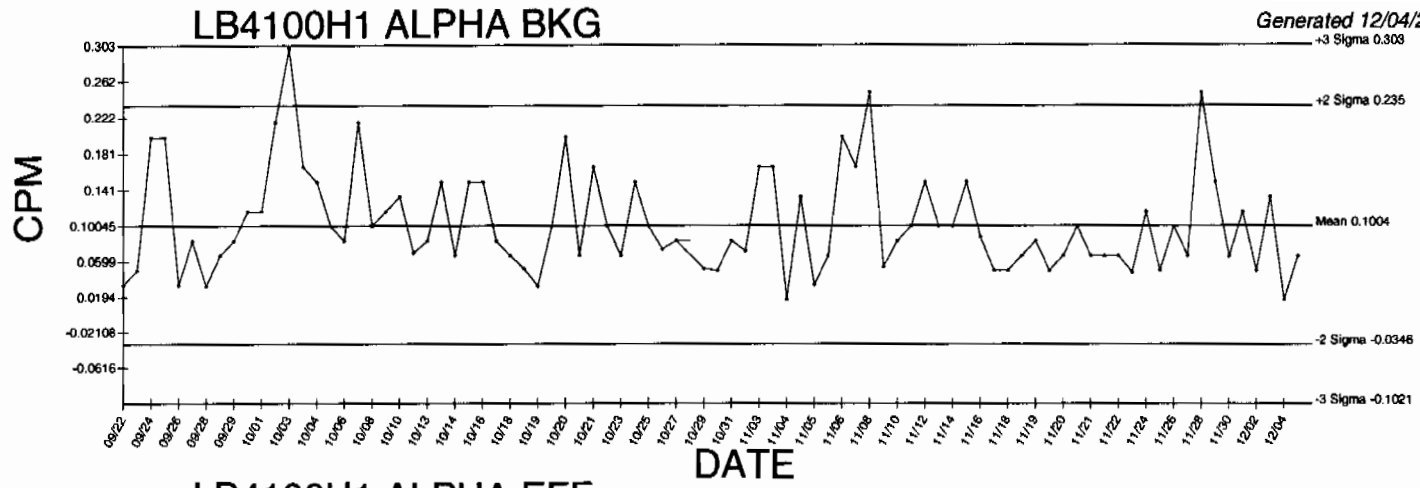

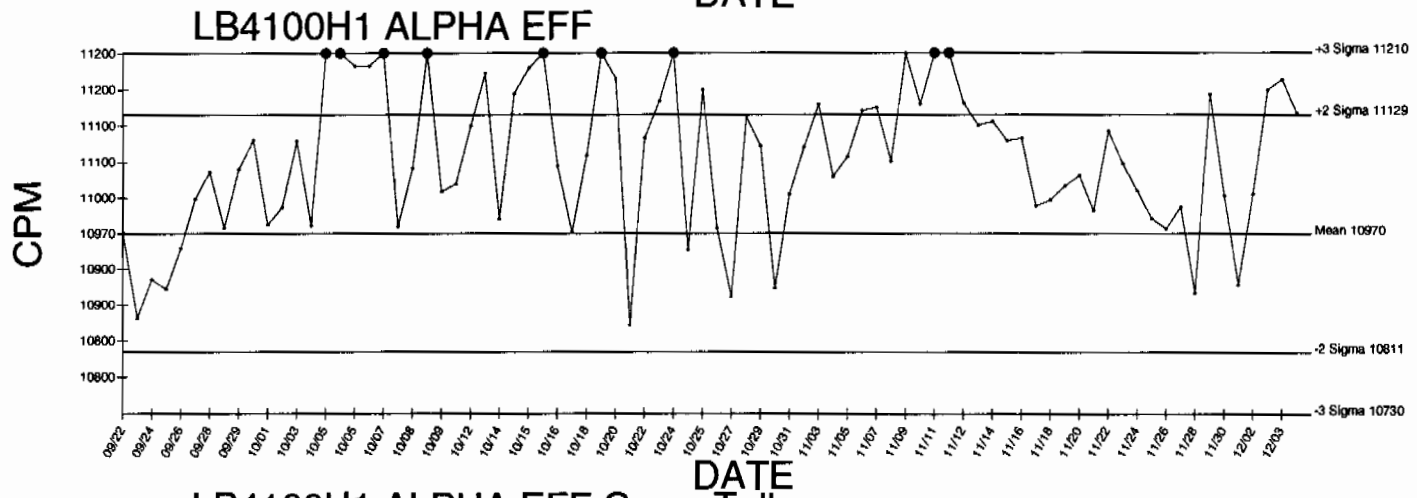

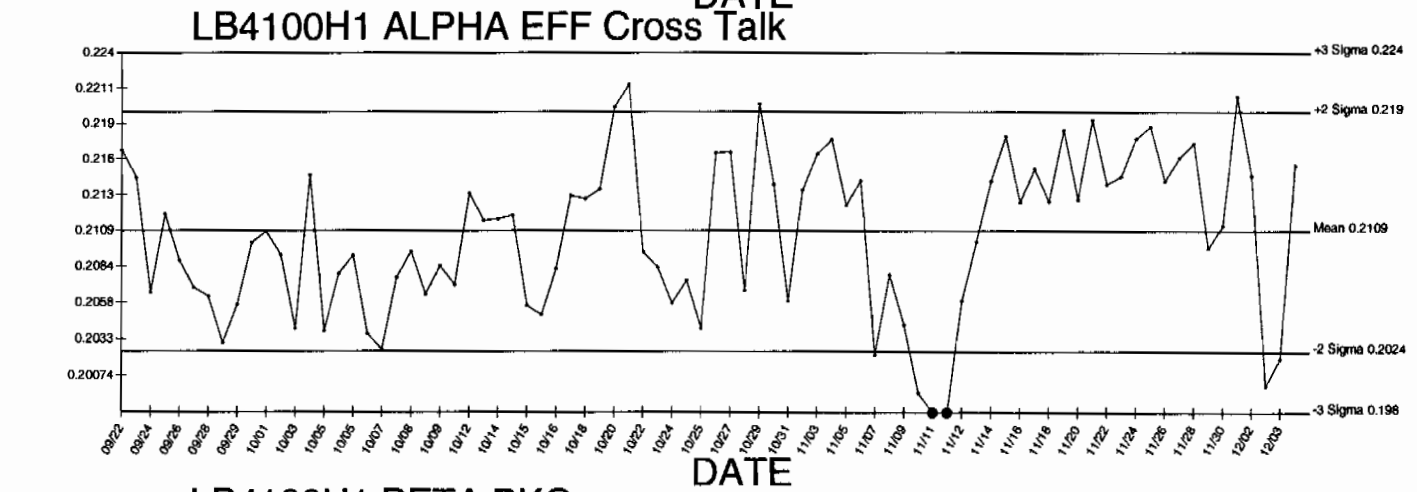

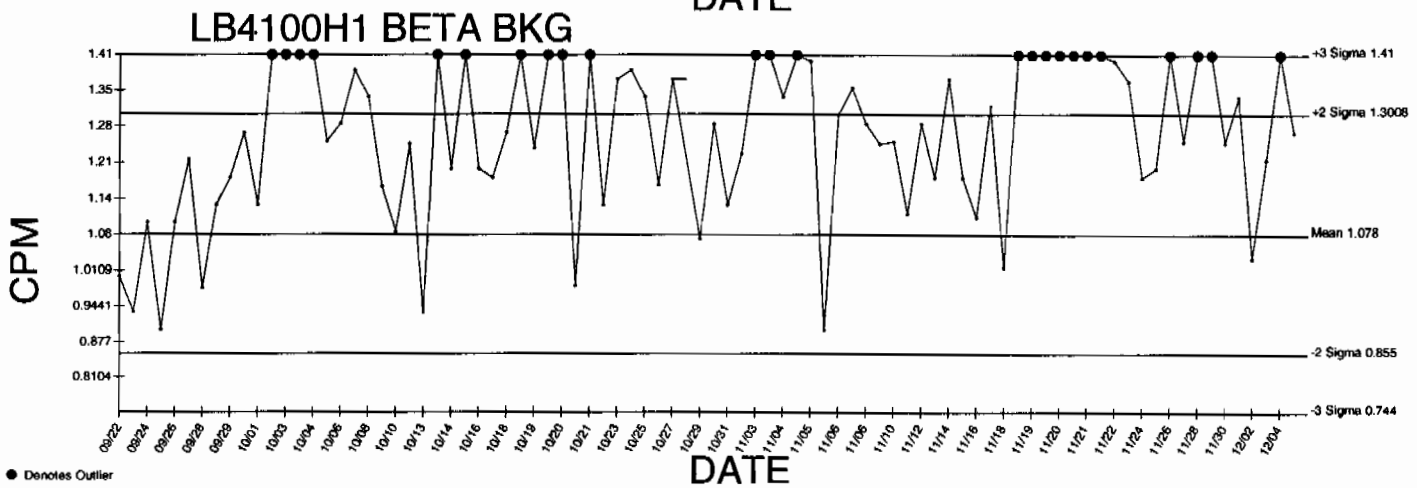

● Denotes Outlier

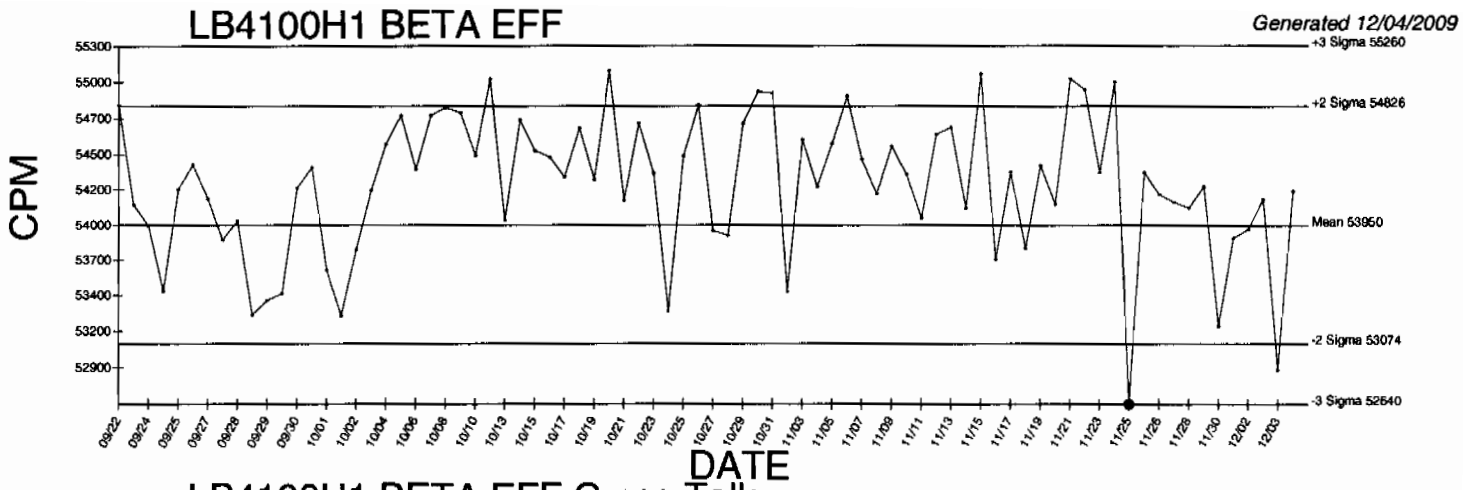

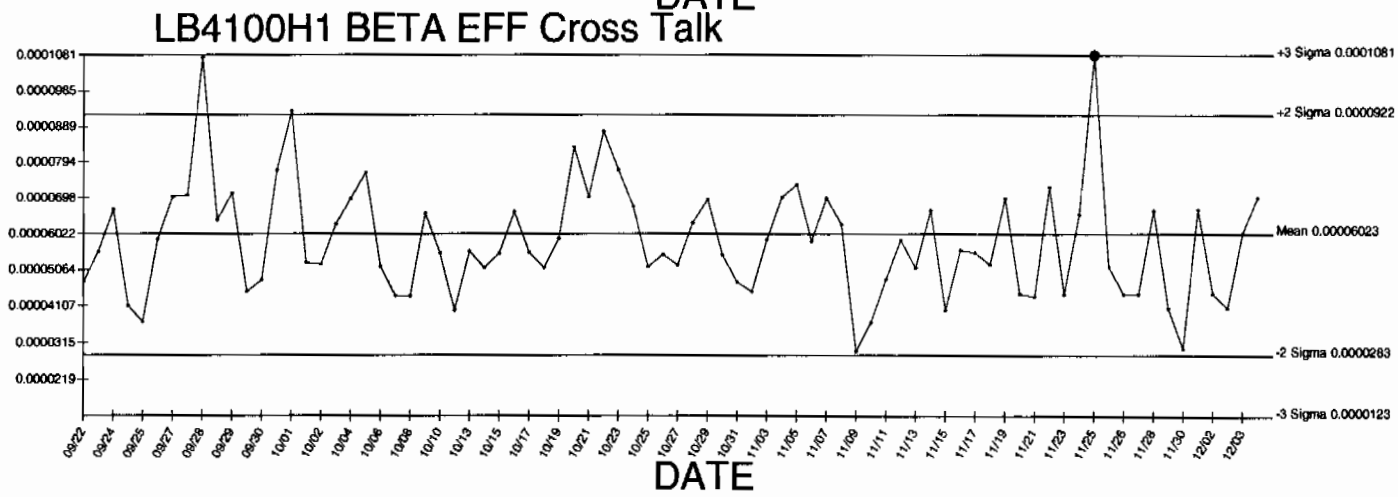

● Denotes Outlier

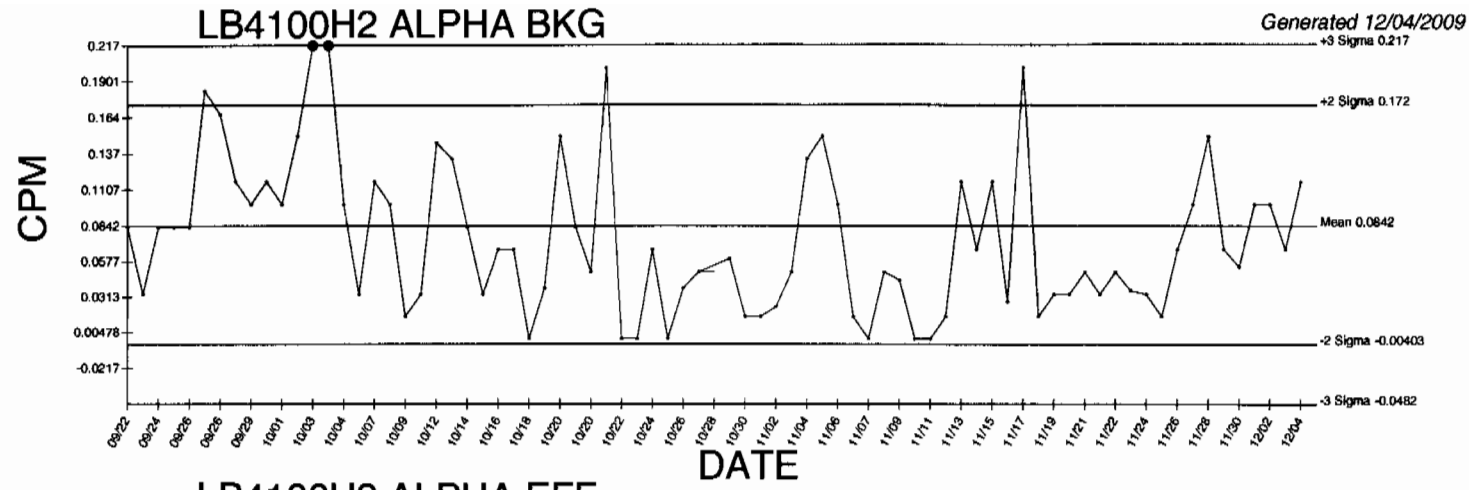

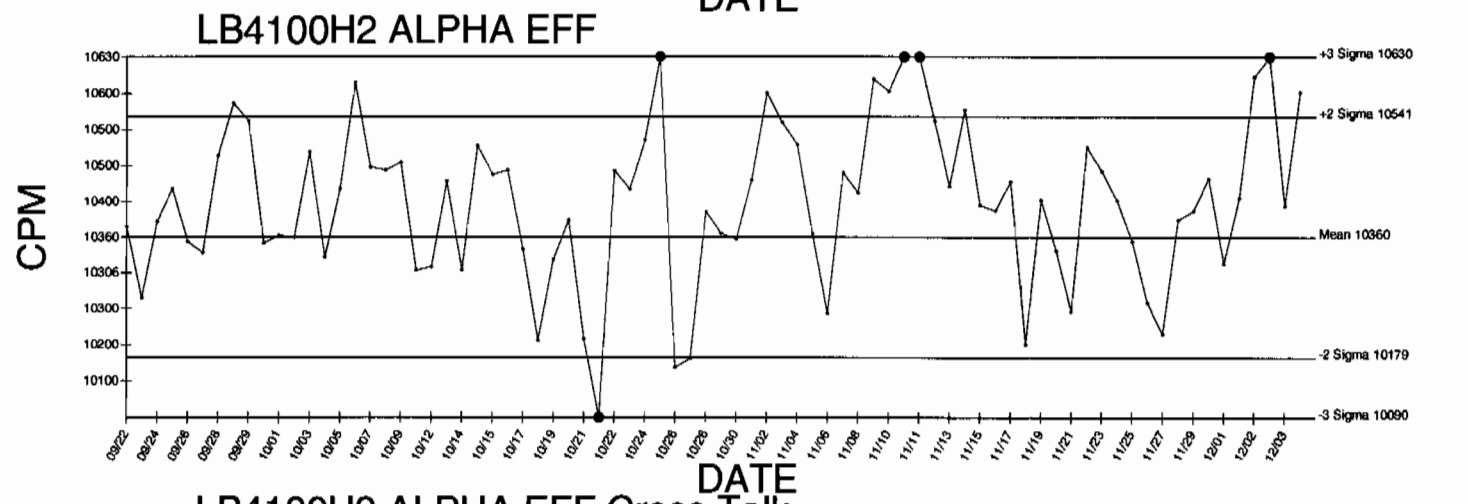

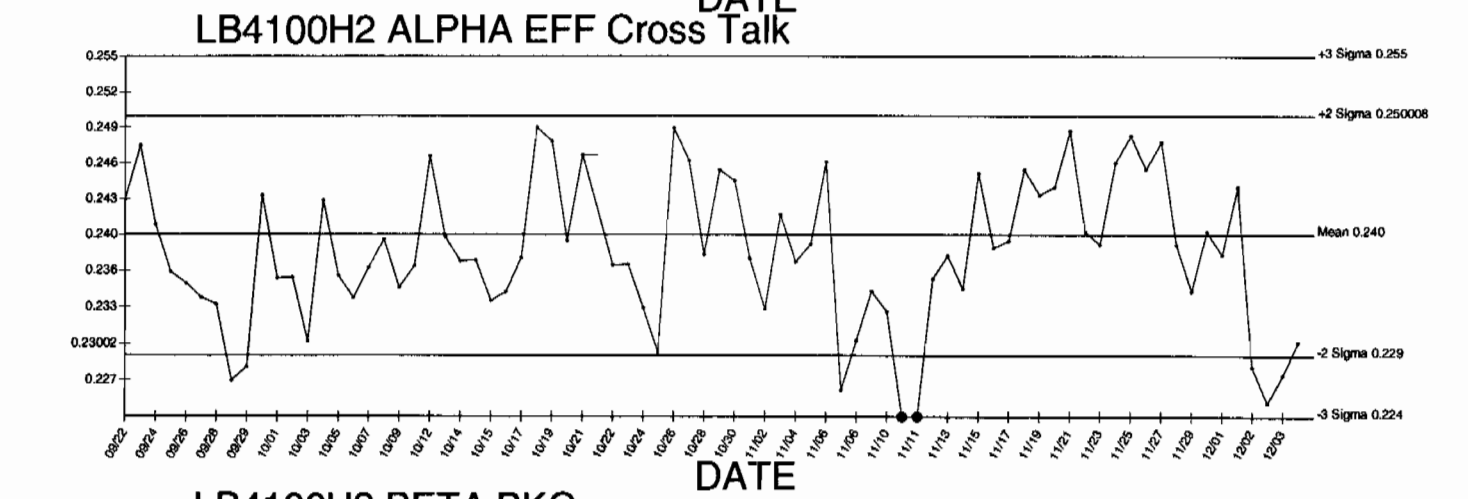

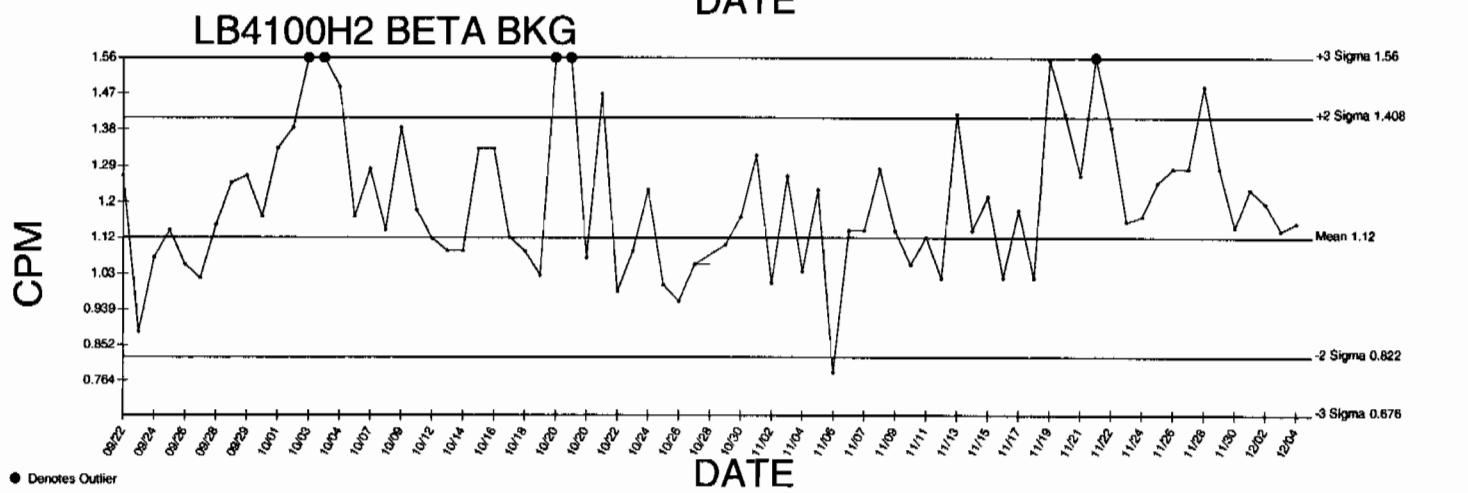

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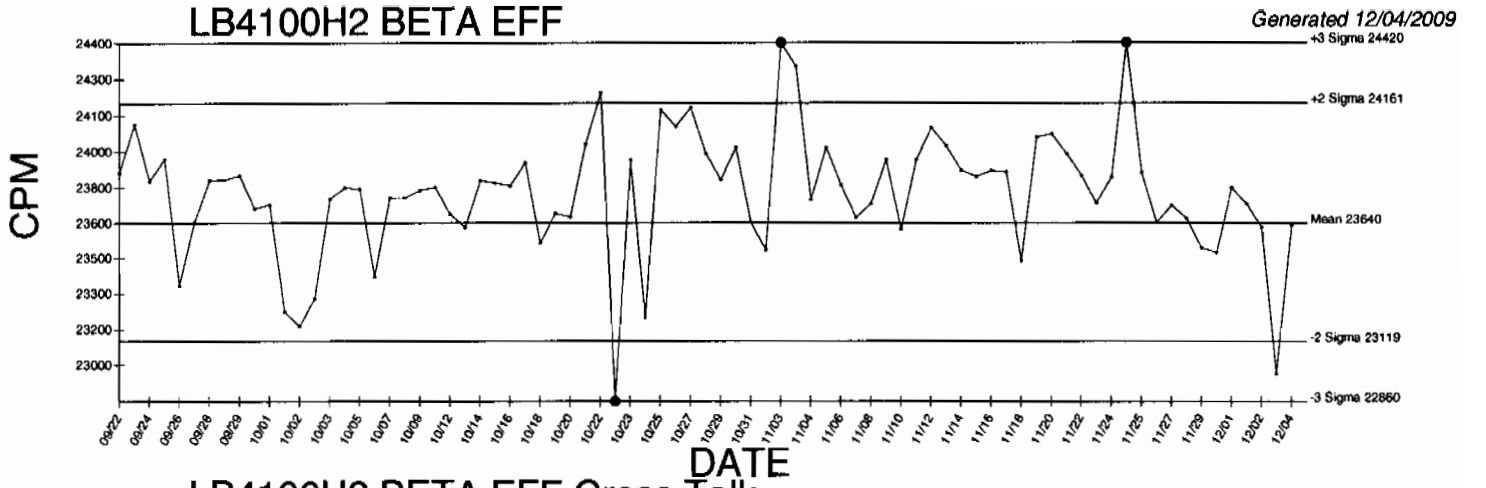

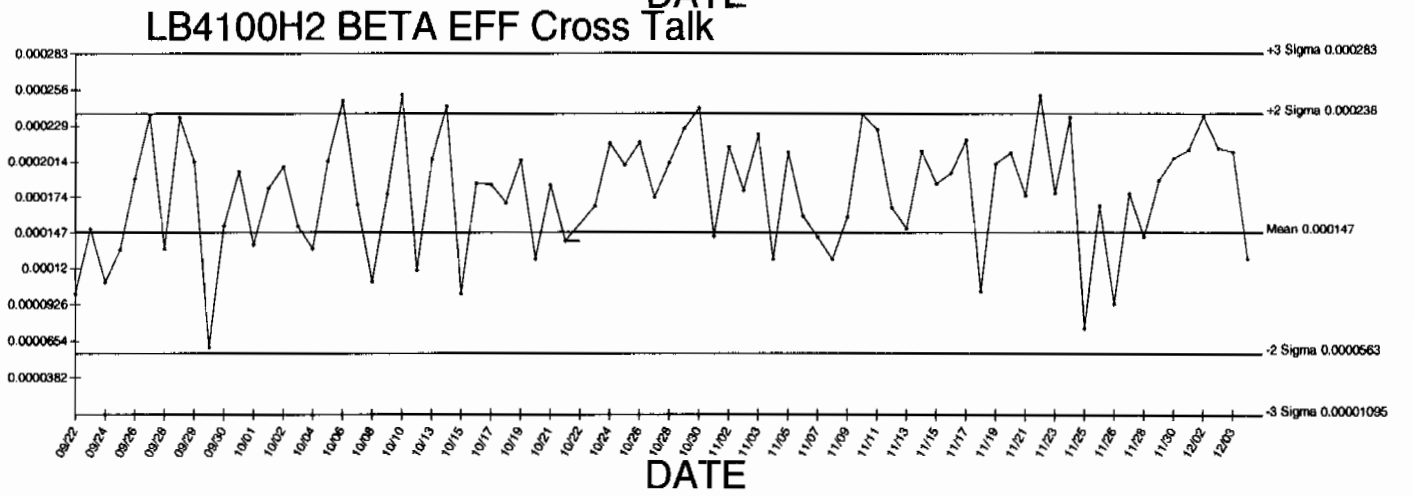

● Denotes Outlier

Generated 12/04/2009

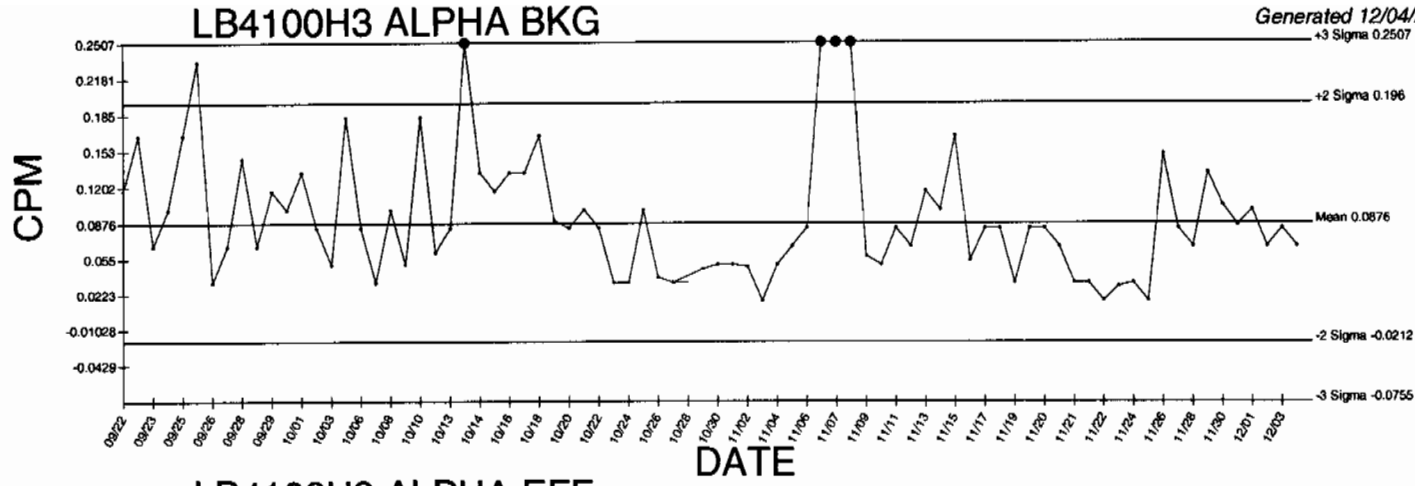

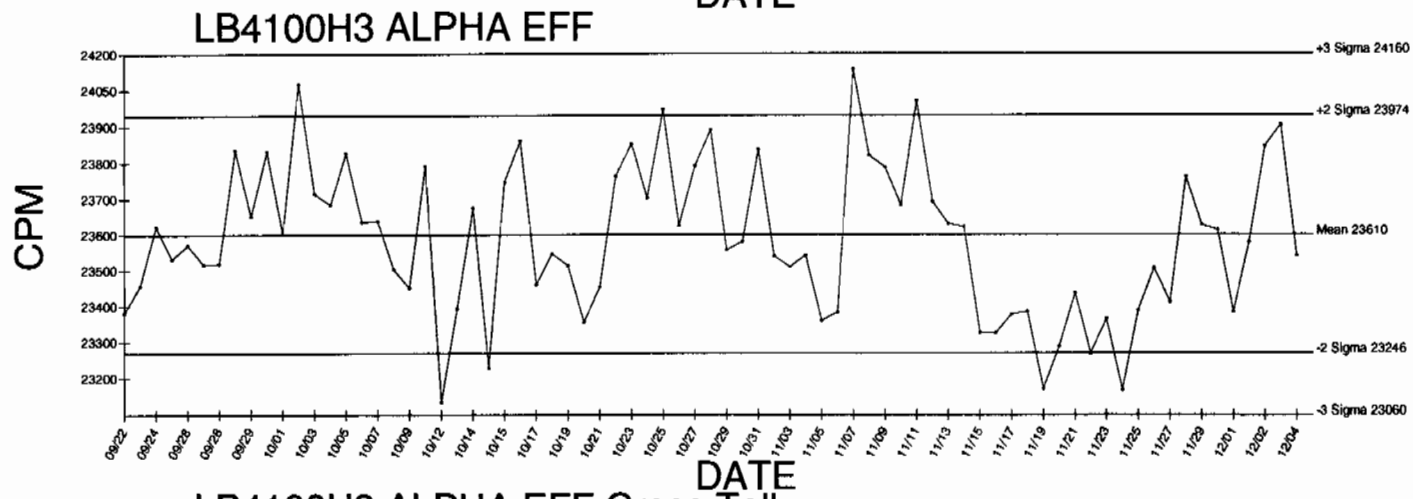

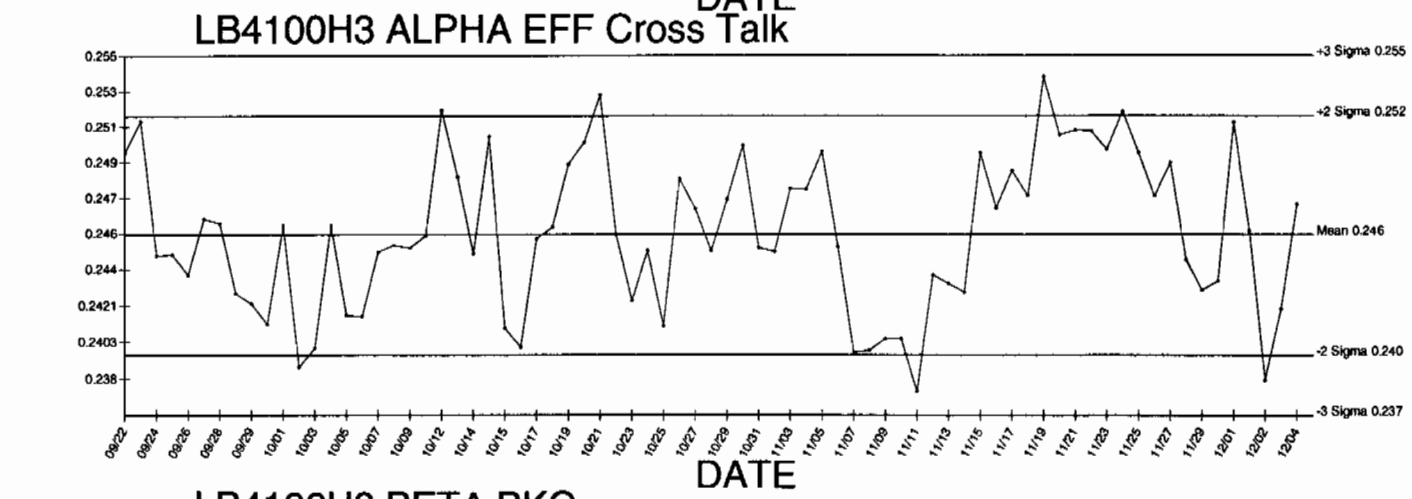

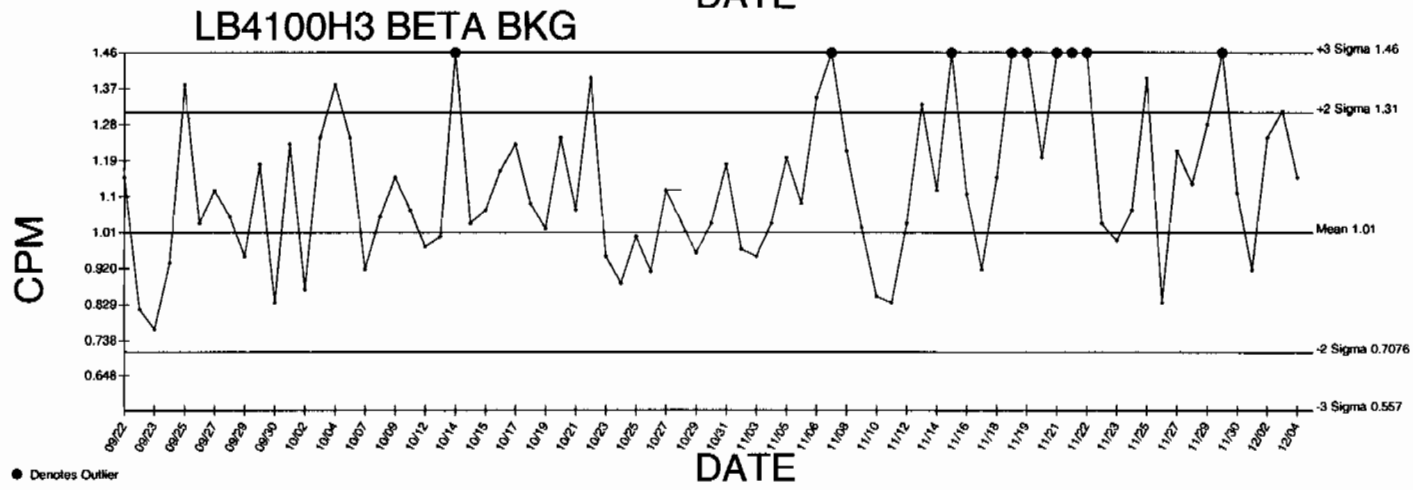

● Denotes Outlier

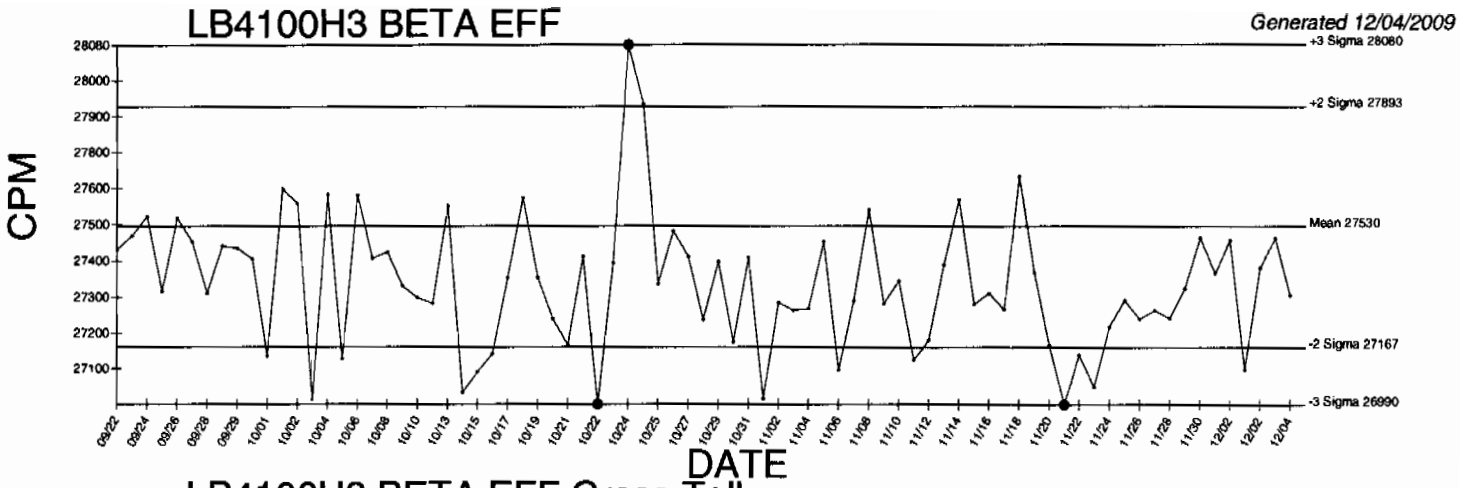

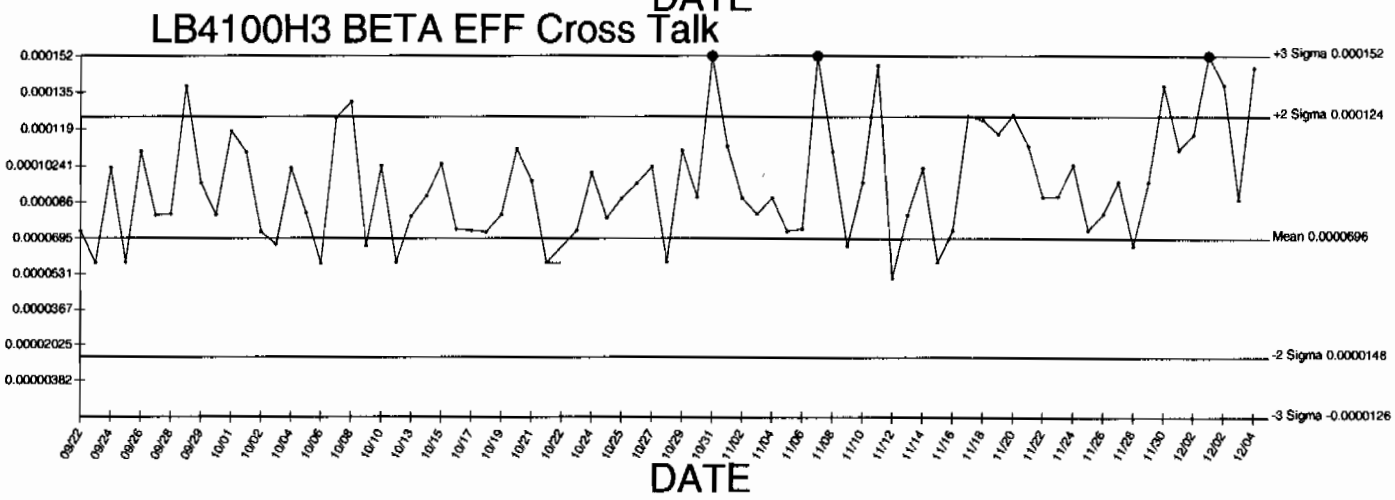

● Denotes Outlier

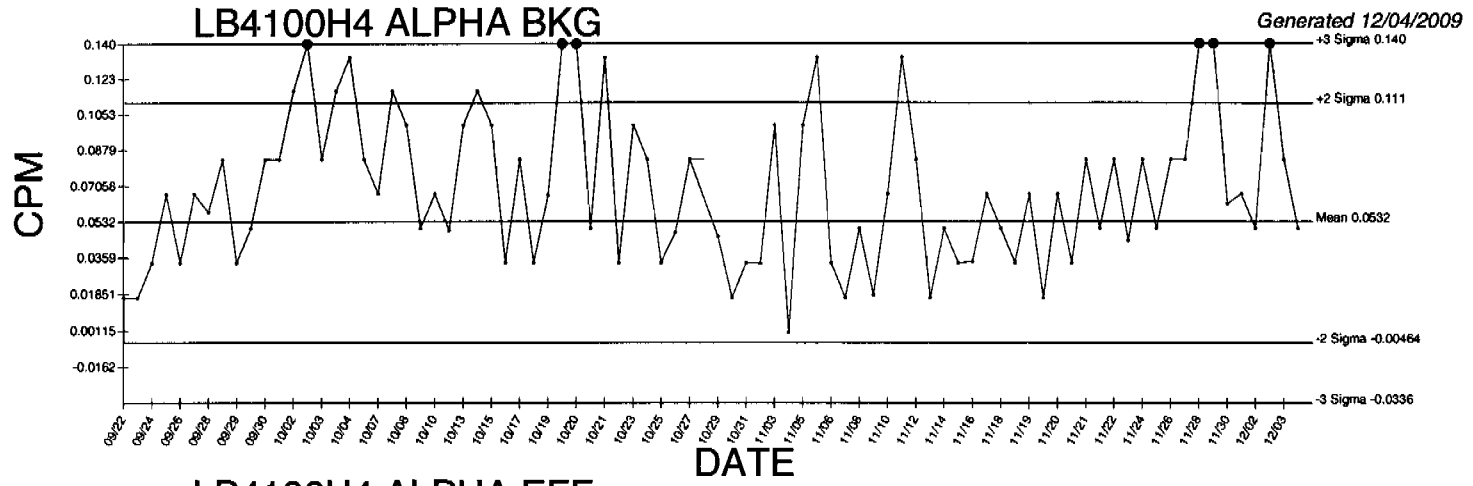

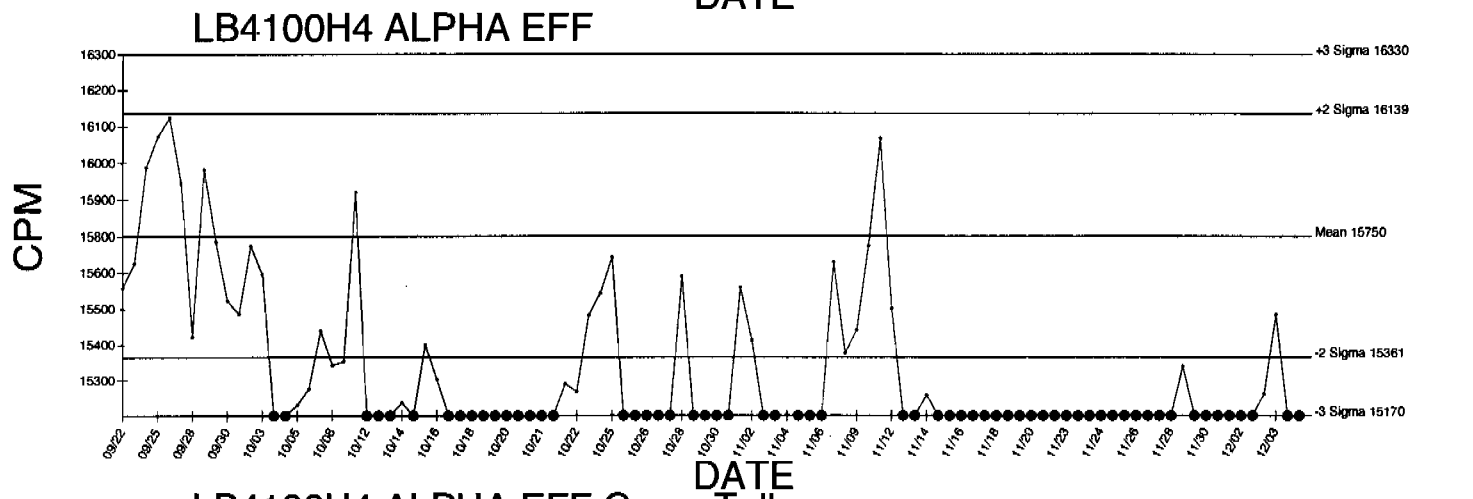

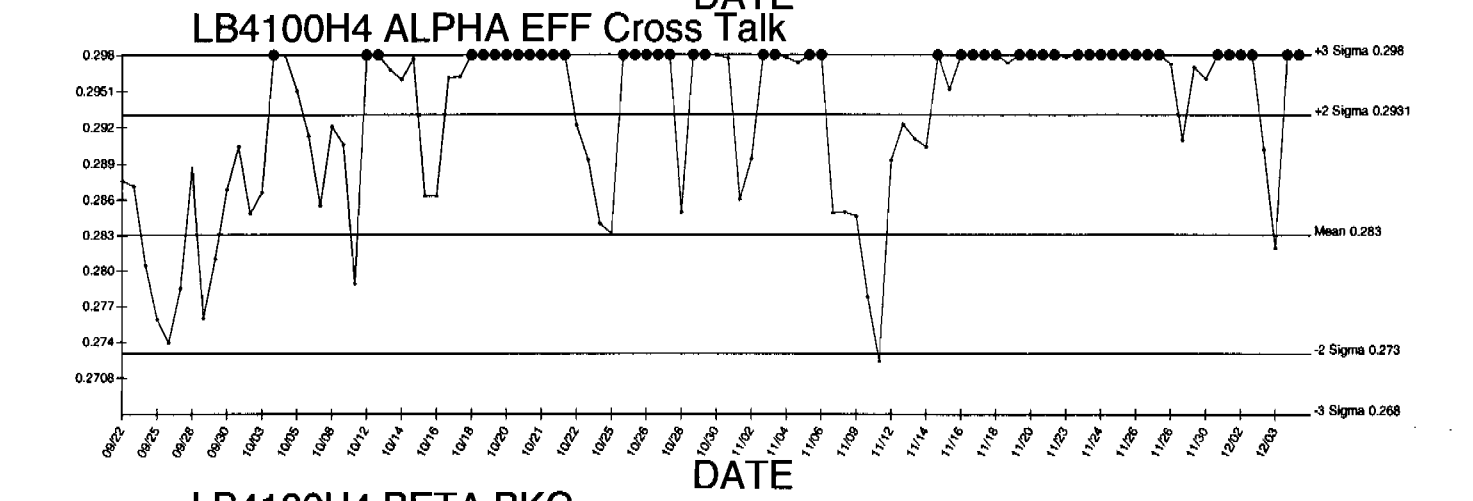

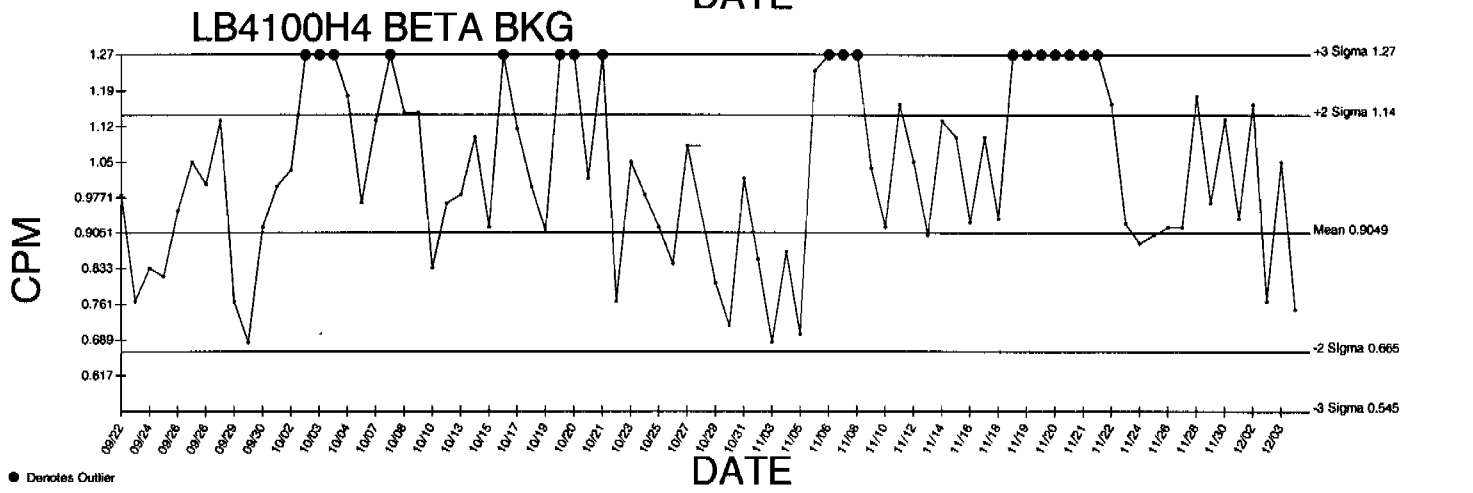

● Denotes Outlier

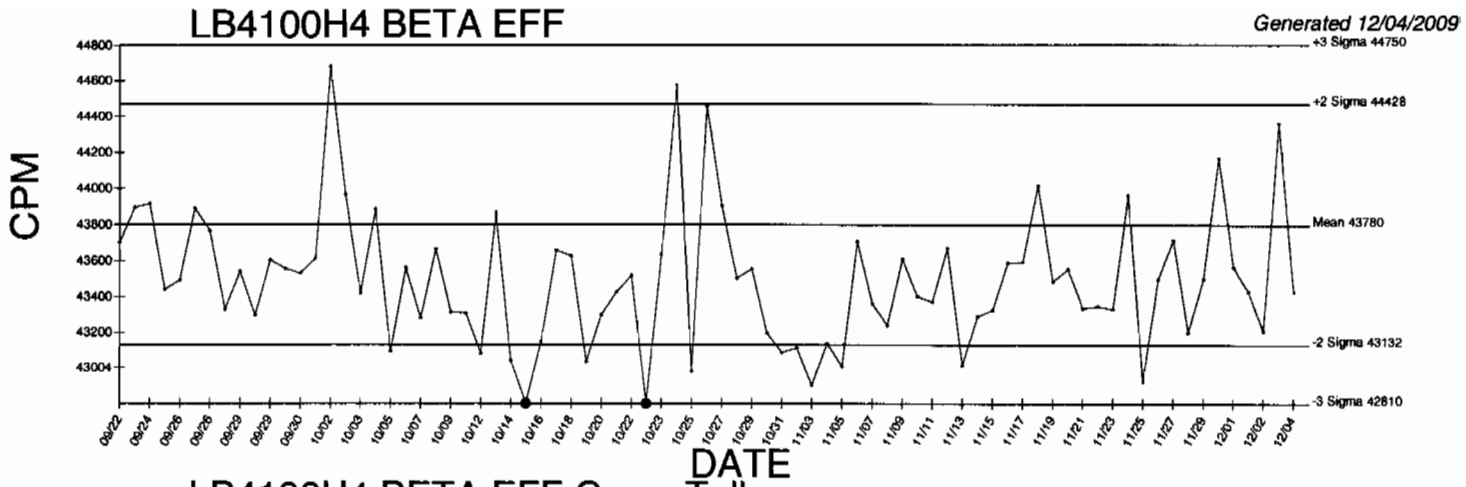

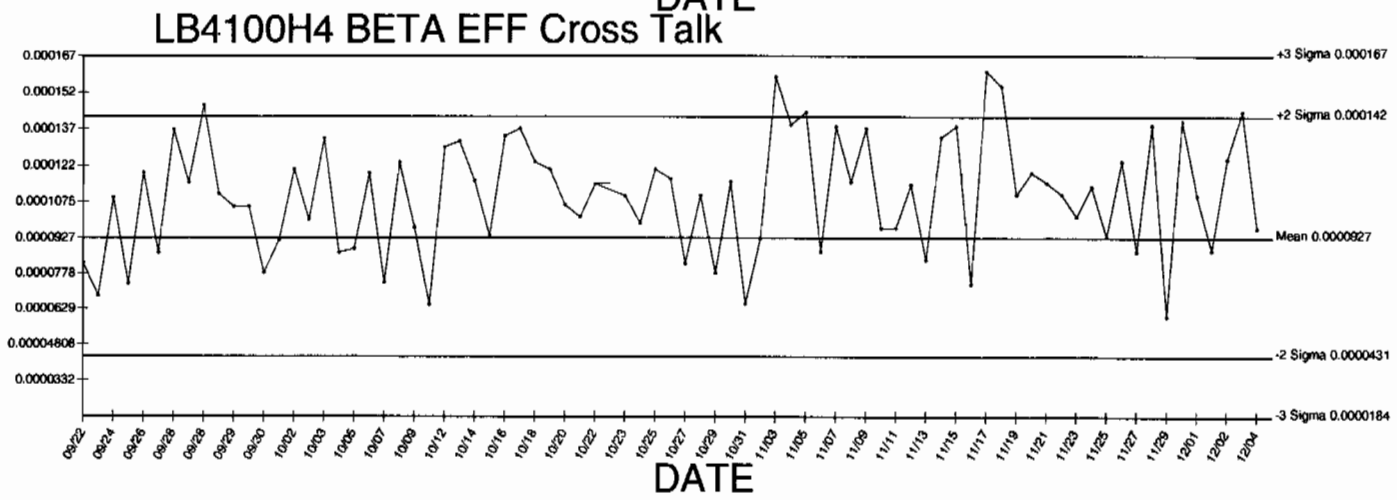

● Denotes Outlier

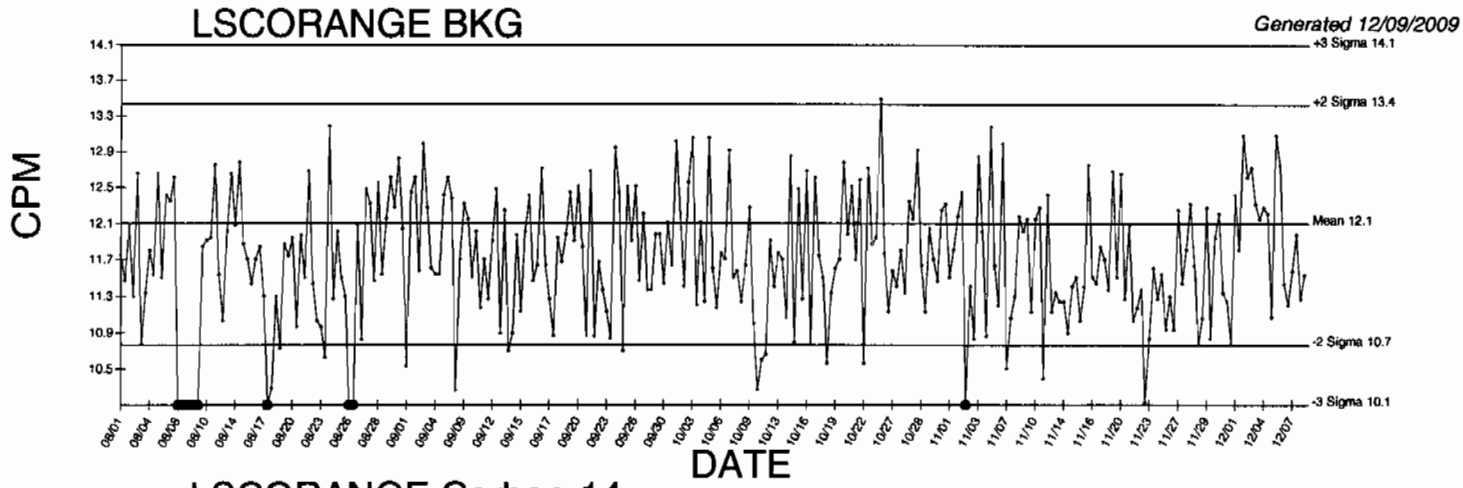

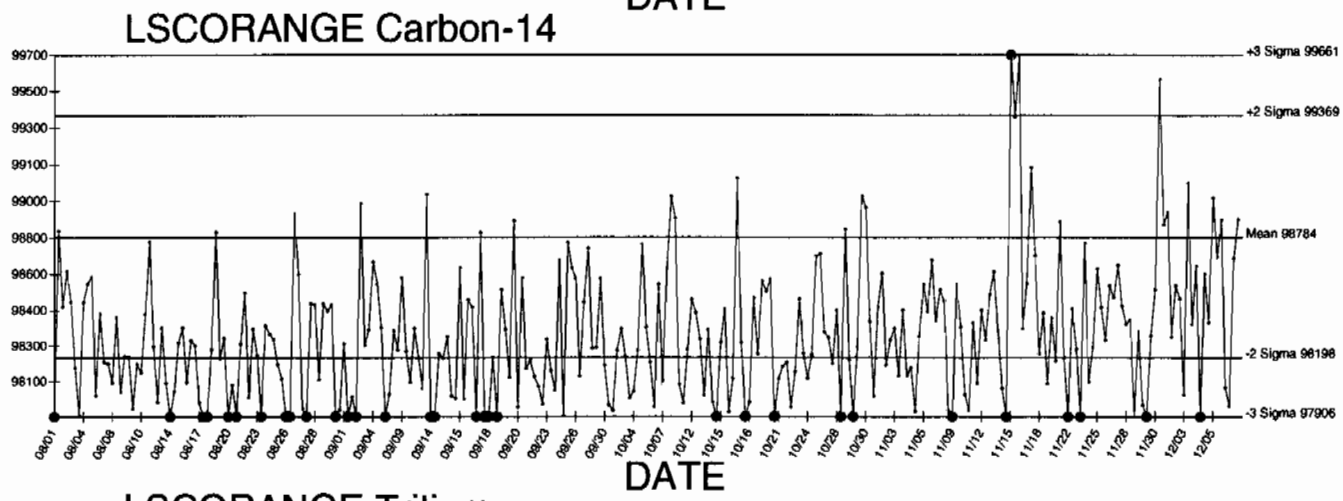

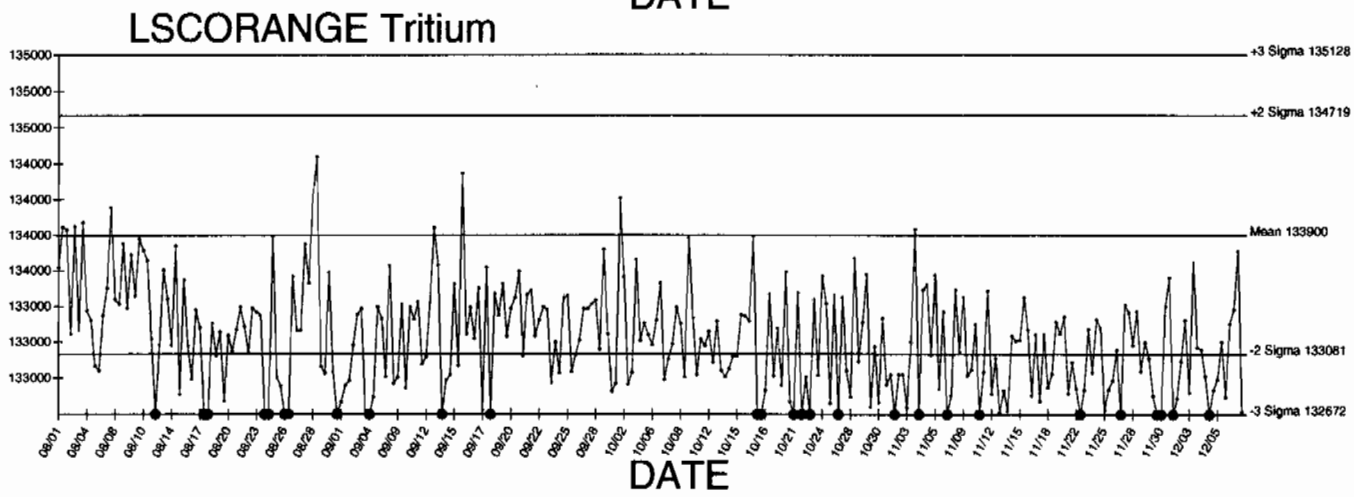

● Denotes Outlier

QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

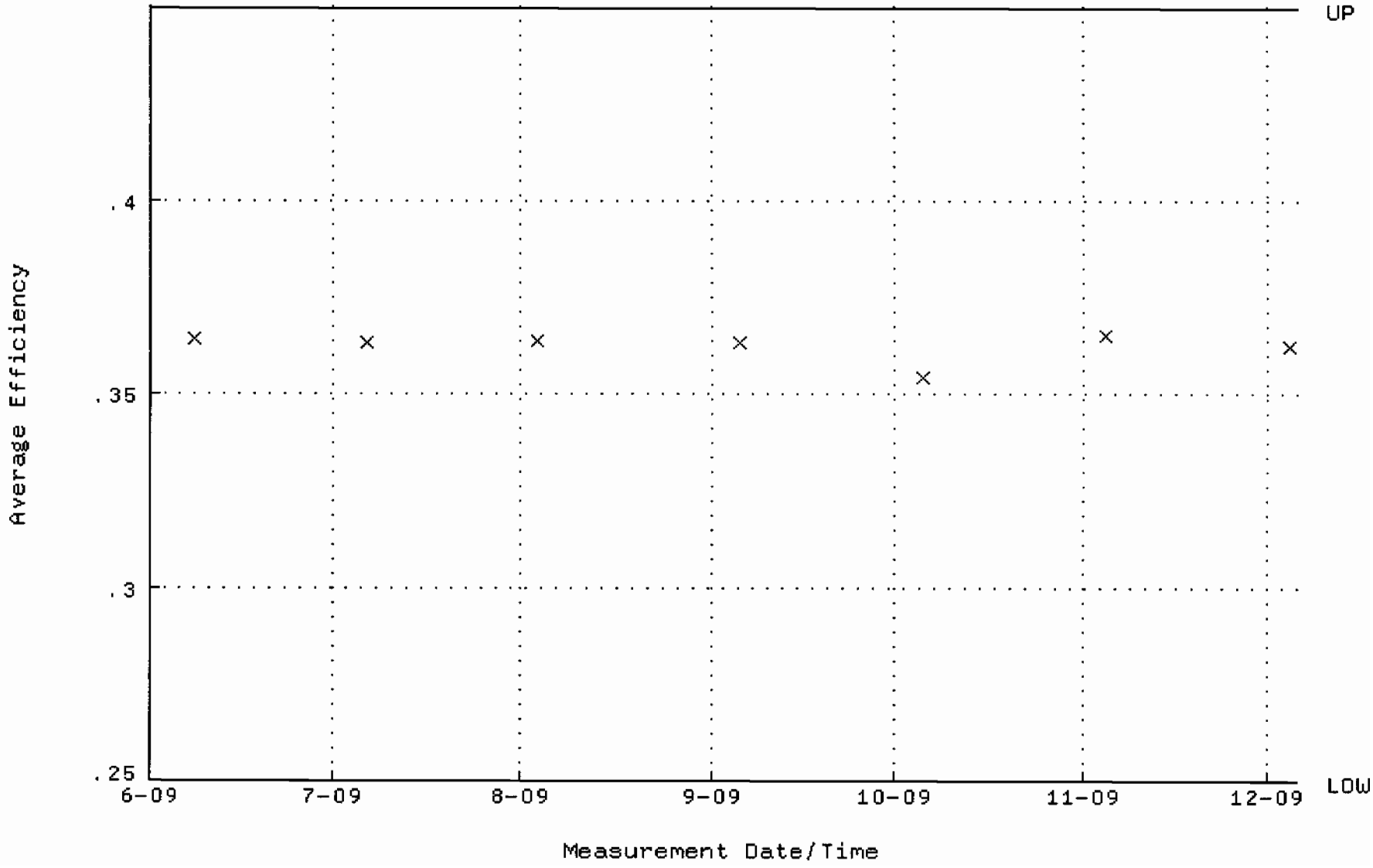

QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

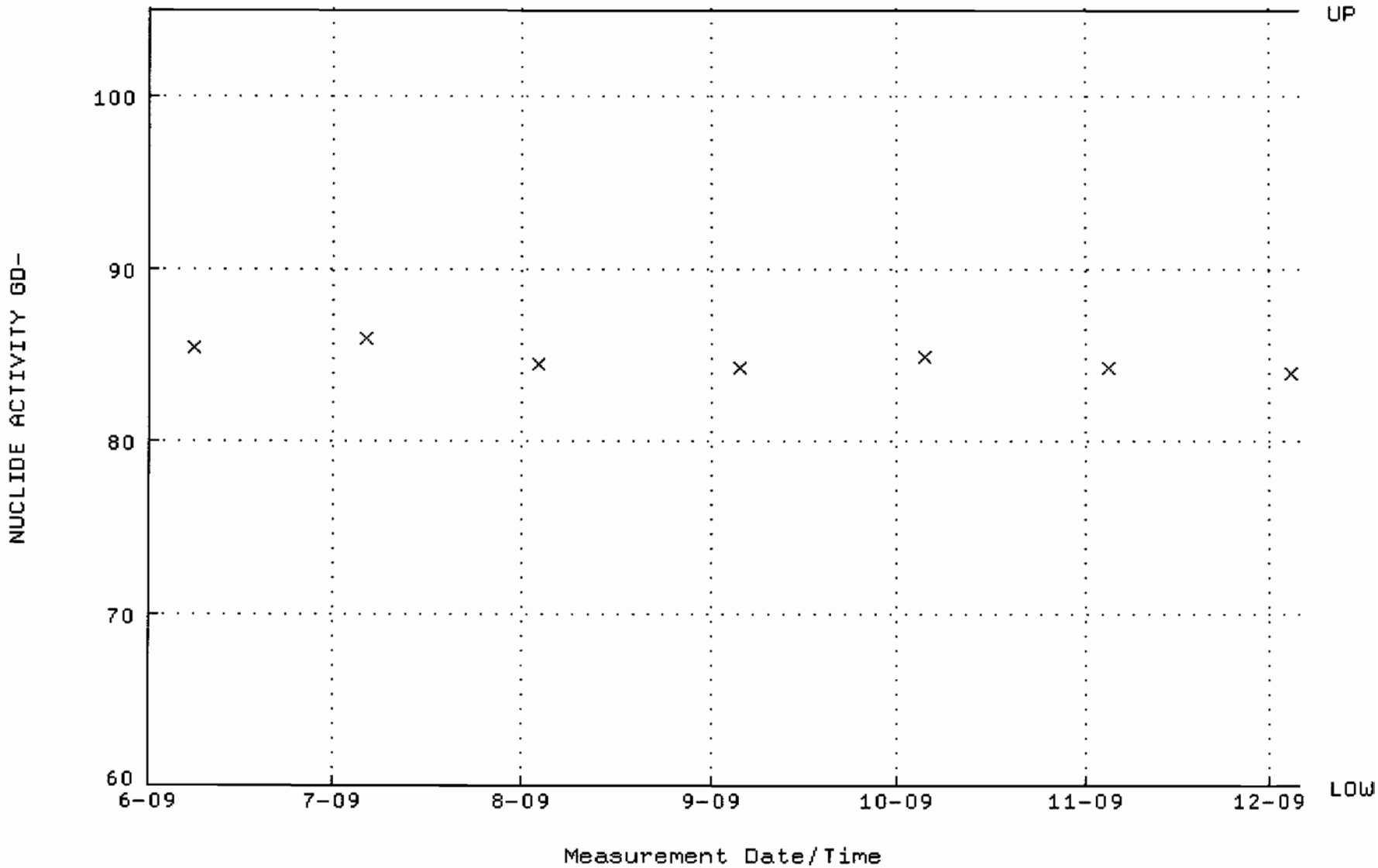

QA filename : DKA100:[ENV_ALPHA.QA.B]B039.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

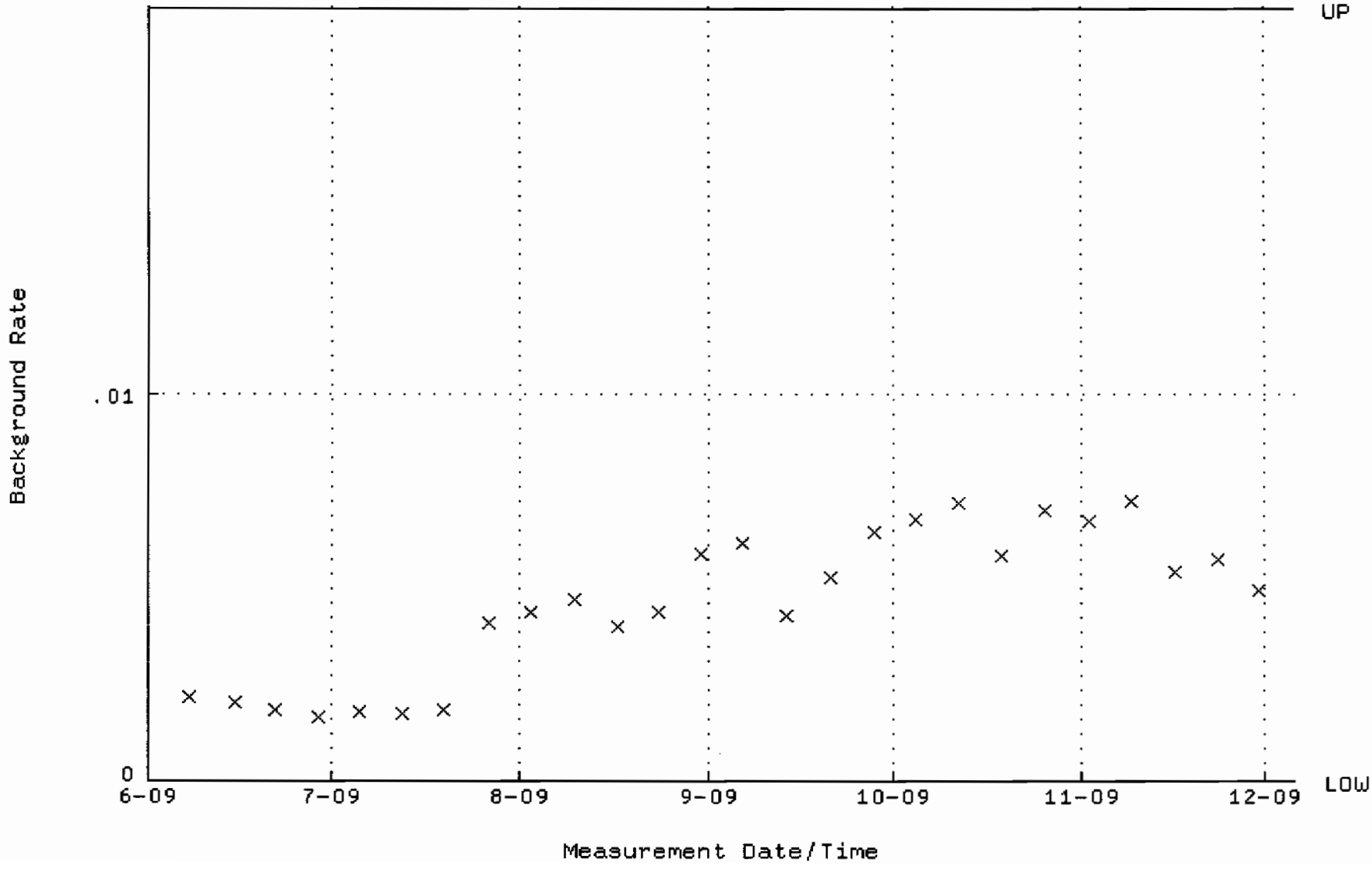

QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.313016 through 0.333016

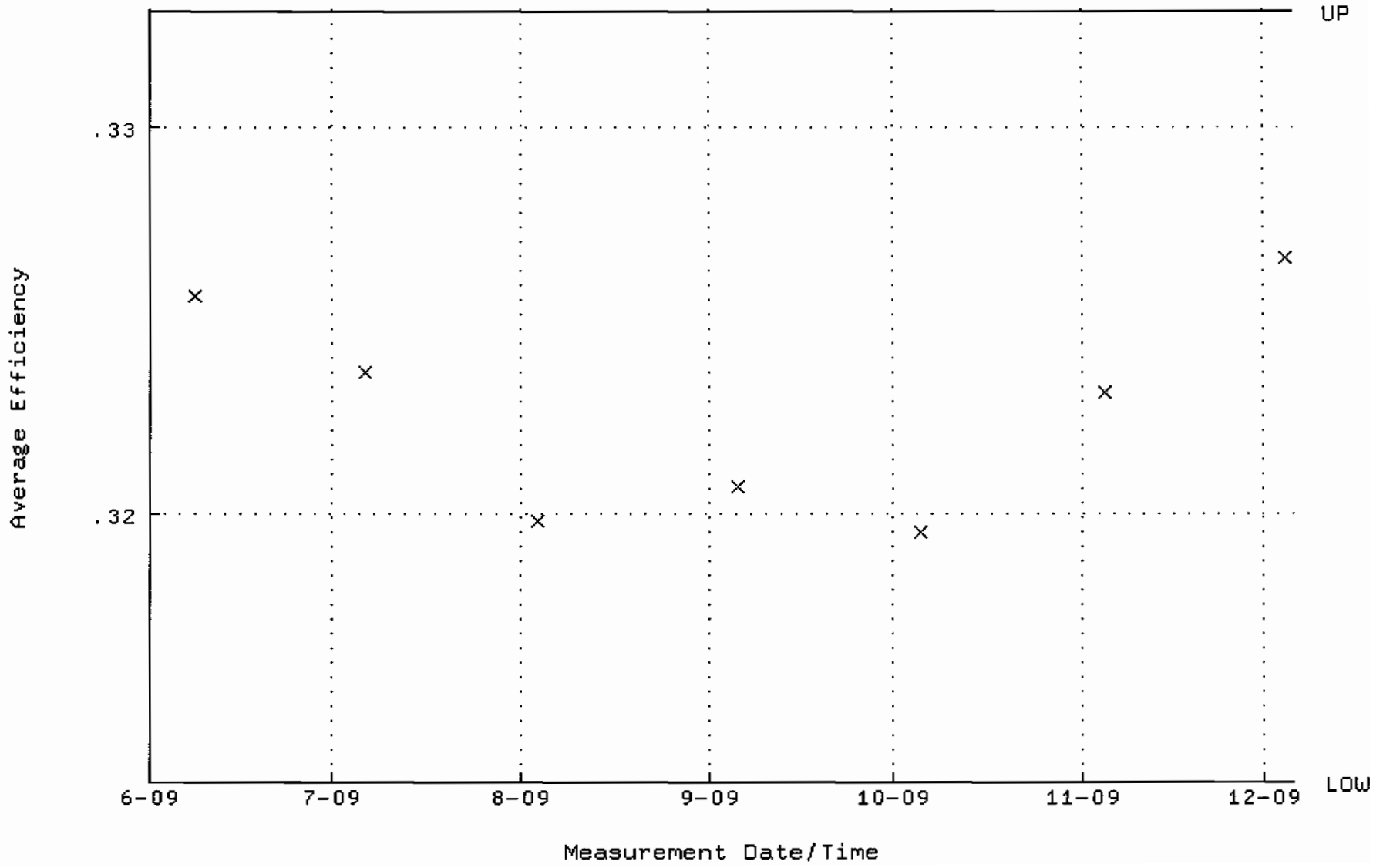

QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 82.8065 through 91.5229

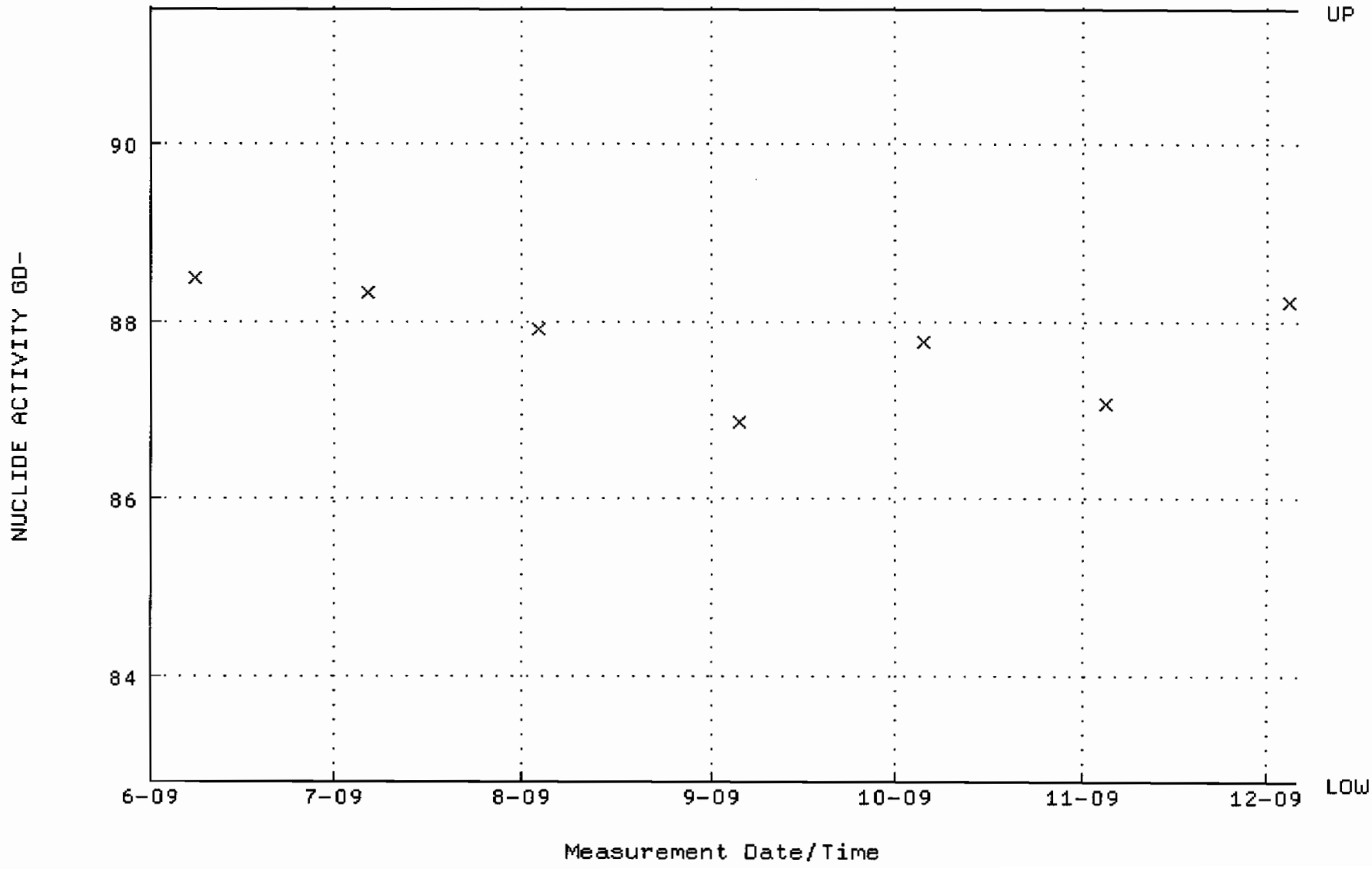

QA filename : DKA100:[ENV_ALPHA.QA.B]B040.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

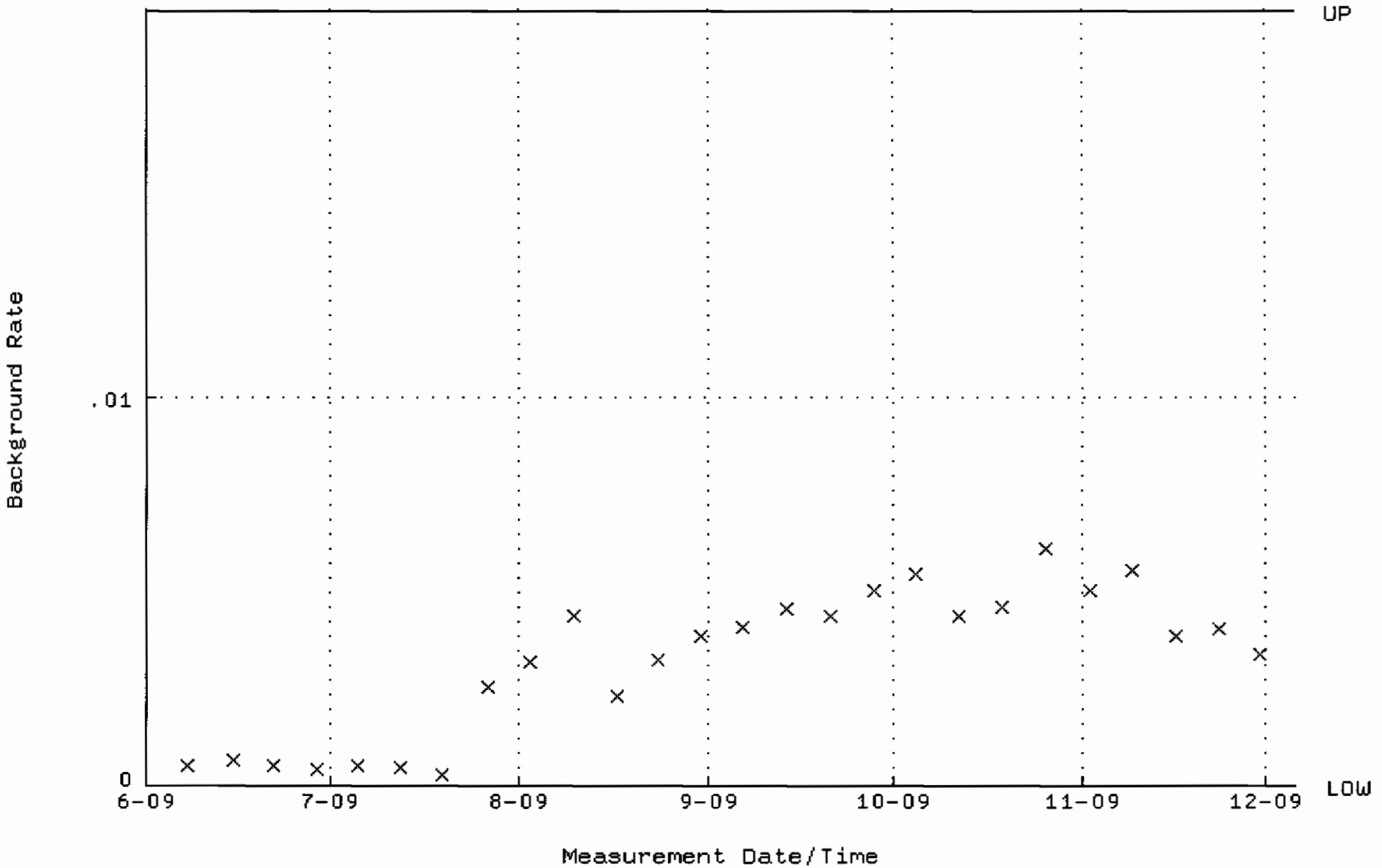

QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.320943 through 0.340943

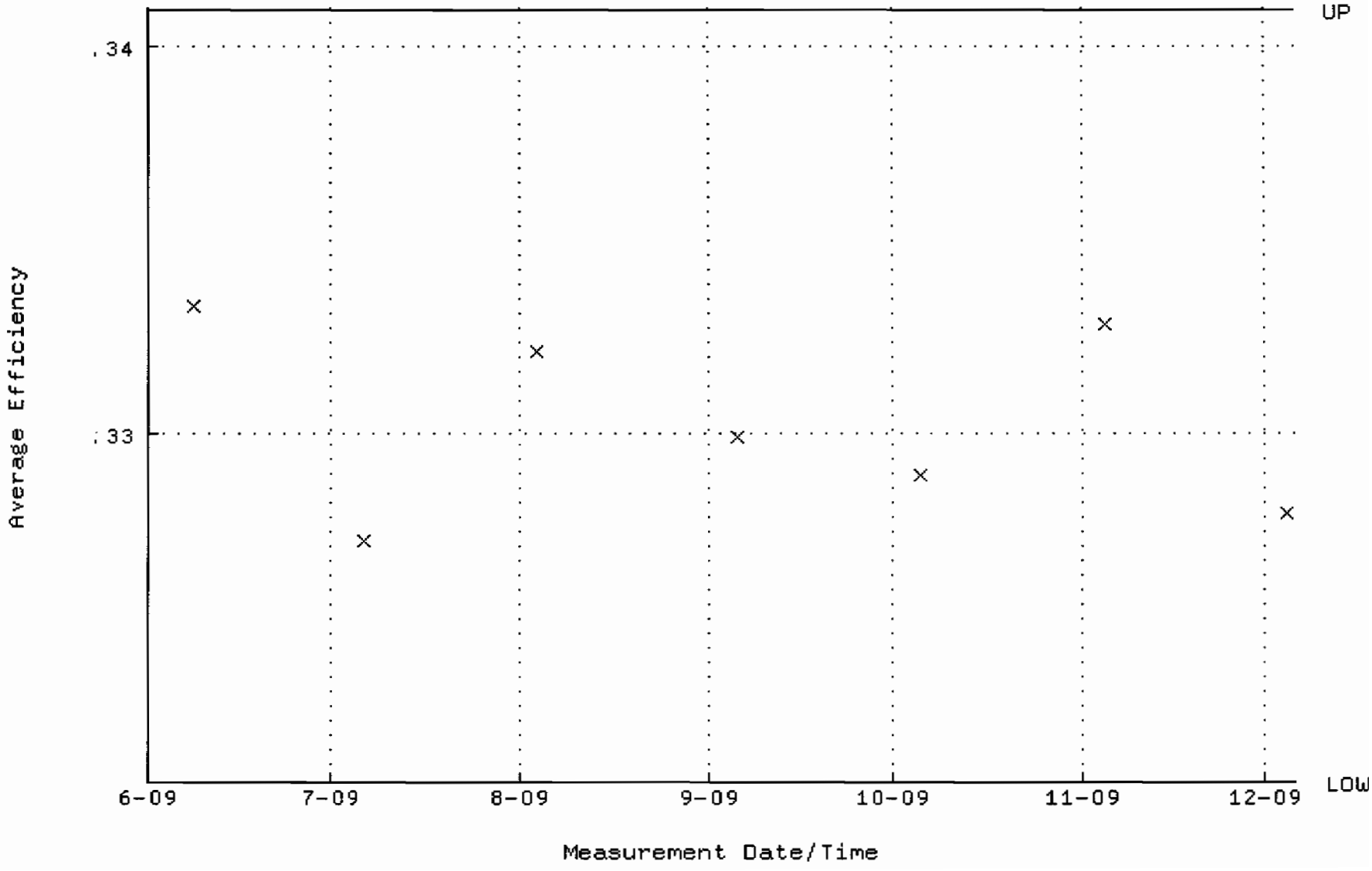

QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 86.6435 through 95.7639

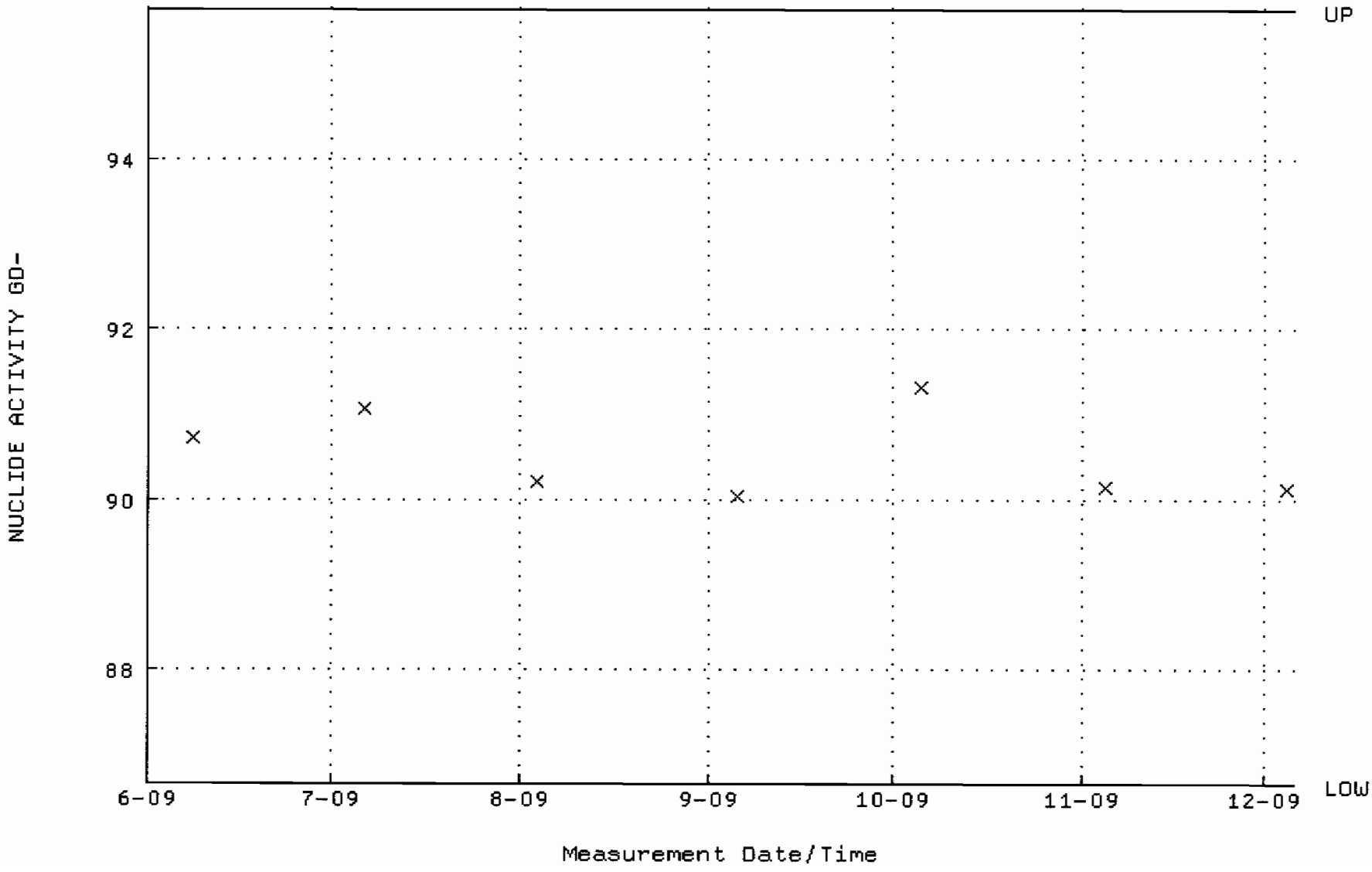

QA filename : DKA100:[ENV_ALPHA.QA.B]B041.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

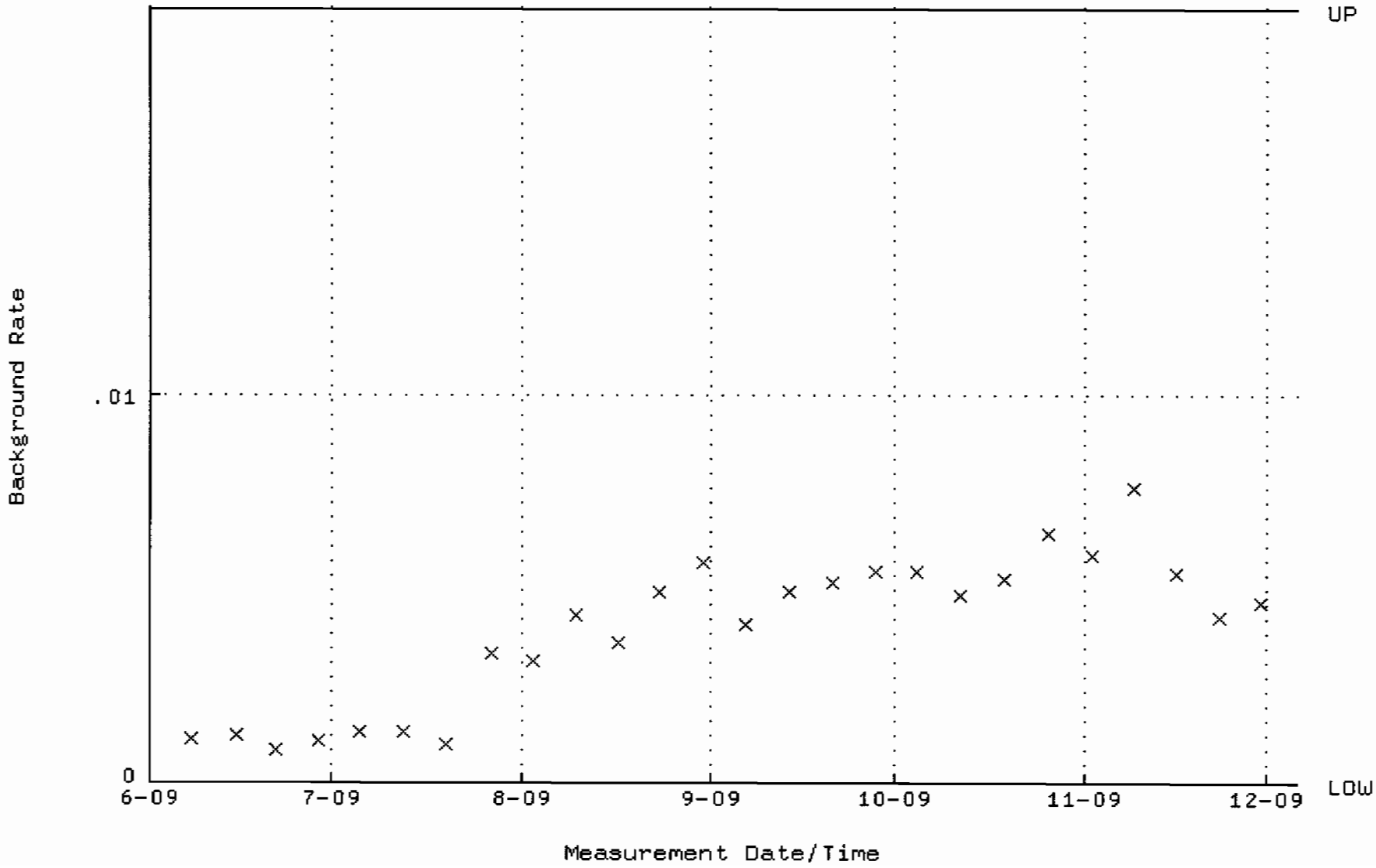

QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.322243 through 0.342243

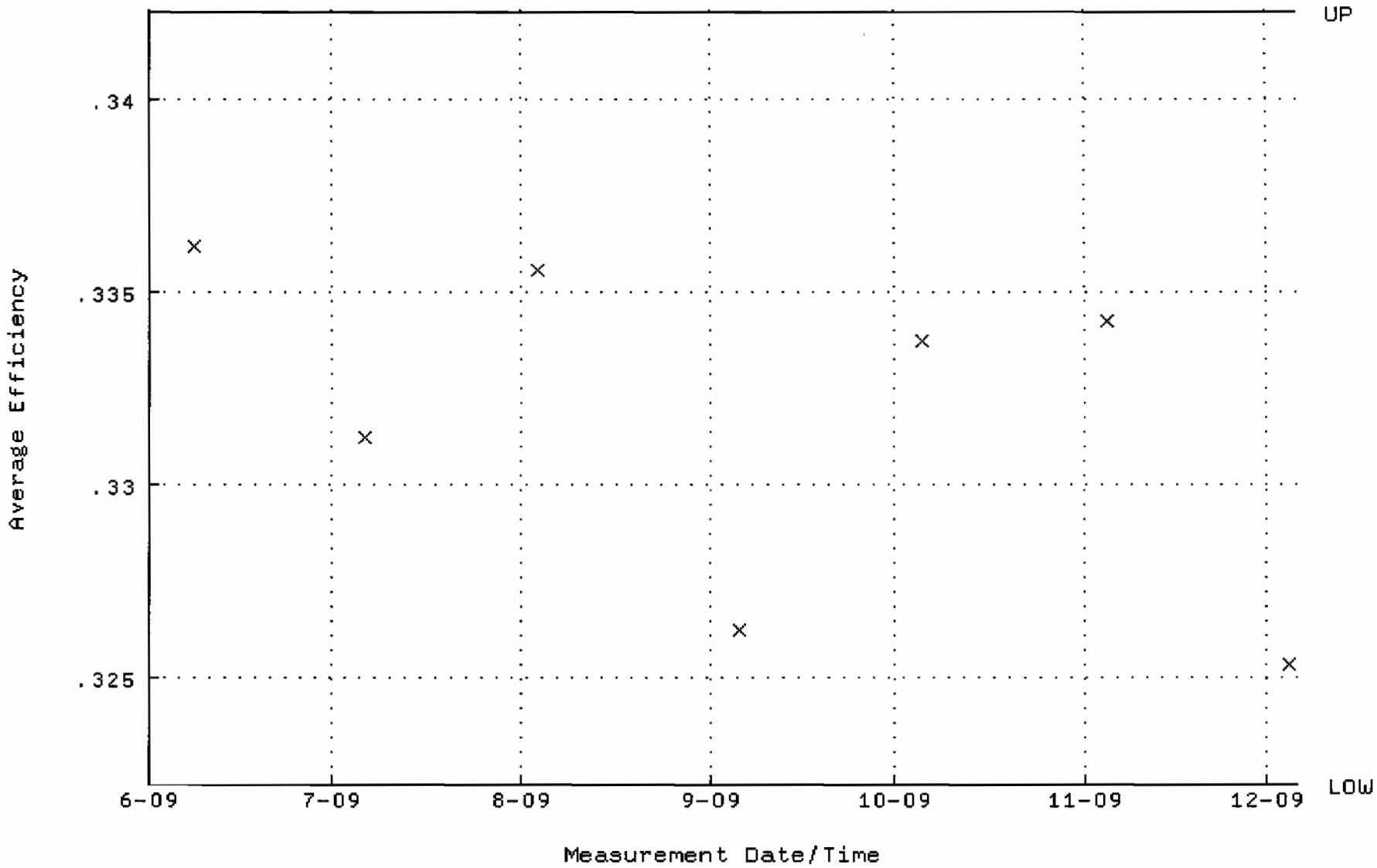

QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 80.6389 through 89.1273

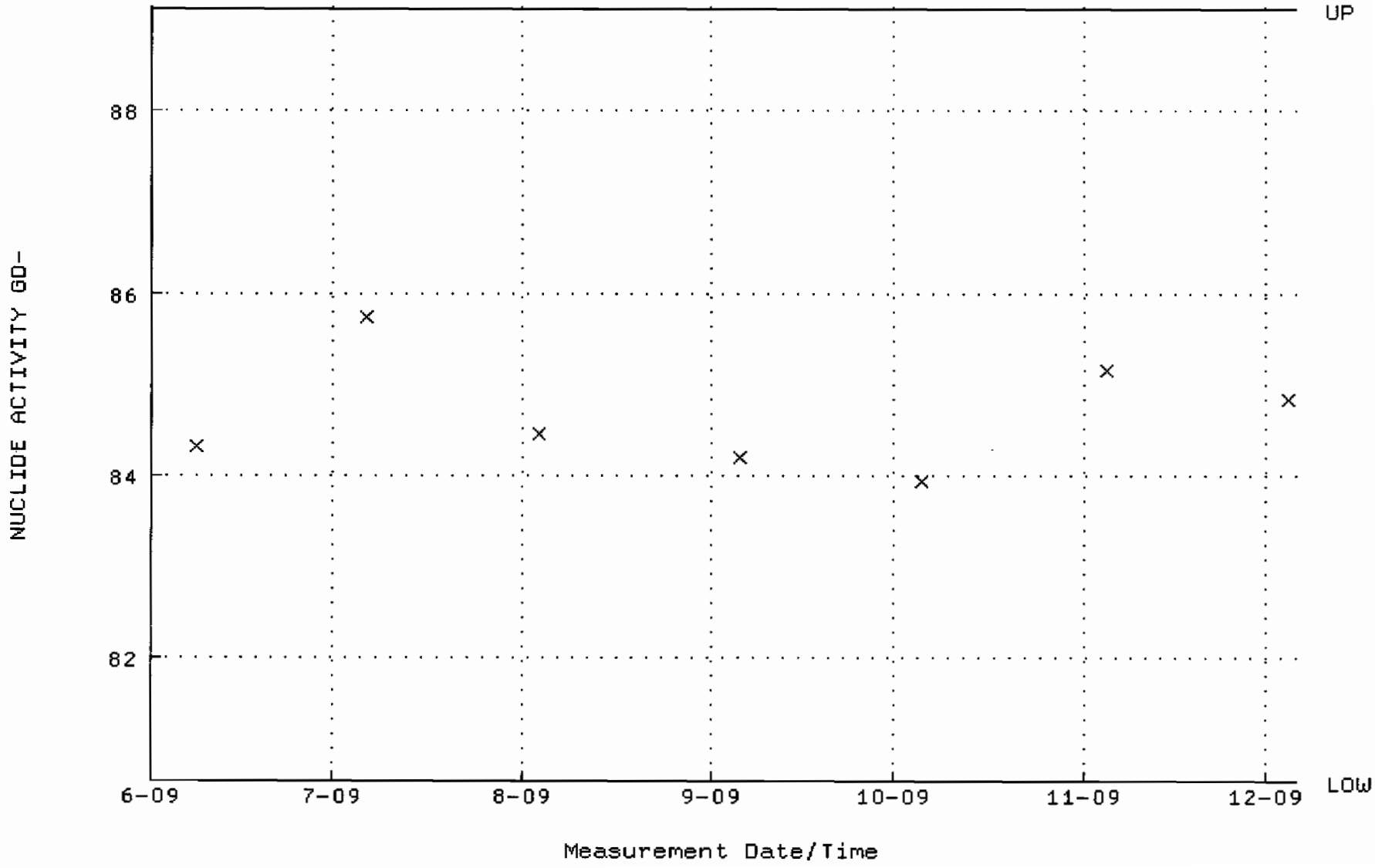

QA filename : DKA100:[ENV_ALPHA.QA.B]B042.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

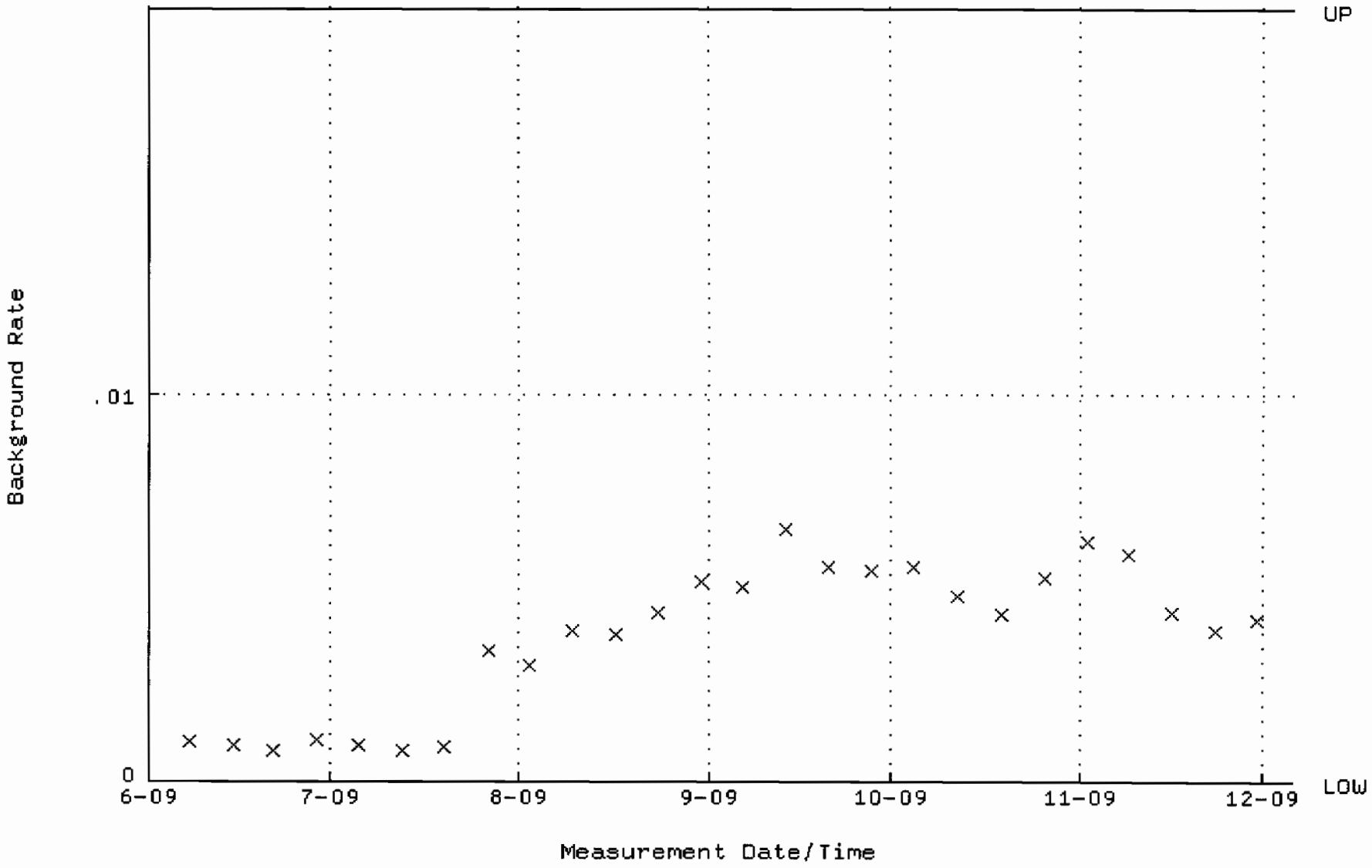

QA filename : DKA100:[ENV_ALPHA.QA.W]W071.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.309161 through 0.329161

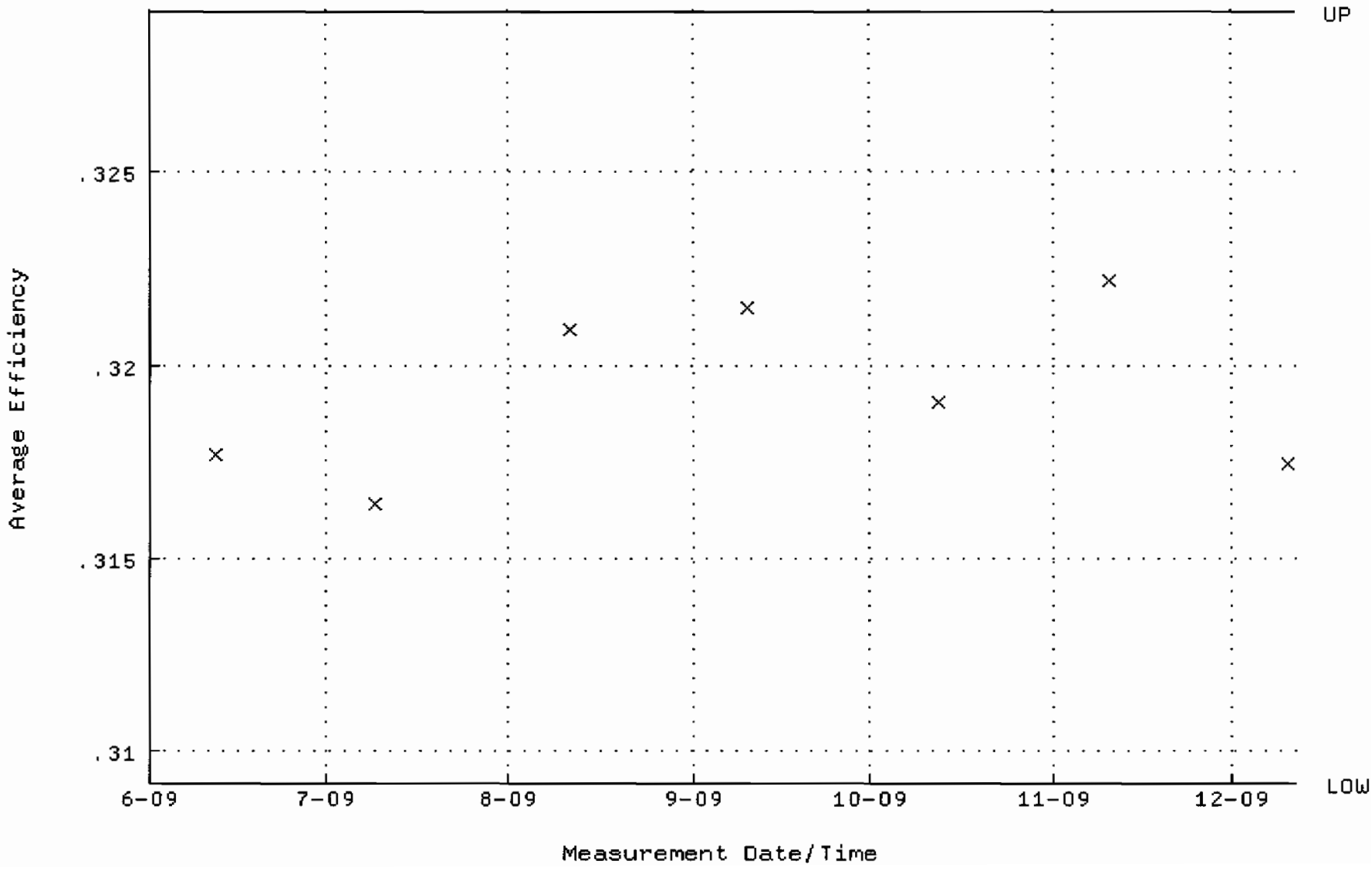

QA filename : DKA100:[ENV_ALPHA.QA.W]W071.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.7769 through 95.9113

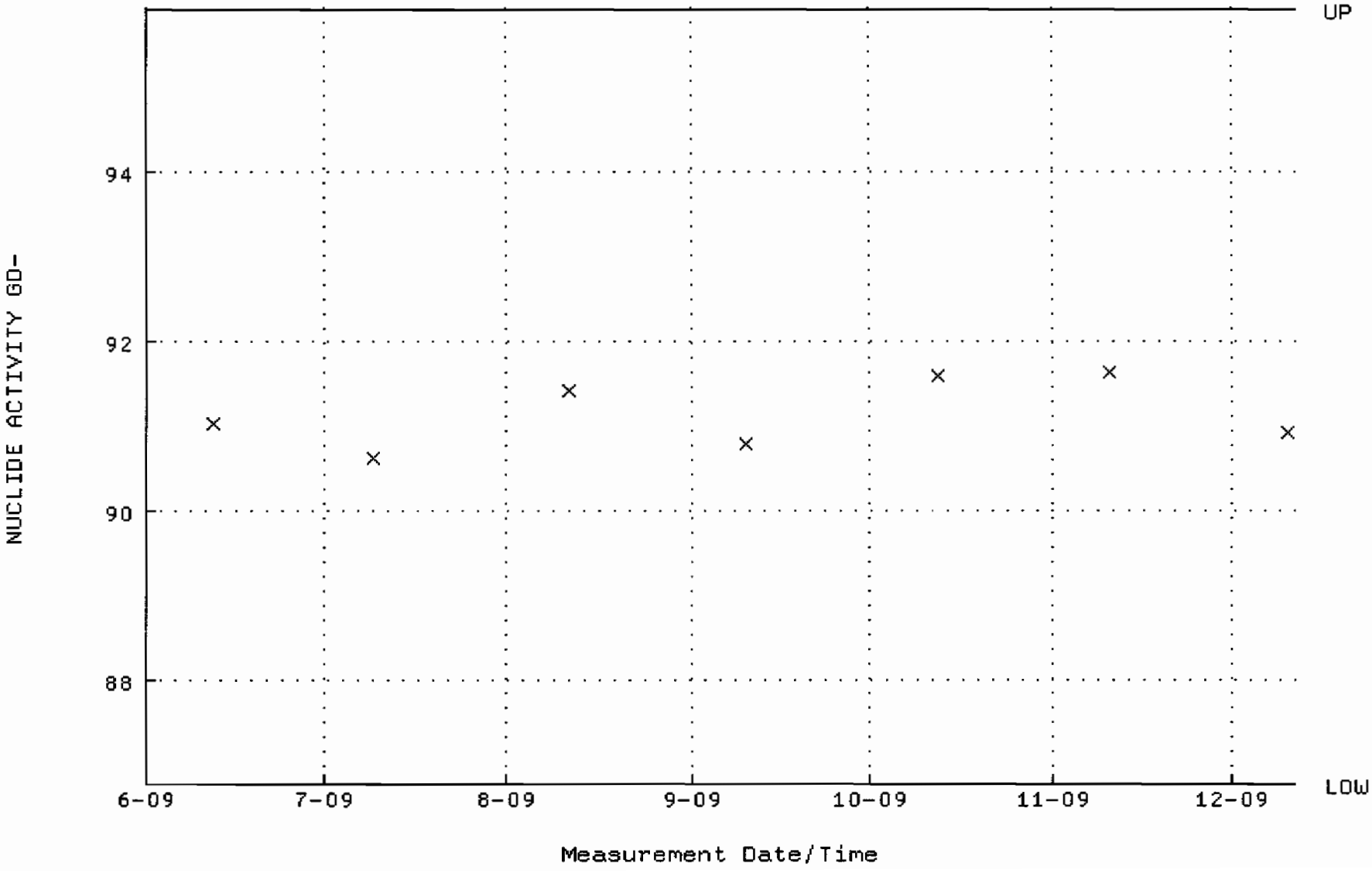

QA filename : DKA100:[ENV_ALPHA.QA.B]B071.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

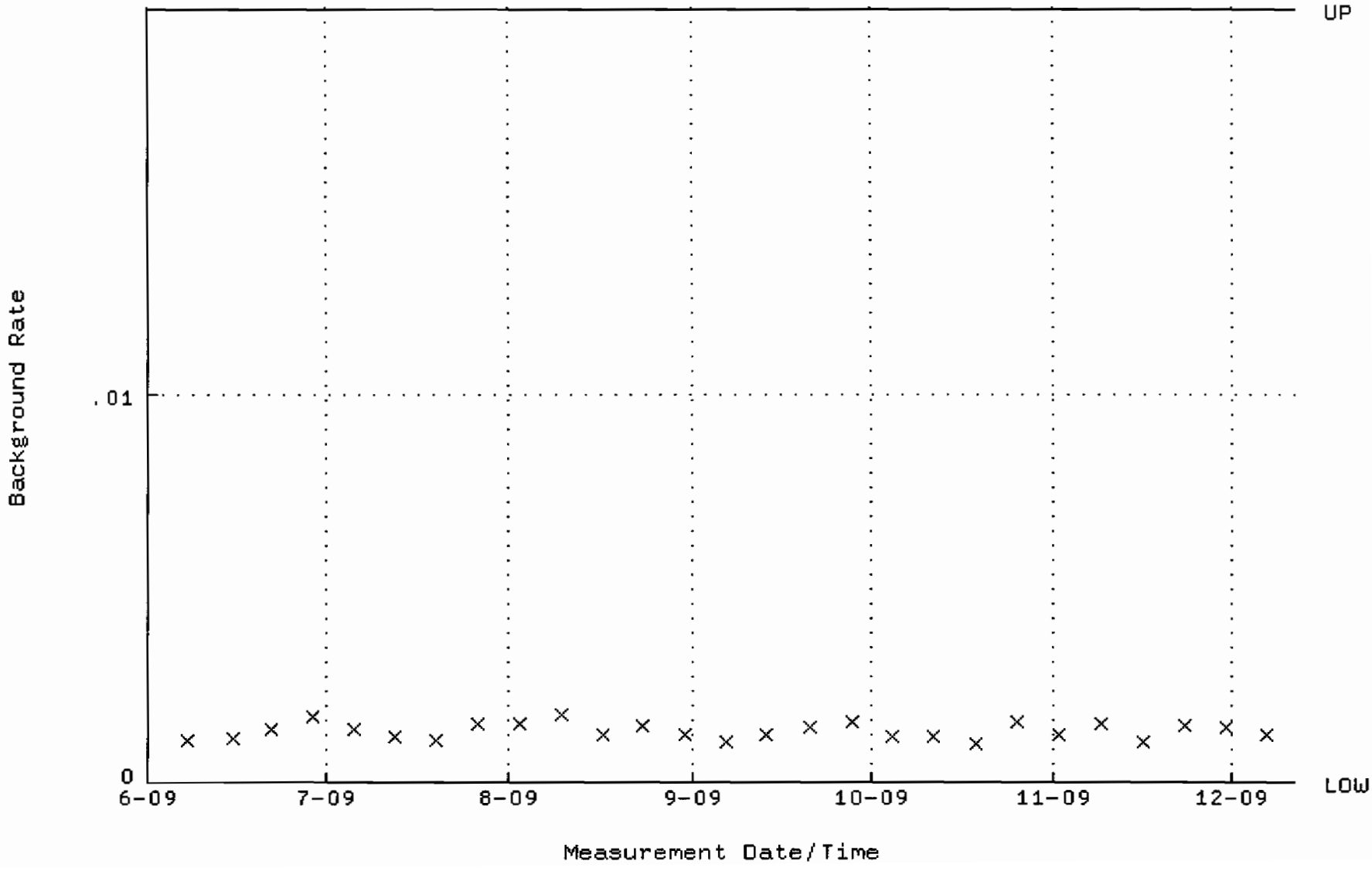

QA filename : DKA100:[ENV_ALPHA.QA.W]W099.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:29 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.330127 through 0.357809

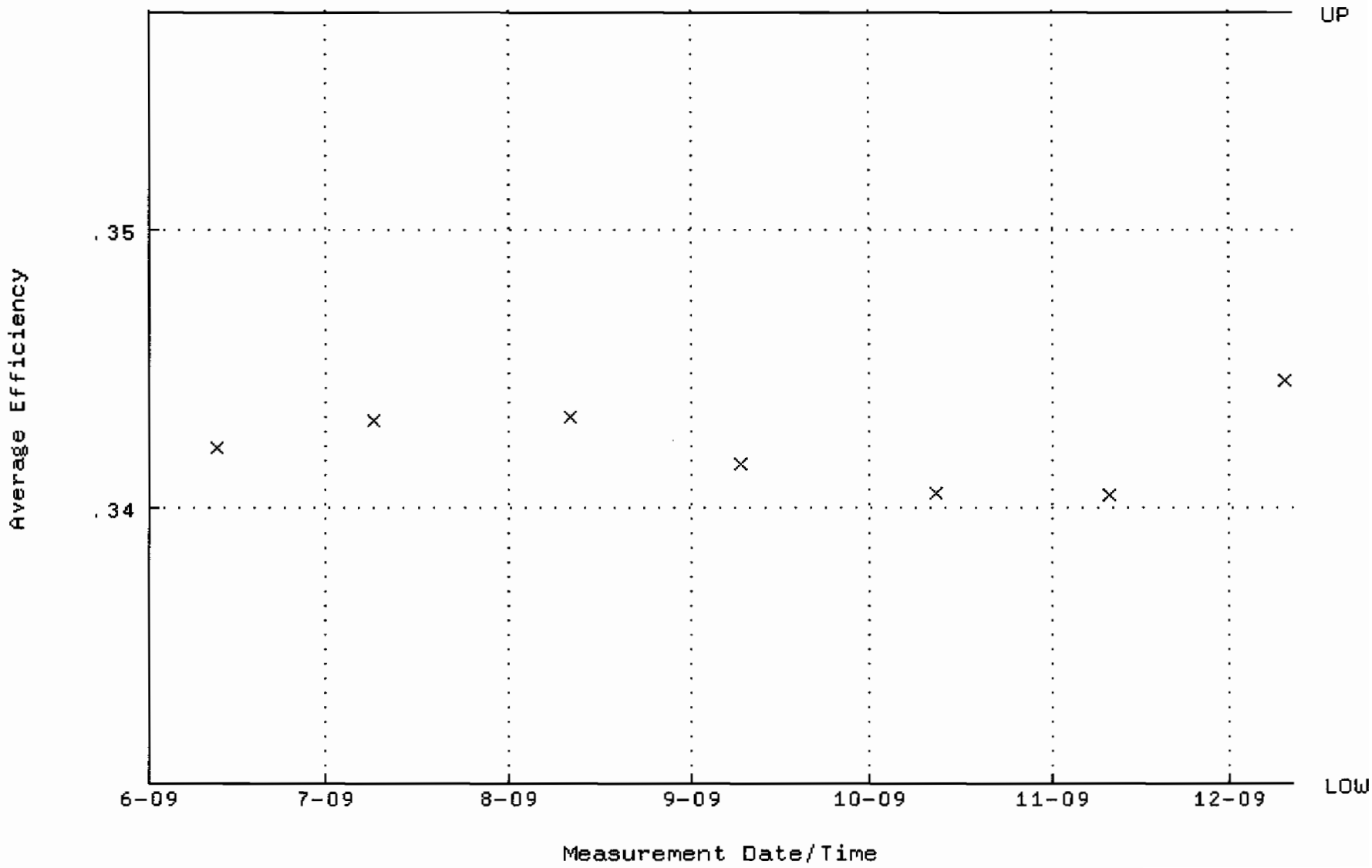

QA filename : DKA100:[ENV_ALPHA.QA.W]W099.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:29 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 68.9116 through 73.1498

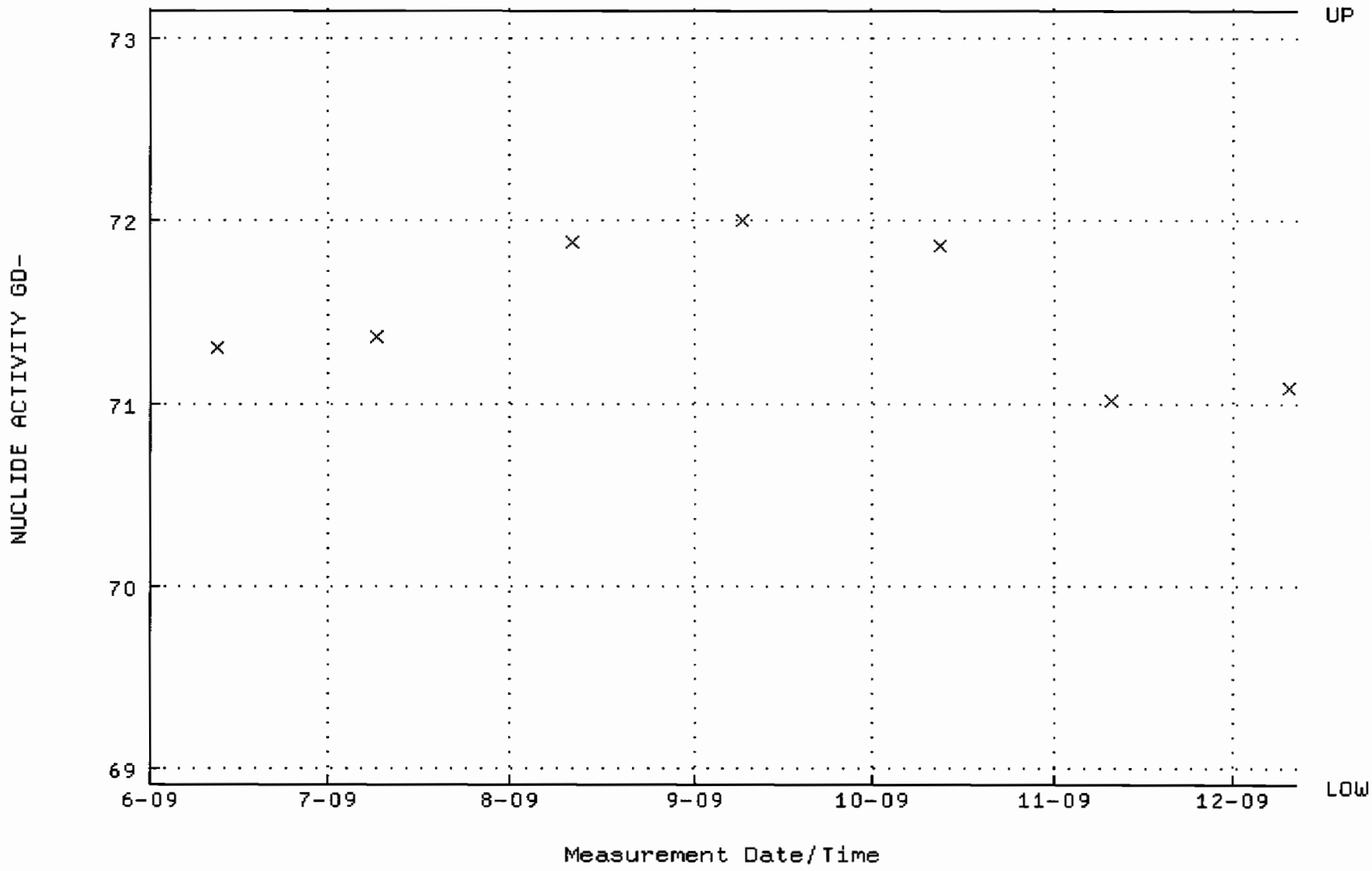

QA filename : DKA100:[ENV_ALPHA.QA.B]B099.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:42 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

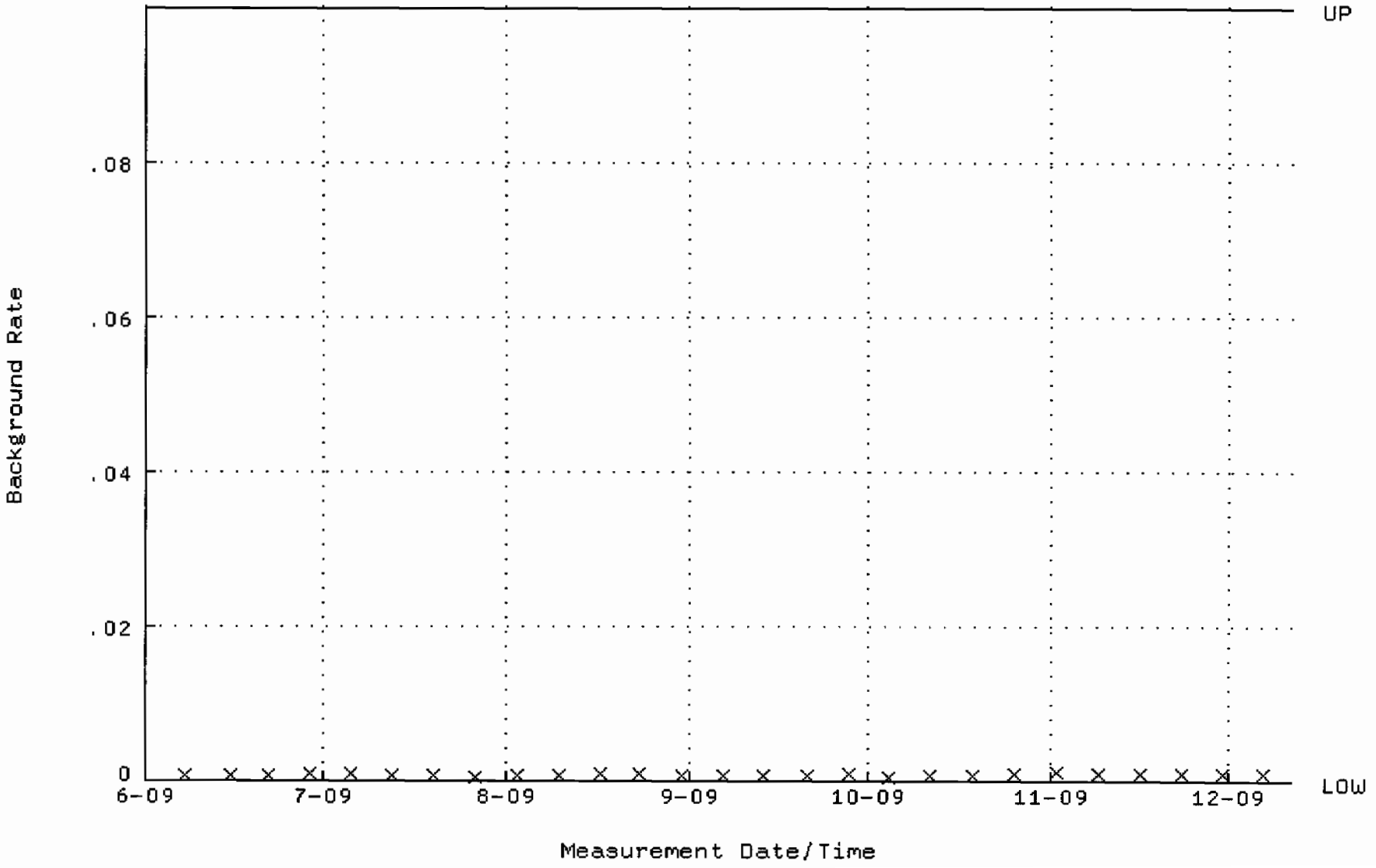

QA filename : DKA100:[ENV_ALPHA.QA.W]W108.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.330641 through 0.360561

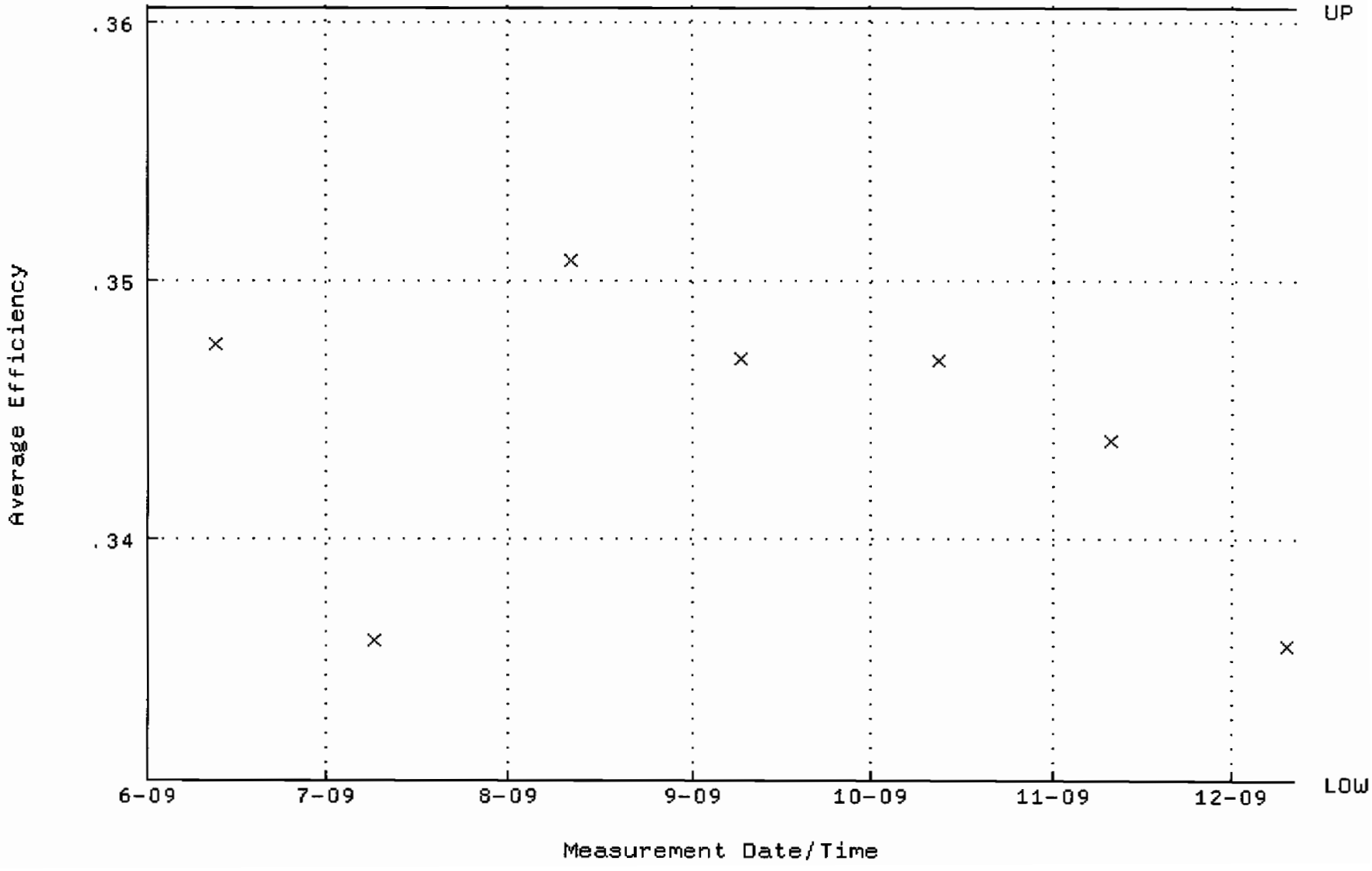

QA filename : DKA100:[ENV_ALPHA.QA.W]W108.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 68.0460 through 72.0402

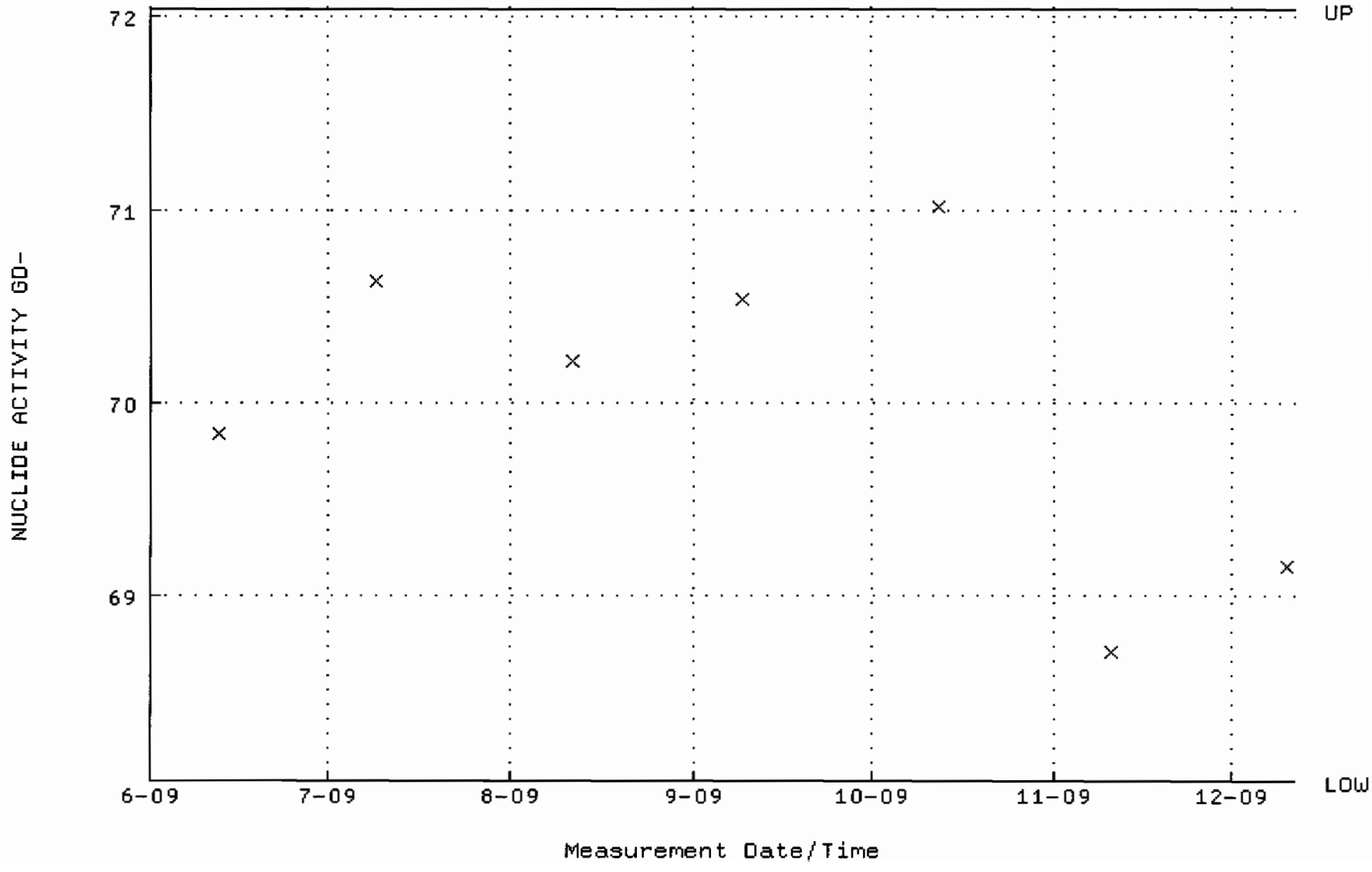

QA filename : DKA100:[ENV_ALPHA.QA.B]B108.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:47 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

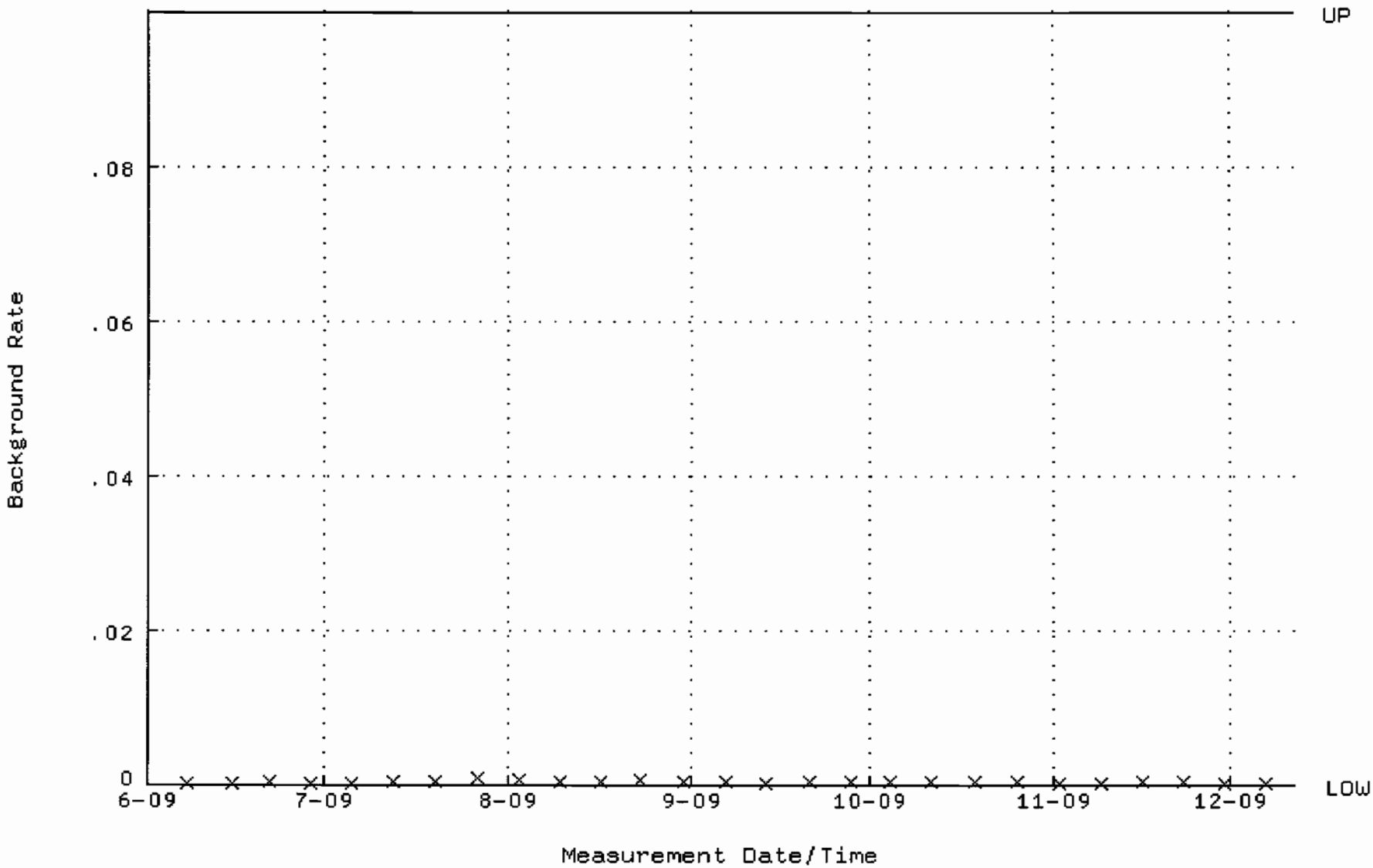

QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 30-JUN-2009 15:19:17 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.344397 through 0.364397

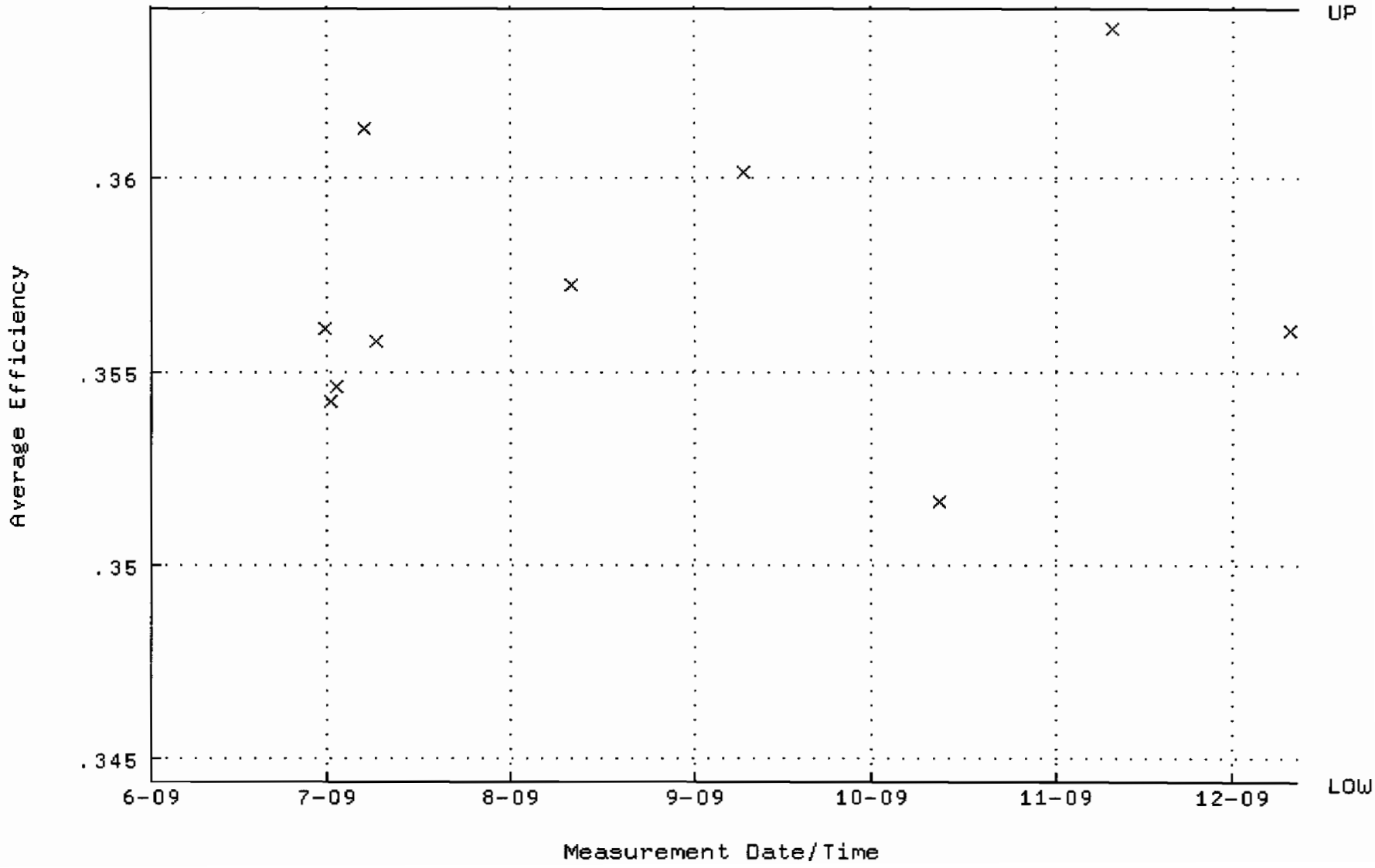

QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 30-JUN-2009 15:19:17 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 63.4194 through 70.0952

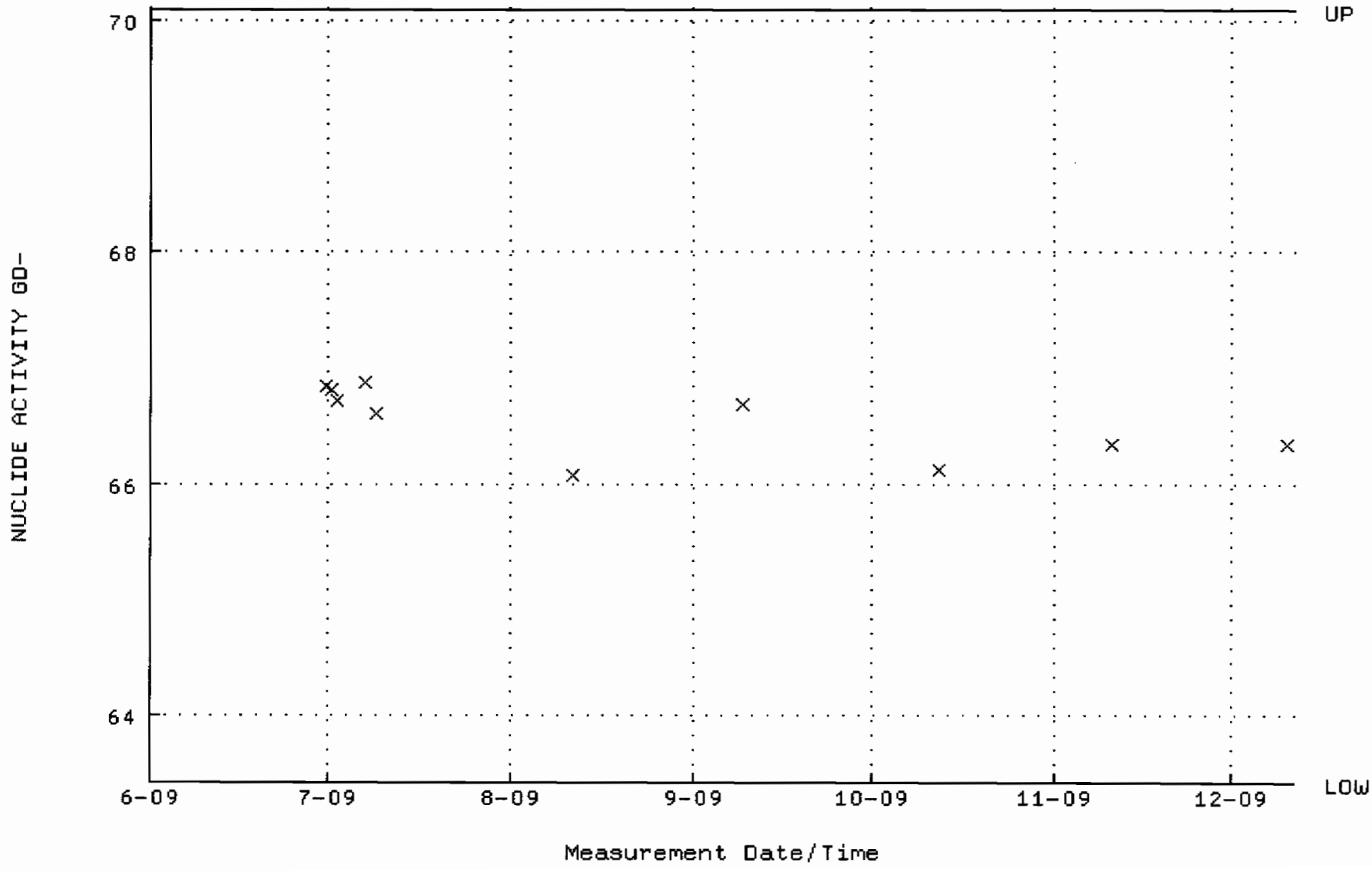

QA filename : DKA100:[ENV_ALPHA.QA.B]B109.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:47 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

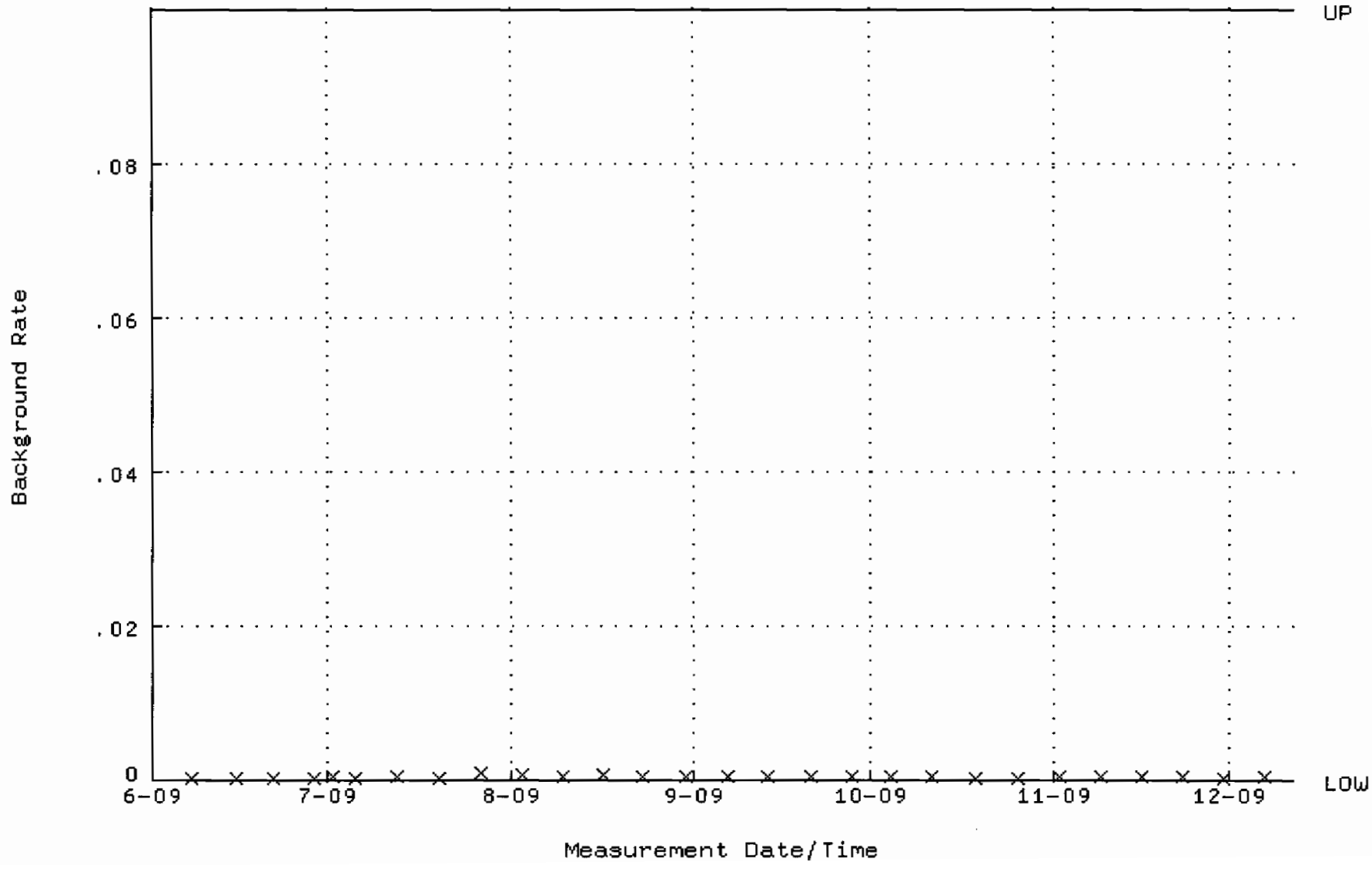

QA filename : DKA100:[ENV_ALPHA.QA.W]W111.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.321662 through 0.358794

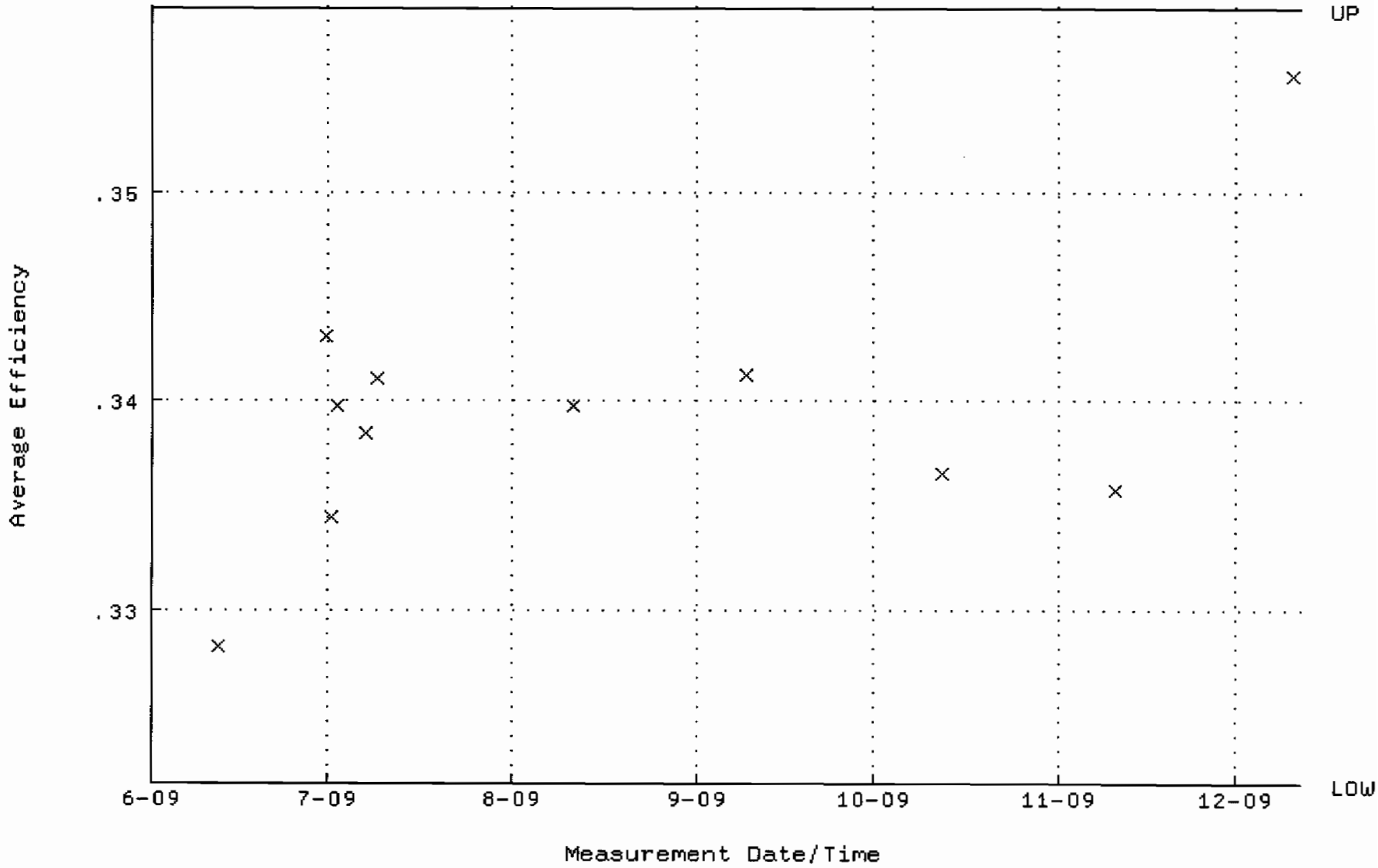

QA filename : DKA100:[ENV_ALPHA.QA.W]W111.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 69.0200 through 71.9448

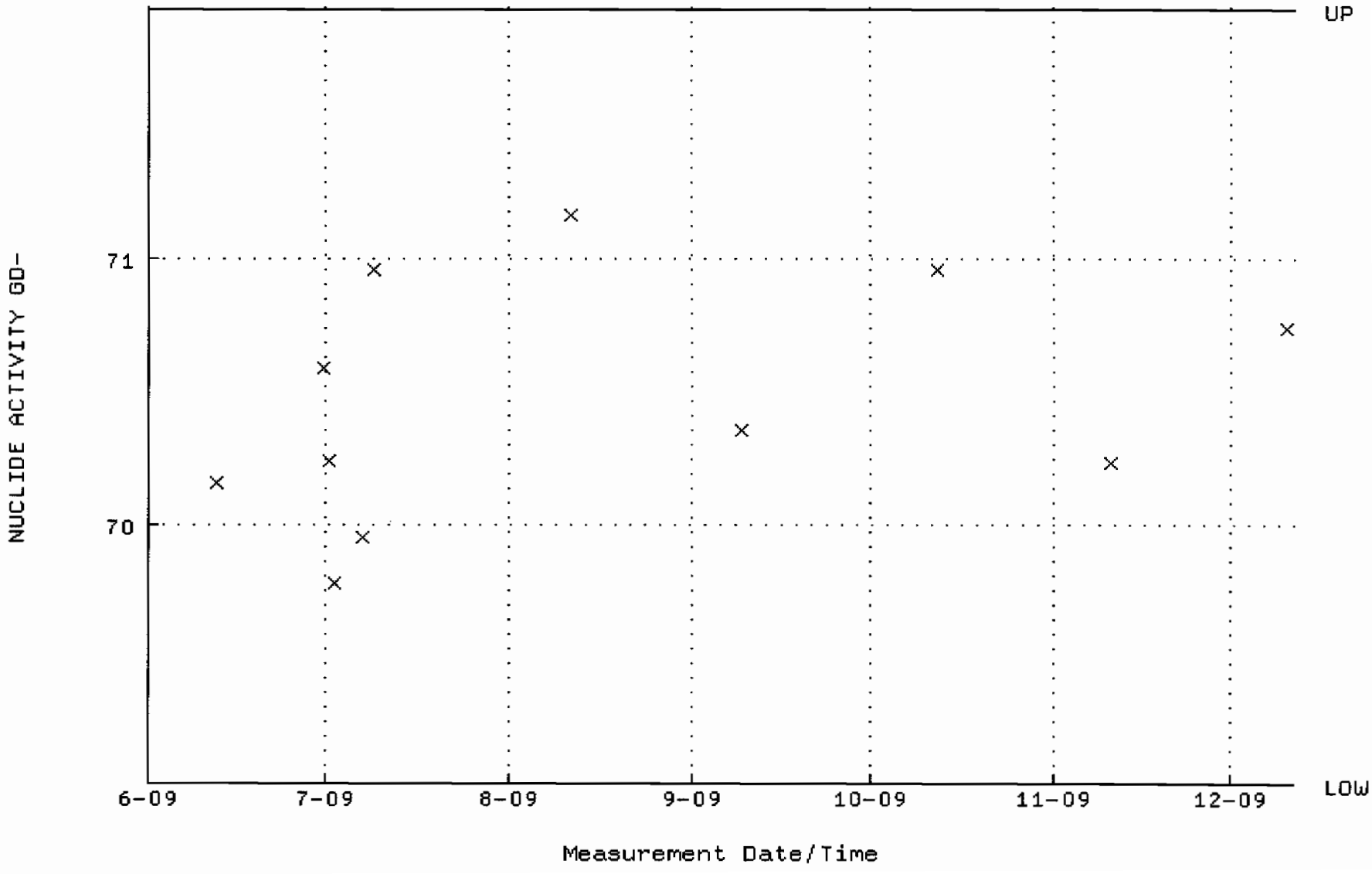

QA filename : DKA100:[ENV_ALPHA.QA.B]B111.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:47 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

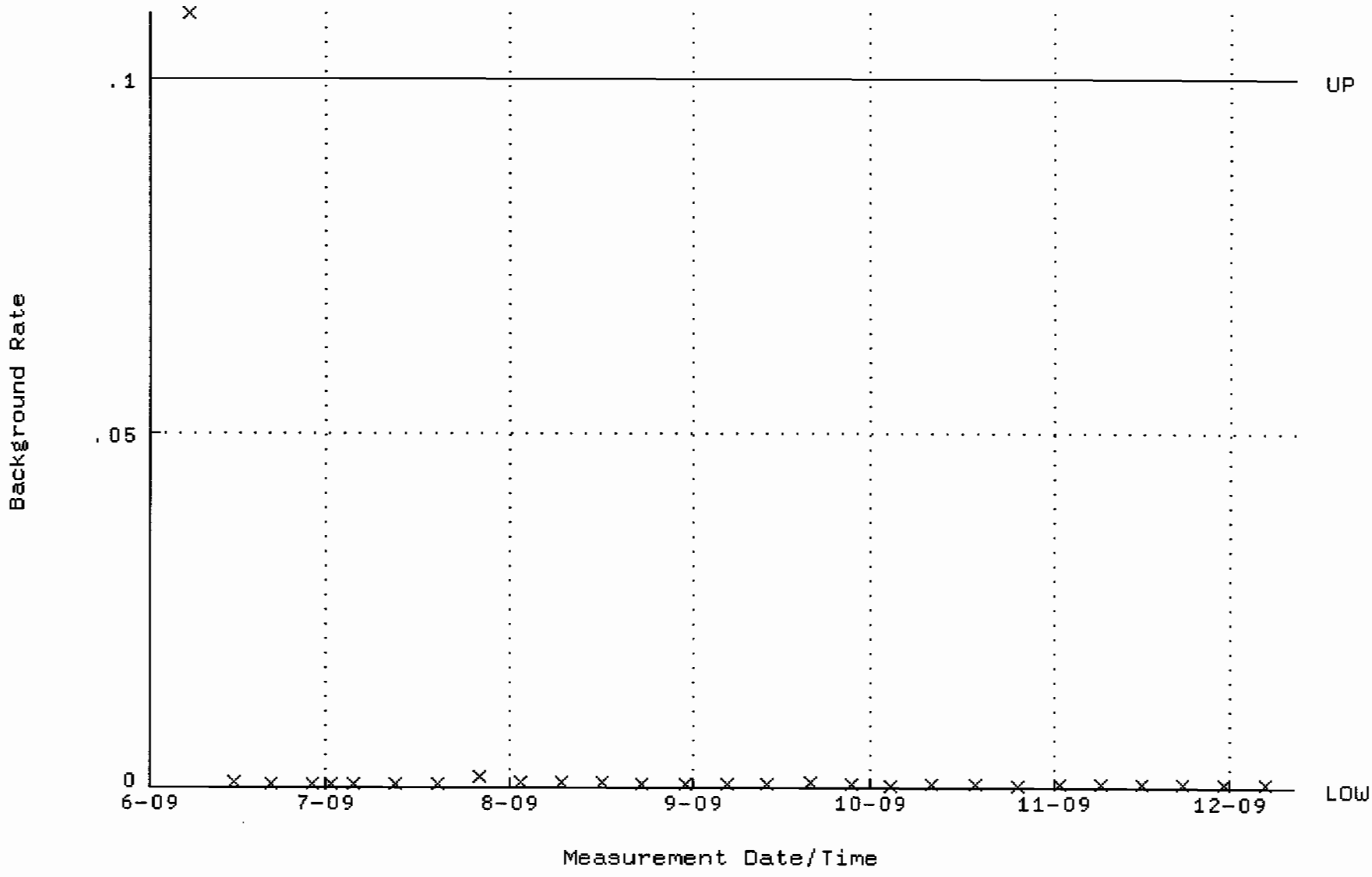

QA filename : DKA100:[ENV_ALPHA.QA.W]W152.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:47:48 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.238479 through 0.258479

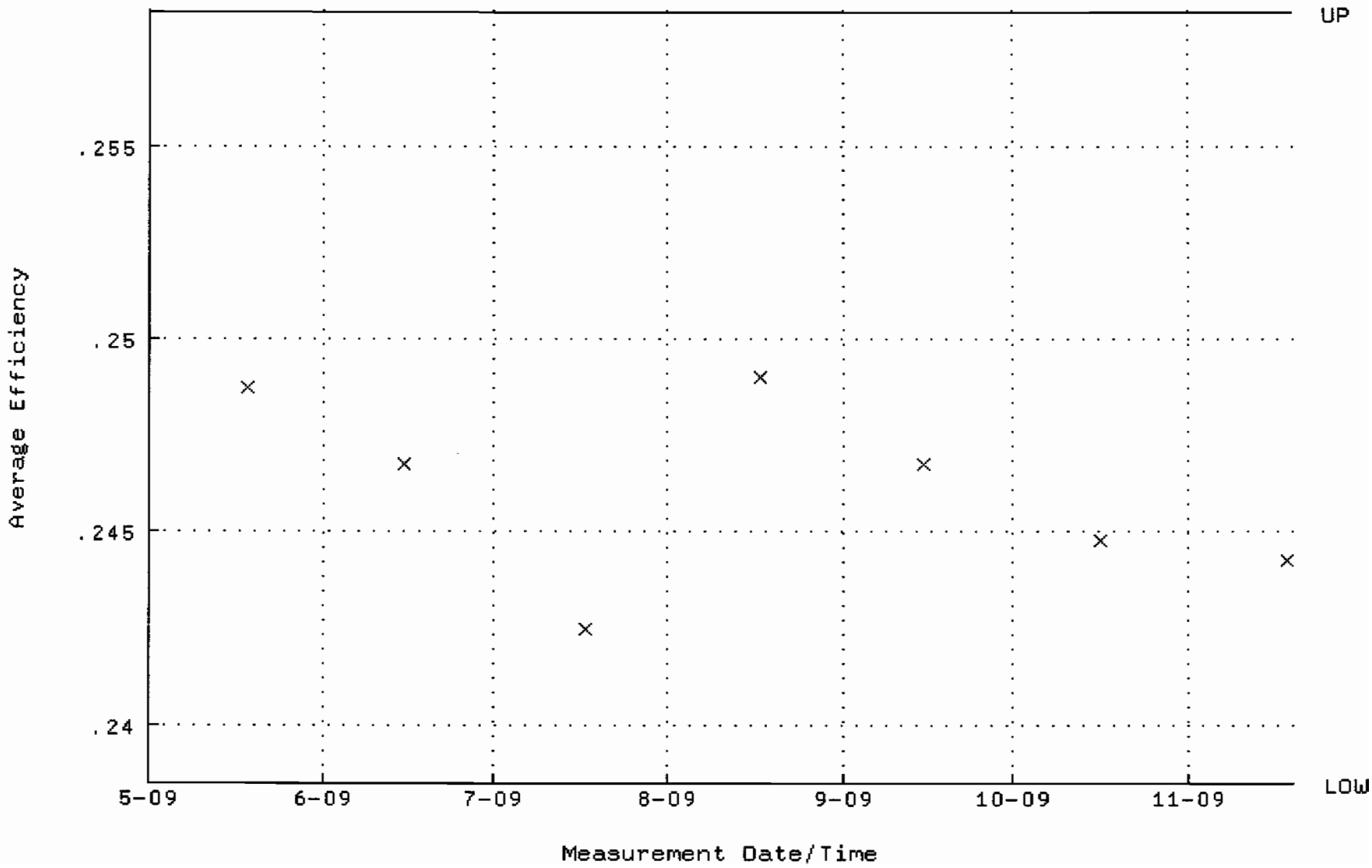

QA filename : DKA100:[ENV_ALPHA.QA.W]W152.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:47:48 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 83.7180 through 92.5304

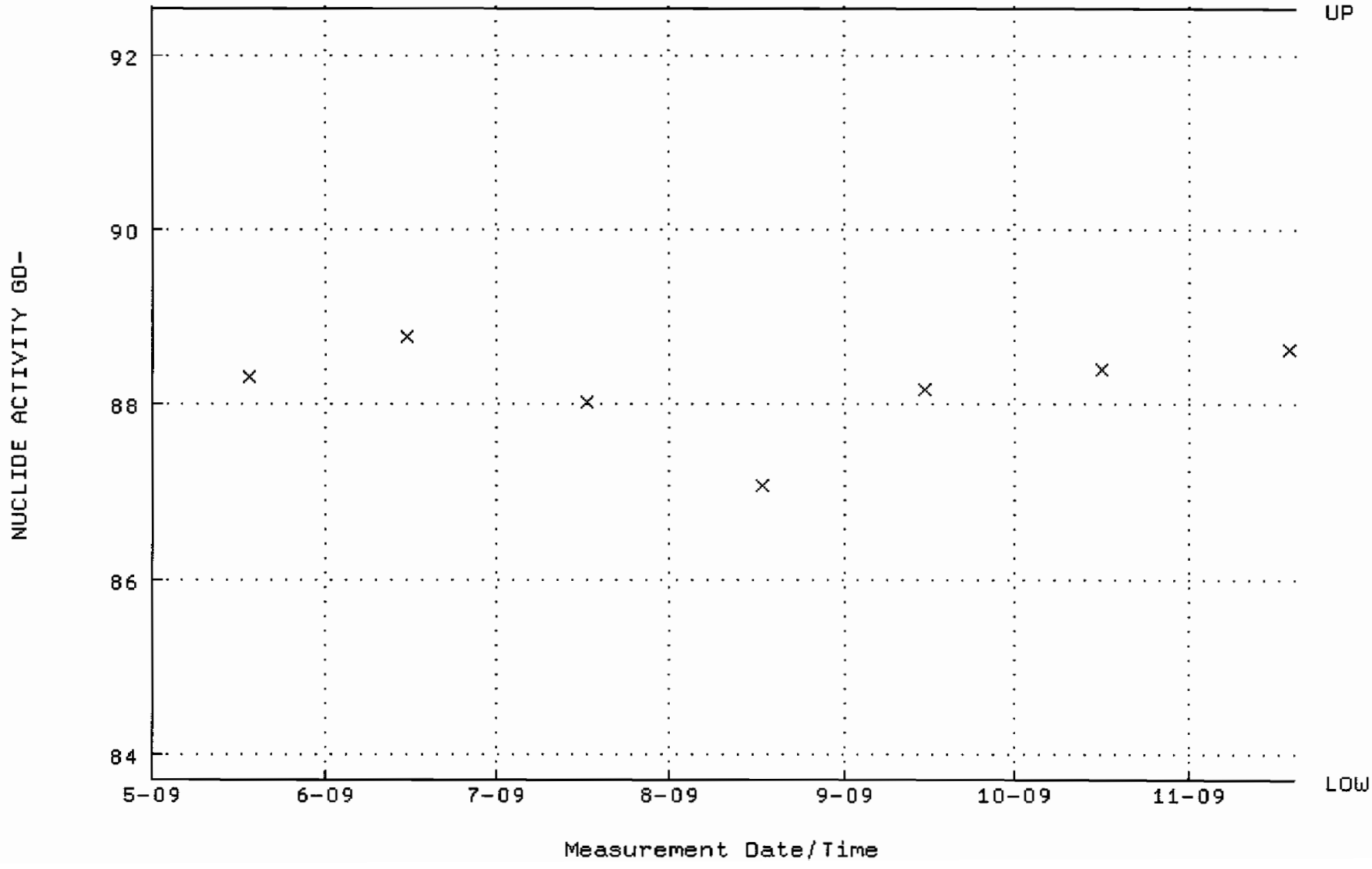

QA filename : DKA100:[ENV_ALPHA.QA.B]B152.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:52:43 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

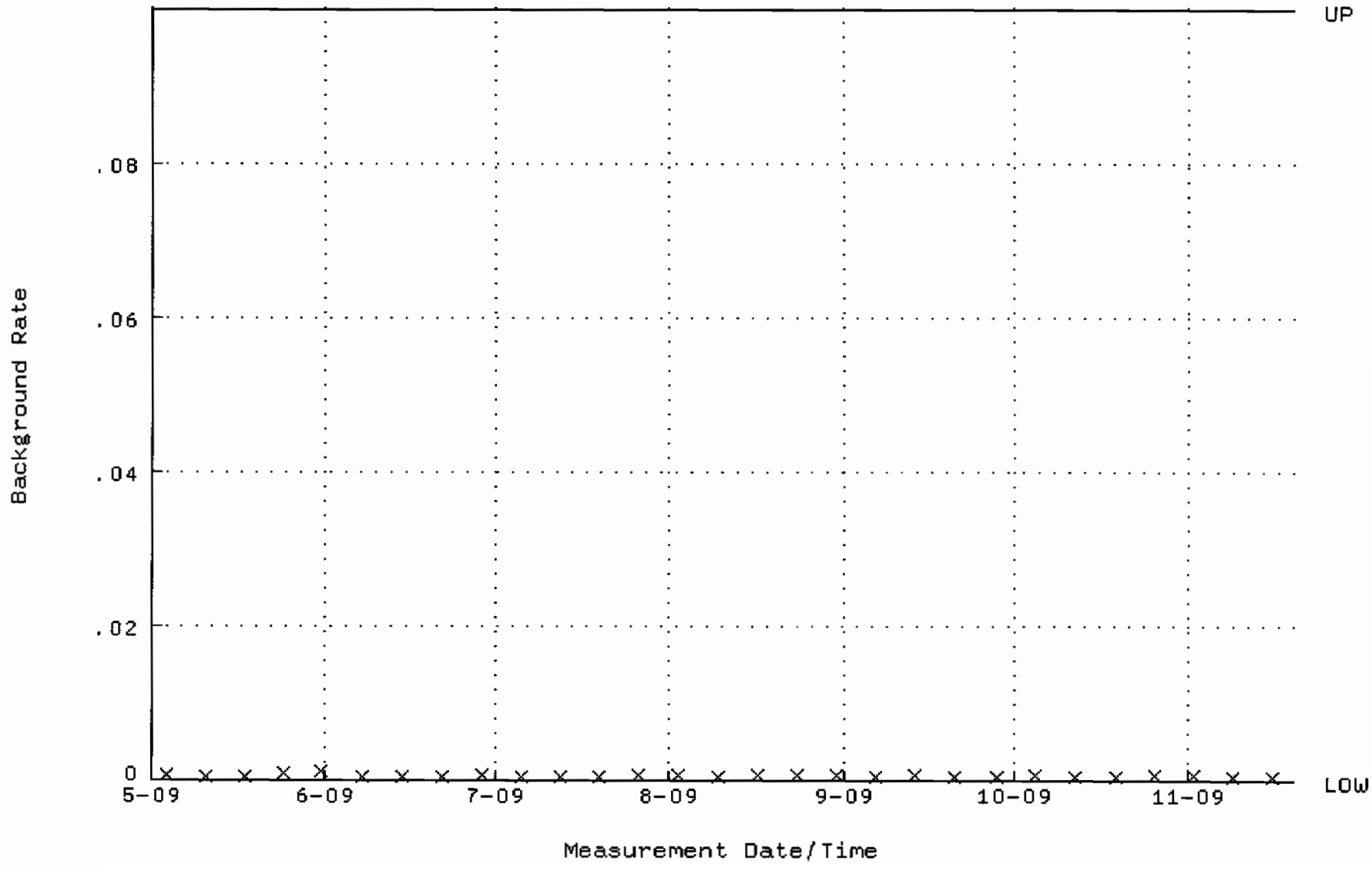

QA filename : DKA100:[ENV_ALPHA.QA.W]W159.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:48:20 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.242851 through 0.262851

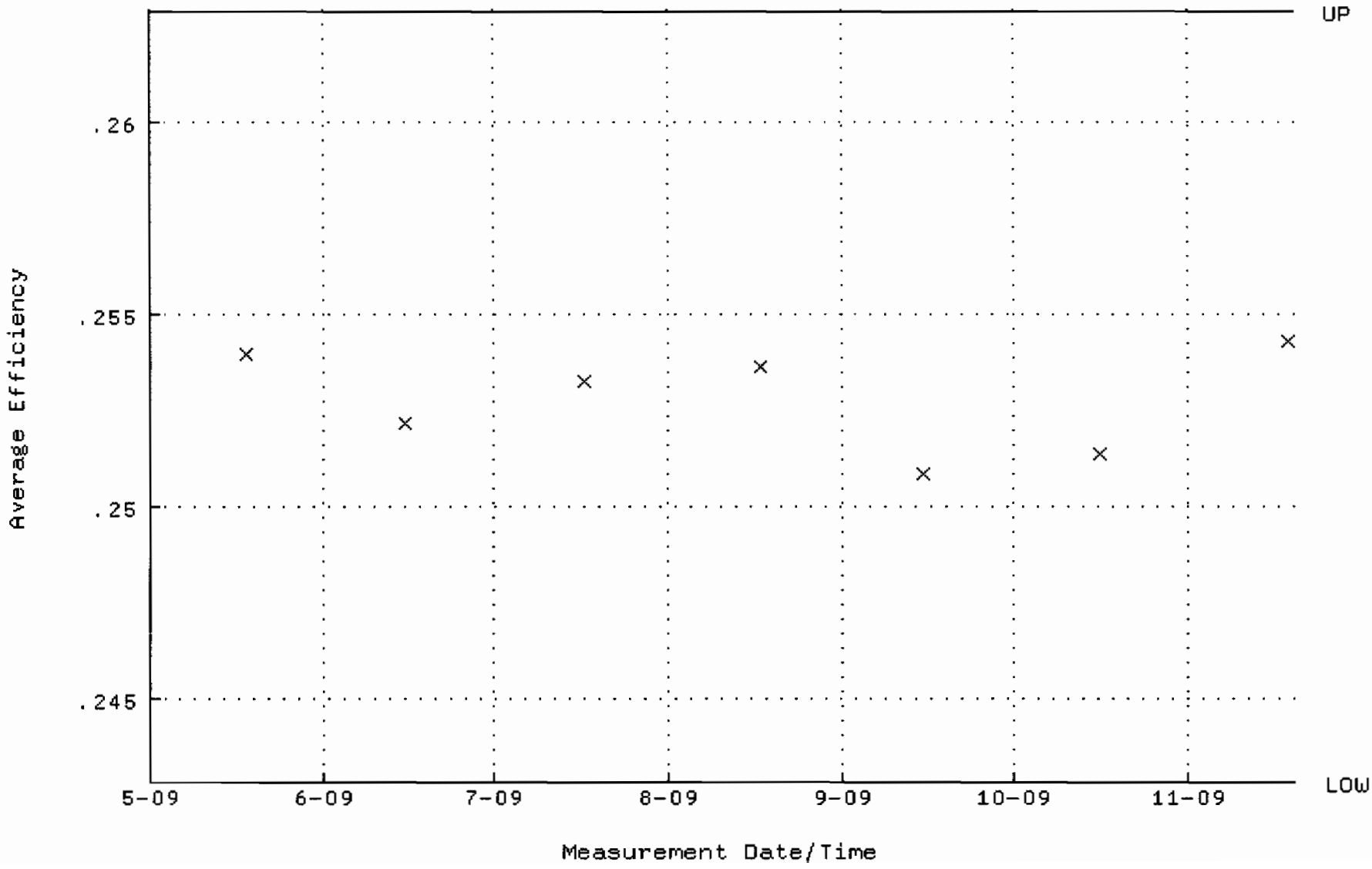

QA filename : DKA100:[ENV_ALPHA.QA.W]W159.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:48:20 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 80.7870 through 89.2909

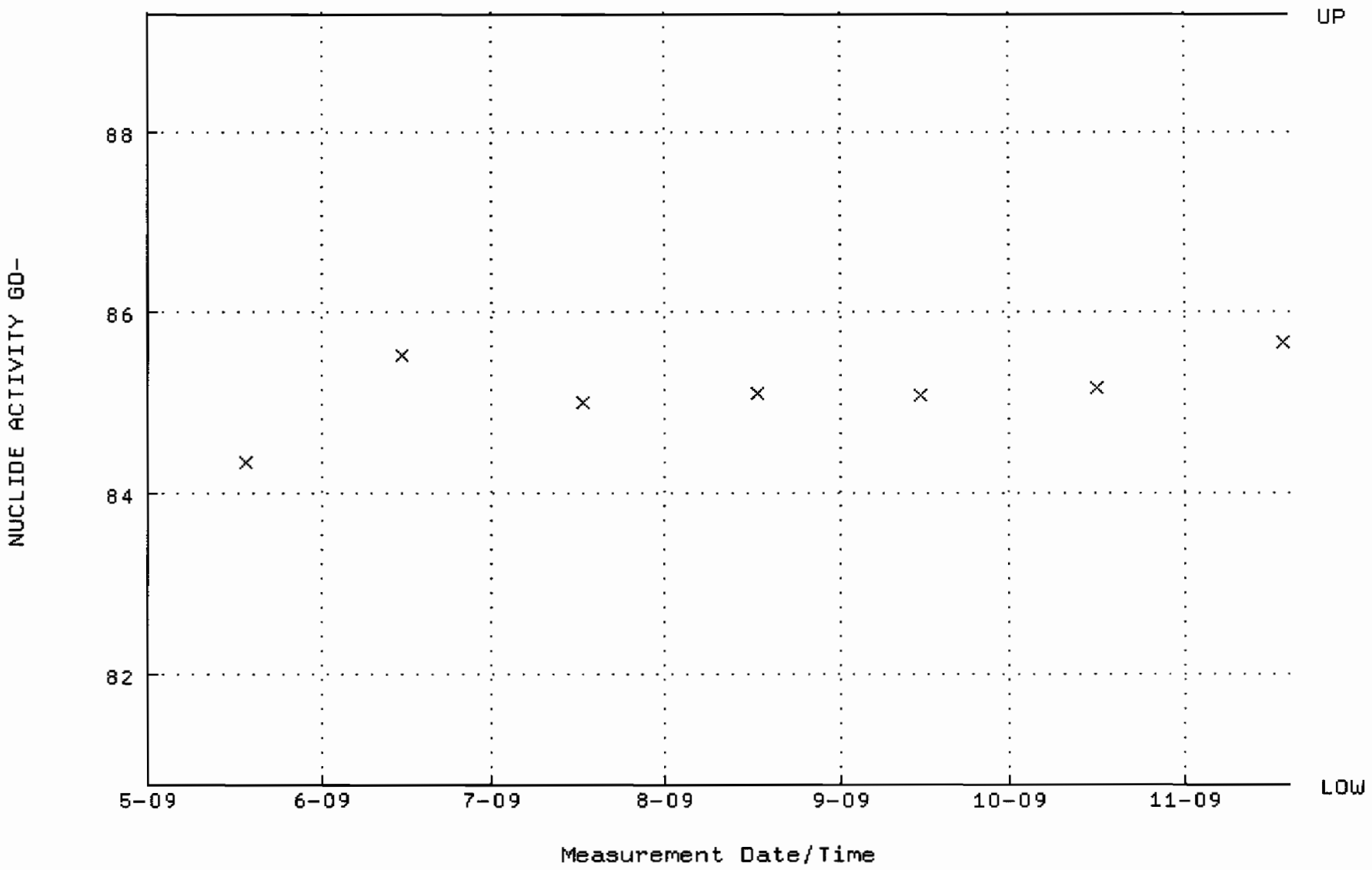

QA filename : DKA100:[ENV_ALPHA.QA.B]B159.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:10 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

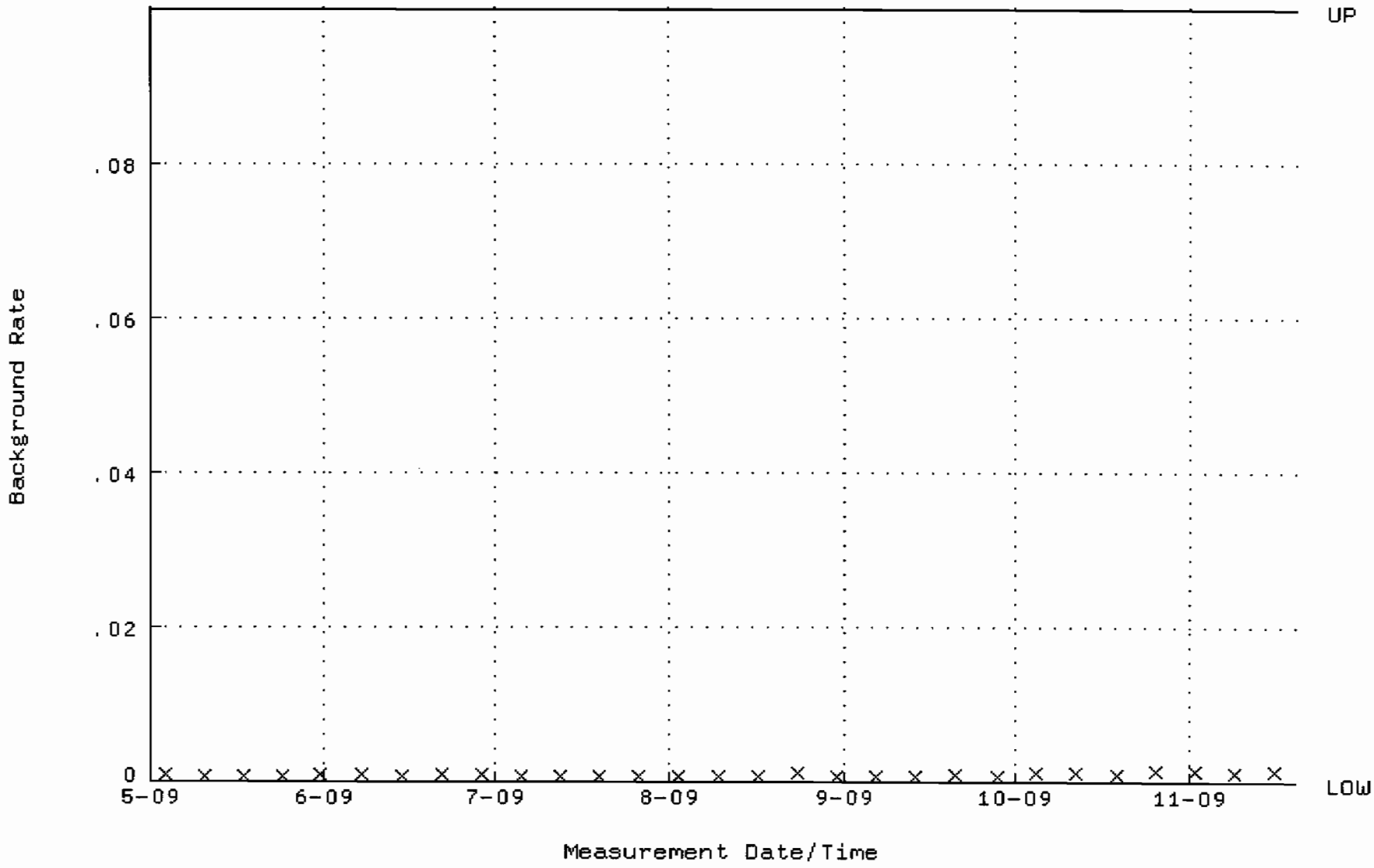

QA filename : DKA100:[ENV_ALPHA.QA.W]W170.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:08 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.360563 through 0.380563

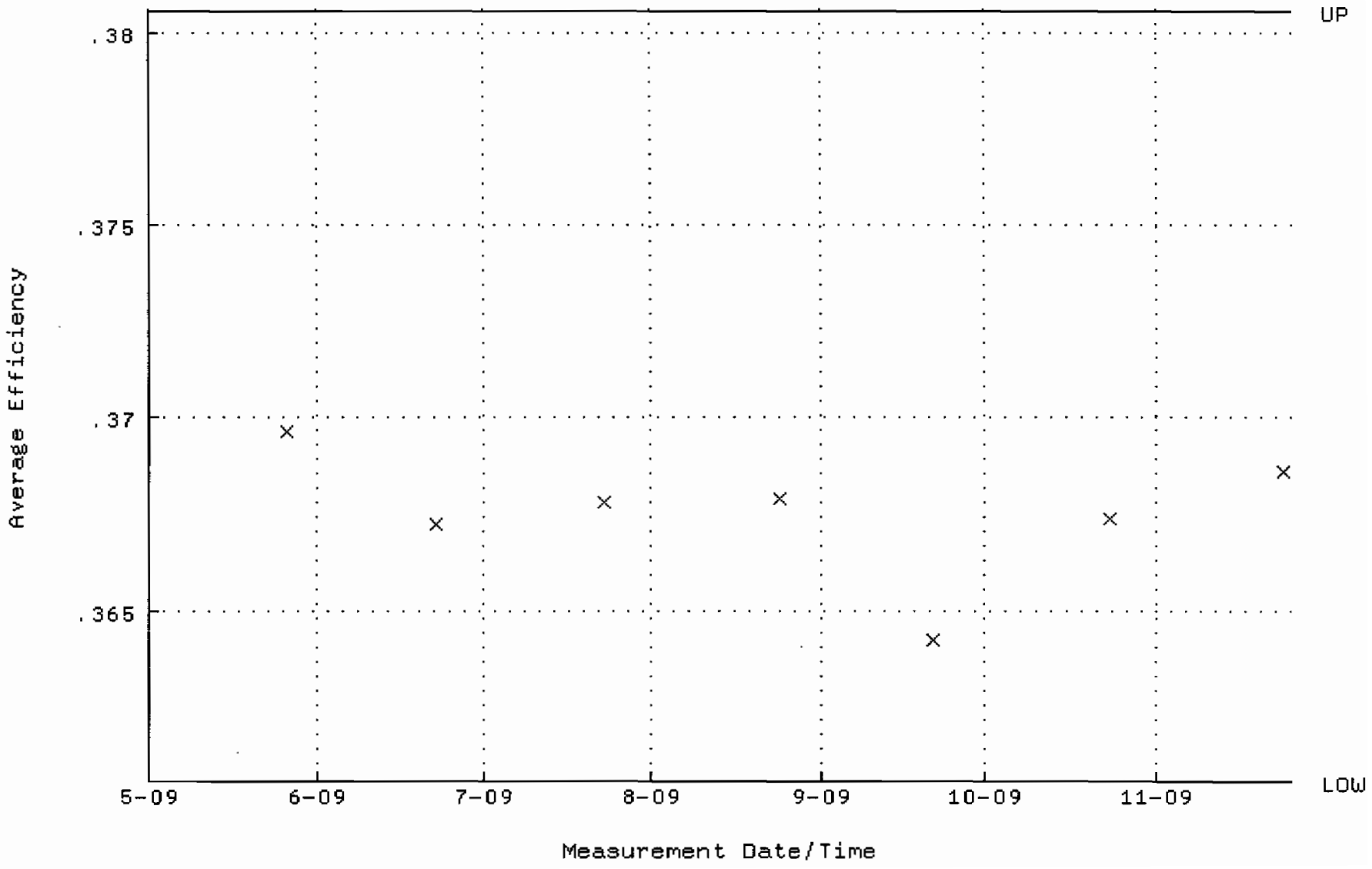

QA filename : DKA100:[ENV_ALPHA.QA.W]W170.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:08 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 89.5841 through 99.0139

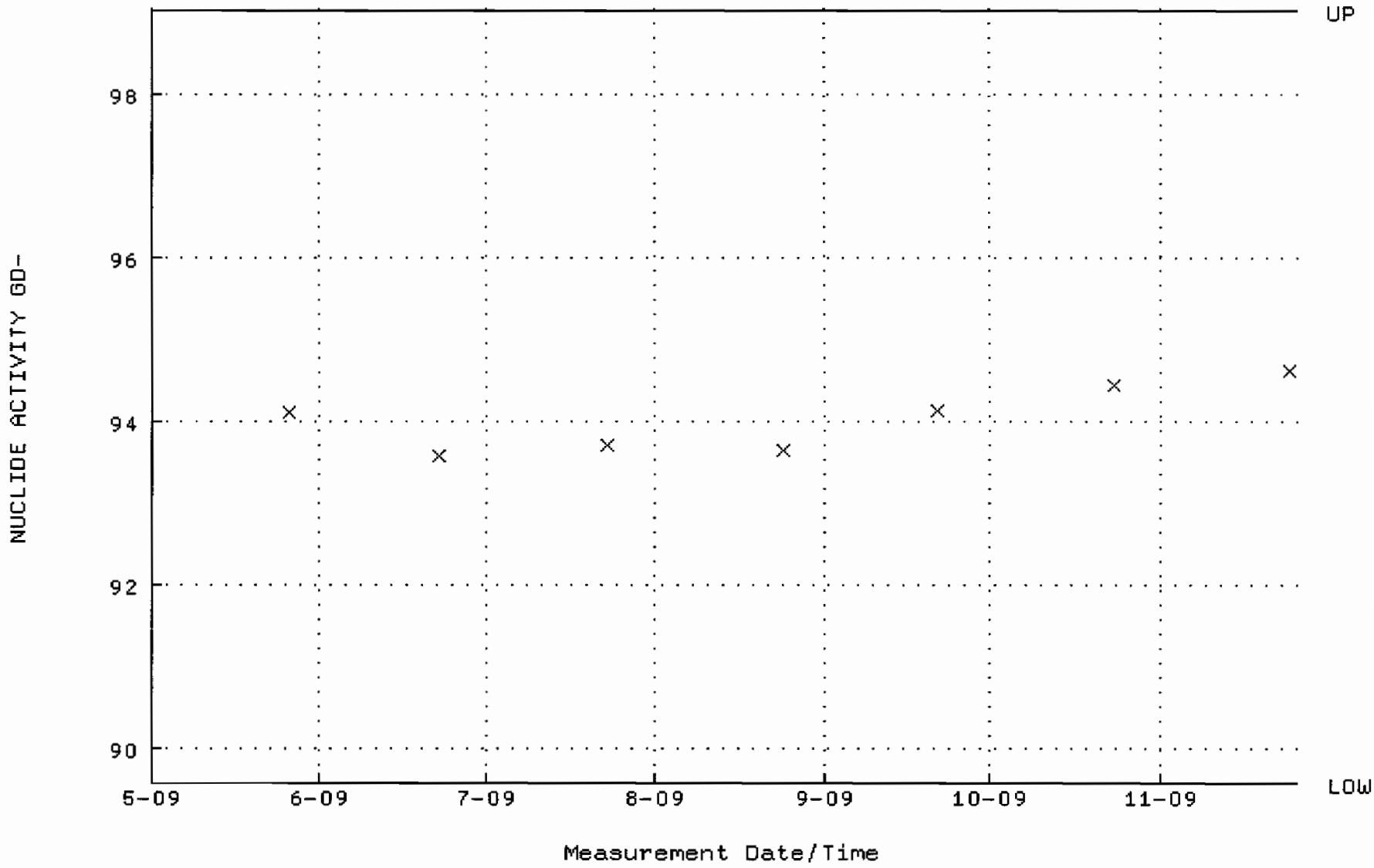

QA filename : DKA100:[ENV_ALPHA.QA.B]B170.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:50 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

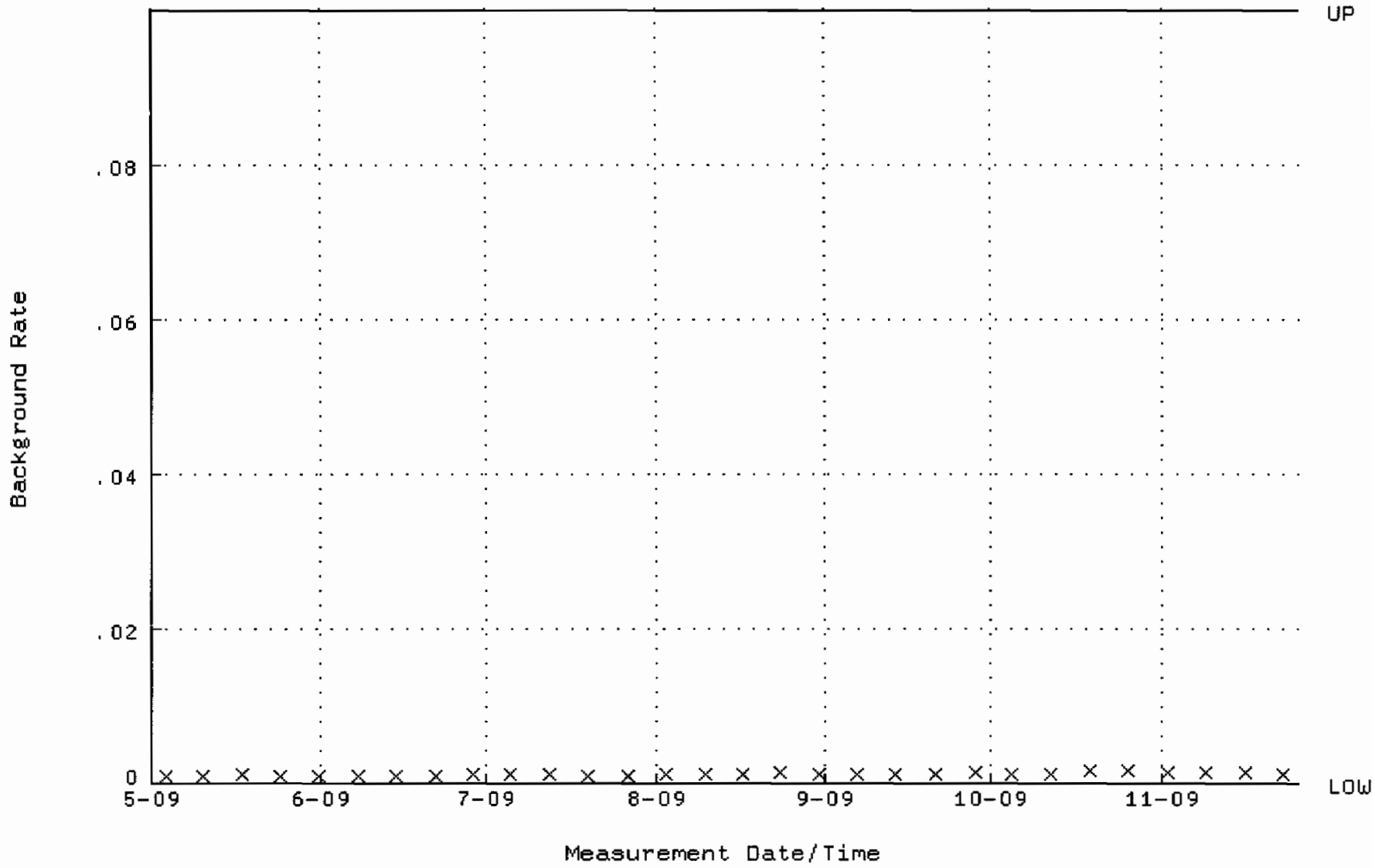

QA filename : DKA100:[ENV_ALPHA.QA.W]W171.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:13 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.375364 through 0.395364

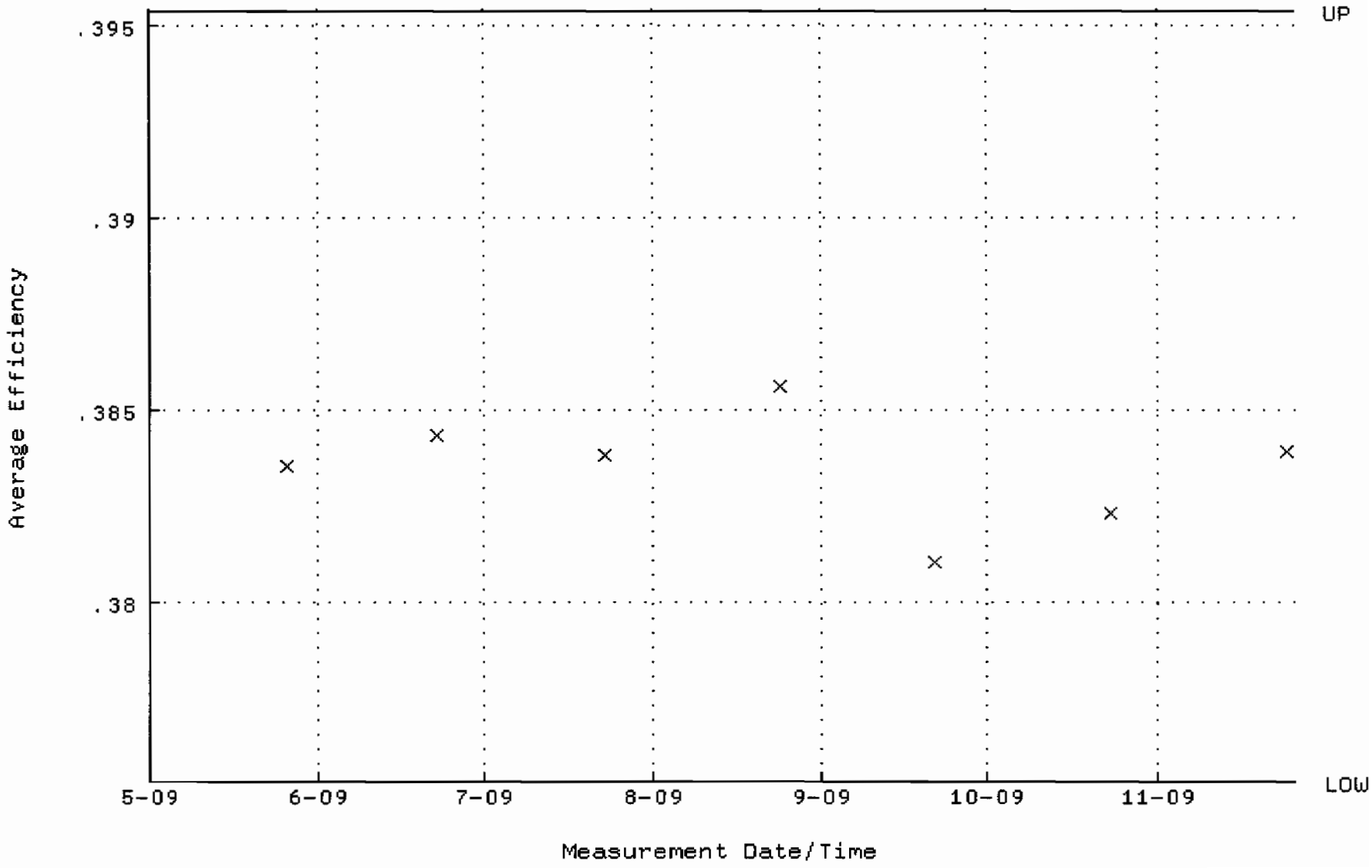

QA filename : DKA100:[ENV_ALPHA.QA.W]W171.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:13 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 84.7539 through 93.6753

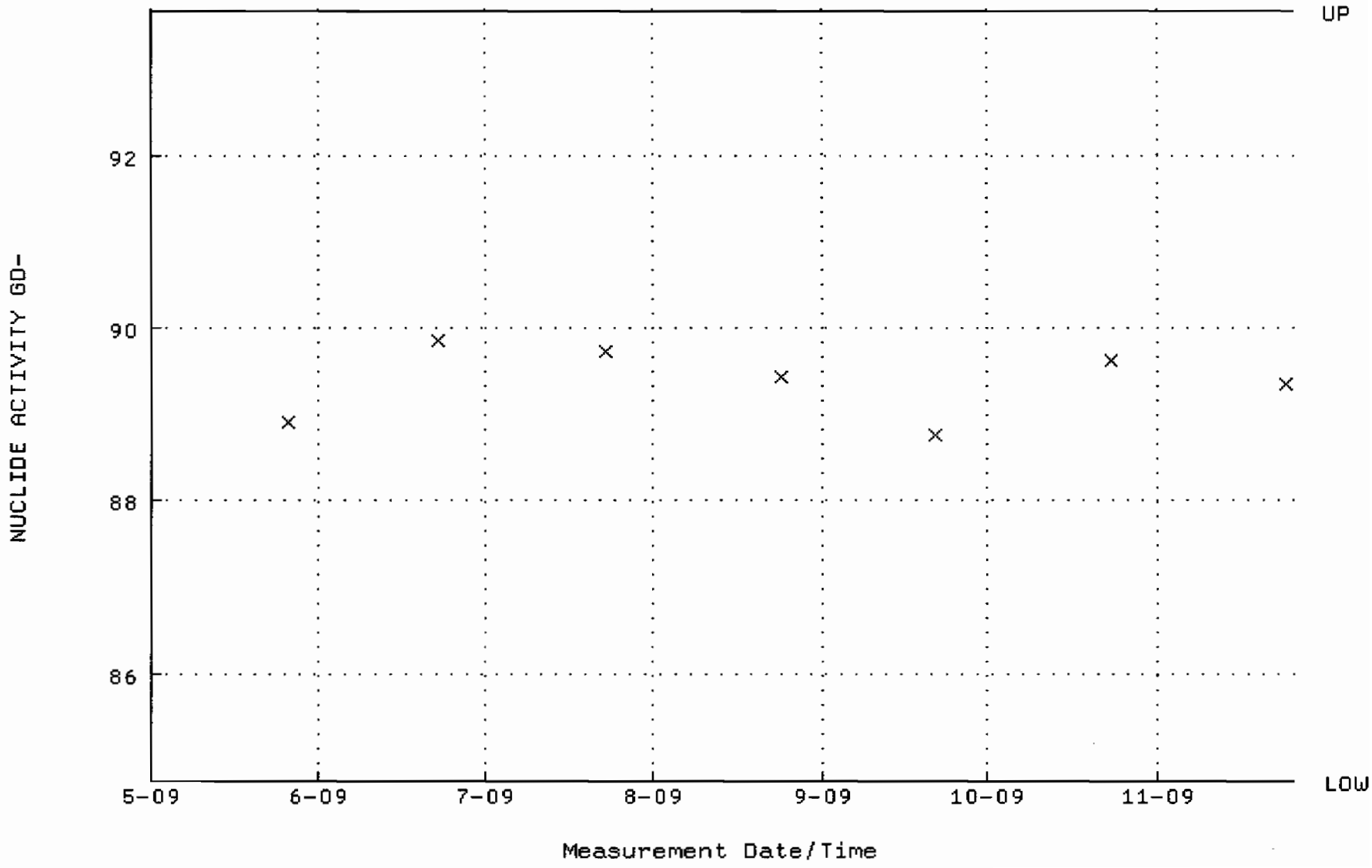

QA filename : DKA100:[ENV_ALPHA.QA.B]B171.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:54 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

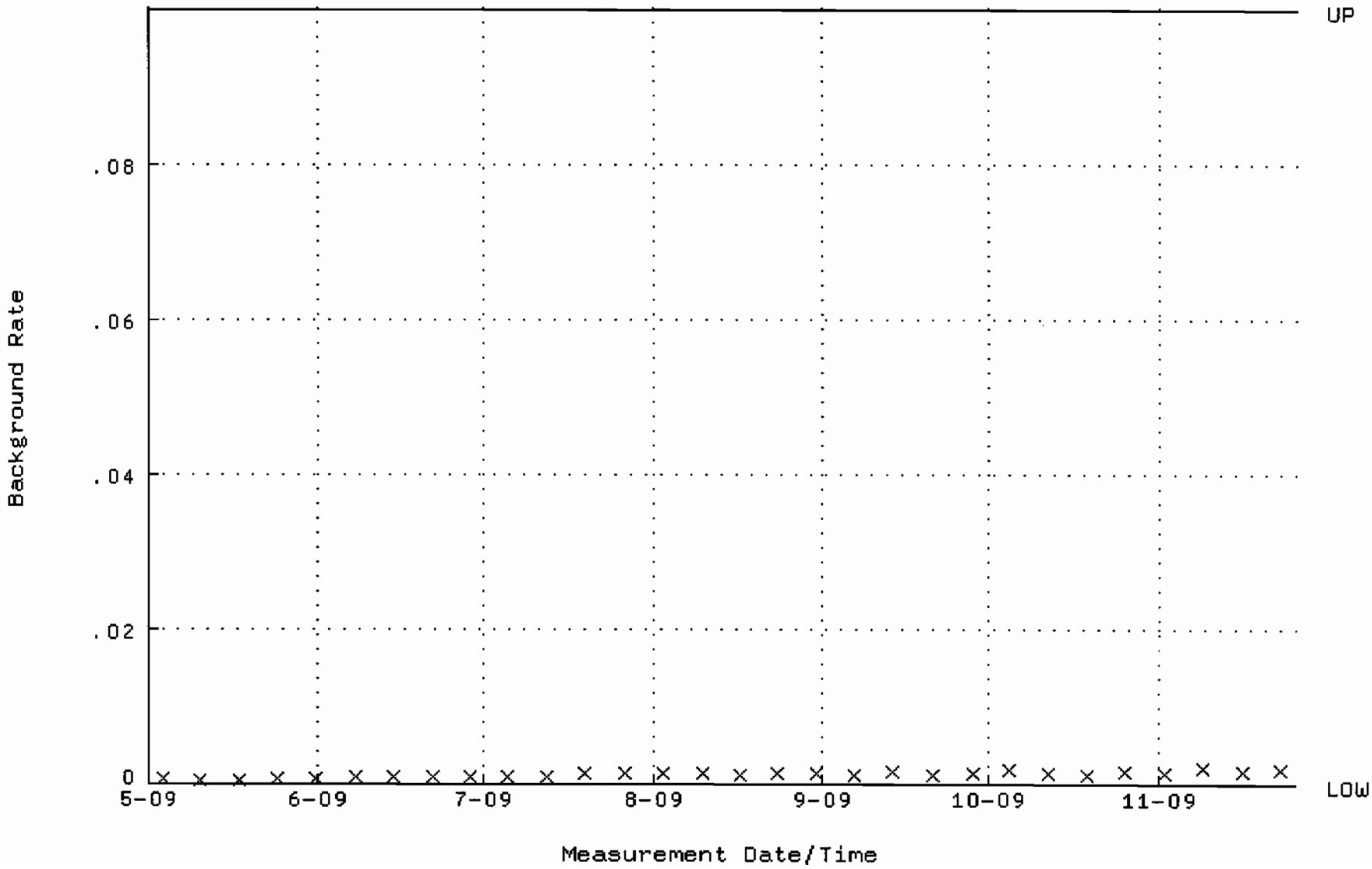

QA filename : DKA100:[ENV_ALPHA.QA.W]W172.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.373575 through 0.393575

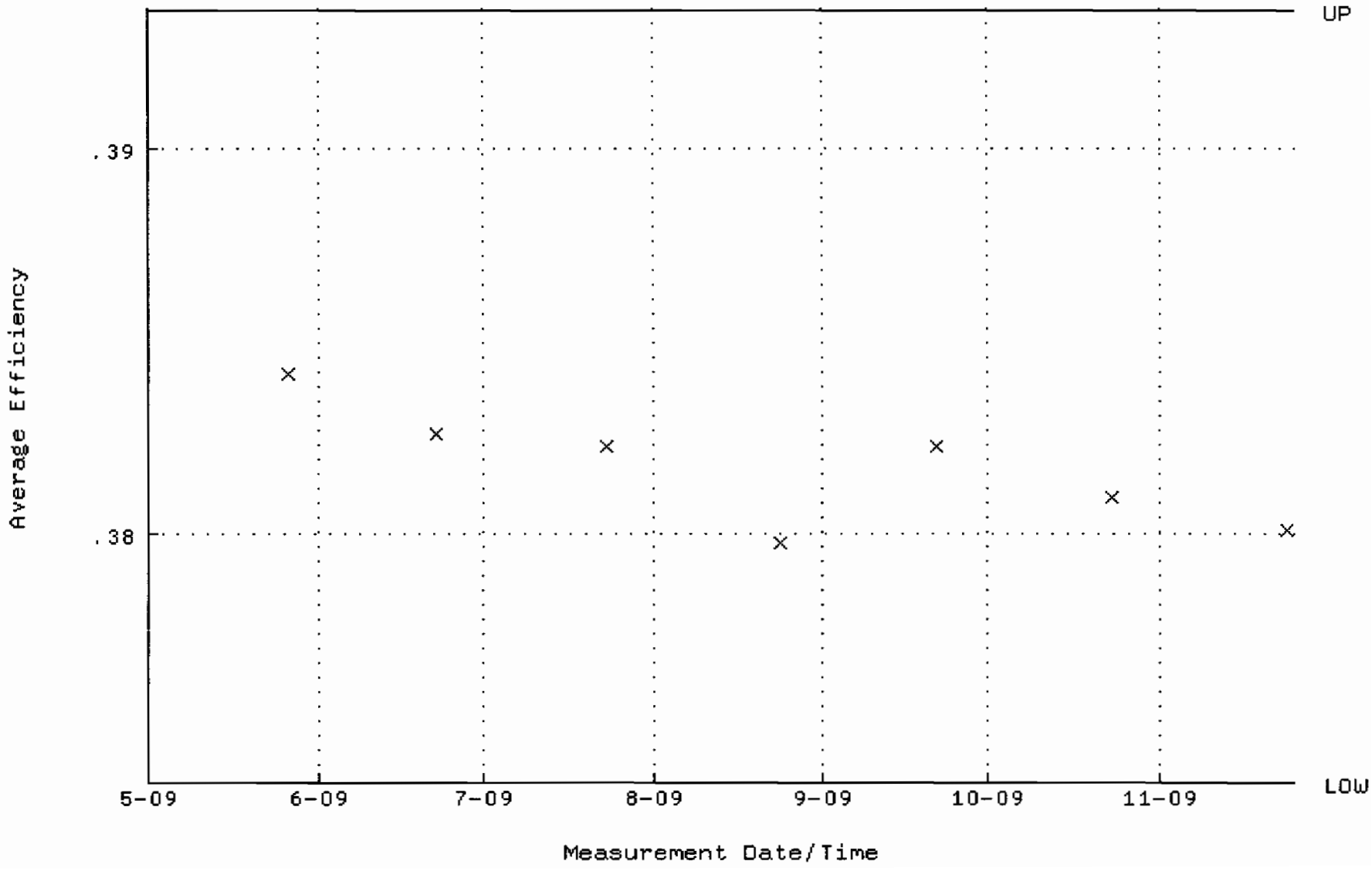

QA filename : DKA100:[ENV_ALPHA.QA.W]W172.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 86.5089 through 95.6151

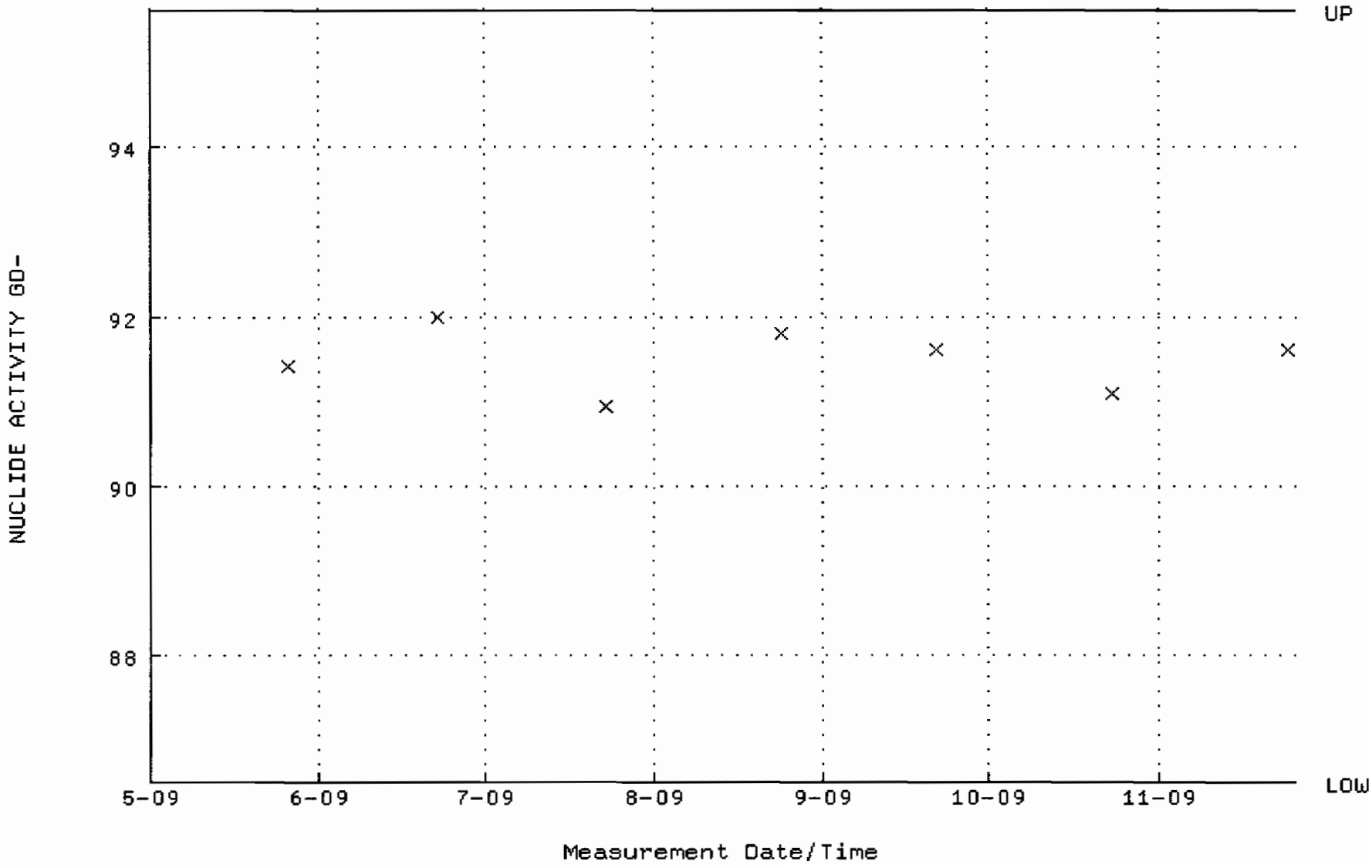

QA filename : DKA100:[ENV_ALPHA.QA.B]B172.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:57 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

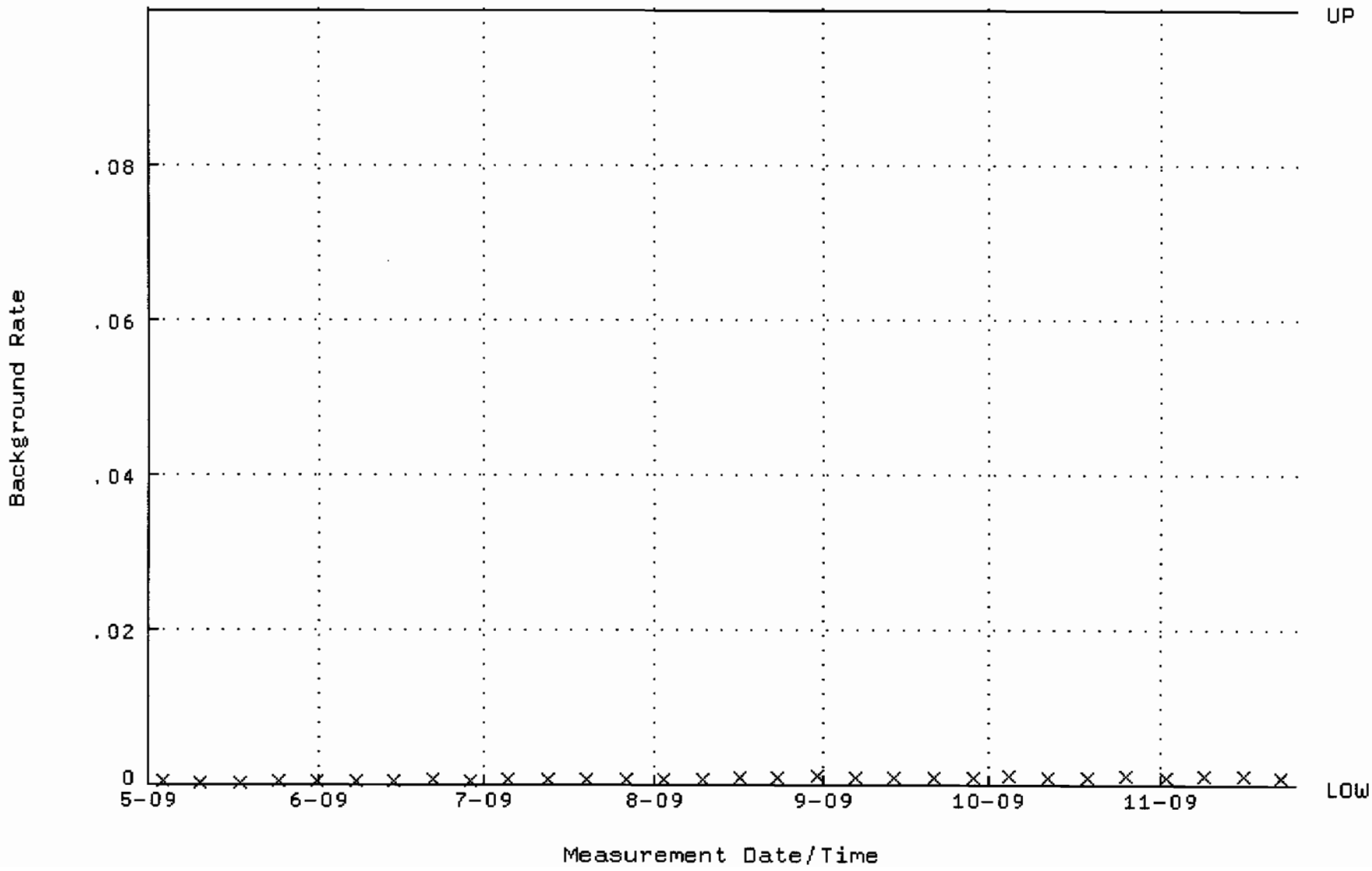

QA filename : DKA100:[ENV_ALPHA.QA.W]W223.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:49 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.359804 through 0.379804

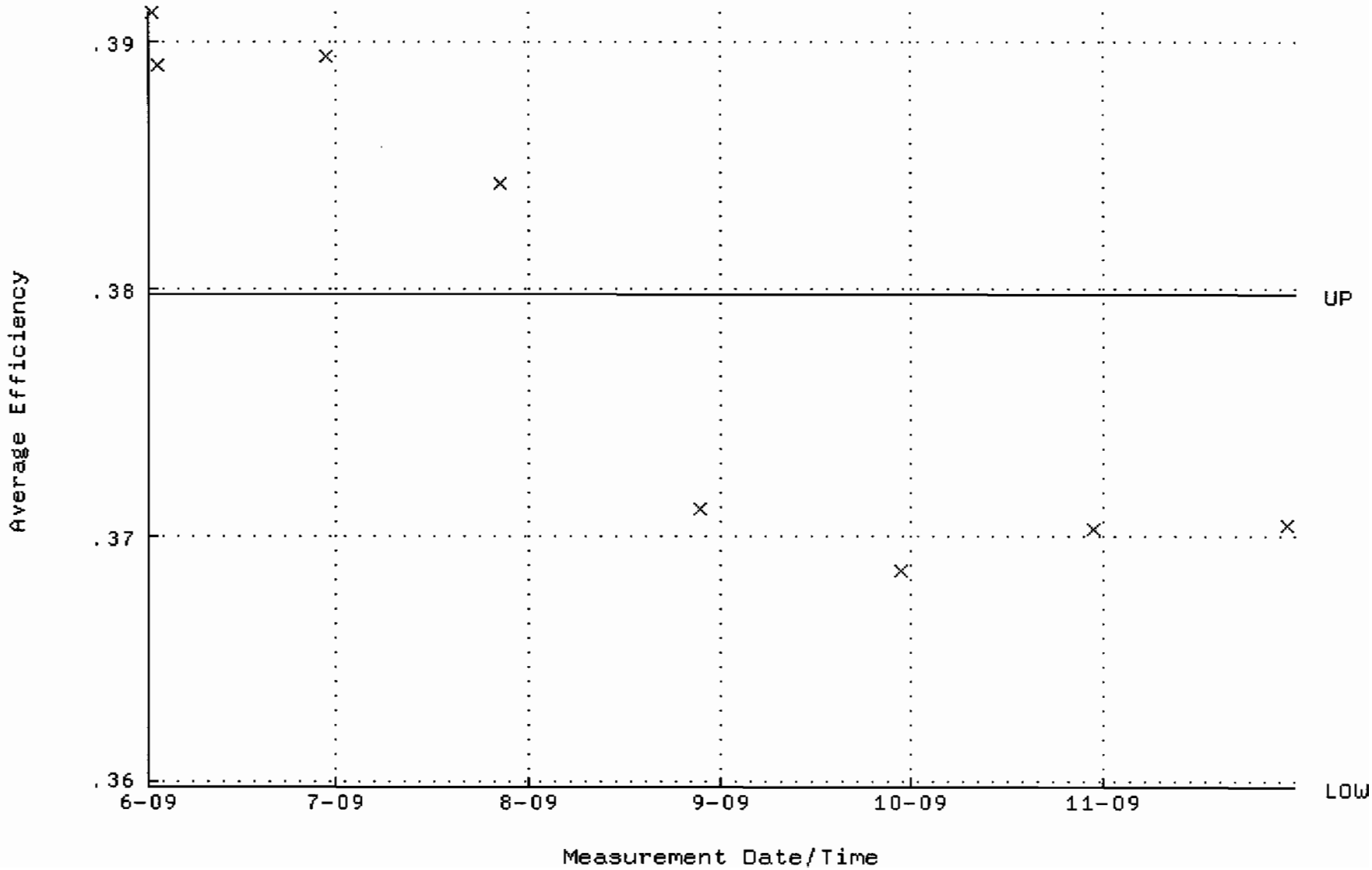

QA filename : DKA100:[ENV_ALPHA.QA.W]W223.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:49 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 89.5441 through 98.9697

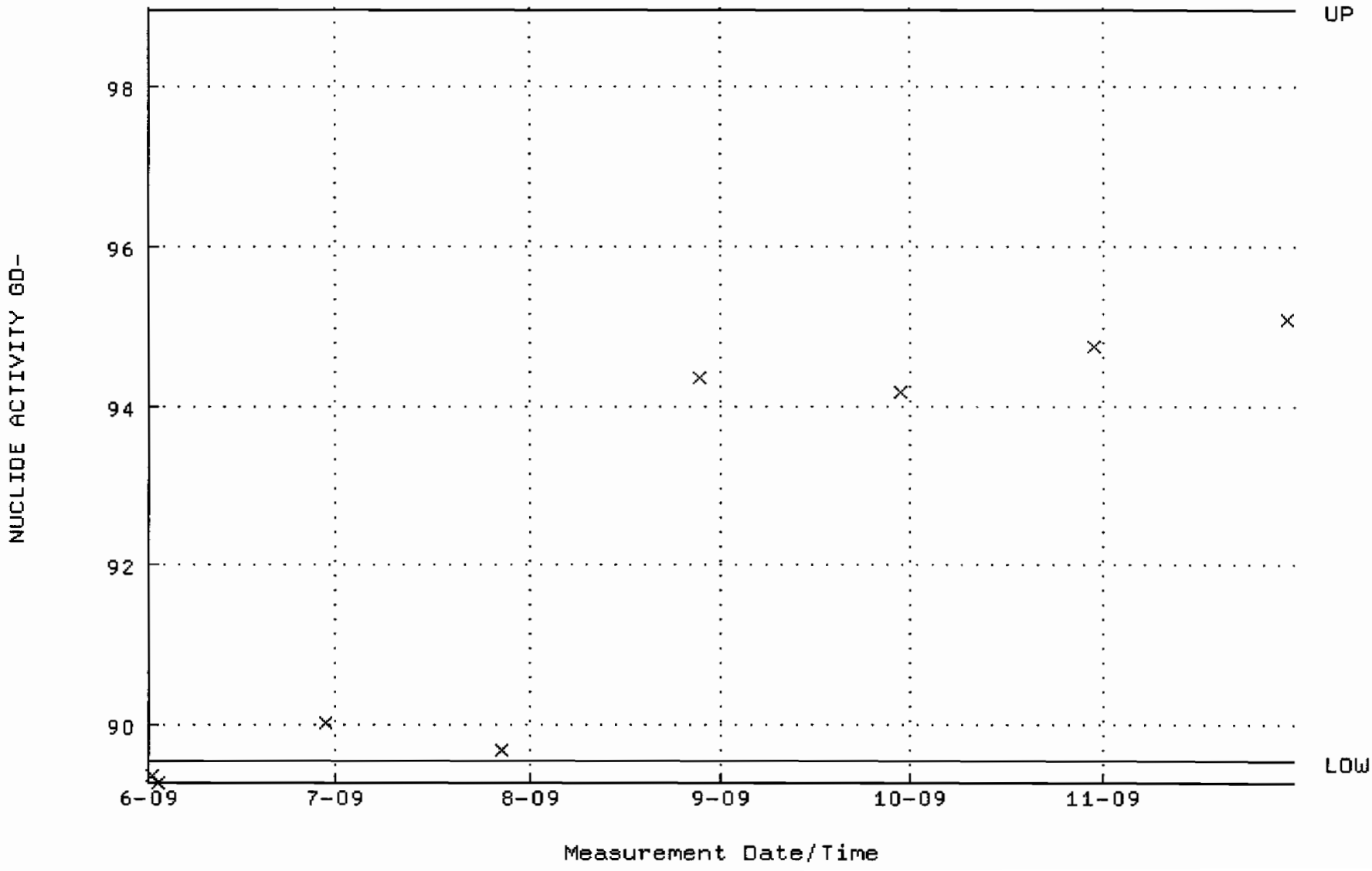

QA filename : DKA100:[ENV_ALPHA.QA.B]B223.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:34 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

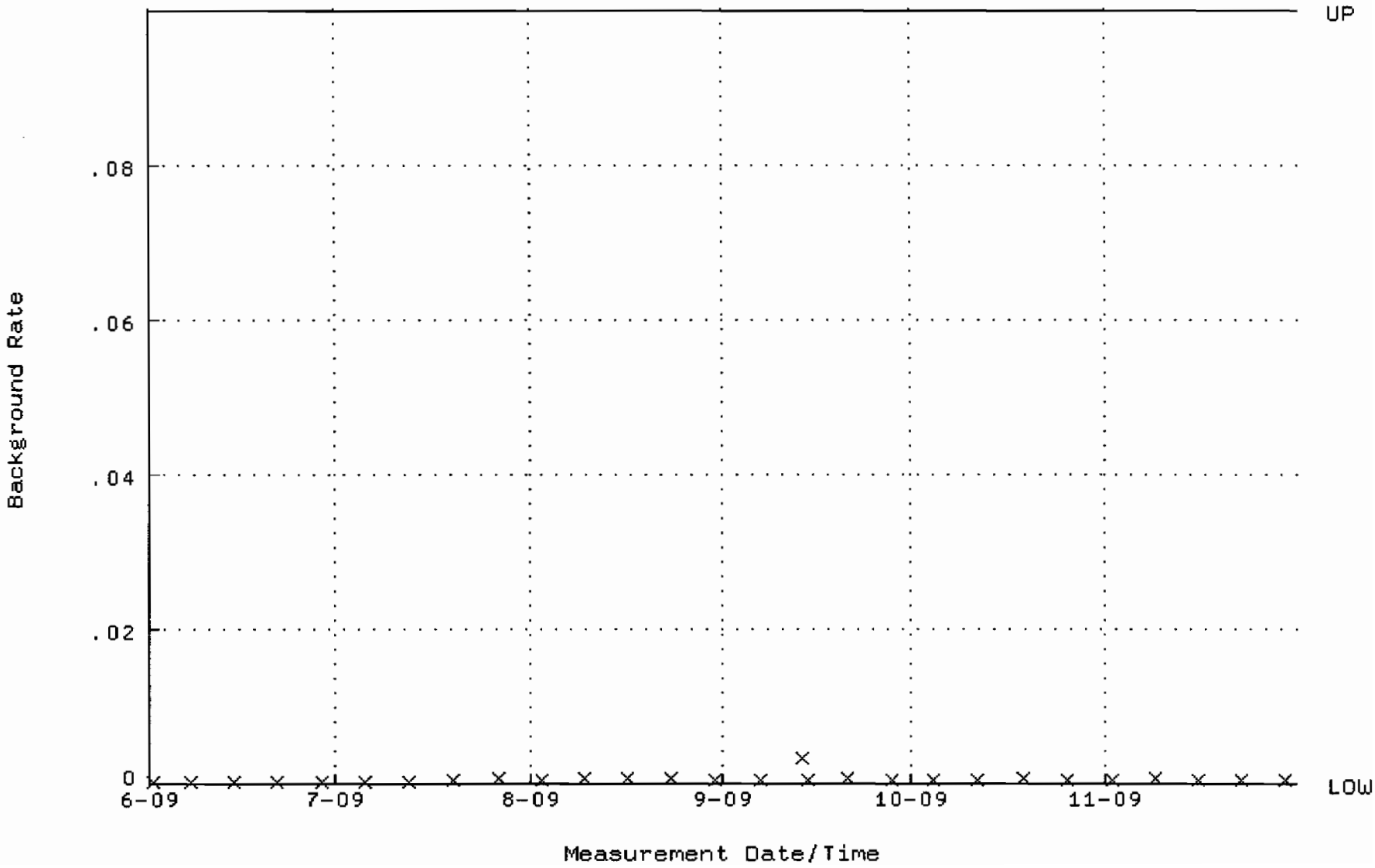

STANDARDS DATA

Amersham International plc
Amersham Laboratories

0134

NAMAS
CALIBRATION No. 0146

[redacted]

Description Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY·64

Chemical form: water Batch: 111

Measurement Reference time: 1200 GMT on 1 March 1996

Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water

which is equivalent to: 13.19 microcuries per gram of water

or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement
This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than ±2.5%

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99·7% confidence level, and the estimated systematic uncertainties.

Purity No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data Half-life of tritium: 12·43 ± 0·11 years

Maximum beta energy of tritium: 18·6 keV

Remarks: The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = $3{\cdot}7 \times 10^{10}$ becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = $3{\cdot}7 \times 10^4$ Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27·027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved signatory

W. F. Case

RC-5-024-061

W.F. Case

Amersham
The Health Science Group

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Johnson
Carrier Conc:	DI WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Johnson
Prep Date:	02/21/2001
Verification Date:	09/10/2008
Expiration Date:	03/27/2010
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (100 mL) = 985535.5200 dpm/mL
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (1.0004 g/mL) / (100 mL) = 985180.3116 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/25/2006	07/25/2007
12/20/2005	Amanda Fehr	5.5451	1000	0134-I	5462.92 dpm/mL	12/20/2006	12/20/2007
07/11/2007	Daniel Roy	5.5863	1000	0134-J	5503.5128 dpm/ml	07/29/2008	07/29/2009
03/25/2009	Mary Aders	5.4917	1000	0134-K	5410.3147 dpm/ml	03/27/2009	03/27/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for H-3 Standard 0134-K

M. Aders	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
4/9/2009	0134-K N1	1097.2000	54.0000	1043.2000	0.380548	1.0000	2741.3099
	0134-K N2	1073.2000	54.0000	1019.2000	0.380548	1.0000	2678.242955
	0134-K N3	1085.2000	54.0000	1031.2000	0.380548	1.0000	2709.776428
						Average =	2709.776428
Mean Value (Counting) =	2709.776428		**104.954429**	**Pass**			
Stdev =	31.53347278		0.01163693	**Rule 3 (Pass/Fail)**			

Certificate Value =	2581.86	dpm/mL
Lower Limit =	2646.709482	dpm/mL
Upper Limit =	2772.843373	dpm/mL
Rule 1 Pass/Fail	**Fail**	***exception taken due to full recovery of standard**
Two sigma =	63.06694556	dpm/mL
10 % of Mean =	270.9776428	dpm/mL
Rule 2 (Pass/Fail)	**Pass**	

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for H-3 source 0134-K by transferring 0.1 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ecoscint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ecoscint Ultra liquid scintillation cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on Silver for H-3 source standard verification. The H-3 efficiency calibration which was used for verification calculations was performed on 4/9/09 using 0020-A (H-3). Calibration data is recorded in this logbook under H-3 0020. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Mary Fritdens 4/9/09
Amanda L. Tech 4/9/09

0244-A Characterization

Sample #	Uranium-233/234 Result (pCi/g)	Uranium-238 Result (pCi/g)	Thorium-230 Result (pCi/g)
0244-A 1	6.59	6.12	25.3
0244-A 2	6.36	6.07	28.5
0244-A 3	5.78	5.53	26.5
0244-A 4	6.48	5.97	25.5
0244-A 5	5.65	5.59	26.2
0244-A 6	6.96	5.78	27.0
0244-A 7	5.95	5.75	24.2
0244-A 8	5.29	5.67	27.2
0244-A 9	5.51	6.05	24.3
0244-A 10	6.37	5.57	25.6
0244-A 11	6.50	5.80	25.8
0244-A 12	6.13	5.42	22.4
0244-A 13	5.49	5.24	24.7
0244-A 14	6.19	5.21	26.9
0244-A 15	6.50	6.27	27.6
0244-A 16	6.50	5.24	24.9
0244-A 17	6.25	6.05	24.7
0244-A 18	6.14	6.00	25.4
0244-A 19	6.19	6.14	26.4
0244-A 20	5.67	5.61	23.2
Mean Value	6.13	5.75	25.62
1 sigma	0.439	0.325	1.493
2 sigma	0.878	0.650	2.986
75% Limit	4.60	4.31	19.22
125% Limit	7.66	7.19	32.03
Expected Result	6.2 +/- 4.0	6.0 +/- 4.0	24.5 +/- 0.6
Achieved Results	6.13 +/- 0.439	5.75 +/- 0.325	25.62 +/- 1.493

REFERENCE DATE 4/14/2000 Scott C Reid 12/1/04

Angela L. Johnson 12/3/04

TRM

Invoice:

5 bottles of TRM-1
10 " " TRM-2 and 3
5 " each of NRM-1 through 6
7 " baghouse dirt

Use 1/4 gm x 10 Samples WITH Together for TRM-2

Table 7. Recommended Concentrations of Tailings Reference Materials (pCi/g)

	TRM-1	TRM-2	TRM-3	TRM-4
U-238	99 ± 6	6.0 ± 4.0	19.6 ± 1.4	44.9 ± 1.6
U-234	105 ± 6	6.2 ± 4.0	19.6 ± 1.9	44.6 ± 1.2
Th-230	471 ± 11	24.5 ± 0.6	58.5 ± 2.1	44.0 ± 1.6
Ra-225	489 ± 17	25.4 ± 0.9	60.3 ± 2.3	42.9 ± 1.2
Pb-210	425 ± 24	22.1 ± 1.2	56.0 ± 2.1	38.9 ± 2.0

Attention Nancy Slater At GEL
Not For Log-In

9911627-01 -> 0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 SMO USE
Carrier/Waybill No.: 7 2 6 7 9 4
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Reference LOV (available at SMO)

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	LAB USE Lab Sample ID
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Instructions	
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Below	
-												
-												
-												
-												
-												
-												
-												

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking (LAB USE ONLY)
Date Entered (mm/dd/yy)
Entered by

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well decontaminated rad materials being sent to GEL on behalf of Hank Mistaer
Please list as separate report.

Abnormal Conditions on Receipt LAB USE

Turnaround Time ☒Normal ☐Rush Required Report Date

QC Limits

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	Douglas E. Perry	DEP	Weston / 7577 / 845-0867

1. Relinquished by	Douglas E. Perry	Org. 7577	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

0244-B Characterization

Sample #	Plutonium-239 Result (pCi/g)	Plutonium-238 Result (pCi/g)	Americium-241 Result (pCi/g)
0244-B 1	39.9	7.88	38.4
0244-B 2	44.1	7.97	40.6
0244-B 3	45.8	6.56	31.8
0244-B 4	43.6	7.69	31.5
0244-B 5	43	7.9	40.2
0244-B 6	43.5	7.84	29.4
0244-B 7	41.3	7.67	36
0244-B 8	44.3	6.95	33.2
0244-B 9	42.7	7.2	29.2
0244-B 10	44.9	7.69	30
0244-B 11	41.4	7.22	30.2
0244-B 12	41.3	7.74	36
0244-B 13	39.2	6.65	33.8
0244-B 14	39.6	7.78	31.1
0244-B 15	45.3	8.41	37.3
0244-B 16	38.1	6.74	33.6
0244-B 17	48.5	8.51	30.5
0244-B 18	36.5	7.23	38.6
0244-B 19	35.3	6.98	30.9
0244-B 20	37.4	8.55	31.3
Mean Value	41.79	7.56	33.68
1 sigma	3.418	0.596	3.724
2 sigma	6.835	1.193	7.448
75% Limit	30.75	6.02	24.38
125% Limit	51.25	10.04	40.63
Expected Result	41.0 +/- 3.0	8.03 +/- 0.37	32.5 +/- 1.1
Achieved Results	41.79 +/- 3.418	7.56 +/- .596	33.68 +/- 3.724

REFERENCE DATA 4/14/2000

Amanda L. Fehr 4/30/04
[illegible] 5/1/04

PEM-1

PREPARATION AND CHARACTERIZATION OF THE PERFORMANCE EVALUATION SOIL SAMPLE PEM-1

INTRODUCTION

Rust Geotech (Rust) was contracted by Los Alamos National Laboratory (LANL) to prepare and characterize a soil performance evaluation sample designated PEM-1. This report describes sample preparation, homogeneity assessment, and determination of the concentrations of 28 elements and radioactive isotopes in the sample.

SAMPLE PREPARATION

Rust received nine five-gallon buckets of soil from LANL. The soils were dried overnight in ovens at 103 °C. The large pieces of leaves and sticks were removed and the soils were ground with ceramic-plate grinders to a particle size that passed through a 325 mesh screen. The samples were blended at the proportions specified by LANL for 48 hours in a 3-cubic-foot cross-flow blender. The sample identifications and the amounts used are listed in Table 1.

Table 1. Sample Identifications and Amounts Used to Prepare PEM-1

LANL Sample ID	Amount Used (kg)
AAA 1592	1.7
AAA 2505-1	10.9
AAA 2505-2	12.8
AAA 2750-1	8.4
AAA 2750-2	8.4
AAA 3205	12.6
AAA 8581	4.2
AAB 3417	12.8
AAB 3475	12.6

The blended sample was transferred to three five-gallon plastic containers. While the sample was being transferred, 10 samples were taken at pre-determined time intervals to be used for homogeneity assessment and sample characterization. These samples are believed to be representative of the bulk material.

Attention Nancy Slater At GEL
Not For Log-In

9911627-01 -> 0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 SMO USE
Carrier/Waybill No.: 7916 7494
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 13
SMO Authorization: [signature]
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location — Tech Area: VI; Building: N/A; Room: N/A

Reference LOV (available at SMO)

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	LAB USE Lab Sample ID
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special Instructions Below	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
-												
-												
-												
-												
-												
-												
-												

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking — SMO USE
Date Entered (mm/dd/yy):
Entered by:

Turnaround Time ☒Normal ☐Rush Required Report Date
QC Limits

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well characterized and materials being sent to GEL on behalf of Hack Miller
Please list as separate report.

Abnormal Conditions on Receipt — LAB USE

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	[signature]	DEP	Weston / 7577 / 845-0867

1. Relinquished by	[signature]	Org. 7577	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution: 5.3739 g (in a 5 ml Flame Sealed Ampoule)

b. Chemical form: Am(NO3)3 in 2N HNO3

c. Carrier content: None added

d. Density: 1.0651 g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under: 228, 278 keV.

Branching ratio(s) used: 0.108, 0.1420 gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration: ±3.0%

b. Random uncertainty in assay: ±0.4%

c. Random uncertainty in weighing(s): ±0.0%

d. Total uncertainty at the 99% confidence level: ±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Khan
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ 1. STANDARD WIPE TEST

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 2. SOAK TEST

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 3. SOAK TEST -- BERYLLIUM WINDOW

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 4. GAS SOURCE TEST (Radioactive Gas)

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ 5. OTHER LEAK TEST

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 6. LEAK TEST NOT APPLICABLE

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Angela Johnson
Prep Date:	01/05/1994
Verification Date:	05/11/2009
Expiration Date:	05/11/2010
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2005	09/10/2006
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/16/2005	Brenda Burke	.001224	500	445-96-2-DD	5.07144 dpm/mL	08/18/2007	08/18/2008
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
10/13/2005	Brenda Burke	.0017	500	445-96-2-EE	7.0435 dpm/mL	11/15/2005	11/15/2006
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
10/14/2005	Mary Aders	.0141	500	445-96-2-FF	58.4196 dpm/mL	10/14/2005	10/14/2006
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
05/10/2006	Mary Aders	2.0753	1000	445-96-2-GG	4299.227 dpm/mL	09/30/2008	09/30/2009
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
06/07/2006	Mary Aders	.0365	1000	445-96-2-HH	75.614 dpm/mL	06/19/2006	06/19/2007
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
05/11/2006	Brenda Burke	.000009739	100	445-96-2-II	.201761 dpm/mL	07/26/2006	07/26/2007
07/20/1995	Theresa Austin	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
05/01/2007	Daniel Roy	.0352	1000	445-96-2-JJ	72.9209 dpm/ml	04/30/2008	04/30/2009
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
06/12/2007	Julie Strock	.01038	250	445-96-2-KK	22.1496 dpm/mL	05/28/2008	05/28/2009

09/11/1995	Theresa Austin	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Austin	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
11/01/2007	Eric Williamson	.001274	500	445-96-2-MM	5.27945 dpm/mL	04/06/2008	04/06/2010
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/19/2008	Daniel Roy	.0424	1000	445-96-2-NN	87.8366 dpm/ml	04/16/2009	04/16/2010
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/04/2008	Julie Strock	.00001005	100	445-96-2-PP	.20819 dpm/mL	12/29/2008	12/29/2009
01/28/2000	Angela Johnson	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
09/29/2008	Julie Strock	.0025219	250	445-96-2-QQ	20.8977 dpm/mL	09/30/2008	09/29/2009
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/23/2009	Tina Schoneman	.001251	500	445-96-2-RR	4.8075 dpm/mL	04/23/2009	04/23/2010
04/13/2001	Angela Johnson	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
05/08/2009	Mary Aders	.0141	1000	445-96-2-SS	29.2098 dpm/ml	05/11/2009	05/11/2010
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003

07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
06/03/2009	Julie Strock	.00000927	100	445-96-2-TT	.1923 dpm/mL	06/05/2009	06/03/2010
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
06/02/2009	Mary Aders	2.1177	1000	445-96-2-UU	4385.1449 dpm/ml	06/04/2009	06/04/2010
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Johnson	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2006	03/14/2007
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Eric Williamson	.011	1000	445-96-2-Z	22.7877 dpm/mL	04/03/2007	04/03/2008

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Am-243 Standard *445-96-2-SS*

M. Aders	Isotope	Value	Uncertainty
5/15/2009	445-96-2-SS #1	1.360	0.1690
	445-96-2-SS #2	1.370	0.1690
	445-96-2-SS #3	1.290	0.1590

Mean Value (Counting) =	1.340	101.99	**Pass**
Stdev =	0.043588989		**Rule 3 (Pass/Fail)**

Target =	1.314
Lower Limit =	1.252822021
Upper Limit =	1.427177979
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.087177979
10 % of Mean =	0.134
Rule 2 (Pass/Fail)	**Pass**

The analyst prepared three standard verification sources for standard ***445-96-2-SS*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Cm-244*** standard ***0533-O*** and 50 micrograms of neodymium carrier in a disposable centrifuge tube. Each standard was diluted with 4 mL of 2 M HCl and 6 mL of DI Water. Two mL of 48% HF was added to precipitate Nd(and Americium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Am-243 were calculated by comparison to Am-241certified values.

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

Mary Fridean 5/15/09
Robert Bin 007509

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

1283

78747-278

U-232 5 mL Liquid in Flame Sealed Vial

Customer: GEL Laboratories, LLC
P.O. No.: 7319 RD, Item 1

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated using a germanium gamma spectrometer system.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Isotope:	U-232
Activity (Bq):	3.754 E3
Half-Life:	68.9 years
Calibration Date:	December 9, 2008 12:00 EST
Relative Expanded Uncertainty (k=2):	5.0%

Comments:
Impurities: U-233 <0.3%, Am-241 <0.15%
5.20453 grams 1M HNO_3 solution.

Source Prepared By: _____
W. Mao, Radiochemist

QA Approved: _____ Date: 12-11-08
D. M. Montgomery, QA Manager

End of Certificate

RECEIVED 12/15/08
RC-S-OE

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1283
Prepared By:	Daniel Roy
Carrier Conc:	1M HNO3
Reference Date:	12/09/2008
Ampoule Mass (g):	5.20453 g
Uncertainty:	+/- 5 %
LogBook No:	RC-S-051-002

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Daniel Roy
Prep Date:	12/16/2008
Verification Date:	12/30/2008
Expiration Date:	12/30/2009
Primary Code:	1283-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.0245 g
Density(g/mL):	1.0285
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (5.20453 g * 100 mL) = 2174.4872 dpm/mL
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (1.0285 g/mL)/ (5.20453 g * 100 mL) = 2114.1700 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/16/2008	Daniel Roy	25.1813	1000	1283-B	53.2375 dpm/ml	12/16/2008	12/16/2009
12/30/2008	Tina Schoneman	2.05	250	1283-C	17.336 dpm/mL	12/30/2008	12/30/2009
12/30/2008	Tina Schoneman	.49	250	1283-D	4.1438 dpm/mL	01/09/2009	01/09/2010
01/14/2009	Mary Aders	25.0528	1000	1283-E	52.9659 dpm/ml	01/15/2009	01/15/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Uranium-232 Standard *1283-E*

Analyst: M. Aders	Serial #	Value		Uncertainty	
Date: 1/14/09	1283-E N1	2.540	pCi/L	0.288	pCi/L
	1283-E N2	2.390	pCi/L	0.272	pCi/L
	1283-E N3	2.450	pCi/L	0.274	pCi/L
Mean Value (Counting) =	2.460	pCi/L		**103.20801**	**Pass**
Stdev =	0.075498344	pCi/L			**Rule 3 (Pass/Fail)**
Target =	2.384	pCi/L			
Lower Limit =	2.309003311	pCi/L			
Upper Limit =	2.610996689	pCi/L			
Rule 1 Pass/Fail	**Pass**				
Two sigma =	0.150996689				
10 % of Mean =	0.246				
Rule 2 (Pass/Fail)	**Pass**				

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for standard **1283-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **1163-E** and was diluted to 10 mL with DI water. 50 micrograms of neodymium carrier and 1ml of Titanium Chloride were added. The solution was allowed to sit for 30 seconds. One mL of 48% HF was then added to precipitate neodymium (and uranium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for U-238 were calculated by comparison to U-232 certified values.

Mary L. Aders 1/19/09
Amanda L. Stahn 2/9/09

1373

National Institute of Standards & Technology
Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

RECEIVED

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 to 7.

12C-5-051-0012

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994 [b]***
Massic activity of the solution [c]	**26.31 $Bq \cdot g^{-1}$**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**
Solution density	**(1.105 ± 0.002) $g \cdot mL^{-1}$ at 20 °C [f]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration ($mol \cdot L^{-1}$)	Mass Fraction ($g \cdot g^{-1}$)
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) $Bq \cdot g^{-1}$ [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three 4πα liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	--	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	$^{239}Pu + ^{240}Pu$ <0.000 001 [u]	$^{239}Pu + ^{240}Pu$ 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	$^{238}Pu + ^{241}Am$ <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) = |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 $s^{-1} \cdot g^{-1}$ for energies less than 3.1 MeV,
0.03 $s^{-1} \cdot g^{-1}$ for energies between 3.1 and 4.4 MeV, and
0.003 $s^{-1} \cdot g^{-1}$ for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 19 and 39 keV,
7×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 49 and 92 keV,
2×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 106 and 507 keV,
1×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 515 and 1456 keV, and
5×10^{-6} $s^{-1} \cdot g^{-1}$ for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}·{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

Standard Traceability Log Rad

Source Material Info

Parent Code:	1373
Prepared By:	Mary Aders
Carrier Conc:	0.5M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC-S-051-092

A Solution Material Info

Isotope:	Plutonium-242
Prepared By:	Mary Aders
Prep Date:	10/23/2009
Verification Date:	10/27/2009
Expiration Date:	10/27/2010
Primary Code:	1373-A
Dilution(mL):	200 mL
Mass of Parent(g):	5.3477 g
Density(g/mL):	1.0145
Balance ID:	38110047

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / (Dilution Vol) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (200 mL) = 42.2094 dpm/mL

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (1.0145 g/mL) / (200 mL) = 41.6041 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Pu-242 Standard 1373-*A*

M. Aders	Isotope	Value	Uncertainty
10/27/2009	1373-A	1.970	0.3050
	1373-A	1.900	0.2980
	1373-A	1.950	0.3000

Mean Value (Counting) =	1.940	102.04	**Pass**
Stdev =	0.036055513		**Rule 3 (Pass/Fail)**

Target =	1.90
Lower Limit =	1.867888974
Upper Limit =	2.012111026
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.072111026
10 % of Mean =	0.194
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for standard 1373-A using 0.1 mL for each source. Each standard was combined with 0.1 mL of Pu239 standard 0338-BB and 50 micrograms of neodymium carrier in a disposable centrifuge tube containing 4 mL of 2 M HCl and 6 mL of DI water. Four drops of 25% Hydrazine dihydrochloride were added to each centrifuge tube and swirled. Two mL of 48% HF was added to precipitate neodymium(and plutonium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Pu-242 were calculated by comparison to Pu-239 certified values.

10/29/09

11/02/09

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

1067

74463-278

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Sr-90
ACTIVITY (Bq):	3.835 E4
HALF-LIFE:	28.79 years
CALIBRATION DATE:	February 7, 2007 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	1.7%

Impurities: γ-impurities <0.1%

5.01066 grams 0.1M HCl solution with 30 μg/g Sr carrier.

NOTE: This source also contains Y-90 in secular equilibrium with Sr-90. The Y-90 activity is equal to the Sr-90 activity. Since Sr-90 and Y-90 both decay 100% by beta emission, the total beta emission rate for the source is twice the certified Sr-90 activity. The half-life for Y-90 is 64.08 hours.

P O NUMBER 2739 RD, Item 1

RECEIVED 2/8/07 DR

SOURCE PREPARED BY: M. Dimitrova
M. Dimitrova, Radiochemist

Q A APPROVED: 2-7-07

RC-S-045-108-A

Standard Traceability Log Rad

Source Material Info

Parent Code:	1067
Prepared By:	Daniel Roy
Carrier Conc:	0.1M HCl
Reference Date:	02/07/2007
Ampoule Mass (g):	5.01066 g
Uncertainty:	+/- 1.7 %
LogBook No:	RC-S-045-108

A Solution Material Info

Isotope:	Strontium-90
Prepared By:	Julie Strock
Prep Date:	10/12/2007
Verification Date:	06/17/2009
Expiration Date:	06/23/2010
Primary Code:	1067-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.9657 g
Density(g/mL):	0.9962
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq)) * (conversion dpm to bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (bq)) * (conversion dpm to bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)

(4.9657 g) * (38350 bq) * (60 dpm/bq) / (5.01066 g * 100 mL) = 22803.5343 dpm/mL

(4.9657 g) * (38350 bq) * (60 dpm/bq) / (0.9962 g/mL)/ (5.01066 g * 100 mL) = 22889.8293 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/23/2008	Daniel Roy	20.0611	1000	1067-B	459.1952 dpm/ml	07/23/2008	07/23/2009
06/16/2009	Mary Aders	20.0693	1000	1067-C	459.3829 dpm/mL	06/17/2009	06/17/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Sr-90 Standard 1067-C

6/18/2009	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Vol. Used (mL)	Source DPM/mL
M. Aders	1067-C N1	922.6000	45.1300	877.4700	2.030242	1.0000	432.1997082
	1067-C N2	905.2700	45.1300	860.1400	2.030242	1.0000	423.66378
	1067-C N3	918.2700	45.1300	873.1400	2.030242	1.0000	430.0669575
						Average =	428.6434819
Mean Value (Counting) =	428.6434819		98.7965109	% of known	Pass		
Stdev =	4.442435123		0.01036394				
Certificate Value =	433.865	dpm/mL					
Lower Limit =	419.7586117	dpm/mL					
Upper Limit =	437.5283522	dpm/mL					
Rule 1 Pass/Fail	Pass	Pass	Pass				
Two sigma =	8.884870247						
10 % of Mean =	42.86434819						
Rule 2 (Pass/Fail)	Pass						

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for Sr-90 source 1067-C by transferring 1 mL portions of the standard into glass liquid scintillation vials. Thirteen mL of Ecoscint Ultra liqiuid scintillation coctail was prepared in a similar fashion using 1 mL of DI water and 13 mL of Ecoscint Ultra liqiuid scintillation coctail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Green for Sr-90 source standard verification. The Sr-90 efficiency calibration which was used for verification calculations was performed on 6/17/09 using source 0133-A (Sr-90). Calibration data is recorded in this logbook under Sr-90 0133-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.
RAD SOP M-001

6/18/09
6/29/09

STANDARDIZATION OF STRONTIUM CARRIER

DATE: [redacted] EXP. DATE: [redacted]

LOT NUMBER [redacted]

STRONTIUM PRECIPITATES

	1	2	3	4
Weight of carrier added	[redacted]			
Aliquot (5.00 mL)				
Crucible + ppt.	[redacted]			
Crucible				
Wt. of ppt., g	0.0178	0.0179	0.0179	0.0178
mg Sr/mL	17.80	17.90	17.90	17.80
mg Sr/g	17.28	17.72	17.55	17.28

Must weigh carrier added

Jennifer L. Robb
9-24-09

Average	Std. Dev.	
17.85	± 0.06	0.00323446
17.46	± 0.22	0.0124023
mg Sr/ 0.5 mL		**8.93**
mg Sr/g		17.46

0.5% of Mean Value = 0.08925 Pass

A satisfactory standardization is obtained when results give a standard deviation of less than 0.5% of the mean value.

RUNLOGS

Instrument Run Log

Instrument Type: GFPC **Batch ID: 926904**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241518001	SAMPLE	JXR1	LB4100H3	04-DEC-09 12:33	DONE	Tuffryn Filter	12-JAN-09 00:00
241518002	SAMPLE	JXR1	LB4100H4	04-DEC-09 12:33	DONE	Tuffryn Filter	12-JAN-09 00:00
241524002	SAMPLE	JXR1	LB4100H1	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00
1201981803	MB	JXR1	LB4100H2	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00
1201981804	DUP	JXR1	LB4100H3	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00
241518003	SAMPLE	JXR1	LB4100G1	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00
241518004	SAMPLE	JXR1	LB4100G2	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00
241518005	SAMPLE	JXR1	LB4100G3	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00
241518006	SAMPLE	JXR1	LB4100G4	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00
1201981805	LCS	JXR1	LB4100H4	04-DEC-09 14:22	DONE	Tuffryn Filter	12-JAN-09 00:00

Instrument Run Log

Instrument Type: LSC **Batch ID: 927653**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241301001	SAMPLE	KXK2	LSCORANGE	04-DEC-09 14:36	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241336001	SAMPLE	KXK2	LSCORANGE	04-DEC-09 16:39	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241336002	SAMPLE	KXK2	LSCORANGE	04-DEC-09 18:41	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241425001	SAMPLE	KXK2	LSCORANGE	04-DEC-09 20:44	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241425002	SAMPLE	KXK2	LSCORANGE	04-DEC-09 22:46	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518001	SAMPLE	KXK2	LSCORANGE	05-DEC-09 00:49	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518002	SAMPLE	KXK2	LSCORANGE	05-DEC-09 04:07	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518005	SAMPLE	KXK2	LSCORANGE	05-DEC-09 10:14	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241524002	SAMPLE	KXK2	LSCORANGE	05-DEC-09 15:50	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241909001	SAMPLE	KXK2	LSCORANGE	05-DEC-09 17:52	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983510	LCS	KXK2	LSCORANGE	06-DEC-09 00:01	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518003	SAMPLE	KXK2	LSCORANGE	08-DEC-09 13:57	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518004	SAMPLE	KXK2	LSCORANGE	08-DEC-09 15:00	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518006	SAMPLE	KXK2	LSCORANGE	08-DEC-09 16:02	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241909002	SAMPLE	KXK2	LSCORANGE	08-DEC-09 17:05	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983508	MB	KXK2	LSCORANGE	08-DEC-09 18:37	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983509	DUP	KXK2	LSCORANGE	08-DEC-09 19:40	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928304**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241518001	SAMPLE	MXE1	1093	10-DEC-09 12:38	DONE		
241518002	SAMPLE	MXE1	1094	10-DEC-09 12:38	DONE		
241518003	SAMPLE	MXE1	1095	10-DEC-09 12:39	DONE		
241518004	SAMPLE	MXE1	1096	10-DEC-09 12:39	DONE		
241518005	SAMPLE	MXE1	1097	10-DEC-09 12:39	DONE		
241518006	SAMPLE	MXE1	1098	10-DEC-09 12:39	DONE		
241524002	SAMPLE	MXE1	1099	10-DEC-09 12:39	DONE		
241559001	SAMPLE	MXE1	1100	10-DEC-09 12:39	DUSE		
241559002	SAMPLE	MXE1	1101	10-DEC-09 12:39	DONE		
241610001	SAMPLE	MXE1	1102	10-DEC-09 12:39	DONE		
241610002	SAMPLE	MXE1	1103	10-DEC-09 12:39	DONE		
241610003	SAMPLE	MXE1	1104	10-DEC-09 12:39	DONE		
241610004	SAMPLE	MXE1	1105	10-DEC-09 12:39	DONE		
241610005	SAMPLE	MXE1	1107	10-DEC-09 12:39	DONE		
1201984982	MB	MXE1	1108	10-DEC-09 12:39	DONE		
1201984983	DUP	MXE1	1109	10-DEC-09 12:39	DONE		
1201984984	LCS	MXE1	1111	10-DEC-09 12:39	DONE		
241610006	SAMPLE	MXE1	1112	10-DEC-09 12:39	DONE		
241610007	SAMPLE	MXE1	1221	10-DEC-09 12:42	DONE		
241610008	SAMPLE	MXE1	1222	10-DEC-09 12:42	DONE		
241610009	SAMPLE	MXE1	1223	10-DEC-09 12:42	DONE		
241559001	SAMPLE	MXE1	1209	11-DEC-09 11:33	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928305**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241610003	SAMPLE	MXE1	1031	11-DEC-09 09:39	DONE		
241610004	SAMPLE	MXE1	1033	11-DEC-09 09:39	DONE		
241610005	SAMPLE	MXE1	1035	11-DEC-09 09:39	DONE		
241610006	SAMPLE	MXE1	1036	11-DEC-09 09:39	DONE		
241610007	SAMPLE	MXE1	1037	11-DEC-09 09:39	DONE		
241610008	SAMPLE	MXE1	1038	11-DEC-09 09:39	DONE		
241610009	SAMPLE	MXE1	1039	11-DEC-09 09:39	DONE		
1201984985	MB	MXE1	1040	11-DEC-09 09:39	DONE		
1201984986	DUP	MXE1	1041	11-DEC-09 09:39	DONE		
1201984987	LCS	MXE1	1042	11-DEC-09 09:39	DONE		
241518001	SAMPLE	MXE1	1043	11-DEC-09 11:57	DUSE		
241518002	SAMPLE	MXE1	1044	11-DEC-09 11:57	DONE		
241518003	SAMPLE	MXE1	1045	11-DEC-09 11:57	DONE		
241518004	SAMPLE	MXE1	1046	11-DEC-09 11:57	DONE		
241518005	SAMPLE	MXE1	1047	11-DEC-09 11:57	DONE		
241518006	SAMPLE	MXE1	1048	11-DEC-09 11:57	DONE		
241524002	SAMPLE	MXE1	1071	11-DEC-09 11:57	DONE		
241559001	SAMPLE	MXE1	1072	11-DEC-09 11:57	DONE		
241559002	SAMPLE	MXE1	1073	11-DEC-09 11:57	DONE		
241610001	SAMPLE	MXE1	1074	11-DEC-09 11:57	DONE		
241610002	SAMPLE	MXE1	1076	11-DEC-09 11:57	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 931796**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
1201993216	LCS	MXE1	1152	14-DEC-09 12:07	DONE		
241518001	SAMPLE	MXE1	1153	14-DEC-09 12:07	DONE		
241518002	SAMPLE	MXE1	1154	14-DEC-09 12:07	DONE		
241518003	SAMPLE	MXE1	1155	14-DEC-09 12:07	DONE		
241518004	SAMPLE	MXE1	1156	14-DEC-09 12:07	DONE		
241518005	SAMPLE	MXE1	1157	14-DEC-09 12:07	DONE		
241518006	SAMPLE	MXE1	1158	14-DEC-09 12:07	DONE		
241524002	SAMPLE	MXE1	1159	14-DEC-09 12:08	DONE		
241559001	SAMPLE	MXE1	1160	14-DEC-09 12:08	DONE		
241559002	SAMPLE	MXE1	1161	14-DEC-09 12:20	DONE		
241610001	SAMPLE	MXE1	1162	14-DEC-09 12:20	DONE		
241610002	SAMPLE	MXE1	1163	14-DEC-09 12:20	DONE		
241610003	SAMPLE	MXE1	1164	14-DEC-09 12:20	DONE		
241610004	SAMPLE	MXE1	1165	14-DEC-09 12:20	DONE		
241610005	SAMPLE	MXE1	1166	14-DEC-09 12:20	DONE		
241610006	SAMPLE	MXE1	1167	14-DEC-09 12:21	DONE		
241610007	SAMPLE	MXE1	1168	14-DEC-09 12:21	DONE		
241610008	SAMPLE	MXE1	1169	14-DEC-09 12:21	DONE		
241610009	SAMPLE	MXE1	1170	14-DEC-09 12:21	DONE		
1201993214	MB	MXE1	1171	14-DEC-09 12:21	DONE		
1201993215	DUP	MXE1	1172	14-DEC-09 12:21	DONE		

GC SEMIVOLATILE PESTICIDE ANALYSIS

Pesticide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-600

Method/Analysis Information

Procedure:	**Analysis of Organochlorine Pesticides and Chlorinated Hydrocarbons by ECD**
Analytical Method:	SW846 8081A
Prep Method:	SW846 3550B
Analytical Batch Number:	926807
Prep Batch Number:	926803

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8081A:

Sample ID	Client ID
241524002	WST03-10-2132
1201981581	Method Blank (MB)
1201981584	Laboratory Control Sample (LCS)
1201981585	Laboratory Control Sample (LCS)-Toxaphene LCS Only
1201981582	241423004(WST03-10-2131) Matrix Spike (MS)
1201981583	241423004(WST03-10-2131) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 10.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) did not meet the acceptance criteria.

Two of the five quantified peaks did not meet the acceptance criteria in Toxaphene standard analyzed for this SDG; however, the average concentration of the five peaks met the acceptance criteria.

Several target analytes failed to meet the acceptance criteria with positive or negative bias in the standards bracketing the sample in this SDG. The positive and negative bias for the analytical data is a result of instrument response increasing or decreasing after the initial calibration. The instrument response never decreased to a point where the target analytes would not be detected. These target analytes were not detected in the associated samples; therefore, the non-compliance has no adverse effects on the data.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
QC sample 1201981585 (Toxaphene LCS) surrogate recovery was above the acceptance criteria. This non-compliance had no adverse effects on the data as the LCS spike recovery met the acceptance limits. There were no target analytes detected in the associated samples. See NCR ID 64015 located in the Miscellaneous Data section.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (10-578) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. Additionally, copper was added to all sample extracts to remove sulfur. Samples were cleaned with Florisil prior to analysis.

Sample Dilutions
Sample 241524002 (WST03-10-2132) was diluted at 1:10 due to the oily consistency, presence of dark particulates, and the dark hue of the samples.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information:

Electronic Package Comment

This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Nonconformance (NCR) Documentation
Nonconformance report (NCRs) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR ID 764015 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The lower results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Sample 241524002 (WST03-10-2132) contained detections of Aroclors.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD5A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD5A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733–001–09)

Client SDG: 10–600 GEL Work Order: 241524

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

P Organics––The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP–like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Pat Steele **Name: Patricia Steele**

Date: 17 DEC 2009 **Title: Group Leader**
Laboratory Manager

Roadmap for LANL 10-600 PEST

This roadmap was analyzed by cla01575 on 12-01-2009, 15:47.
This roadmap was reviewed by rob01090 on 12-03-2009, 19:29.
This roadmap was packaged by yml on 12-15-2009, 14:59.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/112909.b/031f3101.d	241524002	sample	30-NOV-2009	00:08	10-600.sub	WST03-10-2132	10.00000	926807	USE - uploaded both columns, reporting lower result

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/112909.b/031b3101.d	241524002	sample	30-NOV-2009	00:08	10-600.sub	WST03-10-2132	10.00000	926807	USE - uploaded both columns, reporting lower result

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd5a.i/112909.b/018f1801.d	1201981581	mb	29-NOV-2009	21:32	10-578.sub	PBLK01	1.00000	926807	USE - uploaded both columns, reporting lower result
■	N	/chem/ecd5a.i/112909.b/018f1801-589.d	1201981581	mb	29-NOV-2009	21:32	10-589.sub	PBLK01	1.00000	926807	
☐	N	/chem/ecd5a.i/112909.b/018f1801-600.d	1201981581	mb	29-NOV-2009	21:32	10-600.sub	PBLK01	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/019f1901.d	1201981584	lcs	29-NOV-2009	21:44	10-578.sub	PBLK01LCS	1.00000	926807	USE - uploaded both columns, reporting lower result
■	N	/chem/ecd5a.i/112909.b/019f1901-589.d	1201981584	lcs	29-NOV-2009	21:44	10-589.sub	PBLK01LCS	1.00000	926807	
☐	N	/chem/ecd5a.i/112909.b/019f1901-600.d	1201981584	lcs	29-NOV-2009	21:44	10-600.sub	PBLK01LCS	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/020f2001.d	1201981585	lcs	29-NOV-2009	21:56	10-578.sub	PBLK01TLCS	1.00000	926807	USE - uploaded both columns, reporting lower result
■	N	/chem/ecd5a.i/112909.b/020f2001-589.d	1201981585	lcs	29-NOV-2009	21:56	10-589.sub	PBLK01TLCS	1.00000	926807	
☐	N	/chem/ecd5a.i/112909.b/020f2001-600.d	1201981585	lcs	29-NOV-2009	21:56	10-600.sub	PBLK01TLCS	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/022f2201.d	1201981582	ms	29-NOV-2009	22:20	10-578.sub	WST03-10-2131MS	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor
■	N	/chem/ecd5a.i/112909.b/023f2301.d	1201981583	msd	29-NOV-2009	22:32	10-578.sub	WST03-10-2131MSD	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd5a.i/112909.b/018b1801.d	1201981581	mb	29-NOV-2009	21:32	10-578.sub	PBLK01	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/018b1801-600.d	1201981581	mb	29-NOV-2009	21:32	10-600.sub	PBLK01	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/018b1801-589.d	1201981581	mb	29-NOV-2009	21:32	10-589.sub	PBLK01	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/019b1901.d	1201981584	lcs	29-NOV-2009	21:44	10-578.sub	PBLK01LCS	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/019b1901-600.d	1201981584	lcs	29-NOV-2009	21:44	10-600.sub	PBLK01LCS	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/019b1901-589.d	1201981584	lcs	29-NOV-2009	21:44	10-589.sub	PBLK01LCS	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/020b2001.d	1201981585	lcs	29-NOV-2009	21:56	10-578.sub	PBLK01TLCS	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/020b2001-600.d	1201981585	lcs	29-NOV-2009	21:56	10-600.sub	PBLK01TLCS	1.00000	926807	
■	N	/chem/ecd5a.i/112909.b/020b2001-589.d	1201981585	lcs	29-NOV-2009	21:56	10-589.sub	PBLK01TLCS	1.00000	926807	
■	N	/chem/ecd5a.i/112809.b/068b6801.d	1201981582	ms	29-NOV-2009	01:48	8081.sub	WST03-10-2131(24142	10.00000	926807	
■	N	/chem/ecd5a.i/112909.b/022b2201.d	1201981582	ms	29-NOV-2009	22:20	10-578.sub	WST03-10-2131MS	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor
■	N	/chem/ecd5a.i/112909.b/023b2301.d	1201981583	msd	29-NOV-2009	22:32	10-578.sub	WST03-10-2131MSD	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor

SAMPLE DATA SUMMARY

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2132	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/30/2009 00:08	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30.02 g	**Final Volume:**	5 mL
Data File:	031f3101.d	**Column:**	1 CLP-1	**Level:**	LOW
	031b3101.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.11	ug/kg	1.78	7.11	1
58-89-9	gamma-BHC (Lindane)	U	7.11	ug/kg	1.78	7.11	1
319-85-7	beta-BHC	U	7.11	ug/kg	1.78	7.11	1
319-86-8	delta-BHC	U	7.11	ug/kg	1.78	7.11	1
76-44-8	Heptachlor	U	7.11	ug/kg	1.78	7.11	1
309-00-2	Aldrin	U	7.11	ug/kg	1.78	7.11	1
1024-57-3	Heptachlor epoxide	U	7.11	ug/kg	2.22	7.11	1
5103-74-2	gamma-Chlordane	U	7.11	ug/kg	1.78	7.11	1
5103-71-9	alpha-Chlordane	U	7.11	ug/kg	1.78	7.11	1
959-98-8	Endosulfan I	U	7.11	ug/kg	1.78	7.11	1
72-55-9	4,4'-DDE	U	14.2	ug/kg	3.55	14.2	1
60-57-1	Dieldrin	U	14.2	ug/kg	3.55	14.2	1
72-20-8	Endrin	U	14.2	ug/kg	3.55	14.2	1
72-54-8	4,4'-DDD	U	14.2	ug/kg	3.55	14.2	1
33213-65-9	Endosulfan II	U	14.2	ug/kg	3.55	14.2	1
7421-93-4	Endrin aldehyde	U	14.2	ug/kg	3.55	14.2	1
50-29-3	4,4'-DDT	J	6.92	ug/kg	3.55	14.2	1
1031-07-8	Endosulfan sulfate	U	14.2	ug/kg	3.55	14.2	1
72-43-5	Methoxychlor	U	71.1	ug/kg	17.8	71.1	1
53494-70-5	Endrin ketone	U	14.2	ug/kg	3.55	14.2	1
8001-35-2	Toxaphene	U	178	ug/kg	59.2	178	1

QUALITY CONTROL SUMMARY

Pesticide

Surrogate Recovery Report

SDG Number: 10-600

Matrix Type: SOLID

CAP Column (1) : CLP-1 **CAP Column (2) : CLP-2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201981581	MB for batch 926803	97	90	108	103
1201981584	LCS for batch 926803	105	97	113	109
1201981585	LCS for batch 926803	111 *	101	122 *	110
241524002	WST03-10-2132	90 D	96 D	102 D	85 D

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926803
Lab Sample ID: 1201981584
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 21:44
Dilution: 1
Prep Batch ID: 926803
Batch ID: 926807

CAS No	Parmname		Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
319-84-6	LCS	alpha-BHC	16.7	0.0	16.7	100	56-129
58-89-9	LCS	gamma-BHC (Lindane)	16.7	0.0	16.7	100	56-127
319-85-7	LCS	beta-BHC	16.7	0.0	15.9	95	54-117
319-86-8	LCS	delta-BHC	16.7	0.0	16.8	101	60-129
76-44-8	LCS	Heptachlor	16.7	0.0	16.2	97	55-127
309-00-2	LCS	Aldrin	16.7	0.0	15.5	93	54-123
1024-57-3	LCS	Heptachlor epoxide	16.7	0.0	14.7	88	58-122
5103-74-2	LCS	gamma-Chlordane	16.7	0.0	15.0	90	55-124
5103-71-9	LCS	alpha-Chlordane	16.7	0.0	15.7	94	56-120
959-98-8	LCS	Endosulfan I	16.7	0.0	14.9	89	51-119
72-55-9	LCS	4,4'-DDE	41.7	0.0	41.4	99	60-128
60-57-1	LCS	Dieldrin	41.7	0.0	39.3	94	59-119
72-20-8	LCS	Endrin	41.7	0.0	41.8	100	63-131
72-54-8	LCS	4,4'-DDD	41.7	0.0	42.1	101	61-131
33213-65-9	LCS	Endosulfan II	41.7	0.0	41.2	99	59-120
7421-93-4	LCS	Endrin aldehyde	41.7	0.0	36.6	88	55-125
50-29-3	LCS	4,4'-DDT	41.7	0.0	42.8	103	63-139
1031-07-8	LCS	Endosulfan sulfate	41.7	0.0	40.4	97	60-127
72-43-5	LCS	Methoxychlor	167	0.0	190	114	59-143
53494-70-5	LCS	Endrin ketone	41.7	0.0	39.2	94	59-132

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600
Client ID: LCS for batch 926803
Lab Sample ID: 1201981585
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 21:56
Prep Batch ID: 926803
Batch ID: 926807
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
8001-35-2	LCS	Toxaphene	133	0.0	150	113	48-131

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2131MS
Lab Sample ID: 1201981582
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 7.9
Analysis Date: 11/29/2009 22:20
Prep Batch ID: 926803
Batch ID: 926807
Dilution: 10

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
319-84-6	MS	alpha-BHC	18.1	0.00	U	14.0	77	41-132
58-89-9	MS	gamma-BHC (Lindane)	18.1	0.00	U	14.5	80	43-127
319-85-7	MS	beta-BHC	18.1	0.00	U	15.7	87	36-130
319-86-8	MS	delta-BHC	18.1	0.00	U	13.9	77	39-134
76-44-8	MS	Heptachlor	18.1	0.00	U	14.2	79	41-133
309-00-2	MS	Aldrin	18.1	0.00	U	14.3	79	41-128
1024-57-3	MS	Heptachlor epoxide	18.1	0.00	U	16.2	89	39-133
5103-74-2	MS	gamma-Chlordane	18.1	3.23	JP	16.8	75	37-133
5103-71-9	MS	alpha-Chlordane	18.1	0.00	U	18.1	100	40-122
959-98-8	MS	Endosulfan I	18.1	0.00	U	16.4	91	32-126
72-55-9	MS	4,4'-DDE	45.2	0.00	U	39.4	87	42-138
60-57-1	MS	Dieldrin	45.2	7.94	J	42.9	77	38-132
72-20-8	MS	Endrin	45.2	0.00	U	54.1	120	45-139
72-54-8	MS	4,4'-DDD	45.2	0.00	U	42.4	94	41-139
33213-65-9	MS	Endosulfan II	45.2	0.00	U	41.2	91	35-130
7421-93-4	MS	Endrin aldehyde	45.2	0.00	U	33.5	74	29-126
50-29-3	MS	4,4'-DDT	45.2	0.00	U	36.2	80	38-155
1031-07-8	MS	Endosulfan sulfate	45.2	0.00	U	35.3	78	39-131
72-43-5	MS	Methoxychlor	181	0.00	U	135	75	44-153
53494-70-5	MS	Endrin ketone	45.2	0.00	U	31.2	69	41-133

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2131MSD
Lab Sample ID: 1201981583
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 7.9
Analysis Date: 11/29/2009 22:32
Prep Batch ID: 926803
Batch ID: 926807
Dilution: 10

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
319-84-6	MSD alpha-BHC	18.1	0.00	U	13.4	74	41-132	4	0-30
58-89-9	MSD gamma-BHC (Lindane)	18.1	0.00	U	13.8	77	43-127	5	0-30
319-85-7	MSD beta-BHC	18.1	0.00	U	15.0	83	36-130	5	0-30
319-86-8	MSD delta-BHC	18.1	0.00	U	13.3	74	39-134	5	0-30
76-44-8	MSD Heptachlor	18.1	0.00	U	13.4	74	41-133	6	0-30
309-00-2	MSD Aldrin	18.1	0.00	U	13.8	76	41-128	3	0-30
1024-57-3	MSD Heptachlor epoxide	18.1	0.00	U	15.3	85	39-133	5	0-30
5103-74-2	MSD gamma-Chlordane	18.1	3.23	JP	16.3	72	37-133	3	0-30
5103-71-9	MSD alpha-Chlordane	18.1	0.00	U	16.8	93	40-122	7	0-30
959-98-8	MSD Endosulfan I	18.1	0.00	U	15.7	87	32-126	5	0-30
72-55-9	MSD 4,4'-DDE	45.2	0.00	U	37.3	82	42-138	6	0-30
60-57-1	MSD Dieldrin	45.2	7.94	J	40.6	72	38-132	6	0-30
72-20-8	MSD Endrin	45.2	0.00	U	49.2	109	45-139	9	0-30
72-54-8	MSD 4,4'-DDD	45.2	0.00	U	40.3	89	41-139	5	0-30
33213-65-9	MSD Endosulfan II	45.2	0.00	U	40.0	88	35-130	3	0-30
7421-93-4	MSD Endrin aldehyde	45.2	0.00	U	30.2	67	29-126	10	0-30
50-29-3	MSD 4,4'-DDT	45.2	0.00	U	33.0	73	38-155	9	0-30
1031-07-8	MSD Endosulfan sulfate	45.2	0.00	U	34.3	76	39-131	3	0-30
72-43-5	MSD Methoxychlor	181	0.00	U	128	71	44-153	5	0-30
53494-70-5	MSD Endrin ketone	45.2	0.00	U	29.7	66	41-133	5	0-30

Method Blank Summary

SDG Number:	10–600	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926803	Instrument ID:	ECD5A.I_2 ECD5A.I_1	Data File:	018b1801–600.d 018f1801–589.d
Lab Sample ID:	1201981581				
Column:	CLP–2 CLP–1	Prep Date:	11/27/2009 10:04	Analyzed:	11/29/09 21:32
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926803	1201981584	019f1901–589.d 019b1901–589.d	11/29/09	2144
02 LCS for batch 926803	1201981585	020f2001–589.d 020b2001–589.d	11/29/09	2156
05 WST03–10–2132	241524002	031f3101.d 031b3101.d	11/30/09	0008

SAMPLE
DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–600	**Date Collected:**	11/18/2009 12:00	**Matrix:**	R
Lab Sample ID:	241524002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2132	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/30/2009 00:08	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30.02 g	**Final Volume:**	5 mL
Data File:	031f3101.d	**Column:**	1 CLP–1	**Level:**	LOW
	031b3101.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC	U	7.11	ug/kg	1.78	7.11	1
58–89–9	gamma–BHC (Lindane)	U	7.11	ug/kg	1.78	7.11	1
319–85–7	beta–BHC	U	7.11	ug/kg	1.78	7.11	1
319–86–8	delta–BHC	U	7.11	ug/kg	1.78	7.11	1
76–44–8	Heptachlor	U	7.11	ug/kg	1.78	7.11	1
309–00–2	Aldrin	U	7.11	ug/kg	1.78	7.11	1
1024–57–3	Heptachlor epoxide	U	7.11	ug/kg	2.22	7.11	1
5103–74–2	gamma–Chlordane	U	7.11	ug/kg	1.78	7.11	1
5103–71–9	alpha–Chlordane	U	7.11	ug/kg	1.78	7.11	1
959–98–8	Endosulfan I	U	7.11	ug/kg	1.78	7.11	1
72–55–9	4,4'–DDE	U	14.2	ug/kg	3.55	14.2	1
60–57–1	Dieldrin	U	14.2	ug/kg	3.55	14.2	1
72–20–8	Endrin	U	14.2	ug/kg	3.55	14.2	1
72–54–8	4,4'–DDD	U	14.2	ug/kg	3.55	14.2	1
33213–65–9	Endosulfan II	U	14.2	ug/kg	3.55	14.2	1
7421–93–4	Endrin aldehyde	U	14.2	ug/kg	3.55	14.2	1
50–29–3	4,4'–DDT	J	6.92	ug/kg	3.55	14.2	1
1031–07–8	Endosulfan sulfate	U	14.2	ug/kg	3.55	14.2	1
72–43–5	Methoxychlor	U	71.1	ug/kg	17.8	71.1	1
53494–70–5	Endrin ketone	U	14.2	ug/kg	3.55	14.2	1
8001–35–2	Toxaphene	U	178	ug/kg	59.2	178	1

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CLP-1

Data file : /chem/ecd5a.i/112909.b/031f3101.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 30-NOV-2009 00:08
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241524002|10|
Misc Info : |ECD81A_1SF|926807|SVPF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 31
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	6.23420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	7446979	18.0457	32.0	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	3465983	20.4504	36.3	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.212	5.227	-0.015	958347	3.89716	6.92	80.00- 120.00	100.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd5a.i/112909.b/031f3101.d
Date : 30-NOV-2009 00:08
Client ID: WST03-10-2132
Sample Info: |2415240021101|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

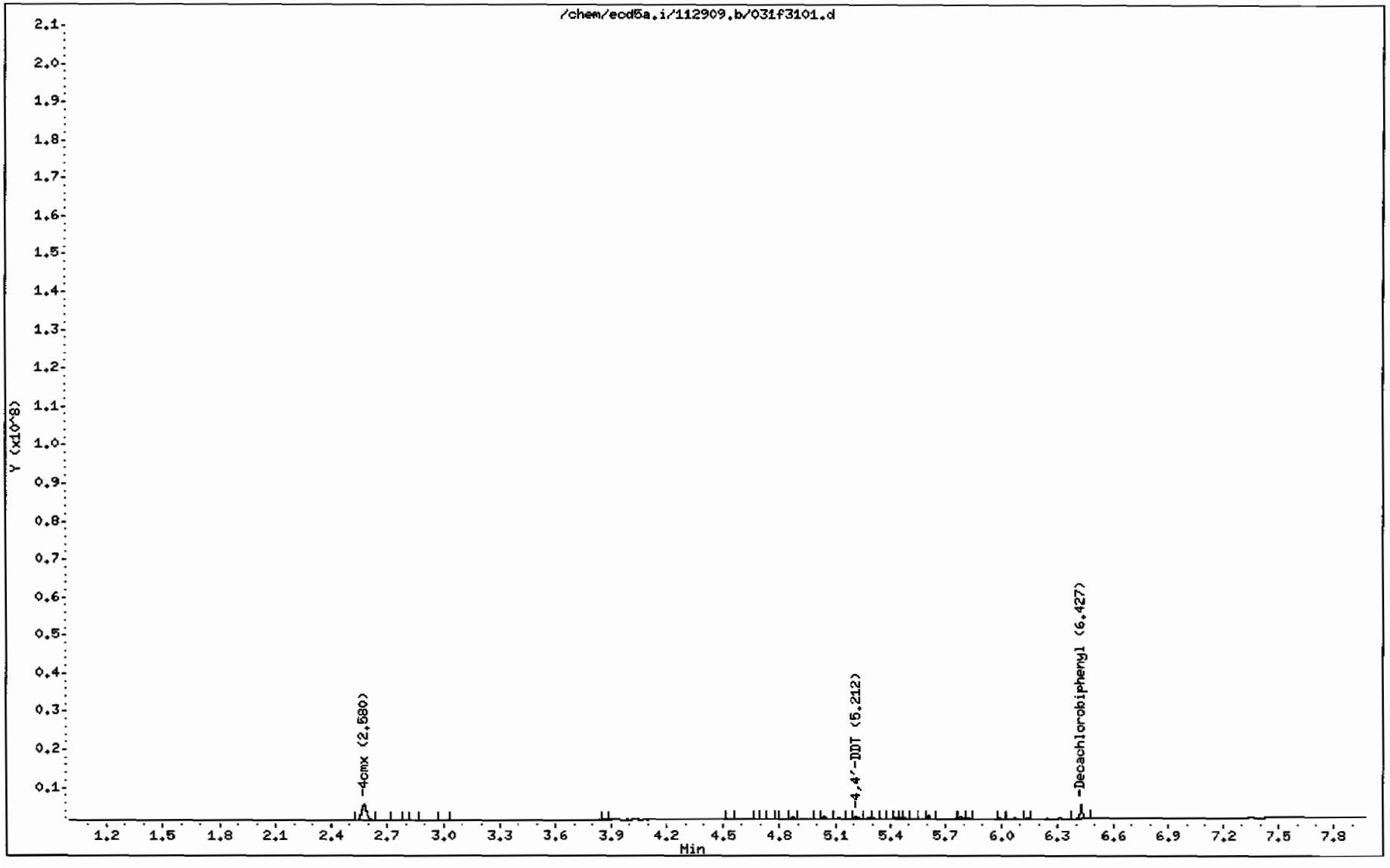

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/031b3101.d
Lab Smp Id: 241524002 Client Smp ID: WST03-10-2132
Inj Date : 30-NOV-2009 00:08
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241524002|10|
Misc Info : |ECD81A_1SF|926807|SVPF|LANL|SOIL|WST03-10-2132|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 31
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	6.23420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.125	-0.001	87008637	19.2704	34.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	54209606	16.9182	30.0	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.945	4.944	0.001	10672619	4.16219	7.39	80.00- 120.00	100.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd5a.i/112909.b/031b3101.d
Date : 30-NOV-2009 00:08
Client ID: WST03-10-2132
Sample Info: |241524002|101|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

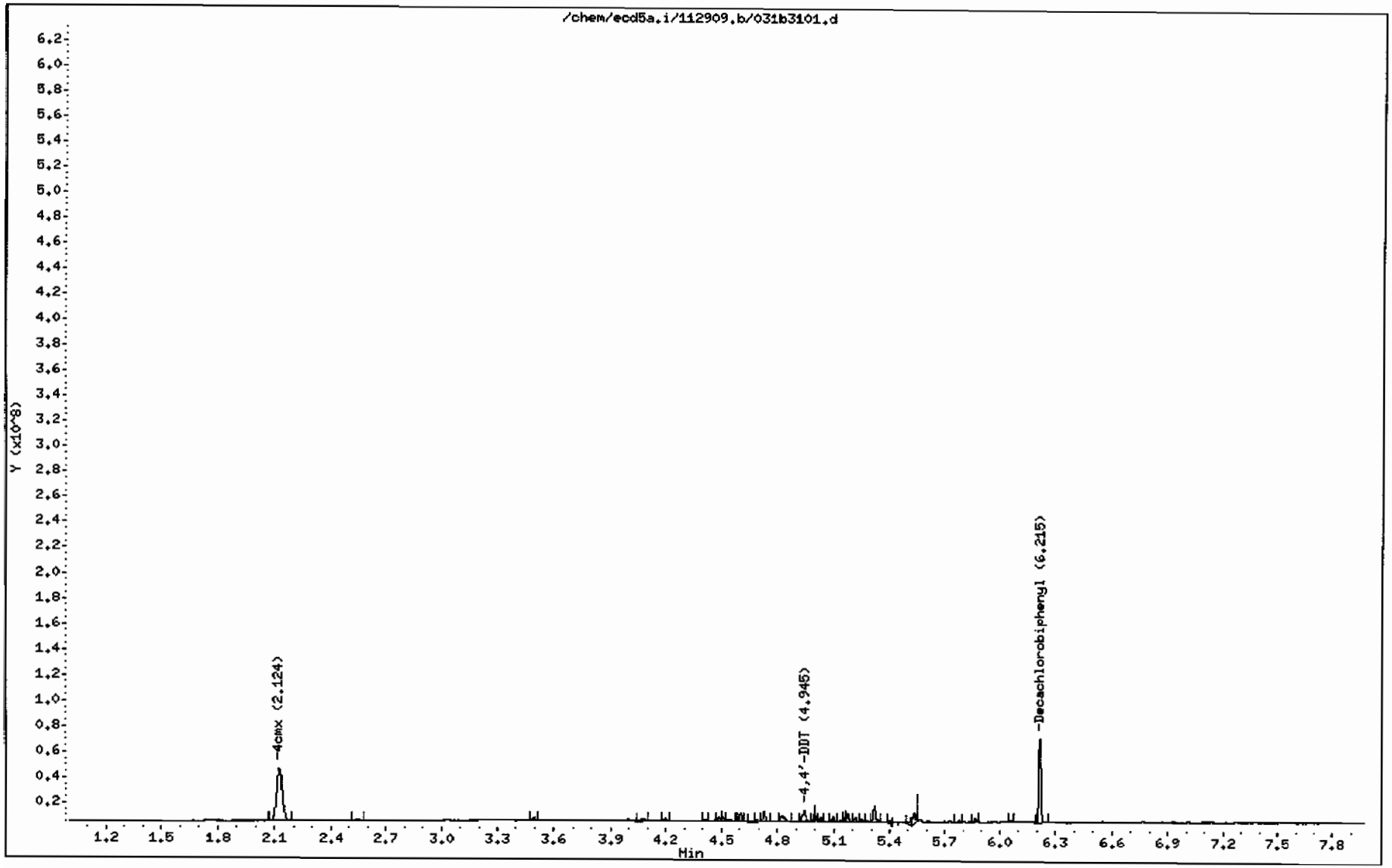

STANDARDS DATA

Report Date: 30-Nov-2009 10:56

Calibration History

Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
25-NOV-2009 03:16	gapa	/chem/ecd5a.i/112409a.b/021f2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006f0601.d
28-NOV-2009 15:27	chlor	/chem/ecd5a.i/112809.b/016f1601.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010f1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006f0601.d
Cal Level: 2 , Cal Amount: 10.00000		
25-NOV-2009 03:28	gapa	/chem/ecd5a.i/112409a.b/022f2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007f0701.d
28-NOV-2009 15:39	chlor	/chem/ecd5a.i/112809.b/017f1701.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011f1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007f0701.d
Cal Level: 3 , Cal Amount: 50.00000		
25-NOV-2009 03:40	gapa	/chem/ecd5a.i/112409a.b/023f2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008f0801.d
28-NOV-2009 15:51	chlor	/chem/ecd5a.i/112809.b/018f1801.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012f1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008f0801.d
Cal Level: 4 , Cal Amount: 100.00000		
25-NOV-2009 03:52	gapa	/chem/ecd5a.i/112409a.b/024f2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024f2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023f2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022f2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015f1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013f1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009f0901.d
28-NOV-2009 16:03	chlor	/chem/ecd5a.i/112809.b/019f1901.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013f1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009f0901.d
Cal Level: 5 , Cal Amount: 200.00000		
25-NOV-2009 04:04	gapa	/chem/ecd5a.i/112409a.b/025f2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010f1001.d
28-NOV-2009 16:15	chlor	/chem/ecd5a.i/112809.b/020f2001.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014f1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010f1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 03:58	indab	/chem/ecd5a.i/112909.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 02:34	indab	/chem/ecd5a.i/112909.b/043f4301.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 06:57	indab	/chem/ecd5a.i/112909.b/065f6501.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 05:45	indab	/chem/ecd5a.i/112909.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 00:35	indab	/chem/ecd5a.i/112909.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 22:56	indab	/chem/ecd5a.i/112909.b/025f2501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 21:06	indab	/chem/ecd5a.i/112909.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:53	chlor	/chem/ecd5a.i/112909.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:41	tox	/chem/ecd5a.i/112909.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 20:05	indab	/chem/ecd5a.i/112909.b/011f1101.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:29	indab	/chem/ecd5a.i/112909.b/003f0301.d

Report Date: 30-Nov-2009 10:54

Calibration History

Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
25-NOV-2009 03:16	gapa	/chem/ecd5a.i/112409a.b/021b2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006b0601.d
28-NOV-2009 15:27	chlor	/chem/ecd5a.i/112809.b/016b1601.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010b1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006b0601.d
Cal Level: 2 , Cal Amount: 10.00000		
25-NOV-2009 03:28	gapa	/chem/ecd5a.i/112409a.b/022b2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007b0701.d
28-NOV-2009 15:39	chlor	/chem/ecd5a.i/112809.b/017b1701.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011b1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007b0701.d
Cal Level: 3 , Cal Amount: 50.00000		
25-NOV-2009 03:40	gapa	/chem/ecd5a.i/112409a.b/023b2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008b0801.d
28-NOV-2009 15:51	chlor	/chem/ecd5a.i/112809.b/018b1801.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012b1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008b0801.d
Cal Level: 4 , Cal Amount: 100.00000		
25-NOV-2009 03:52	gapa	/chem/ecd5a.i/112409a.b/024b2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024b2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023b2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022b2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015b1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013b1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009b0901.d
28-NOV-2009 16:03	chlor	/chem/ecd5a.i/112809.b/019b1901.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013b1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009b0901.d
Cal Level: 5 , Cal Amount: 200.00000		
25-NOV-2009 04:04	gapa	/chem/ecd5a.i/112409a.b/025b2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010b1001.d
28-NOV-2009 16:15	chlor	/chem/ecd5a.i/112809.b/020b2001.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014b1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010b1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 03:58	indab	/chem/ecd5a.i/112909.b/050b5001.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 02:34	indab	/chem/ecd5a.i/112909.b/043b4301.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 05:45	indab	/chem/ecd5a.i/112909.b/059b5901.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 06:57	indab	/chem/ecd5a.i/112909.b/065b6501.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 00:35	indab	/chem/ecd5a.i/112909.b/033b3301.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 22:56	indab	/chem/ecd5a.i/112909.b/025b2501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 21:06	indab	/chem/ecd5a.i/112909.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:53	chlor	/chem/ecd5a.i/112909.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:41	tox	/chem/ecd5a.i/112909.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 20:05	indab	/chem/ecd5a.i/112909.b/011b1101.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:29	indab	/chem/ecd5a.i/112909.b/003b0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 09:45 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.579	2.549-2.609	4.127e+05
63 2,4,5-Trichlorophenol	1.476	1.376-1.576	
59 Hexachlorobenzene	3.074	2.974-3.174	4.020e+05
2 Aroclor-1221	2.631	2.601-2.661	5.910e+03
	2.767	2.736-2.796	3.363e+03
	2.802	2.772-2.832	1.422e+04
3 Aroclor-1016	3.102	3.072-3.132	1.760e+04
	3.460	3.430-3.490	2.200e+04
	3.686	3.656-3.716	8.402e+03
	3.702	3.672-3.732	8.144e+03
	3.839	3.809-3.869	1.168e+04
4 Aroclor-1232	3.104	3.074-3.134	7.998e+03
	3.248	3.218-3.278	2.167e+03
	3.459	3.430-3.490	1.042e+04
	3.555	3.525-3.585	6.943e+03
	4.119	4.089-4.149	4.959e+03
5 alpha-BHC	3.169	3.139-3.199	5.337e+05
6 Aroclor-1242	3.103	3.003-3.203	1.426e+04
	3.460	3.360-3.560	1.830e+04
	3.600	3.500-3.700	7.474e+03
	4.118	4.018-4.218	9.828e+03
	4.137	4.037-4.237	9.417e+03
7 gamma-BHC (Lindane)	3.454	3.424-3.484	4.666e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.770	3.670-3.870	1.466e+04
	4.429	4.329-4.529	8.179e+03
	4.553	4.453-4.653	4.178e+04
	4.638	4.538-4.738	6.428e+04
	5.120	5.020-5.220	7.733e+03
9 Aroclor-1248	3.686	3.586-3.786	1.281e+04
	3.839	3.739-3.939	1.679e+04
	3.897	3.797-3.997	1.095e+04
	4.119	4.019-4.219	2.029e+04
	4.509	4.409-4.609	9.814e+03
10 Heptachlor	3.831	3.801-3.861	4.090e+05
11 Aldrin	4.051	4.021-4.081	4.406e+05
12 beta-BHC	3.532	3.502-3.562	2.122e+05
13 delta-BHC	3.674	3.644-3.704	4.909e+05
14 Heptachlor epoxide	4.472	4.442-4.502	3.972e+05
15 Aroclor-1254	4.090	4.060-4.120	1.481e+04
	4.257	4.227-4.287	2.571e+04
	4.509	4.479-4.539	2.679e+04
	4.679	4.649-4.709	2.010e+04
	4.960	4.930-4.990	2.920e+04
16 Endosulfan I	4.728	4.698-4.758	3.588e+05
17 gamma-Chlordane	4.554	4.524-4.584	3.909e+05
18 alpha-Chlordane	4.639	4.609-4.669	3.796e+05
19 4,4'-DDE	4.689	4.659-4.719	3.941e+05
20 Dieldrin	4.879	4.849-4.909	3.839e+05
21 Aroclor-1260	4.621	4.521-4.721	2.245e+04
	4.788	4.688-4.888	3.535e+04
	4.866	4.766-4.966	1.482e+04
	4.960	4.860-5.060	3.945e+04
	5.358	5.258-5.458	4.235e+04
22 Endrin	5.024	4.994-5.054	3.283e+05
23 Toxaphene	4.667	4.637-4.697	2.144e+03
	4.882	4.852-4.912	5.628e+03
	4.938	4.908-4.968	5.158e+03
	4.975	4.945-5.005	6.906e+03
	5.156	5.126-5.186	1.145e+04
24 Endosulfan II	5.163	5.133-5.193	3.108e+05
25 4,4'-DDD	5.059	5.029-5.089	3.085e+05
26 4,4'-DDT	5.227	5.197-5.257	2.459e+05
27 Endrin aldehyde	5.416	5.386-5.446	2.729e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.510	5.480-5.540	1.181e+05
	29 Endosulfan sulfate	5.675	5.645-5.705	2.955e+05
	30 Aroclor-1268	5.050	4.950-5.150	
		5.067	4.967-5.167	
		5.185	5.085-5.285	
		5.378	5.278-5.478	
		5.531	5.431-5.631	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	5.846	5.816-5.876	3.247e+05
	51 Mirex	5.669	5.639-5.699	2.376e+05
	52 C-Nonachlor	5.096	5.066-5.126	3.839e+05
	53 O-Chlordane	4.461	4.431-4.491	3.071e+05
	54 T-Nonachlor	4.684	4.654-4.714	3.294e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.523	4.493-4.553	2.226e+05
	58 2,4-DDD	4.851	4.821-4.881	1.896e+05
	57 2,4-DDT	5.008	4.978-5.038	1.953e+05
$	32 Decachlorobiphenyl	6.427	6.397-6.457	1.695e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 09:42 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	92700.000000
Initial:End Threshold	46350.000000
Initial:Area Threshold	927000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.125	2.095-2.155	4.515e+06
61 2,4,5-Trichlorophenol	1.631	1.531-1.731	
59 Hexachlorobenzene	2.700	2.670-2.730	4.295e+06
2 Aroclor-1221	3.136	3.107-3.167	3.819e+04
	3.255	3.225-3.285	2.282e+04
	3.304	3.274-3.334	7.878e+04
3 Aroclor-1016	3.947	3.917-3.977	1.293e+05
	4.040	4.010-4.070	8.559e+04
	4.110	4.080-4.140	5.407e+04
	4.171	4.141-4.201	5.109e+04
	4.351	4.321-4.381	6.850e+04
4 Aroclor-1232	3.304	3.275-3.334	5.230e+04
	3.949	3.919-3.979	5.701e+04
	4.040	4.010-4.070	3.929e+04
	4.350	4.320-4.380	3.045e+04
	4.622	4.592-4.652	3.317e+04
5 alpha-BHC	2.796	2.766-2.826	6.310e+06
6 Aroclor-1242	3.618	3.588-3.648	8.644e+04
	4.040	4.010-4.070	6.791e+04
	4.109	4.079-4.139	4.340e+04
	4.350	4.320-4.380	5.437e+04
	4.430	4.400-4.460	5.974e+04
7 gamma-BHC (Lindane)	3.110	3.080-3.140	5.481e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.337	3.307-3.367	1.607e+05
	4.055	4.025-4.085	8.180e+04
	4.198	4.168-4.228	4.016e+05
	4.292	4.262-4.322	3.207e+05
	4.841	4.811-4.871	7.676e+04
9 Aroclor-1248	4.172	4.142-4.202	7.431e+04
	4.351	4.321-4.381	9.433e+04
	4.431	4.401-4.461	1.002e+05
	4.592	4.562-4.622	1.083e+05
	4.768	4.738-4.798	1.138e+05
10 Heptachlor	3.448	3.418-3.478	4.460e+06
11 Aldrin	3.679	3.649-3.709	4.984e+06
12 beta-BHC	3.189	3.159-3.219	2.438e+06
13 delta-BHC	3.414	3.384-3.444	5.431e+06
14 Heptachlor epoxide	4.074	4.044-4.104	4.197e+06
15 Aroclor-1254	4.619	4.589-4.649	9.484e+04
	4.734	4.704-4.764	1.078e+05
	5.023	4.993-5.053	1.477e+05
	5.158	5.128-5.188	1.045e+05
	5.481	5.451-5.511	1.267e+05
16 Endosulfan I	4.325	4.295-4.355	3.848e+06
17 gamma-Chlordane	4.199	4.169-4.229	4.466e+06
18 alpha-Chlordane	4.293	4.263-4.323	4.307e+06
19 4,4'-DDE	4.405	4.375-4.435	4.093e+06
20 Dieldrin	4.498	4.468-4.528	4.057e+06
21 Aroclor-1260	5.043	5.013-5.073	6.157e+04
	5.140	5.110-5.170	1.370e+05
	5.261	5.231-5.291	1.523e+05
	5.481	5.451-5.511	1.467e+05
	6.079	6.049-6.109	1.563e+05
22 Endrin	4.684	4.654-4.714	3.533e+06
23 Toxaphene	4.556	4.526-4.586	3.946e+04
	4.785	4.755-4.815	5.053e+04
	4.806	4.776-4.836	7.541e+04
	4.865	4.835-4.895	1.327e+05
	5.021	4.991-5.051	7.494e+04
24 Endosulfan II	4.814	4.784-4.844	3.350e+06
25 4,4'-DDD	4.758	4.728-4.788	3.483e+06
26 4,4'-DDT	4.944	4.914-4.974	2.564e+06
27 Endrin aldehyde	5.016	4.986-5.046	2.760e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
28 Methoxychlor	5.350	5.320-5.380	8.575e+05
29 Endosulfan sulfate	5.180	5.150-5.210	3.045e+06
30 Aroclor-1268	5.217	5.187-5.247	
	5.596	5.566-5.626	
	5.628	5.598-5.658	
	5.769	5.739-5.799	
	6.149	6.119-6.179	
60 Aroclor-1262	4.689	4.589-4.789	
	4.779	4.679-4.879	
	5.074	4.974-5.174	
	5.224	5.124-5.324	
	5.396	5.296-5.496	
31 Endrin ketone	5.496	5.466-5.526	3.461e+06
51 Mirex	5.513	5.483-5.543	2.564e+06
52 C-Nonachlor	4.778	4.748-4.808	4.380e+06
53 O-Chlordane	4.060	4.030-4.090	3.450e+06
54 T-Nonachlor	4.302	4.272-4.332	3.758e+06
55 1,2-Dichlorobenzene	6.619	6.589-6.649	
56 2,4-DDE	4.250	4.220-4.280	2.402e+06
58 2,4-DDD	4.569	4.539-4.599	2.199e+06
57 2,4-DDT	4.753	4.723-4.783	1.963e+06
$ 32 Decachlorobiphenyl	6.214	6.184-6.244	3.204e+06

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Cal Date : 30-Nov-2009 09:45 cla01575
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/112409a.b/021f2101.d
Level 2: /chem/ecd5a.i/112409a.b/022f2201.d
Level 3: /chem/ecd5a.i/112409a.b/023f2301.d
Level 4: /chem/ecd5a.i/112409a.b/024f2401.d
Level 5: /chem/ecd5a.i/112409a.b/025f2501.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	450385	399520	383873	392198	384222	402040	6.911
2 Aroclor-1221(1)	+++++	+++++	+++++	5910	+++++	5910	0.000
(2)	+++++	+++++	+++++	3363	+++++	3363	0.000
(3)	+++++	+++++	+++++	14218	+++++	14218	0.000
3 Aroclor-1016(1)	18316	18455	17930	17404	15906	17602	5.863
(2)	21725	22828	22310	22663	20456	21996	4.360
(3)	8841	8543	8438	8235	7951	8402	3.973
(4)	8274	8363	8182	8166	7736	8144	2.968
(5)	11759	11851	11816	11833	11120	11676	2.678
4 Aroclor-1232(1)	+++++	+++++	+++++	7998	+++++	7998	0.000
(2)	+++++	+++++	+++++	2167	+++++	2167	0.000
(3)	+++++	+++++	+++++	10425	+++++	10425	0.000
(4)	+++++	+++++	+++++	6943	+++++	6943	0.000
(5)	+++++	+++++	+++++	4959	+++++	4959	0.000
5 alpha-BHC	491739	508089	538268	551826	578483	533681	6.472
6 Aroclor-1242(1)	+++++	+++++	+++++	14263	+++++	14263	0.000
(2)	+++++	+++++	+++++	18303	+++++	18303	0.000
(3)	+++++	+++++	+++++	7474	+++++	7474	0.000
(4)	+++++	+++++	+++++	9828	+++++	9828	0.000
(5)	+++++	+++++	+++++	9417	+++++	9417	0.000
7 gamma-BHC (Lindane)	434473	449351	470116	477498	501412	466570	5.540
8 Chlordane (tech.)(1)	16016	14616	14119	13963	14584	14660	5.525
(2)	8682	8229	7858	7902	8222	8179	4.041
(3)	42084	40429	41161	43308	41939	41784	2.584
(4)	64973	62271	63704	66683	63783	64283	2.565
(5)	7932	7214	7327	7910	8281	7733	5.800

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Cal Date : 30-Nov-2009 09:45 cla01575
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	___ RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	12812	+++++	12812	0.000
(2)	+++++	+++++	+++++	16794	+++++	16794	0.000
(3)	+++++	+++++	+++++	10955	+++++	10955	0.000
(4)	+++++	+++++	+++++	20294	+++++	20294	0.000
(5)	+++++	+++++	+++++	9814	+++++	9814	0.000
10 Heptachlor	401838	409045	409978	403588	420372	408964	1.775
11 Aldrin	417768	429626	447022	449900	458668	440597	3.757
12 beta-BHC	216642	213028	206845	207774	216729	212204	2.225
13 delta-BHC	451379	466994	496935	508937	530192	490887	6.473
14 Heptachlor epoxide	393287	397980	398351	396957	399183	397152	0.580
15 Aroclor-1254(1)	+++++	+++++	+++++	14812	+++++	14812	0.000
(2)	+++++	+++++	+++++	25713	+++++	25713	0.000
(3)	+++++	+++++	+++++	26786	+++++	26786	0.000
(4)	+++++	+++++	+++++	20102	+++++	20102	0.000
(5)	+++++	+++++	+++++	29201	+++++	29201	0.000
16 Endosulfan I	353738	358685	360703	358983	361922	358806	0.871
17 gamma-Chlordane	383840	380376	389568	394798	405930	390903	2.569
18 alpha-Chlordane	359872	365634	385024	390477	396857	379573	4.227
19 4,4'-DDE	382759	400641	404947	394450	387652	394090	2.307
20 Dieldrin	374922	389692	392394	384495	378232	383947	1.926
21 Aroclor-1260(1)	22983	23321	22940	22516	20469	22446	5.085
(2)	35726	36888	36310	35624	32213	35352	5.167
(3)	14778	14965	14903	14964	14487	14820	1.354
(4)	39548	40617	40289	39914	36902	39454	3.756
(5)	42946	43953	43513	42694	38645	42350	5.027
22 Endrin	326619	336344	333566	325148	319734	328282	2.035
23 Toxaphene(1)	2264	2121	2189	2025	2123	2144	4.138
(2)	6590	5395	5422	5385	5348	5628	9.569
(3)	5804	4927	4976	5029	5056	5158	7.061
(4)	7353	6689	6859	6817	6814	6906	3.735
(5)	12002	11128	11116	11290	11735	11454	3.456
24 Endosulfan II	290780	301637	325836	322726	312862	310768	4.711
25 4,4'-DDD	296756	310832	315715	311519	307886	308541	2.320

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Cal Date : 30-Nov-2009 09:45 cla01575
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
26 4,4'-DDT	231690	251563	248827	237254	260211	245909	4.646
27 Endrin aldehyde	281843	279990	271328	266247	265173	272916	2.819
28 Methoxychlor	127039	129131	114263	107759	112493	118137	7.971
29 Endosulfan sulfate	301362	300700	292392	289061	294158	295535	1.809
30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Endrin ketone	328518	338793	324847	313038	318073	324654	3.054
51 Mirex	262176	235041	229178	232634	229074	237621	5.872
52 C-Nonachlor	390676	374930	384441	390152	379281	383896	1.781
53 O-Chlordane	332441	308555	300992	302451	291276	307143	5.027
54 T-Nonachlor	342524	326792	325823	330540	321567	329449	2.421
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 2,4-DDE	241403	226089	219770	219122	206837	222644	5.656
58 2,4-DDD	206768	190932	185096	186411	178745	189590	5.562
57 2,4-DDT	204801	186079	195984	195661	193736	195252	3.420
M 62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 1 4cmx	415446	413069	409897	408925	416029	412673	0.774
$ 32 Decachlorobiphenyl	189589	175166	157954	158782	165921	169482	7.787

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Cal Date : 30-Nov-2009 11:29 cla01575

Calibration File Names:
Level 1: /chem/ecd5a.i/112409a.b/021b2101.d
Level 2: /chem/ecd5a.i/112409a.b/022b2201.d
Level 3: /chem/ecd5a.i/112409a.b/023b2301.d
Level 4: /chem/ecd5a.i/112409a.b/024b2401.d
Level 5: /chem/ecd5a.i/112409a.b/025b2501.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	5438712	4353137	3871895	3920633	3892862	AVRG		4295448		15.58373
2 Aroclor-1221 (1)	+++++	+++++	+++++	38194	+++++	AVRG		38194		0.000e+00
(2)	+++++	+++++	+++++	22822	+++++	AVRG		22822		0.000e+00
(3)	+++++	+++++	+++++	78778	+++++	AVRG		78778		0.000e+00
3 Aroclor-1016 (1)	135228	136032	131291	128421	115286	AVRG		129252		6.49152
(2)	94115	91053	86081	82205	74492	AVRG		85590		9.00075
(3)	59100	56752	54061	51882	48540	AVRG		54067		7.61842
(4)	56717	54302	51105	48729	44616	AVRG		51094		9.25654
(5)	75245	71571	68782	66056	60864	AVRG		68504		7.97140
4 Aroclor-1232 (1)	+++++	+++++	+++++	52302	+++++	AVRG		52302		0.000e+00
(2)	+++++	+++++	+++++	57011	+++++	AVRG		57011		0.000e+00
(3)	+++++	+++++	+++++	39294	+++++	AVRG		39294		0.000e+00
(4)	+++++	+++++	+++++	30449	+++++	AVRG		30449		0.000e+00
(5)	+++++	+++++	+++++	33167	+++++	AVRG		33167		0.000e+00
5 alpha-BHC	6838675	6514616	5966818	5953702	6277942	AVRG		6310351		5.96694
6 Aroclor-1242 (1)	+++++	+++++	+++++	86436	+++++	AVRG		86436		0.000e+00
(2)	+++++	+++++	+++++	67908	+++++	AVRG		67908		0.000e+00
(3)	+++++	+++++	+++++	43403	+++++	AVRG		43403		0.000e+00
(4)	+++++	+++++	+++++	54366	+++++	AVRG		54366		0.000e+00
(5)	+++++	+++++	+++++	59740	+++++	AVRG		59740		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Cal Date : 30-Nov-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	5956503	5680115	5177596	5150340	5441473	AVRG		5481205		6.24514
8 Chlordane (tech.) (1)	10682671	20228056	90001928	177415523	485919767	LINR	-46.03688	160700		0.99910
(2)	5886156	10615860	44760865	89255968	247575965	LINR	-43.28250	81805		0.99946
(3)	26899504	49949762	216304304	441477112	1.213e+09	LINR	-39.71281	401615		0.99921
(4)	21492276	39392355	168763135	342725498	967990585	LINR	-30.70914	320672		0.99969
(5)	7666172	11209062	44345941	87145115	234012675	LINR	-71.44643	76765		0.99903
9 Aroclor-1248 (1)	+++++	+++++	+++++	74311	+++++	AVRG		74311		0.000e+00
(2)	+++++	+++++	+++++	94327	+++++	AVRG		94327		0.000e+00
(3)	+++++	+++++	+++++	100218	+++++	AVRG		100218		0.000e+00
(4)	+++++	+++++	+++++	108276	+++++	AVRG		108276		0.000e+00
(5)	+++++	+++++	+++++	113831	+++++	AVRG		113831		0.000e+00
10 Heptachlor	5149048	4797406	4251158	4014001	4089869	AVRG		4460296		11.03009
11 Aldrin	5677312	5304074	4731628	4606988	4599689	AVRG		4983938		9.70928
12 beta-BHC	2878486	2677456	2248224	2156766	2231469	AVRG		2438480		13.11538
13 delta-BHC	5804273	5440206	5129371	5241565	5538336	AVRG		5430750		4.85266
14 Heptachlor epoxide	4885668	4389663	3997179	3934738	3778905	AVRG		4197231		10.62092
15 Aroclor-1254 (1)	+++++	+++++	+++++	94842	+++++	AVRG		94842		0.000e+00
(2)	+++++	+++++	+++++	107760	+++++	AVRG		107760		0.000e+00
(3)	+++++	+++++	+++++	147710	+++++	AVRG		147710		0.000e+00
(4)	+++++	+++++	+++++	104486	+++++	AVRG		104486		0.000e+00
(5)	+++++	+++++	+++++	126738	+++++	AVRG		126738		0.000e+00
16 Endosulfan I	4610162	4233166	3599394	3427182	3370183	AVRG		3848018		14.21280
17 gamma-Chlordane	5032525	4703285	4197236	4143836	4252527	AVRG		4465882		8.66406
18 alpha-Chlordane	4910798	4568637	4032258	3968194	4053295	AVRG		4306636		9.62764

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Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	4632294	4324470	3955249	3808388	3745219	AVRG		4093124		9.18486
20 Dieldrin	4747158	4382405	3906755	3691581	3559389	AVRG		4057458		12.23597
21 Aroclor-1260 (1)	67909	63594	61133	58501	56721	AVRG		61572		7.14408
(2)	154760	142644	136554	130696	120581	AVRG		137047		9.34993
(3)	163780	157424	151415	148508	140329	AVRG		152291		5.84087
(4)	154736	148501	147397	143879	139185	AVRG		146740		3.92572
(5)	161375	159022	154521	152918	153834	AVRG		156334		2.34679
22 Endrin	4221086	3965357	3399432	3101165	2980147	AVRG		3533437		15.30850
23 Toxaphene (1)	6785796	24879794	45282173	83261070	122239904	LINR	-111	39464		0.99938
(2)	10918417	28773691	52336549	103429953	156813371	LINR	-74.20418	50534		0.99913
(3)	13788450	44397334	80246614	159783502	231242827	LINR	-84.19422	75411		0.99965
(4)	23787638	84302296	154527900	270829136	415826281	LINR	-110	132744		0.99822
(5)	10034600	41699252	74815893	149107018	228852094	LINR	-26.40626	74942		0.99931
24 Endosulfan II	3948644	3652790	3191531	3006518	2948819	AVRG		3349660		12.96230
25 4,4'-DDD	3923519	3713531	3334579	3215108	3228910	AVRG		3483129		9.14170
26 4,4'-DDT	2766420	2988879	2464778	2150060	2450778	AVRG		2564183		12.56926
27 Endrin aldehyde	3439834	3095732	2579920	2392309	2294032	AVRG		2760365		17.74426
28 Methoxychlor	52389891	130752199	487589182	847132898	1.757e+09	LINR	-35.80872	857542		0.99845
29 Endosulfan sulfate	3689590	3378872	2880276	2670674	2603092	AVRG		3044501		15.48914
30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

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Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	4283164	4001243	3287755	2903228	2829611	AVRG		3461000		18.87819
51 Mirex	3080659	2537776	2359043	2357090	2483115	AVRG		2563537		11.68607
52 C-Nonachlor	5126313	4319470	4103965	4167050	4183054	AVRG		4379971		9.69304
53 O-Chlordane	4285362	3541383	3191908	3166474	3064288	AVRG		3449883		14.50739
54 T-Nonachlor	4420840	3746219	3519225	3563865	3541133	AVRG		3758256		10.14278
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	3083590	2600064	2233982	2134728	1958842	AVRG		2402241		18.61473
58 2,4-DDD	2716678	2282555	2054870	2016029	1926985	AVRG		2199423		14.43544
57 2,4-DDT	2187975	1689203	2032476	1791066	2113875	AVRG		1962919		10.88862
$ 1 4cmx	5226176	4849317	4202259	4106647	4191288	AVRG		4515137		11.00102
$ 32 Decachlorobiphenyl	3539718	3281064	3038738	3054648	3106952	AVRG		3204224		6.57760

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
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Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Cal Date : 30-Nov-2009 11:29 cla01575

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :11/29/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1817

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.05	4.02	4.08	119	100	19.0
4,4'-DDE						
Endrin	5.02	4.99	5.05	110	100	10.0
4,4'-DDD						
4,4'-DDT	5.22	5.20	5.26	95.2	100	-4.8
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 1.70 Endrin % breakdown (1): 1.40

Combined % breakdown (1): 3.10

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :11/29/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1817

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.68	3.65	3.71	110	100	10.0
4,4'-DDE						
Endrin	4.68	4.65	4.71	111	100	11.0
4,4'-DDD						
4,4'-DDT	4.94	4.91	4.97	91.3	100	-8.7
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 4.20 Endrin % breakdown (1): 1.40

Combined % breakdown (1): 5.60

FORM VII PEST-1 OLM03.0

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 1841

Lab File ID: 004F0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D	
Toxaphene	2144.404	2471.690	0.01	15.3	15.0	<-
(2)	5627.754	4905.798	0.01	-12.8	15.0	
(3)	5158.097	5990.242	0.01	16.1	15.0	<-
(4)	6906.286	7325.832	0.01	6.1	15.0	
(5)	11454.281	12684.546	0.01	10.7	15.0	
4cmx	412673.21	420412.94	0.01	1.9	15.0	
Decachlorobiphenyl	169482.15	161672.52	0.01	-4.6	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 1841

Lab File ID: 004B0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Toxaphene	2150	2000	LINR	7.5	15.0
(2)	1970	2000	LINR	-1.5	15.0
(3)	2140	2000	LINR	7.0	15.0
(4)	1980	2000	LINR	-1.0	15.0
(5)	2070	2000	LINR	3.5	15.0
4cmx	183	200	AVRG	-8.5	15.0
Decachlorobiphenyl	184	200	AVRG	-8.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2005

Lab File ID: 011F1101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
alpha-BHC	533681.26	558273.31	0.01	4.6	15.0
beta-BHC	212203.58	210492.98	0.01	-0.8	15.0
delta-BHC	490887.35	513418.74	0.01	4.6	15.0
gamma-BHC (Lindane)	466570.17	486556.72	0.01	4.3	15.0
Heptachlor	408964.18	420883.45	0.01	2.9	15.0
Aldrin	440596.76	455050.09	0.01	3.3	15.0
Heptachlor epoxide	397151.66	401399.80	0.01	1.1	15.0
Endosulfan I	358806.17	363477.32	0.01	1.3	15.0
Dieldrin	383947.03	388798.10	0.01	1.3	15.0
4,4'-DDE	394089.94	398558.74	0.01	1.1	15.0
Endrin	328282.24	327754.23	0.01	-0.2	15.0
Endosulfan II	310768.15	316638.73	0.01	1.9	15.0
4,4'-DDD	308541.29	315566.17	0.01	2.3	15.0
Endosulfan sulfate	295534.62	295003.23	0.01	-0.2	15.0
4,4'-DDT	245908.91	264692.24	0.01	7.6	15.0
Methoxychlor	118137.10	113863.89	0.01	-3.6	15.0
Endrin ketone	324653.81	327153.95	0.01	0.8	15.0
Endrin aldehyde	272916.18	269720.95	0.01	-1.2	15.0
gamma-Chlordane	390902.58	400400.79	0.01	2.4	15.0
alpha-Chlordane	379572.68	391956.26	0.01	3.3	15.0
4cmx	412673.21	411137.98	0.01	-0.4	15.0
Decachlorobiphenyl	169482.15	162635.84	0.01	-4.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2005

Lab File ID: 011B1101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
alpha-BHC	96.0	100	AVRG	-4.0	15.0
beta-BHC	90.5	100	AVRG	-9.5	15.0
delta-BHC	99.4	100	AVRG	-0.6	15.0
gamma-BHC (Lindane)	96.1	100	AVRG	-3.9	15.0
Heptachlor	93.9	100	AVRG	-6.1	15.0
Aldrin	93.7	100	AVRG	-6.3	15.0
Heptachlor epoxide	93.6	100	AVRG	-6.4	15.0
Endosulfan I	90.4	100	AVRG	-9.6	15.0
Dieldrin	184	200	AVRG	-8.0	15.0
4,4'-DDE	189	200	AVRG	-5.5	15.0
Endrin	180	200	AVRG	-10.0	15.0
Endosulfan II	186	200	AVRG	-7.0	15.0
4,4'-DDD	190	200	AVRG	-5.0	15.0
Endosulfan sulfate	180	200	AVRG	-10.0	15.0
4,4'-DDT	202	200	AVRG	1.0	15.0
Methoxychlor	1090	1000	LINR	9.0	15.0
Endrin ketone	180	200	AVRG	-10.0	15.0
Endrin aldehyde	176	200	AVRG	-12.0	15.0
gamma-Chlordane	94.6	100	AVRG	-5.4	15.0
alpha-Chlordane	93.9	100	AVRG	-6.1	15.0
4cmx	184	200	AVRG	-8.0	15.0
Decachlorobiphenyl	195	200	AVRG	-2.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2106

Lab File ID: 016F1601 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	533681.26	570447.54	0.01	6.9	15.0	
beta-BHC	212203.58	215402.66	0.01	1.5	15.0	
delta-BHC	490887.35	524796.84	0.01	6.9	15.0	
gamma-BHC (Lindane)	466570.17	501525.94	0.01	7.5	15.0	
Heptachlor	408964.18	437480.21	0.01	7.0	15.0	
Aldrin	440596.76	462351.23	0.01	4.9	15.0	
Heptachlor epoxide	397151.66	409997.90	0.01	3.2	15.0	
Endosulfan I	358806.17	369736.64	0.01	3.0	15.0	
Dieldrin	383947.03	394426.18	0.01	2.7	15.0	
4,4'-DDE	394089.94	401280.56	0.01	1.8	15.0	
Endrin	328282.24	336585.52	0.01	2.5	15.0	
Endosulfan II	310768.15	316324.34	0.01	1.8	15.0	
4,4'-DDD	308541.29	322924.57	0.01	4.7	15.0	
Endosulfan sulfate	295534.62	301534.69	0.01	2.0	15.0	
4,4'-DDT	245908.91	285203.95	0.01	16.0	15.0	<-
Methoxychlor	118137.10	119675.44	0.01	1.3	15.0	
Endrin ketone	324653.81	314842.10	0.01	-3.0	15.0	
Endrin aldehyde	272916.18	275867.90	0.01	1.1	15.0	
gamma-Chlordane	390902.58	405786.93	0.01	3.8	15.0	
alpha-Chlordane	379572.68	394582.86	0.01	4.0	15.0	
4cmx	412673.21	416574.94	0.01	0.9	15.0	
Decachlorobiphenyl	169482.15	169205.78	0.01	-0.2	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2106

Lab File ID: 016B1601 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	96.0	100	AVRG	-4.0	15.0	
beta-BHC	90.5	100	AVRG	-9.5	15.0	
delta-BHC	96.0	100	AVRG	-4.0	15.0	
gamma-BHC (Lindane)	96.8	100	AVRG	-3.2	15.0	
Heptachlor	95.4	100	AVRG	-4.6	15.0	
Aldrin	91.3	100	AVRG	-8.7	15.0	
Heptachlor epoxide	81.8	100	AVRG	-18.2	15.0	<-
Endosulfan I	86.2	100	AVRG	-13.8	15.0	
Dieldrin	185	200	AVRG	-7.5	15.0	
4,4'-DDE	188	200	AVRG	-6.0	15.0	
Endrin	183	200	AVRG	-8.5	15.0	
Endosulfan II	183	200	AVRG	-8.5	15.0	
4,4'-DDD	192	200	AVRG	-4.0	15.0	
Endosulfan sulfate	184	200	AVRG	-8.0	15.0	
4,4'-DDT	227	200	AVRG	13.5	15.0	
Methoxychlor	1180	1000	LINR	18.0	15.0	<-
Endrin ketone	186	200	AVRG	-7.0	15.0	
Endrin aldehyde	178	200	AVRG	-11.0	15.0	
gamma-Chlordane	83.1	100	AVRG	-16.9	15.0	<-
alpha-Chlordane	85.8	100	AVRG	-14.2	15.0	
4cmx	183	200	AVRG	-8.5	15.0	
Decachlorobiphenyl	196	200	AVRG	-2.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2256

Lab File ID: 025F2501 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	533681.26	600350.69	0.01	12.5	15.0	
beta-BHC	212203.58	226498.36	0.01	6.7	15.0	
delta-BHC	490887.35	541703.67	0.01	10.4	15.0	
gamma-BHC (Lindane)	466570.17	541831.42	0.01	16.1	15.0	<-
Heptachlor	408964.18	424627.90	0.01	3.8	15.0	
Aldrin	440596.76	461876.71	0.01	4.8	15.0	
Heptachlor epoxide	397151.66	425031.12	0.01	7.0	15.0	
Endosulfan I	358806.17	390250.34	0.01	8.8	15.0	
Dieldrin	383947.03	405869.73	0.01	5.7	15.0	
4,4'-DDE	394089.94	406323.78	0.01	3.1	15.0	
Endrin	328282.24	365176.72	0.01	11.2	15.0	
Endosulfan II	310768.15	342735.93	0.01	10.3	15.0	
4,4'-DDD	308541.29	334581.66	0.01	8.4	15.0	
Endosulfan sulfate	295534.62	310362.14	0.01	5.0	15.0	
4,4'-DDT	245908.91	271820.96	0.01	10.5	15.0	
Methoxychlor	118137.10	121175.51	0.01	2.6	15.0	
Endrin ketone	324653.81	332872.28	0.01	2.5	15.0	
Endrin aldehyde	272916.18	279745.35	0.01	2.5	15.0	
gamma-Chlordane	390902.58	442185.34	0.01	13.1	15.0	
alpha-Chlordane	379572.68	386139.73	0.01	1.7	15.0	
4cmx	412673.21	426123.87	0.01	3.2	15.0	
Decachlorobiphenyl	169482.15	163034.61	0.01	-3.8	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2256

Lab File ID: 025B2501 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	102	100	AVRG	2.0	15.0	
beta-BHC	96.1	100	AVRG	-3.9	15.0	
delta-BHC	102	100	AVRG	2.0	15.0	
gamma-BHC (Lindane)	107	100	AVRG	7.0	15.0	
Heptachlor	96.2	100	AVRG	-3.8	15.0	
Aldrin	94.2	100	AVRG	-5.8	15.0	
Heptachlor epoxide	98.5	100	AVRG	-1.5	15.0	
Endosulfan I	95.6	100	AVRG	-4.4	15.0	
Dieldrin	188	200	AVRG	-6.0	15.0	
4,4'-DDE	194	200	AVRG	-3.0	15.0	
Endrin	195	200	AVRG	-2.5	15.0	
Endosulfan II	187	200	AVRG	-6.5	15.0	
4,4'-DDD	192	200	AVRG	-4.0	15.0	
Endosulfan sulfate	186	200	AVRG	-7.0	15.0	
4,4'-DDT	221	200	AVRG	10.5	15.0	
Methoxychlor	1180	1000	LINR	18.0	15.0	<-
Endrin ketone	180	200	AVRG	-10.0	15.0	
Endrin aldehyde	179	200	AVRG	-10.5	15.0	
gamma-Chlordane	102	100	AVRG	2.0	15.0	
alpha-Chlordane	89.3	100	AVRG	-10.7	15.0	
4cmx	191	200	AVRG	-4.5	15.0	
Decachlorobiphenyl	186	200	AVRG	-7.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/30/09 Time: 0035

Lab File ID: 033F3301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	533681.26	608054.42	0.01	13.9	15.0	
beta-BHC	212203.58	227592.14	0.01	7.2	15.0	
delta-BHC	490887.35	544579.73	0.01	10.9	15.0	
gamma-BHC (Lindane)	466570.17	539399.40	0.01	15.6	15.0	<-
Heptachlor	408964.18	412984.16	0.01	1.0	15.0	
Aldrin	440596.76	468848.88	0.01	6.4	15.0	
Heptachlor epoxide	397151.66	428467.74	0.01	7.9	15.0	
Endosulfan I	358806.17	392297.94	0.01	9.3	15.0	
Dieldrin	383947.03	407152.83	0.01	6.0	15.0	
4,4'-DDE	394089.94	412020.03	0.01	4.5	15.0	
Endrin	328282.24	364658.58	0.01	11.1	15.0	
Endosulfan II	310768.15	354050.31	0.01	13.9	15.0	
4,4'-DDD	308541.29	341719.54	0.01	10.8	15.0	
Endosulfan sulfate	295534.62	312052.34	0.01	5.6	15.0	
4,4'-DDT	245908.91	234377.81	0.01	-4.7	15.0	
Methoxychlor	118137.10	112585.73	0.01	-4.7	15.0	
Endrin ketone	324653.81	310596.67	0.01	-4.3	15.0	
Endrin aldehyde	272916.18	280750.17	0.01	2.9	15.0	
gamma-Chlordane	390902.58	444887.86	0.01	13.8	15.0	
alpha-Chlordane	379572.68	389009.52	0.01	2.5	15.0	
4cmx	412673.21	434055.49	0.01	5.2	15.0	
Decachlorobiphenyl	169482.15	170354.55	0.01	0.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-600

Instrument ID: ECD5A Calibration Date: 11/30/09 Time: 0035

Lab File ID: 033B3301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	103	100	AVRG	3.0	15.0	
beta-BHC	96.3	100	AVRG	-3.7	15.0	
delta-BHC	102	100	AVRG	2.0	15.0	
gamma-BHC (Lindane)	106	100	AVRG	6.0	15.0	
Heptachlor	91.7	100	AVRG	-8.3	15.0	
Aldrin	94.3	100	AVRG	-5.7	15.0	
Heptachlor epoxide	97.7	100	AVRG	-2.3	15.0	
Endosulfan I	96.7	100	AVRG	-3.3	15.0	
Dieldrin	188	200	AVRG	-6.0	15.0	
4,4'-DDE	196	200	AVRG	-2.0	15.0	
Endrin	192	200	AVRG	-4.0	15.0	
Endosulfan II	189	200	AVRG	-5.5	15.0	
4,4'-DDD	193	200	AVRG	-3.5	15.0	
Endosulfan sulfate	182	200	AVRG	-9.0	15.0	
4,4'-DDT	176	200	AVRG	-12.0	15.0	
Methoxychlor	996	1000	LINR	-0.4	15.0	
Endrin ketone	166	200	AVRG	-17.0	15.0	<-
Endrin aldehyde	178	200	AVRG	-11.0	15.0	
gamma-Chlordane	101	100	AVRG	1.0	15.0	
alpha-Chlordane	89.5	100	AVRG	-10.5	15.0	
4cmx	194	200	AVRG	-3.0	15.0	
Decachlorobiphenyl	179	200	AVRG	-10.5	15.0	

FORM VII PEST

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 29-NOV-2009 18:17
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.049	4.051	-0.002	52472707	119.095	119	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.686	4.689	-0.003	143987	0.36537	0.365	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.021	5.024	-0.003	36307817	110.599	110	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.055	5.059	-0.004	170168	0.55153	0.552	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.413	5.416	-0.003	132704	0.48624	0.486	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.224	5.227	-0.003	23417970	95.2303	95.2	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.844	5.846	-0.002	367728	1.13268	1.13	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.574	2.579	-0.005	85648051	207.544	208	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.424	6.427	-0.003	33241931	196.138	196	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/002f0201.d
Date : 29-NOV-2009 18:17
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

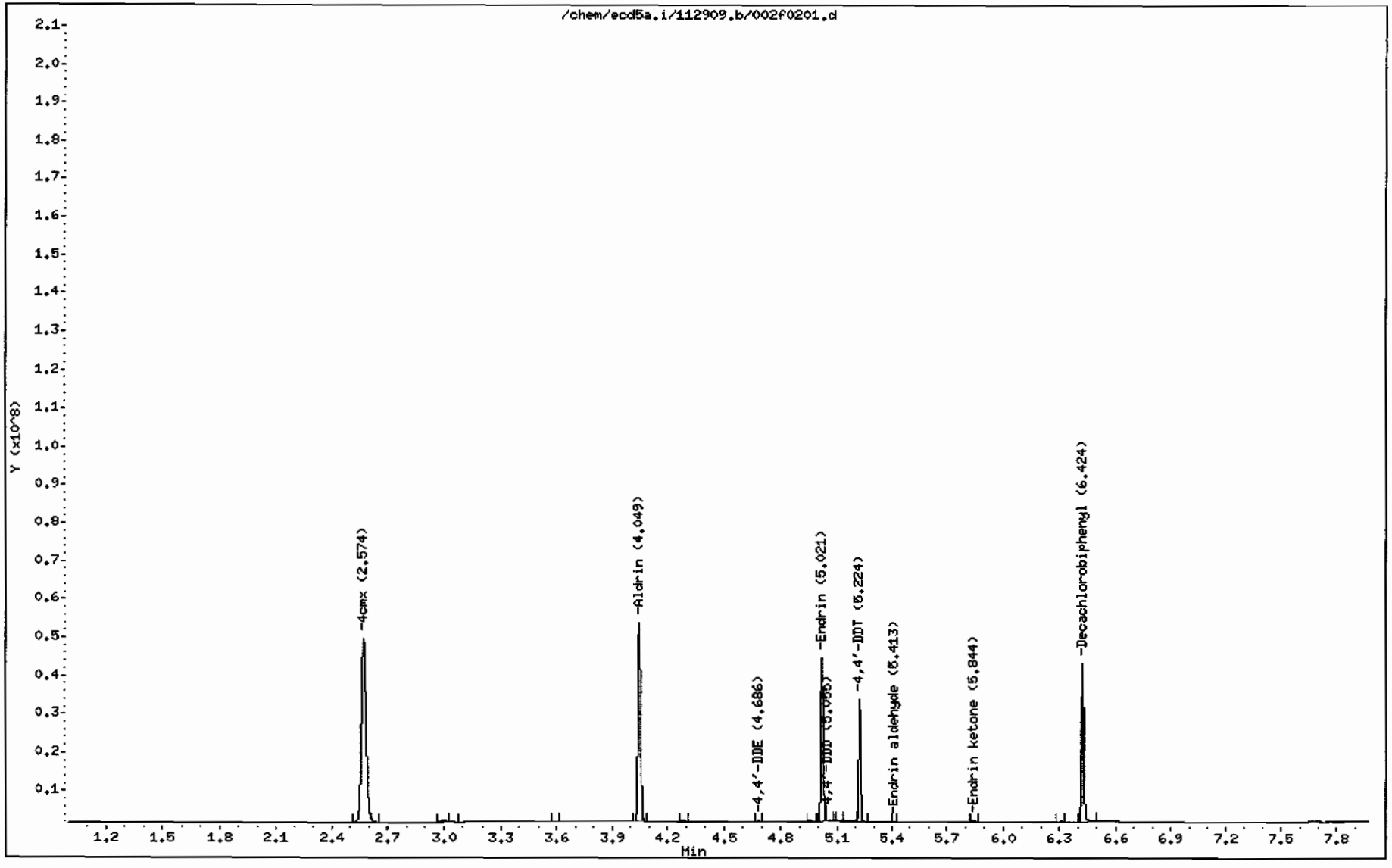

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 29-NOV-2009 18:17
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.678	3.679	-0.001	548988438	110.152	110	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.404	4.405	-0.001	2483074	0.60665	0.607	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.682	4.684	-0.002	390930421	110.637	111	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	7680511	2.20506	2.20	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.015	5.016	-0.001	1696783	0.61470	0.615	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.942	4.944	-0.002	234157642	91.3186	91.3	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.495	5.496	-0.001	5754462	1.66266	1.66	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.123	2.125	-0.002	845634743	187.289	187	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	637285452	198.889	199	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/002b0201.d

Date : 29-NOV-2009 18:17

Client ID: PEM01

Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

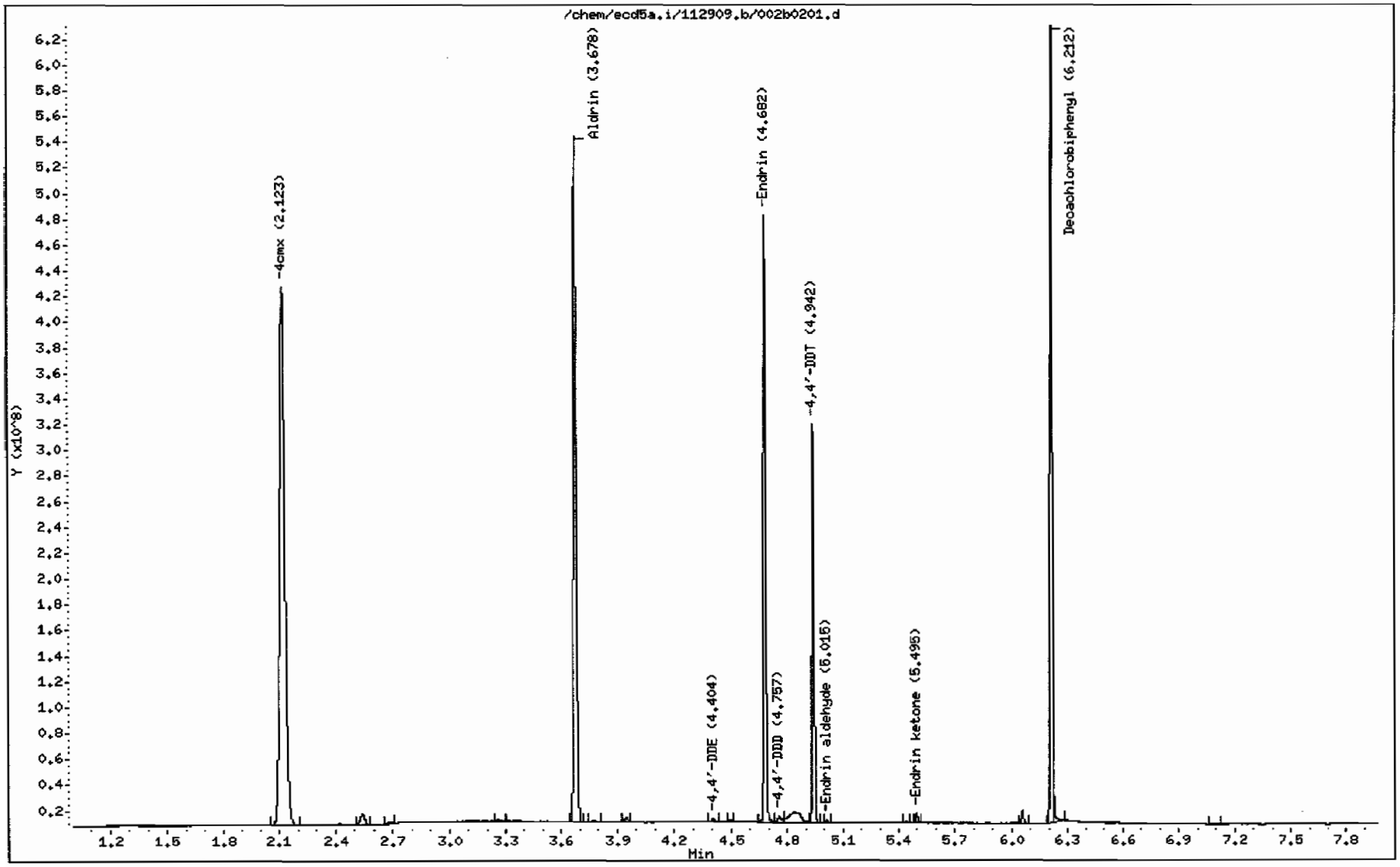

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/004f0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 29-NOV-2009 18:41
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.667	4.667	0.000	4943381	2000.00	2300	80.00- 120.00	100.00(M)
4.882	4.882	0.000	9811595	2000.00	1740	178.48- 218.48	198.48
4.938	4.938	0.000	11980484	2000.00	2320	222.35- 262.35	242.35
4.975	4.975	0.000	14651664	2000.00	2120	276.39- 316.39	296.39
5.156	5.156	0.000	25369092	2000.00	2210	493.19- 533.19	513.19
Average of Peak Amounts =					2.14e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	84082588	200.000	204	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	32334503	200.000	191	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/004f0401.d

Date : 29-NOV-2009 18:41

Client ID: TOXAPH01

Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

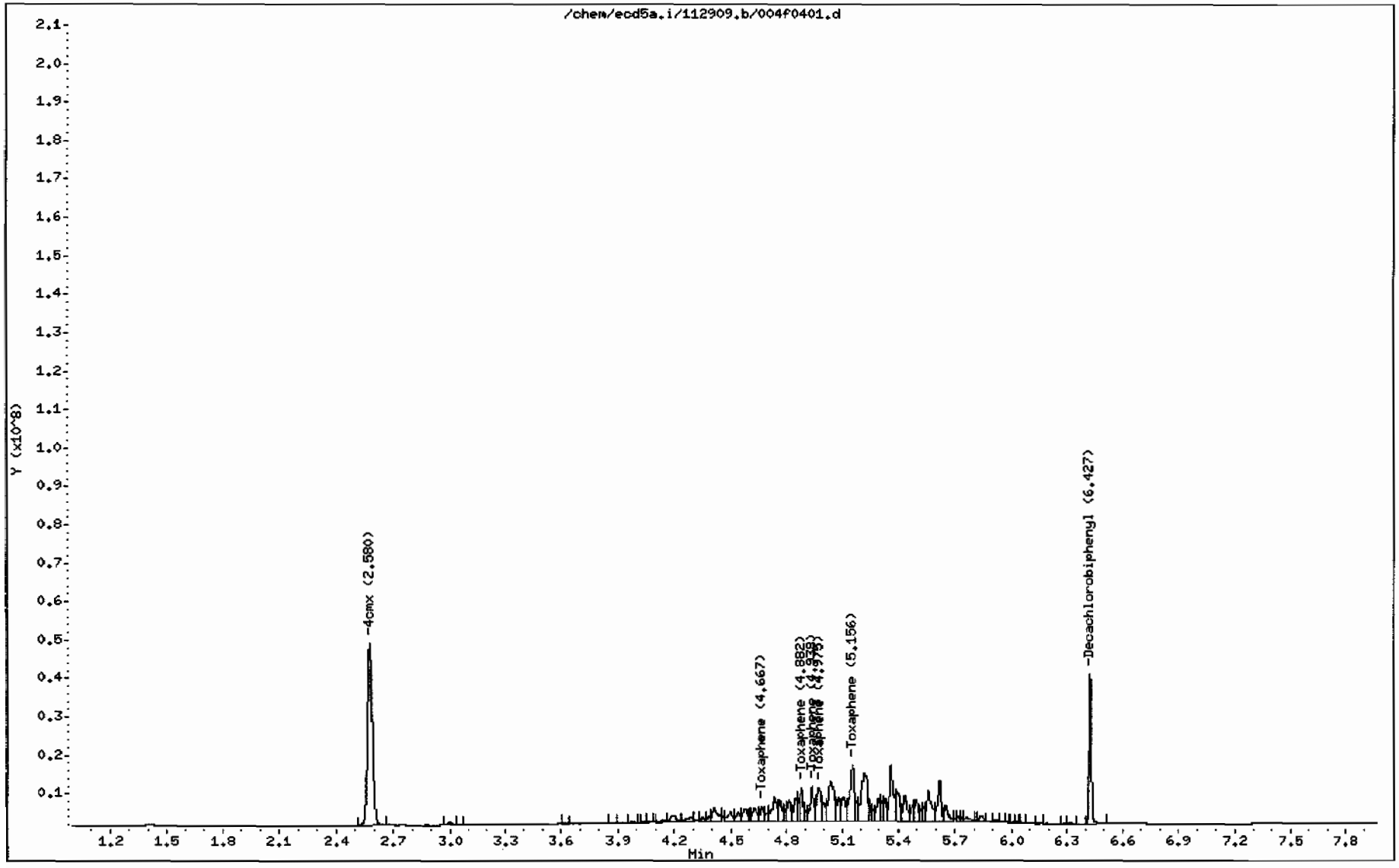

Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/004f0401.d
Operator: HXJ1
Injection Date: 29-NOV-2009 18:41
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

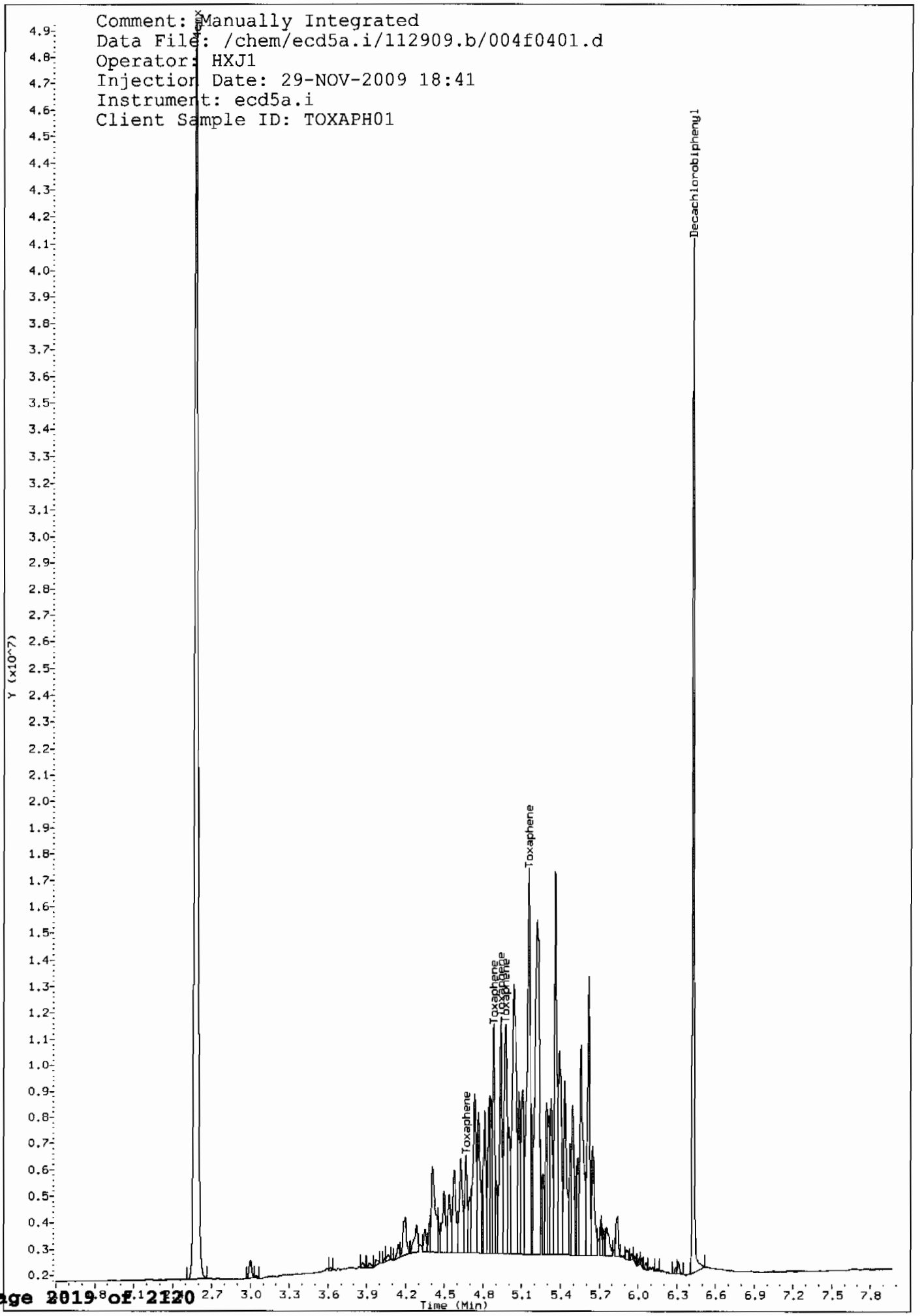

Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-004f0401.d
Operator: HXJ1
Injection Date: 29-NOV-2009 18:41
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

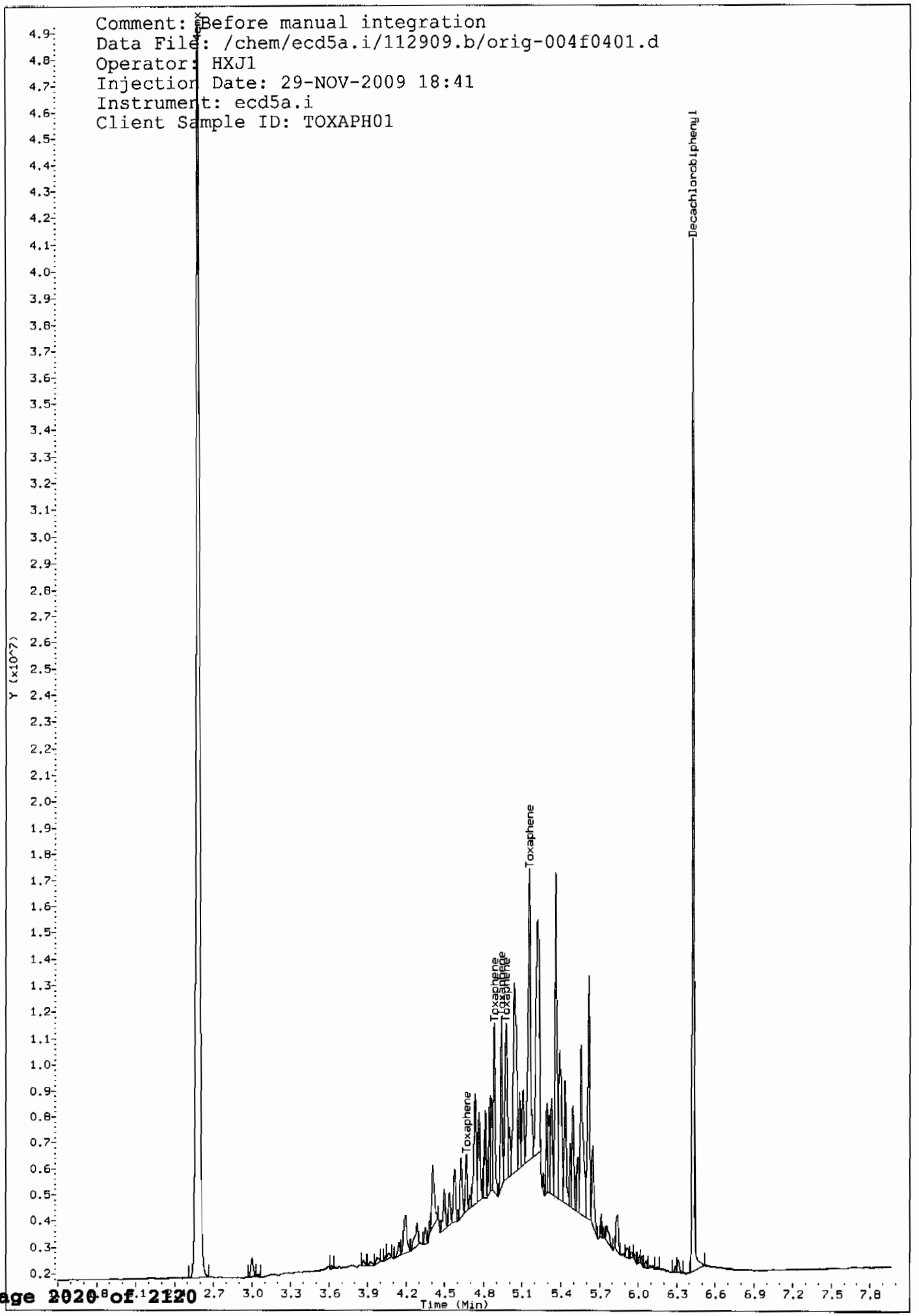

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/004b0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 29-NOV-2009 18:41
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.556	4.556	0.000	89312296	2000.00	2150	80.00- 120.00	100.00
4.785	4.785	0.000	103291653	2000.00	1970	95.65- 135.65	115.65
4.806	4.806	0.000	168095225	2000.00	2140	168.21- 208.21	188.21
4.865	4.865	0.000	277266125	2000.00	1980	290.45- 330.45	310.45
5.021	5.021	0.000	157296760	2000.00	2070	156.12- 196.12	176.12
Average of Peak Amounts =				2.06e+03			
$ 1 4cmx					CAS #: 877-09-8		
2.125	2.125	0.000	825328838	200.000	183	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	590929382	200.000	184	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/004b0401.d
Date : 29-NOV-2009 18:41
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

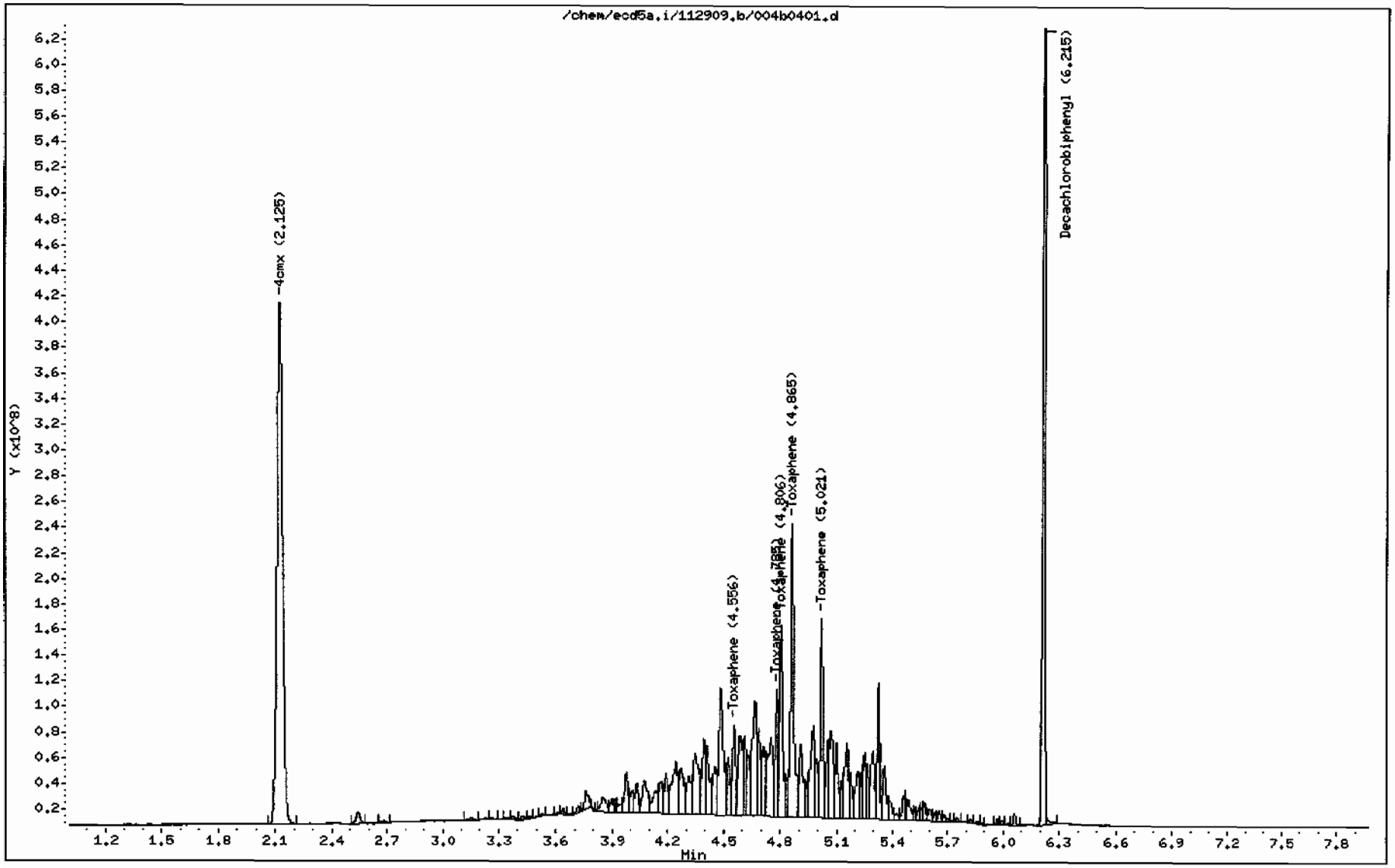

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/011f1101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 29-NOV-2009 20:05
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.169	3.169	0.000	55827331	100.000	105	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.454	3.454	0.000	48655672	100.000	104	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.532	3.532	0.000	21049298	100.000	99.2	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.831	3.831	0.000	42088345	100.000	103	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	51341874	100.000	104	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.051	4.051	0.000	45505009	100.000	103	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	40139980	100.000	101	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.554	4.554	0.000	40040079	100.000	102	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.639	4.639	0.000	39195626	100.000	103	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.728	4.728	0.000	36347732	100.000	101	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.689	4.689	0.000	79711749	200.000	202	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	77759620	200.000	202	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.024	5.024	0.000	65550846	200.000	200	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.059	5.059	0.000	63113235	200.000	204	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	63327746	200.000	204	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	53944189	200.000	198	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.227	5.227	0.000	52938449	200.000	215	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.675	5.675	0.000	59000646	200.000	200	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	113863888	1000.00	964	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	65430790	200.000	202	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	82227596	200.000	199	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	32527168	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/011f1101.d

Date : 29-NOV-2009 20:05

Client ID: INDAB01

Sample Info: IWPE091123-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

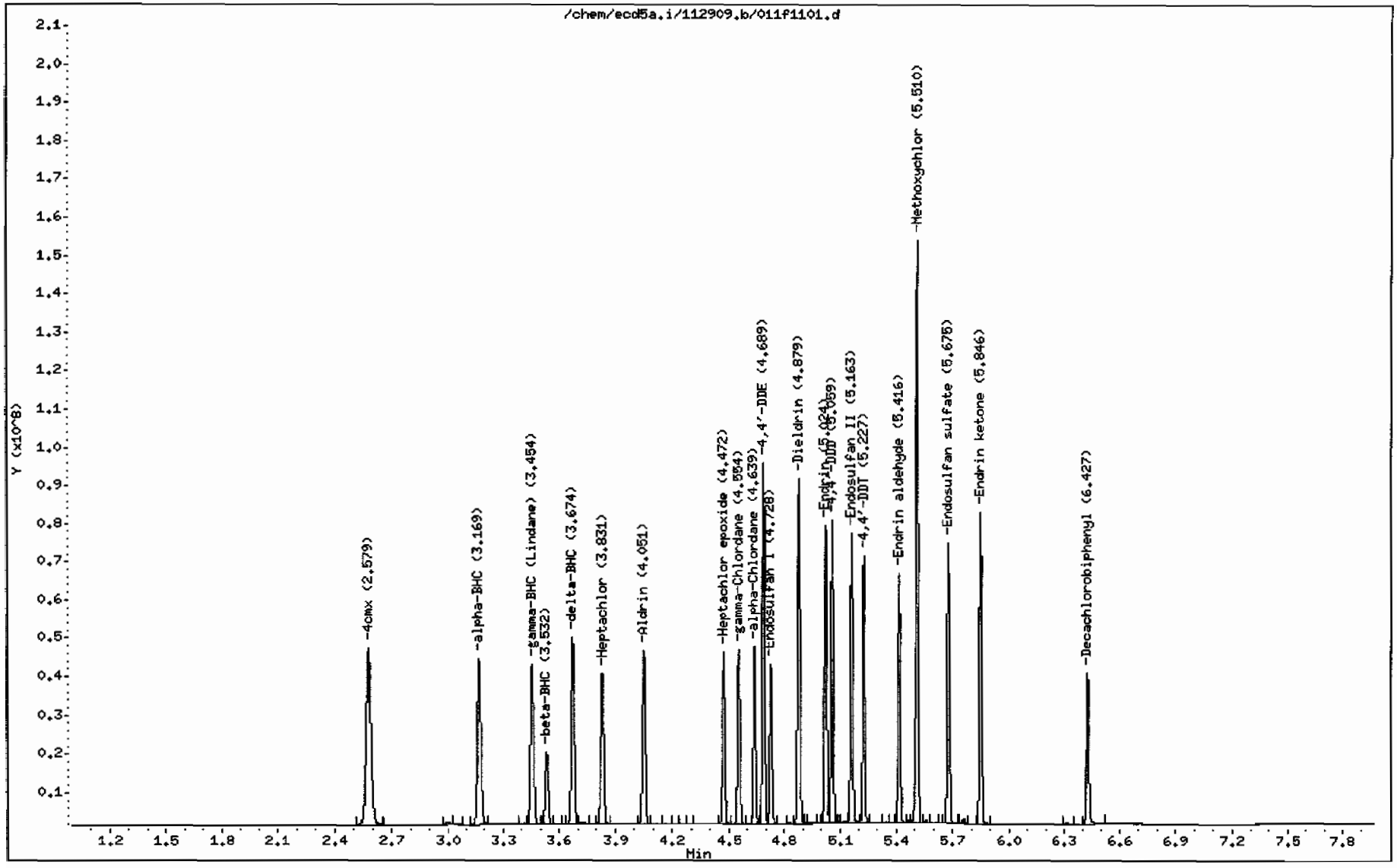

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CLP-2

Data file : /chem/ecd5a.i/112909.b/011b1101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 29-NOV-2009 20:05
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.796	2.796	0.000	605711906	100.000	96.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	526818233	100.000	96.1	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.189	3.189	0.000	220740689	100.000	90.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	418906676	100.000	93.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	539960001	100.000	99.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	467181496	100.000	93.7	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.074	4.074	0.000	393037996	100.000	93.6	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.199	4.199	0.000	422618252	100.000	94.6	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	404244859	100.000	93.9	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	347839005	100.000	90.4	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.405	4.405	0.000	775149199	200.000	189	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	748461437	200.000	184	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	637491918	200.000	180	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.758	4.758	0.000	663212197	200.000	190	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	622797569	200.000	186	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.016	5.016	0.000	486901332	200.000	176	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.944	4.944	0.000	517618647	200.000	202	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.180	5.180	0.000	548186393	200.000	180	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	962232025	1000.00	1090	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.496	5.496	0.000	621617081	200.000	180	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.125	2.125	0.000	830966072	200.000	184	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	626298136	200.000	195	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/011b1101.d
Date : 29-NOV-2009 20:06
Client ID: INDAB01
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

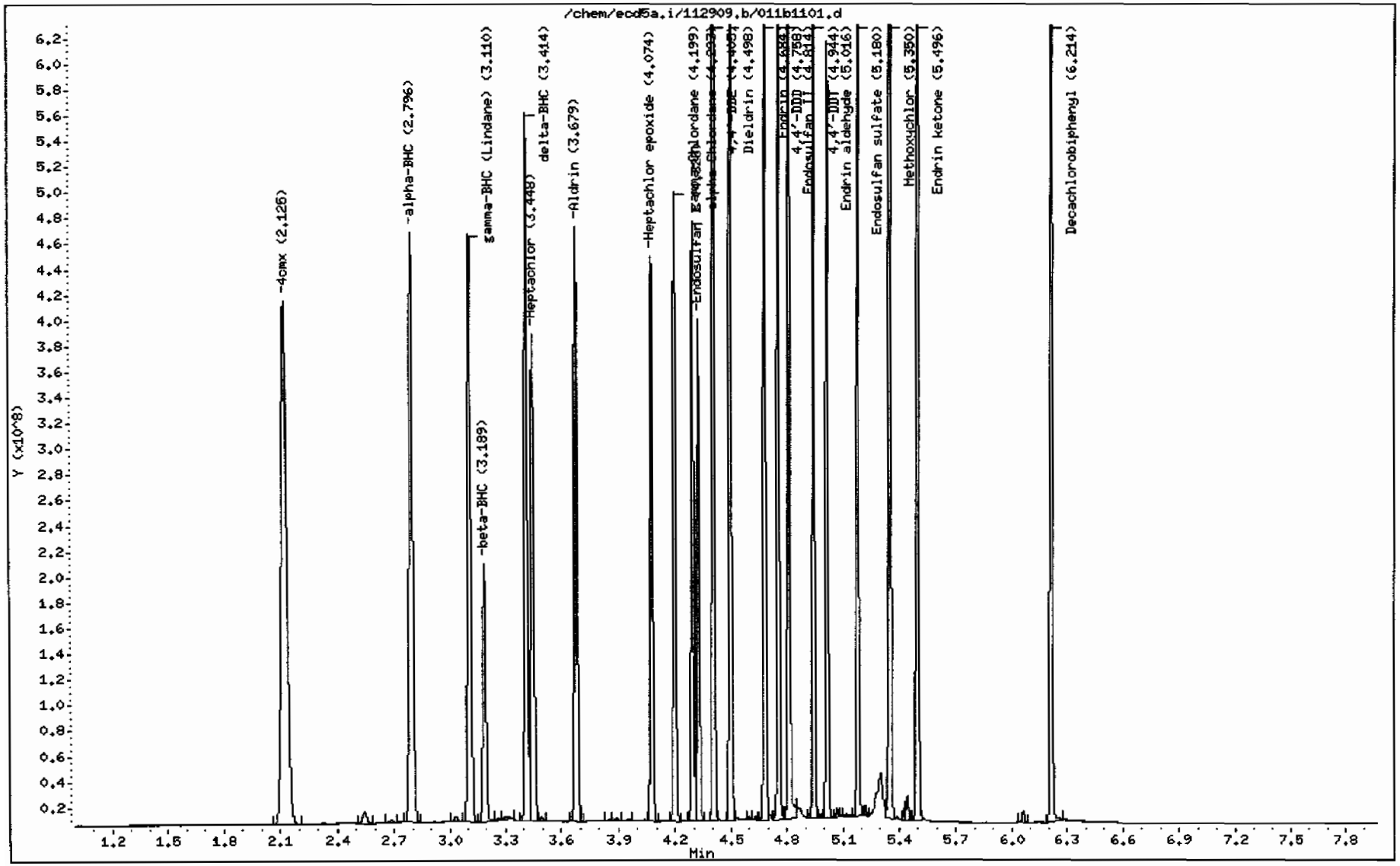

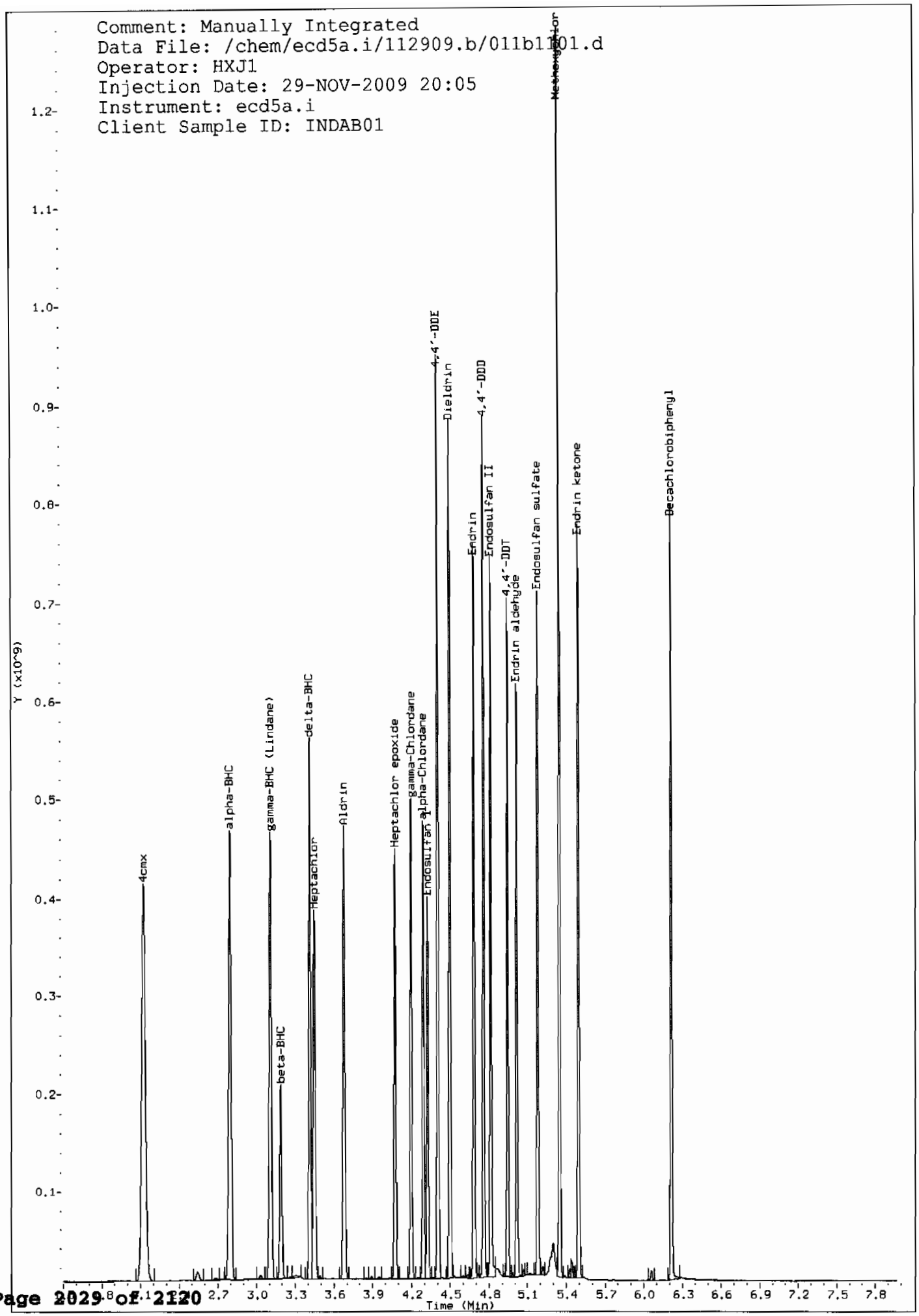
Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/011b1101.d
Operator: HXJ1
Injection Date: 29-NOV-2009 20:05
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
4,4'-DDD
Endrin
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

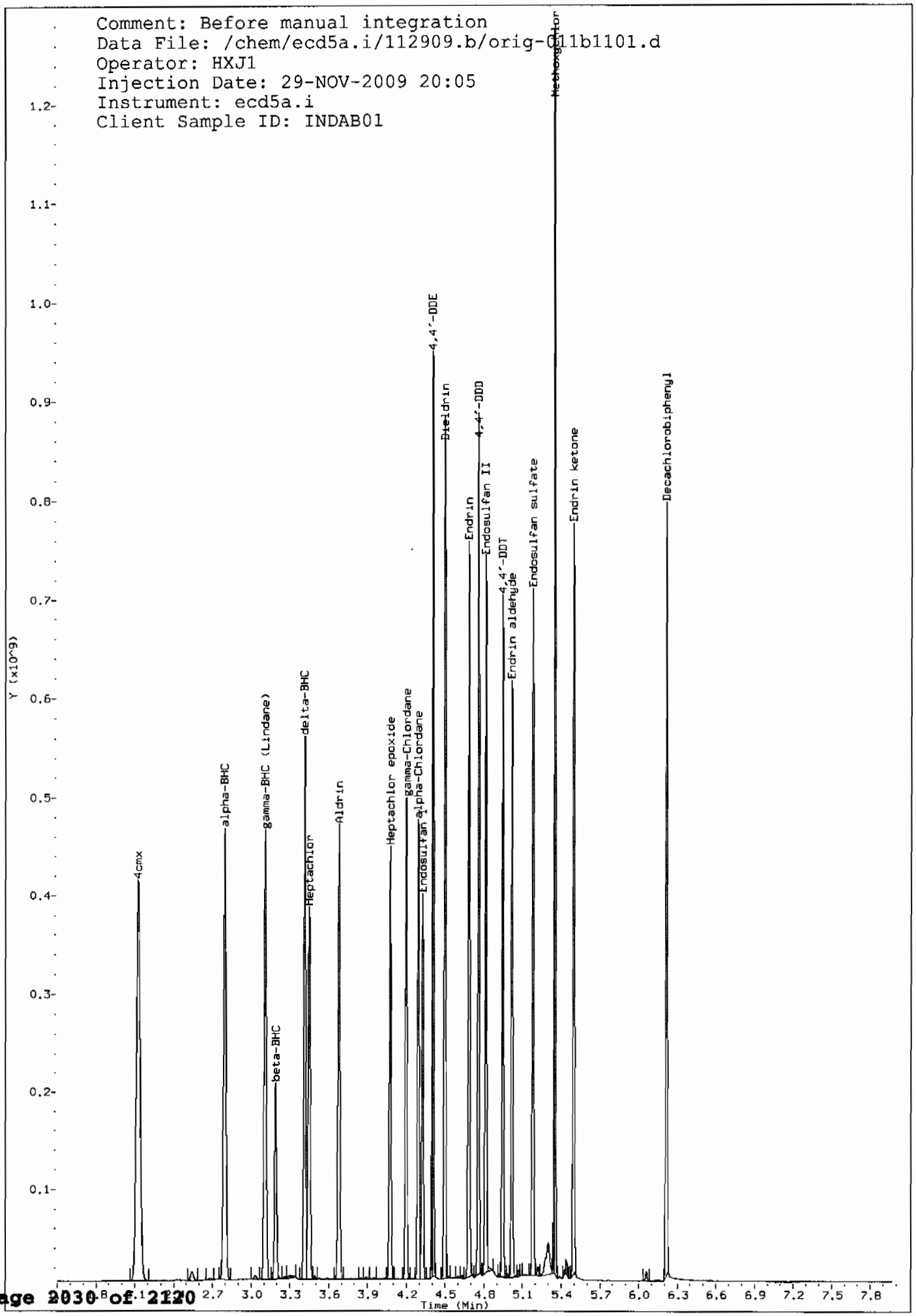
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-011b1101.d
Operator: HXJ1
Injection Date: 29-NOV-2009 20:05
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/112909.b/016f1601.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB02
Inj Date : 29-NOV-2009 21:06
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.173	3.169	0.004	57044753	100.000	107	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.458	3.454	0.004	50152594	100.000	107	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.536	3.532	0.004	21540265	100.000	102	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.834	3.831	0.003	43748020	100.000	107	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.676	3.674	0.002	52479684	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.055	4.051	0.004	46235123	100.000	105	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.475	4.472	0.003	40999790	100.000	103	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.556	4.554	0.002	40578693	100.000	104	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.643	4.639	0.004	39458286	100.000	104	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.731	4.728	0.003	36973664	100.000	103	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.691	4.689	0.002	80256111	200.000	204	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.882	4.879	0.003	78885235	200.000	205	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.028	5.024	0.004	67317103	200.000	205	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.061	5.059	0.002	64584913	200.000	209	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.165	5.163	0.002	63264868	200.000	204	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.418	5.416	0.002	55173580	200.000	202	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.229	5.227	0.002	57040789	200.000	232	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.678	5.675	0.003	60306938	200.000	204	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.513	5.510	0.003	119675438	1000.00	1010	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.849	5.846	0.003	62968420	200.000	194	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.583	2.579	0.004	83314988	200.000	202	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.431	6.427	0.004	33841156	200.000	200	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/016f1601.d
Date : 29-NOV-2009 21:06
Client ID: INDAB02
Sample Info: INFE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

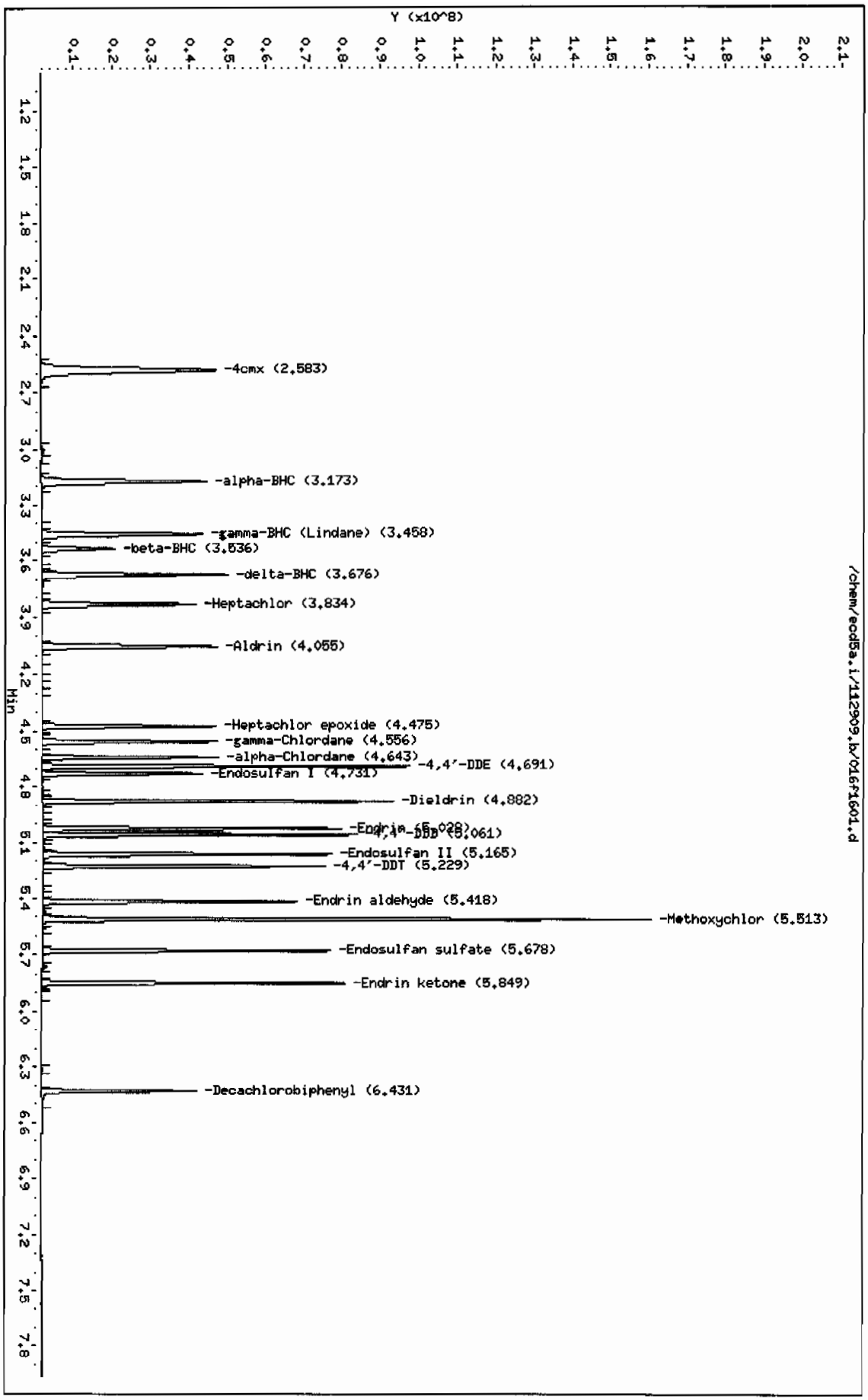

Page 1

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CLP-2

Data file : /chem/ecd5a.i/112909.b/016b1601.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB02
Inj Date : 29-NOV-2009 21:06
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.795	2.796	-0.001	606020650	100.000	96.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.109	3.110	-0.001	530631520	100.000	96.8	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.189	3.189	0.000	220661877	100.000	90.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	425719870	100.000	95.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	521459523	100.000	96.0	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	455200845	100.000	91.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.076	4.074	0.002	343366248	100.000	81.8	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.199	4.199	0.000	371081745	100.000	83.1	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	369559693	100.000	85.8	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	331545708	100.000	86.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.406	4.405	0.001	769270230	200.000	188	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	751172949	200.000	185	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	647412563	200.000	183	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.758	4.758	0.000	667966665	200.000	192	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	613122718	200.000	183	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.018	5.016	0.002	492075885	200.000	178	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.945	4.944	0.001	583033358	200.000	227	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.181	5.180	0.001	561143050	200.000	184	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.352	5.350	0.002	1041705740	1000.00	1180	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	645738699	200.000	186	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.123	2.125	-0.002	827382017	200.000	183	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.219	6.214	0.005	628974182	200.000	196	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/016b1601.d
Date : 29-NOV-2009 21:06
Client ID: INDAB02
Sample Info: IWPE091123-10AB
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

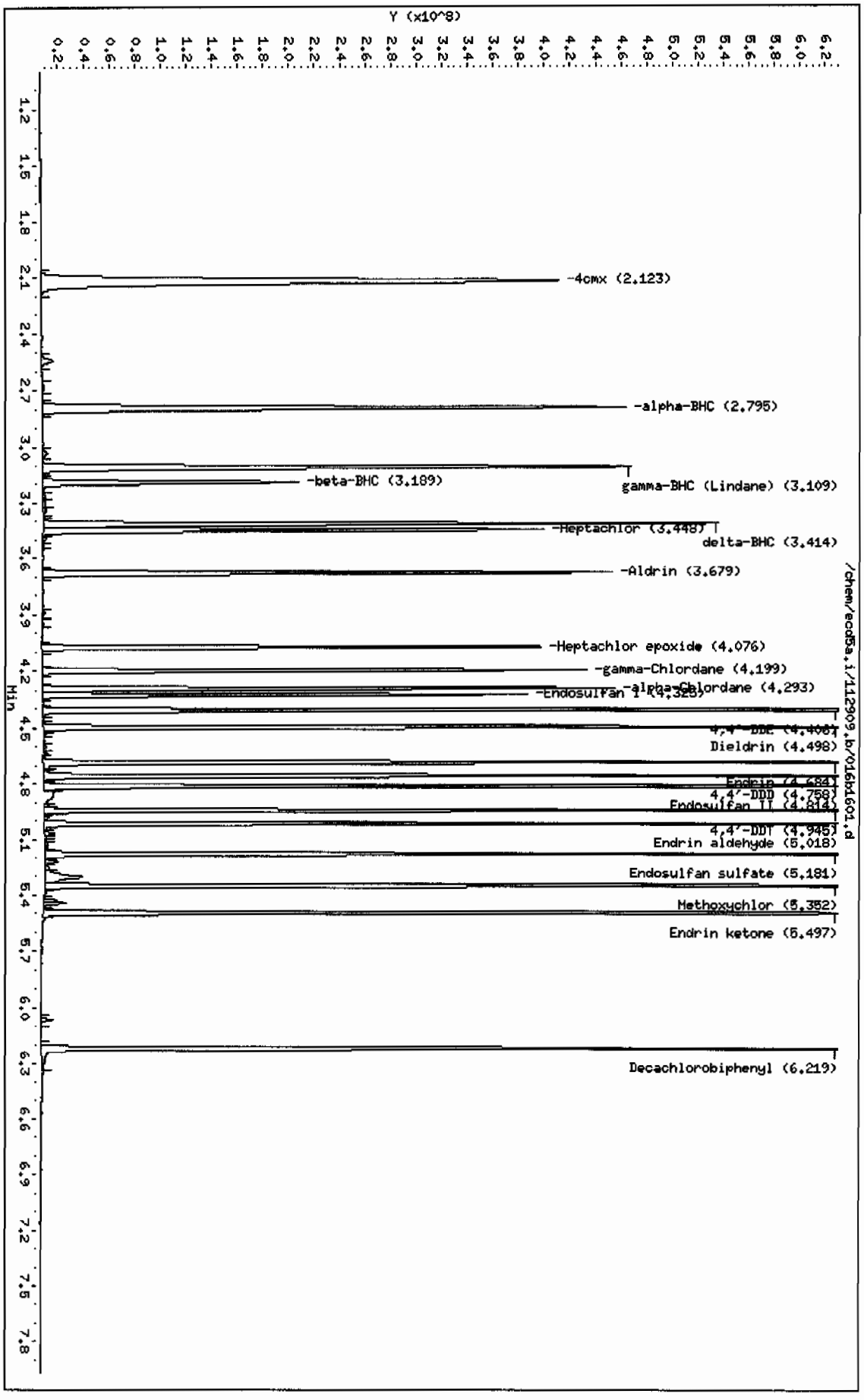

Page 1

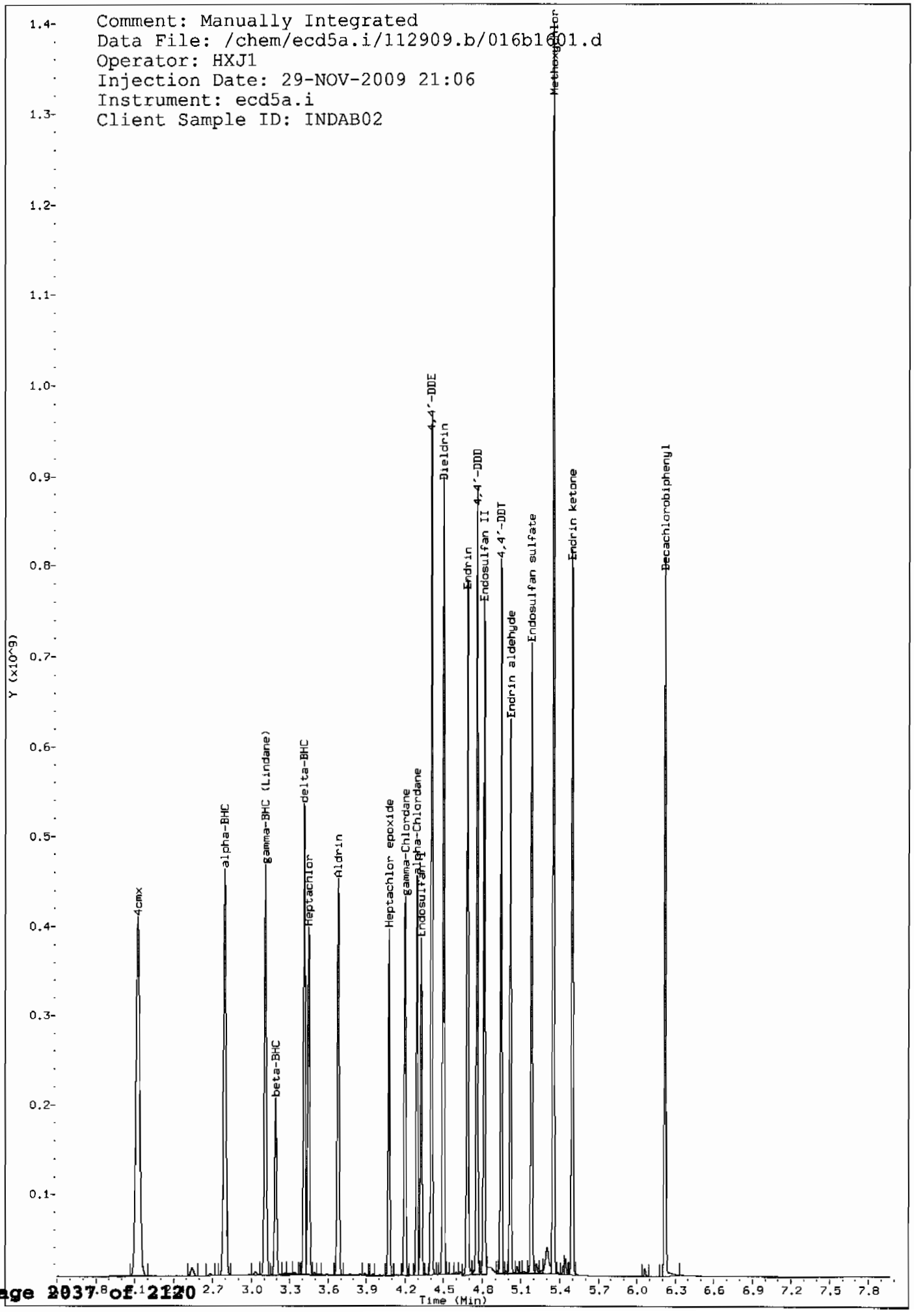
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Operator: HXJ1
Injection Date: 29-NOV-2009 21:06
Instrument: ecd5a.i
Client Sample ID: INDAB02
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

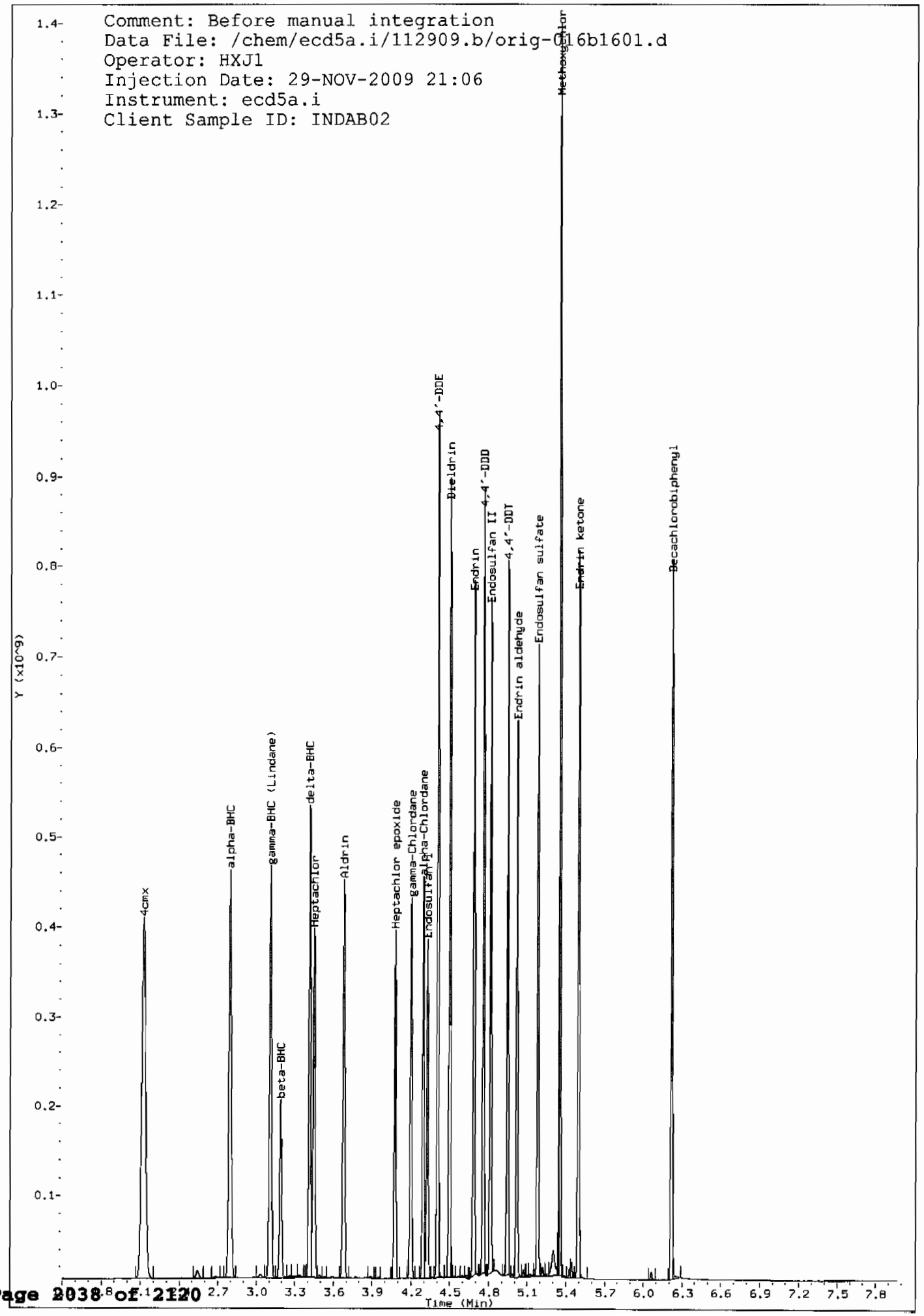
Comment: Before manual integration
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Operator: HXJ1
Injection Date: 29-NOV-2009 21:06
Instrument: ecd5a.i
Client Sample ID: INDAB02
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/112909.b/025f2501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 29-NOV-2009 22:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.170	3.169	0.001	60035068	100.000	112	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.455	3.454	0.001	54183142	100.000	116	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.533	3.532	0.001	22649835	100.000	107	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.831	3.831	0.000	42462789	100.000	104	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.673	3.674	-0.001	54170366	100.000	110	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.052	4.051	0.001	46187671	100.000	105	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	42503112	100.000	107	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.553	4.554	-0.001	44218534	100.000	113	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.640	4.639	0.001	38613972	100.000	102	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.728	4.728	0.000	39025034	100.000	109	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.688	4.689	-0.001	81264755	200.000	206	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	81173946	200.000	211	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	73035344	200.000	222	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.058	5.059	-0.001	66916331	200.000	217	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	68547185	200.000	220	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	55949070	200.000	205	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.228	5.227	0.001	54364192	200.000	221	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.676	5.675	0.001	62072428	200.000	210	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	121175512	1000.00	1020	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	66574456	200.000	205	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	85224774	200.000	206	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	32606923	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/025f2501.d
Date : 29-NOV-2009 22:56
Client ID: INDAB03
Sample Info: IWPE091123-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

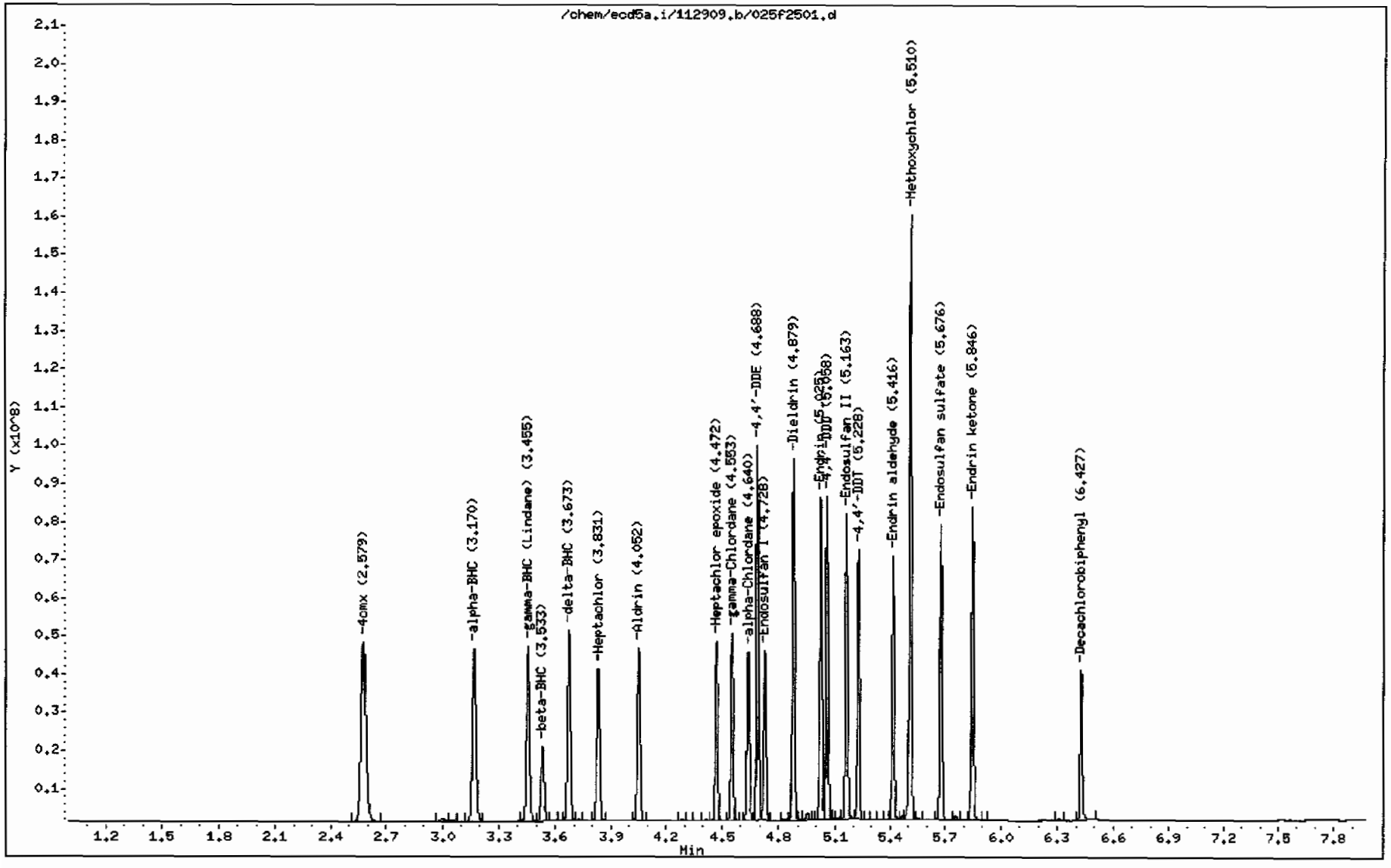

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CLP-2

Data file : /chem/ecd5a.i/112909.b/025b2501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 29-NOV-2009 22:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.796	2.796	0.000	643844273	100.000	102	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	585249683	100.000	107	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.190	3.189	0.001	234326856	100.000	96.1	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	428880319	100.000	96.2	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	552350243	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	469586610	100.000	94.2	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.075	4.074	0.001	413475464	100.000	98.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.198	4.199	-0.001	455571429	100.000	102	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	384744206	100.000	89.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	367717521	100.000	95.6	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.405	4.405	0.000	796116111	200.000	194	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.497	4.498	-0.001	761869980	200.000	188	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.683	4.684	-0.001	688972044	200.000	195	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	670739344	200.000	192	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.813	4.814	-0.001	626657489	200.000	187	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	495305430	200.000	179	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.943	4.944	-0.001	567664001	200.000	221	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.181	5.180	0.001	566711556	200.000	186	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.351	5.350	0.001	1039510778	1000.00	1180	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.496	5.496	0.000	623822379	200.000	180	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.125	2.125	0.000	863129844	200.000	191	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	596166032	200.000	186	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/025b2501.d

Date : 29-NOV-2009 22:56

Client ID: INDAB03

Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

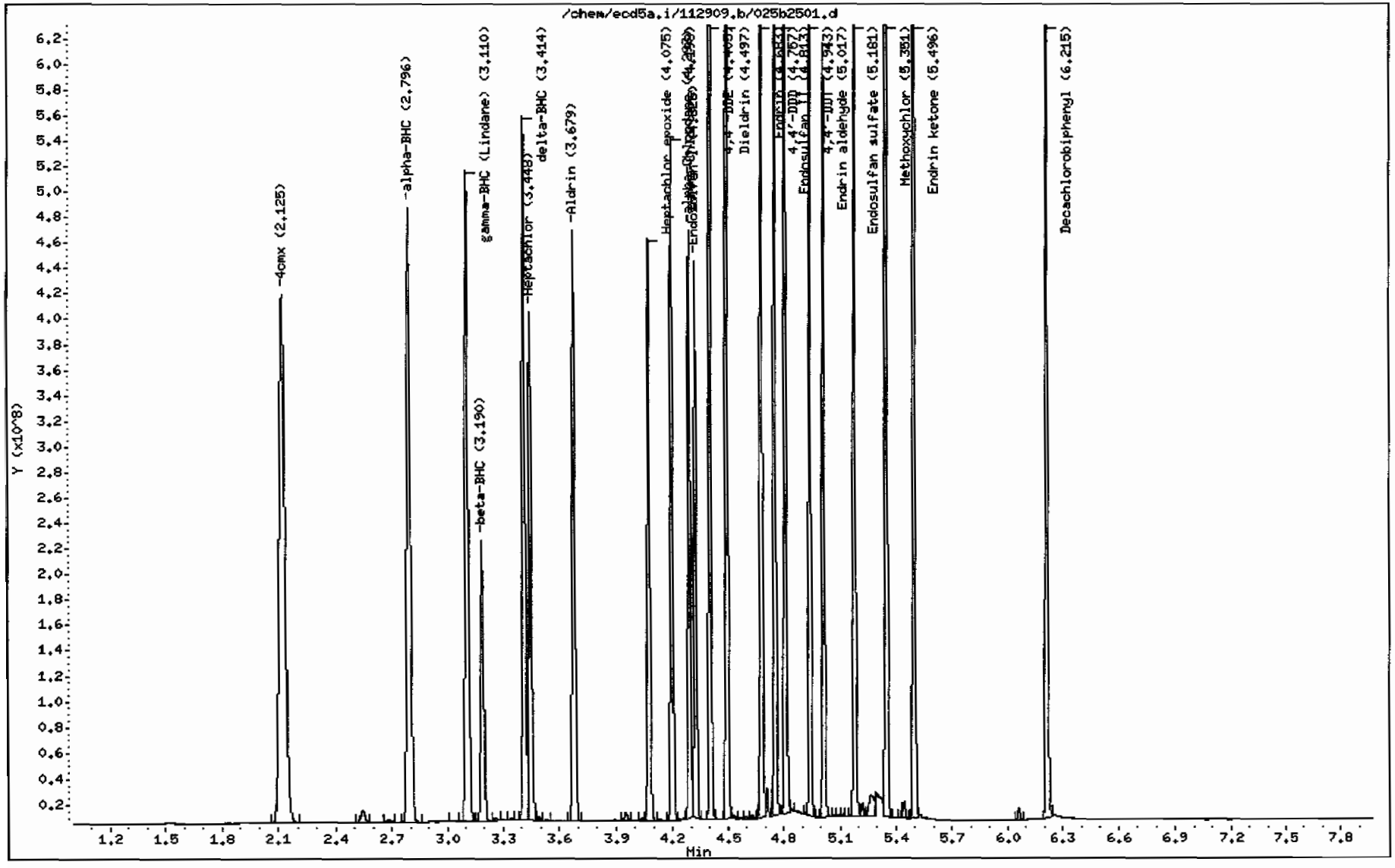

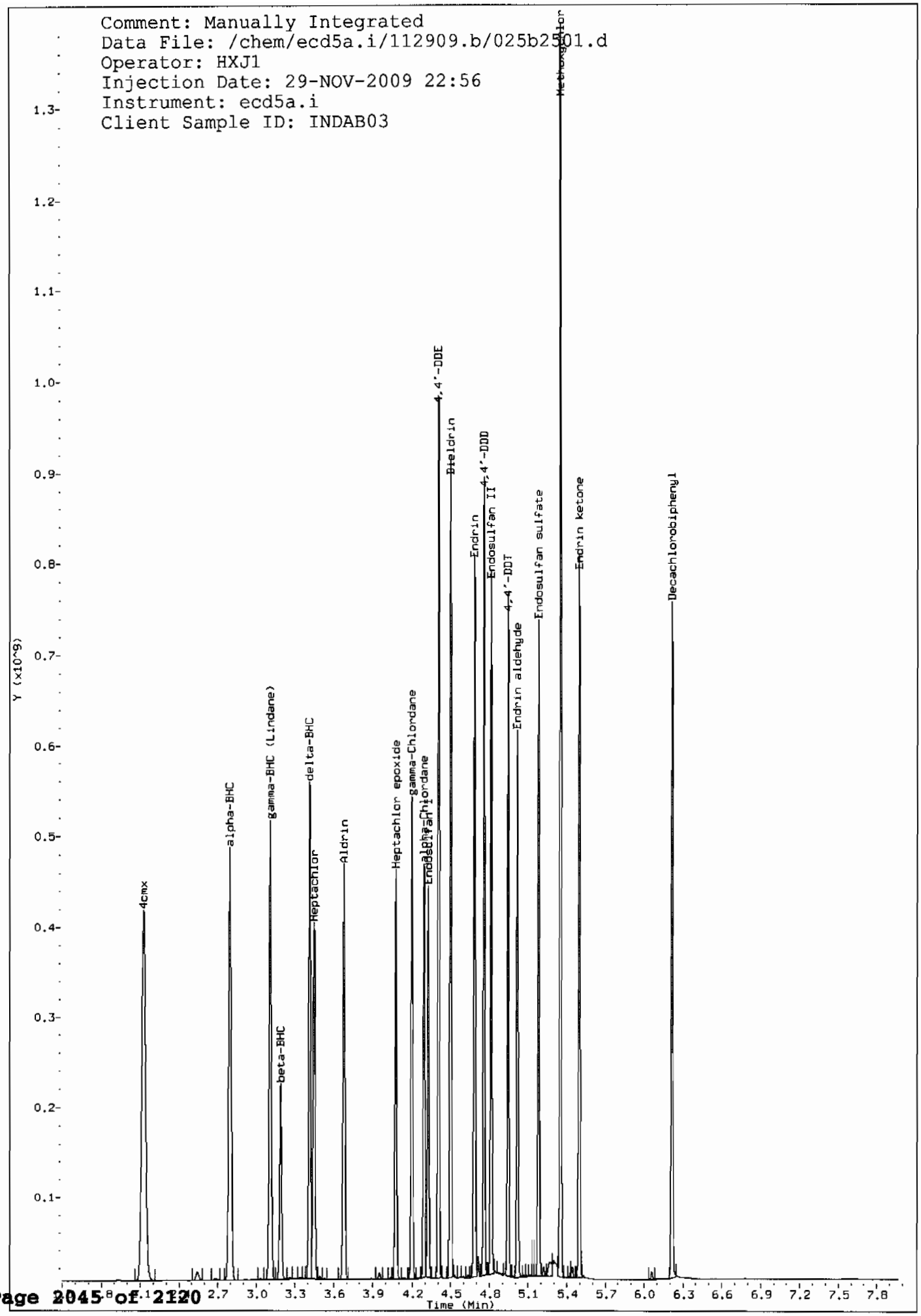
Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/025b2501.d
Operator: HXJ1
Injection Date: 29-NOV-2009 22:56
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

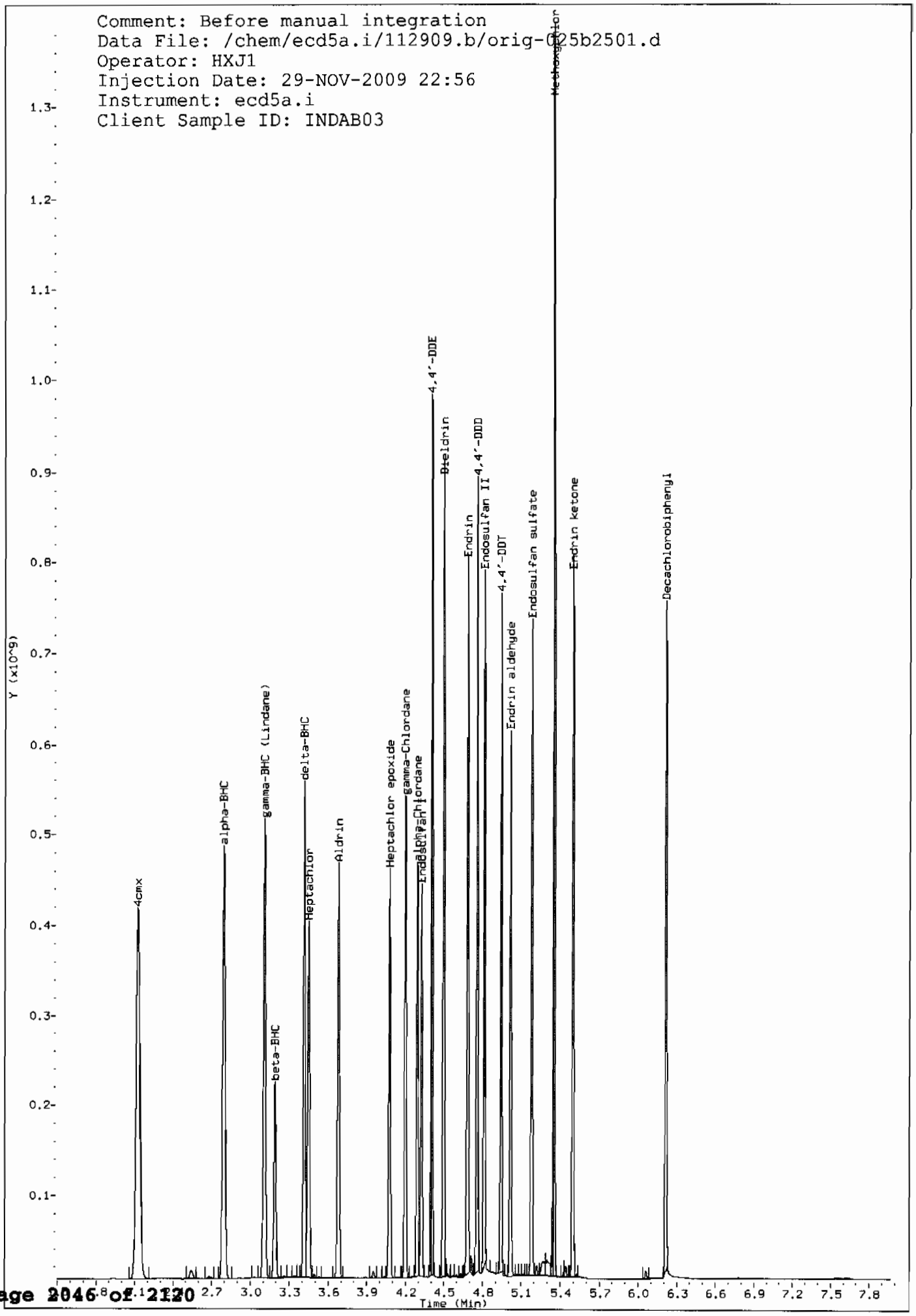
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-025b2501.d
Operator: HXJ1
Injection Date: 29-NOV-2009 22:56
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/112909.b/033f3301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 30-NOV-2009 00:35
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.174	3.169	0.005	60805441	100.000	114	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.458	3.454	0.004	53939940	100.000	116	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.537	3.532	0.005	22759213	100.000	107	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.835	3.831	0.004	41298416	100.000	101	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.677	3.674	0.003	54457972	100.000	111	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.056	4.051	0.005	46884888	100.000	106	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.476	4.472	0.004	42846774	100.000	108	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.557	4.554	0.003	44488786	100.000	114	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.643	4.639	0.004	38900952	100.000	102	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.732	4.728	0.004	39229793	100.000	109	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.692	4.689	0.003	82404006	200.000	209	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.882	4.879	0.003	81430565	200.000	212	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.028	5.024	0.004	72931715	200.000	222	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.062	5.059	0.003	68343908	200.000	222	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.166	5.163	0.003	70810062	200.000	228	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.419	5.416	0.003	56150033	200.000	206	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.230	5.227	0.003	46875562	200.000	191	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.679	5.675	0.004	62410467	200.000	211	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.513	5.510	0.003	112585727	1000.00	953	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.849	5.846	0.003	62119333	200.000	191	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.583	2.579	0.004	86811098	200.000	210	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.430	6.427	0.003	34070911	200.000	201	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/033f3301.d

Date : 30-NOV-2009 00:35

Client ID: INDAB04

Sample Info: IWPE091123-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

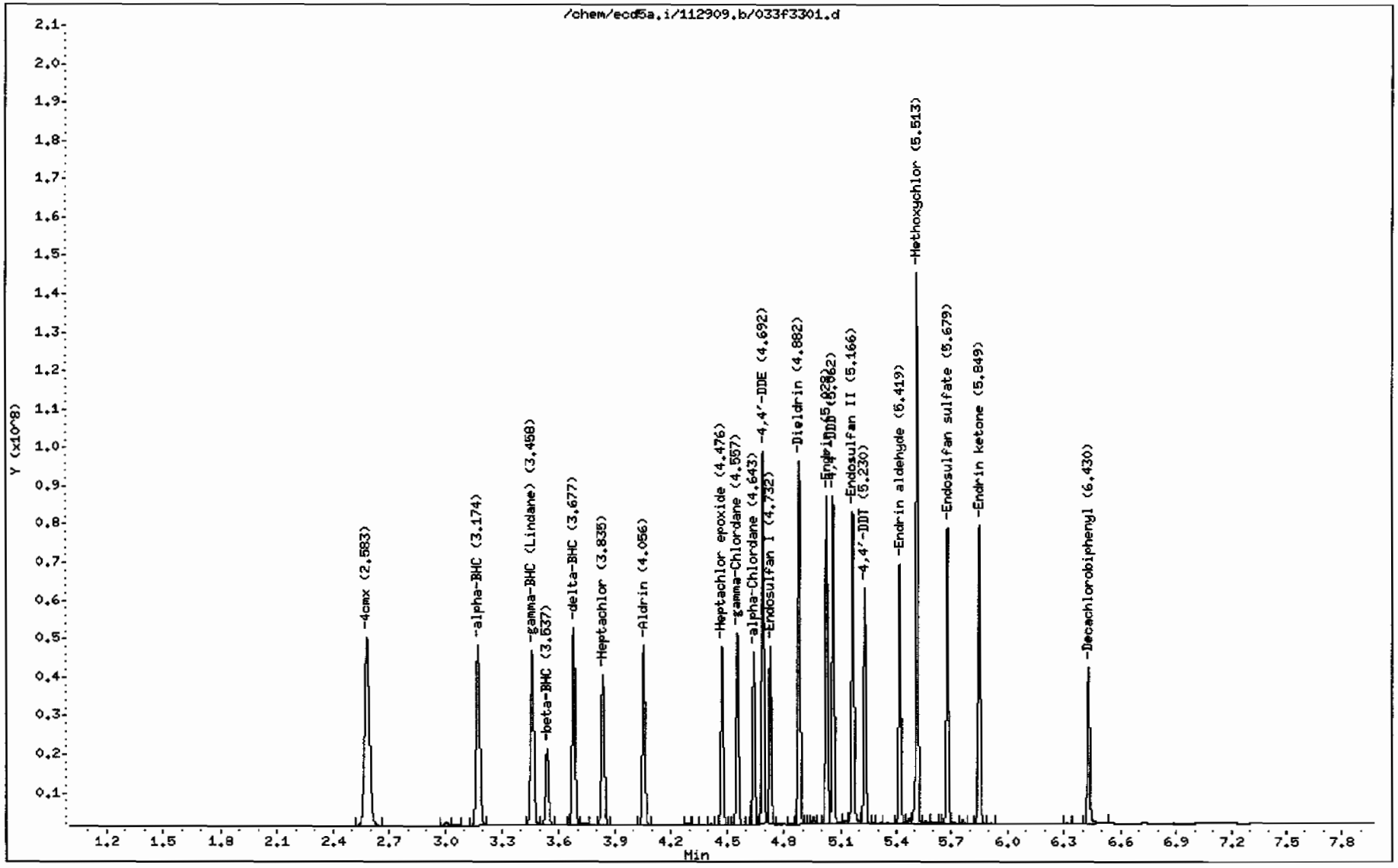

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/033b3301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 30-NOV-2009 00:35
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.795	2.796	-0.001	647471843	100.000	103	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.109	3.110	-0.001	579464102	100.000	106	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.190	3.189	0.001	234833585	100.000	96.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.449	3.448	0.001	408945105	100.000	91.7	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.415	3.414	0.001	551446849	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	469903031	100.000	94.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.076	4.074	0.002	409987921	100.000	97.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.200	4.199	0.001	451813573	100.000	101	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	385276246	100.000	89.5	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.326	4.325	0.001	372009446	100.000	96.7	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
4.407	4.405	0.002	801745227	200.000	196	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	765068103	200.000	188	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.685	4.684	0.001	679895172	200.000	192	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.758	4.758	0.000	672418106	200.000	193	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	631757703	200.000	189	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	490360906	200.000	178	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.945	4.944	0.001	452599945	200.000	176	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.182	5.180	0.002	555426683	200.000	182	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.352	5.350	0.002	885216962	1000.00	996	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	573896239	200.000	166	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.122	2.125	-0.003	877044875	200.000	194	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.217	6.214	0.003	572768638	200.000	179	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/033b3301.d
Date : 30-NOV-2009 00:35
Client ID: INDAB04
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

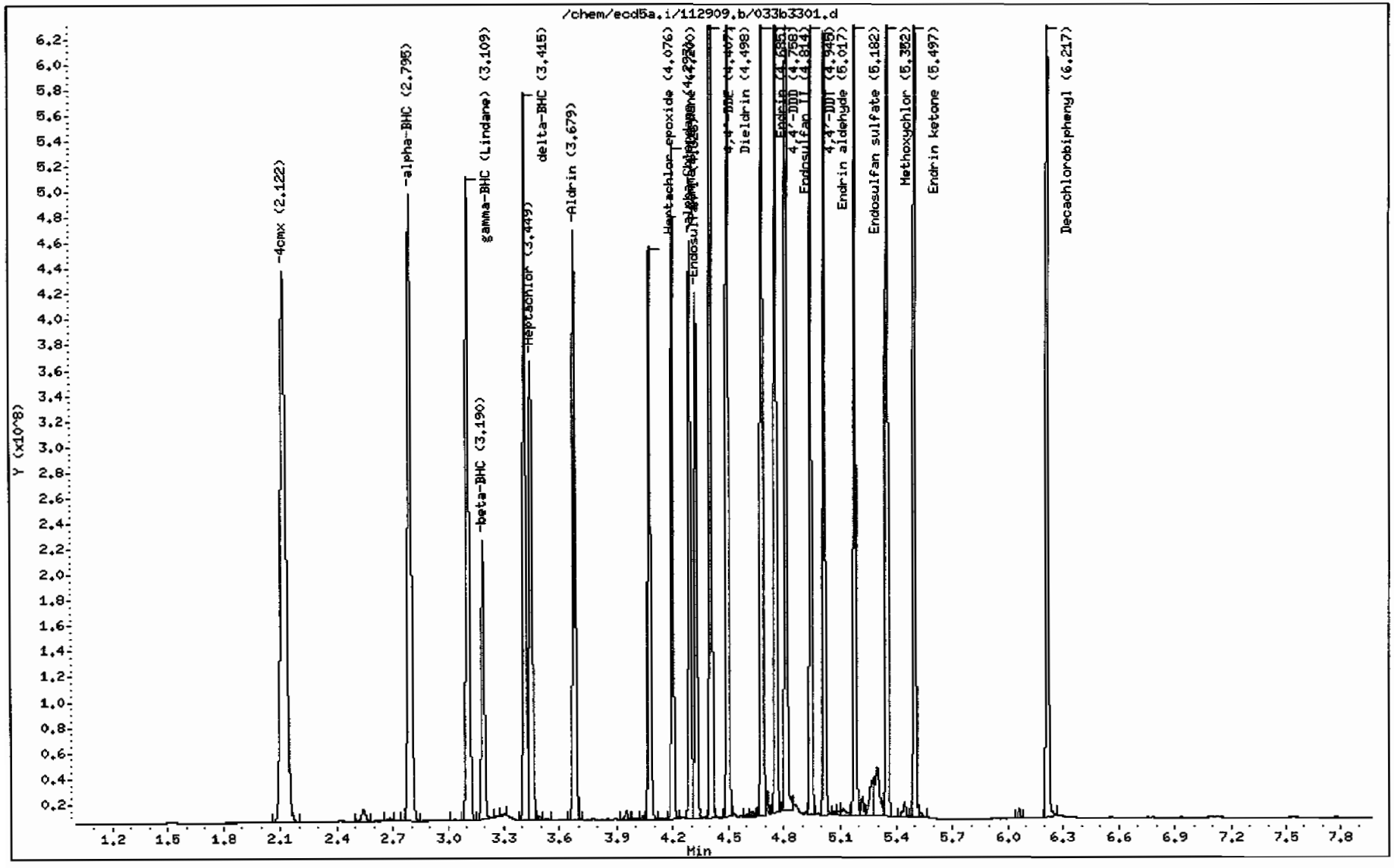

Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/033b3301.d
Operator: HXJ1
Injection Date: 30-NOV-2009 00:35
Instrument: ecd5a.i
Client Sample ID: INDAB04

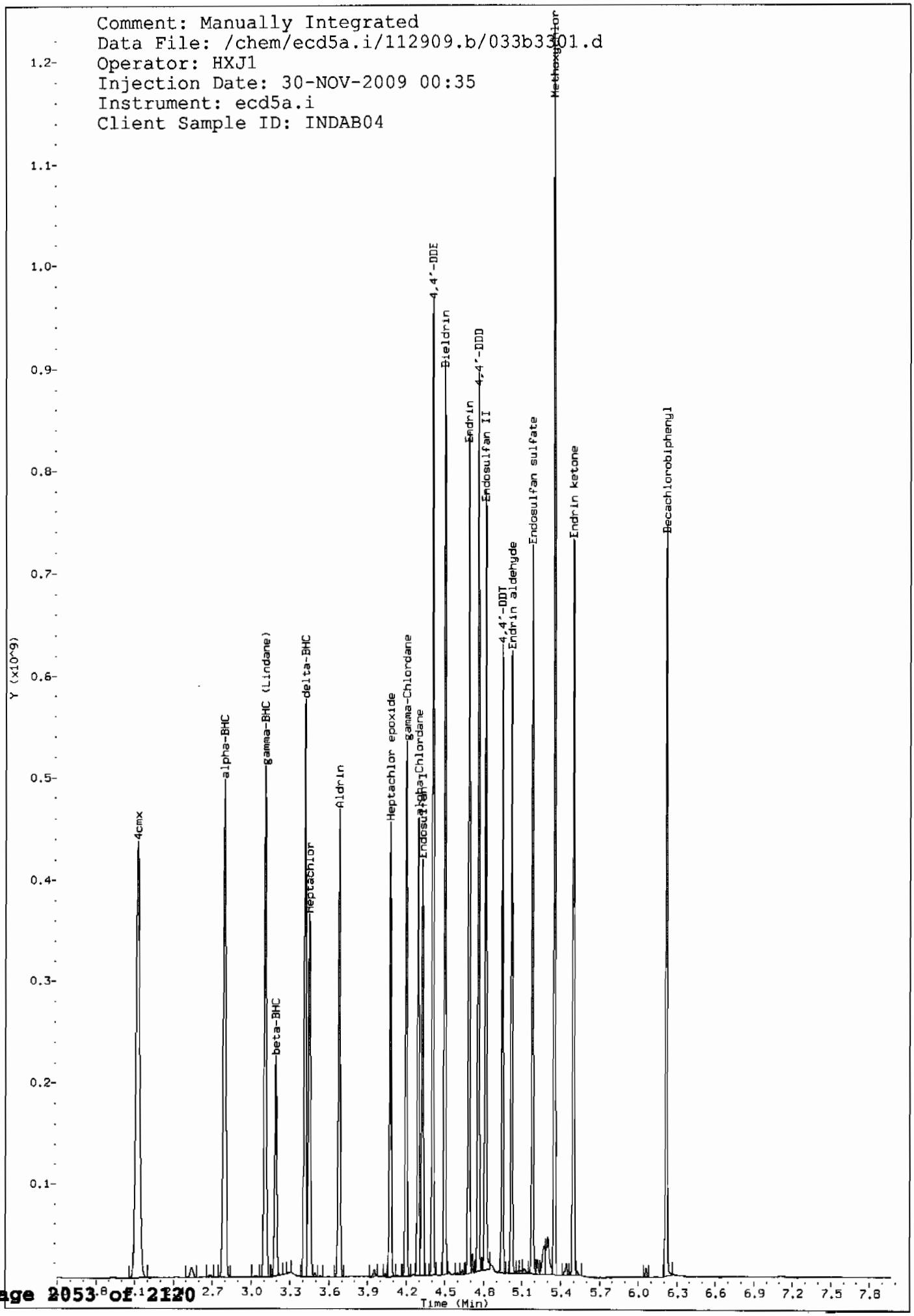

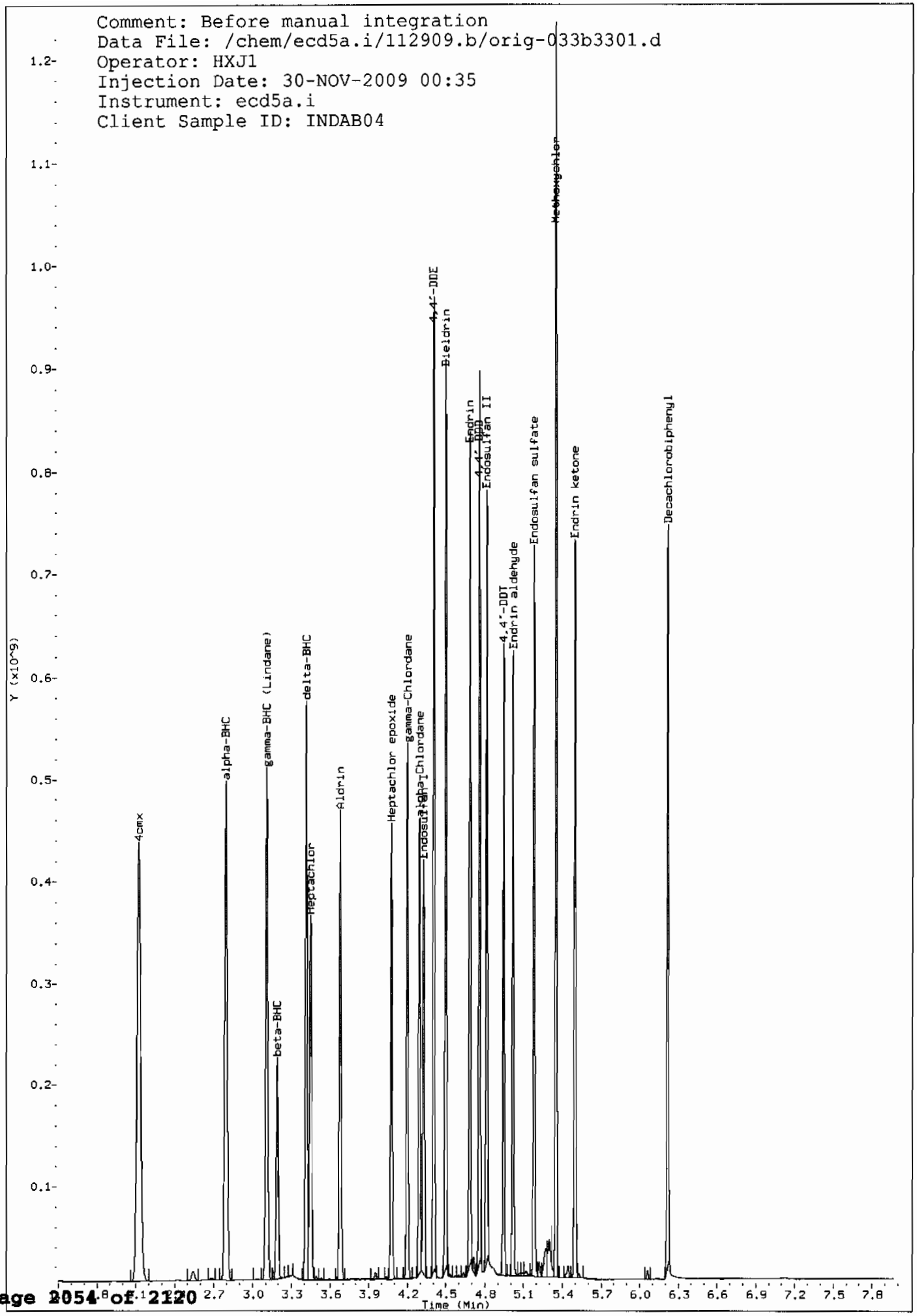
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-033b3301.d
Operator: HXJ1
Injection Date: 30-NOV-2009 00:35
Instrument: ecd5a.i
Client Sample ID: INDAB04
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.59	6.45
02	PEM01	WPE091109-99	11/28/09	1208	2.58	6.43
03	ZZZZZ	ZZZZZ	11/28/09	1235		
04	INDAB01	WPE091128-01	11/28/09	1247	2.58	6.43
05	INDAB02	WPE091128-02	11/28/09	1258	2.58	6.43
06	INDAB03	WPE091128-03	11/28/09	1310	2.58	6.43
07	INDAB04	WPE091128-04	11/28/09	1322	2.58	6.43
08	INDAB05	IPE091128-02	11/28/09	1334	2.58	6.43
09	INDAB01	WPE091123-10	11/28/09	1346	2.58	6.43
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.59	6.45
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.58	6.43
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.58	6.43
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.58	6.43
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.58	6.43
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.58	6.43
16	CHLOR01	WPE091124-21	11/28/09	1527	2.58	6.43
17	CHLOR02	WPE091124-22	11/28/09	1539	2.58	6.43
18	CHLOR03	WPE091124-23	11/28/09	1551	2.58	6.43
19	CHLOR04	WPE091124-24	11/28/09	1603	2.58	6.43
20	CHLOR05	IPE091029-06	11/28/09	1615	2.58	6.43
21	CHLOR01	WPE091021-00	11/28/09	1627	2.58	6.43
22	PEM02	WPE091109-99	11/28/09	1639	2.58	6.43
23	PIBLK02	WAR090914-99	11/28/09	1651	2.58	6.43
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.58	6.43
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.58	6.43
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.58	6.43
27	INDAB02	WPE091123-10	11/28/09	1738	2.58	6.43
28	PIBLK03	WAR090914-99	11/28/09	1750	2.58	6.43
29	ZZZZZ	ZZZZZ	11/28/09	1802	2.59	6.43
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.58	6.43
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.59	6.43
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.58	6.43

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 09/16/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.13 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.12	6.24
02	PEM01	WPE091109-99	11/28/09	1208	2.13	6.22
03	ZZZZZ	ZZZZZ	11/28/09	1235		6.24
04	INDAB01	WPE091128-01	11/28/09	1247	2.12	6.22
05	INDAB02	WPE091128-02	11/28/09	1258	2.12	6.22
06	INDAB03	WPE091128-03	11/28/09	1310	2.13	6.22
07	INDAB04	WPE091128-04	11/28/09	1322	2.12	6.22
08	INDAB05	IPE091128-02	11/28/09	1334	2.13	6.22
09	INDAB01	WPE091123-10	11/28/09	1346	2.13	6.22
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.12	6.24
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.12	6.22
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.12	6.22
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.12	6.22
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.13	6.22
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.13	6.22
16	CHLOR01	WPE091124-21	11/28/09	1527	2.12	6.22
17	CHLOR02	WPE091124-22	11/28/09	1539	2.12	6.22
18	CHLOR03	WPE091124-23	11/28/09	1551	2.13	6.22
19	CHLOR04	WPE091124-24	11/28/09	1603	2.13	6.22
20	CHLOR05	IPE091029-06	11/28/09	1615	2.13	6.22
21	CHLOR01	WPE091021-00	11/28/09	1627	2.12	6.22
22	PEM02	WPE091109-99	11/28/09	1639	2.13	6.22
23	PIBLK02	WAR090914-99	11/28/09	1651	2.13	6.22
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.13	6.22
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.13	6.22
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.13	6.22
27	INDAB02	WPE091123-10	11/28/09	1738	2.13	6.22
28	PIBLK03	WAR090914-99	11/28/09	1750	2.13	6.22
29	TBLK01	1201978540	11/28/09	1802	2.13	6.22
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.13	6.22
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.13	6.22
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.13	6.22

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 09/16/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.13 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/28/09	1850	2.13	6.22
02	PIBLK04	WAR090914-99	11/28/09	1902	2.13	6.22
03	INDAB03	WPE091123-10	11/28/09	1914	2.13	6.22
04	PIBLK05	WAR090914-99	11/28/09	1926	2.13	6.22
05	ZZZZZ	ZZZZZ	11/28/09	1938	2.13	6.22
06	ZZZZZ	ZZZZZ	11/28/09	1950	2.13	6.22
07	ZZZZZ	ZZZZZ	11/28/09	2002	2.13	6.22
08	ZZZZZ	ZZZZZ	11/28/09	2013	2.13	6.22
09	ZZZZZ	ZZZZZ	11/28/09	2025	2.13	6.22
10	ZZZZZ	ZZZZZ	11/28/09	2037	2.13	6.22
11	ZZZZZ	ZZZZZ	11/28/09	2049	2.13	6.22
12	INDAB04	WPE091123-10	11/28/09	2101	2.13	6.22
13	PIBLK06	WAR090914-99	11/28/09	2113	2.13	6.22
14	TBLK01	1201978549	11/28/09	2125	2.13	6.22
15	ZZZZZ	ZZZZZ	11/28/09	2137	2.13	6.22
16	ZZZZZ	ZZZZZ	11/28/09	2149	2.13	6.22
17	ZZZZZ	ZZZZZ	11/28/09	2201	2.13	6.22
18	ZZZZZ	ZZZZZ	11/28/09	2213	2.13	6.22
19	INDAB05	WPE091123-10	11/28/09	2225	2.13	6.22
20	PIBLK07	WAR090914-99	11/28/09	2237	2.13	6.22
21	ZZZZZ	ZZZZZ	11/28/09	2249	2.13	6.22
22	ZZZZZ	ZZZZZ	11/28/09	2301	2.13	6.22
23	ZZZZZ	ZZZZZ	11/28/09	2313	2.13	6.22
24	ZZZZZ	ZZZZZ	11/28/09	2325	2.13	6.21
25	ZZZZZ	ZZZZZ	11/28/09	2337	2.13	6.22
26	ZZZZZ	ZZZZZ	11/28/09	2349	2.13	6.22
27	ZZZZZ	ZZZZZ	11/29/09	0000	2.13	6.22
28	ZZZZZ	ZZZZZ	11/29/09	0012	2.13	6.22
29	ZZZZZ	ZZZZZ	11/29/09	0024	2.13	6.21
30	INDAB06	WPE091123-10	11/29/09	0036	2.13	6.22
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.57	6.42
02	PEM01	WPE091109-99	11/29/09	1817	2.57	6.42
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.58	6.43
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.58	6.43
05	CHLOR01	WPE091021-00	11/29/09	1853	2.58	6.43
06	INDAB01	WPE091128-01	11/29/09	1905	2.58	6.43
07	INDAB02	WPE091128-02	11/29/09	1917	2.58	6.43
08	INDAB03	WPE091128-03	11/29/09	1929	2.58	6.43
09	INDAB04	WPE091128-04	11/29/09	1941	2.58	6.43
10	INDAB05	IPE091128-02	11/29/09	1953	2.58	6.43
11	INDAB01	WPE091123-10	11/29/09	2005	2.58	6.43
12	PIBLK02	WAR090914-99	11/29/09	2017	2.58	6.43
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.58	6.43
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.58	6.43
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.58	6.43
16	INDAB02	WPE091123-10	11/29/09	2106	2.58	6.43
17	PIBLK03	WAR090914-99	11/29/09	2120	2.58	6.43
18	PBLK01	1201981581	11/29/09	2132	2.58	6.43
19	PBLK01LCS	1201981584	11/29/09	2144	2.58	6.43
20	PBLK01TLCS	1201981585	11/29/09	2156	2.58	6.43
21	ZZZZZ	ZZZZZ	11/29/09	2208	2.58	6.43
22	ZZZZZ	ZZZZZ	11/29/09	2220	2.58	6.43
23	ZZZZZ	ZZZZZ	11/29/09	2232	2.58	6.43
24	PIBLK04	WAR090914-99	11/29/09	2244	2.58	6.43
25	INDAB03	WPE091123-10	11/29/09	2256	2.58	6.43
26	PIBLK05	WAR090914-99	11/29/09	2308	2.58	6.43
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.58	6.43
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.58	6.43
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.58	6.43
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.58	6.43
31	WST03-10-2132	241524002	11/30/09	0008	2.58	6.43
32	ZZZZZ	ZZZZZ	11/30/09	0020	2.58	6.43

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	INDAB04	WPE091123-10	11/30/09	0035	2.58	6.43
02	PIBLK06	WAR090914-99	11/30/09	0047	2.58	6.43
03	ZZZZZ	ZZZZZ	11/30/09	0059	2.58	6.43
04	ZZZZZ	ZZZZZ	11/30/09	0111	2.58	6.43
05	ZZZZZ	ZZZZZ	11/30/09	0123	2.58	6.43
06	ZZZZZ	ZZZZZ	11/30/09	0135	2.58	6.43
07	ZZZZZ	ZZZZZ	11/30/09	0147	2.58	6.43
08	ZZZZZ	ZZZZZ	11/30/09	0159	2.58	6.43
09	ZZZZZ	ZZZZZ	11/30/09	0211	2.58	6.43
10	ZZZZZ	ZZZZZ	11/30/09	0223	2.58	6.43
11	INDAB05	WPE091123-10	11/30/09	0234	2.58	6.43
12	PIBLK07	WAR090914-99	11/30/09	0246	2.58	6.43
13	ZZZZZ	ZZZZZ	11/30/09	0258	2.58	6.43
14	ZZZZZ	ZZZZZ	11/30/09	0310	2.58	6.43
15	ZZZZZ	ZZZZZ	11/30/09	0322	2.58	6.43
16	ZZZZZ	ZZZZZ	11/30/09	0334	2.58	6.43
17	ZZZZZ	ZZZZZ	11/30/09	0346	2.58	6.43
18	INDAB06	WPE091123-10	11/30/09	0358	2.58	6.43
19	PIBLK08	WAR090914-99	11/30/09	0410	2.58	6.43
20	ZZZZZ	ZZZZZ	11/30/09	0422	2.58	6.43
21	ZZZZZ	ZZZZZ	11/30/09	0434	2.58	6.43
22	ZZZZZ	ZZZZZ	11/30/09	0446	2.58	6.43
23	ZZZZZ	ZZZZZ	11/30/09	0458	2.58	6.43
24	ZZZZZ	ZZZZZ	11/30/09	0510	2.58	6.43
25	ZZZZZ	ZZZZZ	11/30/09	0522	2.58	6.43
26	ZZZZZ	ZZZZZ	11/30/09	0534	2.58	6.43
27	INDAB07	WPE091123-10	11/30/09	0545	2.58	6.43
28	PIBLK09	WAR090914-99	11/30/09	0557	2.58	6.43
29	ZZZZZ	ZZZZZ	11/30/09	0609	2.58	6.43
30	ZZZZZ	ZZZZZ	11/30/09	0621	2.58	6.43
31	ZZZZZ	ZZZZZ	11/30/09	0633	2.58	6.43
32	ZZZZZ	ZZZZZ	11/30/09	0645	2.59	6.45

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.12	6.21
02	PEM01	WPE091109-99	11/29/09	1817	2.12	6.21
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.12	6.21
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.12	6.21
05	CHLOR01	WPE091021-00	11/29/09	1853	2.12	6.22
06	INDAB01	WPE091128-01	11/29/09	1905	2.13	6.22
07	INDAB02	WPE091128-02	11/29/09	1917	2.13	6.21
08	INDAB03	WPE091128-03	11/29/09	1929	2.12	6.22
09	INDAB04	WPE091128-04	11/29/09	1941	2.12	6.22
10	INDAB05	IPE091128-02	11/29/09	1953	2.13	6.22
11	INDAB01	WPE091123-10	11/29/09	2005	2.13	6.21
12	PIBLK02	WAR090914-99	11/29/09	2017	2.12	6.21
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.12	6.21
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.12	6.21
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.12	6.22
16	INDAB02	WPE091123-10	11/29/09	2106	2.12	6.22
17	PIBLK03	WAR090914-99	11/29/09	2120	2.12	6.22
18	PBLK01	1201981581	11/29/09	2132	2.12	6.21
19	PBLK01LCS	1201981584	11/29/09	2144	2.12	6.22
20	PBLK01TLCS	1201981585	11/29/09	2156	2.13	6.21
21	ZZZZZ	ZZZZZ	11/29/09	2208	2.13	6.22
22	ZZZZZ	ZZZZZ	11/29/09	2220	2.12	6.21
23	ZZZZZ	ZZZZZ	11/29/09	2232	2.13	6.22
24	PIBLK04	WAR090914-99	11/29/09	2244	2.13	6.21
25	INDAB03	WPE091123-10	11/29/09	2256	2.13	6.22
26	PIBLK05	WAR090914-99	11/29/09	2308	2.13	6.22
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.12	6.21
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.12	6.21
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.12	6.21
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.12	6.21
31	WST03-10-2132	241524002	11/30/09	0008	2.12	6.21
32	ZZZZZ	ZZZZZ	11/30/09	0020	2.12	6.21

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-600

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	INDAB04	WPE091123-10	11/30/09	0035	2.12	6.22
02	PIBLK06	WAR090914-99	11/30/09	0047	2.12	6.22
03	ZZZZZ	ZZZZZ	11/30/09	0059	2.12	6.22
04	ZZZZZ	ZZZZZ	11/30/09	0111	2.12	6.22
05	ZZZZZ	ZZZZZ	11/30/09	0123	2.12	6.22
06	ZZZZZ	ZZZZZ	11/30/09	0135	2.12	6.21
07	ZZZZZ	ZZZZZ	11/30/09	0147	2.12	6.21
08	ZZZZZ	ZZZZZ	11/30/09	0159	2.12	6.22
09	ZZZZZ	ZZZZZ	11/30/09	0211	2.12	6.21
10	ZZZZZ	ZZZZZ	11/30/09	0223	2.13	6.22
11	INDAB05	WPE091123-10	11/30/09	0234	2.12	6.21
12	PIBLK07	WAR090914-99	11/30/09	0246	2.12	6.21
13	ZZZZZ	ZZZZZ	11/30/09	0258	2.12	6.22
14	ZZZZZ	ZZZZZ	11/30/09	0310	2.12	6.21
15	ZZZZZ	ZZZZZ	11/30/09	0322	2.12	6.22
16	ZZZZZ	ZZZZZ	11/30/09	0334	2.12	6.21
17	ZZZZZ	ZZZZZ	11/30/09	0346	2.12	6.21
18	INDAB06	WPE091123-10	11/30/09	0358	2.12	6.22
19	PIBLK08	WAR090914-99	11/30/09	0410	2.13	6.21
20	ZZZZZ	ZZZZZ	11/30/09	0422	2.12	6.22
21	ZZZZZ	ZZZZZ	11/30/09	0434	2.12	6.21
22	ZZZZZ	ZZZZZ	11/30/09	0446	2.12	6.21
23	ZZZZZ	ZZZZZ	11/30/09	0458	2.13	6.22
24	ZZZZZ	ZZZZZ	11/30/09	0510	2.12	6.21
25	ZZZZZ	ZZZZZ	11/30/09	0522	2.12	6.22
26	ZZZZZ	ZZZZZ	11/30/09	0534	2.12	6.21
27	INDAB07	WPE091123-10	11/30/09	0545	2.12	6.21
28	PIBLK09	WAR090914-99	11/30/09	0557	2.12	6.22
29	ZZZZZ	ZZZZZ	11/30/09	0609	2.13	6.22
30	ZZZZZ	ZZZZZ	11/30/09	0621	2.12	6.22
31	ZZZZZ	ZZZZZ	11/30/09	0633	2.12	6.21
32	ZZZZZ	ZZZZZ	11/30/09	0645	2.13	

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

Identification Summary

SDG Number: 10–600 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 21:44	**Analyzed:**	29–NOV–09 21:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha–BHC							12.2
Column 1	1	3.17	3.14 – 3.2	18.9		ug/kg	
Column 2	1	2.8	2.77 – 2.83	16.7		ug/kg	
gamma–BHC (Lindane)							15
Column 1	1	3.45	3.42 – 3.48	19.4		ug/kg	
Column 2	1	3.11	3.08 – 3.14	16.7		ug/kg	
beta–BHC							14.2
Column 1	1	3.53	3.5 – 3.56	18.3		ug/kg	
Column 2	1	3.19	3.16 – 3.22	15.9		ug/kg	
delta–BHC							12.1
Column 1	1	3.67	3.64 – 3.7	19		ug/kg	
Column 2	1	3.41	3.38 – 3.44	16.8		ug/kg	
Heptachlor							13.9
Column 1	1	3.83	3.8 – 3.86	18.6		ug/kg	
Column 2	1	3.45	3.42 – 3.48	16.2		ug/kg	

Identification Summary

SDG Number: 10–600 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 21:44	**Analyzed:**	29–NOV–09 21:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aldrin							11.2
Column 1	1	4.05	4.02 – 4.08	17.3		ug/kg	
Column 2	1	3.68	3.65 – 3.71	15.5		ug/kg	
Heptachlor epoxide							21.1
Column 1	1	4.47	4.44 – 4.5	18.2		ug/kg	
Column 2	1	4.08	4.04 – 4.1	14.7		ug/kg	
gamma–Chlordane							17.7
Column 1	1	4.55	4.52 – 4.58	17.9		ug/kg	
Column 2	1	4.2	4.17 – 4.23	15		ug/kg	
alpha–Chlordane							14.8
Column 1	1	4.64	4.61 – 4.67	18.2		ug/kg	
Column 2	1	4.29	4.26 – 4.32	15.7		ug/kg	
Endosulfan I							19.3
Column 1	1	4.73	4.7 – 4.76	18.1		ug/kg	
Column 2	1	4.33	4.3 – 4.36	14.9		ug/kg	

Identification Summary

SDG Number: 10–600 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 21:44	**Analyzed:**	29–NOV–09 21:44

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'–DDE								2.93
	Column 1	1	4.69	4.66 – 4.72	42.7		ug/kg	
	Column 2	1	4.41	4.38 – 4.44	41.4		ug/kg	
Dieldrin								8.79
	Column 1	1	4.88	4.85 – 4.91	42.9		ug/kg	
	Column 2	1	4.5	4.47 – 4.53	39.3		ug/kg	
Endrin								14.3
	Column 1	1	5.03	4.99 – 5.05	48.2		ug/kg	
	Column 2	1	4.68	4.65 – 4.71	41.8		ug/kg	
4,4'–DDD								11.6
	Column 1	1	5.06	5.03 – 5.09	47.3		ug/kg	
	Column 2	1	4.76	4.73 – 4.79	42.1		ug/kg	
Endosulfan II								14.3
	Column 1	1	5.16	5.13 – 5.19	47.5		ug/kg	
	Column 2	1	4.81	4.78 – 4.84	41.2		ug/kg	

Identification Summary

SDG Number: 10–600 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 21:44	**Analyzed:**	29–NOV–09 21:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Endrin aldehyde							11.8
Column 1	1	5.42	5.39 – 5.45	41.2		ug/kg	
Column 2	1	5.02	4.99 – 5.05	36.6		ug/kg	
4,4'–DDT							15.9
Column 1	1	5.23	5.2 – 5.26	50.2		ug/kg	
Column 2	1	4.94	4.91 – 4.97	42.8		ug/kg	
Endosulfan sulfate							20.3
Column 1	1	5.68	5.65 – 5.71	49.5		ug/kg	
Column 2	1	5.18	5.15 – 5.21	40.4		ug/kg	
Methoxychlor							2.67
Column 1	1	5.51	5.48 – 5.54	190		ug/kg	
Column 2	1	5.35	5.32 – 5.38	195		ug/kg	
Endrin ketone							8.39
Column 1	1	5.85	5.82 – 5.88	42.6		ug/kg	
Column 2	1	5.5	5.47 – 5.53	39.2		ug/kg	

Identification Summary

SDG Number: 10–600 **Client ID:** WST03–10–2132

Lab Sample ID: 241524002

Data File:	031f3101.d	**Data File:**	031b3101.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	30–NOV–09 00:08	**Analyzed:**	30–NOV–09 00:08

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'–DDT							6.58
Column 1	1	5.21	5.2 – 5.26	6.92		ug/kg	
Column 2	1	4.94	4.91 – 4.97	7.39		ug/kg	

Identification Summary

SDG Number: 10-600 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981585

Data File:	020f2001.d	**Data File:**	020b2001.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	29-NOV-09 21:56	**Analyzed:**	29-NOV-09 21:56

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							10.5
Column 1	1	4.67	4.64 – 4.7	95.9		ug/kg	
	2	4.88	4.85 – 4.91	154		ug/kg	
	3	4.94	4.91 – 4.97	169		ug/kg	
	4	4.97	4.95 – 5.01	179		ug/kg	
	5	5.15	5.13 – 5.19	155		ug/kg	
					151		
Column 2	1	4.56	4.53 – 4.59	102		ug/kg	
	2	4.78	4.76 – 4.82	171		ug/kg	
	3	4.8	4.78 – 4.84	177		ug/kg	
	4	4.86	4.83 – 4.89	182		ug/kg	
	5	5.02	4.99 – 5.05	205		ug/kg	
					167		

QUALITY CONTROL DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10–600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981581**				
Client Sample:	**QC for batch 926803**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926803**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL–OA–E–041**
Batch ID:	**926807**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:32**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 10:04**	**Aliquot:**	**30 g**	**Final Volume:**	**5 mL**
Data File:	**018f1801–589.d**	**Column:**	**1 CLP–1**	**Level:**	**LOW**
	018b1801–600.d		**2 CLP–2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC	U	0.667	ug/kg	0.167	0.667	1
58–89–9	gamma–BHC (Lindane)	U	0.667	ug/kg	0.167	0.667	1
319–85–7	beta–BHC	U	0.667	ug/kg	0.167	0.667	1
319–86–8	delta–BHC	U	0.667	ug/kg	0.167	0.667	1
76–44–8	Heptachlor	U	0.667	ug/kg	0.167	0.667	1
309–00–2	Aldrin	U	0.667	ug/kg	0.167	0.667	1
1024–57–3	Heptachlor epoxide	U	0.667	ug/kg	0.208	0.667	1
5103–74–2	gamma–Chlordane	U	0.667	ug/kg	0.167	0.667	1
5103–71–9	alpha–Chlordane	U	0.667	ug/kg	0.167	0.667	1
959–98–8	Endosulfan I	U	0.667	ug/kg	0.167	0.667	1
72–55–9	4,4'–DDE	U	1.33	ug/kg	0.333	1.33	1
60–57–1	Dieldrin	U	1.33	ug/kg	0.333	1.33	1
72–20–8	Endrin	U	1.33	ug/kg	0.333	1.33	1
72–54–8	4,4'–DDD	U	1.33	ug/kg	0.333	1.33	1
33213–65–9	Endosulfan II	U	1.33	ug/kg	0.333	1.33	1
7421–93–4	Endrin aldehyde	U	1.33	ug/kg	0.333	1.33	1
50–29–3	4,4'–DDT	U	1.33	ug/kg	0.333	1.33	1
1031–07–8	Endosulfan sulfate	U	1.33	ug/kg	0.333	1.33	1
72–43–5	Methoxychlor	U	6.67	ug/kg	1.67	6.67	1
53494–70–5	Endrin ketone	U	1.33	ug/kg	0.333	1.33	1
8001–35–2	Toxaphene	U	16.7	ug/kg	5.55	16.7	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/018f1801-600.d
Lab Smp Id: 1201981581 Client Smp ID: PBLK01
Inj Date : 29-NOV-2009 21:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981581|1|
Misc Info : |ECD81A_1SF|926807|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	80148052	194.217	32.4	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	36545312	215.629	35.9	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/018f1801-600.d

Date : 29-NOV-2009 21:32

Client ID: PBLK01

Sample Info: |120198158|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

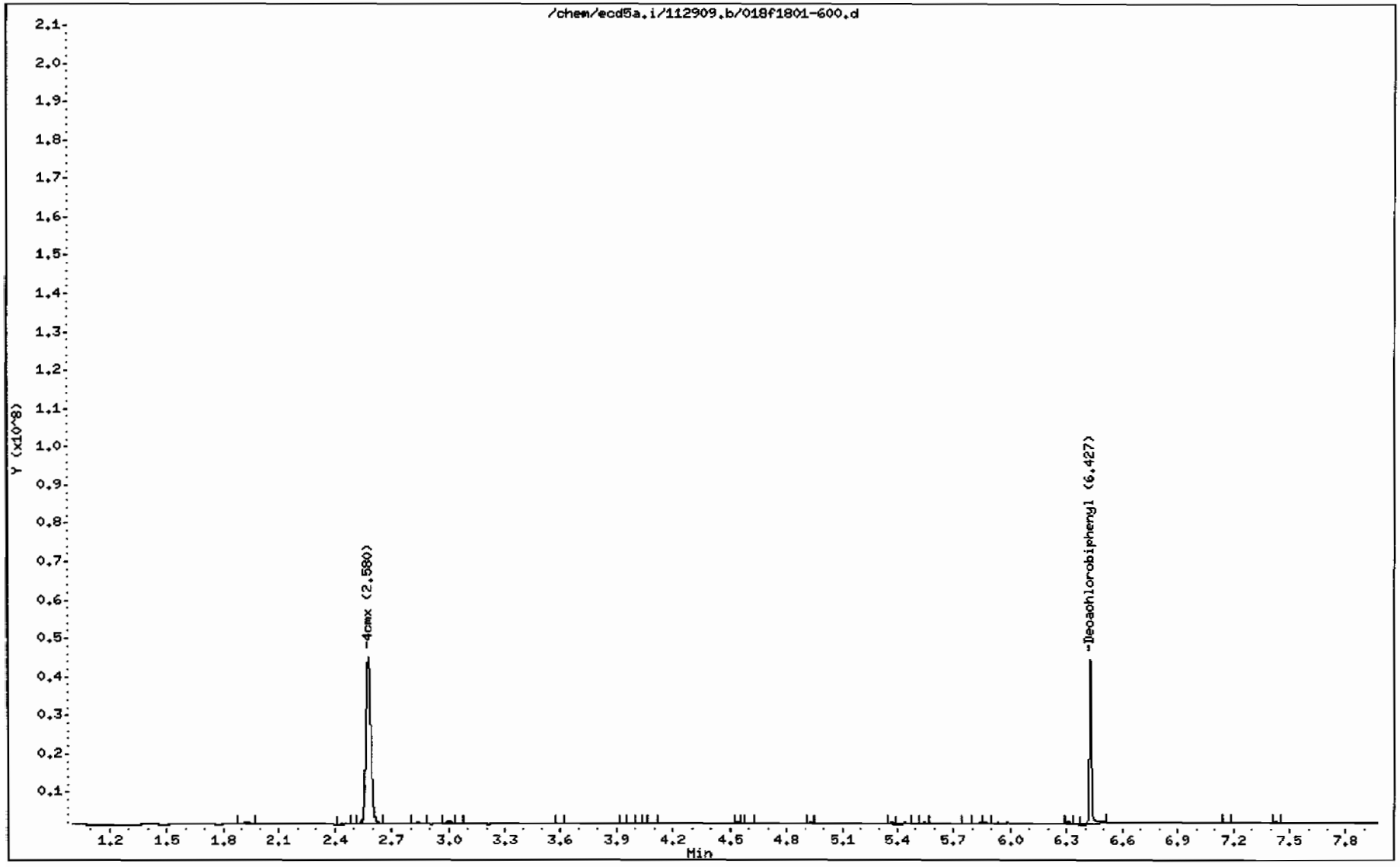

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/018b1801-600.d
Lab Smp Id: 1201981581 Client Smp ID: PBLK01
Inj Date : 29-NOV-2009 21:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981581|1|
Misc Info : |ECD81A_1SF|926807|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.125	-0.001	809335484	179.249	29.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	662216338	206.670	34.4	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/018b1801-600.d

Date : 29-NOV-2009 21:32

Client ID: PBLK01

Sample Info: |1201981581|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

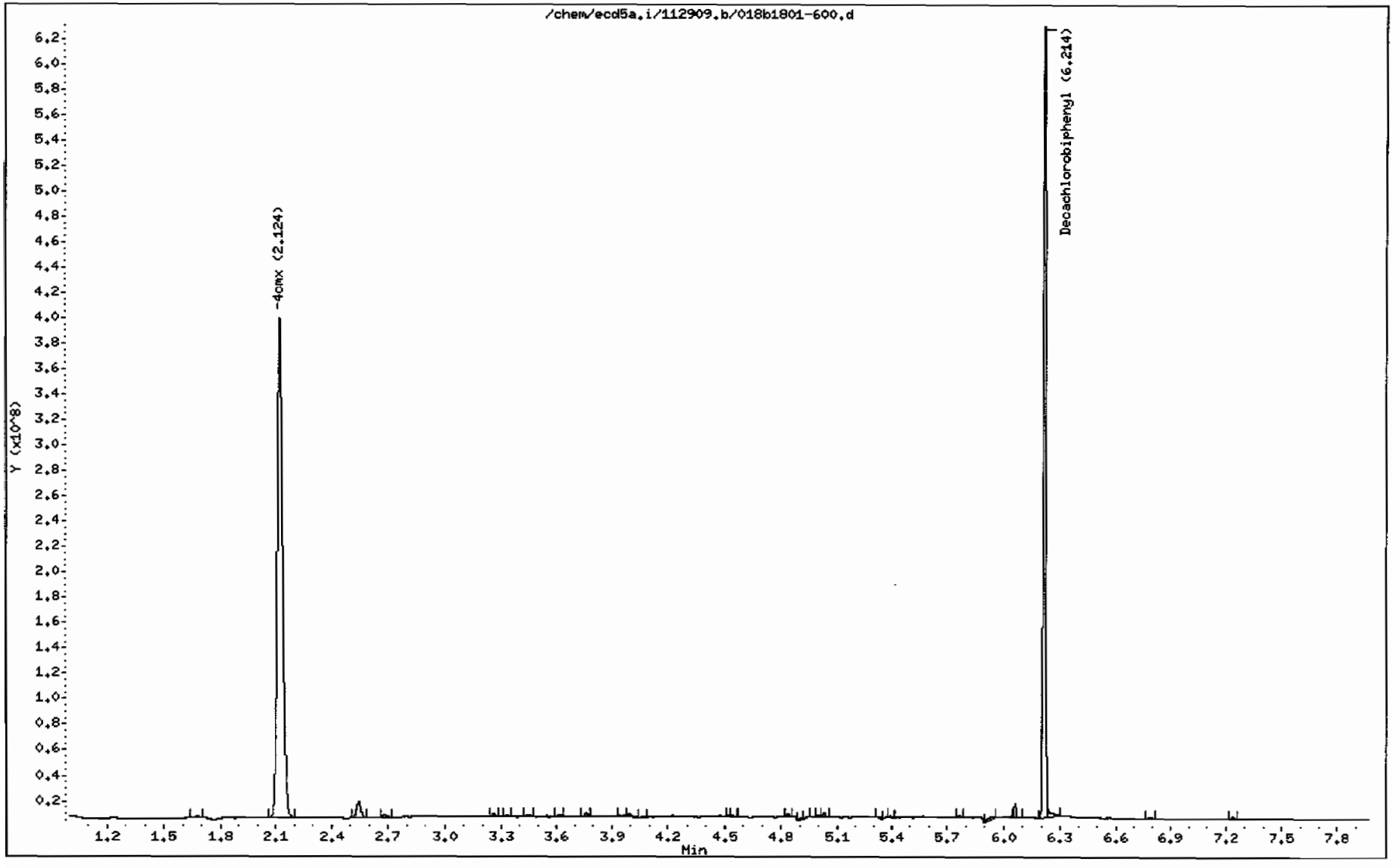

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10–600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981584**				
Client Sample:	**QC for batch 926803**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926803**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL–OA–E–041**
Batch ID:	**926807**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:44**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 10:04**	**Aliquot:**	**30 g**	**Final Volume:**	**5 mL**
Data File:	**019f1901–589.d**	**Column:**	**1 CLP–1**	**Level:**	**LOW**
	019b1901–589.d		**2 CLP–2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC		16.7	ug/kg	0.167	0.667	2
58–89–9	gamma–BHC (Lindane)		16.7	ug/kg	0.167	0.667	2
319–85–7	beta–BHC		15.9	ug/kg	0.167	0.667	2
319–86–8	delta–BHC		16.8	ug/kg	0.167	0.667	2
76–44–8	Heptachlor		16.2	ug/kg	0.167	0.667	2
309–00–2	Aldrin		15.5	ug/kg	0.167	0.667	2
1024–57–3	Heptachlor epoxide		14.7	ug/kg	0.208	0.667	2
5103–74–2	gamma–Chlordane		15.0	ug/kg	0.167	0.667	2
5103–71–9	alpha–Chlordane		15.7	ug/kg	0.167	0.667	2
959–98–8	Endosulfan I		14.9	ug/kg	0.167	0.667	2
72–55–9	4,4'–DDE		41.4	ug/kg	0.333	1.33	2
60–57–1	Dieldrin		39.3	ug/kg	0.333	1.33	2
72–20–8	Endrin		41.8	ug/kg	0.333	1.33	2
72–54–8	4,4'–DDD		42.1	ug/kg	0.333	1.33	2
33213–65–9	Endosulfan II		41.2	ug/kg	0.333	1.33	2
7421–93–4	Endrin aldehyde		36.6	ug/kg	0.333	1.33	2
50–29–3	4,4'–DDT		42.8	ug/kg	0.333	1.33	2
1031–07–8	Endosulfan sulfate		40.4	ug/kg	0.333	1.33	2
72–43–5	Methoxychlor		190	ug/kg	1.67	6.67	1
53494–70–5	Endrin ketone		39.2	ug/kg	0.333	1.33	2
8001–35–2	Toxaphene	U	16.7	ug/kg	5.55	16.7	1

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CLP-1

Data file : /chem/ecd5a.i/112909.b/019f1901-600.d
Lab Smp Id: 1201981584 Client Smp ID: PBLK01LCS
Inj Date : 29-NOV-2009 21:44
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981584|1|
Misc Info : |ECD81A_1SF|926807|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	86871849	210.510	35.1	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.428	6.427	0.001	38351131	226.284	37.7	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.170	3.169	0.001	60379514	113.138	18.8	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.454	3.454	0.000	54427350	116.654	19.4	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.533	3.532	0.001	23305665	109.827	18.3	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	56024126	114.128	19.0	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.831	3.831	0.000	45744012	111.853	18.6	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.053	4.051	0.002	45852400	104.069	17.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.473	4.472	0.001	43285522	108.990	18.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.554	4.554	0.000	42090679	107.676	17.9	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.640	4.639	0.001	41553136	109.473	18.2	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.728	4.728	0.000	38974143	108.622	18.1	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.689	4.689	0.000	100906439	256.049	42.7	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	98849874	257.457	42.9	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	94970411	289.295	48.2	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.059	5.059	0.000	87535194	283.707	47.3	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	88560857	284.974	47.5	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	67386078	246.911	41.2	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.227	5.227	0.000	74120311	301.414	50.2	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.676	5.675	0.001	87773056	296.998	49.5	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	134908980	1141.97	190	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	82952023	255.509	42.6	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd5a.i/112909.b/019f1901-600.d
Date : 29-NOV-2009 21:44
Client ID: PBLK01LCS
Sample Info: |1201981584|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

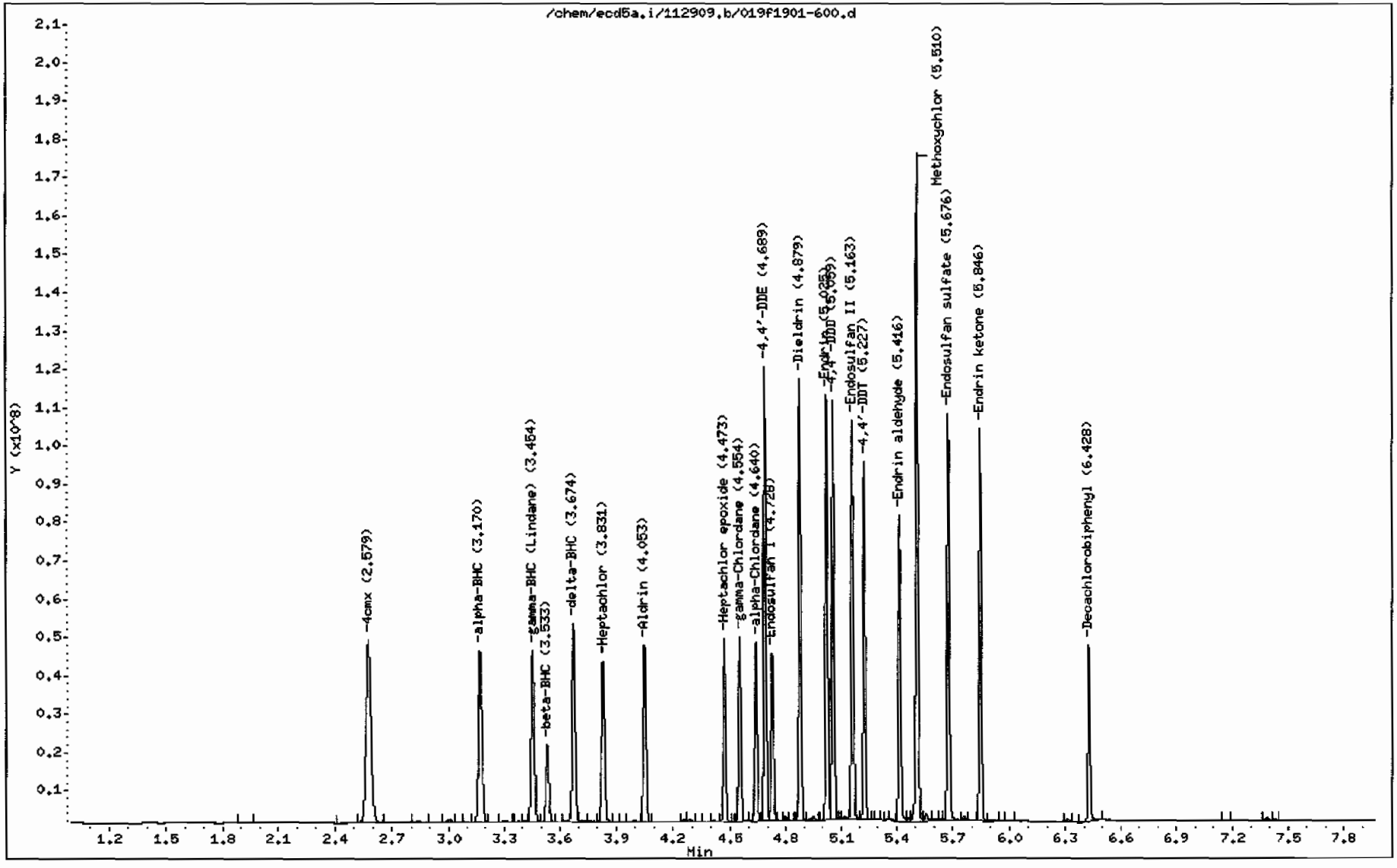

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/019b1901-600.d
Lab Smp Id: 1201981584 Client Smp ID: PBLK01LCS
Inj Date : 29-NOV-2009 21:44
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981584|1|
Misc Info : |ECD81A_1SF|926807|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.125	-0.001	875801575	193.970	32.3	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.216	6.214	0.002	698607915	218.027	36.3	80.00- 120.00	100.00(M)
5 alpha-BHC					CAS #: 319-84-6		
2.795	2.796	-0.001	631958854	100.146	16.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.109	3.110	-0.001	550099820	100.361	16.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.189	3.189	0.000	232187885	95.2183	15.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	548865510	101.066	16.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	434220714	97.3524	16.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	463433956	92.9855	15.5	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.075	4.074	0.001	370306958	88.2265	14.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.198	4.199	-0.001	402698839	90.1723	15.0	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.292	4.293	-0.001	406581099	94.4080	15.7	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	344304046	89.4757	14.9	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.406	4.405	0.001	1017726798	248.643	41.4	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	956694886	235.787	39.3	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	885855838	250.707	41.8	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	879727758	252.568	42.1	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	827029516	246.900	41.1	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	605550095	219.373	36.6	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.944	4.944	0.000	659093784	257.039	42.8	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.180	5.180	0.000	737522512	242.247	40.4	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	1036531670	1172.91	195	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	813114188	234.936	39.2	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/019b1901-600.d

Date : 29-NOV-2009 21:44

Client ID: PBLK01LCS

Sample Info: |120198158411|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

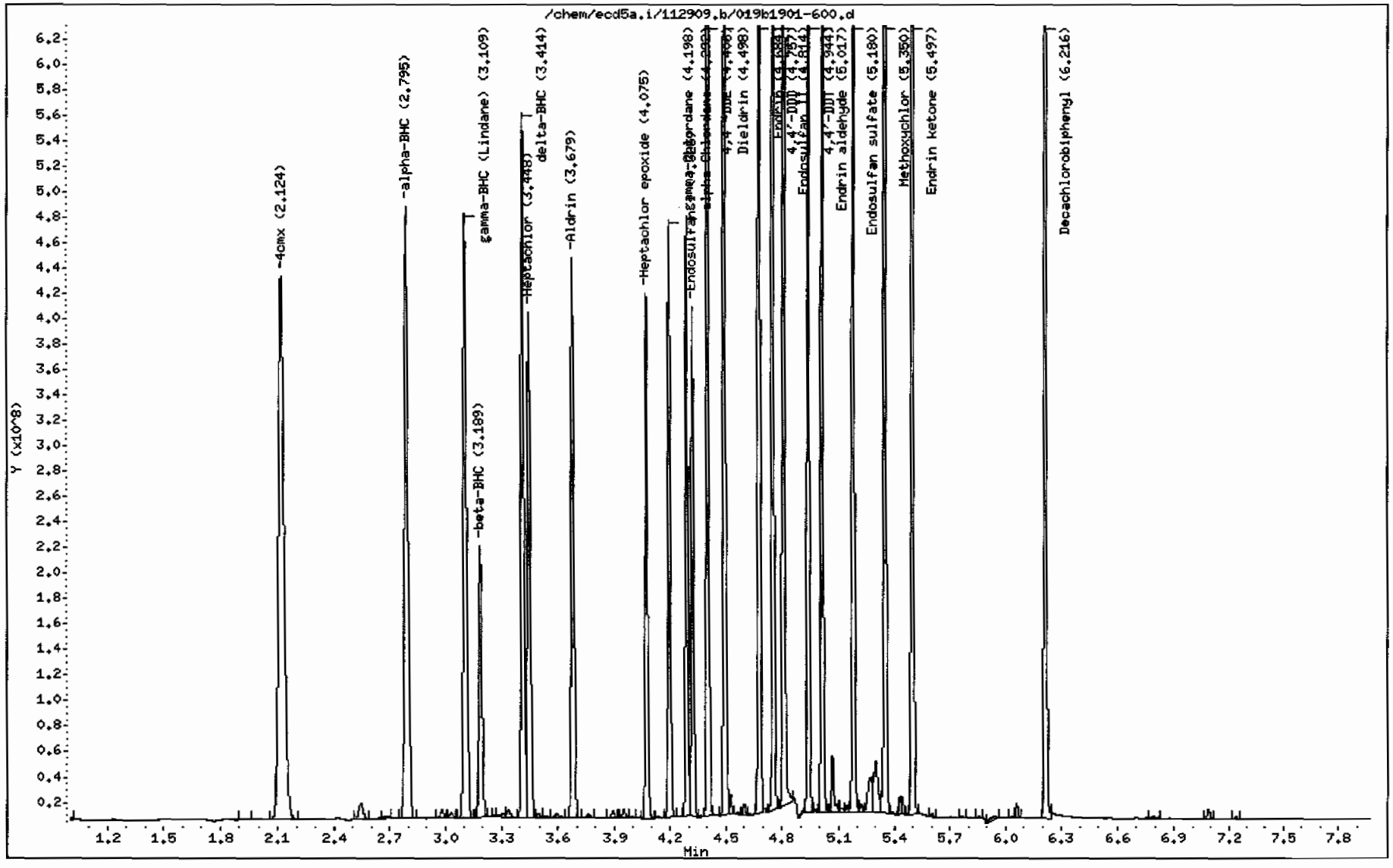

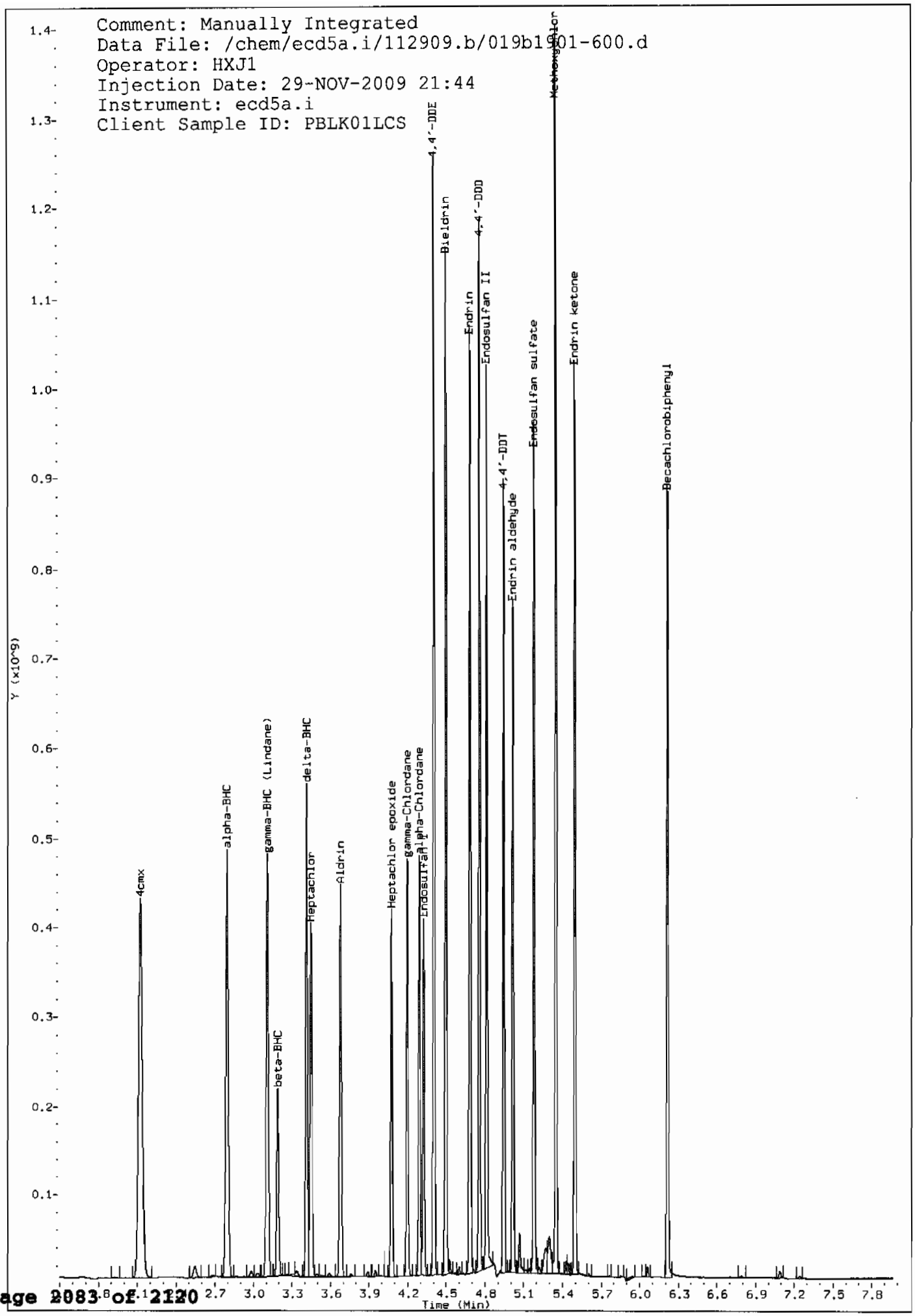
Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/019b1901-600.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:44
Instrument: ecd5a.i
Client Sample ID: PBLK01LCS
Y (x10^-6)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-019b1901-600.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:44
Instrument: ecd5a.i
Client Sample ID: PBLK01LCS

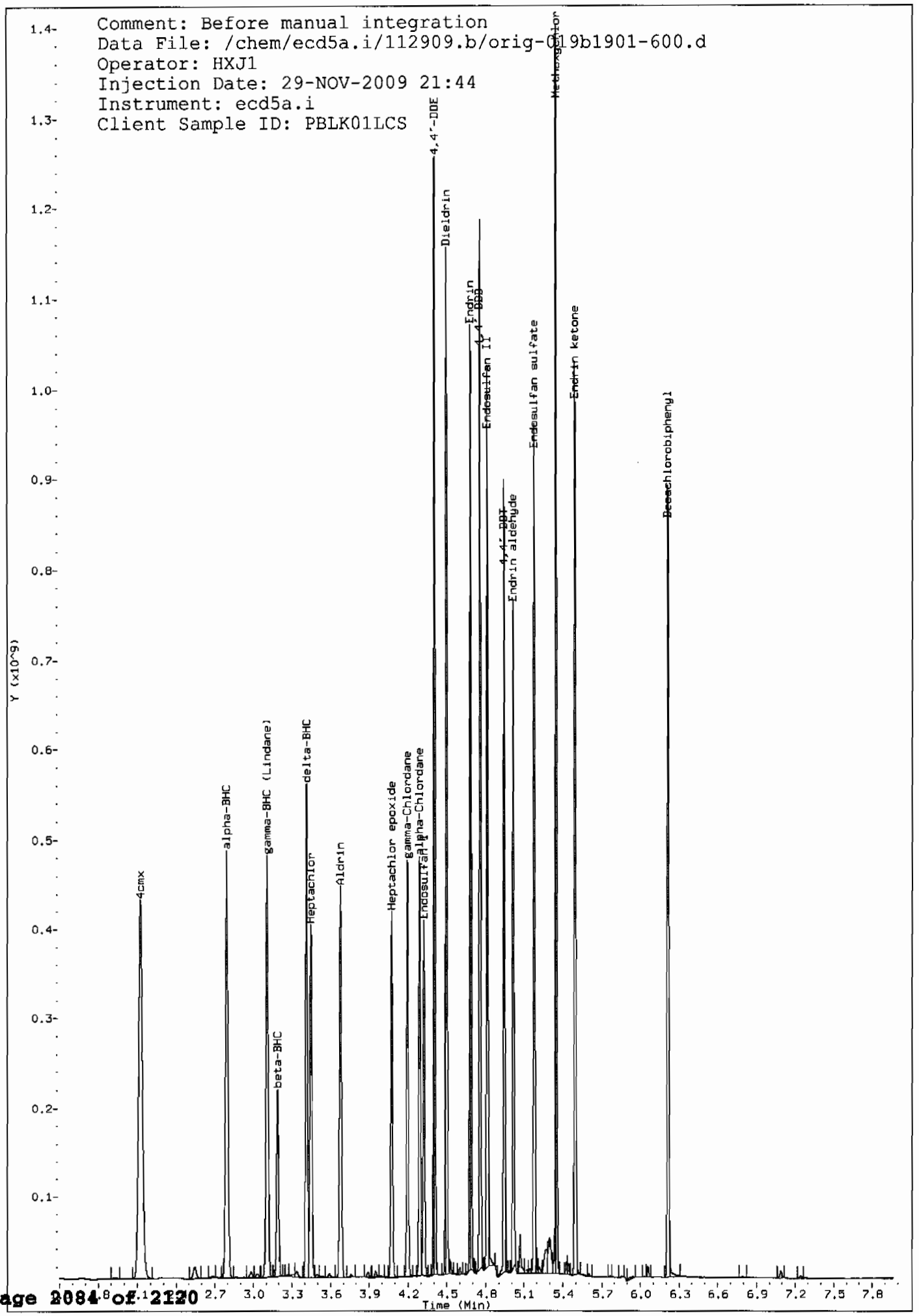

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10–600**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981585**				
Client Sample:	**QC for batch 926803**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926803**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL–OA–E–041**
Batch ID:	**926807**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:56**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 10:04**	**Aliquot:**	**30 g**	**Final Volume:**	**5 mL**
Data File:	**020f2001–589.d**	**Column:**	**1 CLP–1**	**Level:**	**LOW**
	020b2001–589.d		**2 CLP–2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC	U	0.667	ug/kg	0.167	0.667	1
58–89–9	gamma–BHC (Lindane)	U	0.667	ug/kg	0.167	0.667	1
319–85–7	beta–BHC	U	0.667	ug/kg	0.167	0.667	1
319–86–8	delta–BHC	U	0.667	ug/kg	0.167	0.667	1
76–44–8	Heptachlor	U	0.667	ug/kg	0.167	0.667	1
309–00–2	Aldrin	U	0.667	ug/kg	0.167	0.667	1
1024–57–3	Heptachlor epoxide	U	0.667	ug/kg	0.208	0.667	1
5103–74–2	gamma–Chlordane	U	0.667	ug/kg	0.167	0.667	1
5103–71–9	alpha–Chlordane	U	0.667	ug/kg	0.167	0.667	1
959–98–8	Endosulfan I	U	0.667	ug/kg	0.167	0.667	1
72–55–9	4,4'–DDE	U	1.33	ug/kg	0.333	1.33	1
60–57–1	Dieldrin	U	1.33	ug/kg	0.333	1.33	1
72–20–8	Endrin	U	1.33	ug/kg	0.333	1.33	1
72–54–8	4,4'–DDD	U	1.33	ug/kg	0.333	1.33	1
33213–65–9	Endosulfan II	U	1.33	ug/kg	0.333	1.33	1
7421–93–4	Endrin aldehyde	U	1.33	ug/kg	0.333	1.33	1
50–29–3	4,4'–DDT	U	1.33	ug/kg	0.333	1.33	1
1031–07–8	Endosulfan sulfate	U	1.33	ug/kg	0.333	1.33	1
72–43–5	Methoxychlor	U	6.67	ug/kg	1.67	6.67	1
53494–70–5	Endrin ketone	U	1.33	ug/kg	0.333	1.33	1
8001–35–2	Toxaphene		150	ug/kg	5.55	16.7	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/020f2001-600.d
Lab Smp Id: 1201981585 Client Smp ID: PBLK01TLCS
Inj Date : 29-NOV-2009 21:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981585|1|
Misc Info : |ECD81A_1SF|926807|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	91431014	221.558	36.9	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	41280362	243.568	40.6	80.00- 120.00	100.00(R)
23 Toxaphene					CAS #: 8001-35-2		
4.667	4.667	0.000	1234401	575.638	95.9	80.00- 120.00	100.00
4.882	4.882	0.000	5211543	926.043	154	178.48- 218.48	422.19
4.938	4.938	0.000	5226754	1013.31	169	222.35- 262.35	423.42
4.975	4.975	0.000	7398826	1071.32	178	276.39- 316.39	599.39

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
23 Toxaphene (continued)							
5.147	5.156	-0.009	10681947	932.572	155	493.19- 533.19	865.35
		Average of Peak Concentrations =			150		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd5a.i/112909.b/020f2001-600.d

Date : 29-NOV-2009 21:56

Client ID: PBLK01TLCS

Sample Info: |1201981585|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

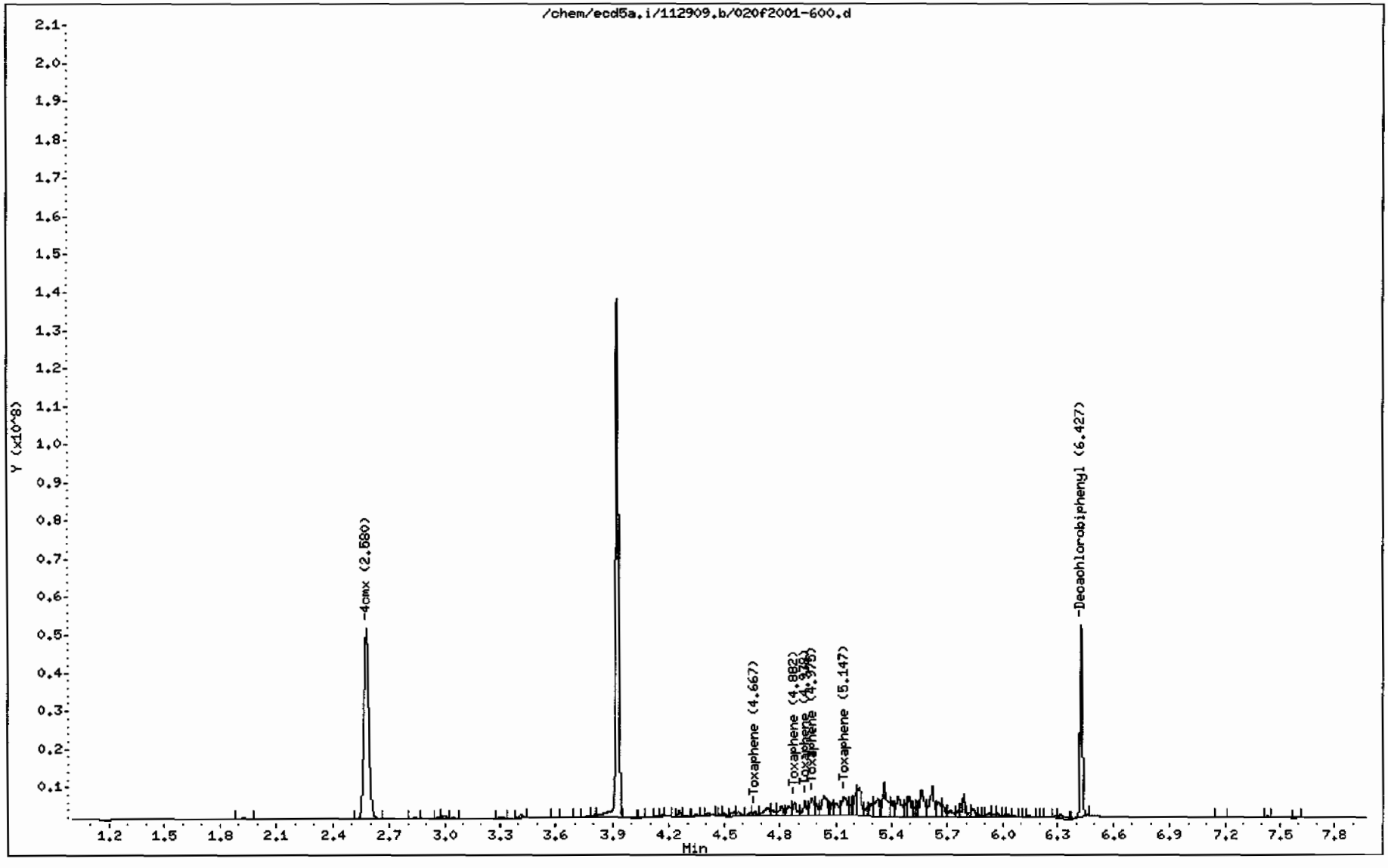

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/020b2001-600.d
Lab Smp Id: 1201981585 Client Smp ID: PBLK01TLCS
Inj Date : 29-NOV-2009 21:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981585|1|
Misc Info : |ECD81A_1SF|926807|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 c1a01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.126	2.125	0.001	909967067	201.537	33.6	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	707232902	220.719	36.8	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.557	4.556	0.001	28433825	609.071	102	80.00- 120.00	100.00(M)
4.785	4.785	0.000	55525864	1024.58	171	95.65- 135.65	195.28
4.805	4.806	-0.001	86549033	1063.50	177	168.21- 208.21	304.39
4.864	4.865	-0.001	159448701	1090.94	182	290.45- 330.45	560.77

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
23 Toxaphene (continued)							
5.020	5.021	-0.001	94111498	1229.39	205	156.12- 196.12	330.98
		Average of Peak Concentrations =			167		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/020b2001-600.d
Date : 29-NOV-2009 21:56
Client ID: PBLK01TLCS
Sample Info: |120198158511|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

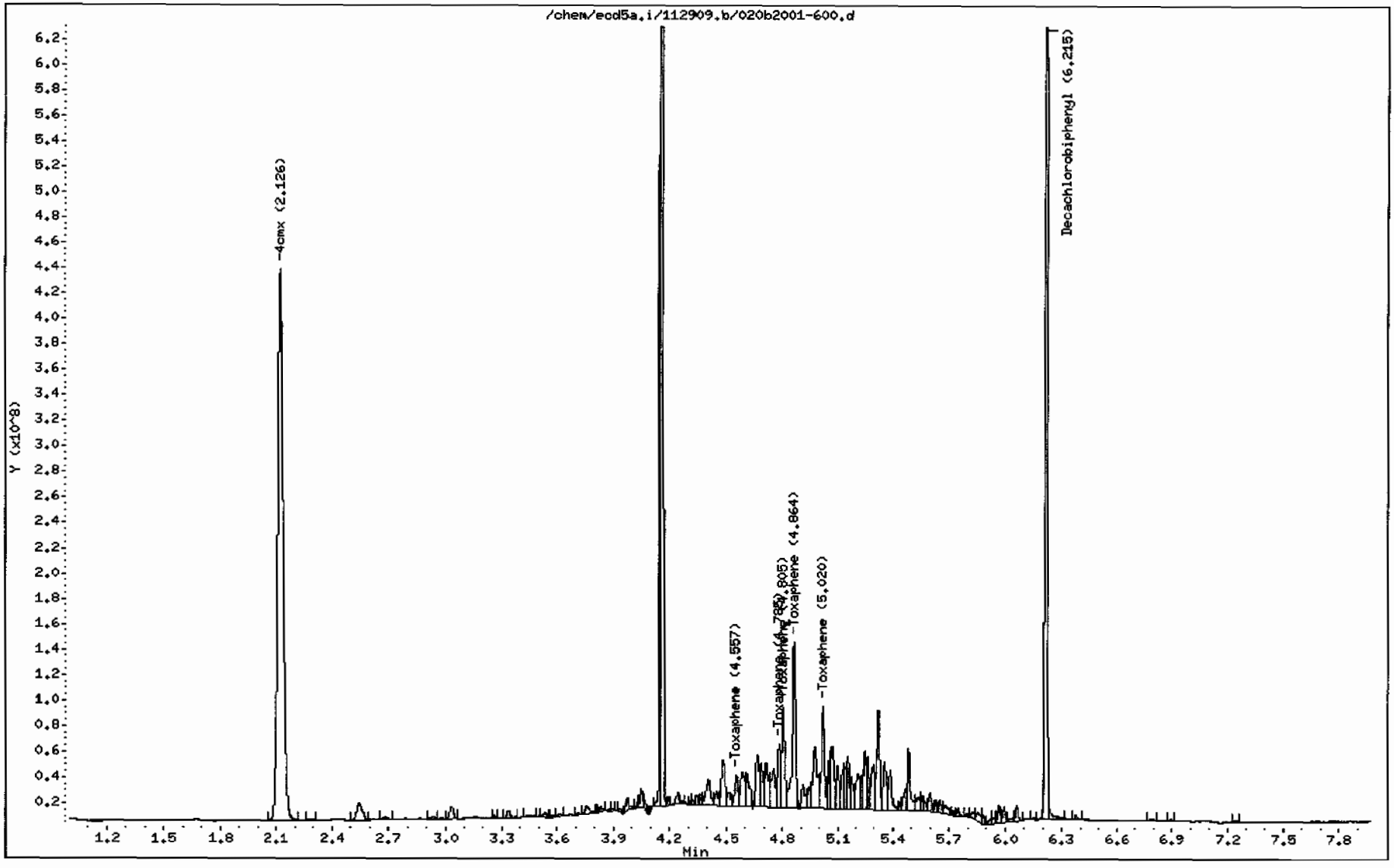

Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/020b2001-600.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:56
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

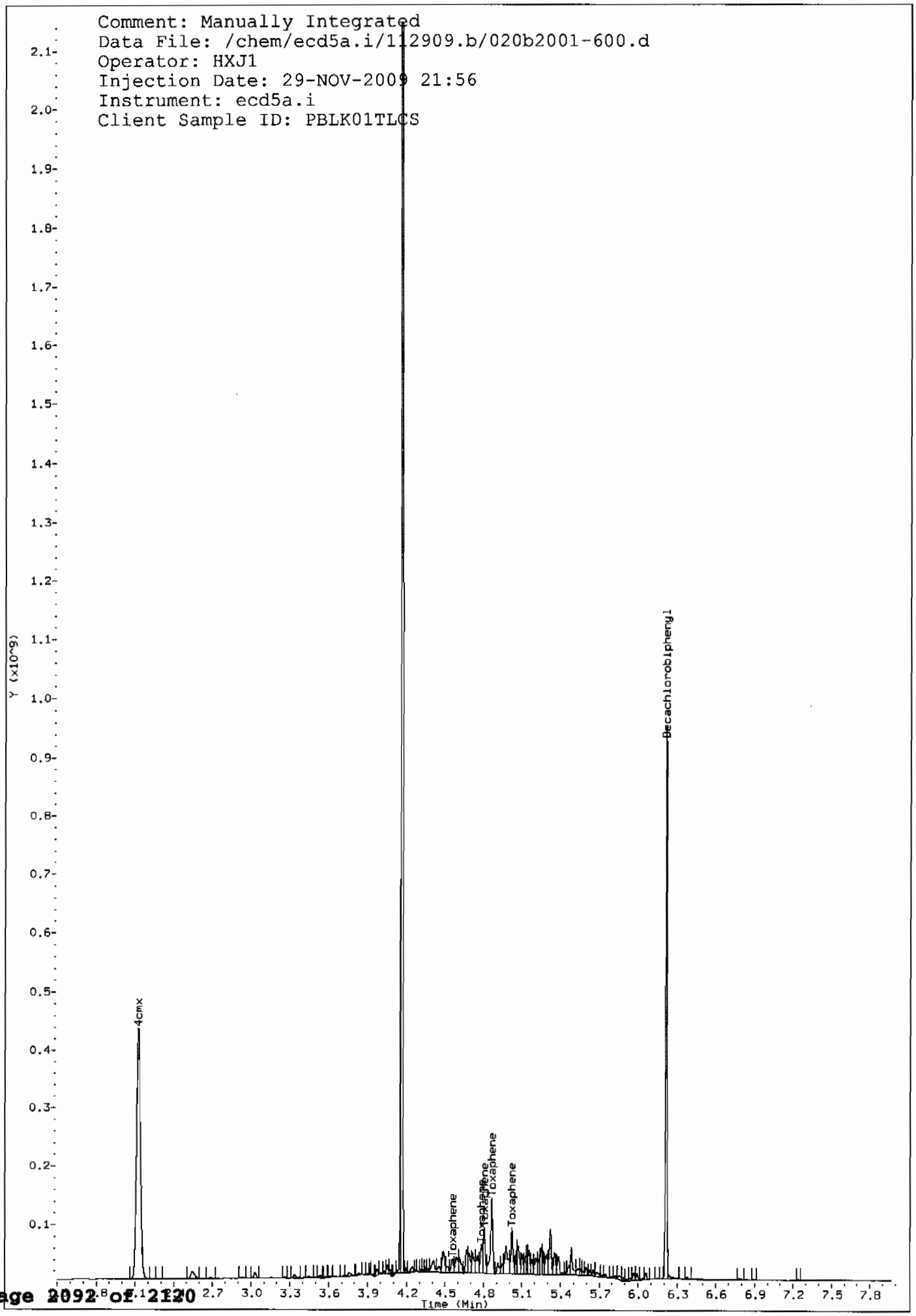

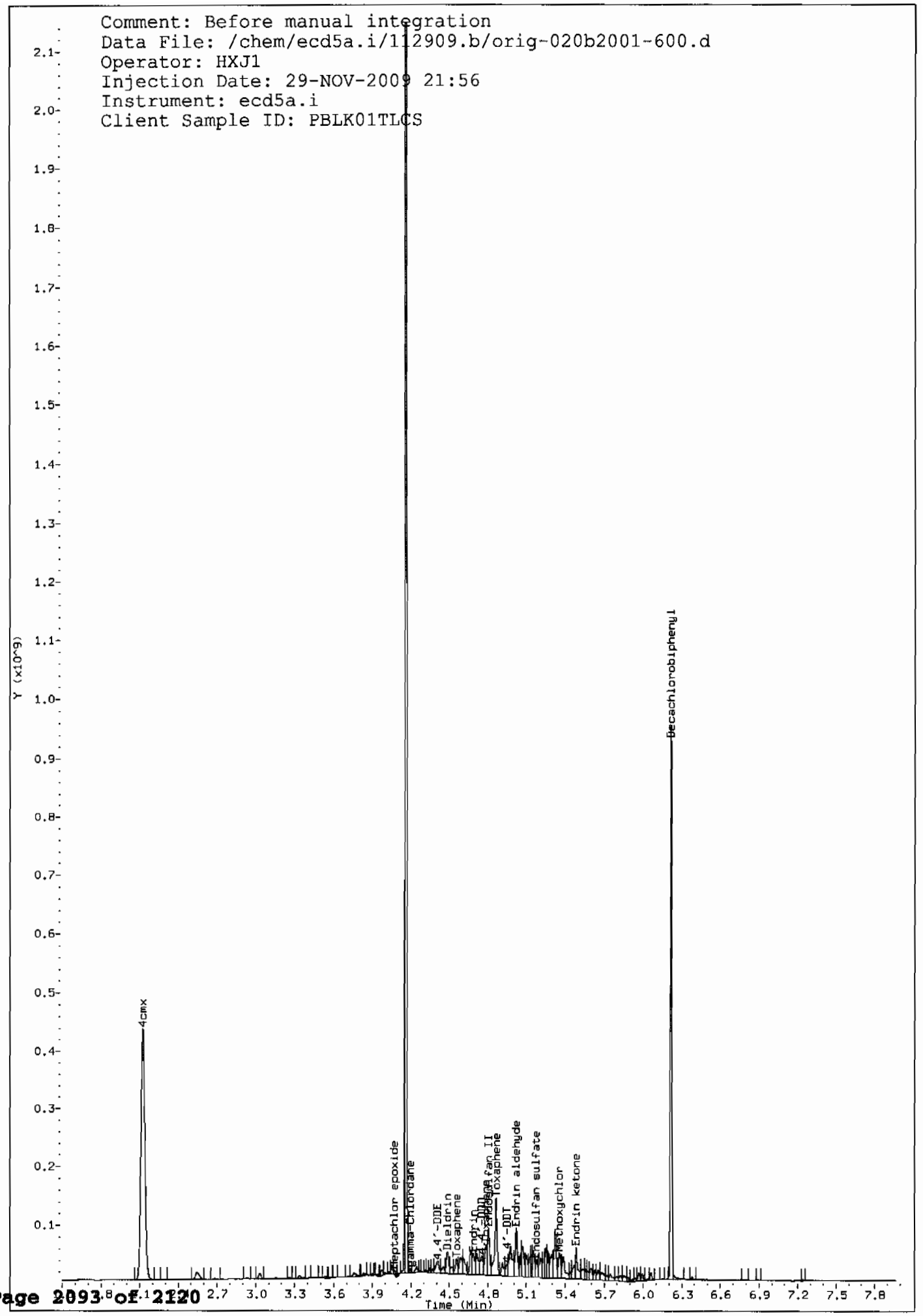
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-020b2001-600.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:56
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
Y (x10^9)
Time (Min)
4cmx
Heptachlor epoxide
gamma-Chlordane
4,4'-DDE
Dieldrin
Toxaphene
Endrin
Endosulfan II
Toxaphene
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 11/29/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ600
MERCURY LOT 906110-AS

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112809.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	28-NOV-2009 11:56		112809	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	28-NOV-2009 12:08		112809	1.0		(b) DDT 8.1%, Endrin 6.6%; (f) DDT 7.9%, Endrin 5.5%
003b0301.d	WPE091128-01AB	CXC2	28-NOV-2009 12:35		112809	1.0		DUSE
004b0401.d	WPE091128-01AB	CXC2	28-NOV-2009 12:47		112809	1.0		INDAB ICAL level 1
005b0501.d	WPE091128-02AB	CXC2	28-NOV-2009 12:58		112809	1.0		INDAB ICAL level 2
006b0601.d	WPE091128-03AB	CXC2	28-NOV-2009 13:10		112809	1.0		INDAB ICAL level 3
007b0701.d	WPE091128-04AB	CXC2	28-NOV-2009 13:22		112809	1.0		INDAB ICAL level 4
008b0801.d	IPE091128-02AB	CXC2	28-NOV-2009 13:34		112809	1.0		INDAB ICAL level 5
009b0901.d	WPE091123-10AB	CXC2	28-NOV-2009 13:46		112809	1.0		All okay
010b1001.d	WPE091124-11TX	CXC2	28-NOV-2009 14:15		112809	1.0		TOXAPH ICAL level 1
011b1101.d	WPE091124-12TX	CXC2	28-NOV-2009 14:27		112809	1.0		TOXAPH ICAL level 2
012b1201.d	WPE091124-13TX	CXC2	28-NOV-2009 14:39		112809	1.0		TOXAPH ICAL level 3
013b1301.d	WPE091124-14TX	CXC2	28-NOV-2009 14:51		112809	1.0		TOXAPH ICAL level 4
014b1401.d	IPE091121-40TX	CXC2	28-NOV-2009 15:03		112809	1.0		TOXAPH ICAL level 5
015b1501.d	WPE091104-52TX	CXC2	28-NOV-2009 15:15		112809	1.0		All okay

Instrument Batch: /chem/ecd5a.i/112809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091124-21CL	CXC2	28-NOV-2009 15:27		112809	1.0		CHLOR ICAL level 1

017b1701.d	WPE091124-22CL	CXC2	28-NOV-2009 15:39		112809		1.0		CHLOR ICAL level 2
018b1801.d	WPE091124-23CL	CXC2	28-NOV-2009 15:51		112809		1.0		CHLOR ICAL level 3
019b1901.d	WPE091124-24CL	CXC2	28-NOV-2009 16:03		112809		1.0		CHLOR ICAL level 4
020b2001.d	IPE091029-06CL	CXC2	28-NOV-2009 16:15		112809		1.0		CHLOR ICAL level 5
021b2101.d	WPE091021-00CL	CXC2	28-NOV-2009 16:27		112809		1.0		All okay
022b2201.d	WPE091109-99DG	CXC2	28-NOV-2009 16:39		112809		1.0		(b) DDT 9.4%, Endrin 7.5%; (f) DDT 6.4%, Endrin 7.0%
023b2301.d	WAR090914-99IB	CXC2	28-NOV-2009 16:51		112809		1.0		Clean
024b2401.d	1201978233	CXC2	28-NOV-2009 17:03	925346	112809		1.0	MB	DUSE - 4cmx, DCB still low - sent for re-extraction
025b2501.d	1201978234	CXC2	28-NOV-2009 17:14	925346	112809		1.0	LCS	DUSE - 4cmx, DCB still low - sent for re-extraction
026b2601.d	241549001	CXC2	28-NOV-2009 17:26	925346	112809		1.0	LANL	DUSE - 4cmx, DCB still low - sent for re-extraction
027b2701.d	WPE091123-10AB	CXC2	28-NOV-2009 17:38		112809		1.0		(b) alphaCHL low, DDT elevated; (f) gamma-BHC, Endrin, Endosulfan II, DDT, Methoxyclor elevated
028b2801.d	WAR090914-99IB	CXC2	28-NOV-2009 17:50		112809		1.0		Clean
029b2901.d	1201978540	CXC2	28-NOV-2009 18:02	926319	241358		1.0	TB	USE, uploaded both columns, reporting higher result
030b3001.d	1201980556	CXC2	28-NOV-2009 18:14	926319	241358		1.0	MB	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC
031b3101.d	1201980563	CXC2	28-NOV-2009 18:26	926319	112809		1.0	LCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
032b3201.d	1201980564	CXC2	28-NOV-2009 18:38	926319	241358		1.0	TLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
033b3301.d	1201980565	CXC2	28-NOV-2009 18:50	926319	241358		1.0	CLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
034b3401.d	WAR090914-99IB	CXC2	28-NOV-2009 19:02		112809		1.0		Clean
035b3501.d	WPE091123-10AB	CXC2	28-NOV-2009 19:14		112809		1.0		(b) DCB elevated; (f) DDE, Endrin, DDT, Methoxychlor elevated

Instrument Batch: /chem/ecd5a.i/112809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	28-NOV-2009 19:26		112809		1.0		Clean
037b3701.d	241358001	CXC2	28-NOV-2009 19:38	926319	241358		5.0	MECP	USE, uploaded both columns, reporting higher result
038b3801.d	1201980557	CXC2	28-NOV-2009 19:50	926319	241358		5.0	MS	USE, uploaded both columns, reporting higher result

039b3901.d	1201980560	CXC2	28-NOV-2009 20:02	926319	241358		5.0	MSD	USE, uploaded both columns, reporting higher result
040b4001.d	1201980558	CXC2	28-NOV-2009 20:13	926319	241358		5.0	TMS	USE, uploaded both columns, reporting higher result
041b4101.d	1201980561	CXC2	28-NOV-2009 20:25	926319	241358		5.0	TMSD	USE, uploaded both columns, reporting higher result
042b4201.d	1201980559	CXC2	28-NOV-2009 20:37	926319	241358		5.0	CMS	USE, uploaded both columns, reporting higher result
043b4301.d	1201980562	CXC2	28-NOV-2009 20:49	926319	241358		5.0	CMSD	USE, uploaded both columns, reporting higher result
044b4401.d	WPE091123-10AB	CXC2	28-NOV-2009 21:01		112809		1.0		(b) All okay; (f) Multiple analytes elevated
045b4501.d	WAR090914-99IB	CXC2	28-NOV-2009 21:13		112809		1.0		Clean
046b4601.d	1201978549	CXC2	28-NOV-2009 21:25	926342	10-589-1		1.0	TB	USE, uploaded both columns, reporting lower result
047b4701.d	1201980615	CXC2	28-NOV-2009 21:37	926342	10-589-1		1.0	MB	USE, uploaded both columns, reporting lower result
048b4801.d	1201980622	CXC2	28-NOV-2009 21:49	926342	10-589-1		1.0	LCS	USE, uploaded both columns, reporting lower result
049b4901.d	1201980623	CXC2	28-NOV-2009 22:01	926342	10-589-1		1.0	TLCS	USE, uploaded both columns, reporting lower result
050b5001.d	1201980624	CXC2	28-NOV-2009 22:13	926342	10-589-1		1.0	CLCS	USE, uploaded both columns, reporting lower result
051b5101.d	WPE091123-10AB	CXC2	28-NOV-2009 22:25		112809		1.0		(b) DDT, Methoxychlor elevated; (f) Multiple analtyes elevated
052b5201.d	WAR090914-99IB	CXC2	28-NOV-2009 22:37		112809		1.0		Clean
053b5301.d	241504001	CXC2	28-NOV-2009 22:49	926342	10-589-1		1.0	LANL	USE, uploaded both columns, reporting lower result
054b5401.d	241504002	CXC2	28-NOV-2009 23:01	926342	10-589-1		1.0	LANL	USE, uploaded both columns, reporting lower result
055b5501.d	1201980616	CXC2	28-NOV-2009 23:13	926342	10-589-1		1.0	MS	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112809.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201980619	CXC2	28-NOV-2009 23:25	926342	10-589-1	1.0	MSD	USE, uploaded both columns, reporting lower result
057b5701.d	1201980617	CXC2	28-NOV-2009 23:37	926342	10-589-1	1.0	TMS	USE, uploaded both columns, reporting lower result
058b5801.d	1201980620	CXC2	28-NOV-2009 23:49	926342	10-589-1	1.0	TMSD	USE, uploaded both columns, reporting lower result
059b5901.d	1201980618	CXC2	29-NOV-2009 00:00	926342	10-589-1	1.0	CMS	USE, uploaded both columns, reporting lower result
060b6001.d	1201980621	CXC2	29-NOV-2009 00:12	926342	10-589-1	1.0	CMSD	USE, uploaded both columns, reporting lower result
061b6101.d	241504003	CXC2	29-NOV-2009 00:24	926342	10-589-1	1.0	LANL	USE, uploaded both columns, reporting lower result
062b6201.d	WPE091123-10AB	CXC2	29-NOV-2009 00:36		112809	1.0		(b) DDT elevated; (f) Multiple analtyes elevated (including DCB)

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/01/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:HXJ1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A
B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112909.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	HXJ1	29-NOV-2009 18:05		112909	1.0		Clean
002b0201.d	WPE091109-99DG	HXJ1	29-NOV-2009 18:17		112909	1.0		(B) DDT 4.2% Endrin 1.4% (F) DDT 1.7% Endrin 1.4%
003b0301.d	WPE091123-10AB	HXJ1	29-NOV-2009 18:29		112909	1.0		DUSE - multiple analyte elevated
004b0401.d	WPE091104-52TX	HXJ1	29-NOV-2009 18:41		112909	1.0		(B) All OK (F) Passes on average/ All OK DODQSM & 8081B
005b0501.d	WPE091021-00CL	HXJ1	29-NOV-2009 18:53		112909	1.0		Elevated - Not target
006b0601.d	WPE091128-01AB	HXJ1	29-NOV-2009 19:05		112909	1.0		INDAB ICAL LEVEL 1
007b0701.d	WPE091128-02AB	HXJ1	29-NOV-2009 19:17		112909	1.0		INDAB ICAL LEVEL 2
008b0801.d	WPE091128-03AB	HXJ1	29-NOV-2009 19:29		112909	1.0		INDAB ICAL LEVEL 3
009b0901.d	WPE091128-04AB	HXJ1	29-NOV-2009 19:41		112909	1.0		INDAB ICAL LEVEL 4
010b1001.d	IPE091128-02AB	HXJ1	29-NOV-2009 19:53		112909	1.0		INDAB ICAL LEVEL 5
011b1101.d	WPE091123-10AB	HXJ1	29-NOV-2009 20:05		112909	1.0		All OK
012b1201.d	WAR090914-99IB	HXJ1	29-NOV-2009 20:17		112909	1.0		Clean
013b1301.d	1201978233	HXJ1	29-NOV-2009 20:28	925346	10-613	1.0	MB	DUSE - DCB low
014b1401.d	1201978234	HXJ1	29-NOV-2009 20:40	925346	10-613	1.0	LCS	DUSE - DCB low
015b1501.d	241549001	HXJ1	29-NOV-2009 20:52	925346	10-613	1.0	LANL	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112909.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016b1601.d	WPE091123-10AB	HXJ1	29-NOV-2009 21:06		112909		1.0		(B) Heptachlor epoxide & gamma-CHL low; Methoyxchlor elevated (F) DDT elevated - CCV failure confirmed in sequence 112809.b
017b1701.d	WAR090914-99IB	HXJ1	29-NOV-2009 21:20		112909		1.0		Clean
018b1801.d	1201981581	HXJ1	29-NOV-2009 21:32	926807	10-578		1.0	MB	USE - uploaded both columns, reporting lower result
019b1901.d	1201981584	HXJ1	29-NOV-2009 21:44	926807	10-578		1.0	LCS	USE - uploaded both columns, reporting lower result (F) 4CMX elevated
020b2001.d	1201981585	HXJ1	29-NOV-2009 21:56	926807	10-578		1.0	TLCS	USE - uploaded both columns, reporting lower result (F) surrogates elevated
021b2101.d	241423004	HXJ1	29-NOV-2009 22:08	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result - Aroclor
022b2201.d	1201981582	HXJ1	29-NOV-2009 22:20	926807	10-578		10.0	MS	USE - uploaded both columns, reporting lower result - Aroclor
023b2301.d	1201981583	HXJ1	29-NOV-2009 22:32	926807	10-578		10.0	MSD	USE - uploaded both columns, reporting lower result - Aroclor
024b2401.d	WAR090914-99IB	HXJ1	29-NOV-2009 22:44		112909		1.0		Clean
025b2501.d	WPE091123-10AB	HXJ1	29-NOV-2009 22:56		112909		1.0		(B) Methoxychlor elevated (F) All OK
026b2601.d	WAR090914-99IB	HXJ1	29-NOV-2009 23:08		112909		1.0		Clean
027b2701.d	241423005	HXJ1	29-NOV-2009 23:20	926807	10-578		10.0	LANL	DUSE - still has sulfur - see re-cleaned vial at 32
028b2801.d	241503002	HXJ1	29-NOV-2009 23:32	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
029b2901.d	241503003	HXJ1	29-NOV-2009 23:44	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result ** hit of DDT below PQL
030b3001.d	241503004	HXJ1	29-NOV-2009 23:56	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
031b3101.d	241524002	HXJ1	30-NOV-2009 00:08	926807	10-600		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
032b3201.d	241423005	HXJ1	30-NOV-2009 00:20	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
033b3301.d	WPE091123-10AB	HXJ1	30-NOV-2009 00:35		112909		1.0		(B) Endrin ketone low (F) gamma-BHC elevated - B&F All OK 8081B
034b3401.d	WAR090914-99IB	HXJ1	30-NOV-2009 00:47		112909		1.0		Clean
035b3501.d	1201979436	HXJ1	30-NOV-2009 00:59	925818	241227		1.0	MB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

Instrument Batch: /chem/ecd5a.i/112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	1201979439	HXJ1	30-NOV-2009 01:11	925818	241227	1.0	LCS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

037b3701.d	241227001	HXJ1	30-NOV-2009 01:23	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
038b3801.d	241227002	HXJ1	30-NOV-2009 01:35	925818	241227	20.0	WSRB	DUSE - surrogates elevated see re-analysis 113009 **HITS gamma- & alpha-CHL, DDE & DDT
039b3901.d	241227003	HXJ1	30-NOV-2009 01:47	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
040b4001.d	241227004	HXJ1	30-NOV-2009 01:59	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
041b4101.d	1201979437	HXJ1	30-NOV-2009 02:11	925818	241227	20.0	MS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
042b4201.d	1201979438	HXJ1	30-NOV-2009 02:23	925818	241227	20.0	MSD	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
043b4301.d	WPE091123-10AB	HXJ1	30-NOV-2009 02:34		112909	1.0		(B) All OK (F) gamma-BHC, gamma-CHL and EndoII elevated for 81A
044b4401.d	WAR090914-99IB	HXJ1	30-NOV-2009 02:46		112909	1.0		Clean
045b4501.d	241227005	HXJ1	30-NOV-2009 02:58	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
046b4601.d	241227006	HXJ1	30-NOV-2009 03:10	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
047b4701.d	241227007	HXJ1	30-NOV-2009 03:22	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
048b4801.d	241227008	HXJ1	30-NOV-2009 03:34	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, DDE & DDD
049b4901.d	241227009	HXJ1	30-NOV-2009 03:46	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
050b5001.d	WPE091123-10AB	HXJ1	30-NOV-2009 03:58		112909	1.0		(B) All OK (F) gamma-BHC & gamma-CHL elevated for 8081A
051b5101.d	WAR090914-99IB	HXJ1	30-NOV-2009 04:10		112909	1.0		Clean
052b5201.d	1201981522	HXJ1	30-NOV-2009 04:22	926780	241451	1.0	MB	DUSE - CCV failure confirmed, reporting analysis 120109.b
053b5301.d	1201981525	HXJ1	30-NOV-2009 04:34	926780	241451	1.0	LCS	DUSE - CCV failure confirmed, reporting analysis 120109.b

054b5401.d	241451001	HXJ1	30-NOV-2009 04:46	926780	241451		1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
055b5501.d	241451002	HXJ1	30-NOV-2009 04:58	926780	241451		1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b

Instrument Batch: /chem/ecd5a.i/112909.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	241451003	HXJ1	30-NOV-2009 05:10	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
057b5701.d	1201981523	HXJ1	30-NOV-2009 05:22	926780	241451	1.0	MS	DUSE - CCV failure confirmed, reporting analysis 120109.b
058b5801.d	1201981524	HXJ1	30-NOV-2009 05:34	926780	241451	1.0	MSD	DUSE - CCV failure confirmed, reporting analysis 120109.b
059b5901.d	WPE091123-10AB	HXJ1	30-NOV-2009 05:45		112909	1.0		(B)DDT, Meth & E.ketone low for DODQSM; Several analytes low for 8081A (F) DDT & Methoxychlor low for DOD QSM; E.ketone low for 8081A
060b6001.d	WAR090914-99IB	HXJ1	30-NOV-2009 05:57		112909	1.0		Clean
061b6101.d	1201982218	HXJ1	30-NOV-2009 06:09	927124	241358	1.0	MB	DUSE - surrogate failure confirmed, reporting first instance
062b6201.d	1201982219	HXJ1	30-NOV-2009 06:21	927124	241358	1.0	LCS	DUSE - surrogate failure confirmed, reporting first instance
063b6301.d	1201982220	HXJ1	30-NOV-2009 06:33	927124	241358	1.0	LCSD	DUSE - surrogate failure confirmed, reporting first instance
064b6401.d	241358001	HXJ1	30-NOV-2009 06:45	927124	241358	2.0	MECP	DUSE - surrogate failure confirmed, reporting first instance
065b6501.d	WPE091123-10AB	HXJ1	30-NOV-2009 06:57		112909	1.0		Almost every analyte on low both columns
066b6601.d	WAR090914-99IB	HXJ1	30-NOV-2009 07:09		112909	1.0		Matrix carryover
067b1001.d	WPE091123-10AB	CXC2	30-NOV-2009 13:28		112909	1.0		DUSE - for reference only

Instrument Batch: /chem/ecd5a.i/112909.b Page: 4

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/022b2201.d
Lab Smp Id: 1201981582 Client Smp ID: WST03-10-2131MS
Inj Date : 29-NOV-2009 22:20
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981582|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 22 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.123	2.125	-0.002	77869886	17.2464	31.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	49718126	15.5164	28.0	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.796	2.796	0.000	53007406	8.40007	15.2	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	46332435	8.45296	15.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.190	3.189	0.001	22453994	9.20819	16.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	45082502	8.30134	15.0	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	38677840	8.67159	15.7	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	42331272	8.49354	15.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.075	4.074	0.001	49948367	11.9003	21.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.199	4.199	0.000	53053859	11.8798	21.5	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.292	4.293	-0.001	41393816	9.61163	17.4	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	33713335	8.76122	15.8	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.405	4.405	0.000	90746424	22.1705	40.1	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.496	4.498	-0.002	102790158	25.3336	45.8	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	81307959	23.0110	41.6	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.756	4.758	-0.002	64825662	18.6113	33.6	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.813	4.814	-0.001	96312592	28.7529	52.0	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.016	5.016	0.000	49616847	17.9747	32.5	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.944	4.944	0.000	81595832	31.8214	57.5	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.180	5.180	0.000	65166363	21.4046	38.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	81641514	59.3953	107	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.496	5.496	0.000	64311672	18.5818	33.6	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/022b2201.d
Date : 29-NOV-2009 22:20
Client ID: WST03-10-2131MS
Sample Info: |1201981582|10|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

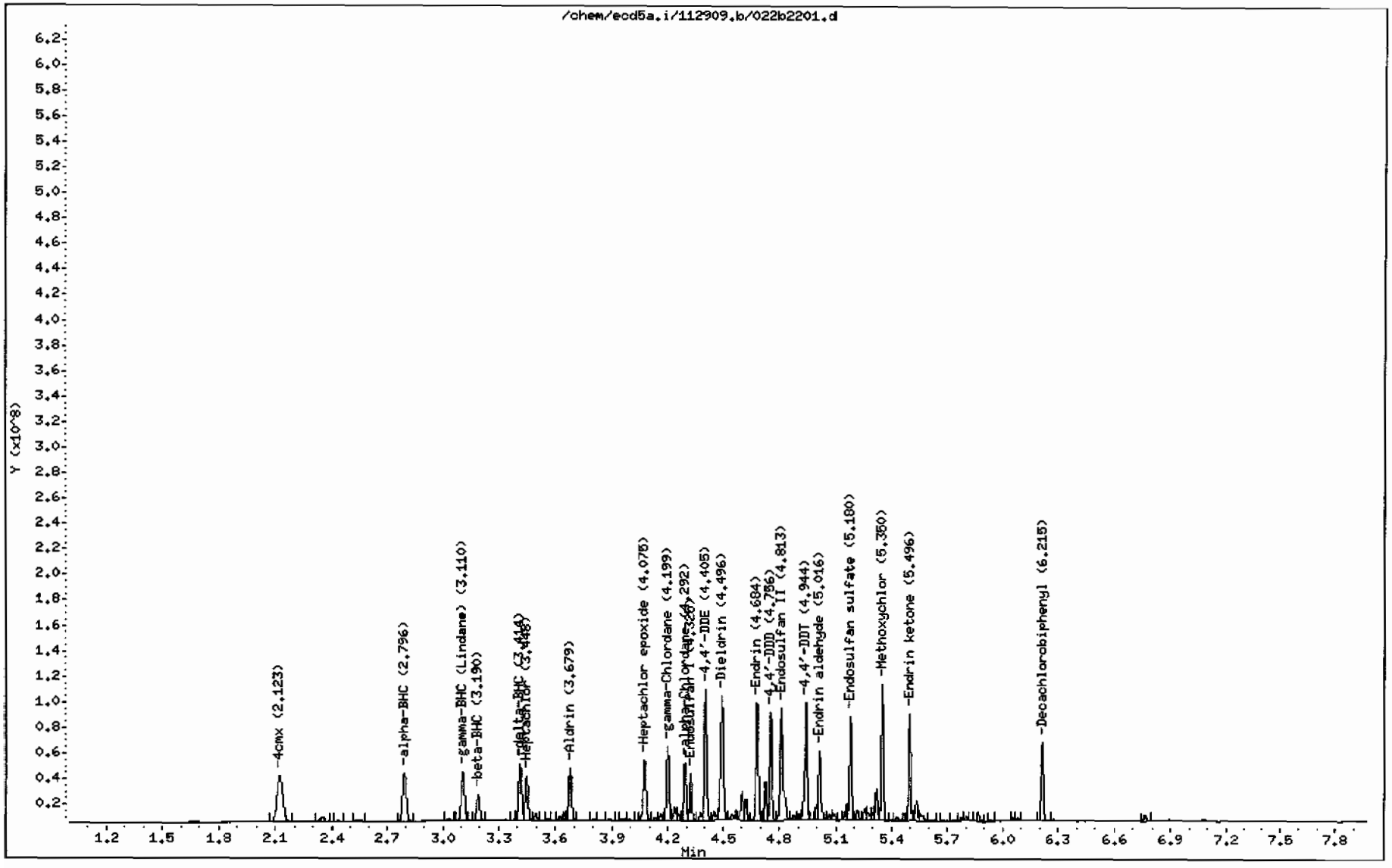

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CLP-1

Data file : /chem/ecd5a.i/112909.b/022f2201.d
Lab Smp Id: 1201981582 Client Smp ID: WST03-10-2131MS
Inj Date : 29-NOV-2009 22:20
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981582|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 22 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	6553836	15.8814	28.7	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.426	6.427	-0.001	2920953	17.2346	31.2	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.170	3.169	0.001	4135190	7.74843	14.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.455	3.454	0.001	3751661	8.04094	14.5	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.533	3.532	0.001	1844878	8.69391	15.7	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	3785886	7.71233	13.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.830	3.831	-0.001	3212664	7.85561	14.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.052	4.051	0.001	3475401	7.88794	14.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	3554311	8.94951	16.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.555	4.554	0.001	3630649	9.28786	16.8	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.640	4.639	0.001	3790538	9.98633	18.0	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.729	4.728	0.001	3252072	9.06359	16.4	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.688	4.689	-0.001	8596426	21.8134	39.4	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.878	4.879	-0.001	9106595	23.7184	42.9	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	9819436	29.9116	54.1	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.058	5.059	-0.001	7233903	23.4455	42.4	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	7084472	22.7966	41.2	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	5056174	18.5265	33.5	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.226	5.227	-0.001	4928686	20.0427	36.2	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.675	5.675	0.000	5776535	19.5461	35.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	8821256	74.6697	135	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	5609409	17.2781	31.2	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/022f2201.d

Date : 29-NOV-2009 22:20

Client ID: WST03-10-2131MS

Sample Info: |1201981582|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

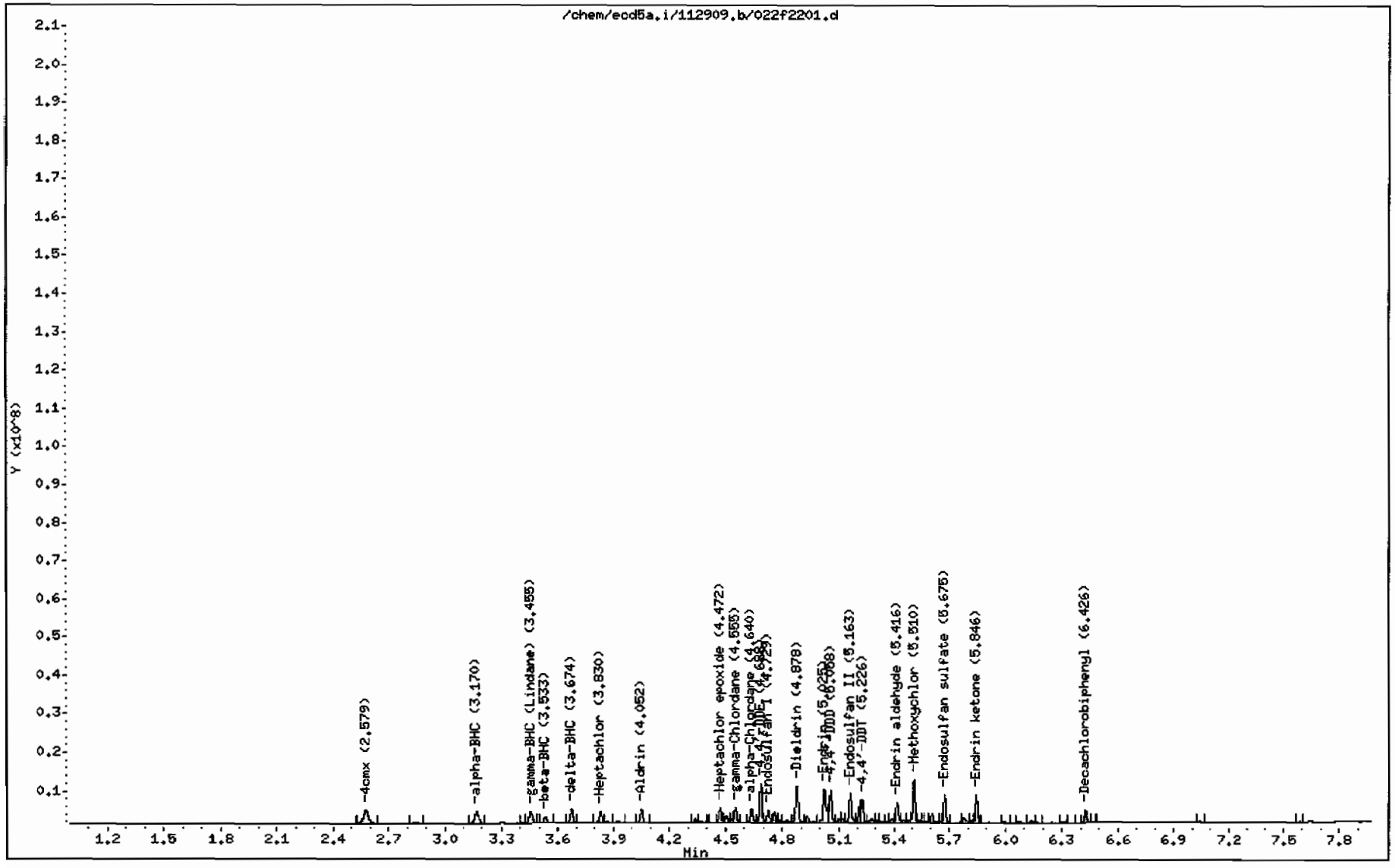

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CLP-2

Data file : /chem/ecd5a.i/112909.b/023b2301.d
Lab Smp Id: 1201981583 Client Smp ID: WST03-10-2131MSD
Inj Date : 29-NOV-2009 22:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981583|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.126	2.125	0.001	74397780	16.4774	29.8	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.216	6.214	0.002	46378731	14.4742	26.2	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.797	2.796	0.001	51219054	8.11667	14.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	43269562	7.89417	14.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.191	3.189	0.002	21496572	8.81556	15.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.415	3.414	0.001	40414719	7.44183	13.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	35928811	8.05525	14.6	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	41608317	8.34848	15.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.077	4.074	0.003	50454959	12.0210	21.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.200	4.199	0.001	49654560	11.1186	20.1	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	40063601	9.30276	16.8	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	31913383	8.29346	15.0	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.406	4.405	0.001	85978588	21.0056	38.0	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.497	4.498	-0.001	99276385	24.4676	44.2	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	72866350	20.6219	37.3	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	59436038	17.0640	30.9	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	90605935	27.0493	48.9	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	44225127	16.0215	29.0	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.945	4.944	0.001	72029075	28.0905	50.8	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.181	5.180	0.001	62244259	20.4448	37.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	71989424	48.1398	87.1	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	60083217	17.3601	31.4	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/023b2301.d
Date : 29-NOV-2009 22:32
Client ID: WST03-10-2131HSD
Sample Info: 1120198158310|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJL
Column diameter: 0.25

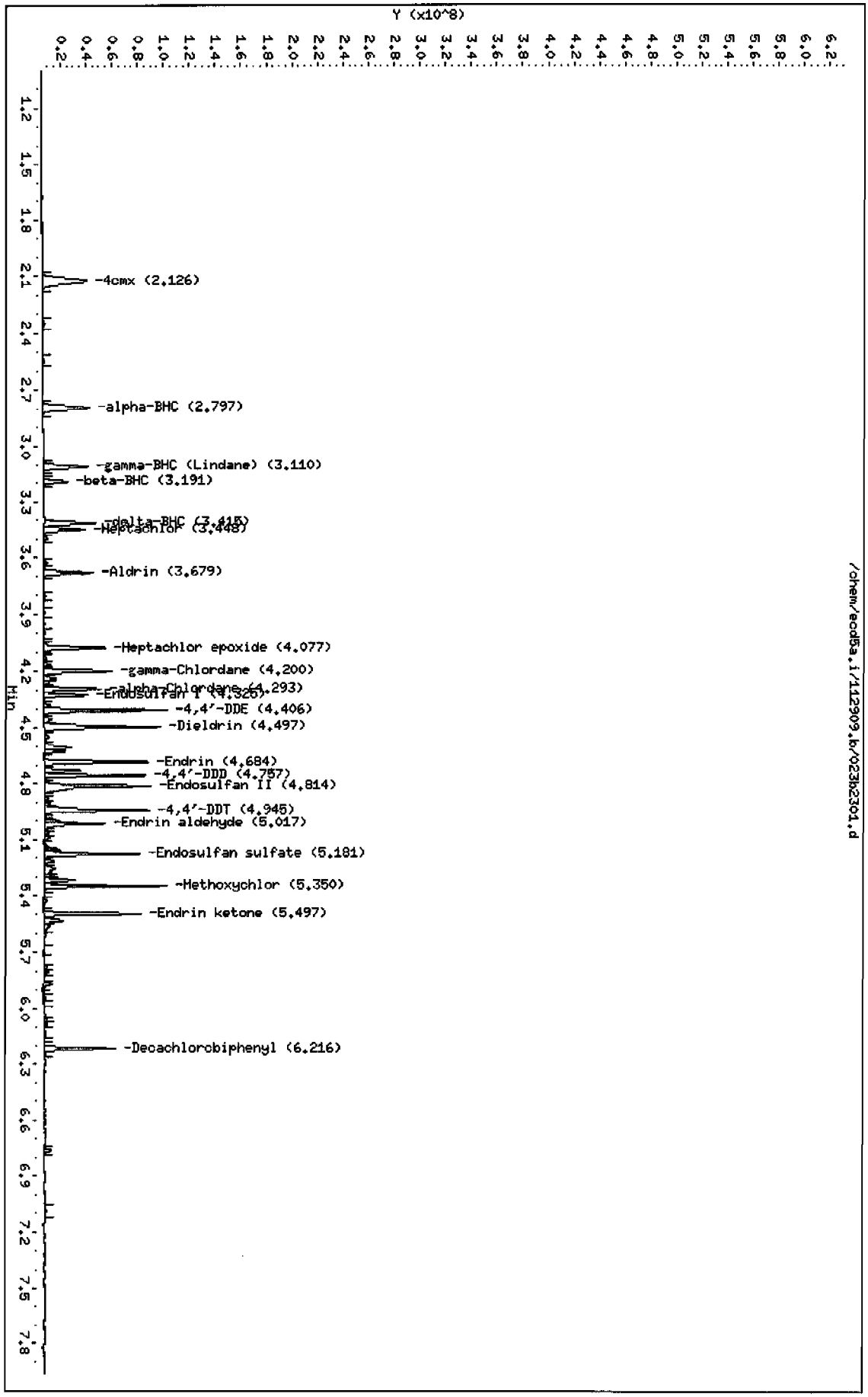

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/023f2301.d
Lab Smp Id: 1201981583 Client Smp ID: WST03-10-2131MSD
Inj Date : 29-NOV-2009 22:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981583|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.581	2.579	0.002	6341535	15.3670	27.8	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	3057776	18.0419	32.6	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.172	3.169	0.003	3967689	7.43457	13.4	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.455	3.454	0.001	3571385	7.65455	13.8	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.534	3.532	0.002	1758180	8.28535	15.0	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	3618027	7.37038	13.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.832	3.831	0.001	3021942	7.38926	13.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.052	4.051	0.001	3359752	7.62546	13.8	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	3370120	8.48573	15.3	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.555	4.554	0.001	3516378	8.99554	16.3	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.641	4.639	0.002	3524005	9.28414	16.8	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.729	4.728	0.001	3107201	8.65983	15.7	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.687	4.689	-0.002	8125268	20.6178	37.3	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	8614756	22.4374	40.6	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	8930940	27.2051	49.2	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.058	5.059	-0.001	6878505	22.2936	40.3	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	6864755	22.0896	40.0	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.417	5.416	0.001	4561392	16.7135	30.2	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.227	5.227	0.000	4482606	18.2287	33.0	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.677	5.675	0.002	5597065	18.9388	34.2	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	8381485	70.9471	128	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.847	5.846	0.001	5321751	16.3921	29.6	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/023f2301.d

Page 1

Date : 29-NOV-2009 22:32

Client ID: WST03-10-2131MSD

Instrument: ecd5a.i

Sample Info: |120198158310|

Volume Injected (uL): 1.0

Operator: HXJ1

Column phase: CLP-1

Column diameter: 0.25

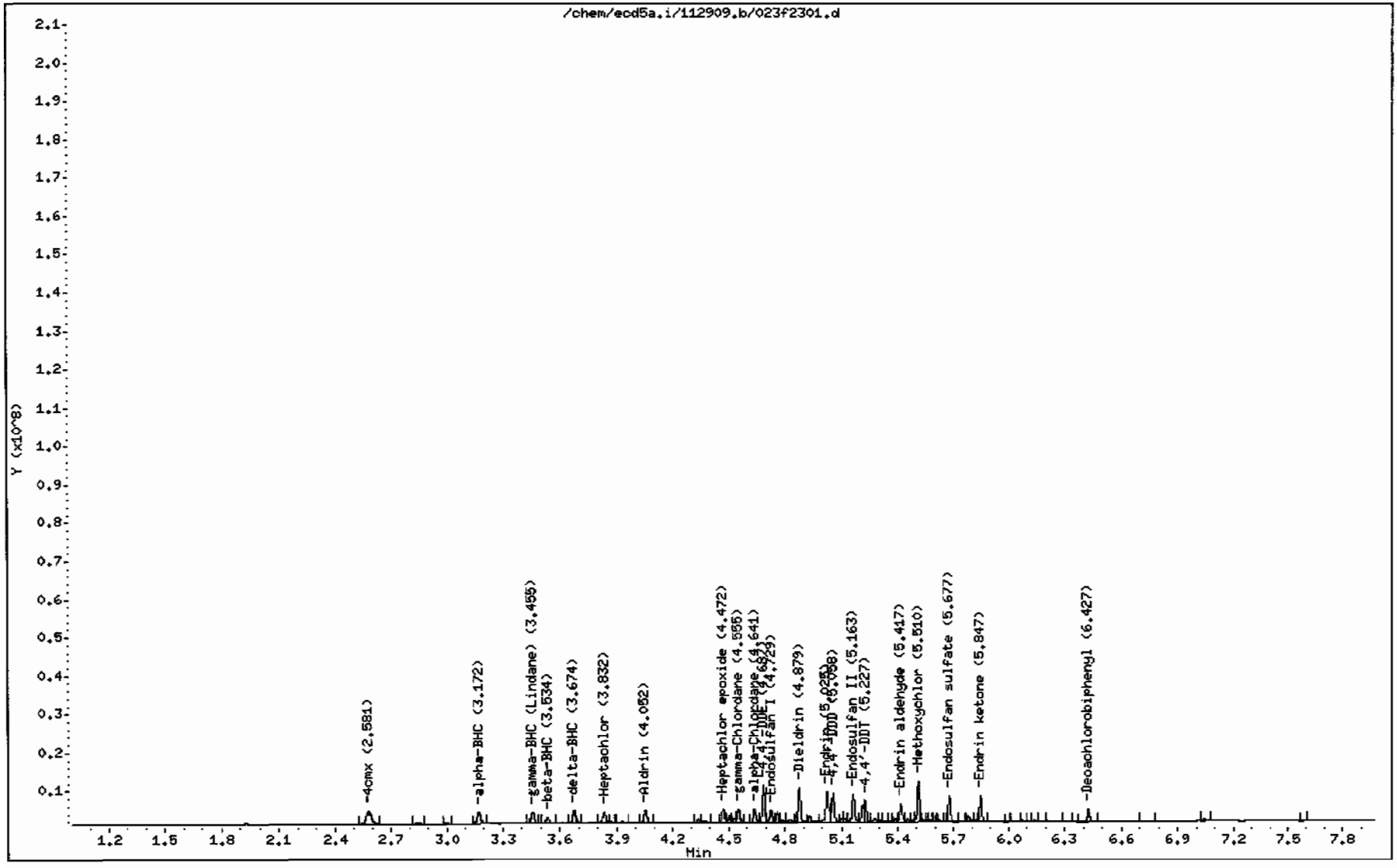

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926803 **Verified by:** _____

Analyst: Robin Hunt

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981581 MB	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
1201981584 LCS	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
1201981585 LCS	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
241423004	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
1201981582 MS (241423004)	27–NOV–2009 10:04:30	30.03	Florisil	5	1	10	5	0.1665
1201981583 MSD (241423004)	27–NOV–2009 10:04:30	30.02	Florisil	5	1	10	5	0.16656
241423005	27–NOV–2009 10:04:30	30.04	Florisil	5	1	10	5	0.16644
241503002	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
241503003	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
241503004	27–NOV–2009 10:04:30	30.01	Florisil	5	1	10	5	0.16661
241524002	27–NOV–2009 10:04:30	30.02	Florisil	5	1	10	5	0.16656

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981584	PESTSPIKE	UE091121–02	1	mL
LCS	1201981585	Toxaphene TCLP LCS	WE091028–11	2	mL
MS	1201981582	PESTSPIKE	UE091121–02	1	mL
MSD	1201981583	PESTSPIKE	UE091121–02	1	mL
SURR	All	PEST SURROGATE 1000 UG/L	UE091114–07	1	mL
REGNT	All	Hexane	091117–B2	150	mL
REGNT	All	Florisil cartridge 1000mg per cartridge	1103846–28	1	g
REGNT	All	Acetone	1219765	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009

Clean up Initials: RWH

Verified By: JAM

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–036

NCR Report No.: 764015
Revision No.: 2

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
01-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8081A	Solid	LANL
Batch ID:	**Sample Numbers:**		
926807	See Below		

Potentially affected work order(s)(SDG): 241423(10-578),241503(10-589),241524(10-600)

Application Issues:

Failed Yield for Surrogates

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. QC sample 1201981585 (Toxaphene LCS) yielded above the acceptance range for surrogates.	1. While the surrogate yield was outside the acceptance range, all spike recoveries were within acceptance limits. Therefore this non-conformance has no adverse effects on the data.

Originator's Name:

Clairette Campbell 01-DEC-09

Data Validator/Group Leader:

Jimin Cao 04-DEC-09

Wednesday, November 18, 2009

REQUEST NUMBER: 10-578

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-578

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2130	R	11/17/2009	
		2	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
		2	WST03-10-2131	R	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-578

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8081A_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8082	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8151A	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8151A_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8260B	1	WST03-10-2130	R	11/17/2009	
		2	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
		2	WST03-10-2131	R	11/17/2009	
		1	WST03-10-2180	S	11/17/2009	
		2	~~WST03-10-2180~~	~~S~~	~~11/17/2009~~	
		1	WST03-10-2181	S	11/17/2009	
		1	WST03-10-2185	S	11/17/2009	
	SW-846:8260B_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8270C	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8270C_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	

Final Page of REQUEST NUMBER 10-578

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-578

REQUEST NUMBER: 10-578

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2181	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2180	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2180	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2185	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2131	1	GLASS	8081A+8151A	Ice	R
WST03-10-2131	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2131	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2131	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2131	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2130	1	GLASS	8081A+8151A	Ice	R
WST03-10-2130	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2130	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2130	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2130	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R

Relinquished By:	Date	Time	Received By:	Date	Time
Printed Name / Signature	11/18/09	1400	Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By: **Date** **Time**

Printed Name Signature

Remarks:

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2130 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		835	SUB-MEDIA:	OTHER	NA
PRS ID:		03-056d	SAMPLE TECH CODE:	HA	
LOCATION ID:	WST-600902	03-608288	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	WST	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~X~~ S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8081A+8151A	500 ML GLASS	Ice	Y	
2		8260B+TPH-GRO	125 ML GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU+SR90	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		TAL metals + TCLP metals	1 LITER POLY	Ice	Y	
1		TCLP ORGANICS P/H/S/V	500 ML AMBER GLASS	Ice	Y	
1		TCN	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13811

SAMPLE COMMENTS: 10 DAY TURNAROUND

LOCATION DESC: 56d-1

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm Samples: MDA>
Background screening: α = 60
β = 1273

COLLECTED BY (PRINT) M. Sherdo, D. Thomas, C. Horne **REVIEWED BY (PRINT)** M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/17/09 1630	(Printed Name)	11/17/09 1630

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2131 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	~~NA~~	AIH
TIME COLLECTED (HH:MM)		0912	SUB-MEDIA:	OTHER	NA
PRS ID:		03-014	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	WST-600902	03-608270	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	WST	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~R~~ S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8081A+8151A	500 ML GLASS	Ice	Y	
2		8260B+TPH-GRO	125 ML GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU+SR90	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		TAL metals + TCLP metals	1 LITER POLY	Ice	Y	
1		TCLP ORGANICS P/H/S/V	500 ML AMBER GLASS	Ice	Y	
1		TCN	125 ML POLY	Ice	Y	

SAMPLE DESC: RE03-09-13436

SAMPLE COMMENTS: ~~10~~ 15 DAY TURNAROUND

LOCATION DESC: Waste Sample includes all hand augered sites in 03-014 SWMU.

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm

Background: α: 40 β: 1273

Samples: MDA >

COLLECTED BY (PRINT) M. Shenda, L. Horne

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/17/09 1630	(Printed Name) Sherri Sherwood	11/17/09 1630

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2181 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	ALLH	Ok
TIME COLLECTED (HH:MM)		0912	SUB-MEDIA:	SOIL	
PRS ID:		03-014, 526	SAMPLE TECH CODE:	DC	
LOCATION ID:	WST-600902	ok	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING:~~ YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 11-17-09 JW	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of WST03-10-2131

SAMPLE COMMENTS: ~~10~~ 15 DAY TURNAROUND
JW 11-17-09

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-17-09	(Printed Name) Sherri Sherwood	11-17-09
(Signature) J. Jordan	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2185 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		0912	SUB-MEDIA:	SOIL	
PRS ID:		03-014	SAMPLE TECH CODE:	DC	
LOCATION ID:	WST-600902	03-608270	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 ~~2~~	2w 11-17-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of WST03-10-2131

SAMPLE COMMENTS: ~~10~~ 15 DAY TURNAROUND

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) [illegible] REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [illegible]	11/17/09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11/17/09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-578 VALIDATION DATE: 1/5/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): TCLP and Non-TCLP GCMS VOC

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the FTB (sample WST03-10-2181) associated with field sample -2130, acetone was detected. The associated field sample result was an ND and, thus, was not qualified.
2. The non TCLP ICV and/or CCV %Ds were >20% for acetone, 2-butanone, and 2-hexanone. The result for acetone in sample -2181 was a detect and, thus, was qualified J,V7c. All other associated sample results were NDs and, thus were qualified UJ,V7c. The TCLP ICV %D was >20% for 2-butanone. The associated sample results were NDs and, thus were qualified UJ,V7c.
3. The LCS %R was < the laboratory's LAL but ≥10% for n-butylbenzene. The associated sample results were NDs and, thus, were qualified UJ,V12a.
4. It should be noted that the containers for non-TCLP sample -2180 were not received by the lab. LANL was informed of this and, thus, no sample data was qualified as a result.
5. It should be also noted that the non-TCLP MS and MSD parent sample was from another LANL RN. Since an MS/MSD was not required, no sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/07/10

DATA VALIDATION COVER SHEET

5114-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

VALIDATOR'S SIGNATURE: _____ DATE: 1/5/10

Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☒	☐	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241423005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**9.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 17:27**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n318.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11	
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11	
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11	
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
74-88-4	Iodomethane	U	5.55	ug/kg	1.77	5.55	
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55	
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
78-93-3	2-Butanone	U	5.55	ug/kg	1.66	5.55	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11	
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
591-78-6	2-Hexanone	U	5.55	ug/kg	1.66	5.55	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11	

LMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241423005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**9.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 17:27**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n318.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11	
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22	
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11	
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11	
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11	
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11	
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11	
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11	
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11	
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11	UJ,V12a
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.77	5.55	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 16:57	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n317.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.369	1.09	
74-87-3	Chloromethane	U	1.09	ug/kg	0.326	1.09	
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.326	1.09	
74-83-9	Bromomethane	U	1.09	ug/kg	0.326	1.09	
75-00-3	Chloroethane	U	1.09	ug/kg	0.326	1.09	
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.326	1.09	
67-64-1	Acetone	U	5.43	ug/kg	1.80	5.43	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.326	1.09	
74-88-4	Iodomethane	U	5.43	ug/kg	1.74	5.43	
75-09-2	Methylene chloride	U	5.43	ug/kg	2.17	5.43	
75-15-0	Carbon disulfide	U	5.43	ug/kg	1.36	5.43	
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09	
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.326	1.09	
78-93-3	2-Butanone	U	5.43	ug/kg	1.63	5.43	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09	
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09	
67-66-3	Chloroform	U	1.09	ug/kg	0.326	1.09	
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.358	1.09	
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.326	1.09	
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.326	1.09	
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.326	1.09	
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.326	1.09	
71-43-2	Benzene	U	1.09	ug/kg	0.326	1.09	
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.358	1.09	
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09	
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.326	1.09	
74-95-3	Dibromomethane	U	1.09	ug/kg	0.326	1.09	
108-10-1	4-Methyl-2-pentanone	U	5.43	ug/kg	1.36	5.43	
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09	
108-88-3	Toluene	U	1.09	ug/kg	0.326	1.09	
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09	
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.326	1.09	
591-78-6	2-Hexanone	U	5.43	ug/kg	1.63	5.43	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.326	1.09	
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.326	1.09	
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.326	1.09	
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.326	1.09	
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.326	1.09	

LMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 16:57	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n317.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.326	1.09	
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.326	2.17	
95-47-6	o-Xylene	U	1.09	ug/kg	0.326	1.09	
100-42-5	Styrene	U	1.09	ug/kg	0.326	1.09	
75-25-2	Bromoform	U	1.09	ug/kg	0.326	1.09	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09	
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.326	1.09	
108-86-1	Bromobenzene	U	1.09	ug/kg	0.326	1.09	
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.326	1.09	
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.326	1.09	
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.326	1.09	
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09	
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.326	1.09	
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.326	1.09	
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09	
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.326	1.09	
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.326	1.09	
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09	
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09	
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.326	1.09	UJ,V12a
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.326	1.09	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.43	ug/kg	1.74	5.43	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09	
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

LMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241423001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2181**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 15:57**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:58**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n315.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	1.90	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

LMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241423001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2181**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 15:57**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:58**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n315.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00	
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00	
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00	
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00	
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00	
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00	
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00	
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00	
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00	
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00	UJ,V12a
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

LMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241423003**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2185**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 16:27**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:59**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n316.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241423003**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2185**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 16:27**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:59**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n316.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00	
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00	
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00	
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00	
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00	
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00	
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00	
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00	
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00	
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00	UJ,V12a
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

LMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 17:31**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o418.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010	
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010	
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050	UJ,V7c
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010	
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010	
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010	
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010	
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010	
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010	
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010	
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010	

LMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 17:01**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o417.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010	
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010	
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050	UJ,V7c
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010	
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010	
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010	
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010	
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010	
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010	
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010	
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010	

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DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-578 VALIDATION DATE: 1/5/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): TCLP and Non-TCLP GC/MS SVOC

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The non-TCLP lCV and/or CCV %Ds were >20% for pyridine, bis(2-chloroisopropyl)ether, hexachlorocyclopentadiene, 3-nitroaniline, and 4-nitroaniline. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The non-TCLP MS and MSD %Rs and RPDs were outside of laboratory acceptance limits for several compounds. It should be noted that the non-TCLP MS and MSD parent sample was from another LANL RN and the raw data for the parent sample was not included in the package. Since an MS/MSD was not required, no sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/07/10

VALIDATOR'S SIGNATURE: DATE: 1/5/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 18:01	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2915.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.6	368	
108-95-2	Phenol	U	368	ug/kg	73.6	368	
95-57-8	2-Chlorophenol	U	368	ug/kg	73.6	368	
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.6	368	
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.6	368	
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.6	368	
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8	
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368	
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368	
87-86-5	Pentachlorophenol	U	368	ug/kg	92.0	368	
129-00-0	Pyrene	J	27.1	ug/kg	11.0	36.8	
110-86-1	Pyridine	U	368	ug/kg	73.6	368	UJ,SV7c
62-53-3	Aniline	U	368	ug/kg	110	368	
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.6	368	
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.6	368	
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368	
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.6	368	
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.6	368	UJ,SV7c
95-48-7	o-Cresol	U	368	ug/kg	73.6	368	
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368	
67-72-1	Hexachloroethane	U	368	ug/kg	73.6	368	
98-95-3	Nitrobenzene	U	368	ug/kg	73.6	368	
78-59-1	Isophorone	U	368	ug/kg	73.6	368	
88-75-5	2-Nitrophenol	U	368	ug/kg	73.6	368	
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368	
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.6	368	
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.6	368	
65-85-0	Benzoic acid	U	736	ug/kg	184	736	
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8	
106-47-8	4-Chloroaniline	U	368	ug/kg	73.6	368	
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.6	368	
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.36	36.8	
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.6	368	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.6	368	
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.6	368	
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	368	ug/kg	73.6	368	
99-09-2	3-Nitroaniline	U	368	ug/kg	73.6	368	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 18:01	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2915.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	368	ug/kg	73.6	368	
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368	
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8	
51-28-5	2,4-Dinitrophenol	U	736	ug/kg	140	736	
132-64-9	Dibenzofuran	U	368	ug/kg	73.6	368	
84-66-2	Diethylphthalate	U	368	ug/kg	73.6	368	
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8	
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.6	368	
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.6	368	
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	368	ug/kg	73.6	368	
122-66-7	Azobenzene	U	368	ug/kg	73.6	368	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.6	368	
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.6	368	
85-01-8	Phenanthrene	J	21.9	ug/kg	11.0	36.8	
120-12-7	Anthracene	U	36.8	ug/kg	7.36	36.8	
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.6	368	
206-44-0	Fluoranthene	J	27.9	ug/kg	11.0	36.8	
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.6	368	
56-55-3	Benzo(a)anthracene	J	12.7	ug/kg	11.0	36.8	
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368	
218-01-9	Chrysene	J	13.6	ug/kg	11.0	36.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.6	368	
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.6	368	
205-99-2	Benzo(b)fluoranthene		117	ug/kg	11.0	36.8	
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8	
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8	
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8	
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8	
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.6	368	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	300	ug/kg		JA
112-95-8	Eicosane	9.38	717	ug/kg	98	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 18:01	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2915.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.75	290	ug/kg		J
	Unknown	10.19	350	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:37	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2914.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.1	360	
108-95-2	Phenol	U	360	ug/kg	72.1	360	
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360	
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360	
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360	
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360	
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0	
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360	
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360	
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360	
129-00-0	Pyrene	J	21.6	ug/kg	10.8	36.0	
110-86-1	Pyridine	U	360	ug/kg	72.1	360	UJ,SV7c
62-53-3	Aniline	U	360	ug/kg	108	360	
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360	
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360	
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360	
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360	
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360	UJ,SV7c
95-48-7	o-Cresol	U	360	ug/kg	72.1	360	
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360	
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360	
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360	
78-59-1	Isophorone	U	360	ug/kg	72.1	360	
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360	
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360	
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360	
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360	
65-85-0	Benzoic acid	U	721	ug/kg	180	721	
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0	
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360	
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360	
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0	
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360	
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360	
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	360	ug/kg	72.1	360	
99-09-2	3-Nitroaniline	U	360	ug/kg	72.1	360	UJ,SV7c

LMF
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:37	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2914.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	360	ug/kg	72.1	360	
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360	
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0	
51-28-5	2,4-Dinitrophenol	U	721	ug/kg	137	721	
132-64-9	Dibenzofuran	U	360	ug/kg	72.1	360	
84-66-2	Diethylphthalate	U	360	ug/kg	72.1	360	
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0	
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.1	360	
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.1	360	
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	360	ug/kg	72.1	360	
122-66-7	Azobenzene	U	360	ug/kg	72.1	360	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.1	360	
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.1	360	
85-01-8	Phenanthrene	J	13.0	ug/kg	10.8	36.0	
120-12-7	Anthracene	U	36.0	ug/kg	7.21	36.0	
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.1	360	
206-44-0	Fluoranthene	J	23.1	ug/kg	10.8	36.0	
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.1	360	
56-55-3	Benzo(a)anthracene	J	12.5	ug/kg	10.8	36.0	
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360	
218-01-9	Chrysene	J	13.3	ug/kg	10.8	36.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.1	360	
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.1	360	
205-99-2	Benzo(b)fluoranthene		115	ug/kg	10.8	36.0	
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0	
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0	
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0	
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0	
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.1	360	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.99	284	ug/kg		J
	Unknown Aldol Condensate	2.88	276	ug/kg		JA

LMF
1/5/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241423004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 17:37**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2914.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.66	155	ug/kg	99	NJ
	Unknown	11.58	341	ug/kg		J

LMF
1/5/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:16**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s610217.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

LMF
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 15:48**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0214.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

LMF
1/5/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-578 VALIDATION DATE: 1/5/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS and MSD parent sample was from another LANL RN and the raw data for the parent sample was not included in the package. No sample results were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/07/10

VALIDATOR'S SIGNATURE: DATE: 1/5/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 22:34	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		12.6	mg/kg	2.34	7.20

LMF
1/5/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 23:13	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.63	mg/kg	2.40	7.39

LMF
1/5/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-578 VALIDATION DATE: 1/5/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☒ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/07/10

VALIDATOR'S SIGNATURE: DATE: 1/5/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/24/2009 22:45	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200006.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	55.5	ug/kg	12.4	55.5

LMF
1/5/10

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/24/2009 22:15	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:05	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200005.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	54.3	ug/kg	12.2	54.3

LMF
1/5/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-578 VALIDATION DATE: 1/6/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): TCLP and Non-TCLP Pesticides

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The non-TCLP CCV %Ds were >15% for 4,4'-DDT; heptachlor epoxide; methoxychlor; gamma-chlordane; gamma-BHC; and endrin ketone on one of the columns. The results for 4,4'-DDT in sample WST03-10-2130 and gamma-chlordane in sample -2131 were detects. However, the sample results were not reported from the same column as the %D outliers and, thus, were not qualified. All other associated sample results were NDs and, thus, were not qualified. The TCLP CCV %Ds were > 15% for methoxychlor and gamma-BHC on one of the columns. The associated sample results were NDs and, thus, were not qualified.
2. The non-TCLP surrogate %Rs were > the laboratory's UAL for 4CMX and decachlorobiphenyl in one column only for the toxaphene LCS. This was a QC sample and, thus, no sample data were qualified.
3. The TCLP MS/MSD RPD did not meet laboratory acceptance criteria for toxaphene. It should be noted that the TCLP MS and MSD parent sample was from another LANL RN. Since an MS/MSD was not required, no sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/07/10

VALIDATOR'S SIGNATURE: DATE: 1/6/10

DATA VALIDATION COVER SHEET

5116-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943
Form 5116-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☒	☐	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☒	☐	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/30/2009 00:20	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30.04 g	**Final Volume:**	5 mL
Data File:	032f3201.d	**Column:**	1 CLP-1	**Level:**	LOW
	032b3201.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.39	ug/kg	1.85	7.39	1
58-89-9	gamma-BHC (Lindane)	U	7.39	ug/kg	1.85	7.39	1
319-85-7	beta-BHC	U	7.39	ug/kg	1.85	7.39	1
319-86-8	delta-BHC	U	7.39	ug/kg	1.85	7.39	1
76-44-8	Heptachlor	U	7.39	ug/kg	1.85	7.39	1
309-00-2	Aldrin	U	7.39	ug/kg	1.85	7.39	1
1024-57-3	Heptachlor epoxide	U	7.39	ug/kg	2.31	7.39	1
5103-74-2	gamma-Chlordane	U	7.39	ug/kg	1.85	7.39	1
5103-71-9	alpha-Chlordane	U	7.39	ug/kg	1.85	7.39	1
959-98-8	Endosulfan I	U	7.39	ug/kg	1.85	7.39	1
72-55-9	4,4'-DDE	U	14.8	ug/kg	3.69	14.8	1
60-57-1	Dieldrin	U	14.8	ug/kg	3.69	14.8	1
72-20-8	Endrin	U	14.8	ug/kg	3.69	14.8	1
72-54-8	4,4'-DDD	U	14.8	ug/kg	3.69	14.8	1
33213-65-9	Endosulfan II	U	14.8	ug/kg	3.69	14.8	1
7421-93-4	Endrin aldehyde	U	14.8	ug/kg	3.69	14.8	1
50-29-3	4,4'-DDT	J	8.63	ug/kg	3.69	14.8	2
1031-07-8	Endosulfan sulfate	U	14.8	ug/kg	3.69	14.8	1
72-43-5	Methoxychlor	U	73.9	ug/kg	18.5	73.9	1
53494-70-5	Endrin ketone	U	14.8	ug/kg	3.69	14.8	1
8001-35-2	Toxaphene	U	185	ug/kg	61.5	185	1

LMF
1/6/10

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8081A	SOP Ref:	GL-OA-E-041
Batch ID:	926807	Inst:	ECD5A.I	Dilution:	10
Run Date:	11/29/2009 22:08	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	11/27/2009 10:04	Aliquot:	30 g	Final Volume:	5 mL
Data File:	021f2101.d	Column:	1 CLP-1	Level:	LOW
	021b2101.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.24	ug/kg	1.81	7.24	1
58-89-9	gamma-BHC (Lindane)	U	7.24	ug/kg	1.81	7.24	1
319-85-7	beta-BHC	U	7.24	ug/kg	1.81	7.24	1
319-86-8	delta-BHC	U	7.24	ug/kg	1.81	7.24	1
76-44-8	Heptachlor	U	7.24	ug/kg	1.81	7.24	1
309-00-2	Aldrin	U	7.24	ug/kg	1.81	7.24	1
1024-57-3	Heptachlor epoxide	U	7.24	ug/kg	2.26	7.24	1
5103-74-2	gamma-Chlordane	JP	3.23	ug/kg	1.81	7.24	1
5103-71-9	alpha-Chlordane	U	7.24	ug/kg	1.81	7.24	1
959-98-8	Endosulfan I	U	7.24	ug/kg	1.81	7.24	1
72-55-9	4,4'-DDE	U	14.5	ug/kg	3.62	14.5	1
60-57-1	Dieldrin	J	7.94	ug/kg	3.62	14.5	1
72-20-8	Endrin	U	14.5	ug/kg	3.62	14.5	1
72-54-8	4,4'-DDD	U	14.5	ug/kg	3.62	14.5	1
33213-65-9	Endosulfan II	U	14.5	ug/kg	3.62	14.5	1
7421-93-4	Endrin aldehyde	U	14.5	ug/kg	3.62	14.5	1
50-29-3	4,4'-DDT	U	14.5	ug/kg	3.62	14.5	1
1031-07-8	Endosulfan sulfate	U	14.5	ug/kg	3.62	14.5	1
72-43-5	Methoxychlor	U	72.4	ug/kg	18.1	72.4	1
53494-70-5	Endrin ketone	U	14.5	ug/kg	3.62	14.5	1
8001-35-2	Toxaphene	U	181	ug/kg	60.3	181	1

LMF
1/6/10

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**10**
Run Date:	**12/08/2009 03:00**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**048f4801.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	048b4801.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

LMF
1/6/10

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1	**Date Collected:**	11/17/2009 12:00	**Matrix:**	TCLP S
Lab Sample ID:	241424001	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/08/2009 02:48	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	047f4701.d	**Column:**	1 CLP-1	**Level:**	LOW
	047b4701.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

LMF
1/6/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-578 VALIDATION DATE: 1/6/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS and MSD parent sample was from another LANL RN and the raw data for the parent sample was not included in the package. Since an MS/MSD was not required, no sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/07/10

VALIDATOR'S SIGNATURE: DATE: 1/6/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 10:20	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	013f1301.d	**Column:**	1 CLP1	**Level:**	LOW
	013b1301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.70	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254		34.8	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260		39.2	ug/kg	1.23	3.70	2

LMF
1/6/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2131	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	50
Run Date:	12/04/2009 10:09	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	1 CLP1	**Level:**	LOW
	012b1201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	181	ug/kg	60.2	181	1
11104–28–2	Aroclor–1221	U	181	ug/kg	60.2	181	1
11141–16–5	Aroclor–1232	U	181	ug/kg	60.2	181	1
53469–21–9	Aroclor–1242	U	181	ug/kg	60.2	181	1
12672–29–6	Aroclor–1248	U	181	ug/kg	60.2	181	1
11097–69–1	Aroclor–1254		2110	ug/kg	60.2	181	1
11096–82–5	Aroclor–1260	P	1370	ug/kg	60.2	181	2

LMF
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DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-578 VALIDATION DATE: 1/6/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): TCLP and Non-TCLP Herbicides

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In non-TCLP CCVs associated with the samples, the %Ds were >15% for dinoseb 2,4-D; 2,4,5-T; MCPP; 2,4,5-TP; and 2,4-DB on both columns. The associated sample results were NDs and, thus, were qualified UJ,P7c. In other non-TCLP CCVs associated with the samples, the %Ds were >15% for 2,4-D; 2,4,5-T; 2,4,5-TP; dichlorprop; dicamba; and 2,4-DB on one of the columns. The associated sample results were NDs and, thus, were not qualified.
2. The non-TCLP MS/MSD %Rs and RPDs did not meet laboratory acceptance criteria for several compounds. The TCLP MSD %R did not meet laboratory acceptance criteria for 2,4-D. It should be noted that the TCLP MS and MSD parent sample was from another LANL RN and the raw data for the parent sample was not included in the package. Since an MS/MSD was not required, no sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/07/10

VALIDATOR'S SIGNATURE: DATE: 1/6/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☒	☐	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☐	☒	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8151A	SOP Ref:	GL-OA-E-011
Batch ID:	927148	Inst:	ECD6A.I	Dilution:	1
Run Date:	12/02/2009 01:59	Analyst:	RXE1	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:11	Aliquot:	50.09 g	Final Volume:	10 mL
Data File:	030f3001.d	Column:	1 Rtx-CLP	Level:	LOW
	030b3001.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column	
75-99-0	Dalapon	U	111	ug/kg	22.1	111	1	
1918-00-9	Dicamba	U	5.54	ug/kg	1.84	5.54	1	
93-65-2	MCPP	U	1110	ug/kg	221	1110	1	UJ,P7c
94-74-6	MCPA	U	1110	ug/kg	255	1110	1	
120-36-5	Dichlorprop	U	5.54	ug/kg	1.84	5.54	1	
94-75-7	2,4-D	U	5.54	ug/kg	1.84	5.54	1	UJ,P7c
93-72-1	2,4,5-TP	U	5.54	ug/kg	1.84	5.54	1	
93-76-5	2,4,5-T	U	5.54	ug/kg	1.84	5.54	1	
94-82-6	2,4-DB	U	5.54	ug/kg	1.84	5.54	1	
88-85-7	Dinoseb	U	5.54	ug/kg	1.84	5.54	1	

LMF
1/6/10

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8151A	SOP Ref:	GL-OA-E-011
Batch ID:	927148	Inst:	ECD6A.I	Dilution:	2
Run Date:	12/01/2009 23:38	Analyst:	RXE1	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:11	Aliquot:	50 g	Final Volume:	10 mL
Data File:	025f2501.d	Column:	1 Rtx-CLP	Level:	LOW
	025b2501.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column	
75-99-0	Dalapon	U	217	ug/kg	43.4	217	1	
1918-00-9	Dicamba	U	10.9	ug/kg	3.61	10.9	1	
93-65-2	MCPP	U	2170	ug/kg	434	2170	1	UJ,P7c
94-74-6	MCPA	U	2170	ug/kg	500	2170	1	
120-36-5	Dichlorprop	U	10.9	ug/kg	3.61	10.9	1	
94-75-7	2,4-D	U	10.9	ug/kg	3.61	10.9	1	UJ,P7c
93-72-1	2,4,5-TP	U	10.9	ug/kg	3.61	10.9	1	
93-76-5	2,4,5-T	U	10.9	ug/kg	3.61	10.9	1	
94-82-6	2,4-DB	U	10.9	ug/kg	3.61	10.9	1	
88-85-7	Dinoseb	U	10.9	ug/kg	3.61	10.9	1	

LMF
1/6/10

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1	Date Collected:	11/17/2009 12:00	Matrix:	TCLP S
Lab Sample ID:	241424002	Date Received:	11/19/2009 08:45		
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8151A	SOP Ref:	GL-OA-E-011
Batch ID:	927402	Inst:	ECD6A.I	Dilution:	1
Run Date:	12/02/2009 15:29	Analyst:	RXE1	Inj. Vol:	1 uL
Prep Date:	12/01/2009 16:23	Aliquot:	5 mL	Final Volume:	10 mL
Data File:	058f5801.d	Column:	1 Rtx-CLP	Level:	LOW
	058b5801.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

LMF
1/6/10

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1	Date Collected:	11/17/2009 12:00	Matrix:	TCLP S
Lab Sample ID:	241424001	Date Received:	11/19/2009 08:45		
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8151A	SOP Ref:	GL-OA-E-011
Batch ID:	927402	Inst:	ECD6A.I	Dilution:	1
Run Date:	12/02/2009 15:01	Analyst:	RXE1	Inj. Vol:	1 uL
Prep Date:	12/01/2009 16:23	Aliquot:	5 mL	Final Volume:	10 mL
Data File:	057f5701.d	Column:	1 Rtx-CLP	Level:	LOW
	057b5701.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

LMF
1/6/10

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-578

REQUEST NUMBER: 10-578

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241423, 241424 %.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2181	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2180	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2180	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2185	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2131	1	GLASS	8081A+8151A	Ice	R
WST03-10-2131	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2131	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2131	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2131	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2130	1	GLASS	8081A+8151A	Ice	R
WST03-10-2130	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2130	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2130	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2130	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/18/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-19-09	08:45
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Wednesday, November 18, 2009

REQUEST NUMBER: 10-578

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-578

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2130	R	11/17/2009	
		2	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
		2	WST03-10-2131	R	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-578

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8081A_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8082	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8151A	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8151A_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8260B	1	WST03-10-2130	R	11/17/2009	
		2	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
		2	WST03-10-2131	R	11/17/2009	
		1	WST03-10-2180	S	11/17/2009	
		~~2~~	~~WST03-10-2180~~	~~S~~	~~11/17/2009~~	
		1	WST03-10-2181	S	11/17/2009	
		1	WST03-10-2185	S	11/17/2009	
	SW-846:8260B_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8270C	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8270C_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	

Final Page of REQUEST NUMBER 10-578

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241423 241424
SDG: 10-578

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 19, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile Herbicide, GC Semivolatile PCB, GC Semivolatile Pesticide, GC Volatiles (GRO), GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-578
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241423 and 241424
SDG: 10-578

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GC/MS Semivolatile Analysis **260**
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Miscellaneous Data 420

GC/MS Semivolatile Analysis **436**
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QC Summary 446
Sample Data 456
Standard Data 465
QC Data 507
Miscellaneous Data 541

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Quality Control Summary 557

Sample Data 563
Standards Data 574
Quality Control Data 586
Miscellaneous Data 593

GC Volatile GRO Analysis 609
Sample Data Summary 615
QC Summary 618
Sample Data 624
Standard Data 631
QC Data 645
Miscellaneous Data 658

GC Semivolatile Pesticide Analysis 662
Sample Data Summary 669
Quality Control Summary 672
Sample Data 679
Standards Data 694
Quality Control Data 790
Miscellaneous Data 834

GC Semivolatile Pesticide Analysis 845
Sample Data Summary 851
Quality Control Summary 854
Sample Data 866
Standards Data 877
Quality Control Data 1052
Miscellaneous Data 1086

GC Semivolatile PCB Analysis 1143
Sample Data Summary 1150
Quality Control Summary 1153
Sample Data 1159
Standards Data 1174
Quality Control Data 1311
Miscellaneous Data 1326

GC Semivolatile Herbicide Analysis 1356
Sample Data Summary 1362
Quality Control Summary 1365
Sample Data 1371

Standards Data 1384
Quality Control Data 1451
Miscellaneous Data 1484

GC Semivolatile Herbicide Analysis 1491
Sample Data Summary 1497
Quality Control Summary 1500
Sample Data 1506
Standards Data 1517
Quality Control Data 1579
Miscellaneous Data 1598

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241423 and 241424
SDG # : 10-578

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 19, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The lab did not receive any 40ml vial 8260B container for sample WST03-10-2180. Los Alamos was notified. Please see attached e-mail. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241423001	WST03-10-2181
241423003	WST03-10-2185
241423004	WST03-10-2131
241423005	WST03-10-2130
241424001	WST03-10-2131
241424002	WST03-10-2130

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile Herbicide, GC Semivolatile PCB, GC Semivolatile Pesticide, GC Volatiles (GRO), GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis
Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-578

REQUEST NUMBER: 10-578

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241423, 241424 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2181	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2180	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2180	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2185	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2131	1	GLASS	8081A+8151A	Ice	R
WST03-10-2131	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2131	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2131	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2131	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2130	1	GLASS	8081A+8151A	Ice	R
WST03-10-2130	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2130	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2130	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2130	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
Jeffrey G	[illegible]	11/18/09	1400	Patricia Dover-Dent	[illegible]	11-19-09	08:45
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Wednesday, November 18, 2009

REQUEST NUMBER: 10-578

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-578

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2130	R	11/17/2009	
		2	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
		2	WST03-10-2131	R	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-578

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8081A_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8082	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8151A	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8151A_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8260B	1	WST03-10-2130	R	11/17/2009	
		2	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
		2	WST03-10-2131	R	11/17/2009	
		1	WST03-10-2180	S	11/17/2009	
		~~2~~	~~WST03-10-2180~~	~~S~~	~~11/17/2009~~	
		1	WST03-10-2181	S	11/17/2009	
		1	WST03-10-2185	S	11/17/2009	
	SW-846:8260B_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8270C	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	
	SW-846:8270C_TCLP	1	WST03-10-2130	R	11/17/2009	
		1	WST03-10-2131	R	11/17/2009	

Final Page of REQUEST NUMBER 10-578

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-578**
Received By:Patricia Dover-Dent	**Date Received:November 19, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:**40 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **2-4,15,16**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?			X	Sample ID's affected: **WST03-10-2180** **the lab did not receive any 40ml vial containers**
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S
7209 7848 9524 2C
7209 7848 9476 3C
7209 7848 9465 4C
7209 7848 9487 4C
7209 7848 9498 4C
7209 7848 9502 4C
7209 7848 9513 4C
7209 7848 9546 15C
7209 7848 9535 16C

PM (or PMA) review: Initials _____ Date 11/20/09

Subject: Sample Receipt for 11/19/09
From: Dionne Francis <Dionne.Francis@gel.com>
Date: Fri, 20 Nov 2009 19:04:10 -0500
To: "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylenev@lanl.gov>, Valerie Davis <vsd@gel.com>

Keith,

RN#10-578, the lab did not receive the 40ml vials 8260B containers for sample WST03-10-2108. Please advise.

RN#10-561, the Gross A/B containers were preserved prior to analysis.

RN#10-584, the lab received 1Gal poly container for sample NPDES13S-10-4754 instead of (3) as indicated on the COC.

RN#10-559, the lab rec'd (1) 40ml vial 8260B container each for samples CAWR-10-4975 and 4980 instead of (2) each as indicated on the COC.

Thanks,
Dionne

--
Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

Let the Bible fill the memory, rule the heart, and guide the feet.

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 37.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

2C

FedEx Express

1 of 3

TRK# 0201 7209 7848 9524

THU - 19NOV A1
PRIORITY OVERNIGHT

MASTER

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

3C

FedEx Express

3 of 3

MPS# 0263 7209 7848 9476

Mstr# 7209 7848 9454 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 158148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4C

FedEx Express

2 of 3

MPS# 0263 7209 7848 9465

Mstr# 7209 7848 9454 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4C

FedEx Express

1 of 2

TRK# 0201 7209 7848 9487

THU - 19NOV A1
PRIORITY OVERNIGHT

MASTER

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9498
Matr# 7209 7848 9487 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9502
MASTER

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156140-434 NDRT V3.1-03

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9513
Matr# 7209 7848 9502 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

IN ID: SAFA (505)665-9968
ENE VALDEZ
ALAMOS NATL LAB.
BLDG 1237 DPU 03

ALAMOS, NM 87545
ED STATES US

SHIP DATE: 18NOV09
ACTWGT: 36.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

LERIE DAVIS
NERAL ENGINEERING LAB
040 SAVAGE RD

CHARLESTON SC 29407
843)556-8171
REF: 6B010AMR2A054196D0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9546
Matr# 7209 7848 9524 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

SHIP USING

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 SLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

16C

FedEx Express

2 of 3

THU - 19NOV A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9535
MstrW 7209 7848 9524 0201

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 02-09

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-578

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	926739
Prep Batch Number:	926738

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241423001	WST03-10-2181
241423003	WST03-10-2185
241423004	WST03-10-2131
241423005	WST03-10-2130
1201981429	Method Blank (MB)
1201981432	Laboratory Control Sample (LCS)
1201981433	Laboratory Control Sample (LCS)
1201981430	241417001(RE03-09-13812) Post Spike (PS)
1201981431	241417001(RE03-09-13812) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
Samples 241423 004 and 005 in this SDG were analyzed on an "dry weight" basis. Samples 241423 001 and 003 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery

The LCS recoveries were not all within the acceptance limits. See NCR# 763414.

QC Sample Designation

Sample 241417001 (RE03-09-13812) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement

The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement

The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance

The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 763414

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/14/09

Roadmap for LANL 10-578 VOA

This roadmap was analyzed by ron01469 on 11-30-2009, 13:42.
This roadmap was reviewed by sar00518 on 12-01-2009, 16:32.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112509v1/1n315.d	241423001	WST03-10-2181	25-NOV-2009	15:57	10-578.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n316.d	241423003	WST03-10-2185	25-NOV-2009	16:27	10-578.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n317.d	241423004	WST03-10-2131	25-NOV-2009	16:57	10-578.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n318.d	241423005	WST03-10-2130	25-NOV-2009	17:27	10-578.sub	1	926739	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112509v1/1n303LA.d	1201981432	LCS	lcs	25-NOV-2009	09:50	all.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n305sLA.d	1201981433	LCS	lcs	25-NOV-2009	10:51	all.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n306BA.d	1201981429	BLANK	mb	25-NOV-2009	11:22	all.sub	1	926739	
■	N	/chem/VOA1.i/112509v1/1n323.d	1201981430	RE03-09-13812MS	ms	25-NOV-2009	19:58	10-575.sub	1	926739	
■	N	/chem/VOA1.i/112509v1/1n324.d	1201981431	RE03-09-13812MSD	msd	25-NOV-2009	20:29	10-575.sub	1	926739	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 17:27	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n318.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.77	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.66	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.66	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 17:27	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n318.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.77	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 16:57	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n317.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.369	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.326	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.326	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.326	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.326	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.326	1.09
67-64-1	Acetone	U	5.43	ug/kg	1.80	5.43
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
74-88-4	Iodomethane	U	5.43	ug/kg	1.74	5.43
75-09-2	Methylene chloride	U	5.43	ug/kg	2.17	5.43
75-15-0	Carbon disulfide	U	5.43	ug/kg	1.36	5.43
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.326	1.09
78-93-3	2-Butanone	U	5.43	ug/kg	1.63	5.43
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.326	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.358	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.326	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.326	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.326	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.326	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.326	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.358	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.326	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.326	1.09
108-10-1	4-Methyl-2-pentanone	U	5.43	ug/kg	1.36	5.43
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.326	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.326	1.09
591-78-6	2-Hexanone	U	5.43	ug/kg	1.63	5.43
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.326	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.326	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.326	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.326	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.326	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 16:57	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n317.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.326	1.09
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.326	2.17
95-47-6	o-Xylene	U	1.09	ug/kg	0.326	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.326	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.326	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.326	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.326	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.326	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.326	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.326	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.326	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.326	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.326	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.326	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.43	ug/kg	1.74	5.43
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241423001	Date Received:	11/19/2009 08:45		
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2181	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 15:57	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 13:58	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n315.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.90	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241423001	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2181	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 15:57	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 13:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n315.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241423003	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2185	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 16:27	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 13:59	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n316.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241423003**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2185**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 16:27**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:59**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n316.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-578

Matrix Type: SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201981432	LCS for batch 926738	109	104	90
1201981433	LCS for batch 926738	98	104	94
1201981429	MB for batch 926738	102	106	96
241423001	WST03-10-2181	114	109	96
241423003	WST03-10-2185	114	112	99
241423004	WST03-10-2131	117	106	96
241423005	WST03-10-2130	112	108	98

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: RE03-09-13812PS
Lab Sample ID: 1201981430
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 19:58
Prep Batch ID: 926738
Batch ID: 926739

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	42.4	85	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	48.1	96	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	47.5	95	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	50.7	101	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	56.2	112	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	55.6	111	51-151
67-64-1	PS	Acetone	250	0.00	U	167	67	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	48.3	97	61-125
74-88-4	PS	Iodomethane	250	0.00	U	225	90	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	51.7	103	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	265	106	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	50.7	101	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	50.9	102	62-125
78-93-3	PS	2-Butanone	250	0.00	U	178	71	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	52.6	105	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	49.4	99	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	49.9	100	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	56.1	112	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	50.5	101	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	49.2	98	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	51.3	103	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	48.8	98	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: RE03-09-13812PS
Lab Sample ID: 1201981430
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 19:58
Prep Batch ID: 926738
Batch ID: 926739

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	50.2	100	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	50.1	100	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	51.2	102	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	52.1	104	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	52.1	104	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	165	66	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	45.6	91	54-133
108-88-3	PS	Toluene	50.0	0.00	U	46.1	92	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	42.6	85	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	47.8	96	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	105	42	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	46.9	94	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	47.1	94	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	49.6	99	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	47.0	94	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	46.3	93	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	42.9	86	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	89.4	89	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	45.9	92	52-127
100-42-5	PS	Styrene	50.0	0.00	U	45.0	90	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	50.3	101	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	47.1	94	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: RE03-09-13812PS
Lab Sample ID: 1201981430
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 19:58
Prep Batch ID: 926738
Batch ID: 926739
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	43.8	88	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	46.5	93	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	40.6	81	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	41.4	83	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	42.0	84	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	41.6	83	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	41.0	82	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	41.7	83	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	40.8	82	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	39.3	79	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	35.7	71	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	43.3	87	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	42.8	86	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	46.4	93	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	47.1	94	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	43.2	86	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	38.6	77	25-149	9	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	45.0	90	39-140	7	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	43.5	87	47-129	9	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	48.3	97	31-135	5	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	54.6	109	53-128	3	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	51.0	102	51-151	9	0-25
67-64-1	PSD	Acetone	250	0.00	U	163	65	21-153	3	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	45.3	91	61-125	6	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	216	87	53-142	4	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	51.1	102	59-136	1	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	257	103	46-129	3	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	49.3	99	56-126	3	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	47.9	96	62-125	6	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	175	70	26-152	2	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	50.5	101	60-130	4	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	47.0	94	55-135	5	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	47.4	95	60-127	5	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	54.4	109	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	47.3	95	59-131	7	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	46.9	94	57-128	5	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	47.5	95	58-136	8	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	45.3	91	58-126	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	48.7	97	56-123	3	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	47.7	95	51-137	5	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	49.8	100	60-126	3	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	48.5	97	55-138	7	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	49.6	99	60-132	5	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	170	68	58-136	3	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	44.1	88	54-133	3	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	45.8	92	52-128	1	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	42.2	84	53-137	1	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	48.4	97	59-130	1	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	111	45	31-148	6	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	47.7	95	57-127	2	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	47.2	94	51-128	0	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	50.1	100	59-139	1	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	47.7	95	57-133	2	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	46.4	93	53-122	0	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	42.9	86	51-125	0	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	87.8	88	50-126	2	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	45.7	91	52-127	0	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	43.8	88	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	51.1	102	57-149	2	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	48.1	96	63-127	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	45.1	90	57-149	3	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	47.7	95	49-131	3	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	41.4	83	40-136	2	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	42.0	84	44-135	1	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	42.3	85	44-140	1	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	42.3	85	42-140	2	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	41.6	83	44-132	2	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	42.8	86	42-142	3	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	41.6	83	43-137	2	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	39.8	80	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	36.6	73	38-145	2	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	43.2	86	43-129	0	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	43.5	87	44-125	2	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	47.7	95	47-151	3	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	46.2	92	59-131	2	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	41.5	83	43-129	4	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926738
Lab Sample ID: 1201981432
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:50
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	41.0	82	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	45.5	91	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	48.8	98	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	53.5	107	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	53.8	108	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	53.0	106	67-151
67-64-1	LCS	Acetone	250	0.0	165	66	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	45.1	90	70-125
74-88-4	LCS	Iodomethane	250	0.0	260	104	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	47.3	95	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	277	111	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	49.9	100	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	45.7	91	75-120
78-93-3	LCS	2-Butanone	250	0.0	185	74	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	49.5	99	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	49.2	98	74-135
67-66-3	LCS	Chloroform	50.0	0.0	44.7	89	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	52.9	106	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	47.7	95	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	48.8	98	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	48.1	96	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	39.6	79	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926738
Lab Sample ID: 1201981432
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:50
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	48.8	98	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	48.6	97	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	47.5	95	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	44.3	89	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	45.1	90	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	220	88	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	46.5	93	80-125
108-88-3	LCS	Toluene	50.0	0.0	49.2	98	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	46.6	93	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	47.0	94	76-120
591-78-6	LCS	2-Hexanone	250	0.0	182	73	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	45.4	91	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	51.4	103	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	49.4	99	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	49.0	98	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	49.1	98	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	45.9	92	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	97.6	98	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	47.7	95	74-120
100-42-5	LCS	Styrene	50.0	0.0	48.8	98	76-125
75-25-2	LCS	Bromoform	50.0	0.0	50.5	101	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	47.8	96	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926738
Lab Sample ID: 1201981432
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:50
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No	Parmname		Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	43.4	87	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	49.1	98	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	42.0	84	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	42.3	85	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	43.3	87	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	42.1	84	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	43.7	87	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	40.5	81	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	41.3	83	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	37.5	75	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	39.1	78	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	46.7	93	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	45.3	91	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	35.2	70 *	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	49.5	99	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	46.2	92	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	44.9	90	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926738
Lab Sample ID: 1201981433
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 10:51
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	265	106	52-139

Method Blank Summary

SDG Number:	10-578	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926738	Instrument ID:	VOA1.I	Data File:	1n306BA.d
Lab Sample ID:	1201981429	Prep Date:	11/25/2009 07:00	Analyzed:	11/25/09 11:22
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926738	1201981432	1n303LA.d	11/25/09	0950
02	LCS for batch 926738	1201981433	1n305sLA.d	11/25/09	1051
03	WST03-10-2181	241423001	1n315.d	11/25/09	1557
04	WST03-10-2185	241423003	1n316.d	11/25/09	1627
05	WST03-10-2131	241423004	1n317.d	11/25/09	1657
06	WST03-10-2130	241423005	1n318.d	11/25/09	1727

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-578

Instrument ID: VOA1.I **Injection Date/Time:** 13-NOV-09 22:17

Column Description: RTX-Volatiles **Lab File ID** /111309v1/11507.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	59
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.1
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W1VM091113-05	/111309v1/11509.d	13-NOV-09 23:18
VSTD001	W1VM091113-07	/111309v1/11511.d	14-NOV-09 00:18
VSTD002	W1VM091113-08	/111309v1/11512.d	14-NOV-09 00:48
VSTD005	W1VM091113-09	/111309v1/11513.d	14-NOV-09 01:19
VSTD010	W1VM091113-10	/111309v1/11514.d	14-NOV-09 01:49
VSTD020	W1VM091113-11	/111309v1/11515.d	14-NOV-09 02:19
VSTD050	W1VM091113-12	/111309v1/11516.d	14-NOV-09 02:49
VSTD100	W1VM091113-13	/111309v1/11517.d	14-NOV-09 03:19
VSTD005S	W1VM091113-14	/111309v1/11519.d	14-NOV-09 04:20
VSTD010S	W1VM091113-15	/111309v1/11520.d	14-NOV-09 04:50
VSTD025S	W1VM091113-16	/111309v1/11521.d	14-NOV-09 05:20
VSTD050S	W1VM091113-17	/111309v1/11522.d	14-NOV-09 05:50
VSTD100S	W1VM091113-18	/111309v1/11523.d	14-NOV-09 06:20
VSTD250S	W1VM091113-19	/111309v1/11524.d	14-NOV-09 06:51
VSTD500S	W1VM091113-20	/111309v1/11525.d	14-NOV-09 07:21
SHORTICV	W1VM091113-19	/111309v1/11528.d	14-NOV-09 08:52

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-578

Instrument ID: VOA1.I **Injection Date/Time:** 16-NOV-09 14:01

Column Description: RTX-Volatiles **Lab File ID** /111609v1/1m108BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	55
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050/LICV	W1VM091116-05	/111609v1/1m108.d	16-NOV-09 14:01

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-578

Instrument ID: VOA1.I **Injection Date/Time:** 25-NOV-09 08:50

Column Description: RTX-Volatiles **Lab File ID** /112509v1/1n301.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	53.6
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	74
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	95.7
177	5.0 - 9.0% of mass 176	6.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091125-01	/112509v1/1n302.d	25-NOV-09 09:20
LCS	1201981432	/112509v1/1n303LA.d	25-NOV-09 09:50
VSTD250S	UVM091118-08A	/112509v1/1n304.d	25-NOV-09 10:21
SLCS	1201981433	/112509v1/1n305sLA.d	25-NOV-09 10:51
MB	1201981429	/112509v1/1n306BA.d	25-NOV-09 11:22
WST03-10-2181	241423001	/112509v1/1n315.d	25-NOV-09 15:57
WST03-10-2185	241423003	/112509v1/1n316.d	25-NOV-09 16:27
WST03-10-2131	241423004	/112509v1/1n317.d	25-NOV-09 16:57
WST03-10-2130	241423005	/112509v1/1n318.d	25-NOV-09 17:27

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-578

STD Analysis Time: 25-NOV-09 09:20

Data File: 1n302.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1036496		13.7		853527		17.2		483618		19.6	
Upper Limit	2072992		14.2		1707054		17.7		967236		20.1	
Lower Limit	518248		13.2		426764		16.7		241809		19.1	
Sample ID												
BLK01LCS	1045218		13.7		841936		17.2		474928		19.6	
BLK01SLCS	1085808		13.7		884474		17.2		482095		19.6	
BLK01	1032717		13.7		836157		17.2		444725		19.6	
WST03-10-2181	832343		13.7		680139		17.2		387200		19.6	
WST03-10-2185	828515		13.7		647396		17.2		367294		19.6	
WST03-10-2131	672308		13.7		536306		17.2		300693		19.6	
WST03-10-2130	810841		13.7		653994		17.2		351840		19.6	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 17:27	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:01	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n318.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.77	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.66	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.66	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241423005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**9.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 17:27**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n318.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.77	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n318.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 25-NOV-2009 17:27
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423005|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.84860	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	810841	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	653994	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	351840	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	565847	56.1040	62.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1433271	53.8471	59.7
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	581522	49.2255	54.6

ION RATIO REPORT

VOA REPORT

Data file: 1n318.d
Report Date: 11/27/2009 04:55
Lab. ID: 241423005 SampleType: SAMPLE
Injection Date: 25-NOV-2009 17:27
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241423005|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	15621	13.68	13.44	80-120	100	(T)
64	2308	13.68	13.44	3- 63	15	(T)
47 Benzene			CAS#: 71-43-2			
78	393	13.31	13.33	80-120	100	( )
77	16929	13.68	13.34	0- 53	4300	(QT)
51	171561	13.34	13.34	6- 66	43571	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	13591	15.52	15.36	80-120	100	(T)
43	7426	15.52	15.36	214-274	55	(QT)
100	901763	15.52	15.36	1- 61	6635	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n318.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 25-NOV-2009 17:27
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423005|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n318.d
Date : 25-NOV-2009 17:27
Client ID: WST03-10-2130
Sample Info: |2414230051926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

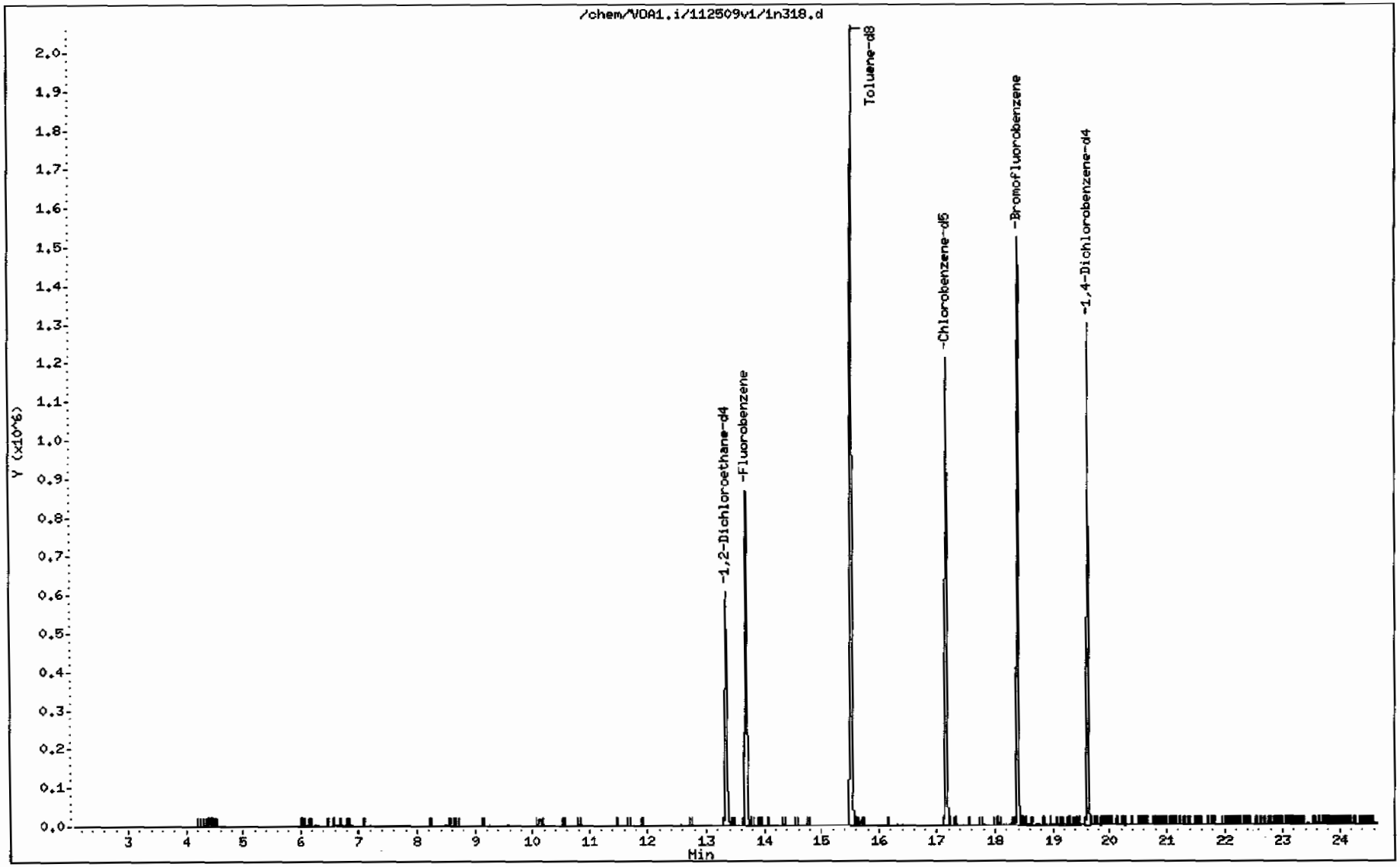

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 16:57	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n317.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.369	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.326	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.326	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.326	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.326	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.326	1.09
67-64-1	Acetone	U	5.43	ug/kg	1.80	5.43
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
74-88-4	Iodomethane	U	5.43	ug/kg	1.74	5.43
75-09-2	Methylene chloride	U	5.43	ug/kg	2.17	5.43
75-15-0	Carbon disulfide	U	5.43	ug/kg	1.36	5.43
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.326	1.09
78-93-3	2-Butanone	U	5.43	ug/kg	1.63	5.43
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.326	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.358	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.326	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.326	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.326	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.326	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.326	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.358	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.326	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.326	1.09
108-10-1	4-Methyl-2-pentanone	U	5.43	ug/kg	1.36	5.43
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.326	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.326	1.09
591-78-6	2-Hexanone	U	5.43	ug/kg	1.63	5.43
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.326	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.326	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.326	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.326	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.326	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 16:57	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n317.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.326	1.09
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.326	2.17
95-47-6	o-Xylene	U	1.09	ug/kg	0.326	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.326	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.326	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.326	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.326	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.326	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.326	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.326	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.326	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.326	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.326	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.326	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.43	ug/kg	1.74	5.43
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n317.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 25-NOV-2009 16:57
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423004|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.92250	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	672308	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	536306	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	300693	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.337	13.341	(0.974)	488846	58.4567	63.5
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1151474	52.7533	57.3
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	484639	48.0025	52.1

ION RATIO REPORT

VOA REPORT

Data file: 1n317.d
Report Date: 11/27/2009 04:54
Lab. ID: 241423004 SampleType: SAMPLE
Injection Date: 25-NOV-2009 16:57
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241423004|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	12333	13.68	13.44	80-120	100	(T)
64	2029	13.68	13.44	3- 63	16	(T)
47 Benzene			CAS#: 71-43-2			
78	184	13.33	13.33	80-120	100	( )
77	14141	13.68	13.34	0- 53	7677	(QT)
51	148689	13.34	13.34	6- 66	80720	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	11223	15.52	15.36	80-120	100	(T)
43	6140	15.52	15.36	214-274	55	(QT)
100	722603	15.52	15.36	1- 61	6438	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n317.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 25-NOV-2009 16:57
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423004|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n317.d

Date : 25-NOV-2009 16:57

Client ID: WST03-10-2131

Sample Info: |2414230041926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

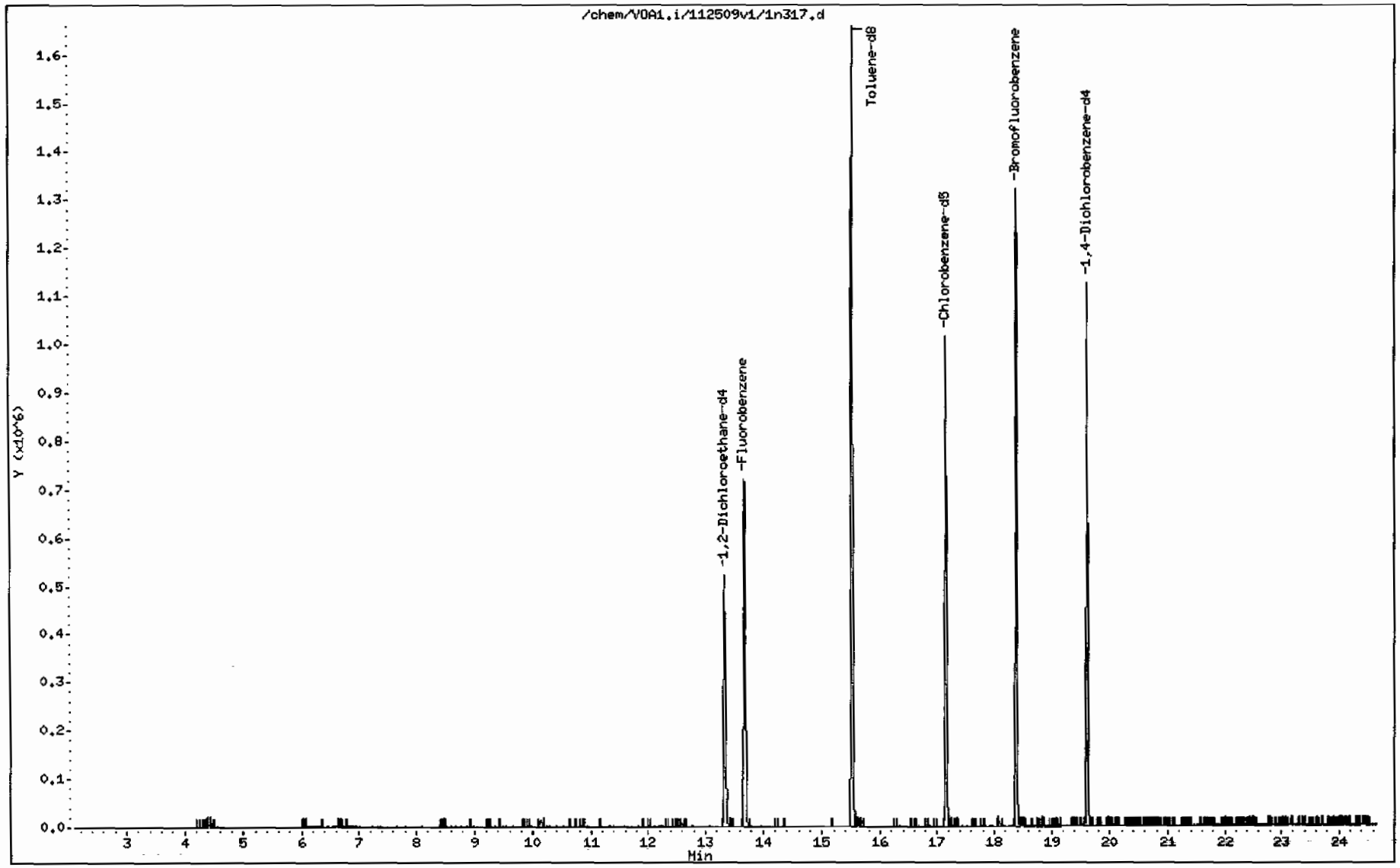

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241423001	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2181	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 15:57	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 13:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n315.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.90	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241423001	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2181	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 15:57	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 13:58	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n315.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n315.d
Lab Smp Id: 241423001 Client Smp ID: WST03-10-2181
Inj Date : 25-NOV-2009 15:57
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	832343	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	680139	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	387200	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	591949	57.1759	57.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1503829	54.3261	54.3
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	621131	47.7767	47.8
16 Acetone	43	9.254	9.249	(0.676)	9384	1.94296	1.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 1n315.d
Report Date: 11/27/2009 04:54
Lab. ID: 241423001 SampleType: SAMPLE
Injection Date: 25-NOV-2009 15:57
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241423001|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
16 Acetone		CAS#: 67-64-1				
43	8908	9.25	9.25	80-120	100	( )
58	705	9.25	9.25	0- 60	8	( )
51 1,2-Dichloroethane		CAS#: 107-06-2				
62	14965	13.69	13.44	80-120	100	(T)
64	2135	13.69	13.44	3- 63	14	(T)
47 Benzene		CAS#: 71-43-2				
78	1665	13.34	13.33	80-120	100	( )
77	138	13.34	13.34	0- 53	8	( )
51	180710	13.34	13.34	6- 66	10851	(Q)
64 4-Methyl-2-pentanone		CAS#: 108-10-1				
58	14842	15.52	15.36	80-120	100	(T)
43	7348	15.52	15.36	214-274	50	(QT)
100	940163	15.52	15.36	1- 61	6334	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n315.d
Lab Smp Id: 241423001 Client Smp ID: WST03-10-2181
Inj Date : 25-NOV-2009 15:57
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n315.d

Date : 25-NOV-2009 15:57

Client ID: WST03-10-2181

Sample Info: |241423001|926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

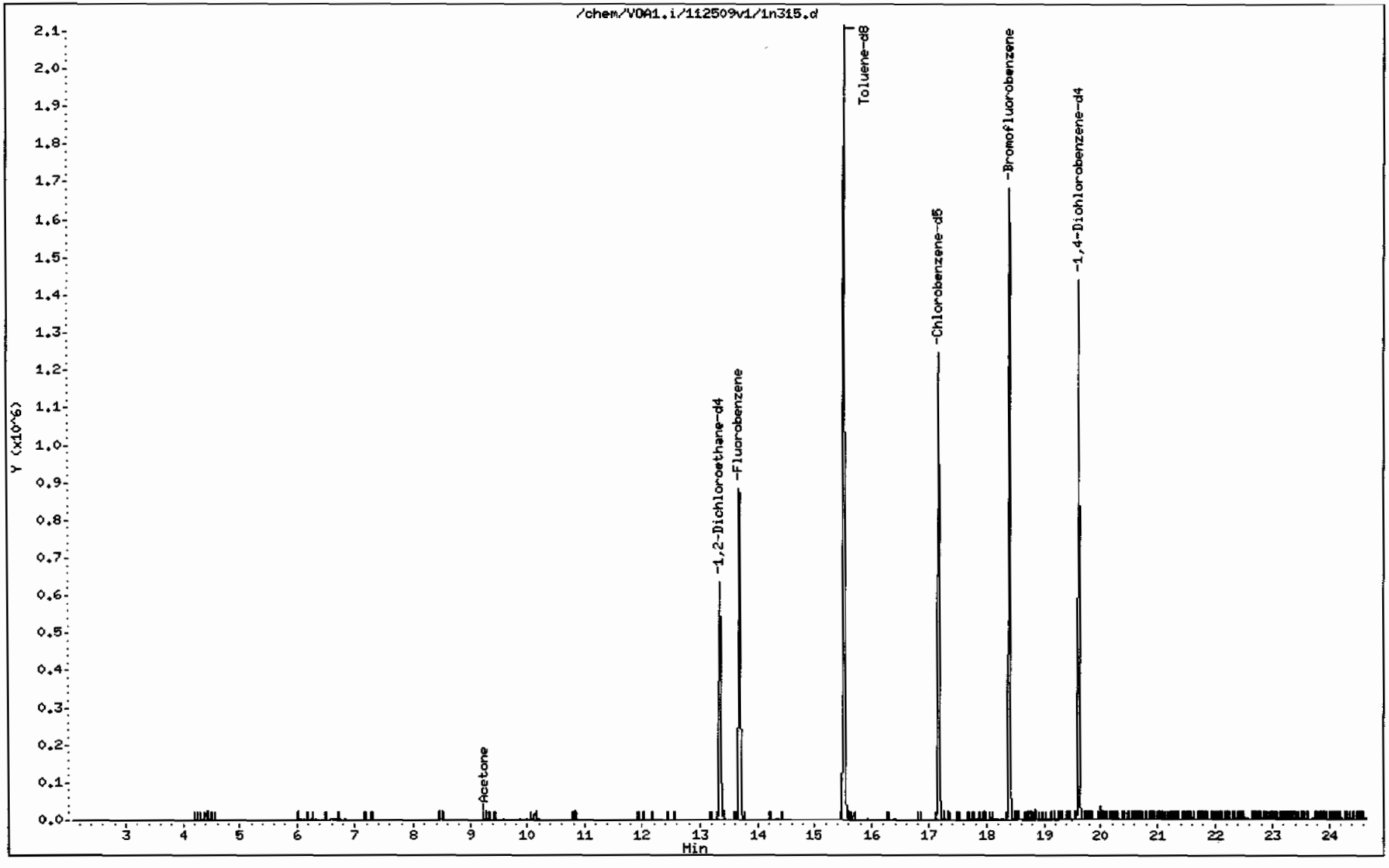

Data File: /chem/VOA1.i/112509v1/1n315.d

Date : 25-NOV-2009 15:57

Client ID: WST03-10-2181

Instrument: VOA1.i

Sample Info: |24142300|1926739|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 1.9 ug/Kg

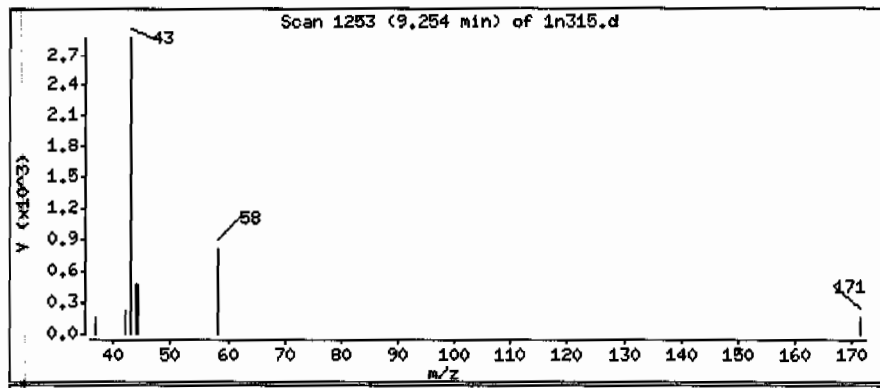

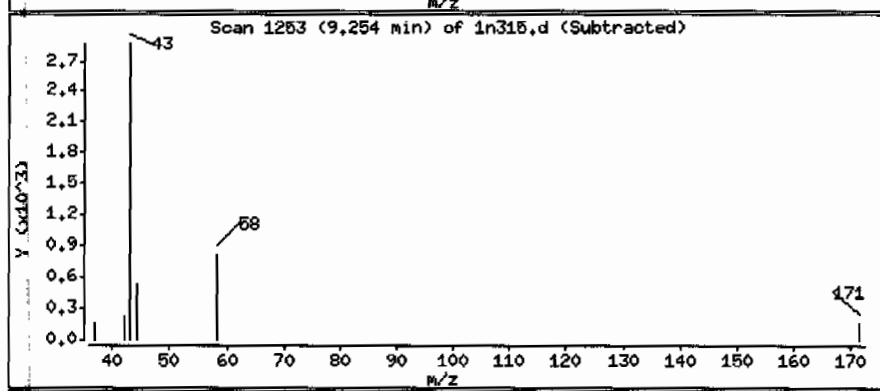

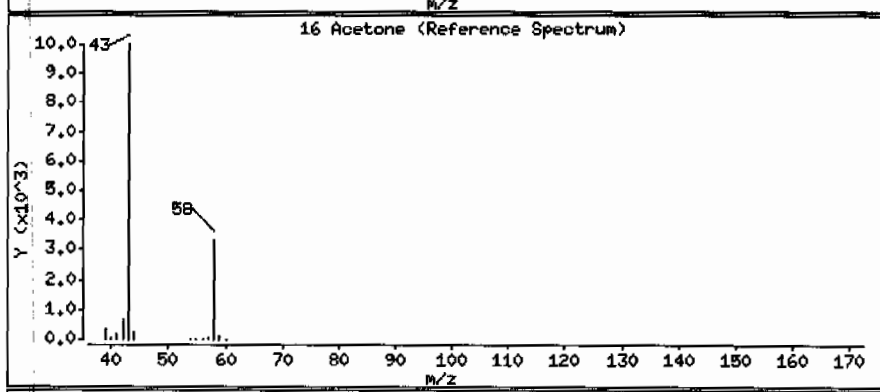

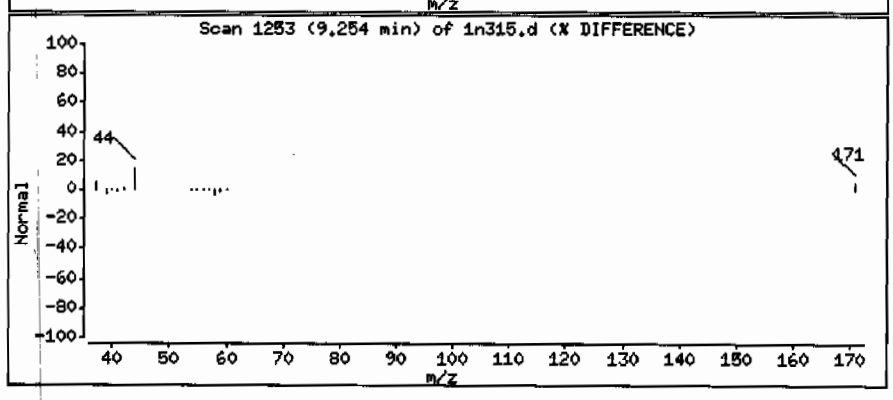

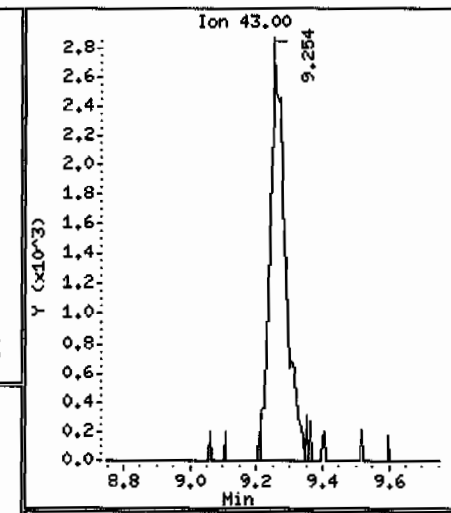

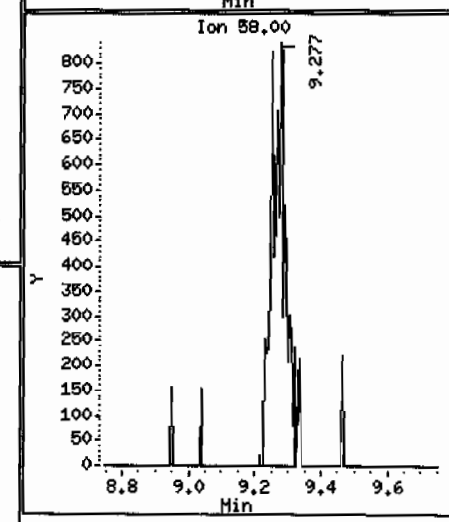

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241423003	Date Received:	11/19/2009 08:45		
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2185	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 16:27	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 13:59	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n316.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241423003	Date Received:	11/19/2009 08:45		
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2185	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 16:27	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 13:59	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n316.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n316.d
Lab Smp Id: 241423003 Client Smp ID: WST03-10-2185
Inj Date : 25-NOV-2009 16:27
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423003|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	828515	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	647396	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.610	(1.000)	367294	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	586291	56.8910	56.9
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1477559	56.0767	56.1
$ 87 Bromofluorobenzene	95	18.390	18.391	(0.938)	607793	49.2845	49.3

ION RATIO REPORT

VOA REPORT

Data file: 1n316.d
Report Date: 11/27/2009 04:54
Lab. ID: 241423003 SampleType: SAMPLE
Injection Date: 25-NOV-2009 16:27
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241423003|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	15514	13.69	13.44	80-120	100	(T)
64	2454	13.68	13.44	3- 63	16	(T)
47 Benzene			CAS#: 71-43-2			
78	2345	13.33	13.33	80-120	100	( )
77	346	13.33	13.34	0- 53	15	( )
51	182409	13.35	13.34	6- 66	7776	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14501	15.52	15.36	80-120	100	(T)
43	8096	15.51	15.36	214-274	56	(QT)
100	921959	15.52	15.36	1- 61	6358	(QT)
83 Bromoform			CAS#: 75-25-2			
173	3115	18.39	18.11	80-120	100	(T)
171	169	18.39	18.10	21- 81	5	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n316.d
Lab Smp Id: 241423003 Client Smp ID: WST03-10-2185
Inj Date : 25-NOV-2009 16:27
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241423003|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n316.d
Date : 25-NOV-2009 16:27
Client ID: WST03-10-2185
Sample Info: |2414230031926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

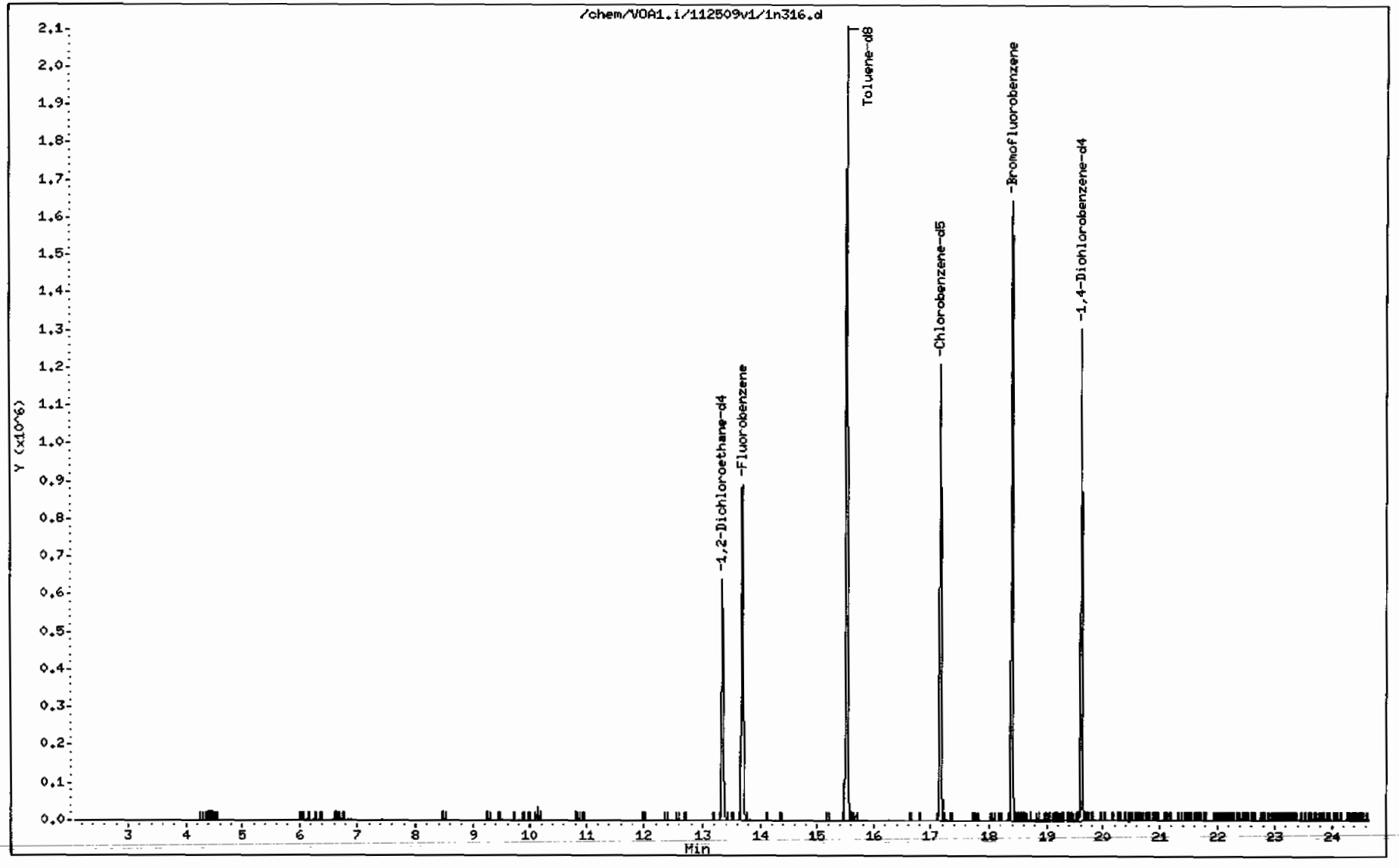

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 25-Nov-2009 08:26

Calibration History

Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Start Cal Date: 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 04:20	ICALsubS	/chem/VOA1.i/111309v1/11519.d
14-NOV-2009 00:18	CALsubL+	/chem/VOA1.i/111309v1/11511.d
Cal Level: 2 , Cal Amount: 2.00000		
14-NOV-2009 04:50	ICALsubS	/chem/VOA1.i/111309v1/11520.d
14-NOV-2009 00:48	CALsubL+	/chem/VOA1.i/111309v1/11512.d
Cal Level: 3 , Cal Amount: 5.00000		
14-NOV-2009 05:20	ICALsubS	/chem/VOA1.i/111309v1/11521.d
14-NOV-2009 01:19	CALsubL+	/chem/VOA1.i/111309v1/11513.d
Cal Level: 4 , Cal Amount: 10.00000		
14-NOV-2009 05:50	ICALsubS	/chem/VOA1.i/111309v1/11522.d
14-NOV-2009 01:49	CALsubL+	/chem/VOA1.i/111309v1/11514.d
Cal Level: 5 , Cal Amount: 20.00000		
14-NOV-2009 06:20	ICALsubS	/chem/VOA1.i/111309v1/11523.d
14-NOV-2009 02:19	CALsubL+	/chem/VOA1.i/111309v1/11515.d
Cal Level: 6 , Cal Amount: 50.00000		
14-NOV-2009 06:51	ICALsubS	/chem/VOA1.i/111309v1/11524.d
14-NOV-2009 02:49	CALsubL+	/chem/VOA1.i/111309v1/11516.d
Cal Level: 7 , Cal Amount: 100.00000		
14-NOV-2009 07:21	ICALsubS	/chem/VOA1.i/111309v1/11525.d
14-NOV-2009 03:19	CALsubL+	/chem/VOA1.i/111309v1/11517.d
Cal Level: 8 , Cal Amount: 200.00000		
13-NOV-2009 23:18	BENZENE+	/chem/VOA1.i/111309v1/11509.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Calibration File Names:
Level 1: /chem/VOA1.i/111309v1/11519.d
Level 2: /chem/VOA1.i/111309v1/11520.d
Level 3: /chem/VOA1.i/111309v1/11521.d
Level 4: /chem/VOA1.i/111309v1/11522.d
Level 5: /chem/VOA1.i/111309v1/11523.d
Level 6: /chem/VOA1.i/111309v1/11524.d
Level 7: /chem/VOA1.i/111309v1/11525.d
Level 8: /chem/VOA1.i/111309v1/11509.d

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M 1 Xylenes (total)	0.81227	0.73137	0.78894	0.72498	0.74753	0.76443					
	0.83207	+++++					AVRG		0.77166		5.29958
M 2 1,2-Dichloroethylene (total)	0.34833	0.34223	0.35784	0.33479	0.33448	0.33077					
	0.34829	+++++					AVRG		0.34239		2.83215
M 3 1,3-Dichloropropylene	0.70586	0.72835	0.78706	0.78242	0.78994	0.81396					
	0.86766	+++++					AVRG		0.78218		6.82978
4 Chlorotrifluoroethylene	0.13485	0.14655	0.15206	0.14935	0.17832	0.16711					
	0.16995	+++++					AVRG		0.15688		9.76231
5 Dichlorodifluoromethane	0.38136	0.29154	0.34309	0.34840	0.34284	0.32399					
	0.30590	+++++					AVRG		0.33388		8.90427

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	ml	m2	%RSD or R^2
6 Chloromethane	0.36352	0.41180	0.43566	0.42653	0.42921	0.41976					
	0.40514	+++++					AVRG		0.41309		5.86079
7 Vinyl chloride	0.37166	0.41882	0.39367	0.36887	0.36084	0.34024					
	0.32820	+++++					AVRG		0.36890		8.32266
8 2-Chloro-1,1,1-trifluoroethan	+++++	0.33998	0.31048	0.30901	0.32578	0.34040					
	0.34703	+++++					AVRG		0.32878		4.95745
9 Bromomethane	0.21690	0.22761	0.23531	0.22897	0.22468	0.21559					
	0.20365	+++++					AVRG		0.22182		4.75715
10 Chloroethane	0.19204	0.24536	0.23794	0.23300	0.23259	0.23061					
	0.22732	+++++					AVRG		0.22841		7.46771
11 Trichlorofluoromethane	0.43608	0.52008	0.53827	0.53954	0.53870	0.53853					
	0.52430	+++++					AVRG		0.51936		7.23277
12 Ethyl Ether	13883	16946	33985	58858	108474	271086					
	556612	+++++					WLINR	-0.01699	0.31004		0.99399
13 Acrolein	0.05333	0.04888	0.04523	0.05392	0.05442	+++++					
	+++++	+++++					AVRG		0.05116		7.77888
14 Trichlorotrifluoroethane	0.38443	0.29919	0.26333	0.27368	0.28733	0.26637					
	0.27318	+++++					AVRG		0.29250		14.49372

GEL Laboratories LLC

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Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 1,1-Dichloroethylene	0.66544	0.72486	0.72849	0.75349	0.72602	0.70860					
	0.70169	+++++					AVRG		0.71551		3.85053
16 Acetone	0.27960	0.29041	0.29028	0.29519	0.28855	0.29877					
	0.28827	+++++					AVRG		0.29015		2.07413
17 Isopropyl Alcohol	+++++	0.01880	0.01931	0.02045	0.01791	0.02228					
	0.02251	+++++					AVRG		0.02021		9.32492
18 Iodomethane	0.47134	0.45473	0.46938	0.46784	0.46221	0.46114					
	0.45366	+++++					AVRG		0.46290		1.51011
19 Carbon disulfide	0.96269	0.92797	0.89305	0.94299	0.92514	0.93790					
	0.86070	+++++					AVRG		0.92149		3.70371
20 Allyl chloride	0.09501	0.09361	0.09290	0.10507	0.12042	0.13013					
	+++++	+++++					AVRG		0.10619		14.81176
21 Methyl acetate	0.26593	0.25494	0.25595	0.25694	0.24207	0.22786					
	0.23511	+++++					AVRG		0.24840		5.49716
22 Acetonitrile	0.03907	0.03505	0.03613	0.03588	0.03452	0.03371					
	0.03550	+++++					AVRG		0.03569		4.76986
23 Methylene chloride	+++++	24051	41818	70969	131447	316200					
	681164	+++++					LINR	-0.03083	0.35083		0.99980

GEL Laboratories LLC

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Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
24 tert-Butyl Alcohol	0.03736	0.03924	0.03623	0.04125	0.03045	0.04033					
	0.04086	+++++					AVRG		0.03796		9.99389
25 tert-Butyl methyl ether	1.02944	1.16134	1.14779	1.21755	1.11739	1.12980					
	1.16499	+++++					AVRG		1.13833		5.06877
26 trans-1,2-Dichloroethylene	0.34072	0.33605	0.34935	0.32977	0.32190	0.31967					
	0.32891	+++++					AVRG		0.33234		3.15938
27 Acrylonitrile	0.11445	0.10516	0.09582	0.09726	0.11027	0.10992					
	0.11442	+++++					AVRG		0.10676		7.18031
28 Isopropyl ether	+++++	1.14017	1.11343	1.15572	1.20439	1.22887					
	1.32967	+++++					AVRG		1.19537		6.54156
29 Vinyl acetate	0.47200	0.53409	0.59574	0.55445	0.52377	0.60780					
	0.57002	+++++					AVRG		0.55113		8.40353
30 1,1-Dichloroethane	0.71917	0.72889	0.80378	0.74289	0.72120	0.71174					
	0.74337	+++++					AVRG		0.73872		4.20348
31 2-Chloro-1,3-butadiene	0.65721	0.59215	0.56354	0.55911	0.62777	0.61361					
	0.65818	+++++					AVRG		0.61022		6.67178
32 Ethyl tert-butyl ether	+++++	1.12815	1.09366	1.08936	1.06318	1.18087					
	1.29073	+++++					AVRG		1.14099		7.34719

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
33 2,2-Dichloropropane	0.48989	0.52491	0.58120	0.54053	0.55119	0.53778					
	0.55150	+++++					AVRG		0.53957		5.18583
34 Ethyl acetate	0.33965	0.28932	0.26285	0.29260	0.27580	0.29649					
	0.28868	+++++					AVRG		0.29220		8.17282
35 2-Butanone	0.25793	0.27740	0.26965	0.27914	0.28942	0.30924					
	0.30740	+++++					AVRG		0.28431		6.68266
36 cis-1,2-Dichloroethylene	0.35593	0.34838	0.36631	0.33981	0.34705	0.34186					
	0.36768	+++++					AVRG		0.35243		3.18020
37 Propionitrile	0.04783	0.04230	0.03731	0.04306	0.04379	0.04424					
	0.04431	+++++					AVRG		0.04326		7.28248
38 Tetrahydrofuran	0.23152	0.20954	0.20440	0.19096	0.19197	0.21633					
	0.18821	+++++					AVRG		0.20471		7.72518
39 Bromochloromethane	0.13887	0.13222	0.13837	0.14209	0.13930	0.14049					
	0.14893	+++++					AVRG		0.14004		3.56145
40 Methacrylonitrile	0.24963	0.22678	0.21065	0.22890	0.23535	0.24087					
	0.23039	+++++					AVRG		0.23180		5.27167
41 Chloroform	0.74775	0.77887	0.82572	0.78772	0.78034	0.77383					
	0.81096	+++++					AVRG		0.78646		3.24006

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
42 Cyclohexane	0.66345	0.64389	0.63890	0.66407	0.64404	0.63011					
	0.64678	+++++					AVRG		0.64732		1.92383
43 1,1,1-Trichloroethane	0.54517	0.62302	0.63779	0.62522	0.62893	0.61320					
	0.63805	+++++					AVRG		0.61591		5.25541
44 Carbon tetrachloride	0.56294	0.58644	0.63641	0.63628	0.63185	0.62091					
	0.64429	+++++					AVRG		0.61702		4.94513
45 1,1-Dichloropropene	0.55100	0.55607	0.56975	0.55980	0.55465	0.55195					
	0.58405	+++++					AVRG		0.56104		2.12886
46 Isobutyl alcohol	0.01033	0.01111	0.01036	0.01037	0.00985	0.01223					
	0.01175	+++++					AVRG		0.01086		7.98726
47 Benzene	36755	49089	122794	236505	464924	1202457					
	2698240	23667					LINR	0.00708	1.40915		0.99937
49 Methyl tert-amyl ether	+++++	0.88273	0.85934	0.84815	0.87620	0.96177					
	1.02973	+++++					AVRG		0.90966		7.81866
50 Cyclohexene	0.53615	0.51960	0.53427	0.54352	0.53716	0.52183					
	0.54823	+++++					AVRG		0.53439		1.96596
51 1,2-Dichloroethane	0.63028	0.70033	0.72243	0.70806	0.70200	0.69617					
	0.69894	+++++					AVRG		0.69403		4.24176

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
53 n-Butyl alcohol	0.00840	0.00793	0.00871	0.00963	0.00810	0.00978					
	0.01083	++++++					AVRG		0.00905		11.70077
54 Trichloroethylene	0.38407	0.37942	0.39497	0.37726	0.38205	0.37012					
	0.39468	++++++					AVRG		0.38323		2.36496
55 Methylcyclohexane	0.61415	0.59438	0.58177	0.58292	0.58847	0.57365					
	0.60973	++++++					AVRG		0.59215		2.53002
56 Methyl methacrylate	0.21424	0.18730	0.18064	0.19254	0.19905	0.20650					
	0.20620	++++++					AVRG		0.19807		6.00920
57 1,2-Dichloropropane	0.39078	0.35768	0.35900	0.35500	0.35022	0.35218					
	0.37196	++++++					AVRG		0.36240		3.96416
58 1,4-Dioxane	0.00305	0.00245	0.00266	0.00286	0.00318	0.00288					
	0.00289	++++++					AVRG		0.00285		8.49652
59 Dibromomethane	0.20277	0.23410	0.23268	0.22085	0.21845	0.22248					
	0.23307	++++++					AVRG		0.22349		5.00706
60 Bromodichloromethane	0.51667	0.56051	0.62592	0.60782	0.59837	0.61544					
	0.63717	++++++					AVRG		0.59456		7.08633
61 2-Chloroethylvinyl ether	2224	2878	11313	21547	54379	210498					
	505362	++++++					LINR	0.39134	0.05430		0.99355

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Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	ml	m2	%RSD or R^2
	100 Level 7	200 Level 8									
62 2-Nitropropane	0.10211	0.09608	0.09548	0.10761	0.11835	0.11732					
	0.11890	+++++					AVRG		0.10798		9.61347
63 cis-1,3-Dichloropropylene	0.56705	0.57716	0.62105	0.61985	0.62451	0.64527					
	0.67992	+++++					AVRG		0.61926		6.21449
64 4-Methyl-2-pentanone	0.15705	0.17262	0.17271	0.18512	0.18978	0.21108					
	0.20813	+++++					AVRG		0.18521		10.62392
66 Toluene	1.14017	1.06414	1.10843	1.06181	1.07135	1.08649					
	1.15420	+++++					AVRG		1.09808		3.39614
67 Ethyl methacrylate	0.52322	0.48434	0.48427	0.53223	0.51154	0.52546					
	0.51582	+++++					AVRG		0.51098		3.79655
68 trans-1,3-Dichloropropylene	0.69838	0.72713	0.78298	0.78308	0.78831	0.81706					
	0.87099	+++++					AVRG		0.78113		7.23969
69 1,1,2-Trichloroethane	0.31590	0.30169	0.29945	0.29278	0.30402	0.30261					
	0.32301	+++++					AVRG		0.30563		3.37459
70 Tetrachloroethylene	0.34151	0.33330	0.33889	0.32547	0.32471	0.32346					
	0.34458	+++++					AVRG		0.33313		2.62174
71 2-Hexanone	0.42866	0.44990	0.45866	0.46921	0.50138	0.56178					
	0.55722	+++++					AVRG		0.48954		10.73922

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
72 1,3-Dichloropropane	0.67890	0.68207	0.69734	0.65590	0.66618	0.66440					
	0.71069	+++++					AVRG		0.67935		2.85695
73 Dibromochloromethane	0.38469	0.38394	0.44512	0.43782	0.44944	0.47113					
	0.49706	+++++					AVRG		0.43846		9.55461
74 1,2-Dibromoethane	0.34045	0.34527	0.36316	0.35106	0.36203	0.36864					
	0.38538	+++++					AVRG		0.35943		4.26461
75 1-Chlorohexane	+++++	0.39312	0.39282	0.32524	0.40104	0.42060					
	0.43305	+++++					AVRG		0.39431		9.49685
77 Chlorobenzene	1.21373	1.15844	1.14111	1.07587	1.08040	1.10429					
	1.17692	+++++					AVRG		1.13582		4.54042
78 Ethylbenzene	2.40687	2.33669	2.47268	2.23463	2.29813	2.32214					
	2.46303	+++++					AVRG		2.36203		3.74714
79 1,1,1,2-Tetrachloroethane	0.42049	0.43141	0.45326	0.42496	0.43613	0.44494					
	0.47082	+++++					AVRG		0.44029		3.98244
80 m,p-Xylenes	0.80780	0.74989	0.79953	0.72779	0.75646	0.76931					
	0.84008	+++++					AVRG		0.77870		4.98818
81 o-Xylene	0.82120	0.69429	0.76774	0.71936	0.72965	0.75467					
	0.81606	+++++					AVRG		0.75757		6.33656

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
82 Styrene	1.30914	1.18192	1.31601	1.23212	1.27501	1.34034					
	1.43319	+++++					AVRG		1.29825		6.19894
83 Bromoform	0.42221	0.45244	0.46276	0.49988	0.51775	0.53547					
	0.59142	+++++					AVRG		0.49742		11.48564
84 Isopropylbenzene	3.92962	3.81106	4.36021	3.96245	4.03248	4.02489					
	4.35218	+++++					AVRG		4.06756		5.17225
85 cis-1,4-Dichloro-2-butene	0.30225	0.29462	0.29877	0.29084	0.32781	0.32850					
	0.31209	+++++					AVRG		0.30784		4.99910
86 Cyclohexanone	12846	23538	58910	150579	381845	+++++					
	+++++	+++++					LINR	0.49988	0.04909		0.99135
88 1,1,2,2-Tetrachloroethane	0.75610	0.74369	0.81649	0.79419	0.78783	0.79158					
	0.86202	+++++					AVRG		0.79313		4.92083
89 n-Propylbenzene	4.79404	4.78851	5.23968	4.82134	4.89570	4.92964					
	5.21295	+++++					AVRG		4.95455		3.89310
90 trans-1,4-Dichloro-2-butene	0.29812	0.31352	0.28782	0.26998	0.31695	0.31835					
	0.29727	+++++					AVRG		0.30029		5.87400
91 Bromobenzene	0.85156	0.84147	0.85882	0.81020	0.81428	0.82700					
	0.88455	+++++					AVRG		0.84112		3.13963

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
92 1,2,3-Trichloropropane	0.28022	0.26897	0.25372	0.25204	0.25423	0.25360					
	0.26290	+++++					AVRG		0.26081		4.05216
93 1,3,5-Trimethylbenzene	3.43446	3.49218	3.68233	3.44662	3.56449	3.59826					
	3.86366	+++++					AVRG		3.58314		4.23441
94 2-Chlorotoluene	3.47821	3.57761	3.79930	3.46640	3.52829	3.52154					
	3.75641	+++++					AVRG		3.58968		3.73610
95 4-Chlorotoluene	3.35203	3.17426	3.34752	3.10435	3.16879	3.17490					
	3.33681	+++++					AVRG		3.23695		3.22667
96 tert-Butylbenzene	2.87089	2.74977	2.84522	2.66297	2.72776	2.70387					
	2.96377	+++++					AVRG		2.78918		3.84011
97 1,2,4-Trimethylbenzene	3.70191	3.60410	3.79540	3.52090	3.56225	3.61987					
	3.87066	+++++					AVRG		3.66787		3.47855
98 Pentachloroethane	0.32060	0.31703	0.32398	0.24876	0.30297	0.37777					
	0.29193	+++++					AVRG		0.31186		12.45420
99 sec-Butylbenzene	4.44800	4.34644	4.60966	4.23567	4.42485	4.37976					
	4.71803	+++++					AVRG		4.45177		3.66292
100 4-Isopropyltoluene	3.36328	3.22054	3.51684	3.17589	3.32966	3.36325					
	3.58839	+++++					AVRG		3.36541		4.38795

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
101 1,3-Dichlorobenzene	1.67374	1.55428	1.66831	1.53164	1.55944	1.58328					
	1.67251	+++++					AVRG		1.60617		3.91972
103 1,4-Dichlorobenzene	1.76616	1.66887	1.68200	1.51979	1.57239	1.60865					
	1.70636	+++++					AVRG		1.64632		5.12085
104 Benzyl chloride	1.62969	1.55776	1.60390	1.34298	1.74375	1.69429					
	1.59116	+++++					AVRG		1.59479		8.02116
105 n-Butylbenzene	3.64538	3.69207	3.98159	3.55254	3.74217	3.76878					
	3.99375	+++++					AVRG		3.76804		4.39399
106 1,2-Dichlorobenzene	1.66043	1.49940	1.55636	1.46965	1.48387	1.49852					
	1.59506	+++++					AVRG		1.53761		4.53952
107 bis(2-Chloroisopropyl)ether	0.37106	0.36662	0.32099	0.32780	0.38946	0.39192					
	0.35359	+++++					AVRG		0.36021		7.73065
108 1,2-Dibromo-3-chloropropane	0.14172	0.13191	0.14045	0.15188	0.15917	0.15194					
	0.18132	+++++					AVRG		0.15120		10.62760
109 1,2,4-Trichlorobenzene	1.16045	1.14150	1.16560	1.09295	1.12242	1.11980					
	1.19388	+++++					AVRG		1.14237		2.96216
110 Hexachlorobutadiene	0.84192	0.81403	0.87311	0.75366	0.80851	0.77001					
	0.79946	+++++					AVRG		0.80867		5.02102

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
111 Naphthalene	2.12943	2.03059	1.99480	2.09592	2.16328	2.08234					
	2.33666	+++++					AVRG		2.11900		5.26088
112 1,2,3-Trichlorobenzene	0.93318	0.98133	0.98253	0.97572	0.96237	0.91436					
	0.97897	+++++					AVRG		0.96121		2.80673
$ 48 1,2-Dichloroethane-d4	0.52359	0.62803	0.63025	0.66045	0.64311	0.66027					
	0.60778	+++++					AVRG		0.62193		7.59277
$ 65 Toluene-d8	1.93610	2.03435	2.05225	2.06640	2.00752	2.08350					
	2.06482	+++++					AVRG		2.03499		2.46206
$ 87 Bromofluorobenzene	1.60564	1.67611	1.67667	1.73493	1.66503	1.69222					
	1.70106	+++++					AVRG		1.67881		2.35520

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/VOA1.i/111309v1/11528.d
Report Date: 18-Nov-2009 11:01

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 11528.d
Analysis Type: WATER
Lab Sample ID: W1VM091113-19
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

Injection Date: 14-NOV-2009 08:52
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.14763	0.14763	0.010	-5.90175	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.36322	0.36322	0.010	10.47439	30.00000	Averaged
13 Acrolein	0.05116	0.04667	0.04667	0.001	-8.77636	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.27186	0.27186	0.030	-7.05527	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02305	0.02305	0.000	14.05893	40.00000	Averaged
20 Allyl chloride	0.10619	0.13404	0.13404	0.010	26.22620	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.04061	0.04061	0.010	6.98257	40.00000	Averaged
27 Acrylonitrile	0.10676	0.10533	0.10533	0.010	-1.33680	30.00000	Averaged
28 Isopropyl ether	1.19537	1.28737	1.28737	0.010	7.69603	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.60811	0.60811	0.010	-0.34717	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.22940	1.22940	0.010	7.74850	30.00000	Averaged
37 Propionitrile	0.04326	0.04095	0.04095	0.010	-5.34093	30.00000	Averaged
34 Ethyl acetate	0.29220	0.26253	0.26253	0.010	-10.15296	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.22054	0.22054	0.010	-4.85685	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.19333	0.19333	0.010	-5.55867	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01041	0.01041	0.001	-4.14907	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	0.98494	0.98494	0.010	8.27576	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.19115	0.19115	0.010	-3.48960	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.48311	0.48311	0.010	-5.45482	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.40080	0.40080	0.000	1.64453	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00267	0.00267	0.001	-6.48301	40.00000	Averaged
62 2-Nitropropane	0.10798	0.10490	0.10490	0.000	-2.85062	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.29808	0.29808	0.010	-3.17173	30.00000	Averaged
86 Cyclohexanone	555	1250	0.02080	0.010	-55.62459	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.28505	0.28505	0.010	-5.07396	30.00000	Averaged
98 Pentachloroethane	0.31186	0.25219	0.25219	0.010	-19.13515	30.00000	Averaged
104 Benzyl chloride	1.59479	1.35725	1.35725	0.010	-14.89504	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.35032	0.35032	0.010	-2.74499	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.54180	0.54180	0.010	-12.88362	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.03543	2.03543	0.010	0.02147	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.62823	1.62823	0.010	-3.01305	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 11528.d
Analysis Type: WATER
Lab Sample ID: W1VM091113-19
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

Injection Date: 14-NOV-2009 08:52
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

Average %D / Drift Results.
Calculated Average %D/Drift = 8.75563
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111309v1/11528.d
Lab Smp Id: W1VM091113-19 Client Smp ID: SHORTICV
Inj Date : 14-NOV-2009 08:52
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091113-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091023-08A/UVM091105-02A
Comment :
Method : /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m
Meth Date : 18-Nov-2009 11:01 ehl Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	493699	150.000	141
8 2-Chloro-1,1,1-trifluoroethane	118	6.298	6.298	(0.460)	1214708	150.000	166
13 Acrolein	56	8.959	8.959	(0.655)	260116	250.000	228
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1515317	250.000	232
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1284719	2500.00	2850
20 Allyl chloride	76	9.856	9.856	(0.720)	747101	250.000	316
24 tert-Butyl Alcohol	59	10.202	10.202	(0.745)	2263586	2500.00	2670
27 Acrylonitrile	53	10.671	10.671	(0.780)	587086	250.000	247
28 Isopropyl ether	45	11.201	11.201	(0.818)	1435106	50.0000	53.8
31 2-Chloro-1,3-butadiene	53	11.399	11.399	(0.833)	677890	50.0000	49.8
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1370484	50.0000	53.9
37 Propionitrile	54	12.407	12.407	(0.906)	228260	250.000	237
34 Ethyl acetate	43	12.167	12.167	(0.889)	1463298	250.000	225
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1229233	250.000	238
38 Tetrahydrofuran	42	12.545	12.545	(0.640)	489608	250.000	236

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
46 Isobutyl alcohol	41	13.111	13.111	(0.958)	580033	2500.00	2400
49 Methyl tert-amyl ether	73	13.350	13.350	(0.975)	1097966	50.0000	54.1
56 Methyl methacrylate	69	14.441	14.441	(1.055)	1065456	250.000	241
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2164928	250.000	236
75 1-Chlorohexane	55	17.033	17.033	(1.244)	446791	50.0000	50.8
58 1,4-Dioxane	88	14.547	14.547	(1.063)	148599	2500.00	2340
62 2-Nitropropane	43	15.081	15.081	(1.102)	584679	250.000	243
85 cis-1,4-Dichloro-2-butene	53	18.275	18.275	(0.932)	754892	250.000	242
86 Cyclohexanone	55	18.386	18.386	(1.071)	466077	1250.00	555
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	721901	250.000	237
98 Pentachloroethane	167	19.201	19.201	(0.979)	638677	250.000	202
104 Benzyl chloride	91	19.776	19.776	(1.008)	3437283	250.000	213
107 bis(2-Chloroisopropyl)ether	45	20.167	20.167	(1.028)	887198	250.000	243
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1114758	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	896248	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	506508	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	603976	50.0000	43.6
$ 65 Toluene-d8	98	15.523	15.523	(0.904)	1824247	50.0000	50.0
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	824709	50.0000	48.5

Data File: /chem/VOA1.i/111309v1/11528.d
Date : 14-NOV-2009 08:52
Client ID: SHORTICV
Sample Info: IW1VH091113-19!SHORTICV!1!VOAF!1!
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

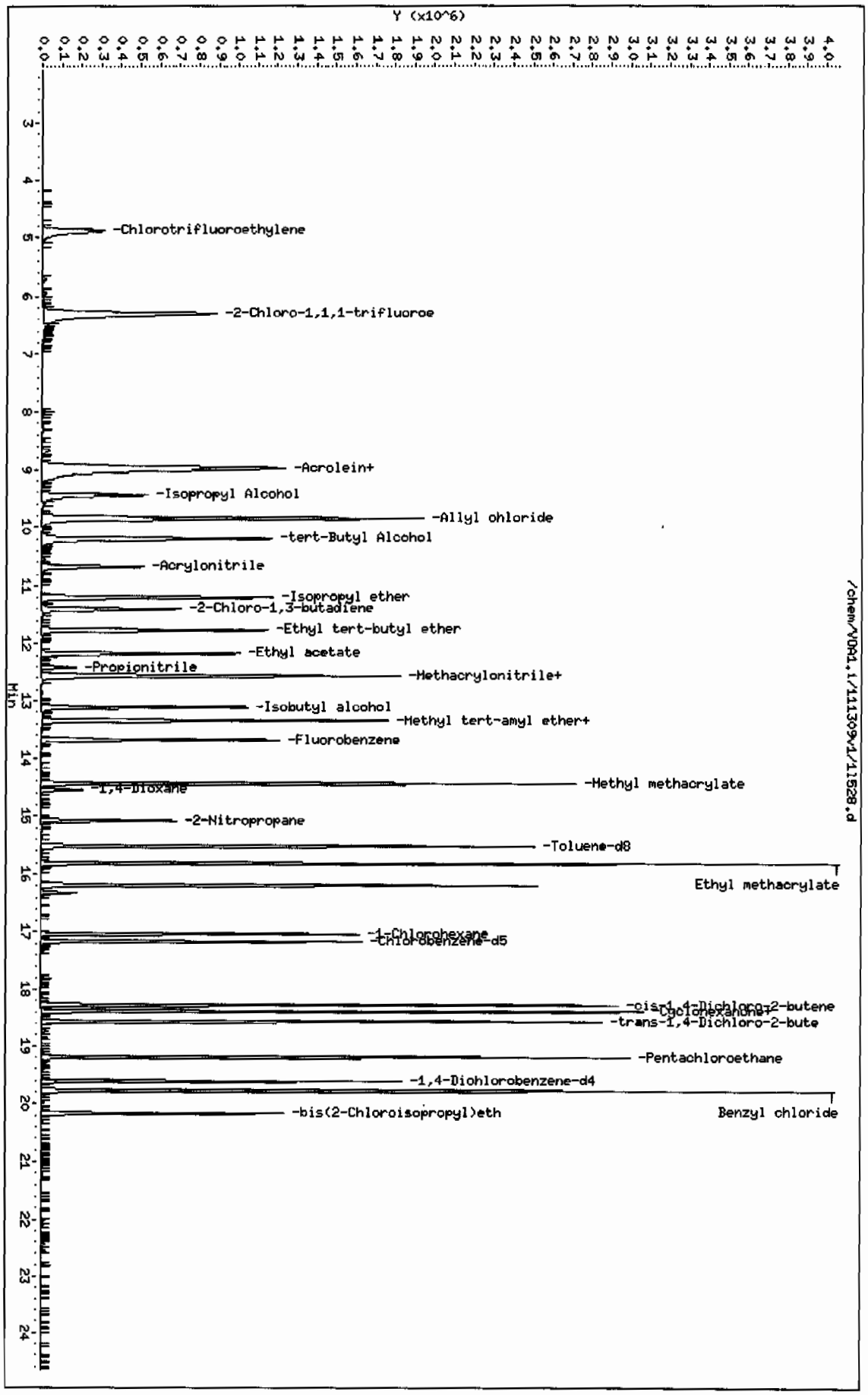

Page 1

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Report Date: 01-Dec-2009 16:53

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.78659	0.78659	0.050	1.93501	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34829	0.34829	0.050	1.72438	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.76082	0.76082	0.050	-2.73046	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.28961	0.28961	0.050	-13.25713	30.00000	Averaged	
	6 Chloromethane	0.41309	0.34567	0.34567	0.100	-16.32056	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.30586	0.30586	0.050	-17.08914	20.00000	Averaged	ccc
	9 Bromomethane	0.22174	0.21949	0.21949	0.050	-1.01260	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24501	0.24501	0.050	7.27015	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.53920	0.53920	0.050	3.81924	30.00000	Averaged	
	12 Ethyl Ether	45.83993	50.00000	0.28952	0.010	-8.32014	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19861	0.19861	0.000	-31.55015	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03488	0.03488	0.010	-2.28372	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.66262	0.66262	0.050	-7.39264	20.00000	Averaged	ccc
	21 Methyl acetate	0.24838	0.21471	0.21471	0.010	-13.55590	40.00000	Averaged	
	18 Iodomethane	0.46290	0.47705	0.47705	0.050	3.05775	30.00000	Averaged	
	23 Methylene chloride	49.69453	50.00000	0.35951	0.000	-0.61094	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.06038	1.06038	0.050	15.07243	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.01424	1.01424	0.050	-10.90101	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.34226	0.34226	0.050	2.98628	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.66089	0.66089	0.010	19.91591	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.68036	0.68036	0.100	-7.89939	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.21356	0.21356	0.030	-24.88572	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.35432	0.35432	0.050	0.53641	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52117	0.52117	0.050	-3.41129	30.00000	Averaged	
	41 Chloroform	0.78646	0.70224	0.70224	0.010	-10.70855	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.14700	0.14700	0.010	4.97038	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.56828	0.56828	0.010	-7.73277	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.70592	0.70592	0.010	9.05253	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55571	0.55571	0.010	-0.95042	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00962	0.00962	0.001	6.25892	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.57859	0.57859	0.010	-6.22742	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62106	0.48336	0.48336	0.010	-22.17142	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.55944	0.55944	0.010	-19.39207	30.00000	Averaged	
	47 Benzene	50.28606	50.00000	1.40724	0.010	0.57211	30.00000	Linear	
	50 Cyclohexene	0.53439	0.52276	0.52276	0.010	-2.17678	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1m108ICV.d
Analysis Type: WATER
Lab Sample ID: W1VM091116-05
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

Injection Date: 16-NOV-2009 14:01
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.37928	0.37928	0.010	-1.03062	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.35751	0.35751	0.010	-1.35037	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.64311	0.64311	0.010	8.60482	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.53560	0.53560	0.010	-9.91614	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20094	0.20094	0.010	-10.08947	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	197	250	0.03848	0.000	-21.31056	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.16731	0.16731	0.010	-9.66493	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.60977	0.60977	0.010	-1.53290	30.00000	Averaged	
$	65 Toluene-d8	2.03499	1.97166	1.97166	0.010	-3.11196	30.00000	Averaged	
	66 Toluene	1.09808	1.09311	1.09311	0.010	-0.45345	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.75103	0.75103	0.010	-3.85367	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.29722	0.29722	0.010	-2.75287	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.37565	0.37565	0.010	-23.26575	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.63720	0.63720	0.010	-6.20551	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34435	0.34435	0.010	3.36940	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.42649	0.42649	0.010	-2.73068	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.35320	0.35320	0.010	-1.73152	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.16153	1.16153	0.300	2.26365	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.42501	0.42501	0.010	-3.47076	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.28751	2.28751	0.010	-3.15483	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.80163	0.80163	0.010	2.94558	30.00000	Averaged	
	81 o-Xylene	0.75757	0.75650	0.75650	0.010	-0.14143	30.00000	Averaged	
	82 Styrene	1.29825	1.33826	1.33826	0.010	3.08236	30.00000	Averaged	
	83 Bromoform	0.49742	0.51659	0.51659	0.100	3.85450	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	4.09104	4.09104	0.010	0.57739	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.80201	0.80201	0.300	1.11984	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.59852	1.59852	0.010	-4.78243	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.22267	0.22267	0.010	-14.62239	30.00000	Averaged	
	91 Bromobenzene	0.84113	0.86234	0.86234	0.010	2.52236	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.95567	4.95567	0.010	0.02259	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.47589	3.47589	0.010	-3.16985	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.53161	3.53161	0.010	-1.43822	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.13706	3.13706	0.010	-3.08595	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.83816	2.83816	0.010	1.75609	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.59991	3.59991	0.010	-1.85290	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.49320	4.49320	0.010	0.93061	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1m108ICV.d
Analysis Type: WATER
Lab Sample ID: W1VM091116-05
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

Injection Date: 16-NOV-2009 14:01
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.51635	3.51635	0.010	4.48521	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.71300	1.71300	0.010	6.65131	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.70171	1.70171	0.010	3.36466	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.75570	3.75570	0.010	-0.32761	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.59378	1.59378	0.010	3.65299	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.16033	0.16033	0.010	6.03864	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20851	1.20851	0.010	5.78950	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.82340	0.82340	0.010	1.82157	30.00000	Averaged
111 Naphthalene	2.11900	2.27355	2.27355	0.010	7.29312	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.98434	0.98434	0.010	2.40643	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.36236
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111609v1/1m108ICV.d
Lab Smp Id: W1VM091116-05 Client Smp ID: ICV
Inj Date : 16-NOV-2009 14:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091116-05|CCV/LCS/ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m
Meth Date : 01-Dec-2009 16:53 slg Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2088100	150.000	153
M 2 1,2-Dichloroethylene (total)	96				778988	100.000	102
M 3 1,3-Dichloropropylene	75				1346471	100.000	97.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	323873	50.0000	43.4
6 Chloromethane	50	5.550	5.550	(0.405)	386561	50.0000	41.8
7 Vinyl chloride	62	5.923	5.923	(0.433)	342039	50.0000	41.4
9 Bromomethane	96	6.948	6.948	(0.508)	245458	50.0000	49.5
10 Chloroethane	64	7.215	7.215	(0.527)	273997	50.0000	53.6
11 Trichlorofluoromethane	101	7.836	7.836	(0.573)	602979	50.0000	51.9
12 Ethyl Ether	59	8.476	8.476	(0.619)	323763	50.0000	45.8
16 Acetone	43	9.254	9.254	(0.676)	1110521	250.000	171
22 Acetonitrile	41	9.976	9.976	(0.729)	975078	1250.00	1220
15 1,1-Dichloroethylene	61	9.093	9.093	(0.664)	741002	50.0000	46.3
21 Methyl acetate	43	9.838	9.838	(0.719)	1200537	250.000	216
18 Iodomethane	142	9.470	9.470	(0.692)	2667438	250.000	258

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
23 Methylene chloride	84	10.137	10.137	(0.741)	402034	50.0000	49.7
19 Carbon disulfide	76	9.571	9.571	(0.699)	5929090	250.000	288
25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1134219	50.0000	44.5
26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	382752	50.0000	51.5
29 Vinyl acetate	43	11.297	11.297	(0.825)	3695328	250.000	300
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	760846	50.0000	46.0
35 2-Butanone	43	12.186	12.186	(0.890)	1194107	250.000	188
36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	396236	50.0000	50.3
33 2,2-Dichloropropane	77	12.158	12.158	(0.888)	582817	50.0000	48.3
41 Chloroform	83	12.614	12.614	(0.922)	785308	50.0000	44.6
39 Bromochloromethane	128	12.559	12.559	(0.918)	164387	50.0000	52.5
43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	635509	50.0000	46.1
42 Cyclohexane	56	12.839	12.839	(0.938)	789422	50.0000	54.5
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	621443	50.0000	49.5
53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1075626	5000.00	5310
44 Carbon tetrachloride	117	13.024	13.024	(0.952)	647037	50.0000	46.9
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	540540	50.0000	38.9
51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	625621	50.0000	40.3
47 Benzene	78	13.337	13.337	(0.974)	1573713	50.0000	50.3
50 Cyclohexene	54	13.396	13.396	(0.979)	584602	50.0000	48.9
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1118294	50.0000	
54 Trichloroethylene	95	14.119	14.119	(1.032)	424142	50.0000	49.5
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	399800	50.0000	49.3
55 Methylcyclohexane	83	14.285	14.285	(1.044)	719182	50.0000	54.3
60 Bromodichloromethane	83	14.754	14.754	(1.078)	598959	50.0000	45.0
59 Dibromomethane	93	14.621	14.621	(1.068)	224707	50.0000	45.0
61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	215138	250.000	197
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	740258	250.000	226
63 cis-1,3-Dichloropropylene	75	15.261	15.261	(1.115)	681900	50.0000	49.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1744680	50.0000	48.4
66 Toluene	92	15.597	15.597	(0.909)	967265	50.0000	49.8
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	664571	50.0000	48.1
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	263004	50.0000	48.6
71 2-Hexanone	43	16.269	16.269	(0.948)	1662015	250.000	192
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	563840	50.0000	46.9
70 Tetrachloroethylene	164	16.195	16.195	(0.944)	304712	50.0000	51.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	377389	50.0000	48.6
74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	312543	50.0000	49.1
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	884878	50.0000	
77 Chlorobenzene	112	17.194	17.194	(1.002)	1027816	50.0000	51.1
79 1,1,1,2-Tetrachloroethane	131	17.263	17.263	(1.006)	376079	50.0000	48.3
78 Ethylbenzene	91	17.222	17.222	(1.003)	2024165	50.0000	48.4
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1418694	100.000	103
81 o-Xylene	106	17.783	17.783	(1.036)	669406	50.0000	49.9
82 Styrene	104	17.806	17.806	(1.038)	1184200	50.0000	51.5
83 Bromoform	173	18.105	18.105	(0.923)	253734	50.0000	51.9
84 Isopropylbenzene	105	18.133	18.133	(0.924)	2009401	50.0000	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.510	18.510	(0.944)	393924	50.0000	50.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	785147	50.0000	47.6
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	109371	50.0000	42.7
91 Bromobenzene	156	18.593	18.593	(0.948)	423557	50.0000	51.3
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2434081	50.0000	50.0
94 2-Chlorotoluene	91	18.745	18.745	(0.956)	1707258	50.0000	48.4
93 1,3,5-Trimethylbenzene	105	18.722	18.722	(0.954)	1734624	50.0000	49.3
95 4-Chlorotoluene	91	18.856	18.856	(0.961)	1540833	50.0000	48.4
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1394021	50.0000	50.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1768170	50.0000	49.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2206931	50.0000	50.5
100 4-Isopropyltoluene	119	19.426	19.426	(0.990)	1727131	50.0000	52.2
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.996)	841377	50.0000	53.3
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.615	(1.000)	491171	50.0000	
103 1,4-Dichlorobenzene	146	19.643	19.643	(1.001)	835831	50.0000	51.7
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1844689	50.0000	49.8
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	782819	50.0000	51.8
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78748	50.0000	53.0
109 1,2,4-Trichlorobenzene	180	22.027	22.027	(1.123)	593584	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	404431	50.0000	50.9
111 Naphthalene	128	22.441	22.441	(1.144)	1116700	50.0000	53.6
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	483479	50.0000	51.2

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Date : 16-NOV-2009 14:01
Client ID: ICV
Sample Info: IW1VHX091116-05|CCV/LCS/ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

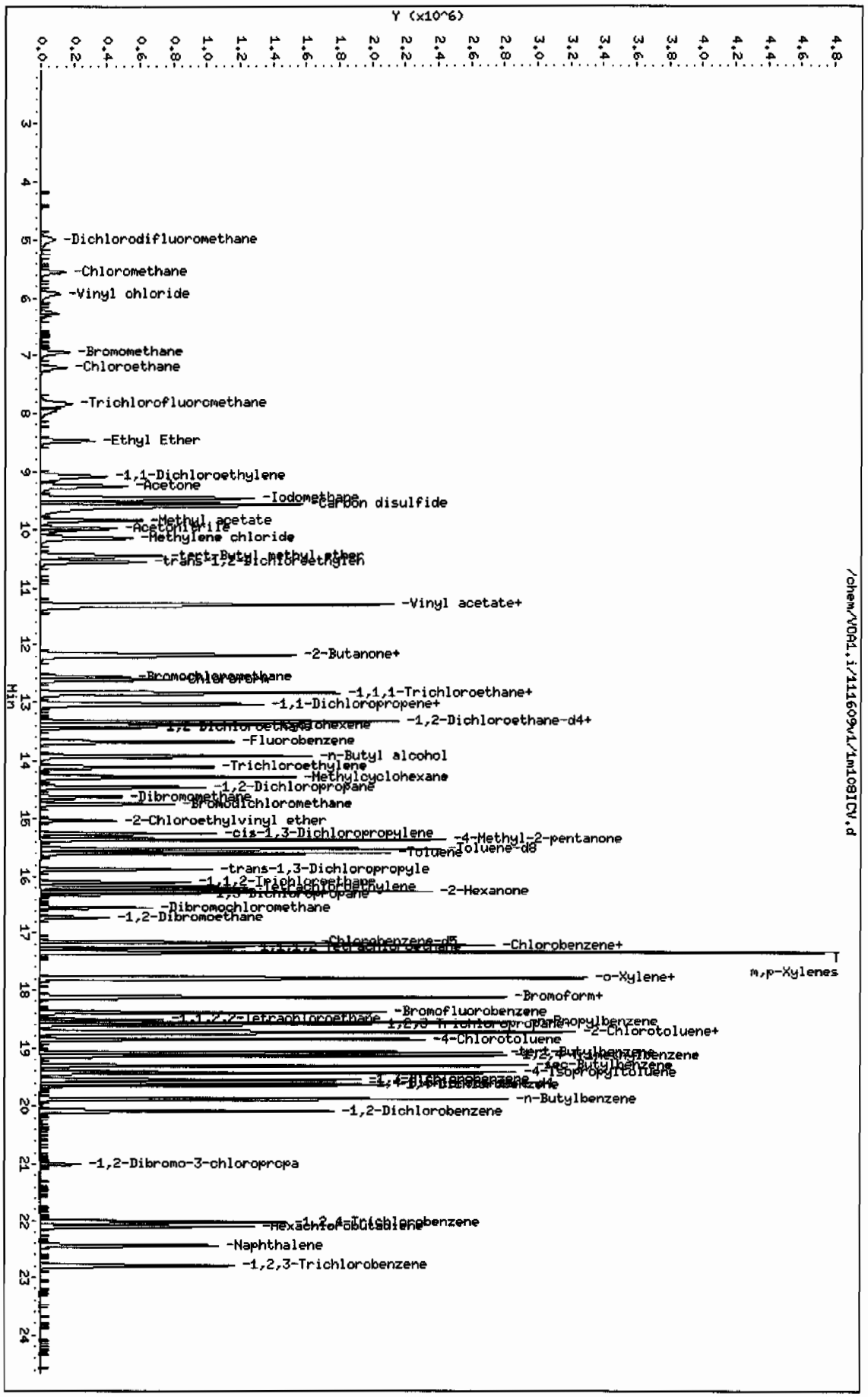

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 09:20
Lab File ID: 1n302.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091125-01 Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.77239	0.77239	0.050	0.09517	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34202	0.34202	0.050	-0.10902	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.73432	0.73432	0.050	-6.11940	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.27253	0.27253	0.050	-18.37439	30.00000	Averaged	
	6 Chloromethane	0.41309	0.37098	0.37098	0.100	-10.19401	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.33633	0.33633	0.050	-8.82979	20.00000	Averaged	ccc
	9 Bromomethane	0.22182	0.23258	0.23258	0.050	4.85423	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24289	0.24289	0.050	6.33847	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.55795	0.55795	0.050	7.43114	30.00000	Averaged	
	12 Ethyl Ether	44.53694	50.00000	0.28144	0.010	-10.92612	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19462	0.19462	0.000	-32.92517	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03407	0.03407	0.010	-4.54038	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.65585	0.65585	0.050	-8.33887	20.00000	Averaged	ccc
	21 Methyl acetate	0.24840	0.20849	0.20849	0.010	-16.06623	40.00000	Averaged	
	18 Iodomethane	0.46290	0.47822	0.47822	0.050	3.30927	30.00000	Averaged	
	23 Methylene chloride	49.36468	50.00000	0.35719	0.000	-1.27065	30.00000	Linear	
	25 tert-Butyl methyl ether	1.13833	1.00500	1.00500	0.050	-11.71288	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.33149	0.33149	0.050	-0.25555	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.67539	0.67539	0.010	22.54812	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.69086	0.69086	0.100	-6.47891	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.20641	0.20641	0.030	-27.40060	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.35254	0.35254	0.050	0.03109	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52263	0.52263	0.050	-3.14046	30.00000	Averaged	
	41 Chloroform	0.78646	0.72111	0.72111	0.010	-8.30928	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.15114	0.15114	0.010	7.93046	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.58505	0.58505	0.010	-5.01144	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.67026	0.67026	0.010	3.54368	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55035	0.55035	0.010	-1.90568	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00873	0.00873	0.001	-3.51230	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.60672	0.60672	0.010	-1.66901	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62193	0.66017	0.66017	0.010	6.14881	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.57208	0.57208	0.010	-17.57103	30.00000	Averaged	
	47 Benzene	48.88554	50.00000	1.36777	0.010	-2.22891	30.00000	Linear	
	50 Cyclohexene	0.53439	0.50549	0.50549	0.010	-5.40824	30.00000	Averaged	
	54 Trichloroethylene	0.38323	0.37670	0.37670	0.010	-1.70295	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.35428	0.35428	0.010	-2.24177	20.00000	Averaged	ccc

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n302.d
Analysis Type: WATER
Lab Sample ID: W1VM091125-01
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

Injection Date: 25-NOV-2009 09:20
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	55 Methylcyclohexane	0.59215	0.62223	0.62223	0.010	5.08002	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.55191	0.55191	0.010	-7.17327	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20656	0.20656	0.010	-7.57154	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	225	250	0.04461	0.000	-10.02193	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.15733	0.15733	0.010	-15.05573	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.60523	0.60523	0.010	-2.26623	30.00000	Averaged	
$	65 Toluene-d8	2.03499	2.10905	2.10905	0.010	3.63920	30.00000	Averaged	
	66 Toluene	1.09808	1.07198	1.07198	0.010	-2.37772	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.73366	0.73366	0.010	-6.07722	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.29107	0.29107	0.010	-4.76557	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.34738	0.34738	0.010	-29.03989	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.62783	0.62783	0.010	-7.58447	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34822	0.34822	0.010	4.53035	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.43529	0.43529	0.010	-0.72373	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.34373	0.34373	0.010	-4.36664	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.14363	1.14363	0.300	0.68764	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.42908	0.42908	0.010	-2.54566	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.23266	2.23266	0.010	-5.47676	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.78410	0.78410	0.010	0.69399	30.00000	Averaged	
	81 o-Xylene	0.75757	0.74897	0.74897	0.010	-1.13487	30.00000	Averaged	
	82 Styrene	1.29825	1.32357	1.32357	0.010	1.95032	30.00000	Averaged	
	83 Bromoform	0.49742	0.48325	0.48325	0.100	-2.84740	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	3.81558	3.81558	0.010	-6.19476	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.76352	0.76352	0.300	-3.73275	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.53620	1.53620	0.010	-8.49444	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.21228	0.21228	0.010	-18.60691	30.00000	Averaged	
	91 Bromobenzene	0.84112	0.86810	0.86810	0.010	3.20756	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.75407	4.75407	0.010	-4.04640	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.35990	3.35990	0.010	-6.40109	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.44199	3.44199	0.010	-3.93941	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.06717	3.06717	0.010	-5.24492	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.72849	2.72849	0.010	-2.17593	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.34659	3.34659	0.010	-8.75928	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.35652	4.35652	0.010	-2.13961	30.00000	Averaged	
	100 4-Isopropyltoluene	3.36541	3.39122	3.39122	0.010	0.76695	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n302.d
Analysis Type: WATER
Lab Sample ID: W1VM091125-01
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

Injection Date: 25-NOV-2009 09:20
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
101 1,3-Dichlorobenzene	1.60617	1.66341	1.66341	0.010	3.56391	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.67899	1.67899	0.010	1.98475	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.68310	3.68310	0.010	-2.25419	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.55205	1.55205	0.010	0.93890	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.14624	0.14624	0.010	-3.28087	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.17130	1.17130	0.010	2.53251	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.79219	0.79219	0.010	-2.03752	30.00000	Averaged
111 Naphthalene	2.11900	2.04179	2.04179	0.010	-3.64370	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.96409	0.96409	0.010	0.29978	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.29619
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n302.d
Lab Smp Id: W1VM091125-01 Client Smp ID: VSTD050
Inj Date : 25-NOV-2009 09:20
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091125-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				1977766	150.000	150
M 2 1,2-Dichloroethylene (total)	96				708995	100.000	99.9
M 3 1,3-Dichloropropylene	75				1253516	100.000	95.8
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	282474	50.0000	40.8
6 Chloromethane	50	5.542	5.542	(0.405)	384517	50.0000	44.9
7 Vinyl chloride	62	5.922	5.922	(0.433)	348601	50.0000	45.6
9 Bromomethane	96	6.947	6.947	(0.508)	241073	50.0000	52.4
10 Chloroethane	64	7.214	7.214	(0.527)	251749	50.0000	53.2
11 Trichlorofluoromethane	101	7.850	7.850	(0.574)	578315	50.0000	53.7
12 Ethyl Ether	59	8.476	8.476	(0.619)	291706	50.0000	44.5
16 Acetone	43	9.249	9.249	(0.676)	1008615	250.000	168
22 Acetonitrile	41	9.972	9.972	(0.729)	882884	1250.00	1190
15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	679783	50.0000	45.8
21 Methyl acetate	43	9.834	9.834	(0.719)	1080499	250.000	210
18 Iodomethane	142	9.470	9.470	(0.692)	2478361	250.000	258

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
23 Methylene chloride	84	10.137	10.137	(0.741)	370228	50.0000	49.4
25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1041677	50.0000	44.1
26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	343588	50.0000	49.9
29 Vinyl acetate	43	11.297	11.297	(0.826)	3500213	250.000	306
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	716070	50.0000	46.8
35 2-Butanone	43	12.186	12.186	(0.891)	1069708	250.000	181
36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	365407	50.0000	50.0
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	541701	50.0000	48.4
41 Chloroform	83	12.609	12.609	(0.922)	747424	50.0000	45.8
39 Bromochloromethane	128	12.559	12.559	(0.918)	156659	50.0000	54.0
43 1,1,1-Trichloroethane	97	12.844	12.844	(0.939)	606397	50.0000	47.5
42 Cyclohexane	56	12.839	12.839	(0.938)	694718	50.0000	51.8
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	570432	50.0000	49.0
53 n-Butyl alcohol	56	13.930	13.930	(1.018)	905273	5000.00	4820
44 Carbon tetrachloride	117	13.023	13.023	(0.952)	628862	50.0000	49.2
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	684261	50.0000	53.1
51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	592959	50.0000	41.2
47 Benzene	78	13.332	13.332	(0.974)	1417692	50.0000	48.9
50 Cyclohexene	54	13.396	13.396	(0.979)	523942	50.0000	47.3
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1036496	50.0000	
54 Trichloroethylene	95	14.114	14.114	(1.032)	390447	50.0000	49.1
57 1,2-Dichloropropane	63	14.460	14.460	(1.057)	367208	50.0000	48.9
55 Methylcyclohexane	83	14.280	14.280	(1.044)	644943	50.0000	52.5
60 Bromodichloromethane	83	14.750	14.750	(1.078)	572051	50.0000	46.4
59 Dibromomethane	93	14.625	14.625	(1.069)	214103	50.0000	46.2
61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.099)	231171	250.000	225
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	671420	250.000	212
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	627315	50.0000	48.9
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1800129	50.0000	51.8
66 Toluene	92	15.597	15.597	(0.909)	914960	50.0000	48.8
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	626200	50.0000	47.0
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.939)	248435	50.0000	47.6
71 2-Hexanone	43	16.269	16.269	(0.948)	1482497	250.000	177
72 1,3-Dichloropropane	76	16.310	16.310	(0.951)	535867	50.0000	46.2
70 Tetrachloroethylene	164	16.190	16.190	(0.944)	297217	50.0000	52.3
73 Dibromochloromethane	129	16.549	16.549	(0.965)	371529	50.0000	49.6
74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	293385	50.0000	47.8
* 76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	853527	50.0000	
77 Chlorobenzene	112	17.194	17.194	(1.002)	976122	50.0000	50.3
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	366231	50.0000	48.7
78 Ethylbenzene	91	17.221	17.221	(1.004)	1905638	50.0000	47.3
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1338500	100.000	101
81 o-Xylene	106	17.788	17.788	(1.037)	639265	50.0000	49.4
82 Styrene	104	17.801	17.801	(1.038)	1129700	50.0000	51.0
83 Bromoform	173	18.110	18.110	(0.923)	233710	50.0000	48.6
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1845286	50.0000	46.9
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	369253	50.0000	48.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	742936	50.0000	45.8
92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	102663	50.0000	40.7
91 Bromobenzene	156	18.593	18.593	(0.948)	419831	50.0000	51.6
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2299156	50.0000	48.0
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1624911	50.0000	46.8
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1664609	50.0000	48.0
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1483343	50.0000	47.4
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	1319547	50.0000	48.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1618473	50.0000	45.6
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2106896	50.0000	48.9
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1640056	50.0000	50.4
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	804457	50.0000	51.8
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	483618	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	811992	50.0000	51.0
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1781216	50.0000	48.9
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	750599	50.0000	50.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	70722	50.0000	48.4
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	566462	50.0000	51.3
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	383120	50.0000	49.0
111 Naphthalene	128	22.437	22.437	(1.144)	987449	50.0000	48.2
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	466252	50.0000	50.1

Data File: /chem/VOA1.i/112509v1/1n302.d
Date : 25-NOV-2009 09:20
Client ID: VSTD050
Sample Info: IW1VH091125-01|CCV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

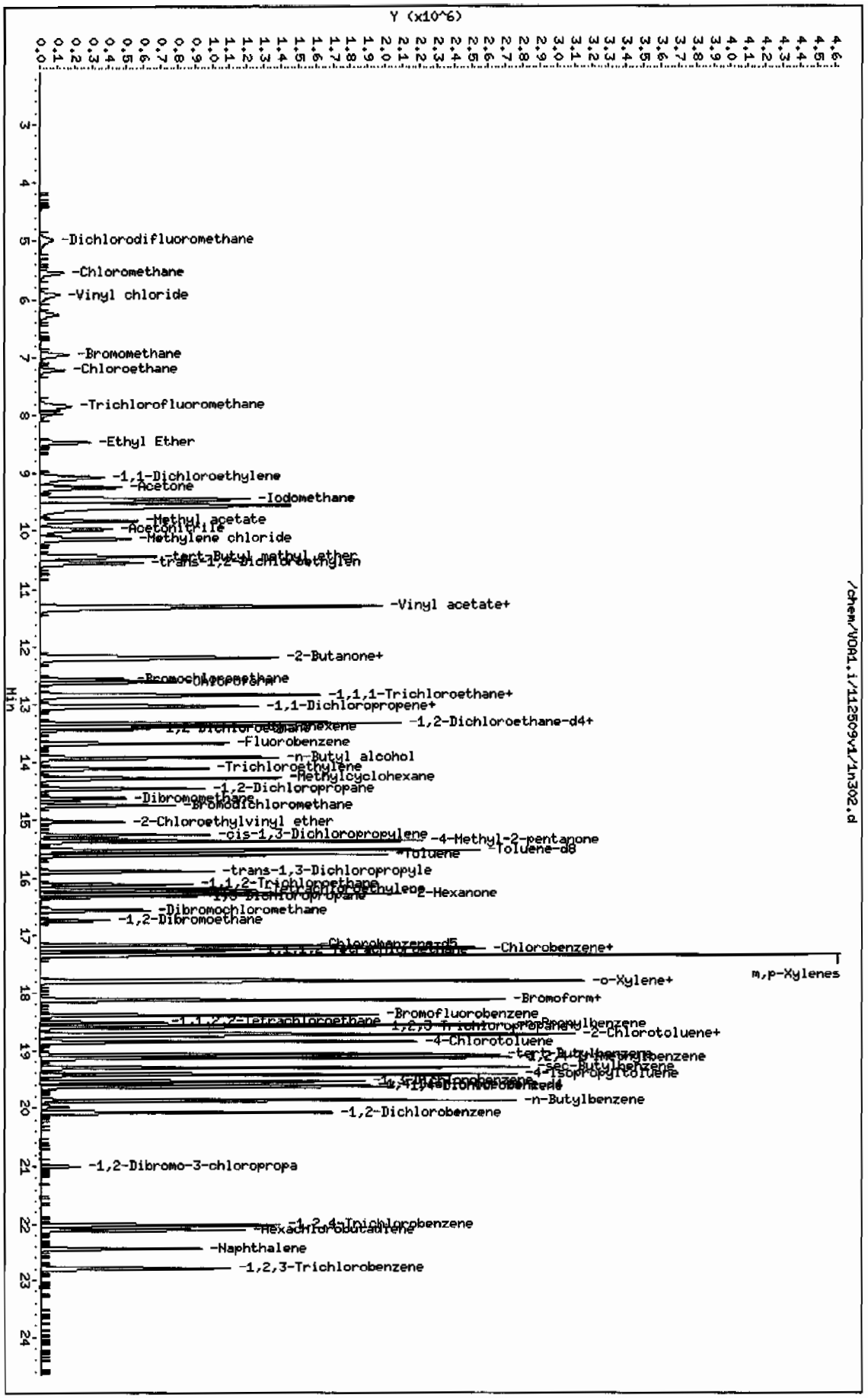

Page 1

Data File: /chem/VOA1.i/112509v1/1n304.d
Report Date: 25-Nov-2009 10:45

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 10:21
Lab File ID: 1n304.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
13 Acrolein	0.05116	0.05786	0.05786	0.001	13.11027	30.00000	Averaged	
14 Trichlorotrifluoroethane	0.29250	0.31104	0.31104	0.030	6.33620	30.00000	Averaged	
20 Allyl chloride	0.10619	0.14577	0.14577	0.010	37.27413	30.00000	Averaged	<-
27 Acrylonitrile	0.10676	0.10158	0.10158	0.010	-4.84809	30.00000	Averaged	
31 2-Chloro-1,3-butadiene	0.61022	0.62369	0.62369	0.010	2.20736	30.00000	Averaged	
37 Propionitrile	0.04326	0.03975	0.03975	0.010	-8.12405	30.00000	Averaged	
34 Ethyl acetate	0.29220	0.24698	0.24698	0.010	-15.47523	40.00000	Averaged	
40 Methacrylonitrile	0.23180	0.21691	0.21691	0.010	-6.42181	30.00000	Averaged	
38 Tetrahydrofuran	0.20471	0.19629	0.19629	0.010	-4.11020	30.00000	Averaged	
46 Isobutyl alcohol	0.01086	0.01023	0.01023	0.001	-5.77222	40.00000	Averaged	
56 Methyl methacrylate	0.19807	0.19694	0.19694	0.010	-0.56736	30.00000	Averaged	
67 Ethyl methacrylate	0.51098	0.49886	0.49886	0.010	-2.37331	30.00000	Averaged	
58 1,4-Dioxane	0.00285	0.00256	0.00256	0.001	-10.23687	40.00000	Averaged	
62 2-Nitropropane	0.10798	0.09933	0.09933	0.000	-8.00455	30.00000	Averaged	
85 cis-1,4-Dichloro-2-butene	0.30784	0.31380	0.31380	0.010	1.93420	30.00000	Averaged	
86 Cyclohexanone	694	1250	0.02628	0.010	-44.45934	40.00000	Linear	<-
90 trans-1,4-Dichloro-2-butene	0.30029	0.29390	0.29390	0.010	-2.12566	30.00000	Averaged	
98 Pentachloroethane	0.31186	0.49786	0.49786	0.010	59.64072	30.00000	Averaged	<-
104 Benzyl chloride	1.59479	1.74589	1.74589	0.010	9.47467	30.00000	Averaged	
107 bis(2-Chloroisopropyl)ether	0.36021	0.34828	0.34828	0.010	-3.31105	30.00000	Averaged	
$ 48 1,2-Dichloroethane-d4	0.62193	0.60544	0.60544	0.010	-2.65062	30.00000	Averaged	
$ 65 Toluene-d8	2.03499	2.16082	2.16082	0.010	6.18312	30.00000	Averaged	
$ 87 Bromofluorobenzene	1.67881	1.59191	1.59191	0.010	-5.17636	30.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 27.08676
Maximun Average %D/Drift = 20.00000
* Failed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n304.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 25-NOV-2009 10:21
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 25-Nov-2009 10:44 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
13 Acrolein	56	8.950	8.950	(0.654)	313836	250.000	283
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1686945	250.000	266
20 Allyl chloride	76	9.852	9.852	(0.720)	790605	250.000	343
27 Acrylonitrile	53	10.671	10.671	(0.780)	550941	250.000	238
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	676539	50.0000	51.1
37 Propionitrile	54	12.402	12.402	(0.906)	215581	250.000	230
34 Ethyl acetate	43	12.163	12.163	(0.889)	1339535	250.000	211
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1176447	250.000	234
38 Tetrahydrofuran	42	12.545	12.545	(0.640)	466691	250.000	240
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	554851	2500.00	2360
56 Methyl methacrylate	69	14.441	14.441	(1.056)	1068148	250.000	248
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2191695	250.000	244
58 1,4-Dioxane	88	14.543	14.543	(1.063)	138792	2500.00	2240
62 2-Nitropropane	43	15.081	15.081	(1.102)	538747	250.000	230
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	746059	250.000	255

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
86 Cyclohexanone	55	18.386	18.386	(1.071)	577343	1250.00	694
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	698766	250.000	245
98 Pentachloroethane	167	19.196	19.196	(0.979)	1183684	250.000	399(A)
104 Benzyl chloride	91	19.772	19.772	(1.008)	4150923	250.000	274
107 bis(2-Chloroisopropyl)ether	45	20.168	20.168	(1.029)	828049	250.000	242
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1084730	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	878690	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	475507	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.975)	656741	50.0000	48.7
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1898687	50.0000	53.1
$ 87 Bromofluorobenzene	95	18.386	18.386	(0.938)	756963	50.0000	47.4

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA1.i/112509v1/1n304.d
Date : 25-NOV-2009 10:21
Client ID: VSTD250S
Sample Info: |UVM091118-08A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXH4
Column diameter: 0.25

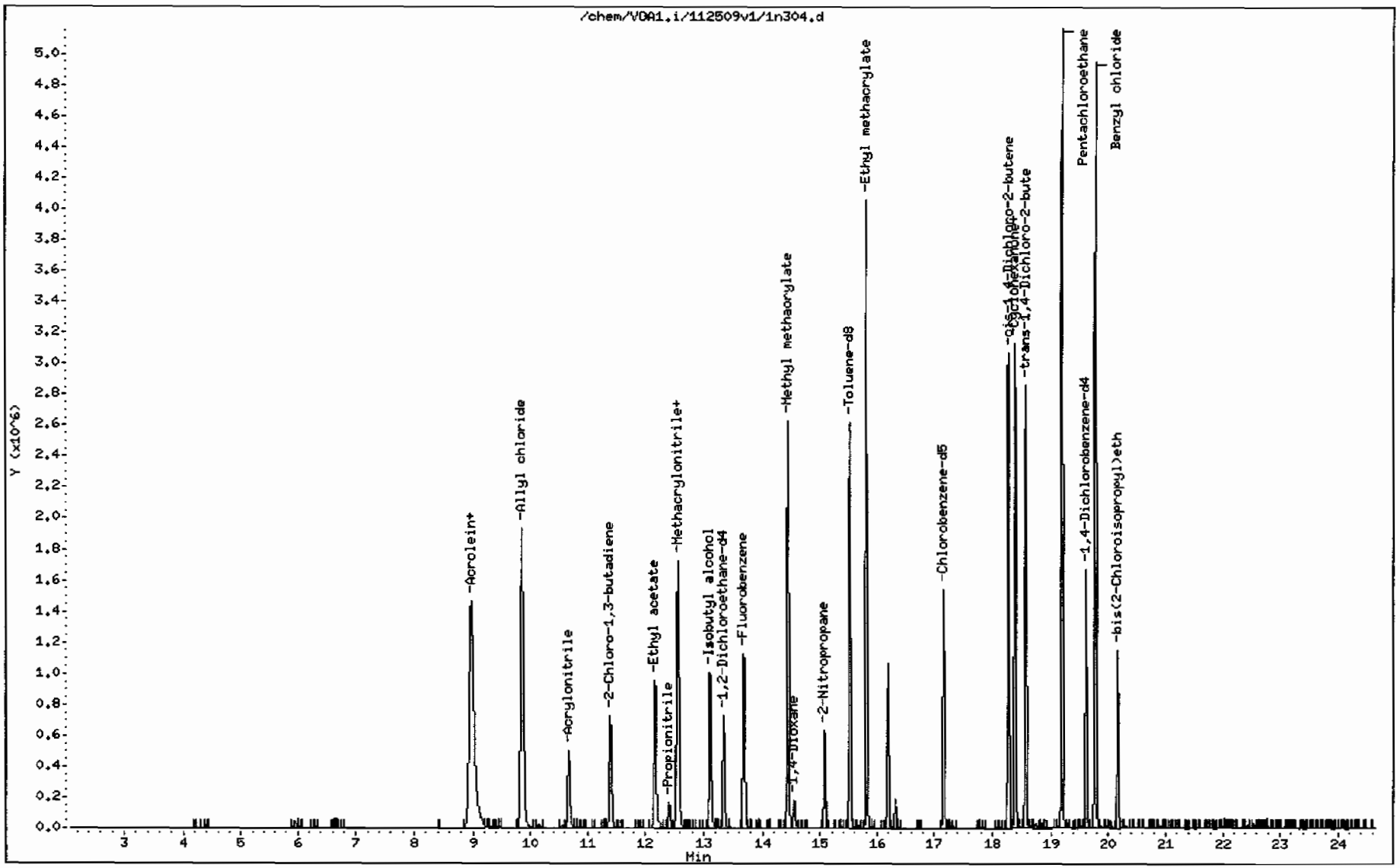

QC Data

Data File: /chem/VOA1.i/111309v1/11507.d

Page 1

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB2|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

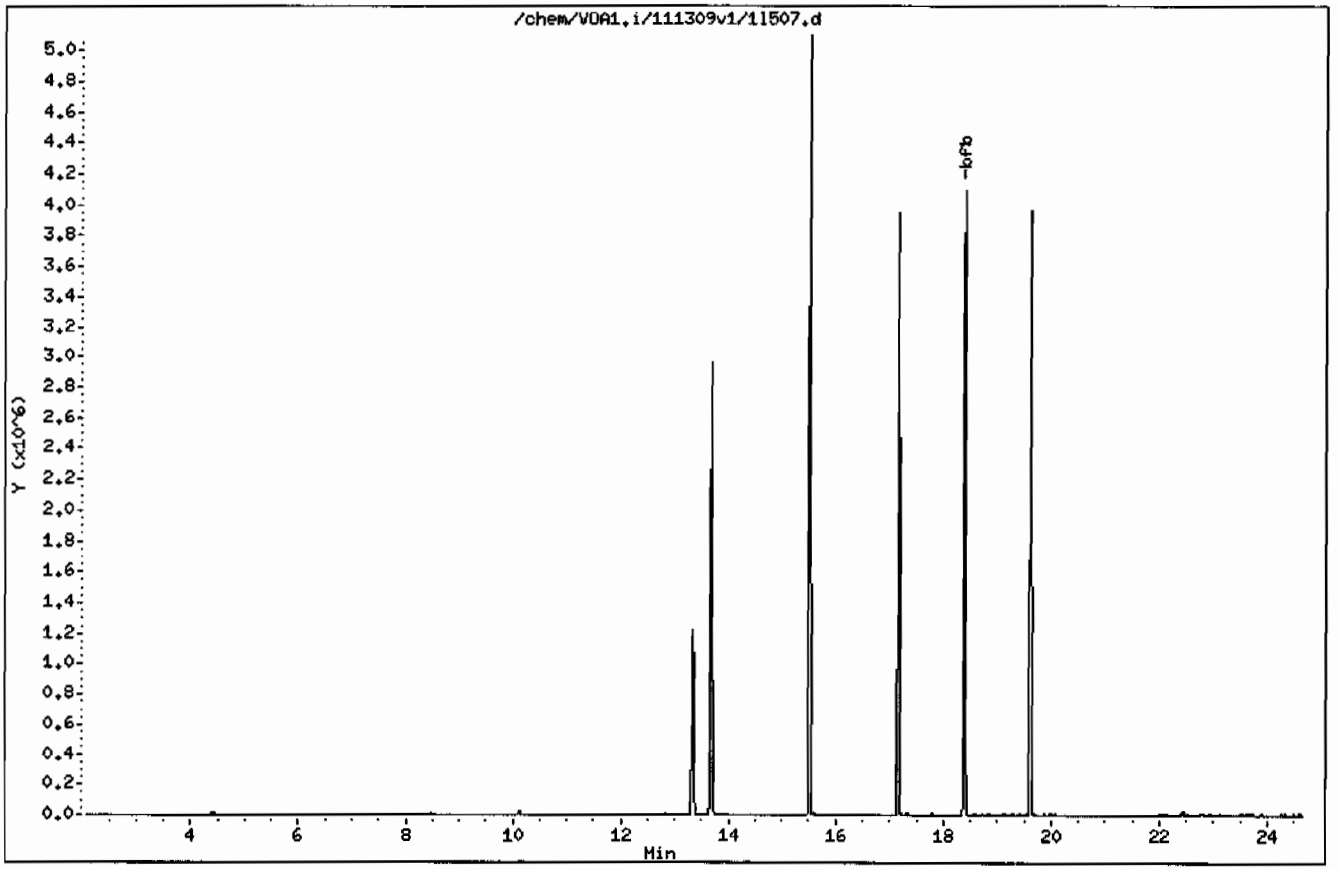

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

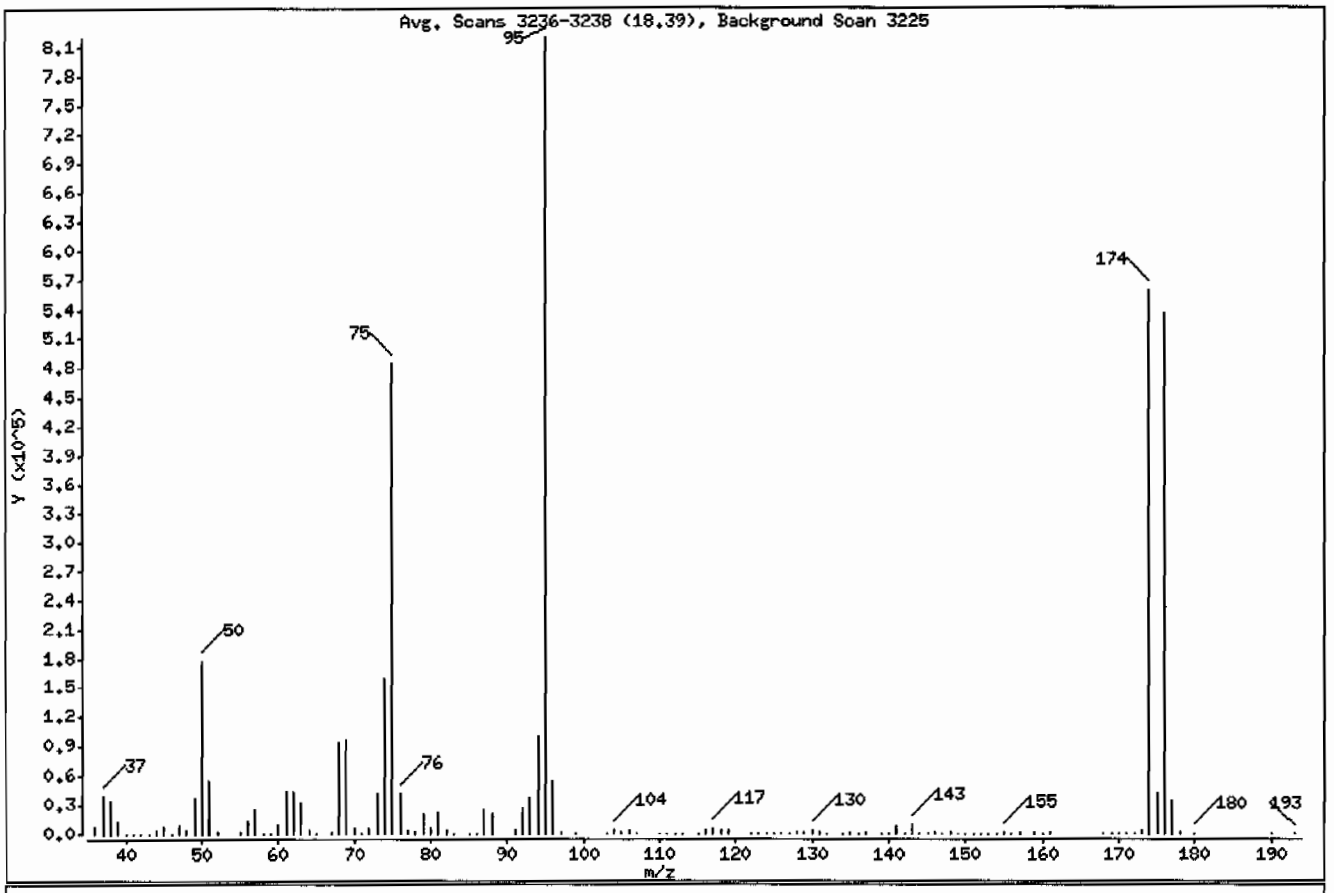

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.72
75	30.00 - 60.00% of mass 95	59.02
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.49 (0.72)
174	50.00 - 100.00% of mass 95	68.14
175	5.00 - 9.00% of mass 174	4.99 (7.33)
176	95.00 - 101.00% of mass 174	65.07 (95.50)
177	5.00 - 9.00% of mass 176	4.22 (6.48)

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB2|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 11507.d

Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7225	70.00	6120	110.00	479	146.00	1188
37.00	39360	71.00	217	111.00	606	147.00	494
38.00	33392	72.00	5094	112.00	379	148.00	1977
39.00	13646	73.00	41472	113.00	584	149.00	463
40.00	251	74.00	158400	115.00	797	150.00	811
41.00	50	75.00	483904	116.00	2966	151.00	74
42.00	138	76.00	42152	117.00	5025	152.00	425
43.00	423	77.00	4070	118.00	2850	153.00	568
44.00	4049	78.00	2614	119.00	3829	154.00	504
45.00	7085	79.00	20536	122.00	323	155.00	1883
46.00	389	80.00	5933	123.00	301	156.00	430
47.00	8871	81.00	21704	124.00	508	157.00	1202
48.00	4657	82.00	3708	125.00	172	159.00	1015
49.00	37544	83.00	554	126.00	282	160.00	117
50.00	178048	85.00	50	127.00	21	161.00	1118
51.00	55256	86.00	546	128.00	2650	168.00	58
52.00	2192	87.00	24184	129.00	1544	169.00	60
55.00	2170	88.00	20208	130.00	3040	170.00	440
56.00	12658	91.00	3132	131.00	1311	171.00	182
57.00	24424	92.00	25640	132.00	121	172.00	596
58.00	905	93.00	38600	134.00	219	173.00	4037
59.00	131	94.00	99912	135.00	1394	174.00	558656
60.00	8890	95.00	819904	136.00	360	175.00	40952
61.00	42584	96.00	54800	137.00	1272	176.00	533504
62.00	42856	97.00	1967	139.00	373	177.00	34684
63.00	32200	99.00	52	140.00	657	178.00	987
64.00	3117	103.00	491	141.00	8405	180.00	56
65.00	197	104.00	3451	142.00	877	190.00	52
67.00	2068	105.00	1217	143.00	9022	193.00	80
68.00	94512	106.00	3389	144.00	613		
69.00	96344	107.00	757	145.00	540		

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Page 1

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

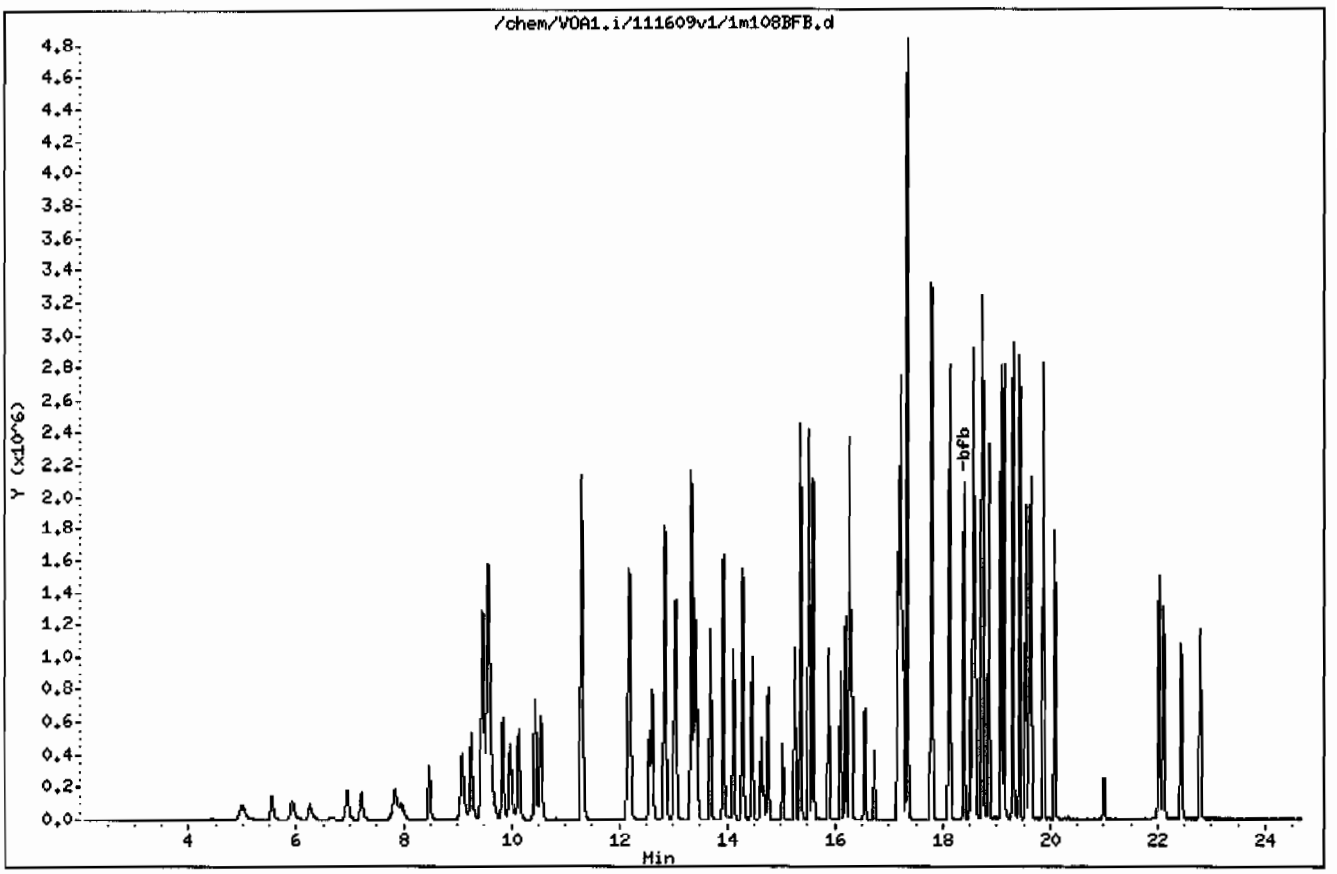

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

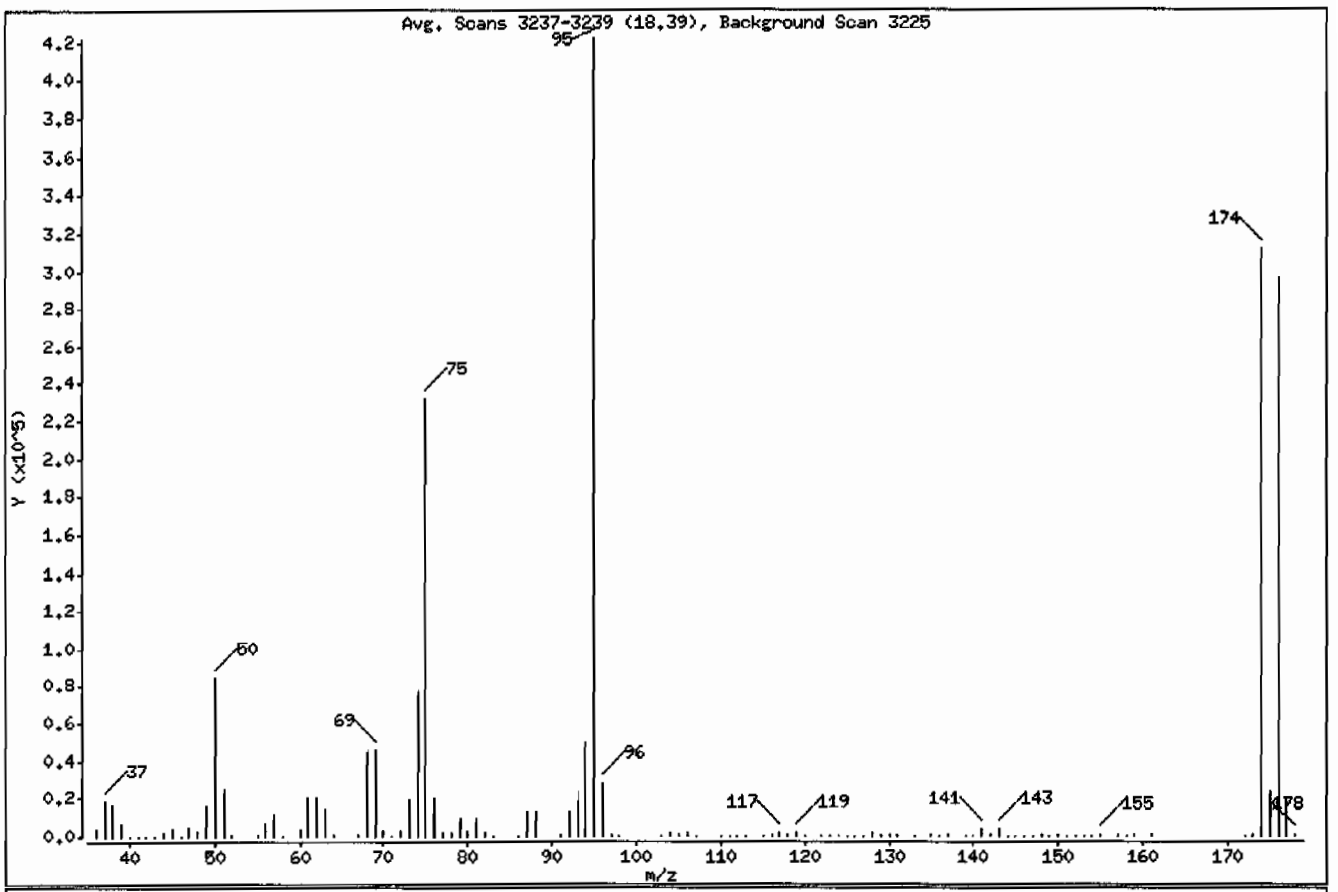

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.06
75	30.00 - 60.00% of mass 95	55.05
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.24 (0.33)
174	50.00 - 100.00% of mass 95	73.77
175	5.00 - 9.00% of mass 174	5.55 (7.52)
176	95.00 - 101.00% of mass 174	70.16 (95.10)
177	5.00 - 9.00% of mass 176	4.80 (6.85)

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1m108BFB.d
Spectrum: Avg. Scans 3237-3239 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3659	69.00	45424	105.00	693	140.00	369
37.00	18736	70.00	3367	106.00	1646	141.00	4255
38.00	16169	71.00	52	107.00	372	142.00	516
39.00	6393	72.00	2726	110.00	174	143.00	4228
40.00	197	73.00	19232	111.00	270	144.00	219
41.00	211	74.00	76640	112.00	131	145.00	352
42.00	88	75.00	232128	113.00	343	146.00	482
43.00	101	76.00	20048	115.00	393	147.00	319
44.00	1967	77.00	2016	116.00	1253	148.00	958
45.00	3625	78.00	1571	117.00	2412	149.00	257
46.00	225	79.00	9321	118.00	1200	150.00	553
47.00	4876	80.00	2593	119.00	2051	151.00	69
48.00	2650	81.00	10141	120.00	65	152.00	268
49.00	16864	82.00	1900	122.00	51	153.00	303
50.00	84536	83.00	304	123.00	52	154.00	398
51.00	25456	86.00	357	124.00	134	155.00	1157
52.00	1092	87.00	13023	125.00	172	157.00	819
55.00	1440	88.00	12376	126.00	137	158.00	66
56.00	6484	91.00	1301	127.00	134	159.00	539
57.00	11568	92.00	12794	128.00	1472	161.00	538
58.00	395	93.00	18184	129.00	873	172.00	156
60.00	4192	94.00	49672	130.00	1342	173.00	1032
61.00	20288	95.00	421696	131.00	645	174.00	311104
62.00	19928	96.00	28576	133.00	54	175.00	23400
63.00	14761	97.00	689	135.00	775	176.00	295872
64.00	1430	98.00	65	136.00	53	177.00	20256
67.00	1159	103.00	156	137.00	650	178.00	602
68.00	44552	104.00	1551	139.00	58		

Data File: /chem/VOA1.i/112509v1/1n301.d

Page 1

Date : 25-NOV-2009 08:50

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

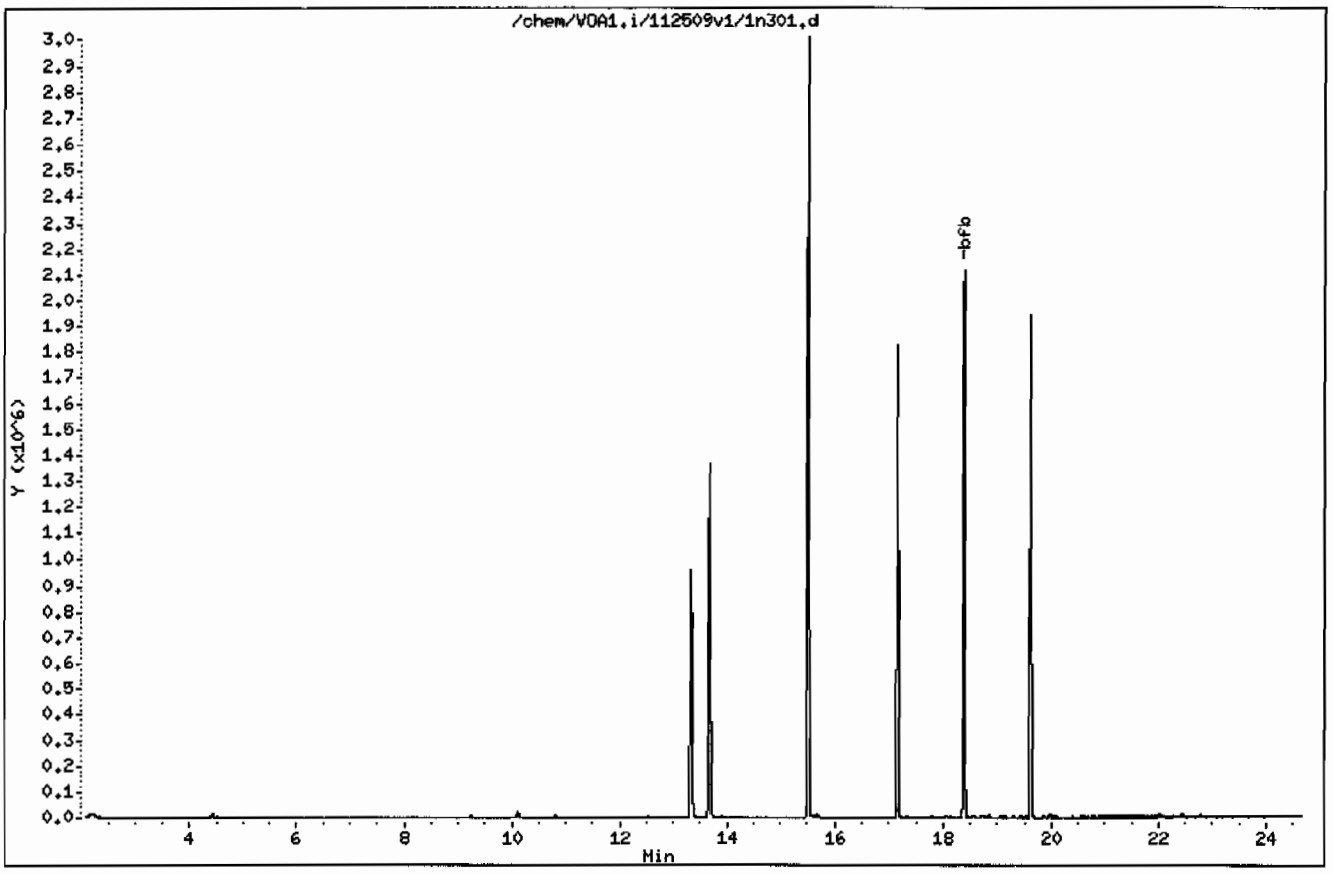

Data File: /chem/VOA1.i/112509v1/1n301.d

Date : 25-NOV-2009 08:50

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

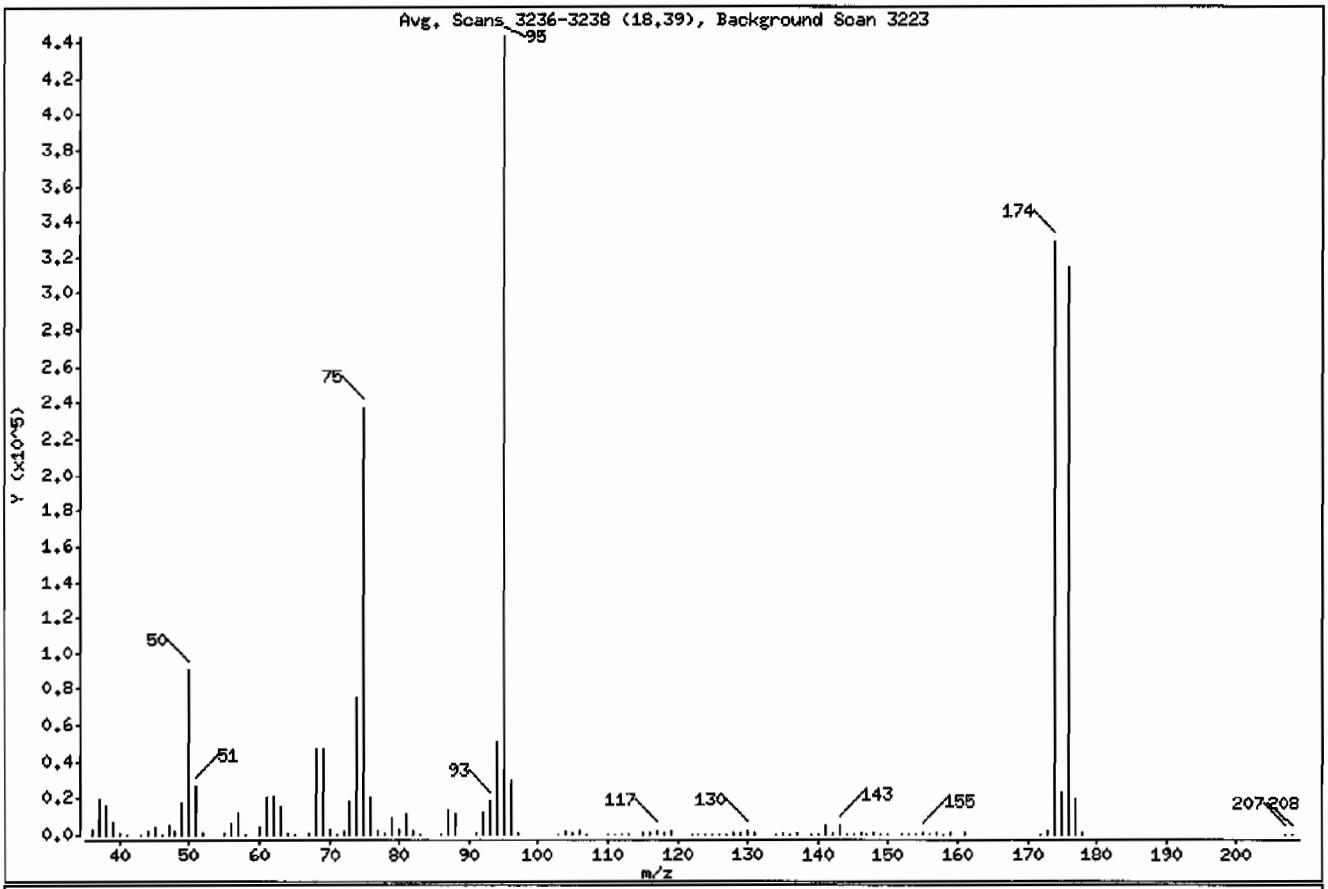

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.40
75	30.00 - 60.00% of mass 95	53.56
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.49 (0.66)
174	50.00 - 100.00% of mass 95	73.99
175	5.00 - 9.00% of mass 174	5.29 (7.16)
176	95.00 - 101.00% of mass 174	70.79 (95.69)
177	5.00 - 9.00% of mass 176	4.48 (6.32)

Data File: /chem/VOA1.i/112509v1/1n301.d

Date : 25-NOV-2009 08:50

Client ID: BFB01 Instrument: VOA1.i

Sample Info: IUVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1n301.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3223
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3152	69.00	46912	106.00	1794	142.00	544
37.00	19680	70.00	3504	107.00	485	143.00	4955
38.00	16648	71.00	70	110.00	238	144.00	298
39.00	7213	72.00	2419	111.00	316	145.00	340
40.00	527	73.00	18464	112.00	318	146.00	584
41.00	53	74.00	74896	113.00	317	147.00	294
43.00	201	75.00	237312	115.00	513	148.00	1188
44.00	1649	76.00	20240	116.00	1413	149.00	320
45.00	3651	77.00	2370	117.00	2354	150.00	466
46.00	376	78.00	1350	118.00	1514	152.00	265
47.00	4811	79.00	9614	119.00	1937	153.00	277
48.00	2537	80.00	2673	122.00	53	154.00	249
49.00	17080	81.00	11095	123.00	53	155.00	1201
50.00	90392	82.00	1711	124.00	287	156.00	185
51.00	26568	83.00	362	125.00	117	157.00	719
52.00	1142	86.00	400	126.00	64	158.00	57
55.00	1264	87.00	13526	127.00	156	159.00	622
56.00	6228	88.00	11662	128.00	1519	161.00	514
57.00	11775	91.00	1500	129.00	781	172.00	336
58.00	410	92.00	12378	130.00	1665	173.00	2177
60.00	4000	93.00	18816	131.00	578	174.00	327808
61.00	20680	94.00	50528	134.00	58	175.00	23456
62.00	21392	95.00	443072	135.00	676	176.00	313664
63.00	15421	96.00	29552	136.00	51	177.00	19832
64.00	1305	97.00	854	137.00	674	178.00	622
65.00	75	103.00	52	139.00	162	207.00	102
67.00	1186	104.00	1633	140.00	294	208.00	51
68.00	46880	105.00	615	141.00	4668		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578			Matrix:	SOIL
Lab Sample ID:	1201981429				
Client Sample:	QC for batch 926738	Client:	LANL010	Project:	QC
Client ID:	MB for batch 926738	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926739	Inst:	VOA1.I	Dilution:	1
Run Date:	11/25/2009 11:22	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 07:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n306BA.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981429**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 11:22**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n306BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n306BA.d
Lab Smp Id: 1201981429 Client Smp ID: MB_for_batch_926738
Inj Date : 25-NOV-2009 11:22
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981429|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	656148	51.0800	51.1
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1032717	50.0000	
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1805428	53.0518	53.0
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	836157	50.0000	
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	718799	48.1376	48.1
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	444725	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n306BA.d
Lab Smp Id: 1201981429 Client Smp ID: MB_for_batch_926738
Inj Date : 25-NOV-2009 11:22
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981429|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n306BA.d

Date : 25-NOV-2009 11:22

Client ID: MB_for_batch_926738

Sample Info: |120198142|926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

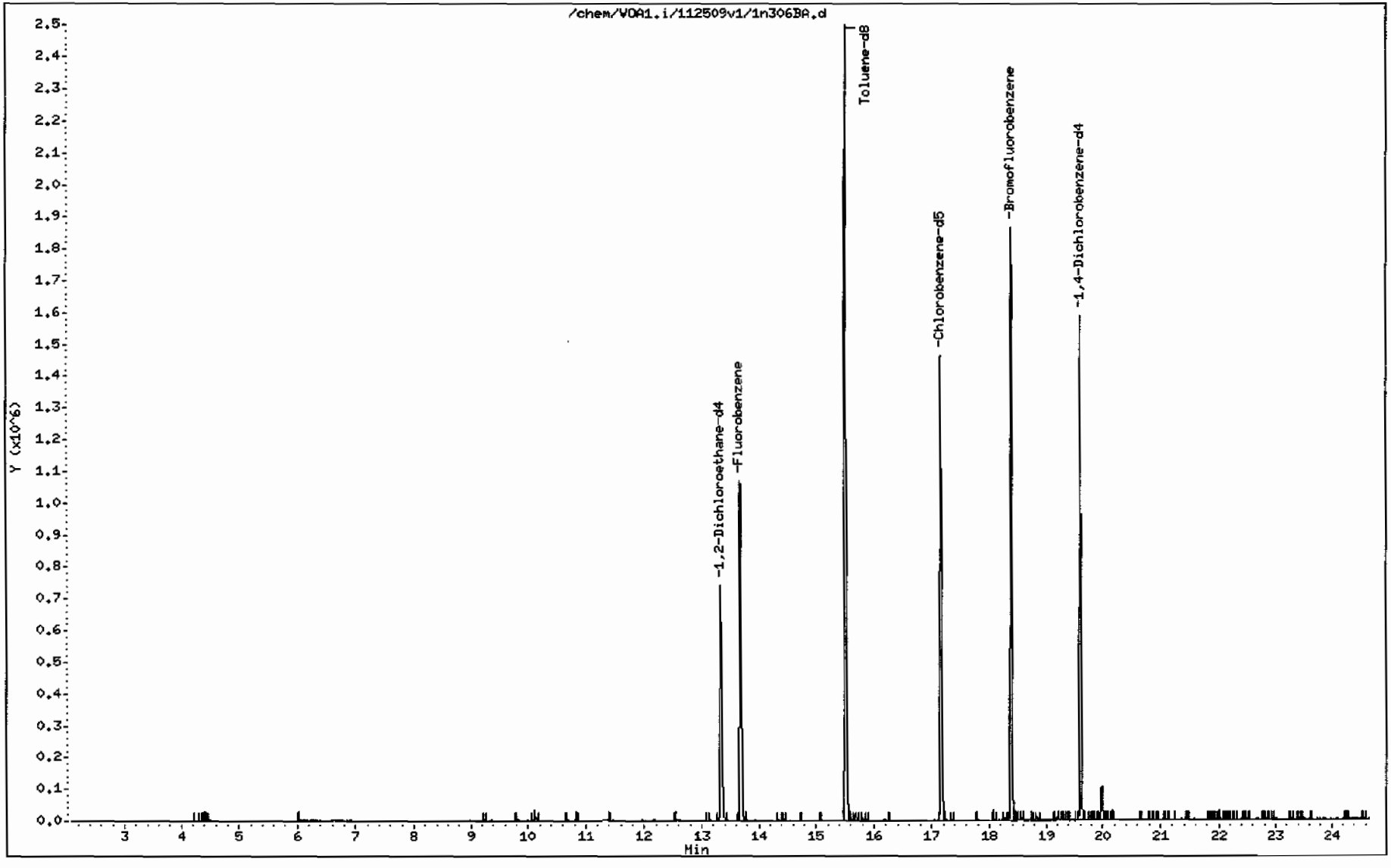

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981432**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 09:50**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n303LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.0	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		48.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		53.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		53.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		53.0	ug/kg	0.300	1.00
67-64-1	Acetone		165	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		45.1	ug/kg	0.300	1.00
74-88-4	Iodomethane		260	ug/kg	1.60	5.00
75-09-2	Methylene chloride		47.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		277	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		49.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		45.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		185	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		49.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		49.2	ug/kg	0.300	1.00
67-66-3	Chloroform		44.7	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		52.9	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		47.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		48.8	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		48.1	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		39.6	ug/kg	0.300	1.00
71-43-2	Benzene		48.8	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		48.6	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		47.5	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		44.3	ug/kg	0.300	1.00
74-95-3	Dibromomethane		45.1	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		220	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		46.5	ug/kg	0.300	1.00
108-88-3	Toluene		49.2	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.6	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		47.0	ug/kg	0.300	1.00
591-78-6	2-Hexanone		182	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		45.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		51.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		49.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		49.1	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578			**Matrix:**	SOIL
Lab Sample ID:	1201981432				
Client Sample:	QC for batch 926738	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926738	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 09:50	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 07:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n303LA.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		45.9	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		97.6	ug/kg	0.300	2.00
95-47-6	o-Xylene		47.7	ug/kg	0.300	1.00
100-42-5	Styrene		48.8	ug/kg	0.300	1.00
75-25-2	Bromoform		50.5	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.8	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		43.4	ug/kg	0.300	1.00
108-86-1	Bromobenzene		49.1	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		42.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		42.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		43.3	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		42.1	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		43.7	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		40.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		41.3	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		37.5	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		39.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		46.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		45.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		35.2	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		49.5	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		46.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		44.9	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n303LA.d
Lab Smp Id: 1201981432 Client Smp ID: LCS_for_batch_92673
Inj Date : 25-NOV-2009 09:50
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981432|926739|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				1887818	145.268	145
M 2 1,2-Dichloroethylene (total)	96				711508	99.4215	99.4
M 3 1,3-Dichloropropylene	75				1215067	93.1133	93.1
5 Dichlorodifluoromethane	85	4.983	4.990	(0.364)	285913	40.9650	41.0
6 Chloromethane	50	5.543	5.542	(0.405)	392629	45.4677	45.5
7 Vinyl chloride	62	5.922	5.922	(0.433)	376708	48.8495	48.8
9 Bromomethane	96	6.948	6.947	(0.508)	247924	53.4672	53.5
10 Chloroethane	64	7.215	7.214	(0.527)	256801	53.7836	53.8
11 Trichlorofluoromethane	101	7.836	7.850	(0.573)	575740	53.0301	53.0
12 Ethyl Ether	59	8.476	8.476	(0.619)	288257	43.6259	43.6
16 Acetone	43	9.249	9.249	(0.676)	998499	164.620	165
22 Acetonitrile	41	9.972	9.972	(0.729)	838263	1123.48	1120

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
15 1,1-Dichloroethylene	61	9.083	9.088	(0.664)	674374	45.0865	45.1
21 Methyl acetate	43	9.834	9.834	(0.719)	1075251	207.073	207
18 Iodomethane	142	9.465	9.470	(0.692)	2514384	259.841	260
23 Methylene chloride	84	10.142	10.137	(0.741)	357897	47.2585	47.2
19 Carbon disulfide	76	9.576	9.571	(0.700)	5331286	276.761	277
25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1023440	43.0088	43.0
26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	346772	49.9144	49.9
29 Vinyl acetate	43	11.297	11.297	(0.826)	3456715	300.038	300
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	705924	45.7133	45.7
35 2-Butanone	43	12.186	12.186	(0.891)	1099451	184.988	185
36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	364736	49.5071	49.5
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	554900	49.1958	49.2
41 Chloroform	83	12.609	12.609	(0.922)	735177	44.7179	44.7
39 Bromochloromethane	128	12.554	12.559	(0.918)	154839	52.8934	52.9
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	614788	47.7497	47.7
42 Cyclohexane	56	12.844	12.839	(0.939)	658753	48.6820	48.7
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	571868	48.7603	48.8
53 n-Butyl alcohol	56	13.930	13.930	(1.018)	871595	4606.15	4610
44 Carbon tetrachloride	117	13.024	13.023	(0.952)	620871	48.1357	48.1
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	711702	54.7422	54.7
51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	574654	39.6089	39.6
47 Benzene	78	13.332	13.332	(0.974)	1426577	48.7822	48.8
50 Cyclohexene	54	13.396	13.396	(0.979)	522960	46.8133	46.8
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1045218	50.0000	
54 Trichloroethylene	95	14.114	14.114	(1.032)	388958	48.5525	48.6
57 1,2-Dichloropropane	63	14.460	14.460	(1.057)	360033	47.5242	47.5
55 Methylcyclohexane	83	14.280	14.280	(1.044)	523855	42.3196	42.3
60 Bromodichloromethane	83	14.750	14.750	(1.078)	550765	44.3134	44.3
59 Dibromomethane	93	14.621	14.625	(1.069)	210734	45.1075	45.1
61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.099)	250273	240.061	240
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	687205	220.345	220
63 cis-1,3-Dichloropropylene	75	15.251	15.256	(1.115)	602272	46.5246	46.5
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1786652	52.1397	52.1
66 Toluene	92	15.597	15.597	(0.909)	909894	49.2091	49.2
68 trans-1,3-Dichloropropylene	75	15.882	15.877	(0.925)	612794	46.5887	46.6
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	242023	47.0268	47.0
71 2-Hexanone	43	16.269	16.269	(0.948)	1498454	181.778	182
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	519044	45.3733	45.4
70 Tetrachloroethylene	164	16.190	16.190	(0.943)	288340	51.4022	51.4
73 Dibromochloromethane	129	16.549	16.549	(0.964)	364369	49.3518	49.4
74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	296742	49.0295	49.0
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	841936	50.0000	
77 Chlorobenzene	112	17.194	17.194	(1.002)	938281	49.0583	49.0
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	342200	46.1566	46.2
78 Ethylbenzene	91	17.222	17.221	(1.003)	1826019	45.9104	45.9
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1279262	97.5624	97.6
81 o-Xylene	106	17.783	17.788	(1.036)	608556	47.7057	47.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
82 Styrene	104	17.806	17.801	(1.038)	1066217	48.7729	48.8
83 Bromoform	173	18.105	18.110	(0.923)	238679	50.5167	50.5
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1673000	43.3016	43.3
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	360249	47.8191	47.8
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	721060	45.2181	45.2
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	107460	43.3774	43.4(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	392021	49.0672	49.1
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1974913	41.9648	42.0
94 2-Chlorotoluene	91	18.741	18.740	(0.956)	1443150	42.3251	42.3
93 1,3,5-Trimethylbenzene	105	18.718	18.717	(0.954)	1432078	42.0770	42.1
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1344854	43.7402	43.7
96 tert-Butylbenzene	119	19.077	19.076	(0.973)	1073521	40.5206	40.5
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1438699	41.2950	41.3
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1586748	37.5247	37.5
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1251053	39.1363	39.1
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	712036	46.6716	46.7
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	474928	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	708109	45.2823	45.3
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1260794	35.2266	35.2(R)
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	655454	44.8784	44.9
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	71144	49.5379	49.5
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	416191	38.3555	38.4
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	215725	28.0848	28.1(R)
111 Naphthalene	128	22.441	22.437	(1.144)	863719	42.9124	42.9
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	354746	38.8545	38.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112509v1/1n303LA.d
Date : 25-NOV-2009 09:50
Client ID: LCS_for_batch_92673
Sample Info: 1120198143219267391|1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

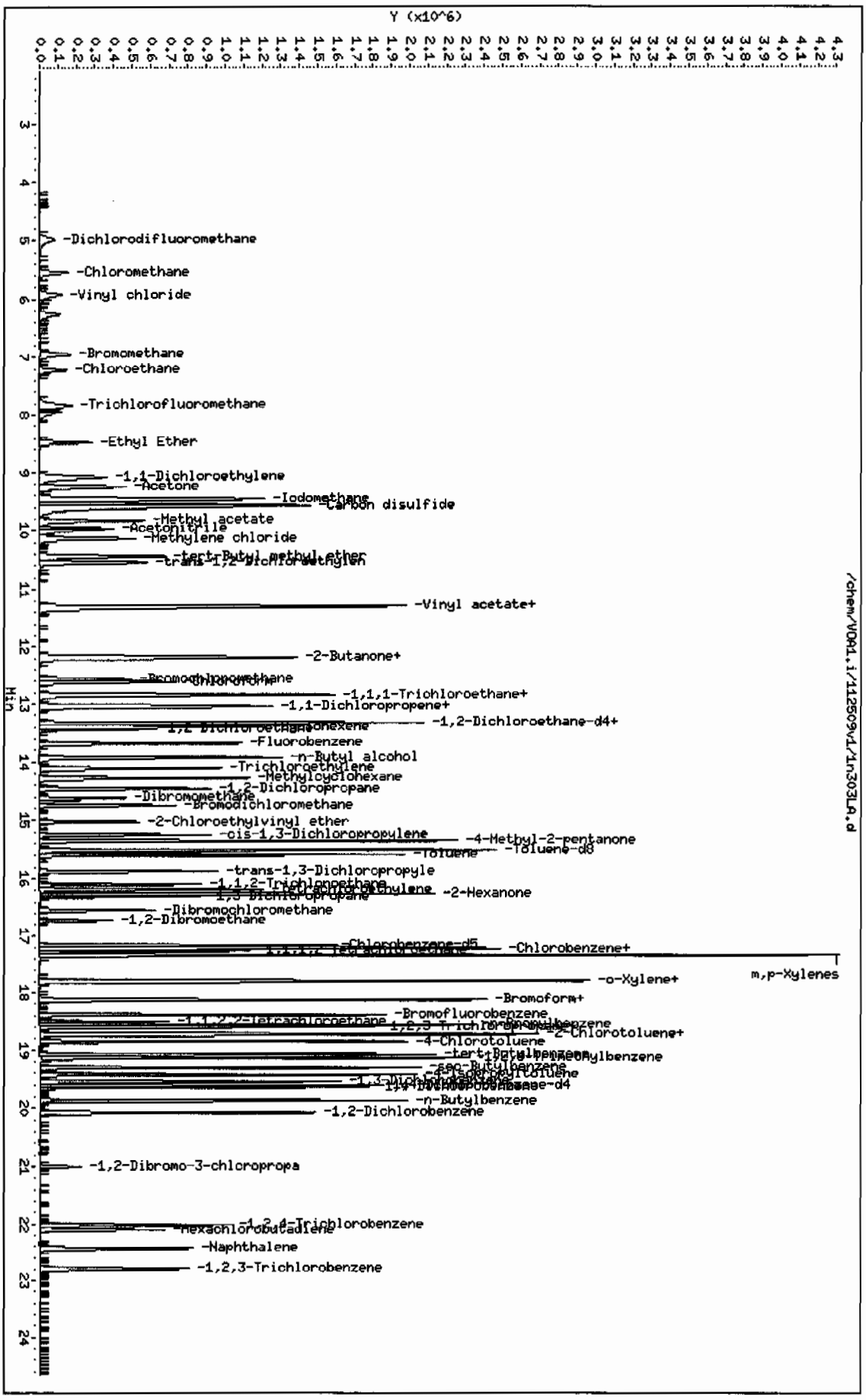

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578			**Matrix:**	SOIL
Lab Sample ID:	1201981433				
Client Sample:	QC for batch 926738	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926738	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 10:51	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 07:02	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n305sLA.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578			**Matrix:**	SOIL
Lab Sample ID:	1201981433				
Client Sample:	QC for batch 926738	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926738	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 10:51	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 07:02	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n305sLA.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		265	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n305sLA.d
Lab Smp Id: 1201981433 Client Smp ID: LCS
Inj Date : 25-NOV-2009 10:51
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981433|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 30-Nov-2009 13:43 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Acrolein	56	8.950	8.954	(0.654)	314105	282.737	283(A)
14 Trichlorotrifluoroethane	101	8.982	8.978	(0.656)	1680976	264.637	265
20 Allyl chloride	76	9.848	9.848	(0.720)	795414	344.930	345(AR)
27 Acrylonitrile	53	10.667	10.671	(0.780)	561273	242.100	242
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	684722	51.6705	51.7
34 Ethyl acetate	43	12.163	12.167	(0.889)	1416416	223.218	223
37 Propionitrile	54	12.402	12.402	(0.906)	220333	234.520	234
38 Tetrahydrofuran	42	12.536	12.540	(0.639)	475004	240.660	241
40 Methacrylonitrile	41	12.559	12.563	(0.918)	1184554	235.324	235
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	526690	2233.91	2230
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	665010	49.2386	49.2
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1085808	50.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
56 Methyl methacrylate	69	14.437	14.437	(1.055)	1065804	247.790	248
58 1,4-Dioxane	88	14.547	14.543	(1.063)	132740	2144.09	2140
62 2-Nitropropane	43	15.081	15.081	(1.102)	539165	229.939	230
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1867447	51.8765	51.9
67 Ethyl methacrylate	69	15.813	15.813	(0.922)	2145903	237.405	237
* 76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	884474	50.0000	
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	743272	250.414	250
86 Cyclohexanone	55	18.386	18.386	(1.072)	572214	683.975	684
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	763494	47.1674	47.2
90 trans-1,4-Dichloro-2-butene	53	18.570	18.566	(0.947)	695666	240.271	240
98 Pentachloroethane	167	19.196	19.196	(0.979)	1019015	338.885	339(A)
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	482095	50.0000	
104 Benzyl chloride	91	19.772	19.772	(1.008)	4141273	269.319	269
107 bis(2-Chloroisopropyl)ether	45	20.168	20.163	(1.028)	842748	242.651	243

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112509v1/1n305sLA.d
Date : 25-NOV-2009 10:51
Client ID: LCS
Sample Info: 1120198143319267391|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

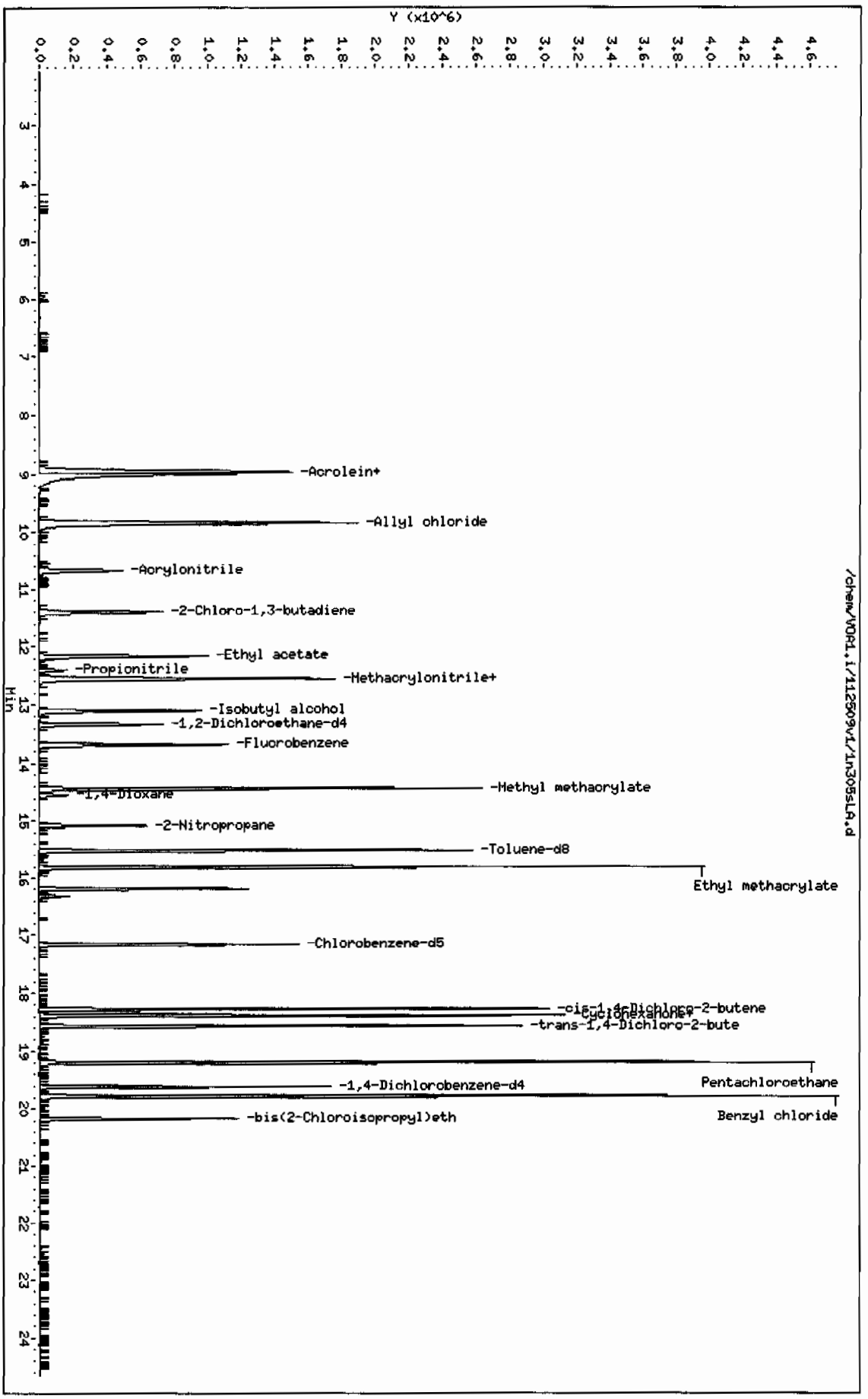

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926738** Verified by: _____

Analyst: Ronda Eagle
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201981429 MB	25-NOV-2009 07:00:00	Soil	5	5	1	
1201981432 LCS	25-NOV-2009 07:01:00	Soil	5	5	1	
1201981433 LCS	25-NOV-2009 07:02:00	Soil	5	5	1	
1201983208 MB	25-NOV-2009 12:30:00	Soil	5	5	1	
1201983209 LCS	25-NOV-2009 12:31:00	Soil	5	5	1	
1201983210 LCS	25-NOV-2009 12:32:00	Soil	5	5	1	
241714001	25-NOV-2009 13:54:00	Soil	5	5	1	
241714002	25-NOV-2009 13:55:00	Soil	5	5	1	
241417001	25-NOV-2009 13:56:00	Soil	5	5	1	
241417002	25-NOV-2009 13:57:00	Soil	5	5	1	
241423001	25-NOV-2009 13:58:00	Soil	5	5	1	
241423003	25-NOV-2009 13:59:00	Soil	5	5	1	
241423004	25-NOV-2009 14:00:00	Soil	5	5	1	
241423005	25-NOV-2009 14:01:00	Soil	5	5	1	
241503001	25-NOV-2009 14:02:00	Soil	5	5	1	
241503002	25-NOV-2009 14:03:00	Soil	5	5	1	
241503003	25-NOV-2009 14:04:00	Soil	5	5	1	
241503004	25-NOV-2009 14:05:00	Soil	5	5	1	
241524001	25-NOV-2009 14:06:00	Soil	5	5	1	
241524002	25-NOV-2009 14:07:00	Soil	5	5	1	
1201981430 PS (241417001)	25-NOV-2009 14:08:00	Soil	5	5	1	
1201981431 PSD (241417001)	25-NOV-2009 14:09:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/13/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111309v1

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
ICV	W1VM091113-18		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
BFB	UVM090821-02				1
SHORT ICV	W1VM091113-19		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/13/2009 22:17	1L507.D	UVM090821-02	GEL	BFB2	5ML	1	N/A	1	W	ACJ	N/A	O	Passed.
11/13/2009 22:47	1L508.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
11/13/2009 23:18	1L509.D	W1VM091113-05	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM090911-01B/UVM091012-01D
11/13/2009 23:48	1L510.D	W1VM091113-06	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	N/A	X	UVM090911-02B/UVM091012-02D: See 1L511
11/14/2009 0:18	1L511.D	W1VM091113-07	GEL	VSTD001	5ML	1	N/A	5	W	ACJ	N/A	O	UVM090911-02B/UVM091012-02D
11/14/2009 0:48	1L512.D	W1VM091113-08	GEL	VSTD002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM090911-03B/UVM091012-03D
11/14/2009 1:19	1L513.D	W1VM091113-09	GEL	VSTD005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM090911-04B/UVM091012-04D
11/14/2009 1:49	1L514.D	W1VM091113-10	GEL	VSTD010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM090911-05B/UVM091012-05D
11/14/2009 2:19	1L515.D	W1VM091113-11	GEL	VSTD020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM090911-06B/UVM091012-06D
11/14/2009 2:49	1L516.D	W1VM091113-12	GEL	VSTD050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM090911-07B/UVM091012-07D
11/14/2009 3:19	1L517.D	W1VM091113-13	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM090911-08B/UVM091012-08D
11/14/2009 3:50	1L518.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	Rinse
11/14/2009 4:20	1L519.D	W1VM091113-14	GEL	VSTD005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091023-01/UVM091110-01E
11/14/2009 4:50	1L520.D	W1VM091113-15	GEL	VSTD010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091023-02/UVM091110-02E
11/14/2009 5:20	1L521.D	W1VM091113-16	GEL	VSTD025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091023-03/UVM091110-03E
11/14/2009 5:50	1L522.D	W1VM091113-17	GEL	VSTD050S	5ML	1	N/A	16	W	ACJ	N/A	O	UVM091023-04/UVM091110-04E
11/14/2009 6:20	1L523.D	W1VM091113-18	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091023-05/UVM091110-05E
11/14/2009 6:51	1L524.D	W1VM091113-19	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091023-06/UVM091110-06E
11/14/2009 7:21	1L525.D	W1VM091113-20	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091023-07/UVM091110-07E
11/14/2009 7:51	1L526.D	12019---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	Rinse
11/14/2009 8:21	1L527.D	W1VM091113-18	GEL	ICV	5ML	1	N/A	21	W	ACJ	N/A	X	UVM091111-01A/IVM091111-01; Vinyl Chloride low. See 11/16/09
11/14/2009 8:52	1L528.D	W1VM091113-19	GEL	SHORT ICV	5ML	1	N/A	22	W	ACJ	N/A	O	UVM091023-08A/UVM091105-02B

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/16/2009 9:04	1M101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	Passed. See 1M108
11/16/2009 9:35	1M102.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	RXM4	N/A	X	
11/16/2009 10:14	1M103.D	W1VM091116-01	GEL	CCV/LCS/ICV	5ML	1	N/A	3	W	RXM4	N/A	X	
11/16/2009 10:45	1M104.D	W1VM091116-02	GEL	LCSD	5ML	1	N/A	4	W	RXM4	N/A	X	
11/16/2009 12:25	1M105.D	W1VM091116-03	GEL	SHORTICV	5ML	1	N/A	5	W	RXM4	N/A	X	Decreased multiplier
11/16/2009 13:00	1M106.D	UVM090821-02	GEL	BFB	5ML	1	N/A	6	W	RXM4	N/A	X	See 1M108
11/16/2009 13:30	1M107.D	W1VM091116-04	GEL	CCV/LCS/ICV	5ML	1	N/A	7	W	RXM4	N/A	X	UVM091111-01A/IVM0901111-01
11/16/2009 14:01	**1M108.D**	**W1VM091116-05**	**GEL**	**BFB/CCV/LCS/ICV**	**5ML**	**1**	**N/A**	**8**	**W**	**RXM4**	**N/A**	**O**	UVM091111-01B/IVM0901111-01
11/16/2009 14:48	1M109.D	W1VM091116-06	GEL	SHORT	5ML	1	N/A	9	W	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 15:20	1M110.D	W1VM091116-07	GEL	LCS	5G	1	N/A	10	S	RXM4	N/A	O	UVM091111-01B/IVM0901111-01
11/16/2009 15:51	1M111.D	W1VM091116-08	GEL	SHORT	5G	1	N/A	11	S	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:21	1M112.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	RXM4	N/A	X	waters were not analyzed. Not needed.
11/16/2009 16:51	1M113.D	12019---	GEL	BLANK	5G	1	N/A	13	S	RXM4	N/A	O	
11/16/2009 17:22	1M114.D	240630001	LANL	923274	5G	1	N/A	14	S	RXM4	N/A	O	
11/16/2009 17:52	1M115.D	240630002	LANL	923274	5G	1	N/A	15	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 18:22	1M116.D	240630003	LANL	923274	5G	1	N/A	16	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 18:52	1M117.D	240630004	LANL	923274	5G	1	N/A	17	S	RXM4	N/A	O	
11/16/2009 19:23	1M118.D	240630005	LANL	923274	5G	1	N/A	18	S	RXM4	N/A	O	
11/16/2009 19:53	1M119.D	240630006	LANL	923274	5G	1	N/A	19	S	RXM4	N/A	O	
11/16/2009 20:23	1M120.D	240630007	LANL	923274	5G	1	N/A	20	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 20:53	1M121.D	240630008	LANL	923274	5G	1	N/A	21	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:23	1M122.D	240630009	LANL	923274	5G	1	N/A	22	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:54	1M123.D	240630010	LANL	923274	5G	1	N/A	23	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 22:24	1M124.D	240630011	LANL	923274	5G	1	N/A	24	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 22:55	1M125.D	240634001	LANL	923274	5G	1	N/A	25	S	RXM4	N/A	O	
11/16/2009 23:25	1M126.D	240634002	LANL	923274	5G	1	N/A	26	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 23:55	1M127.D	240634003	LANL	923274	5G	1	N/A	27	S	RXM4	N/A	O	
11/17/2009 0:25	1M128.D	240634004	LANL	923274	5G	1	N/A	28	S	RXM4	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/17/2009 0:55	1M129.D	240634005	LANL	923274	5G	1	N/A	29	S	RXM4	N/A	O	
11/17/2009 1:25	1M130.D	240634006	LANL	923274	5G	1	N/A	30	S	RXM4	N/A	O	
11/17/2009 1:56	1M131.D	1201973574	LANL	923274	5G	1	N/A	31	S	RXM4	N/A	X	MS 240630001; See 11/17/09
11/17/2009 2:26	1M132.D	1201973575	LANL	923274	5G	1	N/A	32	S	RXM4	N/A	X	MSD 240630001; out of tune. See 11/17/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/25/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 112509v1 AM

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091125-01		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091125-01/02			5+5	
BFB	UVM090821-02				1
SHORT	UVM091118-08A		5	5	

Purge Amount

5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/25/2009 8:50	1N301.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	O	
11/25/2009 9:20	1N302.D	W1VM091125-01	GEL	CCV/LCS	5ML	1	N/A	2	W	RXM4	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 9:50	1N303.D	W1VM091125-02	GEL	LCS	5G	1	N/A	3	S	RXM4	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 10:21	1N304.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	4	W	RXM4	N/A	O	UVM091118-08A
11/25/2009 10:51	1N305.D	UVM091118-08A	GEL	SHORT	5G	1	N/A	5	S	RXM4	N/A	O	
11/25/2009 11:22	1N306.D	12019---	GEL	BLANK	5G	1	N/A	6	S	RXM4	N/A	O	
11/25/2009 11:52	1N307.D	12019---	GEL	BLANK	5ML	1	N/A	7	W	RXM4	N/A	O	
11/25/2009 12:23	1N308.D	12019802193	PNTX	926146	5ML	1	PH2	8	W	RXM4	N	O	MS 240427002
11/25/2009 12:53	1N309.D	12019802194	PNTX	926146	5ML	1	PH2	9	W	RXM4	N	O	MSD 240427002
11/25/2009 13:23	1N310.D	12019--	GEL	BLANK	5ML	1	N/A	10	W	RXM4	N/A	X	
11/25/2009 13:56	1N311.D	241714001	LANL	926739	5G	1	N/A	11	S	RXM4	N/A	O	
11/25/2009 14:26	1N312.D	241714002	LANL	926739	5G	1	N/A	12	S	RXM4	N/A	O	
11/25/2009 14:56	1N313.D	241417001	LANL	926739	5G	1	N/A	13	S	RXM4	N/A	O	
11/25/2009 15:26	1N314.D	241417002	LANL	926739	5G	1	N/A	14	S	RXM4	N/A	O	
11/25/2009 15:57	1N315.D	241423001	LANL	926739	5G	1	N/A	15	S	RXM4	N/A	O	
11/25/2009 16:27	1N316.D	241423003	LANL	926739	5G	1	N/A	16	S	RXM4	N/A	O	
11/25/2009 16:57	1N317.D	241423004	LANL	926739	5G	1	N/A	17	S	RXM4	N/A	O	
11/25/2009 17:27	1N318.D	241423005	LANL	926739	5G	1	N/A	18	S	RXM4	N/A	O	
11/25/2009 17:57	1N319.D	241503001	LANL	926739	5G	1	N/A	19	S	RXM4	N/A	O	
11/25/2009 18:28	1N320.D	241503002	LANL	926739	5G	1	N/A	20	S	RXM4	N/A	O	
11/25/2009 18:58	1N321.D	241503003	LANL	926739	5G	1	N/A	21	S	RXM4	N/A	O	
11/25/2009 19:28	1N322.D	241503004	LANL	926739	5G	1	N/A	22	S	RXM4	N/A	O	
11/25/2009 19:58	1N323.D	1201981430	LANL	926739	5G	1	N/A	23	S	RXM4	N/A	O	MS 241417001
11/25/2009 20:29	1N324.D	1201981431	LANL	926739	5G	1	N/A	24	S	RXM4	N/A	O	MSD 241417001

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
926739	See Below		

Potentially affected work order(s)(SDG): 241417(10-575),241423(10-578),241503(10-589),241524(10-600),241714(10-650)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. LCS 1201981432 did not meet the spike recovery acceptance criteria for the following compound: n-Butylbenzene 70.45% (71.50%-128.40%). 2. LCS 1201983209 did not meet the spike recovery acceptance criteria for the following compound: Bromochloromethane 122.5% (76.00%-121.60%).	1/2. The total number of unnaceptable spike recoveries is within the client required 5% of the total requested analytes. The results are reported.

Originator's Name:

Ronda Eagle 30-NOV-09

Data Validator/Group Leader:

Sarah Kozlik 30-NOV-09

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n313.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 25-NOV-2009 14:56
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	897693	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	715437	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	379941	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	597356	53.4978	57.6
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1571628	53.9742	58.1
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	623950	48.9105	52.6

ION RATIO REPORT

VOA REPORT

Data file: 1n313.d
Report Date: 11/27/2009 04:54
Lab. ID: 241417001 SampleType: SAMPLE
Injection Date: 25-NOV-2009 14:56
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241417001|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-575
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	15863	13.68	13.44	80-120	100	(T)
64	2693	13.69	13.44	3- 63	17	(T)
47 Benzene			CAS#: 71-43-2			
78	467	13.33	13.33	80-120	100	( )
77	18073	13.68	13.34	0- 53	3870	(QT)
51	185997	13.34	13.34	6- 66	39828	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	15674	15.51	15.36	80-120	100	(T)
43	8470	15.51	15.36	214-274	54	(QT)
100	985612	15.52	15.36	1- 61	6288	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n313.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 25-NOV-2009 14:56
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n313.d
Date : 25-NOV-2009 14:56
Client ID: RE03-09-13812
Sample Info: |241417001|926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

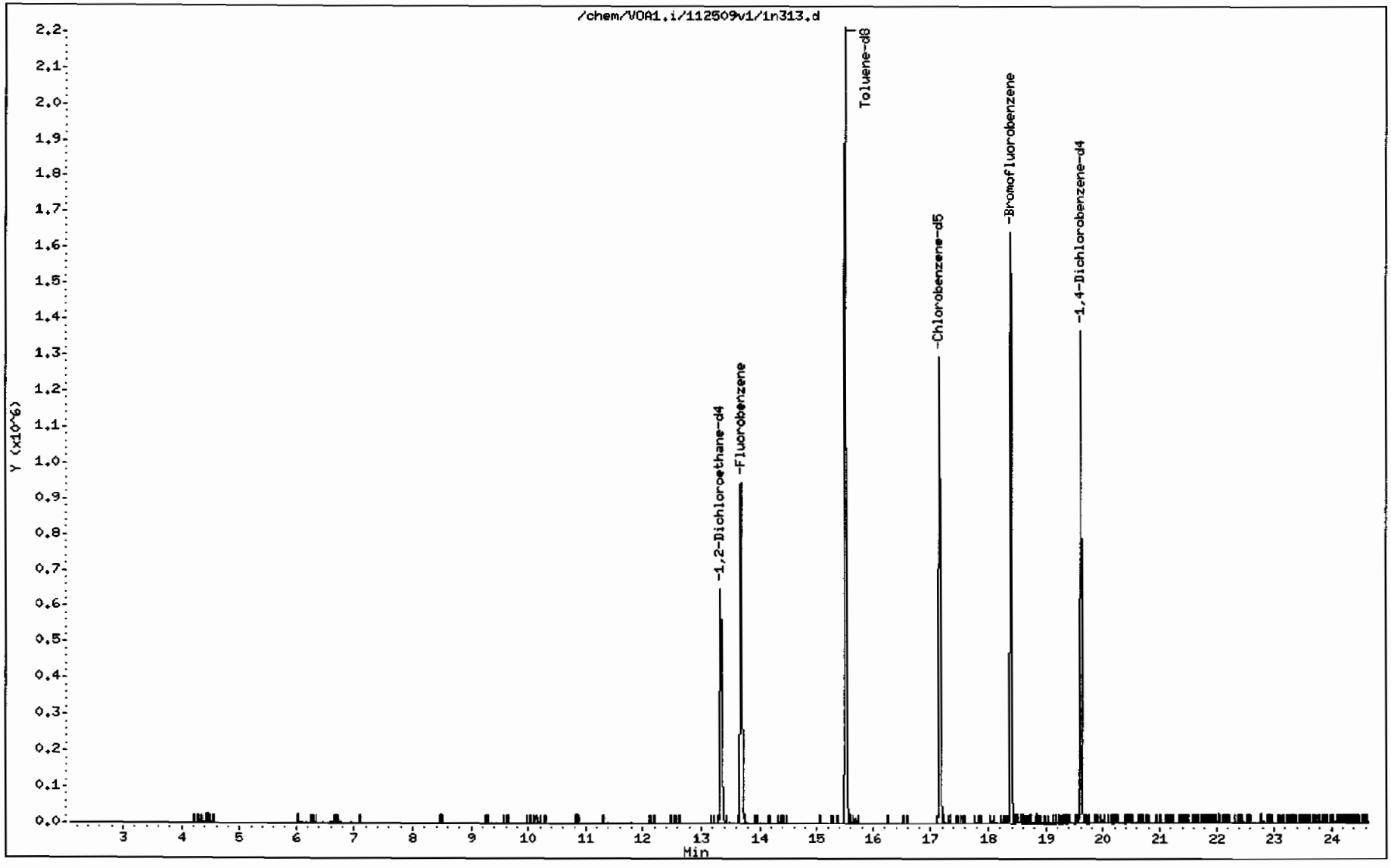

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n323.d
Lab Smp Id: 1201981430 Client Smp ID: RE03-09-13812MS
Inj Date : 25-NOV-2009 19:58
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981430|926739|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241417001
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	796819	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	694339	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	395865	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	582393	58.7607	63.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1465311	51.8521	55.8
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	608664	45.7930	49.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	225650	42.4092	45.6
6 Chloromethane	50	5.550	5.542	(0.405)	316917	48.1407	51.8
7 Vinyl chloride	62	5.922	5.922	(0.433)	278970	47.4525	51.1
9 Bromomethane	96	6.943	6.947	(0.507)	179262	50.7111	54.6
10 Chloroethane	64	7.219	7.214	(0.527)	204517	56.1861	60.5
11 Trichlorofluoromethane	101	7.845	7.850	(0.573)	459945	55.5711	59.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.254	9.249	(0.676)	771650	166.879	180
15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	551194	48.3389	52.0
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	557652	42.7831	46.0
18 Iodomethane	142	9.465	9.470	(0.692)	1660218	225.055	242
23 Methylene chloride	84	10.137	10.137	(0.741)	297934	51.7465	55.7
19 Carbon disulfide	76	9.576	9.571	(0.700)	3898567	265.476	286
26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	268636	50.7215	54.6
30 1,1-Dichloroethane	63	11.325	11.320	(0.827)	599262	50.9036	54.8
35 2-Butanone	43	12.190	12.186	(0.891)	806964	178.102	192
36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	295362	52.5884	56.6
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	550405	43.2826	46.6
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	425131	49.4405	53.2
41 Chloroform	83	12.614	12.609	(0.922)	624845	49.8550	53.7
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	526339	43.2356	46.5
39 Bromochloromethane	128	12.563	12.559	(0.918)	125301	56.1461	60.4
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	496144	50.5475	54.4
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	440252	49.2401	53.0
44 Carbon tetrachloride	117	13.024	13.023	(0.952)	504581	51.3149	55.2
51 1,2-Dichloroethane	62	13.442	13.438	(0.982)	539636	48.7903	52.5
47 Benzene	78	13.336	13.332	(0.974)	1118506	50.1608	54.0
54 Trichloroethylene	95	14.119	14.114	(1.032)	305821	50.0753	53.9
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	295843	51.2248	55.1
60 Bromodichloromethane	83	14.754	14.750	(1.078)	493567	52.0909	56.1
59 Dibromomethane	93	14.625	14.625	(1.069)	185725	52.1471	56.1
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	423248	164.558	177
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	450482	45.6472	49.1
66 Toluene	92	15.597	15.597	(0.909)	703335	46.1238	49.6
68 trans-1,3-Dichloropropylene	75	15.882	15.877	(0.925)	462433	42.6306	45.9
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	202866	47.7975	51.4
71 2-Hexanone	43	16.269	16.269	(0.948)	712740	104.842	113
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	442403	46.8944	50.5
70 Tetrachloroethylene	164	16.190	16.190	(0.943)	217864	47.0944	50.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	301804	49.5671	53.4
74 1,2-Dibromoethane	107	16.729	16.724	(0.975)	234574	46.9966	50.6
77 Chlorobenzene	112	17.194	17.194	(1.002)	729551	46.2534	49.8
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	288225	47.1404	50.7
78 Ethylbenzene	91	17.217	17.221	(1.003)	1407256	42.9029	46.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	966903	89.4157	96.2
81 o-Xylene	106	17.783	17.788	(1.036)	482800	45.8928	49.4
82 Styrene	104	17.806	17.801	(1.038)	810950	44.9816	48.4
83 Bromoform	173	18.105	18.110	(0.923)	198202	50.3281	54.2
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	295510	47.0600	50.6
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	90405	43.7814	47.1(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	309977	46.5470	50.1
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1593664	40.6271	43.7
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1177582	41.4341	44.6
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1351226	41.9583	45.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1180536	41.6139	44.8
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1050035	40.9723	44.1
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	921473	41.7282	44.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1185810	40.8342	44.0
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1385994	39.3234	42.3
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	951885	35.7248	38.4
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1093810	36.6648	39.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	55577	46.4274	50.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112509v1/1n323.d
Date : 25-NOV-2009 19:58
Client ID: RE03-09-13812HS
Sample Info: 1120198143019267391|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

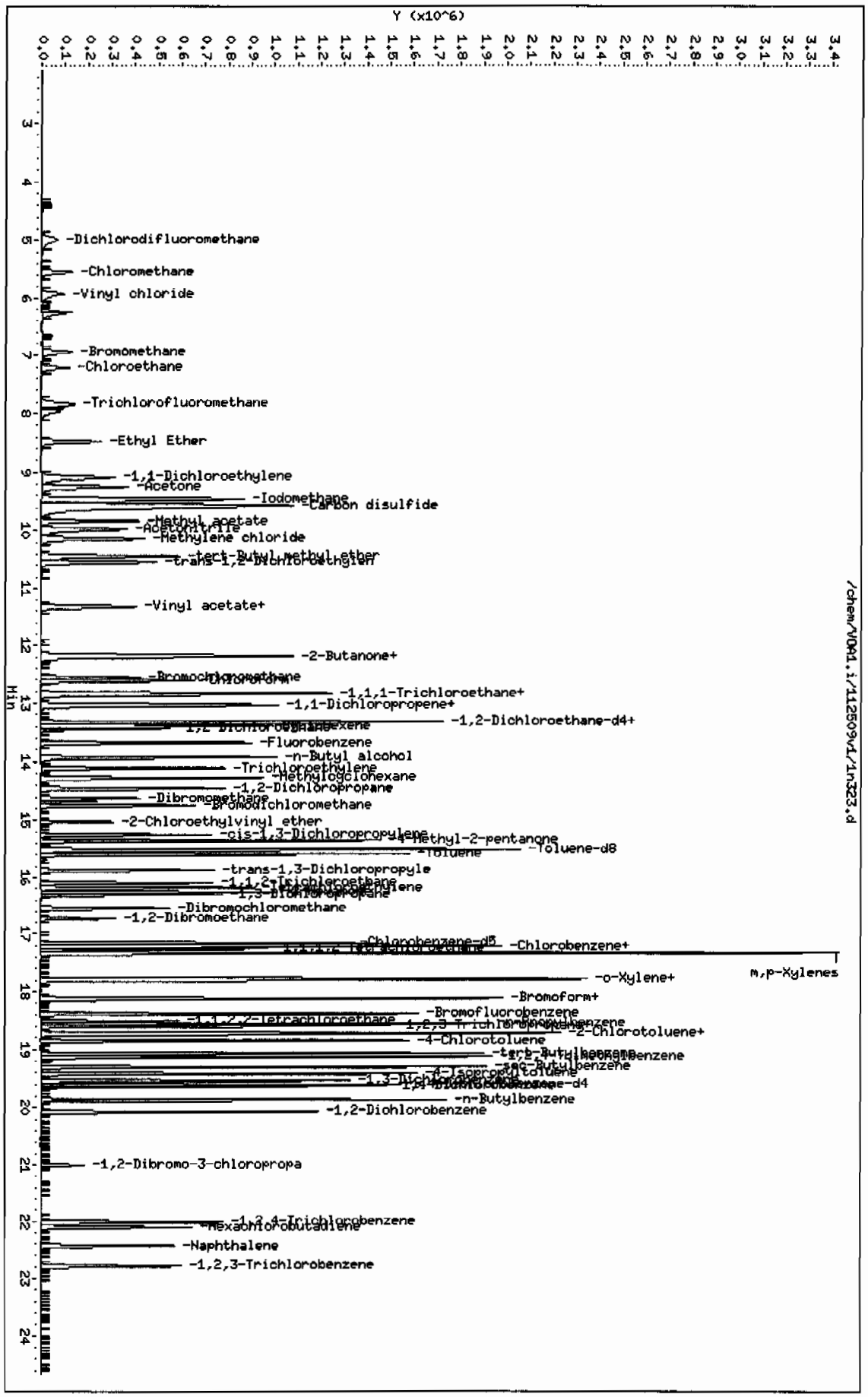

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GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n324.d
Lab Smp Id: 1201981431 Client Smp ID: RE03-09-13812MSD
Inj Date : 25-NOV-2009 20:29
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981431|926739|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241417001
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	883949	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	731041	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	400251	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	621155	56.4942	60.8
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1580652	53.1254	57.2
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	641032	47.6998	51.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	228108	38.6454	41.6
6 Chloromethane	50	5.550	5.542	(0.405)	328977	45.0469	48.5
7 Vinyl chloride	62	5.922	5.922	(0.433)	283964	43.5409	46.9
9 Bromomethane	96	6.947	6.947	(0.508)	189335	48.2813	52.0
10 Chloroethane	64	7.219	7.214	(0.527)	220402	54.5817	58.8
11 Trichlorofluoromethane	101	7.854	7.850	(0.574)	467915	50.9616	54.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.254	9.249	(0.676)	834590	162.700	175
15 1,1-Dichloroethylene	61	9.083	9.088	(0.664)	573262	45.3188	48.8
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	572697	43.4559	46.8
18 Iodomethane	142	9.470	9.470	(0.692)	1770014	216.288	233
23 Methylene chloride	84	10.142	10.137	(0.741)	326393	51.0823	55.0
19 Carbon disulfide	76	9.576	9.571	(0.700)	4194096	257.449	277
26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	289433	49.2616	53.0
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	625975	47.9315	51.6
35 2-Butanone	43	12.186	12.186	(0.890)	877174	174.515	188
36 cis-1,2-Dichloroethylene	96	12.200	12.204	(0.891)	314559	50.4859	54.3
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	555729	43.2224	46.5
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	447948	46.9592	50.5
41 Chloroform	83	12.614	12.609	(0.922)	659599	47.4404	51.1
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	510475	41.4730	44.6
39 Bromochloromethane	128	12.563	12.559	(0.918)	134612	54.3728	58.5
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	515171	47.3125	50.9
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	465171	46.8989	50.5
44 Carbon tetrachloride	117	13.028	13.023	(0.952)	517864	47.4746	51.1
51 1,2-Dichloroethane	62	13.442	13.438	(0.982)	555482	45.2726	48.7
47 Benzene	78	13.336	13.332	(0.974)	1204370	48.6980	52.4
54 Trichloroethylene	95	14.114	14.114	(1.031)	322891	47.6589	51.3
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	318782	49.7560	53.6
60 Bromodichloromethane	83	14.754	14.750	(1.078)	510161	48.5351	52.2
59 Dibromomethane	93	14.625	14.625	(1.069)	195930	49.5899	53.4
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	461238	170.326	183
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	482829	44.1024	47.5
66 Toluene	92	15.597	15.597	(0.909)	734986	45.7795	49.3
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	482379	42.2368	45.5
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.939)	216219	48.3860	52.1
71 2-Hexanone	43	16.269	16.269	(0.948)	796706	111.310	120
72 1,3-Dichloropropane	76	16.310	16.310	(0.951)	473670	47.6880	51.3
70 Tetrachloroethylene	164	16.190	16.190	(0.944)	230013	47.2244	50.8
73 Dibromochloromethane	129	16.545	16.549	(0.964)	320927	50.0616	53.9
74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	250720	47.7095	51.4
77 Chlorobenzene	112	17.194	17.194	(1.002)	770102	46.3731	49.9
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	297713	46.2476	49.8
78 Ethylbenzene	91	17.221	17.221	(1.004)	1482021	42.9139	46.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	999274	87.7698	94.5
81 o-Xylene	106	17.783	17.788	(1.036)	506521	45.7304	49.2
82 Styrene	104	17.806	17.801	(1.038)	832185	43.8420	47.2
83 Bromoform	173	18.105	18.110	(0.923)	203441	51.0923	55.0
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	305520	48.1209	51.8
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	94154	45.0973	48.5(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	321477	47.7449	51.4
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1642875	41.4227	44.6
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1206813	41.9973	45.2
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1378153	42.3254	45.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1213997	42.3244	45.6
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1078344	41.6159	44.8
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	956541	42.8415	46.1
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1221687	41.6087	44.8
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1418697	39.8102	42.8
100 4-Isopropyltoluene	119	19.426	19.422	(0.991)	985658	36.5869	39.4
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1107311	36.7106	39.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	57733	47.7000	51.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112509v1/1n324.d
Date : 25-NOV-2009 20:29
Client ID: RE03-09-13812HSD
Sample Info: 1120198143119267391 1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

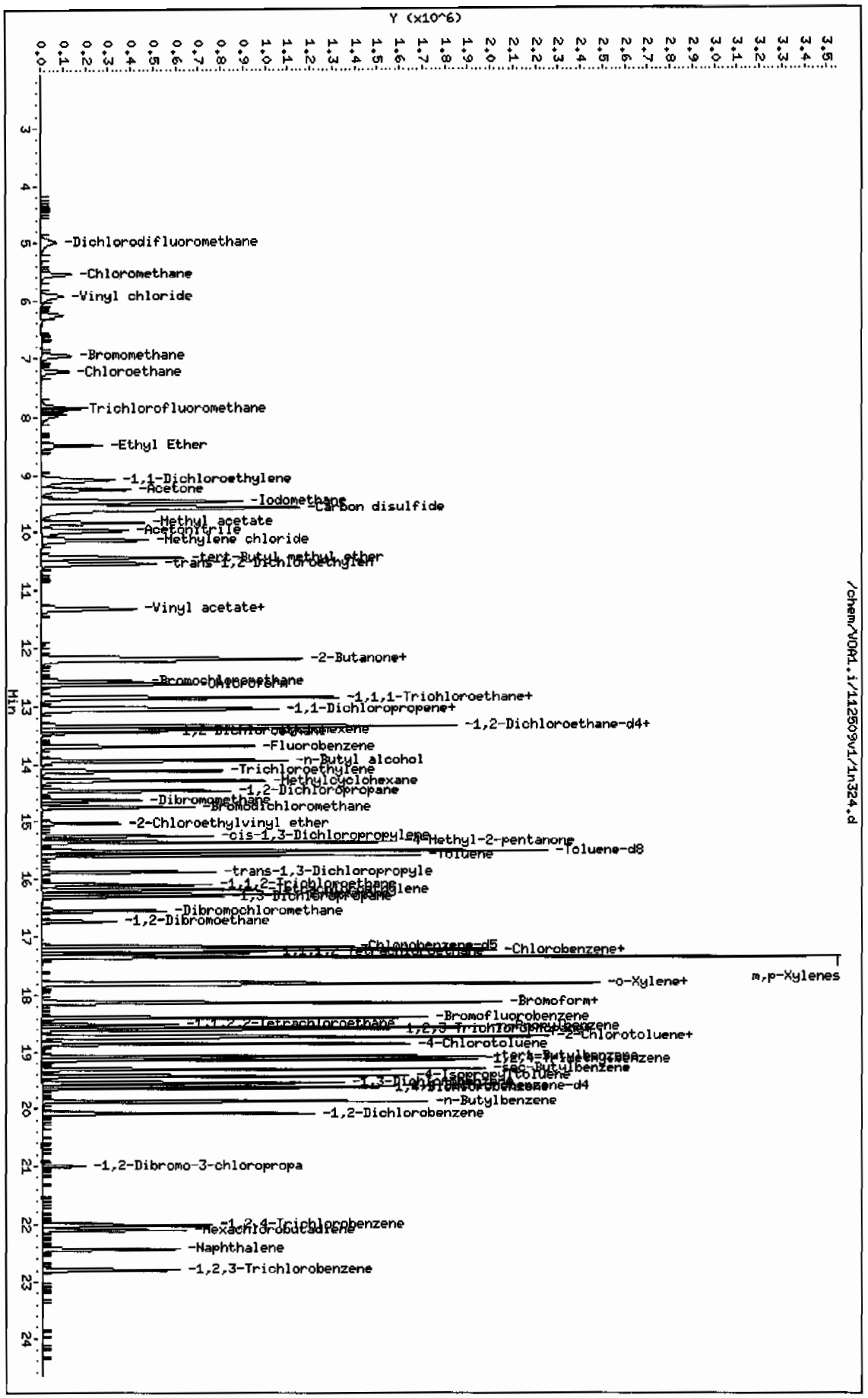

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GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-578-1

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 1311 / 5030B
Analytical Batch Number:	928862
Prep Batch Number:	926094

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241424001	WST03-10-2131
241424002	WST03-10-2130
1201980071	Tumbling Blank (TB)
1201986405	Method Blank (MB)
1201986408	Laboratory Control Sample (LCS)
1201986406	241424001(WST03-10-2131) Post Spike (PS)
1201986407	241424001(WST03-10-2131) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241424001 (WST03-10-2131) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
Due to problems associated with the nature of the TCLP matrix, volatile extracts are routinely diluted before analysis. The dilution factor does not increase detection limits above the regulatory limits required by the client.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-578-1 GEL Work Order: 241424

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 12 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-578-1 VOA

This roadmap was analyzed by ron01469 on 12-07-2009, 10:02.
This roadmap was reviewed by ron01469 on 12-07-2009, 10:04.
This roadmap was reviewed by sar00518 on 12-10-2009, 21:47.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/120309v1/1o417.d	241424001	WST03-10-2131	03-DEC-2009	17:01	10-578-1.sub	10	928862	
☐	N	/chem/VOA1.i/120309v1/1o418.d	241424002	WST03-10-2130	03-DEC-2009	17:31	10-578-1.sub	10	928862	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/120309v1/1o404TLB.d	1201986408	LCS	lcs	03-DEC-2009	10:11	all.sub	1	928862	
☐	N	/chem/VOA1.i/120309v1/1o406TBB.d	1201986405	BLANK	mb	03-DEC-2009	11:15	all.sub	1	928862	
☐	N	/chem/VOA1.i/120309v1/1o411.d	1201980071	TCLPBLANK	tb	03-DEC-2009	13:58	all.sub	10	928862	
☐	N	/chem/VOA1.i/120309v1/1o422.d	1201986406	WST03-10-2131MS	ms	03-DEC-2009	19:34	10-578-1.sub	10	928862	
☐	N	/chem/VOA1.i/120309v1/1o423.d	1201986407	WST03-10-2131MSD	msd	03-DEC-2009	20:05	10-578-1.sub	10	928862	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 17:31**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o418.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 17:01**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o417.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-578-1

Matrix Type: TCLP SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC		TOL %REC		BFB %REC	
1201986408	LCS for batch 928862	96		102		90	
1201986405	MB for batch 928862	92		101		89	
1201980071	TB for batch 926094	95	D	108	D	96	D
241424001	WST03-10-2131	102	D	106	D	90	D
241424002	WST03-10-2130	107	D	109	D	96	D
1201986406	WST03-10-2131PS	106	D	113	D	93	D
1201986407	WST03-10-2131PSD	99	D	105	D	88	D

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(59%-130%)
TOL	= Toluene-d8	(76%-129%)
BFB	= Bromofluorobenzene	(71%-126%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578-1
Client ID: WST03-10-2131PS
Lab Sample ID: 1201986406
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: TCLP S
Analysis Date: 12/03/2009 19:34
Dilution: 10
Prep Batch ID: 926094
Batch ID: 928862

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
75-01-4	PS	Vinyl chloride	0.050	0.00	U	0.0442	88	51-134
75-35-4	PS	1,1-Dichloroethylene	0.050	0.00	U	0.0431	86	61-129
78-93-3	PS	2-Butanone	0.250	0.00	U	0.118	47	11-151
67-66-3	PS	Chloroform	0.050	0.00	U	0.0462	92	70-126
56-23-5	PS	Carbon tetrachloride	0.050	0.00	U	0.0451	90	66-138
107-06-2	PS	1,2-Dichloroethane	0.050	0.00	U	0.0407	81	65-129
71-43-2	PS	Benzene	0.050	0.00	U	0.0495	99	66-121
79-01-6	PS	Trichloroethylene	0.050	0.00	U	0.0483	97	66-127
127-18-4	PS	Tetrachloroethylene	0.050	0.00	U	0.0541	108	63-126
108-90-7	PS	Chlorobenzene	0.050	0.00	U	0.0529	106	69-120
106-46-7	PS	1,4-Dichlorobenzene	0.050	0.00	U	0.0509	102	64-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578-1
Client ID: WST03-10-2131PSD
Lab Sample ID: 1201986407
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/03/2009 20:05
Dilution: 10
Prep Batch ID: 926094
Batch ID: 928862

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-01-4	PSD	Vinyl chloride	0.050	0.00	U	0.0424	85	51-134	4	0-20
75-35-4	PSD	1,1-Dichloroethylene	0.050	0.00	U	0.0424	85	61-129	2	0-20
78-93-3	PSD	2-Butanone	0.250	0.00	U	0.115	46	11-151	2	0-20
67-66-3	PSD	Chloroform	0.050	0.00	U	0.0455	91	70-126	2	0-20
56-23-5	PSD	Carbon tetrachloride	0.050	0.00	U	0.0447	89	66-138	1	0-20
107-06-2	PSD	1,2-Dichloroethane	0.050	0.00	U	0.0405	81	65-129	0	0-20
71-43-2	PSD	Benzene	0.050	0.00	U	0.0507	101	66-121	2	0-20
79-01-6	PSD	Trichloroethylene	0.050	0.00	U	0.0488	98	66-127	1	0-20
127-18-4	PSD	Tetrachloroethylene	0.050	0.00	U	0.0506	101	63-126	7	0-20
108-90-7	PSD	Chlorobenzene	0.050	0.00	U	0.0512	102	69-120	3	0-20
106-46-7	PSD	1,4-Dichlorobenzene	0.050	0.00	U	0.0487	97	64-120	4	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578-1
Client ID: LCS for batch 928862
Lab Sample ID: 1201986408
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 10:11
Dilution: 1
Prep Batch ID: 926094
Batch ID: 928862

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
75-01-4	LCS	Vinyl chloride	0.050	0.0	0.051	102	61-131
75-35-4	LCS	1,1-Dichloroethylene	0.050	0.0	0.0508	102	70-128
78-93-3	LCS	2-Butanone	0.250	0.0	0.208	83	31-160
67-66-3	LCS	Chloroform	0.050	0.0	0.049	98	76-121
56-23-5	LCS	Carbon tetrachloride	0.050	0.0	0.0528	106	75-139
107-06-2	LCS	1,2-Dichloroethane	0.050	0.0	0.0411	82	70-123
71-43-2	LCS	Benzene	0.050	0.0	0.0553	111	72-120
79-01-6	LCS	Trichloroethylene	0.050	0.0	0.0561	112	76-123
127-18-4	LCS	Tetrachloroethylene	0.050	0.0	0.0597	119	72-126
108-90-7	LCS	Chlorobenzene	0.050	0.0	0.0549	110	76-120
106-46-7	LCS	1,4-Dichlorobenzene	0.050	0.0	0.056	112	74-120

Method Blank Summary

SDG Number:	10-578-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 928862	Instrument ID:	VOA1.I	Data File:	1o406TBB.d
Lab Sample ID:	1201986405	Prep Date:	12/03/2009 11:15	Analyzed:	12/03/09 11:15
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928862	1201986408	1o404TLB.d	12/03/09	1011
02 TB for batch 926094	1201980071	1o411.d	12/03/09	1358
03 WST03-10-2131	241424001	1o417.d	12/03/09	1701
04 WST03-10-2130	241424002	1o418.d	12/03/09	1731
05 WST03-10-2131PS	1201986406	1o422.d	12/03/09	1934
06 WST03-10-2131PSD	1201986407	1o423.d	12/03/09	2005

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-578-1

Instrument ID: VOA1.I **Injection Date/Time:** 03-DEC-09 10:11

Column Description: RTX-Volatiles **Lab File ID** /120309v1/1o404BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	52.1
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	77.8
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	96.9
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091203-03	/120309v1/1o404.d	03-DEC-09 10:11
LCS	1201986408	/120309v1/1o404TLB.d	03-DEC-09 10:11
BLANK	1201986405	/120309v1/1o406TBB.d	03-DEC-09 11:15
TCLPBLANK	1201980071	/120309v1/1o411.d	03-DEC-09 13:58
WST03-10-2131	241424001	/120309v1/1o417.d	03-DEC-09 17:01
WST03-10-2130	241424002	/120309v1/1o418.d	03-DEC-09 17:31
WST03-10-2131MS	1201986406	/120309v1/1o422.d	03-DEC-09 19:34
WST03-10-2131MSD	1201986407	/120309v1/1o423.d	03-DEC-09 20:05

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-578-1

Instrument ID: VOA1.I **Injection Date/Time:** 13-NOV-09 22:17

Column Description: RTX-Volatiles **Lab File ID** /111309v1/11507.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	59
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.1
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W1VM091113-05	/111309v1/11509.d	13-NOV-09 23:18
VSTD001	W1VM091113-07	/111309v1/11511.d	14-NOV-09 00:18
VSTD002	W1VM091113-08	/111309v1/11512.d	14-NOV-09 00:48
VSTD005	W1VM091113-09	/111309v1/11513.d	14-NOV-09 01:19
VSTD010	W1VM091113-10	/111309v1/11514.d	14-NOV-09 01:49
VSTD020	W1VM091113-11	/111309v1/11515.d	14-NOV-09 02:19
VSTD050	W1VM091113-12	/111309v1/11516.d	14-NOV-09 02:49
VSTD100	W1VM091113-13	/111309v1/11517.d	14-NOV-09 03:19

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-578-1

Instrument ID: VOA1.I **Injection Date/Time:** 16-NOV-09 14:01

Column Description: RTX-Volatiles **Lab File ID** /111609v1/1m108BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	55
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050/LICV	W1VM091116-05	/111609v1/1m108.d	16-NOV-09 14:01

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-578-1

STD Analysis Time: 03-DEC-09 10:11

Data File: 1o404.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1050992		13.7	906319		17.2	507977		19.6
Upper Limit	2101984		14.2	1812638		17.7	1015954		20.1
Lower Limit	525496		13.2	453160		16.7	253989		19.1
Sample ID									
BLK01LCS	1050992		13.7	906319		17.2	507977		19.6
BLK01	1049253		13.7	885491		17.2	488664		19.6
TBLK01	1027921		13.7	874455		17.2	477083		19.6
WST03-10-2131	884431		13.7	758898		17.2	430104		19.6
WST03-10-2130	850206		13.7	735432		17.2	412035		19.6
WST03-10-2131MS	996436		13.7	795058		17.2	466394		19.6
WST03-10-2131MSD	1031385		13.7	872908		17.2	500769		19.6

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 17:31**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o418.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o418.d
Lab Smp Id: 241424002 Client Smp ID: WST03-10-2130
Inj Date : 03-DEC-2009 17:31
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241424002|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 18
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	850206	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	735432	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.606	(1.000)	412035	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.327	(0.975)	567592	53.7464	0.054
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1628542	54.4082	0.054
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	661570	47.8201	0.048

ION RATIO REPORT

VOA REPORT

Data file: 1o418.d
Report Date: 12/04/2009 07:31
Lab. ID: 241424002 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:31
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241424002|928862|10|VOAF|1|
Miscellaneous Info: LANL 500uL N/A
Comment:
Method used: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Dilution Factor= 10.0
Integrator: HP RTE Compound Sublist: 10-578-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14388	13.68	13.42	80-120	100	(T)
64	2292	13.69	13.42	2- 62	16	(T)
47 Benzene			CAS#: 71-43-2			
78	1006	13.33	13.32	80-120	100	( )
77	17779	13.69	13.32	0- 53	1767	(QT)
51	177966	13.34	13.32	1- 61	17689	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/VOA1.i/120309v1/1o418.d
Date : 03-DEC-2009 17:31
Client ID: WST03-10-2130
Sample Info: |2414240021928862|10|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

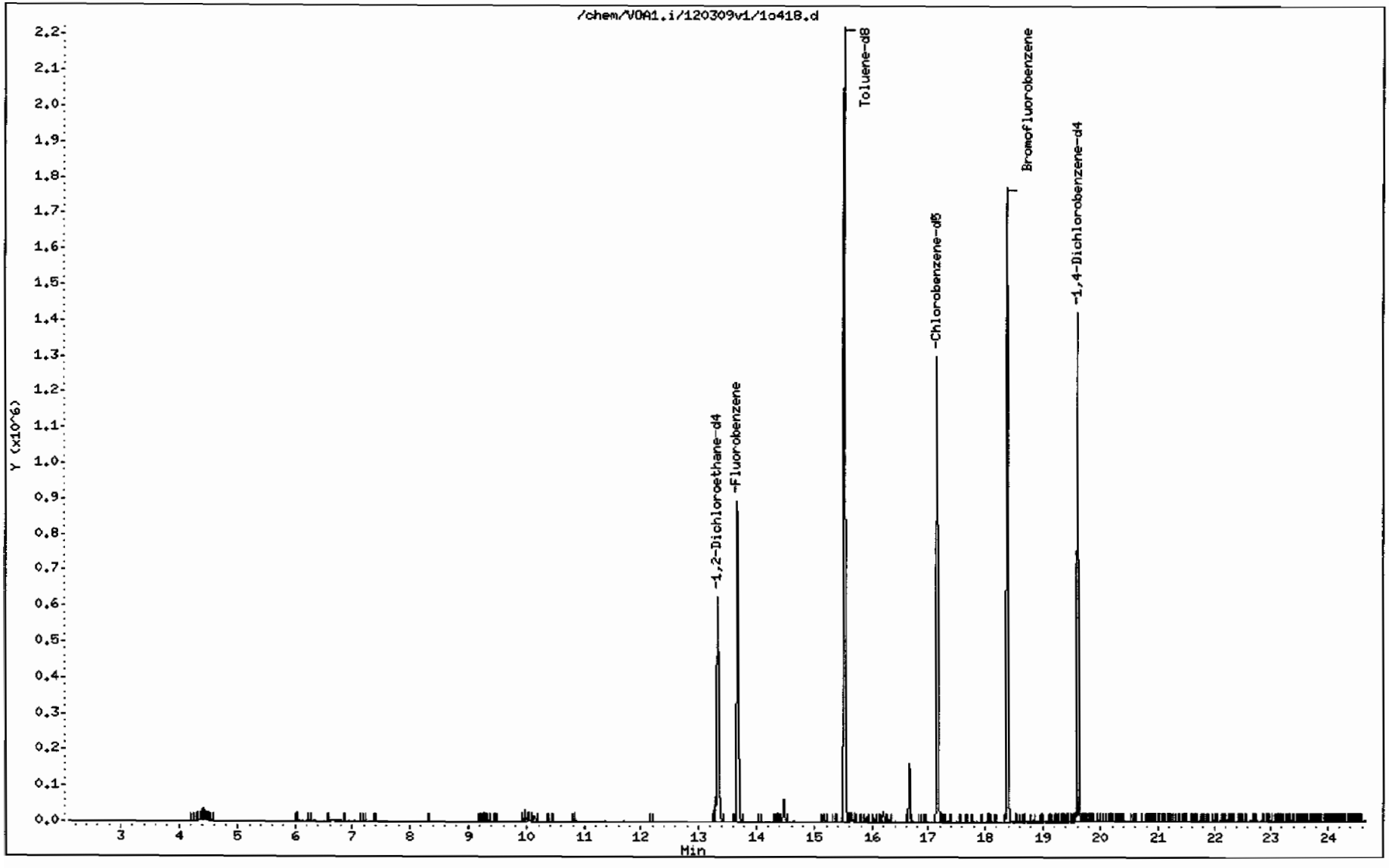

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 17:01**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o417.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o417.d
Lab Smp Id: 241424001 Client Smp ID: WST03-10-2131
Inj Date : 03-DEC-2009 17:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241424001|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 17
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	884431	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	758898	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.606	(1.000)	430104	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.336	13.327	(0.975)	560872	51.0549	0.051
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1630739	52.7969	0.053
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	652369	45.1740	0.045

ION RATIO REPORT

VOA REPORT

Data file: 1o417.d
Report Date: 12/04/2009 07:30
Lab. ID: 241424001 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:01
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241424001|928862|10|VOAF|1|
Miscellaneous Info: LANL 500uL N/A
Comment:
Method used: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Dilution Factor= 10.0
Integrator: HP RTE Compound Sublist: 10-578-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14655	13.68	13.42	80-120	100	(T)
64	2347	13.68	13.42	2- 62	16	(T)
47 Benzene			CAS#: 71-43-2			
78	416	13.32	13.32	80-120	100	( )
77	17152	13.68	13.32	0- 53	4115	(QT)
51	177570	13.34	13.32	1- 61	42597	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/VOA1.i/120309v1/1o417.d

Date : 03-DEC-2009 17:01

Client ID: WST03-10-2131

Sample Info: |241424001|928862|10|VOAF|1|

Purge Volume: 5.0

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

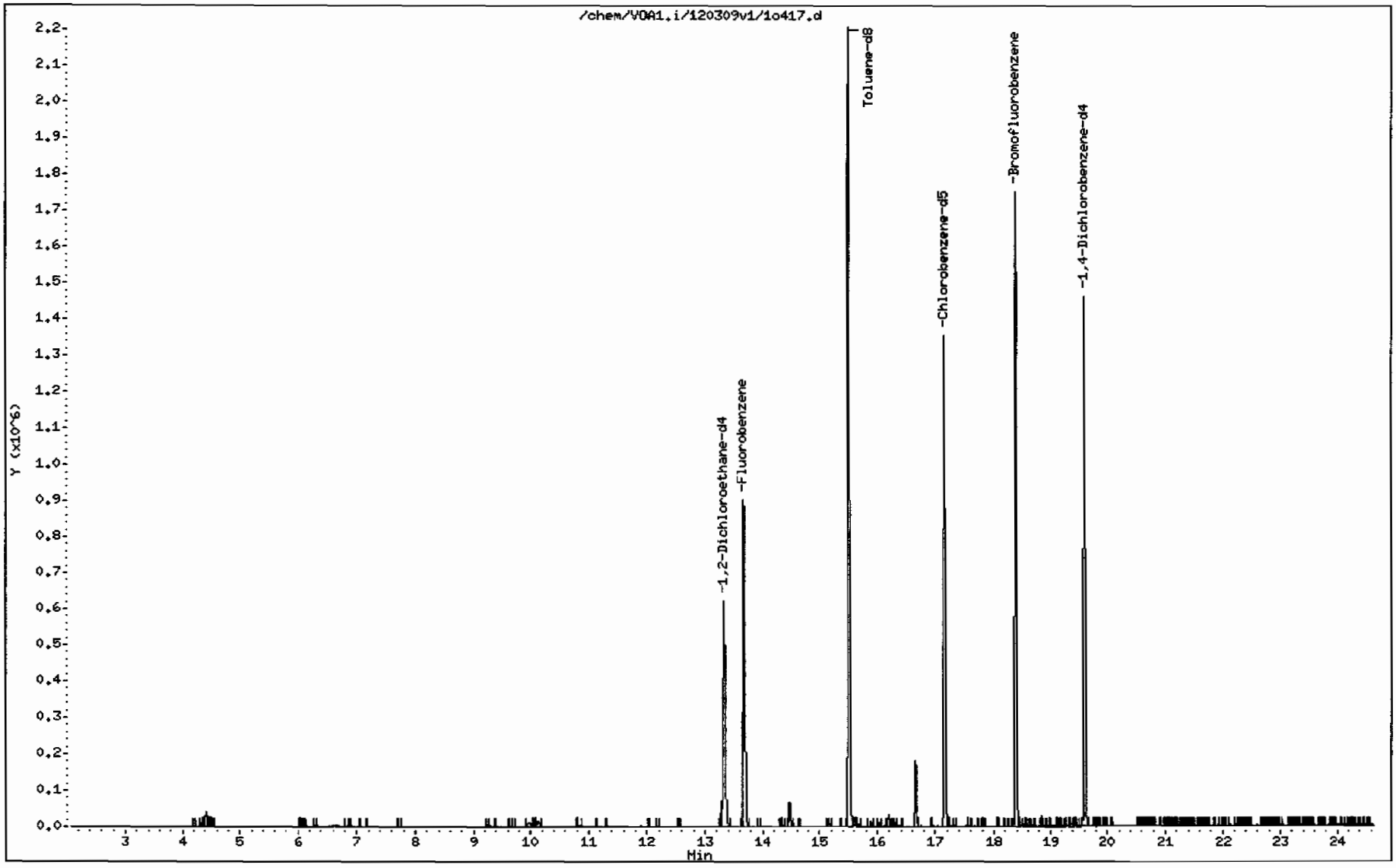

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 03-Dec-2009 13:09

Calibration History

Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Start Cal Date: 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 04:20	ICALsubS	/chem/VOA1.i/111309v1/11519.d
14-NOV-2009 00:18	CALsubL+	/chem/VOA1.i/111309v1/11511.d
Cal Level: 2 , Cal Amount: 2.00000		
14-NOV-2009 04:50	ICALsubS	/chem/VOA1.i/111309v1/11520.d
14-NOV-2009 00:48	CALsubL+	/chem/VOA1.i/111309v1/11512.d
Cal Level: 3 , Cal Amount: 5.00000		
14-NOV-2009 05:20	ICALsubS	/chem/VOA1.i/111309v1/11521.d
14-NOV-2009 01:19	CALsubL+	/chem/VOA1.i/111309v1/11513.d
Cal Level: 4 , Cal Amount: 10.00000		
14-NOV-2009 05:50	ICALsubS	/chem/VOA1.i/111309v1/11522.d
14-NOV-2009 01:49	CALsubL+	/chem/VOA1.i/111309v1/11514.d
Cal Level: 5 , Cal Amount: 20.00000		
14-NOV-2009 06:20	ICALsubS	/chem/VOA1.i/111309v1/11523.d
14-NOV-2009 02:19	CALsubL+	/chem/VOA1.i/111309v1/11515.d
Cal Level: 6 , Cal Amount: 50.00000		
14-NOV-2009 06:51	ICALsubS	/chem/VOA1.i/111309v1/11524.d
14-NOV-2009 02:49	CALsubL+	/chem/VOA1.i/111309v1/11516.d
Cal Level: 7 , Cal Amount: 100.00000		
14-NOV-2009 07:21	ICALsubS	/chem/VOA1.i/111309v1/11525.d
14-NOV-2009 03:19	CALsubL+	/chem/VOA1.i/111309v1/11517.d
Cal Level: 8 , Cal Amount: 200.00000		
13-NOV-2009 23:18	BENZENE+	/chem/VOA1.i/111309v1/11509.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

| Ccal Level: 6 , Ccal Amount: 50.0 |

03-DEC-2009 10:11	CALsubL+	/chem/VOA1.i/120309v1/1o404.d
Ccal Level: 6 , Ccal Amount: 50.0		
03-DEC-2009 08:44	CALsubL+	/chem/VOA1.i/120309v1/1o402.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Calibration File Names:
Level 1: /chem/VOA1.i/111309v1/11519.d
Level 2: /chem/VOA1.i/111309v1/11520.d
Level 3: /chem/VOA1.i/111309v1/11521.d
Level 4: /chem/VOA1.i/111309v1/11522.d
Level 5: /chem/VOA1.i/111309v1/11523.d
Level 6: /chem/VOA1.i/111309v1/11524.d
Level 7: /chem/VOA1.i/111309v1/11525.d
Level 8: /chem/VOA1.i/111309v1/11509.d

Compound	1 Level 1 (100 Level 7)	2 Level 2 (200 Level 8)	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M 1 Xylenes (total)	0.81227	0.73137	0.78894	0.72498	0.74753	0.76443					
	0.83207	+++++					AVRG		0.77166		5.29959
M 2 1,2-Dichloroethylene (total)	0.34833	0.34223	0.35784	0.33479	0.33448	0.33077					
	0.34829	+++++					AVRG		0.34239		2.83217
M 3 1,3-Dichloropropylene	0.70586	0.72835	0.78706	0.78242	0.78994	0.81396					
	0.86766	+++++					AVRG		0.78218		6.82978
4 Chlorotrifluoroethylene	0.13485	0.14655	0.15206	0.14935	0.17832	0.16711					
	0.16995	+++++					AVRG		0.15688		9.76231
5 Dichlorodifluoromethane	0.38136	0.29154	0.34309	0.34840	0.34284	0.32399					
	0.30590	+++++					AVRG		0.33388		8.90428

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
6 Chloromethane	0.36352	0.41180	0.43566	0.42653	0.42921	0.41976					
	0.40514	+++++					AVRG		0.41309		5.86079
7 Vinyl chloride	0.37166	0.41882	0.39367	0.36887	0.36084	0.34024					
	0.32820	+++++					AVRG		0.36890		8.32269
8 2-Chloro-1,1,1-trifluoroethan	+++++	0.33998	0.31048	0.30901	0.32578	0.34040					
	0.34703	+++++					AVRG		0.32878		4.95744
9 Bromomethane	0.21690	0.22761	0.23531	0.22897	0.22468	0.21504					
	0.20365	+++++					AVRG		0.22174		4.78408
10 Chloroethane	0.19204	0.24536	0.23794	0.23300	0.23259	0.23061					
	0.22732	+++++					AVRG		0.22841		7.46771
11 Trichlorofluoromethane	0.43608	0.52008	0.53827	0.53954	0.53870	0.53854					
	0.52430	+++++					AVRG		0.51936		7.23293
12 Ethyl Ether	13883	16946	33985	58858	108474	271086					
	556612	+++++					WLINR	-0.01699	0.31004		0.99399
13 Acrolein	0.05333	0.04888	0.04523	0.05392	0.05442	+++++					
	+++++	+++++					AVRG		0.05116		7.77888
14 Trichlorotrifluoroethane	0.38443	0.29919	0.26333	0.27368	0.28733	0.26637					
	0.27318	+++++					AVRG		0.29250		14.49372

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 1,1-Dichloroethylene	0.66544	0.72486	0.72849	0.75349	0.72602	0.70860					
	0.70169	+++++					AVRG		0.71551		3.85053
16 Acetone	0.27960	0.29041	0.29028	0.29519	0.28855	0.29877					
	0.28827	+++++					AVRG		0.29015		2.07413
17 Isopropyl Alcohol	+++++	0.01880	0.01931	0.02045	0.01791	0.02228					
	0.02251	+++++					AVRG		0.02021		9.32490
18 Iodomethane	0.47134	0.45473	0.46938	0.46784	0.46221	0.46114					
	0.45366	+++++					AVRG		0.46290		1.51011
19 Carbon disulfide	0.96269	0.92797	0.89305	0.94299	0.92514	0.93790					
	0.86070	+++++					AVRG		0.92149		3.70371
20 Allyl chloride	0.09501	0.09361	0.09290	0.10507	0.12042	0.13013					
	+++++	+++++					AVRG		0.10619		14.81176
21 Methyl acetate	0.26593	0.25494	0.25595	0.25694	0.24207	0.22771					
	0.23511	+++++					AVRG		0.24838		5.51213
22 Acetonitrile	0.03907	0.03505	0.03613	0.03588	0.03452	0.03371					
	0.03550	+++++					AVRG		0.03569		4.76987
23 Methylene chloride	+++++	24051	41818	70969	131447	316200					
	681164	+++++					LINR	-0.03083	0.35083		0.99980

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
24 tert-Butyl Alcohol	0.03736	0.03924	0.03623	0.04125	0.03045	0.04033					
	0.04086	+++++					AVRG		0.03796		9.99389
25 tert-Butyl methyl ether	1.02944	1.16134	1.14779	1.21755	1.11739	1.12980					
	1.16499	+++++					AVRG		1.13833		5.06877
26 trans-1,2-Dichloroethylene	0.34072	0.33605	0.34935	0.32977	0.32190	0.31967					
	0.32891	+++++					AVRG		0.33234		3.15938
27 Acrylonitrile	0.11445	0.10516	0.09582	0.09726	0.11027	0.10992					
	0.11442	+++++					AVRG		0.10676		7.18030
28 Isopropyl ether	+++++	1.14017	1.11343	1.15572	1.20439	1.22887					
	1.32967	+++++					AVRG		1.19537		6.54154
29 Vinyl acetate	0.47200	0.53409	0.59574	0.55445	0.52377	0.60780					
	0.57002	+++++					AVRG		0.55113		8.40354
30 1,1-Dichloroethane	0.71917	0.72889	0.80378	0.74289	0.72120	0.71174					
	0.74337	+++++					AVRG		0.73872		4.20349
31 2-Chloro-1,3-butadiene	0.65721	0.59215	0.56354	0.55911	0.62777	0.61361					
	0.65818	+++++					AVRG		0.61022		6.67177
32 Ethyl tert-butyl ether	+++++	1.12815	1.09366	1.08936	1.06318	1.18087					
	1.29073	+++++					AVRG		1.14099		7.34717

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
33 2,2-Dichloropropane	0.48989	0.52491	0.58120	0.54053	0.55119	0.53778					
	0.55150	+++++					AVRG		0.53957		5.18583
34 Ethyl acetate	0.33965	0.28932	0.26285	0.29260	0.27580	0.29649					
	0.28868	+++++					AVRG		0.29220		8.17282
35 2-Butanone	0.25793	0.27740	0.26965	0.27914	0.28942	0.30924					
	0.30740	+++++					AVRG		0.28431		6.68268
36 cis-1,2-Dichloroethylene	0.35593	0.34838	0.36631	0.33981	0.34705	0.34186					
	0.36768	+++++					AVRG		0.35243		3.18022
37 Propionitrile	0.04783	0.04230	0.03731	0.04306	0.04379	0.04424					
	0.04431	+++++					AVRG		0.04326		7.28248
38 Tetrahydrofuran	0.23152	0.20954	0.20440	0.19096	0.19197	0.21633					
	0.18821	+++++					AVRG		0.20471		7.72518
39 Bromochloromethane	0.13887	0.13222	0.13837	0.14209	0.13930	0.14049					
	0.14893	+++++					AVRG		0.14004		3.56145
40 Methacrylonitrile	0.24963	0.22678	0.21065	0.22890	0.23535	0.24087					
	0.23039	+++++					AVRG		0.23180		5.27167
41 Chloroform	0.74775	0.77887	0.82572	0.78772	0.78034	0.77383					
	0.81096	+++++					AVRG		0.78646		3.24006

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
42 Cyclohexane	0.66345	0.64389	0.63890	0.66407	0.64404	0.63011					
	0.64678	+++++					AVRG		0.64732		1.92383
43 1,1,1-Trichloroethane	0.54517	0.62302	0.63779	0.62522	0.62893	0.61320					
	0.63805	+++++					AVRG		0.61591		5.25541
44 Carbon tetrachloride	0.56294	0.58644	0.63641	0.63628	0.63185	0.62091					
	0.64429	+++++					AVRG		0.61702		4.94513
45 1,1-Dichloropropene	0.55100	0.55607	0.56975	0.55980	0.55465	0.55195					
	0.58405	+++++					AVRG		0.56104		2.12886
46 Isobutyl alcohol	0.01033	0.01111	0.01036	0.01037	0.00985	0.01223					
	0.01175	+++++					AVRG		0.01086		7.98726
47 Benzene	36755	49089	122794	236505	464924	1202457					
	2698240	23667					LINR	0.00708	1.40915		0.99937
49 Methyl tert-amyl ether	+++++	0.88273	0.85934	0.84815	0.87620	0.96177					
	1.02973	+++++					AVRG		0.90966		7.81864
50 Cyclohexene	0.53615	0.51960	0.53427	0.54352	0.53716	0.52183					
	0.54823	+++++					AVRG		0.53439		1.96596
51 1,2-Dichloroethane	0.63028	0.70033	0.72243	0.70806	0.70200	0.69617					
	0.69894	+++++					AVRG		0.69403		4.24176

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
53 n-Butyl alcohol	0.00840	0.00793	0.00871	0.00963	0.00810	0.00978					
	0.01083	+++++					AVRG		0.00905		11.70077
54 Trichloroethylene	0.38407	0.37942	0.39497	0.37726	0.38205	0.37012					
	0.39468	+++++					AVRG		0.38323		2.36495
55 Methylcyclohexane	0.61415	0.59438	0.58177	0.58292	0.58847	0.57365					
	0.60973	+++++					AVRG		0.59215		2.53004
56 Methyl methacrylate	0.21424	0.18730	0.18064	0.19254	0.19905	0.20650					
	0.20620	+++++					AVRG		0.19807		6.00920
57 1,2-Dichloropropane	0.39078	0.35768	0.35900	0.35500	0.35022	0.35218					
	0.37196	+++++					AVRG		0.36240		3.96417
58 1,4-Dioxane	0.00305	0.00245	0.00266	0.00286	0.00318	0.00288					
	0.00289	+++++					AVRG		0.00285		8.49653
59 Dibromomethane	0.20277	0.23410	0.23268	0.22085	0.21845	0.22248					
	0.23307	+++++					AVRG		0.22349		5.00707
60 Bromodichloromethane	0.51667	0.56051	0.62592	0.60782	0.59837	0.61544					
	0.63717	+++++					AVRG		0.59456		7.08632
61 2-Chloroethylvinyl ether	2224	2878	11313	21547	54379	210480					
	505362	+++++					LINR	0.39138	0.05430		0.99354

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
62 2-Nitropropane	0.10211	0.09608	0.09548	0.10761	0.11835	0.11732					
	0.11890	+++++					AVRG		0.10798		9.61347
63 cis-1,3-Dichloropropylene	0.56705	0.57716	0.62105	0.61985	0.62451	0.64527					
	0.67992	+++++					AVRG		0.61926		6.21448
64 4-Methyl-2-pentanone	0.15705	0.17262	0.17271	0.18512	0.18978	0.21108					
	0.20813	+++++					AVRG		0.18521		10.62391
66 Toluene	1.14017	1.06414	1.10843	1.06181	1.07135	1.08649					
	1.15420	+++++					AVRG		1.09808		3.39614
67 Ethyl methacrylate	0.52322	0.48434	0.48427	0.53223	0.51154	0.52546					
	0.51582	+++++					AVRG		0.51098		3.79655
68 trans-1,3-Dichloropropylene	0.69838	0.72713	0.78298	0.78308	0.78831	0.81706					
	0.87099	+++++					AVRG		0.78113		7.23969
69 1,1,2-Trichloroethane	0.31590	0.30169	0.29945	0.29278	0.30402	0.30261					
	0.32301	+++++					AVRG		0.30563		3.37461
70 Tetrachloroethylene	0.34151	0.33330	0.33889	0.32547	0.32471	0.32346					
	0.34458	+++++					AVRG		0.33313		2.62178
71 2-Hexanone	0.42866	0.44990	0.45866	0.46921	0.50138	0.56178					
	0.55722	+++++					AVRG		0.48954		10.73922

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
72 1,3-Dichloropropane	0.67890	0.68207	0.69734	0.65590	0.66618	0.66440					
	0.71069	+++++					AVRG		0.67935		2.85695
73 Dibromochloromethane	0.38469	0.38394	0.44512	0.43782	0.44944	0.47113					
	0.49706	+++++					AVRG		0.43846		9.55461
74 1,2-Dibromoethane	0.34045	0.34527	0.36316	0.35106	0.36203	0.36864					
	0.38538	+++++					AVRG		0.35943		4.26460
75 1-Chlorohexane	+++++	0.39312	0.39282	0.32524	0.40104	0.42060					
	0.43305	+++++					AVRG		0.39431		9.49684
77 Chlorobenzene	1.21373	1.15844	1.14111	1.07587	1.08040	1.10429					
	1.17692	+++++					AVRG		1.13582		4.54042
78 Ethylbenzene	2.40687	2.33669	2.47268	2.23463	2.29813	2.32214					
	2.46303	+++++					AVRG		2.36203		3.74714
79 1,1,1,2-Tetrachloroethane	0.42049	0.43141	0.45326	0.42496	0.43613	0.44494					
	0.47082	+++++					AVRG		0.44029		3.98243
80 m,p-Xylenes	0.80780	0.74989	0.79953	0.72779	0.75646	0.76931					
	0.84008	+++++					AVRG		0.77870		4.98818
81 o-Xylene	0.82120	0.69429	0.76774	0.71936	0.72965	0.75467					
	0.81606	+++++					AVRG		0.75757		6.33656

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
82 Styrene	1.30914	1.18192	1.31601	1.23212	1.27501	1.34034					
	1.43319	+++++					AVRG		1.29825		6.19894
83 Bromoform	0.42221	0.45244	0.46276	0.49988	0.51775	0.53547					
	0.59142	+++++					AVRG		0.49742		11.48565
84 Isopropylbenzene	3.92962	3.81106	4.36021	3.96245	4.03248	4.02489					
	4.35218	+++++					AVRG		4.06756		5.17225
85 cis-1,4-Dichloro-2-butene	0.30225	0.29462	0.29877	0.29084	0.32781	0.32850					
	0.31209	+++++					AVRG		0.30784		4.99910
86 Cyclohexanone	12846	23538	58910	150579	381845	+++++					
	+++++	+++++					LINR	0.49988	0.04909		0.99135
88 1,1,2,2-Tetrachloroethane	0.75610	0.74369	0.81649	0.79419	0.78783	0.79158					
	0.86202	+++++					AVRG		0.79313		4.92083
89 n-Propylbenzene	4.79404	4.78851	5.23968	4.82134	4.89570	4.92964					
	5.21295	+++++					AVRG		4.95455		3.89310
90 trans-1,4-Dichloro-2-butene	0.29812	0.31352	0.28782	0.26998	0.31695	0.31835					
	0.29727	+++++					AVRG		0.30029		5.87400
91 Bromobenzene	0.85156	0.84147	0.85882	0.81020	0.81428	0.82700					
	0.88455	+++++					AVRG		0.84113		3.13962

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
92 1,2,3-Trichloropropane	0.28022	0.26897	0.25372	0.25204	0.25423	0.25360					
	0.26290	+++++					AVRG		0.26081		4.05222
93 1,3,5-Trimethylbenzene	3.43446	3.49218	3.68233	3.44662	3.56449	3.59826					
	3.86366	+++++					AVRG		3.58314		4.23441
94 2-Chlorotoluene	3.47821	3.57761	3.79930	3.46640	3.52829	3.52154					
	3.75641	+++++					AVRG		3.58968		3.73608
95 4-Chlorotoluene	3.35203	3.17426	3.34752	3.10435	3.16879	3.17490					
	3.33681	+++++					AVRG		3.23695		3.22666
96 tert-Butylbenzene	2.87089	2.74977	2.84522	2.66297	2.72776	2.70387					
	2.96377	+++++					AVRG		2.78918		3.84009
97 1,2,4-Trimethylbenzene	3.70191	3.60410	3.79540	3.52090	3.56225	3.61987					
	3.87066	+++++					AVRG		3.66787		3.47854
98 Pentachloroethane	0.32060	0.31703	0.32398	0.24876	0.30297	0.37777					
	0.29193	+++++					AVRG		0.31186		12.45420
99 sec-Butylbenzene	4.44800	4.34644	4.60966	4.23567	4.42485	4.37976					
	4.71803	+++++					AVRG		4.45177		3.66291
100 4-Isopropyltoluene	3.36328	3.22054	3.51684	3.17589	3.32966	3.36325					
	3.58839	+++++					AVRG		3.36541		4.38795

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
101 1,3-Dichlorobenzene	1.67374	1.55428	1.66831	1.53164	1.55944	1.58328					
	1.67251	+++++					AVRG		1.60617		3.91971
103 1,4-Dichlorobenzene	1.76616	1.66887	1.68200	1.51979	1.57239	1.60865					
	1.70636	+++++					AVRG		1.64632		5.12085
104 Benzyl chloride	1.62969	1.55776	1.60390	1.34298	1.74375	1.69429					
	1.59116	+++++					AVRG		1.59479		8.02116
105 n-Butylbenzene	3.64538	3.69207	3.98159	3.55254	3.74217	3.76878					
	3.99375	+++++					AVRG		3.76804		4.39399
106 1,2-Dichlorobenzene	1.66043	1.49940	1.55636	1.46965	1.48387	1.49852					
	1.59506	+++++					AVRG		1.53761		4.53951
107 bis(2-Chloroisopropyl)ether	0.37106	0.36662	0.32099	0.32780	0.38946	0.39192					
	0.35359	+++++					AVRG		0.36021		7.73065
108 1,2-Dibromo-3-chloropropane	0.14172	0.13191	0.14045	0.15188	0.15917	0.15194					
	0.18132	+++++					AVRG		0.15120		10.62761
109 1,2,4-Trichlorobenzene	1.16045	1.14150	1.16560	1.09295	1.12242	1.11980					
	1.19388	+++++					AVRG		1.14237		2.96215
110 Hexachlorobutadiene	0.84192	0.81403	0.87311	0.75366	0.80851	0.77001					
	0.79946	+++++					AVRG		0.80867		5.02104

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
111 Naphthalene	2.12943	2.03059	1.99480	2.09592	2.16328	2.08234					
	2.33666	+++++					AVRG		2.11900		5.26088
112 1,2,3-Trichlorobenzene	0.93318	0.98133	0.98253	0.97572	0.96237	0.91436					
	0.97897	+++++					AVRG		0.96121		2.80674
$ 48 1,2-Dichloroethane-d4	0.52359	0.62803	0.63025	0.66045	0.64311	0.65420					
	0.60778	+++++					AVRG		0.62106		7.47894
$ 65 Toluene-d8	1.93610	2.03435	2.05225	2.06640	2.00752	2.08350					
	2.06482	+++++					AVRG		2.03499		2.46206
$ 87 Bromofluorobenzene	1.60564	1.67611	1.67667	1.73493	1.66503	1.69222					
	1.70106	+++++					AVRG		1.67881		2.35521

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
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Integrator : HP RTE
Method file : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Cal Date : 03-Dec-2009 15:05 ron01469

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Report Date: 01-Dec-2009 16:53

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.78659	0.78659	0.050	1.93501	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34829	0.34829	0.050	1.72438	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.76082	0.76082	0.050	-2.73046	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.28961	0.28961	0.050	-13.25713	30.00000	Averaged	
	6 Chloromethane	0.41309	0.34567	0.34567	0.100	-16.32056	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.30586	0.30586	0.050	-17.08914	20.00000	Averaged	ccc
	9 Bromomethane	0.22174	0.21949	0.21949	0.050	-1.01260	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24501	0.24501	0.050	7.27015	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.53920	0.53920	0.050	3.81924	30.00000	Averaged	
	12 Ethyl Ether	45.83993	50.00000	0.28952	0.010	-8.32014	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19861	0.19861	0.000	-31.55015	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03488	0.03488	0.010	-2.28372	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.66262	0.66262	0.050	-7.39264	20.00000	Averaged	ccc
	21 Methyl acetate	0.24838	0.21471	0.21471	0.010	-13.55590	40.00000	Averaged	
	18 Iodomethane	0.46290	0.47705	0.47705	0.050	3.05775	30.00000	Averaged	
	23 Methylene chloride	49.69453	50.00000	0.35951	0.000	-0.61094	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.06038	1.06038	0.050	15.07243	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.01424	1.01424	0.050	-10.90101	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.34226	0.34226	0.050	2.98628	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.66089	0.66089	0.010	19.91591	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.68036	0.68036	0.100	-7.89939	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.21356	0.21356	0.030	-24.88572	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.35432	0.35432	0.050	0.53641	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52117	0.52117	0.050	-3.41129	30.00000	Averaged	
	41 Chloroform	0.78646	0.70224	0.70224	0.010	-10.70855	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.14700	0.14700	0.010	4.97038	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.56828	0.56828	0.010	-7.73277	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.70592	0.70592	0.010	9.05253	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55571	0.55571	0.010	-0.95042	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00962	0.00962	0.001	6.25892	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.57859	0.57859	0.010	-6.22742	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62106	0.48336	0.48336	0.010	-22.17142	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.55944	0.55944	0.010	-19.39207	30.00000	Averaged	
	47 Benzene	50.28606	50.00000	1.40724	0.010	0.57211	30.00000	Linear	
	50 Cyclohexene	0.53439	0.52276	0.52276	0.010	-2.17678	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
54 Trichloroethylene	0.38323	0.37928	0.37928	0.010	-1.03062	30.00000	Averaged	
57 1,2-Dichloropropane	0.36240	0.35751	0.35751	0.010	-1.35037	20.00000	Averaged	ccc
55 Methylcyclohexane	0.59215	0.64311	0.64311	0.010	8.60482	30.00000	Averaged	
60 Bromodichloromethane	0.59456	0.53560	0.53560	0.010	-9.91614	30.00000	Averaged	
59 Dibromomethane	0.22349	0.20094	0.20094	0.010	-10.08947	30.00000	Averaged	
61 2-Chloroethylvinyl ether	197	250	0.03848	0.000	-21.31056	30.00000	Linear	
64 4-Methyl-2-pentanone	0.18521	0.16731	0.16731	0.010	-9.66493	40.00000	Averaged	
63 cis-1,3-Dichloropropylene	0.61926	0.60977	0.60977	0.010	-1.53290	30.00000	Averaged	
$ 65 Toluene-d8	2.03499	1.97166	1.97166	0.010	-3.11196	30.00000	Averaged	
66 Toluene	1.09808	1.09311	1.09311	0.010	-0.45345	20.00000	Averaged	ccc
68 trans-1,3-Dichloropropylene	0.78113	0.75103	0.75103	0.010	-3.85367	30.00000	Averaged	
69 1,1,2-Trichloroethane	0.30563	0.29722	0.29722	0.010	-2.75287	30.00000	Averaged	
71 2-Hexanone	0.48954	0.37565	0.37565	0.010	-23.26575	40.00000	Averaged	
72 1,3-Dichloropropane	0.67935	0.63720	0.63720	0.010	-6.20551	30.00000	Averaged	
70 Tetrachloroethylene	0.33313	0.34435	0.34435	0.010	3.36940	30.00000	Averaged	
73 Dibromochloromethane	0.43846	0.42649	0.42649	0.010	-2.73068	30.00000	Averaged	
74 1,2-Dibromoethane	0.35943	0.35320	0.35320	0.010	-1.73152	30.00000	Averaged	
77 Chlorobenzene	1.13582	1.16153	1.16153	0.300	2.26365	30.00000	Averaged	spcc
79 1,1,1,2-Tetrachloroethane	0.44029	0.42501	0.42501	0.010	-3.47076	30.00000	Averaged	
78 Ethylbenzene	2.36203	2.28751	2.28751	0.010	-3.15483	20.00000	Averaged	ccc
80 m,p-Xylenes	0.77870	0.80163	0.80163	0.010	2.94558	30.00000	Averaged	
81 o-Xylene	0.75757	0.75650	0.75650	0.010	-0.14143	30.00000	Averaged	
82 Styrene	1.29825	1.33826	1.33826	0.010	3.08236	30.00000	Averaged	
83 Bromoform	0.49742	0.51659	0.51659	0.100	3.85450	30.00000	Averaged	spcc
84 Isopropylbenzene	4.06756	4.09104	4.09104	0.010	0.57739	30.00000	Averaged	
88 1,1,2,2-Tetrachloroethane	0.79313	0.80201	0.80201	0.300	1.11984	30.00000	Averaged	spcc
$ 87 Bromofluorobenzene	1.67881	1.59852	1.59852	0.010	-4.78243	30.00000	Averaged	
92 1,2,3-Trichloropropane	0.26081	0.22267	0.22267	0.010	-14.62239	30.00000	Averaged	
91 Bromobenzene	0.84113	0.86234	0.86234	0.010	2.52236	30.00000	Averaged	
89 n-Propylbenzene	4.95455	4.95567	4.95567	0.010	0.02259	30.00000	Averaged	
94 2-Chlorotoluene	3.58968	3.47589	3.47589	0.010	-3.16985	30.00000	Averaged	
93 1,3,5-Trimethylbenzene	3.58314	3.53161	3.53161	0.010	-1.43822	30.00000	Averaged	
95 4-Chlorotoluene	3.23695	3.13706	3.13706	0.010	-3.08595	30.00000	Averaged	
96 tert-Butylbenzene	2.78918	2.83816	2.83816	0.010	1.75609	30.00000	Averaged	
97 1,2,4-Trimethylbenzene	3.66787	3.59991	3.59991	0.010	-1.85290	30.00000	Averaged	
99 sec-Butylbenzene	4.45177	4.49320	4.49320	0.010	0.93061	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.51635	3.51635	0.010	4.48521	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.71300	1.71300	0.010	6.65131	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.70171	1.70171	0.010	3.36466	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.75570	3.75570	0.010	-0.32761	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.59378	1.59378	0.010	3.65299	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.16033	0.16033	0.010	6.03864	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20851	1.20851	0.010	5.78950	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.82340	0.82340	0.010	1.82157	30.00000	Averaged
111 Naphthalene	2.11900	2.27355	2.27355	0.010	7.29312	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.98434	0.98434	0.010	2.40643	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.36236
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111609v1/1m108ICV.d
Lab Smp Id: W1VM091116-05 Client Smp ID: ICV
Inj Date : 16-NOV-2009 14:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091116-05|CCV/LCS/ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m
Meth Date : 01-Dec-2009 16:53 slg Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2088100	150.000	153
M 2 1,2-Dichloroethylene (total)	96				778988	100.000	102
M 3 1,3-Dichloropropylene	75				1346471	100.000	97.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	323873	50.0000	43.4
6 Chloromethane	50	5.550	5.550	(0.405)	386561	50.0000	41.8
7 Vinyl chloride	62	5.923	5.923	(0.433)	342039	50.0000	41.4
9 Bromomethane	96	6.948	6.948	(0.508)	245458	50.0000	49.5
10 Chloroethane	64	7.215	7.215	(0.527)	273997	50.0000	53.6
11 Trichlorofluoromethane	101	7.836	7.836	(0.573)	602979	50.0000	51.9
12 Ethyl Ether	59	8.476	8.476	(0.619)	323763	50.0000	45.8
16 Acetone	43	9.254	9.254	(0.676)	1110521	250.000	171
22 Acetonitrile	41	9.976	9.976	(0.729)	975078	1250.00	1220
15 1,1-Dichloroethylene	61	9.093	9.093	(0.664)	741002	50.0000	46.3
21 Methyl acetate	43	9.838	9.838	(0.719)	1200537	250.000	216
18 Iodomethane	142	9.470	9.470	(0.692)	2667438	250.000	258

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
23 Methylene chloride	84	10.137	10.137	(0.741)	402034	50.0000	49.7
19 Carbon disulfide	76	9.571	9.571	(0.699)	5929090	250.000	288
25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1134219	50.0000	44.5
26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	382752	50.0000	51.5
29 Vinyl acetate	43	11.297	11.297	(0.825)	3695328	250.000	300
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	760846	50.0000	46.0
35 2-Butanone	43	12.186	12.186	(0.890)	1194107	250.000	188
36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	396236	50.0000	50.3
33 2,2-Dichloropropane	77	12.158	12.158	(0.888)	582817	50.0000	48.3
41 Chloroform	83	12.614	12.614	(0.922)	785308	50.0000	44.6
39 Bromochloromethane	128	12.559	12.559	(0.918)	164387	50.0000	52.5
43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	635509	50.0000	46.1
42 Cyclohexane	56	12.839	12.839	(0.938)	789422	50.0000	54.5
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	621443	50.0000	49.5
53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1075626	5000.00	5310
44 Carbon tetrachloride	117	13.024	13.024	(0.952)	647037	50.0000	46.9
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	540540	50.0000	38.9
51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	625621	50.0000	40.3
47 Benzene	78	13.337	13.337	(0.974)	1573713	50.0000	50.3
50 Cyclohexene	54	13.396	13.396	(0.979)	584602	50.0000	48.9
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1118294	50.0000	
54 Trichloroethylene	95	14.119	14.119	(1.032)	424142	50.0000	49.5
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	399800	50.0000	49.3
55 Methylcyclohexane	83	14.285	14.285	(1.044)	719182	50.0000	54.3
60 Bromodichloromethane	83	14.754	14.754	(1.078)	598959	50.0000	45.0
59 Dibromomethane	93	14.621	14.621	(1.068)	224707	50.0000	45.0
61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	215138	250.000	197
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	740258	250.000	226
63 cis-1,3-Dichloropropylene	75	15.261	15.261	(1.115)	681900	50.0000	49.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1744680	50.0000	48.4
66 Toluene	92	15.597	15.597	(0.909)	967265	50.0000	49.8
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	664571	50.0000	48.1
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	263004	50.0000	48.6
71 2-Hexanone	43	16.269	16.269	(0.948)	1662015	250.000	192
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	563840	50.0000	46.9
70 Tetrachloroethylene	164	16.195	16.195	(0.944)	304712	50.0000	51.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	377389	50.0000	48.6
74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	312543	50.0000	49.1
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	884878	50.0000	
77 Chlorobenzene	112	17.194	17.194	(1.002)	1027816	50.0000	51.1
79 1,1,1,2-Tetrachloroethane	131	17.263	17.263	(1.006)	376079	50.0000	48.3
78 Ethylbenzene	91	17.222	17.222	(1.003)	2024165	50.0000	48.4
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1418694	100.000	103
81 o-Xylene	106	17.783	17.783	(1.036)	669406	50.0000	49.9
82 Styrene	104	17.806	17.806	(1.038)	1184200	50.0000	51.5
83 Bromoform	173	18.105	18.105	(0.923)	253734	50.0000	51.9
84 Isopropylbenzene	105	18.133	18.133	(0.924)	2009401	50.0000	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.510	18.510	(0.944)	393924	50.0000	50.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	785147	50.0000	47.6
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	109371	50.0000	42.7
91 Bromobenzene	156	18.593	18.593	(0.948)	423557	50.0000	51.3
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2434081	50.0000	50.0
94 2-Chlorotoluene	91	18.745	18.745	(0.956)	1707258	50.0000	48.4
93 1,3,5-Trimethylbenzene	105	18.722	18.722	(0.954)	1734624	50.0000	49.3
95 4-Chlorotoluene	91	18.856	18.856	(0.961)	1540833	50.0000	48.4
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1394021	50.0000	50.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1768170	50.0000	49.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2206931	50.0000	50.5
100 4-Isopropyltoluene	119	19.426	19.426	(0.990)	1727131	50.0000	52.2
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.996)	841377	50.0000	53.3
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.615	(1.000)	491171	50.0000	
103 1,4-Dichlorobenzene	146	19.643	19.643	(1.001)	835831	50.0000	51.7
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1844689	50.0000	49.8
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	782819	50.0000	51.8
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78748	50.0000	53.0
109 1,2,4-Trichlorobenzene	180	22.027	22.027	(1.123)	593584	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	404431	50.0000	50.9
111 Naphthalene	128	22.441	22.441	(1.144)	1116700	50.0000	53.6
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	483479	50.0000	51.2

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Date : 16-NOV-2009 14:01
Client ID: ICV
Sample Info: IW1VH091116-05ICCV/LCS/ICV11VOAF11I
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

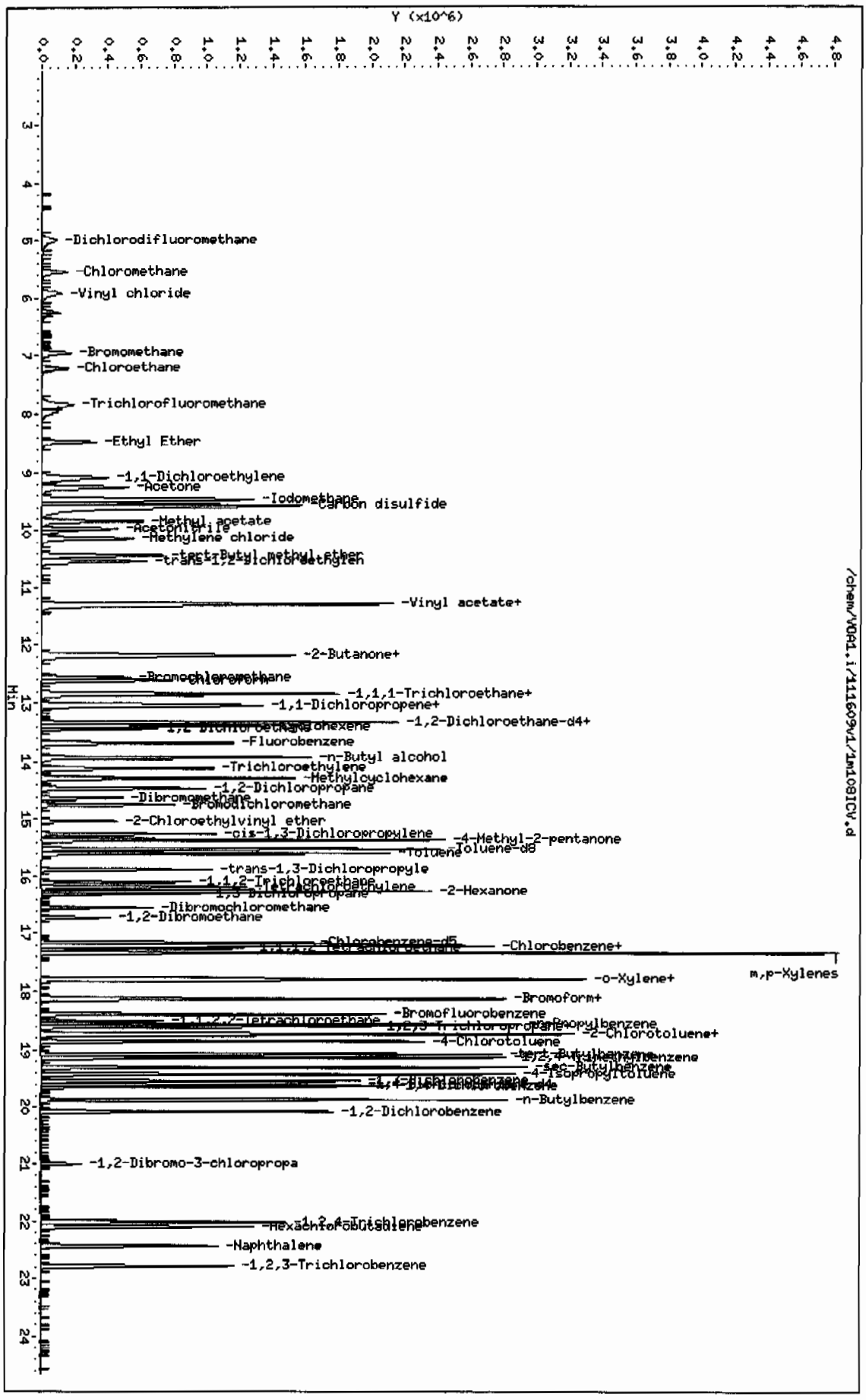

/chem/VOA1.i/111609v1/1m108ICV.d

Page 1

Data File: /chem/VOA1.i/120309v1/1o404.d
Report Date: 03-Dec-2009 15:05

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 03-DEC-2009 10:11
Lab File ID: 1o404.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091203-03 Quant Type: ISTD
Method: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.85467	0.85467	0.050	10.75866	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.39831	0.39831	0.050	16.33372	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.76670	0.76670	0.050	-1.97867	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.34588	0.34588	0.050	3.59618	30.00000	Averaged	
	6 Chloromethane	0.41309	0.41168	0.41168	0.100	-0.33984	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.37611	0.37611	0.050	1.95348	20.00000	Averaged	ccc
	9 Bromomethane	0.22174	0.27341	0.27341	0.050	23.30301	30.00000	Averaged	
	10 Chloroethane	0.22841	0.28884	0.28884	0.050	26.45778	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.62256	0.62256	0.050	19.87009	30.00000	Averaged	
	12 Ethyl Ether	49.09385	50.00000	0.30969	0.010	-1.81230	30.00000	Wt Linear	
	16 Acetone	0.29015	0.22291	0.22291	0.000	-23.17672	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03962	0.03962	0.010	11.01026	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.72704	0.72704	0.050	1.61030	20.00000	Averaged	ccc
	21 Methyl acetate	0.24838	0.23298	0.23298	0.010	-6.20131	40.00000	Averaged	
	18 Iodomethane	0.46290	0.55782	0.55782	0.050	20.50595	30.00000	Averaged	
	23 Methylene chloride	55.97463	50.00000	0.40357	0.000	11.94927	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.18714	1.18714	0.050	28.82779	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.08107	1.08107	0.050	-5.02995	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.39162	0.39162	0.050	17.83788	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.71177	0.71177	0.010	29.14873	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.74899	0.74899	0.100	1.39064	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.23622	0.23622	0.030	-16.91573	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.40501	0.40501	0.050	14.91759	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.56448	0.56448	0.050	4.61535	30.00000	Averaged	
	41 Chloroform	0.78646	0.77105	0.77105	0.010	-1.95890	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.16908	0.16908	0.010	20.73711	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.62330	0.62330	0.010	1.19951	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.75868	0.75868	0.010	17.20379	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.61093	0.61093	0.010	8.89208	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.01095	0.01095	0.001	20.98801	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.65202	0.65202	0.010	5.67284	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62106	0.59453	0.59453	0.010	-4.27223	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.57027	0.57027	0.010	-17.83161	30.00000	Averaged	
	47 Benzene	55.26553	50.00000	1.54758	0.010	10.53107	30.00000	Linear	
	50 Cyclohexene	0.53439	0.56109	0.56109	0.010	4.99587	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1o404.d
Analysis Type: WATER
Lab Sample ID: W1VM091203-03
Method: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m

Injection Date: 03-DEC-2009 10:11
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.43001	0.43001	0.010	12.20902	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.37833	0.37833	0.010	4.39589	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.72646	0.72646	0.010	22.68155	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.58406	0.58406	0.010	-1.76533	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.22910	0.22910	0.010	2.51043	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	238	250	0.04748	0.000	-4.72224	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.17204	0.17204	0.010	-7.11502	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.67420	0.67420	0.010	8.87191	30.00000	Averaged	
$	65 Toluene-d8	2.03499	2.07455	2.07455	0.010	1.94410	30.00000	Averaged	
	66 Toluene	1.09808	1.18296	1.18296	0.010	7.72953	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.75158	0.75158	0.010	-3.78280	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.31145	0.31145	0.010	1.90419	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.37477	0.37477	0.010	-23.44455	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.64608	0.64608	0.010	-4.89728	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.39744	0.39744	0.010	19.30332	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.45325	0.45325	0.010	3.37389	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.37908	0.37908	0.010	5.46707	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.24739	1.24739	0.300	9.82214	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.44843	0.44843	0.010	1.84822	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.39927	2.39927	0.010	1.57670	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.86247	0.86247	0.010	10.75845	30.00000	Averaged	
	81 o-Xylene	0.75757	0.83908	0.83908	0.010	10.76024	30.00000	Averaged	
	82 Styrene	1.29825	1.44467	1.44467	0.010	11.27878	30.00000	Averaged	
	83 Bromoform	0.49742	0.54926	0.54926	0.100	10.42225	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	4.32240	4.32240	0.010	6.26523	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.85696	0.85696	0.300	8.04825	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.51562	1.51562	0.010	-9.72076	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.24669	0.24669	0.010	-5.41299	30.00000	Averaged	
	91 Bromobenzene	0.84113	0.94245	0.94245	0.010	12.04601	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	5.16161	5.16161	0.010	4.17918	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.56730	3.56730	0.010	-0.62360	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.70598	3.70598	0.010	3.42812	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.25188	3.25188	0.010	0.46123	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.98594	2.98594	0.010	7.05465	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.73402	3.73402	0.010	1.80354	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.80755	4.80755	0.010	7.99188	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1o404.d
Analysis Type: WATER
Lab Sample ID: W1VM091203-03
Method: /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m

Injection Date: 03-DEC-2009 10:11
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.71284	3.71284	0.010	10.32359	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.81966	1.81966	0.010	13.29180	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.84531	1.84531	0.010	12.08723	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.92666	3.92666	0.010	4.20968	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.69903	1.69903	0.010	10.49791	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.17567	0.17567	0.010	16.18659	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.33685	1.33685	0.010	17.02427	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.84326	0.84326	0.010	4.27767	30.00000	Averaged
111 Naphthalene	2.11900	2.45813	2.45813	0.010	16.00412	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	1.15407	1.15407	0.010	20.06420	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.84459
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o404.d
Lab Smp Id: W1VM091203-03 Client Smp ID: VSTD050
Inj Date : 03-DEC-2009 10:11
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091203-03|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091129-01A/IVM091130-01
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2323824	150.000	166
M 2 1,2-Dichloroethylene (total)	96				837249	100.000	116
M 3 1,3-Dichloropropylene	75				1389755	100.000	102
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	363519	50.0000	51.8
6 Chloromethane	50	5.535	5.535	(0.405)	432677	50.0000	49.8
7 Vinyl chloride	62	5.908	5.908	(0.432)	395284	50.0000	51.0
9 Bromomethane	96	6.934	6.934	(0.507)	287352	50.0000	61.6
10 Chloroethane	64	7.196	7.196	(0.526)	303568	50.0000	63.2
11 Trichlorofluoromethane	101	7.818	7.818	(0.572)	654302	50.0000	59.9
12 Ethyl Ether	59	8.462	8.462	(0.619)	325484	50.0000	49.1
16 Acetone	43	9.235	9.235	(0.675)	1171360	250.000	192
22 Acetonitrile	41	9.953	9.953	(0.728)	1041067	1250.00	1390
15 1,1-Dichloroethylene	61	9.065	9.065	(0.663)	764108	50.0000	50.8
21 Methyl acetate	43	9.815	9.815	(0.718)	1224279	250.000	234
18 Iodomethane	142	9.447	9.447	(0.691)	2931336	250.000	301

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
23 Methylene chloride	84	10.119	10.119	(0.740)	424151	50.0000	56.0
19 Carbon disulfide	76	9.562	9.562	(0.699)	6238351	250.000	322
25 tert-Butyl methyl ether	73	10.423	10.423	(0.762)	1136198	50.0000	47.5
26 trans-1,2-Dichloroethylene	96	10.529	10.529	(0.770)	411591	50.0000	58.9
29 Vinyl acetate	43	11.279	11.279	(0.825)	3740329	250.000	323
30 1,1-Dichloroethane	63	11.307	11.307	(0.827)	787182	50.0000	50.7
35 2-Butanone	43	12.167	12.167	(0.890)	1241318	250.000	208
36 cis-1,2-Dichloroethylene	96	12.186	12.186	(0.891)	425657	50.0000	57.4
33 2,2-Dichloropropane	77	12.144	12.144	(0.888)	593259	50.0000	52.3
41 Chloroform	83	12.595	12.595	(0.921)	810367	50.0000	49.0
39 Bromochloromethane	128	12.545	12.545	(0.918)	177698	50.0000	60.4
43 1,1,1-Trichloroethane	97	12.830	12.830	(0.938)	655082	50.0000	50.6
42 Cyclohexane	56	12.830	12.830	(0.938)	797367	50.0000	58.6
45 1,1-Dichloropropene	75	13.037	13.037	(0.954)	642078	50.0000	54.4
53 n-Butyl alcohol	56	13.921	13.921	(1.018)	1151017	5000.00	6050
44 Carbon tetrachloride	117	13.010	13.010	(0.952)	685267	50.0000	52.8
$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	624841	50.0000	47.9
51 1,2-Dichloroethane	62	13.424	13.424	(0.982)	599351	50.0000	41.1
47 Benzene	78	13.318	13.318	(0.974)	1626496	50.0000	55.3
50 Cyclohexene	54	13.378	13.378	(0.978)	589703	50.0000	52.5
* 52 Fluorobenzene	96	13.673	13.673	(1.000)	1050992	50.0000	
54 Trichloroethylene	95	14.105	14.105	(1.032)	451940	50.0000	56.1
57 1,2-Dichloropropane	63	14.446	14.446	(1.057)	397625	50.0000	52.2
55 Methylcyclohexane	83	14.271	14.271	(1.044)	763506	50.0000	61.3
60 Bromodichloromethane	83	14.740	14.740	(1.078)	613844	50.0000	49.1
59 Dibromomethane	93	14.616	14.616	(1.069)	240778	50.0000	51.2
61 2-Chloroethylvinyl ether	63	15.021	15.021	(1.099)	249521	250.000	238
64 4-Methyl-2-pentanone	58	15.353	15.353	(0.895)	779596	250.000	232
63 cis-1,3-Dichloropropylene	75	15.247	15.247	(1.115)	708580	50.0000	54.4
$ 65 Toluene-d8	98	15.514	15.514	(0.904)	1880206	50.0000	51.0
66 Toluene	92	15.587	15.587	(0.909)	1072140	50.0000	53.9
68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	681175	50.0000	48.1
69 1,1,2-Trichloroethane	83	16.094	16.094	(0.938)	282276	50.0000	51.0
71 2-Hexanone	43	16.264	16.264	(0.948)	1698320	250.000	191
72 1,3-Dichloropropane	76	16.301	16.301	(0.950)	585557	50.0000	47.6
70 Tetrachloroethylene	164	16.181	16.181	(0.943)	360203	50.0000	59.6
73 Dibromochloromethane	129	16.540	16.540	(0.964)	410791	50.0000	51.7
74 1,2-Dibromoethane	107	16.720	16.720	(0.975)	343565	50.0000	52.7
* 76 Chlorobenzene-d5	117	17.152	17.152	(1.000)	906319	50.0000	
77 Chlorobenzene	112	17.185	17.185	(1.002)	1130528	50.0000	54.9
79 1,1,1,2-Tetrachloroethane	131	17.254	17.254	(1.006)	406416	50.0000	50.9
78 Ethylbenzene	91	17.212	17.212	(1.003)	2174501	50.0000	50.8
80 m,p-Xylenes	106	17.332	17.332	(1.010)	1563347	100.000	111
81 o-Xylene	106	17.779	17.779	(1.036)	760476	50.0000	55.4
82 Styrene	104	17.797	17.797	(1.038)	1309335	50.0000	55.6
83 Bromoform	173	18.101	18.101	(0.923)	279011	50.0000	55.2
84 Isopropylbenzene	105	18.124	18.124	(0.924)	2195679	50.0000	53.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.501	18.501	(0.944)	435316	50.0000	54.0
$ 87 Bromofluorobenzene	95	18.381	18.381	(0.938)	769897	50.0000	45.1
92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	125314	50.0000	47.3
91 Bromobenzene	156	18.589	18.589	(0.948)	478741	50.0000	56.0
89 n-Propylbenzene	91	18.556	18.556	(0.946)	2621979	50.0000	52.1
94 2-Chlorotoluene	91	18.736	18.736	(0.956)	1812104	50.0000	49.7
93 1,3,5-Trimethylbenzene	105	18.713	18.713	(0.954)	1882551	50.0000	51.7
95 4-Chlorotoluene	91	18.851	18.851	(0.961)	1651880	50.0000	50.2
96 tert-Butylbenzene	119	19.072	19.072	(0.973)	1516791	50.0000	53.5
97 1,2,4-Trimethylbenzene	105	19.132	19.132	(0.976)	1896797	50.0000	50.9
99 sec-Butylbenzene	105	19.297	19.297	(0.984)	2442127	50.0000	54.0
100 4-Isopropyltoluene	119	19.417	19.417	(0.990)	1886037	50.0000	55.2
101 1,3-Dichlorobenzene	146	19.537	19.537	(0.996)	924345	50.0000	56.6
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	507977	50.0000	
103 1,4-Dichlorobenzene	146	19.634	19.634	(1.001)	937376	50.0000	56.0
105 n-Butylbenzene	91	19.864	19.864	(1.013)	1994654	50.0000	52.1
106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	863067	50.0000	55.2
108 1,2-Dibromo-3-chloropropane	157	20.996	20.996	(1.071)	89236	50.0000	58.1
109 1,2,4-Trichlorobenzene	180	22.018	22.018	(1.123)	679089	50.0000	58.5
110 Hexachlorobutadiene	225	22.101	22.101	(1.127)	428358	50.0000	52.1
111 Naphthalene	128	22.437	22.437	(1.144)	1248675	50.0000	58.0
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	586239	50.0000	60.0

Data File: /chem/VOA1.i/120309v1/1c404.d
Date : 03-DEC-2009 10:11
Client ID: VSTD050
Sample Info: IW1VH091203-03ICV/LCS11!VOAF11(
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

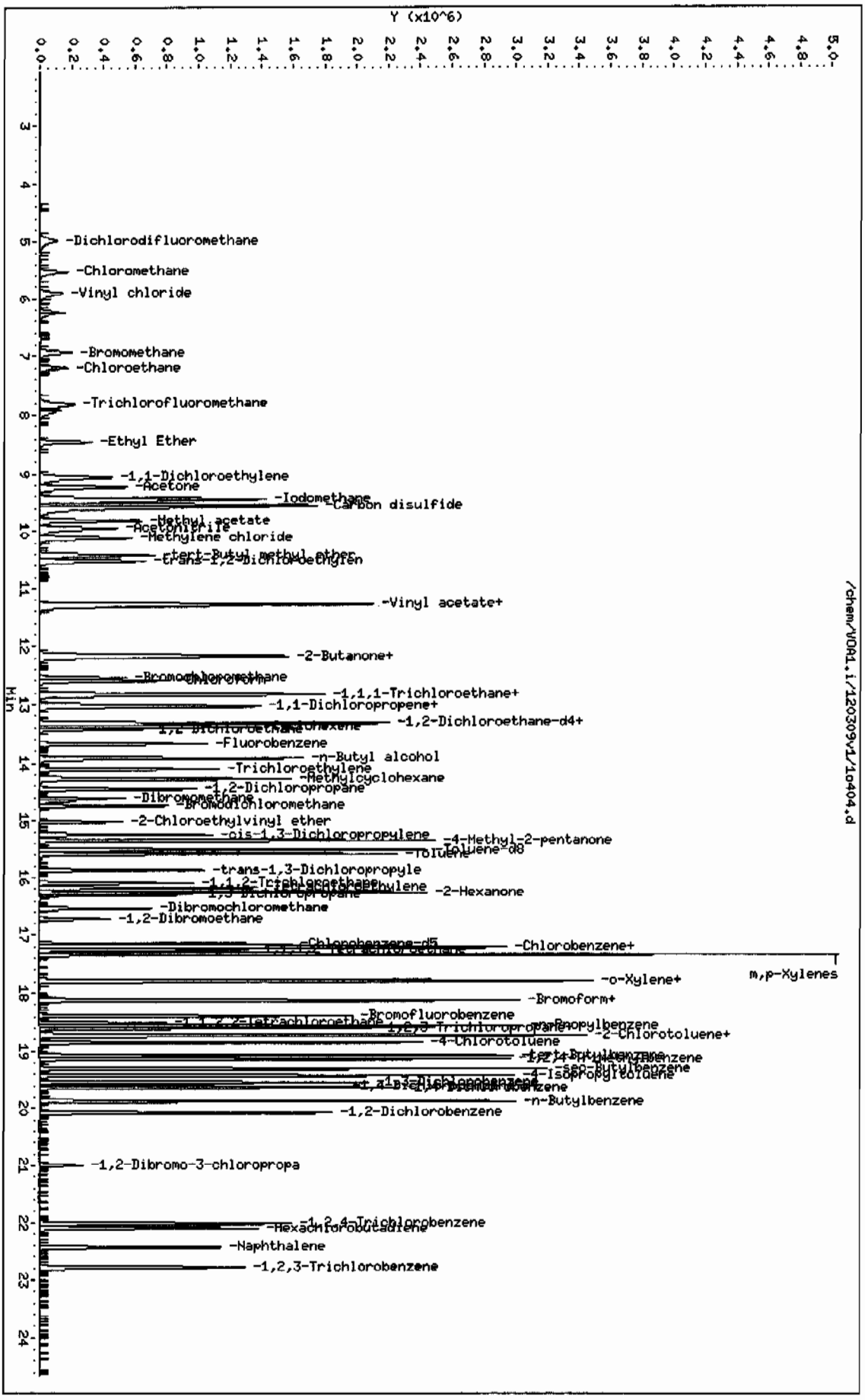

Page 1

QC Data

Data File: /chem/VOA1.i/111309v1/11507.d

Page 1

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

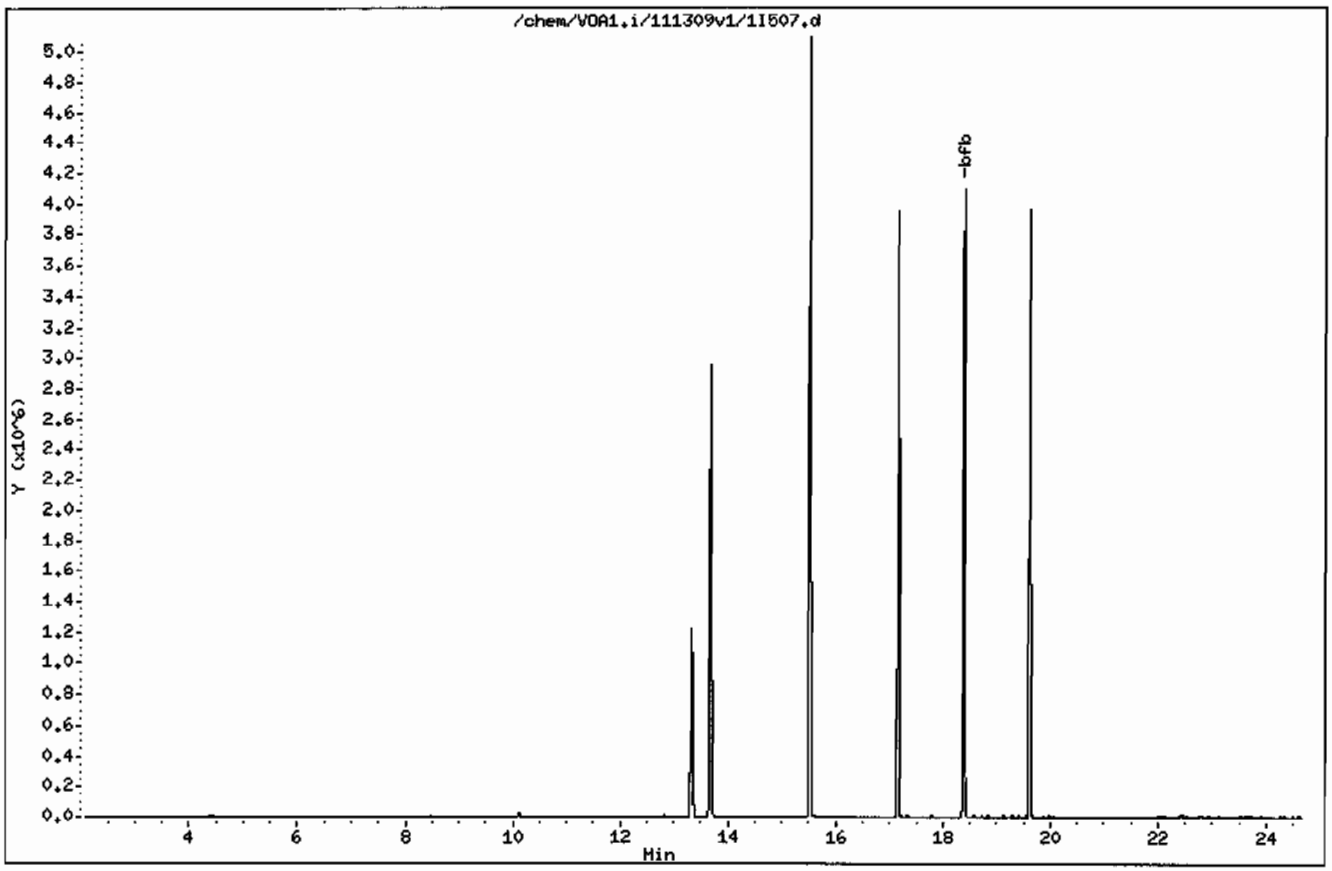

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

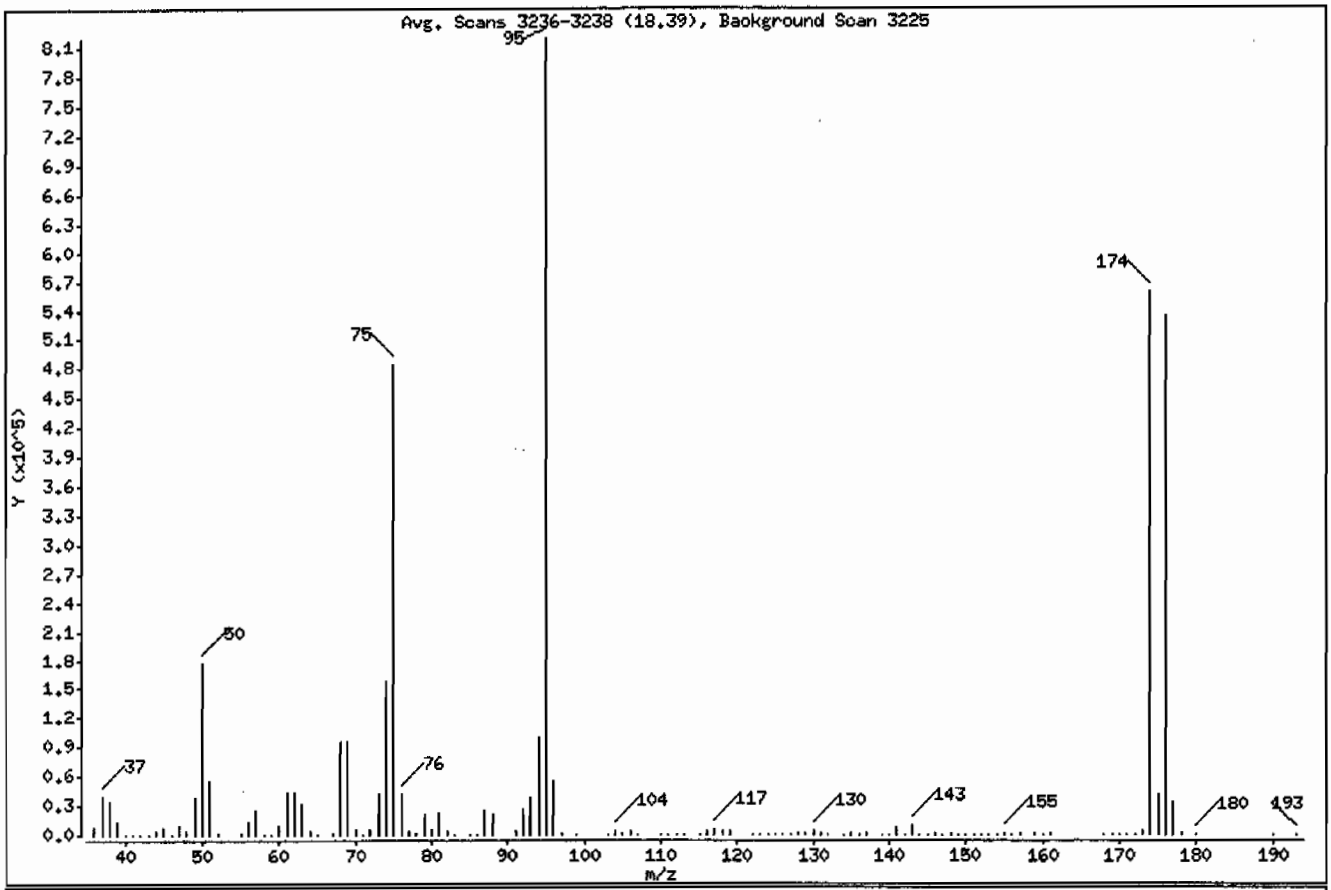

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.72
75	30.00 - 60.00% of mass 95	59.02
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.49 (0.72)
174	50.00 - 100.00% of mass 95	68.14
175	5.00 - 9.00% of mass 174	4.99 (7.33)
176	95.00 - 101.00% of mass 174	65.07 (95.50)
177	5.00 - 9.00% of mass 176	4.22 (6.48)

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 11507.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7225	70.00	6120	110.00	479	146.00	1188
37.00	39360	71.00	217	111.00	606	147.00	494
38.00	33392	72.00	5094	112.00	379	148.00	1977
39.00	13646	73.00	41472	113.00	584	149.00	463
40.00	251	74.00	158400	115.00	797	150.00	811
41.00	50	75.00	483904	116.00	2966	151.00	74
42.00	138	76.00	42152	117.00	5025	152.00	425
43.00	423	77.00	4070	118.00	2850	153.00	568
44.00	4049	78.00	2614	119.00	3829	154.00	504
45.00	7085	79.00	20536	122.00	323	155.00	1883
46.00	389	80.00	5933	123.00	301	156.00	430
47.00	8871	81.00	21704	124.00	508	157.00	1202
48.00	4657	82.00	3708	125.00	172	159.00	1015
49.00	37544	83.00	554	126.00	282	160.00	117
50.00	178048	85.00	50	127.00	21	161.00	1118
51.00	55256	86.00	546	128.00	2650	168.00	58
52.00	2192	87.00	24184	129.00	1544	169.00	60
55.00	2170	88.00	20208	130.00	3040	170.00	440
56.00	12658	91.00	3132	131.00	1311	171.00	182
57.00	24424	92.00	25640	132.00	121	172.00	596
58.00	905	93.00	38600	134.00	219	173.00	4037
59.00	131	94.00	99912	135.00	1394	174.00	558656
60.00	8890	95.00	819904	136.00	360	175.00	40952
61.00	42584	96.00	54800	137.00	1272	176.00	533504
62.00	42856	97.00	1967	139.00	373	177.00	34584
63.00	32200	99.00	52	140.00	657	178.00	987
64.00	3117	103.00	491	141.00	8405	180.00	56
65.00	197	104.00	3451	142.00	877	190.00	52
67.00	2068	105.00	1217	143.00	9022	193.00	80
68.00	94512	106.00	3389	144.00	613		
69.00	96344	107.00	757	145.00	540		

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Page 1

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VH091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

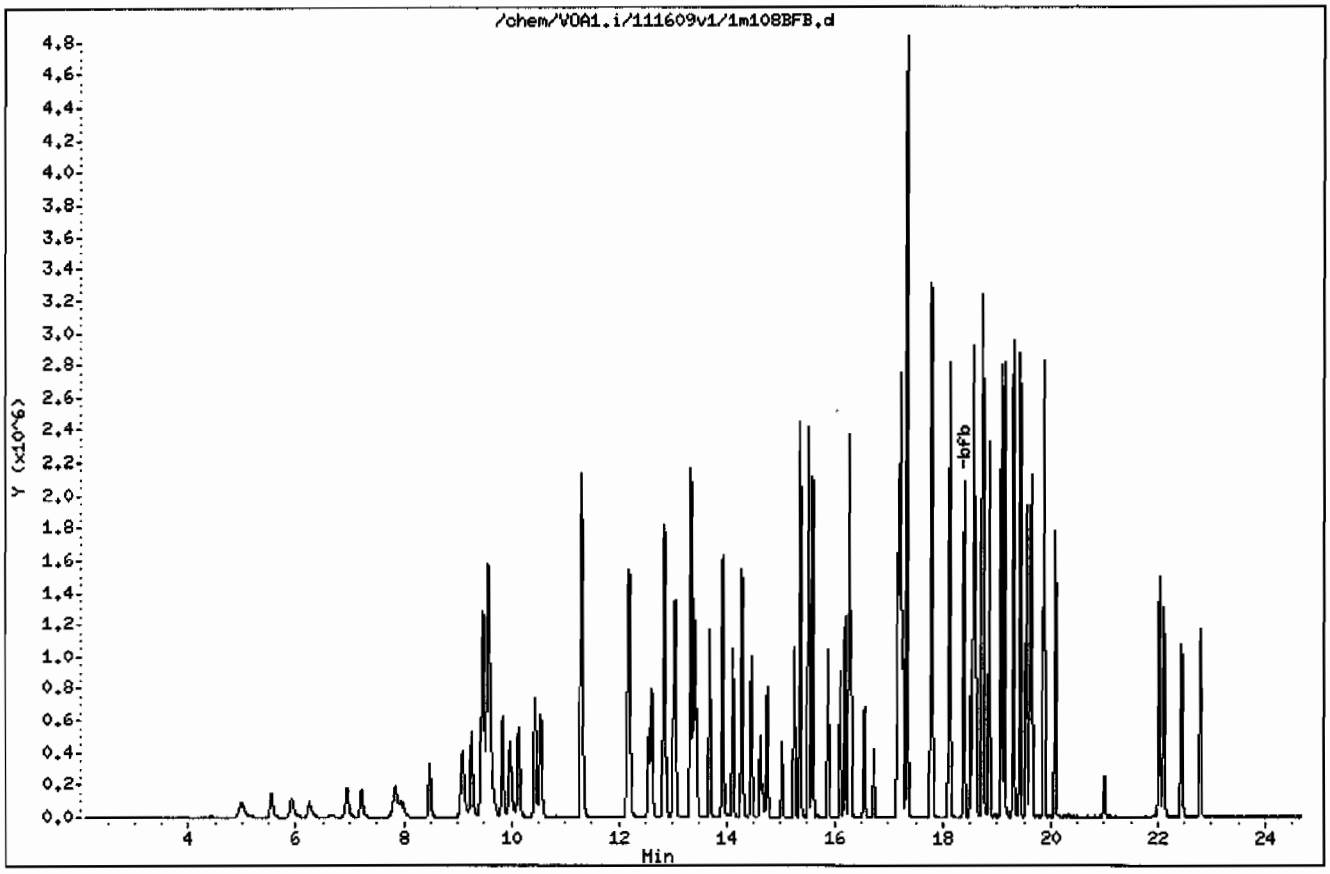

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

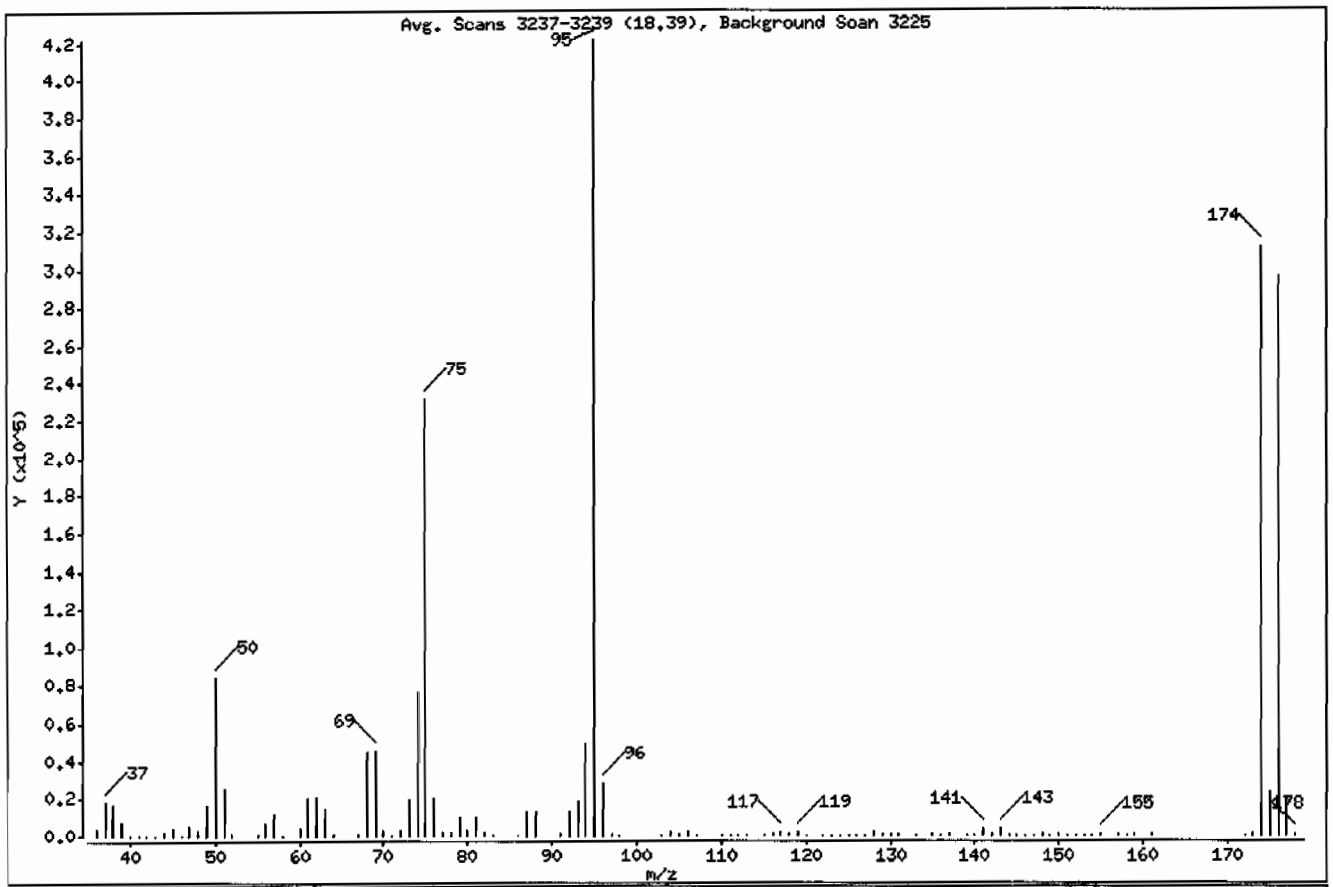

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.05
75	30.00 - 60.00% of mass 95	55.05
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.24 (0.33)
174	50.00 - 100.00% of mass 95	73.77
175	5.00 - 9.00% of mass 174	5.55 (7.52)
176	95.00 - 101.00% of mass 174	70.16 (95.10)
177	5.00 - 9.00% of mass 176	4.80 (6.85)

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1m108BFB.d
Spectrum: Avg. Scans 3237-3239 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3659	69.00	45424	105.00	693	140.00	369
37.00	18736	70.00	3367	106.00	1646	141.00	4255
38.00	16169	71.00	52	107.00	372	142.00	516
39.00	6393	72.00	2726	110.00	174	143.00	4228
40.00	197	73.00	19232	111.00	270	144.00	219
41.00	211	74.00	76640	112.00	131	145.00	352
42.00	88	75.00	232128	113.00	343	146.00	482
43.00	101	76.00	20048	115.00	393	147.00	319
44.00	1967	77.00	2016	116.00	1253	148.00	958
45.00	3625	78.00	1571	117.00	2412	149.00	257
46.00	225	79.00	9321	118.00	1200	150.00	553
47.00	4876	80.00	2593	119.00	2051	151.00	69
48.00	2650	81.00	10141	120.00	65	152.00	268
49.00	16864	82.00	1900	122.00	51	153.00	303
50.00	84536	83.00	304	123.00	52	154.00	398
51.00	25456	86.00	357	124.00	134	155.00	1157
52.00	1092	87.00	13023	125.00	172	157.00	819
55.00	1440	88.00	12376	126.00	137	158.00	66
56.00	6484	91.00	1301	127.00	134	159.00	539
57.00	11568	92.00	12794	128.00	1472	161.00	538
58.00	395	93.00	18184	129.00	873	172.00	156
60.00	4192	94.00	49672	130.00	1342	173.00	1032
61.00	20288	95.00	421696	131.00	645	174.00	311104
62.00	19928	96.00	28576	133.00	54	175.00	23400
63.00	14761	97.00	689	135.00	775	176.00	295872
64.00	1430	98.00	65	136.00	53	177.00	20256
67.00	1159	103.00	156	137.00	650	178.00	602
68.00	44552	104.00	1551	139.00	58		

Data File: /chem/VOA1.i/120309v1/1o404BFB.d

Page 1

Date : 03-DEC-2009 10:11

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VH091203-03|CCV/LCS|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

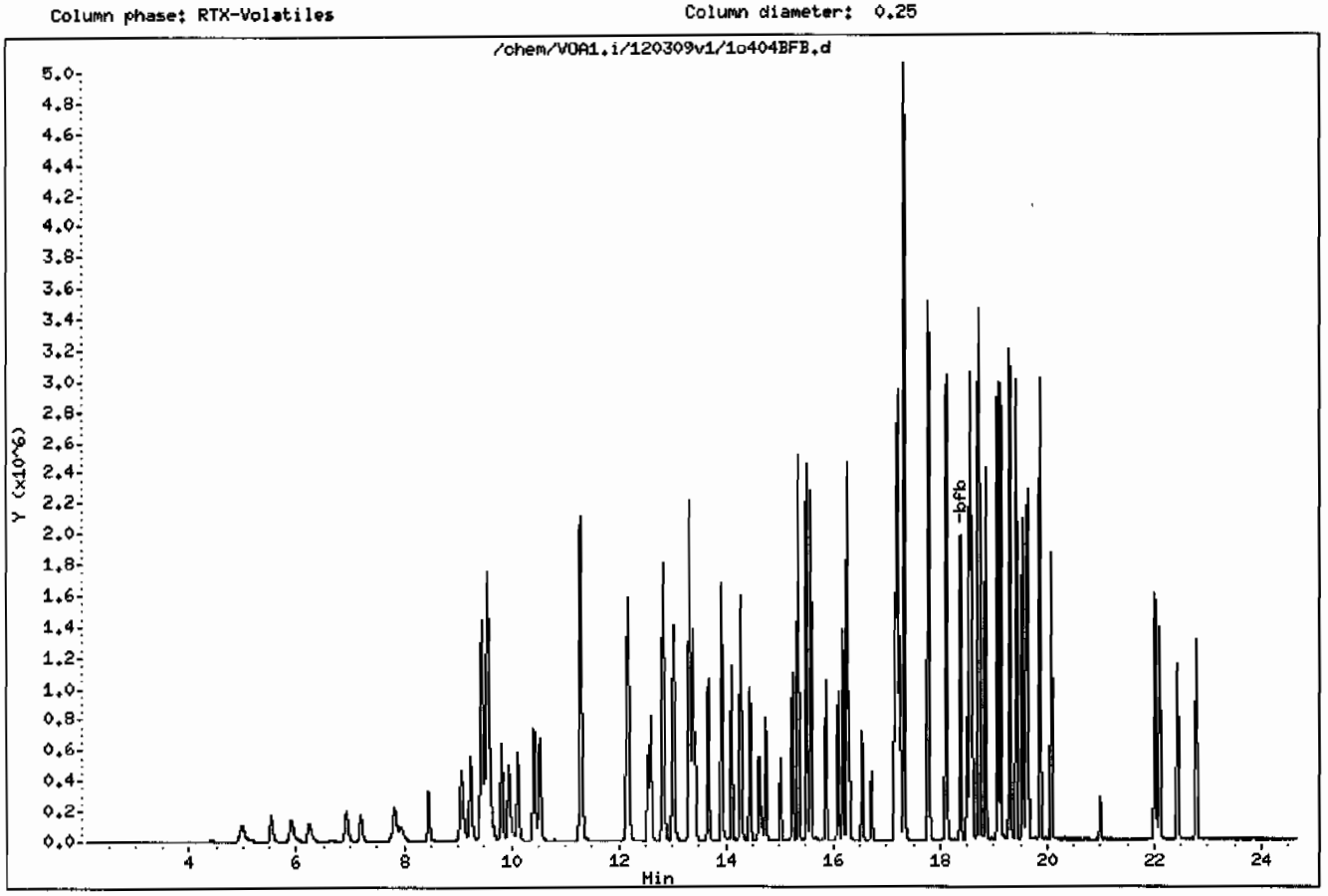

Data File: /chem/VOA1.i/120309v1/1o404BFB.d

Date : 03-DEC-2009 10:11

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091203-03|CCV/LCS|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

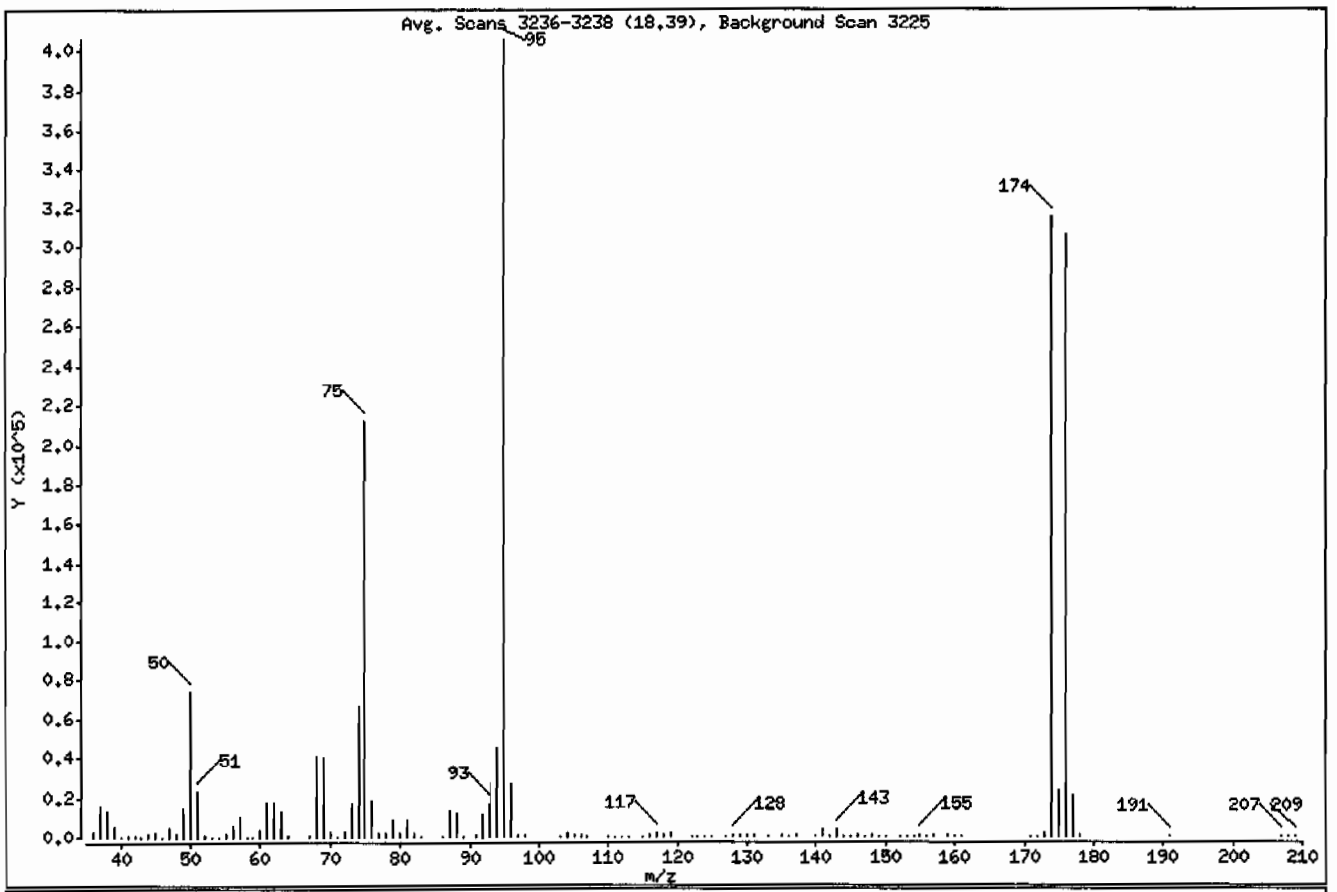

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.11
75	30.00 - 60.00% of mass 95	52.12
96	5.00 - 9.00% of mass 95	6.61
173	Less than 2.00% of mass 174	0.48 (0.61)
174	50.00 - 100.00% of mass 95	77.80
175	5.00 - 9.00% of mass 174	5.71 (7.34)
176	95.00 - 101.00% of mass 174	75.37 (96.88)
177	5.00 - 9.00% of mass 176	5.08 (6.74)

Data File: /chem/VOA1.i/120309v1/1o404BFB.d

Date : 03-DEC-2009 10:11

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091203-03|CCV/LCS|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1o404BFB.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2843	68.00	40736	105.00	565	145.00	229
37.00	16246	69.00	40568	106.00	1124	146.00	665
38.00	13215	70.00	3126	107.00	447	147.00	243
39.00	5991	71.00	141	110.00	72	148.00	832
40.00	243	72.00	2505	111.00	272	149.00	274
41.00	554	73.00	16592	112.00	105	150.00	442
42.00	817	74.00	66424	113.00	319	152.00	224
43.00	7	75.00	211456	115.00	410	153.00	314
44.00	1934	76.00	18200	116.00	1180	154.00	237
45.00	2946	77.00	1898	117.00	2062	155.00	1060
46.00	307	78.00	1432	118.00	1285	156.00	86
47.00	4321	79.00	8147	119.00	2034	157.00	727
48.00	1986	80.00	2311	122.00	57	159.00	530
49.00	14471	81.00	8005	123.00	53	160.00	57
50.00	73488	82.00	1675	124.00	148	161.00	339
51.00	22864	83.00	294	125.00	113	171.00	53
52.00	798	86.00	310	127.00	284	172.00	203
53.00	87	87.00	12609	128.00	1389	173.00	1940
54.00	126	88.00	12375	129.00	525	174.00	315648
55.00	2153	89.00	148	130.00	1272	175.00	23168
56.00	5194	91.00	1246	131.00	519	176.00	305792
57.00	9942	92.00	11158	133.00	52	177.00	20624
58.00	376	93.00	16920	135.00	624	178.00	597
59.00	62	94.00	45136	136.00	185	191.00	89
60.00	3883	95.00	405760	137.00	598	207.00	418
61.00	17544	96.00	26824	140.00	324	208.00	85
62.00	18136	97.00	1004	141.00	3626	209.00	82
63.00	13351	98.00	503	142.00	445		
64.00	1214	103.00	56	143.00	3659		
67.00	1033	104.00	1517	144.00	228		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201980071**				
Client Sample:	**QC for batch 926094**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 926094**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 13:58**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 16:30**				
Data File:	**1o411.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o411.d
Lab Smp Id: 1201980071 Client Smp ID: TCLPBLANK
Inj Date : 03-DEC-2009 13:58
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201980071|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A TCLP BLANK
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 11 QC Sample: TB
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
16 Acetone	43	9.258	9.235	(0.677)	12217	2.04808	0.020(a)
22 Acetonitrile	41	9.972	9.953	(0.729)	11982	16.3291	0.16(a)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.327	(0.975)	603911	47.2988	0.047
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	1027921	50.0000	
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1929963	54.2275	0.054
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	874455	50.0000	
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	764993	47.7565	0.048
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	477083	50.0000	
111 Naphthalene	128	22.432	22.437	(1.144)	5390	0.26658	0.0027(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA1.i/120309v1/1o411.d
Date : 03-DEC-2009 13:58
Client ID: TCLPBLANK
Sample Info: |120198007|928862|10|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

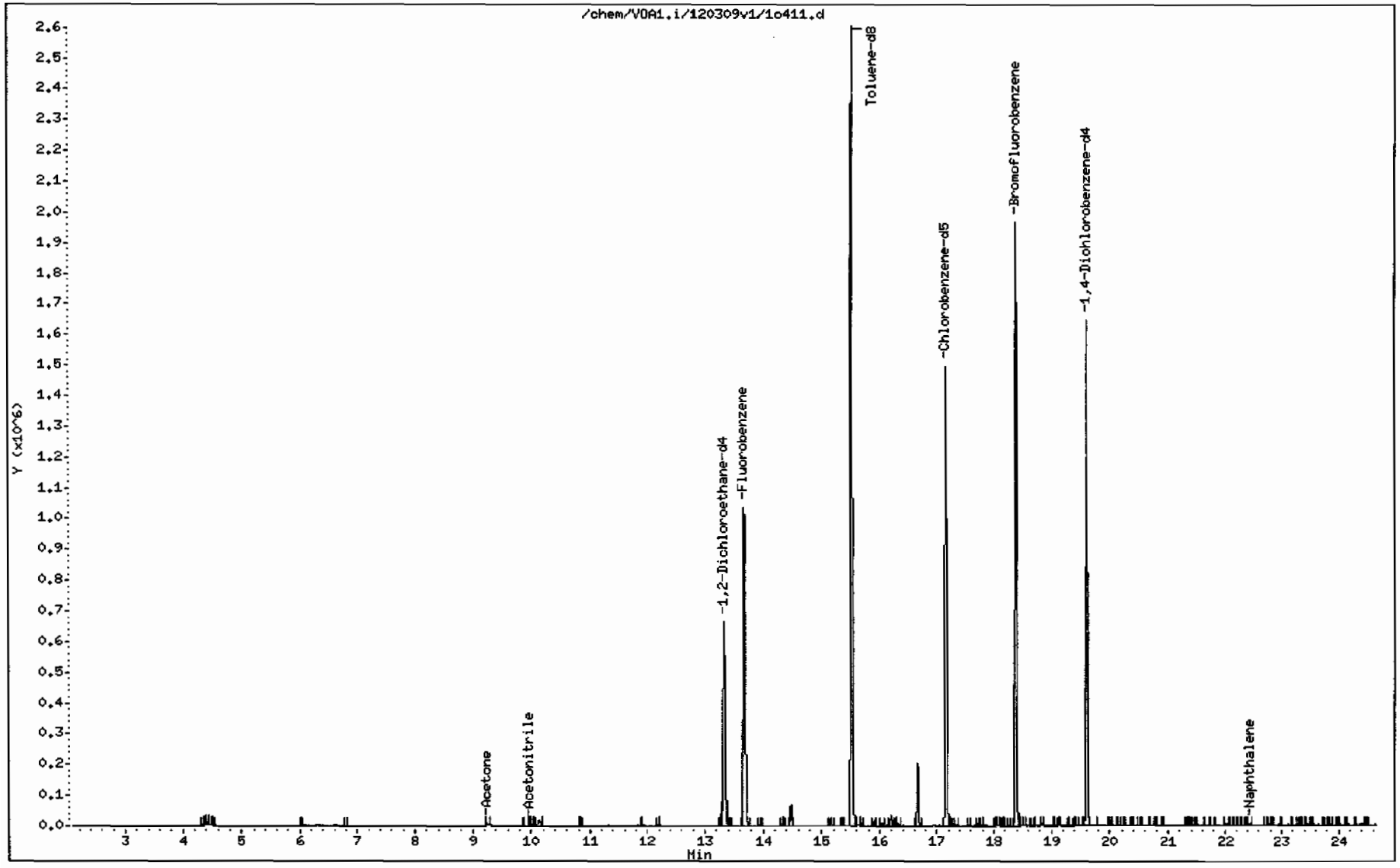

Data File: /chem/VOA1.i/120309v1/1o411.d

Date : 03-DEC-2009 13:58

Client ID: TCLPBLANK

Instrument: VOA1.i

Sample Info: |1201980071|928862|10|VOAF|1|

Purge Volume: 5.0

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 0.020 mg/l

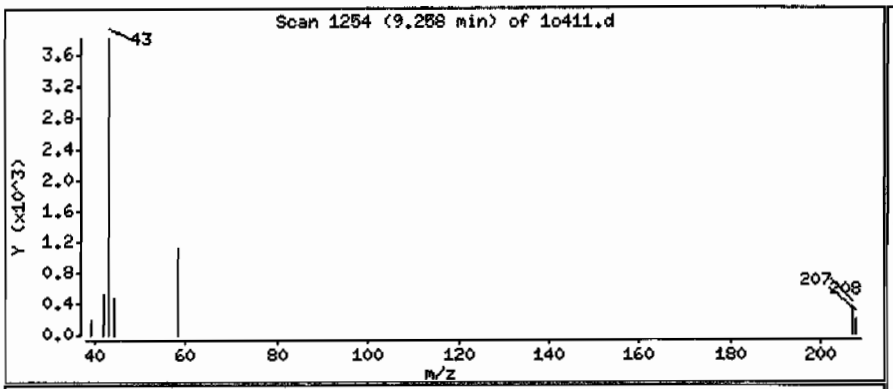

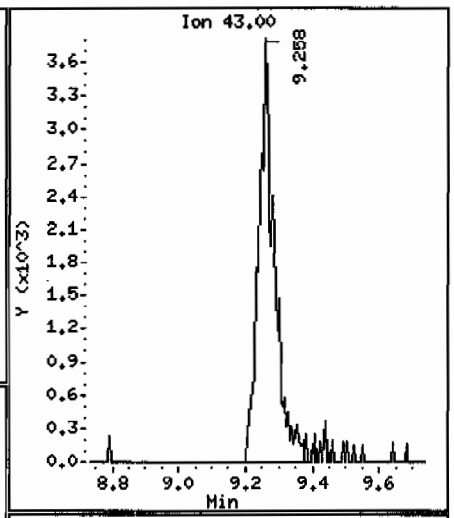

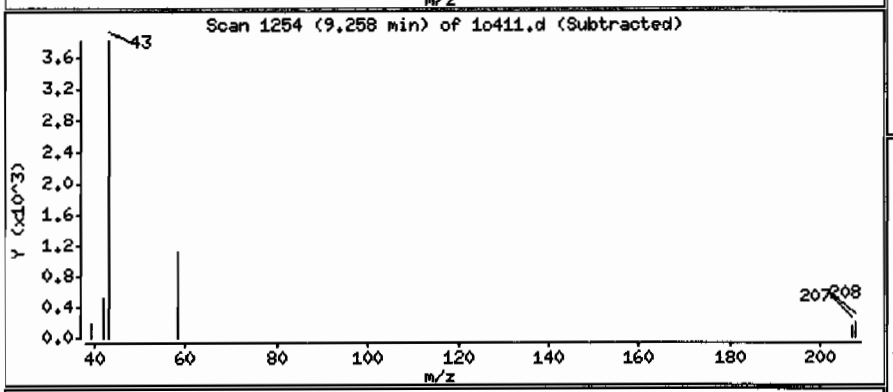

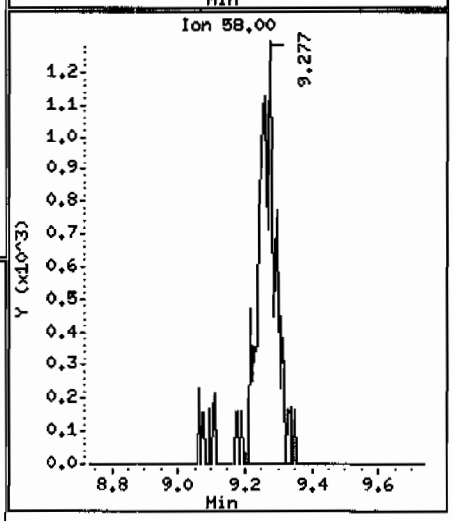

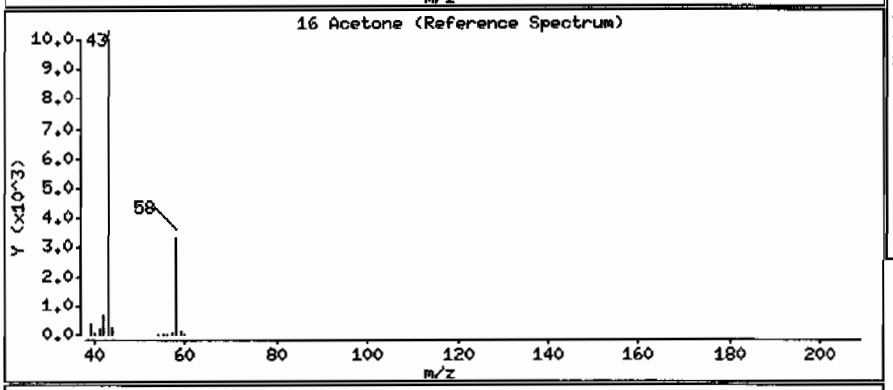

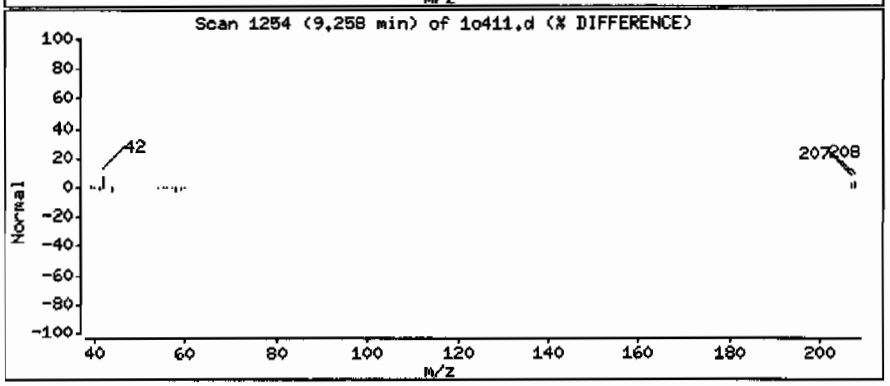

Data File: /chem/VOA1.i/120309v1/1o411.d

Date : 03-DEC-2009 13:58

Client ID: TCLPBLANK

Instrument: VOA1.i

Sample Info: |120198007|1928862|10|VOAF|1|

Purge Volume: 5.0

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

22 Acetonitrile

Concentration: 0.16 mg/l

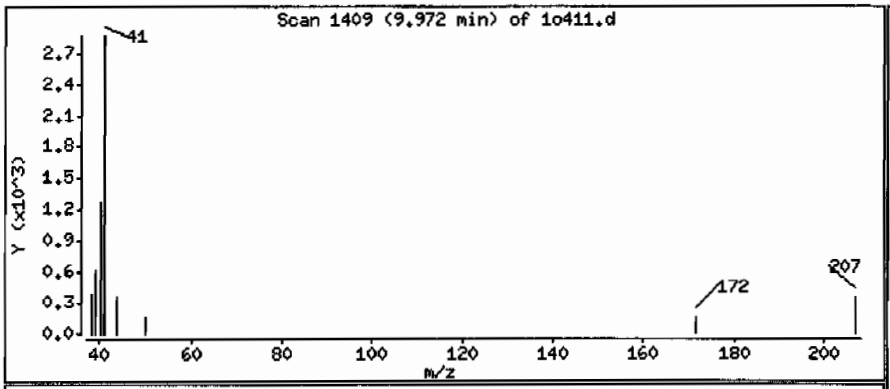

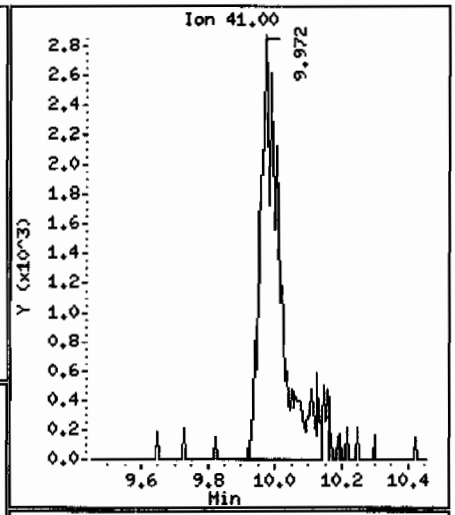

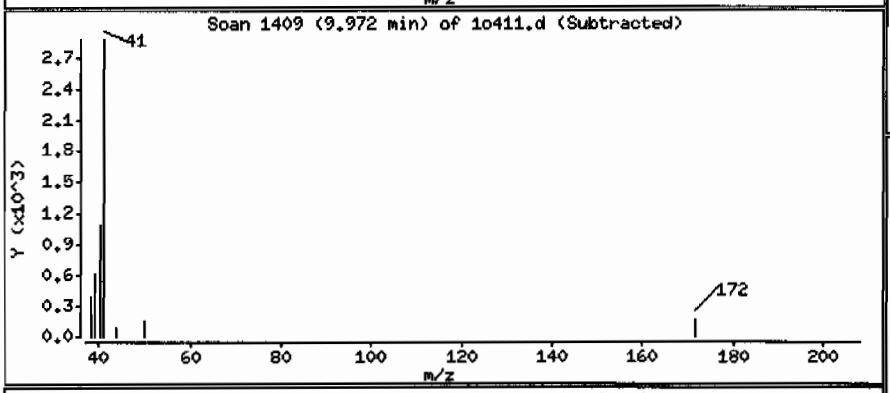

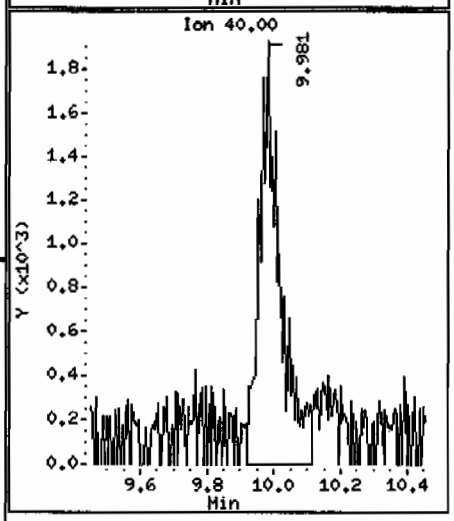

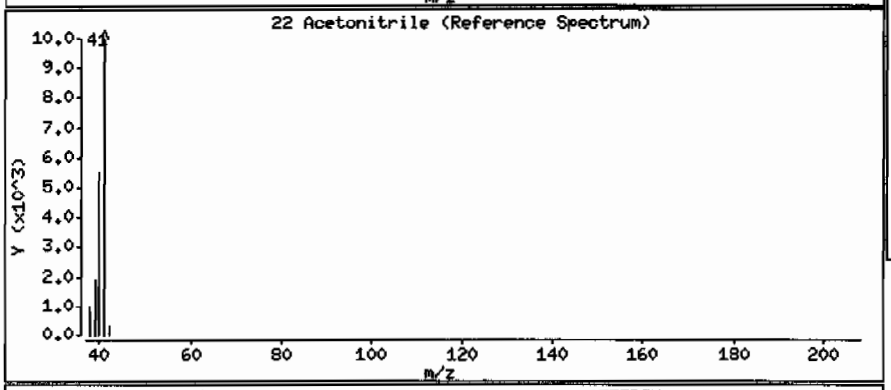

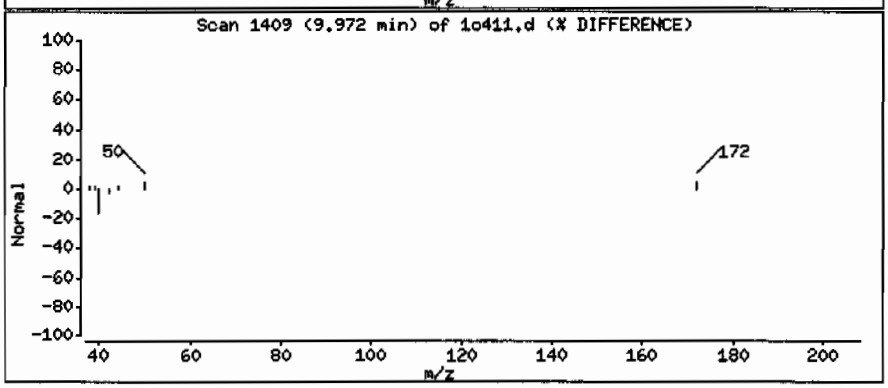

Data File: /chem/VOA1.i/120309v1/1o411.d

Date : 03-DEC-2009 13:58

Client ID: TCLPBLANK

Instrument: VOA1.i

Sample Info: |1201980071|928862|10|VOAF|1|

Purge Volume: 5.0

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

111 Naphthalene

Concentration: 0.0027 mg/l

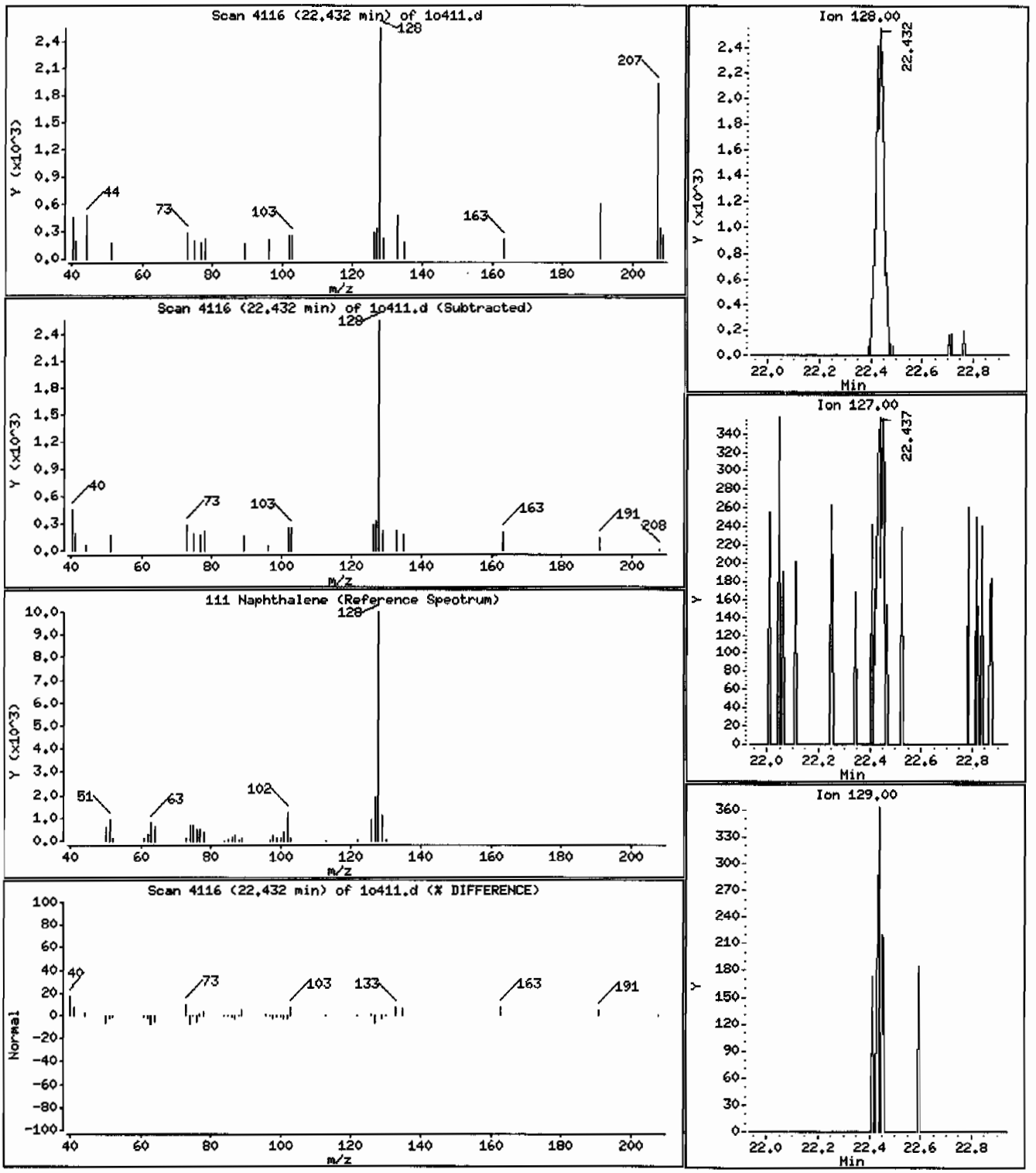

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201986405**				
Client Sample:	**QC for batch 928862**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928862**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 11:15**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 11:15**				
Data File:	**1o406TBB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.001	mg/L	0.0005	0.001
75-35-4	1,1-Dichloroethylene	U	0.001	mg/L	0.0003	0.001
78-93-3	2-Butanone	U	0.005	mg/L	0.00125	0.005
67-66-3	Chloroform	U	0.001	mg/L	0.00025	0.001
56-23-5	Carbon tetrachloride	U	0.001	mg/L	0.0003	0.001
107-06-2	1,2-Dichloroethane	U	0.001	mg/L	0.00025	0.001
71-43-2	Benzene	U	0.001	mg/L	0.0003	0.001
79-01-6	Trichloroethylene	U	0.001	mg/L	0.00025	0.001
127-18-4	Tetrachloroethylene	U	0.001	mg/L	0.0003	0.001
108-90-7	Chlorobenzene	U	0.001	mg/L	0.00025	0.001
106-46-7	1,4-Dichlorobenzene	U	0.001	mg/L	0.00025	0.001

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o406TBB.d
Lab Smp Id: 1201986405 Client Smp ID: BLANK
Inj Date : 03-DEC-2009 11:15
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986405|928862|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
$ 48 1,2-Dichloroethane-d4	65	13.332	13.327	(0.975)	600245	46.0559	0.046
* 52 Fluorobenzene	96	13.677	13.673	(1.000)	1049253	50.0000	
$ 65 Toluene-d8	98	15.514	15.514	(0.904)	1827778	50.7162	0.051
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	885491	50.0000	
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	728855	44.4222	0.044
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	488664	50.0000	
111 Naphthalene	128	22.437	22.437	(1.144)	7819	0.37755	0.00038(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA1.i/120309v1/1o406TBB.d

Date : 03-DEC-2009 11:15

Client ID: BLANK

Sample Info: |1201986405|928862|1|VOAF|1|

Purge Volume: 5.0

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

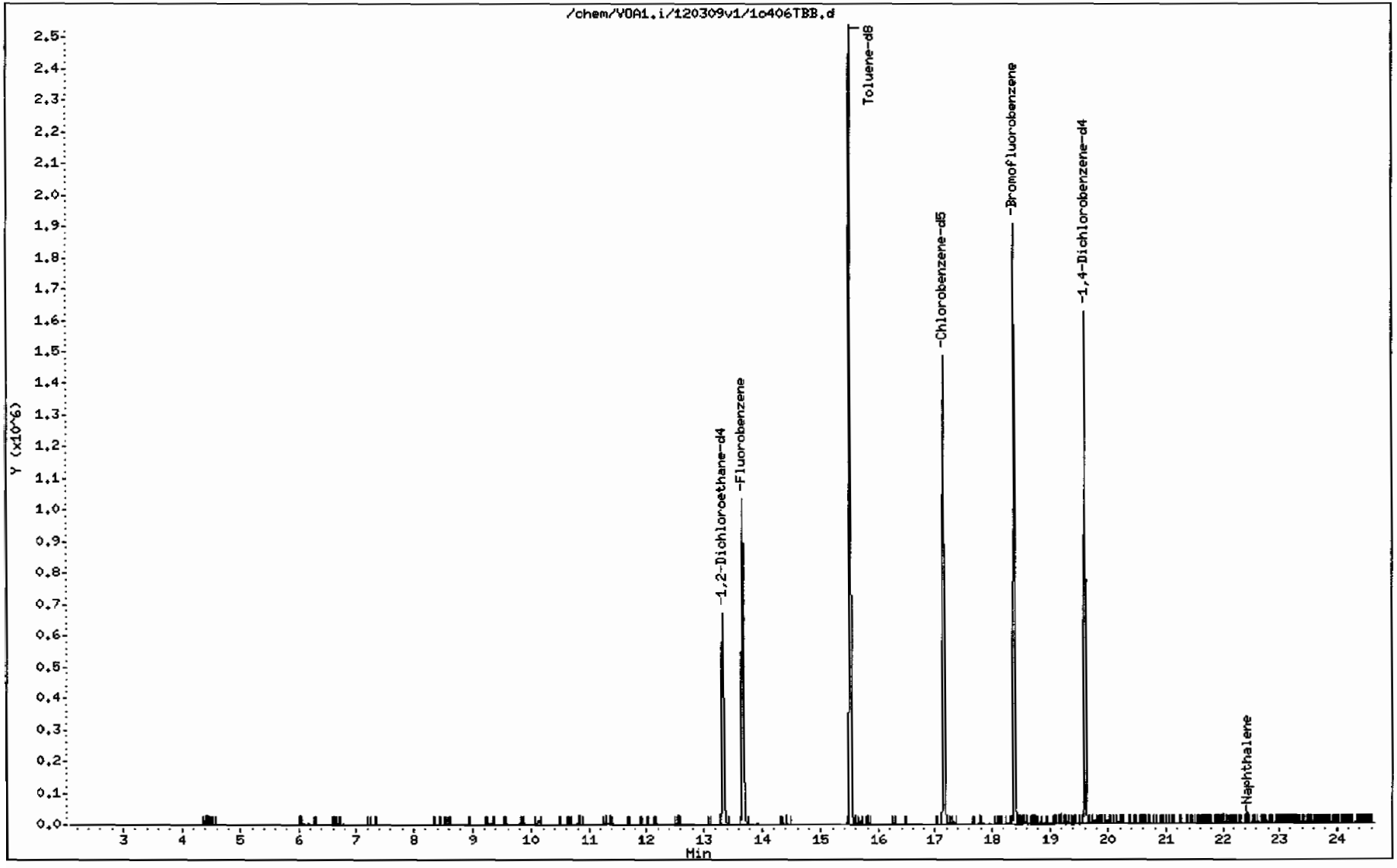

Data File: /chem/VOA1.i/120309v1/1o406TBB.d

Date : 03-DEC-2009 11:15

Client ID: BLANK

Instrument: VOA1.i

Sample Info: |1201986405192886211|VOAF|1|

Purge Volume: 5.0

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

111 Naphthalene

Concentration: 0.00038 mg/l

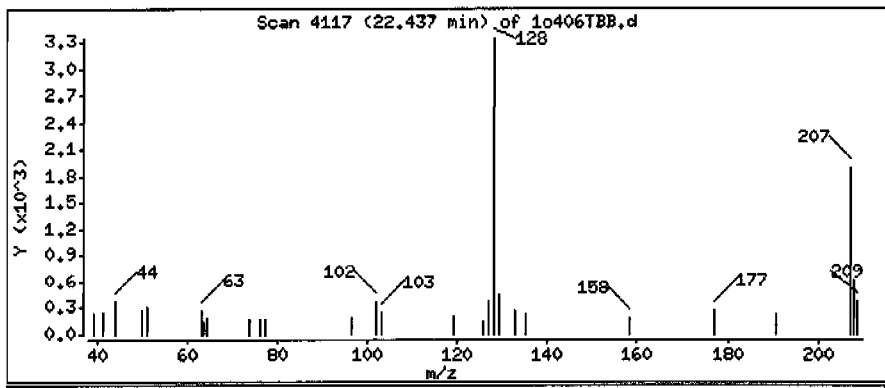

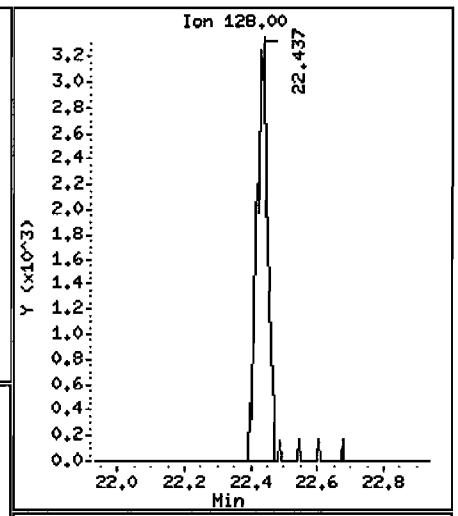

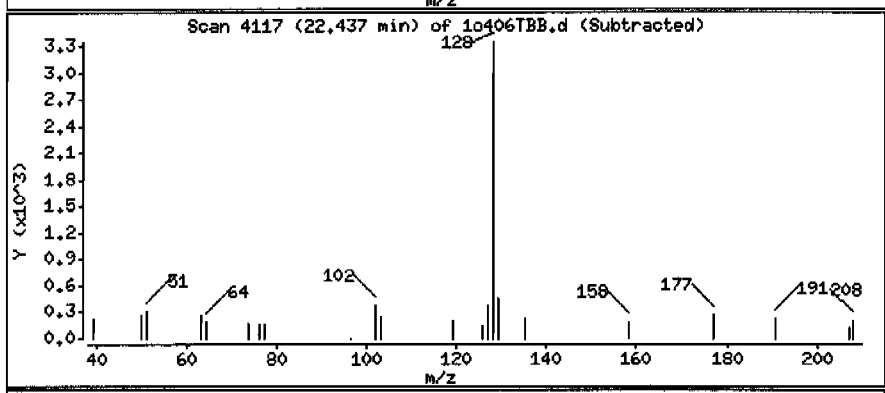

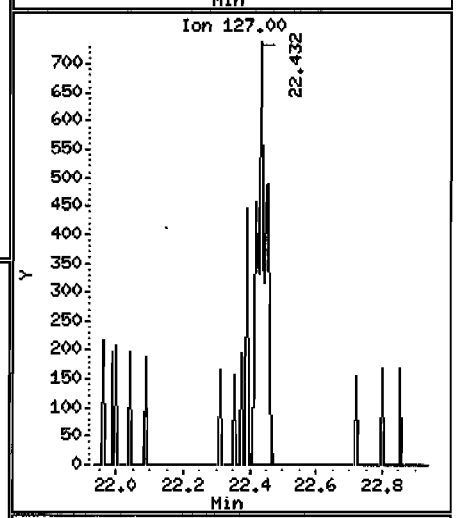

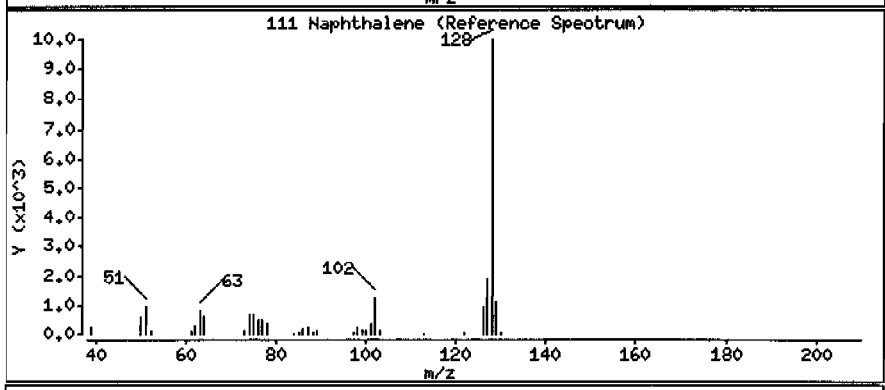

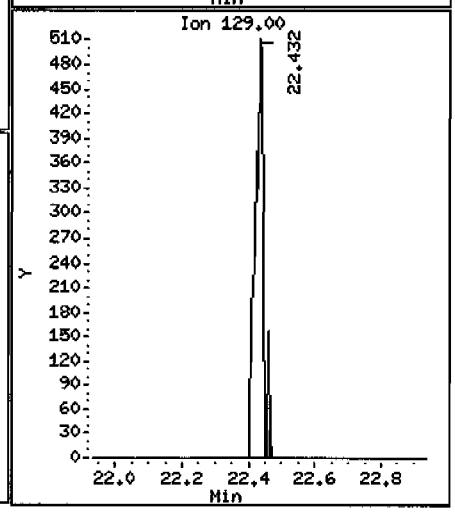

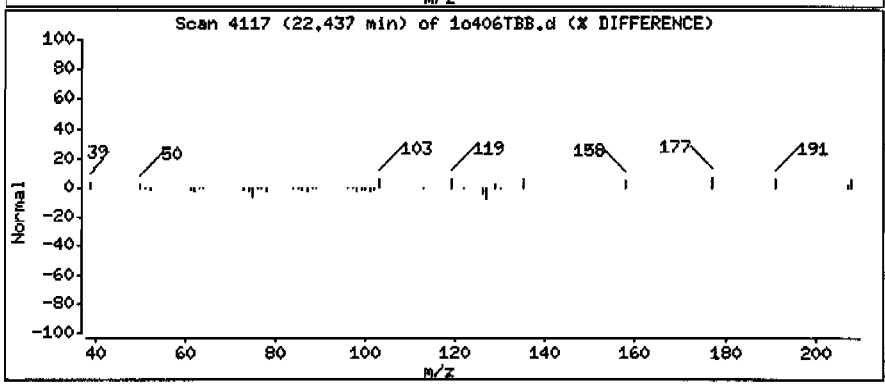

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201986408				
Client Sample:	QC for batch 928862	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 928862	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928862	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	12/03/2009 10:11	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 10:11				
Data File:	1o404TLB.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride		0.051	mg/L	0.0005	0.001
75-35-4	1,1-Dichloroethylene		0.0508	mg/L	0.0003	0.001
78-93-3	2-Butanone		0.208	mg/L	0.00125	0.005
67-66-3	Chloroform		0.049	mg/L	0.00025	0.001
56-23-5	Carbon tetrachloride		0.0528	mg/L	0.0003	0.001
107-06-2	1,2-Dichloroethane		0.0411	mg/L	0.00025	0.001
71-43-2	Benzene		0.0553	mg/L	0.0003	0.001
79-01-6	Trichloroethylene		0.0561	mg/L	0.00025	0.001
127-18-4	Tetrachloroethylene		0.0597	mg/L	0.0003	0.001
108-90-7	Chlorobenzene		0.0549	mg/L	0.00025	0.001
106-46-7	1,4-Dichlorobenzene		0.056	mg/L	0.00025	0.001

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o404TLB.d
Lab Smp Id: 1201986408 Client Smp ID: LCS
Inj Date : 03-DEC-2009 10:11
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986408|928862|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091129-01A/IVM091130-01
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
M 1 Xylenes (total)	106				2323823	166.138	0.17
M 2 1,2-Dichloroethylene (total)	96				837431	116.402	0.12
M 3 1,3-Dichloropropylene	75				1389755	102.545	0.10
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	363519	51.7980	0.052
6 Chloromethane	50	5.535	5.535	(0.405)	432677	49.8300	0.050
7 Vinyl chloride	62	5.908	5.908	(0.432)	395284	50.9767	0.051
9 Bromomethane	96	6.934	6.934	(0.507)	287932	61.7759	0.062
10 Chloroethane	64	7.196	7.196	(0.526)	303568	63.2289	0.063
11 Trichlorofluoromethane	101	7.818	7.818	(0.572)	654302	59.9350	0.060
12 Ethyl Ether	59	8.462	8.462	(0.619)	325484	49.0938	0.049
15 1,1-Dichloroethylene	61	9.065	9.065	(0.663)	764108	50.8051	0.051
16 Acetone	43	9.235	9.235	(0.675)	1171360	192.058	0.19
18 Iodomethane	142	9.447	9.447	(0.691)	2931336	301.265	0.30
19 Carbon disulfide	76	9.562	9.562	(0.699)	6238351	322.070	0.32
21 Methyl acetate	43	9.815	9.815	(0.718)	1217425	233.184	0.23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
	22 Acetonitrile	41	9.953	9.953	(0.728)	1040717	1387.16	1.4
	23 Methylene chloride	84	10.119	10.119	(0.740)	424151	55.9746	0.056
	25 tert-Butyl methyl ether	73	10.423	10.423	(0.762)	1136301	47.4893	0.047
	26 trans-1,2-Dichloroethylene	96	10.529	10.529	(0.770)	411591	58.9189	0.059
	29 Vinyl acetate	43	11.279	11.279	(0.825)	3740419	322.880	0.32
	30 1,1-Dichloroethane	63	11.307	11.307	(0.827)	787182	50.6953	0.051
	33 2,2-Dichloropropane	77	12.144	12.144	(0.888)	593259	52.3076	0.052
	35 2-Butanone	43	12.167	12.167	(0.890)	1241318	207.711	0.21
	36 cis-1,2-Dichloroethylene	96	12.186	12.186	(0.891)	425840	57.4834	0.057
	39 Bromochloromethane	128	12.545	12.545	(0.918)	177698	60.3682	0.060
	41 Chloroform	83	12.595	12.595	(0.921)	810367	49.0205	0.049
	42 Cyclohexane	56	12.830	12.830	(0.938)	797597	58.6188	0.059
	43 1,1,1-Trichloroethane	97	12.830	12.830	(0.938)	655082	50.5997	0.050
	44 Carbon tetrachloride	117	13.010	13.010	(0.952)	685267	52.8364	0.053
	45 1,1-Dichloropropene	75	13.037	13.037	(0.954)	642078	54.4460	0.054
	47 Benzene	78	13.318	13.318	(0.974)	1626563	55.2678	0.055
$	48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	624841	47.8638	0.048
	50 Cyclohexene	54	13.378	13.378	(0.978)	589703	52.4979	0.052
	51 1,2-Dichloroethane	62	13.424	13.424	(0.982)	599351	41.0841	0.041
*	52 Fluorobenzene	96	13.673	13.673	(1.000)	1050992	50.0000	
	53 n-Butyl alcohol	56	13.921	13.921	(1.018)	1151017	6049.40	6.0
	54 Trichloroethylene	95	14.105	14.105	(1.032)	451940	56.1044	0.056
	55 Methylcyclohexane	83	14.271	14.271	(1.044)	763506	61.3408	0.061
	57 1,2-Dichloropropane	63	14.446	14.446	(1.057)	397625	52.1979	0.052
	59 Dibromomethane	93	14.616	14.616	(1.069)	240778	51.2551	0.051
	60 Bromodichloromethane	83	14.740	14.740	(1.078)	613844	49.1173	0.049
	61 2-Chloroethylvinyl ether	63	15.021	15.021	(1.099)	250268	238.848	0.24
	63 cis-1,3-Dichloropropylene	75	15.247	15.247	(1.115)	708580	54.4360	0.054
	64 4-Methyl-2-pentanone	58	15.353	15.353	(0.895)	779596	232.212	0.23
$	65 Toluene-d8	98	15.514	15.514	(0.904)	1880206	50.9721	0.051
	66 Toluene	92	15.587	15.587	(0.909)	1072140	53.8647	0.054
	68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	681175	48.1086	0.048
	69 1,1,2-Trichloroethane	83	16.094	16.094	(0.938)	282276	50.9519	0.051
	70 Tetrachloroethylene	164	16.181	16.181	(0.943)	360203	59.6516	0.060
	71 2-Hexanone	43	16.264	16.264	(0.948)	1698320	191.389	0.19
	72 1,3-Dichloropropane	76	16.301	16.301	(0.950)	585557	47.5514	0.048
	73 Dibromochloromethane	129	16.540	16.540	(0.964)	410791	51.6868	0.052
	74 1,2-Dibromoethane	107	16.720	16.720	(0.975)	343565	52.7334	0.053
*	76 Chlorobenzene-d5	117	17.152	17.152	(1.000)	906319	50.0000	
	77 Chlorobenzene	112	17.185	17.185	(1.002)	1130528	54.9110	0.055
	78 Ethylbenzene	91	17.212	17.212	(1.003)	2174501	50.7883	0.051
	79 1,1,1,2-Tetrachloroethane	131	17.254	17.254	(1.006)	406416	50.9240	0.051
	80 m,p-Xylenes	106	17.332	17.332	(1.010)	1563347	110.758	0.11
	81 o-Xylene	106	17.779	17.779	(1.036)	760476	55.3801	0.055
	82 Styrene	104	17.797	17.797	(1.038)	1309335	55.6394	0.056
	83 Bromoform	173	18.101	18.101	(0.923)	279011	55.2111	0.055
	84 Isopropylbenzene	105	18.124	18.124	(0.924)	2195679	53.1326	0.053

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
$ 87 Bromofluorobenzene	95	18.381	18.381	(0.938)	769897	45.1396	0.045
88 1,1,2,2-Tetrachloroethane	83	18.501	18.501	(0.944)	435316	54.0241	0.054
89 n-Propylbenzene	91	18.556	18.556	(0.946)	2621979	52.0896	0.052
91 Bromobenzene	156	18.589	18.589	(0.948)	478741	56.0230	0.056
92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	125314	47.2934	0.047
93 1,3,5-Trimethylbenzene	105	18.713	18.713	(0.954)	1882551	51.7141	0.052
94 2-Chlorotoluene	91	18.736	18.736	(0.956)	1812804	49.7074	0.050
95 4-Chlorotoluene	91	18.851	18.851	(0.961)	1651880	50.2306	0.050
96 tert-Butylbenzene	119	19.072	19.072	(0.973)	1516791	53.5273	0.054
97 1,2,4-Trimethylbenzene	105	19.132	19.132	(0.976)	1896797	50.9018	0.051
99 sec-Butylbenzene	105	19.297	19.297	(0.984)	2442413	54.0023	0.054
100 4-Isopropyltoluene	119	19.417	19.417	(0.990)	1886129	55.1645	0.055
101 1,3-Dichlorobenzene	146	19.537	19.537	(0.996)	924345	56.6459	0.057
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	507977	50.0000	
103 1,4-Dichlorobenzene	146	19.634	19.634	(1.001)	937376	56.0436	0.056
105 n-Butylbenzene	91	19.864	19.864	(1.013)	1995284	52.1213	0.052
106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	863067	55.2489	0.055
108 1,2-Dibromo-3-chloropropane	157	20.996	20.996	(1.071)	89236	58.0929	0.058
109 1,2,4-Trichlorobenzene	180	22.018	22.018	(1.123)	679089	58.5121	0.058
110 Hexachlorobutadiene	225	22.101	22.101	(1.127)	428358	52.1388	0.052
111 Naphthalene	128	22.437	22.437	(1.144)	1248675	58.0021	0.058
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	586239	60.0320	0.060

Data File: /chem/VOA1.i/120309v1/1o404TLB.d
Date : 03-DEC-2009 10:11
Client ID: LCS
Sample Info: 1120198640819288862111VOAF111
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

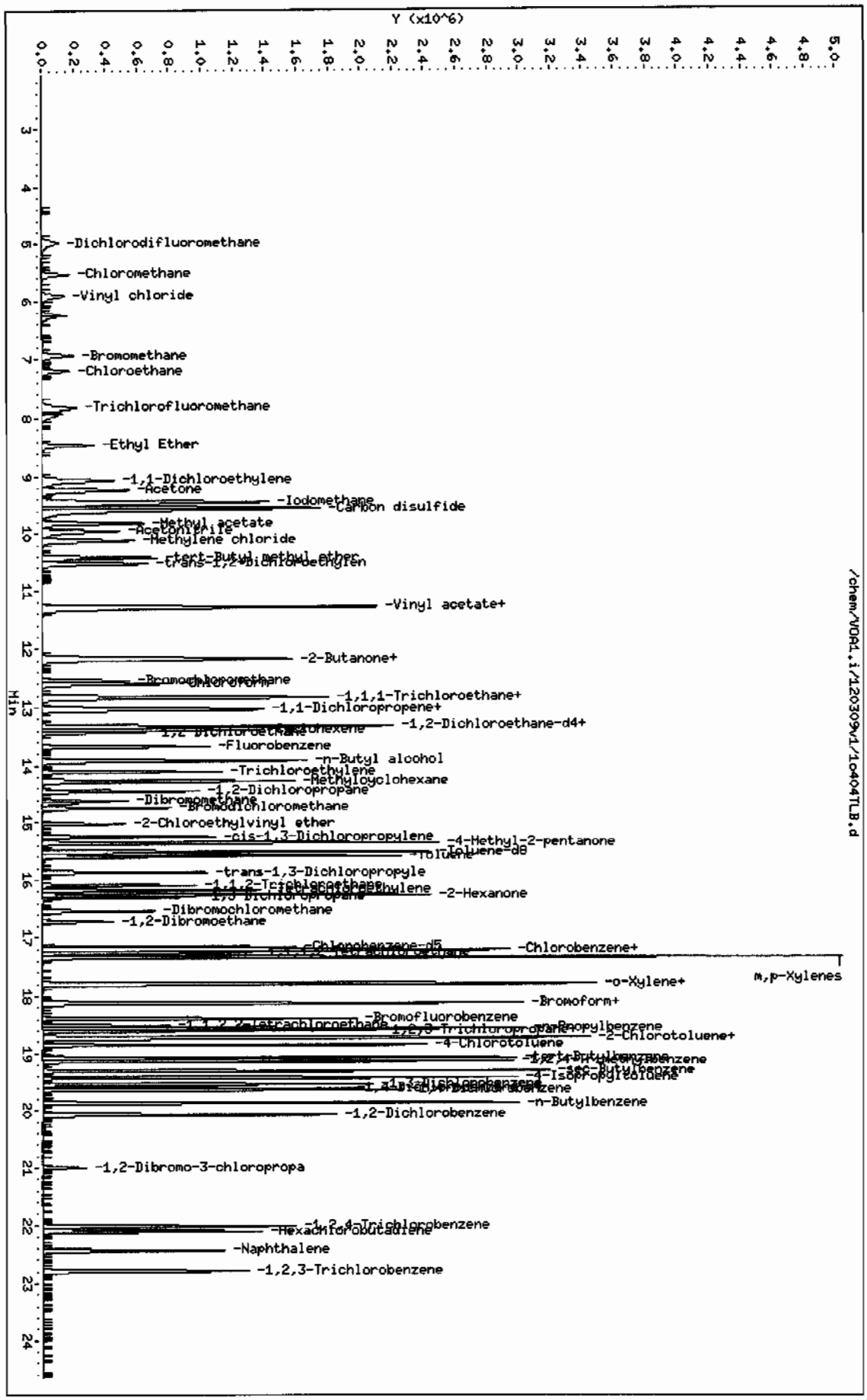

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**1201986406**	**Date Received:**	**11/19/2009 08:45**		
Client Sample:	**QC for batch 928862**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**WST03-10-2131PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928862**	**Inst:**	**VOA1.I**	**Dilution:**	**10**
Run Date:	**12/03/2009 19:34**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 19:34**				
Data File:	**1o422.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride		0.442	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene		0.431	mg/L	0.003	0.010
78-93-3	2-Butanone		1.18	mg/L	0.0125	0.050
67-66-3	Chloroform		0.462	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride		0.451	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane		0.407	mg/L	0.0025	0.010
71-43-2	Benzene		0.495	mg/L	0.003	0.010
79-01-6	Trichloroethylene		0.483	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene		0.541	mg/L	0.003	0.010
108-90-7	Chlorobenzene		0.529	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene		0.509	mg/L	0.0025	0.010

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o422.d
Lab Smp Id: 1201986406 Client Smp ID: WST03-10-2131MS
Inj Date : 03-DEC-2009 19:34
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986406|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A MS 241424001
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 22 QC Sample: MS
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	996436	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.152	(1.000)	795058	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.606	(1.000)	466394	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.327	(0.975)	653216	52.7770	0.053
$ 65 Toluene-d8	98	15.514	15.514	(0.904)	1829581	56.5406	0.056
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	724744	46.2808	0.046
7 Vinyl chloride	62	5.915	5.908	(0.432)	324902	44.1941	0.44
15 1,1-Dichloroethylene	61	9.083	9.065	(0.664)	614756	43.1127	0.43
103 1,4-Dichlorobenzene	146	19.634	19.634	(1.001)	781056	50.8611	0.51
35 2-Butanone	43	12.181	12.167	(0.890)	668965	118.067	1.2
41 Chloroform	83	12.609	12.595	(0.922)	724461	46.2234	0.46
44 Carbon tetrachloride	117	13.019	13.010	(0.952)	554108	45.0628	0.45
51 1,2-Dichloroethane	62	13.438	13.424	(0.982)	562239	40.6503	0.41
47 Benzene	78	13.332	13.318	(0.974)	1381384	49.5438	0.50
54 Trichloroethylene	95	14.115	14.105	(1.032)	369230	48.3463	0.48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
70 Tetrachloroethylene	164	16.186	16.181	(0.943)	286824	54.1468	0.54
77 Chlorobenzene	112	17.185	17.185	(1.002)	955351	52.8961	0.53

Data File: /chem/VOA1.i/120309v1/1c422.d
Date : 03-DEC-2009 19:34
Client ID: WST03-10-2131MS
Sample Info: 1120198640619288621101VOAF11
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

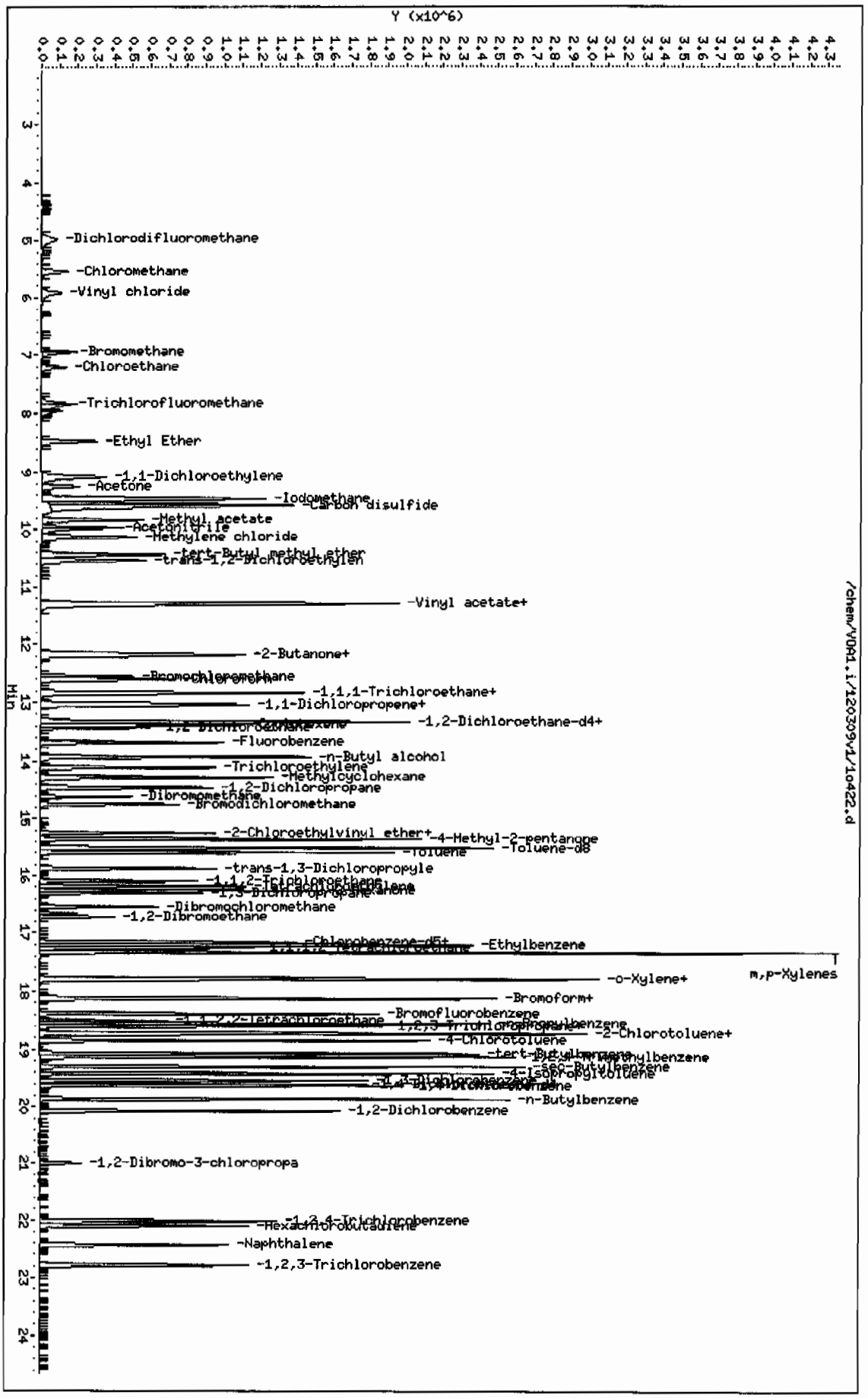

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1	**Date Collected:**	11/17/2009 12:00	**Matrix:**	TCLP S
Lab Sample ID:	1201986407	**Date Received:**	11/19/2009 08:45		
Client Sample:	QC for batch 928862	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2131PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928862	**Inst:**	VOA1.I	**Dilution:**	10
Run Date:	12/03/2009 20:05	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 20:05				
Data File:	1o423.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride		0.424	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene		0.424	mg/L	0.003	0.010
78-93-3	2-Butanone		1.15	mg/L	0.0125	0.050
67-66-3	Chloroform		0.455	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride		0.447	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane		0.405	mg/L	0.0025	0.010
71-43-2	Benzene		0.507	mg/L	0.003	0.010
79-01-6	Trichloroethylene		0.488	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene		0.506	mg/L	0.003	0.010
108-90-7	Chlorobenzene		0.512	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene		0.487	mg/L	0.0025	0.010

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/120309v1/1o423.d
Lab Smp Id: 1201986407 Client Smp ID: WST03-10-2131MSD
Inj Date : 03-DEC-2009 20:05
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201986407|928862|10|VOAF|1|
Misc Info : LANL 500uL N/A MSD 241424001
Comment :
Method : /chem/VOA1.i/120309v1/VOA1-8260ox-111309.m
Meth Date : 03-Dec-2009 15:05 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00500	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
* 52 Fluorobenzene	96	13.682	13.673	(1.000)	1031385	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.152	(1.000)	872908	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	500769	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.337	13.327	(0.975)	635653	49.6177	0.050
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1870533	52.6508	0.053
$ 87 Bromofluorobenzene	95	18.386	18.381	(0.938)	743505	44.2196	0.044
7 Vinyl chloride	62	5.922	5.908	(0.433)	322839	42.4255	0.42
15 1,1-Dichloroethylene	61	9.079	9.065	(0.664)	625832	42.4023	0.42
103 1,4-Dichlorobenzene	146	19.638	19.634	(1.002)	802380	48.6630	0.49
35 2-Butanone	43	12.181	12.167	(0.890)	676693	115.384	1.2
41 Chloroform	83	12.609	12.595	(0.922)	737814	45.4802	0.45
44 Carbon tetrachloride	117	13.019	13.010	(0.952)	568943	44.7014	0.45
51 1,2-Dichloroethane	62	13.438	13.424	(0.982)	580445	40.5446	0.40
47 Benzene	78	13.332	13.318	(0.974)	1463359	50.6971	0.51
54 Trichloroethylene	95	14.114	14.105	(1.032)	385446	48.7594	0.49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (mg/l)
70 Tetrachloroethylene	164	16.186	16.181	(0.943)	294225	50.5903	0.50
77 Chlorobenzene	112	17.189	17.185	(1.002)	1014337	51.1532	0.51

Data File: /chem/VOA1.i/120309v1/1o423.d
Date : 03-DEC-2009 20:05
Client ID: WSTO3-10-2131MSD
Sample Info: !120198640719288621101VOAF!1!
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

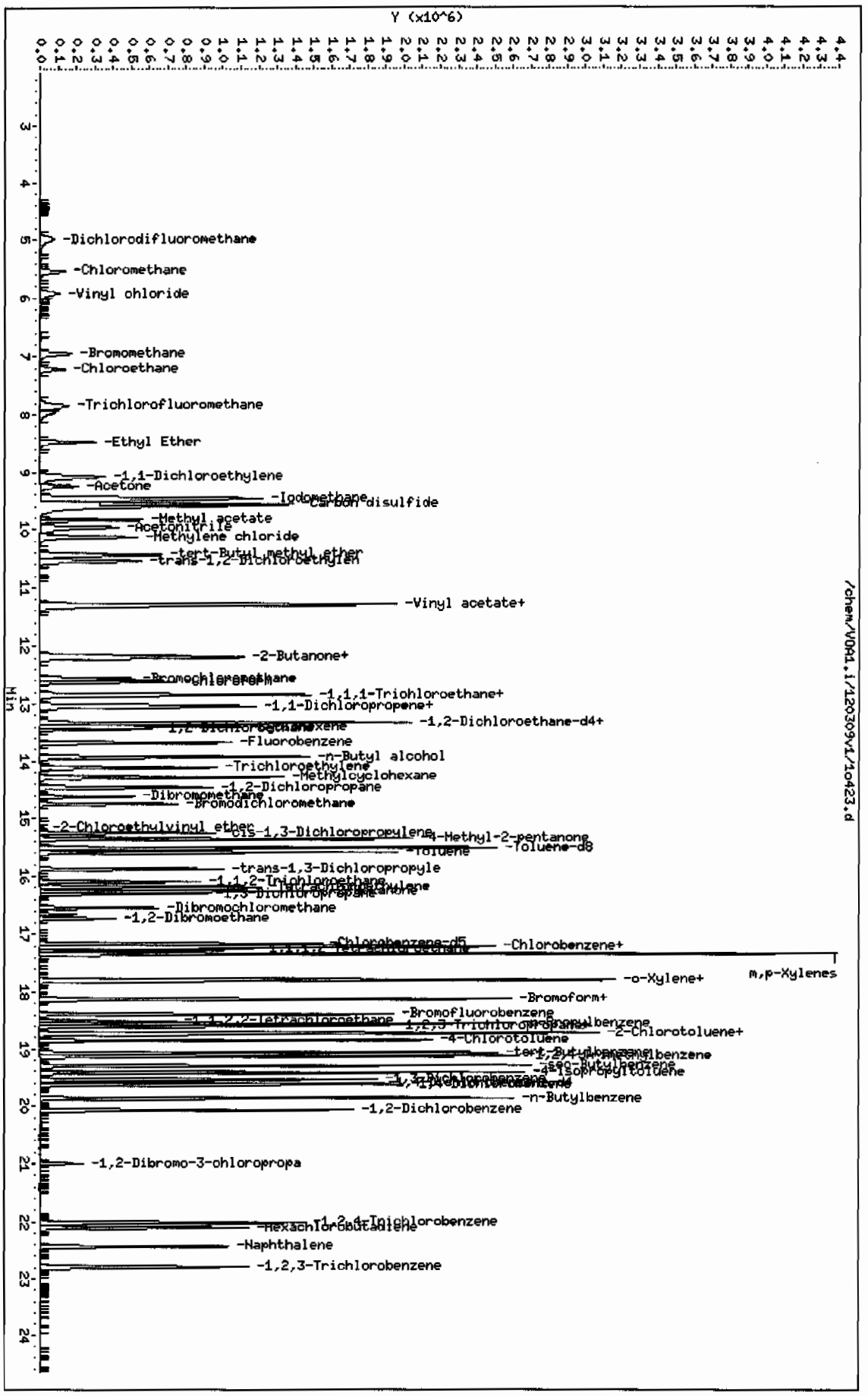

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Miscellaneous Data

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926094 **Verified by:** _____

Analyst: Clifford Postell

Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13

Instrument: TCLP Tumbler #105

Sample ID Analysis Start Date	1201980071 TB 24-NOV-2009 16:30:16	241424001 24-NOV-2009 16:30:16	241424002 24-NOV-2009 16:30:16	241527001 24-NOV-2009 16:30:16
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		25	25	25
Initial pH (su)	4.91			
Final pH (su)	4.91			
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	500	500	500	500
Filtrate Volume (mL)	40	40	40	40
VOA Positive Pressure Y/N	y	y	y	y
ZHE Vessle ID	2	18	21	16

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1017549ZHE	500	mL

Comments:

Extration End Date: 25-NOV-09 09:30:15
Filtration End Date: 25-NOV-09 13:30:15
Bottle Lot Number: B-9-195-01VB
Filter Lot Number: 130101
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/13/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111309v1

Daily Standard

	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
ICV	W1VM091113-18		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
BFB	UVM090821-02				1
SHORT ICV	W1VM091113-19		5+5	5+5	

Purge Amount

5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/13/2009 22:17	1L507.D	UVM090821-02	GEL	BFB2	5ML	1	N/A	1	W	ACJ	N/A	O	Passed.
11/13/2009 22:47	1L508.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
11/13/2009 23:18	1L509.D	W1VM091113-05	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM090911-01B/UVM091012-01D
11/13/2009 23:48	1L510.D	W1VM091113-06	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	N/A	X	UVM090911-02B/UVM091012-02D: See 1L511
11/14/2009 0:18	1L511.D	W1VM091113-07	GEL	VSTD001	5ML	1	N/A	5	W	ACJ	N/A	O	UVM090911-02B/UVM091012-02D
11/14/2009 0:48	1L512.D	W1VM091113-08	GEL	VSTD002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM090911-03B/UVM091012-03D
11/14/2009 1:19	1L513.D	W1VM091113-09	GEL	VSTD005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM090911-04B/UVM091012-04D
11/14/2009 1:49	1L514.D	W1VM091113-10	GEL	VSTD010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM090911-05B/UVM091012-05D
11/14/2009 2:19	1L515.D	W1VM091113-11	GEL	VSTD020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM090911-06B/UVM091012-06D
11/14/2009 2:49	1L516.D	W1VM091113-12	GEL	VSTD050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM090911-07B/UVM091012-07D
11/14/2009 3:19	1L517.D	W1VM091113-13	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM090911-08B/UVM091012-08D
11/14/2009 3:50	1L518.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	Rinse
11/14/2009 4:20	1L519.D	W1VM091113-14	GEL	VSTD005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091023-01/UVM091110-01E
11/14/2009 4:50	1L520.D	W1VM091113-15	GEL	VSTD010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091023-02/UVM091110-02E
11/14/2009 5:20	1L521.D	W1VM091113-16	GEL	VSTD025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091023-03/UVM091110-03E
11/14/2009 5:50	1L522.D	W1VM091113-17	GEL	VSTD050S	5ML	1	N/A	16	W	ACJ	N/A	O	UVM091023-04/UVM091110-04E
11/14/2009 6:20	1L523.D	W1VM091113-18	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091023-05/UVM091110-05E
11/14/2009 6:51	1L524.D	W1VM091113-19	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091023-06/UVM091110-06E
11/14/2009 7:21	1L525.D	W1VM091113-20	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091023-07/UVM091110-07E
11/14/2009 7:51	1L526.D	12019---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	Rinse
11/14/2009 8:21	1L527.D	W1VM091113-18	GEL	ICV	5ML	1	N/A	21	W	ACJ	N/A	X	UVM091111-01A/IVM091111-01; Vinyl Chloride low. See 11/16/09
11/14/2009 8:52	1L528.D	W1VM091113-19	GEL	SHORT ICV	5ML	1	N/A	22	W	ACJ	N/A	O	UVM091023-08A/UVM091105-02B

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/16/2009 9:04	1M101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	Passed. See 1M108
11/16/2009 9:35	1M102.D	12019—	GEL	BLANK	5ML	1	N/A	2	W	RXM4	N/A	X	
11/16/2009 10:14	1M103.D	W1VM091116-01	GEL	CCV/LCS/ICV	5ML	1	N/A	3	W	RXM4	N/A	X	
11/16/2009 10:45	1M104.D	W1VM091116-02	GEL	LCSD	5ML	1	N/A	4	W	RXM4	N/A	X	
11/16/2009 12:25	1M105.D	W1VM091116-03	GEL	SHORTICV	5ML	1	N/A	5	W	RXM4	N/A	X	Decreased multiplier
11/16/2009 13:00	1M106.D	UVM090821-02	GEL	BFB	5ML	1	N/A	6	W	RXM4	N/A	X	See 1M108
11/16/2009 13:30	1M107.D	W1VM091116-04	GEL	CCV/LCS/ICV	5ML	1	N/A	7	W	RXM4	N/A	X	UVM091111-01A/IVM0901111-01
11/16/2009 14:01	**1M108.D**	**W1VM091116-05**	**GEL**	**BFB/CCV/LCS/ICV**	**5ML**	**1**	**N/A**	**8**	**W**	**RXM4**	**N/A**	**O**	UVM091111-01B/IVM0901111-01
11/16/2009 14:48	1M109.D	W1VM091116-06	GEL	SHORT	5ML	1	N/A	9	W	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 15:20	1M110.D	W1VM091116-07	GEL	LCS	5G	1	N/A	10	S	RXM4	N/A	O	UVM091111-01B/IVM0901111-01
11/16/2009 15:51	1M111.D	W1VM091116-08	GEL	SHORT	5G	1	N/A	11	S	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:21	1M112.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	RXM4	N/A	X	waters were not analyzed. Not needed.
11/16/2009 16:51	1M113.D	12019---	GEL	BLANK	5G	1	N/A	13	S	RXM4	N/A	O	
11/16/2009 17:22	1M114.D	240630001	LANL	923274	5G	1	N/A	14	S	RXM4	N/A	O	
11/16/2009 17:52	1M115.D	240630002	LANL	923274	5G	1	N/A	15	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 18:22	1M116.D	240630003	LANL	923274	5G	1	N/A	16	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 18:52	1M117.D	240630004	LANL	923274	5G	1	N/A	17	S	RXM4	N/A	O	
11/16/2009 19:23	1M118.D	240630005	LANL	923274	5G	1	N/A	18	S	RXM4	N/A	O	
11/16/2009 19:53	1M119.D	240630006	LANL	923274	5G	1	N/A	19	S	RXM4	N/A	O	
11/16/2009 20:23	1M120.D	240630007	LANL	923274	5G	1	N/A	20	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 20:53	1M121.D	240630008	LANL	923274	5G	1	N/A	21	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:23	1M122.D	240630009	LANL	923274	5G	1	N/A	22	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:54	1M123.D	240630010	LANL	923274	5G	1	N/A	23	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 22:24	1M124.D	240630011	LANL	923274	5G	1	N/A	24	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 22:55	1M125.D	240634001	LANL	923274	5G	1	N/A	25	S	RXM4	N/A	O	
11/16/2009 23:25	1M126.D	240634002	LANL	923274	5G	1	N/A	26	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 23:55	1M127.D	240634003	LANL	923274	5G	1	N/A	27	S	RXM4	N/A	O	
11/17/2009 0:25	1M128.D	240634004	LANL	923274	5G	1	N/A	28	S	RXM4	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/17/2009 0:55	1M129.D	240634005	LANL	923274	5G	1	N/A	29	S	RXM4	N/A	O	
11/17/2009 1:25	1M130.D	240634006	LANL	923274	5G	1	N/A	30	S	RXM4	N/A	O	
11/17/2009 1:56	1M131.D	1201973574	LANL	923274	5G	1	N/A	31	S	RXM4	N/A	X	MS 240630001; See 11/17/09
11/17/2009 2:26	1M132.D	1201973575	LANL	923274	5G	1	N/A	32	S	RXM4	N/A	X	MSD 240630001; out of tune. See 11/17/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 12/3/2009 Method 8260B/624 Operator: RJM

REVIEWED BY:
DATE:

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 120309v1

Daily Standard

	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091203-03		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091203-03			5+5	
BFB	UVM090821-02				1
SHORT	UVM091118-08A		5	5	

Purge Amount

5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
3 Dec 2009 08:14	1O401.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	See 1O404
3 Dec 2009 08:44	1O402.D	W1VM091203-01	GEL	CCV/LCS	5ML	1	N/A	2	W	RXM4	N/A	X	UVM091129-01A/IVM091130-01
3 Dec 2009 09:15	1O403.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	3	W	RXM4	N/A	X	UVM091118-08A
3 Dec 2009 10:11	1O404.D	W1VM091203-03	GEL	BFB/CCV/LCS	5ML	1	N/A	4	W	RXM4	N/A	O	UVM091129-01A/IVM091130-01 adjusted multiplier
3 Dec 2009 10:42	1O405.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	5	W	RXM4	N/A	O	UVM091118-08A
3 Dec 2009 11:15	1O406.D	12019---	GEL	BLANK	5ML	1	N/A	6	W	RXM4	N/A	O	
3 Dec 2009 11:46	1O407.D	1201984938	SNLS	928279	5ML	1	PH2	7	W	RXM4	N	O	MS 241781001
3 Dec 2009 12:16	1O408.D	1201984939	SNLS	928279	5ML	1	PH2	8	W	RXM4	N	O	MSD 241781001
3 Dec 2009 12:47	1O409.D	12019---	GEL	BLANK	5ML	1	N/A	9	W	RXM4	N/A	X	
3 Dec 2009 13:27	1O410.D	1201983838	LANL	928860	500uL	10	N/A	10	W	RXM4	N/A	O	TCLP BLANK
3 Dec 2009 13:58	1O411.D	1201980071	LANL	928862	500uL	10	N/A	11	W	RXM4	N/A	O	TCLP BLANK
3 Dec 2009 14:29	1O412.D	241904001	LANL	928860	500uL	10	N/A	12	W	RXM4	N/A	O	
3 Dec 2009 14:59	1O413.D	241908001	LANL	928860	500uL	10	N/A	13	W	RXM4	N/A	O	
3 Dec 2009 15:30	1O414.D	241908002	LANL	928860	500uL	10	N/A	14	W	RXM4	N/A	O	
3 Dec 2009 16:00	1O415.D	241912001	LANL	928860	500uL	10	N/A	15	W	RXM4	N/A	O	
3 Dec 2009 16:30	1O416.D	241912002	LANL	928860	500uL	10	N/A	16	W	RXM4	N/A	O	
3 Dec 2009 17:01	1O417.D	241424001	LANL	928862	500uL	10	N/A	17	W	RXM4	N/A	O	
3 Dec 2009 17:31	1O418.D	241424002	LANL	928862	500uL	10	N/A	18	W	RXM4	N/A	O	
3 Dec 2009 18:02	1O419.D	241527001	LANL	928862	500uL	10	N/A	19	W	RXM4	N/A	O	
3 Dec 2009 18:32	1O420.D	1201986243	LANL	928860	500uL	10	N/A	20	W	RXM4	N/A	O	MS 241904001
3 Dec 2009 19:03	1O421.D	1201986244	LANL	928860	500uL	10	N/A	21	W	RXM4	N/A	O	MSD 241904001
3 Dec 2009 19:34	1O422.D	1201986406	LANL	928860	500uL	10	N/A	22	W	RXM4	N/A	O	MS 241424001
3 Dec 2009 20:05	1O423.D	1201986407	LANL	928860	500uL	10	N/A	23	W	RXM4	N/A	O	MSD 241424001

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	926126
Prep Batch Number:	926121

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241423004	WST03-10-2131
241423005	WST03-10-2130
1201980154	Method Blank (MB)
1201980155	241524002(WST03-10-2132) Matrix Spike (MS)
1201980156	241524002(WST03-10-2132) Matrix Spike Duplicate (MSD)
1201980157	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
The non-SDG sample 241524002 (WST03-10-2132) was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD(1201980156) recovered 2,4-Dinitrophenol at 21%. The limits are 25%-104%. Since the MS displayed a similar low (but passing) recovery to the MSD, the failure was attributed to matrix interference and the data results have been reported.

MS/MSD Relative Percent Difference (RPD) Statement
Multiple MS(1201980155)/MSD(1201980156) RPD values were outside of the established acceptance limits. Please see the QC Summary Report for specific failures. Since the analytes were all individually within the acceptance limits for the MS and MSD (with the exception of 2,4-Dinitrophenol), the data results have been reported. The 2,4-Dinitrophenol RPD failure was attributed to matrix interference and the data results have been reported (see MSD recovery statement above).

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
A non-conformance report was not required for the samples reported in this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration
The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD1.I	HP 5973 Mass Spectrometer	HP6890/HP5973	ZB-5ms	25m x 0.2mm, 0.33um (5% Polysilarylene-95% Polydimethylsiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: _____ **Date:** 12-14-09

Roadmap for LANL 10-578 SVOA

This roadmap was analyzed by amy01291 on 12-01-2009, 12:09.
This roadmap was reviewed by bar00895 on 12-01-2009, 14:29.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2914.d	241423004	29-NOV-2009	17:37	10-578.sub	WST03-10-2131	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2915.d	241423005	29-NOV-2009	18:01	10-578.sub	WST03-10-2130	1	926126	REPORT

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s112909.b/s1k2912.d	1201980154	mb	29-NOV-2009	16:50	10-578.sub	SBLK01	1	926126	REPORT
☐	N	/chem/MSD1.i/s112909.b/s1k2913.d	1201980157	lcs	29-NOV-2009	17:14	10-578.sub	SBLK01LCS	1	926126	REPORT

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 18:01	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2915.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.6	368
108-95-2	Phenol	U	368	ug/kg	73.6	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.6	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.6	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.6	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.6	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	92.0	368
129-00-0	Pyrene	J	27.1	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.6	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.6	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.6	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.6	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.6	368
95-48-7	o-Cresol	U	368	ug/kg	73.6	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.6	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.6	368
78-59-1	Isophorone	U	368	ug/kg	73.6	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.6	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.6	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.6	368
65-85-0	Benzoic acid	U	736	ug/kg	184	736
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.6	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.6	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.36	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.6	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.6	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.6	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.6	368
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	368	ug/kg	73.6	368

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 18:01	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2915.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.6	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	736	ug/kg	140	736
132-64-9	Dibenzofuran	U	368	ug/kg	73.6	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.6	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.6	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.6	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	p-Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.6	368
122-66-7	Azobenzene	U	368	ug/kg	73.6	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.6	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.6	368
85-01-8	Phenanthrene	J	21.9	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.36	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.6	368
206-44-0	Fluoranthene	J	27.9	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.6	368
56-55-3	Benzo(a)anthracene	J	12.7	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	J	13.6	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.6	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.6	368
205-99-2	Benzo(b)fluoranthene		117	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.6	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	300	ug/kg		JA
112-95-8	Eicosane	9.38	717	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.l	Dilution:	1
Run Date:	11/29/2009 18:01	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2915.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.75	290	ug/kg		J
	Unknown	10.19	350	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:37	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2914.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.1	360
108-95-2	Phenol	U	360	ug/kg	72.1	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360
129-00-0	Pyrene	J	21.6	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.1	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360
95-48-7	o-Cresol	U	360	ug/kg	72.1	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360
78-59-1	Isophorone	U	360	ug/kg	72.1	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360
65-85-0	Benzoic acid	U	721	ug/kg	180	721
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	360	ug/kg	72.1	360

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:37	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2914.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	360	ug/kg	72.1	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	721	ug/kg	137	721
132-64-9	Dibenzofuran	U	360	ug/kg	72.1	360
84-66-2	Diethylphthalate	U	360	ug/kg	72.1	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.1	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.1	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	p-Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	72.1	360
122-66-7	Azobenzene	U	360	ug/kg	72.1	360
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.1	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.1	360
85-01-8	Phenanthrene	J	13.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.21	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.1	360
206-44-0	Fluoranthene	J	23.1	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.1	360
56-55-3	Benzo(a)anthracene	J	12.5	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	J	13.3	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.1	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.1	360
205-99-2	Benzo(b)fluoranthene		115	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.1	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	284	ug/kg		J
	Unknown Aldol Condensate	2.88	276	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 17:37	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2914.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.66	155	ug/kg	99	NJ
	Unknown	11.58	341	ug/kg		J

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-578

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201980154	MB for batch 926121	80	76	85	91	92	97
1201980157	LCS for batch 926121	79	75	79	89	100	97
241423004	WST03-10-2131	68	65	73	80	85	85
241423005	WST03-10-2130	66	66	70	79	88	89

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1770	0.00	U	1150	65	32-90
108-95-2	MS	Phenol	1770	0.00	U	1200	68	32-105
95-57-8	MS	2-Chlorophenol	1770	0.00	U	1170	66	33-106
106-46-7	MS	1,4-Dichlorobenzene	1770	0.00	U	1060	60	33-95
621-64-7	MS	N-Nitrosodipropylamine	1770	0.00	U	1120	63	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1770	0.00	U	1230	70	38-119
83-32-9	MS	Acenaphthene	1770	0.00	U	1210	68	39-100
121-14-2	MS	2,4-Dinitrotoluene	1770	0.00	U	1140	64	42-107
100-02-7	MS	4-Nitrophenol	1770	0.00	U	1160	65	24-120
87-86-5	MS	Pentachlorophenol	1770	0.00	U	1250	70	26-121
129-00-0	MS	Pyrene	1770	59.8		1460	79	34-120
110-86-1	MS	Pyridine	1770	0.00	U	786	44	30-95
62-53-3	MS	Aniline	1770	0.00	U	949	54	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1770	0.00	U	1110	63	34-101
541-73-1	MS	1,3-Dichlorobenzene	1770	0.00	U	1010	57	31-97
100-51-6	MS	Benzyl alcohol	1770	0.00	U	908	51	17-120
95-50-1	MS	1,2-Dichlorobenzene	1770	0.00	U	1090	62	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1770	0.00	U	1100	62	32-113
95-48-7	MS	o-Cresol	1770	0.00	U	1630	92	31-119
65794-96-9	MS	m,p-Cresols	1770	0.00	U	1360	77	35-125
67-72-1	MS	Hexachloroethane	1770	0.00	U	996	56	30-100
98-95-3	MS	Nitrobenzene	1770	0.00	U	1220	69	33-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1770	0.00	U	1310	74	34-110
88-75-5	MS	2-Nitrophenol	1770	0.00	U	1120	63	32-108
105-67-9	MS	2,4-Dimethylphenol	1770	0.00	U	1230	69	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1770	0.00	U	1120	63	35-108
120-83-2	MS	2,4-Dichlorophenol	1770	0.00	U	1160	65	38-110
65-85-0	MS	Benzoic acid	3540	0.00	U	1170	33	18-134
91-20-3	MS	Naphthalene	1770	0.00	U	1140	64	31-105
106-47-8	MS	4-Chloroaniline	1770	0.00	U	1010	57	29-123
87-68-3	MS	Hexachlorobutadiene	1770	0.00	U	1150	65	31-109
91-57-6	MS	2-Methylnaphthalene	1770	0.00	U	1190	67	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1770	0.00	U	1580	89	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1770	0.00	U	1390	78	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1770	0.00	U	1440	81	37-116
91-58-7	MS	2-Chloronaphthalene	1770	0.00	U	1190	67	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1110	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	980	55	39-117
131-11-3	MS	Dimethylphthalate	1770	0.00	U	1330	75	41-105
606-20-2	MS	2,6-Dinitrotoluene	1770	0.00	U	1230	69	41-103
208-96-8	MS	Acenaphthylene	1770	0.00	U	1240	70	41-103
51-28-5	MS	2,4-Dinitrophenol	1770	0.00	U	513	29	25-104
132-64-9	MS	Dibenzofuran	1770	0.00	U	1450	82	40-114
84-66-2	MS	Diethylphthalate	1770	0.00	U	1410	80	43-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1770	0.00	U	1280	72	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1770	0.00	U	1380	78	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1770	0.00	U	647	37	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	1040	59	35-139
122-39-4	MS	Diphenylamine	1770	0.00	U	1290	73	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1310	74	37-118
101-55-3	MS	4-Bromophenylphenylether	1770	0.00	U	1540	87	39-112
118-74-1	MS	Hexachlorobenzene	1770	0.00	U	1230	70	38-113
85-01-8	MS	Phenanthrene	1770	61.1		1300	70	38-110
120-12-7	MS	Anthracene	1770	14.7	J	1240	69	38-112
84-74-2	MS	Di-n-butylphthalate	1770	0.00	U	1480	84	42-119
206-44-0	MS	Fluoranthene	1770	64.8		1270	68	38-119
85-68-7	MS	Butylbenzylphthalate	1770	0.00	U	1710	97	39-126
56-55-3	MS	Benzo(a)anthracene	1770	29.5	J	1290	71	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1770	0.00	U	1070	61	35-106
218-01-9	MS	Chrysene	1770	26.2	J	1160	64	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1770	0.00	U	1560	88	40-125
117-84-0	MS	Di-n-octylphthalate	1770	0.00	U	1850	104	30-147
205-99-2	MS	Benzo(b)fluoranthene	1770	0.00	U	1530	86	38-117
207-08-9	MS	Benzo(k)fluoranthene	1770	0.00	U	1220	69	39-120
50-32-8	MS	Benzo(a)pyrene	1770	16.9	J	1280	71	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1770	0.00	U	1000	57	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MS
Lab Sample ID: 1201980155
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 19:59
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1770	0.00	U	1030	58	32-124
191-24-2	MS	Benzo(ghi)perylene	1770	0.00	U	942	53	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1770	0.00	U	1130	64	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1770	0.00	U	1120	63	32-90	3	0-30
108-95-2	MSD Phenol	1770	0.00	U	1120	63	32-105	7	0-30
95-57-8	MSD 2-Chlorophenol	1770	0.00	U	1120	63	33-106	4	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1770	0.00	U	1020	58	33-95	4	0-30
621-64-7	MSD N-Nitrosodipropylamine	1770	0.00	U	1010	57	31-109	10	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1770	0.00	U	1150	65	38-119	7	0-30
83-32-9	MSD Acenaphthene	1770	0.00	U	1130	64	39-100	6	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1770	0.00	U	1030	59	42-107	9	0-30
100-02-7	MSD 4-Nitrophenol	1770	0.00	U	1090	62	24-120	6	0-30
87-86-5	MSD Pentachlorophenol	1770	0.00	U	1030	58	26-121	19	0-30
129-00-0	MSD Pyrene	1770	59.8		1410	76	34-120	4	0-30
110-86-1	MSD Pyridine	1770	0.00	U	826	47	30-95	5	0-30
62-53-3	MSD Aniline	1770	0.00	U	944	53	34-111	1	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1770	0.00	U	1080	61	34-101	3	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1770	0.00	U	981	55	31-97	3	0-30
100-51-6	MSD Benzyl alcohol	1770	0.00	U	723	41	17-120	23	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1770	0.00	U	1050	60	32-102	4	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1770	0.00	U	1070	60	32-113	3	0-30
95-48-7	MSD o-Cresol	1770	0.00	U	1530	87	31-119	6	0-30
65794-96-9	MSD m,p-Cresols	1770	0.00	U	1280	72	35-125	6	0-30
67-72-1	MSD Hexachloroethane	1770	0.00	U	914	52	30-100	9	0-30
98-95-3	MSD Nitrobenzene	1770	0.00	U	1160	66	33-108	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Dilution: 1
Prep Batch ID 926121
Batch ID: 926126

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1770	0.00	U	1230	70	34-110	6	0-30
88-75-5	MSD 2-Nitrophenol	1770	0.00	U	1010	57	32-108	11	0-30
105-67-9	MSD 2,4-Dimethylphenol	1770	0.00	U	1140	65	32-115	7	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1770	0.00	U	1070	60	35-108	4	0-30
120-83-2	MSD 2,4-Dichlorophenol	1770	0.00	U	1090	62	38-110	6	0-30
65-85-0	MSD Benzoic acid	3540	0.00	U	1310	37	18-134	11	0-30
91-20-3	MSD Naphthalene	1770	0.00	U	1070	61	31-105	6	0-30
106-47-8	MSD 4-Chloroaniline	1770	0.00	U	973	55	29-123	4	0-30
87-68-3	MSD Hexachlorobutadiene	1770	0.00	U	1090	62	31-109	5	0-30
91-57-6	MSD 2-Methylnaphthalene	1770	0.00	U	1120	64	32-110	6	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1770	0.00	U	1040	59	21-122	41 *	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1770	0.00	U	1250	71	37-108	11	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1770	0.00	U	1330	75	37-116	8	0-30
91-58-7	MSD 2-Chloronaphthalene	1770	0.00	U	1090	62	37-103	8	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1770	0.00	U	1010	57	36-115	9	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1770	0.00	U	920	52	39-117	6	0-30
131-11-3	MSD Dimethylphthalate	1770	0.00	U	1230	70	41-105	8	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1770	0.00	U	1100	62	41-103	11	0-30
208-96-8	MSD Acenaphthylene	1770	0.00	U	1140	64	41-103	8	0-30
51-28-5	MSD 2,4-Dinitrophenol	1770	0.00	U	364	21 *	25-104	34 *	0-30
132-64-9	MSD Dibenzofuran	1770	0.00	U	1350	76	40-114	7	0-30
84-66-2	MSD Diethylphthalate	1770	0.00	U	1320	75	43-110	7	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1770	0.00	U	1190	68	48-99	7	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1770	0.00	U	1300	74	42-111	6	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1770	0.00	U	433	25	19-118	40 *	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1770	0.00	U	948	54	35-139	9	0-30
122-39-4	MSD	Diphenylamine	1770	0.00	U	1170	66	41-112	9	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1770	0.00	U	1200	68	37-118	9	0-30
101-55-3	MSD	4-Bromophenylphenylether	1770	0.00	U	1430	81	39-112	8	0-30
118-74-1	MSD	Hexachlorobenzene	1770	0.00	U	1130	64	38-113	9	0-30
85-01-8	MSD	Phenanthrene	1770	61.1		1190	64	38-110	9	0-30
120-12-7	MSD	Anthracene	1770	14.7	J	1150	64	38-112	7	0-30
84-74-2	MSD	Di-n-butylphthalate	1770	0.00	U	1360	77	42-119	9	0-30
206-44-0	MSD	Fluoranthene	1770	64.8		1130	60	38-119	11	0-30
85-68-7	MSD	Butylbenzylphthalate	1770	0.00	U	1600	90	39-126	7	0-30
56-55-3	MSD	Benzo(a)anthracene	1770	29.5	J	1140	63	39-110	13	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1770	0.00	U	1030	58	35-106	4	0-30
218-01-9	MSD	Chrysene	1770	26.2	J	1080	60	39-109	7	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1770	0.00	U	1460	82	40-125	7	0-30
117-84-0	MSD	Di-n-octylphthalate	1770	0.00	U	2020	114	30-147	9	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1770	0.00	U	1270	72	38-117	19	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1770	0.00	U	1370	77	39-120	12	0-30
50-32-8	MSD	Benzo(a)pyrene	1770	16.9	J	1160	65	40-115	10	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1770	0.00	U	742	42	32-120	30	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2132MSD
Lab Sample ID: 1201980156
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 6.2
Analysis Date: 11/29/2009 20:22
Prep Batch ID: 926121
Batch ID: 926126
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD	Dibenzo(a,h)anthracene	1770	0.00	U	790	45	32-124	26	0-30
191-24-2	MSD	Benzo(ghi)perylene	1770	0.00	U	686	39	28-119	31 *	0-30
120-82-1	MSD	1,2,4-Trichlorobenzene	1770	0.00	U	1070	61	31-105	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 926121
Matrix: SOIL
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analysis Date: 11/29/2009 17:14
Dilution: 1
Analyst: AMY
Prep Batch ID: 926121
Inj. Vol: .5 uL
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1230	74	31-95
108-95-2	LCS	Phenol	1670	0.0	1220	73	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1210	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1180	71	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1130	68	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1230	74	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1280	77	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1230	74	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1170	70	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1390	84	38-116
129-00-0	LCS	Pyrene	1670	0.0	1370	82	43-108
110-86-1	LCS	Pyridine	1670	0.0	927	56	13-129
62-53-3	LCS	Aniline	1670	0.0	1020	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1180	71	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1130	68	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1220	73	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1200	72	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1160	70	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1360	82	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1350	81	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1140	68	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1280	77	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926121 **Matrix:** SOIL

Lab Sample ID: 1201980157

Instrument: MSD1.I **Analysis Date:** 11/29/2009 17:14 **Dilution:** 1

Analyst: AMY **Prep Batch ID** 926121

Inj. Vol: .5 uL **Batch ID:** 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1330	80	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1190	71	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1210	73	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1140	68	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1160	70	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	2170	65	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1190	71	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1020	61	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1230	74	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1250	75	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	2090	126	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1340	81	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1430	86	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1210	73	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1130	68	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	986	59	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1340	81	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1250	75	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1280	77	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1350	81	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1470	88	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1410	85	50-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1300	78	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1390	83	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1200	72	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1110	67	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1240	75	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1290	77	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1520	91	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1330	80	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1290	78	45-107
120-12-7	LCS	Anthracene	1670	0.0	1280	77	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1510	91	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1360	82	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1510	91	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1220	73	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1190	71	45-98
218-01-9	LCS	Chrysene	1670	0.0	1230	74	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1450	87	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1490	89	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1240	74	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1380	83	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1290	77	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1180	71	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926121
Lab Sample ID: 1201980157
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 17:14
Dilution: 1
Prep Batch ID: 926121
Batch ID: 926126

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1160	70	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1220	73	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1220	73	36-109

Method Blank Summary

SDG Number:	10-578	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926121	Instrument ID:	MSD1.I	Data File:	s1k2912-1.d
Lab Sample ID:	1201980154	Prep Date:	11/25/2009 21:20	Analyzed:	11/29/09 16:50
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926121	1201980157	s1k2913-1.d	11/29/09	1714
02 WST03-10-2131	241423004	s1k2914.d	11/29/09	1737
03 WST03-10-2130	241423005	s1k2915.d	11/29/09	1801

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-578

Instrument ID: MSD1.I **Injection Date/Time:** 14-NOV-09 17:38

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.3
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	36.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	77.4
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091111-16	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:22
MEGA010	WBN091111-15	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:51
MEGA020	WBN091111-14	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:21
MEGA040	WBN091111-13.1	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:50
MEGA050	WBN091111-12	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:19
MEGA080	WBN091111-11	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:47
MEGA100	WBN091111-10	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 21:16
MEGA120	WBN091111-09	/chem/MSD1.i/s111409.b/s1k121	14-NOV-09 21:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-578

Instrument ID: MSD1.I **Injection Date/Time:** 15-NOV-09 14:50

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1213.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	39.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.2
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	72.7
442	Greater than 40% of mass 198	70.7
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP010	WBN091111-01	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:28
AP020	WBN091111-02	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:51
AP040	WBN091111-03.1	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:14
AP050	WBN091111-04	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:38
AP080	WBN091111-05	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 17:01
AP100	WBN091111-06	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:24
AP120	WBN091111-07	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:47
APICV	WBN091111-08.1	/chem/MSD1.i/s111409.b/s1k123	15-NOV-09 23:17

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-578

Instrument ID: MSD1.I **Injection Date/Time:** 17-NOV-09 15:48

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1259.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.2
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.5
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	72.4
442	Greater than 40% of mass 198	78.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091027-09.3	/chem/MSD1.i/s111409.b/s1k126	17-NOV-09 16:27

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-578

Instrument ID: MSD1.I **Injection Date/Time:** 29-NOV-09 15:00

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s112909.b/s1k2907.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.7
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	42.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	52.9
197	0 - 1% of mass 198	1
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	74.6
442	Greater than 40% of mass 198	69.8
443	17 - 23% of mass 442	18.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-03.5	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:16
APCVS	WBN091111-03.3	/chem/MSD1.i/s112909.b/s1k290	29-NOV-09 15:40
SBLK01	1201980154	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 16:50
SBLK01LCS	1201980157	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 17:14
WST03-10-2131	241423004	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 17:37
WST03-10-2130	241423005	/chem/MSD1.i/s112909.b/s1k291	29-NOV-09 18:01

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-578

Instrument: MSD1.I

STD Analysis Time: 29-NOV-09 15:16

GC Column: J&W DB-5MS

Data File: s1k2908.d

	1,4-Dichlorobenzene-d4				Naphthalene-d8				Acenaphthene-d10				Phenanthrene-d10				Chrysene-d12				Perylene-d12			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	531725		3.83		2194392		4.69		1110069		5.94		1851790		6.92		1672748		8.56		1414560		9.95	
Upper Limit	1063450		4.33		4388784		5.19		2220138		6.44		3703580		7.42		3345496		9.06		2829120		10.5	
Lower Limit	265863		3.33		1097196		4.19		555035		5.44		925895		6.42		836374		8.06		707280		9.45	
Sample ID																								
BLK01	582567		3.83		2290441		4.69		1227579		5.93		2026415		6.92		1690866		8.55		1420003		9.94	
BLK01LCS	617030		3.83		2615814		4.69		1327800		5.93		2222627		6.92		1876046		8.56		1522701		9.95	
WST03-10-2131	611465		3.83		2387404		4.69		1281105		5.93		2176494		6.92		1881215		8.56		1536638		9.95	
WST03-10-2130	642939		3.83		2532860		4.69		1346985		5.93		2240919		6.92		1820058		8.55		1517955		9.95	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 18:01	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2915.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.6	368
108-95-2	Phenol	U	368	ug/kg	73.6	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.6	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.6	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.6	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.6	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	92.0	368
129-00-0	Pyrene	J	27.1	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.6	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.6	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.6	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.6	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.6	368
95-48-7	o-Cresol	U	368	ug/kg	73.6	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.6	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.6	368
78-59-1	Isophorone	U	368	ug/kg	73.6	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.6	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.6	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.6	368
65-85-0	Benzoic acid	U	736	ug/kg	184	736
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.6	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.6	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.36	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.6	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.6	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.6	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.6	368
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	368	ug/kg	73.6	368

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 18:01	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2915.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.6	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	736	ug/kg	140	736
132-64-9	Dibenzofuran	U	368	ug/kg	73.6	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.6	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.6	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.6	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	p-Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.6	368
122-66-7	Azobenzene	U	368	ug/kg	73.6	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.6	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.6	368
85-01-8	Phenanthrene	J	21.9	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.36	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.6	368
206-44-0	Fluoranthene	J	27.9	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.6	368
56-55-3	Benzo(a)anthracene	J	12.7	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	J	13.6	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.6	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.6	368
205-99-2	Benzo(b)fluoranthene		117	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.6	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	300	ug/kg		JA
112-95-8	Eicosane	9.38	717	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 18:01	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2915.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.75	290	ug/kg		J
	Unknown	10.19	350	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2915.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 29-NOV-2009 18:01
Operator : AMY Inst ID: MSD1.i
Smp Info : |241423005|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	9.84860	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	642939	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2532860	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1346985	40.0000	
* 67 Phenanthrene-d10	188	6.916	6.922	(1.000)	2240919	40.0000	
* 91 Chrysene-d12	240	8.551	8.557	(1.000)	1820058	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1517955	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1112016	66.2178	2440
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1338818	65.5940	2410
$ 20 Nitrobenzene-d5	82	4.187	4.199	(0.893)	586698	35.1489	1290
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1274893	39.5190	1450
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	329445	87.5889	3220
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1267275	44.3581	1630

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.781	7.787	(0.910)	35573	0.73551	27.1(a)
68 Phenanthrene	178	6.934	6.940	(1.003)	30299	0.59495	21.9(a)
76 Fluoranthene	202	7.640	7.645	(1.105)	37258	0.75792	27.9(a)
89 Benzo(a)anthracene	228	8.569	8.545	(1.002)	15046	0.34475	12.7(aH)
92 Chrysene	228	8.569	8.581	(1.002)	15046	0.36886	13.6(aH)
95 Benzo(b)fluoranthene	252	9.492	9.510	(0.954)	20646	3.16477	116

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s1k2915.d
Report Date: 11/30/2009 08:45
Lab. ID: 241423005 SampleType: SAMPLE
Injection Date: 29-NOV-2009 18:01
Operator: AMY Instrument: MSD1.i
Sample Info: |241423005|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	66850	3.56	3.63	80-120	100	(T)
93	840	3.60	3.63	408-468	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	78556	4.19	4.08	80-120	100	(T)
42	50459	4.19	4.08	48-108	64	(T)
22 Isophorone			CAS#: 78-59-1			
82	586698	4.19	4.37	80-120	100	(T)
138	129	4.61	4.37	0- 50	0	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	241384	5.93	5.72	80-120	100	(T)
164	1346985	5.93	5.72	0- 40	558	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	172764	5.93	5.76	80-120	100	(T)
63	1999	5.93	5.76	53-113	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	172764	5.93	6.05	80-120	100	(T)
89	1705	5.93	6.05	40-100	1	(QT)
63	2045	5.93	6.05	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	21287	6.47	6.31	80-120	100	(T)
165	22810	6.47	6.31	65-125	107	(T)
167	6883	6.47	6.31	0- 43	32	(T)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	20563	6.47	6.62	80-120	100	(T)
141	134990	6.47	6.62	62-122	656	(QT)
250	41293	6.47	6.62	66-126	201	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	30299	6.93	6.94	80-120	100	( )
179	6148	6.93	6.94	0- 45	20	( )
176	5639	6.93	6.94	0- 48	19	( )
69 Anthracene			CAS#: 120-12-7			
178	30299	6.93	6.97	80-120	100	( )
179	6148	6.93	6.97	0- 45	20	( )
176	5639	6.93	6.97	0- 48	19	( )
76 Fluoranthene			CAS#: 206-44-0			
202	37258	7.64	7.65	80-120	100	( )
203	6598	7.64	7.65	0- 47	18	( )
101	6204	7.64	7.65	0- 43	17	( )
79 Pyrene			CAS#: 129-00-0			
202	35573	7.78	7.79	80-120	100	( )
200	7374	7.78	7.79	0- 51	21	( )
101	6250	7.77	7.79	0- 45	18	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	17856	8.54	8.55	80-120	100	( )
226	4497	8.54	8.55	0- 55	25	( )
229	5217	8.55	8.55	0- 49	29	( )
92 Chrysene			CAS#: 218-01-9			
228	15046	8.57	8.58	80-120	100	( )
229	4029	8.57	8.58	0- 49	27	( )
226	4497	8.57	8.58	0- 58	30	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	20646	9.49	9.51	80-120	100	( )
253	2988	9.49	9.51	0- 51	14	( )
125	2640	9.50	9.50	0- 44	13	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	20646	9.49	9.53	80-120	100	( )
253	3486	9.49	9.53	0- 51	17	( )
125	2027	9.50	9.53	0- 43	10	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2915.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 29-NOV-2009 18:01
Operator : AMY Inst ID: MSD1.i
Smp Info : |241423005|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	9.84860	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3861628	40.000
* 98 Perylene-d12	9.945	4229129	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.881	786595	8.14780399	300	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Eicosane				CAS #: 112-95-8			
9.381	2058728	19.4718870	717	98	NIST05.L	113488	98
Unknown				CAS #:			
9.751	833704	7.88534611	290	0		0	98
Unknown				CAS #:			
10.186	1004985	9.50536091	350	0		0	98

Data File: /chem/MSD1.i/s112909.b/s1k2915.d
Date : 29-NOV-2009 18:01
Client ID: WST03-10-2130
Sample Info: |2414230051926126|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

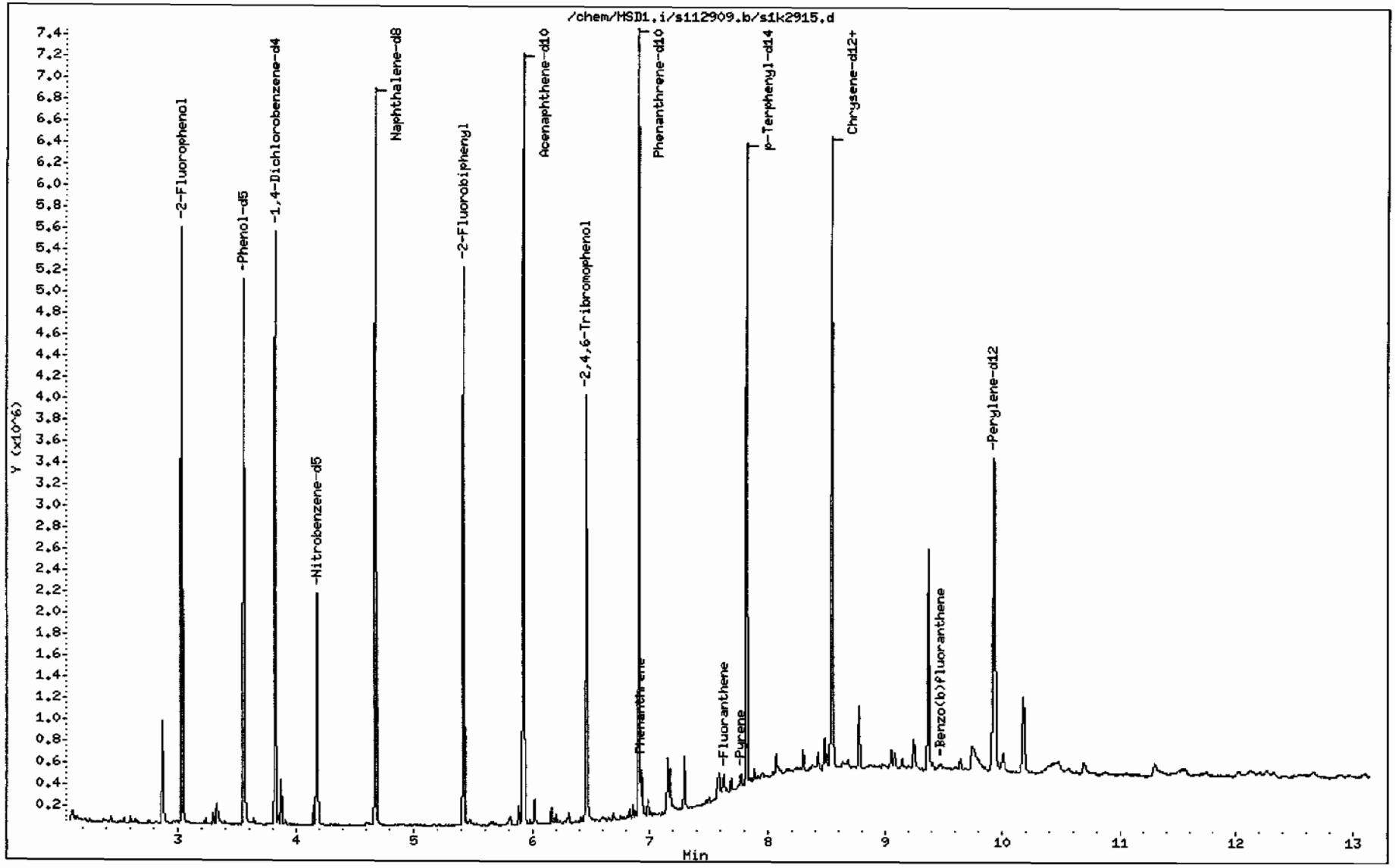

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: 1241423005|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 27.1 ug/Kg

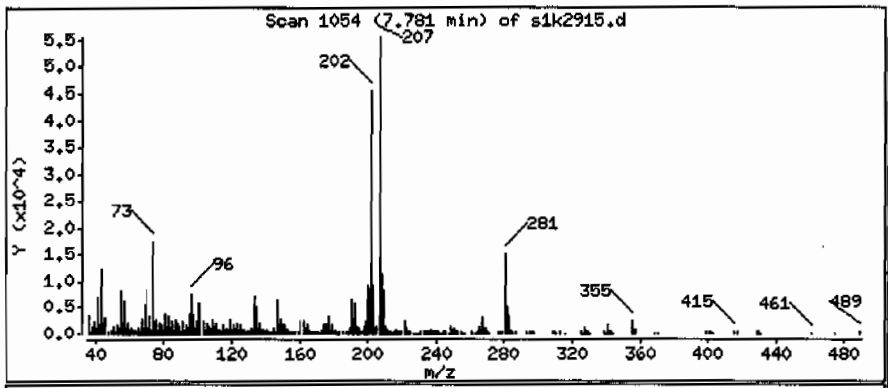

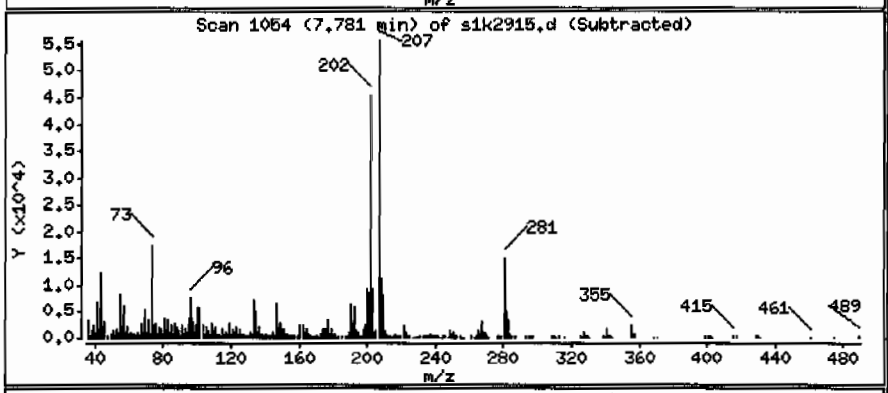

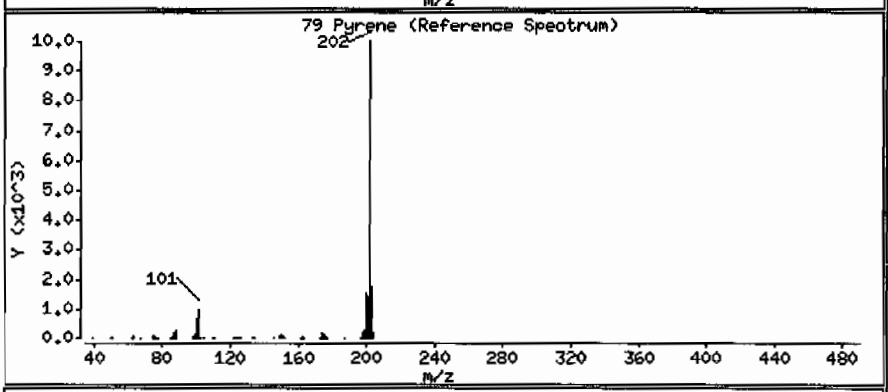

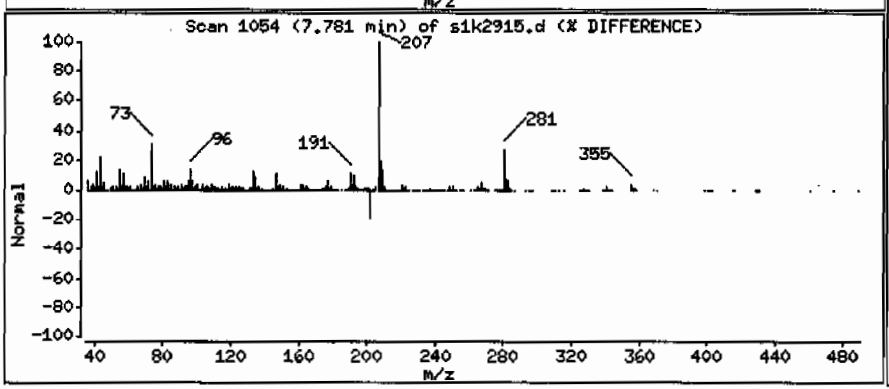

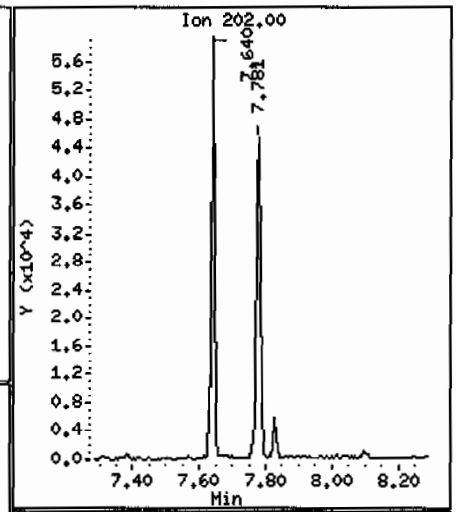

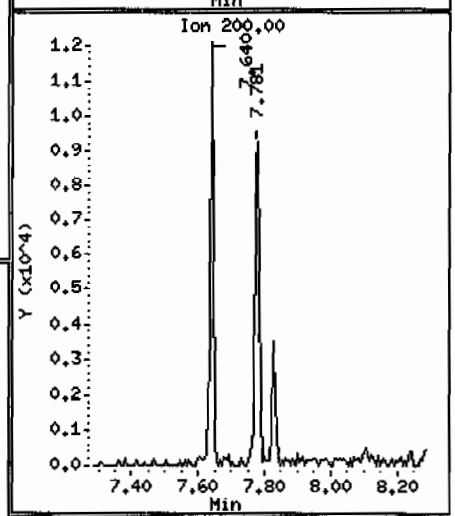

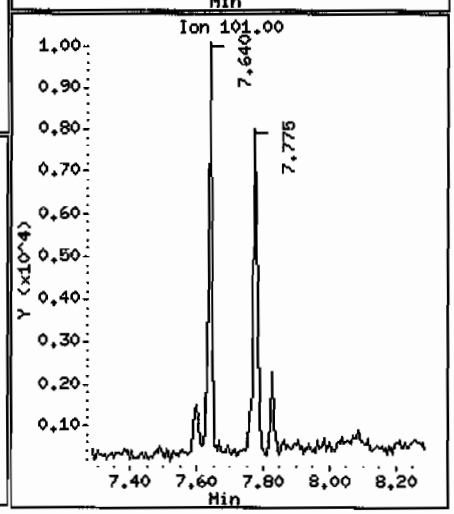

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: 1241423005192612611ISWMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 21.9 ug/Kg

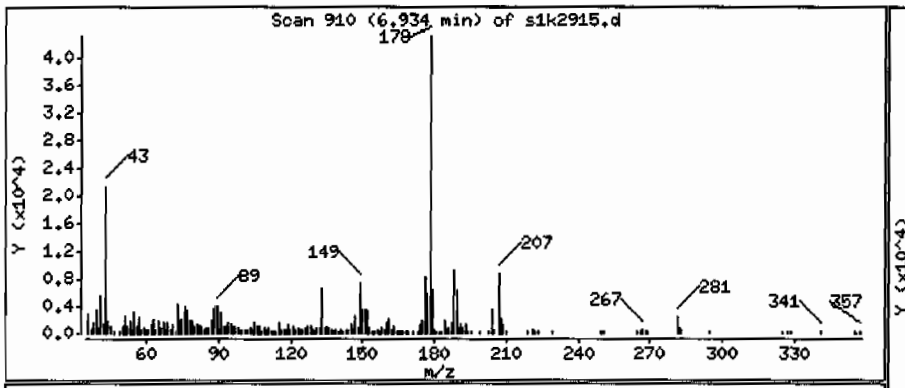

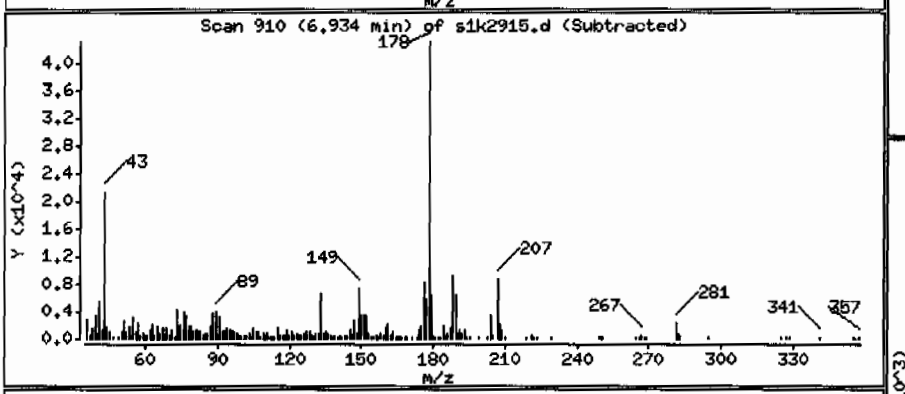

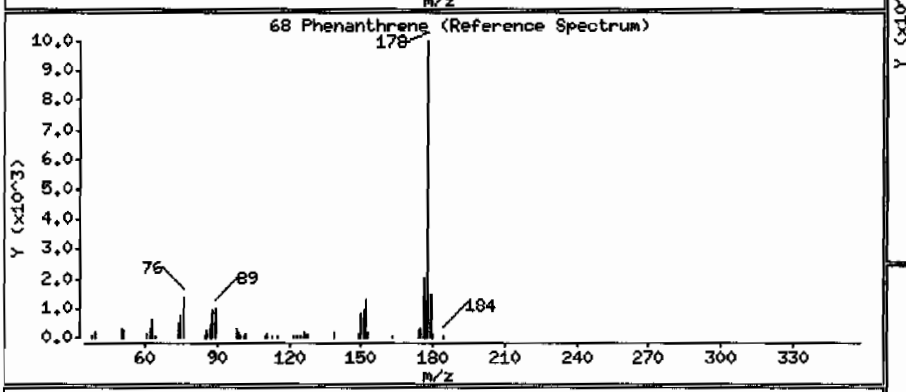

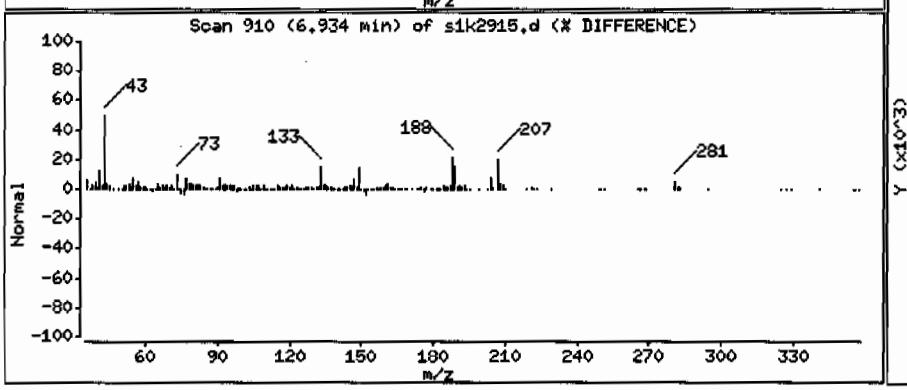

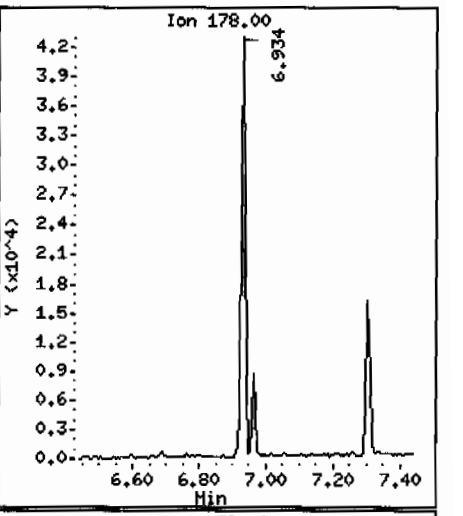

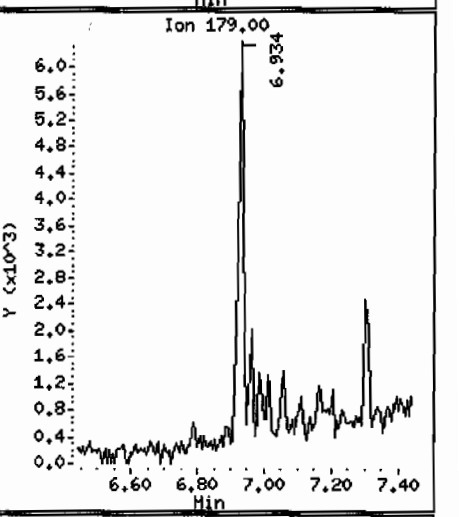

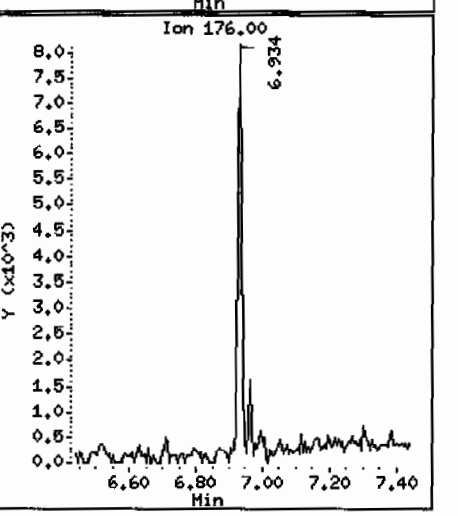

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Page 4

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: |2414230051926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 27.9 ug/Kg

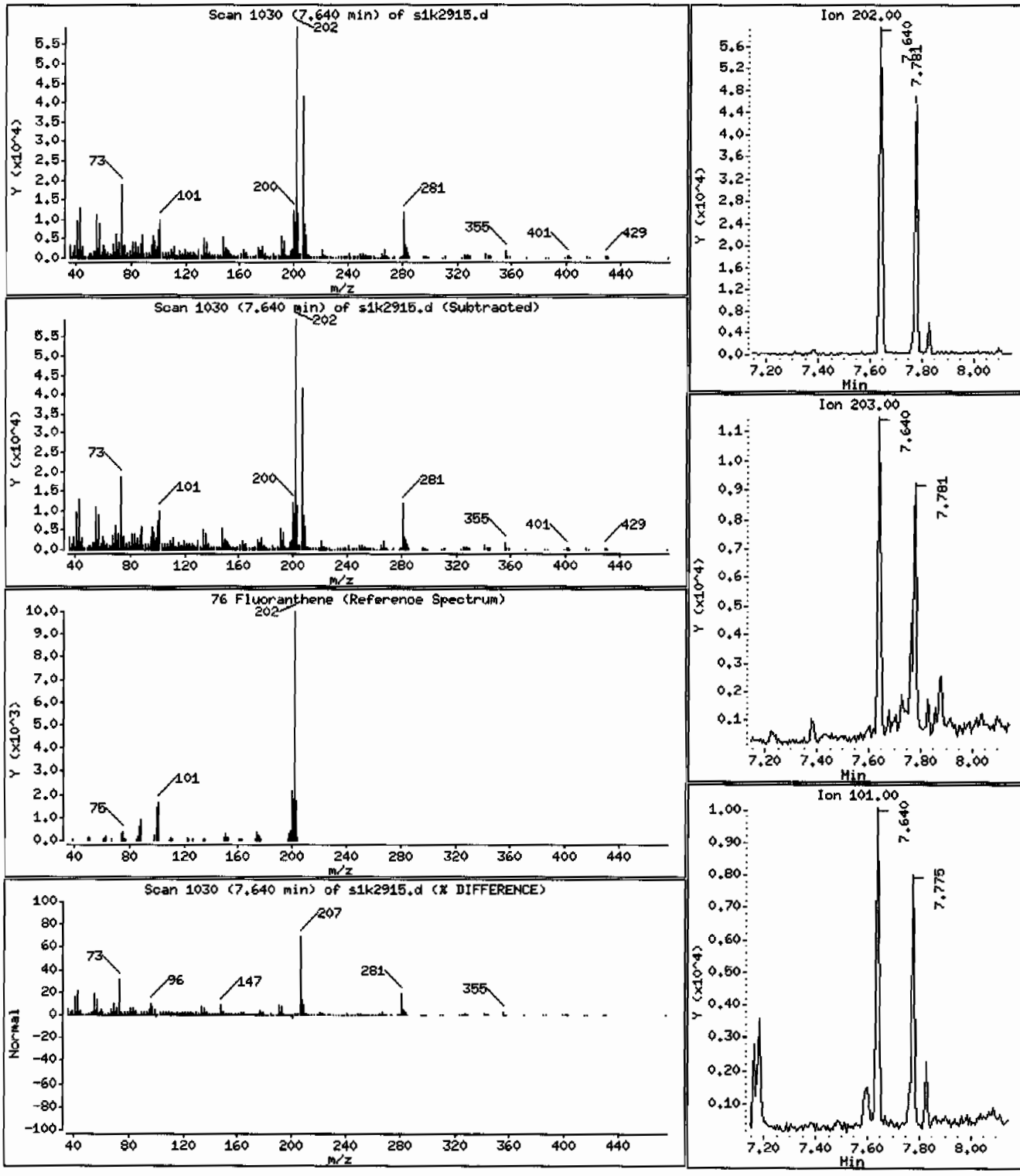

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130 Instrument: MSD1.i

Sample Info: |2414230051926126|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

89 Benzo(a)anthracene Concentration: 12.7 ug/Kg

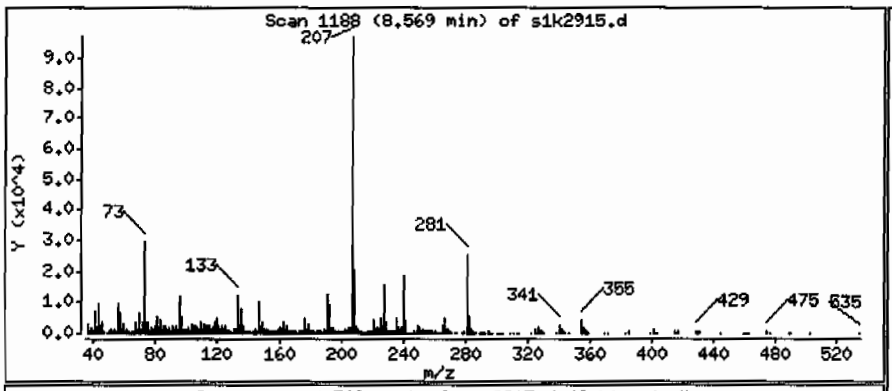

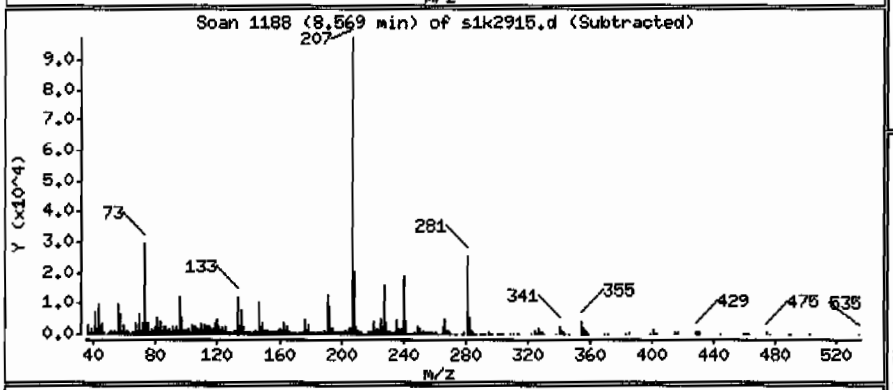

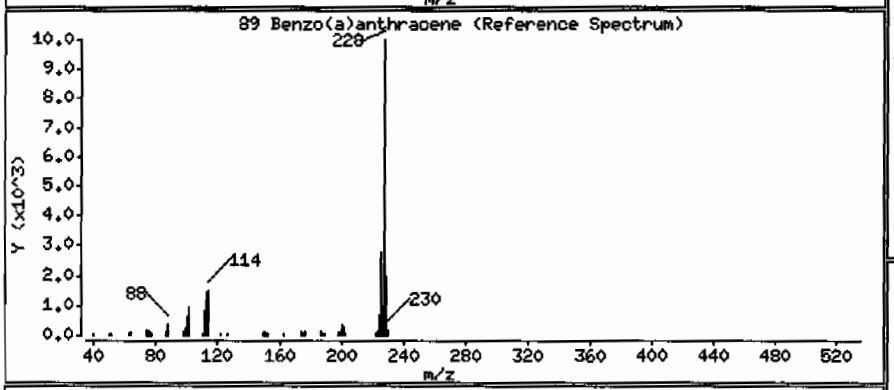

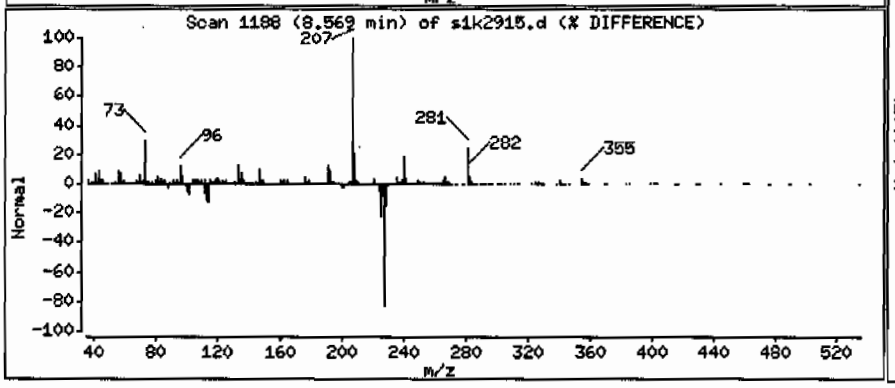

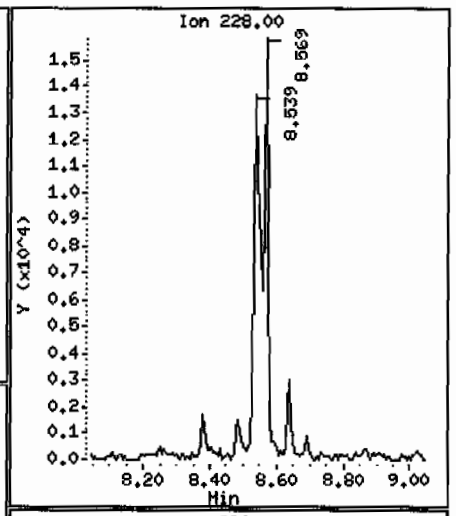

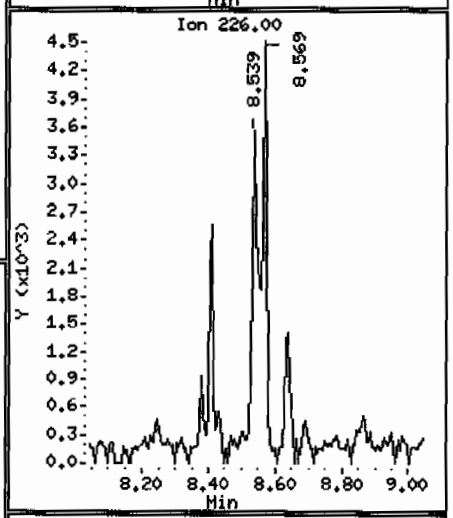

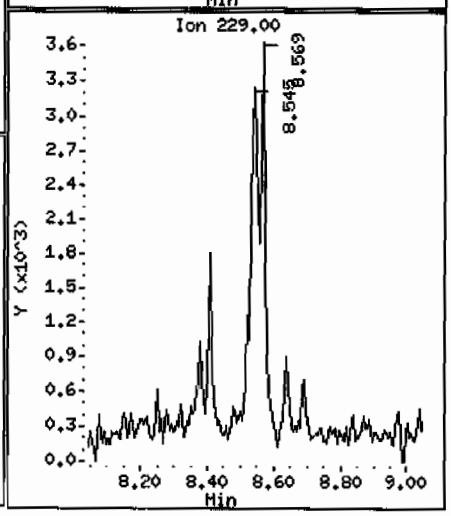

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: 1241423005|926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 13.6 ug/Kg

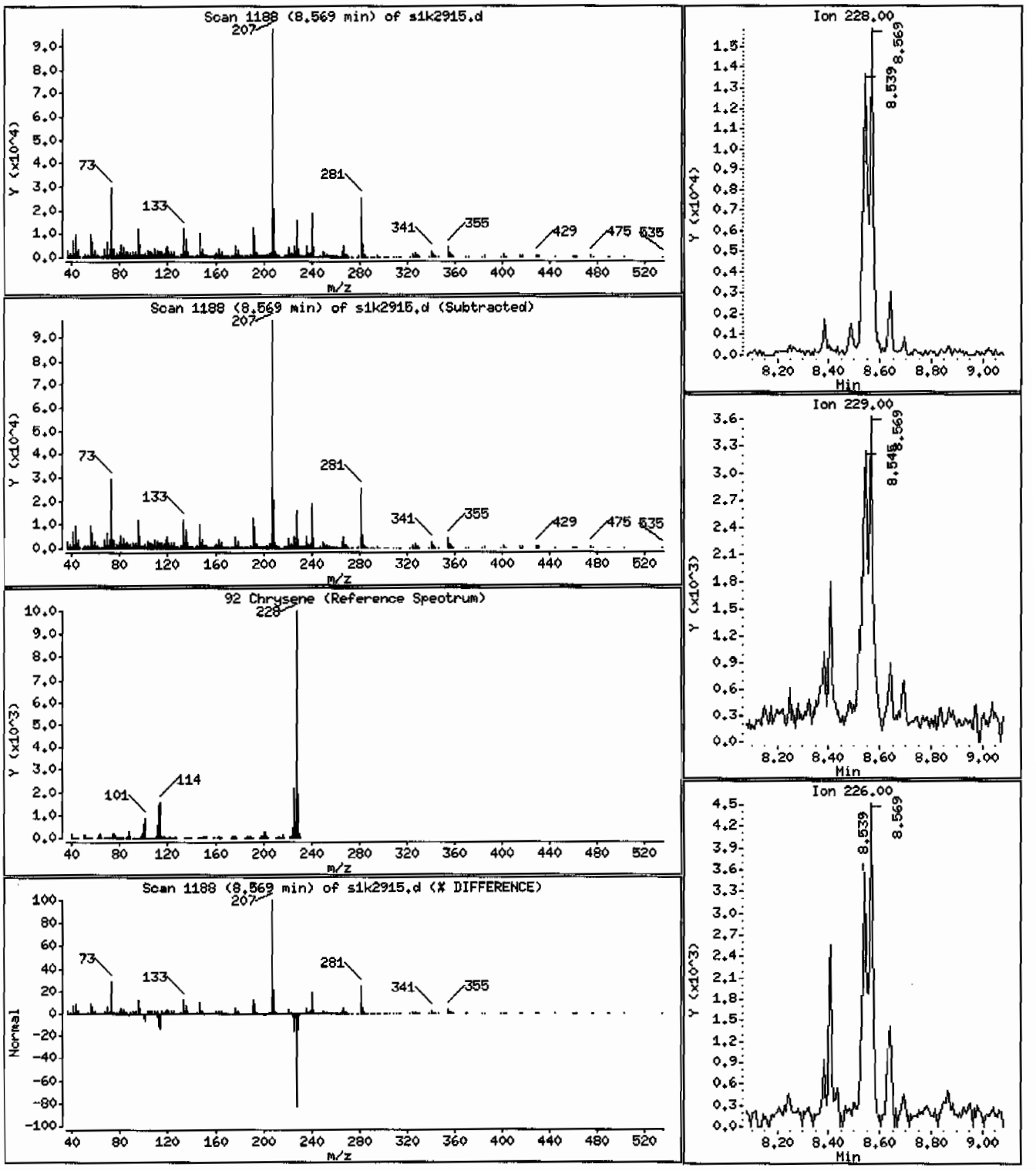

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: |2414230051926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 116 ug/Kg

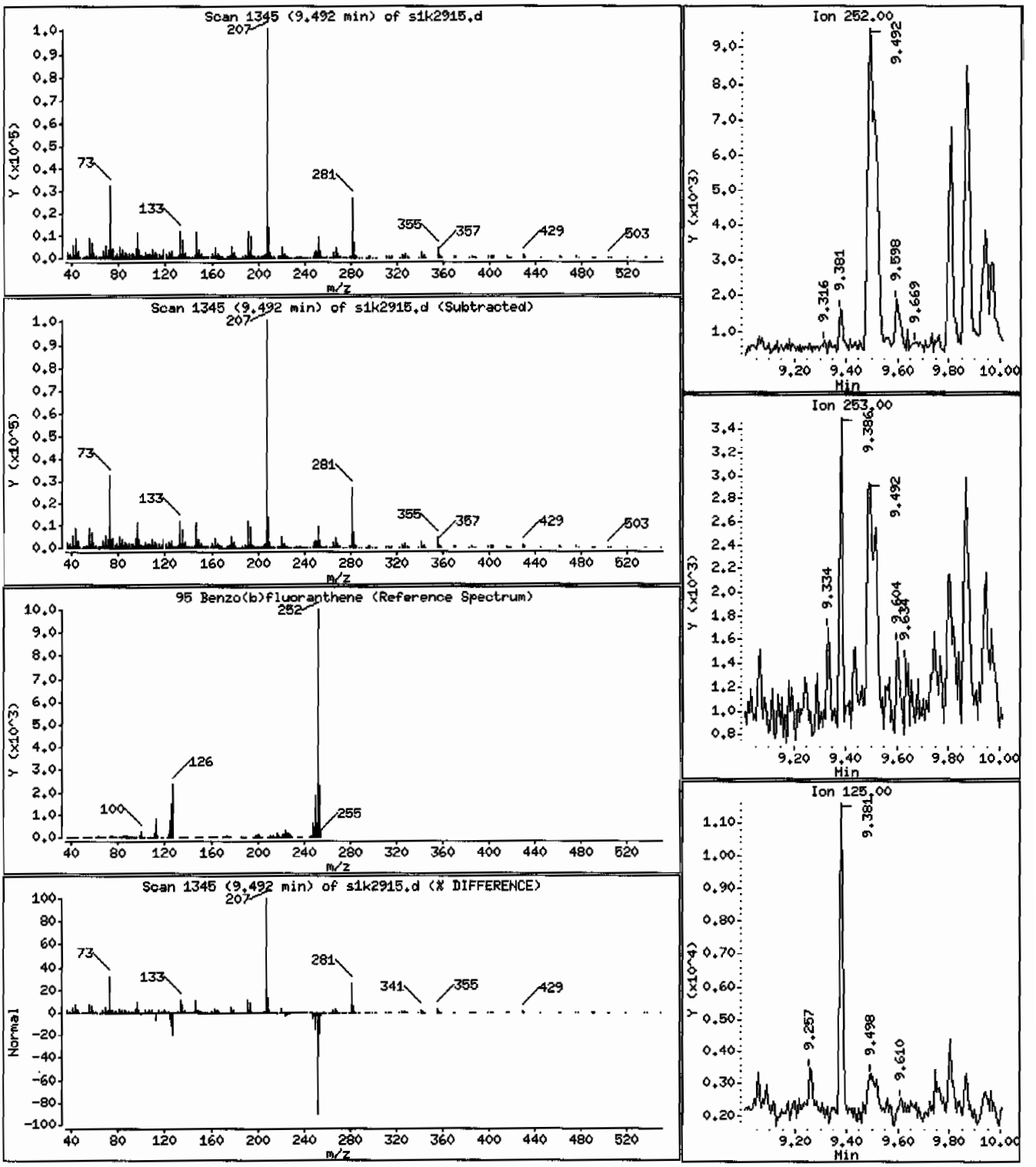

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: |2414230051926126111SVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

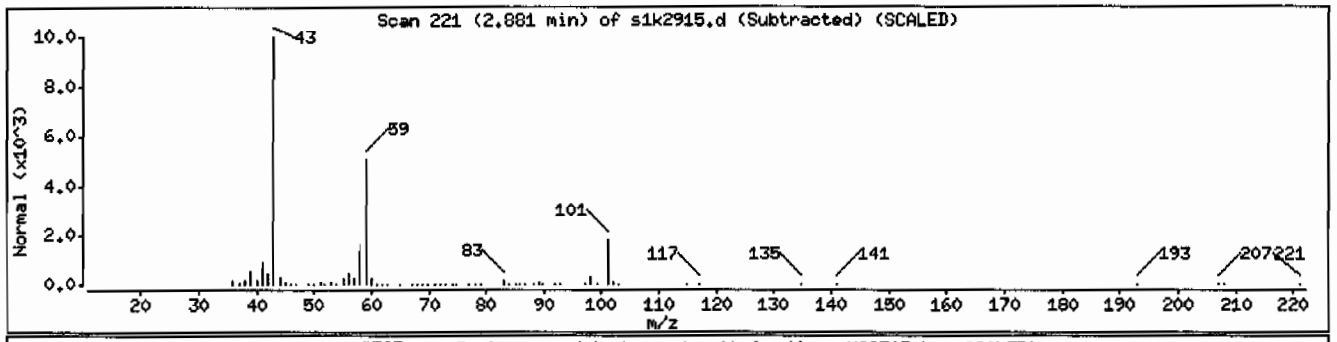

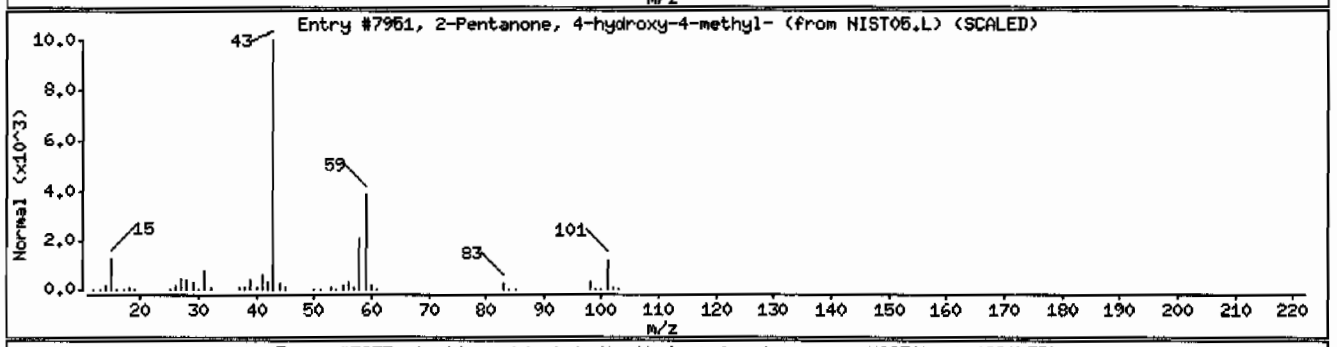

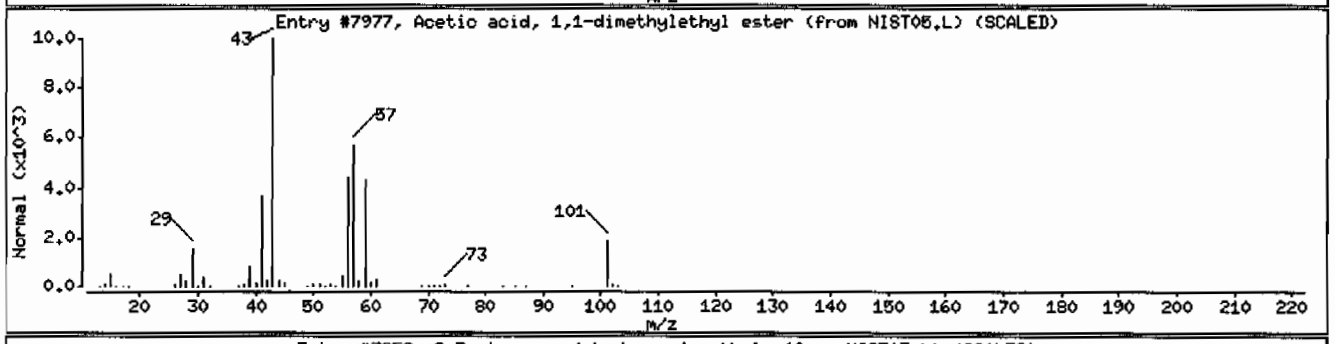

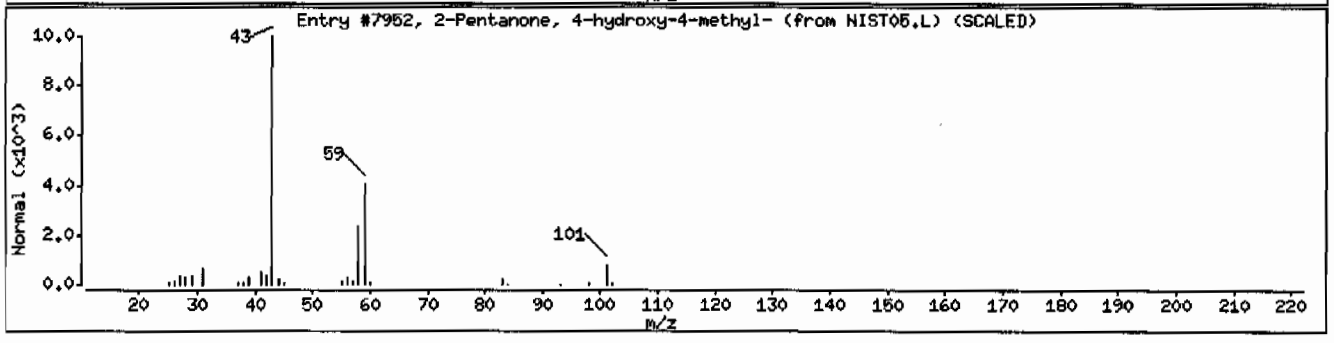

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130 Instrument: MSD1.i

Sample Info: |24142300|9261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113490	97	C20H42	282
Eicosane, 10-methyl-	54833-23-7	NIST05.L	122441	93	C21H44	296

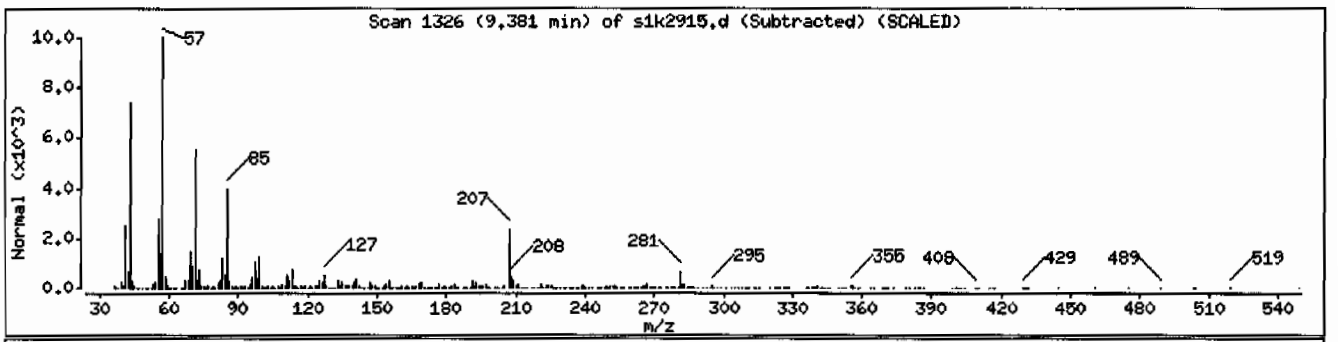

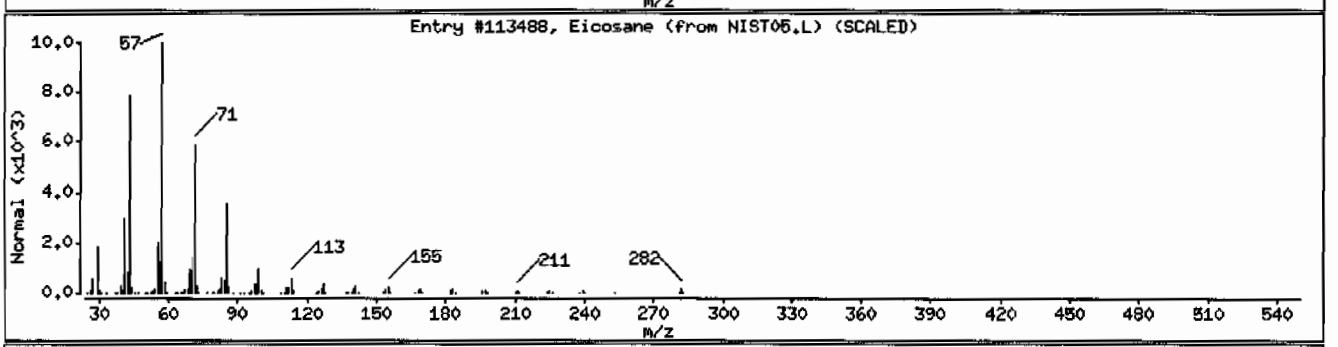

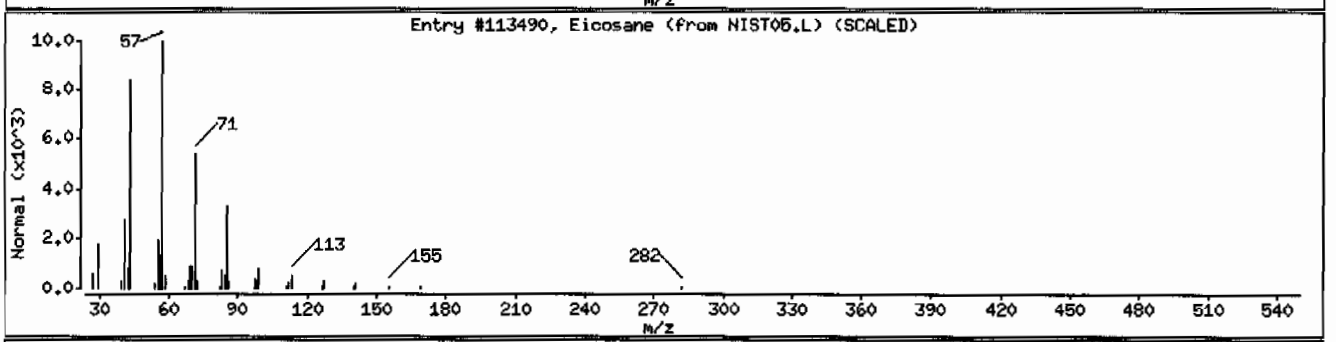

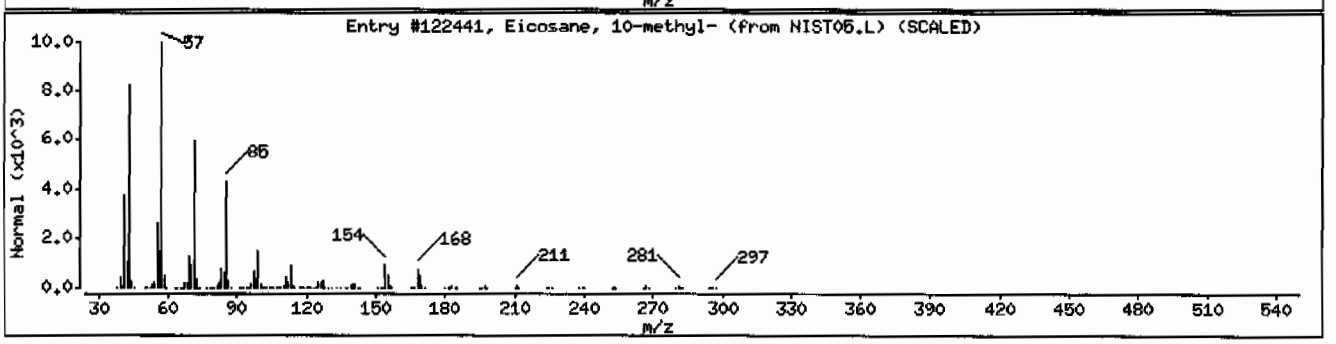

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: |2414230051926126111SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Trimethyl[4-(1-methyl-1-methoxyethyl)phe	1000283-54-8	NIST05.L	83637	64	C13H22O2Si	238
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130463	59	C10H30O3Si4	310
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	50	C10H30O3Si4	310

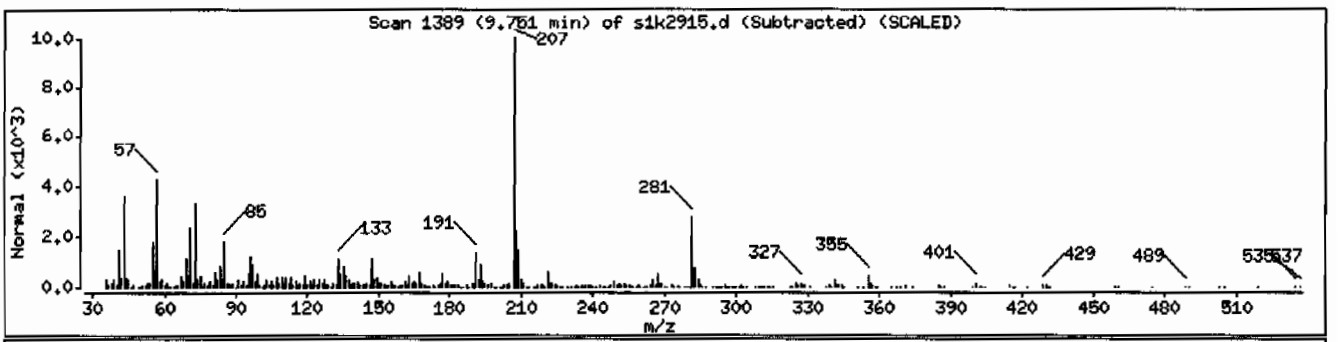

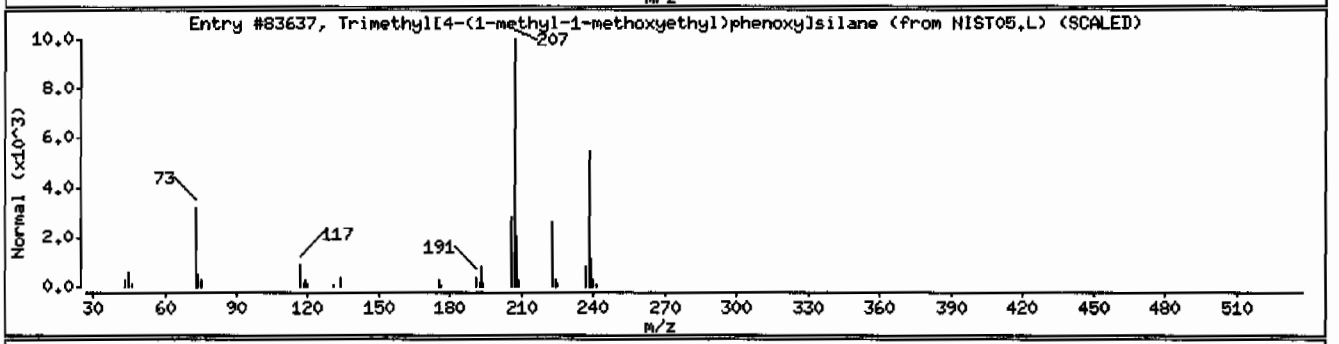

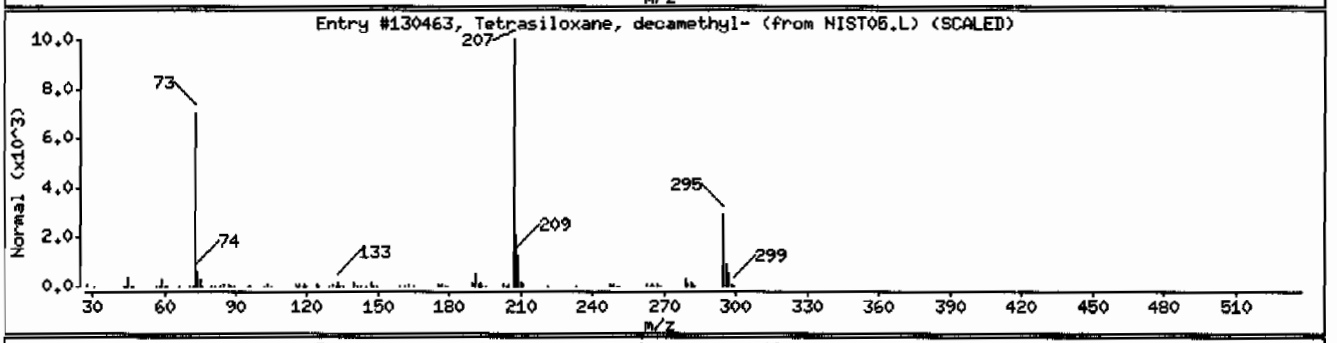

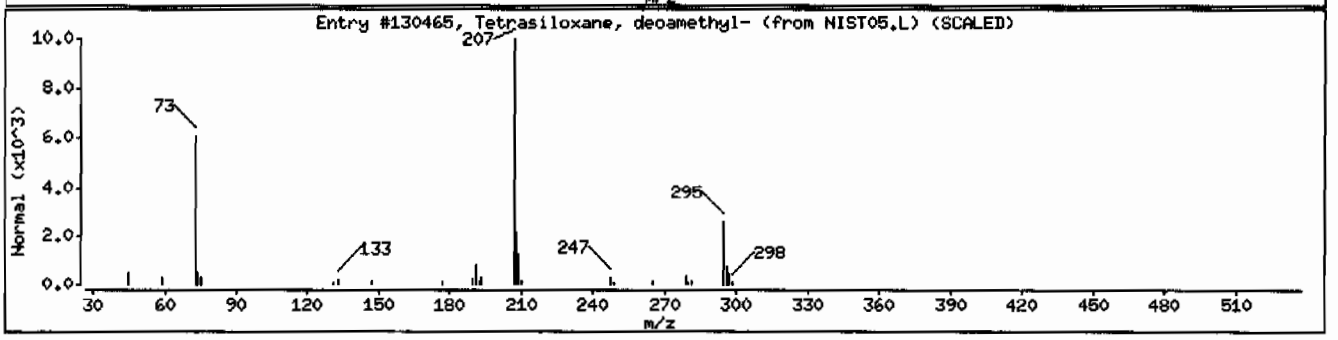

Data File: /chem/MSD1.i/s112909.b/s1k2915.d

Date : 29-NOV-2009 18:01

Client ID: WST03-10-2130

Instrument: MSD1.i

Sample Info: |2414230051926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282
Docosane, 9-butyl-	55282-14-9	NIST05.L	159842	89	C26H54	366
Octadecane, 5,14-dibutyl-	55282-13-8	NIST05.L	159849	89	C26H54	366

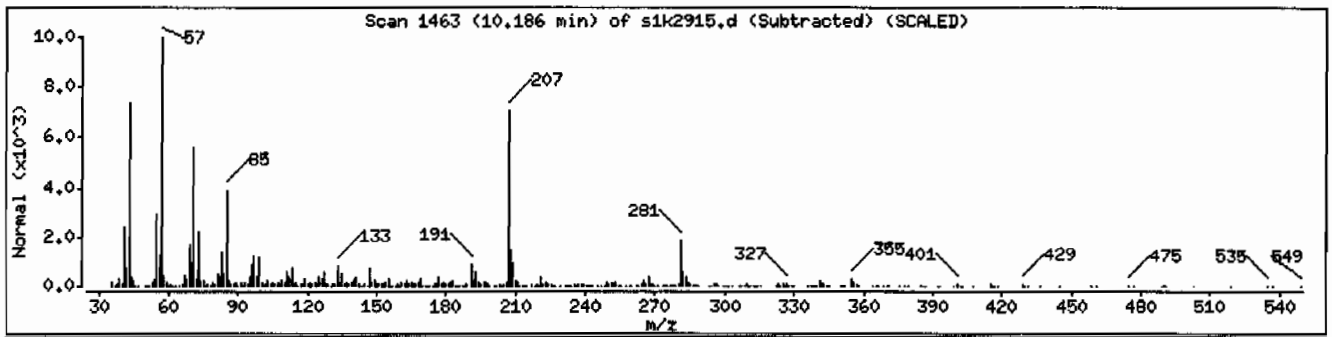

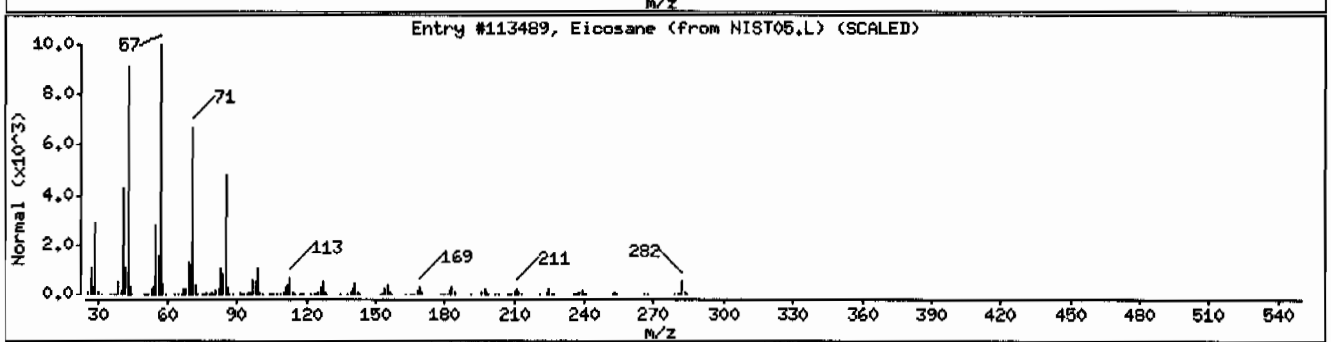

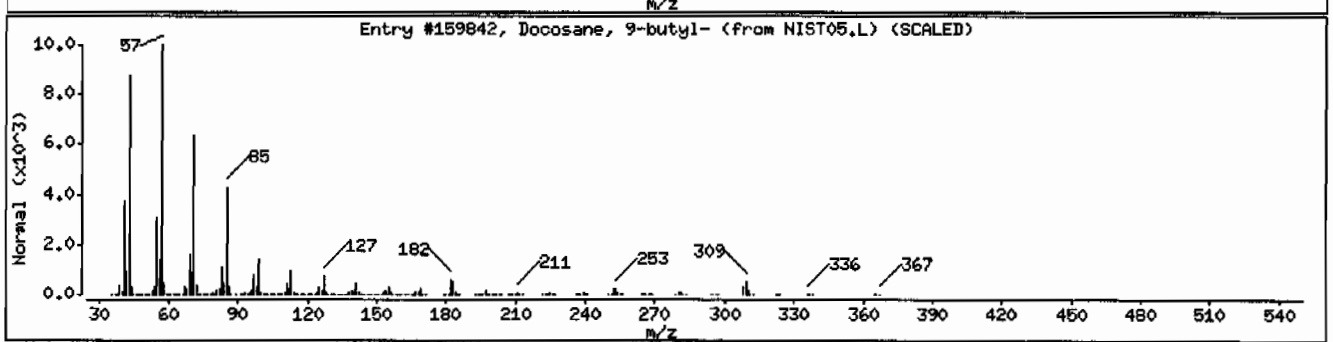

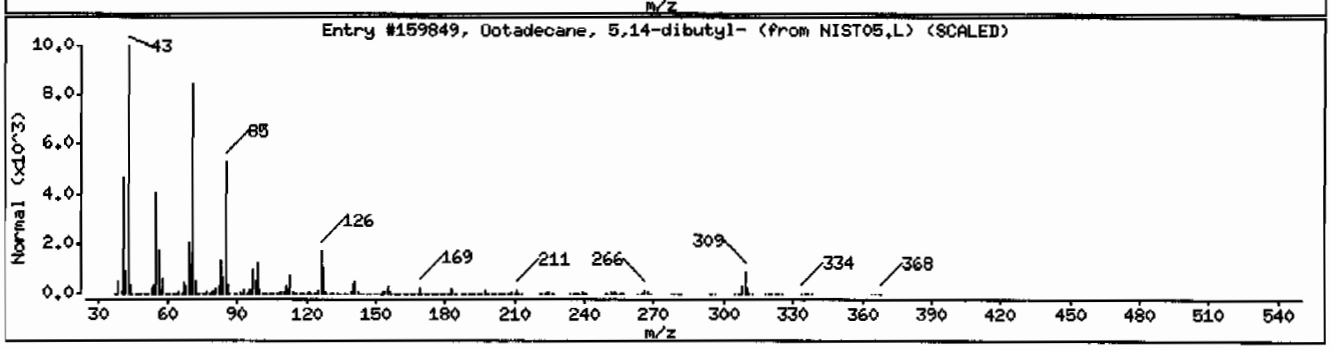

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:37	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2914.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.1	360
108-95-2	Phenol	U	360	ug/kg	72.1	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360
129-00-0	Pyrene	J	21.6	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.1	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360
95-48-7	o-Cresol	U	360	ug/kg	72.1	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360
78-59-1	Isophorone	U	360	ug/kg	72.1	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360
65-85-0	Benzoic acid	U	721	ug/kg	180	721
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	360	ug/kg	72.1	360

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 17:37	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1k2914.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	360	ug/kg	72.1	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	721	ug/kg	137	721
132-64-9	Dibenzofuran	U	360	ug/kg	72.1	360
84-66-2	Diethylphthalate	U	360	ug/kg	72.1	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.1	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.1	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	p-Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	72.1	360
122-66-7	Azobenzene	U	360	ug/kg	72.1	360
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.1	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.1	360
85-01-8	Phenanthrene	J	13.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.21	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.1	360
206-44-0	Fluoranthene	J	23.1	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.1	360
56-55-3	Benzo(a)anthracene	J	12.5	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	J	13.3	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.1	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.1	360
205-99-2	Benzo(b)fluoranthene		115	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.1	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	284	ug/kg		J
	Unknown Aldol Condensate	2.88	276	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926126	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	11/29/2009 17:37	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/25/2009 21:20	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1k2914.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.66	155	ug/kg	99	NJ
	Unknown	11.58	341	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2914.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 29-NOV-2009 17:37
Operator : AMY Inst ID: MSD1.i
Smp Info : |241423004|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	7.92250	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	611465	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2387404	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1281105	40.0000	
* 67 Phenanthrene-d10	188	6.916	6.922	(1.000)	2176494	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1881215	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1536638	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1088494	68.1534	2460
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1268358	65.3405	2360
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	572307	36.3757	1310
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1229899	40.0848	1440
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	305735	85.4652	3080
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1247931	42.2610	1520

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.781	7.787	(0.909)	30003	0.60018	21.6(a)
68 Phenanthrene	178	6.934	6.940	(1.003)	17794	0.35975	13.0(a)
76 Fluoranthene	202	7.645	7.645	(1.105)	30558	0.64003	23.1(a)
89 Benzo(a)anthracene	228	8.575	8.545	(1.002)	15594	0.34569	12.5(aH)
92 Chrysene	228	8.575	8.581	(1.002)	15583	0.36960	13.3(aH)
95 Benzo(b)fluoranthene	252	9.498	9.510	(0.955)	21805	3.18644	115(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s1k2914.d
Report Date: 11/30/2009 08:45
Lab. ID: 241423004 SampleType: SAMPLE
Injection Date: 29-NOV-2009 17:37
Operator: AMY Instrument: MSD1.i
Sample Info: |241423004|926126|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	64521	3.56	3.63	80-120	100	(T)
93	2918	3.60	3.63	408-468	5	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	76341	4.19	4.08	80-120	100	(T)
42	50638	4.19	4.08	48-108	66	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	226537	5.93	5.72	80-120	100	(T)
164	1281103	5.93	5.72	0- 40	566	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	165229	5.93	5.76	80-120	100	(T)
63	2493	5.93	5.76	53-113	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	164883	5.93	6.05	80-120	100	(T)
89	2141	5.93	6.05	40-100	1	(QT)
63	2493	5.93	6.05	19- 79	2	(QT)
53 Fluorene			CAS#: 86-73-7			
166	20199	6.47	6.31	80-120	100	(T)
165	20100	6.47	6.31	65-125	100	(T)
167	6641	6.47	6.31	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	18977	6.47	6.62	80-120	100	(T)
141	129206	6.47	6.62	62-122	681	(QT)
250	38684	6.47	6.62	66-126	204	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	17794	6.93	6.94	80-120	100	( )
179	4176	6.93	6.94	0- 45	23	( )
176	3623	6.93	6.94	0- 48	20	( )
69 Anthracene				CAS#: 120-12-7		
178	17795	6.93	6.97	80-120	100	( )
179	4176	6.93	6.97	0- 45	23	( )
176	3623	6.93	6.97	0- 48	20	( )
76 Fluoranthene				CAS#: 206-44-0		
202	30558	7.65	7.65	80-120	100	( )
203	5256	7.65	7.65	0- 47	17	( )
101	5309	7.64	7.65	0- 43	17	( )
79 Pyrene				CAS#: 129-00-0		
202	30003	7.78	7.79	80-120	100	( )
200	6727	7.78	7.79	0- 51	22	( )
101	5292	7.78	7.79	0- 45	18	( )
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	21468	8.55	8.55	80-120	100	( )
226	4855	8.55	8.55	0- 55	23	( )
229	6146	8.55	8.55	0- 49	29	( )
92 Chrysene				CAS#: 218-01-9		
228	15583	8.57	8.58	80-120	100	( )
229	4391	8.57	8.58	0- 49	28	( )
226	4190	8.57	8.58	0- 58	27	( )
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	21805	9.50	9.51	80-120	100	( )
253	5156	9.50	9.51	0- 51	24	( )
125	4233	9.50	9.50	0- 44	19	( )
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	21818	9.50	9.53	80-120	100	( )
253	5156	9.50	9.53	0- 51	24	( )
125	4061	9.50	9.53	0- 43	19	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2914.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 29-NOV-2009 17:37
Operator : AMY Inst ID: MSD1.i
Smp Info : |241423004|926126|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	7.92250	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3658200	40.000
* 46 Acenaphthene-d10	5.934	5280934	40.000
* 98 Perylene-d12	9.945	4208556	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.987	720760	7.88102977	284	0		0	10
Unknown Aldol Condensate				CAS #:			
2.881	700617	7.66078617	276	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
5.663	566435	4.29041638	155	99	NIST05.L	60020	46
Unknown				CAS #:			
11.580	996703	9.47310825	341	0		0	98

Data File: /chem/MSD1.i/s112909.b/s1k2914.d
Date : 29-NOV-2009 17:37
Client ID: WST03-10-2131
Sample Info: |2414230041926126|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

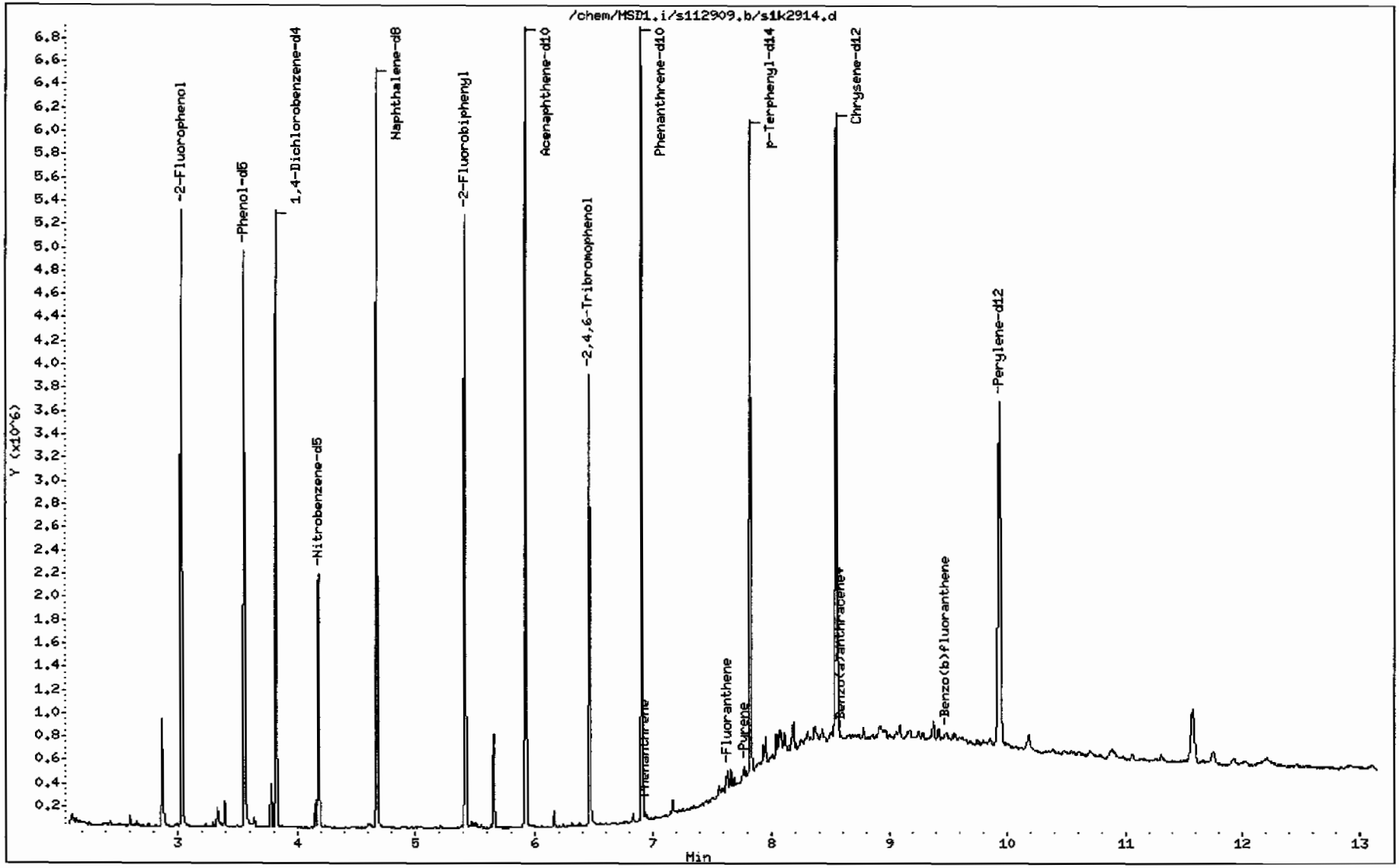

Data File: /chem/MSD1.i/s112909.b/s1k2914.d

Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: |2414230041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 21.6 ug/Kg

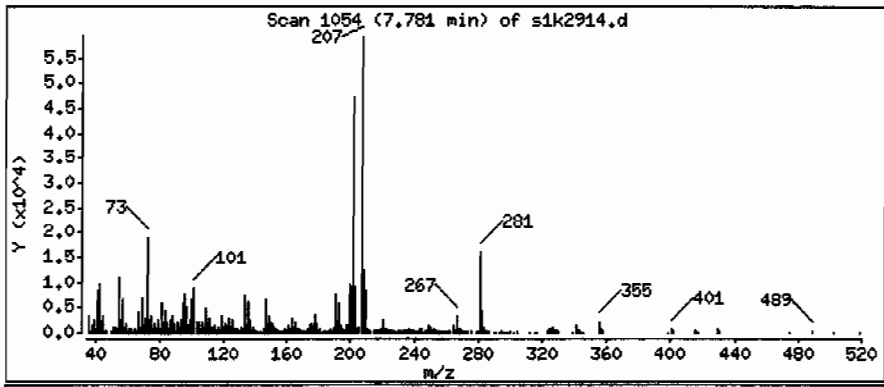

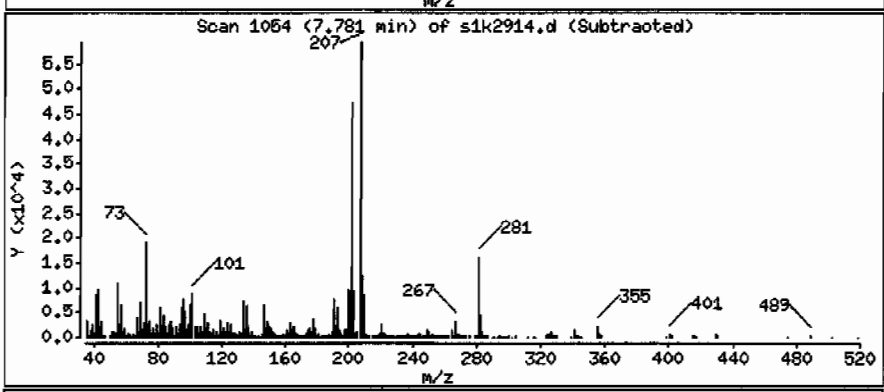

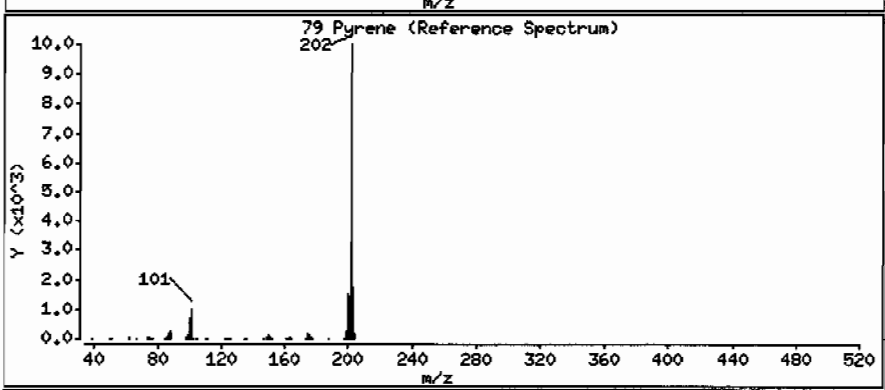

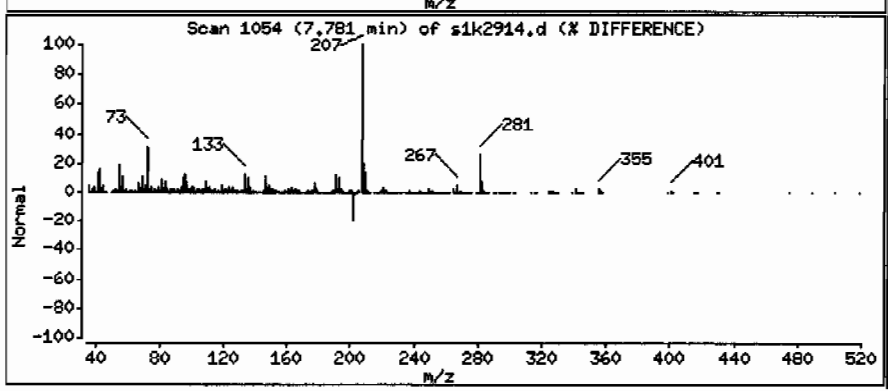

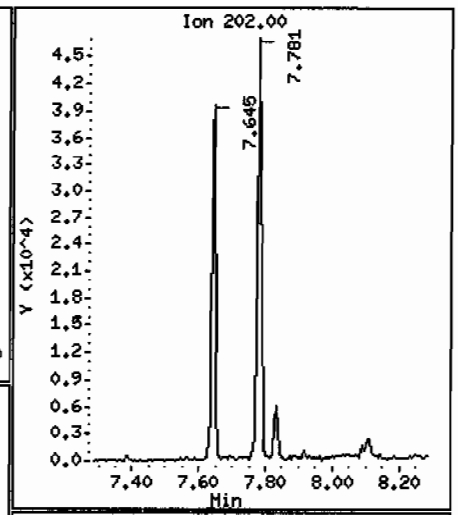

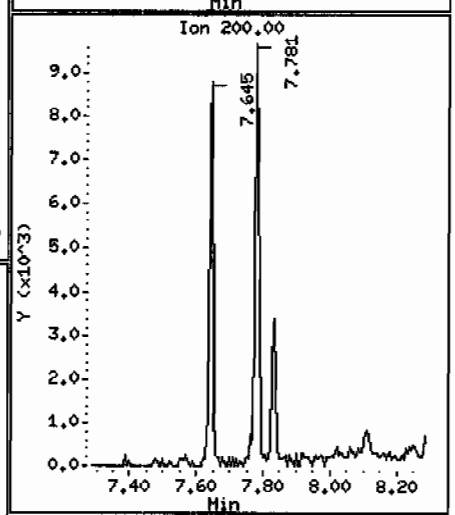

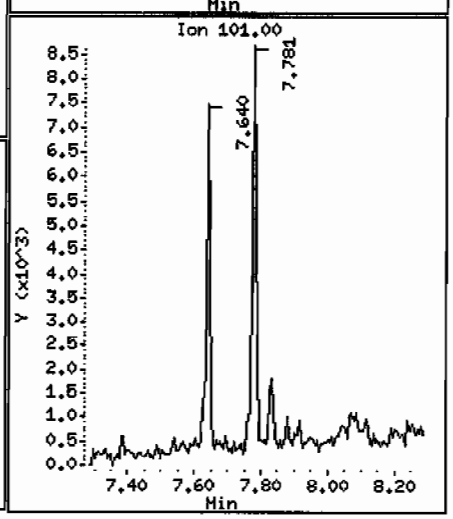

Data File: /chem/MSD1.i/s112909.b/s1k2914.d

Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: |24142300419261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 13.0 ug/Kg

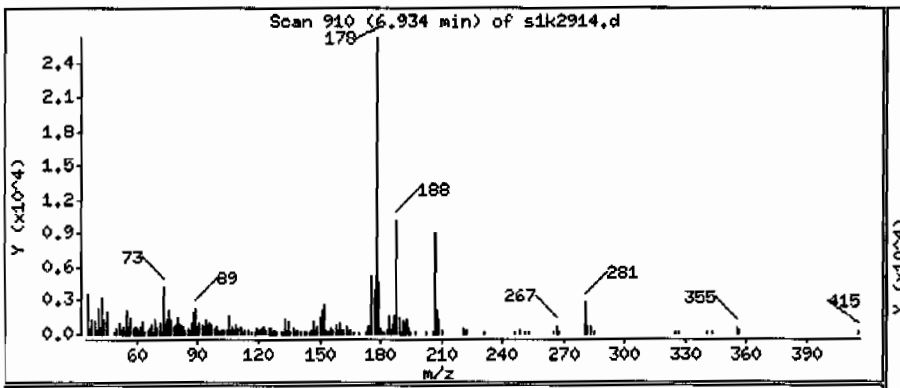

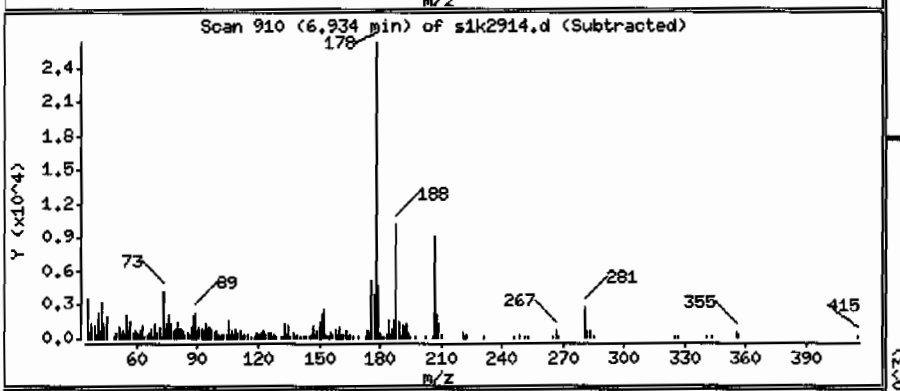

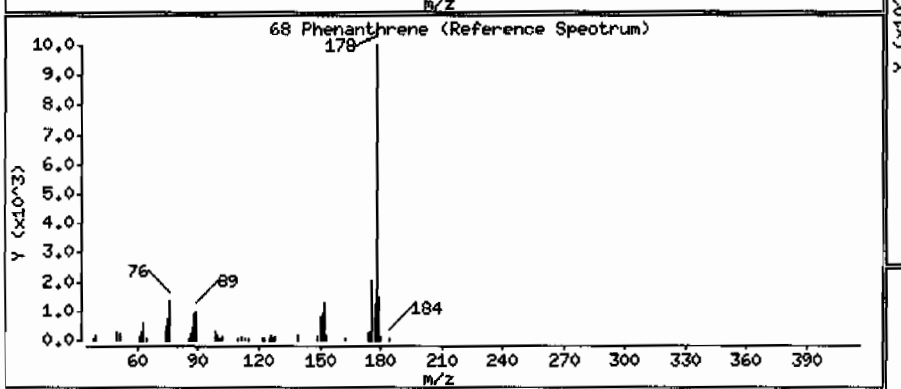

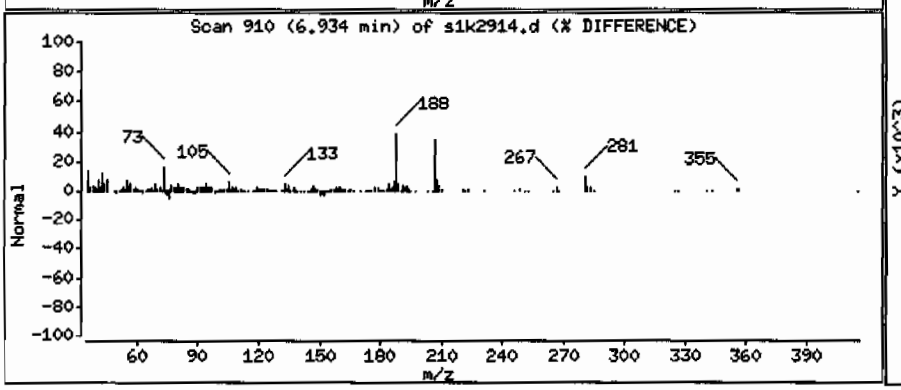

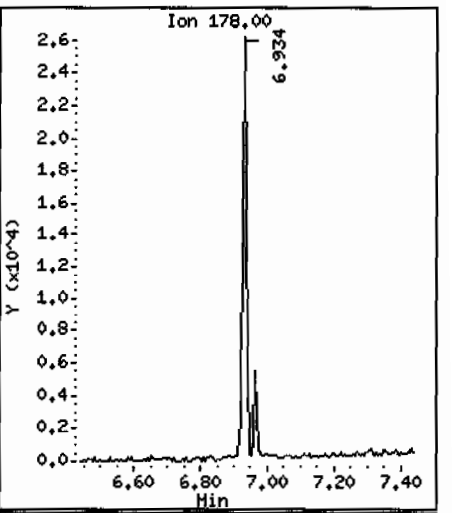

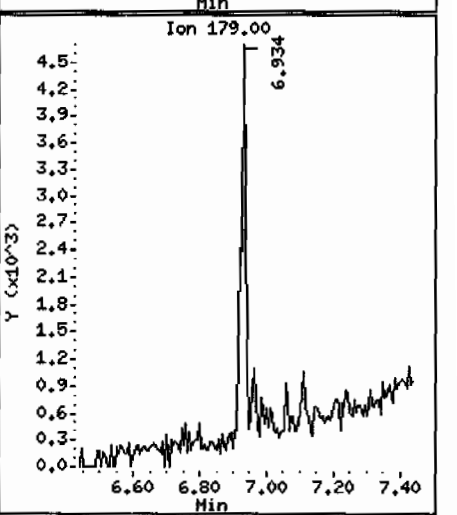

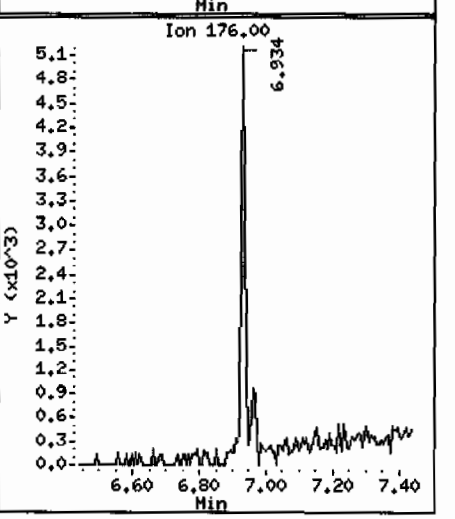

Data File: /chem/MSD1.i/s112909.b/s1k2914.d

Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: 1241423004192612611ISVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 23.1 ug/Kg

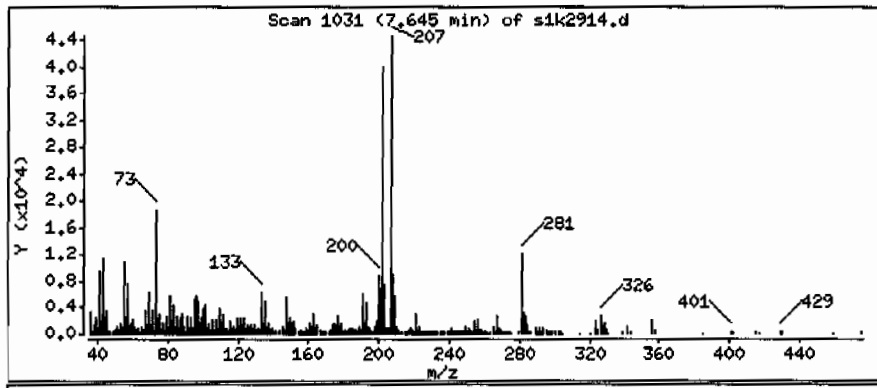

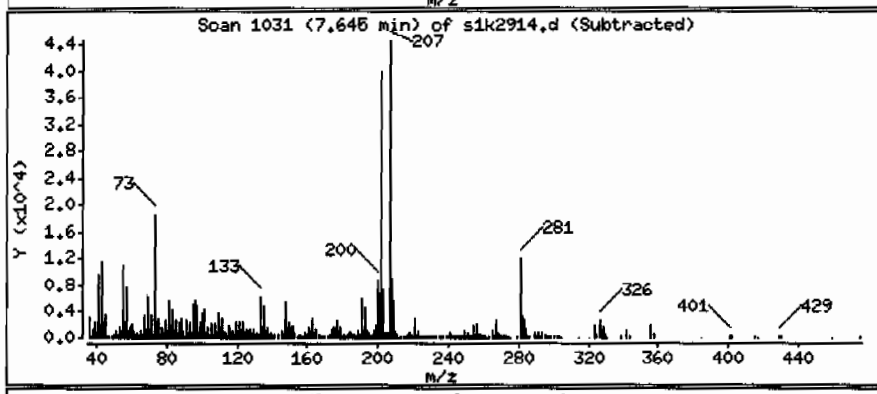

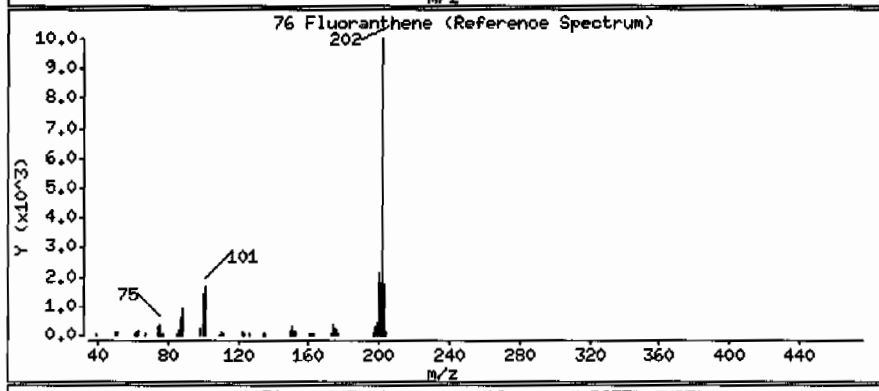

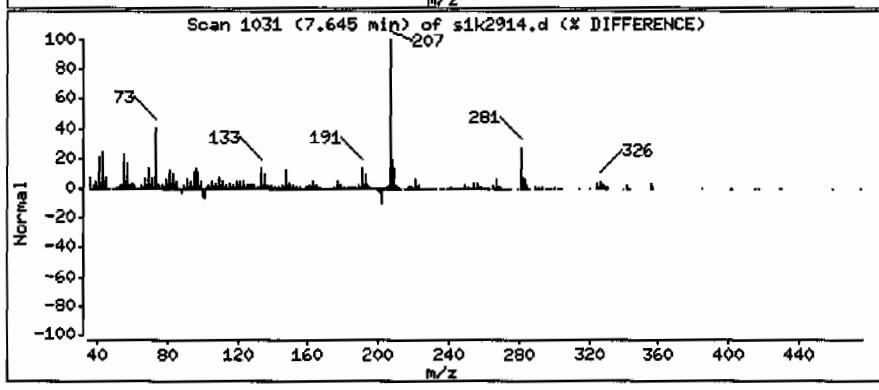

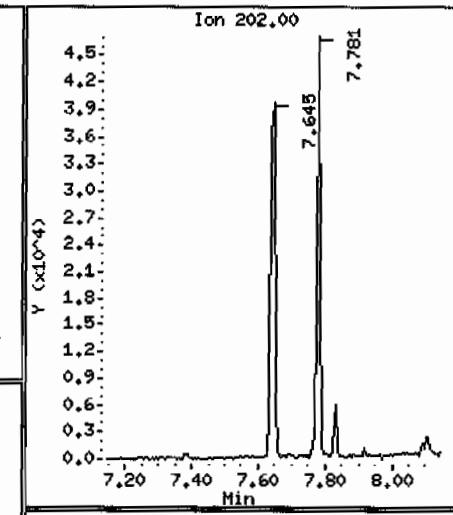

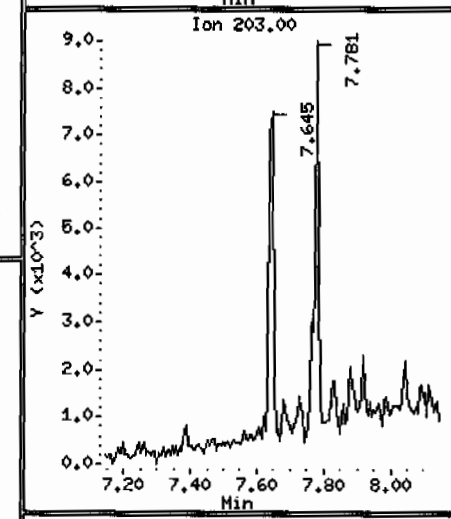

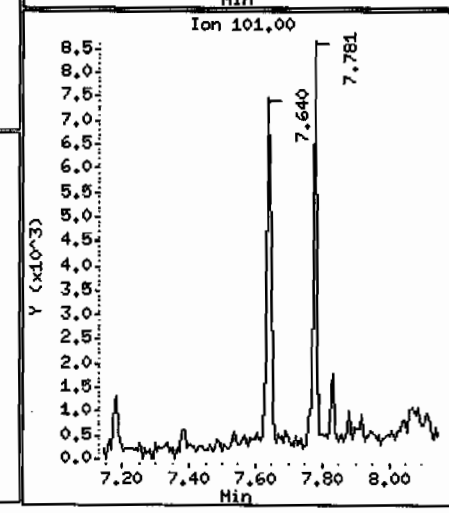

Data File: /chem/MSD1.i/s112909.b/s1k2914.d

Page 5

Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: |24142300419261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 12.5 ug/Kg

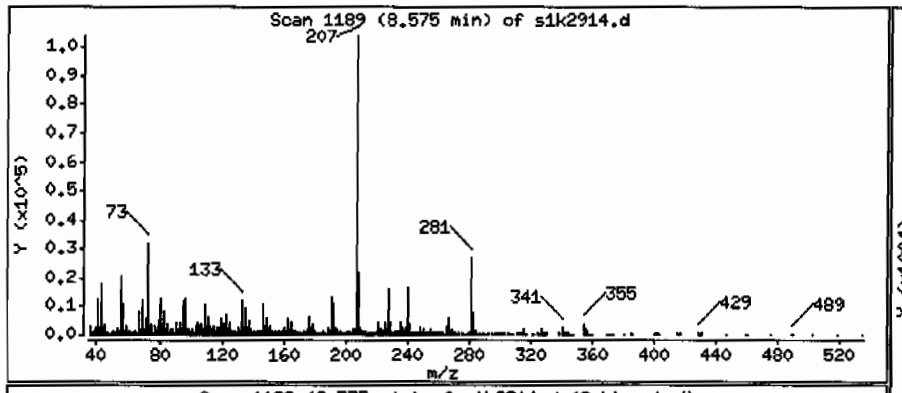

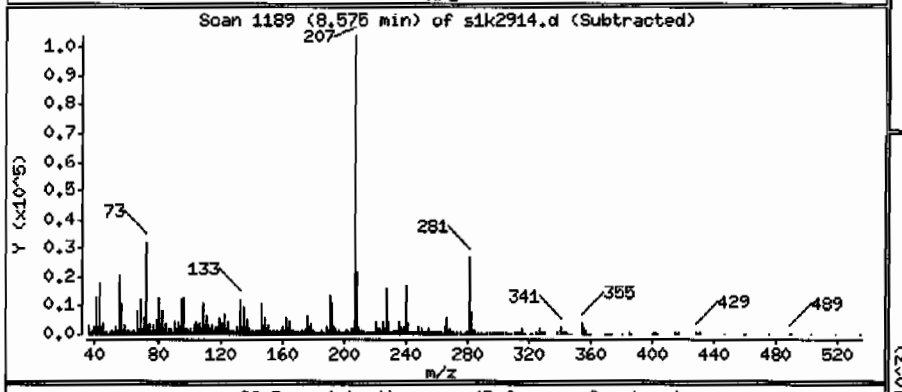

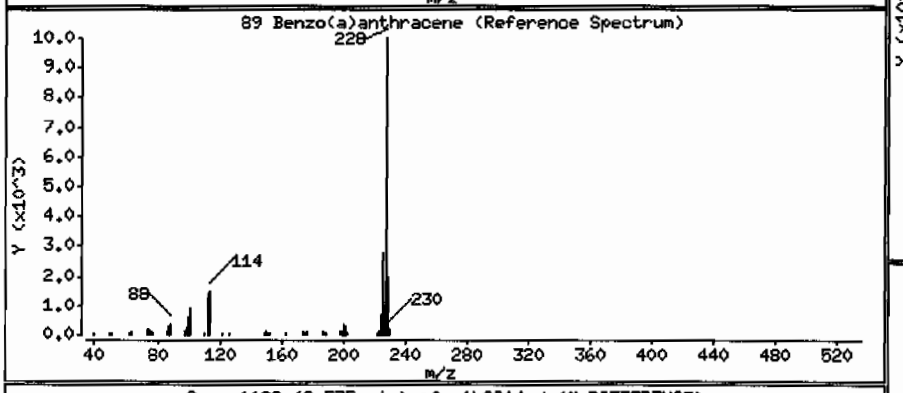

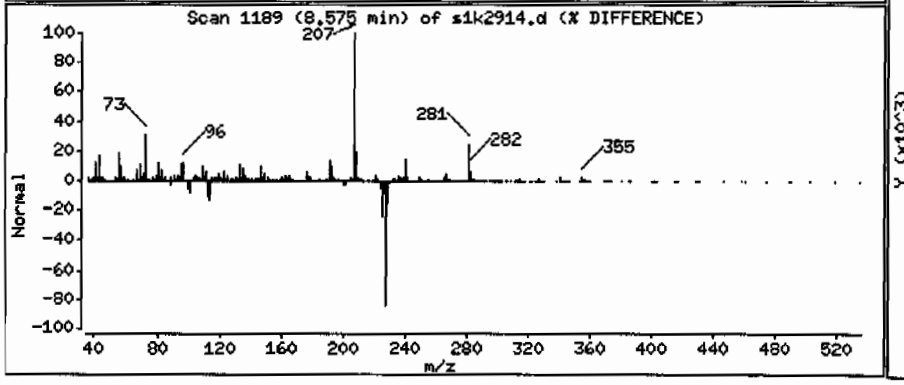

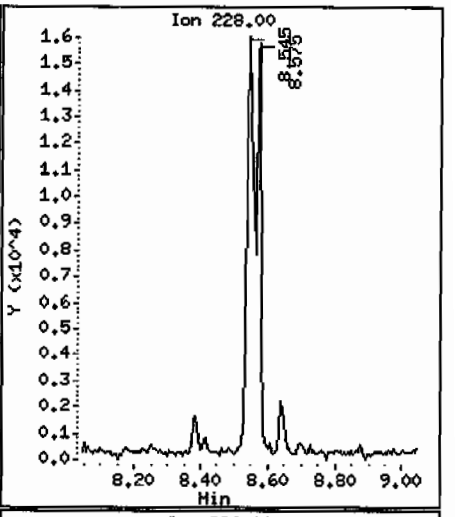

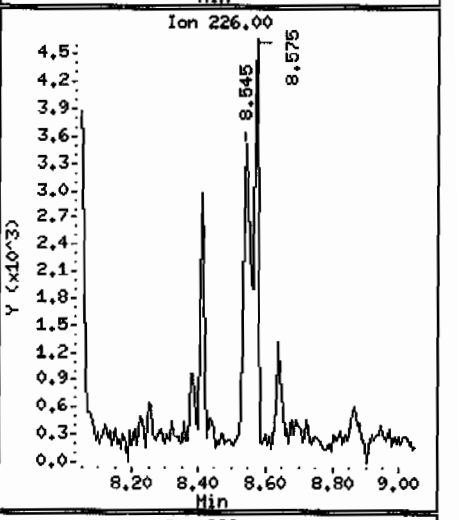

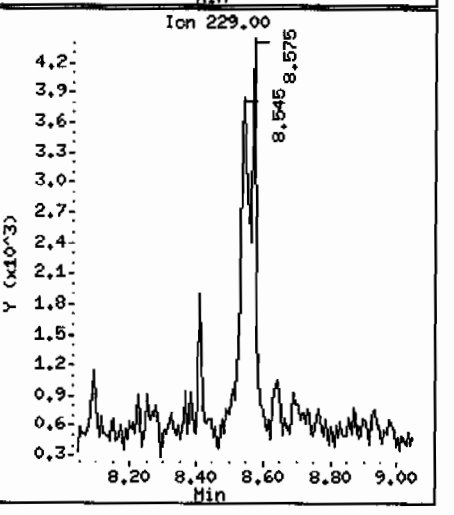

Data File: /chem/MSD1.i/s112909.b/s1k2914.d

Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: |24142300419261261|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 13.3 ug/Kg

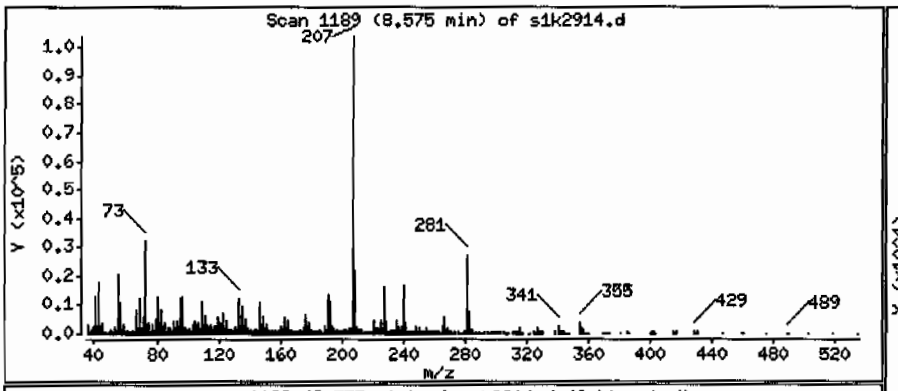

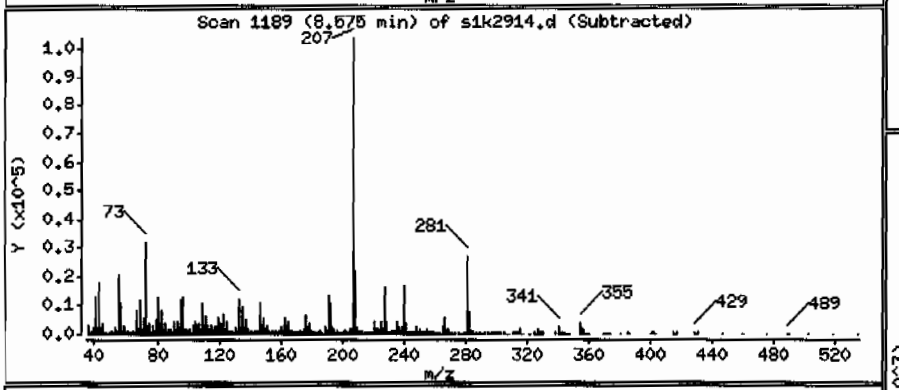

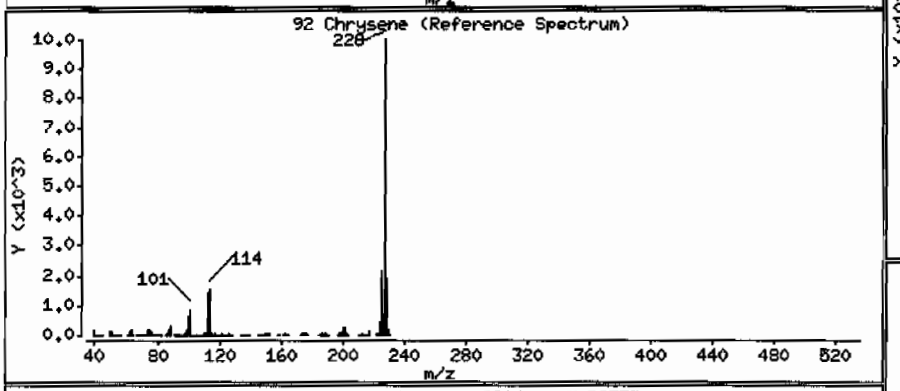

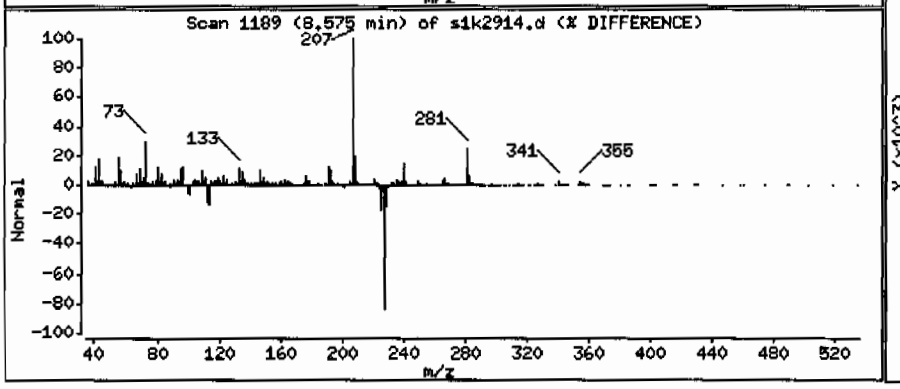

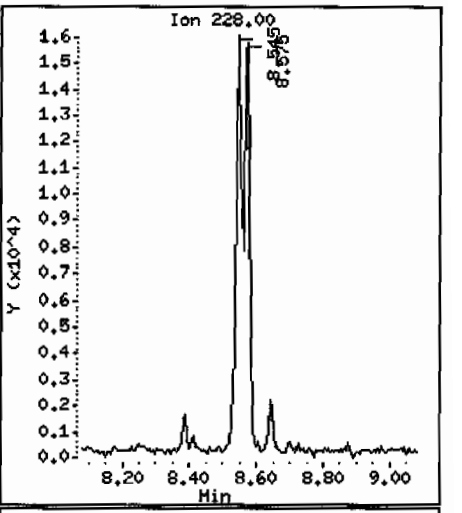

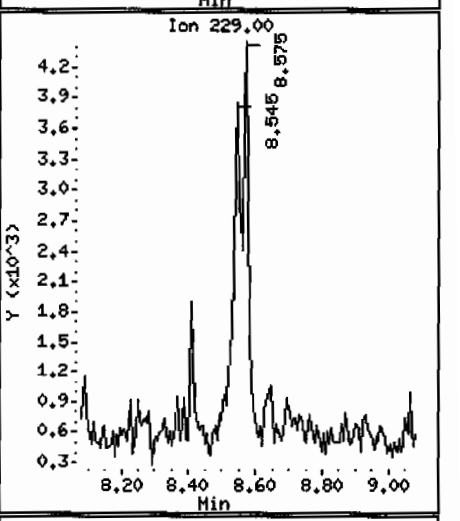

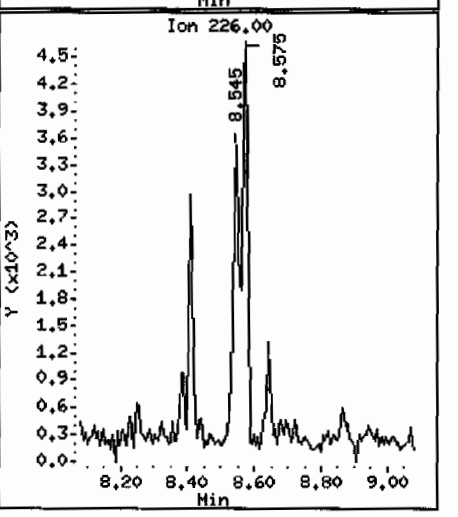

Data File: /chem/MSD1.i/s112909.b/s1k2914.d

Page 7

Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: |2414230041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 115 ug/Kg

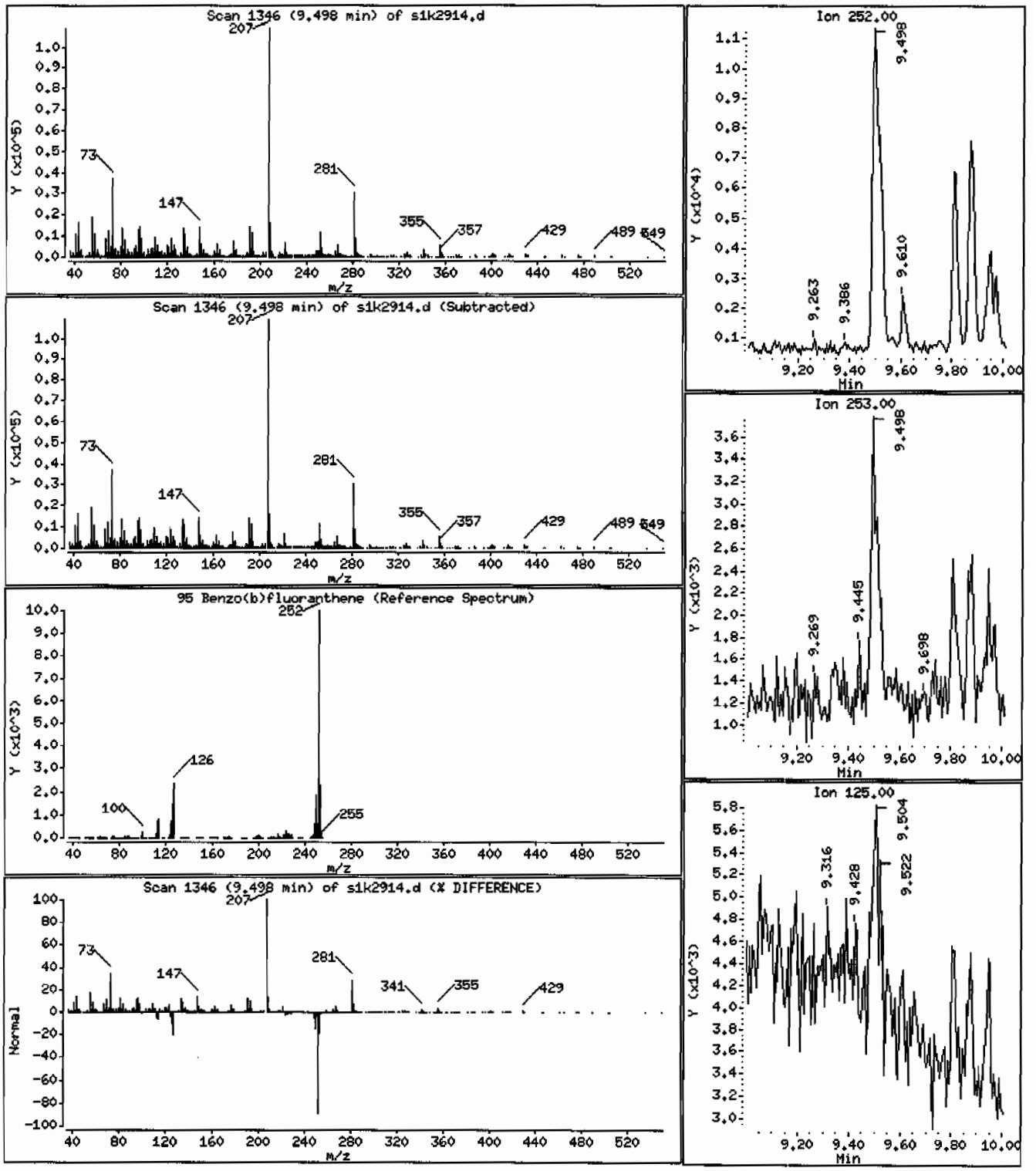

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Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: |2414230041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	53	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	36	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	23	C7H14O2	130

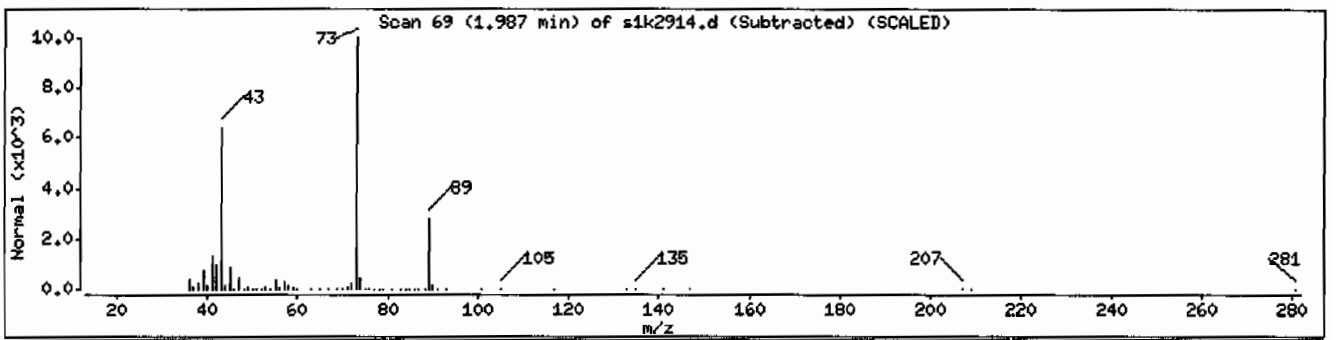

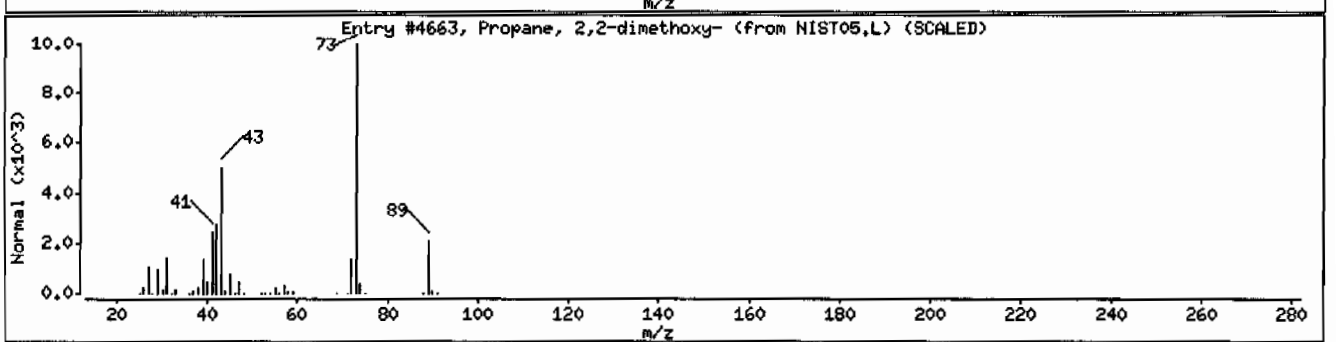

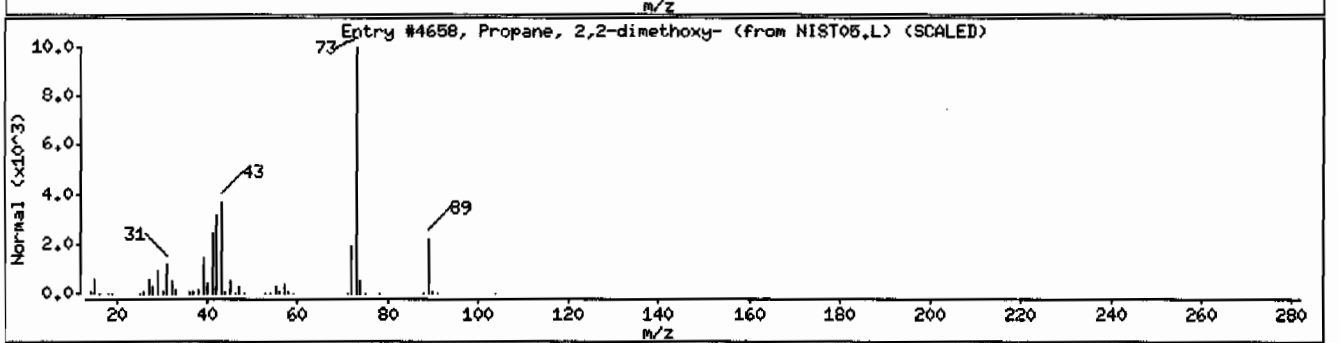

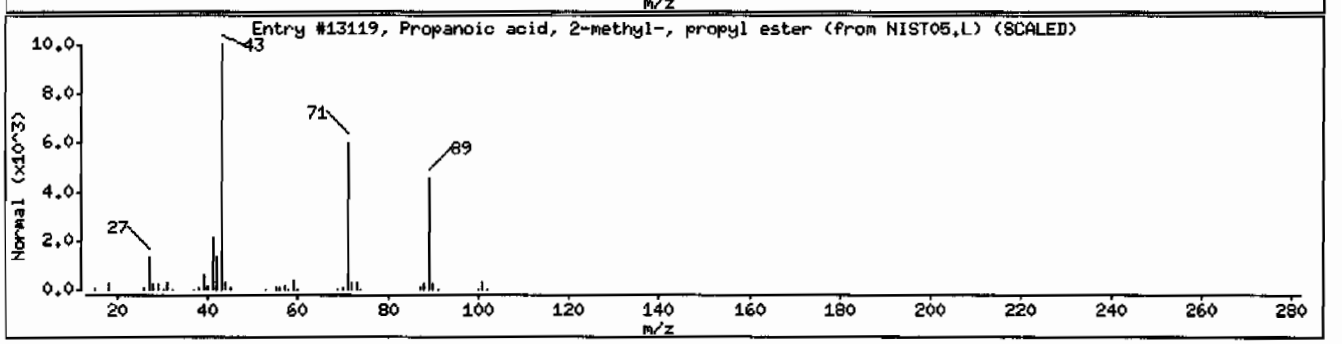

Data File: /chem/MSD1.i/s112909.b/s1k2914.d

Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: 1241423004192612611SVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

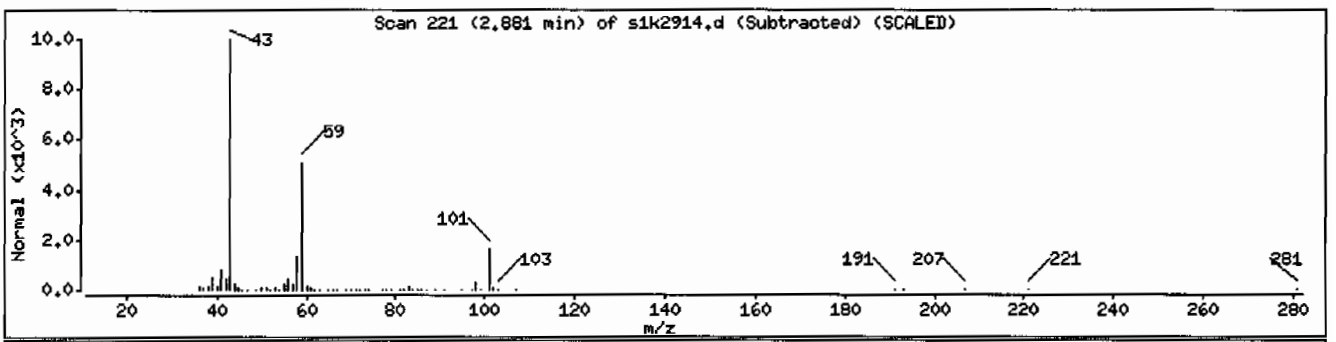

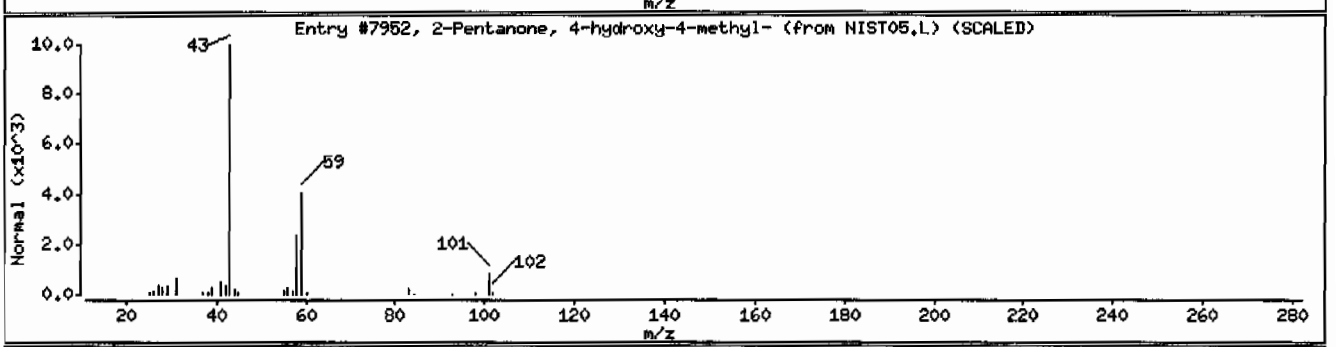

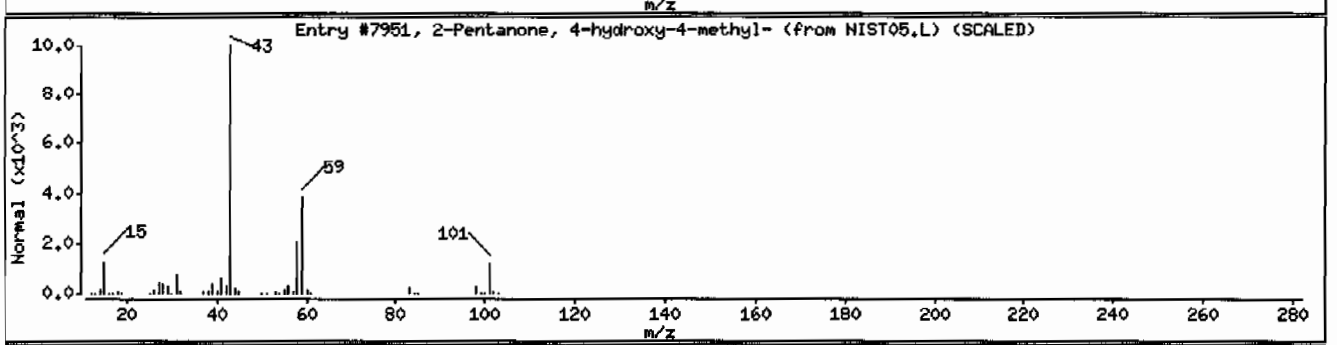

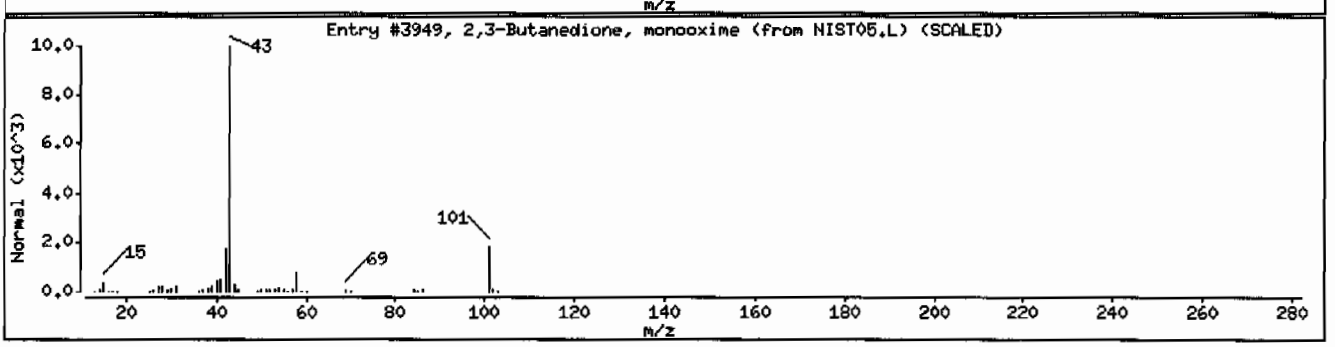

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Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131

Instrument: MSD1.i

Sample Info: |2414230041926126|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204

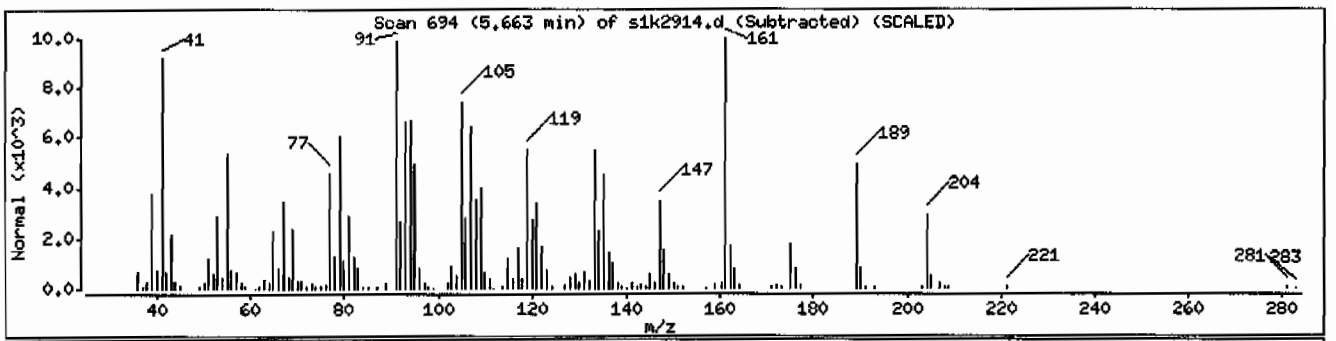

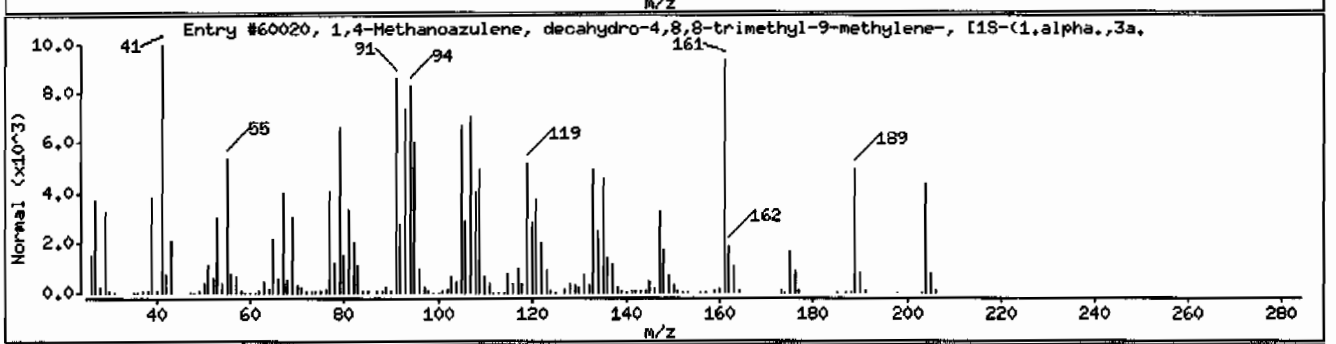

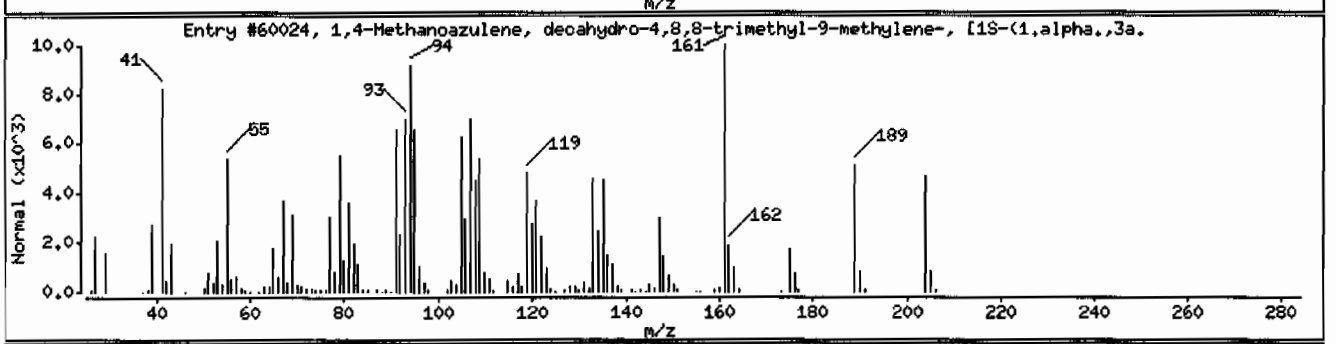

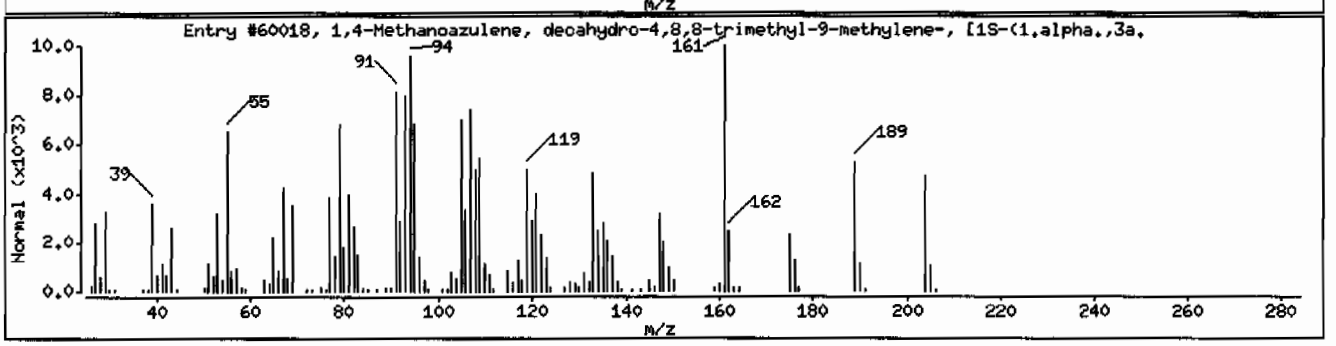

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Date : 29-NOV-2009 17:37

Client ID: WST03-10-2131 Instrument: MSD1.i

Sample Info: |24142300419261261|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzestrol di-TMS derivative	1000137-02-9	NIST05.L	178973	50	C26H42O2Si2	442
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	49	C6H18O3Si3	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	46	C15H13N	207

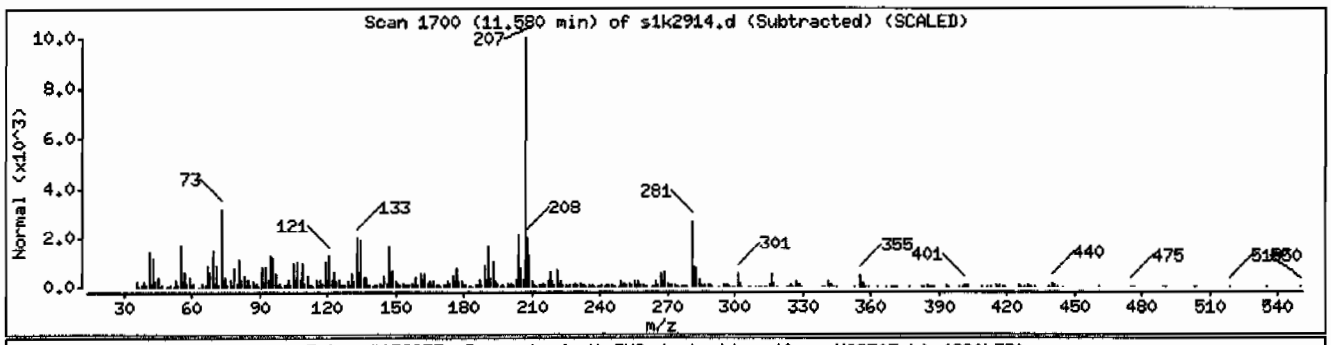

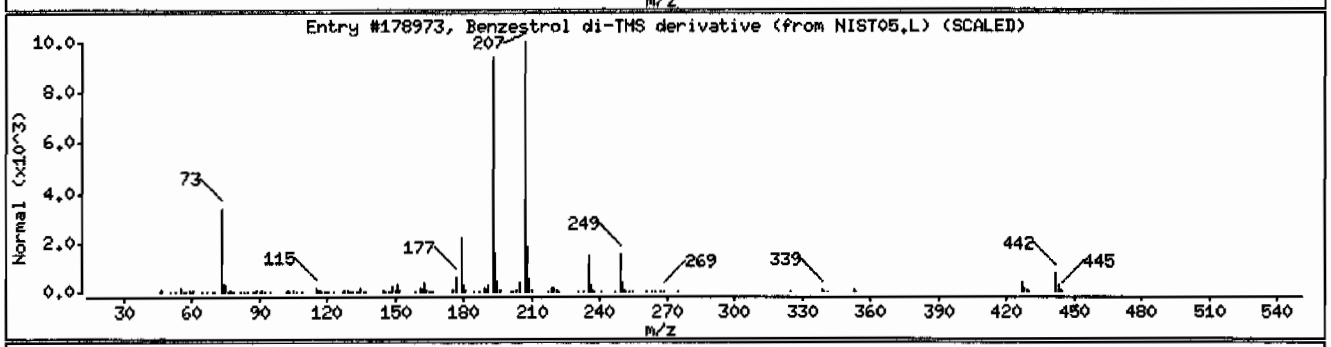

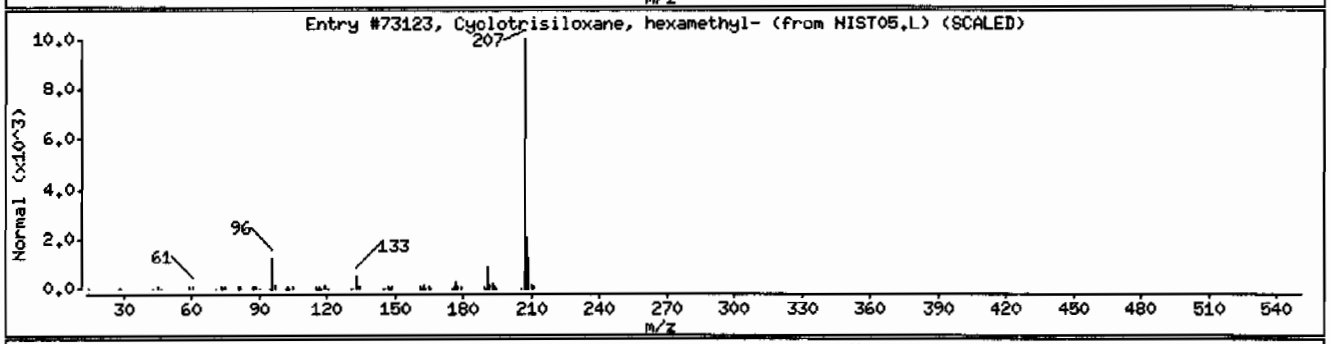

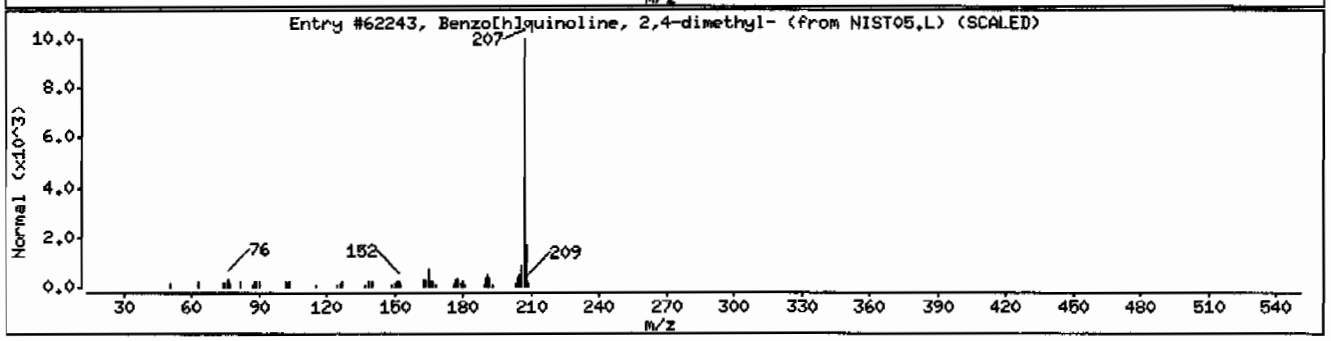

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 30-Nov-2009 09:10

Calibration History

Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Start Cal Date: 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 18:22	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1203.d
Cal Level: 2 , Cal Amount: 10.00000		
17-NOV-2009 16:56	nev	/chem/MSD1.i/s111409.b/s1k1262.d
15-NOV-2009 20:55	hex	/chem/MSD1.i/s111409.b/s1k1229.d
15-NOV-2009 18:11	pest	/chem/MSD1.i/s111409.b/s1k1222.d
15-NOV-2009 15:28	ap12	/chem/MSD1.i/s111409.b/s1k1215.d
14-NOV-2009 18:51	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1204.d
Cal Level: 3 , Cal Amount: 20.00000		
17-NOV-2009 17:19	nev	/chem/MSD1.i/s111409.b/s1k1263.d
15-NOV-2009 21:18	hex	/chem/MSD1.i/s111409.b/s1k1230.d
15-NOV-2009 18:35	pest	/chem/MSD1.i/s111409.b/s1k1223.d
15-NOV-2009 15:51	ap12	/chem/MSD1.i/s111409.b/s1k1216.d
14-NOV-2009 19:21	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1205.d
Cal Level: 4 , Cal Amount: 40.00000		
17-NOV-2009 17:42	nev	/chem/MSD1.i/s111409.b/s1k1264.d
15-NOV-2009 21:42	hex	/chem/MSD1.i/s111409.b/s1k1231.d
15-NOV-2009 18:58	pest	/chem/MSD1.i/s111409.b/s1k1224.d
15-NOV-2009 16:14	ap12	/chem/MSD1.i/s111409.b/s1k1217.d
14-NOV-2009 19:50	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1206.d
Cal Level: 5 , Cal Amount: 50.00000		
17-NOV-2009 18:05	nev	/chem/MSD1.i/s111409.b/s1k1265.d
15-NOV-2009 22:06	hex	/chem/MSD1.i/s111409.b/s1k1232.d
15-NOV-2009 19:21	pest	/chem/MSD1.i/s111409.b/s1k1225.d
15-NOV-2009 16:38	ap12	/chem/MSD1.i/s111409.b/s1k1218.d
14-NOV-2009 20:19	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1207.d
Cal Level: 6 , Cal Amount: 80.00000		
17-NOV-2009 18:28	nev	/chem/MSD1.i/s111409.b/s1k1266.d
15-NOV-2009 22:30	hex	/chem/MSD1.i/s111409.b/s1k1233.d
15-NOV-2009 19:45	pest	/chem/MSD1.i/s111409.b/s1k1226.d
15-NOV-2009 17:01	ap12	/chem/MSD1.i/s111409.b/s1k1219.d
14-NOV-2009 20:47	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1208.d
Cal Level: 7 , Cal Amount: 100.00000		

17-NOV-2009 18:52	nev	/chem/MSD1.i/s111409.b/s1k1267.d
15-NOV-2009 22:53	hex	/chem/MSD1.i/s111409.b/s1k1234.d
15-NOV-2009 20:09	pest	/chem/MSD1.i/s111409.b/s1k1227.d
15-NOV-2009 17:24	ap12	/chem/MSD1.i/s111409.b/s1k1220.d
14-NOV-2009 21:16	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1209.d

Cal Level: 8 , Cal Amount: 120.00000

17-NOV-2009 19:15	nev	/chem/MSD1.i/s111409.b/s1k1268.d
15-NOV-2009 20:31	pest	/chem/MSD1.i/s111409.b/s1k1228.d
15-NOV-2009 17:47	ap12	/chem/MSD1.i/s111409.b/s1k1221.d
14-NOV-2009 21:45	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1210.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

29-NOV-2009 15:16	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2908.d

Ccal Level: 4 , Ccal Amount: 40.0

29-NOV-2009 16:27	pest	/chem/MSD1.i/s112909.b/s1k2911.d

Ccal Level: 4 , Ccal Amount: 40.0

29-NOV-2009 16:04	nev	/chem/MSD1.i/s112909.b/s1k2910.d

Ccal Level: 4 , Ccal Amount: 40.0

29-NOV-2009 15:40	ap12	/chem/MSD1.i/s112909.b/s1k2909.d

Ccal Level: 4 , Ccal Amount: 40.0

29-NOV-2009 13:43	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2906.d

Ccal Level: 4 , Ccal Amount: 40.0

29-NOV-2009 11:23	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2904.d

Ccal Level: 4 , Ccal Amount: 40.0

29-NOV-2009 10:50	MEGAIICARE	/chem/MSD1.i/s112909.b/s1k2903.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Calibration File Names:
Level 1: /chem/MSD1.i/s111409.b/s1k1203.d
Level 2: /chem/MSD1.i/s111409.b/s1k1262.d
Level 3: /chem/MSD1.i/s111409.b/s1k1263.d
Level 4: /chem/MSD1.i/s111409.b/s1k1264.d
Level 5: /chem/MSD1.i/s111409.b/s1k1265.d
Level 6: /chem/MSD1.i/s111409.b/s1k1266.d
Level 7: /chem/MSD1.i/s111409.b/s1k1267.d
Level 8: /chem/MSD1.i/s111409.b/s1k1268.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.54039	0.59425	0.56483	0.56773	0.57115					
	0.58358	0.54985					AVRG		0.56740		3.25055
2 Pyridine	+++++	0.93895	1.06231	1.03607	0.88870	0.86312					
	1.01434	0.86615					AVRG		0.95281		8.83991
4 Aniline	+++++	0.52437	0.56877	0.55954	0.56752	0.56439					
	0.57920	0.54312					AVRG		0.55813		3.31324
209 Benzaldehyde	+++++	0.85863	0.89515	0.82459	0.84178	+++++					
	0.78498	0.73887					AVRG		0.82400		6.72378
6 Phenol	+++++	1.30044	1.37922	1.37450	1.34330	1.33206					
	1.36293	1.27353					AVRG		1.33800		2.93989

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.97066	0.92013	0.97374	0.95071	0.94120	0.92474					
	0.92138	0.84393					AVRG		0.93081		4.39644
8 2-Chlorophenol	+++++	1.10018	1.18374	1.15316	1.14675	1.13425					
	1.15576	1.08633					AVRG		1.13717		2.96542
203 n-Decane	+++++	1.60577	1.68138	1.52755	1.45137	1.35767					
	1.27260	1.12485					AVRG		1.43160		13.59167
9 1,3-Dichlorobenzene	+++++	1.34153	1.44138	1.36782	1.35778	1.32788					
	1.29449	1.20929					AVRG		1.33431		5.33878
11 1,4-Dichlorobenzene	+++++	1.33212	1.41388	1.35420	1.32607	1.29299					
	1.26993	1.16675					AVRG		1.30799		5.91221
12 Benzyl alcohol	+++++	0.65002	0.69243	0.70051	0.67929	0.68651					
	0.73179	0.69932					AVRG		0.69141		3.57264
13 1,2-Dichlorobenzene	+++++	1.29605	1.34639	1.26381	1.21944	1.15866					
	1.13607	1.03545					AVRG		1.20798		8.78247
14 bis(2-Chloroisopropyl)ether	+++++	2.32509	2.42028	2.31148	2.26329	2.15456					
	2.11135	1.93355					AVRG		2.21709		7.35350
15 o-Cresol	+++++	0.90774	0.91911	0.87727	0.85502	0.81471					
	0.80779	0.74384					AVRG		0.84650		7.32849

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.16435	1.20208	1.12556	1.15316	+++++					
	1.08411	1.04352					AVRG		1.12880		5.09017
17 N-Nitrosodipropylamine	0.81293	0.75653	0.80116	0.77693	0.78822	0.71050					
	0.77452	0.67823					AVRG		0.76238		6.05014
18 m,p-Cresols	+++++	1.13181	1.16963	1.17353	1.13669	1.14618					
	1.18516	1.11948					AVRG		1.15179		2.12873
19 Hexachloroethane	+++++	0.47556	0.50281	0.48245	0.48088	0.46955					
	0.46206	0.42193					AVRG		0.47075		5.31168
21 Nitrobenzene	+++++	0.28437	0.30442	0.28298	0.28351	0.27052					
	0.25822	0.23858					AVRG		0.27466		7.74785
22 Isophorone	+++++	0.49709	0.51707	0.49540	0.49196	0.47802					
	0.46730	0.41658					AVRG		0.48049		6.70733
23 2-Nitrophenol	+++++	0.14839	0.15989	0.15609	0.15578	0.14421					
	0.13558	0.12065					AVRG		0.14580		9.49803
24 2,4-Dimethylphenol	+++++	0.25377	0.24260	0.23030	0.24361	0.23323					
	0.21824	0.21248					AVRG		0.23346		6.25831
25 bis(2-Chloroethoxy)methane	+++++	0.32659	0.33857	0.32017	0.31630	0.30271					
	0.29085	0.27012					AVRG		0.30933		7.51487

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
26 2,4-Dichlorophenol	+++++	0.21991	0.23451	0.22671	0.22578	0.22138					
	0.21025	0.19507					AVRG		0.21909		5.89795
27 Benzoic acid	+++++	+++++	0.12652	0.15647	0.17043	0.17939					
	0.17420	0.15820					AVRG		0.16087		11.85426
28 1,2,4-Trichlorobenzene	+++++	0.25324	0.26639	0.25283	0.25336	0.23817					
	0.22476	0.20597					AVRG		0.24210		8.56147
30 Naphthalene	1.00192	0.89427	0.93446	0.86563	0.83102	0.76369					
	0.73215	0.65539					AVRG		0.83482		13.59329
204 alpha-Terpineol	+++++	0.21791	0.22387	0.20802	0.18690	0.18694					
	0.18377	0.16707					AVRG		0.19635		10.50339
31 4-Chloroaniline	+++++	0.39677	0.40757	0.39487	0.39324	0.37614					
	0.36195	0.33806					AVRG		0.38123		6.35973
189 Caprolactam	+++++	0.06846	0.07656	0.07363	0.07653	+++++					
	0.06782	0.06711					AVRG		0.07169		6.15581
32 Hexachlorobutadiene	+++++	0.13511	0.14100	0.13045	0.12864	0.12021					
	0.11205	0.10277					AVRG		0.12432		10.80535
33 4-Chloro-3-methylphenol	+++++	0.21530	0.22699	0.22627	0.22610	0.21202					
	0.21204	0.17967					AVRG		0.21406		7.75567

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
34 2-Methylnaphthalene	0.63189	0.59091	0.61031	0.56805	0.55492	0.51261					
	0.47801	0.44368					AVRG		0.54880		11.97650
35 1-Methylnaphthalene	0.57039	0.52594	0.54774	0.50754	0.49716	0.46294					
	0.43668	0.39804					AVRG		0.49330		11.71827
36 Hexachlorocyclopentadiene	+++++	0.10604	0.13033	0.13014	0.13942	0.12687					
	0.11688	0.10523					AVRG		0.12213		10.70285
208 1,1'-Biphenyl	+++++	1.17951	1.24377	1.14549	1.13585	+++++					
	1.04839	0.97002					AVRG		1.12050		8.68804
205 2,3-Dichloroaniline	+++++	0.46645	0.48933	0.47427	0.46997	0.44649					
	0.43405	0.39749					AVRG		0.45401		6.79831
37 2,4,6-Trichlorophenol	+++++	0.26977	0.29094	0.27785	0.27904	0.25743					
	0.25024	0.23713					AVRG		0.26606		7.03474
38 2,4,5-Trichlorophenol	+++++	0.26905	0.31036	0.32159	0.23043	0.31171					
	0.26900	0.26816					AVRG		0.28290		11.57703
40 2-Chloronaphthalene	1.06866	1.01017	1.06218	1.02382	1.00740	0.95458					
	0.92971	0.84336					AVRG		0.98748		7.61587
42 o-Nitroaniline	+++++	0.29397	0.31274	0.31408	0.31185	0.30784					
	0.31350	0.28932					AVRG		0.30619		3.33957

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Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
41 m-Nitroaniline	+++++	0.27156	0.28234	0.28082	0.27143	0.25979					
	0.28219	0.24573					AVRG		0.27055		5.03620
43 Dimethylphthalate	+++++	1.09522	1.14427	1.12702	1.11254	1.08188					
	1.07235	0.99634					AVRG		1.08995		4.43176
44 2,6-Dinitrotoluene	+++++	0.26660	0.28518	0.28098	0.27933	0.27123					
	0.26992	0.24768					AVRG		0.27156		4.59036
45 Acenaphthylene	1.62784	1.60004	1.67564	1.59865	1.57380	1.47905					
	1.44269	1.32968					AVRG		1.54092		7.42836
47 Acenaphthene	1.00456	0.99034	1.02942	0.97302	0.94853	0.86787					
	0.82882	0.73816					AVRG		0.92259		10.97291
48 2,4-Dinitrophenol	+++++	+++++	0.08843	0.11349	0.11534	0.11082					
	0.11305	0.10198					AVRG		0.10718		9.63049
49 Dibenzofuran	+++++	1.40383	1.45777	1.40759	1.36431	1.30285					
	1.24923	1.15395					AVRG		1.33422		7.92638
50 2,4-Dinitrotoluene	+++++	0.34056	0.36497	0.37079	0.37131	0.36633					
	0.36565	0.33990					AVRG		0.35993		3.80091
51 Diethylphthalate	+++++	1.04278	1.09197	1.06193	1.04018	0.99480					
	0.99307	0.88837					AVRG		1.01616		6.53371

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End Cal Date : 17-NOV-2009 19:15
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Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	0.13809	0.17287	0.18777	0.19477	0.20369					
	0.21665	0.20716					AVRG		0.18871		14.01343
53 Fluorene	1.22796	1.15355	1.19493	1.10753	1.06188	0.99894					
	0.97721	0.88428					AVRG		1.07578		10.93658
54 4-Chlorophenylphenylether	+++++	0.47537	0.49720	0.47503	0.46785	0.44264					
	0.43218	0.38915					AVRG		0.45420		7.92169
55 2-Methyl-4,6-dinitrophenol	+++++	0.08375	0.09608	0.10582	0.10320	0.10771					
	0.10908	0.10272					AVRG		0.10120		8.67983
56 p-Nitroaniline	+++++	0.24392	0.26348	0.26430	0.28144	0.26774					
	0.27465	0.25651					AVRG		0.26458		4.60021
133 Diphenylamine	+++++	0.55588	0.57977	0.55886	0.54789	0.52659					
	0.50269	0.46310					AVRG		0.53354		7.43632
58 1,2-Diphenylhydrazine	+++++	0.69850	0.71486	0.68099	0.66427	0.63670					
	0.61324	0.54832					AVRG		0.65098		8.77582
59 Tributylphosphate	+++++	1.22698	1.16066	1.10479	1.12684	1.06119					
	1.01440	0.96114					AVRG		1.09371		8.21068
61 4-Bromophenylphenylether	+++++	0.13960	0.14381	0.14105	0.13893	0.13903					
	0.13474	0.12486					AVRG		0.13743		4.49074

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	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.18056	0.18610	0.17775	0.16888	0.16686					
	0.15868	0.14199					AVRG		0.16869		8.86819
207 Atrazine	+++++	0.04275	0.04402	0.04191	0.04036	+++++					
	0.03698	0.03447					AVRG		0.04008		9.14364
65 Pentachlorophenol	+++++	0.08713	0.10123	0.10564	0.10198	0.10716					
	0.10688	0.09814					AVRG		0.10117		6.93558
206 n-Octadecane	+++++	0.49445	0.50531	0.45683	0.42873	0.36788					
	0.34975	+++++					AVRG		0.43383		14.85243
68 Phenanthrene	1.08140	0.97577	0.96718	0.91676	0.90684	0.85016					
	0.82329	0.75087					AVRG		0.90903		11.26824
69 Anthracene	1.05572	0.98071	1.00934	0.97561	0.92329	0.88140					
	0.83261	0.73707					AVRG		0.92447		11.24280
72 Di-n-butylphthalate	+++++	1.06714	1.12314	1.06117	1.02135	0.94081					
	0.88726	0.80148					AVRG		0.98605		11.57265
76 Fluoranthene	0.94603	0.94387	0.96313	0.92832	0.88364	0.83514					
	0.79976	0.71979					AVRG		0.87746		9.80038
77 Benzidine	+++++	0.28582	0.36970	0.35152	0.36897	+++++					
	0.43187	0.36504					AVRG		0.36215		12.90005

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	100 Level 7	120 Level 8									
79 Pyrene	1.12921	1.08043	1.13184	1.09423	1.03887	1.05677					
	1.02924	0.94284					AVRG		1.06293		5.79953
85 Butylbenzylphthalate	+++++	0.53253	0.56219	0.50335	0.46569	0.43331					
	0.40529	+++++					AVRG		0.48372		12.38419
89 Benzo(a)anthracene	1.00602	0.91134	0.98073	0.96992	0.98002	0.96903					
	0.95763	0.89850					AVRG		0.95915		3.79585
90 3,3'-Dichlorobenzidine	+++++	0.24634	0.28908	0.28847	0.28710	+++++					
	0.28231	0.25909					AVRG		0.27540		6.60230
92 Chrysene	0.98731	0.93210	0.94599	0.88032	0.86729	0.85456					
	0.87955	0.82465					AVRG		0.89647		6.00506
93 bis(2-Ethylhexyl)phthalate	0.57061	0.72394	0.78180	0.75934	0.74451	0.72196					
	0.68855	0.63132					AVRG		0.70275		10.02985
94 Di-n-octylphthalate	+++++	1.17035	1.39716	1.40560	1.36840	1.34274					
	1.30766	1.16752					AVRG		1.30849		7.70640
95 Benzo(b)fluoranthene	21625	340509	730849	1739197	2305837	3304287					
	3978698	5127789					LINR	0.06661	1.08695		0.99870
96 Benzo(k)fluoranthene	1.03711	1.06722	1.12263	1.01575	1.02623	1.00211					
	0.97020	0.78256					AVRG		1.00298		9.96839

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	20918	319721	688146	1504125	2094282	2912657					
	3398226	3934490					LINR	-0.00385	0.87033		0.99612
99 Indeno(1,2,3-cd)pyrene	21578	336515	700258	1580353	2201480	3025334					
	3523403	4020592					LINR	-0.01092	0.89653		0.99431
100 Dibenzo(a,h)anthracene	16162	268427	581631	1325626	1846286	2532762					
	2946699	3397425					LINR	-0.00445	0.75511		0.99519
101 Benzo(ghi)perylene	0.56462	0.70452	0.77602	0.81299	0.83023	0.80394					
	0.79303	0.72783					AVRG		0.75165		11.54879
102 1,4-Dioxane	+++++	0.32550	0.33716	0.30934	0.31455	+++++					
	0.30805	0.28861					AVRG		0.31387		5.27573
103 Methyl methacrylate	+++++	0.17774	0.19107	0.17805	0.17495	+++++					
	0.17326	0.16336					AVRG		0.17640		5.08144
104 Ethyl methacrylate	+++++	0.73346	0.76622	0.70794	0.70643	+++++					
	0.69714	0.66675					AVRG		0.71299		4.73943
105 2-Picoline	+++++	1.18802	1.23130	1.15065	1.15312	+++++					
	1.12223	1.07774					AVRG		1.15384		4.58113
106 N-Nitrosomethylethylamine	+++++	0.42951	0.48460	0.44623	0.45222	+++++					
	0.46395	0.44906					AVRG		0.45426		4.08577

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.43204	0.45674	0.42468	0.43227	+++++					
	0.41648	0.39202					AVRG		0.42570		5.00242
108 N-Nitrosodiethylamine	+++++	0.47915	0.50719	0.47065	0.48068	+++++					
	0.47830	0.46128					AVRG		0.47954		3.20356
109 Ethyl Methanesulfonate	+++++	0.59343	0.63202	0.58286	0.59990	+++++					
	0.59568	0.57362					AVRG		0.59625		3.34808
110 Pentachloroethane	+++++	0.30094	0.30775	0.28811	0.28717	+++++					
	0.28774	0.27522					AVRG		0.29115		3.95122
111 N-Nitrosopyrrolidine	+++++	0.47773	0.52978	0.49561	0.51566	+++++					
	0.41369	0.41806					AVRG		0.47509		10.34926
113 N-Nitrosomorpholine	+++++	0.63587	0.69755	0.63481	0.65791	+++++					
	0.54487	0.53392					AVRG		0.61749		10.47980
114 o-Toluidine	+++++	1.64551	1.76888	1.61850	1.65178	+++++					
	1.65679	1.57817					AVRG		1.65327		3.85302
115 N-Nitrosopiperidine	+++++	0.12931	0.13922	0.12850	0.13280	+++++					
	0.13244	0.12709					AVRG		0.13156		3.32124
116 a,a-Dimethylphenethylamine	+++++	0.70597	0.78545	0.76293	0.79408	+++++					
	0.79335	0.76628					AVRG		0.76801		4.32000

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.12812	0.12428	0.12751	0.12901	0.12488					
	0.12021	0.11633					AVRG		0.12433		3.70966
118 2,6-Dichlorophenol	+++++	0.18796	0.20530	0.19528	0.20193	+++++					
	0.20014	0.19147					AVRG		0.19701		3.35416
119 Hexachloropropene	+++++	0.07891	0.09539	0.09133	0.09091	+++++					
	0.09225	0.08492					AVRG		0.08895		6.72708
120 p-Phenylenediamine	+++++	0.17417	0.23091	0.21919	0.22009	+++++					
	0.19257	0.17231					AVRG		0.20154		12.55674
121 N-Nitrosodi-n-butylamine	+++++	0.16926	0.19309	0.16843	0.17454	+++++					
	0.16640	0.15862					AVRG		0.17172		6.79719
122 Safrole	+++++	0.18021	0.18852	0.17847	0.18253	+++++					
	0.17443	0.16766					AVRG		0.17864		3.98501
123 1,2,4,5-Tetrachlorobenzene	+++++	0.38048	0.40351	0.37295	0.37017	+++++					
	0.35065	0.32500					AVRG		0.36713		7.29953
124 Isosafrole	+++++	0.32136	0.34935	0.32718	0.32927	+++++					
	0.32898	0.30952					AVRG		0.32761		3.96520
125 1,4-Naphthoquinone	+++++	0.37346	0.38046	0.31457	0.30180	+++++					
	0.18844	0.22186					AVRG		0.29676		26.34996 <-

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.17349	0.18721	0.19120	0.19440	0.19057					
	0.19238	0.17644					AVRG		0.18653		4.41251
127 Pentachlorobenzene	+++++	0.32992	0.34557	0.31675	0.31835	+++++					
	0.29677	0.27972					AVRG		0.31451		7.45207
128 1-Naphthylamine	+++++	0.82636	0.98891	0.93384	0.93443	+++++					
	0.87178	0.80990					AVRG		0.89420		7.80762
129 2-Naphthylamine	+++++	0.96588	1.05556	1.00159	1.00599	+++++					
	0.94403	0.87535					AVRG		0.97473		6.34557
130 2,3,4,6-Tetrachlorophenol	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
131 5-Nitro-o-toluidine	+++++	0.25535	0.29363	0.28574	0.29496	+++++					
	0.29982	0.28219					AVRG		0.28528		5.60973
132 Thionazin	+++++	0.16358	0.16364	0.16630	0.16880	0.16339					
	0.15554	0.14821					AVRG		0.16135		4.38820
134 Sulfotepp	+++++	0.08562	0.08304	0.08303	0.08467	0.07953					
	0.07427	0.07214					AVRG		0.08033		6.54838
135 Phorate	+++++	0.36567	0.35586	0.35721	0.36683	0.34385					
	0.32742	0.31541					AVRG		0.34747		5.65187

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136 1,3,5-Trinitrobenzene	+++++	0.10196	0.12348	0.12395	0.12006	+++++					
	0.11894	0.10898					AVRG		0.11623		7.60291
137 Phenacetin	+++++	0.22684	0.26317	0.26291	0.26441	+++++					
	0.26599	0.25918					AVRG		0.25708		5.83046
138 Diallate	+++++	0.24760	0.24927	0.23322	0.23010	+++++					
	0.21802	0.20853					AVRG		0.23112		6.94549
139 Dimethoate	+++++	0.21461	0.21994	0.23007	0.23724	0.23858					
	0.23513	0.22967					AVRG		0.22932		3.92960
140 4-Aminobiphenyl	+++++	0.53696	0.55369	0.57677	0.59426	+++++					
	0.49840	0.45674					AVRG		0.53614		9.53476
141 Pentachloronitrobenzene	+++++	0.05720	0.06067	0.05490	0.05533	+++++					
	0.04673	0.04463					AVRG		0.05324		11.71339
142 Pronamide	+++++	0.24822	0.26125	0.24154	0.23765	+++++					
	0.17973	+++++					AVRG		0.23368		13.46482
143 Dinoseb	+++++	0.10297	0.12216	0.13126	0.12950	0.13024					
	0.13017	0.12500					AVRG		0.12447		8.06727
144 Disulfoton	+++++	0.32280	0.31415	0.31231	0.32231	0.30214					
	0.27306	0.26345					AVRG		0.30146		7.92046

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	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.18413	0.18908	0.19611	0.20206	0.20472					
	0.19613	0.19053					AVRG		0.19468		3.74715
146 4-Nitroquinoline-1-oxide	+++++	0.00831	0.00998	0.00800	0.01074	+++++					
	0.01133	0.01046					AVRG		0.00980		13.77700
147 Methapyrilene	+++++	0.36466	0.38869	0.39386	0.38311	+++++					
	0.36077	0.31821					AVRG		0.36822		7.55340
148 Isodrin	+++++	0.09085	0.09372	0.08925	0.08743	+++++					
	0.07960	0.07570					AVRG		0.08609		8.09255
149 Aramite	+++++	0.04141	0.04570	0.04371	0.04272	+++++					
	0.04204	0.03972					AVRG		0.04255		4.79399
150 Kepone	+++++	0.06055	0.06732	0.06349	0.06380	+++++					
	0.06458	0.05876					AVRG		0.06308		4.80408
151 p-(Dimethylamino)azobenzene	+++++	0.28782	0.31583	0.29702	0.29097	+++++					
	0.26535	0.24656					AVRG		0.28392		8.62091
152 Chlorobenzilate	+++++	0.21991	0.23787	0.22800	0.23044	+++++					
	0.20814	0.19524					AVRG		0.21994		7.17760
153 3,3'-Dimethylbenzidine	+++++	0.45675	0.51768	0.48413	0.48879	+++++					
	0.49372	0.43564					AVRG		0.47945		6.05117

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154 Famphur	+++++	0.29819	0.30032	0.31780	0.33430	0.32440					
	0.30595	0.30061					AVRG		0.31165		4.49495
155 2-Acetylaminofluorene	+++++	0.23107	0.30345	0.31881	0.32045	+++++					
	0.34822	0.32608					AVRG		0.30801		13.11206
157 7,12Dimethylbenz(a)anthracene	+++++	0.41118	0.44192	0.42666	0.43253	+++++					
	0.40970	0.40537					AVRG		0.42123		3.47443
158 3-Methylcholanthrene	+++++	0.29680	0.36865	0.37932	0.38459	+++++					
	0.39125	0.38204					AVRG		0.36711		9.59696
26 Phthalic anhydride	+++++	30283	90214	245905	320454	497228					
	555160	687649					LINR	0.08413	0.10332		0.99692
173 Carbazole	0.90246	0.82255	0.80875	0.81414	0.83946	0.78812					
	0.78058	0.70109					AVRG		0.80714		7.06036
174 Hexachlorophene	+++++	0.03640	0.04820	0.05180	0.05353	0.05136					
	0.04905	+++++					AVRG		0.04839		12.77621
179 Dibenzo(a,e)pyrene	+++++	117900	312429	817402	1225621	1557621					
	1812574	+++++					LINR	0.07449	0.50549		0.99368
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

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Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
184 p-Benzoquinone	+++++	2462	14132	46568	48315	83536					
	96111	113764					LINR	0.17192	0.08067		0.99223
191 Parathion	+++++	0.06169	0.06089	0.06449	0.06621	0.06308					
	0.06173	0.06112					AVRG		0.06274		3.14637
192 Methoxychlor	+++++	0.32535	0.36631	0.33959	0.33867	0.27894					
	0.25594	+++++					AVRG		0.31747		13.10686
210 m-Toluidine	+++++	0.77272	0.88703	0.90355	0.94226	1.01524					
	0.94351	+++++					AVRG		0.91072		8.87324
211 p-Toluidine	+++++	0.69169	0.70617	0.72166	0.71562	0.68688					
	+++++	+++++					AVRG		0.70440		2.12367
212 Cis Diallate	+++++	0.23437	0.24880	0.23465	0.23944	+++++					
	0.24434	0.23833					AVRG		0.23999		2.35508
213 Trans Diallate	+++++	0.29129	0.29326	0.27438	0.27070	+++++					
	0.25649	0.24533					AVRG		0.27191		6.94549
214 1,4-Dinitrobenzene	+++++	0.16000	0.17119	0.17754	0.17866	0.17639					
	0.17966	0.16860					AVRG		0.17315		4.08379
215 2-Ethoxyethanol	+++++	0.57555	0.62918	0.65385	0.56961	0.58718					
	0.62071	0.58595					AVRG		0.60315		5.24047

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.11447	0.12909	0.13171	0.13536	0.13420					
	0.13376	0.12587					AVRG		0.12921		5.63660
229 2,2'-Dichlorobenzil	+++++	0.67948	0.77608	0.71487	+++++	0.73565					
	+++++	0.63422					AVRG		0.70806		7.63914
230 4-Chlorothioanisole	+++++	0.23155	0.23520	0.23685	+++++	0.23140					
	+++++	0.22159					AVRG		0.23132		2.56050
231 4-Chlorothiophenol	+++++	0.15409	0.17482	0.19368	+++++	0.19893					
	+++++	0.19703					AVRG		0.18371		10.41669
232 bis(p-Chlorophenyl)sulfone	+++++	0.39430	0.43698	0.38579	+++++	0.39600					
	+++++	0.34721					AVRG		0.39206		8.15529
233 bis(p-Chlorophenyl)disulfide	+++++	0.10045	0.11150	0.11707	+++++	0.12020					
	+++++	0.10635					AVRG		0.11111		7.18003
234 Diphenyl disulfide	+++++	0.17804	0.18209	0.18631	+++++	0.17491					
	+++++	0.16341					AVRG		0.17695		4.91531
235 Diphenyl sulfide	+++++	0.71955	0.73103	0.70874	+++++	0.65333					
	+++++	0.61709					AVRG		0.68595		7.09988
236 Phenyl sulfone	+++++	0.43275	0.44078	0.42799	+++++	0.41905					
	+++++	0.39177					AVRG		0.42247		4.46830

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
237 Hydroxymethyl phthalimide	+++++	0.12384	0.15720	0.10384	+++++	0.13032					
	+++++	0.12669					AVRG		0.12838		14.88299
238 Phthalic acid	+++++	24604	70600	163991	+++++	411903					
	+++++	634014					LINR	0.25540	0.11087		0.99102
239 Thiophenol	+++++	0.94048	1.03561	1.08365	+++++	1.12900					
	+++++	1.09332					AVRG		1.05641		6.89893
240 bis(Chloromethyl)ether	+++++	0.78790	0.79417	0.76917	+++++	0.75455					
	+++++	0.73576					AVRG		0.76831		3.12263
241 Octachlorostyrene	+++++	0.06103	0.06315	0.05827	+++++	0.05420					
	+++++	0.04861					AVRG		0.05705		10.14342
M 225 Trichlorophenols	+++++	0.26941	0.30065	0.29972	0.25473	0.28457					
	0.25962	0.25265					AVRG		0.27448		7.49129
M 226 Tetrachlorophenols	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
M 227 Benzo(b,k)fluoranthene	0.78278	0.93887	1.02131	1.01324	1.00976	1.01479					
	1.00963	0.93381					AVRG		0.96552		8.47131
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.97776	1.06271	1.06423	1.06306	1.07281						
	1.07136	1.00157					AVRG		1.04478		3.68308	
$ 5 Phenol-d5	+++++	1.21974	1.33050	1.28249	1.27680	1.26954						
	1.29216	1.21764					AVRG		1.26984		3.15351	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27426	0.28571	0.27066	0.27231	0.25884						
	0.24945	0.23400					AVRG		0.26360		6.62019	
$ 39 2-Fluorobiphenyl	+++++	0.99823	1.04801	1.00239	0.98618	0.93991						
	0.91199	0.81928					AVRG		0.95800		7.87748	
$ 60 2,4,6-Tribromophenol	+++++	0.10924	0.11530	0.11503	0.10898	0.11186						
	0.11271	0.10874					AVRG		0.11169		2.51418	
$ 81 p-Terphenyl-d14	+++++	0.64452	0.67675	0.65301	0.63863	0.61256						
	0.60853	0.56112					AVRG		0.62787		5.98666	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Cal Date : 30-Nov-2009 08:27 amy01291

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 15-NOV-2009 23:17
Lab File ID: s1k1235.d Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 22:53
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.71239	0.71239	0.000	-13.54468	60.00000	Averaged
16 Acetophenone	1.12880	1.15012	1.15012	0.000	1.88924	60.00000	Averaged
189 Caprolactam	0.07169	0.08295	0.08295	0.000	15.71078	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.24126	1.24126	0.000	10.77724	60.00000	Averaged
207 Atrazine	0.04008	0.04737	0.04737	0.000	18.18184	60.00000	Averaged
77 Benzidine	0.36215	0.33951	0.33951	0.000	-6.25196	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.29917	0.29917	0.000	8.63115	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.37981	0.37981	0.000	21.00923	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.20821	0.20821	0.000	18.03005	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.86659	0.86659	0.000	21.54329	60.00000	Averaged
105 2-Picoline	1.15384	1.13306	1.13306	0.000	-1.80140	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.46463	0.46463	0.000	2.28123	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48978	0.48978	0.000	15.05276	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.49102	0.49102	0.000	2.39384	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.74183	0.74183	0.000	24.41607	60.00000	Averaged
110 Pentachloroethane	0.29115	0.40985	0.40985	0.000	40.76840	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.50932	0.50932	0.000	7.20593	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.67896	0.67896	0.000	9.95518	60.00000	Averaged
114 o-Toluidine	1.65327	1.64031	1.64031	0.000	-0.78415	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.13273	0.13273	0.000	0.88789	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.79273	0.79273	0.000	3.21891	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.21797	0.21797	0.000	10.63653	60.00000	Averaged
119 Hexachloropropene	0.08895	0.13367	0.13367	0.000	50.27176	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.18980	0.18980	0.000	-5.82557	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.17829	0.17829	0.000	3.82057	60.00000	Averaged
122 Safrole	0.17864	0.21665	0.21665	0.000	21.27785	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.42376	0.42376	0.000	15.42574	60.00000	Averaged
124 Isosafrole	0.32761	0.46202	0.46202	0.000	41.02664	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.32067	0.32067	0.000	8.05637	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.35074	0.35074	0.000	11.51805	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.98926	0.98926	0.000	10.62991	60.00000	Averaged
129 2-Naphthylamine	0.97473	1.09077	1.09077	0.000	11.90459	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.30775	0.30775	0.000	7.87638	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.15168	0.15168	0.000	30.50015	60.00000	Averaged
137 Phenacetin	0.25708	0.29576	0.29576	0.000	15.04579	60.00000	Averaged
138 Diallate	0.23112	0.23284	0.23284	0.000	0.74457	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1235.d
Analysis Type:
Lab Sample ID: WBN091111-08.1
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 15-NOV-2009 23:17
Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Init. Cal. Times: 18:22 22:53
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.31739	0.31739	0.000	32.25095	60.00000	Averaged
213 Trans Diallate	0.27191	0.27393	0.27393	0.000	0.74457	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.62569	0.62569	0.000	16.70322	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06215	0.06215	0.000	16.73283	60.00000	Averaged
142 Pronamide	0.23368	0.26726	0.26726	0.000	14.37225	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.00923	0.00923	0.000	-5.86960	60.00000	Averaged
147 Methapyrilene	0.36822	0.29090	0.29090	0.000	-20.99905	60.00000	Averaged
148 Isodrin	0.08609	0.08812	0.08812	0.000	2.35297	60.00000	Averaged
149 Aramite	0.04255	0.04327	0.04327	0.000	1.67534	60.00000	Averaged
150 Kepone	0.06308	0.07178	0.07178	0.000	13.77677	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.29411	0.29411	0.000	3.58893	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.24578	0.24578	0.000	11.75217	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.47257	0.47257	0.000	-1.43591	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.33042	0.33042	0.000	7.27461	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.42978	0.42978	0.000	2.03140	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40048	0.40048	0.000	9.08958	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1235.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: APICV
Inj Date : 15-NOV-2009 23:17
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091111-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 10:44 nat00999 Quant Type: ISTD
Cal Date : 15-NOV-2009 21:42 Cal File: s1k1231.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.957	3.940	(1.000)	601939	40.0000		
* 29 Naphthalene-d8	136	4.828	4.810	(1.000)	2374945	40.0000		
* 46 Acenaphthene-d10	164	6.075	6.057	(1.000)	1270499	40.0000		
* 67 Phenanthrene-d10	188	7.057	7.040	(1.000)	2114263	40.0000		
* 91 Chrysene-d12	240	8.739	8.722	(1.000)	1927170	40.0000		
* 98 Perylene-d12	264	10.251	10.222	(1.000)	1696025	40.0000		(H)
209 Benzaldehyde	77	3.681	3.681	(0.930)	428816	40.0000	34.6	
16 Acetophenone	105	4.210	4.210	(1.064)	692304	40.0000	40.8	
189 Caprolactam	113	5.104	5.122	(1.057)	197001	40.0000	46.3	
208 1,1'-Biphenyl	154	5.646	5.651	(0.929)	1577025	40.0000	44.3	
207 Atrazine	173	6.822	6.834	(0.967)	100151	40.0000	47.3	
77 Benzidine	184	7.828	7.834	(0.896)	654298	40.0000	37.5	
90 3,3'-Dichlorobenzidine	252	8.663	8.669	(0.991)	576557	40.0000	43.4	
102 1,4-Dioxane	88	2.281	2.287	(0.576)	228622	40.0000	48.4	
103 Methyl methacrylate	100	2.275	2.275	(0.575)	125330	40.0000	47.2	
104 Ethyl methacrylate	69	2.652	2.652	(0.670)	521635	40.0000	48.6	
105 2-Picoline	93	2.846	2.846	(0.719)	682032	40.0000	39.3	
106 N-Nitrosomethylethylamine	88	2.887	2.893	(0.729)	279676	40.0000	40.9	
107 Methyl methanesulfonate	80	3.046	3.052	(0.770)	294820	40.0000	46.0	
108 N-Nitrosodiethylamine	102	3.281	3.287	(0.829)	295564	40.0000	41.0	
109 Ethyl Methanesulfonate	79	3.440	3.446	(0.869)	446538	40.0000	49.8	
110 Pentachloroethane	167	3.781	3.781	(0.955)	246707	40.0000	56.3	
111 N-Nitrosopyrrolidine	100	4.199	4.216	(1.061)	306582	40.0000	42.9	
113 N-Nitrosomorpholine	56	4.216	4.228	(1.065)	408692	40.0000	44.0	
114 o-Toluidine	106	4.234	4.246	(1.070)	987365	40.0000	39.7	
115 N-Nitrosopiperidine	114	4.434	4.446	(0.918)	315224	40.0000	40.4	
116 a,a-Dimethylphenethylamine	58	4.681	4.681	(0.970)	1882697	40.0000	41.3	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.869	4.875	(1.009)	517655	40.0000	44.2
119 Hexachloropropene	213	4.899	4.898	(1.015)	317465	40.0000	60.1
120 p-Phenylenediamine	108	5.104	5.116	(1.057)	450756	40.0000	37.7
121 N-Nitrosodi-n-butylamine	84	5.069	5.075	(1.050)	423419	40.0000	41.5(T)
122 Safrole	162	5.234	5.240	(1.084)	514526	40.0000	48.5
123 1,2,4,5-Tetrachlorobenzene	216	5.440	5.446	(0.895)	538386	40.0000	46.2
124 Isosafrole	162	5.604	5.610	(0.923)	586994	40.0000	56.4
125 1,4-Naphthoquinone	158	5.793	5.793	(0.954)	407413	40.0000	43.2
127 Pentachlorobenzene	250	6.181	6.187	(1.017)	445615	40.0000	44.6
128 1-Naphthylamine	143	6.263	6.269	(1.031)	1256848	40.0000	44.2
129 2-Naphthylamine	143	6.316	6.322	(1.040)	1385825	40.0000	44.8
131 5-Nitro-o-toluidine	152	6.434	6.445	(1.059)	390998	40.0000	43.2
136 1,3,5-Trinitrobenzene	75	6.645	6.651	(0.942)	320686	40.0000	52.2
137 Phenacetin	108	6.687	6.698	(0.947)	625324	40.0000	46.0
138 Diallate	86	6.669	6.675	(0.945)	492291	40.0000	40.3
212 Cis Diallate	86	6.734	6.734	(0.954)	100656	6.00000	7.9
213 Trans Diallate	86	6.669	6.675	(0.945)	492291	34.0000	34.2
140 4-Aminobiphenyl	169	6.910	6.916	(0.979)	1322873	40.0000	46.7
141 Pentachloronitrobenzene	237	6.934	6.940	(0.982)	131405	40.0000	46.7
142 Pronamide	173	6.922	6.928	(0.981)	565063	40.0000	45.7
146 4-Nitroquinoline-1-oxide	101	7.516	7.522	(1.065)	19512	40.0000	37.6
147 Methapyrilene	58	7.534	7.539	(1.067)	615031	40.0000	31.6
148 Isodrin	193	7.692	7.692	(1.090)	186303	40.0000	40.9
149 Aramite	185	7.916	7.916	(1.122)	91474	40.0000	40.7
150 Kepone	272	8.351	8.363	(1.183)	151752	40.0000	45.5
151 p-(Dimethylamino)azobenzene	120	8.045	8.051	(0.921)	566806	40.0000	41.4
152 Chlorobenzilate	251	8.057	8.063	(0.922)	473667	40.0000	44.7
153 3,3'-Dimethylbenzidine	212	8.257	8.263	(0.945)	910722	40.0000	39.4
155 2-Acetylaminofluorene	181	8.445	8.457	(0.966)	636774	40.0000	42.9
157 7,12Dimethylbenz(a)anthracene	256	9.733	9.745	(0.945)	728922	40.0000	40.8
158 3-Methylcholanthrene	268	10.622	10.639	(1.031)	679223	40.0000	43.6

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/HSD1.i/s111409.b/s1k1235.d
Date : 15-NOV-2009 23:17
Client ID: APICV
Sample Info: IWBN091111-08,1|40 PPM|1|SVMF|1|APICV
Column phase: J&W DB-5HS

Instrument: HSD1.i
Operator: amy
Column diameter: 0.20

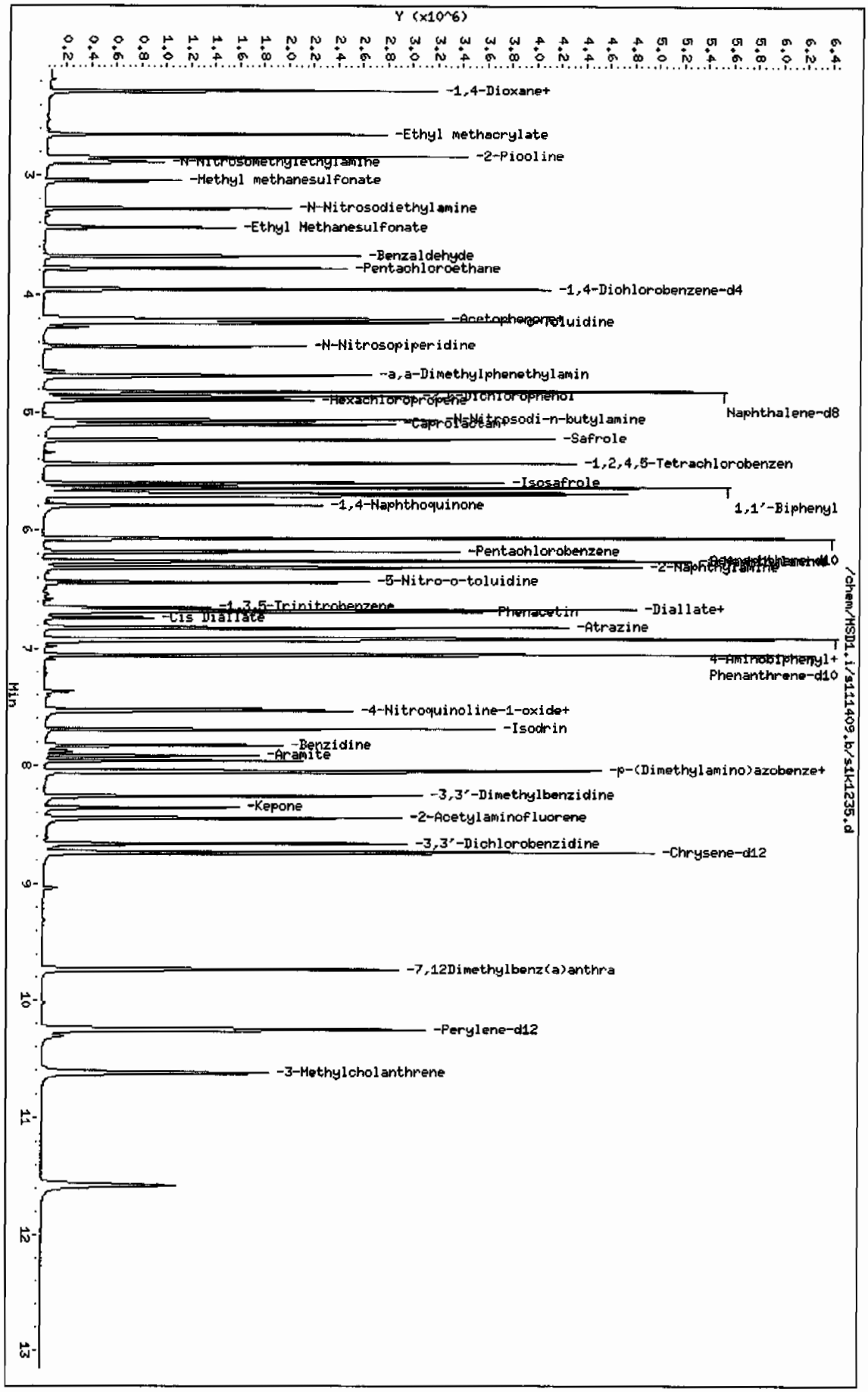

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.04478	0.92701	0.92701	0.000	-11.27306	60.00000	Averaged
$ 5 Phenol-d5	1.26984	1.11829	1.11829	0.000	-11.93416	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.26360	0.25882	0.25882	0.000	-1.81289	60.00000	Averaged
$ 39 2-Fluorobiphenyl	0.95800	0.95545	0.95545	0.000	-0.26619	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11169	0.11397	0.11397	0.000	2.04032	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.62787	0.61091	0.61091	0.000	-2.70233	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.56740	0.52259	0.52259	0.000	-7.89719	60.00000	Averaged
2 Pyridine	0.95281	0.72054	0.72054	0.000	-24.37721	60.00000	Averaged
4 Aniline	0.55813	0.46069	0.46069	0.000	-17.45935	60.00000	Averaged
6 Phenol	1.33800	1.13102	1.13102	0.001	-15.46941	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.93081	0.78725	0.78725	0.000	-15.42323	60.00000	Averaged
8 2-Chlorophenol	1.13717	0.96631	0.96631	0.000	-15.02517	60.00000	Averaged
203 n-Decane	1.43160	1.33489	1.33489	0.000	-6.75532	60.00000	Averaged
9 1,3-Dichlorobenzene	1.33431	1.14485	1.14485	0.000	-14.19930	60.00000	Averaged
11 1,4-Dichlorobenzene	1.30799	1.12905	1.12905	0.001	-13.68038	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.20798	1.02631	1.02631	0.000	-15.03923	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.21709	1.93928	1.93928	0.000	-12.53006	60.00000	Averaged
12 Benzyl alcohol	0.69141	0.59629	0.59629	0.000	-13.75808	60.00000	Averaged
15 o-Cresol	0.84650	0.72216	0.72216	0.000	-14.68816	60.00000	Averaged
18 m,p-Cresols	1.15179	1.00178	1.00178	0.000	-13.02332	60.00000	Averaged
17 N-Nitrosodipropylamine	0.76238	0.61385	0.61385	0.050	-19.48192	60.00000	Averaged spcc
19 Hexachloroethane	0.47075	0.38923	0.38923	0.000	-17.31682	60.00000	Averaged
21 Nitrobenzene	0.27466	0.23975	0.23975	0.000	-12.70858	60.00000	Averaged
22 Isophorone	0.48049	0.42824	0.42824	0.000	-10.87384	60.00000	Averaged
23 2-Nitrophenol	0.14580	0.12443	0.12443	0.001	-14.65471	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.23346	0.23407	0.23407	0.000	0.25935	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30933	0.25445	0.25445	0.000	-17.74126	60.00000	Averaged
26 2,4-Dichlorophenol	0.21909	0.18847	0.18847	0.001	-13.97781	20.00000	Averaged ccc
27 Benzoic acid	0.16087	0.16553	0.16553	0.000	2.89975	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24210	0.21218	0.21218	0.000	-12.36169	60.00000	Averaged
30 Naphthalene	0.83482	0.76679	0.76679	0.000	-8.14910	60.00000	Averaged
204 alpha-Terpineol	0.19635	0.19249	0.19249	0.000	-1.96852	60.00000	Averaged
31 4-Chloroaniline	0.38123	0.34324	0.34324	0.000	-9.96471	60.00000	Averaged
32 Hexachlorobutadiene	0.12432	0.10582	0.10582	0.001	-14.87841	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.21406	0.17276	0.17276	0.001	-19.29025	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.54880	0.51972	0.51972	0.000	-5.29812	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.47920	0.47920	0.000	-2.85884	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.12462	0.12462	0.050	2.03810	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.44519	0.44519	0.000	-1.94238	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.24935	0.24935	0.001	-6.28041	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.25595	0.25595	0.000	-9.52679	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.82050	0.82050	0.000	-16.91018	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.24946	0.24946	0.000	-18.52571	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.22438	0.22438	0.000	-17.06469	60.00000	Averaged
43 Dimethylphthalate	1.08995	0.95932	0.95932	0.000	-11.98438	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.22271	0.22271	0.000	-17.99006	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.29440	0.29440	0.000	-18.20706	60.00000	Averaged
45 Acenaphthylene	1.54092	1.46812	1.46812	0.000	-4.72441	60.00000	Averaged
47 Acenaphthene	0.92259	0.85781	0.85781	0.001	-7.02192	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.09229	0.09229	0.050	-13.89853	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.12564	1.12564	0.000	-15.63294	60.00000	Averaged
51 Diethylphthalate	1.01616	0.93320	0.93320	0.000	-8.16403	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.18660	0.18660	0.050	-1.12202	60.00000	Averaged spcc
53 Fluorene	1.07578	0.99783	0.99783	0.000	-7.24582	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.42578	0.42578	0.000	-6.25867	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.09844	0.09844	0.000	-2.71965	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.21819	0.21819	0.000	-17.53206	60.00000	Averaged
133 Diphenylamine	0.53354	0.46493	0.46493	0.001	-12.85961	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.55777	0.55777	0.000	-14.31896	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.14126	0.14126	0.000	2.79050	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.14433	0.14433	0.000	-14.43782	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.09042	0.09042	0.001	-10.61921	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.42570	0.42570	0.000	-1.87309	60.00000	Averaged
68 Phenanthrene	0.90903	0.83581	0.83581	0.000	-8.05558	60.00000	Averaged
69 Anthracene	0.92447	0.85110	0.85110	0.000	-7.93592	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	0.95396	0.95396	0.000	-3.25457	60.00000	Averaged
76 Fluoranthene	0.87746	0.81704	0.81704	0.001	-6.88555	20.00000	Averaged ccc
79 Pyrene	1.06293	0.98267	0.98267	0.000	-7.55079	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.46739	0.46739	0.000	-3.37649	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.87571	0.87571	0.000	-8.69930	60.00000	Averaged
92 Chrysene	0.89647	0.82199	0.82199	0.000	-8.30767	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.65271	0.65271	0.000	-7.12169	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.19375	1.19375	0.001	-8.76858	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	34.69168	40.00000	0.87030	0.000	-13.27080	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	0.95633	0.95633	0.000	-4.65112	60.00000	Averaged	
	97 Benzo(a)pyrene	37.92700	40.00000	0.82858	0.001	-5.18249	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	35.83759	40.00000	0.81303	0.000	-10.40601	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	35.09981	40.00000	0.66597	0.000	-12.25048	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.69836	0.69836	0.000	-7.08991	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15696	0.15696	0.000	-15.84920	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
	143 Dinoseb	0.12447	0.10965	0.10965	0.000	-11.90708	60.00000	Averaged	
	173 Carbazole	0.80714	0.69773	0.69773	0.000	-13.55506	60.00000	Averaged	
	184 p-Benzoquinone	40.49777	40.00000	0.06781	0.000	1.24442	60.00000	Linear	
	192 Methoxychlor	0.31747	0.36177	0.36177	0.000	13.95477	60.00000	Averaged	
	211 p-Toluidine	0.70440	0.95402	0.95402	0.000	35.43664	60.00000	Averaged	
	210 m-Toluidine	0.91072	0.95200	0.95200	0.000	4.53333	60.00000	Averaged	
	26 Phthalic anhydride	42.71723	40.00000	0.10164	0.000	6.79306	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	24.88814	40.00000	0.27687	0.000	-37.77964	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14504	0.14504	0.000	-16.23762	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.59707	0.59707	0.000	-1.00765	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.12373	0.12373	0.000	-4.23543	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.25265	0.25265	0.000	-7.95340	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	0.91331	0.91331	0.000	-5.40733	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1261.d
Lab Smp Id: WBN091027-09.3 Client Smp ID: MEGAICV
Inj Date : 17-NOV-2009 16:27
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091027-09.3|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 16:47 11o00884 Quant Type: ISTD
Cal Date : 17-NOV-2009 12:38 Cal File: s1k1256.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.928	3.928	(1.000)	530038	40.0000		
* 29 Naphthalene-d8	136	4.793	4.793	(1.000)	2205306	40.0000		
* 46 Acenaphthene-d10	164	6.040	6.040	(1.000)	1135267	40.0000		
* 67 Phenanthrene-d10	188	7.022	7.022	(1.000)	1874551	40.0000		(H)
* 91 Chrysene-d12	240	8.704	8.704	(1.000)	1621760	40.0000		
* 98 Perylene-d12	264	10.198	10.198	(1.000)	1481649	40.0000		
$ 3 2-Fluorophenol	112	3.104	3.104	(0.790)	491348	40.0000	35.5	
$ 5 Phenol-d5	99	3.640	3.640	(0.927)	592737	40.0000	35.2	
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	570788	40.0000	39.3	
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.916)	1084689	40.0000	39.9	
$ 60 2,4,6-Tribromophenol	329	6.575	6.575	(1.089)	129390	40.0000	40.8	
$ 81 p-Terphenyl-d14	244	7.939	7.939	(0.912)	990744	40.0000	38.9	
1 N-Methyl-N-nitrosomethylamine	74	2.410	2.410	(0.614)	276992	40.0000	36.8	
2 Pyridine	79	2.446	2.446	(0.623)	381913	40.0000	30.2	
4 Aniline	66	3.710	3.710	(0.945)	244181	40.0000	33.0	
6 Phenol	94	3.646	3.646	(0.928)	599483	40.0000	33.8	
7 bis(2-Chloroethyl) ether	63	3.722	3.722	(0.948)	417273	40.0000	33.8	
8 2-Chlorophenol	128	3.787	3.787	(0.964)	512179	40.0000	34.0	
203 n-Decane	43	3.775	3.775	(0.961)	707542	40.0000	37.3	
9 1,3-Dichlorobenzene	146	3.893	3.893	(0.991)	606813	40.0000	34.3	
11 1,4-Dichlorobenzene	146	3.934	3.934	(1.001)	598440	40.0000	34.5	
13 1,2-Dichlorobenzene	146	4.040	4.040	(1.028)	543984	40.0000	34.0	
14 bis(2-Chloroisopropyl)ether	45	4.069	4.069	(1.036)	1027894	40.0000	35.0	
12 Benzyl alcohol	108	3.993	3.993	(1.016)	316054	40.0000	34.5	
15 o-Cresol	107	4.040	4.040	(1.028)	382773	40.0000	34.1	
18 m,p-Cresols	107	4.146	4.146	(1.055)	530984	40.0000	34.8	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.163	4.163	(1.060)	325364	40.0000	32.2
19 Hexachloroethane	117	4.269	4.269	(1.087)	206306	40.0000	33.1
21 Nitrobenzene	77	4.304	4.304	(0.898)	528723	40.0000	34.9
22 Isophorone	82	4.457	4.457	(0.930)	944401	40.0000	35.6
23 2-Nitrophenol	139	4.516	4.516	(0.942)	274410	40.0000	34.1
24 2,4-Dimethylphenol	122	4.504	4.504	(0.940)	516190	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.575	4.575	(0.955)	561140	40.0000	32.9
26 2,4-Dichlorophenol	162	4.681	4.681	(0.977)	415624	40.0000	34.4
27 Benzoic acid	105	4.575	4.575	(0.955)	365053	40.0000	41.2
28 1,2,4-Trichlorobenzene	180	4.745	4.745	(0.990)	467914	40.0000	35.0
30 Naphthalene	128	4.810	4.810	(1.004)	1690998	40.0000	36.7
204 alpha-Terpineol	59	4.787	4.787	(0.999)	424496	40.0000	39.2
31 4-Chloroaniline	127	4.822	4.822	(1.006)	756952	40.0000	36.0
32 Hexachlorobutadiene	225	4.875	4.875	(1.017)	233369	40.0000	34.0
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	380998	40.0000	32.3
34 2-Methylnaphthalene	142	5.293	5.293	(1.104)	1146146	40.0000	37.9
35 1-Methylnaphthalene	142	5.363	5.363	(1.119)	1056787	40.0000	38.8
36 Hexachlorocyclopentadiene	237	5.393	5.393	(0.893)	141475	40.0000	40.8
205 2,3-Dichloroaniline	161	5.487	5.487	(0.908)	505408	40.0000	39.2
37 2,4,6-Trichlorophenol	196	5.475	5.475	(0.906)	283075	40.0000	37.5(H)
38 2,4,5-Trichlorophenol	196	5.504	5.504	(0.911)	290570	40.0000	36.2
40 2-Chloronaphthalene	162	5.645	5.645	(0.935)	931485	40.0000	33.2
42 o-Nitroaniline	65	5.698	5.698	(0.944)	283207	40.0000	32.6
41 m-Nitroaniline	138	5.992	5.992	(0.992)	254734	40.0000	33.2
43 Dimethylphthalate	163	5.810	5.810	(0.962)	1089088	40.0000	35.2
44 2,6-Dinitrotoluene	165	5.863	5.863	(0.971)	252831	40.0000	32.8
50 2,4-Dinitrotoluene	165	6.145	6.145	(1.018)	334220	40.0000	32.7
45 Acenaphthylene	152	5.945	5.945	(0.984)	1666713	40.0000	38.1
47 Acenaphthene	154	6.063	6.063	(1.004)	973838	40.0000	37.2
48 2,4-Dinitrophenol	184	6.057	6.057	(1.003)	104771	40.0000	34.4(Q)
49 Dibenzofuran	168	6.181	6.181	(1.023)	1277902	40.0000	33.7
51 Diethylphthalate	149	6.287	6.287	(1.041)	1059428	40.0000	36.7
52 4-Nitrophenol	139	6.075	6.075	(1.006)	211838	40.0000	39.6
53 Fluorene	166	6.416	6.416	(1.062)	1132809	40.0000	37.1
54 4-Chlorophenylphenylether	204	6.392	6.392	(1.058)	483371	40.0000	37.5
55 2-Methyl-4,6-dinitrophenol	198	6.428	6.428	(0.911)	184539	40.0000	38.9
56 p-Nitroaniline	138	6.410	6.410	(1.061)	247705	40.0000	33.0
133 Diphenylamine	169	6.469	6.469	(0.917)	871532	40.0000	34.8
58 1,2-Diphenylhydrazine	77	6.498	6.498	(0.921)	1045567	40.0000	34.3
61 4-Bromophenylphenylether	248	6.716	6.716	(0.952)	264808	40.0000	41.1(H)
63 Hexachlorobenzene	284	6.775	6.775	(0.960)	270561	40.0000	34.2
65 Pentachlorophenol	266	6.892	6.892	(0.977)	169503	40.0000	35.8
206 n-Octadecane	57	6.869	6.869	(0.973)	797995	40.0000	39.2
68 Phenanthrene	178	7.039	7.039	(0.997)	1566761	40.0000	36.8
69 Anthracene	178	7.069	7.069	(1.002)	1595437	40.0000	36.8
72 Di-n-butylphthalate	149	7.310	7.310	(1.036)	1788243	40.0000	38.7
76 Fluoranthene	202	7.751	7.751	(1.098)	1531590	40.0000	37.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.892	7.892	(0.907)	1593654	40.0000	37.0
85 Butylbenzylphthalate	149	8.204	8.204	(0.943)	757996	40.0000	38.6
89 Benzo(a)anthracene	228	8.692	8.692	(0.999)	1420191	40.0000	36.5(H)
92 Chrysene	228	8.728	8.728	(1.003)	1333078	40.0000	36.7
93 bis(2-Ethylhexyl)phthalate	149	8.569	8.569	(0.984)	1058534	40.0000	37.2(H)
94 Di-n-octylphthalate	149	9.110	9.110	(0.893)	1768724	40.0000	36.5
95 Benzo(b)fluoranthene	252	9.716	9.716	(0.953)	1289484	40.0000	34.7(H)
96 Benzo(k)fluoranthene	252	9.745	9.745	(0.956)	1416940	40.0000	38.1
97 Benzo(a)pyrene	252	10.122	10.122	(0.992)	1227658	40.0000	37.9
99 Indeno(1,2,3-cd)pyrene	276	11.863	11.863	(1.163)	1204623	40.0000	35.8(H)
100 Dibenzo(a,h)anthracene	278	11.863	11.863	(1.163)	986733	40.0000	35.1
101 Benzo(ghi)perylene	276	12.380	12.380	(1.214)	1034720	40.0000	37.2
126 m-Dinitrobenzene	168	5.845	5.845	(0.968)	178196	40.0000	33.7
130 2,3,4,6-Tetrachlorophenol	232	6.251	6.251	(1.035)	223733	40.0000	36.5
143 Dinoseb	211	6.981	6.981	(0.989)	205546	40.0000	35.2
173 Carbazole	167	7.151	7.151	(1.013)	1307938	40.0000	34.6
184 p-Benzoquinone	54	3.404	3.404	(0.867)	35940	40.0000	40.5
192 Methoxychlor	227	8.557	8.557	(0.983)	586700	40.0000	45.6
211 p-Toluidine	106	4.204	4.204	(1.070)	505668	40.0000	54.2(H)
210 m-Toluidine	106	4.228	4.228	(1.076)	504598	40.0000	41.8
26 Phthalic anhydride	104	5.322	5.322	(1.110)	224154	40.0000	42.7
179 Dibenzo(a,e)pyrene	302	16.327	16.327	(1.601)	410219	40.0000	24.9(H)
214 1,4-Dinitrobenzene	168	5.787	5.787	(0.958)	164654	40.0000	33.5
215 2-Ethoxyethanol	59	2.257	2.257	(0.575)	316469	40.0000	39.6
216 Methylenebis(2-chloroaniline)	231	8.622	8.622	(0.991)	200666	40.0000	38.3
M 225 Trichlorophenols	196				573645	80.0000	73.6
M 226 Tetrachlorophenols	232				223733	40.0000	36.5
M 227 Benzo(b,k)fluoranthene	252				2706424	80.0000	75.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1261.d
Date : 17-NOV-2009 16:27
Client ID: MEGAICV
Sample Info: WBN091027-09.3:40 PPM|1|SVHF|1|MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

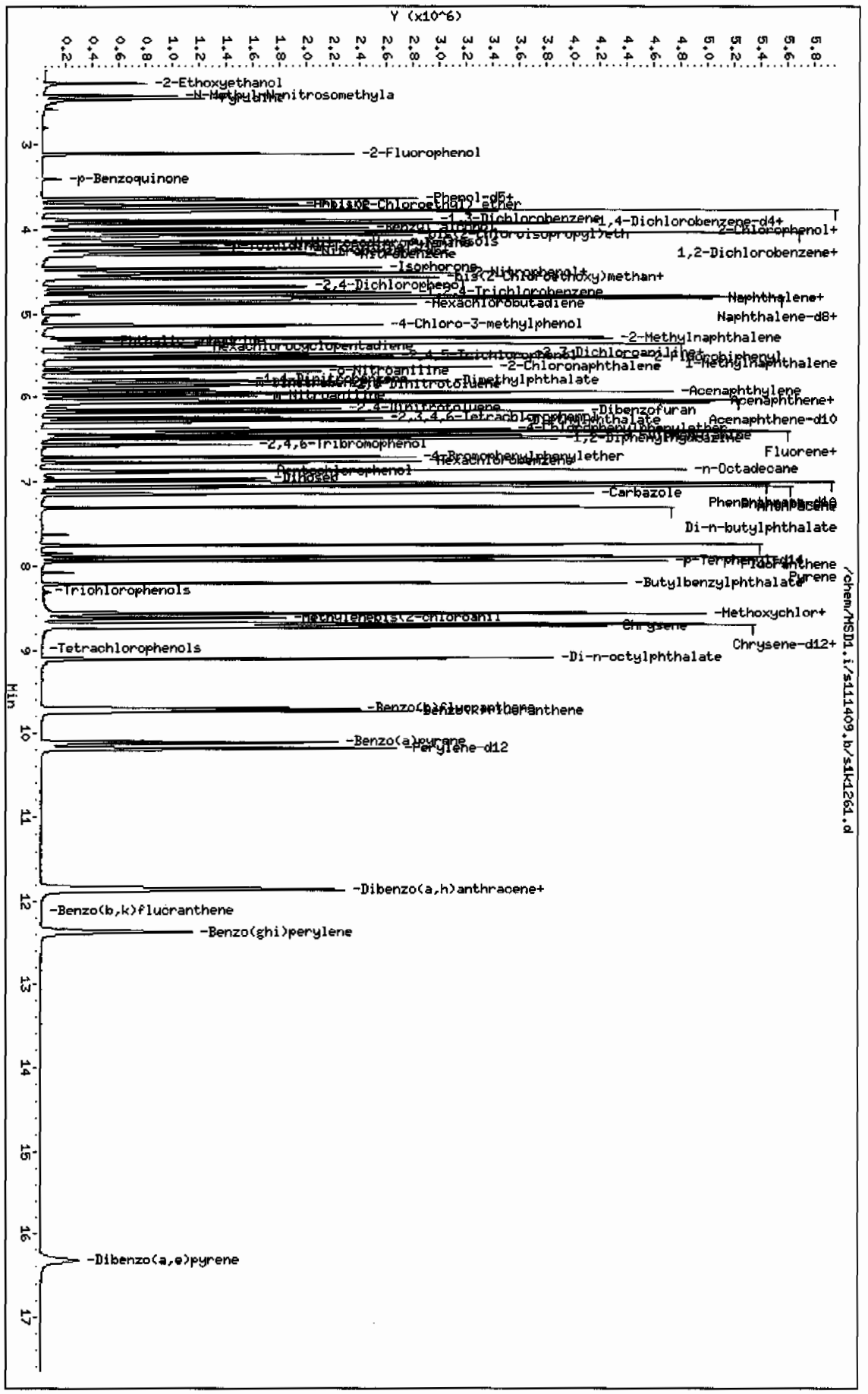

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:16
Lab File ID: s1k2908.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.04478	0.93534	0.93534	0.000	-10.47542	60.00000	Averaged
$ 5 Phenol-d5	1.26984	1.10416	1.10416	0.000	-13.04738	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.26360	0.25055	0.25055	0.000	-4.95183	60.00000	Averaged
$ 39 2-Fluorobiphenyl	0.95800	1.05400	1.05400	0.000	10.02136	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11169	0.12797	0.12797	0.000	14.57528	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.62787	0.69462	0.69462	0.000	10.62981	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.56740	0.49062	0.49062	0.000	-13.53082	60.00000	Averaged
2 Pyridine	0.95281	0.62500	0.62500	0.000	-34.40414	60.00000	Averaged
4 Aniline	0.55813	0.45585	0.45585	0.000	-18.32607	60.00000	Averaged
6 Phenol	1.33800	1.14177	1.14177	0.001	-14.66627	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.93081	0.79196	0.79196	0.000	-14.91692	60.00000	Averaged
8 2-Chlorophenol	1.13717	1.01207	1.01207	0.000	-11.00062	60.00000	Averaged
203 n-Decane	1.43160	1.34530	1.34530	0.000	-6.02780	60.00000	Averaged
9 1,3-Dichlorobenzene	1.33431	1.17510	1.17510	0.000	-11.93236	60.00000	Averaged
11 1,4-Dichlorobenzene	1.30799	1.17800	1.17800	0.001	-9.93823	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.20798	1.11925	1.11925	0.000	-7.34571	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.21709	1.72913	1.72913	0.000	-22.00911	60.00000	Averaged
12 Benzyl alcohol	0.69141	0.59324	0.59324	0.000	-14.19871	60.00000	Averaged
15 o-Cresol	0.84650	0.74615	0.74615	0.000	-11.85443	60.00000	Averaged
18 m,p-Cresols	1.15179	1.01215	1.01215	0.000	-12.12379	60.00000	Averaged
17 N-Nitrosodipropylamine	0.76238	0.62107	0.62107	0.050	-18.53430	60.00000	Averaged spcc
19 Hexachloroethane	0.47075	0.42894	0.42894	0.000	-8.88187	60.00000	Averaged
21 Nitrobenzene	0.27466	0.26056	0.26056	0.000	-5.13308	60.00000	Averaged
22 Isophorone	0.48049	0.43538	0.43538	0.000	-9.38891	60.00000	Averaged
23 2-Nitrophenol	0.14580	0.12807	0.12807	0.001	-12.15608	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.23346	0.21295	0.21295	0.000	-8.78609	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30933	0.25463	0.25463	0.000	-17.68395	60.00000	Averaged
26 2,4-Dichlorophenol	0.21909	0.19606	0.19606	0.001	-10.51358	20.00000	Averaged ccc
27 Benzoic acid	0.16087	0.14918	0.14918	0.000	-7.26607	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24210	0.22426	0.22426	0.000	-7.36864	60.00000	Averaged
30 Naphthalene	0.83482	0.79378	0.79378	0.000	-4.91550	60.00000	Averaged
204 alpha-Terpineol	0.19635	0.19582	0.19582	0.000	-0.27040	60.00000	Averaged
31 4-Chloroaniline	0.38123	0.33848	0.33848	0.000	-11.21420	60.00000	Averaged
32 Hexachlorobutadiene	0.12432	0.12097	0.12097	0.001	-2.68941	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.21406	0.20208	0.20208	0.001	-5.59590	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.54880	0.55002	0.55002	0.000	0.22355	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k2908.d
Analysis Type:
Lab Sample ID: WBN091111-03.5
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

Injection Date: 29-NOV-2009 15:16
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.50931	0.50931	0.000	3.24506	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.17063	0.17063	0.050	39.71345	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.47182	0.47182	0.000	3.92390	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.26941	0.26941	0.001	1.26039	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.29203	0.29203	0.000	3.22560	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.89344	0.89344	0.000	-9.52396	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.25914	0.25914	0.000	-15.36408	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.21032	0.21032	0.000	-22.26231	60.00000	Averaged
43 Dimethylphthalate	1.08995	1.05973	1.05973	0.000	-2.77241	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.23667	0.23667	0.000	-12.84701	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.30949	0.30949	0.000	-14.01501	60.00000	Averaged
45 Acenaphthylene	1.54092	1.53763	1.53763	0.000	-0.21389	60.00000	Averaged
47 Acenaphthene	0.92259	0.95527	0.95527	0.001	3.54259	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.12010	0.12010	0.050	12.05024	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.18008	1.18008	0.000	-11.55280	60.00000	Averaged
51 Diethylphthalate	1.01616	1.07013	1.07013	0.000	5.31178	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.17717	0.17717	0.050	-6.11858	60.00000	Averaged spcc
53 Fluorene	1.07578	1.10537	1.10537	0.000	2.75033	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.45002	0.45002	0.000	-0.92213	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.12048	0.12048	0.000	19.05454	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.18690	0.18690	0.000	-29.36053	60.00000	Averaged
133 Diphenylamine	0.53354	0.47781	0.47781	0.001	-10.44542	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.58501	0.58501	0.000	-10.13455	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.14843	0.14843	0.000	8.00692	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.15850	0.15850	0.000	-6.03827	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.10563	0.10563	0.001	4.40818	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.43789	0.43789	0.000	0.93605	60.00000	Averaged
68 Phenanthrene	0.90903	0.92186	0.92186	0.000	1.41141	60.00000	Averaged
69 Anthracene	0.92447	0.92361	0.92361	0.000	-0.09333	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	1.13002	1.13002	0.000	14.60116	60.00000	Averaged
76 Fluoranthene	0.87746	0.96605	0.96605	0.001	10.09605	20.00000	Averaged ccc
79 Pyrene	1.06293	1.12001	1.12001	0.000	5.37036	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.55218	0.55218	0.000	14.15240	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.91088	0.91088	0.000	-5.03296	60.00000	Averaged
92 Chrysene	0.89647	0.84644	0.84644	0.000	-5.58054	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.78551	0.78551	0.000	11.77612	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k2908.d
Analysis Type:
Lab Sample ID: WBN091111-03.5 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

Injection Date: 29-NOV-2009 15:16
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.50858	1.50858	0.001	15.29192	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	40.03695	40.00000	1.01555	0.000	0.09238	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	1.01457	1.01457	0.000	1.15574	60.00000	Averaged	
	97 Benzo(a)pyrene	39.54204	40.00000	0.86372	0.001	-1.14489	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	36.77191	40.00000	0.83397	0.000	-8.07024	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	36.10091	40.00000	0.68487	0.000	-9.74773	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.72206	0.72206	0.000	-3.93684	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15928	0.15928	0.000	-14.60839	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
	143 Dinoseb	0.12447	0.13803	0.13803	0.000	10.88892	60.00000	Averaged	
	173 Carbazole	0.80714	0.65601	0.65601	0.000	-18.72500	60.00000	Averaged	
	184 p-Benzoquinone	47.43522	40.00000	0.08180	0.000	18.58805	60.00000	Linear	
	192 Methoxychlor	0.31747	0.50861	0.50861	0.000	60.20967	60.00000	Averaged	<-
	211 p-Toluidine	0.70440	0.85962	0.85962	0.000	22.03509	60.00000	Averaged	
	210 m-Toluidine	0.91072	1.22068	1.22068	0.000	34.03536	60.00000	Averaged	
	26 Phthalic anhydride	52.14166	40.00000	0.12599	0.000	30.35416	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14690	0.14690	0.000	-15.16088	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.51251	0.51251	0.000	-15.02672	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.11982	0.11982	0.000	-7.26553	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.28072	0.28072	0.000	2.27314	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.22450	0.22450	0.000	3.91808	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	1.01506	1.01506	0.000	5.13058	60.00000	Averaged	

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Data file : /chem/MSD1.i/s112909.b/s1k2908.d
Lab Smp Id: WBN091111-03.5 Client Smp ID: MEGACVS
Inj Date : 29-NOV-2009 15:16
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.5|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	531725	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2194392	40.0000	
* 46 Acenaphthene-d10	164	5.940	5.940	(1.000)	1110069	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	1851790	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1672748	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1414560	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	497343	40.0000	35.8
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	587107	40.0000	34.8
$ 20 Nitrobenzene-d5	82	4.199	4.199	(0.895)	549806	40.0000	38.0
$ 39 2-Fluorobiphenyl	172	5.434	5.434	(0.915)	1170016	40.0000	44.0
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.090)	142060	40.0000	45.8
$ 81 p-Terphenyl-d14	244	7.834	7.834	(0.915)	1161917	40.0000	44.2
1 N-Methyl-N-nitrosomethylamine	74	2.352	2.352	(0.614)	260877	40.0000	34.6
2 Pyridine	79	2.410	2.410	(0.630)	332329	40.0000	26.2
4 Aniline	66	3.628	3.628	(0.948)	242386	40.0000	32.7
6 Phenol	94	3.575	3.575	(0.934)	607105	40.0000	34.1
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	421107	40.0000	34.0
8 2-Chlorophenol	128	3.704	3.704	(0.968)	538144	40.0000	35.6
203 n-Decane	43	3.675	3.675	(0.960)	715332	40.0000	37.6
9 1,3-Dichlorobenzene	146	3.799	3.799	(0.992)	624828	40.0000	35.2
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	626371	40.0000	36.0
13 1,2-Dichlorobenzene	146	3.946	3.946	(1.031)	595132	40.0000	37.1
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	919419	40.0000	31.2
12 Benzyl alcohol	108	3.910	3.910	(1.022)	315440	40.0000	34.3
15 o-Cresol	107	3.963	3.963	(1.035)	396746	40.0000	35.2
18 m,p-Cresols	107	4.063	4.063	(1.061)	538183	40.0000	35.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	330241	40.0000	32.6
19 Hexachloroethane	117	4.169	4.169	(1.089)	228076	40.0000	36.4
21 Nitrobenzene	77	4.210	4.210	(0.897)	571764	40.0000	37.9
22 Isophorone	82	4.369	4.369	(0.931)	955384	40.0000	36.2
23 2-Nitrophenol	139	4.422	4.422	(0.942)	281046	40.0000	35.1
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	467295	40.0000	36.5
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	558752	40.0000	32.9
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	430222	40.0000	35.8
27 Benzoic acid	105	4.499	4.499	(0.959)	327360	40.0000	37.1
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	492125	40.0000	37.0
30 Naphthalene	128	4.710	4.710	(1.004)	1741866	40.0000	38.0(Q)
204 alpha-Terpineol	59	4.687	4.687	(0.999)	429712	40.0000	39.9
31 4-Chloroaniline	127	4.734	4.734	(1.009)	742753	40.0000	35.5
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	265466	40.0000	38.9
33 4-Chloro-3-methylphenol	107	5.051	5.051	(1.076)	443438	40.0000	37.8
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1206970	40.0000	40.1
35 1-Methylnaphthalene	142	5.257	5.257	(1.120)	1117632	40.0000	41.3
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.890)	189412	40.0000	55.9
205 2,3-Dichloroaniline	161	5.387	5.387	(0.907)	523755	40.0000	41.6
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.906)	299063	40.0000	40.5
38 2,4,5-Trichlorophenol	196	5.410	5.410	(0.911)	324168	40.0000	41.3
40 2-Chloronaphthalene	162	5.540	5.540	(0.933)	991776	40.0000	36.2
42 o-Nitroaniline	65	5.604	5.604	(0.944)	287667	40.0000	33.8
41 m-Nitroaniline	138	5.898	5.898	(0.993)	233470	40.0000	31.1
43 Dimethylphthalate	163	5.716	5.716	(0.962)	1176372	40.0000	38.9
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.970)	262723	40.0000	34.9
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.019)	343551	40.0000	34.4
45 Acenaphthylene	152	5.840	5.840	(0.983)	1706873	40.0000	39.9
47 Acenaphthene	154	5.957	5.957	(1.003)	1060418	40.0000	41.4
48 2,4-Dinitrophenol	184	5.963	5.963	(1.004)	133320	40.0000	44.8(Q)
49 Dibenzofuran	168	6.075	6.075	(1.023)	1309968	40.0000	35.4
51 Diethylphthalate	149	6.198	6.198	(1.044)	1187921	40.0000	42.1
52 4-Nitrophenol	139	6.004	6.004	(1.011)	196669	40.0000	37.6
53 Fluorene	166	6.310	6.310	(1.062)	1227039	40.0000	41.1
54 4-Chlorophenylphenylether	204	6.293	6.293	(1.059)	499549	40.0000	39.6
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	223102	40.0000	47.6
56 p-Nitroaniline	138	6.328	6.328	(1.065)	207467	40.0000	28.2
133 Diphenylamine	169	6.369	6.369	(0.920)	884802	40.0000	35.8
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1083314	40.0000	35.9
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	274868	40.0000	43.2
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	293514	40.0000	37.6
65 Pentachlorophenol	266	6.792	6.792	(0.981)	195597	40.0000	41.8
206 n-Octadecane	57	6.769	6.769	(0.978)	810873	40.0000	40.4
68 Phenanthrene	178	6.940	6.940	(1.003)	1707099	40.0000	40.6
69 Anthracene	178	6.969	6.969	(1.007)	1710324	40.0000	40.0
72 Di-n-butylphthalate	149	7.216	7.216	(1.042)	2092568	40.0000	45.8
76 Fluoranthene	202	7.645	7.645	(1.105)	1788923	40.0000	44.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.787	7.787	(0.910)	1873498	40.0000	42.1
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	923662	40.0000	45.7
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1523665	40.0000	38.0
92 Chrysene	228	8.581	8.581	(1.003)	1415885	40.0000	37.8
93 bis(2-Ethylhexyl)phthalate	149	8.434	8.434	(0.986)	1313964	40.0000	44.7
94 Di-n-octylphthalate	149	8.939	8.939	(0.898)	2133981	40.0000	46.1
95 Benzo(b)fluoranthene	252	9.510	9.510	(0.956)	1436562	40.0000	40.0
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	1435167	40.0000	40.5
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	1221778	40.0000	39.5
99 Indeno(1,2,3-cd)pyrene	276	11.504	11.504	(1.156)	1179700	40.0000	36.8
100 Dibenzo(a,h)anthracene	278	11.498	11.498	(1.155)	968787	40.0000	36.1
101 Benzo(ghi)perylene	276	11.980	11.980	(1.204)	1021393	40.0000	38.4
126 m-Dinitrobenzene	168	5.751	5.751	(0.968)	176810	40.0000	34.2
130 2,3,4,6-Tetrachlorophenol	232	6.157	6.157	(1.037)	249214	40.0000	41.6
143 Dinoseb	211	6.881	6.881	(0.994)	255594	40.0000	44.4
173 Carbazole	167	7.057	7.057	(1.020)	1214784	40.0000	32.5
184 p-Benzoquinone	54	3.334	3.334	(0.871)	43494	40.0000	47.4
192 Methoxychlor	227	8.428	8.428	(0.985)	850778	40.0000	64.1
211 p-Toluidine	106	4.116	4.116	(1.075)	457082	40.0000	48.8
210 m-Toluidine	106	4.140	4.140	(1.081)	649068	40.0000	53.6
26 Phthalic anhydride	104	5.240	5.240	(1.117)	276462	40.0000	52.1
214 1,4-Dinitrobenzene	168	5.693	5.693	(0.958)	163069	40.0000	33.9
215 2-Ethoxyethanol	59	2.205	2.205	(0.576)	272516	40.0000	34.0
216 Methylenebis(2-chloroaniline)	231	8.486	8.486	(0.992)	200426	40.0000	37.1
M 225 Trichlorophenols	196				623231	80.0000	81.8
M 226 Tetrachlorophenols	232				249214	40.0000	41.6
M 227 Benzo(b,k)fluoranthene	252				2871729	80.0000	84.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2908.d
Date : 29-NOV-2009 15:16
Client ID: MEGACVS
Sample Info: IWBN091111-03,5140 PPM11ISWMF11MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

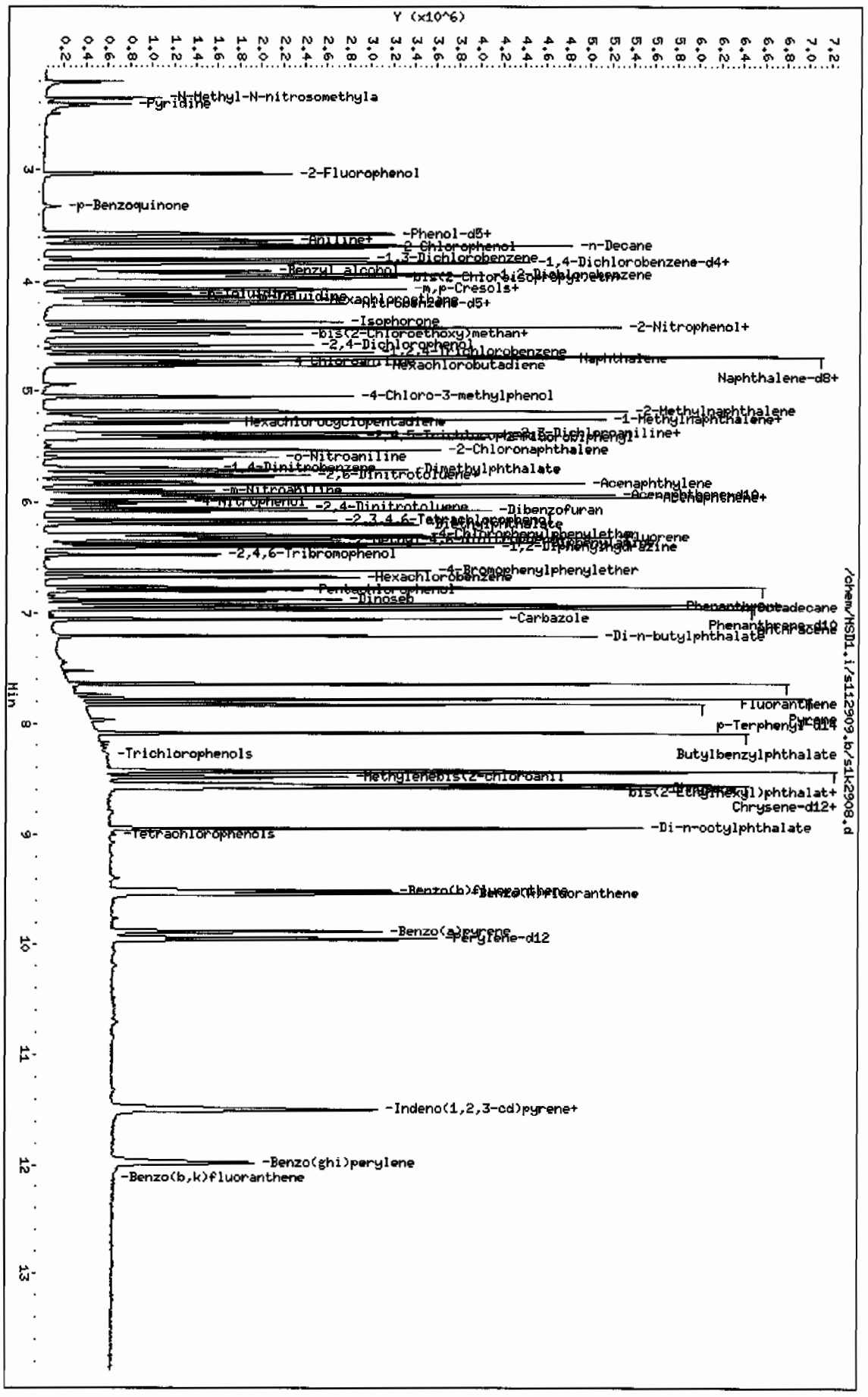

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:40
Lab File ID: s1k2909.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.3 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.83285	0.83285	0.000	1.07424	60.00000	Averaged
16 Acetophenone	1.12880	1.17413	1.17413	0.000	4.01561	60.00000	Averaged
189 Caprolactam	0.07169	0.06992	0.06992	0.000	-2.46899	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.19952	1.19952	0.000	7.05141	60.00000	Averaged
207 Atrazine	0.04008	0.03858	0.03858	0.000	-3.74021	60.00000	Averaged
77 Benzidine	0.36215	0.28557	0.28557	0.000	-21.14800	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.26579	0.26579	0.000	-3.49092	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.32551	0.32551	0.000	3.71012	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.18209	0.18209	0.000	3.22239	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.73877	0.73877	0.000	3.61556	60.00000	Averaged
105 2-Picoline	1.15384	1.17090	1.17090	0.000	1.47854	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.43981	0.43981	0.000	-3.18151	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48596	0.48596	0.000	14.15516	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.45100	0.45100	0.000	-5.95154	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.58421	0.58421	0.000	-2.01938	60.00000	Averaged
110 Pentachloroethane	0.29115	0.32136	0.32136	0.000	10.37514	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.46474	0.46474	0.000	-2.17748	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.66176	0.66176	0.000	7.16931	60.00000	Averaged
114 o-Toluidine	1.65327	1.66011	1.66011	0.000	0.41384	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.12196	0.12196	0.000	-7.29855	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.67623	0.67623	0.000	-11.95066	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.19074	0.19074	0.000	-3.18439	60.00000	Averaged
119 Hexachloropropene	0.08895	0.10078	0.10078	0.000	13.29710	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.16507	0.16507	0.000	-18.09275	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.15467	0.15467	0.000	-9.93437	60.00000	Averaged
122 Safrole	0.17864	0.18418	0.18418	0.000	3.10262	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.40592	0.40592	0.000	10.56556	60.00000	Averaged
124 Isosafrole	0.32761	0.32754	0.32754	0.000	-0.02086	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.27300	0.27300	0.000	-8.00801	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.33822	0.33822	0.000	7.53761	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.87935	0.87935	0.000	-1.66142	60.00000	Averaged
129 2-Naphthylamine	0.97473	0.86505	0.86505	0.000	-11.25277	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.26430	0.26430	0.000	-7.35350	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.13606	0.13606	0.000	17.06678	60.00000	Averaged
137 Phenacetin	0.25708	0.25386	0.25386	0.000	-1.25486	60.00000	Averaged
138 Diallate	0.23112	0.21973	0.21973	0.000	-4.92775	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 29-NOV-2009 15:40
Lab File ID: s1k2909.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-03.3 Quant Type: ISTD
Method: /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.21402	0.21402	0.000	-10.82059	60.00000	Averaged
213 Trans Diallate	0.27191	0.25851	0.25851	0.000	-4.92775	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.50169	0.50169	0.000	-6.42545	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06382	0.06382	0.000	19.86535	60.00000	Averaged
142 Pronamide	0.23368	0.26093	0.26093	0.000	11.66162	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.01142	0.01142	0.000	16.48447	60.00000	Averaged
147 Methapyrilene	0.36822	0.41116	0.41116	0.000	11.66210	60.00000	Averaged
148 Isodrin	0.08609	0.09797	0.09797	0.000	13.79210	60.00000	Averaged
149 Aramite	0.04255	0.04739	0.04739	0.000	11.36229	60.00000	Averaged
150 Kepone	0.06308	0.06796	0.06796	0.000	7.73416	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.31425	0.31425	0.000	10.68260	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.30459	0.30459	0.000	38.48914	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.46482	0.46482	0.000	-3.05232	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.34018	0.34018	0.000	10.44468	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.47473	0.47473	0.000	12.70311	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40587	0.40587	0.000	10.55824	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2909.d
Lab Smp Id: WBN091111-03.3 Client Smp ID: APCVS
Inj Date : 29-NOV-2009 15:40
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-03.3|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:21 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	598729	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2366758	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.934	(1.000)	1267857	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2141696	40.0000	
* 91 Chrysene-d12	240	8.551	8.551	(1.000)	1838470	40.0000	
* 98 Perylene-d12	264	9.939	9.939	(1.000)	1489902	40.0000	
209 Benzaldehyde	77	3.563	3.563	(0.931)	498652	40.0000	40.4
16 Acetophenone	105	4.087	4.087	(1.068)	702983	40.0000	41.6(H)
189 Caprolactam	113	5.004	5.004	(1.066)	165477	40.0000	39.0
208 1,1'-Biphenyl	154	5.510	5.510	(0.929)	1520815	40.0000	42.8(H)
207 Atrazine	173	6.698	6.698	(0.968)	82632	40.0000	38.5
77 Benzidine	184	7.704	7.704	(0.901)	525004	40.0000	31.5
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.993)	488644	40.0000	38.6(H)
102 1,4-Dioxane	88	2.199	2.199	(0.574)	194894	40.0000	41.5
103 Methyl methacrylate	100	2.187	2.187	(0.571)	109022	40.0000	41.3
104 Ethyl methacrylate	69	2.552	2.552	(0.667)	442322	40.0000	41.4
105 2-Picoline	93	2.769	2.769	(0.723)	701054	40.0000	40.6
106 N-Nitrosomethylethylamine	88	2.793	2.793	(0.730)	263327	40.0000	38.7
107 Methyl methanesulfonate	80	2.952	2.952	(0.771)	290960	40.0000	45.7
108 N-Nitrosodiethylamine	102	3.175	3.175	(0.829)	270027	40.0000	37.6
109 Ethyl Methanesulfonate	79	3.334	3.334	(0.871)	349784	40.0000	39.2
110 Pentachloroethane	167	3.657	3.657	(0.955)	192409	40.0000	44.2
111 N-Nitrosopyrrolidine	100	4.087	4.087	(1.068)	278256	40.0000	39.1
113 N-Nitrosomorpholine	56	4.099	4.099	(1.071)	396213	40.0000	42.9(H)
114 o-Toluidine	106	4.110	4.110	(1.074)	993958	40.0000	40.2
115 N-Nitrosopiperidine	114	4.316	4.316	(0.920)	288647	40.0000	37.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.557	4.557	(0.971)	1600470	40.0000	35.2(H)
118 2,6-Dichlorophenol	162	4.740	4.740	(1.010)	451427	40.0000	38.7
119 Hexachloropropene	213	4.757	4.757	(1.014)	238527	40.0000	45.3(H)
120 p-Phenylenediamine	108	4.987	4.987	(1.063)	390689	40.0000	32.8(H)
121 N-Nitrosodi-n-butylamine	84	4.940	4.940	(1.053)	366055	40.0000	36.0(TH)
122 Safrole	162	5.104	5.104	(1.088)	435909	40.0000	41.2
123 1,2,4,5-Tetrachlorobenzene	216	5.304	5.304	(0.894)	514644	40.0000	44.2(H)
124 Isosafrole	162	5.469	5.469	(0.922)	415277	40.0000	40.0(H)
125 1,4-Naphthoquinone	158	5.663	5.663	(0.954)	346123	40.0000	36.8
127 Pentachlorobenzene	250	6.046	6.046	(1.019)	428816	40.0000	43.0(H)
128 1-Naphthylamine	143	6.134	6.134	(1.034)	1114885	40.0000	39.3(H)
129 2-Naphthylamine	143	6.187	6.187	(1.043)	1096759	40.0000	35.5
131 5-Nitro-o-toluidine	152	6.310	6.310	(1.063)	335099	40.0000	37.0(H)
136 1,3,5-Trinitrobenzene	75	6.528	6.528	(0.943)	291408	40.0000	46.8(H)
137 Phenacetin	108	6.569	6.569	(0.949)	543687	40.0000	39.5
138 Diallate	86	6.540	6.540	(0.945)	470601	40.0000	38.0(H)
212 Cis Diallate	86	6.604	6.604	(0.954)	68755	6.00000	5.4
213 Trans Diallate	86	6.540	6.540	(0.945)	470601	34.0000	32.3(H)
140 4-Aminobiphenyl	169	6.787	6.787	(0.980)	1074464	40.0000	37.4(H)
141 Pentachloronitrobenzene	237	6.798	6.798	(0.982)	136682	40.0000	47.9
142 Pronamide	173	6.798	6.798	(0.982)	558829	40.0000	44.7(H)
146 4-Nitroquinoline-1-oxide	101	7.392	7.392	(1.068)	24459	40.0000	46.6
147 Methapyrilene	58	7.404	7.404	(1.070)	880581	40.0000	44.7(H)
148 Isodrin	193	7.557	7.557	(1.092)	209812	40.0000	45.5
149 Aramite	185	7.787	7.787	(1.125)	101489	40.0000	44.5(H)
150 Kepone	272	8.192	8.192	(1.184)	145557	40.0000	43.1(H)
151 p-(Dimethylamino)azobenzene	120	7.904	7.904	(0.924)	577746	40.0000	44.3
152 Chlorobenzilate	251	7.922	7.922	(0.926)	559976	40.0000	55.4(H)
153 3,3'-Dimethylbenzidine	212	8.110	8.110	(0.948)	854557	40.0000	38.8(H)
155 2-Acetylaminofluorene	181	8.292	8.292	(0.970)	625417	40.0000	44.2
157 7,12Dimethylbenz(a)anthracene	256	9.469	9.469	(0.953)	707308	40.0000	45.1(H)
158 3-Methylcholanthrene	268	10.281	10.281	(1.034)	604708	40.0000	44.2(H)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s112909.b/s1k2909.d

Date : 29-NOV-2009 15:40

Client ID: APCVS

Sample Info: |WBN091111-03.3|40 PPM|1|SVMF|1|APCVS

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20

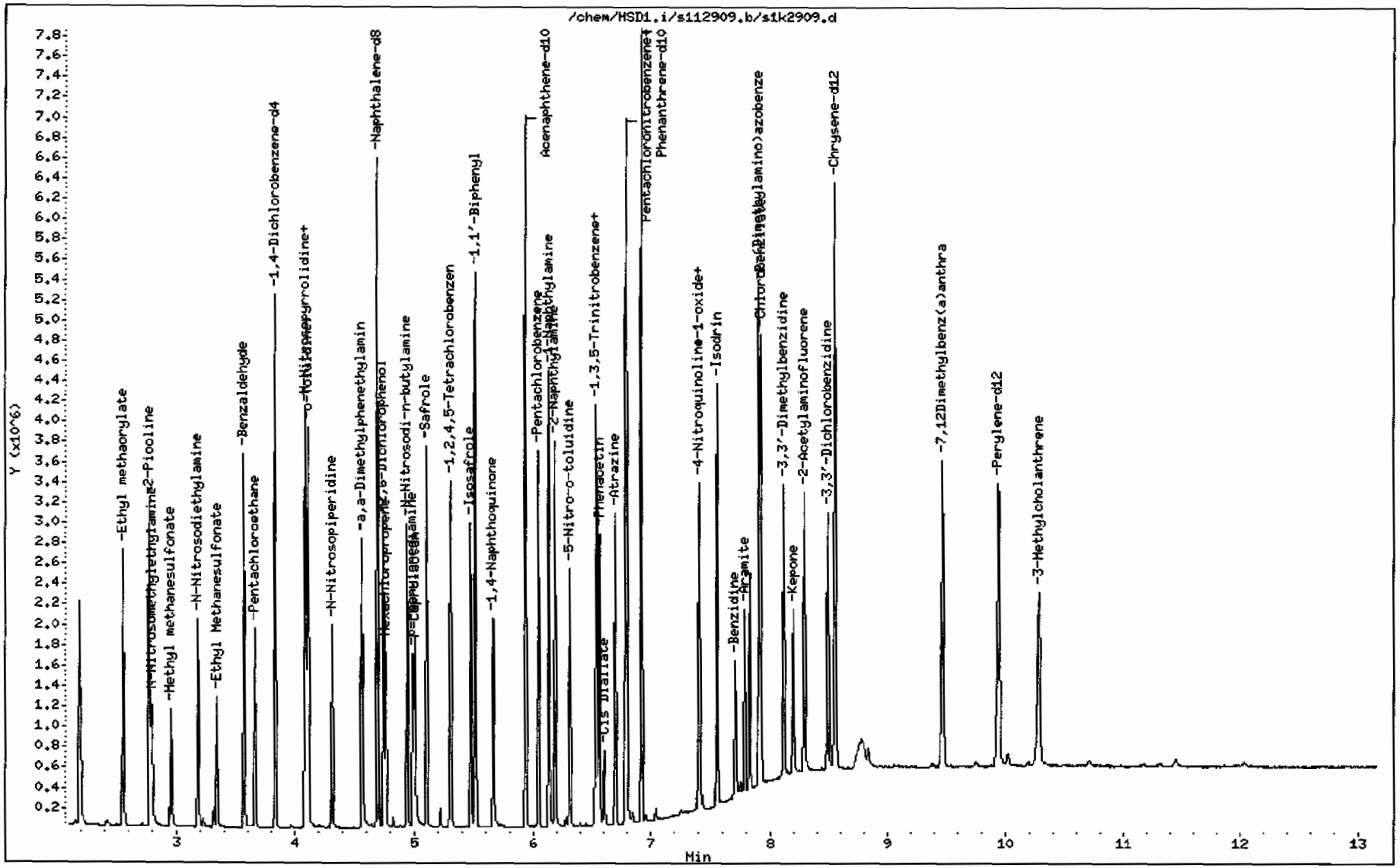

QC Data

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

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Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

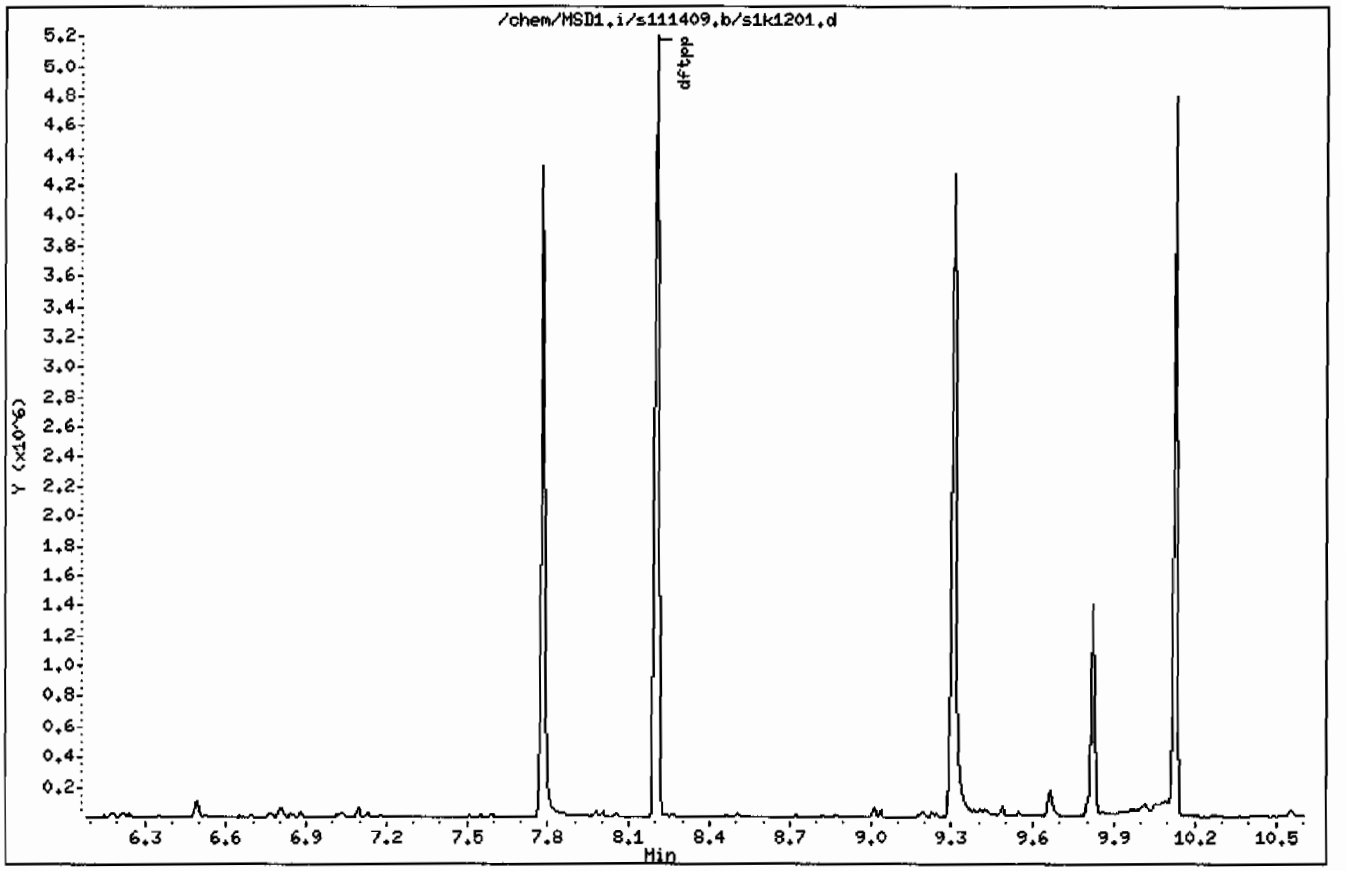

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

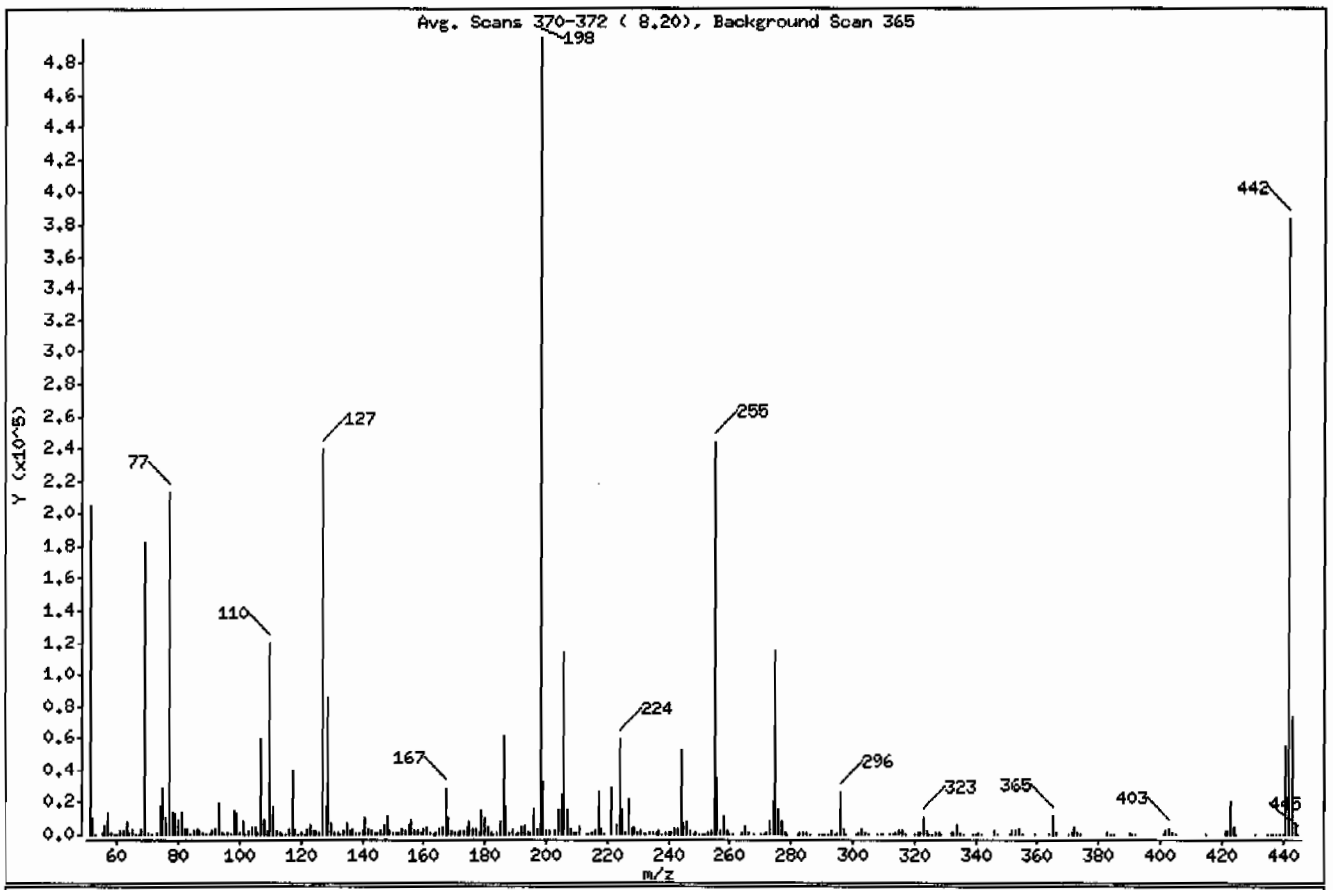

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.33
68	Less than 2.00% of mass 69	0.66 (1.81)
69	Mass 69 relative abundance	36.68
70	Less than 2.00% of mass 69	0.20 (0.55)
127	40.00 - 60.00% of mass 198	48.32
197	Less than 1.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.23
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	77.37
443	17.00 - 23.00% of mass 442	14.83 (19.16)

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	204544	132.00	849	213.00	322	304.00	857
52.00	10058	133.00	398	214.00	81	305.00	126
53.00	476	134.00	2213	215.00	1065	308.00	339
55.00	808	135.00	6445	216.00	2209	309.00	249
56.00	5675	136.00	2682	217.00	25976	310.00	361
57.00	13163	137.00	3409	218.00	3600	312.00	52
58.00	676	138.00	864	219.00	390	313.00	288
59.00	142	139.00	1285	221.00	28416	314.00	1372
60.00	58	140.00	1711	223.00	5970	315.00	2833
61.00	2414	141.00	10495	224.00	59288	316.00	1731
62.00	2627	142.00	3783	225.00	15318	317.00	279
63.00	7561	143.00	2378	226.00	1533	320.00	54
64.00	1048	144.00	706	227.00	21184	321.00	903
65.00	3902	145.00	666	228.00	3165	322.00	596
66.00	253	146.00	1908	229.00	4804	323.00	9908
67.00	264	147.00	5356	230.00	759	324.00	1942
68.00	3280	148.00	10849	231.00	2133	325.00	119
69.00	181568	149.00	2326	232.00	408	326.00	93
70.00	999	150.00	640	233.00	450	327.00	1701
71.00	119	151.00	1554	234.00	1483	328.00	891
73.00	1219	152.00	808	235.00	1658	329.00	88
74.00	17536	153.00	3187	236.00	1183	332.00	578
75.00	28056	154.00	2701	237.00	1728	333.00	855
76.00	9746	155.00	5991	238.00	324	334.00	5817
77.00	212736	156.00	9066	239.00	813	335.00	1475
78.00	13840	157.00	1942	240.00	775	336.00	75
79.00	12099	158.00	1971	241.00	1214	339.00	62
80.00	9416	159.00	1574	242.00	3186	340.00	77
81.00	13432	160.00	3233	243.00	3508	341.00	1027
82.00	3448	161.00	4832	244.00	51832	342.00	243
83.00	3440	162.00	1519	245.00	6691	346.00	2015
84.00	276	163.00	414	246.00	8221	347.00	283
85.00	2469	164.00	763	247.00	1725	351.00	182
86.00	3499	165.00	3823	248.00	403	352.00	2745
87.00	1914	166.00	4542	249.00	1698	353.00	2043

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	945	167.00	28056	250.00	338	354.00	3347
89.00	408	168.00	9882	251.00	378	355.00	568
90.00	81	169.00	1949	252.00	461	359.00	68
91.00	2811	170.00	666	253.00	965	364.00	82
92.00	3305	171.00	868	254.00	2194	365.00	11049
93.00	19392	172.00	1736	255.00	243712	366.00	1525
94.00	1530	173.00	2151	256.00	34792	370.00	312
95.00	401	174.00	4365	257.00	2654	371.00	749
96.00	1021	175.00	8331	258.00	11699	372.00	5103
97.00	481	176.00	2950	259.00	1976	373.00	1317
98.00	14829	177.00	3734	260.00	354	374.00	211
99.00	12143	178.00	1429	261.00	488	383.00	1475
100.00	1081	179.00	14903	264.00	588	384.00	413
101.00	7582	180.00	10676	265.00	4651	385.00	112
102.00	501	181.00	5074	266.00	630	390.00	664
103.00	2806	182.00	848	268.00	97	391.00	481
104.00	4764	183.00	484	270.00	316	392.00	349
105.00	4470	184.00	1118	271.00	565	401.00	323
106.00	1531	185.00	7578	272.00	574	402.00	2059
107.00	58720	186.00	61632	273.00	7763	403.00	3027
108.00	9198	187.00	16824	274.00	20360	404.00	981
109.00	1983	188.00	1678	275.00	115400	405.00	157
110.00	119360	189.00	3368	276.00	14998	415.00	61
111.00	17336	190.00	542	277.00	8371	421.00	2728
112.00	2224	191.00	1652	278.00	1328	422.00	2498
113.00	793	192.00	4637	279.00	337	423.00	19928
114.00	277	193.00	5425	282.00	172	424.00	3991
115.00	405	194.00	1196	283.00	908	425.00	403
116.00	3276	195.00	960	284.00	671	431.00	50
117.00	39312	196.00	15938	285.00	1513	435.00	182
118.00	2868	197.00	3428	286.00	245	436.00	64
119.00	376	198.00	494976	289.00	275	437.00	123
120.00	724	199.00	32528	290.00	365	438.00	300
121.00	279	200.00	2387	291.00	237	439.00	370
122.00	3763	201.00	2747	292.00	481	440.00	354

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	6008	203.00	2693	293.00	2054	441.00	54440
124.00	2602	204.00	14604	294.00	532	442.00	382976
125.00	2647	205.00	25208	295.00	657	443.00	73384
126.00	904	206.00	113680	296.00	26240	444.00	6543
127.00	239168	207.00	14454	297.00	3789	445.00	363
128.00	17576	208.00	3160	298.00	253		
129.00	85072	209.00	1021	301.00	417		
130.00	7156	210.00	801	302.00	580		
131.00	1445	211.00	4362	303.00	3041		

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

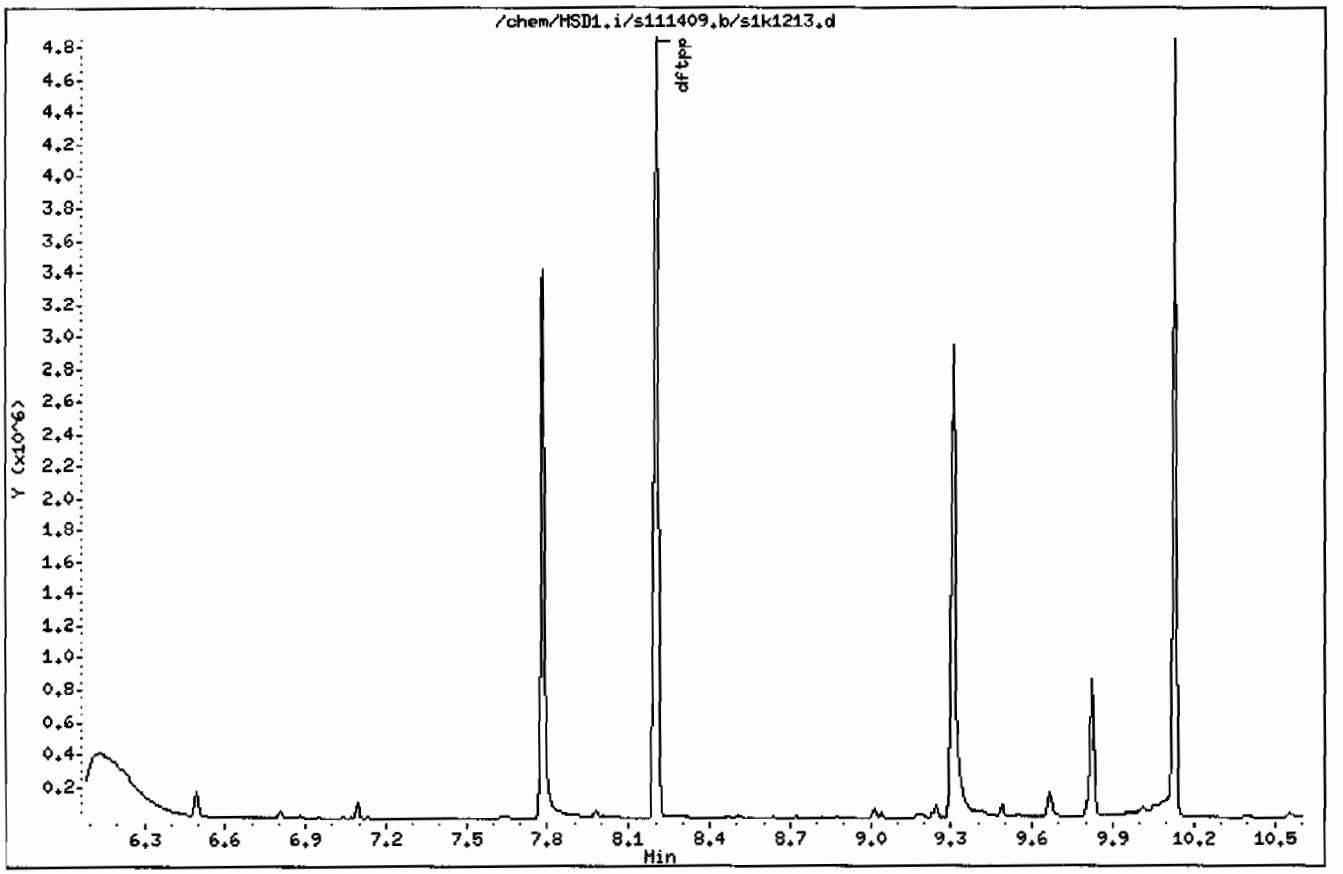

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

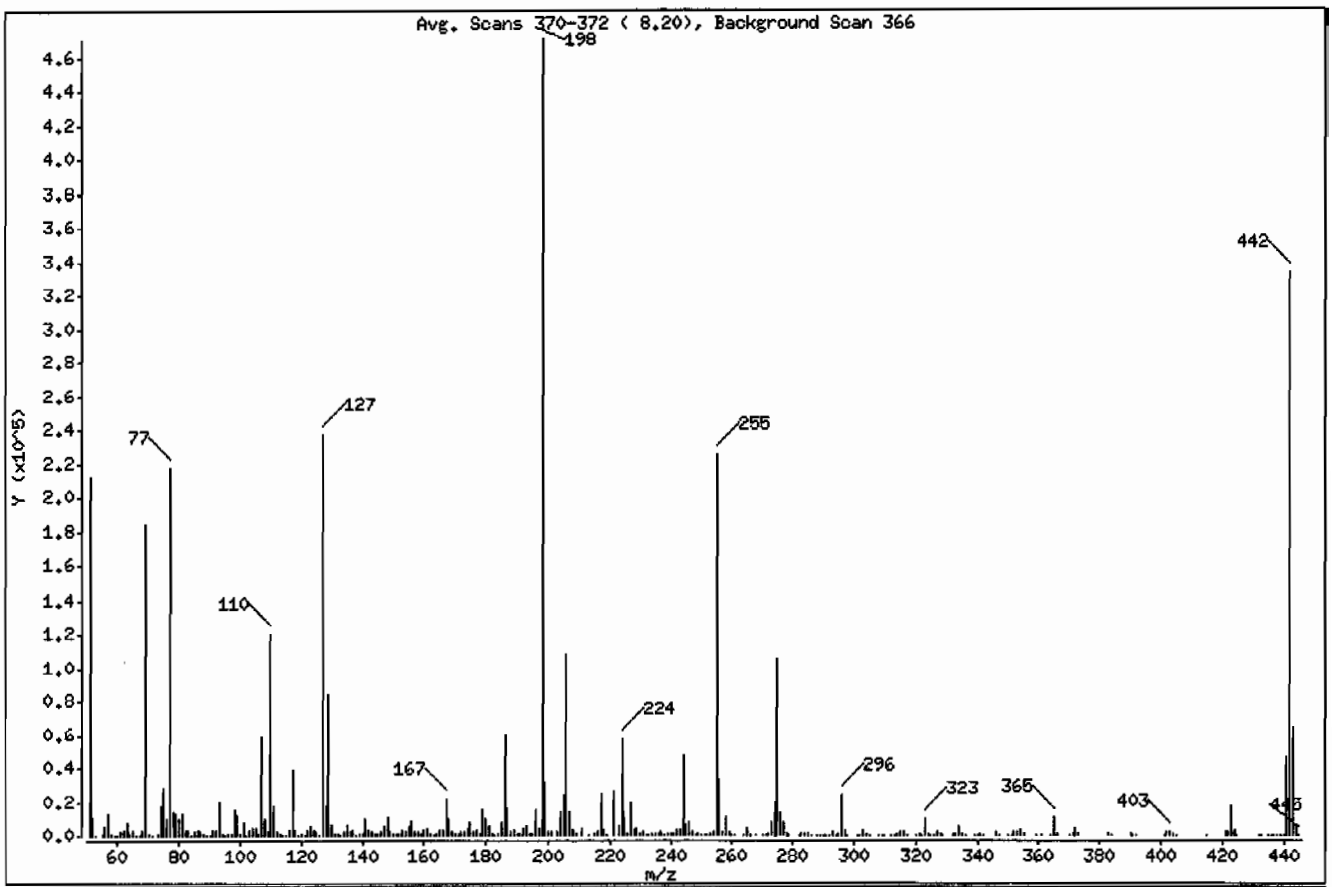

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.07
68	Less than 2.00% of mass 69	0.69 (1.77)
69	Mass 69 relative abundance	39.06
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	50.24
197	Less than 1.00% of mass 198	0.94
199	5.00 - 9.00% of mass 198	6.64
275	10.00 - 30.00% of mass 198	22.36
365	Greater than 1.00% of mass 198	2.27
441	Present, but less than mass 443	9.91
442	Greater than 40.00% of mass 198	70.70
443	17.00 - 23.00% of mass 442	13.63 (19.28)

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	212096	132.00	898	215.00	1069	305.00	54
52.00	10563	133.00	158	216.00	2175	308.00	369
53.00	539	134.00	2246	217.00	25096	309.00	234
55.00	827	135.00	6673	218.00	3427	310.00	330
56.00	5710	136.00	2589	219.00	310	312.00	53
57.00	13040	137.00	3388	221.00	26264	313.00	225
58.00	622	138.00	481	223.00	5732	314.00	1148
59.00	197	139.00	738	224.00	57128	315.00	2673
60.00	264	140.00	1183	225.00	14268	316.00	1636
61.00	2458	141.00	10022	226.00	1583	317.00	257
62.00	2719	142.00	3500	227.00	19912	320.00	120
63.00	7568	143.00	2527	228.00	3016	321.00	868
64.00	1100	144.00	604	229.00	4436	322.00	443
65.00	3684	145.00	642	230.00	645	323.00	9345
66.00	306	146.00	1966	231.00	2162	324.00	1574
67.00	172	147.00	5499	232.00	373	325.00	117
68.00	3245	148.00	10590	233.00	410	326.00	63
69.00	183808	149.00	2267	234.00	1277	327.00	1667
70.00	937	150.00	711	235.00	1617	328.00	859
71.00	201	151.00	1389	236.00	1067	329.00	66
73.00	1312	152.00	1009	237.00	1713	332.00	666
74.00	16976	153.00	3123	238.00	252	333.00	761
75.00	27896	154.00	2582	239.00	815	334.00	5270
76.00	9904	155.00	5732	240.00	635	335.00	1342
77.00	217344	156.00	8806	241.00	1337	336.00	127
78.00	14484	157.00	1860	242.00	2922	339.00	65
79.00	12543	158.00	1872	243.00	3255	340.00	61
80.00	9582	159.00	1459	244.00	47840	341.00	1023
81.00	13483	160.00	3146	245.00	6361	342.00	289
82.00	3494	161.00	4861	246.00	7662	346.00	1844
83.00	3404	162.00	1440	247.00	1632	347.00	399
84.00	268	163.00	441	248.00	425	350.00	54
85.00	2429	164.00	756	249.00	1557	351.00	146
86.00	3717	165.00	3644	250.00	323	352.00	2683
87.00	1777	166.00	3330	251.00	376	353.00	1903

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	858	167.00	21384	252.00	497	354.00	2848
89.00	353	168.00	9329	253.00	1026	355.00	645
90.00	52	169.00	1925	254.00	2307	359.00	128
91.00	2960	170.00	698	255.00	224896	361.00	54
92.00	3280	171.00	771	256.00	32856	364.00	139
93.00	19472	172.00	1741	257.00	2457	365.00	10703
94.00	1413	173.00	2444	258.00	11321	366.00	1552
95.00	284	174.00	4219	259.00	1877	370.00	274
96.00	1152	175.00	8099	260.00	305	371.00	720
97.00	591	176.00	2630	261.00	356	372.00	4645
98.00	14679	177.00	3711	264.00	230	373.00	1151
99.00	12313	178.00	1199	265.00	4470	383.00	1268
100.00	1108	179.00	14622	266.00	429	384.00	380
101.00	7679	180.00	10168	268.00	129	390.00	651
102.00	505	181.00	5015	270.00	325	391.00	487
103.00	2879	182.00	784	271.00	443	392.00	279
104.00	4625	183.00	540	272.00	688	401.00	276
105.00	4311	184.00	1176	273.00	7045	402.00	1862
106.00	1512	185.00	7084	274.00	19240	403.00	2656
107.00	58544	186.00	59904	275.00	105256	404.00	848
108.00	9265	187.00	16158	276.00	13094	405.00	140
109.00	1897	188.00	1716	277.00	7627	415.00	133
110.00	119952	189.00	3108	278.00	1312	421.00	2323
111.00	16904	190.00	572	279.00	308	422.00	2190
112.00	2240	191.00	1592	282.00	136	423.00	16944
113.00	758	192.00	4699	283.00	867	424.00	3191
114.00	126	193.00	5084	284.00	734	425.00	414
115.00	267	194.00	1198	285.00	1299	432.00	51
116.00	3229	195.00	880	286.00	172	433.00	63
117.00	38800	196.00	15085	288.00	53	435.00	138
118.00	2837	197.00	4415	289.00	263	436.00	193
119.00	448	198.00	470656	290.00	271	437.00	144
120.00	769	199.00	31248	291.00	161	438.00	208
121.00	319	200.00	2323	292.00	403	439.00	422
122.00	3761	201.00	2603	293.00	1958	440.00	420

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	5880	203.00	2606	294.00	491	441.00	46632
124.00	2783	204.00	13871	295.00	593	442.00	332736
125.00	2563	205.00	24136	296.00	24248	443.00	64136
126.00	365	206.00	107936	297.00	3568	444.00	5493
127.00	236480	207.00	13718	298.00	201	445.00	305
128.00	17448	208.00	3264	301.00	372		
129.00	84656	209.00	932	302.00	462		
130.00	6942	211.00	4014	303.00	2821		
131.00	1354	213.00	308	304.00	785		

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Page 1

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

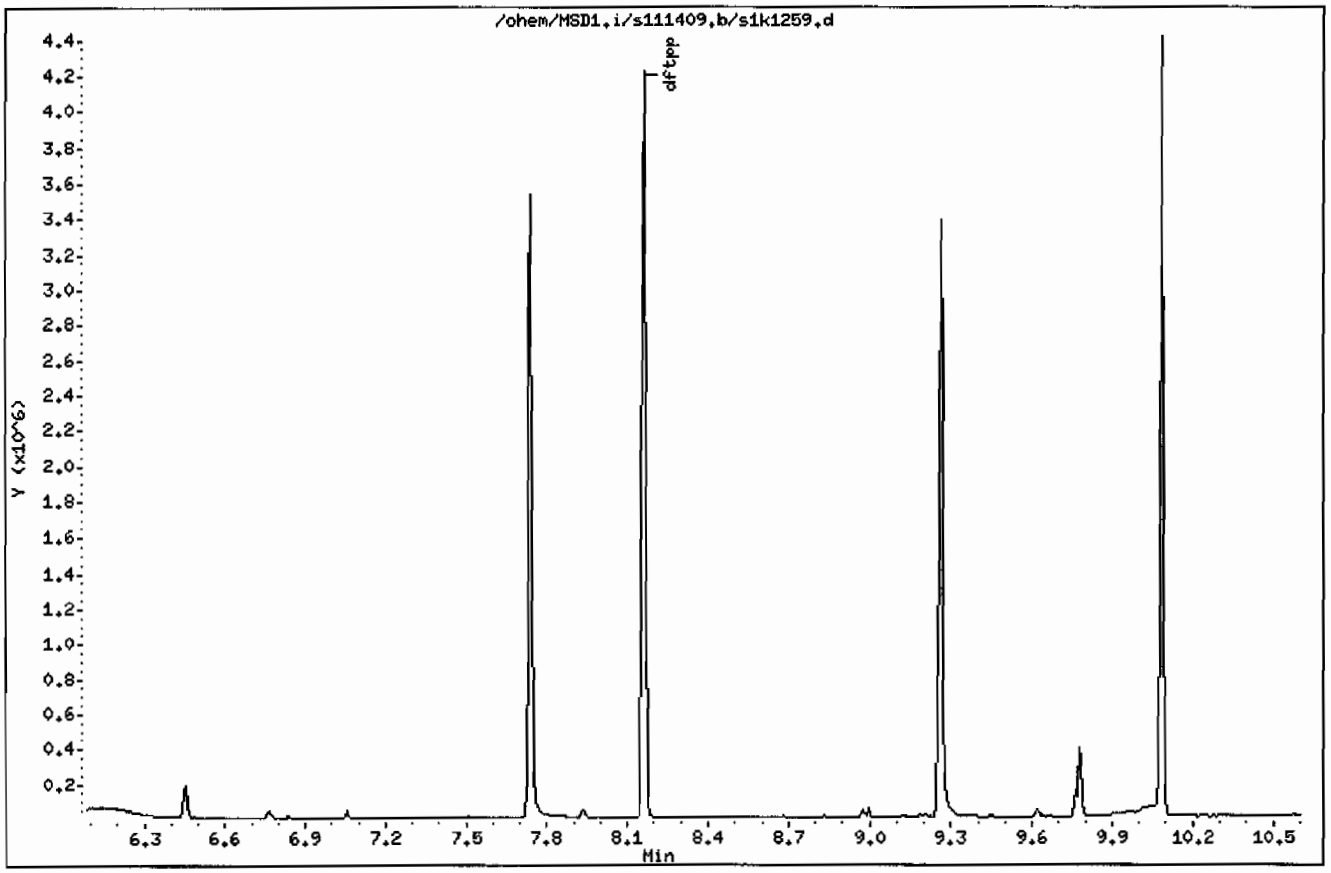

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

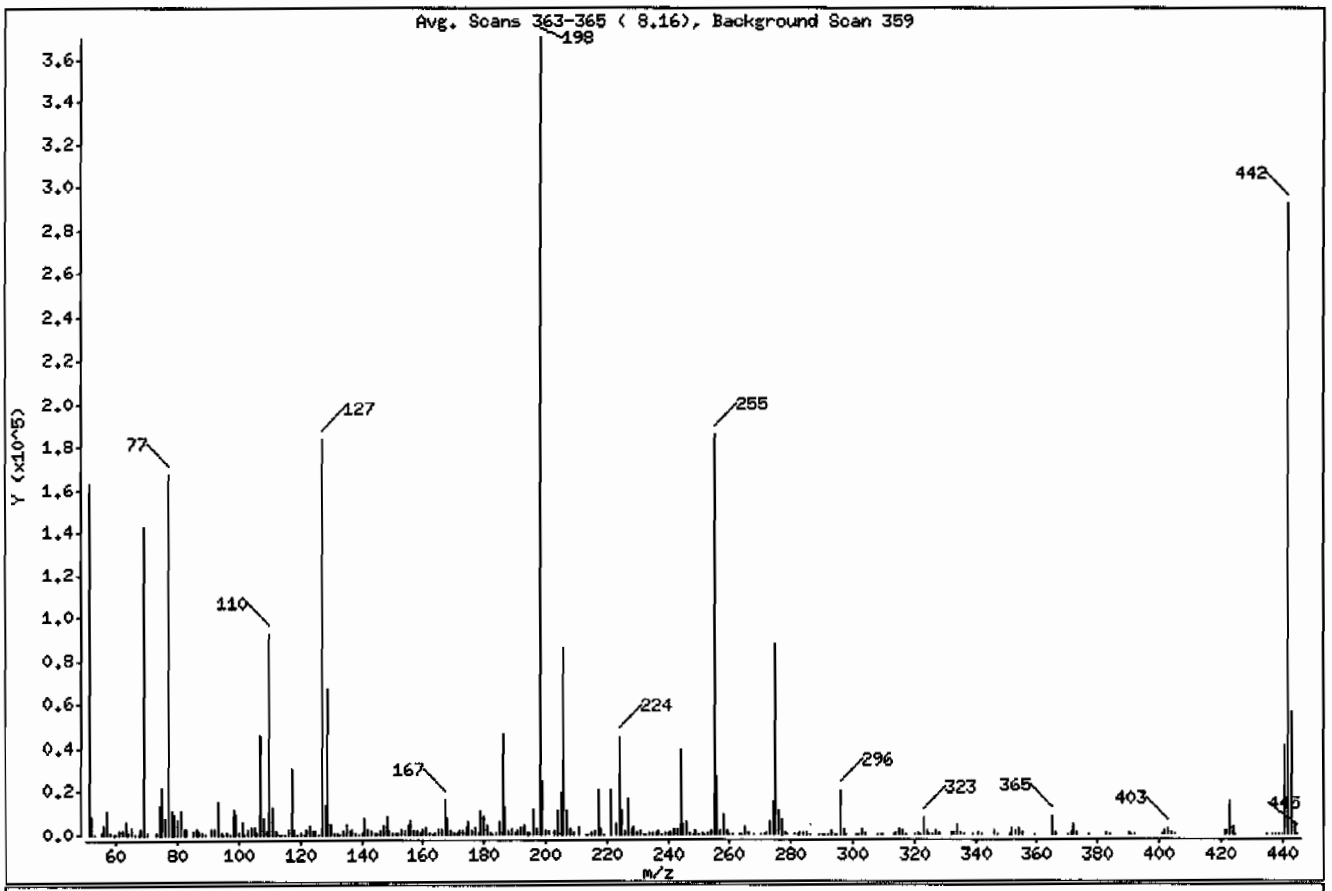

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.19
68	Less than 2.00% of mass 69	0.70 (1.82)
69	Mass 69 relative abundance	38.52
70	Less than 2.00% of mass 69	0.22 (0.58)
127	40.00 - 60.00% of mass 198	49.61
197	Less than 1.00% of mass 198	0.73
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	23.76
365	Greater than 1.00% of mass 198	2.39
441	Present, but less than mass 443	10.94
442	Greater than 40.00% of mass 198	78.91
443	17.00 - 23.00% of mass 442	15.11 (19.15)

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d

Spectrum: Avg. Scans 363-365 (8,16), Background Scan 359

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	163520	132.00	696	209.00	894	295.00	409
52.00	8218	133.00	165	211.00	3176	296.00	20504
53.00	278	134.00	1736	213.00	157	297.00	2961
55.00	768	135.00	5284	214.00	60	298.00	242
56.00	4517	136.00	1990	215.00	896	301.00	228
57.00	10646	137.00	2882	216.00	1633	302.00	377
58.00	485	138.00	608	217.00	20280	303.00	2440
59.00	173	139.00	322	218.00	2791	304.00	779
60.00	130	140.00	728	219.00	287	308.00	333
61.00	1880	141.00	8017	221.00	20640	309.00	180
62.00	1926	142.00	2864	223.00	4752	310.00	288
63.00	5930	143.00	1765	224.00	45496	313.00	172
64.00	771	144.00	446	225.00	11459	314.00	1000
65.00	3009	145.00	462	226.00	1320	315.00	2189
66.00	190	146.00	1638	227.00	16640	316.00	1304
67.00	147	147.00	4131	228.00	2433	317.00	255
68.00	2590	148.00	8419	229.00	3596	320.00	58
69.00	142592	149.00	1752	230.00	541	321.00	701
70.00	823	150.00	512	231.00	1631	322.00	395
73.00	1236	151.00	1272	232.00	323	323.00	7827
74.00	13875	152.00	886	233.00	236	324.00	1465
75.00	21824	153.00	2474	234.00	1059	325.00	55
76.00	7905	154.00	2034	235.00	1215	326.00	117
77.00	167296	155.00	4599	236.00	846	327.00	1319
78.00	11034	156.00	6876	237.00	1279	328.00	683
79.00	9492	157.00	1450	238.00	168	332.00	545
80.00	7131	158.00	1509	239.00	670	333.00	652
81.00	10804	159.00	1113	240.00	518	334.00	4627
82.00	2610	160.00	2655	241.00	1019	335.00	1148
83.00	2719	161.00	3658	242.00	2369	336.00	50
85.00	1896	162.00	1109	243.00	2744	339.00	57
86.00	2616	163.00	339	244.00	39256	341.00	855
87.00	1519	164.00	493	245.00	4982	342.00	192
88.00	684	165.00	2904	246.00	6349	346.00	1554
89.00	219	166.00	2427	247.00	1255	347.00	356

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d

Spectrum: Avg. Scans 363-365 (8,16), Background Scan 359

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	2379	167.00	16175	248.00	341	351.00	56
92.00	2447	168.00	7387	249.00	1305	352.00	2339
93.00	14969	169.00	1311	250.00	210	353.00	1624
94.00	1153	170.00	539	251.00	450	354.00	2500
95.00	287	171.00	706	252.00	278	355.00	434
96.00	810	172.00	1473	253.00	769	359.00	83
97.00	388	173.00	1748	254.00	1972	365.00	8863
98.00	11810	174.00	3414	255.00	185216	366.00	1195
99.00	9686	175.00	6350	256.00	27176	370.00	215
100.00	914	176.00	2063	257.00	2039	371.00	581
101.00	5933	177.00	3047	258.00	9022	372.00	4002
102.00	375	178.00	995	259.00	1444	373.00	996
103.00	2163	179.00	11274	260.00	214	377.00	51
104.00	3736	180.00	8159	261.00	279	383.00	974
105.00	3394	181.00	4009	263.00	55	384.00	323
106.00	1190	182.00	670	264.00	157	390.00	592
107.00	46232	183.00	413	265.00	3712	391.00	375
108.00	7538	184.00	909	266.00	481	392.00	323
109.00	1503	185.00	5852	268.00	53	401.00	231
110.00	92872	186.00	47008	270.00	282	402.00	1478
111.00	12963	187.00	12615	271.00	380	403.00	2390
112.00	1503	188.00	1316	272.00	540	404.00	821
113.00	406	189.00	2602	273.00	5676	405.00	134
114.00	121	190.00	427	274.00	15599	421.00	2054
115.00	133	191.00	1281	275.00	87936	422.00	1867
116.00	2637	192.00	3712	276.00	11240	423.00	15373
117.00	30336	193.00	4225	277.00	6439	424.00	3047
118.00	2397	194.00	901	278.00	950	425.00	291
119.00	332	195.00	603	279.00	182	435.00	71
120.00	620	196.00	12028	281.00	60	437.00	71
121.00	175	197.00	2717	282.00	68	438.00	134
122.00	2801	198.00	370176	283.00	713	439.00	238
123.00	4622	199.00	24728	284.00	493	440.00	191
124.00	2083	200.00	1826	285.00	1250	441.00	40480
125.00	1949	201.00	2072	286.00	254	442.00	292096

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	135	203.00	2082	289.00	243	443.00	55944
127.00	183616	204.00	10956	290.00	235	444.00	5034
128.00	13544	205.00	19552	291.00	131	445.00	311
129.00	66872	206.00	85904	292.00	339		
130.00	5516	207.00	10725	293.00	1482		
131.00	1048	208.00	2576	294.00	389		

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Page 1

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

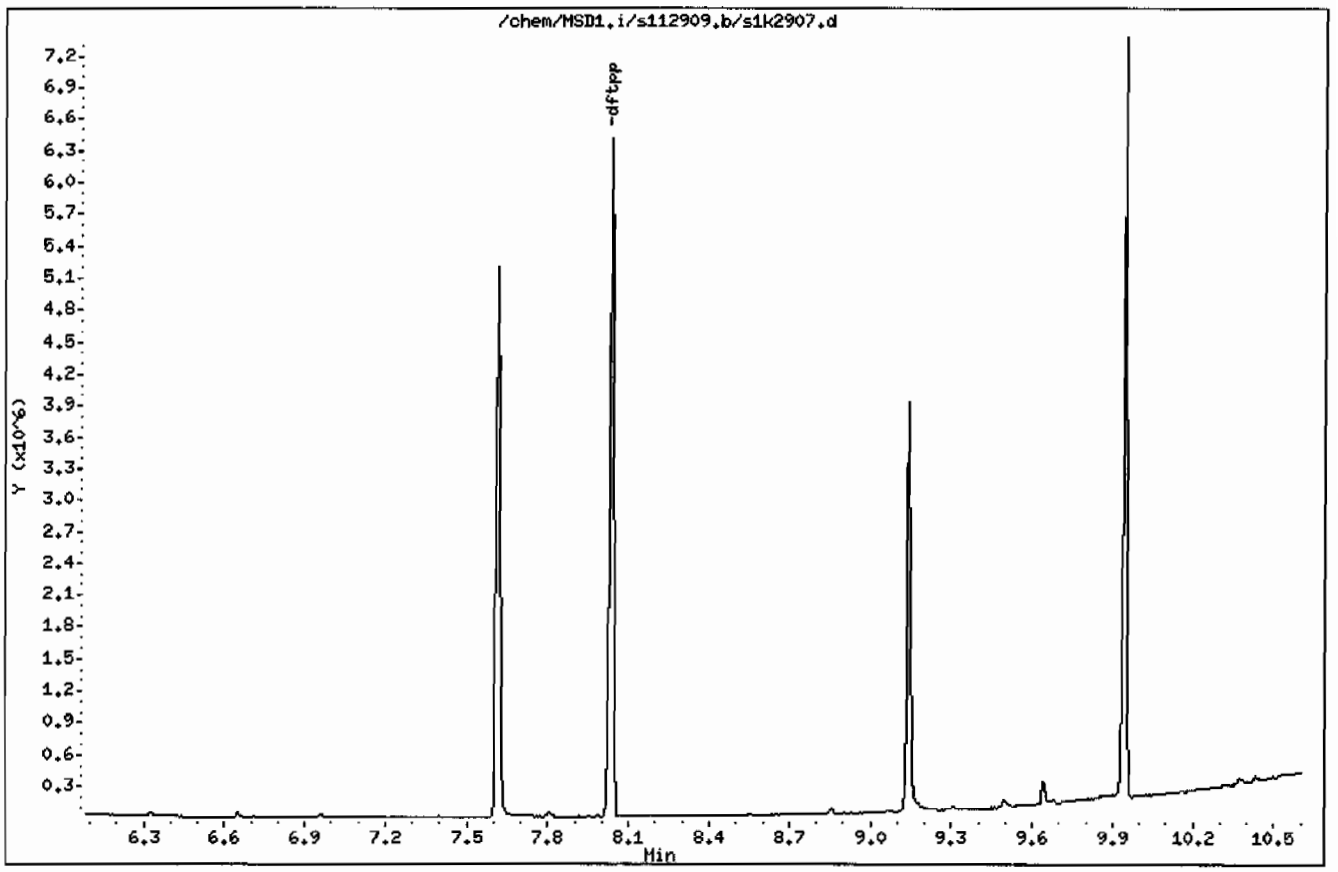

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVHF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

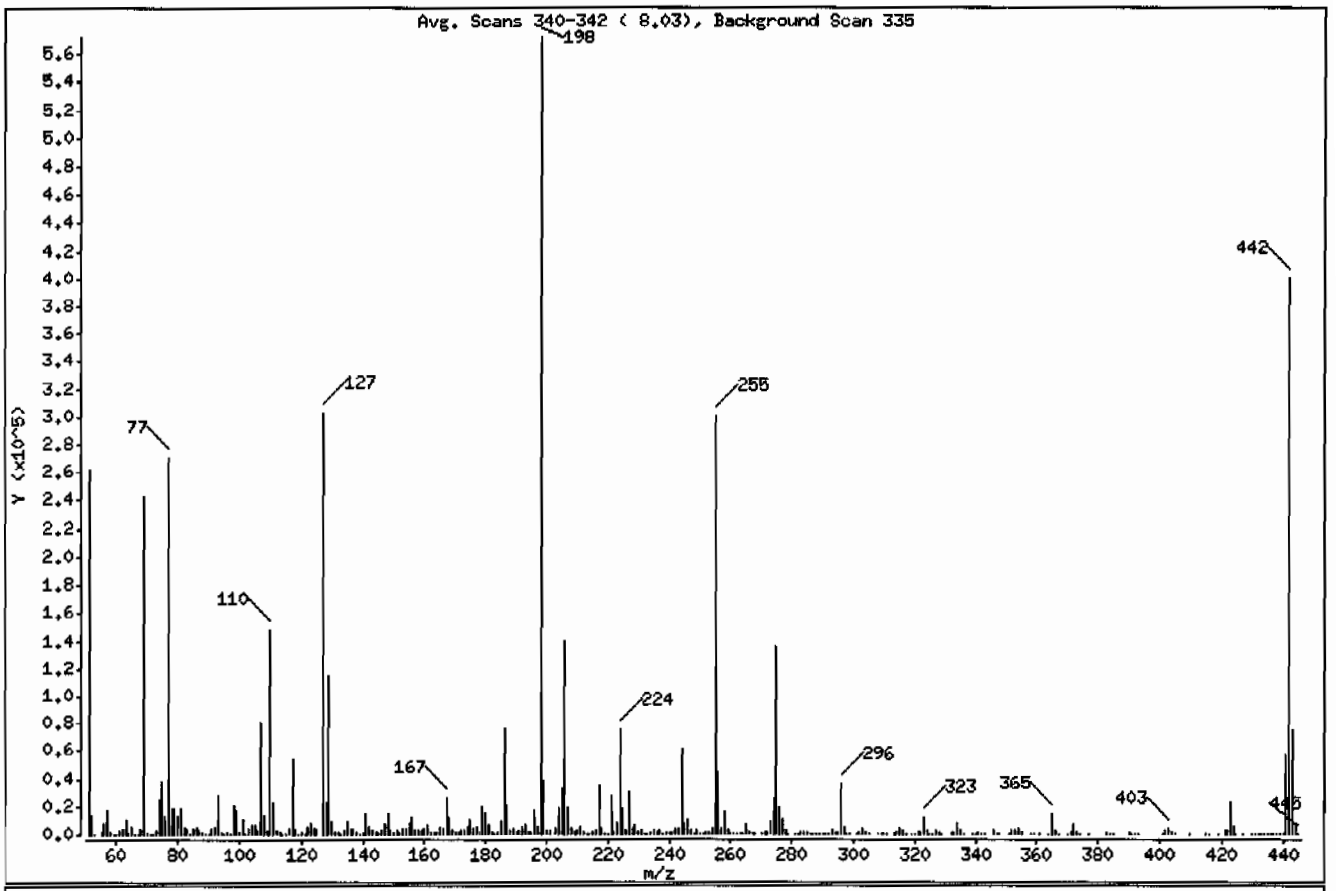

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.73
68	Less than 2.00% of mass 69	0.80 (1.89)
69	Mass 69 relative abundance	42.62
70	Less than 2.00% of mass 69	0.22 (0.51)
127	40.00 - 60.00% of mass 198	52.85
197	Less than 1.00% of mass 198	0.97
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.78
365	Greater than 1.00% of mass 198	2.52
441	Present, but less than mass 443	9.80
442	Greater than 40.00% of mass 198	69.82
443	17.00 - 23.00% of mass 442	13.14 (18.81)

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d

Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	261568	138.00	1011	224.00	74344	315.00	3766
52.00	13053	139.00	525	225.00	18856	316.00	2257
53.00	546	140.00	1213	226.00	2157	317.00	486
55.00	1276	141.00	13910	227.00	29936	319.00	124
56.00	7361	142.00	4991	228.00	4406	320.00	122
57.00	17608	143.00	3037	229.00	6070	321.00	1364
58.00	859	144.00	875	230.00	793	322.00	724
59.00	186	145.00	933	231.00	2539	323.00	12258
60.00	263	146.00	2317	232.00	343	324.00	2267
61.00	3281	147.00	7337	233.00	584	325.00	276
62.00	3450	148.00	14197	234.00	1971	326.00	277
63.00	9977	149.00	3063	235.00	2107	327.00	2299
64.00	1410	150.00	959	236.00	1359	328.00	1374
65.00	4855	151.00	1996	237.00	2622	329.00	176
66.00	354	152.00	1456	238.00	390	332.00	714
67.00	343	153.00	4354	239.00	1056	333.00	1069
68.00	4596	154.00	3352	240.00	998	334.00	7531
69.00	243776	155.00	7645	241.00	1606	335.00	2168
70.00	1241	156.00	11790	242.00	3920	336.00	184
71.00	129	157.00	2594	243.00	4517	339.00	161
72.00	199	158.00	2349	244.00	59896	340.00	194
73.00	2063	159.00	2070	245.00	7845	341.00	1320
74.00	24384	160.00	4131	246.00	10789	342.00	355
75.00	38152	161.00	6758	247.00	2026	343.00	153
76.00	12974	162.00	1653	248.00	636	346.00	2491
77.00	271360	163.00	701	249.00	2240	347.00	542
78.00	18368	164.00	926	250.00	436	348.00	50
79.00	17928	165.00	5065	251.00	641	351.00	193
80.00	13399	166.00	4101	252.00	720	352.00	3193
81.00	18440	167.00	25808	253.00	1512	353.00	2434
82.00	4915	168.00	12341	254.00	3754	354.00	3882
83.00	4045	169.00	2508	255.00	299840	355.00	737
84.00	487	170.00	906	256.00	44336	358.00	63
85.00	3384	171.00	1170	257.00	3929	359.00	186
86.00	5076	172.00	2281	258.00	15933	361.00	56

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	2450	173.00	2934	259.00	2669	364.00	187
88.00	896	174.00	5759	260.00	449	365.00	14431
89.00	560	175.00	10393	261.00	575	366.00	2213
90.00	52	176.00	3562	262.00	64	367.00	258
91.00	4069	177.00	4928	263.00	78	370.00	280
92.00	4877	178.00	1696	264.00	532	371.00	909
93.00	27096	179.00	19400	265.00	6513	372.00	6291
94.00	1944	180.00	14536	266.00	1163	373.00	1495
95.00	588	181.00	6593	267.00	245	374.00	151
96.00	1550	182.00	1216	268.00	277	377.00	175
97.00	606	183.00	567	270.00	481	383.00	1569
98.00	20592	184.00	1573	271.00	711	384.00	388
99.00	17440	185.00	9262	272.00	1001	385.00	151
100.00	1594	186.00	76128	273.00	9247	390.00	761
101.00	10170	187.00	21496	274.00	24496	391.00	516
102.00	520	188.00	2625	275.00	136000	392.00	400
103.00	3750	189.00	4538	276.00	18096	393.00	62
104.00	6276	190.00	825	277.00	10425	401.00	375
105.00	6355	191.00	2089	278.00	2137	402.00	2479
106.00	2176	192.00	5816	279.00	353	403.00	3482
107.00	79800	193.00	6494	281.00	500	404.00	1163
108.00	12799	194.00	1326	282.00	275	405.00	207
109.00	2573	195.00	1041	283.00	1191	410.00	170
110.00	148544	196.00	17744	284.00	981	415.00	200
111.00	22320	197.00	5562	285.00	1943	416.00	51
112.00	2828	198.00	571968	286.00	288	419.00	51
113.00	1025	199.00	37560	287.00	61	421.00	3008
114.00	180	200.00	2980	288.00	103	422.00	2724
115.00	250	201.00	2509	289.00	376	423.00	22240
116.00	4436	203.00	3664	290.00	418	424.00	5666
117.00	54352	204.00	18912	291.00	326	425.00	618
118.00	4423	205.00	32640	292.00	471	427.00	128
119.00	380	206.00	138880	293.00	2634	430.00	90
120.00	1253	207.00	17984	294.00	732	431.00	144
121.00	446	208.00	4448	295.00	933	432.00	114

Data File: /chem/MSD1.i/s112909.b/s1k2907.d

Date : 29-NOV-2009 15:00

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k2907.d
Spectrum: Avg. Scans 340-342 (8.03), Background Scan 335
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	5609	209.00	1626	296.00	35128	433.00	194
123.00	7700	210.00	1988	297.00	4998	434.00	130
124.00	3542	211.00	4936	298.00	403	435.00	213
125.00	3500	212.00	675	299.00	96	436.00	289
127.00	302272	213.00	424	301.00	479	437.00	282
128.00	22824	214.00	214	302.00	742	438.00	198
129.00	114216	215.00	1361	303.00	4244	439.00	300
130.00	9428	216.00	2918	304.00	1082	440.00	326
131.00	1699	217.00	34040	305.00	158	441.00	56056
132.00	1008	218.00	4578	308.00	544	442.00	399360
133.00	415	219.00	568	309.00	411	443.00	75136
134.00	3137	220.00	130	310.00	539	444.00	6738
135.00	8896	221.00	27264	311.00	71	445.00	344
136.00	3689	222.00	1274	313.00	282		
137.00	4593	223.00	8318	314.00	1642		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980154**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 16:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2912-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-578			Matrix:	SOIL
Lab Sample ID:	1201980154				
Client Sample:	QC for batch 926121	Client:	LANL010	Project:	QC
Client ID:	MB for batch 926121	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926126	Inst:	MSD1.I	Dilution:	1
Run Date:	11/29/2009 16:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/25/2009 21:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1k2912-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	316	ug/kg		JA

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Data file : /chem/MSD1.i/s112909.b/s1k2912.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	582567	40.0000	
* 29 Naphthalene-d8	136	4.687	4.693	(1.000)	2290441	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1227579	40.0000	
* 67 Phenanthrene-d10	188	6.916	6.922	(1.000)	2026415	40.0000	
* 91 Chrysene-d12	240	8.551	8.557	(1.000)	1690866	40.0000	
* 98 Perylene-d12	264	9.939	9.951	(1.000)	1420003	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1213962	79.7797	2660
$ 5 Phenol-d5	99	3.563	3.569	(0.931)	1404929	75.9663	2530
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.895)	640323	42.4217	1410
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1337726	45.5002	1520
$ 60 2,4,6-Tribromophenol	329	6.469	6.475	(1.090)	315669	92.0898	3070
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1290910	48.6378	1620

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2912.d
Lab Smp Id: 1201980154 Client Smp ID: SBLK01
Inj Date : 29-NOV-2009 16:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980154|926126|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.828	3529801	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.881	836229	9.47621609	316	0		0	10

Data File: /chem/MSD1.i/s112909.b/s1k2912.d
Date : 29-NOV-2009 16:50
Client ID: SBLK01
Sample Info: !1201980154!926126!1!SVHF!1!SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

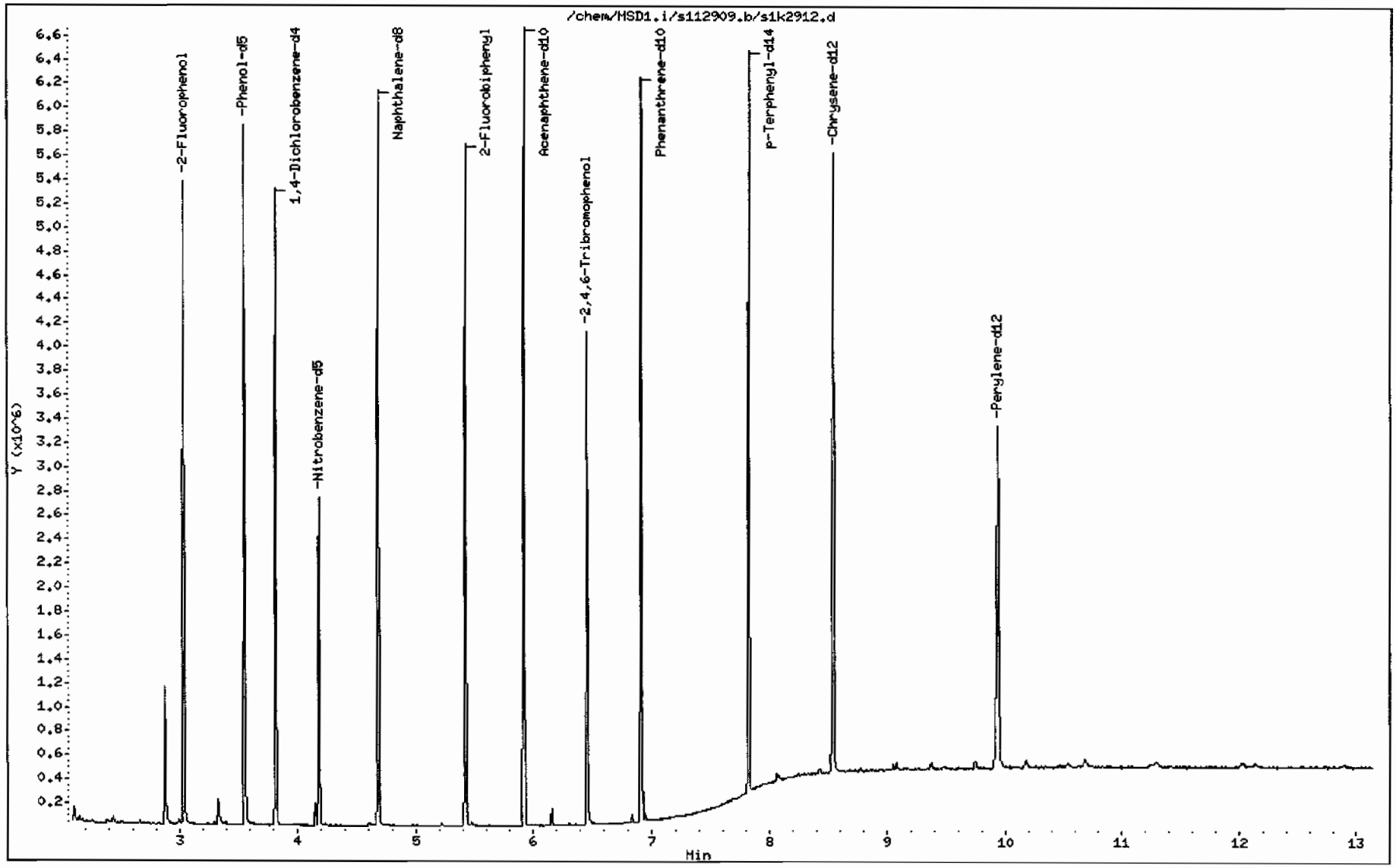

Data File: /chem/MSD1.i/s112909.b/s1k2912.d

Date : 29-NOV-2009 16:50

Client ID: SBLK01 Instrument: MSD1.i

Sample Info: |120198015419261261|1|SVHF|1|SBLK01

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Searoh Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1,3,5-Pentanetriol, 3-methyl-	7564-64-9	NIST05.L	14621	39	C6H14O3	134

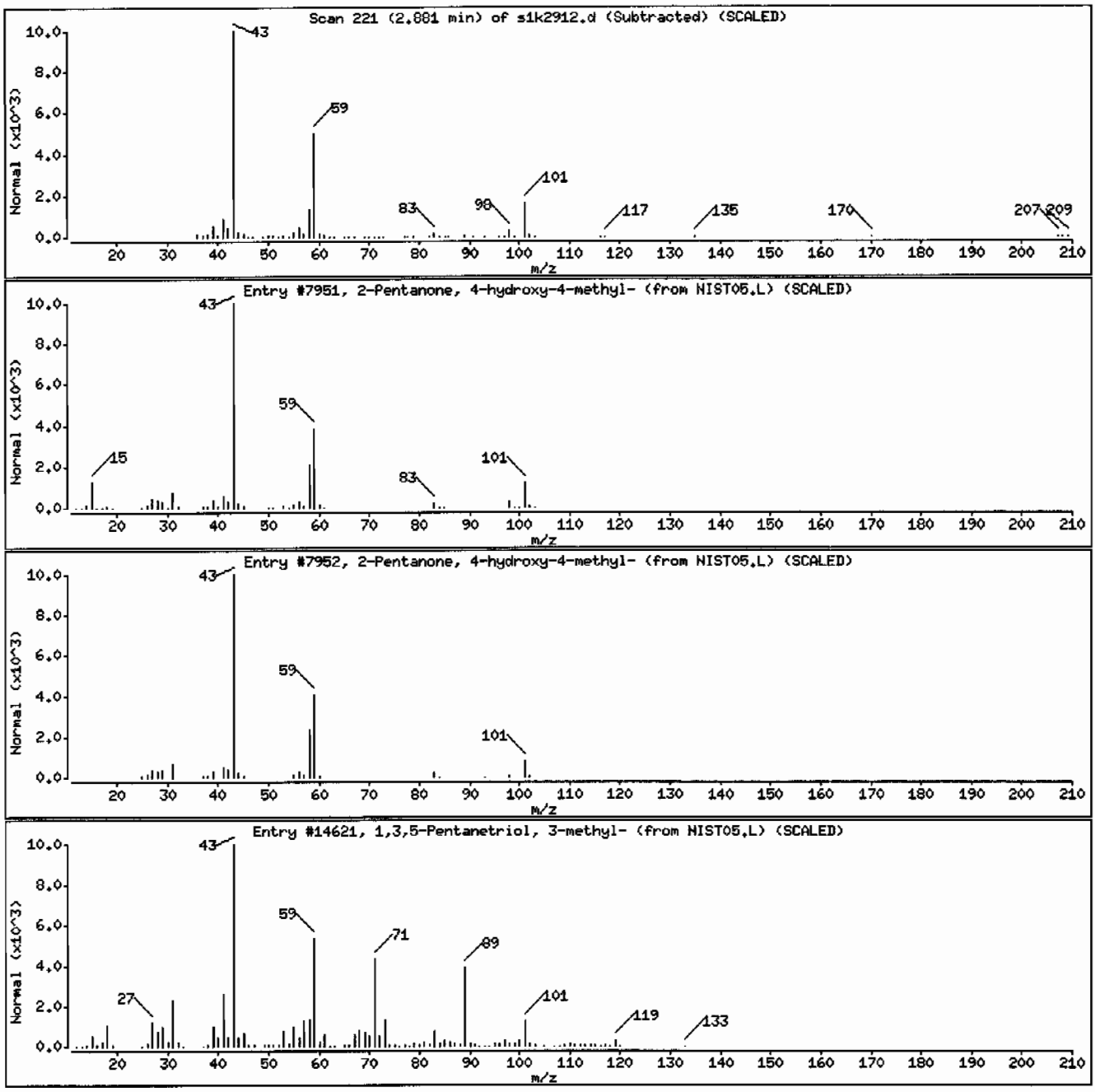

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980157**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 17:14**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2913-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1230	ug/kg	66.7	333
108-95-2	Phenol		1220	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1210	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1180	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1130	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1230	ug/kg	66.7	333
83-32-9	Acenaphthene		1280	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1230	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1170	ug/kg	110	333
87-86-5	Pentachlorophenol		1390	ug/kg	83.3	333
129-00-0	Pyrene		1370	ug/kg	10.0	33.3
110-86-1	Pyridine		927	ug/kg	66.7	333
62-53-3	Aniline		1020	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1180	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1130	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1220	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1200	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1160	ug/kg	66.7	333
95-48-7	o-Cresol		1360	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1350	ug/kg	100	333
67-72-1	Hexachloroethane		1140	ug/kg	66.7	333
98-95-3	Nitrobenzene		1280	ug/kg	66.7	333
78-59-1	Isophorone		1330	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1190	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1210	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1140	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1160	ug/kg	66.7	333
65-85-0	Benzoic acid		2170	ug/kg	167	667
91-20-3	Naphthalene		1190	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1020	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1230	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1250	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		2090	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1340	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1430	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1210	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1130	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		986	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980157**				
Client Sample:	**QC for batch 926121**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926126**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 17:14**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/25/2009 21:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1k2913-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1340	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1250	ug/kg	33.3	333
208-96-8	Acenaphthylene		1280	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1350	ug/kg	127	667
132-64-9	Dibenzofuran		1470	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1300	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1390	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1200	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1110	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1240	ug/kg	66.7	333
122-66-7	Azobenzene		1290	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1520	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1330	ug/kg	66.7	333
85-01-8	Phenanthrene		1290	ug/kg	10.0	33.3
120-12-7	Anthracene		1280	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1510	ug/kg	66.7	333
206-44-0	Fluoranthene		1360	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1510	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1220	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1190	ug/kg	100	333
218-01-9	Chrysene		1230	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1450	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1490	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1240	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1380	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1290	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1180	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1160	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1220	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1220	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2913.d
Lab Smp Id: 1201980157 Client Smp ID: SBLK01LCS
Inj Date : 29-NOV-2009 17:14
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980157|926126|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	617030	40.0000	
* 29 Naphthalene-d8	136	4.693	4.693	(1.000)	2615814	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1327800	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2222627	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1876046	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	1522701	40.0000	
$ 3 2-Fluorophenol	112	3.046	3.040	(0.796)	1271871	78.9169	2630
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1461421	74.6073	2490
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	684430	39.7037	1320
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1416944	44.5569	1480
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	371535	100.207	3340
$ 81 p-Terphenyl-d14	244	7.828	7.834	(0.915)	1434844	48.7247	1620

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	752654	36.4664	1220
8 2-Chlorophenol	128	3.704	3.704	(0.968)	639061	36.4310	1210
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	713236	35.3495	1180
17 N-Nitrosodipropylamine	70	4.075	4.075	(1.065)	399043	33.9316	1130(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	577162	36.4542	1220
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	516096	36.8685	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1174835	38.3615	1280
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	440376	36.8581	1230
52 4-Nitrophenol	139	6.010	6.004	(1.013)	220683	35.2282	1170
65 Pentachlorophenol	266	6.798	6.792	(0.982)	235029	41.8099	1390
79 Pyrene	202	7.781	7.787	(0.909)	2047657	41.0742	1370
2 Pyridine	79	2.428	2.410	(0.634)	408899	27.8205	927
4 Aniline	66	3.622	3.628	(0.946)	263031	30.5509	1020
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510398	35.5468	1180
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	696923	33.8596	1130
12 Benzyl alcohol	108	3.910	3.910	(1.022)	390042	36.5704	1220
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	672531	36.0915	1200
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1191956	34.8523	1160
15 o-Cresol	107	3.963	3.963	(1.035)	534295	40.9176	1360
18 m,p-Cresols	107	4.063	4.063	(1.061)	719000	40.4679	1350
19 Hexachloroethane	117	4.169	4.169	(1.089)	248216	34.1819	1140
21 Nitrobenzene	77	4.210	4.210	(0.897)	691613	38.5060	1280
22 Isophorone	82	4.363	4.369	(0.930)	1252978	39.8762	1330
23 2-Nitrophenol	139	4.422	4.422	(0.942)	340801	35.7439	1190
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	554549	36.3226	1210
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	691571	34.1877	1140
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	497973	34.7566	1160
27 Benzoic acid	105	4.516	4.499	(0.962)	683711	64.9910	2170
30 Naphthalene	128	4.704	4.710	(1.002)	1951439	35.7452	1190(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	763147	30.6108	1020
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	299492	36.8387	1230
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349146	37.5924	1250
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	254671	62.8185	2090
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	356012	40.3106	1340
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	403669	42.9853	1430
40 2-Chloronaphthalene	162	5.540	5.540	(0.934)	1190080	36.3056	1210
42 o-Nitroaniline	65	5.604	5.604	(0.944)	343985	33.8440	1130
41 m-Nitroaniline	138	5.898	5.898	(0.994)	265638	29.5780	986
43 Dimethylphthalate	163	5.710	5.716	(0.962)	1456615	40.2594	1340
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	338062	37.5023	1250
45 Acenaphthylene	152	5.840	5.840	(0.984)	1959446	38.3071	1280
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	144123	40.5068	1350(Q)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1952785	44.0915	1470
51 Diethylphthalate	149	6.192	6.198	(1.044)	1428178	42.3398	1410
53 Fluorene	166	6.310	6.310	(1.063)	1390645	38.9420	1300
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	628903	41.7119	1390
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	202018	35.9267	1200

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	292736	33.3313	1110
133 Diphenylamine	169	6.369	6.369	(0.920)	1105073	37.2750	1240
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1396329	38.6021	1290
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	348687	45.6613	1520
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	375137	40.0219	1330
68 Phenanthrene	178	6.939	6.940	(1.003)	1960363	38.8105	1290
69 Anthracene	178	6.969	6.969	(1.007)	1974619	38.4401	1280
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2486060	45.3739	1510
76 Fluoranthene	202	7.645	7.645	(1.105)	1989736	40.8094	1360
85 Butylbenzylphthalate	149	8.086	8.092	(0.945)	1030539	45.4238	1510
89 Benzo(a)anthracene	228	8.539	8.545	(0.998)	1649744	36.6730	1220
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	461604	35.7370	1190
92 Chrysene	228	8.575	8.581	(1.002)	1554454	36.9708	1230
93 bis(2-Ethylhexyl)phthalate	149	8.428	8.434	(0.985)	1434232	43.5143	1450
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	2221573	44.6001	1490
95 Benzo(b)fluoranthene	252	9.498	9.510	(0.955)	1426222	37.1329	1240
96 Benzo(k)fluoranthene	252	9.528	9.533	(0.958)	1583032	41.4615	1380
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	1285249	38.6386	1290
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	1223235	35.4050	1180
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	1008016	34.8891	1160
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	1046013	36.5568	1220
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	323215	36.9282	1230

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2913.d
Date : 29-NOV-2009 17:14
Client ID: SBLK01LCS
Sample Info: I120198015719261261|1|SVHF1|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AHY
Column diameter: 0.20

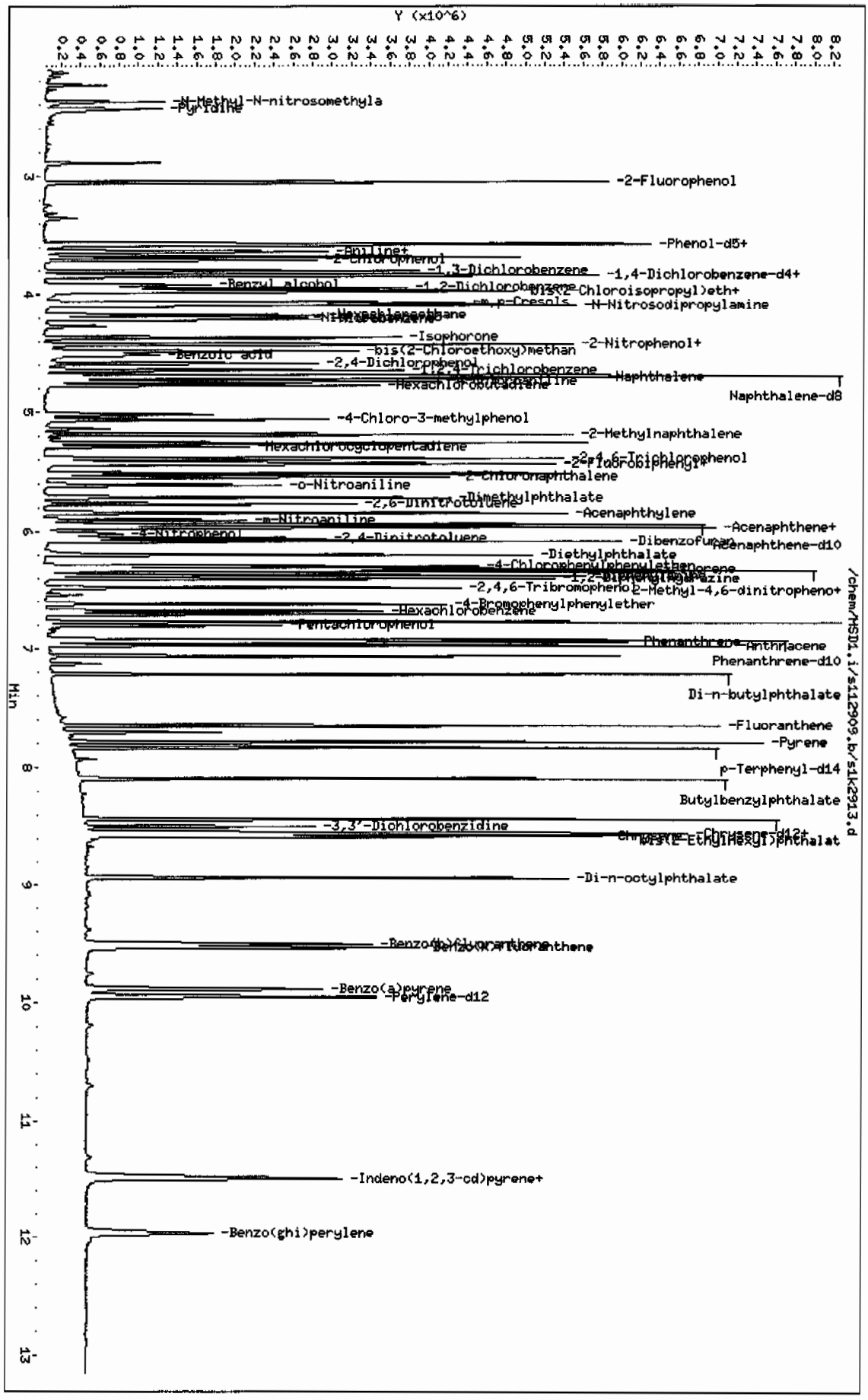

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926121 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201980154 MB	25-NOV-2009 21:20:56	30	1	0.03333
1201980157 LCS	25-NOV-2009 21:20:56	30	1	0.03333
241423004	25-NOV-2009 21:20:56	30.13	1	0.03319
241423005	25-NOV-2009 21:20:56	30.13	1	0.03319
241503002	25-NOV-2009 21:20:56	30.13	1	0.03319
241503003	25-NOV-2009 21:20:56	30.12	1	0.0332
241503004	25-NOV-2009 21:20:56	30.06	1	0.03327
241524002	25-NOV-2009 21:20:56	30.13	1	0.03319
1201980155 MS (241524002)	25-NOV-2009 21:20:56	30.12	1	0.0332
1201980156 MSD (241524002)	25-NOV-2009 21:20:56	30.16	1	0.03316
241534001	25-NOV-2009 21:20:56	30.17	1	0.03315
241534002	25-NOV-2009 21:20:56	30.13	1	0.03319
241534003	25-NOV-2009 21:20:56	30.04	1	0.03329
241534004	25-NOV-2009 21:20:56	30.13	1	0.03319
241534005	25-NOV-2009 21:20:56	30.13	1	0.03319
241534006	25-NOV-2009 21:20:56	30.13	1	0.03319
241534008	25-NOV-2009 21:20:56	30.07	1	0.03326
241539001	25-NOV-2009 21:20:56	30.01	1	0.03332
241539002	25-NOV-2009 21:20:56	30.13	1	0.03319
241539003	25-NOV-2009 21:20:56	30.13	1	0.03319
241539004	25-NOV-2009 21:20:56	30.04	1	0.03329

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201980157	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201980157	BENZIDINE LCS	UE091117-20	1	mL
MS	1201980155	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201980155	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201980156	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201980156	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/14/2009 METHOD: See raw data OPERATOR: AMY REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:116462-D
Multiplier Voltage: 1400 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091006-01 Internal Std ID: WBN091024-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s111409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k1201-D.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1201.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1202.d	INST BLK	amy	14-NOV-2009 17:53	-----	s111409	1.0	INST BLK	
s1k1203.d	WBN091111-16	amy	14-NOV-2009 18:22	1 PPM	s111409	1.0	MEGA001	
s1k1204.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	
s1k1204MRQ.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	pass linearity for c26 and c184
s1k1205.d	WBN091111-14	amy	14-NOV-2009 19:21	20 PPM	s111409	1.0	MEGA020	
s1k1206.d	WBN091111-13.1	amy	14-NOV-2009 19:50	40 PPM	s111409	1.0	MEGA040	
s1k1207.d	WBN091111-12	amy	14-NOV-2009 20:19	50 PPM	s111409	1.0	MEGA050	
s1k1208.d	WBN091111-11	amy	14-NOV-2009 20:47	80 PPM	s111409	1.0	MEGA080	
s1k1209.d	WBN091111-10	amy	14-NOV-2009 21:16	100 PPM	s111409	1.0	MEGA100	
s1k1210.d	WBN091111-09	amy	14-NOV-2009 21:45	120 PPM	s111409	1.0	MEGA120	
s1k1211.d	INST BLK	amy	14-NOV-2009 22:14	-----	s111409	1.0	INST BLK	
s1k1212-BOE.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212-D.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE: fails c65
s1k1213-D.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1213.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1214.d	INST BLK	amy	15-NOV-2009 15:05	-----	s111409	1.0	INST BLK	

s1k1215.d	WBN091111-01	amy	15-NOV-2009 15:28	10 PPM	s111409	1.0	AP010	
s1k1216.d	WBN091111-02	amy	15-NOV-2009 15:51	20 PPM	s111409	1.0	AP020	
s1k1217.d	WBN091111-03.1	amy	15-NOV-2009 16:14	40 PPM	s111409	1.0	AP040	
s1k1218.d	WBN091111-04	amy	15-NOV-2009 16:38	50 PPM	s111409	1.0	AP050	
s1k1219.d	WBN091111-05	amy	15-NOV-2009 17:01	80 PPM	s111409	1.0	AP080	
s1k1220.d	WBN091111-06	amy	15-NOV-2009 17:24	100 PPM	s111409	1.0	AP100	
s1k1221.d	WBN091111-07	amy	15-NOV-2009 17:47	120 PPM	s111409	1.0	AP120	
s1k1222.d	WBN091029-25	amy	15-NOV-2009 18:11	10 PPM	s111409	1.0	PEST010	
s1k1223.d	WBN091029-24	amy	15-NOV-2009 18:35	20 PPM	s111409	1.0	PEST020	
s1k1224.d	WBN091029-23.1	amy	15-NOV-2009 18:58	40 PPM	s111409	1.0	PEST040	
s1k1225.d	WBN091029-22	amy	15-NOV-2009 19:21	50 PPM	s111409	1.0	PEST050	
s1k1226.d	WBN091029-21	amy	15-NOV-2009 19:45	80 PPM	s111409	1.0	PEST080	
s1k1227.d	WBN091029-20	amy	15-NOV-2009 20:09	100 PPM	s111409	1.0	PEST100	
s1k1228.d	WBN091029-19	amy	15-NOV-2009 20:31	120 PPM	s111409	1.0	PEST120	
s1k1229.d	WBN091016-16	amy	15-NOV-2009 20:55	500 PPM	s111409	1.0	HEX500	
s1k1230.d	WBN091016-15	amy	15-NOV-2009 21:18	1000 PPM	s111409	1.0	HEX1000	
s1k1231.d	WBN091016-14	amy	15-NOV-2009 21:42	1250 PPM	s111409	1.0	HEX1250	
s1k1232.d	WBN091016-13	amy	15-NOV-2009 22:06	1500 PPM	s111409	1.0	HEX503	
s1k1233.d	WBN091016-12	amy	15-NOV-2009 22:30	1750 PPM	s111409	1.0	HEX504	
s1k1234.d	UBN090825-02.4	amy	15-NOV-2009 22:53	2000 PPM	s111409	1.0	HEX2000	
s1k1235-D.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1235.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1236-D.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1236.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1237-D.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1237.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1238-D.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown

s1k1238.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown
s1k1239.d	INST BLK	amy	16-NOV-2009 00:43	-----	s111409	1.0	INST BLK	
s1k1240.d	UBN090924-01	amy	16-NOV-2009 01:05	10 PPM	s111409	1.0	NEV010	DUSE
s1k1241.d	UBN090924-02	amy	16-NOV-2009 01:28	20 PPM	s111409	1.0	NEV020	DUSE
s1k1242.d	UBN090924-03	amy	16-NOV-2009 01:51	40 PPM	s111409	1.0	NEV040	DUSE
s1k1243.d	UBN090924-04	amy	16-NOV-2009 02:14	50 PPM	s111409	1.0	NEV050	DUSE
s1k1244.d	UBN090924-05	amy	16-NOV-2009 02:38	80 PPM	s111409	1.0	NEV080	DUSE
s1k1245.d	UBN090924-06	amy	16-NOV-2009 03:01	100 PPM	s111409	1.0	NEV100	DUSE
s1k1246.d	UBN090924-07	amy	16-NOV-2009 03:23	120 PPM	s111409	1.0	NEV120	DUSE
s1k1247-D.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1247.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1248.d	INST BLK	amy	17-NOV-2009 09:20	-----	s111409	1.0	INST BLK	
s1k1249.d	WBN091027-09.2	amy	17-NOV-2009 09:48	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails
s1k1250.d	UBN090924-01	amy	17-NOV-2009 10:17	10 PPM	s111409	1.0	NEV010	DUSE
s1k1251.d	UBN090924-02	amy	17-NOV-2009 10:41	20 PPM	s111409	1.0	NEV020	DUSE
s1k1252.d	UBN090924-03	amy	17-NOV-2009 11:04	40 PPM	s111409	1.0	NEV040	DUSE
s1k1253.d	UBN090924-04	amy	17-NOV-2009 11:27	50 PPM	s111409	1.0	NEV050	DUSE
s1k1254.d	UBN090924-05	amy	17-NOV-2009 11:50	80 PPM	s111409	1.0	NEV080	DUSE
s1k1255.d	UBN090924-06	amy	17-NOV-2009 12:14	100 PPM	s111409	1.0	NEV100	DUSE
s1k1256.d	UBN090924-07	amy	17-NOV-2009 12:38	120 PPM	s111409	1.0	NEV120	DUSE
s1k1257.d	WBN091027-09.1	amy	17-NOV-2009 13:02	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails /clean inj port
s1k1259-D.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1259.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1260.d	INST BLK	amy	17-NOV-2009 16:04	-----	s111409	1.0	INST BLK	
s1k1261-BOE.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261-D.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	pass 530038

s1k1262.d	UBN091117-01	amy	17-NOV-2009 16:56	10 PPM	s111409	1.0	NEV010	
s1k1263.d	UBN091117-02	amy	17-NOV-2009 17:19	20 PPM	s111409	1.0	NEV020	
s1k1264.d	UBN091117-03	amy	17-NOV-2009 17:42	40 PPM	s111409	1.0	NEV040	
s1k1265.d	UBN091117-04	amy	17-NOV-2009 18:05	50 PPM	s111409	1.0	NEV050	DUSE
s1k1266.d	UBN091117-05	amy	17-NOV-2009 18:28	80 PPM	s111409	1.0	NEV080	
s1k1267.d	UBN091117-06	amy	17-NOV-2009 18:52	100 PPM	s111409	1.0	NEV100	DUSE
s1k1268.d	UBN091117-07	amy	17-NOV-2009 19:15	120 PPM	s111409	1.0	NEV120	

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/29/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1318 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k2901.d	WBN091101-01	AMY	29-NOV-2009 10:14	50 PPM	s112909	1.0	DFTPP	DUSE-tune failed
s1k2902.d	WBN091101-01	AMY	29-NOV-2009 10:34	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2903.d	WBN091106-05.5	AMY	29-NOV-2009 10:50	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2904.d	WBN091106-05.5	AMY	29-NOV-2009 11:23	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-megacheck failed
s1k2905.d	WBN091101-01	AMY	29-NOV-2009 13:27	50 PPM	s112909	1.0	DFTPP	DUSE-megacheck failed
s1k2906.d	WBN091111-03.5	AMY	29-NOV-2009 13:43	40 PPM	s112909	1.0	MEGACVS	DUSE-megacheck failed
s1k2907.d	WBN091101-01	AMY	29-NOV-2009 15:00	50 PPM	s112909	1.0	DFTPP	PASSING
s1k2908.d	WBN091111-03.5	AMY	29-NOV-2009 15:16	40 PPM	MEGAIICARE	1.0	MEGACVS	PASSING
s1k2909.d	WBN091111-03.3	AMY	29-NOV-2009 15:40	40 PPM	apl2	1.0	APCVS	PASSING
s1k2910.d	WBN091117-08.1	AMY	29-NOV-2009 16:04	40 PPM	nev	1.0	NEVCVS	DUSE-not needed
s1k2911.d	WBN091029-23.3	AMY	29-NOV-2009 16:27	40 PPM	pest	1.0	PESTCVS	DUSE-not needed
s1k2912-1.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-589	1.0	SBLK01	REPORT
s1k2912-2.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-600	1.0	SBLK01	REPORT
s1k2912-3.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-601	1.0	SBLK01	REPORT
s1k2912-4.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-603	1.0	SBLK01	REPORT
s1k2912.d	1201980154	AMY	29-NOV-2009 16:50	926126	10-578	1.0	SBLK01	REPORT
s1k2913-1.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-589	1.0	SBLK01LCS	REPORT
s1k2913-2.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-600	1.0	SBLK01LCS	REPORT
s1k2913-3.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-601	1.0	SBLK01LCS	REPORT

s1k2913-4.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-603		1.0	SBLK01LCS	REPORT
s1k2913.d	1201980157	AMY	29-NOV-2009 17:14	926126	10-578		1.0	SBLK01LCS	REPORT
s1k2914.d	241423004	AMY	29-NOV-2009 17:37	926126	10-578		1.0	LANL	REPORT
s1k2915.d	241423005	AMY	29-NOV-2009 18:01	926126	10-578		1.0	LANL	REPORT
s1k2916.d	241503002	AMY	29-NOV-2009 18:24	926126	10-589		1.0	LANL	REPORT
s1k2917.d	241503003	AMY	29-NOV-2009 18:48	926126	10-589		1.0	LANL	REPORT
s1k2918.d	241503004	AMY	29-NOV-2009 19:11	926126	10-589		1.0	LANL	REPORT
s1k2919.d	241524002	AMY	29-NOV-2009 19:35	926126	10-600		1.0	LANL	REPORT
s1k2920.d	1201980155	AMY	29-NOV-2009 19:59	926126	10-600		1.0	MS	REPORT
s1k2921.d	1201980156	AMY	29-NOV-2009 20:22	926126	10-600		1.0	MSD	REPORT
s1k2922.d	241534001	AMY	29-NOV-2009 20:46	926126	10-601		1.0	LANL	REPORT
s1k2923.d	241534002	AMY	29-NOV-2009 21:09	926126	10-601		1.0	LANL	REPORT
s1k2924.d	241534003	AMY	29-NOV-2009 21:32	926126	10-601		1.0	LANL	REPORT
s1k2925.d	241534004	AMY	29-NOV-2009 21:56	926126	10-601		1.0	LANL	REPORT
s1k2926.d	241534005	AMY	29-NOV-2009 22:19	926126	10-601		1.0	LANL	REPORT
s1k2927.d	241534006	AMY	29-NOV-2009 22:42	926126	10-601		1.0	LANL	REPORT
s1k2928.d	241534008	AMY	29-NOV-2009 23:06	926126	10-601		1.0	LANL	REPORT
s1k2929.d	241539001	AMY	29-NOV-2009 23:29	926126	10-603		4.0	LANL	REPORT
s1k2930.d	241539002	AMY	29-NOV-2009 23:52	926126	10-603		1.0	LANL	REPORT
s1k2931.d	241539003	AMY	30-NOV-2009 00:15	926126	10-603		4.0	LANL	REPORT
s1k2932.d	241539004	AMY	30-NOV-2009 00:39	926126	10-603		4.0	LANL	REPORT

Instrument Batch: /chem/MSD1.i/s112909.b

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GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2920.d
Lab Smp Id: 1201980155 Client Smp ID: WST03-10-2132MS
Inj Date : 29-NOV-2009 19:59
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980155|926126|1|SVMF|1|MS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	699947	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2934133	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1463731	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2363993	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1684742	40.0000	
* 98 Perylene-d12	264	9.951	9.951	(1.000)	1120190	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1289380	70.5260	2500
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1547686	69.6514	2470
$ 20 Nitrobenzene-d5	82	4.193	4.199	(0.893)	673013	34.8059	1230
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1433542	40.8925	1450
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	370034	90.5336	3200
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1328013	50.2177	1780

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	796747	34.0298	1200
8 2-Chlorophenol	128	3.704	3.704	(0.968)	656662	32.9999	1170
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	685652	29.9567	1060
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	420390	31.5122	1120(Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.640	(0.989)	566160	31.8799	1130
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	545668	34.7521	1230
47 Acenaphthene	154	5.957	5.957	(1.004)	1149404	34.0458	1200
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	422299	32.0627	1140
52 4-Nitrophenol	139	6.016	6.004	(1.014)	225669	32.6788	1160(Q)
65 Pentachlorophenol	266	6.798	6.792	(0.982)	210344	35.1811	1240
79 Pyrene	202	7.786	7.787	(0.910)	1850873	41.3427	1460
2 Pyridine	79	2.422	2.410	(0.633)	370227	22.2054	786
4 Aniline	66	3.622	3.628	(0.946)	261857	26.8116	949
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	510651	31.3514	1110
9 1,3-Dichlorobenzene	146	3.793	3.799	(0.991)	668790	28.6436	1010
12 Benzyl alcohol	108	3.916	3.910	(1.023)	310221	25.6408	908
13 1,2-Dichlorobenzene	146	3.940	3.946	(1.029)	652552	30.8709	1090
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1201535	30.9706	1100
15 o-Cresol	107	3.969	3.963	(1.037)	683532	46.1455	1630
18 m,p-Cresols	107	4.063	4.063	(1.061)	772494	38.3282	1360
19 Hexachloroethane	117	4.169	4.169	(1.089)	231829	28.1433	996
21 Nitrobenzene	77	4.204	4.210	(0.896)	695598	34.5264	1220
22 Isophorone	82	4.363	4.369	(0.930)	1299945	36.8827	1300
23 2-Nitrophenol	139	4.422	4.422	(0.942)	337453	31.5531	1120
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	592642	34.6064	1220
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	715403	31.5291	1120
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	524523	32.6380	1160
27 Benzoic acid	105	4.498	4.499	(0.959)	390090	33.0577	1170
30 Naphthalene	128	4.704	4.710	(1.002)	1963373	32.0621	1140(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	797874	28.5317	1010
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	297235	32.5947	1150
34 2-Methylnaphthalene	142	5.187	5.187	(1.105)	1349639	33.5263	1190
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	199168	44.5657	1580
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	381472	39.1822	1390
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	421700	40.7352	1440
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	1212305	33.5491	1190
42 o-Nitroaniline	65	5.604	5.604	(0.944)	350257	31.2609	1110
41 m-Nitroaniline	138	5.898	5.898	(0.994)	274130	27.6889	980
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1500237	37.6143	1330
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	344190	34.6363	1230
45 Acenaphthylene	152	5.839	5.840	(0.984)	1966987	34.8834	1240
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	56861	14.4972	513(aQ)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1996093	40.8839	1450
51 Diethylphthalate	149	6.192	6.198	(1.044)	1481999	39.8553	1410
53 Fluorene	166	6.310	6.310	(1.063)	1421709	36.1147	1280
54 4-Chlorophenylphenylether	204	6.287	6.293	(1.059)	646361	38.8886	1380
55 2-Methyl-4,6-dinitrophenol	198	6.334	6.334	(0.915)	109209	18.2603	646

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.328	6.328	(1.066)	284762	29.4123	1040
133 Diphenylamine	169	6.369	6.369	(0.920)	1145372	36.3240	1290
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1426823	37.0863	1310
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	354319	43.6242	1540
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	346909	34.7972	1230
68 Phenanthrene	178	6.939	6.940	(1.003)	1975120	36.7644	1300
69 Anthracene	178	6.969	6.969	(1.007)	1913297	35.0190	1240
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2440805	41.8840	1480
76 Fluoranthene	202	7.645	7.645	(1.105)	1854236	35.7562	1270
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	984368	48.3155	1710
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1477404	36.5712	1290
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	350925	30.2533	1070
92 Chrysene	228	8.575	8.581	(1.002)	1231772	32.6228	1160
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1306621	44.1441	1560
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1909554	52.1111	1840
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.955)	1234751	43.2281	1530
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.958)	964822	34.3499	1220
97 Benzo(a)pyrene	252	9.886	9.886	(0.993)	883640	36.1004	1280
99 Indeno(1,2,3-cd)pyrene	276	11.492	11.504	(1.155)	722470	28.3387	1000
100 Dibenzo(a,h)anthracene	278	11.492	11.498	(1.155)	615954	28.9496	1020
101 Benzo(ghi)perylene	276	11.974	11.980	(1.203)	559720	26.5904	942
1 N-Methyl-N-nitrosomethylamine	74	2.369	2.352	(0.619)	321743	32.4054	1150

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s112909.b/s1k2920.d
Date : 29-NOV-2009 19:59
Client ID: WST03-10-2132MS
Sample Info: 1120198015519261261|SVMF1|1MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AHY
Column diameter: 0.20

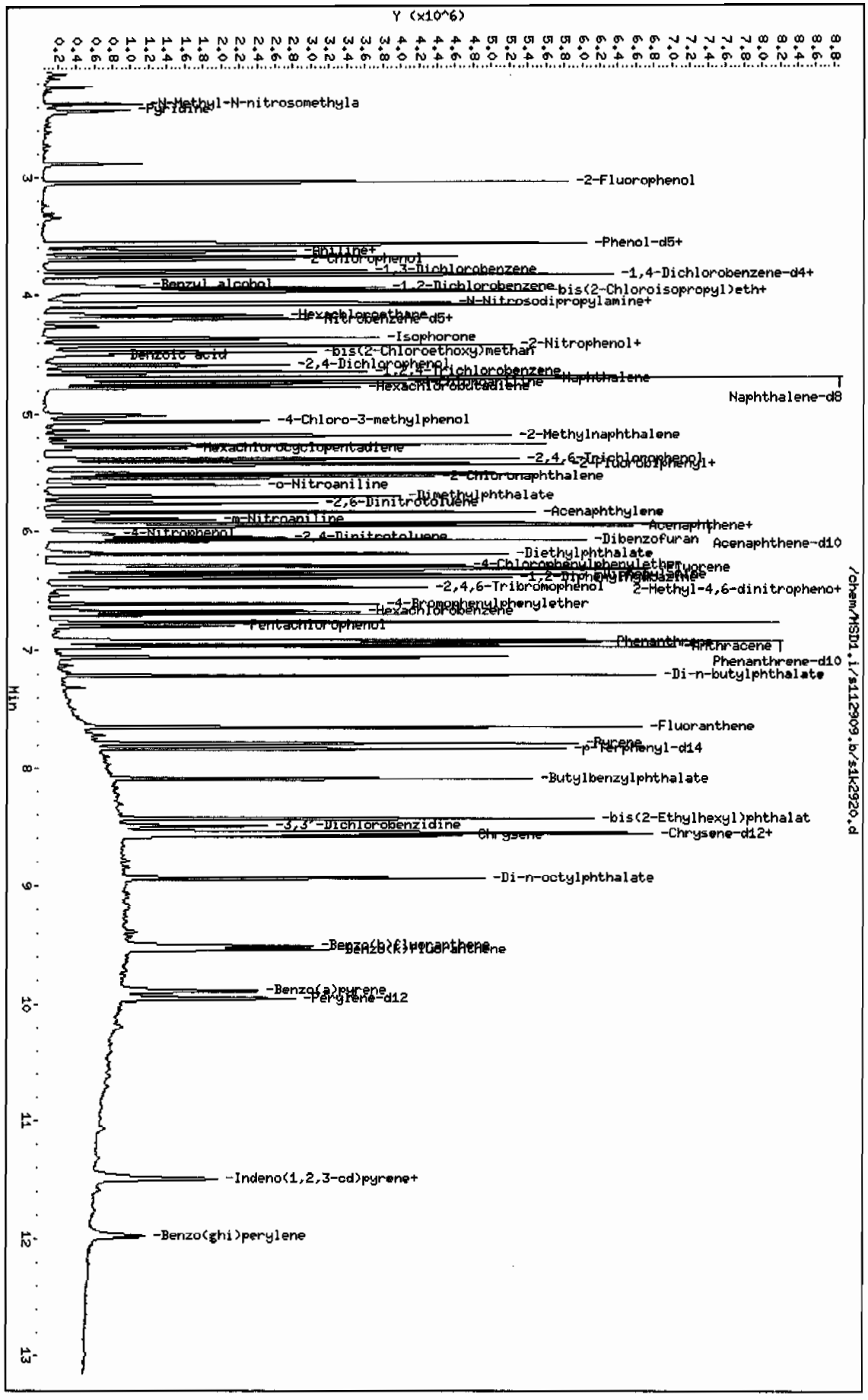

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GEL Laboratories LLC

Data file : /chem/MSD1.i/s112909.b/s1k2921.d
Lab Smp Id: 1201980156 Client Smp ID: WST03-10-2132MSD
Inj Date : 29-NOV-2009 20:22
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201980156|926126|1|SVMF|1|MSD
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s112909.b/MSD1-M8270AQA-111409.m
Meth Date : 30-Nov-2009 08:27 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-600.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.16000	weight of sample
M	6.23420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.828	(1.000)	615056	40.0000	
* 29 Naphthalene-d8	136	4.692	4.693	(1.000)	2554313	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.940	(1.000)	1300161	40.0000	
* 67 Phenanthrene-d10	188	6.922	6.922	(1.000)	2151794	40.0000	
* 91 Chrysene-d12	240	8.557	8.557	(1.000)	1447390	40.0000	
* 98 Perylene-d12	264	9.945	9.951	(1.000)	806048	40.0000	
$ 3 2-Fluorophenol	112	3.040	3.040	(0.794)	1069314	66.5616	2350
$ 5 Phenol-d5	99	3.569	3.569	(0.932)	1262977	64.6835	2290
$ 20 Nitrobenzene-d5	82	4.192	4.199	(0.893)	552216	32.8053	1160
$ 39 2-Fluorobiphenyl	172	5.428	5.434	(0.915)	1174801	37.7279	1330
$ 60 2,4,6-Tribromophenol	329	6.475	6.475	(1.091)	298226	82.1443	2900
$ 81 p-Terphenyl-d14	244	7.833	7.834	(0.915)	1075352	47.3318	1670

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.575	3.575	(0.934)	651465	31.6651	1120
8 2-Chlorophenol	128	3.704	3.704	(0.968)	553085	31.6310	1120
11 1,4-Dichlorobenzene	146	3.840	3.840	(1.003)	582464	28.9608	1020
17 N-Nitrosodipropylamine	70	4.069	4.075	(1.063)	333817	28.4764	1010(Q)
28 1,2,4-Trichlorobenzene	180	4.639	4.640	(0.989)	469632	30.3767	1070
33 4-Chloro-3-methylphenol	107	5.057	5.051	(1.078)	442703	32.3870	1140
47 Acenaphthene	154	5.957	5.957	(1.004)	961549	32.0646	1130
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	342426	29.2692	1030
52 4-Nitrophenol	139	6.016	6.004	(1.014)	189174	30.8403	1090
65 Pentachlorophenol	266	6.798	6.792	(0.982)	158486	29.1215	1030
79 Pyrene	202	7.786	7.787	(0.910)	1531042	39.8068	1410
2 Pyridine	79	2.416	2.410	(0.631)	342320	23.3654	826
4 Aniline	66	3.622	3.628	(0.946)	229123	26.6979	944
7 bis(2-Chloroethyl) ether	63	3.634	3.634	(0.949)	435483	30.4267	1080
9 1,3-Dichlorobenzene	146	3.792	3.799	(0.991)	569061	27.7362	981
12 Benzyl alcohol	108	3.916	3.910	(1.023)	217397	20.4486	723
13 1,2-Dichlorobenzene	146	3.945	3.946	(1.031)	553673	29.8084	1050
14 bis(2-Chloroisopropyl)ether	45	3.975	3.975	(1.038)	1027417	30.1377	1060
15 o-Cresol	107	3.963	3.963	(1.035)	564636	43.3800	1530
18 m,p-Cresols	107	4.063	4.063	(1.061)	640140	36.1451	1280
19 Hexachloroethane	117	4.169	4.169	(1.089)	187184	25.8600	914
21 Nitrobenzene	77	4.204	4.210	(0.896)	575076	32.7886	1160
22 Isophorone	82	4.363	4.369	(0.930)	1071543	34.9231	1230
23 2-Nitrophenol	139	4.422	4.422	(0.942)	264819	28.4435	1000
24 2,4-Dimethylphenol	122	4.422	4.422	(0.942)	481800	32.3175	1140
25 bis(2-Chloroethoxy)methane	93	4.481	4.481	(0.955)	596951	30.2207	1070
26 2,4-Dichlorophenol	162	4.587	4.587	(0.977)	431087	30.8127	1090
27 Benzoic acid	105	4.492	4.499	(0.957)	380487	37.0385	1310
30 Naphthalene	128	4.704	4.710	(1.002)	1617437	30.3405	1070(Q)
31 4-Chloroaniline	127	4.734	4.734	(1.009)	670092	27.5254	973
32 Hexachlorobutadiene	225	4.769	4.769	(1.016)	245534	30.9288	1090
34 2-Methylnaphthalene	142	5.186	5.187	(1.105)	1113411	31.7709	1120
36 Hexachlorocyclopentadiene	237	5.287	5.287	(0.891)	116360	29.3123	1040
37 2,4,6-Trichlorophenol	196	5.381	5.381	(0.907)	305116	35.2822	1250
38 2,4,5-Trichlorophenol	196	5.416	5.410	(0.913)	345638	37.5882	1330
40 2-Chloronaphthalene	162	5.539	5.540	(0.934)	992781	30.9305	1090
42 o-Nitroaniline	65	5.604	5.604	(0.944)	284051	28.5413	1010
41 m-Nitroaniline	138	5.898	5.898	(0.994)	228764	26.0137	920
43 Dimethylphthalate	163	5.704	5.716	(0.961)	1233662	34.8220	1230
44 2,6-Dinitrotoluene	165	5.763	5.763	(0.971)	273916	31.0324	1100
45 Acenaphthylene	152	5.839	5.840	(0.984)	1610084	32.1462	1140
48 2,4-Dinitrophenol	184	5.963	5.963	(1.005)	35859	10.2927	364(aQR)
49 Dibenzofuran	168	6.075	6.075	(1.024)	1650486	38.0582	1340
51 Diethylphthalate	149	6.192	6.198	(1.044)	1231486	37.2848	1320
53 Fluorene	166	6.310	6.310	(1.063)	1181344	33.7842	1190
54 4-Chlorophenylphenylether	204	6.292	6.293	(1.060)	542687	36.7587	1300
55 2-Methyl-4,6-dinitrophenol	198	6.333	6.334	(0.915)	66699	12.2522	433

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.322	6.328	(1.065)	230458	26.7980	948
133 Diphenylamine	169	6.369	6.369	(0.920)	953629	33.2255	1170
58 1,2-Diphenylhydrazine	77	6.398	6.398	(0.924)	1185255	33.8455	1200
61 4-Bromophenylphenylether	248	6.616	6.616	(0.956)	299469	40.5070	1430
63 Hexachlorobenzene	284	6.675	6.675	(0.964)	288959	31.8427	1120
68 Phenanthrene	178	6.939	6.940	(1.003)	1651328	33.7686	1190
69 Anthracene	178	6.969	6.969	(1.007)	1620434	32.5836	1150
72 Di-n-butylphthalate	149	7.210	7.216	(1.042)	2043329	38.5211	1360
76 Fluoranthene	202	7.645	7.645	(1.105)	1511208	32.0151	1130
85 Butylbenzylphthalate	149	8.092	8.092	(0.946)	791858	45.2402	1600
89 Benzo(a)anthracene	228	8.545	8.545	(0.999)	1120091	32.2732	1140
90 3,3'-Dichlorobenzidine	252	8.492	8.492	(0.992)	289961	29.0969	1030
92 Chrysene	228	8.575	8.581	(1.002)	992111	30.5843	1080
93 bis(2-Ethylhexyl)phthalate	149	8.433	8.434	(0.986)	1048714	41.2409	1460
94 Di-n-octylphthalate	149	8.933	8.939	(0.898)	1507003	57.1534	2020
95 Benzo(b)fluoranthene	252	9.504	9.510	(0.956)	727997	35.9011	1270
96 Benzo(k)fluoranthene	252	9.533	9.533	(0.959)	781492	38.6663	1370
97 Benzo(a)pyrene	252	9.880	9.886	(0.993)	578752	32.8455	1160
99 Indeno(1,2,3-cd)pyrene	276	11.486	11.504	(1.155)	387228	20.9970	742
100 Dibenzo(a,h)anthracene	278	11.486	11.498	(1.155)	342583	22.3360	790
101 Benzo(ghi)perylene	276	11.963	11.980	(1.203)	293979	19.4089	686
1 N-Methyl-N-nitrosomethylamine	74	2.363	2.352	(0.617)	275353	31.5608	1120

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD1.i/s112909.b/s1k2921.d
Date : 29-NOV-2009 20:22
Client ID: WST03-10-2132MSD
Sample Info: 1120198015619261261|1|SVMF11|MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

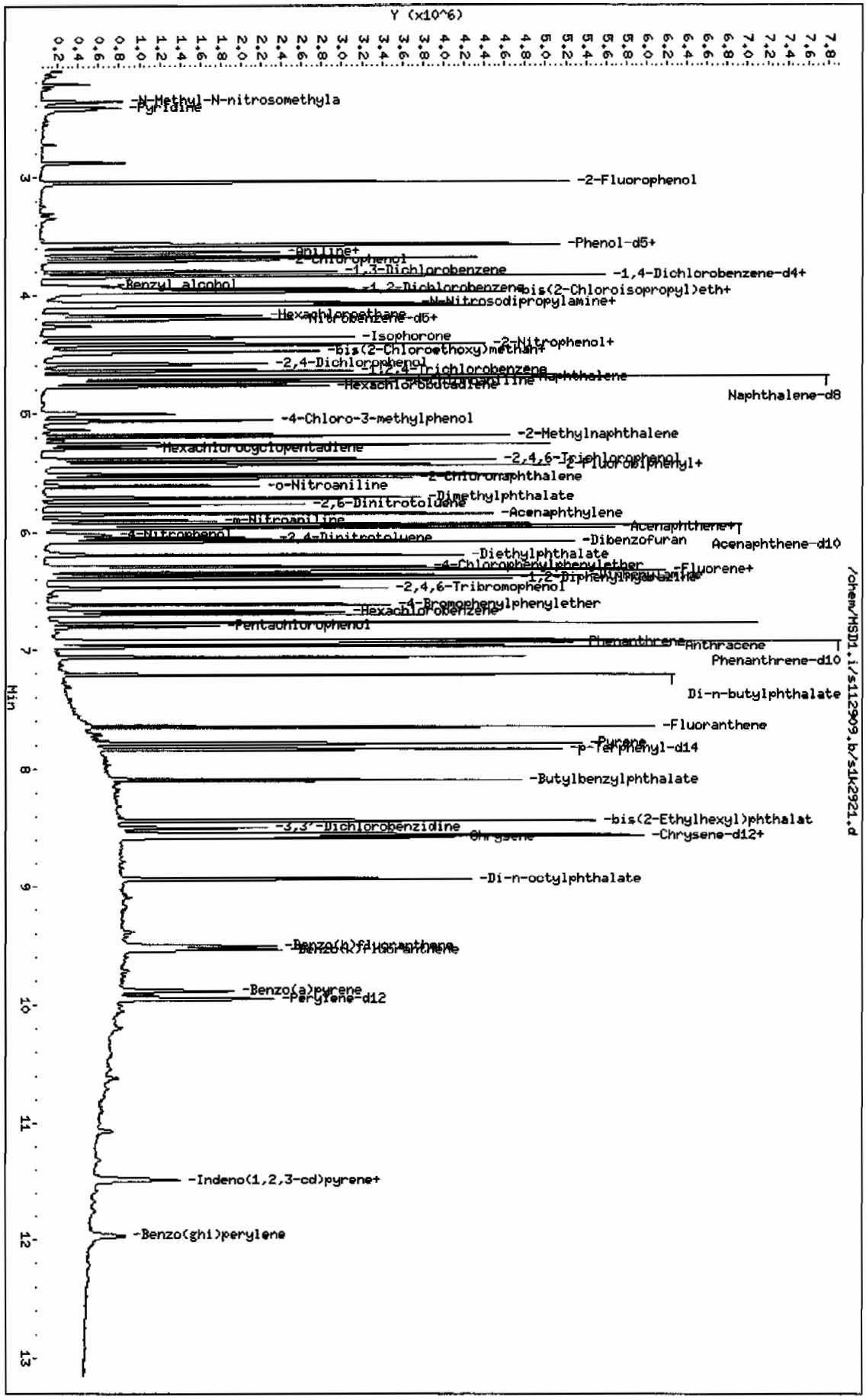

Page 1

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578-1

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3510C
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	927064
Prep Batch Number:	927063
TCLP Prep Batch Number:	926091

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241424001	WST03-10-2131
241424002	WST03-10-2130
1201980055	TCLP Blank (TB)
1201982116	Method Blank (MB)
1201982117	241424001(WST03-10-2131) Matrix Spike (MS)
1201982118	241424001(WST03-10-2131) Matrix Spike Duplicate (MSD)
1201982119	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the

Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241424001 (WST03-10-2131) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration
The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beuchum **Date:** 12-15-09

Roadmap for LANL 10-578-1 SVOA

This roadmap was analyzed by nat00999 on 12-03-2009, 10:14.
This roadmap was reviewed by dan01134 on 12-04-2009, 08:10.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD6.i/s120209.b/s6l0214.d	241424001	02-DEC-2009	15:48	10-578-1.sub	WST03-10-2131	1	927064	
☐	N	/chem/MSD6.i/s120209.b/s6l0217.d	241424002	02-DEC-2009	17:16	10-578-1.sub	WST03-10-2130	1	927064	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	Y	/chem/MSD6.i/s120209.b/s6l0206.d	1201980055	tb	02-DEC-2009	11:59	10-578-1.sub	TCLPBALNK	1.00000	927064	
☐	Y	/chem/MSD6.i/s120209.b/s6l0207.d	1201982116	mb	02-DEC-2009	12:28	10-578-1.sub	SBLK01	1.00000	927064	
☐	Y	/chem/MSD6.i/s120209.b/s6l0208.d	1201982119	lcs	02-DEC-2009	12:56	10-578-1.sub	SBLK01LCS	1.00000	927064	
☐	Y	/chem/MSD6.i/s120209.b/s6l0215.d	1201982117	ms	02-DEC-2009	16:17	10-578-1.sub	WST03-10-2131MS	1.00000	927064	
☐	Y	/chem/MSD6.i/s120209.b/s6l0216.d	1201982118	msd	02-DEC-2009	16:46	10-578-1.sub	WST03-10-2131MSD	1.00000	927064	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:16**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0217.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 15:48**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0214.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-578-1

Matrix Type: TCLP SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201980055	TB for batch 926091	36	23	59	57	67	78
1201982116	MB for batch 927063	50	31	81	78	82	101
1201982119	LCS for batch 927063	43	26	72	70	87	93
241424001	WST03-10-2131	51	32	84	80	92	101
1201982117	WST03-10-2131MS	49	30	78	78	94	99
1201982118	WST03-10-2131MSD	47	29	79	79	97	99
241424002	WST03-10-2130	43	26	74	72	88	97

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(25%-92%)
PHL	=	Phenol-d5	(15%-73%)
NBZ	=	Nitrobenzene-d5	(40%-112%)
FBP	=	2-Fluorobiphenyl	(35%-100%)
TBP	=	2,4,6-Tribromophenol	(39%-115%)
TPH	=	p-Terphenyl-d14	(46%-130%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578-1
Client ID: WST03-10-2131MS
Lab Sample ID: 1201982117
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: TCLP S
Analysis Date: 12/02/2009 16:17
Dilution: 1
Prep Batch ID: 927063
Batch ID: 927064

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
106-46-7	MS	1,4-Dichlorobenzene	0.500	0.00	U	0.307	61	37-91
121-14-2	MS	2,4-Dinitrotoluene	0.500	0.00	U	0.409	82	50-109
87-86-5	MS	Pentachlorophenol	0.500	0.00	U	0.436	87	38-131
110-86-1	MS	Pyridine	0.500	0.00	U	0.383	77	28-110
95-48-7	MS	o-Cresol	0.500	0.00	U	0.318	64	37-105
65794-96-9	MS	m,p-Cresols	0.500	0.00	U	0.315	63	33-110
67-72-1	MS	Hexachloroethane	0.500	0.00	U	0.277	55	34-95
98-95-3	MS	Nitrobenzene	0.500	0.00	U	0.367	73	43-118
87-68-3	MS	Hexachlorobutadiene	0.500	0.00	U	0.305	61	31-106
88-06-2	MS	2,4,6-Trichlorophenol	0.500	0.00	U	0.422	84	46-114
95-95-4	MS	2,4,5-Trichlorophenol	0.500	0.00	U	0.444	89	46-117
118-74-1	MS	Hexachlorobenzene	0.500	0.00	U	0.432	86	47-120

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-578-1

Sample Type: Matrix Spike Duplicate

Client ID: WST03-10-2131MSD

Matrix: TCLP S

Lab Sample ID: 1201982118

Instrument: MSD6.I

Analysis Date: 12/02/2009 16:46

Dilution: 1

Analyst: NAG1

Prep Batch ID: 927063

Inj. Vol: .5 uL

Batch ID: 927064

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
106-46-7	MSD 1,4-Dichlorobenzene	0.500	0.00	U	0.326	65	37-91	6	0-25
121-14-2	MSD 2,4-Dinitrotoluene	0.500	0.00	U	0.416	83	50-109	2	0-25
87-86-5	MSD Pentachlorophenol	0.500	0.00	U	0.412	82	38-131	6	0-25
110-86-1	MSD Pyridine	0.500	0.00	U	0.362	72	28-110	6	0-25
95-48-7	MSD o-Cresol	0.500	0.00	U	0.314	63	37-105	1	0-25
65794-96-9	MSD m,p-Cresols	0.500	0.00	U	0.300	60	33-110	5	0-25
67-72-1	MSD Hexachloroethane	0.500	0.00	U	0.301	60	34-95	8	0-25
98-95-3	MSD Nitrobenzene	0.500	0.00	U	0.375	75	43-118	2	0-25
87-68-3	MSD Hexachlorobutadiene	0.500	0.00	U	0.331	66	31-106	8	0-25
88-06-2	MSD 2,4,6-Trichlorophenol	0.500	0.00	U	0.437	87	46-114	3	0-25
95-95-4	MSD 2,4,5-Trichlorophenol	0.500	0.00	U	0.442	88	46-117	0	0-25
118-74-1	MSD Hexachlorobenzene	0.500	0.00	U	0.429	86	47-120	1	0-25

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578-1
Client ID: LCS for batch 927063
Lab Sample ID: 1201982119
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/02/2009 12:56
Dilution: 1
Prep Batch ID: 927063
Batch ID: 927064

CAS No	Parmname		Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
106-46-7	LCS	1,4-Dichlorobenzene	0.100	0.0	0.0585	58	38-88
121-14-2	LCS	2,4-Dinitrotoluene	0.100	0.0	0.0783	78	55-108
87-86-5	LCS	Pentachlorophenol	0.100	0.0	0.0759	76	44-121
110-86-1	LCS	Pyridine	0.100	0.0	0.0628	63	26-103
95-48-7	LCS	o-Cresol	0.100	0.0	0.059	59	41-94
65794-96-9	LCS	m,p-Cresols	0.100	0.0	0.0599	60	38-96
67-72-1	LCS	Hexachloroethane	0.100	0.0	0.0527	53	35-92
98-95-3	LCS	Nitrobenzene	0.100	0.0	0.0681	68	48-112
87-68-3	LCS	Hexachlorobutadiene	0.100	0.0	0.0568	57	33-98
88-06-2	LCS	2,4,6-Trichlorophenol	0.100	0.0	0.0773	77	54-111
95-95-4	LCS	2,4,5-Trichlorophenol	0.100	0.0	0.077	77	50-111
118-74-1	LCS	Hexachlorobenzene	0.100	0.0	0.0791	79	53-115

Method Blank Summary

SDG Number:	10-578-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 927063	Instrument ID:	MSD6.I	Data File:	s6l0207-1.d
Lab Sample ID:	1201982116	Prep Date:	12/01/2009 17:09	Analyzed:	12/02/09 12:28
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	TB for batch 926091	1201980055	s6l0206-1.d	12/02/09	1159
02	LCS for batch 927063	1201982119	s6l0208-1.d	12/02/09	1256
03	WST03-10-2131	241424001	s6l0214.d	12/02/09	1548
04	WST03-10-2131MS	1201982117	s6l0215.d	12/02/09	1617
05	WST03-10-2131MSD	1201982118	s6l0216.d	12/02/09	1646
06	WST03-10-2130	241424002	s6l0217.d	12/02/09	1716

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-578-1

Instrument ID: MSD6.I **Injection Date/Time:** 02-DEC-09 09:54

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120209.b/s6l0202.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.4
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	39.8
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	49.3
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	23.2
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.2
442	Greater than 40% of mass 198	78.2
443	17 - 23% of mass 442	19.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD6.i/s120209.b/s6l0203	02-DEC-09 10:08
TCLPBALNK	1201980055	/chem/MSD6.i/s120209.b/s6l0206	02-DEC-09 11:59
SBLK01	1201982116	/chem/MSD6.i/s120209.b/s6l0207	02-DEC-09 12:28
SBLK01LCS	1201982119	/chem/MSD6.i/s120209.b/s6l0208	02-DEC-09 12:56
WST03-10-2131	241424001	/chem/MSD6.i/s120209.b/s6l0214	02-DEC-09 15:48
WST03-10-2131MS	1201982117	/chem/MSD6.i/s120209.b/s6l0215	02-DEC-09 16:17
WST03-10-2131MSD	1201982118	/chem/MSD6.i/s120209.b/s6l0216	02-DEC-09 16:46
WST03-10-2130	241424002	/chem/MSD6.i/s120209.b/s6l0217	02-DEC-09 17:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-578-1

Instrument ID: MSD6.I **Injection Date/Time:** 09-NOV-09 18:00

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0911.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.7
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.9
442	Greater than 40% of mass 198	77.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL	WBN091106-08	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 18:53
MEGAICAL	WBN091106-07	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 19:31
MEGAICAL	WBN091106-06	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:09
MEGAICAL	WBN091106-05.1	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:46
MEGAICAL	WBN091106-04	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 21:25
MEGAICAL	WBN091106-03	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:01
MEGAICAL	WBN091106-02	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:39
MEGAICAL	WBN091106-01	/chem/MSD6.i/s110909.b/s6k092	09-NOV-09 23:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-578-1

Instrument ID: MSD6.I **Injection Date/Time:** 10-NOV-09 11:07

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0921.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	72.6
442	Greater than 40% of mass 198	76
443	17 - 23% of mass 442	19.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091106-09.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 20:29

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD6.I

GC Column: J&W DB-5MS

Client SDG: 10-578-1

STD Analysis Time: 02-DEC-09 10:08

Data File: s6l0203.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	222113		4.79	909547		6.06	465946		7.93	825539		9.54	702789		12.6	620321		14.9
Upper Limit	444226		5.29	1819094		6.56	931892		8.43	1651078		10.0	1405578		13.1	1240642		15.4
Lower Limit	111057		4.29	454774		5.56	232973		7.43	412770		9.04	351395		12.1	310161		14.4
Sample ID																		
TBLK01	249871		4.79	934540		6.05	504510		7.92	858736		9.54	661689		12.5	503879		14.9
BLK01	240512		4.79	900254		6.05	490744		7.92	823213		9.54	613554		12.5	436716		14.9
BLK01LCS	233217		4.79	903849		6.06	502849		7.92	874679		9.54	685622		12.5	534290		14.9
WST03-10-2131	229375		4.79	844834		6.05	460681		7.92	789963		9.53	632568		12.5	486642		14.9
WST03-10-2131MS	225538		4.79	841485		6.05	455444		7.92	784435		9.54	646881		12.5	512844		14.9
WST03-10-2131MSD	226840		4.79	848203		6.06	464376		7.92	807366		9.54	646296		12.5	491283		14.9
WST03-10-2130	234018		4.79	865565		6.05	469910		7.92	800431		9.54	652028		12.5	501437		14.9

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:16**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0217.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610217.d
Lab Smp Id: 241424002 Client Smp ID: WST03-10-2130
Inj Date : 02-DEC-2009 17:16
Operator : nagl Inst ID: MSD6.i
Smp Info : |241424002|927064|1|SVMF|1|LANL
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.785	4.788	(1.000)	234018	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	865565	40.0000	
* 46 Acenaphthene-d10	164	7.922	7.927	(1.000)	469910	40.0000	
* 67 Phenanthrene-d10	188	9.535	9.540	(1.000)	800431	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	652028	40.0000	
* 98 Perylene-d12	264	14.855	14.863	(1.000)	501437	40.0000	
$ 3 2-Fluorophenol	112	3.636	3.636	(0.760)	253699	43.2909	0.22
$ 5 Phenol-d5	99	4.395	4.406	(0.919)	191389	25.8755	0.13
$ 20 Nitrobenzene-d5	82	5.315	5.320	(0.878)	225083	36.7604	0.18
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	435894	35.9947	0.18
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	120957	88.1907	0.44
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	510768	48.5750	0.24

ION RATIO REPORT

SV REPORT

Data file: s610217.d
Report Date: 12/03/2009 09:10
Lab. ID: 241424002 SampleType: SAMPLE
Injection Date: 02-DEC-2009 17:16
Operator: nagl Instrument: MSD6.i
Sample Info: |241424002|927064|1|SVMF|1|LANL
Miscellaneous Info: |MSDTCLP_LF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	61347	7.92	8.12	80-120	100	(T)
89	367	7.92	8.12	39- 99	1	(QT)
63	584	7.92	8.12	16- 76	1	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s120209.b/s610217.d
Date : 02-DEC-2009 17:16
Client ID: WST03-10-2130
Sample Info: |24142400219270641|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

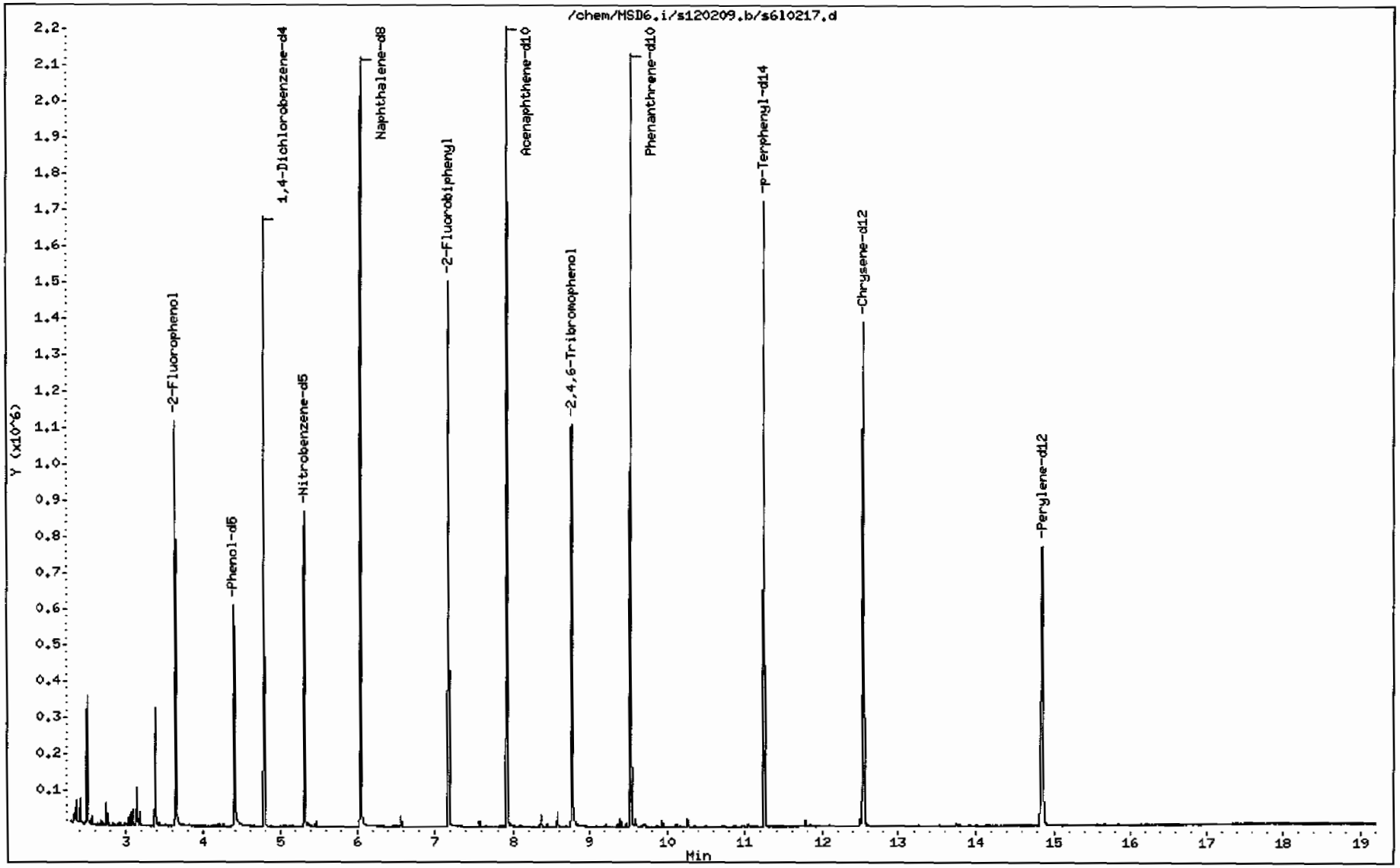

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 15:48**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0214.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610214.d
Lab Smp Id: 241424001 Client Smp ID: WST03-10-2131
Inj Date : 02-DEC-2009 15:48
Operator : nagl Inst ID: MSD6.i
Smp Info : |241424001|927064|1|SVMF|1|LANL
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.785	4.788	(1.000)	229375	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	844834	40.0000	
* 46 Acenaphthene-d10	164	7.922	7.927	(1.000)	460681	40.0000	
* 67 Phenanthrene-d10	188	9.535	9.540	(1.000)	789963	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	632568	40.0000	
* 98 Perylene-d12	264	14.853	14.863	(1.000)	486642	40.0000	
$ 3 2-Fluorophenol	112	3.636	3.636	(0.760)	290862	50.6370	0.25
$ 5 Phenol-d5	99	4.395	4.406	(0.919)	230999	31.8628	0.16
$ 20 Nitrobenzene-d5	82	5.315	5.320	(0.878)	249593	41.7637	0.21
$ 39 2-Fluorobiphenyl	172	7.180	7.183	(0.906)	475094	40.0176	0.20
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	124161	92.3403	0.46
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	517195	50.6994	0.25

ION RATIO REPORT

SV REPORT

Data file: s610214.d
Report Date: 12/02/2009 16:59
Lab. ID: 241424001 SampleType: SAMPLE
Injection Date: 02-DEC-2009 15:48
Operator: nagl Instrument: MSD6.i
Sample Info: |241424001|927064|1|SVMF|1|LANL
Miscellaneous Info: |MSDTCLP_LF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-578-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	59758	7.92	8.12	80-120	100	(T)
89	593	7.92	8.12	39- 99	1	(QT)
63	584	7.92	8.12	16- 76	1	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s120209.b/s610214.d
Date : 02-DEC-2009 15:48
Client ID: WST03-10-2131
Sample Info: |2414240011927064|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

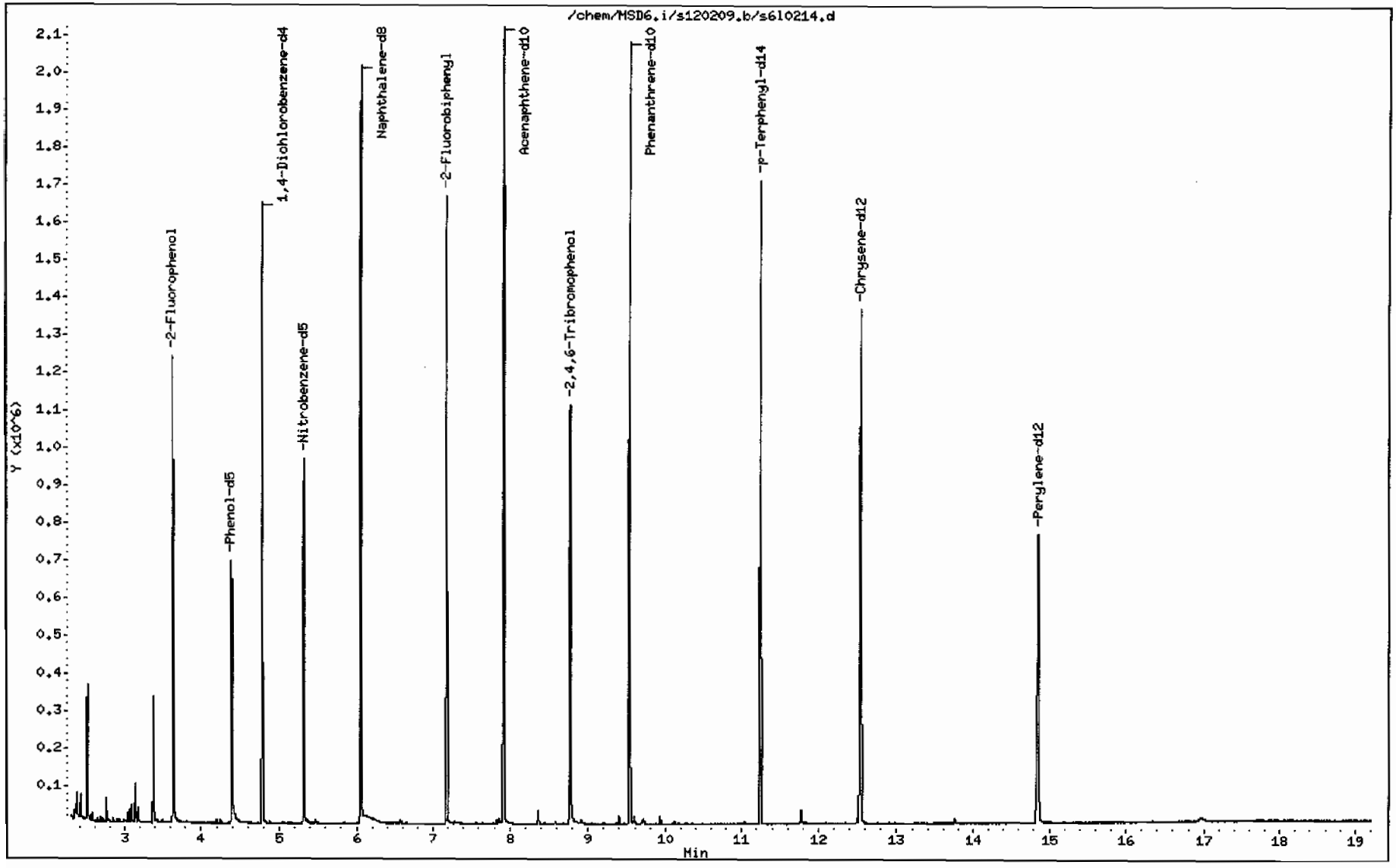

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 02-Dec-2009 16:34

Calibration History

Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Start Cal Date: 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
09-NOV-2009 18:53	MEGA	/chem/MSD6.i/s110909.b/s6k0913.d
Cal Level: 2 , Cal Amount: 10.00000		
11-NOV-2009 01:47	NEV	/chem/MSD6.i/s110909.b/s6k0948.d
10-NOV-2009 22:55	HEX	/chem/MSD6.i/s110909.b/s6k0942.d
10-NOV-2009 16:20	PEST	/chem/MSD6.i/s110909.b/s6k0930.d
10-NOV-2009 11:59	AP12	/chem/MSD6.i/s110909.b/s6k0923.d
09-NOV-2009 19:31	MEGA	/chem/MSD6.i/s110909.b/s6k0914.d
Cal Level: 3 , Cal Amount: 20.00000		
11-NOV-2009 02:16	NEV	/chem/MSD6.i/s110909.b/s6k0949.d
10-NOV-2009 23:24	HEX	/chem/MSD6.i/s110909.b/s6k0943.d
10-NOV-2009 16:56	PEST	/chem/MSD6.i/s110909.b/s6k0931.d
10-NOV-2009 12:36	AP12	/chem/MSD6.i/s110909.b/s6k0924.d
09-NOV-2009 20:09	MEGA	/chem/MSD6.i/s110909.b/s6k0915.d
Cal Level: 4 , Cal Amount: 40.00000		
11-NOV-2009 02:44	NEV	/chem/MSD6.i/s110909.b/s6k0950.d
10-NOV-2009 23:53	HEX	/chem/MSD6.i/s110909.b/s6k0944.d
10-NOV-2009 17:33	PEST	/chem/MSD6.i/s110909.b/s6k0932.d
10-NOV-2009 13:13	AP12	/chem/MSD6.i/s110909.b/s6k0925.d
09-NOV-2009 20:46	MEGA	/chem/MSD6.i/s110909.b/s6k0916.d
Cal Level: 5 , Cal Amount: 50.00000		
11-NOV-2009 03:12	NEV	/chem/MSD6.i/s110909.b/s6k0951.d
11-NOV-2009 00:21	HEX	/chem/MSD6.i/s110909.b/s6k0945.d
10-NOV-2009 18:09	PEST	/chem/MSD6.i/s110909.b/s6k0933.d
10-NOV-2009 13:51	AP12	/chem/MSD6.i/s110909.b/s6k0926.d
09-NOV-2009 21:25	MEGA	/chem/MSD6.i/s110909.b/s6k0917.d
Cal Level: 6 , Cal Amount: 80.00000		
11-NOV-2009 03:41	NEV	/chem/MSD6.i/s110909.b/s6k0952.d
11-NOV-2009 00:50	HEX	/chem/MSD6.i/s110909.b/s6k0946.d
10-NOV-2009 18:45	PEST	/chem/MSD6.i/s110909.b/s6k0934.d
10-NOV-2009 14:30	AP12	/chem/MSD6.i/s110909.b/s6k0927.d
09-NOV-2009 22:01	MEGA	/chem/MSD6.i/s110909.b/s6k0918.d
Cal Level: 7 , Cal Amount: 100.00000		

11-NOV-2009 04:10	NEV	/chem/MSD6.i/s110909.b/s6k0953.d
11-NOV-2009 01:18	HEX	/chem/MSD6.i/s110909.b/s6k0947.d
10-NOV-2009 19:21	PEST	/chem/MSD6.i/s110909.b/s6k0935.d
10-NOV-2009 15:06	AP12	/chem/MSD6.i/s110909.b/s6k0928.d
09-NOV-2009 22:39	MEGA	/chem/MSD6.i/s110909.b/s6k0919.d

Cal Level: 8 , Cal Amount: 120.00000		
11-NOV-2009 04:38	NEV	/chem/MSD6.i/s110909.b/s6k0954.d
10-NOV-2009 19:58	PEST	/chem/MSD6.i/s110909.b/s6k0936.d
10-NOV-2009 15:43	AP12	/chem/MSD6.i/s110909.b/s6k0929.d
09-NOV-2009 23:16	MEGA	/chem/MSD6.i/s110909.b/s6k0920.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
02-DEC-2009 10:58	AP12	/chem/MSD6.i/s120209.b/s610204.d

Ccal Level: 4 , Ccal Amount: 40.0		
02-DEC-2009 10:08	MEGA	/chem/MSD6.i/s120209.b/s610203.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Calibration File Names:
Level 1: /chem/MSD6.i/s110909.b/s6k0913.d
Level 2: /chem/MSD6.i/s110909.b/s6k0948.d
Level 3: /chem/MSD6.i/s110909.b/s6k0949.d
Level 4: /chem/MSD6.i/s110909.b/s6k0950.d
Level 5: /chem/MSD6.i/s110909.b/s6k0951.d
Level 6: /chem/MSD6.i/s110909.b/s6k0952.d
Level 7: /chem/MSD6.i/s110909.b/s6k0953.d
Level 8: /chem/MSD6.i/s110909.b/s6k0954.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.62711	0.72014	0.69994	0.71294	0.67761					
	0.66245	0.66663					AVRG		0.68098		4.78734
2 Pyridine	+++++	0.78506	0.84345	0.94451	0.94132	0.77430					
	0.82190	0.82246					AVRG		0.84757		8.16958
4 Aniline	+++++	0.51792	0.56281	0.52949	0.53182	0.51964					
	0.51849	0.51247					AVRG		0.52752		3.21865
209 Benzaldehyde	+++++	0.94297	0.91161	0.92064	0.86617	0.84259					
	0.79828	0.74667					AVRG		0.86127		8.23824
6 Phenol	+++++	1.29580	1.38609	1.27955	1.27629	1.24279					
	1.20107	1.21677					AVRG		1.27120		4.82676

GEL Laboratories LLC

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Integrator : HP RTE
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Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.93365	0.90056	0.92748	0.85273	0.86174	0.82247					
	0.79075	0.79709					AVRG		0.86081		6.48811
8 2-Chlorophenol	+++++	1.05270	1.10343	1.04994	1.05384	0.99340					
	0.95375	0.94058					AVRG		1.02109		5.85808
203 n-Decane	+++++	1.57696	1.59018	1.40648	1.36249	1.17658					
	+++++	+++++					AVRG		1.42254		11.98709
9 1,3-Dichlorobenzene	+++++	1.22415	1.27608	1.20806	1.21136	1.14335					
	1.08668	1.07881					AVRG		1.17550		6.31837
11 1,4-Dichlorobenzene	+++++	1.27202	1.32037	1.21925	1.20743	1.15141					
	1.09639	1.07447					AVRG		1.19162		7.54222
12 Benzyl alcohol	+++++	0.60900	0.65716	0.63043	0.62465	0.64143					
	0.63021	0.64767					AVRG		0.63436		2.50657
13 1,2-Dichlorobenzene	+++++	1.16666	1.21707	1.13327	1.12016	1.08966					
	1.03460	1.02472					AVRG		1.11231		6.21300
14 bis(2-Chloroisopropyl)ether	+++++	2.07635	2.13325	1.99088	1.97675	1.86028					
	1.72252	1.69272					AVRG		1.92182		8.81925
15 o-Cresol	+++++	0.82992	0.88629	0.84024	0.85639	0.80893					
	0.80386	0.79407					AVRG		0.83139		3.92027

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Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.20921	1.17591	1.21168	1.15285	1.16925					
	1.13524	1.12939					AVRG		1.16908		2.80572
17 N-Nitrosodipropylamine	0.65638	0.74117	0.78851	0.72893	0.73002	0.72328					
	0.70725	0.59369					AVRG		0.70865		8.34285
18 m,p-Cresols	+++++	1.03591	1.12590	1.04958	1.05532	1.04720					
	1.02399	1.03632					AVRG		1.05346		3.18987
19 Hexachloroethane	+++++	0.45806	0.49524	0.47390	0.46960	0.45628					
	0.43995	0.43396					AVRG		0.46100		4.53111
21 Nitrobenzene	+++++	0.31691	0.32516	0.29885	0.29715	0.27038					
	0.24823	0.23966					AVRG		0.28519		11.62250
22 Isophorone	+++++	0.55891	0.57824	0.53268	0.53266	0.49425					
	0.45829	0.38358					AVRG		0.50552		13.23015
23 2-Nitrophenol	+++++	0.13453	0.14214	0.13601	0.13806	0.12888					
	0.12072	0.12047					AVRG		0.13154		6.43934
24 2,4-Dimethylphenol	+++++	0.23987	0.22536	0.21067	0.20421	0.21065					
	0.21868	0.21622					AVRG		0.21795		5.40955
25 bis(2-Chloroethoxy)methane	+++++	0.33208	0.34147	0.30906	0.30442	0.28195					
	0.26036	0.25310					AVRG		0.29749		11.40063

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Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19875	0.21444	0.20921	0.20622	0.19391					
	0.18142	0.17985					AVRG		0.19769		6.80078
27 Benzoic acid	+++++	+++++	0.10585	0.12338	0.14032	0.14157					
	0.15049	0.14556					AVRG		0.13453		12.46641
28 1,2,4-Trichlorobenzene	+++++	0.27809	0.27557	0.25214	0.25046	0.22876					
	0.21050	0.20278					AVRG		0.24261		12.25857
30 Naphthalene	0.93577	0.85146	0.85267	0.76017	0.74029	0.64713					
	+++++	+++++					AVRG		0.79792		12.82401
204 alpha-Terpineol	+++++	0.23577	0.25490	0.22003	0.21987	0.20427					
	0.17723	+++++					AVRG		0.21868		12.15593
31 4-Chloroaniline	+++++	0.26389	0.28196	0.26991	0.26064	0.24995					
	0.23771	0.23114					AVRG		0.25646		7.00922
189 Caprolactam	+++++	0.06766	0.07272	0.08214	0.08102	0.07115					
	0.07075	0.07172					AVRG		0.07388		7.43636
32 Hexachlorobutadiene	+++++	0.14265	0.14557	0.13182	0.13097	0.11864					
	0.10931	0.10542					AVRG		0.12634		12.40746
33 4-Chloro-3-methylphenol	+++++	0.20824	0.22585	0.20971	0.20633	0.19424					
	0.17957	0.17303					AVRG		0.19957		9.25582

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Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.56779	0.53746	0.54769	0.49857	0.47476	0.43707					
	0.39981	0.38884					AVRG		0.48150		14.15789
35 1-Methylnaphthalene	0.55872	0.52838	0.53208	0.48366	0.46920	0.42612					
	0.38935	0.38051					AVRG		0.47100		14.29869
36 Hexachlorocyclopentadiene	+++++	0.13520	0.17775	0.15114	0.16219	0.15378					
	0.18308	0.16783					AVRG		0.16157		10.19735
208 1,1'-Biphenyl	+++++	1.32152	1.23439	1.25731	1.19710	1.16580					
	1.12776	1.10528					AVRG		1.20131		6.32036
205 2,3-Dichloroaniline	+++++	0.51880	0.53286	0.48272	0.49159	0.46096					
	0.42997	0.43664					AVRG		0.47908		8.16477
37 2,4,6-Trichlorophenol	+++++	0.27570	0.29634	0.28058	0.28008	0.26989					
	0.25242	0.25556					AVRG		0.27294		5.58990
38 2,4,5-Trichlorophenol	+++++	0.28031	0.30282	0.29443	0.29832	0.29160					
	0.28523	0.28197					AVRG		0.29067		2.92500
40 2-Chloronaphthalene	0.91208	0.94921	0.97975	0.90835	0.91949	0.87198					
	0.81926	0.82647					AVRG		0.89832		6.24992
42 o-Nitroaniline	+++++	0.28653	0.32807	0.30812	0.31848	0.31056					
	0.29539	0.30412					AVRG		0.30732		4.50651

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Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.19029	0.23187	0.23025	0.23197	0.23511					
	0.22216	0.23314					AVRG		0.22497		7.03906
43 Dimethylphthalate	+++++	1.10253	1.11895	1.05122	1.05401	1.01311					
	0.95493	0.88796					AVRG		1.02610		7.97599
44 2,6-Dinitrotoluene	+++++	0.24859	0.25869	0.24751	0.24771	0.24514					
	0.22903	0.23656					AVRG		0.24475		3.87474
45 Acenaphthylene	1.45077	1.53234	1.59736	1.47314	1.47686	1.41153					
	1.30118	1.31187					AVRG		1.44438		7.03164
47 Acenaphthene	0.97754	0.93463	0.97051	0.90906	0.90733	0.85875					
	0.82122	0.83304					AVRG		0.90151		6.58830
48 2,4-Dinitrophenol	+++++	+++++	15920	45695	60199	121040					
	185455	+++++					LINR	0.36255	0.13077		0.99262
49 Dibenzofuran	+++++	1.31036	1.35172	1.24091	1.23630	1.17505					
	1.09035	1.11352					AVRG		1.21689		7.96140
50 2,4-Dinitrotoluene	+++++	0.28688	0.32526	0.31392	0.31582	0.31468					
	0.30077	0.30301					AVRG		0.30862		4.09740
51 Diethylphthalate	+++++	1.08427	1.13193	1.06273	1.05585	1.00787					
	0.93441	0.95637					AVRG		1.03335		6.84784

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	12277	40572	90802	114423	208122					
	294363	379687					LINR	0.18209	0.20146		0.99664
53 Fluorene	1.06940	1.05468	1.10259	1.00777	1.00699	0.94775					
	0.89677	0.90440					AVRG		0.99879		7.65829
54 4-Chlorophenylphenylether	+++++	0.49941	0.52344	0.48539	0.48490	0.45443					
	0.43029	0.42560					AVRG		0.47192		7.71070
55 2-Methyl-4,6-dinitrophenol	+++++	9251	34357	85168	107219	199515					
	279188	346834					LINR	0.17722	0.10780		0.99957
56 p-Nitroaniline	+++++	18297	49968	114446	144020	267165					
	377942	477974					LINR	0.17663	0.25514		0.99741
133 Diphenylamine	+++++	0.51235	0.51279	0.48995	0.49110	0.46341					
	0.45142	0.45392					AVRG		0.48213		5.41113
58 1,2-Diphenylhydrazine	+++++	0.65288	0.67935	0.62730	0.62752	0.58724					
	0.56393	0.55466					AVRG		0.61327		7.55575
59 Tributylphosphate	+++++	1.19922	1.25332	1.24022	1.27997	1.24188					
	1.19433	1.14050					AVRG		1.22135		3.81011
61 4-Bromophenylphenylether	+++++	0.16321	0.16758	0.15949	0.16092	0.15366					
	0.14977	0.15022					AVRG		0.15784		4.30183

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.17072	0.17525	0.16702	0.16690	0.16190					
	0.15730	0.15822					AVRG		0.16533		3.97990
207 Atrazine	+++++	0.04466	0.04316	0.04336	0.04050	0.04104					
	0.03746	0.03425					AVRG		0.04063		9.04410
65 Pentachlorophenol	+++++	12427	38945	80211	100581	192628					
	259470	326879					LINR	0.13427	0.09964		0.99838
206 n-Octadecane	+++++	0.51627	0.51598	0.45832	0.46068	0.40718					
	0.37377	0.35992					AVRG		0.44173		14.37986
68 Phenanthrene	0.95060	0.88603	0.89746	0.83221	0.81673	0.77346					
	0.73349	0.72773					AVRG		0.82721		9.72714
69 Anthracene	0.87683	0.86194	0.90534	0.83970	0.83829	0.78921					
	0.75133	0.75196					AVRG		0.82682		6.91971
72 Di-n-butylphthalate	+++++	1.00113	1.04654	0.99105	0.98676	0.92173					
	0.85606	0.84350					AVRG		0.94954		8.15043
76 Fluoranthene	0.78392	0.79487	0.87026	0.82674	0.81613	0.77420					
	0.73596	0.73727					AVRG		0.79242		5.73137
77 Benzidine	+++++	0.35813	0.40641	0.39242	0.37729	0.37701					
	0.39765	0.44234					AVRG		0.39304		6.85454

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
79 Pyrene	1.12114	1.31021	1.22539	1.10007	1.11660	1.02083					
	0.96007	0.94734					AVRG		1.10021		11.38295
85 Butylbenzylphthalate	+++++	0.52543	0.54028	0.51608	0.52406	0.49119					
	0.46906	0.45845					AVRG		0.50351		6.16544
89 Benzo(a)anthracene	0.94221	0.85505	0.89830	0.85692	0.85716	0.83423					
	0.82127	0.83891					AVRG		0.86301		4.55256
90 3,3'-Dichlorobenzidine	+++++	0.23529	0.28074	0.29290	0.29384	0.28532					
	0.28779	0.30173					AVRG		0.28252		7.74710
92 Chrysene	0.87195	0.83557	0.87346	0.82487	0.82639	0.80729					
	0.78155	0.79409					AVRG		0.82690		4.03552
93 bis(2-Ethylhexyl)phthalate	7340	107837	270739	551016	645048	1078889					
	1389660	1700943					WLINR	0.01019	0.70092		0.99014
94 Di-n-octylphthalate	+++++	1.19610	1.35485	1.31605	1.35770	1.25055					
	1.27306	1.15060					AVRG		1.27127		6.18607
95 Benzo(b)fluoranthene	0.74161	0.85750	0.94279	0.90432	0.93361	0.89239					
	0.89332	0.91506					AVRG		0.88507		7.19928
96 Benzo(k)fluoranthene	0.73172	0.86857	0.95518	0.92430	0.92244	0.89945					
	0.88010	0.85909					AVRG		0.88011		7.72381

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.54179	0.70605	0.81133	0.81358	0.82559	0.80913					
	0.80179	0.80647					AVRG		0.76447		12.74919
99 Indeno(1,2,3-cd)pyrene	5888	60939	200863	402882	510813	1012558					
	1348903	1889688					LINR	0.07592	0.78768		0.99752
100 Dibenzo(a,h)anthracene	3385	46770	157194	361792	411532	815285					
	1094612	1529825					LINR	0.06768	0.63666		0.99908
101 Benzo(ghi)perylene	0.41694	0.53228	0.60870	0.60962	0.60436	0.63133					
	0.62968	0.63931					AVRG		0.58403		12.88683
102 1,4-Dioxane	+++++	0.37671	0.37043	0.39061	0.37803	0.36375					
	0.35237	0.33052					AVRG		0.36606		5.38827
103 Methyl methacrylate	+++++	0.19626	0.19646	0.20436	0.20625	0.18540					
	0.18964	0.17876					AVRG		0.19388		5.13081
104 Ethyl methacrylate	+++++	0.79650	0.81191	0.84398	0.82898	0.80568					
	0.79571	0.75648					AVRG		0.80561		3.45659
105 2-Picoline	+++++	1.39124	1.31746	1.36987	1.31904	1.28927					
	1.27506	1.19912					AVRG		1.30872		4.85814
106 N-Nitrosomethylethylamine	+++++	0.50512	0.48970	0.52453	0.49928	0.51969					
	0.51463	0.52429					AVRG		0.51104		2.61826

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.56429	0.53321	0.56316	0.50377	0.53102					
	0.50923	0.49498					AVRG		0.52852		5.24900
108 N-Nitrosodiethylamine	+++++	0.50310	0.47987	0.51154	0.48534	0.49862					
	0.49304	0.49722					AVRG		0.49553		2.15019
109 Ethyl Methanesulfonate	+++++	0.65808	0.64977	0.67344	0.62747	0.66045					
	0.64399	0.64860					AVRG		0.65169		2.21442
110 Pentachloroethane	+++++	0.32209	0.31386	0.33094	0.32010	0.31614					
	0.31148	0.30303					AVRG		0.31681		2.78134
111 N-Nitrosopyrrolidine	+++++	0.44182	0.46376	0.50830	0.47779	0.50143					
	0.49385	0.44600					AVRG		0.47614		5.57640
113 N-Nitrosomorpholine	+++++	0.71032	0.67134	0.71256	0.65887	0.68726					
	0.65974	0.65547					AVRG		0.67936		3.58698
114 o-Toluidine	+++++	1.74797	1.65530	1.71709	1.64005	1.64679					
	1.58070	1.58178					AVRG		1.65281		3.79762
115 N-Nitrosopiperidine	+++++	0.13834	0.13623	0.14736	0.13885	0.14290					
	0.13997	0.14373					AVRG		0.14105		2.69891
116 a,a-Dimethylphenethylamine	+++++	0.78770	0.81587	0.88476	0.87463	0.88336					
	0.86623	0.87565					AVRG		0.85546		4.44785

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.14741	0.14492	0.13783	0.14116	0.13439					
	0.12857	0.12370					AVRG		0.13685		6.28357
118 2,6-Dichlorophenol	+++++	0.19682	0.19992	0.21240	0.20960	0.21251					
	0.20568	0.21118					AVRG		0.20687		3.05257
119 Hexachloropropene	+++++	0.08644	0.09499	0.10791	0.10350	0.10830					
	0.10654	0.11112					AVRG		0.10269		8.60612
120 p-Phenylenediamine	+++++	0.19714	0.24091	0.25567	0.24421	0.23168					
	0.22043	0.21678					AVRG		0.22955		8.57933
121 N-Nitrosodi-n-butylamine	+++++	0.22447	0.22501	0.22216	0.21154	0.19839					
	0.19348	0.19524					AVRG		0.21004		6.76180
122 Safrole	+++++	0.18675	0.18585	0.19677	0.19040	0.18675					
	0.17956	0.17958					AVRG		0.18653		3.22597
123 1,2,4,5-Tetrachlorobenzene	+++++	0.45393	0.42422	0.44255	0.41650	0.41676					
	0.40609	0.40229					AVRG		0.42319		4.45863
124 Isosafrole	+++++	0.34011	0.33198	0.35164	0.33779	0.34233					
	0.33627	0.33702					AVRG		0.33959		1.83025
125 1,4-Naphthoquinone	+++++	0.30018	0.32824	0.34894	0.32634	0.29745					
	0.28366	0.26235					AVRG		0.30674		9.65282

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.15441	0.17500	0.17160	0.17355	0.17392					
	0.16754	0.16904					AVRG		0.16929		4.19006
127 Pentachlorobenzene	+++++	0.38426	0.36575	0.37736	0.36552	0.35674					
	0.35182	0.35035					AVRG		0.36454		3.50537
128 1-Naphthylamine	+++++	0.90674	0.92102	0.95184	0.91692	0.90718					
	0.86367	0.88454					AVRG		0.90742		3.07978
129 2-Naphthylamine	+++++	0.96578	1.00999	1.02440	0.99125	0.97953					
	0.93471	0.95520					AVRG		0.98012		3.19024
130 2,3,4,6-Tetrachlorophenol	+++++	0.20640	0.23481	0.21862	0.21374	0.22201					
	0.21460	0.22254					AVRG		0.21896		4.07356
131 5-Nitro-o-toluidine	+++++	0.22084	0.26615	0.28994	0.29013	0.29251					
	0.28841	0.30508					AVRG		0.27901		10.07623
132 Thionazin	+++++	0.16760	0.17396	0.17237	0.17849	0.17822					
	0.16987	0.16398					AVRG		0.17207		3.11896
134 Sulfotepp	+++++	0.08934	0.08802	0.08507	0.08886	0.08655					
	0.08265	0.08005					AVRG		0.08579		4.00843
135 Phorate	+++++	0.38230	0.38968	0.37391	0.38904	0.37359					
	0.35020	0.32660					AVRG		0.36933		6.25438

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	14861	45341	104071	130665	222134					
	265730	408609					LINR	0.09141	0.12978		0.99734
137 Phenacetin	+++++	0.21732	0.25812	0.27209	0.26902	0.27044					
	0.26738	0.28241					AVRG		0.26240		8.05167
138 Diallate	+++++	0.26191	0.24374	0.25182	0.23998	0.23522					
	0.22716	0.22410					AVRG		0.24056		5.55643
139 Dimethoate	+++++	0.18955	0.19806	0.21061	0.22946	0.23158					
	0.22398	0.21950					AVRG		0.21468		7.45885
140 4-Aminobiphenyl	+++++	0.50489	0.50584	0.54599	0.56556	0.56494					
	0.53276	0.52934					AVRG		0.53562		4.66298
141 Pentachloronitrobenzene	+++++	0.06195	0.06081	0.06546	0.06329	0.06151					
	0.06084	0.05959					AVRG		0.06192		3.12402
142 Pronamide	+++++	0.26962	0.26582	0.27431	0.26759	0.26151					
	0.25173	0.25174					AVRG		0.26319		3.31411
143 Dinoseb	+++++	11996	47856	123552	154632	280906					
	375481	479562					LINR	0.15482	0.14736		0.99949
144 Disulfoton	+++++	0.31933	0.32969	0.31920	0.32975	0.31125					
	0.29624	0.27823					AVRG		0.31196		6.02930

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	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.14493	0.15978	0.17270	0.18140	0.18775					
	0.18141	0.17864					AVRG		0.17237		8.70434
146 4-Nitroquinoline-1-oxide	+++++	0.02012	0.03296	0.02700	0.02533	0.02224					
	0.01930	0.01750					AVRG		0.02349		22.76469 <-
147 Methapyrilene	+++++	0.40623	0.42209	0.41103	0.39768	0.37937					
	0.35132	0.33430					AVRG		0.38600		8.45747
148 Isodrin	+++++	0.10136	0.09753	0.10130	0.09757	0.09481					
	0.09122	0.09037					AVRG		0.09631		4.58453
149 Aramite	+++++	0.03841	0.04251	0.04600	0.04566	0.04690					
	0.04564	0.04428					AVRG		0.04420		6.60357
150 Kepone	+++++	0.05674	0.06191	0.06311	0.06098	0.06085					
	0.06194	0.06656					AVRG		0.06173		4.75009
151 p-(Dimethylamino)azobenzene	+++++	0.31224	0.31378	0.33288	0.32474	0.31931					
	0.31446	0.30396					AVRG		0.31734		2.95033
152 Chlorobenzilate	+++++	0.30009	0.27506	0.30295	0.29512	0.29377					
	0.29203	0.28006					AVRG		0.29130		3.50189
153 3,3'-Dimethylbenzidine	+++++	0.49489	0.52397	0.53487	0.52482	0.53397					
	0.53619	0.54473					AVRG		0.52763		3.04743

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	100 Level 7	120 Level 8										
154 Famphur	+++++	0.28850	0.33742	0.33640	0.36516	0.37704						
	0.35655	0.33317					AVRG		0.34203		8.41381	
155 2-Acetylaminofluorene	+++++	23996	98558	217618	290992	478700						
	598627	953419					LINR	0.12414	0.37309		0.99874	
157 7,12Dimethylbenz(a)anthracene	+++++	0.45745	0.44941	0.48919	0.48420	0.49542						
	0.49422	0.48353					AVRG		0.47906		3.80416	
158 3-Methylcholanthrene	+++++	0.29343	0.35502	0.37871	0.37695	0.38953						
	0.38995	0.40328					AVRG		0.36955		9.94080	
26 Phthalic anhydride	+++++	10939	40864	83487	108159	203846						
	306459	+++++					LINR	0.14938	0.09004		0.99590	
173 Carbazole	0.68572	0.63216	0.65059	0.65023	0.64669	0.65901						
	0.65208	0.65947					AVRG		0.65449		2.32370	
174 Hexachlorophene	+++++	0.04700	0.06194	0.06687	0.06701	0.06606						
	+++++	+++++					AVRG		0.06178		13.78238	
179 Dibenzo(a,e)pyrene	+++++	21397	67635	183254	214017	467062						
	+++++	+++++					LINR	0.16800	0.36891		0.99459	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	0.09983	0.11502	0.14598	0.13665	0.14571					
	0.12211	0.12583					AVRG		0.12730		13.25929
191 Parathion	+++++	0.05089	0.05709	0.06102	0.06360	0.06315					
	0.06253	0.06173					AVRG		0.06000		7.60183
192 Methoxychlor	+++++	0.54663	0.59527	0.57022	0.57190	0.55995					
	0.49223	0.53082					AVRG		0.55243		6.05482
210 m-Toluidine	+++++	1.07152	1.09862	1.08267	1.09477	1.19760					
	1.39731	0.92523					AVRG		1.12396		12.87193
211 p-Toluidine	+++++	0.98878	1.01175	0.93629	0.93823	0.84629					
	0.67790	+++++					AVRG		0.89987		13.64283
212 Cis Diallate	+++++	0.25680	0.24216	0.25774	0.25015	0.25647					
	0.24871	0.25860					AVRG		0.25295		2.41779
213 Trans Diallate	+++++	0.30813	0.28675	0.29626	0.28232	0.27673					
	0.26725	0.26364					AVRG		0.28301		5.55643
214 1,4-Dinitrobenzene	+++++	0.15465	0.18602	0.18671	0.19154	0.19074					
	0.18381	0.19324					AVRG		0.18382		7.23195
215 2-Ethoxyethanol	+++++	0.69474	0.75708	0.72314	0.72734	0.69576					
	0.68979	0.68463					AVRG		0.71035		3.71426

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	11622	37526	94270	117296	226774					
	306702	394688					LINR	0.14094	0.14618		0.99920
229 2,2'-Dichlorobenzil	+++++	0.65548	0.70788	0.67278	+++++	0.85557					
	0.79635	+++++					AVRG		0.73761		11.58274
230 4-Chlorothioanisole	+++++	65505	120100	275307	+++++	727615					
	828249	+++++					LINR	0.13623	0.30665		0.99347
231 4-Chlorothiophenol	+++++	14955	49890	195788	+++++	593706					
	683100	+++++					LINR	0.29380	0.27176		0.99219
232 bis(p-Chlorophenyl)sulfone	+++++	0.41911	0.42098	0.38909	+++++	0.48605					
	0.44832	+++++					AVRG		0.43271		8.42306
233 bis(p-Chlorophenyl)disulfide	+++++	0.19644	0.20913	0.18244	+++++	0.22594					
	0.20806	+++++					AVRG		0.20440		7.90920
234 Diphenyl disulfide	+++++	0.20078	0.21401	0.19911	+++++	0.24759					
	0.23595	+++++					AVRG		0.21949		9.81334
235 Diphenyl sulfide	+++++	0.77537	0.76082	0.73538	+++++	0.86393					
	0.82035	+++++					AVRG		0.79117		6.45415
236 Phenyl sulfone	+++++	0.43220	0.43102	0.40994	+++++	0.50304					
	0.47114	+++++					AVRG		0.44947		8.28032

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.14671	0.15531	0.12673	+++++	0.19818						
	0.17963	+++++					AVRG		0.16131		17.36813	<-
238 Phthalic acid	+++++	13646	40994	115933	+++++	343308						
	402020	+++++					LINR	0.25337	0.15547		0.99358	
239 Thiophenol	+++++	41092	104698	327879	+++++	922601						
	1046955	+++++					LINR	0.23456	1.46946		0.99364	
240 bis(Chloromethyl)ether	+++++	1.01755	1.00429	0.94829	+++++	1.10480						
	1.05711	+++++					AVRG		1.02641		5.71407	
241 Octachlorostyrene	+++++	0.06097	0.06109	0.05953	+++++	0.07399						
	0.07072	+++++					AVRG		0.06526		10.12747	
M 225 Trichlorophenols	+++++	0.27800	0.29958	0.28751	0.28920	0.28074						
	0.26883	0.26877					AVRG		0.28180		3.98593	
M 226 Tetrachlorophenols	+++++	0.20640	0.23481	0.21862	0.21374	0.22201						
	0.21460	0.22254					AVRG		0.21896		4.07356	
M 227 Benzo(b,k)fluoranthene	0.73667	0.86303	0.94898	0.91431	0.92802	0.89592						
	0.88671	0.88707					AVRG		0.88259		7.33906	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.98202	1.07204	1.02934	1.03017	0.98830						
	0.95348	0.95648					AVRG		1.00169		4.36295	
$ 5 Phenol-d5	+++++	1.23734	1.34586	1.27212	1.28456	1.26316						
	1.22407	1.22277					AVRG		1.26427		3.41674	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.30745	0.31426	0.29453	0.29315	0.27101						
	0.25359	0.24671					AVRG		0.28296		9.27927	
$ 39 2-Fluorobiphenyl	+++++	1.11512	1.14628	1.04977	1.05601	0.99136						
	0.92488	0.93239					AVRG		1.03083		8.29816	
$ 60 2,4,6-Tribromophenol	+++++	0.10485	0.11685	0.11180	0.11267	0.12310						
	0.12190	0.12607					AVRG		0.11675		6.41378	
$ 81 p-Terphenyl-d14	+++++	0.71309	0.69797	0.64349	0.66522	0.61764						
	0.59401	0.58404					AVRG		0.64507		7.73004	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Cal Date : 02-Dec-2009 11:54 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Report Date: 11-Nov-2009 10:50

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	3 2-Fluorophenol	1.00169	1.03466	1.03466	0.000	3.29147	60.00000	Averaged
$	5 Phenol-d5	1.26427	1.24245	1.24245	0.000	-1.72556	60.00000	Averaged
$	20 Nitrobenzene-d5	0.28296	0.29902	0.29902	0.000	5.67523	60.00000	Averaged
$	39 2-Fluorobiphenyl	1.03083	1.08174	1.08174	0.000	4.93820	60.00000	Averaged
$	60 2,4,6-Tribromophenol	0.11675	0.12945	0.12945	0.000	10.88297	60.00000	Averaged
$	81 p-Terphenyl-d14	0.64507	0.72359	0.72359	0.000	12.17316	60.00000	Averaged
	1 N-Methyl-N-nitrosomethylami	0.68098	0.64081	0.64081	0.000	-5.89855	60.00000	Averaged
	2 Pyridine	0.84757	0.77144	0.77144	0.000	-8.98267	60.00000	Averaged
	4 Aniline	0.52752	0.51930	0.51930	0.000	-1.55765	60.00000	Averaged
	6 Phenol	1.27120	1.23489	1.23489	0.001	-2.85632	20.00000	Averaged ccc
	7 bis(2-Chloroethyl) ether	0.86081	0.80936	0.80936	0.000	-5.97614	60.00000	Averaged
	8 2-Chlorophenol	1.02109	1.01772	1.01772	0.000	-0.32996	60.00000	Averaged
	203 n-Decane	1.42254	1.44155	1.44155	0.000	1.33631	60.00000	Averaged
	9 1,3-Dichlorobenzene	1.17550	1.19665	1.19665	0.000	1.79939	60.00000	Averaged
	11 1,4-Dichlorobenzene	1.19162	1.18877	1.18877	0.001	-0.23932	20.00000	Averaged ccc
	13 1,2-Dichlorobenzene	1.11231	1.12583	1.12583	0.000	1.21558	60.00000	Averaged
	14 bis(2-Chloroisopropyl)ether	1.92182	1.94108	1.94108	0.000	1.00230	60.00000	Averaged
	12 Benzyl alcohol	0.63436	0.65075	0.65075	0.000	2.58272	60.00000	Averaged
	15 o-Cresol	0.83139	0.83798	0.83798	0.000	0.79318	60.00000	Averaged
	18 m,p-Cresols	1.05346	1.05662	1.05662	0.000	0.29972	60.00000	Averaged
	17 N-Nitrosodipropylamine	0.70865	0.69204	0.69204	0.050	-2.34415	60.00000	Averaged spcc
	19 Hexachloroethane	0.46100	0.44650	0.44650	0.000	-3.14409	60.00000	Averaged
	21 Nitrobenzene	0.28519	0.29957	0.29957	0.000	5.04113	60.00000	Averaged
	22 Isophorone	0.50552	0.52435	0.52435	0.000	3.72478	60.00000	Averaged
	23 2-Nitrophenol	0.13154	0.13639	0.13639	0.001	3.68222	20.00000	Averaged ccc
	24 2,4-Dimethylphenol	0.21795	0.23088	0.23088	0.000	5.93159	60.00000	Averaged
	25 bis(2-Chloroethoxy)methane	0.29749	0.30276	0.30276	0.000	1.77222	60.00000	Averaged
	26 2,4-Dichlorophenol	0.19769	0.20590	0.20590	0.001	4.15386	20.00000	Averaged ccc
	27 Benzoic acid	0.13453	0.14567	0.14567	0.000	8.28081	60.00000	Averaged
	28 1,2,4-Trichlorobenzene	0.24261	0.24953	0.24953	0.000	2.85087	60.00000	Averaged
	30 Naphthalene	0.79792	0.83170	0.83170	0.000	4.23406	60.00000	Averaged
	204 alpha-Terpineol	0.21868	0.21801	0.21801	0.000	-0.30655	60.00000	Averaged
	31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51176	60.00000	Averaged
	32 Hexachlorobutadiene	0.12634	0.13489	0.13489	0.001	6.77038	20.00000	Averaged ccc
	33 4-Chloro-3-methylphenol	0.19957	0.20148	0.20148	0.001	0.96147	20.00000	Averaged ccc
	34 2-Methylnaphthalene	0.48150	0.55976	0.55976	0.000	16.25394	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.47100	0.53047	0.53047	0.000	12.62514	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16157	0.12441	0.12441	0.050	-22.99690	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.47908	0.48878	0.48878	0.000	2.02564	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.27294	0.27425	0.27425	0.001	0.48093	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.29067	0.30912	0.30912	0.000	6.34737	60.00000	Averaged	
40 2-Chloronaphthalene	0.89832	0.89821	0.89821	0.000	-0.01212	60.00000	Averaged	
42 o-Nitroaniline	0.30732	0.29883	0.29883	0.000	-2.76487	60.00000	Averaged	
41 m-Nitroaniline	0.22497	0.22544	0.22544	0.000	0.20968	60.00000	Averaged	
43 Dimethylphthalate	1.02610	1.07233	1.07233	0.000	4.50566	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.24475	0.24571	0.24571	0.000	0.39287	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.30862	0.32387	0.32387	0.000	4.94261	60.00000	Averaged	
45 Acenaphthylene	1.44438	1.60997	1.60997	0.000	11.46448	60.00000	Averaged	
47 Acenaphthene	0.90151	0.96315	0.96315	0.001	6.83729	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	35.88405	40.00000	0.06990	0.050	-10.28987	60.00000	Linear	spcc
49 Dibenzofuran	1.21689	1.24464	1.24464	0.000	2.28092	60.00000	Averaged	
51 Diethylphthalate	1.03335	1.08103	1.08103	0.000	4.61479	60.00000	Averaged	
52 4-Nitrophenol	37.16907	40.00000	0.15052	0.050	-7.07733	60.00000	Linear	spcc
53 Fluorene	0.99879	1.09503	1.09503	0.000	9.63571	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.47192	0.49481	0.49481	0.000	4.84948	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	44.79678	40.00000	0.10162	0.000	11.99194	60.00000	Linear	
56 p-Nitroaniline	37.18126	40.00000	0.19210	0.000	-7.04684	60.00000	Linear	
133 Diphenylamine	0.48213	0.48382	0.48382	0.001	0.34977	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.61327	0.61966	0.61966	0.000	1.04277	60.00000	Averaged	
61 4-Bromophenylphenylether	0.15784	0.15705	0.15705	0.000	-0.50023	60.00000	Averaged	
63 Hexachlorobenzene	0.16533	0.16268	0.16268	0.000	-1.60406	60.00000	Averaged	
65 Pentachlorophenol	41.23337	40.00000	0.08933	0.001	3.08343	20.00000	Linear	ccc
206 n-Octadecane	0.44173	0.45929	0.45929	0.000	3.97491	60.00000	Averaged	
68 Phenanthrene	0.82721	0.88585	0.88585	0.000	7.08867	60.00000	Averaged	
69 Anthracene	0.82682	0.90991	0.90991	0.000	10.04830	60.00000	Averaged	
72 Di-n-butylphthalate	0.94954	1.02135	1.02135	0.000	7.56331	60.00000	Averaged	
76 Fluoranthene	0.79242	0.90654	0.90654	0.001	14.40110	20.00000	Averaged	ccc
79 Pyrene	1.10021	1.20816	1.20816	0.000	9.81213	60.00000	Averaged	
85 Butylbenzylphthalate	0.50351	0.54090	0.54090	0.000	7.42706	60.00000	Averaged	
89 Benzo(a)anthracene	0.86301	0.92157	0.92157	0.000	6.78546	60.00000	Averaged	
92 Chrysene	0.82690	0.90169	0.90169	0.000	9.04505	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	41.60196	40.00000	0.72185	0.000	4.00491	60.00000	Wt Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.35676	1.35676	0.001	6.72426	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.99154	0.99154	0.000	12.02912	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	1.01364	1.01364	0.000	15.17242	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.88080	0.88080	0.001	15.21790	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	40.05227	40.00000	0.72891	0.000	0.13069	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	37.95723	40.00000	0.56106	0.000	-5.10692	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.61594	0.61594	0.000	5.46367	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17081	0.17081	0.000	0.89311	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
	143 Dinoseb	37.88463	40.00000	0.11675	0.000	-5.28842	60.00000	Linear	
	173 Carbazole	0.65449	0.70032	0.70032	0.000	7.00193	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.14364	0.14364	0.000	12.83157	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.57593	0.57593	0.000	4.25434	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.90823	0.90823	0.000	0.92871	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.11262	1.11262	0.000	-1.00903	60.00000	Averaged	
	26 Phthalic anhydride	71.32284	40.00000	0.14710	0.000	78.30709	60.00000	Linear	<-
	179 Dibenzo(a,e)pyrene	23.04060	40.00000	0.15052	0.000	-42.39851	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17485	0.17485	0.000	-4.87689	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.75383	0.75383	0.000	6.12038	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.25405	40.00000	0.11920	0.000	-4.36487	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.29168	0.29168	0.000	3.50642	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	1.00259	1.00259	0.000	13.59635	60.00000	Averaged	

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Data file : /chem/MSD6.i/s110909.b/s6k0937.d
Lab Smp Id: WBN091106-09.1 Client Smp ID: MEGAICV
Inj Date : 10-NOV-2009 20:29
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091106-09.1|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 10:50 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	267857	40.0000	
* 29 Naphthalene-d8	136	6.116	6.116	(1.000)	1007489	40.0000	
* 46 Acenaphthene-d10	164	7.986	7.986	(1.000)	511035	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	891521	40.0000	
* 91 Chrysene-d12	240	12.618	12.618	(1.000)	688764	40.0000	
* 98 Perylene-d12	264	14.955	14.955	(1.000)	524055	40.0000	
$ 3 2-Fluorophenol	112	3.646	3.646	(0.754)	277141	40.0000	41.3
$ 5 Phenol-d5	99	4.431	4.431	(0.917)	332800	40.0000	39.3
$ 20 Nitrobenzene-d5	82	5.371	5.371	(0.878)	301256	40.0000	42.3
$ 39 2-Fluorobiphenyl	172	7.242	7.242	(0.907)	552805	40.0000	42.0
$ 60 2,4,6-Tribromophenol	329	8.834	8.834	(1.106)	66156	40.0000	44.4
$ 81 p-Terphenyl-d14	244	11.306	11.306	(0.896)	498384	40.0000	44.9
1 N-Methyl-N-nitrosomethylamine	74	2.663	2.663	(0.551)	171645	40.0000	37.6
2 Pyridine	79	2.701	2.701	(0.559)	206635	40.0000	36.4
4 Aniline	66	4.518	4.518	(0.935)	139099	40.0000	39.4
6 Phenol	94	4.444	4.444	(0.919)	330773	40.0000	38.8
7 bis(2-Chloroethyl) ether	63	4.559	4.559	(0.943)	216794	40.0000	37.6
8 2-Chlorophenol	128	4.633	4.633	(0.958)	272604	40.0000	39.9
203 n-Decane	43	4.643	4.643	(0.960)	386128	40.0000	40.5
9 1,3-Dichlorobenzene	146	4.783	4.783	(0.989)	320531	40.0000	40.7
11 1,4-Dichlorobenzene	146	4.852	4.852	(1.004)	318420	40.0000	39.9
13 1,2-Dichlorobenzene	146	5.002	5.002	(1.035)	301561	40.0000	40.5
14 bis(2-Chloroisopropyl)ether	45	5.068	5.068	(1.048)	519933	40.0000	40.4
12 Benzyl alcohol	108	4.941	4.941	(1.022)	174307	40.0000	41.0
15 o-Cresol	107	5.025	5.025	(1.040)	224459	40.0000	40.3
18 m,p-Cresols	107	5.180	5.180	(1.072)	283022	40.0000	40.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.206	5.206	(1.077)	185368	40.0000	39.1
19 Hexachloroethane	117	5.338	5.338	(1.104)	119599	40.0000	38.7
21 Nitrobenzene	77	5.392	5.392	(0.882)	301811	40.0000	42.0
22 Isophorone	82	5.626	5.626	(0.920)	528272	40.0000	41.5
23 2-Nitrophenol	139	5.708	5.708	(0.933)	137410	40.0000	41.5
24 2,4-Dimethylphenol	122	5.718	5.718	(0.935)	232609	40.0000	42.4
25 bis(2-Chloroethoxy)methane	93	5.825	5.825	(0.952)	305032	40.0000	40.7
26 2,4-Dichlorophenol	162	5.950	5.950	(0.973)	207439	40.0000	41.7
27 Benzoic acid	105	5.812	5.812	(0.950)	146760	40.0000	43.3(H)
28 1,2,4-Trichlorobenzene	180	6.047	6.047	(0.989)	251400	40.0000	41.1
30 Naphthalene	128	6.138	6.138	(1.004)	837929	40.0000	41.7
204 alpha-Terpineol	59	6.123	6.123	(1.001)	219641	40.0000	39.9
31 4-Chloroaniline	127	6.172	6.172	(1.009)	267452	40.0000	41.4
32 Hexachlorobutadiene	225	6.251	6.251	(1.022)	135904	40.0000	42.7
33 4-Chloro-3-methylphenol	107	6.653	6.653	(1.088)	202993	40.0000	40.4
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	563953	40.0000	46.5
35 1-Methylnaphthalene	142	6.969	6.969	(1.140)	534441	40.0000	45.0
36 Hexachlorocyclopentadiene	237	7.020	7.020	(0.879)	63579	40.0000	30.8
205 2,3-Dichloroaniline	161	7.155	7.155	(0.896)	249785	40.0000	40.8
37 2,4,6-Trichlorophenol	196	7.147	7.147	(0.895)	140152	40.0000	40.2
38 2,4,5-Trichlorophenol	196	7.183	7.183	(0.899)	157970	40.0000	42.5
40 2-Chloronaphthalene	162	7.384	7.384	(0.925)	459019	40.0000	40.0
42 o-Nitroaniline	65	7.479	7.479	(0.936)	152711	40.0000	38.9
41 m-Nitroaniline	138	7.922	7.922	(0.992)	115209	40.0000	40.1
43 Dimethylphthalate	163	7.670	7.670	(0.960)	548000	40.0000	41.8
44 2,6-Dinitrotoluene	165	7.739	7.739	(0.969)	125566	40.0000	40.2
50 2,4-Dinitrotoluene	165	8.172	8.172	(1.023)	165511	40.0000	42.0
45 Acenaphthylene	152	7.835	7.835	(0.981)	822752	40.0000	44.6
47 Acenaphthene	154	8.024	8.024	(1.005)	492203	40.0000	42.7
48 2,4-Dinitrophenol	184	8.029	8.029	(1.005)	35722	40.0000	35.9
49 Dibenzofuran	168	8.205	8.205	(1.027)	636057	40.0000	40.9
51 Diethylphthalate	149	8.424	8.424	(1.055)	552446	40.0000	41.8
52 4-Nitrophenol	139	8.070	8.070	(1.011)	76920	40.0000	37.2
53 Fluorene	166	8.577	8.577	(1.074)	559601	40.0000	43.8
54 4-Chlorophenylphenylether	204	8.564	8.564	(1.072)	252864	40.0000	41.9
55 2-Methyl-4,6-dinitrophenol	198	8.613	8.613	(0.897)	90597	40.0000	44.8
56 p-Nitroaniline	138	8.582	8.582	(1.075)	98168	40.0000	37.2
133 Diphenylamine	169	8.689	8.689	(0.905)	431336	40.0000	40.1
58 1,2-Diphenylhydrazine	77	8.738	8.738	(0.910)	552443	40.0000	40.4
61 4-Bromophenylphenylether	248	9.094	9.094	(0.947)	140012	40.0000	39.8
63 Hexachlorobenzene	284	9.173	9.173	(0.956)	145031	40.0000	39.4
65 Pentachlorophenol	266	9.375	9.375	(0.977)	79644	40.0000	41.2
206 n-Octadecane	57	9.431	9.431	(0.982)	409467	40.0000	41.6
68 Phenanthrene	178	9.624	9.624	(1.003)	789756	40.0000	42.8
69 Anthracene	178	9.680	9.680	(1.008)	811200	40.0000	44.0
72 Di-n-butylphthalate	149	10.190	10.190	(1.062)	910557	40.0000	43.0
76 Fluoranthene	202	10.914	10.914	(1.137)	808196	40.0000	45.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	11.166	11.166	(0.885)	832137	40.0000	43.9
85 Butylbenzylphthalate	149	11.841	11.841	(0.938)	372553	40.0000	43.0
89 Benzo(a)anthracene	228	12.598	12.598	(0.998)	634741	40.0000	42.7
92 Chrysene	228	12.654	12.654	(1.003)	621053	40.0000	43.6
93 bis(2-Ethylhexyl)phthalate	149	12.570	12.570	(0.996)	497186	40.0000	41.6
94 Di-n-octylphthalate	149	13.561	13.561	(0.907)	711015	40.0000	42.7
95 Benzo(b)fluoranthene	252	14.275	14.275	(0.954)	519622	40.0000	44.8
96 Benzo(k)fluoranthene	252	14.326	14.326	(0.958)	531203	40.0000	46.1
97 Benzo(a)pyrene	252	14.853	14.853	(0.993)	461589	40.0000	46.1
99 Indeno(1,2,3-cd)pyrene	276	16.945	16.945	(1.133)	381990	40.0000	40.0
100 Dibenzo(a,h)anthracene	278	16.978	16.978	(1.135)	294025	40.0000	38.0
101 Benzo(ghi)perylene	276	17.460	17.460	(1.167)	322785	40.0000	42.2
126 m-Dinitrobenzene	168	7.708	7.708	(0.965)	87288	40.0000	40.4
130 2,3,4,6-Tetrachlorophenol	232	8.325	8.325	(1.042)	119161	40.0000	42.6
143 Dinoseb	211	9.561	9.561	(0.996)	104085	40.0000	37.9
173 Carbazole	167	9.841	9.841	(1.025)	624352	40.0000	42.8
184 p-Benzoquinone	54	4.085	4.085	(0.845)	38475	40.0000	45.1
192 Methoxychlor	227	12.468	12.468	(0.988)	396683	40.0000	41.7
211 p-Toluidine	106	5.252	5.252	(1.086)	243276	40.0000	40.4
210 m-Toluidine	106	5.285	5.285	(1.093)	298023	40.0000	39.6
26 Phthalic anhydride	104	6.911	6.911	(1.130)	148201	40.0000	71.3
179 Dibenzo(a,e)pyrene	302	21.182	21.182	(1.416)	78881	40.0000	23.0
214 1,4-Dinitrobenzene	75	7.624	7.624	(0.955)	89355	40.0000	38.0
215 2-Ethoxyethanol	59	2.454	2.454	(0.508)	201919	40.0000	42.4
216 Methylenebis(2-chloroaniline)	231	12.539	12.539	(0.994)	82098	40.0000	38.2
M 225 Trichlorophenols	196				298122	80.0000	82.8
M 226 Tetrachlorophenols	232				119161	40.0000	42.6
M 227 Benzo(b,k)fluoranthene	252				1050825	80.0000	90.9

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Date : 10-NOV-2009 20:29
Client ID: HEGAICV
Sample Info: IWBNC91106-09,1:40 PPMI1:SVMFI1:HEGAICV

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: JHB3
Column diameter: 0.20

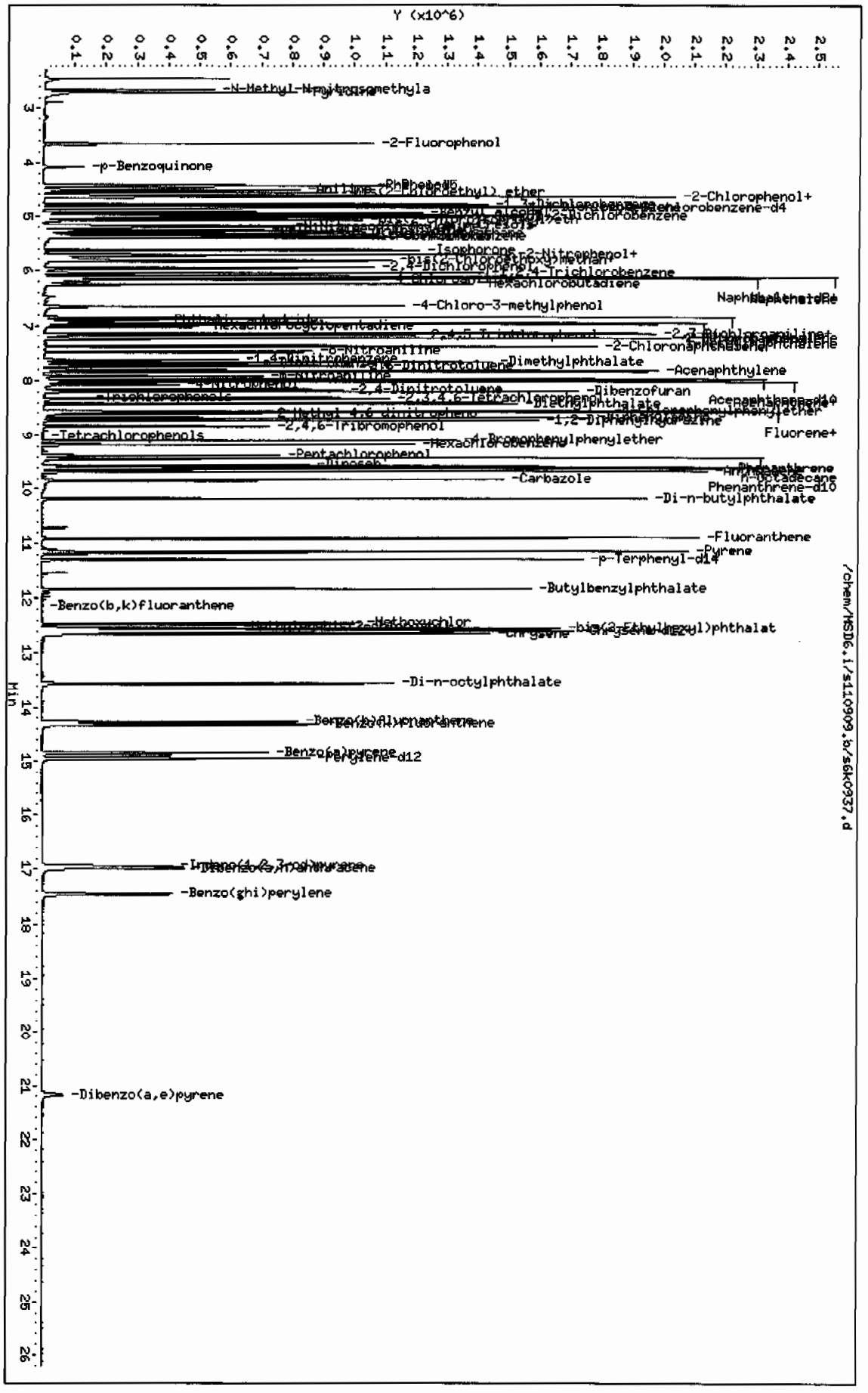

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 02-DEC-2009 10:08
Lab File ID: s610203.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.00169	1.06108	1.06108	0.000	5.92913	60.00000	Averaged
$ 5 Phenol-d5	1.26427	1.41611	1.41611	0.000	12.00996	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28296	0.28738	0.28738	0.000	1.56404	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.03083	1.08004	1.08004	0.000	4.77381	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11675	0.13820	0.13820	0.000	18.37577	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.64507	0.65640	0.65640	0.000	1.75741	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.70636	0.70636	0.000	3.72709	60.00000	Averaged
2 Pyridine	0.84757	0.84549	0.84549	0.000	-0.24532	60.00000	Averaged
4 Aniline	0.52752	0.54563	0.54563	0.000	3.43343	60.00000	Averaged
6 Phenol	1.27120	1.39658	1.39658	0.001	9.86327	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.86555	0.86555	0.000	0.55043	60.00000	Averaged
8 2-Chlorophenol	1.02109	1.09997	1.09997	0.000	7.72466	60.00000	Averaged
203 n-Decane	1.42254	1.32221	1.32221	0.000	-7.05262	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.28400	1.28400	0.000	9.23065	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.28818	1.28818	0.001	8.10302	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.22732	1.22732	0.000	10.34012	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.97771	1.97771	0.000	2.90829	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.13511	0.13511	0.000	-78.70124	60.00000	Averaged <-
15 o-Cresol	0.83139	0.96235	0.96235	0.000	15.75220	60.00000	Averaged
18 m,p-Cresols	1.05346	1.17465	1.17465	0.000	11.50456	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.77869	0.77869	0.050	9.88304	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.48353	0.48353	0.000	4.88751	60.00000	Averaged
21 Nitrobenzene	0.28519	0.28639	0.28639	0.000	0.41969	60.00000	Averaged
22 Isophorone	0.50552	0.54231	0.54231	0.000	7.27867	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.15083	0.15083	0.001	14.65889	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.21900	0.21900	0.000	0.48198	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.31757	0.31757	0.000	6.74827	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.21922	0.21922	0.001	10.89228	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.14756	0.14756	0.000	9.68987	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.26250	0.26250	0.000	8.19442	60.00000	Averaged
30 Naphthalene	0.79792	0.77167	0.77167	0.000	-3.28963	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.23956	0.23956	0.000	9.54680	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51093	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.13163	0.13163	0.001	4.18560	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.23498	0.23498	0.001	17.74627	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.52762	0.52762	0.000	9.57894	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 02-DEC-2009 10:08
Lab File ID: s610203.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35	1-Methylnaphthalene	0.47100	0.51136	0.51136	0.000	8.56821	60.00000	Averaged
36	Hexachlorocyclopentadiene	0.16157	0.20559	0.20559	0.050	27.24975	60.00000	Averaged spcc
205	2,3-Dichloroaniline	0.47908	0.49953	0.49953	0.000	4.26989	60.00000	Averaged
37	2,4,6-Trichlorophenol	0.27294	0.28777	0.28777	0.001	5.43373	20.00000	Averaged ccc
38	2,4,5-Trichlorophenol	0.29067	0.32519	0.32519	0.000	11.87753	60.00000	Averaged
40	2-Chloronaphthalene	0.89832	0.95464	0.95464	0.000	6.26917	60.00000	Averaged
42	o-Nitroaniline	0.30732	0.30223	0.30223	0.000	-1.65604	60.00000	Averaged
41	m-Nitroaniline	0.22497	0.23391	0.23391	0.000	3.97215	60.00000	Averaged
43	Dimethylphthalate	1.02610	1.08668	1.08668	0.000	5.90335	60.00000	Averaged
44	2,6-Dinitrotoluene	0.24475	0.25874	0.25874	0.000	5.71629	60.00000	Averaged
50	2,4-Dinitrotoluene	0.30862	0.33057	0.33057	0.000	7.11379	60.00000	Averaged
45	Acenaphthylene	1.44438	1.54363	1.54363	0.000	6.87104	60.00000	Averaged
47	Acenaphthene	0.90151	0.92574	0.92574	0.001	2.68818	20.00000	Averaged ccc
48	2,4-Dinitrophenol	52.18576	40.00000	0.12319	0.050	30.46441	60.00000	Linear spcc
49	Dibenzofuran	1.21689	1.30097	1.30097	0.000	6.90995	60.00000	Averaged
51	Diethylphthalate	1.03335	1.08750	1.08750	0.000	5.24092	60.00000	Averaged
52	4-Nitrophenol	45.56272	40.00000	0.19279	0.050	13.90681	60.00000	Linear spcc
53	Fluorene	0.99879	1.07170	1.07170	0.000	7.29979	60.00000	Averaged
54	4-Chlorophenylphenylether	0.47192	0.52527	0.52527	0.000	11.30515	60.00000	Averaged
55	2-Methyl-4,6-dinitrophenol	44.28532	40.00000	0.10024	0.000	10.71331	60.00000	Linear
56	p-Nitroaniline	40.62783	40.00000	0.21408	0.000	1.56958	60.00000	Linear
133	Diphenylamine	0.48213	0.50735	0.50735	0.001	5.23103	20.00000	Averaged ccc
58	1,2-Diphenylhydrazine	0.61327	0.61678	0.61678	0.000	0.57181	60.00000	Averaged
61	4-Bromophenylphenylether	0.15784	0.17032	0.17032	0.000	7.91055	60.00000	Averaged
63	Hexachlorobenzene	0.16533	0.17644	0.17644	0.000	6.71899	60.00000	Averaged
65	Pentachlorophenol	41.74129	40.00000	0.09060	0.001	4.35322	20.00000	Linear ccc
206	n-Octadecane	0.44173	0.46852	0.46852	0.000	6.06473	60.00000	Averaged
68	Phenanthrene	0.82721	0.85240	0.85240	0.000	3.04462	60.00000	Averaged
69	Anthracene	0.82682	0.86617	0.86617	0.000	4.75839	60.00000	Averaged
72	Di-n-butylphthalate	0.94954	1.03888	1.03888	0.000	9.40886	60.00000	Averaged
76	Fluoranthene	0.79242	0.86589	0.86589	0.001	9.27234	20.00000	Averaged ccc
79	Pyrene	1.10021	1.07300	1.07300	0.000	-2.47304	60.00000	Averaged
85	Butylbenzylphthalate	0.50351	0.52499	0.52499	0.000	4.26757	60.00000	Averaged
89	Benzo(a)anthracene	0.86301	0.90649	0.90649	0.000	5.03859	60.00000	Averaged
92	Chrysene	0.82690	0.86715	0.86715	0.000	4.86750	60.00000	Averaged
93	bis(2-Ethylhexyl)phthalate	43.08219	40.00000	0.74779	0.000	7.70547	60.00000	Wt Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 02-DEC-2009 10:08
Lab File ID: s610203.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.40728	1.40728	0.001	10.69834	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.94247	0.94247	0.000	6.48468	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	0.93614	0.93614	0.000	6.36719	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.85825	0.85825	0.001	12.26811	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	43.44918	40.00000	0.79580	0.000	8.62296	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	43.95827	40.00000	0.65657	0.000	9.89569	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.65673	0.65673	0.000	12.44856	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.18706	0.18706	0.000	10.49414	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.24795	0.24795	0.000	13.23830	60.00000	Averaged	
	143 Dinoseb	45.01616	40.00000	0.14302	0.000	12.54039	60.00000	Linear	
	173 Carbazole	0.65449	0.65354	0.65354	0.000	-0.14531	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.03539	0.03539	0.000	-72.20264	60.00000	Averaged	<-
	192 Methoxychlor	0.55243	0.58487	0.58487	0.000	5.87124	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.94552	0.94552	0.000	5.07288	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.15363	1.15363	0.000	2.64001	60.00000	Averaged	
	26 Phthalic anhydride	32.49883	40.00000	0.05971	0.000	-18.75291	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.18581	0.18581	0.000	1.08338	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.51480	0.51480	0.000	-27.52904	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	40.96370	40.00000	0.12910	0.000	2.40925	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.30648	0.30648	0.000	8.75698	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.24795	0.24795	0.000	13.23830	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	0.93931	0.93931	0.000	6.42610	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610203.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 02-DEC-2009 10:08
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	222113	40.0000	
* 29 Naphthalene-d8	136	6.059	6.059	(1.000)	909547	40.0000	
* 46 Acenaphthene-d10	164	7.927	7.927	(1.000)	465946	40.0000	
* 67 Phenanthrene-d10	188	9.540	9.540	(1.000)	825539	40.0000	
* 91 Chrysene-d12	240	12.549	12.549	(1.000)	702789	40.0000	
* 98 Perylene-d12	264	14.863	14.863	(1.000)	620321	40.0000	
$ 3 2-Fluorophenol	112	3.636	3.636	(0.759)	235680	40.0000	42.4
$ 5 Phenol-d5	99	4.406	4.406	(0.920)	314536	40.0000	44.8
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.878)	261389	40.0000	40.6
$ 39 2-Fluorobiphenyl	172	7.183	7.183	(0.906)	503241	40.0000	41.9
$ 60 2,4,6-Tribromophenol	329	8.778	8.778	(1.107)	64395	40.0000	47.4
$ 81 p-Terphenyl-d14	244	11.250	11.250	(0.896)	461313	40.0000	40.7
1 N-Methyl-N-nitrosomethylamine	74	2.691	2.691	(0.562)	156891	40.0000	41.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.734	2.734	(0.571)	187795	40.0000	39.9
4 Aniline	66	4.477	4.477	(0.935)	121192	40.0000	41.4
6 Phenol	94	4.418	4.418	(0.923)	310198	40.0000	43.9
7 bis(2-Chloroethyl) ether	63	4.515	4.515	(0.943)	192249	40.0000	40.2
8 2-Chlorophenol	128	4.592	4.592	(0.959)	244317	40.0000	43.1
203 n-Decane	43	4.597	4.597	(0.960)	293680	40.0000	37.2
9 1,3-Dichlorobenzene	146	4.737	4.737	(0.989)	285194	40.0000	43.7
11 1,4-Dichlorobenzene	146	4.803	4.803	(1.003)	286121	40.0000	43.2
13 1,2-Dichlorobenzene	146	4.951	4.951	(1.034)	272604	40.0000	44.1
14 bis(2-Chloroisopropyl)ether	45	5.017	5.017	(1.048)	439276	40.0000	41.2
12 Benzyl alcohol	108	4.900	4.900	(1.023)	30010	40.0000	8.5
15 o-Cresol	107	4.987	4.987	(1.042)	213750	40.0000	46.3
18 m,p-Cresols	107	5.140	5.140	(1.073)	260906	40.0000	44.6
17 N-Nitrosodipropylamine	70	5.157	5.157	(1.077)	172957	40.0000	44.0
19 Hexachloroethane	117	5.282	5.282	(1.103)	107398	40.0000	42.0
21 Nitrobenzene	77	5.341	5.341	(0.881)	260483	40.0000	40.2
22 Isophorone	82	5.578	5.578	(0.921)	493257	40.0000	42.9
23 2-Nitrophenol	139	5.657	5.657	(0.934)	137185	40.0000	45.9
24 2,4-Dimethylphenol	122	5.675	5.675	(0.936)	199193	40.0000	40.2
25 bis(2-Chloroethoxy)methane	93	5.771	5.771	(0.952)	288843	40.0000	42.7
26 2,4-Dichlorophenol	162	5.904	5.904	(0.974)	199389	40.0000	44.4
27 Benzoic acid	105	5.779	5.779	(0.954)	134217	40.0000	43.9
28 1,2,4-Trichlorobenzene	180	5.991	5.991	(0.989)	238752	40.0000	43.3
30 Naphthalene	128	6.082	6.082	(1.004)	701868	40.0000	38.7
204 alpha-Terpineol	59	6.072	6.072	(1.002)	217887	40.0000	43.8
31 4-Chloroaniline	127	6.121	6.121	(1.010)	241450	40.0000	41.4
32 Hexachlorobutadiene	225	6.189	6.189	(1.021)	119722	40.0000	41.7
33 4-Chloro-3-methylphenol	107	6.612	6.612	(1.091)	213726	40.0000	47.1
34 2-Methylnaphthalene	142	6.803	6.803	(1.123)	479896	40.0000	43.8
35 1-Methylnaphthalene	142	6.910	6.910	(1.140)	465106	40.0000	43.4
36 Hexachlorocyclopentadiene	237	6.961	6.961	(0.878)	95796	40.0000	50.9
205 2,3-Dichloroaniline	161	7.099	7.099	(0.896)	232756	40.0000	41.7
37 2,4,6-Trichlorophenol	196	7.094	7.094	(0.895)	134085	40.0000	42.2
38 2,4,5-Trichlorophenol	196	7.137	7.137	(0.900)	151522	40.0000	44.8
40 2-Chloronaphthalene	162	7.326	7.326	(0.924)	444811	40.0000	42.5
42 o-Nitroaniline	65	7.428	7.428	(0.937)	140825	40.0000	39.3
41 m-Nitroaniline	138	7.874	7.874	(0.993)	108988	40.0000	41.6
43 Dimethylphthalate	163	7.616	7.616	(0.961)	506332	40.0000	42.4
44 2,6-Dinitrotoluene	165	7.685	7.685	(0.969)	120558	40.0000	42.3
50 2,4-Dinitrotoluene	165	8.123	8.123	(1.025)	154030	40.0000	42.8
45 Acenaphthylene	152	7.777	7.777	(0.981)	719246	40.0000	42.7
47 Acenaphthene	154	7.963	7.963	(1.004)	431347	40.0000	41.1
48 2,4-Dinitrophenol	184	7.983	7.983	(1.007)	57402	40.0000	52.2
49 Dibenzofuran	168	8.146	8.146	(1.028)	606184	40.0000	42.8
51 Diethylphthalate	149	8.368	8.368	(1.056)	506718	40.0000	42.1
52 4-Nitrophenol	139	8.047	8.047	(1.015)	89831	40.0000	45.6
53 Fluorene	166	8.518	8.518	(1.075)	499356	40.0000	42.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.503	8.503	(1.073)	244749	40.0000	44.5
55 2-Methyl-4,6-dinitrophenol	198	8.564	8.564	(0.898)	82754	40.0000	44.3
56 p-Nitroaniline	138	8.534	8.534	(1.077)	99750	40.0000	40.6
133 Diphenylamine	169	8.633	8.633	(0.905)	418841	40.0000	42.1
58 1,2-Diphenylhydrazine	77	8.679	8.679	(0.910)	509172	40.0000	40.2
61 4-Bromophenylphenylether	248	9.036	9.036	(0.947)	140609	40.0000	43.2
63 Hexachlorobenzene	284	9.112	9.112	(0.955)	145657	40.0000	42.7
65 Pentachlorophenol	266	9.321	9.321	(0.977)	74794	40.0000	41.7
206 n-Octadecane	57	9.372	9.372	(0.982)	386783	40.0000	42.4
68 Phenanthrene	178	9.566	9.566	(1.003)	703689	40.0000	41.2
69 Anthracene	178	9.622	9.622	(1.009)	715055	40.0000	41.9
72 Di-n-butylphthalate	149	10.131	10.131	(1.062)	857633	40.0000	43.8
76 Fluoranthene	202	10.855	10.855	(1.138)	714830	40.0000	43.7
79 Pyrene	202	11.107	11.107	(0.885)	754091	40.0000	39.0
85 Butylbenzylphthalate	149	11.780	11.780	(0.939)	368959	40.0000	41.7
89 Benzo(a)anthracene	228	12.529	12.529	(0.998)	637071	40.0000	42.0
92 Chrysene	228	12.585	12.585	(1.003)	609422	40.0000	41.9
93 bis(2-Ethylhexyl)phthalate	149	12.498	12.498	(0.996)	525539	40.0000	43.1
94 Di-n-octylphthalate	149	13.477	13.477	(0.907)	872964	40.0000	44.3
95 Benzo(b)fluoranthene	252	14.190	14.190	(0.955)	584633	40.0000	42.6
96 Benzo(k)fluoranthene	252	14.239	14.239	(0.958)	580710	40.0000	42.5
97 Benzo(a)pyrene	252	14.761	14.761	(0.993)	532392	40.0000	44.9
99 Indeno(1,2,3-cd)pyrene	276	16.843	16.843	(1.133)	493654	40.0000	43.4
100 Dibenzo(a,h)anthracene	278	16.874	16.874	(1.135)	407286	40.0000	44.0
101 Benzo(ghi)perylene	276	17.353	17.353	(1.167)	407384	40.0000	45.0
126 m-Dinitrobenzene	168	7.662	7.662	(0.967)	87160	40.0000	44.2
130 2,3,4,6-Tetrachlorophenol	232	8.271	8.271	(1.043)	115529	40.0000	45.3
143 Dinoseb	211	9.504	9.504	(0.996)	118070	40.0000	45.0
173 Carbazole	167	9.785	9.785	(1.026)	539526	40.0000	39.9
184 p-Benzoquinone	54	4.054	4.054	(0.847)	7860	40.0000	11.1
192 Methoxychlor	227	12.402	12.402	(0.988)	411038	40.0000	42.3
211 p-Toluidine	106	5.203	5.203	(1.087)	210013	40.0000	42.0
210 m-Toluidine	106	5.239	5.239	(1.094)	256237	40.0000	41.0
26 Phthalic anhydride	104	6.862	6.862	(1.132)	54305	40.0000	32.5
214 1,4-Dinitrobenzene	75	7.576	7.576	(0.956)	86576	40.0000	40.4
215 2-Ethoxyethanol	59	2.495	2.495	(0.521)	114344	40.0000	29.0
216 Methylenebis(2-chloroaniline)	231	12.476	12.476	(0.994)	90729	40.0000	41.0(Q)
M 225 Trichlorophenols	196				285607	80.0000	87.0
M 226 Tetrachlorophenols	232				115529	40.0000	45.3
M 227 Benzo(b,k)fluoranthene	252				1165343	80.0000	85.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120209.b/s610203.d
Date : 02-DEC-2009 10:08
Client ID: MEGACVS
Sample Info: IWBN091106-05,3140 PPM11SVMF11MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

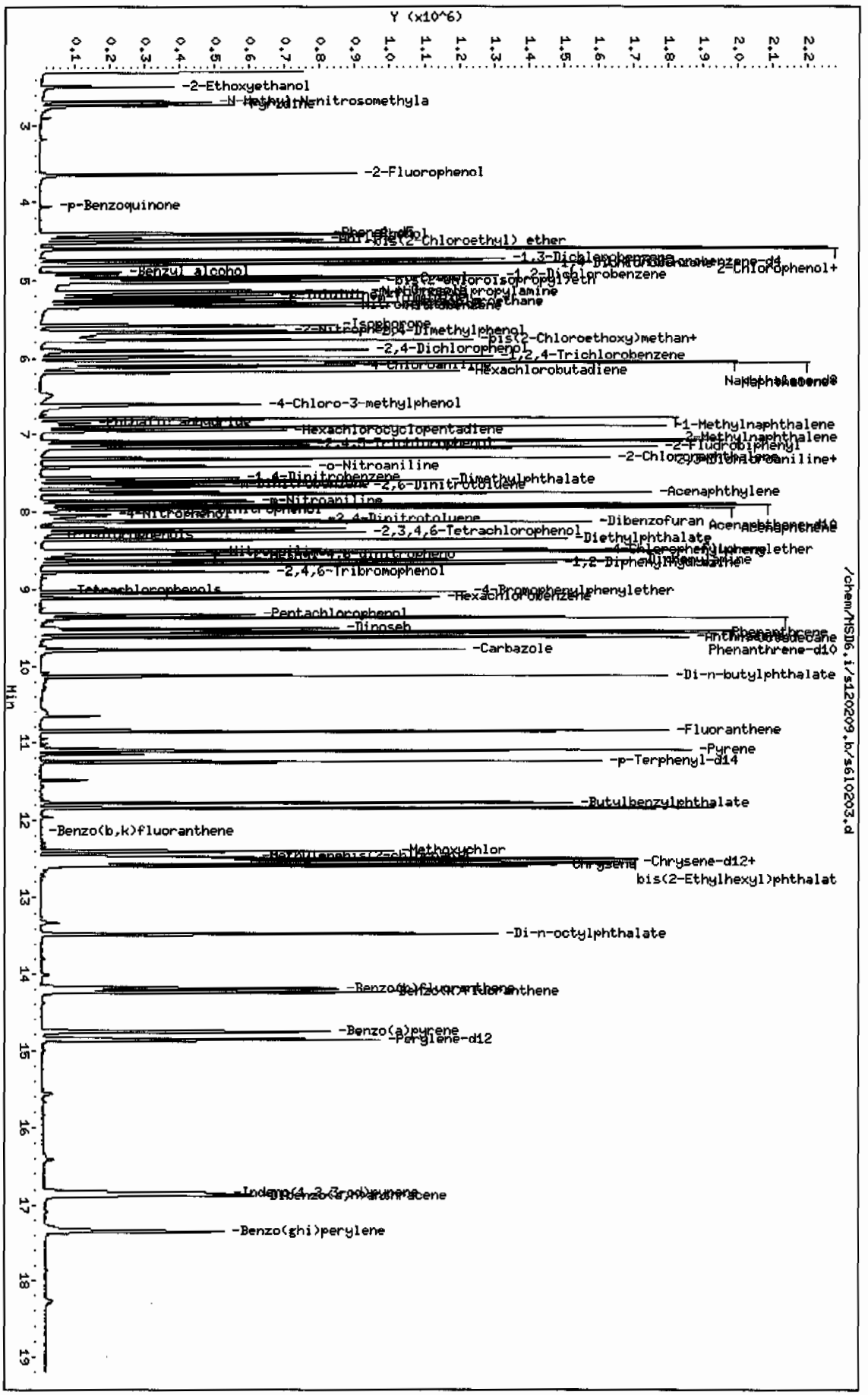

Page 1

QC Data

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Page 1

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

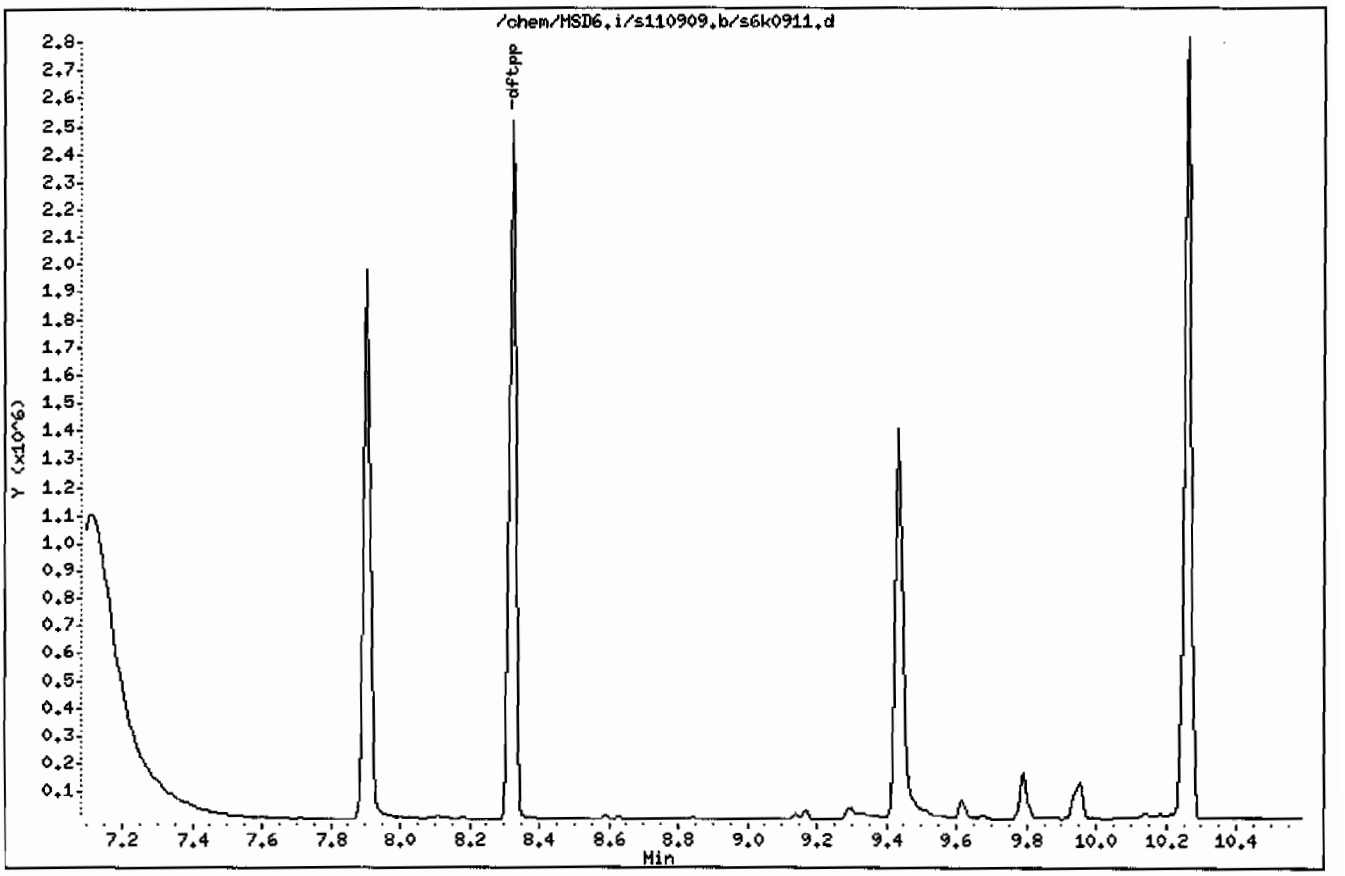

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Page 2

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

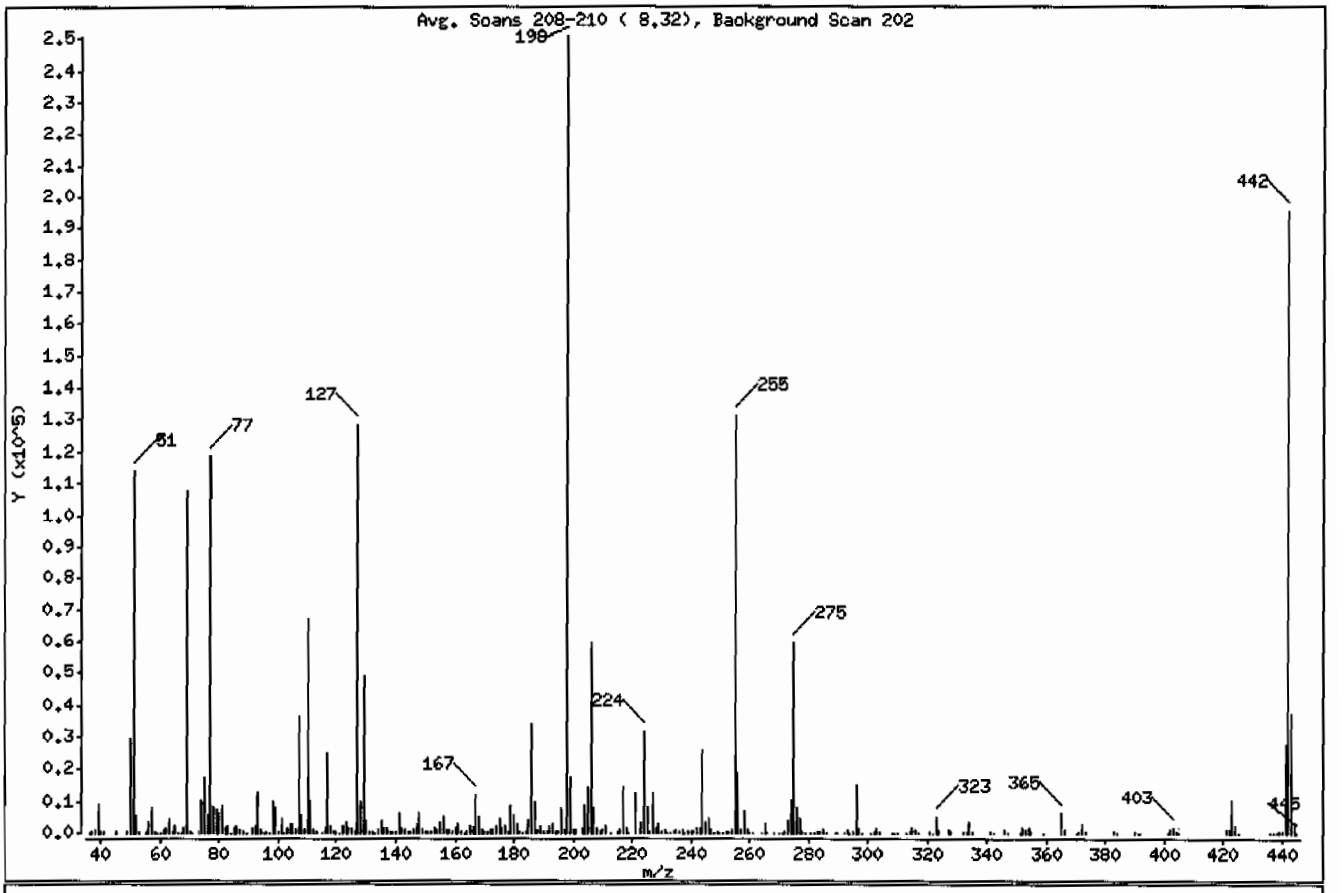

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.40
68	Less than 2.00% of mass 69	0.67 (1.56)
69	Mass 69 relative abundance	42.98
70	Less than 2.00% of mass 69	0.23 (0.53)
127	40.00 - 60.00% of mass 198	51.37
197	Less than 1.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 30.00% of mass 198	23.67
365	Greater than 1.00% of mass 198	2.45
441	Present, but less than mass 443	11.05
442	Greater than 40.00% of mass 198	77.94
443	17.00 - 23.00% of mass 442	14.94 (19.17)

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8	122.00	2302	198.00	250752	284.00	336
37.00	393	123.00	3695	199.00	17344	285.00	937
38.00	1200	124.00	1621	200.00	1195	286.00	170
39.00	9016	125.00	1448	201.00	1207	289.00	255
40.00	406	126.00	632	203.00	1659	290.00	159
41.00	292	127.00	128832	204.00	8363	292.00	259
45.00	305	128.00	9787	205.00	14289	293.00	1083
49.00	640	129.00	49280	206.00	59576	294.00	255
50.00	29544	130.00	4085	207.00	7878	295.00	324
51.00	113864	131.00	795	208.00	1898	296.00	14712
52.00	5719	132.00	464	209.00	609	297.00	1998
53.00	291	133.00	153	210.00	1016	298.00	48
55.00	556	134.00	1412	211.00	2089	301.00	220
56.00	3212	135.00	3908	213.00	96	302.00	374
57.00	7977	136.00	1509	215.00	674	303.00	1716
58.00	306	137.00	2002	216.00	1188	304.00	518
59.00	43	138.00	459	217.00	14324	308.00	142
60.00	144	139.00	392	218.00	1841	309.00	104
61.00	1384	140.00	751	219.00	194	310.00	127
62.00	1579	141.00	6116	221.00	12869	313.00	98
63.00	4522	142.00	1931	223.00	3368	314.00	758
64.00	592	143.00	1380	224.00	31752	315.00	1571
65.00	2251	144.00	329	225.00	7987	316.00	915
66.00	47	145.00	339	226.00	839	317.00	119
67.00	98	146.00	1032	227.00	12952	321.00	481
68.00	1681	147.00	3100	228.00	1848	322.00	229
69.00	107792	148.00	6347	229.00	2774	323.00	5178
70.00	566	149.00	1410	230.00	478	324.00	998
71.00	154	150.00	411	231.00	1257	327.00	960
73.00	818	151.00	692	232.00	280	328.00	487
74.00	10556	152.00	489	233.00	226	332.00	397
75.00	17208	153.00	1814	234.00	759	333.00	430
76.00	5735	154.00	1411	235.00	1001	334.00	3299
77.00	118792	155.00	3187	236.00	589	335.00	849
78.00	8119	156.00	5061	237.00	1093	341.00	644

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVHF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	7616	157.00	1047	238.00	176	342.00	184
80.00	6053	158.00	1005	239.00	483	346.00	1112
81.00	8741	159.00	819	240.00	449	347.00	197
82.00	1932	160.00	1690	241.00	776	351.00	99
83.00	2188	161.00	2737	242.00	1684	352.00	1491
84.00	232	162.00	809	243.00	1819	353.00	1169
85.00	1461	163.00	190	244.00	25832	354.00	1725
86.00	2130	164.00	335	245.00	3598	355.00	318
87.00	1162	165.00	2034	246.00	4786	359.00	103
88.00	449	166.00	1979	247.00	980	365.00	6134
89.00	268	167.00	12360	248.00	210	366.00	872
91.00	1835	168.00	5121	249.00	829	370.00	96
92.00	2163	169.00	1038	250.00	174	371.00	434
93.00	12786	170.00	446	251.00	238	372.00	2651
94.00	908	171.00	470	252.00	289	373.00	754
95.00	251	172.00	1064	253.00	569	383.00	711
96.00	626	173.00	1291	254.00	1047	384.00	258
97.00	236	174.00	2515	255.00	131328	390.00	402
98.00	9808	175.00	4789	256.00	18784	391.00	259
99.00	8032	176.00	1446	257.00	1424	392.00	153
100.00	745	177.00	2269	258.00	6873	401.00	116
101.00	4368	178.00	802	259.00	1148	402.00	1140
102.00	258	179.00	8475	260.00	228	403.00	1594
103.00	1616	180.00	5994	261.00	261	404.00	514
104.00	3096	181.00	2983	264.00	141	405.00	98
105.00	2795	182.00	429	265.00	2620	421.00	1430
106.00	910	183.00	259	266.00	251	422.00	1234
107.00	36184	184.00	679	268.00	180	423.00	10131
108.00	5604	185.00	3929	270.00	163	424.00	2144
109.00	997	186.00	34256	271.00	257	425.00	193
110.00	66656	187.00	9747	272.00	290	436.00	45
111.00	10177	188.00	1146	273.00	3906	437.00	191
112.00	1133	189.00	2105	274.00	10561	438.00	232
113.00	472	190.00	292	275.00	59368	439.00	301
115.00	217	191.00	815	276.00	7957	440.00	309

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1841	192.00	2423	277.00	4641	441.00	27712
117.00	25072	193.00	3008	278.00	676	442.00	195456
118.00	2060	194.00	699	279.00	175	443.00	37472
119.00	345	195.00	448	281.00	87	444.00	3400
120.00	476	196.00	7876	282.00	46	445.00	197
121.00	165	197.00	1433	283.00	505		

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Page 1

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

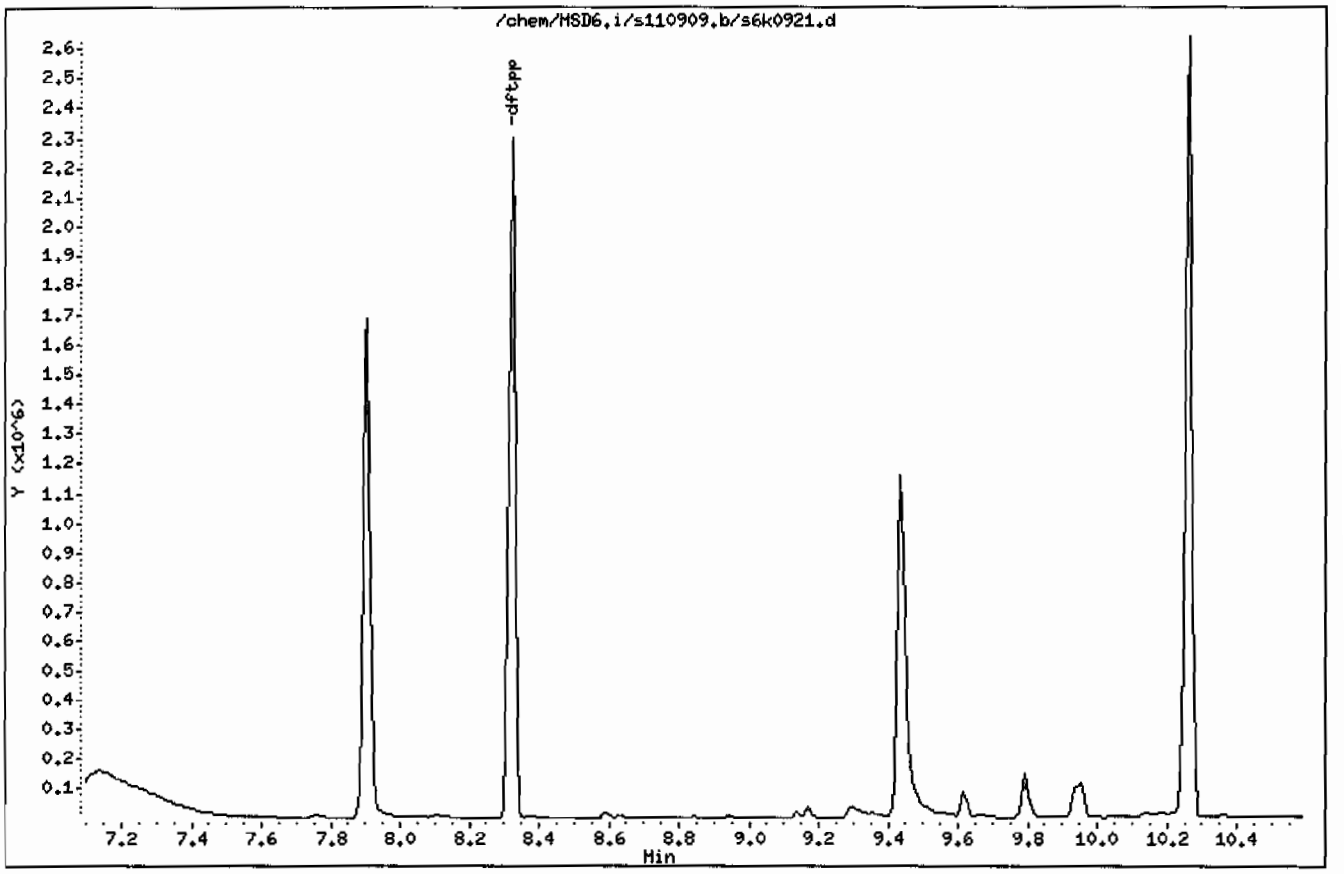

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

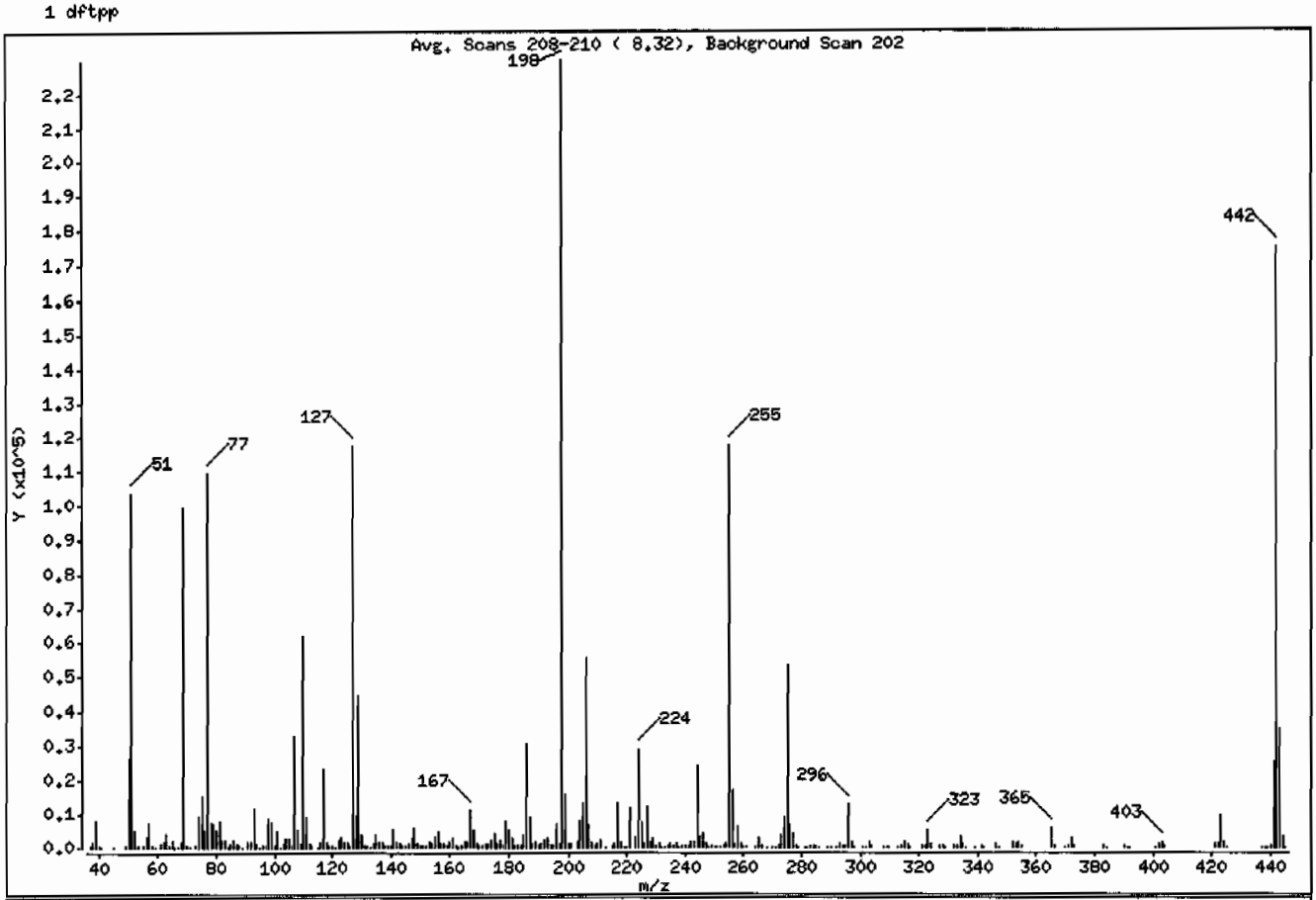

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.09
68	Less than 2.00% of mass 69	0.69 (1.59)
69	Mass 69 relative abundance	43.13
70	Less than 2.00% of mass 69	0.21 (0.50)
127	40.00 - 60.00% of mass 198	50.95
197	Less than 1.00% of mass 198	0.38
199	5.00 - 9.00% of mass 198	7.01
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.61
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	76.04
443	17.00 - 23.00% of mass 442	15.14 (19.92)

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVHF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	446	124.00	1597	200.00	1296	285.00	727
38.00	1364	125.00	1527	201.00	1130	286.00	93
39.00	8081	126.00	500	203.00	1398	289.00	109
40.00	429	127.00	117112	204.00	7870	290.00	48
41.00	123	128.00	9305	205.00	12990	292.00	179
45.00	232	129.00	44864	206.00	55704	293.00	996
49.00	676	130.00	3877	207.00	6919	294.00	284
50.00	26328	131.00	762	208.00	1589	295.00	295
51.00	103656	132.00	413	209.00	492	296.00	12743
52.00	5217	133.00	83	210.00	869	297.00	1758
53.00	281	134.00	1179	211.00	2059	298.00	106
55.00	508	135.00	3584	213.00	155	301.00	200
56.00	3141	136.00	1380	215.00	501	302.00	236
57.00	7300	137.00	1770	216.00	1098	303.00	1828
58.00	351	138.00	422	217.00	13179	304.00	578
59.00	89	139.00	313	218.00	1725	308.00	164
61.00	1282	140.00	577	219.00	178	309.00	120
62.00	1522	141.00	5319	220.00	48	310.00	179
63.00	4035	142.00	1826	221.00	11795	313.00	116
64.00	709	143.00	1268	223.00	3181	314.00	633
65.00	2010	144.00	322	224.00	29056	315.00	1462
66.00	201	145.00	315	225.00	7532	316.00	903
67.00	136	146.00	853	226.00	796	317.00	97
68.00	1576	147.00	2856	227.00	12169	321.00	535
69.00	99128	148.00	5895	228.00	1834	322.00	301
70.00	492	149.00	1137	229.00	2389	323.00	5031
71.00	87	150.00	371	230.00	448	324.00	932
73.00	640	151.00	713	231.00	1077	327.00	782
74.00	9704	152.00	430	232.00	217	328.00	460
75.00	15458	153.00	1634	233.00	234	329.00	92
76.00	5031	154.00	1294	234.00	764	332.00	329
77.00	109208	155.00	2977	235.00	895	333.00	541
78.00	7381	156.00	4520	236.00	588	334.00	3026
79.00	6803	157.00	931	237.00	934	335.00	912
80.00	5387	158.00	937	238.00	52	336.00	92

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	7979	159.00	792	239.00	457	339.00	88
82.00	2000	160.00	1501	240.00	364	341.00	550
83.00	1851	161.00	2637	241.00	638	342.00	176
84.00	203	162.00	756	242.00	1412	346.00	1020
85.00	1319	163.00	204	243.00	1572	347.00	119
86.00	1985	164.00	328	244.00	24152	352.00	1335
87.00	1000	165.00	1810	245.00	3200	353.00	950
88.00	412	166.00	1695	246.00	4314	354.00	1475
89.00	260	167.00	10891	247.00	844	355.00	296
91.00	1676	168.00	5136	248.00	166	365.00	5995
92.00	1806	169.00	973	249.00	748	366.00	747
93.00	11677	170.00	306	250.00	170	370.00	103
94.00	892	171.00	442	251.00	190	371.00	323
95.00	199	172.00	897	252.00	210	372.00	2543
96.00	636	173.00	1105	253.00	472	373.00	611
97.00	286	174.00	2178	254.00	899	383.00	675
98.00	8556	175.00	4297	255.00	117320	384.00	156
99.00	7312	176.00	1290	256.00	16728	390.00	314
100.00	595	177.00	2105	257.00	1320	391.00	189
101.00	4548	178.00	636	258.00	6484	392.00	157
102.00	251	179.00	8002	259.00	1064	401.00	199
103.00	1289	180.00	5191	260.00	200	402.00	1090
104.00	2626	181.00	2701	261.00	212	403.00	1396
105.00	2533	182.00	448	264.00	192	404.00	427
106.00	724	183.00	312	265.00	2469	421.00	1265
107.00	33008	184.00	599	266.00	401	422.00	1145
108.00	5264	185.00	3797	268.00	43	423.00	9473
109.00	994	186.00	30448	270.00	167	424.00	1846
110.00	61616	187.00	8914	271.00	186	425.00	183
111.00	9026	188.00	970	272.00	329	437.00	54
112.00	1057	189.00	1726	273.00	3492	438.00	170
113.00	367	190.00	298	274.00	9124	439.00	228
115.00	227	191.00	976	275.00	53576	440.00	294
116.00	1610	192.00	2282	276.00	7126	441.00	25272
117.00	23152	193.00	2535	277.00	3970	442.00	174784

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1681	194.00	518	278.00	653	443.00	34808
119.00	280	195.00	333	279.00	140	444.00	3177
120.00	427	196.00	6863	281.00	140	445.00	129
121.00	176	197.00	878	282.00	42		
122.00	2199	198.00	229824	283.00	507		
123.00	3315	199.00	16104	284.00	294		

Data File: /chem/MSD6.i/s120209.b/s610202.d

Page 1

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

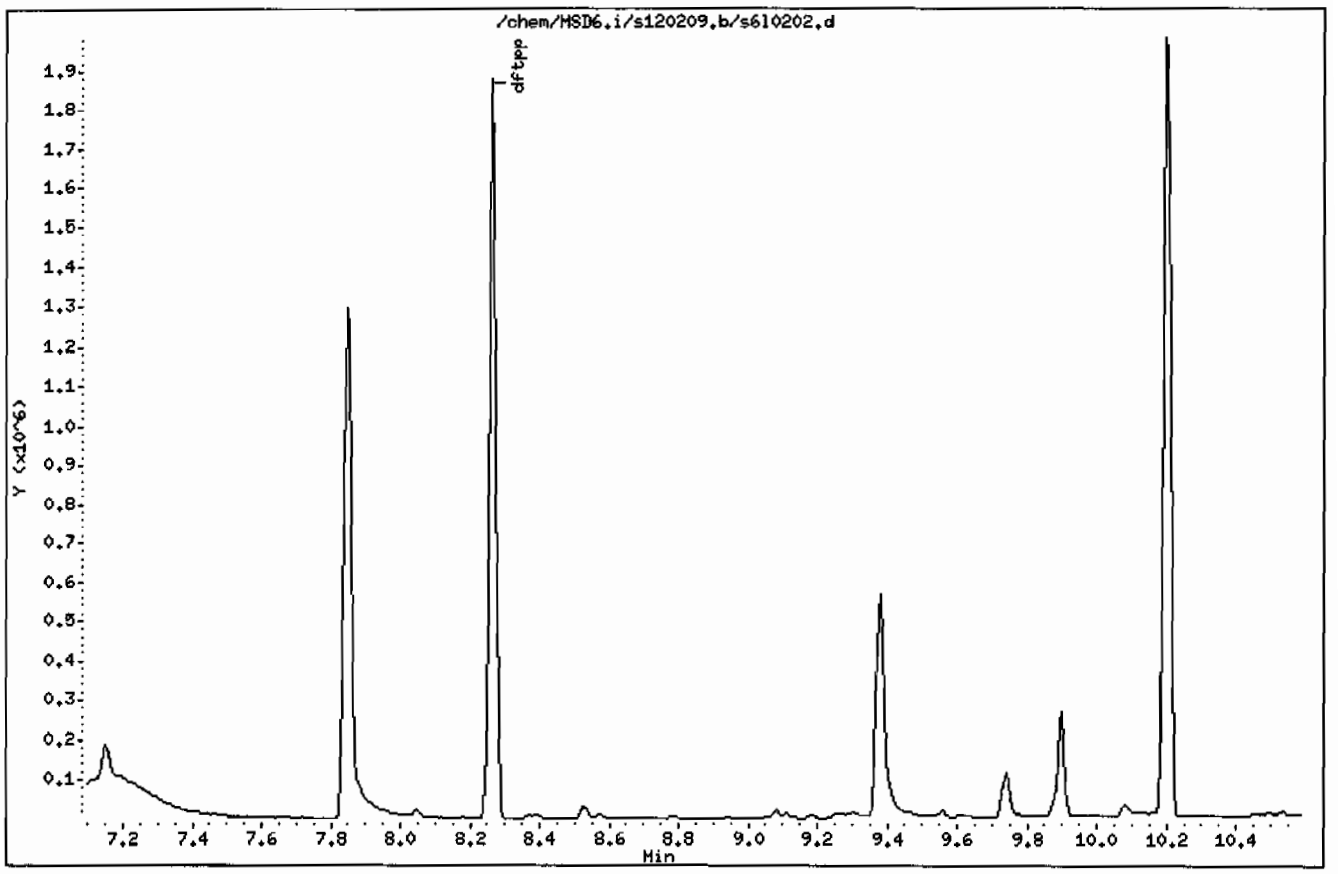

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

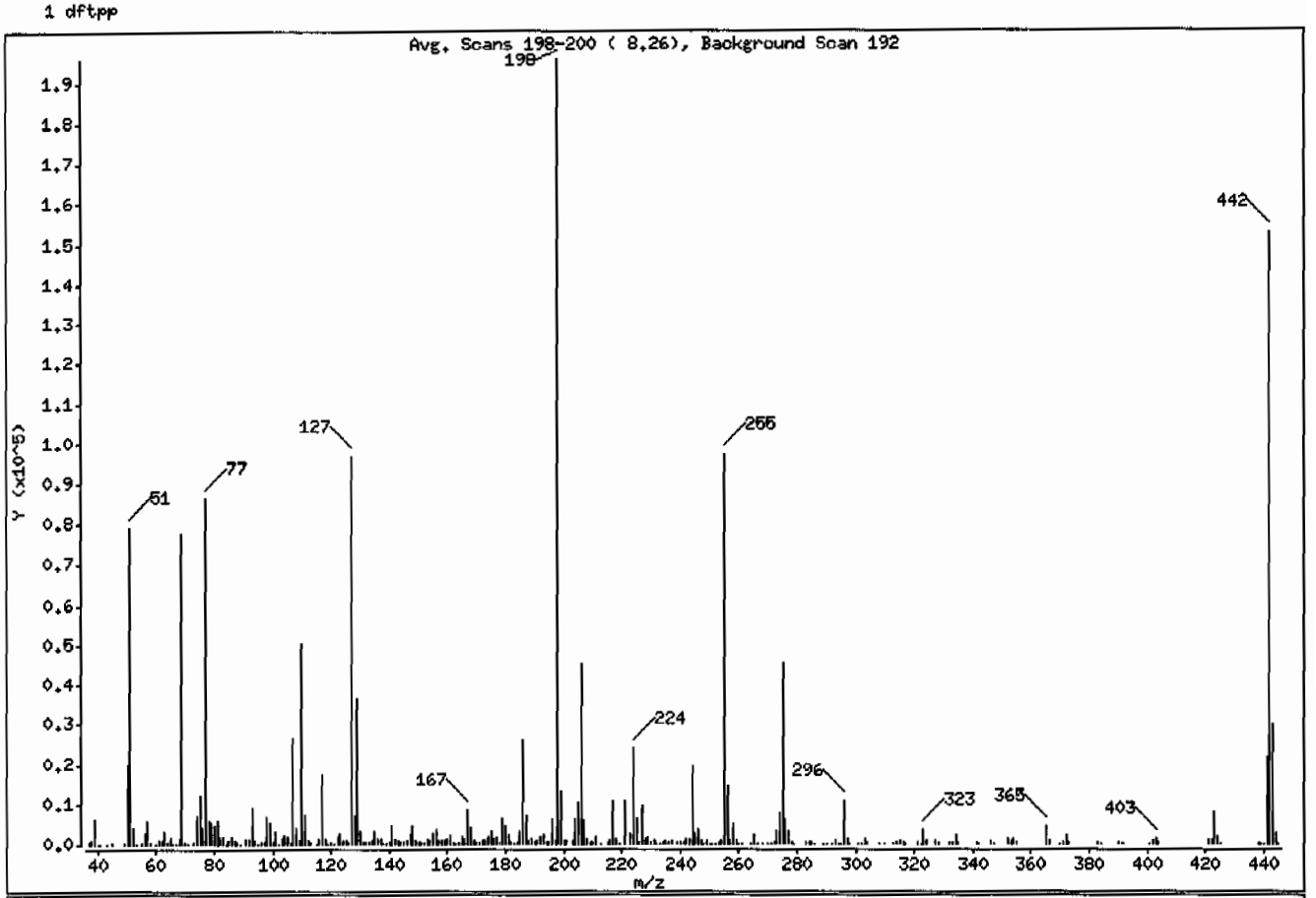

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.39
68	Less than 2.00% of mass 69	0.60 (1.50)
69	Mass 69 relative abundance	39.82
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	49.32
197	Less than 1.00% of mass 198	0.48
199	5.00 - 9.00% of mass 198	6.76
275	10.00 - 30.00% of mass 198	23.23
365	Greater than 1.00% of mass 198	2.36
441	Present, but less than mass 443	11.13
442	Greater than 40.00% of mass 198	78.16
443	17.00 - 23.00% of mass 442	15.20 (19.45)

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610202.d
Spectrum: Avg. Scans 198-200 (8.26), Background Scan 192
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	303	121.00	91	195.00	314	279.00	90
38.00	968	122.00	1654	196.00	6285	283.00	375
39.00	6157	123.00	2697	197.00	934	284.00	283
40.00	138	124.00	1073	198.00	195712	285.00	668
41.00	123	125.00	1079	199.00	13229	286.00	85
43.00	59	126.00	345	200.00	1047	289.00	103
45.00	226	127.00	96552	201.00	1042	290.00	43
49.00	599	128.00	7078	203.00	1064	292.00	190
50.00	20000	129.00	36256	204.00	6323	293.00	754
51.00	79056	130.00	3234	205.00	10520	294.00	218
52.00	4078	131.00	660	206.00	44920	295.00	190
53.00	187	132.00	338	207.00	5816	296.00	10847
55.00	330	133.00	229	208.00	1489	297.00	1471
56.00	2483	134.00	1022	209.00	480	298.00	43
57.00	5817	135.00	3045	210.00	561	301.00	174
58.00	250	136.00	1168	211.00	1689	302.00	214
60.00	95	137.00	1311	213.00	95	303.00	1398
61.00	950	138.00	196	215.00	421	304.00	346
62.00	1092	139.00	218	216.00	888	308.00	188
63.00	3057	140.00	426	217.00	10593	310.00	113
64.00	397	141.00	4581	218.00	1432	313.00	96
65.00	1664	142.00	1446	219.00	190	314.00	573
66.00	43	143.00	1014	221.00	10732	315.00	1094
67.00	178	144.00	291	223.00	2495	316.00	649
68.00	1172	145.00	312	224.00	23904	317.00	97
69.00	77936	146.00	850	225.00	6261	321.00	401
70.00	399	147.00	2263	226.00	632	322.00	160
71.00	41	148.00	4637	227.00	9332	323.00	3761
73.00	497	149.00	1016	228.00	1351	324.00	753
74.00	7327	150.00	335	229.00	1957	327.00	696
75.00	12020	151.00	555	230.00	296	328.00	348
76.00	3999	152.00	397	231.00	952	332.00	288
77.00	86520	153.00	1342	232.00	171	333.00	338
78.00	5999	154.00	1082	233.00	210	334.00	2440
79.00	5296	155.00	2498	234.00	595	335.00	649

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610202.d
Spectrum: Avg. Scans 198-200 (8.26), Background Scan 192
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	4369	156.00	3758	235.00	687	341.00	473
81.00	6015	157.00	801	236.00	463	342.00	102
82.00	1716	158.00	877	237.00	826	346.00	816
83.00	1607	159.00	691	239.00	421	347.00	108
84.00	207	160.00	1273	240.00	311	352.00	1162
85.00	1073	161.00	2026	241.00	488	353.00	819
86.00	1714	162.00	569	242.00	1349	354.00	1287
87.00	807	163.00	183	243.00	1271	355.00	337
88.00	294	164.00	276	244.00	19408	365.00	4617
89.00	156	165.00	1664	245.00	2601	366.00	710
91.00	1442	166.00	1275	246.00	3419	370.00	99
92.00	1501	167.00	8454	247.00	690	371.00	328
93.00	8963	168.00	3829	248.00	155	372.00	2143
94.00	681	169.00	761	249.00	702	373.00	515
95.00	102	170.00	294	250.00	100	383.00	581
96.00	526	171.00	378	251.00	109	384.00	166
97.00	235	172.00	773	252.00	206	390.00	332
98.00	6771	173.00	916	253.00	423	391.00	200
99.00	5495	174.00	1699	254.00	737	392.00	98
100.00	471	175.00	3321	255.00	97304	401.00	112
101.00	3151	176.00	1190	256.00	14566	402.00	861
102.00	217	177.00	1588	257.00	1091	403.00	1220
103.00	1127	178.00	518	258.00	5100	404.00	403
104.00	2081	179.00	6361	259.00	760	421.00	1019
105.00	1951	180.00	4460	260.00	111	422.00	992
106.00	668	181.00	2194	261.00	194	423.00	7956
107.00	26328	182.00	336	264.00	91	424.00	1694
108.00	4257	183.00	176	265.00	2140	425.00	123
109.00	726	184.00	514	266.00	218	438.00	45
110.00	50568	185.00	3001	268.00	27	439.00	98
111.00	7298	186.00	25880	270.00	94	440.00	118
112.00	941	187.00	7123	271.00	112	441.00	21784
113.00	305	188.00	763	272.00	235	442.00	152960
115.00	43	189.00	1450	273.00	3040	443.00	29752
116.00	1374	190.00	312	274.00	7787	444.00	2861

Data File: /chem/MSD6.i/s120209.b/s610202.d

Date : 02-DEC-2009 09:54

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610202.d
Spectrum: Avg. Scans 198-200 (8.26), Background Scan 192
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	17628	191.00	697	275.00	45464	445.00	118
118.00	1296	192.00	1948	276.00	6085		
119.00	221	193.00	2310	277.00	3305		
120.00	305	194.00	475	278.00	499		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201980055**				
Client Sample:	**QC for batch 926091**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 926091**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 11:59**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0206-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610206.d
Lab Smp Id: 1201980055 Client Smp ID: TCLPBALNK
Inj Date : 02-DEC-2009 11:59
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201980055|927064|1|SVMF|1|TBLK01
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 5 QC Sample: TB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	249871	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	934540	40.0000	
* 46 Acenaphthene-d10	164	7.925	7.927	(1.000)	504510	40.0000	
* 67 Phenanthrene-d10	188	9.538	9.540	(1.000)	858736	40.0000	
* 91 Chrysene-d12	240	12.542	12.549	(1.000)	661689	40.0000	
* 98 Perylene-d12	264	14.858	14.863	(1.000)	503879	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	228171	36.4646	0.18
$ 5 Phenol-d5	99	4.401	4.406	(0.919)	179098	22.6775	0.11
$ 20 Nitrobenzene-d5	82	5.315	5.320	(0.878)	194666	29.4463	0.15
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	369321	28.4058	0.14
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	98605	66.9631	0.33
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	414291	38.8246	0.19

Data File: /chem/MSD6.i/s120209.b/s610206.d
Date : 02-DEC-2009 11:59
Client ID: TCLPBALNK
Sample Info: |120198005519270641|SVMF|1|TBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

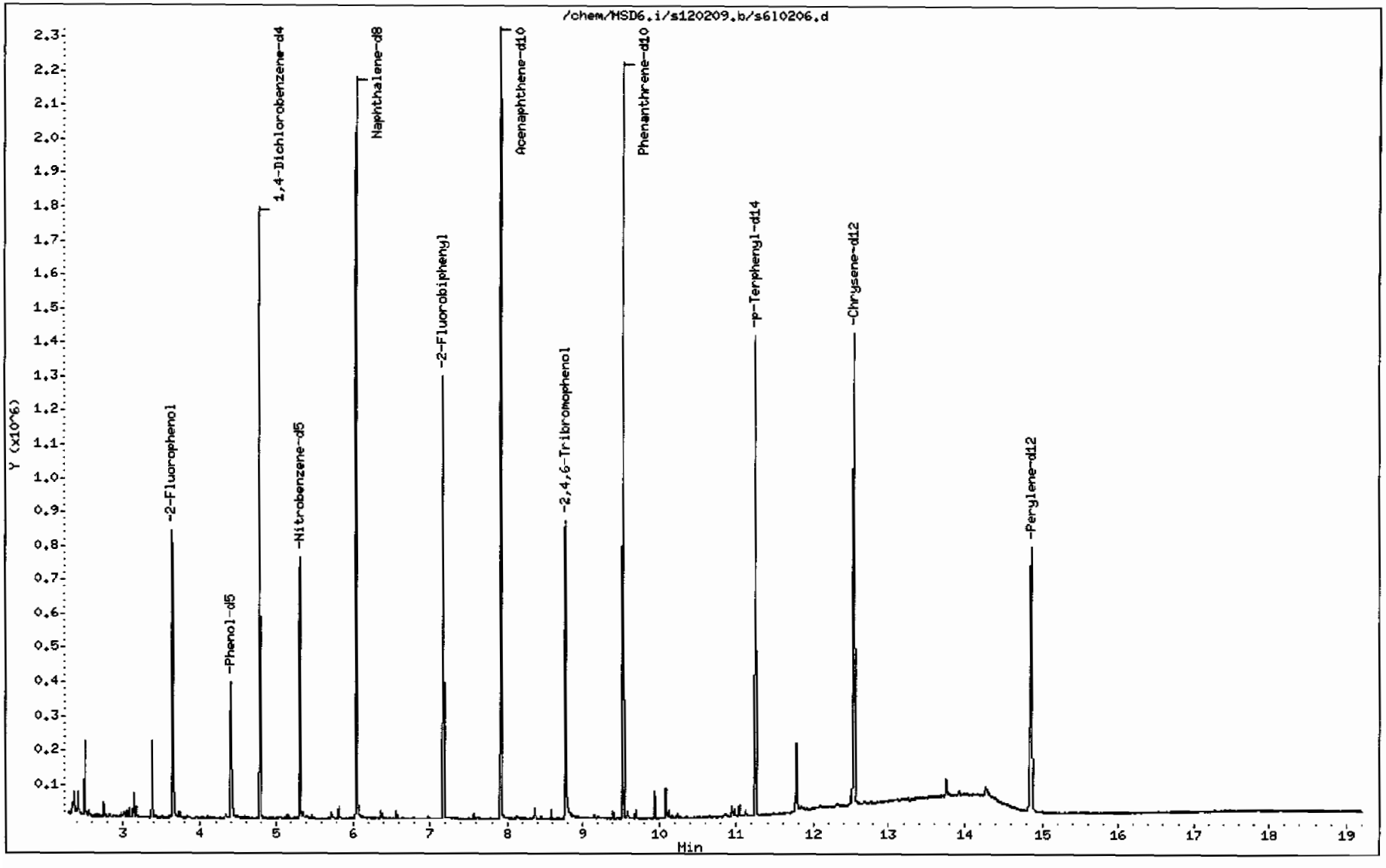

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982116**				
Client Sample:	**QC for batch 927063**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927063**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 12:28**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0207-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene	U	0.010	mg/L	0.002	0.010
87-86-5	Pentachlorophenol	U	0.010	mg/L	0.002	0.010
110-86-1	Pyridine	U	0.010	mg/L	0.003	0.010
95-48-7	o-Cresol	U	0.010	mg/L	0.002	0.010
65794-96-9	m,p-Cresols	U	0.010	mg/L	0.003	0.010
67-72-1	Hexachloroethane	U	0.010	mg/L	0.002	0.010
98-95-3	Nitrobenzene	U	0.010	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene	U	0.010	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol	U	0.010	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol	U	0.010	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene	U	0.010	mg/L	0.002	0.010

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Data file : /chem/MSD6.i/s120209.b/s610207.d
Lab Smp Id: 1201982116 Client Smp ID: SBLK01
Inj Date : 02-DEC-2009 12:28
Operator : nag1 Inst ID: MSD6.i
Smp Info : |1201982116|927064|1|SVMF|1|SBLK01
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	240512	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	900254	40.0000	
* 46 Acenaphthene-d10	164	7.925	7.927	(1.000)	490744	40.0000	
* 67 Phenanthrene-d10	188	9.535	9.540	(1.000)	823213	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	613554	40.0000	
* 98 Perylene-d12	264	14.853	14.863	(1.000)	436716	40.0000	
$ 3 2-Fluorophenol	112	3.636	3.636	(0.759)	298922	49.6304	0.050
$ 5 Phenol-d5	99	4.396	4.406	(0.918)	233356	30.6975	0.031
$ 20 Nitrobenzene-d5	82	5.315	5.320	(0.878)	258757	40.6317	0.041
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	494175	39.0749	0.039
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	117995	82.3787	0.082
$ 81 p-Terphenyl-d14	244	11.250	11.250	(0.897)	498281	50.3590	0.050

Data File: /chem/MSD6.i/s120209.b/s610207.d

Date : 02-DEC-2009 12:28

Client ID: SBLK01

Sample Info: |120198211 6|927064|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nagi

Column diameter: 0.20

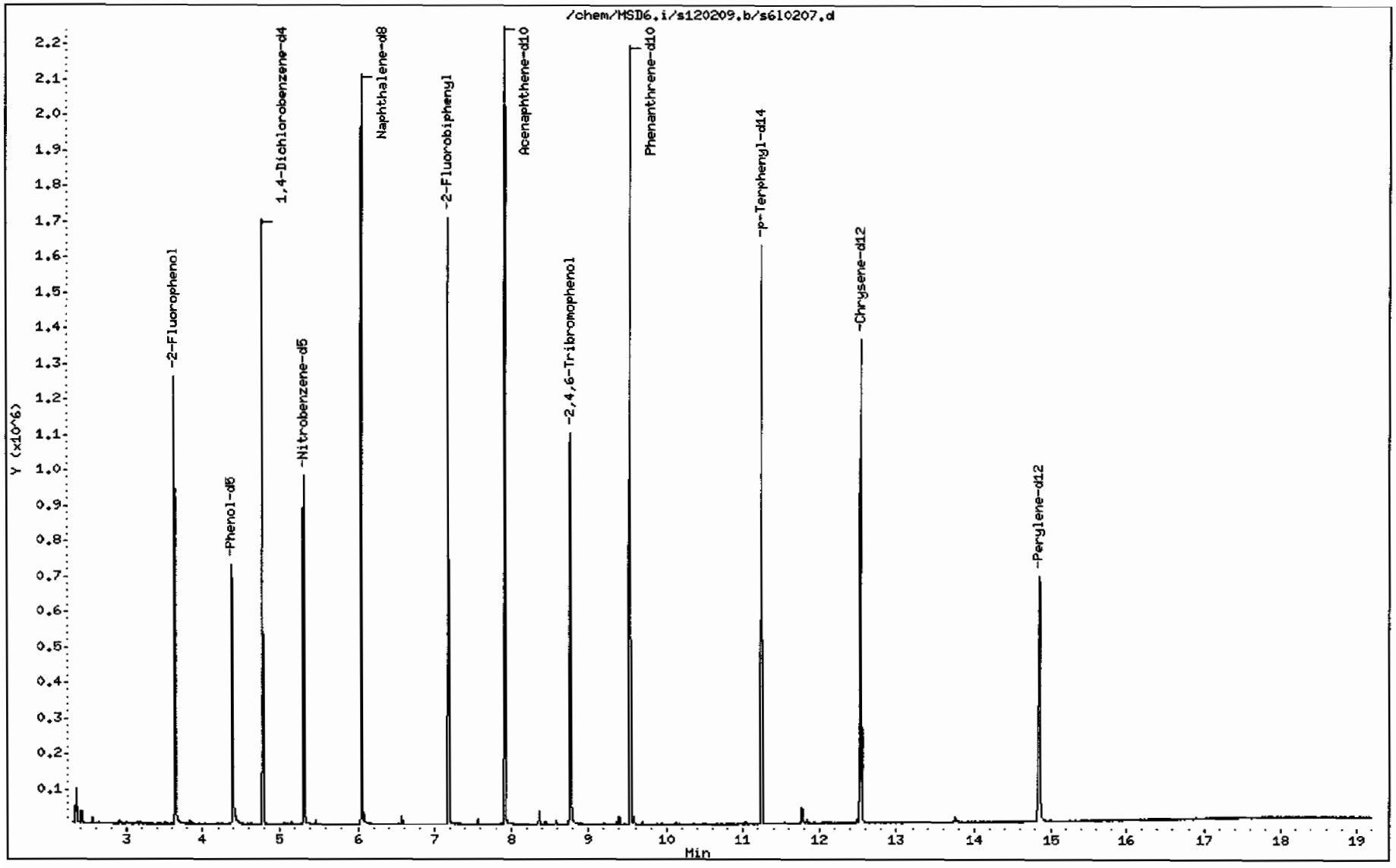

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982119**				
Client Sample:	**QC for batch 927063**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927063**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 12:56**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0208-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene		0.0585	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene		0.0783	mg/L	0.002	0.010
87-86-5	Pentachlorophenol		0.0759	mg/L	0.002	0.010
110-86-1	Pyridine		0.0628	mg/L	0.003	0.010
95-48-7	o-Cresol		0.059	mg/L	0.002	0.010
65794-96-9	m,p-Cresols		0.0599	mg/L	0.003	0.010
67-72-1	Hexachloroethane		0.0527	mg/L	0.002	0.010
98-95-3	Nitrobenzene		0.0681	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene		0.0568	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol		0.0773	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol		0.077	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene		0.0791	mg/L	0.002	0.010

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Data file : /chem/MSD6.i/s120209.b/s610208.d
Lab Smp Id: 1201982119 Client Smp ID: SBLK01LCS
Inj Date : 02-DEC-2009 12:56
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201982119|927064|1|SVMF|1|SBLK01LCS
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	233217	40.0000	
* 29 Naphthalene-d8	136	6.057	6.059	(1.000)	903849	40.0000	
* 46 Acenaphthene-d10	164	7.925	7.927	(1.000)	502849	40.0000	
* 67 Phenanthrene-d10	188	9.538	9.540	(1.000)	874679	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	685622	40.0000	
* 98 Perylene-d12	264	14.855	14.863	(1.000)	534290	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	252749	43.2769	0.043
$ 5 Phenol-d5	99	4.396	4.406	(0.918)	193260	26.2181	0.026
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.878)	231395	36.1906	0.036
$ 39 2-Fluorobiphenyl	172	7.181	7.183	(0.906)	454377	35.0632	0.035
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	127787	87.0674	0.087
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	513716	46.4615	0.046
11 1,4-Dichlorobenzene	146	4.806	4.803	(1.004)	406280	58.4773	0.058

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	8.118	8.123	(1.024)	303935	78.3391	0.078
65 Pentachlorophenol	266	9.321	9.321	(0.977)	153713	75.9182	0.076
2 Pyridine	79	2.734	2.734	(0.571)	310148	62.7613	0.063
15 o-Cresol	107	4.984	4.987	(1.041)	286055	59.0128	0.059
18 m,p-Cresols	107	5.134	5.140	(1.072)	367671	59.8607	0.060
19 Hexachloroethane	117	5.282	5.282	(1.103)	141626	52.6920	0.053
21 Nitrobenzene	77	5.343	5.341	(0.882)	439159	68.1476	0.068
32 Hexachlorobutadiene	225	6.189	6.189	(1.022)	162163	56.8035	0.057
37 2,4,6-Trichlorophenol	196	7.094	7.094	(0.895)	265334	77.3304	0.077
38 2,4,5-Trichlorophenol	196	7.135	7.137	(0.900)	281455	77.0254	0.077
63 Hexachlorobenzene	284	9.115	9.112	(0.956)	286023	79.1152	0.079

Data File: /chem/MSD6.i/s120209.b/s610208.d

Date : 02-DEC-2009 12:56

Client ID: SBLK01LCS

Sample Info: !120198211!927064!1!SVHF!1!SBLK01LCS

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

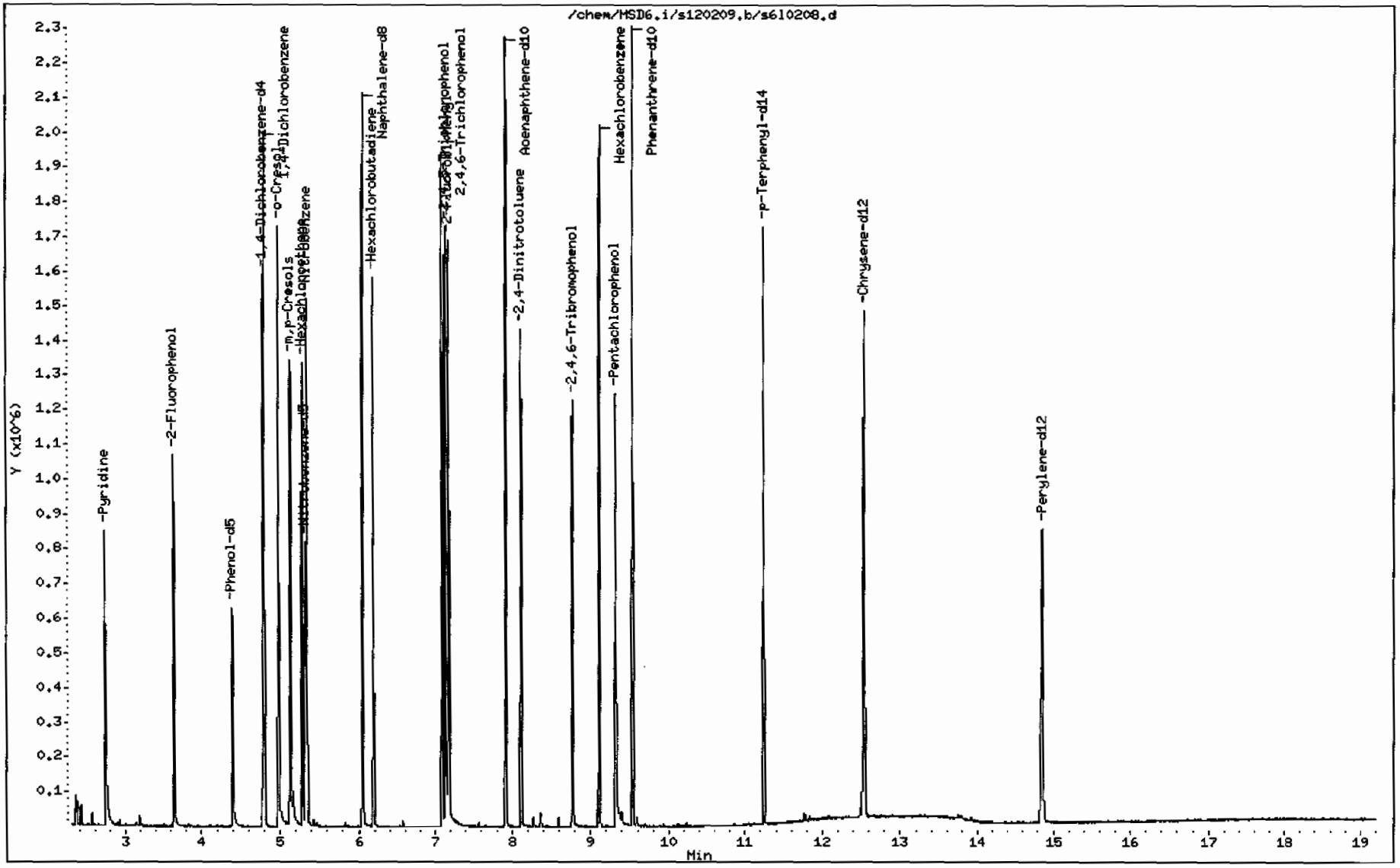

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**1201982117**	**Date Received:**	**11/19/2009 08:45**		
Client Sample:	**QC for batch 927063**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**WST03-10-2131MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 16:17**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0215.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene		0.307	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene		0.409	mg/L	0.010	0.050
87-86-5	Pentachlorophenol		0.436	mg/L	0.010	0.050
110-86-1	Pyridine		0.383	mg/L	0.015	0.050
95-48-7	o-Cresol		0.318	mg/L	0.010	0.050
65794-96-9	m,p-Cresols		0.315	mg/L	0.015	0.050
67-72-1	Hexachloroethane		0.277	mg/L	0.010	0.050
98-95-3	Nitrobenzene		0.367	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene		0.305	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol		0.422	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol		0.444	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene		0.432	mg/L	0.010	0.050

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610215.d
Lab Smp Id: 1201982117 Client Smp ID: WST03-10-2131MS
Inj Date : 02-DEC-2009 16:17
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201982117|927064|1|SVMF|1|LANL001MS
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	225538	40.0000	
* 29 Naphthalene-d8	136	6.054	6.059	(1.000)	841485	40.0000	
* 46 Acenaphthene-d10	164	7.922	7.927	(1.000)	455444	40.0000	
* 67 Phenanthrene-d10	188	9.537	9.540	(1.000)	784435	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	646881	40.0000	
* 98 Perylene-d12	264	14.855	14.863	(1.000)	512844	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	275632	48.8019	0.24
$ 5 Phenol-d5	99	4.395	4.406	(0.918)	215441	30.2224	0.15
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.879)	233189	39.1741	0.20
$ 39 2-Fluorobiphenyl	172	7.183	7.183	(0.907)	456063	38.8564	0.19
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	125023	94.0505	0.47
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	518541	49.7066	0.25
11 1,4-Dichlorobenzene	146	4.806	4.803	(1.004)	412963	61.4630	0.31

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	8.118	8.123	(1.025)	287695	81.8715	0.41
65 Pentachlorophenol	266	9.321	9.321	(0.977)	159828	87.1635	0.44
2 Pyridine	79	2.742	2.734	(0.573)	365710	76.5245	0.38
15 o-Cresol	107	4.984	4.987	(1.041)	297806	63.5288	0.32
18 m,p-Cresols	107	5.134	5.140	(1.072)	374050	62.9727	0.31
19 Hexachloroethane	117	5.282	5.282	(1.103)	144080	55.4301	0.28
21 Nitrobenzene	77	5.343	5.341	(0.883)	440807	73.4728	0.37
32 Hexachlorobutadiene	225	6.189	6.189	(1.022)	162160	61.0121	0.30
37 2,4,6-Trichlorophenol	196	7.091	7.094	(0.895)	262468	84.4571	0.42
38 2,4,5-Trichlorophenol	196	7.135	7.137	(0.901)	293631	88.7217	0.44
63 Hexachlorobenzene	284	9.114	9.112	(0.956)	280062	86.3784	0.43

Data File: /chem/MSD6.i/s120209.b/s610215.d

Date : 02-DEC-2009 16:17

Client ID: WST03-10-2131MS

Sample Info: 1120198211719270641 1|SVMF|1|LANL001MS

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

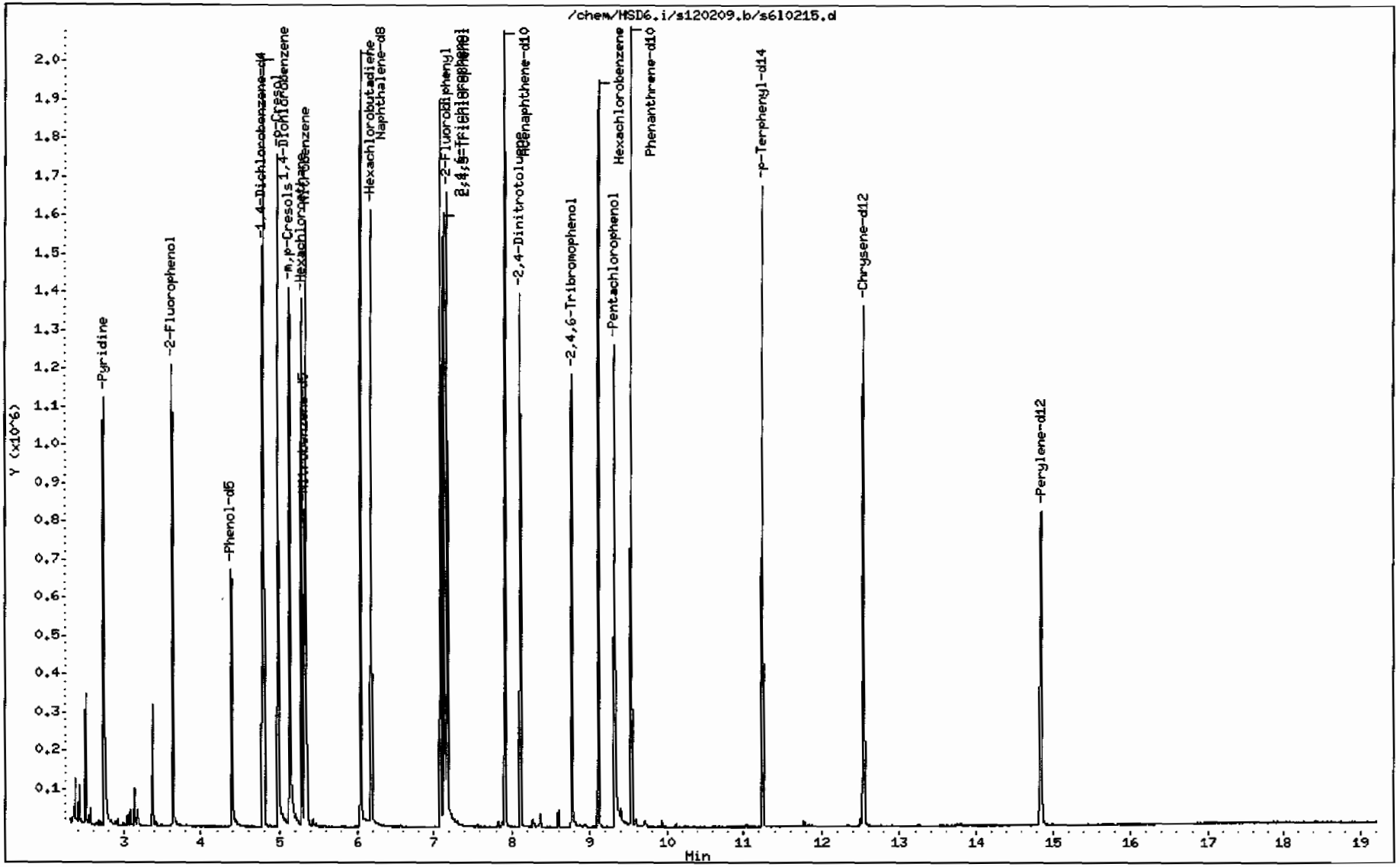

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**1201982118**	**Date Received:**	**11/19/2009 08:45**		
Client Sample:	**QC for batch 927063**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**WST03-10-2131MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927064**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 16:46**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/01/2009 17:09**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s6l0216.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene		0.326	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene		0.416	mg/L	0.010	0.050
87-86-5	Pentachlorophenol		0.412	mg/L	0.010	0.050
110-86-1	Pyridine		0.362	mg/L	0.015	0.050
95-48-7	o-Cresol		0.314	mg/L	0.010	0.050
65794-96-9	m,p-Cresols		0.300	mg/L	0.015	0.050
67-72-1	Hexachloroethane		0.301	mg/L	0.010	0.050
98-95-3	Nitrobenzene		0.375	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene		0.331	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol		0.437	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol		0.442	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene		0.429	mg/L	0.010	0.050

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120209.b/s610216.d
Lab Smp Id: 1201982118 Client Smp ID: WST03-10-2131MSD
Inj Date : 02-DEC-2009 16:46
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201982118|927064|1|SVMF|1|LANL001MSD
Misc Info : |MSDTCLP_LF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120209.b/MSD6-M8270C-AQA-110909.m
Meth Date : 02-Dec-2009 16:43 llo00884 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-578-1.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	4.788	4.788	(1.000)	226840	40.0000	
* 29 Naphthalene-d8	136	6.057	6.059	(1.000)	848203	40.0000	
* 46 Acenaphthene-d10	164	7.922	7.927	(1.000)	464376	40.0000	
* 67 Phenanthrene-d10	188	9.537	9.540	(1.000)	807366	40.0000	
* 91 Chrysene-d12	240	12.539	12.549	(1.000)	646296	40.0000	
* 98 Perylene-d12	264	14.853	14.863	(1.000)	491283	40.0000	
$ 3 2-Fluorophenol	112	3.639	3.636	(0.760)	265293	46.7017	0.23
$ 5 Phenol-d5	99	4.395	4.406	(0.918)	206890	28.8563	0.14
$ 20 Nitrobenzene-d5	82	5.320	5.320	(0.878)	237561	39.5925	0.20
$ 39 2-Fluorobiphenyl	172	7.183	7.183	(0.907)	469735	39.2514	0.20
$ 60 2,4,6-Tribromophenol	329	8.773	8.778	(1.107)	131202	96.8004	0.48
$ 81 p-Terphenyl-d14	244	11.247	11.250	(0.897)	515979	49.5058	0.25
11 1,4-Dichlorobenzene	146	4.806	4.803	(1.004)	440208	65.1419	0.32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	8.121	8.123	(1.025)	298155	83.2162	0.42
65 Pentachlorophenol	266	9.321	9.321	(0.977)	154836	82.3583	0.41
2 Pyridine	79	2.739	2.734	(0.572)	348044	72.4099	0.36
15 o-Cresol	107	4.984	4.987	(1.041)	295897	62.7593	0.31
18 m,p-Cresols	107	5.134	5.140	(1.072)	358346	59.9826	0.30
19 Hexachloroethane	117	5.282	5.282	(1.103)	157435	60.2203	0.30
21 Nitrobenzene	77	5.343	5.341	(0.882)	453225	74.9443	0.37
32 Hexachlorobutadiene	225	6.189	6.189	(1.022)	177322	66.1884	0.33
37 2,4,6-Trichlorophenol	196	7.094	7.094	(0.895)	276654	87.3096	0.44
38 2,4,5-Trichlorophenol	196	7.135	7.137	(0.901)	298293	88.3967	0.44
63 Hexachlorobenzene	284	9.114	9.112	(0.956)	286041	85.7168	0.43

Data File: /chem/MSD6.i/s120209.b/s610216.d
Date : 02-DEC-2009 16:46
Client ID: WST03-10-2131MSD
Sample Info: 1120198211819270641|1|SVHF1|LANL001MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

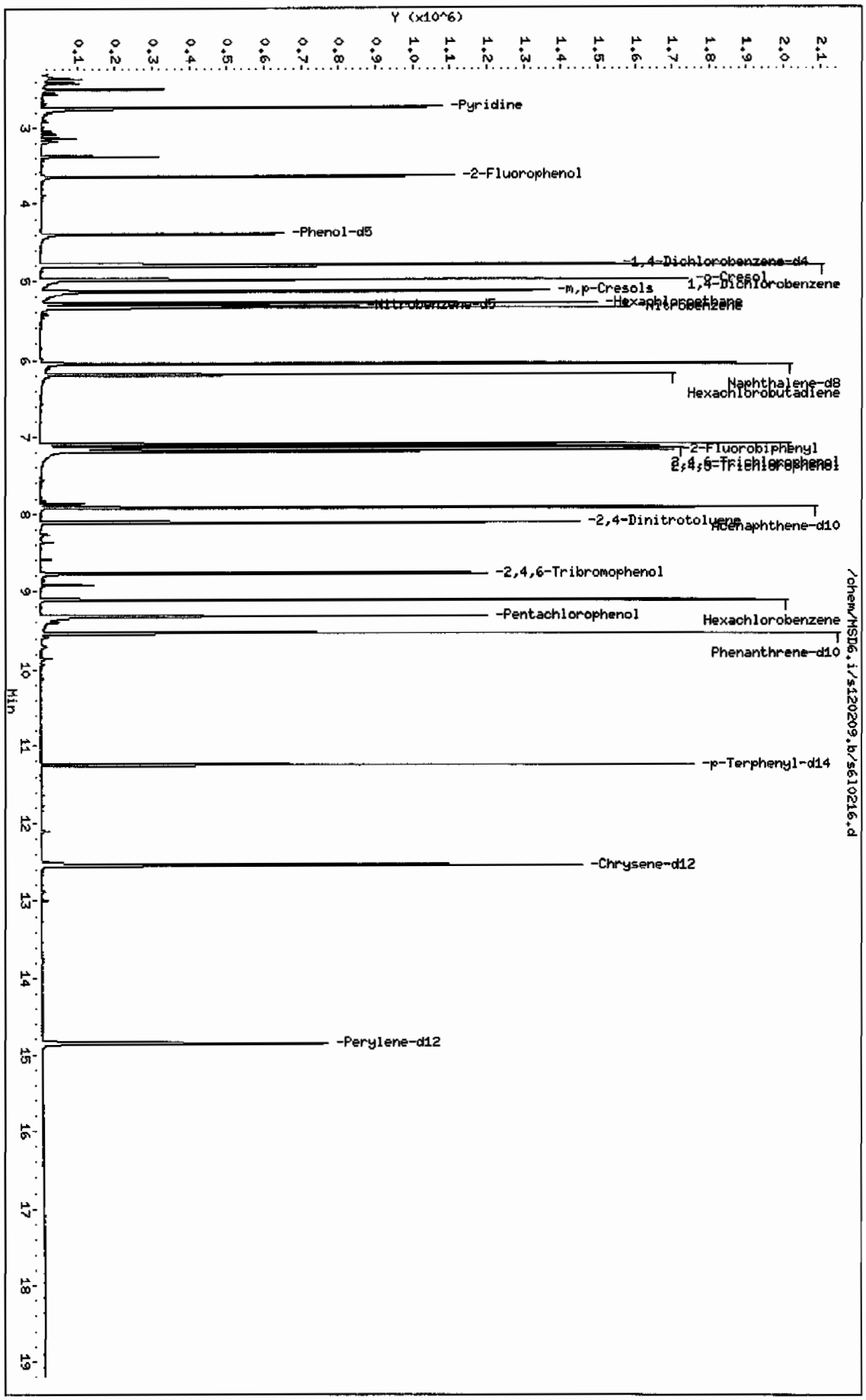

Page 1

Miscellaneous Data

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926091 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #106

Sample ID Analysis Start Date	1201980055 TB 24-NOV-2009 16:30:47	241424001 24-NOV-2009 16:30:47	241424002 24-NOV-2009 16:30:47	241527001 24-NOV-2009 16:30:47
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.91	7.16	8.21	7.89
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.92	5	5	5
Final pH (su)	4.92	1.85	1.91	2.04
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	1000	1000	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:45
Filtration End Date: 25-NOV-09 13:30:45
Bottle Lot Number: H929301DB
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 927063 **Verified by:** _____
Analyst: Jesse Craig
Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 21
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Sec Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201980055 TB	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
1201982116 MB	01-DEC-2009 17:09:37	1000	5	1	13	1	0.001
1201982119 LCS	01-DEC-2009 17:09:37	1000	5	1	13	1	0.001
241424001	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
1201982117 MS (241424001)	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
1201982118 MSD (241424001)	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
241424002	01-DEC-2009 17:09:37	200	5	1	13	1	0.005
241527001	01-DEC-2009 17:09:37	200	5	1	13	1	0.005

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982119	8270 TCLP Spiking Solution	UE091121-16	1	mL
MS	1201982117	8270 TCLP Spiking Solution	UE091121-16	1	mL
MSD	1201982118	8270 TCLP Spiking Solution	UE091121-16	1	mL
SURR	All	BNA for all Surrogate	UE091117-10	1	mL
REGNT	All	Sulfuric Acid Sol., 1:1	1228597	2	mL
REGNT	All	Methylene Chloride	1231728-D	360	mL
REGNT	All	10 N Sodium Hydroxide Solution	1233279	10	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

All samples became emulsive during the basic phase of the extraction. However, no additional methylene chloride was necessary to break the emulsion.

Verified By: SJ

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/02/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610201.d	WBN091128-01	AMY	02-DEC-2009 08:08	50 PPM	s120209	1.0	DFTPP	DUSE
s610202.d	WBN091128-01	nagl	02-DEC-2009 09:54	50 PPM	s120209	1.0	DFTPP	222113
s610203.d	WBN091106-05.3	nagl	02-DEC-2009 10:08	40 PPM	s120209	1.0	MEGACVS	
s610204.d	WBN091111-03.4	nagl	02-DEC-2009 10:58	40 PPM	s120209	1.0	APCVS	
s610205.d	WBN091029-23.4	nagl	02-DEC-2009 11:26	40 PPM	s120209	1.0	PESTCVS	
s610206.d	1201980055	nagl	02-DEC-2009 11:59	927064	10-578-1	1.0	TBLK01	
s610207.d	1201982116	nagl	02-DEC-2009 12:28	927064	10-578-1	1.0	SBLK01	
s610208.d	1201982119	nagl	02-DEC-2009 12:56	927064	10-578-1	1.0	SBLK01LCS	
s610209.d	1201980841	nagl	02-DEC-2009 13:24	927714	10-648-1	1.0	TBLK01	
s610210.d	1201983692	nagl	02-DEC-2009 13:53	927714	10-648-1	1.0	SBLK01	
s610211.d	1201983693	nagl	02-DEC-2009 14:21	927714	10-648-1	1.0	SBLK01LCS	
s610212.d	1201981831	nagl	02-DEC-2009 14:50	926929	241779	1.0	SBLK01	DUSE
s610213.d	1201981834	nagl	02-DEC-2009 15:19	926929	241779	1.0	SBLK01LCS	DUSE
s610214.d	241424001	nagl	02-DEC-2009 15:48	927064	10-578-1	1.0	LANL	
s610215.d	1201982117	nagl	02-DEC-2009 16:17	927064	10-578-1	1.0	LANL001MS	
s610216.d	1201982118	nagl	02-DEC-2009 16:46	927064	10-578-1	1.0	LANL001MSD	
s610217.d	241424002	nagl	02-DEC-2009 17:16	927064	10-578-1	1.0	LANL	
s610218.d	241527001	nagl	02-DEC-2009 17:45	927064	10-600-1	1.0	LANL	
s610219.d	241704001	nagl	02-DEC-2009 18:14	927714	10-648-1	1.0	LANL	

s610220.d	1201983694	nagl	02-DEC-2009 18:44	927714	10-648-1	1.0	LANL001MS	
s610221.d	1201983695	nagl	02-DEC-2009 19:14	927714	10-648-1	1.0	LANL001MSD	
s610222.d	241704002	nagl	02-DEC-2009 19:43	927714	10-648-1	1.0	LANL	
s610223.d	241837001	nagl	02-DEC-2009 20:13	926941	241837	1.0	NREA	USE - failed surr - sample consumed - rr of s610129
s610224.d	241842008	nagl	02-DEC-2009 20:43	926941	241842	40.0	NREA	USE - failed surr - diluted - rr of s610130

Instrument Batch: /chem/MSD6.i/s120209.b

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 11/09/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1198658-D
Multiplier Voltage: 1565 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s110909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6k0901.d	WBN091101-01	JMB3	09-NOV-2009 11:20	50 PPM	s110909	1.0	DFTPP	DUSE
s6k0902.d	inst blk	JMB3	09-NOV-2009 11:35	--------	s110909	1.0	INST BLK	DUSE
s6k0903.d	WBN091106-08	JMB3	09-NOV-2009 12:23	1 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0904.d	WBN091106-07	JMB3	09-NOV-2009 13:00	10 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0905.d	WBN091106-06	JMB3	09-NOV-2009 13:36	20 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0906.d	WBN091106-05.1	JMB3	09-NOV-2009 14:14	40 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0907.d	WBN091106-04	JMB3	09-NOV-2009 14:52	50 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0908.d	WBN091106-03	JMB3	09-NOV-2009 15:30	80 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0909.d	WBN091106-02	JMB3	09-NOV-2009 16:06	100 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0910.d	WBN091106-01	JMB3	09-NOV-2009 16:43	120 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0911-D.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0912.d	inst blk	JMB3	09-NOV-2009 18:15	--------	s110909	1.0	INST BLK	
s6k0913.d	WBN091106-08	JMB3	09-NOV-2009 18:53	1 PPM	s110909	1.0	MEGAICAL	
s6k0914.d	WBN091106-07	JMB3	09-NOV-2009 19:31	10 PPM	s110909	1.0	MEGAICAL	
s6k0915.d	WBN091106-06	JMB3	09-NOV-2009 20:09	20 PPM	s110909	1.0	MEGAICAL	
s6k0916.d	WBN091106-05.1	JMB3	09-NOV-2009 20:46	40 PPM	s110909	1.0	MEGAICAL	
s6k0917.d	WBN091106-04	JMB3	09-NOV-2009 21:25	50 PPM	s110909	1.0	MEGAICAL	
s6k0918.d	WBN091106-03	JMB3	09-NOV-2009 22:01	80 PPM	s110909	1.0	MEGAICAL	

s6k0919.d	WBN091106-02	JMB3	09-NOV-2009 22:39	100 PPM	s110909	1.0	MEGAICAL	
s6k0920.d	WBN091106-01	JMB3	09-NOV-2009 23:16	120 PPM	s110909	1.0	MEGAICAL	
s6k0921-D.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0921.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0922.d	inst blk	JMB3	10-NOV-2009 11:21	--------	s110909	1.0	INST BLK	
s6k0923.d	WBN091016-01	JMB3	10-NOV-2009 11:59	10 PPM	s110909	1.0	AP12ICAL	
s6k0924.d	WBN091016-02	JMB3	10-NOV-2009 12:36	20 PPM	s110909	1.0	AP12ICAL	
s6k0925.d	WBN091016-03	JMB3	10-NOV-2009 13:13	40 PPM	s110909	1.0	AP12ICAL	
s6k0926.d	WBN091016-04	JMB3	10-NOV-2009 13:51	50 PPM	s110909	1.0	AP12ICAL	
s6k0927.d	WBN091016-05	JMB3	10-NOV-2009 14:30	80 PPM	s110909	1.0	AP12ICAL	
s6k0928.d	WBN091016-06	JMB3	10-NOV-2009 15:06	100 PPM	s110909	1.0	AP12ICAL	
s6k0929.d	WBN091016-07	JMB3	10-NOV-2009 15:43	120 PPM	s110909	1.0	AP12ICAL	
s6k0930.d	WBN091029-25	JMB3	10-NOV-2009 16:20	10 PPM	s110909	1.0	PESTICAL	
s6k0931.d	WBN091029-24	JMB3	10-NOV-2009 16:56	20 PPM	s110909	1.0	PESTICAL	
s6k0932.d	WBN091029-23.1	JMB3	10-NOV-2009 17:33	40 PPM	s110909	1.0	PESTICAL	
s6k0933.d	WBN091029-22	JMB3	10-NOV-2009 18:09	50 PPM	s110909	1.0	PESTICAL	
s6k0934.d	WBN091029-21	JMB3	10-NOV-2009 18:45	80 PPM	s110909	1.0	PESTICAL	
s6k0935.d	WBN091029-20	JMB3	10-NOV-2009 19:21	100 PPM	s110909	1.0	PESTICAL	
s6k0936.d	WBN091029-19	JMB3	10-NOV-2009 19:58	120 PPM	s110909	1.0	PESTICAL	
s6k0937-D.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	FAILED SC 8270D
s6k0937.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	
s6k0938-D.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0938.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0939-D.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0939.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0940-D.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	
s6k0940.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	

s6k0941.d	inst blk	JMB3	10-NOV-2009 22:26	--------	s110909	1.0	INST BLK	
s6k0942.d	WBN091016-16	JMB3	10-NOV-2009 22:55	500 PPM	s110909	1.0	HEXICAL	
s6k0943.d	WBN091016-15	JMB3	10-NOV-2009 23:24	1000 PPM	s110909	1.0	HEXICAL	
s6k0944.d	WBN091016-14	JMB3	10-NOV-2009 23:53	1250 PPM	s110909	1.0	HEXICAL	
s6k0945.d	WBN091016-13	JMB3	11-NOV-2009 00:21	1500 PPM	s110909	1.0	HEXICAL	
s6k0946.d	WBN091016-12	JMB3	11-NOV-2009 00:50	1750 PPM	s110909	1.0	HEXICAL	
s6k0947.d	UBN090828-02.4-16	JMB3	11-NOV-2009 01:18	500 PPM	s110909	1.0	HEXICAL	
s6k0948.d	UBN090924-01	JMB3	11-NOV-2009 01:47	10 PPM	s110909	1.0	NEVICAL	
s6k0949.d	UBN090924-02	JMB3	11-NOV-2009 02:16	20 PPM	s110909	1.0	NEVICAL	
s6k0950.d	UBN090924-03	JMB3	11-NOV-2009 02:44	40 PPM	s110909	1.0	NEVICAL	
s6k0951.d	UBN090924-04	JMB3	11-NOV-2009 03:12	50 PPM	s110909	1.0	NEVICAL	
s6k0952.d	UBN090924-05	JMB3	11-NOV-2009 03:41	80 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0953.d	UBN090924-06	JMB3	11-NOV-2009 04:10	100 PPM	s110909	1.0	NEVICAL	
s6k0954.d	UBN090924-07	JMB3	11-NOV-2009 04:38	120 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0955-D.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	DUSE - failed >70%-130%
s6k0955.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	

GC SEMIVOLATILE DRO ANALYSIS

DRO Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578

Method/Analysis Information

Procedure:	**Analysis of Diesel Range Organics by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	926871
Prep Batch Number:	926870

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241423004	WST03-10-2131
241423005	WST03-10-2130
1201981721	Method Blank (MB)
1201981724	Laboratory Control Sample (LCS)
1201981722	241417001(RE03-09-13812) Matrix Spike (MS)
1201981723	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-575) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned

and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao **Date:** 12/14/09

Roadmap for LANL 10-578 DRO

This roadmap was analyzed by kev01577 on 12-02-2009, 01:52.
This roadmap was reviewed by kev01577 on 12-02-2009, 01:56.
This roadmap was reviewed by jim01140 on 12-02-2009, 08:48.
This roadmap was packaged by yml on 12-12-2009, 07:37.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/113009dr/011f1101.d	241423004	30-NOV-2009	22:34	10-578.sub	WST03-10-2131	1.00000	926871	USE
☐	N	/chem/fid5.i/113009dr/012f1201.d	241423005	30-NOV-2009	23:13	10-578.sub	WST03-10-2130	1.00000	926871	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/113009dr/005f0501.d	1201981721	mb	30-NOV-2009	18:43	all.sub	DBLK01	1.00000	926871	USE
☐	N	/chem/fid5.i/113009dr/006f0601.d	1201981724	lcs	30-NOV-2009	19:21	all.sub	DBLK01LCS	1.00000	926871	USE
■	N	/chem/fid5.i/113009dr/008f0801.d	1201981722	ms	30-NOV-2009	20:38	10-575.sub	RE03-09-13812MS	1.00000	926871	USE
■	N	/chem/fid5.i/113009dr/009f0901.d	1201981723	msd	30-NOV-2009	21:17	10-575.sub	RE03-09-13812MSD	1.00000	926871	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03–10–2131	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 22:34	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		12.6	mg/kg	2.34	7.20

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03–10–2130	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 23:13	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.63	mg/kg	2.40	7.39

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10-578

Matrix Type: SOLID

CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC
1201981721	MB for batch 926870	59
1201981724	LCS for batch 926870	83
241423004	WST03-10-2131	46
241423005	WST03-10-2130	47

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10–578
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 926870
Matrix: SOIL
Lab Sample ID: 1201981724
Instrument: FID5.I
Analysis Date: 11/30/2009 19:21
Dilution: 1
Analyst: KXR2
Prep Batch ID: 926870
Inj. Vol: 1 uL
Batch ID: 926871

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	27.7	83	53–114

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981722**	**%Moisture:**	**7.1**
Instrument:	**FID5.I**	**Analysis Date:**	**11/30/2009 20:38**
Analyst:	**KXR2**	**Prep Batch ID:**	**926870**
Inj. Vol:	**1 uL**	**Batch ID:**	**926871**

Dilution: 1

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	35.7	3.19	J	28.1	70	21-122

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10–575
Client ID: RE03–09–13812MSD
Lab Sample ID: 1201981723
Instrument: FID5.I
Analyst: KXR2
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/30/2009 21:17
Dilution: 1
Prep Batch ID: 926870
Batch ID: 926871

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	35.7	3.19	J	28.0	70	21–122	0	0–30

Method Blank Summary

SDG Number:	10-578	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926870	Instrument ID:	FID5.I	Data File:	005f0501.d
Lab Sample ID:	1201981721	Prep Date:	11/29/2009 20:04	Analyzed:	11/30/09 18:43
Column:	DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926870	1201981724	006f0601.d	11/30/09	1921
04 WST03-10-2131	241423004	011f1101.d	11/30/09	2234
05 WST03-10-2130	241423005	012f1201.d	11/30/09	2313

SAMPLE
DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423004	Date Received:	11/19/2009 08:45	%Moisture:	7.9
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2131	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 22:34	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		12.6	mg/kg	2.34	7.20

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/011f1101.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 30-NOV-2009 22:34
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241423004|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			47280433	351.177	12.6	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.138	14.145	-0.007	1973916	9.28568	0.33	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /ohem/fid5.i/113009dr/011f1101.d
Date : 30-NOV-2009 22:34
Client ID: WST03-10-2131
Sample Info: |241423004|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

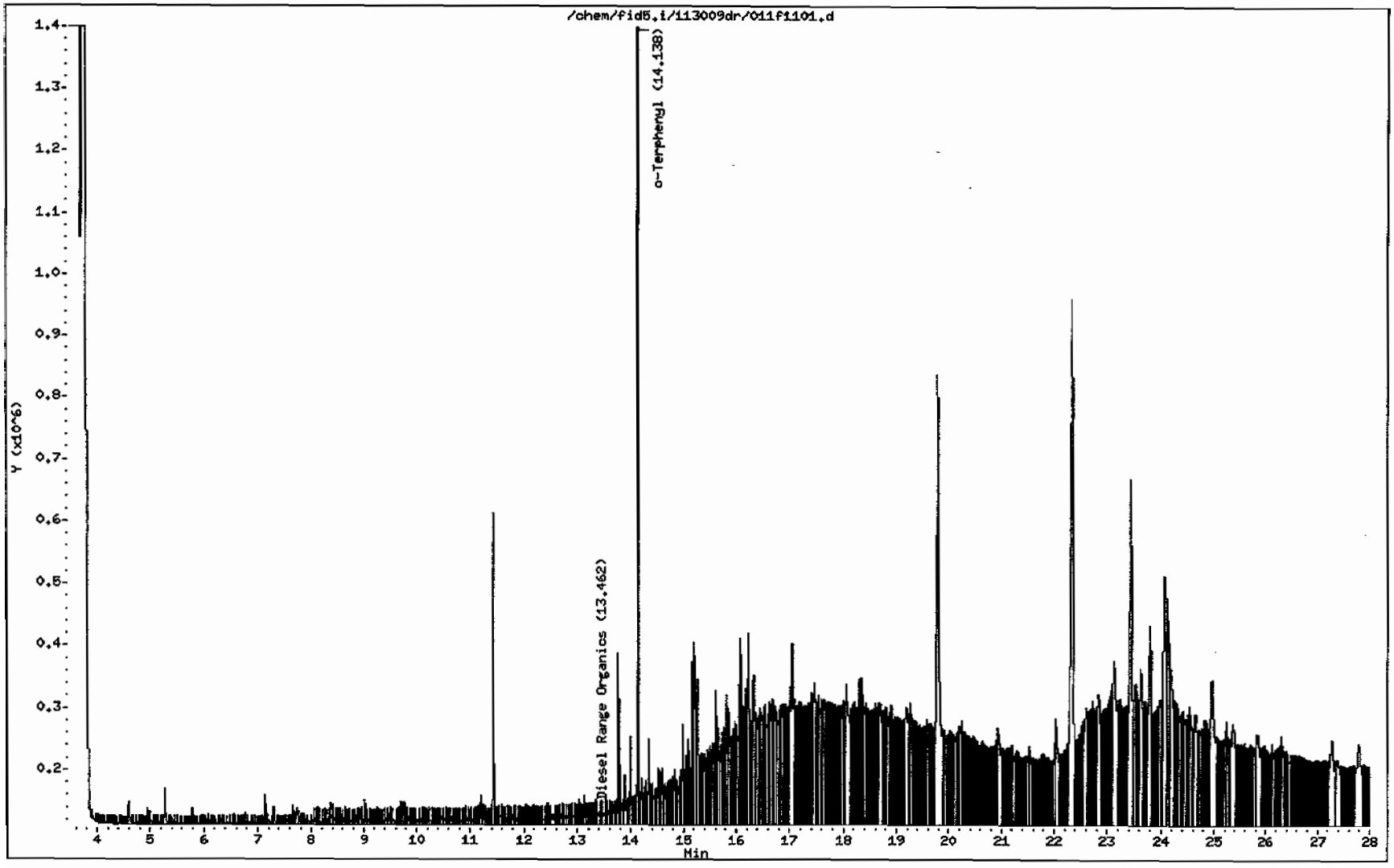

Data File: /chem/fid5.i/113009dn/011f1101.d
Injection Date: 30-NOV-2009 22:34
Instrument: fid5.i
Client Sample ID: WST03-10-2131

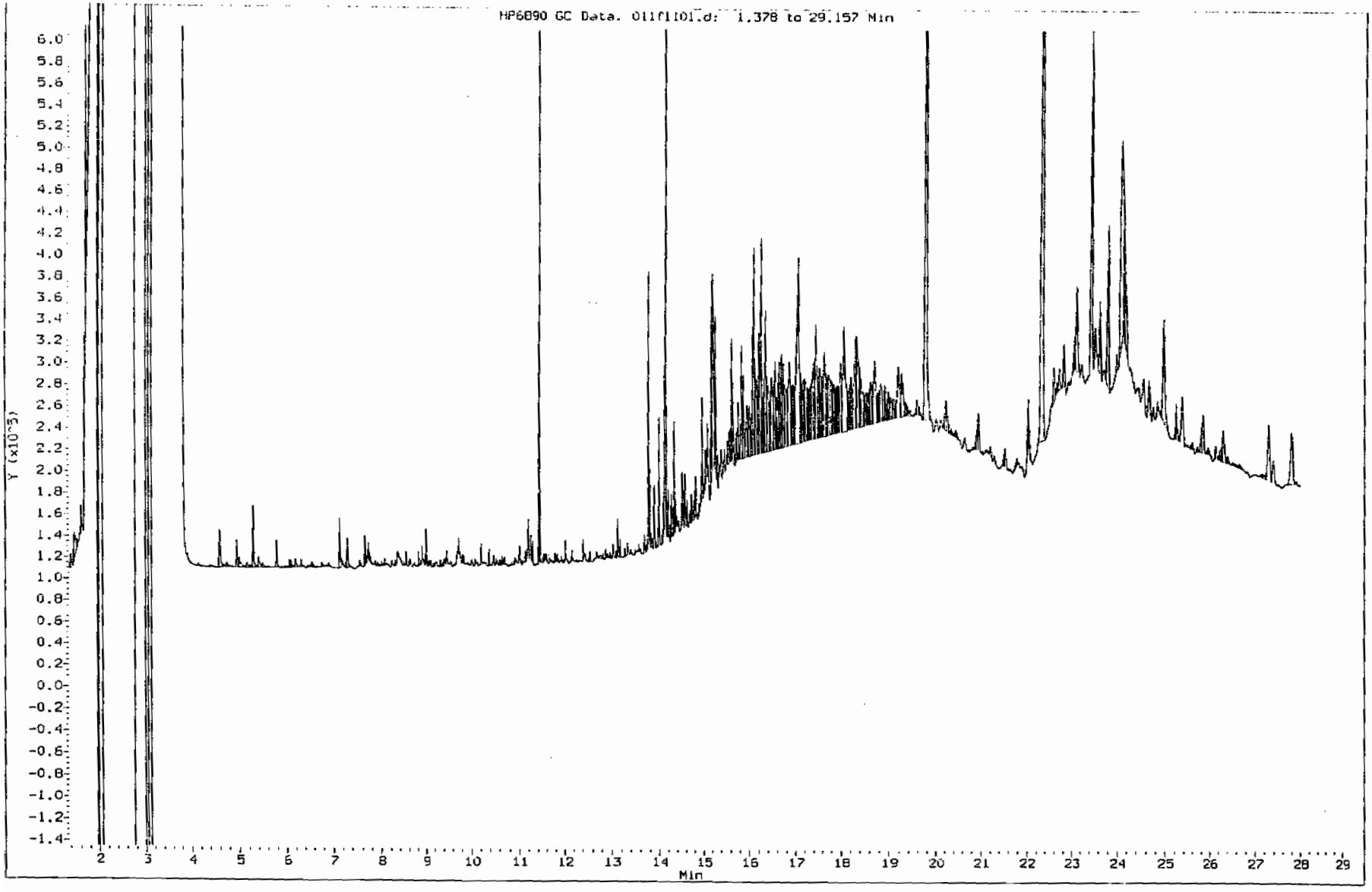

Data File: /chem/fid5.i/113009dr/011f1101.d
Injection Date: 30-NOV-2009 22:34
Instrument: Fid5.i
Client Sample ID: WST03-10-2131

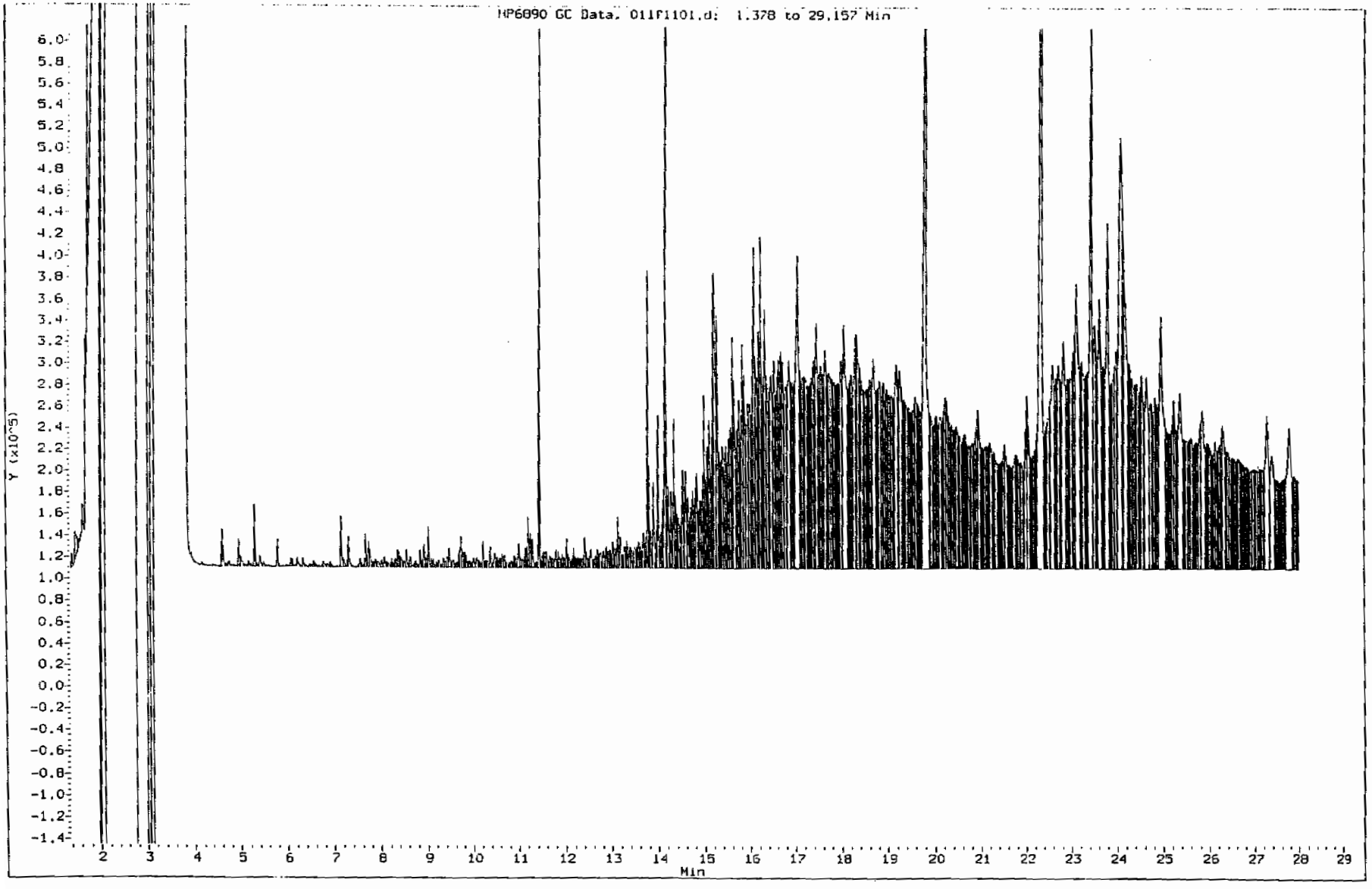

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-578	Date Collected:	11/17/2009 12:00	Matrix:	R
Lab Sample ID:	241423005	Date Received:	11/19/2009 08:45	%Moisture:	9.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2130	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 23:13	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.63	mg/kg	2.40	7.39

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/012f1201.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 30-NOV-2009 23:13
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241423005|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	9.84860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			13232060	98.2817	3.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.139	14.145	-0.006	2015891	9.48314	0.35	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/012f1201.d
Date : 30-NOV-2009 23:13
Client ID: WST03-10-2130
Sample Info: I241423005|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

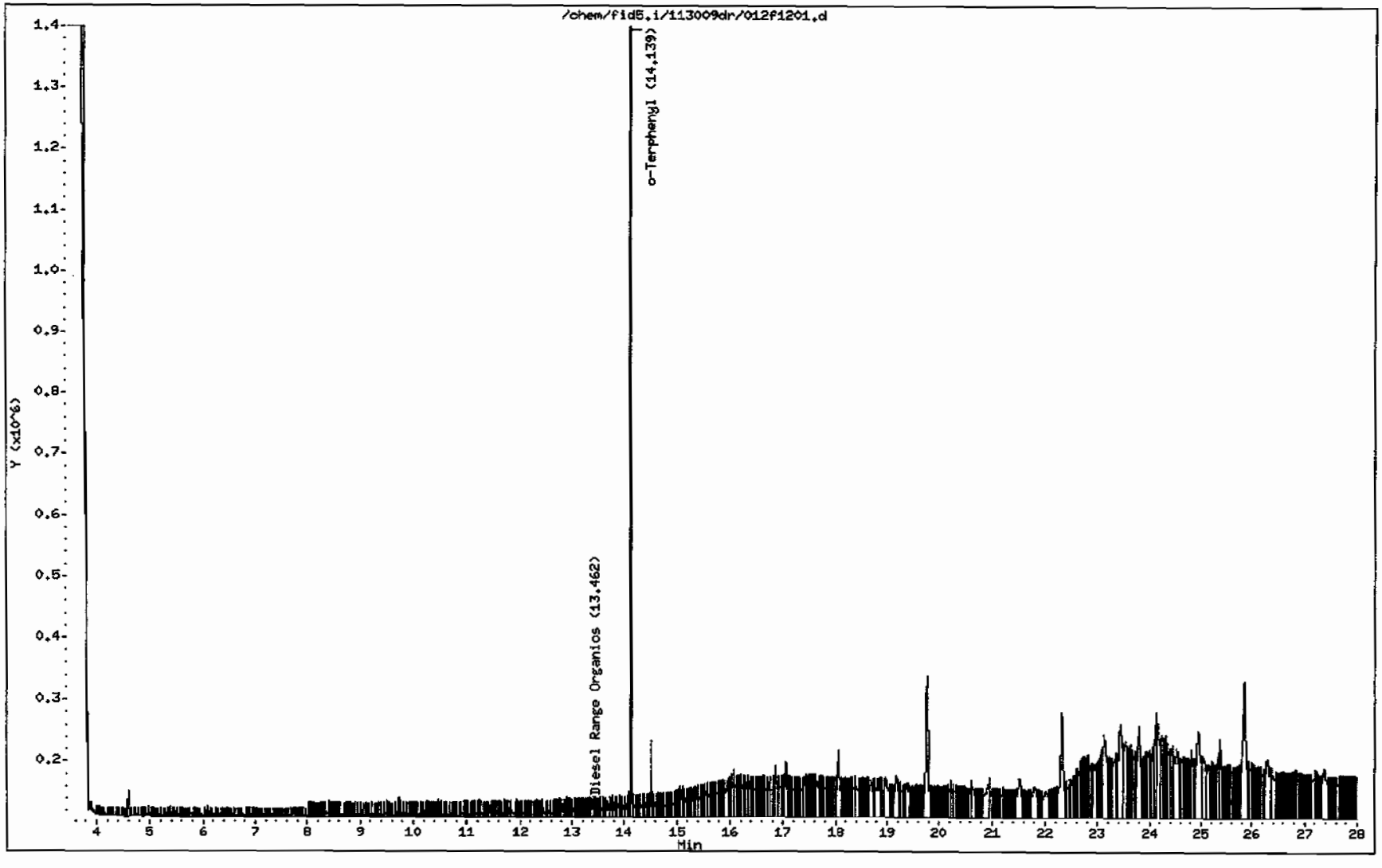

Data File: /chem/fid5.i/113009dr/012f1201.d
Injection Date: 30-NOV-2009 23:13
Instrument: fid5.i
Client Sample ID: WST03-10-2130

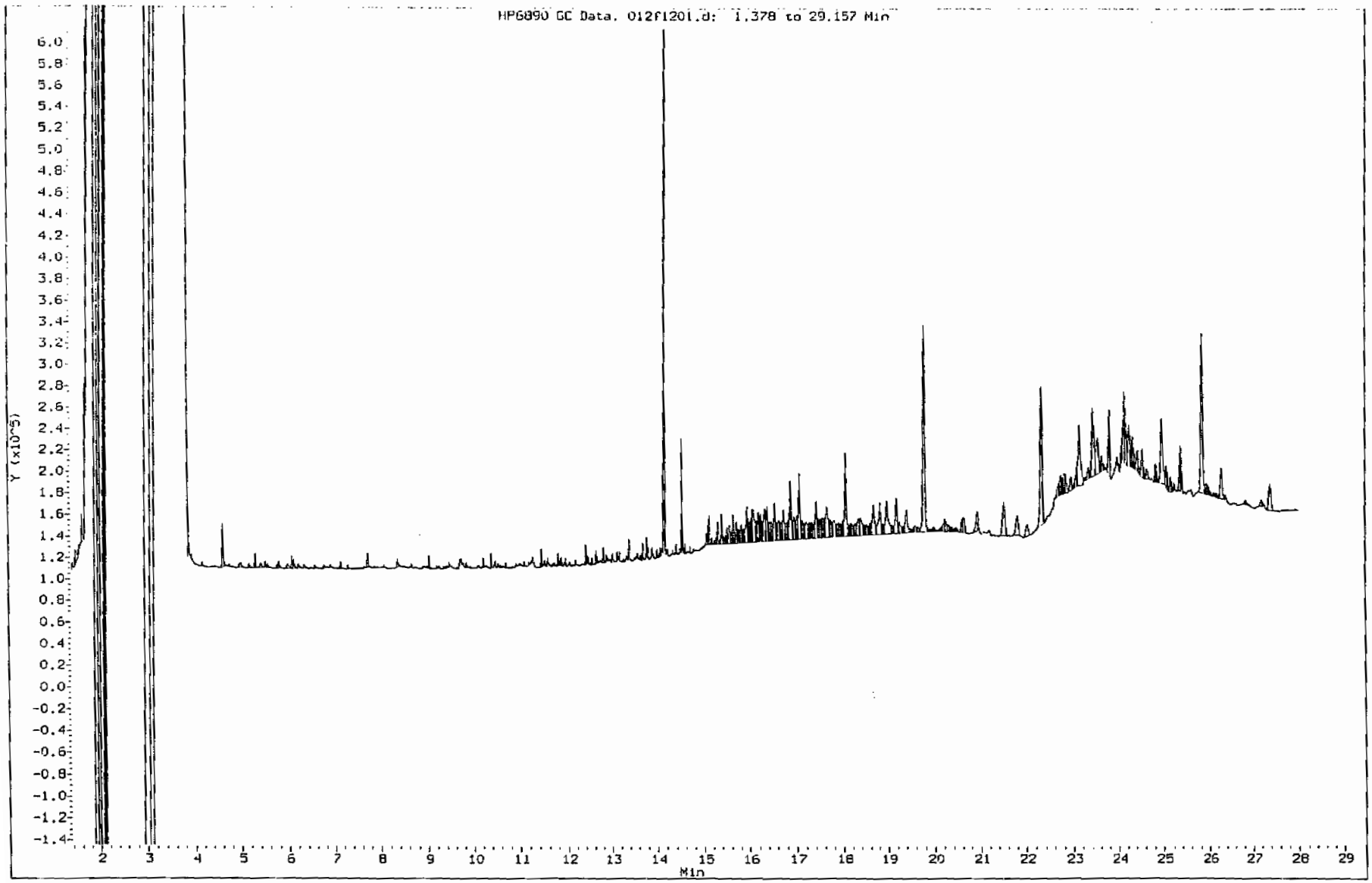

Data File: /chem/fid5.i/113009dr/012f1201.d
Injection Date: 30-NOV-2009 23:13
Instrument: fid5.i
Client Sample ID: WST03-10-2130

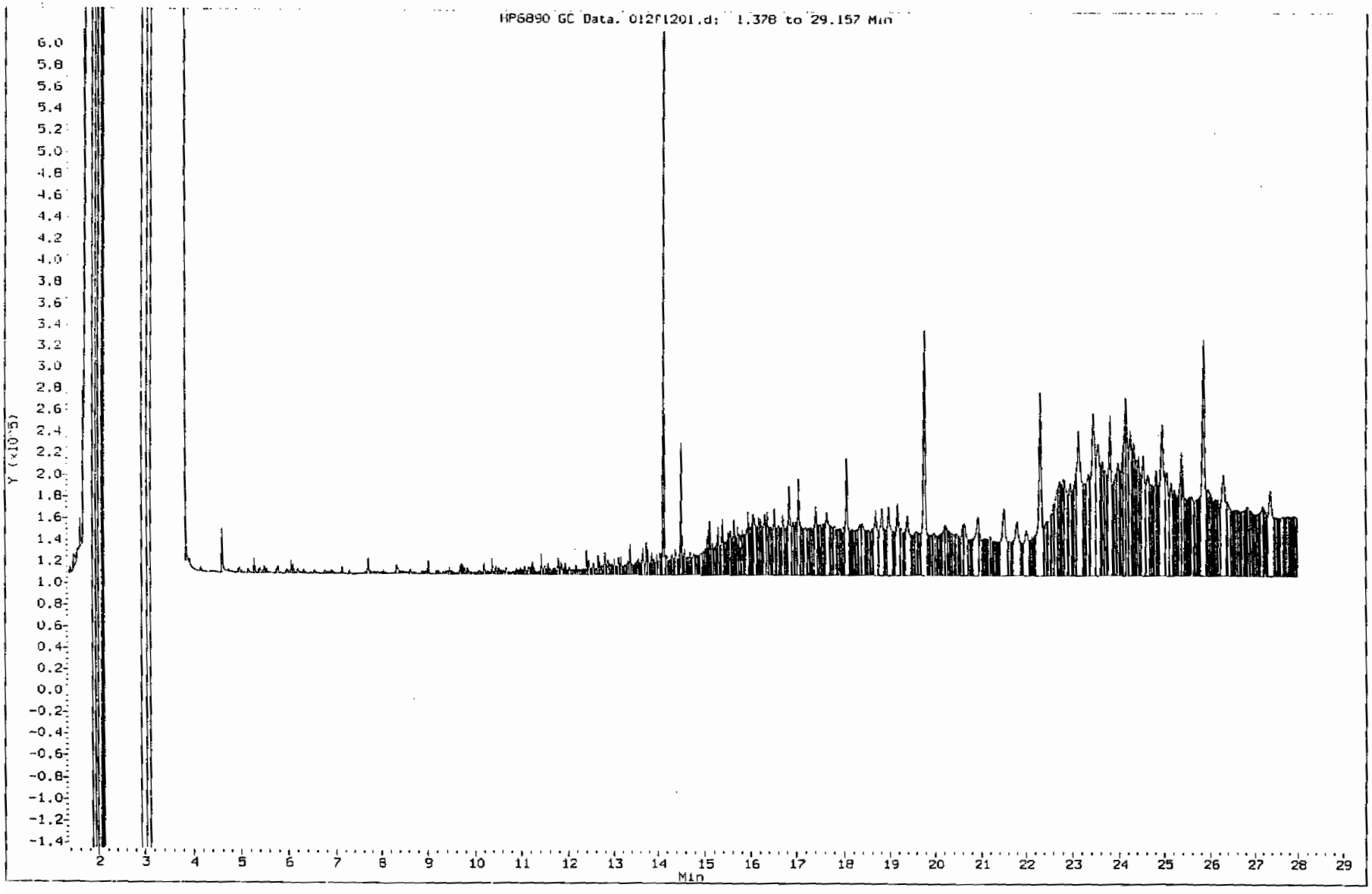

STANDARDS DATA

Report Date: 02-Dec-2009 01:12

Calibration History

Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 23:51	dro	/chem/fid5.i/113009dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 17:28	dro	/chem/fid5.i/113009dr/003f0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 01-Dec-2009 09:57 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

	Compound	RT	RT Window	RF
	3 Decane (C10)	8.032	8.002-8.062	
S	1 Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2 o-Terphenyl	14.145	14.115-14.175	2.126e+05
	4 Octacosane (C28)	18.867	18.837-18.897	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

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INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Cal Date : 01-Dec-2009 09:57 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 1728

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	141780.20	0.01	5.3	15.0
o-Terphenyl	212576.33	208247.31	0.01	-2.0	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 2351

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	152520.07	0.01	13.3	15.0
o-Terphenyl	212576.33	223357.08	0.01	5.1	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 30-NOV-2009 17:28
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
$ 1 Diesel Range Organics					CAS #:
8.008- 18.916			141780197	1000.00	1050
$ 2 o-Terphenyl					CAS #: 84-15-1
14.145	14.145	0.000	5206182	25.0000	24.5

Data File: /chem/fid5.i/113009dr/003f0301.d
Date : 30-NOV-2009 17:28
Client ID: DSTD01
Sample Info: !UFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

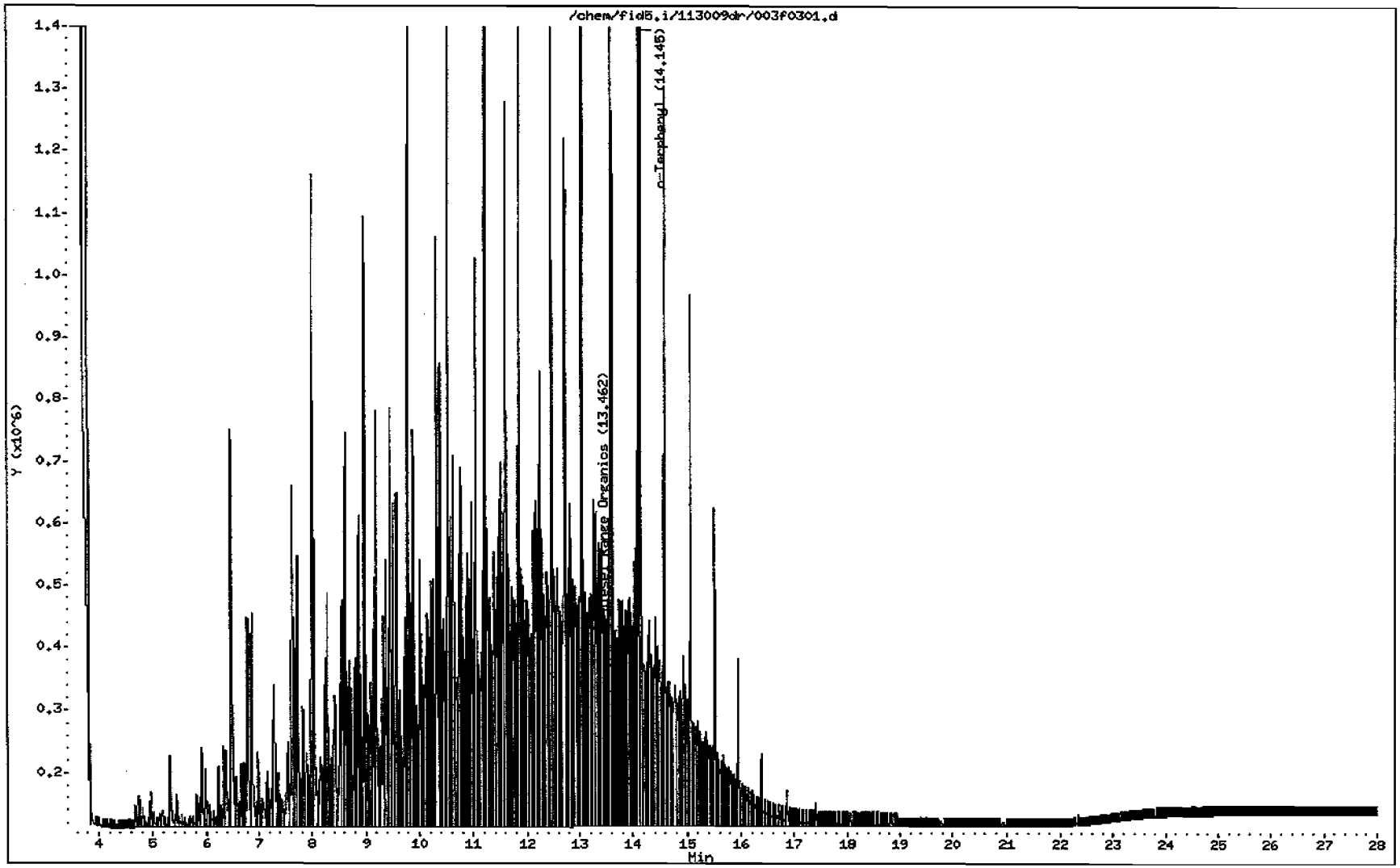

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 30-NOV-2009 23:51
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	8.008- 18.916			152520070	1000.00		1130
$	2 o-Terphenyl						CAS #: 84-15-1
	14.146	14.145	0.001	5583926	25.0000		26.3

Data File: /chem/fid5.i/113009dr/013f1301.d
Date : 30-NOV-2009 23:51
Client ID: DSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

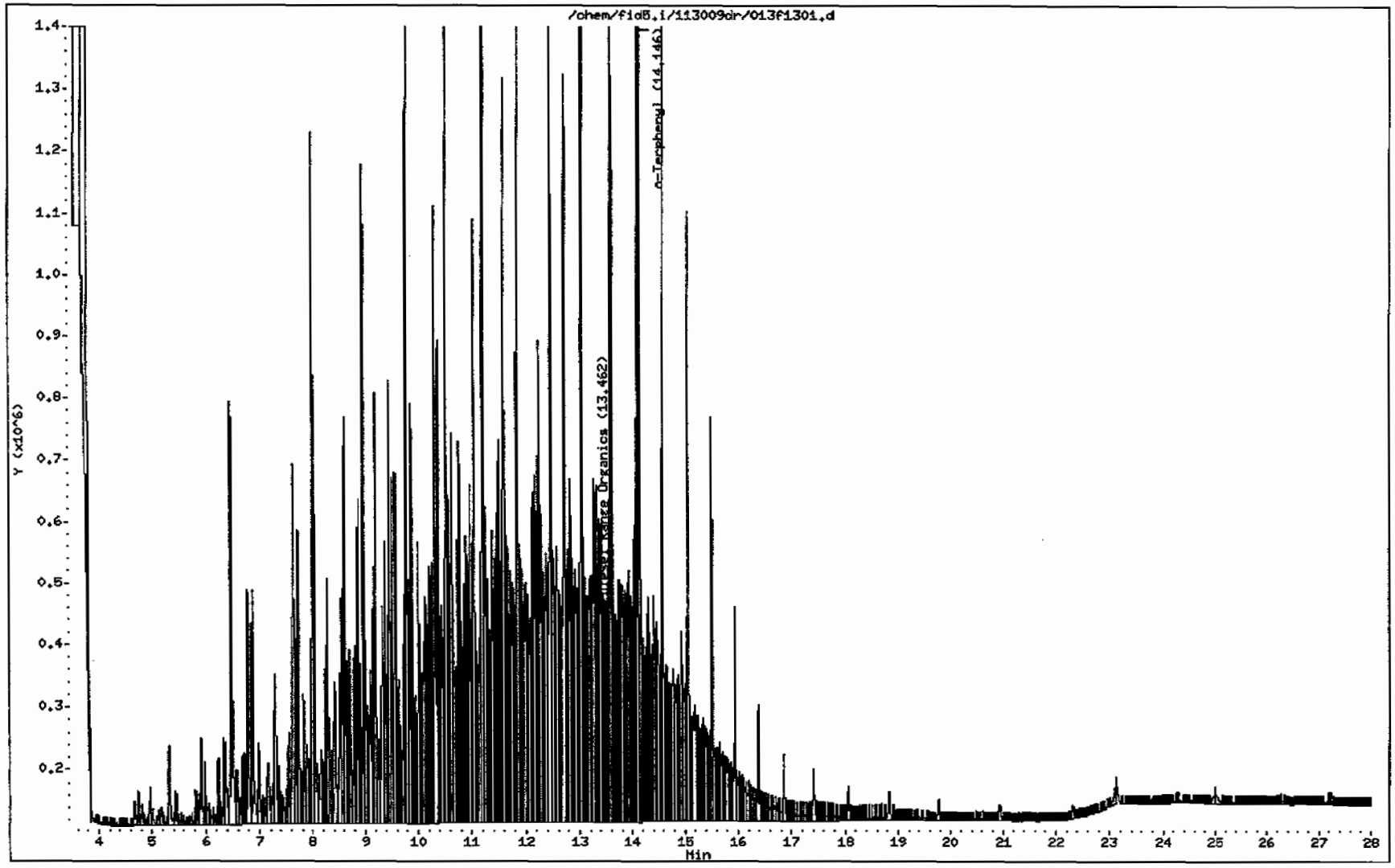

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	11/30/09	1612	14.14	
02	RTMARKER	UFI091013-03	11/30/09	1649		
03	DSTD01	UFI091118-01	11/30/09	1728	14.15	
04	DIBLK02	WFI091130-06	11/30/09	1805	14.14	
05	DBLK01	1201981721	11/30/09	1843	14.14	
06	DBLK01LCS	1201981724	11/30/09	1921	14.14	
07	ZZZZZ	ZZZZZ	11/30/09	2000	14.14	
08	ZZZZZ	ZZZZZ	11/30/09	2038	14.14	
09	ZZZZZ	ZZZZZ	11/30/09	2117	14.14	
10	ZZZZZ	ZZZZZ	11/30/09	2155	14.14	
11	WST03-10-2131	241423004	11/30/09	2234	14.14	
12	WST03-10-2130	241423005	11/30/09	2313	14.14	
13	DSTD02	UFI091118-01	11/30/09	2351	14.15	
14	DIBLK03	WFI091130-06	12/01/09	0029	14.14	
15	ZZZZZ	ZZZZZ	12/01/09	0107	14.14	
16	ZZZZZ	ZZZZZ	12/01/09	0145	14.14	
17	ZZZZZ	ZZZZZ	12/01/09	0224	14.14	
18	ZZZZZ	ZZZZZ	12/01/09	0303	14.13	
19	ZZZZZ	ZZZZZ	12/01/09	0341		
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-578			**Matrix:**	SOIL
Lab Sample ID:	1201981721				
Client Sample:	QC for batch 926870	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926870	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 18:43	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/005f0501.d
Lab Smp Id: 1201981721 Client Smp ID: DBLK01
Inj Date : 30-NOV-2009 18:43
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981721|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2500731	11.7639	0.39

Data File: /chem/fid5.i/113009dr/005f0501.d
Date : 30-NOV-2009 18:43
Client ID: DBLK01
Sample Info: |1201981721|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

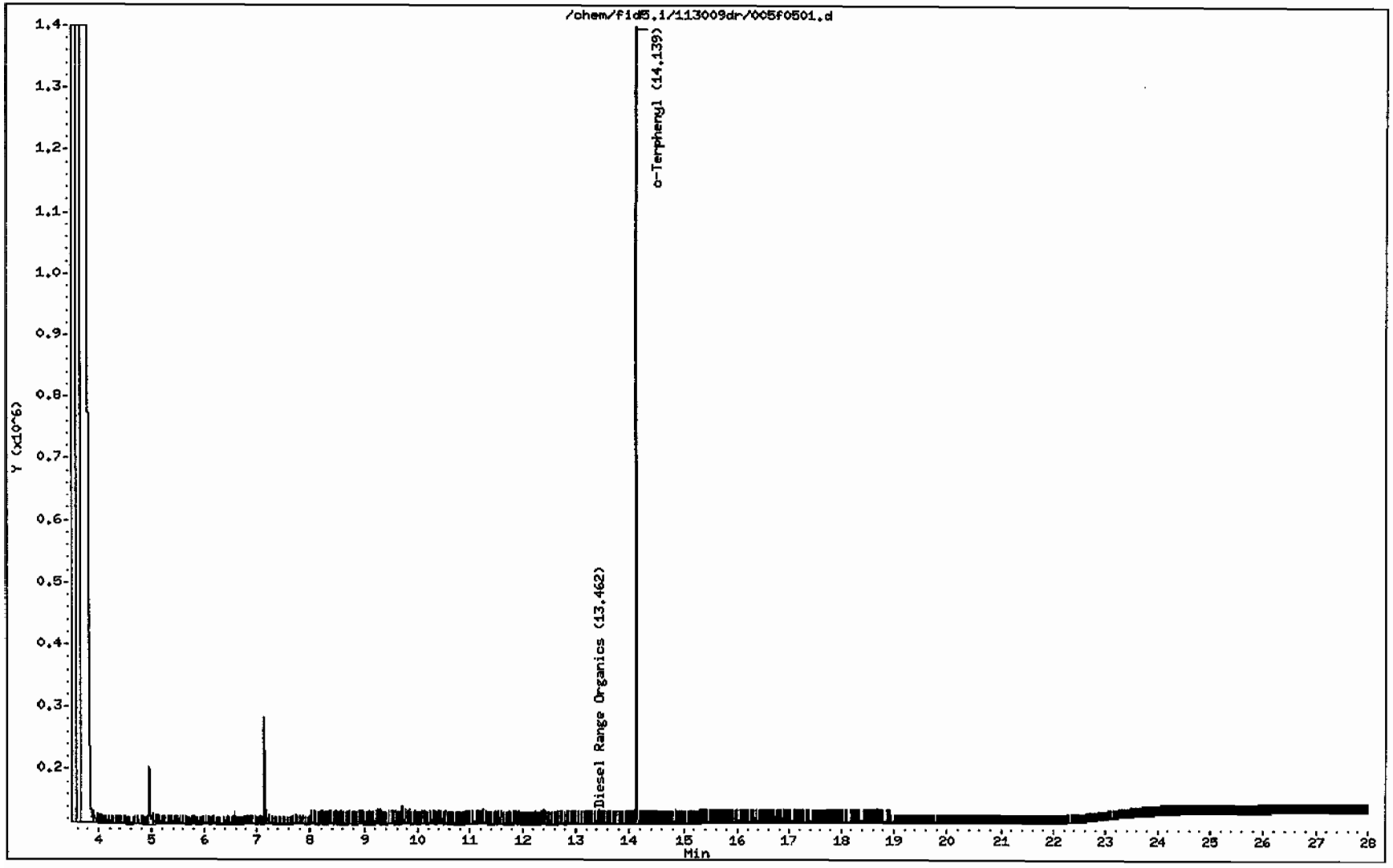

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-578			Matrix:	SOIL
Lab Sample ID:	1201981724				
Client Sample:	QC for batch 926870	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926870	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 19:21	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		27.7	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/006f0601.d
Lab Smp Id: 1201981724 Client Smp ID: DBLK01LCS
Inj Date : 30-NOV-2009 19:21
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981724|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			112073366	832.429	27.7
$ 2 o-Terphenyl					CAS #: 84-15-1
14.143	14.145	-0.002	3523785	16.5766	0.55

Data File: /chem/fid5.i/113009dr/006f0601.d
Date : 30-NOV-2009 19:21
Client ID: DBLK01LCS
Sample Info: |120198172411|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

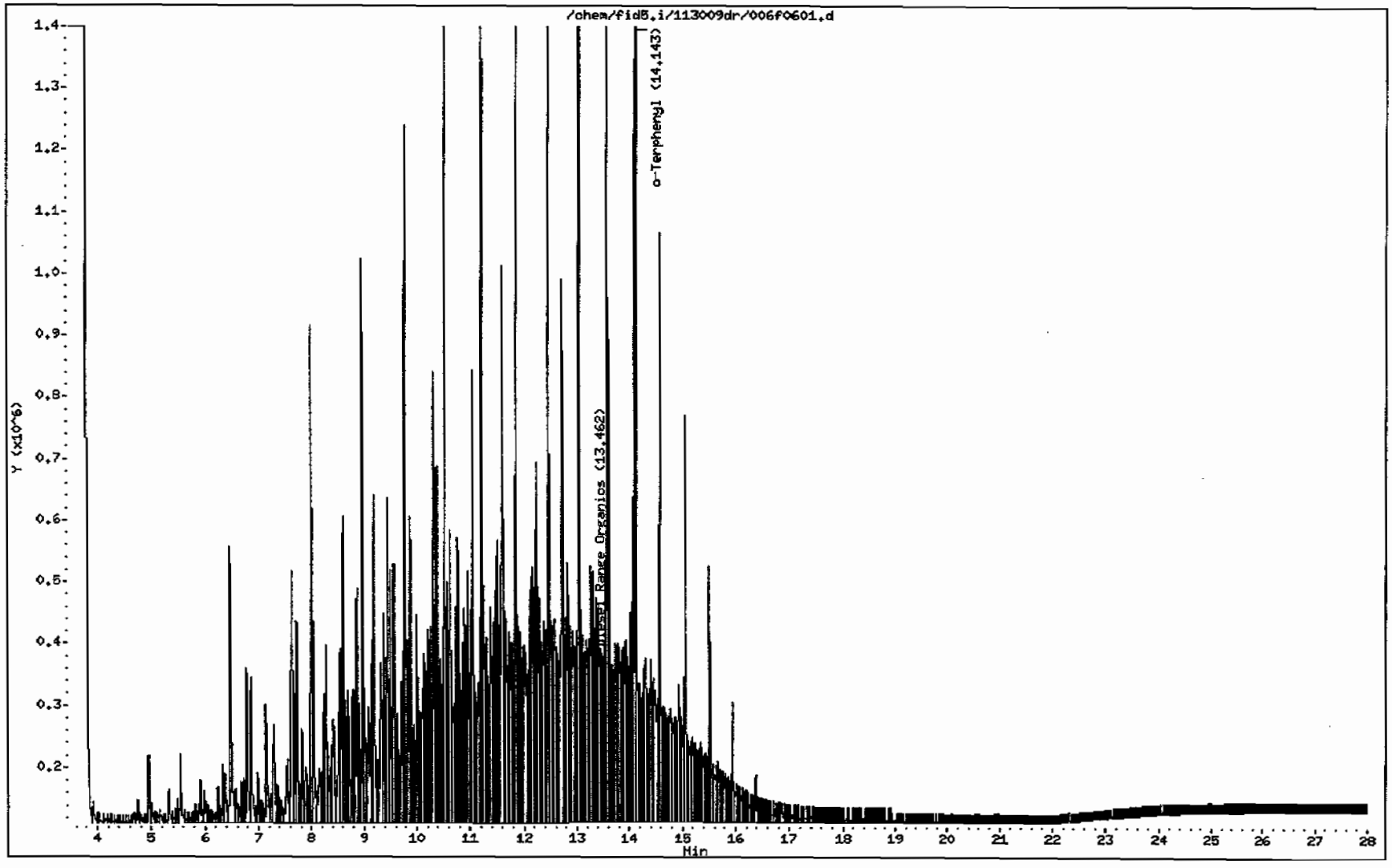

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORH	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MBSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359	1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359	1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359	1.0	LANL	USE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359	1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359	1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359	1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359	1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359	1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08		SDGa26875	1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46		SDGa26875	1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359	1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359	1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359	1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359	1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359	1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359	1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359	1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359	1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875	1.0		CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359	1.0	LANL	USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359	1.0	LANL	USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359	1.0	LANL	USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359	1.0	LANL	USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406	1.0	LANL	USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406		1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406		1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875		1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875		1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875		1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385		1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385		1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385		1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385		1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385		1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385		1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385		1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385		1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385		1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42		SDGa26875		1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20		SDGa26875		1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58		SDGa26875		1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35		SDGa26875		1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 12/01/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:113009DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	30-NOV-2009 16:12		SDGa01714	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	30-NOV-2009 16:49		SDGa01714	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	30-NOV-2009 17:28		SDGa01714	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	30-NOV-2009 18:05		SDGa01714	1.0		CLEAN
005f0501.d	1201981721	KXR2	30-NOV-2009 18:43	926871	SDGa01714	1.0	MB	USE
006f0601.d	1201981724	KXR2	30-NOV-2009 19:21	926871		1.0	LCS	USE
007f0701.d	241417001	KXR2	30-NOV-2009 20:00	926871	10-575	1.0	LANL	USE
008f0801.d	1201981722	KXR2	30-NOV-2009 20:38	926871	10-575	1.0	MS	USE
009f0901.d	1201981723	KXR2	30-NOV-2009 21:17	926871	10-575	1.0	MSD	USE
010f1001.d	241417002	KXR2	30-NOV-2009 21:55	926871	10-575	1.0	LANL	USE
011f1101.d	241423004	KXR2	30-NOV-2009 22:34	926871	10-578	1.0	LANL	USE
012f1201.d	241423005	KXR2	30-NOV-2009 23:13	926871	10-578	1.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	30-NOV-2009 23:51		SDGa01714	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	01-DEC-2009 00:29		SDGa01714	1.0		CLEAN
015f1501.d	241503002	KXR2	01-DEC-2009 01:07	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

Instrument Batch: /chem/fid5.i/113009dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241503003	KXR2	01-DEC-2009 01:45	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

017f1701.d	241503004	KXR2	01-DEC-2009 02:24	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN
018f1801.d	241524002	KXR2	01-DEC-2009 03:03	926871	10-600	10.0	LANL	DUSE,INSTRUMENT SHUTDOWN
019f1901.d	241539001	KXR2	01-DEC-2009 03:41	926871	10-603	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926870 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981721 MB	29–NOV–2009 20:04:50	30	1	0.03333
1201981724 LCS	29–NOV–2009 20:04:50	30	1	0.03333
241417001	29–NOV–2009 20:04:50	30.17	1	0.03315
1201981722 MS (241417001)	29–NOV–2009 20:04:50	30.13	1	0.03319
1201981723 MSD (241417001)	29–NOV–2009 20:04:50	30.17	1	0.03315
241417002	29–NOV–2009 20:04:50	30.18	1	0.03313
241423004	29–NOV–2009 20:04:50	30.18	1	0.03313
241423005	29–NOV–2009 20:04:50	30.04	1	0.03329
241503002	29–NOV–2009 20:04:50	30.11	1	0.03321
241503003	29–NOV–2009 20:04:50	30.1	1	0.03322
241503004	29–NOV–2009 20:04:50	30.19	1	0.03312
241524002	29–NOV–2009 20:04:50	30.09	1	0.03323
241539001	29–NOV–2009 20:04:50	30.02	1	0.03331
241539002	29–NOV–2009 20:04:50	30.05	1	0.03328
241539003	29–NOV–2009 20:04:50	30.03	1	0.0333
241539004	29–NOV–2009 20:04:50	30.03	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981724	TPH DRO LCS	UE091030–08	1	mL
MS	1201981722	TPH DRO LCS	UE091030–08	1	mL
MSD	1201981723	TPH DRO LCS	UE091030–08	1	mL
SURR	All	20 ppm surrogate	WE091121–04	1	mL
REGNT	All	Methylene Chloride	1234878–D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/008f0801.d
Lab Smp Id: 1201981722 Client Smp ID: RE03-09-13812MS
Inj Date : 30-NOV-2009 20:38
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981722|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			105879710	786.426	28.1	
S 2 o-Terphenyl					CAS #: 84-15-1	
14.142	14.145	-0.003	2871765	13.5093	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/008f0801.d
Date : 30-NOV-2009 20:38
Client ID: RE03-09-13812MS
Sample Info: |1201981722|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

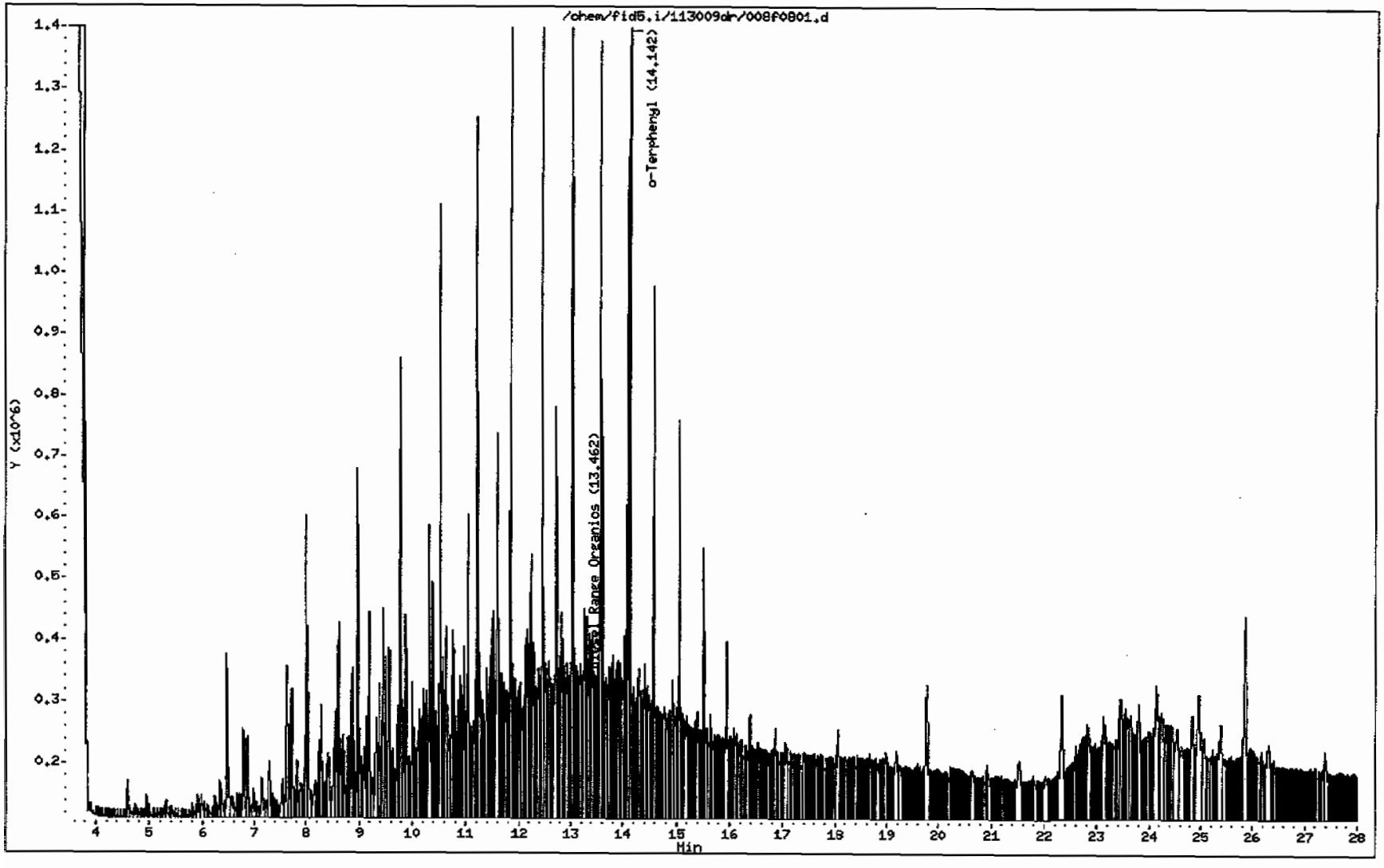

Data File: /chem/fid5.i/113009dr/008f0801.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

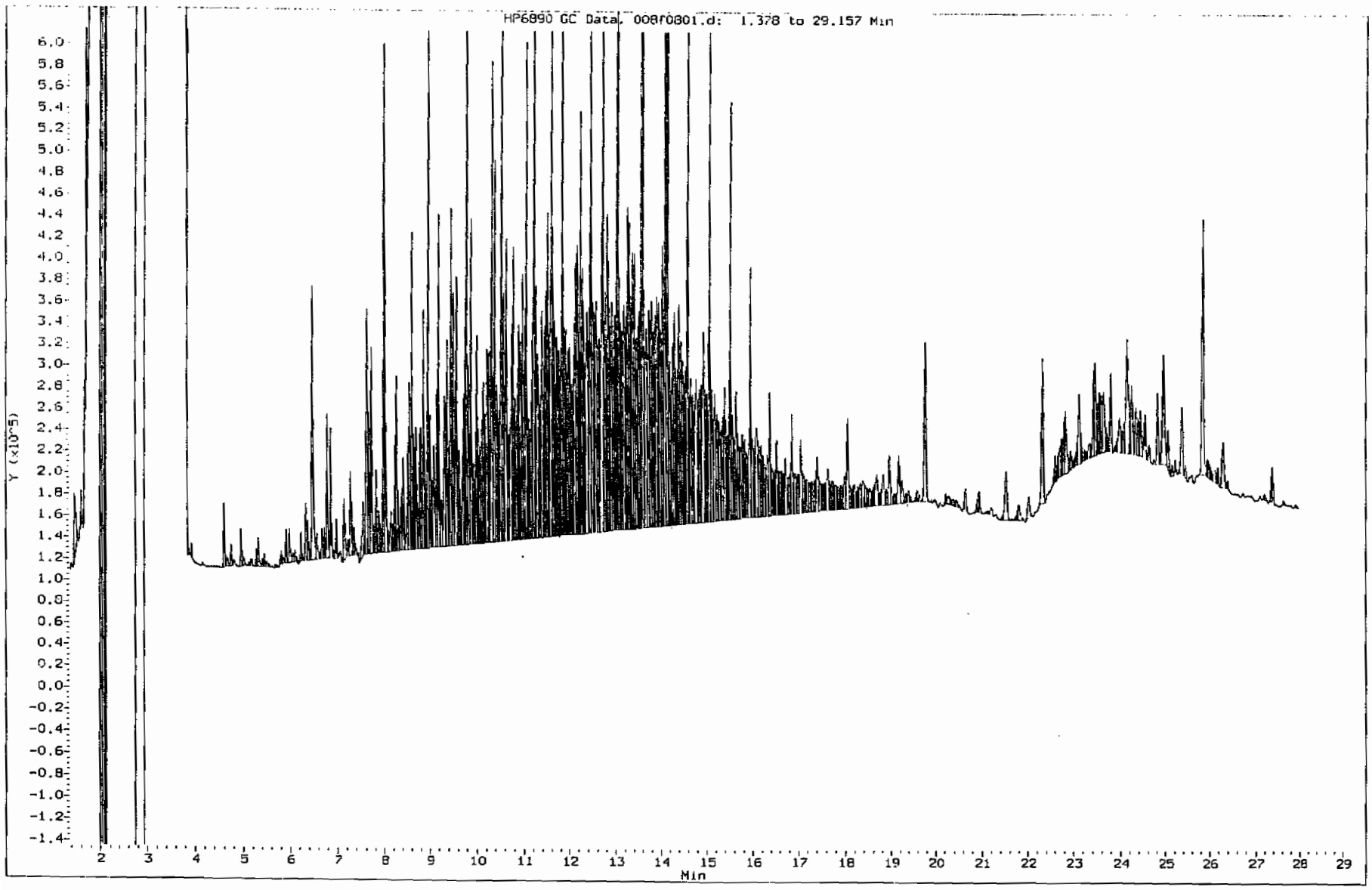

Data File: /chem/fid5.i/113009dr/0080001.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

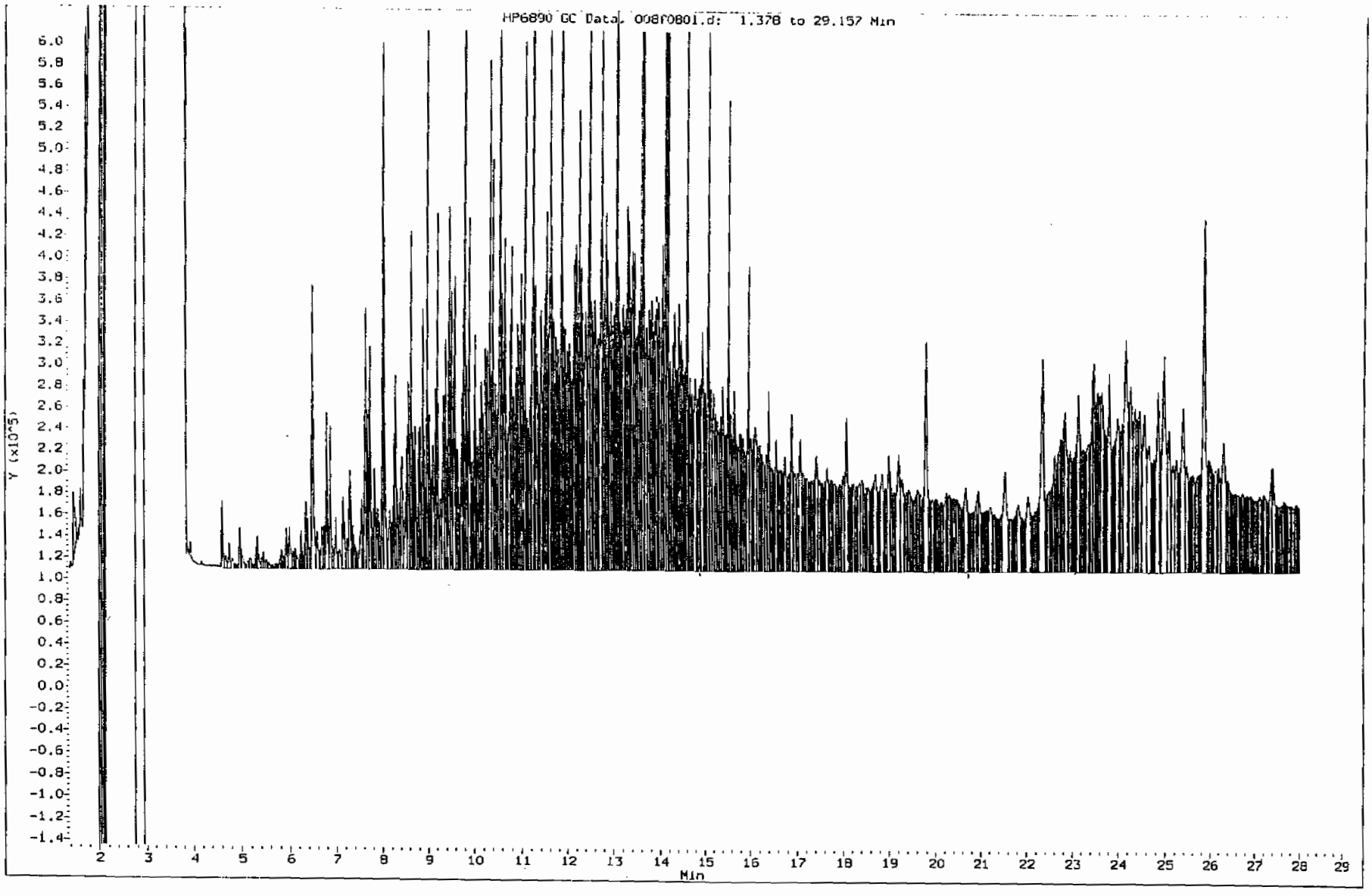

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/009f0901.d
Lab Smp Id: 1201981723 Client Smp ID: RE03-09-13812MSD
Inj Date : 30-NOV-2009 21:17
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981723|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
$ 1 Diesel Range Organics					CAS #:	
8.008- 18.916			105621807	784.510	28.0	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.141	14.145	-0.004	2830842	13.3168	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/009f0901.d
Date : 30-NOV-2009 21:17
Client ID: RE03-09-13812MSD
Sample Info: |1201981723|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

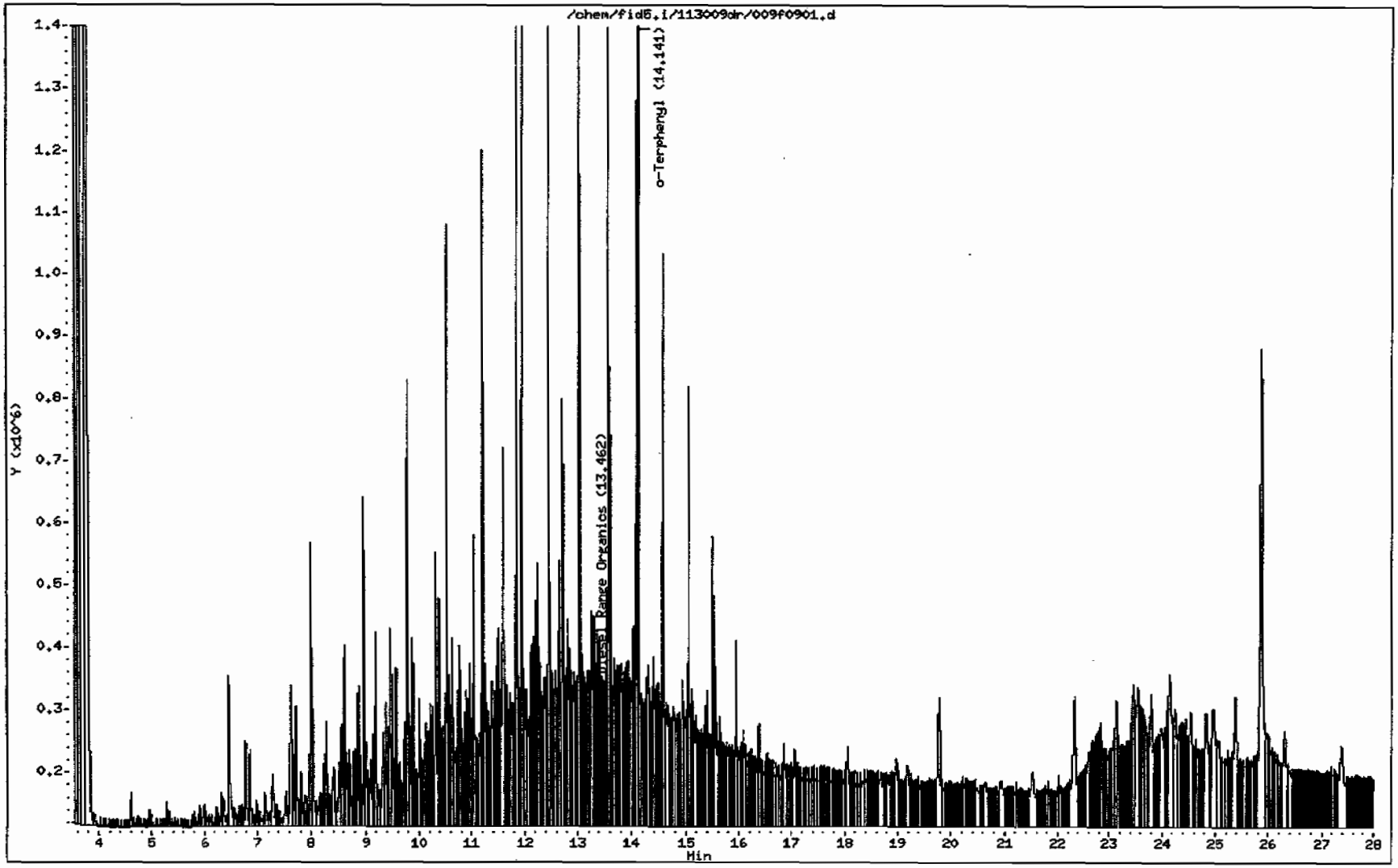

Data File: /chem/fid5.i/113009dr/009f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

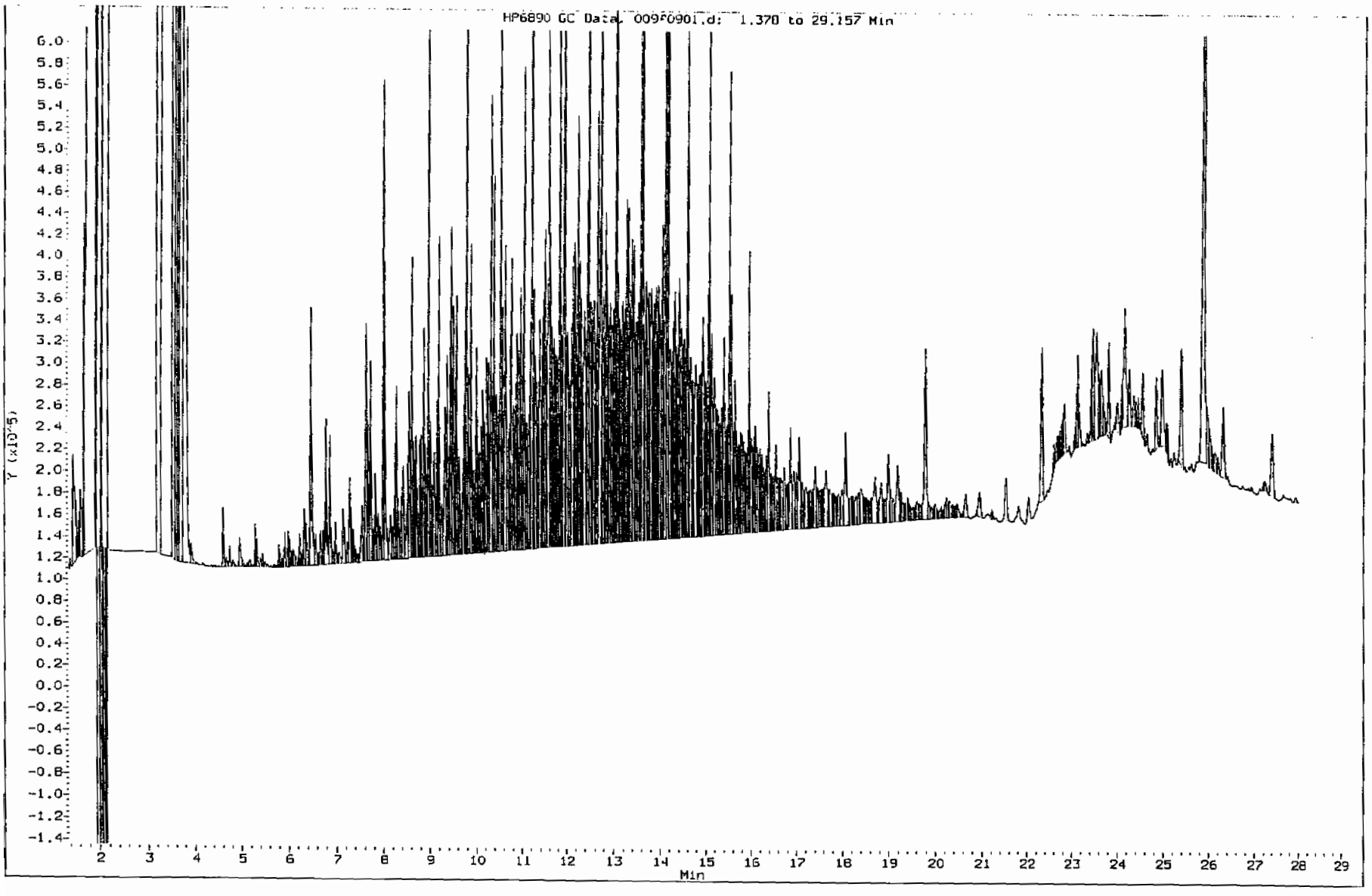

Data File: /chem/fid5.i/113009dr/009f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

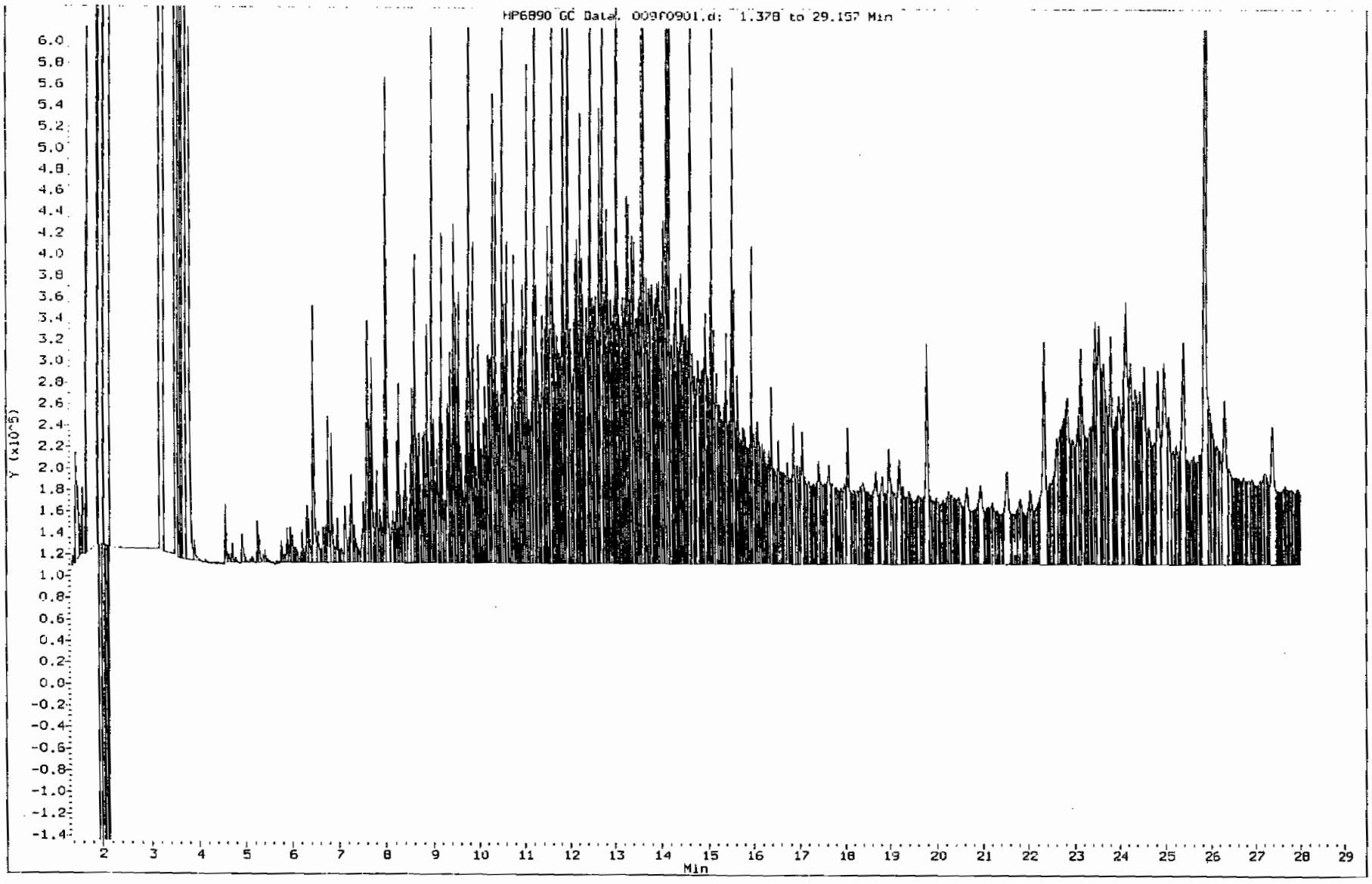

GC Volatile GRO Analysis

GC Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-578

Method/Analysis Information

Procedure:	Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector
Analytical Method:	SW846 8015B VOC
Prep Method:	SW846 8015B PREP
Analytical Batch Number:	922251
Prep Batch Number:	922250

Sample Analysis

The following client and quality control samples were analyzed to complete this sample delivery group/work order using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241423004	WST03-10-2131
241423005	WST03-10-2130
1201980891	Method Blank (MB)
1201980895	Laboratory Control Sample (LCS)
1201980892	241423004(WST03-10-2131) Post Spike (PS)
1201980893	241423004(WST03-10-2131) Post Spike Duplicate (PSD)

The samples in this SDG were analyzed on a "dry weight" basis.

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Gasoline Range Organics will be designated as GRO throughout this case narrative.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 20.2.6.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-004 REV# 18.

Calibration Information

Due to the limited capacity of software, all of the current initial calibration files may not be displayed. If necessary, a calibration history report was inserted, prior to the appropriate Form 6, in the Standards section in the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries, in all samples and quality control samples, were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241423004 (WST03-10-2131) was selected for analysis as the matrix spike.

Matrix Spike (PS) Recovery Statement
The GRO recovery was within the acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The GRO recovery was within the acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD between the matrix spike pair met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A NCR was not required for this sample delivery group/work order.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check(s), and samples may have been manually integrated to correct misidentification of peaks by the integration software.

Additional Comments
Additional comments were not required for this SDG.

System Configuration
The GRO Organics analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOC4A.I	Agilent 6890N FID	HP6890N GC/FID	DB-624	0.53mm x 3.0u x 15m	Tekmar #1

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-578 GEL Work Order: 241423

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 12 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-578 GRO

This roadmap was analyzed by ACJ on 11-27-2009, 16:24.
This roadmap was reviewed by kel00587 on 11-30-2009, 14:57.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/voc4a.i/112409/4m200005.d	241423004	24-NOV-2009	22:15	GRO.sub	WST03-10-2131	1	
☐	N	/chem/voc4a.i/112409/4m200006.d	241423005	24-NOV-2009	22:45	GRO.sub	WST03-10-2130	1	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/voc4a.i/112409/4m200011.d	1201980892	ms	25-NOV-2009	01:13	GRO.sub	WST03-10-2131MS	1	
☐	N	/chem/voc4a.i/112409/4m200012.d	1201980893	msd	25-NOV-2009	01:42	GRO.sub	WST03-10-2131MSD	1	
☐	Y	/chem/voc4a.i/112409/4m200003L.d	1201980895	lcs	24-NOV-2009	21:03	GRO.sub	LCS	1.00000	
☐	Y	/chem/voc4a.i/112409/4m200004B.d	1201980891	mb	24-NOV-2009	21:33	GRO.sub	BLANK	1.00000	

Sample Data Summary

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/24/2009 22:45	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200006.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	55.5	ug/kg	12.4	55.5

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/24/2009 22:15	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:05	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200005.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	54.3	ug/kg	12.2	54.3

QC Summary

GC Volatiles (GRO)

Surrogate Recovery Report

SDG Number: 10-578

Matrix Type: SOLID

CAP Column (1) : Rtx-Volatiles

Sample ID	Client ID	BFB %REC
1201980895	LCS for batch 922250	96
1201980891	MB for batch 922250	98
241423004	WST03-10-2131	85
241423005	WST03-10-2130	87
1201980892	WST03-10-2131PS	72
1201980893	WST03-10-2131PSD	75

Surrogate	Acceptance Limits
BFB = Bromofluorobenzene	(26%-143%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-578**	**Sample Type:**	**Post Spike**
Client ID:	**WST03-10-2131PS**	**Matrix:**	**R**
Lab Sample ID:	**1201980892**	**%Moisture:**	**7.9**
Instrument:	**VOC4A.I**	**Analysis Date:**	**11/25/2009 01:13**
Analyst:	**ACJ**	**Prep Batch ID:**	**922250**
Aliquot:	**5 mL**	**Batch ID:**	**922251**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
PS	Gasoline Range Organics	500	0.00	U	348	70	5-138

GC Volatiles (GRO)

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2131PSD
Lab Sample ID: 1201980893
Instrument: VOC4A.I
Analyst: ACJ
Aliquot: 5 mL

Sample Type: Post Spike Duplicate
Matrix: R
%Moisture: 7.9
Analysis Date: 11/25/2009 01:42
Prep Batch ID: 922250
Batch ID: 922251
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
PSD	Gasoline Range Organics	500	0.00	U	405	81	5-138	15	0-30

GC Volatiles (GRO)

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 922250
Lab Sample ID: 1201980895
Instrument: VOC4A.I
Analyst: ACJ
Aliquot: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/24/2009 21:03
Dilution: 1
Prep Batch ID: 922250
Batch ID: 922251

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
	LCS	Gasoline Range Organics	500	0.0	512	102	85-123

Method Blank Summary

SDG Number:	10-578	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 922250	Instrument ID:	VOC4A.I	Data File:	4m200004B.d
Lab Sample ID:	1201980891	Prep Date:	11/24/2009 20:00	Analyzed:	11/24/09 21:33
Column:	Rtx-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 922250	1201980895	4m200003L.d	11/24/09	2103
02	WST03-10-2131	241423004	4m200005.d	11/24/09	2215
03	WST03-10-2130	241423005	4m200006.d	11/24/09	2245
04	WST03-10-2131PS	1201980892	4m200011.d	11/25/09	0113
05	WST03-10-2131PSD	1201980893	4m200012.d	11/25/09	0142

Sample Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/24/2009 22:45	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200006.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	55.5	ug/kg	12.4	55.5

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Data file : /chem/voc4a.i/112409/4m200006.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 24-NOV-2009 22:45
Operator : ACJ Inst ID: voc4a.i
Smp Info : |241423005|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.84860	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	40274458	43.5868	48.3

Data File: /chem/voc4a.i/112409/4m200006.d
Date : 24-NOV-2009 22:45
Client ID: WST03-10-2130
Sample Info: |241423005|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

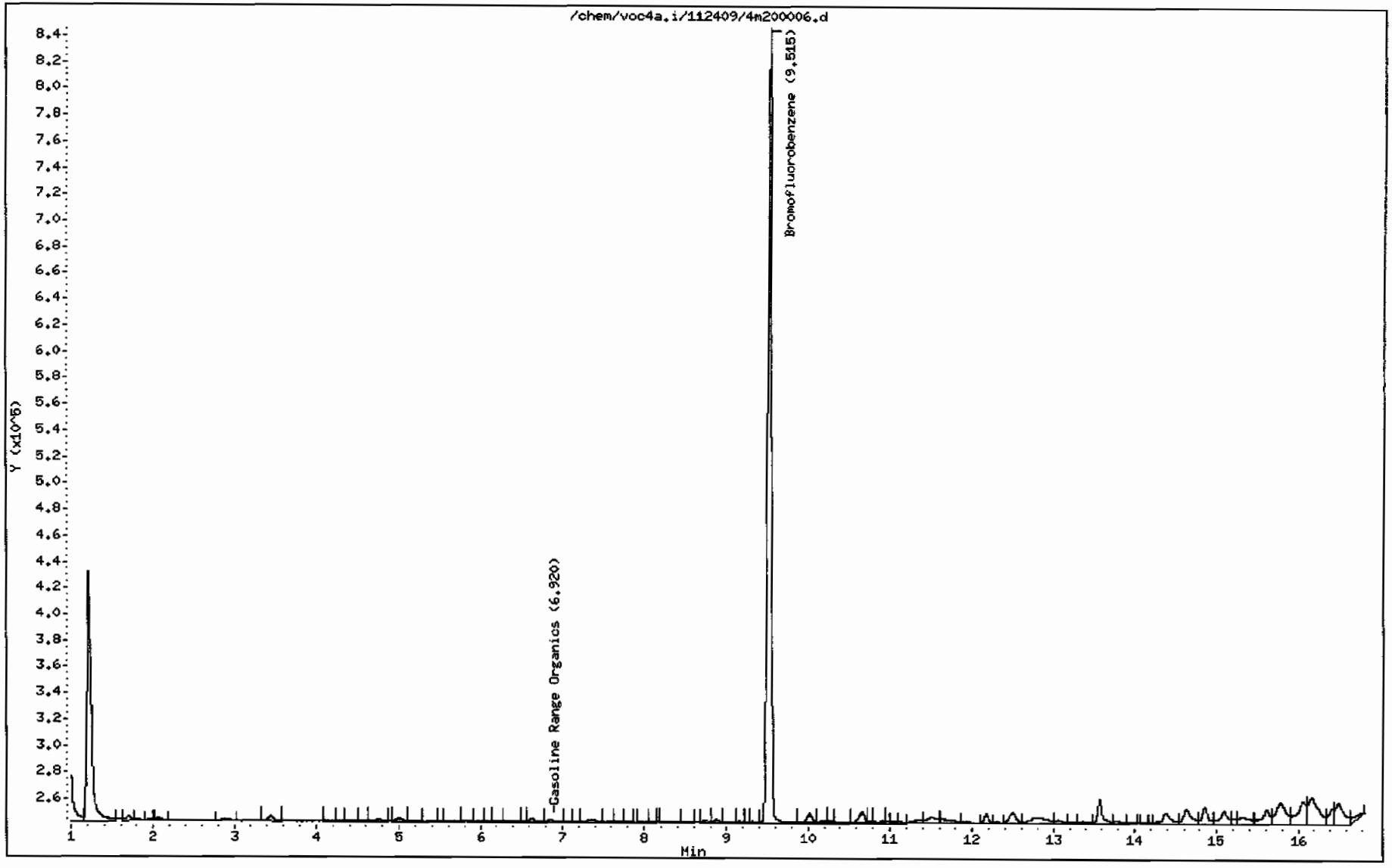

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241423004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8015A/B VOC**	**SOP Ref:**	**GL-OA-E-004**
Batch ID:	**922251**	**Inst:**	**VOC4A.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 22:15**	**Analyst:**	**ACJ**	**Aliquot:**	**5 mL**
Prep Date:	**11/24/2009 21:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m200005.d**	**Column:**	**Rtx-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	54.3	ug/kg	12.2	54.3

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SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200005.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 24-NOV-2009 22:15
Operator : ACJ Inst ID: voc4a.i
Smp Info : |241423004|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.92250	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	39471228	42.7175	46.4

Data File: /chem/voc4a.i/112409/4m200005.d
Date : 24-NOV-2009 22:15
Client ID: WST03-10-2131
Sample Info: |24142300411|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

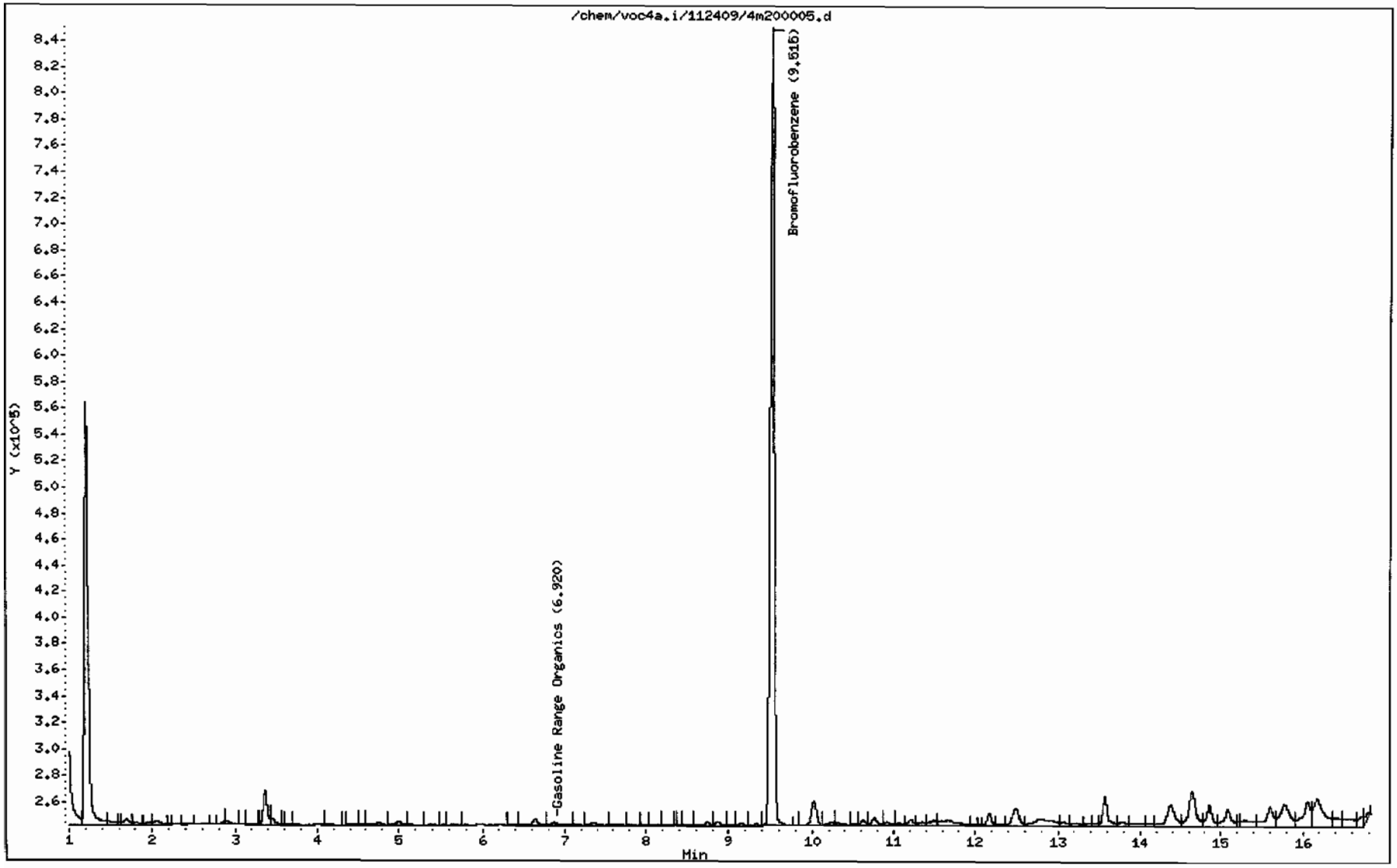

Standard Data

Report Date: 27-Nov-2009 15:58

Calibration History

Method : /chem/voc4a.i/112409/8015GRO-111909.m
Start Cal Date: 19-NOV-2009 23:12
End Cal Date : 20-NOV-2009 02:10

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 50.00000		
19-NOV-2009 23:12	GRO	/chem/voc4a.i/111909/41400011.d
Cal Level: 2 , Cal Amount: 100.00000		
19-NOV-2009 23:42	GRO	/chem/voc4a.i/111909/41400012.d
Cal Level: 3 , Cal Amount: 250.00000		
20-NOV-2009 00:12	GRO	/chem/voc4a.i/111909/41400013.d
Cal Level: 4 , Cal Amount: 500.00000		
20-NOV-2009 00:42	GRO	/chem/voc4a.i/111909/41400014.d
Cal Level: 5 , Cal Amount: 750.00000		
20-NOV-2009 01:11	GRO	/chem/voc4a.i/111909/41400015.d
Cal Level: 6 , Cal Amount: 1000.00000		
20-NOV-2009 01:41	GRO	/chem/voc4a.i/111909/41400016.d
Cal Level: 7 , Cal Amount: 2000.00000		
20-NOV-2009 02:10	GRO	/chem/voc4a.i/111909/41400017.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 500		
25-NOV-2009 02:12	GRO	/chem/voc4a.i/112409/4m200013.d
Ccal Level: 4 , Ccal Amount: 500		
24-NOV-2009 20:33	GRO	/chem/voc4a.i/112409/4m200002.d

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INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 23:12
End Cal Date : 20-NOV-2009 02:10
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem/voc4a.i/112409/8015GRO-111909.m
Cal Date : 25-Nov-2009 15:34 amj
Curve Type : Average

Calibration File Names:
Level 1: /chem/voc4a.i/111909/41400011.d
Level 2: /chem/voc4a.i/111909/41400012.d
Level 3: /chem/voc4a.i/111909/41400013.d
Level 4: /chem/voc4a.i/111909/41400014.d
Level 5: /chem/voc4a.i/111909/41400015.d
Level 6: /chem/voc4a.i/111909/41400016.d
Level 7: /chem/voc4a.i/111909/41400017.d

Compound	50.000 Level 1 / 2000.000 Level 7	100.000 Level 2	250.000 Level 3	500.000 Level 4	750.000 Level 5	1000.000 Level 6	RRF	% RSD
S 1 Gasoline Range Organics	1255205 / 1299511	1274066	1246296	1312469	1288300	1298519	1282052	1.911
2 2-Methylpentane	***** / *****	*****	*****	*****	*****	*****	*****	*****
4 1,2,4-Trimethylbenzene	***** / *****	*****	*****	*****	*****	*****	*****	*****
$ 3 Bromofluorobenzene	***** / 822707	992384	952106	929271	921927	925641	924006	6.076

Data File: /chem/voc4a.i/111909/41400019.d
Report Date: 20-Nov-2009 11:25

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i
Lab File ID: 41400019.d
Analysis Type: WATER
Lab Sample ID: GROICV
Method: /chem/voc4a.i/111909/8015GRO-111909.m

Injection Date: 20-NOV-2009 03:10
Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Init. Cal. Times: 23:12 02:10
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1304800	0.010	1.77435	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	927628	0.010	0.39196	15.00000	Averaged

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SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/111909/41400019.d
Lab Smp Id: GROICV Client Smp ID: VSTD0500
Inj Date : 20-NOV-2009 03:10
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROICV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/111909/8015GRO-111909.m
Meth Date : 20-Nov-2009 11:25 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 1 Gasoline Range Organics						CAS #:
	2.888	10.945		652400203	500.000	509
$ 3 Bromofluorobenzene						CAS #: 460-00-4
	9.513	9.513	0.000	46381387	50.0000	50.2

Data File: /chem/voc4a.i/111909/41400019.d

Date : 20-NOV-2009 03:10

Client ID: VSTD0500

Sample Info: IGROICVI

Purge Volume: 5.0

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

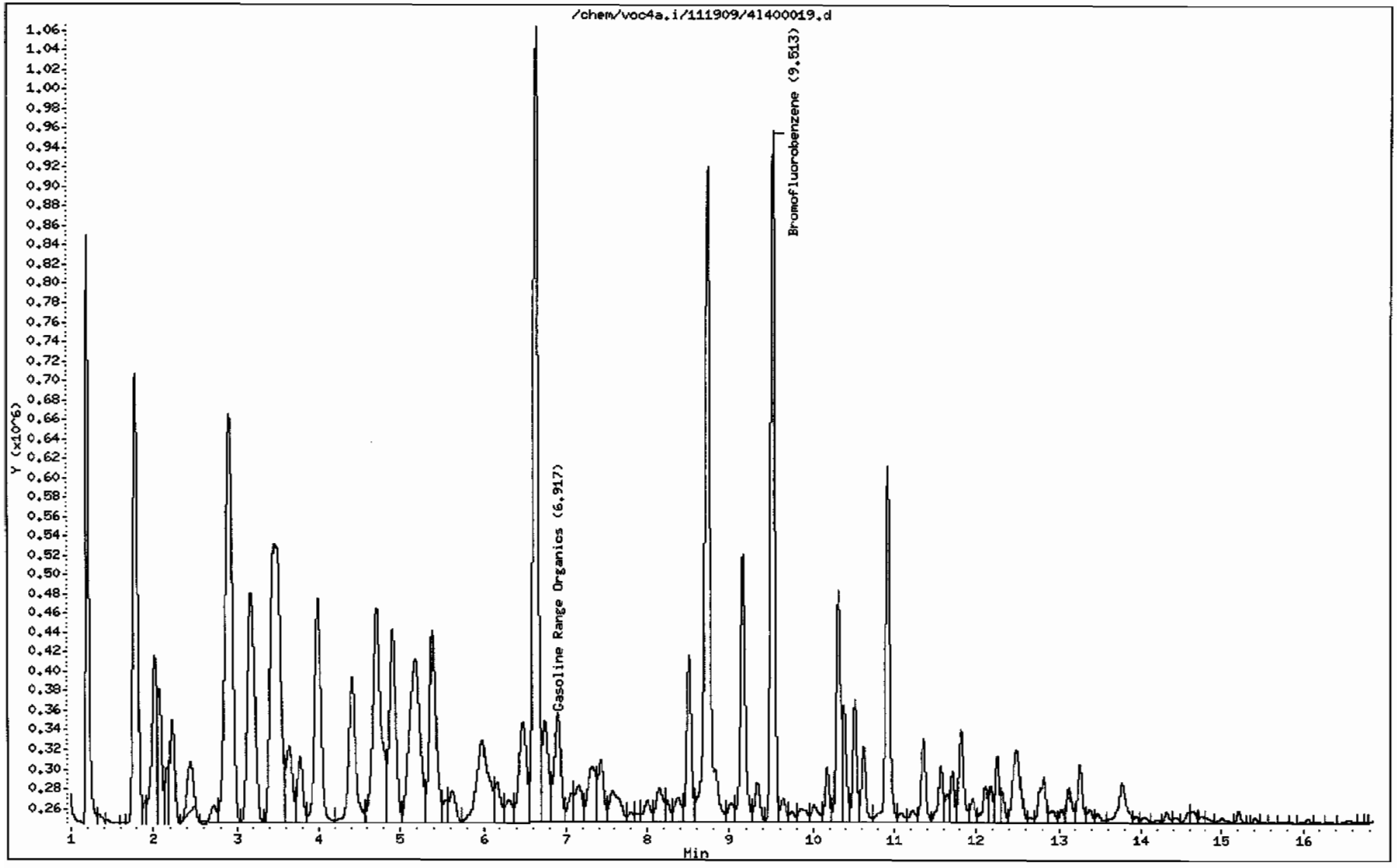

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i Injection Date: 24-NOV-2009 20:33
Lab File ID: 4m200002.d Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:12 02:10
Lab Sample ID: GROCCV Quant Type: ESTD
Method: /chem/voc4a.i/112409/8015GRO-111909.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1375526	0.010	7.29096	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	956311	0.010	3.49620	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200002.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 24-NOV-2009 20:33
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics						CAS #:
	2.896~	10.944		687763070	500.000	536
$ 3 Bromofluorobenzene						CAS #: 460-00-4
	9.513	9.513	0.000	47815555	50.0000	51.7

Data File: /chem/voc4a.i/112409/4m200002.d
Date : 24-NOV-2009 20:33
Client ID: VSTD0500
Sample Info: IGROCCVI
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i
Operator: ACJ
Column diameter: 0.25

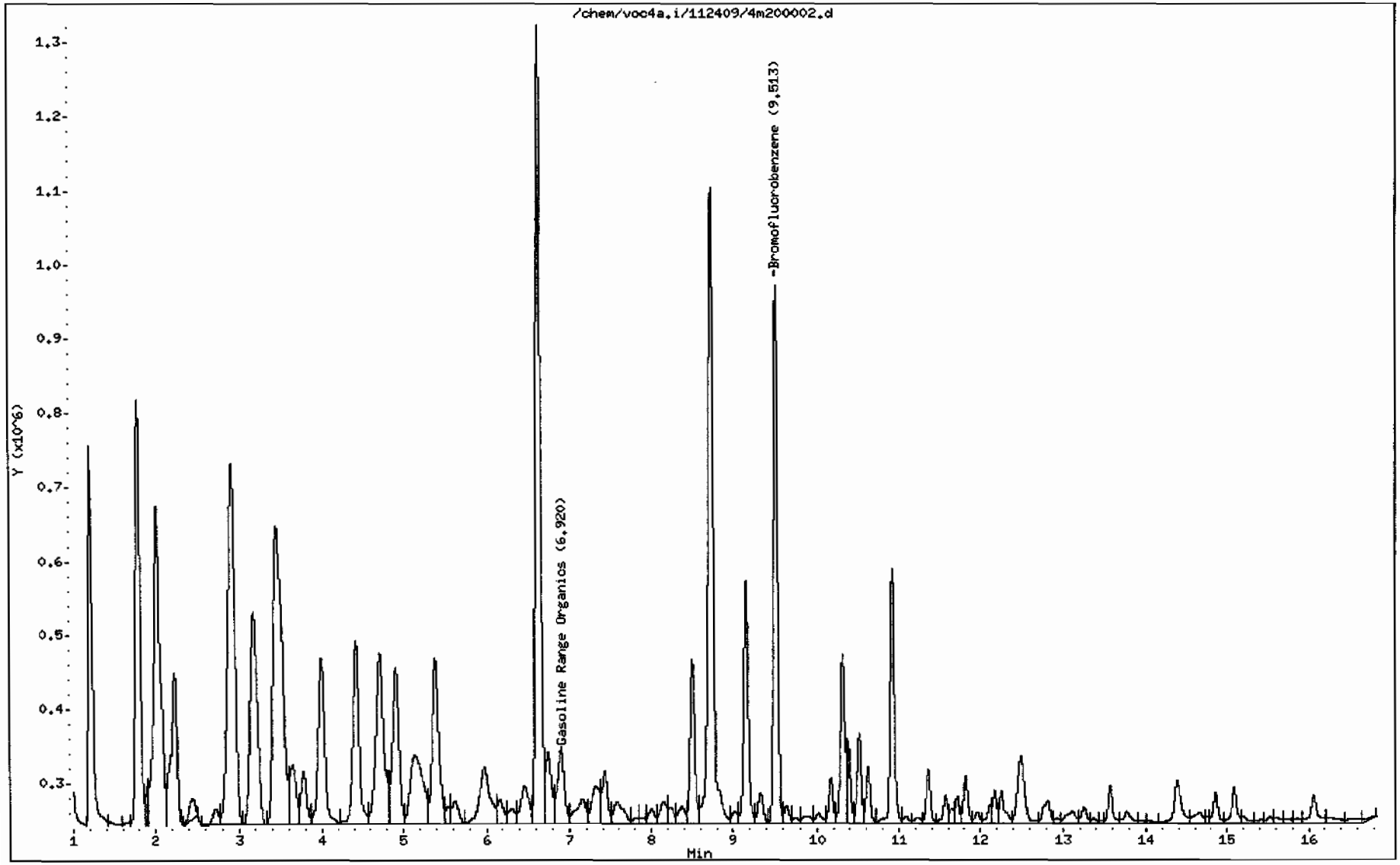

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i Injection Date: 25-NOV-2009 02:12
Lab File ID: 4m200013.d Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:12 02:10
Lab Sample ID: GROCCV Quant Type: ESTD
Method: /chem/voc4a.i/112409/8015GRO-111909.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1242413	0.010	-3.09185	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	899576	0.010	-2.64391	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200013.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 25-NOV-2009 02:12
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics					CAS #:
2.896-	10.944		621206542	500.000	484
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	44978809	50.0000	48.7

Data File: /chem/voc4a.i/112409/4m200013.d
Date : 25-NOV-2009 02:12
Client ID: VSTD0500
Sample Info: IGROCCVI
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i
Operator: ACJ
Column diameter: 0.25

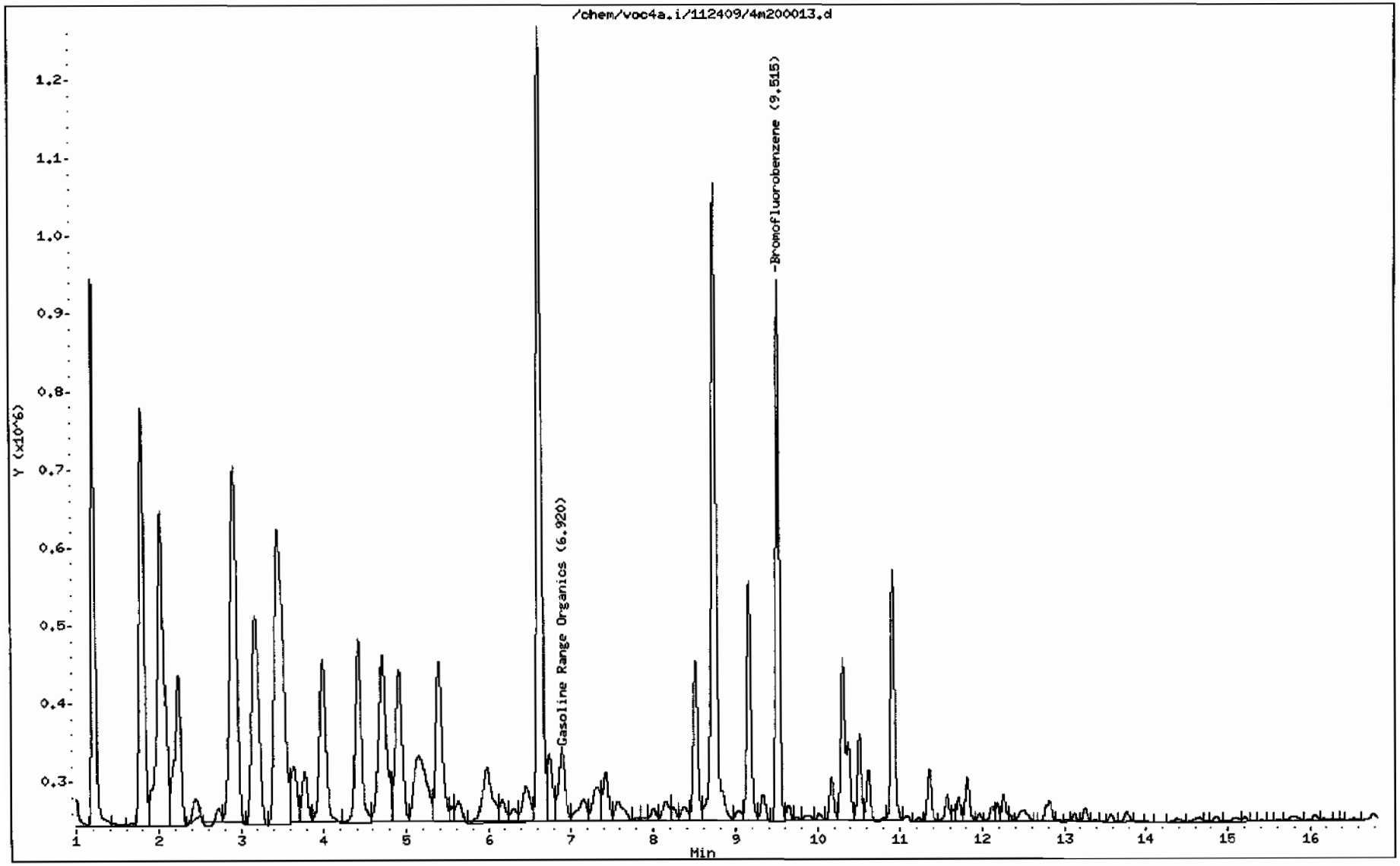

Analytical Sequence

Lab Name: GEL Laboratories LLC **Client SDG:** 10-578

GC Column: Rtx-Volatiles **Init. Calibration Dates:**19-NOV-09 23:12 - 20-NOV-09 02:1

Instrument ID: VOC4A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

	Mean Surrogate RT From Initial Calibration:			9.51
	RT Range Based on Calibration Verification:			9.48 9.54 #
	Sample Number	**Lab Sample ID**	**Analysis Date**	**Bromofluorobenzene**
1	VSTD0050	VSTD0050	19-NOV-09 23:12	9.51
2	VSTD0100	VSTD0100	19-NOV-09 23:42	9.51
3	VSTD0250	VSTD0250	20-NOV-09 00:12	9.51
4	VSTD0500	VSTD0500	20-NOV-09 00:42	9.51
5	VSTD0750	VSTD0750	20-NOV-09 01:11	9.51
6	VSTD1000	VSTD1000	20-NOV-09 01:41	9.51
7	VSTD2000	VSTD2000	20-NOV-09 02:10	9.51
8	VSTD0500	GROICV	20-NOV-09 03:10	9.51

Column used to flag retention time values with an asterisk.

Analytical Sequence

Lab Name: GEL Laboratories LLC **Client SDG:** 10-578

GC Column: Rtx-Volatiles **Init. Calibration Dates:**19-NOV-09 23:12 - 20-NOV-09 02:1

Instrument ID: VOC4A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

	Mean Surrogate RT From Initial Calibration: RT Range Based on Calibration Verification:			9.51 9.48 9.54 #
	Sample Number	**Lab Sample ID**	**Analysis Date**	**Bromofluorobenzene**
1	VSTD0500	GROCCV	24-NOV-09 20:33	9.51
2	BLK01LCS	1201980895	24-NOV-09 21:03	9.51
3	BLANK	1201980891	24-NOV-09 21:33	9.51
4	WST03-10-2131	241423004	24-NOV-09 22:15	9.51
5	WST03-10-2130	241423005	24-NOV-09 22:45	9.51
6	ZZZZZZZ	ZZZZZZZ	24-NOV-09 23:14	9.52
7	ZZZZZZZ	ZZZZZZZ	24-NOV-09 23:44	9.51
8	ZZZZZZZ	ZZZZZZZ	25-NOV-09 00:13	9.52
9	ZZZZZZZ	ZZZZZZZ	25-NOV-09 00:43	9.52
10	WST03-10-2131PS	1201980892	25-NOV-09 01:13	9.51
11	WST03-10-2131PSD	1201980893	25-NOV-09 01:42	9.51
12	VSTD0500	GROCCV	25-NOV-09 02:12	9.51

Column used to flag retention time values with an asterisk.

QC Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980891**				
Client Sample:	**QC for batch 922250**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 922250**	**Method:**	**SW846 8015A/B VOC**	**SOP Ref:**	**GL-OA-E-004**
Batch ID:	**922251**	**Inst:**	**VOC4A.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 21:33**	**Analyst:**	**ACJ**	**Aliquot:**	**5 mL**
Prep Date:	**11/24/2009 20:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m200004B.d**	**Column:**	**Rtx-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	50.0	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200004B.d
Lab Smp Id: 1201980891 Client Smp ID: BLANK
Inj Date : 24-NOV-2009 21:33
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980891|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.514	9.513	0.001	45064534	48.7708	48.8

Data File: /chem/voc4a.i/112409/4m200004B.d
Date : 24-NOV-2009 21:33
Client ID: BLANK
Sample Info: |120198089111|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

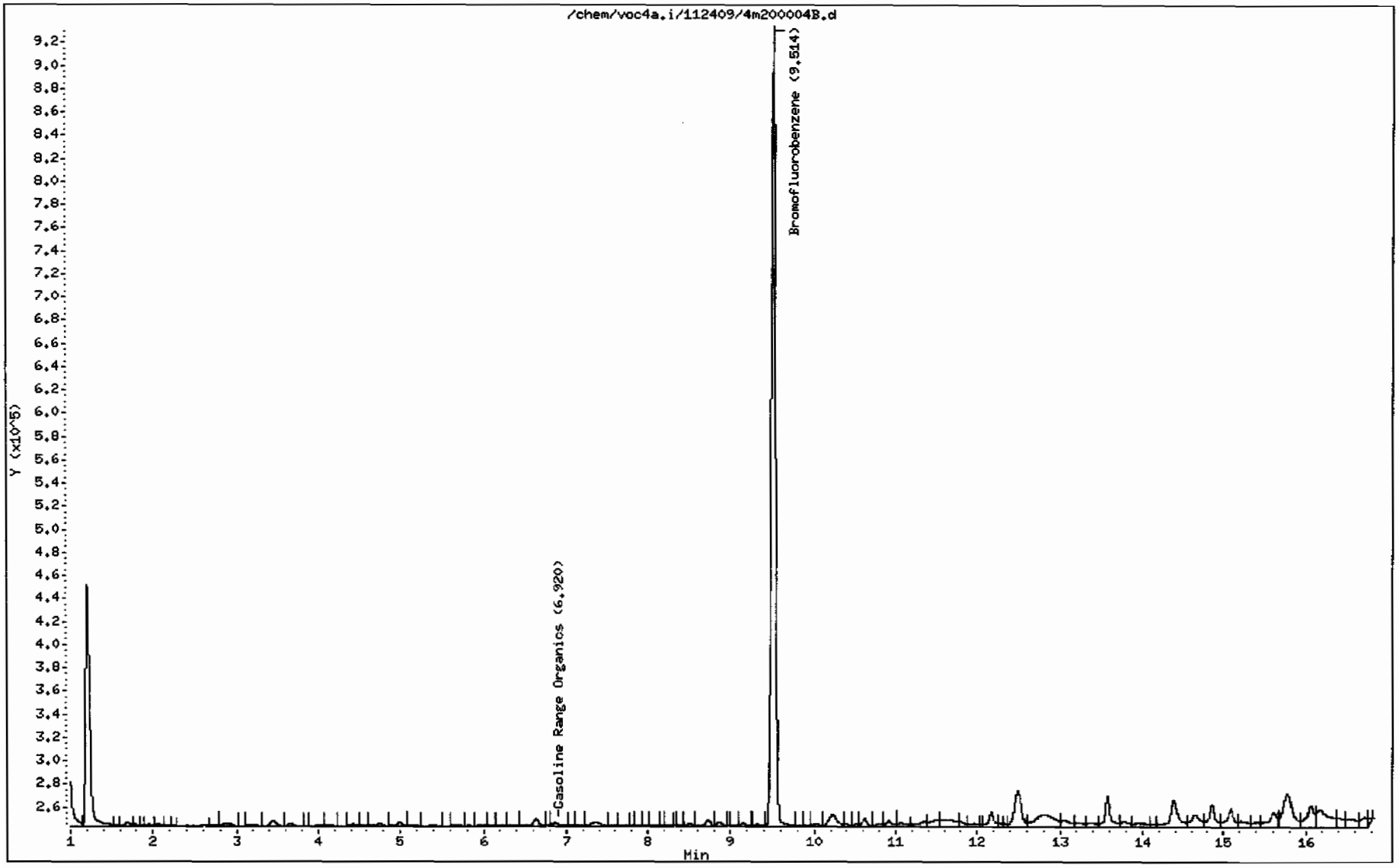

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980895**				
Client Sample:	**QC for batch 922250**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 922250**	**Method:**	**SW846 8015A/B VOC**	**SOP Ref:**	**GL-OA-E-004**
Batch ID:	**922251**	**Inst:**	**VOC4A.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 21:03**	**Analyst:**	**ACJ**	**Aliquot:**	**5 mL**
Prep Date:	**11/24/2009 19:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m200003L.d**	**Column:**	**Rtx-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		512	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200003L.d
Lab Smp Id: 1201980895 Client Smp ID: LCS
Inj Date : 24-NOV-2009 21:03
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980895|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.896-	10.944		656813672	512.314	512
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.514	9.513	0.001	44227544	47.8650	47.9

Data File: /chem/voc4a.i/112409/4m200003L.d

Date : 24-NOV-2009 21:03

Client ID: LCS

Sample Info: |120198089511|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

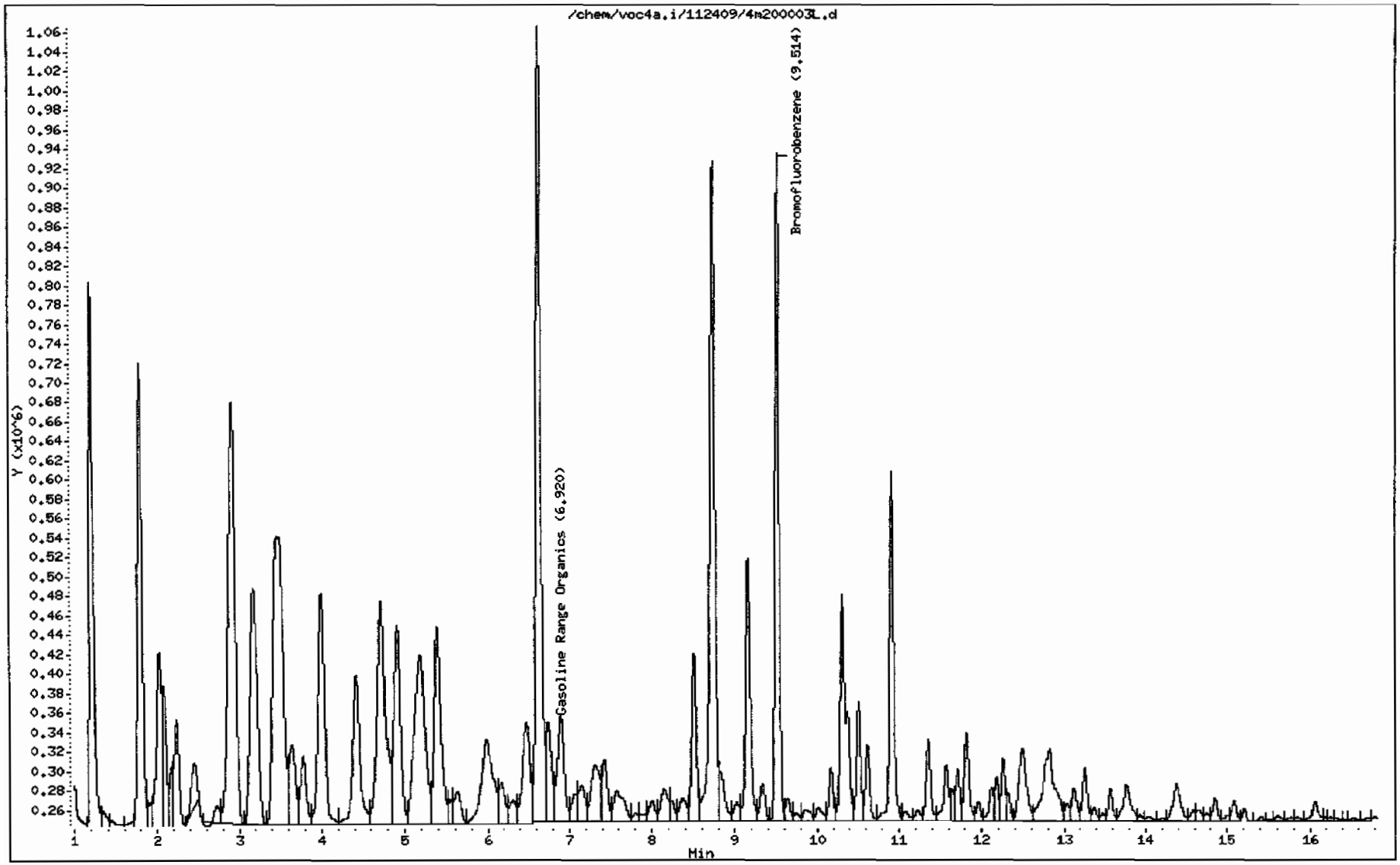

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201980892	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
Client Sample:	QC for batch 922250	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2131PS	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/25/2009 01:13	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200011.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		378	ug/kg	12.2	54.3

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200011.d
Lab Smp Id: 1201980892 Client Smp ID: WST03-10-2131MS
Inj Date : 25-NOV-2009 01:13
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980892|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.92250	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.896-	10.944		446634168	348.374	378
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	33215037	35.9468	39.0

Data File: /chem/voc4a.i/112409/4m200011.d
Date : 25-NOV-2009 01:13
Client ID: WST03-10-2131MS
Sample Info: 1120198089211

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

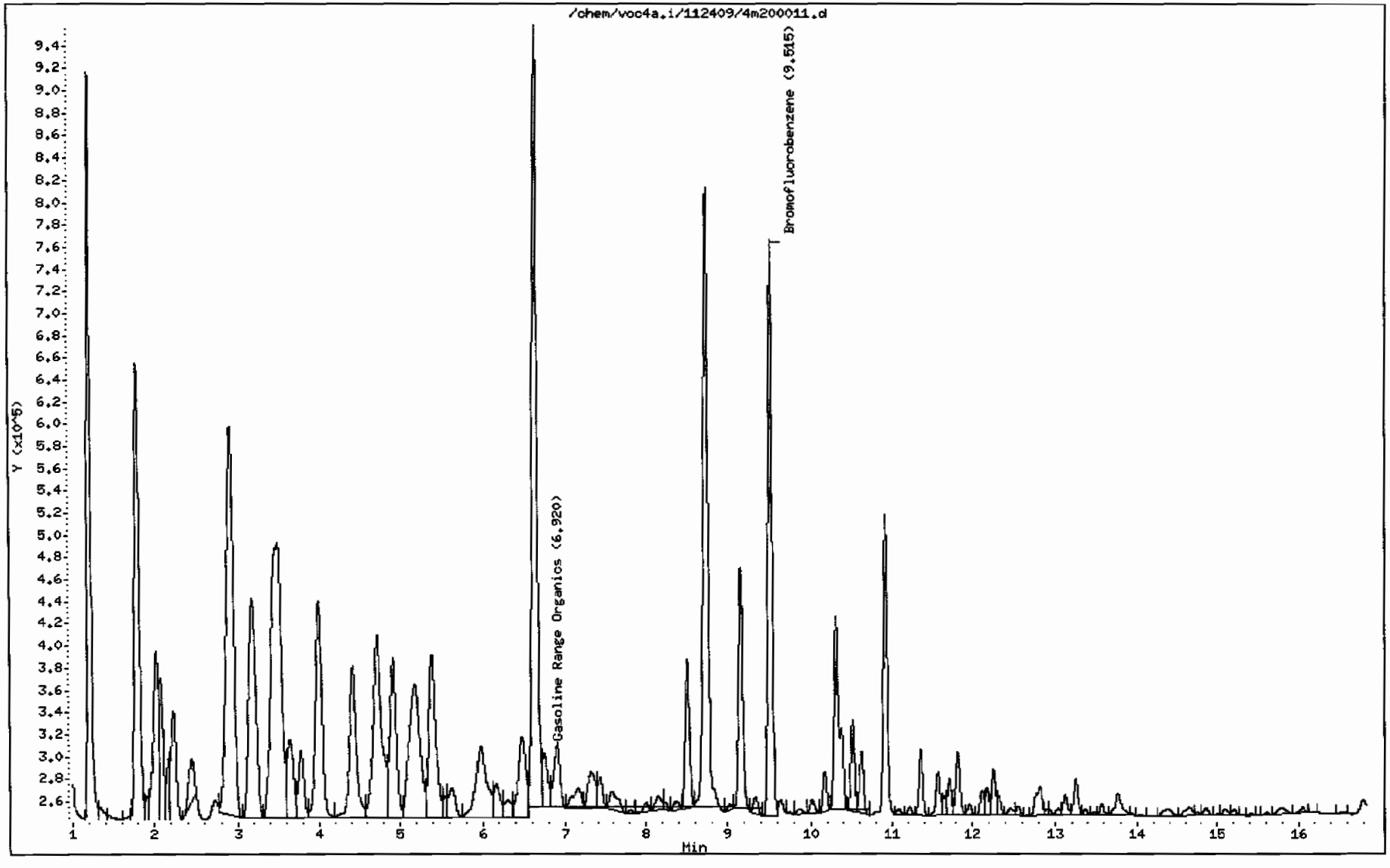

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201980893	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
Client Sample:	QC for batch 922250	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2131PSD	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	922251	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	11/25/2009 01:42	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	11/24/2009 21:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m200012.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		440	ug/kg	12.2	54.3

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/112409/4m200012.d
Lab Smp Id: 1201980893 Client Smp ID: WST03-10-2131MSD
Inj Date : 25-NOV-2009 01:42
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201980893|1|
Misc Info : |VOC8015_LF|922251|GROF|
Comment : FID
Method : /chem/voc4a.i/112409/8015GRO-111909.m
Meth Date : 25-Nov-2009 15:34 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.92250	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.896-	10.944		519074681	404.878	440
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	34506927	37.3449	40.6

Data File: /chem/voc4a.i/112409/4m200012.d

Date : 25-NOV-2009 01:42

Client ID: WST03-10-2131MSD

Sample Info: 1120198089311

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

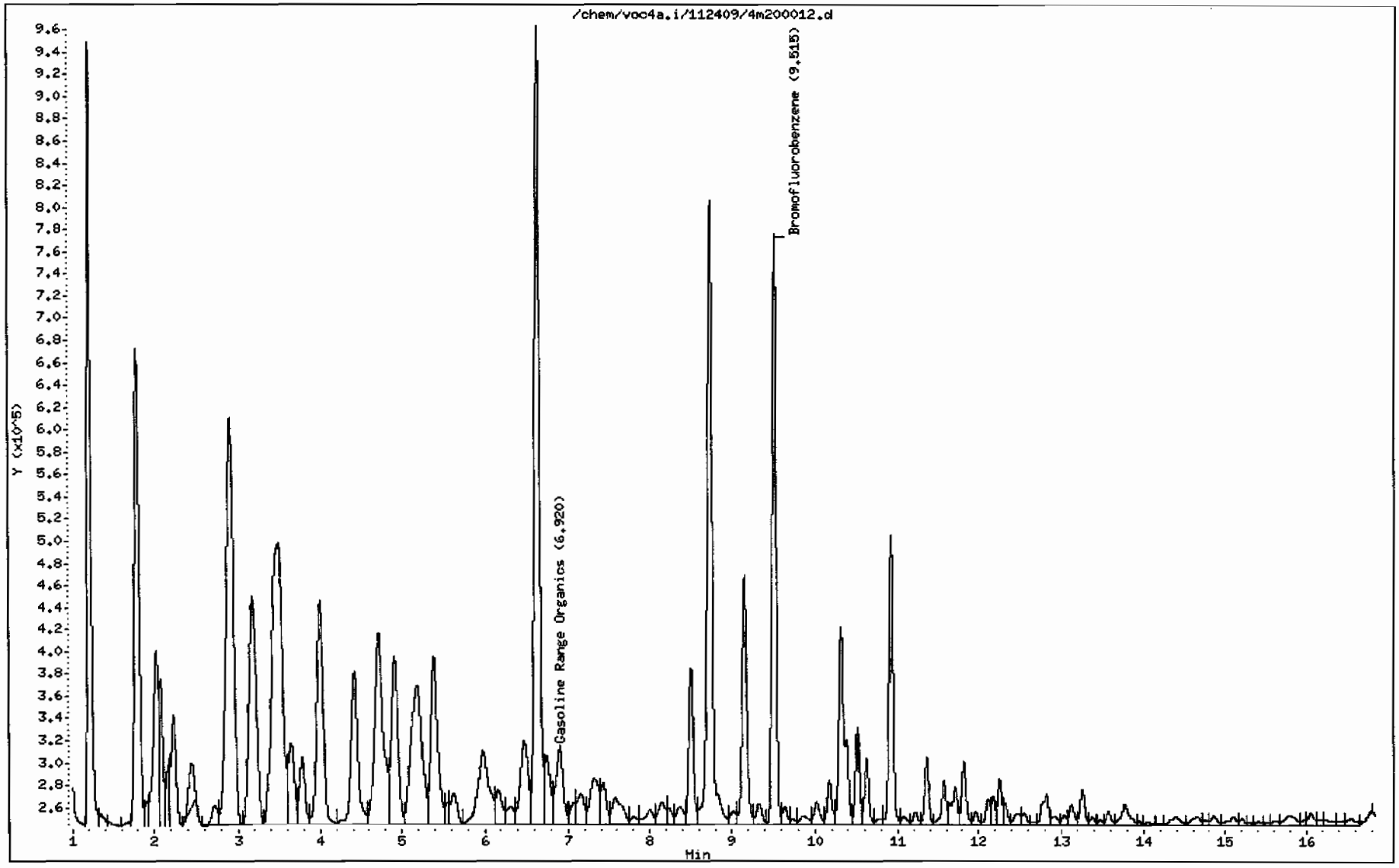

Miscellaneous Data

Prep Logbook

Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector

Batch ID: **922250** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Amy Jamison
Method: SW846 8015A/B PREP
Lab SOP: GL-OA-E-004 REV# 18
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201970909 LCS	12-NOV-2009 16:00:00	Soil	5	5	1	
1201970906 MB	12-NOV-2009 16:30:00	Soil	5	5	1	
240216002	12-NOV-2009 21:50:00	Soil	5	5	1	
240230002	12-NOV-2009 21:53:00	Soil	5	5	1	
1201980894 LCS	21-NOV-2009 11:30:00	Soil	5	5	1	
1201980890 MB	21-NOV-2009 12:00:00	Soil	5	5	1	
241038002	21-NOV-2009 12:10:00	Soil	5	5	1	
1201980895 LCS	24-NOV-2009 19:30:00	Soil	5	5	1	
1201980891 MB	24-NOV-2009 20:00:00	Soil	5	5	1	
241423004	24-NOV-2009 21:05:00	Soil	5	5	1	
1201980892 PS (241423004)	24-NOV-2009 21:06:00	Soil	5	5	1	
1201980893 PSD (241423004)	24-NOV-2009 21:07:00	Soil	5	5	1	
241423005	24-NOV-2009 21:08:00	Soil	5	5	1	
241503002	24-NOV-2009 21:09:00	Soil	5	5	1	
241503003	24-NOV-2009 21:10:00	Soil	5	5	1	
241503004	24-NOV-2009 21:11:00	Soil	5	5	1	
241524002	24-NOV-2009 21:12:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 11/19/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009

(See pg. 118 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: VOC4A 111909

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG090714-02E		5		
IS	N/A				
SS	UVG091022-01C	2.5	2.5	2.5	2.5
LCS/MS	UVG090714-02E			5	
RTCHECK	WVG09119-02				5+5
C5/C12 RTCHECK	N/A				5

Purge Amount	
5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
11/19/2009 16:30	4L400001.D	WVG091119-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	X	UVG090909-01A/UVG081212-02B
11/19/2009 17:00	4L400002.D	UVG090915-01B	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	X	
11/19/2009 17:30	4L400003.D	UVG090714-02E	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	X	
11/19/2009 17:59	4L400004.D	BLANK	GEL	BLANK	5G	1	N/A	4	S	ACJ	N/A	X	
11/19/2009 19:46	4L400005.D	240862002	LANL	923800	4.9G	1	N/A	5	S	ACJ	N/A	X	
11/19/2009 20:13	4L400006.D	1201974683	LANL	923800	5G	1	N/A	6	S	ACJ	N/A	X	
11/19/2009 20:43	4L400007.D	1201974684	LANL	923800	5G	1	N/A	7	S	ACJ	N/A	X	
11/19/2009 21:13	4L400008.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	8	W	ACJ	N/A	X	
11/19/2009 21:48	4L400009.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	9	W	ACJ	N/A	X	
11/19/2009 22:43	4L400010.D	WVG091119-02	GEL	RTCHECK	5ML	1	N/A	10	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
11/19/2009 23:12	4L400011.D	VSTD0050	GEL	ICAL	5ML	1	N/A	11	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/19/2009 23:42	4L400012.D	VSTD0100	GEL	ICAL	5ML	1	N/A	12	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 0:12	4L400013.D	VSTD0250	GEL	ICAL	5ML	1	N/A	13	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 0:42	4L400014.D	VSTD0500	GEL	ICAL	5ML	1	N/A	14	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 1:11	4L400015.D	VSTD0750	GEL	ICAL	5ML	1	N/A	15	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 1:41	4L400016.D	VSTD1000	GEL	ICAL	5ML	1	N/A	16	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 2:10	4L400017.D	VSTD2000	GEL	ICAL	5ML	1	N/A	17	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 2:40	4L400018.D	BLANK	GEL	BLANK	5ML	1	N/A	18	W	ACJ	N/A	X	
11/20/2009 3:10	4L400019.D	UVG090714-02E	GEL	ICV/CCV	5ML	1	N/A	19	W	ACJ	N/A	O	
11/20/2009 3:40	4L400020.D	UVG090714-02E	GEL	LCS	5G	1	N/A	20	S	ACJ	N/A	O	
11/20/2009 4:09	4L400021.D	BLANK	GEL	BLANK	5G	1	N/A	21	S	ACJ	N/A	O	
11/20/2009 4:39	4L400022.D	1201974683	LANL	923800	5G	1	N/A	22	S	ACJ	N/A	O	
11/20/2009 5:08	4L400023.D	1201974684	LANL	923800	5G	1	N/A	23	S	ACJ	N/A	O	
11/20/2009 5:38	4L400024.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	24	W	ACJ	N/A	O	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 11/24/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009

(See pg. 118 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: VOC4A 112409

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG090915-01B		5		
IS	N/A				
SS	UVG091022-01C	2.5	2.5	2.5	2.5
LCS/MS	UVG090714-02E			5	
RTCHECK	WVG091124-01				5+5
C5/C12 RTCHECK	N/A				5

Purge Amount	
5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
11/24/2009	20:04	4M200001.D	WVG091124-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
11/24/2009	20:33	4M200002.D	UVG090915-01B	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	O	
11/24/2009	21:03	4M200003.D	UVG090714-02E	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	
11/24/2009	21:33	4M200004.D	BLANK	GEL	BLANK	5G	1	N/A	4	S	ACJ	N/A	O	
11/24/2009	22:15	4M200005.D	241423004	LANL	922251	5G	1	N/A	5	S	ACJ	N/A	O	
11/24/2009	22:45	4M200006.D	241423005	LANL	922251	5G	1	N/A	6	S	ACJ	N/A	O	
11/24/2009	23:14	4M200007.D	241503002	LANL	922251	5G	1	N/A	7	S	ACJ	N/A	O	
11/24/2009	23:44	4M200008.D	241503003	LANL	922251	5G	1	N/A	8	S	ACJ	N/A	O	
11/25/2009	0:13	4M200009.D	241503004	LANL	922251	5G	1	N/A	9	S	ACJ	N/A	O	
11/25/2009	0:43	4M200010.D	241524002	LANL	922251	5G	1	N/A	10	S	ACJ	N/A	O	
11/25/2009	1:13	4M200011.D	1201980892	LANL	922251	5G	1	N/A	11	S	ACJ	N/A	O	
11/25/2009	1:42	4M200012.D	1201980893	LANL	922251	5G	1	N/A	12	S	ACJ	N/A	O	
11/25/2009	2:12	4M200013.D	UVG090915-01B	GEL	CCV	5ML	1	N/A	13	W	ACJ	N/A	O	

GC SEMIVOLATILE PESTICIDE ANALYSIS

Pesticide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578

Method/Analysis Information

Procedure:	**Analysis of Organochlorine Pesticides and Chlorinated Hydrocarbons by ECD**
Analytical Method:	SW846 8081A
Prep Method:	SW846 3550B
Analytical Batch Number:	926807
Prep Batch Number:	926803

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8081A:

Sample ID	Client ID
241423004	WST03-10-2131
241423005	WST03-10-2130
1201981581	Method Blank (MB)
1201981584	Laboratory Control Sample (LCS)
1201981585	Laboratory Control Sample (LCS)-Toxaphene LCS Only
1201981582	241423004(WST03-10-2131) Matrix Spike (MS)
1201981583	241423004(WST03-10-2131) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 10.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the

concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) did not meet the acceptance criteria.

Two of the five quantified peaks did not meet the acceptance criteria in Toxaphene standard analyzed for this SDG; however, the average concentration of the five peaks met the acceptance criteria.

Several target analytes failed to meet the acceptance criteria with positive or negative bias in the standards bracketing the sample in this SDG. The positive and negative bias for the analytical data is a result of instrument response increasing or decreasing after the initial calibration. The instrument response never decreased to a point where the target analytes would not be detected. These target analytes were not detected in the associated samples; therefore, the non-compliance has no adverse effects on the data.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
QC sample 1201981585 (Toxaphene LCS) did not meet the surrogate recovery acceptance criteria with a positive bias. This non-compliance had no adverse effects on the data as the LCS spike recovery met the acceptance limits. There were no target analytes detected in the associated samples. See NCR #764015 located in the Miscellaneous Data section.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241423004 (WST03-10-2131) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. Additionally, copper was added to all sample extracts to remove sulfur. Samples were cleaned with Florisil prior to analysis.

Sample Dilutions
Samples 241423004 (WST03-10-2131) and 241423005 (WST03-10-2130) were diluted at 1:10 due to the oily consistency, presence of dark particulates, and the dark hue of the samples.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information:

Electronic Package Comment

This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Nonconformance (NCR) Documentation
Nonconformance report (NCRs) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR # 764015 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The lower results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Samples 241423004 (WST03-10-2131) and 241423005 (WST03-10-2130) contained detections of Aroclors.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD5A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD5A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kam Beck Date: 12-15-09

Roadmap for LANL 10-578 PEST

This roadmap was analyzed by cla01575 on 12-01-2009, 15:39.
This roadmap was reviewed by rob01090 on 12-03-2009, 19:30.
This roadmap was validated by yml on 12-14-2009, 11:40.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/112909.b/021f2101.d	241423004	sample	29-NOV-2009	22:08	10-578.sub	WST03-10-2131	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor
■	N	/chem/ecd5a.i/112909.b/027f2701.d	241423005	sample	29-NOV-2009	23:20	10-578.sub	WST03-10-2130	10.00000	926807	DUSE - still has sulfur - see re-cleaned vial at 32
☐	N	/chem/ecd5a.i/112909.b/032f3201.d	241423005	sample	30-NOV-2009	00:20	10-578.sub	WST03-10-2130	10.00000	926807	USE - uploaded both columns, reporting lower result

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/112909.b/021b2101.d	241423004	sample	29-NOV-2009	22:08	10-578.sub	WST03-10-2131	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor
■	N	/chem/ecd5a.i/112909.b/027b2701.d	241423005	sample	29-NOV-2009	23:20	10-578.sub	WST03-10-2130	10.00000	926807	DUSE - still has sulfur - see re-cleaned vial at 32
☐	N	/chem/ecd5a.i/112909.b/032b3201.d	241423005	sample	30-NOV-2009	00:20	10-578.sub	WST03-10-2130	10.00000	926807	USE - uploaded both columns, reporting lower result

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/112909.b/018f1801.d	1201981581	mb	29-NOV-2009	21:32	10-578.sub	PBLK01	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/019f1901.d	1201981584	lcs	29-NOV-2009	21:44	10-578.sub	PBLK01LCS	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/020f2001.d	1201981585	lcs	29-NOV-2009	21:56	10-578.sub	PBLK01TLCS	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/022f2201.d	1201981582	ms	29-NOV-2009	22:20	10-578.sub	WST03-10-2131MS	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor
☐	N	/chem/ecd5a.i/112909.b/023f2301.d	1201981583	msd	29-NOV-2009	22:32	10-578.sub	WST03-10-2131MSD	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/112909.b/018b1801.d	1201981581	mb	29-NOV-2009	21:32	10-578.sub	PBLK01	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/019b1901.d	1201981584	lcs	29-NOV-2009	21:44	10-578.sub	PBLK01LCS	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/020b2001.d	1201981585	lcs	29-NOV-2009	21:56	10-578.sub	PBLK01TLCS	1.00000	926807	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/112909.b/022b2201.d	1201981582	ms	29-NOV-2009	22:20	10-578.sub	WST03-10-2131MS	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor
☐	N	/chem/ecd5a.i/112909.b/023b2301.d	1201981583	msd	29-NOV-2009	22:32	10-578.sub	WST03-10-2131MSD	10.00000	926807	USE - uploaded both columns, reporting lower result - Aroclor

SAMPLE DATA SUMMARY

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/30/2009 00:20	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30.04 g	**Final Volume:**	5 mL
Data File:	032f3201.d	**Column:**	1 CLP-1	**Level:**	LOW
	032b3201.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.39	ug/kg	1.85	7.39	1
58-89-9	gamma-BHC (Lindane)	U	7.39	ug/kg	1.85	7.39	1
319-85-7	beta-BHC	U	7.39	ug/kg	1.85	7.39	1
319-86-8	delta-BHC	U	7.39	ug/kg	1.85	7.39	1
76-44-8	Heptachlor	U	7.39	ug/kg	1.85	7.39	1
309-00-2	Aldrin	U	7.39	ug/kg	1.85	7.39	1
1024-57-3	Heptachlor epoxide	U	7.39	ug/kg	2.31	7.39	1
5103-74-2	gamma-Chlordane	U	7.39	ug/kg	1.85	7.39	1
5103-71-9	alpha-Chlordane	U	7.39	ug/kg	1.85	7.39	1
959-98-8	Endosulfan I	U	7.39	ug/kg	1.85	7.39	1
72-55-9	4,4'-DDE	U	14.8	ug/kg	3.69	14.8	1
60-57-1	Dieldrin	U	14.8	ug/kg	3.69	14.8	1
72-20-8	Endrin	U	14.8	ug/kg	3.69	14.8	1
72-54-8	4,4'-DDD	U	14.8	ug/kg	3.69	14.8	1
33213-65-9	Endosulfan II	U	14.8	ug/kg	3.69	14.8	1
7421-93-4	Endrin aldehyde	U	14.8	ug/kg	3.69	14.8	1
50-29-3	4,4'-DDT	J	8.63	ug/kg	3.69	14.8	2
1031-07-8	Endosulfan sulfate	U	14.8	ug/kg	3.69	14.8	1
72-43-5	Methoxychlor	U	73.9	ug/kg	18.5	73.9	1
53494-70-5	Endrin ketone	U	14.8	ug/kg	3.69	14.8	1
8001-35-2	Toxaphene	U	185	ug/kg	61.5	185	1

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/29/2009 22:08	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30 g	**Final Volume:**	5 mL
Data File:	021f2101.d	**Column:**	1 CLP-1	**Level:**	LOW
	021b2101.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.24	ug/kg	1.81	7.24	1
58-89-9	gamma-BHC (Lindane)	U	7.24	ug/kg	1.81	7.24	1
319-85-7	beta-BHC	U	7.24	ug/kg	1.81	7.24	1
319-86-8	delta-BHC	U	7.24	ug/kg	1.81	7.24	1
76-44-8	Heptachlor	U	7.24	ug/kg	1.81	7.24	1
309-00-2	Aldrin	U	7.24	ug/kg	1.81	7.24	1
1024-57-3	Heptachlor epoxide	U	7.24	ug/kg	2.26	7.24	1
5103-74-2	gamma-Chlordane	JP	3.23	ug/kg	1.81	7.24	1
5103-71-9	alpha-Chlordane	U	7.24	ug/kg	1.81	7.24	1
959-98-8	Endosulfan I	U	7.24	ug/kg	1.81	7.24	1
72-55-9	4,4'-DDE	U	14.5	ug/kg	3.62	14.5	1
60-57-1	Dieldrin	J	7.94	ug/kg	3.62	14.5	1
72-20-8	Endrin	U	14.5	ug/kg	3.62	14.5	1
72-54-8	4,4'-DDD	U	14.5	ug/kg	3.62	14.5	1
33213-65-9	Endosulfan II	U	14.5	ug/kg	3.62	14.5	1
7421-93-4	Endrin aldehyde	U	14.5	ug/kg	3.62	14.5	1
50-29-3	4,4'-DDT	U	14.5	ug/kg	3.62	14.5	1
1031-07-8	Endosulfan sulfate	U	14.5	ug/kg	3.62	14.5	1
72-43-5	Methoxychlor	U	72.4	ug/kg	18.1	72.4	1
53494-70-5	Endrin ketone	U	14.5	ug/kg	3.62	14.5	1
8001-35-2	Toxaphene	U	181	ug/kg	60.3	181	1

QUALITY CONTROL SUMMARY

Pesticide

Surrogate Recovery Report

SDG Number: 10–578

Matrix Type: SOLID

CAP Column (1) : CLP–1 **CAP Column (2) : CLP–2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201981581	MB for batch 926803	97		90		108		103	
1201981584	LCS for batch 926803	105		97		113		109	
1201981585	LCS for batch 926803	111 *		101		122 *		110	
241423004	WST03–10–2131	83	D	89	D	99	D	86	D
1201981582	WST03–10–2131MS	79	D	86	D	86	D	78	D
1201981583	WST03–10–2131MSD	77	D	82	D	90	D	72	D
241423005	WST03–10–2130	85	D	92	D	80	D	80	D

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%–105%)
DCB = Decachlorobiphenyl	(33%–115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926803
Lab Sample ID: 1201981584
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 21:44
Dilution: 1
Prep Batch ID: 926803
Batch ID: 926807

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
319-84-6	LCS	alpha-BHC	16.7	0.0	16.7	100	56-129
58-89-9	LCS	gamma-BHC (Lindane)	16.7	0.0	16.7	100	56-127
319-85-7	LCS	beta-BHC	16.7	0.0	15.9	95	54-117
319-86-8	LCS	delta-BHC	16.7	0.0	16.8	101	60-129
76-44-8	LCS	Heptachlor	16.7	0.0	16.2	97	55-127
309-00-2	LCS	Aldrin	16.7	0.0	15.5	93	54-123
1024-57-3	LCS	Heptachlor epoxide	16.7	0.0	14.7	88	58-122
5103-74-2	LCS	gamma-Chlordane	16.7	0.0	15.0	90	55-124
5103-71-9	LCS	alpha-Chlordane	16.7	0.0	15.7	94	56-120
959-98-8	LCS	Endosulfan I	16.7	0.0	14.9	89	51-119
72-55-9	LCS	4,4'-DDE	41.7	0.0	41.4	99	60-128
60-57-1	LCS	Dieldrin	41.7	0.0	39.3	94	59-119
72-20-8	LCS	Endrin	41.7	0.0	41.8	100	63-131
72-54-8	LCS	4,4'-DDD	41.7	0.0	42.1	101	61-131
33213-65-9	LCS	Endosulfan II	41.7	0.0	41.2	99	59-120
7421-93-4	LCS	Endrin aldehyde	41.7	0.0	36.6	88	55-125
50-29-3	LCS	4,4'-DDT	41.7	0.0	42.8	103	63-139
1031-07-8	LCS	Endosulfan sulfate	41.7	0.0	40.4	97	60-127
72-43-5	LCS	Methoxychlor	167	0.0	190	114	59-143
53494-70-5	LCS	Endrin ketone	41.7	0.0	39.2	94	59-132

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 926803
Lab Sample ID: 1201981585
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/29/2009 21:56
Dilution: 1
Prep Batch ID: 926803
Batch ID: 926807

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
8001-35-2	LCS	Toxaphene	133	0.0	150	113	48-131

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2131MS
Lab Sample ID: 1201981582
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 7.9
Analysis Date: 11/29/2009 22:20
Prep Batch ID: 926803
Batch ID: 926807
Dilution: 10

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
319-84-6	MS	alpha-BHC	18.1	0.00	U	14.0	77	41-132
58-89-9	MS	gamma-BHC (Lindane)	18.1	0.00	U	14.5	80	43-127
319-85-7	MS	beta-BHC	18.1	0.00	U	15.7	87	36-130
319-86-8	MS	delta-BHC	18.1	0.00	U	13.9	77	39-134
76-44-8	MS	Heptachlor	18.1	0.00	U	14.2	79	41-133
309-00-2	MS	Aldrin	18.1	0.00	U	14.3	79	41-128
1024-57-3	MS	Heptachlor epoxide	18.1	0.00	U	16.2	89	39-133
5103-74-2	MS	gamma-Chlordane	18.1	3.23	JP	16.8	75	37-133
5103-71-9	MS	alpha-Chlordane	18.1	0.00	U	18.1	100	40-122
959-98-8	MS	Endosulfan I	18.1	0.00	U	16.4	91	32-126
72-55-9	MS	4,4'-DDE	45.2	0.00	U	39.4	87	42-138
60-57-1	MS	Dieldrin	45.2	7.94	J	42.9	77	38-132
72-20-8	MS	Endrin	45.2	0.00	U	54.1	120	45-139
72-54-8	MS	4,4'-DDD	45.2	0.00	U	42.4	94	41-139
33213-65-9	MS	Endosulfan II	45.2	0.00	U	41.2	91	35-130
7421-93-4	MS	Endrin aldehyde	45.2	0.00	U	33.5	74	29-126
50-29-3	MS	4,4'-DDT	45.2	0.00	U	36.2	80	38-155
1031-07-8	MS	Endosulfan sulfate	45.2	0.00	U	35.3	78	39-131
72-43-5	MS	Methoxychlor	181	0.00	U	135	75	44-153
53494-70-5	MS	Endrin ketone	45.2	0.00	U	31.2	69	41-133

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–578**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**WST03–10–2131MSD**	**Matrix:**	**R**
Lab Sample ID:	**1201981583**	**%Moisture:**	**7.9**
Instrument:	**ECD5A.I**	**Analysis Date:**	**11/29/2009 22:32** **Dilution: 10**
Analyst:	**HXJ1**	**Prep Batch ID**	**926803**
Inj. Vol:	**1 uL**	**Batch ID:**	**926807**

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
319–84–6	MSD alpha–BHC	18.1	0.00	U	13.4	74	41–132	4	0–30
58–89–9	MSD gamma–BHC (Lindane)	18.1	0.00	U	13.8	77	43–127	5	0–30
319–85–7	MSD beta–BHC	18.1	0.00	U	15.0	83	36–130	5	0–30
319–86–8	MSD delta–BHC	18.1	0.00	U	13.3	74	39–134	5	0–30
76–44–8	MSD Heptachlor	18.1	0.00	U	13.4	74	41–133	6	0–30
309–00–2	MSD Aldrin	18.1	0.00	U	13.8	76	41–128	3	0–30
1024–57–3	MSD Heptachlor epoxide	18.1	0.00	U	15.3	85	39–133	5	0–30
5103–74–2	MSD gamma–Chlordane	18.1	3.23	JP	16.3	72	37–133	3	0–30
5103–71–9	MSD alpha–Chlordane	18.1	0.00	U	16.8	93	40–122	7	0–30
959–98–8	MSD Endosulfan I	18.1	0.00	U	15.7	87	32–126	5	0–30
72–55–9	MSD 4,4'–DDE	45.2	0.00	U	37.3	82	42–138	6	0–30
60–57–1	MSD Dieldrin	45.2	7.94	J	40.6	72	38–132	6	0–30
72–20–8	MSD Endrin	45.2	0.00	U	49.2	109	45–139	9	0–30
72–54–8	MSD 4,4'–DDD	45.2	0.00	U	40.3	89	41–139	5	0–30
33213–65–9	MSD Endosulfan II	45.2	0.00	U	40.0	88	35–130	3	0–30
7421–93–4	MSD Endrin aldehyde	45.2	0.00	U	30.2	67	29–126	10	0–30
50–29–3	MSD 4,4'–DDT	45.2	0.00	U	33.0	73	38–155	9	0–30
1031–07–8	MSD Endosulfan sulfate	45.2	0.00	U	34.3	76	39–131	3	0–30
72–43–5	MSD Methoxychlor	181	0.00	U	128	71	44–153	5	0–30
53494–70–5	MSD Endrin ketone	45.2	0.00	U	29.7	66	41–133	5	0–30

Method Blank Summary

SDG Number:	10–578	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926803	Instrument ID:	ECD5A.I_2 ECD5A.I_1	Data File:	018b1801–589.d 018f1801–589.d
Lab Sample ID:	1201981581				
Column:	CLP–2 CLP–1	Prep Date:	11/27/2009 10:04	Analyzed:	11/29/09 21:32
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926803	1201981584	019f1901–589.d 019b1901–589.d	11/29/09	2144
02 LCS for batch 926803	1201981585	020f2001–589.d 020b2001–589.d	11/29/09	2156
03 WST03–10–2131	241423004	021f2101.d 021b2101.d	11/29/09	2208
04 WST03–10–2131MS	1201981582	022f2201.d 022b2201.d	11/29/09	2220
05 WST03–10–2131MSD	1201981583	023f2301.d 023b2301.d	11/29/09	2232
06 WST03–10–2130	241423005	032f3201.d 032b3201.d	11/30/09	0020

SAMPLE
DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241423005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**9.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**926807**	**Inst:**	**ECD5A.I**	**Dilution:**	**10**
Run Date:	**11/30/2009 00:20**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 10:04**	**Aliquot:**	**30.04 g**	**Final Volume:**	**5 mL**
Data File:	**032f3201.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	032b3201.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.39	ug/kg	1.85	7.39	1
58-89-9	gamma-BHC (Lindane)	U	7.39	ug/kg	1.85	7.39	1
319-85-7	beta-BHC	U	7.39	ug/kg	1.85	7.39	1
319-86-8	delta-BHC	U	7.39	ug/kg	1.85	7.39	1
76-44-8	Heptachlor	U	7.39	ug/kg	1.85	7.39	1
309-00-2	Aldrin	U	7.39	ug/kg	1.85	7.39	1
1024-57-3	Heptachlor epoxide	U	7.39	ug/kg	2.31	7.39	1
5103-74-2	gamma-Chlordane	U	7.39	ug/kg	1.85	7.39	1
5103-71-9	alpha-Chlordane	U	7.39	ug/kg	1.85	7.39	1
959-98-8	Endosulfan I	U	7.39	ug/kg	1.85	7.39	1
72-55-9	4,4'-DDE	U	14.8	ug/kg	3.69	14.8	1
60-57-1	Dieldrin	U	14.8	ug/kg	3.69	14.8	1
72-20-8	Endrin	U	14.8	ug/kg	3.69	14.8	1
72-54-8	4,4'-DDD	U	14.8	ug/kg	3.69	14.8	1
33213-65-9	Endosulfan II	U	14.8	ug/kg	3.69	14.8	1
7421-93-4	Endrin aldehyde	U	14.8	ug/kg	3.69	14.8	1
50-29-3	4,4'-DDT	J	8.63	ug/kg	3.69	14.8	2
1031-07-8	Endosulfan sulfate	U	14.8	ug/kg	3.69	14.8	1
72-43-5	Methoxychlor	U	73.9	ug/kg	18.5	73.9	1
53494-70-5	Endrin ketone	U	14.8	ug/kg	3.69	14.8	1
8001-35-2	Toxaphene	U	185	ug/kg	61.5	185	1

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CLP-1

Data file : /chem/ecd5a.i/112909.b/032f3201.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 30-NOV-2009 00:20
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241423005|10|
Misc Info : |ECD81A_1SF|926807|SVPF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 32
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	9.84860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.581	2.579	0.002	7044568	17.0706	31.5	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.428	6.427	0.001	2721859	16.0599	29.6	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.213	5.227	-0.014	1383938	5.62785	10.4	80.00- 120.00	100.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd5a.i/112909.b/032f3201.d

Date : 30-NOV-2009 00:20

Client ID: WST03-10-2130

Sample Info: |2414230051101|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

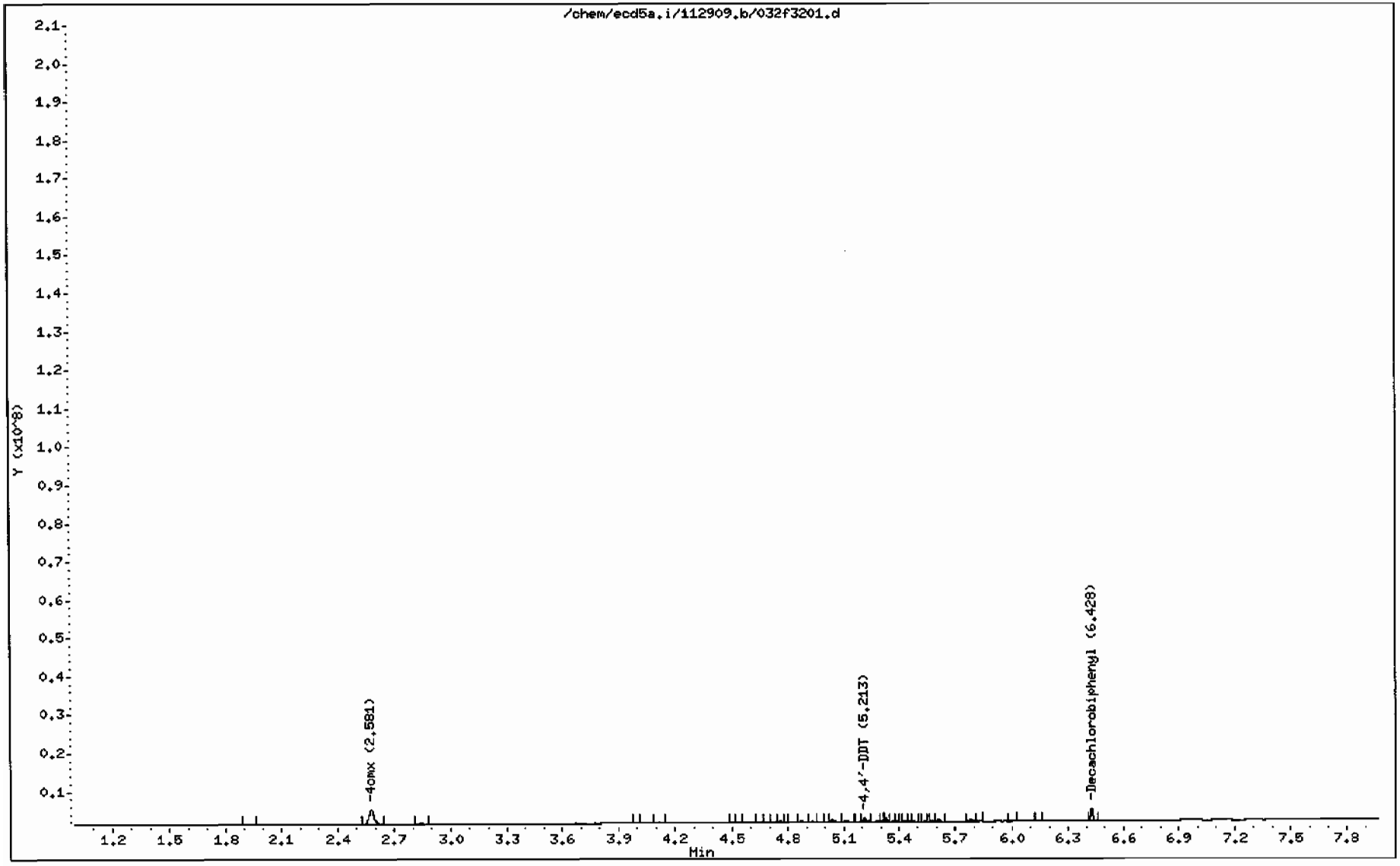

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CLP-2

Data file : /chem/ecd5a.i/112909.b/032b3201.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 30-NOV-2009 00:20
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241423005|10|
Misc Info : |ECD81A_1SF|926807|SVPF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 32
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	9.84860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.125	-0.001	82977356	18.3776	33.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	51079768	15.9414	29.4	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.946	4.944	0.002	11986757	4.67469	8.63	80.00- 120.00	100.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd5a.i/112909.b/032b3201.d

Date : 30-NOV-2009 00:20

Client ID: WST03-10-2130

Sample Info: |241423005|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

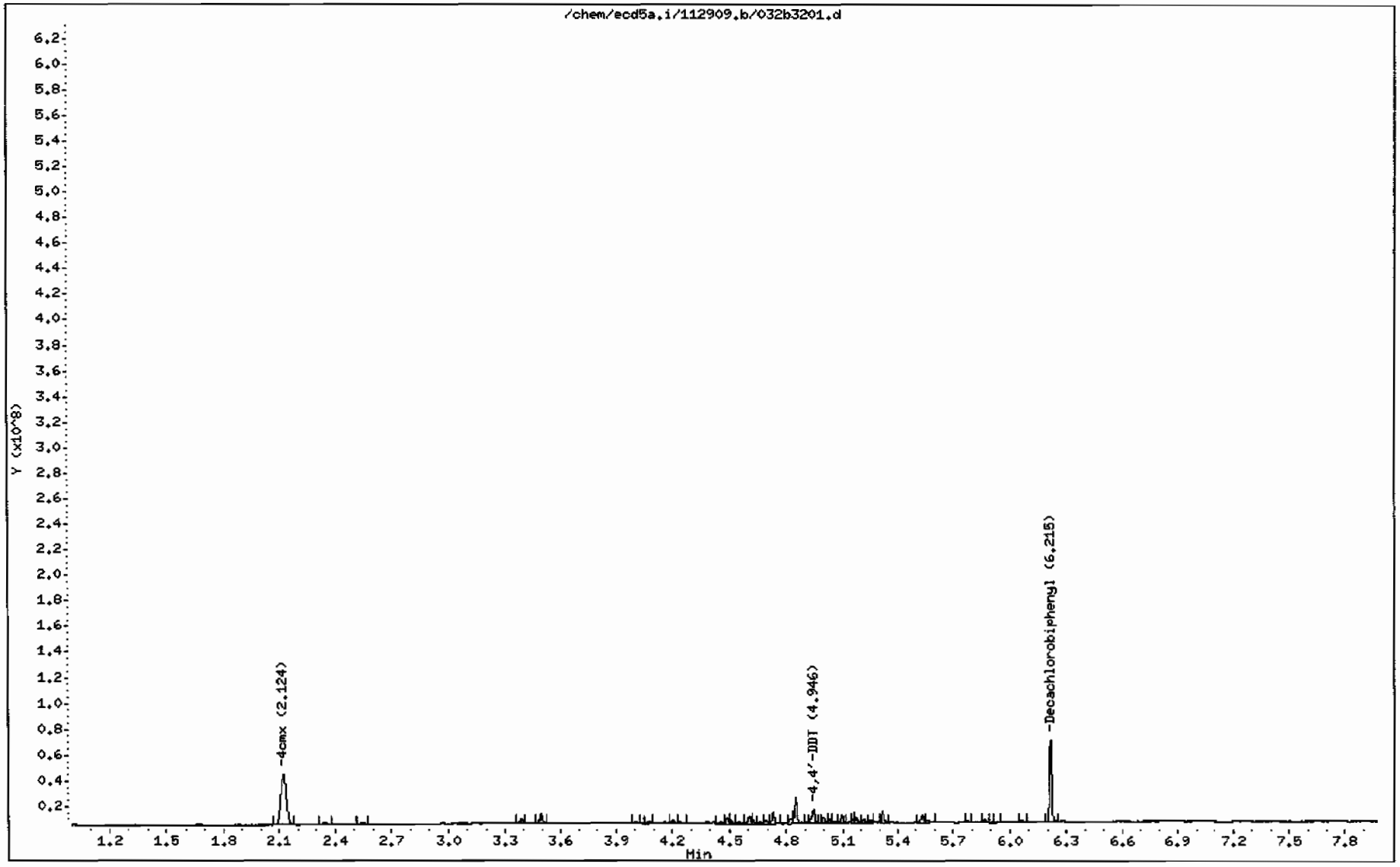

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/29/2009 22:08	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30 g	**Final Volume:**	5 mL
Data File:	021f2101.d	**Column:**	1 CLP-1	**Level:**	LOW
	021b2101.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.24	ug/kg	1.81	7.24	1
58-89-9	gamma-BHC (Lindane)	U	7.24	ug/kg	1.81	7.24	1
319-85-7	beta-BHC	U	7.24	ug/kg	1.81	7.24	1
319-86-8	delta-BHC	U	7.24	ug/kg	1.81	7.24	1
76-44-8	Heptachlor	U	7.24	ug/kg	1.81	7.24	1
309-00-2	Aldrin	U	7.24	ug/kg	1.81	7.24	1
1024-57-3	Heptachlor epoxide	U	7.24	ug/kg	2.26	7.24	1
5103-74-2	gamma-Chlordane	JP	3.23	ug/kg	1.81	7.24	1
5103-71-9	alpha-Chlordane	U	7.24	ug/kg	1.81	7.24	1
959-98-8	Endosulfan I	U	7.24	ug/kg	1.81	7.24	1
72-55-9	4,4'-DDE	U	14.5	ug/kg	3.62	14.5	1
60-57-1	Dieldrin	J	7.94	ug/kg	3.62	14.5	1
72-20-8	Endrin	U	14.5	ug/kg	3.62	14.5	1
72-54-8	4,4'-DDD	U	14.5	ug/kg	3.62	14.5	1
33213-65-9	Endosulfan II	U	14.5	ug/kg	3.62	14.5	1
7421-93-4	Endrin aldehyde	U	14.5	ug/kg	3.62	14.5	1
50-29-3	4,4'-DDT	U	14.5	ug/kg	3.62	14.5	1
1031-07-8	Endosulfan sulfate	U	14.5	ug/kg	3.62	14.5	1
72-43-5	Methoxychlor	U	72.4	ug/kg	18.1	72.4	1
53494-70-5	Endrin ketone	U	14.5	ug/kg	3.62	14.5	1
8001-35-2	Toxaphene	U	181	ug/kg	60.3	181	1

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CLP-1

Data file : /chem/ecd5a.i/112909.b/021f2101.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 29-NOV-2009 22:08
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241423004|10|
Misc Info : |ECD81A_1SF|926807|SVPF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 21
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	6840024	16.5749	30.0	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.428	6.427	0.001	3341990	19.7188	35.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.559	4.554	0.005	697215	1.78360	3.23	80.00- 120.00	100.00(a)
20 Dieldrin					CAS #: 60-57-1		
4.873	4.879	-0.006	1684540	4.38743	7.94	80.00- 120.00	100.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd5a.i/112909.b/021f2101.d

Date : 29-NOV-2009 22:08

Client ID: WST03-10-2131

Sample Info: |241423004|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

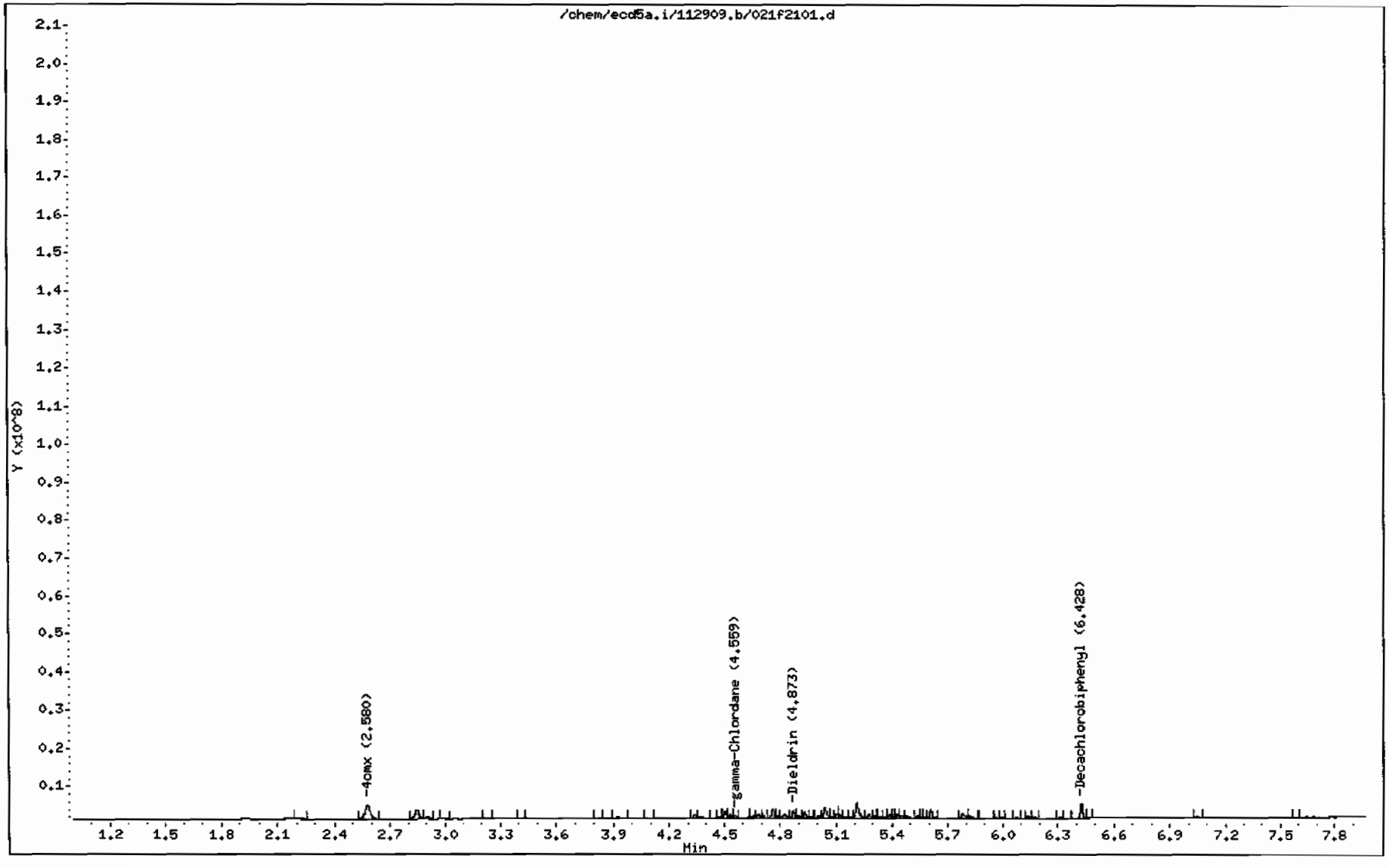

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CLP-2

Data file : /chem/ecd5a.i/112909.b/021b2101.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 29-NOV-2009 22:08
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241423004|10|
Misc Info : |ECD81A_1SF|926807|SVPF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 21
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.125	2.125	0.000	80171510	17.7562	32.1	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.217	6.214	0.003	55030092	17.1742	31.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.201	4.199	0.002	18201016	4.07557	7.38	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.488	4.498	-0.010	25176790	6.20507	11.2	80.00- 120.00	100.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd5a.i/112909.b/021b2101.d

Date : 29-NOV-2009 22:08

Client ID: WST03-10-2131

Sample Info: |2414230041|01|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

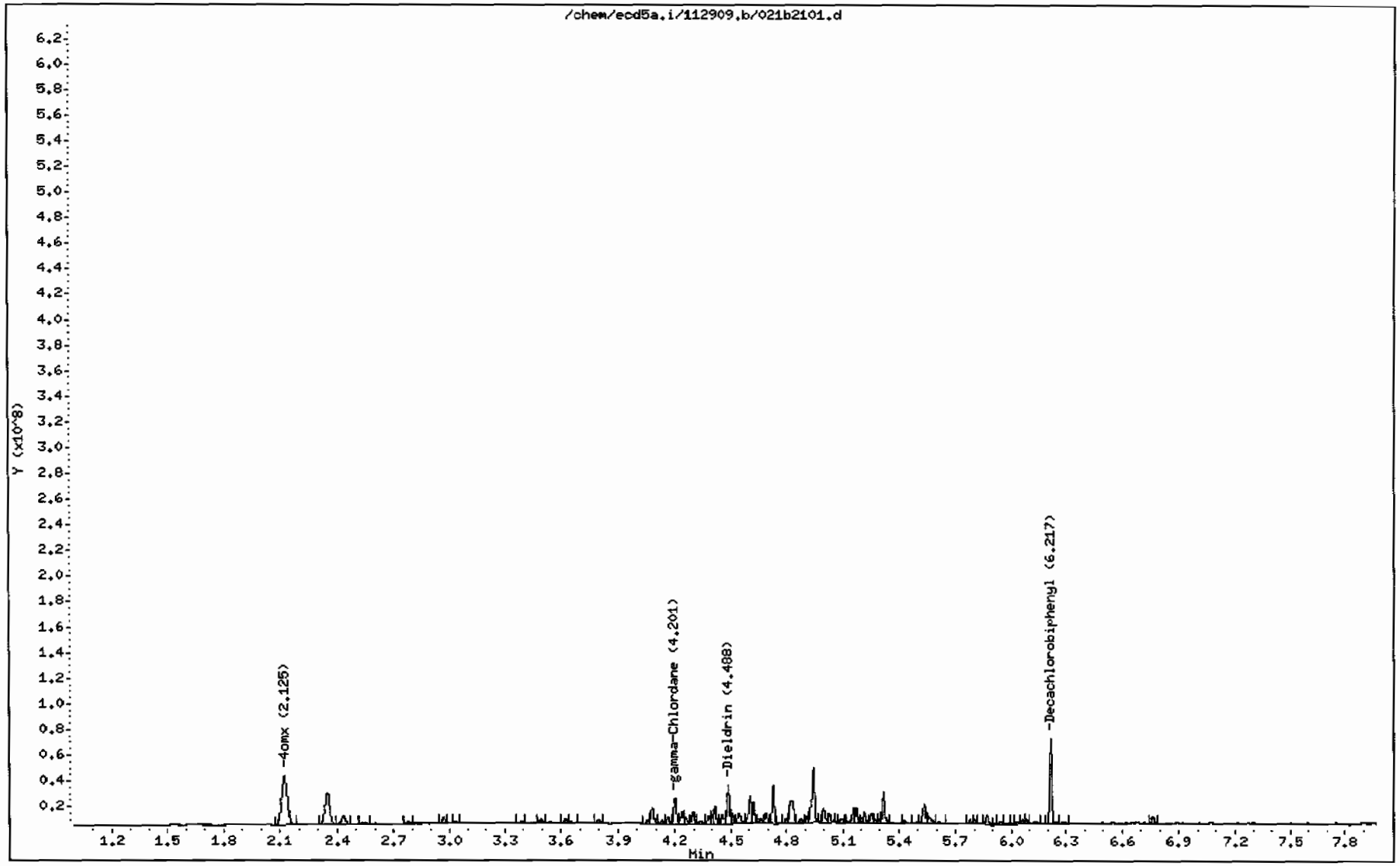

STANDARDS DATA

Report Date: 30-Nov-2009 10:56

Calibration History

Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
25-NOV-2009 03:16	gapa	/chem/ecd5a.i/112409a.b/021f2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006f0601.d
28-NOV-2009 15:27	chlor	/chem/ecd5a.i/112809.b/016f1601.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010f1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006f0601.d
Cal Level: 2 , Cal Amount: 10.00000		
25-NOV-2009 03:28	gapa	/chem/ecd5a.i/112409a.b/022f2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007f0701.d
28-NOV-2009 15:39	chlor	/chem/ecd5a.i/112809.b/017f1701.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011f1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007f0701.d
Cal Level: 3 , Cal Amount: 50.00000		
25-NOV-2009 03:40	gapa	/chem/ecd5a.i/112409a.b/023f2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008f0801.d
28-NOV-2009 15:51	chlor	/chem/ecd5a.i/112809.b/018f1801.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012f1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008f0801.d
Cal Level: 4 , Cal Amount: 100.00000		
25-NOV-2009 03:52	gapa	/chem/ecd5a.i/112409a.b/024f2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024f2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023f2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022f2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015f1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013f1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009f0901.d
28-NOV-2009 16:03	chlor	/chem/ecd5a.i/112809.b/019f1901.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013f1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009f0901.d
Cal Level: 5 , Cal Amount: 200.00000		
25-NOV-2009 04:04	gapa	/chem/ecd5a.i/112409a.b/025f2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010f1001.d
28-NOV-2009 16:15	chlor	/chem/ecd5a.i/112809.b/020f2001.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014f1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010f1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 03:58	indab	/chem/ecd5a.i/112909.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 02:34	indab	/chem/ecd5a.i/112909.b/043f4301.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 06:57	indab	/chem/ecd5a.i/112909.b/065f6501.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 05:45	indab	/chem/ecd5a.i/112909.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 00:35	indab	/chem/ecd5a.i/112909.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 22:56	indab	/chem/ecd5a.i/112909.b/025f2501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 21:06	indab	/chem/ecd5a.i/112909.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:53	chlor	/chem/ecd5a.i/112909.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:41	tox	/chem/ecd5a.i/112909.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 20:05	indab	/chem/ecd5a.i/112909.b/011f1101.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:29	indab	/chem/ecd5a.i/112909.b/003f0301.d

Report Date: 30-Nov-2009 10:54

Calibration History

Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
25-NOV-2009 03:16	gapa	/chem/ecd5a.i/112409a.b/021b2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006b0601.d
28-NOV-2009 15:27	chlor	/chem/ecd5a.i/112809.b/016b1601.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010b1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006b0601.d
Cal Level: 2 , Cal Amount: 10.00000		
25-NOV-2009 03:28	gapa	/chem/ecd5a.i/112409a.b/022b2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007b0701.d
28-NOV-2009 15:39	chlor	/chem/ecd5a.i/112809.b/017b1701.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011b1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007b0701.d
Cal Level: 3 , Cal Amount: 50.00000		
25-NOV-2009 03:40	gapa	/chem/ecd5a.i/112409a.b/023b2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008b0801.d
28-NOV-2009 15:51	chlor	/chem/ecd5a.i/112809.b/018b1801.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012b1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008b0801.d
Cal Level: 4 , Cal Amount: 100.00000		
25-NOV-2009 03:52	gapa	/chem/ecd5a.i/112409a.b/024b2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024b2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023b2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022b2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015b1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013b1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009b0901.d
28-NOV-2009 16:03	chlor	/chem/ecd5a.i/112809.b/019b1901.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013b1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009b0901.d
Cal Level: 5 , Cal Amount: 200.00000		
25-NOV-2009 04:04	gapa	/chem/ecd5a.i/112409a.b/025b2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010b1001.d
28-NOV-2009 16:15	chlor	/chem/ecd5a.i/112809.b/020b2001.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014b1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010b1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 03:58	indab	/chem/ecd5a.i/112909.b/050b5001.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 02:34	indab	/chem/ecd5a.i/112909.b/043b4301.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 05:45	indab	/chem/ecd5a.i/112909.b/059b5901.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 06:57	indab	/chem/ecd5a.i/112909.b/065b6501.d
Ccal Level: 4 , Ccal Amount: 100		
30-NOV-2009 00:35	indab	/chem/ecd5a.i/112909.b/033b3301.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 22:56	indab	/chem/ecd5a.i/112909.b/025b2501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 21:06	indab	/chem/ecd5a.i/112909.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:53	chlor	/chem/ecd5a.i/112909.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:41	tox	/chem/ecd5a.i/112909.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 20:05	indab	/chem/ecd5a.i/112909.b/011b1101.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 100		
29-NOV-2009 18:29	indab	/chem/ecd5a.i/112909.b/003b0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 09:45 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.579	2.549-2.609	4.127e+05
63 2,4,5-Trichlorophenol	1.476	1.376-1.576	
59 Hexachlorobenzene	3.074	2.974-3.174	4.020e+05
2 Aroclor-1221	2.631	2.601-2.661	5.910e+03
	2.767	2.736-2.796	3.363e+03
	2.802	2.772-2.832	1.422e+04
3 Aroclor-1016	3.102	3.072-3.132	1.760e+04
	3.460	3.430-3.490	2.200e+04
	3.686	3.656-3.716	8.402e+03
	3.702	3.672-3.732	8.144e+03
	3.839	3.809-3.869	1.168e+04
4 Aroclor-1232	3.104	3.074-3.134	7.998e+03
	3.248	3.218-3.278	2.167e+03
	3.459	3.430-3.490	1.042e+04
	3.555	3.525-3.585	6.943e+03
	4.119	4.089-4.149	4.959e+03
5 alpha-BHC	3.169	3.139-3.199	5.337e+05
6 Aroclor-1242	3.103	3.003-3.203	1.426e+04
	3.460	3.360-3.560	1.830e+04
	3.600	3.500-3.700	7.474e+03
	4.118	4.018-4.218	9.828e+03
	4.137	4.037-4.237	9.417e+03
7 gamma-BHC (Lindane)	3.454	3.424-3.484	4.666e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.770	3.670-3.870	1.466e+04
	4.429	4.329-4.529	8.179e+03
	4.553	4.453-4.653	4.178e+04
	4.638	4.538-4.738	6.428e+04
	5.120	5.020-5.220	7.733e+03
9 Aroclor-1248	3.686	3.586-3.786	1.281e+04
	3.839	3.739-3.939	1.679e+04
	3.897	3.797-3.997	1.095e+04
	4.119	4.019-4.219	2.029e+04
	4.509	4.409-4.609	9.814e+03
10 Heptachlor	3.831	3.801-3.861	4.090e+05
11 Aldrin	4.051	4.021-4.081	4.406e+05
12 beta-BHC	3.532	3.502-3.562	2.122e+05
13 delta-BHC	3.674	3.644-3.704	4.909e+05
14 Heptachlor epoxide	4.472	4.442-4.502	3.972e+05
15 Aroclor-1254	4.090	4.060-4.120	1.481e+04
	4.257	4.227-4.287	2.571e+04
	4.509	4.479-4.539	2.679e+04
	4.679	4.649-4.709	2.010e+04
	4.960	4.930-4.990	2.920e+04
16 Endosulfan I	4.728	4.698-4.758	3.588e+05
17 gamma-Chlordane	4.554	4.524-4.584	3.909e+05
18 alpha-Chlordane	4.639	4.609-4.669	3.796e+05
19 4,4'-DDE	4.689	4.659-4.719	3.941e+05
20 Dieldrin	4.879	4.849-4.909	3.839e+05
21 Aroclor-1260	4.621	4.521-4.721	2.245e+04
	4.788	4.688-4.888	3.535e+04
	4.866	4.766-4.966	1.482e+04
	4.960	4.860-5.060	3.945e+04
	5.358	5.258-5.458	4.235e+04
22 Endrin	5.024	4.994-5.054	3.283e+05
23 Toxaphene	4.667	4.637-4.697	2.144e+03
	4.882	4.852-4.912	5.628e+03
	4.938	4.908-4.968	5.158e+03
	4.975	4.945-5.005	6.906e+03
	5.156	5.126-5.186	1.145e+04
24 Endosulfan II	5.163	5.133-5.193	3.108e+05
25 4,4'-DDD	5.059	5.029-5.089	3.085e+05
26 4,4'-DDT	5.227	5.197-5.257	2.459e+05
27 Endrin aldehyde	5.416	5.386-5.446	2.729e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.510	5.480-5.540	1.181e+05
	29 Endosulfan sulfate	5.675	5.645-5.705	2.955e+05
	30 Aroclor-1268	5.050	4.950-5.150	
		5.067	4.967-5.167	
		5.185	5.085-5.285	
		5.378	5.278-5.478	
		5.531	5.431-5.631	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	5.846	5.816-5.876	3.247e+05
	51 Mirex	5.669	5.639-5.699	2.376e+05
	52 C-Nonachlor	5.096	5.066-5.126	3.839e+05
	53 O-Chlordane	4.461	4.431-4.491	3.071e+05
	54 T-Nonachlor	4.684	4.654-4.714	3.294e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.523	4.493-4.553	2.226e+05
	58 2,4-DDD	4.851	4.821-4.881	1.896e+05
	57 2,4-DDT	5.008	4.978-5.038	1.953e+05
$	32 Decachlorobiphenyl	6.427	6.397-6.457	1.695e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 09:42 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	92700.000000
Initial:End Threshold	46350.000000
Initial:Area Threshold	927000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx *	2.125	2.095-2.155	4.515e+06
61 2,4,5-Trichlorophenol	1.631	1.531-1.731	
59 Hexachlorobenzene	2.700	2.670-2.730	4.295e+06
2 Aroclor-1221	3.136	3.107-3.167	3.819e+04
	3.255	3.225-3.285	2.282e+04
	3.304	3.274-3.334	7.878e+04
3 Aroclor-1016	3.947	3.917-3.977	1.293e+05
	4.040	4.010-4.070	8.559e+04
	4.110	4.080-4.140	5.407e+04
	4.171	4.141-4.201	5.109e+04
	4.351	4.321-4.381	6.850e+04
4 Aroclor-1232	3.304	3.275-3.334	5.230e+04
	3.949	3.919-3.979	5.701e+04
	4.040	4.010-4.070	3.929e+04
	4.350	4.320-4.380	3.045e+04
	4.622	4.592-4.652	3.317e+04
5 alpha-BHC	2.796	2.766-2.826	6.310e+06
6 Aroclor-1242	3.618	3.588-3.648	8.644e+04
	4.040	4.010-4.070	6.791e+04
	4.109	4.079-4.139	4.340e+04
	4.350	4.320-4.380	5.437e+04
	4.430	4.400-4.460	5.974e+04
7 gamma-BHC (Lindane)	3.110	3.080-3.140	5.481e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.337	3.307-3.367	1.607e+05
	4.055	4.025-4.085	8.180e+04
	4.198	4.168-4.228	4.016e+05
	4.292	4.262-4.322	3.207e+05
	4.841	4.811-4.871	7.676e+04
9 Aroclor-1248	4.172	4.142-4.202	7.431e+04
	4.351	4.321-4.381	9.433e+04
	4.431	4.401-4.461	1.002e+05
	4.592	4.562-4.622	1.083e+05
	4.768	4.738-4.798	1.138e+05
10 Heptachlor	3.448	3.418-3.478	4.460e+06
11 Aldrin	3.679	3.649-3.709	4.984e+06
12 beta-BHC	3.189	3.159-3.219	2.438e+06
13 delta-BHC	3.414	3.384-3.444	5.431e+06
14 Heptachlor epoxide	4.074	4.044-4.104	4.197e+06
15 Aroclor-1254	4.619	4.589-4.649	9.484e+04
	4.734	4.704-4.764	1.078e+05
	5.023	4.993-5.053	1.477e+05
	5.158	5.128-5.188	1.045e+05
	5.481	5.451-5.511	1.267e+05
16 Endosulfan I	4.325	4.295-4.355	3.848e+06
17 gamma-Chlordane	4.199	4.169-4.229	4.466e+06
18 alpha-Chlordane	4.293	4.263-4.323	4.307e+06
19 4,4'-DDE	4.405	4.375-4.435	4.093e+06
20 Dieldrin	4.498	4.468-4.528	4.057e+06
21 Aroclor-1260	5.043	5.013-5.073	6.157e+04
	5.140	5.110-5.170	1.370e+05
	5.261	5.231-5.291	1.523e+05
	5.481	5.451-5.511	1.467e+05
	6.079	6.049-6.109	1.563e+05
22 Endrin	4.684	4.654-4.714	3.533e+06
23 Toxaphene	4.556	4.526-4.586	3.946e+04
	4.785	4.755-4.815	5.053e+04
	4.806	4.776-4.836	7.541e+04
	4.865	4.835-4.895	1.327e+05
	5.021	4.991-5.051	7.494e+04
24 Endosulfan II	4.814	4.784-4.844	3.350e+06
25 4,4'-DDD	4.758	4.728-4.788	3.483e+06
26 4,4'-DDT	4.944	4.914-4.974	2.564e+06
27 Endrin aldehyde	5.016	4.986-5.046	2.760e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
28 Methoxychlor	5.350	5.320-5.380	8.575e+05
29 Endosulfan sulfate	5.180	5.150-5.210	3.045e+06
30 Aroclor-1268	5.217	5.187-5.247	
	5.596	5.566-5.626	
	5.628	5.598-5.658	
	5.769	5.739-5.799	
	6.149	6.119-6.179	
60 Aroclor-1262	4.689	4.589-4.789	
	4.779	4.679-4.879	
	5.074	4.974-5.174	
	5.224	5.124-5.324	
	5.396	5.296-5.496	
31 Endrin ketone	5.496	5.466-5.526	3.461e+06
51 Mirex	5.513	5.483-5.543	2.564e+06
52 C-Nonachlor	4.778	4.748-4.808	4.380e+06
53 O-Chlordane	4.060	4.030-4.090	3.450e+06
54 T-Nonachlor	4.302	4.272-4.332	3.758e+06
55 1,2-Dichlorobenzene	6.619	6.589-6.649	
56 2,4-DDE	4.250	4.220-4.280	2.402e+06
58 2,4-DDD	4.569	4.539-4.599	2.199e+06
57 2,4-DDT	4.753	4.723-4.783	1.963e+06
$ 32 Decachlorobiphenyl	6.214	6.184-6.244	3.204e+06

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Cal Date : 30-Nov-2009 09:45 cla01575
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/112409a.b/021f2101.d
Level 2: /chem/ecd5a.i/112409a.b/022f2201.d
Level 3: /chem/ecd5a.i/112409a.b/023f2301.d
Level 4: /chem/ecd5a.i/112409a.b/024f2401.d
Level 5: /chem/ecd5a.i/112409a.b/025f2501.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	450385	399520	383873	392198	384222	402040	6.911
2 Aroclor-1221(1)	+++++	+++++	+++++	5910	+++++	5910	0.000
(2)	+++++	+++++	+++++	3363	+++++	3363	0.000
(3)	+++++	+++++	+++++	14218	+++++	14218	0.000
3 Aroclor-1016(1)	18316	18455	17930	17404	15906	17602	5.863
(2)	21725	22828	22310	22663	20456	21996	4.360
(3)	8841	8543	8438	8235	7951	8402	3.973
(4)	8274	8363	8182	8166	7736	8144	2.968
(5)	11759	11851	11816	11833	11120	11676	2.678
4 Aroclor-1232(1)	+++++	+++++	+++++	7998	+++++	7998	0.000
(2)	+++++	+++++	+++++	2167	+++++	2167	0.000
(3)	+++++	+++++	+++++	10425	+++++	10425	0.000
(4)	+++++	+++++	+++++	6943	+++++	6943	0.000
(5)	+++++	+++++	+++++	4959	+++++	4959	0.000
5 alpha-BHC	491739	508089	538268	551826	578483	533681	6.472
6 Aroclor-1242(1)	+++++	+++++	+++++	14263	+++++	14263	0.000
(2)	+++++	+++++	+++++	18303	+++++	18303	0.000
(3)	+++++	+++++	+++++	7474	+++++	7474	0.000
(4)	+++++	+++++	+++++	9828	+++++	9828	0.000
(5)	+++++	+++++	+++++	9417	+++++	9417	0.000
7 gamma-BHC (Lindane)	434473	449351	470116	477498	501412	466570	5.540
8 Chlordane (tech.)(1)	16016	14616	14119	13963	14584	14660	5.525
(2)	8682	8229	7858	7902	8222	8179	4.041
(3)	42084	40429	41161	43308	41939	41784	2.584
(4)	64973	62271	63704	66683	63783	64283	2.565
(5)	7932	7214	7327	7910	8281	7733	5.800

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Quant Method : ESTD
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Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Cal Date : 30-Nov-2009 09:45 cla01575
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	12812	+++++	12812	0.000
(2)	+++++	+++++	+++++	16794	+++++	16794	0.000
(3)	+++++	+++++	+++++	10955	+++++	10955	0.000
(4)	+++++	+++++	+++++	20294	+++++	20294	0.000
(5)	+++++	+++++	+++++	9814	+++++	9814	0.000
10 Heptachlor	401838	409045	409978	403588	420372	408964	1.775
11 Aldrin	417768	429626	447022	449900	458668	440597	3.757
12 beta-BHC	216642	213028	206845	207774	216729	212204	2.225
13 delta-BHC	451379	466994	496935	508937	530192	490887	6.473
14 Heptachlor epoxide	393287	397980	398351	396957	399183	397152	0.580
15 Aroclor-1254(1)	+++++	+++++	+++++	14812	+++++	14812	0.000
(2)	+++++	+++++	+++++	25713	+++++	25713	0.000
(3)	+++++	+++++	+++++	26786	+++++	26786	0.000
(4)	+++++	+++++	+++++	20102	+++++	20102	0.000
(5)	+++++	+++++	+++++	29201	+++++	29201	0.000
16 Endosulfan I	353738	358685	360703	358983	361922	358806	0.871
17 gamma-Chlordane	383840	380376	389568	394798	405930	390903	2.569
18 alpha-Chlordane	359872	365634	385024	390477	396857	379573	4.227
19 4,4'-DDE	382759	400641	404947	394450	387652	394090	2.307
20 Dieldrin	374922	389692	392394	384495	378232	383947	1.926
21 Aroclor-1260(1)	22983	23321	22940	22516	20469	22446	5.085
(2)	35726	36888	36310	35624	32213	35352	5.167
(3)	14778	14965	14903	14964	14487	14820	1.354
(4)	39548	40617	40289	39914	36902	39454	3.756
(5)	42946	43953	43513	42694	38645	42350	5.027
22 Endrin	326619	336344	333566	325148	319734	328282	2.035
23 Toxaphene(1)	2264	2121	2189	2025	2123	2144	4.138
(2)	6590	5395	5422	5385	5348	5628	9.569
(3)	5804	4927	4976	5029	5056	5158	7.061
(4)	7353	6689	6859	6817	6814	6906	3.735
(5)	12002	11128	11116	11290	11735	11454	3.456
24 Endosulfan II	290780	301637	325836	322726	312862	310768	4.711
25 4,4'-DDD	296756	310832	315715	311519	307886	308541	2.320

GEL Laboratories LLC

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Cal Date : 30-Nov-2009 09:45 cla01575
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
	26 4,4'-DDT	231690	251563	248827	237254	260211	245909	4.646
	27 Endrin aldehyde	281843	279990	271328	266247	265173	272916	2.819
	28 Methoxychlor	127039	129131	114263	107759	112493	118137	7.971
	29 Endosulfan sulfate	301362	300700	292392	289061	294158	295535	1.809
	30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	61 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	31 Endrin ketone	328518	338793	324847	313038	318073	324654	3.054
	51 Mirex	262176	235041	229178	232634	229074	237621	5.872
	52 C-Nonachlor	390676	374930	384441	390152	379281	383896	1.781
	53 O-Chlordane	332441	308555	300992	302451	291276	307143	5.027
	54 T-Nonachlor	342524	326792	325823	330540	321567	329449	2.421
	55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	56 2,4-DDE	241403	226089	219770	219122	206837	222644	5.656
	58 2,4-DDD	206768	190932	185096	186411	178745	189590	5.562
	57 2,4-DDT	204801	186079	195984	195661	193736	195252	3.420
M	62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	1 4cmx	415446	413069	409897	408925	416029	412673	0.774
$	32 Decachlorobiphenyl	189589	175166	157954	158782	165921	169482	7.787

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
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Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Cal Date : 30-Nov-2009 11:29 cla01575

Calibration File Names:
Level 1: /chem/ecd5a.i/112409a.b/021b2101.d
Level 2: /chem/ecd5a.i/112409a.b/022b2201.d
Level 3: /chem/ecd5a.i/112409a.b/023b2301.d
Level 4: /chem/ecd5a.i/112409a.b/024b2401.d
Level 5: /chem/ecd5a.i/112409a.b/025b2501.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG	0.000e+00			0.000e+00
59 Hexachlorobenzene	5438712	4353137	3871895	3920633	3892862	AVRG		4295448		15.58373
2 Aroclor-1221 (1)	+++++	+++++	+++++	38194	+++++	AVRG		38194		0.000e+00
(2)	+++++	+++++	+++++	22822	+++++	AVRG		22822		0.000e+00
(3)	+++++	+++++	+++++	78778	+++++	AVRG		78778		0.000e+00
3 Aroclor-1016 (1)	135228	136032	131291	128421	115286	AVRG		129252		6.49152
(2)	94115	91053	86081	82205	74492	AVRG		85590		9.00075
(3)	59100	56752	54061	51882	48540	AVRG		54067		7.61842
(4)	56717	54302	51105	48729	44616	AVRG		51094		9.25654
(5)	75245	71571	68782	66056	60864	AVRG		68504		7.97140
4 Aroclor-1232 (1)	+++++	+++++	+++++	52302	+++++	AVRG		52302		0.000e+00
(2)	+++++	+++++	+++++	57011	+++++	AVRG		57011		0.000e+00
(3)	+++++	+++++	+++++	39294	+++++	AVRG		39294		0.000e+00
(4)	+++++	+++++	+++++	30449	+++++	AVRG		30449		0.000e+00
(5)	+++++	+++++	+++++	33167	+++++	AVRG		33167		0.000e+00
5 alpha-BHC	6838675	6514616	5966818	5953702	6277942	AVRG		6310351		5.96694
6 Aroclor-1242 (1)	+++++	+++++	+++++	86436	+++++	AVRG		86436		0.000e+00
(2)	+++++	+++++	+++++	67908	+++++	AVRG		67908		0.000e+00
(3)	+++++	+++++	+++++	43403	+++++	AVRG		43403		0.000e+00
(4)	+++++	+++++	+++++	54366	+++++	AVRG		54366		0.000e+00
(5)	+++++	+++++	+++++	59740	+++++	AVRG		59740		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Cal Date : 30-Nov-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	5956503	5680115	5177596	5150340	5441473	AVRG		5481205		6.24514
8 Chlordane (tech.) (1)	10682671	20228056	90001928	177415523	485919767	LINR	-46.03688	160700		0.99910
(2)	5886156	10615860	44760865	89255968	247575965	LINR	-43.28250	81805		0.99946
(3)	26899504	49949762	216304304	441477112	1.213e+09	LINR	-39.71281	401615		0.99921
(4)	21492276	39392355	168763135	342725498	967990585	LINR	-30.70914	320672		0.99969
(5)	7666172	11209062	44345941	87145115	234012675	LINR	-71.44643	76765		0.99903
9 Aroclor-1248 (1)	+++++	+++++	+++++	74311	+++++	AVRG		74311		0.000e+00
(2)	+++++	+++++	+++++	94327	+++++	AVRG		94327		0.000e+00
(3)	+++++	+++++	+++++	100218	+++++	AVRG		100218		0.000e+00
(4)	+++++	+++++	+++++	108276	+++++	AVRG		108276		0.000e+00
(5)	+++++	+++++	+++++	113831	+++++	AVRG		113831		0.000e+00
10 Heptachlor	5149048	4797406	4251158	4014001	4089869	AVRG		4460296		11.03009
11 Aldrin	5677312	5304074	4731628	4606988	4599689	AVRG		4983938		9.70928
12 beta-BHC	2878486	2677456	2248224	2156766	2231469	AVRG		2438480		13.11538
13 delta-BHC	5804273	5440206	5129371	5241565	5538336	AVRG		5430750		4.85266
14 Heptachlor epoxide	4885668	4389663	3997179	3934738	3778905	AVRG		4197231		10.62092
15 Aroclor-1254 (1)	+++++	+++++	+++++	94842	+++++	AVRG		94842		0.000e+00
(2)	+++++	+++++	+++++	107760	+++++	AVRG		107760		0.000e+00
(3)	+++++	+++++	+++++	147710	+++++	AVRG		147710		0.000e+00
(4)	+++++	+++++	+++++	104486	+++++	AVRG		104486		0.000e+00
(5)	+++++	+++++	+++++	126738	+++++	AVRG		126738		0.000e+00
16 Endosulfan I	4610162	4233166	3599394	3427182	3370183	AVRG		3848018		14.21280
17 gamma-Chlordane	5032525	4703285	4197236	4143836	4252527	AVRG		4465882		8.66406
18 alpha-Chlordane	4910798	4568637	4032258	3968194	4053295	AVRG		4306636		9.62764

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Cal Date : 30-Nov-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	4632294	4324470	3955249	3808388	3745219	AVRG		4093124		9.18486
20 Dieldrin	4747158	4382405	3906755	3691581	3559389	AVRG		4057458		12.23597
21 Aroclor-1260 (1)	67909	63594	61133	58501	56721	AVRG		61572		7.14408
(2)	154760	142644	136554	130696	120581	AVRG		137047		9.34993
(3)	163780	157424	151415	148508	140329	AVRG		152291		5.84087
(4)	154736	148501	147397	143879	139185	AVRG		146740		3.92572
(5)	161375	159022	154521	152918	153834	AVRG		156334		2.34679
22 Endrin	4221086	3965357	3399432	3101165	2980147	AVRG		3533437		15.30850
23 Toxaphene (1)	6785796	24879794	45282173	83261070	122239904	LINR	-111	39464		0.99938
(2)	10918417	28773691	52336549	103429953	156813371	LINR	-74.20418	50534		0.99913
(3)	13788450	44397334	80246614	159783502	231242827	LINR	-84.19422	75411		0.99965
(4)	23787638	84302296	154527900	270829136	415826281	LINR	-110	132744		0.99822
(5)	10034600	41699252	74815893	149107018	228852094	LINR	-26.40626	74942		0.99931
24 Endosulfan II	3948644	3652790	3191531	3006518	2948819	AVRG		3349660		12.96230
25 4,4'-DDD	3923519	3713531	3334579	3215108	3228910	AVRG		3483129		9.14170
26 4,4'-DDT	2766420	2988879	2464778	2150060	2450778	AVRG		2564183		12.56926
27 Endrin aldehyde	3439834	3095732	2579920	2392309	2294032	AVRG		2760365		17.74426
28 Methoxychlor	52389891	130752199	487589182	847132898	1.757e+09	LINR	-35.80872	857542		0.99845
29 Endosulfan sulfate	3689590	3378872	2880276	2670674	2603092	AVRG		3044501		15.48914
30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

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Cal Date : 30-Nov-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	4283164	4001243	3287755	2903228	2829611	AVRG		3461000		18.87819
51 Mirex	3080659	2537776	2359043	2357090	2483115	AVRG		2563537		11.68607
52 C-Nonachlor	5126313	4319470	4103965	4167050	4183054	AVRG		4379971		9.69304
53 O-Chlordane	4285362	3541383	3191908	3166474	3064288	AVRG		3449883		14.50739
54 T-Nonachlor	4420840	3746219	3519225	3563865	3541133	AVRG		3758256		10.14278
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	3083590	2600064	2233982	2134728	1958842	AVRG		2402241		18.61473
58 2,4-DDD	2716678	2282555	2054870	2016029	1926985	AVRG		2199423		14.43544
57 2,4-DDT	2187975	1689203	2032476	1791066	2113875	AVRG		1962919		10.88862
$ 1 4cmx	5226176	4849317	4202259	4106647	4191288	AVRG		4515137		11.00102
$ 32 Decachlorobiphenyl	3539718	3281064	3038738	3054648	3106952	AVRG		3204224		6.57760

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 29-NOV-2009 19:53
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Cal Date : 30-Nov-2009 11:29 cla01575

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :11/29/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1817

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.05	4.02	4.08	119	100	19.0
4,4'-DDE						
Endrin	5.02	4.99	5.05	110	100	10.0
4,4'-DDD						
4,4'-DDT	5.22	5.20	5.26	95.2	100	-4.8
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 1.70 Endrin % breakdown (1): 1.40

Combined % breakdown (1): 3.10

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :11/29/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1817

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.68	3.65	3.71	110	100	10.0
4,4'-DDE						
Endrin	4.68	4.65	4.71	111	100	11.0
4,4'-DDD						
4,4'-DDT	4.94	4.91	4.97	91.3	100	-8.7
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 4.20 Endrin % breakdown (1): 1.40

Combined % breakdown (1): 5.60

FORM VII PEST-1 OLM03.0

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 1841

Lab File ID: 004F0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D	
Toxaphene	2144.404	2471.690	0.01	15.3	15.0	<-
(2)	5627.754	4905.798	0.01	-12.8	15.0	
(3)	5158.097	5990.242	0.01	16.1	15.0	<-
(4)	6906.286	7325.832	0.01	6.1	15.0	
(5)	11454.281	12684.546	0.01	10.7	15.0	
4cmx	412673.21	420412.94	0.01	1.9	15.0	
Decachlorobiphenyl	169482.15	161672.52	0.01	-4.6	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 1841

Lab File ID: 004B0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Toxaphene	2150	2000	LINR	7.5	15.0
(2)	1970	2000	LINR	-1.5	15.0
(3)	2140	2000	LINR	7.0	15.0
(4)	1980	2000	LINR	-1.0	15.0
(5)	2070	2000	LINR	3.5	15.0
4cmx	183	200	AVRG	-8.5	15.0
Decachlorobiphenyl	184	200	AVRG	-8.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2005

Lab File ID: 011F1101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
alpha-BHC	533681.26	558273.31	0.01	4.6	15.0
beta-BHC	212203.58	210492.98	0.01	-0.8	15.0
delta-BHC	490887.35	513418.74	0.01	4.6	15.0
gamma-BHC (Lindane)	466570.17	486556.72	0.01	4.3	15.0
Heptachlor	408964.18	420883.45	0.01	2.9	15.0
Aldrin	440596.76	455050.09	0.01	3.3	15.0
Heptachlor epoxide	397151.66	401399.80	0.01	1.1	15.0
Endosulfan I	358806.17	363477.32	0.01	1.3	15.0
Dieldrin	383947.03	388798.10	0.01	1.3	15.0
4,4'-DDE	394089.94	398558.74	0.01	1.1	15.0
Endrin	328282.24	327754.23	0.01	-0.2	15.0
Endosulfan II	310768.15	316638.73	0.01	1.9	15.0
4,4'-DDD	308541.29	315566.17	0.01	2.3	15.0
Endosulfan sulfate	295534.62	295003.23	0.01	-0.2	15.0
4,4'-DDT	245908.91	264692.24	0.01	7.6	15.0
Methoxychlor	118137.10	113863.89	0.01	-3.6	15.0
Endrin ketone	324653.81	327153.95	0.01	0.8	15.0
Endrin aldehyde	272916.18	269720.95	0.01	-1.2	15.0
gamma-Chlordane	390902.58	400400.79	0.01	2.4	15.0
alpha-Chlordane	379572.68	391956.26	0.01	3.3	15.0
4cmx	412673.21	411137.98	0.01	-0.4	15.0
Decachlorobiphenyl	169482.15	162635.84	0.01	-4.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2005

Lab File ID: 011B1101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
alpha-BHC	96.0	100	AVRG	-4.0	15.0
beta-BHC	90.5	100	AVRG	-9.5	15.0
delta-BHC	99.4	100	AVRG	-0.6	15.0
gamma-BHC (Lindane)	96.1	100	AVRG	-3.9	15.0
Heptachlor	93.9	100	AVRG	-6.1	15.0
Aldrin	93.7	100	AVRG	-6.3	15.0
Heptachlor epoxide	93.6	100	AVRG	-6.4	15.0
Endosulfan I	90.4	100	AVRG	-9.6	15.0
Dieldrin	184	200	AVRG	-8.0	15.0
4,4'-DDE	189	200	AVRG	-5.5	15.0
Endrin	180	200	AVRG	-10.0	15.0
Endosulfan II	186	200	AVRG	-7.0	15.0
4,4'-DDD	190	200	AVRG	-5.0	15.0
Endosulfan sulfate	180	200	AVRG	-10.0	15.0
4,4'-DDT	202	200	AVRG	1.0	15.0
Methoxychlor	1090	1000	LINR	9.0	15.0
Endrin ketone	180	200	AVRG	-10.0	15.0
Endrin aldehyde	176	200	AVRG	-12.0	15.0
gamma-Chlordane	94.6	100	AVRG	-5.4	15.0
alpha-Chlordane	93.9	100	AVRG	-6.1	15.0
4cmx	184	200	AVRG	-8.0	15.0
Decachlorobiphenyl	195	200	AVRG	-2.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2106

Lab File ID: 016F1601 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	533681.26	570447.54	0.01	6.9	15.0	
beta-BHC	212203.58	215402.66	0.01	1.5	15.0	
delta-BHC	490887.35	524796.84	0.01	6.9	15.0	
gamma-BHC (Lindane)	466570.17	501525.94	0.01	7.5	15.0	
Heptachlor	408964.18	437480.21	0.01	7.0	15.0	
Aldrin	440596.76	462351.23	0.01	4.9	15.0	
Heptachlor epoxide	397151.66	409997.90	0.01	3.2	15.0	
Endosulfan I	358806.17	369736.64	0.01	3.0	15.0	
Dieldrin	383947.03	394426.18	0.01	2.7	15.0	
4,4'-DDE	394089.94	401280.56	0.01	1.8	15.0	
Endrin	328282.24	336585.52	0.01	2.5	15.0	
Endosulfan II	310768.15	316324.34	0.01	1.8	15.0	
4,4'-DDD	308541.29	322924.57	0.01	4.7	15.0	
Endosulfan sulfate	295534.62	301534.69	0.01	2.0	15.0	
4,4'-DDT	245908.91	285203.95	0.01	16.0	15.0	<-
Methoxychlor	118137.10	119675.44	0.01	1.3	15.0	
Endrin ketone	324653.81	314842.10	0.01	-3.0	15.0	
Endrin aldehyde	272916.18	275867.90	0.01	1.1	15.0	
gamma-Chlordane	390902.58	405786.93	0.01	3.8	15.0	
alpha-Chlordane	379572.68	394582.86	0.01	4.0	15.0	
4cmx	412673.21	416574.94	0.01	0.9	15.0	
Decachlorobiphenyl	169482.15	169205.78	0.01	-0.2	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2106

Lab File ID: 016B1601 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	96.0	100	AVRG	-4.0	15.0	
beta-BHC	90.5	100	AVRG	-9.5	15.0	
delta-BHC	96.0	100	AVRG	-4.0	15.0	
gamma-BHC (Lindane)	96.8	100	AVRG	-3.2	15.0	
Heptachlor	95.4	100	AVRG	-4.6	15.0	
Aldrin	91.3	100	AVRG	-8.7	15.0	
Heptachlor epoxide	81.8	100	AVRG	-18.2	15.0	<-
Endosulfan I	86.2	100	AVRG	-13.8	15.0	
Dieldrin	185	200	AVRG	-7.5	15.0	
4,4'-DDE	188	200	AVRG	-6.0	15.0	
Endrin	183	200	AVRG	-8.5	15.0	
Endosulfan II	183	200	AVRG	-8.5	15.0	
4,4'-DDD	192	200	AVRG	-4.0	15.0	
Endosulfan sulfate	184	200	AVRG	-8.0	15.0	
4,4'-DDT	227	200	AVRG	13.5	15.0	
Methoxychlor	1180	1000	LINR	18.0	15.0	<-
Endrin ketone	186	200	AVRG	-7.0	15.0	
Endrin aldehyde	178	200	AVRG	-11.0	15.0	
gamma-Chlordane	83.1	100	AVRG	-16.9	15.0	<-
alpha-Chlordane	85.8	100	AVRG	-14.2	15.0	
4cmx	183	200	AVRG	-8.5	15.0	
Decachlorobiphenyl	196	200	AVRG	-2.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2256

Lab File ID: 025F2501 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	533681.26	600350.69	0.01	12.5	15.0	
beta-BHC	212203.58	226498.36	0.01	6.7	15.0	
delta-BHC	490887.35	541703.67	0.01	10.4	15.0	
gamma-BHC (Lindane)	466570.17	541831.42	0.01	16.1	15.0	<-
Heptachlor	408964.18	424627.90	0.01	3.8	15.0	
Aldrin	440596.76	461876.71	0.01	4.8	15.0	
Heptachlor epoxide	397151.66	425031.12	0.01	7.0	15.0	
Endosulfan I	358806.17	390250.34	0.01	8.8	15.0	
Dieldrin	383947.03	405869.73	0.01	5.7	15.0	
4,4'-DDE	394089.94	406323.78	0.01	3.1	15.0	
Endrin	328282.24	365176.72	0.01	11.2	15.0	
Endosulfan II	310768.15	342735.93	0.01	10.3	15.0	
4,4'-DDD	308541.29	334581.66	0.01	8.4	15.0	
Endosulfan sulfate	295534.62	310362.14	0.01	5.0	15.0	
4,4'-DDT	245908.91	271820.96	0.01	10.5	15.0	
Methoxychlor	118137.10	121175.51	0.01	2.6	15.0	
Endrin ketone	324653.81	332872.28	0.01	2.5	15.0	
Endrin aldehyde	272916.18	279745.35	0.01	2.5	15.0	
gamma-Chlordane	390902.58	442185.34	0.01	13.1	15.0	
alpha-Chlordane	379572.68	386139.73	0.01	1.7	15.0	
4cmx	412673.21	426123.87	0.01	3.2	15.0	
Decachlorobiphenyl	169482.15	163034.61	0.01	-3.8	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/29/09 Time: 2256

Lab File ID: 025B2501 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	102	100	AVRG	2.0	15.0	
beta-BHC	96.1	100	AVRG	-3.9	15.0	
delta-BHC	102	100	AVRG	2.0	15.0	
gamma-BHC (Lindane)	107	100	AVRG	7.0	15.0	
Heptachlor	96.2	100	AVRG	-3.8	15.0	
Aldrin	94.2	100	AVRG	-5.8	15.0	
Heptachlor epoxide	98.5	100	AVRG	-1.5	15.0	
Endosulfan I	95.6	100	AVRG	-4.4	15.0	
Dieldrin	188	200	AVRG	-6.0	15.0	
4,4'-DDE	194	200	AVRG	-3.0	15.0	
Endrin	195	200	AVRG	-2.5	15.0	
Endosulfan II	187	200	AVRG	-6.5	15.0	
4,4'-DDD	192	200	AVRG	-4.0	15.0	
Endosulfan sulfate	186	200	AVRG	-7.0	15.0	
4,4'-DDT	221	200	AVRG	10.5	15.0	
Methoxychlor	1180	1000	LINR	18.0	15.0	<-
Endrin ketone	180	200	AVRG	-10.0	15.0	
Endrin aldehyde	179	200	AVRG	-10.5	15.0	
gamma-Chlordane	102	100	AVRG	2.0	15.0	
alpha-Chlordane	89.3	100	AVRG	-10.7	15.0	
4cmx	191	200	AVRG	-4.5	15.0	
Decachlorobiphenyl	186	200	AVRG	-7.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/30/09 Time: 0035

Lab File ID: 033F3301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	533681.26	608054.42	0.01	13.9	15.0	
beta-BHC	212203.58	227592.14	0.01	7.2	15.0	
delta-BHC	490887.35	544579.73	0.01	10.9	15.0	
gamma-BHC (Lindane)	466570.17	539399.40	0.01	15.6	15.0	<-
Heptachlor	408964.18	412984.16	0.01	1.0	15.0	
Aldrin	440596.76	468848.88	0.01	6.4	15.0	
Heptachlor epoxide	397151.66	428467.74	0.01	7.9	15.0	
Endosulfan I	358806.17	392297.94	0.01	9.3	15.0	
Dieldrin	383947.03	407152.83	0.01	6.0	15.0	
4,4'-DDE	394089.94	412020.03	0.01	4.5	15.0	
Endrin	328282.24	364658.58	0.01	11.1	15.0	
Endosulfan II	310768.15	354050.31	0.01	13.9	15.0	
4,4'-DDD	308541.29	341719.54	0.01	10.8	15.0	
Endosulfan sulfate	295534.62	312052.34	0.01	5.6	15.0	
4,4'-DDT	245908.91	234377.81	0.01	-4.7	15.0	
Methoxychlor	118137.10	112585.73	0.01	-4.7	15.0	
Endrin ketone	324653.81	310596.67	0.01	-4.3	15.0	
Endrin aldehyde	272916.18	280750.17	0.01	2.9	15.0	
gamma-Chlordane	390902.58	444887.86	0.01	13.8	15.0	
alpha-Chlordane	379572.68	389009.52	0.01	2.5	15.0	
4cmx	412673.21	434055.49	0.01	5.2	15.0	
Decachlorobiphenyl	169482.15	170354.55	0.01	0.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD5A Calibration Date: 11/30/09 Time: 0035

Lab File ID: 033B3301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	103	100	AVRG	3.0	15.0	
beta-BHC	96.3	100	AVRG	-3.7	15.0	
delta-BHC	102	100	AVRG	2.0	15.0	
gamma-BHC (Lindane)	106	100	AVRG	6.0	15.0	
Heptachlor	91.7	100	AVRG	-8.3	15.0	
Aldrin	94.3	100	AVRG	-5.7	15.0	
Heptachlor epoxide	97.7	100	AVRG	-2.3	15.0	
Endosulfan I	96.7	100	AVRG	-3.3	15.0	
Dieldrin	188	200	AVRG	-6.0	15.0	
4,4'-DDE	196	200	AVRG	-2.0	15.0	
Endrin	192	200	AVRG	-4.0	15.0	
Endosulfan II	189	200	AVRG	-5.5	15.0	
4,4'-DDD	193	200	AVRG	-3.5	15.0	
Endosulfan sulfate	182	200	AVRG	-9.0	15.0	
4,4'-DDT	176	200	AVRG	-12.0	15.0	
Methoxychlor	996	1000	LINR	-0.4	15.0	
Endrin ketone	166	200	AVRG	-17.0	15.0	<-
Endrin aldehyde	178	200	AVRG	-11.0	15.0	
gamma-Chlordane	101	100	AVRG	1.0	15.0	
alpha-Chlordane	89.5	100	AVRG	-10.5	15.0	
4cmx	194	200	AVRG	-3.0	15.0	
Decachlorobiphenyl	179	200	AVRG	-10.5	15.0	

FORM VII PEST

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 29-NOV-2009 18:17
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.049	4.051	-0.002	52472707	119.095	119	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.686	4.689	-0.003	143987	0.36537	0.365	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.021	5.024	-0.003	36307817	110.599	110	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.055	5.059	-0.004	170168	0.55153	0.552	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.413	5.416	-0.003	132704	0.48624	0.486	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.224	5.227	-0.003	23417970	95.2303	95.2	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.844	5.846	-0.002	367728	1.13268	1.13	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.574	2.579	-0.005	85648051	207.544	208	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.424	6.427	-0.003	33241931	196.138	196	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/002f0201.d
Date : 29-NOV-2009 18:17
Client ID: PEM01
Sample Info: IWPE091109-99DC

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

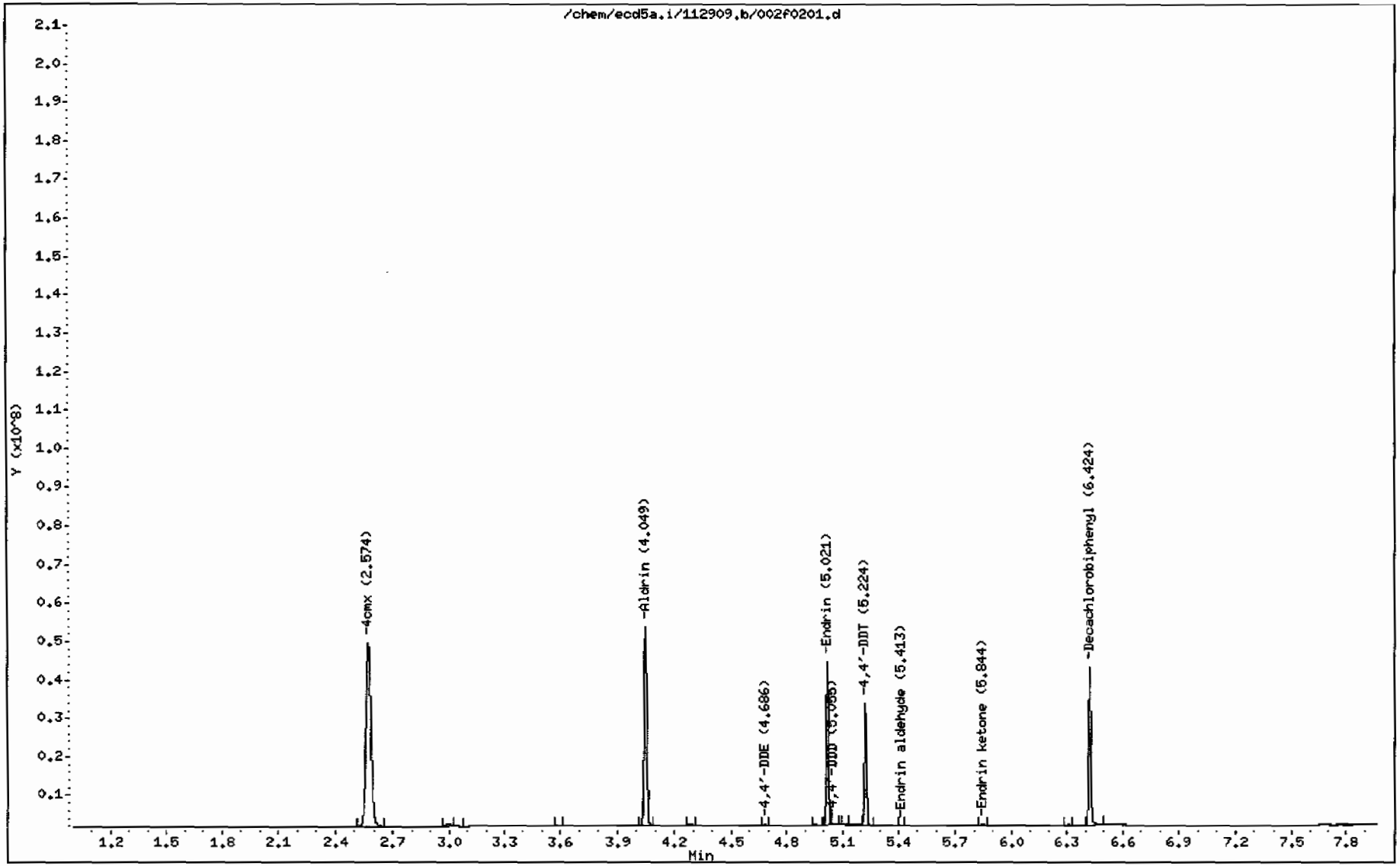

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 29-NOV-2009 18:17
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.678	3.679	-0.001	548988438	110.152	110	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.404	4.405	-0.001	2483074	0.60665	0.607	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.682	4.684	-0.002	390930421	110.637	111	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	7680511	2.20506	2.20	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.015	5.016	-0.001	1696783	0.61470	0.615	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.942	4.944	-0.002	234157642	91.3186	91.3	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.495	5.496	-0.001	5754462	1.66266	1.66	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.123	2.125	-0.002	845634743	187.289	187	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	637285452	198.889	199	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/002b0201.d
Date : 29-NOV-2009 18:17
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

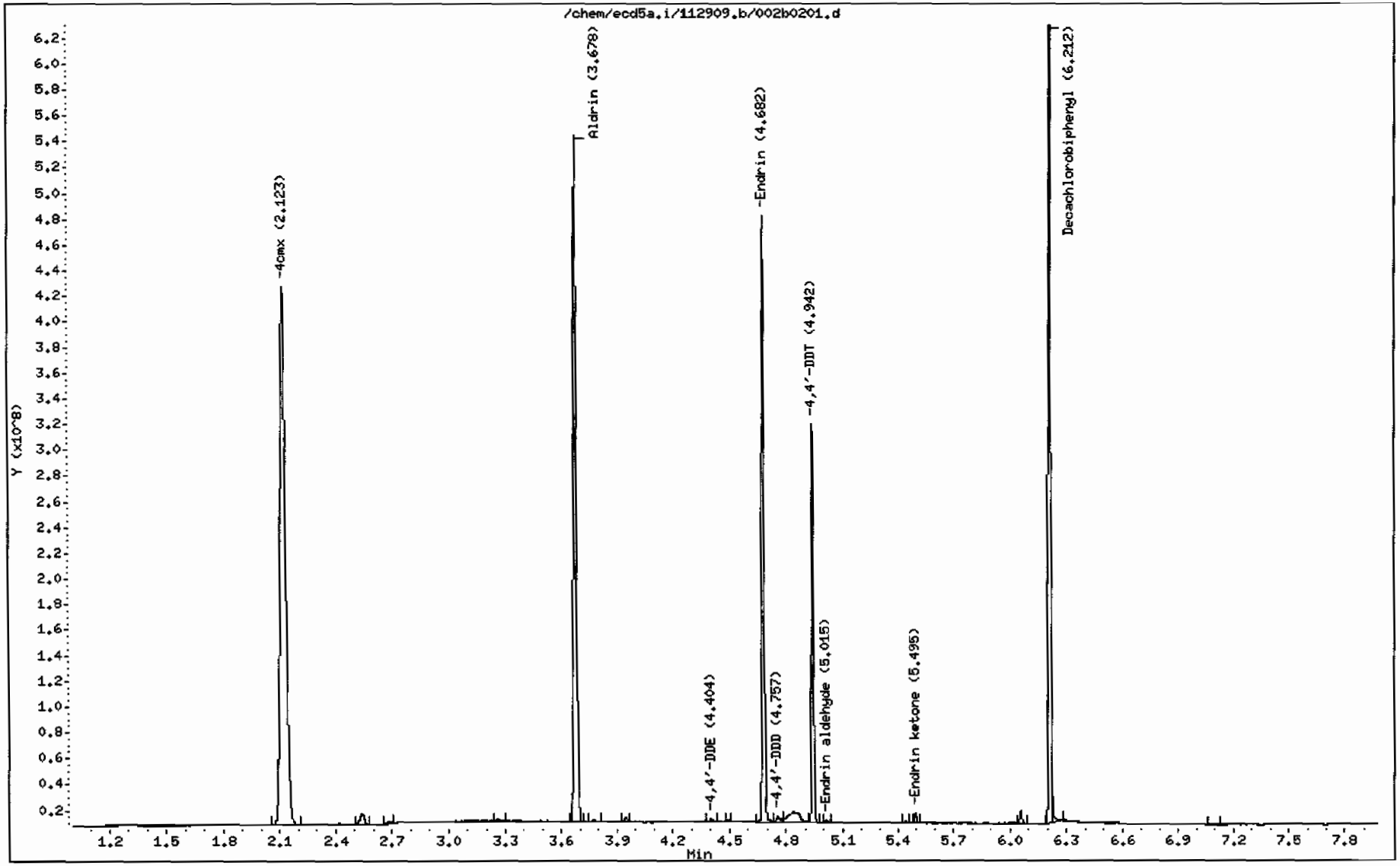

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/004f0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 29-NOV-2009 18:41
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.667	4.667	0.000	4943381	2000.00	2300	80.00- 120.00	100.00(M)
4.882	4.882	0.000	9811595	2000.00	1740	178.48- 218.48	198.48
4.938	4.938	0.000	11980484	2000.00	2320	222.35- 262.35	242.35
4.975	4.975	0.000	14651664	2000.00	2120	276.39- 316.39	296.39
5.156	5.156	0.000	25369092	2000.00	2210	493.19- 533.19	513.19
Average of Peak Amounts =					2.14e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	84082588	200.000	204	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	32334503	200.000	191	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/004f0401.d
Date : 29-NOV-2009 18:41
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

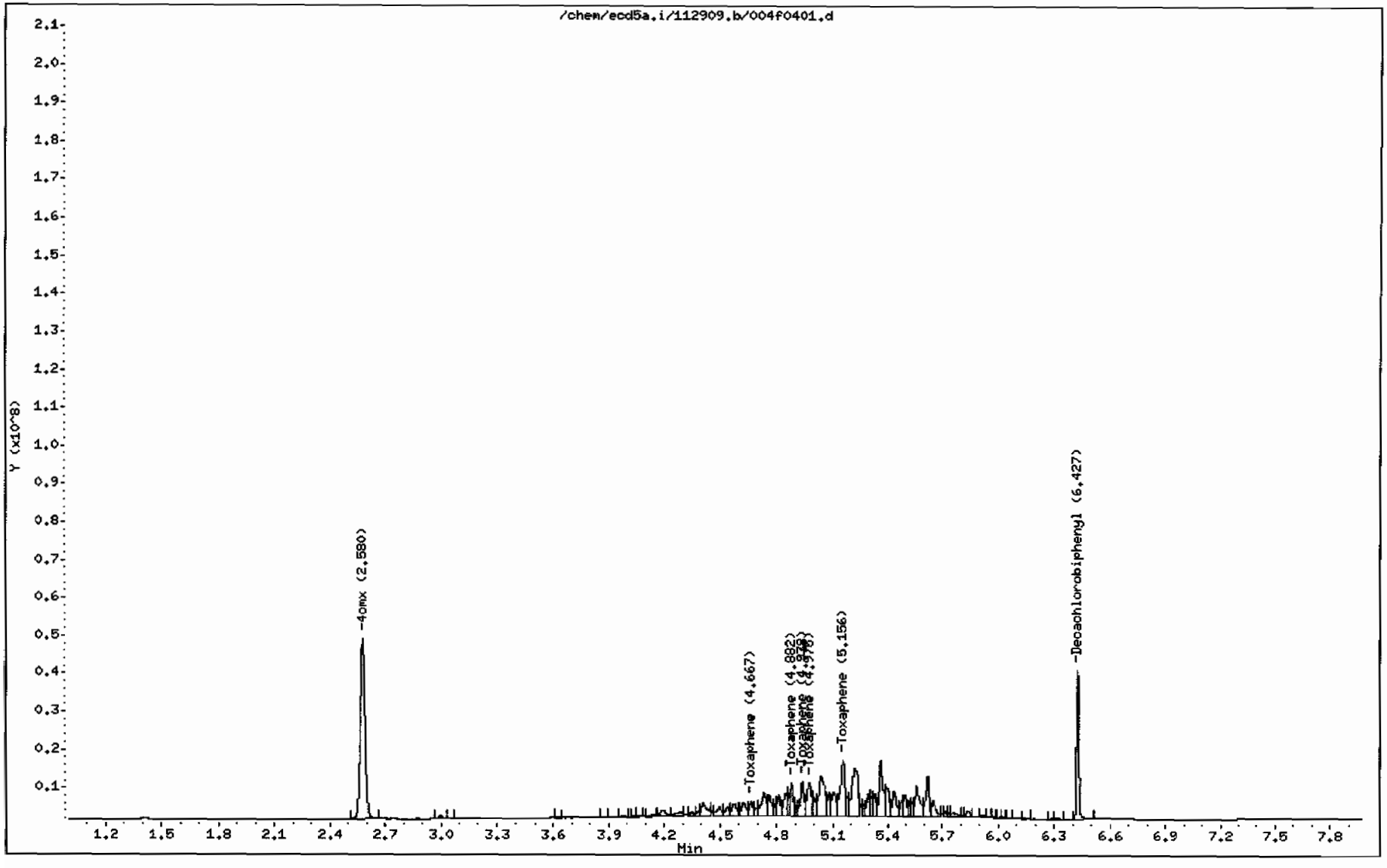

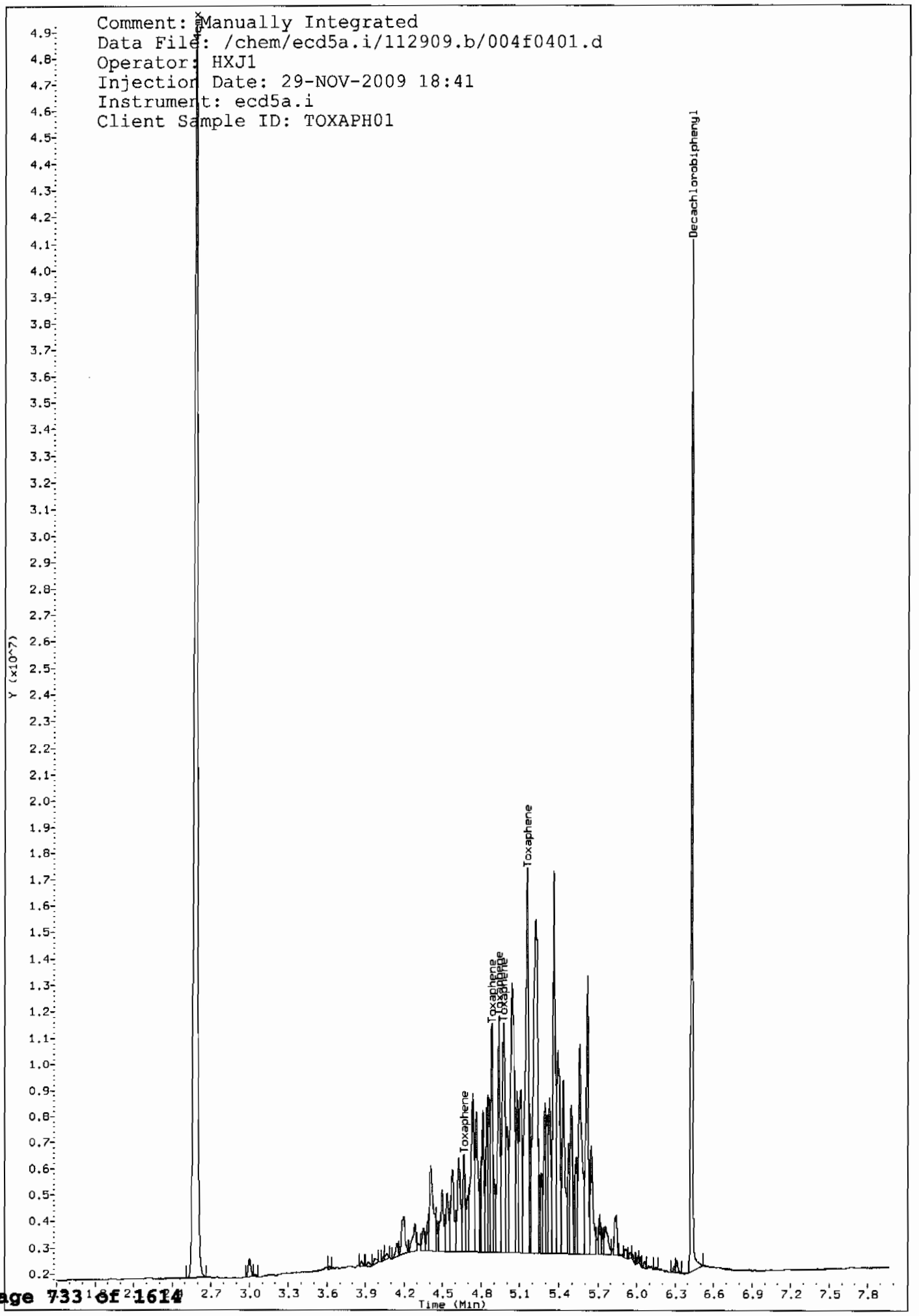
Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/004f0401.d
Operator: HXJ1
Injection Date: 29-NOV-2009 18:41
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

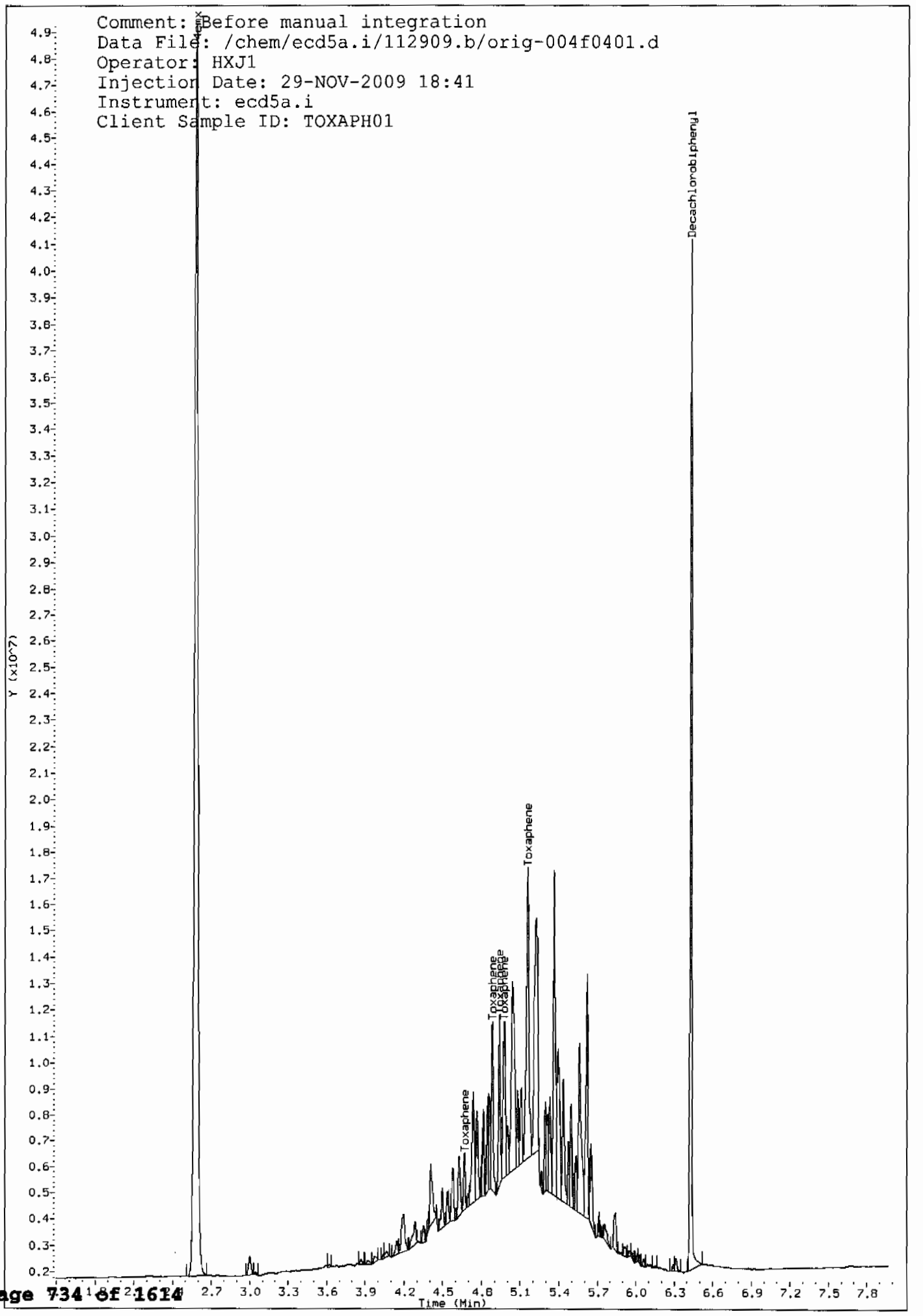
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-004f0401.d
Operator: HXJ1
Injection Date: 29-NOV-2009 18:41
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/004b0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 29-NOV-2009 18:41
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.556	4.556	0.000	89312296	2000.00	2150	80.00- 120.00	100.00
4.785	4.785	0.000	103291653	2000.00	1970	95.65- 135.65	115.65
4.806	4.806	0.000	168095225	2000.00	2140	168.21- 208.21	188.21
4.865	4.865	0.000	277266125	2000.00	1980	290.45- 330.45	310.45
5.021	5.021	0.000	157296760	2000.00	2070	156.12- 196.12	176.12

Average of Peak Amounts = 2.06e+03

$ 1 4cmx					CAS #: 877-09-8		
2.125	2.125	0.000	825328838	200.000	183	80.00- 120.00	100.00

$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	590929382	200.000	184	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/004b0401.d

Date : 29-NOV-2009 18:41

Client ID: TOXAPH01

Sample Info: IWPE091104-52TX

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

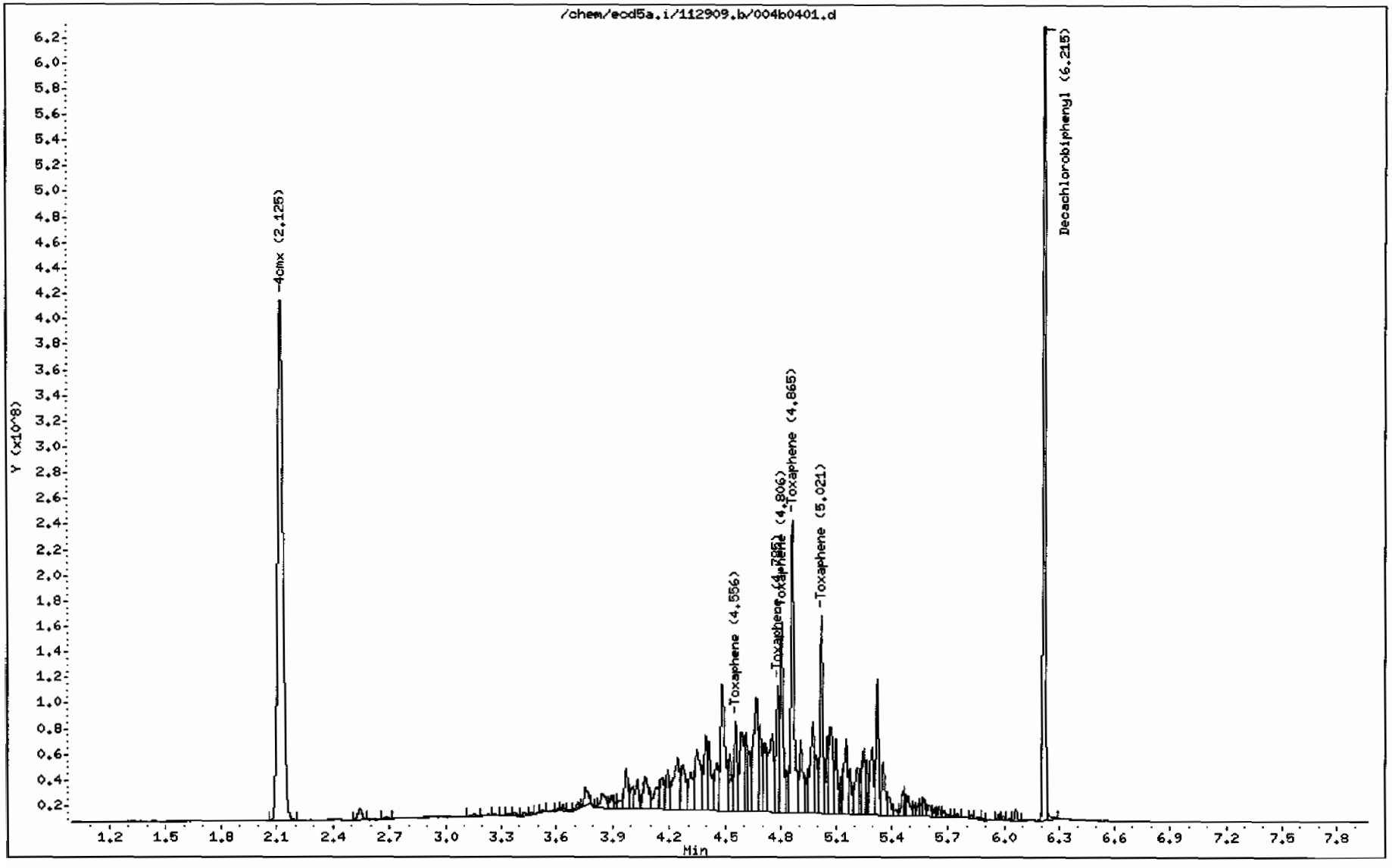

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/011f1101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 29-NOV-2009 20:05
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.169	3.169	0.000	55827331	100.000	105	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.454	3.454	0.000	48655672	100.000	104	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.532	3.532	0.000	21049298	100.000	99.2	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.831	3.831	0.000	42088345	100.000	103	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	51341874	100.000	104	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.051	4.051	0.000	45505009	100.000	103	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	40139980	100.000	101	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.554	4.554	0.000	40040079	100.000	102	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.639	4.639	0.000	39195626	100.000	103	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.728	4.728	0.000	36347732	100.000	101	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.689	4.689	0.000	79711749	200.000	202	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	77759620	200.000	202	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.024	5.024	0.000	65550846	200.000	200	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.059	5.059	0.000	63113235	200.000	204	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	63327746	200.000	204	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	53944189	200.000	198	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.227	5.227	0.000	52938449	200.000	215	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.675	5.675	0.000	59000646	200.000	200	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	113863888	1000.00	964	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	65430790	200.000	202	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	82227596	200.000	199	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	32527168	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/011f1101.d
Date : 29-NOV-2009 20:05
Client ID: INDAB01
Sample Info: IWPE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

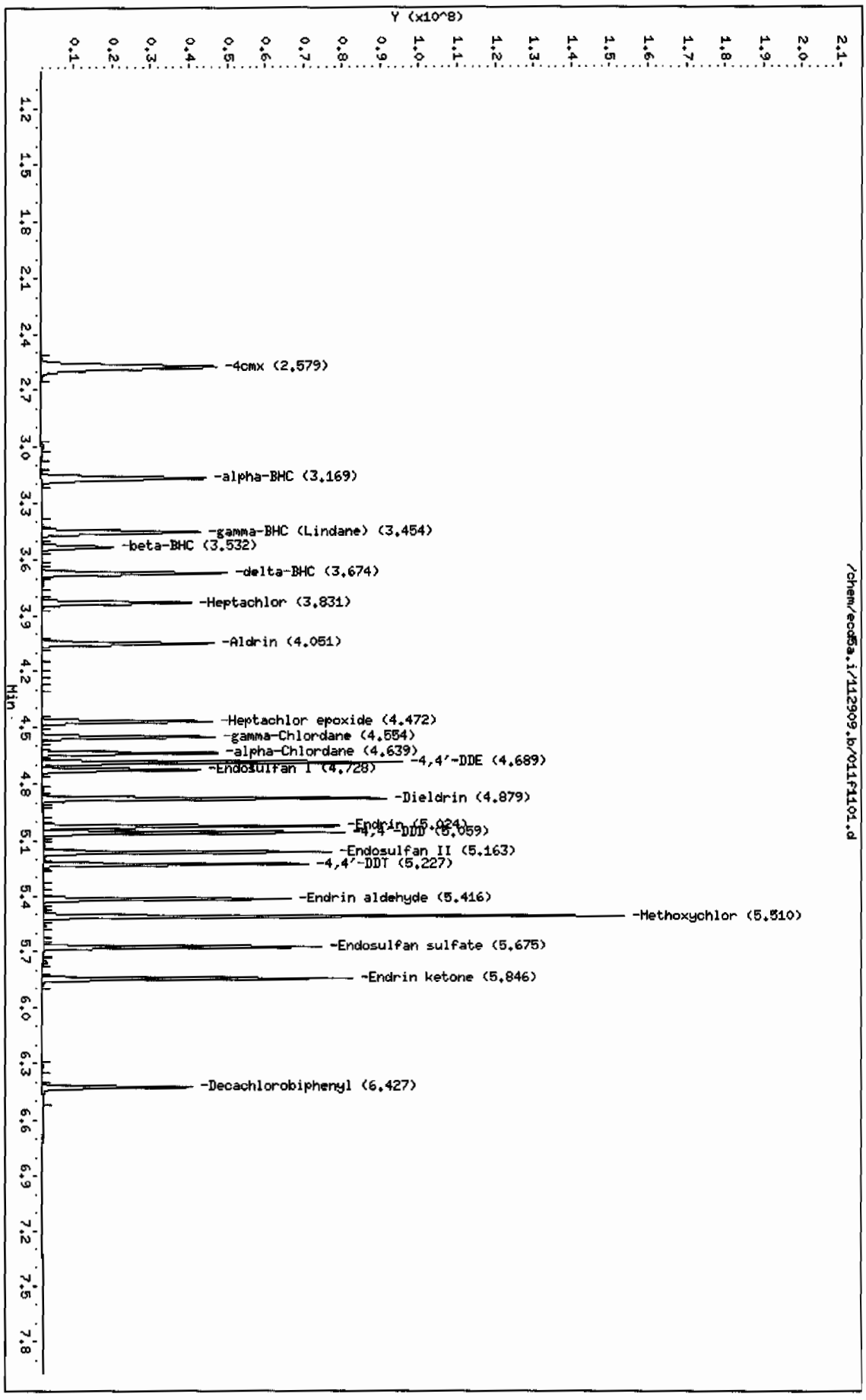

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/011b1101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 29-NOV-2009 20:05
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.796	2.796	0.000	605711906	100.000	96.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	526818233	100.000	96.1	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.189	3.189	0.000	220740689	100.000	90.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	418906676	100.000	93.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	539960001	100.000	99.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	467181496	100.000	93.7	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.074	4.074	0.000	393037996	100.000	93.6	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.199	4.199	0.000	422618252	100.000	94.6	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	404244859	100.000	93.9	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	347839005	100.000	90.4	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.405	4.405	0.000	775149199	200.000	189	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	748461437	200.000	184	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	637491918	200.000	180	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.758	4.758	0.000	663212197	200.000	190	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	622797569	200.000	186	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.016	5.016	0.000	486901332	200.000	176	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.944	4.944	0.000	517618647	200.000	202	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.180	5.180	0.000	548186393	200.000	180	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	962232025	1000.00	1090	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.496	5.496	0.000	621617081	200.000	180	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.125	2.125	0.000	830966072	200.000	184	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	626298136	200.000	195	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/011b1101.d
Date : 29-NOV-2009 20:05
Client ID: INDAB01
Sample Info: IWPE091123-10AB

Instrument: ecd5a.i

Operator: HXJ1

Column phase: CLP-2

Column diameter: 0.25

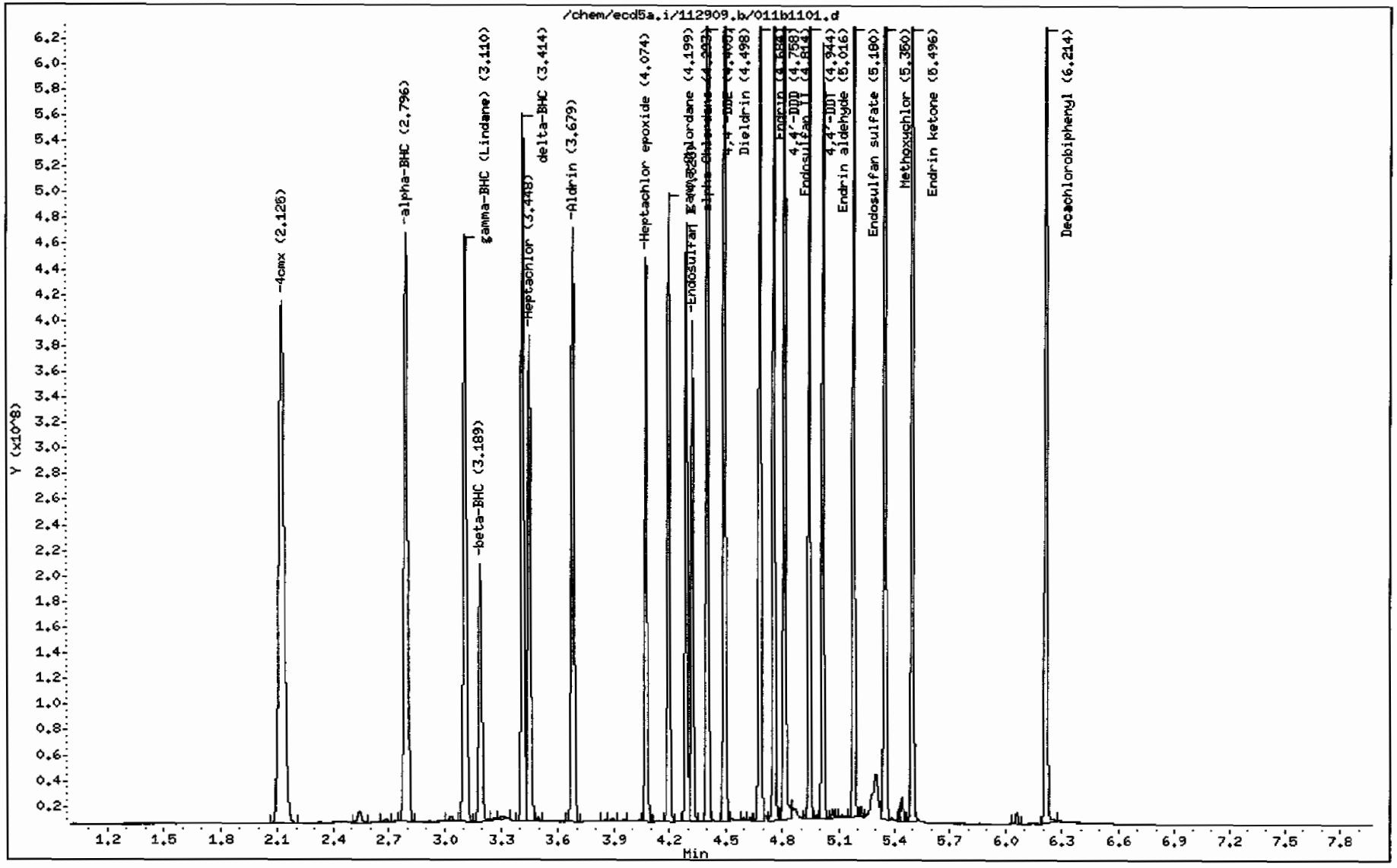

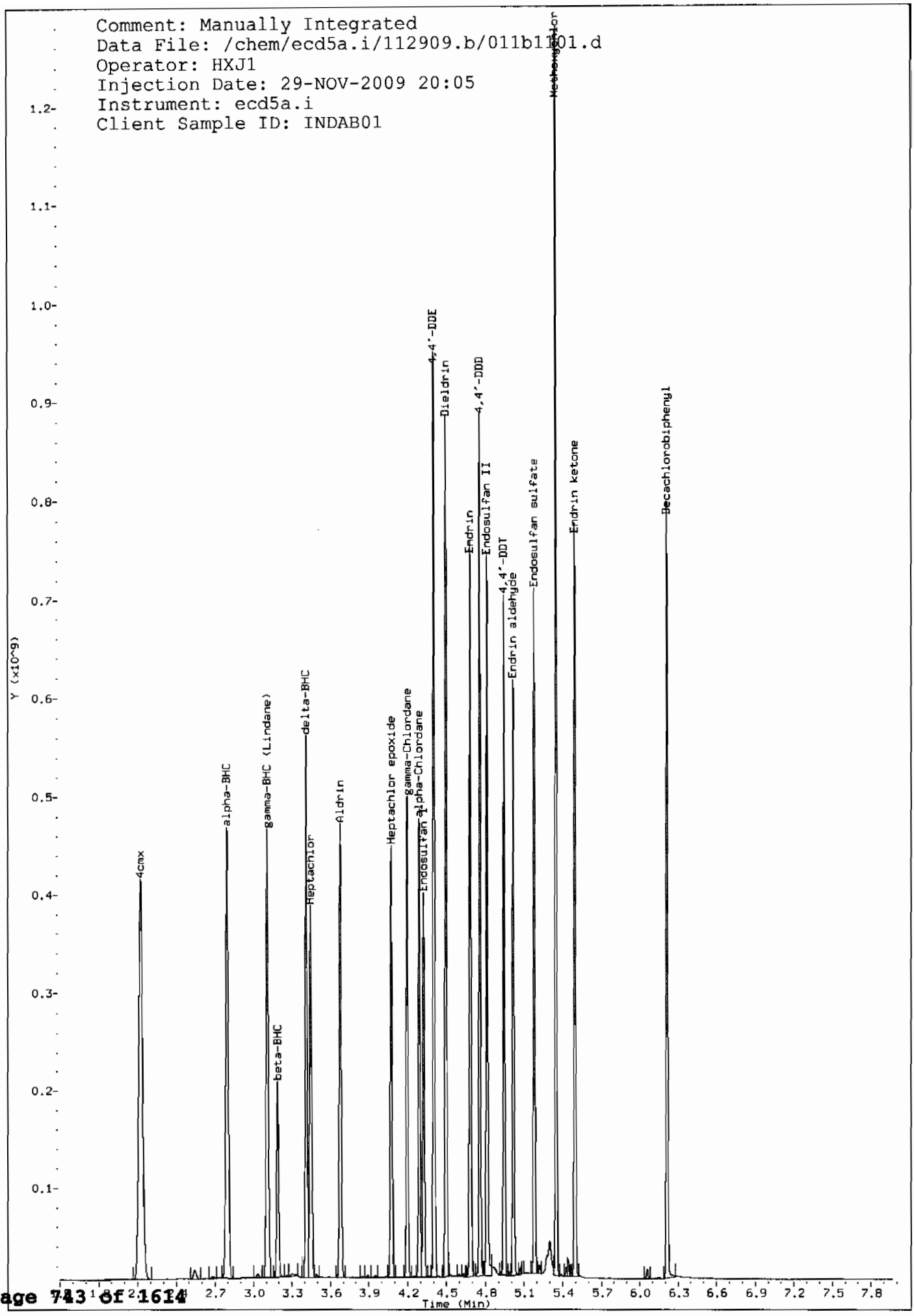
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Operator: HXJ1
Injection Date: 29-NOV-2009 20:05
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

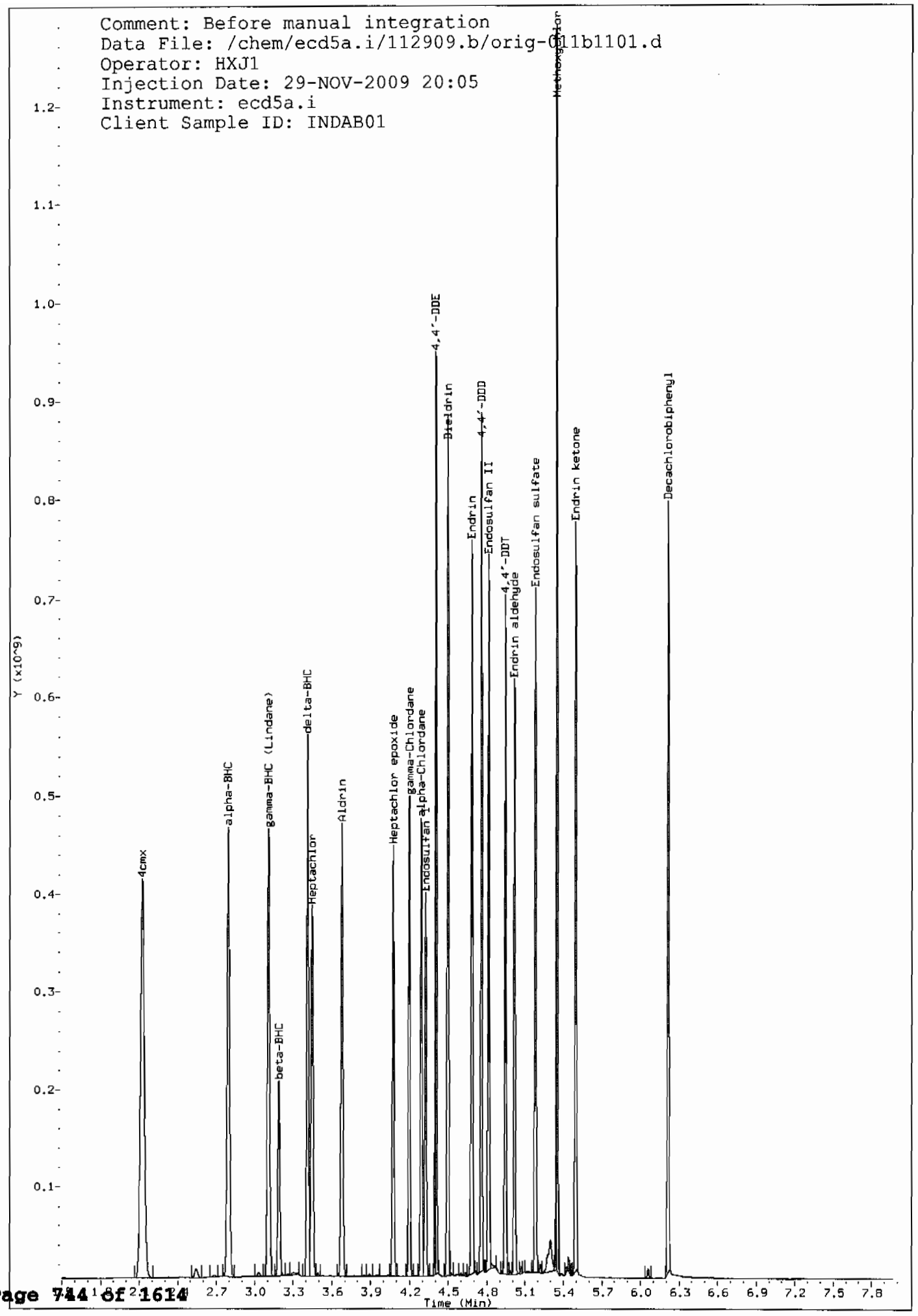
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Operator: HXJ1
Injection Date: 29-NOV-2009 20:05
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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Data file : /chem/ecd5a.i/112909.b/016f1601.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB02
Inj Date : 29-NOV-2009 21:06
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.173	3.169	0.004	57044753	100.000	107	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.458	3.454	0.004	50152594	100.000	107	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.536	3.532	0.004	21540265	100.000	102	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.834	3.831	0.003	43748020	100.000	107	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.676	3.674	0.002	52479684	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.055	4.051	0.004	46235123	100.000	105	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.475	4.472	0.003	40999790	100.000	103	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.556	4.554	0.002	40578693	100.000	104	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.643	4.639	0.004	39458286	100.000	104	80.00- 120.00	100.00

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
	16 Endosulfan I					CAS #: 959-98-8		
	4.731	4.728	0.003	36973664	100.000	103	80.00- 120.00	100.00
	19 4,4'-DDE					CAS #: 72-55-9		
	4.691	4.689	0.002	80256111	200.000	204	80.00- 120.00	100.00
	20 Dieldrin					CAS #: 60-57-1		
	4.882	4.879	0.003	78885235	200.000	205	80.00- 120.00	100.00
	22 Endrin					CAS #: 72-20-8		
	5.028	5.024	0.004	67317103	200.000	205	80.00- 120.00	100.00
	25 4,4'-DDD					CAS #: 72-54-8		
	5.061	5.059	0.002	64584913	200.000	209	80.00- 120.00	100.00
	24 Endosulfan II					CAS #: 33213-65-9		
	5.165	5.163	0.002	63264868	200.000	204	80.00- 120.00	100.00
	27 Endrin aldehyde					CAS #: 7421-93-4		
	5.418	5.416	0.002	55173580	200.000	202	80.00- 120.00	100.00
	26 4,4'-DDT					CAS #: 50-29-3		
	5.229	5.227	0.002	57040789	200.000	232	80.00- 120.00	100.00
	29 Endosulfan sulfate					CAS #: 1031-07-8		
	5.678	5.675	0.003	60306938	200.000	204	80.00- 120.00	100.00
	28 Methoxychlor					CAS #: 72-43-5		
	5.513	5.510	0.003	119675438	1000.00	1010	80.00- 120.00	100.00
	31 Endrin ketone					CAS #: 53494-70-5		
	5.849	5.846	0.003	62968420	200.000	194	80.00- 120.00	100.00
$	1 4cmx					CAS #: 877-09-8		
	2.583	2.579	0.004	83314988	200.000	202	80.00- 120.00	100.00
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	6.431	6.427	0.004	33841156	200.000	200	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/016f1601.d
Date : 29-NOV-2009 21:06
Client ID: INDA0B02
Sample Info: IWPE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

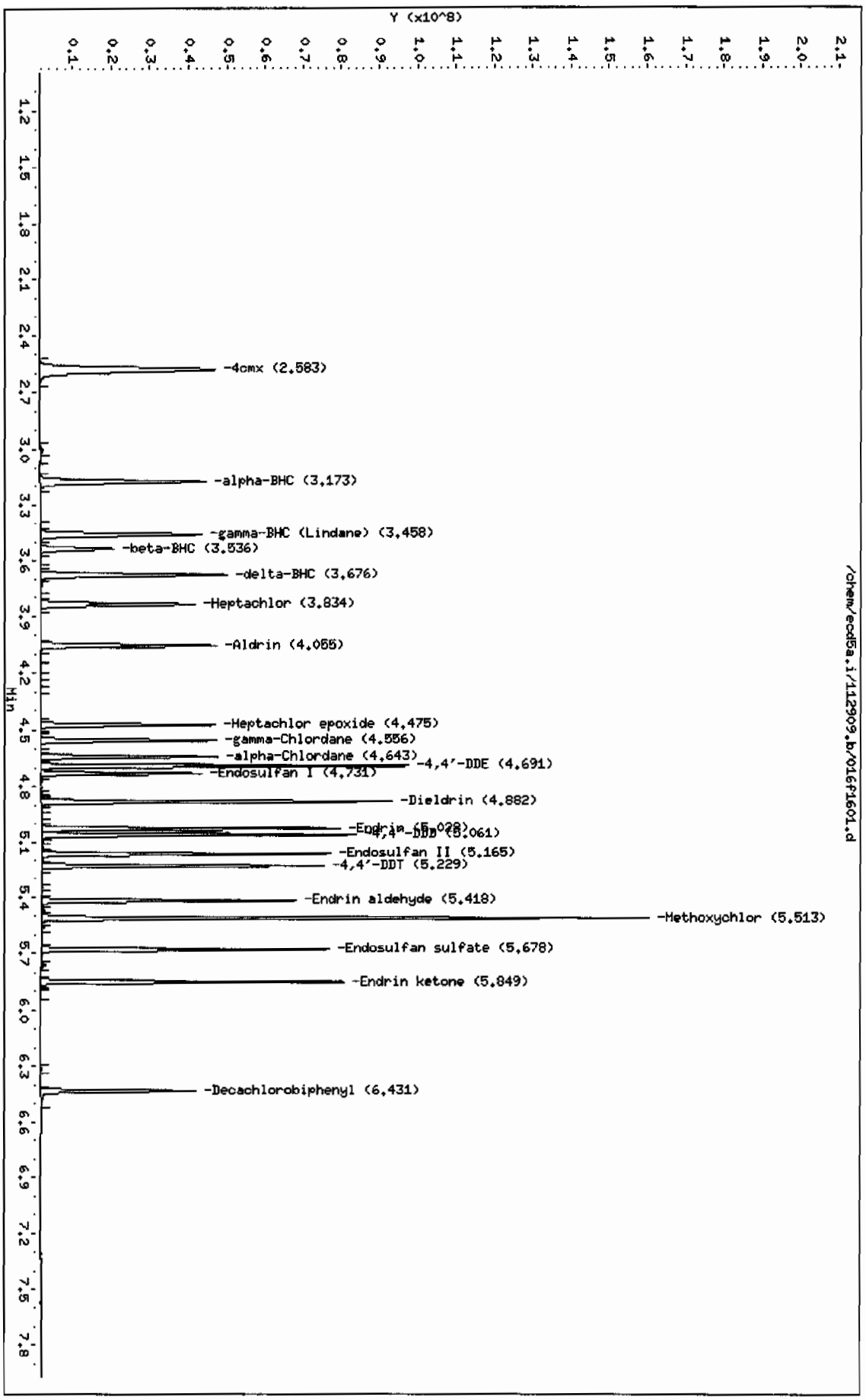

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CLP-2

Data file : /chem/ecd5a.i/112909.b/016b1601.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB02
Inj Date : 29-NOV-2009 21:06
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.795	2.796	-0.001	606020650	100.000	96.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.109	3.110	-0.001	530631520	100.000	96.8	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.189	3.189	0.000	220661877	100.000	90.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	425719870	100.000	95.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	521459523	100.000	96.0	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	455200845	100.000	91.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.076	4.074	0.002	343366248	100.000	81.8	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.199	4.199	0.000	371081745	100.000	83.1	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	369559693	100.000	85.8	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	331545708	100.000	86.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.406	4.405	0.001	769270230	200.000	188	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	751172949	200.000	185	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	647412563	200.000	183	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.758	4.758	0.000	667966665	200.000	192	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	613122718	200.000	183	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.018	5.016	0.002	492075885	200.000	178	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.945	4.944	0.001	583033358	200.000	227	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.181	5.180	0.001	561143050	200.000	184	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.352	5.350	0.002	1041705740	1000.00	1180	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	645738699	200.000	186	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.123	2.125	-0.002	827382017	200.000	183	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.219	6.214	0.005	628974182	200.000	196	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/016b1601.d
Date : 29-NOV-2009 21:06
Client ID: INDPB02
Sample Info: IWPE091123-10AB
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

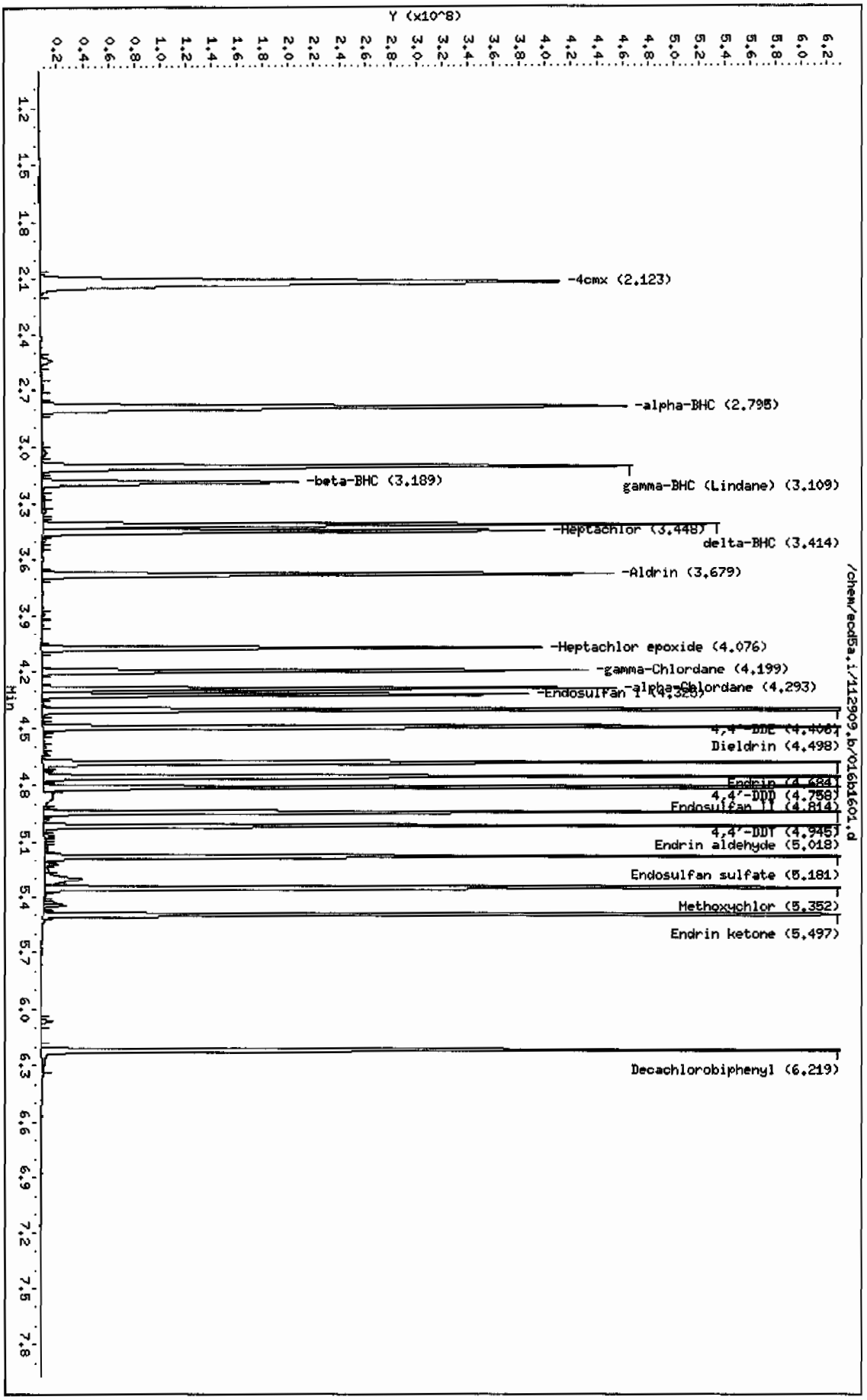

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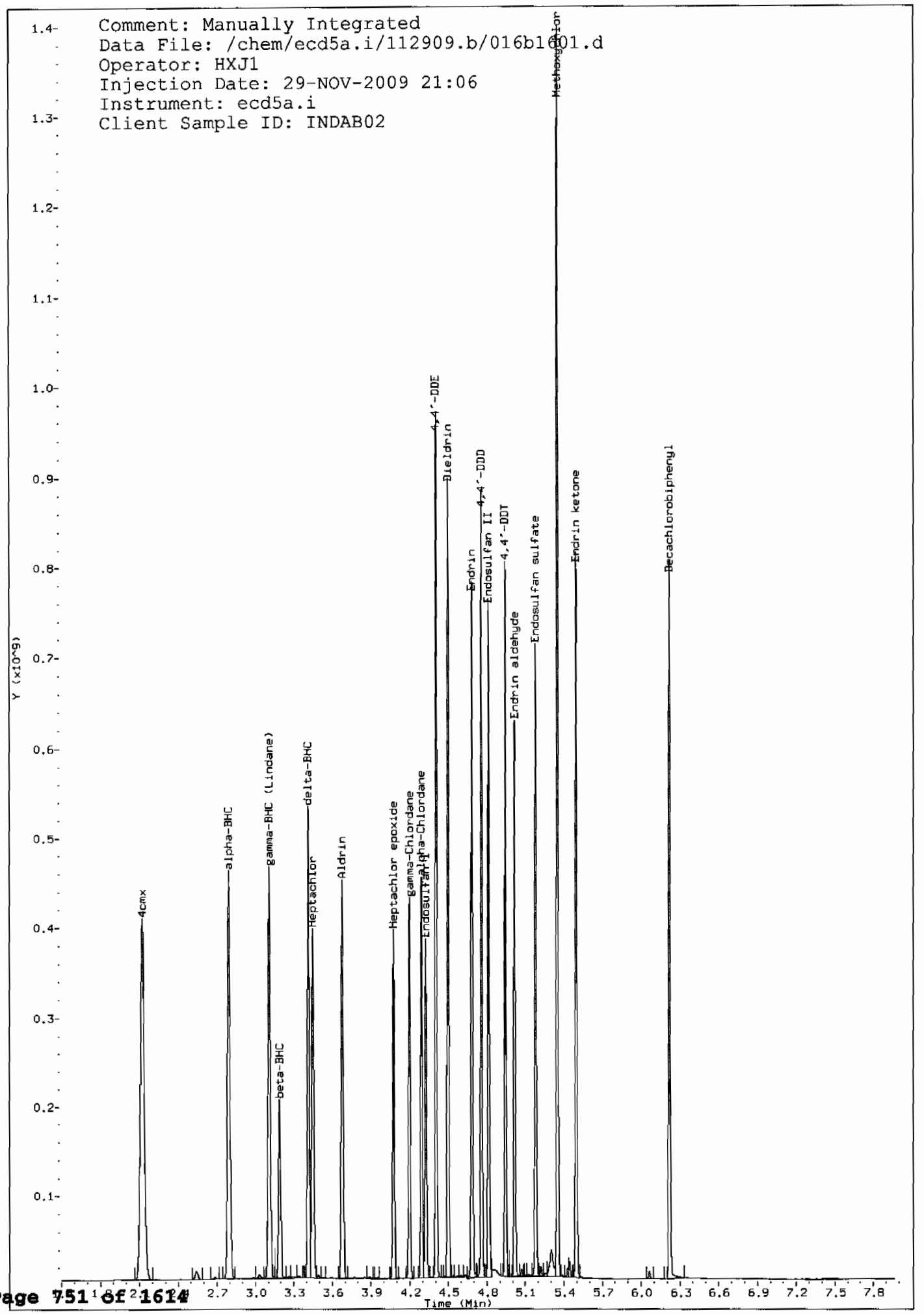
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Data File: /chem/ecd5a.i/112909.b/016b1601.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:06
Instrument: ecd5a.i
Client Sample ID: INDAB02
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

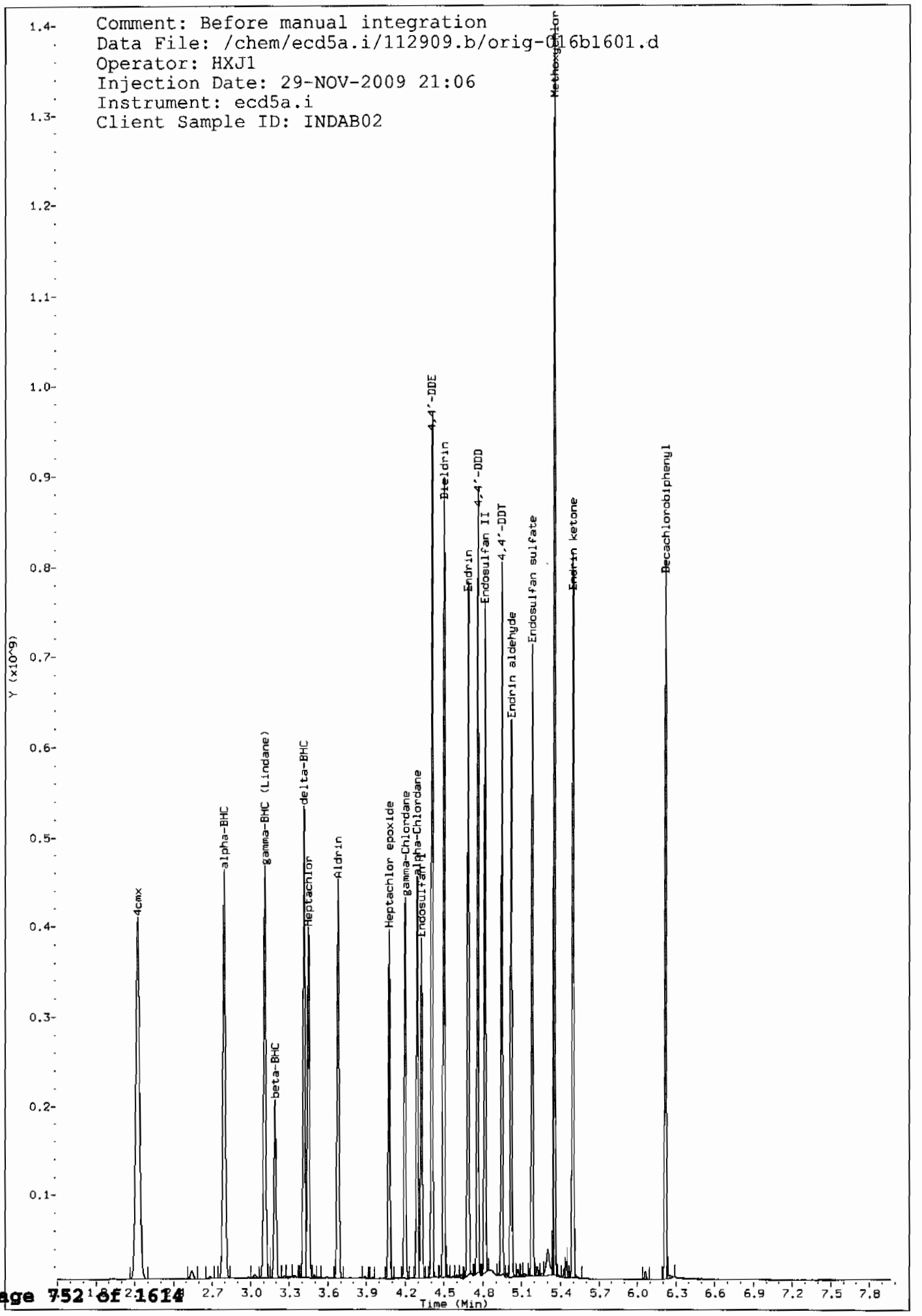
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-016b1601.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:06
Instrument: ecd5a.i
Client Sample ID: INDAB02
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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Data file : /chem/ecd5a.i/112909.b/025f2501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 29-NOV-2009 22:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.170	3.169	0.001	60035068	100.000	112	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.455	3.454	0.001	54183142	100.000	116	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.533	3.532	0.001	22649835	100.000	107	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.831	3.831	0.000	42462789	100.000	104	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.673	3.674	-0.001	54170366	100.000	110	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.052	4.051	0.001	46187671	100.000	105	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	42503112	100.000	107	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.553	4.554	-0.001	44218534	100.000	113	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.640	4.639	0.001	38613972	100.000	102	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.728	4.728	0.000	39025034	100.000	109	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.688	4.689	-0.001	81264755	200.000	206	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	81173946	200.000	211	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	73035344	200.000	222	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.058	5.059	-0.001	66916331	200.000	217	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	68547185	200.000	220	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	55949070	200.000	205	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.228	5.227	0.001	54364192	200.000	221	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.676	5.675	0.001	62072428	200.000	210	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	121175512	1000.00	1020	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	66574456	200.000	205	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	85224774	200.000	206	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	32606923	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/025f2501.d
Date : 29-NOV-2009 22:56
Client ID: INDAB03
Sample Info: IWFE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

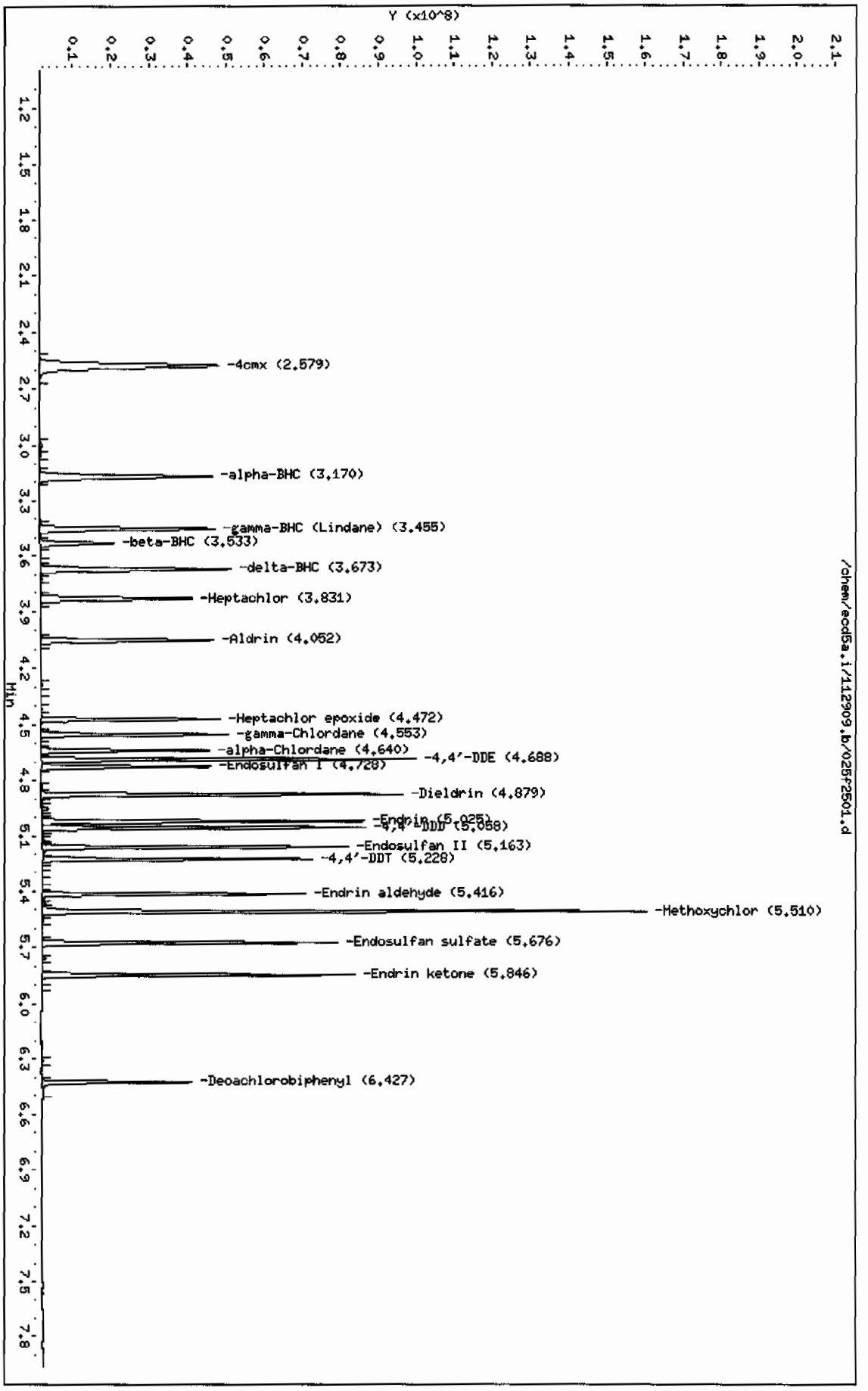

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CLP-2

Data file : /chem/ecd5a.i/112909.b/025b2501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 29-NOV-2009 22:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.796	2.796	0.000	643844273	100.000	102	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	585249683	100.000	107	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.190	3.189	0.001	234326856	100.000	96.1	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	428880319	100.000	96.2	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	552350243	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	469586610	100.000	94.2	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.075	4.074	0.001	413475464	100.000	98.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.198	4.199	-0.001	455571429	100.000	102	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	384744206	100.000	89.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	367717521	100.000	95.6	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.405	4.405	0.000	796116111	200.000	194	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.497	4.498	-0.001	761869980	200.000	188	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.683	4.684	-0.001	688972044	200.000	195	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	670739344	200.000	192	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.813	4.814	-0.001	626657489	200.000	187	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	495305430	200.000	179	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.943	4.944	-0.001	567664001	200.000	221	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.181	5.180	0.001	566711556	200.000	186	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.351	5.350	0.001	1039510778	1000.00	1180	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.496	5.496	0.000	623822379	200.000	180	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.125	2.125	0.000	863129844	200.000	191	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	596166032	200.000	186	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/025b2501.d
Date : 29-NOV-2009 22:56
Client ID: INDAB03
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

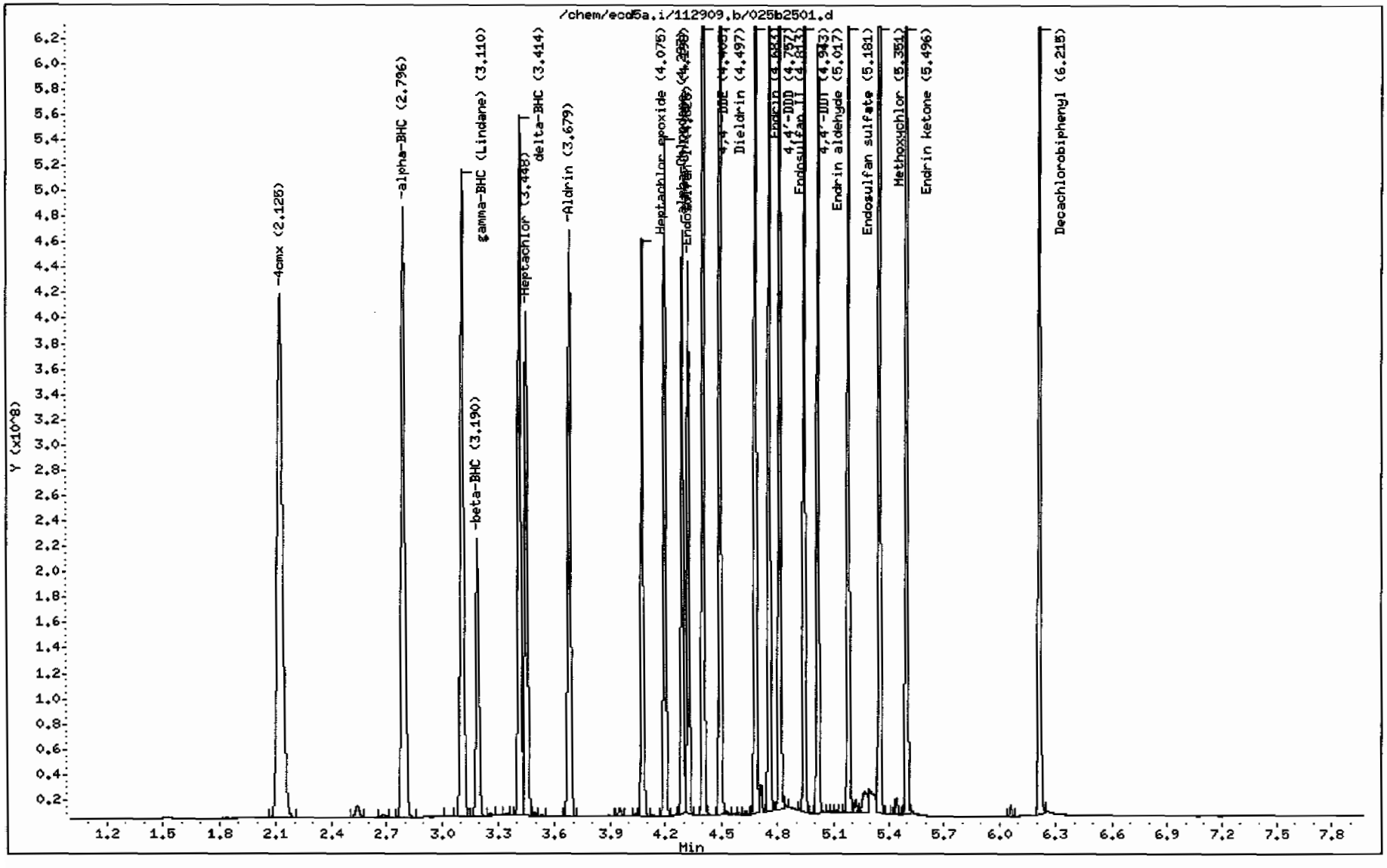

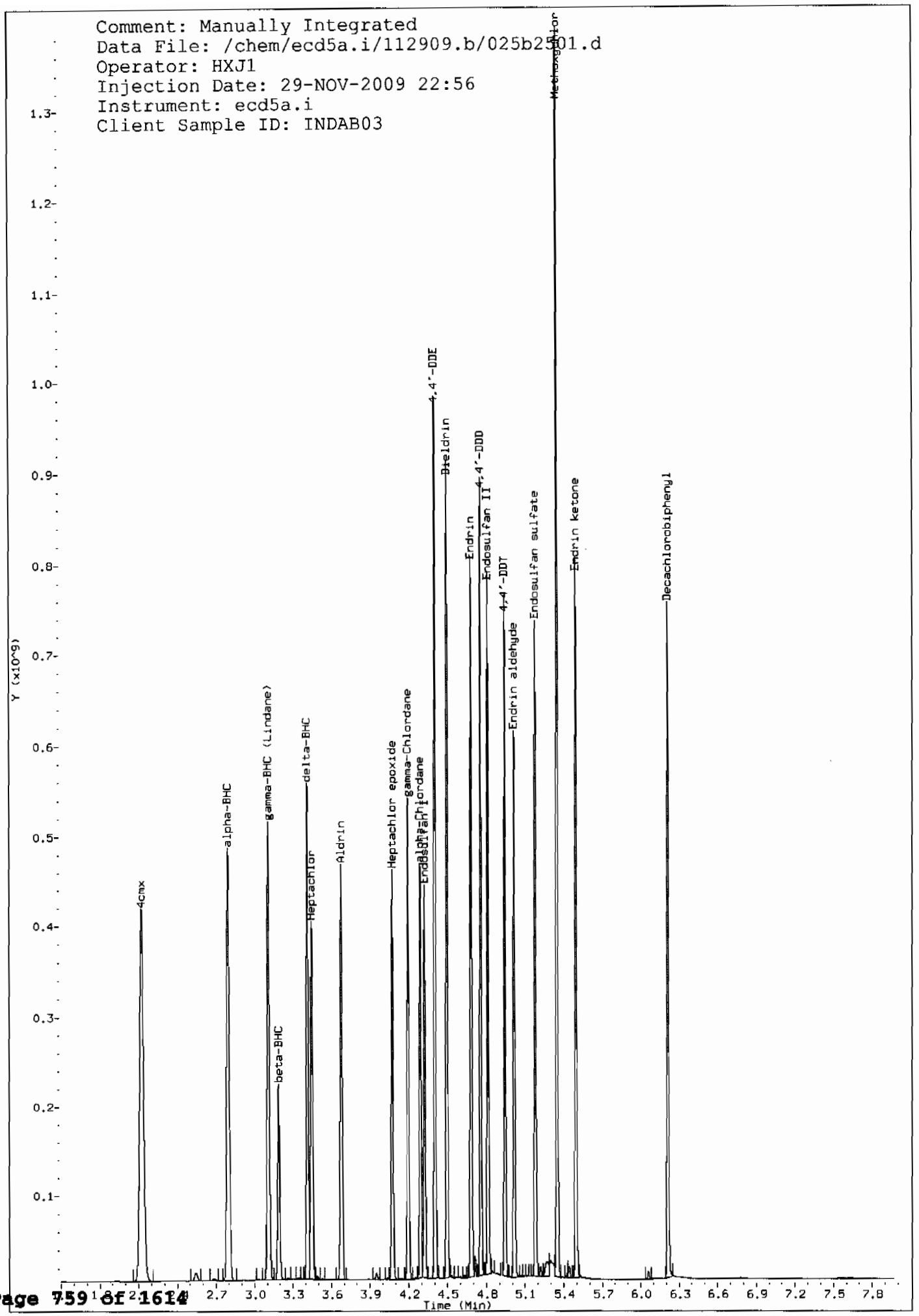
Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/025b2501.d
Operator: HXJ1
Injection Date: 29-NOV-2009 22:56
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

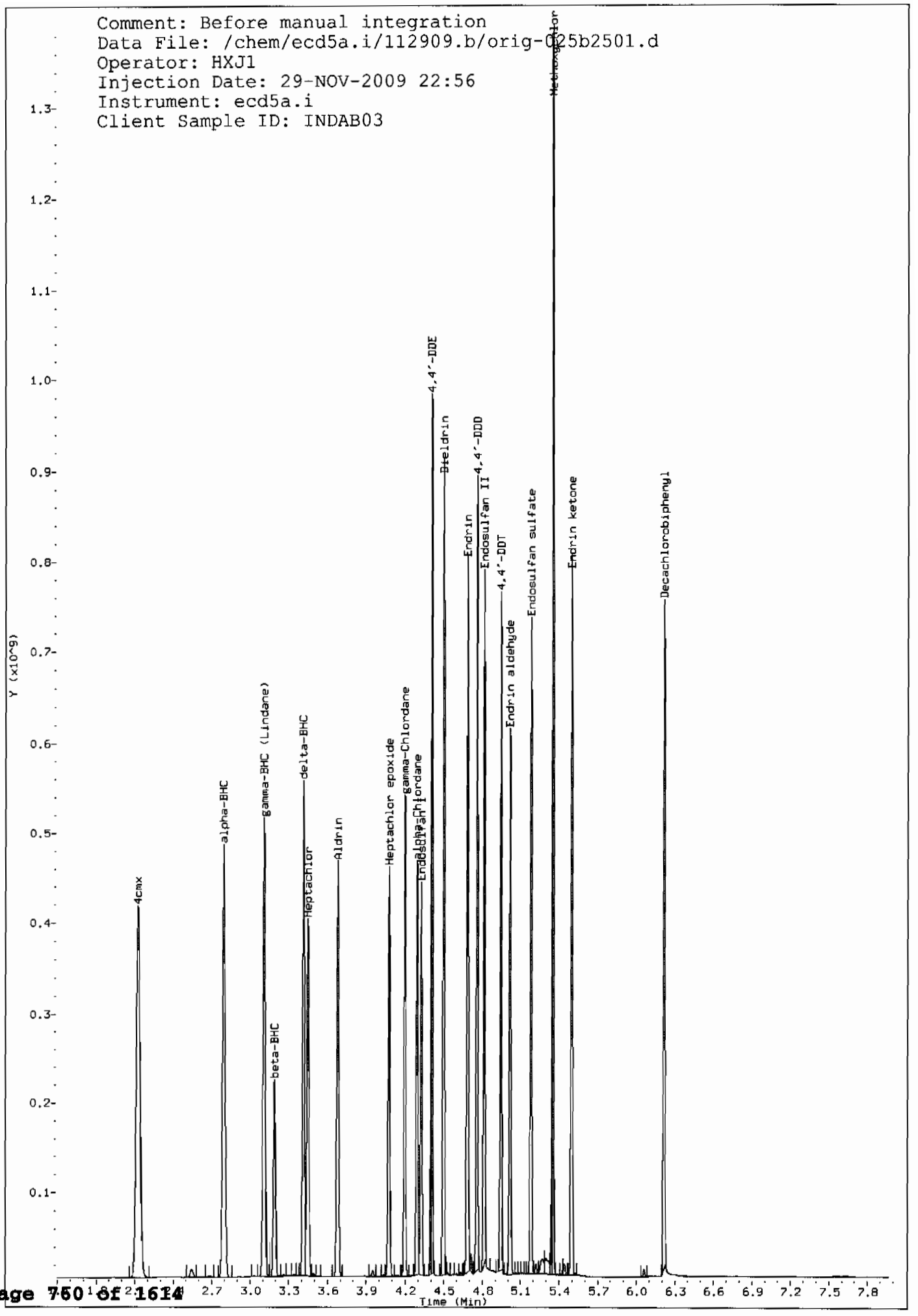
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-025b2501.d
Operator: HXJ1
Injection Date: 29-NOV-2009 22:56
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/033f3301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 30-NOV-2009 00:35
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.174	3.169	0.005	60805441	100.000	114	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.458	3.454	0.004	53939940	100.000	116	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.537	3.532	0.005	22759213	100.000	107	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.835	3.831	0.004	41298416	100.000	101	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.677	3.674	0.003	54457972	100.000	111	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.056	4.051	0.005	46884888	100.000	106	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.476	4.472	0.004	42846774	100.000	108	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.557	4.554	0.003	44488786	100.000	114	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.643	4.639	0.004	38900952	100.000	102	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.732	4.728	0.004	39229793	100.000	109	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.692	4.689	0.003	82404006	200.000	209	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.882	4.879	0.003	81430565	200.000	212	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.028	5.024	0.004	72931715	200.000	222	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.062	5.059	0.003	68343908	200.000	222	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.166	5.163	0.003	70810062	200.000	228	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.419	5.416	0.003	56150033	200.000	206	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.230	5.227	0.003	46875562	200.000	191	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.679	5.675	0.004	62410467	200.000	211	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.513	5.510	0.003	112585727	1000.00	953	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.849	5.846	0.003	62119333	200.000	191	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.583	2.579	0.004	86811098	200.000	210	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.430	6.427	0.003	34070911	200.000	201	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/033f3301.d
Date : 30-NOV-2009 00:35
Client ID: INDAB04
Sample Info: IWPE091123-10AB
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

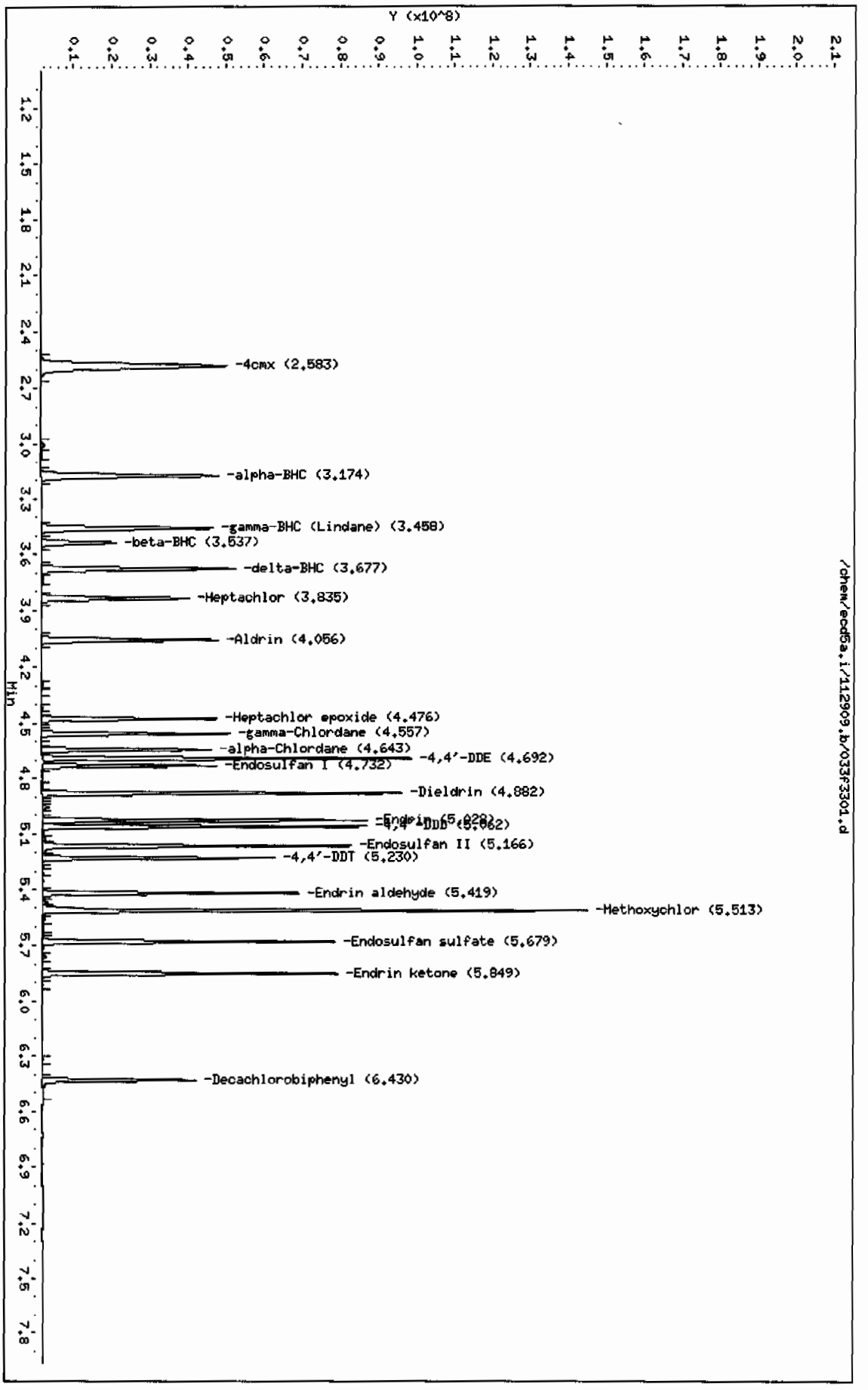

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CLP-2

Data file : /chem/ecd5a.i/112909.b/033b3301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 30-NOV-2009 00:35
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.795	2.796	-0.001	647471843	100.000	103	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.109	3.110	-0.001	579464102	100.000	106	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.190	3.189	0.001	234833585	100.000	96.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.449	3.448	0.001	408945105	100.000	91.7	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.415	3.414	0.001	551446849	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	469903031	100.000	94.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.076	4.074	0.002	409987921	100.000	97.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.200	4.199	0.001	451813573	100.000	101	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	385276246	100.000	89.5	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.326	4.325	0.001	372009446	100.000	96.7	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
4.407	4.405	0.002	801745227	200.000	196	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	765068103	200.000	188	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.685	4.684	0.001	679895172	200.000	192	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.758	4.758	0.000	672418106	200.000	193	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	631757703	200.000	189	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	490360906	200.000	178	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.945	4.944	0.001	452599945	200.000	176	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.182	5.180	0.002	555426683	200.000	182	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.352	5.350	0.002	885216962	1000.00	996	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	573896239	200.000	166	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.122	2.125	-0.003	877044875	200.000	194	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.217	6.214	0.003	572768638	200.000	179	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/033b3301.d

Date : 30-NOV-2009 00:35

Client ID: INDAB04

Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

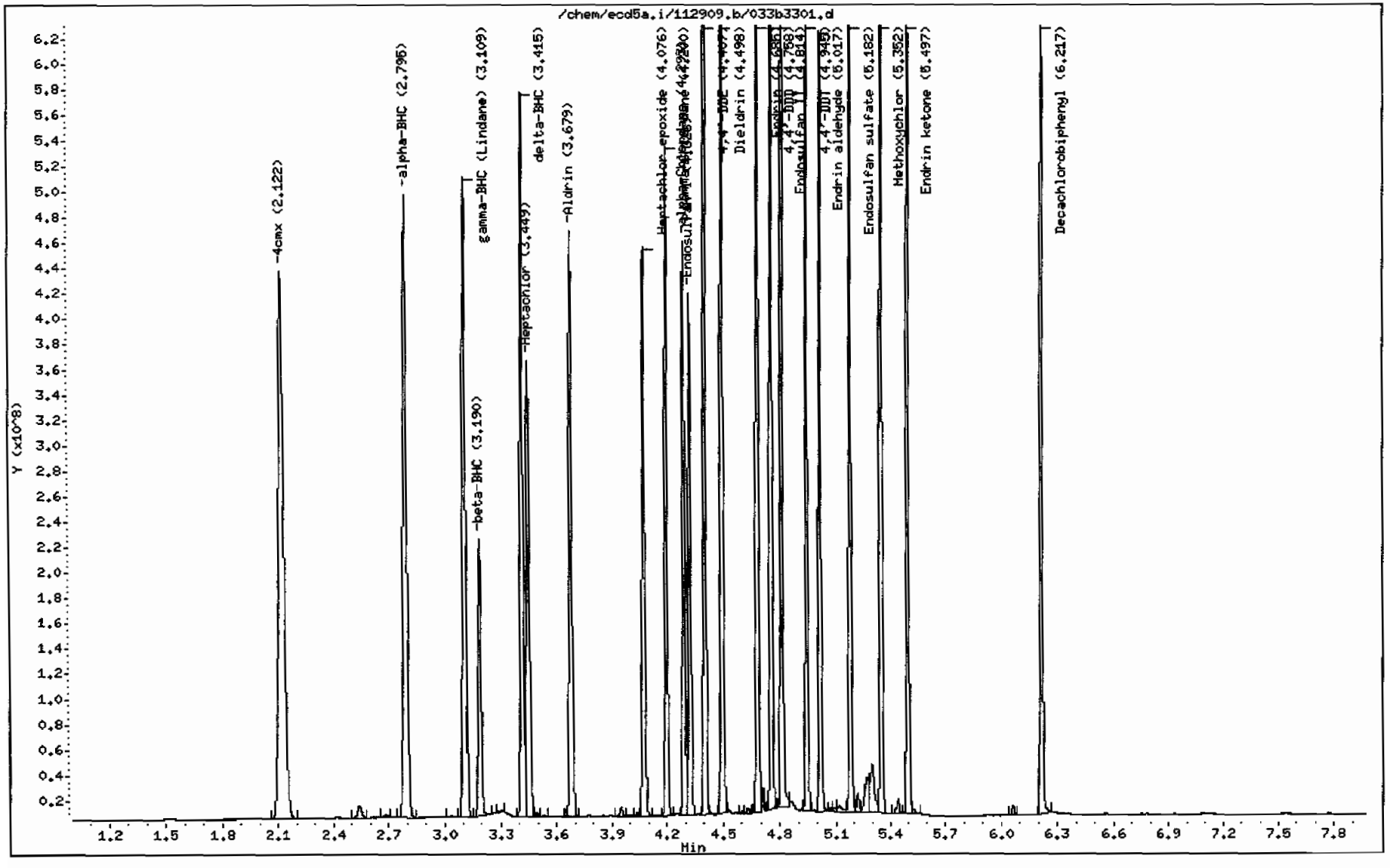

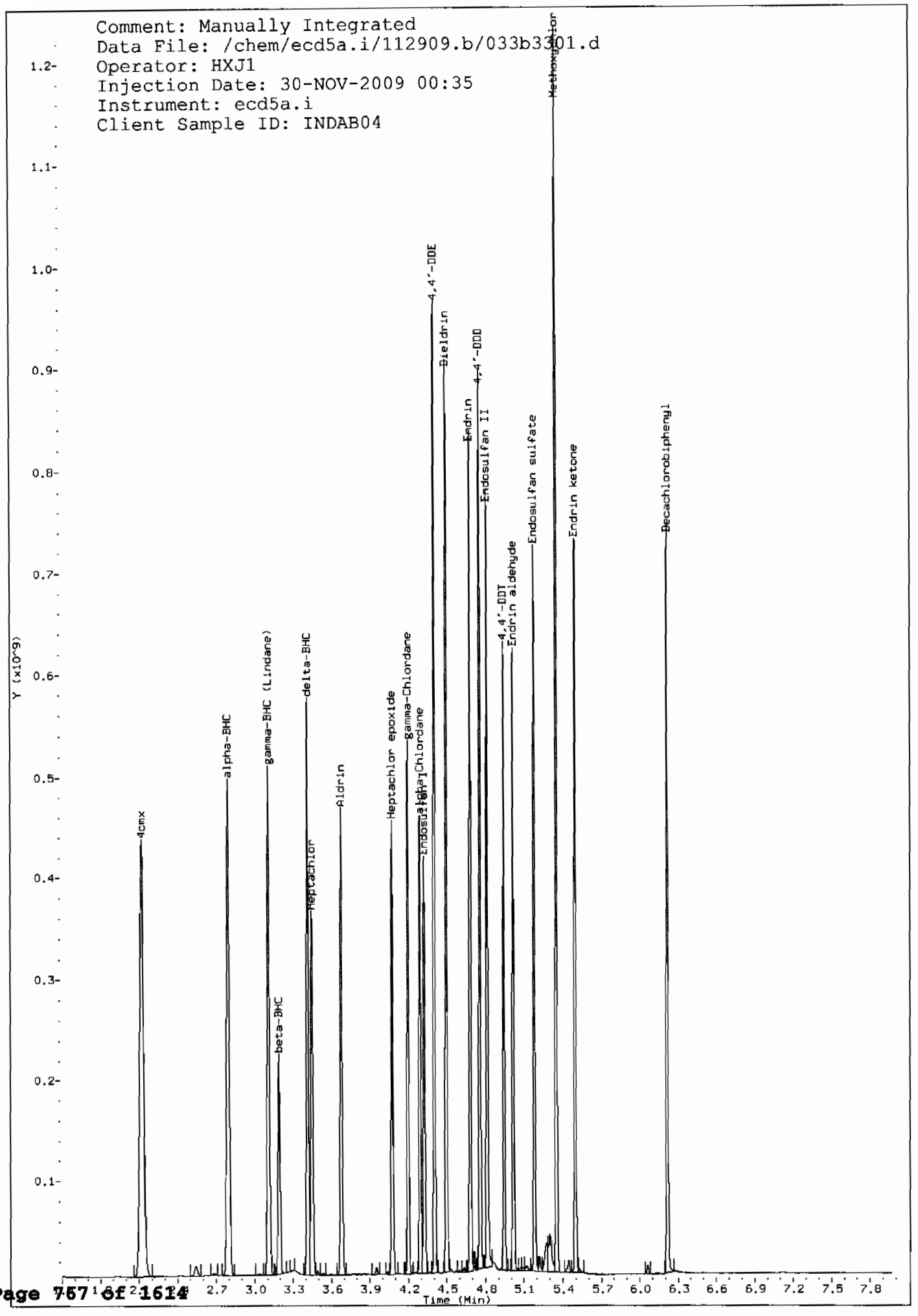
Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/033b3301.d
Operator: HXJ1
Injection Date: 30-NOV-2009 00:35
Instrument: ecd5a.i
Client Sample ID: INDAB04
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

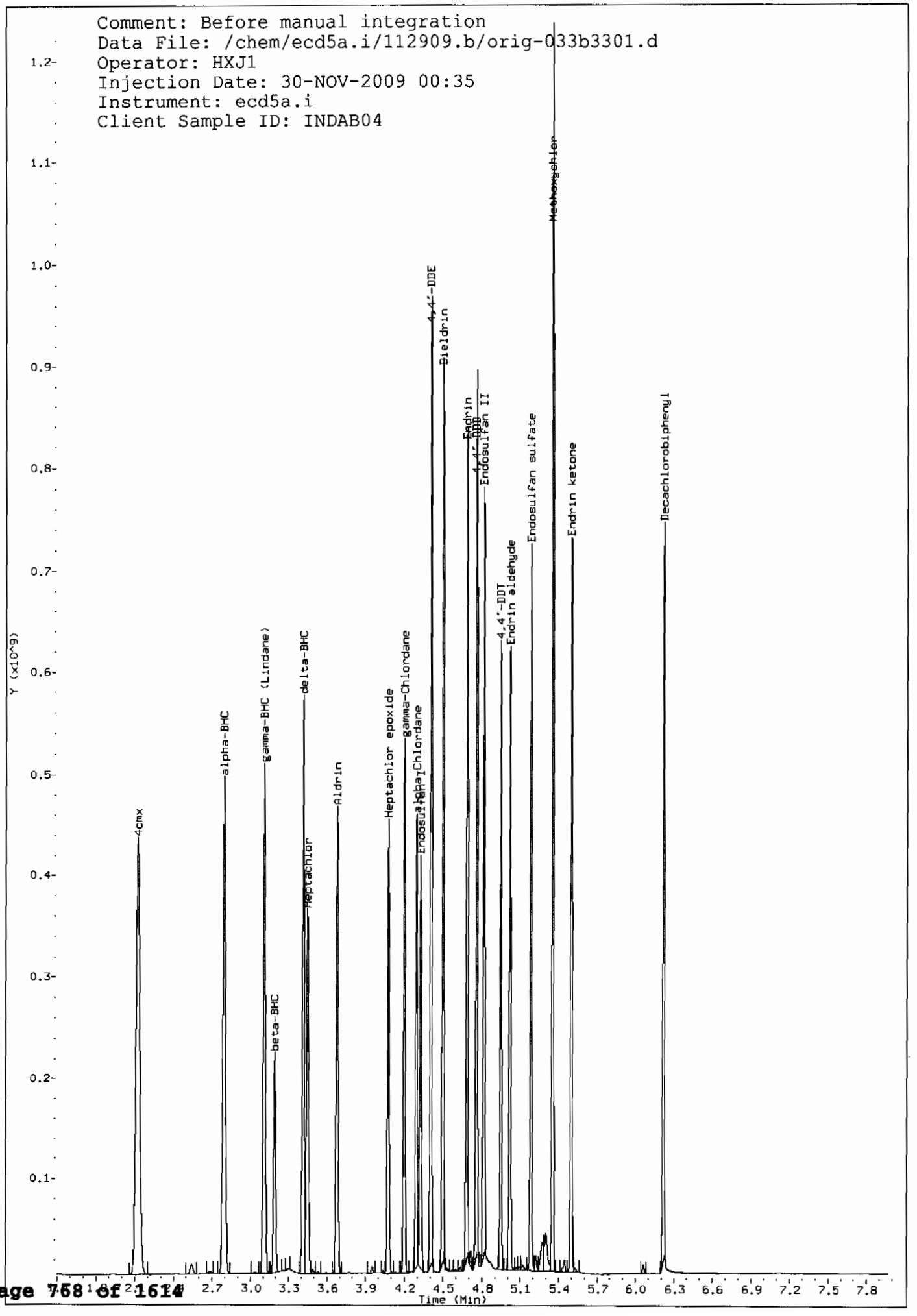
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-033b3301.d
Operator: HXJ1
Injection Date: 30-NOV-2009 00:35
Instrument: ecd5a.i
Client Sample ID: INDAB04
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.59	6.45
02	PEM01	WPE091109-99	11/28/09	1208	2.58	6.43
03	ZZZZZ	ZZZZZ	11/28/09	1235		
04	INDAB01	WPE091128-01	11/28/09	1247	2.58	6.43
05	INDAB02	WPE091128-02	11/28/09	1258	2.58	6.43
06	INDAB03	WPE091128-03	11/28/09	1310	2.58	6.43
07	INDAB04	WPE091128-04	11/28/09	1322	2.58	6.43
08	INDAB05	IPE091128-02	11/28/09	1334	2.58	6.43
09	INDAB01	WPE091123-10	11/28/09	1346	2.58	6.43
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.59	6.45
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.58	6.43
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.58	6.43
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.58	6.43
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.58	6.43
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.58	6.43
16	CHLOR01	WPE091124-21	11/28/09	1527	2.58	6.43
17	CHLOR02	WPE091124-22	11/28/09	1539	2.58	6.43
18	CHLOR03	WPE091124-23	11/28/09	1551	2.58	6.43
19	CHLOR04	WPE091124-24	11/28/09	1603	2.58	6.43
20	CHLOR05	IPE091029-06	11/28/09	1615	2.58	6.43
21	CHLOR01	WPE091021-00	11/28/09	1627	2.58	6.43
22	PEM02	WPE091109-99	11/28/09	1639	2.58	6.43
23	PIBLK02	WAR090914-99	11/28/09	1651	2.58	6.43
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.58	6.43
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.58	6.43
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.58	6.43
27	INDAB02	WPE091123-10	11/28/09	1738	2.58	6.43
28	PIBLK03	WAR090914-99	11/28/09	1750	2.58	6.43
29	ZZZZZ	ZZZZZ	11/28/09	1802	2.59	6.43
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.58	6.43
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.59	6.43
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.58	6.43

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.13 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.12	6.24
02	PEM01	WPE091109-99	11/28/09	1208	2.13	6.22
03	ZZZZZ	ZZZZZ	11/28/09	1235		6.24
04	INDAB01	WPE091128-01	11/28/09	1247	2.12	6.22
05	INDAB02	WPE091128-02	11/28/09	1258	2.12	6.22
06	INDAB03	WPE091128-03	11/28/09	1310	2.13	6.22
07	INDAB04	WPE091128-04	11/28/09	1322	2.12	6.22
08	INDAB05	IPE091128-02	11/28/09	1334	2.13	6.22
09	INDAB01	WPE091123-10	11/28/09	1346	2.13	6.22
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.12	6.24
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.12	6.22
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.12	6.22
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.12	6.22
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.13	6.22
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.13	6.22
16	CHLOR01	WPE091124-21	11/28/09	1527	2.12	6.22
17	CHLOR02	WPE091124-22	11/28/09	1539	2.12	6.22
18	CHLOR03	WPE091124-23	11/28/09	1551	2.13	6.22
19	CHLOR04	WPE091124-24	11/28/09	1603	2.13	6.22
20	CHLOR05	IPE091029-06	11/28/09	1615	2.13	6.22
21	CHLOR01	WPE091021-00	11/28/09	1627	2.12	6.22
22	PEM02	WPE091109-99	11/28/09	1639	2.13	6.22
23	PIBLK02	WAR090914-99	11/28/09	1651	2.13	6.22
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.13	6.22
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.13	6.22
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.13	6.22
27	INDAB02	WPE091123-10	11/28/09	1738	2.13	6.22
28	PIBLK03	WAR090914-99	11/28/09	1750	2.13	6.22
29	ZZZZZ	ZZZZZ	11/28/09	1802	2.13	6.22
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.13	6.22
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.13	6.22
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.13	6.22

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.57	6.42
02	PEM01	WPE091109-99	11/29/09	1817	2.57	6.42
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.58	6.43
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.58	6.43
05	CHLOR01	WPE091021-00	11/29/09	1853	2.58	6.43
06	INDAB01	WPE091128-01	11/29/09	1905	2.58	6.43
07	INDAB02	WPE091128-02	11/29/09	1917	2.58	6.43
08	INDAB03	WPE091128-03	11/29/09	1929	2.58	6.43
09	INDAB04	WPE091128-04	11/29/09	1941	2.58	6.43
10	INDAB05	IPE091128-02	11/29/09	1953	2.58	6.43
11	INDAB01	WPE091123-10	11/29/09	2005	2.58	6.43
12	PIBLK02	WAR090914-99	11/29/09	2017	2.58	6.43
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.58	6.43
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.58	6.43
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.58	6.43
16	INDAB02	WPE091123-10	11/29/09	2106	2.58	6.43
17	PIBLK03	WAR090914-99	11/29/09	2120	2.58	6.43
18	PBLK01	1201981581	11/29/09	2132	2.58	6.43
19	PBLK01LCS	1201981584	11/29/09	2144	2.58	6.43
20	PBLK01TLCS	1201981585	11/29/09	2156	2.58	6.43
21	WST03-10-2131	241423004	11/29/09	2208	2.58	6.43
22	WST03-10-2131MS	1201981582	11/29/09	2220	2.58	6.43
23	WST03-10-2131MSD	1201981583	11/29/09	2232	2.58	6.43
24	PIBLK04	WAR090914-99	11/29/09	2244	2.58	6.43
25	INDAB03	WPE091123-10	11/29/09	2256	2.58	6.43
26	PIBLK05	WAR090914-99	11/29/09	2308	2.58	6.43
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.58	6.43
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.58	6.43
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.58	6.43
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.58	6.43
31	ZZZZZ	ZZZZZ	11/30/09	0008	2.58	6.43
32	WST03-10-2130	241423005	11/30/09	0020	2.58	6.43

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	INDAB04	WPE091123-10	11/30/09	0035	2.58	6.43
02	PIBLK06	WAR090914-99	11/30/09	0047	2.58	6.43
03	ZZZZZ	ZZZZZ	11/30/09	0059	2.58	6.43
04	ZZZZZ	ZZZZZ	11/30/09	0111	2.58	6.43
05	ZZZZZ	ZZZZZ	11/30/09	0123	2.58	6.43
06	ZZZZZ	ZZZZZ	11/30/09	0135	2.58	6.43
07	ZZZZZ	ZZZZZ	11/30/09	0147	2.58	6.43
08	ZZZZZ	ZZZZZ	11/30/09	0159	2.58	6.43
09	ZZZZZ	ZZZZZ	11/30/09	0211	2.58	6.43
10	ZZZZZ	ZZZZZ	11/30/09	0223	2.58	6.43
11	INDAB05	WPE091123-10	11/30/09	0234	2.58	6.43
12	PIBLK07	WAR090914-99	11/30/09	0246	2.58	6.43
13	ZZZZZ	ZZZZZ	11/30/09	0258	2.58	6.43
14	ZZZZZ	ZZZZZ	11/30/09	0310	2.58	6.43
15	ZZZZZ	ZZZZZ	11/30/09	0322	2.58	6.43
16	ZZZZZ	ZZZZZ	11/30/09	0334	2.58	6.43
17	ZZZZZ	ZZZZZ	11/30/09	0346	2.58	6.43
18	INDAB06	WPE091123-10	11/30/09	0358	2.58	6.43
19	PIBLK08	WAR090914-99	11/30/09	0410	2.58	6.43
20	ZZZZZ	ZZZZZ	11/30/09	0422	2.58	6.43
21	ZZZZZ	ZZZZZ	11/30/09	0434	2.58	6.43
22	ZZZZZ	ZZZZZ	11/30/09	0446	2.58	6.43
23	ZZZZZ	ZZZZZ	11/30/09	0458	2.58	6.43
24	ZZZZZ	ZZZZZ	11/30/09	0510	2.58	6.43
25	ZZZZZ	ZZZZZ	11/30/09	0522	2.58	6.43
26	ZZZZZ	ZZZZZ	11/30/09	0534	2.58	6.43
27	INDAB07	WPE091123-10	11/30/09	0545	2.58	6.43
28	PIBLK09	WAR090914-99	11/30/09	0557	2.58	6.43
29	ZZZZZ	ZZZZZ	11/30/09	0609	2.58	6.43
30	ZZZZZ	ZZZZZ	11/30/09	0621	2.58	6.43
31	ZZZZZ	ZZZZZ	11/30/09	0633	2.58	6.43
32	ZZZZZ	ZZZZZ	11/30/09	0645	2.59	6.45

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.12	6.21
02	PEM01	WPE091109-99	11/29/09	1817	2.12	6.21
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.12	6.21
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.12	6.21
05	CHLOR01	WPE091021-00	11/29/09	1853	2.12	6.22
06	INDAB01	WPE091128-01	11/29/09	1905	2.13	6.22
07	INDAB02	WPE091128-02	11/29/09	1917	2.13	6.21
08	INDAB03	WPE091128-03	11/29/09	1929	2.12	6.22
09	INDAB04	WPE091128-04	11/29/09	1941	2.12	6.22
10	INDAB05	IPE091128-02	11/29/09	1953	2.13	6.22
11	INDAB01	WPE091123-10	11/29/09	2005	2.13	6.21
12	PIBLK02	WAR090914-99	11/29/09	2017	2.12	6.21
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.12	6.21
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.12	6.21
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.12	6.22
16	INDAB02	WPE091123-10	11/29/09	2106	2.12	6.22
17	PIBLK03	WAR090914-99	11/29/09	2120	2.12	6.22
18	PBLK01	1201981581	11/29/09	2132	2.12	6.43
19	PBLK01LCS	1201981584	11/29/09	2144	2.12	6.43
20	PBLK01TLCS	1201981585	11/29/09	2156	2.13	6.43
21	WST03-10-2131	241423004	11/29/09	2208	2.13	6.43
22	WST03-10-2131MS	1201981582	11/29/09	2220	2.12	6.43
23	WST03-10-2131MSD	1201981583	11/29/09	2232	2.13	6.43
24	PIBLK04	WAR090914-99	11/29/09	2244	2.13	6.21
25	INDAB03	WPE091123-10	11/29/09	2256	2.13	6.22
26	PIBLK05	WAR090914-99	11/29/09	2308	2.13	6.22
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.12	6.21
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.12	6.21
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.12	6.21
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.12	6.21
31	ZZZZZ	ZZZZZ	11/30/09	0008	2.12	6.21
32	WST03-10-2130	241423005	11/30/09	0020	2.12	6.21

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	INDAB04	WPE091123-10	11/30/09	0035	2.12	6.22
02	PIBLK06	WAR090914-99	11/30/09	0047	2.12	6.22
03	ZZZZZ	ZZZZZ	11/30/09	0059	2.12	6.22
04	ZZZZZ	ZZZZZ	11/30/09	0111	2.12	6.22
05	ZZZZZ	ZZZZZ	11/30/09	0123	2.12	6.22
06	ZZZZZ	ZZZZZ	11/30/09	0135	2.12	6.21
07	ZZZZZ	ZZZZZ	11/30/09	0147	2.12	6.21
08	ZZZZZ	ZZZZZ	11/30/09	0159	2.12	6.22
09	ZZZZZ	ZZZZZ	11/30/09	0211	2.12	6.21
10	ZZZZZ	ZZZZZ	11/30/09	0223	2.13	6.22
11	INDAB05	WPE091123-10	11/30/09	0234	2.12	6.21
12	PIBLK07	WAR090914-99	11/30/09	0246	2.12	6.21
13	ZZZZZ	ZZZZZ	11/30/09	0258	2.12	6.22
14	ZZZZZ	ZZZZZ	11/30/09	0310	2.12	6.21
15	ZZZZZ	ZZZZZ	11/30/09	0322	2.12	6.22
16	ZZZZZ	ZZZZZ	11/30/09	0334	2.12	6.21
17	ZZZZZ	ZZZZZ	11/30/09	0346	2.12	6.21
18	INDAB06	WPE091123-10	11/30/09	0358	2.12	6.22
19	PIBLK08	WAR090914-99	11/30/09	0410	2.13	6.21
20	ZZZZZ	ZZZZZ	11/30/09	0422	2.12	6.22
21	ZZZZZ	ZZZZZ	11/30/09	0434	2.12	6.21
22	ZZZZZ	ZZZZZ	11/30/09	0446	2.12	6.21
23	ZZZZZ	ZZZZZ	11/30/09	0458	2.13	6.22
24	ZZZZZ	ZZZZZ	11/30/09	0510	2.12	6.21
25	ZZZZZ	ZZZZZ	11/30/09	0522	2.12	6.22
26	ZZZZZ	ZZZZZ	11/30/09	0534	2.12	6.21
27	INDAB07	WPE091123-10	11/30/09	0545	2.12	6.21
28	PIBLK09	WAR090914-99	11/30/09	0557	2.12	6.22
29	ZZZZZ	ZZZZZ	11/30/09	0609	2.13	6.22
30	ZZZZZ	ZZZZZ	11/30/09	0621	2.12	6.22
31	ZZZZZ	ZZZZZ	11/30/09	0633	2.12	6.21
32	ZZZZZ	ZZZZZ	11/30/09	0645	2.13	

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

Identification Summary

SDG Number: 10-578 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	29-NOV-09 21:44	**Analyzed:**	29-NOV-09 21:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							12.2
Column 1	1	3.17	3.14 - 3.2	18.9		ug/kg	
Column 2	1	2.8	2.77 - 2.83	16.7		ug/kg	
gamma-BHC (Lindane)							15
Column 1	1	3.45	3.42 - 3.48	19.4		ug/kg	
Column 2	1	3.11	3.08 - 3.14	16.7		ug/kg	
beta-BHC							14.2
Column 1	1	3.53	3.5 - 3.56	18.3		ug/kg	
Column 2	1	3.19	3.16 - 3.22	15.9		ug/kg	
delta-BHC							12.1
Column 1	1	3.67	3.64 - 3.7	19		ug/kg	
Column 2	1	3.41	3.38 - 3.44	16.8		ug/kg	
Heptachlor							13.9
Column 1	1	3.83	3.8 - 3.86	18.6		ug/kg	
Column 2	1	3.45	3.42 - 3.48	16.2		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 21:44	**Analyzed:**	29–NOV–09 21:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aldrin							11.2
Column 1	1	4.05	4.02 – 4.08	17.3		ug/kg	
Column 2	1	3.68	3.65 – 3.71	15.5		ug/kg	
Heptachlor epoxide							21.1
Column 1	1	4.47	4.44 – 4.5	18.2		ug/kg	
Column 2	1	4.08	4.04 – 4.1	14.7		ug/kg	
gamma–Chlordane							17.7
Column 1	1	4.55	4.52 – 4.58	17.9		ug/kg	
Column 2	1	4.2	4.17 – 4.23	15		ug/kg	
alpha–Chlordane							14.8
Column 1	1	4.64	4.61 – 4.67	18.2		ug/kg	
Column 2	1	4.29	4.26 – 4.32	15.7		ug/kg	
Endosulfan I							19.3
Column 1	1	4.73	4.7 – 4.76	18.1		ug/kg	
Column 2	1	4.33	4.3 – 4.36	14.9		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 21:44	**Analyzed:**	29–NOV–09 21:44

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'–DDE								2.93
	Column 1	1	4.69	4.66 – 4.72	42.7		ug/kg	
	Column 2	1	4.41	4.38 – 4.44	41.4		ug/kg	
Dieldrin								8.79
	Column 1	1	4.88	4.85 – 4.91	42.9		ug/kg	
	Column 2	1	4.5	4.47 – 4.53	39.3		ug/kg	
Endrin								14.3
	Column 1	1	5.03	4.99 – 5.05	48.2		ug/kg	
	Column 2	1	4.68	4.65 – 4.71	41.8		ug/kg	
4,4'–DDD								11.6
	Column 1	1	5.06	5.03 – 5.09	47.3		ug/kg	
	Column 2	1	4.76	4.73 – 4.79	42.1		ug/kg	
Endosulfan II								14.3
	Column 1	1	5.16	5.13 – 5.19	47.5		ug/kg	
	Column 2	1	4.81	4.78 – 4.84	41.2		ug/kg	

Identification Summary

SDG Number: 10-578 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981584

Data File:	019f1901.d	**Data File:**	019b1901.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	29-NOV-09 21:44	**Analyzed:**	29-NOV-09 21:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Endrin aldehyde							11.8
Column 1	1	5.42	5.39 – 5.45	41.2		ug/kg	
Column 2	1	5.02	4.99 – 5.05	36.6		ug/kg	
4,4'-DDT							15.9
Column 1	1	5.23	5.2 – 5.26	50.2		ug/kg	
Column 2	1	4.94	4.91 – 4.97	42.8		ug/kg	
Endosulfan sulfate							20.3
Column 1	1	5.68	5.65 – 5.71	49.5		ug/kg	
Column 2	1	5.18	5.15 – 5.21	40.4		ug/kg	
Methoxychlor							2.67
Column 1	1	5.51	5.48 – 5.54	190		ug/kg	
Column 2	1	5.35	5.32 – 5.38	195		ug/kg	
Endrin ketone							8.39
Column 1	1	5.85	5.82 – 5.88	42.6		ug/kg	
Column 2	1	5.5	5.47 – 5.53	39.2		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** LCS for batch 926803

Lab Sample ID: 1201981585

Data File:	020f2001.d	**Data File:**	020b2001.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 21:56	**Analyzed:**	29–NOV–09 21:56

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							10.5
Column 1	1	4.67	4.64 – 4.7	95.9		ug/kg	
	2	4.88	4.85 – 4.91	154		ug/kg	
	3	4.94	4.91 – 4.97	169		ug/kg	
	4	4.97	4.95 – 5.01	179		ug/kg	
	5	5.15	5.13 – 5.19	155		ug/kg	
					151		
Column 2	1	4.56	4.53 – 4.59	102		ug/kg	
	2	4.78	4.76 – 4.82	171		ug/kg	
	3	4.8	4.78 – 4.84	177		ug/kg	
	4	4.86	4.83 – 4.89	182		ug/kg	
	5	5.02	4.99 – 5.05	205		ug/kg	
					167		

Identification Summary

SDG Number: 10-578 **Client ID:** WST03-10-2130

Lab Sample ID: 241423005

Data File:	032f3201.d	**Data File:**	032b3201.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-NOV-09 00:20	**Analyzed:**	30-NOV-09 00:20

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'-DDT							18.5
Column 1	1	5.21	5.2 – 5.26	10.4		ug/kg	
Column 2	1	4.95	4.91 – 4.97	8.63		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131

Lab Sample ID: 241423004

Data File:	021f2101.d	**Data File:**	021b2101.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 22:08	**Analyzed:**	29–NOV–09 22:08

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
gamma–Chlordane							78.2
Column 1	1	4.56	4.52 – 4.58	3.23		ug/kg	
Column 2	1	4.2	4.17 – 4.23	7.38		ug/kg	
Dieldrin							34.3
Column 1	1	4.87	4.85 – 4.91	7.94		ug/kg	
Column 2	1	4.49	4.47 – 4.53	11.2		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MS

Lab Sample ID: 1201981582

Data File:	022f2201.d	**Data File:**	022b2201.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 22:20	**Analyzed:**	29–NOV–09 22:20

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha–BHC							8.07
Column 1	1	3.17	3.14 – 3.2	14		ug/kg	
Column 2	1	2.8	2.77 – 2.83	15.2		ug/kg	
gamma–BHC (Lindane)							5
Column 1	1	3.45	3.42 – 3.48	14.5		ug/kg	
Column 2	1	3.11	3.08 – 3.14	15.3		ug/kg	
beta–BHC							5.75
Column 1	1	3.53	3.5 – 3.56	15.7		ug/kg	
Column 2	1	3.19	3.16 – 3.22	16.7		ug/kg	
delta–BHC							7.36
Column 1	1	3.67	3.64 – 3.7	13.9		ug/kg	
Column 2	1	3.41	3.38 – 3.44	15		ug/kg	
Heptachlor							9.87
Column 1	1	3.83	3.8 – 3.86	14.2		ug/kg	
Column 2	1	3.45	3.42 – 3.48	15.7		ug/kg	

Identification Summary

SDG Number: 10-578 **Client ID:** WST03-10-2131MS

Lab Sample ID: 1201981582

Data File:	022f2201.d	**Data File:**	022b2201.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	29-NOV-09 22:20	**Analyzed:**	29-NOV-09 22:20

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aldrin							7.39
Column 1	1	4.05	4.02 – 4.08	14.3		ug/kg	
Column 2	1	3.68	3.65 – 3.71	15.4		ug/kg	
Heptachlor epoxide							28.3
Column 1	1	4.47	4.44 – 4.5	16.2		ug/kg	
Column 2	1	4.08	4.04 – 4.1	21.5		ug/kg	
gamma-Chlordane							24.5
Column 1	1	4.55	4.52 – 4.58	16.8		ug/kg	
Column 2	1	4.2	4.17 – 4.23	21.5		ug/kg	
alpha-Chlordane							3.82
Column 1	1	4.64	4.61 – 4.67	18.1		ug/kg	
Column 2	1	4.29	4.26 – 4.32	17.4		ug/kg	
Endosulfan I							3.39
Column 1	1	4.73	4.7 – 4.76	16.4		ug/kg	
Column 2	1	4.32	4.3 – 4.36	15.8		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MS

Lab Sample ID: 1201981582

Data File:	022f2201.d	**Data File:**	022b2201.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 22:20	**Analyzed:**	29–NOV–09 22:20

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'–DDE								1.62
	Column 1	1	4.69	4.66 – 4.72	39.4		ug/kg	
	Column 2	1	4.4	4.38 – 4.44	40.1		ug/kg	
Dieldrin								6.59
	Column 1	1	4.88	4.85 – 4.91	42.9		ug/kg	
	Column 2	1	4.5	4.47 – 4.53	45.8		ug/kg	
Endrin								26.1
	Column 1	1	5.03	4.99 – 5.05	54.1		ug/kg	
	Column 2	1	4.68	4.65 – 4.71	41.6		ug/kg	
4,4'–DDD								23
	Column 1	1	5.06	5.03 – 5.09	42.4		ug/kg	
	Column 2	1	4.76	4.73 – 4.79	33.7		ug/kg	
Endosulfan II								23.1
	Column 1	1	5.16	5.13 – 5.19	41.2		ug/kg	
	Column 2	1	4.81	4.78 – 4.84	52		ug/kg	

Identification Summary

SDG Number: 10-578 **Client ID:** WST03-10-2131MS

Lab Sample ID: 1201981582

Data File:	022f2201.d	**Data File:**	022b2201.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	29-NOV-09 22:20	**Analyzed:**	29-NOV-09 22:20

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Endrin aldehyde							3.02
Column 1	1	5.42	5.39 – 5.45	33.5		ug/kg	
Column 2	1	5.02	4.99 – 5.05	32.5		ug/kg	
4,4'-DDT							45.4
Column 1	1	5.23	5.2 – 5.26	36.2		ug/kg	
Column 2	1	4.94	4.91 – 4.97	57.5		ug/kg	
Endosulfan sulfate							9.08
Column 1	1	5.68	5.65 – 5.71	35.3		ug/kg	
Column 2	1	5.18	5.15 – 5.21	38.7		ug/kg	
Methoxychlor							22.8
Column 1	1	5.51	5.48 – 5.54	135		ug/kg	
Column 2	1	5.35	5.32 – 5.38	107		ug/kg	
Endrin ketone							7.27
Column 1	1	5.85	5.82 – 5.88	31.2		ug/kg	
Column 2	1	5.5	5.47 – 5.53	33.6		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MSD

Lab Sample ID: 1201981583

Data File:	023f2301.d	**Data File:**	023b2301.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 22:32	**Analyzed:**	29–NOV–09 22:32

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha–BHC							8.77
Column 1	1	3.17	3.14 – 3.2	13.4		ug/kg	
Column 2	1	2.8	2.77 – 2.83	14.7		ug/kg	
gamma–BHC (Lindane)							3.08
Column 1	1	3.45	3.42 – 3.48	13.8		ug/kg	
Column 2	1	3.11	3.08 – 3.14	14.3		ug/kg	
beta–BHC							6.2
Column 1	1	3.53	3.5 – 3.56	15		ug/kg	
Column 2	1	3.19	3.16 – 3.22	15.9		ug/kg	
delta–BHC							.965
Column 1	1	3.67	3.64 – 3.7	13.3		ug/kg	
Column 2	1	3.41	3.38 – 3.44	13.5		ug/kg	
Heptachlor							8.62
Column 1	1	3.83	3.8 – 3.86	13.4		ug/kg	
Column 2	1	3.45	3.42 – 3.48	14.6		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MSD

Lab Sample ID: 1201981583

Data File:	023f2301.d	**Data File:**	023b2301.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 22:32	**Analyzed:**	29–NOV–09 22:32

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aldrin							9.05
Column 1	1	4.05	4.02 – 4.08	13.8		ug/kg	
Column 2	1	3.68	3.65 – 3.71	15.1		ug/kg	
Heptachlor epoxide							34.5
Column 1	1	4.47	4.44 – 4.5	15.3		ug/kg	
Column 2	1	4.08	4.04 – 4.1	21.7		ug/kg	
gamma–Chlordane							21.1
Column 1	1	4.55	4.52 – 4.58	16.3		ug/kg	
Column 2	1	4.2	4.17 – 4.23	20.1		ug/kg	
alpha–Chlordane							.2
Column 1	1	4.64	4.61 – 4.67	16.8		ug/kg	
Column 2	1	4.29	4.26 – 4.32	16.8		ug/kg	
Endosulfan I							4.32
Column 1	1	4.73	4.7 – 4.76	15.7		ug/kg	
Column 2	1	4.32	4.3 – 4.36	15		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MSD

Lab Sample ID: 1201981583

Data File:	023f2301.d	**Data File:**	023b2301.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	29–NOV–09 22:32	**Analyzed:**	29–NOV–09 22:32

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'–DDE							1.86
Column 1	1	4.69	4.66 – 4.72	37.3		ug/kg	
Column 2	1	4.41	4.38 – 4.44	38		ug/kg	
Dieldrin							8.66
Column 1	1	4.88	4.85 – 4.91	40.6		ug/kg	
Column 2	1	4.5	4.47 – 4.53	44.3		ug/kg	
Endrin							27.5
Column 1	1	5.02	4.99 – 5.05	49.2		ug/kg	
Column 2	1	4.68	4.65 – 4.71	37.3		ug/kg	
4,4'–DDD							26.6
Column 1	1	5.06	5.03 – 5.09	40.3		ug/kg	
Column 2	1	4.76	4.73 – 4.79	30.9		ug/kg	
Endosulfan II							20.2
Column 1	1	5.16	5.13 – 5.19	40		ug/kg	
Column 2	1	4.81	4.78 – 4.84	48.9		ug/kg	

Identification Summary

SDG Number: 10-578 **Client ID:** WST03-10-2131MSD

Lab Sample ID: 1201981583

Data File:	023f2301.d	**Data File:**	023b2301.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	29-NOV-09 22:32	**Analyzed:**	29-NOV-09 22:32

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Endrin aldehyde							4.23
Column 1	1	5.42	5.39 – 5.45	30.2		ug/kg	
Column 2	1	5.02	4.99 – 5.05	29		ug/kg	
4,4'-DDT							42.6
Column 1	1	5.23	5.2 – 5.26	33		ug/kg	
Column 2	1	4.94	4.91 – 4.97	50.8		ug/kg	
Endosulfan sulfate							7.65
Column 1	1	5.68	5.65 – 5.71	34.3		ug/kg	
Column 2	1	5.18	5.15 – 5.21	37		ug/kg	
Methoxychlor							38.3
Column 1	1	5.51	5.48 – 5.54	128		ug/kg	
Column 2	1	5.35	5.32 – 5.38	87.1		ug/kg	
Endrin ketone							5.74
Column 1	1	5.85	5.82 – 5.88	29.7		ug/kg	
Column 2	1	5.5	5.47 – 5.53	31.4		ug/kg	

QUALITY CONTROL DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10–578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981581**				
Client Sample:	**QC for batch 926803**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926803**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL–OA–E–041**
Batch ID:	**926807**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:32**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 10:04**	**Aliquot:**	**30 g**	**Final Volume:**	**5 mL**
Data File:	**018f1801–589.d**	**Column:**	**1 CLP–1**	**Level:**	**LOW**
	018b1801–600.d		**2 CLP–2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC	U	0.667	ug/kg	0.167	0.667	1
58–89–9	gamma–BHC (Lindane)	U	0.667	ug/kg	0.167	0.667	1
319–85–7	beta–BHC	U	0.667	ug/kg	0.167	0.667	1
319–86–8	delta–BHC	U	0.667	ug/kg	0.167	0.667	1
76–44–8	Heptachlor	U	0.667	ug/kg	0.167	0.667	1
309–00–2	Aldrin	U	0.667	ug/kg	0.167	0.667	1
1024–57–3	Heptachlor epoxide	U	0.667	ug/kg	0.208	0.667	1
5103–74–2	gamma–Chlordane	U	0.667	ug/kg	0.167	0.667	1
5103–71–9	alpha–Chlordane	U	0.667	ug/kg	0.167	0.667	1
959–98–8	Endosulfan I	U	0.667	ug/kg	0.167	0.667	1
72–55–9	4,4'–DDE	U	1.33	ug/kg	0.333	1.33	1
60–57–1	Dieldrin	U	1.33	ug/kg	0.333	1.33	1
72–20–8	Endrin	U	1.33	ug/kg	0.333	1.33	1
72–54–8	4,4'–DDD	U	1.33	ug/kg	0.333	1.33	1
33213–65–9	Endosulfan II	U	1.33	ug/kg	0.333	1.33	1
7421–93–4	Endrin aldehyde	U	1.33	ug/kg	0.333	1.33	1
50–29–3	4,4'–DDT	U	1.33	ug/kg	0.333	1.33	1
1031–07–8	Endosulfan sulfate	U	1.33	ug/kg	0.333	1.33	1
72–43–5	Methoxychlor	U	6.67	ug/kg	1.67	6.67	1
53494–70–5	Endrin ketone	U	1.33	ug/kg	0.333	1.33	1
8001–35–2	Toxaphene	U	16.7	ug/kg	5.55	16.7	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/018f1801.d
Lab Smp Id: 1201981581 Client Smp ID: PBLK01
Inj Date : 29-NOV-2009 21:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981581|1|
Misc Info : |ECD81A_1SF|926807|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	80148052	194.217	32.4	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	36545312	215.629	35.9	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/018f1801.d

Date : 29-NOV-2009 21:32

Client ID: PBLK01

Sample Info: |120198158|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

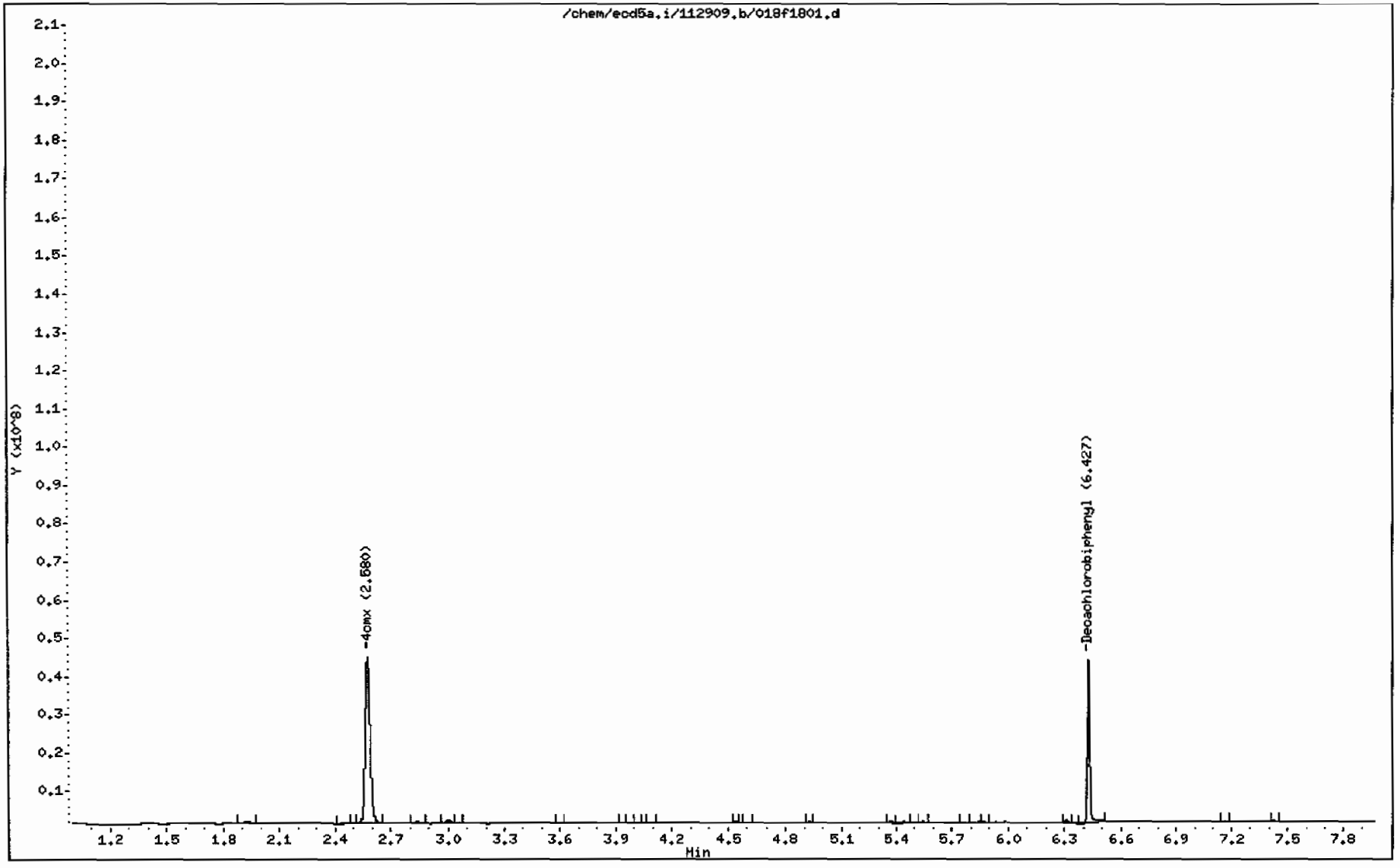

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/018b1801.d
Lab Smp Id: 1201981581 Client Smp ID: PBLK01
Inj Date : 29-NOV-2009 21:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981581|1|
Misc Info : |ECD81A_1SF|926807|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.125	-0.001	809335484	179.249	29.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	662216338	206.670	34.4	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/018b1801.d

Date : 29-NOV-2009 21:32

Client ID: PBLK01

Sample Info: |120198158|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

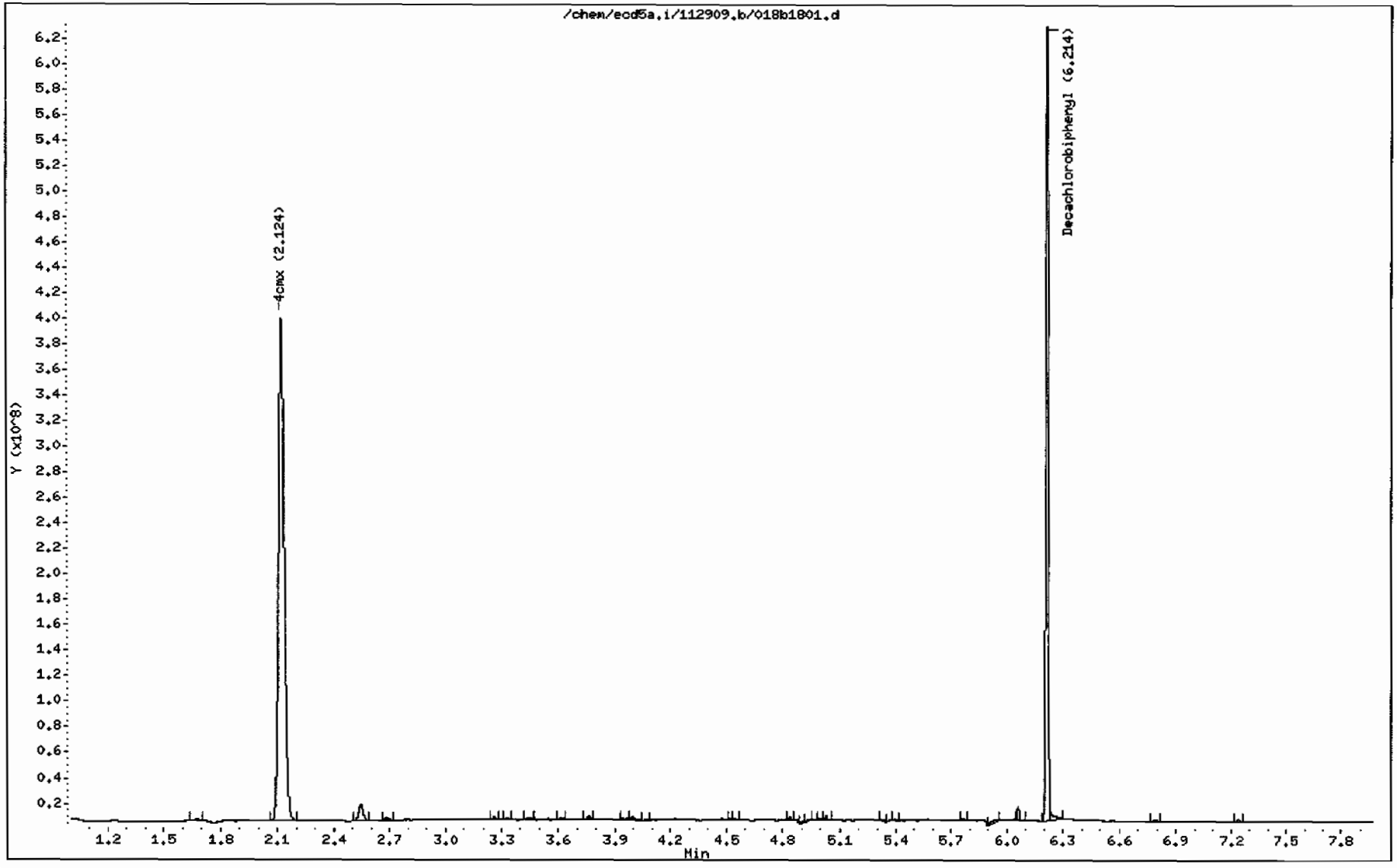

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–578			**Matrix:**	SOIL
Lab Sample ID:	1201981584				
Client Sample:	QC for batch 926803	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926803	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	1
Run Date:	11/29/2009 21:44	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30 g	**Final Volume:**	5 mL
Data File:	019f1901–589.d	**Column:**	1 CLP–1	**Level:**	LOW
	019b1901–589.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC		16.7	ug/kg	0.167	0.667	2
58–89–9	gamma–BHC (Lindane)		16.7	ug/kg	0.167	0.667	2
319–85–7	beta–BHC		15.9	ug/kg	0.167	0.667	2
319–86–8	delta–BHC		16.8	ug/kg	0.167	0.667	2
76–44–8	Heptachlor		16.2	ug/kg	0.167	0.667	2
309–00–2	Aldrin		15.5	ug/kg	0.167	0.667	2
1024–57–3	Heptachlor epoxide		14.7	ug/kg	0.208	0.667	2
5103–74–2	gamma–Chlordane		15.0	ug/kg	0.167	0.667	2
5103–71–9	alpha–Chlordane		15.7	ug/kg	0.167	0.667	2
959–98–8	Endosulfan I		14.9	ug/kg	0.167	0.667	2
72–55–9	4,4'–DDE		41.4	ug/kg	0.333	1.33	2
60–57–1	Dieldrin		39.3	ug/kg	0.333	1.33	2
72–20–8	Endrin		41.8	ug/kg	0.333	1.33	2
72–54–8	4,4'–DDD		42.1	ug/kg	0.333	1.33	2
33213–65–9	Endosulfan II		41.2	ug/kg	0.333	1.33	2
7421–93–4	Endrin aldehyde		36.6	ug/kg	0.333	1.33	2
50–29–3	4,4'–DDT		42.8	ug/kg	0.333	1.33	2
1031–07–8	Endosulfan sulfate		40.4	ug/kg	0.333	1.33	2
72–43–5	Methoxychlor		190	ug/kg	1.67	6.67	1
53494–70–5	Endrin ketone		39.2	ug/kg	0.333	1.33	2
8001–35–2	Toxaphene	U	16.7	ug/kg	5.55	16.7	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/019f1901.d
Lab Smp Id: 1201981584 Client Smp ID: PBLK01LCS
Inj Date : 29-NOV-2009 21:44
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981584|1|
Misc Info : |ECD81A_1SF|926807|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	86871849	210.510	35.1	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.428	6.427	0.001	38351131	226.284	37.7	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.170	3.169	0.001	60379514	113.138	18.8	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.454	3.454	0.000	54427350	116.654	19.4	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.533	3.532	0.001	23305665	109.827	18.3	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	56024126	114.128	19.0	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.831	3.831	0.000	45744012	111.853	18.6	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.053	4.051	0.002	45852400	104.069	17.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.473	4.472	0.001	43285522	108.990	18.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.554	4.554	0.000	42090679	107.676	17.9	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.640	4.639	0.001	41553136	109.473	18.2	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.728	4.728	0.000	38974143	108.622	18.1	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.689	4.689	0.000	100906439	256.049	42.7	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	98849874	257.457	42.9	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	94970411	289.295	48.2	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.059	5.059	0.000	87535194	283.707	47.3	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	88560857	284.974	47.5	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	67386078	246.911	41.2	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.227	5.227	0.000	74120311	301.414	50.2	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.676	5.675	0.001	87773056	296.998	49.5	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	134908980	1141.97	190	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	82952023	255.509	42.6	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd5a.i/112909.b/019f1901.d
Date : 29-NOV-2009 21:44
Client ID: PBLK01LCS
Sample Info: |120198153411|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

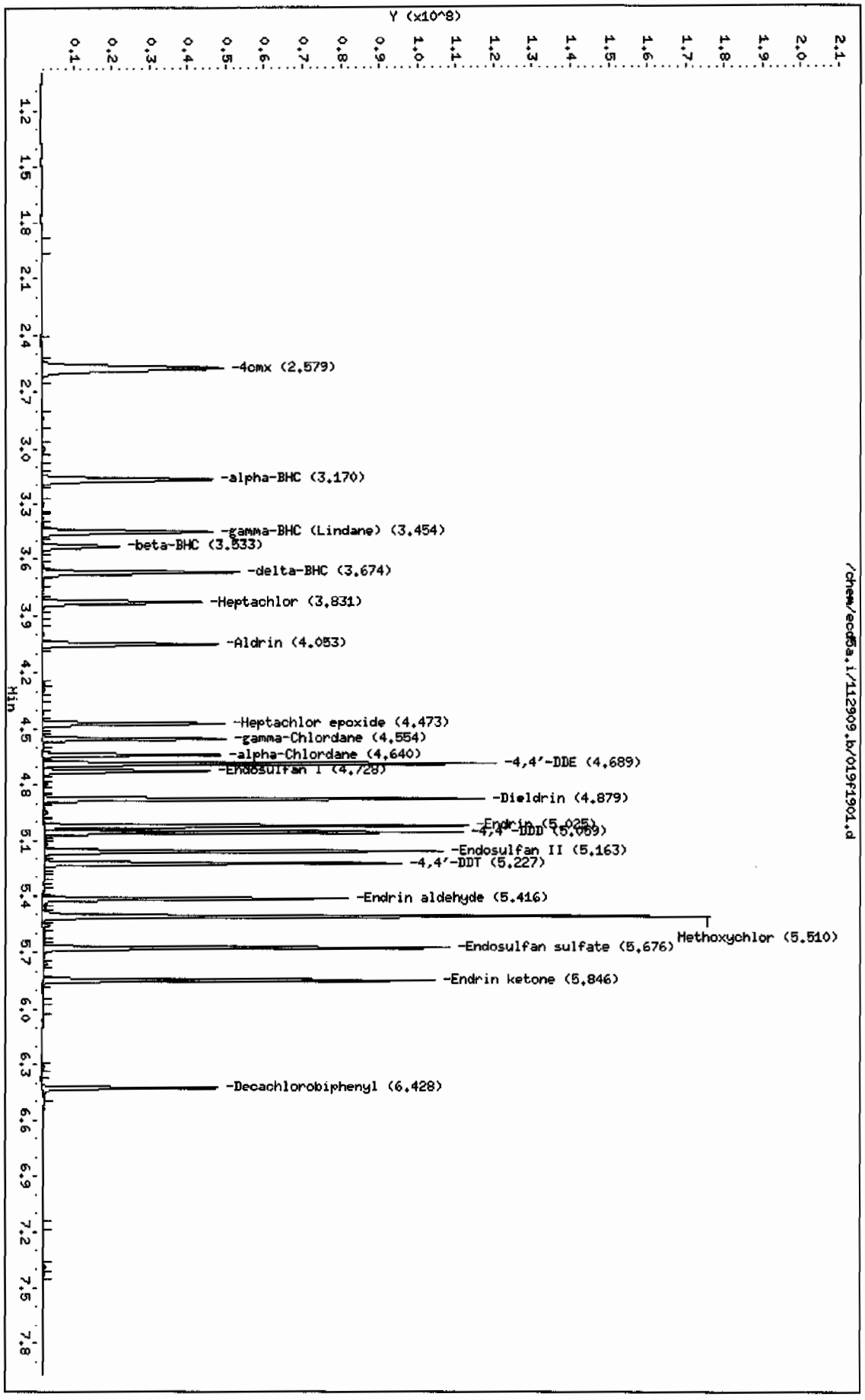

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/019b1901.d
Lab Smp Id: 1201981584 Client Smp ID: PBLK01LCS
Inj Date : 29-NOV-2009 21:44
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981584|1|
Misc Info : |ECD81A_1SF|926807|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.125	-0.001	875801575	193.970	32.3	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.216	6.214	0.002	698607915	218.027	36.3	80.00- 120.00	100.00(M)
5 alpha-BHC					CAS #: 319-84-6		
2.795	2.796	-0.001	631958854	100.146	16.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.109	3.110	-0.001	550099820	100.361	16.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.189	3.189	0.000	232187885	95.2183	15.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	548865510	101.066	16.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	434220714	97.3524	16.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	463433956	92.9855	15.5	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.075	4.074	0.001	370306958	88.2265	14.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.198	4.199	-0.001	402698839	90.1723	15.0	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.292	4.293	-0.001	406581099	94.4080	15.7	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	344304046	89.4757	14.9	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.406	4.405	0.001	1017726798	248.643	41.4	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.498	4.498	0.000	956694886	235.787	39.3	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	885855838	250.707	41.8	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	879727758	252.568	42.1	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	827029516	246.900	41.1	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	605550095	219.373	36.6	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.944	4.944	0.000	659093784	257.039	42.8	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.180	5.180	0.000	737522512	242.247	40.4	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	1036531670	1172.91	195	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	813114188	234.936	39.2	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/019b1901.d
Date : 29-NOV-2009 21:44
Client ID: PBLK01LCS
Sample Info: |120198158411|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

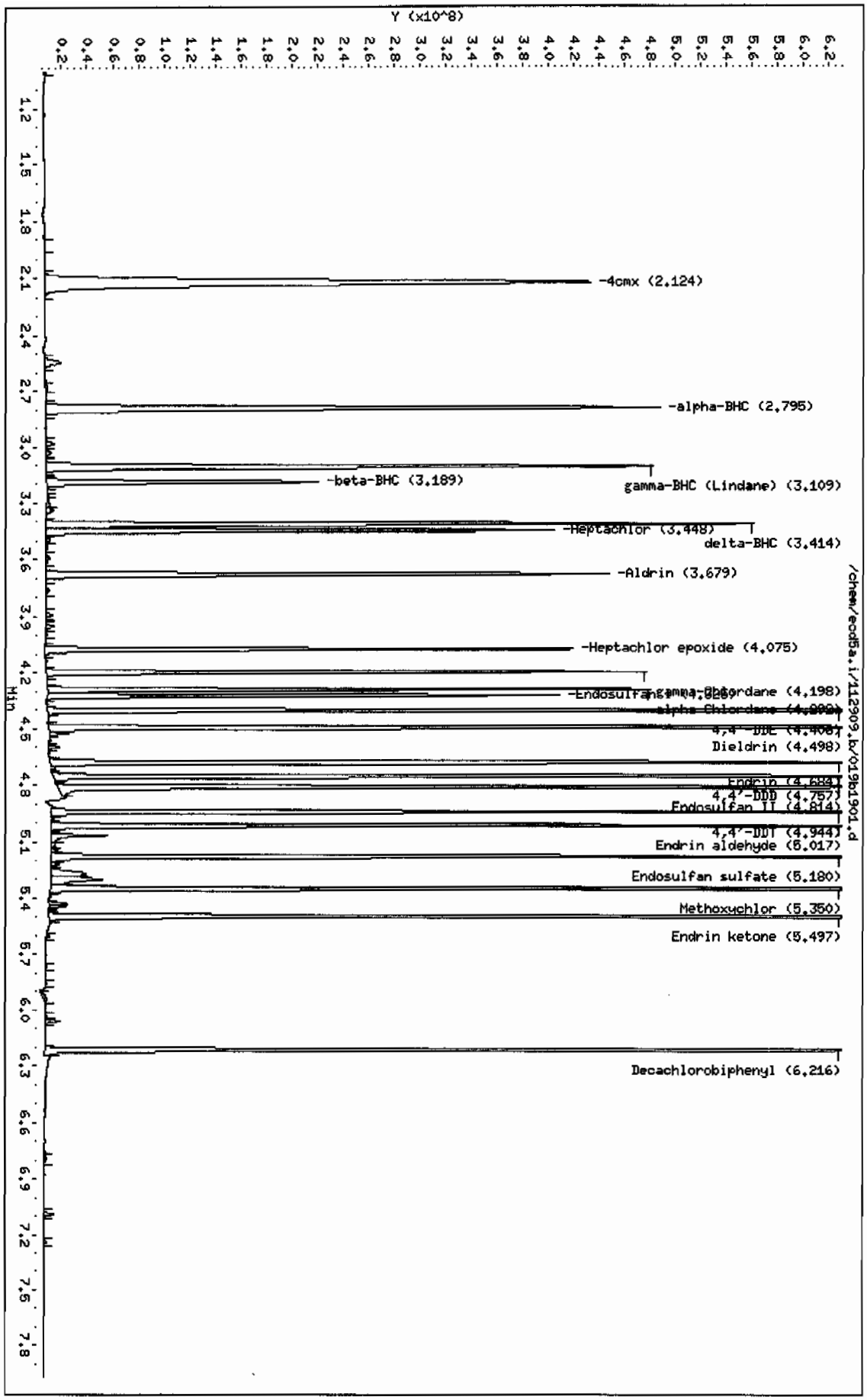

Page 1

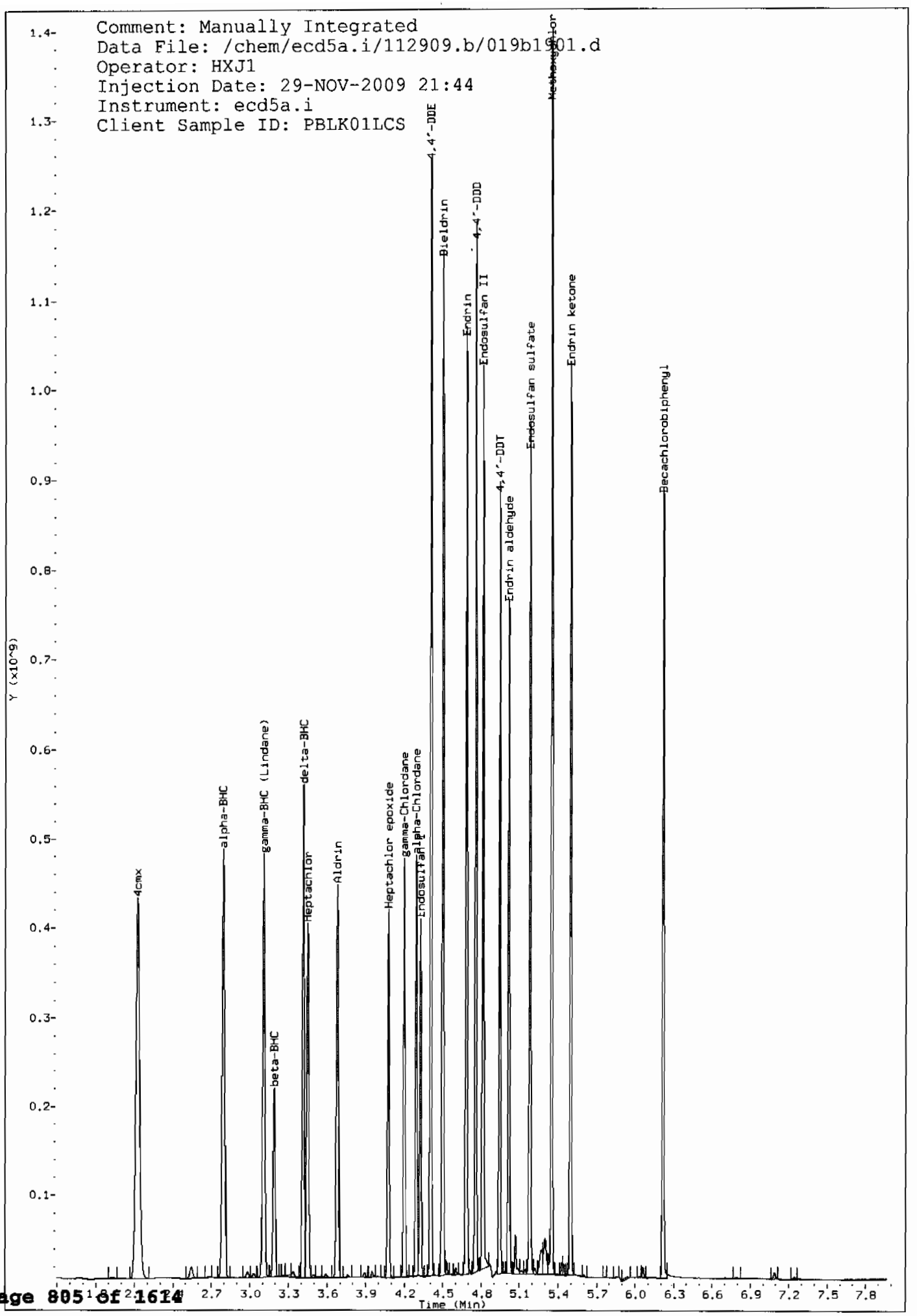
Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/019b1901.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:44
Instrument: ecd5a.i
Client Sample ID: PBLK01LCS
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl

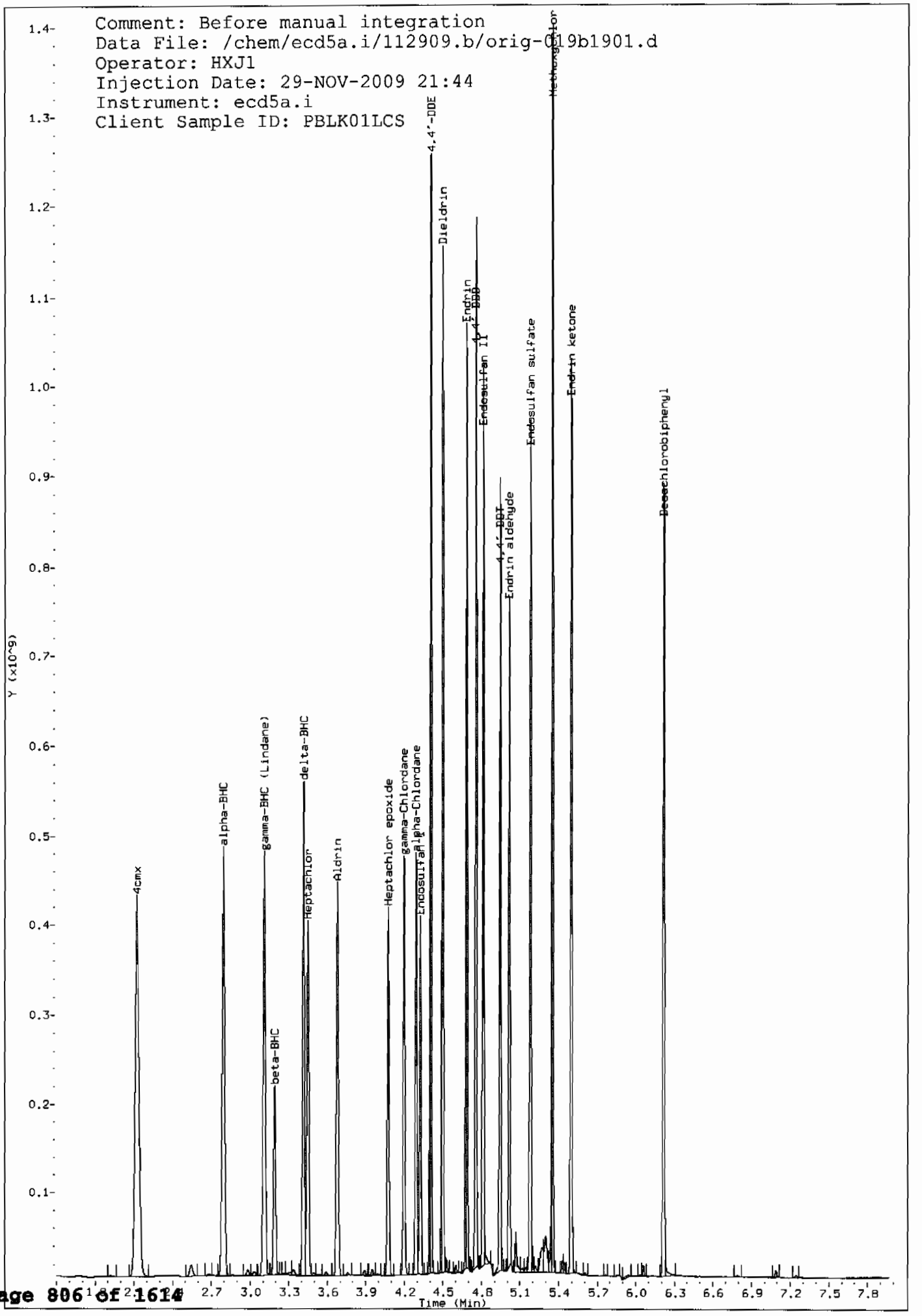
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-019b1901.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:44
Instrument: ecd5a.i
Client Sample ID: PBLK01LCS
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981585**				
Client Sample:	**QC for batch 926803**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926803**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**926807**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**11/29/2009 21:56**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 10:04**	**Aliquot:**	**30 g**	**Final Volume:**	**5 mL**
Data File:	**020f2001-589.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	020b2001-589.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.667	ug/kg	0.167	0.667	1
58-89-9	gamma-BHC (Lindane)	U	0.667	ug/kg	0.167	0.667	1
319-85-7	beta-BHC	U	0.667	ug/kg	0.167	0.667	1
319-86-8	delta-BHC	U	0.667	ug/kg	0.167	0.667	1
76-44-8	Heptachlor	U	0.667	ug/kg	0.167	0.667	1
309-00-2	Aldrin	U	0.667	ug/kg	0.167	0.667	1
1024-57-3	Heptachlor epoxide	U	0.667	ug/kg	0.208	0.667	1
5103-74-2	gamma-Chlordane	U	0.667	ug/kg	0.167	0.667	1
5103-71-9	alpha-Chlordane	U	0.667	ug/kg	0.167	0.667	1
959-98-8	Endosulfan I	U	0.667	ug/kg	0.167	0.667	1
72-55-9	4,4'-DDE	U	1.33	ug/kg	0.333	1.33	1
60-57-1	Dieldrin	U	1.33	ug/kg	0.333	1.33	1
72-20-8	Endrin	U	1.33	ug/kg	0.333	1.33	1
72-54-8	4,4'-DDD	U	1.33	ug/kg	0.333	1.33	1
33213-65-9	Endosulfan II	U	1.33	ug/kg	0.333	1.33	1
7421-93-4	Endrin aldehyde	U	1.33	ug/kg	0.333	1.33	1
50-29-3	4,4'-DDT	U	1.33	ug/kg	0.333	1.33	1
1031-07-8	Endosulfan sulfate	U	1.33	ug/kg	0.333	1.33	1
72-43-5	Methoxychlor	U	6.67	ug/kg	1.67	6.67	1
53494-70-5	Endrin ketone	U	1.33	ug/kg	0.333	1.33	1
8001-35-2	Toxaphene		150	ug/kg	5.55	16.7	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/020f2001.d
Lab Smp Id: 1201981585 Client Smp ID: PBLK01TLCS
Inj Date : 29-NOV-2009 21:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981585|1|
Misc Info : |ECD81A_1SF|926807|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.580	2.579	0.001	91431014	221.558	36.9	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	41280362	243.568	40.6	80.00- 120.00	100.00(R)
23 Toxaphene					CAS #: 8001-35-2		
4.667	4.667	0.000	1234401	575.638	95.9	80.00- 120.00	100.00
4.882	4.882	0.000	5211543	926.043	154	178.48- 218.48	422.19
4.938	4.938	0.000	5226754	1013.31	169	222.35- 262.35	423.42
4.975	4.975	0.000	7398826	1071.32	178	276.39- 316.39	599.39

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
23 Toxaphene (continued)							
5.147	5.156	-0.009	10681947	932.572	155	493.19- 533.19	865.35
Average of Peak Concentrations =					150		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd5a.i/112909.b/020f2001.d

Date : 29-NOV-2009 21:56

Client ID: PBLK01TLCS

Sample Info: |120198158511|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

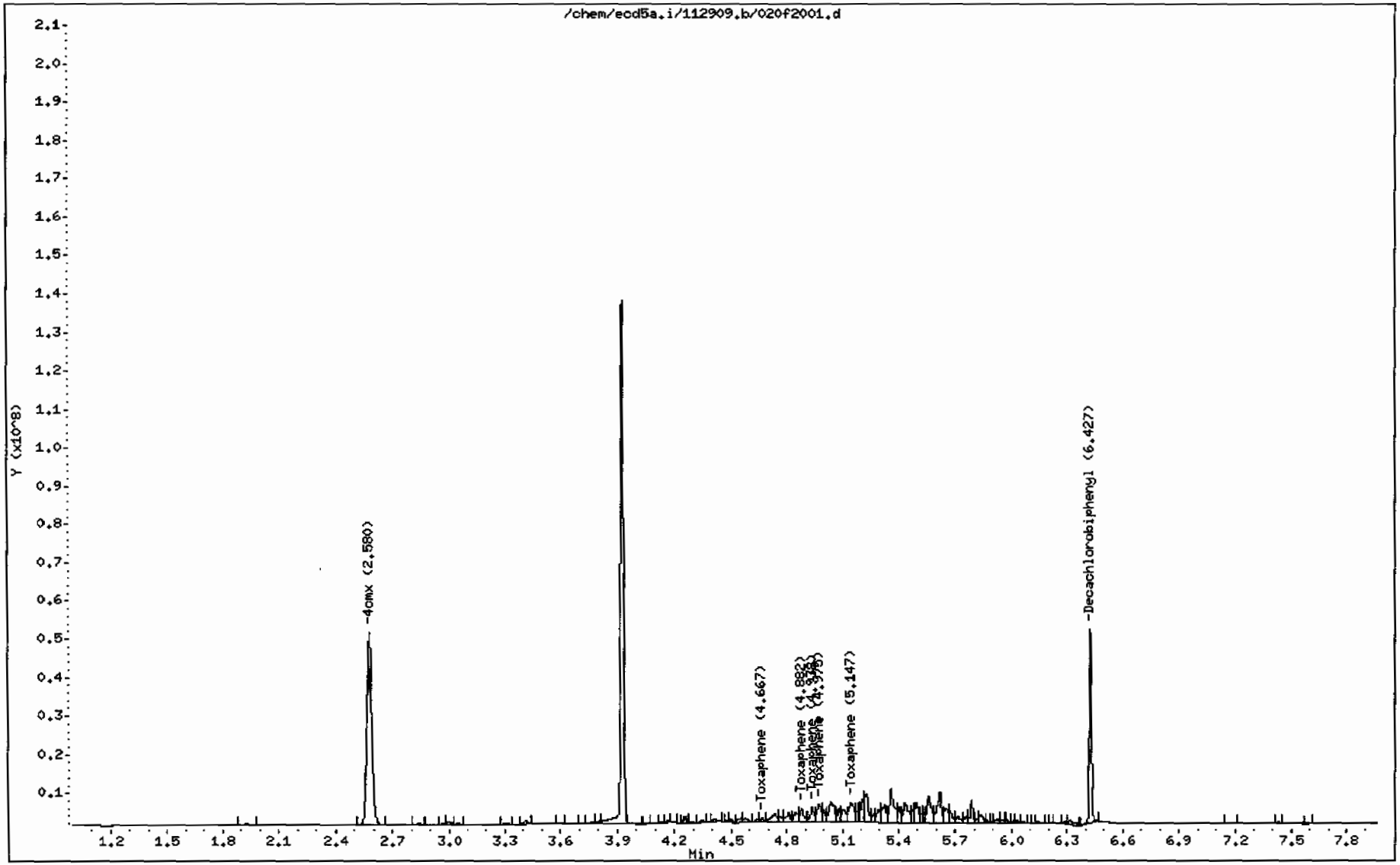

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/020b2001.d
Lab Smp Id: 1201981585 Client Smp ID: PBLK01TLCS
Inj Date : 29-NOV-2009 21:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981585|1|
Misc Info : |ECD81A_1SF|926807|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.126	2.125	0.001	909967067	201.537	33.6	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	707232902	220.719	36.8	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.557	4.556	0.001	28433825	609.071	102	80.00- 120.00	100.00(M)
4.785	4.785	0.000	55525864	1024.58	171	95.65- 135.65	195.28
4.805	4.806	-0.001	86549033	1063.50	177	168.21- 208.21	304.39
4.864	4.865	-0.001	159448701	1090.94	182	290.45- 330.45	560.77

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
23 Toxaphene (continued)							
5.020	5.021	-0.001	94111498	1229.39	205	156.12- 196.12	330.98
		Average of Peak Concentrations =			167		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112909.b/020b2001.d
Date : 29-NOV-2009 21:56
Client ID: PBLK01TLCS
Sample Info: |120198158511|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

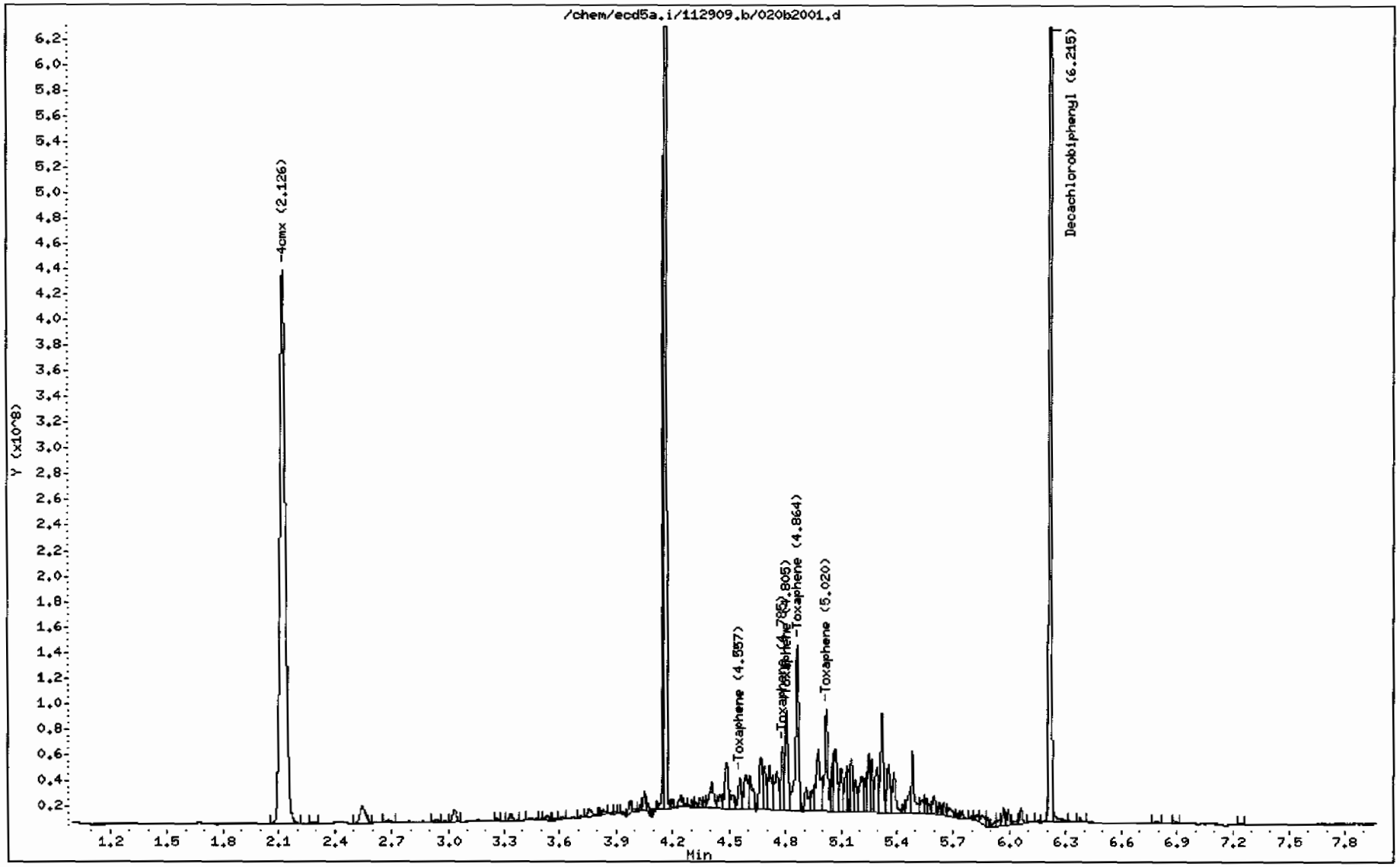

Comment: Manually Integrated
Data File: /chem/ecd5a.i/112909.b/020b2001.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:56
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

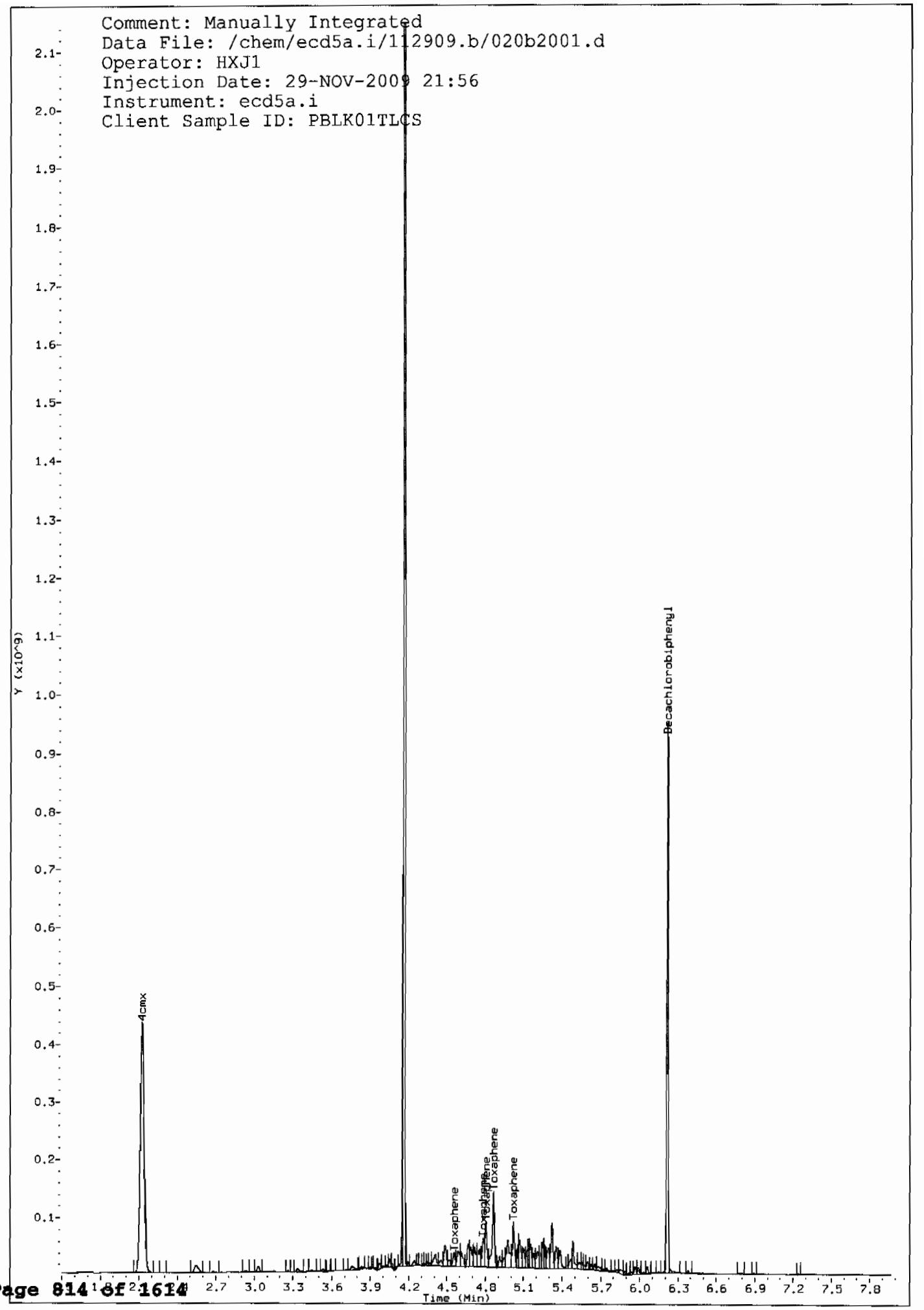

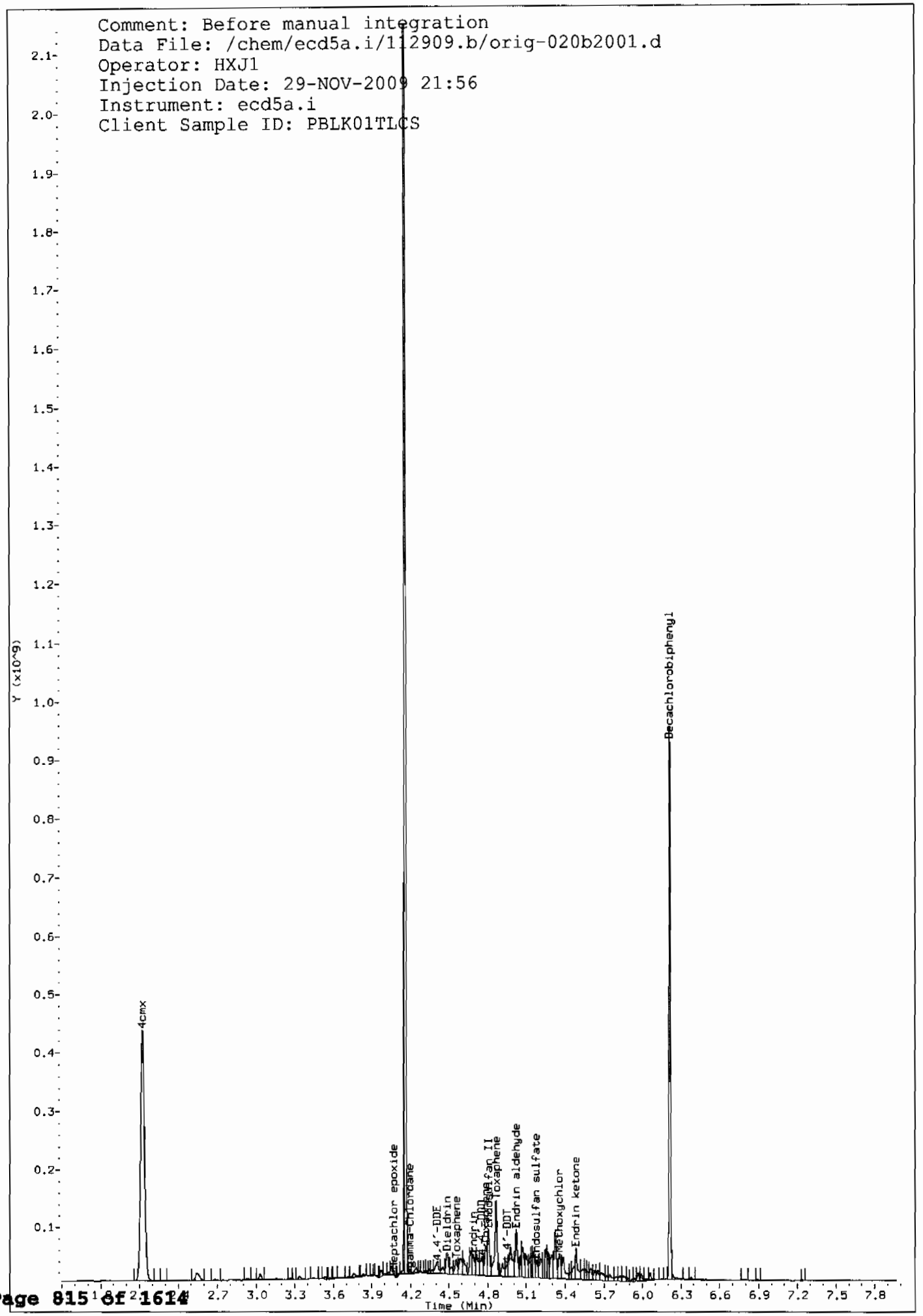
Comment: Before manual integration
Data File: /chem/ecd5a.i/112909.b/orig-020b2001.d
Operator: HXJ1
Injection Date: 29-NOV-2009 21:56
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
Y (x10^9)
Time (Min)
4cmx
Heptachlor epoxide
gamma-Chlordane
4,4'-DDE
Dieldrin
Toxaphene
Endrin
Endosulfan II
Toxaphene
4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201981582	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
Client Sample:	QC for batch 926803	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2131MS	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/29/2009 22:20	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30.03 g	**Final Volume:**	5 mL
Data File:	022f2201.d	**Column:**	1 CLP-1	**Level:**	LOW
	022b2201.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC		14.0	ug/kg	1.81	7.23	1
58-89-9	gamma-BHC (Lindane)		14.5	ug/kg	1.81	7.23	1
319-85-7	beta-BHC		15.7	ug/kg	1.81	7.23	1
319-86-8	delta-BHC		13.9	ug/kg	1.81	7.23	1
76-44-8	Heptachlor		14.2	ug/kg	1.81	7.23	1
309-00-2	Aldrin		14.3	ug/kg	1.81	7.23	1
1024-57-3	Heptachlor epoxide		16.2	ug/kg	2.26	7.23	1
5103-74-2	gamma-Chlordane		16.8	ug/kg	1.81	7.23	1
5103-71-9	alpha-Chlordane		18.1	ug/kg	1.81	7.23	1
959-98-8	Endosulfan I		16.4	ug/kg	1.81	7.23	1
72-55-9	4,4'-DDE		39.4	ug/kg	3.62	14.5	1
60-57-1	Dieldrin		42.9	ug/kg	3.62	14.5	1
72-20-8	Endrin		54.1	ug/kg	3.62	14.5	1
72-54-8	4,4'-DDD		42.4	ug/kg	3.62	14.5	1
33213-65-9	Endosulfan II		41.2	ug/kg	3.62	14.5	1
7421-93-4	Endrin aldehyde		33.5	ug/kg	3.62	14.5	1
50-29-3	4,4'-DDT		36.2	ug/kg	3.62	14.5	1
1031-07-8	Endosulfan sulfate		35.3	ug/kg	3.62	14.5	1
72-43-5	Methoxychlor		135	ug/kg	18.1	72.3	1
53494-70-5	Endrin ketone		31.2	ug/kg	3.62	14.5	1
8001-35-2	Toxaphene	U	181	ug/kg	60.2	181	1

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CLP-1

Data file : /chem/ecd5a.i/112909.b/022f2201.d
Lab Smp Id: 1201981582 Client Smp ID: WST03-10-2131MS
Inj Date : 29-NOV-2009 22:20
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981582|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 22 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.579	0.000	6553836	15.8814	28.7	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.426	6.427	-0.001	2920953	17.2346	31.2	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.170	3.169	0.001	4135190	7.74843	14.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.455	3.454	0.001	3751661	8.04094	14.5	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.533	3.532	0.001	1844878	8.69391	15.7	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	3785886	7.71233	13.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.830	3.831	-0.001	3212664	7.85561	14.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.052	4.051	0.001	3475401	7.88794	14.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	3554311	8.94951	16.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.555	4.554	0.001	3630649	9.28786	16.8	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.640	4.639	0.001	3790538	9.98633	18.0	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.729	4.728	0.001	3252072	9.06359	16.4	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.688	4.689	-0.001	8596426	21.8134	39.4	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.878	4.879	-0.001	9106595	23.7184	42.9	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	9819436	29.9116	54.1	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.058	5.059	-0.001	7233903	23.4455	42.4	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	7084472	22.7966	41.2	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.416	5.416	0.000	5056174	18.5265	33.5	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.226	5.227	-0.001	4928686	20.0427	36.2	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.675	5.675	0.000	5776535	19.5461	35.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	8821256	74.6697	135	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.846	5.846	0.000	5609409	17.2781	31.2	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/022f2201.d
Date : 29-NOV-2009 22:20
Client ID: WST03-10-2131MS
Sample Info: |1201981582|10|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

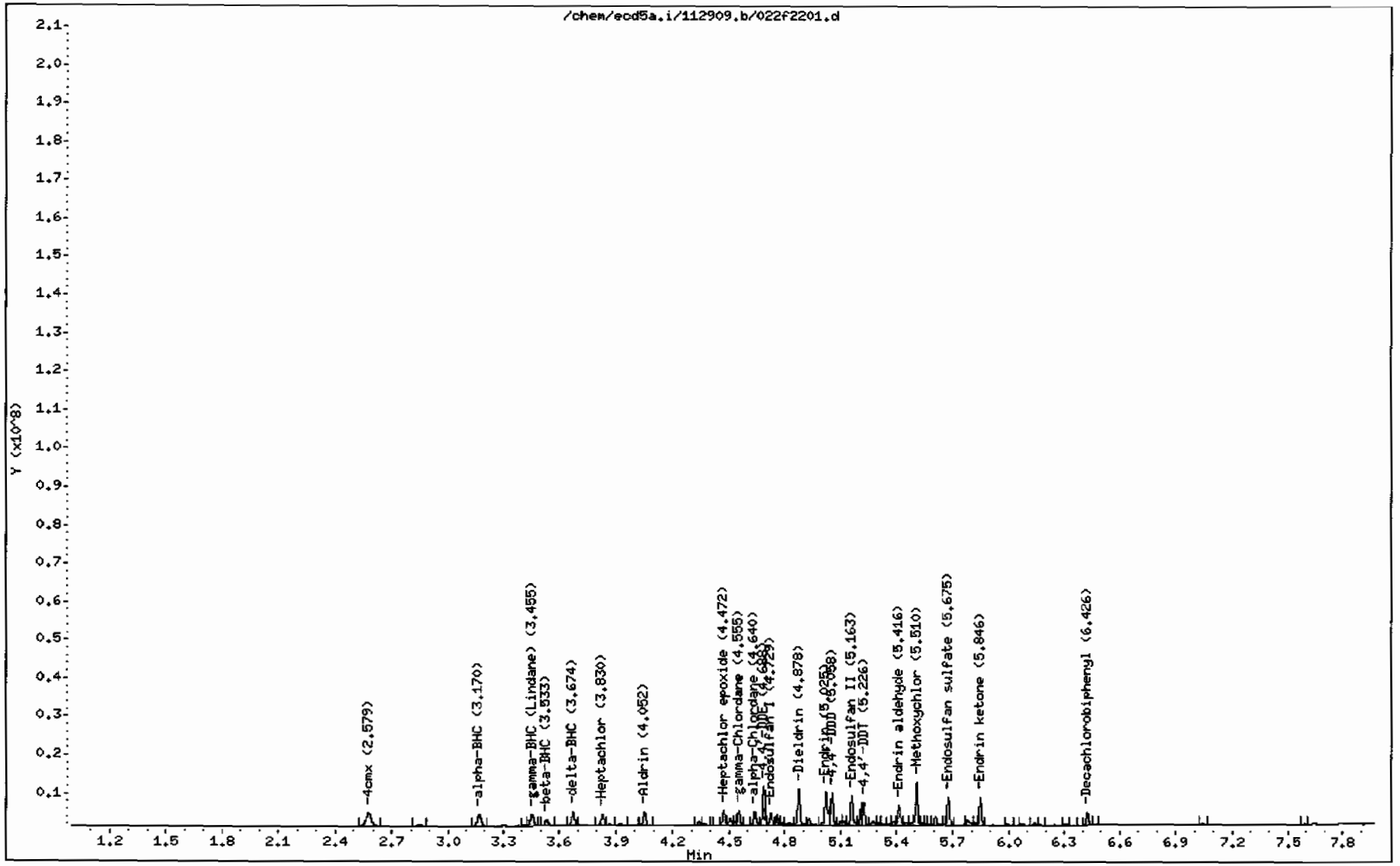

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CLP-2

Data file : /chem/ecd5a.i/112909.b/022b2201.d
Lab Smp Id: 1201981582 Client Smp ID: WST03-10-2131MS
Inj Date : 29-NOV-2009 22:20
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981582|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 09:42 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 22 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.123	2.125	-0.002	77869886	17.2464	31.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	49718126	15.5164	28.0	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.796	2.796	0.000	53007406	8.40007	15.2	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	46332435	8.45296	15.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.190	3.189	0.001	22453994	9.20819	16.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.414	3.414	0.000	45082502	8.30134	15.0	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	38677840	8.67159	15.7	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	42331272	8.49354	15.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.075	4.074	0.001	49948367	11.9003	21.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.199	4.199	0.000	53053859	11.8798	21.5	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.292	4.293	-0.001	41393816	9.61163	17.4	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	33713335	8.76122	15.8	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.405	4.405	0.000	90746424	22.1705	40.1	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.496	4.498	-0.002	102790158	25.3336	45.8	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	81307959	23.0110	41.6	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.756	4.758	-0.002	64825662	18.6113	33.6	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.813	4.814	-0.001	96312592	28.7529	52.0	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.016	5.016	0.000	49616847	17.9747	32.5	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.944	4.944	0.000	81595832	31.8214	57.5	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.180	5.180	0.000	65166363	21.4046	38.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	81641514	59.3953	107	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.496	5.496	0.000	64311672	18.5818	33.6	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/022b2201.d
Date : 29-NOV-2009 22:20
Client ID: WST03-10-2131MS
Sample Info: |12019815821|0|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

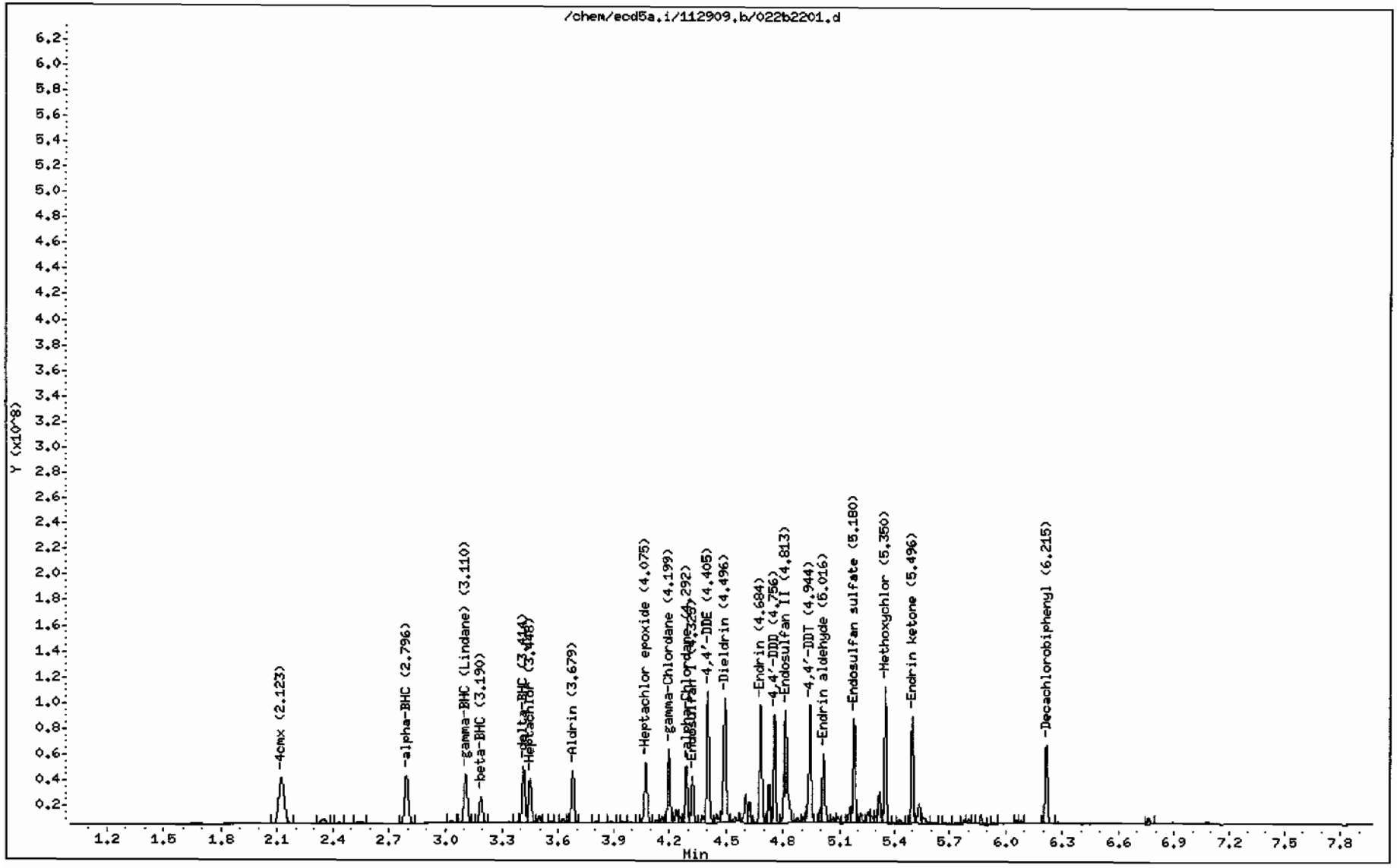

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201981583	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
Client Sample:	QC for batch 926803	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2131MSD	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	926807	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	11/29/2009 22:32	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 10:04	**Aliquot:**	30.02 g	**Final Volume:**	5 mL
Data File:	023f2301.d	**Column:**	1 CLP–1	**Level:**	LOW
	023b2301.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC		13.4	ug/kg	1.81	7.24	1
58–89–9	gamma–BHC (Lindane)		13.8	ug/kg	1.81	7.24	1
319–85–7	beta–BHC		15.0	ug/kg	1.81	7.24	1
319–86–8	delta–BHC		13.3	ug/kg	1.81	7.24	1
76–44–8	Heptachlor		13.4	ug/kg	1.81	7.24	1
309–00–2	Aldrin		13.8	ug/kg	1.81	7.24	1
1024–57–3	Heptachlor epoxide		15.3	ug/kg	2.26	7.24	1
5103–74–2	gamma–Chlordane		16.3	ug/kg	1.81	7.24	1
5103–71–9	alpha–Chlordane		16.8	ug/kg	1.81	7.24	1
959–98–8	Endosulfan I		15.7	ug/kg	1.81	7.24	1
72–55–9	4,4'–DDE		37.3	ug/kg	3.62	14.5	1
60–57–1	Dieldrin		40.6	ug/kg	3.62	14.5	1
72–20–8	Endrin		49.2	ug/kg	3.62	14.5	1
72–54–8	4,4'–DDD		40.3	ug/kg	3.62	14.5	1
33213–65–9	Endosulfan II		40.0	ug/kg	3.62	14.5	1
7421–93–4	Endrin aldehyde		30.2	ug/kg	3.62	14.5	1
50–29–3	4,4'–DDT		33.0	ug/kg	3.62	14.5	1
1031–07–8	Endosulfan sulfate		34.3	ug/kg	3.62	14.5	1
72–43–5	Methoxychlor		128	ug/kg	18.1	72.4	1
53494–70–5	Endrin ketone		29.7	ug/kg	3.62	14.5	1
8001–35–2	Toxaphene	U	181	ug/kg	60.2	181	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112909.b/023f2301.d
Lab Smp Id: 1201981583 Client Smp ID: WST03-10-2131MSD
Inj Date : 29-NOV-2009 22:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981583|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-F-8081-112809.m
Meth Date : 30-Nov-2009 09:45 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025f2501.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.581	2.579	0.002	6341535	15.3670	27.8	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.427	6.427	0.000	3057776	18.0419	32.6	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.172	3.169	0.003	3967689	7.43457	13.4	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.455	3.454	0.001	3571385	7.65455	13.8	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.534	3.532	0.002	1758180	8.28535	15.0	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.674	3.674	0.000	3618027	7.37038	13.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.832	3.831	0.001	3021942	7.38926	13.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.052	4.051	0.001	3359752	7.62546	13.8	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.472	4.472	0.000	3370120	8.48573	15.3	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.555	4.554	0.001	3516378	8.99554	16.3	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.641	4.639	0.002	3524005	9.28414	16.8	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.729	4.728	0.001	3107201	8.65983	15.7	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.687	4.689	-0.002	8125268	20.6178	37.3	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.879	4.879	0.000	8614756	22.4374	40.6	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.025	5.024	0.001	8930940	27.2051	49.2	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.058	5.059	-0.001	6878505	22.2936	40.3	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.163	5.163	0.000	6864755	22.0896	40.0	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.417	5.416	0.001	4561392	16.7135	30.2	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.227	5.227	0.000	4482606	18.2287	33.0	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.677	5.675	0.002	5597065	18.9388	34.2	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.510	5.510	0.000	8381485	70.9471	128	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.847	5.846	0.001	5321751	16.3921	29.6	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/023f2301.d

Date : 29-NOV-2009 22:32

Client ID: WST03-10-2131MSD

Sample Info: |1201981583|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

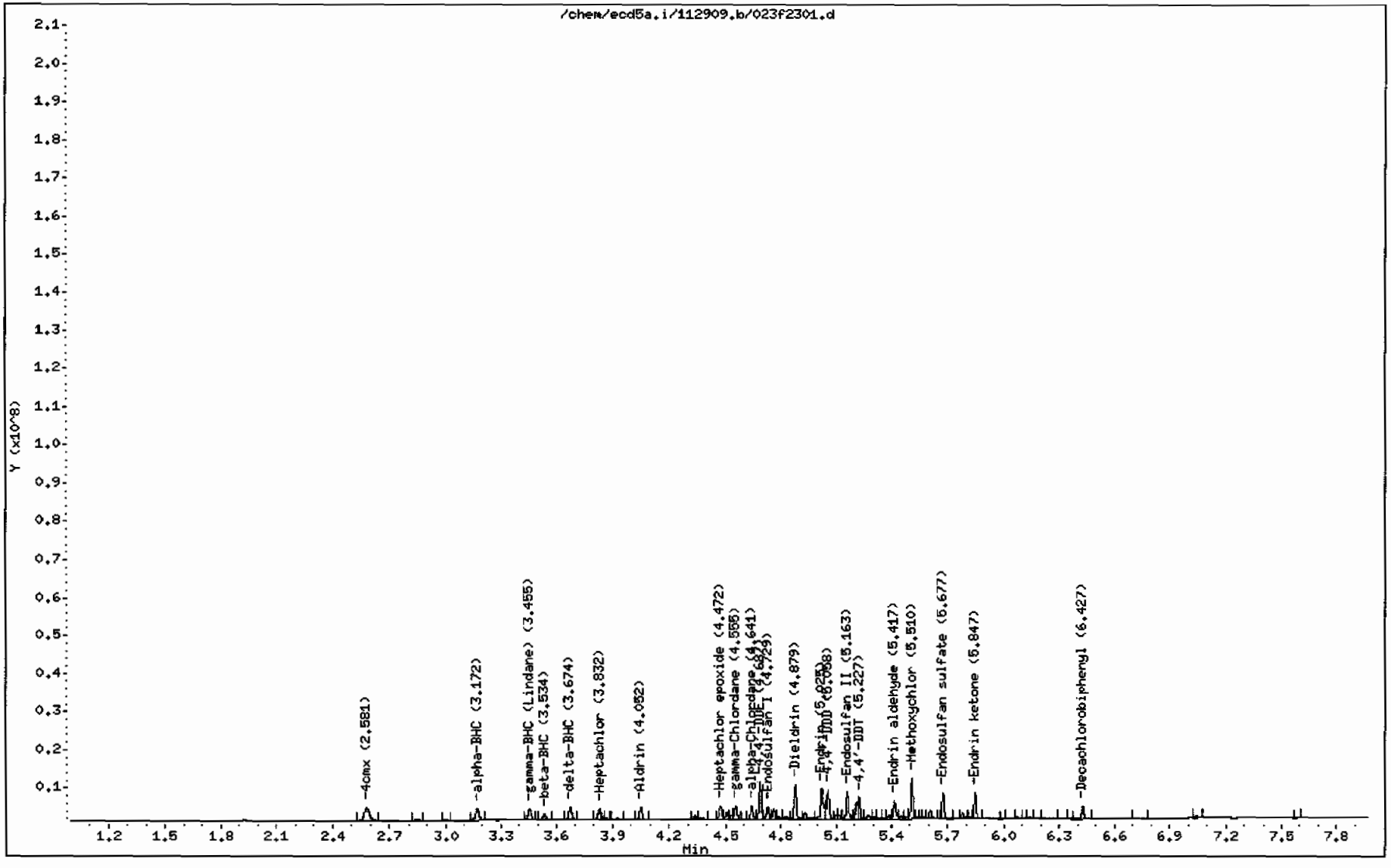

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112909.b/023b2301.d
Lab Smp Id: 1201981583 Client Smp ID: WST03-10-2131MSD
Inj Date : 29-NOV-2009 22:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201981583|10|
Misc Info : |ECD81A_1SF|926807|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/112909.b/ECD5-B-8081-112809.m
Meth Date : 30-Nov-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 25-NOV-2009 04:04 Cal File: 025b2501.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.126	2.125	0.001	74397780	16.4774	29.8	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.216	6.214	0.002	46378731	14.4742	26.2	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.797	2.796	0.001	51219054	8.11667	14.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.110	3.110	0.000	43269562	7.89417	14.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.191	3.189	0.002	21496572	8.81556	15.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.415	3.414	0.001	40414719	7.44183	13.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.448	3.448	0.000	35928811	8.05525	14.6	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.679	3.679	0.000	41608317	8.34848	15.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.077	4.074	0.003	50454959	12.0210	21.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.200	4.199	0.001	49654560	11.1186	20.1	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.293	4.293	0.000	40063601	9.30276	16.8	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.325	4.325	0.000	31913383	8.29346	15.0	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.406	4.405	0.001	85978588	21.0056	38.0	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.497	4.498	-0.001	99276385	24.4676	44.2	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.684	4.684	0.000	72866350	20.6219	37.3	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.757	4.758	-0.001	59436038	17.0640	30.9	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.814	4.814	0.000	90605935	27.0493	48.9	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.017	5.016	0.001	44225127	16.0215	29.0	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.945	4.944	0.001	72029075	28.0905	50.8	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.181	5.180	0.001	62244259	20.4448	37.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.350	5.350	0.000	71989424	48.1398	87.1	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.497	5.496	0.001	60083217	17.3601	31.4	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112909.b/023b2301.d

Date : 29-NOV-2009 22:32

Client ID: WST03-10-2131MSD

Sample Info: |1201981583|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

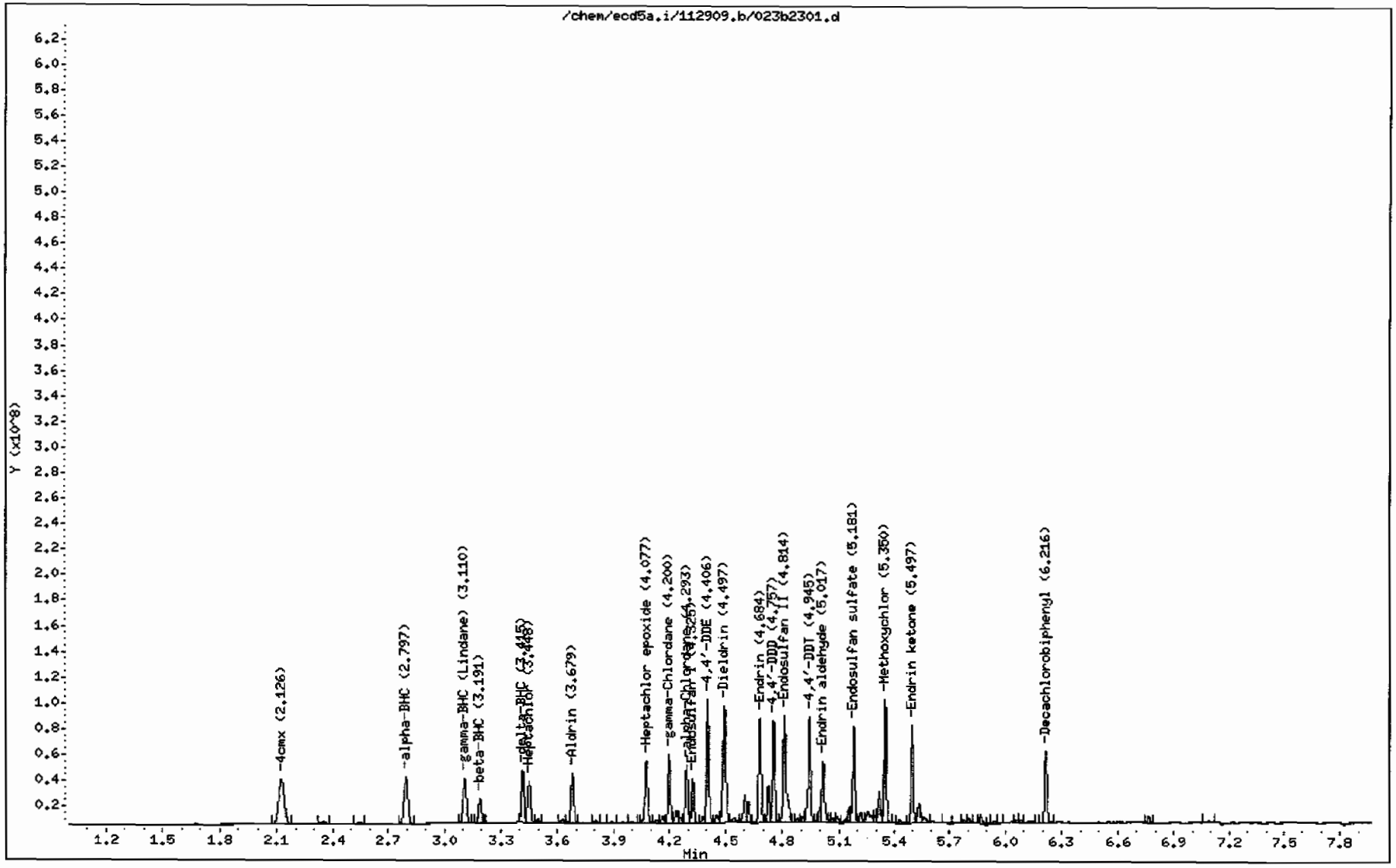

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 11/29/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ600
MERCURY LOT 906110-AS

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112809.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	28-NOV-2009 11:56		112809	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	28-NOV-2009 12:08		112809	1.0		(b) DDT 8.1%, Endrin 6.6%; (f) DDT 7.9%, Endrin 5.5%
003b0301.d	WPE091128-01AB	CXC2	28-NOV-2009 12:35		112809	1.0		DUSE
004b0401.d	WPE091128-01AB	CXC2	28-NOV-2009 12:47		112809	1.0		INDAB ICAL level 1
005b0501.d	WPE091128-02AB	CXC2	28-NOV-2009 12:58		112809	1.0		INDAB ICAL level 2
006b0601.d	WPE091128-03AB	CXC2	28-NOV-2009 13:10		112809	1.0		INDAB ICAL level 3
007b0701.d	WPE091128-04AB	CXC2	28-NOV-2009 13:22		112809	1.0		INDAB ICAL level 4
008b0801.d	IPE091128-02AB	CXC2	28-NOV-2009 13:34		112809	1.0		INDAB ICAL level 5
009b0901.d	WPE091123-10AB	CXC2	28-NOV-2009 13:46		112809	1.0		All okay
010b1001.d	WPE091124-11TX	CXC2	28-NOV-2009 14:15		112809	1.0		TOXAPH ICAL level 1
011b1101.d	WPE091124-12TX	CXC2	28-NOV-2009 14:27		112809	1.0		TOXAPH ICAL level 2
012b1201.d	WPE091124-13TX	CXC2	28-NOV-2009 14:39		112809	1.0		TOXAPH ICAL level 3
013b1301.d	WPE091124-14TX	CXC2	28-NOV-2009 14:51		112809	1.0		TOXAPH ICAL level 4
014b1401.d	IPE091121-40TX	CXC2	28-NOV-2009 15:03		112809	1.0		TOXAPH ICAL level 5
015b1501.d	WPE091104-52TX	CXC2	28-NOV-2009 15:15		112809	1.0		All okay

Instrument Batch: /chem/ecd5a.i/112809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091124-21CL	CXC2	28-NOV-2009 15:27		112809	1.0		CHLOR ICAL level 1

017b1701.d	WPE091124-22CL	CXC2	28-NOV-2009 15:39		112809		1.0		CHLOR ICAL level 2
018b1801.d	WPE091124-23CL	CXC2	28-NOV-2009 15:51		112809		1.0		CHLOR ICAL level 3
019b1901.d	WPE091124-24CL	CXC2	28-NOV-2009 16:03		112809		1.0		CHLOR ICAL level 4
020b2001.d	IPE091029-06CL	CXC2	28-NOV-2009 16:15		112809		1.0		CHLOR ICAL level 5
021b2101.d	WPE091021-00CL	CXC2	28-NOV-2009 16:27		112809		1.0		All okay
022b2201.d	WPE091109-99DG	CXC2	28-NOV-2009 16:39		112809		1.0		(b) DDT 9.4%, Endrin 7.5%; (f) DDT 6.4%, Endrin 7.0%
023b2301.d	WAR090914-99IB	CXC2	28-NOV-2009 16:51		112809		1.0		Clean
024b2401.d	1201978233	CXC2	28-NOV-2009 17:03	925346	112809		1.0	MB	DUSE - 4cmx, DCB still low - sent for re-extraction
025b2501.d	1201978234	CXC2	28-NOV-2009 17:14	925346	112809		1.0	LCS	DUSE - 4cmx, DCB still low - sent for re-extraction
026b2601.d	241549001	CXC2	28-NOV-2009 17:26	925346	112809		1.0	LANL	DUSE - 4cmx, DCB still low - sent for re-extraction
027b2701.d	WPE091123-10AB	CXC2	28-NOV-2009 17:38		112809		1.0		(b) alphaCHL low, DDT elevated; (f) gamma-BHC, Endrin, Endosulfan II, DDT, Methoxyclor elevated
028b2801.d	WAR090914-99IB	CXC2	28-NOV-2009 17:50		112809		1.0		Clean
029b2901.d	1201978540	CXC2	28-NOV-2009 18:02	926319	241358		1.0	TB	USE, uploaded both columns, reporting higher result
030b3001.d	1201980556	CXC2	28-NOV-2009 18:14	926319	241358		1.0	MB	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC
031b3101.d	1201980563	CXC2	28-NOV-2009 18:26	926319	112809		1.0	LCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
032b3201.d	1201980564	CXC2	28-NOV-2009 18:38	926319	241358		1.0	TLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
033b3301.d	1201980565	CXC2	28-NOV-2009 18:50	926319	241358		1.0	CLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
034b3401.d	WAR090914-99IB	CXC2	28-NOV-2009 19:02		112809		1.0		Clean
035b3501.d	WPE091123-10AB	CXC2	28-NOV-2009 19:14		112809		1.0		(b) DCB elevated; (f) DDE, Endrin, DDT, Methoxychlor elevated

Instrument Batch: /chem/ecd5a.i/112809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	28-NOV-2009 19:26		112809		1.0	Clean
037b3701.d	241358001	CXC2	28-NOV-2009 19:38	926319	241358		5.0	MECP USE, uploaded both columns, reporting higher result
038b3801.d	1201980557	CXC2	28-NOV-2009 19:50	926319	241358		5.0	MS USE, uploaded both columns, reporting higher result

039b3901.d	1201980560	CXC2	28-NOV-2009 20:02	926319	241358	5.0	MSD	USE, uploaded both columns, reporting higher result
040b4001.d	1201980558	CXC2	28-NOV-2009 20:13	926319	241358	5.0	TMS	USE, uploaded both columns, reporting higher result
041b4101.d	1201980561	CXC2	28-NOV-2009 20:25	926319	241358	5.0	TMSD	USE, uploaded both columns, reporting higher result
042b4201.d	1201980559	CXC2	28-NOV-2009 20:37	926319	241358	5.0	CMS	USE, uploaded both columns, reporting higher result
043b4301.d	1201980562	CXC2	28-NOV-2009 20:49	926319	241358	5.0	CMSD	USE, uploaded both columns, reporting higher result
044b4401.d	WPE091123-10AB	CXC2	28-NOV-2009 21:01		112809	1.0		(b) All okay; (f) Multiple analytes elevated
045b4501.d	WAR090914-99IB	CXC2	28-NOV-2009 21:13		112809	1.0		Clean
046b4601.d	1201978549	CXC2	28-NOV-2009 21:25	926342	10-589-1	1.0	TB	USE, uploaded both columns, reporting lower result
047b4701.d	1201980615	CXC2	28-NOV-2009 21:37	926342	10-589-1	1.0	MB	USE, uploaded both columns, reporting lower result
048b4801.d	1201980622	CXC2	28-NOV-2009 21:49	926342	10-589-1	1.0	LCS	USE, uploaded both columns, reporting lower result
049b4901.d	1201980623	CXC2	28-NOV-2009 22:01	926342	10-589-1	1.0	TLCS	USE, uploaded both columns, reporting lower result
050b5001.d	1201980624	CXC2	28-NOV-2009 22:13	926342	10-589-1	1.0	CLCS	USE, uploaded both columns, reporting lower result
051b5101.d	WPE091123-10AB	CXC2	28-NOV-2009 22:25		112809	1.0		(b) DDT, Methoxychlor elevated; (f) Multiple analtyes elevated
052b5201.d	WAR090914-99IB	CXC2	28-NOV-2009 22:37		112809	1.0		Clean
053b5301.d	241504001	CXC2	28-NOV-2009 22:49	926342	10-589-1	1.0	LANL	USE, uploaded both columns, reporting lower result
054b5401.d	241504002	CXC2	28-NOV-2009 23:01	926342	10-589-1	1.0	LANL	USE, uploaded both columns, reporting lower result
055b5501.d	1201980616	CXC2	28-NOV-2009 23:13	926342	10-589-1	1.0	MS	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201980619	CXC2	28-NOV-2009 23:25	926342	10-589-1	1.0	MSD	USE, uploaded both columns, reporting lower result
057b5701.d	1201980617	CXC2	28-NOV-2009 23:37	926342	10-589-1	1.0	TMS	USE, uploaded both columns, reporting lower result
058b5801.d	1201980620	CXC2	28-NOV-2009 23:49	926342	10-589-1	1.0	TMSD	USE, uploaded both columns, reporting lower result
059b5901.d	1201980618	CXC2	29-NOV-2009 00:00	926342	10-589-1	1.0	CMS	USE, uploaded both columns, reporting lower result
060b6001.d	1201980621	CXC2	29-NOV-2009 00:12	926342	10-589-1	1.0	CMSD	USE, uploaded both columns, reporting lower result
061b6101.d	241504003	CXC2	29-NOV-2009 00:24	926342	10-589-1	1.0	LANL	USE, uploaded both columns, reporting lower result
062b6201.d	WPE091123-10AB	CXC2	29-NOV-2009 00:36		112809	1.0		(b) DDT elevated; (f) Multiple analtyes elevated (including DCB)

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/01/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:HXJ1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A
B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112909.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	HXJ1	29-NOV-2009 18:05		112909	1.0		Clean
002b0201.d	WPE091109-99DG	HXJ1	29-NOV-2009 18:17		112909	1.0		(B) DDT 4.2% Endrin 1.4% (F) DDT 1.7% Endrin 1.4%
003b0301.d	WPE091123-10AB	HXJ1	29-NOV-2009 18:29		112909	1.0		DUSE - multiple analyte elevated
004b0401.d	WPE091104-52TX	HXJ1	29-NOV-2009 18:41		112909	1.0		(B) All OK (F) Passes on average/ All OK DODQSM & 8081B
005b0501.d	WPE091021-00CL	HXJ1	29-NOV-2009 18:53		112909	1.0		Elevated - Not target
006b0601.d	WPE091128-01AB	HXJ1	29-NOV-2009 19:05		112909	1.0		INDAB ICAL LEVEL 1
007b0701.d	WPE091128-02AB	HXJ1	29-NOV-2009 19:17		112909	1.0		INDAB ICAL LEVEL 2
008b0801.d	WPE091128-03AB	HXJ1	29-NOV-2009 19:29		112909	1.0		INDAB ICAL LEVEL 3
009b0901.d	WPE091128-04AB	HXJ1	29-NOV-2009 19:41		112909	1.0		INDAB ICAL LEVEL 4
010b1001.d	IPE091128-02AB	HXJ1	29-NOV-2009 19:53		112909	1.0		INDAB ICAL LEVEL 5
011b1101.d	WPE091123-10AB	HXJ1	29-NOV-2009 20:05		112909	1.0		All OK
012b1201.d	WAR090914-99IB	HXJ1	29-NOV-2009 20:17		112909	1.0		Clean
013b1301.d	1201978233	HXJ1	29-NOV-2009 20:28	925346	10-613	1.0	MB	DUSE - DCB low
014b1401.d	1201978234	HXJ1	29-NOV-2009 20:40	925346	10-613	1.0	LCS	DUSE - DCB low
015b1501.d	241549001	HXJ1	29-NOV-2009 20:52	925346	10-613	1.0	LANL	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112909.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016b1601.d	WPE091123-10AB	HXJ1	29-NOV-2009 21:06		112909		1.0		(B) Heptachlor epoxide & gamma-CHL low; Methoyxchlor elevated (F) DDT elevated - CCV failure confirmed in sequence 112809.b
017b1701.d	WAR090914-99IB	HXJ1	29-NOV-2009 21:20		112909		1.0		Clean
018b1801.d	1201981581	HXJ1	29-NOV-2009 21:32	926807	10-578		1.0	MB	USE - uploaded both columns, reporting lower result
019b1901.d	1201981584	HXJ1	29-NOV-2009 21:44	926807	10-578		1.0	LCS	USE - uploaded both columns, reporting lower result (F) 4CMX elevated
020b2001.d	1201981585	HXJ1	29-NOV-2009 21:56	926807	10-578		1.0	TLCS	USE - uploaded both columns, reporting lower result (F) surrogates elevated
021b2101.d	241423004	HXJ1	29-NOV-2009 22:08	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result - Aroclor
022b2201.d	1201981582	HXJ1	29-NOV-2009 22:20	926807	10-578		10.0	MS	USE - uploaded both columns, reporting lower result - Aroclor
023b2301.d	1201981583	HXJ1	29-NOV-2009 22:32	926807	10-578		10.0	MSD	USE - uploaded both columns, reporting lower result - Aroclor
024b2401.d	WAR090914-99IB	HXJ1	29-NOV-2009 22:44		112909		1.0		Clean
025b2501.d	WPE091123-10AB	HXJ1	29-NOV-2009 22:56		112909		1.0		(B) Methoxychlor elevated (F) All OK
026b2601.d	WAR090914-99IB	HXJ1	29-NOV-2009 23:08		112909		1.0		Clean
027b2701.d	241423005	HXJ1	29-NOV-2009 23:20	926807	10-578		10.0	LANL	DUSE - still has sulfur - see re-cleaned vial at 32
028b2801.d	241503002	HXJ1	29-NOV-2009 23:32	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
029b2901.d	241503003	HXJ1	29-NOV-2009 23:44	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result ** hit of DDT below PQL
030b3001.d	241503004	HXJ1	29-NOV-2009 23:56	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
031b3101.d	241524002	HXJ1	30-NOV-2009 00:08	926807	10-600		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
032b3201.d	241423005	HXJ1	30-NOV-2009 00:20	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
033b3301.d	WPE091123-10AB	HXJ1	30-NOV-2009 00:35		112909		1.0		(B) Endrin ketone low (F) gamma-BHC elevated - B&F All OK 8081B
034b3401.d	WAR090914-99IB	HXJ1	30-NOV-2009 00:47		112909		1.0		Clean
035b3501.d	1201979436	HXJ1	30-NOV-2009 00:59	925818	241227		1.0	MB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

Instrument Batch: /chem/ecd5a.i/112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	1201979439	HXJ1	30-NOV-2009 01:11	925818	241227	1.0	LCS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

037b3701.d	241227001	HXJ1	30-NOV-2009 01:23	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
038b3801.d	241227002	HXJ1	30-NOV-2009 01:35	925818	241227	20.0	WSRB	DUSE - surrogates elevated see re-analysis 113009 **HITS gamma- & alpha-CHL, DDE & DDT
039b3901.d	241227003	HXJ1	30-NOV-2009 01:47	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
040b4001.d	241227004	HXJ1	30-NOV-2009 01:59	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
041b4101.d	1201979437	HXJ1	30-NOV-2009 02:11	925818	241227	20.0	MS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
042b4201.d	1201979438	HXJ1	30-NOV-2009 02:23	925818	241227	20.0	MSD	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
043b4301.d	WPE091123-10AB	HXJ1	30-NOV-2009 02:34		112909	1.0		(B) All OK (F) gamma-BHC, gamma-CHL and EndoII elevated for 81A
044b4401.d	WAR090914-99IB	HXJ1	30-NOV-2009 02:46		112909	1.0		Clean
045b4501.d	241227005	HXJ1	30-NOV-2009 02:58	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
046b4601.d	241227006	HXJ1	30-NOV-2009 03:10	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
047b4701.d	241227007	HXJ1	30-NOV-2009 03:22	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
048b4801.d	241227008	HXJ1	30-NOV-2009 03:34	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, DDE & DDD
049b4901.d	241227009	HXJ1	30-NOV-2009 03:46	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
050b5001.d	WPE091123-10AB	HXJ1	30-NOV-2009 03:58		112909	1.0		(B) All OK (F) gamma-BHC & gamma-CHL elevated for 8081A
051b5101.d	WAR090914-99IB	HXJ1	30-NOV-2009 04:10		112909	1.0		Clean
052b5201.d	1201981522	HXJ1	30-NOV-2009 04:22	926780	241451	1.0	MB	DUSE - CCV failure confirmed, reporting analysis 120109.b
053b5301.d	1201981525	HXJ1	30-NOV-2009 04:34	926780	241451	1.0	LCS	DUSE - CCV failure confirmed, reporting analysis 120109.b

054b5401.d	241451001	HXJ1	30-NOV-2009 04:46	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
055b5501.d	241451002	HXJ1	30-NOV-2009 04:58	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b

Instrument Batch: /chem/ecd5a.i/112909.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	241451003	HXJ1	30-NOV-2009 05:10	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
057b5701.d	1201981523	HXJ1	30-NOV-2009 05:22	926780	241451	1.0	MS	DUSE - CCV failure confirmed, reporting analysis 120109.b
058b5801.d	1201981524	HXJ1	30-NOV-2009 05:34	926780	241451	1.0	MSD	DUSE - CCV failure confirmed, reporting analysis 120109.b
059b5901.d	WPE091123-10AB	HXJ1	30-NOV-2009 05:45		112909	1.0		(B)DDT, Meth & E.ketone low for DODQSM; Several analytes low for 8081A (F) DDT & Methoxychlor low for DOD QSM; E.ketone low for 8081A
060b6001.d	WAR090914-99IB	HXJ1	30-NOV-2009 05:57		112909	1.0		Clean
061b6101.d	1201982218	HXJ1	30-NOV-2009 06:09	927124	241358	1.0	MB	DUSE - surrogate failure confirmed, reporting first instance
062b6201.d	1201982219	HXJ1	30-NOV-2009 06:21	927124	241358	1.0	LCS	DUSE - surrogate failure confirmed, reporting first instance
063b6301.d	1201982220	HXJ1	30-NOV-2009 06:33	927124	241358	1.0	LCSD	DUSE - surrogate failure confirmed, reporting first instance
064b6401.d	241358001	HXJ1	30-NOV-2009 06:45	927124	241358	2.0	MECP	DUSE - surrogate failure confirmed, reporting first instance
065b6501.d	WPE091123-10AB	HXJ1	30-NOV-2009 06:57		112909	1.0		Almost every analyte on low both columns
066b6601.d	WAR090914-99IB	HXJ1	30-NOV-2009 07:09		112909	1.0		Matrix carryover
067b1001.d	WPE091123-10AB	CXC2	30-NOV-2009 13:28		112909	1.0		DUSE - for reference only

Instrument Batch: /chem/ecd5a.i/112909.b Page: 4

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926803 **Verified by:** _____

Analyst: Robin Hunt

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981581 MB	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
1201981584 LCS	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
1201981585 LCS	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
241423004	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
1201981582 MS (241423004)	27–NOV–2009 10:04:30	30.03	Florisil	5	1	10	5	0.1665
1201981583 MSD (241423004)	27–NOV–2009 10:04:30	30.02	Florisil	5	1	10	5	0.16656
241423005	27–NOV–2009 10:04:30	30.04	Florisil	5	1	10	5	0.16644
241503002	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
241503003	27–NOV–2009 10:04:30	30	Florisil	5	1	10	5	0.16667
241503004	27–NOV–2009 10:04:30	30.01	Florisil	5	1	10	5	0.16661
241524002	27–NOV–2009 10:04:30	30.02	Florisil	5	1	10	5	0.16656

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981584	PESTSPIKE	UE091121–02	1	mL
LCS	1201981585	Toxaphene TCLP LCS	WE091028–11	2	mL
MS	1201981582	PESTSPIKE	UE091121–02	1	mL
MSD	1201981583	PESTSPIKE	UE091121–02	1	mL
SURR	All	PEST SURROGATE 1000 UG/L	UE091114–07	1	mL
REGNT	All	Hexane	091117–B2	150	mL
REGNT	All	Florisil cartridge 1000mg per cartridge	1103846–28	1	g
REGNT	All	Acetone	1219765	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009

Clean up Initials: RWH

Verified By: JAM

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–036

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
01-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8081A	Solid	LANL
Batch ID:	**Sample Numbers:**		
926807	See Below		

Potentially affected work order(s)(SDG): 241423(10-578),241503(10-589),241524(10-600)

Application Issues:

Failed Yield for Surrogates

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. QC sample 1201981585 (Toxaphene LCS) yielded above the acceptance range for surrogates.	1. While the surrogate yield was outside the acceptance range, all spike recoveries were within acceptance limits. Therefore this non-conformance has no adverse effects on the data.

Originator's Name:

Clairette Campbell 01-DEC-09

Data Validator/Group Leader:

Jimin Cao 04-DEC-09

GC SEMIVOLATILE PESTICIDE ANALYSIS

Pesticide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578-1

Method/Analysis Information

Procedure:	**Analysis of Organochlorine Pesticides and Chlorinated Hydrocarbons by ECD**
Analytical Method:	SW846 8081A
Prep Method:	SW846 3510C
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	927116
Prep Batch Number:	927115
TCLP Prep Batch Number:	926091

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8081A:

Sample ID	Client ID
241424001	WST03-10-2131
241424002	WST03-10-2130
1201980055	TCLP Blank (TB)
1201982197	Method Blank (MB)
1201982204	Laboratory Control Sample (LCS)
1201982205	Laboratory Control Sample (LCS)-Toxaphene LCS Only
1201982206	Laboratory Control Sample (LCS)-Chlordane (tech.) LCS Only
1201982198	241720001(WST49-10-5425) Matrix Spike (MS)
1201982199	241720001(WST49-10-5425) Matrix Spike (MS)-Toxaphene MS Only
1201982200	241720001(WST49-10-5425) Matrix Spike (MS)-Chlordane (tech.) MS Only
1201982201	241720001(WST49-10-5425) Matrix Spike Duplicate (MSD)
1201982202	241720001(WST49-10-5425) Matrix Spike Duplicate (MSD)-Toxaphene MSD Only
1201982203	241720001(WST49-10-5425) Matrix Spike Duplicate (MSD)-Chlordane (tech.) MSD Only

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 10.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

One of the five quantified peaks did not meet the acceptance criteria in Toxaphene standard analyzed for this SDG; however, the average concentration of the five peaks met the acceptance criteria.

Several target analytes failed to meet the acceptance criteria with positive or negative bias on one analytical column in the standards bracketing the samples 241424001 (WST03-10-2131) and 241424002 (WST03-10-2130) in this SDG. However, this non-compliance had no adverse effects on the data as there were no target analytes detected on either of the columns in these samples.

The CCV standard bracketing the QC samples TB, MB and LCS failed to meet the acceptance criteria with negative bias; however this is not likely to affect the data as all QC samples met surrogate and spike recovery acceptance criteria. See NCR#767434 in the Miscellaneous Data section.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-653-1) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD did not meet the acceptance limits for Toxaphene MSD due to relatively higher spike recovery in the MS.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions

Samples 241424001 (WST03-10-2131) and 241424002 (WST03-10-2130) were diluted at 1:10 due to historical data and a strong acidic odor.

Sample Re-extraction/Re-analysis
Re-extraction was not performed for the samples in this SDG.

Miscellaneous Information:

Electronic Package Comment

This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR#767434 was generated for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The lower results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD5A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD5A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/16/09

Roadmap for LANL 10-578-1 PEST

This roadmap was analyzed by cla01575 on 12-08-2009, 14:52.
This roadmap was reviewed by jim01140 on 12-08-2009, 16:08.
This roadmap was packaged by yml on 12-14-2009, 15:48.
This roadmap was validated by jim01140 on 12-16-2009, 10:51.
This roadmap was validated by jim01140 on 12-16-2009, 11:00.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120709a.b/047f4701.d	241424001	sample	08-DEC-2009	02:48	10-578-1.sub	WST03-10-2131	10.00000	927116	USE - uploaded both columns, reporting lower result
■	N	/chem/ecd5a.i/120209.b/068f6801.d	241424001	sample	03-DEC-2009	04:48	10-578-1.sub	WST03-10-2131	10.00000	927116	DUSE - see sequence 120709a.b
☐	N	/chem/ecd5a.i/120709a.b/048f4801.d	241424002	sample	08-DEC-2009	03:00	10-578-1.sub	WST03-10-2130	10.00000	927116	USE - uploaded both columns, reporting lower result
■	N	/chem/ecd5a.i/120209.b/069f6901.d	241424002	sample	03-DEC-2009	05:00	10-578-1.sub	WST03-10-2130	10.00000	927116	DUSE - see sequence 120709a.b

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120709a.b/047b4701.d	241424001	sample	08-DEC-2009	02:48	10-578-1.sub	WST03-10-2131	10.00000	927116	USE - uploaded both columns, reporting lower result
■	N	/chem/ecd5a.i/120209.b/068b6801.d	241424001	sample	03-DEC-2009	04:48	10-578-1.sub	WST03-10-2131	10.00000	927116	DUSE - see sequence 120709a.b
■	N	/chem/ecd5a.i/120709.b/004b0401.d	241424001	sample	07-DEC-2009	08:15	8081.sub	WST03 10-2131	10.00000		
☐	N	/chem/ecd5a.i/120709a.b/048b4801.d	241424002	sample	08-DEC-2009	03:00	10-578-1.sub	WST03-10-2130	10.00000	927116	USE - uploaded both columns, reporting lower result
■	N	/chem/ecd5a.i/120209.b/069b6901.d	241424002	sample	03-DEC-2009	05:00	10-578-1.sub	WST03-10-2130	10.00000	927116	DUSE - see sequence 120709a.b
■	N	/chem/ecd5a.i/120709.b/005b0501.d	241424002	sample	07-DEC-2009	08:27	8081.sub	WST03-10-2130	10.00000		

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120209.b/062f6201.d	1201980055	tb	03-DEC-2009	03:36	10-578-1.sub	TBLK01	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/064f6401.d	1201982197	mb	03-DEC-2009	04:00	10-578-1.sub	PBLK01	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/065f6501.d	1201982204	lcs	03-DEC-2009	04:12	10-578-1.sub	PBLK01LCS	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/066f6601.d	1201982205	lcs	03-DEC-2009	04:24	10-578-1.sub	PBLK01TLCS	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/067f6701.d	1201982206	lcs	03-DEC-2009	04:36	10-578-1.sub	PBLK01CLCS	1.00000	927116	USE - uploaded both columns, reporting lower result

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120209.b/062b6201.d	1201980055	tb	03-DEC-2009	03:36	10-578-1.sub	TBLK01	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/064b6401.d	1201982197	mb	03-DEC-2009	04:00	10-578-1.sub	PBLK01	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/065b6501.d	1201982204	lcs	03-DEC-2009	04:12	10-578-1.sub	PBLK01LCS	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/066b6601.d	1201982205	lcs	03-DEC-2009	04:24	10-578-1.sub	PBLK01TLCS	1.00000	927116	USE - uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120209.b/067b6701.d	1201982206	lcs	03-DEC-2009	04:36	10-578-1.sub	PBLK01CLCS	1.00000	927116	USE - uploaded both columns, reporting lower result

SAMPLE DATA SUMMARY

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424002**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2130**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**10**
Run Date:	**12/08/2009 03:00**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**048f4801.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	048b4801.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**10**
Run Date:	**12/08/2009 02:48**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**047f4701.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	047b4701.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

QUALITY CONTROL SUMMARY

Pesticide

Surrogate Recovery Report

SDG Number: 10–578–1

Matrix Type: TCLP SOLID

CAP Column (1) : CLP–1 **CAP Column (2) : CLP–2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201980055	TB for batch 926091	76		64		78		64	
1201982197	MB for batch 927115	74		62		80		59	
1201982204	LCS for batch 927115	57		47		64		44	
1201982205	LCS for batch 927115	63		48		75		53	
1201982206	LCS for batch 927115	71		64		73		62	
241424001	WST03–10–2131	71	D	76	D	69	D	63	D
241424002	WST03–10–2130	80	D	86	D	90	D	79	D

Surrogate	Acceptance Limits
4CMX = 4cmx	(29%–103%)
DCB = Decachlorobiphenyl	(34%–118%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–578–1
Client ID: LCS for batch 927115
Lab Sample ID: 1201982206
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 04:36
Dilution: 1
Prep Batch ID: 927115
Batch ID: 927116

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
57–74–9	LCS Chlordane (tech.)	0.100	0.0	0.0683	68	38–131

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578-1
Client ID: LCS for batch 927115
Lab Sample ID: 1201982204
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 04:12
Dilution: 1
Prep Batch ID: 927115
Batch ID: 927116

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
58-89-9	LCS	gamma-BHC (Lindane)	0.005	0.0	0.00288	58	49-138
76-44-8	LCS	Heptachlor	0.005	0.0	0.00288	58	38-132
1024-57-3	LCS	Heptachlor epoxide	0.005	0.0	0.00268	54	49-134
72-20-8	LCS	Endrin	0.005	0.0	0.00315	63	56-145
72-43-5	LCS	Methoxychlor	0.050	0.0	0.0357	71	53-151

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578-1
Client ID: LCS for batch 927115
Lab Sample ID: 1201982205
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/03/2009 04:24
Dilution: 1
Prep Batch ID: 927115
Batch ID: 927116

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
8001-35-2	LCS Toxaphene	0.100	0.0	0.0731	73	41-143

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MS
Lab Sample ID: 1201982200
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP S
Analysis Date: 12/08/2009 02:00
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
57-74-9	MS	Chlordane (tech.)	0.100	0.00	U	0.0662	66	38-134

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MSD
Lab Sample ID: 1201982203
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/08/2009 02:12
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
57-74-9	MSD Chlordane (tech.)	0.100	0.00	U	0.0573	57	38-134	14	0-30

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MS
Lab Sample ID: 1201982198
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP S
Analysis Date: 12/08/2009 01:12
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
58-89-9	MS	gamma-BHC (Lindane)	0.005	0.00	U	0.00355	71	46-132
76-44-8	MS	Heptachlor	0.005	0.00	U	0.00409	82	37-127
1024-57-3	MS	Heptachlor epoxide	0.005	0.00	U	0.0038	76	44-129
72-20-8	MS	Endrin	0.005	0.00	U	0.00421	84	48-145
72-43-5	MS	Methoxychlor	0.050	0.00	U	0.0488	98	47-156

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–653–1
Client ID: WST49–10–5425MSD
Lab Sample ID: 1201982201
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/08/2009 01:24
Dilution: 10
Prep Batch ID: 927115
Batch ID: 927116

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
58–89–9	MSD gamma–BHC (Lindane)	0.005	0.00	U	0.00418	84	46–132	16	0–30
76–44–8	MSD Heptachlor	0.005	0.00	U	0.00423	85	37–127	3	0–30
1024–57–3	MSD Heptachlor epoxide	0.005	0.00	U	0.00415	83	44–129	9	0–30
72–20–8	MSD Endrin	0.005	0.00	U	0.00445	89	48–145	6	0–30
72–43–5	MSD Methoxychlor	0.050	0.00	U	0.053	106	47–156	8	0–30

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MS
Lab Sample ID: 1201982199
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP S
Analysis Date: 12/08/2009 01:36
Prep Batch ID: 927115
Batch ID: 927116
Dilution: 10

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
8001-35-2	MS	Toxaphene	0.100	0.00	U	0.110	110	38-138

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-653-1
Client ID: WST49-10-5425MSD
Lab Sample ID: 1201982202
Instrument: ECD5A.I
Analyst: CXC2
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP S
Analysis Date: 12/08/2009 01:48
Dilution: 10
Prep Batch ID: 927115
Batch ID: 927116

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
8001-35-2	MSD Toxaphene	0.100	0.00	U	0.0791	79	38-138	33 *	0-30

Method Blank Summary

SDG Number:	10-578-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 927115	Instrument ID:	ECD5A.I_2 ECD5A.I_1	Data File:	064b6401-600.d 064f6401-600.d
Lab Sample ID:	1201982197				
Column:	CLP-2 CLP-1	Prep Date:	12/01/2009 18:05	Analyzed:	12/03/09 04:00
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 TB for batch 926091	1201980055	062f6201-600.d 062b6201-600.d	12/03/09	0336
02 LCS for batch 927115	1201982204	065f6501-600.d 065b6501-600.d	12/03/09	0412
03 LCS for batch 927115	1201982205	066f6601-600.d 066b6601-600.d	12/03/09	0424
04 LCS for batch 927115	1201982206	067f6701-600.d 067b6701-600.d	12/03/09	0436
11 WST03-10-2131	241424001	047f4701.d 047b4701.d	12/08/09	0248
12 WST03-10-2130	241424002	048f4801.d 048b4801.d	12/08/09	0300

SAMPLE
DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1	**Date Collected:**	11/17/2009 12:00	**Matrix:**	TCLP S
Lab Sample ID:	241424002	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/08/2009 03:00	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	048f4801.d	**Column:**	1 CLP-1	**Level:**	LOW
	048b4801.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/048f4801.d
Lab Smp Id: 241424002 Client Smp ID: WST03-10-2130
Inj Date : 08-DEC-2009 03:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |241424002|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 48
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.404	2.409	-0.005	7042809	15.9122	0.00796	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.343	6.344	-0.001	4710272	17.9249	0.00896	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/048f4801.d

Date : 08-DEC-2009 03:00

Client ID: WST03-10-2130

Sample Info: |241424002|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

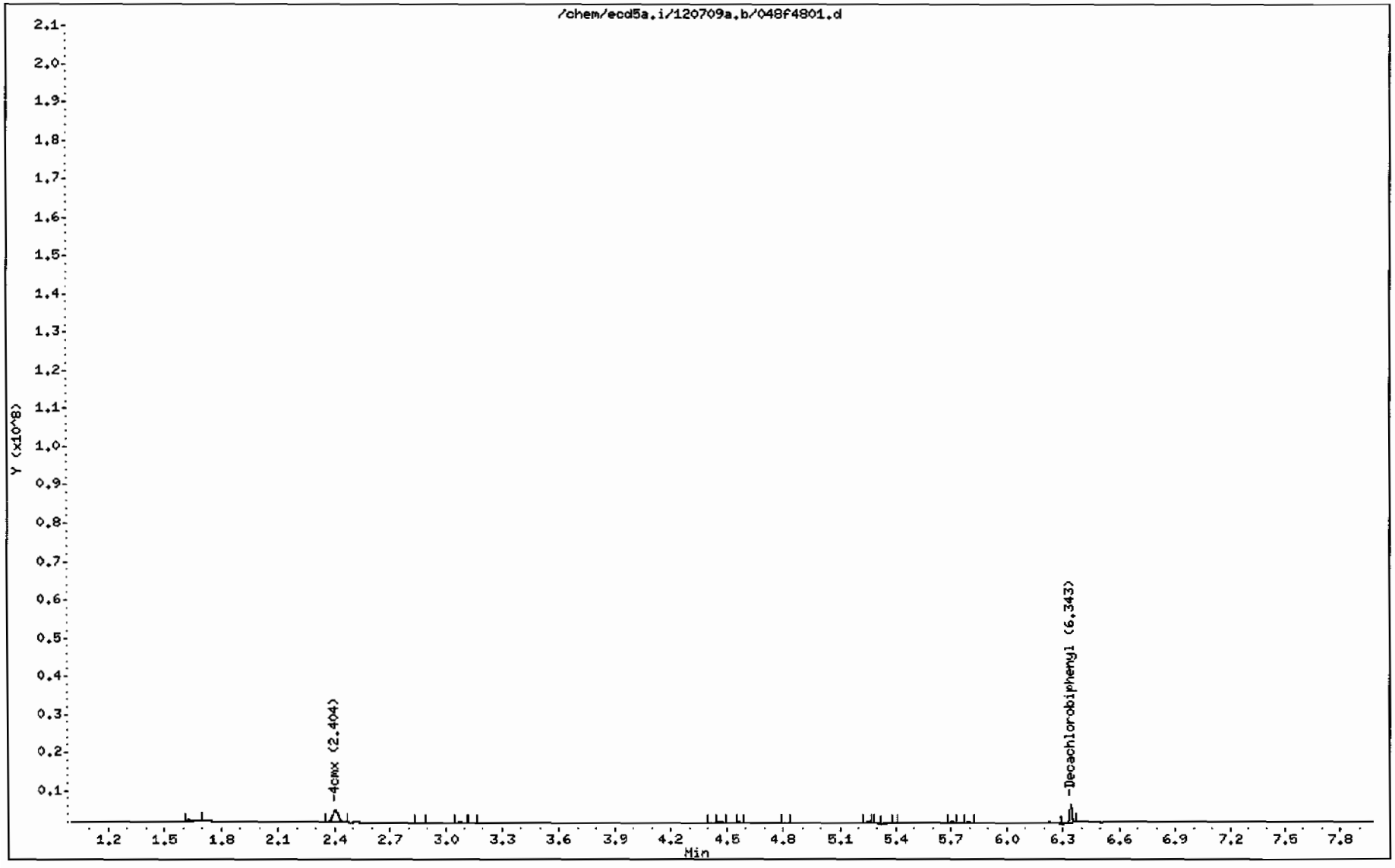

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CLP-2

Data file : /chem/ecd5a.i/120709a.b/048b4801.d
Lab Smp Id: 241424002 Client Smp ID: WST03-10-2130
Inj Date : 08-DEC-2009 03:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |241424002|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 48
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.059	2.064	-0.005	85373225	17.1439	0.00857	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	44064846	15.8843	0.00794	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/048b4801.d

Date : 08-DEC-2009 03:00

Client ID: WST03-10-2130

Sample Info: |241424002|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

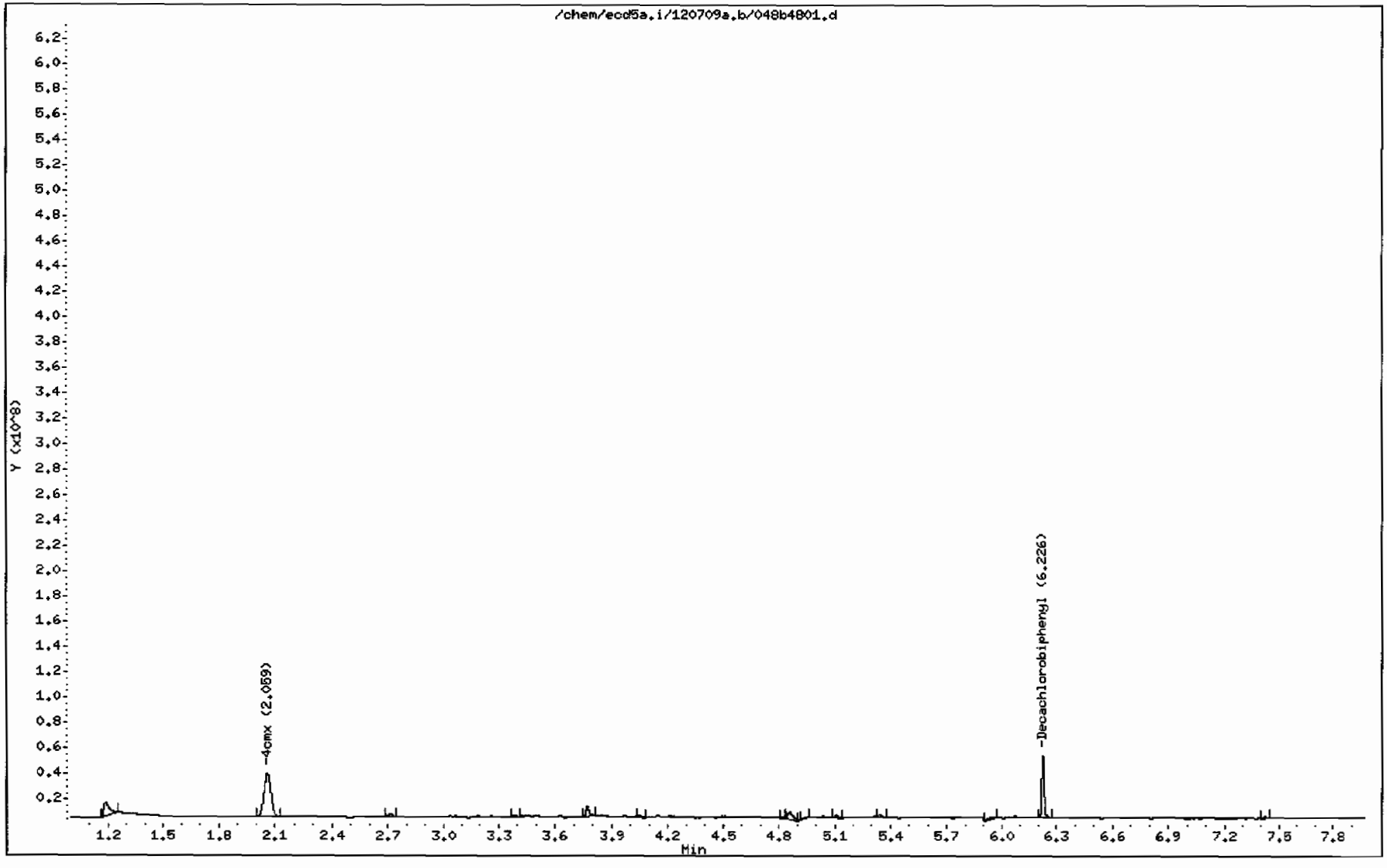

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1	**Date Collected:**	11/17/2009 12:00	**Matrix:**	TCLP S
Lab Sample ID:	241424001	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/08/2009 02:48	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	047f4701.d	**Column:**	1 CLP-1	**Level:**	LOW
	047b4701.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.002	mg/L	0.0005	0.002	1
76-44-8	Heptachlor	U	0.002	mg/L	0.0005	0.002	1
1024-57-3	Heptachlor epoxide	U	0.002	mg/L	0.0005	0.002	1
72-20-8	Endrin	U	0.004	mg/L	0.001	0.004	1
72-43-5	Methoxychlor	U	0.020	mg/L	0.005	0.020	1
57-74-9	Chlordane (tech.)	U	0.025	mg/L	0.00765	0.025	1
8001-35-2	Toxaphene	U	0.050	mg/L	0.015	0.050	1

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/047f4701.d
Lab Smp Id: 241424001 Client Smp ID: WST03-10-2131
Inj Date : 08-DEC-2009 02:48
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |241424001|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 47
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	6255204	14.1327	0.00707	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	3607706	13.7291	0.00686	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/047f4701.d
Date : 08-DEC-2009 02:48
Client ID: WST03-10-2131
Sample Info: |241424001|10|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

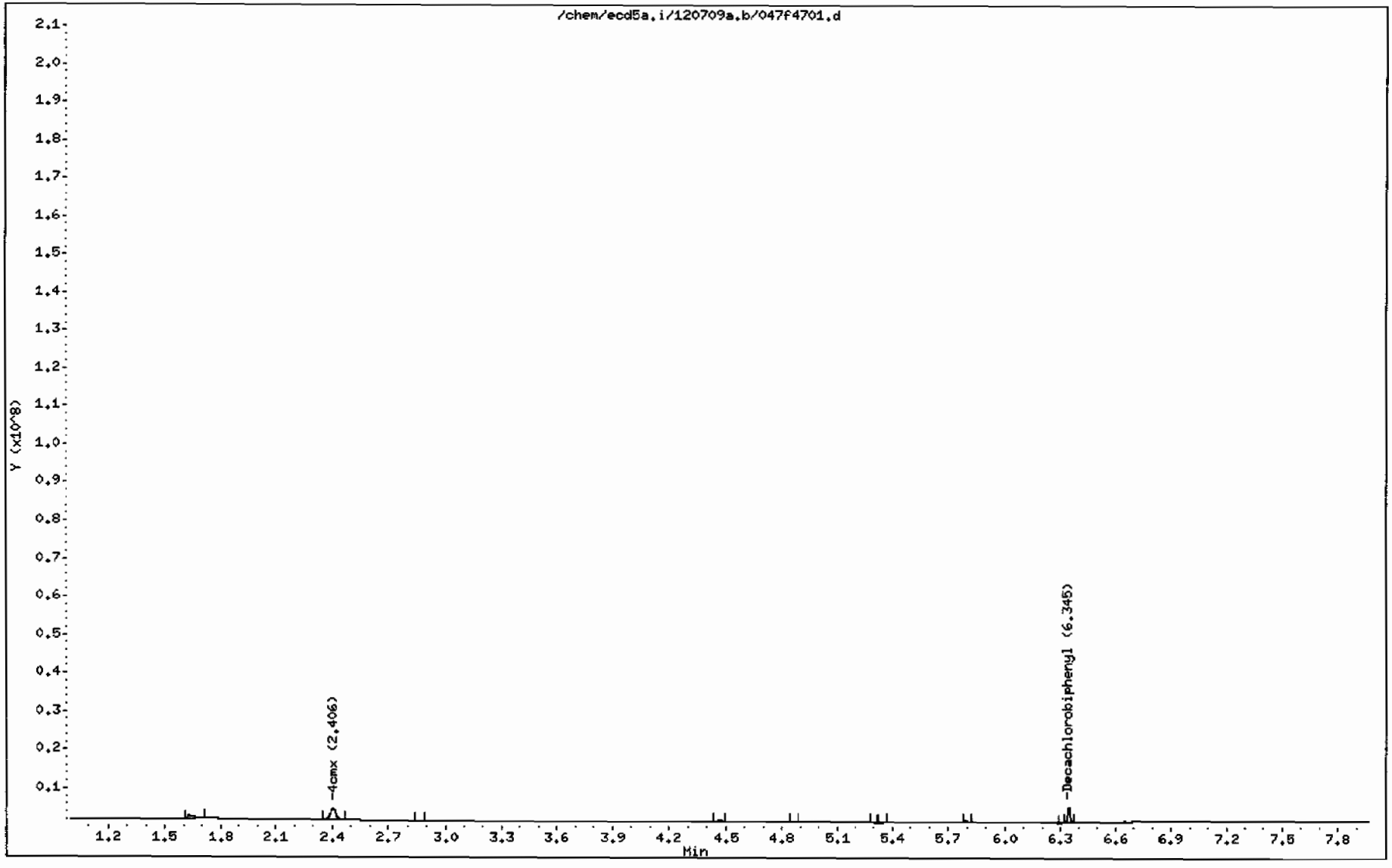

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CLP-2

Data file : /chem/ecd5a.i/120709a.b/047b4701.d
Lab Smp Id: 241424001 Client Smp ID: WST03-10-2131
Inj Date : 08-DEC-2009 02:48
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |241424001|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 47
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.061	2.064	-0.003	75413716	15.1439	0.00757	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.228	6.226	0.002	35119170	12.6596	0.00633	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/047b4701.d
Date : 08-DEC-2009 02:48
Client ID: WST03-10-2131
Sample Info: |241424001|10|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

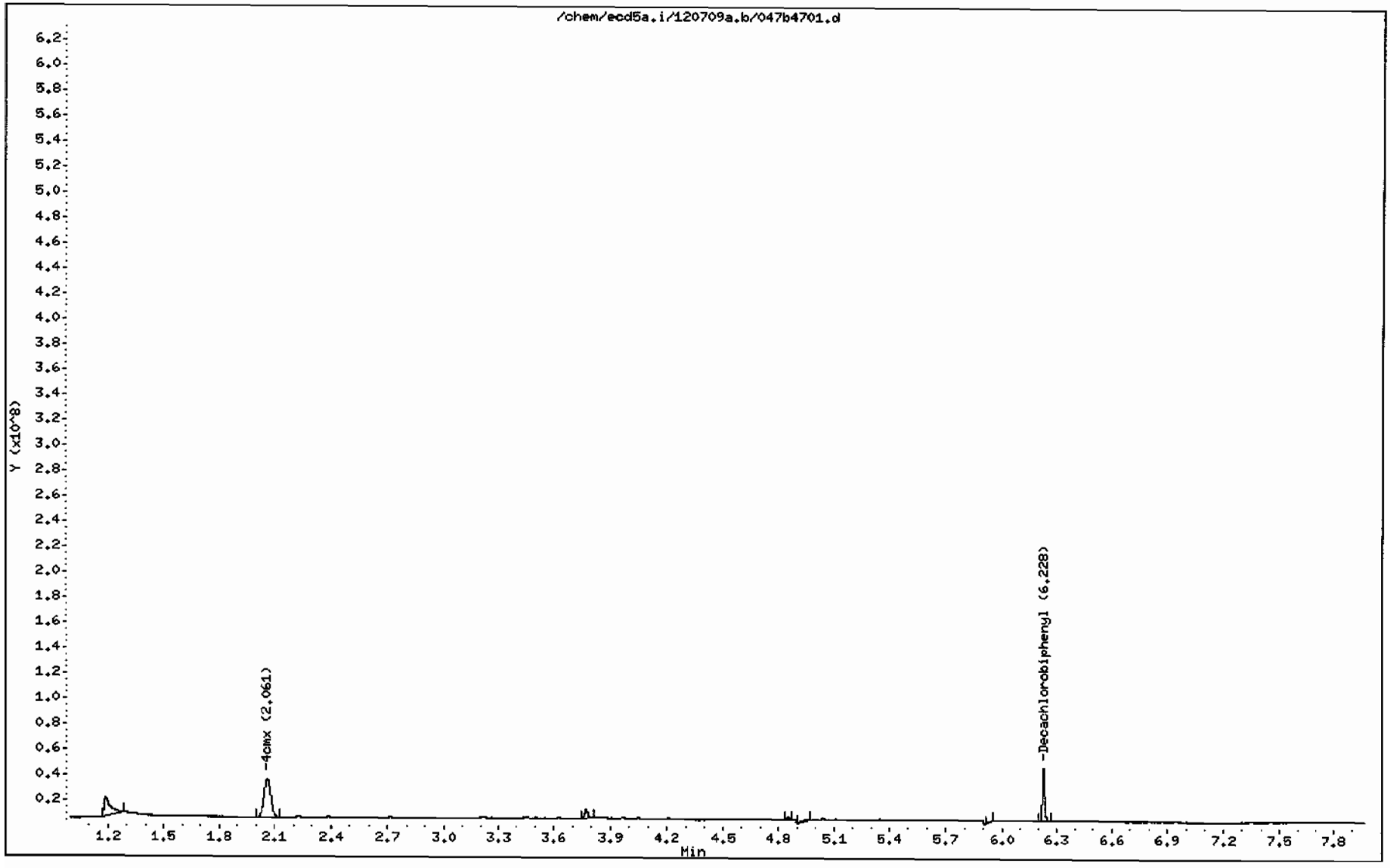

STANDARDS DATA

Report Date: 08-Dec-2009 12:15

Calibration History

Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
30-NOV-2009 16:51	gapa	/chem/ecd5a.i/113009.b/013f1301.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006f0601.d
30-NOV-2009 15:29	chlor	/chem/ecd5a.i/113009.b/007f0701.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010f1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006f0601.d
Cal Level: 2 , Cal Amount: 10.00000		
30-NOV-2009 17:03	gapa	/chem/ecd5a.i/113009.b/014f1401.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007f0701.d
30-NOV-2009 15:41	chlor	/chem/ecd5a.i/113009.b/008f0801.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011f1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007f0701.d
Cal Level: 3 , Cal Amount: 50.00000		
30-NOV-2009 17:15	gapa	/chem/ecd5a.i/113009.b/015f1501.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008f0801.d
30-NOV-2009 15:53	chlor	/chem/ecd5a.i/113009.b/009f0901.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012f1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008f0801.d
Cal Level: 4 , Cal Amount: 100.00000		
30-NOV-2009 17:27	gapa	/chem/ecd5a.i/113009.b/016f1601.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024f2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023f2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022f2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015f1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013f1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009f0901.d
30-NOV-2009 16:05	chlor	/chem/ecd5a.i/113009.b/010f1001.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013f1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009f0901.d
Cal Level: 5 , Cal Amount: 200.00000		
30-NOV-2009 17:39	gapa	/chem/ecd5a.i/113009.b/017f1701.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010f1001.d
30-NOV-2009 16:28	chlor	/chem/ecd5a.i/113009.b/011f1101.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014f1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010f1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:39	2,4,5-TCP	/chem/ecd5a.i/120209.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 11:18	indab	/chem/ecd5a.i/120209.b/099f9901.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:04	chlor	/chem/ecd5a.i/120209.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:52	tox	/chem/ecd5a.i/120209.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 10:23	indab	/chem/ecd5a.i/120209.b/096f9601.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 07:48	indab	/chem/ecd5a.i/120209.b/083f8301.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 05:24	indab	/chem/ecd5a.i/120209.b/071f7101.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 03:12	indab	/chem/ecd5a.i/120209.b/060f6001.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 01:13	indab	/chem/ecd5a.i/120209.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 23:37	indab	/chem/ecd5a.i/120209.b/042f4201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 22:49	indab	/chem/ecd5a.i/120209.b/038f3801.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 21:38	indab	/chem/ecd5a.i/120209.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 19:14	indab	/chem/ecd5a.i/120209.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:19	gapa	/chem/ecd5a.i/120209.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:40	indab	/chem/ecd5a.i/120209.b/003f0301.d

Report Date: 08-Dec-2009 12:15

Calibration History

Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
30-NOV-2009 16:51	gapa	/chem/ecd5a.i/113009.b/013b1301.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006b0601.d
30-NOV-2009 15:29	chlor	/chem/ecd5a.i/113009.b/007b0701.d
28-NOV-2009 14:15	tox	/chem/ecd5a.i/112809.b/010b1001.d
29-NOV-2009 19:05	indab	/chem/ecd5a.i/112909.b/006b0601.d
Cal Level: 2 , Cal Amount: 10.00000		
30-NOV-2009 17:03	gapa	/chem/ecd5a.i/113009.b/014b1401.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007b0701.d
30-NOV-2009 15:41	chlor	/chem/ecd5a.i/113009.b/008b0801.d
28-NOV-2009 14:27	tox	/chem/ecd5a.i/112809.b/011b1101.d
29-NOV-2009 19:17	indab	/chem/ecd5a.i/112909.b/007b0701.d
Cal Level: 3 , Cal Amount: 50.00000		
30-NOV-2009 17:15	gapa	/chem/ecd5a.i/113009.b/015b1501.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008b0801.d
30-NOV-2009 15:53	chlor	/chem/ecd5a.i/113009.b/009b0901.d
28-NOV-2009 14:39	tox	/chem/ecd5a.i/112809.b/012b1201.d
29-NOV-2009 19:29	indab	/chem/ecd5a.i/112909.b/008b0801.d
Cal Level: 4 , Cal Amount: 100.00000		
30-NOV-2009 17:27	gapa	/chem/ecd5a.i/113009.b/016b1601.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024b2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023b2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022b2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015b1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013b1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009b0901.d
30-NOV-2009 16:05	chlor	/chem/ecd5a.i/113009.b/010b1001.d
28-NOV-2009 14:51	tox	/chem/ecd5a.i/112809.b/013b1301.d
29-NOV-2009 19:41	indab	/chem/ecd5a.i/112909.b/009b0901.d
Cal Level: 5 , Cal Amount: 200.00000		
30-NOV-2009 17:39	gapa	/chem/ecd5a.i/113009.b/017b1701.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010b1001.d
30-NOV-2009 16:28	chlor	/chem/ecd5a.i/113009.b/011b1101.d
28-NOV-2009 15:03	tox	/chem/ecd5a.i/112809.b/014b1401.d
29-NOV-2009 19:53	indab	/chem/ecd5a.i/112909.b/010b1001.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 11:18	indab	/chem/ecd5a.i/120209.b/099b9901.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 10:23	indab	/chem/ecd5a.i/120209.b/096b9601.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:04	chlor	/chem/ecd5a.i/120209.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 07:48	indab	/chem/ecd5a.i/120209.b/083b8301.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 05:24	indab	/chem/ecd5a.i/120209.b/071b7101.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 01:13	indab	/chem/ecd5a.i/120209.b/050b5001.d
Ccal Level: 4 , Ccal Amount: 100		
03-DEC-2009 03:12	indab	/chem/ecd5a.i/120209.b/060b6001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 23:37	indab	/chem/ecd5a.i/120209.b/042b4201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 22:49	indab	/chem/ecd5a.i/120209.b/038b3801.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 21:38	indab	/chem/ecd5a.i/120209.b/032b3201.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 19:14	indab	/chem/ecd5a.i/120209.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 16:19	gapa	/chem/ecd5a.i/120209.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:52	tox	/chem/ecd5a.i/120209.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 100		
02-DEC-2009 15:40	indab	/chem/ecd5a.i/120209.b/003b0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 11:29 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.573	2.543-2.603	4.127e+05
63 2,4,5-Trichlorophenol	0.740	0.640-0.840	
59 Hexachlorobenzene	2.997	2.897-3.097	4.053e+05
2 Aroclor-1221	2.631	2.601-2.661	5.910e+03
	2.767	2.736-2.796	3.363e+03
	2.802	2.772-2.832	1.422e+04
3 Aroclor-1016	3.102	3.072-3.132	1.760e+04
	3.460	3.430-3.490	2.200e+04
	3.686	3.656-3.716	8.402e+03
	3.702	3.672-3.732	8.144e+03
	3.839	3.809-3.869	1.168e+04
4 Aroclor-1232	3.104	3.074-3.134	7.998e+03
	3.248	3.218-3.278	2.167e+03
	3.459	3.430-3.490	1.042e+04
	3.555	3.525-3.585	6.943e+03
	4.119	4.089-4.149	4.959e+03
5 alpha-BHC	3.163	3.133-3.193	5.337e+05
6 Aroclor-1242	3.103	3.003-3.203	1.426e+04
	3.460	3.360-3.560	1.830e+04
	3.600	3.500-3.700	7.474e+03
	4.118	4.018-4.218	9.828e+03
	4.137	4.037-4.237	9.417e+03
7 gamma-BHC (Lindane)	3.447	3.417-3.477	4.666e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.763	3.663-3.863	1.521e+04
	4.422	4.322-4.522	8.885e+03
	4.546	4.446-4.646	4.838e+04
	4.631	4.531-4.731	7.431e+04
	4.766	4.666-4.866	3.988e+03
9 Aroclor-1248	3.686	3.586-3.786	1.281e+04
	3.839	3.739-3.939	1.679e+04
	3.897	3.797-3.997	1.095e+04
	4.119	4.019-4.219	2.029e+04
	4.509	4.409-4.609	9.814e+03
10 Heptachlor	3.824	3.794-3.854	4.090e+05
11 Aldrin	4.044	4.014-4.074	4.406e+05
12 beta-BHC	3.525	3.495-3.555	2.122e+05
13 delta-BHC	3.666	3.636-3.696	4.909e+05
14 Heptachlor epoxide	4.464	4.434-4.494	3.972e+05
15 Aroclor-1254	4.090	4.060-4.120	1.481e+04
	4.257	4.227-4.287	2.571e+04
	4.509	4.479-4.539	2.679e+04
	4.679	4.649-4.709	2.010e+04
	4.960	4.930-4.990	2.920e+04
16 Endosulfan I	4.720	4.690-4.750	3.588e+05
17 gamma-Chlordane	4.546	4.516-4.576	3.909e+05
18 alpha-Chlordane	4.632	4.602-4.662	3.796e+05
19 4,4'-DDE	4.681	4.651-4.711	3.941e+05
20 Dieldrin	4.872	4.842-4.902	3.839e+05
21 Aroclor-1260	4.621	4.521-4.721	2.245e+04
	4.788	4.688-4.888	3.535e+04
	4.866	4.766-4.966	1.482e+04
	4.960	4.860-5.060	3.945e+04
	5.358	5.258-5.458	4.235e+04
22 Endrin	5.017	4.987-5.047	3.283e+05
23 Toxaphene	4.660	4.630-4.690	2.144e+03
	4.875	4.845-4.905	5.628e+03
	4.931	4.901-4.961	5.158e+03
	4.967	4.937-4.997	6.906e+03
	5.149	5.119-5.179	1.145e+04
24 Endosulfan II	5.154	5.124-5.184	3.108e+05
25 4,4'-DDD	5.051	5.021-5.081	3.085e+05
26 4,4'-DDT	5.219	5.189-5.249	2.459e+05
27 Endrin aldehyde	5.408	5.378-5.438	2.729e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.503	5.473-5.533	1.181e+05
	29 Endosulfan sulfate	5.668	5.638-5.698	2.955e+05
	30 Aroclor-1268	5.050	4.950-5.150	
		5.067	4.967-5.167	
		5.185	5.085-5.285	
		5.378	5.278-5.478	
		5.531	5.431-5.631	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	5.839	5.809-5.869	3.247e+05
	51 Mirex	5.611	5.581-5.641	2.509e+05
	52 C-Nonachlor	5.039	5.009-5.069	4.150e+05
	53 O-Chlordane	4.400	4.370-4.430	3.312e+05
	54 T-Nonachlor	4.625	4.595-4.655	3.518e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.464	4.434-4.494	2.324e+05
	58 2,4-DDD	4.794	4.764-4.824	2.045e+05
	57 2,4-DDT	4.950	4.920-4.980	1.826e+05
$	32 Decachlorobiphenyl	6.422	6.392-6.452	1.695e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 11:29 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	92700.000000
Initial:End Threshold	46350.000000
Initial:Area Threshold	927000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.121	2.091-2.151	4.515e+06
61 2,4,5-Trichlorophenol	1.631	1.531-1.731	
59 Hexachlorobenzene	2.637	2.607-2.667	4.473e+06
2 Aroclor-1221	3.136	3.107-3.167	3.819e+04
	3.255	3.225-3.285	2.282e+04
	3.304	3.274-3.334	7.878e+04
3 Aroclor-1016	3.947	3.917-3.977	1.293e+05
	4.040	4.010-4.070	8.559e+04
	4.110	4.080-4.140	5.407e+04
	4.171	4.141-4.201	5.109e+04
	4.351	4.321-4.381	6.850e+04
4 Aroclor-1232	3.304	3.275-3.334	5.230e+04
	3.949	3.919-3.979	5.701e+04
	4.040	4.010-4.070	3.929e+04
	4.350	4.320-4.380	3.045e+04
	4.622	4.592-4.652	3.317e+04
5 alpha-BHC	2.793	2.763-2.823	6.310e+06
6 Aroclor-1242	3.618	3.588-3.648	8.644e+04
	4.040	4.010-4.070	6.791e+04
	4.109	4.079-4.139	4.340e+04
	4.350	4.320-4.380	5.437e+04
	4.430	4.400-4.460	5.974e+04
7 gamma-BHC (Lindane)	3.106	3.076-3.136	5.481e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.334	3.304-3.364	1.963e+05
	4.050	4.020-4.080	1.071e+05
	4.194	4.164-4.224	4.886e+05
	4.288	4.258-4.318	3.826e+05
	4.438	4.408-4.468	4.103e+04
9 Aroclor-1248	4.172	4.142-4.202	7.431e+04
	4.351	4.321-4.381	9.433e+04
	4.431	4.401-4.461	1.002e+05
	4.592	4.562-4.622	1.083e+05
	4.768	4.738-4.798	1.138e+05
10 Heptachlor	3.444	3.414-3.474	4.460e+06
11 Aldrin	3.675	3.645-3.705	4.984e+06
12 beta-BHC	3.186	3.156-3.216	2.438e+06
13 delta-BHC	3.410	3.380-3.440	5.431e+06
14 Heptachlor epoxide	4.070	4.040-4.100	4.197e+06
15 Aroclor-1254	4.619	4.589-4.649	9.484e+04
	4.734	4.704-4.764	1.078e+05
	5.023	4.993-5.053	1.477e+05
	5.158	5.128-5.188	1.045e+05
	5.481	5.451-5.511	1.267e+05
16 Endosulfan I	4.320	4.290-4.350	3.848e+06
17 gamma-Chlordane	4.194	4.164-4.224	4.466e+06
18 alpha-Chlordane	4.288	4.258-4.318	4.307e+06
19 4,4'-DDE	4.401	4.371-4.431	4.093e+06
20 Dieldrin	4.493	4.463-4.523	4.057e+06
21 Aroclor-1260	5.043	5.013-5.073	6.157e+04
	5.140	5.110-5.170	1.370e+05
	5.261	5.231-5.291	1.523e+05
	5.481	5.451-5.511	1.467e+05
	6.079	6.049-6.109	1.563e+05
22 Endrin	4.679	4.649-4.709	3.533e+06
23 Toxaphene	4.553	4.523-4.583	3.946e+04
	4.782	4.752-4.812	5.053e+04
	4.802	4.772-4.832	7.541e+04
	4.861	4.831-4.891	1.327e+05
	5.018	4.988-5.048	7.494e+04
24 Endosulfan II	4.809	4.779-4.839	3.350e+06
25 4,4'-DDD	4.754	4.724-4.784	3.483e+06
26 4,4'-DDT	4.940	4.910-4.970	2.564e+06
27 Endrin aldehyde	5.013	4.983-5.043	2.760e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m

Compound	RT	RT Window	RF
28 Methoxychlor	5.346	5.316-5.376	8.575e+05
29 Endosulfan sulfate	5.176	5.146-5.206	3.045e+06
30 Aroclor-1268	5.217	5.187-5.247	
	5.596	5.566-5.626	
	5.628	5.598-5.658	
	5.769	5.739-5.799	
	6.149	6.119-6.179	
60 Aroclor-1262	4.689	4.589-4.789	
	4.779	4.679-4.879	
	5.074	4.974-5.174	
	5.224	5.124-5.324	
	5.396	5.296-5.496	
31 Endrin ketone	5.492	5.462-5.522	3.461e+06
51 Mirex	5.470	5.440-5.500	2.725e+06
52 C-Nonachlor	4.735	4.705-4.765	4.601e+06
53 O-Chlordane	4.011	3.981-4.041	3.689e+06
54 T-Nonachlor	4.256	4.226-4.286	4.007e+06
55 1,2-Dichlorobenzene	6.619	6.589-6.649	
56 2,4-DDE	4.204	4.174-4.234	2.557e+06
58 2,4-DDD	4.525	4.495-4.555	2.313e+06
57 2,4-DDT	4.710	4.680-4.740	1.910e+06
$ 32 Decachlorobiphenyl	6.214	6.184-6.244	3.204e+06

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/113009.b/013f1301.d
Level 2: /chem/ecd5a.i/113009.b/014f1401.d
Level 3: /chem/ecd5a.i/113009.b/015f1501.d
Level 4: /chem/ecd5a.i/113009.b/016f1601.d
Level 5: /chem/ecd5a.i/113009.b/017f1701.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	459493	404841	390998	387075	383854	405252	7.738
2 Aroclor-1221(1)	+++++	+++++	+++++	5910	+++++	5910	0.000
(2)	+++++	+++++	+++++	3363	+++++	3363	0.000
(3)	+++++	+++++	+++++	14218	+++++	14218	0.000
3 Aroclor-1016(1)	18316	18455	17930	17404	15906	17602	5.863
(2)	21725	22828	22310	22663	20456	21996	4.360
(3)	8841	8543	8438	8235	7951	8402	3.973
(4)	8274	8363	8182	8166	7736	8144	2.968
(5)	11759	11851	11816	11833	11120	11676	2.678
4 Aroclor-1232(1)	+++++	+++++	+++++	7998	+++++	7998	0.000
(2)	+++++	+++++	+++++	2167	+++++	2167	0.000
(3)	+++++	+++++	+++++	10425	+++++	10425	0.000
(4)	+++++	+++++	+++++	6943	+++++	6943	0.000
(5)	+++++	+++++	+++++	4959	+++++	4959	0.000
5 alpha-BHC	491739	508089	538268	551826	578483	533681	6.472
6 Aroclor-1242(1)	+++++	+++++	+++++	14263	+++++	14263	0.000
(2)	+++++	+++++	+++++	18303	+++++	18303	0.000
(3)	+++++	+++++	+++++	7474	+++++	7474	0.000
(4)	+++++	+++++	+++++	9828	+++++	9828	0.000
(5)	+++++	+++++	+++++	9417	+++++	9417	0.000
7 gamma-BHC (Lindane)	434473	449351	470116	477498	501412	466570	5.540
8 Chlordane (tech.)(1)	14752	15409	14812	14855	16225	15211	4.110
(2)	8428	8540	8998	8860	9600	8885	5.195
(3)	46010	46727	49533	49062	50586	48384	4.004
(4)	71000	72641	76714	74554	76618	74305	3.358
(5)	4495	4292	3645	3545	3960	3988	10.216

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
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Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	12812	+++++	12812	0.000
(2)	+++++	+++++	+++++	16794	+++++	16794	0.000
(3)	+++++	+++++	+++++	10955	+++++	10955	0.000
(4)	+++++	+++++	+++++	20294	+++++	20294	0.000
(5)	+++++	+++++	+++++	9814	+++++	9814	0.000
10 Heptachlor	401838	409045	409978	403588	420372	408964	1.775
11 Aldrin	417768	429626	447022	449900	458668	440597	3.757
12 beta-BHC	216642	213028	206845	207774	216729	212204	2.225
13 delta-BHC	451379	466994	496935	508937	530192	490887	6.473
14 Heptachlor epoxide	393287	397980	398351	396957	399183	397152	0.580
15 Aroclor-1254(1)	+++++	+++++	+++++	14812	+++++	14812	0.000
(2)	+++++	+++++	+++++	25713	+++++	25713	0.000
(3)	+++++	+++++	+++++	26786	+++++	26786	0.000
(4)	+++++	+++++	+++++	20102	+++++	20102	0.000
(5)	+++++	+++++	+++++	29201	+++++	29201	0.000
16 Endosulfan I	353738	358685	360703	358983	361922	358806	0.871
17 gamma-Chlordane	383840	380376	389568	394798	405930	390903	2.569
18 alpha-Chlordane	359872	365634	385024	390477	396857	379573	4.227
19 4,4'-DDE	382759	400641	404947	394450	387652	394090	2.307
20 Dieldrin	374922	389692	392394	384495	378232	383947	1.926
21 Aroclor-1260(1)	22983	23321	22940	22516	20469	22446	5.085
(2)	35726	36888	36310	35624	32213	35352	5.167
(3)	14778	14965	14903	14964	14487	14820	1.354
(4)	39548	40617	40289	39914	36902	39454	3.756
(5)	42946	43953	43513	42694	38645	42350	5.027
22 Endrin	326619	336344	333566	325148	319734	328282	2.035
23 Toxaphene(1)	2264	2121	2189	2025	2123	2144	4.138
(2)	6590	5395	5422	5385	5348	5628	9.569
(3)	5804	4927	4976	5029	5056	5158	7.061
(4)	7353	6689	6859	6817	6814	6906	3.735
(5)	12002	11128	11116	11290	11735	11454	3.456
24 Endosulfan II	290780	301637	325836	322726	312862	310768	4.711
25 4,4'-DDD	296756	310832	315715	311519	307886	308541	2.320

GEL Laboratories LLC

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Integrator : Falcon
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Cal Date : 03-Dec-2009 11:29 cla01575
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
	26 4,4'-DDT	231690	251563	248827	237254	260211	245909	4.646
	27 Endrin aldehyde	281843	279990	271328	266247	265173	272916	2.819
	28 Methoxychlor	127039	129131	114263	107759	112493	118137	7.971
	29 Endosulfan sulfate	301362	300700	292392	289061	294158	295535	1.809
	30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	61 Aroclor-1262 (1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	31 Endrin ketone	328518	338793	324847	313038	318073	324654	3.054
	51 Mirex	276112	254438	244918	240590	238507	250913	6.122
	52 C-Nonachlor	421270	417494	422663	412053	401499	414996	2.070
	53 O-Chlordane	355903	337510	331033	320915	310452	331162	5.200
	54 T-Nonachlor	364861	350405	356422	348915	338327	351786	2.784
	55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	56 2,4-DDE	252099	239483	233093	224192	212897	232353	6.407
	58 2,4-DDD	219182	208752	203714	198828	192041	204503	5.021
	57 2,4-DDT	170177	170308	191010	188986	192485	182593	6.212
M	62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	1 4cmx	415446	413069	409897	408925	416029	412673	0.774
$	32 Decachlorobiphenyl	189589	175166	157954	158782	165921	169482	7.787

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Calibration File Names:
Level 1: /chem/ecd5a.i/113009.b/013b1301.d
Level 2: /chem/ecd5a.i/113009.b/014b1401.d
Level 3: /chem/ecd5a.i/113009.b/015b1501.d
Level 4: /chem/ecd5a.i/113009.b/016b1601.d
Level 5: /chem/ecd5a.i/113009.b/017b1701.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	5610501	4622923	4063658	4013116	4054497	AVRG		4472939		15.28852
2 Aroclor-1221(1)	+++++	+++++	+++++	38194	+++++	AVRG		38194		0.000e+00
(2)	+++++	+++++	+++++	22822	+++++	AVRG		22822		0.000e+00
(3)	+++++	+++++	+++++	78778	+++++	AVRG		78778		0.000e+00
3 Aroclor-1016(1)	135228	136032	131291	128421	115286	AVRG		129252		6.49152
(2)	94115	91053	86081	82205	74492	AVRG		85590		9.00075
(3)	59100	56752	54061	51882	48540	AVRG		54067		7.61842
(4)	56717	54302	51105	48729	44616	AVRG		51094		9.25654
(5)	75245	71571	68782	66056	60864	AVRG		68504		7.97140
4 Aroclor-1232(1)	+++++	+++++	+++++	52302	+++++	AVRG		52302		0.000e+00
(2)	+++++	+++++	+++++	57011	+++++	AVRG		57011		0.000e+00
(3)	+++++	+++++	+++++	39294	+++++	AVRG		39294		0.000e+00
(4)	+++++	+++++	+++++	30449	+++++	AVRG		30449		0.000e+00
(5)	+++++	+++++	+++++	33167	+++++	AVRG		33167		0.000e+00
5 alpha-BHC	6838675	6514616	5966818	5953702	6277942	AVRG		6310351		5.96694
6 Aroclor-1242(1)	+++++	+++++	+++++	86436	+++++	AVRG		86436		0.000e+00
(2)	+++++	+++++	+++++	67908	+++++	AVRG		67908		0.000e+00
(3)	+++++	+++++	+++++	43403	+++++	AVRG		43403		0.000e+00
(4)	+++++	+++++	+++++	54366	+++++	AVRG		54366		0.000e+00
(5)	+++++	+++++	+++++	59740	+++++	AVRG		59740		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	5956503	5680115	5177596	5150340	5441473	AVRG		5481205		6.24514
8 Chlordane (tech.) (1)	223157	217277	191001	177203	172778	AVRG		196283		11.69392
(2)	122737	128933	99386	86820	97497	AVRG		107075		16.73380
(3)	548498	538775	462818	440251	452770	AVRG		488622		10.43118
(4)	442662	422594	355466	340415	351822	AVRG		382592		12.16875
(5)	47866	49080	35942	33298	38950	AVRG		41027		17.30065
9 Aroclor-1248 (1)	+++++	+++++	+++++	74311	+++++	AVRG		74311		0.000e+00
(2)	+++++	+++++	+++++	94327	+++++	AVRG		94327		0.000e+00
(3)	+++++	+++++	+++++	100218	+++++	AVRG		100218		0.000e+00
(4)	+++++	+++++	+++++	108276	+++++	AVRG		108276		0.000e+00
(5)	+++++	+++++	+++++	113831	+++++	AVRG		113831		0.000e+00
10 Heptachlor	5149048	4797406	4251158	4014001	4089869	AVRG		4460296		11.03009
11 Aldrin	5677312	5304074	4731628	4606988	4599689	AVRG		4983938		9.70928
12 beta-BHC	2878486	2677456	2248224	2156766	2231469	AVRG		2438480		13.11538
13 delta-BHC	5804273	5440206	5129371	5241565	5538336	AVRG		5430750		4.85266
14 Heptachlor epoxide	4885668	4389663	3997179	3934738	3778905	AVRG		4197231		10.62092
15 Aroclor-1254 (1)	+++++	+++++	+++++	94842	+++++	AVRG		94842		0.000e+00
(2)	+++++	+++++	+++++	107760	+++++	AVRG		107760		0.000e+00
(3)	+++++	+++++	+++++	147710	+++++	AVRG		147710		0.000e+00
(4)	+++++	+++++	+++++	104486	+++++	AVRG		104486		0.000e+00
(5)	+++++	+++++	+++++	126738	+++++	AVRG		126738		0.000e+00
16 Endosulfan I	4610162	4233166	3599394	3427182	3370183	AVRG		3848018		14.21280
17 gamma-Chlordane	5032525	4703285	4197236	4143836	4252527	AVRG		4465882		8.66406
18 alpha-Chlordane	4910798	4568637	4032258	3968194	4053295	AVRG		4306636		9.62764

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
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Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	4632294	4324470	3955249	3808388	3745219	AVRG		4093124		9.18486
20 Dieldrin	4747158	4382405	3906755	3691581	3559389	AVRG		4057458		12.23597
21 Aroclor-1260(1)	67909	63594	61133	58501	56721	AVRG		61572		7.14408
(2)	154760	142644	136554	130696	120581	AVRG		137047		9.34993
(3)	163780	157424	151415	148508	140329	AVRG		152291		5.84087
(4)	154736	148501	147397	143879	139185	AVRG		146740		3.92572
(5)	161375	159022	154521	152918	153834	AVRG		156334		2.34679
22 Endrin	4221086	3965357	3399432	3101165	2980147	AVRG		3533437		15.30850
23 Toxaphene(1)	6785796	24879794	45282173	83261070	122239904	LINR	-111	39464		0.99938
(2)	10918417	28773691	52336549	103429953	156813371	LINR	-74.20418	50534		0.99913
(3)	13788450	44397334	80246614	159783502	231242827	LINR	-84.19422	75411		0.99965
(4)	23787638	84302296	154527900	270829136	415826281	LINR	-110	132744		0.99822
(5)	10034600	41699252	74815893	149107018	228852094	LINR	-26.40626	74942		0.99931
24 Endosulfan II	3948644	3652790	3191531	3006518	2948819	AVRG		3349660		12.96230
25 4,4'-DDD	3923519	3713531	3334579	3215108	3228910	AVRG		3483129		9.14170
26 4,4'-DDT	2766420	2988879	2464778	2150060	2450778	AVRG		2564183		12.56926
27 Endrin aldehyde	3439834	3095732	2579920	2392309	2294032	AVRG		2760365		17.74426
28 Methoxychlor	52389891	130752199	487589182	847132898	1.757e+09	LINR	-35.80872	857542		0.99845
29 Endosulfan sulfate	3689590	3378872	2880276	2670674	2603092	AVRG		3044501		15.48914
30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

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Cal Date : 03-Dec-2009 11:29 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	4283164	4001243	3287755	2903228	2829611	AVRG		3461000		18.87819
51 Mirex	3287453	2804690	2510722	2485250	2535232	AVRG		2724669		12.47467
52 C-Nonachlor	5384255	4663008	4379519	4318696	4261847	AVRG		4601465		10.08329
53 O-Chlordane	4601588	3834809	3445674	3315954	3245580	AVRG		3688721		15.14911
54 T-Nonachlor	4758367	4054458	3771384	3707291	3744505	AVRG		4007201		11.02726
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	3317388	2792740	2388656	2221962	2064777	AVRG		2557105		19.71535
58 2,4-DDD	2911841	2456928	2157155	2059524	1978481	AVRG		2312786		16.46118
57 2,4-DDT	2002256	1920256	1906555	1843254	1875424	AVRG		1909549		3.12874
$ 1 4cmx	5226176	4849317	4202259	4106647	4191288	AVRG		4515137		11.00102
$ 32 Decachlorobiphenyl	3539718	3281064	3038738	3054648	3106952	AVRG		3204224		6.57760

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INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 30-NOV-2009 17:39
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Cal Date : 03-Dec-2009 11:29 cla01575

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

Report Date: 08-Dec-2009 10:55

Calibration History

Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
05-DEC-2009 02:40	gapa	/chem/ecd5a.i/120409b.b/021f2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006f0601.d
07-DEC-2009 20:50	chlor	/chem/ecd5a.i/120709a.b/017f1701.d
07-DEC-2009 18:38	tox	/chem/ecd5a.i/120709a.b/009f0901.d
07-DEC-2009 17:26	indab	/chem/ecd5a.i/120709a.b/003f0301.d
Cal Level: 2 , Cal Amount: 10.00000		
05-DEC-2009 02:52	gapa	/chem/ecd5a.i/120409b.b/022f2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007f0701.d
07-DEC-2009 21:02	chlor	/chem/ecd5a.i/120709a.b/018f1801.d
07-DEC-2009 18:50	tox	/chem/ecd5a.i/120709a.b/010f1001.d
07-DEC-2009 17:38	indab	/chem/ecd5a.i/120709a.b/004f0401.d
Cal Level: 3 , Cal Amount: 50.00000		
05-DEC-2009 03:04	gapa	/chem/ecd5a.i/120409b.b/023f2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008f0801.d
07-DEC-2009 21:14	chlor	/chem/ecd5a.i/120709a.b/019f1901.d
07-DEC-2009 20:02	tox	/chem/ecd5a.i/120709a.b/013f1301.d
07-DEC-2009 17:50	indab	/chem/ecd5a.i/120709a.b/005f0501.d
Cal Level: 4 , Cal Amount: 100.00000		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024f2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024f2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023f2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022f2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015f1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013f1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009f0901.d
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020f2001.d
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014f1401.d
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006f0601.d
Cal Level: 5 , Cal Amount: 200.00000		
05-DEC-2009 03:28	gapa	/chem/ecd5a.i/120409b.b/025f2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010f1001.d
07-DEC-2009 21:38	chlor	/chem/ecd5a.i/120709a.b/021f2101.d
07-DEC-2009 20:26	tox	/chem/ecd5a.i/120709a.b/015f1501.d
07-DEC-2009 18:14	indab	/chem/ecd5a.i/120709a.b/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 05:35	indab	/chem/ecd5a.i/120709a.b/061f6101.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 03:36	indab	/chem/ecd5a.i/120709a.b/051f5101.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 02:24	indab	/chem/ecd5a.i/120709a.b/045f4501.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 00:25	indab	/chem/ecd5a.i/120709a.b/035f3501.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:49	chlor	/chem/ecd5a.i/120709a.b/022f2201.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:38	tox	/chem/ecd5a.i/120709a.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:26	indab	/chem/ecd5a.i/120709a.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006f0601.d

Report Date: 08-Dec-2009 10:55

Calibration History

Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
05-DEC-2009 02:40	gapa	/chem/ecd5a.i/120409b.b/021b2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006b0601.d
07-DEC-2009 20:50	chlor	/chem/ecd5a.i/120709a.b/017b1701.d
07-DEC-2009 18:38	tox	/chem/ecd5a.i/120709a.b/009b0901.d
07-DEC-2009 17:26	indab	/chem/ecd5a.i/120709a.b/003b0301.d
Cal Level: 2 , Cal Amount: 10.00000		
05-DEC-2009 02:52	gapa	/chem/ecd5a.i/120409b.b/022b2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007b0701.d
07-DEC-2009 21:02	chlor	/chem/ecd5a.i/120709a.b/018b1801.d
07-DEC-2009 18:50	tox	/chem/ecd5a.i/120709a.b/010b1001.d
07-DEC-2009 17:38	indab	/chem/ecd5a.i/120709a.b/004b0401.d
Cal Level: 3 , Cal Amount: 50.00000		
05-DEC-2009 03:04	gapa	/chem/ecd5a.i/120409b.b/023b2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008b0801.d
07-DEC-2009 21:14	chlor	/chem/ecd5a.i/120709a.b/019b1901.d
07-DEC-2009 20:02	tox	/chem/ecd5a.i/120709a.b/013b1301.d
07-DEC-2009 17:50	indab	/chem/ecd5a.i/120709a.b/005b0501.d
Cal Level: 4 , Cal Amount: 100.00000		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024b2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024b2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023b2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022b2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015b1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013b1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009b0901.d
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020b2001.d
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014b1401.d
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006b0601.d
Cal Level: 5 , Cal Amount: 200.00000		
05-DEC-2009 03:28	gapa	/chem/ecd5a.i/120409b.b/025b2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010b1001.d
07-DEC-2009 21:38	chlor	/chem/ecd5a.i/120709a.b/021b2101.d
07-DEC-2009 20:26	tox	/chem/ecd5a.i/120709a.b/015b1501.d
07-DEC-2009 18:14	indab	/chem/ecd5a.i/120709a.b/007b0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 03:36	indab	/chem/ecd5a.i/120709a.b/051b5101.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 02:24	indab	/chem/ecd5a.i/120709a.b/045b4501.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 00:25	indab	/chem/ecd5a.i/120709a.b/035b3501.d
Ccal Level: 4 , Ccal Amount: 100		
08-DEC-2009 05:35	indab	/chem/ecd5a.i/120709a.b/061b6101.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:49	chlor	/chem/ecd5a.i/120709a.b/022b2201.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 21:26	chlor	/chem/ecd5a.i/120709a.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:38	tox	/chem/ecd5a.i/120709a.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 20:14	tox	/chem/ecd5a.i/120709a.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:26	indab	/chem/ecd5a.i/120709a.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 100		
07-DEC-2009 18:02	indab	/chem/ecd5a.i/120709a.b/006b0601.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Quant Method : ESTD Target Version : 3.50
Last Update : 08-Dec-2009 10:08 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.409	2.379-2.439	4.426e+05
63 2,4,5-Trichlorophenol	1.476	1.376-1.576	
59 Hexachlorobenzene	3.159	3.059-3.259	3.882e+05
2 Aroclor-1221	2.631	2.601-2.661	5.910e+03
	2.767	2.736-2.796	3.363e+03
	2.802	2.772-2.832	1.422e+04
3 Aroclor-1016	3.102	3.072-3.132	1.760e+04
	3.460	3.430-3.490	2.200e+04
	3.686	3.656-3.716	8.402e+03
	3.702	3.672-3.732	8.144e+03
	3.839	3.809-3.869	1.168e+04
4 Aroclor-1232	3.104	3.074-3.134	7.998e+03
	3.248	3.218-3.278	2.167e+03
	3.459	3.430-3.490	1.042e+04
	3.555	3.525-3.585	6.943e+03
	4.119	4.089-4.149	4.959e+03
5 alpha-BHC	3.050	3.020-3.080	5.658e+05
6 Aroclor-1242	3.103	3.003-3.203	1.426e+04
	3.460	3.360-3.560	1.830e+04
	3.600	3.500-3.700	7.474e+03
	4.118	4.018-4.218	9.828e+03
	4.137	4.037-4.237	9.417e+03
7 gamma-BHC (Lindane)	3.350	3.320-3.380	4.727e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.677	3.577-3.777	1.970e+04
	4.071	3.971-4.171	1.873e+04
	4.350	4.250-4.450	1.267e+04
	4.475	4.375-4.575	5.742e+04
	5.044	4.944-5.144	9.295e+03
9 Aroclor-1248	3.686	3.586-3.786	1.281e+04
	3.839	3.739-3.939	1.679e+04
	3.897	3.797-3.997	1.095e+04
	4.119	4.019-4.219	2.029e+04
	4.509	4.409-4.609	9.814e+03
10 Heptachlor	3.740	3.710-3.770	3.948e+05
11 Aldrin	3.966	3.936-3.996	4.770e+05
12 beta-BHC	3.433	3.403-3.463	2.358e+05
13 delta-BHC	3.577	3.547-3.607	5.191e+05
14 Heptachlor epoxide	4.392	4.362-4.422	4.305e+05
15 Aroclor-1254	4.090	4.060-4.120	1.481e+04
	4.257	4.227-4.287	2.571e+04
	4.509	4.479-4.539	2.679e+04
	4.679	4.649-4.709	2.010e+04
	4.960	4.930-4.990	2.920e+04
16 Endosulfan I	4.650	4.620-4.680	3.875e+05
17 gamma-Chlordane	4.475	4.445-4.505	4.222e+05
18 alpha-Chlordane	4.562	4.532-4.592	4.065e+05
19 4,4'-DDE	4.614	4.584-4.644	4.159e+05
20 Dieldrin	4.802	4.772-4.832	4.095e+05
21 Aroclor-1260	4.621	4.521-4.721	2.245e+04
	4.788	4.688-4.888	3.535e+04
	4.866	4.766-4.966	1.482e+04
	4.960	4.860-5.060	3.945e+04
	5.358	5.258-5.458	4.235e+04
22 Endrin	4.947	4.917-4.977	3.460e+05
23 Toxaphene	4.737	4.707-4.767	4.191e+03
	4.807	4.777-4.837	7.478e+03
	4.862	4.832-4.892	6.953e+03
	4.963	4.933-4.993	1.500e+04
	5.079	5.049-5.109	1.466e+04
24 Endosulfan II	5.086	5.056-5.116	3.636e+05
25 4,4'-DDD	4.985	4.955-5.015	3.472e+05
26 4,4'-DDT	5.153	5.123-5.183	1.645e+05
27 Endrin aldehyde	5.339	5.309-5.369	3.006e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.436	5.406-5.466	9.789e+04
	29 Endosulfan sulfate	5.597	5.567-5.627	3.141e+05
	30 Aroclor-1268	5.050	4.950-5.150	
		5.067	4.967-5.167	
		5.185	5.085-5.285	
		5.378	5.278-5.478	
		5.531	5.431-5.631	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	5.767	5.737-5.797	2.834e+05
	51 Mirex	5.805	5.775-5.835	2.290e+05
	52 C-Nonachlor	5.228	5.198-5.258	3.943e+05
	53 O-Chlordane	4.586	4.556-4.616	3.128e+05
	54 T-Nonachlor	4.811	4.781-4.841	3.369e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.647	4.617-4.677	2.204e+05
	58 2,4-DDD	4.979	4.949-5.008	1.978e+05
	57 2,4-DDT	5.136	5.106-5.166	1.547e+05
$	32 Decachlorobiphenyl	6.344	6.314-6.374	2.628e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Quant Method : ESTD Target Version : 3.50
Last Update : 08-Dec-2009 10:03 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	92700.000000
Initial:End Threshold	46350.000000
Initial:Area Threshold	927000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.064	2.034-2.094	4.980e+06
61 2,4,5-Trichlorophenol	1.631	1.531-1.731	
59 Hexachlorobenzene	2.657	2.627-2.687	4.557e+06
2 Aroclor-1221	3.136	3.107-3.167	3.819e+04
	3.255	3.225-3.285	2.282e+04
	3.304	3.274-3.334	7.878e+04
3 Aroclor-1016	3.947	3.917-3.977	1.293e+05
	4.040	4.010-4.070	8.559e+04
	4.110	4.080-4.140	5.407e+04
	4.171	4.141-4.201	5.109e+04
	4.351	4.321-4.381	6.850e+04
4 Aroclor-1232	3.304	3.275-3.334	5.230e+04
	3.949	3.919-3.979	5.701e+04
	4.040	4.010-4.070	3.929e+04
	4.350	4.320-4.380	3.045e+04
	4.622	4.592-4.652	3.317e+04
5 alpha-BHC	2.781	2.751-2.811	6.966e+06
6 Aroclor-1242	3.618	3.588-3.648	8.644e+04
	4.040	4.010-4.070	6.791e+04
	4.109	4.079-4.139	4.340e+04
	4.350	4.320-4.380	5.437e+04
	4.430	4.400-4.460	5.974e+04
7 gamma-BHC (Lindane)	3.107	3.077-3.137	6.086e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.340	3.310-3.370	1.842e+05
	4.067	4.037-4.097	8.885e+04
	4.211	4.181-4.241	4.608e+05
	4.306	4.276-4.336	3.741e+05
	4.855	4.825-4.885	1.221e+05
9 Aroclor-1248	4.172	4.142-4.202	7.431e+04
	4.351	4.321-4.381	9.433e+04
	4.431	4.401-4.461	1.002e+05
	4.592	4.562-4.622	1.083e+05
	4.768	4.738-4.798	1.138e+05
10 Heptachlor	3.453	3.423-3.483	4.980e+06
11 Aldrin	3.687	3.657-3.717	5.504e+06
12 beta-BHC	3.191	3.161-3.221	2.282e+06
13 delta-BHC	3.420	3.390-3.450	6.064e+06
14 Heptachlor epoxide	4.088	4.058-4.118	4.774e+06
15 Aroclor-1254	4.619	4.589-4.649	9.484e+04
	4.734	4.704-4.764	1.078e+05
	5.023	4.993-5.053	1.477e+05
	5.158	5.128-5.188	1.045e+05
	5.481	5.451-5.511	1.267e+05
16 Endosulfan I	4.338	4.308-4.368	4.209e+06
17 gamma-Chlordane	4.211	4.181-4.241	4.889e+06
18 alpha-Chlordane	4.306	4.276-4.336	4.706e+06
19 4,4'-DDE	4.419	4.389-4.449	4.432e+06
20 Dieldrin	4.511	4.481-4.541	4.365e+06
21 Aroclor-1260	5.043	5.013-5.073	6.157e+04
	5.140	5.110-5.170	1.370e+05
	5.261	5.231-5.291	1.523e+05
	5.481	5.451-5.511	1.467e+05
	6.079	6.049-6.109	1.563e+05
22 Endrin	4.698	4.668-4.728	3.776e+06
23 Toxaphene	4.499	4.469-4.529	7.464e+04
	4.570	4.540-4.600	4.424e+04
	4.682	4.652-4.712	7.738e+04
	4.819	4.789-4.849	1.022e+05
	4.879	4.849-4.909	1.835e+05
24 Endosulfan II	4.827	4.797-4.857	3.583e+06
25 4,4'-DDD	4.771	4.741-4.801	3.758e+06
26 4,4'-DDT	4.958	4.928-4.988	2.751e+06
27 Endrin aldehyde	5.031	5.001-5.061	2.973e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.363	5.333-5.393	1.106e+06
	29 Endosulfan sulfate	5.194	5.164-5.224	3.353e+06
	30 Aroclor-1268	5.217	5.187-5.247	
		5.596	5.566-5.626	
		5.628	5.598-5.658	
		5.769	5.739-5.799	
		6.149	6.119-6.179	
	60 Aroclor-1262	4.689	4.589-4.789	
		4.779	4.679-4.879	
		5.074	4.974-5.174	
		5.224	5.124-5.324	
		5.396	5.296-5.496	
	31 Endrin ketone	5.509	5.479-5.539	3.016e+06
	51 Mirex	5.518	5.488-5.548	2.494e+06
	52 C-Nonachlor	4.782	4.752-4.812	4.546e+06
	53 O-Chlordane	4.058	4.028-4.088	3.680e+06
	54 T-Nonachlor	4.303	4.274-4.333	3.953e+06
	55 1,2-Dichlorobenzene	6.619	6.589-6.649	
	56 2,4-DDE	4.251	4.221-4.281	2.053e+06
	58 2,4-DDD	4.572	4.542-4.602	2.283e+06
	57 2,4-DDT	4.757	4.727-4.787	2.076e+06
$	32 Decachlorobiphenyl	6.226	6.196-6.256	2.774e+06

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Cal Date : 08-Dec-2009 10:08 cla01575
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/120409b.b/021f2101.d
Level 2: /chem/ecd5a.i/120409b.b/022f2201.d
Level 3: /chem/ecd5a.i/120409b.b/023f2301.d
Level 4: /chem/ecd5a.i/120409b.b/024f2401.d
Level 5: /chem/ecd5a.i/120409b.b/025f2501.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	451162	387986	367027	366085	368958	388243	9.351
2 Aroclor-1221(1)	+++++	+++++	+++++	5910	+++++	5910	0.000
(2)	+++++	+++++	+++++	3363	+++++	3363	0.000
(3)	+++++	+++++	+++++	14218	+++++	14218	0.000
3 Aroclor-1016(1)	18316	18455	17930	17404	15906	17602	5.863
(2)	21725	22828	22310	22663	20456	21996	4.360
(3)	8841	8543	8438	8235	7951	8402	3.973
(4)	8274	8363	8182	8166	7736	8144	2.968
(5)	11759	11851	11816	11833	11120	11676	2.678
4 Aroclor-1232(1)	+++++	+++++	+++++	7998	+++++	7998	0.000
(2)	+++++	+++++	+++++	2167	+++++	2167	0.000
(3)	+++++	+++++	+++++	10425	+++++	10425	0.000
(4)	+++++	+++++	+++++	6943	+++++	6943	0.000
(5)	+++++	+++++	+++++	4959	+++++	4959	0.000
5 alpha-BHC	569252	539806	557588	571567	590609	565764	3.311
6 Aroclor-1242(1)	+++++	+++++	+++++	14263	+++++	14263	0.000
(2)	+++++	+++++	+++++	18303	+++++	18303	0.000
(3)	+++++	+++++	+++++	7474	+++++	7474	0.000
(4)	+++++	+++++	+++++	9828	+++++	9828	0.000
(5)	+++++	+++++	+++++	9417	+++++	9417	0.000
7 gamma-BHC (Lindane)	477505	447910	461996	475445	500583	472688	4.147
8 Chlordane (tech.)(1)	22711	21228	18273	18324	17957	19699	10.879
(2)	23163	20836	17013	16572	16063	18729	16.629
(3)	14911	13966	11651	11527	11284	12668	13.069
(4)	63200	59677	55131	55291	53784	57417	6.829
(5)	10636	8938	8403	8221	10276	9295	11.831

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Cal Date : 08-Dec-2009 10:08 cla01575
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	12812	+++++	12812	0.000
(2)	+++++	+++++	+++++	16794	+++++	16794	0.000
(3)	+++++	+++++	+++++	10955	+++++	10955	0.000
(4)	+++++	+++++	+++++	20294	+++++	20294	0.000
(5)	+++++	+++++	+++++	9814	+++++	9814	0.000
10 Heptachlor	414706	379772	381456	385424	412845	394841	4.412
11 Aldrin	497502	470197	473861	474916	468619	477019	2.461
12 beta-BHC	276310	245967	219579	217109	220153	235824	10.815
13 delta-BHC	520947	494617	514899	526439	538406	519062	3.117
14 Heptachlor epoxide	466930	437186	422744	417654	407784	430460	5.339
15 Aroclor-1254(1)	+++++	+++++	+++++	14812	+++++	14812	0.000
(2)	+++++	+++++	+++++	25713	+++++	25713	0.000
(3)	+++++	+++++	+++++	26786	+++++	26786	0.000
(4)	+++++	+++++	+++++	20102	+++++	20102	0.000
(5)	+++++	+++++	+++++	29201	+++++	29201	0.000
16 Endosulfan I	420027	394544	378839	374982	369208	387520	5.279
17 gamma-Chlordane	448010	417063	414575	416079	415058	422157	3.431
18 alpha-Chlordane	421751	408767	406548	401642	393789	406499	2.530
19 4,4'-DDE	427151	421670	424861	413274	392303	415852	3.409
20 Dieldrin	425167	416166	414760	402907	388354	409471	3.471
21 Aroclor-1260(1)	22983	23321	22940	22516	20469	22446	5.085
(2)	35726	36888	36310	35624	32213	35352	5.167
(3)	14778	14965	14903	14964	14487	14820	1.354
(4)	39548	40617	40289	39914	36902	39454	3.756
(5)	42946	43953	43513	42694	38645	42350	5.027
22 Endrin	368262	354051	347841	334746	325275	346035	4.836
23 Toxaphene(1)	4930	3991	4017	4019	4001	4191	9.851
(2)	8661	7072	7386	7157	7112	7478	8.995
(3)	7771	6793	6812	6553	6834	6953	6.781
(4)	16003	14256	14562	14867	15335	15005	4.570
(5)	16042	14248	13567	14706	14752	14663	6.179
24 Endosulfan II	389323	381961	362958	356514	327065	363564	6.715
25 4,4'-DDD	357934	361064	354630	338783	323795	347241	4.511

GEL Laboratories LLC

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Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Cal Date : 08-Dec-2009 10:08 cla01575
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
	26 4,4'-DDT	139124	138181	156701	170122	218233	164472	19.972
	27 Endrin aldehyde	332760	312846	295803	286851	274872	300626	7.545
	28 Methoxychlor	98700	95927	96706	95132	102996	97892	3.214
	29 Endosulfan sulfate	343304	319960	305095	303203	299161	314145	5.761
	30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	61 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	31 Endrin ketone	291410	276226	277261	278292	293897	283417	3.002
	51 Mirex	259962	231947	216366	218180	218649	229021	8.025
	52 C-Nonachlor	409160	392847	392123	390875	386731	394347	2.184
	53 O-Chlordane	343864	315598	305572	301977	297134	312829	5.954
	54 T-Nonachlor	358283	334318	332927	330171	328873	336914	3.603
	55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	56 2,4-DDE	240672	221856	219006	214175	206476	220437	5.772
	58 2,4-DDD	206130	201318	196461	194071	191092	197814	3.017
	57 2,4-DDT	143151	148792	152919	162534	166019	154683	6.141
M	62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	1 4cmx	486358	446184	428038	426732	425718	442606	5.844
$	32 Decachlorobiphenyl	304028	280053	261635	252863	215310	262778	12.553

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Calibration File Names:
Level 1: /chem/ecd5a.i/120409b.b/021b2101.d
Level 2: /chem/ecd5a.i/120409b.b/022b2201.d
Level 3: /chem/ecd5a.i/120409b.b/023b2301.d
Level 4: /chem/ecd5a.i/120409b.b/024b2401.d
Level 5: /chem/ecd5a.i/120409b.b/025b2501.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	5845652	4719180	4103250	4027456	4087067	AVRG		4556521		16.97872
2 Aroclor-1221 (1)	+++++	+++++	+++++	38194	+++++	AVRG		38194		0.000e+00
(2)	+++++	+++++	+++++	22822	+++++	AVRG		22822		0.000e+00
(3)	+++++	+++++	+++++	78778	+++++	AVRG		78778		0.000e+00
3 Aroclor-1016 (1)	135228	136032	131291	128421	115286	AVRG		129252		6.49152
(2)	94115	91053	86081	82205	74492	AVRG		85590		9.00075
(3)	59100	56752	54061	51882	48540	AVRG		54067		7.61842
(4)	56717	54302	51105	48729	44616	AVRG		51094		9.25654
(5)	75245	71571	68782	66056	60864	AVRG		68504		7.97140
4 Aroclor-1232 (1)	+++++	+++++	+++++	52302	+++++	AVRG		52302		0.000e+00
(2)	+++++	+++++	+++++	57011	+++++	AVRG		57011		0.000e+00
(3)	+++++	+++++	+++++	39294	+++++	AVRG		39294		0.000e+00
(4)	+++++	+++++	+++++	30449	+++++	AVRG		30449		0.000e+00
(5)	+++++	+++++	+++++	33167	+++++	AVRG		33167		0.000e+00
5 alpha-BHC	7935734	7247488	6521093	6475422	6650823	AVRG		6966112		8.95782
6 Aroclor-1242 (1)	+++++	+++++	+++++	86436	+++++	AVRG		86436		0.000e+00
(2)	+++++	+++++	+++++	67908	+++++	AVRG		67908		0.000e+00
(3)	+++++	+++++	+++++	43403	+++++	AVRG		43403		0.000e+00
(4)	+++++	+++++	+++++	54366	+++++	AVRG		54366		0.000e+00
(5)	+++++	+++++	+++++	59740	+++++	AVRG		59740		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	7051230	6360380	5681190	5605835	5732111	AVRG		6086149		10.15063
8 Chlordane (tech.) (1)	15105108	27732388	109956303	202317339	561578348	LINR	-65.37562	184190		0.99938
(2)	8039884	14525451	53283661	102573463	271361548	LINR	-82.43634	88852		0.99858
(3)	36540822	66351571	262209824	510957868	1.400e+09	LINR	-58.02060	460764		0.99931
(4)	29041806	52032371	203386498	393736855	1.135e+09	LINR	-39.49092	374094		0.99994
(5)	8618579	15807644	64321505	117714352	369370040	LINR	-13.45257	122069		0.99948
9 Aroclor-1248 (1)	+++++	+++++	+++++	74311	+++++	AVRG		74311		0.000e+00
(2)	+++++	+++++	+++++	94327	+++++	AVRG		94327		0.000e+00
(3)	+++++	+++++	+++++	100218	+++++	AVRG		100218		0.000e+00
(4)	+++++	+++++	+++++	108276	+++++	AVRG		108276		0.000e+00
(5)	+++++	+++++	+++++	113831	+++++	AVRG		113831		0.000e+00
10 Heptachlor	6115995	5417410	4639800	4393509	4333138	AVRG		4979970		15.42392
11 Aldrin	6575227	5885262	5198089	5007450	4853822	AVRG		5503970		13.02508
12 beta-BHC	13907521	30688700	124667036	234231748	463311364	LINR	-3.18477	2281527		0.99986
13 delta-BHC	7060371	6350085	5782430	5723732	5401914	AVRG		6063707		10.77652
14 Heptachlor epoxide	5892559	5271747	4558666	4261222	3885170	AVRG		4773873		16.88263
15 Aroclor-1254 (1)	+++++	+++++	+++++	94842	+++++	AVRG		94842		0.000e+00
(2)	+++++	+++++	+++++	107760	+++++	AVRG		107760		0.000e+00
(3)	+++++	+++++	+++++	147710	+++++	AVRG		147710		0.000e+00
(4)	+++++	+++++	+++++	104486	+++++	AVRG		104486		0.000e+00
(5)	+++++	+++++	+++++	126738	+++++	AVRG		126738		0.000e+00
16 Endosulfan I	5287232	4658103	3931764	3683550	3485721	AVRG		4209274		17.77962
17 gamma-Chlordane	5767437	5190161	4595028	4476270	4416867	AVRG		4889153		11.84722
18 alpha-Chlordane	5660860	5001083	4392463	4248855	4226627	AVRG		4705978		13.16752

GEL Laboratories LLC

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Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	5149117	4647073	4307619	4100232	3955132	AVRG		4431835		10.78277
20 Dieldrin	5280413	4704566	4191970	3939224	3711196	AVRG		4365474		14.45126
21 Aroclor-1260 (1)	67909	63594	61133	58501	56721	AVRG		61572		7.14408
(2)	154760	142644	136554	130696	120581	AVRG		137047		9.34993
(3)	163780	157424	151415	148508	140329	AVRG		152291		5.84087
(4)	154736	148501	147397	143879	139185	AVRG		146740		3.92572
(5)	161375	159022	154521	152918	153834	AVRG		156334		2.34679
22 Endrin	4877405	4152543	3558138	3237311	3056341	AVRG		3776347		19.68507
23 Toxaphene (1)	13648226	50640338	87452430	161315151	232166275	LINR	-141	74640		0.99873
(2)	7773013	28548416	53714021	95719310	136829836	LINR	-138	44238		0.99776
(3)	13917215	50897027	86113441	173423223	235620922	LINR	-127	77377		0.99583
(4)	14960305	58211640	108297119	210039120	312383522	LINR	-57.44536	102202		0.99995
(5)	26975184	102163244	197954953	372572397	562294030	LINR	-55.21826	183529		0.99976
24 Endosulfan II	4451839	3915771	3401737	3150780	2993833	AVRG		3582792		16.70250
25 4,4'-DDD	4499088	3919743	3575614	3431361	3363283	AVRG		3757818		12.41870
26 4,4'-DDT	2974056	2769082	2639859	2575692	2795402	AVRG		2750818		5.60640
27 Endrin aldehyde	3810044	3304780	2779985	2569706	2401636	AVRG		2973230		19.44553
28 Methoxychlor	1364486	1224466	1035207	964322	943223	AVRG		1106341		16.44650
29 Endosulfan sulfate	4142419	3661790	3182799	2956560	2819439	AVRG		3352601		16.26461
30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

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Quant Method : ESTD
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Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	37328035	81723507	348430646	643584294	1.223e+09	LINR	-9.14682	3016477		0.99905
51 Mirex	3034376	2586762	2271014	2269682	2306378	AVRG		2493642		13.23750
52 C-Nonachlor	5434147	4569347	4237619	4239635	4247988	AVRG		4545747		11.36243
53 O-Chlordane	4621772	3807865	3391569	3315709	3261404	AVRG		3679664		15.45956
54 T-Nonachlor	4810064	4005490	3650418	3617452	3681149	AVRG		3952915		12.74570
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	13446243	55335831	233676302	440290648	828617791	LINR	-8.28053	2052994		0.99881
58 2,4-DDD	2867792	2442281	2094342	2052175	1958044	AVRG		2282927		16.41635
57 2,4-DDT	2385124	2200116	1922405	1948754	1925922	AVRG		2076464		10.02315
$ 1 4cmx	6049049	5370754	4593324	4457884	4427988	AVRG		4979800		14.27878
$ 32 Decachlorobiphenyl	3245440	2836003	2545029	2518445	2725693	AVRG		2774122		10.60447

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 07-DEC-2009 21:38
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Cal Date : 08-Dec-2009 10:03 cla01575

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/02/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1528

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.04	4.01	4.07	126	100	26.0
4,4'-DDE						
Endrin	5.02	4.99	5.05	118	100	18.0
4,4'-DDD						
4,4'-DDT	5.22	5.19	5.25	88.6	100	-11.4
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 4.70 Endrin % breakdown (1): 2.20

Combined % breakdown (1): 6.90

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/02/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1528

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.67	3.65	3.71	120	100	20.0
4,4'-DDE						
Endrin	4.68	4.65	4.71	116	100	16.0
4,4'-DDD						
4,4'-DDT	4.94	4.91	4.97	97.4	100	-2.6
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 5.50 Endrin % breakdown (1): 2.80

Combined % breakdown (1): 8.30

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1714

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.97	3.94	4.00	119	100	19.0
4,4'-DDE						
Endrin	4.95	4.92	4.98	110	100	10.0
4,4'-DDD						
4,4'-DDT	5.15	5.12	5.18	83.8	100	-16.2
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 8.00 Endrin % breakdown (1): 2.80

Combined % breakdown (1): 10.80

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1714

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D
Aldrin	3.69	3.66	3.72	114	100	14.0
4,4'-DDE						
Endrin	4.70	4.67	4.73	110	100	10.0
4,4'-DDD						
4,4'-DDT	4.96	4.93	4.99	98.6	100	-1.4
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 4.80 Endrin % breakdown (1): 4.50

Combined % breakdown (1): 9.30

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2201

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.96	3.94	4.00	118	100	18.0
4,4'-DDE						
Endrin	4.95	4.92	4.98	107	100	7.0
4,4'-DDD						
4,4'-DDT	5.15	5.12	5.18	80.5	100	-19.5
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 11.70 Endrin % breakdown (1): 4.40

Combined % breakdown (1): 16.10

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/07/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2201

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.69	3.66	3.72	114	100	14.0
4,4'-DDE						
Endrin	4.70	4.67	4.73	108	100	8.0
4,4'-DDD						
4,4'-DDT	4.96	4.93	4.99	91.5	100	-8.5
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 8.60 Endrin % breakdown (1): 6.50

Combined % breakdown (1): 15.10

FORM VII PEST-1 OLM03.0

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1540

Lab File ID: 003F0301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
gamma-BHC (Lindane)	466570.17	526352.01	0.01	12.8	15.0
Heptachlor	408964.18	411860.70	0.01	0.7	15.0
Heptachlor epoxide	397151.66	419239.05	0.01	5.6	15.0
Endrin	328282.24	357248.19	0.01	8.8	15.0
Methoxychlor	118137.10	113070.75	0.01	-4.3	15.0
4cmx	412673.21	420769.41	0.01	2.0	15.0
Decachlorobiphenyl	169482.15	163126.23	0.01	-3.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1540

Lab File ID: 003B0301 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	106	100	AVRG	6.0	15.0
Heptachlor	95.4	100	AVRG	-4.6	15.0
Heptachlor epoxide	99.2	100	AVRG	-0.8	15.0
Endrin	195	200	AVRG	-2.5	15.0
Methoxychlor	1070	1000	LINR	7.0	15.0
4cmx	195	200	AVRG	-2.5	15.0
Decachlorobiphenyl	186	200	AVRG	-7.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1552

Lab File ID: 004F0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Toxaphene	2144.404	2367.347	0.01	10.4	15.0
(2)	5627.754	5877.268	0.01	4.4	15.0
(3)	5158.097	5788.473	0.01	12.2	15.0
(4)	6906.286	7422.360	0.01	7.5	15.0
(5)	11454.281	12740.281	0.01	11.2	15.0
4cmx	412673.21	409077.16	0.01	-0.9	15.0
Decachlorobiphenyl	169482.15	155594.40	0.01	-8.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1552

Lab File ID: 004B0401 Init. Calib. Date(s): 11/28/09 11/28/09

Heated Purge: (Y/N) N Init. Calib. Times: 1415 1503

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Toxaphene	2200	2000	LINR	10.0	15.0
(2)	2060	2000	LINR	3.0	15.0
(3)	2120	2000	LINR	6.0	15.0
(4)	2170	2000	LINR	8.5	15.0
(5)	2020	2000	LINR	1.0	15.0
4cmx	189	200	AVRG	-5.5	15.0
Decachlorobiphenyl	172	200	AVRG	-14.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1604

Lab File ID: 005F0501 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 1529 1628

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	15210.604	15364.576	0.01	1.0	15.0
(2)	8884.890	9209.103	0.01	3.6	15.0
(3)	48383.574	49482.743	0.01	2.3	15.0
(4)	74305.410	72104.076	0.01	-3.0	15.0
(5)	3987.623	3592.907	0.01	-9.9	15.0
4cmx	412673.21	416153.30	0.01	0.8	15.0
Decachlorobiphenyl	169482.15	161053.49	0.01	-5.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/02/09 Time: 1604

Lab File ID: 005B0501 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 1529 1628

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	196283.19	193503.41	0.01	-1.4	15.0
(2)	107074.75	99637.259	0.01	-6.9	15.0
(3)	488622.36	464182.88	0.01	-5.0	15.0
(4)	382591.70	363813.73	0.01	-4.9	15.0
(5)	41027.143	41512.379	0.01	1.2	15.0
4cmx	4515137.1	4454374.7	0.01	-1.3	15.0
Decachlorobiphenyl	3204224.0	2784181.2	0.01	-13.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0312

Lab File ID: 060F6001 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
gamma-BHC (Lindane)	466570.17	552178.80	0.01	18.3	15.0	<-
Heptachlor	408964.18	429523.01	0.01	5.0	15.0	
Heptachlor epoxide	397151.66	450912.68	0.01	13.5	15.0	
Endrin	328282.24	380456.12	0.01	15.9	15.0	<-
Methoxychlor	118137.10	111847.01	0.01	-5.3	15.0	
4cmx	412673.21	449655.59	0.01	9.0	15.0	
Decachlorobiphenyl	169482.15	182277.69	0.01	7.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0312

Lab File ID: 060B6001 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	107	100	AVRG	7.0	15.0
Heptachlor	93.6	100	AVRG	-6.4	15.0
Heptachlor epoxide	102	100	AVRG	2.0	15.0
Endrin	198	200	AVRG	-1.0	15.0
Methoxychlor	895	1000	LINR	-10.5	15.0
4cmx	200	200	AVRG	0.0	15.0
Decachlorobiphenyl	205	200	AVRG	2.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0524

Lab File ID: 071F7101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
gamma-BHC (Lindane)	466570.17	497127.41	0.01	6.5	15.0	
Heptachlor	408964.18	190957.76	0.01	-53.3	15.0	<-
Heptachlor epoxide	397151.66	429497.49	0.01	8.1	15.0	
Endrin	328282.24	350569.66	0.01	6.8	15.0	
Methoxychlor	118137.10	54160.636	0.01	-54.2	15.0	<-
4cmx	412673.21	435582.69	0.01	5.6	15.0	
Decachlorobiphenyl	169482.15	176179.61	0.01	4.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/03/09 Time: 0524

Lab File ID: 071B7101 Init. Calib. Date(s): 11/29/09 11/29/09

Heated Purge: (Y/N) N Init. Calib. Times: 1905 1953

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	94.7	100	AVRG	-5.3	15.0	
Heptachlor	31.3	100	AVRG	-68.7	15.0	<-
Heptachlor epoxide	94.1	100	AVRG	-5.9	15.0	
Endrin	170	200	AVRG	-15.0	15.0	
Methoxychlor	124	1000	LINR	-87.6	15.0	<-
4cmx	197	200	AVRG	-1.5	15.0	
Decachlorobiphenyl	189	200	AVRG	-5.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 1826

Lab File ID: 008F0801 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
gamma-BHC (Lindane)	472687.72	493662.89	0.01	4.4	15.0
Heptachlor	394840.62	369551.66	0.01	-6.4	15.0
Heptachlor epoxide	430459.53	417642.13	0.01	-3.0	15.0
Endrin	346034.88	351466.21	0.01	1.6	15.0
Methoxychlor	97891.983	96492.687	0.01	-1.4	15.0
4cmx	442605.72	434891.46	0.01	-1.7	15.0
Decachlorobiphenyl	262777.87	253810.48	0.01	-3.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 1826

Lab File ID: 008B0801 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	96.2	100	AVRG	-3.8	15.0
Heptachlor	85.0	100	AVRG	-15.0	15.0
Heptachlor epoxide	90.5	100	AVRG	-9.5	15.0
Endrin	181	200	AVRG	-9.5	15.0
Methoxychlor	887	1000	AVRG	-11.3	15.0
4cmx	183	200	AVRG	-8.5	15.0
Decachlorobiphenyl	184	200	AVRG	-8.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2038

Lab File ID: 016F1601 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1838 2026

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Toxaphene	4191.401	4315.237	0.01	3.0	15.0
(2)	7477.678	7266.342	0.01	-2.8	15.0
(3)	6952.564	7006.073	0.01	0.8	15.0
(4)	15004.500	13475.367	0.01	-10.2	15.0
(5)	14662.834	13921.410	0.01	-5.0	15.0
4cmx	442605.72	440101.66	0.01	-0.6	15.0
Decachlorobiphenyl	262777.87	251947.58	0.01	-4.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2038

Lab File ID: 016B1601 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1838 2026

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
Toxaphene	2080	2000	LINR	4.0	15.0	
(2)	2050	2000	LINR	2.5	15.0	
(3)	2030	2000	LINR	1.5	15.0	
(4)	1740	2000	LINR	-13.0	15.0	
(5)	1630	2000	LINR	-18.5	15.0	<-
4cmx	184	200	AVRG	-8.0	15.0	
Decachlorobiphenyl	179	200	AVRG	-10.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2149

Lab File ID: 022F2201 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 2050 2138

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	19698.628	17964.062	0.01	-8.8	15.0
(2)	18729.358	18560.193	0.01	-0.9	15.0
(3)	12667.811	11247.133	0.01	-11.2	15.0
(4)	57416.696	51913.882	0.01	-9.6	15.0
(5)	9294.755	9019.172	0.01	-3.0	15.0
4cmx	442605.72	440469.46	0.01	-0.5	15.0
Decachlorobiphenyl	262777.87	255449.05	0.01	-2.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/07/09 Time: 2149

Lab File ID: 022B2201 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 2050 2138

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Chlordane (tech.)	1040	1000	LINR	4.0	15.0
(2)	1040	1000	LINR	4.0	15.0
(3)	975	1000	LINR	-2.5	15.0
(4)	984	1000	LINR	-1.6	15.0
(5)	1090	1000	LINR	9.0	15.0
4cmx	189	200	AVRG	-5.5	15.0
Decachlorobiphenyl	186	200	AVRG	-7.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0224

Lab File ID: 045F4501 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
gamma-BHC (Lindane)	472687.72	528129.71	0.01	11.7	15.0
Heptachlor	394840.62	399453.57	0.01	1.2	15.0
Heptachlor epoxide	430459.53	440961.42	0.01	2.4	15.0
Endrin	346034.88	362574.04	0.01	4.8	15.0
Methoxychlor	97891.983	102973.14	0.01	5.2	15.0
4cmx	442605.72	455468.67	0.01	2.9	15.0
Decachlorobiphenyl	262777.87	251649.15	0.01	-4.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0224

Lab File ID: 045B4501 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	98.9	100	AVRG	-1.1	15.0	
Heptachlor	86.6	100	AVRG	-13.4	15.0	
Heptachlor epoxide	92.1	100	AVRG	-7.9	15.0	
Endrin	178	200	AVRG	-11.0	15.0	
Methoxychlor	810	1000	AVRG	-19.0	15.0	<-
4cmx	190	200	AVRG	-5.0	15.0	
Decachlorobiphenyl	202	200	AVRG	1.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0336

Lab File ID: 051F5101 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D	
gamma-BHC (Lindane)	472687.72	573964.45	0.01	21.4	15.0	<-
Heptachlor	394840.62	435888.81	0.01	10.4	15.0	
Heptachlor epoxide	430459.53	476602.95	0.01	10.7	15.0	
Endrin	346034.88	398475.56	0.01	15.2	15.0	<-
Methoxychlor	97891.983	111886.30	0.01	14.3	15.0	
4cmx	442605.72	495623.82	0.01	12.0	15.0	
Decachlorobiphenyl	262777.87	264064.49	0.01	0.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD5A Calibration Date: 12/08/09 Time: 0336

Lab File ID: 051B5101 Init. Calib. Date(s): 12/07/09 12/07/09

Heated Purge: (Y/N) N Init. Calib. Times: 1726 1814

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	108	100	AVRG	8.0	15.0
Heptachlor	95.2	100	AVRG	-4.8	15.0
Heptachlor epoxide	100	100	AVRG	0.0	15.0
Endrin	197	200	AVRG	-1.5	15.0
Methoxychlor	879	1000	AVRG	-12.1	15.0
4cmx	206	200	AVRG	3.0	15.0
Decachlorobiphenyl	220	200	AVRG	10.0	15.0

FORM VII PEST

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 02-DEC-2009 15:28
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.045	4.044	0.001	55672680	126.357	126	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.682	4.681	0.001	145166	0.36836	0.368	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.018	5.017	0.001	38811293	118.225	118	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
5.052	5.051	0.001	918691	2.97753	2.98	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.410	5.408	0.002	194416	0.71237	0.712	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.221	5.219	0.002	21775873	88.5526	88.6	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.841	5.839	0.002	688841	2.12177	2.12	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	88466427	214.374	214	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.422	6.422	0.000	33580282	198.135	198	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/002f0201.d

Date : 02-DEC-2009 15:28

Client ID: PEM01

Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

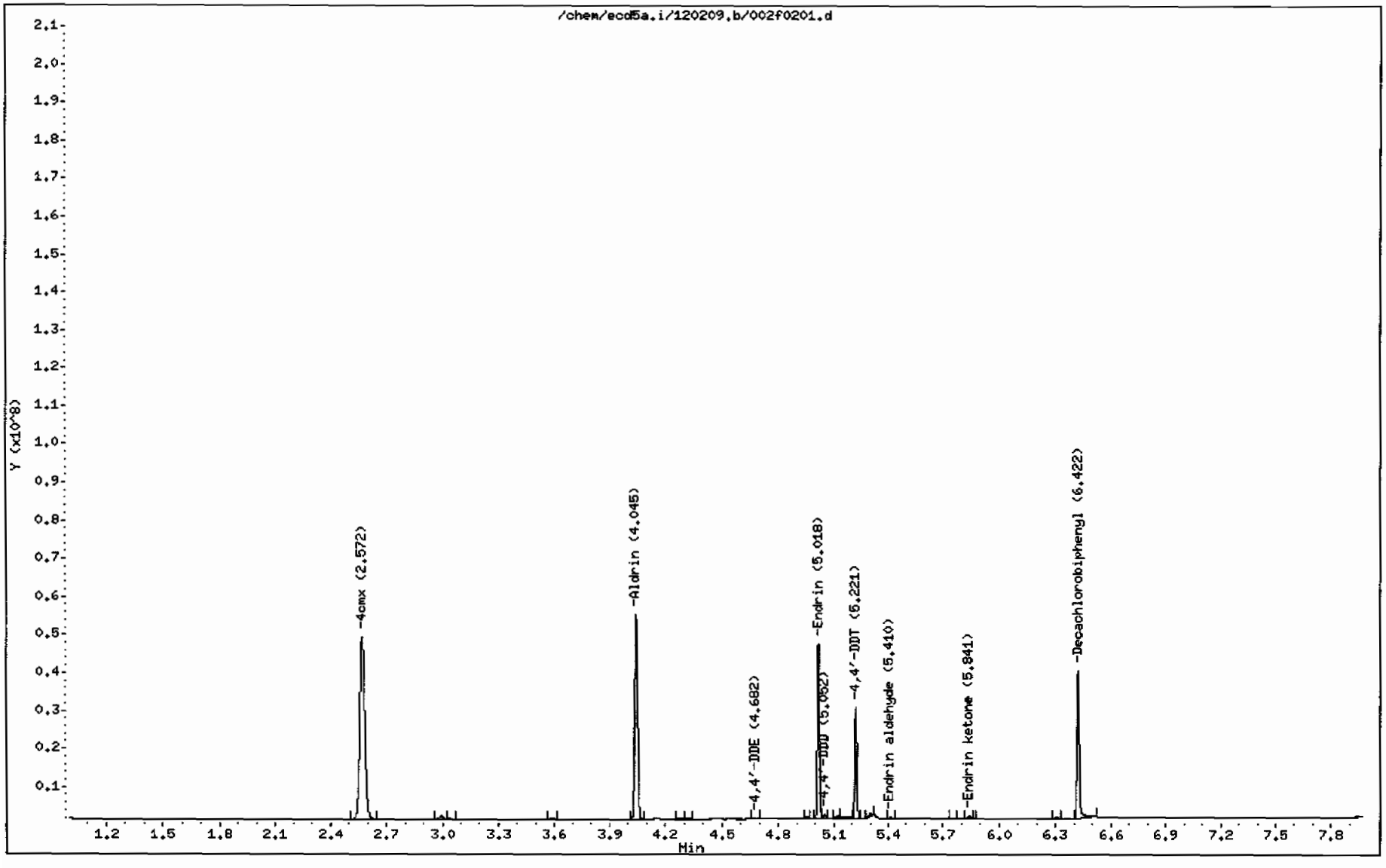

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 02-DEC-2009 15:28
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	596071838	119.599	120	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.402	4.401	0.001	2175030	0.53139	0.531	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.680	4.679	0.001	410733637	116.242	116	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.754	4.754	0.000	12261386	3.52022	3.52	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.013	5.013	0.000	1904947	0.69011	0.690	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.941	4.940	0.001	249806781	97.4216	97.4	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.493	5.492	0.001	9850834	2.84624	2.85	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.120	2.121	-0.001	920696808	203.913	204	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.213	6.214	-0.001	607655019	189.642	190	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/002b0201.d
Date : 02-DEC-2009 15:28
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

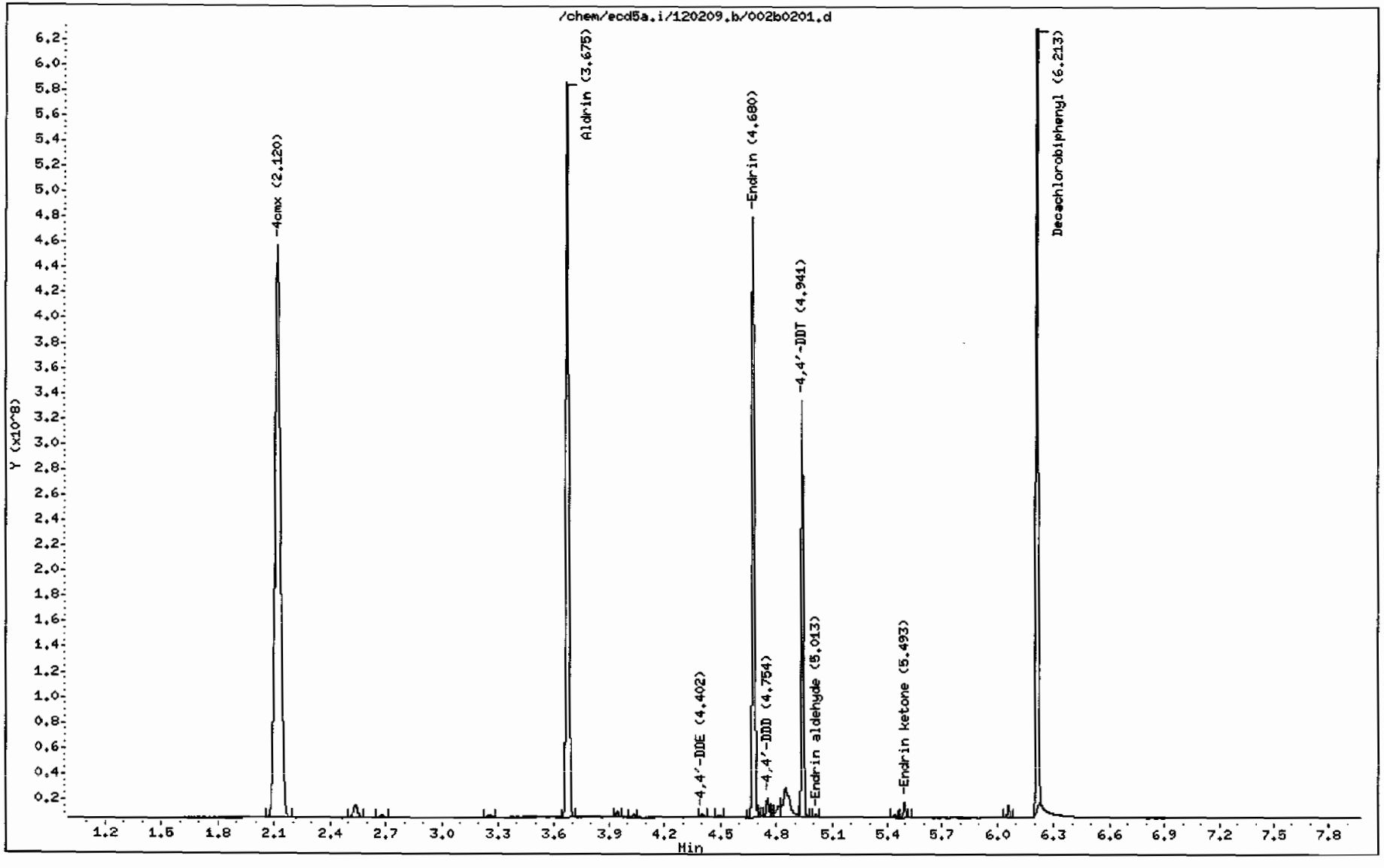

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 07-DEC-2009 17:14
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.967	3.966	0.001	56800739	119.074	119	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.616	4.614	0.002	186889	0.44941	0.449	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.948	4.947	0.001	37939943	109.642	110	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.987	4.985	0.002	1004596	2.89308	2.89	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.342	5.339	0.003	292928	0.97439	0.974	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.154	5.153	0.001	13784492	83.8104	83.8	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.771	5.767	0.004	791135	2.79142	2.79	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	91088055	205.800	206	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.350	6.344	0.006	52821000	201.010	201	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/002f0201.d
Date : 07-DEC-2009 17:14
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

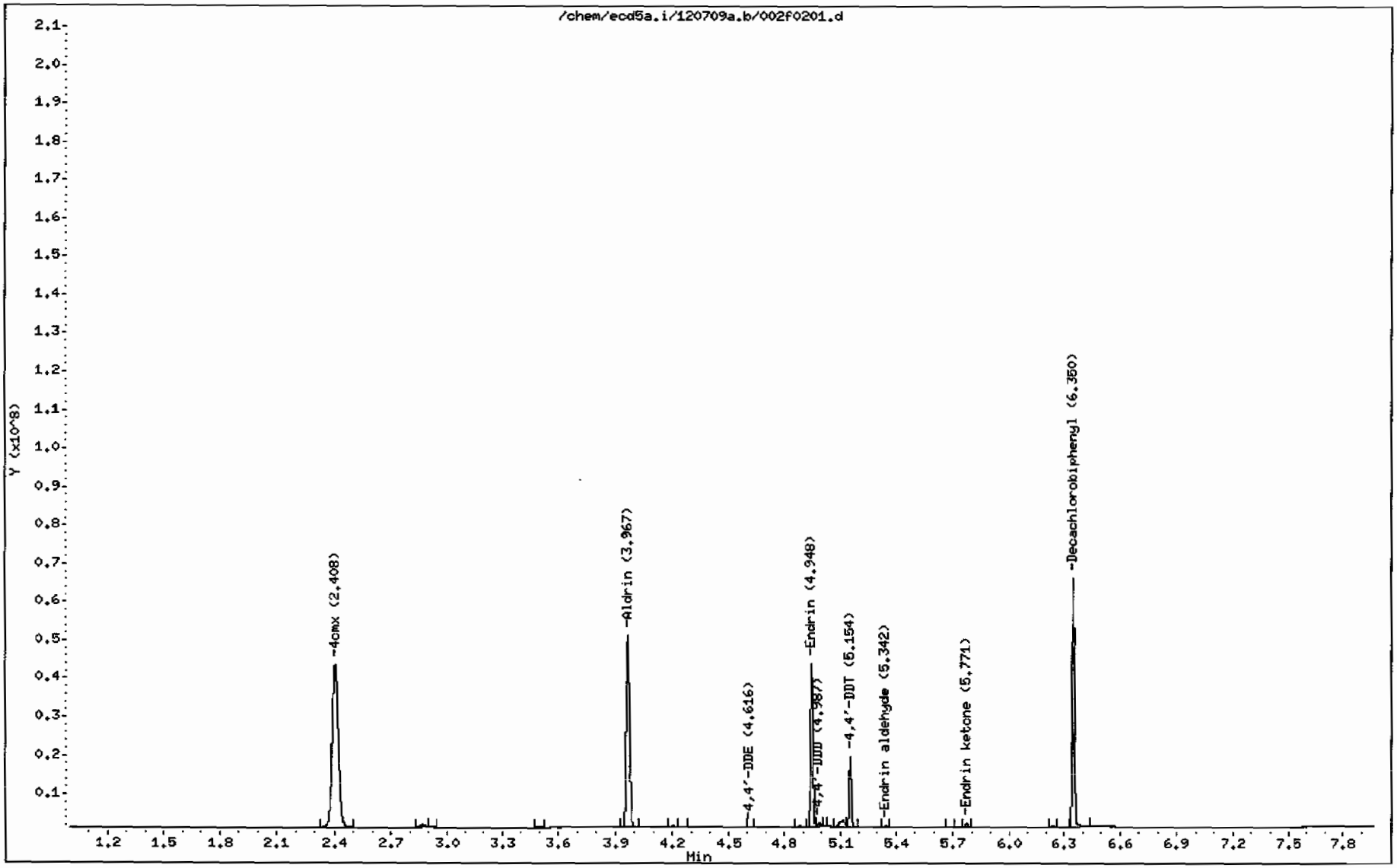

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 07-DEC-2009 17:14
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.686	3.687	-0.001	626265059	113.784	114	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.698	4.698	0.000	415838637	110.117	110	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.772	4.771	0.001	11151374	2.96751	2.97	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.958	4.958	0.000	271263527	98.6119	98.6	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.058	2.064	-0.006	948940593	190.558	190	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.236	6.226	0.010	540939803	194.995	195	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/002b0201.d
Date : 07-DEC-2009 17:14
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

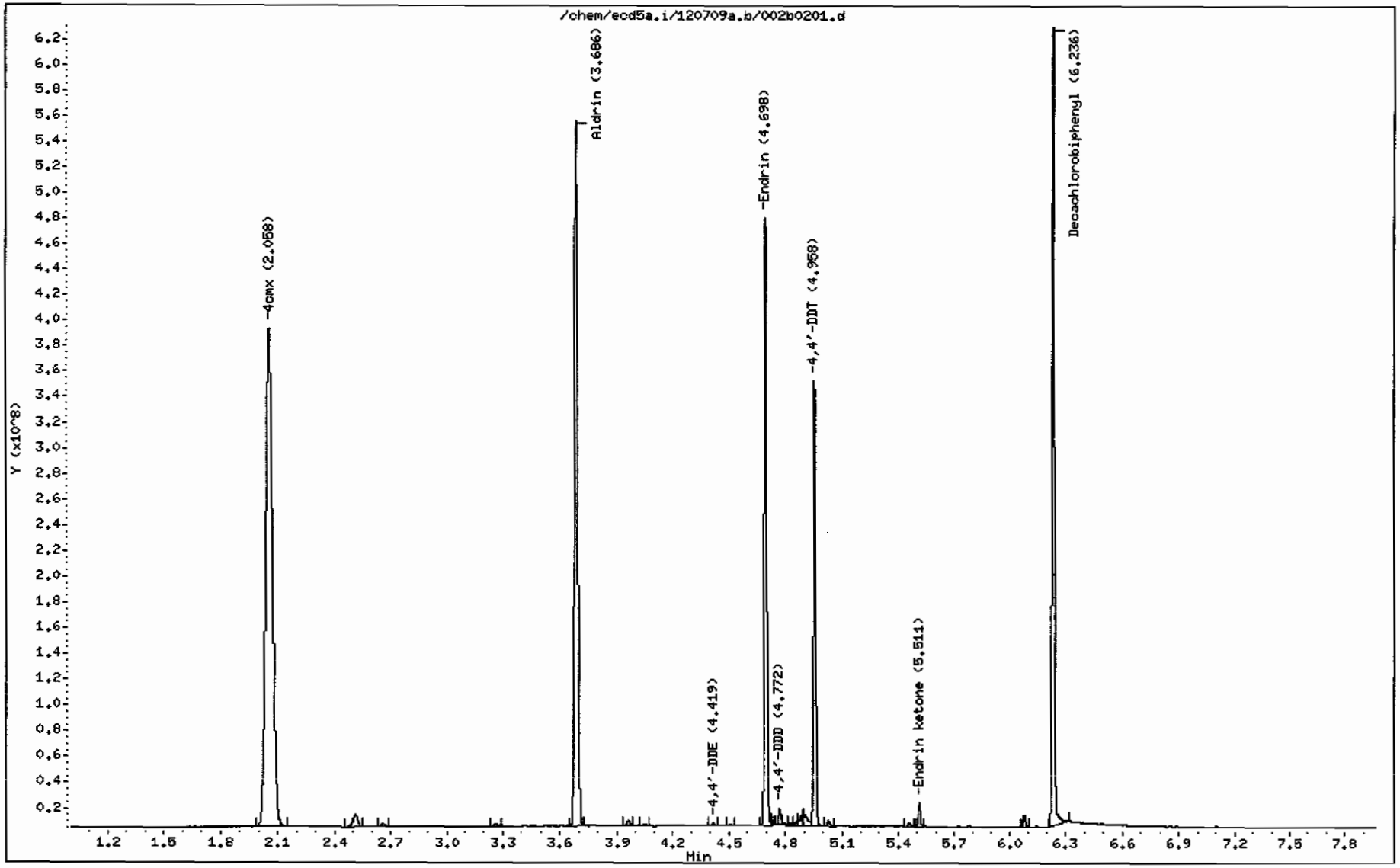

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/023f2301.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 07-DEC-2009 22:01
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 23 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.964	3.966	-0.002	56499355	118.443	118	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.613	4.614	-0.001	212759	0.51162	0.512	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	37122028	107.278	107	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.984	4.985	-0.001	1543436	4.44485	4.44	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.339	5.339	0.000	477813	1.58939	1.59	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.153	5.153	0.000	13238887	80.4931	80.5	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.768	5.767	0.001	1226694	4.32823	4.33	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.409	-0.004	90798881	205.146	205	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.343	6.344	-0.001	52322131	199.112	199	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/023f2301.d
Date : 07-DEC-2009 22:01
Client ID: PEM02
Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

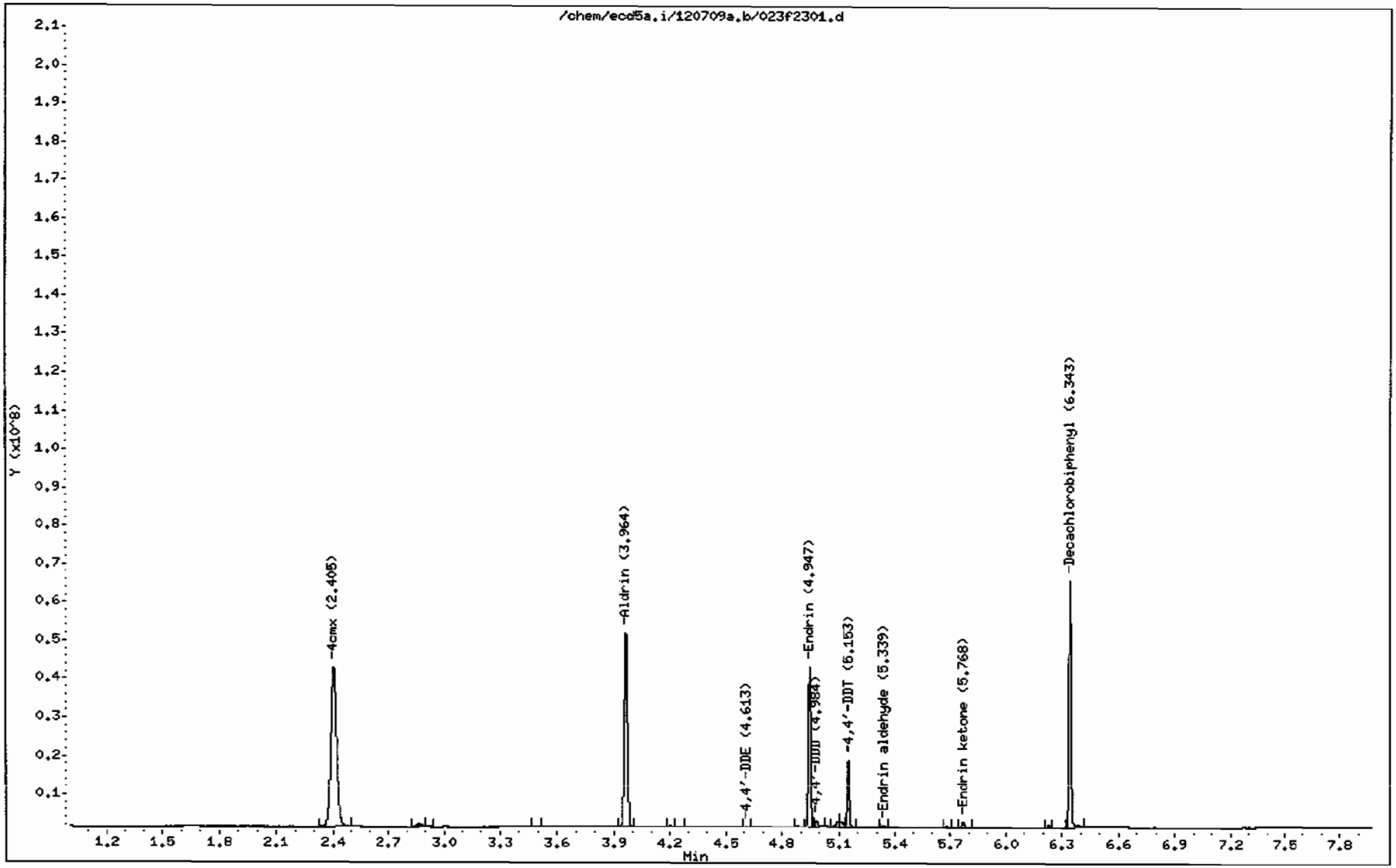

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/023b2301.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 07-DEC-2009 22:01
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 23 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.686	3.687	-0.001	630432688	114.541	114	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.417	4.419	-0.002	2718238	0.61334	0.613	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	406277295	107.585	108	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.769	4.771	-0.002	21078404	5.60921	5.61	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.030	5.031	-0.001	5823020	1.95848	1.96	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.958	4.958	0.000	251598203	91.4630	91.5	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	22235235			80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.060	2.064	-0.004	955394490	191.854	192	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	547754698	197.452	197	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/023b2301.d
Date : 07-DEC-2009 22:01
Client ID: PEM02
Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

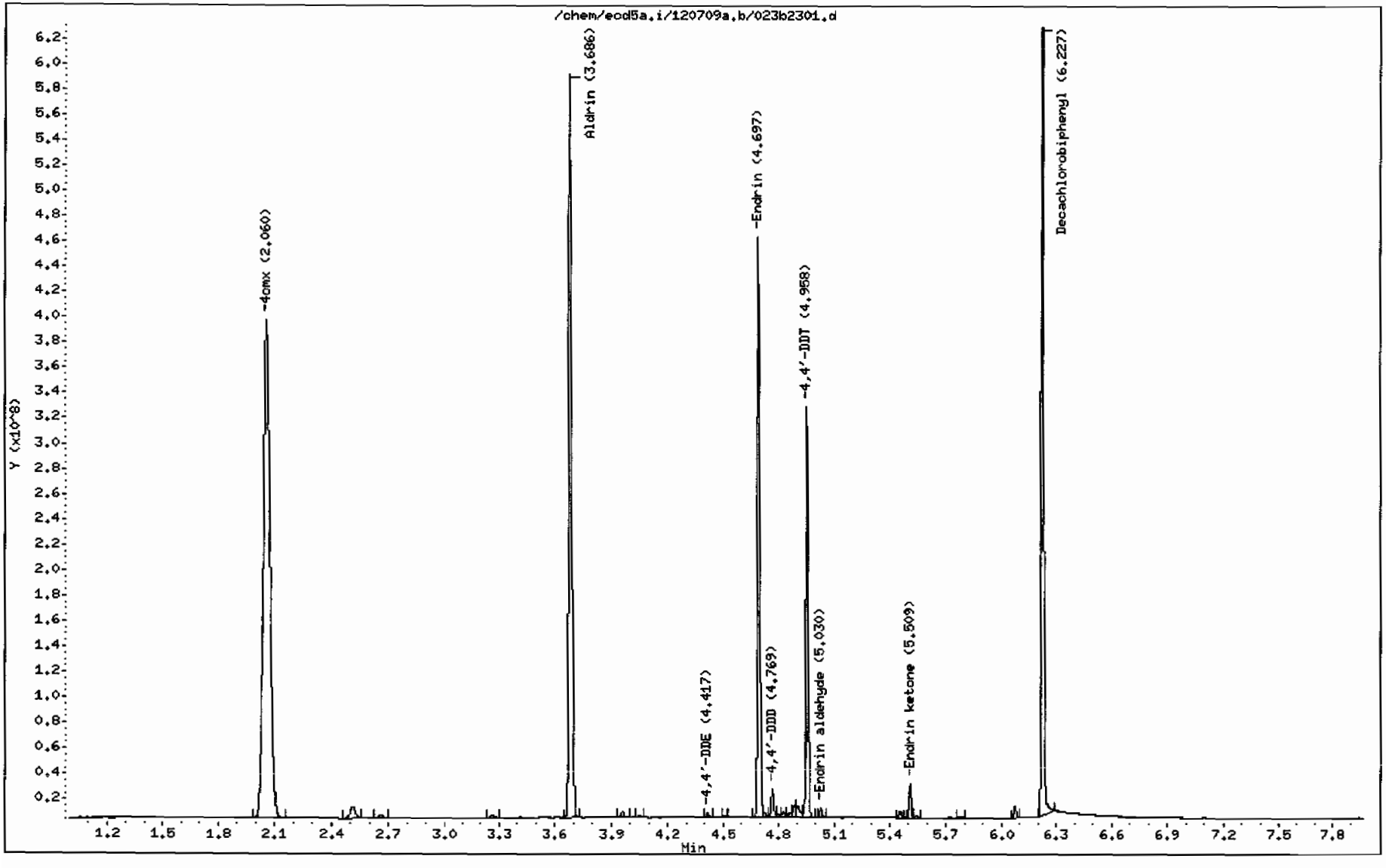

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/003f0301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 02-DEC-2009 15:40
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.163	3.163	0.000	58956664	100.000	110	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.447	3.447	0.000	52635201	100.000	113	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.525	3.525	0.000	22318471	100.000	105	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	41186070	100.000	101	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.666	3.666	0.000	53300538	100.000	108	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.044	4.044	0.000	45563520	100.000	103	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.464	4.464	0.000	41923905	100.000	106	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.546	4.546	0.000	43383185	100.000	111	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.632	4.632	0.000	37752003	100.000	99.4	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.720	4.720	0.000	39085811	100.000	109	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.681	4.681	0.000	80325859	200.000	204	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.872	4.872	0.000	79839420	200.000	208	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.017	5.017	0.000	71449638	200.000	218	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.051	5.051	0.000	66275363	200.000	215	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.154	5.154	0.000	68150087	200.000	219	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.408	5.408	0.000	55019606	200.000	202	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.219	5.219	0.000	47779642	200.000	194	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.668	5.668	0.000	60433582	200.000	204	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.503	5.503	0.000	113070746	1000.00	957	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.839	5.839	0.000	63651572	200.000	196	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.573	2.573	0.000	84153881	200.000	204	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.422	6.422	0.000	32625247	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/003f0301.d
Date : 02-DEC-2009 15:40
Client ID: INDAB01
Sample Info: IWPE091123-10AB

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

Column phase: CLP-1

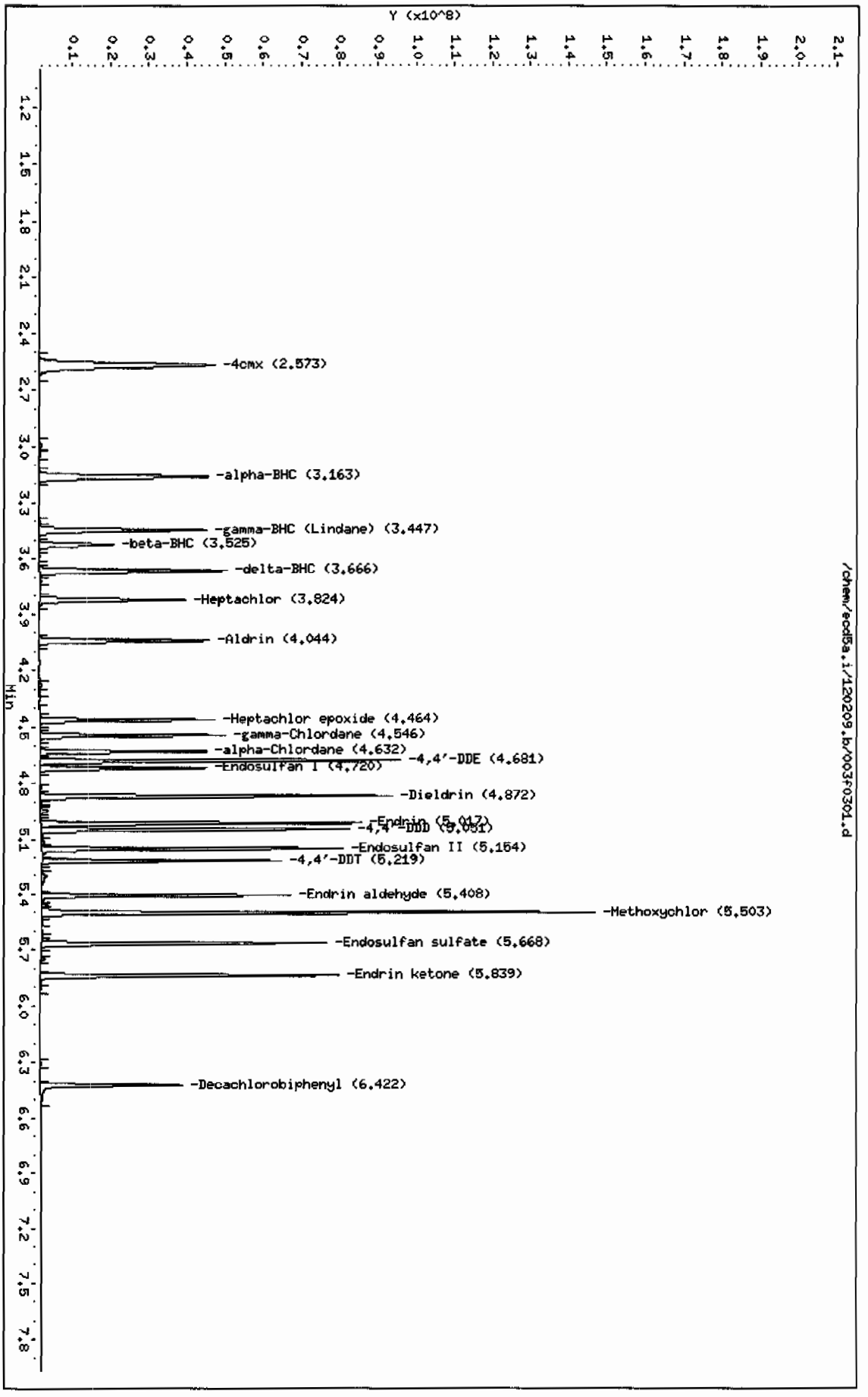

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/003b0301.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 02-DEC-2009 15:40
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.793	2.793	0.000	649332933	100.000	103	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.106	3.106	0.000	583506868	100.000	106	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.186	3.186	0.000	236379782	100.000	96.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	425539022	100.000	95.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.410	3.410	0.000	556747239	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	473820542	100.000	95.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.070	4.070	0.000	416202881	100.000	99.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.194	4.194	0.000	455630668	100.000	102	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.288	4.288	0.000	386564798	100.000	89.8	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.320	4.320	0.000	371282334	100.000	96.5	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.401	4.401	0.000	799512405	200.000	195	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.493	4.493	0.000	770651831	200.000	190	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.679	4.679	0.000	689362715	200.000	195	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.754	4.754	0.000	676252878	200.000	194	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.809	4.809	0.000	644672835	200.000	192	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.013	5.013	0.000	489051340	200.000	177	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.940	4.940	0.000	489858877	200.000	191	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.176	5.176	0.000	559134872	200.000	184	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.346	5.346	0.000	945610623	1000.00	1070	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.492	5.492	0.000	606974029	200.000	175	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	881797515	200.000	195	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	594615566	200.000	186	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/0036o301.d
Date : 02-DEC-2009 15:40
Client ID: INDAB01
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

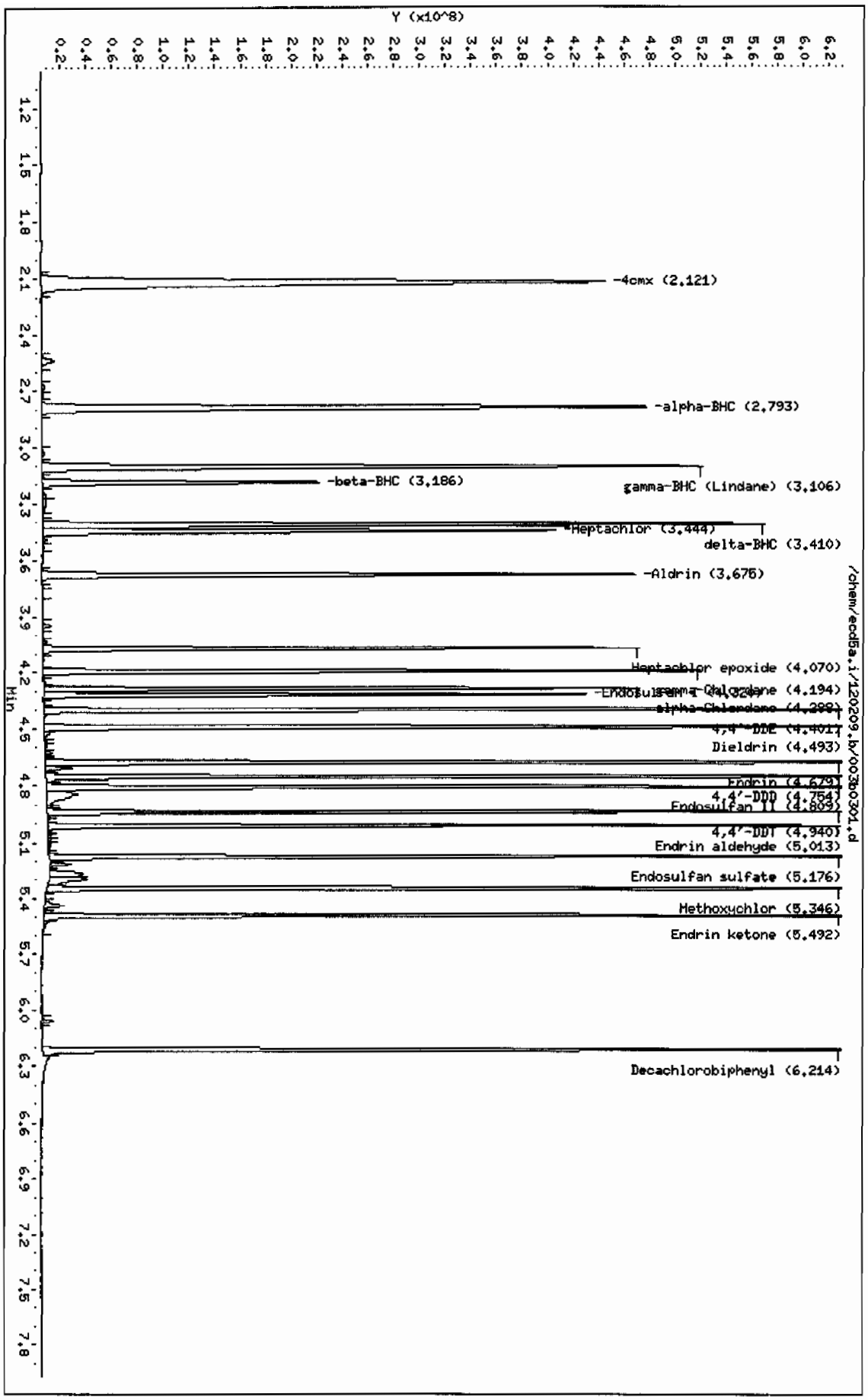

Page 1

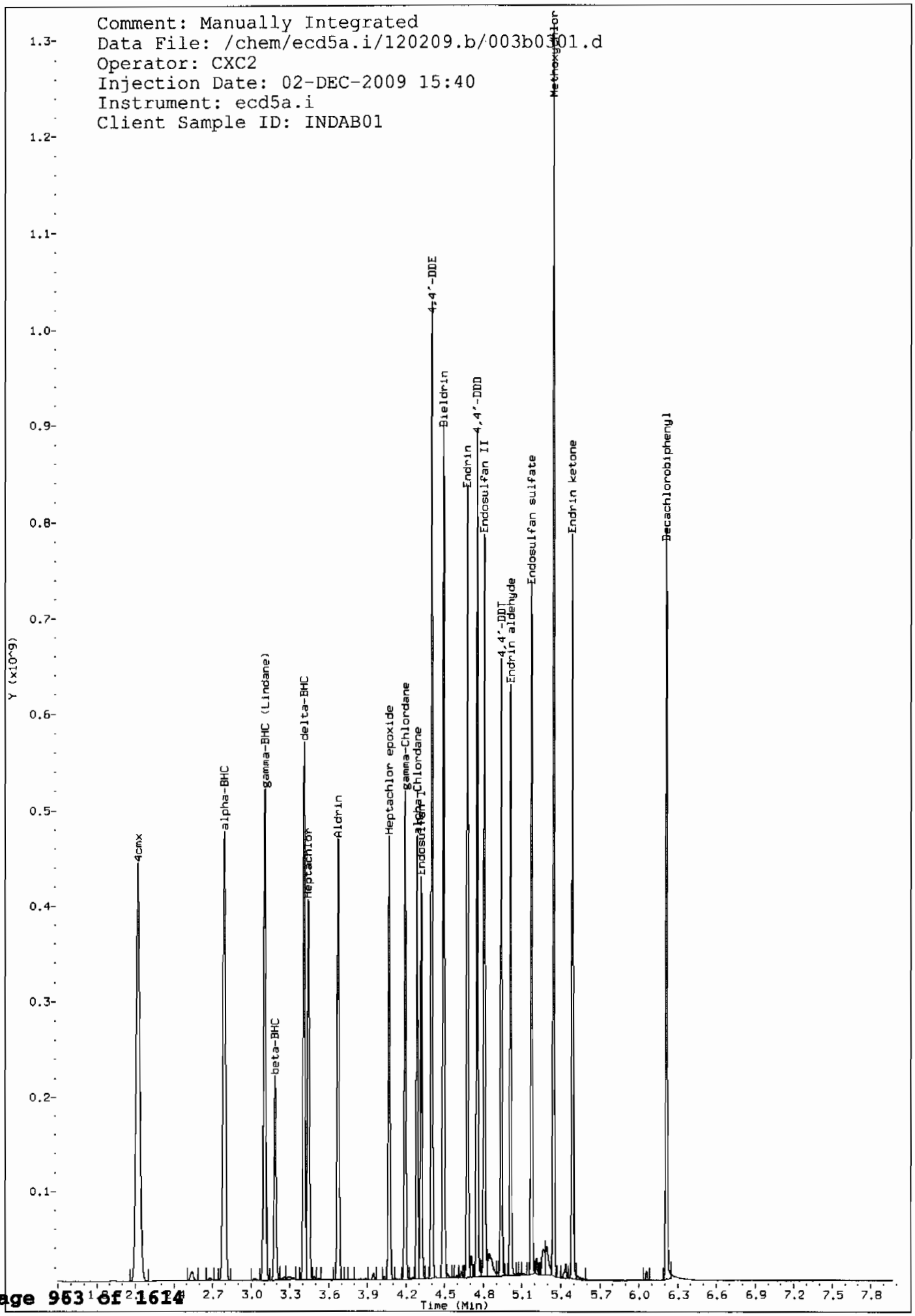
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/003b0301.d
Operator: CXC2
Injection Date: 02-DEC-2009 15:40
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

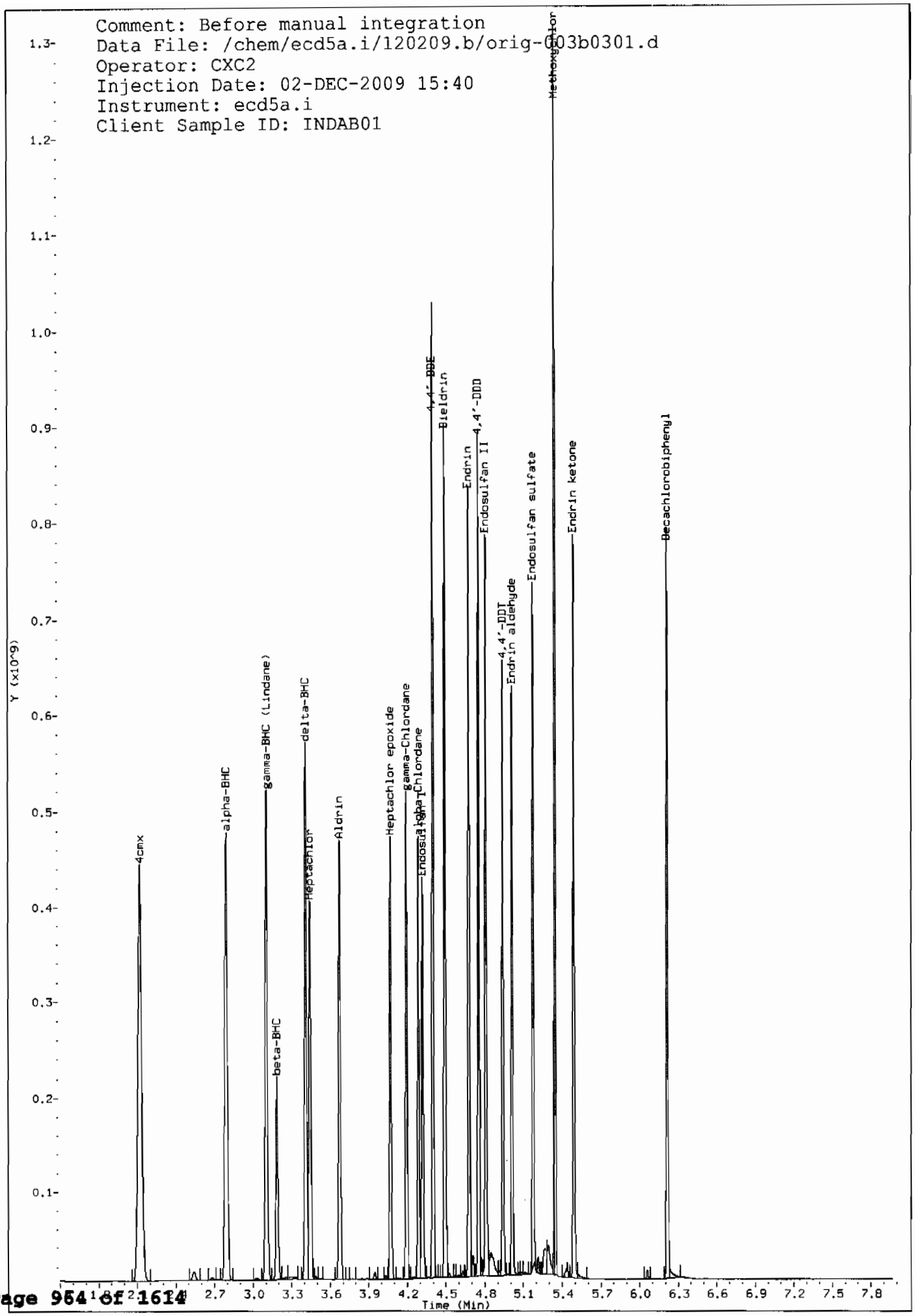
Comment: Before manual integration
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Operator: CXC2
Injection Date: 02-DEC-2009 15:40
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/120209.b/004f0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 02-DEC-2009 15:52
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.660	4.660	0.000	4734694	2000.00	2210	80.00- 120.00	100.00(M)
4.875	4.875	0.000	11754537	2000.00	2090	228.26- 268.26	248.26
4.931	4.931	0.000	11576946	2000.00	2240	224.51- 264.51	244.51
4.967	4.967	0.000	14844720	2000.00	2150	293.53- 333.53	313.53
5.149	5.149	0.000	25480562	2000.00	2220	518.17- 558.17	538.17
Average of Peak Amounts =					2.18e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	81815431	200.000	198	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	31118880	200.000	184	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/004f0401.d

Date : 02-DEC-2009 15:52

Client ID: TOXAPH01

Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

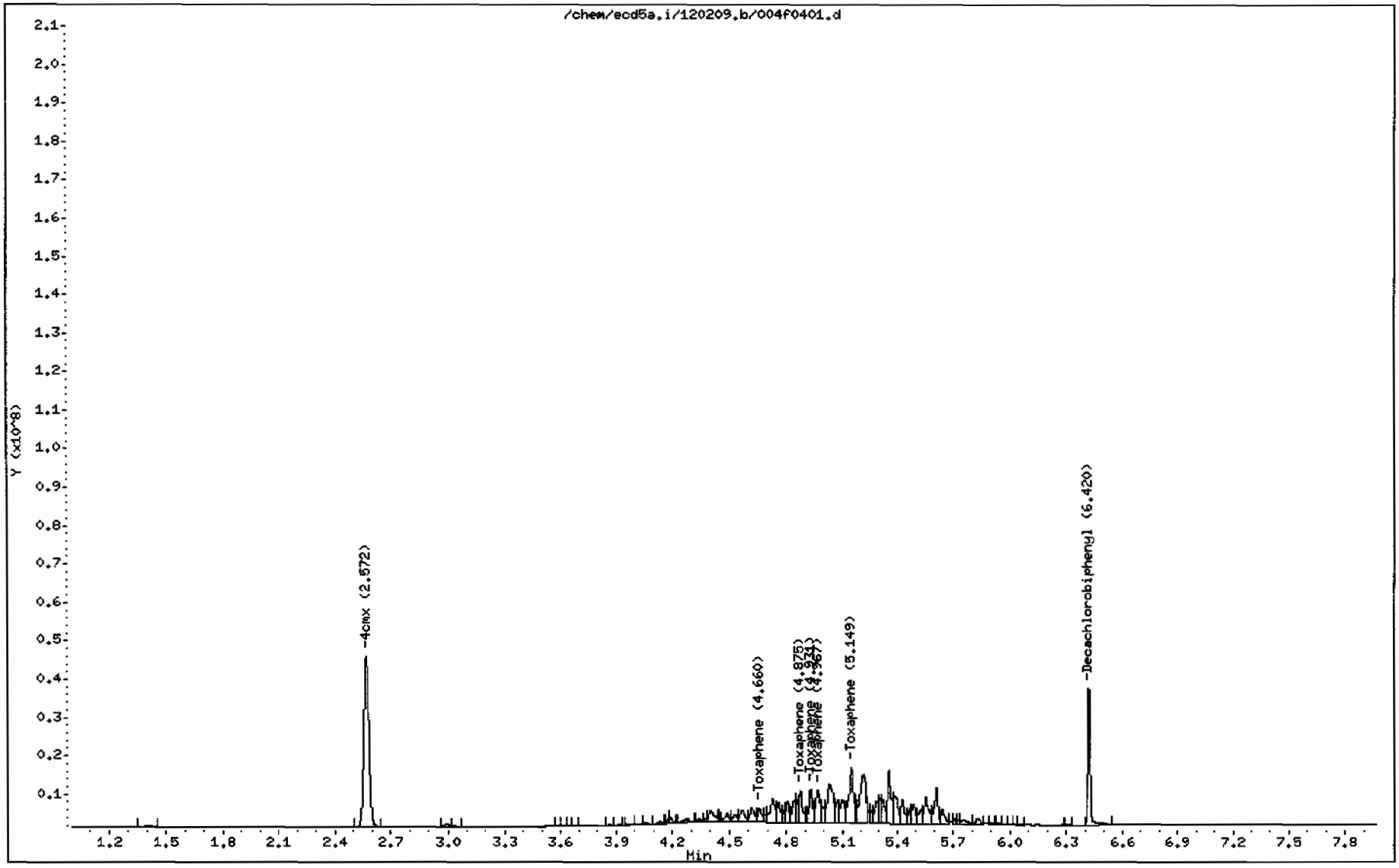

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Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

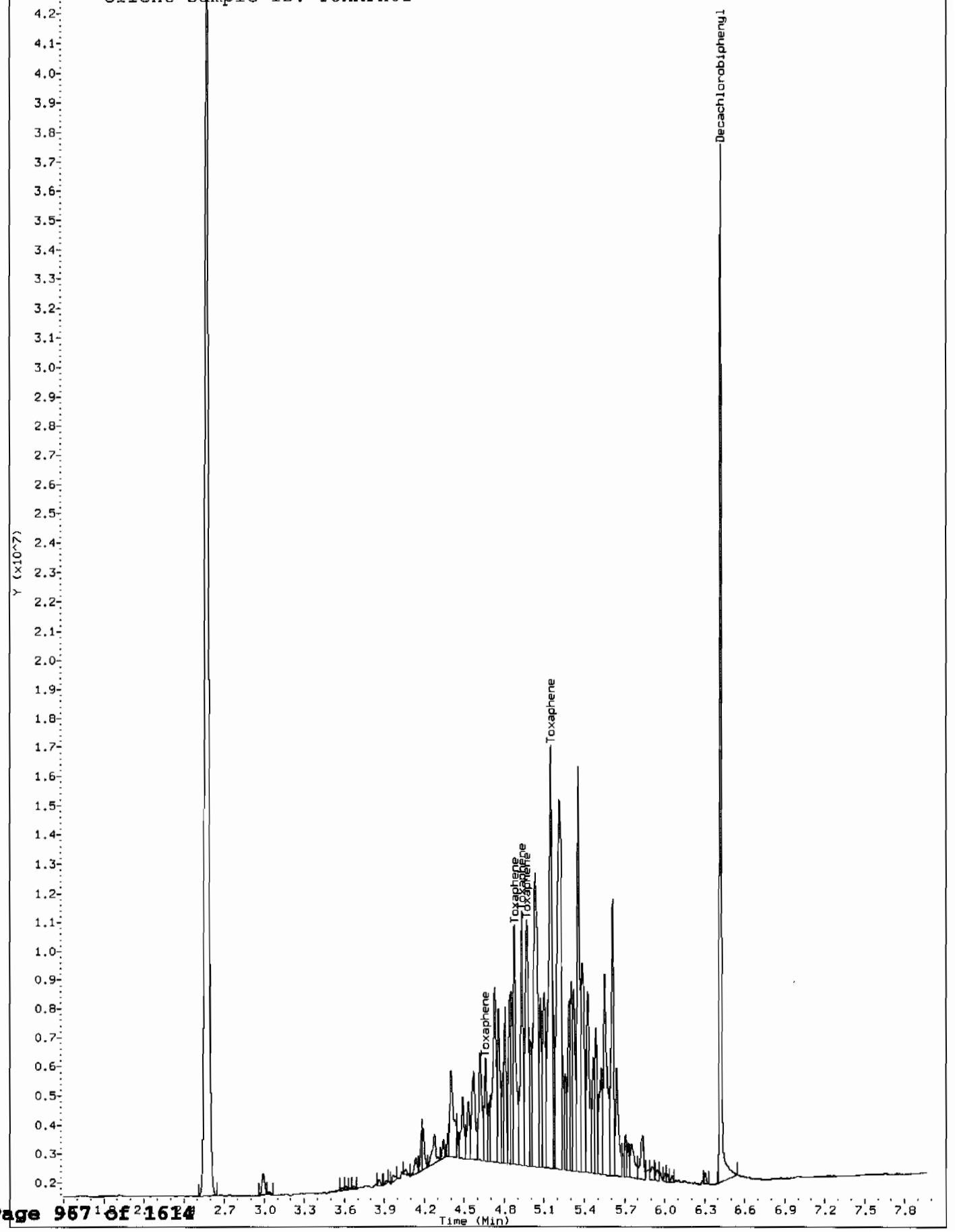

Comment: Before manual integration
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Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

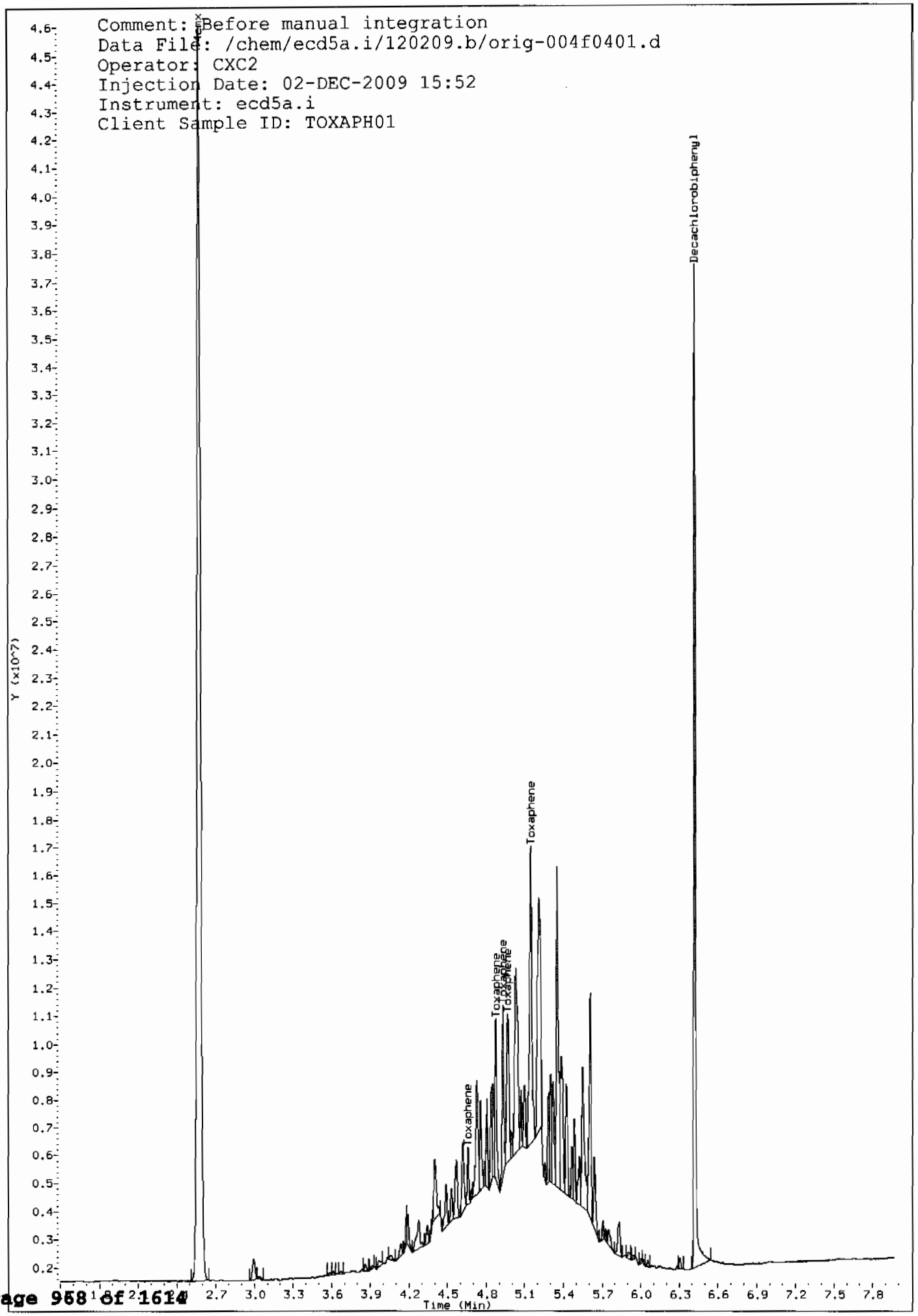

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CLP-2

Data file : /chem/ecd5a.i/120209.b/004b0401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 02-DEC-2009 15:52
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.553	4.553	0.000	91250322	2000.00	2200	80.00- 120.00	100.00(M)
4.782	4.782	0.000	108065665	2000.00	2060	98.43- 138.43	118.43
4.802	4.802	0.000	166107339	2000.00	2120	162.03- 202.03	182.03
4.861	4.861	0.000	302629321	2000.00	2170	311.65- 351.65	331.65
5.018	5.018	0.000	153195922	2000.00	2020	147.89- 187.89	167.89
Average of Peak Amounts =					2.11e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	853288452	200.000	189	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	552902413	200.000	172	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/004b0401.d
Date : 02-DEC-2009 15:52
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

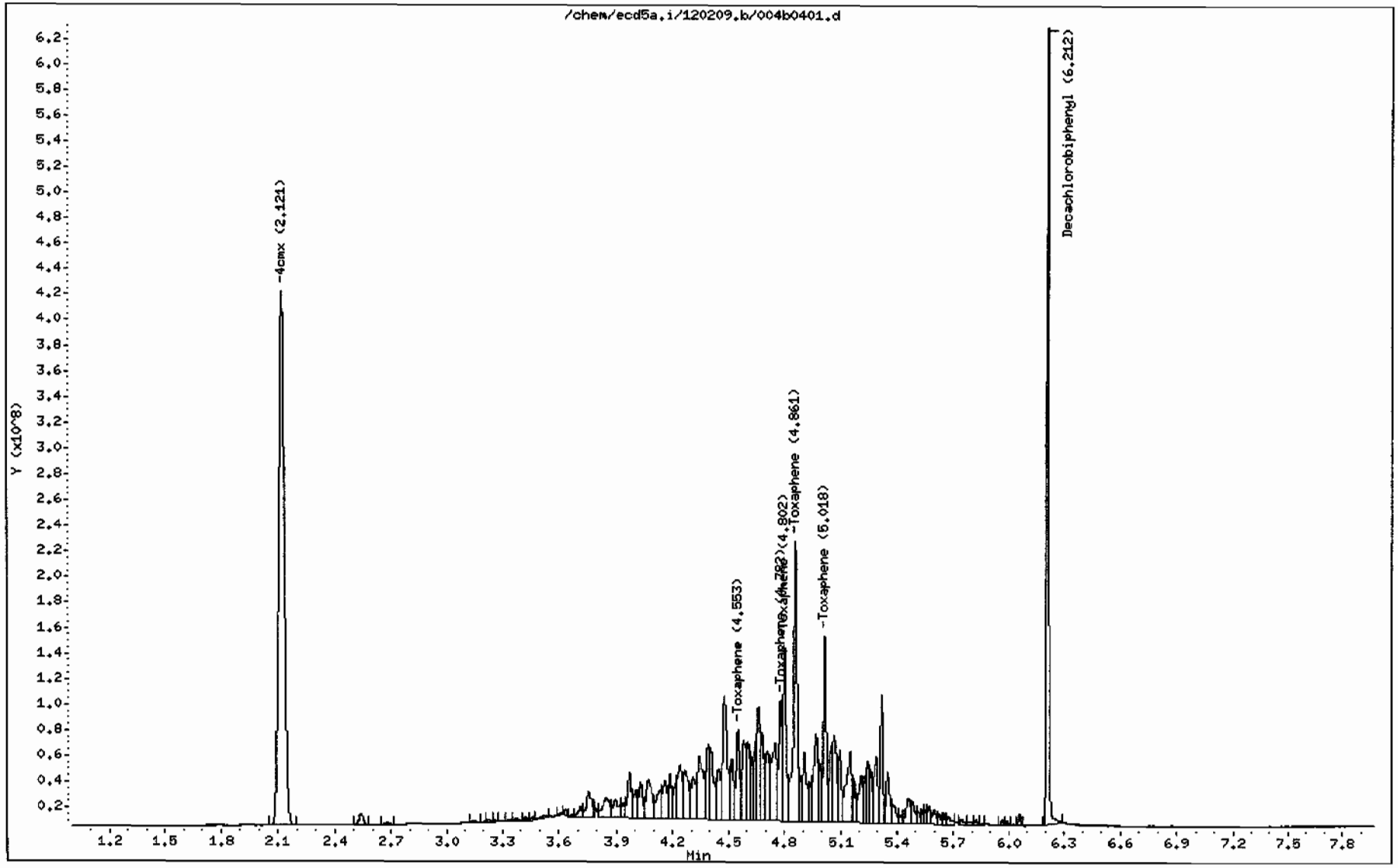

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/004b0401.d
Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

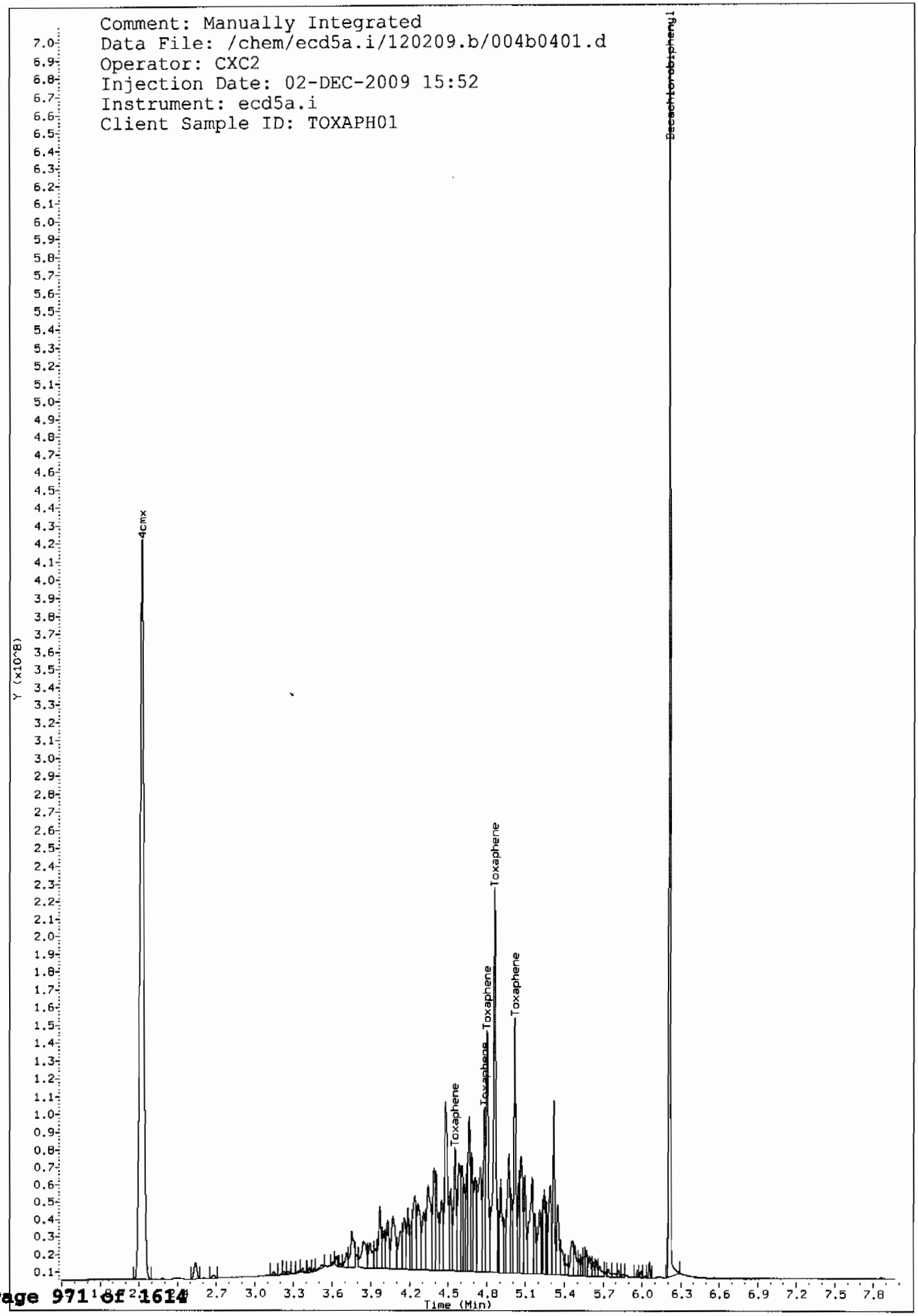

Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-004b0401.d
Operator: CXC2
Injection Date: 02-DEC-2009 15:52
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

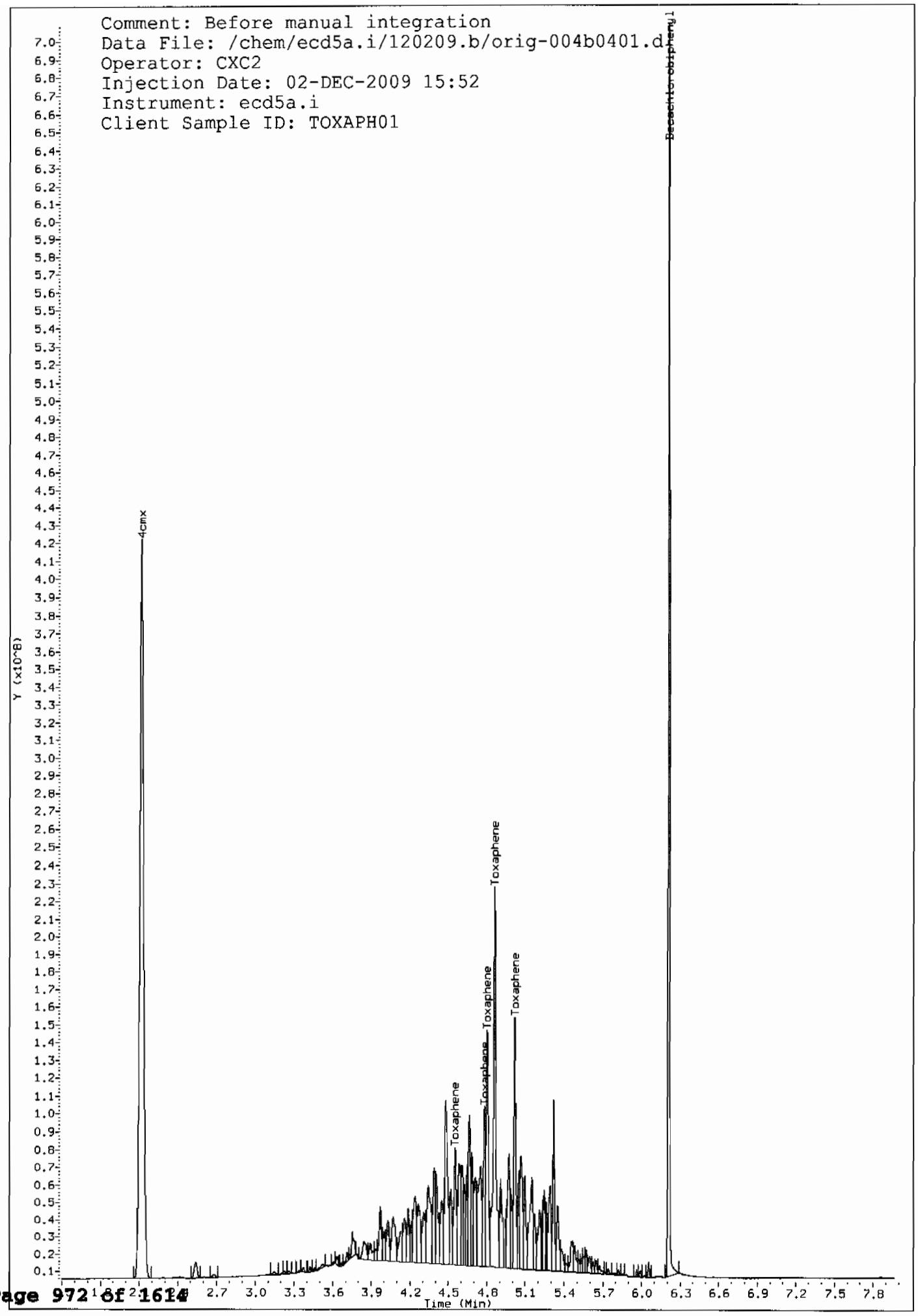

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/005f0501.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 02-DEC-2009 16:04
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.763	3.763	0.000	15364576	1000.00	1010	80.00- 120.00	100.00
4.422	4.422	0.000	9209103	1000.00	1040	39.94- 79.94	59.94
4.546	4.546	0.000	49482743	1000.00	1020	302.06- 342.06	322.06
4.631	4.631	0.000	72104076	1000.00	970	449.29- 489.29	469.29
4.766	4.766	0.000	3592907	1000.00	901	3.38- 43.38	23.38
Average of Peak Amounts =					988		
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	83230660	200.000	202	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.421	6.422	-0.001	32210699	200.000	190	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/005f0501.d

Date : 02-DEC-2009 16:04

Client ID: CHLOR01

Sample Info: IWPE091021-00CL

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

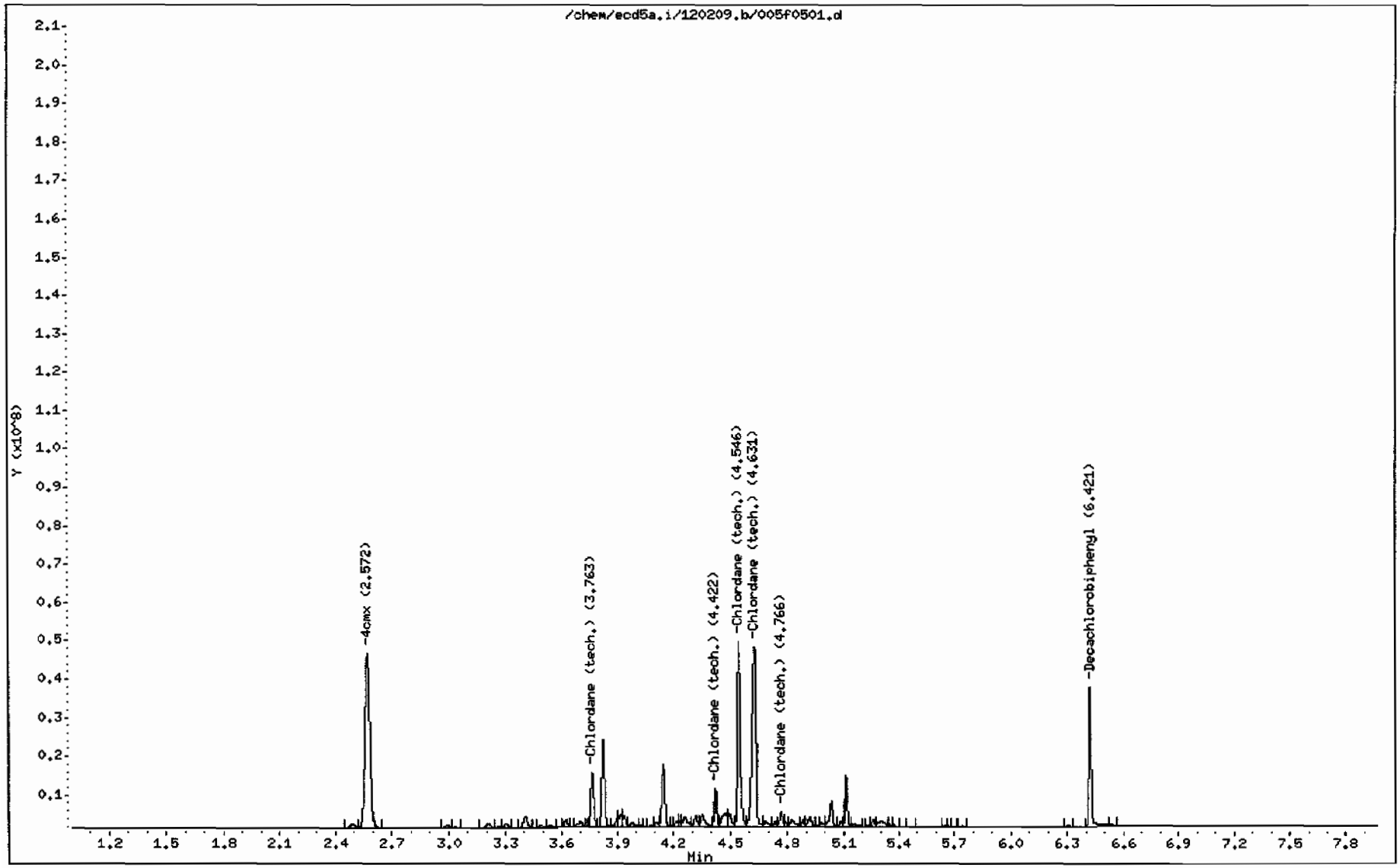

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/005b0501.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 02-DEC-2009 16:04
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.334	3.334	0.000	193503412	1000.00	986	80.00- 120.00	100.00(M)
4.050	4.050	0.000	99637259	1000.00	930	31.49- 71.49	51.49
4.194	4.194	0.000	464182876	1000.00	950	219.88- 259.88	239.88
4.288	4.288	0.000	363813733	1000.00	951	168.01- 208.01	188.01
4.438	4.438	0.000	41512379	1000.00	1010	1.45- 41.45	21.45
Average of Peak Amounts =					966		
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	890874931	200.000	197	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	556836240	200.000	174	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/005b0501.d
Date : 02-DEC-2009 16:04
Client ID: CHLOR01
Sample Info: IWPE091021-00CL

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

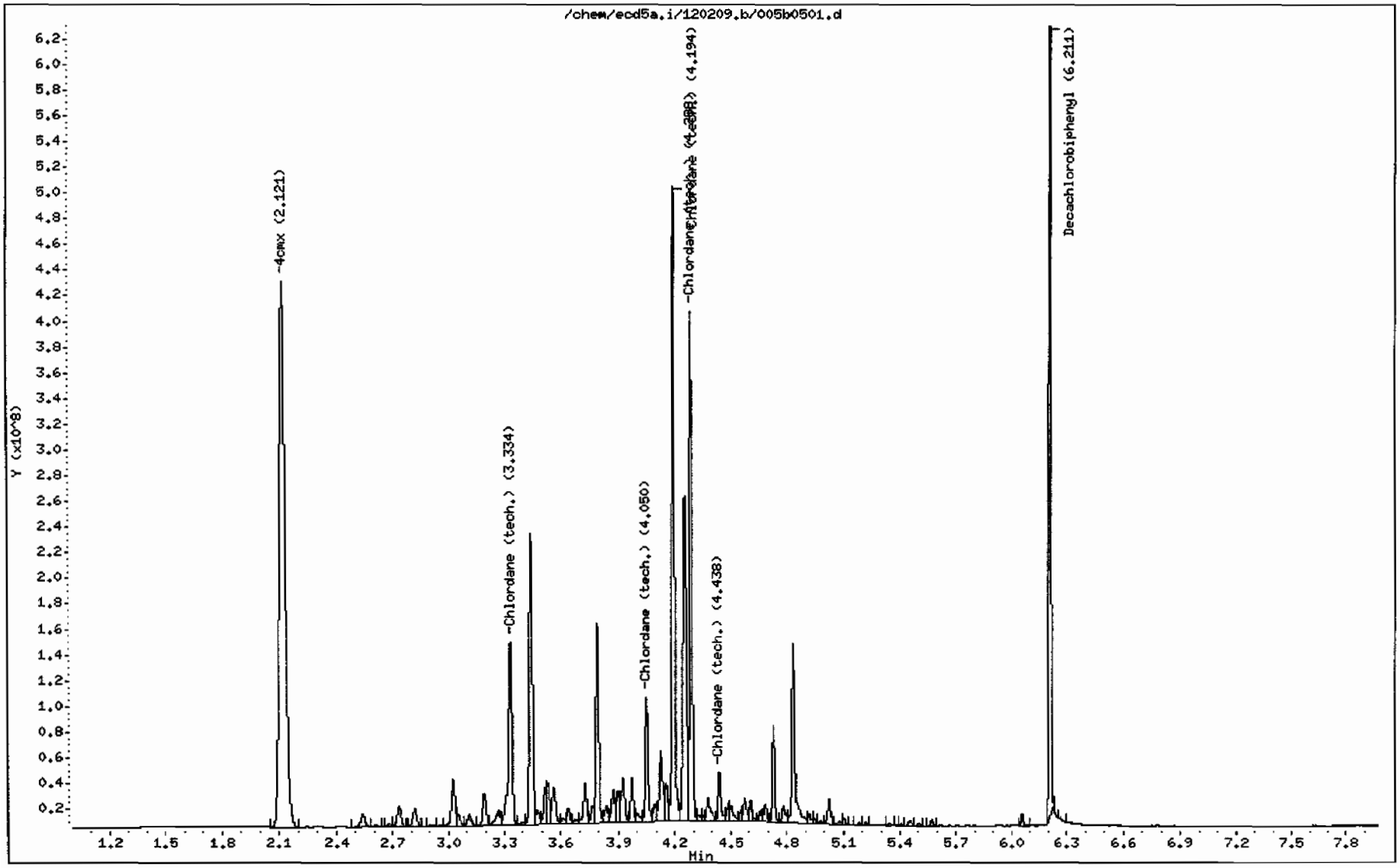

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/005b0501.d
Operator: CXC2
Injection Date: 02-DEC-2009 16:04
Instrument: ecd5a.i
Client Sample ID: CHLOR01

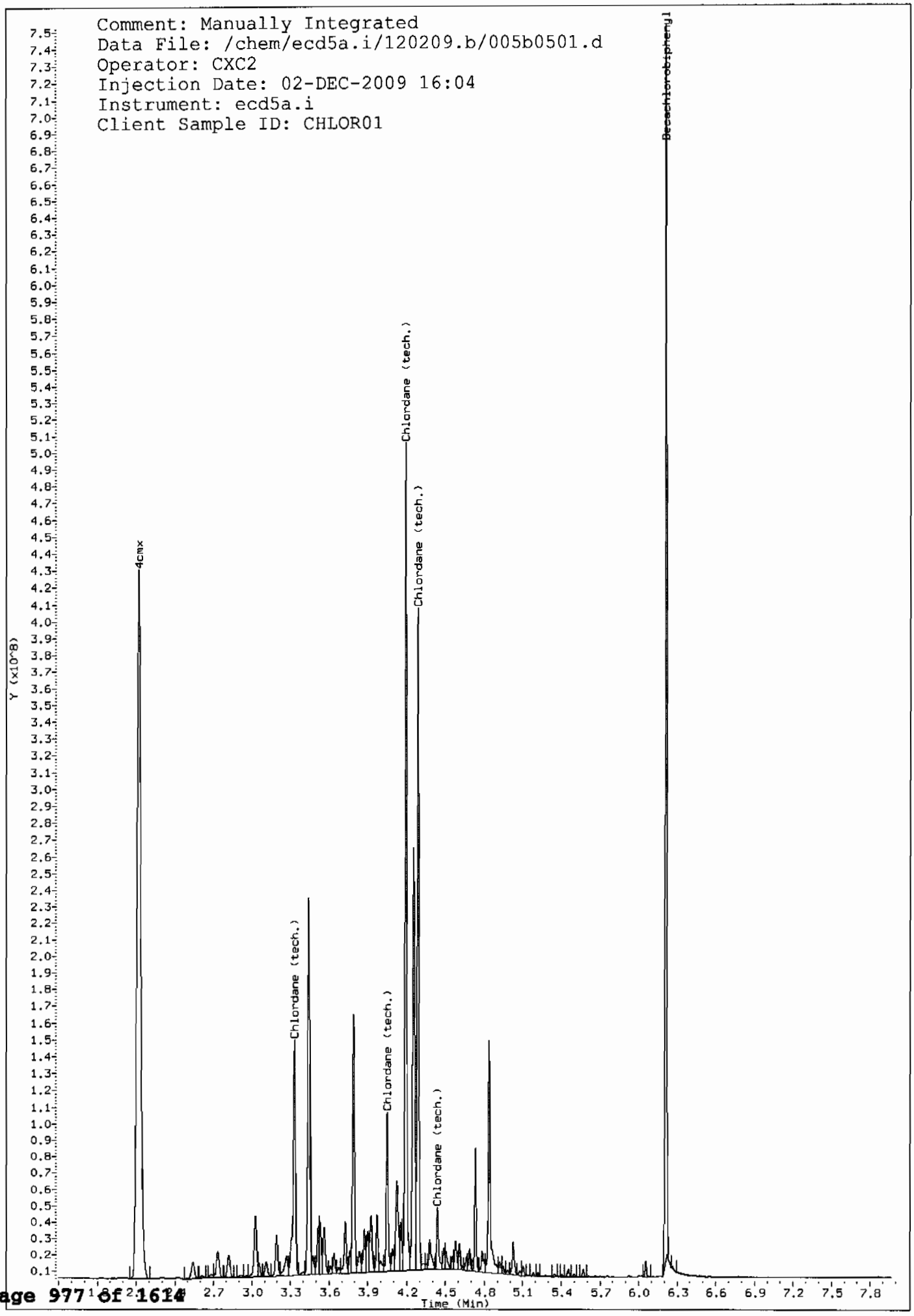

Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-005b0501.d
Operator: CXC2
Injection Date: 02-DEC-2009 16:04
Instrument: ecd5a.i
Client Sample ID: CHLOR01

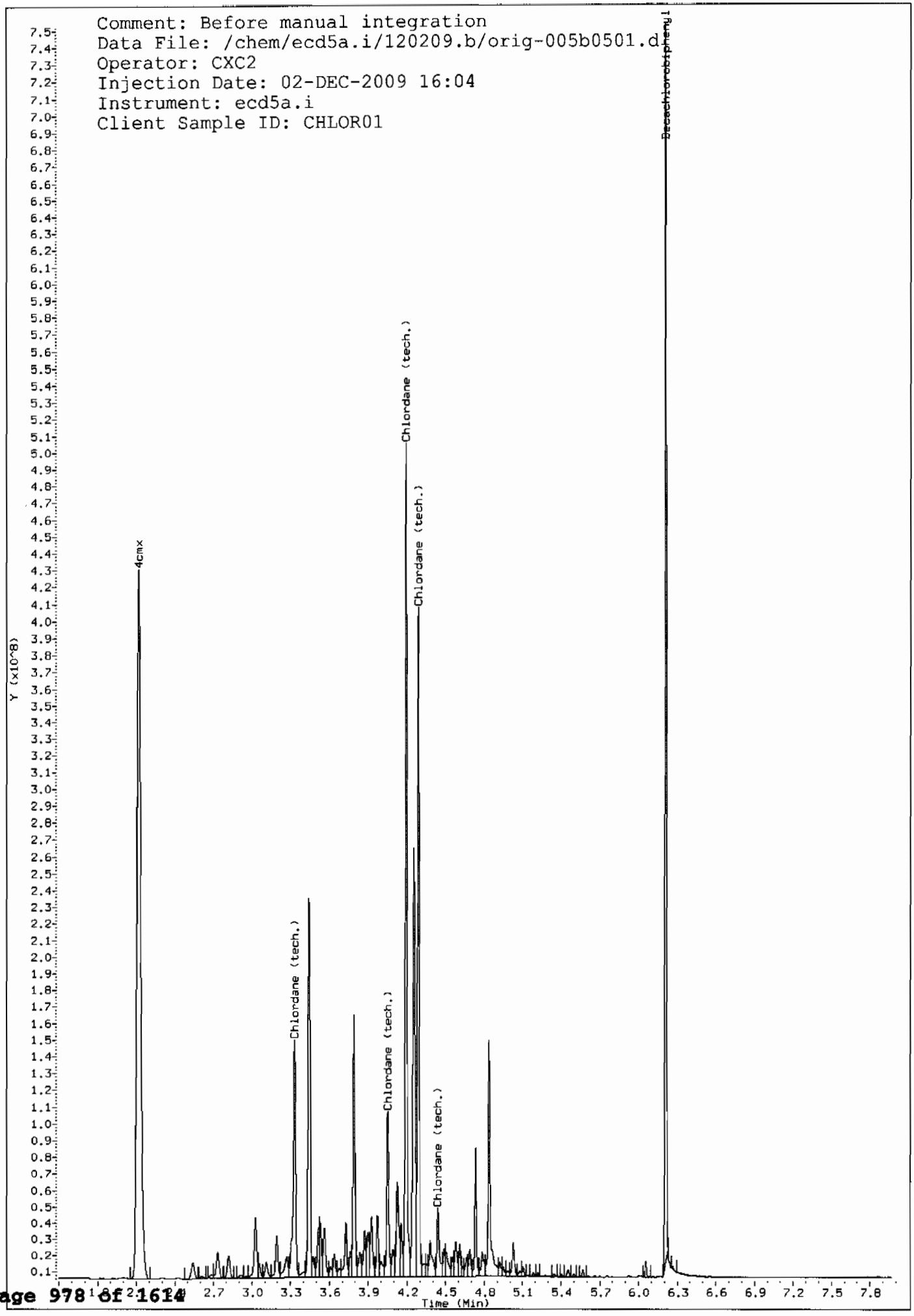

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CLP-1

Data file : /chem/ecd5a.i/120209.b/060f6001.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB07
Inj Date : 03-DEC-2009 03:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.163	3.163	0.000	62545679	100.000	117	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.447	3.447	0.000	55217880	100.000	118	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.526	3.525	0.001	23669621	100.000	112	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	42952300	100.000	105	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.667	3.666	0.001	56884332	100.000	116	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.045	4.044	0.001	49107023	100.000	111	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.465	4.464	0.001	45091268	100.000	114	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.546	4.546	0.000	46787979	100.000	120	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.632	4.632	0.000	40673912	100.000	107	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.720	4.720	0.000	42067281	100.000	117	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.682	4.681	0.001	85842740	200.000	218	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.872	4.872	0.000	85909045	200.000	224	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.017	5.017	0.000	76091223	200.000	232	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.052	5.051	0.001	75663327	200.000	245	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.155	5.154	0.001	75466945	200.000	243	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.407	5.408	-0.001	59678040	200.000	219	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.220	5.219	0.001	44200351	200.000	180	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.667	5.668	-0.001	65348895	200.000	221	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.502	5.503	-0.001	111847007	1000.00	947	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.838	5.839	-0.001	66635689	200.000	205	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.574	2.573	0.001	89931118	200.000	218	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	36455538	200.000	215	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/060f6001.d
Date : 03-DEC-2009 03:12
Client ID: INDAB07
Sample Info: IWFE091123-106B

Column phase: CLP-1

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

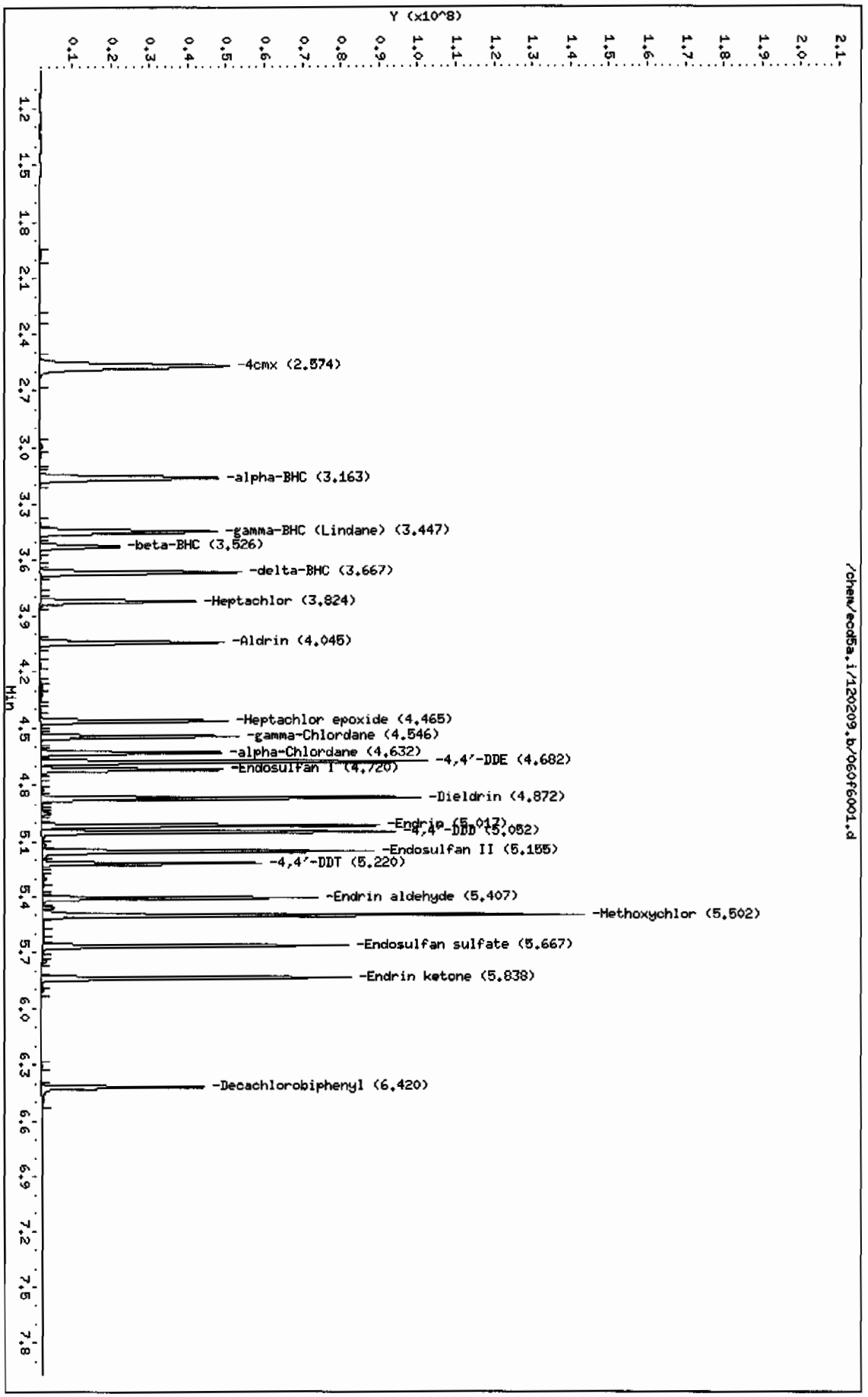

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CLP-2

Data file : /chem/ecd5a.i/120209.b/060b6001.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB07
Inj Date : 03-DEC-2009 03:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.793	2.793	0.000	661613804	100.000	105	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.106	0.001	586656106	100.000	107	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.187	3.186	0.001	240201767	100.000	98.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	417733807	100.000	93.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.411	3.410	0.001	578928542	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	490492864	100.000	98.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	428604686	100.000	102	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.195	4.194	0.001	462926176	100.000	104	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.288	4.288	0.000	397355472	100.000	92.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.322	4.320	0.002	378089612	100.000	98.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.402	4.401	0.001	828117854	200.000	202	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.493	4.493	0.000	794730501	200.000	196	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.680	4.679	0.001	699570533	200.000	198	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.753	4.754	-0.001	732443990	200.000	210	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.809	4.809	0.000	689538309	200.000	206	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.012	5.013	-0.001	522620489	200.000	189	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.940	4.940	0.000	391862142	200.000	153	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.177	5.176	0.001	591443330	200.000	194	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.347	5.346	0.001	797983703	1000.00	895	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.492	5.492	0.000	604155716	200.000	174	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.122	2.121	0.001	903965048	200.000	200	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	657434641	200.000	205	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/060b6001.d
Date : 03-DEC-2009 03:12
Client ID: INDAB07
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

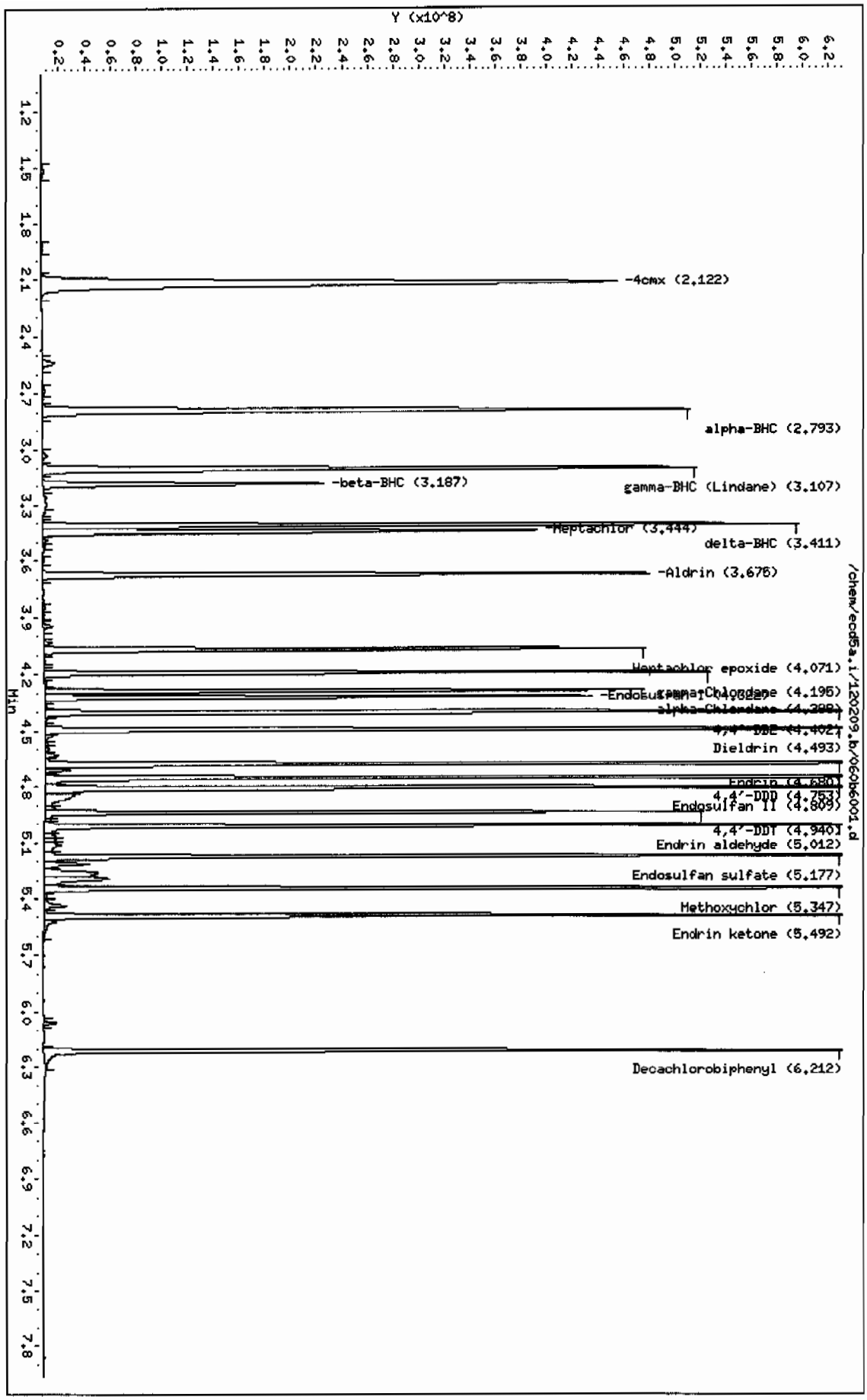

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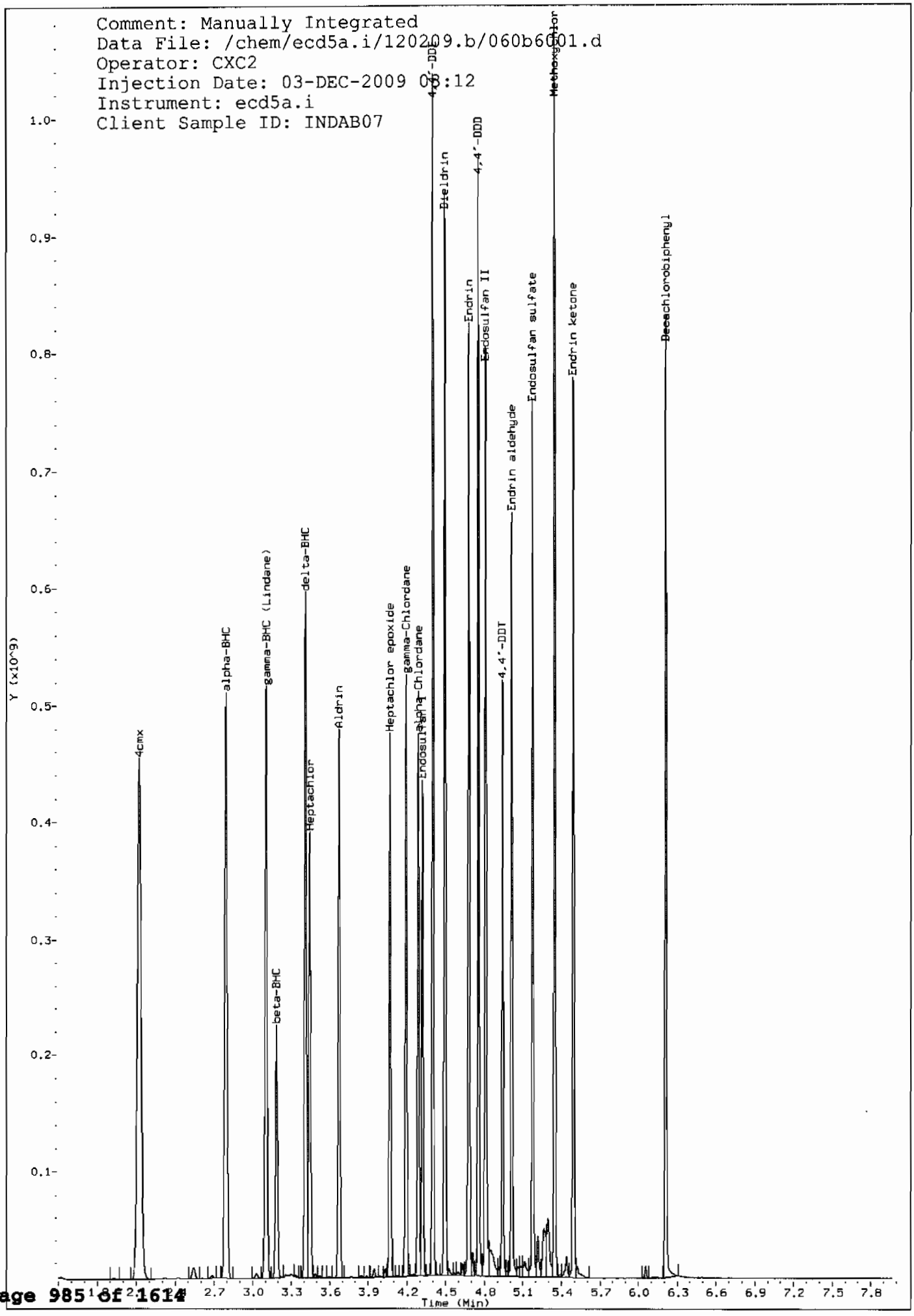
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/060b6001.d
Operator: CXC2
Injection Date: 03-DEC-2009 03:12
Instrument: ecd5a.i
Client Sample ID: INDAB07
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

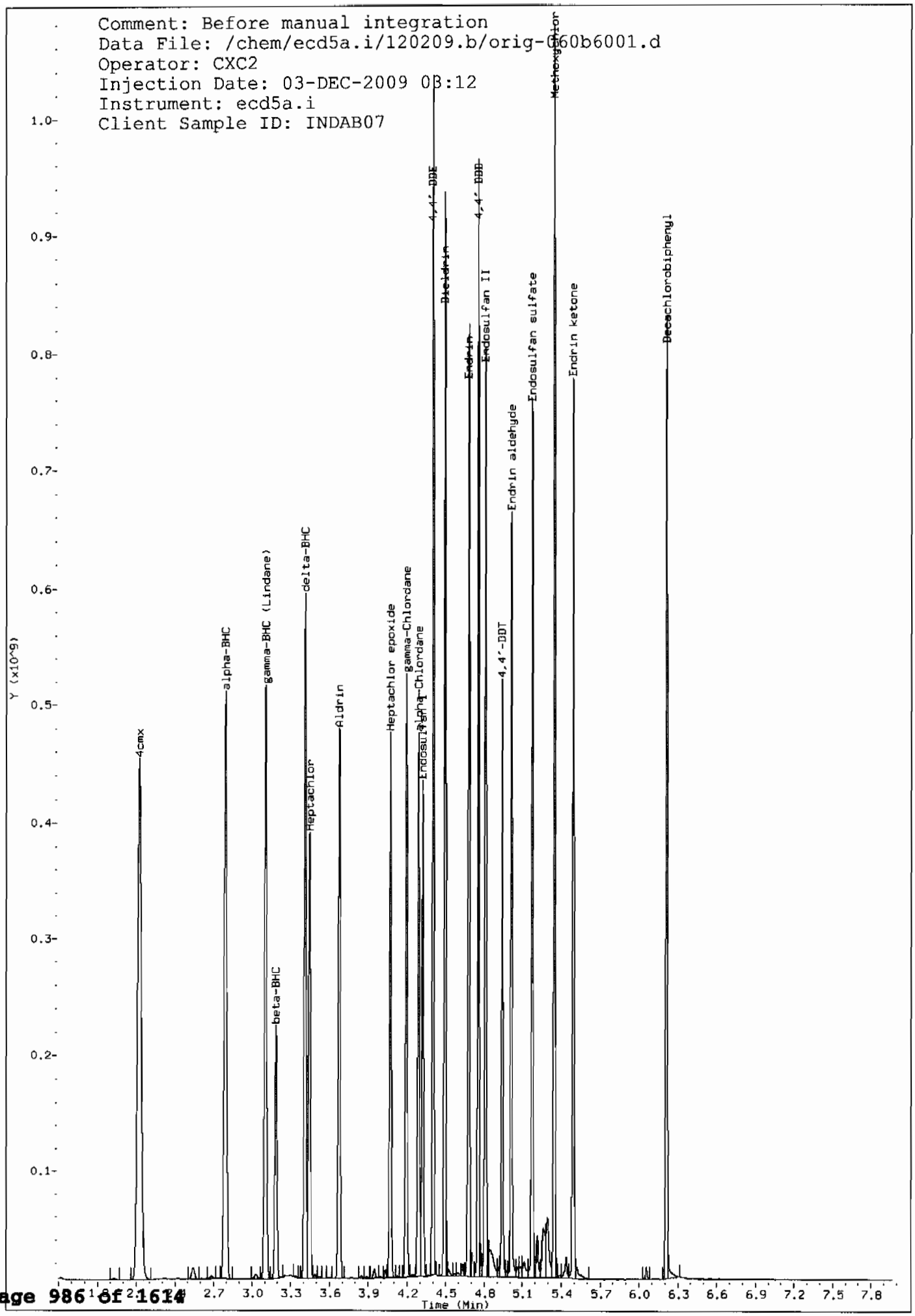
Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-060b6001.d
Operator: CXC2
Injection Date: 03-DEC-2009 08:12
Instrument: ecd5a.i
Client Sample ID: INDAB07
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/120209.b/071f7101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB08
Inj Date : 03-DEC-2009 05:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.163	3.163	0.000	60358891	100.000	113	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.447	3.447	0.000	49712741	100.000	106	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.526	3.525	0.001	22311330	100.000	105	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	19095776	100.000	46.7	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.666	3.666	0.000	54481648	100.000	111	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.045	4.044	0.001	47372033	100.000	108	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.465	4.464	0.001	42949748	100.000	108	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.546	4.546	0.000	43416424	100.000	111	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.632	4.632	0.000	38123650	100.000	100	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.721	4.720	0.001	39364498	100.000	110	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.681	4.681	0.000	81753513	200.000	207	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.871	4.872	-0.001	80882287	200.000	211	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.017	5.017	0.000	70113932	200.000	214	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.051	5.051	0.000	68602541	200.000	222	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.155	5.154	0.001	68346401	200.000	220	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.408	5.408	0.000	57184459	200.000	210	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.220	5.219	0.001	5882180	200.000	23.9	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.667	5.668	-0.001	58943147	200.000	199	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.501	5.503	-0.002	54160636	1000.00	458	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.838	5.839	-0.001	34572298	200.000	106	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.572	2.573	-0.001	87116538	200.000	211	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.419	6.422	-0.003	35235923	200.000	208	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/071f7101.d
Date : 03-DEC-2009 05:24
Client ID: INDAB08
Sample Info: IWPE091123-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

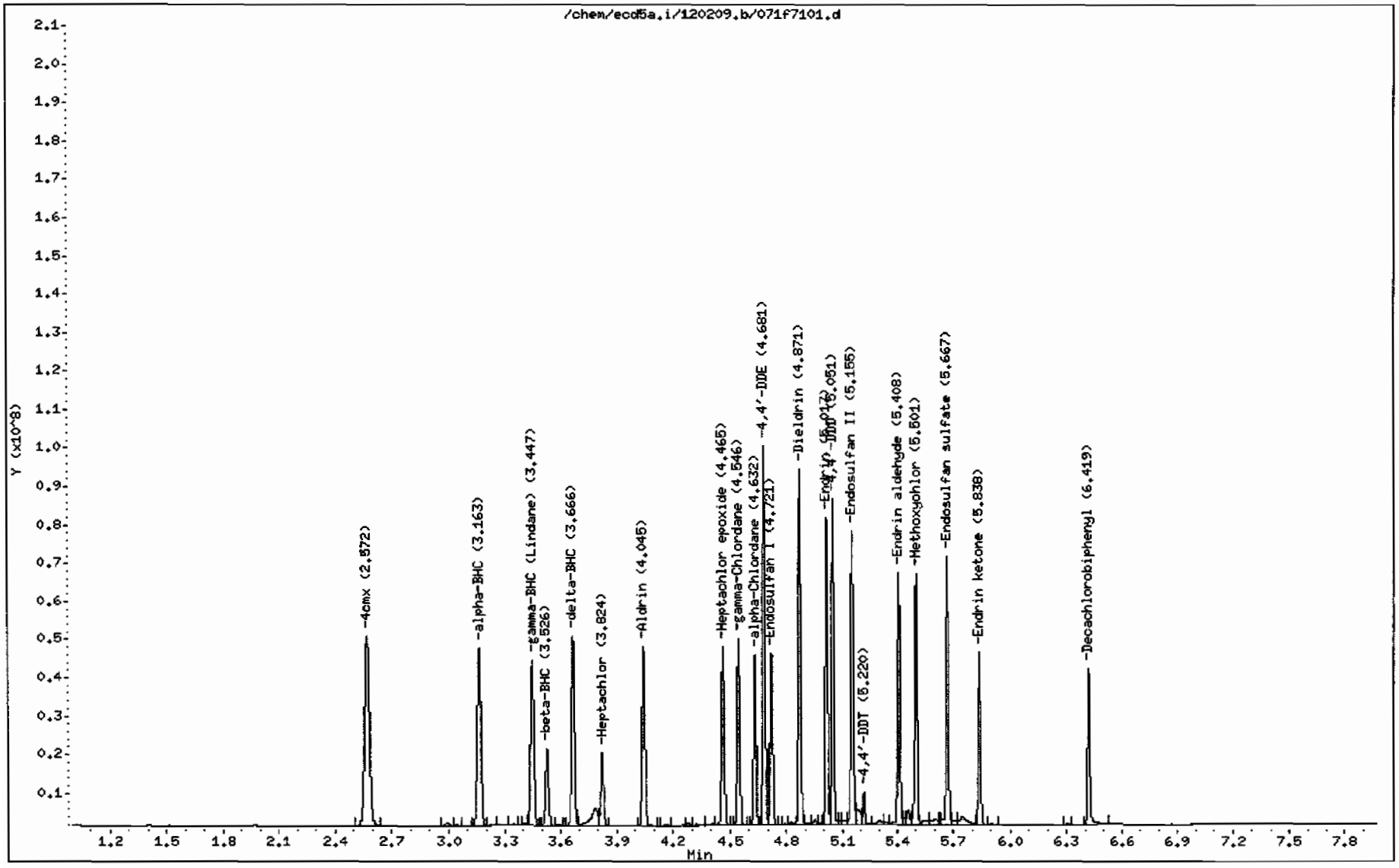

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/071b7101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB08
Inj Date : 03-DEC-2009 05:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120209.b/ECD5-B-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 71 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.792	2.793	-0.001	635136023	100.000	101	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.106	3.106	0.000	519050611	100.000	94.7	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.186	3.186	0.000	223715794	100.000	91.7	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	139678599	100.000	31.3	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.411	3.410	0.001	528987072	100.000	97.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.675	3.675	0.000	453864292	100.000	91.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	395038471	100.000	94.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.195	4.194	0.001	419515487	100.000	93.9	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.289	4.288	0.001	361971549	100.000	84.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.321	4.320	0.001	346746119	100.000	90.1	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.401	4.401	0.000	768696497	200.000	188	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.493	4.493	0.000	717886947	200.000	177	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.679	4.679	0.000	602753065	200.000	170	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.753	4.754	-0.001	603600173	200.000	173	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.809	4.809	0.000	570209610	200.000	170	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.011	5.013	-0.002	465323427	200.000	168	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.940	4.940	0.000	8847792	200.000	3.45	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.176	5.176	0.000	488657713	200.000	160	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.346	5.346	0.000	136702912	1000.00	124	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.491	5.492	-0.001	247617139	200.000	71.5	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	888385091	200.000	197	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	607066317	200.000	189	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/071b7101.d
Date : 03-DEC-2009 05:24
Client ID: INDAB08
Sample Info: IWPE091123-10AB
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

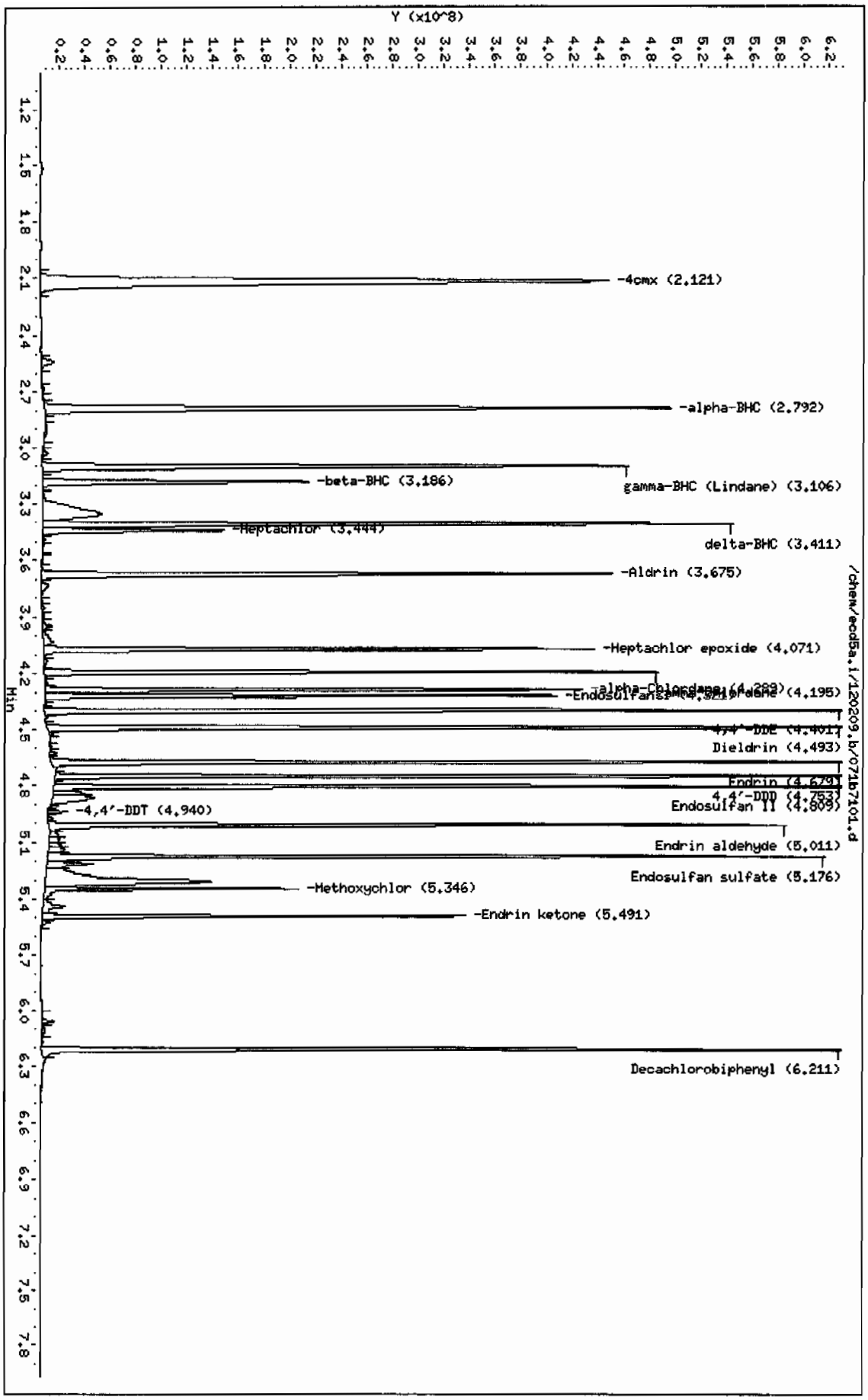

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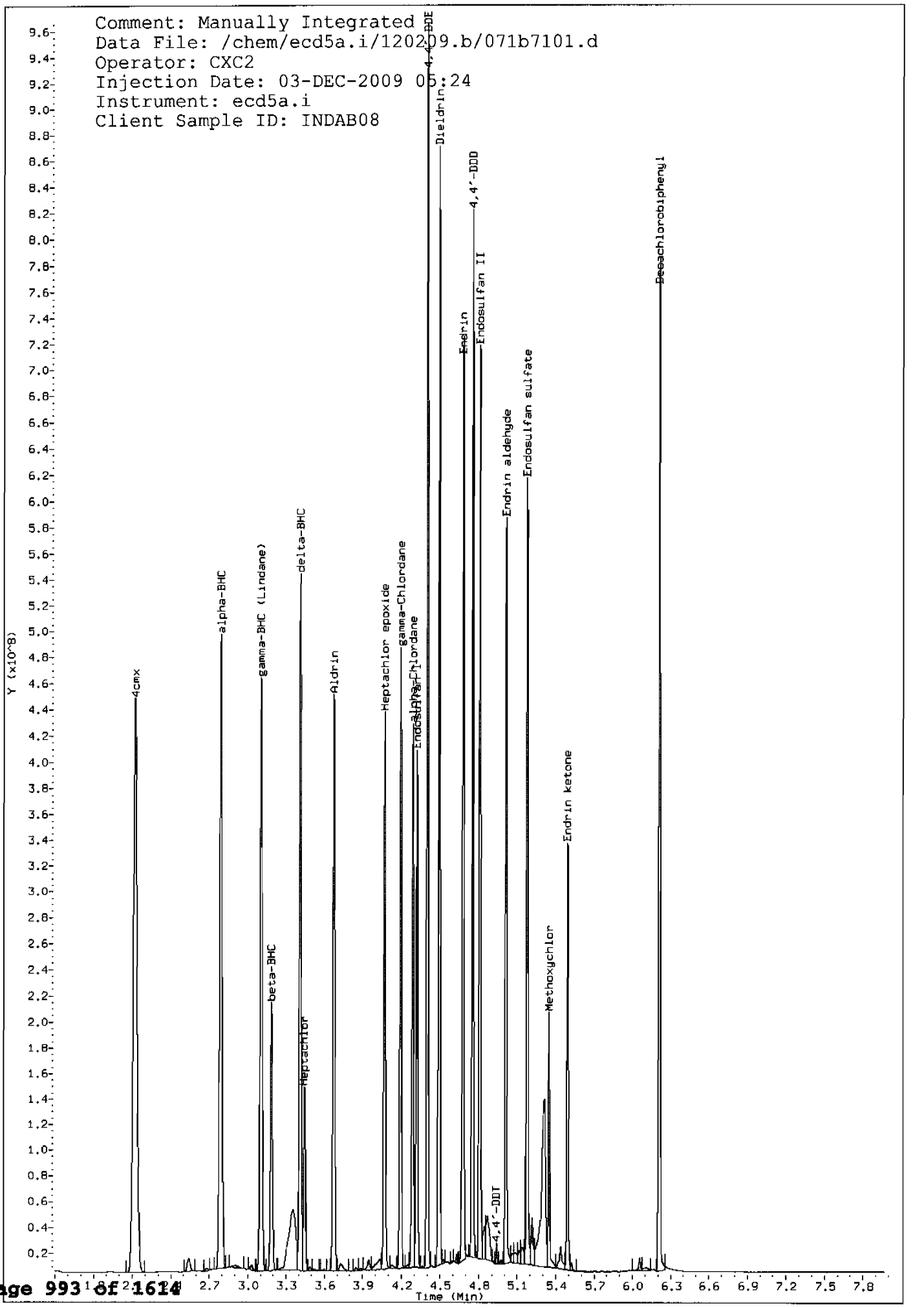
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Operator: CXC2
Injection Date: 03-DEC-2009 05:24
Instrument: ecd5a.i
Client Sample ID: INDAB08
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

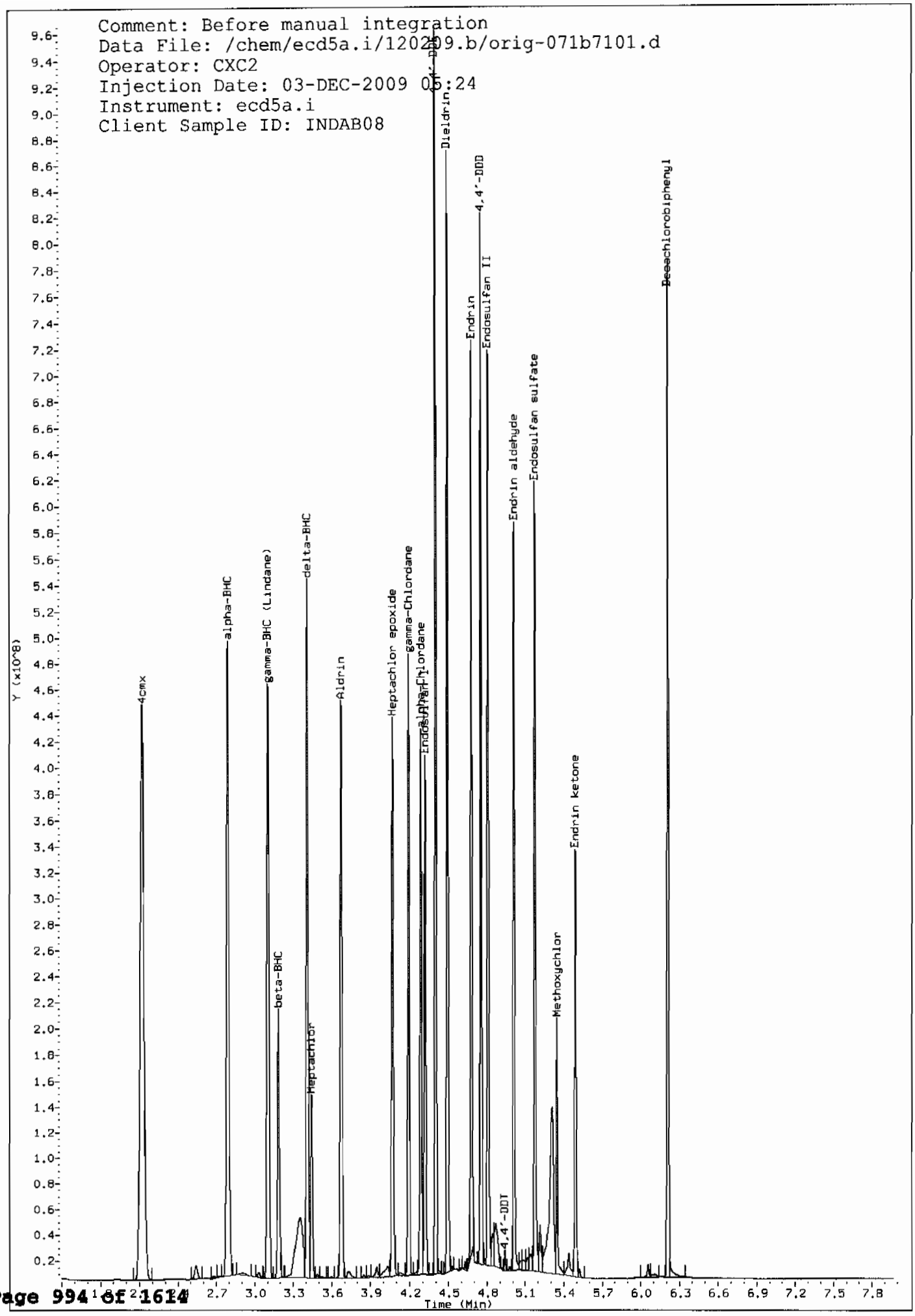
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Operator: CXC2
Injection Date: 03-DEC-2009 05:24
Instrument: ecd5a.i
Client Sample ID: INDAB08
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/008f0801.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB01
Inj Date : 07-DEC-2009 18:26
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.050	3.050	0.000	57687264	100.000	102	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.350	3.350	0.000	49366289	100.000	104	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.433	3.433	0.000	21830933	100.000	92.6	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.740	3.740	0.000	36955166	100.000	93.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.577	3.577	0.000	52258277	100.000	101	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.966	3.966	0.000	45804775	100.000	96.0	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	41764213	100.000	97.0	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.475	4.475	0.000	43645118	100.000	103	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.562	4.562	0.000	37859563	100.000	93.1	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.650	4.650	0.000	39048367	100.000	101	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.614	4.614	0.000	82821698	200.000	199	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.802	4.802	0.000	80472849	200.000	196	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	70293241	200.000	203	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.985	4.985	0.000	67712484	200.000	195	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.086	5.086	0.000	72823660	200.000	200	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.339	5.339	0.000	55735649	200.000	185	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.153	5.153	0.000	36790169	200.000	224	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.597	5.597	0.000	59498289	200.000	189	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.436	5.436	0.000	96492687	1000.00	986	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.767	5.767	0.000	54907645	200.000	194	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.409	2.409	0.000	86978291	200.000	196	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	50762096	200.000	193	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/008f0801.d
Date : 07-DEC-2009 18:26
Client ID: INDAB01
Sample Info: IWPE091207-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

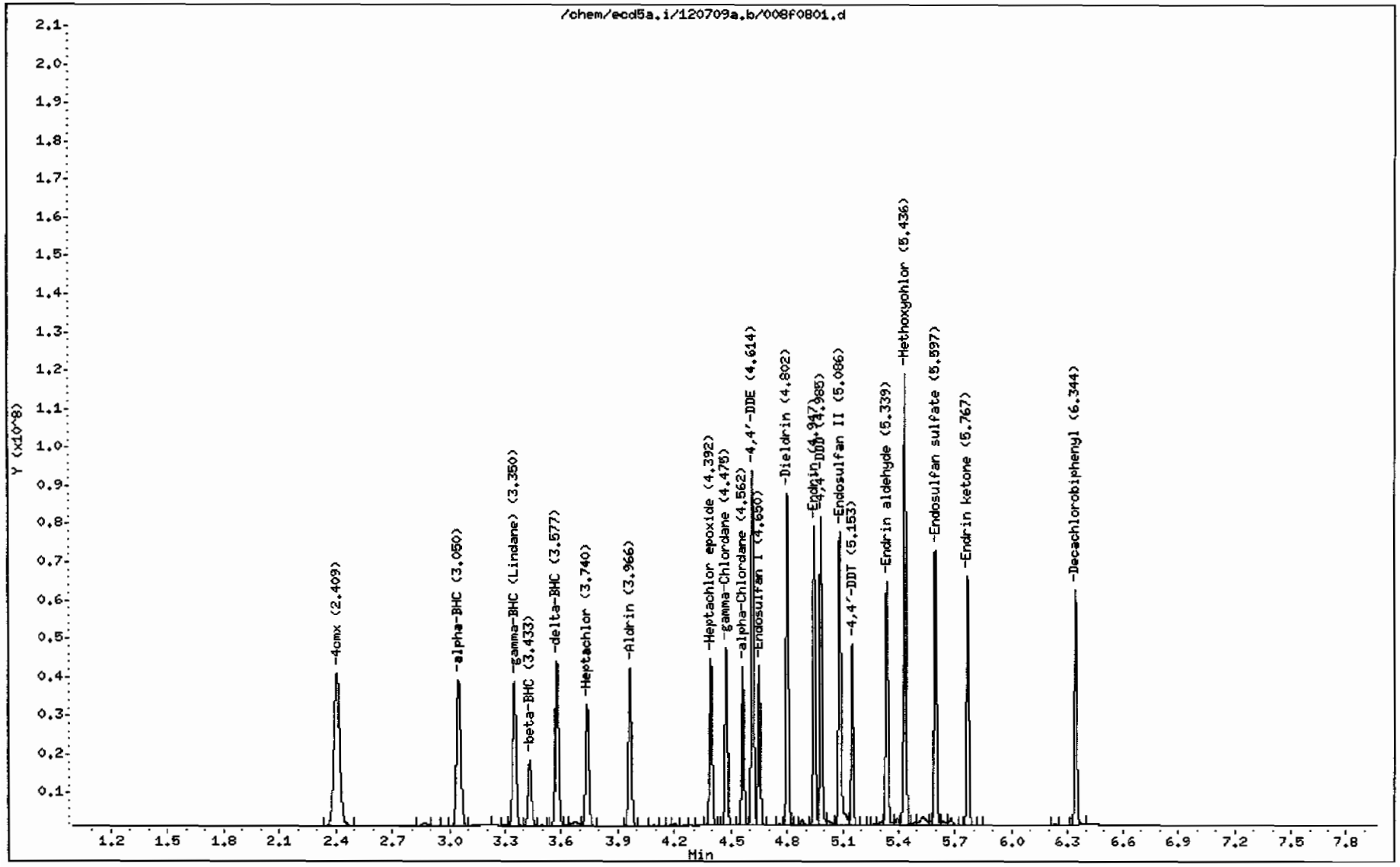

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/008b0801.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB01
Inj Date : 07-DEC-2009 18:26
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.781	2.781	0.000	655840329	100.000	94.1	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.107	0.000	585681220	100.000	96.2	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.191	3.191	0.000	236514108	100.000	100	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.453	3.453	0.000	423595293	100.000	85.0	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.420	3.420	0.000	569081844	100.000	93.8	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.687	3.687	0.000	484291214	100.000	88.0	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.088	4.088	0.000	432182498	100.000	90.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.211	4.211	0.000	471990690	100.000	96.5	80.00- 120.00	100.00(M)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.306	4.306	0.000	400577737	100.000	85.1	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.338	4.338	0.000	384375664	100.000	91.3	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
4.419	4.419	0.000	827368123	200.000	187	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.511	4.511	0.000	783258974	200.000	179	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.698	4.698	0.000	684188081	200.000	181	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.771	4.771	0.000	695115426	200.000	185	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.827	4.827	0.000	651076648	200.000	182	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.031	5.031	0.000	507506413	200.000	171	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.958	4.958	0.000	550261233	200.000	200	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.194	5.194	0.000	601194205	200.000	179	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.363	5.363	0.000	981670687	1000.00	887	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	634214708	200.000	201	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	912532366	200.000	183	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	510047305	200.000	184	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/0008b0801.d
Date : 07-DEC-2009 18:26
Client ID: INDAB01
Sample Info: IWPE091207-10AB

Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

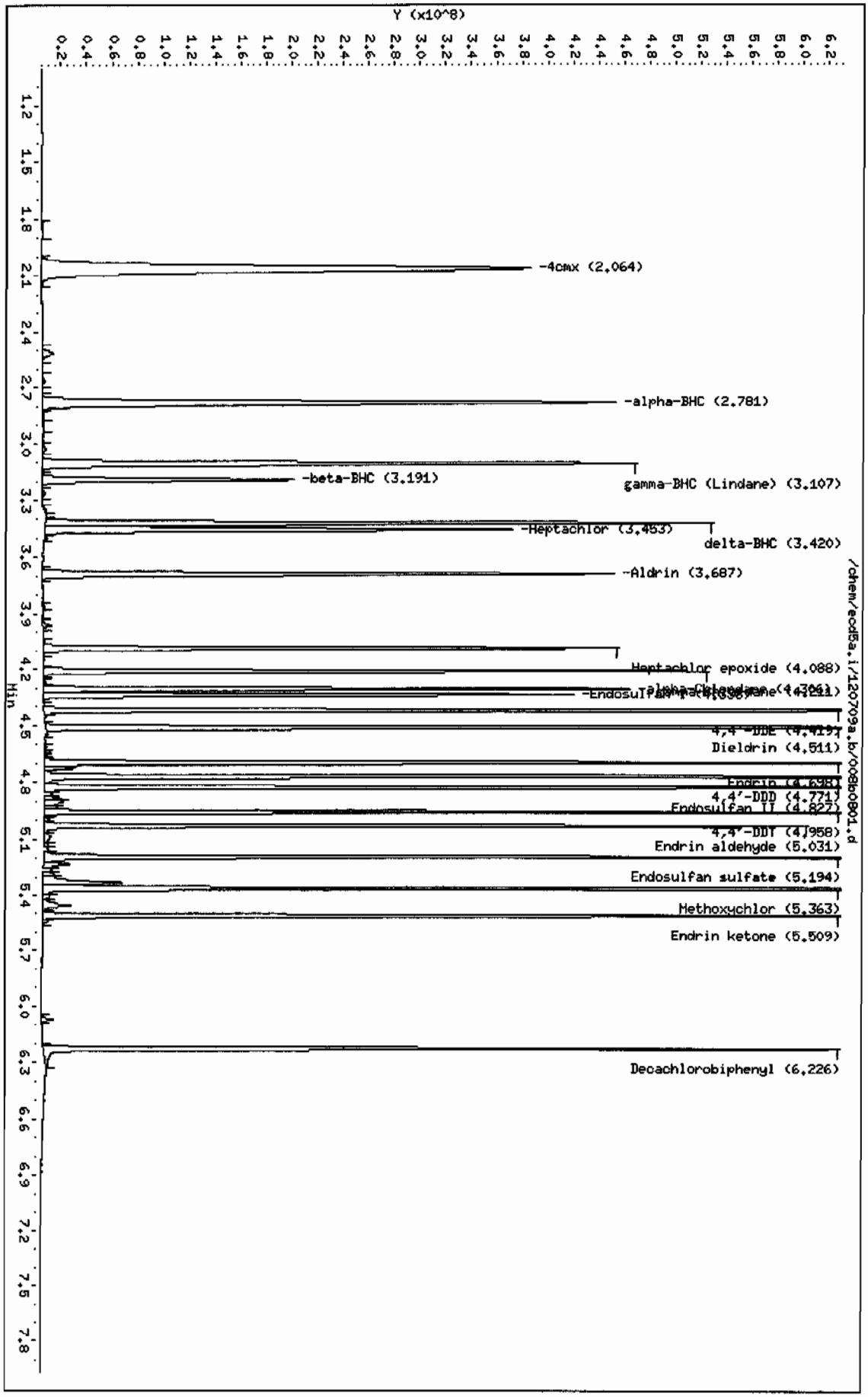

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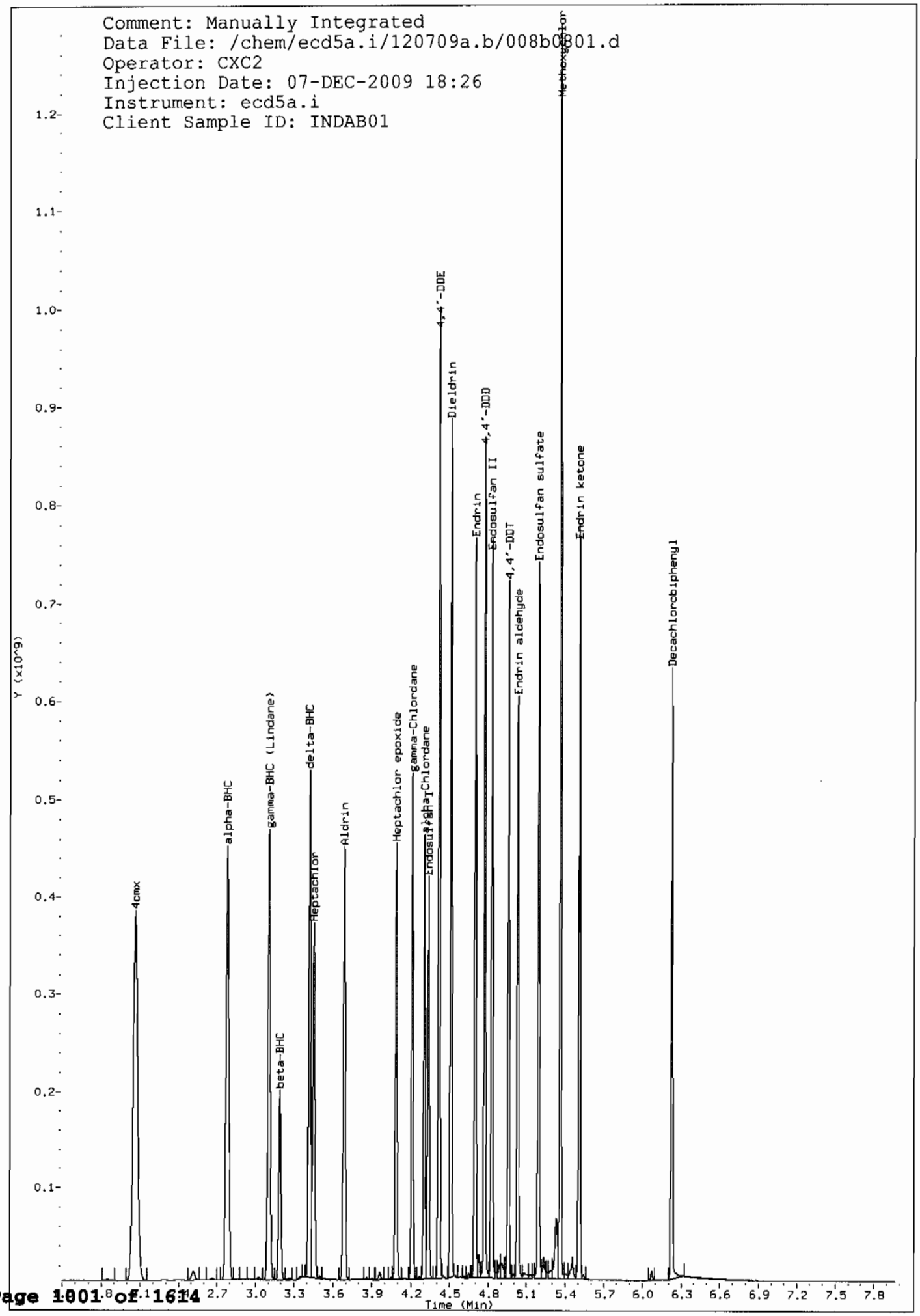
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/008b0801.d
Operator: CXC2
Injection Date: 07-DEC-2009 18:26
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

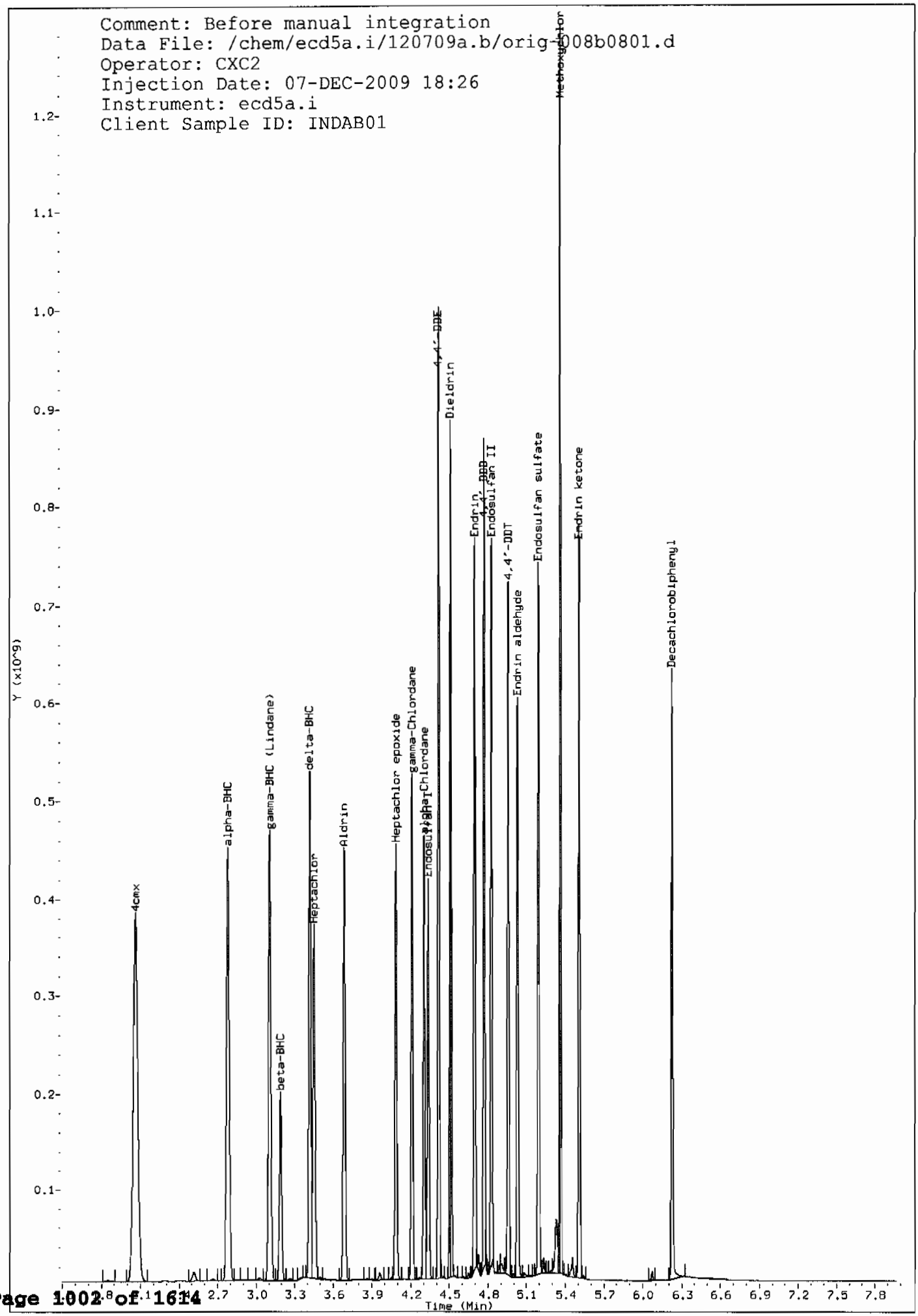
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Operator: CXC2
Injection Date: 07-DEC-2009 18:26
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/016f1601.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 07-DEC-2009 20:38
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.737	4.737	0.000	8630474	2000.00	2060	80.00- 120.00	100.00(M)
4.807	4.807	0.000	14532684	2000.00	1940	148.39- 188.39	168.39
4.862	4.862	0.000	14012146	2000.00	2020	142.36- 182.36	162.36
4.963	4.963	0.000	26950734	2000.00	1800	292.27- 332.27	312.27
5.079	5.079	0.000	27842820	2000.00	1900	302.61- 342.61	322.61
Average of Peak Amounts =					1.94e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	88020333	200.000	199	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	50389517	200.000	192	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/016f1601.d
Date : 07-DEC-2009 20:38
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

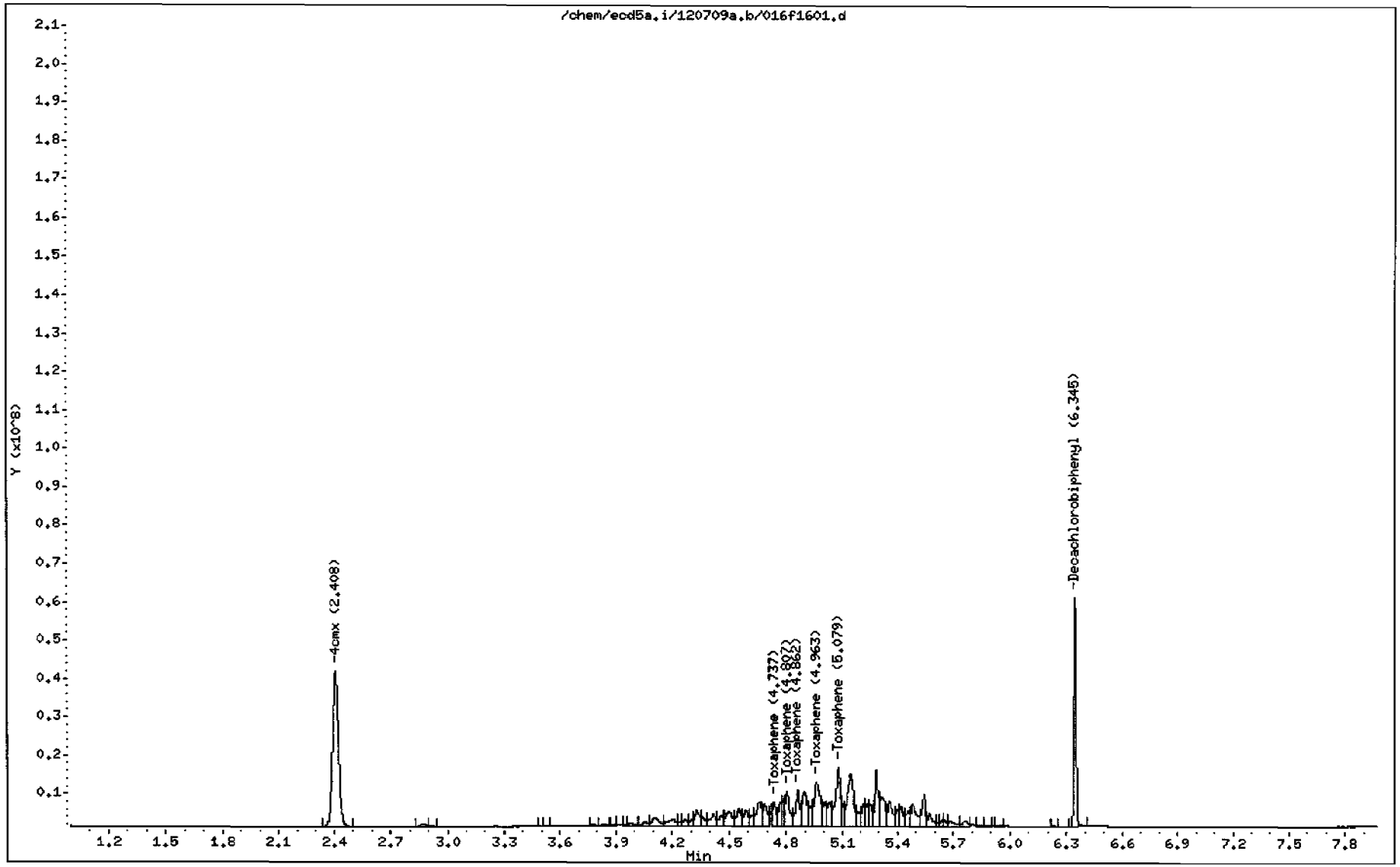

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/016f1601.d
Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

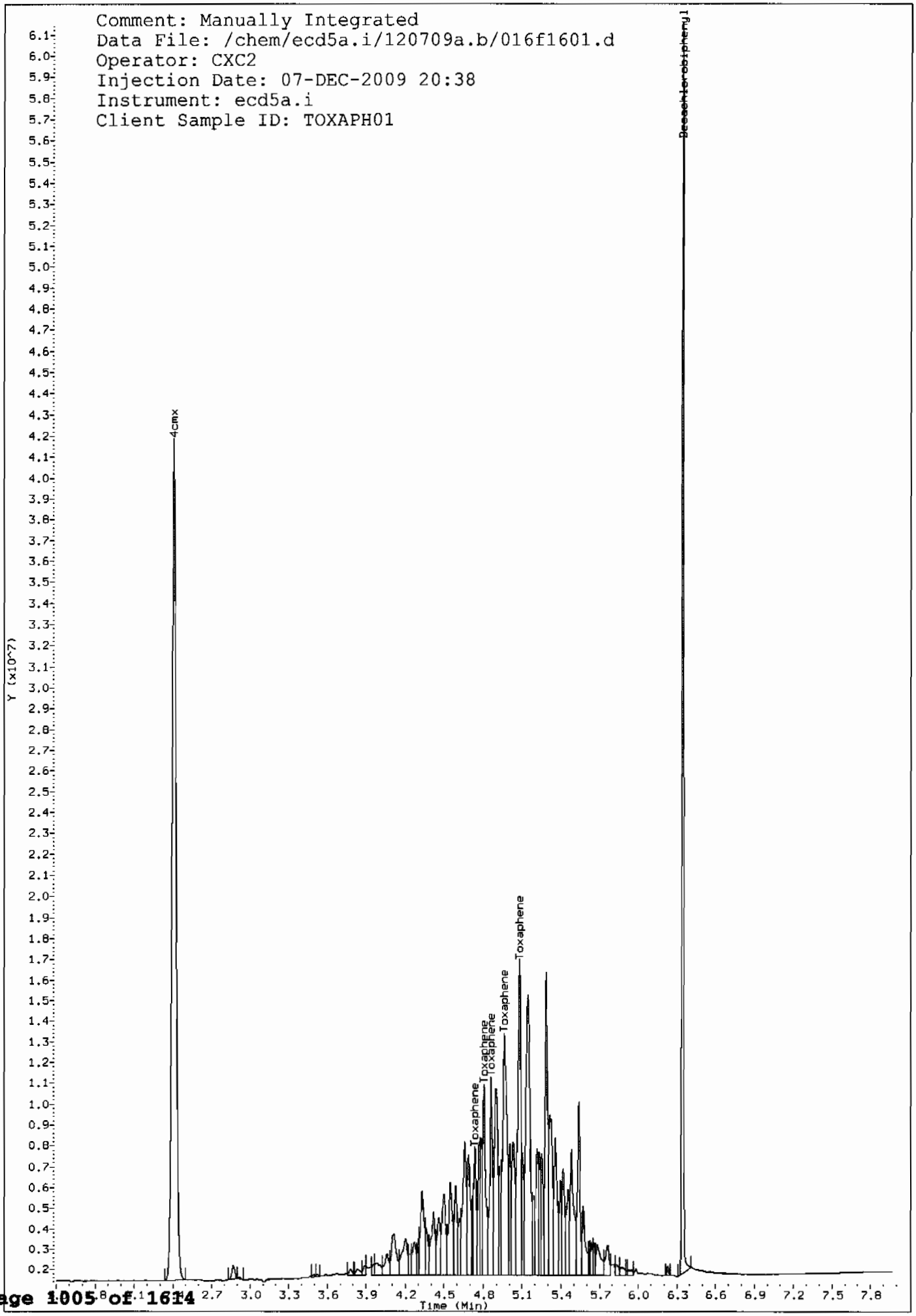

Comment: Before manual integration
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Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

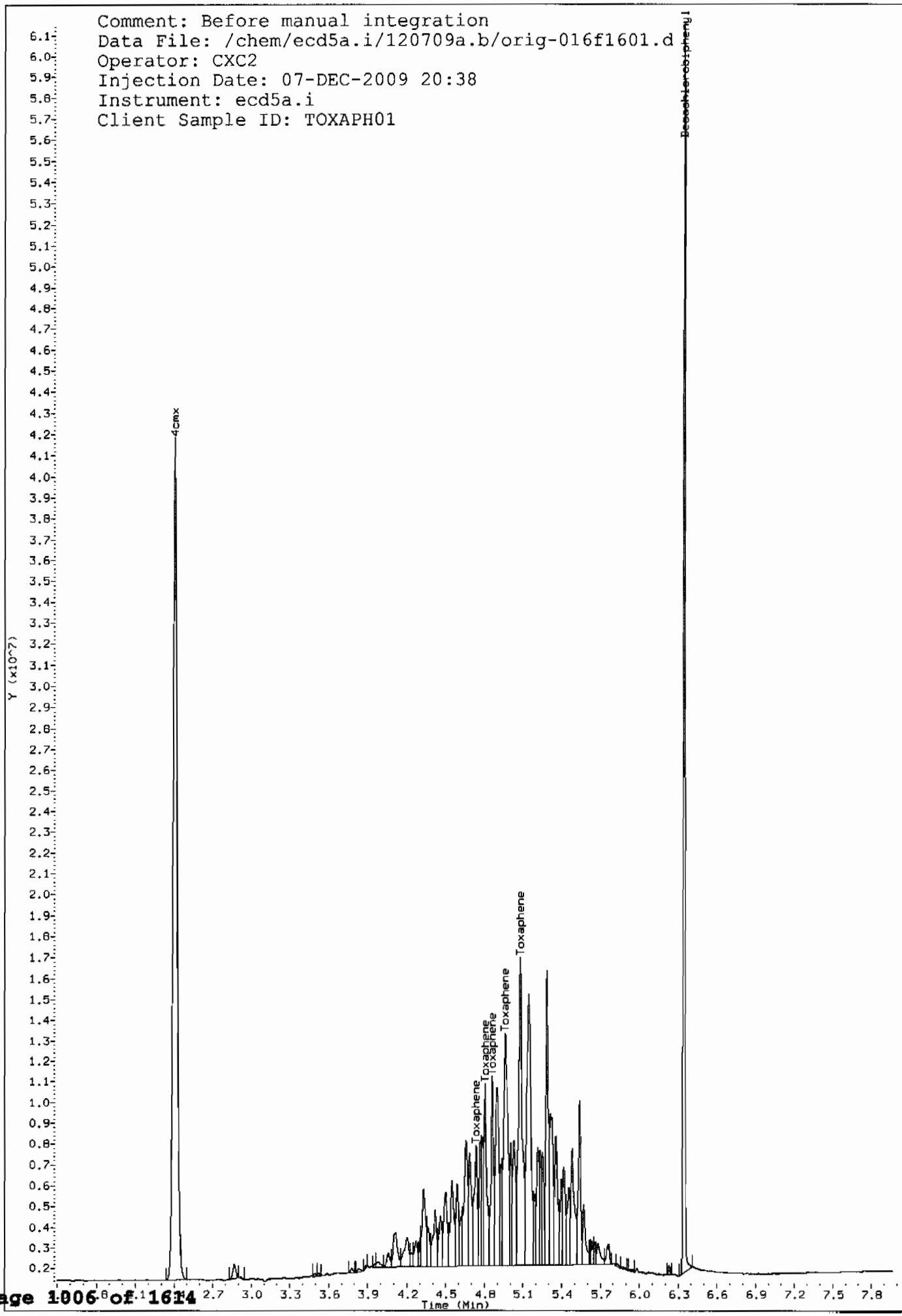

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/016b1601.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 07-DEC-2009 20:38
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.499	4.499	0.000	165851487	2000.00	2080	80.00- 120.00	100.00(M)
4.570	4.570	0.000	96758970	2000.00	2050	38.34- 78.34	58.34
4.682	4.682	0.000	167218850	2000.00	2030	80.82- 120.82	100.82
4.819	4.819	0.000	183991758	2000.00	1740	90.94- 130.94	110.94
4.879	4.879	0.000	309094032	2000.00	1630	166.37- 206.37	186.37
Average of Peak Amounts =					1.91e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	917954345	200.000	184	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	497270187	200.000	179	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/016b1601.d
Date : 07-DEC-2009 20:38
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

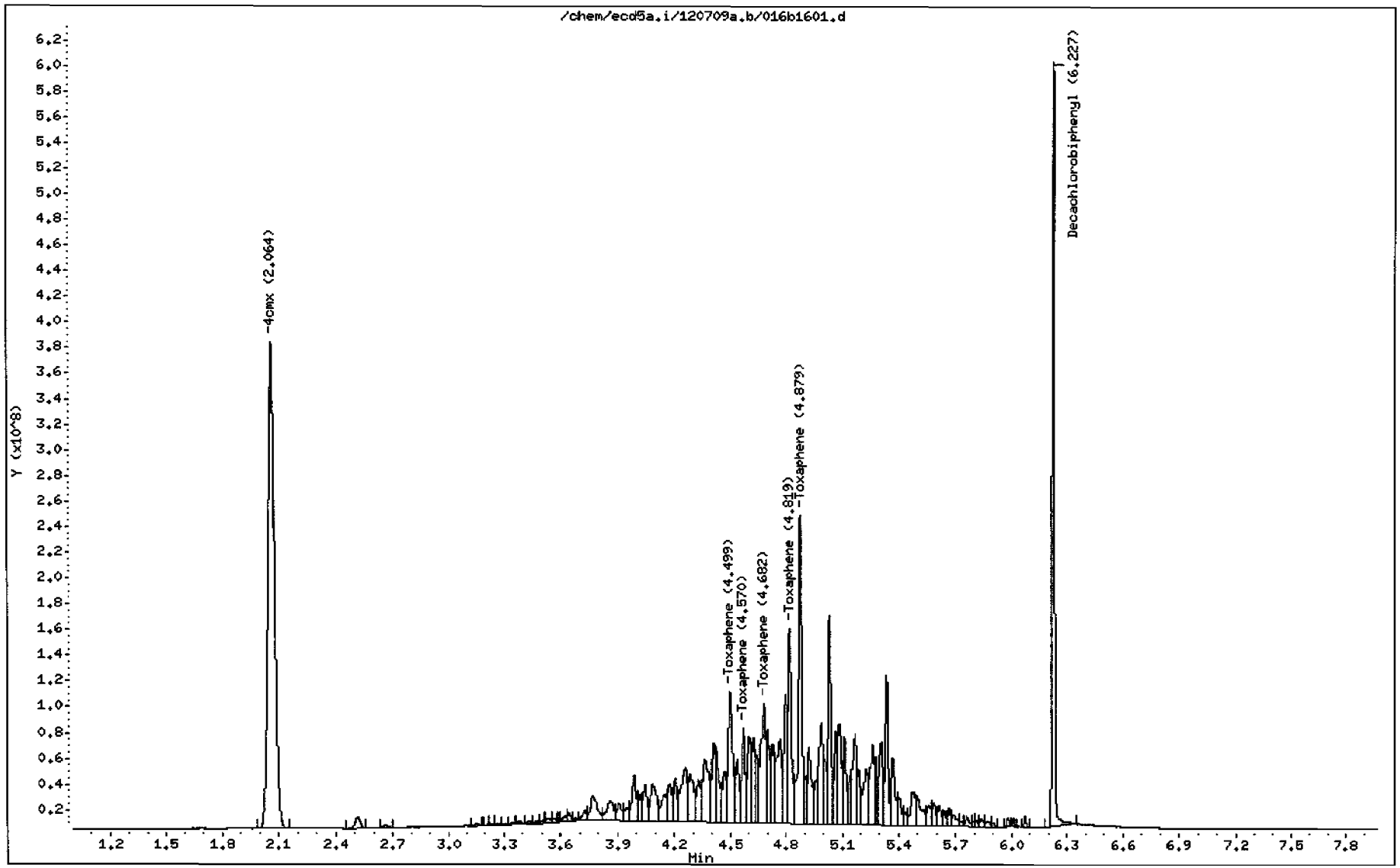

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/016b1601.d
Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

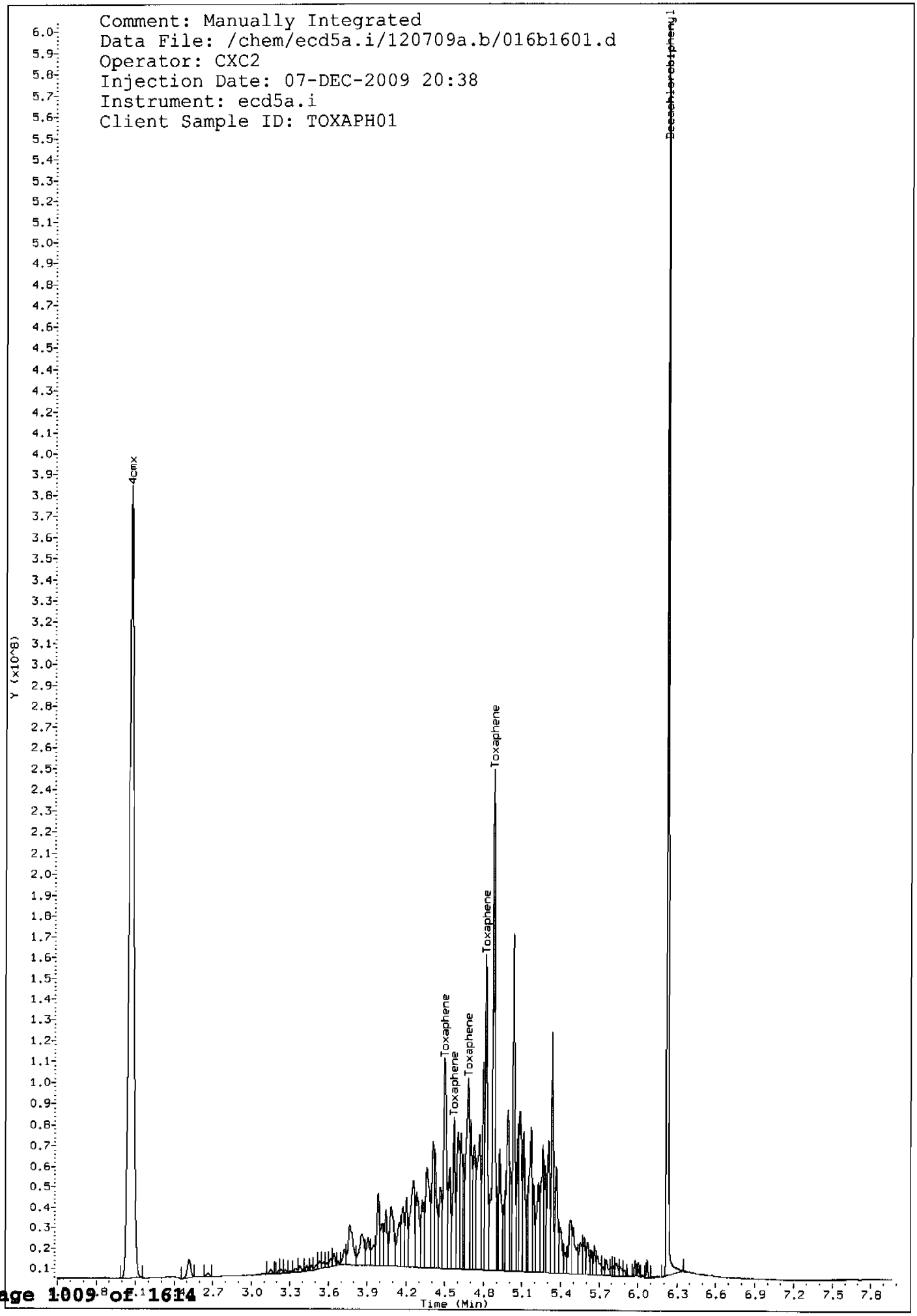

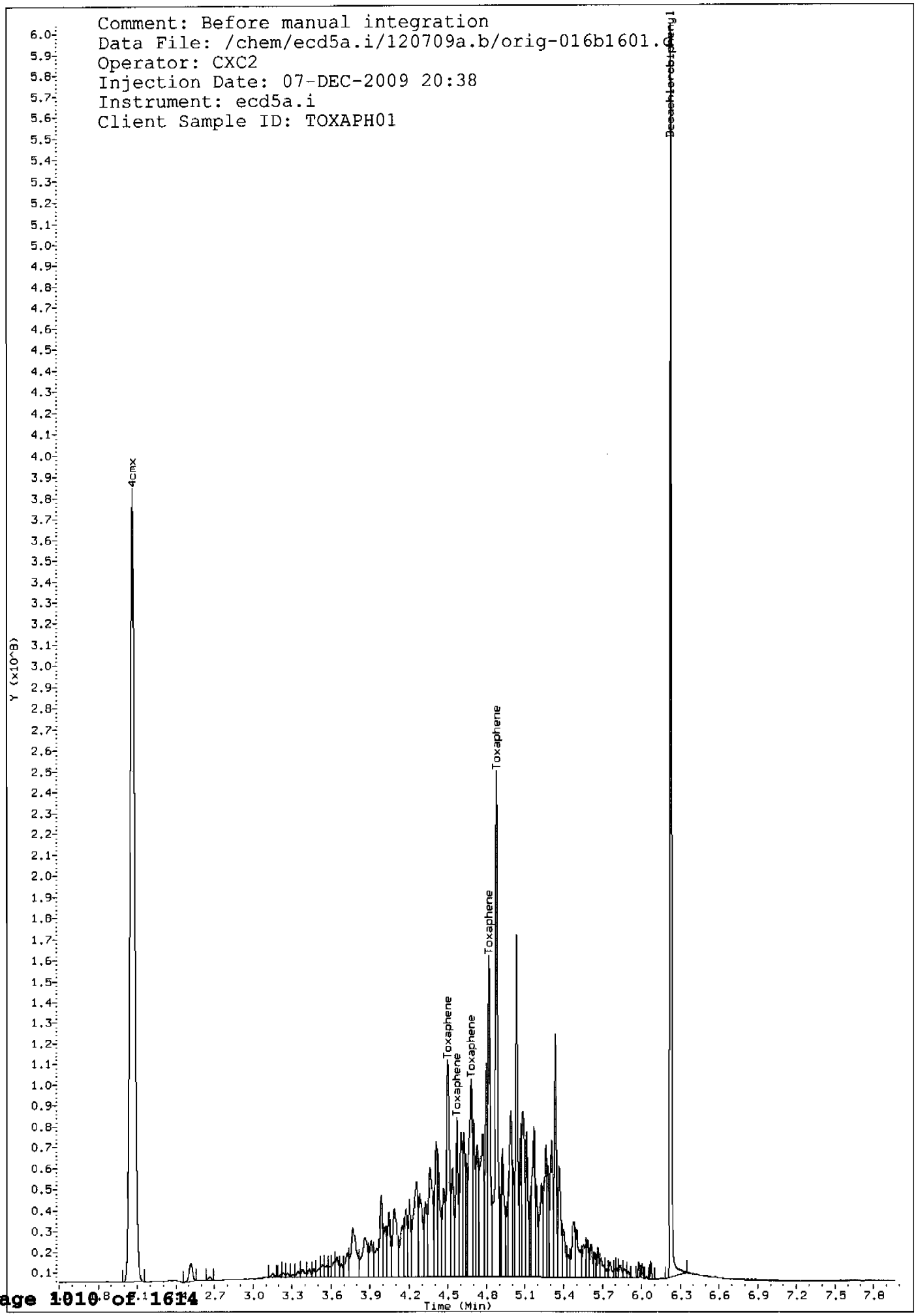
Comment: Before manual integration
Data File: /chem/ecd5a.i/120709a.b/orig-016b1601.
Operator: CXC2
Injection Date: 07-DEC-2009 20:38
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/022f2201.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 07-DEC-2009 21:49
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.677	3.677	0.000	17964062	1000.00	912	80.00- 120.00	100.00
4.071	4.071	0.000	18560193	1000.00	991	83.32- 123.32	103.32
4.350	4.350	0.000	11247133	1000.00	888	42.61- 82.61	62.61
4.475	4.475	0.000	51913882	1000.00	904	268.99- 308.99	288.99
5.044	5.044	0.000	9019172	1000.00	970	30.21- 70.21	50.21
Average of Peak Amounts =					933		
$ 1 4cmx					CAS #: 877-09-8		
2.404	2.409	-0.005	88093892	200.000	199	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	51089810	200.000	194	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/022f2201.d
Date : 07-DEC-2009 21:49
Client ID: CHLOR01
Sample Info: IWPE091021-00CL

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

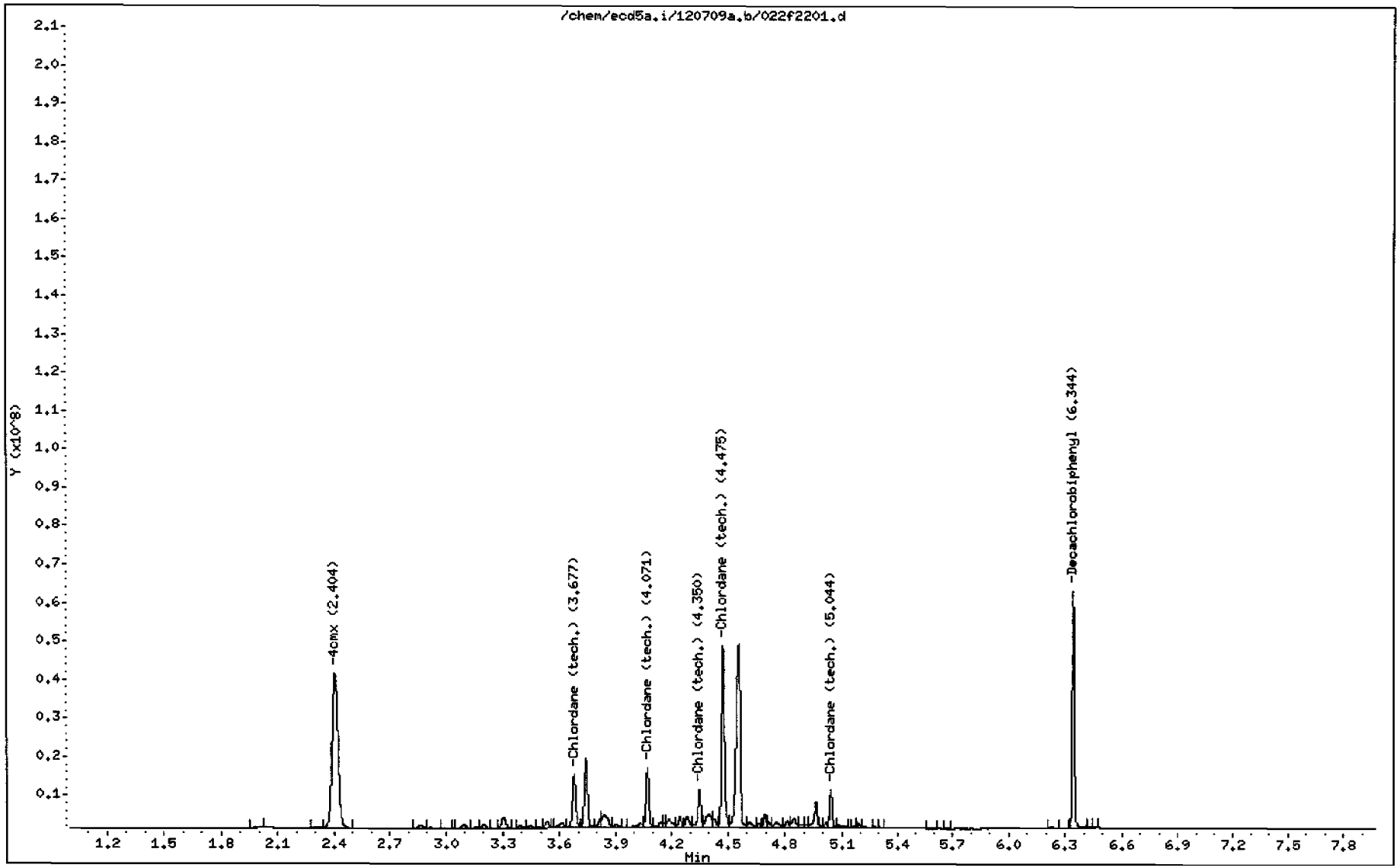

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/022b2201.d
Lab Smp Id: WPE091021-00CL Client Smp ID: CHLOR01
Inj Date : 07-DEC-2009 21:49
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091021-00CL
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.340	3.340	0.000	202773524	1000.00	1040	80.00- 120.00	100.00(M)
4.067	4.067	0.000	106455121	1000.00	1040	32.50- 72.50	52.50
4.211	4.211	0.000	492888151	1000.00	975	223.07- 263.07	243.07
4.306	4.306	0.000	388313074	1000.00	984	171.50- 211.50	191.50
4.855	4.855	0.000	134584862	1000.00	1090	46.37- 86.37	66.37
Average of Peak Amounts =					1.02e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.062	2.064	-0.002	940173324	200.000	189	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	516237397	200.000	186	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/022b2201.d
Date : 07-DEC-2009 21:49
Client ID: CHLOR01
Sample Info: IWPE091021-00CL

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

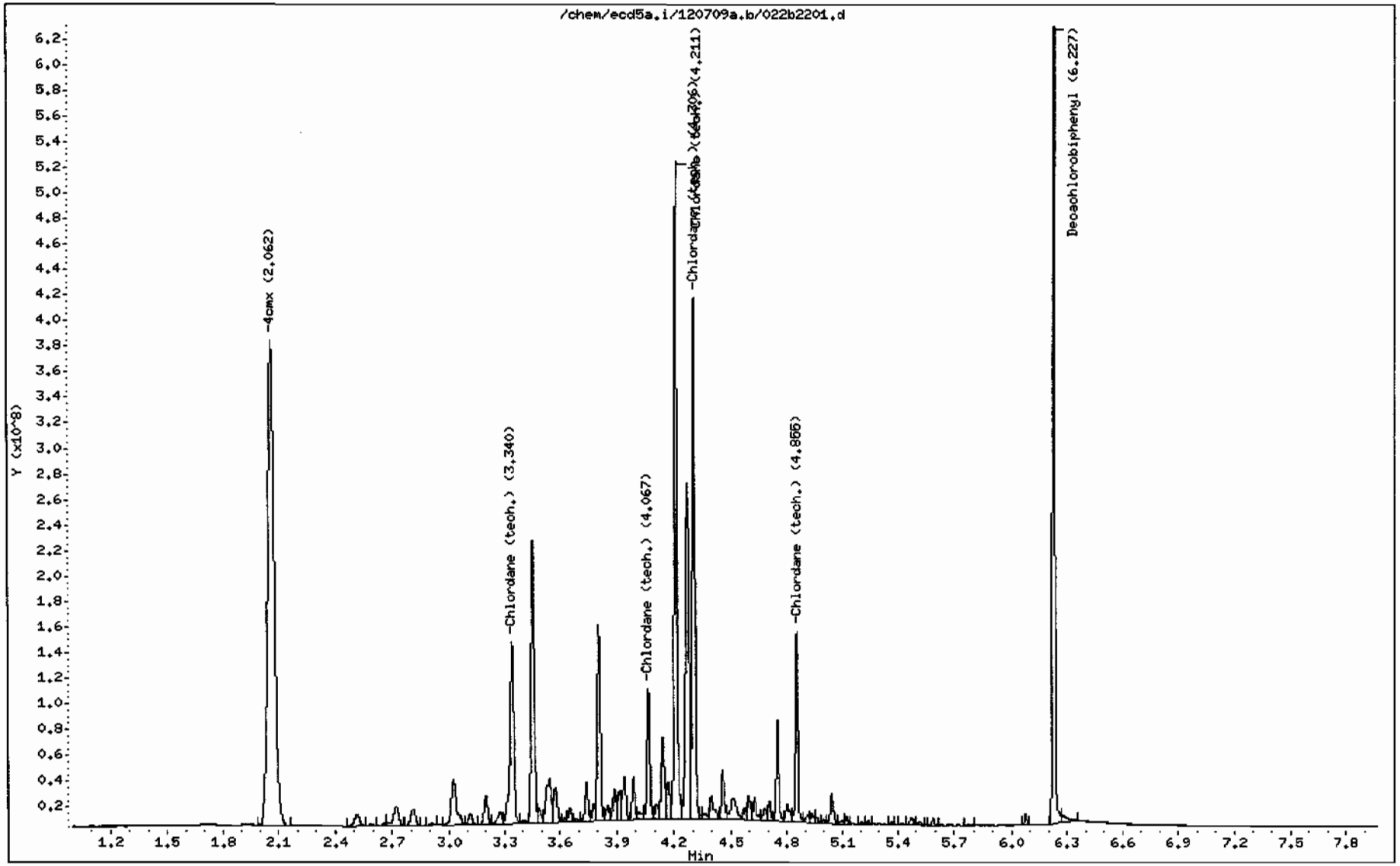

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/022b2201.d
Operator: CXC2
Injection Date: 07-DEC-2009 21:49
Instrument: ecd5a.i
Client Sample ID: CHLOR01

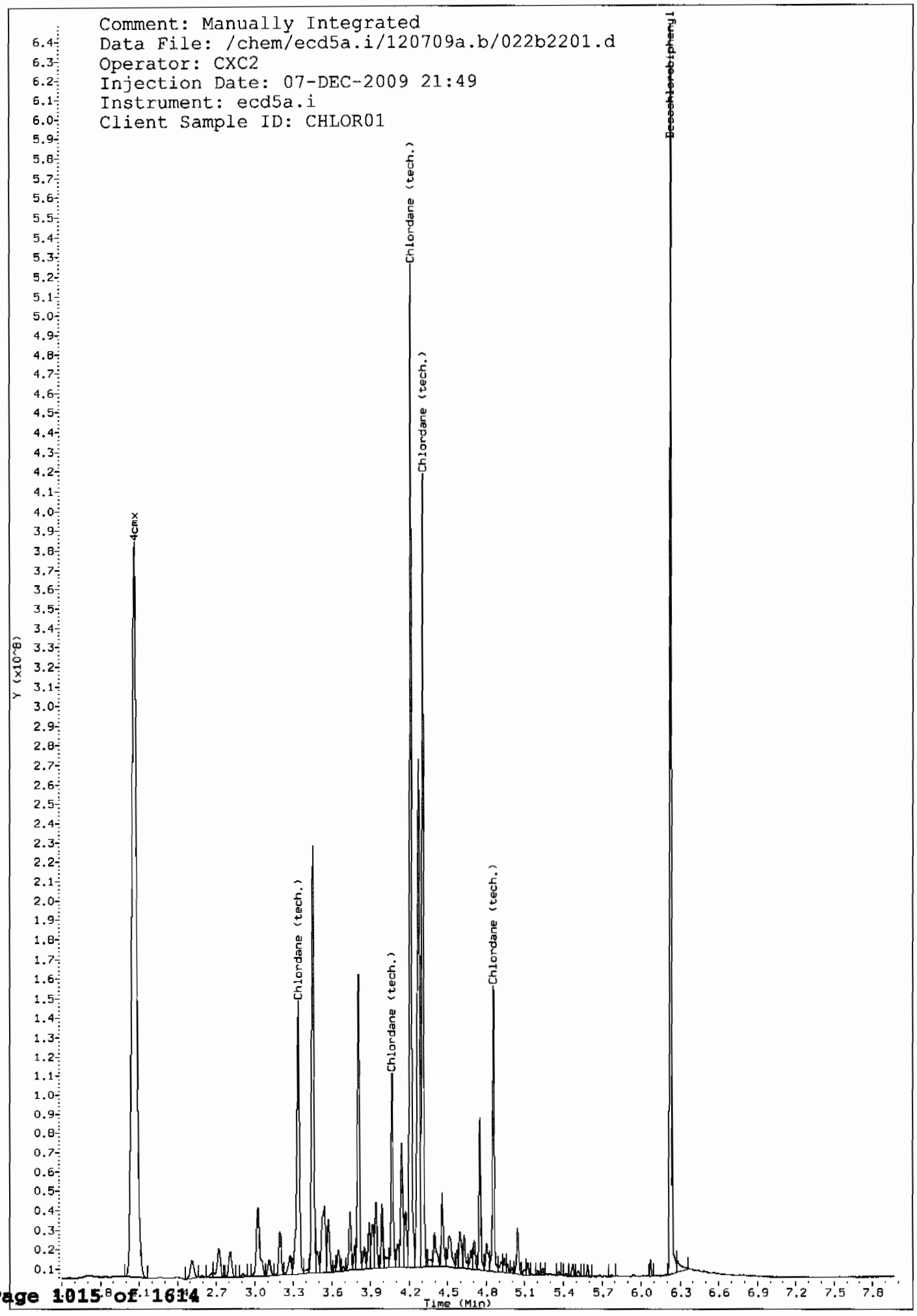

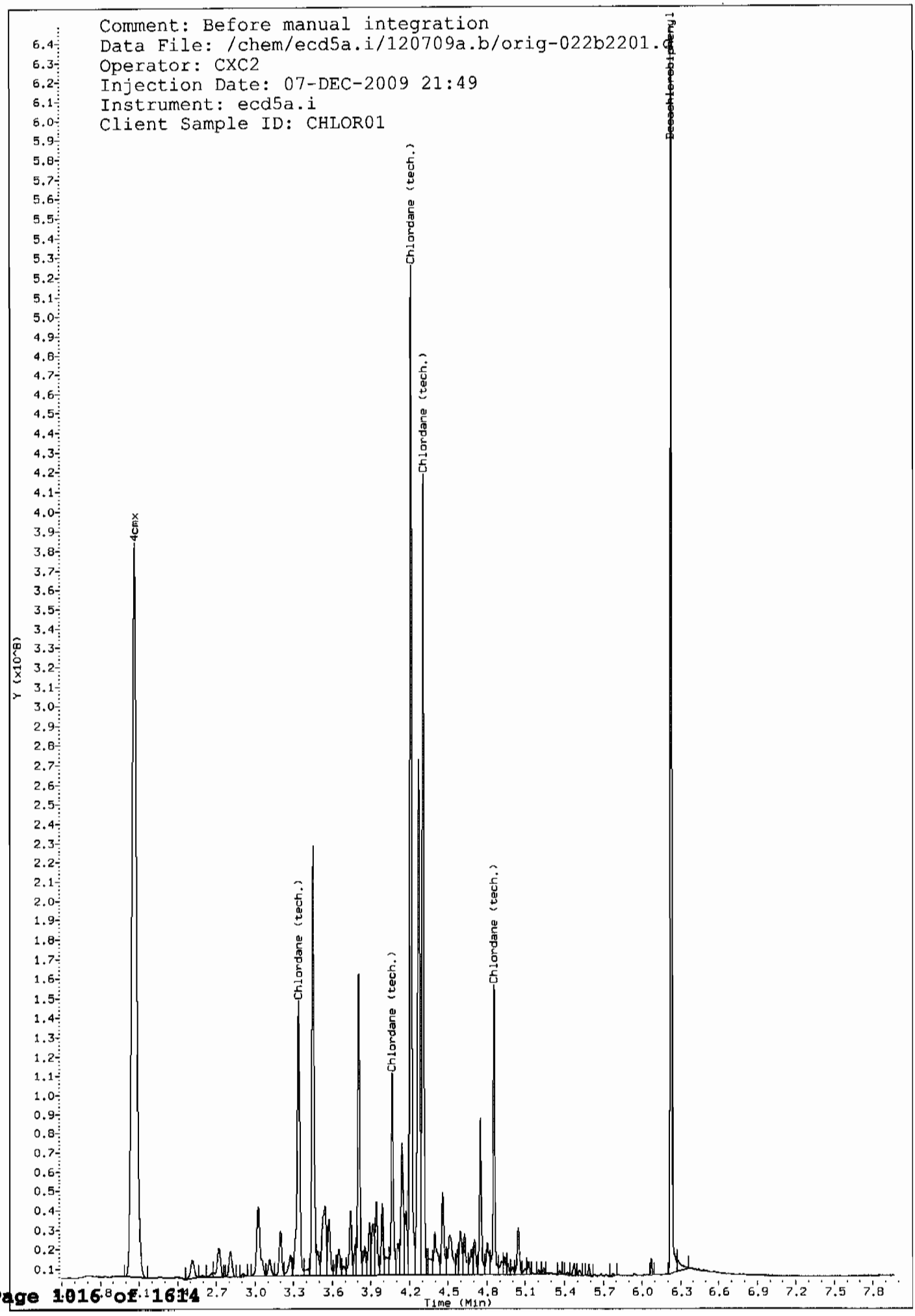
Comment: Before manual integration
Data File: /chem/ecd5a.i/120709a.b/orig-022b2201.
Operator: CXC2
Injection Date: 07-DEC-2009 21:49
Instrument: ecd5a.i
Client Sample ID: CHLOR01
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/045f4501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 08-DEC-2009 02:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.049	3.050	-0.001	60927756	100.000	108	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	52812971	100.000	112	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.433	3.433	0.000	22900769	100.000	97.1	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.739	3.740	-0.001	39945356	100.000	101	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.577	3.577	0.000	55334140	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.964	3.966	-0.002	48769052	100.000	102	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	44096142	100.000	102	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.474	4.475	-0.001	45747817	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.561	4.562	-0.001	39771433	100.000	97.8	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.649	4.650	-0.001	41188852	100.000	106	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.614	4.614	0.000	86560322	200.000	208	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.801	4.802	-0.001	84303888	200.000	206	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	72514807	200.000	210	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.984	4.985	-0.001	71515003	200.000	206	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.085	5.086	-0.001	75707071	200.000	208	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.338	5.339	-0.001	58567071	200.000	195	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.152	5.153	-0.001	41853630	200.000	254	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.597	5.597	0.000	63509409	200.000	202	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.436	5.436	0.000	102973136	1000.00	1050	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.767	5.767	0.000	60962223	200.000	215	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	91093734	200.000	206	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	50329831	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/045f4501.d
Date : 08-DEC-2009 02:24
Client ID: INDAB03
Sample Info: IWPE091123-10AB

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

Column phase: CLP-1

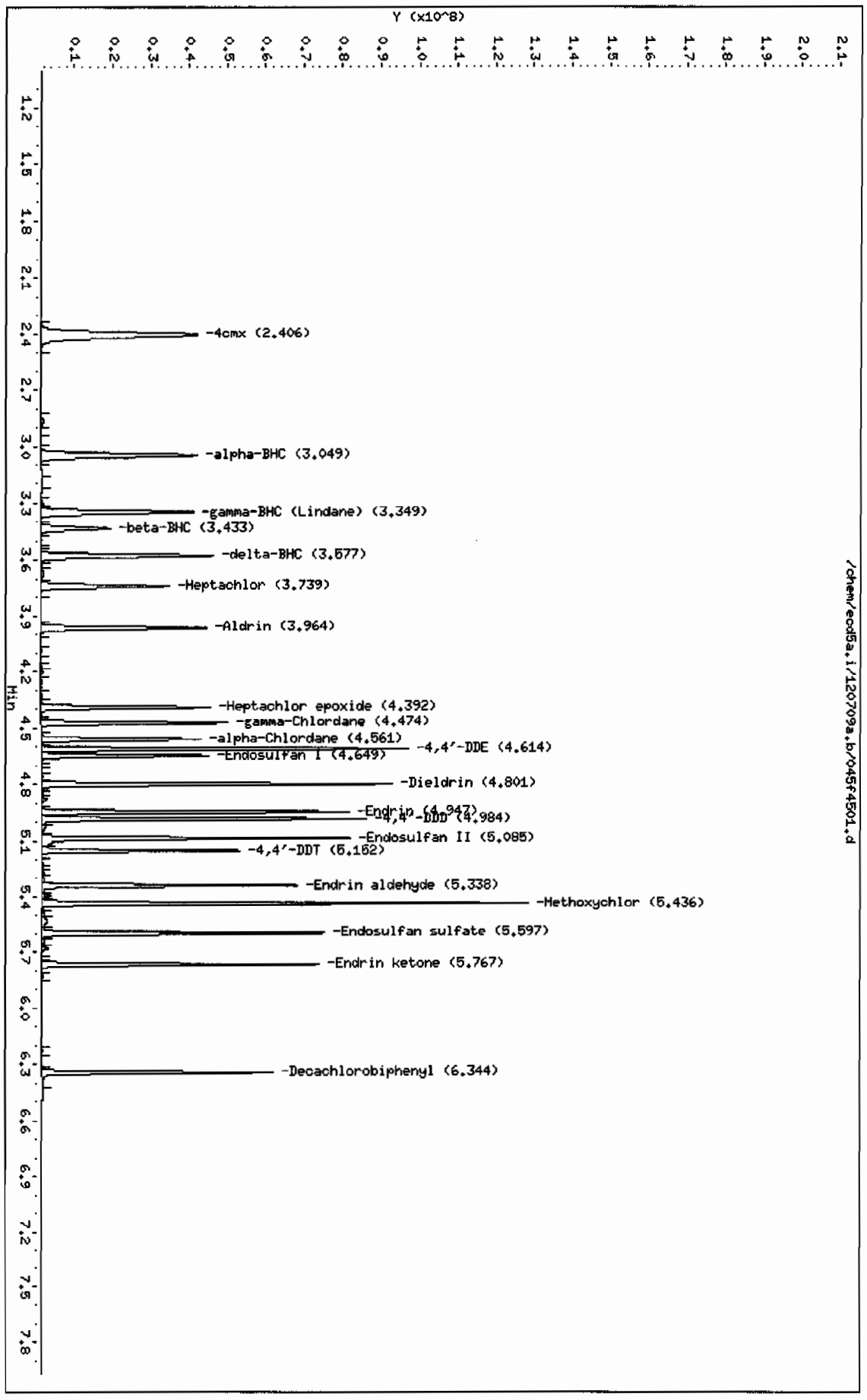

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GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/045b4501.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB03
Inj Date : 08-DEC-2009 02:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.779	2.781	-0.002	680528774	100.000	97.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.105	3.107	-0.002	601853972	100.000	98.9	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.190	3.191	-0.001	244042089	100.000	104	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.452	3.453	-0.001	431479381	100.000	86.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.419	3.420	-0.001	596051948	100.000	98.3	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.687	3.687	0.000	507058848	100.000	92.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.086	4.088	-0.002	439522443	100.000	92.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.210	4.211	-0.001	484192092	100.000	99.0	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.304	4.306	-0.002	404627153	100.000	86.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.337	4.338	-0.001	388090065	100.000	92.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.419	4.419	0.000	854494609	200.000	193	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.510	4.511	-0.001	804635751	200.000	184	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	673636715	200.000	178	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.770	4.771	-0.001	699214174	200.000	186	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.826	4.827	-0.001	650911245	200.000	182	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.029	5.031	-0.002	517164006	200.000	174	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.957	4.958	-0.001	487959272	200.000	177	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.194	5.194	0.000	613539909	200.000	183	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	896748208	1000.00	810	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	631765208	200.000	200	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.062	2.064	-0.002	945752140	200.000	190	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	561825397	200.000	202	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/045b4501.d
Date : 08-DEC-2009 02:24
Client ID: INDAB03
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

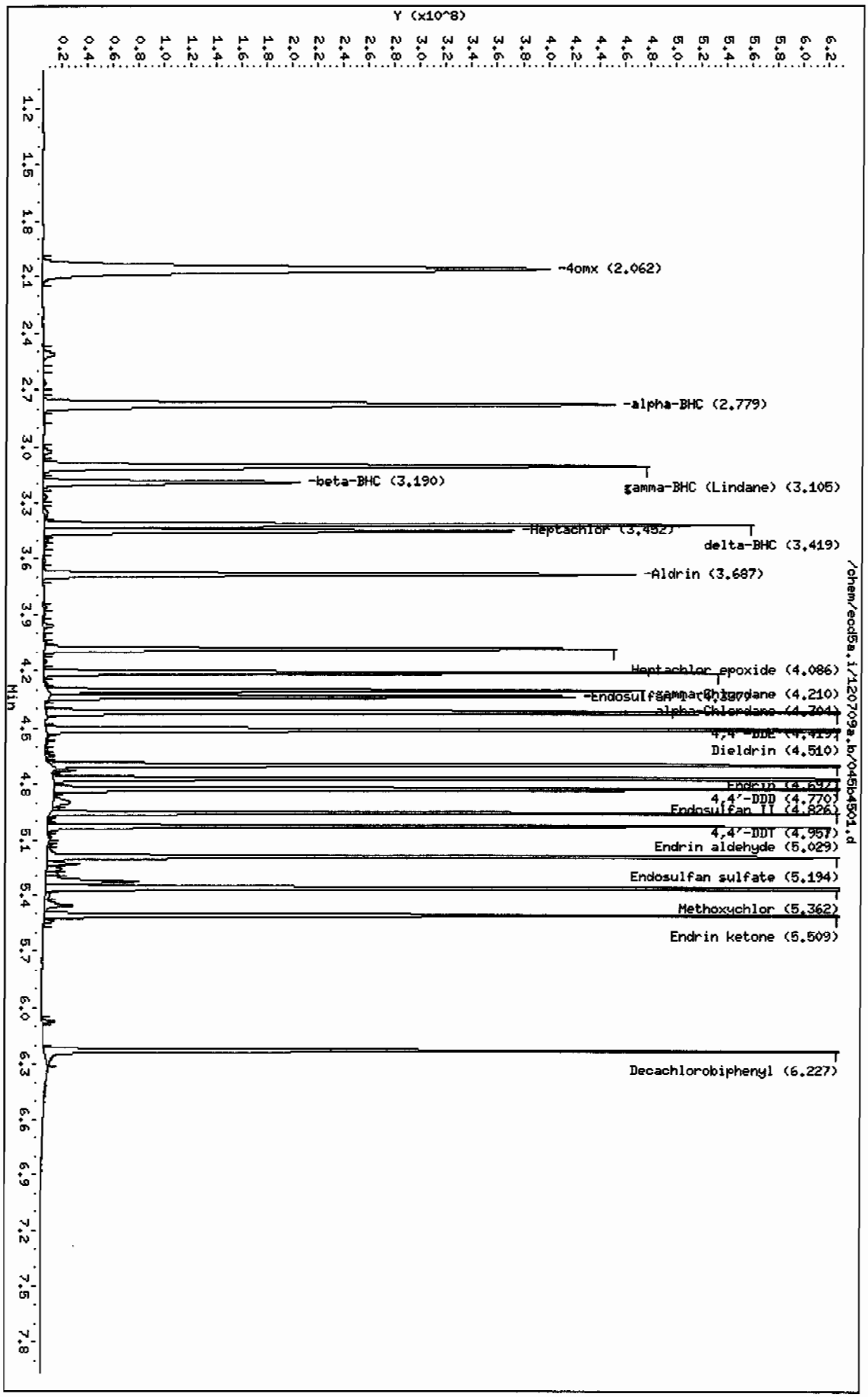

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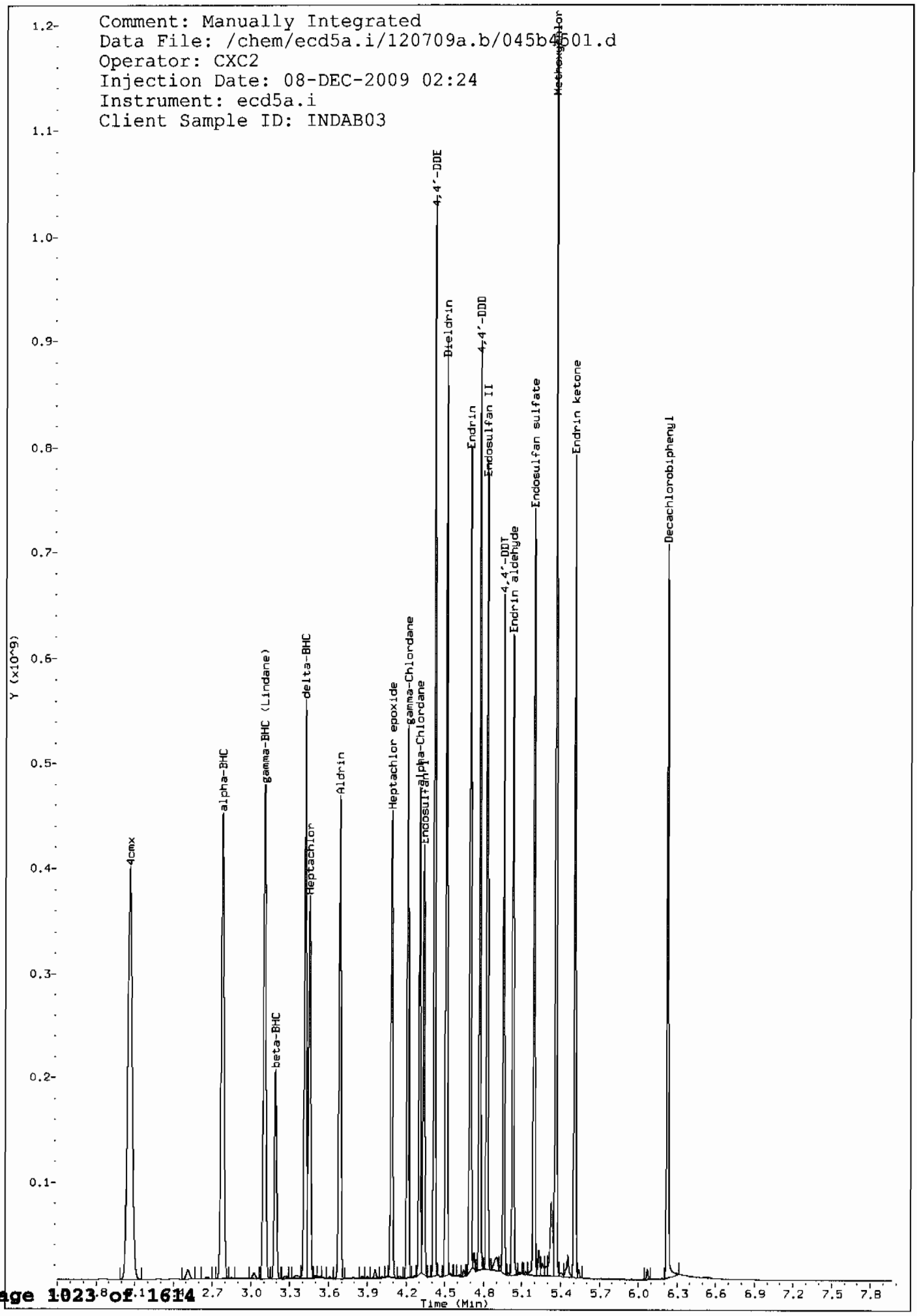
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/045b4501.d
Operator: CXC2
Injection Date: 08-DEC-2009 02:24
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

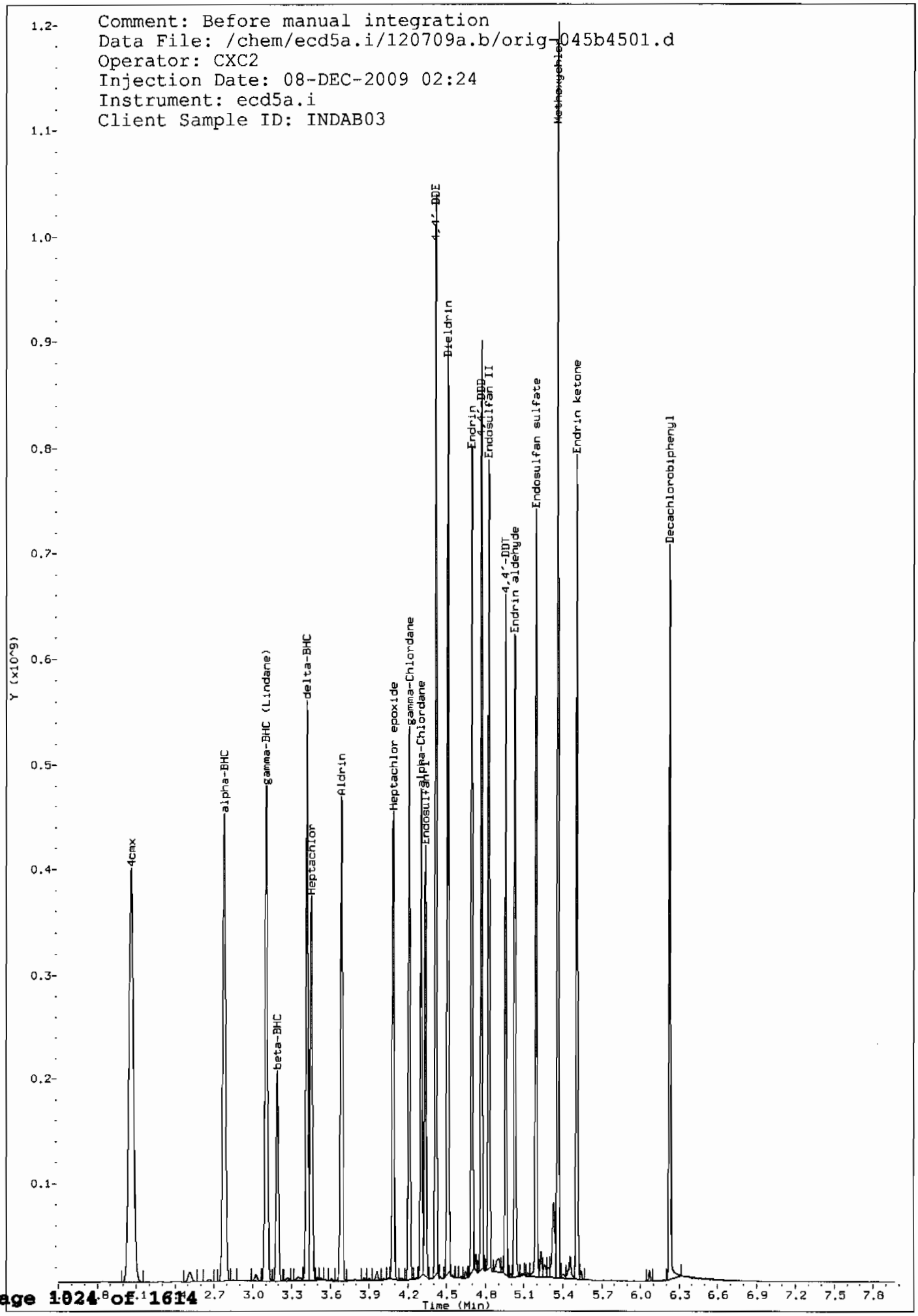
Comment: Before manual integration
Data File: /chem/ecd5a.i/120709a.b/orig-045b4501.d
Operator: CXC2
Injection Date: 08-DEC-2009 02:24
Instrument: ecd5a.i
Client Sample ID: INDAB03
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/051f5101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 08-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.049	3.050	-0.001	66913659	100.000	118	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	57396445	100.000	121	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.432	3.433	-0.001	24800459	100.000	105	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.739	3.740	-0.001	43588881	100.000	110	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.577	3.577	0.000	59956078	100.000	116	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.965	3.966	-0.001	52682363	100.000	110	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	47660294	100.000	111	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.475	4.475	0.000	49575212	100.000	117	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.561	4.562	-0.001	42777372	100.000	105	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.649	4.650	-0.001	44635127	100.000	115	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.614	4.614	0.000	93380464	200.000	224	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.802	4.802	0.000	91329834	200.000	223	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	79695111	200.000	230	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.985	4.985	0.000	77455788	200.000	223	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.085	5.086	-0.001	80941603	200.000	223	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.338	5.339	-0.001	63324511	200.000	211	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.153	5.153	0.000	45472842	200.000	276	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.597	5.597	0.000	68734163	200.000	219	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.436	5.436	0.000	111886298	1000.00	1140	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.767	5.767	0.000	65893982	200.000	232	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	99124763	200.000	224	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.346	6.344	0.002	52812899	200.000	201	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/051f5101.d
Date : 08-DEC-2009 03:36
Client ID: INDAB04
Sample Info: IWPE091123-10AB

Instrument: ecd5a.i

Column phase: CLP-1

Operator: CXC2
Column diameter: 0.25

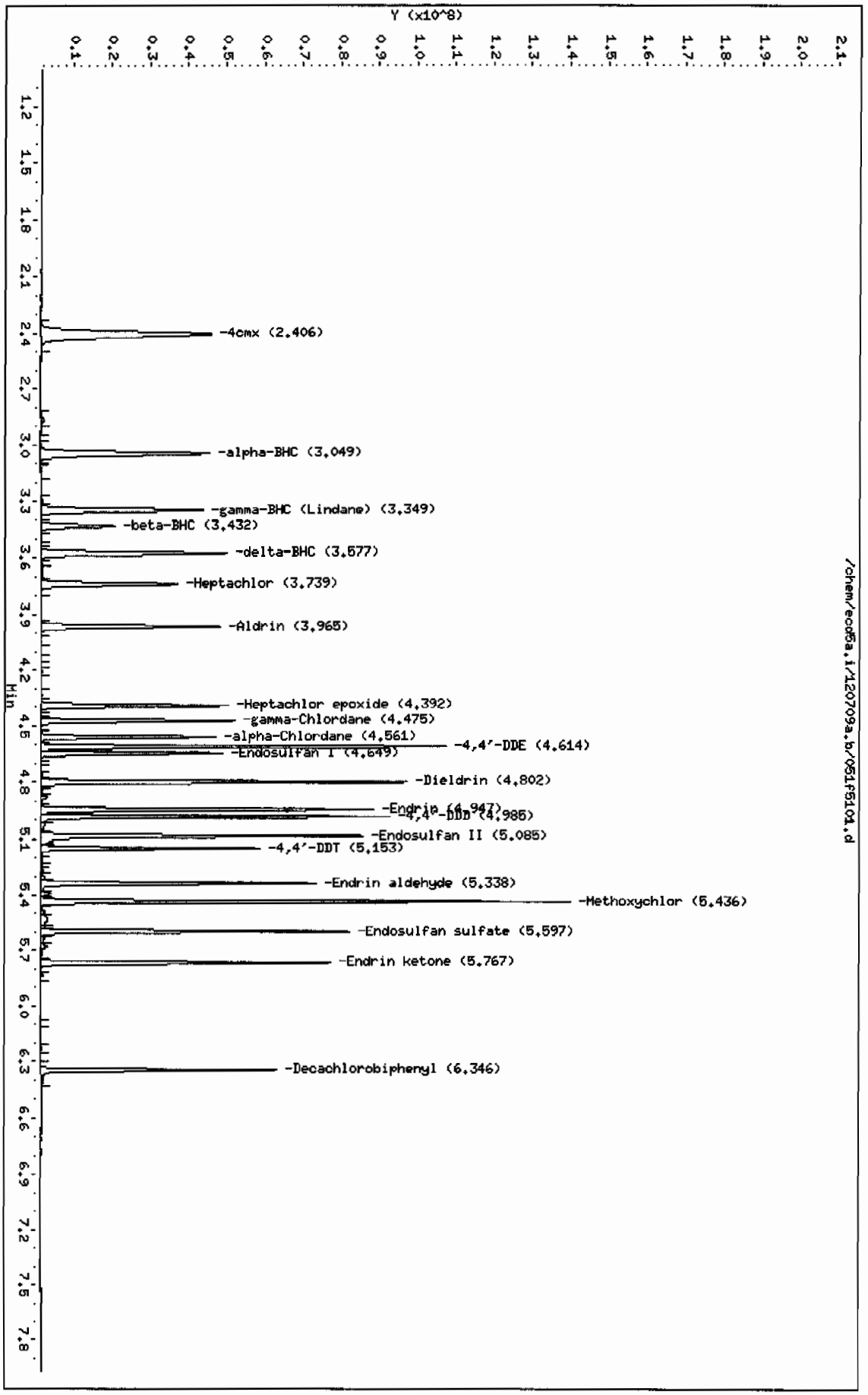

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/051b5101.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB04
Inj Date : 08-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 10:03 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.781	2.781	0.000	741390788	100.000	106	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.106	3.107	-0.001	656253278	100.000	108	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.191	3.191	0.000	263676080	100.000	112	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.452	3.453	-0.001	474220702	100.000	95.2	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.419	3.420	-0.001	649581400	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.687	3.687	0.000	550337260	100.000	100	80.00- 120.00	100.00(M)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.086	4.088	-0.002	478351567	100.000	100	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.211	4.211	0.000	528204486	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.305	4.306	-0.001	445878067	100.000	94.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endsulfan I					CAS #: 959-98-8		
4.338	4.338	0.000	428195704	100.000	102	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.418	4.419	-0.001	929609553	200.000	210	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.511	4.511	0.000	873422209	200.000	200	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	745248628	200.000	197	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.771	4.771	0.000	760650410	200.000	202	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.826	4.827	-0.001	703980681	200.000	196	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.030	5.031	-0.001	555911500	200.000	187	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.957	4.958	-0.001	539882040	200.000	196	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.194	5.194	0.000	655436760	200.000	196	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	972685735	1000.00	879	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.509	5.509	0.000	680537285	200.000	216	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.061	2.064	-0.003	1027928732	200.000	206	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.228	6.226	0.002	610525903	200.000	220	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/051b5101.d
Date : 08-DEC-2009 03:36
Client ID: INDAB04
Sample Info: IWPE091123-10AB
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

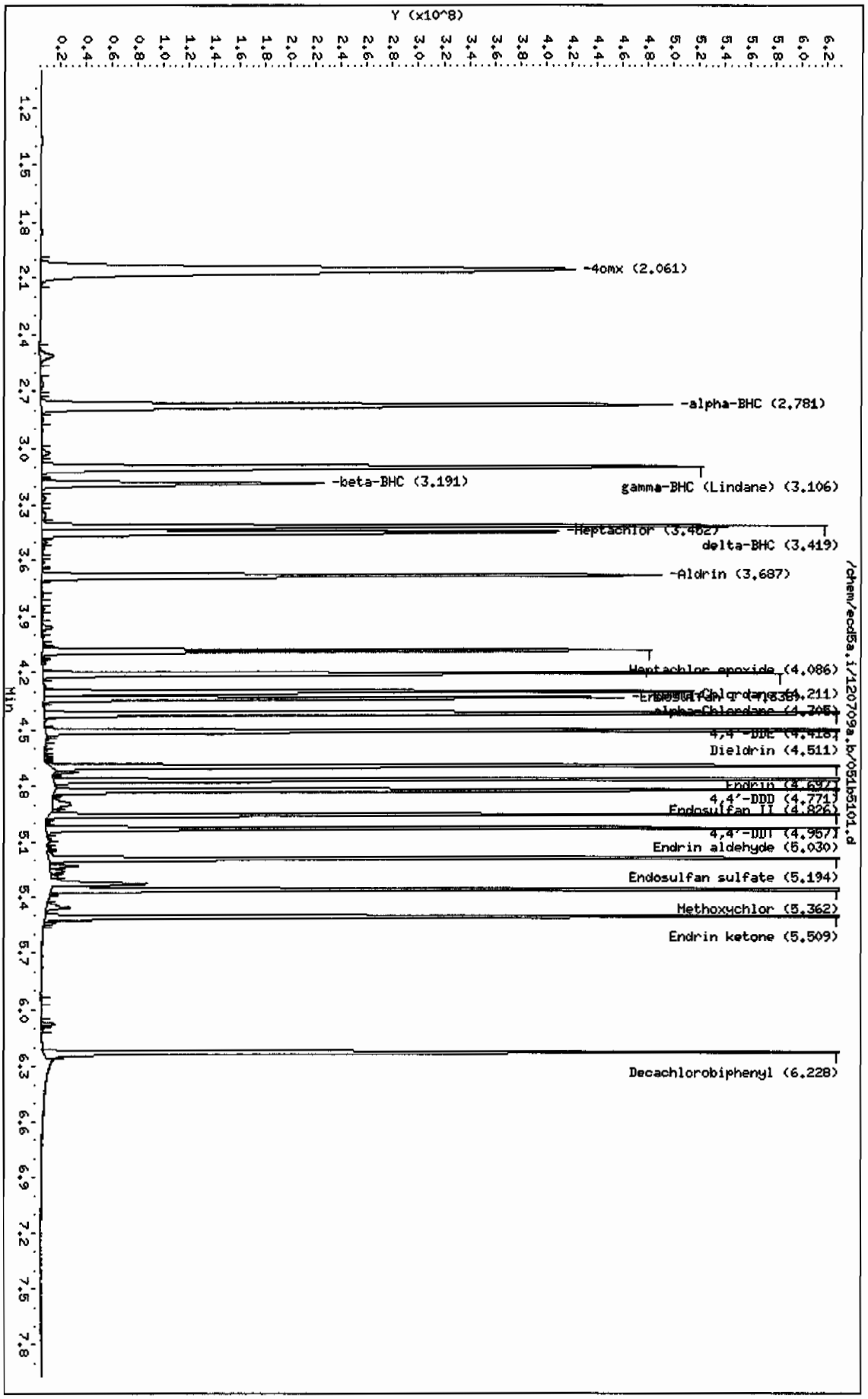

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Comment: Manually Integrated
Data File: /chem/ecd5a.i/120709a.b/051b5101.d
Operator: CXC2
Injection Date: 08-DEC-2009 03:36
Instrument: ecd5a.i
Client Sample ID: INDAB04

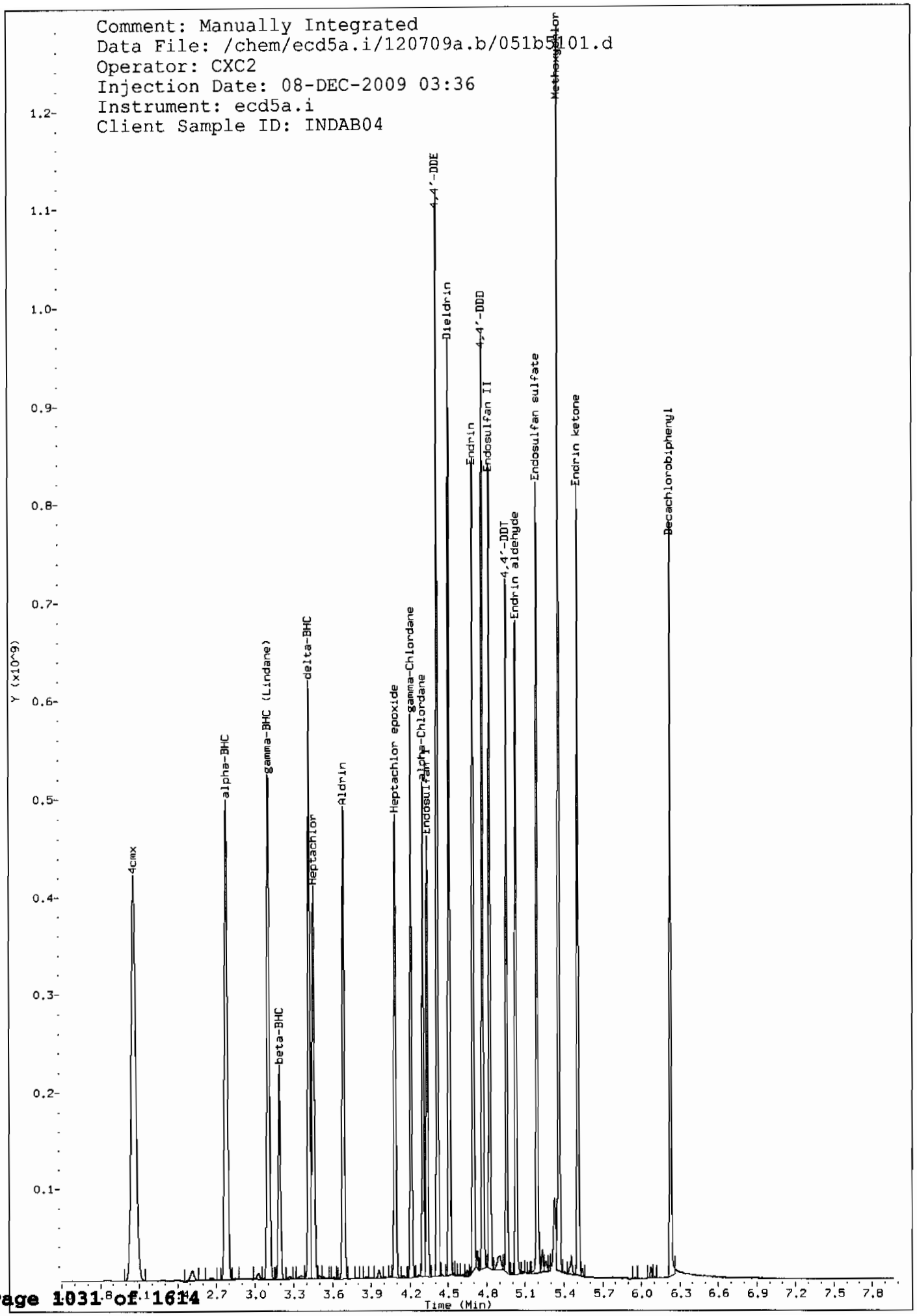

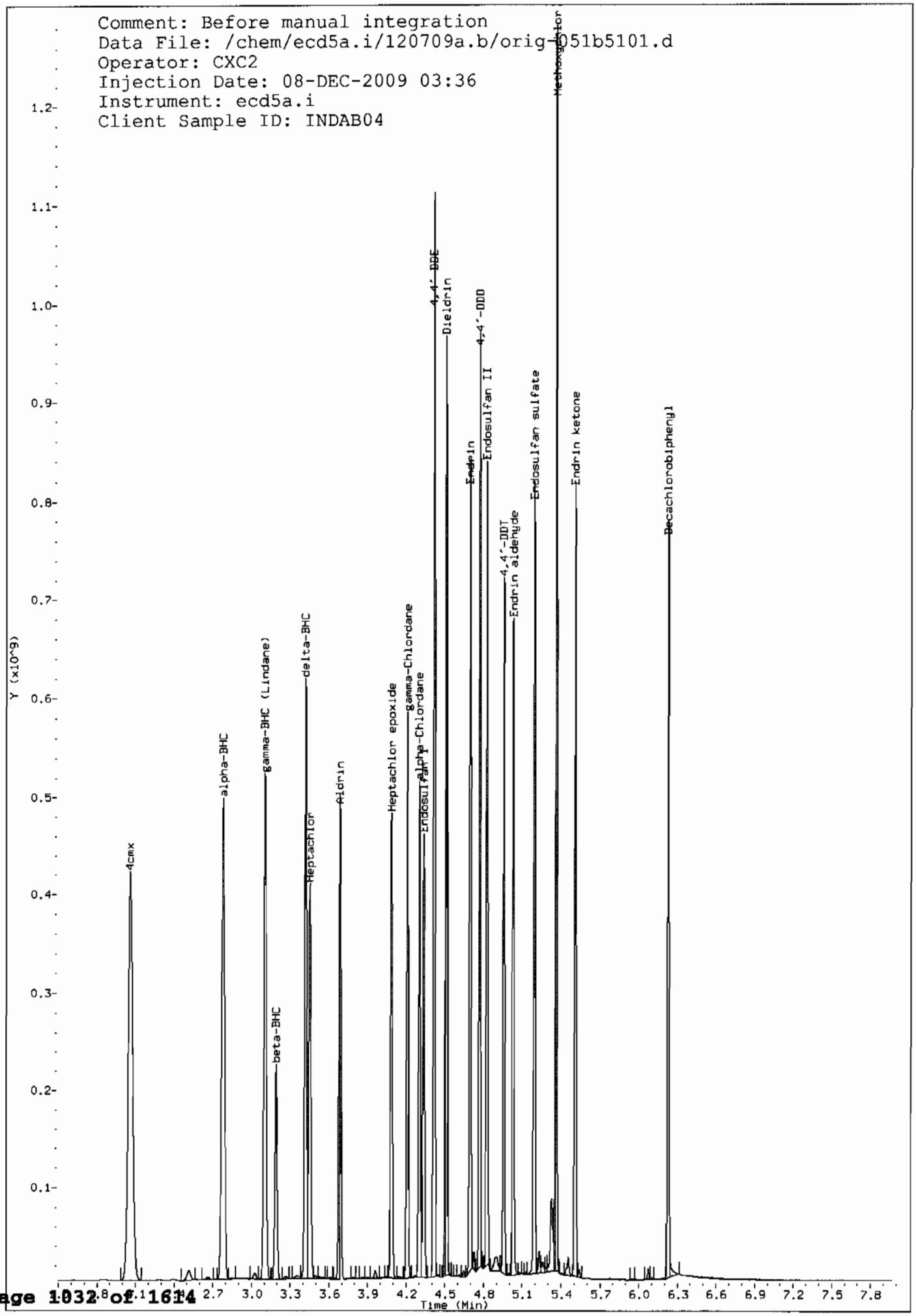
Comment: Before manual integration
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Operator: CXC2
Injection Date: 08-DEC-2009 03:36
Instrument: ecd5a.i
Client Sample ID: INDAB04
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
4,4'-DDD
Endrin
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.59	6.45
02	PEM01	WPE091109-99	11/28/09	1208	2.58	6.43
03	ZZZZZ	ZZZZZ	11/28/09	1235		
04	INDAB01	WPE091128-01	11/28/09	1247	2.58	6.43
05	INDAB02	WPE091128-02	11/28/09	1258	2.58	6.43
06	INDAB03	WPE091128-03	11/28/09	1310	2.58	6.43
07	INDAB04	WPE091128-04	11/28/09	1322	2.58	6.43
08	INDAB05	IPE091128-02	11/28/09	1334	2.58	6.43
09	INDAB01	WPE091123-10	11/28/09	1346	2.58	6.43
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.59	6.45
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.58	6.43
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.58	6.43
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.58	6.43
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.58	6.43
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.58	6.43
16	CHLOR01	WPE091124-21	11/28/09	1527	2.58	6.43
17	CHLOR02	WPE091124-22	11/28/09	1539	2.58	6.43
18	CHLOR03	WPE091124-23	11/28/09	1551	2.58	6.43
19	CHLOR04	WPE091124-24	11/28/09	1603	2.58	6.43
20	CHLOR05	IPE091029-06	11/28/09	1615	2.58	6.43
21	CHLOR01	WPE091021-00	11/28/09	1627	2.58	6.43
22	PEM02	WPE091109-99	11/28/09	1639	2.58	6.43
23	PIBLK02	WAR090914-99	11/28/09	1651	2.58	6.43
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.58	6.43
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.58	6.43
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.58	6.43
27	INDAB02	WPE091123-10	11/28/09	1738	2.58	6.43
28	PIBLK03	WAR090914-99	11/28/09	1750	2.58	6.43
29	ZZZZZ	ZZZZZ	11/28/09	1802	2.59	6.43
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.58	6.43
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.59	6.43
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.58	6.43

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/28/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.13 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/28/09	1156	2.12	6.24
02	PEM01	WPE091109-99	11/28/09	1208	2.13	6.22
03	ZZZZZ	ZZZZZ	11/28/09	1235		6.24
04	INDAB01	WPE091128-01	11/28/09	1247	2.12	6.22
05	INDAB02	WPE091128-02	11/28/09	1258	2.12	6.22
06	INDAB03	WPE091128-03	11/28/09	1310	2.13	6.22
07	INDAB04	WPE091128-04	11/28/09	1322	2.12	6.22
08	INDAB05	IPE091128-02	11/28/09	1334	2.13	6.22
09	INDAB01	WPE091123-10	11/28/09	1346	2.13	6.22
10	TOXAPH01	WPE091124-11	11/28/09	1415	2.12	6.24
11	TOXAPH02	WPE091124-12	11/28/09	1427	2.12	6.22
12	TOXAPH03	WPE091124-13	11/28/09	1439	2.12	6.22
13	TOXAPH04	WPE091124-14	11/28/09	1451	2.12	6.22
14	TOXAPH05	IPE091121-40	11/28/09	1503	2.13	6.22
15	TOXAPH01	WPE091104-52	11/28/09	1515	2.13	6.22
16	CHLOR01	WPE091124-21	11/28/09	1527	2.12	6.22
17	CHLOR02	WPE091124-22	11/28/09	1539	2.12	6.22
18	CHLOR03	WPE091124-23	11/28/09	1551	2.13	6.22
19	CHLOR04	WPE091124-24	11/28/09	1603	2.13	6.22
20	CHLOR05	IPE091029-06	11/28/09	1615	2.13	6.22
21	CHLOR01	WPE091021-00	11/28/09	1627	2.12	6.22
22	PEM02	WPE091109-99	11/28/09	1639	2.13	6.22
23	PIBLK02	WAR090914-99	11/28/09	1651	2.13	6.22
24	ZZZZZ	ZZZZZ	11/28/09	1703	2.13	6.22
25	ZZZZZ	ZZZZZ	11/28/09	1714	2.13	6.22
26	ZZZZZ	ZZZZZ	11/28/09	1726	2.13	6.22
27	INDAB02	WPE091123-10	11/28/09	1738	2.13	6.22
28	PIBLK03	WAR090914-99	11/28/09	1750	2.13	6.22
29	ZZZZZ	ZZZZZ	11/28/09	1802	2.13	6.22
30	ZZZZZ	ZZZZZ	11/28/09	1814	2.13	6.22
31	ZZZZZ	ZZZZZ	11/28/09	1826	2.13	6.22
32	ZZZZZ	ZZZZZ	11/28/09	1838	2.13	6.22

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/29/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.57	6.42
02	PEM01	WPE091109-99	11/29/09	1817	2.57	6.42
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.58	6.43
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.58	6.43
05	CHLOR01	WPE091021-00	11/29/09	1853	2.58	6.43
06	INDAB01	WPE091128-01	11/29/09	1905	2.58	6.43
07	INDAB02	WPE091128-02	11/29/09	1917	2.58	6.43
08	INDAB03	WPE091128-03	11/29/09	1929	2.58	6.43
09	INDAB04	WPE091128-04	11/29/09	1941	2.58	6.43
10	INDAB05	IPE091128-02	11/29/09	1953	2.58	6.43
11	INDAB01	WPE091123-10	11/29/09	2005	2.58	6.43
12	PIBLK02	WAR090914-99	11/29/09	2017	2.58	6.43
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.58	6.43
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.58	6.43
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.58	6.43
16	INDAB02	WPE091123-10	11/29/09	2106	2.58	6.43
17	PIBLK03	WAR090914-99	11/29/09	2120	2.58	6.43
18	ZZZZZ	ZZZZZ	11/29/09	2132	2.58	6.43
19	ZZZZZ	ZZZZZ	11/29/09	2144	2.58	6.43
20	ZZZZZ	ZZZZZ	11/29/09	2156	2.58	6.43
21	ZZZZZ	ZZZZZ	11/29/09	2208	2.58	6.43
22	ZZZZZ	ZZZZZ	11/29/09	2220	2.58	6.43
23	ZZZZZ	ZZZZZ	11/29/09	2232	2.58	6.43
24	PIBLK04	WAR090914-99	11/29/09	2244	2.58	6.43
25	INDAB03	WPE091123-10	11/29/09	2256	2.58	6.43
26	PIBLK05	WAR090914-99	11/29/09	2308	2.58	6.43
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.58	6.43
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.58	6.43
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.58	6.43
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.58	6.43
31	ZZZZZ	ZZZZZ	11/30/09	0008	2.58	6.43
32	ZZZZZ	ZZZZZ	11/30/09	0020	2.58	6.43

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/29/09 11/29/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/29/09	1805	2.12	6.21
02	PEM01	WPE091109-99	11/29/09	1817	2.12	6.21
03	ZZZZZ	ZZZZZ	11/29/09	1829	2.12	6.21
04	TOXAPH01	WPE091104-52	11/29/09	1841	2.12	6.21
05	CHLOR01	WPE091021-00	11/29/09	1853	2.12	6.22
06	INDAB01	WPE091128-01	11/29/09	1905	2.13	6.22
07	INDAB02	WPE091128-02	11/29/09	1917	2.13	6.21
08	INDAB03	WPE091128-03	11/29/09	1929	2.12	6.22
09	INDAB04	WPE091128-04	11/29/09	1941	2.12	6.22
10	INDAB05	IPE091128-02	11/29/09	1953	2.13	6.22
11	INDAB01	WPE091123-10	11/29/09	2005	2.13	6.21
12	PIBLK02	WAR090914-99	11/29/09	2017	2.12	6.21
13	ZZZZZ	ZZZZZ	11/29/09	2028	2.12	6.21
14	ZZZZZ	ZZZZZ	11/29/09	2040	2.12	6.21
15	ZZZZZ	ZZZZZ	11/29/09	2052	2.12	6.22
16	INDAB02	WPE091123-10	11/29/09	2106	2.12	6.22
17	PIBLK03	WAR090914-99	11/29/09	2120	2.12	6.22
18	ZZZZZ	ZZZZZ	11/29/09	2132	2.12	6.21
19	ZZZZZ	ZZZZZ	11/29/09	2144	2.12	6.22
20	ZZZZZ	ZZZZZ	11/29/09	2156	2.13	6.21
21	ZZZZZ	ZZZZZ	11/29/09	2208	2.13	6.22
22	ZZZZZ	ZZZZZ	11/29/09	2220	2.12	6.21
23	ZZZZZ	ZZZZZ	11/29/09	2232	2.13	6.22
24	PIBLK04	WAR090914-99	11/29/09	2244	2.13	6.21
25	INDAB03	WPE091123-10	11/29/09	2256	2.13	6.22
26	PIBLK05	WAR090914-99	11/29/09	2308	2.13	6.22
27	ZZZZZ	ZZZZZ	11/29/09	2320	2.12	6.21
28	ZZZZZ	ZZZZZ	11/29/09	2332	2.12	6.21
29	ZZZZZ	ZZZZZ	11/29/09	2344	2.12	6.21
30	ZZZZZ	ZZZZZ	11/29/09	2356	2.12	6.21
31	ZZZZZ	ZZZZZ	11/30/09	0008	2.12	6.21
32	ZZZZZ	ZZZZZ	11/30/09	0020	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.58 DCB: 6.43

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/30/09	1354	2.58	6.44
02	PEM01	WPE091109-99	11/30/09	1406	2.58	6.42
03	INDAB01	WPE091123-10	11/30/09	1418	2.58	6.43
04	ZZZZZ	ZZZZZ	11/30/09	1430	2.58	6.42
05	ZZZZZ	ZZZZZ	11/30/09	1442	2.58	6.42
06	TOXAPH01	WPE091104-52	11/30/09	1454	2.58	6.42
07	CHLOR01	WPE091130-21	11/30/09	1529	2.58	6.45
08	CHLOR02	WPE091130-22	11/30/09	1541	2.58	6.43
09	CHLOR03	WPE091130-23	11/30/09	1553	2.58	6.43
10	CHLOR04	WPE091130-24	11/30/09	1605	2.58	6.42
11	CHLOR05	IPE091029-06	11/30/09	1628	2.58	6.44
12	CHLOR01	WPE091021-00	11/30/09	1639	2.58	6.42
13	GAPA01	WPE091130-31	11/30/09	1651	2.58	6.42
14	GAPA02	WPE091130-32	11/30/09	1703	2.58	6.42
15	GAPA03	WPE091130-33	11/30/09	1715	2.58	6.42
16	GAPA04	WPE091130-34	11/30/09	1727	2.58	6.42
17	GAPA05	IPE091110-01	11/30/09	1739	2.58	6.42
18	GAPA01	WPE091021-05	11/30/09	1751	2.58	6.42
19	PEM02	WPE091109-99	11/30/09	1803	2.58	6.42
20	PIBLK02	WAR090914-99	11/30/09	1815	2.58	6.42
21	ZZZZZ	ZZZZZ	11/30/09	1827	2.58	6.42
22	ZZZZZ	ZZZZZ	11/30/09	1839	2.58	6.42
23	ZZZZZ	ZZZZZ	11/30/09	1851	2.58	6.42
24	ZZZZZ	ZZZZZ	11/30/09	1903	2.58	6.42
25	ZZZZZ	ZZZZZ	11/30/09	1915	2.58	6.42
26	ZZZZZ	ZZZZZ	11/30/09	1927	2.58	6.42
27	ZZZZZ	ZZZZZ	11/30/09	1939	2.58	6.42
28	INDAB02	WPE091123-10	11/30/09	1951	2.58	6.42
29	PIBLK03	WAR090914-99	11/30/09	2003	2.58	6.43
30	ZZZZZ	ZZZZZ	11/30/09	2015	2.58	6.42
31	ZZZZZ	ZZZZZ	11/30/09	2027	2.58	6.42
32	ZZZZZ	ZZZZZ	11/30/09	2038	2.58	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	11/30/09	1354	2.12	6.24
02	PEM01	WPE091109-99	11/30/09	1406	2.12	6.22
03	INDAB01	WPE091123-10	11/30/09	1418	2.12	6.22
04	ZZZZZ	ZZZZZ	11/30/09	1430	2.13	6.22
05	ZZZZZ	ZZZZZ	11/30/09	1442	2.13	6.22
06	TOXAPH01	WPE091104-52	11/30/09	1454	2.13	6.22
07	CHLOR01	WPE091130-21	11/30/09	1529	2.12	6.24
08	CHLOR02	WPE091130-22	11/30/09	1541	2.12	6.22
09	CHLOR03	WPE091130-23	11/30/09	1553	2.12	6.22
10	CHLOR04	WPE091130-24	11/30/09	1605	2.12	6.22
11	CHLOR05	IPE091029-06	11/30/09	1628	2.12	6.23
12	CHLOR01	WPE091021-00	11/30/09	1639	2.12	6.22
13	GAPA01	WPE091130-31	11/30/09	1651	2.12	6.22
14	GAPA02	WPE091130-32	11/30/09	1703	2.12	6.22
15	GAPA03	WPE091130-33	11/30/09	1715	2.12	6.22
16	GAPA04	WPE091130-34	11/30/09	1727	2.12	6.22
17	GAPA05	IPE091110-01	11/30/09	1739	2.12	6.21
18	GAPA01	WPE091021-05	11/30/09	1751	2.13	6.22
19	PEM02	WPE091109-99	11/30/09	1803	2.13	6.22
20	PIBLK02	WAR090914-99	11/30/09	1815	2.12	6.22
21	ZZZZZ	ZZZZZ	11/30/09	1827	2.13	6.22
22	ZZZZZ	ZZZZZ	11/30/09	1839	2.13	6.22
23	ZZZZZ	ZZZZZ	11/30/09	1851	2.13	6.21
24	ZZZZZ	ZZZZZ	11/30/09	1903	2.13	6.21
25	ZZZZZ	ZZZZZ	11/30/09	1915	2.13	6.21
26	ZZZZZ	ZZZZZ	11/30/09	1927	2.13	6.22
27	ZZZZZ	ZZZZZ	11/30/09	1939	2.13	6.22
28	INDAB02	WPE091123-10	11/30/09	1951	2.13	6.21
29	PIBLK03	WAR090914-99	11/30/09	2003	2.13	6.22
30	ZZZZZ	ZZZZZ	11/30/09	2015	2.13	6.21
31	ZZZZZ	ZZZZZ	11/30/09	2027	2.13	6.21
32	ZZZZZ	ZZZZZ	11/30/09	2038	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.57 DCB: 6.42

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/02/09	1516	2.58	6.43
02	PEM01	WPE091109-99	12/02/09	1528	2.57	6.42
03	INDAB01	WPE091123-10	12/02/09	1540	2.57	6.42
04	TOXAPH01	WPE091104-52	12/02/09	1552	2.57	6.42
05	CHLOR01	WPE091021-00	12/02/09	1604	2.57	6.42
06	GAPA01	WPE091021-05	12/02/09	1619	2.58	6.42
07	ZZZZZ	ZZZZZ	12/02/09	1639		
08	ZZZZZ	ZZZZZ	12/02/09	1651	2.57	6.43
09	PIBLK02	WAR090914-99	12/02/09	1703	2.57	6.42
10	ZZZZZ	ZZZZZ	12/02/09	1715	2.57	6.42
11	ZZZZZ	ZZZZZ	12/02/09	1727	2.57	6.42
12	ZZZZZ	ZZZZZ	12/02/09	1739	2.57	6.42
13	ZZZZZ	ZZZZZ	12/02/09	1751	2.57	6.42
14	ZZZZZ	ZZZZZ	12/02/09	1802	2.57	6.42
15	ZZZZZ	ZZZZZ	12/02/09	1814	2.58	6.42
16	ZZZZZ	ZZZZZ	12/02/09	1826	2.57	6.42
17	ZZZZZ	ZZZZZ	12/02/09	1838	2.57	6.42
18	ZZZZZ	ZZZZZ	12/02/09	1850	2.57	6.42
19	ZZZZZ	ZZZZZ	12/02/09	1902	2.57	6.42
20	INDAB02	WPE091123-10	12/02/09	1914	2.57	6.42
21	PIBLK03	WAR090914-99	12/02/09	1926	2.57	6.42
22	ZZZZZ	ZZZZZ	12/02/09	1938	2.58	6.42
23	ZZZZZ	ZZZZZ	12/02/09	1950	2.57	6.42
24	ZZZZZ	ZZZZZ	12/02/09	2002	2.57	6.42
25	ZZZZZ	ZZZZZ	12/02/09	2014	2.57	6.42
26	ZZZZZ	ZZZZZ	12/02/09	2026	2.57	6.42
27	ZZZZZ	ZZZZZ	12/02/09	2038	2.58	6.42
28	ZZZZZ	ZZZZZ	12/02/09	2050	2.57	6.42
29	ZZZZZ	ZZZZZ	12/02/09	2102	2.57	6.42
30	ZZZZZ	ZZZZZ	12/02/09	2114	2.57	6.42
31	ZZZZZ	ZZZZZ	12/02/09	2126	2.57	6.42
32	INDAB03	WPE091123-10	12/02/09	2138	2.57	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.57 DCB: 6.42

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK04	WAR090914-99	12/02/09	2150	2.57	6.42
02	ZZZZZ	ZZZZZ	12/02/09	2202	2.57	6.42
03	ZZZZZ	ZZZZZ	12/02/09	2214	2.57	6.42
04	ZZZZZ	ZZZZZ	12/02/09	2226	2.57	6.42
05	ZZZZZ	ZZZZZ	12/02/09	2238	2.57	6.42
06	INDAB04	WPE091123-10	12/02/09	2249	2.57	6.42
07	PIBLK05	WAR090914-99	12/02/09	2301	2.57	6.42
08	ZZZZZ	ZZZZZ	12/02/09	2313	2.57	6.42
09	ZZZZZ	ZZZZZ	12/02/09	2325	2.57	6.42
10	IDNAB05	WPE091123-10	12/02/09	2337	2.57	6.42
11	PIBLK06	WAR090914-99	12/02/09	2349	2.57	6.42
12	ZZZZZ	ZZZZZ	12/03/09	0001	2.57	6.42
13	ZZZZZ	ZZZZZ	12/03/09	0013	2.58	6.42
14	ZZZZZ	ZZZZZ	12/03/09	0025	2.58	6.42
15	ZZZZZ	ZZZZZ	12/03/09	0037	2.58	6.42
16	ZZZZZ	ZZZZZ	12/03/09	0049	2.57	6.42
17	PIBLK07	WAR090914-99	12/03/09	0101	2.57	6.42
18	INDAB06	WPE091123-10	12/03/09	0113	2.57	6.42
19	PIBLK08	WAR090914-99	12/03/09	0125	2.57	6.42
20	ZZZZZ	ZZZZZ	12/03/09	0137	2.58	6.42
21	ZZZZZ	ZZZZZ	12/03/09	0149	2.58	6.42
22	ZZZZZ	ZZZZZ	12/03/09	0201	2.58	6.42
23	ZZZZZ	ZZZZZ	12/03/09	0212	2.58	6.42
24	ZZZZZ	ZZZZZ	12/03/09	0225	2.58	6.42
25	ZZZZZ	ZZZZZ	12/03/09	0236	2.58	6.42
26	ZZZZZ	ZZZZZ	12/03/09	0248	2.58	6.42
27	PIBLK09	WAR090914-99	12/03/09	0300	2.57	6.42
28	INDAB07	WPE091123-10	12/03/09	0312	2.57	6.42
29	PIBLK10	WAR090914-99	12/03/09	0324	2.57	6.42
30	TBLK01	1201980055	12/03/09	0336	2.58	6.42
31	ZZZZZ	ZZZZZ	12/03/09	0348	2.58	6.42
32	PBLK01	1201982197	12/03/09	0400	2.57	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.57 DCB: 6.42

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PBLK01LCS	1201982204	12/03/09	0412	2.58	6.42
02	PBLK01TLCS	1201982205	12/03/09	0424	2.58	6.42
03	PBLK01CLCS	1201982206	12/03/09	0436	2.57	6.42
04	ZZZZZ	ZZZZZ	12/03/09	0448	2.57	6.42
05	ZZZZZ	ZZZZZ	12/03/09	0500	2.57	6.42
06	PIBLK11	WAR090914-99	12/03/09	0512	2.57	6.42
07	INDAB08	WPE091123-10	12/03/09	0524	2.57	6.42
08	PIBLK12	WAR090914-99	12/03/09	0536	2.57	6.42
09	ZZZZZ	ZZZZZ	12/03/09	0548	2.57	6.42
10	ZZZZZ	ZZZZZ	12/03/09	0600	2.57	6.42
11	ZZZZZ	ZZZZZ	12/03/09	0612	2.57	6.42
12	ZZZZZ	ZZZZZ	12/03/09	0624	2.57	6.42
13	ZZZZZ	ZZZZZ	12/03/09	0636	2.57	6.42
14	ZZZZZ	ZZZZZ	12/03/09	0648	2.57	6.42
15	ZZZZZ	ZZZZZ	12/03/09	0700	2.57	6.42
16	ZZZZZ	ZZZZZ	12/03/09	0712	2.57	6.42
17	ZZZZZ	ZZZZZ	12/03/09	0724	2.57	6.42
18	PIBLK13	WAR090914-99	12/03/09	0736	2.57	6.42
19	INDAB09	WPE091123-10	12/03/09	0748	2.57	6.42
20	PIBLK14	WAR090914-99	12/03/09	0759	2.57	6.42
21	ZZZZZ	ZZZZZ	12/03/09	0811	2.58	6.42
22	ZZZZZ	ZZZZZ	12/03/09	0823	2.57	6.42
23	ZZZZZ	ZZZZZ	12/03/09	0835	2.57	6.42
24	ZZZZZ	ZZZZZ	12/03/09	0847	2.57	6.42
25	ZZZZZ	ZZZZZ	12/03/09	0859	2.57	6.42
26	ZZZZZ	ZZZZZ	12/03/09	0911	2.57	6.42
27	ZZZZZ	ZZZZZ	12/03/09	0923	2.57	6.42
28	ZZZZZ	ZZZZZ	12/03/09	0935	2.57	6.42
29	ZZZZZ	ZZZZZ	12/03/09	0947	2.57	6.42
30	ZZZZZ	ZZZZZ	12/03/09	0959	2.57	6.42
31	PIBLK15	WAR090914-99	12/03/09	1011	2.57	6.42
32	INDAB10	WPE091123-10	12/03/09	1023	2.57	6.42

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/02/09	1516	2.12	6.23
02	PEM01	WPE091109-99	12/02/09	1528	2.12	6.21
03	INDAB01	WPE091123-10	12/02/09	1540	2.12	6.21
04	TOXAPH01	WPE091104-52	12/02/09	1552	2.12	6.21
05	CHLOR01	WPE091021-00	12/02/09	1604	2.12	6.21
06	GAPA01	WPE091021-05	12/02/09	1619	2.12	6.22
07	ZZZZZ	ZZZZZ	12/02/09	1639		
08	ZZZZZ	ZZZZZ	12/02/09	1651	2.12	6.22
09	PIBLK02	WAR090914-99	12/02/09	1703	2.12	6.21
10	ZZZZZ	ZZZZZ	12/02/09	1715	2.12	6.22
11	ZZZZZ	ZZZZZ	12/02/09	1727	2.12	6.21
12	ZZZZZ	ZZZZZ	12/02/09	1739	2.12	6.22
13	ZZZZZ	ZZZZZ	12/02/09	1751	2.12	6.21
14	ZZZZZ	ZZZZZ	12/02/09	1802	2.12	6.21
15	ZZZZZ	ZZZZZ	12/02/09	1814	2.12	6.21
16	ZZZZZ	ZZZZZ	12/02/09	1826	2.12	6.21
17	ZZZZZ	ZZZZZ	12/02/09	1838	2.12	6.21
18	ZZZZZ	ZZZZZ	12/02/09	1850	2.12	6.21
19	ZZZZZ	ZZZZZ	12/02/09	1902	2.12	6.21
20	INDAB02	WPE091123-10	12/02/09	1914	2.12	6.21
21	PIBLK03	WAR090914-99	12/02/09	1926	2.12	6.21
22	ZZZZZ	ZZZZZ	12/02/09	1938	2.12	6.21
23	ZZZZZ	ZZZZZ	12/02/09	1950	2.12	6.21
24	ZZZZZ	ZZZZZ	12/02/09	2002	2.12	6.21
25	ZZZZZ	ZZZZZ	12/02/09	2014	2.12	6.21
26	ZZZZZ	ZZZZZ	12/02/09	2026	2.12	6.21
27	ZZZZZ	ZZZZZ	12/02/09	2038	2.13	6.21
28	ZZZZZ	ZZZZZ	12/02/09	2050	2.12	6.21
29	ZZZZZ	ZZZZZ	12/02/09	2102	2.12	6.21
30	ZZZZZ	ZZZZZ	12/02/09	2114	2.12	6.21
31	ZZZZZ	ZZZZZ	12/02/09	2126	2.12	6.21
32	INDAB03	WPE091123-10	12/02/09	2138	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK04	WAR090914-99	12/02/09	2150	2.12	6.21
02	ZZZZZ	ZZZZZ	12/02/09	2202	2.12	6.21
03	ZZZZZ	ZZZZZ	12/02/09	2214	2.12	6.21
04	ZZZZZ	ZZZZZ	12/02/09	2226	2.12	6.21
05	ZZZZZ	ZZZZZ	12/02/09	2238	2.12	6.21
06	INDAB04	WPE091123-10	12/02/09	2249	2.12	6.21
07	PIBLK05	WAR090914-99	12/02/09	2301	2.12	6.21
08	ZZZZZ	ZZZZZ	12/02/09	2313	2.12	6.21
09	ZZZZZ	ZZZZZ	12/02/09	2325	2.12	6.21
10	INDAB05	WPE091123-10	12/02/09	2337	2.12	6.21
11	PIBLK06	WAR090914-99	12/02/09	2349	2.12	6.21
12	ZZZZZ	ZZZZZ	12/03/09	0001	2.12	6.21
13	ZZZZZ	ZZZZZ	12/03/09	0013	2.13	6.21
14	ZZZZZ	ZZZZZ	12/03/09	0025	2.13	6.21
15	ZZZZZ	ZZZZZ	12/03/09	0037	2.12	6.21
16	ZZZZZ	ZZZZZ	12/03/09	0049	2.12	6.21
17	PIBLK07	WAR090914-99	12/03/09	0101	2.12	6.21
18	INDAB06	WPE091123-10	12/03/09	0113	2.12	6.21
19	PIBLK08	WAR090914-99	12/03/09	0125	2.12	6.21
20	ZZZZZ	ZZZZZ	12/03/09	0137	2.12	6.21
21	ZZZZZ	ZZZZZ	12/03/09	0149	2.12	6.21
22	ZZZZZ	ZZZZZ	12/03/09	0201	2.12	6.21
23	ZZZZZ	ZZZZZ	12/03/09	0212	2.13	6.21
24	ZZZZZ	ZZZZZ	12/03/09	0225	2.12	6.21
25	ZZZZZ	ZZZZZ	12/03/09	0236	2.12	6.21
26	ZZZZZ	ZZZZZ	12/03/09	0248	2.13	6.21
27	PIBLK09	WAR090914-99	12/03/09	0300	2.12	6.21
28	INDAB07	WPE091123-10	12/03/09	0312	2.12	6.21
29	PIBLK10	WAR090914-99	12/03/09	0324	2.12	6.21
30	TBLK01	1201980055	12/03/09	0336	2.12	6.21
31	ZZZZZ	ZZZZZ	12/03/09	0348	2.13	6.21
32	PBLK01	1201982197	12/03/09	0400	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/28/09 11/30/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.12 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PBLK01LCS	1201982204	12/03/09	0412	2.12	6.21
02	PBLK01TLCS	1201982205	12/03/09	0424	2.13	6.21
03	PBLK01CLCS	1201982206	12/03/09	0436	2.12	6.21
04	ZZZZZ	ZZZZZ	12/03/09	0448	2.12	6.21
05	ZZZZZ	ZZZZZ	12/03/09	0500	2.12	6.21
06	PIBLK11	WAR090914-99	12/03/09	0512	2.12	6.21
07	INDAB08	WPE091123-10	12/03/09	0524	2.12	6.21
08	PIBLK12	WAR090914-99	12/03/09	0536	2.12	6.21
09	ZZZZZ	ZZZZZ	12/03/09	0548	2.12	6.21
10	ZZZZZ	ZZZZZ	12/03/09	0600	2.12	6.21
11	ZZZZZ	ZZZZZ	12/03/09	0612	2.12	6.21
12	ZZZZZ	ZZZZZ	12/03/09	0624	2.12	6.21
13	ZZZZZ	ZZZZZ	12/03/09	0636	2.12	6.21
14	ZZZZZ	ZZZZZ	12/03/09	0648	2.12	6.21
15	ZZZZZ	ZZZZZ	12/03/09	0700	2.12	6.21
16	ZZZZZ	ZZZZZ	12/03/09	0712	2.12	6.21
17	ZZZZZ	ZZZZZ	12/03/09	0724	2.12	6.21
18	PIBLK13	WAR090914-99	12/03/09	0736	2.12	6.21
19	INDAB09	WPE091123-10	12/03/09	0748	2.12	6.21
20	PIBLK14	WAR090914-99	12/03/09	0759	2.12	6.21
21	ZZZZZ	ZZZZZ	12/03/09	0811	2.12	6.21
22	ZZZZZ	ZZZZZ	12/03/09	0823	2.12	6.21
23	ZZZZZ	ZZZZZ	12/03/09	0835	2.12	6.21
24	ZZZZZ	ZZZZZ	12/03/09	0847	2.12	6.21
25	ZZZZZ	ZZZZZ	12/03/09	0859	2.12	6.21
26	ZZZZZ	ZZZZZ	12/03/09	0911	2.12	6.21
27	ZZZZZ	ZZZZZ	12/03/09	0923	2.12	6.21
28	ZZZZZ	ZZZZZ	12/03/09	0935	2.12	6.21
29	ZZZZZ	ZZZZZ	12/03/09	0947	2.12	6.21
30	ZZZZZ	ZZZZZ	12/03/09	0959	2.12	6.21
31	PIBLKK15	WAR090914-99	12/03/09	1011	2.12	6.21
32	INDAB10	WPE091123-10	12/03/09	1023	2.12	6.21

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.41 DCB: 6.34

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/07/09	1656	2.41	6.35
02	PEM01	WPE091109-99	12/07/09	1714	2.41	6.35
03	INDAB01	WPE091207-01	12/07/09	1726	2.40	6.34
04	INDAB02	WPE091207-02	12/07/09	1738	2.40	6.34
05	INDAB03	WPE091207-03	12/07/09	1750	2.40	6.34
06	INDAB04	WPE091207-04	12/07/09	1802	2.40	6.34
07	INDAB05	IPE091128-02	12/07/09	1814	2.40	6.34
08	INDAB01	WPE091207-10	12/07/09	1826	2.41	6.34
09	TOXAPH01	WPE091207-11	12/07/09	1838	2.41	6.34
10	TOXAPH02	WPE091207-12	12/07/09	1850	2.41	6.35
11	ZZZZZ	ZZZZZ	12/07/09	1938	2.41	6.35
12	ZZZZZ	ZZZZZ	12/07/09	1950	2.41	6.35
13	TOXAPH03	WPE091207-13	12/07/09	2002	2.41	6.35
14	TOXAPH04	WPE091207-14	12/07/09	2014	2.41	6.34
15	TOXAPH05	IPE091121-40	12/07/09	2026	2.40	6.34
16	TOXAPH01	WPE091104-52	12/07/09	2038	2.41	6.35
17	CHLOR01	WPE091207-21	12/07/09	2050	2.41	6.34
18	CHLOR02	WPE091207-22	12/07/09	2102	2.41	6.35
19	CHLOR03	WPE091207-23	12/07/09	2114	2.41	6.35
20	CHLOR04	WPE091207-24	12/07/09	2126	2.41	6.35
21	CHLOR05	IPE091029-06	12/07/09	2138	2.41	6.35
22	CHLOR01	WPE091021-00	12/07/09	2149	2.40	6.34
23	PEM02	WPE091109-99	12/07/09	2201	2.41	6.34
24	PIBLK02	WAR090914-99	12/07/09	2213	2.41	6.34
25	ZZZZZ	ZZZZZ	12/07/09	2225	2.41	6.34
26	ZZZZZ	ZZZZZ	12/07/09	2237	2.41	6.34
27	ZZZZZ	ZZZZZ	12/07/09	2249	2.41	6.35
28	ZZZZZ	ZZZZZ	12/07/09	2301	2.41	6.35
29	ZZZZZ	ZZZZZ	12/07/09	2313	2.41	6.34
30	ZZZZZ	ZZZZZ	12/07/09	2325	2.41	6.34
31	ZZZZZ	ZZZZZ	12/07/09	2337	2.41	6.34
32	ZZZZZ	ZZZZZ	12/07/09	2349	2.41	6.34

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.41 DCB: 6.34

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/08/09	0001	2.41	6.34
02	ZZZZZ	ZZZZZ	12/08/09	0013	2.41	6.35
03	INDAB02	WPE091123-10	12/08/09	0025	2.41	6.34
04	PIBLK03	WAR090914-99	12/08/09	0037	2.41	6.34
05	ZZZZZ	ZZZZZ	12/08/09	0049	2.41	6.34
06	ZZZZZ	ZZZZZ	12/08/09	0100	2.41	6.35
07	ZZZZZ	ZZZZZ	12/08/09	0112	2.41	6.34
08	ZZZZZ	ZZZZZ	12/08/09	0124	2.41	6.34
09	ZZZZZ	ZZZZZ	12/08/09	0136	2.41	6.34
10	ZZZZZ	ZZZZZ	12/08/09	0148	2.41	6.34
11	ZZZZZ	ZZZZZ	12/08/09	0200	2.41	6.34
12	ZZZZZ	ZZZZZ	12/08/09	0212	2.41	6.35
13	INDAB03	WPE091123-10	12/08/09	0224	2.41	6.34
14	PIBLK04	WAR090914-99	12/08/09	0236	2.41	6.34
15	WST03-10-2131	241424001	12/08/09	0248	2.41	6.35
16	WST03-10-2130	241424002	12/08/09	0300	2.40	6.34
17	ZZZZZ	ZZZZZ	12/08/09	0312	2.41	6.34
18	PIBLK05	WAR090914-99	12/08/09	0324	2.41	6.34
19	INDAB04	WPE091123-10	12/08/09	0336	2.41	6.35
20	PIBLK06	WAR090914-99	12/08/09	0348	2.41	6.34
21	ZZZZZ	ZZZZZ	12/08/09	0411	2.41	6.34
22	ZZZZZ	ZZZZZ	12/08/09	0423	2.41	6.34
23	ZZZZZ	ZZZZZ	12/08/09	0435	2.41	6.34
24	ZZZZZ	ZZZZZ	12/08/09	0447	2.41	6.34
25	ZZZZZ	ZZZZZ	12/08/09	0459	2.41	6.34
26	ZZZZZ	ZZZZZ	12/08/09	0511	2.41	6.34
27	PIBLK07	WAR090914-99	12/08/09	0523	2.41	6.34
28	INDAB05	WPE091123-10	12/08/09	0535	2.41	6.34
29	PIBLK08	WAR090914-99	12/08/09	0547	2.41	6.34
30	ZZZZZ	ZZZZZ	12/08/09	0559	2.41	6.34
31	ZZZZZ	ZZZZZ	12/08/09	0611	2.41	6.34
32	ZZZZZ	ZZZZZ	12/08/09	0623	2.41	6.34

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.06 DCB: 6.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/07/09	1656	2.06	6.23
02	PEM01	WPE091109-99	12/07/09	1714	2.06	6.24
03	INDAB01	WPE091207-01	12/07/09	1726	2.06	6.23
04	INDAB02	WPE091207-02	12/07/09	1738	2.06	6.23
05	INDAB03	WPE091207-03	12/07/09	1750	2.06	6.23
06	INDAB04	WPE091207-04	12/07/09	1802	2.06	6.23
07	INDAB05	IPE091128-02	12/07/09	1814	2.06	6.23
08	INDAB01	WPE091207-10	12/07/09	1826	2.06	6.23
09	TOXAPH01	WPE091207-11	12/07/09	1838	2.06	6.23
10	TOXAPH02	WPE091207-12	12/07/09	1850	2.06	6.23
11	ZZZZZ	ZZZZZ	12/07/09	1938	2.06	6.24
12	ZZZZZ	ZZZZZ	12/07/09	1950	2.06	6.23
13	TOXAPH03	WPE091207-13	12/07/09	2002	2.06	6.23
14	TOXAPH04	WPE091207-14	12/07/09	2014	2.06	6.23
15	TOXAPH05	IPE091121-40	12/07/09	2026	2.07	6.23
16	TOXAPH01	WPE091104-52	12/07/09	2038	2.06	6.23
17	CHLOR01	WPE091207-21	12/07/09	2050	2.06	6.23
18	CHLOR02	WPE091207-22	12/07/09	2102	2.06	6.23
19	CHLOR03	WPE091207-23	12/07/09	2114	2.06	6.23
20	CHLOR04	WPE091207-24	12/07/09	2126	2.06	6.23
21	CHLOR05	IPE091029-06	12/07/09	2138	2.06	6.23
22	CHLOR01	WPE091021-00	12/07/09	2149	2.06	6.23
23	PEM02	WPE091109-99	12/07/09	2201	2.06	6.23
24	PIBLK02	WAR090914-99	12/07/09	2213	2.06	6.23
25	ZZZZZ	ZZZZZ	12/07/09	2225	2.06	6.23
26	ZZZZZ	ZZZZZ	12/07/09	2237	2.06	6.23
27	ZZZZZ	ZZZZZ	12/07/09	2249	2.06	6.23
28	ZZZZZ	ZZZZZ	12/07/09	2301	2.06	6.23
29	ZZZZZ	ZZZZZ	12/07/09	2313	2.06	6.23
30	ZZZZZ	ZZZZZ	12/07/09	2325	2.06	6.23
31	ZZZZZ	ZZZZZ	12/07/09	2337	2.06	6.22
32	ZZZZZ	ZZZZZ	12/07/09	2349	2.06	6.23

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/07/09 12/07/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.06 DCB: 6.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/08/09	0001	2.06	6.23
02	ZZZZZ	ZZZZZ	12/08/09	0013	2.06	6.23
03	INDAB02	WPE091123-10	12/08/09	0025	2.06	6.23
04	PIBLK03	WAR090914-99	12/08/09	0037	2.06	6.23
05	ZZZZZ	ZZZZZ	12/08/09	0049	2.06	6.23
06	ZZZZZ	ZZZZZ	12/08/09	0100	2.06	6.23
07	ZZZZZ	ZZZZZ	12/08/09	0112	2.06	6.23
08	ZZZZZ	ZZZZZ	12/08/09	0124	2.06	6.23
09	ZZZZZ	ZZZZZ	12/08/09	0136	2.06	6.23
10	ZZZZZ	ZZZZZ	12/08/09	0148	2.06	6.23
11	ZZZZZ	ZZZZZ	12/08/09	0200	2.06	6.23
12	ZZZZZ	ZZZZZ	12/08/09	0212	2.06	6.23
13	INDAB03	WPE091123-10	12/08/09	0224	2.06	6.23
14	PIBLK04	WAR090914-99	12/08/09	0236	2.06	6.23
15	WST03-10-2131	241424001	12/08/09	0248	2.06	6.23
16	WST03-10-2130	241424002	12/08/09	0300	2.06	6.23
17	ZZZZZ	ZZZZZ	12/08/09	0312	2.06	6.23
18	PIBLK05	WAR090914-99	12/08/09	0324	2.06	6.23
19	INDAB04	WPE091123-10	12/08/09	0336	2.06	6.23
20	PIBLK06	WAR090914-99	12/08/09	0348	2.06	6.23
21	ZZZZZ	ZZZZZ	12/08/09	0411	2.06	6.23
22	ZZZZZ	ZZZZZ	12/08/09	0423	2.06	6.23
23	ZZZZZ	ZZZZZ	12/08/09	0435	2.06	6.23
24	ZZZZZ	ZZZZZ	12/08/09	0447	2.06	6.23
25	ZZZZZ	ZZZZZ	12/08/09	0459	2.06	6.23
26	ZZZZZ	ZZZZZ	12/08/09	0511	2.06	6.22
27	PIBLK07	WAR090914-99	12/08/09	0523	2.06	6.23
28	INDAB05	WPE091123-10	12/08/09	0535	2.06	6.23
29	PIBLK08	WAR090914-99	12/08/09	0547	2.06	6.23
30	ZZZZZ	ZZZZZ	12/08/09	0559	2.06	6.23
31	ZZZZZ	ZZZZZ	12/08/09	0611	2.06	6.23
32	ZZZZZ	ZZZZZ	12/08/09	0623	2.06	6.23

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

Identification Summary

SDG Number: 10-578-1 **Client ID:** LCS for batch 927115

Lab Sample ID: 1201982204

Data File:	065f6501.d	**Data File:**	065b6501.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	03-DEC-09 04:12	**Analyzed:**	03-DEC-09 04:12

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
gamma-BHC (Lindane)							24
Column 1	1	3.45	3.42 – 3.48	.00366		mg/L	
Column 2	1	3.11	3.08 – 3.14	.00288		mg/L	
Heptachlor							28.7
Column 1	1	3.82	3.79 – 3.85	.00384		mg/L	
Column 2	1	3.44	3.41 – 3.47	.00288		mg/L	
Heptachlor epoxide							23
Column 1	1	4.47	4.43 – 4.49	.00338		mg/L	
Column 2	1	4.07	4.04 – 4.1	.00268		mg/L	
Endrin							5.02
Column 1	1	5.02	4.99 – 5.05	.00331		mg/L	
Column 2	1	4.68	4.65 – 4.71	.00315		mg/L	
Methoxychlor							3.81
Column 1	1	5.5	5.47 – 5.53	.0371		mg/L	
Column 2	1	5.34	5.32 – 5.38	.0357		mg/L	

Identification Summary

SDG Number: 10–578–1 **Client ID:** LCS for batch 927115

Lab Sample ID: 1201982206

Data File:	067f6701.d	**Data File:**	067b6701.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	03–DEC–09 04:36	**Analyzed:**	03–DEC–09 04:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Chlordane (tech.)							5.39
Column 1	1	3.76	3.66 – 3.86	.0888		mg/L	
	2	4.42	4.32 – 4.52	.0775		mg/L	
	3	4.55	4.45 – 4.65	.0683		mg/L	
	4	4.63	4.53 – 4.73	.0676		mg/L	
	5	4.77	4.67 – 4.87	.0582		mg/L	
					.0721		
Column 2	1	3.33	3.3 – 3.36	.0771		mg/L	
	2	4.05	4.02 – 4.08	.0577		mg/L	
	3	4.19	4.16 – 4.22	.0639		mg/L	
	4	4.29	4.26 – 4.32	.0653		mg/L	
	5	4.44	4.41 – 4.47	.0775		mg/L	
					.0683		

Identification Summary

SDG Number: 10-578-1

Client ID: LCS for batch 927115

Lab Sample ID: 1201982205

Data File:	066f6601.d	**Data File:**	066b6601.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	03-DEC-09 04:24	**Analyzed:**	03-DEC-09 04:24

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							16.1
Column 1	1	4.66	4.63 – 4.69	.0755		mg/L	
	2	4.88	4.85 – 4.91	.076		mg/L	
	3	4.93	4.9 – 4.96	.0856		mg/L	
	4	4.97	4.94 – 5	.0919		mg/L	
	5	5.15	5.12 – 5.18	.1		mg/L	
					.0858		
Column 2	1	4.55	4.52 – 4.58	.0783		mg/L	
	2	4.78	4.75 – 4.81	.059		mg/L	
	3	4.8	4.77 – 4.83	.0762		mg/L	
	4	4.86	4.83 – 4.89	.0735		mg/L	
	5	5.02	4.99 – 5.05	.0784		mg/L	
					.0731		

QUALITY CONTROL DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201980055				
Client Sample:	QC for batch 926091	**Client:**	LANL010	**Project:**	QC
Client ID:	TB for batch 926091	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	1
Run Date:	12/03/2009 03:36	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	062f6201-600.d	**Column:**	1 CLP-1	**Level:**	LOW
	062b6201-600.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/062f6201.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK01
Inj Date : 03-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201980055|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 62 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.575	2.573	0.002	62780491	152.131	0.00761	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	26540591	156.598	0.00783	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/062f6201.d
Date : 03-DEC-2009 03:36
Client ID: TBLK01
Sample Info: |120198005|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

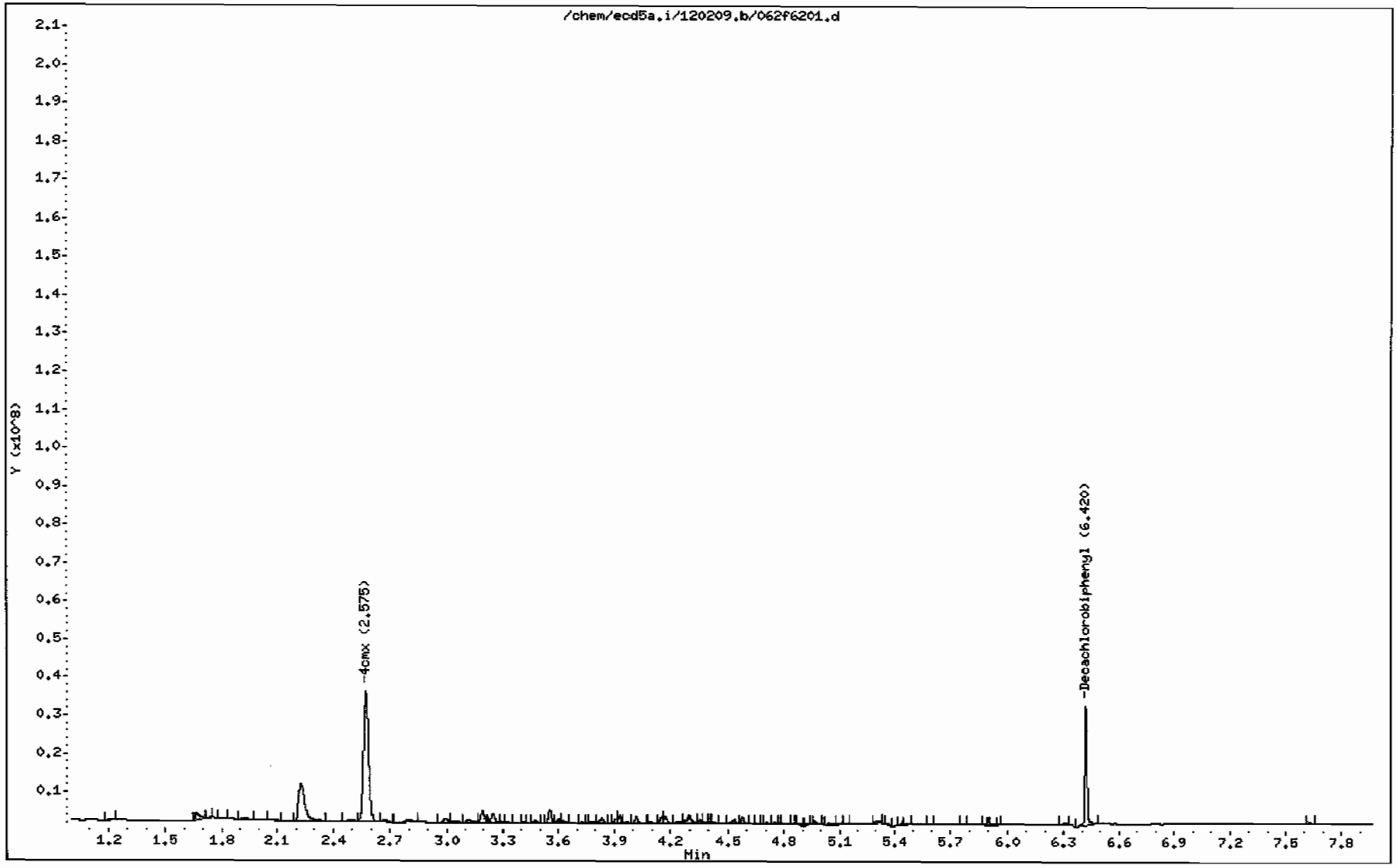

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/062b6201.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK01
Inj Date : 03-DEC-2009 03:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201980055|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 62 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.121	0.003	576528679	127.688	0.00638	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	409689172	127.859	0.00639	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/062b6201.d

Date : 03-DEC-2009 03:36

Client ID: TBLK01

Sample Info: |1201980055|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

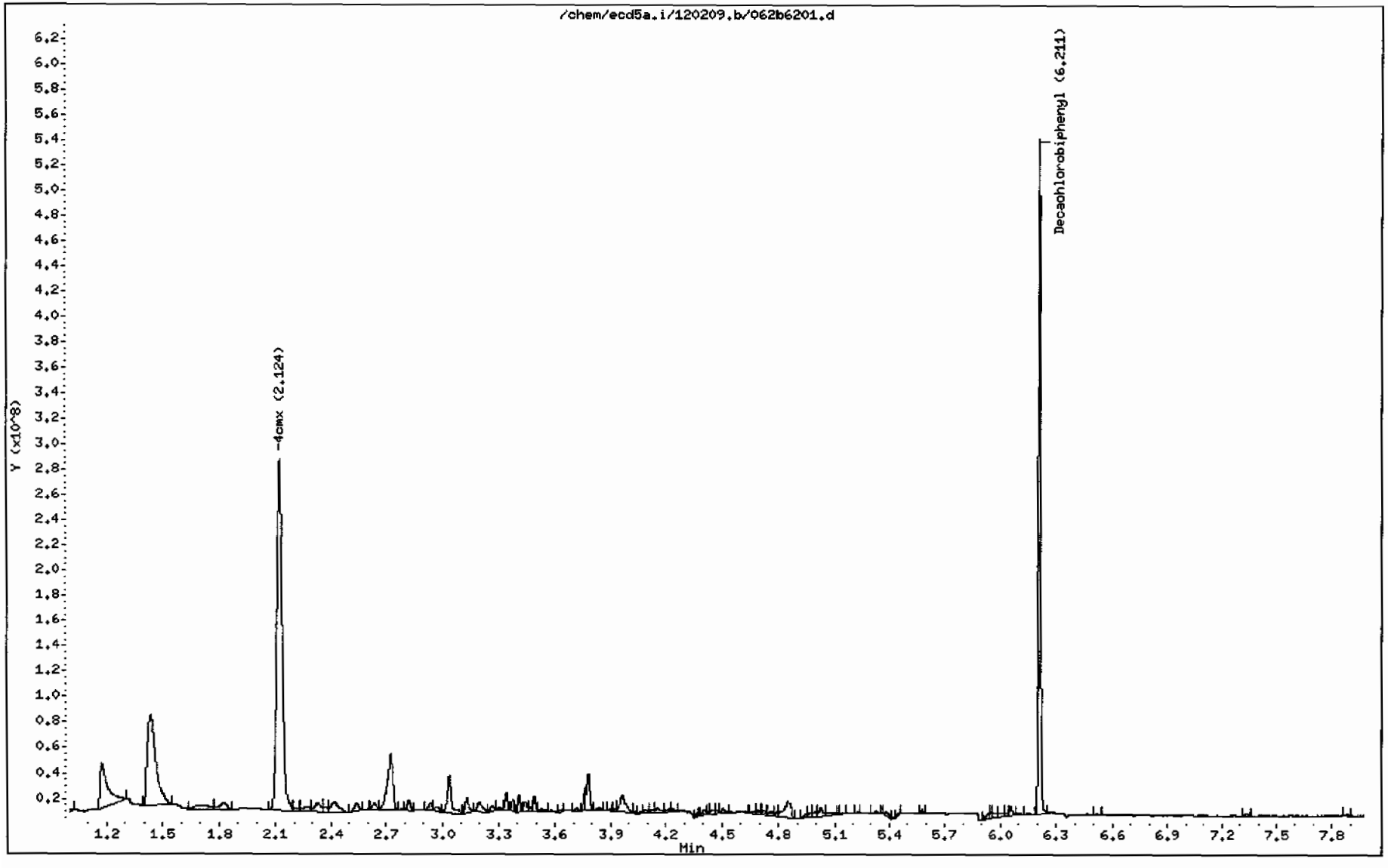

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982197**				
Client Sample:	**QC for batch 927115**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927115**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 04:00**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**064f6401-600.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	064b6401-600.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/064f6401.d
Lab Smp Id: 1201982197 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 04:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982197|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 64 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.575	2.573	0.002	61060351	147.963	0.00740	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.419	6.422	-0.003	27244870	160.754	0.00804	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/064f6401.d

Date : 03-DEC-2009 04:00

Client ID: PBLK01

Sample Info: |120198219711|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

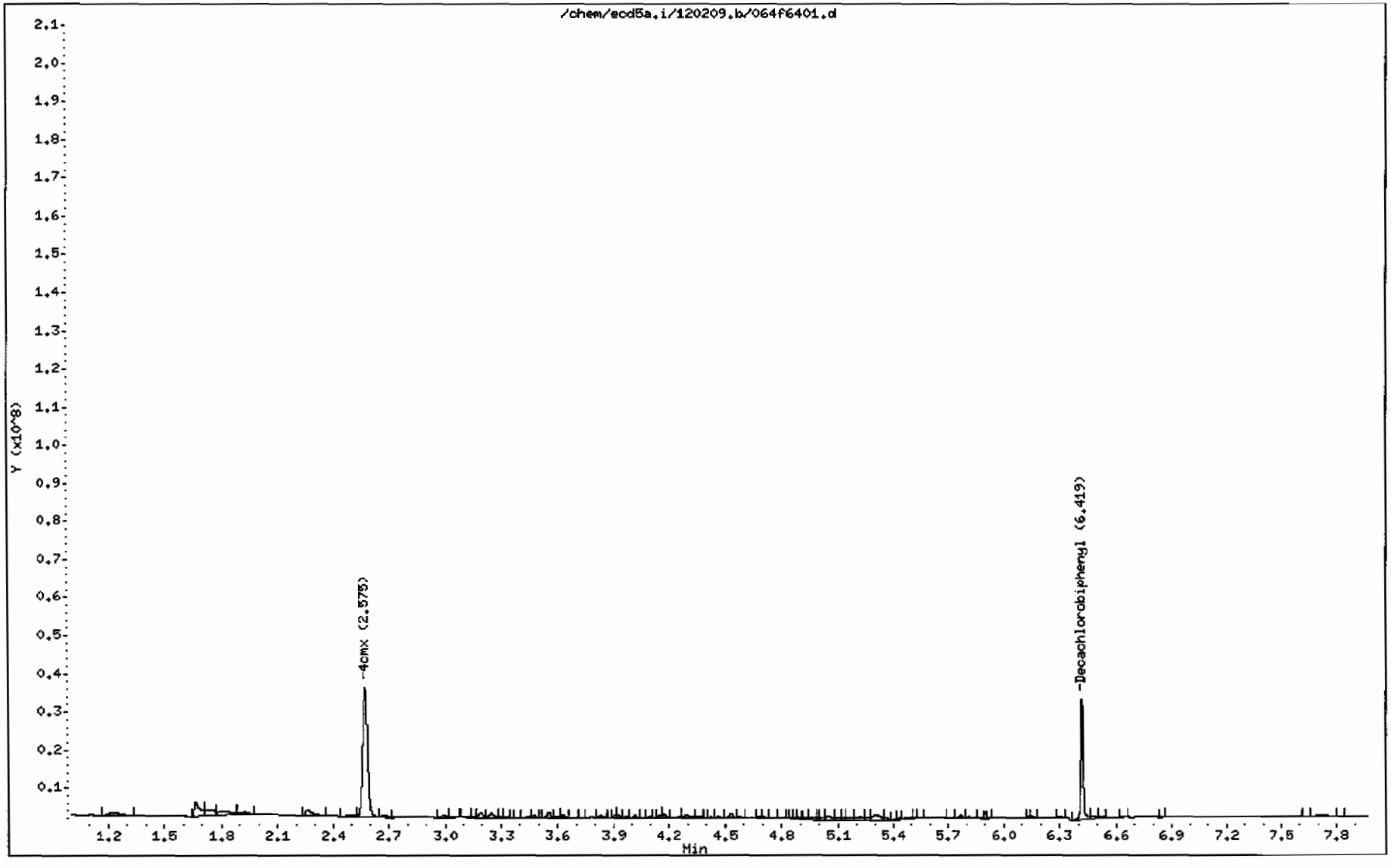

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/064b6401.d
Lab Smp Id: 1201982197 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 04:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982197|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 64 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.122	2.121	0.001	556868757	123.334	0.00617	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	379601299	118.469	0.00592	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/064b6401.d
Date : 03-DEC-2009 04:00
Client ID: PBLK01
Sample Info: |120198219711|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

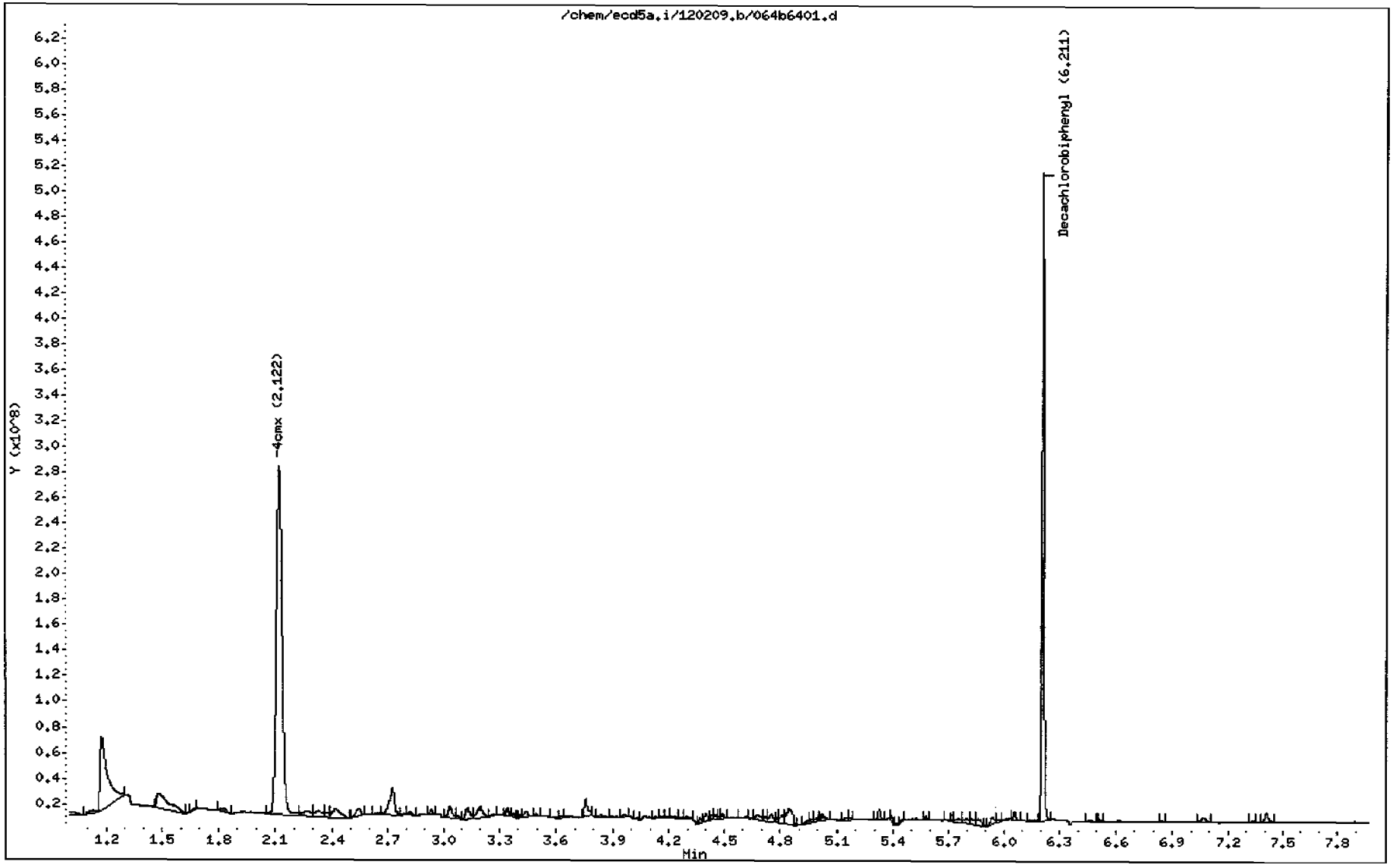

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–578–1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201982206				
Client Sample:	QC for batch 927115	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927115	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	1
Run Date:	12/03/2009 04:36	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	067f6701–600.d	**Column:**	1 CLP–1	**Level:**	LOW
	067b6701–600.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72–20–8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)		0.0683	mg/L	0.000765	0.0025	2
8001–35–2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd5a.i/120209.b/067f6701.d
Lab Smp Id: 1201982206 Client Smp ID: PBLK01CLCS
Inj Date : 03-DEC-2009 04:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982206|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|CLCS|SOIL|CLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 67 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.573	2.573	0.000	58882665	142.686	0.00713	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	24861060	146.688	0.00733	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.763	3.763	0.000	27004993	1775.41	0.0888	80.00- 120.00	100.00
4.423	4.422	0.001	13773257	1550.19	0.0775	39.94- 79.94	51.00
4.546	4.546	0.000	66076716	1365.68	0.0683	302.06- 342.06	244.68
4.631	4.631	0.000	100502774	1352.56	0.0676	449.29- 489.29	372.16
4.766	4.766	0.000	4640793	1163.80	0.0582	3.38- 43.38	17.18

Average of Peak Concentrations = 0.0721

Data File: /chem/ecd5a.i/120209.b/067f6701.d
Date : 03-DEC-2009 04:36
Client ID: PBLK01CLCS
Sample Info: |1201982206|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

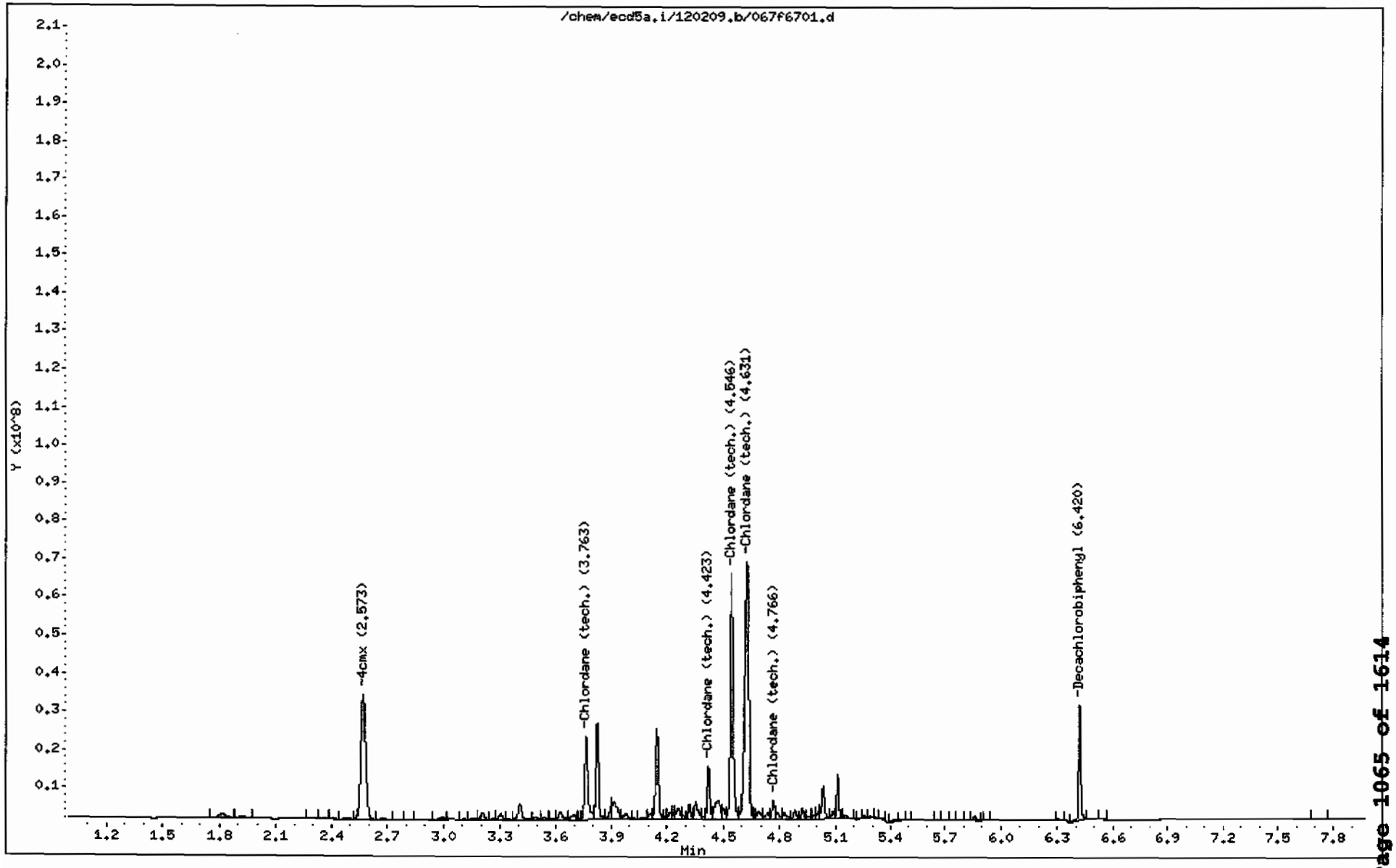

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/067b6701.d
Lab Smp Id: 1201982206 Client Smp ID: PBLK01CLCS
Inj Date : 03-DEC-2009 04:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982206|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|CLCS|SOIL|CLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 67 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.121	2.121	0.000	577536521	127.911	0.00640	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	395183325	123.332	0.00617	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.335	3.334	0.001	302786537	1542.60	0.0771	80.00- 120.00	100.00
4.051	4.050	0.001	123462224	1153.05	0.0576	31.49- 71.49	40.78
4.195	4.194	0.001	624699662	1278.49	0.0639	219.88- 259.88	206.32
4.289	4.288	0.001	499401112	1305.31	0.0653	168.01- 208.01	164.94
4.440	4.438	0.002	63590121	1549.95	0.0775	1.45- 41.45	21.00

Average of Peak Concentrations = 0.0683

Data File: /chem/ecd5a.i/120209.b/067b6701.d

Date : 03-DEC-2009 04:36

Client ID: PBLK01CLCS

Sample Info: |1201982206|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

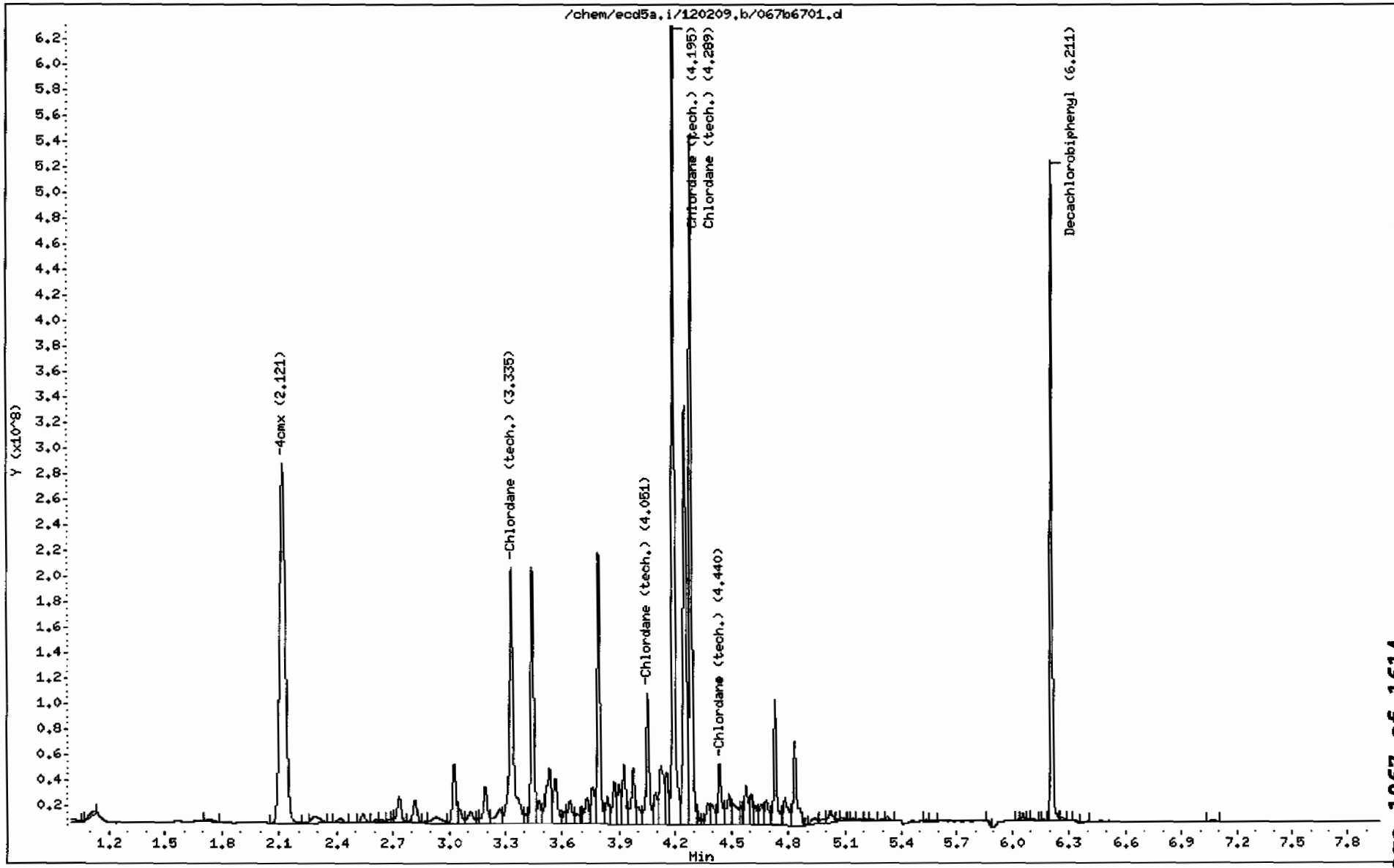

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201982204**				
Client Sample:	**QC for batch 927115**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927115**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**927116**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 04:12**	**Analyst:**	**CXC2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 18:05**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**065f6501-600.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	065b6501-600.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)		0.00288	mg/L	0.00005	0.0002	2
76-44-8	Heptachlor		0.00288	mg/L	0.00005	0.0002	2
1024-57-3	Heptachlor epoxide		0.00268	mg/L	0.00005	0.0002	2
72-20-8	Endrin		0.00315	mg/L	0.0001	0.0004	2
72-43-5	Methoxychlor		0.0357	mg/L	0.0005	0.002	2
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120209.b/065f6501.d
Lab Smp Id: 1201982204 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 04:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982204|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 65 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.576	2.573	0.003	47299346	114.617	0.00573	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.419	6.422	-0.003	21751726	128.342	0.00642	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.448	3.447	0.001	34197886	73.2963	0.00366	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.824	3.824	0.000	31421994	76.8331	0.00384	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.465	4.464	0.001	26865138	67.6445	0.00338	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.017	5.017	0.000	21760331	66.2854	0.00331	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.503	5.503	0.000	87588960	741.418	0.0371	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/065f6501.d
Date : 03-DEC-2009 04:12
Client ID: PBLK01LCS
Sample Info: |120198220411|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

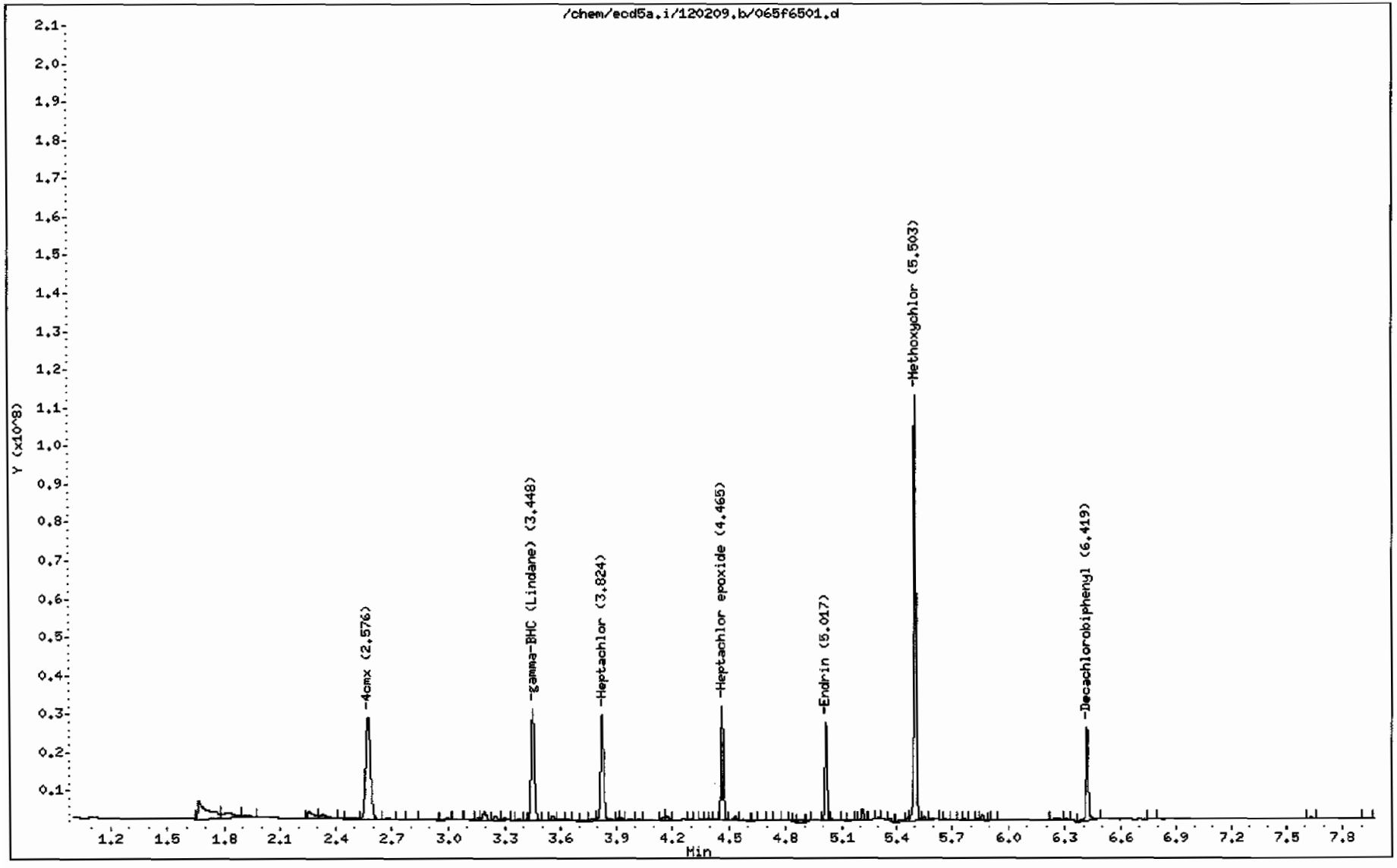

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/065b6501.d
Lab Smp Id: 1201982204 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 04:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982204|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 65 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.124	2.121	0.003	428445008	94.8908	0.00474	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.211	6.214	-0.003	284574727	88.8124	0.00444	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.106	0.001	315611209	57.5806	0.00288	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.444	3.444	0.000	256697854	57.5517	0.00288	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	225304932	53.6794	0.00268	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.679	4.679	0.000	222738983	63.0375	0.00315	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.344	5.346	-0.002	642763173	713.732	0.0357	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120209.b/065b6501.d
Date : 03-DEC-2009 04:12
Client ID: PBLK01LCS
Sample Info: 1120198220411
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

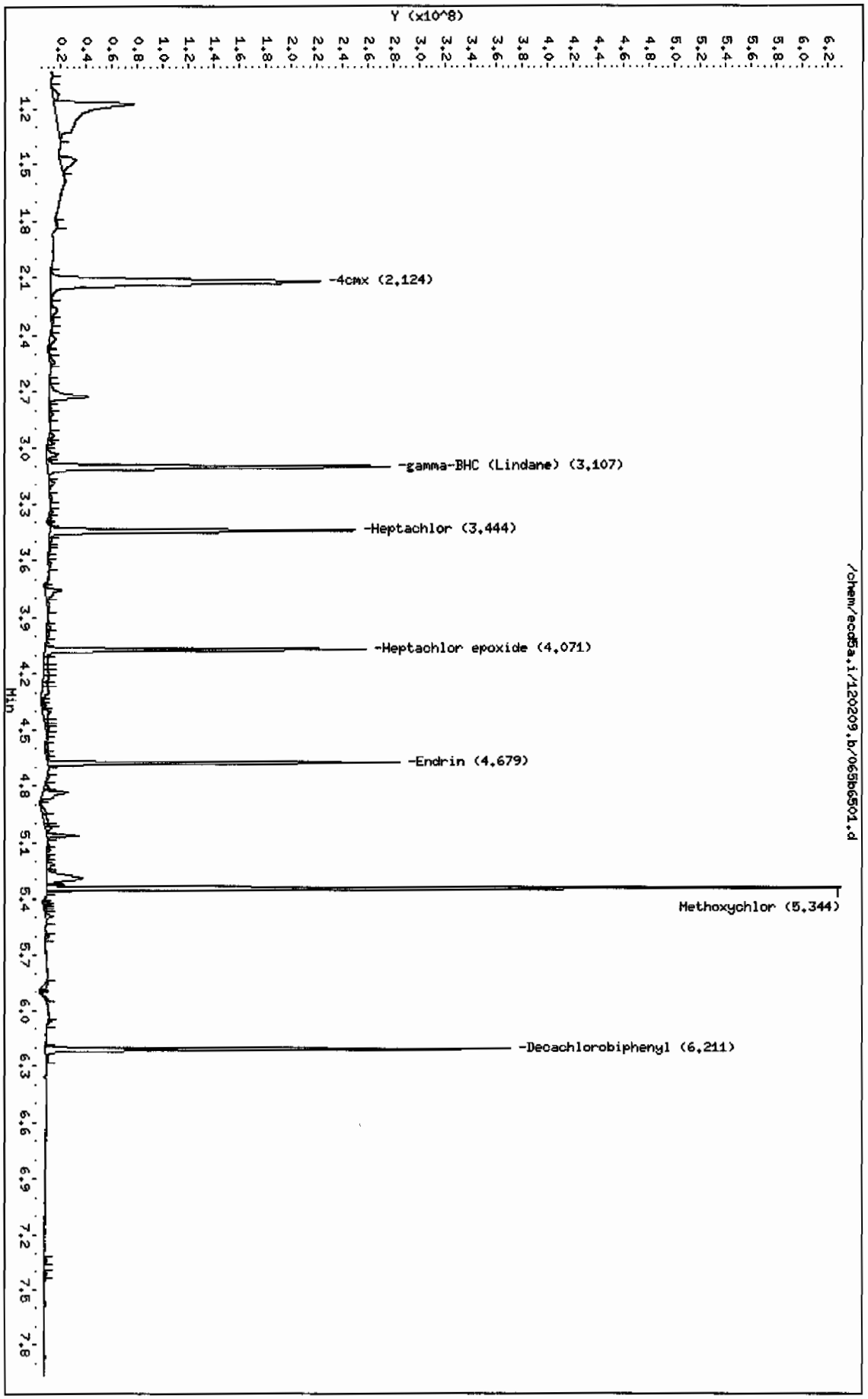

Page 1

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–578–1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201982205				
Client Sample:	QC for batch 927115	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927115	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	927116	**Inst:**	ECD5A.I	**Dilution:**	1
Run Date:	12/03/2009 04:24	**Analyst:**	CXC2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 18:05	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	066f6601–600.d	**Column:**	1 CLP–1	**Level:**	LOW
	066b6601–600.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72–20–8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene		0.0731	mg/L	0.0015	0.005	2

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CLP-1

Data file : /chem/ecd5a.i/120209.b/066f6601.d
Lab Smp Id: 1201982205 Client Smp ID: PBLK01TLCS
Inj Date : 03-DEC-2009 04:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982205|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-F-8081-112809.m
Meth Date : 03-Dec-2009 11:29 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017f1701.d
Als bottle: 66 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.579	2.573	0.006	51977341	125.953	0.00630	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.420	6.422	-0.002	25486428	150.378	0.00752	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.660	4.660	0.000	3238371	1510.15	0.0755	80.00- 120.00	100.00(M)
4.876	4.875	0.001	8556929	1520.49	0.0760	228.26- 268.26	264.24
4.930	4.931	-0.001	8833826	1712.61	0.0856	224.51- 264.51	272.79
4.969	4.967	0.002	12690301	1837.50	0.0919	293.53- 333.53	391.87
5.149	5.149	0.000	22936754	2002.46	0.100	518.17- 558.17	708.28

Average of Peak Concentrations = 0.0858

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/066f6601.d
Date : 03-DEC-2009 04:24
Client ID: PBLK01TLCS
Sample Info: |120198220511|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

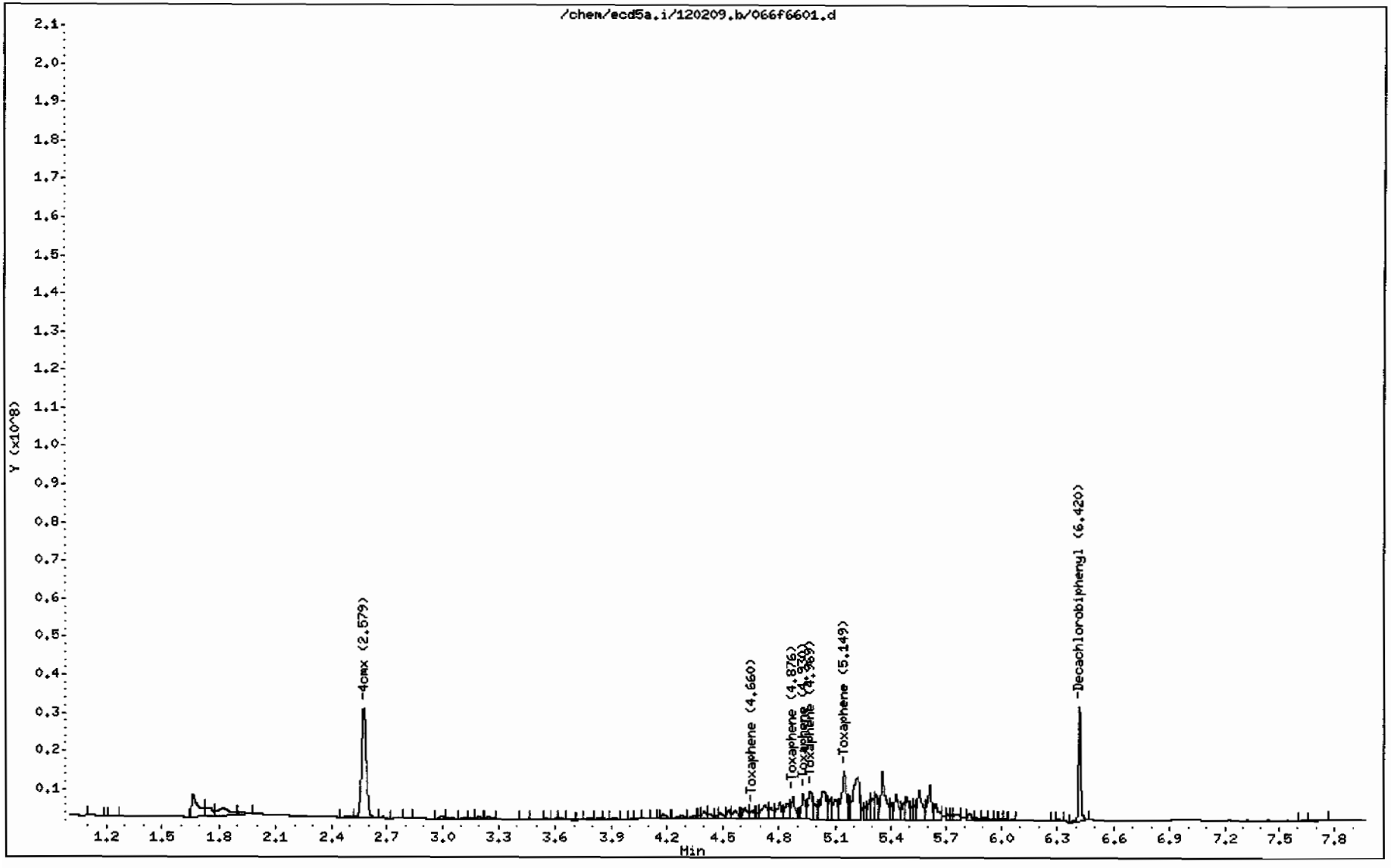

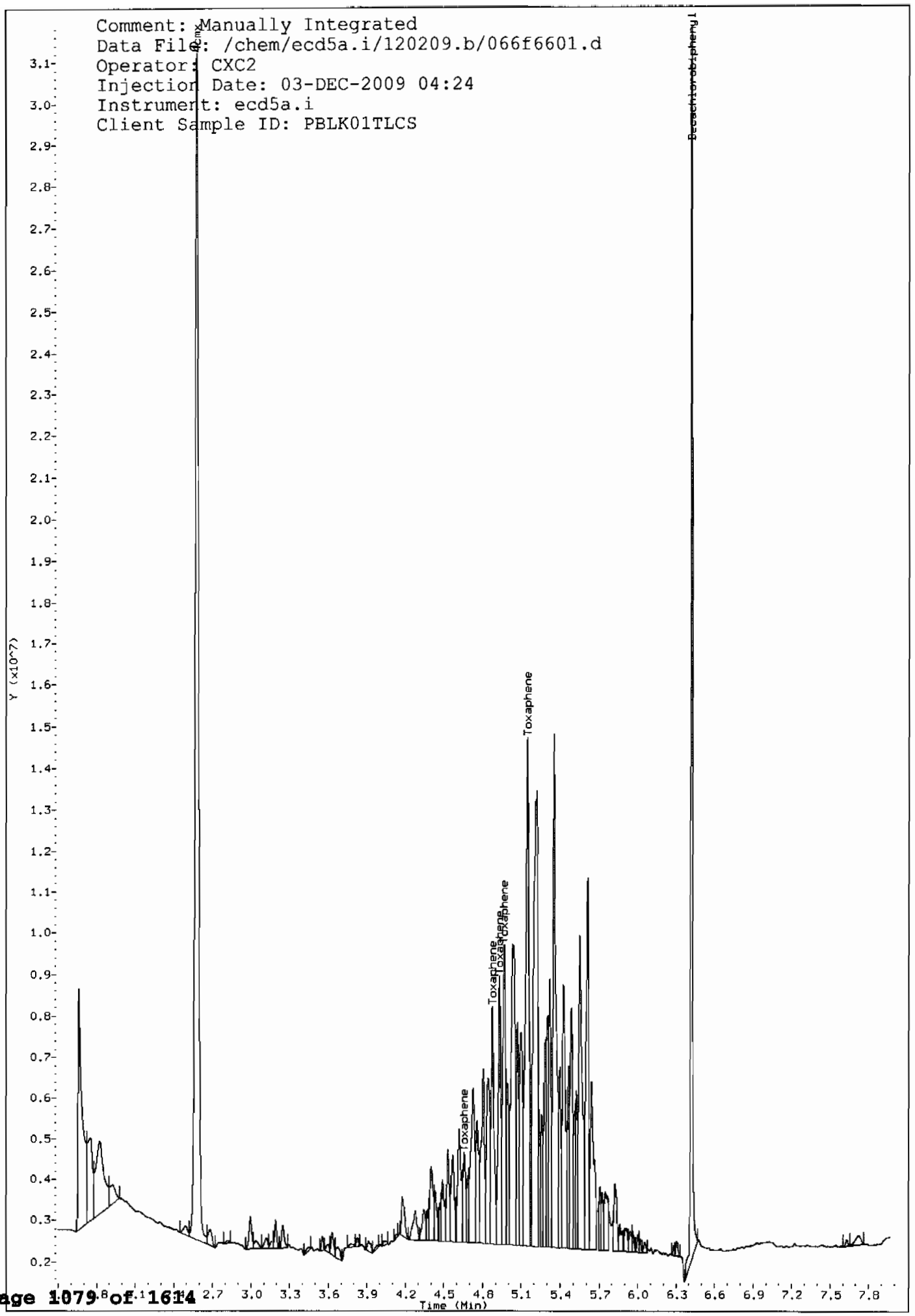
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/066f6601.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

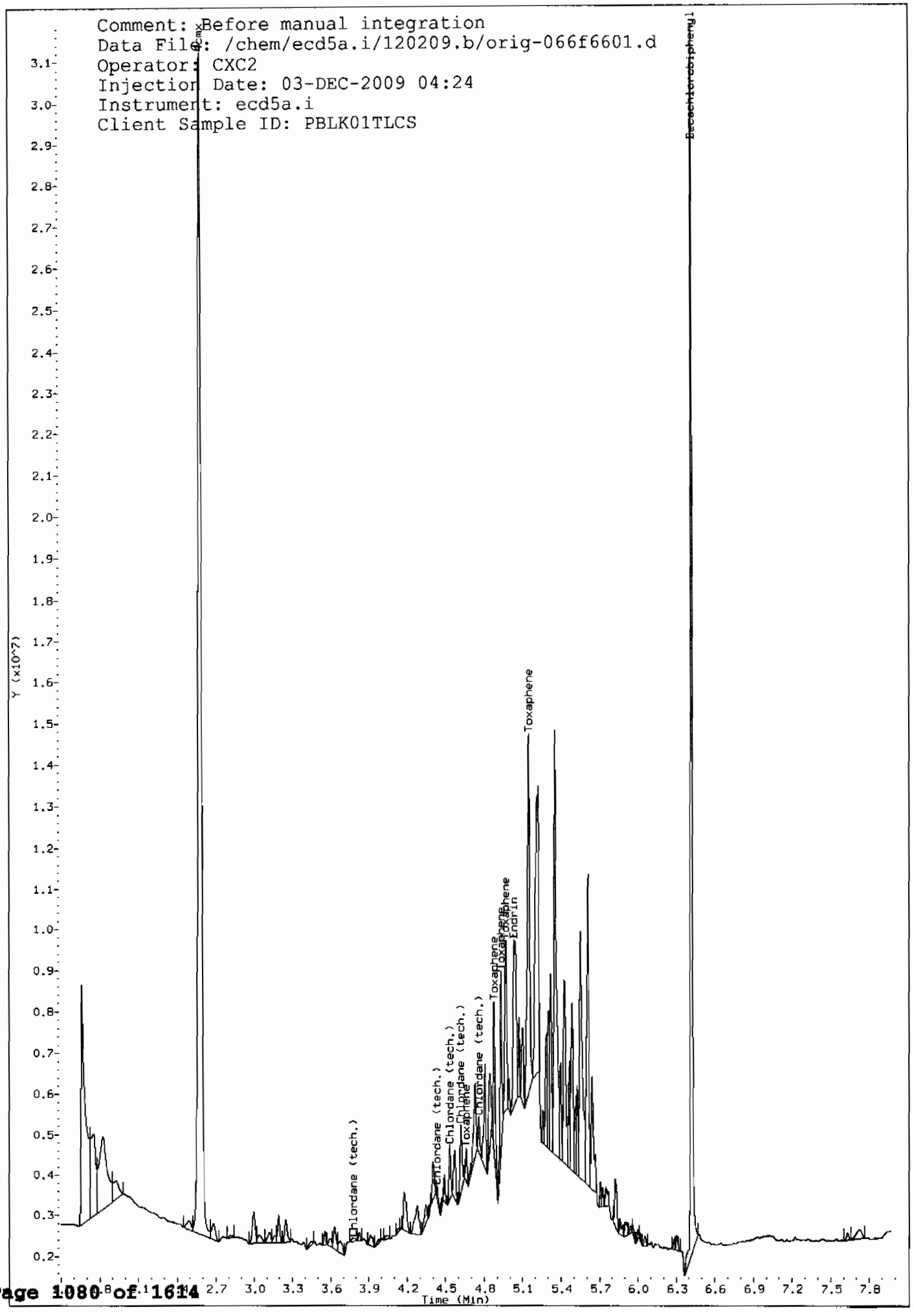
Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-066f6601.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
Decachlorobiphenyl
Toxaphene
Endrin
Chlordane (tech.)
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120209.b/066b6601.d
Lab Smp Id: 1201982205 Client Smp ID: PBLK01TLCS
Inj Date : 03-DEC-2009 04:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982205|1|
Misc Info : |ECDPTL_1LF|927116|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/120209.b/orig-ECD5-B-8081-112809.m
Meth Date : 04-Dec-2009 10:49 cla01575 Quant Type: ESTD
Cal Date : 30-NOV-2009 17:39 Cal File: 017b1701.d
Als bottle: 66 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.128	2.121	0.007	434239123	96.1741	0.00481	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.210	6.214	-0.004	340178961	106.166	0.00531	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.553	4.553	0.000	66208285	1566.26	0.0783	80.00- 120.00	100.00(M)
4.783	4.782	0.001	63360438	1179.62	0.0590	98.43- 138.43	95.70
4.801	4.802	-0.001	121319779	1524.59	0.0762	162.03- 202.03	183.24
4.860	4.861	-0.001	209772902	1470.05	0.0735	311.65- 351.65	316.84
5.016	5.018	-0.002	119414584	1567.03	0.0784	147.89- 187.89	180.36
			Average of Peak Concentrations =		0.0731		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120209.b/066b6601.d

Date : 03-DEC-2009 04:24

Client ID: PBLK01TLCS

Sample Info: !120198220511!

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

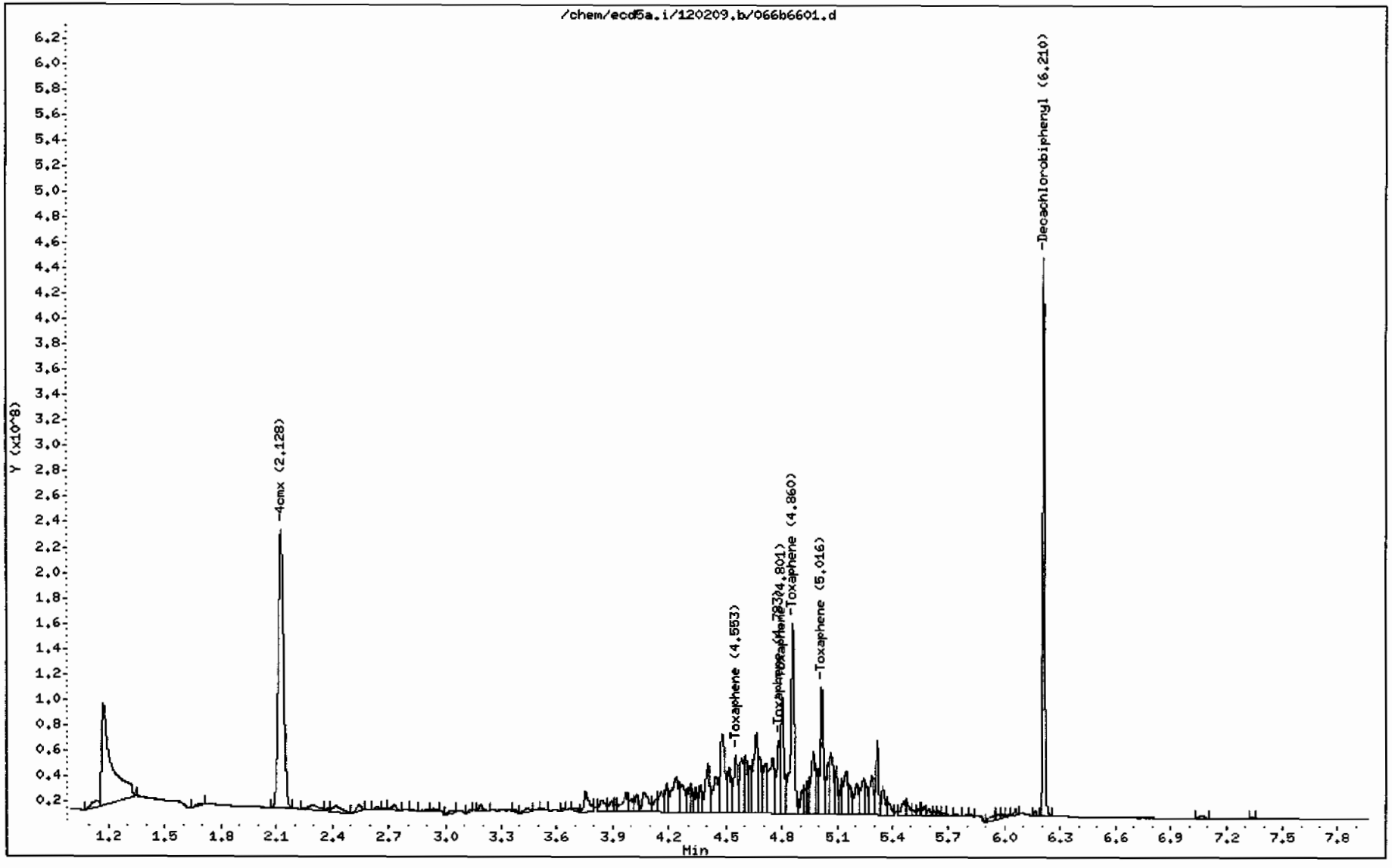

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120209.b/066b6601.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

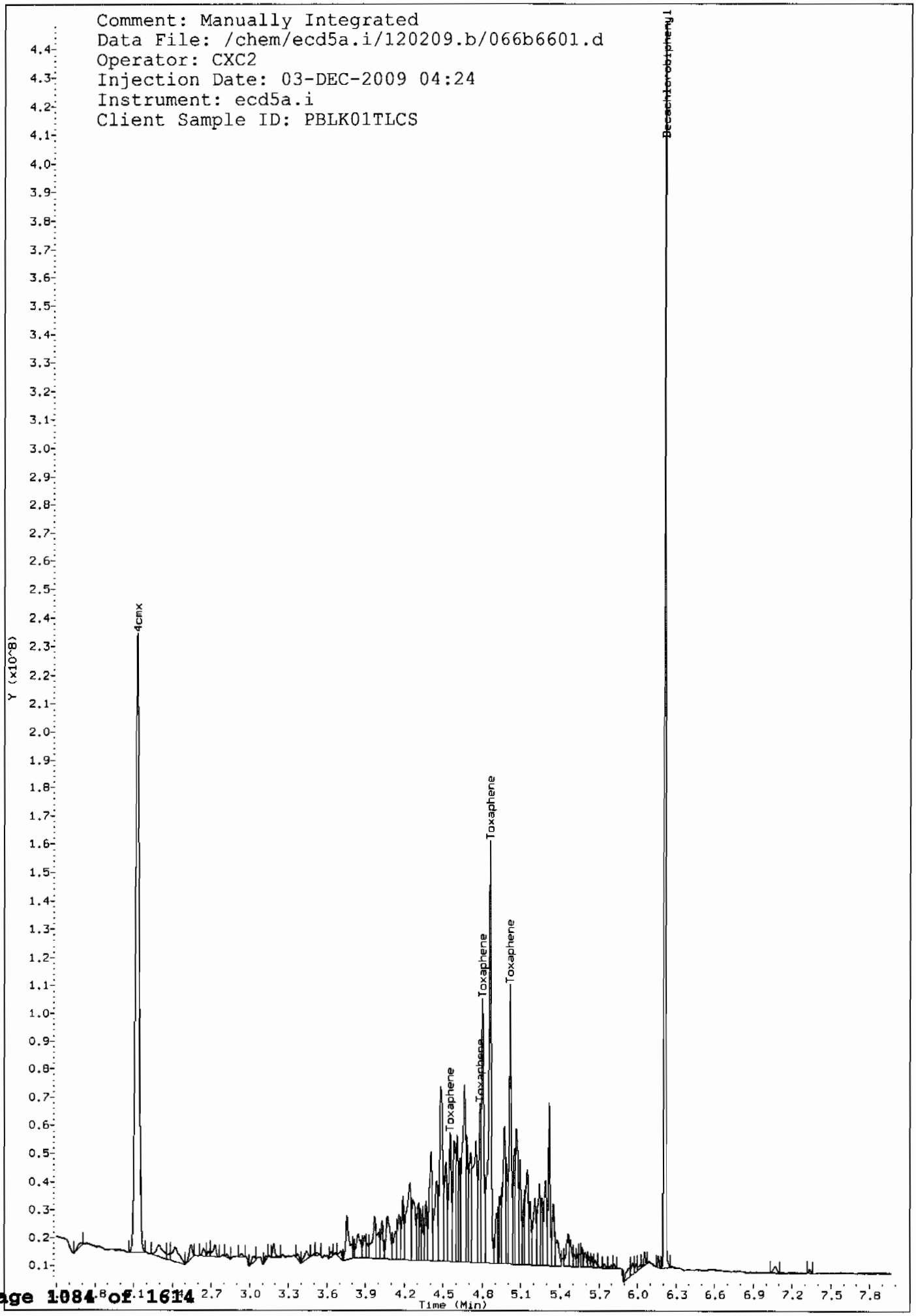

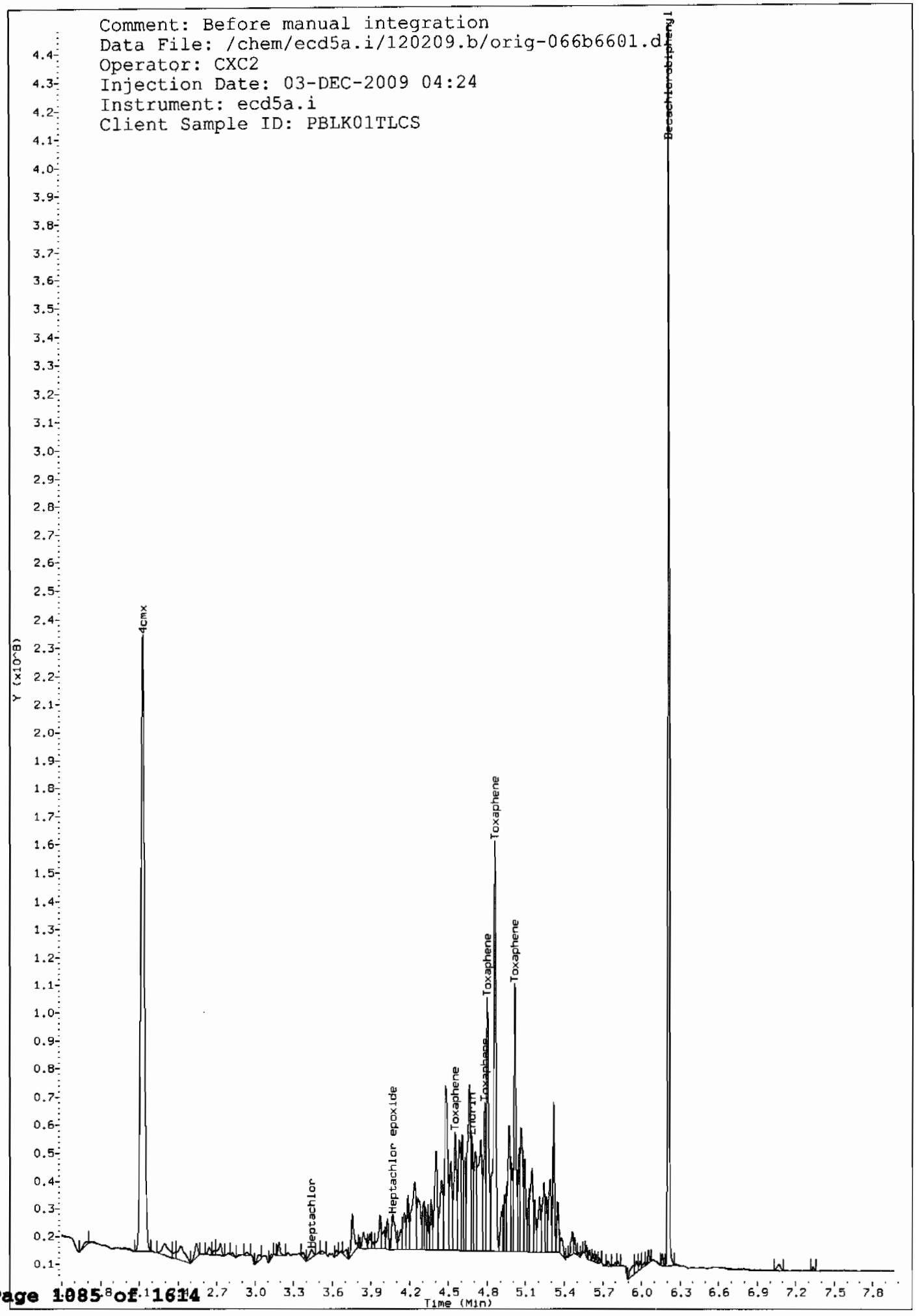
Comment: Before manual integration
Data File: /chem/ecd5a.i/120209.b/orig-066b6601.d
Operator: CXC2
Injection Date: 03-DEC-2009 04:24
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
Decachlorobiphenyl
4cmx
Heptachlor
Heptachlor epoxide
Toxaphene
Endrin
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 11/29/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ600
MERCURY LOT 906110-AS

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112809.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	28-NOV-2009 11:56		112809	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	28-NOV-2009 12:08		112809	1.0		(b) DDT 8.1%, Endrin 6.6%; (f) DDT 7.9%, Endrin 5.5%
003b0301.d	WPE091128-01AB	CXC2	28-NOV-2009 12:35		112809	1.0		DUSE
004b0401.d	WPE091128-01AB	CXC2	28-NOV-2009 12:47		112809	1.0		INDAB ICAL level 1
005b0501.d	WPE091128-02AB	CXC2	28-NOV-2009 12:58		112809	1.0		INDAB ICAL level 2
006b0601.d	WPE091128-03AB	CXC2	28-NOV-2009 13:10		112809	1.0		INDAB ICAL level 3
007b0701.d	WPE091128-04AB	CXC2	28-NOV-2009 13:22		112809	1.0		INDAB ICAL level 4
008b0801.d	IPE091128-02AB	CXC2	28-NOV-2009 13:34		112809	1.0		INDAB ICAL level 5
009b0901.d	WPE091123-10AB	CXC2	28-NOV-2009 13:46		112809	1.0		All okay
010b1001.d	WPE091124-11TX	CXC2	28-NOV-2009 14:15		112809	1.0		TOXAPH ICAL level 1
011b1101.d	WPE091124-12TX	CXC2	28-NOV-2009 14:27		112809	1.0		TOXAPH ICAL level 2
012b1201.d	WPE091124-13TX	CXC2	28-NOV-2009 14:39		112809	1.0		TOXAPH ICAL level 3
013b1301.d	WPE091124-14TX	CXC2	28-NOV-2009 14:51		112809	1.0		TOXAPH ICAL level 4
014b1401.d	IPE091121-40TX	CXC2	28-NOV-2009 15:03		112809	1.0		TOXAPH ICAL level 5
015b1501.d	WPE091104-52TX	CXC2	28-NOV-2009 15:15		112809	1.0		All okay

Instrument Batch: /chem/ecd5a.i/112809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091124-21CL	CXC2	28-NOV-2009 15:27		112809	1.0		CHLOR ICAL level 1

017b1701.d	WPE091124-22CL	CXC2	28-NOV-2009 15:39		112809		1.0		CHLOR ICAL level 2
018b1801.d	WPE091124-23CL	CXC2	28-NOV-2009 15:51		112809		1.0		CHLOR ICAL level 3
019b1901.d	WPE091124-24CL	CXC2	28-NOV-2009 16:03		112809		1.0		CHLOR ICAL level 4
020b2001.d	IPE091029-06CL	CXC2	28-NOV-2009 16:15		112809		1.0		CHLOR ICAL level 5
021b2101.d	WPE091021-00CL	CXC2	28-NOV-2009 16:27		112809		1.0		All okay
022b2201.d	WPE091109-99DG	CXC2	28-NOV-2009 16:39		112809		1.0		(b) DDT 9.4%, Endrin 7.5%; (f) DDT 6.4%, Endrin 7.0%
023b2301.d	WAR090914-99IB	CXC2	28-NOV-2009 16:51		112809		1.0		Clean
024b2401.d	1201978233	CXC2	28-NOV-2009 17:03	925346	112809		1.0	MB	DUSE - 4cmx, DCB still low - sent for re-extraction
025b2501.d	1201978234	CXC2	28-NOV-2009 17:14	925346	112809		1.0	LCS	DUSE - 4cmx, DCB still low - sent for re-extraction
026b2601.d	241549001	CXC2	28-NOV-2009 17:26	925346	112809		1.0	LANL	DUSE - 4cmx, DCB still low - sent for re-extraction
027b2701.d	WPE091123-10AB	CXC2	28-NOV-2009 17:38		112809		1.0		(b) alphaCHL low, DDT elevated; (f) gamma-BHC, Endrin, Endosulfan II, DDT, Methoxyclor elevated
028b2801.d	WAR090914-99IB	CXC2	28-NOV-2009 17:50		112809		1.0		Clean
029b2901.d	1201978540	CXC2	28-NOV-2009 18:02	926319	241358		1.0	TB	USE, uploaded both columns, reporting higher result
030b3001.d	1201980556	CXC2	28-NOV-2009 18:14	926319	241358		1.0	MB	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC
031b3101.d	1201980563	CXC2	28-NOV-2009 18:26	926319	112809		1.0	LCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
032b3201.d	1201980564	CXC2	28-NOV-2009 18:38	926319	241358		1.0	TLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
033b3301.d	1201980565	CXC2	28-NOV-2009 18:50	926319	241358		1.0	CLCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in sample and matrix QC - spikes pass
034b3401.d	WAR090914-99IB	CXC2	28-NOV-2009 19:02		112809		1.0		Clean
035b3501.d	WPE091123-10AB	CXC2	28-NOV-2009 19:14		112809		1.0		(b) DCB elevated; (f) DDE, Endrin, DDT, Methoxychlor elevated

Instrument Batch: /chem/ecd5a.i/112809.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	28-NOV-2009 19:26		112809		1.0	Clean
037b3701.d	241358001	CXC2	28-NOV-2009 19:38	926319	241358		5.0	MECP	USE, uploaded both columns, reporting higher result
038b3801.d	1201980557	CXC2	28-NOV-2009 19:50	926319	241358		5.0	MS	USE, uploaded both columns, reporting higher result

039b3901.d	1201980560	CXC2	28-NOV-2009 20:02	926319	241358	5.0	MSD	USE, uploaded both columns, reporting higher result
040b4001.d	1201980558	CXC2	28-NOV-2009 20:13	926319	241358	5.0	TMS	USE, uploaded both columns, reporting higher result
041b4101.d	1201980561	CXC2	28-NOV-2009 20:25	926319	241358	5.0	TMSD	USE, uploaded both columns, reporting higher result
042b4201.d	1201980559	CXC2	28-NOV-2009 20:37	926319	241358	5.0	CMS	USE, uploaded both columns, reporting higher result
043b4301.d	1201980562	CXC2	28-NOV-2009 20:49	926319	241358	5.0	CMSD	USE, uploaded both columns, reporting higher result
044b4401.d	WPE091123-10AB	CXC2	28-NOV-2009 21:01		112809	1.0		(b) All okay; (f) Multiple analytes elevated
045b4501.d	WAR090914-99IB	CXC2	28-NOV-2009 21:13		112809	1.0		Clean
046b4601.d	1201978549	CXC2	28-NOV-2009 21:25	926342	10-589-1	1.0	TB	USE, uploaded both columns, reporting lower result
047b4701.d	1201980615	CXC2	28-NOV-2009 21:37	926342	10-589-1	1.0	MB	USE, uploaded both columns, reporting lower result
048b4801.d	1201980622	CXC2	28-NOV-2009 21:49	926342	10-589-1	1.0	LCS	USE, uploaded both columns, reporting lower result
049b4901.d	1201980623	CXC2	28-NOV-2009 22:01	926342	10-589-1	1.0	TLCS	USE, uploaded both columns, reporting lower result
050b5001.d	1201980624	CXC2	28-NOV-2009 22:13	926342	10-589-1	1.0	CLCS	USE, uploaded both columns, reporting lower result
051b5101.d	WPE091123-10AB	CXC2	28-NOV-2009 22:25		112809	1.0		(b) DDT, Methoxychlor elevated; (f) Multiple analtyes elevated
052b5201.d	WAR090914-99IB	CXC2	28-NOV-2009 22:37		112809	1.0		Clean
053b5301.d	241504001	CXC2	28-NOV-2009 22:49	926342	10-589-1	1.0	LANL	USE, uploaded both columns, reporting lower result
054b5401.d	241504002	CXC2	28-NOV-2009 23:01	926342	10-589-1	1.0	LANL	USE, uploaded both columns, reporting lower result
055b5501.d	1201980616	CXC2	28-NOV-2009 23:13	926342	10-589-1	1.0	MS	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112809.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201980619	CXC2	28-NOV-2009 23:25	926342	10-589-1	1.0	MSD	USE, uploaded both columns, reporting lower result
057b5701.d	1201980617	CXC2	28-NOV-2009 23:37	926342	10-589-1	1.0	TMS	USE, uploaded both columns, reporting lower result
058b5801.d	1201980620	CXC2	28-NOV-2009 23:49	926342	10-589-1	1.0	TMSD	USE, uploaded both columns, reporting lower result
059b5901.d	1201980618	CXC2	29-NOV-2009 00:00	926342	10-589-1	1.0	CMS	USE, uploaded both columns, reporting lower result
060b6001.d	1201980621	CXC2	29-NOV-2009 00:12	926342	10-589-1	1.0	CMSD	USE, uploaded both columns, reporting lower result
061b6101.d	241504003	CXC2	29-NOV-2009 00:24	926342	10-589-1	1.0	LANL	USE, uploaded both columns, reporting lower result
062b6201.d	WPE091123-10AB	CXC2	29-NOV-2009 00:36		112809	1.0		(b) DDT elevated; (f) Multiple analtyes elevated (including DCB)

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/01/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:HXJ1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A
B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112909.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	HXJ1	29-NOV-2009 18:05		112909	1.0		Clean
002b0201.d	WPE091109-99DG	HXJ1	29-NOV-2009 18:17		112909	1.0		(B) DDT 4.2% Endrin 1.4% (F) DDT 1.7% Endrin 1.4%
003b0301.d	WPE091123-10AB	HXJ1	29-NOV-2009 18:29		112909	1.0		DUSE - multiple analyte elevated
004b0401.d	WPE091104-52TX	HXJ1	29-NOV-2009 18:41		112909	1.0		(B) All OK (F) Passes on average/ All OK DODQSM & 8081B
005b0501.d	WPE091021-00CL	HXJ1	29-NOV-2009 18:53		112909	1.0		Elevated - Not target
006b0601.d	WPE091128-01AB	HXJ1	29-NOV-2009 19:05		112909	1.0		INDAB ICAL LEVEL 1
007b0701.d	WPE091128-02AB	HXJ1	29-NOV-2009 19:17		112909	1.0		INDAB ICAL LEVEL 2
008b0801.d	WPE091128-03AB	HXJ1	29-NOV-2009 19:29		112909	1.0		INDAB ICAL LEVEL 3
009b0901.d	WPE091128-04AB	HXJ1	29-NOV-2009 19:41		112909	1.0		INDAB ICAL LEVEL 4
010b1001.d	IPE091128-02AB	HXJ1	29-NOV-2009 19:53		112909	1.0		INDAB ICAL LEVEL 5
011b1101.d	WPE091123-10AB	HXJ1	29-NOV-2009 20:05		112909	1.0		All OK
012b1201.d	WAR090914-99IB	HXJ1	29-NOV-2009 20:17		112909	1.0		Clean
013b1301.d	1201978233	HXJ1	29-NOV-2009 20:28	925346	10-613	1.0	MB	DUSE - DCB low
014b1401.d	1201978234	HXJ1	29-NOV-2009 20:40	925346	10-613	1.0	LCS	DUSE - DCB low
015b1501.d	241549001	HXJ1	29-NOV-2009 20:52	925346	10-613	1.0	LANL	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112909.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016b1601.d	WPE091123-10AB	HXJ1	29-NOV-2009 21:06		112909		1.0		(B) Heptachlor epoxide & gamma-CHL low; Methoyxchlor elevated (F) DDT elevated - CCV failure confirmed in sequence 112809.b
017b1701.d	WAR090914-99IB	HXJ1	29-NOV-2009 21:20		112909		1.0		Clean
018b1801.d	1201981581	HXJ1	29-NOV-2009 21:32	926807	10-578		1.0	MB	USE - uploaded both columns, reporting lower result
019b1901.d	1201981584	HXJ1	29-NOV-2009 21:44	926807	10-578		1.0	LCS	USE - uploaded both columns, reporting lower result (F) 4CMX elevated
020b2001.d	1201981585	HXJ1	29-NOV-2009 21:56	926807	10-578		1.0	TLCS	USE - uploaded both columns, reporting lower result (F) surrogates elevated
021b2101.d	241423004	HXJ1	29-NOV-2009 22:08	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result - Aroclor
022b2201.d	1201981582	HXJ1	29-NOV-2009 22:20	926807	10-578		10.0	MS	USE - uploaded both columns, reporting lower result - Aroclor
023b2301.d	1201981583	HXJ1	29-NOV-2009 22:32	926807	10-578		10.0	MSD	USE - uploaded both columns, reporting lower result - Aroclor
024b2401.d	WAR090914-99IB	HXJ1	29-NOV-2009 22:44		112909		1.0		Clean
025b2501.d	WPE091123-10AB	HXJ1	29-NOV-2009 22:56		112909		1.0		(B) Methoxychlor elevated (F) All OK
026b2601.d	WAR090914-99IB	HXJ1	29-NOV-2009 23:08		112909		1.0		Clean
027b2701.d	241423005	HXJ1	29-NOV-2009 23:20	926807	10-578		10.0	LANL	DUSE - still has sulfur - see re-cleaned vial at 32
028b2801.d	241503002	HXJ1	29-NOV-2009 23:32	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
029b2901.d	241503003	HXJ1	29-NOV-2009 23:44	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result ** hit of DDT below PQL
030b3001.d	241503004	HXJ1	29-NOV-2009 23:56	926807	10-589		10.0	LANL	USE - uploaded both columns, reporting lower result
031b3101.d	241524002	HXJ1	30-NOV-2009 00:08	926807	10-600		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
032b3201.d	241423005	HXJ1	30-NOV-2009 00:20	926807	10-578		10.0	LANL	USE - uploaded both columns, reporting lower result ** Contains Aroclors
033b3301.d	WPE091123-10AB	HXJ1	30-NOV-2009 00:35		112909		1.0		(B) Endrin ketone low (F) gamma-BHC elevated - B&F All OK 8081B
034b3401.d	WAR090914-99IB	HXJ1	30-NOV-2009 00:47		112909		1.0		Clean
035b3501.d	1201979436	HXJ1	30-NOV-2009 00:59	925818	241227		1.0	MB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

Instrument Batch: /chem/ecd5a.i/112909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	1201979439	HXJ1	30-NOV-2009 01:11	925818	241227	1.0	LCS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column

037b3701.d	241227001	HXJ1	30-NOV-2009 01:23	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
038b3801.d	241227002	HXJ1	30-NOV-2009 01:35	925818	241227	20.0	WSRB	DUSE - surrogates elevated see re-analysis 113009 **HITS gamma- & alpha-CHL, DDE & DDT
039b3901.d	241227003	HXJ1	30-NOV-2009 01:47	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL & DDE
040b4001.d	241227004	HXJ1	30-NOV-2009 01:59	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
041b4101.d	1201979437	HXJ1	30-NOV-2009 02:11	925818	241227	20.0	MS	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
042b4201.d	1201979438	HXJ1	30-NOV-2009 02:23	925818	241227	20.0	MSD	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column ** failures due to matrix
043b4301.d	WPE091123-10AB	HXJ1	30-NOV-2009 02:34		112909	1.0		(B) All OK (F) gamma-BHC, gamma-CHL and EndoII elevated for 81A
044b4401.d	WAR090914-99IB	HXJ1	30-NOV-2009 02:46		112909	1.0		Clean
045b4501.d	241227005	HXJ1	30-NOV-2009 02:58	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
046b4601.d	241227006	HXJ1	30-NOV-2009 03:10	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
047b4701.d	241227007	HXJ1	30-NOV-2009 03:22	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
048b4801.d	241227008	HXJ1	30-NOV-2009 03:34	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, DDE & DDD
049b4901.d	241227009	HXJ1	30-NOV-2009 03:46	925818	241227	20.0	WSRB	USE - uploaded both columns, reporting Front column result due to DDE co-elution on Back column **HITS gamma- & alpha-CHL, & DDE
050b5001.d	WPE091123-10AB	HXJ1	30-NOV-2009 03:58		112909	1.0		(B) All OK (F) gamma-BHC & gamma-CHL elevated for 8081A
051b5101.d	WAR090914-99IB	HXJ1	30-NOV-2009 04:10		112909	1.0		Clean
052b5201.d	1201981522	HXJ1	30-NOV-2009 04:22	926780	241451	1.0	MB	DUSE - CCV failure confirmed, reporting analysis 120109.b
053b5301.d	1201981525	HXJ1	30-NOV-2009 04:34	926780	241451	1.0	LCS	DUSE - CCV failure confirmed, reporting analysis 120109.b

054b5401.d	241451001	HXJ1	30-NOV-2009 04:46	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
055b5501.d	241451002	HXJ1	30-NOV-2009 04:58	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	241451003	HXJ1	30-NOV-2009 05:10	926780	241451	1.0	SAIC	DUSE - CCV failure confirmed, reporting analysis 120109.b
057b5701.d	1201981523	HXJ1	30-NOV-2009 05:22	926780	241451	1.0	MS	DUSE - CCV failure confirmed, reporting analysis 120109.b
058b5801.d	1201981524	HXJ1	30-NOV-2009 05:34	926780	241451	1.0	MSD	DUSE - CCV failure confirmed, reporting analysis 120109.b
059b5901.d	WPE091123-10AB	HXJ1	30-NOV-2009 05:45		112909	1.0		(B)DDT, Meth & E.ketone low for DODQSM; Several analytes low for 8081A (F) DDT & Methoxychlor low for DOD QSM; E.ketone low for 8081A
060b6001.d	WAR090914-99IB	HXJ1	30-NOV-2009 05:57		112909	1.0		Clean
061b6101.d	1201982218	HXJ1	30-NOV-2009 06:09	927124	241358	1.0	MB	DUSE - surrogate failure confirmed, reporting first instance
062b6201.d	1201982219	HXJ1	30-NOV-2009 06:21	927124	241358	1.0	LCS	DUSE - surrogate failure confirmed, reporting first instance
063b6301.d	1201982220	HXJ1	30-NOV-2009 06:33	927124	241358	1.0	LCSD	DUSE - surrogate failure confirmed, reporting first instance
064b6401.d	241358001	HXJ1	30-NOV-2009 06:45	927124	241358	2.0	MECP	DUSE - surrogate failure confirmed, reporting first instance
065b6501.d	WPE091123-10AB	HXJ1	30-NOV-2009 06:57		112909	1.0		Almost every analyte on low both columns
066b6601.d	WAR090914-99IB	HXJ1	30-NOV-2009 07:09		112909	1.0		Matrix carryover
067b1001.d	WPE091123-10AB	CXC2	30-NOV-2009 13:28		112909	1.0		DUSE - for reference only

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/01/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ600
MERCURY LOT 906110-AS

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/113009.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	30-NOV-2009 13:54		113009	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	30-NOV-2009 14:06		113009	1.0		(b) DDT 5.4%, Endrin 3.4%; (f) DDT 3.9%, Endrin 3.0%
003b0301.d	WPE091123-10AB	CXC2	30-NOV-2009 14:18		113009	1.0		All okay
004b0401.d	WPE091104-52TX	CXC2	30-NOV-2009 14:30		113009	1.0		DUSE
005b0501.d	WPE091021-00CL	CXC2	30-NOV-2009 14:42		113009	1.0		DUSE
006b0601.d	WPE091104-52TX	CXC2	30-NOV-2009 14:54		113009	1.0		(b) Passes on average; (f) All okay
007b0701.d	WPE091130-21CL	CXC2	30-NOV-2009 15:29		113009	1.0		CHLOR ICAL level 1
008b0801.d	WPE091130-22CL	CXC2	30-NOV-2009 15:41		113009	1.0		CHLOR ICAL level 2
009b0901.d	WPE091130-23CL	CXC2	30-NOV-2009 15:53		113009	1.0		CHLOR ICAL level 3
010b1001.d	WPE091130-24CL	CXC2	30-NOV-2009 16:05		113009	1.0		CHLOR ICAL level 4
011b1101.d	IPE091029-06CL	CXC2	30-NOV-2009 16:28		113009	1.0		CHLOR ICAL level 5
012b1201.d	WPE091021-00CL	CXC2	30-NOV-2009 16:39		113009	1.0		All okay
013b1301.d	WPE091130-31GA	CXC2	30-NOV-2009 16:51		113009	1.0		GAPA ICAL level 1
014b1401.d	WPE091130-32GA	CXC2	30-NOV-2009 17:03		113009	1.0		GAPA ICAL level 2
015b1501.d	WPE091130-33GA	CXC2	30-NOV-2009 17:15		113009	1.0		GAPA ICAL level 3

Instrument Batch: /chem/ecd5a.i/113009.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091130-34GA	CXC2	30-NOV-2009 17:27		113009	1.0		GAPA ICAL level 4

017b1701.d	IPE091110-01GA	CXC2	30-NOV-2009 17:39		113009		1.0		GAPA ICAL level 5
018b1801.d	WPE091021-05GA	CXC2	30-NOV-2009 17:51		113009		1.0		All okay
019b1901.d	WPE091109-99DG	CXC2	30-NOV-2009 18:03		113009		1.0		(b) DDT 2.4%, Endrin 5.1%; (f) DDT 2.2%, Endrin 4.2%
020b2001.d	WAR090914-99IB	CXC2	30-NOV-2009 18:15		113009		1.0		Clean
021b2101.d	241227002	CXC2	30-NOV-2009 18:27	925818	241227		20.0	WSRB	USE, uploaded both columns, reporting higher result
022b2201.d	1201978233PF	CXC2	30-NOV-2009 18:39	925346	113009		1.0	MB	DUSE - surrogate low in preFlorisil screen - sent for re-extract
023b2301.d	1201978234PF	CXC2	30-NOV-2009 18:51	925346	113009		1.0	LCS	DUSE - surrogate low in preFlorisil screen - sent for re-extract
024b2401.d	1201981547	CXC2	30-NOV-2009 19:03	926791	241691		1.0	MB	USE, uploaded both columns, reporting higher result
025b2501.d	1201981548	CXC2	30-NOV-2009 19:15	926791	241691		1.0	LCS	USE, uploaded both columns, reporting higher result
026b2601.d	1201981549	CXC2	30-NOV-2009 19:27	926791	241691		1.0	LCSD	USE, uploaded both columns, reporting higher result
027b2701.d	241691001	CXC2	30-NOV-2009 19:39	926791	241691		1.0	GEEL	USE, uploaded both columns, reporting higher result
028b2801.d	WPE091123-10AB	CXC2	30-NOV-2009 19:51		113009		1.0		All okay
029b2901.d	WAR090914-99IB	CXC2	30-NOV-2009 20:03		113009		1.0		Clean
030b3001.d	1201977986	CXC2	30-NOV-2009 20:15	925220	241238		1.0	MB	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in samples, matrix QC, and LCS
031b3101.d	1201977987	CXC2	30-NOV-2009 20:27	925220	241238		1.0	LCS	USE, uploaded both columns, reporting higher result
032b3201.d	241238004	CXC2	30-NOV-2009 20:38	925220	241238		10.0	GEEL	USE, uploaded both columns, reporting higher result
033b3301.d	1201977988	CXC2	30-NOV-2009 20:50	925220	241238		10.0	MS	USE, uploaded both columns, reporting higher result
034b3401.d	1201977989	CXC2	30-NOV-2009 21:02	925220	241238		10.0	MSD	USE, uploaded both columns, reporting higher result
035b3501.d	WPE091123-10AB	CXC2	30-NOV-2009 21:14		113009		1.0		(b) DDT, Endrin ketone low for 8081A (Passes 8081B); (f) All okay

Instrument Batch: /chem/ecd5a.i/113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	30-NOV-2009 21:26		113009		1.0	Clean
037b3701.d	241238005	CXC2	30-NOV-2009 21:38	925220	241238		10.0	GEEL	USE, uploaded both columns, reporting higher result
038b3801.d	241238006	CXC2	30-NOV-2009 21:50	925220	241238		10.0	GEEL	USE, uploaded both columns, reporting higher result
039b3901.d	241240005	CXC2	30-NOV-2009 22:02	925220	241240		10.0	GEEL	USE, uploaded both columns, reporting higher result
040b4001.d	241240006	CXC2	30-NOV-2009 22:14	925220	241240		10.0	GEEL	USE, uploaded both columns, reporting higher result

041b4101.d	241240007	CXC2	30-NOV-2009 22:26	925220	241240	10.0	GEEL	DUSE - still has sulfur - re-cleaned/re-analyzed vial 44
042b4201.d	241367003	CXC2	30-NOV-2009 22:38	925220	241367	10.0	GEEL	USE, uploaded both columns, reporting higher result
043b4301.d	241367004	CXC2	30-NOV-2009 22:50	925220	241367	10.0	GEEL	DUSE - no surrogates? Sample was re-diluted/re-cleaned/re-analyzed vial 49
044b4401.d	241240007	CXC2	30-NOV-2009 23:02	925220	241240	10.0	GEEL	USE, uploaded both columns, reporting higher result
045b4501.d	WPE091123-10AB	CXC2	30-NOV-2009 23:14		113009	1.0		(b) All okay; (f) Endosulfan II elevated - Passes 8081B
046b4601.d	WAR090914-99IB	CXC2	30-NOV-2009 23:26		113009	1.0		Clean
047b4701.d	WPE091123-10AB	CXC2	30-NOV-2009 23:38		113009	1.0		(b) DDT low - Passes 8081B; (f) All okay
048b4801.d	WAR090914-99IB	CXC2	30-NOV-2009 23:50		113009	1.0		Clean
049b4901.d	241367004	CXC2	01-DEC-2009 00:02	925220	241367	10.0	GEEL	|| **STILL NO SURROGATES**
050b5001.d	1201979176	CXC2	01-DEC-2009 00:14	926767	10-462-1	1.0	TB	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
051b5101.d	1201981489	CXC2	01-DEC-2009 00:26	926767	10-462-1	1.0	MB	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
052b5201.d	1201981496	CXC2	01-DEC-2009 00:38	926767	10-462-1	1.0	LCS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
053b5301.d	1201981497	CXC2	01-DEC-2009 00:50	926767	10-462-1	1.0	TLCS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
054b5401.d	1201981498	CXC2	01-DEC-2009 01:02	926767	10-462-1	1.0	CLCS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
055b5501.d	WAR090914-99IB	CXC2	01-DEC-2009 01:14		113009	1.0		Clean

Instrument Batch: /chem/ecd5a.i/113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	WPE091123-10AB	CXC2	01-DEC-2009 01:26		113009	1.0		(b) DDT, Endrin ketone low; (f) gamma-BHC elevated
057b5701.d	WAR090914-99IB	CXC2	01-DEC-2009 01:37		113009	1.0		Clean
058b5801.d	241040001	CXC2	01-DEC-2009 01:49	926767	10-462-1	1.0	LANL	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
059b5901.d	1201981490	CXC2	01-DEC-2009 02:01	926767	10-462-1	1.0	MS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
060b6001.d	1201981493	CXC2	01-DEC-2009 02:13	926767	10-462-1	1.0	MSD	DUSE - 4cmx low in all batch QC, and on back column in sample

								SENT FOR RE-EXTRACTION
061b6101.d	1201981491	CXC2	01-DEC-2009 02:25	926767	10-462-1	1.0	TMS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
062b6201.d	1201981494	CXC2	01-DEC-2009 02:37	926767	10-462-1	1.0	TMSD	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
063b6301.d	1201981492	CXC2	01-DEC-2009 02:49	926767	10-462-1	1.0	CMS	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
064b6401.d	1201981495	CXC2	01-DEC-2009 03:01	926767	10-462-1	1.0	CMSD	DUSE - 4cmx low in all batch QC, and on back column in sample SENT FOR RE-EXTRACTION
065b6501.d	WPE091123-10AB	CXC2	01-DEC-2009 03:13		113009	1.0		(b) DDT, Endrin ketone low; (f) gamma-BHC elevated
066b6601.d	WAR090914-99IB	CXC2	01-DEC-2009 03:25		113009	1.0		Clean
067b6701.d	1201981522	CXC2	01-DEC-2009 03:37	926780	241451	1.0	MB	DUSE - CCV failure DID NOT confirm - re-analyze
068b6801.d	1201981525	CXC2	01-DEC-2009 07:05	926780	241451	1.0	SAIC	DUSE - CCV failure DID NOT confirm - re-analyze
069b6901.d	241451001	CXC2	01-DEC-2009 07:17	926780	241451	1.0	SAIC	DUSE - CCV failure DID NOT confirm - re-analyze
070b7001.d	241451002	CXC2	01-DEC-2009 07:29	926780	241451	1.0	SAIC	DUSE - CCV failure DID NOT confirm - re-analyze
071b7101.d	241451003	CXC2	01-DEC-2009 07:41	926780	241451	1.0	MS	DUSE - CCV failure DID NOT confirm - re-analyze
072b7201.d	1201981523	CXC2	01-DEC-2009 07:53	926780	241451	1.0	MSD	DUSE - CCV failure DID NOT confirm - re-analyze
073b7301.d	1201981524	CXC2	01-DEC-2009 08:05		241451	1.0		(b) alpha-CHL, DDT, Endrin ketone, DCB low; (f) All okay for 8081B
074b7401.d	WPE091123-10AB	CXC2	01-DEC-2009 08:17		113009	1.0		Clean
075b7501.d	WPE091123-10AB	CXC2	01-DEC-2009 13:49		113009	1.0		FOR REFERENCE ONLY

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/03/2009 METHOD: ECD5-B-8081-112809.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A/B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/120209.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	02-DEC-2009 15:16		120209	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	02-DEC-2009 15:28		120209	1.0		(B) DDT 5.5% Endrin 2.8% (F) DDT 4.7% Endrin 2.2%
003b0301.d	WPE091123-10AB	CXC2	02-DEC-2009 15:40		120209	1.0		All OK
004b0401.d	WPE091104-52TX	CXC2	02-DEC-2009 15:52		120209	1.0		All OK
005b0501.d	WPE091021-00CL	CXC2	02-DEC-2009 16:04		120209	1.0		All OK
006b0601.d	WPE091021-05GA	CXC2	02-DEC-2009 16:19		120209	1.0		(B) All OK (F) DDT elevated, passes 8081B
007b0701.d	245TCP	CXC2	02-DEC-2009 16:39		120209	1.0		DUSE - for reference only
008b0801.d	FlorCartH16553	CXC2	02-DEC-2009 16:51		120209	1.0		DUSE - for reference only
009b0901.d	WAR090914-99IB	CXC2	02-DEC-2009 17:03		120209	1.0		Clean
010b1001.d	1201982313	CXC2	02-DEC-2009 17:15	927192	10-648	1.0	MB	USE - uploaded both columns, reporting the lower result
011b1101.d	1201982316	CXC2	02-DEC-2009 17:27	927192	10-648	1.0	LCS	USE - uploaded both columns, reporting the lower result
012b1201.d	1201982317	CXC2	02-DEC-2009 17:39	927192	10-648	1.0	TLCS	USE - uploaded both columns, reporting the lower result
013b1301.d	241697003	CXC2	02-DEC-2009 17:51	927192	10-648	1.0	LANL	USE - uploaded both columns, reporting the lower result
014b1401.d	241697004	CXC2	02-DEC-2009 18:02	927192	10-648	1.0	LANL	USE - uploaded both columns, reporting the lower result
015b1501.d	241714002	CXC2	02-DEC-2009 18:14	927192	10-650	1.0	LANL	USE - uploaded both columns, reporting the lower result

Instrument Batch: /chem/ecd5a.i/120209.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	1201982314	CXC2	02-DEC-2009 18:26	927192	10-650	1.0	MS	USE - uploaded both columns, reporting the lower result

017b1701.d	1201982315	CXC2	02-DEC-2009 18:38	927192	10-650		1.0	MSD	USE - uploaded both columns, reporting the lower result
018b1801.d	241718001	CXC2	02-DEC-2009 18:50	927192	10-653		1.0	LANL	USE - uploaded both columns, reporting the lower result
019b1901.d	241728002	CXC2	02-DEC-2009 19:02	927192	10-654		1.0	LANL	USE - uploaded both columns, reporting the lower result
020b2001.d	WPE091123-10AB	CXC2	02-DEC-2009 19:14		120209		1.0		(B) alpha-CHL,E.aldehyde,DDT,Endosulfan sulfate,E.ketone,DCB low (F) Endrin ketone low
021b2101.d	WAR090914-99IB	CXC2	02-DEC-2009 19:26		120209		1.0		Clean
022b2201.d	241750002	CXC2	02-DEC-2009 19:38	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
023b2301.d	241750003	CXC2	02-DEC-2009 19:50	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
024b2401.d	241750004	CXC2	02-DEC-2009 20:02	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
025b2501.d	241750005	CXC2	02-DEC-2009 20:14	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
026b2601.d	241750006	CXC2	02-DEC-2009 20:26	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
027b2701.d	241750007	CXC2	02-DEC-2009 20:38	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
028b2801.d	241750008	CXC2	02-DEC-2009 20:50	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
029b2901.d	241750009	CXC2	02-DEC-2009 21:02	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
030b3001.d	241750010	CXC2	02-DEC-2009 21:14	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
031b3101.d	241750011	CXC2	02-DEC-2009 21:26	927192	10-655		1.0	LANL	USE - uploaded both columns, reporting the lower result
032b3201.d	WPE091123-10AB	CXC2	02-DEC-2009 21:38		120209		1.0		(B) All OK (F) Endrin ketone low for 8081B
033b3301.d	WAR090914-99IB	CXC2	02-DEC-2009 21:50		120209		1.0		Clean
034b3401.d	1201984481	CXC2	02-DEC-2009 22:02	928117	241367		1.0	MB	DUSE - sulfur still in sample after Copper clean up at 10X
035b3501.d	1201984482	CXC2	02-DEC-2009 22:14	928117	241367		1.0	LCS	DUSE - sulfur still in sample after Copper clean up at 10X

Instrument Batch: /chem/ecd5a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	1201984483	CXC2	02-DEC-2009 22:26	928117	241367	1.0	QCLSD	DUSE - sulfur still in sample after Copper clean up at 10X
037b3701.d	241367004	CXC2	02-DEC-2009 22:38	928117	241367	10.0	GEEL	DUSE - sulfur still in sample after Copper clean up at 10X
038b3801.d	WPE091123-10AB	CXC2	02-DEC-2009 22:49		120209	1.0		All OK
039b3901.d	WAR090914-99IB	CXC2	02-DEC-2009 23:01		120209	1.0		Clean
040b4001.d	240472006	CXC2	02-DEC-2009 23:13	921633	240472	1.0	WSRB	DUSE - 4CMX still low - report first instance

041b4101.d	240472007	CXC2	02-DEC-2009 23:25	921633	240472		1.0	WSRB	DUSE - 4CMX still low - report first instance
042b4201.d	WPE091123-10AB	CXC2	02-DEC-2009 23:37		120209		1.0		(B) DDT low for 8081B (F) DDT & Endrin ketone low for 8081B
043b4301.d	WAR090914-99IB	CXC2	02-DEC-2009 23:49		120209		1.0		Clean
044b4401.d	1201979176	CXC2	03-DEC-2009 00:01	927942	10-462-1		1.0	TB	USE - uploaded both columns, reporting lower result
045b4501.d	1201984152	CXC2	03-DEC-2009 00:13	927942	10-462-1		1.0	MB	USE - uploaded both columns, reporting lower result
046b4601.d	1201984159	CXC2	03-DEC-2009 00:25	927942	10-462-1		1.0	LCS	USE - uploaded both columns, reporting lower result
047b4701.d	1201984160	CXC2	03-DEC-2009 00:37	927942	10-462-1		1.0	TLCS	USE - uploaded both columns, reporting lower result
048b4801.d	1201984161	CXC2	03-DEC-2009 00:49	927942	10-462-1		1.0	CLCS	USE - uploaded both columns, reporting lower result
049b4901.d	WAR090914-99IB	CXC2	03-DEC-2009 01:01		120209		1.0		Clean
050b5001.d	WPE091123-10AB	CXC2	03-DEC-2009 01:13		120209		1.0		All OK for TLCP (B)DDT, E.ketone low (F)DDD&EndoII elevated; DDT low
051b5101.d	WAR090914-99IB	CXC2	03-DEC-2009 01:25		120209		1.0		Clean
052b5201.d	241040001	CXC2	03-DEC-2009 01:37	927942	10-462-1		1.0	LANL	USE - uploaded both columns, reporting lower result
053b5301.d	1201984153	CXC2	03-DEC-2009 01:49	927942	10-462-1		1.0	MS	USE - uploaded both columns, reporting lower result
054b5401.d	1201984156	CXC2	03-DEC-2009 02:01	927942	10-462-1		1.0	MSD	USE - uploaded both columns, reporting lower result
055b5501.d	1201984154	CXC2	03-DEC-2009 02:12	927942	10-462-1		1.0	TMS	USE - uploaded both columns, reporting lower resul

Instrument Batch: /chem/ecd5a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201984157	CXC2	03-DEC-2009 02:25	927942	10-462-1		1.0	TMSD	USE - uploaded both columns, reporting lower result
057b5701.d	1201984155	CXC2	03-DEC-2009 02:36	927942	10-462-1		1.0	CMS	USE - uploaded both columns, reporting lower result
058b5801.d	1201984158	CXC2	03-DEC-2009 02:48	927942	10-462-1		1.0	CMSD	USE - uploaded both columns, reporting lower result
059b5901.d	WAR090914-99IB	CXC2	03-DEC-2009 03:00		120209		1.0		Clean
060b6001.d	WPE091123-10AB	CXC2	03-DEC-2009 03:12		120209		1.0		(B) DDT low at -23.5% drift (F) several elevated including gamma-BHC and Endrin
061b6101.d	WAR090914-99IB	CXC2	03-DEC-2009 03:24		120209		1.0		Clean
062b6201.d	1201980055	CXC2	03-DEC-2009 03:36	927116	10-578-1		1.0	TB	USE - uploaded both columns, reporting lower result
063b6301.d	1201980750	CXC2	03-DEC-2009 03:48	927116	10-653-1		1.0	TB	USE - uploaded both columns, reporting lower result
064b6401.d	1201982197	CXC2	03-DEC-2009 04:00	927116	10-578-1		1.0	MB	USE - uploaded both columns, reporting lower result

065b6501.d	1201982204	CXC2	03-DEC-2009 04:12	927116	10-578-1		1.0	LCS	USE - uploaded both columns, reporting lower result
066b6601.d	1201982205	CXC2	03-DEC-2009 04:24	927116	10-578-1		1.0	TLCS	USE - uploaded both columns, reporting lower result
067b6701.d	1201982206	CXC2	03-DEC-2009 04:36	927116	10-578-1		1.0	CLCS	USE - uploaded both columns, reporting lower result
068b6801.d	241424001	CXC2	03-DEC-2009 04:48	927116	10-578-1		10.0	LANL	DUSE - see sequence 120709a.b
069b6901.d	241424002	CXC2	03-DEC-2009 05:00	927116	10-578-1		10.0	LANL	DUSE - see sequence 120709a.b
070b7001.d	WAR090914-99IB	CXC2	03-DEC-2009 05:12		120209		1.0		Clean
071b7101.d	WPE091123-10AB	CXC2	03-DEC-2009 05:24		120209		1.0		(B) Several low, including: Heptachlor, DDT and Methoxychlor which had on column ppb of 31, 3.5, 124 respectively (F) Heptachlor, DDT, Methoxychlor and Endrin ketone very low
072b7201.d	WAR090914-99IB	CXC2	03-DEC-2009 05:36		120209		1.0		Clean
073b7301.d	241527001	CXC2	03-DEC-2009 05:48	927116	10-600-1		10.0	LANL	DUSE - see sequence 120709a.b
074b7401.d	241720001	CXC2	03-DEC-2009 06:00	927116	10-653-1		10.0	LANL	DUSE - see sequence 120709a.b
075b7501.d	1201982198	CXC2	03-DEC-2009 06:12	927116	10-653-1		10.0	MS	DUSE - see sequence 120709a.b

Instrument Batch: /chem/ecd5a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076b7601.d	1201982201	CXC2	03-DEC-2009 06:24	927116	10-653-1		10.0	MSD	DUSE - see sequence 120709a.b
077b7701.d	1201982199	CXC2	03-DEC-2009 06:36	927116	10-653-1		10.0	TMS	DUSE - see sequence 120709a.b
078b7801.d	1201982202	CXC2	03-DEC-2009 06:48	927116	10-653-1		10.0	TMSD	DUSE - see sequence 120709a.b
079b7901.d	1201982200	CXC2	03-DEC-2009 07:00	927116	10-653-1		10.0	CMS	DUSE - see sequence 120709a.b
080b8001.d	1201982203	CXC2	03-DEC-2009 07:12	927116	10-653-1		10.0	CMSD	DUSE - see sequence 120709a.b
081b8101.d	241732001	CXC2	03-DEC-2009 07:24	927116	10-654-1		10.0	LANL	DUSE - see sequence 120709a.b
082b8201.d	WAR090914-99IB	CXC2	03-DEC-2009 07:36		120209		1.0		Clean
083b8301.d	WPE091123-10AB	CXC2	03-DEC-2009 07:48		120209		1.0		(B) Heptachlor, DDT, Meth, & E.ketone low at on column ppb of 35, 9, 213 and 88 respectively (F) Heptachlor, DDT, Methoxychlor and Endrin ketone very low
084b8401.d	WAR090914-99IB	CXC2	03-DEC-2009 07:59		120209		1.0		Clean
085b8501.d	241751001	CXC2	03-DEC-2009 08:11	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
086b8601.d	241751002	CXC2	03-DEC-2009 08:23	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b

087b8701.d	241751003	CXC2	03-DEC-2009 08:35	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
088b8801.d	241751004	CXC2	03-DEC-2009 08:47	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
089b8901.d	241751005	CXC2	03-DEC-2009 08:59	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
090b9001.d	241751006	CXC2	03-DEC-2009 09:11	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
091b9101.d	241751007	CXC2	03-DEC-2009 09:23	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
092b9201.d	241751008	CXC2	03-DEC-2009 09:35	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
093b9301.d	241751009	CXC2	03-DEC-2009 09:47	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
094b9401.d	241751010	CXC2	03-DEC-2009 09:59	927116	10-655-1		10.0	LANL	DUSE - see sequence 120709a.b
095b9501.d	WAR090914-99IB	CXC2	03-DEC-2009 10:11		120209		1.0		Clean

Instrument Batch: /chem/ecd5a.i/120209.b Page: 5

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
096b9601.d	WPE091123-10AB	CXC2	03-DEC-2009 10:23		120209	1.0		(B) Heptachlor, DDT, Meth, & E.ketone low at on column ppb of 45, 17, 263, and 106 respectively (F) DDT, Methoxychlor and Endrin ketone low
097b9701.d	240472006	CXC2	03-DEC-2009 10:35	921633	240472	1.0	WSRB	DUSE
098b9801.d	240472007	CXC2	03-DEC-2009 10:47	921633	240472	1.0	WSRB	DUSE
099b9901.d	WPE091123-10AB	CXC2	03-DEC-2009 11:18		120209	1.0		DUSE

Instrument Batch: /chem/ecd5a.i/120209.b Page: 6

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/08/2009 METHOD: ECD5-B-8081-120709a.m OPERATOR:CXC2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A/B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/120709a.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	CXC2	07-DEC-2009 16:56		120709a	1.0		Clean
002b0201.d	WPE091109-99DG	CXC2	07-DEC-2009 17:14		120709a	1.0		(B) DDT 4.8% Endrin 4.5% (F) DDT 8.0% Endrin 2.8%
003b0301.d	WPE091207-01AB	CXC2	07-DEC-2009 17:26		120709a	1.0		INDAB ICAL level 1
004b0401.d	WPE091207-02AB	CXC2	07-DEC-2009 17:38		120709a	1.0		INDAB ICAL level 2
005b0501.d	WPE091207-03AB	CXC2	07-DEC-2009 17:50		120709a	1.0		INDAB ICAL level 3
006b0601.d	WPE091207-04AB	CXC2	07-DEC-2009 18:02		120709a	1.0		INDAB ICAL level 4
007b0701.d	IPE091128-02AB	CXC2	07-DEC-2009 18:14		120709a	1.0		INDAB ICAL level 5
008b0801.d	WPE091207-10AB	CXC2	07-DEC-2009 18:26		120709a	1.0		All OK
009b0901.d	WPE091207-11TX	CXC2	07-DEC-2009 18:38		120709a	1.0		TOXAPH ICAL level 1
010b1001.d	WPE091207-12TX	CXC2	07-DEC-2009 18:50		120709a	1.0		TOXAPH ICAL level 2
011b1101.d	WAR090914-99IB	CXC2	07-DEC-2009 19:38		120709a	1.0		DUSE - misinjection
012b1201.d	WAR090914-99IB	CXC2	07-DEC-2009 19:50		120709a	1.0		DUSE
013b1301.d	WPE091207-13TX	CXC2	07-DEC-2009 20:02		120709a	1.0		TOXAPH ICAL level 3
014b1401.d	WPE091207-14TX	CXC2	07-DEC-2009 20:14		120709a	1.0		TOXAPH ICAL level 4
015b1501.d	IPE091121-40TX	CXC2	07-DEC-2009 20:26		120709a	1.0		TOXAPH ICAL level 5

Instrument Batch: /chem/ecd5a.i/120709a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091104-52TX	CXC2	07-DEC-2009 20:38		120709a	1.0		(B) Passes on average (F) All OK

017b1701.d	WPE091207-21CL	CXC2	07-DEC-2009 20:50		120709a	1.0		CHLOR ICAL level 1
018b1801.d	WPE091207-22CL	CXC2	07-DEC-2009 21:02		120709a	1.0		CHLOR ICAL level 2
019b1901.d	WPE091207-23CL	CXC2	07-DEC-2009 21:14		120709a	1.0		CHLOR ICAL level 3
020b2001.d	WPE091207-24CL	CXC2	07-DEC-2009 21:26		120709a	1.0		CHLOR ICAL level 4
021b2101.d	IPE091029-06CL	CXC2	07-DEC-2009 21:38		120709a	1.0		CHLOR ICAL level 5
022b2201.d	WPE091021-00CL	CXC2	07-DEC-2009 21:49		120709a	1.0		All OK
023b2301.d	WPE091109-99DG	CXC2	07-DEC-2009 22:01		120709a	1.0		(B) DDT 8.6% Endrin 6.5% (F) DDT 11.7% Endrin 4.4%
024b2401.d	WAR090914-99IB	CXC2	07-DEC-2009 22:13		120709a	1.0		Clean
025b2501.d	241751001	CXC2	07-DEC-2009 22:25	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
026b2601.d	241751002	CXC2	07-DEC-2009 22:37	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
027b2701.d	241751003	CXC2	07-DEC-2009 22:49	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
028b2801.d	241751004	CXC2	07-DEC-2009 23:01	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
029b2901.d	241751005	CXC2	07-DEC-2009 23:13	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
030b3001.d	241751006	CXC2	07-DEC-2009 23:25	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
031b3101.d	241751007	CXC2	07-DEC-2009 23:37	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
032b3201.d	241751008	CXC2	07-DEC-2009 23:49	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
033b3301.d	241751009	CXC2	08-DEC-2009 00:01	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
034b3401.d	241751010	CXC2	08-DEC-2009 00:13	927116	10-655-1	10.0	LANL	USE - uploaded both columns, reporting lower result
035b3501.d	WPE091123-10AB	CXC2	08-DEC-2009 00:25		120709a	1.0		(B) Heptachlor, alpha-CHL, E.aldehyde & Meth low (F) DDT high

Instrument Batch: /chem/ecd5a.i/120709a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	CXC2	08-DEC-2009 00:37		120709a	1.0		Clean
037b3701.d	241732001	CXC2	08-DEC-2009 00:49	927116	10-654-1	10.0	LANL	USE - uploaded both columns, reporting lower result
038b3801.d	241720001	CXC2	08-DEC-2009 01:00	927116	10-653-1	10.0	LANL	USE - uploaded both columns, reporting lower result
039b3901.d	1201982198	CXC2	08-DEC-2009 01:12	927116	10-653-1	10.0	MS	USE - uploaded both columns, reporting lower result
040b4001.d	1201982201	CXC2	08-DEC-2009 01:24	927116	10-653-1	10.0	MSD	USE - uploaded both columns, reporting lower result

041b4101.d	1201982199	CXC2	08-DEC-2009 01:36	927116	10-653-1		10.0	TMS	USE - uploaded both columns, reporting lower result
042b4201.d	1201982202	CXC2	08-DEC-2009 01:48	927116	10-653-1		10.0	TMSD	USE - uploaded both columns, reporting lower result
043b4301.d	1201982200	CXC2	08-DEC-2009 02:00	927116	10-653-1		10.0	CMS	USE - uploaded both columns, reporting lower result
044b4401.d	1201982203	CXC2	08-DEC-2009 02:12	927116	10-653-1		10.0	CMSD	USE - uploaded both columns, reporting lower result
045b4501.d	WPE091123-10AB	CXC2	08-DEC-2009 02:24		120709a		1.0		(B) Methoxychlor low (F) DDT elevated
046b4601.d	WAR090914-99IB	CXC2	08-DEC-2009 02:36		120709a		1.0		Clean
047b4701.d	241424001	CXC2	08-DEC-2009 02:48	927116	10-578-1		10.0	LANL	USE - uploaded both columns, reporting lower result
048b4801.d	241424002	CXC2	08-DEC-2009 03:00	927116	10-578-1		10.0	LANL	USE - uploaded both columns, reporting lower result
049b4901.d	241527001	CXC2	08-DEC-2009 03:12	927116	10-600-1		10.0	LANL	USE - uploaded both columns, reporting lower result
050b5001.d	WAR090914-99IB	CXC2	08-DEC-2009 03:24		120709a		1.0		Clean
051b5101.d	WPE091123-10AB	CXC2	08-DEC-2009 03:36		120709a		1.0		(B) All OK (F) Several elevated
052b5201.d	WAR090914-99IB	CXC2	08-DEC-2009 03:48		120709a		1.0		Clean
053b5301.d	1201984162	CXC2	08-DEC-2009 04:00	927944	241451		1.0	MB	USE - uploaded both columns, reporting lower result
054b5401.d	1201984163	CXC2	08-DEC-2009 04:11	927944	241451		1.0	LCS	USE - uploaded both columns, reporting lower result
055b5501.d	241451004	CXC2	08-DEC-2009 04:23	927944	241451		1.0	SAIC	USE - uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/120709a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	241591001	CXC2	08-DEC-2009 04:35	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
057b5701.d	241591002	CXC2	08-DEC-2009 04:47	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
058b5801.d	241591003	CXC2	08-DEC-2009 04:59	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
059b5901.d	241591004	CXC2	08-DEC-2009 05:11	927944	241591		1.0	SAIC	USE - uploaded both columns, reporting lower result
060b6001.d	WAR090914-99IB	CXC2	08-DEC-2009 05:23		120709a		1.0		Clean
061b6101.d	WPE091123-10AB	CXC2	08-DEC-2009 05:35		120709a		1.0		(b) Multiple analytes low; (f) DCB low
062b6201.d	WAR090914-99IB	CXC2	08-DEC-2009 05:47		120709a		1.0		Clean
063b6301.d	241616001	CXC2	08-DEC-2009 05:59	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b
064b6401.d	241616002	CXC2	08-DEC-2009 06:11	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b
065b6501.d	241616003	CXC2	08-DEC-2009 06:23	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b

066b6601.d	241616005	CXC2	08-DEC-2009 08:06	927944	241616		1.0	SAIC	DUSE- syringe plunger bent - not bracketed with CCV - see 121009a.b

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CLP-2

Data file : /chem/ecd5a.i/120709a.b/039b3901.d
Lab Smp Id: 1201982198 Client Smp ID: WST49-10-5425MS
Inj Date : 08-DEC-2009 01:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982198|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 39 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.063	2.064	-0.001	74317147	14.9237	0.00746	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	42570625	15.3456	0.00767	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.107	3.107	0.000	51938809	8.53394	0.00427	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.452	3.453	-0.001	43203677	8.67549	0.00434	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.088	4.088	0.000	32443974	6.79615	0.00340	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.697	4.698	-0.001	38902977	10.3017	0.00515	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	100653601	90.9788	0.0455	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/039b3901.d
Date : 08-DEC-2009 01:12
Client ID: WST49-10-5425(24172
Sample Info: |1201982198|10|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: CXC2
Column diameter: 0.25

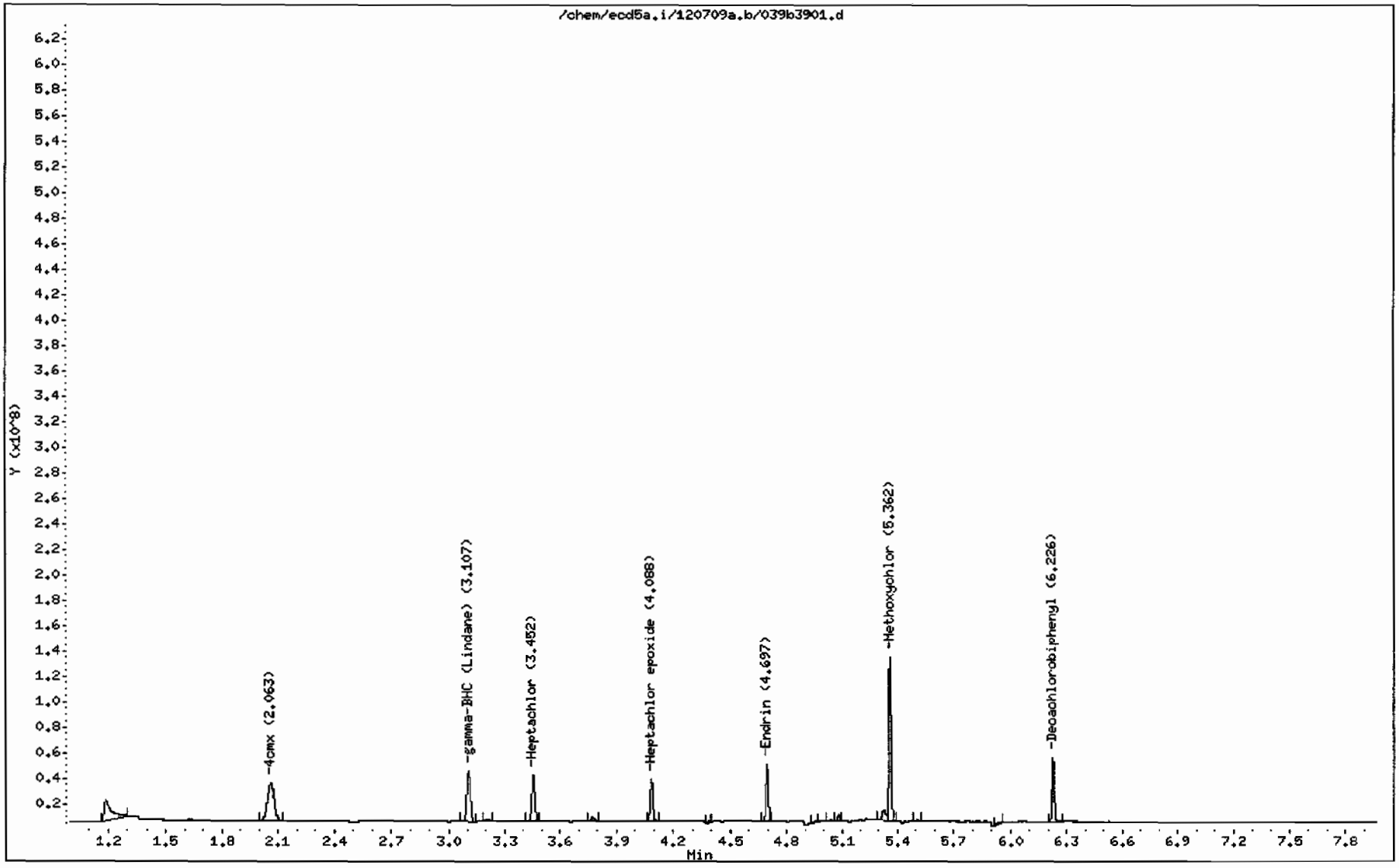

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CLP-1

Data file : /chem/ecd5a.i/120709a.b/039f3901.d
Lab Smp Id: 1201982198 Client Smp ID: WST49-10-5425MS
Inj Date : 08-DEC-2009 01:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982198|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 39 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	6134807	13.8607	0.00693	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	4652549	17.7053	0.00885	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	3356748	7.10141	0.00355	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.739	3.740	-0.001	3228711	8.17725	0.00409	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	3274926	7.60798	0.00380	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	2911826	8.41483	0.00421	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.436	5.436	0.000	9554080	97.5982	0.0488	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/039f3901.d
Date : 08-DEC-2009 01:12
Client ID: WST49-10-5425(24172
Sample Info: |1201982198|10|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

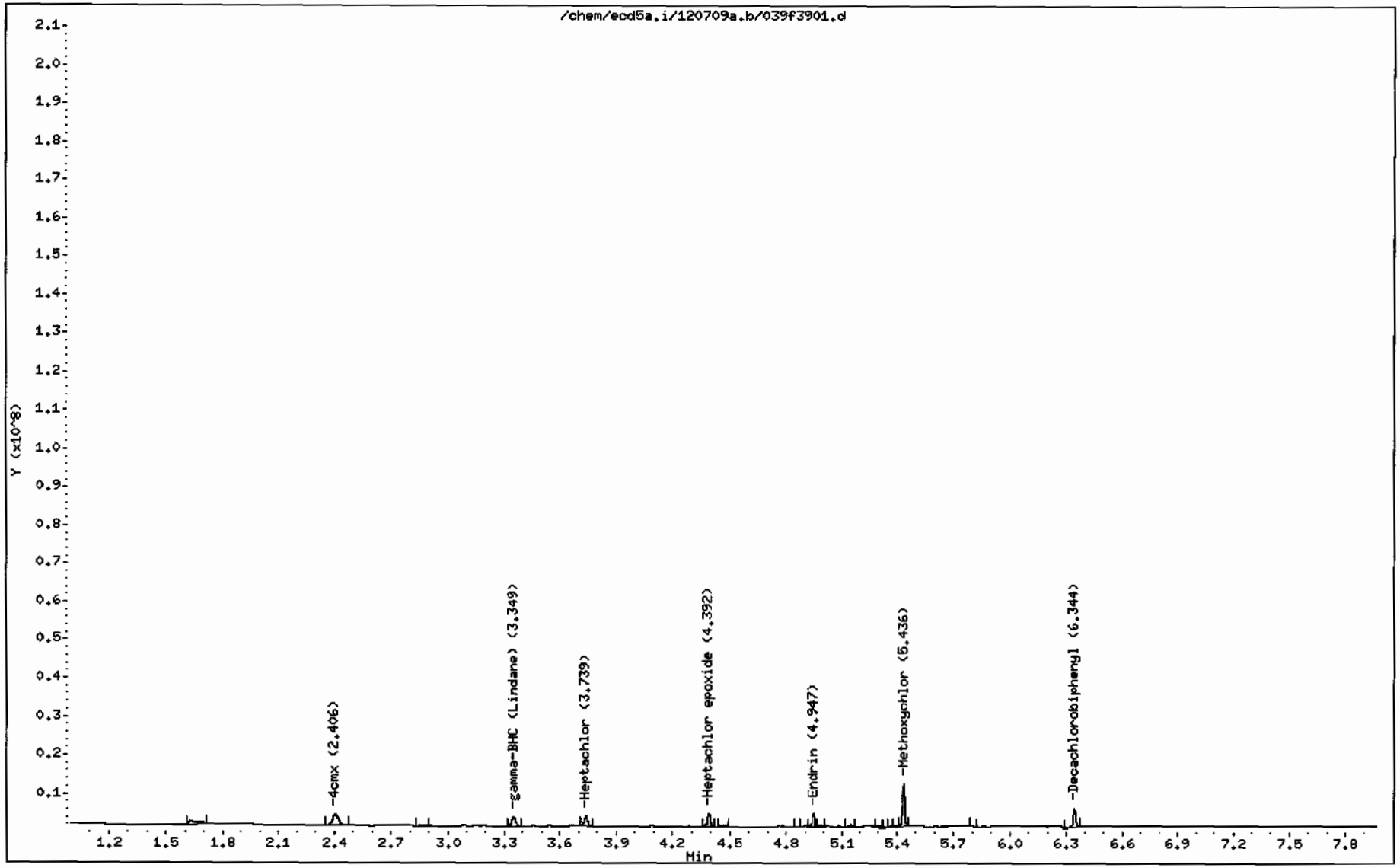

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CLP-2

Data file : /chem/ecd5a.i/120709a.b/040b4001.d
Lab Smp Id: 1201982201 Client Smp ID: WST49-10-5425MSD
Inj Date : 08-DEC-2009 01:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982201|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 40 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	73849208	14.8298	0.00741	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	40932625	14.7552	0.00738	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.108	3.107	0.001	52721352	8.66251	0.00433	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.453	3.453	0.000	44967956	9.02976	0.00451	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.087	4.088	-0.001	39745388	8.32561	0.00416	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.698	4.698	0.000	40675992	10.7713	0.00538	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.362	5.363	-0.001	105797003	95.6279	0.0478	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/040b4001.d

Date : 08-DEC-2009 01:24

Client ID: WST49-10-5425MSD

Sample Info: |1201982201|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

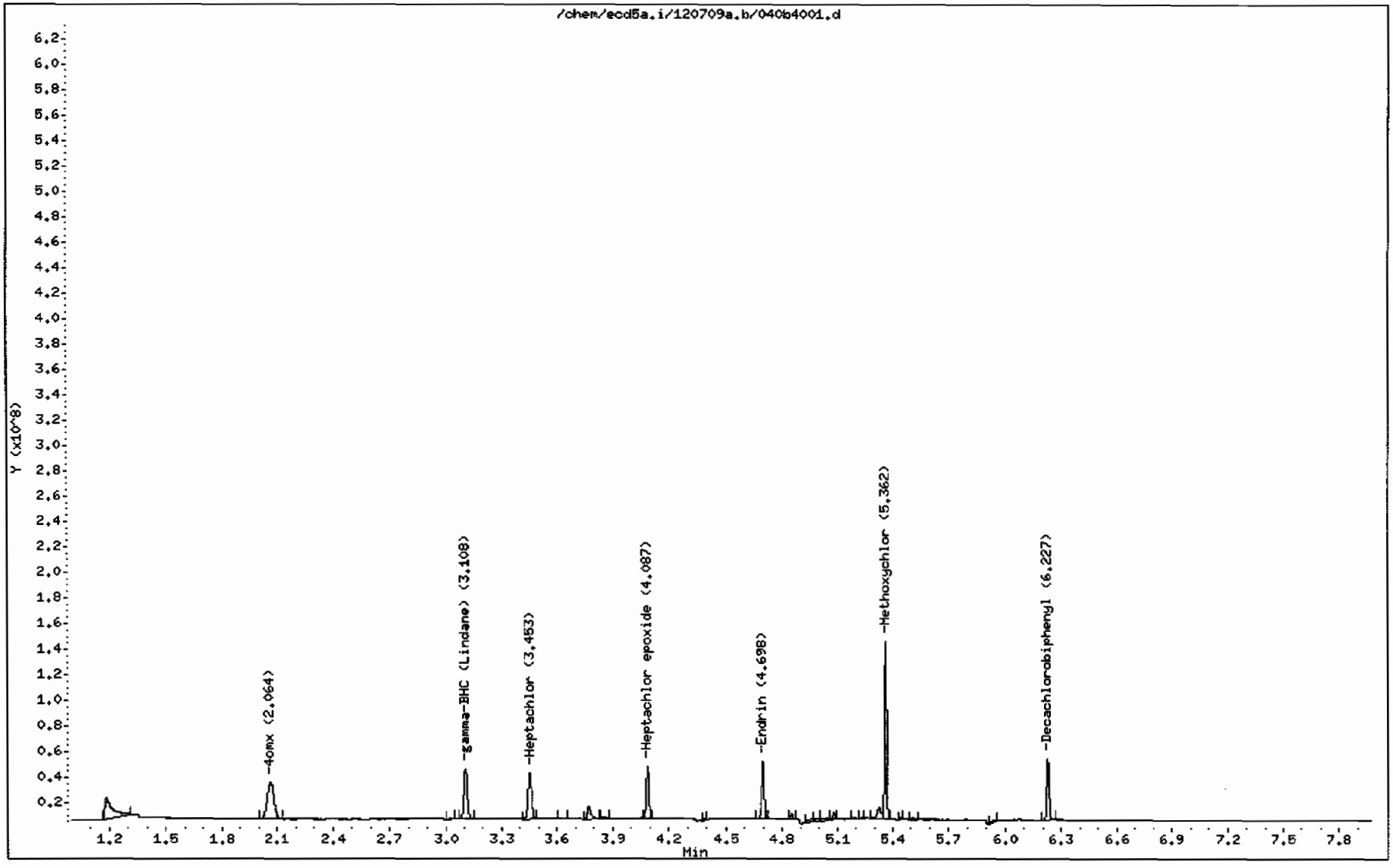

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/040f4001.d
Lab Smp Id: 1201982201 Client Smp ID: WST49-10-5425MSD
Inj Date : 08-DEC-2009 01:24
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982201|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 40 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.410	2.409	0.001	6161382	13.9207	0.00696	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	4639148	17.6543	0.00883	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.349	3.350	-0.001	3947504	8.35119	0.00418	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.741	3.740	0.001	3337977	8.45399	0.00423	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.392	4.392	0.000	3576683	8.30899	0.00415	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.947	4.947	0.000	3082343	8.90761	0.00445	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.437	5.436	0.001	10377220	106.007	0.0530	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120709a.b/040f4001.d
Date : 08-DEC-2009 01:24
Client ID: WST49-10-5425MSD
Sample Info: |1201982201|10|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

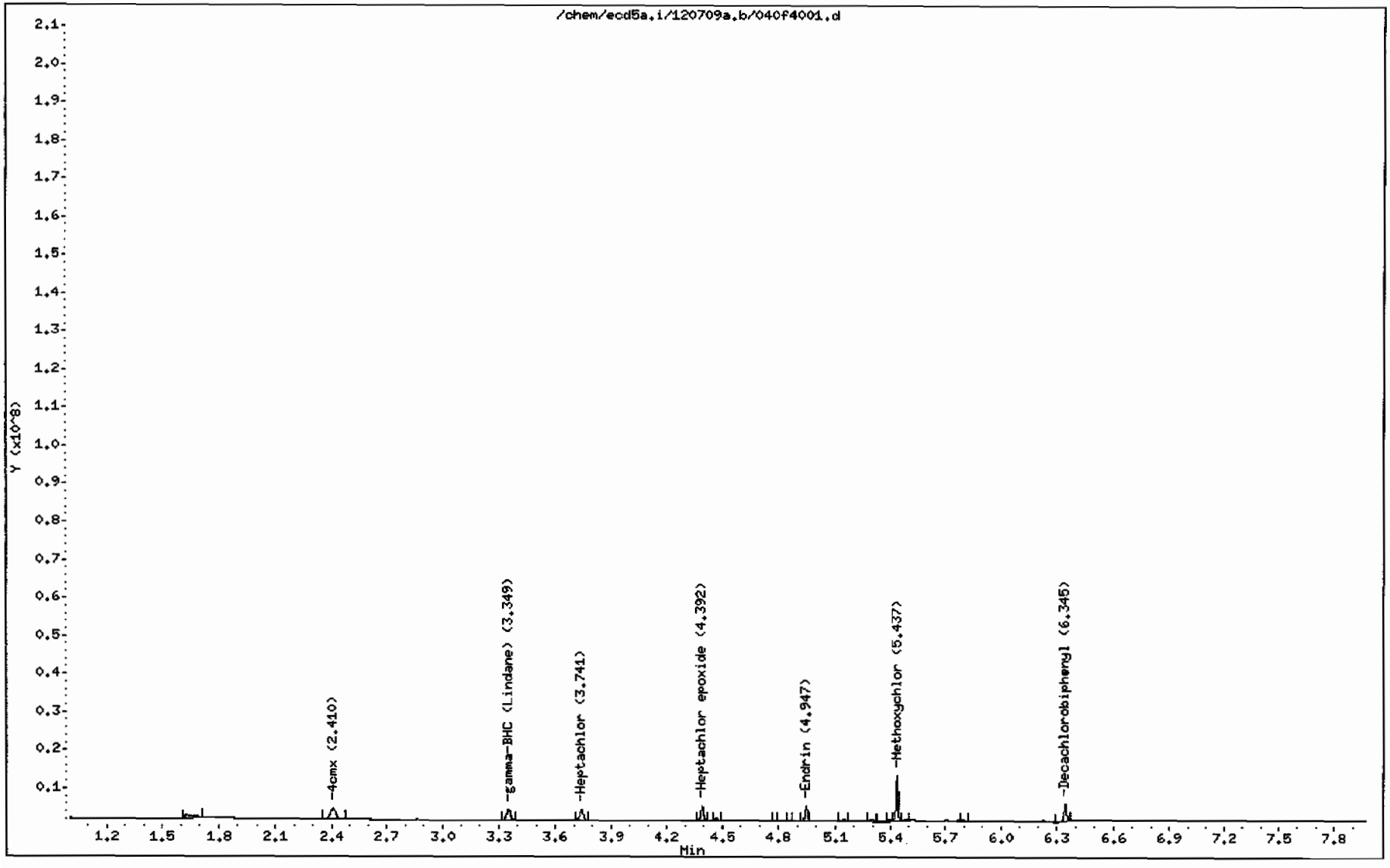

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/041b4101.d
Lab Smp Id: 1201982199 Client Smp ID: WST49-10-5425TMS
Inj Date : 08-DEC-2009 01:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982199|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 41 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.063	2.064	-0.001	62797043	12.6104	0.00630	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	37186024	13.4046	0.00670	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.497	4.499	-0.002	22936602	166.351	0.0832	80.00- 120.00	100.00
4.570	4.570	0.000	14204449	182.683	0.0913	38.34- 78.34	61.93
4.680	4.682	-0.002	23699812	178.911	0.0894	80.82- 120.82	103.33
4.819	4.819	0.000	24255122	179.879	0.0899	90.94- 130.94	105.75
4.878	4.879	-0.001	43836511	183.636	0.0918	166.37- 206.37	191.12

Average of Peak Concentrations = 0.0891

Data File: /chem/ecd5a.i/120709a.b/041b4101.d

Date : 08-DEC-2009 01:36

Client ID: WST49-10-5425TMS

Sample Info: |1201982199|101

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

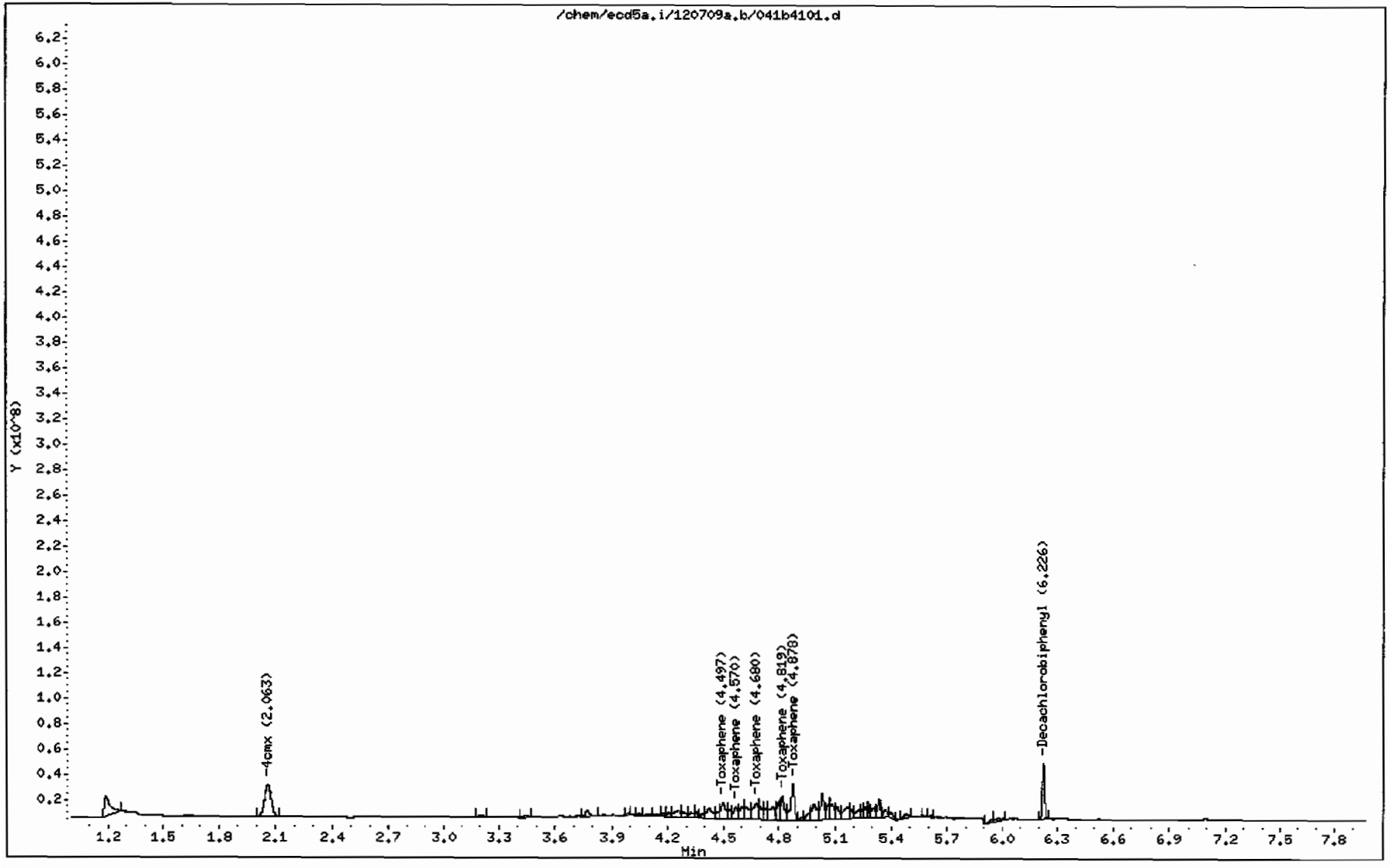

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/041f4101.d
Lab Smp Id: 1201982199 Client Smp ID: WST49-10-5425TMS
Inj Date : 08-DEC-2009 01:36
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982199|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 41 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.409	-0.004	5197268	11.7424	0.00587	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	4226517	16.0840	0.00804	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.735	4.737	-0.002	1345561	321.029	0.160	80.00- 120.00	100.00(M)
4.805	4.807	-0.002	1478069	197.664	0.0988	148.39- 188.39	109.85
4.861	4.862	-0.001	1167512	167.925	0.0840	142.36- 182.36	86.77
4.973	4.963	0.010	2636140	175.690	0.0878	292.27- 332.27	195.91
5.078	5.079	-0.001	3448332	235.175	0.118	302.61- 342.61	256.27

Average of Peak Concentrations = 0.110

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/041f4101.d

Date : 08-DEC-2009 01:36

Client ID: WST49-10-5425TMS

Sample Info: |12019821991101

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

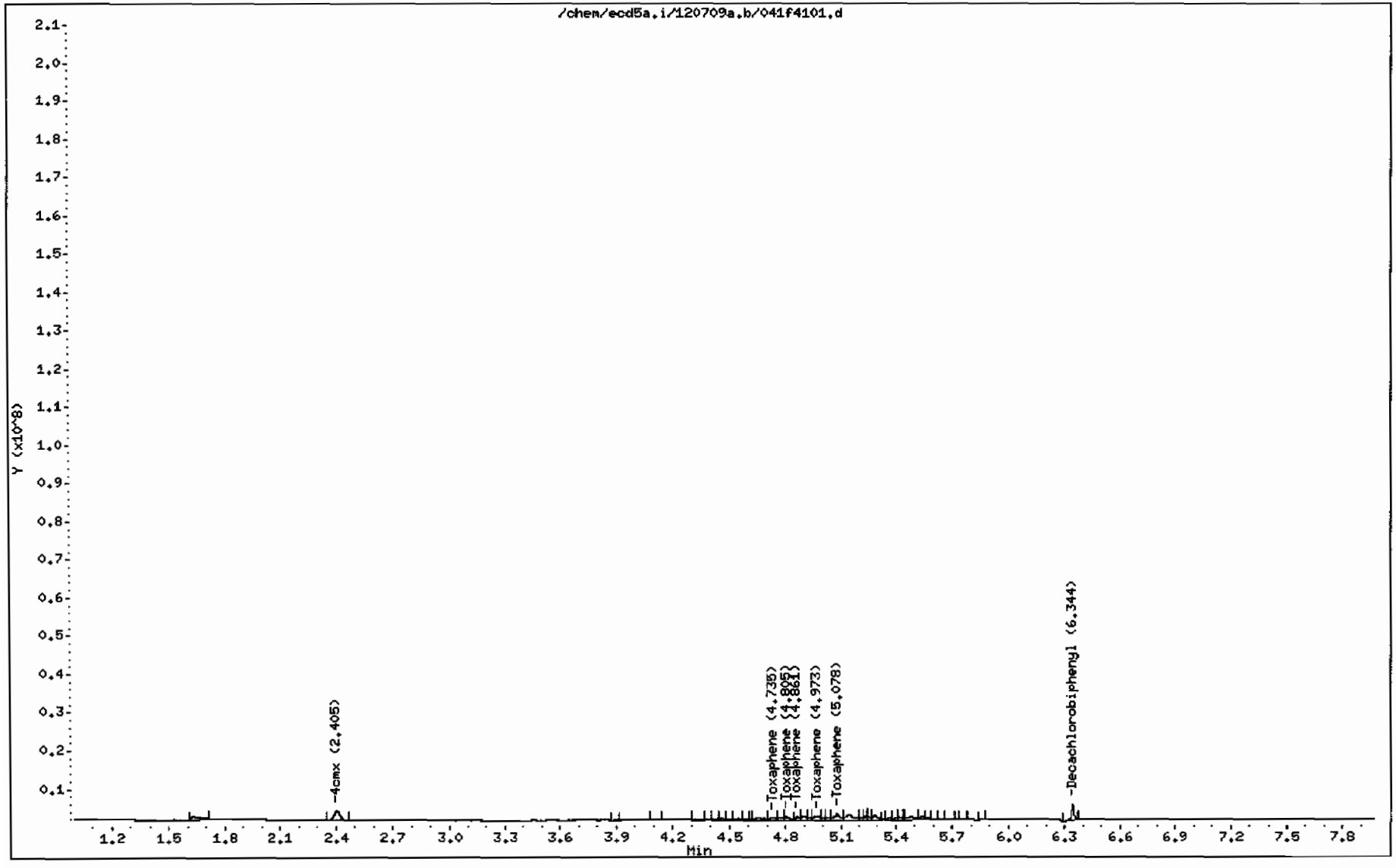

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/042b4201.d
Lab Smp Id: 1201982202 Client Smp ID: WST49-10-5425TMSD
Inj Date : 08-DEC-2009 01:48
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982202|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 42 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.064	2.064	0.000	67671579	13.5892	0.00679	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.226	0.000	37511776	13.5220	0.00676	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.499	4.499	0.000	19760123	123.793	0.0619	80.00- 120.00	100.00(M)
4.569	4.570	-0.001	12571787	145.776	0.0729	38.34- 78.34	63.62
4.680	4.682	-0.002	20304377	135.030	0.0675	80.82- 120.82	102.75
4.819	4.819	0.000	24383055	181.131	0.0906	90.94- 130.94	123.40
4.878	4.879	-0.001	40649094	166.268	0.0831	166.37- 206.37	205.71

Average of Peak Concentrations = 0.0752

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/042b4201.d
Date : 08-DEC-2009 01:48
Client ID: WST49-10-5425(24172
Sample Info: |1201982202|10|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

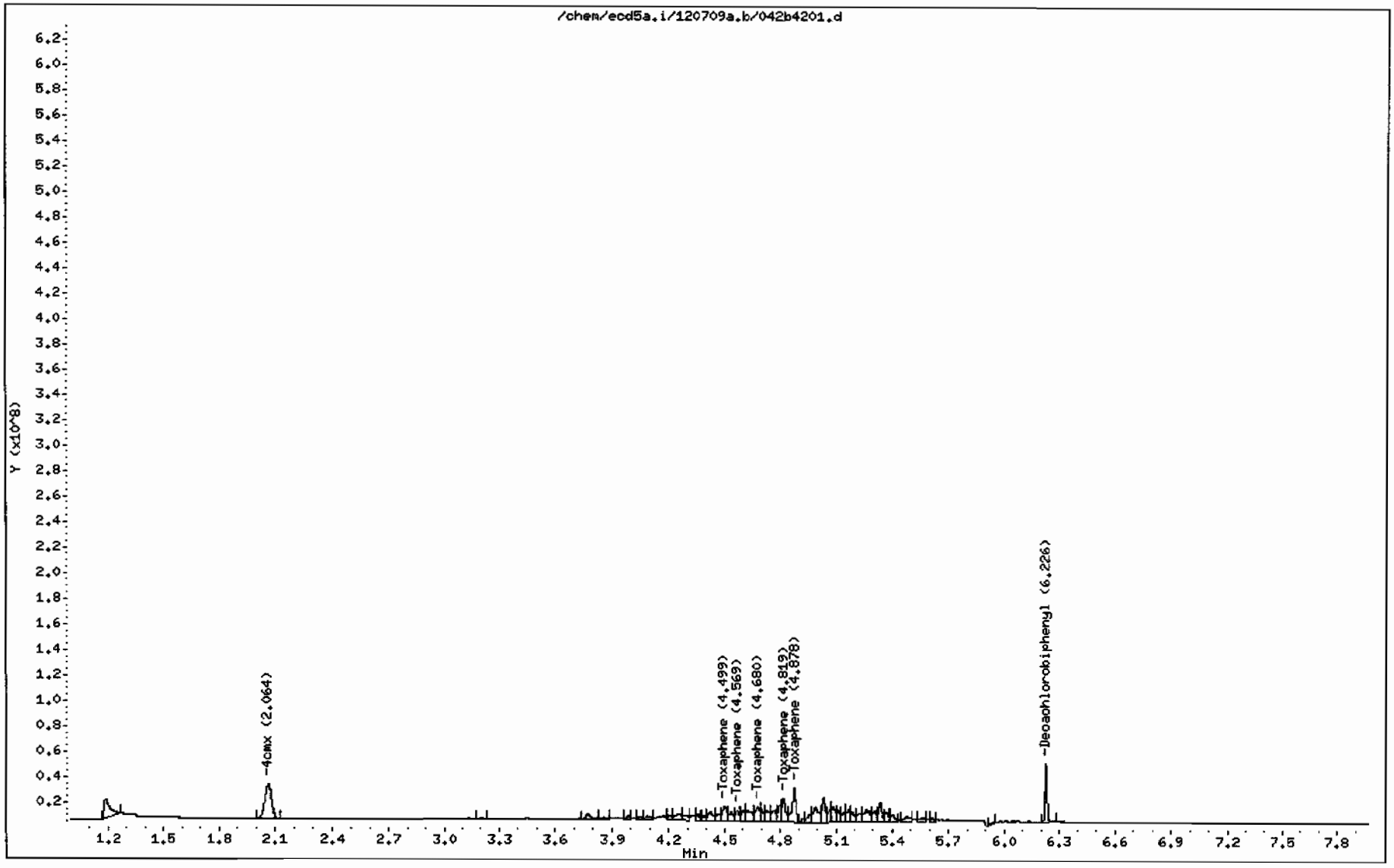

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/042f4201.d
Lab Smp Id: 1201982202 Client Smp ID: WST49-10-5425TMSD
Inj Date : 08-DEC-2009 01:48
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982202|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 42 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	5589339	12.6283	0.00631	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.344	6.344	0.000	4436103	16.8816	0.00844	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.735	4.737	-0.002	665520	158.782	0.0794	80.00- 120.00	100.00(M)
4.806	4.807	-0.001	1207985	161.545	0.0808	148.39- 188.39	181.51
4.861	4.862	-0.001	879645	126.521	0.0633	142.36- 182.36	132.17
4.973	4.963	0.010	2258081	150.494	0.0752	292.27- 332.27	339.30
5.079	5.079	0.000	2842319	193.845	0.0969	302.61- 342.61	427.08

Average of Peak Concentrations = 0.0791

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120709a.b/042f4201.d

Date : 08-DEC-2009 01:48

Client ID: WST49-10-5425(24172

Sample Info: |1201982202|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

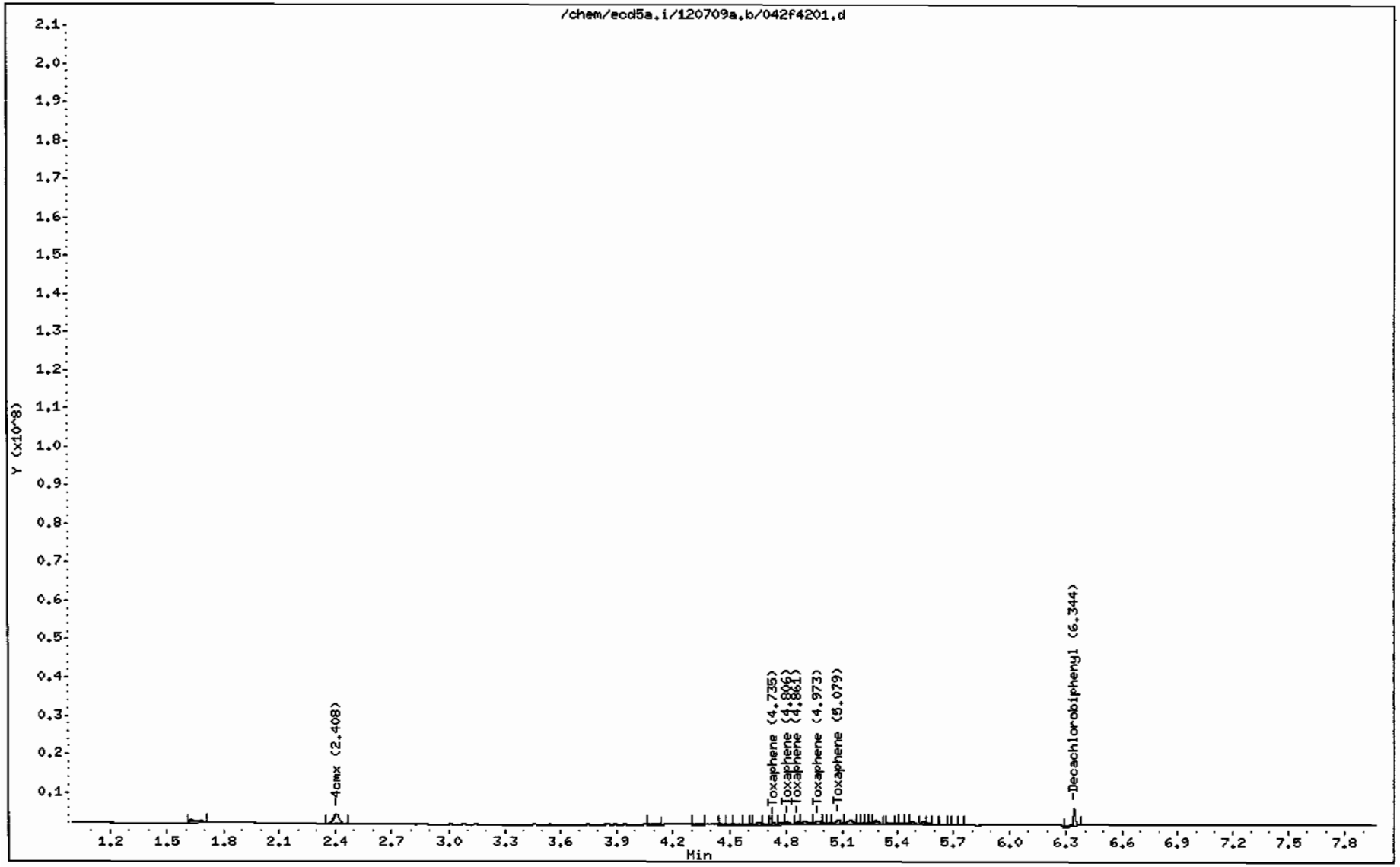

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/043b4301.d
Lab Smp Id: 1201982200 Client Smp ID: WST49-10-5425CMS
Inj Date : 08-DEC-2009 02:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982200|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 43 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.062	2.064	-0.002	60678767	12.1850	0.00609	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.227	6.226	0.001	37484503	13.5122	0.00676	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.341	3.340	0.001	31297334	104.543	0.0523	80.00- 120.00	100.00
4.066	4.067	-0.001	15508967	117.323	0.0587	32.50- 72.50	49.55
4.210	4.211	-0.001	75794361	120.025	0.0600	223.07- 263.07	242.18
4.305	4.306	-0.001	61564301	130.406	0.0652	171.50- 211.50	196.71
4.855	4.855	0.000	36046364	281.842	0.141	46.37- 86.37	115.17

Average of Peak Concentrations = 0.0754

Data File: /chem/ecd5a.i/120709a.b/043b4301.d

Page 1

Date : 08-DEC-2009 02:00

Client ID: WST49-10-5425(24172

Instrument: ecd5a.i

Sample Info: |1201982200|10|

Volume Injected (uL): 1.0

Operator: CXC2

Column phase: CLP-2

Column diameter: 0.25

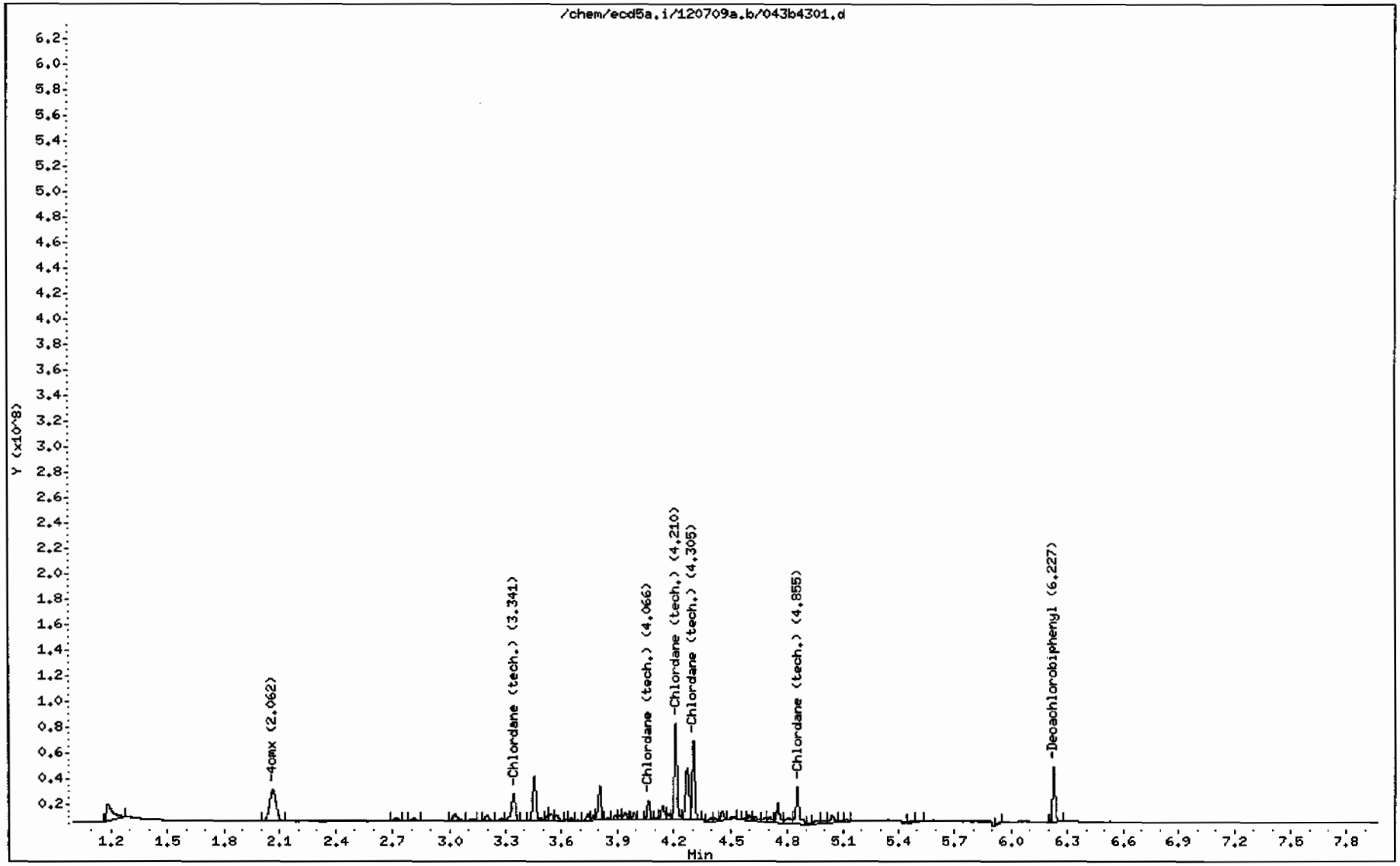

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/043f4301.d
Lab Smp Id: 1201982200 Client Smp ID: WST49-10-5425CMS
Inj Date : 08-DEC-2009 02:00
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982200|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 43 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.408	2.409	-0.001	4890276	11.0488	0.00552	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	4242900	16.1463	0.00807	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.677	3.677	0.000	2197300	111.546	0.0558	80.00- 120.00	100.00
4.071	4.071	0.000	2579823	137.742	0.0689	83.32- 123.32	117.41
4.350	4.350	0.000	1448747	114.364	0.0572	42.61- 82.61	65.93
4.475	4.475	0.000	7010418	122.097	0.0610	268.99- 308.99	319.05
5.044	5.044	0.000	1638197	176.250	0.0881	30.21- 70.21	74.55

Average of Peak Concentrations = 0.0662

Data File: /chem/ecd5a.i/120709a.b/043f4301.d
Date : 08-DEC-2009 02:00
Client ID: WST49-10-5425(24172
Sample Info: |1201982200|10|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

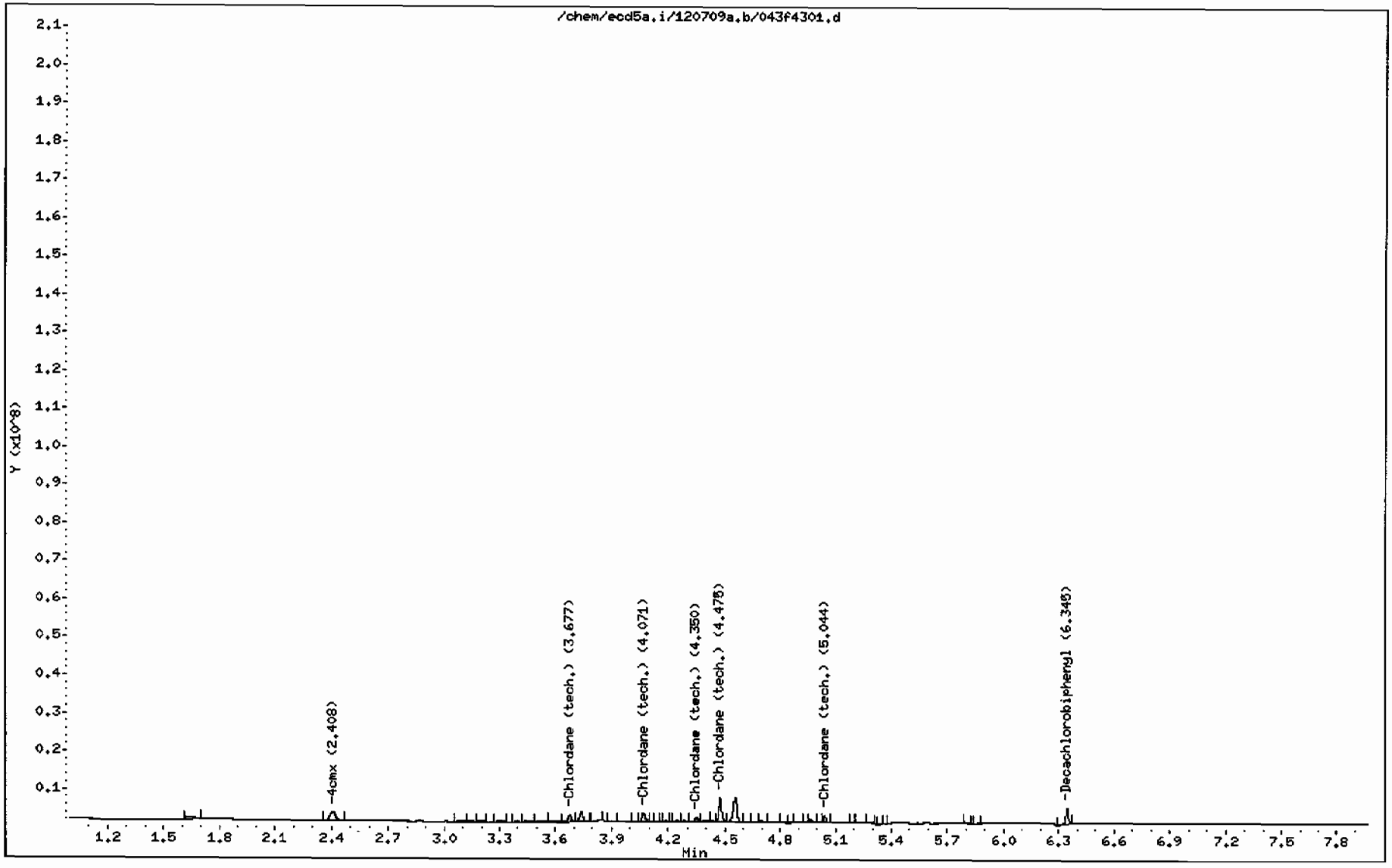

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120709a.b/044b4401.d
Lab Smp Id: 1201982203 Client Smp ID: WST49-10-5425CMSD
Inj Date : 08-DEC-2009 02:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982203|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-B-8081-120709a.m
Meth Date : 08-Dec-2009 12:22 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.063	2.064	-0.001	55428111	11.1306	0.00556	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.228	6.226	0.002	32600236	11.7516	0.00588	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.340	3.340	0.000	27527123	84.0743	0.0420	80.00- 120.00	100.00
4.067	4.067	0.000	14148550	103.515	0.0518	32.50- 72.50	51.40
4.211	4.211	0.000	66862004	101.717	0.0508	223.07- 263.07	242.89
4.305	4.306	-0.001	54386794	111.664	0.0558	171.50- 211.50	197.58
4.854	4.855	-0.001	19137389	143.322	0.0717	46.37- 86.37	69.52
Average of Peak Concentrations =					0.0544		

Data File: /chem/ecd5a.i/120709a.b/044b4401.d
Date : 08-DEC-2009 02:12
Client ID: WST49-10-5425(24172
Sample Info: |1201982203|10|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: CXC2
Column diameter: 0.25

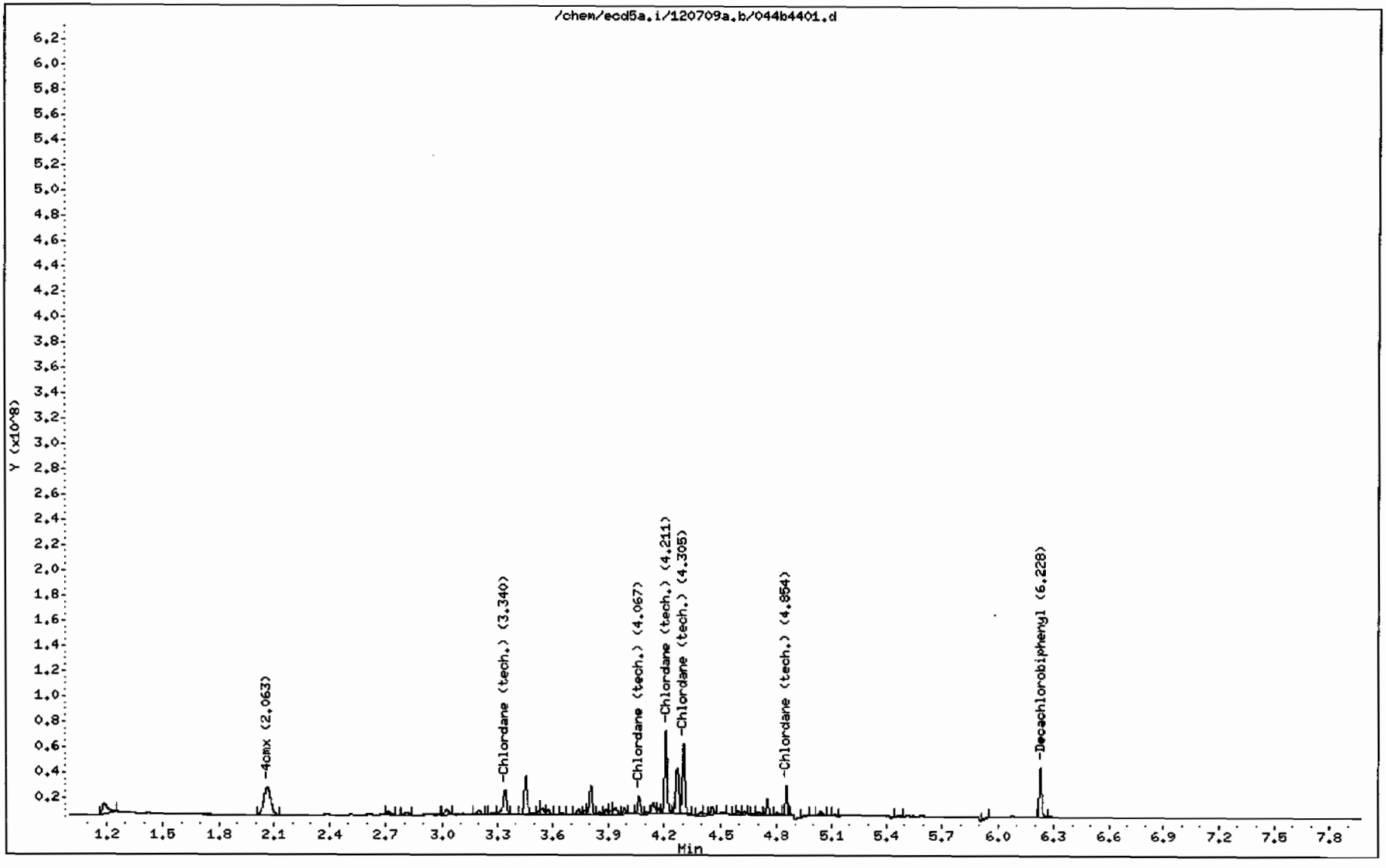

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120709a.b/044f4401.d
Lab Smp Id: 1201982203 Client Smp ID: WST49-10-5425CMSD
Inj Date : 08-DEC-2009 02:12
Operator : CXC2 Inst ID: ecd5a.i
Smp Info : |1201982203|10|
Misc Info : |ECDPTL_1LF|927116|SVPF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120709a.b/ECD5-F-8081-120709a.m
Meth Date : 08-Dec-2009 10:08 cla01575 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-653-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.409	-0.003	4431695	10.0127	0.00501	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.345	6.344	0.001	3826876	14.5632	0.00728	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.677	3.677	0.000	1942608	98.6164	0.0493	80.00- 120.00	100.00
4.071	4.071	0.000	2243305	119.775	0.0599	83.32- 123.32	115.48
4.350	4.350	0.000	1273751	100.550	0.0503	42.61- 82.61	65.57
4.475	4.475	0.000	6087793	106.028	0.0530	268.99- 308.99	313.38
5.044	5.044	0.000	1376322	148.075	0.0740	30.21- 70.21	70.85

Average of Peak Concentrations = 0.0573

Data File: /chem/ecd5a.i/120709a.b/044f4401.d

Date : 08-DEC-2009 02:12

Client ID: WST49-10-5425(24172

Sample Info: |1201982203|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: CXC2

Column diameter: 0.25

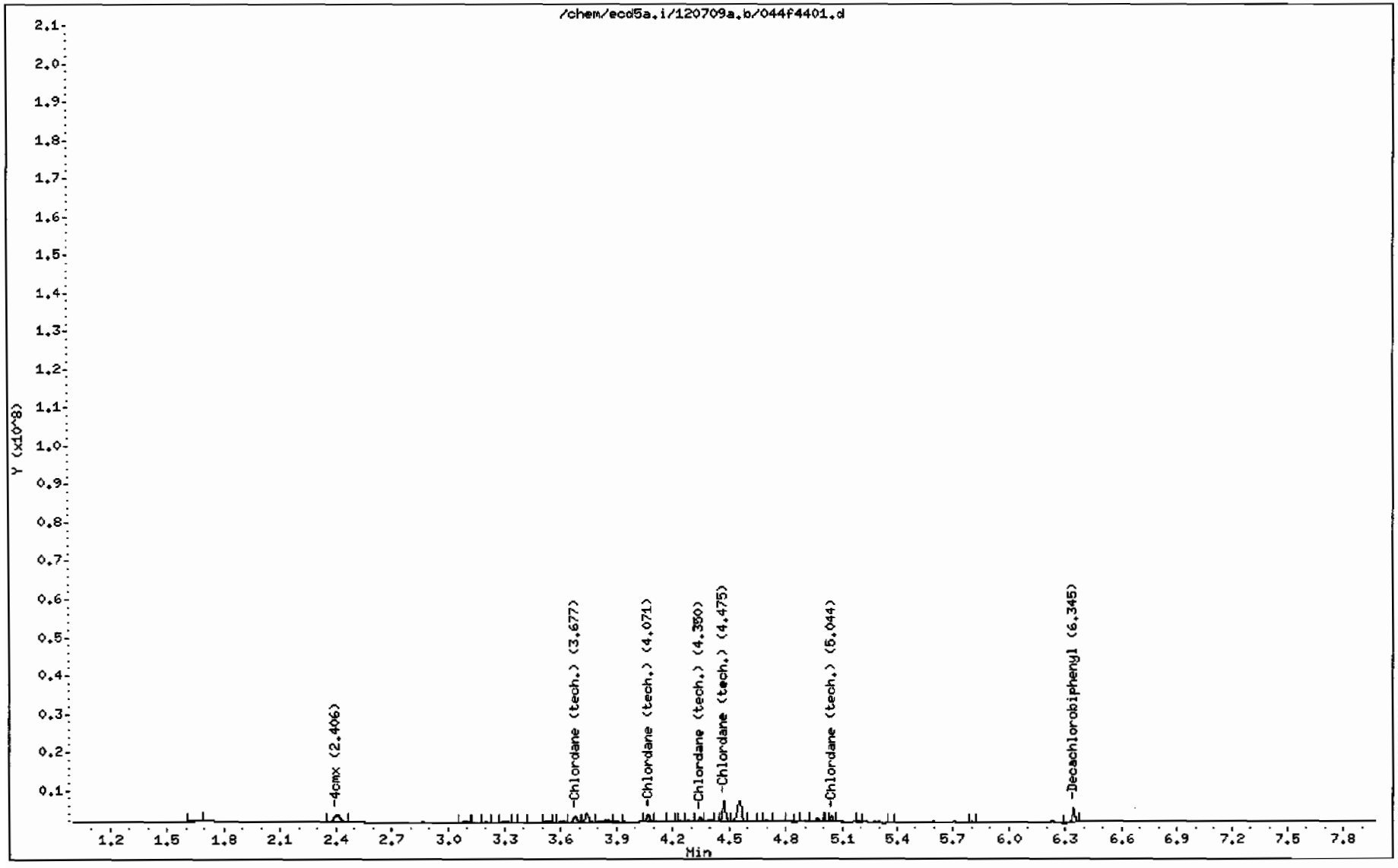

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 927115 **Verified by:** _____

Analyst: Terry Allison

Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 21

Instrument: Semi-Volatiles Manual
Volatiles Manual Instrument

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201980750 TB	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982197 MB	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982204 LCS	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982205 LCS	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982206 LCS	01-DEC-2009 18:05:48	20	5	5	1	0.05
241424001	01-DEC-2009 18:05:48	20	5	5	1	0.05
241424002	01-DEC-2009 18:05:48	20	5	5	1	0.05
241527001	01-DEC-2009 18:05:48	20	6	6	1	0.05
241720001	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982198 MS (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982201 MSD (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982199 MS (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982202 MSD (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982200 MS (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201982203 MSD (241720001)	01-DEC-2009 18:05:48	20	5	5	1	0.05
241732001	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751001	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751002	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751003	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751004	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751005	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751006	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751007	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751008	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751009	01-DEC-2009 18:05:48	20	5	5	1	0.05
241751010	01-DEC-2009 18:05:48	20	5	5	1	0.05
1201980055 TB	01-DEC-2009 18:05:48	20	5	5	1	0.05

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982204	PESTICIDE TCLP LCS	UE091009-06	1	mL
LCS	1201982205	Toxaphene TCLP LCS	WE091028-11	1	mL
LCS	1201982206	Chlordane TCLP LCS	WE091111-04	1	mL
MS	1201982198	PESTICIDE TCLP LCS	UE091009-06	1	mL
MS	1201982199	Toxaphene TCLP LCS	WE091028-11	1	mL
MS	1201982200	Chlordane TCLP LCS	WE091111-04	1	mL
MSD	1201982201	PESTICIDE TCLP LCS	UE091009-06	1	mL
MSD	1201982202	Toxaphene TCLP LCS	WE091028-11	1	mL

Comments:

Verified By: RLC

Final Solvent: Hexane

Prep Logbook

Batch ID: 927115 **Verified by:** _____

Analyst: Terry Allison

Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 21

Instrument: Semi-Volatiles Manual
Volatiles Manual Instrument

Sample ID		Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
MSD	1201982203	Chlordane TCLP LCS		WE091111-04	1	mL	
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L		UE091114-15	1	mL	
REGNT	All	Methylene Chloride		1233148-D	180	mL	
REGNT	All	Hexane		1233925-B2	5	mL	
SOURC	All	SODIUM SULFATE		1236563	30	g	

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926091 **Verified by:** _____

Analyst: Clifford Postell

Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13

Instrument: TCLP Tumbler #106

Sample ID Analysis Start Date	1201980055 TB 24-NOV-2009 16:30:47	241424001 24-NOV-2009 16:30:47	241424002 24-NOV-2009 16:30:47	241527001 24-NOV-2009 16:30:47
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.91	7.16	8.21	7.89
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.92	5	5	5
Final pH (su)	4.92	1.85	1.91	2.04
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	1000	1000	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:45
Filtration End Date: 25-NOV-09 13:30:45
Bottle Lot Number: H929301DB
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

NCR Report No.: 767434
Revision No.: 3

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
08-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8081A	Solid	LANL
Batch ID:	**Sample Numbers:**		
927116	See Below		

Potentially affected work order(s)(SDG): 241424(10-578-1),241527(10-600-1),241720(10-653-1),241732(10-654-1),241751(10-655-1)

Application Issues:

Failed CCV or CCB

Failed RPD for MS/MSD, or PS/PSD

Failed Yield for Surrogates

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The RPD between the MS and MSD did not meet the acceptance criteria for Toxaphene.	1. The RPD values were not all within the acceptance limits. The MS/MSD pairs passed spike recoveries for all analytes. The results are reported.
2. Sample 241720001 yielded above the acceptance range for surrogates.	2. Despite this positive bias, no target analytes were detected in the sample. Therefore, this non-conformance has no adverse effect on the reported data.
3. The CCV standard bracketing QC samples TB, MB and LCS failed to meet the acceptance criteria with negative bias for several target analytes on both analytical columns.	3. All QC samples met surrogate and spike recovery acceptance criteria. All LANL samples in this batch were bracketed by the CCV standards with acceptance recovery. The data were reported.

Originator's Name:

Clairette Campbell 08-DEC-09

Data Validator/Group Leader:

Jimin Cao 16-DEC-09

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	926729
Prep Batch Number:	926728

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241423004	WST03-10-2131
241423005	WST03-10-2130
1201981410	Method Blank (MB)
1201981411	241418003(RE03-09-13959) Matrix Spike (MS)
1201981412	241418003(RE03-09-13959) Matrix Spike Duplicate (MSD)
1201981413	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the

Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration requirements have been met for this SDG.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this non-compliance has no adverse effects on the data.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-576) was selected for matrix spike and matrix spike duplicate analysis. A Form III and raw data summarizing results has been included in the package.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241423004 (1:50) was diluted due to the oily matrix of the extract as well as over-range target analytes in the sample.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whittock Date: 12-15-2009

Roadmap for LANL 10-578 PCB

This roadmap was analyzed by jen01212 on 12-04-2009, 11:59.
This roadmap was reviewed by jim01140 on 12-07-2009, 09:30.
This roadmap was packaged by sha01289 on 12-15-2009, 08:55.
This roadmap was validated by rob01090 on 12-15-2009, 17:45.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd2a.i/120309.b/075f7501.d	241423004	sample	03-DEC-2009	21:51	10-578.sub	WST03-10-2131	5.00000	926729	DUSE OVERRANGE, RE-RUN AT 10X
□	N	/chem/ecd2a.i/120409.b/012f1201.d	241423004	sample	04-DEC-2009	10:09	10-578.sub	WST03-10-2131	50.00000	926729	UPLOAD BOTH, USE HIGHER
■	N	/chem/ecd2a.i/120309.b/076f7601.d	241423005	sample	03-DEC-2009	22:02	10-578.sub	WST03-10-2130	1.00000	926729	DUSE, AFTER OVERRANGE
□	N	/chem/ecd2a.i/120409.b/013f1301.d	241423005	sample	04-DEC-2009	10:20	10-578.sub	WST03-10-2130	1.00000	926729	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd2a.i/120309.b/075b7501.d	241423004	sample	03-DEC-2009	21:51	10-578.sub	WST03-10-2131	5.00000	926729	DUSE OVERRANGE, RE-RUN AT 10X
□	N	/chem/ecd2a.i/120409.b/012b1201.d	241423004	sample	04-DEC-2009	10:09	10-578.sub	WST03-10-2131	50.00000	926729	UPLOAD BOTH, USE HIGHER
■	N	/chem/ecd2a.i/120309.b/076b7601.d	241423005	sample	03-DEC-2009	22:02	10-578.sub	WST03-10-2130	1.00000	926729	DUSE, AFTER OVERRANGE
□	N	/chem/ecd2a.i/120409.b/013b1301.d	241423005	sample	04-DEC-2009	10:20	10-578.sub	WST03-10-2130	1.00000	926729	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd2a.i/120309.b/051f5101-1.d	1201981410	mb	03-DEC-2009	17:25	10-578.sub	PBLK01	1.00000	926729	
□	N	/chem/ecd2a.i/120309.b/052f5201-1.d	1201981413	lcs	03-DEC-2009	17:36	10-578.sub	PBLK01LCS	1.00000	926729	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd2a.i/120309.b/051b5101-1.d	1201981410	mb	03-DEC-2009	17:25	10-578.sub	PBLK01	1.00000	926729	
□	N	/chem/ecd2a.i/120309.b/052b5201-1.d	1201981413	lcs	03-DEC-2009	17:36	10-578.sub	PBLK01LCS	1.00000	926729	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2130	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 10:20	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	013f1301.d	**Column:**	1 CLP1	**Level:**	LOW
	013b1301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.70	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254		34.8	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260		39.2	ug/kg	1.23	3.70	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	50
Run Date:	12/04/2009 10:09	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	1 CLP1	**Level:**	LOW
	012b1201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	181	ug/kg	60.2	181	1
11104-28-2	Aroclor-1221	U	181	ug/kg	60.2	181	1
11141-16-5	Aroclor-1232	U	181	ug/kg	60.2	181	1
53469-21-9	Aroclor-1242	U	181	ug/kg	60.2	181	1
12672-29-6	Aroclor-1248	U	181	ug/kg	60.2	181	1
11097-69-1	Aroclor-1254		2110	ug/kg	60.2	181	1
11096-82-5	Aroclor-1260	P	1370	ug/kg	60.2	181	2

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10–578

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201981410	MB for batch 926728	94		100		74		77	
1201981413	LCS for batch 926728	96		103		80		82	
241423004	WST03–10–2131	92	D	78	D	80	D	72	D
241423005	WST03–10–2130	74		77		51		59	

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%–105%)
DCB = Decachlorobiphenyl	(33%–115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–578
Client ID: LCS for batch 926728
Lab Sample ID: 1201981413
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 17:36
Prep Batch ID: 926728
Batch ID: 926729
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	LCS	Aroclor–1016	33.3	0.0	31.6	95	41–110
11096–82–5	LCS	Aroclor–1260	33.3	0.0	33.7	101	48–110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: RE03-09-13959MS
Lab Sample ID: 1201981411
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 17.7
Analysis Date: 12/03/2009 18:42
Prep Batch ID 926728
Batch ID: 926729

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	40.3	0.00	U	37.1	92	23-117
11096-82-5	MS	Aroclor-1260	40.3	0.00	U	39.3	98	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–578
Client ID: RE03–09–13959MSD
Lab Sample ID: 1201981412
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 17.7
Analysis Date: 12/03/2009 18:54
Prep Batch ID: 926728
Batch ID: 926729
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	40.4	0.00	U	33.6	83	23–117	10	0–30
11096–82–5	MSD Aroclor–1260	40.4	0.00	U	36.2	90	27–116	8	0–30

Method Blank Summary

SDG Number:	10–578	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926728	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	051b5101–1.d 051f5101–1.d
Lab Sample ID:	1201981410				
Column:	CLP2 CLP1	Prep Date:	11/27/2009 21:14	Analyzed:	12/03/09 17:25
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926728	1201981413	052f5201–1.d 052b5201–1.d	12/03/09	1736
04 WST03–10–2131	241423004	012f1201.d 012b1201.d	12/04/09	1009
05 WST03–10–2130	241423005	013f1301.d 013b1301.d	12/04/09	1020

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2130	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 10:20	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	013f1301.d	**Column:**	1 CLP1	**Level:**	LOW
	013b1301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.70	ug/kg	1.23	3.70	1
11104–28–2	Aroclor–1221	U	3.70	ug/kg	1.23	3.70	1
11141–16–5	Aroclor–1232	U	3.70	ug/kg	1.23	3.70	1
53469–21–9	Aroclor–1242	U	3.70	ug/kg	1.23	3.70	1
12672–29–6	Aroclor–1248	U	3.70	ug/kg	1.23	3.70	1
11097–69–1	Aroclor–1254		34.8	ug/kg	1.23	3.70	1
11096–82–5	Aroclor–1260		39.2	ug/kg	1.23	3.70	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/013f1301.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 04-DEC-2009 10:20
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241423005|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	9.84860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	8566885	148.444	5.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.611	-0.001	5629439	102.672	3.8	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.246	-0.001	1033443	496.835	18.4	80.00- 120.00	100.00
3.428	3.429	-0.001	1836566	662.509	24.5	114.57- 154.57	177.71
3.697	3.698	-0.001	2876544	768.636	28.4	164.46- 204.46	278.35
3.888	3.890	-0.002	2102527	755.569	27.9	116.33- 156.33	203.45
4.018	4.019	-0.001	5568976	2017.71	74.6	109.04- 149.04	538.88

Average of Peak Concentrations = 34.8

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.019	-0.001	5568976	1369.38	50.6	80.00- 120.00	100.00
4.290	4.290	0.000	1809215	715.581	26.4	41.10- 81.10	32.49
4.455	4.456	-0.001	1738941	673.173	24.9	42.35- 82.35	31.23
4.667	4.668	-0.001	3950875	654.540	24.2	126.34- 166.34	70.94
4.857	4.857	0.000	2571018	882.921	32.6	49.78- 89.78	46.17
			Average of Peak Concentrations =		31.7		

Data File: /chem/ecd2a.i/120409.b/013f1301.d
Date : 04-DEC-2009 10:20
Client ID: WST03-10-2130
Sample Info: |241423005|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

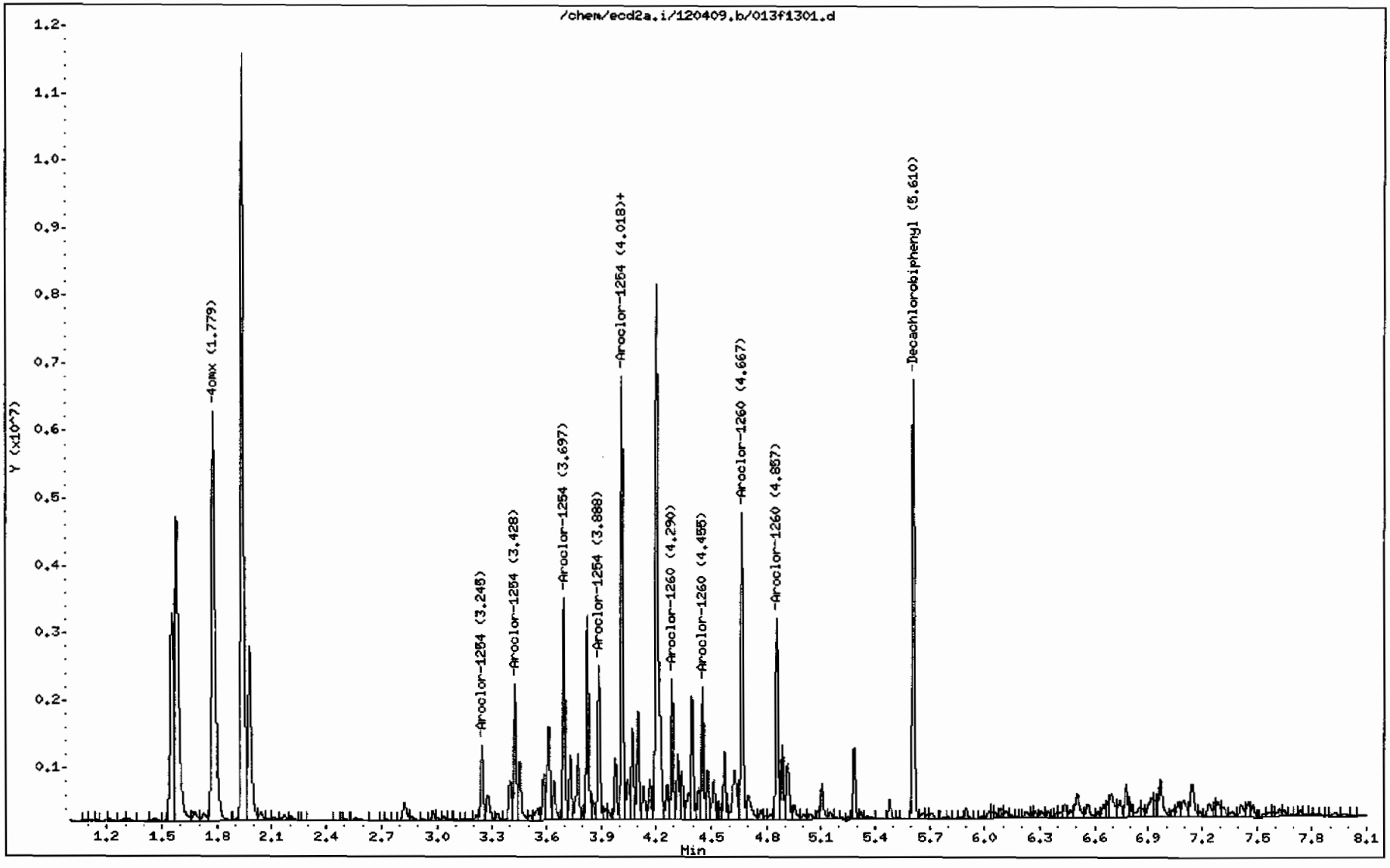

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/013b1301.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 04-DEC-2009 10:20
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241423005|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	9.84860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.077	-0.002	18105513	153.177	5.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	12716219	117.048	4.3	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	2394213	480.255	17.8	80.00- 120.00	100.00
3.964	3.965	-0.001	4509843	777.701	28.7	96.52- 136.52	188.36
4.200	4.200	0.000	2464317	612.559	22.6	62.32- 102.32	102.93
4.281	4.281	0.000	6060475	783.881	29.0	137.92- 177.92	253.13
4.445	4.445	0.000	3992013	711.803	26.3	90.15- 130.15	166.74
Average of Peak Concentrations =					24.9		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	6081164	1103.13	40.8	80.00- 120.00	100.00
4.570	4.570	0.000	9428863	1322.06	48.9	107.74- 147.74	155.05
4.681	4.682	-0.001	6062672	1281.38	47.4	64.97- 104.97	99.70
4.880	4.880	0.000	4716821	813.153	30.0	79.48- 119.48	77.56
5.505	5.505	0.000	7065594	781.533	28.9	137.38- 177.38	116.19
			Average of Peak Concentrations =		39.2		

Data File: /chem/ecd2a.i/120409.b/013b1301.d
Date : 04-DEC-2009 10:20
Client ID: WST03-10-2130
Sample Info: |24142300511|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

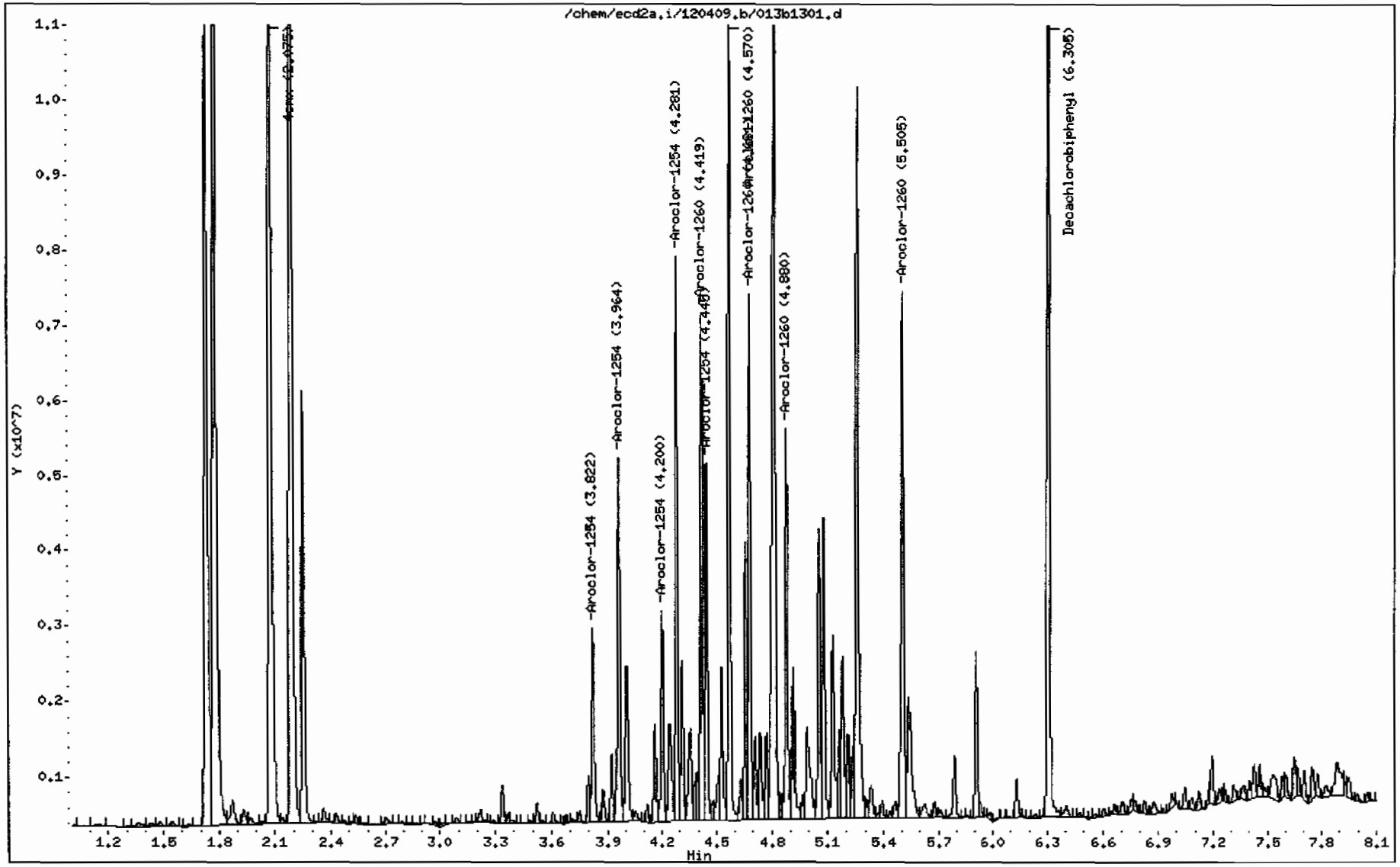

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	50
Run Date:	12/04/2009 10:09	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	1 CLP1	**Level:**	LOW
	012b1201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	181	ug/kg	60.2	181	1
11104-28-2	Aroclor-1221	U	181	ug/kg	60.2	181	1
11141-16-5	Aroclor-1232	U	181	ug/kg	60.2	181	1
53469-21-9	Aroclor-1242	U	181	ug/kg	60.2	181	1
12672-29-6	Aroclor-1248	U	181	ug/kg	60.2	181	1
11097-69-1	Aroclor-1254		2110	ug/kg	60.2	181	1
11096-82-5	Aroclor-1260	P	1370	ug/kg	60.2	181	2

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/012f1201.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 04-DEC-2009 10:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241423004|50|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 12
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	212732	3.68614	6.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	176504	3.21916	5.8	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.246	3.246	0.000	2139487	1028.57	1860	80.00- 120.00	100.00
3.428	3.429	-0.001	2688371	969.783	1750	114.57- 154.57	125.65
3.697	3.698	-0.001	4811363	1285.64	2320	164.46- 204.46	224.88
3.890	3.890	0.000	2713056	974.971	1760	116.33- 156.33	126.81
4.018	4.019	-0.001	4331992	1569.54	2840	109.04- 149.04	202.48
			Average of Peak Concentrations =		2110		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.019	-0.001	4331992	1065.21	1920	80.00- 120.00	100.00
4.290	4.290	0.000	749161	296.308	535	41.10- 81.10	17.29
4.456	4.456	0.000	748759	289.857	524	42.35- 82.35	17.28
4.667	4.668	-0.001	1742821	288.733	522	126.34- 166.34	40.23
4.857	4.857	0.000	1072474	368.301	665	49.78- 89.78	24.76
			Average of Peak Concentrations =		833		

Data File: /chem/ecd2a.i/120409.b/012f1201.d

Date : 04-DEC-2009 10:09

Client ID: WST03-10-2131

Sample Info: |241423004|501

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

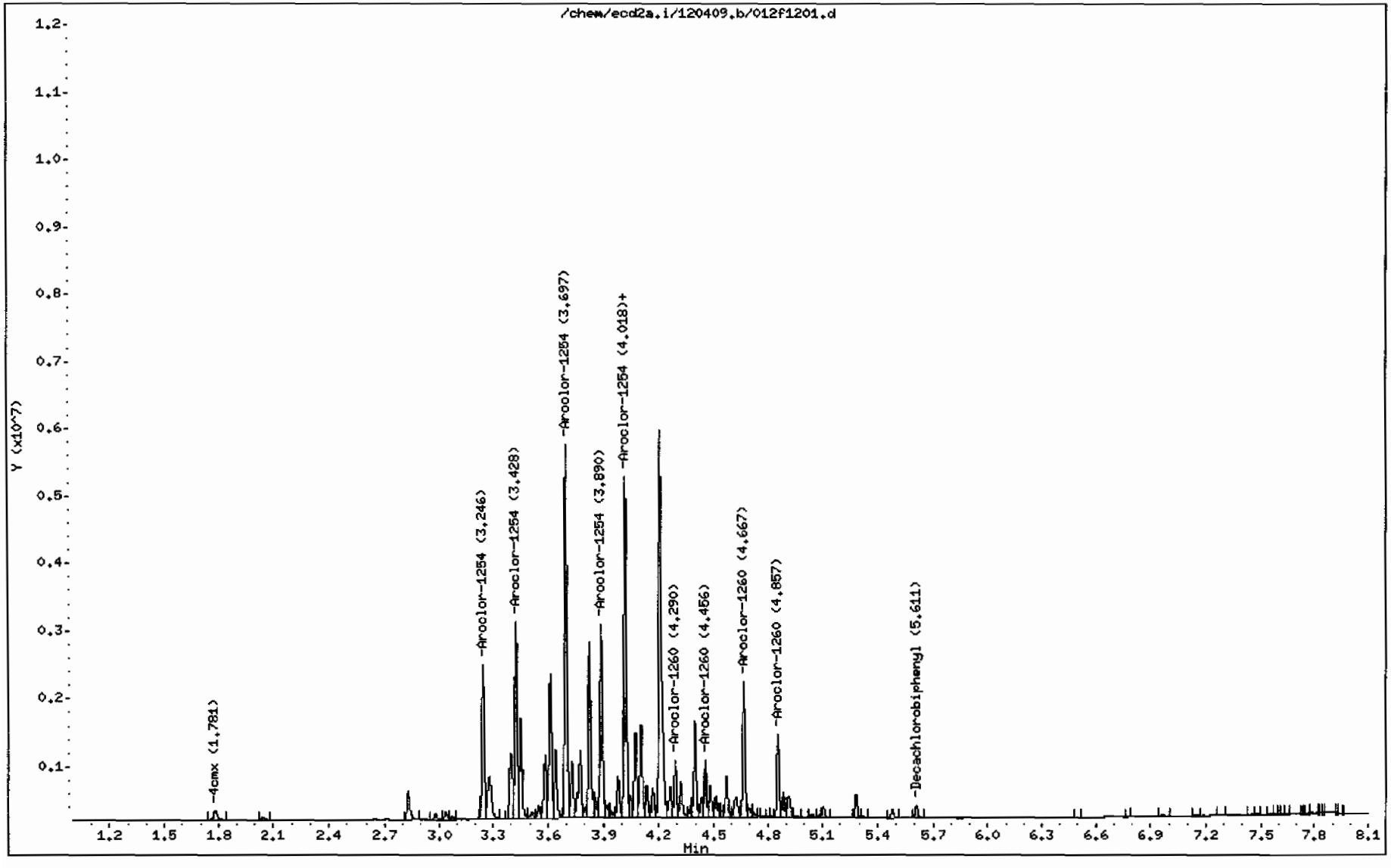

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/012b1201.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 04-DEC-2009 10:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241423004|50|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 12
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	367836	3.11198	5.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	312256	2.87419	5.2	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	5015113	1005.98	1820	80.00- 120.00	100.00
3.964	3.965	-0.001	5871803	1012.56	1830	96.52- 136.52	117.08
4.200	4.200	0.000	3883332	965.285	1740	62.32- 102.32	77.43
4.282	4.281	0.001	10474067	1354.75	2450	137.92- 177.92	208.85
4.445	4.445	0.000	5400170	962.888	1740	90.15- 130.15	107.68
			Average of Peak Concentrations =		1920		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.420	-0.002	5541990	1005.32	1820	80.00- 120.00	100.00
4.570	4.570	0.000	6749296	946.344	1710	107.74- 147.74	121.78
4.681	4.682	-0.001	5326418	1125.77	2030	64.97- 104.97	96.11
4.880	4.880	0.000	2316009	399.267	721	79.48- 119.48	41.79
5.506	5.505	0.001	2878804	318.428	575	137.38- 177.38	51.95
Average of Peak Concentrations =					1370		

Data File: /chem/ecd2a.i/120409.b/012b1201.d

Date : 04-DEC-2009 10:09

Client ID: WST03-10-2131

Sample Info: |241423004|50|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

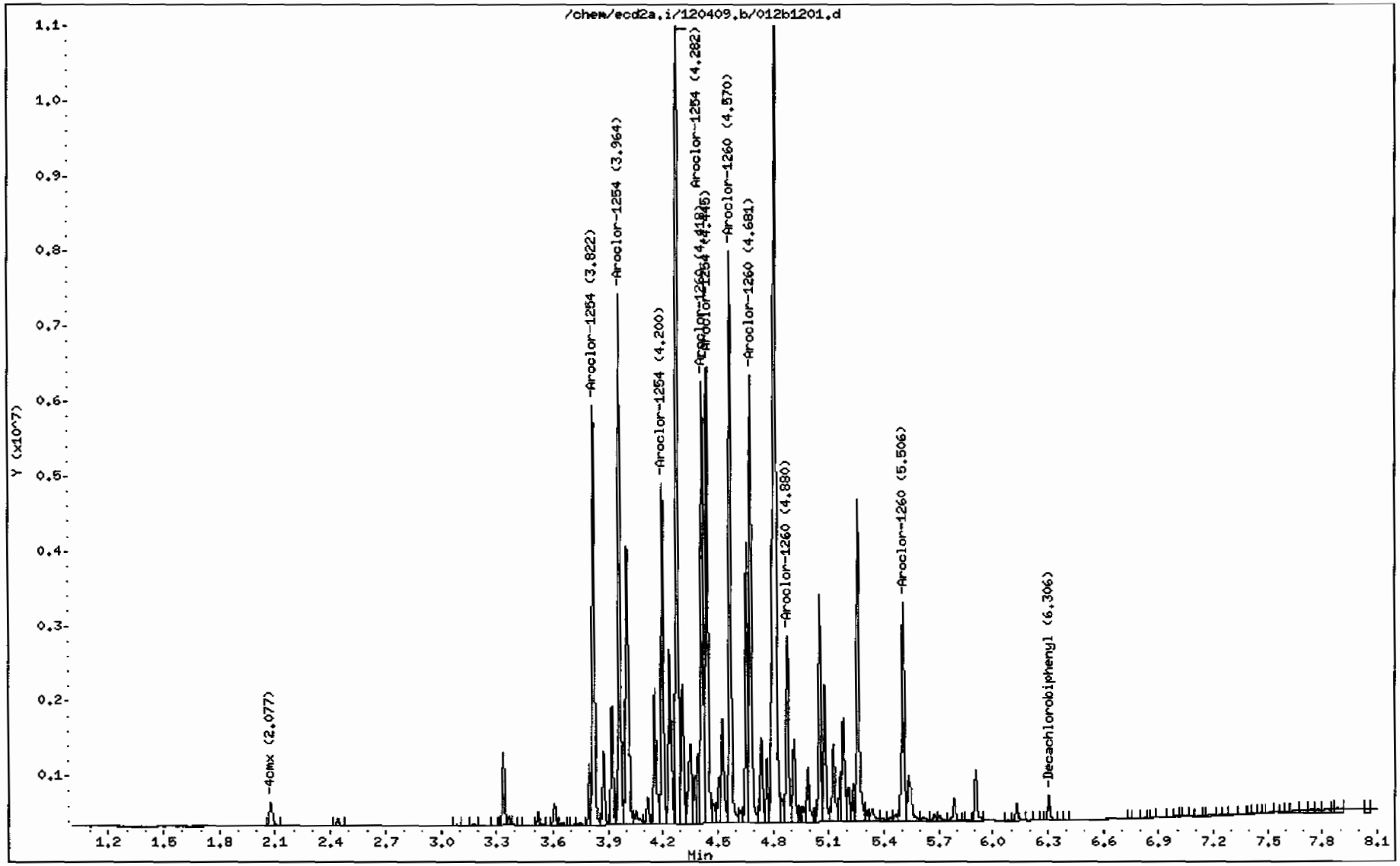

STANDARDS DATA

Report Date: 09-Dec-2009 07:15

Calibration History

Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d

12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 14:05	AR1660	/chem/ecd2a.i/120309.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 00:16	AR1660	/chem/ecd2a.i/120309.b/088f8801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 22:36	AR1660	/chem/ecd2a.i/120309.b/079f7901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 20:23	AR1660	/chem/ecd2a.i/120309.b/067f6701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 18:09	AR1660	/chem/ecd2a.i/120309.b/055f5501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 16:18	AR1660	/chem/ecd2a.i/120309.b/045f4501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:17	AR1221	/chem/ecd2a.i/120309.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 11:52	AR1660	/chem/ecd2a.i/120309.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:39	AR1268	/chem/ecd2a.i/120309.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:28	AR1262	/chem/ecd2a.i/120309.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:54	AR1248	/chem/ecd2a.i/120309.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:05	AR1232	/chem/ecd2a.i/120309.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:43	AR1242	/chem/ecd2a.i/120309.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:32	AR1254	/chem/ecd2a.i/120309.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:21	AR1660	/chem/ecd2a.i/120309.b/002f0201.d

Report Date: 03-Dec-2009 12:34

Calibration History

Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 11:52	AR1660	/chem/ecd2a.i/120309.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:39	AR1268	/chem/ecd2a.i/120309.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:28	AR1262	/chem/ecd2a.i/120309.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:17	AR1221	/chem/ecd2a.i/120309.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:05	AR1232	/chem/ecd2a.i/120309.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:54	AR1248	/chem/ecd2a.i/120309.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:43	AR1242	/chem/ecd2a.i/120309.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:32	AR1254	/chem/ecd2a.i/120309.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:21	AR1660	/chem/ecd2a.i/120309.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 12:17 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.280	2.250-2.310	2.100e+03
	2.601	2.571-2.631	4.505e+03
	2.692	2.662-2.722	1.820e+03
	2.827	2.797-2.857	9.329e+02
	2.978	2.948-3.008	1.378e+03
2 Aroclor-1221	1.446	1.416-1.476	4.641e+02
	1.905	1.875-1.935	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.033	2.003-2.063	1.165e+03
	2.280	2.250-2.310	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.736	2.706-2.766	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.979	2.949-3.009	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
		3.428	3.398-3.458	2.772e+03
		3.697	3.667-3.727	3.742e+03
		3.888	3.858-3.918	2.783e+03
		4.018	3.988-4.048	2.760e+03
	7 Aroclor-1260	4.016	3.986-4.046	4.067e+03
		4.288	4.258-4.318	2.528e+03
		4.454	4.424-4.484	2.583e+03
		4.665	4.635-4.695	6.036e+03
		4.855	4.825-4.885	2.912e+03
	8 Aroclor-1262	3.827	3.797-3.857	2.273e+03
		4.018	3.988-4.048	3.072e+03
		4.289	4.259-4.319	4.004e+03
		4.455	4.425-4.485	3.573e+03
		4.857	4.827-4.887	2.501e+03
	9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
		4.912	4.882-4.942	9.361e+03
		5.045	5.015-5.075	7.073e+03
		5.283	5.253-5.313	3.056e+03
		5.480	5.450-5.510	2.201e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.779	1.749-1.809	5.771e+04
$	12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
	13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
	14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
	15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 12:15 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.750	2.720-2.780	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.335	3.305-3.365	1.979e+03
	3.364	3.334-3.394	2.061e+03
	3.521	3.491-3.551	2.754e+03
2 Aroclor-1221	2.299	2.269-2.329	1.263e+03
	2.404	2.374-2.434	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.448	2.418-2.478	2.061e+03
	2.751	2.721-2.781	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.257	3.227-3.287	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.751	2.721-2.781	3.445e+03
	3.185	3.155-3.215	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.335	3.305-3.365	1.508e+03
	3.522	3.492-3.552	2.145e+03
5 Aroclor-1248	3.336	3.306-3.366	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.797	3.767-3.827	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.822	3.792-3.852	4.985e+03
	3.963	3.933-3.993	5.799e+03
	4.200	4.170-4.230	4.023e+03
	4.280	4.250-4.310	7.731e+03
	4.443	4.413-4.473	5.608e+03
7 Aroclor-1260	4.418	4.388-4.448	5.513e+03
	4.569	4.539-4.599	7.132e+03
	4.680	4.650-4.710	4.731e+03
	4.878	4.848-4.908	5.801e+03
	5.504	5.474-5.534	9.041e+03
8 Aroclor-1262	4.418	4.388-4.448	4.703e+03
	4.570	4.540-4.600	5.853e+03
	4.879	4.849-4.909	8.946e+03
	5.079	5.049-5.109	7.772e+03
	5.258	5.228-5.288	1.672e+04
9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
	5.535	5.505-5.565	2.018e+04
	5.707	5.677-5.737	1.496e+04
	5.907	5.877-5.937	6.438e+03
	6.131	6.101-6.161	4.409e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.075	2.045-2.105	1.182e+05
$ 12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Cal Date : 03-Dec-2009 12:17 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008f0801.d
Level 2: /chem/ecd2a.i/120209.b/009f0901.d
Level 3: /chem/ecd2a.i/120209.b/010f1001.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/120209.b/012f1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	$\overline{RRF}$	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

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INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Cal Date : 03-Dec-2009 12:17 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
(2)	2598	2539	2501	2535	2469	2528	1.903
(3)	2625	2577	2548	2609	2557	2583	1.287
(4)	5914	5894	5999	6196	6179	6036	2.381
(5)	2944	2846	2851	2940	2978	2912	2.044
8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
(2)	3295	3066	3031	3051	2917	3072	4.482
(3)	4237	3997	3977	3997	3815	4004	3.763
(4)	3754	3532	3556	3594	3430	3573	3.295
(5)	2578	2453	2481	2538	2454	2501	2.217
9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
(2)	9332	9272	9238	9197	9765	9361	2.470
(3)	6985	6923	6953	6984	7523	7073	3.568
(4)	3112	3015	2984	2964	3207	3056	3.331
(5)	21397	21592	21760	21851	23464	22013	3.767
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$ 11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$ 12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Cal Date : 03-Dec-2009 12:15 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008b0801.d
Level 2: /chem/ecd2a.i/120209.b/009b0901.d
Level 3: /chem/ecd2a.i/120209.b/010b1001.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/120209.b/012b1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Cal Date : 03-Dec-2009 12:15 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

Report Date: 07-Dec-2009 10:04

Calibration History

Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 01:17	AR1660	/chem/ecd2a.i/120409.b/092f9201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:14	AR1660	/chem/ecd2a.i/120409.b/081f8101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:01	AR1660	/chem/ecd2a.i/120409.b/069f6901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:05	AR1660	/chem/ecd2a.i/120409.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:21	AR1660	/chem/ecd2a.i/120409.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 15:03	AR1660	/chem/ecd2a.i/120409.b/038f3801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 12:44	AR1660	/chem/ecd2a.i/120409.b/026f2601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:31	AR1660	/chem/ecd2a.i/120409.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:36	AR1268	/chem/ecd2a.i/120409.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:25	AR1262	/chem/ecd2a.i/120409.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:14	AR1221	/chem/ecd2a.i/120409.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:02	AR1232	/chem/ecd2a.i/120409.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:51	AR1248	/chem/ecd2a.i/120409.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:40	AR1242	/chem/ecd2a.i/120409.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:29	AR1254	/chem/ecd2a.i/120409.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:18	AR1660	/chem/ecd2a.i/120409.b/002f0201.d

Report Date: 04-Dec-2009 11:50

Calibration History

Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:31	AR1660	/chem/ecd2a.i/120409.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:36	AR1268	/chem/ecd2a.i/120409.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:25	AR1262	/chem/ecd2a.i/120409.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:14	AR1221	/chem/ecd2a.i/120409.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:02	AR1232	/chem/ecd2a.i/120409.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:51	AR1248	/chem/ecd2a.i/120409.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:40	AR1242	/chem/ecd2a.i/120409.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:29	AR1254	/chem/ecd2a.i/120409.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:18	AR1660	/chem/ecd2a.i/120409.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 10:54 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.282	2.252-2.312	2.100e+03
	2.604	2.574-2.634	4.505e+03
	2.695	2.665-2.725	1.820e+03
	2.830	2.800-2.860	9.329e+02
	2.980	2.950-3.010	1.378e+03
2 Aroclor-1221	1.446	1.416-1.476	4.641e+02
	1.906	1.876-1.936	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.035	2.005-2.065	1.165e+03
	2.281	2.251-2.311	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.737	2.707-2.767	5.102e+02
	2.980	2.950-3.010	5.840e+02
4 Aroclor-1242	2.282	2.252-2.312	1.733e+03
	2.695	2.665-2.725	1.484e+03
	2.737	2.707-2.767	9.058e+02
	2.830	2.800-2.860	7.269e+02
	2.980	2.950-3.010	1.120e+03
5 Aroclor-1248	2.829	2.799-2.859	1.527e+03
	2.980	2.950-3.010	2.027e+03
	3.039	3.009-3.069	1.571e+03
	3.274	3.244-3.304	2.218e+03
	3.427	3.397-3.457	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.246	3.216-3.276	2.080e+03
	3.429	3.399-3.459	2.772e+03
	3.698	3.668-3.728	3.742e+03
	3.890	3.860-3.920	2.783e+03
	4.019	3.989-4.049	2.760e+03
7 Aroclor-1260	4.019	3.989-4.049	4.067e+03
	4.290	4.260-4.320	2.528e+03
	4.456	4.426-4.486	2.583e+03
	4.668	4.638-4.698	6.036e+03
	4.857	4.827-4.887	2.912e+03
8 Aroclor-1262	3.828	3.798-3.858	2.273e+03
	4.019	3.989-4.049	3.072e+03
	4.290	4.261-4.320	4.004e+03
	4.455	4.426-4.486	3.573e+03
	4.857	4.827-4.887	2.501e+03
9 Aroclor-1268	4.887	4.857-4.917	9.392e+03
	4.913	4.883-4.943	9.361e+03
	5.046	5.016-5.076	7.073e+03
	5.284	5.254-5.314	3.056e+03
	5.481	5.451-5.511	2.201e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.781	1.751-1.811	5.771e+04
$ 12 Decachlorobiphenyl	5.611	5.581-5.641	5.483e+04
13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 10:52 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.752	2.722-2.782	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.336	3.306-3.366	1.979e+03
	3.365	3.335-3.395	2.061e+03
	3.524	3.494-3.554	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.404	2.374-2.434	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.449	2.419-2.479	2.061e+03
	2.752	2.722-2.782	1.960e+03
	3.186	3.156-3.216	1.498e+03
	3.258	3.228-3.288	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.752	2.722-2.782	3.445e+03
	3.186	3.156-3.216	2.681e+03
	3.258	3.228-3.288	1.637e+03
	3.337	3.307-3.367	1.508e+03
	3.524	3.494-3.554	2.145e+03
5 Aroclor-1248	3.337	3.307-3.367	3.282e+03
	3.523	3.493-3.553	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.798	3.768-3.828	4.697e+03
	3.828	3.798-3.858	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.823	3.793-3.853	4.985e+03
	3.965	3.935-3.995	5.799e+03
	4.200	4.170-4.230	4.023e+03
	4.281	4.251-4.311	7.731e+03
	4.445	4.415-4.475	5.608e+03
7 Aroclor-1260	4.420	4.390-4.450	5.513e+03
	4.570	4.540-4.600	7.132e+03
	4.682	4.652-4.712	4.731e+03
	4.880	4.850-4.910	5.801e+03
	5.505	5.475-5.535	9.041e+03
8 Aroclor-1262	4.420	4.390-4.450	4.703e+03
	4.571	4.541-4.601	5.853e+03
	4.879	4.849-4.909	8.946e+03
	5.080	5.050-5.110	7.772e+03
	5.258	5.228-5.288	1.672e+04
9 Aroclor-1268	5.504	5.474-5.534	2.032e+04
	5.536	5.506-5.566	2.018e+04
	5.707	5.677-5.737	1.496e+04
	5.907	5.877-5.937	6.438e+03
	6.131	6.101-6.161	4.409e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.077	2.047-2.107	1.182e+05
$ 12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Cal Date : 04-Dec-2009 10:54 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008f0801.d
Level 2: /chem/ecd2a.i/120209.b/009f0901.d
Level 3: /chem/ecd2a.i/120209.b/010f1001.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/120209.b/012f1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	$\overline{RRF}$	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Cal Date : 04-Dec-2009 10:54 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
	(2)	2598	2539	2501	2535	2469	2528	1.903
	(3)	2625	2577	2548	2609	2557	2583	1.287
	(4)	5914	5894	5999	6196	6179	6036	2.381
	(5)	2944	2846	2851	2940	2978	2912	2.044
	8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
	(2)	3295	3066	3031	3051	2917	3072	4.482
	(3)	4237	3997	3977	3997	3815	4004	3.763
	(4)	3754	3532	3556	3594	3430	3573	3.295
	(5)	2578	2453	2481	2538	2454	2501	2.217
	9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
	(2)	9332	9272	9238	9197	9765	9361	2.470
	(3)	6985	6923	6953	6984	7523	7073	3.568
	(4)	3112	3015	2984	2964	3207	3056	3.331
	(5)	21397	21592	21760	21851	23464	22013	3.767
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
	14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
	15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$	11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$	12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Cal Date : 04-Dec-2009 10:52 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008b0801.d
Level 2: /chem/ecd2a.i/120209.b/009b0901.d
Level 3: /chem/ecd2a.i/120209.b/010b1001.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/120209.b/012b1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Cal Date : 04-Dec-2009 10:52 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0821

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2085.253	0.01	-0.7	15.0
(2)	4504.513	4285.927	0.01	-4.8	15.0
(3)	1820.211	1728.701	0.01	-5.0	15.0
(4)	932.883	835.835	0.01	-10.4	15.0
(5)	1378.125	1268.162	0.01	-8.0	15.0
Aroclor-1260	4066.794	4077.459	0.01	0.3	15.0
(2)	2528.317	2528.986	0.01	0.0	15.0
(3)	2583.202	2589.227	0.01	0.2	15.0
(4)	6036.106	6066.223	0.01	0.5	15.0
(5)	2911.947	2891.295	0.01	-0.7	15.0
4cmx	57711.247	61240.300	0.01	6.1	15.0
Decachlorobiphenyl	54829.246	49462.440	0.01	-9.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0821

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4174.215	0.01	-2.0	15.0
(2)	3444.681	3357.939	0.01	-2.5	15.0
(3)	1979.487	1949.046	0.01	-1.5	15.0
(4)	2061.253	2027.884	0.01	-1.6	15.0
(5)	2754.170	2756.943	0.01	0.1	15.0
Aroclor-1260	5512.644	5813.745	0.01	5.5	15.0
(2)	7131.968	7474.901	0.01	4.8	15.0
(3)	4731.365	5007.399	0.01	5.8	15.0
(4)	5800.657	5946.667	0.01	2.5	15.0
(5)	9040.681	9360.400	0.01	3.5	15.0
4cmx	118199.83	131354.53	0.01	11.1	15.0
Decachlorobiphenyl	108641.52	103854.55	0.01	-4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0832

Lab File ID: 003F0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1969.624	0.01	-5.3	15.0
(2)	2772.138	2634.906	0.01	-5.0	15.0
(3)	3742.400	3627.492	0.01	-3.1	15.0
(4)	2782.705	2705.422	0.01	-2.8	15.0
(5)	2760.043	2562.087	0.01	-7.2	15.0
4cmx	57711.247	64723.850	0.01	12.2	15.0
Decachlorobiphenyl	54829.246	53425.320	0.01	-2.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0832

Lab File ID: 003B0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4956.809	0.01	-0.6	15.0	
(2)	5798.946	5759.379	0.01	-0.7	15.0	
(3)	4022.990	4046.006	0.01	0.6	15.0	
(4)	7731.372	7802.109	0.01	0.9	15.0	
(5)	5608.308	5487.038	0.01	-2.2	15.0	
4cmx	118199.83	139202.25	0.01	17.8	15.0	<-
Decachlorobiphenyl	108641.52	112202.84	0.01	3.3	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1618

Lab File ID: 045F4501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2030.518	0.01	-3.3	15.0	
(2)	4504.513	4356.685	0.01	-3.3	15.0	
(3)	1820.211	1743.924	0.01	-4.2	15.0	
(4)	932.883	854.233	0.01	-8.4	15.0	
(5)	1378.125	1309.544	0.01	-5.0	15.0	
Aroclor-1260	4066.794	4096.006	0.01	0.7	15.0	
(2)	2528.317	2491.202	0.01	-1.5	15.0	
(3)	2583.202	2554.375	0.01	-1.1	15.0	
(4)	6036.106	5937.904	0.01	-1.6	15.0	
(5)	2911.947	2831.785	0.01	-2.8	15.0	
4cmx	57711.247	62043.470	0.01	7.5	15.0	
Decachlorobiphenyl	54829.246	44093.980	0.01	-19.6	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1618

Lab File ID: 045B4501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4216.212	0.01	-1.0	15.0	
(2)	3444.681	3405.549	0.01	-1.1	15.0	
(3)	1979.487	1963.953	0.01	-0.8	15.0	
(4)	2061.253	2065.526	0.01	0.2	15.0	
(5)	2754.170	2798.242	0.01	1.6	15.0	
Aroclor-1260	5512.644	5729.480	0.01	3.9	15.0	
(2)	7131.968	7299.919	0.01	2.4	15.0	
(3)	4731.365	4829.058	0.01	2.1	15.0	
(4)	5800.657	5716.115	0.01	-1.4	15.0	
(5)	9040.681	8826.543	0.01	-2.4	15.0	
4cmx	118199.83	132813.10	0.01	12.4	15.0	
Decachlorobiphenyl	108641.52	86887.570	0.01	-20.0	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1809

Lab File ID: 055F5501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2047.399	0.01	-2.5	15.0
(2)	4504.513	4384.029	0.01	-2.7	15.0
(3)	1820.211	1759.330	0.01	-3.3	15.0
(4)	932.883	883.630	0.01	-5.3	15.0
(5)	1378.125	1281.466	0.01	-7.0	15.0
Aroclor-1260	4066.794	4145.972	0.01	1.9	15.0
(2)	2528.317	2544.535	0.01	0.6	15.0
(3)	2583.202	2603.734	0.01	0.8	15.0
(4)	6036.106	6101.061	0.01	1.1	15.0
(5)	2911.947	2916.980	0.01	0.2	15.0
4cmx	57711.247	62578.520	0.01	8.4	15.0
Decachlorobiphenyl	54829.246	47400.040	0.01	-13.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1809

Lab File ID: 055B5501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4268.280	0.01	0.2	15.0
(2)	3444.681	3465.346	0.01	0.6	15.0
(3)	1979.487	2011.970	0.01	1.6	15.0
(4)	2061.253	2064.024	0.01	0.1	15.0
(5)	2754.170	2847.951	0.01	3.4	15.0
Aroclor-1260	5512.644	5893.238	0.01	6.9	15.0
(2)	7131.968	7495.996	0.01	5.1	15.0
(3)	4731.365	4978.184	0.01	5.2	15.0
(4)	5800.657	5877.103	0.01	1.3	15.0
(5)	9040.681	9056.734	0.01	0.2	15.0
4cmx	118199.83	134094.29	0.01	13.4	15.0
Decachlorobiphenyl	108641.52	94981.590	0.01	-12.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0818

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2071.757	0.01	-1.3	15.0
(2)	4504.513	4297.144	0.01	-4.6	15.0
(3)	1820.211	1704.431	0.01	-6.4	15.0
(4)	932.883	860.050	0.01	-7.8	15.0
(5)	1378.125	1252.180	0.01	-9.1	15.0
Aroclor-1260	4066.794	4085.124	0.01	0.4	15.0
(2)	2528.317	2494.262	0.01	-1.3	15.0
(3)	2583.202	2561.196	0.01	-0.8	15.0
(4)	6036.106	6040.775	0.01	0.1	15.0
(5)	2911.947	2863.737	0.01	-1.6	15.0
4cmx	57711.247	61632.170	0.01	6.8	15.0
Decachlorobiphenyl	54829.246	47372.580	0.01	-13.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0818

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4225.102	0.01	-0.8	15.0
(2)	3444.681	3391.994	0.01	-1.5	15.0
(3)	1979.487	1966.559	0.01	-0.6	15.0
(4)	2061.253	2066.552	0.01	0.2	15.0
(5)	2754.170	2798.287	0.01	1.6	15.0
Aroclor-1260	5512.644	5841.697	0.01	6.0	15.0
(2)	7131.968	7492.876	0.01	5.1	15.0
(3)	4731.365	5012.957	0.01	6.0	15.0
(4)	5800.657	5917.428	0.01	2.0	15.0
(5)	9040.681	9352.254	0.01	3.4	15.0
4cmx	118199.83	133352.68	0.01	12.8	15.0
Decachlorobiphenyl	108641.52	98848.300	0.01	-9.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0829

Lab File ID: 003F0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1983.593	0.01	-4.6	15.0
(2)	2772.138	2669.352	0.01	-3.7	15.0
(3)	3742.400	3658.875	0.01	-2.2	15.0
(4)	2782.705	2704.227	0.01	-2.8	15.0
(5)	2760.043	2559.579	0.01	-7.3	15.0
4cmx	57711.247	65316.300	0.01	13.2	15.0
Decachlorobiphenyl	54829.246	49176.270	0.01	-10.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0829

Lab File ID: 003B0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	5022.044	0.01	0.7	15.0	
(2)	5798.946	5851.683	0.01	0.9	15.0	
(3)	4022.990	4134.285	0.01	2.8	15.0	
(4)	7731.372	7930.967	0.01	2.6	15.0	
(5)	5608.308	5531.600	0.01	-1.4	15.0	
4cmx	118199.83	142741.03	0.01	20.8	15.0	<-
Decachlorobiphenyl	108641.52	102054.27	0.01	-6.1	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 1031

Lab File ID: 014F1401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2036.570	0.01	-3.0	15.0	
(2)	4504.513	4386.282	0.01	-2.6	15.0	
(3)	1820.211	1769.419	0.01	-2.8	15.0	
(4)	932.883	885.419	0.01	-5.1	15.0	
(5)	1378.125	1327.543	0.01	-3.7	15.0	
Aroclor-1260	4066.794	4147.508	0.01	2.0	15.0	
(2)	2528.317	2533.961	0.01	0.2	15.0	
(3)	2583.202	2585.807	0.01	0.1	15.0	
(4)	6036.106	6069.416	0.01	0.6	15.0	
(5)	2911.947	2894.297	0.01	-0.6	15.0	
4cmx	57711.247	62751.120	0.01	8.7	15.0	
Decachlorobiphenyl	54829.246	46167.240	0.01	-15.8	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 1031

Lab File ID: 014B1401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4276.331	0.01	0.4	15.0
(2)	3444.681	3460.999	0.01	0.5	15.0
(3)	1979.487	1994.688	0.01	0.8	15.0
(4)	2061.253	2072.725	0.01	0.6	15.0
(5)	2754.170	2846.623	0.01	3.4	15.0
Aroclor-1260	5512.644	5875.456	0.01	6.6	15.0
(2)	7131.968	7505.516	0.01	5.2	15.0
(3)	4731.365	4992.600	0.01	5.5	15.0
(4)	5800.657	5844.982	0.01	0.8	15.0
(5)	9040.681	9246.938	0.01	2.3	15.0
4cmx	118199.83	135053.80	0.01	14.2	15.0
Decachlorobiphenyl	108641.52	97857.660	0.01	-9.9	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 08:21
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6124030	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	4946244	100.000	90.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2085253	1000.00	993	80.00- 120.00	100.00(M)
2.601	2.601	0.000	4285927	1000.00	951	185.54- 225.54	205.54
2.692	2.692	0.000	1728701	1000.00	950	62.90- 102.90	82.90
2.827	2.827	0.000	835835	1000.00	896	20.08- 60.08	40.08
2.978	2.978	0.000	1268162	1000.00	920	40.82- 80.82	60.82
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.016	0.000	4077459	1000.00	1000	80.00- 120.00	100.00
4.288	4.288	0.000	2528986	1000.00	1000	42.02- 82.02	62.02
4.454	4.454	0.000	2589227	1000.00	1000	43.50- 83.50	63.50
4.665	4.665	0.000	6066223	1000.00	1000	128.77- 168.77	148.77
4.855	4.855	0.000	2891295	1000.00	993	50.91- 90.91	70.91
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/002f0201.d

Date : 03-DEC-2009 08:21

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

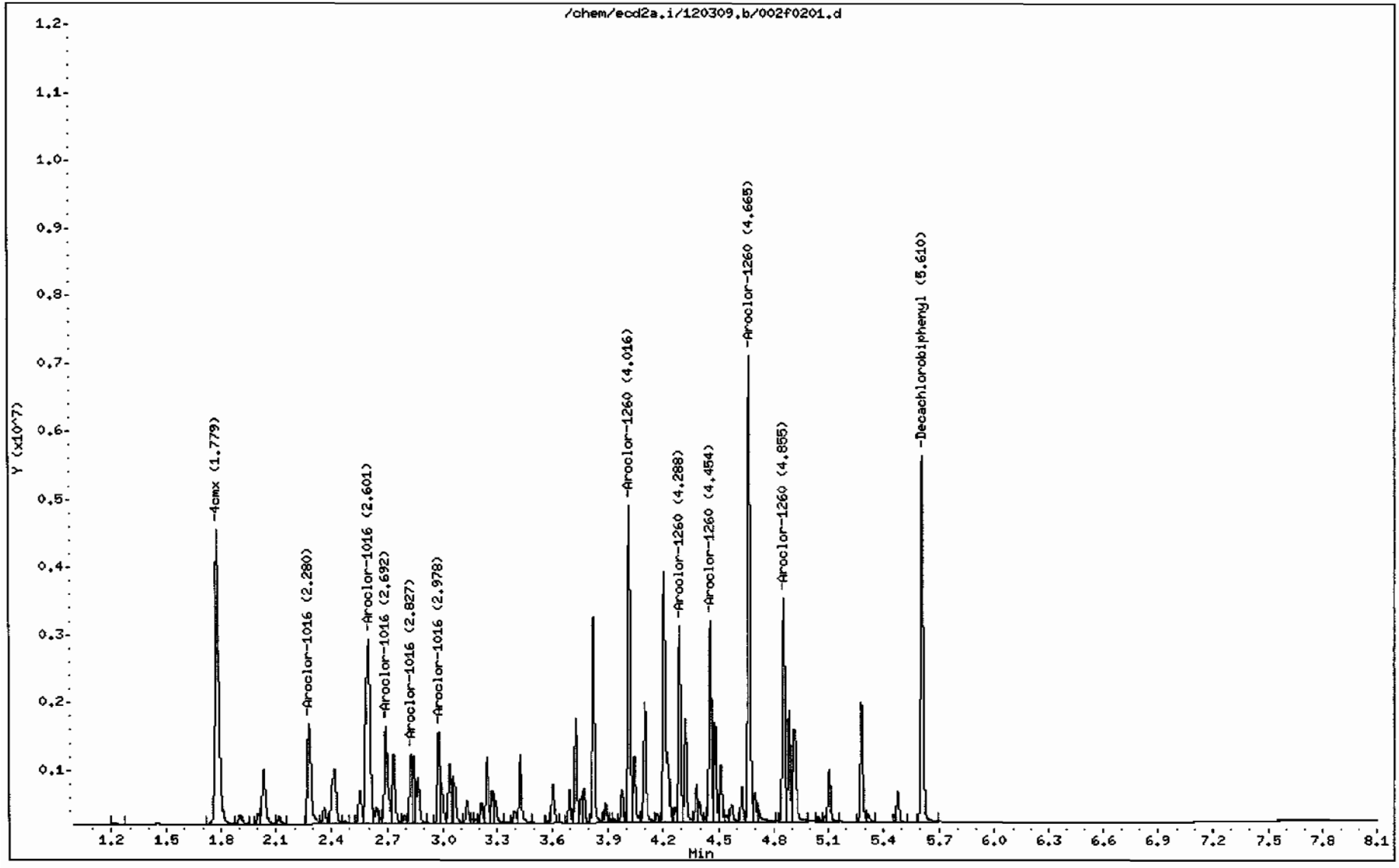

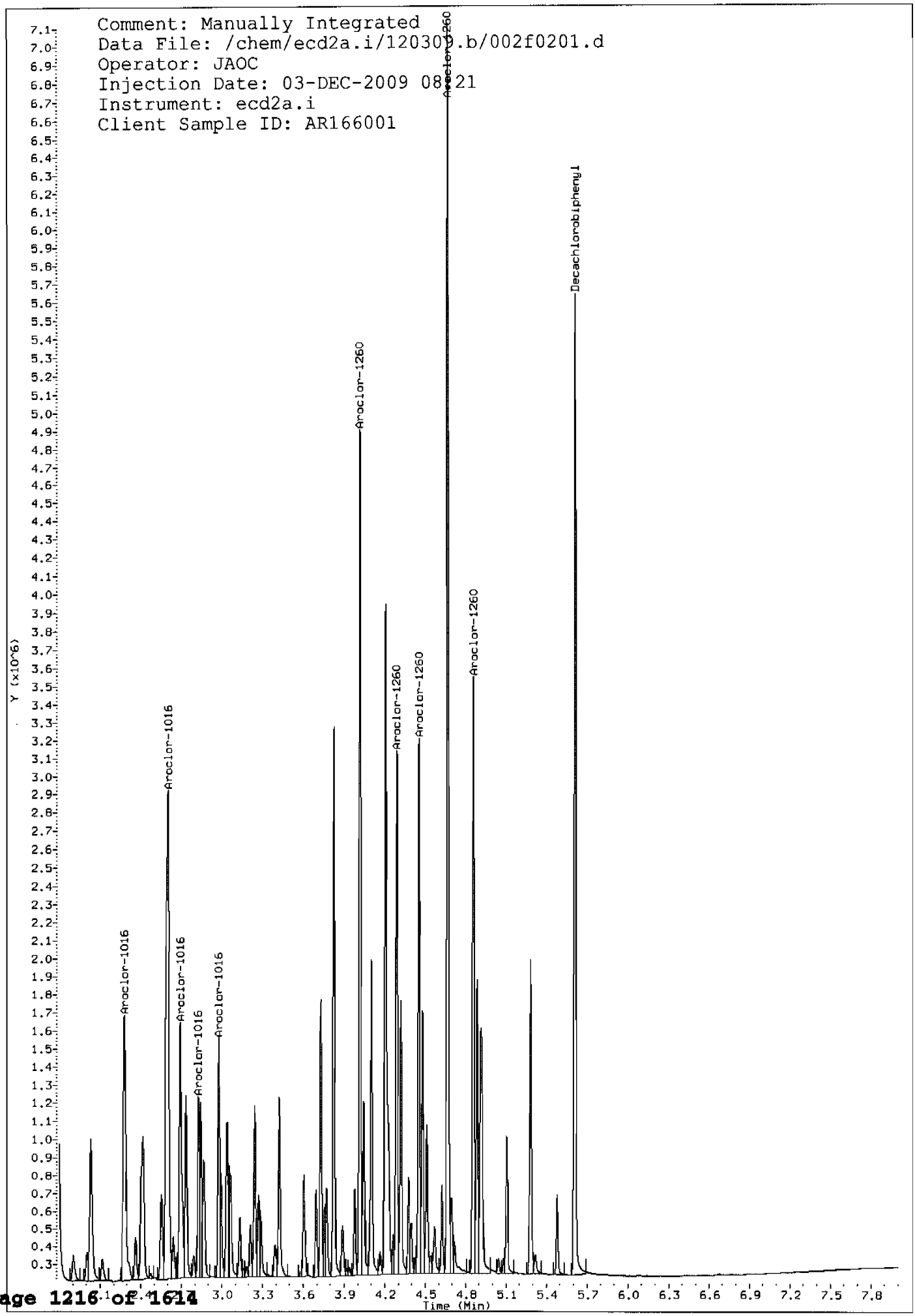
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/002f0201.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:21
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1260
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

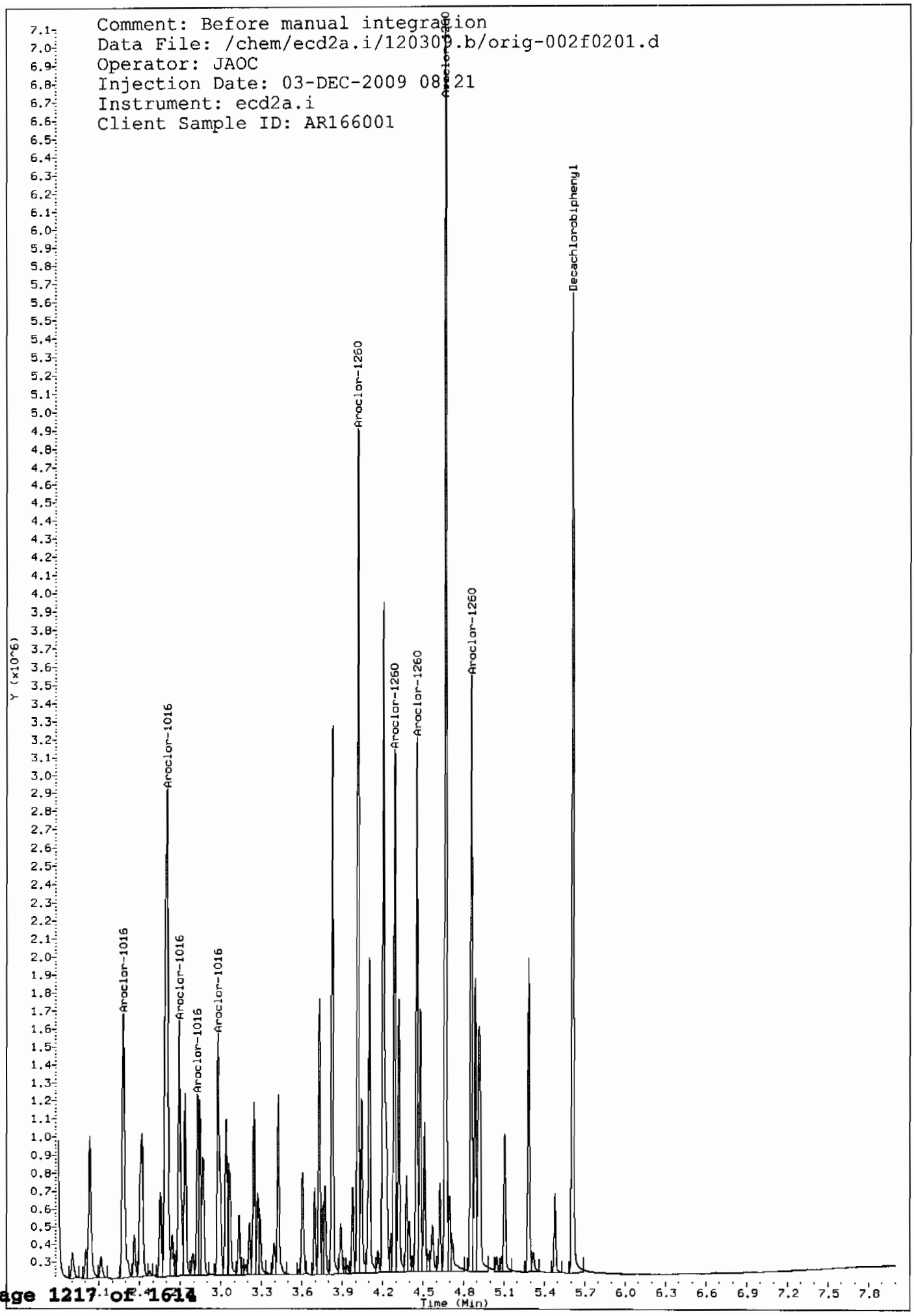
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-002f0201.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:21
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 08:21
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13135453	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10385455	100.000	95.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.750	0.000	4174215	1000.00	980	80.00- 120.00	100.00
3.185	3.185	0.000	3357939	1000.00	975	60.44- 100.44	80.44
3.335	3.335	0.000	1949045	1000.00	985	26.69- 66.69	46.69
3.364	3.364	0.000	2027883	1000.00	984	28.58- 68.58	48.58
3.521	3.521	0.000	2756942	1000.00	1000	46.05- 86.05	66.05
Average of Peak Amounts =					985		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5813745	1000.00	1050	80.00- 120.00	100.00
4.569	4.569	0.000	7474901	1000.00	1050	108.57- 148.57	128.57
4.680	4.680	0.000	5007398	1000.00	1060	66.13- 106.13	86.13
4.878	4.878	0.000	5946667	1000.00	1020	82.29- 122.29	102.29
5.504	5.504	0.000	9360400	1000.00	1040	141.00- 181.00	161.00
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/002b0201.d
Date : 03-DEC-2009 08:21
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

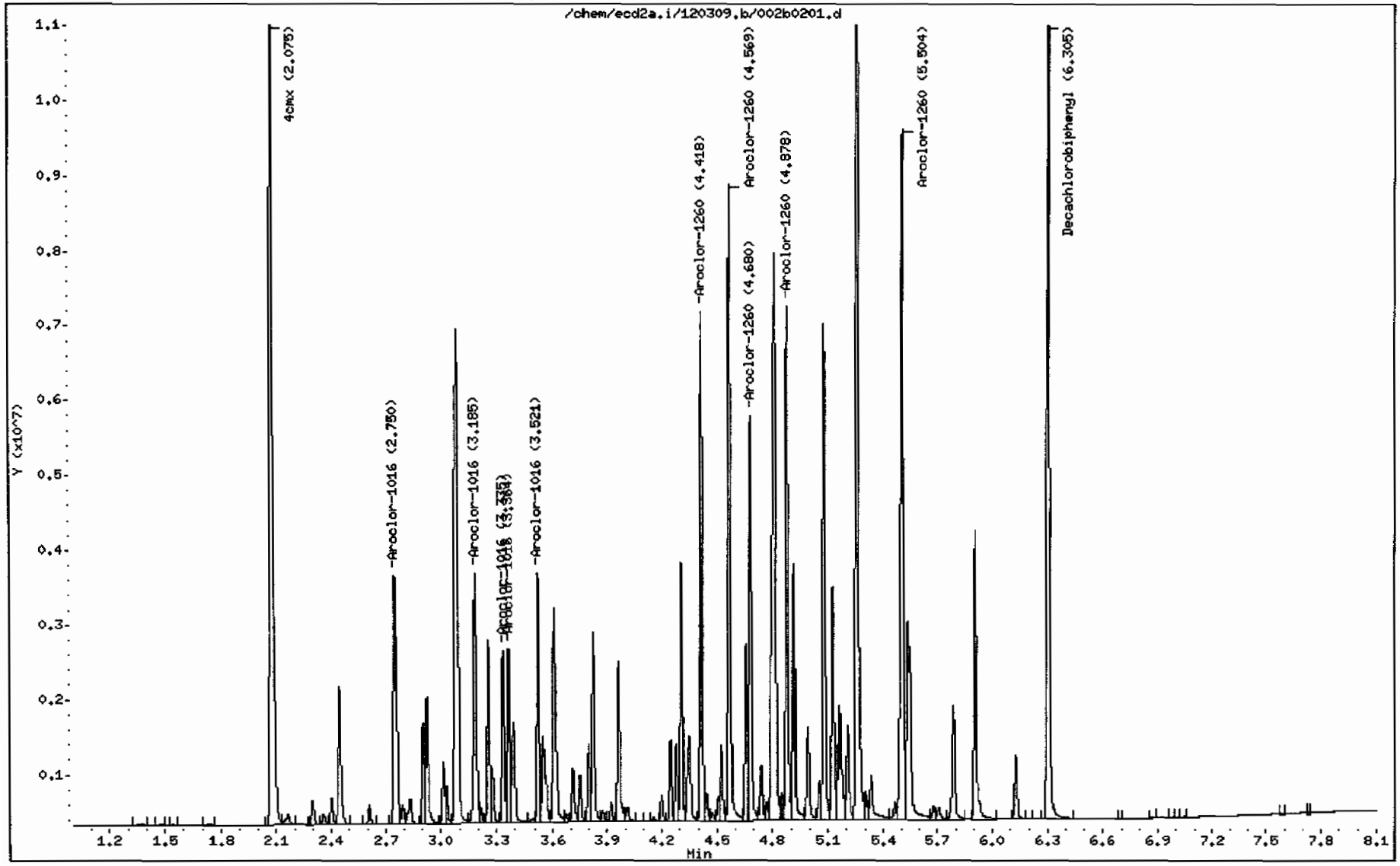

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 08:32
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	6472385	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5342532	100.000	97.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1969623	1000.00	947	80.00- 120.00	100.00
3.428	3.428	0.000	2634906	1000.00	950	113.78- 153.78	133.78
3.697	3.697	0.000	3627492	1000.00	969	164.17- 204.17	184.17
3.888	3.888	0.000	2705421	1000.00	972	117.36- 157.36	137.36
4.018	4.018	0.000	2562087	1000.00	928	110.08- 150.08	130.08
Average of Peak Amounts =					953		

Data File: /chem/ecd2a.i/120309.b/003f0301.d

Date : 03-DEC-2009 08:32

Client ID: AR125401

Sample Info: 1WAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

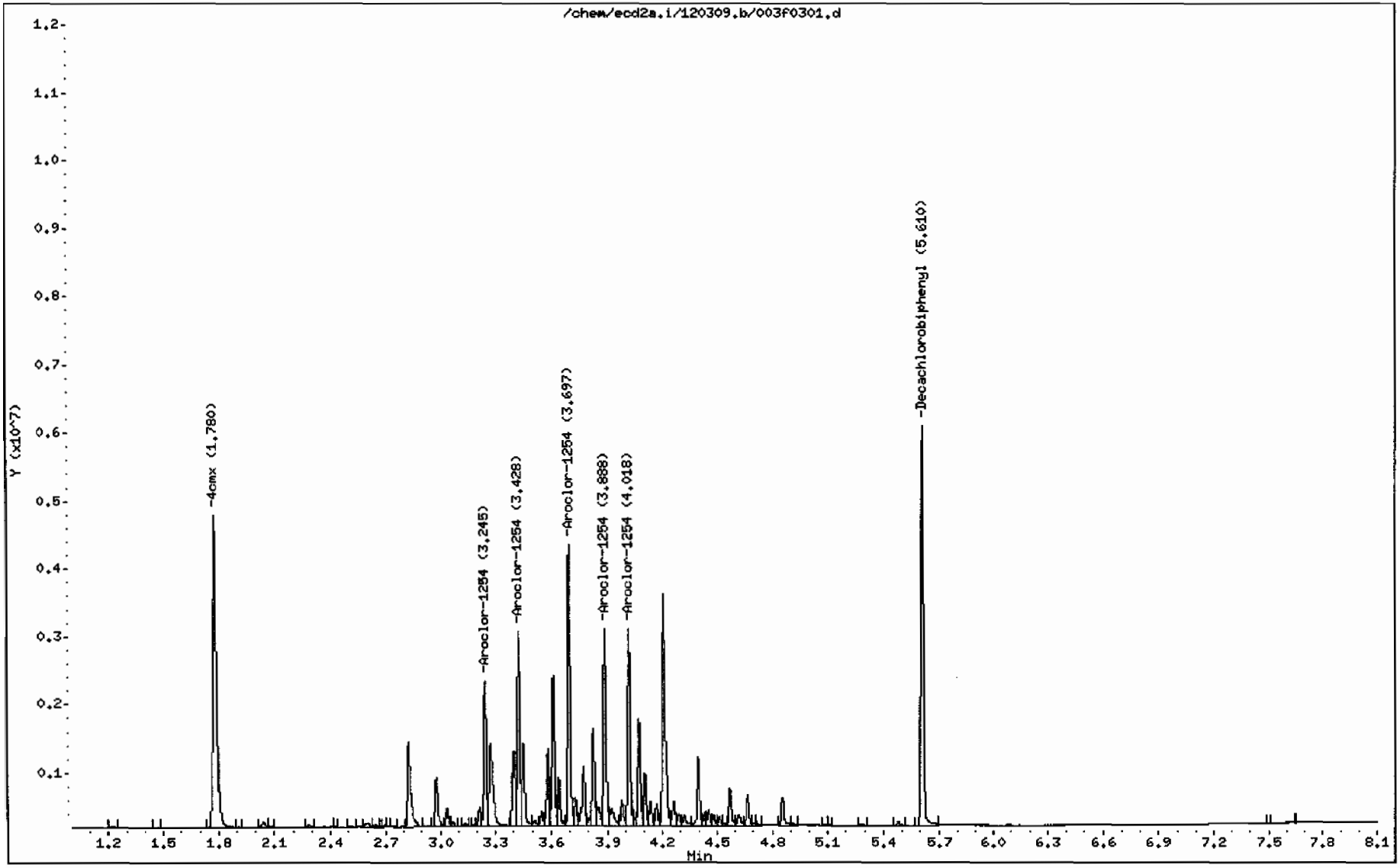

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 08:32
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13920225	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	11220284	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	4956808	1000.00	994	80.00- 120.00	100.00
3.963	3.963	0.000	5759378	1000.00	993	96.19- 136.19	116.19
4.200	4.200	0.000	4046006	1000.00	1000	61.63- 101.63	81.63
4.280	4.280	0.000	7802109	1000.00	1010	137.40- 177.40	157.40
4.443	4.443	0.000	5487038	1000.00	978	90.70- 130.70	110.70
Average of Peak Amounts =					996		

Data File: /chem/ecd2a.i/120309.b/003b0301.d
Date : 03-DEC-2009 08:32
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

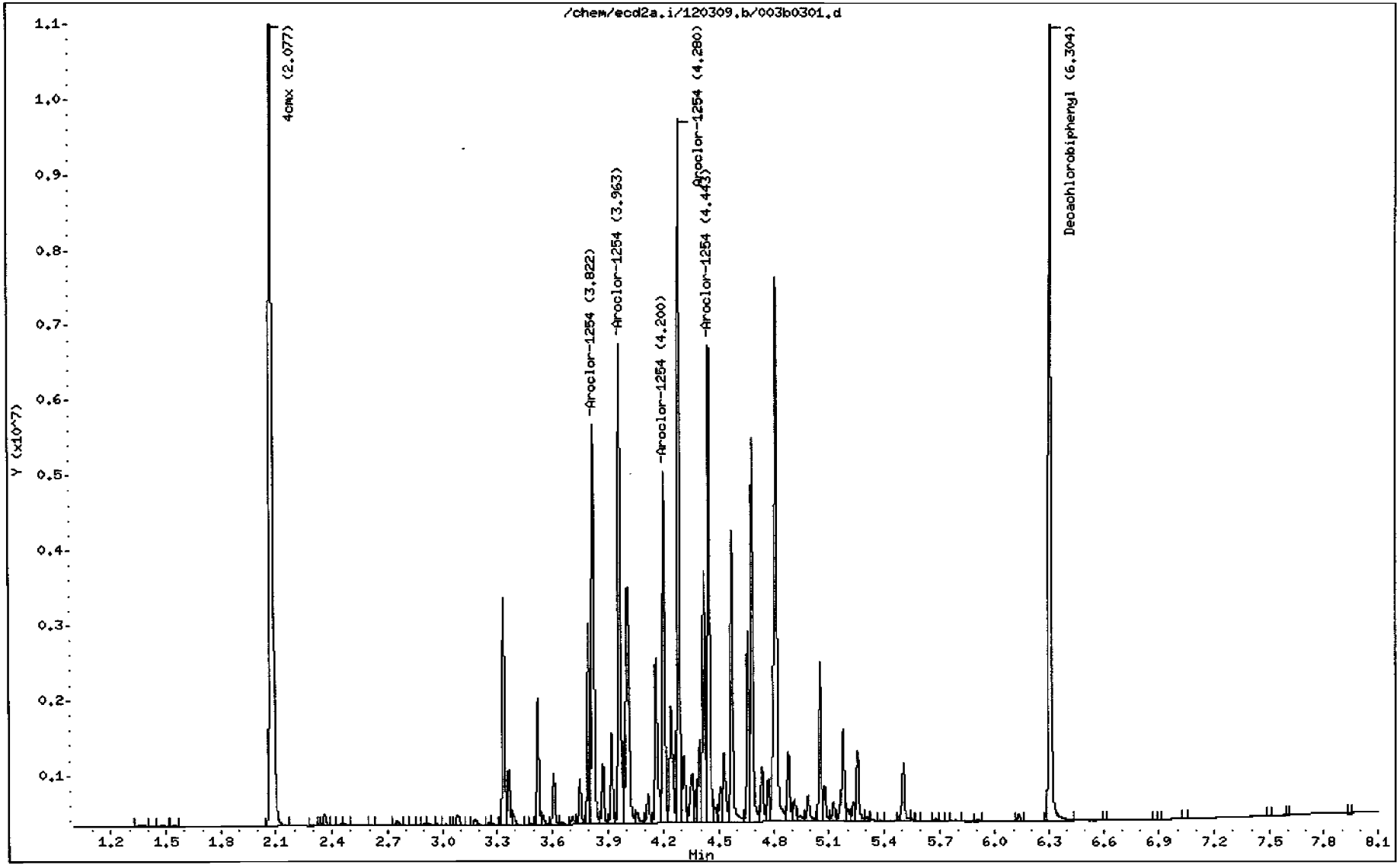

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 08:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6537650	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5242004	100.000	95.6	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1864718	1000.00	1080	80.00- 120.00	100.00(M)
2.693	2.693	0.000	1512911	1000.00	1020	61.13- 101.13	81.13
2.736	2.736	0.000	946427	1000.00	1040	30.75- 70.75	50.75
2.828	2.828	0.000	758891	1000.00	1040	20.70- 60.70	40.70
2.979	2.979	0.000	1214381	1000.00	1080	45.12- 85.12	65.12

Average of Peak Amounts = 1.05e+03

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/004f0401.d
Date : 03-DEC-2009 08:43
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

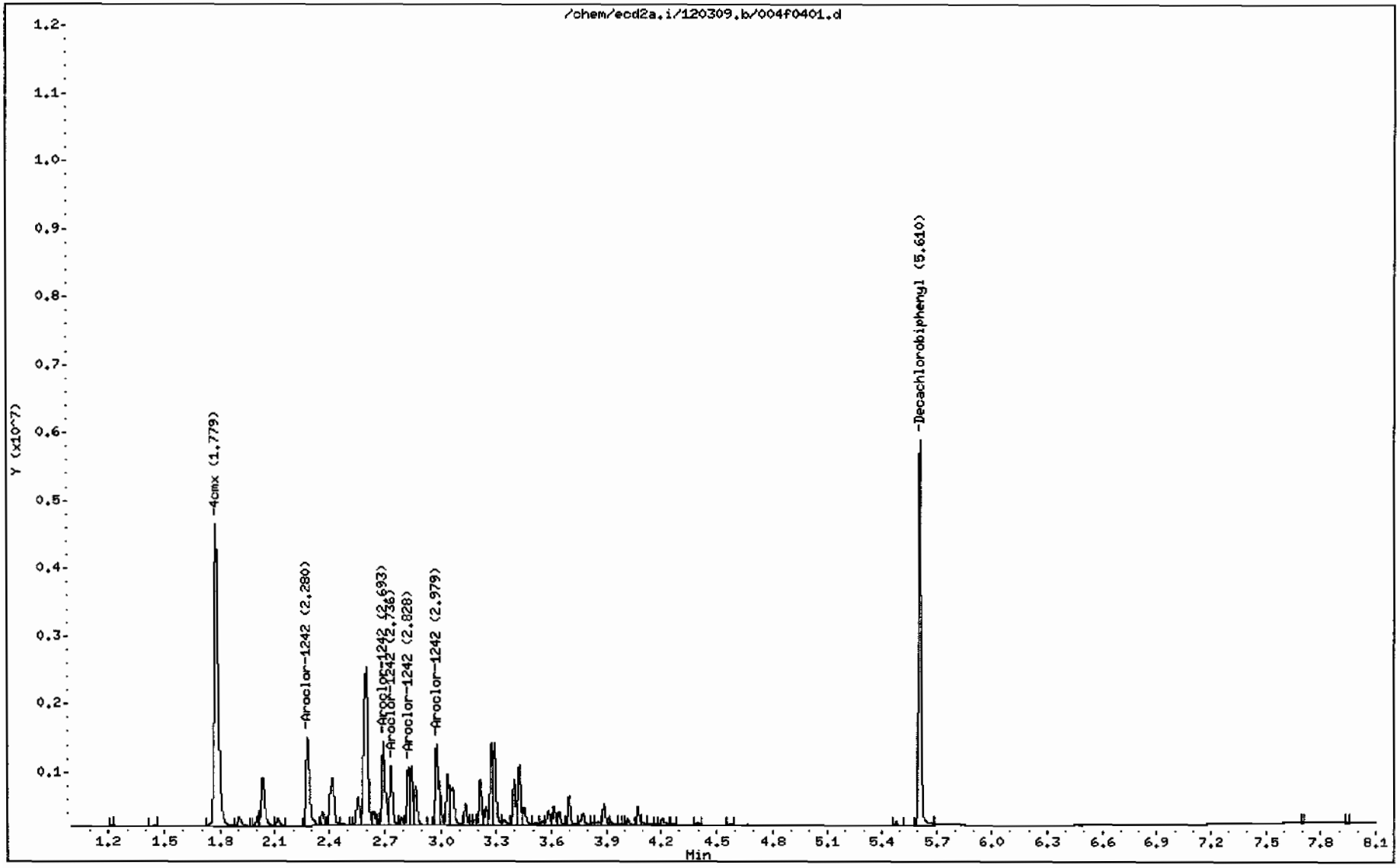

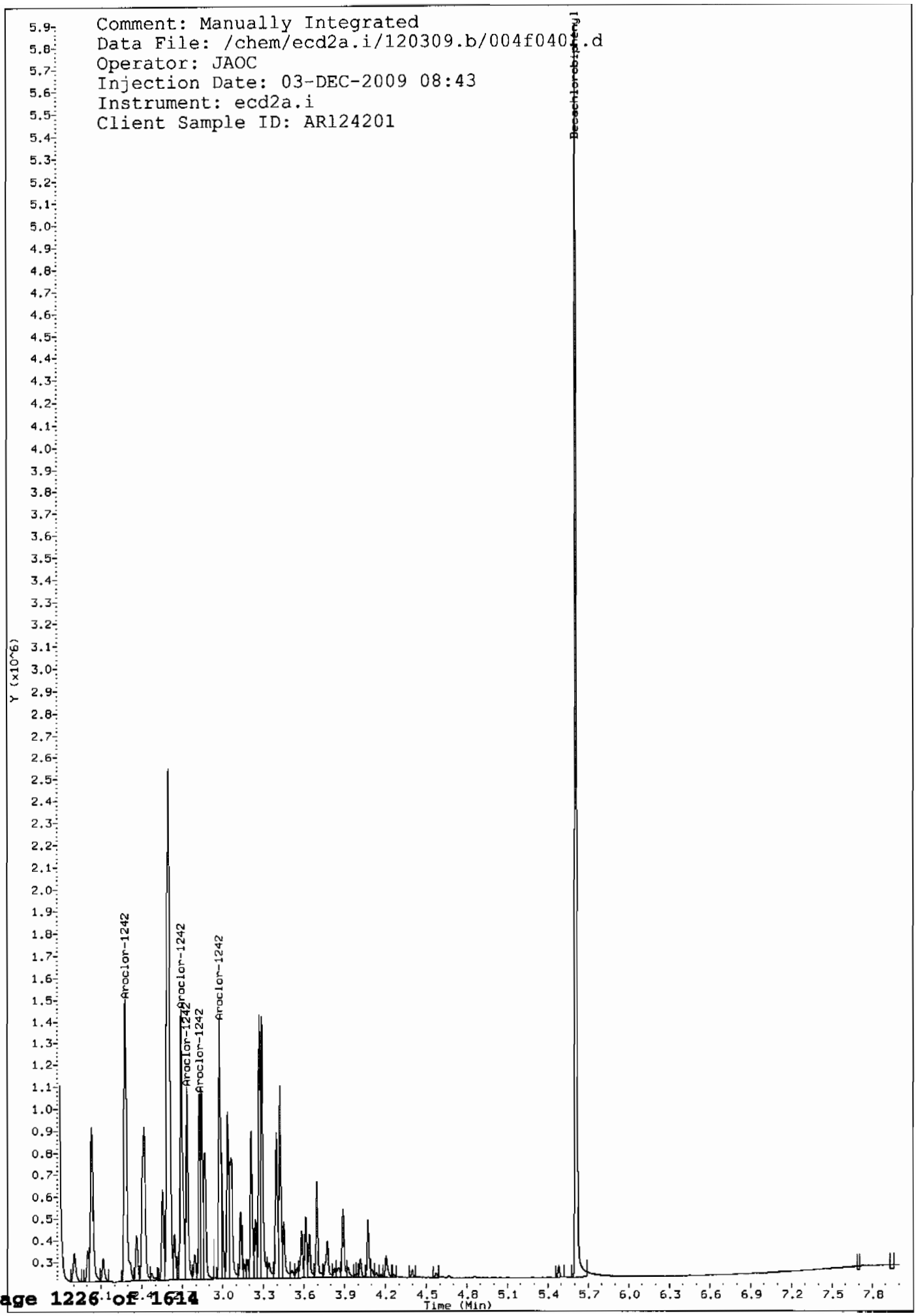
Comment: Manually Integrated
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Operator: JAOC
Injection Date: 03-DEC-2009 08:43
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

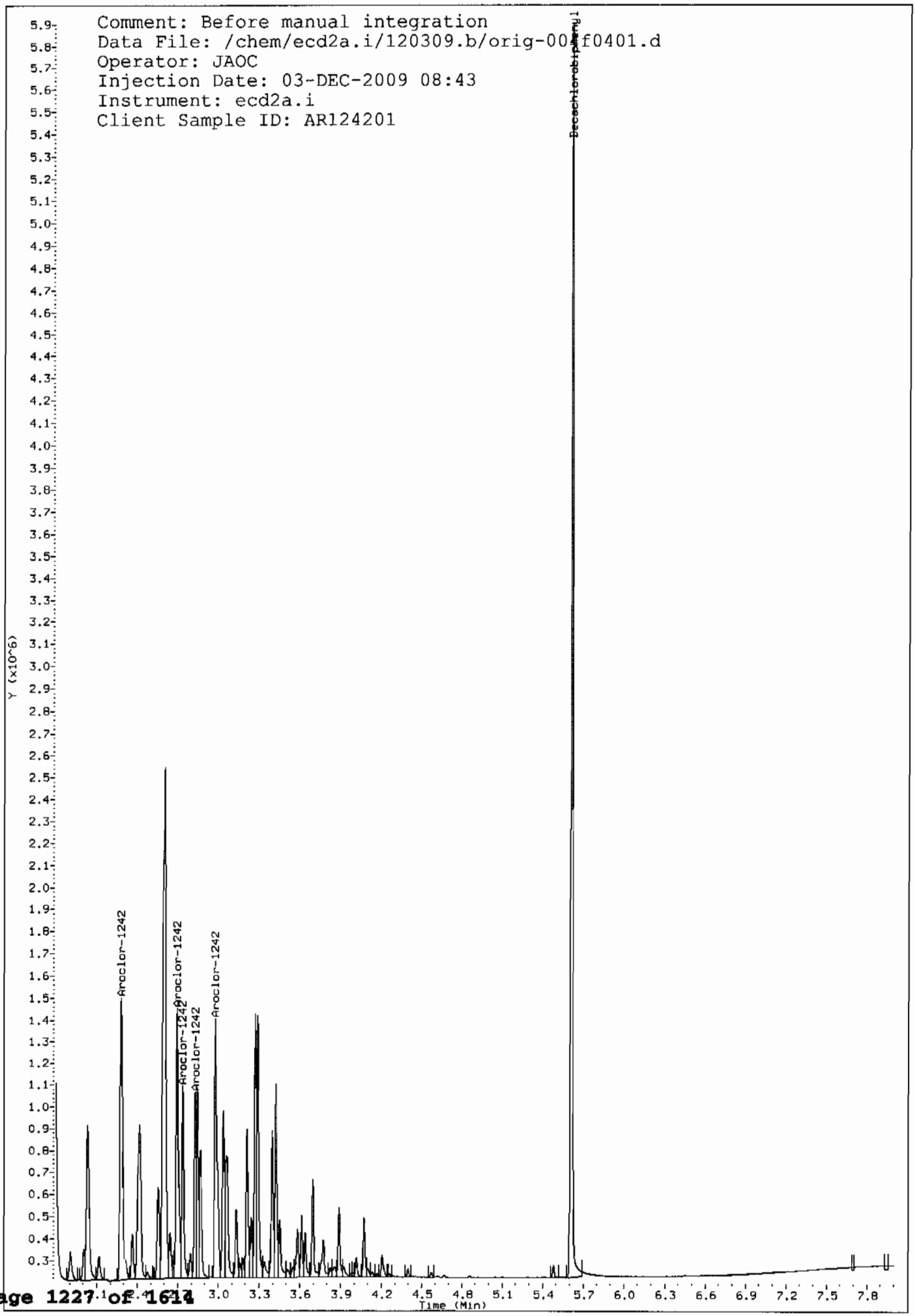
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Data File: /chem/ecd2a.i/120309.b/orig-004f0401.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:43
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 08:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	14014463	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11008738	100.000	101	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.751	2.751	0.000	3664129	1000.00	1060	80.00- 120.00	100.00
3.185	3.185	0.000	2696371	1000.00	1000	53.59- 93.59	73.59
3.257	3.257	0.000	1635174	1000.00	999	24.63- 64.63	44.63
3.335	3.335	0.000	1531191	1000.00	1020	21.79- 61.79	41.79
3.522	3.522	0.000	2292877	1000.00	1070	42.58- 82.58	62.58

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecd2a.i/120309.b/004b0401.d
Date : 03-DEC-2009 08:43
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

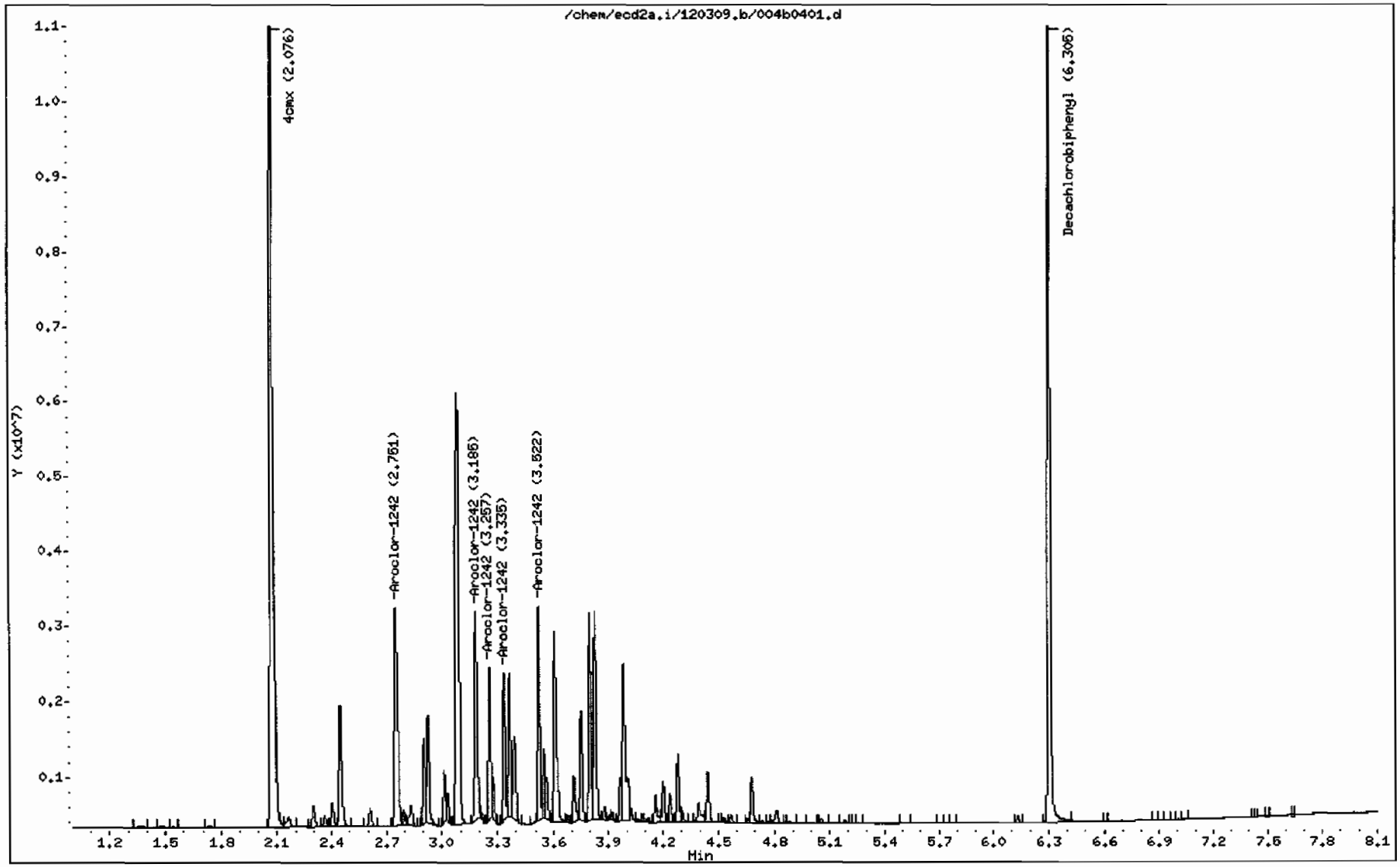

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 08:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	7176948	100.000	124	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5927719	100.000	108	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.827	2.827	0.000	1474555	1000.00	966	80.00- 120.00	100.00(M)
2.979	2.979	0.000	2023657	1000.00	998	117.24- 157.24	181.85
3.038	3.038	0.000	1560950	1000.00	994	85.86- 125.86	105.86
3.272	3.272	0.000	2192176	1000.00	988	128.67- 168.67	148.67
3.425	3.425	0.000	1904865	1000.00	996	109.18- 149.18	129.18
Average of Peak Amounts =					988		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/005f0501.d
Date : 03-DEC-2009 08:54
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

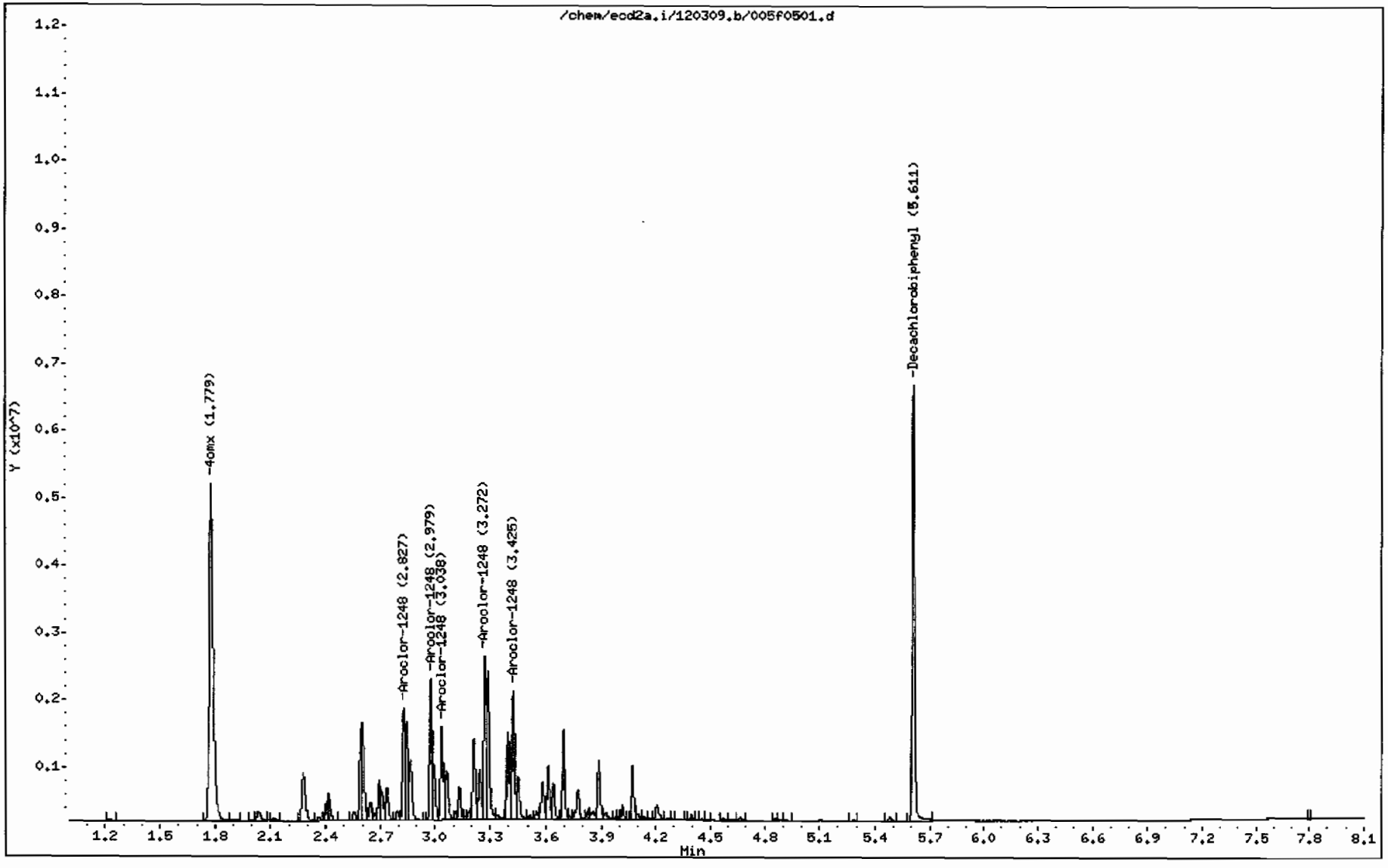

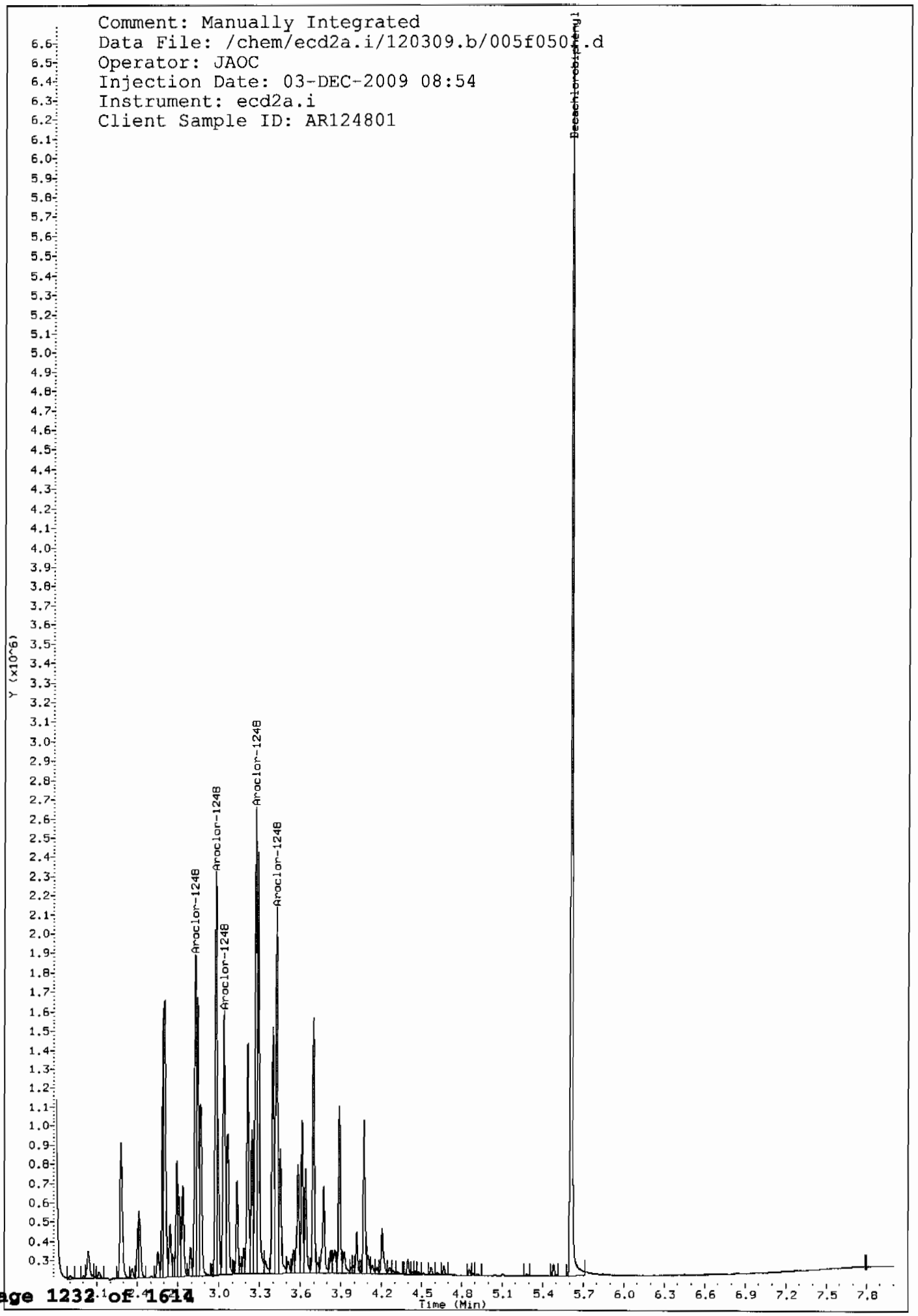
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/005f0501.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:54
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

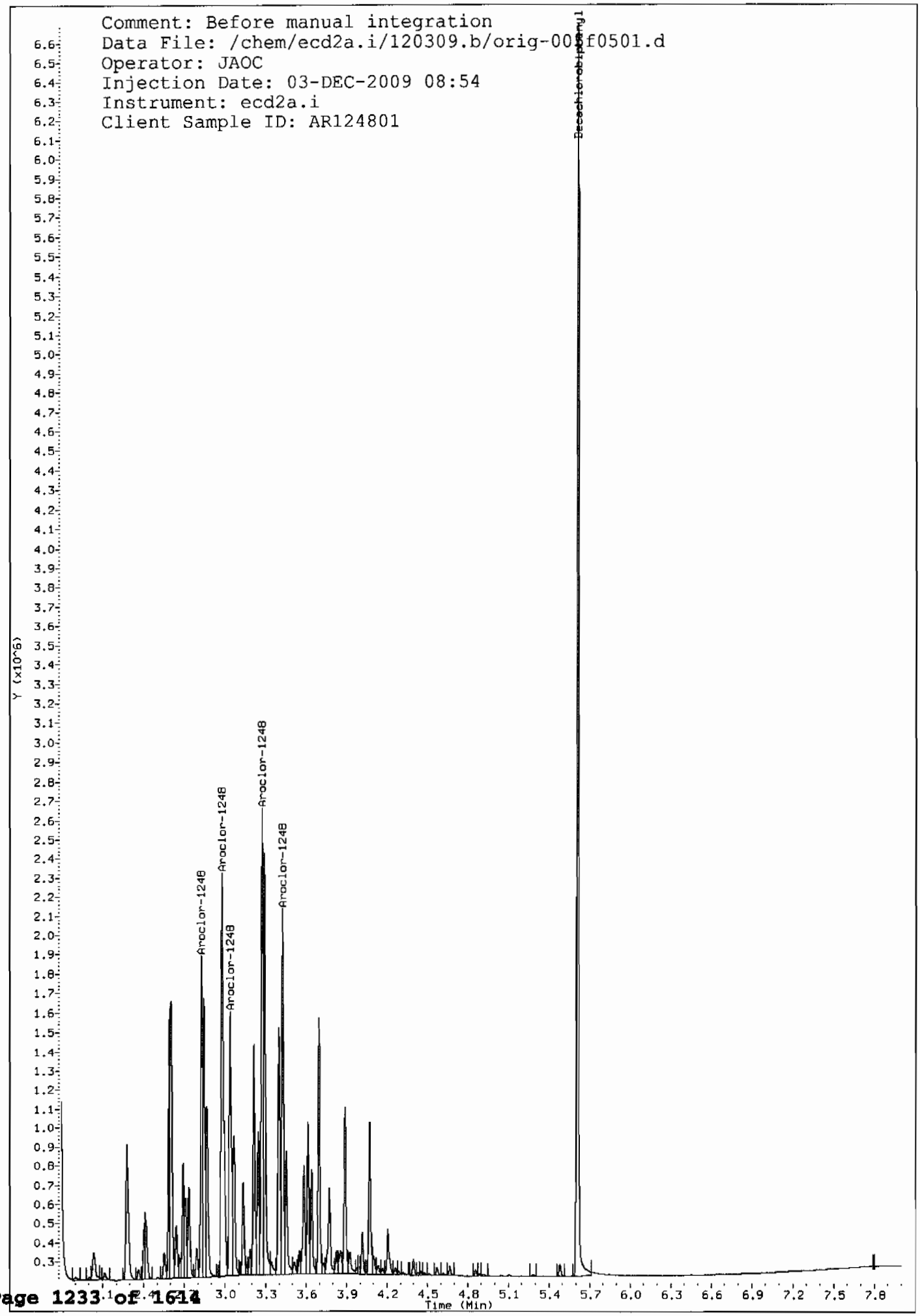
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-005f0501.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:54
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 08:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	15468032	100.000	131	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	12416332	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	3372417	1000.00	1030	80.00- 120.00	100.00
3.522	3.522	0.000	4325187	1000.00	1030	108.25- 148.25	128.25
3.609	3.609	0.000	4583011	1000.00	1030	115.90- 155.90	135.90
3.797	3.797	0.000	4814880	1000.00	1020	122.77- 162.77	142.77
3.827	3.827	0.000	5549978	1000.00	1030	144.57- 184.57	164.57

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecd2a.i/120309.b/005b0501.d
Date : 03-DEC-2009 08:54
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

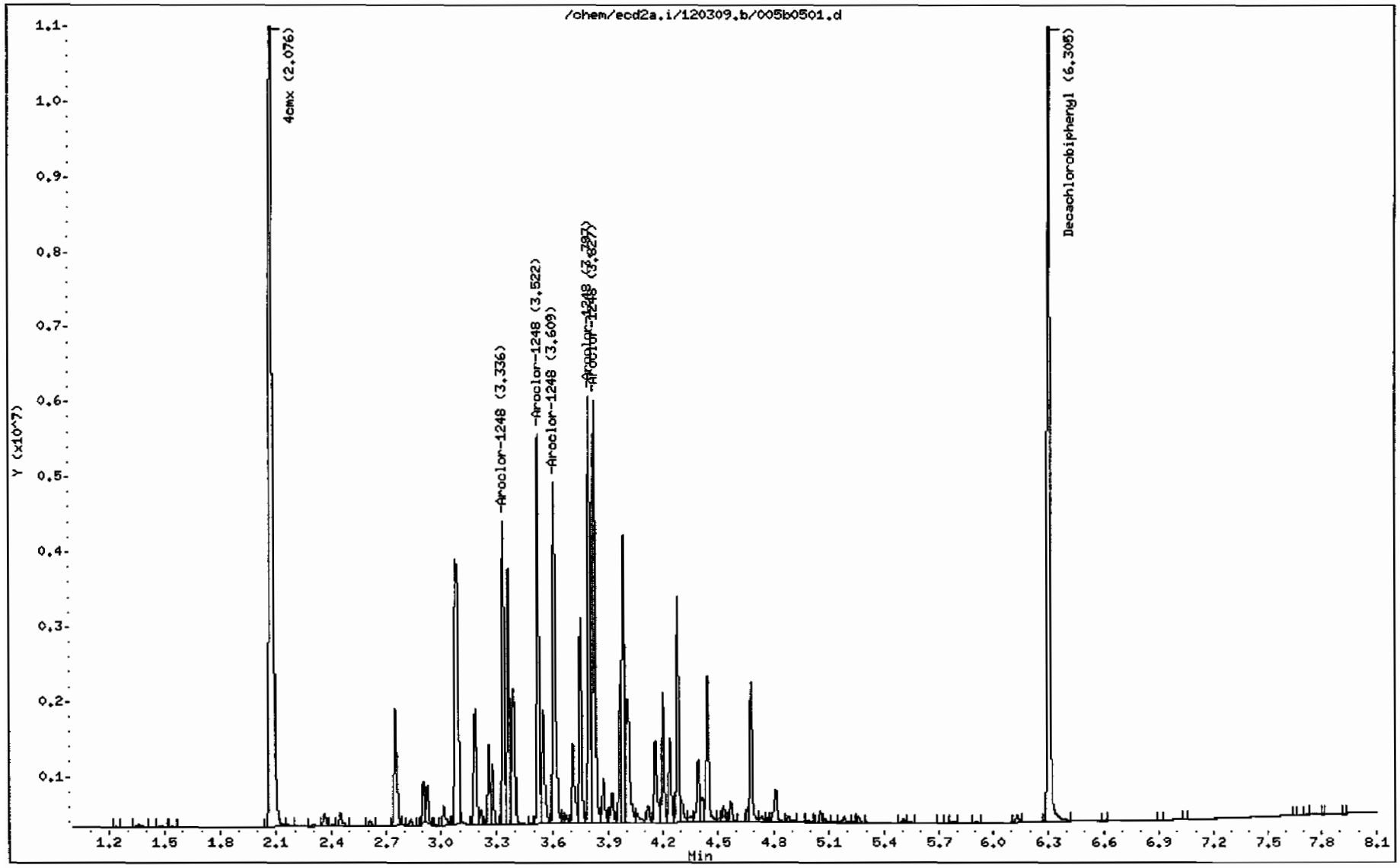

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 09:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	8484289	100.000	147	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6989603	100.000	127	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.033	2.033	0.000	1401667	1000.00	1200	80.00- 120.00	100.00(M)
2.280	2.280	0.000	1108261	1000.00	1190	59.07- 99.07	79.07
2.694	2.694	0.000	963768	1000.00	1200	48.76- 88.76	68.76
2.736	2.736	0.000	622142	1000.00	1220	24.39- 64.39	44.39
2.979	2.979	0.000	680049	1000.00	1160	28.52- 68.52	48.52

Average of Peak Amounts = 1.2e+03

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/006f0601.d
Date : 03-DEC-2009 09:05
Client ID: AR123201
Sample Info: !WAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

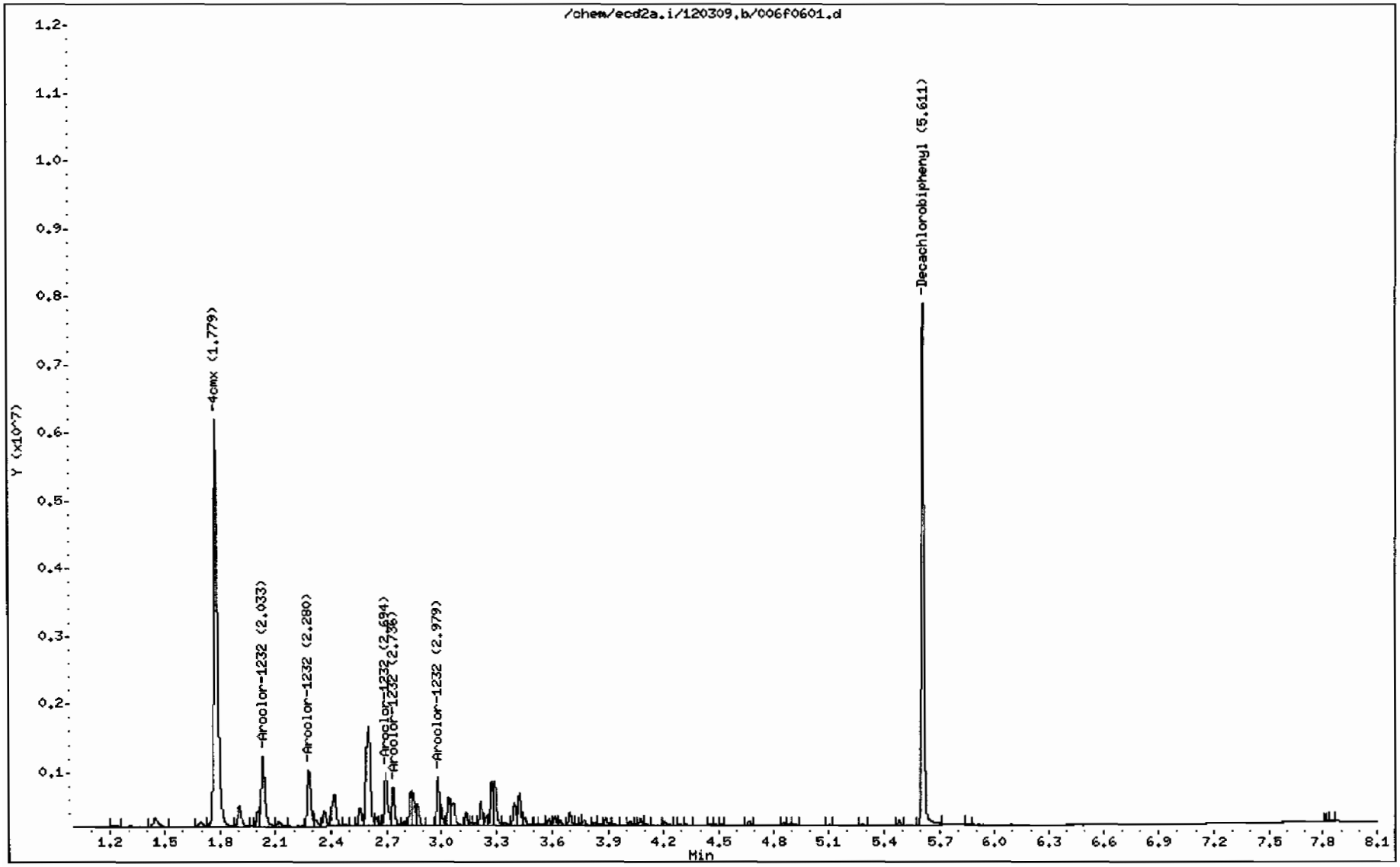

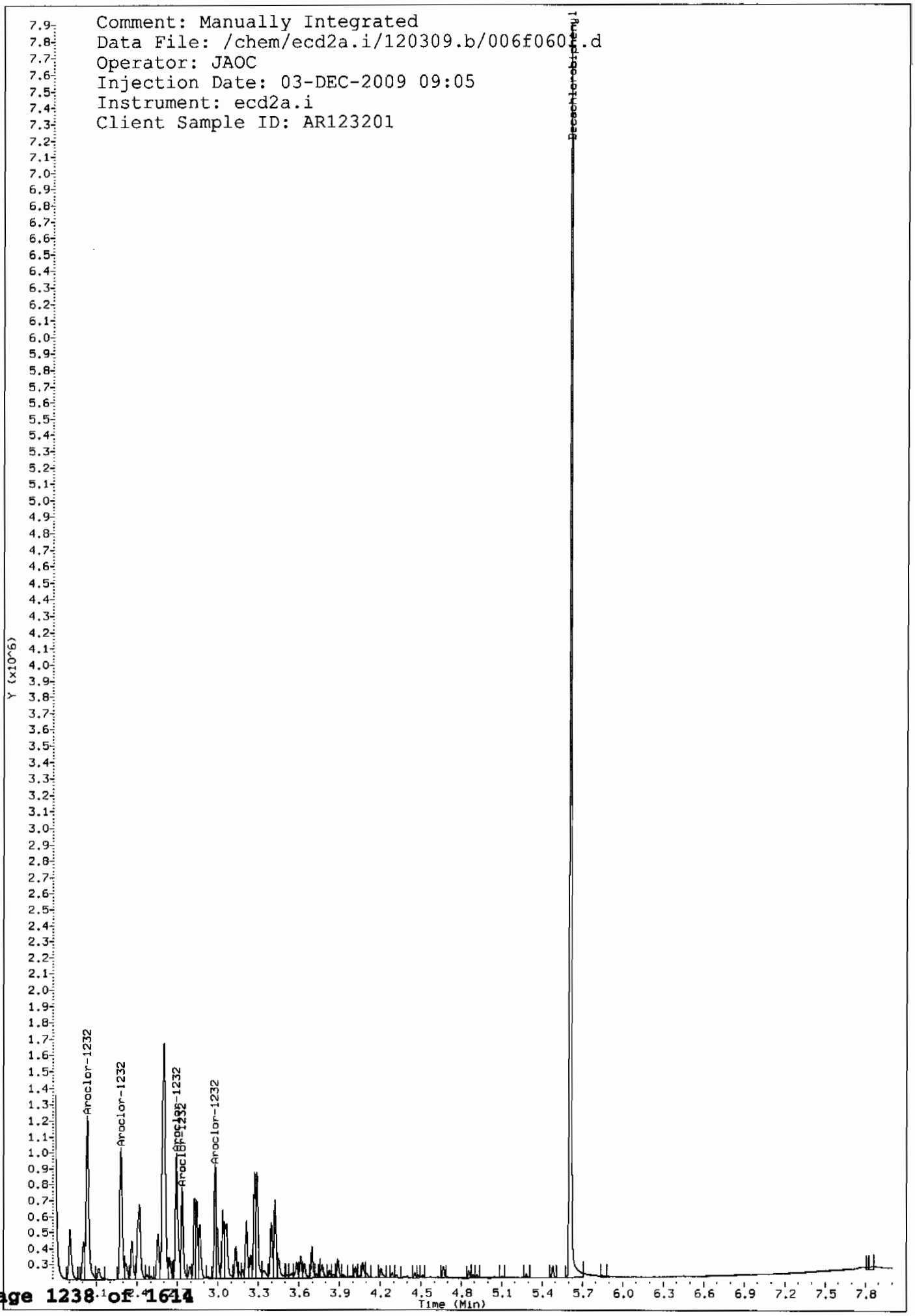
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/006f060[illegible].d
Operator: JAOC
Injection Date: 03-DEC-2009 09:05
Instrument: ecd2a.i
Client Sample ID: AR123201
Decachlorobiphenyl
Aroclor-1232
Aroclor-1232
Aroclor-1232
Aroclor-1232
Aroclor-1232
Y (x10^6)
Time (Min)

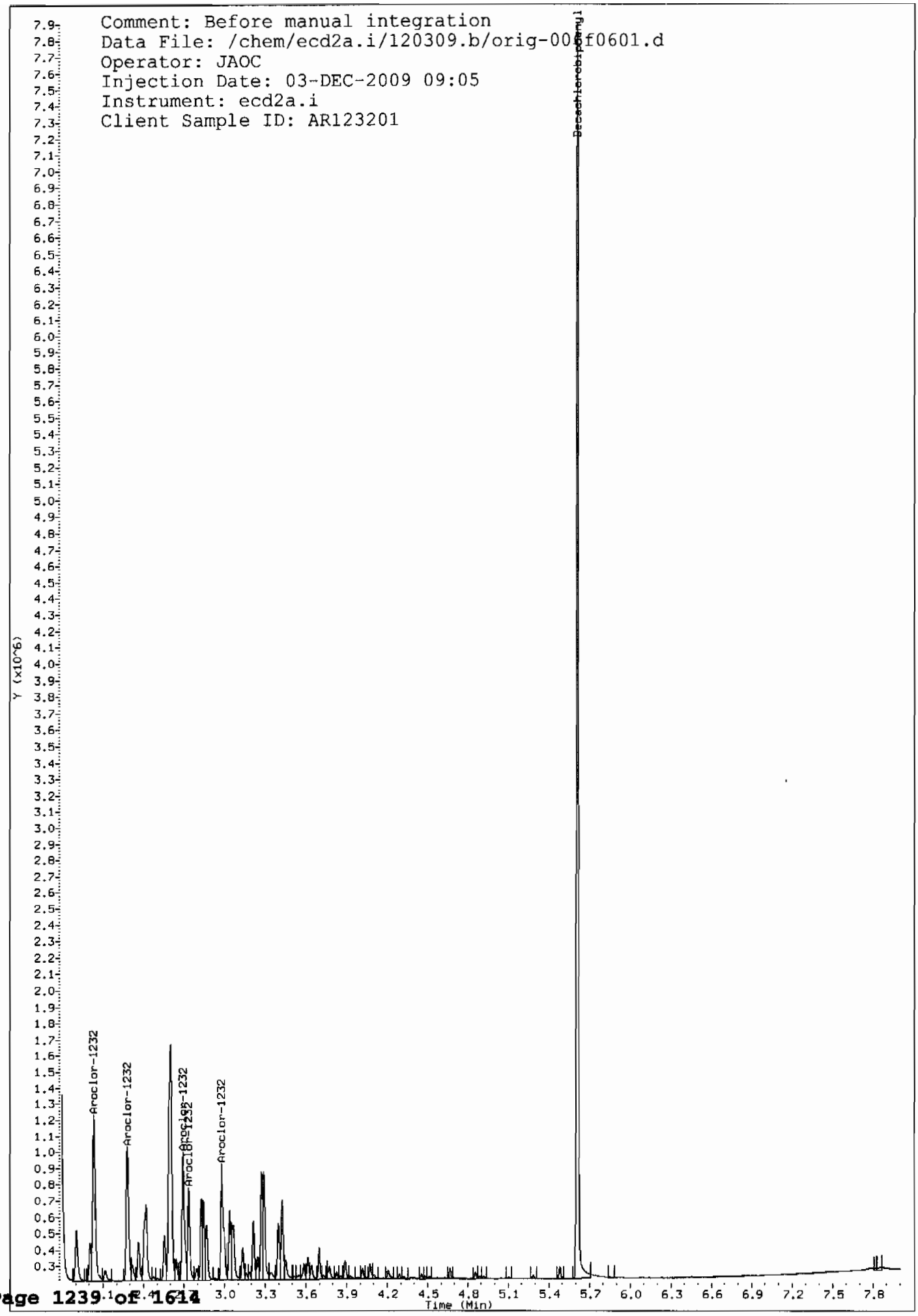
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-005f0601.d
Operator: JAOC
Injection Date: 03-DEC-2009 09:05
Instrument: ecd2a.i
Client Sample ID: AR123201
Decachlorobiphenyl
Aroclor-1232
Aroclor-1232
Aroclor-1232
Aroclor-1232
Aroclor-1232
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 09:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	18213495	100.000	154	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	14777154	100.000	136	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.448	2.448	0.000	2404157	1000.00	1170	80.00- 120.00	100.00
2.751	2.751	0.000	2312538	1000.00	1180	76.19- 116.19	96.19
3.185	3.185	0.000	1872182	1000.00	1250	57.87- 97.87	77.87
3.257	3.257	0.000	1095454	1000.00	1180	25.57- 65.57	45.57
3.523	3.523	0.000	1342494	1000.00	1210	35.84- 75.84	55.84

Average of Peak Amounts = 1.2e+03

Data File: /chem/ecd2a.i/120309.b/006b0601.d
Date : 03-DEC-2009 09:05
Client ID: AR123201
Sample Info: !WAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

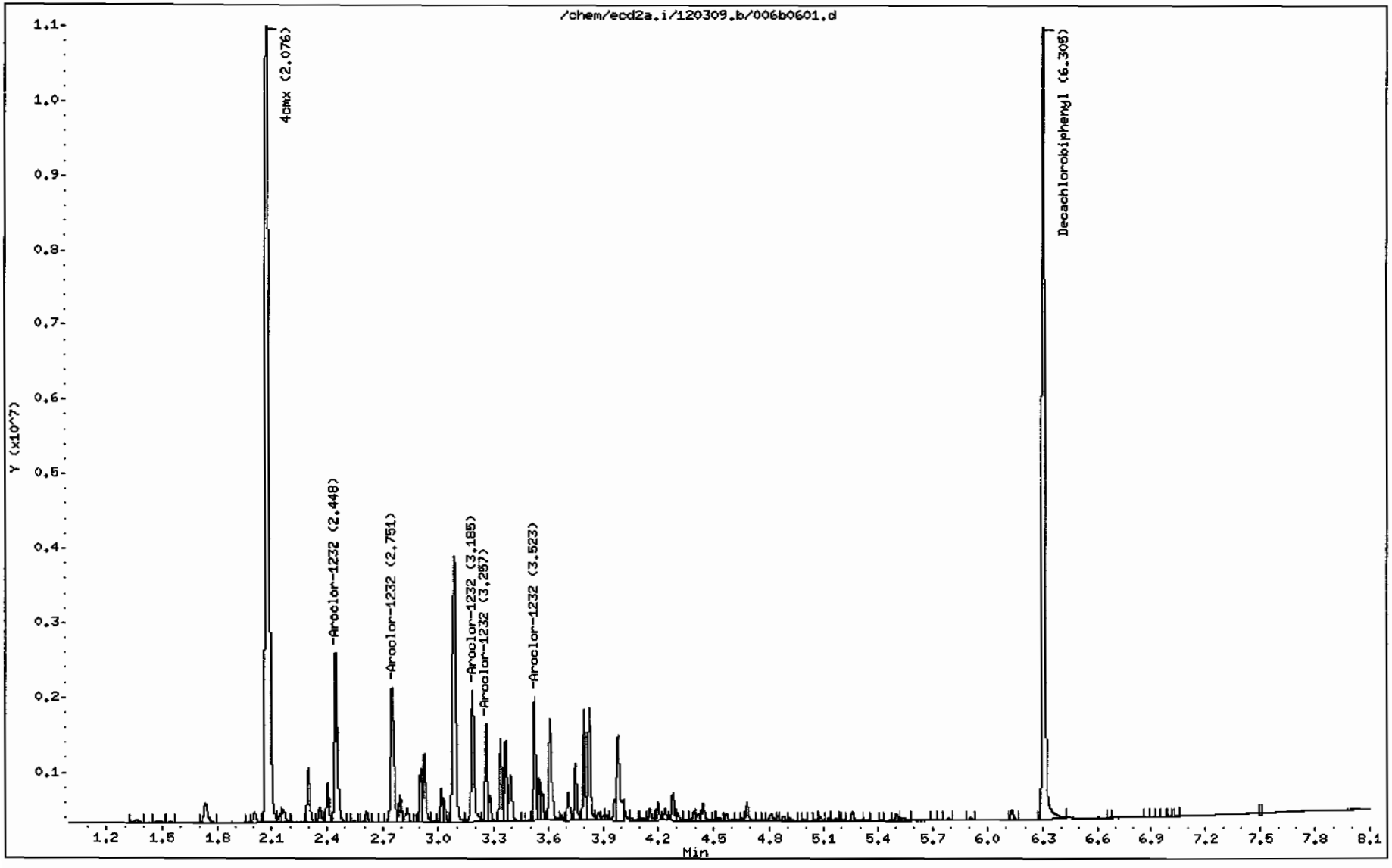

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 09:17
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 13:23 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6537929	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5224914	100.000	95.3	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	545550	1000.00	1180	80.00- 120.00	100.00
1.904	1.904	0.000	770872	1000.00	1170	121.30- 161.30	141.30
2.004	2.004	0.000	388905	1000.00	1120	51.29- 91.29	71.29

Average of Peak Amounts = 1.16e+03

Data File: /chem/ecd2a.i/120309.b/007f0701.d
Date : 03-DEC-2009 09:17
Client ID: AR122101
Sample Info: !WAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

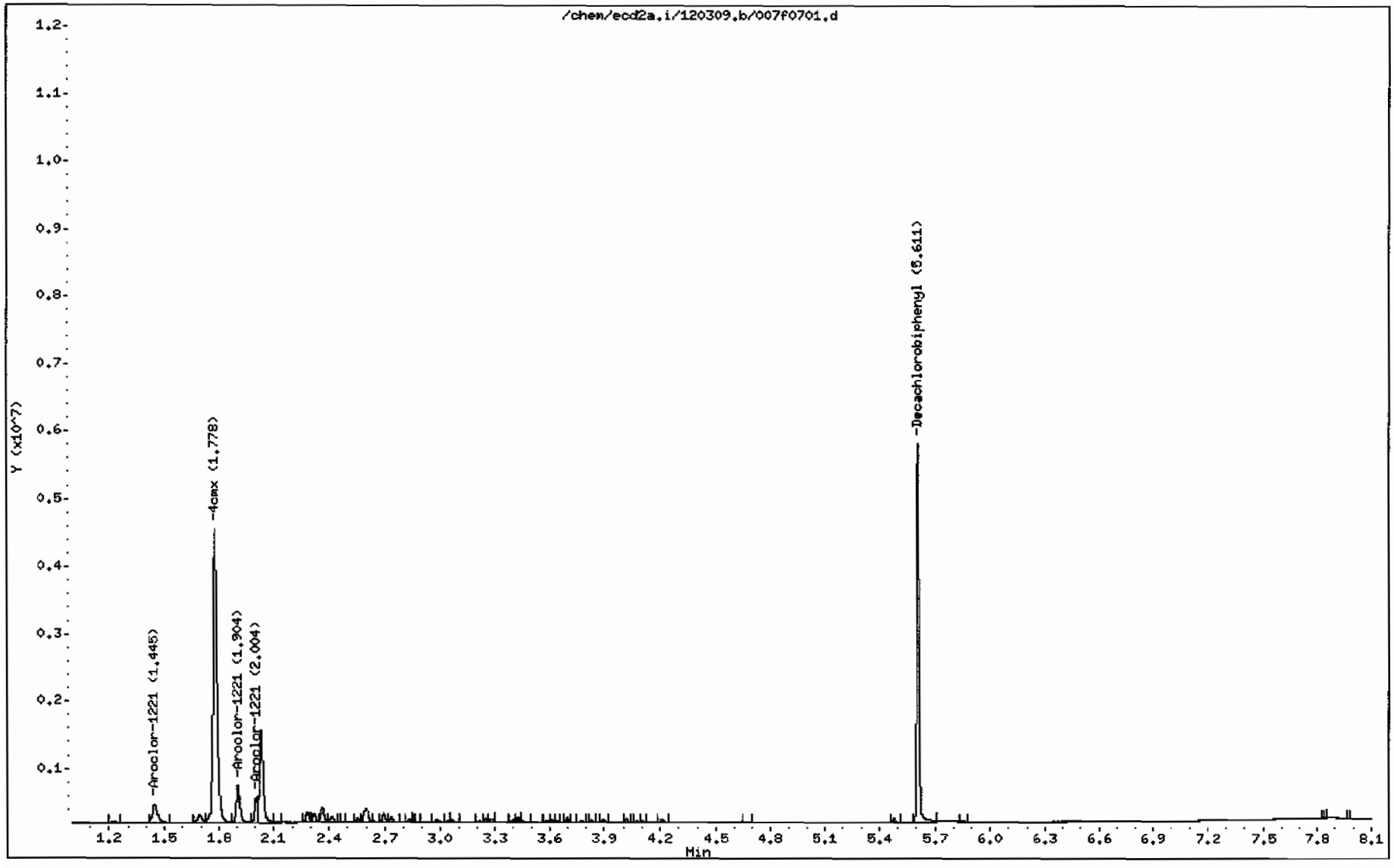

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 09:17
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13792010	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10908463	100.000	100	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.299	2.299	0.000	1396907	1000.00	1100	80.00- 120.00	100.00
2.404	2.404	0.000	852382	1000.00	1100	41.02- 81.02	61.02
2.448	2.448	0.000	3384246	1000.00	1110	222.27- 262.27	242.27

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd2a.i/120309.b/007b0701.d
Date : 03-DEC-2009 09:17
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

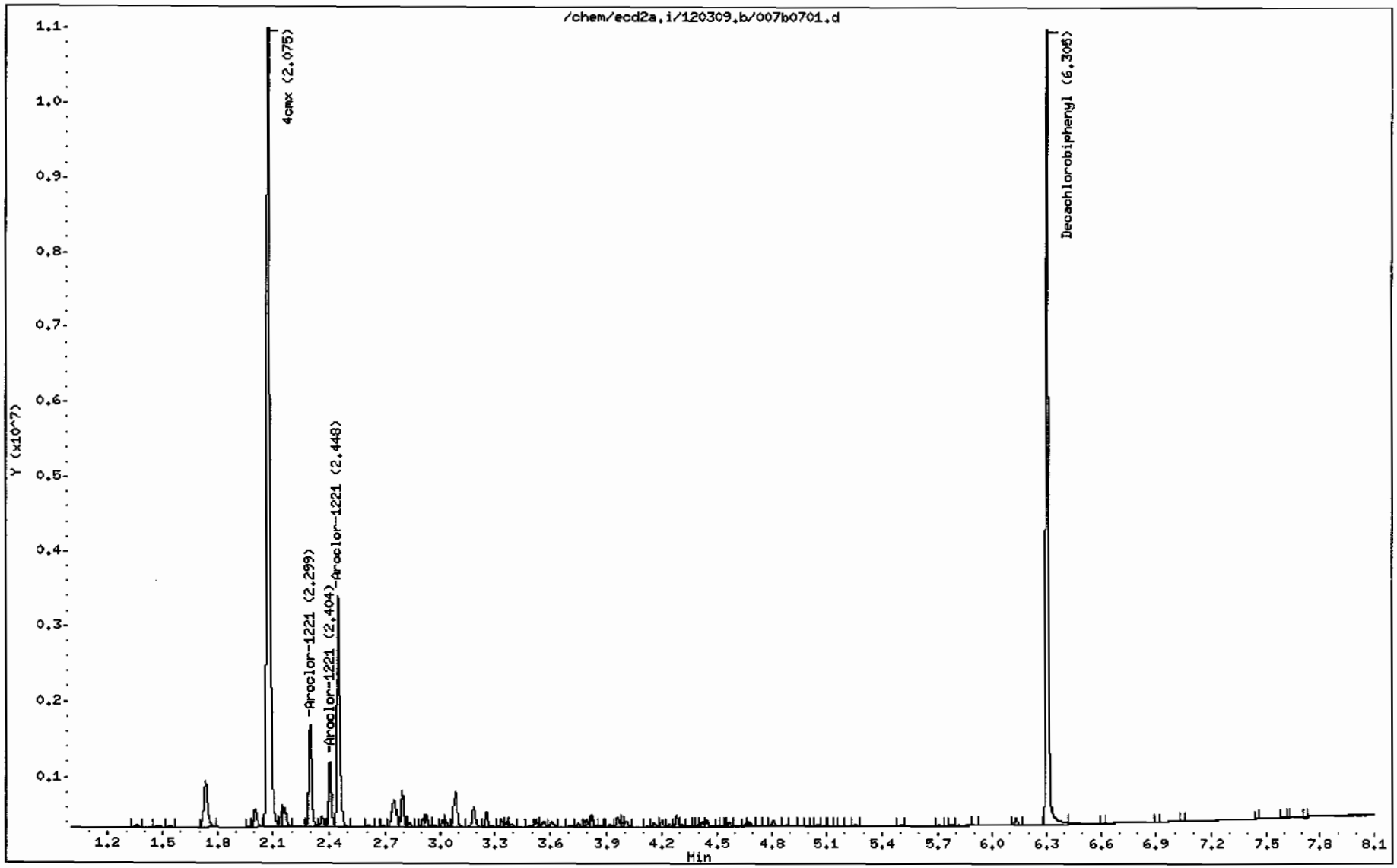

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/045f4501.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 03-DEC-2009 16:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 04
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	6204347	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4409398	100.000	80.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.280	0.002	2030518	1000.00	967	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4356685	1000.00	967	191.91- 231.91	214.56
2.694	2.692	0.002	1743924	1000.00	958	65.28- 105.28	85.89
2.829	2.827	0.002	854233	1000.00	916	23.06- 63.06	42.07
2.980	2.978	0.002	1309544	1000.00	950	41.11- 81.11	64.49
Average of Peak Amounts =					952		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4096006	1000.00	1010	80.00- 120.00	100.00
4.290	4.288	0.002	2491202	1000.00	985	40.91- 80.91	60.82
4.455	4.454	0.001	2554375	1000.00	989	42.71- 82.71	62.36
4.668	4.665	0.003	5937904	1000.00	984	125.86- 165.86	144.97
4.856	4.855	0.001	2831785	1000.00	972	49.52- 89.52	69.14
Average of Peak Amounts =					988		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/045f4501.d

Date : 03-DEC-2009 16:18

Client ID: AR166004

Sample Info: IWAR091119-60 04

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

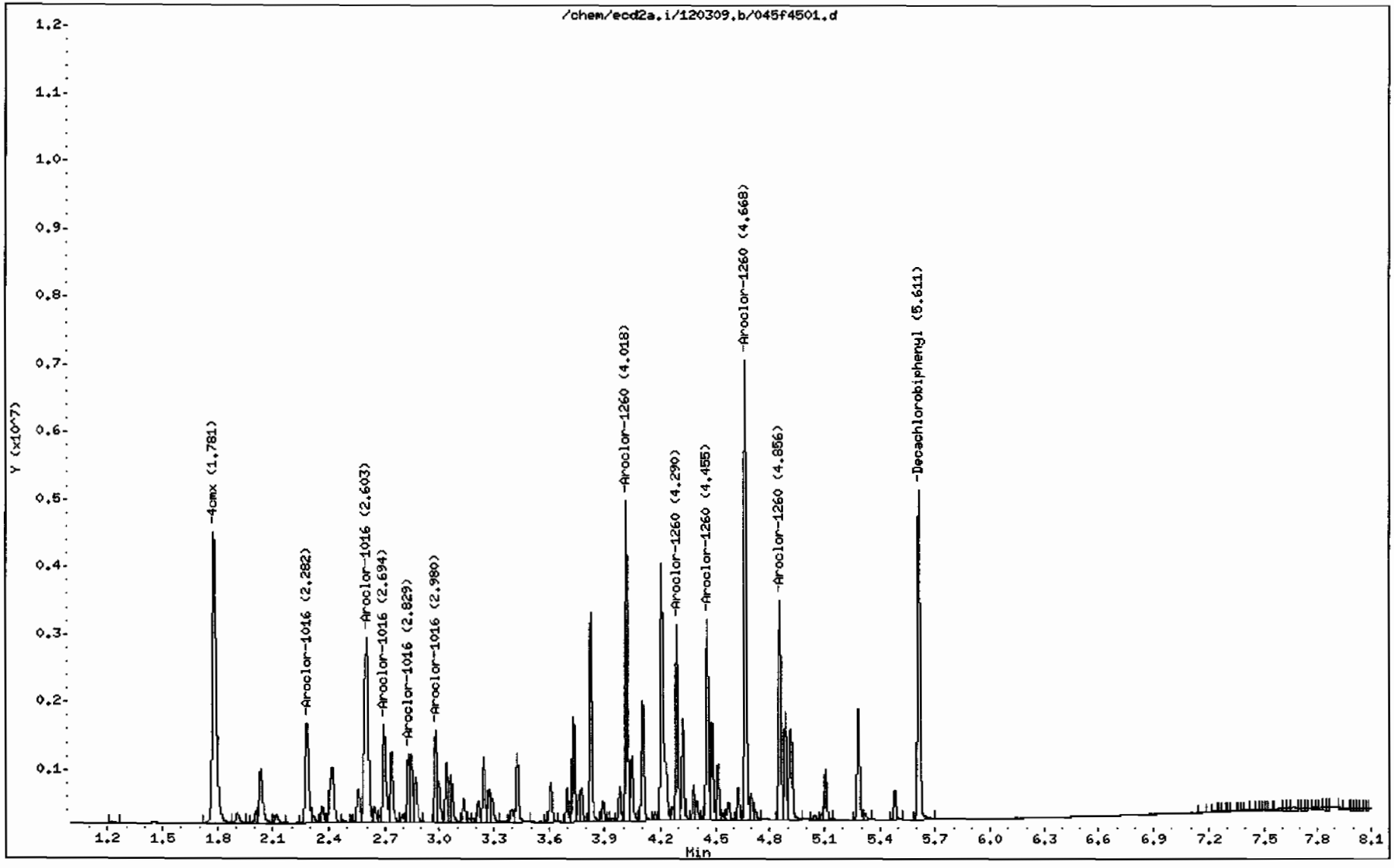

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/045f4501.d
Operator: JAOC
Injection Date: 03-DEC-2009 16:18
Instrument: ecd2a.i
Client Sample ID: AR166004

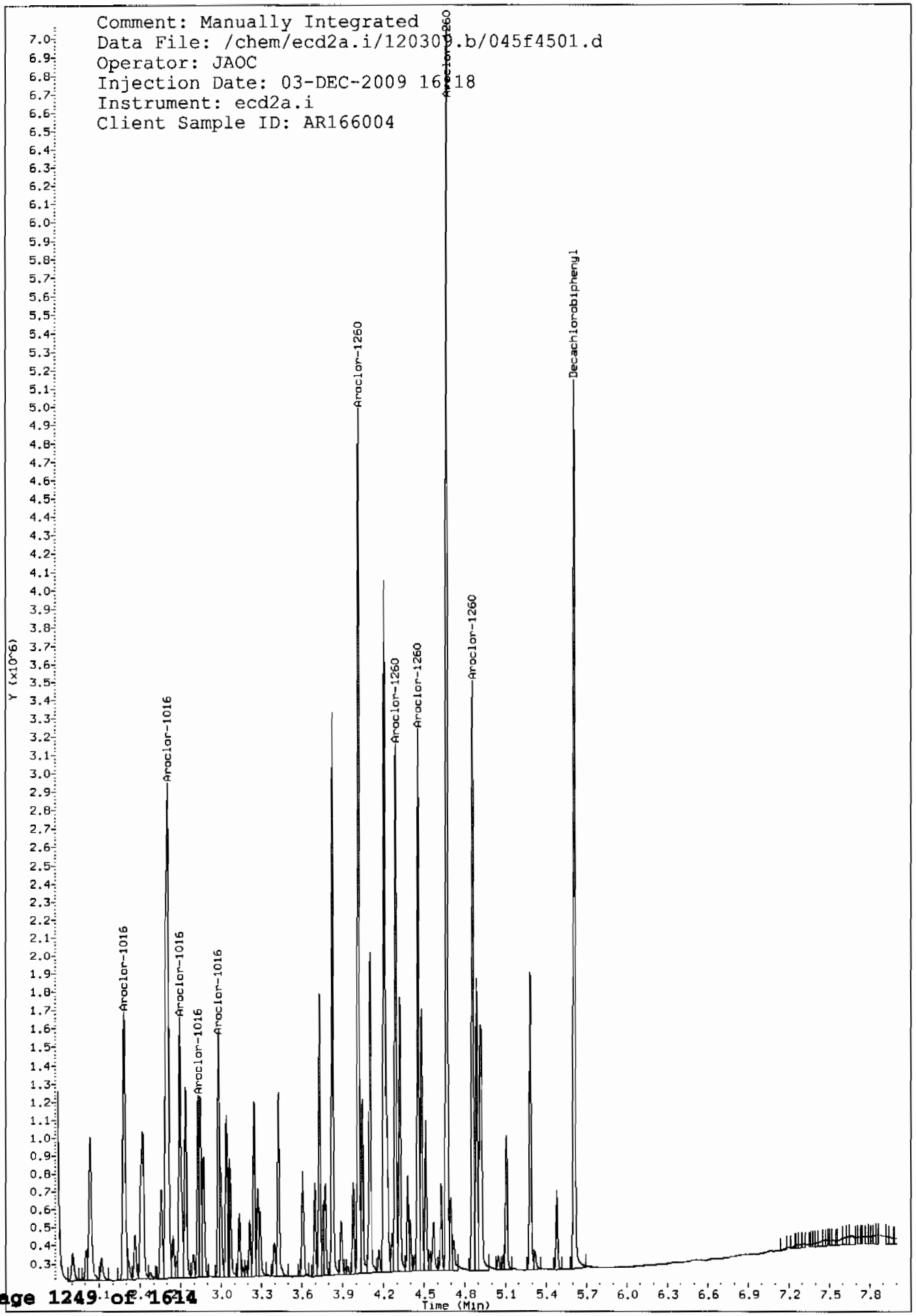

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-045f4501.d
Operator: JAOC
Injection Date: 03-DEC-2009 16:18
Instrument: ecd2a.i
Client Sample ID: AR166004

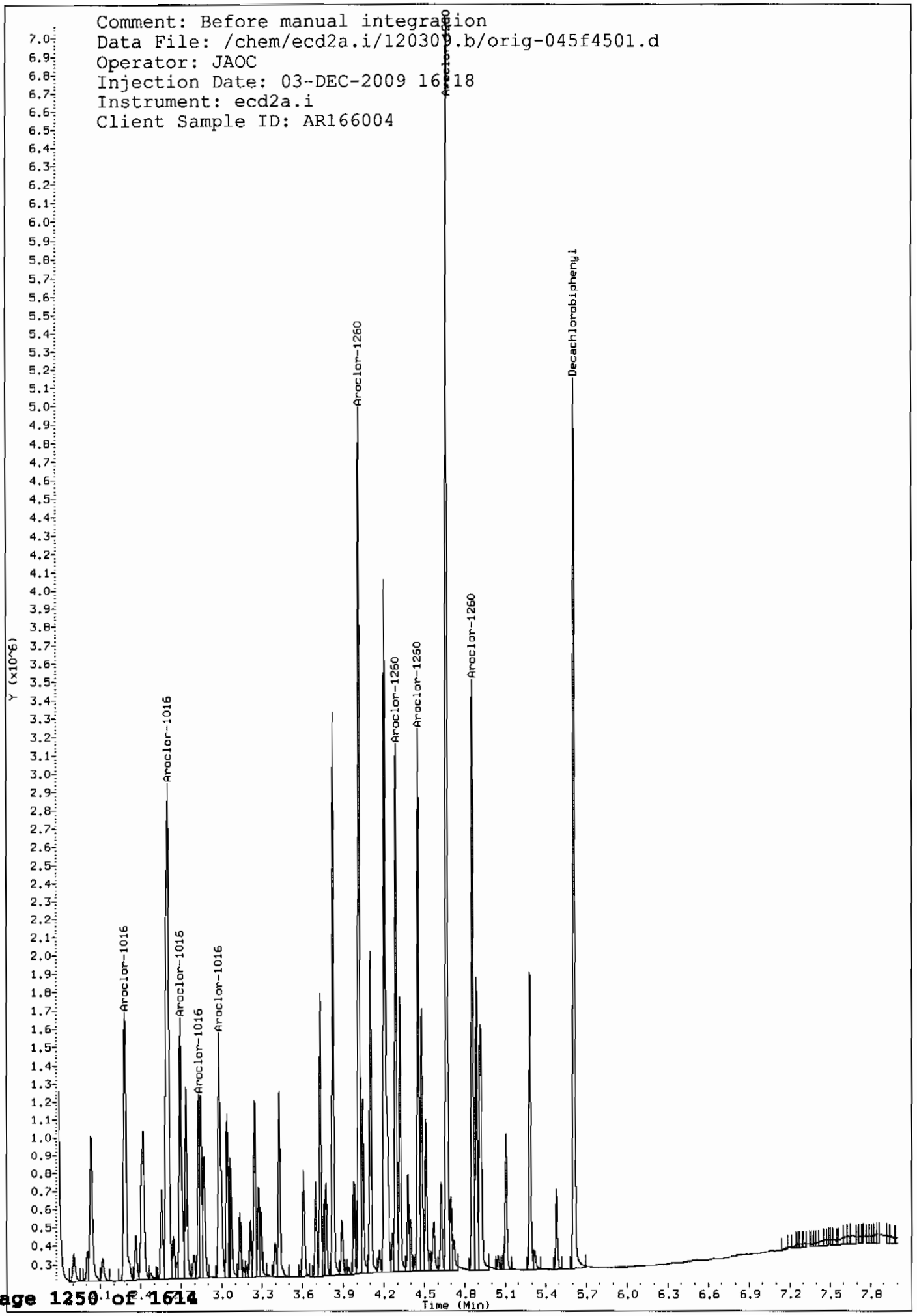

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/045b4501.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 03-DEC-2009 16:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 04
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13281310	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	8688757	100.000	80.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4216212	1000.00	990	80.00- 120.00	100.00
3.185	3.185	0.000	3405548	1000.00	989	61.21- 101.21	80.77
3.336	3.335	0.001	1963953	1000.00	992	26.96- 66.96	46.58
3.365	3.364	0.001	2065526	1000.00	1000	28.74- 68.74	48.99
3.523	3.521	0.002	2798242	1000.00	1020	46.95- 86.95	66.37
Average of Peak Amounts =					998		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5729480	1000.00	1040	80.00- 120.00	100.00
4.570	4.569	0.001	7299919	1000.00	1020	107.13- 147.13	127.41
4.682	4.680	0.002	4829057	1000.00	1020	64.21- 104.21	84.28
4.880	4.878	0.002	5716115	1000.00	985	80.11- 120.11	99.77
5.505	5.504	0.001	8826542	1000.00	976	135.13- 175.13	154.05
Average of Peak Amounts =					1.01e+03		

Data File: /chem/ecd2a.i/120309.b/045b4501.d
Date : 03-DEC-2009 16:18
Client ID: AR166004
Sample Info: IWAR091119-60 04

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

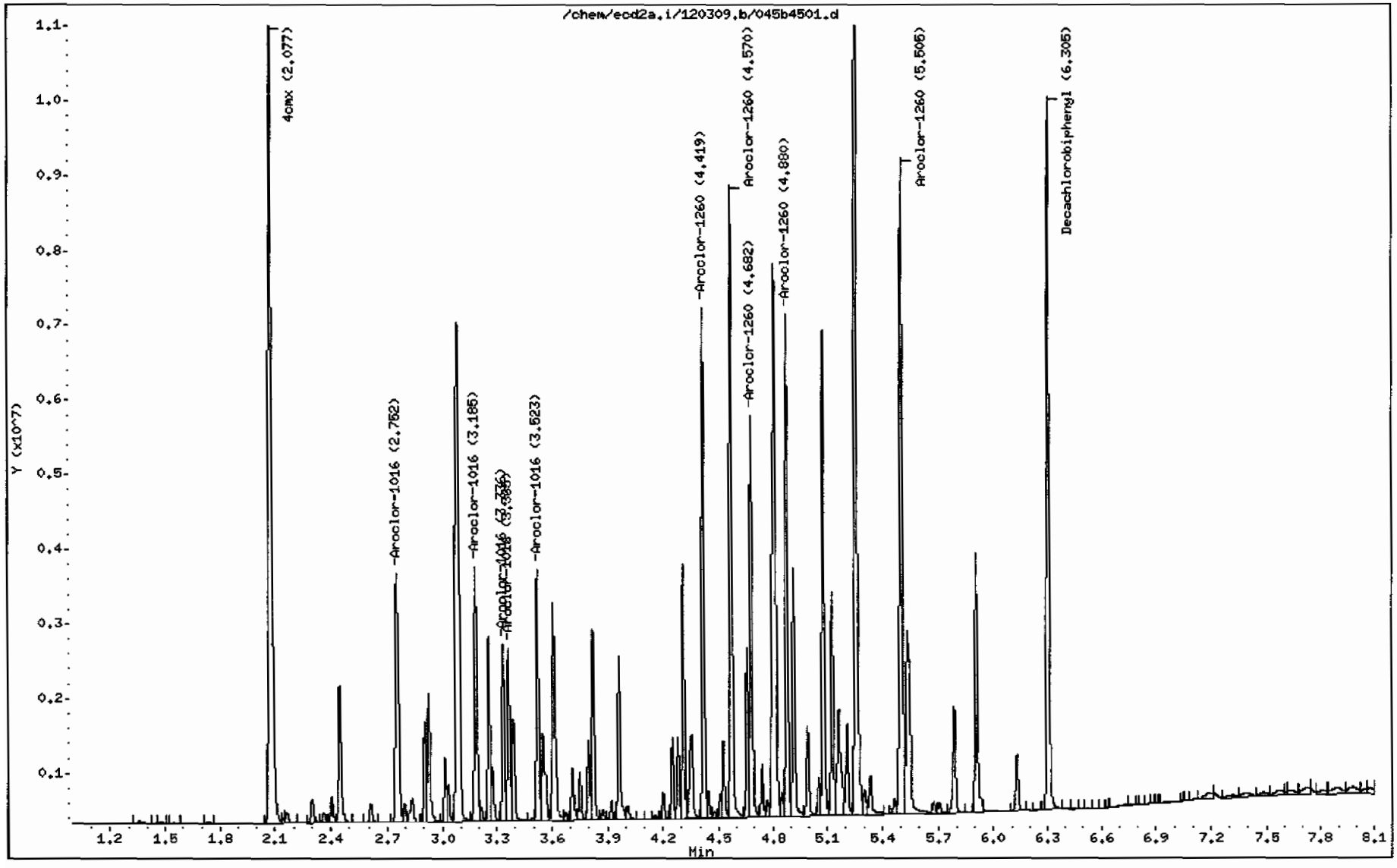

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/055f5501.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 18:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 05
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 55 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6257852	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4740004	100.000	86.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2047399	1000.00	975	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4384029	1000.00	973	191.91- 231.91	214.13
2.693	2.692	0.001	1759330	1000.00	966	65.28- 105.28	85.93
2.828	2.827	0.001	883630	1000.00	947	23.06- 63.06	43.16
2.979	2.978	0.001	1281466	1000.00	930	41.11- 81.11	62.59
Average of Peak Amounts =					958		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4145972	1000.00	1020	80.00- 120.00	100.00
4.289	4.288	0.001	2544535	1000.00	1010	40.91- 80.91	61.37
4.455	4.454	0.001	2603734	1000.00	1010	42.71- 82.71	62.80
4.668	4.665	0.003	6101061	1000.00	1010	125.86- 165.86	147.16
4.857	4.855	0.002	2916980	1000.00	1000	49.52- 89.52	70.36
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/055f5501.d

Date : 03-DEC-2009 18:09

Client ID: AR166005

Sample Info: IWAR091119-60 05

Column phase: CLP1

Page 1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

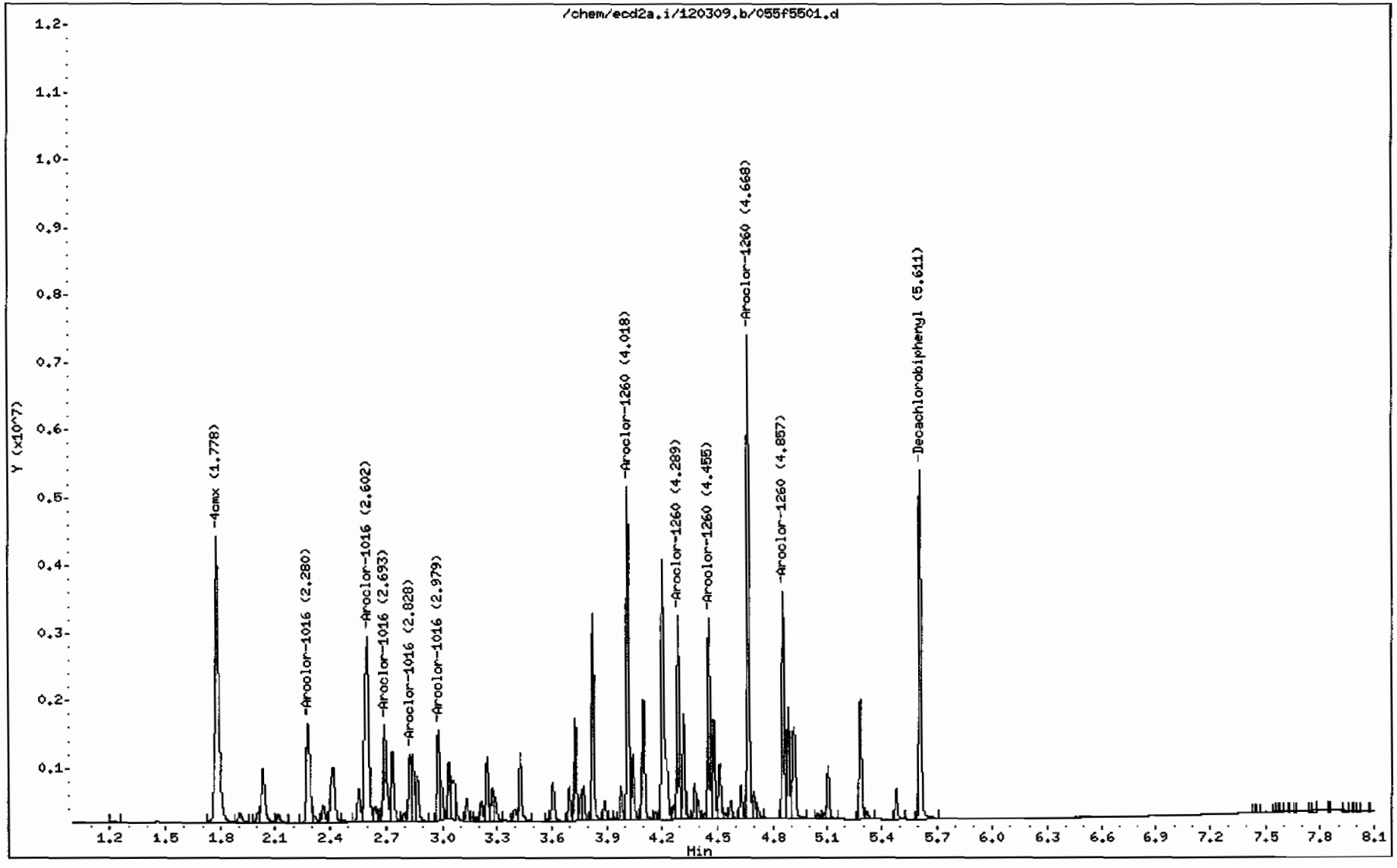

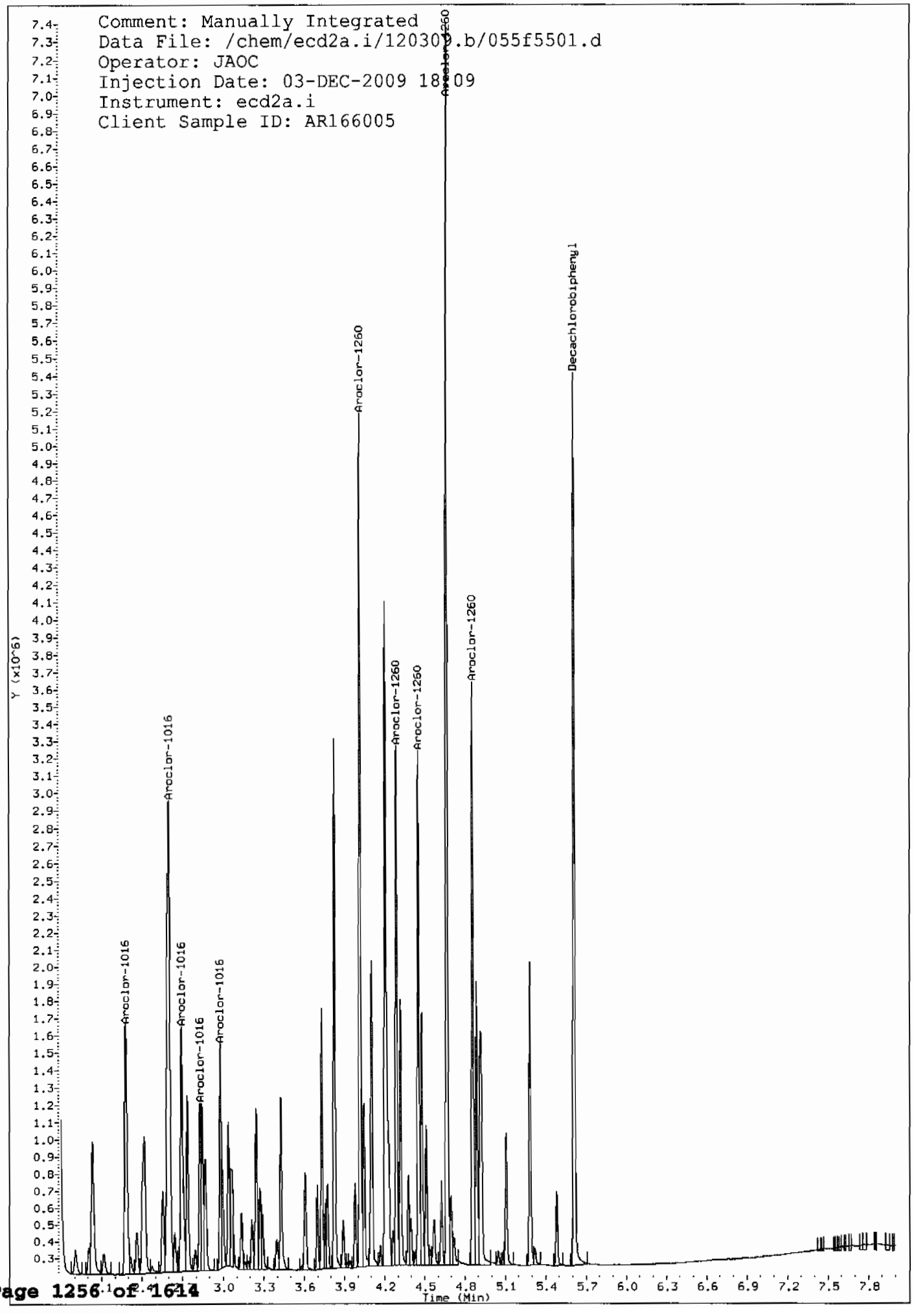
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/055f5501.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:09
Instrument: ecd2a.i
Client Sample ID: AR166005
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

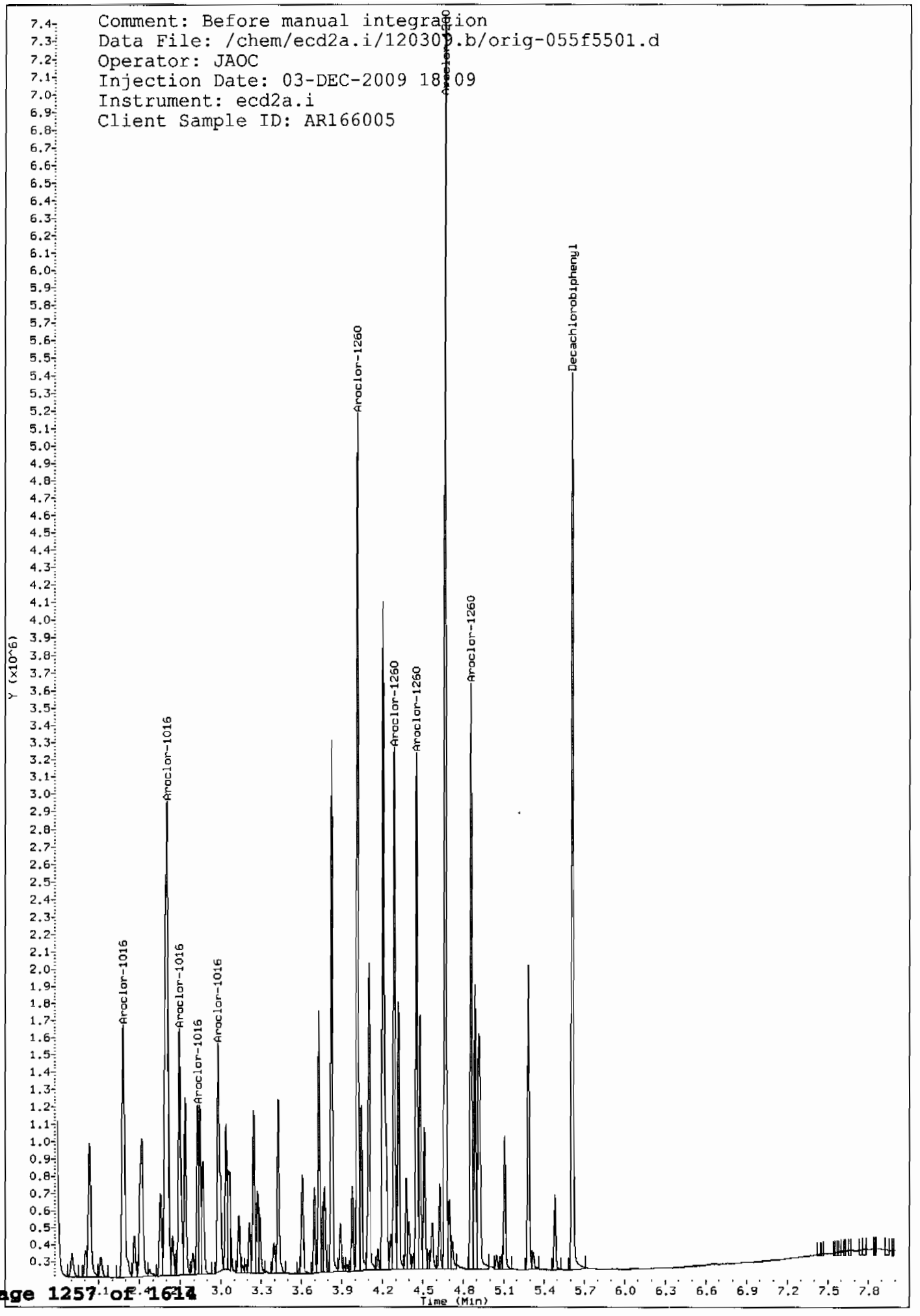
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-055f5501.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:09
Instrument: ecd2a.i
Client Sample ID: AR166005
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/055b5501.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 18:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 05
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 55 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13409429	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9498159	100.000	87.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4268280	1000.00	1000	80.00- 120.00	100.00
3.185	3.185	0.000	3465345	1000.00	1000	61.21- 101.21	81.19
3.336	3.335	0.001	2011969	1000.00	1020	26.96- 66.96	47.14
3.364	3.364	0.000	2064024	1000.00	1000	28.74- 68.74	48.36
3.523	3.521	0.002	2847950	1000.00	1030	46.95- 86.95	66.72
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5893238	1000.00	1070	80.00- 120.00	100.00
4.570	4.569	0.001	7495996	1000.00	1050	107.13- 147.13	127.20
4.682	4.680	0.002	4978183	1000.00	1050	64.21- 104.21	84.47
4.879	4.878	0.001	5877103	1000.00	1010	80.11- 120.11	99.73
5.505	5.504	0.001	9056734	1000.00	1000	135.13- 175.13	153.68
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/055b5501.d
Date : 03-DEC-2009 18:09
Client ID: AR166005
Sample Info: IWAR091119-60 05
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

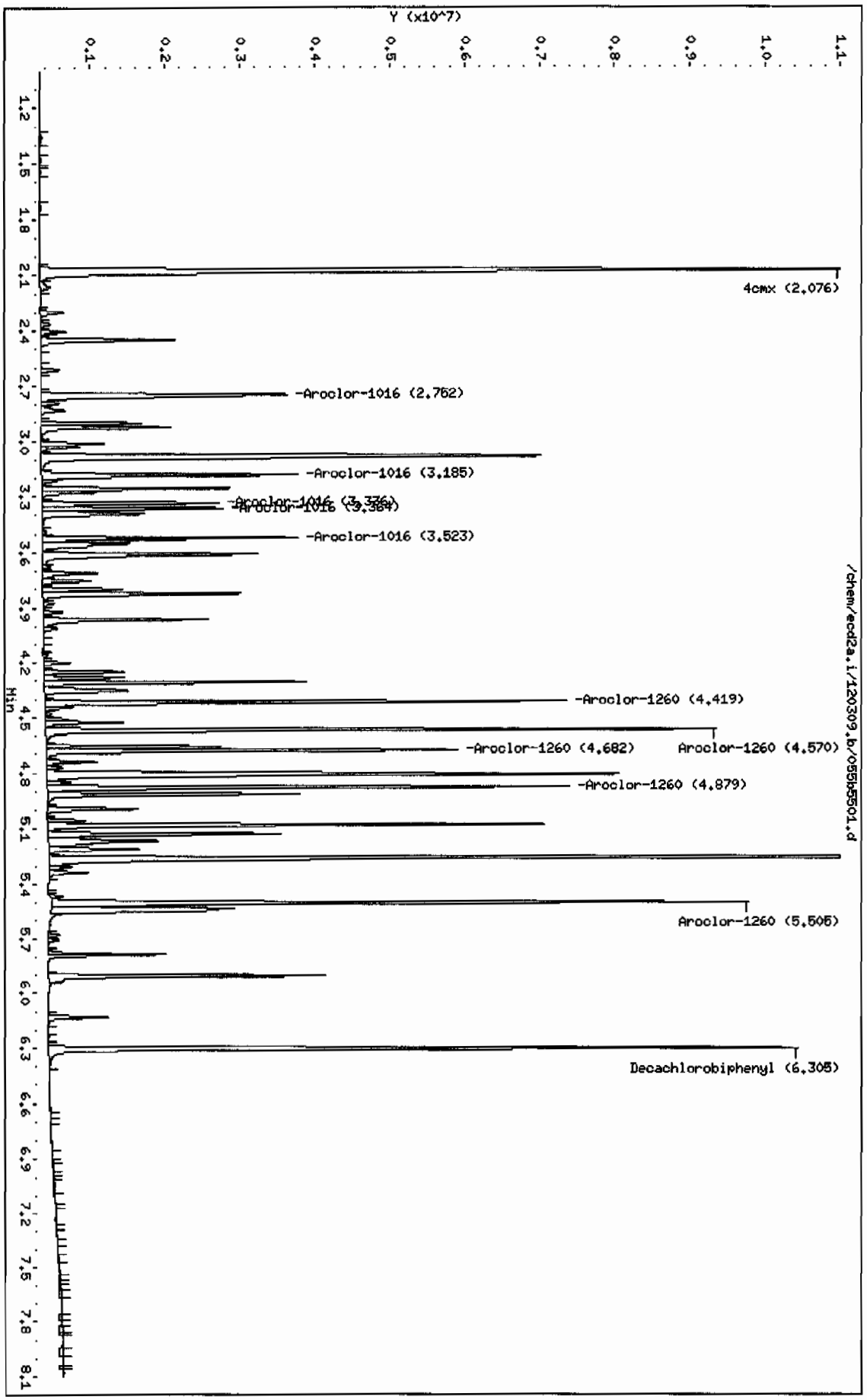

Page 1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 08:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6163217	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	4737258	100.000	86.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.282	0.000	2071757	1000.00	987	80.00- 120.00	100.00(M)
2.604	2.604	0.000	4297144	1000.00	954	195.38- 235.38	207.42
2.695	2.695	0.000	1704431	1000.00	936	66.88- 106.88	82.27
2.830	2.830	0.000	860050	1000.00	922	23.48- 63.48	41.51
2.980	2.980	0.000	1252180	1000.00	909	45.19- 85.19	60.44
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	4085124	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2494262	1000.00	986	41.10- 81.10	61.06
4.456	4.456	0.000	2561196	1000.00	991	42.35- 82.35	62.70
4.668	4.668	0.000	6040775	1000.00	1000	126.34- 166.34	147.87
4.857	4.857	0.000	2863737	1000.00	983	49.78- 89.78	70.10
Average of Peak Amounts =					993		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/002f0201.d
Date : 04-DEC-2009 08:18
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

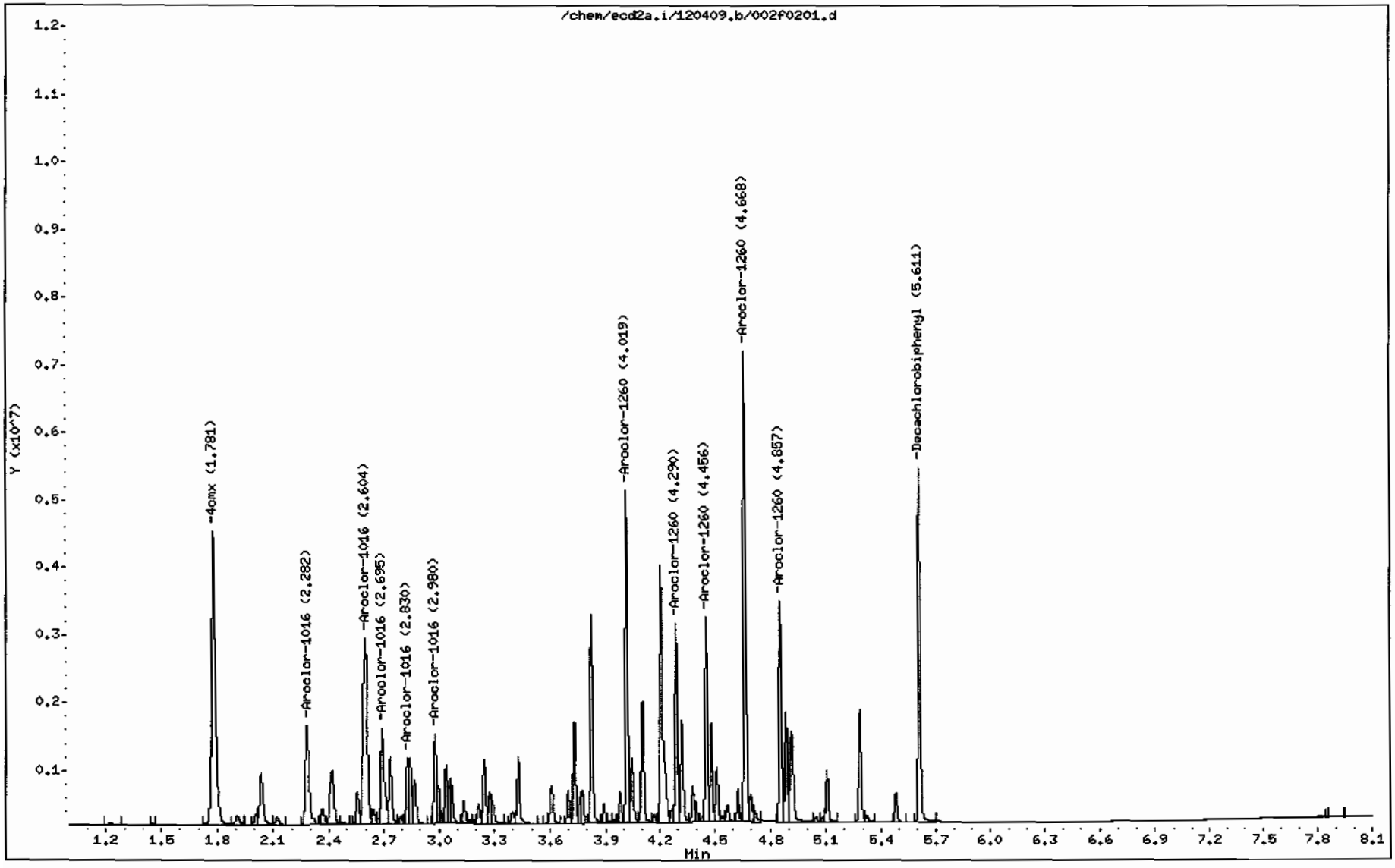

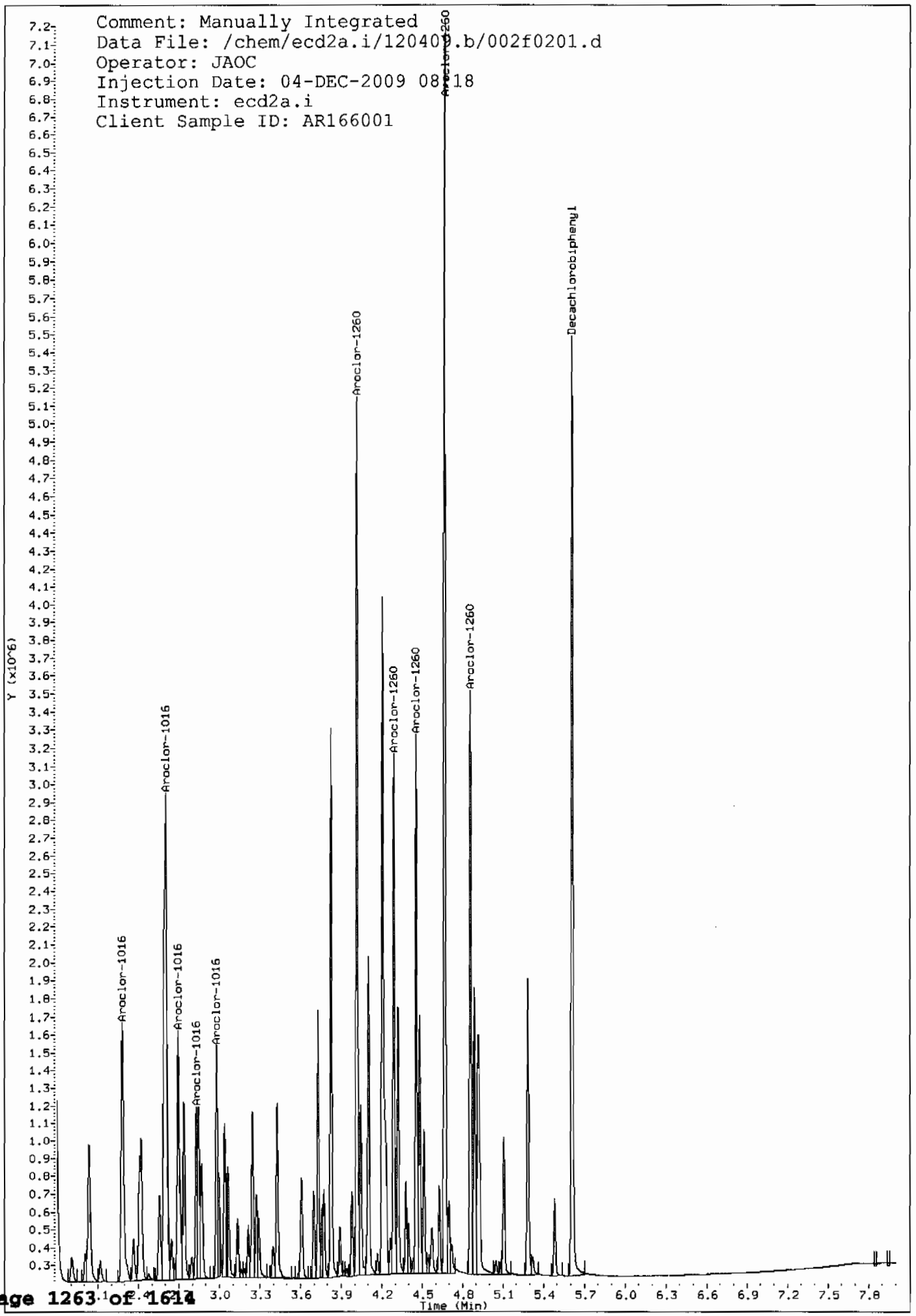
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/002f0201.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:18
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

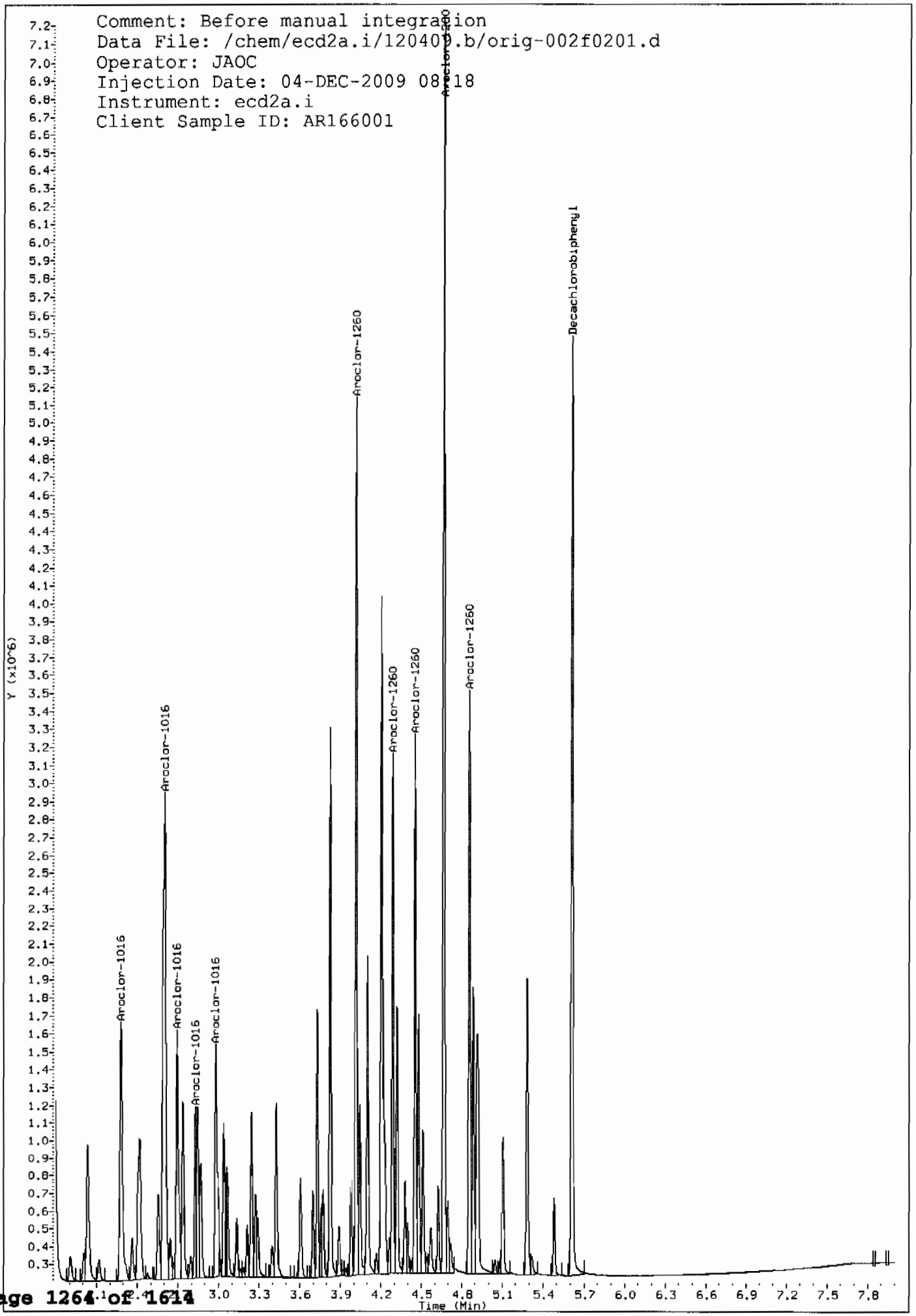
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-002f0201.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:18
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1260
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 08:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	13335268	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9884830	100.000	91.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	4225101	1000.00	992	80.00- 120.00	100.00
3.185	3.185	0.000	3391993	1000.00	985	60.93- 100.93	80.28
3.336	3.336	0.000	1966559	1000.00	993	26.64- 66.64	46.54
3.365	3.365	0.000	2066552	1000.00	1000	28.47- 68.47	48.91
3.524	3.524	0.000	2798286	1000.00	1020	46.57- 86.57	66.23
Average of Peak Amounts =					998		
7 Aroclor-1260					CAS #: 11096-82-5		
4.420	4.420	0.000	5841696	1000.00	1060	80.00- 120.00	100.00
4.570	4.570	0.000	7492875	1000.00	1050	107.74- 147.74	128.27
4.682	4.682	0.000	5012957	1000.00	1060	64.97- 104.97	85.81
4.880	4.880	0.000	5917427	1000.00	1020	79.48- 119.48	101.30
5.505	5.505	0.000	9352254	1000.00	1030	137.38- 177.38	160.09
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120409.b/002b0201.d
Date : 04-DEC-2009 08:18
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

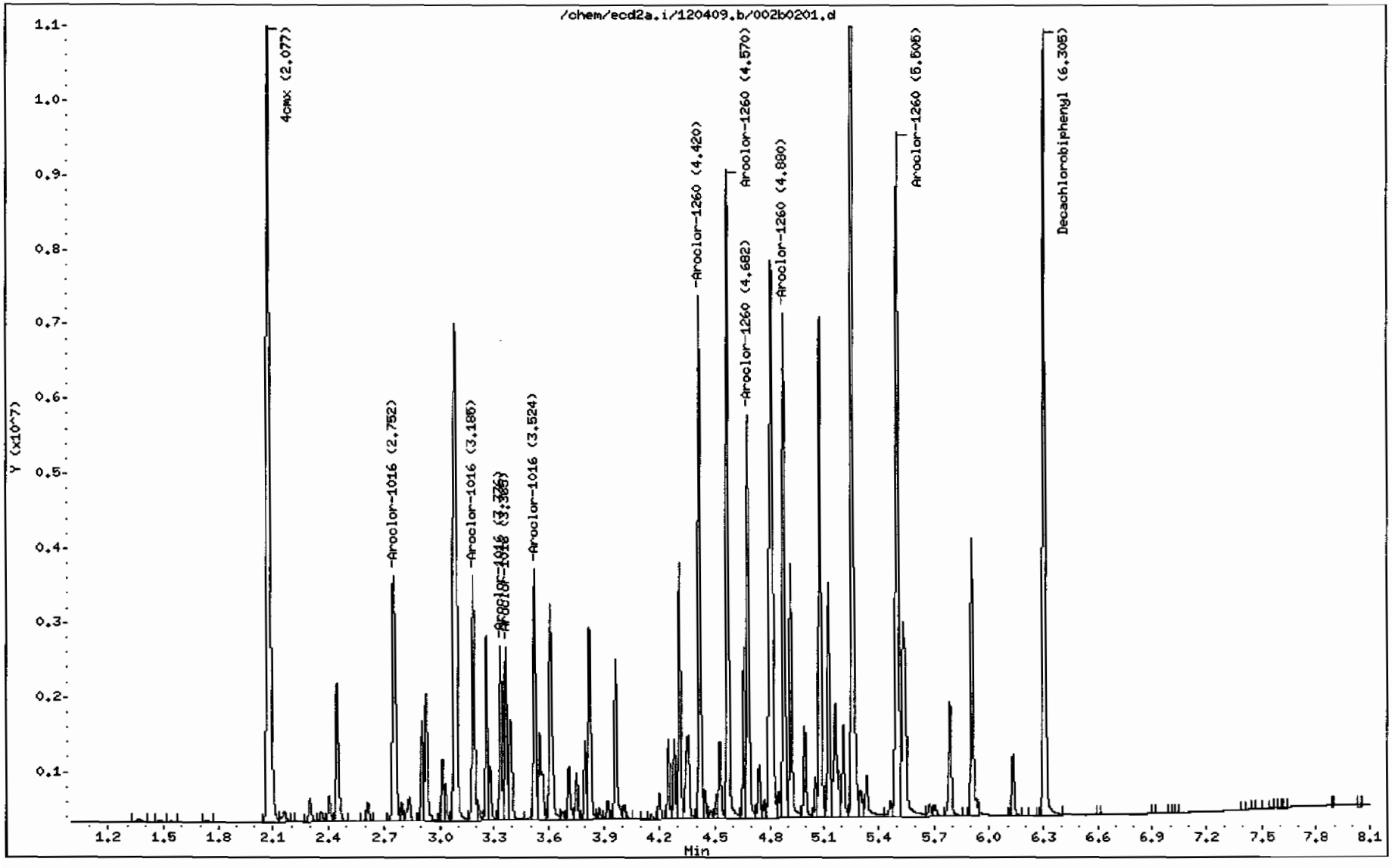

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 08:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.782	1.781	0.001	6531630	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	4917627	100.000	89.7	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.246	3.246	0.000	1983592	1000.00	954	80.00- 120.00	100.00
3.429	3.429	0.000	2669351	1000.00	963	114.57- 154.57	134.57
3.698	3.698	0.000	3658874	1000.00	978	164.46- 204.46	184.46
3.890	3.890	0.000	2704227	1000.00	972	116.33- 156.33	136.33
4.019	4.019	0.000	2559579	1000.00	927	109.04- 149.04	129.04
Average of Peak Amounts =					959		

Data File: /chem/ecd2a.i/120409.b/003f0301.d

Date : 04-DEC-2009 08:29

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP1

Page 1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

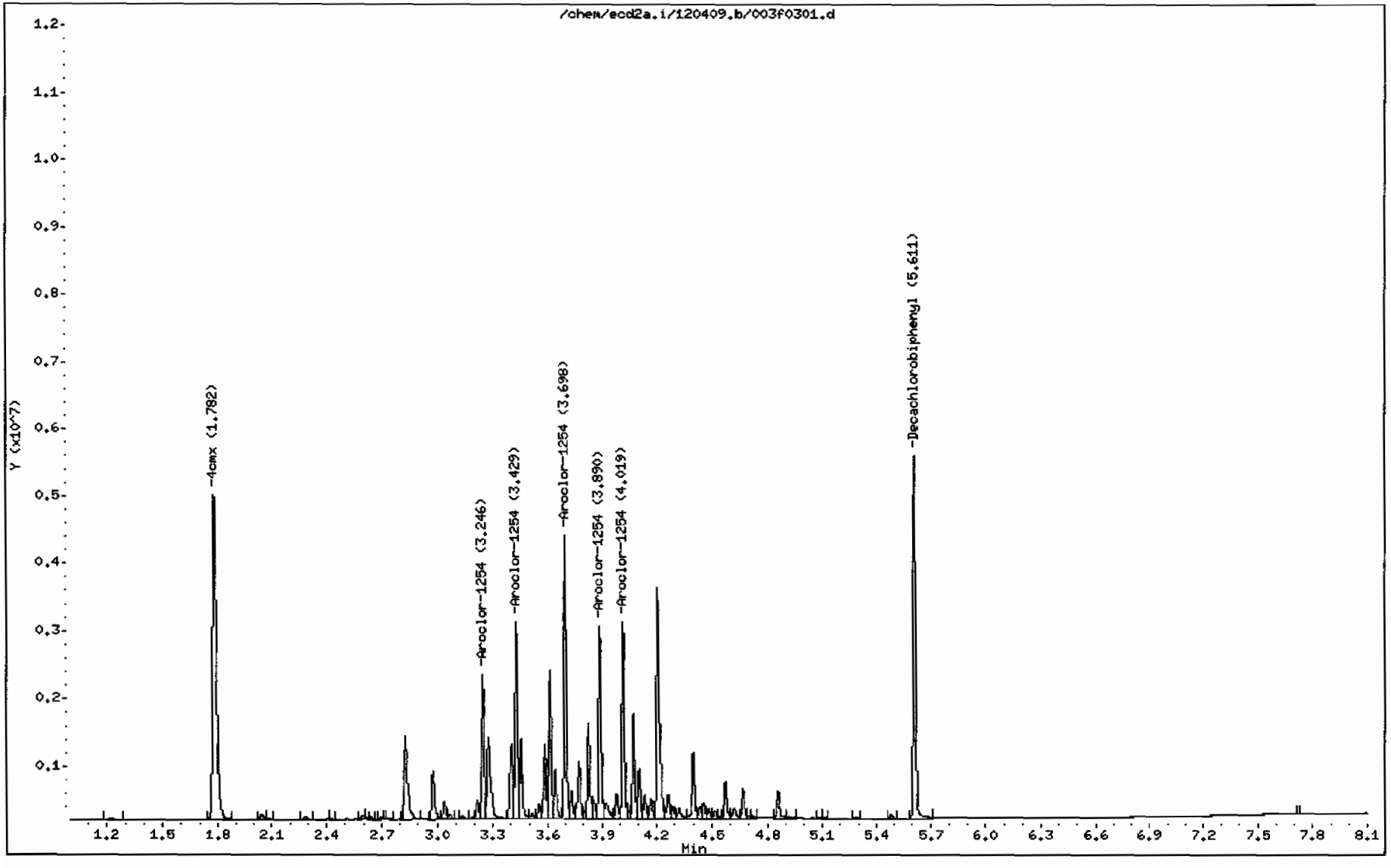

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 08:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.077	0.001	14274103	100.000	121	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10205427	100.000	93.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	5022044	1000.00	1010	80.00- 120.00	100.00
3.965	3.965	0.000	5851683	1000.00	1010	96.52- 136.52	116.52
4.200	4.200	0.000	4134285	1000.00	1030	62.32- 102.32	82.32
4.281	4.281	0.000	7930966	1000.00	1020	137.92- 177.92	157.92
4.445	4.445	0.000	5531600	1000.00	986	90.15- 130.15	110.15

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/120409.b/003b0301.d
Date : 04-DEC-2009 08:29
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

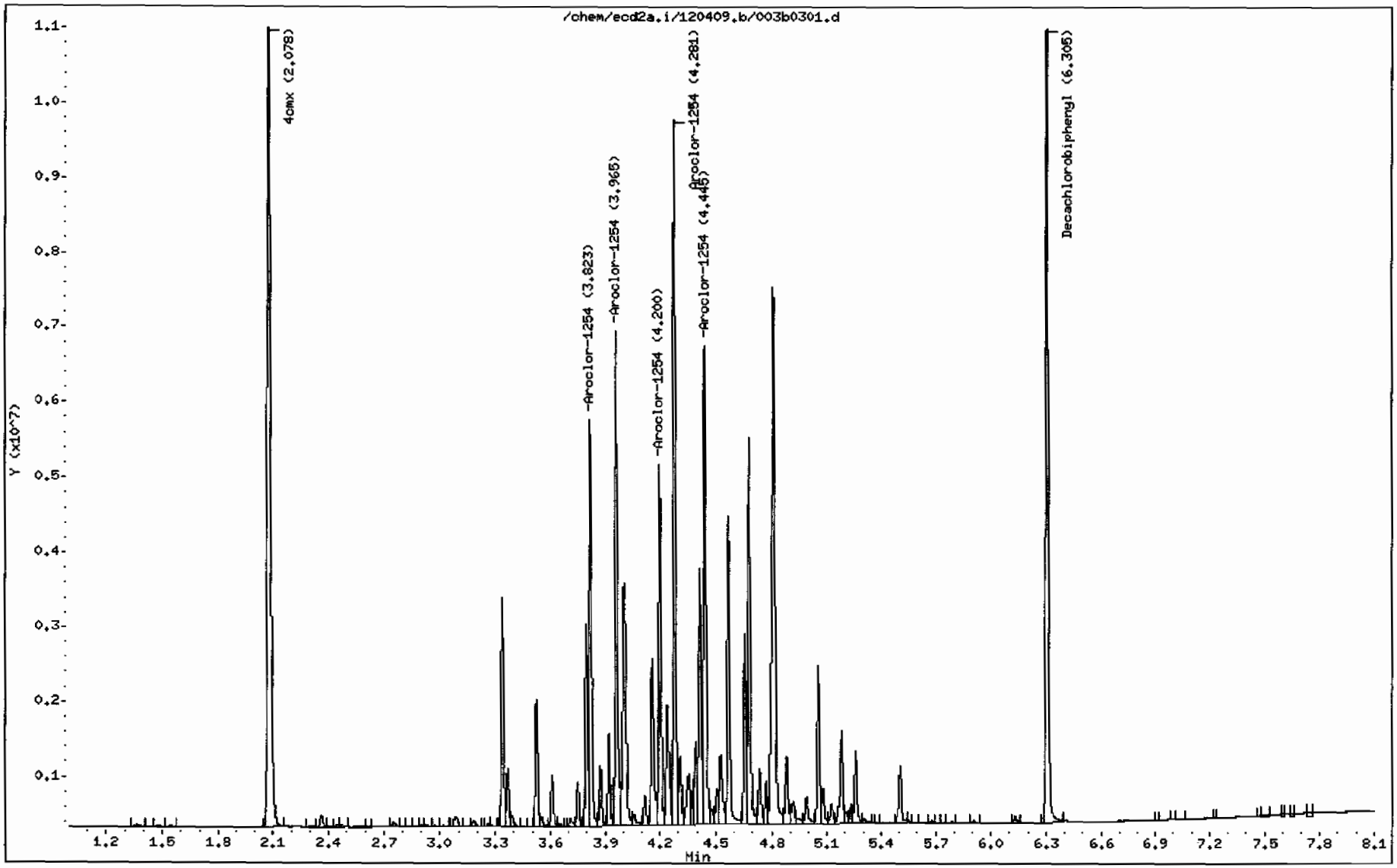

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 08:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6486468	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5102418	100.000	93.1	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.282	2.282	0.000	1755609	1000.00	1010	80.00- 120.00	100.00(M)
2.695	2.695	0.000	1482642	1000.00	999	64.45- 104.45	84.45
2.737	2.737	0.000	919294	1000.00	1010	32.36- 72.36	52.36
2.830	2.830	0.000	731419	1000.00	1010	21.66- 61.66	41.66
2.980	2.980	0.000	1074276	1000.00	960	41.19- 81.19	61.19
		Average of Peak Amounts =			998		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/004F0401.d
Date : 04-DEC-2009 08:40
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

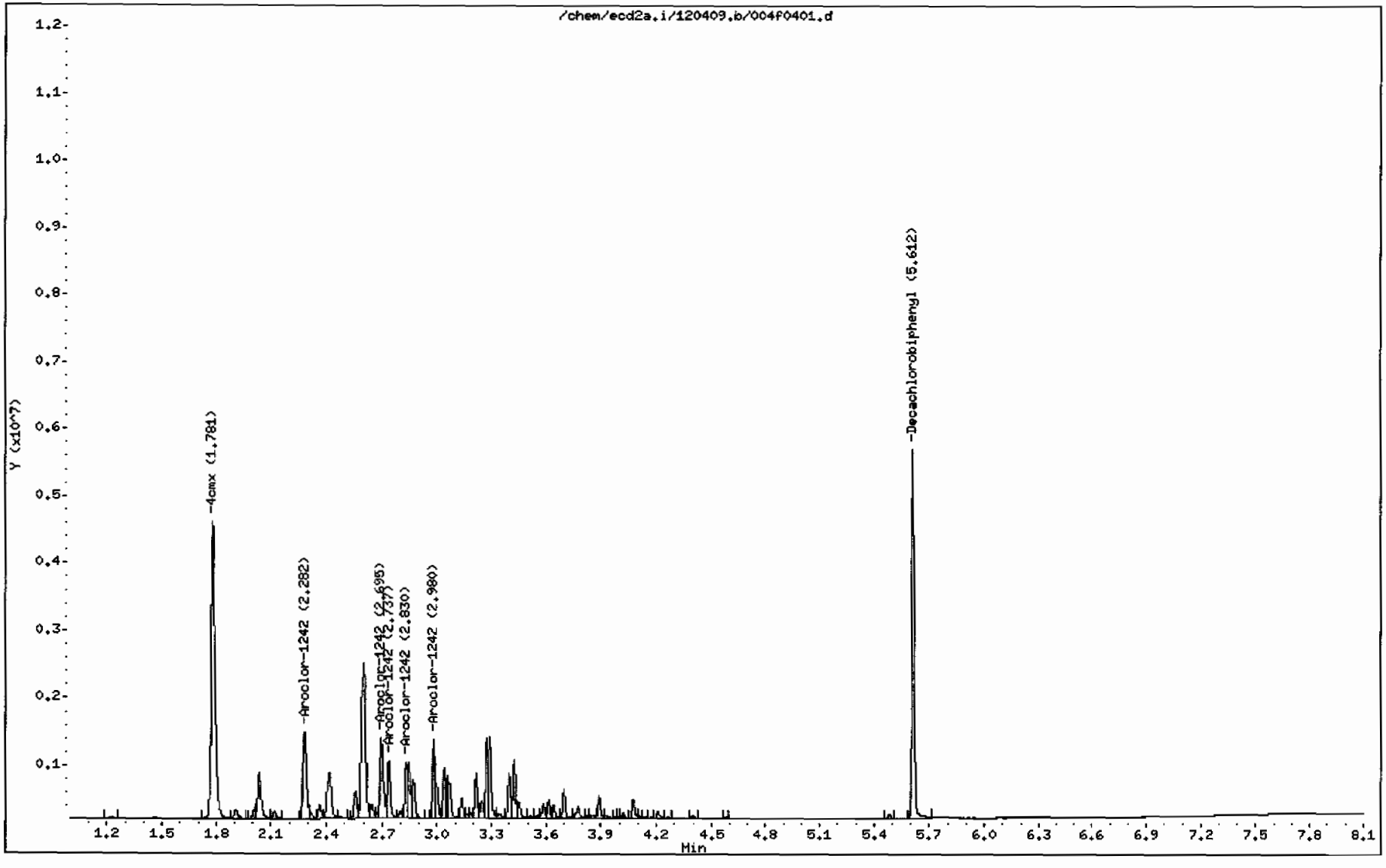

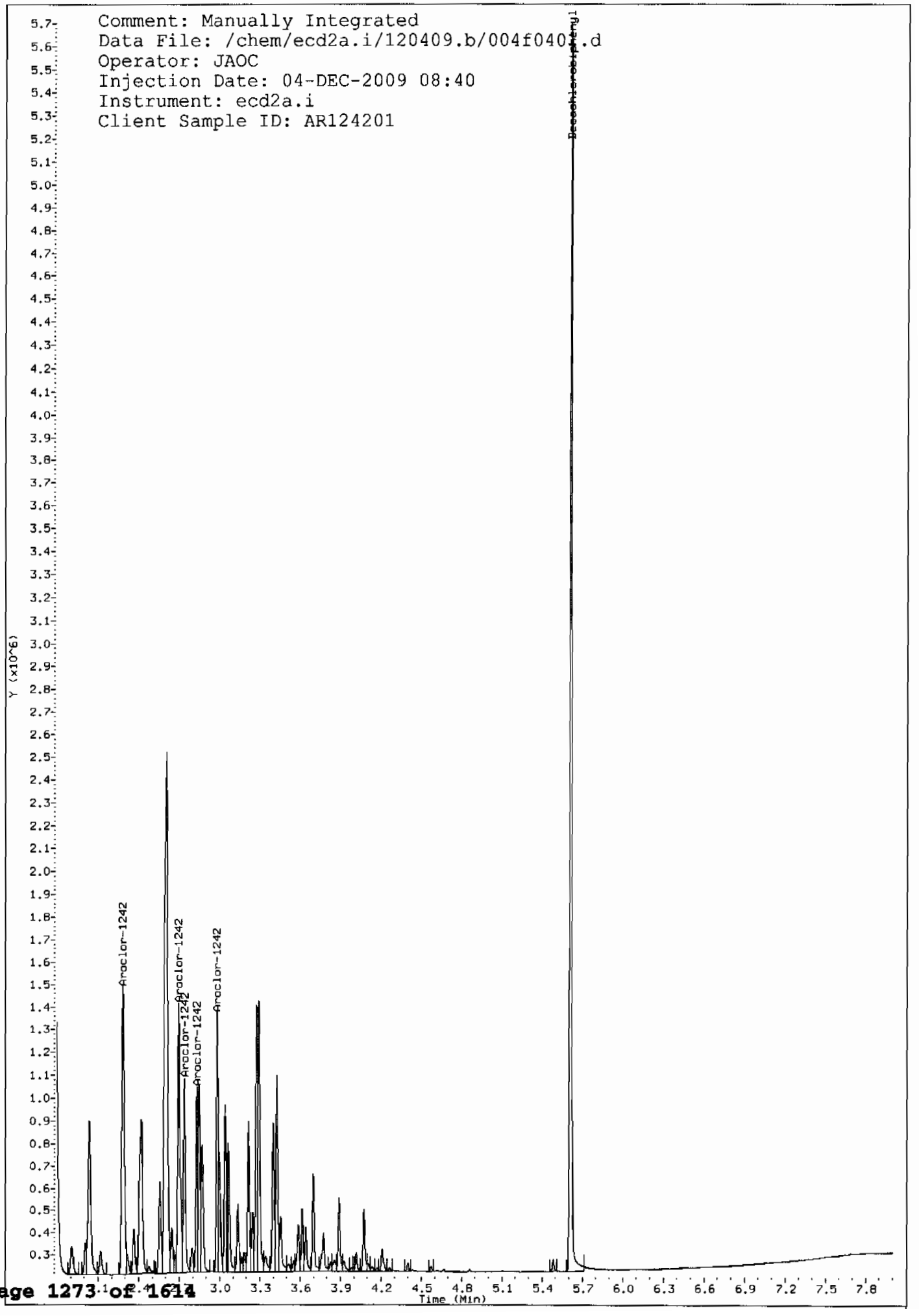
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Data File: /chem/ecd2a.i/120409.b/004f040.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:40
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

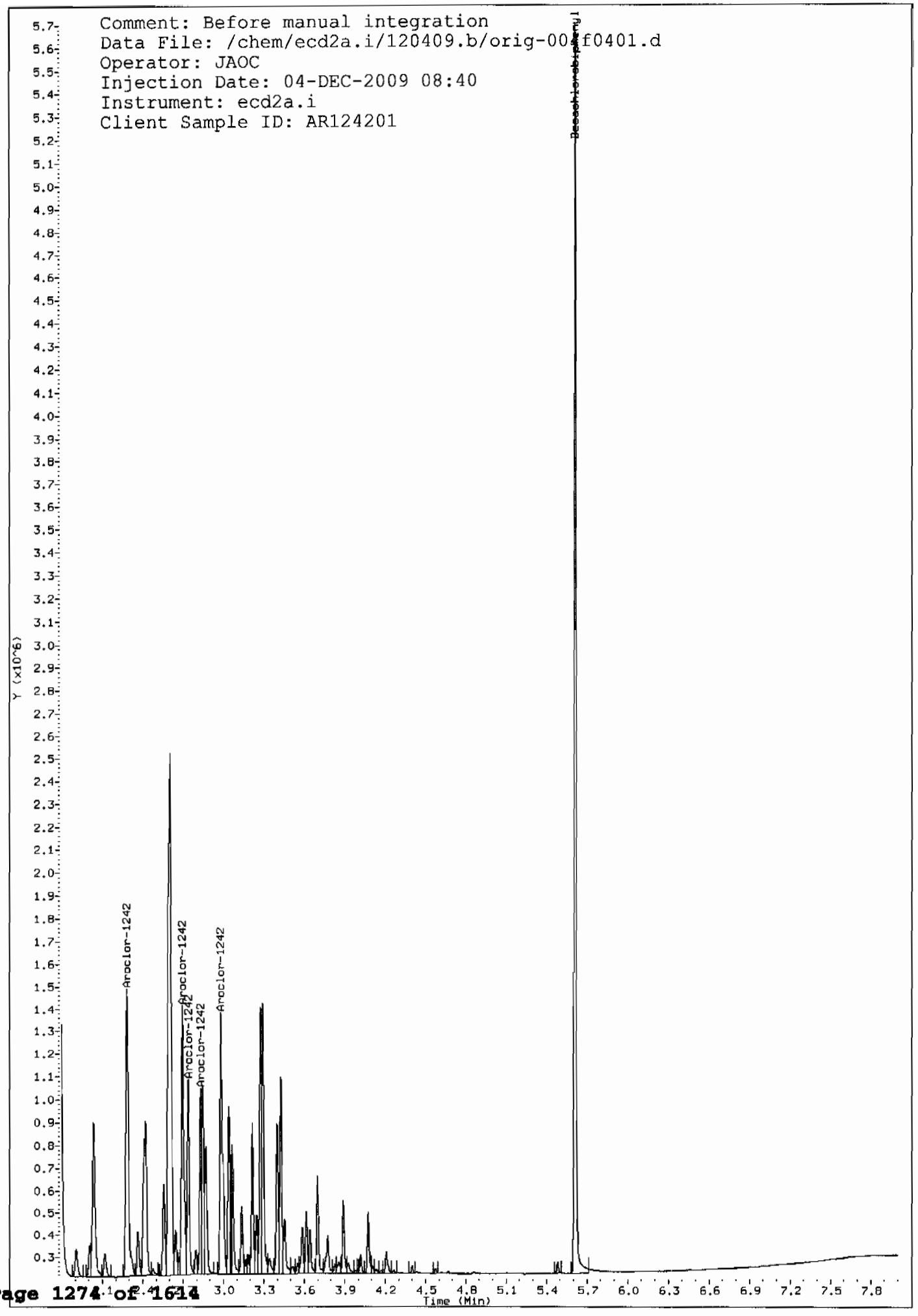
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-004f0401.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:40
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 08:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	14080772	100.000	119	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	10639536	100.000	97.9	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.752	2.752	0.000	3708980	1000.00	1080	80.00- 120.00	100.00
3.186	3.186	0.000	2900924	1000.00	1080	58.21- 98.21	78.21
3.258	3.258	0.000	1759638	1000.00	1080	27.44- 67.44	47.44
3.337	3.337	0.000	1642557	1000.00	1090	24.29- 64.29	44.29
3.524	3.524	0.000	2418759	1000.00	1130	45.21- 85.21	65.21

Average of Peak Amounts = 1.09e+03

Data File: /chem/ecd2a.i/120409.b/004b0401.d

Date : 04-DEC-2009 08:40

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

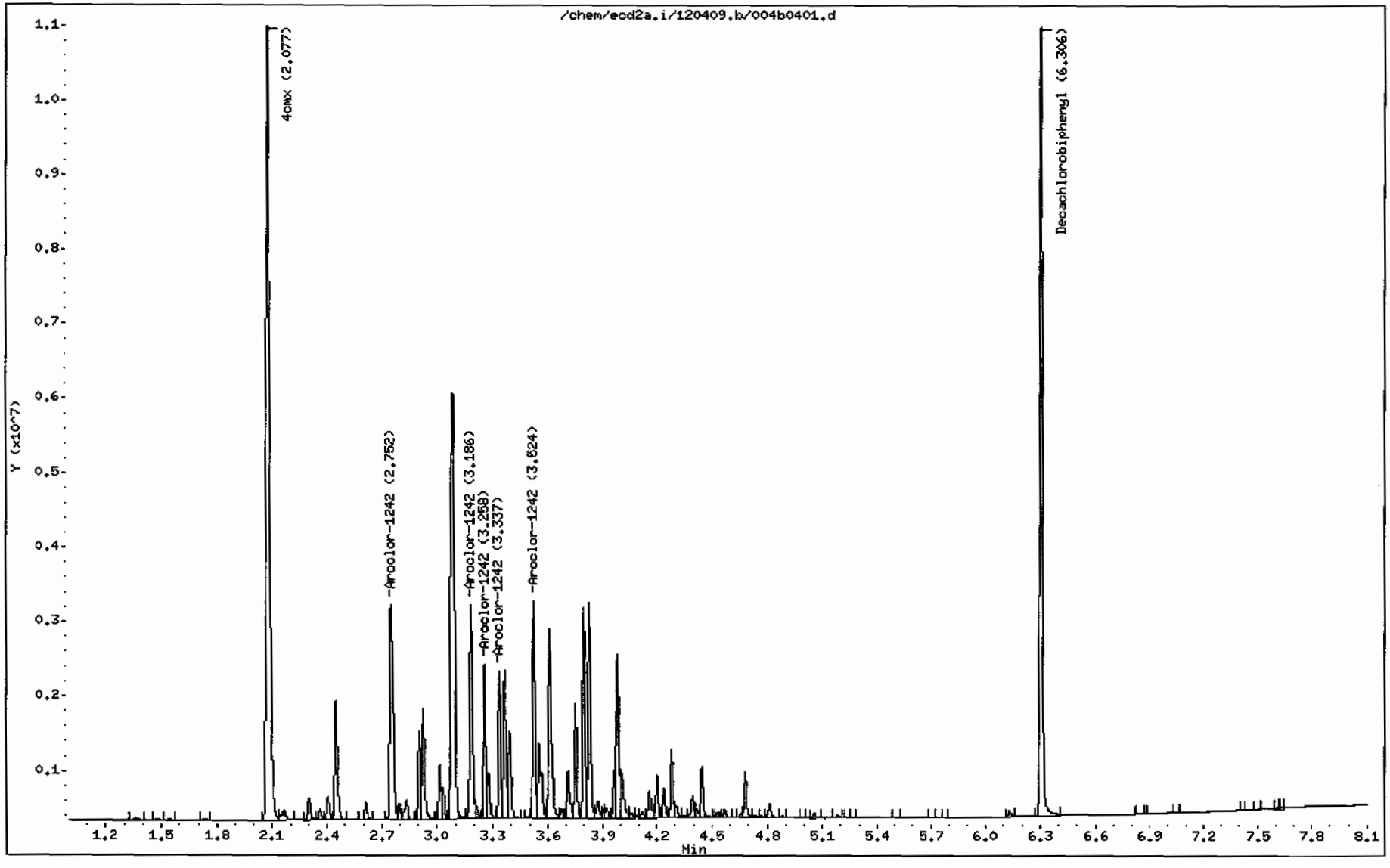

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 08:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	7149591	100.000	124	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5747701	100.000	105	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.829	2.829	0.000	1497108	1000.00	980	80.00- 120.00	100.00(M)
2.980	2.980	0.000	2034290	1000.00	1000	115.88- 155.88	135.88
3.039	3.039	0.000	1541525	1000.00	981	82.97- 122.97	102.97
3.274	3.274	0.000	2243178	1000.00	1010	129.83- 169.83	149.83
3.427	3.427	0.000	1886569	1000.00	986	106.01- 146.01	126.01
Average of Peak Amounts =					993		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/005f0501.d

Date : 04-DEC-2009 08:51

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

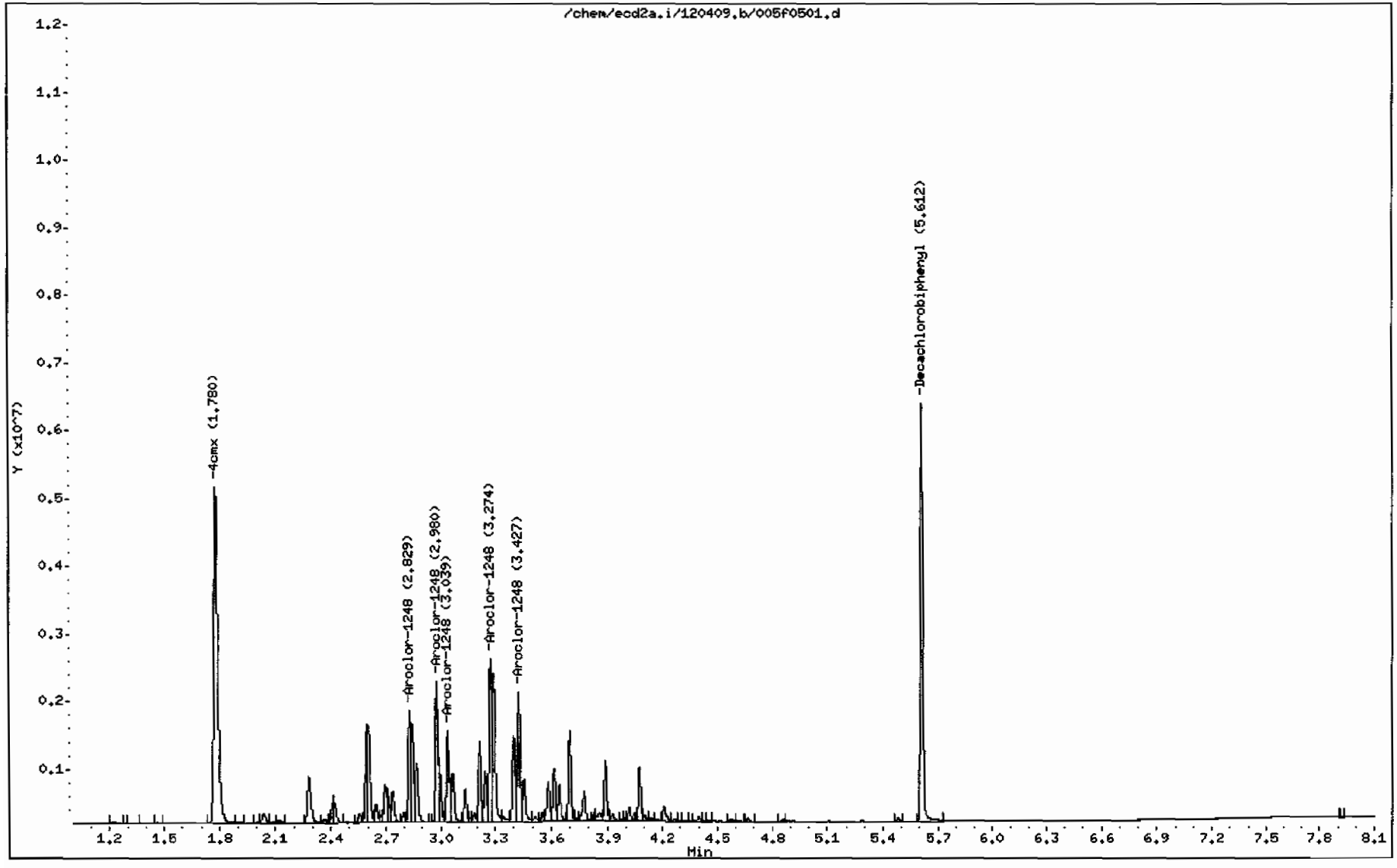

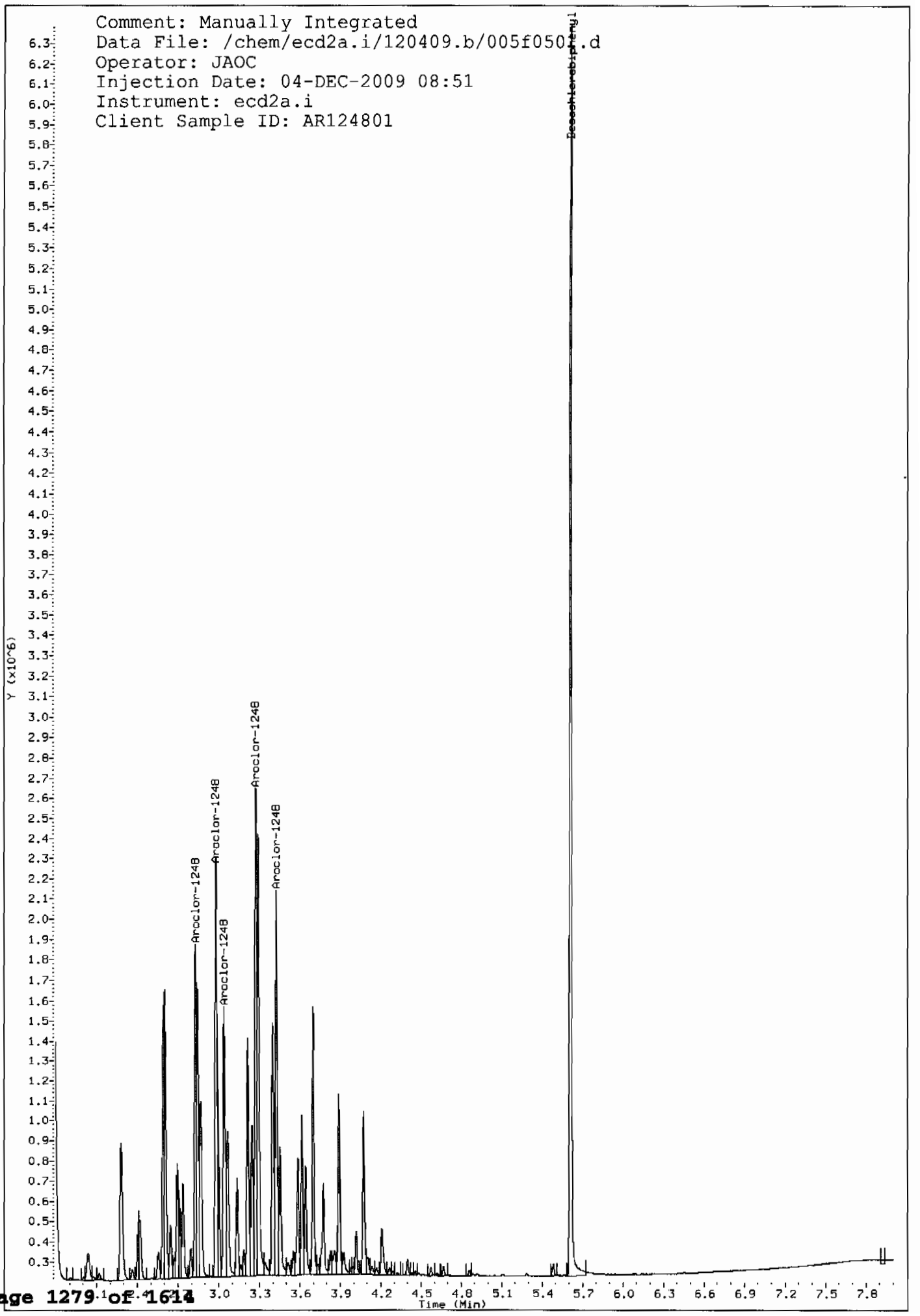
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/005f0501.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:51
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-005f0501.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:51
Instrument: ecd2a.i
Client Sample ID: AR124801

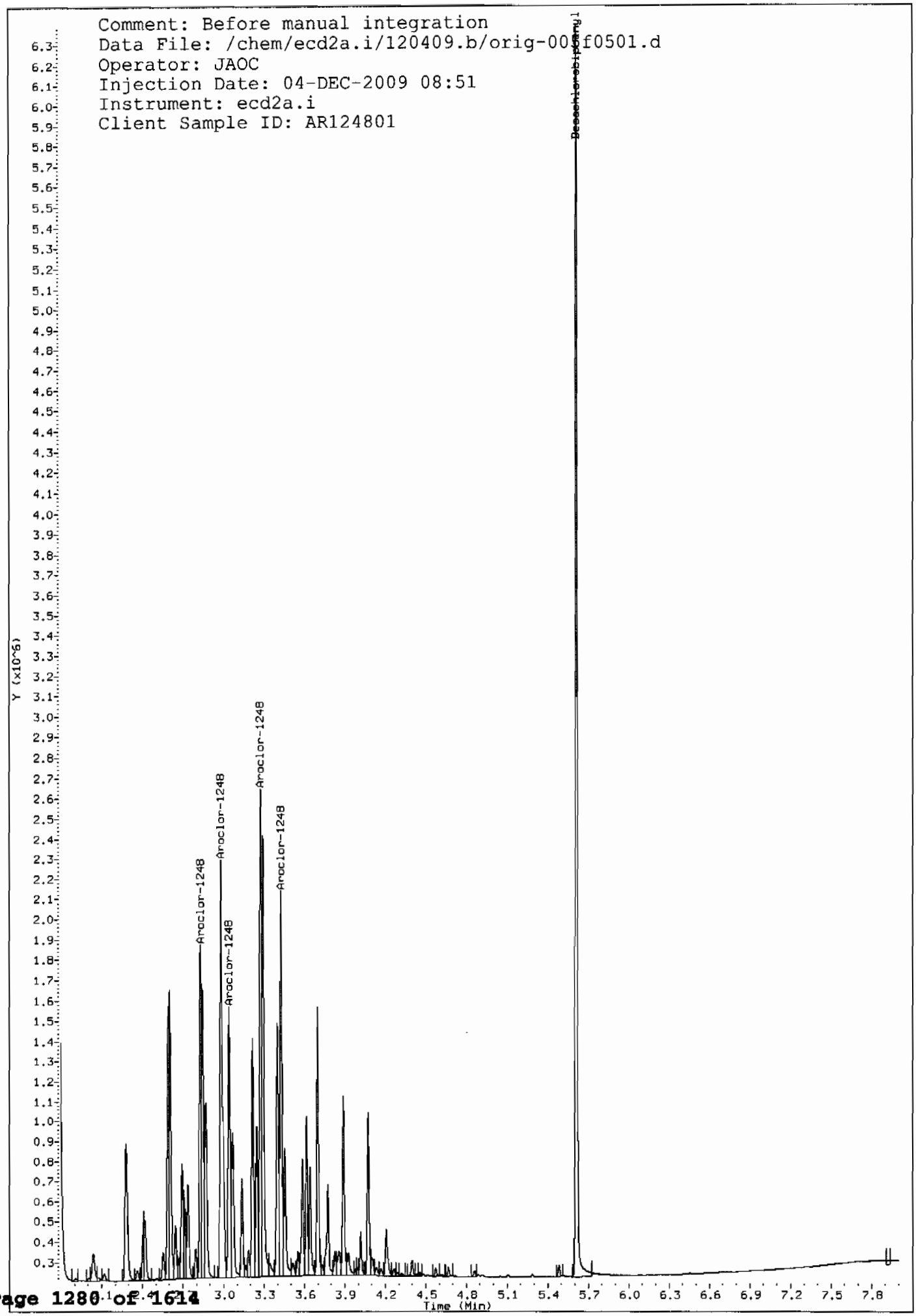

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 08:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	15582216	100.000	132	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	11985221	100.000	110	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.337	3.337	0.000	3392581	1000.00	1030	80.00- 120.00	100.00
3.523	3.523	0.000	4371454	1000.00	1040	108.85- 148.85	128.85
3.609	3.609	0.000	4618983	1000.00	1040	116.15- 156.15	136.15
3.798	3.798	0.000	4893749	1000.00	1040	124.25- 164.25	144.25
3.828	3.828	0.000	5579765	1000.00	1040	144.47- 184.47	164.47

Average of Peak Amounts = 1.04e+03

Data File: /chem/ecd2a.i/120409.b/005b0501.d

Date : 04-DEC-2009 08:51

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

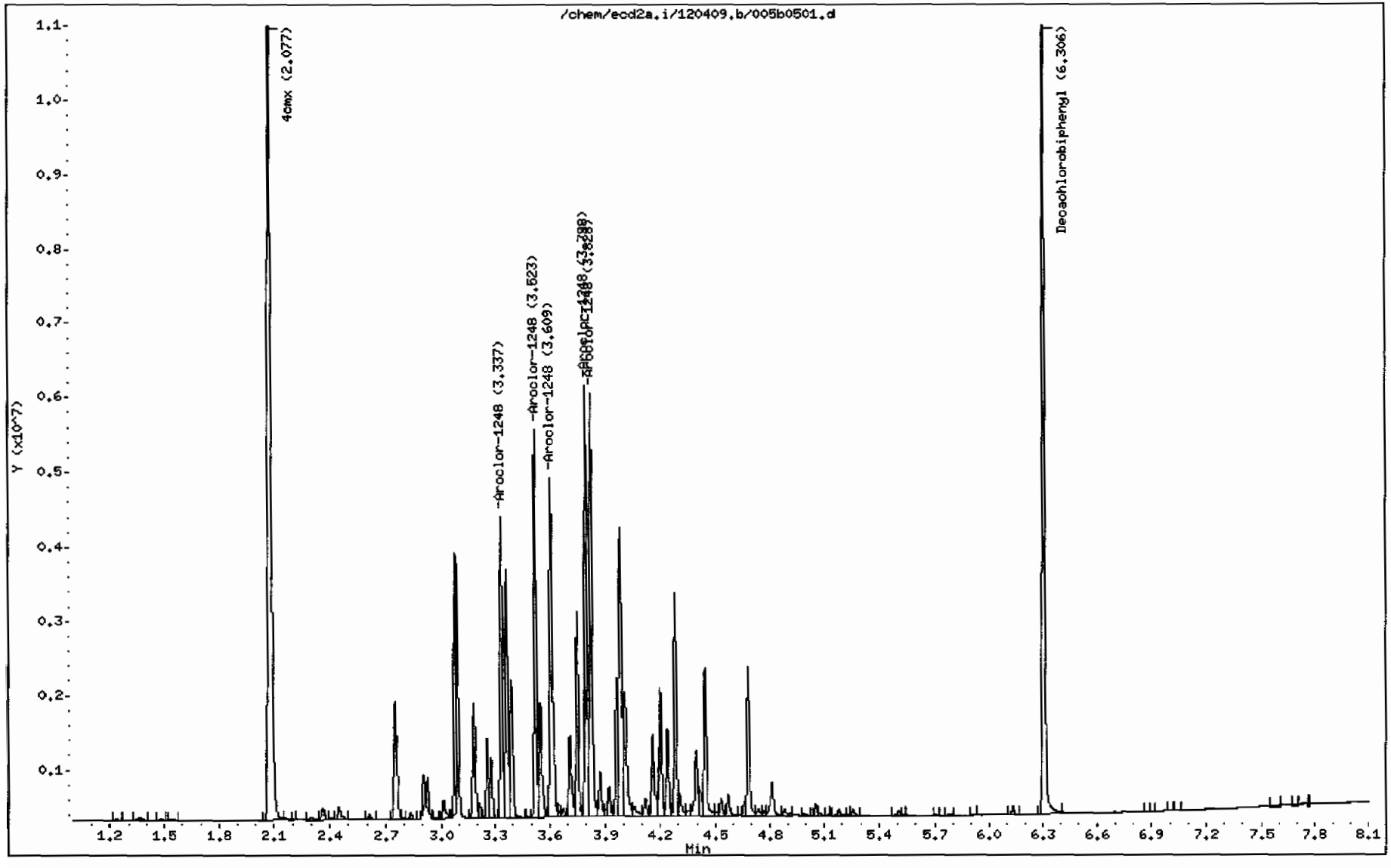

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	8621267	100.000	149	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	6506644	100.000	119	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.035	2.035	0.000	1384275	1000.00	1190	80.00- 120.00	100.00
2.281	2.281	0.000	1104806	1000.00	1190	59.81- 99.81	79.81
2.694	2.694	0.000	941781	1000.00	1180	48.03- 88.03	68.03
2.737	2.737	0.000	600816	1000.00	1180	23.40- 63.40	43.40
2.980	2.980	0.000	943613	1000.00	1620	48.17- 88.17	68.17

Average of Peak Amounts = 1.27e+03

Data File: /chem/ecd2a.i/120409.b/006f0601.d

Date : 04-DEC-2009 09:02

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

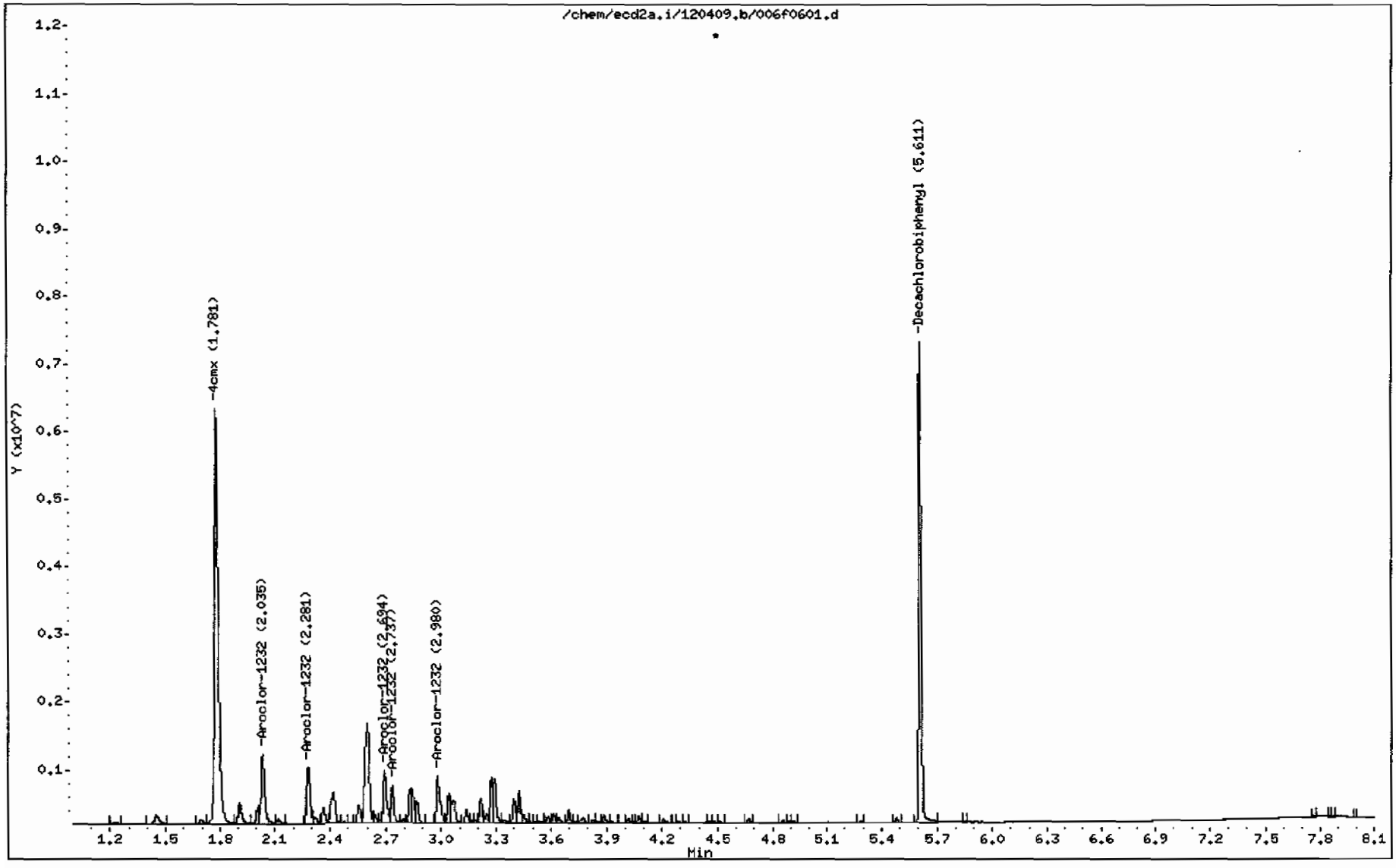

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	18754881	100.000	159	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	13758950	100.000	127	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.449	2.449	0.000	2472780	1000.00	1200	80.00- 120.00	100.00
2.752	2.752	0.000	2370965	1000.00	1210	75.88- 115.88	95.88
3.186	3.186	0.000	1903861	1000.00	1270	56.99- 96.99	76.99
3.258	3.258	0.000	1122766	1000.00	1210	25.41- 65.41	45.41
3.523	3.523	0.000	1380121	1000.00	1250	35.81- 75.81	55.81

Average of Peak Amounts = 1.23e+03

Data File: /ohem/ecd2a.i/120409.b/006b0601.d
Date : 04-DEC-2009 09:02
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

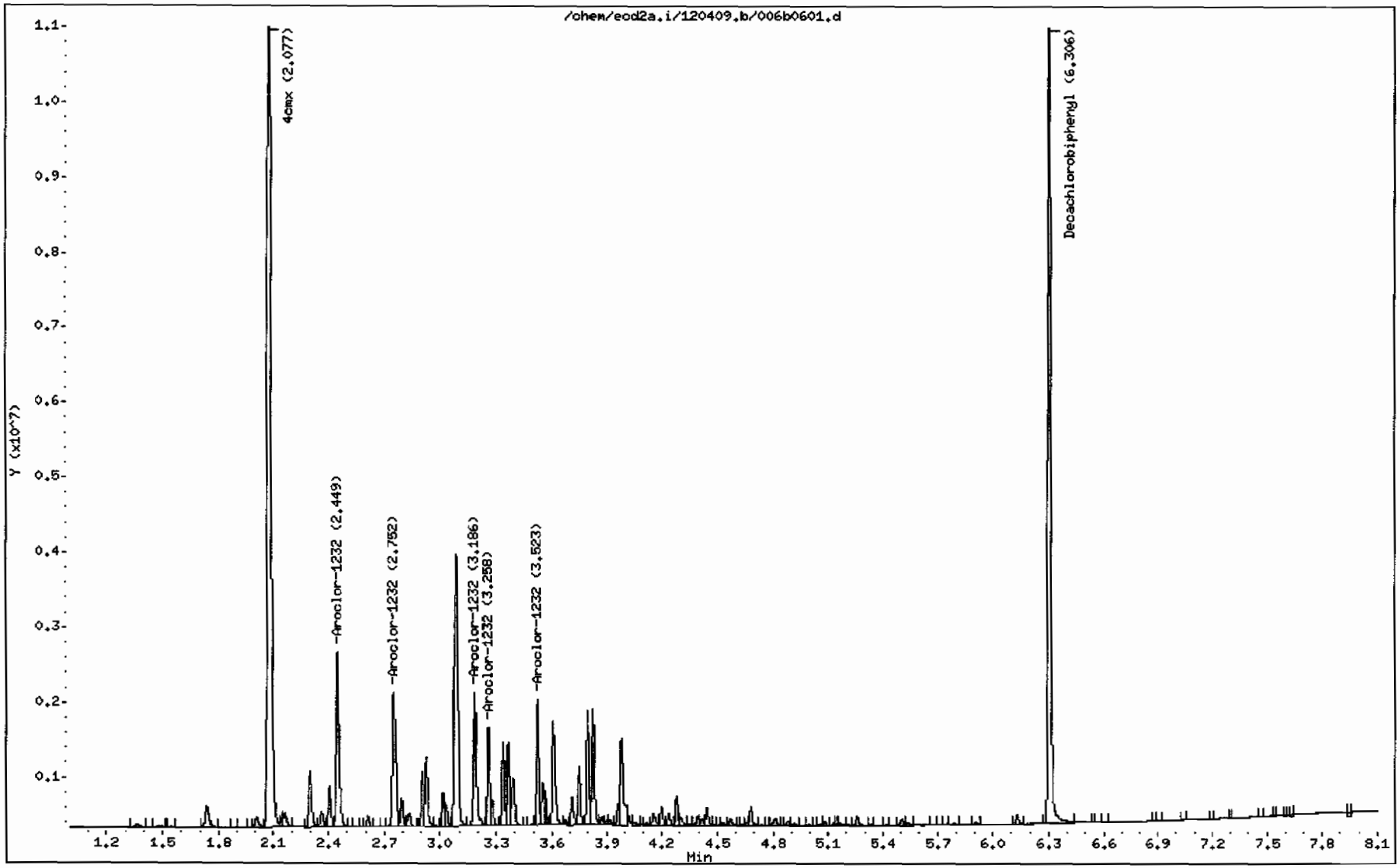

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 09:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	6580063	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5053731	100.000	92.2	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.446	1.446	0.000	540584	1000.00	1160	80.00- 120.00	100.00
1.906	1.906	0.000	754634	1000.00	1150	119.60- 159.60	139.60
2.005	2.005	0.000	376013	1000.00	1080	49.56- 89.56	69.56

Average of Peak Amounts = 1.13e+03

Data File: /chem/ecd2a.i/120409.b/007f0701.d
Date : 04-DEC-2009 09:14
Client ID: AR122101
Sample Info: !WAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

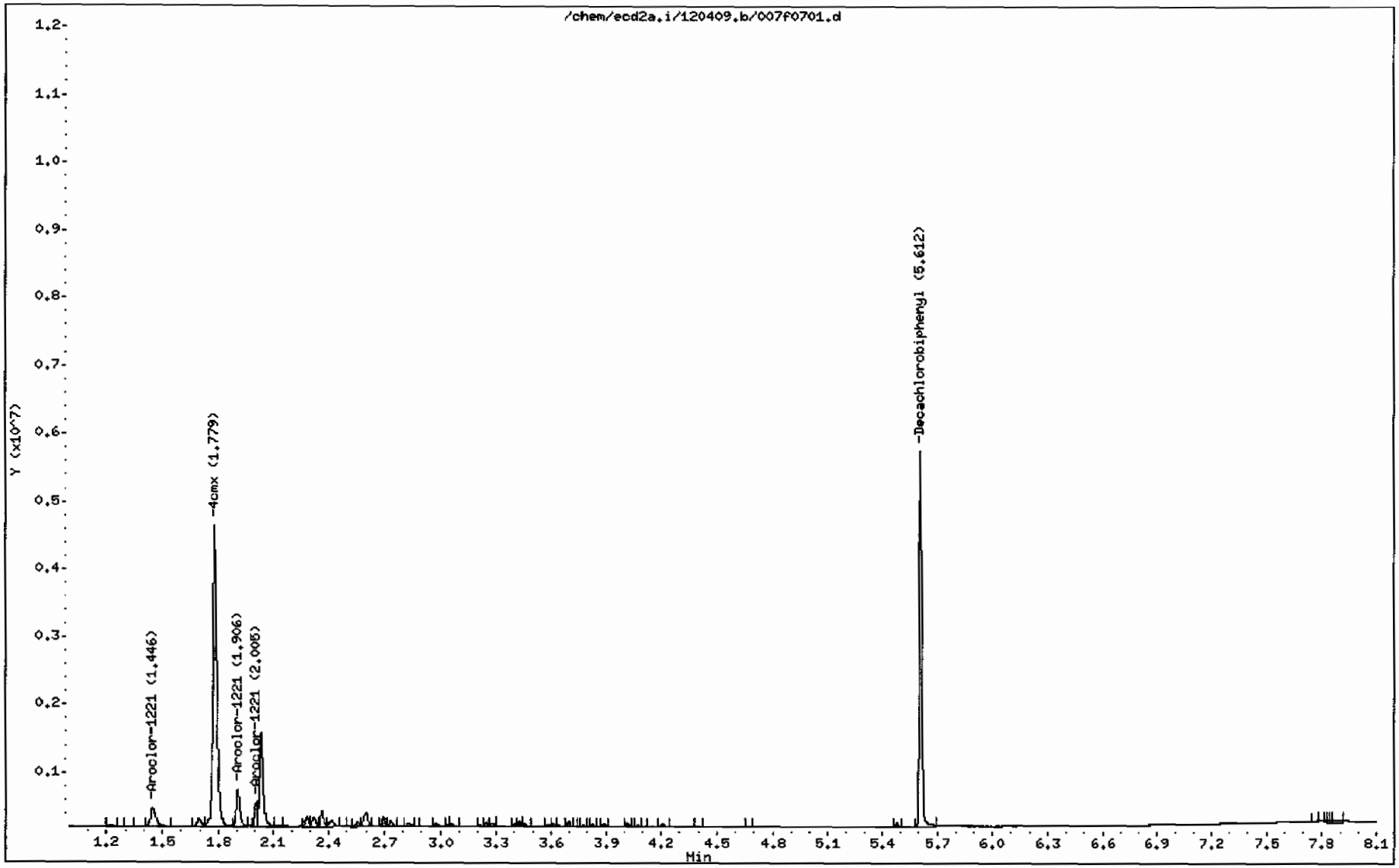

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 09:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	14002245	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	10613265	100.000	97.7	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1409536	1000.00	1120	80.00- 120.00	100.00
2.404	2.404	0.000	866738	1000.00	1120	41.49- 81.49	61.49
2.448	2.448	0.000	3431998	1000.00	1120	223.48- 263.48	243.48

Average of Peak Amounts = 1.12e+03

Data File: /chem/ecd2a.i/120409.b/007b0701.d

Date : 04-DEC-2009 09:14

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

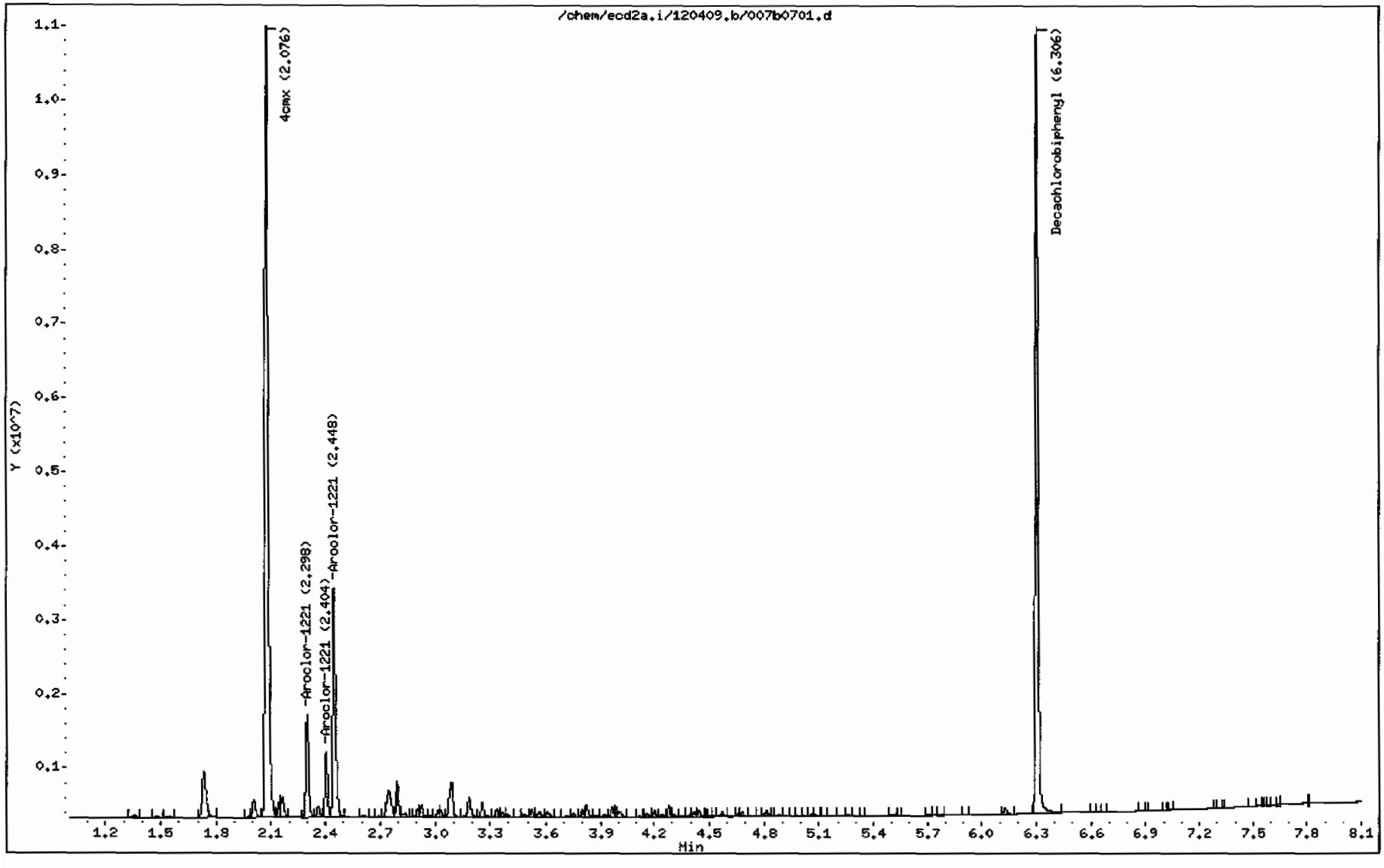

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/014f1401.d
Lab Smp Id: WAR091119-60 02 Client Smp ID: AR166002
Inj Date : 04-DEC-2009 10:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 02
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6275112	100.000	109	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	4616724	100.000	84.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.282	0.000	2036570	1000.00	970	80.00- 120.00	100.00(M)
2.604	2.604	0.000	4386282	1000.00	974	195.38- 235.38	215.38
2.694	2.695	-0.001	1769419	1000.00	972	66.88- 106.88	86.88
2.829	2.830	-0.001	885419	1000.00	949	23.48- 63.48	43.48
2.980	2.980	0.000	1327543	1000.00	963	45.19- 85.19	65.19
Average of Peak Amounts =					966		
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	4147508	1000.00	1020	80.00- 120.00	100.00
4.289	4.290	-0.001	2533961	1000.00	1000	41.10- 81.10	61.10
4.455	4.456	-0.001	2585807	1000.00	1000	42.35- 82.35	62.35
4.668	4.668	0.000	6069416	1000.00	1000	126.34- 166.34	146.34
4.857	4.857	0.000	2894297	1000.00	994	49.78- 89.78	69.78
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/014f1401.d
Date : 04-DEC-2009 10:31
Client ID: AR166002
Sample Info: IWAR091119-60 02

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

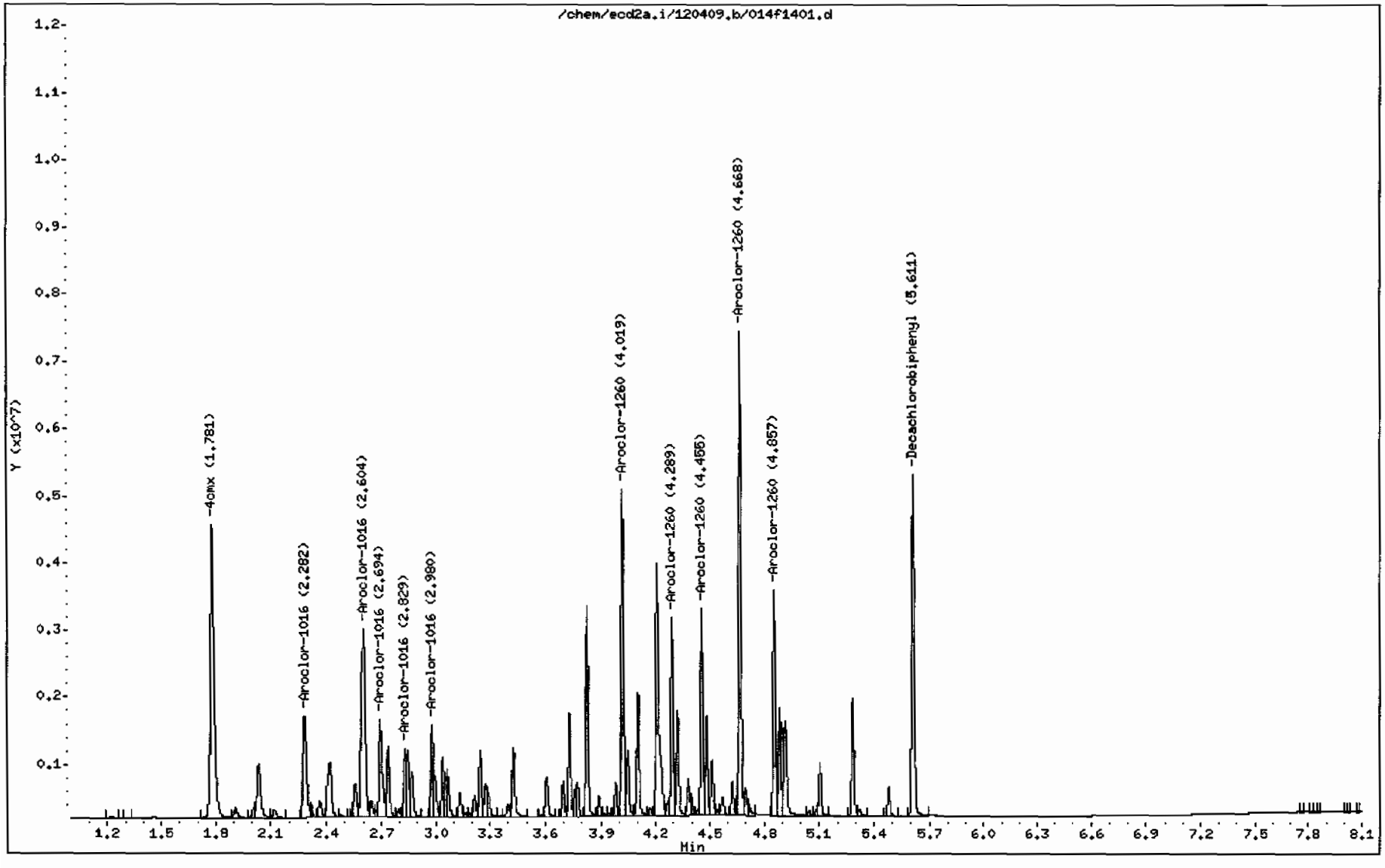

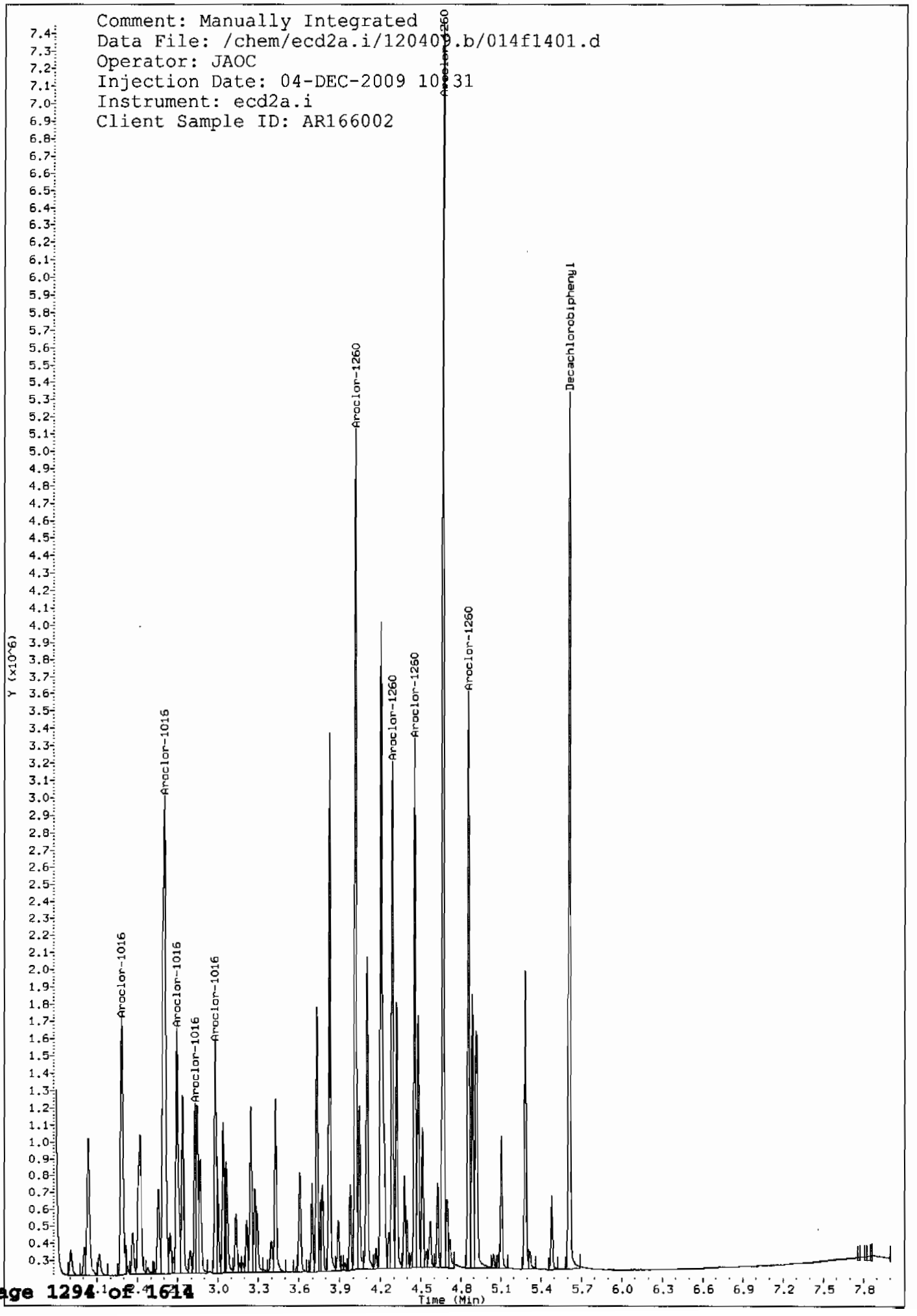
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/014f1401.d
Operator: JAOC
Injection Date: 04-DEC-2009 10:31
Instrument: ecd2a.i
Client Sample ID: AR166002
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-014f1401.d
Operator: JAOC
Injection Date: 04-DEC-2009 10:31
Instrument: ecd2a.i
Client Sample ID: AR166002

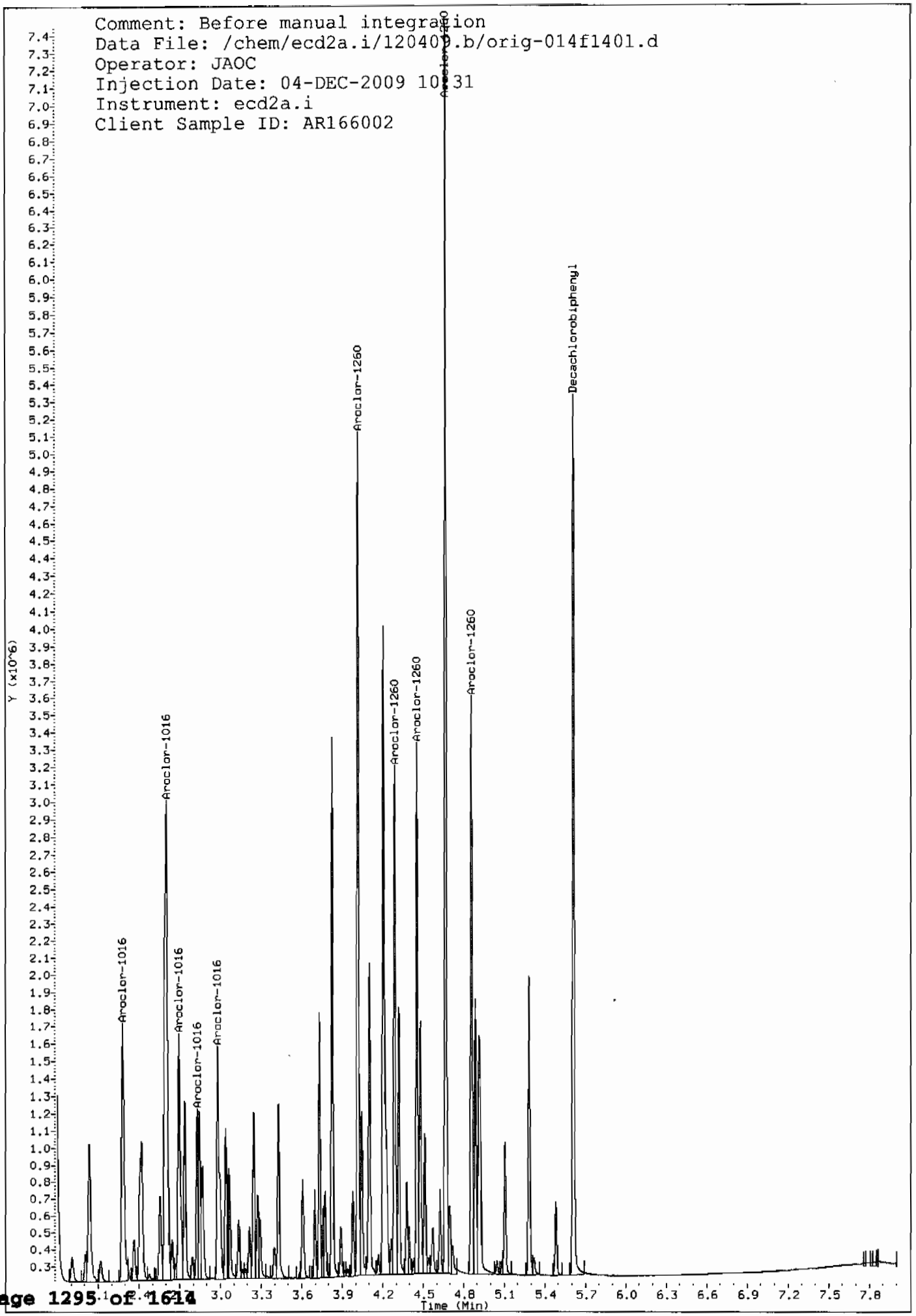

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/014b1401.d
Lab Smp Id: WAR091119-60 02 Client Smp ID: AR166002
Inj Date : 04-DEC-2009 10:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 02
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.077	0.001	13505380	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	9785766	100.000	90.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	4276331	1000.00	1000	80.00- 120.00	100.00
3.185	3.185	0.000	3460999	1000.00	1000	60.93- 100.93	80.93
3.336	3.336	0.000	1994688	1000.00	1010	26.64- 66.64	46.64
3.364	3.365	-0.001	2072725	1000.00	1000	28.47- 68.47	48.47
3.523	3.524	-0.001	2846622	1000.00	1030	46.57- 86.57	66.57
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	5875455	1000.00	1060	80.00- 120.00	100.00
4.570	4.570	0.000	7505516	1000.00	1050	107.74- 147.74	127.74
4.682	4.682	0.000	4992599	1000.00	1060	64.97- 104.97	84.97
4.879	4.880	-0.001	5844981	1000.00	1010	79.48- 119.48	99.48
5.505	5.505	0.000	9246938	1000.00	1020	137.38- 177.38	157.38
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120409.b/014b1401.d
Date : 04-DEC-2009 10:31
Client ID: AR166002
Sample Info: IWAR091119-60 02

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

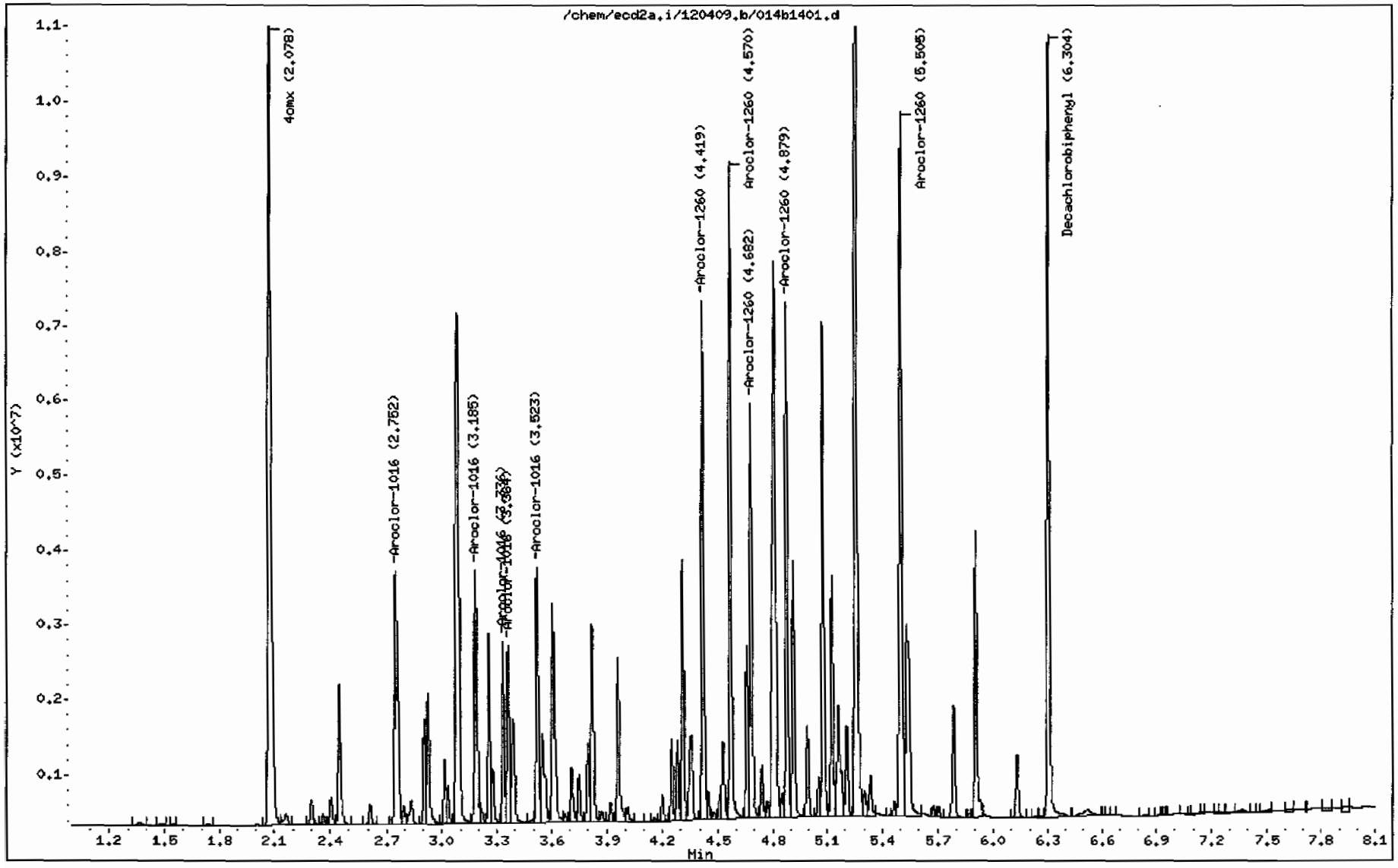

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	AR166001	WAR091119-60	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	AR124801	WAR091027-48	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	AR166001	WAR091119-60	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	AR124801	WAR091027-48	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0810	1.77	5.61
02	AR166001	WAR091119-60	12/03/09	0821	1.78	5.61
03	AR125401	WAR091102-54	12/03/09	0832	1.78	5.61
04	AR124201	WAR091102-42	12/03/09	0843	1.78	5.61
05	AR124801	WAR091027-48	12/03/09	0854	1.78	5.61
06	AR123201	WAR090930-32	12/03/09	0905	1.78	5.61
07	AR122101	WAR091111-21	12/03/09	0917	1.78	5.61
08	AR126201	WAR091111-62	12/03/09	0928	1.78	5.61
09	AR126801	WAR091106-68	12/03/09	0939	1.78	5.61
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0950		
11	PIBLK02	WAR090916-99	12/03/09	1001	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	1012	1.78	5.61
13	ZZZZZ	ZZZZZ	12/03/09	1023	1.78	5.61
14	ZZZZZ	ZZZZZ	12/03/09	1034	1.78	5.61
15	ZZZZZ	ZZZZZ	12/03/09	1045	1.78	5.61
16	ZZZZZ	ZZZZZ	12/03/09	1057	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	1108	1.78	5.61
18	ZZZZZ	ZZZZZ	12/03/09	1119	1.78	5.61
19	ZZZZZ	ZZZZZ	12/03/09	1130	1.78	5.61
20	ZZZZZ	ZZZZZ	12/03/09	1141	1.78	5.61
21	AR166002	WAR091119-60	12/03/09	1152	1.78	5.61
22	PIBLK03	WAR090916-99	12/03/09	1203	1.78	5.61
23	ZZZZZ	ZZZZZ	12/03/09	1214	1.78	5.61
24	ZZZZZ	ZZZZZ	12/03/09	1225	1.78	5.61
25	ZZZZZ	ZZZZZ	12/03/09	1236	1.78	5.61
26	ZZZZZ	ZZZZZ	12/03/09	1247	1.78	5.61
27	ZZZZZ	ZZZZZ	12/03/09	1258	1.78	5.61
28	ZZZZZ	ZZZZZ	12/03/09	1309	1.78	5.61
29	ZZZZZ	ZZZZZ	12/03/09	1321	1.78	5.61
30	ZZZZZ	ZZZZZ	12/03/09	1332	1.78	5.61
31	ZZZZZ	ZZZZZ	12/03/09	1343	1.78	5.61
32	ZZZZZ	ZZZZZ	12/03/09	1354	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166003	WAR091119-60	12/03/09	1405	1.78	5.61
02	PIBLK04	WAR090916-99	12/03/09	1416	1.78	5.61
03	ZZZZZ	ZZZZZ	12/03/09	1427	1.78	5.61
04	ZZZZZ	ZZZZZ	12/03/09	1438	1.78	5.61
05	ZZZZZ	ZZZZZ	12/03/09	1449	1.78	5.61
06	ZZZZZ	ZZZZZ	12/03/09	1500	1.78	5.61
07	ZZZZZ	ZZZZZ	12/03/09	1512	1.78	5.62
08	ZZZZZ	ZZZZZ	12/03/09	1523	1.78	5.61
09	ZZZZZ	ZZZZZ	12/03/09	1534	1.78	5.61
10	ZZZZZ	ZZZZZ	12/03/09	1545	1.78	5.61
11	ZZZZZ	ZZZZZ	12/03/09	1556	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	1607	1.78	5.61
13	AR166004	WAR091119-60	12/03/09	1618	1.78	5.61
14	PIBLK05	WAR090916-99	12/03/09	1629	1.78	5.61
15	ZZZZZ	ZZZZZ	12/03/09	1640	1.78	5.61
16	ZZZZZ	ZZZZZ	12/03/09	1651	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	1703	1.78	5.62
18	ZZZZZ	ZZZZZ	12/03/09	1714	1.78	5.61
19	PBLK01	1201981410	12/03/09	1725	1.78	5.61
20	PBLK01LCS	1201981413	12/03/09	1736	1.78	5.61
21	ZZZZZ	ZZZZZ	12/03/09	1747	1.78	5.61
22	ZZZZZ	ZZZZZ	12/03/09	1758	1.78	5.61
23	AR166005	WAR091119-60	12/03/09	1809	1.78	5.61
24	PIBLK06	WAR090916-99	12/03/09	1820	1.78	5.61
25	ZZZZZ	ZZZZZ	12/03/09	1831	1.78	5.61
26	ZZZZZ	ZZZZZ	12/03/09	1842	1.78	5.61
27	ZZZZZ	ZZZZZ	12/03/09	1854	1.78	5.61
28	ZZZZZ	ZZZZZ	12/03/09	1905	1.78	5.61
29	ZZZZZ	ZZZZZ	12/03/09	1916	1.78	5.61
30	ZZZZZ	ZZZZZ	12/03/09	1927	1.78	5.61
31	ZZZZZ	ZZZZZ	12/03/09	1938	1.78	5.61
32	ZZZZZ	ZZZZZ	12/03/09	1949	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0810	2.07	6.30
02	AR166001	WAR091119-60	12/03/09	0821	2.08	6.30
03	AR125401	WAR091102-54	12/03/09	0832	2.08	6.30
04	AR124201	WAR091102-42	12/03/09	0843	2.08	6.30
05	AR124801	WAR091027-48	12/03/09	0854	2.08	6.30
06	AR123201	WAR090930-32	12/03/09	0905	2.08	6.31
07	AR122101	WAR091111-21	12/03/09	0917	2.08	6.31
08	AR126201	WAR091111-62	12/03/09	0928	2.08	6.31
09	AR126801	WAR091106-68	12/03/09	0939	2.08	6.30
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0950		
11	PIBLK02	WAR090916-99	12/03/09	1001	2.08	6.30
12	ZZZZZ	ZZZZZ	12/03/09	1012	2.08	6.31
13	ZZZZZ	ZZZZZ	12/03/09	1023	2.08	6.30
14	ZZZZZ	ZZZZZ	12/03/09	1034	2.08	6.31
15	ZZZZZ	ZZZZZ	12/03/09	1045	2.08	6.31
16	ZZZZZ	ZZZZZ	12/03/09	1057	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	1108	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	1119	2.08	6.30
19	ZZZZZ	ZZZZZ	12/03/09	1130	2.08	6.30
20	ZZZZZ	ZZZZZ	12/03/09	1141	2.08	6.30
21	AR166002	WAR091119-60	12/03/09	1152	2.08	6.30
22	PIBLK03	WAR090916-99	12/03/09	1203	2.08	6.30
23	ZZZZZ	ZZZZZ	12/03/09	1214	2.08	6.31
24	ZZZZZ	ZZZZZ	12/03/09	1225	2.08	6.30
25	ZZZZZ	ZZZZZ	12/03/09	1236	2.08	6.30
26	ZZZZZ	ZZZZZ	12/03/09	1247	2.08	6.31
27	ZZZZZ	ZZZZZ	12/03/09	1258	2.08	6.30
28	ZZZZZ	ZZZZZ	12/03/09	1309	2.08	6.30
29	ZZZZZ	ZZZZZ	12/03/09	1321	2.08	6.30
30	ZZZZZ	ZZZZZ	12/03/09	1332	2.08	6.30
31	ZZZZZ	ZZZZZ	12/03/09	1343	2.08	6.30
32	ZZZZZ	ZZZZZ	12/03/09	1354	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166003	WAR091119-60	12/03/09	1405	2.08	6.30
02	PIBLK04	WAR090916-99	12/03/09	1416	2.08	6.30
03	ZZZZZ	ZZZZZ	12/03/09	1427	2.08	6.31
04	ZZZZZ	ZZZZZ	12/03/09	1438	2.08	6.31
05	ZZZZZ	ZZZZZ	12/03/09	1449	2.08	6.31
06	ZZZZZ	ZZZZZ	12/03/09	1500	2.08	6.31
07	ZZZZZ	ZZZZZ	12/03/09	1512	2.08	6.31
08	ZZZZZ	ZZZZZ	12/03/09	1523	2.08	6.30
09	ZZZZZ	ZZZZZ	12/03/09	1534	2.08	6.31
10	ZZZZZ	ZZZZZ	12/03/09	1545	2.08	6.31
11	ZZZZZ	ZZZZZ	12/03/09	1556	2.08	6.30
12	ZZZZZ	ZZZZZ	12/03/09	1607	2.08	6.31
13	AR166004	WAR091119-60	12/03/09	1618	2.08	6.31
14	PIBLK05	WAR090916-99	12/03/09	1629	2.08	6.31
15	ZZZZZ	ZZZZZ	12/03/09	1640	2.08	6.31
16	ZZZZZ	ZZZZZ	12/03/09	1651	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	1703	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	1714	2.08	6.31
19	PBLK01	1201981410	12/03/09	1725	2.08	6.31
20	PBLK01LCS	1201981413	12/03/09	1736	2.08	6.31
21	ZZZZZ	ZZZZZ	12/03/09	1747	2.08	6.30
22	ZZZZZ	ZZZZZ	12/03/09	1758	2.08	6.30
23	AR166005	WAR091119-60	12/03/09	1809	2.08	6.31
24	PIBLK06	WAR090916-99	12/03/09	1820	2.08	6.31
25	ZZZZZ	ZZZZZ	12/03/09	1831	2.08	6.31
26	ZZZZZ	ZZZZZ	12/03/09	1842	2.08	6.30
27	ZZZZZ	ZZZZZ	12/03/09	1854	2.08	6.31
28	ZZZZZ	ZZZZZ	12/03/09	1905	2.08	6.31
29	ZZZZZ	ZZZZZ	12/03/09	1916	2.08	6.31
30	ZZZZZ	ZZZZZ	12/03/09	1927	2.08	6.31
31	ZZZZZ	ZZZZZ	12/03/09	1938	2.08	6.31
32	ZZZZZ	ZZZZZ	12/03/09	1949	2.08	6.31

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0807	1.78	5.61
02	AR166001	WAR091119-60	12/04/09	0818	1.78	5.61
03	AR125401	WAR091102-54	12/04/09	0829	1.78	5.61
04	AR124201	WAR091102-42	12/04/09	0840	1.78	5.61
05	AR124801	WAR091027-48	12/04/09	0851	1.78	5.61
06	AR123201	WAR090930-32	12/04/09	0902	1.78	5.61
07	AR122101	WAR091111-21	12/04/09	0914	1.78	5.61
08	AR126201	WAR091111-62	12/04/09	0925	1.78	5.61
09	AR126801	WAR091106-68	12/04/09	0936	1.78	5.61
10	DDTANALOGSTD	WAR091020-DD	12/04/09	0947		
11	PIBLK02	WAR090916-99	12/04/09	0958	1.78	5.61
12	WST03-10-213	241423004	12/04/09	1009	1.78	5.61
13	WST03-10-213	241423005	12/04/09	1020	1.78	5.61
14	AR166002	WAR091119-60	12/04/09	1031	1.78	5.61
15	PIBLK03	WAR090916-99	12/04/09	1042	1.78	5.61
16	ZZZZZ	ZZZZZ	12/04/09	1054	1.78	5.61
17	ZZZZZ	ZZZZZ	12/04/09	1105	1.78	5.61
18	ZZZZZ	ZZZZZ	12/04/09	1116	1.78	5.61
19	ZZZZZ	ZZZZZ	12/04/09	1127	1.78	5.61
20	ZZZZZ	ZZZZZ	12/04/09	1138	1.78	5.61
21	ZZZZZ	ZZZZZ	12/04/09	1149	1.78	5.61
22	ZZZZZ	ZZZZZ	12/04/09	1200	1.78	5.61
23	ZZZZZ	ZZZZZ	12/04/09	1211	1.78	5.61
24	ZZZZZ	ZZZZZ	12/04/09	1222	1.78	5.61
25	ZZZZZ	ZZZZZ	12/04/09	1233	1.78	5.61
26	AR166003	WAR091119-60	12/04/09	1244	1.78	5.61
27	PIBLK04	WAR090916-99	12/04/09	1255	1.78	5.61
28	ZZZZZ	ZZZZZ	12/04/09	1307	1.78	5.61
29	ZZZZZ	ZZZZZ	12/04/09	1318	1.78	5.61
30	ZZZZZ	ZZZZZ	12/04/09	1329	1.78	5.61
31	ZZZZZ	ZZZZZ	12/04/09	1340	1.78	5.61
32	ZZZZZ	ZZZZZ	12/04/09	1351	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0807	2.08	6.31
02	AR166001	WAR091119-60	12/04/09	0818	2.08	6.31
03	AR125401	WAR091102-54	12/04/09	0829	2.08	6.31
04	AR124201	WAR091102-42	12/04/09	0840	2.08	6.31
05	AR124801	WAR091027-48	12/04/09	0851	2.08	6.31
06	AR123201	WAR090930-32	12/04/09	0902	2.08	6.31
07	AR122101	WAR091111-21	12/04/09	0914	2.08	6.31
08	AR126201	WAR091111-62	12/04/09	0925	2.08	6.31
09	AR126801	WAR091106-68	12/04/09	0936	2.08	6.30
10	DDTANALOGSTD	WAR091020-DD	12/04/09	0947		
11	PIBLK02	WAR090916-99	12/04/09	0958	2.08	6.30
12	WST03-10-213	241423004	12/04/09	1009	2.08	6.31
13	WST03-10-213	241423005	12/04/09	1020	2.08	6.31
14	AR166002	WAR091119-60	12/04/09	1031	2.08	6.30
15	PIBLK03	WAR090916-99	12/04/09	1042	2.08	6.31
16	ZZZZZ	ZZZZZ	12/04/09	1054	2.08	6.31
17	ZZZZZ	ZZZZZ	12/04/09	1105	2.08	6.30
18	ZZZZZ	ZZZZZ	12/04/09	1116	2.08	6.30
19	ZZZZZ	ZZZZZ	12/04/09	1127	2.08	6.30
20	ZZZZZ	ZZZZZ	12/04/09	1138	2.08	6.30
21	ZZZZZ	ZZZZZ	12/04/09	1149	2.08	6.30
22	ZZZZZ	ZZZZZ	12/04/09	1200	2.08	6.30
23	ZZZZZ	ZZZZZ	12/04/09	1211	2.08	6.30
24	ZZZZZ	ZZZZZ	12/04/09	1222	2.08	6.31
25	ZZZZZ	ZZZZZ	12/04/09	1233	2.08	6.30
26	AR166003	WAR091119-60	12/04/09	1244	2.08	6.30
27	PIBLK04	WAR090916-99	12/04/09	1255	2.08	6.31
28	ZZZZZ	ZZZZZ	12/04/09	1307	2.08	6.30
29	ZZZZZ	ZZZZZ	12/04/09	1318	2.08	6.30
30	ZZZZZ	ZZZZZ	12/04/09	1329	2.08	6.30
31	ZZZZZ	ZZZZZ	12/04/09	1340	2.07	6.30
32	ZZZZZ	ZZZZZ	12/04/09	1351	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–578 **Client ID:** LCS for batch 926728

Lab Sample ID: 1201981413

Data File:	052f5201.d	**Data File:**	052b5201.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 17:36	**Analyzed:**	03–DEC–09 17:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							2.37
Column 1	1	2.28	2.25 – 2.31	32.1		ug/kg	
	2	2.6	2.57 – 2.63	30.6		ug/kg	
	3	2.69	2.66 – 2.72	30.4		ug/kg	
	4	2.83	2.8 – 2.86	30.4		ug/kg	
	5	2.98	2.95 – 3.01	30.8		ug/kg	
					30.9		
Column 2	1	2.75	2.72 – 2.78	31.3		ug/kg	
	2	3.19	3.15 – 3.21	31.5		ug/kg	
	3	3.34	3.3 – 3.36	31.7		ug/kg	
	4	3.37	3.33 – 3.39	31		ug/kg	
	5	3.52	3.49 – 3.55	32.4		ug/kg	
					31.6		
Aroclor–1260							1.56
Column 1	1	4.02	3.99 – 4.05	33.3		ug/kg	
	2	4.29	4.26 – 4.32	32.9		ug/kg	
	3	4.46	4.42 – 4.48	33.1		ug/kg	
	4	4.67	4.64 – 4.7	33.4		ug/kg	
	5	4.86	4.83 – 4.89	33.1		ug/kg	
					33.2		
Column 2	1	4.42	4.39 – 4.45	34.3		ug/kg	
	2	4.57	4.54 – 4.6	34.1		ug/kg	
	3	4.68	4.65 – 4.71	33.8		ug/kg	
	4	4.88	4.85 – 4.91	32.7		ug/kg	
	5	5.51	5.47 – 5.53	33.4		ug/kg	
					33.7		

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2130

Lab Sample ID: 241423005

Data File:	013f1301.d	**Data File:**	013b1301.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 10:20	**Analyzed:**	04–DEC–09 10:20

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							33.1
Column 1	1	3.25	3.22 – 3.28	18.4		ug/kg	
	2	3.43	3.4 – 3.46	24.5		ug/kg	
	3	3.7	3.67 – 3.73	28.4		ug/kg	
	4	3.89	3.86 – 3.92	27.9		ug/kg	
	5	4.02	3.99 – 4.05	74.6		ug/kg	
					34.8		
Column 2	1	3.82	3.79 – 3.85	17.8		ug/kg	
	2	3.96	3.93 – 3.99	28.7		ug/kg	
	3	4.2	4.17 – 4.23	22.6		ug/kg	
	4	4.28	4.25 – 4.31	29		ug/kg	
	5	4.44	4.41 – 4.47	26.3		ug/kg	
					24.9		
Aroclor–1260							21
Column 1	1	4.02	3.99 – 4.05	50.6		ug/kg	
	2	4.29	4.26 – 4.32	26.4		ug/kg	
	3	4.45	4.43 – 4.49	24.9		ug/kg	
	4	4.67	4.64 – 4.7	24.2		ug/kg	
	5	4.86	4.83 – 4.89	32.6		ug/kg	
					31.8		
Column 2	1	4.42	4.39 – 4.45	40.8		ug/kg	
	2	4.57	4.54 – 4.6	48.9		ug/kg	
	3	4.68	4.65 – 4.71	47.4		ug/kg	
	4	4.88	4.85 – 4.91	30.1		ug/kg	
	5	5.51	5.48 – 5.54	28.9		ug/kg	
					39.2		

Identification Summary

SDG Number: 10-578 **Client ID:** WST03-10-2131

Lab Sample ID: 241423004

Data File:	012f1201.d	**Data File:**	012b1201.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04-DEC-09 10:09	**Analyzed:**	04-DEC-09 10:09

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							9.47
Column 1	1	3.25	3.22 – 3.28	1860		ug/kg	
	2	3.43	3.4 – 3.46	1750		ug/kg	
	3	3.7	3.67 – 3.73	2320		ug/kg	
	4	3.89	3.86 – 3.92	1760		ug/kg	
	5	4.02	3.99 – 4.05	2840		ug/kg	
					2110		
Column 2	1	3.82	3.79 – 3.85	1820		ug/kg	
	2	3.96	3.93 – 3.99	1830		ug/kg	
	3	4.2	4.17 – 4.23	1740		ug/kg	
	4	4.28	4.25 – 4.31	2450		ug/kg	
	5	4.44	4.41 – 4.47	1740		ug/kg	
					1920		
Aroclor-1260							48.7
Column 1	1	4.02	3.99 – 4.05	1920		ug/kg	
	2	4.29	4.26 – 4.32	535		ug/kg	
	3	4.46	4.43 – 4.49	524		ug/kg	
	4	4.67	4.64 – 4.7	522		ug/kg	
	5	4.86	4.83 – 4.89	665		ug/kg	
					834		
Column 2	1	4.42	4.39 – 4.45	1820		ug/kg	
	2	4.57	4.54 – 4.6	1710		ug/kg	
	3	4.68	4.65 – 4.71	2030		ug/kg	
	4	4.88	4.85 – 4.91	721		ug/kg	
	5	5.51	5.48 – 5.54	575		ug/kg	
					1370		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–578			**Matrix:**	SOIL
Lab Sample ID:	1201981410				
Client Sample:	QC for batch 926728	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926728	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 17:25	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	051f5101–1.d	**Column:**	1 CLP1	**Level:**	LOW
	051b5101–1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/051f5101-1.d
Lab Smp Id: 1201981410 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 17:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981410|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 51 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10836896	187.778	6.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8102321	147.774	4.9	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/051f5101-1.d

Date : 03-DEC-2009 17:25

Client ID: PBLK01

Sample Info: |120198141011|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

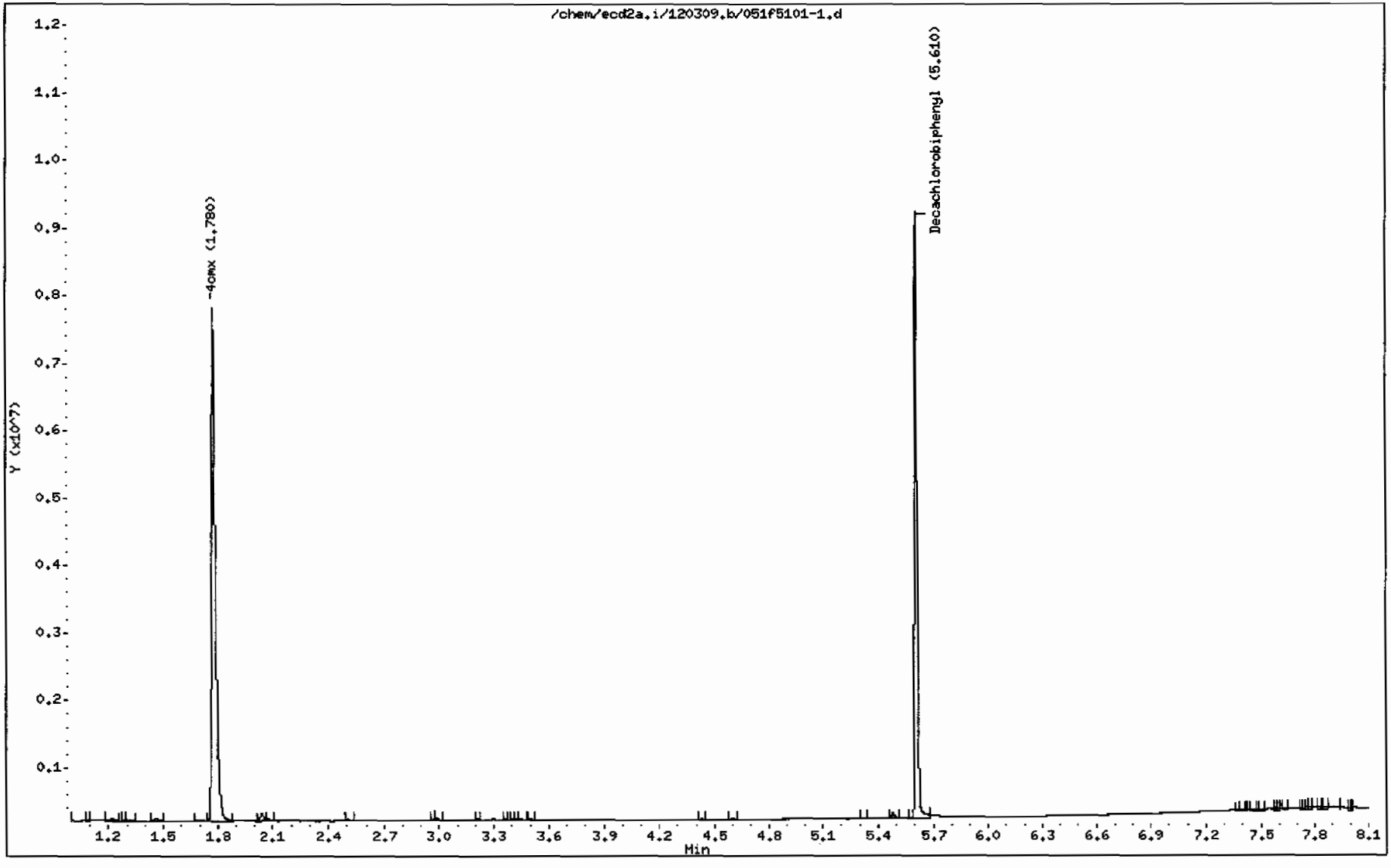

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/051b5101-1.d
Lab Smp Id: 1201981410 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 17:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981410|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 51 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	23746407	200.901	6.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	16767718	154.340	5.1	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/051b5101-1.d
Date : 03-DEC-2009 17:25
Client ID: PBLK01
Sample Info: |1201981410|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

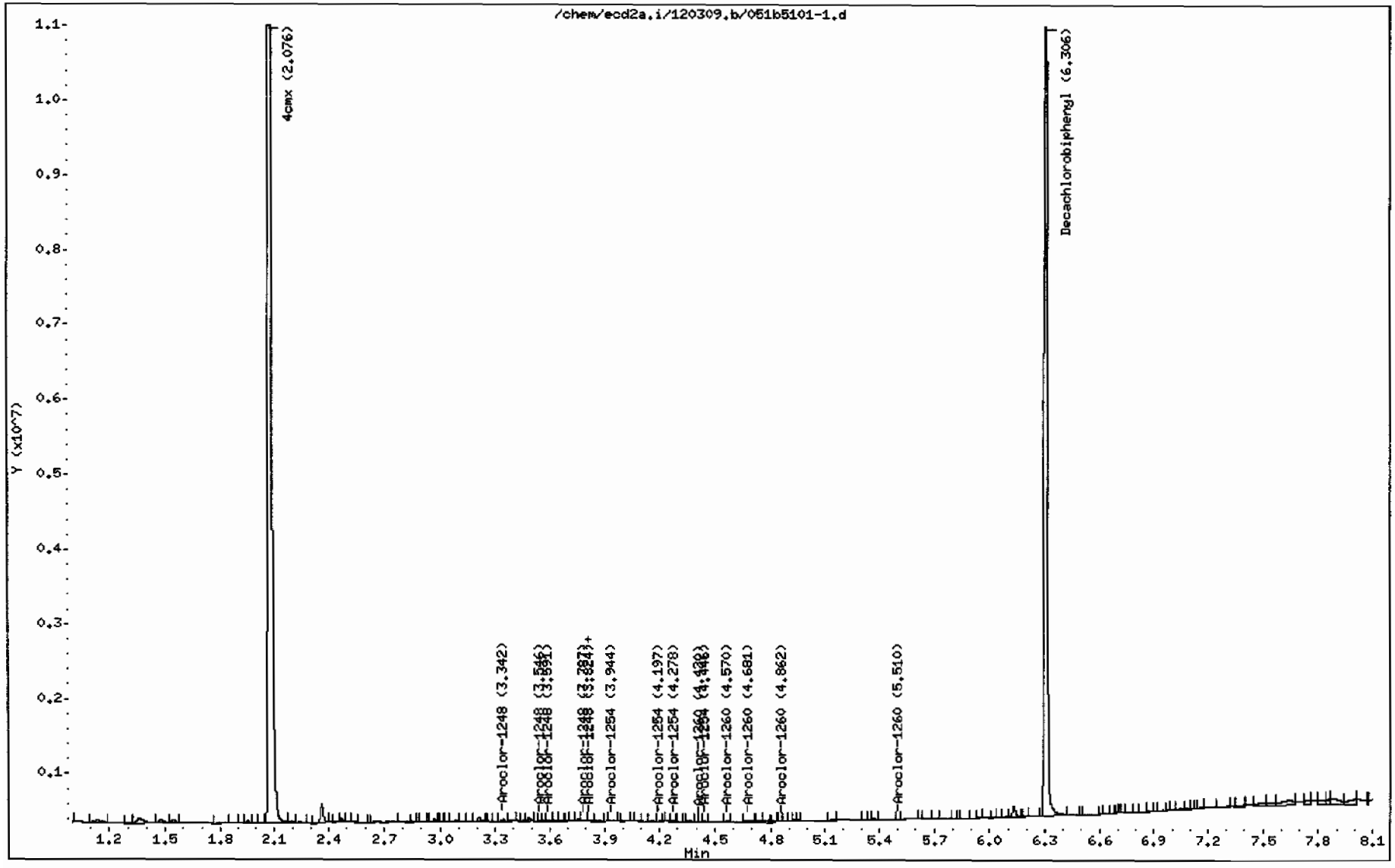

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–578			**Matrix:**	SOIL
Lab Sample ID:	1201981413				
Client Sample:	QC for batch 926728	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926728	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 17:36	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	052f5201–1.d	**Column:**	1 CLP1	**Level:**	LOW
	052b5201–1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		31.6	ug/kg	1.11	3.33	2
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		33.7	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/052f5201-1.d
Lab Smp Id: 1201981413 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 17:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981413|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	11046764	191.414	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	8822798	160.914	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	2020219	962.099	32.1	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4137433	918.508	30.6	191.91- 231.91	204.80
2.694	2.692	0.002	1661377	912.739	30.4	65.28- 105.28	82.24
2.829	2.827	0.002	849541	910.662	30.4	23.06- 63.06	42.05

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.980	2.978	0.002	1274883	925.085	30.8	41.11- 81.11	63.11
Average of Peak Concentrations =					30.9		
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.016	0.003	4068365	1000.39	33.3	80.00- 120.00	100.00
4.289	4.288	0.001	2494673	986.693	32.9	40.91- 80.91	61.32
4.455	4.454	0.001	2563289	992.291	33.1	42.71- 82.71	63.01
4.668	4.665	0.003	6048225	1002.01	33.4	125.86- 165.86	148.66
4.857	4.855	0.002	2892043	993.165	33.1	49.52- 89.52	71.09
Average of Peak Concentrations =					33.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/052f5201-1.d
Date : 03-DEC-2009 17:36
Client ID: PBLK01LCS
Sample Info: |120198141311|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

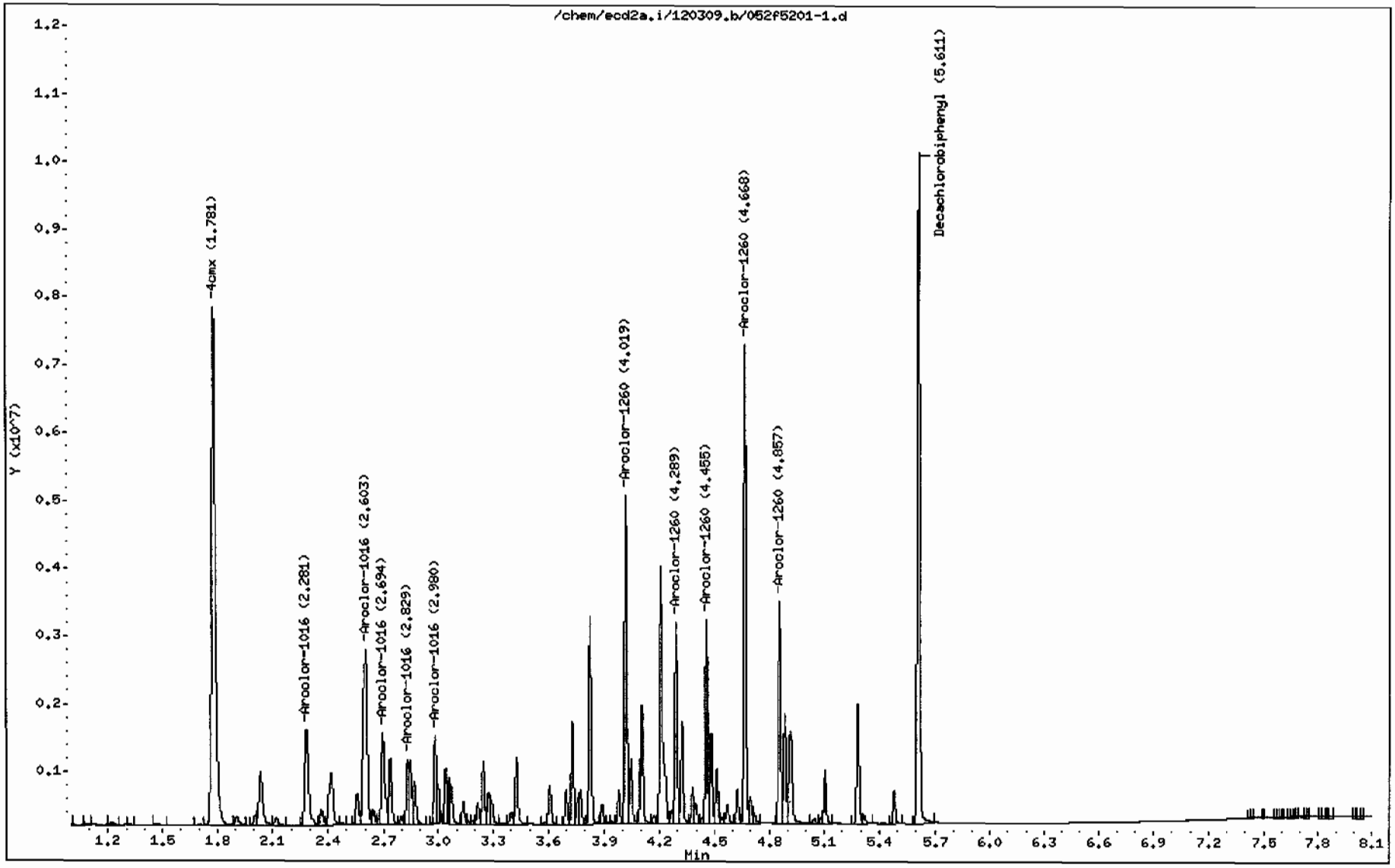

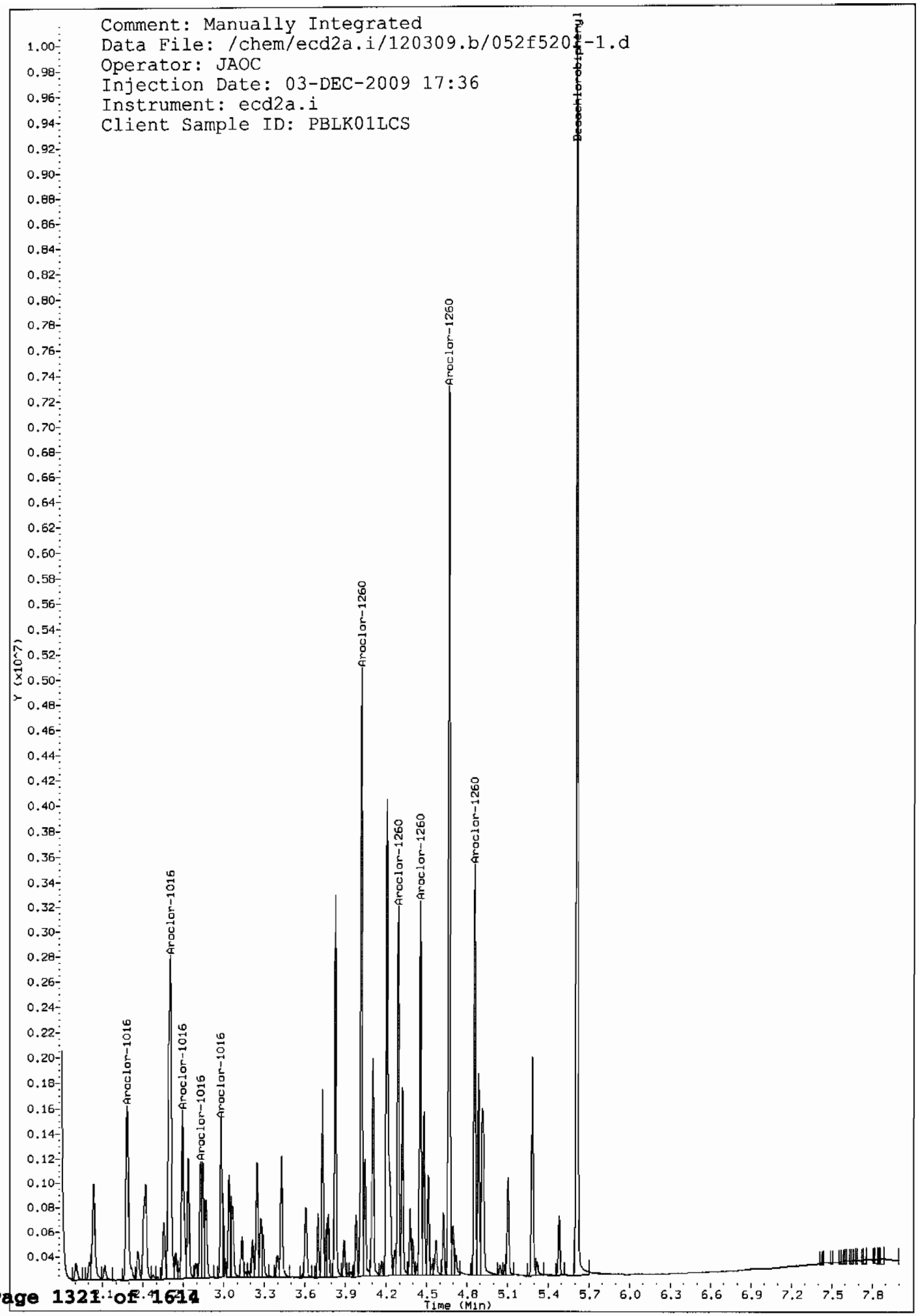
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Data File: /chem/ecd2a.i/120309.b/052f5201-1.d
Operator: JAOC
Injection Date: 03-DEC-2009 17:36
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
Time (Min)

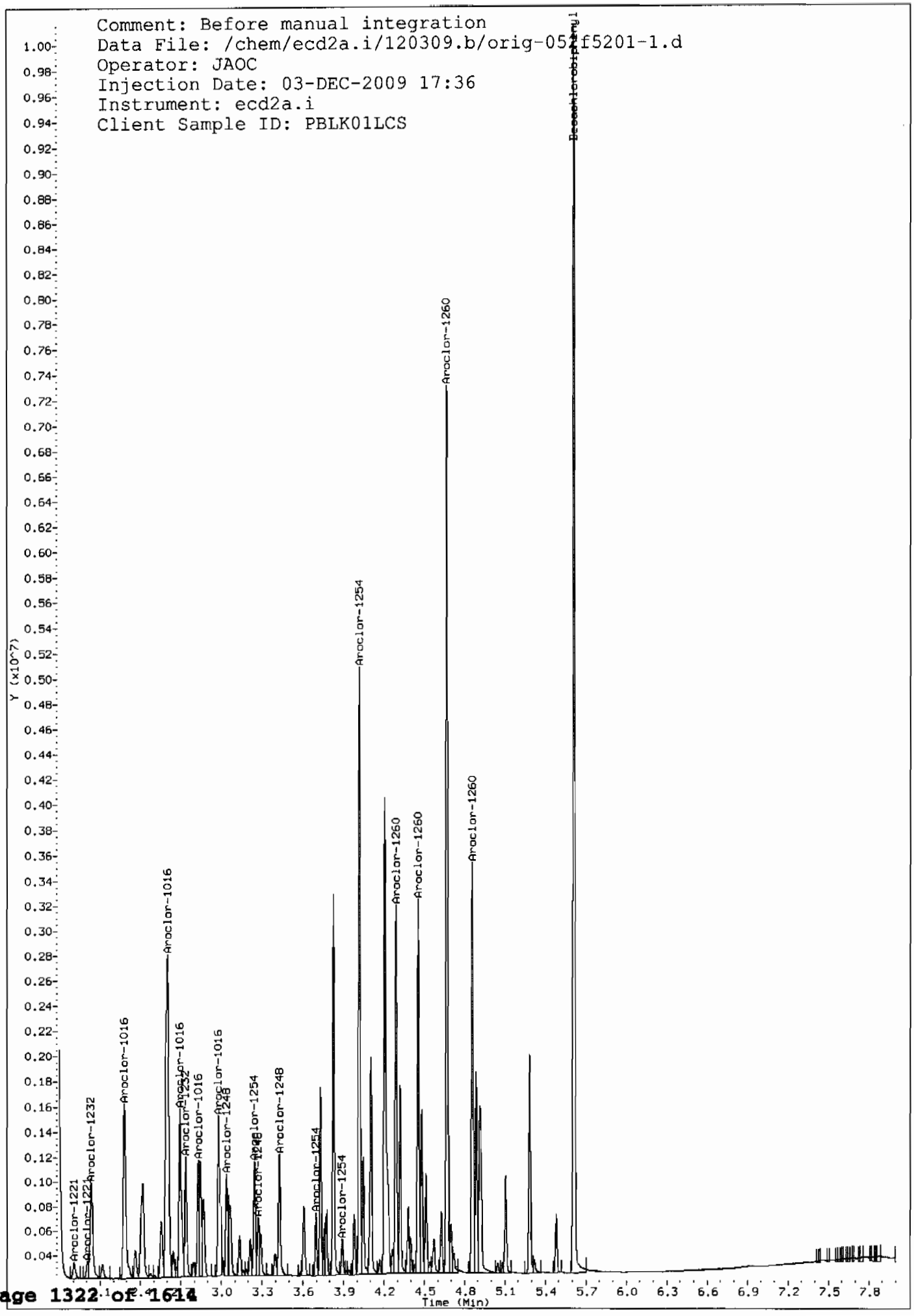
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-05f5201-1.d
Operator: JAOC
Injection Date: 03-DEC-2009 17:36
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1221
Aroclor-1232
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/052b5201-1.d
Lab Smp Id: 1201981413 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 17:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981413|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	24233942	205.025	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17883484	164.610	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.753	2.750	0.003	4003522	940.224	31.3	80.00- 120.00	100.00
3.186	3.185	0.001	3259724	946.306	31.5	61.21- 101.21	81.42
3.337	3.335	0.002	1882499	951.004	31.7	26.96- 66.96	47.02
3.365	3.364	0.001	1920231	931.584	31.0	28.74- 68.74	47.96

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.524	3.521	0.003	2673806	970.821	32.4	46.95- 86.95	66.79
Average of Peak Concentrations =					31.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5678453	1030.08	34.3	80.00- 120.00	100.00
4.570	4.569	0.001	7303724	1024.08	34.1	107.13- 147.13	128.62
4.682	4.680	0.002	4796067	1013.68	33.8	64.21- 104.21	84.46
4.879	4.878	0.001	5693991	981.611	32.7	80.11- 120.11	100.27
5.505	5.504	0.001	9072806	1003.55	33.4	135.13- 175.13	159.78
Average of Peak Concentrations =					33.7		

Data File: /chem/ecd2a.i/120309.b/052b5201-1.d
Date : 03-DEC-2009 17:36
Client ID: PBLK01LCS
Sample Info: |120198141311|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

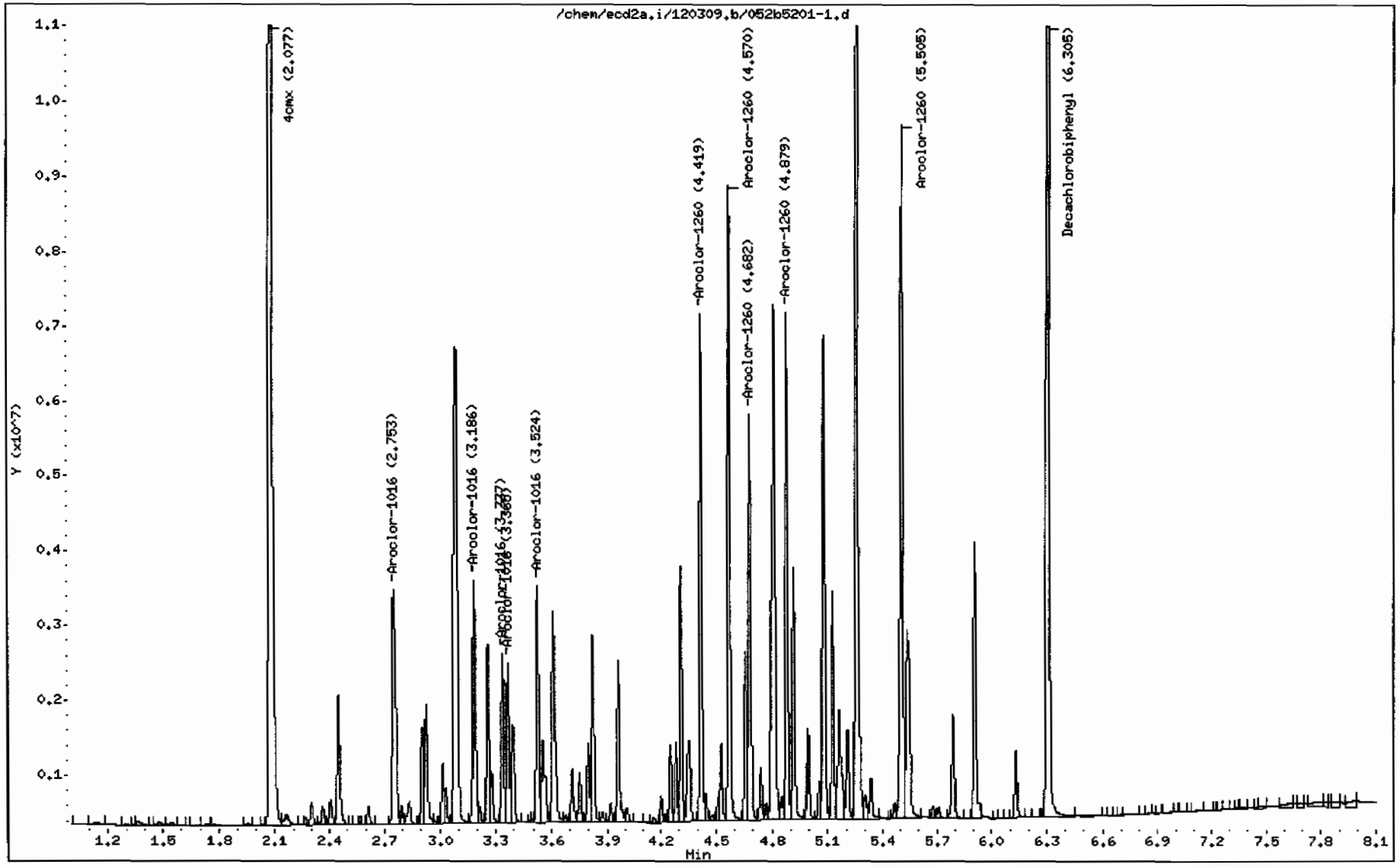

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48			111809		1.0	DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59			111809		1.0	CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356			1.0	QC A UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356			1.0	QC A UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356			5.0	LANL UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356			1.0	LANL UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356			5.0	LANL UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356			1.0	LANL UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356			5.0	LANL UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356			1.0	LANL UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356			1.0	LANL UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356			5.0	LANL UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01			111809		1.0	PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12			111809		1.0	CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356			5.0	LANL UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356			1.0	LANL UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356			5.0	LANL UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356			1.0	LANL UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362			1.0	LANL UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362			1.0 QC A UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362			1.0 QC A UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362			1.0 LANL UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52			111809		1.0 PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03			111809		1.0 CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0		DUSE
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0		1254 LEVEL 1
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0		1254 LEVEL 2
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0		1254 LEVEL 3
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0		1254 LEVEL 4
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0		1254 LEVEL 5
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0		1248 LEVEL 1
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0		1248 LEVEL 2
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0		1248 LEVEL 3
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0		1248 LEVEL 4
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0		1248 LEVEL 5

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0		DUSE

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18			113009a		1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29			113009a		1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40			113009a		1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51			113009a		1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02			113009a		1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13			113009a		1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25			113009a		1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399			1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399			1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399			200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399			200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399			200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36			113009a		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47			113009a		1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688			1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688			1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688			1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688			1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688			1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12			113009a		1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23			113009a		1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463			100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463			1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463			5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463			20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462		10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a		1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a		1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390		1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407		1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407		5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a		1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a		1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a	1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/04/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number: Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	03-DEC-2009 08:10		120309	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	03-DEC-2009 08:21		120309	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	03-DEC-2009 08:32		120309	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	03-DEC-2009 08:43		120309	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	03-DEC-2009 08:54		120309	1.0		PASSES BOTH COLUMNS
006f0601.d	WAR090930-32	JAOC	03-DEC-2009 09:05		120309	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	03-DEC-2009 09:17		120309	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	03-DEC-2009 09:28		120309	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	03-DEC-2009 09:39		120309	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	JAOC	03-DEC-2009 09:50		120309	1.0		DDT
011f1101.d	WAR090916-99 02	JAOC	03-DEC-2009 10:01		120309	1.0		CLEAN
012f1201.d	241175006	JAOC	03-DEC-2009 10:12	926702	10-516	10.0	LANL	UPLOAD BOTH, USE HIGHER
013f1301.d	241175007	JAOC	03-DEC-2009 10:23	926702	10-516	1.0	LANL	DUSE, RE-VIAL
014f1401.d	1201984412	JAOC	03-DEC-2009 10:34	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER
015f1501.d	1201984413	JAOC	03-DEC-2009 10:45	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120309.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1201984416	JAOC	03-DEC-2009 10:57	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER

017f1701.d	241626001	JAOC	03-DEC-2009 11:08	928081	EUI-7398P	50.0	CARE	UPLOAD BOTH, USE HIGHER
018f1801.d	1201984414	JAOC	03-DEC-2009 11:19	928081	EUI-7398P	50.0	QC A	UPLOAD BOTH, USE HIGHER
019f1901.d	1201984415	JAOC	03-DEC-2009 11:30	928081	EUI-7398P	50.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	241175007	JAOC	03-DEC-2009 11:41	926702	10-516	1.0	LANL	UPLOAD BOTH, USE HIGHER
021f2101.d	WAR091119-60 02	JAOC	03-DEC-2009 11:52	1660	120309	1.0	CVS	PASSES BOTH COLUMNS
022f2201.d	WAR090916-99 03	JAOC	03-DEC-2009 12:03	SOLV	120309	1.0	IB	CLEAN
023f2301.d	1201978766	JAOC	03-DEC-2009 12:14	925544	10-457	1.0	QC A	UPLOAD BOTH, USE HIGHER
024f2401.d	1201978769	JAOC	03-DEC-2009 12:25	925544	10-457	1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	241027001	JAOC	03-DEC-2009 12:36	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	241027002	JAOC	03-DEC-2009 12:47	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	241027003	JAOC	03-DEC-2009 12:58	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	241027004	JAOC	03-DEC-2009 13:09	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	241027005	JAOC	03-DEC-2009 13:21	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
030f3001.d	241027006	JAOC	03-DEC-2009 13:32	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
031f3101.d	241027007	JAOC	03-DEC-2009 13:43	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	241027008	JAOC	03-DEC-2009 13:54	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
033f3301.d	WAR091119-60 03	JAOC	03-DEC-2009 14:05		120309	1.0		PASSES BOTH COLUMNS
034f3401.d	WAR090916-99 04	JAOC	03-DEC-2009 14:16	SOLV	120309	1.0	IB	CLEAN
035f3501.d	241027009	JAOC	03-DEC-2009 14:27	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241027010	JAOC	03-DEC-2009 14:38	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
037f3701.d	241027011	JAOC	03-DEC-2009 14:49	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
038f3801.d	241027012	JAOC	03-DEC-2009 15:00	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241027013	JAOC	03-DEC-2009 15:12	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241027015	JAOC	03-DEC-2009 15:23	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241033001	JAOC	03-DEC-2009 15:34	925544	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	1201978767	JAOC	03-DEC-2009 15:45	925544	10-460		1.0	QC A	UPLOAD BOTH, USE HIGHER
043f4301.d	1201978768	JAOC	03-DEC-2009 15:56	925544	10-460		1.0	QC A	UPLOAD BOTH, USE HIGHER
044f4401.d	241033002	JAOC	03-DEC-2009 16:07	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	03-DEC-2009 16:18		120309		1.0		PASSES BOTH COLUMNS, DCB LOW
046f4601.d	WAR090916-99 05	JAOC	03-DEC-2009 16:29		120309		1.0		CLEAN
047f4701.d	241033003	JAOC	03-DEC-2009 16:40	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
048f4801.d	241033004	JAOC	03-DEC-2009 16:51	925544	10-460		1.0	LANL	DUSE, LOOKS LIKE NO SURROGATE WAS ADDED
049f4901.d	241033005	JAOC	03-DEC-2009 17:03	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	241033006	JAOC	03-DEC-2009 17:14	925544	10-460		1.0	LANL	UPLOAD BOTH, USE HIGHER
051f5101.d	1201981410	JAOC	03-DEC-2009 17:25	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	1201981413	JAOC	03-DEC-2009 17:36	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
053f5301.d	241418001	JAOC	03-DEC-2009 17:47	926729	10-576		5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	241418002	JAOC	03-DEC-2009 17:58	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
055f5501.d	WAR091119-60 05	JAOC	03-DEC-2009 18:09		120309		1.0		PASSES BOTH COLUMNS

Instrument Batch: /chem/ecd2a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 06	JAOC	03-DEC-2009 18:20		120309		1.0	CLEAN
057f5701.d	241418003	JAOC	03-DEC-2009 18:31	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
058f5801.d	1201981411	JAOC	03-DEC-2009 18:42	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
059f5901.d	1201981412	JAOC	03-DEC-2009 18:54	926729	10-576		1.0	QC A	UPLOAD BOTH, USE HIGHER
060f6001.d	241418004	JAOC	03-DEC-2009 19:05	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
061f6101.d	241418005	JAOC	03-DEC-2009 19:16	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
062f6201.d	241418006	JAOC	03-DEC-2009 19:27	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
063f6301.d	241418007	JAOC	03-DEC-2009 19:38	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
064f6401.d	241418008	JAOC	03-DEC-2009 19:49	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241418009	JAOC	03-DEC-2009 20:00	926729	10-576		1.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241418010	JAOC	03-DEC-2009 20:11	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	WAR091119-60 06	JAOC	03-DEC-2009 20:23		120309	1.0		PASSES BOTH COLUMNS
068f6801.d	WAR090916-99 07	JAOC	03-DEC-2009 20:34		120309	1.0		CLEAN
069f6901.d	241418011	JAOC	03-DEC-2009 20:45	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241418012	JAOC	03-DEC-2009 20:56	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241418013	JAOC	03-DEC-2009 21:07	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	241418014	JAOC	03-DEC-2009 21:18	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
073f7301.d	241418015	JAOC	03-DEC-2009 21:29	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
074f7401.d	241418016	JAOC	03-DEC-2009 21:40	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241423004	JAOC	03-DEC-2009 21:51	926729	10-578	5.0	LANL	DUSE OVERRANGE, RE-RUN AT 10X

Instrument Batch: /chem/ecd2a.i/120309.b Page: 4

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241423005	JAOC	03-DEC-2009 22:02	926729	10-578	1.0	LANL	DUSE, AFTER OVERRANGE
077f7701.d	241512001	JAOC	03-DEC-2009 22:14	926729	10-598	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241524002	JAOC	03-DEC-2009 22:25	926729	10-600	5.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	WAR091119-60 07	JAOC	03-DEC-2009 22:36		120309	1.0		PASSES BOTH COLUMNS, DCB LOW
080f8001.d	WAR090916-99 08	JAOC	03-DEC-2009 22:47		120309	1.0		CLEAN
081f8101.d	1201984424	JAOC	03-DEC-2009 22:58	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
082f8201.d	1201984423	JAOC	03-DEC-2009 23:09	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
083f8301.d	241994001	JAOC	03-DEC-2009 23:20	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
084f8401.d	1201984425	JAOC	03-DEC-2009 23:31	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
085f8501.d	1201984426	JAOC	03-DEC-2009 23:43	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
086f8601.d	241994002	JAOC	03-DEC-2009 23:54	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
087f8701.d	241994003	JAOC	04-DEC-2009 00:05	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
088f8801.d	WAR091119-60 08	JAOC	04-DEC-2009 00:16		120309	1.0		PASSES BOTH COLUMNS
089f8901.d	WAR090916-99 09	JAOC	04-DEC-2009 00:27		120309	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/07/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:120409 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	04-DEC-2009 08:07		120409	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	04-DEC-2009 08:18		120409	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	04-DEC-2009 08:29		120409	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	04-DEC-2009 08:40		120409	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	04-DEC-2009 08:51		120409	1.0		PASSES BOTH COLUMNS
006f0601.d	WAR090930-32	JAOC	04-DEC-2009 09:02		120409	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	04-DEC-2009 09:14		120409	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	04-DEC-2009 09:25		120409	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	04-DEC-2009 09:36		120409	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	JAOC	04-DEC-2009 09:47		120409	1.0		DDT
011f1101.d	WAR090916-99 02	JAOC	04-DEC-2009 09:58		120409	1.0		CLEAN
012f1201.d	241423004	JAOC	04-DEC-2009 10:09	926729	10-578	50.0	LANL	UPLOAD BOTH, USE HIGHER
013f1301.d	241423005	JAOC	04-DEC-2009 10:20	926729	10-578	1.0	LANL	UPLOAD BOTH, USE HIGHER
014f1401.d	WAR091119-60 02	JAOC	04-DEC-2009 10:31		120409	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090916-99 03	JAOC	04-DEC-2009 10:42		120409	1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/120409.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1201982181	JAOC	04-DEC-2009 10:54	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES (MB FAILS LIMITS ON ONE COLUMN)

017f1701.d	1201982184	JAOC	04-DEC-2009 11:05	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
018f1801.d	241451001	JAOC	04-DEC-2009 11:16	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
019f1901.d	241451002	JAOC	04-DEC-2009 11:27	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
020f2001.d	241451003	JAOC	04-DEC-2009 11:38	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
021f2101.d	1201982182	JAOC	04-DEC-2009 11:49	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
022f2201.d	1201982183	JAOC	04-DEC-2009 12:00	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
023f2301.d	241451004	JAOC	04-DEC-2009 12:11	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
024f2401.d	241591001	JAOC	04-DEC-2009 12:22	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
025f2501.d	241591002	JAOC	04-DEC-2009 12:33	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
026f2601.d	WAR091119-60 03	JAOC	04-DEC-2009 12:44		120409	1.0		PASSES BOTH COLUMNS
027f2701.d	WAR090916-99 04	JAOC	04-DEC-2009 12:55		120409	1.0		CLEAN
028f2801.d	241591003	JAOC	04-DEC-2009 13:07	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
029f2901.d	241591004	JAOC	04-DEC-2009 13:18	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
030f3001.d	241616001	JAOC	04-DEC-2009 13:29	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
031f3101.d	241616002	JAOC	04-DEC-2009 13:40	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
032f3201.d	241616003	JAOC	04-DEC-2009 13:51	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
033f3301.d	241616004	JAOC	04-DEC-2009 14:02	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
034f3401.d	241616005	JAOC	04-DEC-2009 14:13	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
035f3501.d	241649001	JAOC	04-DEC-2009 14:24	927105	241649	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241649002	JAOC	04-DEC-2009 14:35	927105	241649	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
037f3701.d	241649001	JAOC	04-DEC-2009 14:52	927105	241649	5.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
038f3801.d	WAR091119-60 04	JAOC	04-DEC-2009 15:03		120409	1.0		PASSES BOTH COLUMNS
039f3901.d	WAR090916-99 05	JAOC	04-DEC-2009 15:14		120409	1.0		CLEAN
040f4001.d	1201982189	JAOC	04-DEC-2009 15:25	927108	241765	1.0	QC A	UPLOAD BOTH, USE HIGHER

041f4101.d	1201982192	JAOC	04-DEC-2009 15:36	927108	241765	1.0	QC A	UPLOAD BOTH, USE HIGHER
042f4201.d	241765001	JAOC	04-DEC-2009 15:47	927108	241765	5.0	SAIC	UPLOAD BOTH, USE HIGHER
043f4301.d	241765002	JAOC	04-DEC-2009 15:59	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
044f4401.d	241765003	JAOC	04-DEC-2009 16:10	927108	241765	25.0	SAIC	UPLOAD BOTH, USE HIGHER
045f4501.d	241765004	JAOC	04-DEC-2009 16:21	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
046f4601.d	241765005	JAOC	04-DEC-2009 16:32	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
047f4701.d	241765006	JAOC	04-DEC-2009 16:43	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
048f4801.d	241765007	JAOC	04-DEC-2009 16:54	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
049f4901.d	241765008	JAOC	04-DEC-2009 17:05	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
050f5001.d	WAR091119-60 05	JAOC	04-DEC-2009 17:21		120409	1.0		PASSES BOTH COLUMNS
051f5101.d	WAR090916-99 06	JAOC	04-DEC-2009 17:32		120409	1.0		CLEAN
052f5201.d	241765009	JAOC	04-DEC-2009 17:43	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
053f5301.d	241765010	JAOC	04-DEC-2009 17:54	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
054f5401.d	241853001	JAOC	04-DEC-2009 18:05	927108	241853	5.0	SAIC	UPLOAD BOTH, USE HIGHER
055f5501.d	241853002	JAOC	04-DEC-2009 18:16	927108	241853	5.0	SAIC	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241853003	JAOC	04-DEC-2009 18:27	927108	241853	1.0	SAIC	UPLOAD BOTH, USE HIGHER
057f5701.d	1201982190	JAOC	04-DEC-2009 18:38	927108	241853	1.0	QC A	UPLOAD BOTH, USE HIGHER
058f5801.d	1201982191	JAOC	04-DEC-2009 18:50	927108	241853	1.0	QC A	UPLOAD BOTH, USE HIGHER
059f5901.d	WAR091119-60 06	JAOC	04-DEC-2009 19:05		120409	1.0		PASSES BOTH COLUMNS
060f6001.d	WAR090916-99 07	JAOC	04-DEC-2009 19:16		120409	1.0		CLEAN
061f6101.d	1201982301	JAOC	04-DEC-2009 19:27	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER (HAS HITS BELOW PQL BUT ABOVE MDL, NO HITS IN SAMPLES)
062f6201.d	1201982304	JAOC	04-DEC-2009 19:39	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	241886001	JAOC	04-DEC-2009 19:50	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER
064f6401.d	241886002	JAOC	04-DEC-2009 20:01	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER

065f6501.d	241886003	JAOC	04-DEC-2009 20:12	927182	241886	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
066f6601.d	241886004	JAOC	04-DEC-2009 20:23	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER
067f6701.d	1201982302	JAOC	04-DEC-2009 20:34	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
068f6801.d	1201982303	JAOC	04-DEC-2009 20:45	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
069f6901.d	WAR091119-60 07	JAOC	04-DEC-2009 21:01		120409	1.0		PASSES BOTH COLUMNS
070f7001.d	WAR090916-99 08	JAOC	04-DEC-2009 21:12		120409	1.0		CLEAN
071f7101.d	1201984179	JAOC	04-DEC-2009 21:23	927953	10-668	1.0	QC A	UPLOAD BOTH, USE HIGHER
072f7201.d	1201984180	JAOC	04-DEC-2009 21:34	927953	10-668	1.0	QC A	UPLOAD BOTH, USE HIGHER
073f7301.d	241827001	JAOC	04-DEC-2009 21:45	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
074f7401.d	241827004	JAOC	04-DEC-2009 21:57	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241827005	JAOC	04-DEC-2009 22:08	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241827006	JAOC	04-DEC-2009 22:19	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241838002	JAOC	04-DEC-2009 22:30	927953	10-670	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241900001	JAOC	04-DEC-2009 22:41	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241900002	JAOC	04-DEC-2009 22:52	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241900003	JAOC	04-DEC-2009 23:03	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	WAR091119-60 08	JAOC	04-DEC-2009 23:14		120409	1.0		PASSES BOTH COLUMNS
082f8201.d	WAR090916-99 09	JAOC	04-DEC-2009 23:26		120409	1.0		CLEAN
083f8301.d	241900004	JAOC	04-DEC-2009 23:37	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	241900006	JAOC	04-DEC-2009 23:48	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
085f8501.d	241903002	JAOC	04-DEC-2009 23:59	927953	10-690	5.0	LANL	UPLOAD BOTH, USE HIGHER
086f8601.d	241907001	JAOC	05-DEC-2009 00:10	927953	10-692	1.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	241907002	JAOC	05-DEC-2009 00:21	927953	10-692	1.0	LANL	UPLOAD BOTH, USE HIGHER
088f8801.d	241911001	JAOC	05-DEC-2009 00:32	927953	10-694	1.0	LANL	UPLOAD BOTH, USE HIGHER
089f8901.d	1201984181	JAOC	05-DEC-2009 00:43	927953	10-694	1.0	QC A	UPLOAD BOTH, USE HIGHER

090f9001.d	1201984182	JAOC	05-DEC-2009 00:55	927953	10-694		1.0	QC A	UPLOAD BOTH, USE HIGHER
091f9101.d	241911002	JAOC	05-DEC-2009 01:06	927953	10-694		1.0	LANL	UPLOAD BOTH, USE HIGHER
092f9201.d	WAR091119-60 09	JAOC	05-DEC-2009 01:17		120409		1.0		PASSES BOTH COLUMNS
093f9301.d	WAR090916-99 10	JAOC	05-DEC-2009 01:28		120409		1.0		CLEAN

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/058b5801.d
Lab Smp Id: 1201981411 Client Smp ID: RE03-09-13959MS
Inj Date : 03-DEC-2009 18:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981411|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 58 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22668773	191.783	7.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17899895	164.761	6.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3846513	903.351	36.4	80.00- 120.00	100.00
3.185	3.185	0.000	3201334	929.356	37.4	61.21- 101.21	83.23
3.336	3.335	0.001	1865837	942.586	38.0	26.96- 66.96	48.51
3.364	3.364	0.000	1833001	889.266	35.8	28.74- 68.74	47.65
3.522	3.521	0.001	2639029	958.194	38.6	46.95- 86.95	68.61

Average of Peak Concentrations = 37.2

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5631456	1021.55	41.2	80.00- 120.00	100.00
4.570	4.569	0.001	7415776	1039.79	41.9	107.13- 147.13	131.68
4.682	4.680	0.002	4859421	1027.07	41.4	64.21- 104.21	86.29
4.879	4.878	0.001	5641638	972.586	39.2	80.11- 120.11	100.18
5.505	5.504	0.001	8865808	980.657	39.5	135.13- 175.13	157.43
			Average of Peak Concentrations =		40.6		

Data File: /chem/ecd2a.i/120309.b/058b5801.d
Date : 03-DEC-2009 18:42
Client ID: RE03-09-13959MS
Sample Info: |120198141|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

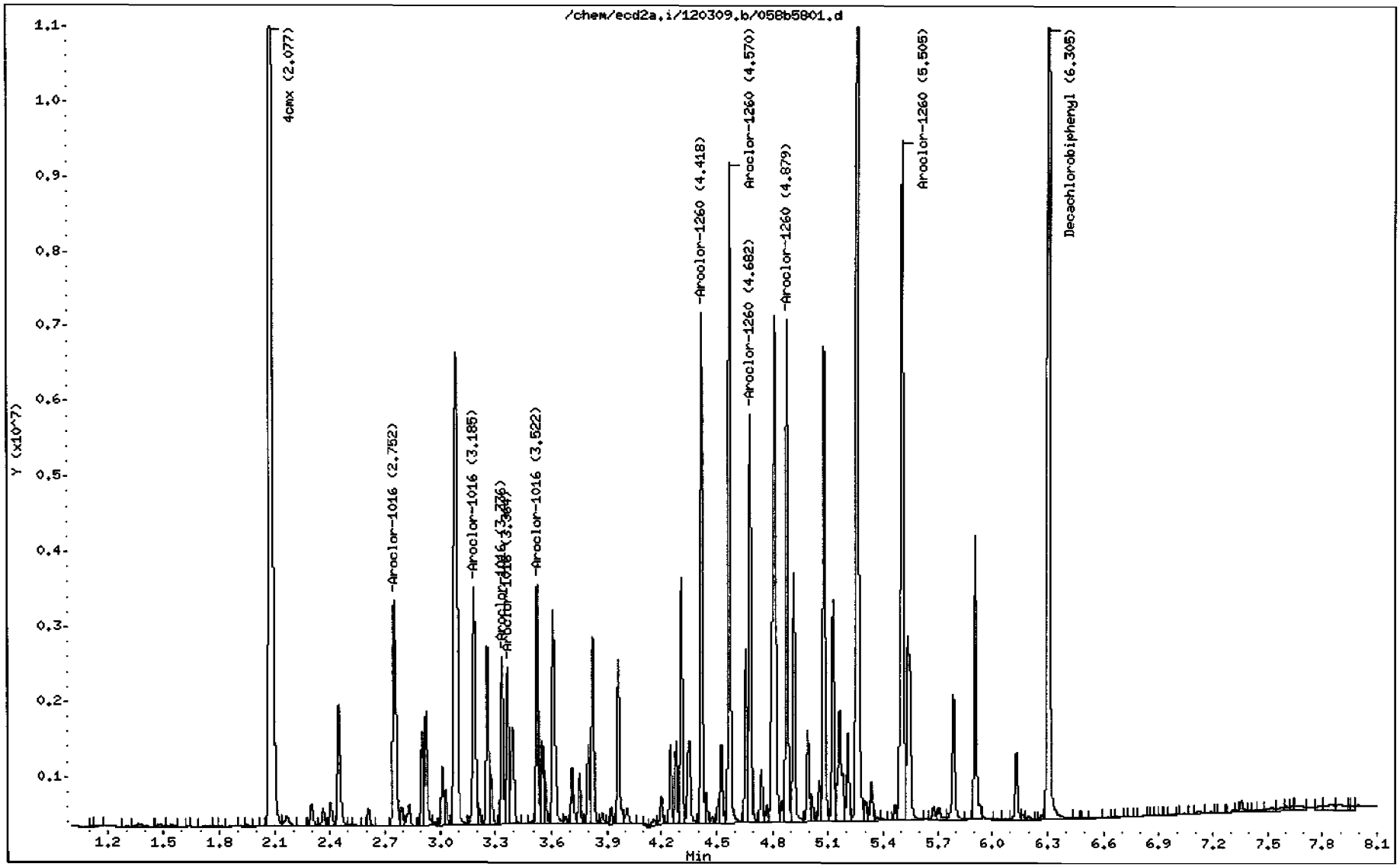

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/058f5801.d
Lab Smp Id: 1201981411 Client Smp ID: RE03-09-13959MS
Inj Date : 03-DEC-2009 18:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981411|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 58 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10377798	179.823	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7838476	142.962	5.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	1851046	881.533	35.5	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4107570	911.879	36.7	191.91- 231.91	211.49
2.693	2.692	0.001	1661339	912.718	36.8	65.28- 105.28	85.54
2.828	2.827	0.001	842546	903.164	36.4	23.06- 63.06	43.38
2.980	2.978	0.002	1367720	992.450	40.0	41.11- 81.11	92.19

Average of Peak Concentrations = 37.1

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	4090607	1005.86	40.5	80.00- 120.00	100.00
4.289	4.288	0.001	2464320	974.688	39.3	40.91- 80.91	60.24
4.454	4.454	0.000	2615893	1012.66	40.8	42.71- 82.71	63.95
4.667	4.665	0.002	5388781	892.758	36.0	125.86- 165.86	131.74
4.856	4.855	0.001	2869499	985.423	39.7	49.52- 89.52	70.15
			Average of Peak Concentrations =		39.3		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/058f5801.d
Date : 03-DEC-2009 18:42
Client ID: RE03-09-13959MS
Sample Info: |1201981411|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

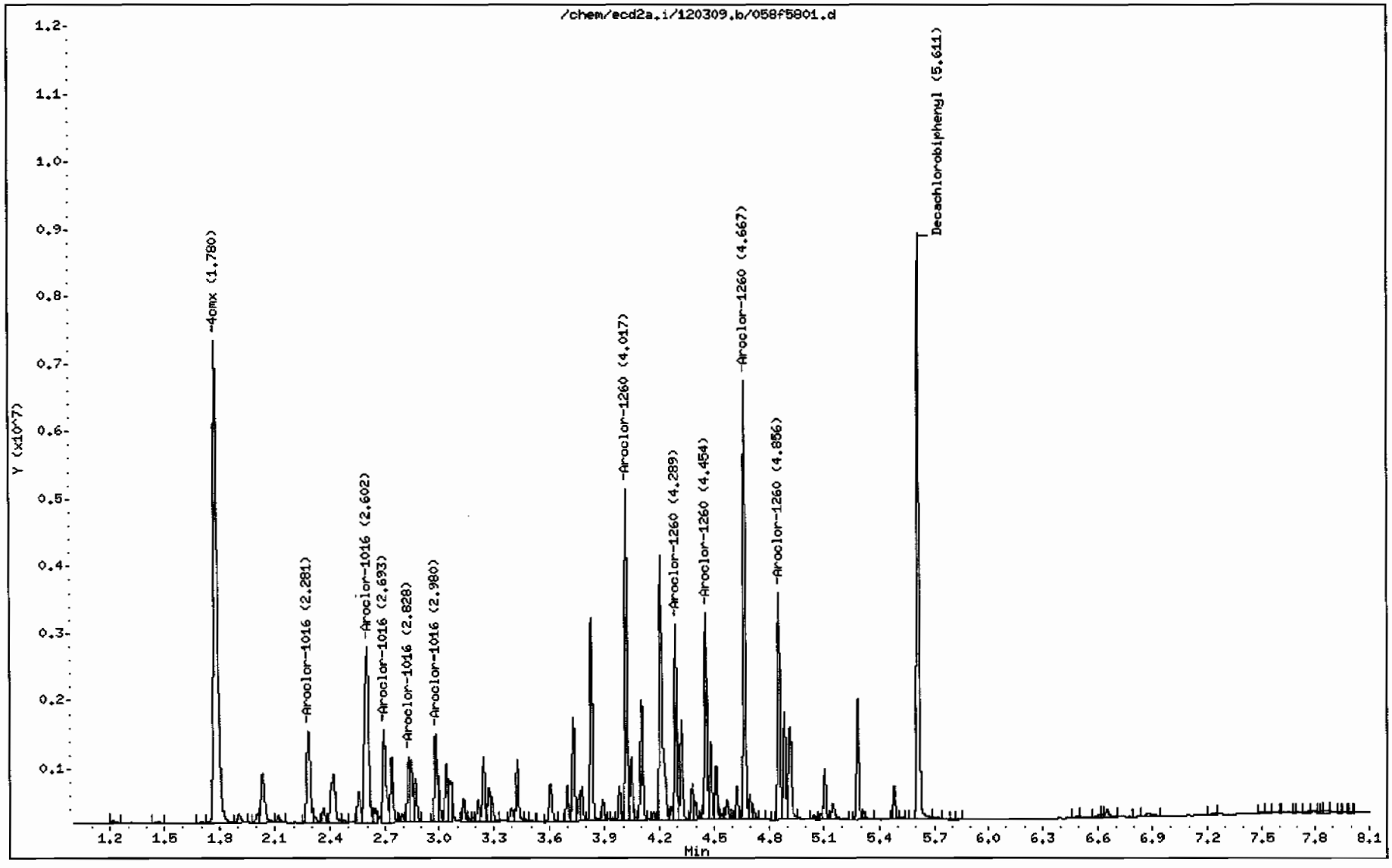

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/059b5901.d
Lab Smp Id: 1201981412 Client Smp ID: RE03-09-13959MSD
Inj Date : 03-DEC-2009 18:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981412|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 59 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21314209	180.324	7.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	16061504	147.839	6.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3594121	844.076	34.1	80.00- 120.00	100.00
3.185	3.185	0.000	3116444	904.712	36.6	61.21- 101.21	86.71
3.336	3.335	0.001	1815558	917.186	37.1	26.96- 66.96	50.51
3.365	3.364	0.001	1744732	846.443	34.2	28.74- 68.74	48.54
3.523	3.521	0.002	2543042	923.342	37.3	46.95- 86.95	70.76

Average of Peak Concentrations = 35.9

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5133233	931.174	37.6	80.00- 120.00	100.00
4.570	4.569	0.001	6838854	958.901	38.8	107.13- 147.13	133.23
4.682	4.680	0.002	4482339	947.367	38.3	64.21- 104.21	87.32
4.880	4.878	0.002	5107909	880.574	35.6	80.11- 120.11	99.51
5.505	5.504	0.001	7986869	883.437	35.7	135.13- 175.13	155.59
			Average of Peak Concentrations =		37.2		

Data File: /chem/ecd2a.i/120309.b/059b5901.d
Date : 03-DEC-2009 18:54
Client ID: RE03-09-13959MSD
Sample Info: |120198141211|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

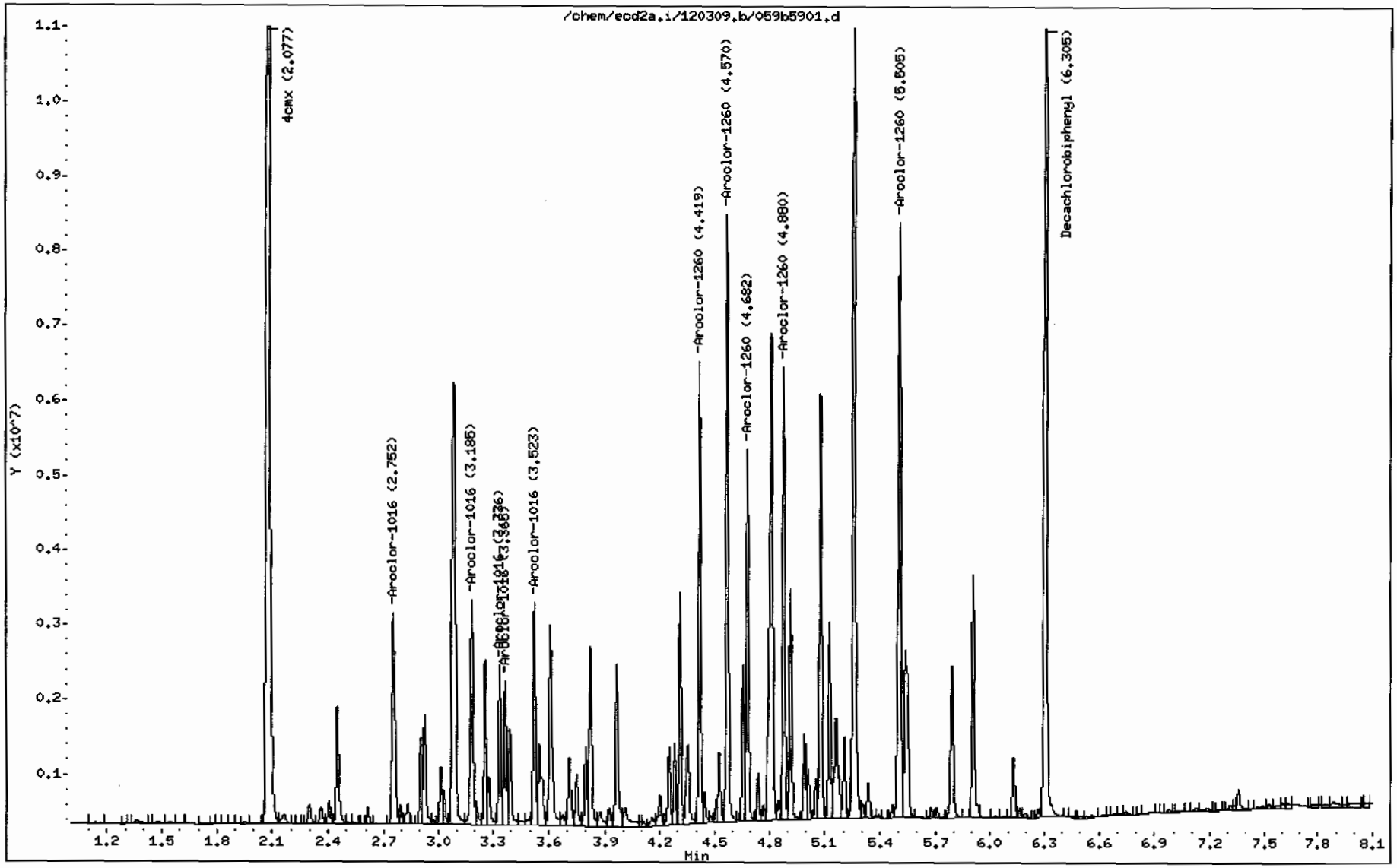

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/059f5901.d
Lab Smp Id: 1201981412 Client Smp ID: RE03-09-13959MSD
Inj Date : 03-DEC-2009 18:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981412|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 59 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9780999	169.482	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6799121	124.005	5.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.280	0.002	1700945	810.049	32.8	80.00- 120.00	100.00(M)
2.604	2.601	0.003	3792957	842.035	34.0	191.91- 231.91	216.09
2.695	2.692	0.003	1515325	832.500	33.7	65.28- 105.28	86.33
2.830	2.827	0.003	758013	812.549	32.8	23.06- 63.06	43.19
2.980	2.978	0.002	1180025	856.254	34.6	41.11- 81.11	92.67

Average of Peak Concentrations = 33.6

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.016	0.003	3774236	928.062	37.5	80.00- 120.00	100.00
4.290	4.288	0.002	2266393	896.404	36.2	40.91- 80.91	60.05
4.455	4.454	0.001	2549369	986.903	39.9	42.71- 82.71	67.55
4.668	4.665	0.003	4606247	763.116	30.8	125.86- 165.86	122.04
4.857	4.855	0.002	2633534	904.389	36.6	49.52- 89.52	69.78
			Average of Peak Concentrations =		36.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/059f5901.d
Date : 03-DEC-2009 18:54
Client ID: RE03-09-13959MSD
Sample Info: |120198141211|
Volume Injected (uL): 1.0
Column phase: CLP1

Page 1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

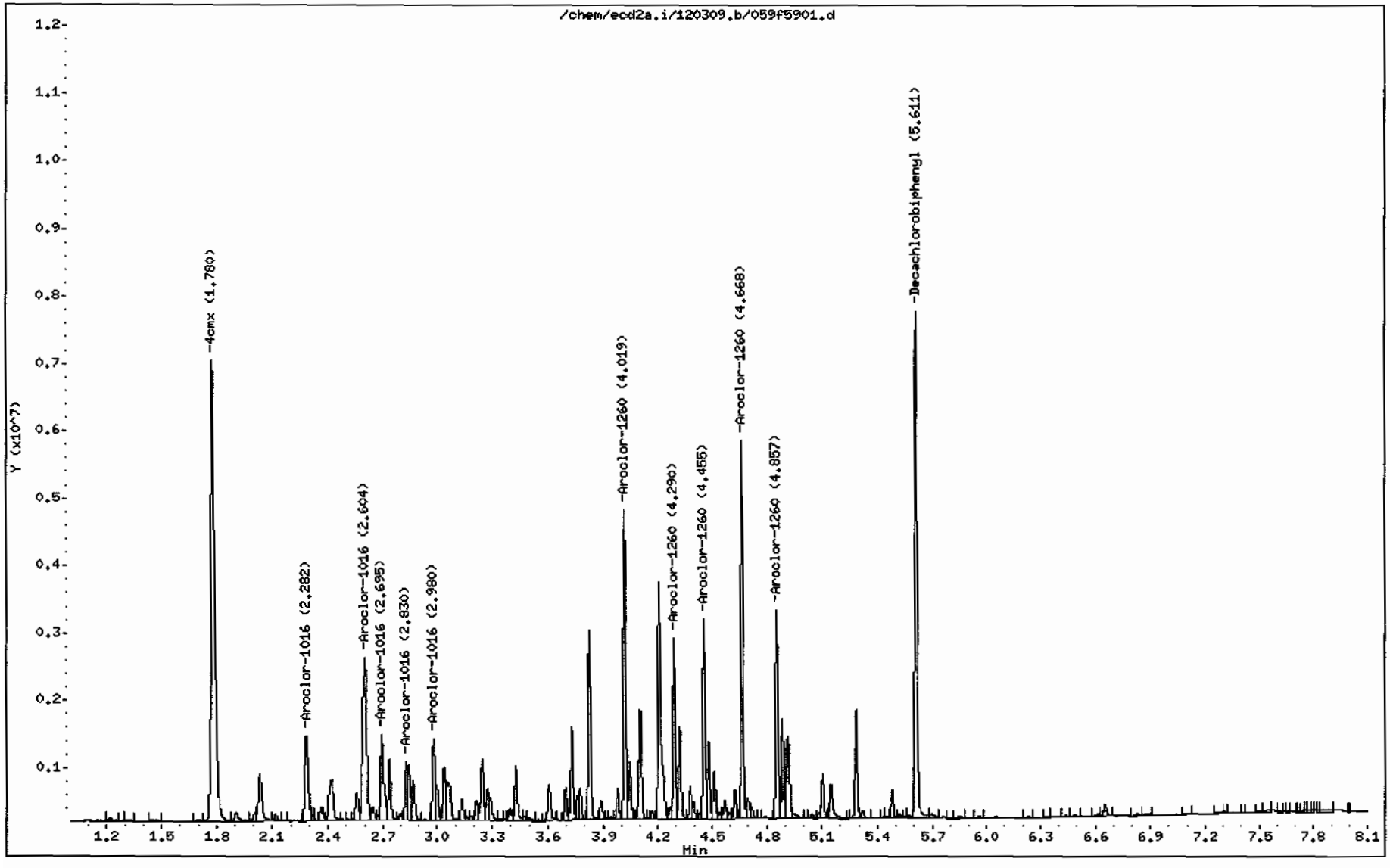

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926728 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981410 MB	27-NOV-2009 21:14:34	30	H2SO4/KMn2		2	9	1	0.03333
1201981413 LCS	27-NOV-2009 21:14:34	30	H2SO4/KMn2		2	9	1	0.03333
241418001	27-NOV-2009 21:14:34	30.09	H2SO4/KMn2		2	9	1	0.03323
241418002	27-NOV-2009 21:14:34	30.07	H2SO4/KMn2		2	9	1	0.03326
241418003	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
1201981411 MS (241418003)	27-NOV-2009 21:14:34	30.15	H2SO4/KMn2		2	9	1	0.03317
1201981412 MSD (241418003)	27-NOV-2009 21:14:34	30.04	H2SO4/KMn2		2	9	1	0.03329
241418004	27-NOV-2009 21:14:34	30.07	H2SO4/KMn2		2	9	1	0.03326
241418005	27-NOV-2009 21:14:34	30.08	H2SO4/KMn2		2	9	1	0.03324
241418006	27-NOV-2009 21:14:34	30.04	H2SO4/KMn2		2	9	1	0.03329
241418007	27-NOV-2009 21:14:34	30.12	H2SO4/KMn2		2	9	1	0.0332
241418008	27-NOV-2009 21:14:34	30.01	H2SO4/KMn2		2	9	1	0.03332
241418009	27-NOV-2009 21:14:34	30.14	H2SO4/KMn2		2	9	1	0.03318
241418010	27-NOV-2009 21:14:34	30.17	H2SO4/KMn2		2	9	1	0.03315
241418011	27-NOV-2009 21:14:34	30.02	H2SO4/KMn2		2	9	1	0.03331
241418012	27-NOV-2009 21:14:34	30.08	H2SO4/KMn2		2	9	1	0.03324
241418013	27-NOV-2009 21:14:34	30.17	H2SO4/KMn2		2	9	1	0.03315
241418014	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
241418015	27-NOV-2009 21:14:34	30.15	H2SO4/KMn2		2	9	1	0.03317
241418016	27-NOV-2009 21:14:34	30.18	H2SO4/KMn2		2	9	1	0.03313
241423004	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
241423005	27-NOV-2009 21:14:34	30.01	H2SO4/KMn2		2	9	1	0.03332
241512001	27-NOV-2009 21:14:34	30.13	H2SO4/KMn2		2	9	1	0.03319
241524002	27-NOV-2009 21:14:34	30.13	H2SO4/KMn2		2	9	1	0.03319

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981413	PCB Laboratory Control	WE091113-07	1	mL
MS	1201981411	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201981412	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009
Clean up Initials: AJS
Verified By: AV
Final Solvent: Hexane
Clean Up SOP: GL-OA-E-037

HERBICIDE ANALYSIS

Herbicide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578

Method/Analysis Information

Procedure:	**Analysis of Chlorophenoxy Acid Herbicides by ECD**
Analytical Method:	SW846 8151A
Prep Method:	SW846 8151A
Analytical Batch Number:	927148
Prep Batch Number:	927147

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8151A:

Sample ID	Client ID
241423004	WST03-10-2131
241423005	WST03-10-2130
1201982252	Method Blank (MB)
1201982255	Laboratory Control Sample (LCS)
1201982253	241423004(WST03-10-2131) Matrix Spike (MS)
1201982254	241423004(WST03-10-2131) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-011 REV# 18.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 21.7.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

Several target analytes failed to meet the acceptance criteria with positive bias in the standards bracketing the samples in this SDG. The positive bias for the analytical data is a result of instrument response increasing after the initial calibration. These target analytes were not detected in the samples; therefore, the non-compliance has no adverse effects on the data.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this had no adverse effects on the data as the surrogate recovery was well within the acceptance range in the sample in this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241423004 (WST03-10-2131) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were not within the acceptance limits due to sample matrix interference. See NCR #764742 located in the Miscellaneous Data section.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were not within the acceptance limits due to sample matrix interference. See NCR #764742 located in the Miscellaneous Data section.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD did not meet the acceptance limits for MCPP due to sample matrix interference. See NCR #764742 located in the Miscellaneous Data section.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 1201982253 (WST03-10-2131MS), 1201982254 (WST03-10-2131MSD) and 241423004 (WST03-10-2131) were diluted at 1:2 due to the viscous nature of the matrix.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Report (NCR) Documentation

Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR # 764742 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

Manual Integration

Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this Herbicide fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-HERB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD6A.I_1	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD6A.I_2	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimi Cao Date: 12/15/09

Roadmap for LANL 10-578 HERB

This roadmap was analyzed by reb01393 on 12-02-2009, 15:27.
This roadmap was reviewed by jcb on 12-03-2009, 09:43.
This roadmap was packaged by yml on 12-14-2009, 19:36.
This roadmap was validated by jim01140 on 12-15-2009, 13:13.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/025f2501.d	241423004	sample	01-DEC-2009	23:38	10-578.sub	WST03-10-2131	2.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/030f3001.d	241423005	sample	02-DEC-2009	01:59	10-578.sub	WST03-10-2130	1.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/025b2501.d	241423004	sample	01-DEC-2009	23:38	10-578.sub	WST03-10-2131	2.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/030b3001.d	241423005	sample	02-DEC-2009	01:59	10-578.sub	WST03-10-2130	1.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/023f2301.d	1201982252	mb	01-DEC-2009	22:41	10-578.sub	HBLK01	1.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/024f2401.d	1201982255	lcs	01-DEC-2009	23:09	10-578.sub	HBLK01LCS	1.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/026f2601.d	1201982253	ms	02-DEC-2009	00:06	10-578.sub	WST03-10-2131MS	2.00000	927148	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MSD.
☐	N	/chem/ecd6a.i/120109.b/027f2701.d	1201982254	msd	02-DEC-2009	00:35	10-578.sub	WST03-10-2131MSD	2.00000	927148	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MS.

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/023b2301.d	1201982252	mb	01-DEC-2009	22:41	10-578.sub	HBLK01	1.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/024b2401.d	1201982255	lcs	01-DEC-2009	23:09	10-578.sub	HBLK01LCS	1.00000	927148	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/026b2601.d	1201982253	ms	02-DEC-2009	00:06	10-578.sub	WST03-10-2131MS	2.00000	927148	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MSD.
☐	N	/chem/ecd6a.i/120109.b/027b2701.d	1201982254	msd	02-DEC-2009	00:35	10-578.sub	WST03-10-2131MSD	2.00000	927148	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MS.

SAMPLE DATA SUMMARY

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2130	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927148	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 01:59	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:11	**Aliquot:**	50.09 g	**Final Volume:**	10 mL
Data File:	030f3001.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	030b3001.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon	U	111	ug/kg	22.1	111	1
1918–00–9	Dicamba	U	5.54	ug/kg	1.84	5.54	1
93–65–2	MCPP	U	1110	ug/kg	221	1110	1
94–74–6	MCPA	U	1110	ug/kg	255	1110	1
120–36–5	Dichlorprop	U	5.54	ug/kg	1.84	5.54	1
94–75–7	2,4–D	U	5.54	ug/kg	1.84	5.54	1
93–72–1	2,4,5–TP	U	5.54	ug/kg	1.84	5.54	1
93–76–5	2,4,5–T	U	5.54	ug/kg	1.84	5.54	1
94–82–6	2,4–DB	U	5.54	ug/kg	1.84	5.54	1
88–85–7	Dinoseb	U	5.54	ug/kg	1.84	5.54	1

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2131	**Method:**	SW846 8151A	**SOP Ref:**	GL-OA-E-011
Batch ID:	927148	**Inst:**	ECD6A.I	**Dilution:**	2
Run Date:	12/01/2009 23:38	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:11	**Aliquot:**	50 g	**Final Volume:**	10 mL
Data File:	025f2501.d	**Column:**	1 Rtx-CLP	**Level:**	LOW
	025b2501.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75-99-0	Dalapon	U	217	ug/kg	43.4	217	1
1918-00-9	Dicamba	U	10.9	ug/kg	3.61	10.9	1
93-65-2	MCPP	U	2170	ug/kg	434	2170	1
94-74-6	MCPA	U	2170	ug/kg	500	2170	1
120-36-5	Dichlorprop	U	10.9	ug/kg	3.61	10.9	1
94-75-7	2,4-D	U	10.9	ug/kg	3.61	10.9	1
93-72-1	2,4,5-TP	U	10.9	ug/kg	3.61	10.9	1
93-76-5	2,4,5-T	U	10.9	ug/kg	3.61	10.9	1
94-82-6	2,4-DB	U	10.9	ug/kg	3.61	10.9	1
88-85-7	Dinoseb	U	10.9	ug/kg	3.61	10.9	1

QUALITY CONTROL SUMMARY

Herbicide

Surrogate Recovery Report

SDG Number: 10–578

Matrix Type: SOLID

CAP Column (1) : Rtx–CLP **CAP Column (2) : Rtx–CLPII**

Sample ID	Client ID	DCAA 1 %REC #		DCAA 2 %REC #	
1201982252	MB for batch 927147	62		61	
1201982255	LCS for batch 927147	94		90	
241423004	WST03–10–2131	90	D	83	D
1201982253	WST03–10–2131MS	109	D	90	D
1201982254	WST03–10–2131MSD	105	D	86	D
241423005	WST03–10–2130	89		85	

Surrogate	Acceptance Limits
DCAA = 2,4–Dichlorophenylacetic acid	(30%–126%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: LCS for batch 927147
Lab Sample ID: 1201982255
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 23:09
Dilution: 1
Prep Batch ID: 927147
Batch ID: 927148

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-99-0	LCS	Dalapon	400	0.0	216	54	30-96
1918-00-9	LCS	Dicamba	40.0	0.0	36.0	90	51-105
93-65-2	LCS	MCPP	4000	0.0	3700	93	49-127
94-74-6	LCS	MCPA	4000	0.0	3370	84	47-125
120-36-5	LCS	Dichlorprop	40.0	0.0	39.1	98	56-109
94-75-7	LCS	2,4-D	40.0	0.0	39.2	98	39-125
93-72-1	LCS	2,4,5-TP	40.0	0.0	39.7	99	48-120
93-76-5	LCS	2,4,5-T	40.0	0.0	40.3	101	42-127
94-82-6	LCS	2,4-DB	40.0	0.0	41.4	104	56-128
88-85-7	LCS	Dinoseb	40.0	0.0	46.5	116	30-121

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2131MS
Lab Sample ID: 1201982253
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 7.9
Analysis Date: 12/02/2009 00:06
Prep Batch ID: 927147
Batch ID: 927148

Dilution: 2

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-99-0	MS	Dalapon	434	0.00	U	275	63	30-94
1918-00-9	MS	Dicamba	43.4	0.00	U	36.7	85	30-100
93-65-2	MS	MCPP	4340	0.00	U	25600	591 *	30-111
94-74-6	MS	MCPA	4340	0.00	U	5320	123 *	30-109
120-36-5	MS	Dichlorprop	43.4	0.00	U	40.3	93	30-111
94-75-7	MS	2,4-D	43.4	0.00	U	40.9	94	30-148
93-72-1	MS	2,4,5-TP	43.4	0.00	U	35.8	82	30-118
93-76-5	MS	2,4,5-T	43.4	0.00	U	29.3	68	30-123
94-82-6	MS	2,4-DB	43.4	0.00	U	67.0	154 *	30-119
88-85-7	MS	Dinoseb	43.4	0.00	U	50.0	115	30-140

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-578
Client ID: WST03-10-2131MSD
Lab Sample ID: 1201982254
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 7.9
Analysis Date: 12/02/2009 00:35
Prep Batch ID: 927147
Batch ID: 927148
Dilution: 2

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-99-0	MSD Dalapon	434	0.00	U	277	64	30-94	1	0-25
1918-00-9	MSD Dicamba	43.4	0.00	U	35.9	83	30-100	2	0-25
93-65-2	MSD MCPP	4340	0.00	U	9210	212 *	30-111	94 *	0-25
94-74-6	MSD MCPA	4340	0.00	U	5140	118 *	30-109	3	0-25
120-36-5	MSD Dichlorprop	43.4	0.00	U	39.9	92	30-111	1	0-25
94-75-7	MSD 2,4-D	43.4	0.00	U	40.9	94	30-148	0	0-25
93-72-1	MSD 2,4,5-TP	43.4	0.00	U	36.9	85	30-118	3	0-25
93-76-5	MSD 2,4,5-T	43.4	0.00	U	30.3	70	30-123	3	0-25
94-82-6	MSD 2,4-DB	43.4	0.00	U	67.5	156 *	30-119	1	0-25
88-85-7	MSD Dinoseb	43.4	0.00	U	43.4	100	30-140	14	0-25

Method Blank Summary

SDG Number:	10–578	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927147	Instrument ID:	ECD6A.I_2 ECD6A.I_1	Data File:	023b2301.d 023f2301.d
Lab Sample ID:	1201982252				
Column:	Rtx–CLPII Rtx–CLP	Prep Date:	11/30/2009 11:11	Analyzed:	12/01/09 22:41
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927147	1201982255	024f2401.d 024b2401.d	12/01/09	2309
02 WST03–10–2131	241423004	025f2501.d 025b2501.d	12/01/09	2338
03 WST03–10–2131MS	1201982253	026f2601.d 026b2601.d	12/02/09	0006
04 WST03–10–2131MSD	1201982254	027f2701.d 027b2701.d	12/02/09	0035
05 WST03–10–2130	241423005	030f3001.d 030b3001.d	12/02/09	0159

SAMPLE
DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	9.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2130	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927148	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 01:59	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:11	**Aliquot:**	50.09 g	**Final Volume:**	10 mL
Data File:	030f3001.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	030b3001.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon	U	111	ug/kg	22.1	111	1
1918–00–9	Dicamba	U	5.54	ug/kg	1.84	5.54	1
93–65–2	MCPP	U	1110	ug/kg	221	1110	1
94–74–6	MCPA	U	1110	ug/kg	255	1110	1
120–36–5	Dichlorprop	U	5.54	ug/kg	1.84	5.54	1
94–75–7	2,4–D	U	5.54	ug/kg	1.84	5.54	1
93–72–1	2,4,5–TP	U	5.54	ug/kg	1.84	5.54	1
93–76–5	2,4,5–T	U	5.54	ug/kg	1.84	5.54	1
94–82–6	2,4–DB	U	5.54	ug/kg	1.84	5.54	1
88–85–7	Dinoseb	U	5.54	ug/kg	1.84	5.54	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/030f3001.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 02-DEC-2009 01:59
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241423005|1|
Misc Info : |ECD51H_1SF|927148|SVHF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.09000	Weight of sample extracted (g)
M	9.84860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.719	10.698	0.021	47356085	445.702	98.7

Data File: /chem/ecd6a.i/120109.b/030f3001.d
Date : 02-DEC-2009 01:59
Client ID: WST03-10-2130
Sample Info: |241423005|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

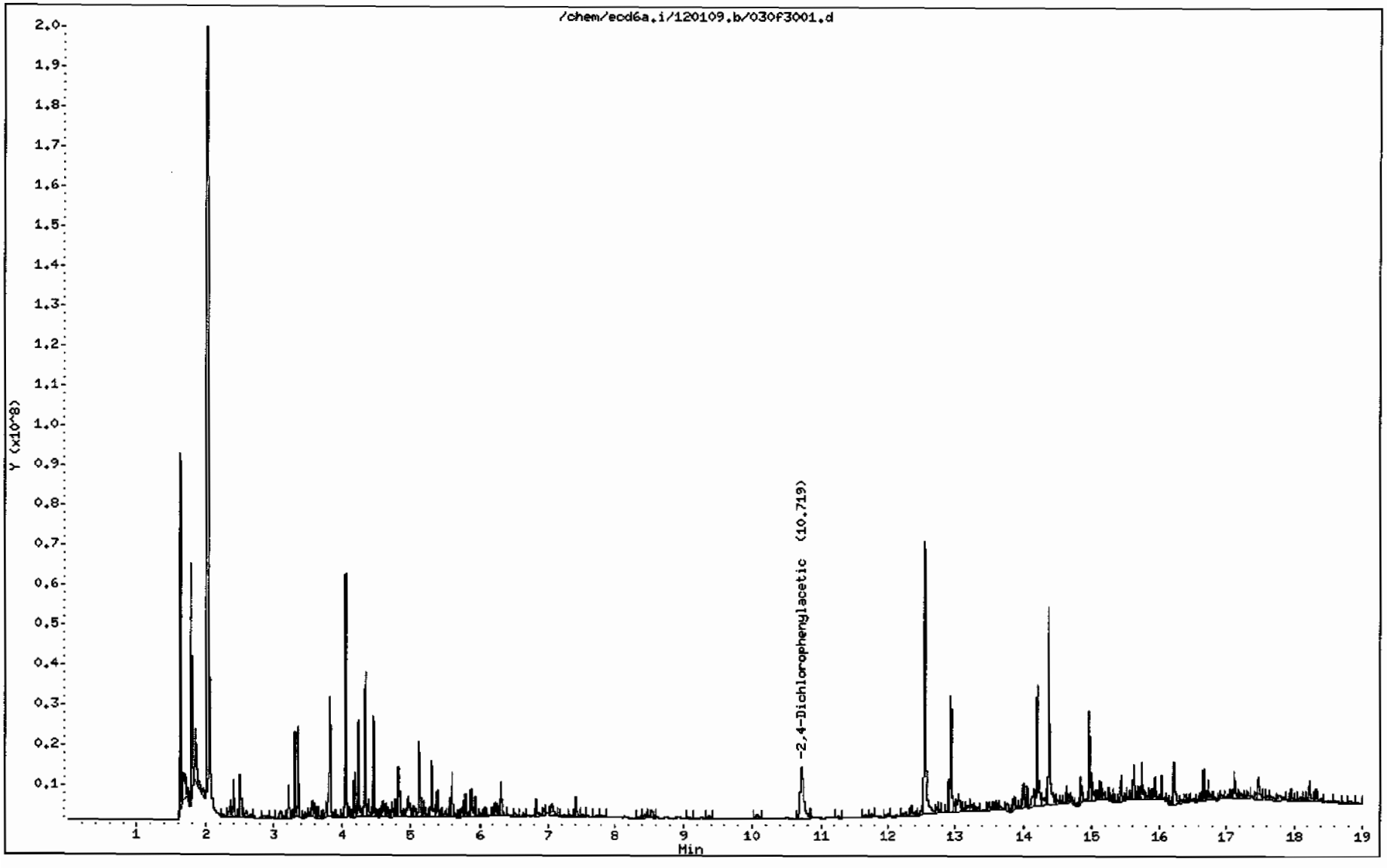

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/030b3001.d
Lab Smp Id: 241423005 Client Smp ID: WST03-10-2130
Inj Date : 02-DEC-2009 01:59
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241423005|1|
Misc Info : |ECD51H_1SF|927148|SVHF|LANL|SOIL|WST03-10-2130|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.09000	Weight of sample extracted (g)
M	9.84860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.724	11.717	0.007	50790342	427.060	94.6	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/030b3001.d
Date : 02-DEC-2009 01:59
Client ID: WST03-10-2130
Sample Info: |241423005|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

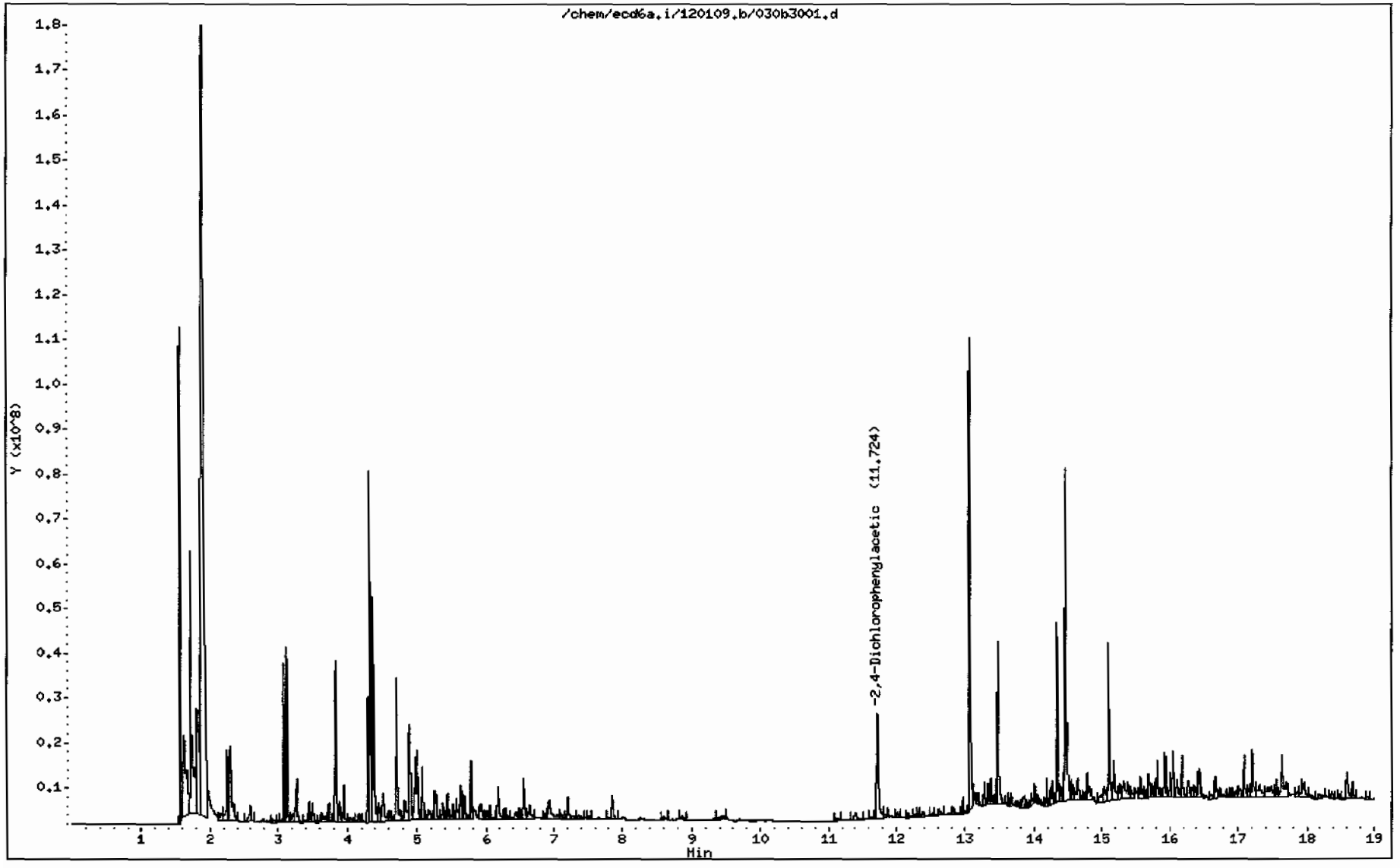

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/030b3001.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:59
Instrument: ecd6a.i
Client Sample ID: WST03-10-2130

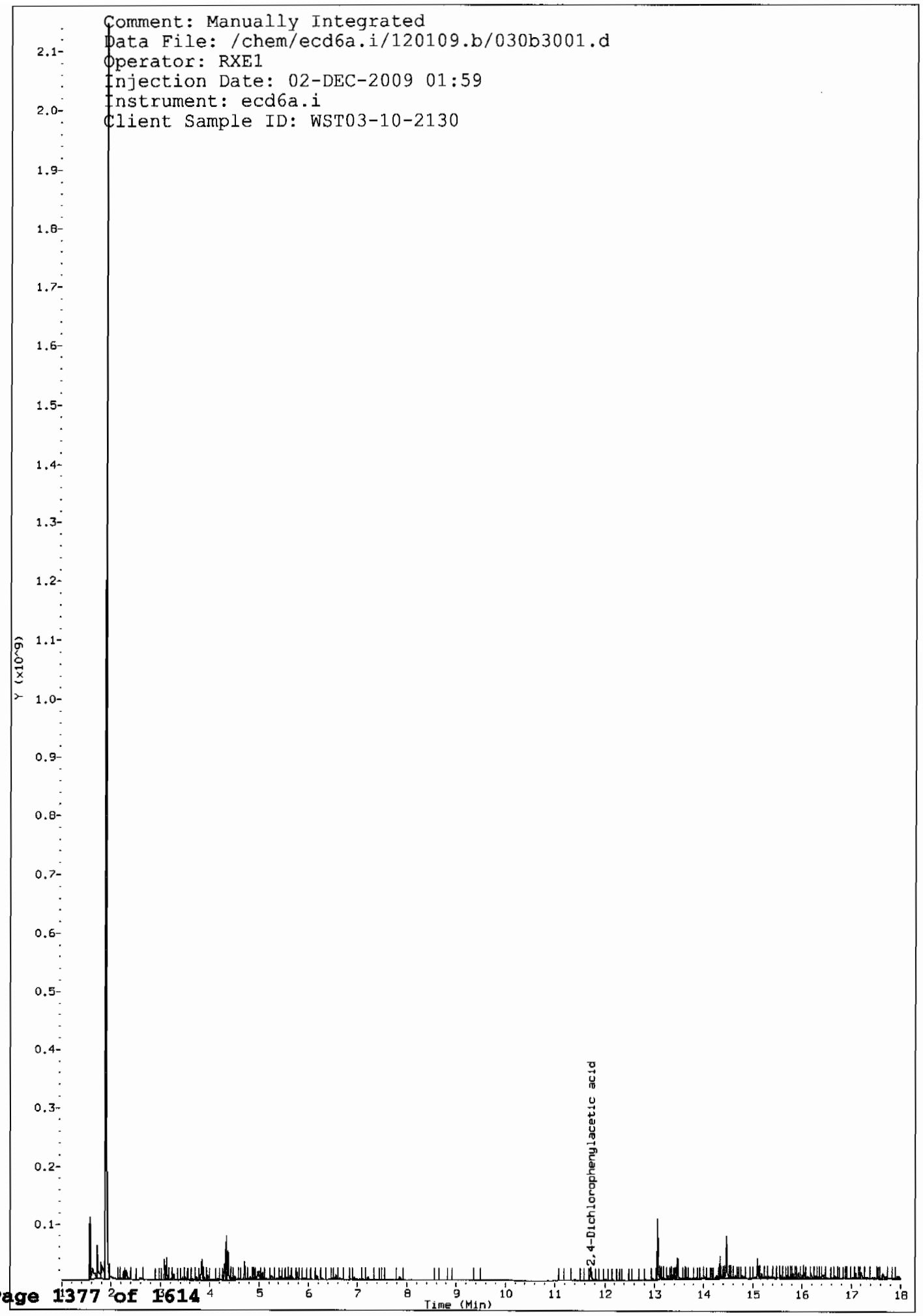

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-030b3001.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:59
Instrument: ecd6a.i
Client Sample ID: WST03-10-2130

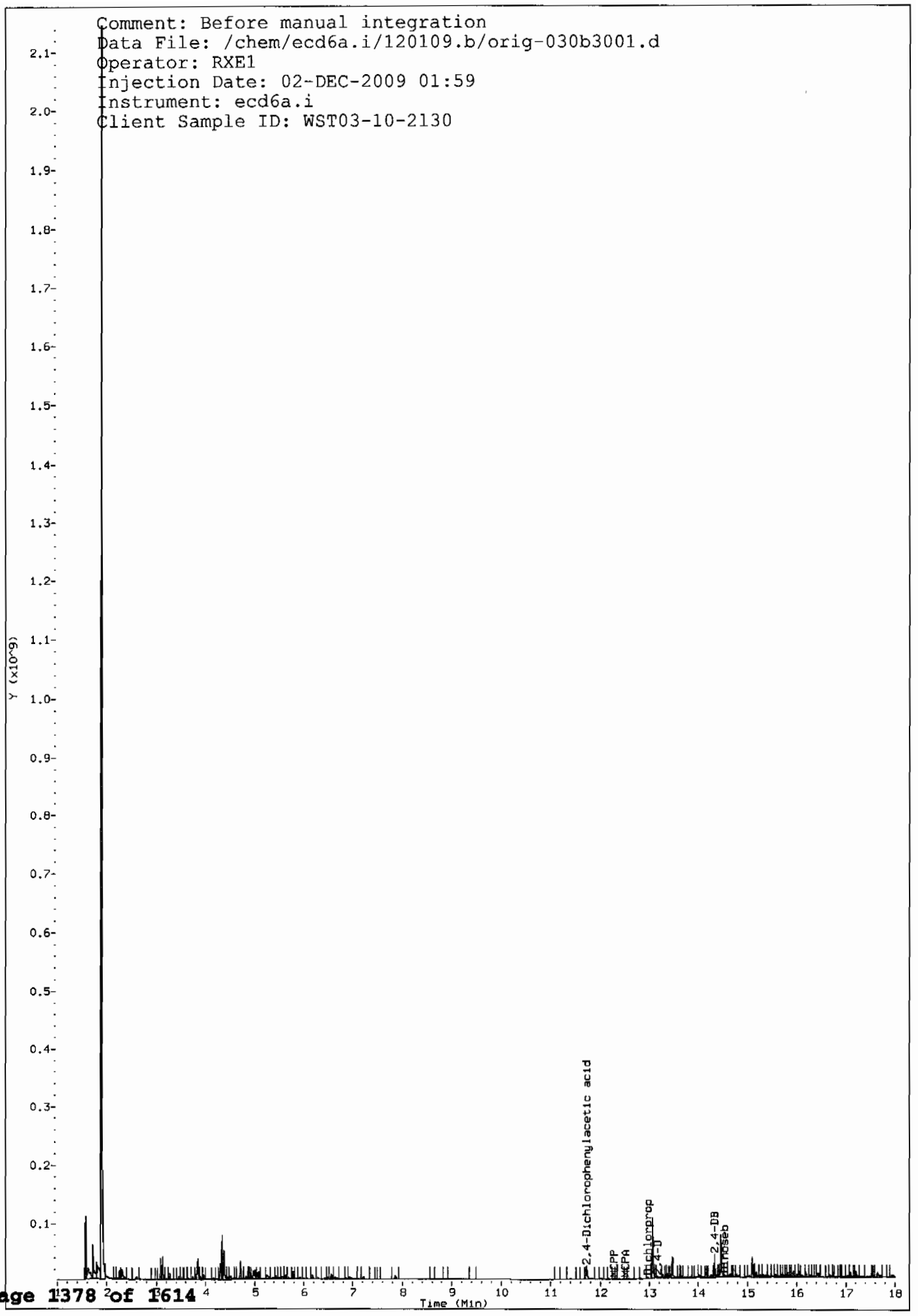

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	241423004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2131	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927148	**Inst:**	ECD6A.I	**Dilution:**	2
Run Date:	12/01/2009 23:38	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:11	**Aliquot:**	50 g	**Final Volume:**	10 mL
Data File:	025f2501.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	025b2501.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon	U	217	ug/kg	43.4	217	1
1918–00–9	Dicamba	U	10.9	ug/kg	3.61	10.9	1
93–65–2	MCPP	U	2170	ug/kg	434	2170	1
94–74–6	MCPA	U	2170	ug/kg	500	2170	1
120–36–5	Dichlorprop	U	10.9	ug/kg	3.61	10.9	1
94–75–7	2,4–D	U	10.9	ug/kg	3.61	10.9	1
93–72–1	2,4,5–TP	U	10.9	ug/kg	3.61	10.9	1
93–76–5	2,4,5–T	U	10.9	ug/kg	3.61	10.9	1
94–82–6	2,4–DB	U	10.9	ug/kg	3.61	10.9	1
88–85–7	Dinoseb	U	10.9	ug/kg	3.61	10.9	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/025f2501.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 01-DEC-2009 23:38
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241423004|2|
Misc Info : |ECD51H_1SF|927148|SVHF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 25
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.725	10.698	0.027	23824072	224.225	97.4

Data File: /chem/ecd6a.i/120109.b/025f2501.d

Date : 01-DEC-2009 23:38

Client ID: WST03-10-2131

Sample Info: |24142300412|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

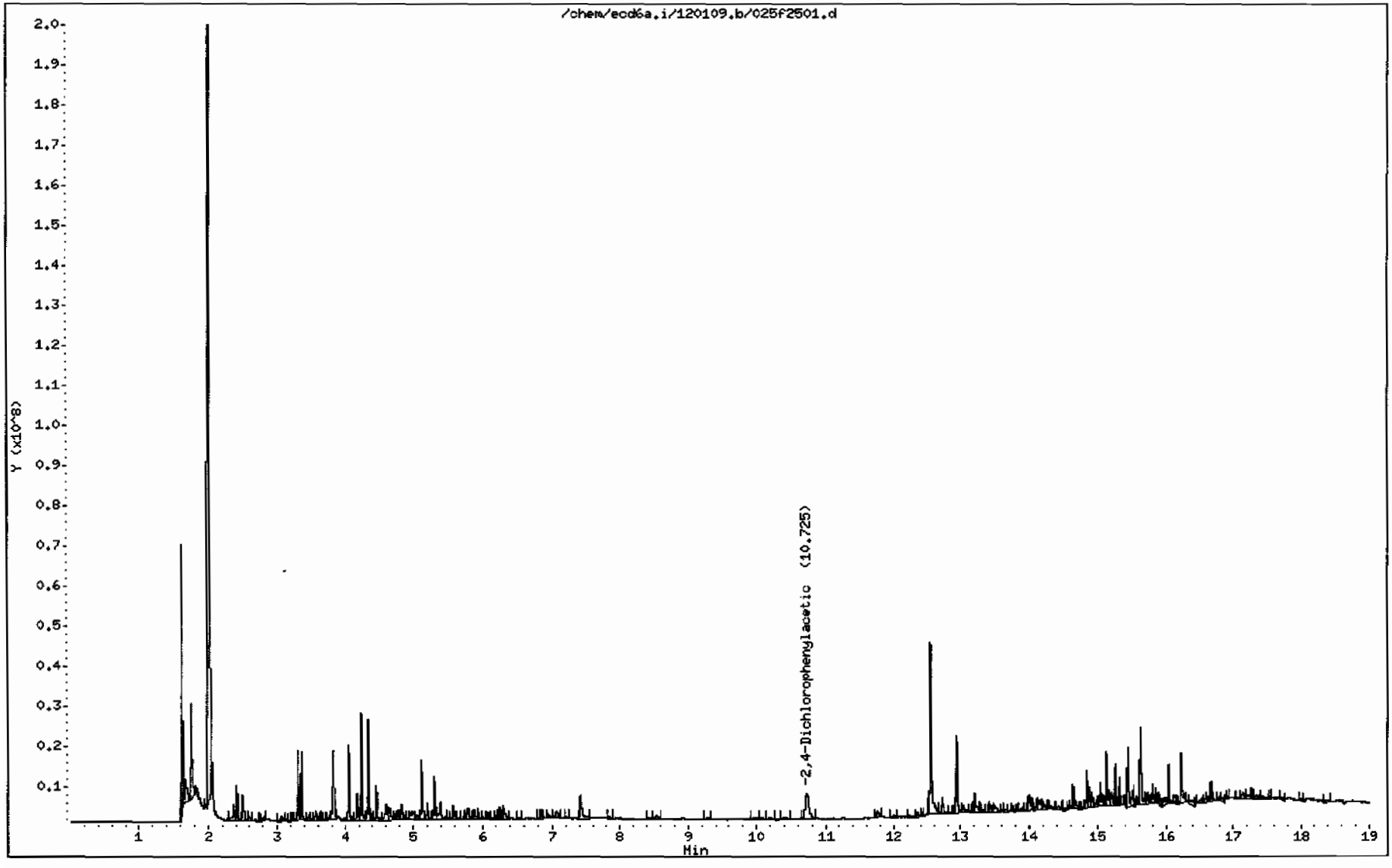

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/025b2501.d
Lab Smp Id: 241423004 Client Smp ID: WST03-10-2131
Inj Date : 01-DEC-2009 23:38
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241423004|2|
Misc Info : |ECD51H_1SF|927148|SVHF|LANL|SOIL|WST03-10-2131|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 25
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.727	11.717	0.010	24659987	207.348	90.1

Data File: /chem/ecd6a.i/120109.b/025b2501.d

Date : 01-DEC-2009 23:38

Client ID: WST03-10-2131

Sample Info: |24142300412|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

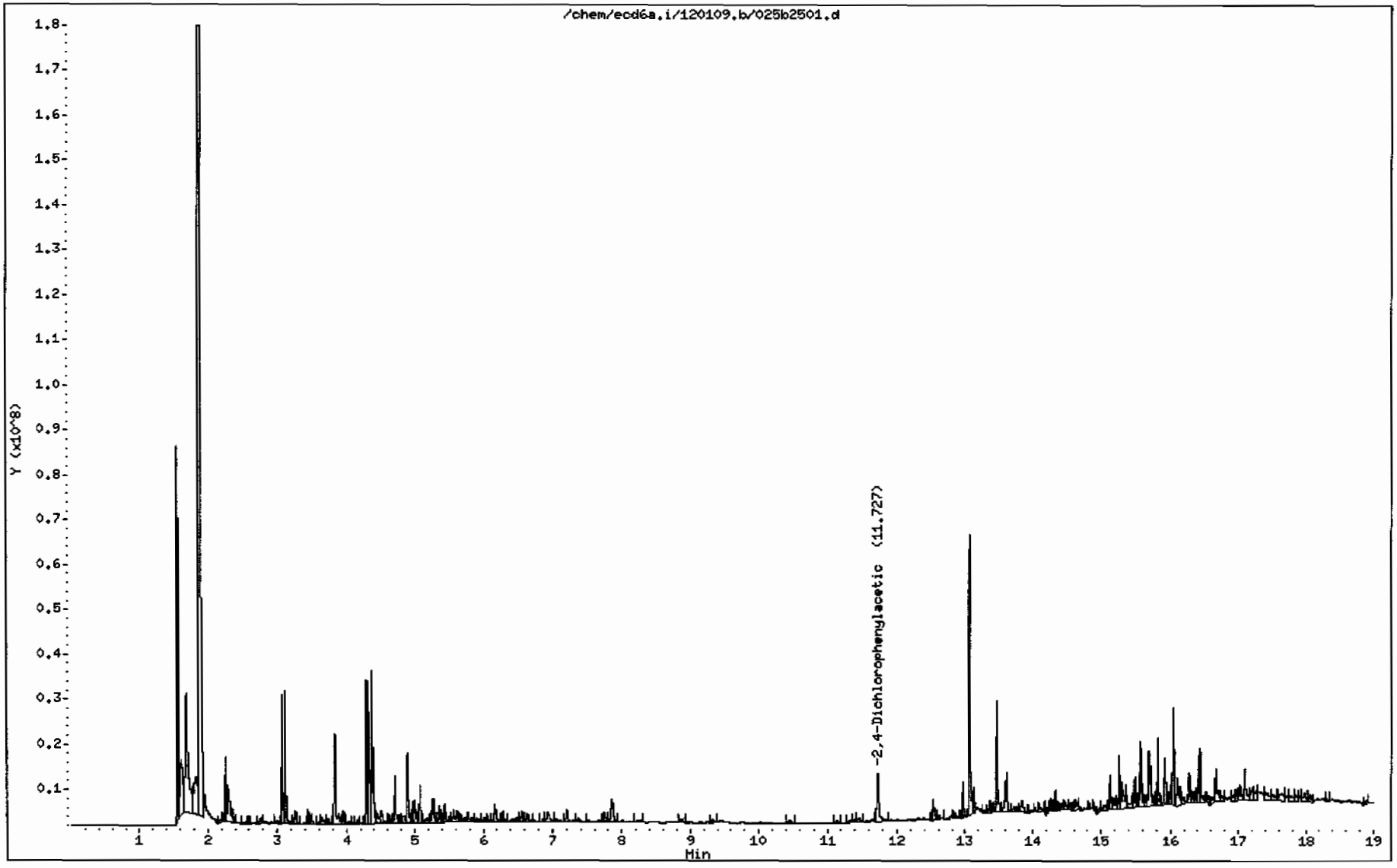

STANDARDS DATA

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002f0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003f0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004f0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005f0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007f0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008f0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084f8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074f7401.d

Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054f5401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 09:32	all	/chem/ecd6a.i/120109.b/046f4601.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 18:16	all	/chem/ecd6a.i/120109.b/064f6401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 01:02	all	/chem/ecd6a.i/120109.b/028f2801.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 05:45	all	/chem/ecd6a.i/120109.b/038f3801.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 21:44	all	/chem/ecd6a.i/120109.b/021f2101.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 16:08	all	/chem/ecd6a.i/120109.b/009f0901.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002b0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003b0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004b0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005b0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006b0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007b0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008b0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084b8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074b7401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054b5401.d

Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 09:32	all	/chem/ecd6a.i/120109.b/046b4601.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 18:16	all	/chem/ecd6a.i/120109.b/064b6401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 01:02	all	/chem/ecd6a.i/120109.b/028b2801.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 05:45	all	/chem/ecd6a.i/120109.b/038b3801.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 21:44	all	/chem/ecd6a.i/120109.b/021b2101.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 16:08	all	/chem/ecd6a.i/120109.b/009b0901.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006b0601.d

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COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	72858.000000
Initial:End Threshold	36429.000000
Initial:Area Threshold	728580.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	20.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000

	Compound	RT	RT Window	RF
	1 Dalapon	4.000	3.970-4.030	8.358e+04
$	2 2,4-Dichlorophenylacetic a	10.698	10.638-10.758	1.063e+05
	3 Dicamba	11.214	11.154-11.274	3.984e+05
	4 MCPP	11.729	11.669-11.789	3.485e+02
	5 MCPA	11.999	11.939-12.059	6.488e+02
	6 Dichlorprop	12.512	12.452-12.572	9.811e+04
	7 2,4-D	12.775	12.715-12.835	9.981e+04
	43 Pentachlorophenol	12.924	12.904-12.944	1.050e+06
	8 2,4,5-TP	13.512	13.482-13.542	4.822e+05
	9 2,4,5-T	13.715	13.675-13.755	4.163e+05
	10 2,4-DB	14.061	14.021-14.101	4.697e+04
	11 Dinoseb	14.638	14.608-14.668	2.191e+05

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COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	105244.000000
Initial:End Threshold	52622.000000
Initial:Area Threshold	1052440.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	25.000000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

	Compound	RT	RT Window	RF
	1 Dalapon	3.963	3.933-3.993	1.101e+05
$	2 2,4-Dichlorophenylacetic a	11.717	11.657-11.777	1.189e+05
	3 MCPP	12.246	12.186-12.306	3.863e+02
	4 Dicamba	12.000	11.940-12.060	4.475e+05
	5 MCPA	12.552	12.492-12.612	7.632e+02
	6 Dichlorprop	12.927	12.867-12.987	1.222e+05
	7 2,4-D	13.216	13.156-13.276	1.466e+05
	43 Pentachlorophenol	13.487	13.467-13.507	1.348e+06
	8 2,4,5-TP	13.825	13.795-13.855	5.770e+05
	9 2,4,5-T	14.065	14.035-14.095	4.771e+05
	10 Dinoseb	14.519	14.489-14.549	2.304e+05
	11 2,4-DB	14.354	14.314-14.394	6.662e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002f0201.d
Level 2: /chem/ecd6a.i/120109.b/003f0301.d
Level 3: /chem/ecd6a.i/120109.b/004f0401.d
Level 4: /chem/ecd6a.i/120109.b/005f0501.d
Level 5: /chem/ecd6a.i/120109.b/006f0601.d
Level 6: /chem/ecd6a.i/120109.b/007f0701.d
Level 7: /chem/ecd6a.i/120109.b/008f0801.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
1 Dalapon	+++++	79759	77099	90101	84329	83743		
	86440						83578	5.558
3 Dicamba	410356	419146	401802	405456	394767	379418		
	378101						398435	3.861
4 MCPP	+++++	319	339	352	359	354		
	368						349	4.922
5 MCPA	+++++	675	642	661	653	633		
	629						649	2.685
6 Dichlorprop	104713	103611	97122	98110	96912	92561		
	93769						98114	4.669
7 2,4-D	88737	98217	95724	105038	103064	102557		
	105356						99813	6.040
43 Pentachlorophenol	1087173	1110429	1048940	1060478	1045628	997069		
	1002014						1050247	3.939

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1 / 400.000 Level 7	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
8 2,4,5-TP	492919	495515	472258	491705	487675	468321		
	466963						482194	2.590
9 2,4,5-T	394661	408706	384612	438870	433931	422814		
	430258						416265	4.989
10 2,4-DB	39162	43417	44875	49575	51111	50418		
	50206						46966	9.690
11 Dinoseb	230101	225942	216507	213886	224921	210402		
	211879						219091	3.552
$ 2 2,4-Dichlorophenylacetic acid	108080	110960	107596	110113	106225	101270		
	99510						106251	4.075

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002b0201.d
Level 2: /chem/ecd6a.i/120109.b/003b0301.d
Level 3: /chem/ecd6a.i/120109.b/004b0401.d
Level 4: /chem/ecd6a.i/120109.b/005b0501.d
Level 5: /chem/ecd6a.i/120109.b/006b0601.d
Level 6: /chem/ecd6a.i/120109.b/007b0701.d
Level 7: /chem/ecd6a.i/120109.b/008b0801.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	400.000 Level 7	RRF	% RSD
1 Dalapon	+++++	98106	96954	119992	111692	113951	119890	110098	9.331
3 MCPP	+++++	350	365	386	397	399	421	386	6.595
4 Dicamba	449422	446473	430565	448713	449180	449025	458911	447470	1.888
5 MCPA	+++++	819	738	774	762	746	740	763	4.015
6 Dichlorprop	135168	131720	115878	119926	118099	115406	119363	122223	6.468
7 2,4-D	152343	149276	135359	148967	143733	146310	150228	146602	3.874
43 Pentachlorophenol	1280880	1326050	1301780	1352765	1381520	1367964	1423708	1347810	3.635

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	400.000 Level 7	___ RRF	% RSD
8 2,4,5-TP	528143	568958	555456	578704	602748	597990	606932	576990	4.962
9 2,4,5-T	424544	438865	442454	497147	497302	508185	531119	477088	8.608
10 Dinoseb	207093	212167	211025	232955	251099	243499	254885	230389	8.784
11 2,4-DB	69154	66396	63869	66342	65984	66319	68302	66624	2.559
$ 2 2,4-Dichlorophenylacetic acid	122147	120666	115303	119536	117395	116524	120941	118930	2.146

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009F0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
Dalapon	83578.428	82576.474	0.005	-1.2	15.0
MCPA	648.828	658.314	0.005	1.5	15.0
2,4-D	99813.291	103435.11	0.005	3.6	15.0
2,4,5-T	416264.72	429851.16	0.005	3.3	15.0
Dinoseb	219091.19	218374.44	0.005	-0.3	15.0
MCPP	348.505	359.196	0.01	3.1	15.0
Dichlorprop	98114.076	97091.000	0.01	-1.0	15.0
2,4,5-TP	482193.63	489200.79	0.01	1.4	15.0
Dicamba	398435.16	399654.07	0.01	0.3	15.0
2,4-DB	46966.168	49375.945	0.01	5.1	15.0
Pentachlorophenol	1050247.3	1044090.6	0.01	-0.6	15.0
2,4-Dichlorophenylacetic aci	106250.60	110571.95	0.01	4.1	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009B0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D
Dalapon	110097.67	109424.62	0.005	-0.6	15.0
MCPA	763.211	729.702	0.005	-4.4	15.0
2,4-D	146602.25	146157.23	0.005	0.3	15.0
2,4,5-T	477088.18	502040.23	0.005	5.2	15.0
Dinoseb	230388.97	242178.58	0.005	5.1	15.0
MCPP	386.296	394.629	0.01	2.2	15.0
Dichlorprop	122222.86	115798.72	0.01	-5.2	15.0
2,4,5-TP	576990.28	605274.08	0.01	4.9	15.0
Dicamba	447469.94	450987.37	0.01	0.8	15.0
2,4-DB	66623.779	66159.482	0.01	-0.7	15.0
Pentachlorophenol	1347809.8	1381780.3	0.01	2.5	15.0
2,4-Dichlorophenylacetic aci	118930.17	122553.87	0.01	3.0	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 2144

Lab File ID: 021F2101 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	83578.428	90111.674	0.005	7.8	15.0	
MCPA	648.828	642.190	0.005	-1.0	15.0	
2,4-D	99813.291	121442.60	0.005	21.7	15.0	<-
2,4,5-T	416264.72	453989.92	0.005	9.1	15.0	
Dinoseb	219091.19	264197.15	0.005	20.6	15.0	<-
MCPP	348.505	381.481	0.01	9.5	15.0	
Dichlorprop	98114.076	108751.79	0.01	10.8	15.0	
2,4,5-TP	482193.63	523827.84	0.01	8.6	15.0	
Dicamba	398435.16	428722.52	0.01	7.6	15.0	
2,4-DB	46966.168	82691.642	0.01	76.1	15.0	<-
Pentachlorophenol	1050247.3	1129351.7	0.01	7.5	15.0	
2,4-Dichlorophenylacetic aci	106250.60	117863.42	0.01	10.9	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 2144

Lab File ID: 021B2101 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	110097.67	116338.53	0.005	5.7	15.0	
MCPA	763.211	681.722	0.005	-10.7	15.0	
2,4-D	146602.25	161163.40	0.005	9.9	15.0	
2,4,5-T	477088.18	540297.60	0.005	13.2	15.0	
Dinoseb	230388.97	342339.69	0.005	48.6	15.0	<-
MCPP	386.296	408.230	0.01	5.7	15.0	
Dichlorprop	122222.86	119676.19	0.01	-2.1	15.0	
2,4,5-TP	576990.28	612505.82	0.01	6.2	15.0	
Dicamba	447469.94	483032.42	0.01	7.9	15.0	
2,4-DB	66623.779	71887.585	0.01	7.9	15.0	
Pentachlorophenol	1347809.8	1380536.3	0.01	2.4	15.0	
2,4-Dichlorophenylacetic aci	118930.17	125392.04	0.01	5.4	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0102

Lab File ID: 028F2801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	83578.428	91037.404	0.005	8.9	15.0	
MCPA	648.828	721.793	0.005	11.2	15.0	
2,4-D	99813.291	133807.20	0.005	34.0	15.0	<-
2,4,5-T	416264.72	519166.24	0.005	24.7	15.0	<-
Dinoseb	219091.19	268156.51	0.005	22.4	15.0	<-
MCPP	348.505	421.951	0.01	21.1	15.0	<-
Dichlorprop	98114.076	117963.10	0.01	20.2	15.0	<-
2,4,5-TP	482193.63	579540.14	0.01	20.2	15.0	<-
Dicamba	398435.16	452680.34	0.01	13.6	15.0	
2,4-DB	46966.168	66013.165	0.01	40.6	15.0	<-
Pentachlorophenol	1050247.3	1223969.6	0.01	16.5	15.0	<-
2,4-Dichlorophenylacetic aci	106250.60	123075.77	0.01	15.8	15.0	<-

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0102

Lab File ID: 028B2801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	110097.67	119205.39	0.005	8.3	15.0	
MCPA	763.211	784.059	0.005	2.7	15.0	
2,4-D	146602.25	170105.36	0.005	16.0	15.0	<-
2,4,5-T	477088.18	561702.70	0.005	17.7	15.0	<-
Dinoseb	230388.97	346762.25	0.005	50.5	15.0	<-
MCPP	386.296	469.900	0.01	21.6	15.0	<-
Dichlorprop	122222.86	135534.71	0.01	10.9	15.0	
2,4,5-TP	576990.28	681630.17	0.01	18.1	15.0	<-
Dicamba	447469.94	527722.68	0.01	17.9	15.0	<-
2,4-DB	66623.779	78799.720	0.01	18.3	15.0	<-
Pentachlorophenol	1347809.8	1587406.0	0.01	17.8	15.0	<-
2,4-Dichlorophenylacetic aci	118930.17	136029.60	0.01	14.4	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0545

Lab File ID: 038F3801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	83578.428	90244.016	0.005	8.0	15.0	
MCPA	648.828	705.772	0.005	8.8	15.0	
2,4-D	99813.291	127900.23	0.005	28.1	15.0	<-
2,4,5-T	416264.72	506201.61	0.005	21.6	15.0	<-
Dinoseb	219091.19	250678.87	0.005	14.4	15.0	
MCPP	348.505	409.240	0.01	17.4	15.0	<-
Dichlorprop	98114.076	114610.43	0.01	16.8	15.0	<-
2,4,5-TP	482193.63	566812.91	0.01	17.5	15.0	<-
Dicamba	398435.16	442333.98	0.01	11.0	15.0	
2,4-DB	46966.168	65122.074	0.01	38.6	15.0	<-
Pentachlorophenol	1050247.3	1199753.4	0.01	14.2	15.0	
2,4-Dichlorophenylacetic aci	106250.60	120387.03	0.01	13.3	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0545

Lab File ID: 038B3801 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
Dalapon	110097.67	117425.02	0.005	6.6	15.0	
MCPA	763.211	770.898	0.005	1.0	15.0	
2,4-D	146602.25	167162.07	0.005	14.0	15.0	
2,4,5-T	477088.18	546351.88	0.005	14.5	15.0	
Dinoseb	230388.97	299846.98	0.005	30.1	15.0	<-
MCPP	386.296	465.616	0.01	20.5	15.0	<-
Dichlorprop	122222.86	131248.08	0.01	7.4	15.0	
2,4,5-TP	576990.28	662519.89	0.01	14.8	15.0	
Dicamba	447469.94	512831.17	0.01	14.6	15.0	
2,4-DB	66623.779	77965.990	0.01	17.0	15.0	<-
Pentachlorophenol	1347809.8	1559565.4	0.01	15.7	15.0	<-
2,4-Dichlorophenylacetic aci	118930.17	135264.70	0.01	13.7	15.0	

FORM VII HERBICIDE

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/009f0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
1 Dalapon					CAS #: 75-99-0		
4.000	4.000	0.000	165152948	2000.00	1980		
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9		
10.698	10.698	0.000	55285977	500.000	520		(M)
3 Dicamba					CAS #: 6597-78-0		
11.214	11.214	0.000	79930813	200.000	201		(M)
4 MCPP					CAS #: 7085-19-0		
11.729	11.729	0.000	7183913	20000.0	20600		(M)
5 MCPA					CAS #: 94-74-6		
11.999	11.999	0.000	13166275	20000.0	20300		(M)
6 Dichlorprop					CAS #: 120-36-5		
12.512	12.512	0.000	19418200	200.000	198		(M)
7 2,4-D					CAS #: 94-75-7		
12.775	12.775	0.000	20687022	200.000	207		
43 Pentachlorophenol					CAS #: 87-86-5		
12.924	12.924	0.000	208818126	200.000	199		(M)
8 2,4,5-TP					CAS #: 93-72-1		
13.512	13.512	0.000	97840159	200.000	203		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.715	13.715	0.000	85970231	200.000	206		(M)
10 2,4-DB					CAS #: 94-82-6		
14.064	14.064	0.000	9875189	200.000	210		(M)
11 Dinoseb					CAS #: 88-85-7		
14.638	14.638	0.000	43674888	200.000	199		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009f0901.d
Date : 01-DEC-2009 16:08
Client ID: HSTD01
Sample Info: IWHB091030-12

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

Column phase: Rtx-CLP

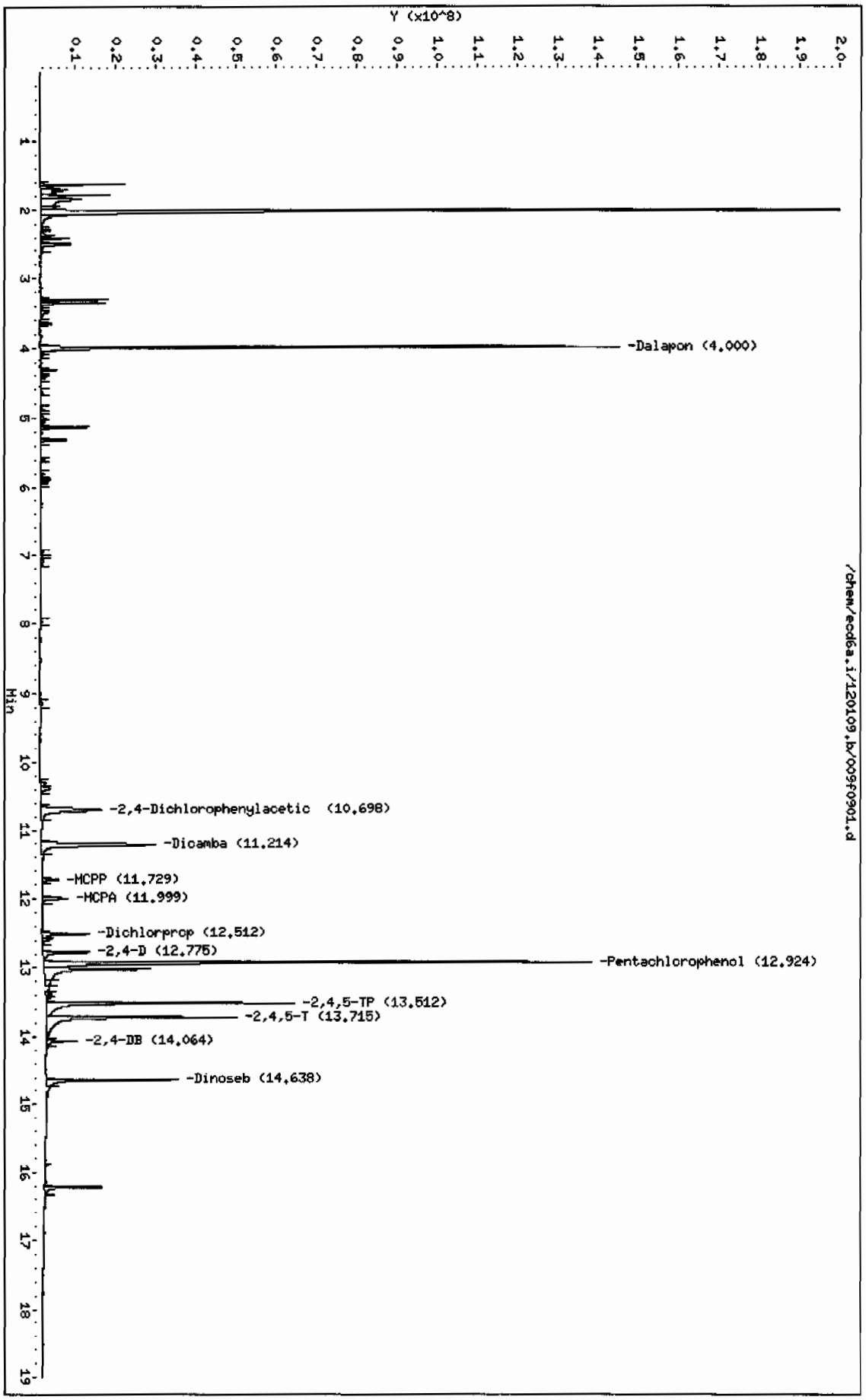

Page 1

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

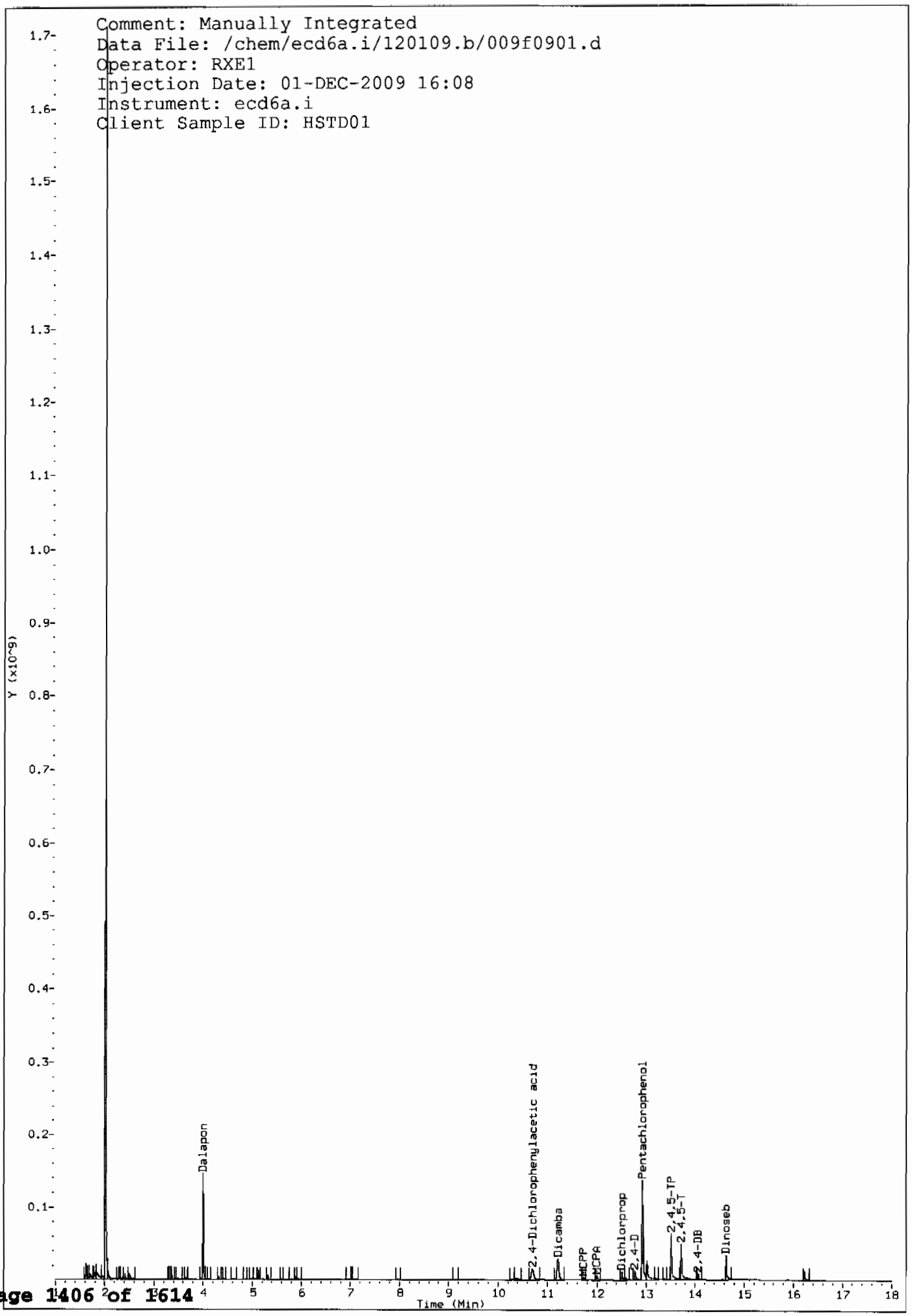

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

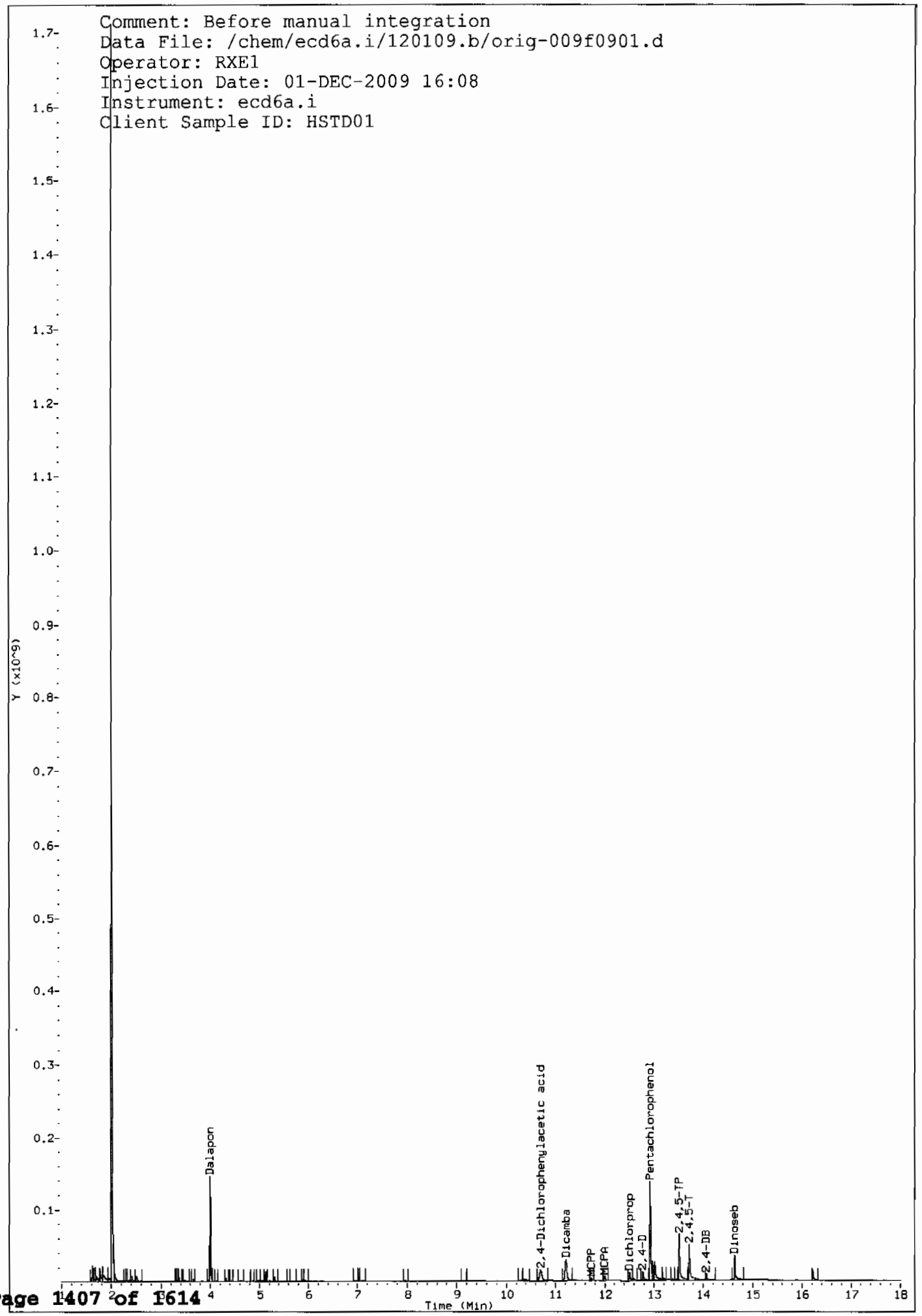

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/009b0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
1 Dalapon					CAS #: 88-85-7		
3.963	3.963	0.000	218849243	2000.00	1990		
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9		
11.717	11.717	0.000	61276933	500.000	515		(M)
3 MCPP					CAS #: 7085-19-0		
12.246	12.246	0.000	7892573	20000.0	20400		(M)
4 Dicamba					CAS #: 6597-78-0		
12.000	12.000	0.000	90197474	200.000	202		(M)
5 MCPA					CAS #: 94-74-6		
12.552	12.552	0.000	14594046	20000.0	19100		(M)
6 Dichlorprop					CAS #: 120-36-5		
12.927	12.927	0.000	23159743	200.000	189		(M)
7 2,4-D					CAS #: 94-75-7		
13.216	13.216	0.000	29231447	200.000	199		
43 Pentachlorophenol					CAS #: 87-86-5		
13.487	13.487	0.000	276356059	200.000	205		(M)
8 2,4,5-TP					CAS #: 93-72-1		
13.825	13.825	0.000	121054815	200.000	210		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.065	14.065	0.000	100408046	200.000	210		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	48435715	200.000	210		(M)
11 2,4-DB					CAS #: 94-82-6		
14.354	14.354	0.000	13231896	200.000	199		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009b0901.d

Date : 01-DEC-2009 16:08

Client ID: HSTD01

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

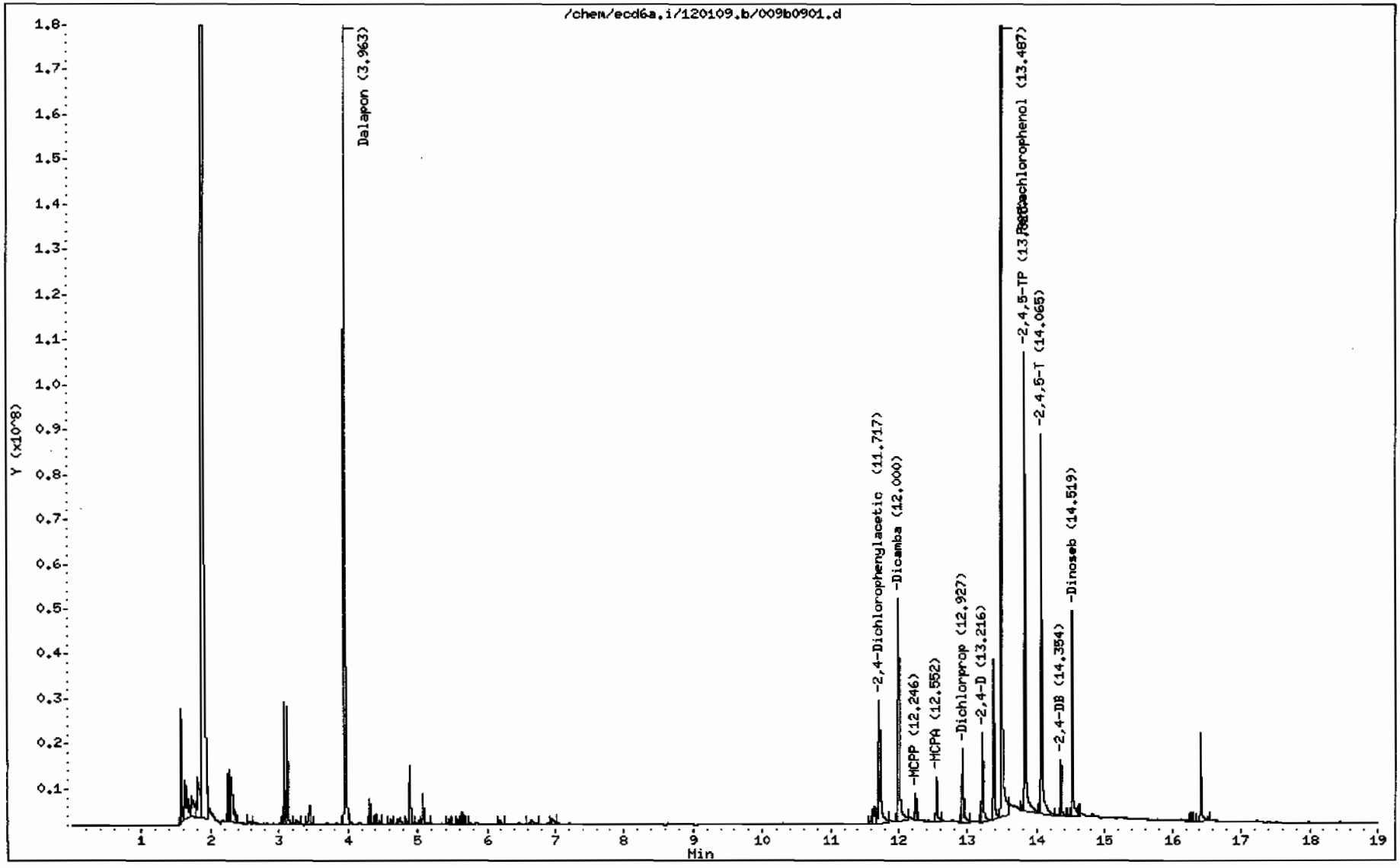

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

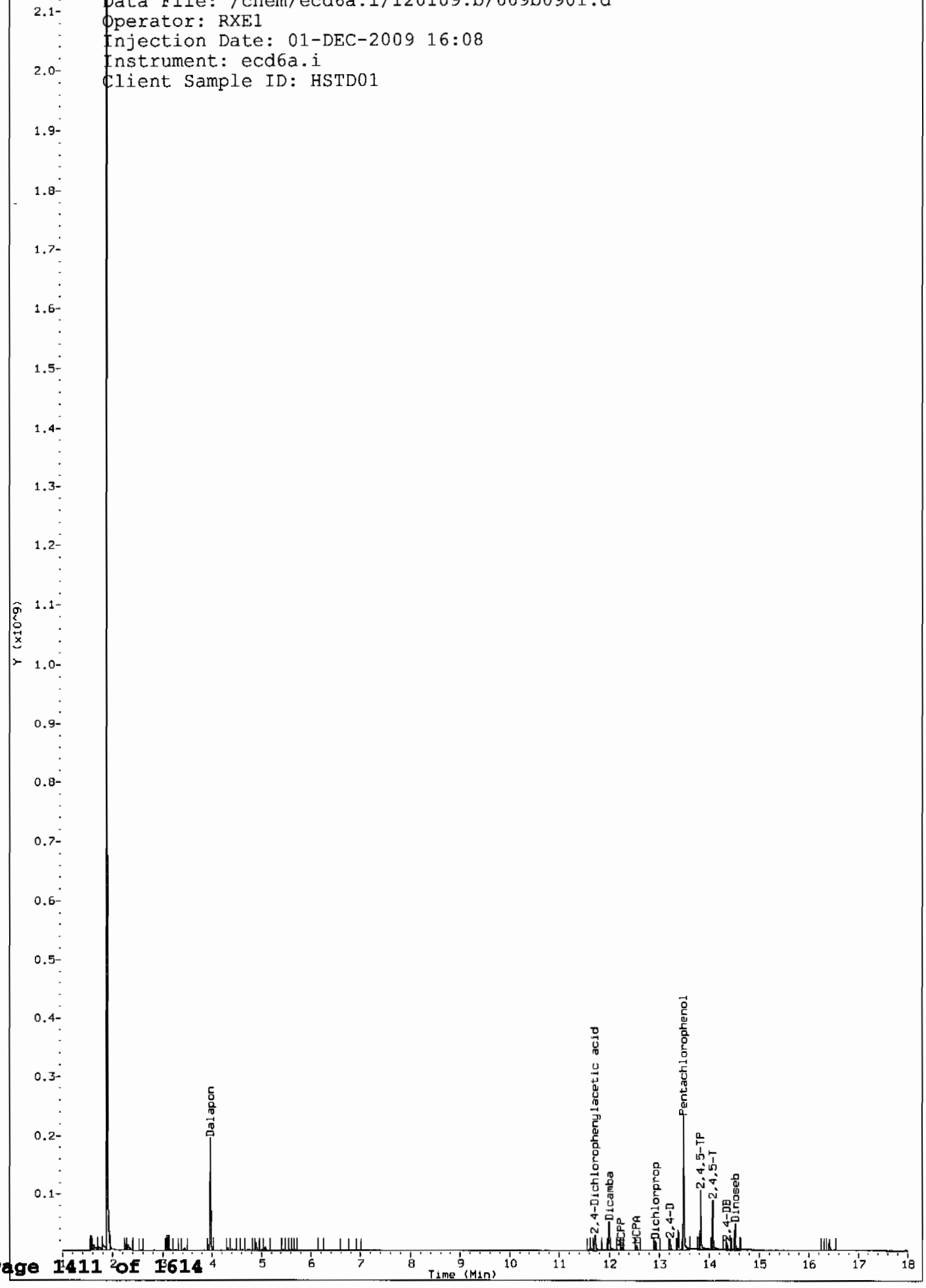

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

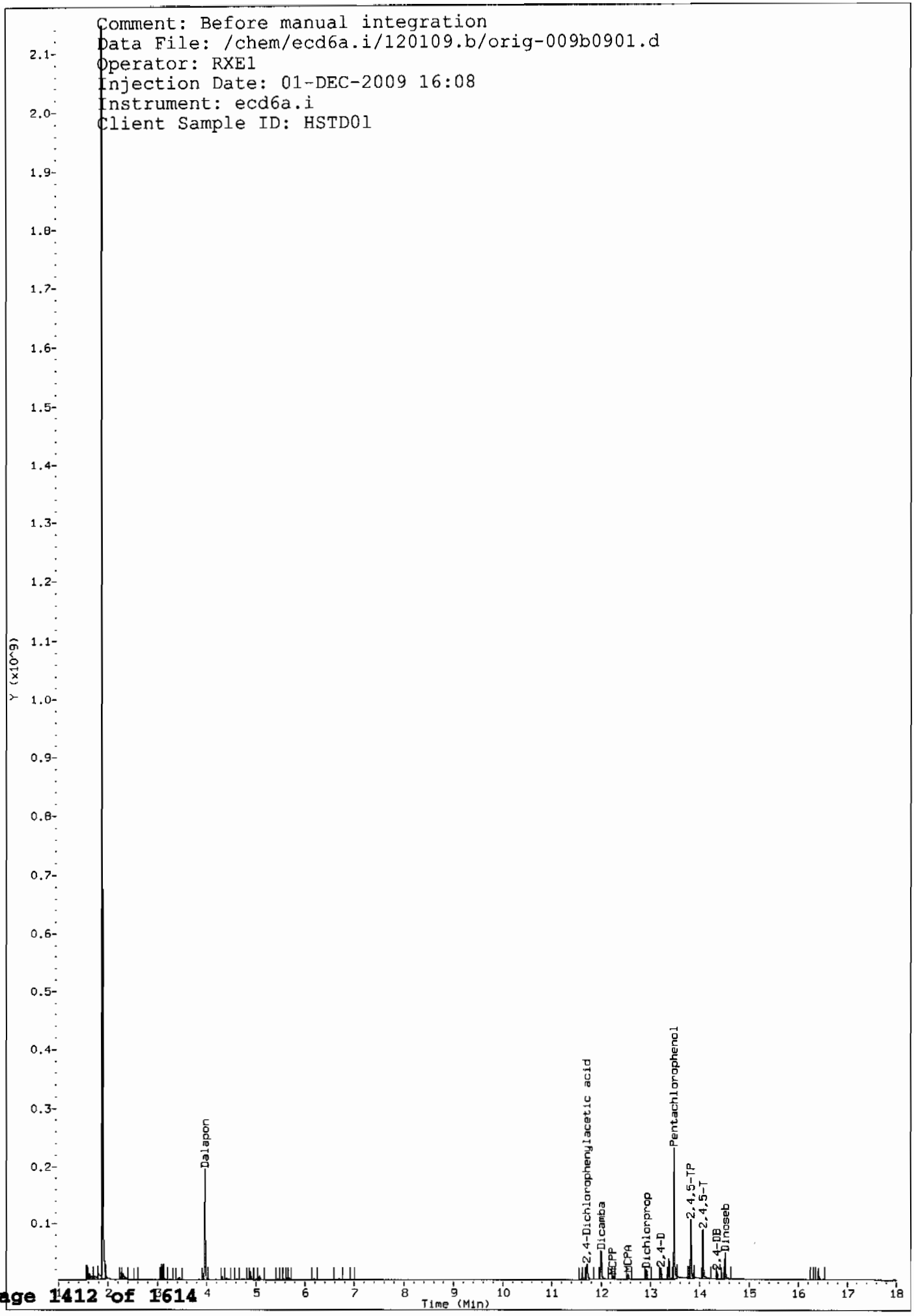

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/021f2101.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD02
Inj Date : 01-DEC-2009 21:44
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 09:16 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.995	4.000	-0.005	180223347	2000.00	2160	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.690	10.698	-0.008	58931710	500.000	555	
	3 Dicamba					CAS #: 6597-78-0	
	11.207	11.214	-0.007	85744504	200.000	215	
	4 MCPP					CAS #: 7085-19-0	
	11.724	11.729	-0.005	7629618	20000.0	21900	
	5 MCPA					CAS #: 94-74-6	
	11.997	11.999	-0.002	12843803	20000.0	19800	
	6 Dichlorprop					CAS #: 120-36-5	
	12.507	12.512	-0.005	21750358	200.000	222	
	7 2,4-D					CAS #: 94-75-7	
	12.771	12.775	-0.004	24288519	200.000	243	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.923	12.924	-0.001	225870339	200.000	215	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.509	13.512	-0.003	104765568	200.000	217	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.712	13.715	-0.003	90797983	200.000	218		(M)
10 2,4-DB					CAS #: 94-82-6		
14.061	14.064	-0.003	16538328	200.000	352		(M)
11 Dinoseb					CAS #: 88-85-7		
14.638	14.638	0.000	52839430	200.000	241		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/021f2101.d
Date : 01-DEC-2009 21:44
Client ID: HSTD02
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

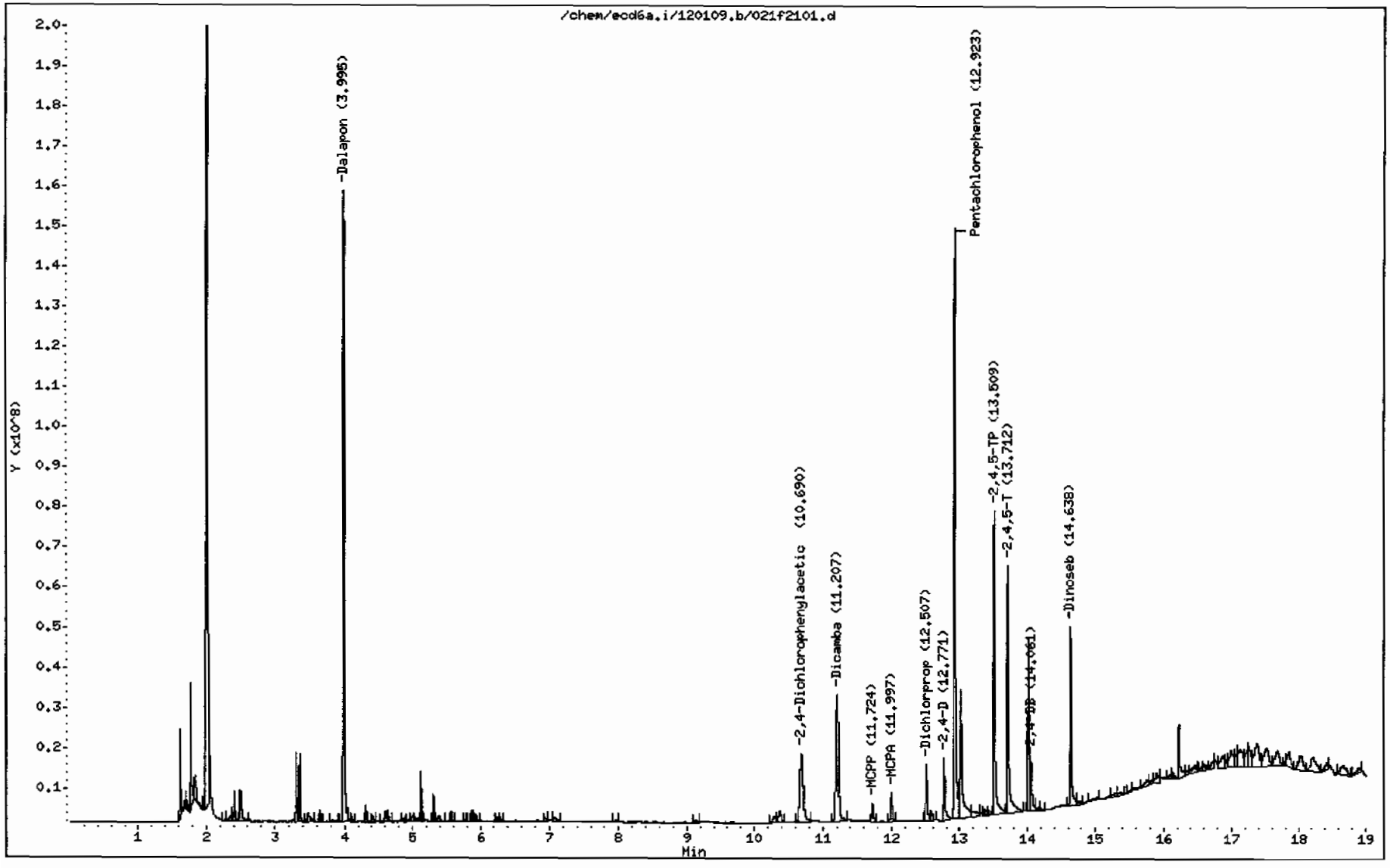

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/021b2101.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD02
Inj Date : 01-DEC-2009 21:44
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 09:14 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dalapon					CAS #: 88-85-7
	3.958	3.963	-0.005	232677055	2000.00	2110
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
	11.710	11.717	-0.007	62696020	500.000	527
	3 MCPP					CAS #: 7085-19-0
	12.245	12.246	-0.001	8164601	20000.0	21100
	4 Dicamba					CAS #: 6597-78-0
	11.996	12.000	-0.004	96606484	200.000	216
	5 MCPA					CAS #: 94-74-6
	12.550	12.552	-0.002	13634450	20000.0	17900
	6 Dichlorprop					CAS #: 120-36-5
	12.923	12.927	-0.004	23935238	200.000	196
	7 2,4-D					CAS #: 94-75-7
	13.213	13.216	-0.003	32232681	200.000	220
	43 Pentachlorophenol					CAS #: 87-86-5
	13.479	13.487	-0.008	276107268	200.000	205
	8 2,4,5-TP					CAS #: 93-72-1
	13.823	13.825	-0.002	122501164	200.000	212

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
14.063	14.065	-0.002	108059520	200.000	226	
10 Dinoseb					CAS #: 88-85-7	
14.518	14.519	-0.001	68467937	200.000	297	(M)
11 2,4-DB					CAS #: 94-82-6	
14.351	14.354	-0.003	14377517	200.000	216	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/021b2101.d

Date : 01-DEC-2009 21:44

Client ID: HSTD02

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

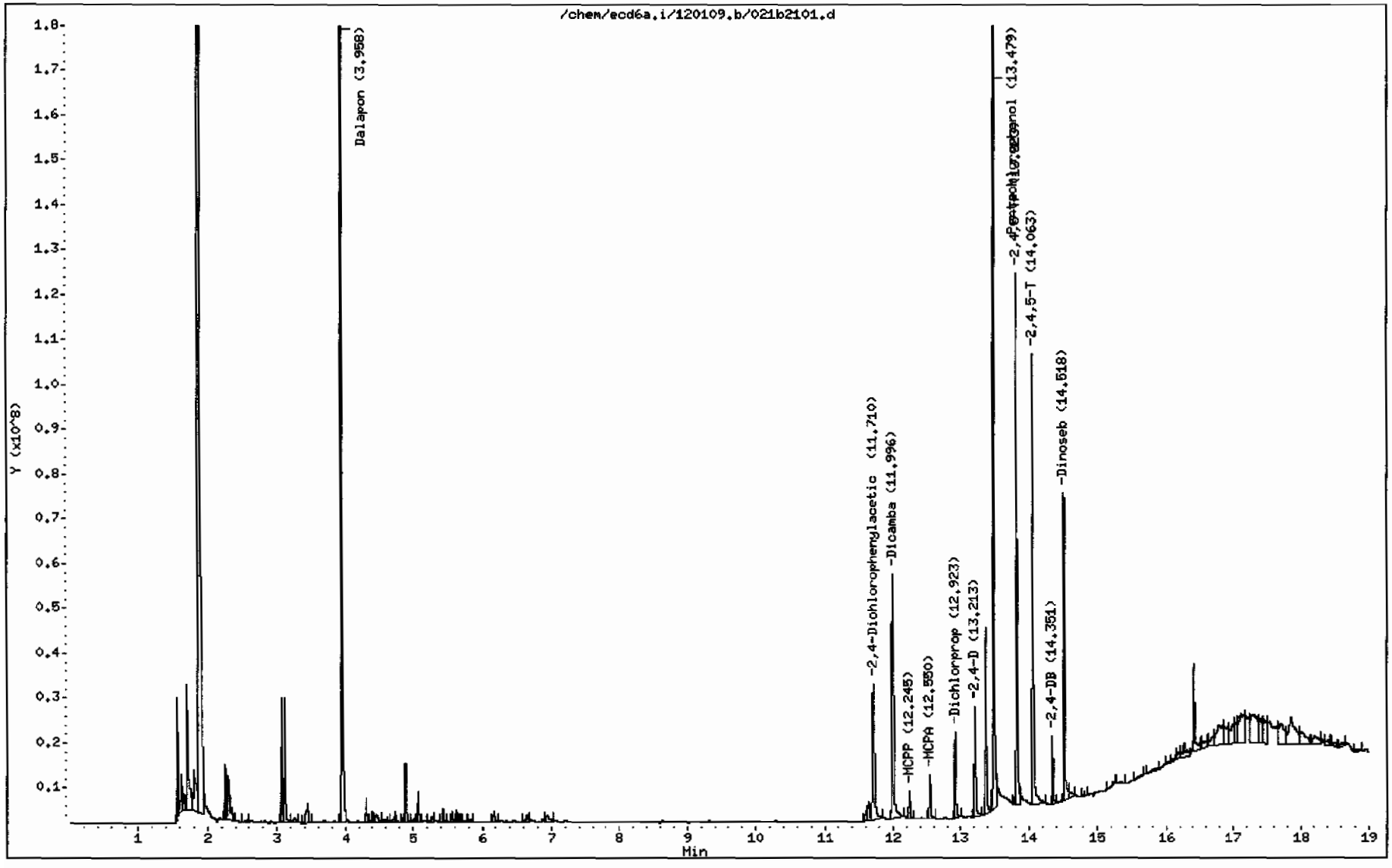

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/021b2101.d
Operator: RXE1
Injection Date: 01-DEC-2009 21:44
Instrument: ecd6a.i
Client Sample ID: HSTD02

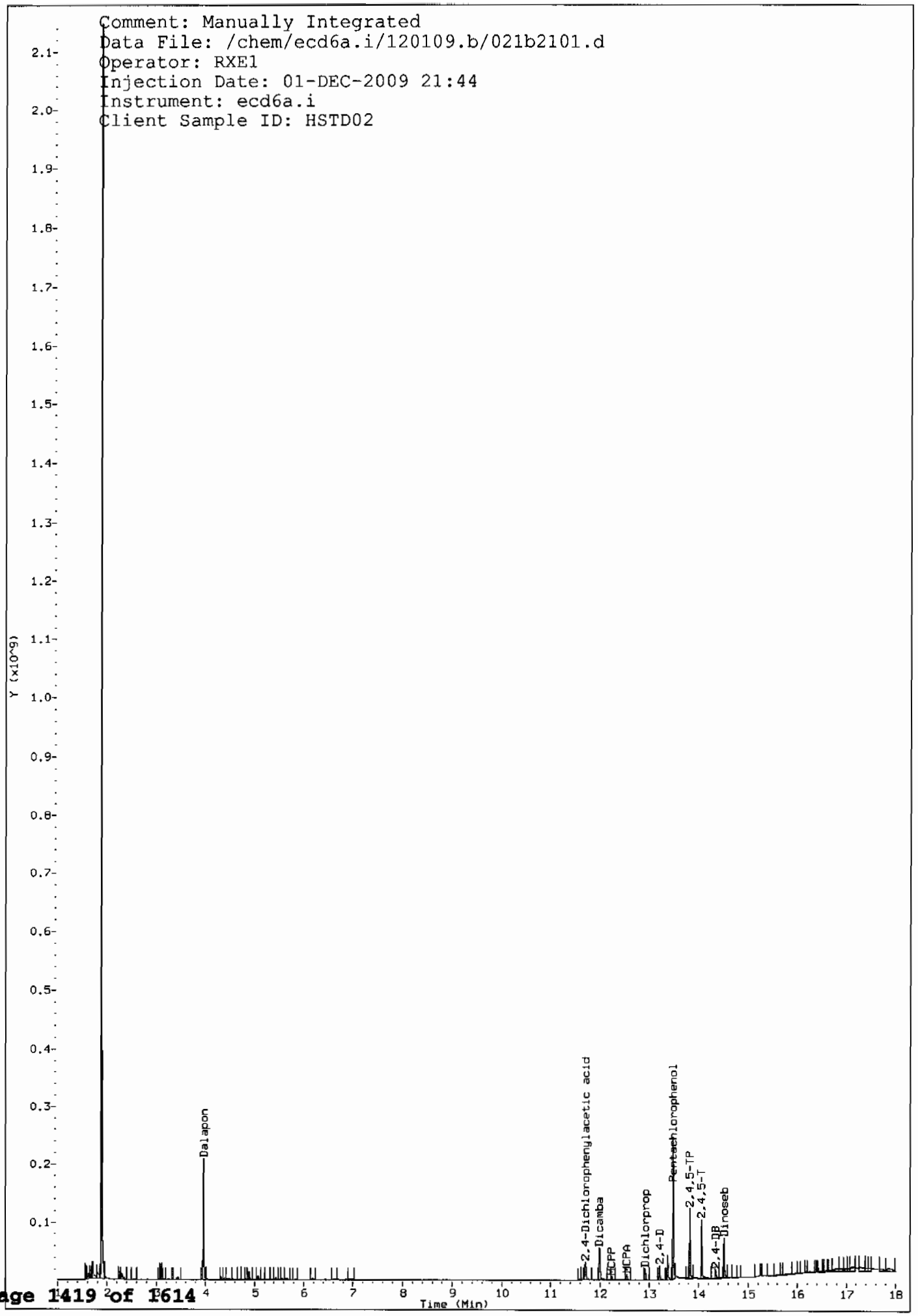

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-021b2101.d
Operator: RXE1
Injection Date: 01-DEC-2009 21:44
Instrument: ecd6a.i
Client Sample ID: HSTD02

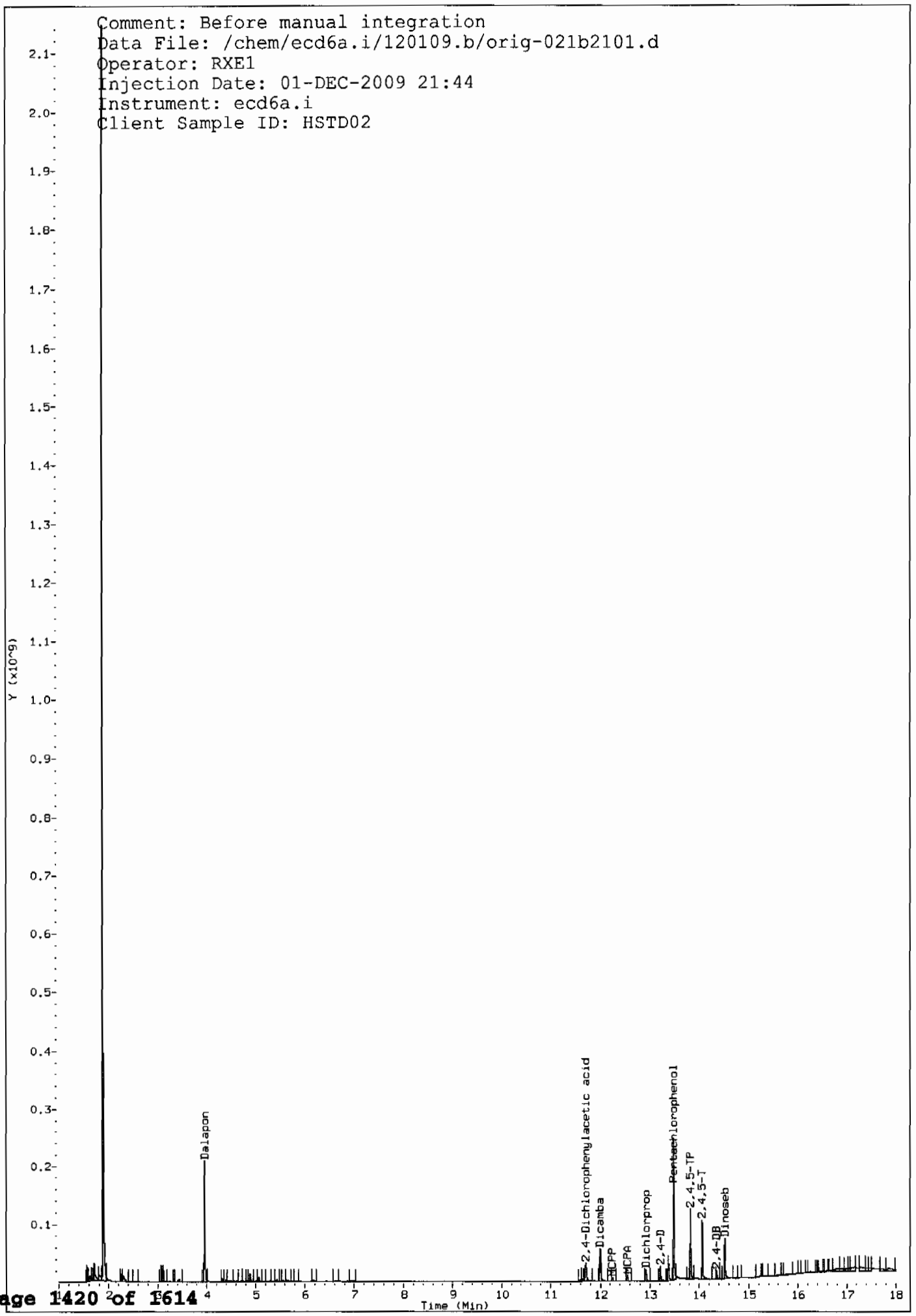

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/028f2801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD03
Inj Date : 02-DEC-2009 01:02
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.992	4.000	-0.008	182074807	2000.00	2180	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.692	10.698	-0.006	61537884	500.000	579	
	3 Dicamba					CAS #: 6597-78-0	
	11.211	11.214	-0.003	90536067	200.000	227	
	4 MCPP					CAS #: 7085-19-0	
	11.727	11.729	-0.002	8439016	20000.0	24200	
	5 MCPA					CAS #: 94-74-6	
	11.997	11.999	-0.002	14435858	20000.0	22200	
	6 Dichlorprop					CAS #: 120-36-5	
	12.508	12.512	-0.004	23592620	200.000	240	
	7 2,4-D					CAS #: 94-75-7	
	12.773	12.775	-0.002	26761440	200.000	268	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.925	12.924	0.001	244793917	200.000	233	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.511	13.512	-0.001	115908028	200.000	240	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.713	13.715	-0.002	103833249	200.000	249	(M)
10 2,4-DB					CAS #: 94-82-6	
14.063	14.064	-0.001	13202633	200.000	281	(M)
11 Dinoseb					CAS #: 88-85-7	
14.639	14.638	0.001	53631302	200.000	245	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/028f2801.d
Date : 02-DEC-2009 01:02
Client ID: HSTD03
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

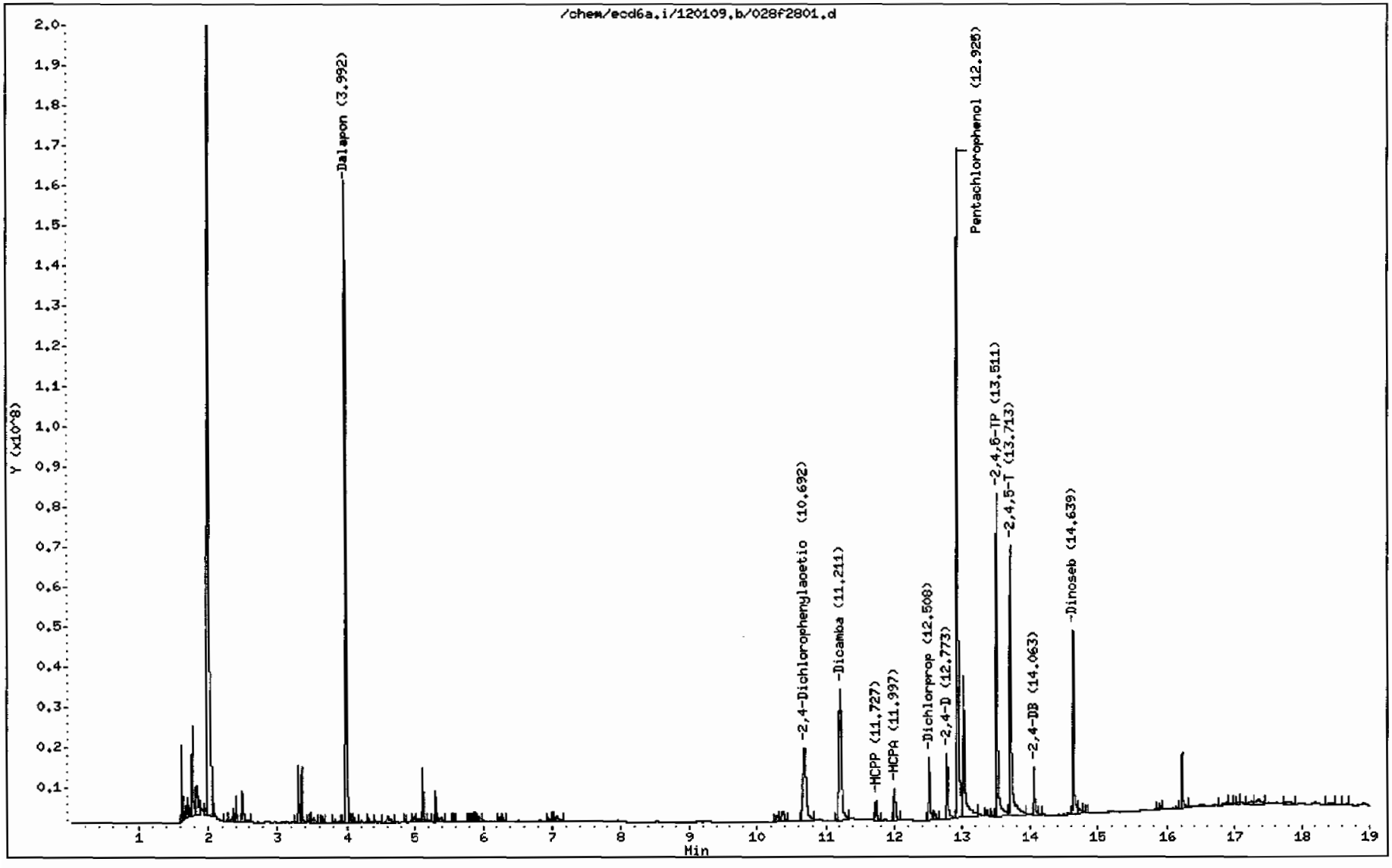

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/028f2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

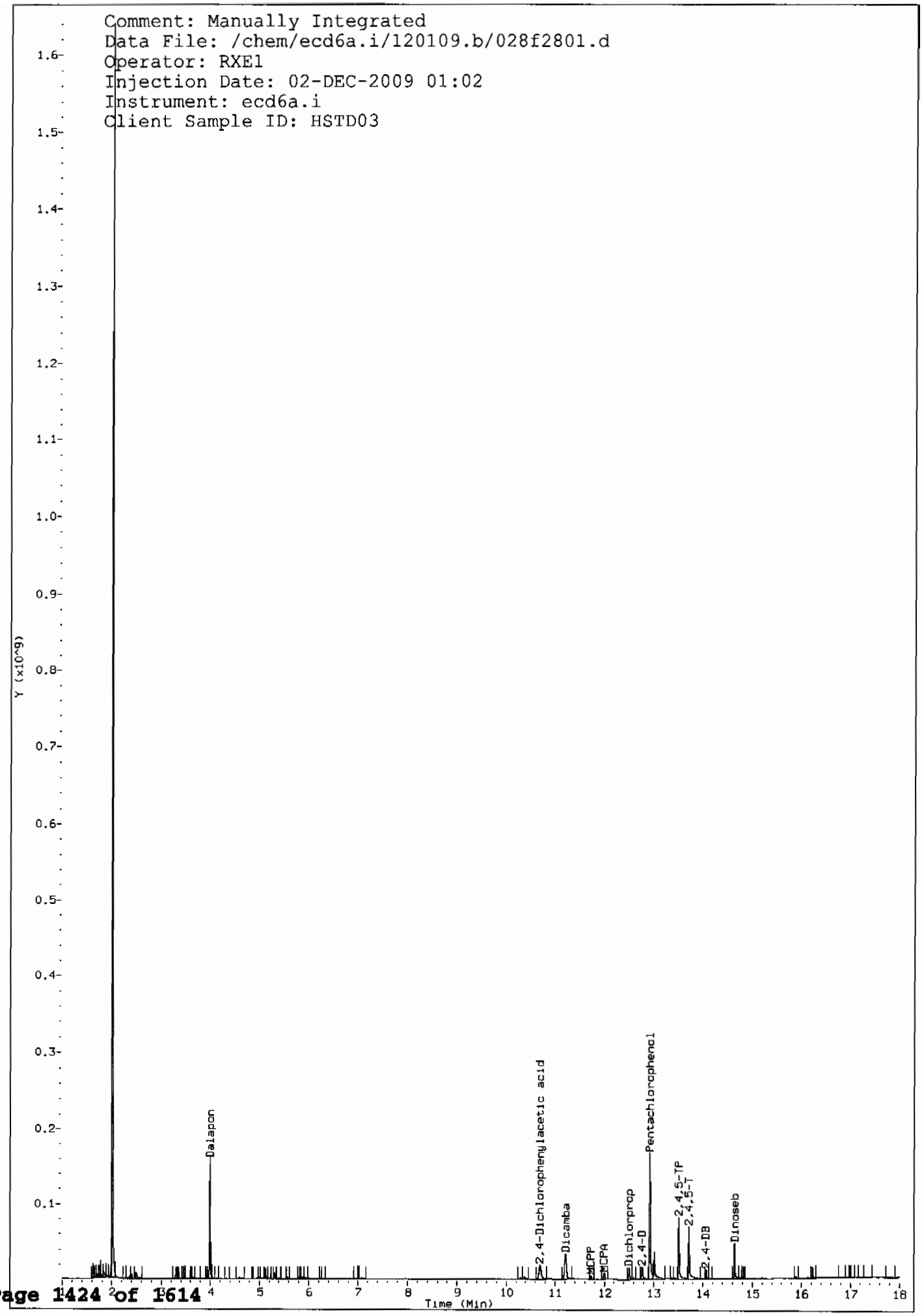

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-028f2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

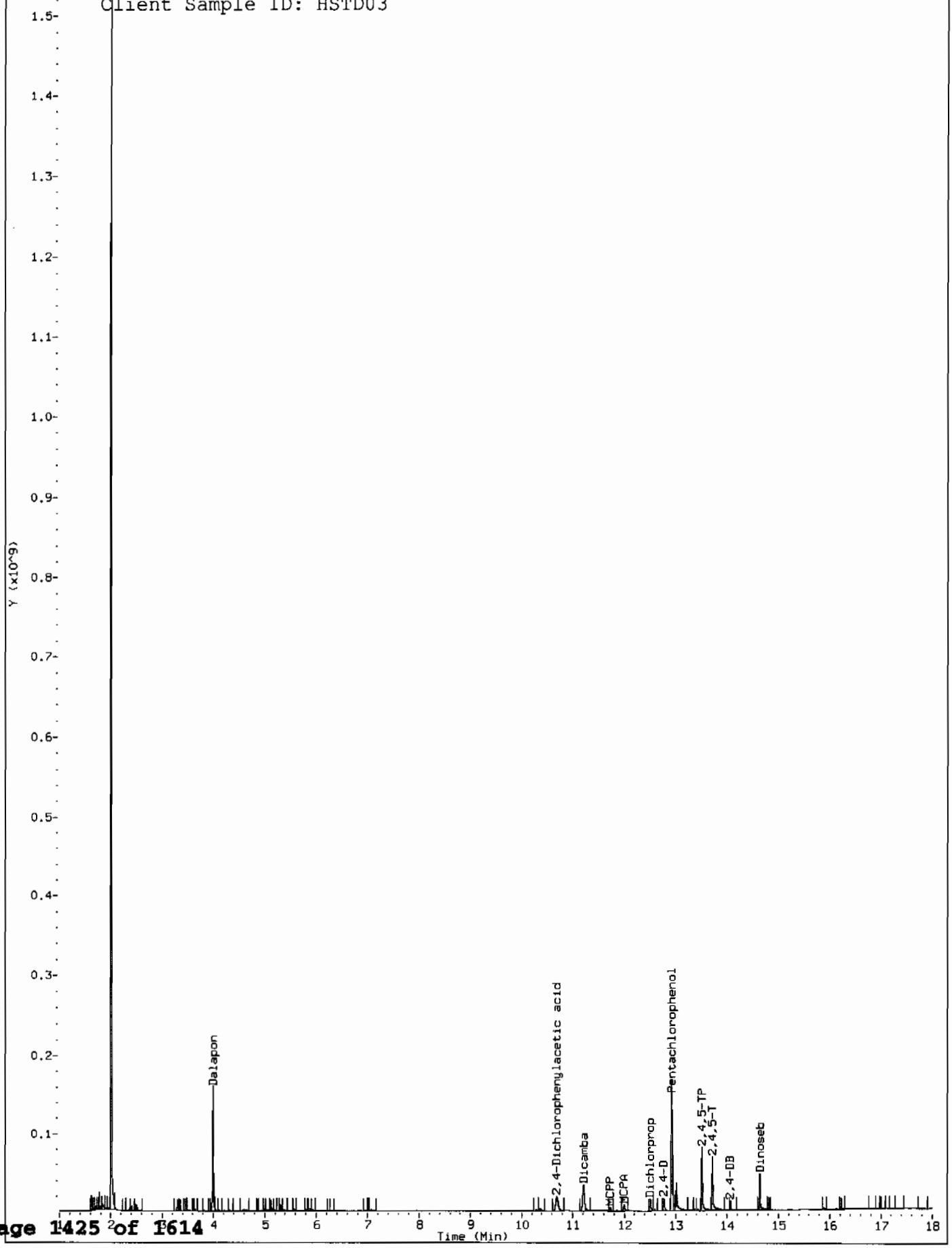

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/028b2801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD03
Inj Date : 02-DEC-2009 01:02
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 88-85-7	
	3.957	3.963	-0.006	238410775	2000.00	2160	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	11.712	11.717	-0.005	68014801	500.000	572	(M)
	3 MCPP					CAS #: 7085-19-0	
	12.246	12.246	0.000	9397997	20000.0	24300	(M)
	4 Dicamba					CAS #: 6597-78-0	
	11.998	12.000	-0.002	105544535	200.000	236	
	5 MCPA					CAS #: 94-74-6	
	12.552	12.552	0.000	15681173	20000.0	20500	
	6 Dichlorprop					CAS #: 120-36-5	
	12.925	12.927	-0.002	27106942	200.000	222	
	7 2,4-D					CAS #: 94-75-7	
	13.214	13.216	-0.002	34021071	200.000	232	
	43 Pentachlorophenol					CAS #: 87-86-5	
	13.483	13.487	-0.004	317481192	200.000	236	
	8 2,4,5-TP					CAS #: 93-72-1	
	13.825	13.825	0.000	136326034	200.000	236	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.064	14.065	-0.001	112340541	200.000	235		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	69352450	200.000	301		(M)
11 2,4-DB					CAS #: 94-82-6		
14.352	14.354	-0.002	15759944	200.000	236		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/028b2801.d
Date : 02-DEC-2009 01:02
Client ID: HSTD03
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

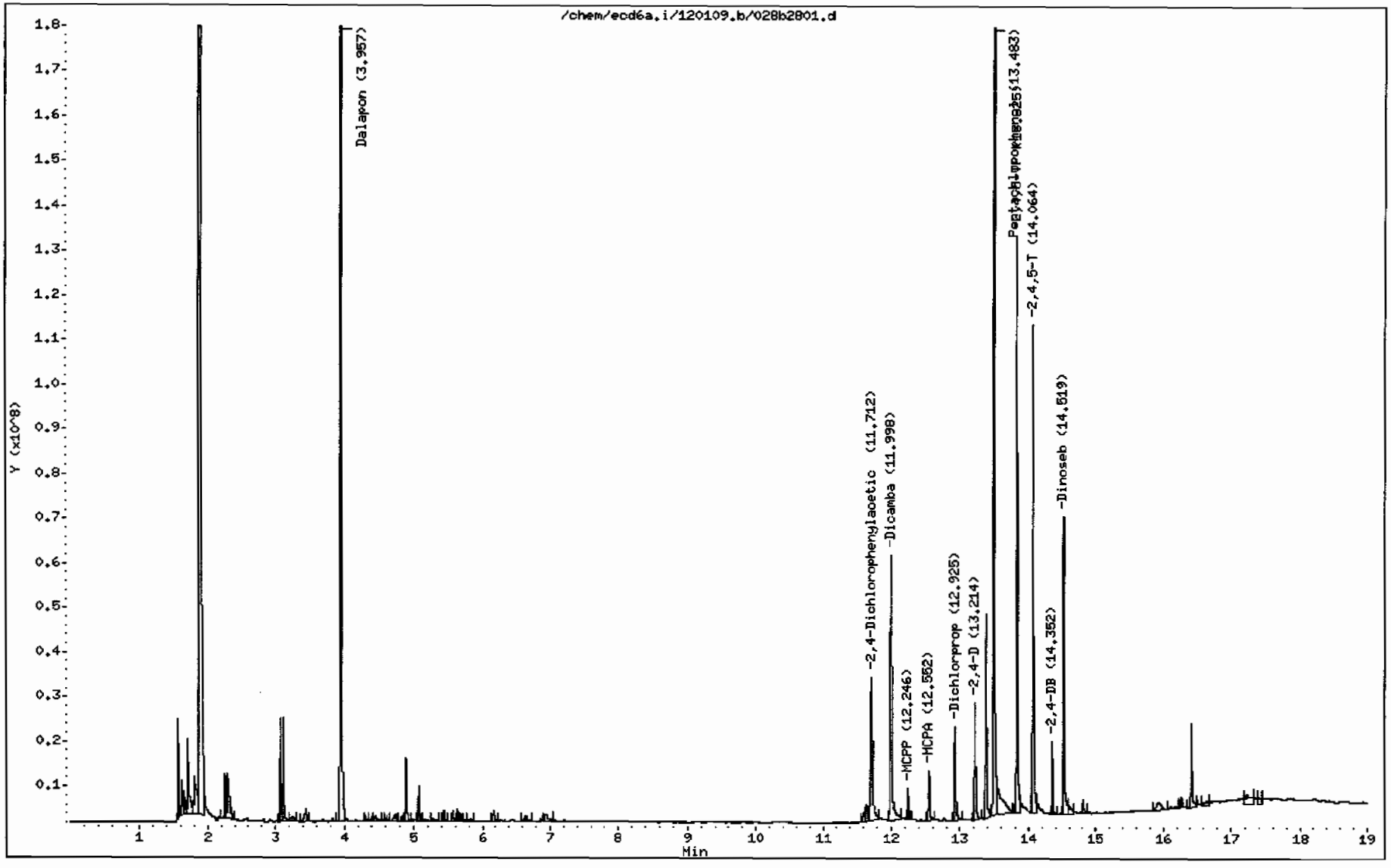

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/028b2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

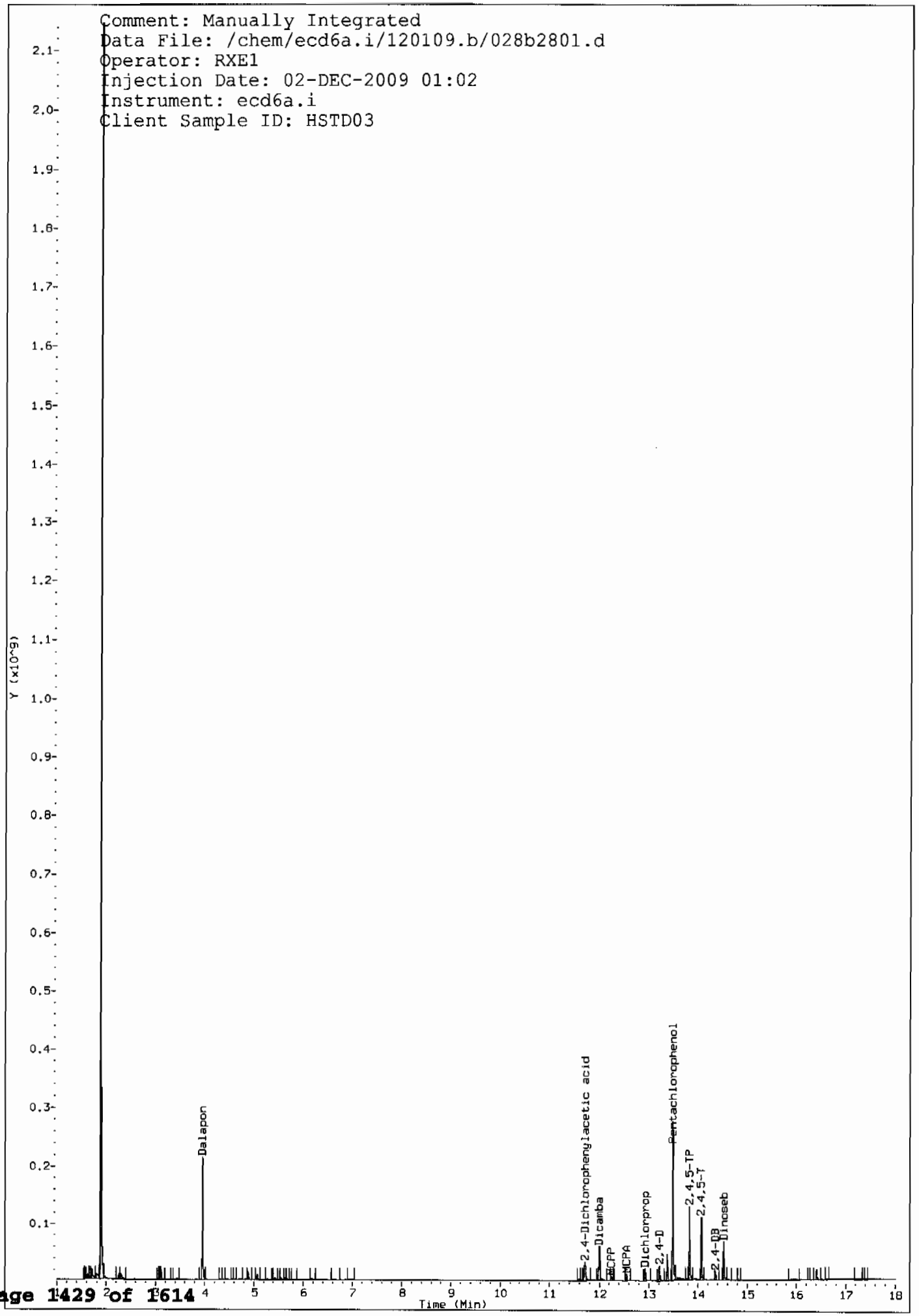

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-028b2801.d
Operator: RXE1
Injection Date: 02-DEC-2009 01:02
Instrument: ecd6a.i
Client Sample ID: HSTD03

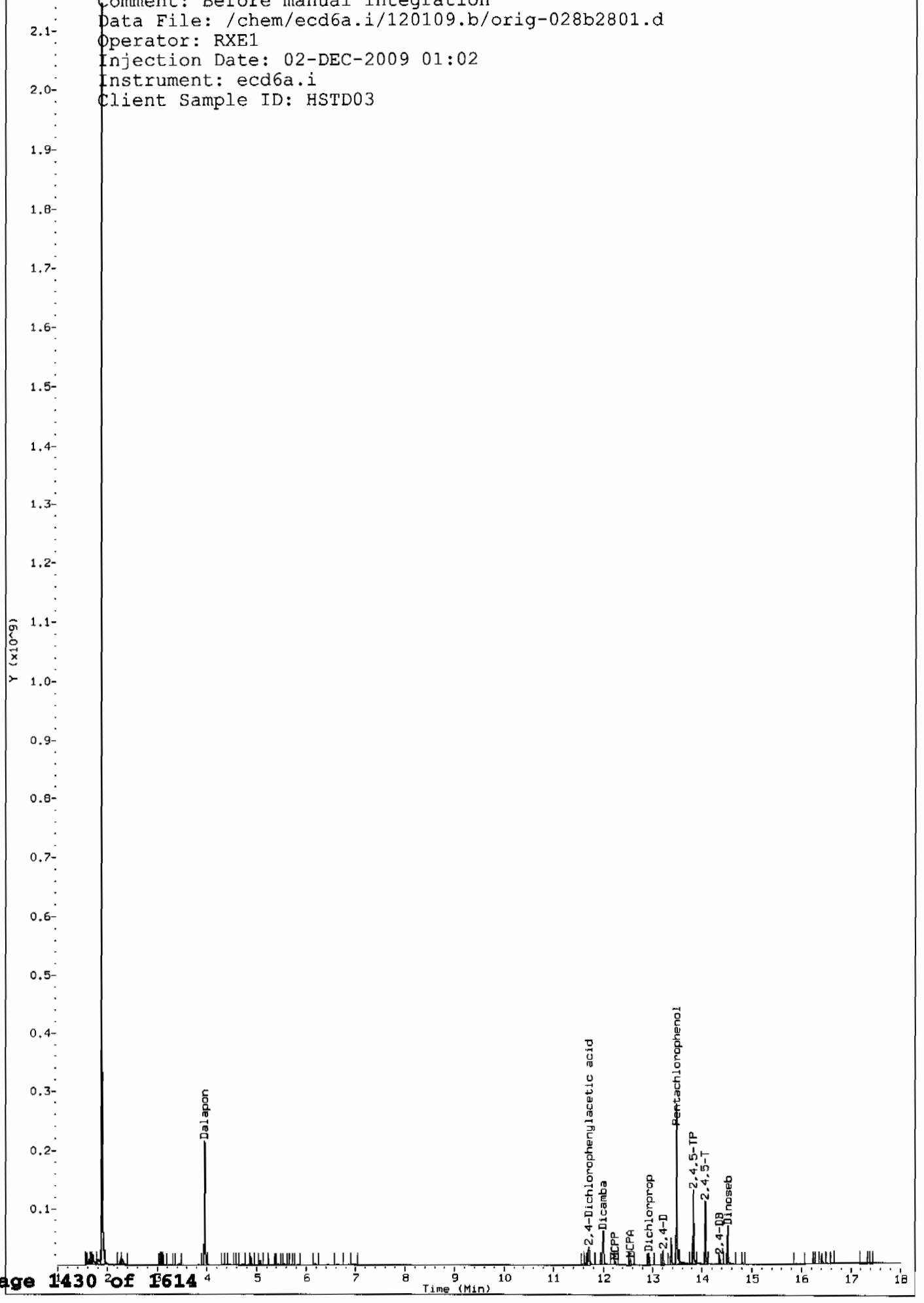

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/038f3801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD04
Inj Date : 02-DEC-2009 05:45
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.991	4.000	-0.009	180488032	2000.00	2160	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.690	10.698	-0.008	60193515	500.000	566	
	3 Dicamba					CAS #: 6597-78-0	
	11.208	11.214	-0.006	88466796	200.000	222	
	4 MCPP					CAS #: 7085-19-0	
	11.727	11.729	-0.002	8184804	20000.0	23500	
	5 MCPA					CAS #: 94-74-6	
	11.996	11.999	-0.003	14115451	20000.0	21800	
	6 Dichlorprop					CAS #: 120-36-5	
	12.507	12.512	-0.005	22922087	200.000	234	
	7 2,4-D					CAS #: 94-75-7	
	12.772	12.775	-0.003	25580046	200.000	256	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.925	12.924	0.001	239950682	200.000	228	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.510	13.512	-0.002	113362582	200.000	235	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.713	13.715	-0.002	101240321	200.000	243		(M)
10 2,4-DB					CAS #: 94-82-6		
14.063	14.064	-0.001	13024414	200.000	277		(M)
11 Dinoseb					CAS #: 88-85-7		
14.639	14.638	0.001	50135774	200.000	229		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/038f3801.d
Date : 02-DEC-2009 05:45
Client ID: HSTD04
Sample Info: iWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

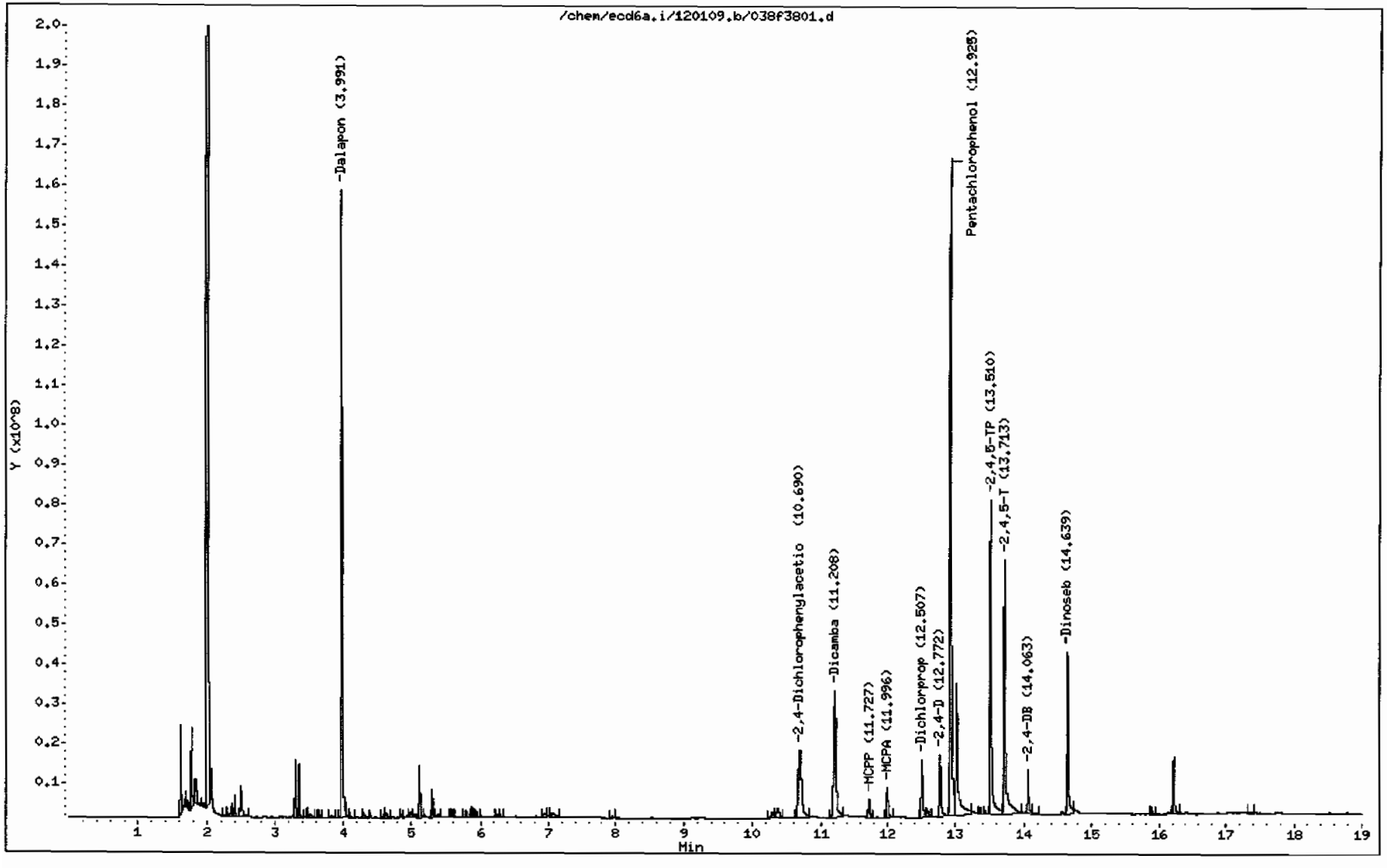

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/038f3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

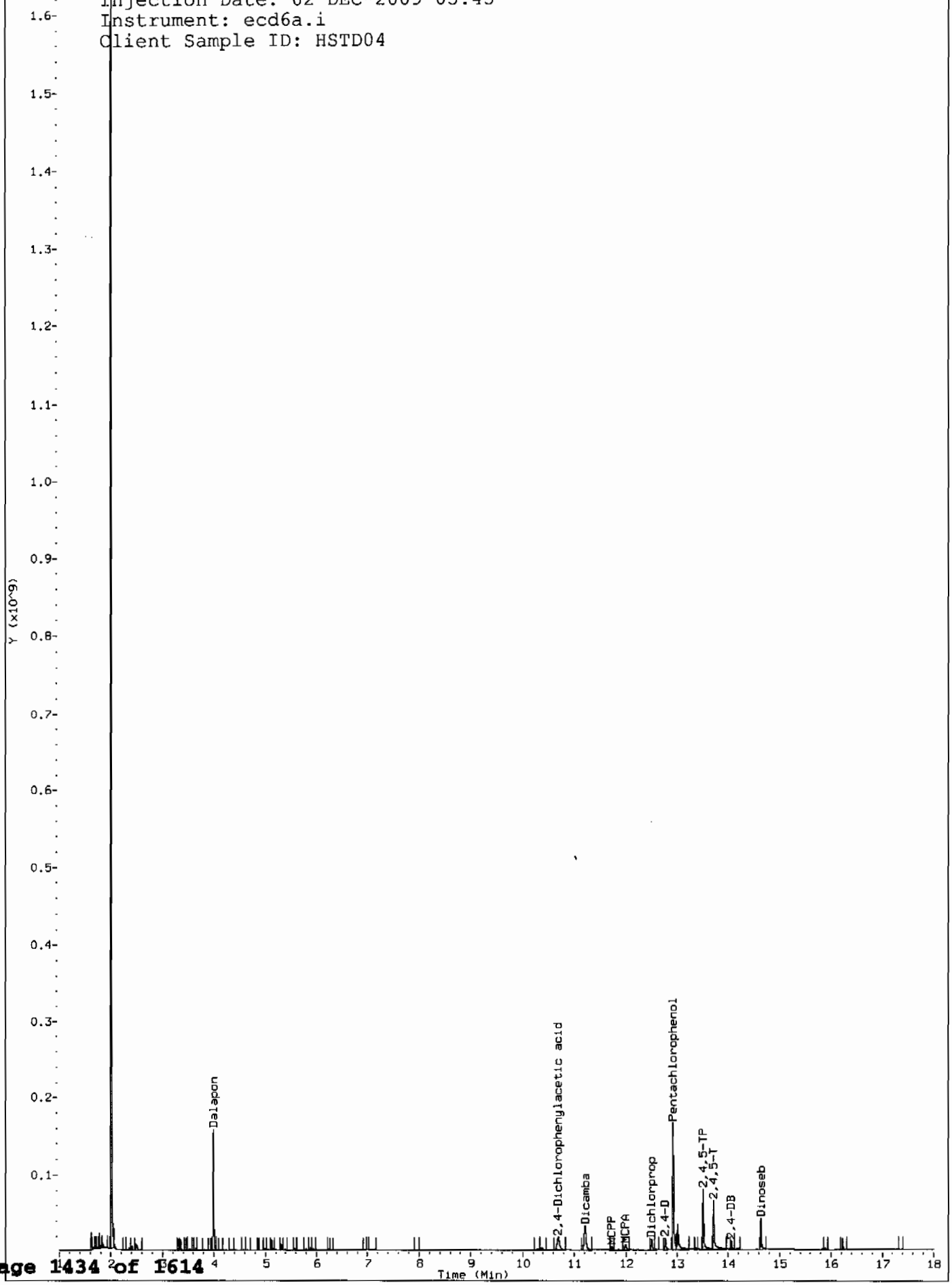

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-038f3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

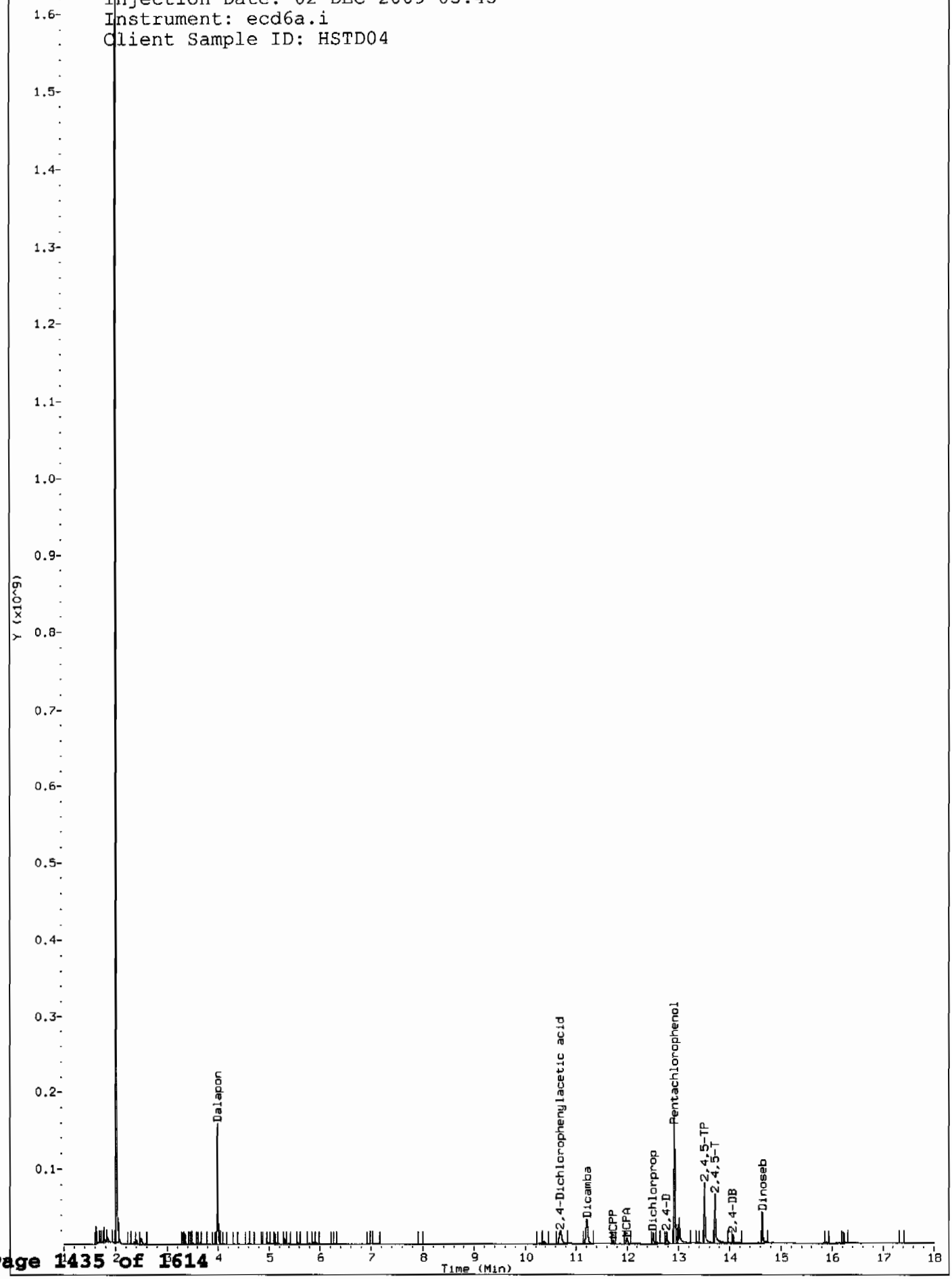

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/038b3801.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD04
Inj Date : 02-DEC-2009 05:45
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
	1 Dalapon						CAS #: 88-85-7	
	3.948	3.963	-0.015	234850038	2000.00	2130		
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9	
	11.709	11.717	-0.008	67632352	500.000	569		
	3 MCPP						CAS #: 7085-19-0	
	12.243	12.246	-0.003	9312312	20000.0	24100		(M)
	4 Dicamba						CAS #: 6597-78-0	
	11.997	12.000	-0.003	102566235	200.000	229		
	5 MCPA						CAS #: 94-74-6	
	12.551	12.552	-0.001	15417957	20000.0	20200		
	6 Dichlorprop						CAS #: 120-36-5	
	12.924	12.927	-0.003	26249615	200.000	215		
	7 2,4-D						CAS #: 94-75-7	
	13.213	13.216	-0.003	33432414	200.000	228		
	43 Pentachlorophenol						CAS #: 87-86-5	
	13.486	13.487	-0.001	311913073	200.000	231		
	8 2,4,5-TP						CAS #: 93-72-1	
	13.825	13.825	0.000	132503977	200.000	230		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.064	14.065	-0.001	109270376	200.000	229		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	59969396	200.000	260		(M)
11 2,4-DB					CAS #: 94-82-6		
14.353	14.354	-0.001	15593198	200.000	234		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/038b3801.d

Date : 02-DEC-2009 05:45

Client ID: HSTD04

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

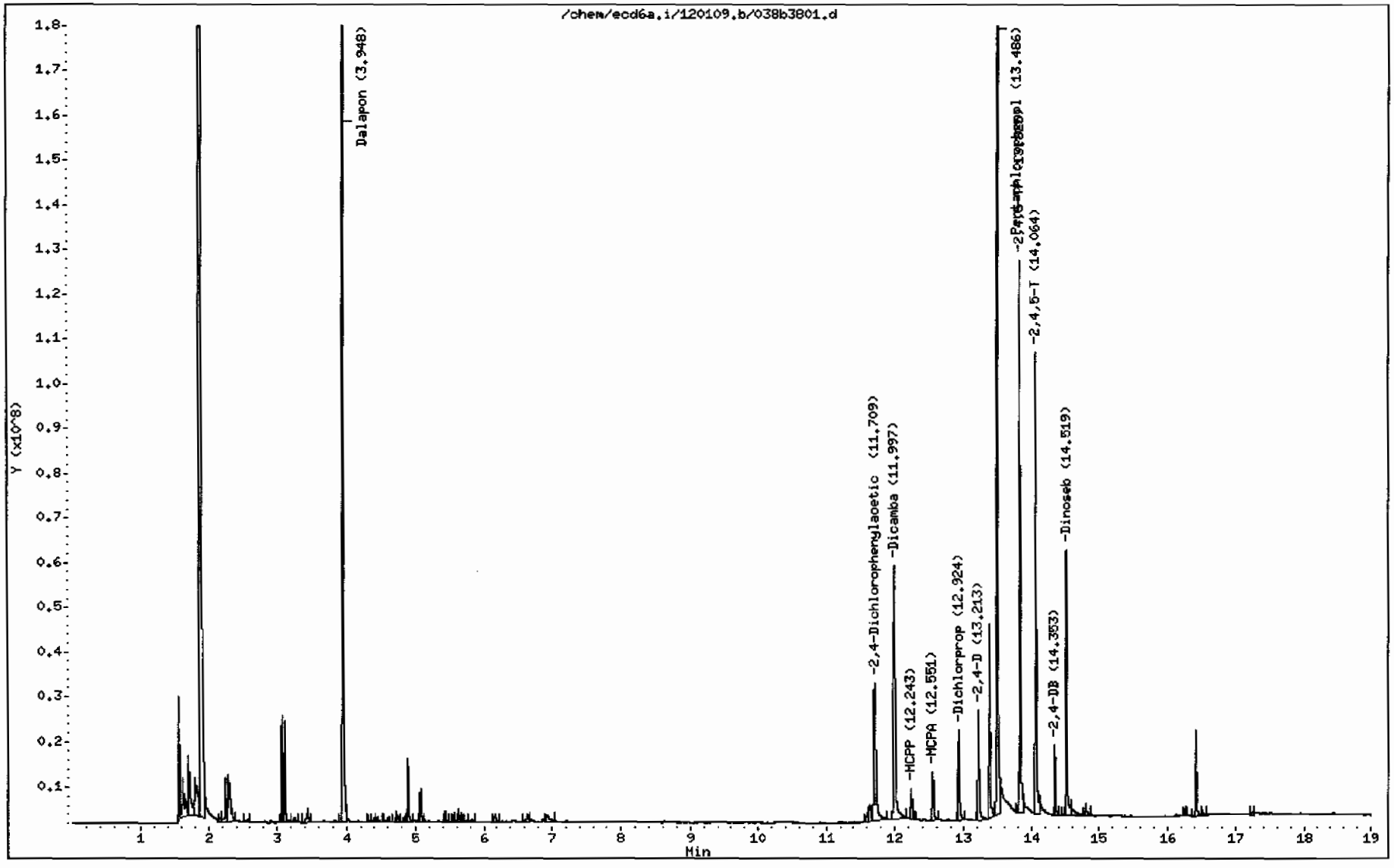

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/038b3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

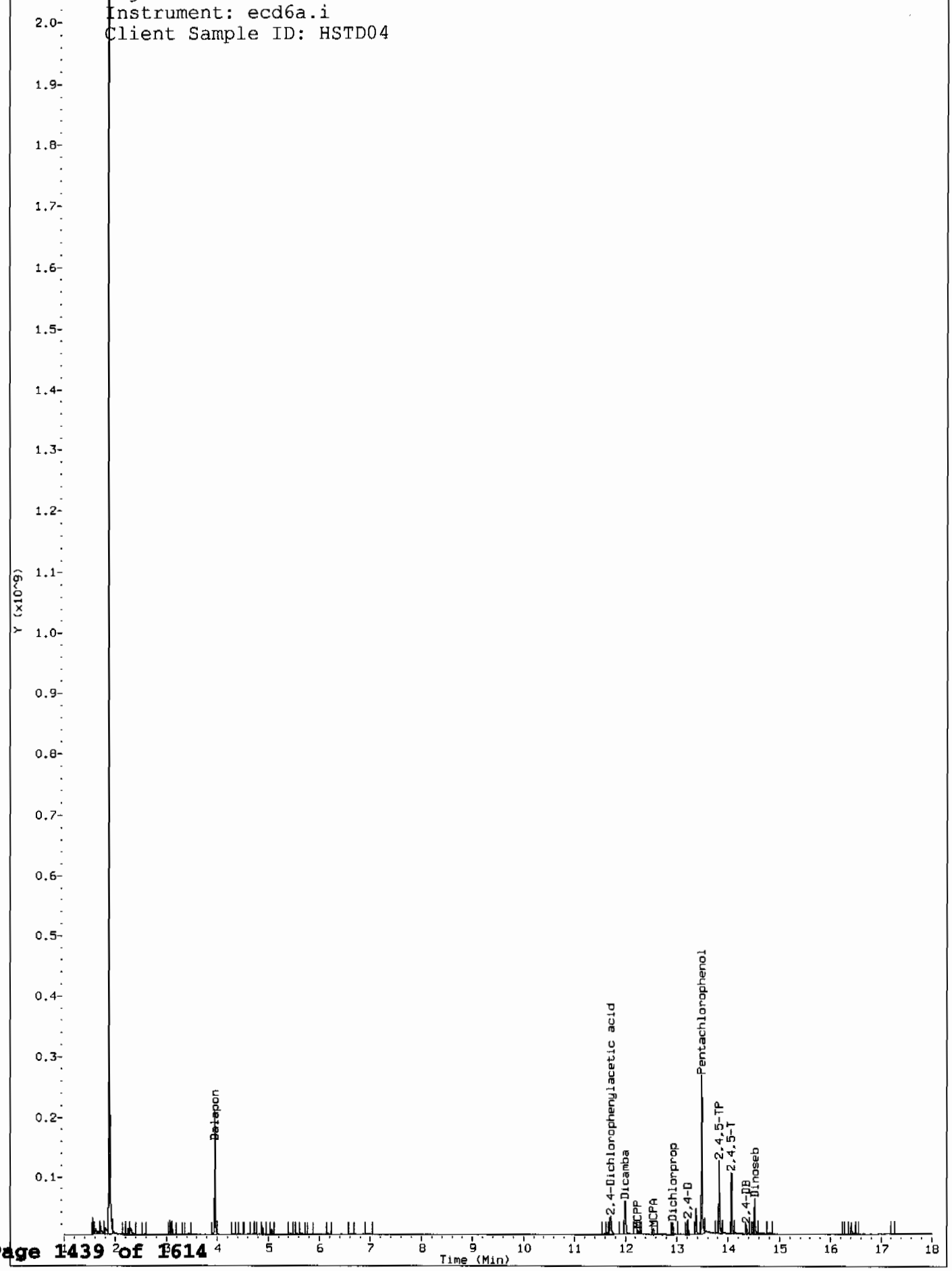

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-038b3801.d
Operator: RXE1
Injection Date: 02-DEC-2009 05:45
Instrument: ecd6a.i
Client Sample ID: HSTD04

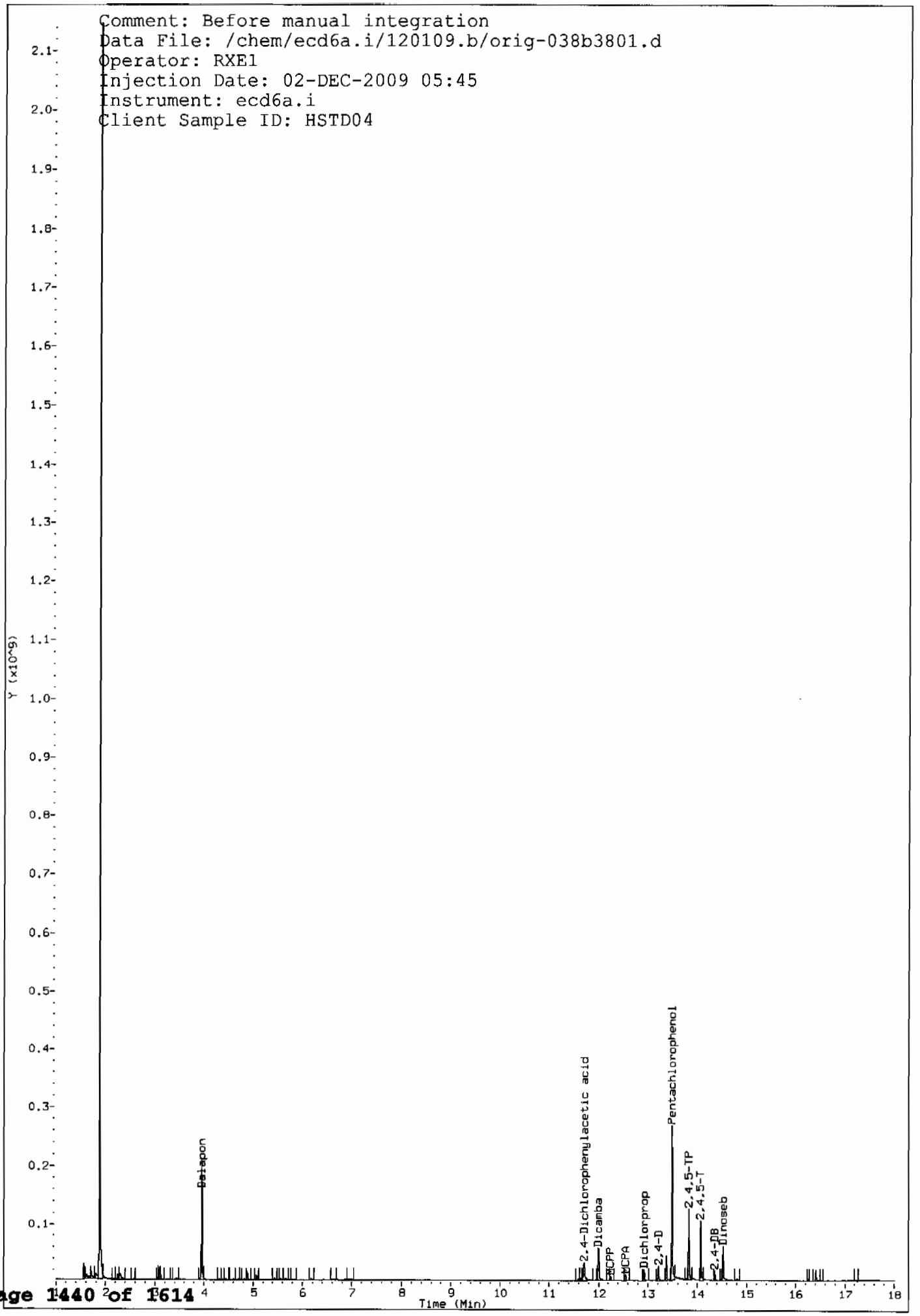

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	10.74	
02	HSTD01	WHB091030-01	12/01/09	1250	10.74	
03	HSTD02	WHB091030-02	12/01/09	1320	10.73	
04	HSTD03	WHB091030-03	12/01/09	1348	10.71	
05	HSTD04	WHB091030-04	12/01/09	1416	10.70	
06	HSTD05	WHB091030-05	12/01/09	1445	10.70	
07	HSTD06	WHB091030-06	12/01/09	1512	10.69	
08	HSTD07	WHB091030-07	12/01/09	1540	10.68	
09	HSTD01	WHB091030-12	12/01/09	1608	10.70	
10	HIBLK02	WHB091117-02	12/01/09	1635	10.74	
11	ZZZZZ	ZZZZZ	12/01/09	1704	10.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	10.70	
13	ZZZZZ	ZZZZZ	12/01/09	1800	10.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	10.70	
15	ZZZZZ	ZZZZZ	12/01/09	1856	10.70	
16	ZZZZZ	ZZZZZ	12/01/09	1925	10.69	
17	ZZZZZ	ZZZZZ	12/01/09	1952	10.68	
18	ZZZZZ	ZZZZZ	12/01/09	2020	10.69	
19	ZZZZZ	ZZZZZ	12/01/09	2048	10.71	
20	ZZZZZ	ZZZZZ	12/01/09	2116	10.68	
21	HSTD02	WHB091030-12	12/01/09	2144	10.69	
22	HIBLK03	WHB091117-02	12/01/09	2212	10.73	
23	HBLK01	1201982252	12/01/09	2241	10.73	
24	HBLK01LCS	1201982255	12/01/09	2309	10.69	
25	WST03-10-2131	241423004	12/01/09	2338	10.73	
26	WST03-10-2131MS	1201982253	12/02/09	0006	10.70	
27	WST03-10-2131MSD	1201982254	12/02/09	0035	10.70	
28	HSTD03	WHB091030-12	12/02/09	0102	10.69	
29	HIBLK04	WHB091117-02	12/02/09	0131	10.73	
30	WST03-10-2130	241423005	12/02/09	0159	10.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	10.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	10.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 2

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	10.73	
02	ZZZZZ	ZZZZZ	12/02/09	0352	10.74	
03	ZZZZZ	ZZZZZ	12/02/09	0421	10.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	10.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	10.72	
06	HSTD04	WHB091030-12	12/02/09	0545	10.69	
07	HIBLK05	WHB091117-02	12/02/09	0613	10.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	10.74	
09	ZZZZZ	ZZZZZ	12/02/09	0710	10.69	
10	ZZZZZ	ZZZZZ	12/02/09	0739	10.74	
11	ZZZZZ	ZZZZZ	12/02/09	0808	10.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	10.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	10.72	
14	HSTD05	WHB091030-12	12/02/09	0932	10.68	
15	HIBLK06	WHB091117-02	12/02/09	1000	10.73	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	10.72	
18	ZZZZZ	ZZZZZ	12/02/09	1131	10.70	
19	ZZZZZ	ZZZZZ	12/02/09	1159	10.71	
20	ZZZZZ	ZZZZZ	12/02/09	1227	10.71	
21	ZZZZZ	ZZZZZ	12/02/09	1255	10.68	
22	HSTD06	WHB091030-12	12/02/09	1335	10.69	
23	HIBLK07	WHB091117-02	12/02/09	1404	10.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	10.71	
25	ZZZZZ	ZZZZZ	12/02/09	1501	10.72	
26	ZZZZZ	ZZZZZ	12/02/09	1529	10.72	
27	ZZZZZ	ZZZZZ	12/02/09	1557	10.72	
28	ZZZZZ	ZZZZZ	12/02/09	1625	10.69	
29	ZZZZZ	ZZZZZ	12/02/09	1653	10.69	
30	ZZZZZ	ZZZZZ	12/02/09	1721	10.71	
31	ZZZZZ	ZZZZZ	12/02/09	1748	10.71	
32	HSTD07	WHB091030-12	12/02/09	1816	10.69	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	11.73	
02	HSTD01	WHB091030-01	12/01/09	1250	11.73	
03	HSTD02	WHB091030-02	12/01/09	1320	11.73	
04	HSTD03	WHB091030-03	12/01/09	1348	11.72	
05	HSTD04	WHB091030-04	12/01/09	1416	11.72	
06	HSTD05	WHB091030-05	12/01/09	1445	11.72	
07	HSTD06	WHB091030-06	12/01/09	1512	11.71	
08	HSTD07	WHB091030-07	12/01/09	1540	11.71	
09	HSTD01	WHB091030-12	12/01/09	1608	11.72	
10	HIBLK02	WHB091117-02	12/01/09	1635	11.73	
11	ZZZZZ	ZZZZZ	12/01/09	1704	11.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	11.72	
13	ZZZZZ	ZZZZZ	12/01/09	1800	11.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	11.72	
15	ZZZZZ	ZZZZZ	12/01/09	1856	11.72	
16	ZZZZZ	ZZZZZ	12/01/09	1925	11.71	
17	ZZZZZ	ZZZZZ	12/01/09	1952	11.71	
18	ZZZZZ	ZZZZZ	12/01/09	2020	11.71	
19	ZZZZZ	ZZZZZ	12/01/09	2048	11.72	
20	ZZZZZ	ZZZZZ	12/01/09	2116	11.71	
21	HSTD02	WHB091030-12	12/01/09	2144	11.71	
22	HIBLK03	WHB091117-02	12/01/09	2212	11.73	
23	HBLK01	1201982252	12/01/09	2241	11.73	
24	HBLK01LCS	1201982255	12/01/09	2309	11.71	
25	WST03-10-2131	241423004	12/01/09	2338	11.73	
26	WST03-10-2131MS	1201982253	12/02/09	0006	11.72	
27	WST03-10-2131MSD	1201982254	12/02/09	0035	11.72	
28	HSTD03	WHB091030-12	12/02/09	0102	11.71	
29	HIBLK04	WHB091117-02	12/02/09	0131	11.73	
30	WST03-10-2130	241423005	12/02/09	0159	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	11.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	11.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	11.73	
02	ZZZZZ	ZZZZZ	12/02/09	0352	11.73	
03	ZZZZZ	ZZZZZ	12/02/09	0421	11.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	11.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	11.73	
06	HSTD04	WHB091030-12	12/02/09	0545	11.71	
07	HIBLK05	WHB091117-02	12/02/09	0613	11.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	11.73	
09	ZZZZZ	ZZZZZ	12/02/09	0710	11.71	
10	ZZZZZ	ZZZZZ	12/02/09	0739	11.73	
11	ZZZZZ	ZZZZZ	12/02/09	0808	11.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	11.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	11.72	
14	HSTD05	WHB091030-12	12/02/09	0932	11.71	
15	HIBLK06	WHB091117-02	12/02/09	1000	11.72	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	11.72	
18	ZZZZZ	ZZZZZ	12/02/09	1131	11.72	
19	ZZZZZ	ZZZZZ	12/02/09	1159	11.72	
20	ZZZZZ	ZZZZZ	12/02/09	1227	11.72	
21	ZZZZZ	ZZZZZ	12/02/09	1255	11.70	
22	HSTD06	WHB091030-12	12/02/09	1335	11.71	
23	HIBLK07	WHB091117-02	12/02/09	1404	11.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	11.72	
25	ZZZZZ	ZZZZZ	12/02/09	1501	11.72	
26	ZZZZZ	ZZZZZ	12/02/09	1529	11.72	
27	ZZZZZ	ZZZZZ	12/02/09	1557	11.73	
28	ZZZZZ	ZZZZZ	12/02/09	1625	11.71	
29	ZZZZZ	ZZZZZ	12/02/09	1653	11.71	
30	ZZZZZ	ZZZZZ	12/02/09	1721	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	1748	11.72	
32	HSTD07	WHB091030-12	12/02/09	1816	11.71	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

Identification Summary

SDG Number: 10–578 **Client ID:** LCS for batch 927147

Lab Sample ID: 1201982255

Data File:	024f2401.d	**Data File:**	024b2401.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	01–DEC–09 23:09	**Analyzed:**	01–DEC–09 23:09

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dalapon								5.61
	Column 1	1	4	3.97 – 4.03	204		ug/kg	
	Column 2	1	3.96	3.93 – 3.99	216		ug/kg	
Dicamba								2.22
	Column 1	1	11.21	11.15 – 11.27	35.2		ug/kg	
	Column 2	1	12	11.94 – 12.06	36		ug/kg	
MCPP								40.7
	Column 1	1	11.73	11.67 – 11.79	3700		ug/kg	
	Column 2	1	12.25	12.19 – 12.31	2450		ug/kg	
MCPA								11.2
	Column 1	1	12	11.94 – 12.06	3370		ug/kg	
	Column 2	1	12.55	12.49 – 12.61	3020		ug/kg	
Dichlorprop								9.37
	Column 1	1	12.51	12.45 – 12.57	39.1		ug/kg	
	Column 2	1	12.92	12.87 – 12.99	35.6		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** LCS for batch 927147

Lab Sample ID: 1201982255

Data File:	024f2401.d	**Data File:**	024b2401.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	01–DEC–09 23:09	**Analyzed:**	01–DEC–09 23:09

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								9.79
	Column 1	1	12.77	12.71 – 12.83	39.2		ug/kg	
	Column 2	1	13.21	13.16 – 13.28	35.5		ug/kg	
2,4,5–TP								2.94
	Column 1	1	13.51	13.48 – 13.54	39.7		ug/kg	
	Column 2	1	13.82	13.8 – 13.86	38.5		ug/kg	
2,4,5–T								4.76
	Column 1	1	13.71	13.67 – 13.75	38.4		ug/kg	
	Column 2	1	14.06	14.04 – 14.1	40.3		ug/kg	
2,4–DB								4.22
	Column 1	1	14.06	14.02 – 14.1	41.4		ug/kg	
	Column 2	1	14.35	14.31 – 14.39	39.7		ug/kg	
Dinoseb								17.9
	Column 1	1	14.64	14.61 – 14.67	38.9		ug/kg	
	Column 2	1	14.52	14.49 – 14.55	46.5		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MS

Lab Sample ID: 1201982253

Data File:	026f2601.d	**Data File:**	026b2601.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	02–DEC–09 00:06	**Analyzed:**	02–DEC–09 00:06

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dalapon								4.35
	Column 1	1	3.99	3.97 – 4.03	275		ug/kg	
	Column 2	1	3.96	3.93 – 3.99	287		ug/kg	
Dicamba								8.44
	Column 1	1	11.22	11.15 – 11.27	36.7		ug/kg	
	Column 2	1	12	11.94 – 12.06	33.7		ug/kg	
MCPP								163
	Column 1	1	11.75	11.67 – 11.79	25600		ug/kg	
	Column 2	1	12.25	12.19 – 12.31	2600		ug/kg	
MCPA								108
	Column 1	1	12	11.94 – 12.06	5320		ug/kg	
	Column 2	1	12.52	12.49 – 12.61	17800		ug/kg	
Dichlorprop								31.2
	Column 1	1	12.51	12.45 – 12.57	40.3		ug/kg	
	Column 2	1	12.92	12.87 – 12.99	29.4		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MS

Lab Sample ID: 1201982253

Data File:	026f2601.d	**Data File:**	026b2601.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	02–DEC–09 00:06	**Analyzed:**	02–DEC–09 00:06

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								70.7
	Column 1	1	12.77	12.71 – 12.83	40.9		ug/kg	
	Column 2	1	13.21	13.16 – 13.28	85.6		ug/kg	
2,4,5–TP								.746
	Column 1	1	13.51	13.48 – 13.54	35.8		ug/kg	
	Column 2	1	13.82	13.8 – 13.86	35.5		ug/kg	
2,4,5–T								12.6
	Column 1	1	13.71	13.67 – 13.75	29.3		ug/kg	
	Column 2	1	14.06	14.04 – 14.1	33.3		ug/kg	
2,4–DB								11.4
	Column 1	1	14.06	14.02 – 14.1	67		ug/kg	
	Column 2	1	14.34	14.31 – 14.39	75.1		ug/kg	
Dinoseb								2.89
	Column 1	1	14.64	14.61 – 14.67	50		ug/kg	
	Column 2	1	14.52	14.49 – 14.55	51.4		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MSD

Lab Sample ID: 1201982254

Data File:	027f2701.d	**Data File:**	027b2701.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	02–DEC–09 00:35	**Analyzed:**	02–DEC–09 00:35

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dalapon								.553
	Column 1	1	3.99	3.97 – 4.03	277		ug/kg	
	Column 2	1	3.96	3.93 – 3.99	279		ug/kg	
Dicamba								7.46
	Column 1	1	11.22	11.15 – 11.27	35.9		ug/kg	
	Column 2	1	12	11.94 – 12.06	33.3		ug/kg	
MCPP								110
	Column 1	1	11.74	11.67 – 11.79	9210		ug/kg	
	Column 2	1	12.25	12.19 – 12.31	2680		ug/kg	
MCPA								34.5
	Column 1	1	12	11.94 – 12.06	5140		ug/kg	
	Column 2	1	12.52	12.49 – 12.61	7290		ug/kg	
Dichlorprop								29.9
	Column 1	1	12.5	12.45 – 12.57	39.9		ug/kg	
	Column 2	1	12.92	12.87 – 12.99	29.5		ug/kg	

Identification Summary

SDG Number: 10–578 **Client ID:** WST03–10–2131MSD

Lab Sample ID: 1201982254

Data File:	027f2701.d	**Data File:**	027b2701.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	02–DEC–09 00:35	**Analyzed:**	02–DEC–09 00:35

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								21.7
	Column 1	1	12.77	12.71 – 12.83	40.9		ug/kg	
	Column 2	1	13.21	13.16 – 13.28	50.8		ug/kg	
2,4,5–TP								2.29
	Column 1	1	13.51	13.48 – 13.54	36.9		ug/kg	
	Column 2	1	13.82	13.8 – 13.86	36.1		ug/kg	
2,4,5–T								9.3
	Column 1	1	13.71	13.67 – 13.75	30.3		ug/kg	
	Column 2	1	14.06	14.04 – 14.1	33.2		ug/kg	
2,4–DB								18.4
	Column 1	1	14.06	14.02 – 14.1	67.5		ug/kg	
	Column 2	1	14.34	14.31 – 14.39	81.2		ug/kg	
Dinoseb								3.91
	Column 1	1	14.64	14.61 – 14.67	43.4		ug/kg	
	Column 2	1	14.52	14.49 – 14.55	45.1		ug/kg	

QUALITY CONTROL DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982252**				
Client Sample:	**QC for batch 927147**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927147**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**927148**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:41**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:11**	**Aliquot:**	**50 g**	**Final Volume:**	**10 mL**
Data File:	**023f2301.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	023b2301.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon	U	100	ug/kg	20.0	100	1
1918–00–9	Dicamba	U	5.00	ug/kg	1.66	5.00	1
93–65–2	MCPP	U	1000	ug/kg	200	1000	1
94–74–6	MCPA	U	1000	ug/kg	230	1000	1
120–36–5	Dichlorprop	U	5.00	ug/kg	1.66	5.00	1
94–75–7	2,4–D	U	5.00	ug/kg	1.66	5.00	1
93–72–1	2,4,5–TP	U	5.00	ug/kg	1.66	5.00	1
93–76–5	2,4,5–T	U	5.00	ug/kg	1.66	5.00	1
94–82–6	2,4–DB	U	5.00	ug/kg	1.66	5.00	1
88–85–7	Dinoseb	U	5.00	ug/kg	1.66	5.00	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/023f2301.d
Lab Smp Id: 1201982252 Client Smp ID: HBLK01
Inj Date : 01-DEC-2009 22:41
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982252|1|
Misc Info : |ECD51H_1SF|927148|SVHF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 02-Dec-2009 11:44 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 23 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.732	10.698	0.034	32892147	309.571	61.9

Data File: /chem/ecd6a.i/120109.b/023f2301.d

Date : 01-DEC-2009 22:41

Client ID: HBLK01

Sample Info: |120198225211|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

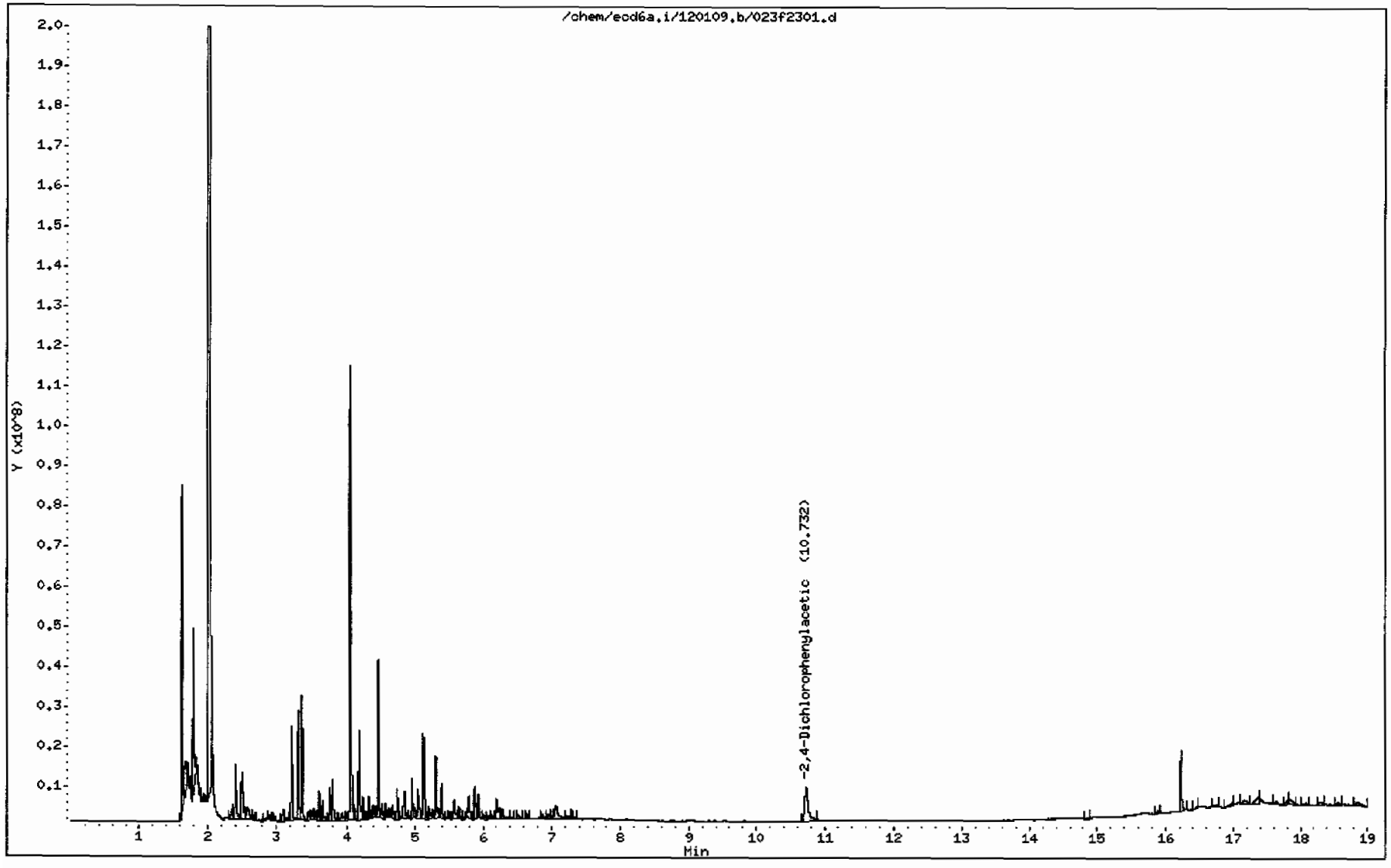

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/023b2301.d
Lab Smp Id: 1201982252 Client Smp ID: HBLK01
Inj Date : 01-DEC-2009 22:41
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982252|1|
Misc Info : |ECD51H_1SF|927148|SVHF|MB|SOIL|MB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 02-Dec-2009 11:42 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 23 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.729	11.717	0.012	36360699	305.731	61.1

Data File: /chem/ecd6a.i/120109.b/023b2301.d
Date : 01-DEC-2009 22:41
Client ID: HBLK01
Sample Info: |1201982252|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

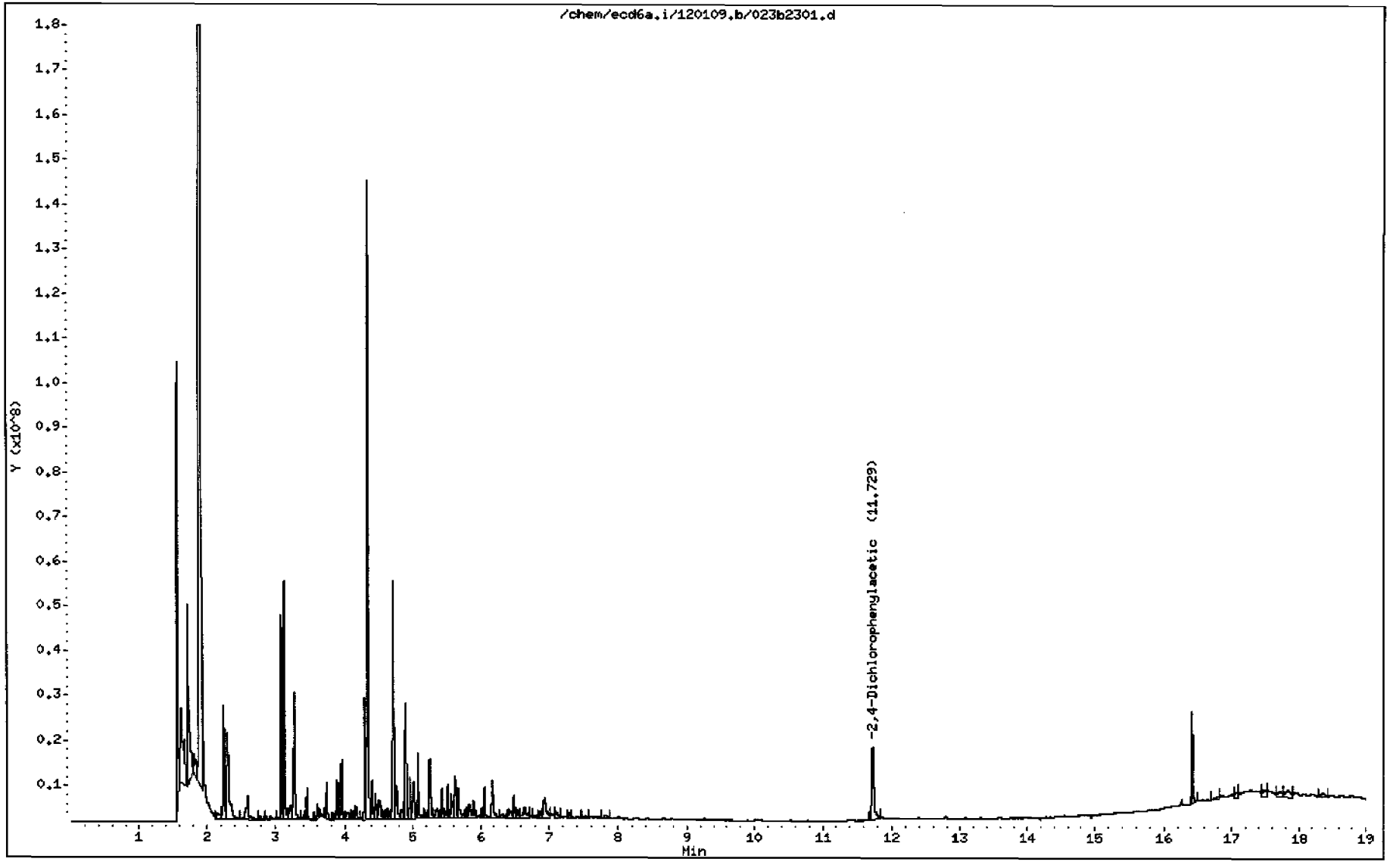

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982255**				
Client Sample:	**QC for batch 927147**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927147**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**927148**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:09**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:11**	**Aliquot:**	**50 g**	**Final Volume:**	**10 mL**
Data File:	**024f2401.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	024b2401.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75-99-0	Dalapon		216	ug/kg	20.0	100	2
1918-00-9	Dicamba		36.0	ug/kg	1.66	5.00	2
93-65-2	MCPP	P	3700	ug/kg	200	1000	1
94-74-6	MCPA		3370	ug/kg	230	1000	1
120-36-5	Dichlorprop		39.1	ug/kg	1.66	5.00	1
94-75-7	2,4-D		39.2	ug/kg	1.66	5.00	1
93-72-1	2,4,5-TP		39.7	ug/kg	1.66	5.00	1
93-76-5	2,4,5-T		40.3	ug/kg	1.66	5.00	2
94-82-6	2,4-DB		41.4	ug/kg	1.66	5.00	1
88-85-7	Dinoseb		46.5	ug/kg	1.66	5.00	2

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/024f2401.d
Lab Smp Id: 1201982255 Client Smp ID: HBLK01LCS
Inj Date : 01-DEC-2009 23:09
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982255|1|
Misc Info : |ECD51H_1SF|927148|SVHF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 24 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.693	10.698	-0.005	50138509	471.889	94.4
1 Dalapon					CAS #: 75-99-0
3.999	4.000	-0.001	85158329	1018.90	204
3 Dicamba					CAS #: 6597-78-0
11.210	11.214	-0.004	70202384	176.195	35.2
4 MCPP					CAS #: 7085-19-0
11.728	11.729	-0.001	6453383	18517.3	3700

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
5 MCPA					CAS #: 94-74-6
11.998	11.999	-0.001	10946016	16870.4	3370
6 Dichlorprop					CAS #: 120-36-5
12.510	12.512	-0.002	19202727	195.718	39.1
7 2,4-D					CAS #: 94-75-7
12.772	12.775	-0.003	19562272	195.989	39.2
8 2,4,5-TP					CAS #: 93-72-1
13.510	13.512	-0.002	95641175	198.346	39.7
9 2,4,5-T					CAS #: 93-76-5
13.713	13.715	-0.002	79958571	192.086	38.4
10 2,4-DB					CAS #: 94-82-6
14.062	14.061	0.001	9727464	207.116	41.4
11 Dinoseb					CAS #: 88-85-7
14.638	14.638	0.000	42588835	194.389	38.9

Data File: /chem/ecd6a.i/120109.b/024f2401.d
Date : 01-DEC-2009 23:09
Client ID: HBLK01LCS
Sample Info: |120198225511|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

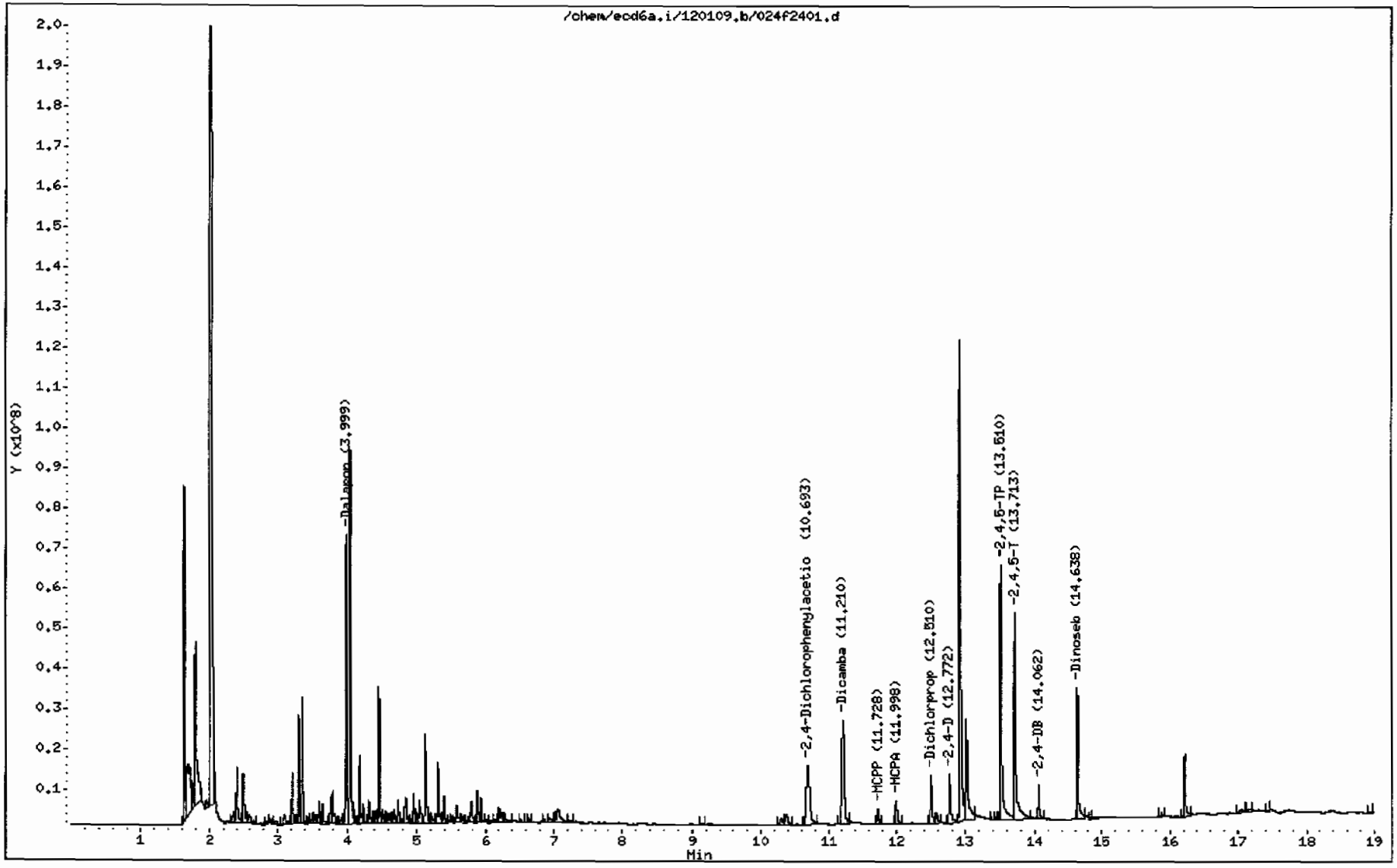

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/024b2401.d
Lab Smp Id: 1201982255 Client Smp ID: HBLK01LCS
Inj Date : 01-DEC-2009 23:09
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982255|1|
Misc Info : |ECD51H_1SF|927148|SVHF|LCS|SOIL|LCS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 24 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.713	11.717	-0.004	53505360	449.889	90.0
1 Dalapon					CAS #: 88-85-7
3.961	3.963	-0.002	118653276	1077.71	216
4 Dicamba					CAS #: 6597-78-0
12.000	12.000	0.000	80613357	180.154	36.0
3 MCPP					CAS #: 7085-19-0
12.246	12.246	0.000	4733218	12252.8	2450

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
5 MCPA					CAS #: 94-74-6
12.551	12.552	-0.001	11508761	15079.4	3020
6 Dichlorprop					CAS #: 120-36-5
12.925	12.927	-0.002	21781081	178.208	35.6
7 2,4-D					CAS #: 94-75-7
13.214	13.216	-0.002	26051024	177.699	35.5
8 2,4,5-TP					CAS #: 93-72-1
13.824	13.825	-0.001	111130910	192.604	38.5
9 2,4,5-T					CAS #: 93-76-5
14.064	14.065	-0.001	96105926	201.443	40.3
11 2,4-DB					CAS #: 94-82-6
14.352	14.354	-0.002	13228531	198.556	39.7
10 Dinoseb					CAS #: 88-85-7
14.518	14.519	-0.001	53612531	232.704	46.5

Data File: /chem/ecd6a.i/120109.b/024b2401.d
Date : 01-DEC-2009 23:09
Client ID: HBLK01LCS
Sample Info: |120198225|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

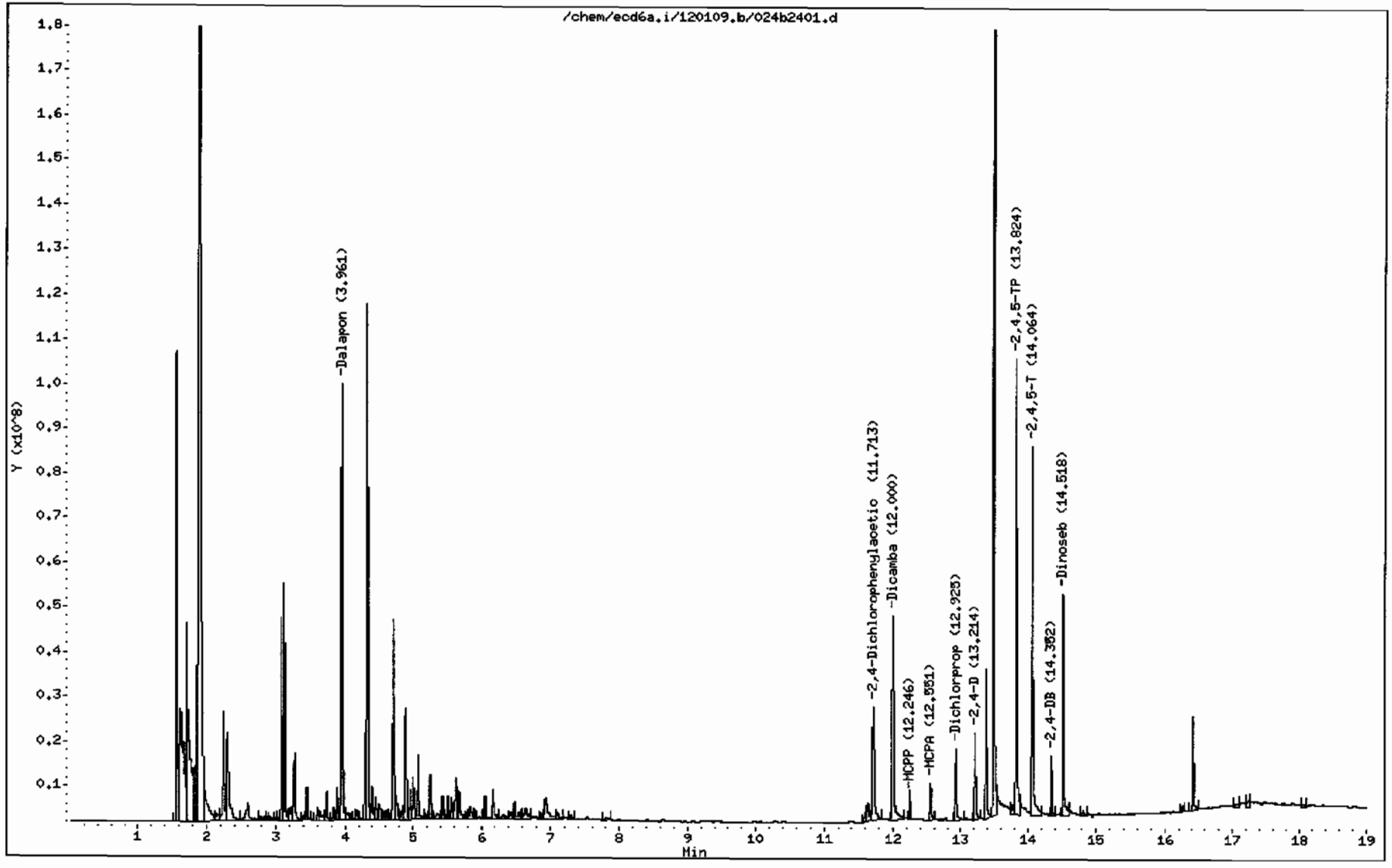

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201982253	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
Client Sample:	QC for batch 927147	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2131MS	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927148	**Inst:**	ECD6A.I	**Dilution:**	2
Run Date:	12/02/2009 00:06	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:11	**Aliquot:**	50.09 g	**Final Volume:**	10 mL
Data File:	026f2601.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	026b2601.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon		275	ug/kg	43.4	217	1
1918–00–9	Dicamba		36.7	ug/kg	3.60	10.8	1
93–65–2	MCPP	P	25600	ug/kg	434	2170	1
94–74–6	MCPA	P	5320	ug/kg	499	2170	1
120–36–5	Dichlorprop		40.3	ug/kg	3.60	10.8	1
94–75–7	2,4–D	P	40.9	ug/kg	3.60	10.8	1
93–72–1	2,4,5–TP		35.8	ug/kg	3.60	10.8	1
93–76–5	2,4,5–T		29.3	ug/kg	3.60	10.8	1
94–82–6	2,4–DB		67.0	ug/kg	3.60	10.8	1
88–85–7	Dinoseb		50.0	ug/kg	3.60	10.8	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/026f2601.d
Lab Smp Id: 1201982253 Client Smp ID: WST03-10-2131MS
Inj Date : 02-DEC-2009 00:06
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982253|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 26 QC Sample: MS
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.09000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.699	10.698	0.001	29065320	273.554	119	
1 Dalapon					CAS #: 75-99-0	
3.995	4.000	-0.005	53013799	634.300	275	
3 Dicamba					CAS #: 6597-78-0	
11.218	11.214	0.004	33703055	84.5886	36.7	(M)
4 MCPP					CAS #: 7085-19-0	
11.746	11.729	0.017	20608691	59134.5	25600	(ARM)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
11.995	11.999	-0.004	7961193	12270.1	5320	(RM)
6 Dichlorprop					CAS #: 120-36-5	
12.506	12.512	-0.006	9124464	92.9985	40.3	(M)
7 2,4-D					CAS #: 94-75-7	
12.769	12.775	-0.006	9407759	94.2536	40.9	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.507	13.512	-0.005	39765872	82.4687	35.8	(M)
9 2,4,5-T					CAS #: 93-76-5	
13.710	13.715	-0.005	28165891	67.6634	29.3	(M)
10 2,4-DB					CAS #: 94-82-6	
14.055	14.061	-0.006	7251772	154.404	67.0	(RM)
11 Dinoseb					CAS #: 88-85-7	
14.637	14.638	-0.001	25240175	115.204	50.0	(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/026f2601.d

Date : 02-DEC-2009 00:06

Client ID: WST03-10-2131MS

Sample Info: |1201982253|2|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

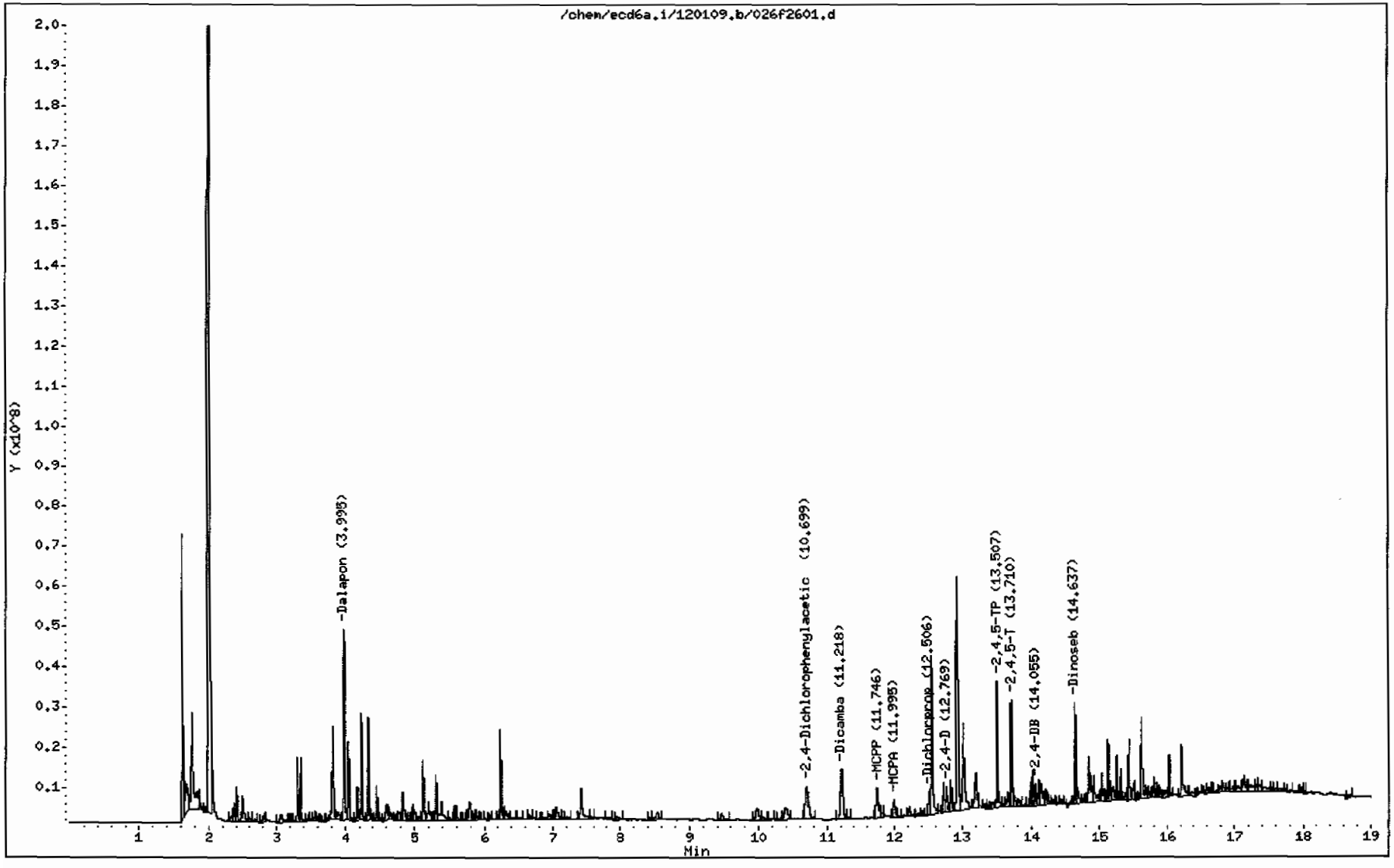

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/026b2601.d
Lab Smp Id: 1201982253 Client Smp ID: WST03-10-2131MS
Inj Date : 02-DEC-2009 00:06
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982253|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MS|SOIL|MS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 26 QC Sample: MS
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.09000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.718	11.717	0.001	26800170	225.344	97.7	
1 Dalapon					CAS #: 88-85-7	
3.957	3.963	-0.006	72939226	662.496	287	
4 Dicamba					CAS #: 6597-78-0	
12.002	12.000	0.002	34785252	77.7376	33.7	
3 MCPP					CAS #: 7085-19-0	
12.246	12.246	0.000	2319629	6004.80	2600	(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.520	12.552	-0.032	31412726	41158.6	17800	(ARM)
6 Dichlorprop					CAS #: 120-36-5	
12.923	12.927	-0.004	8299195	67.9022	29.4	(M)
7 2,4-D					CAS #: 94-75-7	
13.215	13.216	-0.001	28922863	197.288	85.6	(RM)
8 2,4,5-TP					CAS #: 93-72-1	
13.823	13.825	-0.002	47229926	81.8557	35.5	(M)
9 2,4,5-T					CAS #: 93-76-5	
14.063	14.065	-0.002	36612866	76.7423	33.3	(M)
11 2,4-DB					CAS #: 94-82-6	
14.340	14.354	-0.014	11535343	173.142	75.1	(RM)
10 Dinoseb					CAS #: 88-85-7	
14.517	14.519	-0.002	27320806	118.586	51.4	(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/026b2601.d
Date : 02-DEC-2009 00:06
Client ID: WST03-10-2131MS
Sample Info: |120198225312|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

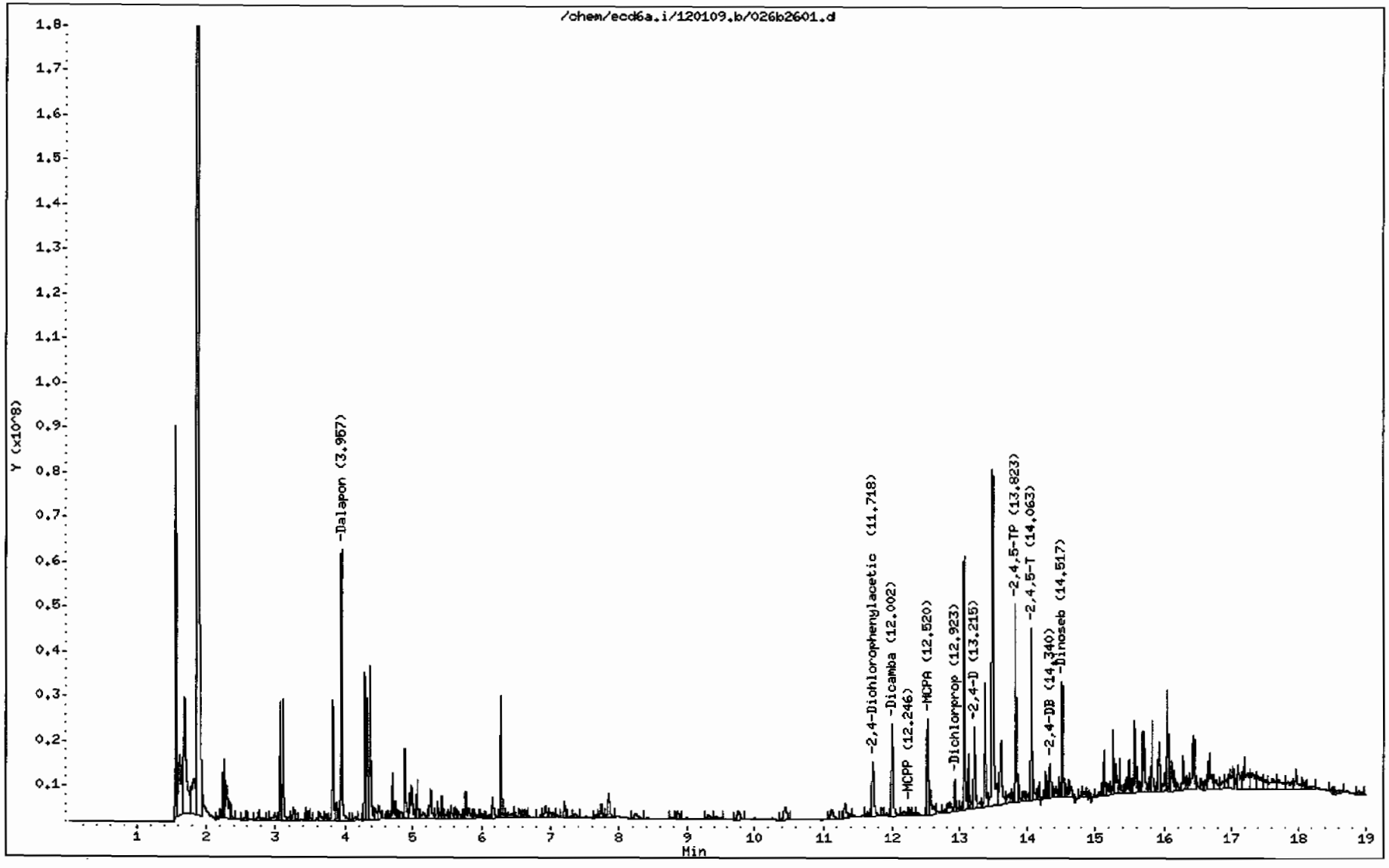

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/026b2601.d
Operator: RXE1
Injection Date: 02-DEC-2009 00:06
Instrument: ecd6a.i
Client Sample ID: WST03-10-2131MS

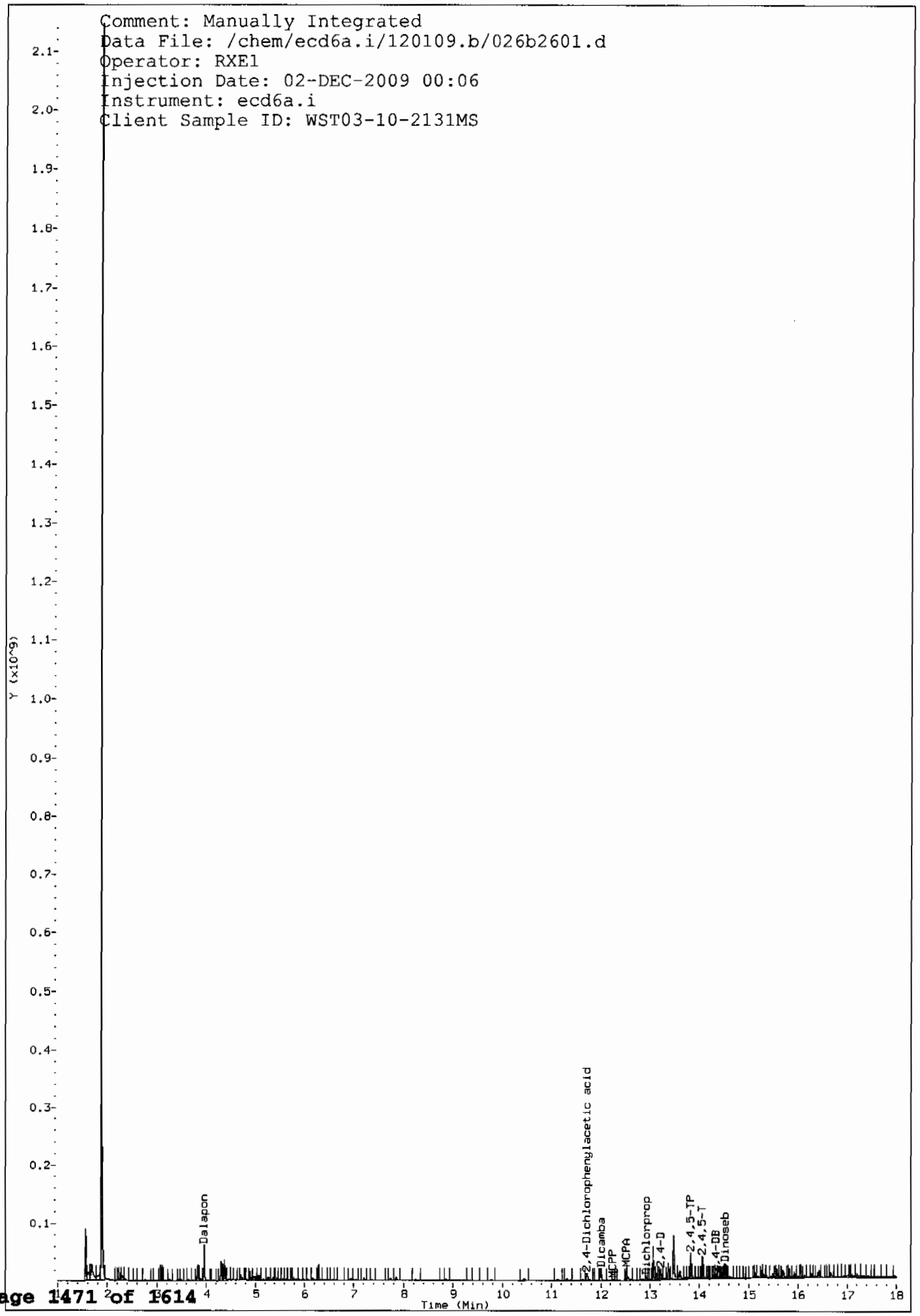

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-026b2601.d
Operator: RXE1
Injection Date: 02-DEC-2009 00:06
Instrument: ecd6a.i
Client Sample ID: WST03-10-2131MS

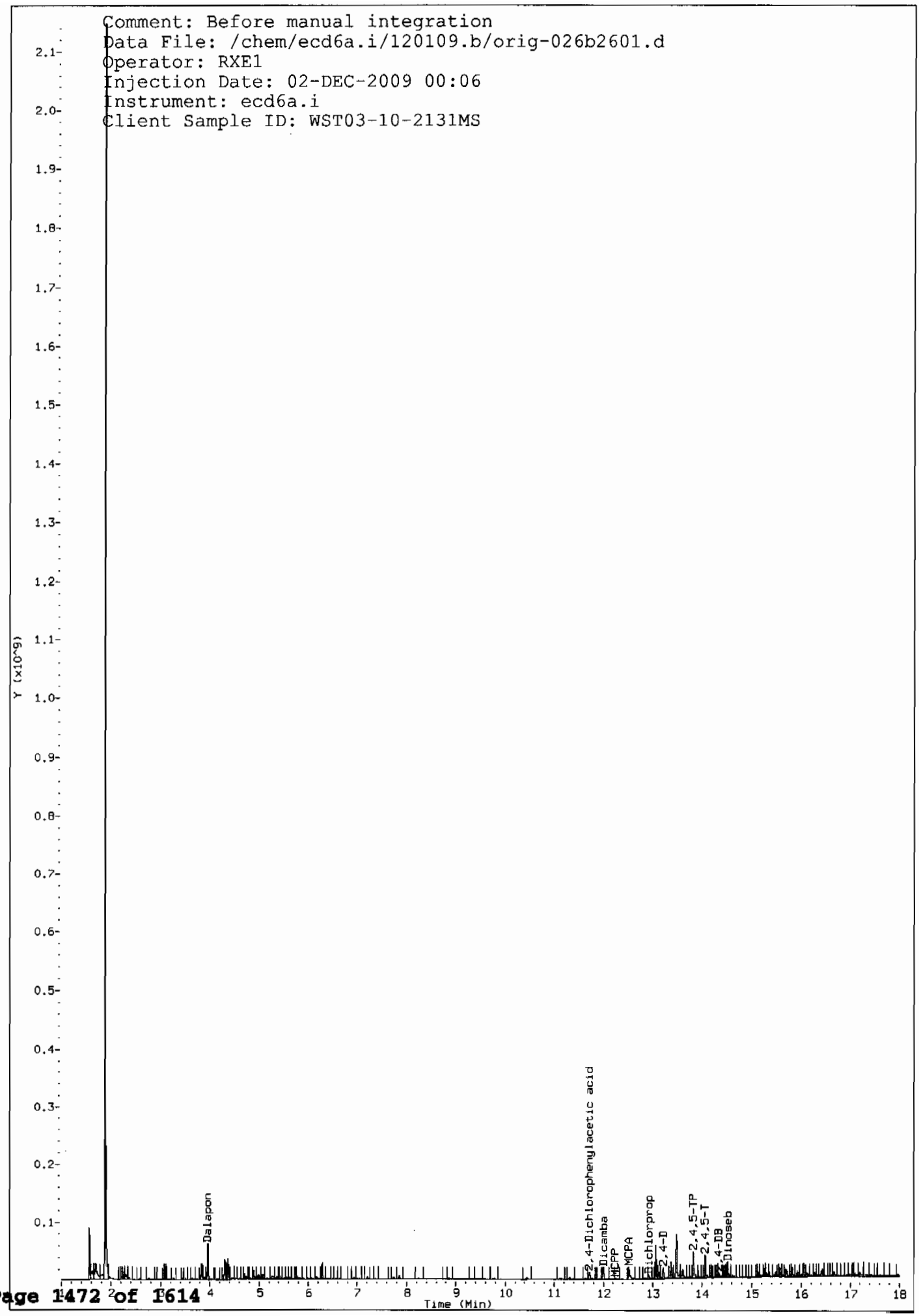

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578	**Date Collected:**	11/17/2009 12:00	**Matrix:**	R
Lab Sample ID:	1201982254	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.9
Client Sample:	QC for batch 927147	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2131MSD	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927148	**Inst:**	ECD6A.I	**Dilution:**	2
Run Date:	12/02/2009 00:35	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:11	**Aliquot:**	50.04 g	**Final Volume:**	10 mL
Data File:	027f2701.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	027b2701.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon		277	ug/kg	43.4	217	1
1918–00–9	Dicamba		35.9	ug/kg	3.60	10.9	1
93–65–2	MCPP	P	9210	ug/kg	434	2170	1
94–74–6	MCPA		5140	ug/kg	499	2170	1
120–36–5	Dichlorprop		39.9	ug/kg	3.60	10.9	1
94–75–7	2,4–D		40.9	ug/kg	3.60	10.9	1
93–72–1	2,4,5–TP		36.9	ug/kg	3.60	10.9	1
93–76–5	2,4,5–T		30.3	ug/kg	3.60	10.9	1
94–82–6	2,4–DB		67.5	ug/kg	3.60	10.9	1
88–85–7	Dinoseb		43.4	ug/kg	3.60	10.9	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/027f2701.d
Lab Smp Id: 1201982254 Client Smp ID: WST03-10-2131MSD
Inj Date : 02-DEC-2009 00:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982254|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 27 QC Sample: MSD
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.04000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.702	10.698	0.004	28004902	263.574	114	
1 Dalapon					CAS #: 75-99-0	
3.995	4.000	-0.005	53425384	639.225	277	
3 Dicamba					CAS #: 6597-78-0	
11.218	11.214	0.004	32915108	82.6110	35.8	
4 MCPP					CAS #: 7085-19-0	
11.741	11.729	0.012	7397727	21227.0	9210	(R)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
11.998	11.999	-0.001	7684540	11843.7	5140	(RM)
6 Dichlorprop					CAS #: 120-36-5	
12.505	12.512	-0.007	9011275	91.8449	39.9	(M)
7 2,4-D					CAS #: 94-75-7	
12.769	12.775	-0.006	9395563	94.1314	40.8	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.508	13.512	-0.004	40977161	84.9807	36.9	(M)
9 2,4,5-T					CAS #: 93-76-5	
13.710	13.715	-0.005	29033488	69.7477	30.3	(M)
10 2,4-DB					CAS #: 94-82-6	
14.055	14.061	-0.006	7304282	155.522	67.5	(RM)
11 Dinoseb					CAS #: 88-85-7	
14.637	14.638	-0.001	21889537	99.9106	43.4	(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/027f2701.d
Date : 02-DEC-2009 00:35
Client ID: WST03-10-2131MSD
Sample Info: |120198225412|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

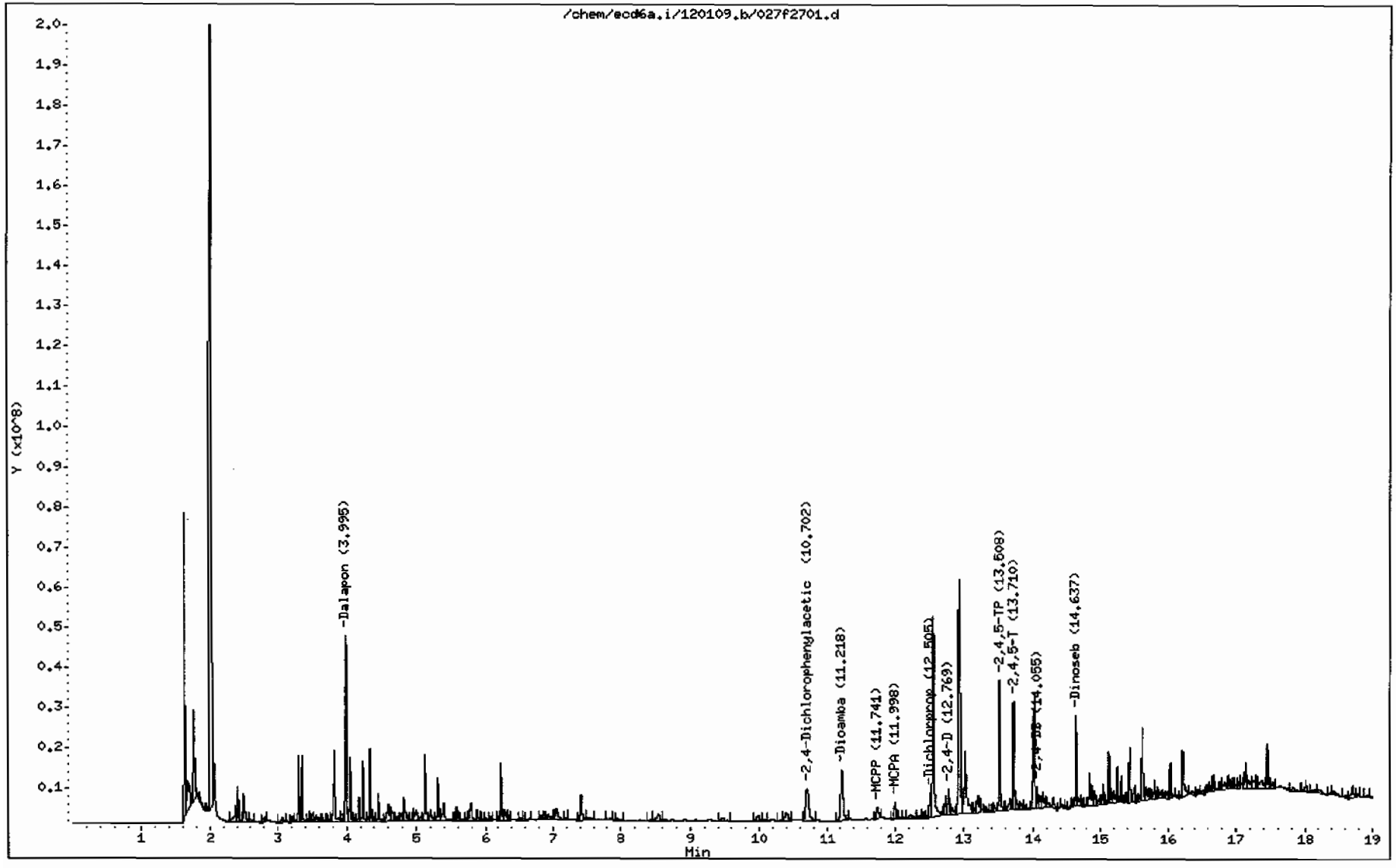

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/027f2701.d
Operator: RXE1
Injection Date: 02-DEC-2009 00:35
Instrument: ecd6a.i
Client Sample ID: WST03-10-2131MSD

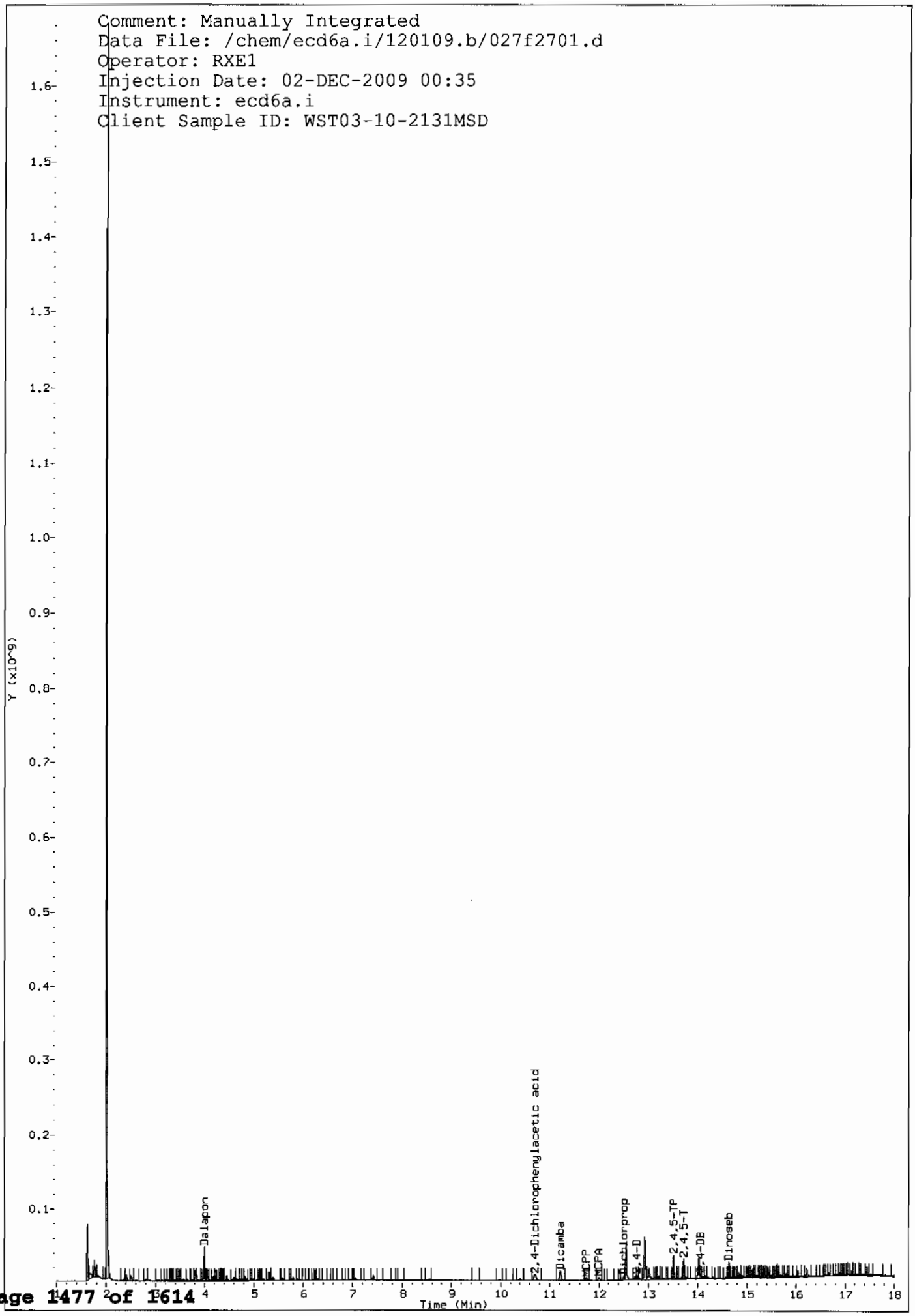

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-027f2701.d
Operator: RXE1
Injection Date: 02-DEC-2009 00:35
Instrument: ecd6a.i
Client Sample ID: WST03-10-2131MSD

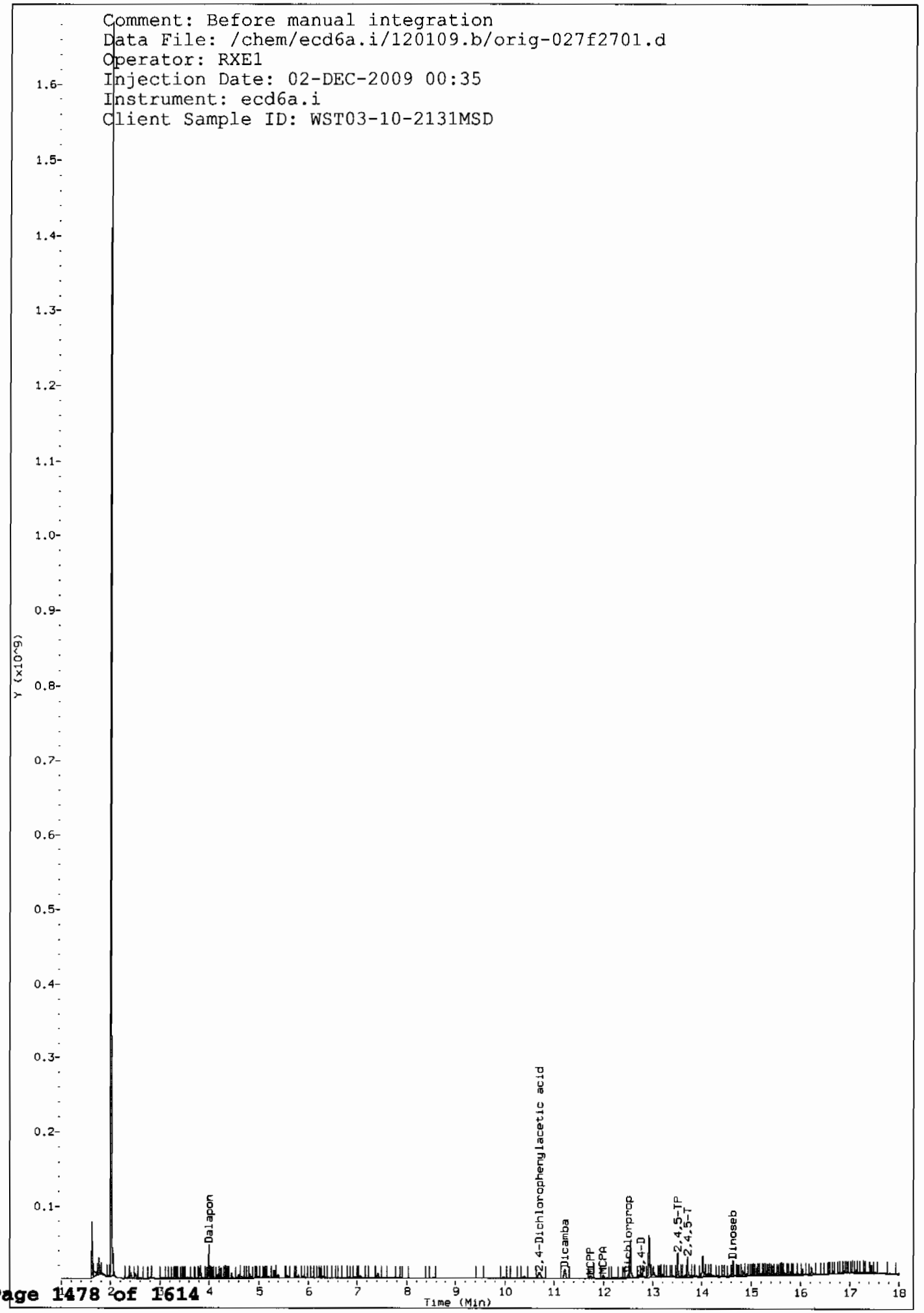

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/027b2701.d
Lab Smp Id: 1201982254 Client Smp ID: WST03-10-2131MSD
Inj Date : 02-DEC-2009 00:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982254|2|
Misc Info : |ECD51H_1SF|927148|SVHF|MSD|SOIL|MSD|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 27 QC Sample: MSD
Dil Factor: 2.00000
Integrator: Falcon Compound Sublist: 10-578.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.04000	Weight of sample extracted (g)
M	7.92250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.717	11.717	0.000	25643400	215.617	93.6	
1 Dalapon					CAS #: 88-85-7	
3.958	3.963	-0.005	70767571	642.771	279	
4 Dicamba					CAS #: 6597-78-0	
12.002	12.000	0.002	34307228	76.6693	33.3	
3 MCPP					CAS #: 7085-19-0	
12.247	12.246	0.001	2382639	6167.91	2680	(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.521	12.552	-0.031	12811558	16786.4	7290	(RM)
6 Dichlorprop					CAS #: 120-36-5	
12.923	12.927	-0.004	8306764	67.9641	29.5	(M)
7 2,4-D					CAS #: 94-75-7	
13.213	13.216	-0.003	17164718	117.084	50.8	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.823	13.825	-0.002	47920986	83.0534	36.0	(M)
9 2,4,5-T					CAS #: 93-76-5	
14.062	14.065	-0.003	36521007	76.5498	33.2	(M)
11 2,4-DB					CAS #: 94-82-6	
14.339	14.354	-0.015	12465341	187.100	81.2	(RM)
10 Dinoseb					CAS #: 88-85-7	
14.516	14.519	-0.003	23937459	103.900	45.1	(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/027b2701.d
Date : 02-DEC-2009 00:35
Client ID: WST03-10-2131MSD
Sample Info: |120198225412|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

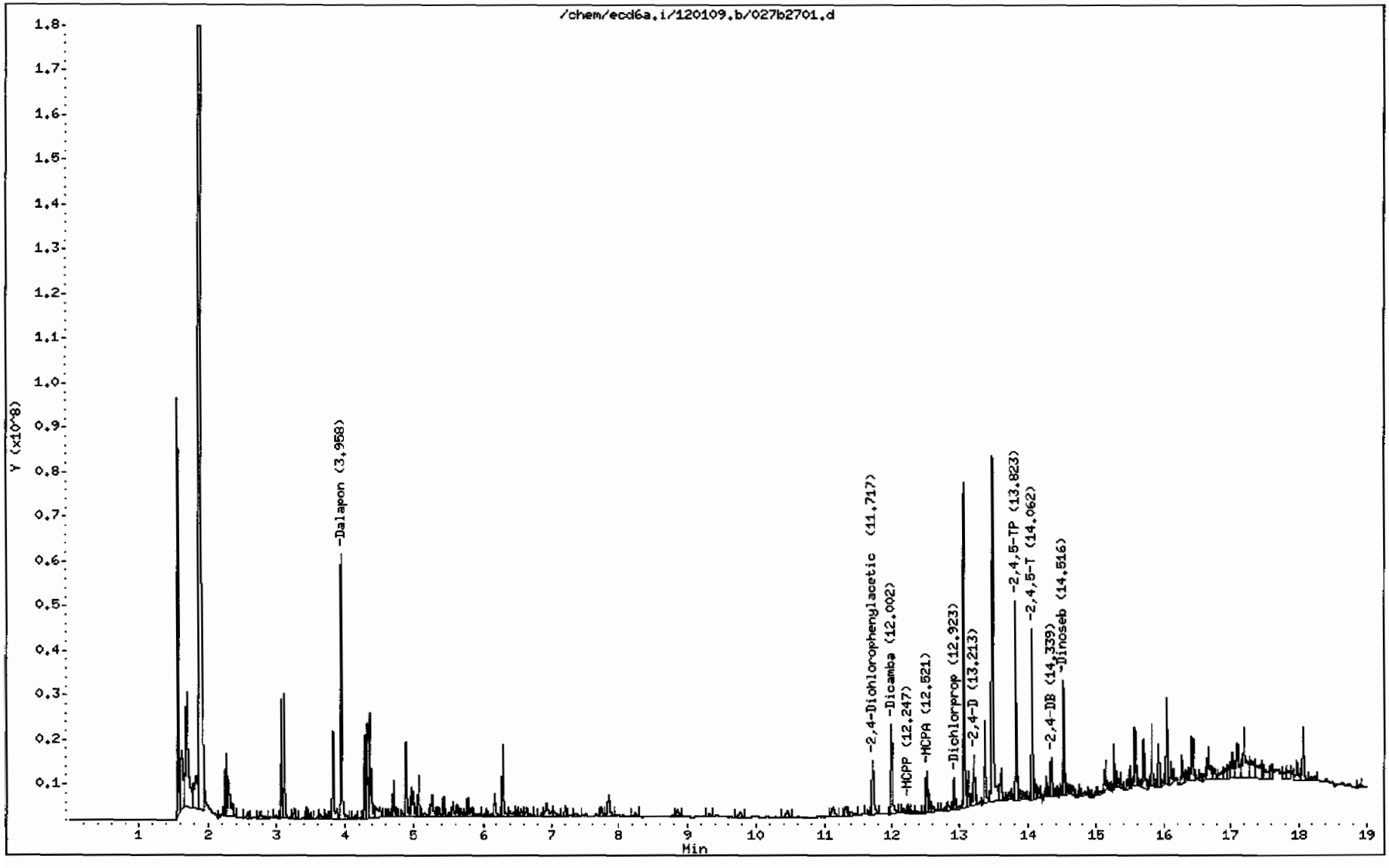

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/027b2701.d
Operator: RXE1
Injection Date: 02-DEC-2009 00:35
Instrument: ecd6a.i
Client Sample ID: WST03-10-2131MSD

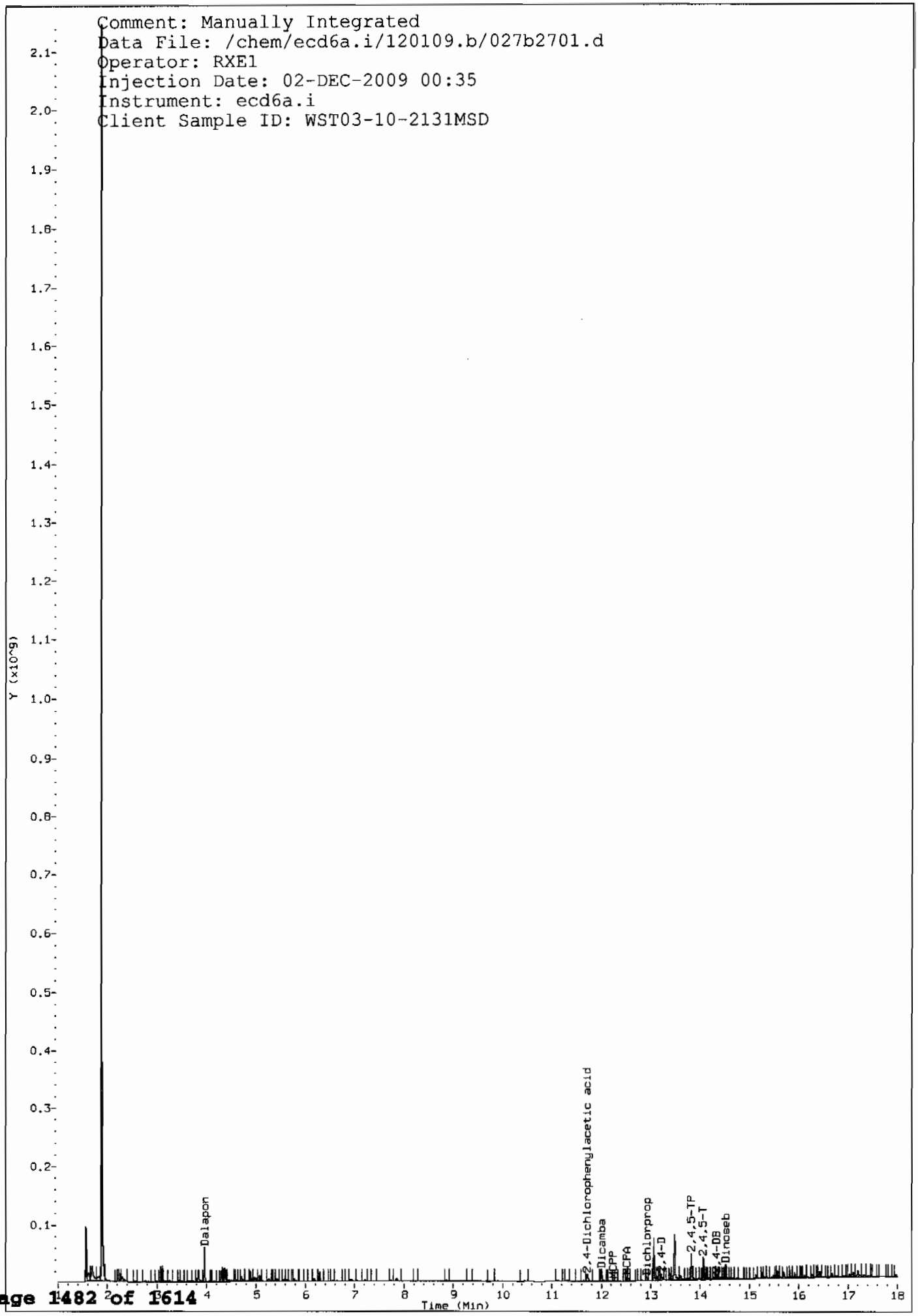

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-027b2701.d
Operator: RXE1
Injection Date: 02-DEC-2009 00:35
Instrument: ecd6a.i
Client Sample ID: WST03-10-2131MSD

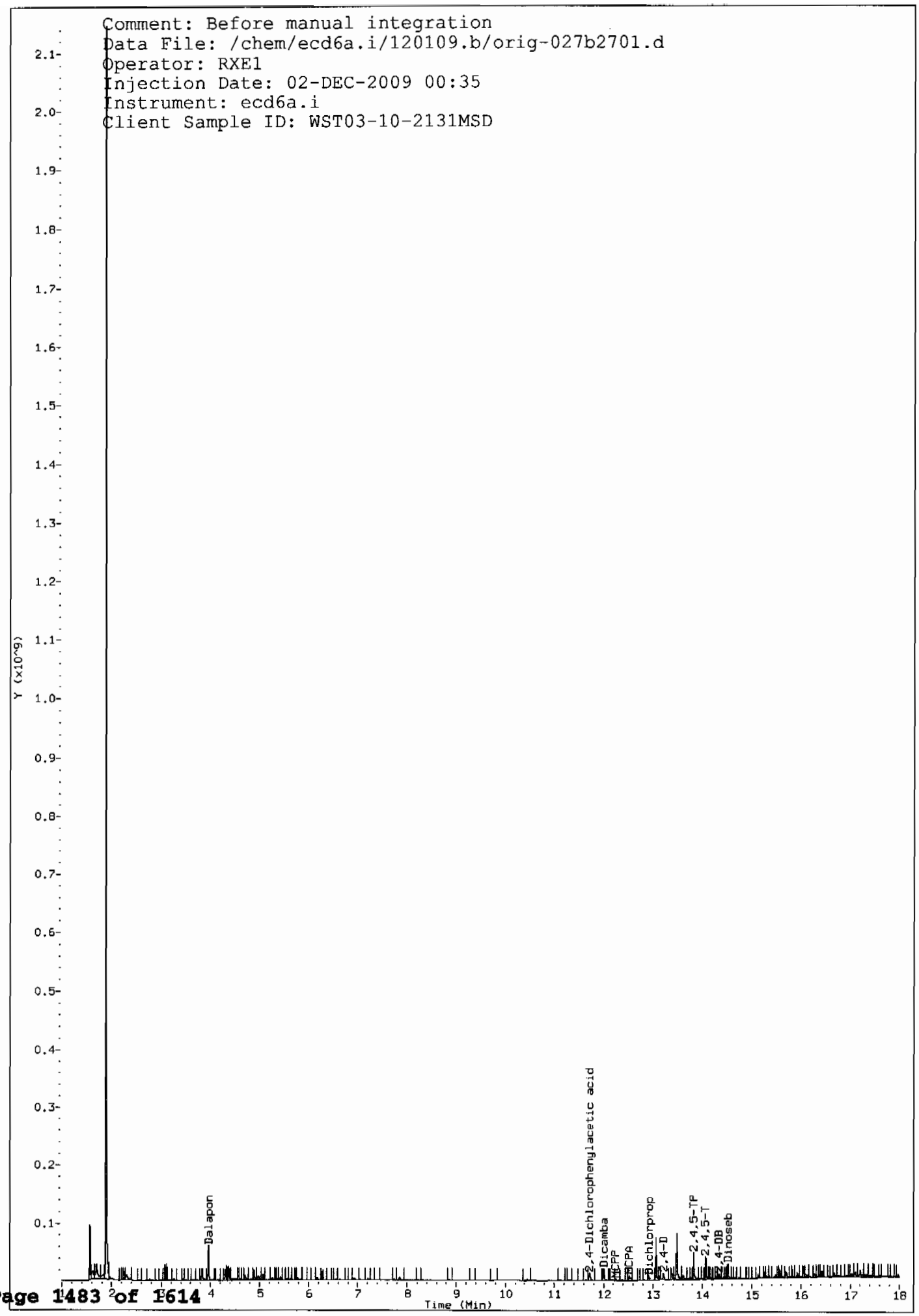

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD6

DATE: 12/02/2009 METHOD: ECD6-F-8151A-120109.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-011 Analysis of Chlorophenoxy Herbicides by ECD
EPA Method: 8151A Chlorinated Herbicides by GC Using Derivation
Sequence Number:120109 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WHB091117-02	RXE1	01-DEC-2009 12:22		120109	1.0	INSTBLK	CLEAN
002f0201.d	WHB091030-01	RXE1	01-DEC-2009 12:50		120109	1.0	HSTD01	ICAL LVL 1
003f0301.d	WHB091030-02	RXE1	01-DEC-2009 13:20		120109	1.0	HSTD02	ICAL LVL 2
004f0401.d	WHB091030-03	RXE1	01-DEC-2009 13:48		120109	1.0	HSTD03	ICAL LVL 3
005f0501.d	WHB091030-04	RXE1	01-DEC-2009 14:16		120109	1.0	HSTD04	ICAL LVL 4
006f0601.d	WHB091030-05	RXE1	01-DEC-2009 14:45		120109	1.0	HSTD05	ICAL LVL 5
007f0701.d	WHB091030-06	RXE1	01-DEC-2009 15:12		120109	1.0	HSTD06	ICAL LVL 6
008f0801.d	WHB091030-07	RXE1	01-DEC-2009 15:40		120109	1.0	HSTD07	ICAL LVL 7
009f0901.d	WHB091030-12	RXE1	01-DEC-2009 16:08		120109	1.0	HSTD01	USE. ICV. ALL ANALYTES PASSING BOTH COLUMNS.
010f1001.d	WHB091117-02	RXE1	01-DEC-2009 16:35		120109	1.0	INSTBLK	CLEAN
011f1101.d	1201982244	RXE1	01-DEC-2009 17:04	927142	10-671	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
012f1201.d	1201982247	RXE1	01-DEC-2009 17:32	927142	10-671	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
013f1301.d	241813006	RXE1	01-DEC-2009 18:00	927142	10-671	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
014f1401.d	1201982245	RXE1	01-DEC-2009 18:28	927142	10-671	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
015f1501.d	1201982246	RXE1	01-DEC-2009 18:56	927142	10-671	1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241895002	RXE1	01-DEC-2009 19:25	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
017f1701.d	241895005	RXE1	01-DEC-2009 19:52	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

018f1801.d	241895008	RXE1	01-DEC-2009 20:20	927142	10-698		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
019f1901.d	241895011	RXE1	01-DEC-2009 20:48	927142	10-698		1.0	LANL	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
020f2001.d	241918005	RXE1	01-DEC-2009 21:16	927142	10-701		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
021f2101.d	WHB091030-12	RXE1	01-DEC-2009 21:44		120109		1.0	HSTD02	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
022f2201.d	WHB091117-02	RXE1	01-DEC-2009 22:12		120109		1.0	INSTBLK	CLEAN
023f2301.d	1201982252	RXE1	01-DEC-2009 22:41	927148	10-578		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
024f2401.d	1201982255	RXE1	01-DEC-2009 23:09	927148	10-578		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
025f2501.d	241423004	RXE1	01-DEC-2009 23:38	927148	10-578		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
026f2601.d	1201982253	RXE1	02-DEC-2009 00:06	927148	10-578		2.0	MS	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MSD.
027f2701.d	1201982254	RXE1	02-DEC-2009 00:35	927148	10-578		2.0	MSD	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MS.
028f2801.d	WHB091030-12	RXE1	02-DEC-2009 01:02		120109		1.0	HSTD03	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
029f2901.d	WHB091117-02	RXE1	02-DEC-2009 01:31		120109		1.0	INSTBLK	CLEAN
030f3001.d	241423005	RXE1	02-DEC-2009 01:59	927148	10-578		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
031f3101.d	241503002	RXE1	02-DEC-2009 02:27	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
032f3201.d	241503003	RXE1	02-DEC-2009 02:55	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
033f3301.d	241503004	RXE1	02-DEC-2009 03:24	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
034f3401.d	241524002	RXE1	02-DEC-2009 03:52	927148	10-600		20.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
035f3501.d	241697003	RXE1	02-DEC-2009 04:21	927148	10-648		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241697004	RXE1	02-DEC-2009 04:48	927148	10-648		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
037f3701.d	241714002	RXE1	02-DEC-2009 05:16	927148	10-650		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
038f3801.d	WHB091030-12	RXE1	02-DEC-2009 05:45		120109		1.0	HSTD04	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
039f3901.d	WHB091117-02	RXE1	02-DEC-2009 06:13		120109		1.0	INSTBLK	CLEAN
040f4001.d	1201982248	RXE1	02-DEC-2009 06:42	927145	241437		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
041f4101.d	1201982251	RXE1	02-DEC-2009 07:10	927145	241437		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

042f4201.d	241437003	RXE1	02-DEC-2009 07:39	927145	241437		1.0	PCGE	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
043f4301.d	241437009	RXE1	02-DEC-2009 08:08	927145	241437		1.0	PCGE	USE. $ LOW BOTH, CONFIRMED BY MS/MSD.
044f4401.d	1201982249	RXE1	02-DEC-2009 08:36	927145	241437		1.0	MS	USE. $/SPIKES LOW BOTH, CONFIRMED BY MSD.
045f4501.d	1201982250	RXE1	02-DEC-2009 09:04	927145	241437		1.0	MSD	USE. $/SPIKES LOW BOTH, CONFIRMED BY MS.
046f4601.d	WHB091030-12	RXE1	02-DEC-2009 09:32		120109		1.0	HSTD05	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
047f4701.d	WHB091117-02	RXE1	02-DEC-2009 10:00		120109		1.0	INSTBLK	CLEAN
048f4801.d	WE091201-02	RXE1	02-DEC-2009 10:28		120109		1.0	SCREEN	DUSE
049f4901.d	1201979176	RXE1	02-DEC-2009 11:03	927402	10-462-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
050f5001.d	1201980055	RXE1	02-DEC-2009 11:31	927402	10-578-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
051f5101.d	1201980841	RXE1	02-DEC-2009 11:59	927402	10-648-1		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
052f5201.d	1201982751	RXE1	02-DEC-2009 12:27	927402	10-600-1		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
053f5301.d	1201982752	RXE1	02-DEC-2009 12:55	927402	10-600-1		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
054f5401.d	WHB091030-12	RXE1	02-DEC-2009 13:35		120109		1.0	HSTD06	USE. CCV. DAL LOW (B), DB HI (F).
055f5501.d	WHB091117-02	RXE1	02-DEC-2009 14:04		120109		1.0	INSTBLK	CLEAN
056f5601.d	241040001	RXE1	02-DEC-2009 14:32	927402	10-462-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
057f5701.d	241424001	RXE1	02-DEC-2009 15:01	927402	10-578-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
058f5801.d	241424002	RXE1	02-DEC-2009 15:29	927402	10-578-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
059f5901.d	241527001	RXE1	02-DEC-2009 15:57	927402	10-600-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
060f6001.d	1201982753	RXE1	02-DEC-2009 16:25	927402	10-600-1		1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
061f6101.d	1201982754	RXE1	02-DEC-2009 16:53	927402	10-600-1		1.0	MSD	USE. D SLIGHT HI (F), PASSING (B).
062f6201.d	241704001	RXE1	02-DEC-2009 17:21	927402	10-648-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
063f6301.d	241704002	RXE1	02-DEC-2009 17:48	927402	10-648-1		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
064f6401.d	WHB091030-12	RXE1	02-DEC-2009 18:16		120109		1.0	HSTD07	USE. CCV. D/DB HI (F), PASSING (B).
065f6501.d	WHB091117-02	RXE1	02-DEC-2009 18:45		120109		1.0	INSTBLK	CLEAN
066f6601.d	1201983560	RXE1	02-DEC-2009 19:14	927672	10-653		1.0	MB	DUSE

10H

Instrument Batch: /chem/ecd6a.i/120109.b

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

067f6701.d	1201983561	RXE1	02-DEC-2009 19:43	927672	10-653	1.0	LCS	DUSE
068f6801.d	241718001	RXE1	02-DEC-2009 20:11	927672	10-653	1.0	LANL	DUSE
069f6901.d	241728002	RXE1	02-DEC-2009 20:40	927672	10-654	1.0	LANL	DUSE
070f7001.d	241750002	RXE1	02-DEC-2009 21:08	927672	10-655	1.0	LANL	DUSE
071f7101.d	241750003	RXE1	02-DEC-2009 21:36	927672	10-655	1.0	LANL	DUSE
072f7201.d	1201983562	RXE1	02-DEC-2009 22:05	927672	10-655	1.0	MS	DUSE
073f7301.d	1201983563	RXE1	02-DEC-2009 22:33	927672	10-655	1.0	MSD	DUSE
074f7401.d	WHB091030-12	RXE1	02-DEC-2009 23:02		120109	1.0	HSTD08	USE. CCV. DB HI (F), PASSING (B).
075f7501.d	WHB091117-02	RXE1	02-DEC-2009 23:29		120109	1.0	INSTBLK	CLEAN
076f7601.d	241750004	RXE1	02-DEC-2009 23:58	927672	10-655	1.0	LANL	DUSE
077f7701.d	241750005	RXE1	03-DEC-2009 00:25	927672	10-655	1.0	LANL	DUSE
078f7801.d	241750006	RXE1	03-DEC-2009 00:54	927672	10-655	1.0	LANL	DUSE
079f7901.d	241750007	RXE1	03-DEC-2009 01:22	927672	10-655	1.0	LANL	DUSE
080f8001.d	241750008	RXE1	03-DEC-2009 01:50	927672	10-655	1.0	LANL	DUSE
081f8101.d	241750009	RXE1	03-DEC-2009 02:19	927672	10-655	1.0	LANL	DUSE
082f8201.d	241750010	RXE1	03-DEC-2009 02:47	927672	10-655	1.0	LANL	DUSE
083f8301.d	241750011	RXE1	03-DEC-2009 03:15	927672	10-655	1.0	LANL	DUSE
084f8401.d	WHB091030-12	RXE1	03-DEC-2009 03:44		120109	1.0	HSTD09	USE. CCV. DB HI (F), PASSING (B).
085f8501.d	WHB091117-02	RXE1	03-DEC-2009 04:12		120109	1.0	INSTBLK	CLEAN

Prep Logbook

The Extraction of Herbicides from Soil and Sludge Samples

Batch ID: 927147 **Verified by:** _____

Analyst: Robin Hunt

Method: SW846 8151A

Lab SOP: GL-OA-E-027 REV# 8

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982252 MB	30-NOV-2009 11:11:04	50	10	0.2
1201982255 LCS	30-NOV-2009 11:11:04	50	10	0.2
241423004	30-NOV-2009 11:11:04	50	10	0.2
1201982253 MS (241423004)	30-NOV-2009 11:11:04	50.09	10	0.19964
1201982254 MSD (241423004)	30-NOV-2009 11:11:04	50.04	10	0.19984
241423005	30-NOV-2009 11:11:04	50.09	10	0.19964
241503002	30-NOV-2009 11:11:04	50	10	0.2
241503003	30-NOV-2009 11:11:04	50	10	0.2
241503004	30-NOV-2009 11:11:04	50.01	10	0.19996
241524002	30-NOV-2009 11:11:04	50.02	10	0.19992
241697003	30-NOV-2009 11:11:04	50	10	0.2
241697004	30-NOV-2009 11:11:04	50.07	10	0.19972
241714002	30-NOV-2009 11:11:04	50	10	0.2

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982255	HERBICIDE LCS	WE091110-02	1	mL
MS	1201982253	HERBICIDE LCS	WE091110-02	1	mL
MSD	1201982254	HERBICIDE LCS	WE091110-02	1	mL
SURR	All	HERBICIDE SURROGATE	WE091110-03	.05	mL
REGNT	All	Methanol	091117-C	.5	mL
REGNT	All	Iso-octane	1106542-A	1	mL
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Hexane	1233925-B2	50	mL
REGNT	All	N-METHYL-N-NITROSO-P-TOLUENESULFON-AMIDE	1234528A	2	mL
REGNT	All	Methylene Chloride	1234878-D	150	mL
SOURC	All	SODIUM SULFATE	1233923	50	g

Comments:

Verified By: JAM

Final Solvent: Hexane

NCR Report No.: 764742
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8151A	Solid	LANL
Batch ID:	**Sample Numbers:**		
927148	See Below		

Potentially affected work order(s)(SDG):241423(10-578),241503(10-589),241524(10-600),241697(10-648),241714(10-650)

Application Issues:

Failed Recovery for MSD/PSD

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The MS(1201982253) and MSD(1201982254) did not meet spike recovery acceptance limits or RPD acceptance limits.	1. As the MS and MSD displayed similar recoveries, the failures were attributed to co-eluting sample matrix interference and data have been reported. The RPD values were not all within the acceptance limits. The MS/MSD pair had similar recoveries for the analytes and the failures are attributed to matrix interference.

Originator's Name:

Rebecca Enzor 02-DEC-09

Data Validator/Group Leader:

Cameron Bearden 03-DEC-09

HERBICIDE ANALYSIS

Herbicide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-578-1

Method/Analysis Information

Procedure:	**Analysis of Chlorophenoxy Acid Herbicides by ECD**
Analytical Method:	SW846 8151A
Prep Method:	SW846 8151A Prep
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	927402
Prep Batch Number:	927399
TCLP Prep Batch Number:	926091

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8151A:

Sample ID	Client ID
241424001	WST03-10-2131
241424002	WST03-10-2130
1201980055	TCLP Blank (TB)
1201982751	Method Blank (MB)
1201982752	Laboratory Control Sample (LCS)
1201982753	241527001(WST03-10-2132) Matrix Spike (MS)
1201982754	241527001(WST03-10-2132) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-011 REV# 18.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 21.7.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the

concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

The standards, analyzed for this SDG, failed to meet the acceptance criteria; however this non-compliance had no adverse effects on the data as there were no target analytes detected in the associated samples.

Surrogate recovery did not meet the acceptance criteria in the standards analyzed for this SDG; however, this had no adverse effects on the data as the surrogate recovery was well within the acceptance range in the sample in this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-600-1) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was not within the established acceptance limits for 2,4-D and was slightly above the limits; however, this non-conformance had no adverse effects on the data as there were no target analytes detected in the associated samples.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Report (NCR) Documentation

Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration

Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this Herbicide fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-HERB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD6A.I_1	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD6A.I_2	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/15/09

Roadmap for LANL 10-578-1 HERB

This roadmap was analyzed by reb01393 on 12-03-2009, 12:05.
This roadmap was reviewed by jim01140 on 12-04-2009, 08:29.
This roadmap was packaged by yml on 12-14-2009, 19:13.
This roadmap was validated by jim01140 on 12-15-2009, 13:32.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/057f5701.d	241424001	sample	02-DEC-2009	15:01	10-578-1.sub	WST03-10-2131	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/058f5801.d	241424002	sample	02-DEC-2009	15:29	10-578-1.sub	WST03-10-2130	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/057b5701.d	241424001	sample	02-DEC-2009	15:01	10-578-1.sub	WST03-10-2131	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/058b5801.d	241424002	sample	02-DEC-2009	15:29	10-578-1.sub	WS1U3-10-2130	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/050f5001.d	1201980055	tb	02-DEC-2009	11:31	10-578-1.sub	TBLK01	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/052f5201c.d	1201982751	mb	02-DEC-2009	12:27	10-578-1.sub	HBLK01	1.00000	927402	
☐	N	/chem/ecd6a.i/120109.b/053f5301c.d	1201982752	lcs	02-DEC-2009	12:55	10-578-1.sub	HBLK01LCS	1.00000	927402	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120109.b/050b5001.d	1201980055	tb	02-DEC-2009	11:31	10-578-1.sub	TBLK01	1.00000	927402	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/120109.b/052b5201c.d	1201982751	mb	02-DEC-2009	12:27	10-578-1.sub	HBLK01	1.00000	927402	
☐	N	/chem/ecd6a.i/120109.b/053b5301c.d	1201982752	lcs	02-DEC-2009	12:55	10-578-1.sub	HBLK01LCS	1.00000	927402	

SAMPLE DATA SUMMARY

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578–1	**Date Collected:**	11/17/2009 12:00	**Matrix:**	TCLP S
Lab Sample ID:	241424002	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2130	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 15:29	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	058f5801.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	058b5801.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.050	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP	U	0.050	mg/L	0.0166	0.050	1

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578–1	**Date Collected:**	11/17/2009 12:00	**Matrix:**	TCLP S
Lab Sample ID:	241424001	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2131	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 15:01	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	057f5701.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	057b5701.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.050	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP	U	0.050	mg/L	0.0166	0.050	1

QUALITY CONTROL SUMMARY

Herbicide

Surrogate Recovery Report

SDG Number: 10-578-1

Matrix Type: TCLP SOLID

CAP Column (1) : Rtx-CLP **CAP Column (2) : Rtx-CLPII**

Sample ID	Client ID	DCAA 1 %REC #	DCAA 2 %REC #
1201980055	TB for batch 926091	119	114
1201982751	MB for batch 927399	104	97
1201982752	LCS for batch 927399	118	111
241424001	WST03-10-2131	100	96
241424002	WST03-10-2130	109	104

Surrogate	Acceptance Limits
DCAA = 2,4-Dichlorophenylacetic acid	(47%-122%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–578–1
Client ID: LCS for batch 927399
Lab Sample ID: 1201982752
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/02/2009 12:55
Dilution: 1
Prep Batch ID: 927399
Batch ID: 927402

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
94–75–7	LCS 2,4–D	0.002	0.0	0.00256	128	43–131
93–72–1	LCS 2,4,5–TP	0.002	0.0	0.0023	115	41–122

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-600-1
Client ID: WST03-10-2132MS
Lab Sample ID: 1201982753
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP R
Analysis Date: 12/02/2009 16:25
Prep Batch ID: 927399
Batch ID: 927402
Dilution: 1

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
94-75-7	MS	2,4-D	0.400	0.00	U	0.501	125	48-125
93-72-1	MS	2,4,5-TP	0.400	0.00	U	0.438	110	24-131

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–600–1
Client ID: WST03–10–2132MSD
Lab Sample ID: 1201982754
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP R
Analysis Date: 12/02/2009 16:53
Prep Batch ID: 927399
Batch ID: 927402
Dilution: 1

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
94–75–7	MSD 2,4–D	0.400	0.00	U	0.503	126 *	48–125	0	0–20
93–72–1	MSD 2,4,5–TP	0.400	0.00	U	0.451	113	24–131	3	0–20

Method Blank Summary

SDG Number:	10-578-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 927399	Instrument ID:	ECD6A.I_2 ECD6A.I_1	Data File:	052b5201.d 052f5201.d
Lab Sample ID:	1201982751				
Column:	Rtx-CLPII Rtx-CLP	Prep Date:	12/01/2009 16:23	Analyzed:	12/02/09 12:27
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 TB for batch 926091	1201980055	050f5001.d 050b5001.d	12/02/09	1131
02 LCS for batch 927399	1201982752	053f5301.d 053b5301.d	12/02/09	1255
03 WST03-10-2131	241424001	057f5701.d 057b5701.d	12/02/09	1501
04 WST03-10-2130	241424002	058f5801.d 058b5801.d	12/02/09	1529

SAMPLE
DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578–1	**Date Collected:**	11/17/2009 12:00	**Matrix:**	TCLP S
Lab Sample ID:	241424002	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2130	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 15:29	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	058f5801.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	058b5801.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.050	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP	U	0.050	mg/L	0.0166	0.050	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/058f5801.d
Lab Smp Id: 241424002 Client Smp ID: WST03-10-2130
Inj Date : 02-DEC-2009 15:29
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241424002|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LANL|SOIL|WST03-10-2130|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.716	10.698	0.018	58045208	546.305	1.1

Data File: /chem/ecd6a.i/120109.b/058f5801.d
Date : 02-DEC-2009 15:29
Client ID: WST03-10-2130
Sample Info: |24142400211|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

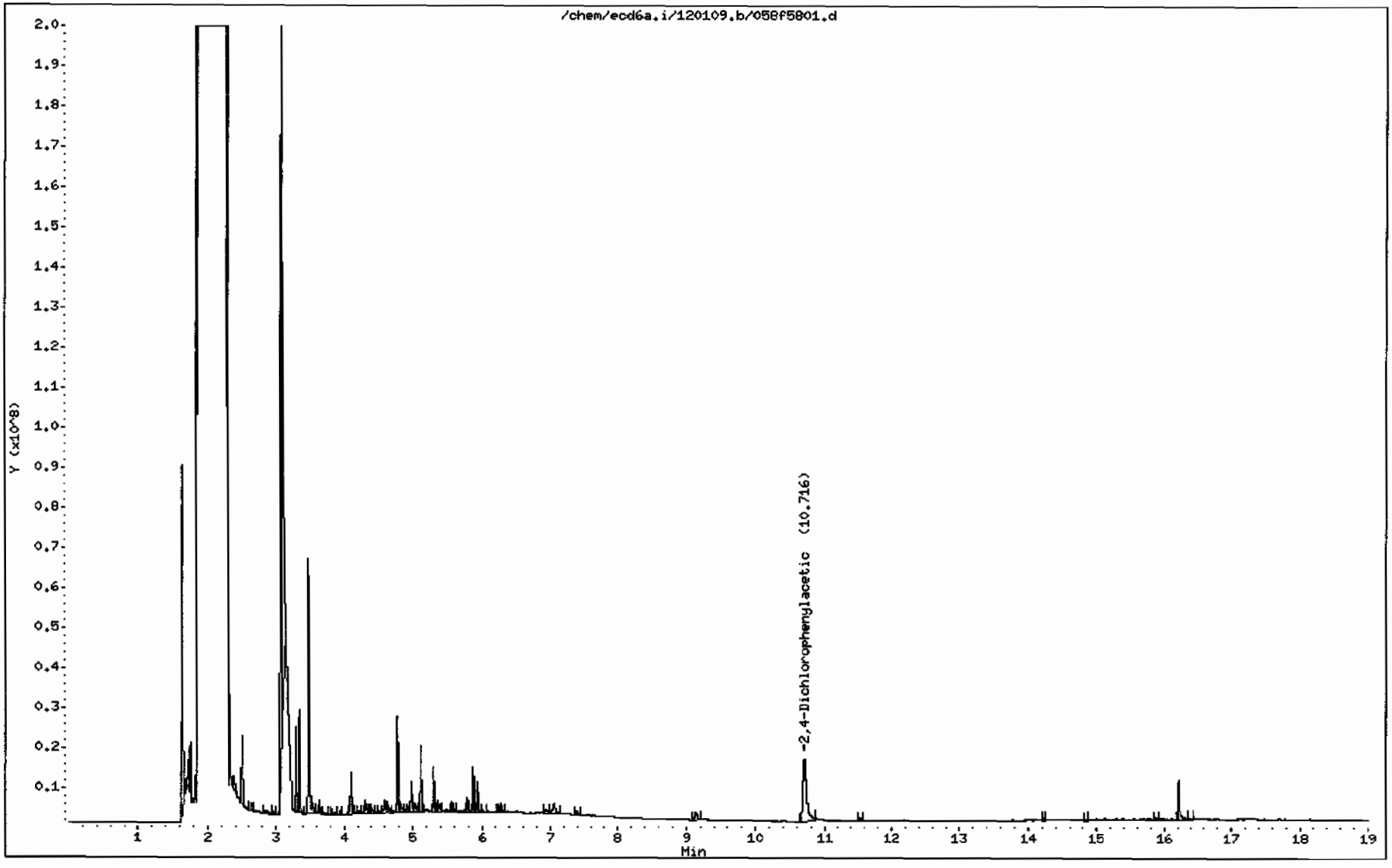

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/058b5801.d
Lab Smp Id: 241424002 Client Smp ID: WST03-10-2130
Inj Date : 02-DEC-2009 15:29
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241424002|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LANL|SOIL|WST03-10-2130|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.720	11.717	0.003	61665802	518.504	1.0

Data File: /chem/ecd6a.i/120109.b/058b5801.d
Date : 02-DEC-2009 15:29
Client ID: WST03-10-2130
Sample Info: |24142400211|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

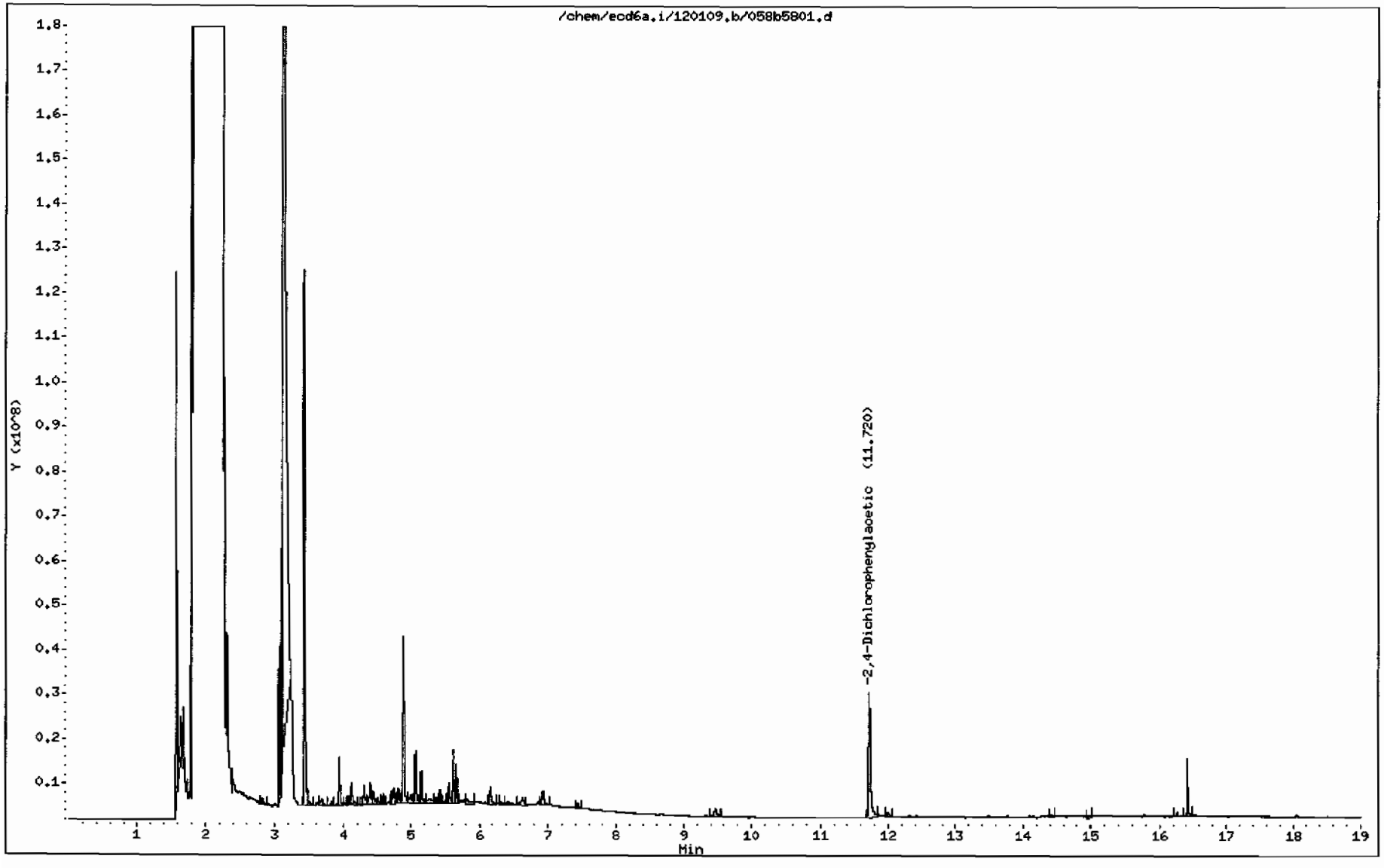

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-578-1**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**TCLP S**
Lab Sample ID:	**241424001**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2131**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**927402**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 15:01**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 16:23**	**Aliquot:**	**5 mL**	**Final Volume:**	**10 mL**
Data File:	**057f5701.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	057b5701.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/057f5701.d
Lab Smp Id: 241424001 Client Smp ID: WST03-10-2131
Inj Date : 02-DEC-2009 15:01
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241424001|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LANL|SOIL|WST03-10-2131|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.723	10.698	0.025	53025334	499.059	1.00

Data File: /chem/ecd6a.i/120109.b/057f5701.d

Date : 02-DEC-2009 15:01

Client ID: WST03-10-2131

Sample Info: |241424001|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

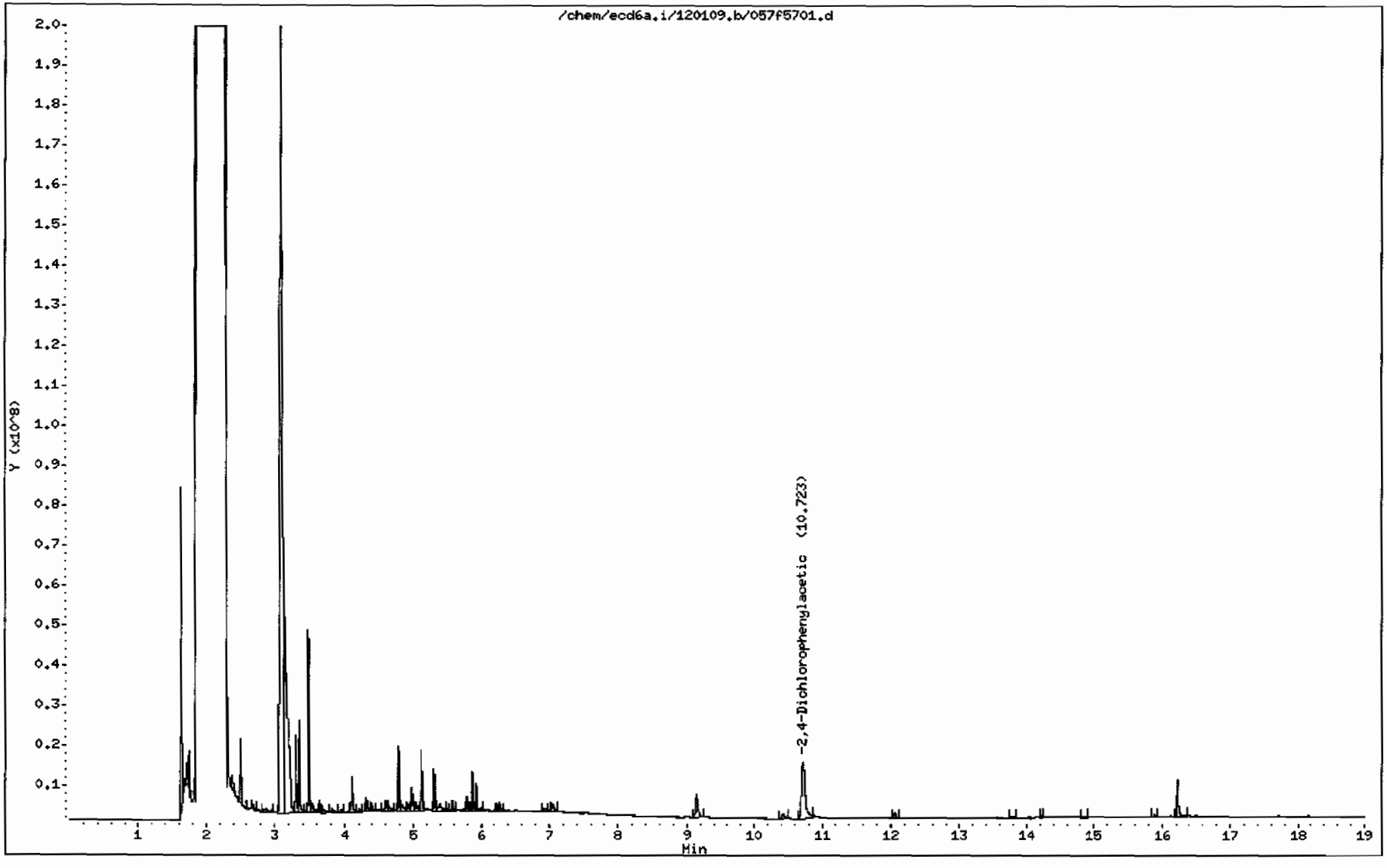

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/057b5701.d
Lab Smp Id: 241424001 Client Smp ID: WST03-10-2131
Inj Date : 02-DEC-2009 15:01
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241424001|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LANL|SOIL|WST03-10-2131|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.724	11.717	0.007	57223103	481.149	0.96

Data File: /chem/ecd6a.i/120109.b/057b5701.d
Date : 02-DEC-2009 15:01
Client ID: WST03-10-2131
Sample Info: |241424001|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

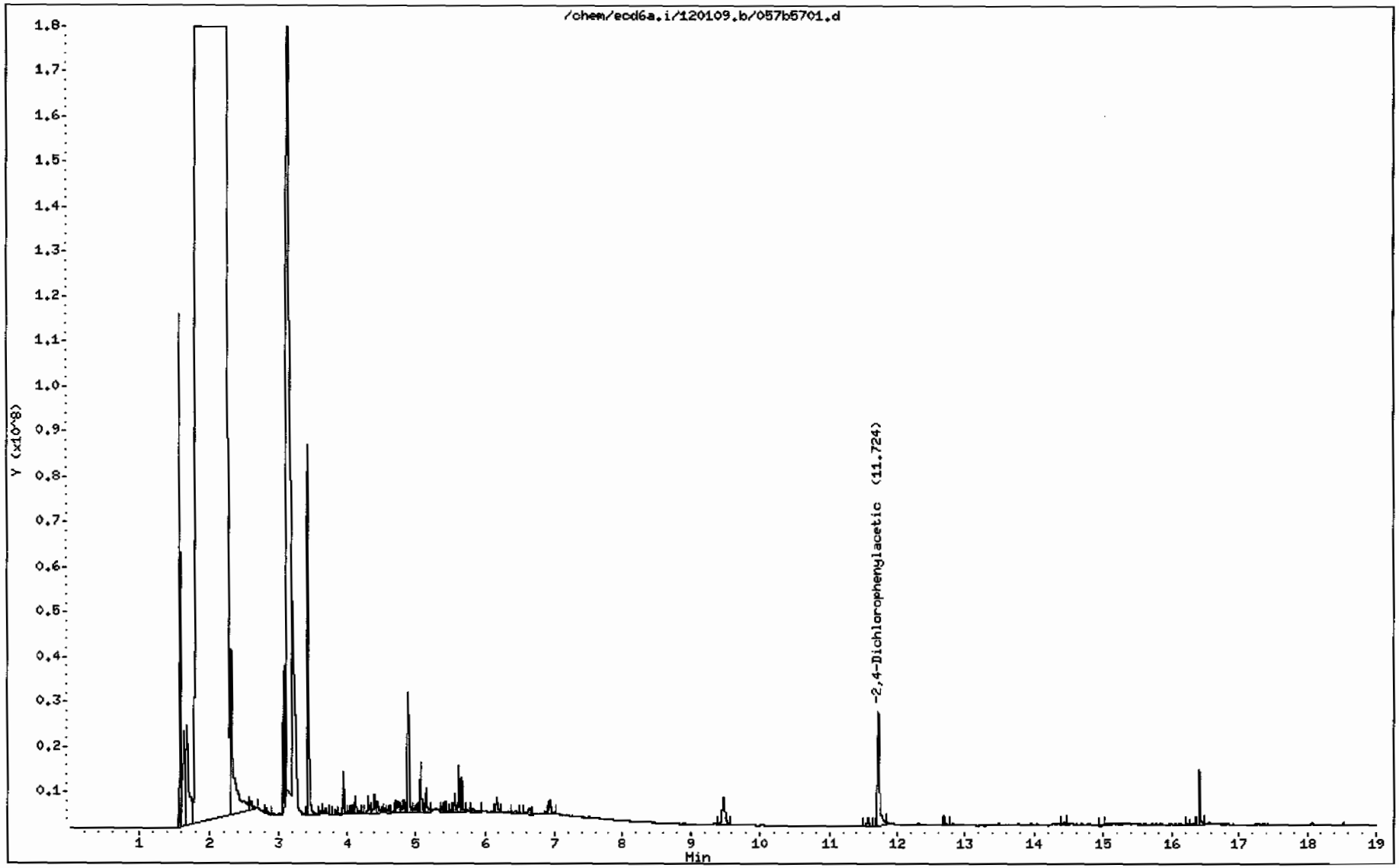

STANDARDS DATA

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002f0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003f0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004f0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005f0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007f0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008f0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084f8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074f7401.d

Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054f5401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 09:32	all	/chem/ecd6a.i/120109.b/046f4601.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 18:16	all	/chem/ecd6a.i/120109.b/064f6401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 01:02	all	/chem/ecd6a.i/120109.b/028f2801.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 05:45	all	/chem/ecd6a.i/120109.b/038f3801.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 21:44	all	/chem/ecd6a.i/120109.b/021f2101.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 16:08	all	/chem/ecd6a.i/120109.b/009f0901.d
Ccal Level: 5 , Ccal Amount: 200		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006f0601.d

Report Date: 07-Dec-2009 10:06

Calibration History

Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
01-DEC-2009 12:50	all	/chem/ecd6a.i/120109.b/002b0201.d
Cal Level: 2 , Cal Amount: 50.00000		
01-DEC-2009 13:20	all	/chem/ecd6a.i/120109.b/003b0301.d
Cal Level: 3 , Cal Amount: 100.00000		
01-DEC-2009 13:48	all	/chem/ecd6a.i/120109.b/004b0401.d
Cal Level: 4 , Cal Amount: 150.00000		
01-DEC-2009 14:16	all	/chem/ecd6a.i/120109.b/005b0501.d
Cal Level: 5 , Cal Amount: 200.00000		
01-DEC-2009 14:45	all	/chem/ecd6a.i/120109.b/006b0601.d
Cal Level: 6 , Cal Amount: 300.00000		
01-DEC-2009 15:12	all	/chem/ecd6a.i/120109.b/007b0701.d
Cal Level: 7 , Cal Amount: 400.00000		
01-DEC-2009 15:40	all	/chem/ecd6a.i/120109.b/008b0801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
03-DEC-2009 03:44	all	/chem/ecd6a.i/120109.b/084b8401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 23:02	all	/chem/ecd6a.i/120109.b/074b7401.d
Ccal Level: 5 , Ccal Amount: 200		
02-DEC-2009 13:35	all	/chem/ecd6a.i/120109.b/054b5401.d

Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 09:32 | all | /chem/ecd6a.i/120109.b/046b4601.d
Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 18:16 | all | /chem/ecd6a.i/120109.b/064b6401.d
Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 01:02 | all | /chem/ecd6a.i/120109.b/028b2801.d
Ccal Level: 5 , Ccal Amount: 200
02-DEC-2009 05:45 | all | /chem/ecd6a.i/120109.b/038b3801.d
Ccal Level: 5 , Ccal Amount: 200
01-DEC-2009 21:44 | all | /chem/ecd6a.i/120109.b/021b2101.d
Ccal Level: 5 , Ccal Amount: 200
01-DEC-2009 16:08 | all | /chem/ecd6a.i/120109.b/009b0901.d
Ccal Level: 5 , Ccal Amount: 200
01-DEC-2009 14:45 | all | /chem/ecd6a.i/120109.b/006b0601.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	72858.000000
Initial:End Threshold	36429.000000
Initial:Area Threshold	728580.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	20.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000

	Compound	RT	RT Window	RF
	1 Dalapon	4.000	3.970-4.030	8.358e+04
$	2 2,4-Dichlorophenylacetic a	10.698	10.638-10.758	1.063e+05
	3 Dicamba	11.214	11.154-11.274	3.984e+05
	4 MCPP	11.729	11.669-11.789	3.485e+02
	5 MCPA	11.999	11.939-12.059	6.488e+02
	6 Dichlorprop	12.512	12.452-12.572	9.811e+04
	7 2,4-D	12.775	12.715-12.835	9.981e+04
	43 Pentachlorophenol	12.924	12.904-12.944	1.050e+06
	8 2,4,5-TP	13.512	13.482-13.542	4.822e+05
	9 2,4,5-T	13.715	13.675-13.755	4.163e+05
	10 2,4-DB	14.061	14.021-14.101	4.697e+04
	11 Dinoseb	14.638	14.608-14.668	2.191e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 09:50 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	105244.000000
Initial:End Threshold	52622.000000
Initial:Area Threshold	1052440.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	25.000000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

	Compound	RT	RT Window	RF
	1 Dalapon	3.963	3.933-3.993	1.101e+05
$	2 2,4-Dichlorophenylacetic a	11.717	11.657-11.777	1.189e+05
	3 MCPP	12.246	12.186-12.306	3.863e+02
	4 Dicamba	12.000	11.940-12.060	4.475e+05
	5 MCPA	12.552	12.492-12.612	7.632e+02
	6 Dichlorprop	12.927	12.867-12.987	1.222e+05
	7 2,4-D	13.216	13.156-13.276	1.466e+05
	43 Pentachlorophenol	13.487	13.467-13.507	1.348e+06
	8 2,4,5-TP	13.825	13.795-13.855	5.770e+05
	9 2,4,5-T	14.065	14.035-14.095	4.771e+05
	10 Dinoseb	14.519	14.489-14.549	2.304e+05
	11 2,4-DB	14.354	14.314-14.394	6.662e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002f0201.d
Level 2: /chem/ecd6a.i/120109.b/003f0301.d
Level 3: /chem/ecd6a.i/120109.b/004f0401.d
Level 4: /chem/ecd6a.i/120109.b/005f0501.d
Level 5: /chem/ecd6a.i/120109.b/006f0601.d
Level 6: /chem/ecd6a.i/120109.b/007f0701.d
Level 7: /chem/ecd6a.i/120109.b/008f0801.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
1 Dalapon	+++++	79759	77099	90101	84329	83743		
	86440						83578	5.558
3 Dicamba	410356	419146	401802	405456	394767	379418		
	378101						398435	3.861
4 MCPP	+++++	319	339	352	359	354		
	368						349	4.922
5 MCPA	+++++	675	642	661	653	633		
	629						649	2.685
6 Dichlorprop	104713	103611	97122	98110	96912	92561		
	93769						98114	4.669
7 2,4-D	88737	98217	95724	105038	103064	102557		
	105356						99813	6.040
43 Pentachlorophenol	1087173	1110429	1048940	1060478	1045628	997069		
	1002014						1050247	3.939

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1 / 400.000 Level 7	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
8 2,4,5-TP	492919	495515	472258	491705	487675	468321		
	466963						482194	2.590
9 2,4,5-T	394661	408706	384612	438870	433931	422814		
	430258						416265	4.989
10 2,4-DB	39162	43417	44875	49575	51111	50418		
	50206						46966	9.690
11 Dinoseb	230101	225942	216507	213886	224921	210402		
	211879						219091	3.552
$ 2 2,4-Dichlorophenylacetic acid	108080	110960	107596	110113	106225	101270		
	99510						106251	4.075

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120109.b/002b0201.d
Level 2: /chem/ecd6a.i/120109.b/003b0301.d
Level 3: /chem/ecd6a.i/120109.b/004b0401.d
Level 4: /chem/ecd6a.i/120109.b/005b0501.d
Level 5: /chem/ecd6a.i/120109.b/006b0601.d
Level 6: /chem/ecd6a.i/120109.b/007b0701.d
Level 7: /chem/ecd6a.i/120109.b/008b0801.d

Compound	25.000 Level 1 / 400.000 Level 7	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
1 Dalapon	+++++ / 119890	98106	96954	119992	111692	113951	110098	9.331
3 MCPP	+++++ / 421	350	365	386	397	399	386	6.595
4 Dicamba	449422 / 458911	446473	430565	448713	449180	449025	447470	1.888
5 MCPA	+++++ / 740	819	738	774	762	746	763	4.015
6 Dichlorprop	135168 / 119363	131720	115878	119926	118099	115406	122223	6.468
7 2,4-D	152343 / 150228	149276	135359	148967	143733	146310	146602	3.874
43 Pentachlorophenol	1280880 / 1423708	1326050	1301780	1352765	1381520	1367964	1347810	3.635

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 01-DEC-2009 15:40
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Cal Date : 03-Dec-2009 09:50 tif01533
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
8 2,4,5-TP	528143	568958	555456	578704	602748	597990		
	606932						576990	4.962
9 2,4,5-T	424544	438865	442454	497147	497302	508185		
	531119						477088	8.608
10 Dinoseb	207093	212167	211025	232955	251099	243499		
	254885						230389	8.784
11 2,4-DB	69154	66396	63869	66342	65984	66319		
	68302						66624	2.559
$ 2 2,4-Dichlorophenylacetic acid	122147	120666	115303	119536	117395	116524		
	120941						118930	2.146

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009F0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D
2,4-D	99813.291	103435.11	0.005	3.6	15.0
2,4,5-TP	482193.63	489200.79	0.01	1.4	15.0
2,4-Dichlorophenylacetic aci	106250.60	110571.95	0.01	4.1	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/01/09 Time: 1608

Lab File ID: 009B0901 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D
2,4-D	146602.25	146157.23	0.005	-0.3	15.0
2,4,5-TP	576990.28	605274.08	0.01	4.9	15.0
2,4-Dichlorophenylacetic aci	118930.17	122553.87	0.01	3.0	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0932

Lab File ID: 046F4601 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
2,4-D	99813.291	132088.64	0.005	32.3	15.0	<-
2,4,5-TP	482193.63	585480.53	0.01	21.4	15.0	<-
2,4-Dichlorophenylacetic aci	106250.60	125661.08	0.01	18.3	15.0	<-

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 0932

Lab File ID: 046B4601 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
2,4-D	146602.25	175181.39	0.005	19.5	15.0	<-
2,4,5-TP	576990.28	684291.13	0.01	18.6	15.0	<-
2,4-Dichlorophenylacetic aci	118930.17	140312.93	0.01	18.0	15.0	<-

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1335

Lab File ID: 054F5401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	99813.291	113160.65	0.005	13.4	15.0
2,4,5-TP	482193.63	530954.20	0.01	10.1	15.0
2,4-Dichlorophenylacetic aci	106250.60	114564.34	0.01	7.8	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1335

Lab File ID: 054B5401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	146602.25	145863.24	0.005	-0.5	15.0
2,4,5-TP	576990.28	627390.18	0.01	8.7	15.0
2,4-Dichlorophenylacetic aci	118930.17	127369.27	0.01	7.1	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1816

Lab File ID: 064F6401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D	
2,4-D	99813.291	114963.48	0.005	15.2	15.0	<-
2,4,5-TP	482193.63	543102.29	0.01	12.6	15.0	
2,4-Dichlorophenylacetic aci	106250.60	116700.79	0.01	9.8	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

Instrument ID: ECD6A Calibration Date: 12/02/09 Time: 1816

Lab File ID: 064B6401 Init. Calib. Date(s): 12/01/09 12/01/09

Heated Purge: (Y/N) N Init. Calib. Times: 1250 1540

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	146602.25	148472.53	0.005	1.3	15.0
2,4,5-TP	576990.28	614706.64	0.01	6.5	15.0
2,4-Dichlorophenylacetic aci	118930.17	121096.87	0.01	1.8	15.0

FORM VII HERBICIDE

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/009f0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	4.000	4.000	0.000	165152948	2000.00	1980	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.698	10.698	0.000	55285977	500.000	520	(M)
	3 Dicamba					CAS #: 6597-78-0	
	11.214	11.214	0.000	79930813	200.000	201	(M)
	4 MCPP					CAS #: 7085-19-0	
	11.729	11.729	0.000	7183913	20000.0	20600	(M)
	5 MCPA					CAS #: 94-74-6	
	11.999	11.999	0.000	13166275	20000.0	20300	(M)
	6 Dichlorprop					CAS #: 120-36-5	
	12.512	12.512	0.000	19418200	200.000	198	(M)
	7 2,4-D					CAS #: 94-75-7	
	12.775	12.775	0.000	20687022	200.000	207	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.924	12.924	0.000	208818126	200.000	199	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.512	13.512	0.000	97840159	200.000	203	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.715	13.715	0.000	85970231	200.000	206	(M)
10 2,4-DB					CAS #: 94-82-6	
14.064	14.064	0.000	9875189	200.000	210	(M)
11 Dinoseb					CAS #: 88-85-7	
14.638	14.638	0.000	43674888	200.000	199	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009f0901.d
Date : 01-DEC-2009 16:08
Client ID: HSTD01
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

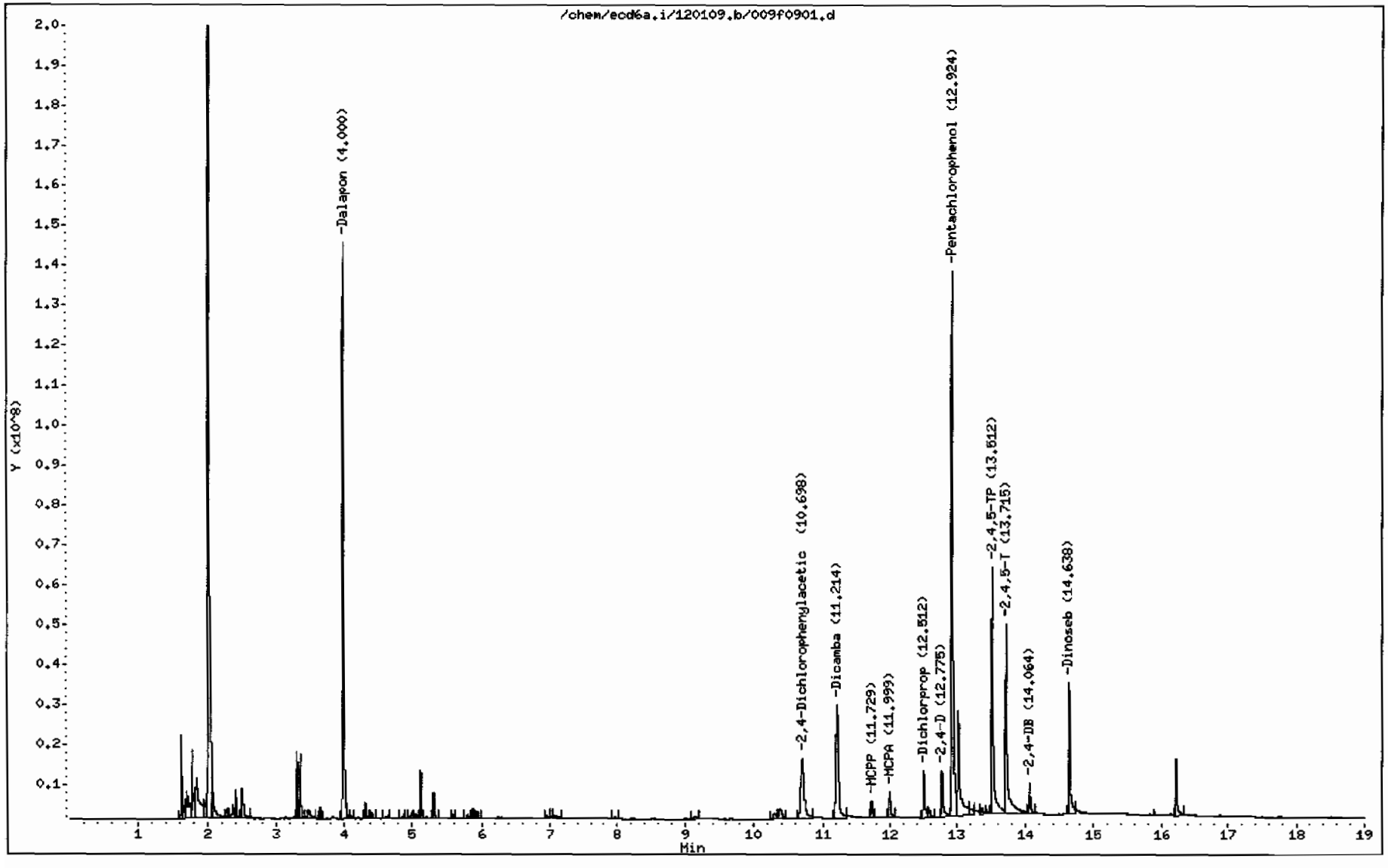

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

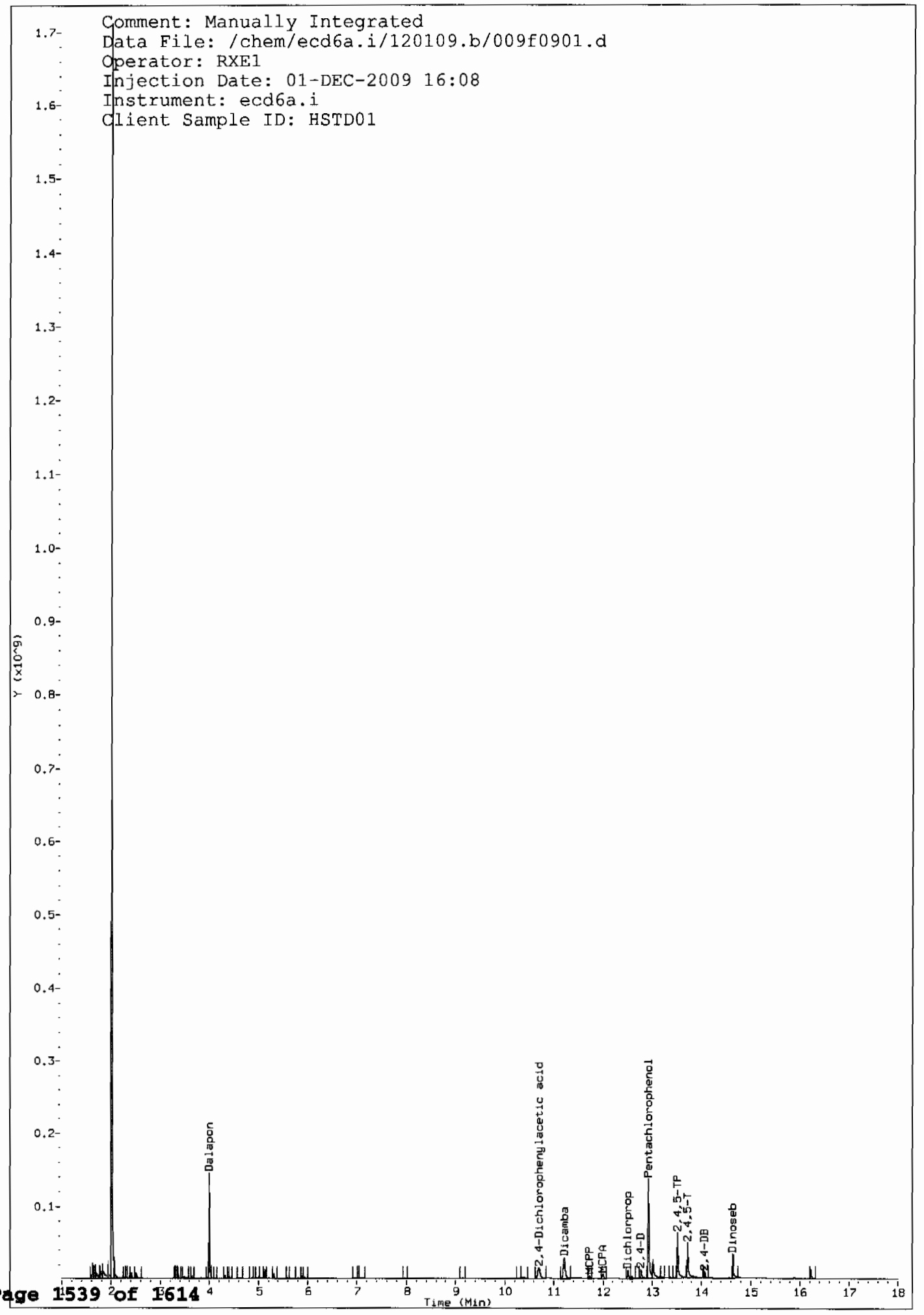

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009f0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

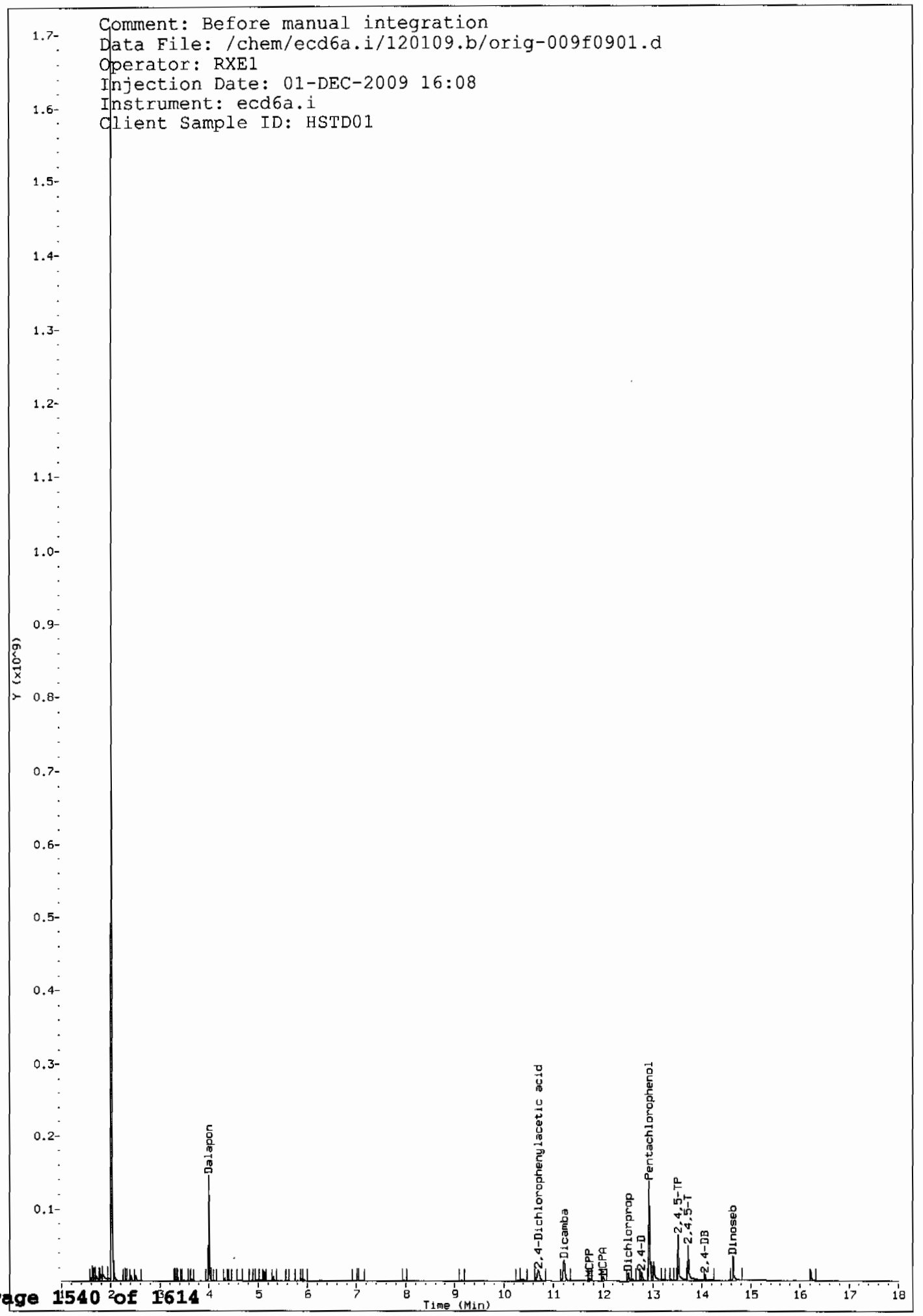

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/009b0901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 01-DEC-2009 16:08
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 01-Dec-2009 16:29 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
1 Dalapon					CAS #: 88-85-7		
3.963	3.963	0.000	218849243	2000.00	1990		
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9		
11.717	11.717	0.000	61276933	500.000	515		(M)
3 MCPP					CAS #: 7085-19-0		
12.246	12.246	0.000	7892573	20000.0	20400		(M)
4 Dicamba					CAS #: 6597-78-0		
12.000	12.000	0.000	90197474	200.000	202		(M)
5 MCPA					CAS #: 94-74-6		
12.552	12.552	0.000	14594046	20000.0	19100		(M)
6 Dichlorprop					CAS #: 120-36-5		
12.927	12.927	0.000	23159743	200.000	189		(M)
7 2,4-D					CAS #: 94-75-7		
13.216	13.216	0.000	29231447	200.000	199		
43 Pentachlorophenol					CAS #: 87-86-5		
13.487	13.487	0.000	276356059	200.000	205		(M)
8 2,4,5-TP					CAS #: 93-72-1		
13.825	13.825	0.000	121054815	200.000	210		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.065	14.065	0.000	100408046	200.000	210		(M)
10 Dinoseb					CAS #: 88-85-7		
14.519	14.519	0.000	48435715	200.000	210		(M)
11 2,4-DB					CAS #: 94-82-6		
14.354	14.354	0.000	13231896	200.000	199		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/009b0901.d

Date : 01-DEC-2009 16:08

Client ID: HSTD01

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

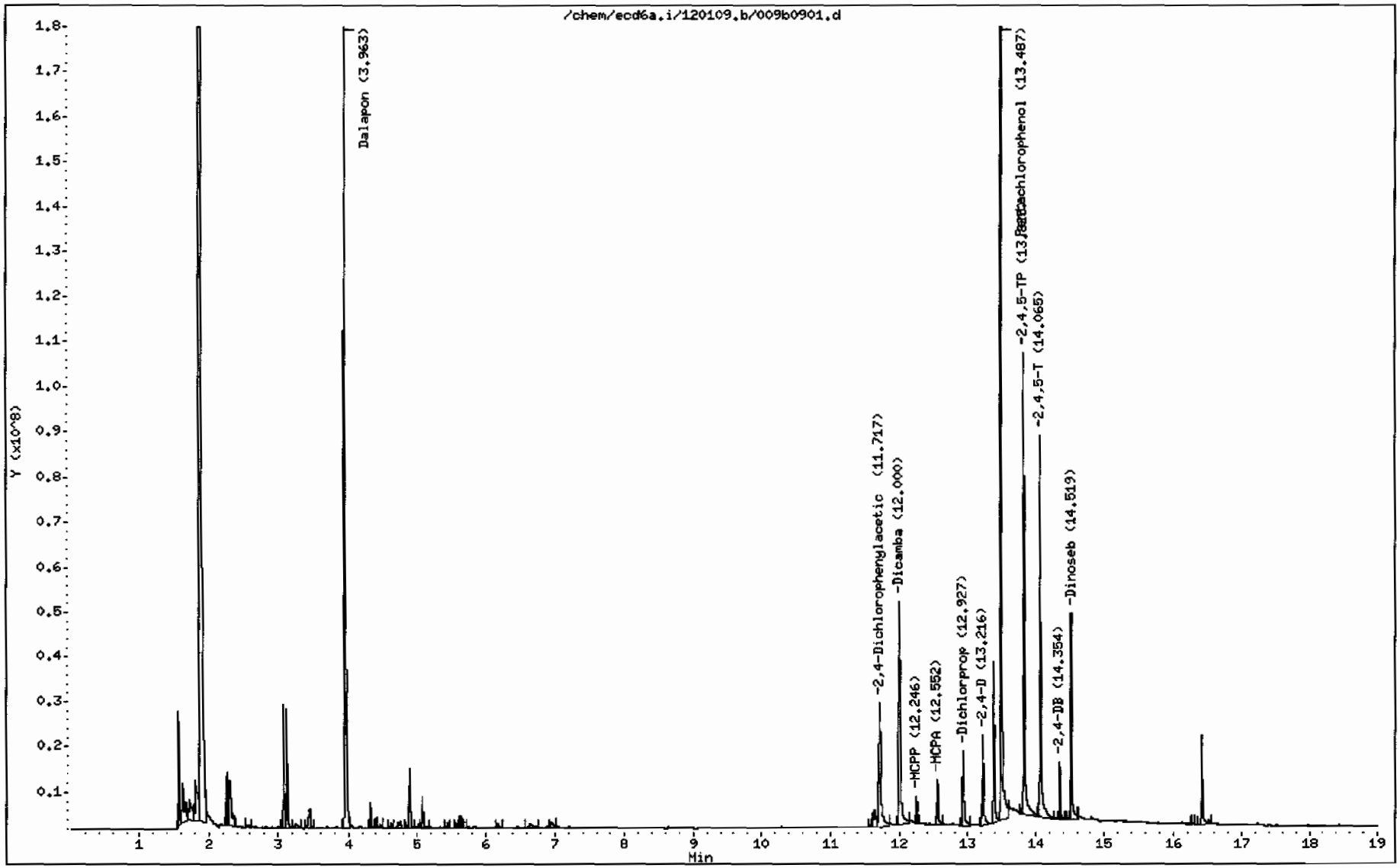

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

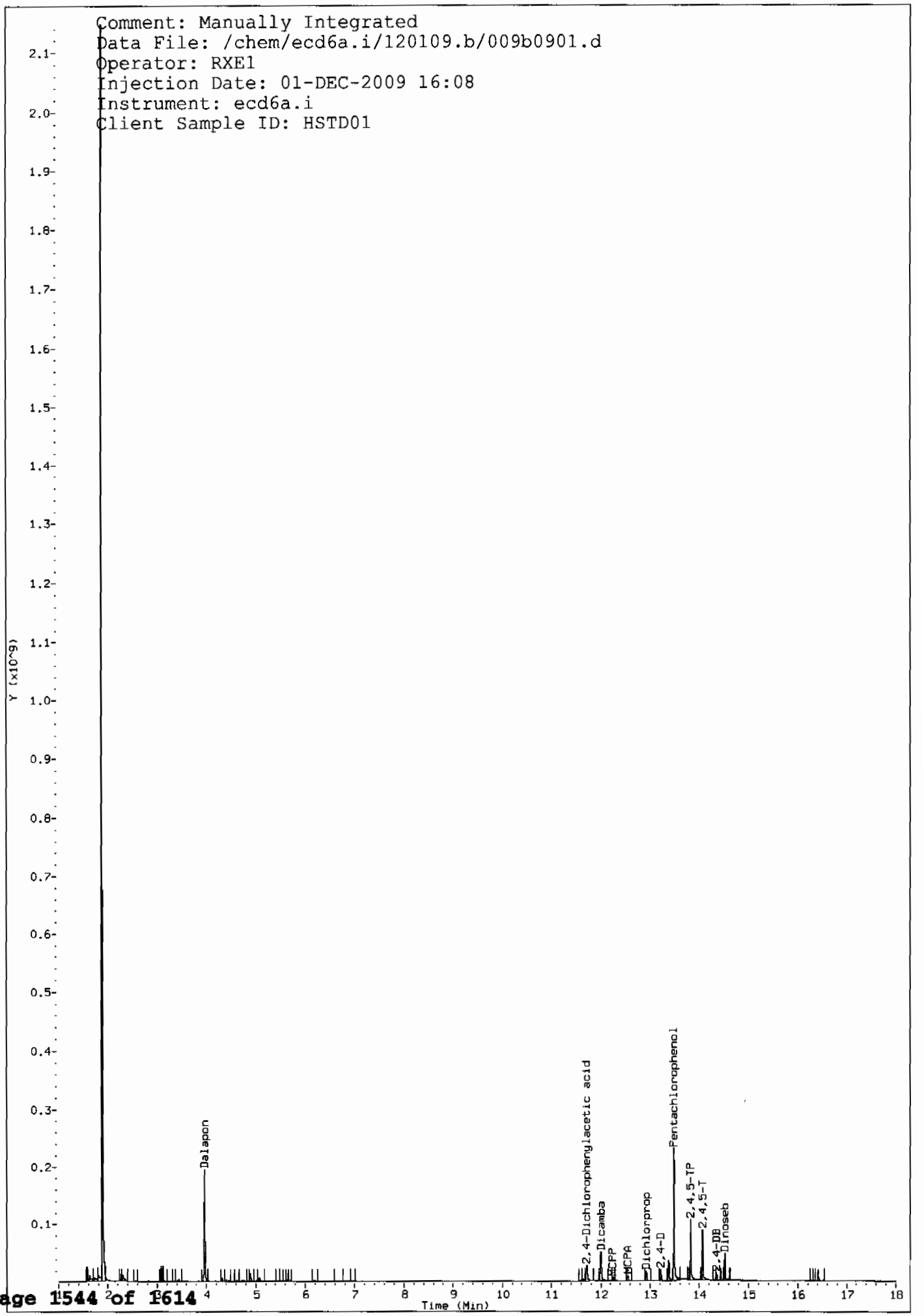

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-009b0901.d
Operator: RXE1
Injection Date: 01-DEC-2009 16:08
Instrument: ecd6a.i
Client Sample ID: HSTD01

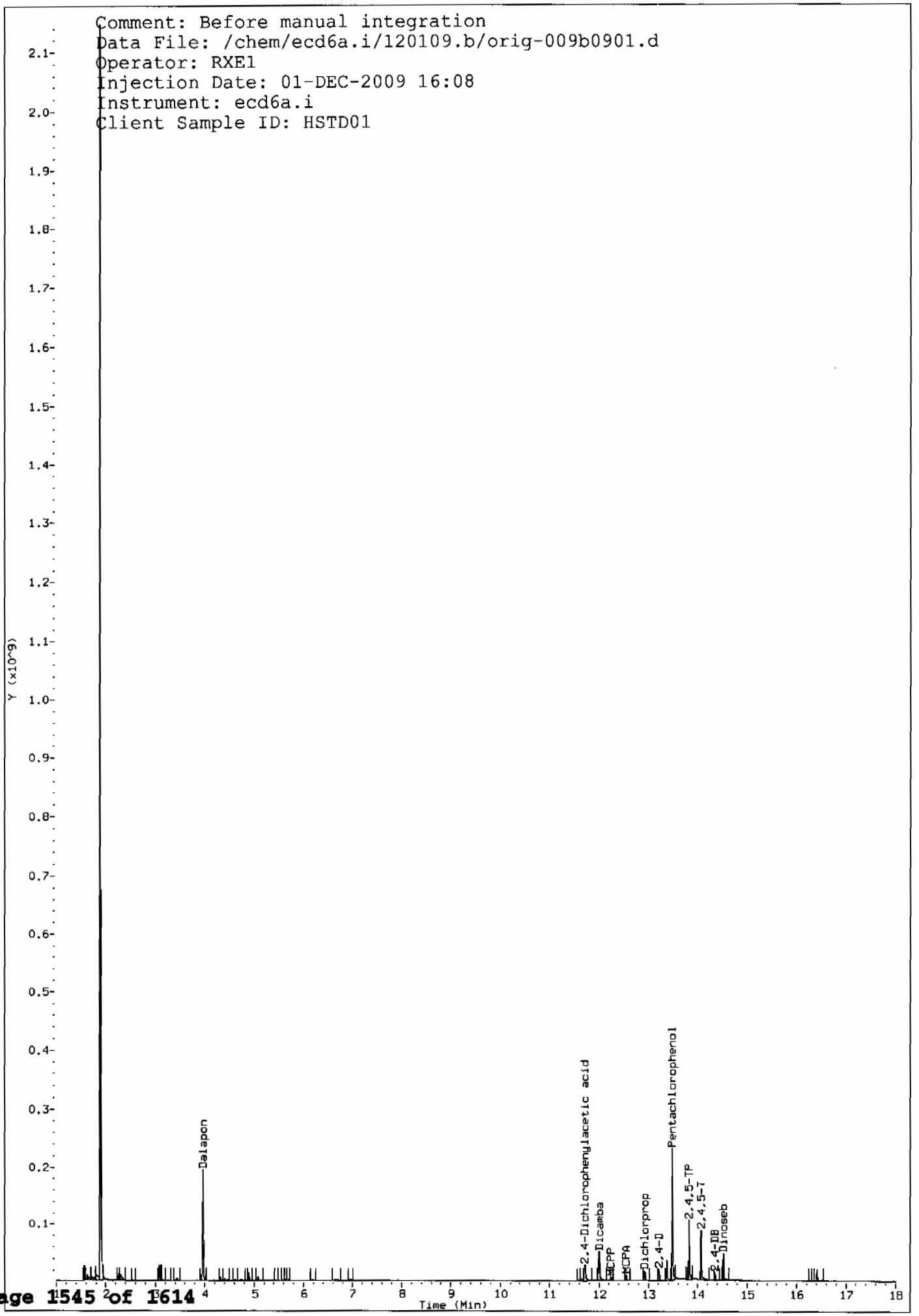

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/046f4601.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD05
Inj Date : 02-DEC-2009 09:32
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 46 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.988	4.000	-0.012	185832745	2000.00	2220	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.683	10.698	-0.015	62830540	500.000	591	
	3 Dicamba					CAS #: 6597-78-0	
	11.203	11.214	-0.011	91808390	200.000	230	
	4 MCPP					CAS #: 7085-19-0	
	11.721	11.729	-0.008	8523580	20000.0	24400	
	5 MCPA					CAS #: 94-74-6	
	11.993	11.999	-0.006	14567167	20000.0	22400	
	6 Dichlorprop					CAS #: 120-36-5	
	12.506	12.512	-0.006	23566167	200.000	240	
	7 2,4-D					CAS #: 94-75-7	
	12.769	12.775	-0.006	26417729	200.000	265	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.922	12.924	-0.002	247295202	200.000	235	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.508	13.512	-0.004	117096105	200.000	243	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.711	13.715	-0.004	104921186	200.000	252	(M)
10 2,4-DB					CAS #: 94-82-6	
14.061	14.061	0.000	13090632	200.000	279	(M)
11 Dinoseb					CAS #: 88-85-7	
14.637	14.638	-0.001	51334752	200.000	234	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/046f4601.d
Date : 02-DEC-2009 09:32
Client ID: HSTD05
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

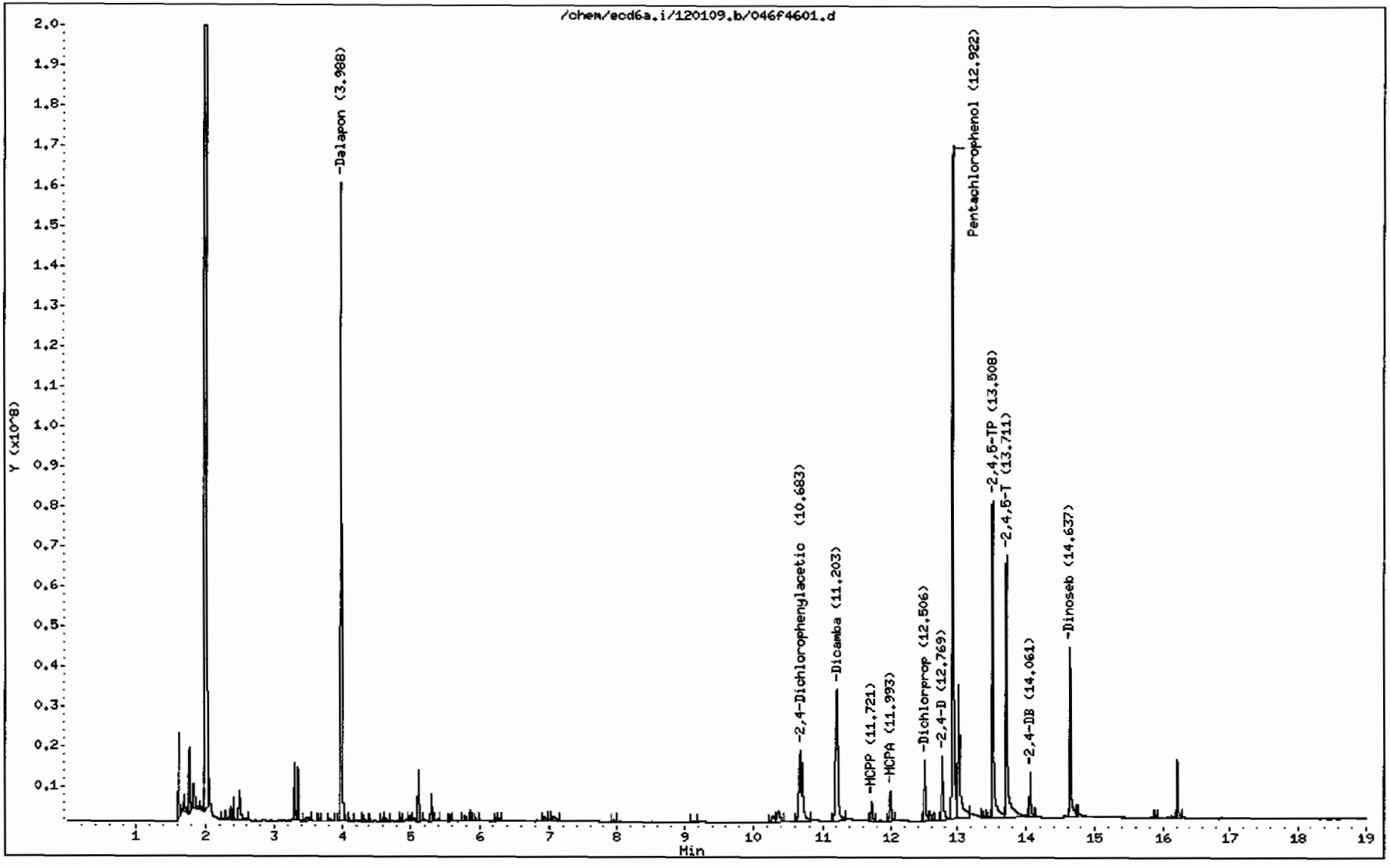

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/046f4601.d
Operator: RXE1
Injection Date: 02-DEC-2009 09:32
Instrument: ecd6a.i
Client Sample ID: HSTD05

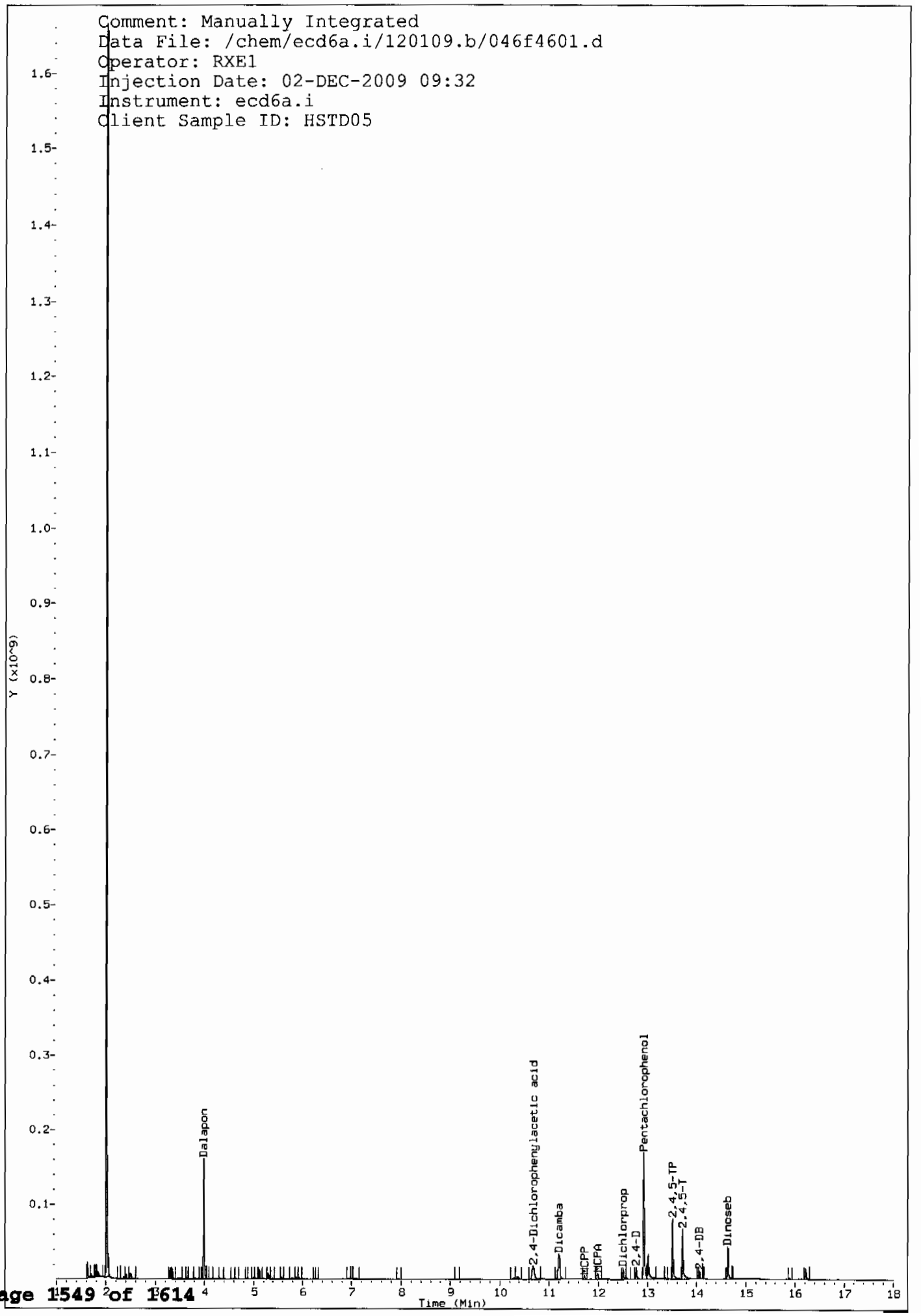

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-046f4601.d
Operator: RXE1
Injection Date: 02-DEC-2009 09:32
Instrument: ecd6a.i
Client Sample ID: HSTD05

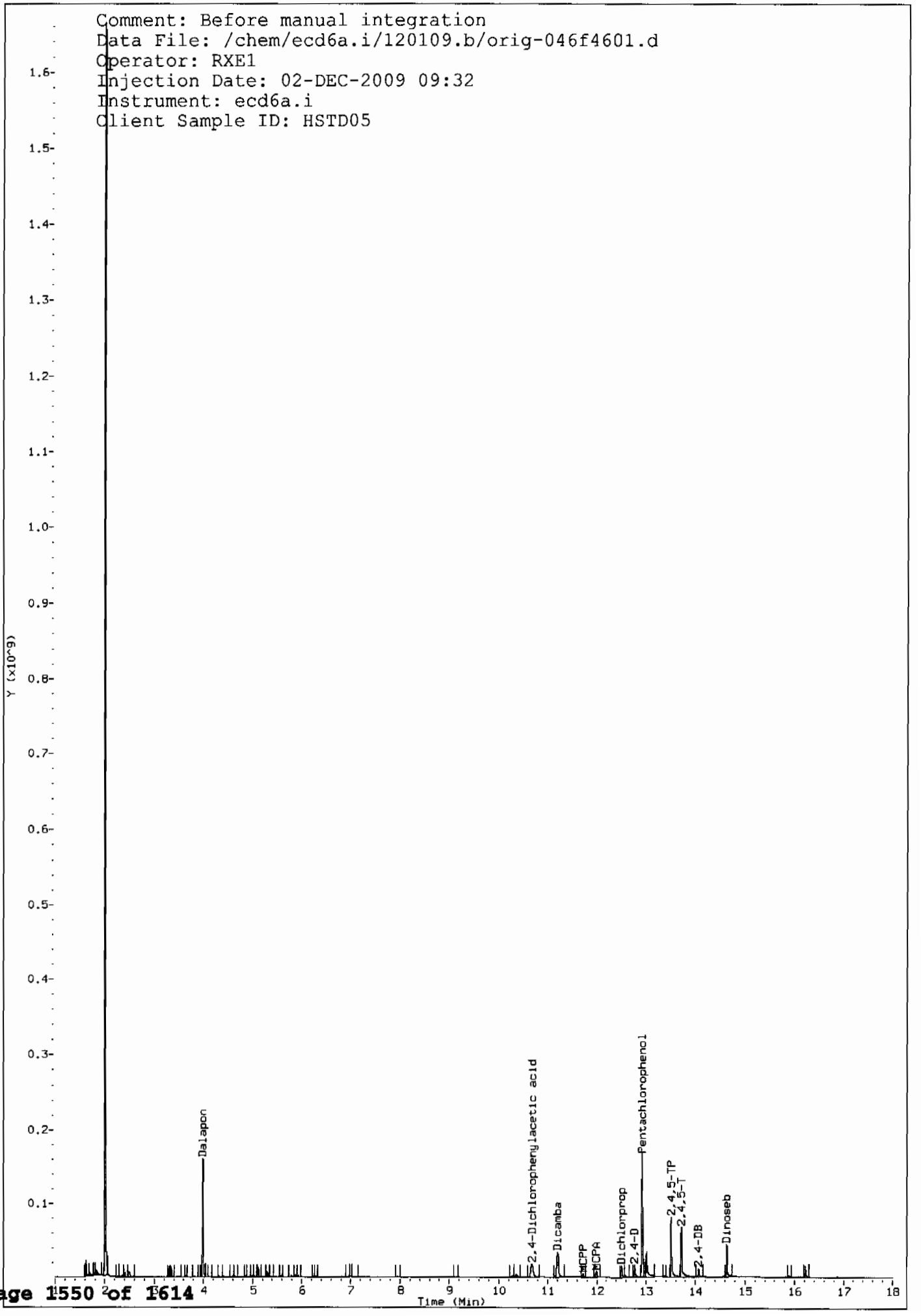

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/046b4601.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD05
Inj Date : 02-DEC-2009 09:32
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 46 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon						CAS #: 88-85-7
	3.947	3.963	-0.016	244034296	2000.00	2220	
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.705	11.717	-0.012	70156467	500.000	590	
	3 MCPP						CAS #: 7085-19-0
	12.240	12.246	-0.006	9609298	20000.0	24900	
	4 Dicamba						CAS #: 6597-78-0
	11.993	12.000	-0.007	107381522	200.000	240	
	5 MCPA						CAS #: 94-74-6
	12.548	12.552	-0.004	16162526	20000.0	21200	
	6 Dichlorprop						CAS #: 120-36-5
	12.921	12.927	-0.006	27396917	200.000	224	
	7 2,4-D						CAS #: 94-75-7
	13.212	13.216	-0.004	35036277	200.000	239	
	43 Pentachlorophenol						CAS #: 87-86-5
	13.480	13.487	-0.007	321100785	200.000	238	
	8 2,4,5-TP						CAS #: 93-72-1
	13.822	13.825	-0.003	136858226	200.000	237	

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
9 2,4,5-T					CAS #: 93-76-5
14.062	14.065	-0.003	111363599	200.000	233
10 Dinoseb					CAS #: 88-85-7
14.517	14.519	-0.002	67341377	200.000	292
11 2,4-DB					CAS #: 94-82-6
14.351	14.354	-0.003	16091654	200.000	242

Data File: /chem/ecd6a.i/120109.b/046b4601.d
Date : 02-DEC-2009 09:32
Client ID: HSTD05
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

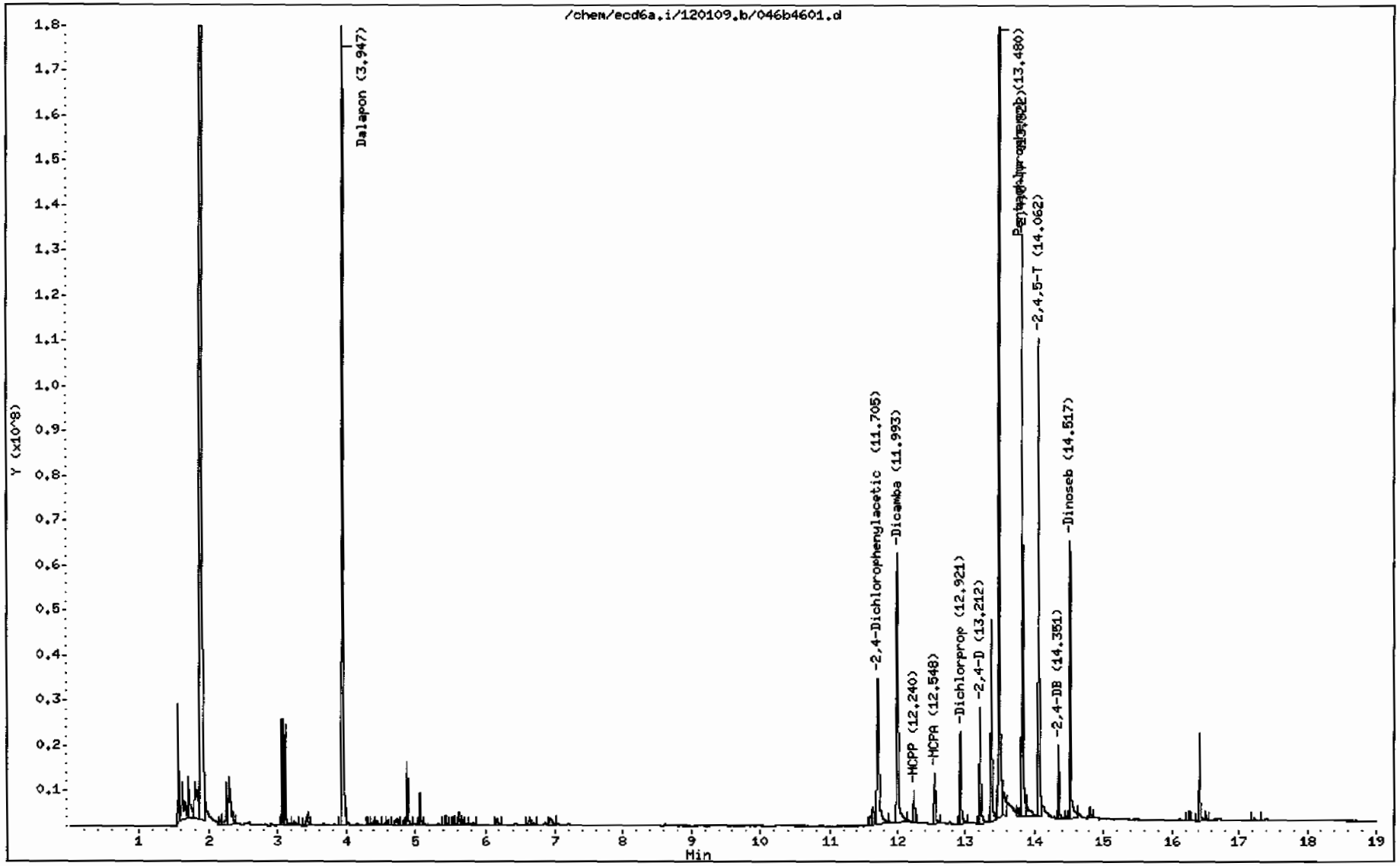

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/054f5401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD06
Inj Date : 02-DEC-2009 13:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 08:51 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 54 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
1 Dalapon					CAS #: 75-99-0	
3.987	4.000	-0.013	143542393	2000.00	1720	(M)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.687	10.698	-0.011	57282168	500.000	539	(M)
3 Dicamba					CAS #: 6597-78-0	
11.206	11.214	-0.008	82460922	200.000	207	(M)
4 MCPP					CAS #: 7085-19-0	
11.725	11.729	-0.004	7297051	20000.0	20900	(M)
5 MCPA					CAS #: 94-74-6	
11.994	11.999	-0.005	12863607	20000.0	19800	(M)
6 Dichlorprop					CAS #: 120-36-5	
12.508	12.512	-0.004	21553730	200.000	220	(M)
7 2,4-D					CAS #: 94-75-7	
12.773	12.775	-0.002	22632130	200.000	227	(M)
43 Pentachlorophenol					CAS #: 87-86-5	
12.923	12.924	-0.001	224095918	200.000	213	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.511	13.512	-0.001	106190840	200.000	220	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.713	13.715	-0.002	89814416	200.000	216	(M)
10 2,4-DB					CAS #: 94-82-6	
14.062	14.061	0.001	11400228	200.000	243	(M)
11 Dinoseb					CAS #: 88-85-7	
14.639	14.638	0.001	43329429	200.000	198	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/054f5401.d
Date : 02-DEC-2009 13:35
Client ID: HSTD06
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

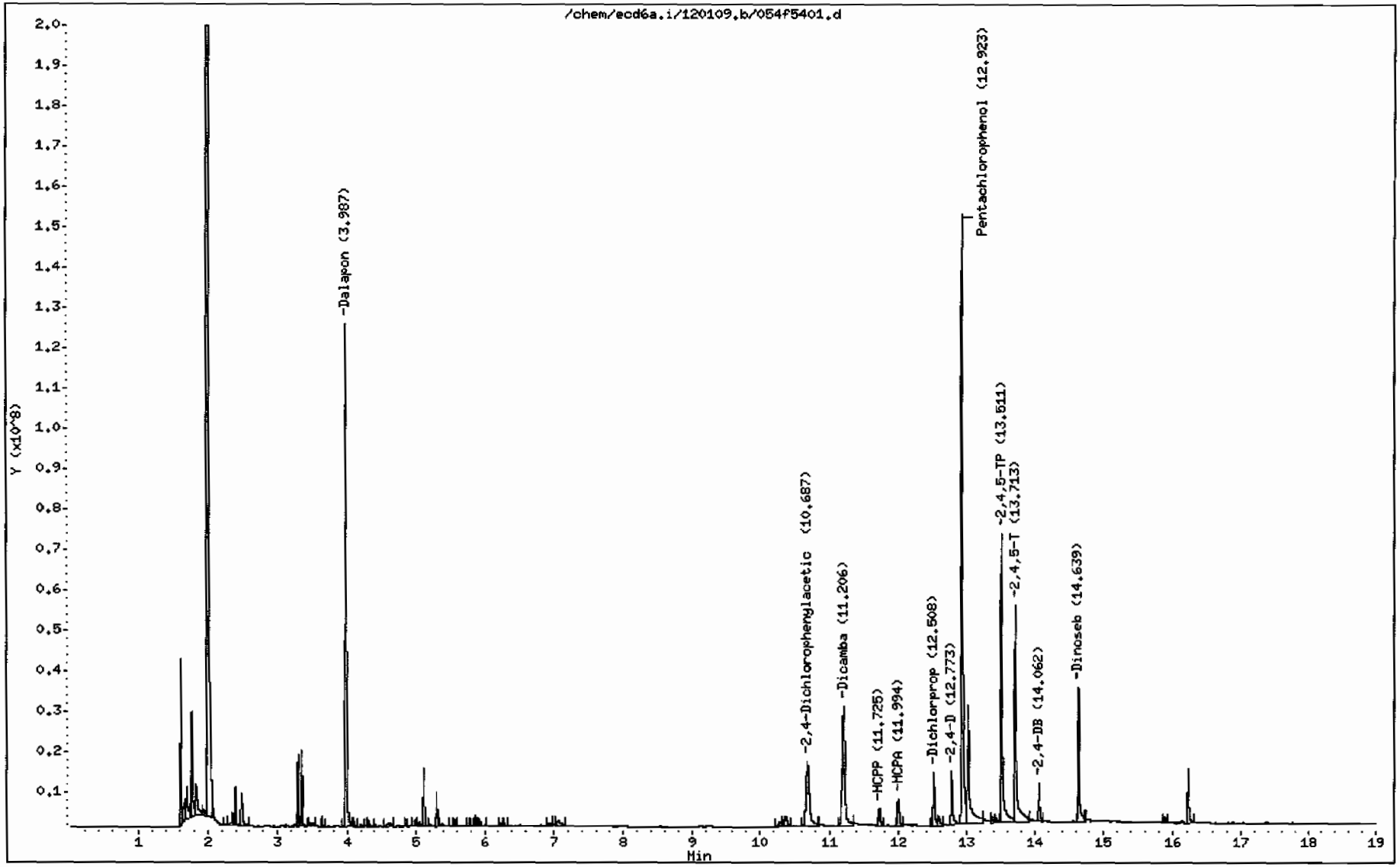

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/054f5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06

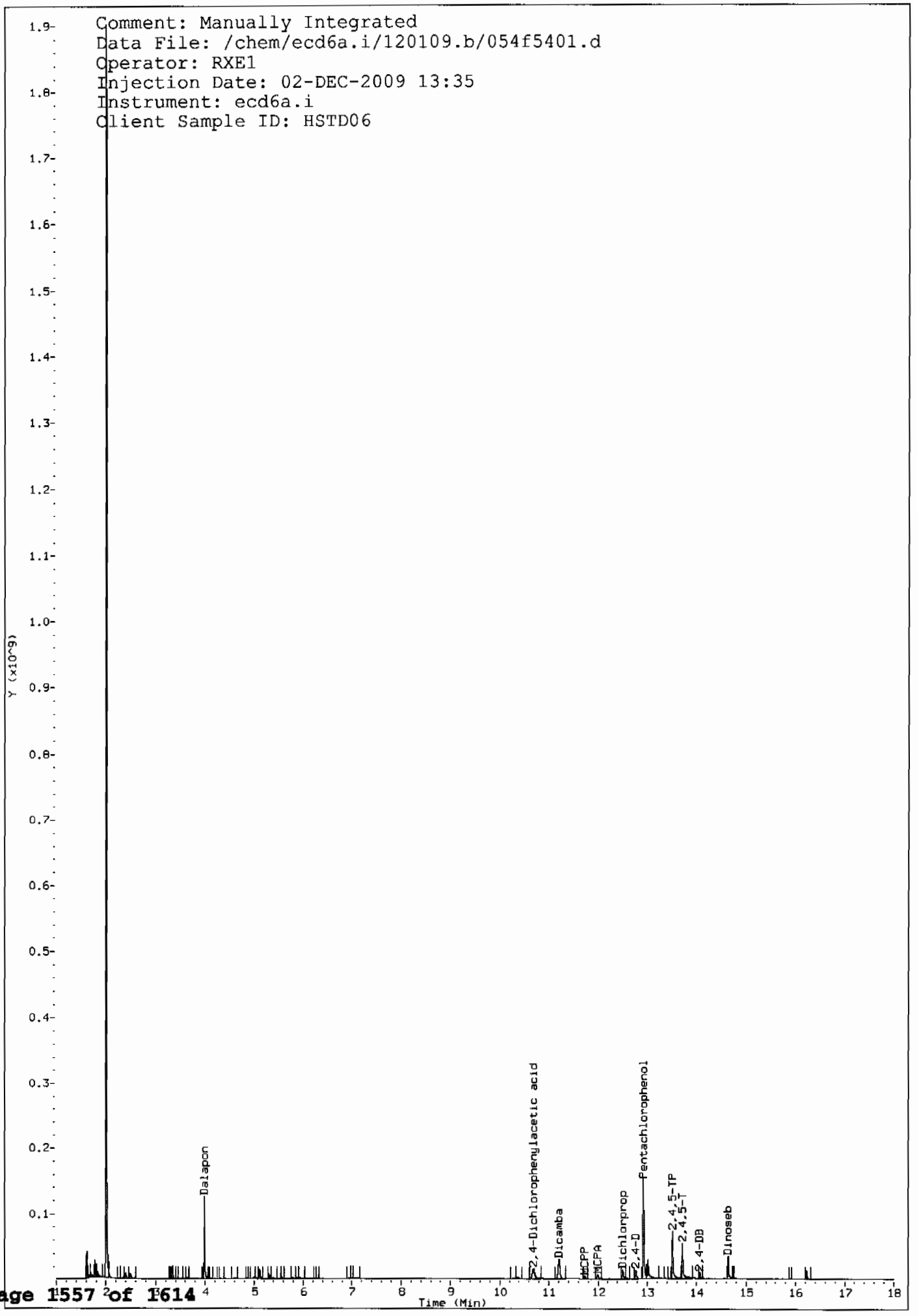

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-054f5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06

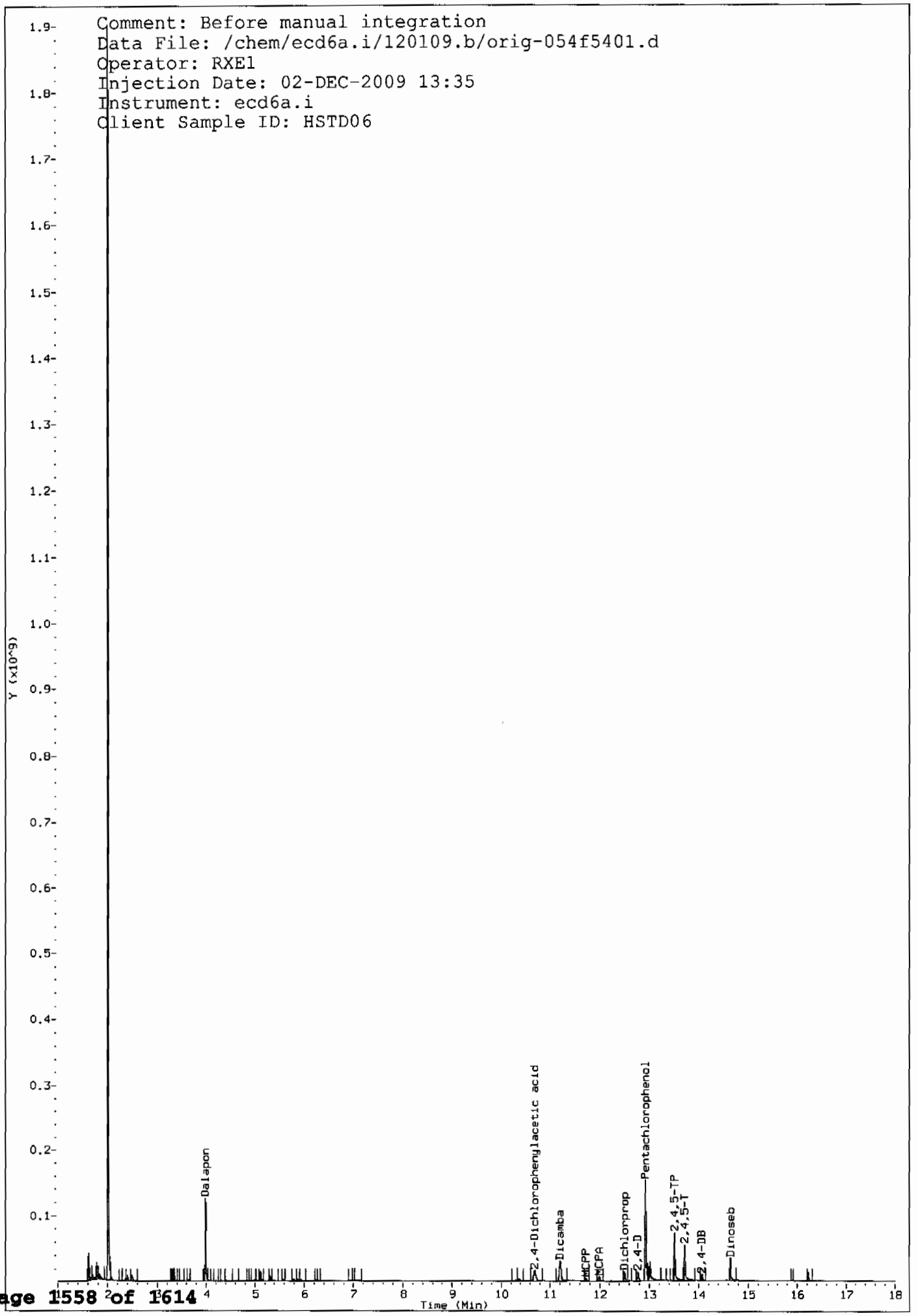

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/054b5401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD06
Inj Date : 02-DEC-2009 13:35
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:23 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 54 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 88-85-7	
	3.949	3.963	-0.014	186952303	2000.00	1700	(M)
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	11.707	11.717	-0.010	63684634	500.000	535	(M)
	3 MCPP					CAS #: 7085-19-0	
	12.242	12.246	-0.004	7776769	20000.0	20100	(M)
	4 Dicamba					CAS #: 6597-78-0	
	11.994	12.000	-0.006	95444465	200.000	213	(M)
	5 MCPA					CAS #: 94-74-6	
	12.548	12.552	-0.004	13686453	20000.0	17900	(M)
	6 Dichlorprop					CAS #: 120-36-5	
	12.922	12.927	-0.005	24926533	200.000	204	(M)
	7 2,4-D					CAS #: 94-75-7	
	13.213	13.216	-0.003	29172648	200.000	199	(M)
	43 Pentachlorophenol					CAS #: 87-86-5	
	13.485	13.487	-0.002	297450227	200.000	221	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.824	13.825	-0.001	125478035	200.000	217	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
14.063	14.065	-0.002	100308736	200.000	210	(M)
10 Dinoseb					CAS #: 88-85-7	
14.517	14.519	-0.002	49753776	200.000	216	(M)
11 2,4-DB					CAS #: 94-82-6	
14.352	14.354	-0.002	14248376	200.000	214	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/054b5401.d
Date : 02-DEC-2009 13:35
Client ID: HSTD06
Sample Info: !WHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

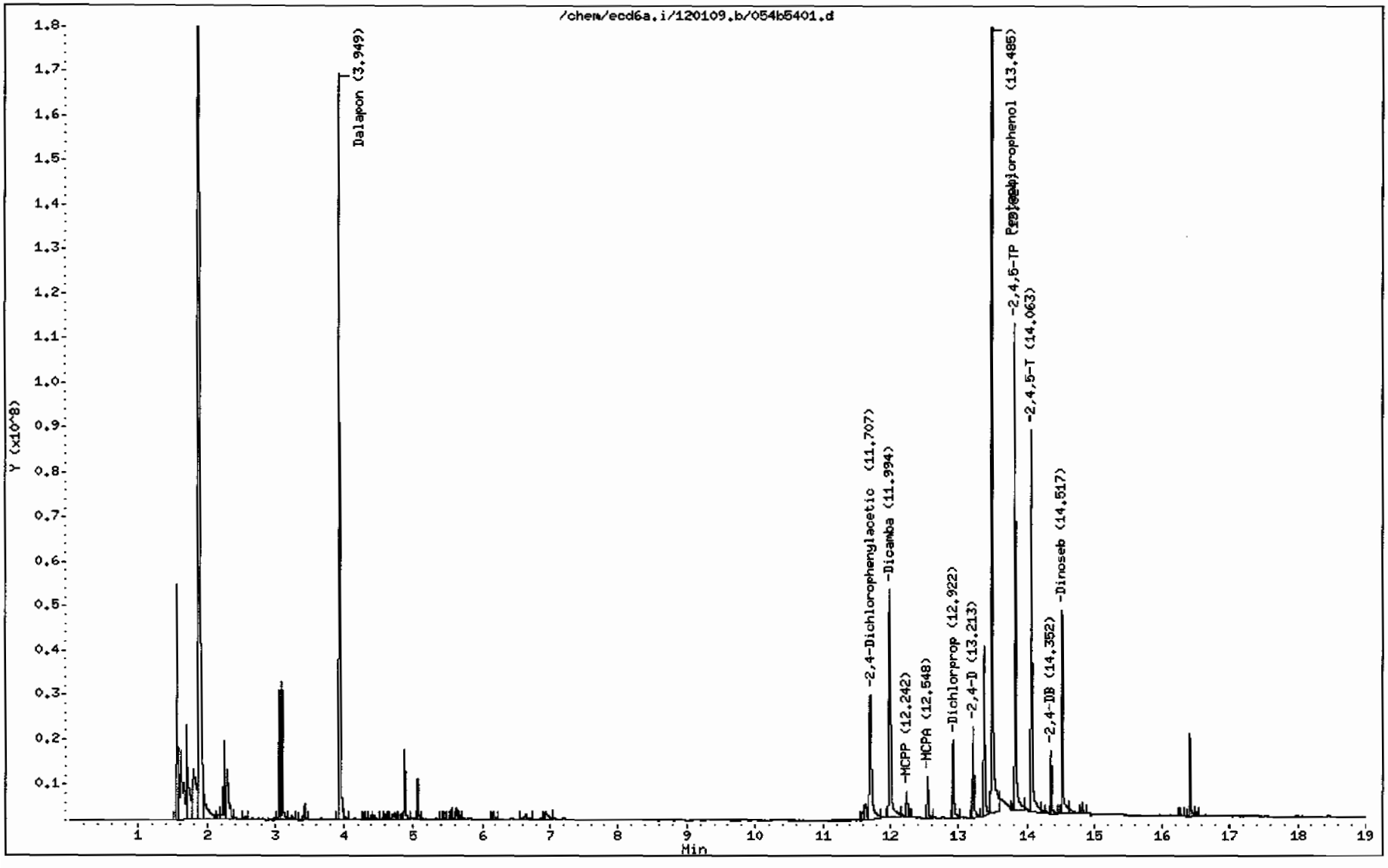

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/054b5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06

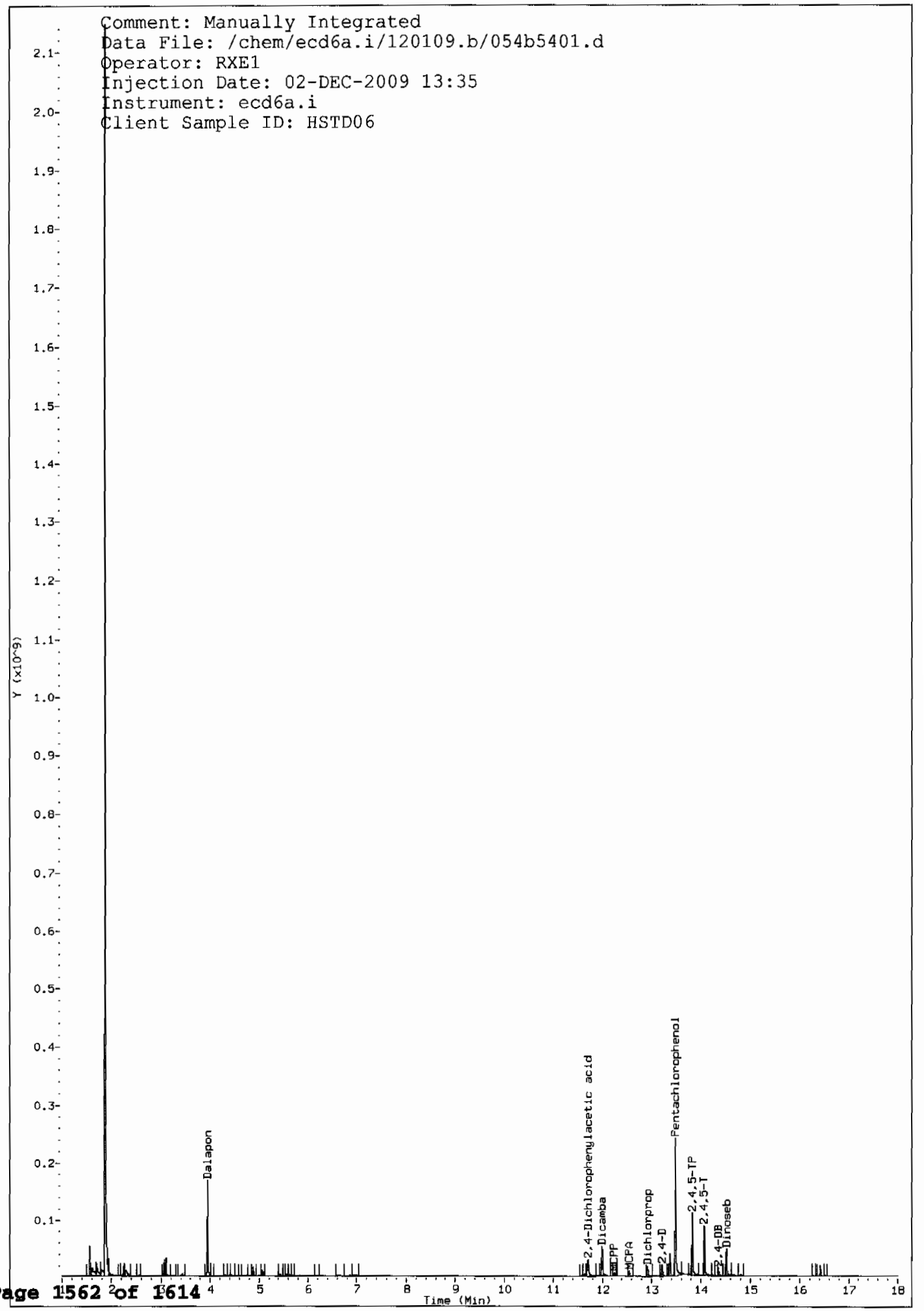

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-054b5401.d
Operator: RXE1
Injection Date: 02-DEC-2009 13:35
Instrument: ecd6a.i
Client Sample ID: HSTD06

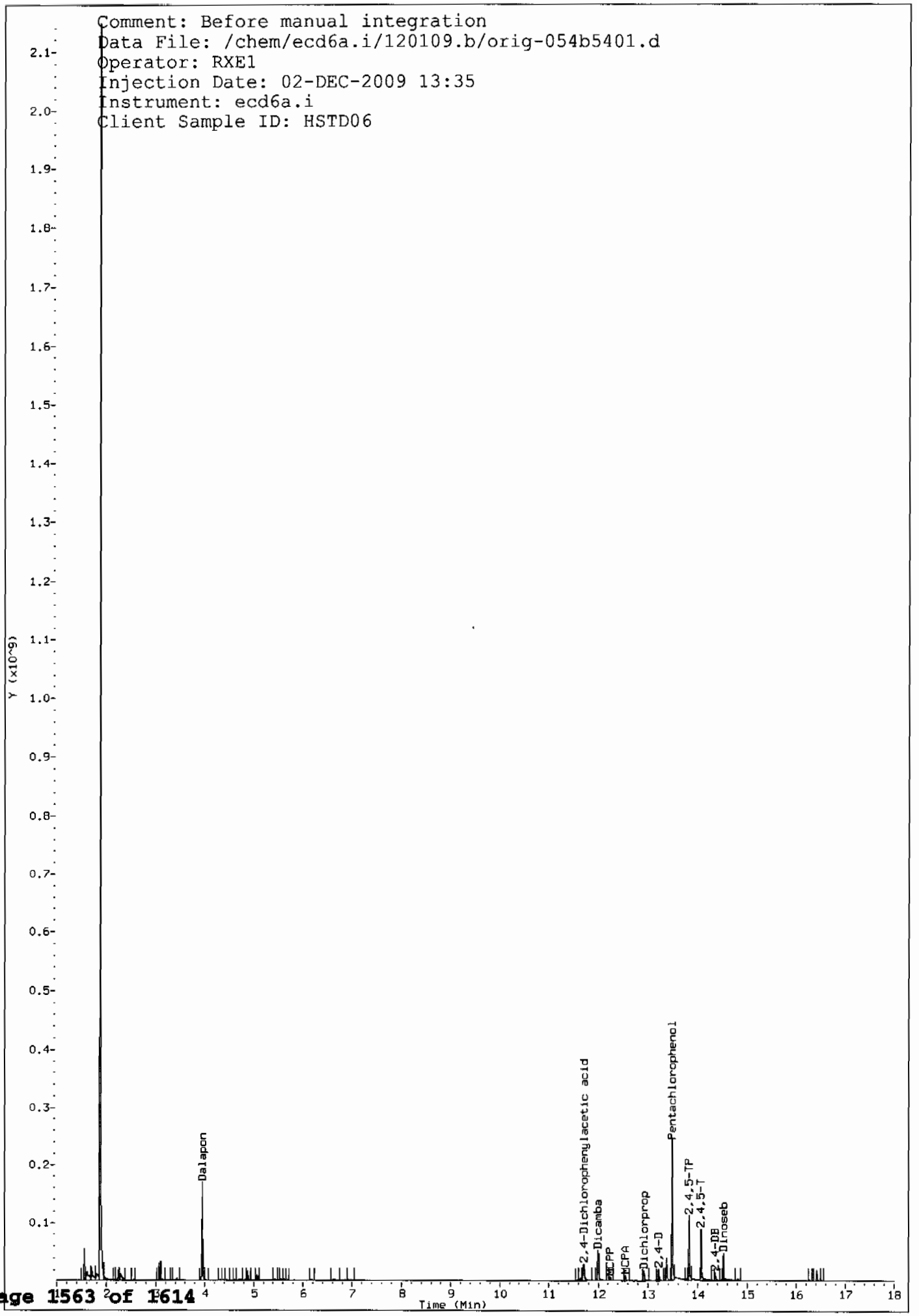

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/064f6401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD07
Inj Date : 02-DEC-2009 18:16
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 08:51 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 64 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.990	4.000	-0.010	146943601	2000.00	1760	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.689	10.698	-0.009	58350393	500.000	549	
	3 Dicamba					CAS #: 6597-78-0	
	11.205	11.214	-0.009	84731034	200.000	213	
	4 MCPP					CAS #: 7085-19-0	
	11.723	11.729	-0.006	7401102	20000.0	21200	
	5 MCPA					CAS #: 94-74-6	
	11.996	11.999	-0.003	12583043	20000.0	19400	
	6 Dichlorprop					CAS #: 120-36-5	
	12.507	12.512	-0.005	21509725	200.000	219	
	7 2,4-D					CAS #: 94-75-7	
	12.771	12.775	-0.004	22992695	200.000	230	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.922	12.924	-0.002	227042775	200.000	216	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.510	13.512	-0.002	108620457	200.000	225	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.714	13.715	-0.001	91626946	200.000	220		(M)
10 2,4-DB					CAS #: 94-82-6		
14.062	14.061	0.001	11146569	200.000	237		(M)
11 Dinoseb					CAS #: 88-85-7		
14.638	14.638	0.000	45247718	200.000	206		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/064f6401.d
Date : 02-DEC-2009 18:16
Client ID: HSTD07
Sample Info: IWHB091030-12

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

Column phase: Rtx-CLP

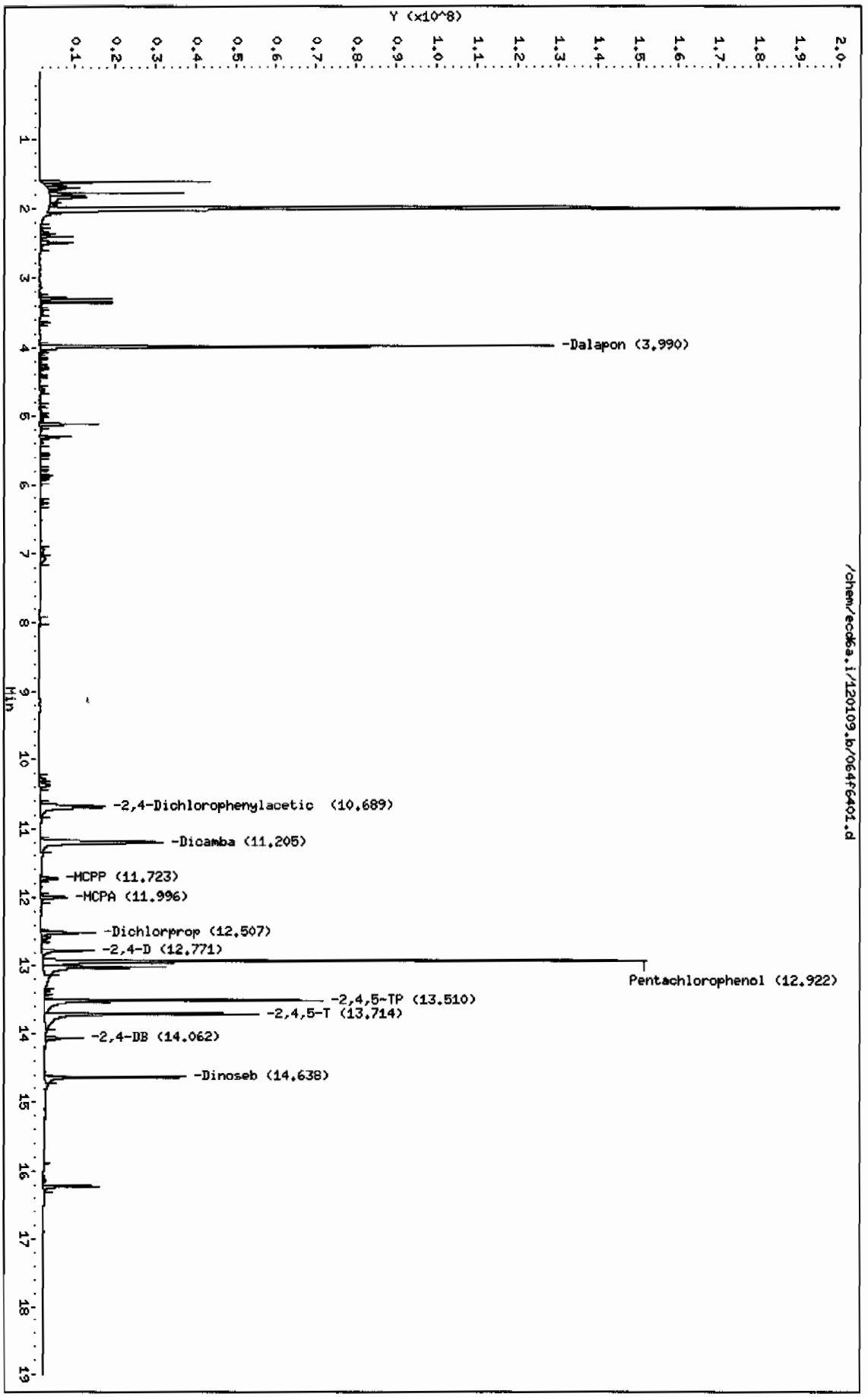

Page 1

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/064f6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07

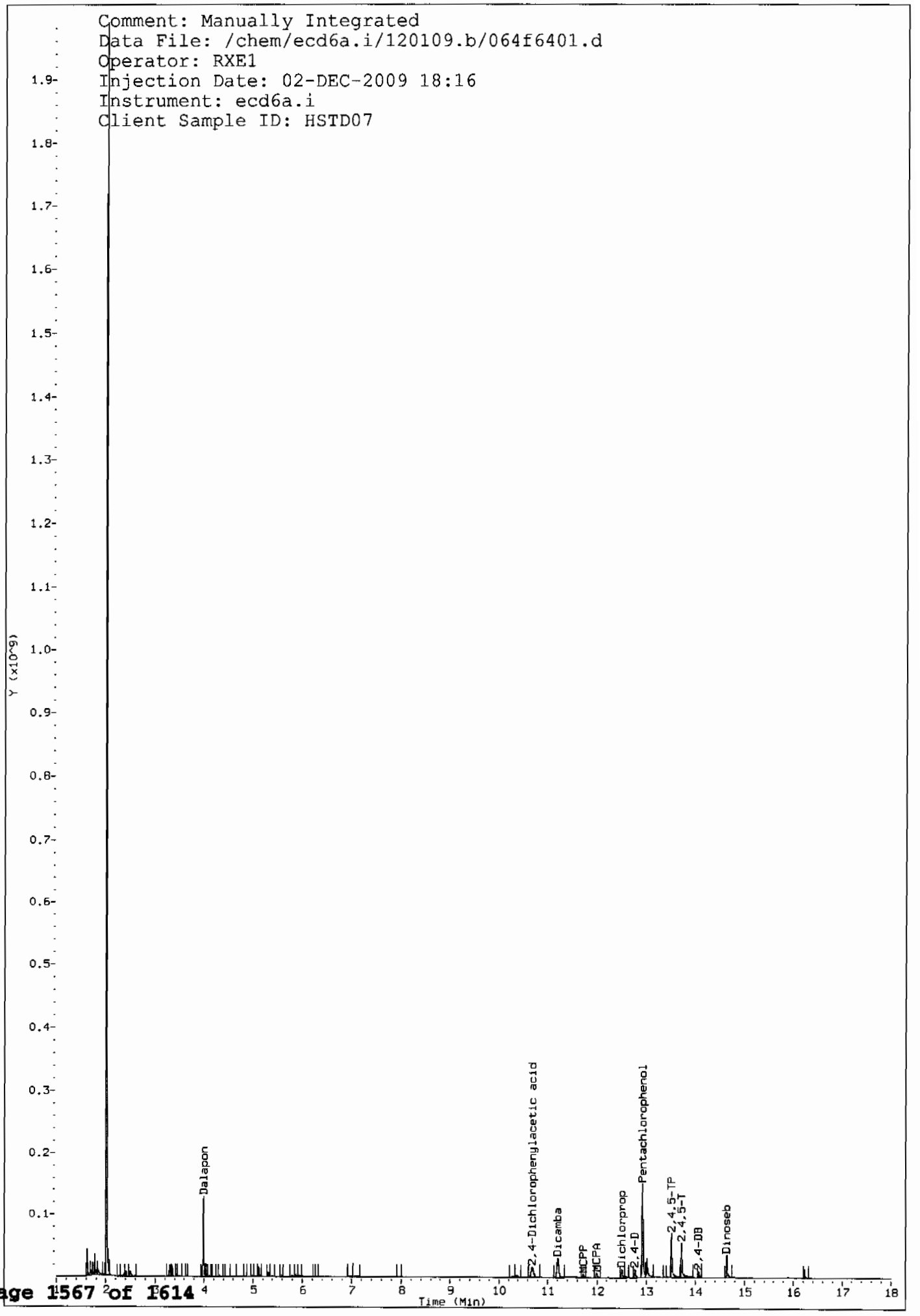

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-064f6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07

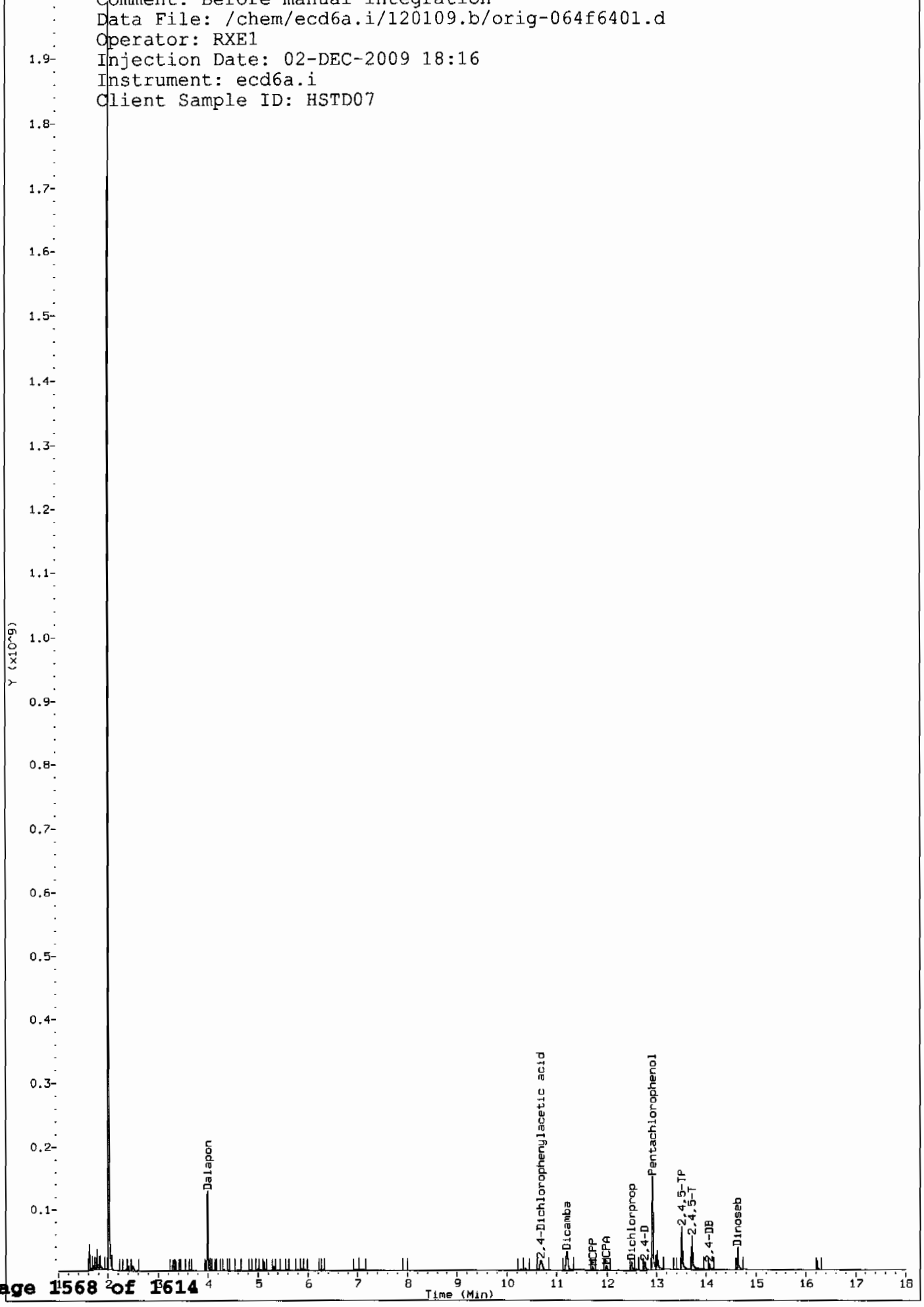

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/064b6401.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD07
Inj Date : 02-DEC-2009 18:16
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 08:49 reb01393 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 64 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dalapon					CAS #: 88-85-7
	3.954	3.963	-0.009	189551047	2000.00	1720
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
	11.708	11.717	-0.009	60548437	500.000	509
	3 MCPP					CAS #: 7085-19-0
	12.242	12.246	-0.004	7731987	20000.0	20000
	4 Dicamba					CAS #: 6597-78-0
	11.996	12.000	-0.004	94531197	200.000	211
	5 MCPA					CAS #: 94-74-6
	12.549	12.552	-0.003	13054565	20000.0	17100
	6 Dichlorprop					CAS #: 120-36-5
	12.922	12.927	-0.005	24183707	200.000	198
	7 2,4-D					CAS #: 94-75-7
	13.213	13.216	-0.003	29694506	200.000	202
	43 Pentachlorophenol					CAS #: 87-86-5
	13.483	13.487	-0.004	279993830	200.000	208
	8 2,4,5-TP					CAS #: 93-72-1
	13.824	13.825	-0.001	122941327	200.000	213

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.064	14.065	-0.001	105723314	200.000	222		
10 Dinoseb					CAS #: 88-85-7		
14.518	14.519	-0.001	51038579	200.000	222		(M)
11 2,4-DB					CAS #: 94-82-6		
14.352	14.354	-0.002	14156715	200.000	212		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/064b6401.d

Date : 02-DEC-2009 18:16

Client ID: HSTD07

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

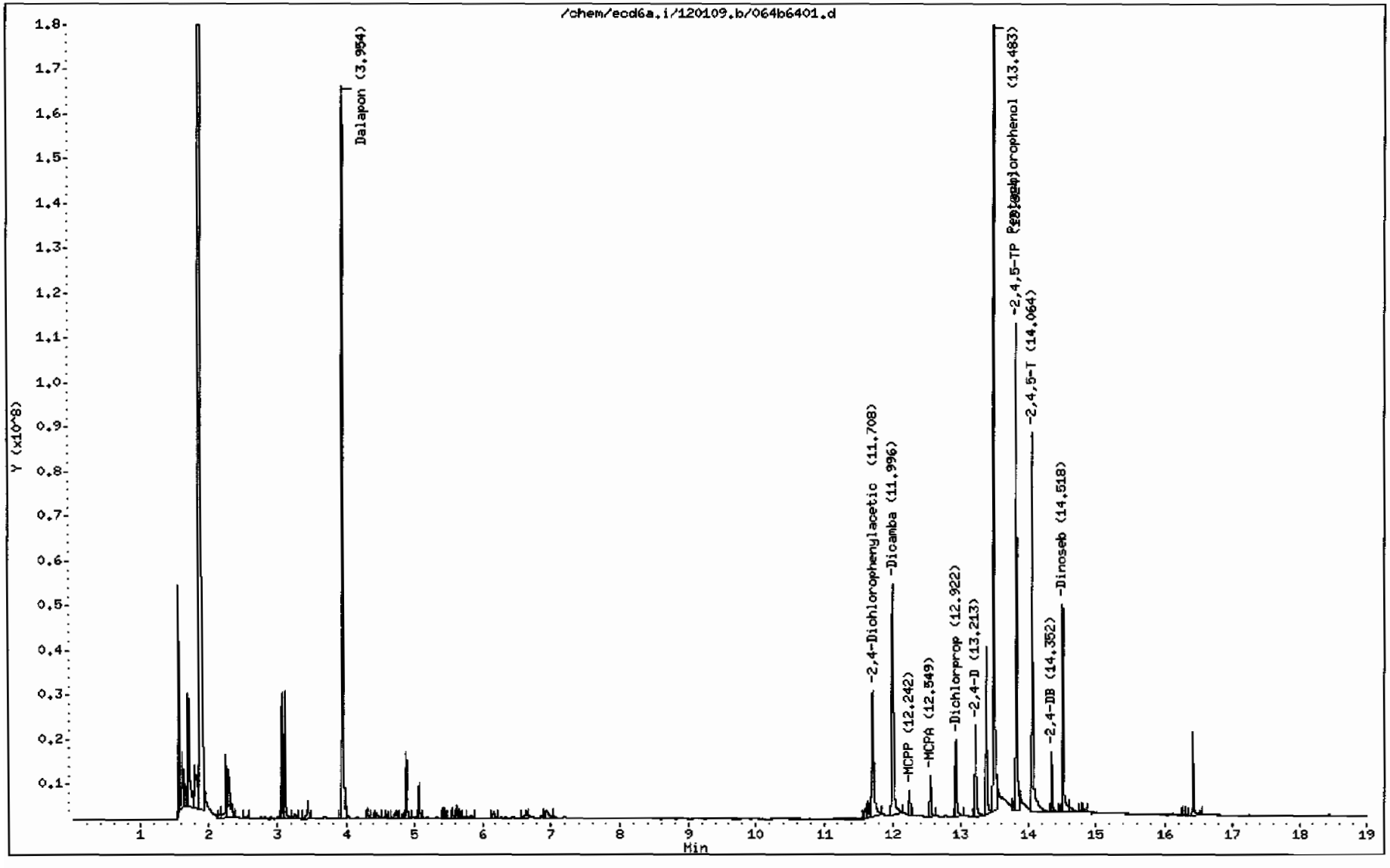

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/064b6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07

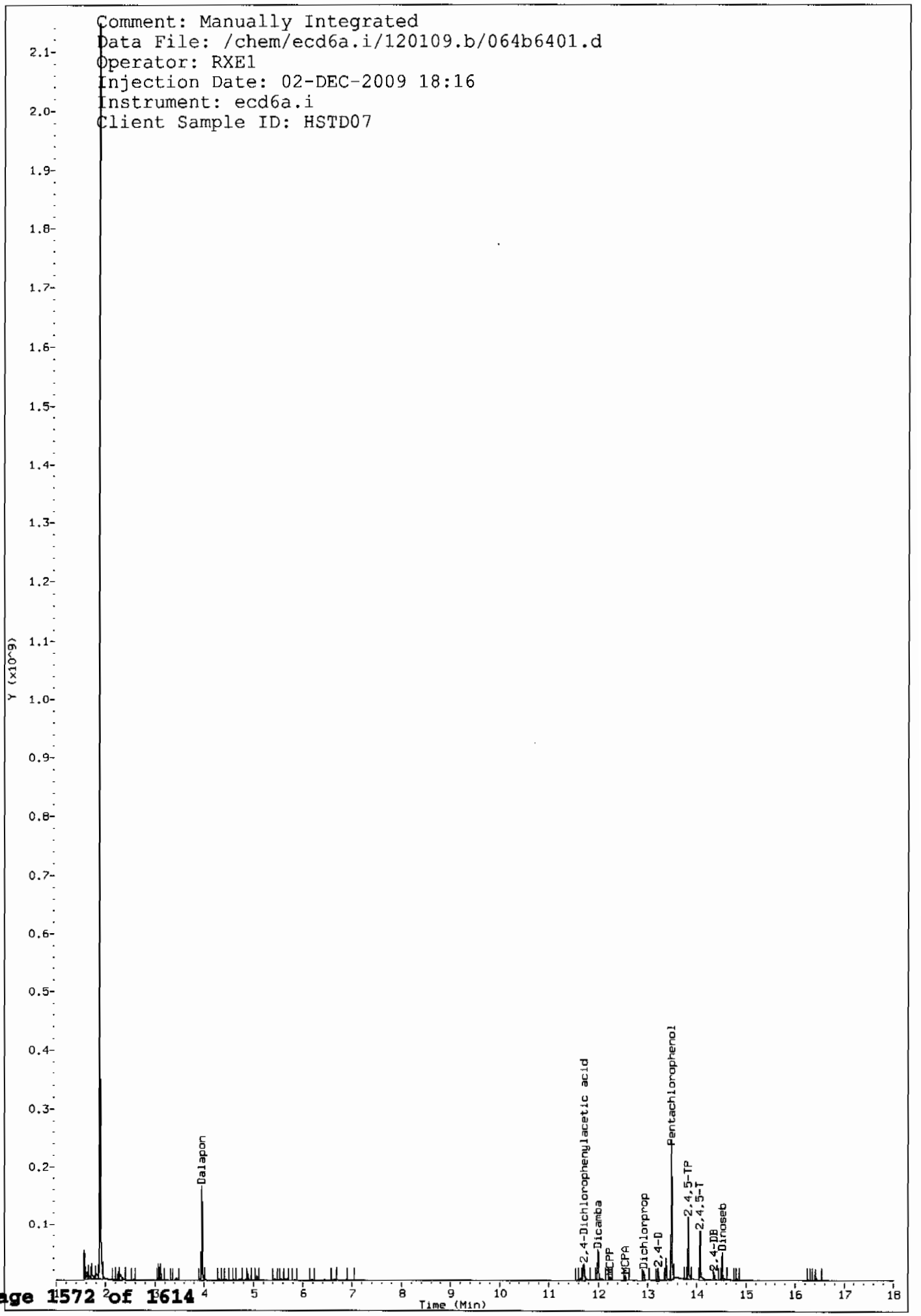

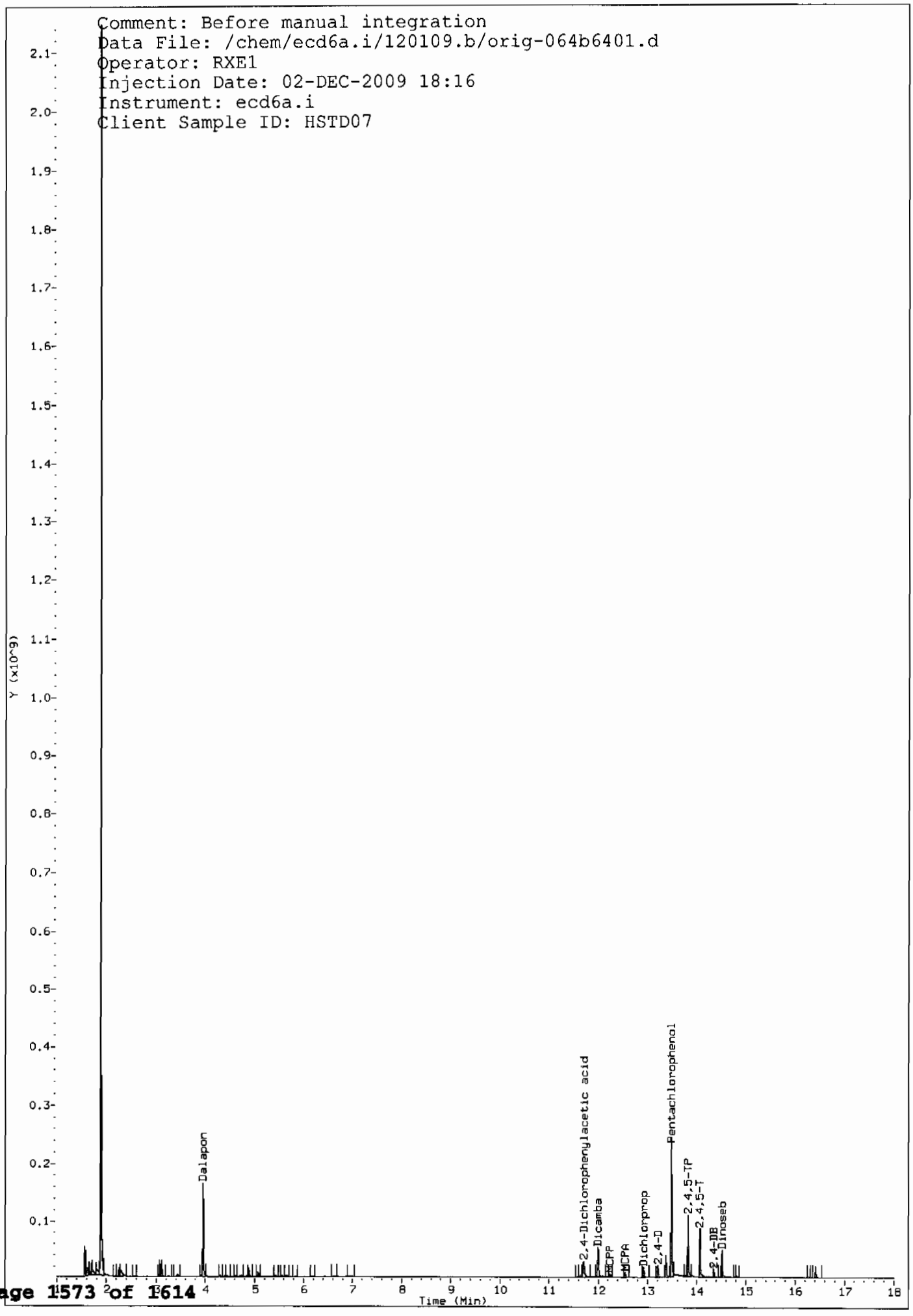
Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-064b6401.d
Operator: RXE1
Injection Date: 02-DEC-2009 18:16
Instrument: ecd6a.i
Client Sample ID: HSTD07
Y (x10^9)
Time (Min)
Dalapon
2,4-Dichlorophenylacetic acid
Dicamba
MCPP
MCPA
Dichlorprop
2,4-D
Pentachlorophenol
2,4,5-TP
2,4,5-T
2,4-DB
Dinoseb

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	10.74	
02	HSTD01	WHB091030-01	12/01/09	1250	10.74	
03	HSTD02	WHB091030-02	12/01/09	1320	10.73	
04	HSTD03	WHB091030-03	12/01/09	1348	10.71	
05	HSTD04	WHB091030-04	12/01/09	1416	10.70	
06	HSTD05	WHB091030-05	12/01/09	1445	10.70	
07	HSTD06	WHB091030-06	12/01/09	1512	10.69	
08	HSTD07	WHB091030-07	12/01/09	1540	10.68	
09	HSTD01	WHB091030-12	12/01/09	1608	10.70	
10	HIBLK02	WHB091117-02	12/01/09	1635	10.74	
11	ZZZZZ	ZZZZZ	12/01/09	1704	10.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	10.70	
13	ZZZZZ	ZZZZZ	12/01/09	1800	10.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	10.70	
15	ZZZZZ	ZZZZZ	12/01/09	1856	10.70	
16	ZZZZZ	ZZZZZ	12/01/09	1925	10.69	
17	ZZZZZ	ZZZZZ	12/01/09	1952	10.68	
18	ZZZZZ	ZZZZZ	12/01/09	2020	10.69	
19	ZZZZZ	ZZZZZ	12/01/09	2048	10.71	
20	ZZZZZ	ZZZZZ	12/01/09	2116	10.68	
21	HSTD02	WHB091030-12	12/01/09	2144	10.69	
22	HIBLK03	WHB091117-02	12/01/09	2212	10.73	
23	ZZZZZ	ZZZZZ	12/01/09	2241	10.73	
24	ZZZZZ	ZZZZZ	12/01/09	2309	10.69	
25	ZZZZZ	ZZZZZ	12/01/09	2338	10.73	
26	ZZZZZ	ZZZZZ	12/02/09	0006	10.70	
27	ZZZZZ	ZZZZZ	12/02/09	0035	10.70	
28	HSTD03	WHB091030-12	12/02/09	0102	10.69	
29	HIBLK04	WHB091117-02	12/02/09	0131	10.73	
30	ZZZZZ	ZZZZZ	12/02/09	0159	10.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	10.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	10.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	10.73	
02	ZZZZZ	ZZZZZ	12/02/09	0352	10.74	
03	ZZZZZ	ZZZZZ	12/02/09	0421	10.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	10.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	10.72	
06	HSTD04	WHB091030-12	12/02/09	0545	10.69	
07	HIBLK05	WHB091117-02	12/02/09	0613	10.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	10.74	
09	ZZZZZ	ZZZZZ	12/02/09	0710	10.69	
10	ZZZZZ	ZZZZZ	12/02/09	0739	10.74	
11	ZZZZZ	ZZZZZ	12/02/09	0808	10.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	10.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	10.72	
14	HSTD05	WHB091030-12	12/02/09	0932	10.68	
15	HIBLK06	WHB091117-02	12/02/09	1000	10.73	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	10.72	
18	TBLK01	1201980055	12/02/09	1131	10.70	
19	ZZZZZ	ZZZZZ	12/02/09	1159	10.71	
20	HBLK01	1201982751	12/02/09	1227	10.71	
21	HBLK01LCS	1201982752	12/02/09	1255	10.68	
22	HSTD06	WHB091030-12	12/02/09	1335	10.69	
23	HIBLK07	WHB091117-02	12/02/09	1404	10.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	10.71	
25	WST03-10-2131	241424001	12/02/09	1501	10.72	
26	WST03-10-2130	241424002	12/02/09	1529	10.72	
27	ZZZZZ	ZZZZZ	12/02/09	1557	10.72	
28	ZZZZZ	ZZZZZ	12/02/09	1625	10.69	
29	ZZZZZ	ZZZZZ	12/02/09	1653	10.69	
30	ZZZZZ	ZZZZZ	12/02/09	1721	10.71	
31	ZZZZZ	ZZZZZ	12/02/09	1748	10.71	
32	HSTD07	WHB091030-12	12/02/09	1816	10.69	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/01/09	1222	11.73	
02	HSTD01	WHB091030-01	12/01/09	1250	11.73	
03	HSTD02	WHB091030-02	12/01/09	1320	11.73	
04	HSTD03	WHB091030-03	12/01/09	1348	11.72	
05	HSTD04	WHB091030-04	12/01/09	1416	11.72	
06	HSTD05	WHB091030-05	12/01/09	1445	11.72	
07	HSTD06	WHB091030-06	12/01/09	1512	11.71	
08	HSTD07	WHB091030-07	12/01/09	1540	11.71	
09	HSTD01	WHB091030-12	12/01/09	1608	11.72	
10	HIBLK02	WHB091117-02	12/01/09	1635	11.73	
11	ZZZZZ	ZZZZZ	12/01/09	1704	11.73	
12	ZZZZZ	ZZZZZ	12/01/09	1732	11.72	
13	ZZZZZ	ZZZZZ	12/01/09	1800	11.73	
14	ZZZZZ	ZZZZZ	12/01/09	1828	11.72	
15	ZZZZZ	ZZZZZ	12/01/09	1856	11.72	
16	ZZZZZ	ZZZZZ	12/01/09	1925	11.71	
17	ZZZZZ	ZZZZZ	12/01/09	1952	11.71	
18	ZZZZZ	ZZZZZ	12/01/09	2020	11.71	
19	ZZZZZ	ZZZZZ	12/01/09	2048	11.72	
20	ZZZZZ	ZZZZZ	12/01/09	2116	11.71	
21	HSTD02	WHB091030-12	12/01/09	2144	11.71	
22	HIBLK03	WHB091117-02	12/01/09	2212	11.73	
23	ZZZZZ	ZZZZZ	12/01/09	2241	11.73	
24	ZZZZZ	ZZZZZ	12/01/09	2309	11.71	
25	ZZZZZ	ZZZZZ	12/01/09	2338	11.73	
26	ZZZZZ	ZZZZZ	12/02/09	0006	11.72	
27	ZZZZZ	ZZZZZ	12/02/09	0035	11.72	
28	HSTD03	WHB091030-12	12/02/09	0102	11.71	
29	HIBLK04	WHB091117-02	12/02/09	0131	11.73	
30	ZZZZZ	ZZZZZ	12/02/09	0159	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	0227	11.72	
32	ZZZZZ	ZZZZZ	12/02/09	0255	11.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-578-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/01/09 12/01/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/02/09	0324	11.73	
02	ZZZZZ	ZZZZZ	12/02/09	0352	11.73	
03	ZZZZZ	ZZZZZ	12/02/09	0421	11.72	
04	ZZZZZ	ZZZZZ	12/02/09	0448	11.73	
05	ZZZZZ	ZZZZZ	12/02/09	0516	11.73	
06	HSTD04	WHB091030-12	12/02/09	0545	11.71	
07	HIBLK05	WHB091117-02	12/02/09	0613	11.73	
08	ZZZZZ	ZZZZZ	12/02/09	0642	11.73	
09	ZZZZZ	ZZZZZ	12/02/09	0710	11.71	
10	ZZZZZ	ZZZZZ	12/02/09	0739	11.73	
11	ZZZZZ	ZZZZZ	12/02/09	0808	11.73	
12	ZZZZZ	ZZZZZ	12/02/09	0836	11.72	
13	ZZZZZ	ZZZZZ	12/02/09	0904	11.72	
14	HSTD05	WHB091030-12	12/02/09	0932	11.71	
15	HIBLK06	WHB091117-02	12/02/09	1000	11.72	
16	ZZZZZ	ZZZZZ	12/02/09	1028		
17	ZZZZZ	ZZZZZ	12/02/09	1103	11.72	
18	TBLK01	1201980055	12/02/09	1131	11.72	
19	ZZZZZ	ZZZZZ	12/02/09	1159	11.72	
20	HBLK01	1201982751	12/02/09	1227	11.72	
21	HBLK01LCS	1201982752	12/02/09	1255	11.70	
22	HSTD06	WHB091030-12	12/02/09	1335	11.71	
23	HIBLK07	WHB091117-02	12/02/09	1404	11.73	
24	ZZZZZ	ZZZZZ	12/02/09	1432	11.72	
25	WST03-10-2131	241424001	12/02/09	1501	11.72	
26	WST03-10-2130	241424002	12/02/09	1529	11.72	
27	ZZZZZ	ZZZZZ	12/02/09	1557	11.73	
28	ZZZZZ	ZZZZZ	12/02/09	1625	11.71	
29	ZZZZZ	ZZZZZ	12/02/09	1653	11.71	
30	ZZZZZ	ZZZZZ	12/02/09	1721	11.72	
31	ZZZZZ	ZZZZZ	12/02/09	1748	11.72	
32	HSTD07	WHB091030-12	12/02/09	1816	11.71	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

Identification Summary

SDG Number: 10–578–1 **Client ID:** LCS for batch 927399

Lab Sample ID: 1201982752

Data File:	053f5301.d	**Data File:**	053b5301.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	02–DEC–09 12:55	**Analyzed:**	02–DEC–09 12:55

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								12.5
	Column 1	1	12.77	12.71 – 12.83	.00256		mg/L	
	Column 2	1	13.21	13.16 – 13.28	.00226		mg/L	
2,4,5–TP								1.53
	Column 1	1	13.51	13.48 – 13.54	.0023		mg/L	
	Column 2	1	13.82	13.8 – 13.86	.00227		mg/L	

QUALITY CONTROL DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578–1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201980055				
Client Sample:	QC for batch 926091	**Client:**	LANL010	**Project:**	QC
Client ID:	TB for batch 926091	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 11:31	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	050f5001.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	050b5001.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.050	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP	U	0.050	mg/L	0.0166	0.050	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/050f5001.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK01
Inj Date : 02-DEC-2009 11:31
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201980055|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 50 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.704	10.698	0.006	63031355	593.233	1.2

Data File: /chem/ecd6a.i/120109.b/050f5001.d

Date : 02-DEC-2009 11:31

Client ID: TBLK01

Sample Info: |120198005|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

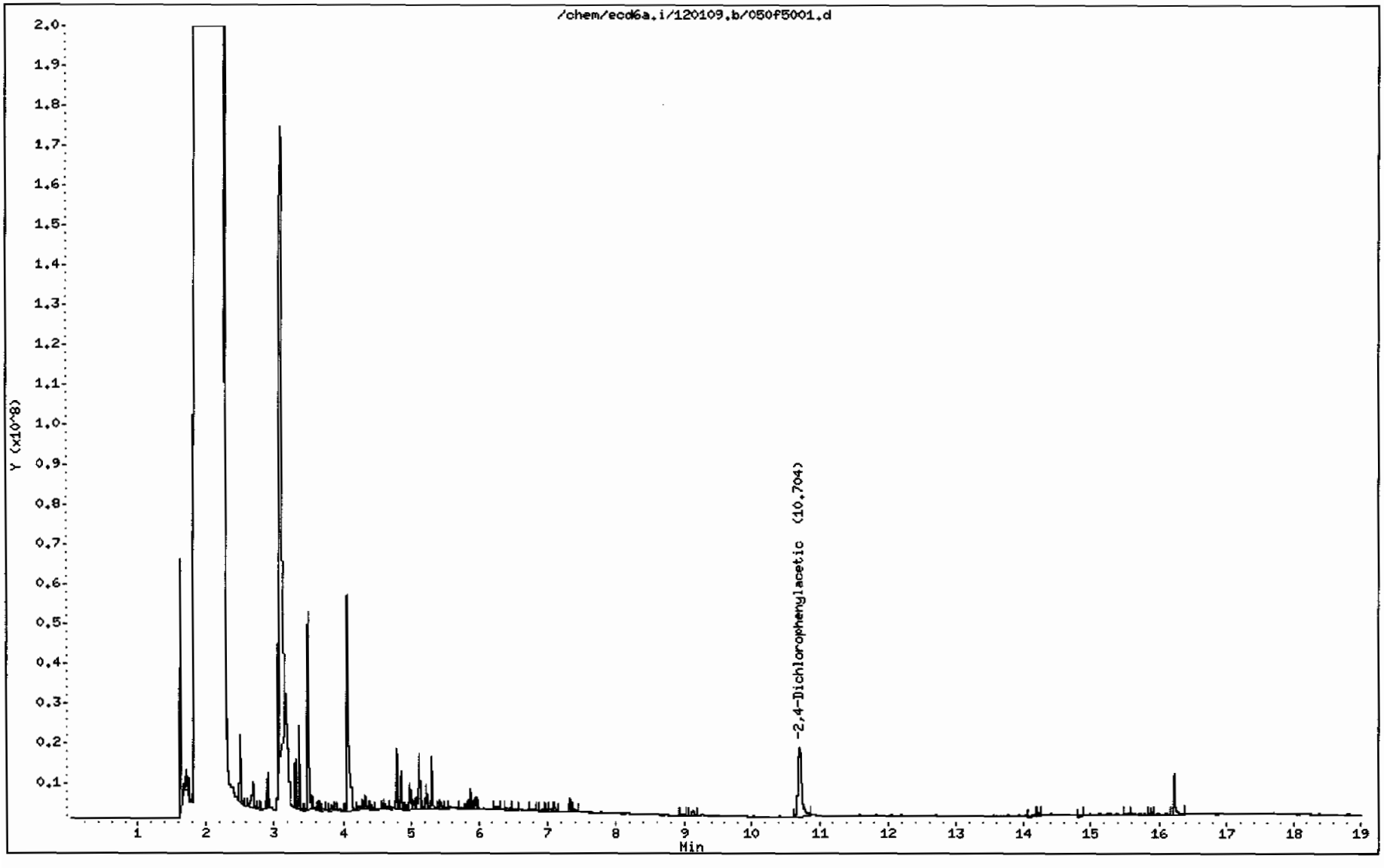

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/050b5001.d
Lab Smp Id: 1201980055 Client Smp ID: TBLK01
Inj Date : 02-DEC-2009 11:31
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201980055|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|TB|SOIL|TB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 50 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
RT	EXP RT	DLT RT	RESPONSE		
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.716	11.717	-0.001	68073887	572.385	1.1

Data File: /chem/ecd6a.i/120109.b/050b5001.d
Date : 02-DEC-2009 11:31
Client ID: TBLK01
Sample Info: |120198005|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

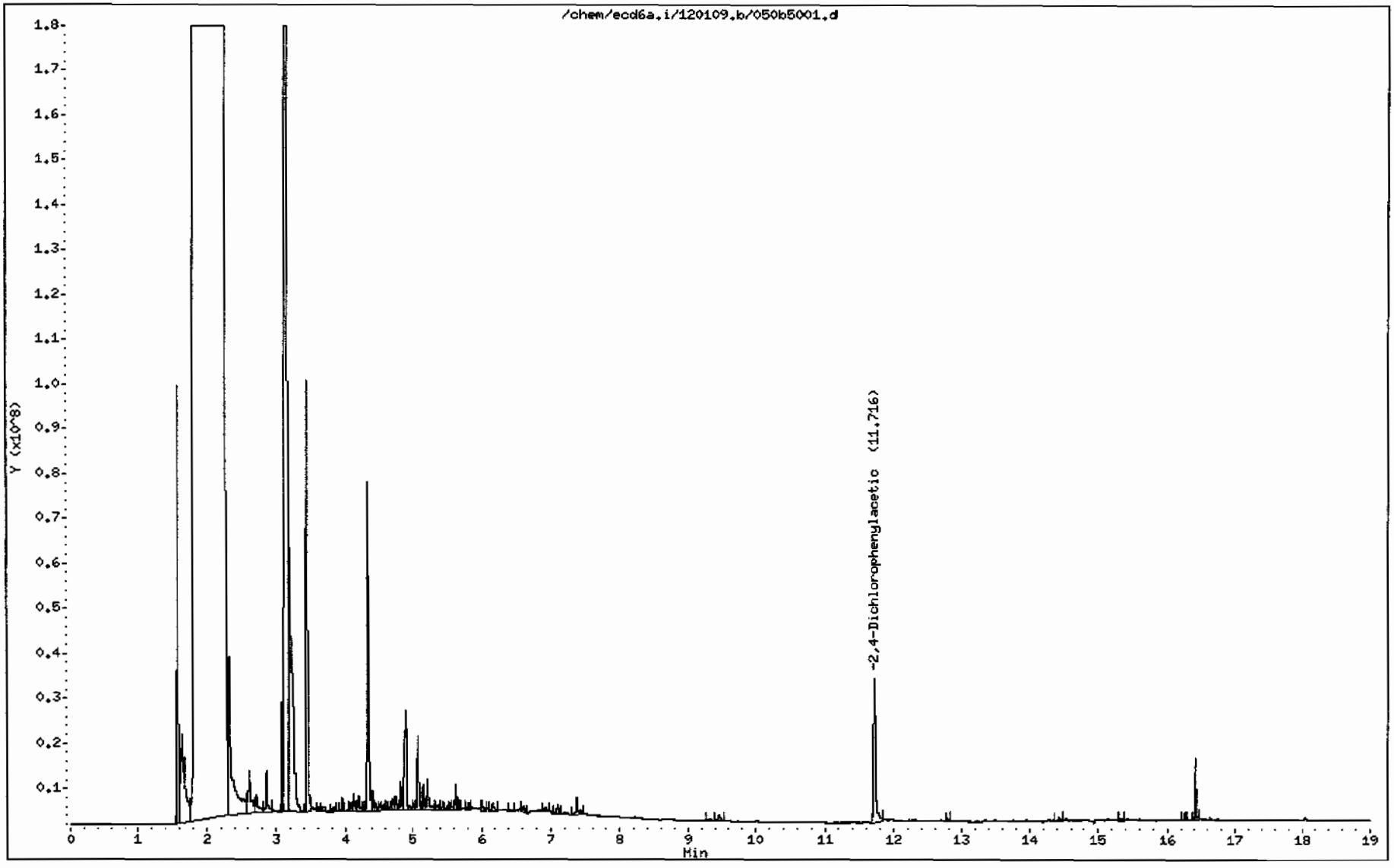

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–578–1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201982751				
Client Sample:	QC for batch 927399	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 927399	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 12:27	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	1000 mL	**Final Volume:**	10 mL
Data File:	052f5201.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	052b5201.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.00025	mg/L	0.000083	0.00025	1
93–72–1	2,4,5–TP	U	0.00025	mg/L	0.000083	0.00025	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/052f5201c.d
Lab Smp Id: 1201982751 Client Smp ID: HBLK01
Inj Date : 02-DEC-2009 12:27
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982751|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 52 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.711	10.698	0.013	54986755	517.520	0.0052

Data File: /chem/ecd6a.i/120109.b/052f5201c.d
Date : 02-DEC-2009 12:27
Client ID: HBLK01
Sample Info: |1201982751|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

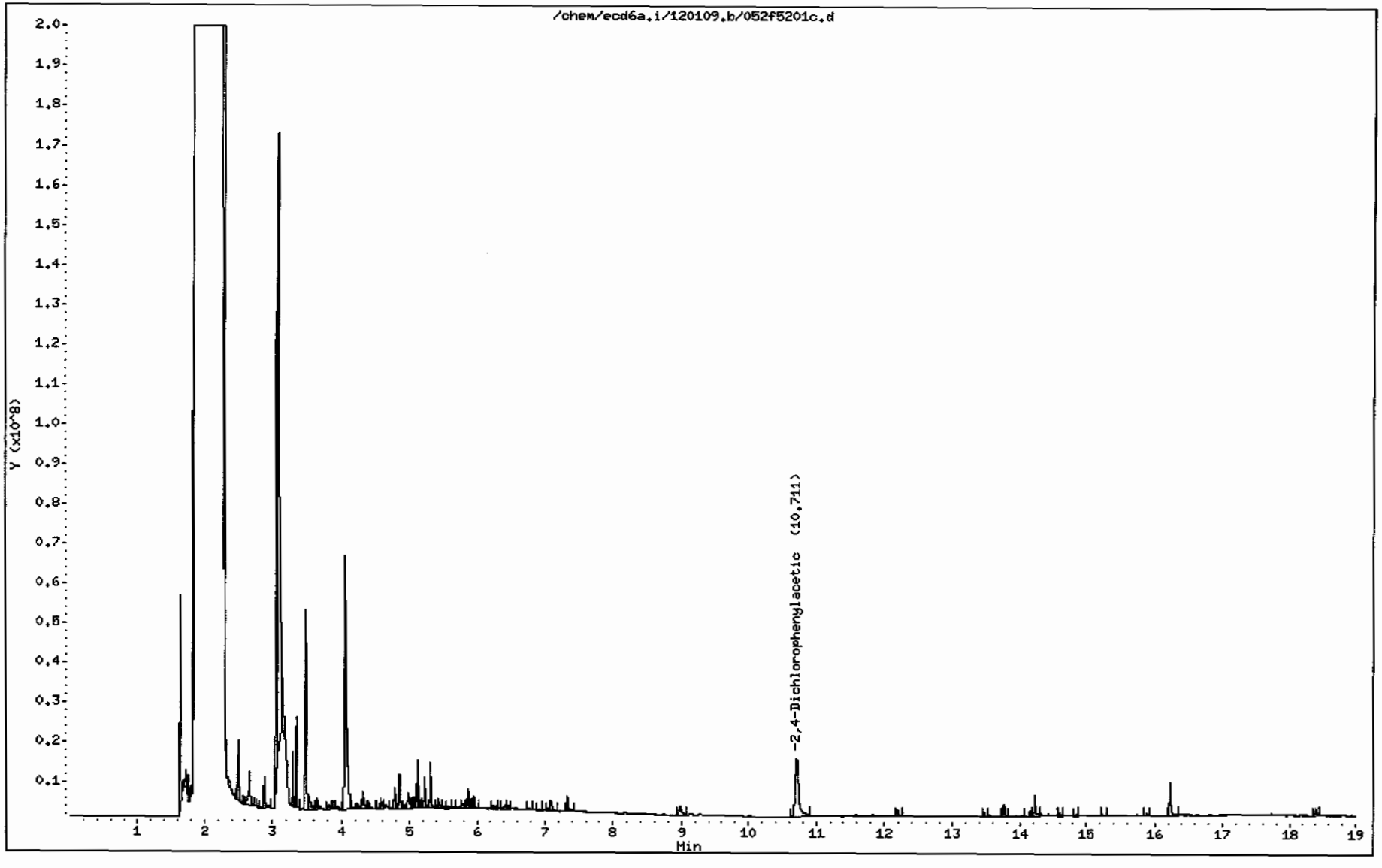

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/052b5201c.d
Lab Smp Id: 1201982751 Client Smp ID: HBLK01
Inj Date : 02-DEC-2009 12:27
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982751|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MB|SOIL|MB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 52 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.719	11.717	0.002	57933009	487.118	0.0049

Data File: /chem/ecd6a.i/120109.b/052b5201c.d
Date : 02-DEC-2009 12:27
Client ID: HBLK01
Sample Info: |120198275|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

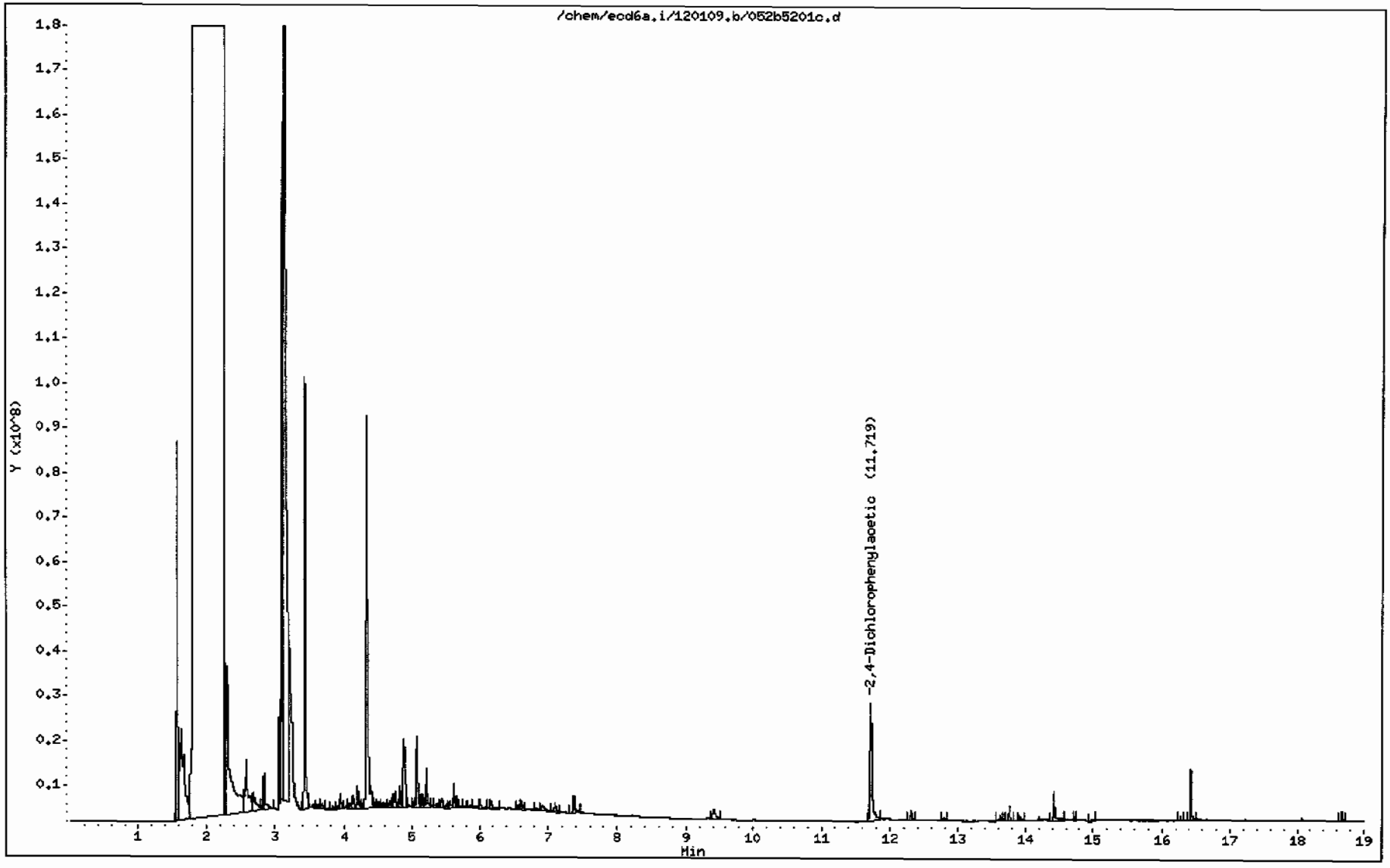

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-578-1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201982752				
Client Sample:	QC for batch 927399	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927399	**Method:**	SW846 8151A	**SOP Ref:**	GL-OA-E-011
Batch ID:	927402	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/02/2009 12:55	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 16:23	**Aliquot:**	1000 mL	**Final Volume:**	10 mL
Data File:	053f5301.d	**Column:**	1 Rtx-CLP	**Level:**	LOW
	053b5301.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D		0.00256	mg/L	0.000083	0.00025	1
93-72-1	2,4,5-TP		0.0023	mg/L	0.000083	0.00025	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/053f5301c.d
Lab Smp Id: 1201982752 Client Smp ID: HBLK01LCS
Inj Date : 02-DEC-2009 12:55
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982752|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 53 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.682	10.698	-0.016	62440302	587.670	0.0059	
7 2,4-D					CAS #: 94-75-7	
12.767	12.775	-0.008	25558601	256.064	0.0026	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.505	13.512	-0.007	110918552	230.029	0.0023	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/053f5301c.d

Date : 02-DEC-2009 12:55

Client ID: HBLK01LCS

Sample Info: |1201982752|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

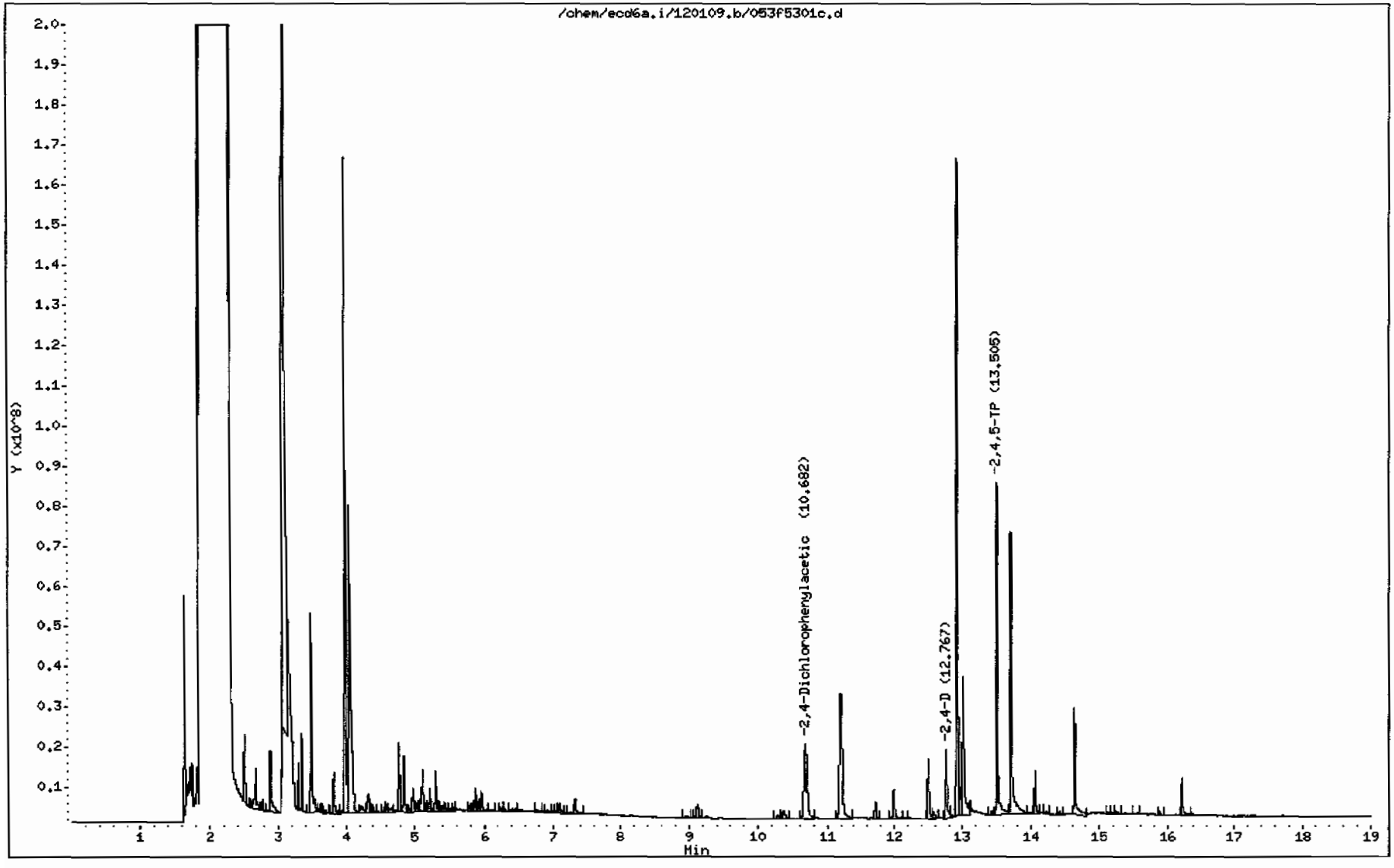

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120109.b/053f5301c.d
Operator: RXE1
Injection Date: 02-DEC-2009 12:55
Instrument: ecd6a.i
Client Sample ID: HBLK01LCS

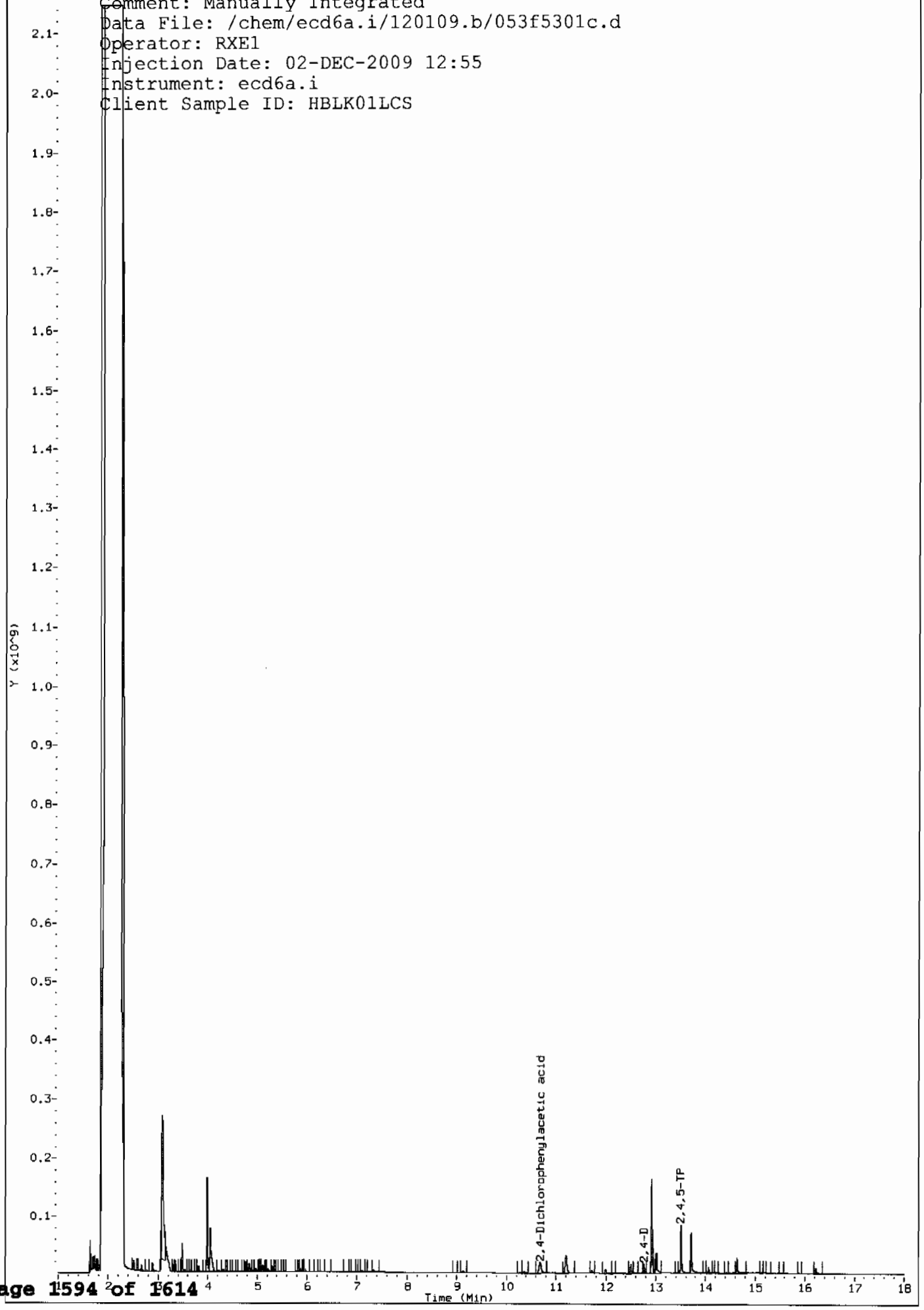

Comment: Before manual integration
Data File: /chem/ecd6a.i/120109.b/orig-053f5301c.d
Operator: RXE1
Injection Date: 02-DEC-2009 12:55
Instrument: ecd6a.i
Client Sample ID: HBLK01LCS

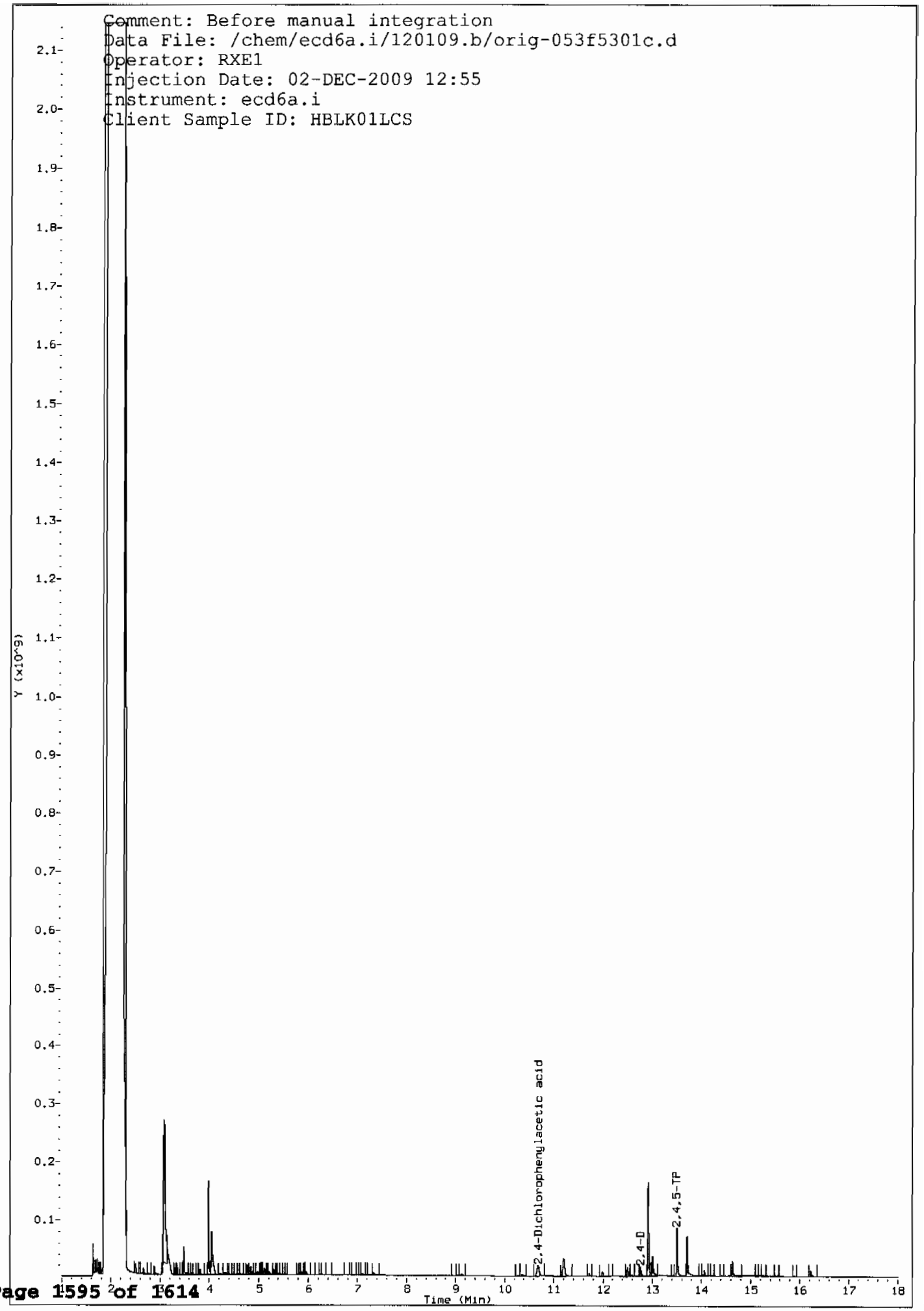

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/053b5301c.d
Lab Smp Id: 1201982752 Client Smp ID: HBLK01LCS
Inj Date : 02-DEC-2009 12:55
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982752|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|LCS|SOIL|LCS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 53 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-578-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.704	11.717	-0.013	66286040	557.353	0.0056
7 2,4-D					CAS #: 94-75-7
13.210	13.216	-0.006	33114049	225.877	0.0022
8 2,4,5-TP					CAS #: 93-72-1
13.820	13.825	-0.005	130705740	226.530	0.0023

Data File: /chem/ecd6a.i/120109.b/053b5301c.d

Date : 02-DEC-2009 12:55

Client ID: HBLK01LCS

Sample Info: |120198275211|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

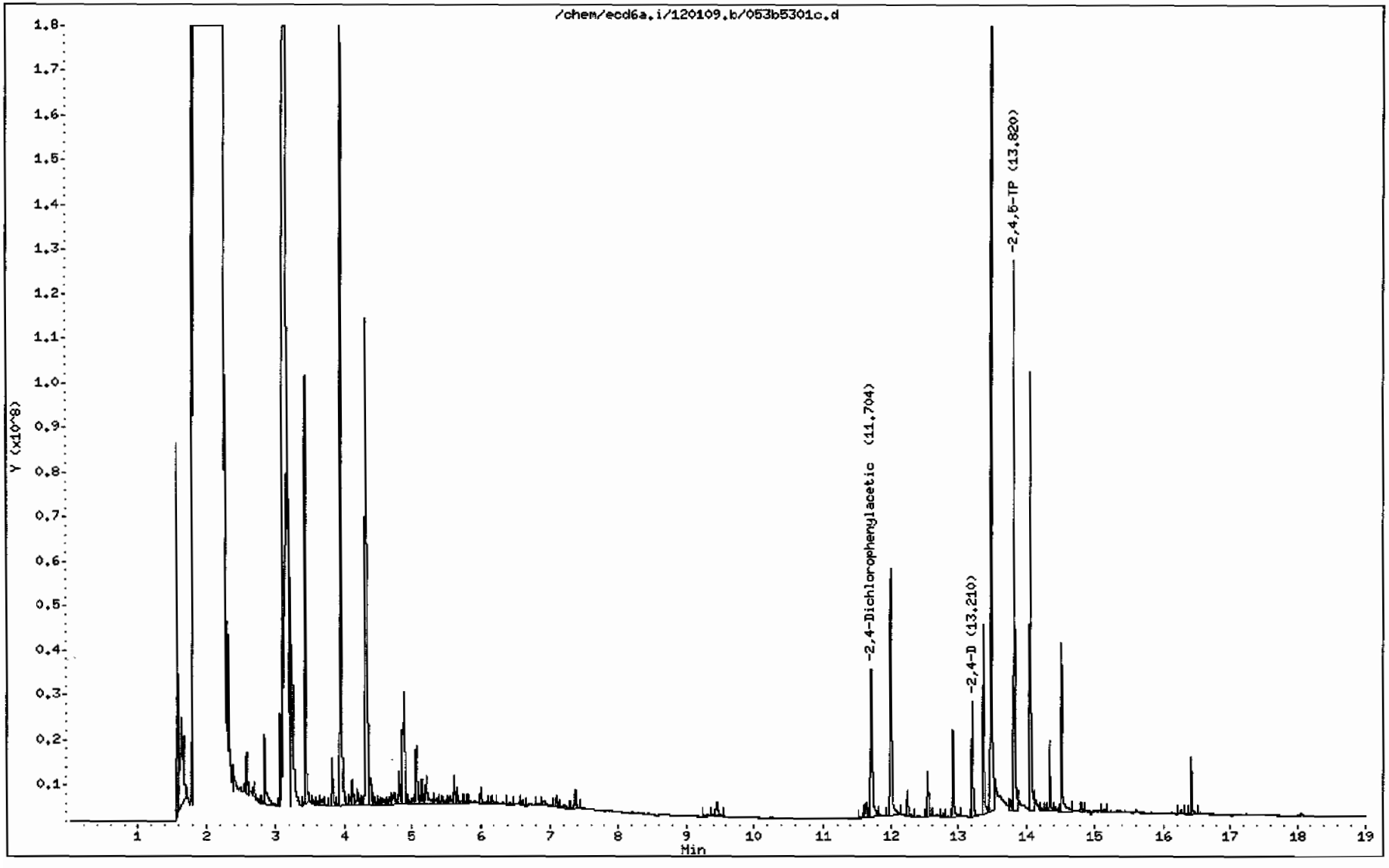

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD6

DATE: 12/02/2009 METHOD: ECD6-F-8151A-120109.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-011 Analysis of Chlorophenoxy Herbicides by ECD
EPA Method: 8151A Chlorinated Herbicides by GC Using Derivation
Sequence Number:120109 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WHB091117-02	RXE1	01-DEC-2009 12:22		120109	1.0	INSTBLK	CLEAN
002f0201.d	WHB091030-01	RXE1	01-DEC-2009 12:50		120109	1.0	HSTD01	ICAL LVL 1
003f0301.d	WHB091030-02	RXE1	01-DEC-2009 13:20		120109	1.0	HSTD02	ICAL LVL 2
004f0401.d	WHB091030-03	RXE1	01-DEC-2009 13:48		120109	1.0	HSTD03	ICAL LVL 3
005f0501.d	WHB091030-04	RXE1	01-DEC-2009 14:16		120109	1.0	HSTD04	ICAL LVL 4
006f0601.d	WHB091030-05	RXE1	01-DEC-2009 14:45		120109	1.0	HSTD05	ICAL LVL 5
007f0701.d	WHB091030-06	RXE1	01-DEC-2009 15:12		120109	1.0	HSTD06	ICAL LVL 6
008f0801.d	WHB091030-07	RXE1	01-DEC-2009 15:40		120109	1.0	HSTD07	ICAL LVL 7
009f0901.d	WHB091030-12	RXE1	01-DEC-2009 16:08		120109	1.0	HSTD01	USE. ICV. ALL ANALYTES PASSING BOTH COLUMNS.
010f1001.d	WHB091117-02	RXE1	01-DEC-2009 16:35		120109	1.0	INSTBLK	CLEAN
011f1101.d	1201982244	RXE1	01-DEC-2009 17:04	927142	10-671	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
012f1201.d	1201982247	RXE1	01-DEC-2009 17:32	927142	10-671	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
013f1301.d	241813006	RXE1	01-DEC-2009 18:00	927142	10-671	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
014f1401.d	1201982245	RXE1	01-DEC-2009 18:28	927142	10-671	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
015f1501.d	1201982246	RXE1	01-DEC-2009 18:56	927142	10-671	1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241895002	RXE1	01-DEC-2009 19:25	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
017f1701.d	241895005	RXE1	01-DEC-2009 19:52	927142	10-698	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

018f1801.d	241895008	RXE1	01-DEC-2009 20:20	927142	10-698		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
019f1901.d	241895011	RXE1	01-DEC-2009 20:48	927142	10-698		1.0	LANL	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
020f2001.d	241918005	RXE1	01-DEC-2009 21:16	927142	10-701		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
021f2101.d	WHB091030-12	RXE1	01-DEC-2009 21:44		120109		1.0	HSTD02	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
022f2201.d	WHB091117-02	RXE1	01-DEC-2009 22:12		120109		1.0	INSTBLK	CLEAN
023f2301.d	1201982252	RXE1	01-DEC-2009 22:41	927148	10-578		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
024f2401.d	1201982255	RXE1	01-DEC-2009 23:09	927148	10-578		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
025f2501.d	241423004	RXE1	01-DEC-2009 23:38	927148	10-578		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
026f2601.d	1201982253	RXE1	02-DEC-2009 00:06	927148	10-578		2.0	MS	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MSD.
027f2701.d	1201982254	RXE1	02-DEC-2009 00:35	927148	10-578		2.0	MSD	USE. MULTIPLE ANALYTES HIGH, BOTH COLUMNS, CONFIRMED BY MS.
028f2801.d	WHB091030-12	RXE1	02-DEC-2009 01:02		120109		1.0	HSTD03	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
029f2901.d	WHB091117-02	RXE1	02-DEC-2009 01:31		120109		1.0	INSTBLK	CLEAN
030f3001.d	241423005	RXE1	02-DEC-2009 01:59	927148	10-578		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
031f3101.d	241503002	RXE1	02-DEC-2009 02:27	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
032f3201.d	241503003	RXE1	02-DEC-2009 02:55	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
033f3301.d	241503004	RXE1	02-DEC-2009 03:24	927148	10-589		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
034f3401.d	241524002	RXE1	02-DEC-2009 03:52	927148	10-600		20.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
035f3501.d	241697003	RXE1	02-DEC-2009 04:21	927148	10-648		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241697004	RXE1	02-DEC-2009 04:48	927148	10-648		2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
037f3701.d	241714002	RXE1	02-DEC-2009 05:16	927148	10-650		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
038f3801.d	WHB091030-12	RXE1	02-DEC-2009 05:45		120109		1.0	HSTD04	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
039f3901.d	WHB091117-02	RXE1	02-DEC-2009 06:13		120109		1.0	INSTBLK	CLEAN
040f4001.d	1201982248	RXE1	02-DEC-2009 06:42	927145	241437		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
041f4101.d	1201982251	RXE1	02-DEC-2009 07:10	927145	241437		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

042f4201.d	241437003	RXE1	02-DEC-2009 07:39	927145	241437	1.0	PCGE	USE. $ LOW BOTH, RE-EXTRACTING OUT OF HOLD.
043f4301.d	241437009	RXE1	02-DEC-2009 08:08	927145	241437	1.0	PCGE	USE. $ LOW BOTH, CONFIRMED BY MS/MSD.
044f4401.d	1201982249	RXE1	02-DEC-2009 08:36	927145	241437	1.0	MS	USE. $/SPIKES LOW BOTH, CONFIRMED BY MSD.
045f4501.d	1201982250	RXE1	02-DEC-2009 09:04	927145	241437	1.0	MSD	USE. $/SPIKES LOW BOTH, CONFIRMED BY MS.
046f4601.d	WHB091030-12	RXE1	02-DEC-2009 09:32		120109	1.0	HSTD05	USE. CCV. MULTIPLE ANALYTES FAILING HI BOTH COLUMNS.
047f4701.d	WHB091117-02	RXE1	02-DEC-2009 10:00		120109	1.0	INSTBLK	CLEAN
048f4801.d	WE091201-02	RXE1	02-DEC-2009 10:28		120109	1.0	SCREEN	DUSE
049f4901.d	1201979176	RXE1	02-DEC-2009 11:03	927402	10-462-1	1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
050f5001.d	1201980055	RXE1	02-DEC-2009 11:31	927402	10-578-1	1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
051f5101.d	1201980841	RXE1	02-DEC-2009 11:59	927402	10-648-1	1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
052f5201.d	1201982751	RXE1	02-DEC-2009 12:27	927402	10-600-1	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
053f5301.d	1201982752	RXE1	02-DEC-2009 12:55	927402	10-600-1	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
054f5401.d	WHB091030-12	RXE1	02-DEC-2009 13:35		120109	1.0	HSTD06	USE. CCV. DAL LOW (B), DB HI (F).
055f5501.d	WHB091117-02	RXE1	02-DEC-2009 14:04		120109	1.0	INSTBLK	CLEAN
056f5601.d	241040001	RXE1	02-DEC-2009 14:32	927402	10-462-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
057f5701.d	241424001	RXE1	02-DEC-2009 15:01	927402	10-578-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
058f5801.d	241424002	RXE1	02-DEC-2009 15:29	927402	10-578-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
059f5901.d	241527001	RXE1	02-DEC-2009 15:57	927402	10-600-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
060f6001.d	1201982753	RXE1	02-DEC-2009 16:25	927402	10-600-1	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
061f6101.d	1201982754	RXE1	02-DEC-2009 16:53	927402	10-600-1	1.0	MSD	USE. D SLIGHT HI (F), PASSING (B).
062f6201.d	241704001	RXE1	02-DEC-2009 17:21	927402	10-648-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
063f6301.d	241704002	RXE1	02-DEC-2009 17:48	927402	10-648-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
064f6401.d	WHB091030-12	RXE1	02-DEC-2009 18:16		120109	1.0	HSTD07	USE. CCV. D/DB HI (F), PASSING (B).
065f6501.d	WHB091117-02	RXE1	02-DEC-2009 18:45		120109	1.0	INSTBLK	CLEAN
066f6601.d	1201983560	RXE1	02-DEC-2009 19:14	927672	10-653	1.0	MB	DUSE

10H

Instrument Batch: /chem/ecd6a.i/120109.b Page: 4

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

067f6701.d	1201983561	RXE1	02-DEC-2009 19:43	927672	10-653	1.0	LCS	DUSE
068f6801.d	241718001	RXE1	02-DEC-2009 20:11	927672	10-653	1.0	LANL	DUSE
069f6901.d	241728002	RXE1	02-DEC-2009 20:40	927672	10-654	1.0	LANL	DUSE
070f7001.d	241750002	RXE1	02-DEC-2009 21:08	927672	10-655	1.0	LANL	DUSE
071f7101.d	241750003	RXE1	02-DEC-2009 21:36	927672	10-655	1.0	LANL	DUSE
072f7201.d	1201983562	RXE1	02-DEC-2009 22:05	927672	10-655	1.0	MS	DUSE
073f7301.d	1201983563	RXE1	02-DEC-2009 22:33	927672	10-655	1.0	MSD	DUSE
074f7401.d	WHB091030-12	RXE1	02-DEC-2009 23:02		120109	1.0	HSTD08	USE. CCV. DB HI (F), PASSING (B).
075f7501.d	WHB091117-02	RXE1	02-DEC-2009 23:29		120109	1.0	INSTBLK	CLEAN
076f7601.d	241750004	RXE1	02-DEC-2009 23:58	927672	10-655	1.0	LANL	DUSE
077f7701.d	241750005	RXE1	03-DEC-2009 00:25	927672	10-655	1.0	LANL	DUSE
078f7801.d	241750006	RXE1	03-DEC-2009 00:54	927672	10-655	1.0	LANL	DUSE
079f7901.d	241750007	RXE1	03-DEC-2009 01:22	927672	10-655	1.0	LANL	DUSE
080f8001.d	241750008	RXE1	03-DEC-2009 01:50	927672	10-655	1.0	LANL	DUSE
081f8101.d	241750009	RXE1	03-DEC-2009 02:19	927672	10-655	1.0	LANL	DUSE
082f8201.d	241750010	RXE1	03-DEC-2009 02:47	927672	10-655	1.0	LANL	DUSE
083f8301.d	241750011	RXE1	03-DEC-2009 03:15	927672	10-655	1.0	LANL	DUSE
084f8401.d	WHB091030-12	RXE1	03-DEC-2009 03:44		120109	1.0	HSTD09	USE. CCV. DB HI (F), PASSING (B).
085f8501.d	WHB091117-02	RXE1	03-DEC-2009 04:12		120109	1.0	INSTBLK	CLEAN

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/060b6001.d
Lab Smp Id: 1201982753 Client Smp ID: WST03-10-2132MS
Inj Date : 02-DEC-2009 16:25
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982753|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MS|SOIL|MS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 60 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.709	11.717	-0.008	61799465	519.628	1.0
7 2,4-D					CAS #: 94-75-7
13.212	13.216	-0.004	29270149	199.657	0.40
8 2,4,5-TP					CAS #: 93-72-1
13.822	13.825	-0.003	124117327	215.112	0.43

Data File: /chem/ecd6a.i/120109.b/060b6001.d
Date : 02-DEC-2009 16:25
Client ID: WST03-10-2132MS
Sample Info: |1201982753|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

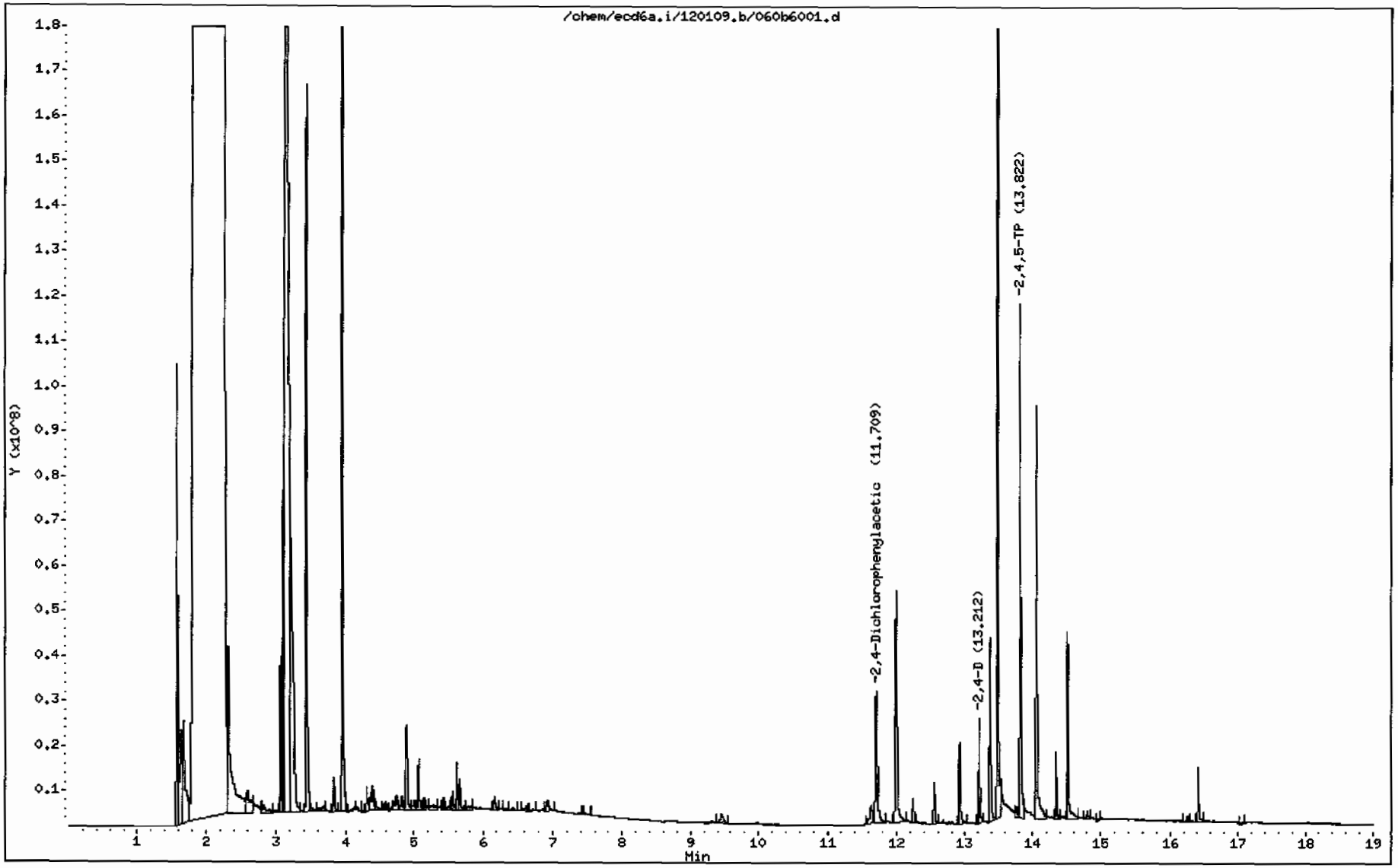

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/060f6001.d
Lab Smp Id: 1201982753 Client Smp ID: WST03-10-2132MS
Inj Date : 02-DEC-2009 16:25
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982753|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 60 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.686	10.698	-0.012	56850236	535.058	1.1	
7 2,4-D					CAS #: 94-75-7	
12.769	12.775	-0.006	24986099	250.328	0.50	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.507	13.512	-0.005	105654823	219.113	0.44	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/060f6001.d

Date : 02-DEC-2009 16:25

Client ID: WST03-10-2132MS

Sample Info: |1201982753|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

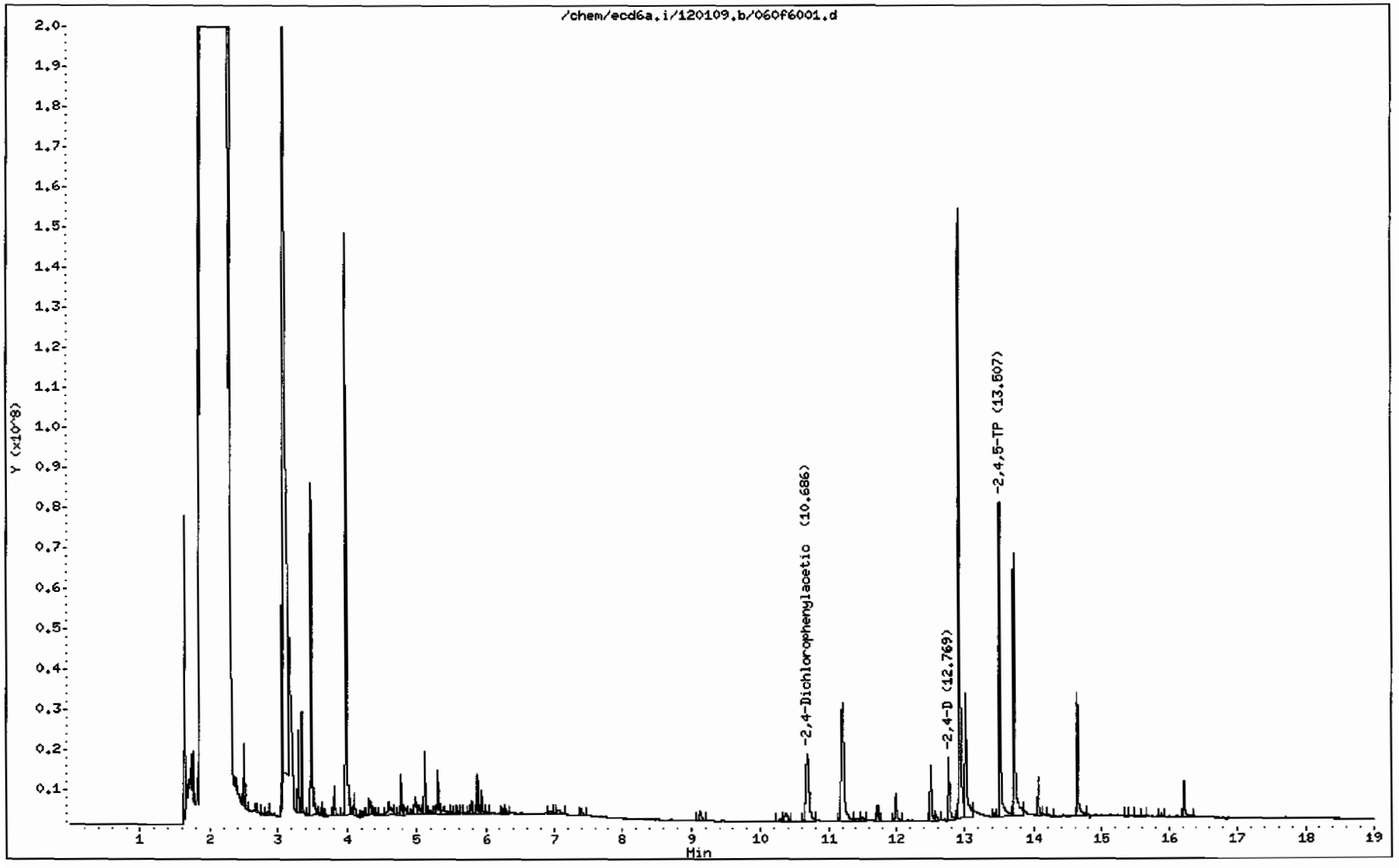

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120109.b/061b6101.d
Lab Smp Id: 1201982754 Client Smp ID: WST03-10-2132MSD
Inj Date : 02-DEC-2009 16:53
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982754|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MSD|SOIL|MSD|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120109.b/ECD6-B-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008b0801.d
Als bottle: 61 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.711	11.717	-0.006	65542873	551.104	1.1
7 2,4-D					CAS #: 94-75-7
13.212	13.216	-0.004	29839394	203.540	0.41
8 2,4,5-TP					CAS #: 93-72-1
13.823	13.825	-0.002	122703440	212.661	0.42

Data File: /chem/ecd6a.i/120109.b/061b6101.d
Date : 02-DEC-2009 16:53
Client ID: WST03-10-2132MSD
Sample Info: |1201982754|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

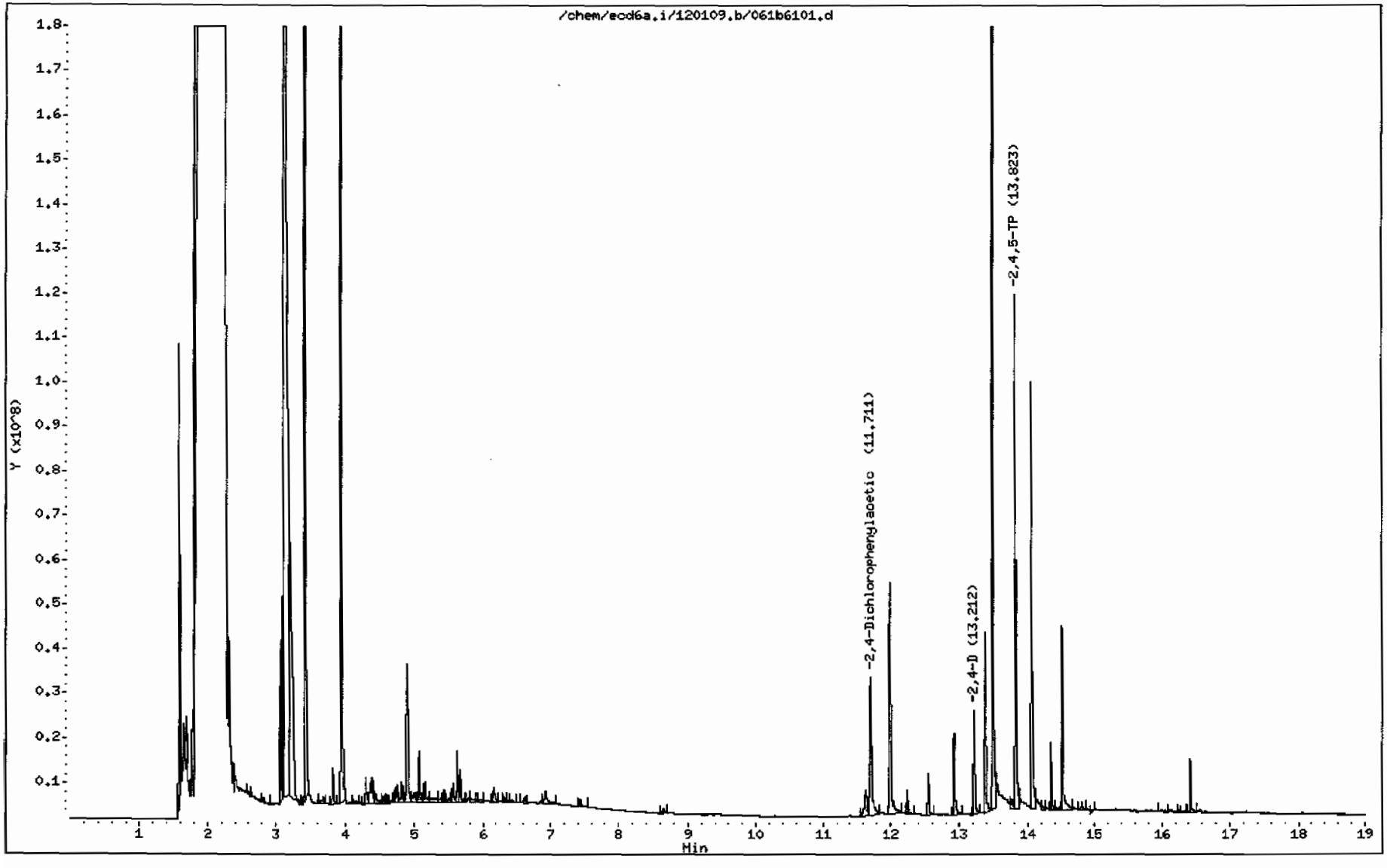

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120109.b/061f6101.d
Lab Smp Id: 1201982754 Client Smp ID: WST03-10-2132MSD
Inj Date : 02-DEC-2009 16:53
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201982754|1|
Misc Info : |ECDTPH_1LF|927402|SVHF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd6a.i/120109.b/ECD6-F-8151A-120109.m
Meth Date : 03-Dec-2009 09:50 tif01533 Quant Type: ESTD
Cal Date : 01-DEC-2009 15:40 Cal File: 008f0801.d
Als bottle: 61 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-600-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
10.689	10.698	-0.009	59688565	561.772	1.1	
7 2,4-D					CAS #: 94-75-7	
12.770	12.775	-0.005	25104912	251.519	0.50	(RM)
8 2,4,5-TP					CAS #: 93-72-1	
13.508	13.512	-0.004	108767047	225.567	0.45	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120109.b/061f6101.d
Date : 02-DEC-2009 16:53
Client ID: WST03-10-2132MSD
Sample Info: |120198275411|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

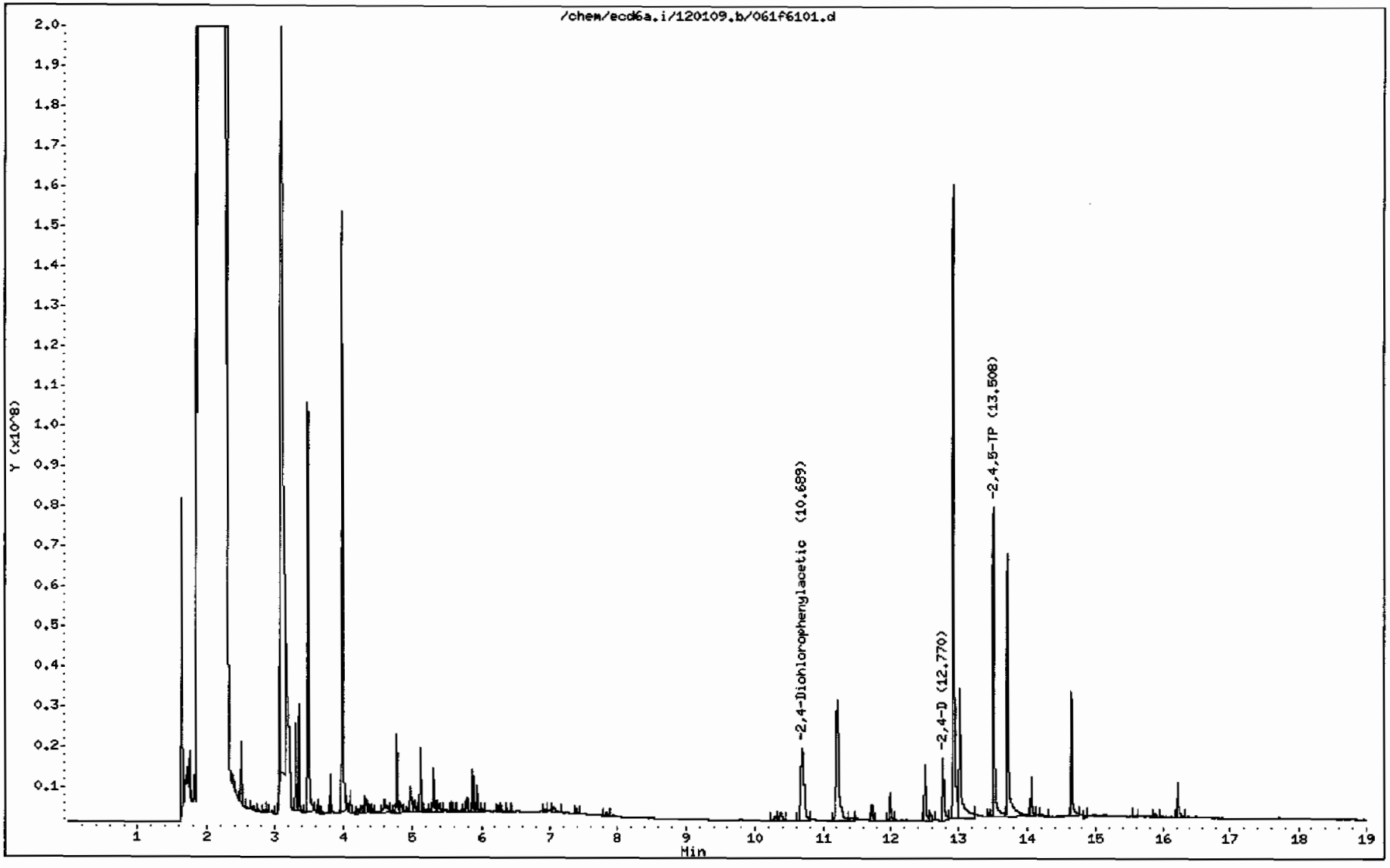

Prep Logbook

The Extraction of Herbicides from Groundwater, Wastewater and Other Aqueous Samples

Batch ID: 927399 **Verified by:** _____

Analyst: Sophia Cox

Method: SW846 8151A Prep

Lab SOP: GL–OA–E–015 REV# 12

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201979176 TB	01–DEC–2009 16:23:35	5	13	1	10	2
1201980055 TB	01–DEC–2009 16:23:35	5	13	1	10	2
1201980841 TB	01–DEC–2009 16:23:35	5	13	1	10	2
1201982751 MB	01–DEC–2009 16:23:35	1000	13	1	10	0.01
1201982752 LCS	01–DEC–2009 16:23:35	1000	13	1	10	0.01
241040001	01–DEC–2009 16:23:35	5	13	1	10	2
241424001	01–DEC–2009 16:23:35	5	13	1	10	2
241424002	01–DEC–2009 16:23:35	5	13	1	10	2
241527001	01–DEC–2009 16:23:35	5	13	1	10	2
1201982753 MS (241527001)	01–DEC–2009 16:23:35	5	13	1	10	2
1201982754 MSD (241527001)	01–DEC–2009 16:23:35	5	13	1	10	2
241704001	01–DEC–2009 16:23:35	5	13	1	10	2
241704002	01–DEC–2009 16:23:35	5	13	1	10	2

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982752	HERBICIDE LCS	WE091110–02	1	mL
MS	1201982753	HERBICIDE LCS	WE091110–02	1	mL
MSD	1201982754	HERBICIDE LCS	WE091110–02	1	mL
SURR	All	HERBICIDE SURROGATE	WE091110–03	.05	mL
REGNT	All	Methanol	091117–C	.5	mL
REGNT	All	Iso–octane	1106542–A	1	mL
REGNT	All	Methylene Chloride	1233148–D	180	mL
REGNT	All	Hexane	1233925–B2	4	mL
REGNT	All	Sodium hydroxide sol., 6N	1235843	17	mL
REGNT	All	Sulfuric Acid Sol., 12N For Herbicides	1235845	17	mL
REGNT	All	N–METHYL–N–NITROSO–P–TOLUENESULFON–AMIDE	1236127A	2	mL
REGNT	All	Ethyl ether	UN1233192a	240	mL

Comments:

Verified By: JAM

Final Solvent: Hexane

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 926091 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #106

Sample ID Analysis Start Date	1201980055 TB 24-NOV-2009 16:30:47	241424001 24-NOV-2009 16:30:47	241424002 24-NOV-2009 16:30:47	241527001 24-NOV-2009 16:30:47
100% Solid Y/N		y	y	y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.91	7.16	8.21	7.89
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.92	5	5	5
Final pH (su)	4.92	1.85	1.91	2.04
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	TCLP #1	SOLID	SOLID	SOLID
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	1000	1000	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1017923	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 25-NOV-09 09:30:45
Filtration End Date: 25-NOV-09 13:30:45
Bottle Lot Number: H929301DB
Filter Lot Number: 9045002
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-577

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13958	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13959	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13960	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13961	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13962	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13963	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13964	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13965	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13966	S	11/17/2009	Plus, B, Li, Si, Ti, U

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13967	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13968	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13969	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13970	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13971	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3913	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3914	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3923	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3924	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3933	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3934	W	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:6020	1	RE03-10-3923	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3924	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3933	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3934	W	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-13958	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13959	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13960	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13961	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13962	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13963	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13964	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13965	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13966	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13967	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13968	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13969	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13970	S	11/17/2009	Plus, B, Li, Si, Ti, U

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-13971	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3913	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3914	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3923	W	11/17/2009	
		1	RE03-10-3924	W	11/17/2009	
		1	RE03-10-3933	W	11/17/2009	
		1	RE03-10-3934	W	11/17/2009	

Final Page of REQUEST NUMBER 10-577

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-577

REQUEST NUMBER: 10-577

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13959	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13960	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13958	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13965	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13970	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13969	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13967	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13971	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13963	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13968	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13964	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13966	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13962	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13961	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3914	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3913	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3933	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3933	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3934	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3934	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3923	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3923	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3924	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3924	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/18/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13958 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	ALL H
TIME COLLECTED (HH:MM)		1020	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608330		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	3'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	4'	SCREEN/PORT DESC:		—
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SAND, GRAVEL ALLUVIUM w/ ASPHALT. LIGHT BROWN (7.5 YR 6/4)

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: ~~MW~~ 526-16

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background:
α: 60
β: 1273
Samples: MDA >

COLLECTED BY (PRINT) D. Thomas, M. Shendo **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/17/09 1630	(Printed Name) (Signature) [signature]	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13959 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1024	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608330		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	5'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	6'	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand Strong Brown 7.5YR 4/6

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: 52b-16

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background:
α: 60 DPM
β: 1273 DPM
Samples: MDA>

COLLECTED BY (PRINT) D. Thomas, M. Sherdo

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13960 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	~~NA~~	QBt3
TIME COLLECTED (HH:MM)		1036	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608331		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	3'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	4'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Rock, Tuff. QBt3 Light Brown 7.5YR 5/2

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: 52b-17

FIELD SCREENING/MEASUREMENT RESULTS: PID: 30.4 ppm
Background:
α 60 DPM
β 1273 DPM
Samples: MDA>

COLLECTED BY (PRINT) C. Horne **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13961 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	~~NA~~	QB+3
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608331		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	5'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	6'	SCREEN/PORT DESC:		
FIELD MATRIX:	~~S~~ MN R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Rock, Tuff QB+3. Reddish gray 7.5YR 5/2

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: 52b-17

FIELD SCREENING/MEASUREMENT RESULTS: PID: 694 ppm
Background:
α: 60 DPM
β: 1273 DPM
Samples: MDA>

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11-17-09 1630	(Printed Name) (Signature) [signature]	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13962 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		~~1149~~ 1247	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608332	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: CLAYEY SAND. Very dark brown (7.5YR 2.5/3)

SAMPLE COMMENTS: ~~NA~~ 11/17/09 sample location was changed 2 feet west due to steamline pipe below original location

LOCATION DESC: 03-052(b)-7

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND α: 60 DPM β: 1273 DPM

SAMPLES: MDA >

COLLECTED BY (PRINT) L. Horne, M. Shendo, D. Thomas

REVIEWED BY (PRINT) M. Hauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains	11/17/09 1630	(Printed Name)	11/17/09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13963 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1300	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608332	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand fill. Reddish Yellow 5YR6/3

SAMPLE COMMENTS: NA

LOCATION DESC: 03-052(b)-7

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND α: 60 DPM β: 1273 DPM

SAMPLES: MDA>

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains (Signature) Megan R	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13964 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1317	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608333	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY CLAY SAND. BROWN (7.5 YR 5/3)

SAMPLE COMMENTS: location moved 5 feet North

LOCATION DESC: 03-052(b)-8

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND α: 60 DPM β: 1273 DPM SAMPLES: MDA >

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** M. Nuck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) D. Thomas (Signature)	11-17-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13965 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1329	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608333	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SAND, GRAVEL FILL. Light reddish yellow (7.5 YR 6/6)

SAMPLE COMMENTS: location moved 5 feet north

LOCATION DESC: 03-052(b)-8

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND α: 60 DPM β: 1273 DPM

SAMPLES: MDA>

COLLECTED BY (PRINT) M. Shendo

REVIEWED BY (PRINT) M. Vaut

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-17-09	(Printed Name) Sherri Sherwood	11-17-09
(Signature) [illegible]	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13966 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		MW ~~11-9~~ 11-17-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1405	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608334		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand. Brown 7.5YR 4/4

SAMPLE COMMENTS: NA

LOCATION DESC: 52(b)-15

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background
α: 60 DPM
β: 1273 DPM
Samples: MDA>

COLLECTED BY (PRINT) L. Horne, D. Thomas, M. Shenda **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13967 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	QTB3
TIME COLLECTED (HH:MM)		1414	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608334	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ R mk 11/17/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: REDDISH BROWN TUFF (2.5 YR 4/4)

SAMPLE COMMENTS: Hit tuff @ 4'

LOCATION DESC: 03-052(b)-15

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND α: 60 β: 1273 SAMPLES <MDA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Wauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13968 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1428	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608335	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY CLAY SAND. LIGHT YELLOWISH BROWN. (10YR 6/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-052(b)-14

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND SAMPLES

α: 60 MDA

β: 1273

COLLECTED BY (PRINT) M. Shendo REVIEWED BY (PRINT) M. Dauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13969 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		me 11/17/09 ~~1435~~ 11/17/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1435	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608335	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY SAND FILL . LIGHT BROWN (7.5YR 6/6)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-052(b) - 14

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND α: 60 β: 1273

SAMPLES: <MDA

COLLECTED BY (PRINT) D. Thomas, L. Horne **REVIEWED BY (PRINT)** M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-17-09	(Printed Name)	11-17-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13970 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1449	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608336	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: CLAY SAND. LIGHT BROWN (7.5 YR 6/4)

SAMPLE COMMENTS: ~~NA~~ ~~TUFF~~ NA ne 11/17/09

LOCATION DESC: 03-052(b)-13

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.0 ppm BACKGROUND
α: 60 DPM
β: 1273 DPM

SAMPLES: MDA >

COLLECTED BY (PRINT) M. Shendo, L. Horne, D. Thomas **REVIEWED BY (PRINT)** M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-17-09	(Printed Name)	11-17-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13971 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	QTB3
TIME COLLECTED (HH:MM)		1455	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608336	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR mp 11/17/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: LT. REDDISH YELLOW (7.5 YR 6/6) TUFF

SAMPLE COMMENTS: ~~NA~~ HIT TUFF @ 4'

LOCATION DESC: 03-052(b)-13

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND SAMPLES:
α: 60 DPM MDA >
β: 1273 DPM

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3913 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1024	SUB-MEDIA:	SOIL	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608330	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	5'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	6'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: QC Sample of RE03-09-13959

SAMPLE COMMENTS: NA

LOCATION DESC: ~~NA~~ me 11/17/09 03-052(b)-16

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Background < α: 60 β: 1273 SAMPLES mDA>

COLLECTED BY (PRINT) L. Horne, D. Thomas, M. Shende **REVIEWED BY (PRINT)** M. Dorck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Ravins (Signature)	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3914 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1317.	SUB-MEDIA:	SOIL	
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608333	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: QC Sample of RE03-09-13964

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Yauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-17-09	(Printed Name) Sherri Sherwood	11-17-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3923 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608331	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13961

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Ubuck

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3924 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1340	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608333	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13965

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-17-09 1630	(Printed Name) Sherri Sherwood	11-17-09 1630
(Signature) [illegible]		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3933 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1137	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608331	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13961

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3934 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1350	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608333	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13965

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-17-09	(Printed Name) Sherri Sherwood	11-17-09
(Signature) [illegible]	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-14032 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	AI(H
TIME COLLECTED (HH:MM)		0935	SUB-MEDIA:	OTHER	Ok
PRS ID:	03-056(d) + 03-052(b)	Ok	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 SLS 11-17-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13811
RE03-09-13958

SAMPLE COMMENTS:

LOCATION DESC: 56d-1, 52b-16

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sheredo **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan	11-17-09	(Printed Name) K. Greene	11-17-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-577 VALIDATION DATE: 01/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the solid MB, Si was detected. The associated sample results were detects >50X the MB concentration and, thus, were not qualified, based on professional judgment.
2. In the solid CCBs associated with sample RE03-09-13969, K was detected. In the solid CCBs Sb and Mg were detected. Also, in the aqueous CCBs Tl was detected. The associated sample results were either detects >5X the greatest associated blank concentration or NDs and, thus, were not qualified.
3. In the FR blanks, samples -10-3993 and -10-3934, which were associated with all samples, Al, Ba, Ca, Cr, Fe, Mn, Ni, Si, Na, Ti and Zn were detected. The Na results for samples -09-13959, -09-13970, -09-13968, -09-13966, -09-13962 and -10-3913, the Cr results for samples -09-13959, -13961 and -10-3913 and the Ni results for all samples were detects ≤5X the FR blank concentration and, thus, were qualified U,I4d. All other associated sample results were detects ≥5X the FR blank concentrations and, thus, were not qualified. In the FB, sample -10-3923, associated with samples -09-13960 and -09-13961, Fe and Si were detected. Also, in the FB, sample -10-3924, associated with samples -10-13964 and -10-13965, Si was detected. The associated sample results were detects ≥5X the FB blank concentrations and, thus, were not qualified.
4. The aqueous LCS %R for Hg was > the laboratory UAL. The associated sample results were NDs and, thus, were not qualified.
5. The solid MS %R was < the laboratory LAL but ≥10% for Si. The associated sample results were detects and, thus, were qualified J-,I6a. The solid MS %Rs were > the laboratory UAL for Hg, Mg, K and Ti. The Hg results for samples -09-13959, -09-13960, -09-13958, -09-13961 and -10-3913 were NDs and, thus, were qualified UJ,I6b. All other associated sample results were detects and, thus, were qualified J+,I6b. Also, the MS %Rs were > the laboratory UAL for Al and Fe.

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.

6. The RPD between the duplicate and its parent sample for Ba was >35%, and the duplicate and parent sample results were ≥5X the PQL. The associated sample results were detects and, thus, were qualified J,I10a.
7. It should be noted the soil matrix QC analyses for Hg and the aqueous matrix QC for ICP an d ICP-MS were performed on LANL samples from other RNs. No sample data were qualified as a result

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 01/27/10

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 **Metals Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☒	☐	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419001 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13959 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5040000	ug/Kg		8160	24000	24000	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-36-0	Antimony	1200	ug/Kg	U	396	1200	1200	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-38-2	Arsenic	0.457	mg/kg	J	0.243	1.21	1.21	2	MS	SKJ	12/03/09 21:18	091203-5	925193
7440-39-3	Barium J,I10a	114000	ug/Kg	*N	120	600	600	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-41-7	Beryllium	0.464	mg/kg		0.0243	0.121	0.121	2	MS	BAJ	12/06/09 07:01	091205-6	925193
7440-42-8	Boron	6000	ug/Kg	U	1200	6000	6000	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-43-9	Cadmium	600	ug/Kg	U	120	600	600	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-70-2	Calcium	973000	ug/Kg		9600	30000	30000	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-47-3	Chromium U,I4d	3220	ug/Kg	*	180	600	600	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-48-4	Cobalt	705	ug/Kg		180	600	600	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-50-8	Copper	2550	ug/Kg		360	1200	1200	1	P	HSC	12/07/09 18:54	120709A-2	925191
7439-89-6	Iron	4290000	ug/Kg		9600	30000	30000	1	P	HSC	12/07/09 18:54	120709A-2	925191
7439-92-1	Lead	4150	ug/Kg		300	1200	1200	1	P	HSC	12/07/09 18:54	120709A-2	925191
7439-93-2	Lithium	5.33	mg/kg		0.486	2.43	2.43	2	MS	BAJ	12/06/09 07:01	091205-6	925193
7439-95-4	Magnesium J+,I6b	701000	ug/Kg	N	10200	36000	36000	1	P	HSC	12/07/09 18:54	120709A-2	925191
7439-96-5	Manganese	57200	ug/Kg		240	1200	1200	1	P	HSC	12/07/09 18:54	120709A-2	925191
7439-97-6	Mercury UJ,I6b	13.4	ug/kg	U	4.56	13.4	13.4	1	AV	JXL1	12/07/09 10:49	120709S1-7	924862
7440-02-0	Nickel U,I4d	2.39	mg/kg		0.121	0.486	0.486	2	MS	BAJ	12/06/09 07:01	091205-6	925193
7440-09-7	Potassium J+,I6b	544000	ug/Kg	N	7680	30000	30000	1	P	HSC	12/07/09 18:54	120709A-2	925191
7782-49-2	Selenium	1.21	mg/kg	U	0.607	1.21	1.21	2	MS	SKJ	12/03/09 21:18	091203-5	925193
7440-21-3	Silicon J-,I6a	702000	ug/Kg	N	1810	12100	12100	1	P	HSC	12/11/09 11:05	121109A-1	931347
7440-22-4	Silver	600	ug/Kg	U	120	600	600	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-23-5	Sodium U,I4d	308000	ug/Kg		8400	30000	30000	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-28-0	Thallium	0.142	mg/kg	J	0.0729	0.243	0.243	2	MS	SKJ	12/03/09 08:38	091202-4	925193
7440-32-6	Titanium J+,I6b	143000	ug/Kg	N	120	600	600	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-61-1	Uranium	0.222	mg/kg		0.016	0.0486	0.0486	2	MS	SKJ	12/03/09 21:18	091203-5	925193
7440-62-2	Vanadium	5310	ug/Kg		120	600	600	1	P	HSC	12/07/09 18:54	120709A-2	925191
7440-66-6	Zinc	14700	ug/Kg		396	1200	1200	1	P	HSC	12/07/09 18:54	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.544	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.506	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

P.S. 1/27/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419002 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13960 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2060000	ug/Kg		7820	23000	23000	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-36-0	Antimony	1150	ug/Kg	U	379	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-38-2	Arsenic	1.1	mg/kg	J	0.23	1.15	1.15	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-39-3	Barium J,I10a	24700	ug/Kg	*N	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-41-7	Beryllium	0.279	mg/kg		0.023	0.115	0.115	2	MS	BAJ	12/06/09 07:14	091205-6	925193
7440-42-8	Boron	5750	ug/Kg	U	1150	5750	5750	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-43-9	Cadmium	121	ug/Kg	J	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-70-2	Calcium	1420000	ug/Kg		9200	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-47-3	Chromium	3430	ug/Kg	*	172	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-48-4	Cobalt	590	ug/Kg		172	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-50-8	Copper	1240	ug/Kg		345	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-89-6	Iron	9170000	ug/Kg		9200	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-92-1	Lead	2810	ug/Kg		287	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-93-2	Lithium	8.46	mg/kg		0.461	2.3	2.3	2	MS	BAJ	12/06/09 07:14	091205-6	925193
7439-95-4	Magnesium J+,I6b	515000	ug/Kg	N	9770	34500	34500	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-96-5	Manganese	225000	ug/Kg		230	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-97-6	Mercury UJ,I6b	12.8	ug/kg	U	4.35	12.8	12.8	1	AV	JXL1	12/07/09 10:51	120709S1-7	924862
7440-02-0	Nickel U,I4d	1.96	mg/kg		0.115	0.461	0.461	2	MS	BAJ	12/06/09 07:14	091205-6	925193
7440-09-7	Potassium J+,I6b	528000	ug/Kg	N	7360	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7782-49-2	Selenium	1.15	mg/kg	U	0.576	1.15	1.15	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-21-3	Silicon J-,I6a	773000	ug/Kg	N	1730	11600	11600	1	P	HSC	12/11/09 11:22	121109A-1	931347
7440-22-4	Silver	219	ug/Kg	J	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-23-5	Sodium	364000	ug/Kg		8050	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-28-0	Thallium	0.230	mg/kg	U	0.0691	0.23	0.23	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-32-6	Titanium J+,I6b	430000	ug/Kg	N	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-61-1	Uranium	0.344	mg/kg		0.0152	0.0461	0.0461	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-62-2	Vanadium	5150	ug/Kg		115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-66-6	Zinc	36900	ug/Kg		379	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.548	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.507	g	50	mL	11/21/09	BCD1

P.S. 1/27/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419003 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13958 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8910000	ug/Kg		9010	26500	26500	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-36-0	Antimony	1320	ug/Kg	U	437	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-38-2	Arsenic	1.16	mg/kg	J	0.275	1.37	1.37	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-39-3	Barium J,I10a	59900	ug/Kg	*N	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-41-7	Beryllium	1.4	mg/kg		0.137	0.687	0.687	10	MS	BAJ	12/06/09 07:16	091205-6	925193
7440-42-8	Boron	1550	ug/Kg	J	1320	6620	6620	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-43-9	Cadmium	662	ug/Kg	U	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-70-2	Calcium	2030000	ug/Kg		10600	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-47-3	Chromium	7090	ug/Kg	*	199	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-48-4	Cobalt	1890	ug/Kg		199	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-50-8	Copper	6580	ug/Kg		397	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-89-6	Iron	7390000	ug/Kg		10600	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-92-1	Lead	6440	ug/Kg		331	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-93-2	Lithium	11.8	mg/kg	J	2.75	13.7	13.7	10	MS	BAJ	12/06/09 07:16	091205-6	925193
7439-95-4	Magnesium J+,I6b	1640000	ug/Kg	N	11300	39700	39700	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-96-5	Manganese	136000	ug/Kg		265	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-97-6	Mercury UJ,I6b	15.7	ug/kg	U	5.33	15.7	15.7	1	AV	JXL1	12/07/09 10:53	120709S1-7	924862
7440-02-0	Nickel U,I4d	8.73	mg/kg		0.687	2.75	2.75	10	MS	BAJ	12/06/09 07:16	091205-6	925193
7440-09-7	Potassium J+,I6b	1050000	ug/Kg	N	8480	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7782-49-2	Selenium	1.37	mg/kg	U	0.687	1.37	1.37	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-21-3	Silicon J-,I6a	768000	ug/Kg	N	1950	13000	13000	1	P	HSC	12/11/09 11:33	121109A-1	931347
7440-22-4	Silver	662	ug/Kg	U	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-23-5	Sodium	637000	ug/Kg		9270	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-28-0	Thallium	0.151	mg/kg	J	0.0825	0.275	0.275	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-32-6	Titanium J+,I6b	113000	ug/Kg	N	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-61-1	Uranium	0.408	mg/kg		0.0181	0.055	0.055	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-62-2	Vanadium	9940	ug/Kg		132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-66-6	Zinc	25200	ug/Kg		437	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.526	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.519	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419004 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13965 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13100000	ug/Kg		7310	21500	21500	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-36-0	Antimony	1080	ug/Kg	U	355	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-38-2	Arsenic	1.7	mg/kg		0.224	1.12	1.12	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-39-3	Barium J,I10a	116000	ug/Kg	*N	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-41-7	Beryllium	1.42	mg/kg		0.112	0.561	0.561	10	MS	BAJ	12/06/09 07:17	091205-6	925193
7440-42-8	Boron	2410	ug/Kg	J	1080	5380	5380	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-70-2	Calcium	3220000	ug/Kg		8600	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-47-3	Chromium	9160	ug/Kg	*	161	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-48-4	Cobalt	3580	ug/Kg		161	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-50-8	Copper	6490	ug/Kg		323	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-89-6	Iron	10200000	ug/Kg		8600	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-92-1	Lead	11100	ug/Kg		269	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-93-2	Lithium	14.4	mg/kg		2.24	11.2	11.2	10	MS	BAJ	12/06/09 07:17	091205-6	925193
7439-95-4	Magnesium J+,I6b	2050000	ug/Kg	N	9140	32300	32300	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-96-5	Manganese	290000	ug/Kg		215	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-97-6	Mercury J+,I6b	20.9	ug/kg		4.61	13.5	13.5	1	AV	JXL1	12/07/09 10:55	120709S1-7	924862
7440-02-0	Nickel U,I4d	12.8	mg/kg		0.561	2.24	2.24	10	MS	BAJ	12/06/09 07:17	091205-6	925193
7440-09-7	Potassium J+,I6b	1320000	ug/Kg	N	6880	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7782-49-2	Selenium	1.12	mg/kg	U	0.561	1.12	1.12	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-21-3	Silicon J-,I6a	958000	ug/Kg	N	1610	10800	10800	1	P	HSC	12/11/09 11:37	121109A-1	931347
7440-22-4	Silver	183	ug/Kg	J	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-23-5	Sodium	619000	ug/Kg		7530	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-28-0	Thallium	0.283	mg/kg		0.0673	0.224	0.224	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-32-6	Titanium J+,I6b	227000	ug/Kg	N	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-61-1	Uranium	0.590	mg/kg		0.0148	0.0449	0.0449	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-62-2	Vanadium	14600	ug/Kg		108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-66-6	Zinc	27700	ug/Kg		355	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.5	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419005 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13970 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16300000	ug/Kg		7590	22300	22300	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-36-0	Antimony	1120	ug/Kg	U	368	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-38-2	Arsenic	2.65	mg/kg		0.215	1.08	1.08	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-39-3	Barium J,I10a	120000	ug/Kg	*N	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-41-7	Beryllium	1.39	mg/kg		0.108	0.538	0.538	10	MS	BAJ	12/06/09 07:19	091205-6	925193
7440-42-8	Boron	2240	ug/Kg	J	1120	5580	5580	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-43-9	Cadmium	135	ug/Kg	J	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-70-2	Calcium	3410000	ug/Kg		8930	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-47-3	Chromium	13000	ug/Kg	*	167	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-48-4	Cobalt	5540	ug/Kg		167	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-50-8	Copper	9420	ug/Kg		335	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-89-6	Iron	16800000	ug/Kg		8930	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-92-1	Lead	14700	ug/Kg		279	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-93-2	Lithium	19.3	mg/kg		2.15	10.8	10.8	10	MS	BAJ	12/06/09 07:19	091205-6	925193
7439-95-4	Magnesium J+,I6b	2890000	ug/Kg	N	9490	33500	33500	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-96-5	Manganese	345000	ug/Kg		223	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-97-6	Mercury J+,I6b	23.8	ug/kg		4.04	11.9	11.9	1	AV	JXL1	12/07/09 10:57	120709S1-7	924862
7440-02-0	Nickel U,I4d	11	mg/kg		0.538	2.15	2.15	10	MS	BAJ	12/06/09 07:19	091205-6	925193
7440-09-7	Potassium J+,I6b	1370000	ug/Kg	N	7140	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7782-49-2	Selenium	1.08	mg/kg	U	0.538	1.08	1.08	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-21-3	Silicon J-,I6a	648000	ug/Kg	N	1520	10100	10100	1	P	HSC	12/11/09 11:40	121109A-1	931347
7440-22-4	Silver	324	ug/Kg	J	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-23-5	Sodium U,I4d	210000	ug/Kg		7810	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-28-0	Thallium	0.222	mg/kg		0.0645	0.215	0.215	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-32-6	Titanium J+,I6b	249000	ug/Kg	N	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-61-1	Uranium	1.06	mg/kg		0.0142	0.043	0.043	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-62-2	Vanadium	31500	ug/Kg		112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-66-6	Zinc	27500	ug/Kg		368	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.565	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.52	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419006 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13969 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	14000000	ug/Kg		7710	22700	22700	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-36-0	Antimony	1130	ug/Kg	U	374	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-38-2	Arsenic	3.36	mg/kg		0.23	1.15	1.15	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-39-3	Barium J,I10a	327000	ug/Kg	*N	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-41-7	Beryllium	2.04	mg/kg		0.115	0.576	0.576	10	MS	BAJ	12/06/09 07:21	091205-6	925193
7440-42-8	Boron	1710	ug/Kg	J	1130	5670	5670	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-43-9	Cadmium	567	ug/Kg	U	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-70-2	Calcium	5610000	ug/Kg		9070	28400	28400	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-47-3	Chromium	11100	ug/Kg	*	170	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-48-4	Cobalt	9230	ug/Kg		170	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-50-8	Copper	10400	ug/Kg		340	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-89-6	Iron	13900000	ug/Kg		9070	28400	28400	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-92-1	Lead	16400	ug/Kg		284	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-93-2	Lithium	20.5	mg/kg		2.3	11.5	11.5	10	MS	BAJ	12/06/09 07:21	091205-6	925193
7439-95-4	Magnesium J+,I6b	2970000	ug/Kg	N	9640	34000	34000	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-96-5	Manganese	1350000	ug/Kg		1130	5670	5670	5	P	HSC	12/11/09 12:47	121109A-3	925191
7439-97-6	Mercury J+,I6b	28.4	ug/kg		4.4	12.9	12.9	1	AV	JXL1	12/07/09 10:59	120709S1-7	924862
7440-02-0	Nickel U,I4d	16.9	mg/kg		0.576	2.3	2.3	10	MS	BAJ	12/06/09 07:21	091205-6	925193
7440-09-7	Potassium J+,I6b	1650000	ug/Kg	N	36300	142000	142000	5	P	HSC	12/11/09 12:47	121109A-3	925191
7782-49-2	Selenium	1.15	mg/kg	U	0.576	1.15	1.15	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-21-3	Silicon J-,I6a	854000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/11/09 11:43	121109A-1	931347
7440-22-4	Silver	375	ug/Kg	J	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-23-5	Sodium	439000	ug/Kg		7940	28400	28400	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-28-0	Thallium	0.299	mg/kg		0.0691	0.23	0.23	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-32-6	Titanium J+,I6b	118000	ug/Kg	N	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-61-1	Uranium	0.521	mg/kg		0.0152	0.0461	0.0461	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-62-2	Vanadium	29700	ug/Kg		113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-66-6	Zinc	26000	ug/Kg		374	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.534	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419007 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13967 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17000000	ug/Kg		8250	24300	24300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-36-0	Antimony	1210	ug/Kg	U	400	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-38-2	Arsenic	1.66	mg/kg		0.232	1.16	1.16	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-39-3	Barium J,I10a	430000	ug/Kg	*N	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-41-7	Beryllium	3.17	mg/kg		0.116	0.58	0.58	10	MS	BAJ	12/06/09 07:23	091205-6	925193
7440-42-8	Boron	2610	ug/Kg	J	1210	6070	6070	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-43-9	Cadmium	607	ug/Kg	U	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-70-2	Calcium	4980000	ug/Kg		9710	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-47-3	Chromium	8350	ug/Kg	*	182	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-48-4	Cobalt	5800	ug/Kg		182	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-50-8	Copper	6210	ug/Kg		364	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-89-6	Iron	10600000	ug/Kg		9710	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-92-1	Lead	11700	ug/Kg		303	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-93-2	Lithium	16.9	mg/kg		2.32	11.6	11.6	10	MS	BAJ	12/06/09 07:23	091205-6	925193
7439-95-4	Magnesium J+,I6b	2690000	ug/Kg	N	10300	36400	36400	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-96-5	Manganese	161000	ug/Kg		243	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-97-6	Mercury J+,I6b	25.2	ug/kg		4.53	13.3	13.3	1	AV	JXL1	12/07/09 11:05	120709S1-7	924862
7440-02-0	Nickel U,I4d	16.5	mg/kg		0.58	2.32	2.32	10	MS	BAJ	12/06/09 07:23	091205-6	925193
7440-09-7	Potassium J+,I6b	1640000	ug/Kg	N	7760	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7782-49-2	Selenium	1.16	mg/kg	U	0.58	1.16	1.16	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-21-3	Silicon J-,I6a	1030000	ug/Kg	N	1820	12100	12100	1	P	HSC	12/11/09 11:46	121109A-1	931347
7440-22-4	Silver	607	ug/Kg	U	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-23-5	Sodium	389000	ug/Kg		8490	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-28-0	Thallium	0.252	mg/kg		0.0696	0.232	0.232	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-32-6	Titanium J+,I6b	103000	ug/Kg	N	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-61-1	Uranium	0.437	mg/kg		0.0153	0.0464	0.0464	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-62-2	Vanadium	16900	ug/Kg		121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-66-6	Zinc	25500	ug/Kg		400	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.548	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.502	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419008 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13971 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13700000	ug/Kg		8060	23700	23700	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-36-0	Antimony	1190	ug/Kg	U	391	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-38-2	Arsenic	2.57	mg/kg		0.239	1.19	1.19	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-39-3	Barium J,I10a	161000	ug/Kg	*N	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-41-7	Beryllium	2	mg/kg		0.119	0.597	0.597	10	MS	BAJ	12/06/09 07:28	091205-6	925193
7440-42-8	Boron	1570	ug/Kg	J	1190	5930	5930	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-43-9	Cadmium	593	ug/Kg	U	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-70-2	Calcium	3460000	ug/Kg		9480	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-47-3	Chromium	8150	ug/Kg	*	178	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-48-4	Cobalt	2650	ug/Kg		178	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-50-8	Copper	7600	ug/Kg		356	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-89-6	Iron	11300000	ug/Kg		9480	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-92-1	Lead	9630	ug/Kg		296	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-93-2	Lithium	18.6	mg/kg		2.39	11.9	11.9	10	MS	BAJ	12/06/09 07:28	091205-6	925193
7439-95-4	Magnesium J+,I6b	2530000	ug/Kg	N	10100	35600	35600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-96-5	Manganese	119000	ug/Kg		237	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-97-6	Mercury J+,I6b	16.1	ug/kg		4.38	12.9	12.9	1	AV	JXL1	12/07/09 11:07	120709S1-7	924862
7440-02-0	Nickel U,I4d	15.3	mg/kg		0.597	2.39	2.39	10	MS	BAJ	12/06/09 07:28	091205-6	925193
7440-09-7	Potassium J+,I6b	1540000	ug/Kg	N	7580	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7782-49-2	Selenium	1.19	mg/kg	U	0.597	1.19	1.19	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-21-3	Silicon J-,I6a	1150000	ug/Kg	N	1850	12300	12300	1	P	HSC	12/11/09 11:49	121109A-1	931347
7440-22-4	Silver	250	ug/Kg	J	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-23-5	Sodium	773000	ug/Kg		8300	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-28-0	Thallium	0.251	mg/kg		0.0717	0.239	0.239	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-32-6	Titanium J+,I6b	154000	ug/Kg	N	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-61-1	Uranium	0.581	mg/kg		0.0158	0.0478	0.0478	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-62-2	Vanadium	18300	ug/Kg		119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-66-6	Zinc	26300	ug/Kg		391	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.575	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.521	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.517	g	50	mL	11/21/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419009 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13963 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15500000	ug/Kg		8140	24000	24000	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-36-0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-38-2	Arsenic	1.33	mg/kg		0.238	1.19	1.19	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-39-3	Barium J,I10a	144000	ug/Kg	*N	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-41-7	Beryllium	1.21	mg/kg		0.119	0.595	0.595	10	MS	BAJ	12/06/09 07:30	091205-6	925193
7440-42-8	Boron	1490	ug/Kg	J	1200	5990	5990	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-43-9	Cadmium	599	ug/Kg	U	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-70-2	Calcium	3680000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-47-3	Chromium	13300	ug/Kg	*	180	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-48-4	Cobalt	2200	ug/Kg		180	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-50-8	Copper	6670	ug/Kg		359	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-89-6	Iron	10500000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-92-1	Lead	10300	ug/Kg		299	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-93-2	Lithium	12.9	mg/kg		2.38	11.9	11.9	10	MS	BAJ	12/06/09 07:30	091205-6	925193
7439-95-4	Magnesium J+,I6b	2060000	ug/Kg	N	10200	35900	35900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-96-5	Manganese	129000	ug/Kg		240	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-97-6	Mercury J+,I6b	29.4	ug/kg		4.89	14.4	14.4	1	AV	JXL1	12/07/09 11:09	120709S1-7	924862
7440-02-0	Nickel U,I4d	11.5	mg/kg		0.595	2.38	2.38	10	MS	BAJ	12/06/09 07:30	091205-6	925193
7440-09-7	Potassium J+,I6b	1110000	ug/Kg	N	7660	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7782-49-2	Selenium	1.19	mg/kg	U	0.595	1.19	1.19	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-21-3	Silicon J-,I6a	1220000	ug/Kg	N	1800	12000	12000	1	P	HSC	12/11/09 11:52	121109A-1	931347
7440-22-4	Silver	251	ug/Kg	J	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-23-5	Sodium	461000	ug/Kg		8380	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-28-0	Thallium	0.194	mg/kg	J	0.0714	0.238	0.238	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-32-6	Titanium J+,I6b	212000	ug/Kg	N	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-61-1	Uranium	0.622	mg/kg		0.0157	0.0476	0.0476	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-62-2	Vanadium	16100	ug/Kg		120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-66-6	Zinc	20700	ug/Kg		395	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.504	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.504	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.507	g	50	mL	11/21/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419010 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13968 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10900000	ug/Kg		7140	21000	21000	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-36-0	Antimony	1050	ug/Kg	U	346	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-38-2	Arsenic	4.77	mg/kg		0.215	1.07	1.07	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-39-3	Barium J,I10a	181000	ug/Kg	*N	105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-41-7	Beryllium	1.15	mg/kg		0.107	0.537	0.537	10	MS	BAJ	12/06/09 07:32	091205-6	925193
7440-42-8	Boron	2050	ug/Kg	J	1050	5250	5250	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-70-2	Calcium	2460000	ug/Kg		8400	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-47-3	Chromium	10200	ug/Kg	*	157	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-48-4	Cobalt	8130	ug/Kg		157	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-50-8	Copper	6270	ug/Kg		315	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-89-6	Iron	15100000	ug/Kg		8400	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-92-1	Lead	25500	ug/Kg		262	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-93-2	Lithium	14.1	mg/kg		2.15	10.7	10.7	10	MS	BAJ	12/06/09 07:32	091205-6	925193
7439-95-4	Magnesium J+,I6b	2010000	ug/Kg	N	8920	31500	31500	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-96-5	Manganese	873000	ug/Kg		210	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-97-6	Mercury J+,I6b	13	ug/kg		3.96	11.6	11.6	1	AV	JXL1	12/07/09 11:10	120709S1-7	924862
7440-02-0	Nickel U,I4d	9.24	mg/kg		0.537	2.15	2.15	10	MS	BAJ	12/06/09 07:32	091205-6	925193
7440-09-7	Potassium J+,I6b	1060000	ug/Kg	N	6720	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7782-49-2	Selenium	1.07	mg/kg	U	0.537	1.07	1.07	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-21-3	Silicon J-,I6a	1090000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/11/09 12:03	121109A-1	931347
7440-22-4	Silver	635	ug/Kg		105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-23-5	Sodium U,I4d	108000	ug/Kg		7350	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-28-0	Thallium	0.185	mg/kg	J	0.0645	0.215	0.215	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-32-6	Titanium J+,I6b	304000	ug/Kg	N	105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-61-1	Uranium	1.09	mg/kg		0.0142	0.043	0.043	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-62-2	Vanadium	37600	ug/Kg		105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-66-6	Zinc	21000	ug/Kg		346	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.564	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.521	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419011 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13964 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15400000	ug/Kg		7450	21900	21900	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-36-0	Antimony	1100	ug/Kg	U	362	1100	1100	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-38-2	Arsenic	3.04	mg/kg		0.23	1.15	1.15	2	MS	SKJ	12/03/09 23:10	091203-5	925193
7440-39-3	Barium J,I10a	118000	ug/Kg	*N	110	548	548	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-41-7	Beryllium	1.27	mg/kg		0.115	0.574	0.574	10	MS	BAJ	12/06/09 07:34	091205-6	925193
7440-42-8	Boron	2910	ug/Kg	J	1100	5480	5480	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-43-9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-70-2	Calcium	3200000	ug/Kg		8770	27400	27400	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-47-3	Chromium	14200	ug/Kg	*	164	548	548	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-48-4	Cobalt	6900	ug/Kg		164	548	548	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-50-8	Copper	10200	ug/Kg		329	1100	1100	1	P	HSC	12/07/09 20:59	120709A-2	925191
7439-89-6	Iron	17400000	ug/Kg		8770	27400	27400	1	P	HSC	12/07/09 20:59	120709A-2	925191
7439-92-1	Lead	14800	ug/Kg		274	1100	1100	1	P	HSC	12/07/09 20:59	120709A-2	925191
7439-93-2	Lithium	20.4	mg/kg		2.3	11.5	11.5	10	MS	BAJ	12/06/09 07:34	091205-6	925193
7439-95-4	Magnesium J+,I6b	2960000	ug/Kg	N	9310	32900	32900	1	P	HSC	12/07/09 20:59	120709A-2	925191
7439-96-5	Manganese	452000	ug/Kg		219	1100	1100	1	P	HSC	12/07/09 20:59	120709A-2	925191
7439-97-6	Mercury J+,I6b	25.9	ug/kg		4.67	13.7	13.7	1	AV	JXL1	12/07/09 11:12	120709S1-7	924862
7440-02-0	Nickel U,I4d	12	mg/kg		0.574	2.3	2.3	10	MS	BAJ	12/06/09 07:34	091205-6	925193
7440-09-7	Potassium J+,I6b	1400000	ug/Kg	N	7010	27400	27400	1	P	HSC	12/07/09 20:59	120709A-2	925191
7782-49-2	Selenium	1.15	mg/kg	U	0.574	1.15	1.15	2	MS	SKJ	12/03/09 23:10	091203-5	925193
7440-21-3	Silicon J-,I6a	701000	ug/Kg	N	1680	11200	11200	1	P	HSC	12/11/09 12:06	121109A-1	931347
7440-22-4	Silver	384	ug/Kg	J	110	548	548	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-23-5	Sodium	490000	ug/Kg		7670	27400	27400	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-28-0	Thallium	0.257	mg/kg		0.0689	0.23	0.23	2	MS	SKJ	12/03/09 23:10	091203-5	925193
7440-32-6	Titanium J+,I6b	283000	ug/Kg	N	110	548	548	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-61-1	Uranium	0.734	mg/kg		0.0152	0.0459	0.0459	2	MS	SKJ	12/03/09 23:10	091203-5	925193
7440-62-2	Vanadium	34400	ug/Kg		110	548	548	1	P	HSC	12/07/09 20:59	120709A-2	925191
7440-66-6	Zinc	27500	ug/Kg		362	1100	1100	1	P	HSC	12/07/09 20:59	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.502	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.524	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419012 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13966 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9380000	ug/Kg		7120	20900	20900	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-36-0	Antimony	1050	ug/Kg	U	345	1050	1050	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-38-2	Arsenic	3.16	mg/kg		0.206	1.03	1.03	2	MS	SKJ	12/03/09 23:17	091203-5	925193
7440-39-3	Barium J,I10a	137000	ug/Kg	*N	105	523	523	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-41-7	Beryllium	0.991	mg/kg		0.103	0.515	0.515	10	MS	BAJ	12/06/09 07:35	091205-6	925193
7440-42-8	Boron	2160	ug/Kg	J	1050	5230	5230	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-43-9	Cadmium	523	ug/Kg	U	105	523	523	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-70-2	Calcium	2220000	ug/Kg		8370	26200	26200	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-47-3	Chromium	9840	ug/Kg	*	157	523	523	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-48-4	Cobalt	6600	ug/Kg		157	523	523	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-50-8	Copper	6720	ug/Kg		314	1050	1050	1	P	HSC	12/07/09 21:06	120709A-2	925191
7439-89-6	Iron	13700000	ug/Kg		8370	26200	26200	1	P	HSC	12/07/09 21:06	120709A-2	925191
7439-92-1	Lead	15700	ug/Kg		262	1050	1050	1	P	HSC	12/07/09 21:06	120709A-2	925191
7439-93-2	Lithium	13.3	mg/kg		2.06	10.3	10.3	10	MS	BAJ	12/06/09 07:35	091205-6	925193
7439-95-4	Magnesium J+,I6b	1850000	ug/Kg	N	8900	31400	31400	1	P	HSC	12/07/09 21:06	120709A-2	925191
7439-96-5	Manganese	536000	ug/Kg		209	1050	1050	1	P	HSC	12/07/09 21:06	120709A-2	925191
7439-97-6	Mercury J+,I6b	14.4	ug/kg		4.32	12.7	12.7	1	AV	JXL1	12/07/09 11:14	120709S1-7	924862
7440-02-0	Nickel U,I4d	10.5	mg/kg		0.515	2.06	2.06	10	MS	BAJ	12/06/09 07:35	091205-6	925193
7440-09-7	Potassium J+,I6b	1430000	ug/Kg	N	6700	26200	26200	1	P	HSC	12/07/09 21:06	120709A-2	925191
7782-49-2	Selenium	1.03	mg/kg	U	0.515	1.03	1.03	2	MS	SKJ	12/03/09 23:17	091203-5	925193
7440-21-3	Silicon J-,I6a	1090000	ug/Kg	N	1620	10800	10800	1	P	HSC	12/11/09 12:09	121109A-1	931347
7440-22-4	Silver	434	ug/Kg	J	105	523	523	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-23-5	Sodium U,I4d	61900	ug/Kg		7330	26200	26200	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-28-0	Thallium	0.169	mg/kg	J	0.0619	0.206	0.206	2	MS	SKJ	12/03/09 23:17	091203-5	925193
7440-32-6	Titanium J+,I6b	324000	ug/Kg	N	105	523	523	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-61-1	Uranium	1.04	mg/kg		0.0136	0.0412	0.0412	2	MS	SKJ	12/03/09 23:17	091203-5	925193
7440-62-2	Vanadium	31000	ug/Kg		105	523	523	1	P	HSC	12/07/09 21:06	120709A-2	925191
7440-66-6	Zinc	24200	ug/Kg		345	1050	1050	1	P	HSC	12/07/09 21:06	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.511	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.517	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419013 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13962 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8100000	ug/Kg		7720	22700	22700	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-36-0	Antimony	1140	ug/Kg	U	375	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-38-2	Arsenic	2.66	mg/kg		0.223	1.11	1.11	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-39-3	Barium J,I10a	117000	ug/Kg	*N	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-41-7	Beryllium	0.972	mg/kg		0.111	0.557	0.557	10	MS	BAJ	12/06/09 07:41	091205-6	925193
7440-42-8	Boron	1600	ug/Kg	J	1140	5680	5680	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-43-9	Cadmium	568	ug/Kg	U	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-70-2	Calcium	1860000	ug/Kg		9080	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-47-3	Chromium	20700	ug/Kg	*	170	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-48-4	Cobalt	7040	ug/Kg		170	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-50-8	Copper	5920	ug/Kg		341	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-89-6	Iron	13200000	ug/Kg		9080	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-92-1	Lead	14200	ug/Kg		284	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-93-2	Lithium	11.9	mg/kg		2.23	11.1	11.1	10	MS	BAJ	12/06/09 07:41	091205-6	925193
7439-95-4	Magnesium J+,I6b	1730000	ug/Kg	N	9650	34100	34100	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-96-5	Manganese	554000	ug/Kg		227	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-97-6	Mercury J+,I6b	14.2	ug/kg		4.54	13.4	13.4	1	AV	JXLI	12/07/09 11:16	120709S1-7	924862
7440-02-0	Nickel U,I4d	10.4	mg/kg		0.557	2.23	2.23	10	MS	BAJ	12/06/09 07:41	091205-6	925193
7440-09-7	Potassium J+,I6b	1060000	ug/Kg	N	7270	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-21-3	Silicon J-,I6a	1160000	ug/Kg	N	1640	10900	10900	1	P	HSC	12/11/09 12:12	121109A-1	931347
7440-22-4	Silver	365	ug/Kg	J	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-23-5	Sodium U,I4d	142000	ug/Kg		7950	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-28-0	Thallium	0.164	mg/kg	J	0.0668	0.223	0.223	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-32-6	Titanium J+,I6b	366000	ug/Kg	N	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-61-1	Uranium	1.18	mg/kg		0.0147	0.0445	0.0445	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-62-2	Vanadium	30700	ug/Kg		114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-66-6	Zinc	20100	ug/Kg		375	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.513	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.513	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419014 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13961 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1480000	ug/Kg		8140	23900	23900	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-36-0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-38-2	Arsenic	0.978	mg/kg	J	0.237	1.19	1.19	2	MS	SKJ	12/03/09 23:29	091203-5	925193
7440-39-3	Barium J,I10a	23700	ug/Kg	*N	120	599	599	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-41-7	Beryllium	0.267	mg/kg		0.0237	0.119	0.119	2	MS	BAJ	12/06/09 07:43	091205-6	925193
7440-42-8	Boron	5990	ug/Kg	U	1200	5990	5990	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-43-9	Cadmium	599	ug/Kg	U	120	599	599	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-70-2	Calcium	716000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-47-3	Chromium U,I4d	3270	ug/Kg	*	180	599	599	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-48-4	Cobalt	532	ug/Kg	J	180	599	599	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-50-8	Copper	1040	ug/Kg	J	359	1200	1200	1	P	HSC	12/07/09 21:21	120709A-2	925191
7439-89-6	Iron	7370000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 21:21	120709A-2	925191
7439-92-1	Lead	2710	ug/Kg		299	1200	1200	1	P	HSC	12/07/09 21:21	120709A-2	925191
7439-93-2	Lithium	11.6	mg/kg		0.474	2.37	2.37	2	MS	BAJ	12/06/09 07:43	091205-6	925193
7439-95-4	Magnesium J+,I6b	433000	ug/Kg	N	10200	35900	35900	1	P	HSC	12/07/09 21:21	120709A-2	925191
7439-96-5	Manganese	211000	ug/Kg		239	1200	1200	1	P	HSC	12/07/09 21:21	120709A-2	925191
7439-97-6	Mercury UJ,I6b	13.8	ug/kg	U	4.7	13.8	13.8	1	AV	JXL1	12/07/09 11:18	120709S1-7	924862
7440-02-0	Nickel U,I4d	1.81	mg/kg		0.119	0.474	0.474	2	MS	BAJ	12/06/09 07:43	091205-6	925193
7440-09-7	Potassium J+,I6b	573000	ug/Kg	N	7660	29900	29900	1	P	HSC	12/07/09 21:21	120709A-2	925191
7782-49-2	Selenium	1.19	mg/kg	U	0.593	1.19	1.19	2	MS	SKJ	12/03/09 23:29	091203-5	925193
7440-21-3	Silicon J-,I6a	642000	ug/Kg	N	1800	12000	12000	1	P	HSC	12/11/09 12:16	121109A-1	931347
7440-22-4	Silver	207	ug/Kg	J	120	599	599	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-23-5	Sodium	417000	ug/Kg		8380	29900	29900	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-28-0	Thallium	0.237	mg/kg	U	0.0711	0.237	0.237	2	MS	SKJ	12/03/09 23:29	091203-5	925193
7440-32-6	Titanium J+,I6b	381000	ug/Kg	N	120	599	599	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-61-1	Uranium	0.342	mg/kg		0.0156	0.0474	0.0474	2	MS	SKJ	12/03/09 23:29	091203-5	925193
7440-62-2	Vanadium	4070	ug/Kg		120	599	599	1	P	HSC	12/07/09 21:21	120709A-2	925191
7440-66-6	Zinc	34700	ug/Kg		395	1200	1200	1	P	HSC	12/07/09 21:21	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.523	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419015 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3914 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10300000	ug/Kg		7790	22900	22900	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-36-0	Antimony	1150	ug/Kg	U	378	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-38-2	Arsenic	3.72	mg/kg		0.225	1.13	1.13	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-39-3	Barium J,I10a	133000	ug/Kg	*N	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-41-7	Beryllium	1.35	mg/kg		0.113	0.563	0.563	10	MS	BAJ	12/06/09 07:44	091205-6	925193
7440-42-8	Boron	1800	ug/Kg	J	1150	5730	5730	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-43-9	Cadmium	573	ug/Kg	U	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-70-2	Calcium	2910000	ug/Kg		9170	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-47-3	Chromium	16500	ug/Kg	*	172	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-48-4	Cobalt	9280	ug/Kg		172	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-50-8	Copper	7710	ug/Kg		344	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-89-6	Iron	14900000	ug/Kg		9170	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-92-1	Lead	17600	ug/Kg		287	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-93-2	Lithium	17.9	mg/kg		2.25	11.3	11.3	10	MS	BAJ	12/06/09 07:44	091205-6	925193
7439-95-4	Magnesium J+,I6b	2330000	ug/Kg	N	9740	34400	34400	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-96-5	Manganese	699000	ug/Kg		229	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-97-6	Mercury J+,I6b	27.2	ug/kg		4.36	12.8	12.8	1	AV	JXL1	12/07/09 11:20	120709S1-7	924862
7440-02-0	Nickel U,I4d	13.8	mg/kg		0.563	2.25	2.25	10	MS	BAJ	12/06/09 07:44	091205-6	925193
7440-09-7	Potassium J+,I6b	1130000	ug/Kg	N	7340	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7782-49-2	Selenium	1.13	mg/kg	U	0.563	1.13	1.13	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-21-3	Silicon J-,I6a	900000	ug/Kg	N	1720	11500	11500	1	P	HSC	12/11/09 12:20	121109A-1	931347
7440-22-4	Silver	526	ug/Kg	J	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-23-5	Sodium	419000	ug/Kg		8020	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-28-0	Thallium	0.260	mg/kg		0.0676	0.225	0.225	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-32-6	Titanium J+,I6b	238000	ug/Kg	N	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-61-1	Uranium	0.895	mg/kg		0.0149	0.045	0.045	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-62-2	Vanadium	33400	ug/Kg		115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-66-6	Zinc	22700	ug/Kg		378	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.536	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419016 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3913 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3820000	ug/Kg		7990	23500	23500	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-36-0	Antimony	1180	ug/Kg	U	388	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-38-2	Arsenic	0.426	mg/kg	J	0.241	1.2	1.2	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-39-3	Barium J,I10a	68000	ug/Kg	*N	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-41-7	Beryllium	0.507	mg/kg		0.0241	0.12	0.12	2	MS	BAJ	12/06/09 07:46	091205-6	925193
7440-42-8	Boron	5880	ug/Kg	U	1180	5880	5880	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-43-9	Cadmium	588	ug/Kg	U	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-70-2	Calcium	904000	ug/Kg		9410	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-47-3	Chromium U,I4d	2870	ug/Kg	*	176	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-48-4	Cobalt	953	ug/Kg		176	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-50-8	Copper	3130	ug/Kg		353	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-89-6	Iron	3630000	ug/Kg		9410	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-92-1	Lead	4000	ug/Kg		294	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-93-2	Lithium	6.18	mg/kg		0.482	2.41	2.41	2	MS	BAJ	12/06/09 07:46	091205-6	925193
7439-95-4	Magnesium J+,I6b	630000	ug/Kg	N	9990	35300	35300	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-96-5	Manganese	76500	ug/Kg		235	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-97-6	Mercury UJ,I6b	13.1	ug/kg	U	4.45	13.1	13.1	1	AV	JXL1	12/07/09 11:22	120709S1-7	924862
7440-02-0	Nickel U,I4d	2.81	mg/kg		0.12	0.482	0.482	2	MS	BAJ	12/06/09 07:46	091205-6	925193
7440-09-7	Potassium J+,I6b	412000	ug/Kg	N	7520	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7782-49-2	Selenium	1.2	mg/kg	U	0.602	1.2	1.2	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-21-3	Silicon J-,I6a	1040000	ug/Kg	N	1810	12100	12100	1	P	HSC	12/11/09 12:22	121109A-1	931347
7440-22-4	Silver	588	ug/Kg	U	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-23-5	Sodium U,I4d	245000	ug/Kg		8230	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-28-0	Thallium	0.241	mg/kg	U	0.0722	0.241	0.241	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-32-6	Titanium J+,I6b	144000	ug/Kg	N	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-61-1	Uranium	0.249	mg/kg		0.0159	0.0482	0.0482	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-62-2	Vanadium	5190	ug/Kg		118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-66-6	Zinc	15800	ug/Kg		388	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.553	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.513	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241420001 **BASIS:** As Received **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3933 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	92.9	ug/L	J	68	200	200	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:38	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-39-3	Barium	1.76	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:30	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7440-70-2	Calcium	71.6	ug/L	J	50	200	200	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-47-3	Chromium	1.88	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:19	120409A-1	925377
7439-89-6	Iron	80.6	ug/L	J	30	100	100	1	P	HSC	12/04/09 17:19	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:19	120409A-1	925377
7439-96-5	Manganese	3.77	ug/L	J	1	5	5	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:50	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:19	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-21-3	Silicon	184	ug/L		25	100	100	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-23-5	Sodium	533	ug/L		100	300	300	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7440-32-6	Titanium	1.68	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:43	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-66-6	Zinc	4.06	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 17:19	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241420002 **BASIS:** As Received **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3934 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	174	ug/L	J	68	200	200	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:41	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-39-3	Barium	3.11	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:32	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7440-70-2	Calcium	96.7	ug/L	J	50	200	200	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-47-3	Chromium	5.86	ug/L		1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:26	120409A-1	925377
7439-89-6	Iron	131	ug/L		30	100	100	1	P	HSC	12/04/09 17:26	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:26	120409A-1	925377
7439-96-5	Manganese	7.69	ug/L		1	5	5	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:58	112509W1-7	924857
7440-02-0	Nickel	3.78	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:26	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-21-3	Silicon	281	ug/L		25	100	100	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-23-5	Sodium	291	ug/L	J	100	300	300	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7440-32-6	Titanium	3.49	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:46	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-66-6	Zinc	7.55	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 17:26	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241420003 **BASIS:** As Received **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3923 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:43	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:33	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:39	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:33	120409A-1	925377
7439-89-6	Iron	35.6	ug/L	J	30	100	100	1	P	HSC	12/04/09 17:33	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:39	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:39	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:33	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 08:39	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 11:00	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:33	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-21-3	Silicon	29.2	ug/L	J	25	100	100	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:39	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:48	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:33	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 17:33	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241420004 **BASIS:** As Received **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3924 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:45	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:35	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:45	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:40	120409A-1	925377
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 17:40	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:45	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:45	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:40	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 08:45	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 11:02	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:40	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-21-3	Silicon	29.2	ug/L	J	25	100	100	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:45	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:51	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:40	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 17:40	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

P.S. 1/27/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-577 VALIDATION DATE: 01/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Total CN only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the aqueous matrix QC analysis was performed on a LANL sample from another RN. No sample data were qualified as a result.
2. In the solid ICB/CCBs associated with all samples except RE03-09-13959, -09-13960, -09-13958, -09-13965 and -09-13970, total cyanide was detected. The result for sample -10-3913 was a detect ≥5X the greatest associated blank concentration and, thus, was not qualified. All other associated sample results were NDs and, thus, were not qualified. In the aqueous ICB, total cyanide was detected. The associated results for sample -10-3933 and -10-3924 were detects ≤5X the associated blank concentration and, thus, were qualified U,I4b. All other associated sample results were NDs and, thus, were not qualified.

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: ### Mr. Peter Steves DATE: 01/27/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 **General Chemistry Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13959	Project:	LANL01004
Sample ID:	241419001	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.1	276	ug/kg	1	AXC2 11/23/09	1538	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13960	Project:	LANL01004
Sample ID:	241419002	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	14.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.4	292	ug/kg	1	AXC2 11/23/09	1539	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13958	Project:	LANL01004
Sample ID:	241419003	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	27.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	91.6	337	ug/kg	1	AXC2 11/23/09	1540	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13965	Project:	LANL01004
Sample ID:	241419004	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	11.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2 11/23/09	1541	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13970	Project:	LANL01004
Sample ID:	241419005	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	10.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.6	274	ug/kg	1	AXC2 11/23/09	1542	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13969	Project:	LANL01004
Sample ID:	241419006	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	13.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	76.8	282	ug/kg	1	AXC2 11/27/09	1017	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13967	Project:	LANL01004
Sample ID:	241419007	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	78.1	287	ug/kg	1	AXC2 11/27/09	1021	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13971	Project:	LANL01004
Sample ID:	241419008	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	19%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.2	291	ug/kg	1	AXC2 11/27/09	1028	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13963	Project:	LANL01004
Sample ID:	241419009	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.0	265	ug/kg	1	AXC2 11/27/09	1029	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13968	Project:	LANL01004
Sample ID:	241419010	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	8.55%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.2	240	ug/kg	1	AXC2 11/27/09	1029	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13964	Project:	LANL01004
Sample ID:	241419011	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	12.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.5	252	ug/kg	1	AXC2 11/27/09	1030	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13966	Project:	LANL01004
Sample ID:	241419012	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	7.61%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	64.6	237	ug/kg	1	AXC2 11/27/09	1031	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13962	Project:	LANL01004
Sample ID:	241419013	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	12.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.7	275	ug/kg	1	AXC2 11/27/09	1032	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13961	Project:	LANL01004
Sample ID:	241419014	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	81.9	301	ug/kg	1	AXC2 11/27/09	1033	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-10-3914	Project:	LANL01004
Sample ID:	241419015	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	12.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	77.9	287	ug/kg	1	AXC2 11/27/09	1034	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

P.S. 1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-10-3913	Project:	LANL01004
Sample ID:	241419016	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		1900	73.2	269	ug/kg	1	AXC2 11/27/09	1035	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

P.S. 1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID:	RE03-10-3933	Project:	LANL01004
Sample ID:	241420001	Client ID:	LANL010
Matrix:	W		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal											
SW9012A Cyanide, Total "As Received"											
Cyanide, Total	J	2.45	U,I4b	1.66	5.00	ug/L	1	AXC2 11/24/09	1709	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

P.S. 1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID:	RE03-10-3934	Project:	LANL01004
Sample ID:	241420002	Client ID:	LANL010
Matrix:	W		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1710	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

P.S. 1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID: RE03-10-3923
Sample ID: 241420003
Matrix: W
Collect Date: 17-NOV-09 12:00
Receive Date: 19-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1711	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

P.S. 1/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID:	RE03-10-3924	Project:	LANL01004
Sample ID:	241420004	Client ID:	LANL010
Matrix:	W		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal											
SW9012A Cyanide, Total "As Received"											
Cyanide, Total	J	3.67	U,I4b	1.66	5.00	ug/L	1	AXC2 11/24/09	1716	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

P.S. 1/27/10

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-577

REQUEST NUMBER: 10-577

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 241419, 241420

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13959	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13960	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13958	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13965	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13970	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13969	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13967	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13971	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13963	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13968	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13964	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13966	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13962	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13961	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3914	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3913	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3933	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3933	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3934	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3934	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3923	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3923	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3924	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3924	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/18/09	1400	Patricia Dove-Dent	[illegible]	11-19-09	08:45
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-577

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13958	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13959	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13960	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13961	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13962	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13963	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13964	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13965	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13966	S	11/17/2009	Plus, B, Li, Si, Ti, U

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13967	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13968	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13969	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13970	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13971	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3913	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3914	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3923	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3924	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3933	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3934	W	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:6020	1	RE03-10-3923	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3924	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3933	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3934	W	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-13958	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13959	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13960	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13961	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13962	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13963	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13964	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13965	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13966	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13967	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13968	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13969	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	[illegible]	S	[illegible]	[illegible]

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-13971	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3913	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3914	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3923	W	11/17/2009	
		1	RE03-10-3924	W	11/17/2009	
		1	RE03-10-3933	W	11/17/2009	
		1	RE03-10-3934	W	11/17/2009	

Final Page of REQUEST NUMBER 10-577

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 24, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241419 241420
SDG: 10-577

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 19, 2009, and analyzed for General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-577
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241419 and 241420
SDG: 10-577

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- Raw Data 984
- Miscellaneous 1301

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- Quality Control Summary 1366
- Instrument QC Data Summary 1369
- Cyanide, Total 1371
- Miscellaneous 1391

General Chemistry Analysis **1393**
- Case Narrative 1394
- Sample Data Summary 1399
- Quality Control Summary 1405
- Instrument QC Data Summary 1408
- Cyanide, Total 1410

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241419 and 241420
SDG # : 10-577

November 24, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 19, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241419001	RE03-09-13959
241419002	RE03-09-13960
241419003	RE03-09-13958
241419004	RE03-09-13965
241419005	RE03-09-13970
241419006	RE03-09-13969
241419007	RE03-09-13967
241419008	RE03-09-13971
241419009	RE03-09-13963
241419010	RE03-09-13968
241419011	RE03-09-13964
241419012	RE03-09-13966
241419013	RE03-09-13962
241419014	RE03-09-13961
241419015	RE03-10-3914
241419016	RE03-10-3913
241420001	RE03-10-3933
241420002	RE03-10-3934
241420003	RE03-10-3923
241420004	RE03-10-3924

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for DFrancis

Valerie Davis

Project Manager

List of current GEL Certifications as of 24 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-577

REQUEST NUMBER: 10-577

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241419, 241420/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13959	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13960	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13958	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13965	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13970	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13969	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13967	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13971	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13963	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13968	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13964	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13966	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13962	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13961	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3914	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3913	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-3933	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3933	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3934	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3934	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3923	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3923	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-3924	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-3924	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/18/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-19-09	08:45
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-577

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13958	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13959	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13960	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13961	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13962	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13963	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13964	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13965	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13966	S	11/17/2009	Plus, B, Li, Si, Ti, U

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13967	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13968	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13969	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13970	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13971	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3913	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3914	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3923	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3924	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3933	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3934	W	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:6020	1	RE03-10-3923	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3924	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3933	W	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3934	W	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-13958	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13959	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13960	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13961	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13962	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13963	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13964	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13965	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13966	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13967	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13968	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13969	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13970	S	11/17/2009	Plus, B, Li, Si, Ti, U

Wednesday, November 18, 2009

REQUEST NUMBER: 10-577

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-13971	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3913	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3914	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-3923	W	11/17/2009	
		1	RE03-10-3924	W	11/17/2009	
		1	RE03-10-3933	W	11/17/2009	
		1	RE03-10-3934	W	11/17/2009	

Final Page of REQUEST NUMBER 10-577

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-577**
Received By:Patricia Dover-Dent	**Date Received:November 19, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:**40 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **2-4,15,16**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S
7209 7848 9524 2C
7209 7848 9476 3C
7209 7848 9465 4C
7209 7848 9487 4C
7209 7848 9498 4C
7209 7848 9502 4C
7209 7848 9513 4C
7209 7848 9546 15C
7209 7848 9535 16C

PM (or PMA) review: Initials PF Date 11/20/09

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 37.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

2C

FedEx Express

1 of 3
TRK# 0201 7209 7848 9524
MM MASTER MM

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4C

FedEx Express

2 of 3
MPS# 0263 7209 7848 9465
Mstr# 7209 7848 9454 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

3C

FedEx Express

3 of 3
MPS# 0263 7209 7848 9476
Mstr# 7209 7848 9454 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 150148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

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FedEx Express

1 of 2
TRK# 0201 7209 7848 9487
MM MASTER MM

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9498
Mstr# 7209 7848 9487 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9502
** MASTER **

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NDT 03/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9513
Mstr# 7209 7848 9502 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 36.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9546
Mstr# 7209 7848 9524 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

SHIPPING

ORIGIN ID: SAFA (505)665-9866
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 SLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

16C

FedEx Express

2 of 3
MPS# 0263 7209 7848 9535
Matr# 7209 7848 9524 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRJT V3 06-09

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-577

Sample Analysis

Sample ID	Client ID
241419001	RE03-09-13959
241419002	RE03-09-13960
241419003	RE03-09-13958
241419004	RE03-09-13965
241419005	RE03-09-13970
241419006	RE03-09-13969
241419007	RE03-09-13967
241419008	RE03-09-13971
241419009	RE03-09-13963
241419010	RE03-09-13968
241419011	RE03-09-13964
241419012	RE03-09-13966
241419013	RE03-09-13962
241419014	RE03-09-13961
241419015	RE03-10-3914
241419016	RE03-10-3913
1201977927	Method Blank (MB) **ICP**
1201992149	Method Blank (MB) **ICP**
1201977932	Laboratory Control Sample (LCS)
1201992150	Laboratory Control Sample (LCS)
1201977929	241419001(RE03-09-13959L) Serial Dilution (SD)
1201977928	241419001(RE03-09-13959D) Sample Duplicate (DUP)
1201977930	241419001(RE03-09-13959S) Matrix Spike (MS)
1201977931	241419001(RE03-09-13959SD) Matrix Spike Duplicate (MSD)
1201977933	Method Blank (MB) **ICP-MS**
1201977938	Laboratory Control Sample (LCS)
1201977935	241419001(RE03-09-13959L) Serial Dilution (SD)
1201977934	241419001(RE03-09-13959D) Sample Duplicate (DUP)
1201977936	241419001(RE03-09-13959S) Matrix Spike (MS)

1201977937	241419001(RE03-09-13959SD) Matrix Spike Duplicate (MSD)
1201977155	Method Blank (MB) **CVAA**
1201977156	Laboratory Control Sample (LCS)
1201977159	241425001(WST03-10-2131L) Serial Dilution (SD)
1201977157	241425001(WST03-10-2131D) Sample Duplicate (DUP)
1201977158	241425001(WST03-10-2131S) Matrix Spike (MS)
1201977160	241425001(WST03-10-2131SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925191, 931347, 925193 and 924862
Prep Batch :	925190, 931343, 925192 and 924861
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively

coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS analyzed with this SDG met the acceptance criteria of percent recovery.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241419001 (RE03-09-13959)-ICP and ICP-MS and 241425001 (WST03-10-2131)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of mercury, magnesium, potassium, silicon and titanium as indicated by the "N qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of mercury, barium, magnesium, potassium and titanium as indicate by the "N" qualifier.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exceptions of mercury and barium as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of barium and chromium as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D) with the exception of mercury as indicate by the "E" qualifier.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and

time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The sample 241419006 ICP required dilution in order to bring over range manganese concentrations within the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS. Per the SOP, samples 241419003, 241419004, 241419005, 241419006, 241419007, 241419008, 241419009, 241419010, 241419011, 241419012, 241419013 and 241419015 on the ICP-MS required a 10x dilution due to relatively high native sample concentration of an internal standard for lithium, beryllium and nickel.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 766704, 767841 and 769212. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Dick Cole A. Elmore **Date:** 12.15.09

Sample Data Summary

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419001 **BASIS:** Dry Weight **DATE COLLECTED** 17–NOV–09

CLIENT ID: RE03–09–13959 **LEVEL:** Low **DATE RECEIVED** 19–NOV–09

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	5040000	ug/Kg		8160	24000	24000	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–36–0	Antimony	1200	ug/Kg	U	396	1200	1200	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–38–2	Arsenic	0.457	mg/kg	J	0.243	1.21	1.21	2	MS	SKJ	12/03/09 21:18	091203–5	925193
7440–39–3	Barium	114000	ug/Kg	*N	120	600	600	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–41–7	Beryllium	0.464	mg/kg		0.0243	0.121	0.121	2	MS	BAJ	12/06/09 07:01	091205–6	925193
7440–42–8	Boron	6000	ug/Kg	U	1200	6000	6000	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–43–9	Cadmium	600	ug/Kg	U	120	600	600	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–70–2	Calcium	973000	ug/Kg		9600	30000	30000	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–47–3	Chromium	3220	ug/Kg	*	180	600	600	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–48–4	Cobalt	705	ug/Kg		180	600	600	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–50–8	Copper	2550	ug/Kg		360	1200	1200	1	P	HSC	12/07/09 18:54	120709A–2	925191
7439–89–6	Iron	4290000	ug/Kg		9600	30000	30000	1	P	HSC	12/07/09 18:54	120709A–2	925191
7439–92–1	Lead	4150	ug/Kg		300	1200	1200	1	P	HSC	12/07/09 18:54	120709A–2	925191
7439–93–2	Lithium	5.33	mg/kg		0.486	2.43	2.43	2	MS	BAJ	12/06/09 07:01	091205–6	925193
7439–95–4	Magnesium	701000	ug/Kg	N	10200	36000	36000	1	P	HSC	12/07/09 18:54	120709A–2	925191
7439–96–5	Manganese	57200	ug/Kg		240	1200	1200	1	P	HSC	12/07/09 18:54	120709A–2	925191
7439–97–6	Mercury	13.4	ug/kg	U	4.56	13.4	13.4	1	AV	JXL1	12/07/09 10:49	120709S1–7	924862
7440–02–0	Nickel	2.39	mg/kg		0.121	0.486	0.486	2	MS	BAJ	12/06/09 07:01	091205–6	925193
7440–09–7	Potassium	544000	ug/Kg	N	7680	30000	30000	1	P	HSC	12/07/09 18:54	120709A–2	925191
7782–49–2	Selenium	1.21	mg/kg	U	0.607	1.21	1.21	2	MS	SKJ	12/03/09 21:18	091203–5	925193
7440–21–3	Silicon	702000	ug/Kg	N	1810	12100	12100	1	P	HSC	12/11/09 11:05	121109A–1	931347
7440–22–4	Silver	600	ug/Kg	U	120	600	600	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–23–5	Sodium	308000	ug/Kg		8400	30000	30000	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–28–0	Thallium	0.142	mg/kg	J	0.0729	0.243	0.243	2	MS	SKJ	12/03/09 08:38	091202–4	925193
7440–32–6	Titanium	143000	ug/Kg	N	120	600	600	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–61–1	Uranium	0.222	mg/kg		0.016	0.0486	0.0486	2	MS	SKJ	12/03/09 21:18	091203–5	925193
7440–62–2	Vanadium	5310	ug/Kg		120	600	600	1	P	HSC	12/07/09 18:54	120709A–2	925191
7440–66–6	Zinc	14700	ug/Kg		396	1200	1200	1	P	HSC	12/07/09 18:54	120709A–2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.544	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.506	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.504	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419002 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13960 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2060000	ug/Kg		7820	23000	23000	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-36-0	Antimony	1150	ug/Kg	U	379	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-38-2	Arsenic	1.1	mg/kg	J	0.23	1.15	1.15	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-39-3	Barium	24700	ug/Kg	*N	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-41-7	Beryllium	0.279	mg/kg		0.023	0.115	0.115	2	MS	BAJ	12/06/09 07:14	091205-6	925193
7440-42-8	Boron	5750	ug/Kg	U	1150	5750	5750	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-43-9	Cadmium	121	ug/Kg	J	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-70-2	Calcium	1420000	ug/Kg		9200	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-47-3	Chromium	3430	ug/Kg	*	172	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-48-4	Cobalt	590	ug/Kg		172	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-50-8	Copper	1240	ug/Kg		345	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-89-6	Iron	9170000	ug/Kg		9200	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-92-1	Lead	2810	ug/Kg		287	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-93-2	Lithium	8.46	mg/kg		0.461	2.3	2.3	2	MS	BAJ	12/06/09 07:14	091205-6	925193
7439-95-4	Magnesium	515000	ug/Kg	N	9770	34500	34500	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-96-5	Manganese	225000	ug/Kg		230	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191
7439-97-6	Mercury	12.8	ug/kg	U	4.35	12.8	12.8	1	AV	JXL1	12/07/09 10:51	120709S1-7	924862
7440-02-0	Nickel	1.96	mg/kg		0.115	0.461	0.461	2	MS	BAJ	12/06/09 07:14	091205-6	925193
7440-09-7	Potassium	528000	ug/Kg	N	7360	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7782-49-2	Selenium	1.15	mg/kg	U	0.576	1.15	1.15	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-21-3	Silicon	773000	ug/Kg	N	1730	11600	11600	1	P	HSC	12/11/09 11:22	121109A-1	931347
7440-22-4	Silver	219	ug/Kg	J	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-23-5	Sodium	364000	ug/Kg		8050	28700	28700	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-28-0	Thallium	0.230	mg/kg	U	0.0691	0.23	0.23	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-32-6	Titanium	430000	ug/Kg	N	115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-61-1	Uranium	0.344	mg/kg		0.0152	0.0461	0.0461	2	MS	SKJ	12/03/09 22:02	091203-5	925193
7440-62-2	Vanadium	5150	ug/Kg		115	575	575	1	P	HSC	12/07/09 19:28	120709A-2	925191
7440-66-6	Zinc	36900	ug/Kg		379	1150	1150	1	P	HSC	12/07/09 19:28	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.548	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.507	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.505	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419003 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13958 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8910000	ug/Kg		9010	26500	26500	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-36-0	Antimony	1320	ug/Kg	U	437	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-38-2	Arsenic	1.16	mg/kg	J	0.275	1.37	1.37	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-39-3	Barium	59900	ug/Kg	*N	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-41-7	Beryllium	1.4	mg/kg		0.137	0.687	0.687	10	MS	BAJ	12/06/09 07:16	091205-6	925193
7440-42-8	Boron	1550	ug/Kg	J	1320	6620	6620	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-43-9	Cadmium	662	ug/Kg	U	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-70-2	Calcium	2030000	ug/Kg		10600	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-47-3	Chromium	7090	ug/Kg	*	199	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-48-4	Cobalt	1890	ug/Kg		199	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-50-8	Copper	6580	ug/Kg		397	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-89-6	Iron	7390000	ug/Kg		10600	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-92-1	Lead	6440	ug/Kg		331	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-93-2	Lithium	11.8	mg/kg	J	2.75	13.7	13.7	10	MS	BAJ	12/06/09 07:16	091205-6	925193
7439-95-4	Magnesium	1640000	ug/Kg	N	11300	39700	39700	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-96-5	Manganese	136000	ug/Kg		265	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191
7439-97-6	Mercury	15.7	ug/kg	U	5.33	15.7	15.7	1	AV	JXL1	12/07/09 10:53	120709S1-7	924862
7440-02-0	Nickel	8.73	mg/kg		0.687	2.75	2.75	10	MS	BAJ	12/06/09 07:16	091205-6	925193
7440-09-7	Potassium	1050000	ug/Kg	N	8480	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7782-49-2	Selenium	1.37	mg/kg	U	0.687	1.37	1.37	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-21-3	Silicon	768000	ug/Kg	N	1950	13000	13000	1	P	HSC	12/11/09 11:33	121109A-1	931347
7440-22-4	Silver	662	ug/Kg	U	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-23-5	Sodium	637000	ug/Kg		9270	33100	33100	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-28-0	Thallium	0.151	mg/kg	J	0.0825	0.275	0.275	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-32-6	Titanium	113000	ug/Kg	N	132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-61-1	Uranium	0.408	mg/kg		0.0181	0.055	0.055	2	MS	SKJ	12/03/09 22:08	091203-5	925193
7440-62-2	Vanadium	9940	ug/Kg		132	662	662	1	P	HSC	12/07/09 19:49	120709A-2	925191
7440-66-6	Zinc	25200	ug/Kg		437	1320	1320	1	P	HSC	12/07/09 19:49	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.526	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.519	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.53	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419004 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13965 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13100000	ug/Kg		7310	21500	21500	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-36-0	Antimony	1080	ug/Kg	U	355	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-38-2	Arsenic	1.7	mg/kg		0.224	1.12	1.12	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-39-3	Barium	116000	ug/Kg	*N	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-41-7	Beryllium	1.42	mg/kg		0.112	0.561	0.561	10	MS	BAJ	12/06/09 07:17	091205-6	925193
7440-42-8	Boron	2410	ug/Kg	J	1080	5380	5380	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-70-2	Calcium	3220000	ug/Kg		8600	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-47-3	Chromium	9160	ug/Kg	*	161	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-48-4	Cobalt	3580	ug/Kg		161	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-50-8	Copper	6490	ug/Kg		323	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-89-6	Iron	10200000	ug/Kg		8600	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-92-1	Lead	11100	ug/Kg		269	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-93-2	Lithium	14.4	mg/kg		2.24	11.2	11.2	10	MS	BAJ	12/06/09 07:17	091205-6	925193
7439-95-4	Magnesium	2050000	ug/Kg	N	9140	32300	32300	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-96-5	Manganese	290000	ug/Kg		215	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191
7439-97-6	Mercury	20.9	ug/kg		4.61	13.5	13.5	1	AV	JXL1	12/07/09 10:55	120709S1-7	924862
7440-02-0	Nickel	12.8	mg/kg		0.561	2.24	2.24	10	MS	BAJ	12/06/09 07:17	091205-6	925193
7440-09-7	Potassium	1320000	ug/Kg	N	6880	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7782-49-2	Selenium	1.12	mg/kg	U	0.561	1.12	1.12	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-21-3	Silicon	958000	ug/Kg	N	1610	10800	10800	1	P	HSC	12/11/09 11:37	121109A-1	931347
7440-22-4	Silver	183	ug/Kg	J	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-23-5	Sodium	619000	ug/Kg		7530	26900	26900	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-28-0	Thallium	0.283	mg/kg		0.0673	0.224	0.224	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-32-6	Titanium	227000	ug/Kg	N	108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-61-1	Uranium	0.590	mg/kg		0.0148	0.0449	0.0449	2	MS	SKJ	12/03/09 22:14	091203-5	925193
7440-62-2	Vanadium	14600	ug/Kg		108	538	538	1	P	HSC	12/07/09 19:56	120709A-2	925191
7440-66-6	Zinc	27700	ug/Kg		355	1080	1080	1	P	HSC	12/07/09 19:56	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.5	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.525	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419005 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13970 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16300000	ug/Kg		7590	22300	22300	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-36-0	Antimony	1120	ug/Kg	U	368	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-38-2	Arsenic	2.65	mg/kg		0.215	1.08	1.08	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-39-3	Barium	120000	ug/Kg	*N	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-41-7	Beryllium	1.39	mg/kg		0.108	0.538	0.538	10	MS	BAJ	12/06/09 07:19	091205-6	925193
7440-42-8	Boron	2240	ug/Kg	J	1120	5580	5580	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-43-9	Cadmium	135	ug/Kg	J	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-70-2	Calcium	3410000	ug/Kg		8930	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-47-3	Chromium	13000	ug/Kg	*	167	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-48-4	Cobalt	5540	ug/Kg		167	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-50-8	Copper	9420	ug/Kg		335	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-89-6	Iron	16800000	ug/Kg		8930	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-92-1	Lead	14700	ug/Kg		279	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-93-2	Lithium	19.3	mg/kg		2.15	10.8	10.8	10	MS	BAJ	12/06/09 07:19	091205-6	925193
7439-95-4	Magnesium	2890000	ug/Kg	N	9490	33500	33500	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-96-5	Manganese	345000	ug/Kg		223	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191
7439-97-6	Mercury	23.8	ug/kg		4.04	11.9	11.9	1	AV	JXL1	12/07/09 10:57	120709S1-7	924862
7440-02-0	Nickel	11	mg/kg		0.538	2.15	2.15	10	MS	BAJ	12/06/09 07:19	091205-6	925193
7440-09-7	Potassium	1370000	ug/Kg	N	7140	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7782-49-2	Selenium	1.08	mg/kg	U	0.538	1.08	1.08	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-21-3	Silicon	648000	ug/Kg	N	1520	10100	10100	1	P	HSC	12/11/09 11:40	121109A-1	931347
7440-22-4	Silver	324	ug/Kg	J	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-23-5	Sodium	210000	ug/Kg		7810	27900	27900	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-28-0	Thallium	0.222	mg/kg		0.0645	0.215	0.215	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-32-6	Titanium	249000	ug/Kg	N	112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-61-1	Uranium	1.06	mg/kg		0.0142	0.043	0.043	2	MS	SKJ	12/03/09 22:21	091203-5	925193
7440-62-2	Vanadium	31500	ug/Kg		112	558	558	1	P	HSC	12/07/09 20:03	120709A-2	925191
7440-66-6	Zinc	27500	ug/Kg		368	1120	1120	1	P	HSC	12/07/09 20:03	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.565	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.52	g	50	mL	11/21/09	BCD1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.553	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419006 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13969 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	14000000	ug/Kg		7710	22700	22700	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-36-0	Antimony	1130	ug/Kg	U	374	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-38-2	Arsenic	3.36	mg/kg		0.23	1.15	1.15	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-39-3	Barium	327000	ug/Kg	*N	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-41-7	Beryllium	2.04	mg/kg		0.115	0.576	0.576	10	MS	BAJ	12/06/09 07:21	091205-6	925193
7440-42-8	Boron	1710	ug/Kg	J	1130	5670	5670	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-43-9	Cadmium	567	ug/Kg	U	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-70-2	Calcium	5610000	ug/Kg		9070	28400	28400	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-47-3	Chromium	11100	ug/Kg	*	170	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-48-4	Cobalt	9230	ug/Kg		170	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-50-8	Copper	10400	ug/Kg		340	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-89-6	Iron	13900000	ug/Kg		9070	28400	28400	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-92-1	Lead	16400	ug/Kg		284	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-93-2	Lithium	20.5	mg/kg		2.3	11.5	11.5	10	MS	BAJ	12/06/09 07:21	091205-6	925193
7439-95-4	Magnesium	2970000	ug/Kg	N	9640	34000	34000	1	P	HSC	12/07/09 20:10	120709A-2	925191
7439-96-5	Manganese	1350000	ug/Kg		1130	5670	5670	5	P	HSC	12/11/09 12:47	121109A-3	925191
7439-97-6	Mercury	28.4	ug/kg		4.4	12.9	12.9	1	AV	JXL1	12/07/09 10:59	120709S1-7	924862
7440-02-0	Nickel	16.9	mg/kg		0.576	2.3	2.3	10	MS	BAJ	12/06/09 07:21	091205-6	925193
7440-09-7	Potassium	1650000	ug/Kg	N	36300	142000	142000	5	P	HSC	12/11/09 12:47	121109A-3	925191
7782-49-2	Selenium	1.15	mg/kg	U	0.576	1.15	1.15	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-21-3	Silicon	854000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/11/09 11:43	121109A-1	931347
7440-22-4	Silver	375	ug/Kg	J	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-23-5	Sodium	439000	ug/Kg		7940	28400	28400	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-28-0	Thallium	0.299	mg/kg		0.0691	0.23	0.23	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-32-6	Titanium	118000	ug/Kg	N	113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-61-1	Uranium	0.521	mg/kg		0.0152	0.0461	0.0461	2	MS	SKJ	12/03/09 22:27	091203-5	925193
7440-62-2	Vanadium	29700	ug/Kg		113	567	567	1	P	HSC	12/07/09 20:10	120709A-2	925191
7440-66-6	Zinc	26000	ug/Kg		374	1130	1130	1	P	HSC	12/07/09 20:10	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.534	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.538	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419007 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13967 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17000000	ug/Kg		8250	24300	24300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-36-0	Antimony	1210	ug/Kg	U	400	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-38-2	Arsenic	1.66	mg/kg		0.232	1.16	1.16	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-39-3	Barium	430000	ug/Kg	*N	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-41-7	Beryllium	3.17	mg/kg		0.116	0.58	0.58	10	MS	BAJ	12/06/09 07:23	091205-6	925193
7440-42-8	Boron	2610	ug/Kg	J	1210	6070	6070	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-43-9	Cadmium	607	ug/Kg	U	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-70-2	Calcium	4980000	ug/Kg		9710	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-47-3	Chromium	8350	ug/Kg	*	182	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-48-4	Cobalt	5800	ug/Kg		182	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-50-8	Copper	6210	ug/Kg		364	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-89-6	Iron	10600000	ug/Kg		9710	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-92-1	Lead	11700	ug/Kg		303	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-93-2	Lithium	16.9	mg/kg		2.32	11.6	11.6	10	MS	BAJ	12/06/09 07:23	091205-6	925193
7439-95-4	Magnesium	2690000	ug/Kg	N	10300	36400	36400	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-96-5	Manganese	161000	ug/Kg		243	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191
7439-97-6	Mercury	25.2	ug/kg		4.53	13.3	13.3	1	AV	JXL1	12/07/09 11:05	120709S1-7	924862
7440-02-0	Nickel	16.5	mg/kg		0.58	2.32	2.32	10	MS	BAJ	12/06/09 07:23	091205-6	925193
7440-09-7	Potassium	1640000	ug/Kg	N	7760	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7782-49-2	Selenium	1.16	mg/kg	U	0.58	1.16	1.16	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-21-3	Silicon	1030000	ug/Kg	N	1820	12100	12100	1	P	HSC	12/11/09 11:46	121109A-1	931347
7440-22-4	Silver	607	ug/Kg	U	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-23-5	Sodium	389000	ug/Kg		8490	30300	30300	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-28-0	Thallium	0.252	mg/kg		0.0696	0.232	0.232	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-32-6	Titanium	103000	ug/Kg	N	121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-61-1	Uranium	0.437	mg/kg		0.0153	0.0464	0.0464	2	MS	SKJ	12/03/09 22:33	091203-5	925193
7440-62-2	Vanadium	16900	ug/Kg		121	607	607	1	P	HSC	12/07/09 20:17	120709A-2	925191
7440-66-6	Zinc	25500	ug/Kg		400	1210	1210	1	P	HSC	12/07/09 20:17	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.548	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.502	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.503	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419008 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13971 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13700000	ug/Kg		8060	23700	23700	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-36-0	Antimony	1190	ug/Kg	U	391	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-38-2	Arsenic	2.57	mg/kg		0.239	1.19	1.19	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-39-3	Barium	161000	ug/Kg	*N	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-41-7	Beryllium	2	mg/kg		0.119	0.597	0.597	10	MS	BAJ	12/06/09 07:28	091205-6	925193
7440-42-8	Boron	1570	ug/Kg	J	1190	5930	5930	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-43-9	Cadmium	593	ug/Kg	U	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-70-2	Calcium	3460000	ug/Kg		9480	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-47-3	Chromium	8150	ug/Kg	*	178	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-48-4	Cobalt	2650	ug/Kg		178	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-50-8	Copper	7600	ug/Kg		356	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-89-6	Iron	11300000	ug/Kg		9480	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-92-1	Lead	9630	ug/Kg		296	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-93-2	Lithium	18.6	mg/kg		2.39	11.9	11.9	10	MS	BAJ	12/06/09 07:28	091205-6	925193
7439-95-4	Magnesium	2530000	ug/Kg	N	10100	35600	35600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-96-5	Manganese	119000	ug/Kg		237	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191
7439-97-6	Mercury	16.1	ug/kg		4.38	12.9	12.9	1	AV	JXL1	12/07/09 11:07	120709S1-7	924862
7440-02-0	Nickel	15.3	mg/kg		0.597	2.39	2.39	10	MS	BAJ	12/06/09 07:28	091205-6	925193
7440-09-7	Potassium	1540000	ug/Kg	N	7580	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7782-49-2	Selenium	1.19	mg/kg	U	0.597	1.19	1.19	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-21-3	Silicon	1150000	ug/Kg	N	1850	12300	12300	1	P	HSC	12/11/09 11:49	121109A-1	931347
7440-22-4	Silver	250	ug/Kg	J	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-23-5	Sodium	773000	ug/Kg		8300	29600	29600	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-28-0	Thallium	0.251	mg/kg		0.0717	0.239	0.239	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-32-6	Titanium	154000	ug/Kg	N	119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-61-1	Uranium	0.581	mg/kg		0.0158	0.0478	0.0478	2	MS	SKJ	12/03/09 22:39	091203-5	925193
7440-62-2	Vanadium	18300	ug/Kg		119	593	593	1	P	HSC	12/07/09 20:24	120709A-2	925191
7440-66-6	Zinc	26300	ug/Kg		391	1190	1190	1	P	HSC	12/07/09 20:24	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.575	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.521	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.517	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.5	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419009 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13963 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15500000	ug/Kg		8140	24000	24000	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-36-0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-38-2	Arsenic	1.33	mg/kg		0.238	1.19	1.19	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-39-3	Barium	144000	ug/Kg	*N	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-41-7	Beryllium	1.21	mg/kg		0.119	0.595	0.595	10	MS	BAJ	12/06/09 07:30	091205-6	925193
7440-42-8	Boron	1490	ug/Kg	J	1200	5990	5990	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-43-9	Cadmium	599	ug/Kg	U	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-70-2	Calcium	3680000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-47-3	Chromium	13300	ug/Kg	*	180	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-48-4	Cobalt	2200	ug/Kg		180	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-50-8	Copper	6670	ug/Kg		359	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-89-6	Iron	10500000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-92-1	Lead	10300	ug/Kg		299	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-93-2	Lithium	12.9	mg/kg		2.38	11.9	11.9	10	MS	BAJ	12/06/09 07:30	091205-6	925193
7439-95-4	Magnesium	2060000	ug/Kg	N	10200	35900	35900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-96-5	Manganese	129000	ug/Kg		240	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191
7439-97-6	Mercury	29.4	ug/kg		4.89	14.4	14.4	1	AV	JXL1	12/07/09 11:09	120709S1-7	924862
7440-02-0	Nickel	11.5	mg/kg		0.595	2.38	2.38	10	MS	BAJ	12/06/09 07:30	091205-6	925193
7440-09-7	Potassium	1110000	ug/Kg	N	7660	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7782-49-2	Selenium	1.19	mg/kg	U	0.595	1.19	1.19	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-21-3	Silicon	1220000	ug/Kg	N	1800	12000	12000	1	P	HSC	12/11/09 11:52	121109A-1	931347
7440-22-4	Silver	251	ug/Kg	J	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-23-5	Sodium	461000	ug/Kg		8380	29900	29900	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-28-0	Thallium	0.194	mg/kg	J	0.0714	0.238	0.238	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-32-6	Titanium	212000	ug/Kg	N	120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-61-1	Uranium	0.622	mg/kg		0.0157	0.0476	0.0476	2	MS	SKJ	12/03/09 22:45	091203-5	925193
7440-62-2	Vanadium	16100	ug/Kg		120	599	599	1	P	HSC	12/07/09 20:31	120709A-2	925191
7440-66-6	Zinc	20700	ug/Kg		395	1200	1200	1	P	HSC	12/07/09 20:31	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.504	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.504	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.507	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.503	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419010 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13968 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10900000	ug/Kg		7140	21000	21000	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-36-0	Antimony	1050	ug/Kg	U	346	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-38-2	Arsenic	4.77	mg/kg		0.215	1.07	1.07	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-39-3	Barium	181000	ug/Kg	*N	105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-41-7	Beryllium	1.15	mg/kg		0.107	0.537	0.537	10	MS	BAJ	12/06/09 07:32	091205-6	925193
7440-42-8	Boron	2050	ug/Kg	J	1050	5250	5250	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-70-2	Calcium	2460000	ug/Kg		8400	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-47-3	Chromium	10200	ug/Kg	*	157	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-48-4	Cobalt	8130	ug/Kg		157	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-50-8	Copper	6270	ug/Kg		315	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-89-6	Iron	15100000	ug/Kg		8400	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-92-1	Lead	25500	ug/Kg		262	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-93-2	Lithium	14.1	mg/kg		2.15	10.7	10.7	10	MS	BAJ	12/06/09 07:32	091205-6	925193
7439-95-4	Magnesium	2010000	ug/Kg	N	8920	31500	31500	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-96-5	Manganese	873000	ug/Kg		210	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191
7439-97-6	Mercury	13	ug/kg		3.96	11.6	11.6	1	AV	JXL1	12/07/09 11:10	120709S1-7	924862
7440-02-0	Nickel	9.24	mg/kg		0.537	2.15	2.15	10	MS	BAJ	12/06/09 07:32	091205-6	925193
7440-09-7	Potassium	1060000	ug/Kg	N	6720	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7782-49-2	Selenium	1.07	mg/kg	U	0.537	1.07	1.07	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-21-3	Silicon	1090000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/11/09 12:03	121109A-1	931347
7440-22-4	Silver	635	ug/Kg		105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-23-5	Sodium	108000	ug/Kg		7350	26200	26200	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-28-0	Thallium	0.185	mg/kg	J	0.0645	0.215	0.215	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-32-6	Titanium	304000	ug/Kg	N	105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-61-1	Uranium	1.09	mg/kg		0.0142	0.043	0.043	2	MS	SKJ	12/03/09 23:04	091203-5	925193
7440-62-2	Vanadium	37600	ug/Kg		105	525	525	1	P	HSC	12/07/09 20:52	120709A-2	925191
7440-66-6	Zinc	21000	ug/Kg		346	1050	1050	1	P	HSC	12/07/09 20:52	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.564	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.521	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.525	g	50	mL	12/10/09	BCD1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419011 **BASIS:** Dry Weight **DATE COLLECTED** 17–NOV–09

CLIENT ID: RE03–09–13964 **LEVEL:** Low **DATE RECEIVED** 19–NOV–09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	15400000	ug/Kg		7450	21900	21900	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–36–0	Antimony	1100	ug/Kg	U	362	1100	1100	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–38–2	Arsenic	3.04	mg/kg		0.23	1.15	1.15	2	MS	SKJ	12/03/09 23:10	091203–5	925193
7440–39–3	Barium	118000	ug/Kg	*N	110	548	548	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–41–7	Beryllium	1.27	mg/kg		0.115	0.574	0.574	10	MS	BAJ	12/06/09 07:34	091205–6	925193
7440–42–8	Boron	2910	ug/Kg	J	1100	5480	5480	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–43–9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–70–2	Calcium	3200000	ug/Kg		8770	27400	27400	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–47–3	Chromium	14200	ug/Kg	*	164	548	548	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–48–4	Cobalt	6900	ug/Kg		164	548	548	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–50–8	Copper	10200	ug/Kg		329	1100	1100	1	P	HSC	12/07/09 20:59	120709A–2	925191
7439–89–6	Iron	17400000	ug/Kg		8770	27400	27400	1	P	HSC	12/07/09 20:59	120709A–2	925191
7439–92–1	Lead	14800	ug/Kg		274	1100	1100	1	P	HSC	12/07/09 20:59	120709A–2	925191
7439–93–2	Lithium	20.4	mg/kg		2.3	11.5	11.5	10	MS	BAJ	12/06/09 07:34	091205–6	925193
7439–95–4	Magnesium	2960000	ug/Kg	N	9310	32900	32900	1	P	HSC	12/07/09 20:59	120709A–2	925191
7439–96–5	Manganese	452000	ug/Kg		219	1100	1100	1	P	HSC	12/07/09 20:59	120709A–2	925191
7439–97–6	Mercury	25.9	ug/kg		4.67	13.7	13.7	1	AV	JXL1	12/07/09 11:12	120709S1–7	924862
7440–02–0	Nickel	12	mg/kg		0.574	2.3	2.3	10	MS	BAJ	12/06/09 07:34	091205–6	925193
7440–09–7	Potassium	1400000	ug/Kg	N	7010	27400	27400	1	P	HSC	12/07/09 20:59	120709A–2	925191
7782–49–2	Selenium	1.15	mg/kg	U	0.574	1.15	1.15	2	MS	SKJ	12/03/09 23:10	091203–5	925193
7440–21–3	Silicon	701000	ug/Kg	N	1680	11200	11200	1	P	HSC	12/11/09 12:06	121109A–1	931347
7440–22–4	Silver	384	ug/Kg	J	110	548	548	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–23–5	Sodium	490000	ug/Kg		7670	27400	27400	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–28–0	Thallium	0.257	mg/kg		0.0689	0.23	0.23	2	MS	SKJ	12/03/09 23:10	091203–5	925193
7440–32–6	Titanium	283000	ug/Kg	N	110	548	548	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–61–1	Uranium	0.734	mg/kg		0.0152	0.0459	0.0459	2	MS	SKJ	12/03/09 23:10	091203–5	925193
7440–62–2	Vanadium	34400	ug/Kg		110	548	548	1	P	HSC	12/07/09 20:59	120709A–2	925191
7440–66–6	Zinc	27500	ug/Kg		362	1100	1100	1	P	HSC	12/07/09 20:59	120709A–2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.502	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.524	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.512	g	50	mL	12/10/09	BCD1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419012 **BASIS:** Dry Weight **DATE COLLECTED** 17–NOV–09

CLIENT ID: RE03–09–13966 **LEVEL:** Low **DATE RECEIVED** 19–NOV–09

MATRIX: SOIL **%SOLIDS:** 92.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	9380000	ug/Kg		7120	20900	20900	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–36–0	Antimony	1050	ug/Kg	U	345	1050	1050	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–38–2	Arsenic	3.16	mg/kg		0.206	1.03	1.03	2	MS	SKJ	12/03/09 23:17	091203–5	925193
7440–39–3	Barium	137000	ug/Kg	*N	105	523	523	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–41–7	Beryllium	0.991	mg/kg		0.103	0.515	0.515	10	MS	BAJ	12/06/09 07:35	091205–6	925193
7440–42–8	Boron	2160	ug/Kg	J	1050	5230	5230	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–43–9	Cadmium	523	ug/Kg	U	105	523	523	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–70–2	Calcium	2220000	ug/Kg		8370	26200	26200	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–47–3	Chromium	9840	ug/Kg	*	157	523	523	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–48–4	Cobalt	6600	ug/Kg		157	523	523	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–50–8	Copper	6720	ug/Kg		314	1050	1050	1	P	HSC	12/07/09 21:06	120709A–2	925191
7439–89–6	Iron	13700000	ug/Kg		8370	26200	26200	1	P	HSC	12/07/09 21:06	120709A–2	925191
7439–92–1	Lead	15700	ug/Kg		262	1050	1050	1	P	HSC	12/07/09 21:06	120709A–2	925191
7439–93–2	Lithium	13.3	mg/kg		2.06	10.3	10.3	10	MS	BAJ	12/06/09 07:35	091205–6	925193
7439–95–4	Magnesium	1850000	ug/Kg	N	8900	31400	31400	1	P	HSC	12/07/09 21:06	120709A–2	925191
7439–96–5	Manganese	536000	ug/Kg		209	1050	1050	1	P	HSC	12/07/09 21:06	120709A–2	925191
7439–97–6	Mercury	14.4	ug/kg		4.32	12.7	12.7	1	AV	JXL1	12/07/09 11:14	120709S1–7	924862
7440–02–0	Nickel	10.5	mg/kg		0.515	2.06	2.06	10	MS	BAJ	12/06/09 07:35	091205–6	925193
7440–09–7	Potassium	1430000	ug/Kg	N	6700	26200	26200	1	P	HSC	12/07/09 21:06	120709A–2	925191
7782–49–2	Selenium	1.03	mg/kg	U	0.515	1.03	1.03	2	MS	SKJ	12/03/09 23:17	091203–5	925193
7440–21–3	Silicon	1090000	ug/Kg	N	1620	10800	10800	1	P	HSC	12/11/09 12:09	121109A–1	931347
7440–22–4	Silver	434	ug/Kg	J	105	523	523	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–23–5	Sodium	61900	ug/Kg		7330	26200	26200	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–28–0	Thallium	0.169	mg/kg	J	0.0619	0.206	0.206	2	MS	SKJ	12/03/09 23:17	091203–5	925193
7440–32–6	Titanium	324000	ug/Kg	N	105	523	523	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–61–1	Uranium	1.04	mg/kg		0.0136	0.0412	0.0412	2	MS	SKJ	12/03/09 23:17	091203–5	925193
7440–62–2	Vanadium	31000	ug/Kg		105	523	523	1	P	HSC	12/07/09 21:06	120709A–2	925191
7440–66–6	Zinc	24200	ug/Kg		345	1050	1050	1	P	HSC	12/07/09 21:06	120709A–2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.511	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.517	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.5	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419013 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13962 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8100000	ug/Kg		7720	22700	22700	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-36-0	Antimony	1140	ug/Kg	U	375	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-38-2	Arsenic	2.66	mg/kg		0.223	1.11	1.11	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-39-3	Barium	117000	ug/Kg	*N	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-41-7	Beryllium	0.972	mg/kg		0.111	0.557	0.557	10	MS	BAJ	12/06/09 07:41	091205-6	925193
7440-42-8	Boron	1600	ug/Kg	J	1140	5680	5680	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-43-9	Cadmium	568	ug/Kg	U	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-70-2	Calcium	1860000	ug/Kg		9080	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-47-3	Chromium	20700	ug/Kg	*	170	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-48-4	Cobalt	7040	ug/Kg		170	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-50-8	Copper	5920	ug/Kg		341	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-89-6	Iron	13200000	ug/Kg		9080	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-92-1	Lead	14200	ug/Kg		284	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-93-2	Lithium	11.9	mg/kg		2.23	11.1	11.1	10	MS	BAJ	12/06/09 07:41	091205-6	925193
7439-95-4	Magnesium	1730000	ug/Kg	N	9650	34100	34100	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-96-5	Manganese	554000	ug/Kg		227	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191
7439-97-6	Mercury	14.2	ug/kg		4.54	13.4	13.4	1	AV	JXL1	12/07/09 11:16	120709S1-7	924862
7440-02-0	Nickel	10.4	mg/kg		0.557	2.23	2.23	10	MS	BAJ	12/06/09 07:41	091205-6	925193
7440-09-7	Potassium	1060000	ug/Kg	N	7270	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-21-3	Silicon	1160000	ug/Kg	N	1640	10900	10900	1	P	HSC	12/11/09 12:12	121109A-1	931347
7440-22-4	Silver	365	ug/Kg	J	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-23-5	Sodium	142000	ug/Kg		7950	28400	28400	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-28-0	Thallium	0.164	mg/kg	J	0.0668	0.223	0.223	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-32-6	Titanium	366000	ug/Kg	N	114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-61-1	Uranium	1.18	mg/kg		0.0147	0.0445	0.0445	2	MS	SKJ	12/03/09 23:23	091203-5	925193
7440-62-2	Vanadium	30700	ug/Kg		114	568	568	1	P	HSC	12/07/09 21:14	120709A-2	925191
7440-66-6	Zinc	20100	ug/Kg		375	1140	1140	1	P	HSC	12/07/09 21:14	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.513	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.513	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.524	g	50	mL	12/10/09	BCD1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419014 **BASIS:** Dry Weight **DATE COLLECTED** 17–NOV–09

CLIENT ID: RE03–09–13961 **LEVEL:** Low **DATE RECEIVED** 19–NOV–09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	1480000	ug/Kg		8140	23900	23900	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–36–0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–38–2	Arsenic	0.978	mg/kg	J	0.237	1.19	1.19	2	MS	SKJ	12/03/09 23:29	091203–5	925193
7440–39–3	Barium	23700	ug/Kg	*N	120	599	599	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–41–7	Beryllium	0.267	mg/kg		0.0237	0.119	0.119	2	MS	BAJ	12/06/09 07:43	091205–6	925193
7440–42–8	Boron	5990	ug/Kg	U	1200	5990	5990	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–43–9	Cadmium	599	ug/Kg	U	120	599	599	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–70–2	Calcium	716000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–47–3	Chromium	3270	ug/Kg	*	180	599	599	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–48–4	Cobalt	532	ug/Kg	J	180	599	599	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–50–8	Copper	1040	ug/Kg	J	359	1200	1200	1	P	HSC	12/07/09 21:21	120709A–2	925191
7439–89–6	Iron	7370000	ug/Kg		9580	29900	29900	1	P	HSC	12/07/09 21:21	120709A–2	925191
7439–92–1	Lead	2710	ug/Kg		299	1200	1200	1	P	HSC	12/07/09 21:21	120709A–2	925191
7439–93–2	Lithium	11.6	mg/kg		0.474	2.37	2.37	2	MS	BAJ	12/06/09 07:43	091205–6	925193
7439–95–4	Magnesium	433000	ug/Kg	N	10200	35900	35900	1	P	HSC	12/07/09 21:21	120709A–2	925191
7439–96–5	Manganese	211000	ug/Kg		239	1200	1200	1	P	HSC	12/07/09 21:21	120709A–2	925191
7439–97–6	Mercury	13.8	ug/kg	U	4.7	13.8	13.8	1	AV	JXL1	12/07/09 11:18	120709S1–7	924862
7440–02–0	Nickel	1.81	mg/kg		0.119	0.474	0.474	2	MS	BAJ	12/06/09 07:43	091205–6	925193
7440–09–7	Potassium	573000	ug/Kg	N	7660	29900	29900	1	P	HSC	12/07/09 21:21	120709A–2	925191
7782–49–2	Selenium	1.19	mg/kg	U	0.593	1.19	1.19	2	MS	SKJ	12/03/09 23:29	091203–5	925193
7440–21–3	Silicon	642000	ug/Kg	N	1800	12000	12000	1	P	HSC	12/11/09 12:16	121109A–1	931347
7440–22–4	Silver	207	ug/Kg	J	120	599	599	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–23–5	Sodium	417000	ug/Kg		8380	29900	29900	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–28–0	Thallium	0.237	mg/kg	U	0.0711	0.237	0.237	2	MS	SKJ	12/03/09 23:29	091203–5	925193
7440–32–6	Titanium	381000	ug/Kg	N	120	599	599	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–61–1	Uranium	0.342	mg/kg		0.0156	0.0474	0.0474	2	MS	SKJ	12/03/09 23:29	091203–5	925193
7440–62–2	Vanadium	4070	ug/Kg		120	599	599	1	P	HSC	12/07/09 21:21	120709A–2	925191
7440–66–6	Zinc	34700	ug/Kg		395	1200	1200	1	P	HSC	12/07/09 21:21	120709A–2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.523	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.503	g	50	mL	12/10/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419015 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3914 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10300000	ug/Kg		7790	22900	22900	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-36-0	Antimony	1150	ug/Kg	U	378	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-38-2	Arsenic	3.72	mg/kg		0.225	1.13	1.13	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-39-3	Barium	133000	ug/Kg	*N	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-41-7	Beryllium	1.35	mg/kg		0.113	0.563	0.563	10	MS	BAJ	12/06/09 07:44	091205-6	925193
7440-42-8	Boron	1800	ug/Kg	J	1150	5730	5730	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-43-9	Cadmium	573	ug/Kg	U	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-70-2	Calcium	2910000	ug/Kg		9170	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-47-3	Chromium	16500	ug/Kg	*	172	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-48-4	Cobalt	9280	ug/Kg		172	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-50-8	Copper	7710	ug/Kg		344	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-89-6	Iron	14900000	ug/Kg		9170	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-92-1	Lead	17600	ug/Kg		287	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-93-2	Lithium	17.9	mg/kg		2.25	11.3	11.3	10	MS	BAJ	12/06/09 07:44	091205-6	925193
7439-95-4	Magnesium	2330000	ug/Kg	N	9740	34400	34400	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-96-5	Manganese	699000	ug/Kg		229	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191
7439-97-6	Mercury	27.2	ug/kg		4.36	12.8	12.8	1	AV	JXL1	12/07/09 11:20	120709S1-7	924862
7440-02-0	Nickel	13.8	mg/kg		0.563	2.25	2.25	10	MS	BAJ	12/06/09 07:44	091205-6	925193
7440-09-7	Potassium	1130000	ug/Kg	N	7340	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7782-49-2	Selenium	1.13	mg/kg	U	0.563	1.13	1.13	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-21-3	Silicon	900000	ug/Kg	N	1720	11500	11500	1	P	HSC	12/11/09 12:20	121109A-1	931347
7440-22-4	Silver	526	ug/Kg	J	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-23-5	Sodium	419000	ug/Kg		8020	28700	28700	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-28-0	Thallium	0.260	mg/kg		0.0676	0.225	0.225	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-32-6	Titanium	238000	ug/Kg	N	115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-61-1	Uranium	0.895	mg/kg		0.0149	0.045	0.045	2	MS	SKJ	12/03/09 23:35	091203-5	925193
7440-62-2	Vanadium	33400	ug/Kg		115	573	573	1	P	HSC	12/07/09 21:28	120709A-2	925191
7440-66-6	Zinc	22700	ug/Kg		378	1150	1150	1	P	HSC	12/07/09 21:28	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.536	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.5	g	50	mL	12/10/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241419016 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3913 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3820000	ug/Kg		7990	23500	23500	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-36-0	Antimony	1180	ug/Kg	U	388	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-38-2	Arsenic	0.426	mg/kg	J	0.241	1.2	1.2	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-39-3	Barium	68000	ug/Kg	*N	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-41-7	Beryllium	0.507	mg/kg		0.0241	0.12	0.12	2	MS	BAJ	12/06/09 07:46	091205-6	925193
7440-42-8	Boron	5880	ug/Kg	U	1180	5880	5880	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-43-9	Cadmium	588	ug/Kg	U	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-70-2	Calcium	904000	ug/Kg		9410	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-47-3	Chromium	2870	ug/Kg	*	176	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-48-4	Cobalt	953	ug/Kg		176	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-50-8	Copper	3130	ug/Kg		353	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-89-6	Iron	3630000	ug/Kg		9410	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-92-1	Lead	4000	ug/Kg		294	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-93-2	Lithium	6.18	mg/kg		0.482	2.41	2.41	2	MS	BAJ	12/06/09 07:46	091205-6	925193
7439-95-4	Magnesium	630000	ug/Kg	N	9990	35300	35300	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-96-5	Manganese	76500	ug/Kg		235	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191
7439-97-6	Mercury	13.1	ug/kg	U	4.45	13.1	13.1	1	AV	JXL1	12/07/09 11:22	120709S1-7	924862
7440-02-0	Nickel	2.81	mg/kg		0.12	0.482	0.482	2	MS	BAJ	12/06/09 07:46	091205-6	925193
7440-09-7	Potassium	412000	ug/Kg	N	7520	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7782-49-2	Selenium	1.2	mg/kg	U	0.602	1.2	1.2	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-21-3	Silicon	1040000	ug/Kg	N	1810	12100	12100	1	P	HSC	12/11/09 12:22	121109A-1	931347
7440-22-4	Silver	588	ug/Kg	U	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-23-5	Sodium	245000	ug/Kg		8230	29400	29400	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-28-0	Thallium	0.241	mg/kg	U	0.0722	0.241	0.241	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-32-6	Titanium	144000	ug/Kg	N	118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-61-1	Uranium	0.249	mg/kg		0.0159	0.0482	0.0482	2	MS	SKJ	12/03/09 23:41	091203-5	925193
7440-62-2	Vanadium	5190	ug/Kg		118	588	588	1	P	HSC	12/07/09 21:35	120709A-2	925191
7440-66-6	Zinc	15800	ug/Kg		388	1180	1180	1	P	HSC	12/07/09 21:35	120709A-2	925191

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.553	g	30	mL	12/04/09	TXB3
925191	925190	SW846 3050B	0.513	g	50	mL	11/21/09	BCD1
925193	925192	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

931347	931343	SW846 3050B	0.5	g	50	mL	12/10/09	BCD1

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Thallium	47.6	ug/L	50	ug/L	95.1	90.0 – 110.0	MS	03–DEC–09 06:15	091202–4
	Arsenic	47.8	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	03–DEC–09 19:58	091203–5
	Selenium	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	03–DEC–09 19:58	091203–5
	Thallium	47.4	ug/L	50	ug/L	94.8	90.0 – 110.0	MS	03–DEC–09 19:58	091203–5
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	03–DEC–09 19:58	091203–5
	Beryllium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	06–DEC–09 06:40	091205–6
	Lithium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	06–DEC–09 06:40	091205–6
	Nickel	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	06–DEC–09 06:40	091205–6
	Aluminum	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Antimony	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Boron	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Cadmium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Calcium	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Chromium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Lead	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Magnesium	5460	ug/L	5000	ug/L	109.3	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Manganese	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Potassium	2540	ug/L	2500	ug/L	101.7	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Silver	265	ug/L	250	ug/L	106	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Sodium	2410	ug/L	2500	ug/L	96.3	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Titanium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	07–DEC–09 06:33	120709A–2
	Mercury	5.19	ug/L	5	ug/L	103.8	90.0 – 110.0	AV	07–DEC–09 10:07	120709S1–7
	Silicon	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11–DEC–09 09:48	121109A–1
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 11:07	121109A–3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	2510	ug/L	2500	ug/L	100.5	90.0 – 110.0	P	11-DEC-09 11:07	121109A-3
CCV01										
	Thallium	45.8	ug/L	50	ug/L	91.7	90.0 – 110.0	MS	03-DEC-09 06:46	091202-4
	Arsenic	46.6	ug/L	50	ug/L	93.1	90.0 – 110.0	MS	03-DEC-09 20:29	091203-5
	Selenium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	03-DEC-09 20:29	091203-5
	Thallium	47.4	ug/L	50	ug/L	94.8	90.0 – 110.0	MS	03-DEC-09 20:29	091203-5
	Uranium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	03-DEC-09 20:29	091203-5
	Beryllium	52.5	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	06-DEC-09 06:49	091205-6
	Lithium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	06-DEC-09 06:49	091205-6
	Nickel	52.2	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	06-DEC-09 06:49	091205-6
	Aluminum	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Antimony	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Barium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Cadmium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Calcium	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Cobalt	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Copper	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Lead	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Magnesium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Manganese	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Potassium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Silver	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Sodium	9160	ug/L	10000	ug/L	91.6	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Titanium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Zinc	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	07-DEC-09 07:19	120709A-2
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	07-DEC-09 10:13	120709S1-7

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silicon	2660	ug/L	2500	ug/L	106.3	90.0 – 110.0	P	11-DEC-09 10:11	121109A-1
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11-DEC-09 11:53	121109A-3
	Potassium	5470	ug/L	5000	ug/L	109.5	90.0 – 110.0	P	11-DEC-09 11:53	121109A-3
CCV02										
	Thallium	47.6	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	03-DEC-09 07:04	091202-4
	Arsenic	47.1	ug/L	50	ug/L	94.2	90.0 – 110.0	MS	03-DEC-09 20:47	091203-5
	Selenium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	03-DEC-09 20:47	091203-5
	Thallium	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	03-DEC-09 20:47	091203-5
	Uranium	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	03-DEC-09 20:47	091203-5
	Beryllium	53.9	ug/L	50	ug/L	107.8	90.0 – 110.0	MS	06-DEC-09 06:54	091205-6
	Lithium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	06-DEC-09 06:54	091205-6
	Nickel	54	ug/L	50	ug/L	108	90.0 – 110.0	MS	06-DEC-09 06:54	091205-6
	Aluminum	4880	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Antimony	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Barium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Boron	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Calcium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Chromium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Cobalt	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Copper	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Iron	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Lead	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Magnesium	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Manganese	480	ug/L	500	ug/L	96	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Silver	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Sodium	9530	ug/L	10000	ug/L	95.3	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Titanium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Vanadium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Zinc	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	07-DEC-09 07:34	120709A-2
	Mercury	5.38	ug/L	5	ug/L	107.7	80.0 – 120.0	AV	07-DEC-09 10:37	120709S1-7
	Silicon	2640	ug/L	2500	ug/L	105.8	90.0 – 110.0	P	11-DEC-09 10:23	121109A-1
	Manganese	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-DEC-09 12:09	121109A-3
	Potassium	4750	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	11-DEC-09 12:09	121109A-3
CCV03										
	Thallium	45.1	ug/L	50	ug/L	90.3	90.0 – 110.0	MS	03-DEC-09 08:07	091202-4
	Arsenic	47	ug/L	50	ug/L	93.9	90.0 – 110.0	MS	03-DEC-09 21:49	091203-5
	Selenium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	03-DEC-09 21:49	091203-5
	Thallium	47.9	ug/L	50	ug/L	95.8	90.0 – 110.0	MS	03-DEC-09 21:49	091203-5
	Uranium	52.8	ug/L	50	ug/L	105.5	90.0 – 110.0	MS	03-DEC-09 21:49	091203-5
	Beryllium	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	06-DEC-09 07:10	091205-6
	Lithium	52.6	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	06-DEC-09 07:10	091205-6
	Nickel	52.4	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	06-DEC-09 07:10	091205-6
	Aluminum	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Barium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Boron	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Cadmium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Chromium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Copper	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Iron	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Lead	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Magnesium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Manganese	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Potassium	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2
	Sodium	9730	ug/L	10000	ug/L	97.3	90.0 – 110.0	P	07-DEC-09 08:02	120709A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Titanium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	07–DEC–09 08:02	120709A–2
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	07–DEC–09 08:02	120709A–2
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	07–DEC–09 08:02	120709A–2
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	07–DEC–09 11:01	120709S1–7
	Silicon	2630	ug/L	2500	ug/L	105.1	90.0 – 110.0	P	11–DEC–09 10:34	121109A–1
	Manganese	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11–DEC–09 12:30	121109A–3
	Potassium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	11–DEC–09 12:30	121109A–3
CCV04										
	Thallium	44.9	ug/L	50	ug/L	89.9	90.0 – 110.0	MS	03–DEC–09 09:15	091202–4
	Arsenic	46.7	ug/L	50	ug/L	93.4	90.0 – 110.0	MS	03–DEC–09 22:52	091203–5
	Selenium	50.9	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	03–DEC–09 22:52	091203–5
	Thallium	47.7	ug/L	50	ug/L	95.4	90.0 – 110.0	MS	03–DEC–09 22:52	091203–5
	Uranium	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	03–DEC–09 22:52	091203–5
	Beryllium	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	06–DEC–09 07:25	091205–6
	Lithium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	06–DEC–09 07:25	091205–6
	Nickel	54.2	ug/L	50	ug/L	108.3	90.0 – 110.0	MS	06–DEC–09 07:25	091205–6
	Aluminum	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Antimony	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Barium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Boron	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Cadmium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Chromium	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Cobalt	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Copper	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Lead	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Magnesium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Manganese	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Potassium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Sodium	9500	ug/L	10000	ug/L	95	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Titanium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Vanadium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Zinc	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	07–DEC–09 09:22	120709A–2
	Mercury	5.79	ug/L	5	ug/L	115.9	80.0 – 120.0	AV	07–DEC–09 11:24	120709S1–7
	Silicon	2600	ug/L	2500	ug/L	103.8	90.0 – 110.0	P	11–DEC–09 10:51	121109A–1
	Manganese	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 13:02	121109A–3
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	11–DEC–09 13:02	121109A–3
CCV05										
	Arsenic	45.9	ug/L	50	ug/L	91.9	90.0 – 110.0	MS	03–DEC–09 23:48	091203–5
	Selenium	49.4	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	03–DEC–09 23:48	091203–5
	Thallium	47.8	ug/L	50	ug/L	95.6	90.0 – 110.0	MS	03–DEC–09 23:48	091203–5
	Uranium	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	03–DEC–09 23:48	091203–5
	Beryllium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	06–DEC–09 07:37	091205–6
	Lithium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	06–DEC–09 07:37	091205–6
	Nickel	53.6	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	06–DEC–09 07:37	091205–6
	Aluminum	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Antimony	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Barium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Boron	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Cadmium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Calcium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Chromium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Cobalt	485	ug/L	500	ug/L	97	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Copper	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Magnesium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Manganese	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Silver	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Sodium	9440	ug/L	10000	ug/L	94.4	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Titanium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Vanadium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Zinc	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	07–DEC–09 10:39	120709A–2
	Mercury	5.49	ug/L	5	ug/L	109.7	80.0 – 120.0	AV	07–DEC–09 11:48	120709S1–7
	Silicon	2620	ug/L	2500	ug/L	104.9	90.0 – 110.0	P	11–DEC–09 11:26	121109A–1
CCV06										
	Beryllium	53.7	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	06–DEC–09 07:48	091205–6
	Lithium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	06–DEC–09 07:48	091205–6
	Nickel	54.2	ug/L	50	ug/L	108.3	90.0 – 110.0	MS	06–DEC–09 07:48	091205–6
	Aluminum	4870	ug/L	5000	ug/L	97.4	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Antimony	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Barium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Boron	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Cadmium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Copper	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Lead	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Magnesium	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Manganese	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Sodium	9310	ug/L	10000	ug/L	93.1	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Titanium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Zinc	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	07–DEC–09 11:52	120709A–2
	Silicon	2610	ug/L	2500	ug/L	104.3	90.0 – 110.0	P	11–DEC–09 11:55	121109A–1
CCV07										
	Aluminum	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Antimony	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Barium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Boron	475	ug/L	500	ug/L	95	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Cadmium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Copper	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Lead	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Manganese	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Silver	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Titanium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Vanadium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Zinc	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	07–DEC–09 13:01	120709A–2
	Silicon	2640	ug/L	2500	ug/L	105.6	90.0 – 110.0	P	11–DEC–09 12:26	121109A–1
CCV08										
	Aluminum	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Antimony	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Barium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Boron	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Cadmium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Cobalt	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Iron	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Lead	490	ug/L	500	ug/L	98	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Magnesium	5240	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Manganese	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Potassium	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Silver	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Sodium	9240	ug/L	10000	ug/L	92.4	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Titanium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07–DEC–09 14:07	120709A–2
CCV09										
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Antimony	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Barium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Boron	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Cadmium	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Calcium	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Chromium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Cobalt	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Copper	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Iron	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Lead	472	ug/L	500	ug/L	94.5	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Magnesium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Manganese	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Potassium	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2
	Sodium	9650	ug/L	10000	ug/L	96.5	90.0 – 110.0	P	07–DEC–09 14:34	120709A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Titanium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	07-DEC-09 14:34	120709A-2
	Vanadium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07-DEC-09 14:34	120709A-2
	Zinc	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	07-DEC-09 14:34	120709A-2
CCV10										
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Antimony	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Barium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Boron	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Cadmium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Cobalt	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Copper	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Lead	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Magnesium	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Manganese	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Silver	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Titanium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Vanadium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
	Zinc	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	07-DEC-09 15:29	120709A-2
CCV11										
	Aluminum	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Antimony	495	ug/L	500	ug/L	99	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Barium	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Boron	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Cadmium	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Calcium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Cobalt	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Copper	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Iron	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Magnesium	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Manganese	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Sodium	9260	ug/L	10000	ug/L	92.6	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Titanium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Vanadium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
	Zinc	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	07-DEC-09 16:23	120709A-2
CCV12										
	Aluminum	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Barium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Boron	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Cadmium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Cobalt	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Copper	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Iron	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Magnesium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Manganese	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Silver	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	07-DEC-09 17:11	120709A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Titanium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	07–DEC–09 17:11	120709A–2
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	07–DEC–09 17:11	120709A–2
	Zinc	480	ug/L	500	ug/L	96	90.0 – 110.0	P	07–DEC–09 17:11	120709A–2
CCV13										
	Aluminum	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Antimony	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Barium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Boron	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Cadmium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Chromium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Cobalt	485	ug/L	500	ug/L	97	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Copper	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Iron	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Lead	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Manganese	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Silver	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Sodium	9230	ug/L	10000	ug/L	92.3	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Vanadium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
	Zinc	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	07–DEC–09 18:26	120709A–2
CCV14										
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 19:35	120709A–2
	Antimony	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	07–DEC–09 19:35	120709A–2
	Barium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	07–DEC–09 19:35	120709A–2
	Boron	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	07–DEC–09 19:35	120709A–2
	Cadmium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	07–DEC–09 19:35	120709A–2
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	07–DEC–09 19:35	120709A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Cobalt	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Copper	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Iron	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Lead	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Magnesium	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Manganese	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Potassium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Silver	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Sodium	9130	ug/L	10000	ug/L	91.3	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
	Zinc	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	07-DEC-09 19:35	120709A-2
CCV15										
	Aluminum	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Antimony	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Boron	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Cadmium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Copper	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Iron	4950	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Lead	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Magnesium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Manganese	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Silver	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2
	Sodium	9220	ug/L	10000	ug/L	92.2	90.0 – 110.0	P	07-DEC-09 20:38	120709A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Titanium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	07–DEC–09 20:38	120709A–2
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	07–DEC–09 20:38	120709A–2
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	07–DEC–09 20:38	120709A–2
CCV16										
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Antimony	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Boron	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Cadmium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Calcium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Chromium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Cobalt	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Copper	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Lead	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Manganese	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Sodium	9190	ug/L	10000	ug/L	91.9	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Titanium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	07–DEC–09 21:42	120709A–2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Thallium	1.04	ug/L	1	ug/L	103.8	70.0 - 130.0	MS	03-DEC-09 06:27	091202-4
	Thallium	1.09	ug/L	1	ug/L	108.8	70.0 - 130.0	MS	03-DEC-09 20:10	091203-5
	Arsenic	6.11	ug/L	5	ug/L	122.1	70.0 - 130.0	MS	03-DEC-09 20:10	091203-5
	Uranium	.207	ug/L	.2	ug/L	103.5	70.0 - 130.0	MS	03-DEC-09 20:10	091203-5
	Selenium	5.36	ug/L	5	ug/L	107.2	70.0 - 130.0	MS	03-DEC-09 20:10	091203-5
	Nickel	2.25	ug/L	2	ug/L	112.7	70.0 - 130.0	MS	06-DEC-09 06:44	091205-6
	Lithium	11.4	ug/L	10	ug/L	114.2	70.0 - 130.0	MS	06-DEC-09 06:44	091205-6
	Beryllium	.571	ug/L	.5	ug/L	114.2	70.0 - 130.0	MS	06-DEC-09 06:44	091205-6
	Mercury	.155	ug/L	.2	ug/L	77.4	70.0 - 130.0	AV	07-DEC-09 10:11	120709S1-7
PQL01										
	Calcium	200	ug/L	200	ug/L	99.9	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Boron	49	ug/L	50	ug/L	98	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Titanium	5.04	ug/L	5	ug/L	100.7	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Aluminum	191	ug/L	200	ug/L	95.5	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Lead	10.4	ug/L	10	ug/L	104.2	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Manganese	10.1	ug/L	10	ug/L	101.2	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Silver	5.13	ug/L	5	ug/L	102.6	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Antimony	11.9	ug/L	10	ug/L	118.5	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Zinc	9.55	ug/L	10	ug/L	95.5	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Vanadium	5.28	ug/L	5	ug/L	105.5	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Copper	10.1	ug/L	10	ug/L	101.2	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Cobalt	4.7	ug/L	5	ug/L	93.9	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Chromium	4.69	ug/L	5	ug/L	93.8	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Cadmium	4.73	ug/L	5	ug/L	94.7	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Barium	4.95	ug/L	5	ug/L	99	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Sodium	279	ug/L	300	ug/L	93	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Potassium	174	ug/L	150	ug/L	116	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Magnesium	353	ug/L	300	ug/L	117.6	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Iron	123	ug/L	100	ug/L	122.5	70.0 - 130.0	P	07-DEC-09 06:47	120709A-2
	Silicon	97.7	ug/L	100	ug/L	97.7	70.0 - 130.0	P	11-DEC-09 09:55	121109A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Manganese	10.3	ug/L	10	ug/L	102.9	70.0 - 130.0	P	11-DEC-09 11:21	121109A-3
	Potassium	201	ug/L	150	ug/L	134	70.0 - 130.0	P	11-DEC-09 11:21	121109A-3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	03–DEC–09 06:21	091202–4
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	03–DEC–09 20:04	091203–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	03–DEC–09 20:04	091203–5
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	03–DEC–09 20:04	091203–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	03–DEC–09 20:04	091203–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–DEC–09 06:42	091205–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	06–DEC–09 06:42	091205–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–DEC–09 06:42	091205–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 06:40	120709A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 06:40	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 06:40	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 06:40	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 06:40	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 06:40	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 06:40	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 06:40	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 06:40	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 06:40	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 06:40	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 06:40	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 06:40	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 06:40	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 06:40	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 06:40	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 06:40	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 06:40	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 06:40	120709A–2
	Mercury	–0.096	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:09	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	11–DEC–09 09:52	121109A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 11:14	121109A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	11–DEC–09 11:14	121109A–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB01										
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	03–DEC–09 06:52	091202–4
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	03–DEC–09 20:35	091203–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	03–DEC–09 20:35	091203–5
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	03–DEC–09 20:35	091203–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	03–DEC–09 20:35	091203–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–DEC–09 06:51	091205–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	06–DEC–09 06:51	091205–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–DEC–09 06:51	091205–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 07:26	120709A–2
	Antimony	7.96	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 07:26	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:26	120709A–2
	Boron	13.32	+/–50	J	10.0	50.0	SOL	P	07–DEC–09 07:26	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:26	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:26	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:26	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:26	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 07:26	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:26	120709A–2
	Lead	4.08	+/–10	J	2.5	10.0	SOL	P	07–DEC–09 07:26	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 07:26	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 07:26	120709A–2
	Potassium	168.2	+/–250	J	64.0	250	SOL	P	07–DEC–09 07:26	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:26	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 07:26	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:26	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:26	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 07:26	120709A–2
	Mercury	–0.098	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:15	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	11–DEC–09 10:15	121109A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:00	121109A–3
	Potassium	261.86	+/–250		64.0	250	SOL	P	11–DEC–09 12:00	121109A–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB02										
	Thallium	0.333	+/–1	J	0.3	1.0	SOL	MS	03–DEC–09 07:11	091202–4
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	03–DEC–09 20:54	091203–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	03–DEC–09 20:54	091203–5
	Thallium	0.612	+/–1	J	0.3	1.0	SOL	MS	03–DEC–09 20:54	091203–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	03–DEC–09 20:54	091203–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–DEC–09 06:56	091205–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	06–DEC–09 06:56	091205–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–DEC–09 06:56	091205–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 07:41	120709A–2
	Antimony	6.27	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 07:41	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:41	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 07:41	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:41	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:41	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:41	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 07:41	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 07:41	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 07:41	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 07:41	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 07:41	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 07:41	120709A–2
	Potassium	76.92	+/–250	J	64.0	250	SOL	P	07–DEC–09 07:41	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:41	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 07:41	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:41	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 07:41	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 07:41	120709A–2
	Mercury	–0.091	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:39	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	11–DEC–09 10:27	121109A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:16	121109A–3
	Potassium	149.38	+/–250	J	64.0	250	SOL	P	11–DEC–09 12:16	121109A–3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB03										
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	03-DEC-09 08:13	091202-4
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	03-DEC-09 21:56	091203-5
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	03-DEC-09 21:56	091203-5
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	03-DEC-09 21:56	091203-5
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	03-DEC-09 21:56	091203-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	06-DEC-09 07:12	091205-6
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	06-DEC-09 07:12	091205-6
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	06-DEC-09 07:12	091205-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	07-DEC-09 08:09	120709A-2
	Antimony	7.94	+/-10	J	3.3	10.0	SOL	P	07-DEC-09 08:09	120709A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 08:09	120709A-2
	Boron	19.41	+/-50	J	10.0	50.0	SOL	P	07-DEC-09 08:09	120709A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 08:09	120709A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 08:09	120709A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 08:09	120709A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 08:09	120709A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	07-DEC-09 08:09	120709A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 08:09	120709A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	07-DEC-09 08:09	120709A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	07-DEC-09 08:09	120709A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	07-DEC-09 08:09	120709A-2
	Potassium	80.19	+/-250	J	64.0	250	SOL	P	07-DEC-09 08:09	120709A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 08:09	120709A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	07-DEC-09 08:09	120709A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 08:09	120709A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 08:09	120709A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	07-DEC-09 08:09	120709A-2
	Mercury	-0.117	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 11:03	120709S1-7
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	11-DEC-09 10:37	121109A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 12:37	121109A-3
	Potassium	82.76	+/-250	J	64.0	250	SOL	P	11-DEC-09 12:37	121109A-3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB04										
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	03–DEC–09 09:22	091202–4
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	03–DEC–09 22:58	091203–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	03–DEC–09 22:58	091203–5
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	03–DEC–09 22:58	091203–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	03–DEC–09 22:58	091203–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–DEC–09 07:26	091205–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	06–DEC–09 07:26	091205–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–DEC–09 07:26	091205–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 09:29	120709A–2
	Antimony	4.69	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 09:29	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:29	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 09:29	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:29	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 09:29	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 09:29	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 09:29	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 09:29	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 09:29	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 09:29	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 09:29	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 09:29	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 09:29	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:29	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 09:29	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:29	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 09:29	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 09:29	120709A–2
	Mercury	–0.136	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:26	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	11–DEC–09 10:55	121109A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 13:09	121109A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	11–DEC–09 13:09	121109A–3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	03–DEC–09 23:54	091203–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	03–DEC–09 23:54	091203–5
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	03–DEC–09 23:54	091203–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	03–DEC–09 23:54	091203–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–DEC–09 07:39	091205–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	06–DEC–09 07:39	091205–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–DEC–09 07:39	091205–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 10:46	120709A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 10:46	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:46	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 10:46	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:46	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 10:46	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 10:46	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 10:46	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 10:46	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 10:46	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 10:46	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 10:46	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 10:46	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 10:46	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:46	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 10:46	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:46	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 10:46	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 10:46	120709A–2
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 11:50	120709S1–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	11–DEC–09 11:30	121109A–1
CCB06										
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–DEC–09 07:50	091205–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	06–DEC–09 07:50	091205–6

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	06-DEC-09 07:50	091205-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	07-DEC-09 11:59	120709A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	07-DEC-09 11:59	120709A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 11:59	120709A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	07-DEC-09 11:59	120709A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 11:59	120709A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 11:59	120709A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 11:59	120709A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 11:59	120709A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	07-DEC-09 11:59	120709A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 11:59	120709A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	07-DEC-09 11:59	120709A-2
	Magnesium	95.22	+/-300	J	85.0	300	SOL	P	07-DEC-09 11:59	120709A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	07-DEC-09 11:59	120709A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	07-DEC-09 11:59	120709A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 11:59	120709A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	07-DEC-09 11:59	120709A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 11:59	120709A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 11:59	120709A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	07-DEC-09 11:59	120709A-2
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	11-DEC-09 11:59	121109A-1
CCB07										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	07-DEC-09 13:08	120709A-2
	Antimony	4.24	+/-10	J	3.3	10.0	SOL	P	07-DEC-09 13:08	120709A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 13:08	120709A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	07-DEC-09 13:08	120709A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 13:08	120709A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 13:08	120709A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 13:08	120709A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 13:08	120709A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	07-DEC-09 13:08	120709A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 13:08	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 13:08	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 13:08	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 13:08	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 13:08	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:08	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 13:08	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:08	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 13:08	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 13:08	120709A–2
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	11–DEC–09 12:30	121109A–1
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 14:14	120709A–2
	Antimony	3.9	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 14:14	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:14	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 14:14	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:14	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 14:14	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 14:14	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 14:14	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 14:14	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 14:14	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 14:14	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 14:14	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 14:14	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 14:14	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:14	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 14:14	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:14	120709A–2
	Vanadium	1.05	+/–5	J	1.0	5.0	SOL	P	07–DEC–09 14:14	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 14:14	120709A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 14:42	120709A–2
	Antimony	3.62	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 14:42	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:42	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 14:42	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:42	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 14:42	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 14:42	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 14:42	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 14:42	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 14:42	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 14:42	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 14:42	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 14:42	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 14:42	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:42	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 14:42	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:42	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 14:42	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 14:42	120709A–2
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 15:36	120709A–2
	Antimony	4.16	+/–10	J	3.3	10.0	SOL	P	07–DEC–09 15:36	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 15:36	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 15:36	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 15:36	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 15:36	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 15:36	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 15:36	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 15:36	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 15:36	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 15:36	120709A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Magnesium	122.33	+/-300	J	85.0	300	SOL	P	07-DEC-09 15:36	120709A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	07-DEC-09 15:36	120709A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	07-DEC-09 15:36	120709A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 15:36	120709A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	07-DEC-09 15:36	120709A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 15:36	120709A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 15:36	120709A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	07-DEC-09 15:36	120709A-2
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	07-DEC-09 16:30	120709A-2
	Antimony	3.89	+/-10	J	3.3	10.0	SOL	P	07-DEC-09 16:30	120709A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 16:30	120709A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	07-DEC-09 16:30	120709A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 16:30	120709A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 16:30	120709A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 16:30	120709A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 16:30	120709A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	07-DEC-09 16:30	120709A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 16:30	120709A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	07-DEC-09 16:30	120709A-2
	Magnesium	125.43	+/-300	J	85.0	300	SOL	P	07-DEC-09 16:30	120709A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	07-DEC-09 16:30	120709A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	07-DEC-09 16:30	120709A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 16:30	120709A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	07-DEC-09 16:30	120709A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 16:30	120709A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 16:30	120709A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	07-DEC-09 16:30	120709A-2
CCB12										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	07-DEC-09 17:18	120709A-2
	Antimony	5.71	+/-10	J	3.3	10.0	SOL	P	07-DEC-09 17:18	120709A-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 17:18	120709A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	07-DEC-09 17:18	120709A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 17:18	120709A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 17:18	120709A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 17:18	120709A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 17:18	120709A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	07-DEC-09 17:18	120709A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 17:18	120709A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	07-DEC-09 17:18	120709A-2
	Magnesium	110.61	+/-300	J	85.0	300	SOL	P	07-DEC-09 17:18	120709A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	07-DEC-09 17:18	120709A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	07-DEC-09 17:18	120709A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 17:18	120709A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	07-DEC-09 17:18	120709A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 17:18	120709A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 17:18	120709A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	07-DEC-09 17:18	120709A-2
CCB13										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	07-DEC-09 18:33	120709A-2
	Antimony	3.68	+/-10	J	3.3	10.0	SOL	P	07-DEC-09 18:33	120709A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 18:33	120709A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	07-DEC-09 18:33	120709A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	07-DEC-09 18:33	120709A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 18:33	120709A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 18:33	120709A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	07-DEC-09 18:33	120709A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	07-DEC-09 18:33	120709A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	07-DEC-09 18:33	120709A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	07-DEC-09 18:33	120709A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	07-DEC-09 18:33	120709A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	07-DEC-09 18:33	120709A-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 18:33	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 18:33	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 18:33	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 18:33	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 18:33	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 18:33	120709A–2
CCB14										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 19:42	120709A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 19:42	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 19:42	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 19:42	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 19:42	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 19:42	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 19:42	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 19:42	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 19:42	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 19:42	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 19:42	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 19:42	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 19:42	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 19:42	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 19:42	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 19:42	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 19:42	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 19:42	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 19:42	120709A–2
CCB15										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 20:45	120709A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 20:45	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 20:45	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 20:45	120709A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 20:45	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 20:45	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 20:45	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 20:45	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 20:45	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 20:45	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 20:45	120709A–2
	Magnesium	128.62	+/–300	J	85.0	300	SOL	P	07–DEC–09 20:45	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 20:45	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 20:45	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 20:45	120709A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 20:45	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 20:45	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 20:45	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 20:45	120709A–2
CCB16										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	07–DEC–09 21:49	120709A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 21:49	120709A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 21:49	120709A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	07–DEC–09 21:49	120709A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 21:49	120709A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 21:49	120709A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 21:49	120709A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	07–DEC–09 21:49	120709A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	07–DEC–09 21:49	120709A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	07–DEC–09 21:49	120709A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	07–DEC–09 21:49	120709A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	07–DEC–09 21:49	120709A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	07–DEC–09 21:49	120709A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	07–DEC–09 21:49	120709A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 21:49	120709A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	07–DEC–09 21:49	120709A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 21:49	120709A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	07–DEC–09 21:49	120709A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	07–DEC–09 21:49	120709A–2

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–577

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201977155								
	Mercury	–4.34	ug/kg	+/–10.417	J	AV	3.54	10.4
1201977927								
	Aluminum	6480	ug/Kg	+/–19047.619	U	P	6480	19000
	Antimony	314	ug/Kg	+/–952.381	U	P	314	952
	Boron	952	ug/Kg	+/–4761.905	U	P	952	4760
	Calcium	7620	ug/Kg	+/–23809.524	U	P	7620	23800
	Cobalt	143	ug/Kg	+/–476.19	U	P	143	476
	Iron	7620	ug/Kg	+/–23809.524	U	P	7620	23800
	Magnesium	8100	ug/Kg	+/–28571.429	U	P	8100	28600
	Potassium	6100	ug/Kg	+/–23809.524	U	P	6100	23800
	Zinc	314	ug/Kg	+/–952.381	U	P	314	952
	Vanadium	95.2	ug/Kg	+/–476.19	U	P	95.2	476
	Titanium	95.2	ug/Kg	+/–476.19	U	P	95.2	476
	Sodium	6670	ug/Kg	+/–23809.524	U	P	6670	23800
	Silver	95.2	ug/Kg	+/–476.19	U	P	95.2	476
	Manganese	190	ug/Kg	+/–952.381	U	P	190	952
	Lead	238	ug/Kg	+/–952.381	U	P	238	952
	Copper	286	ug/Kg	+/–952.381	U	P	286	952
	Chromium	143	ug/Kg	+/–476.19	U	P	143	476
	Cadmium	95.2	ug/Kg	+/–476.19	U	P	95.2	476
	Barium	95.2	ug/Kg	+/–476.19	U	P	95.2	476
1201977933								
	Arsenic	0.196	mg/kg	+/–0.982	U	MS	0.196	0.982
	Selenium	0.491	mg/kg	+/–0.982	U	MS	0.491	0.982
	Uranium	0.013	mg/kg	+/–0.039	U	MS	0.013	0.0393
	Thallium	0.0589	mg/kg	+/–0.196	U	MS	0.0589	0.196
	Nickel	0.0982	mg/kg	+/–0.393	U	MS	0.0982	0.393
	Beryllium	0.0197	mg/kg	+/–0.098	U	MS	0.0197	0.0982
	Lithium	0.393	mg/kg	+/–1.965	U	MS	0.393	1.96
1201992149								
	Silicon	1510	ug/Kg	+/–9652.51	J	P	1450	9650

METALS
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Interference Check Sample

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Silicon	16.4	ug/L					11-DEC-09 09:59	121109A-1
ICSAB01									
	Silicon	5230	ug/L	5000	ug/L	105	80.0 - 120.0	11-DEC-09 10:02	121109A-1

METALS
-4-
Interference Check Sample

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	512000	ug/L	500000	ug/L	102	80.0 - 120.0	07-DEC-09 06:54	120709A-2
	Antimony	4.63	ug/L					07-DEC-09 06:54	120709A-2
	Barium	2.55	ug/L					07-DEC-09 06:54	120709A-2
	Boron	-2.42	ug/L					07-DEC-09 06:54	120709A-2
	Cadmium	1.08	ug/L					07-DEC-09 06:54	120709A-2
	Calcium	468000	ug/L	500000	ug/L	93.7	80.0 - 120.0	07-DEC-09 06:54	120709A-2
	Chromium	1.13	ug/L					07-DEC-09 06:54	120709A-2
	Cobalt	-1.86	ug/L					07-DEC-09 06:54	120709A-2
	Copper	3.75	ug/L					07-DEC-09 06:54	120709A-2
	Iron	181000	ug/L	200000	ug/L	90.4	80.0 - 120.0	07-DEC-09 06:54	120709A-2
	Lead	5.81	ug/L					07-DEC-09 06:54	120709A-2
	Magnesium	480000	ug/L	500000	ug/L	96.1	80.0 - 120.0	07-DEC-09 06:54	120709A-2
	Manganese	8.99	ug/L					07-DEC-09 06:54	120709A-2
	Potassium	23.6	ug/L					07-DEC-09 06:54	120709A-2
	Silver	-1.13	ug/L					07-DEC-09 06:54	120709A-2
	Sodium	9.61	ug/L					07-DEC-09 06:54	120709A-2
	Titanium	-2.36	ug/L					07-DEC-09 06:54	120709A-2
	Vanadium	0.152	ug/L					07-DEC-09 06:54	120709A-2
	Zinc	-6.62	ug/L					07-DEC-09 06:54	120709A-2
ICSAB01									
	Aluminum	522000	ug/L	500000	ug/L	104	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Antimony	532	ug/L	500	ug/L	106	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Barium	488	ug/L	500	ug/L	97.6	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Boron	495	ug/L	500	ug/L	99.1	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Cadmium	469	ug/L	500	ug/L	93.7	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Calcium	490000	ug/L	500000	ug/L	98.1	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Chromium	475	ug/L	500	ug/L	94.9	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Cobalt	443	ug/L	500	ug/L	88.5	80.0 - 120.0	07-DEC-09 07:00	120709A-2
	Copper	539	ug/L	500	ug/L	108	80.0 - 120.0	07-DEC-09 07:00	120709A-2

METALS
–4–
Interference Check Sample

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Iron	189000	ug/L	200000	ug/L	94.7	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Lead	464	ug/L	500	ug/L	92.9	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Magnesium	507000	ug/L	500000	ug/L	102	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Manganese	483	ug/L	500	ug/L	96.6	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Potassium	5640	ug/L	5000	ug/L	113	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Silver	270	ug/L	250	ug/L	108	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Sodium	5190	ug/L	5000	ug/L	104	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Titanium	513	ug/L	500	ug/L	103	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Vanadium	496	ug/L	500	ug/L	99.3	80.0 – 120.0	07–DEC–09 07:00	120709A–2
	Zinc	479	ug/L	500	ug/L	95.8	80.0 – 120.0	07–DEC–09 07:00	120709A–2

METALS
-4-
Interference Check Sample

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Manganese	10.7	ug/L					11-DEC-09 11:28	121109A-3
	Potassium	46.8	ug/L					11-DEC-09 11:28	121109A-3
ICSAB01									
	Manganese	490	ug/L	500	ug/L	98.1	80.0 - 120.0	11-DEC-09 11:34	121109A-3
	Potassium	5580	ug/L	5000	ug/L	112	80.0 - 120.0	11-DEC-09 11:34	121109A-3

METALS
–4–
Interference Check Sample

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	–0.032	ug/L					03–DEC–09 06:33	091202–4
ICSAB01									
	Thallium	18.2	ug/L	20	ug/L	91.1	80.0 – 120.0	03–DEC–09 06:40	091202–4

METALS
-4-
Interference Check Sample

SDG No: 10-577

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	-0.662	ug/L					03-DEC-09 20:16	091203-5
	Selenium	-0.432	ug/L					03-DEC-09 20:16	091203-5
	Thallium	0.041	ug/L					03-DEC-09 20:16	091203-5
	Uranium	-0.013	ug/L					03-DEC-09 20:16	091203-5
ICSAB01									
	Arsenic	21.8	ug/L	20	ug/L	109	80.0 - 120.0	03-DEC-09 20:23	091203-5
	Selenium	22.6	ug/L	20	ug/L	113	80.0 - 120.0	03-DEC-09 20:23	091203-5
	Thallium	18.6	ug/L	20	ug/L	93	80.0 - 120.0	03-DEC-09 20:23	091203-5
	Uranium	21.4	ug/L	20	ug/L	107	80.0 - 120.0	03-DEC-09 20:23	091203-5

METALS
–4–
Interference Check Sample

SDG No: 10–577

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.077	ug/L					06–DEC–09 06:46	091205–6
	Lithium	0.076	ug/L					06–DEC–09 06:46	091205–6
	Nickel	3.1	ug/L					06–DEC–09 06:46	091205–6
ICSAB01									
	Beryllium	20.2	ug/L	20	ug/L	101	80.0 – 120.0	06–DEC–09 06:47	091205–6
	Lithium	20.6	ug/L	20	ug/L	103	80.0 – 120.0	06–DEC–09 06:47	091205–6
	Nickel	24.9	ug/L	22.7	ug/L	109	80.0 – 120.0	06–DEC–09 06:47	091205–6

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-577 **Client ID** WST03-10-2131S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.1

Sample ID: 241425001 **Spike ID:** 1201977158

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	366		181		122	152	N	AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–577 **Client ID** WST03–10–2131SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.1

Sample ID: 241425001 **Spike ID:** 1201977160

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	619		181		129	341	N	AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–577 **Client ID** RE03–09–13959S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241419001 **Spike ID:** 1201977930

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		9690000		5040000		583000	798	N/A	P
Antimony	ug/Kg	75–125	51000		396	U	58300	87.5		P
Barium	ug/Kg	75–125	173000		114000		58300	99.8		P
Boron	ug/Kg	75–125	58400		1200	U	58300	98.4		P
Cadmium	ug/Kg	75–125	57500		120	U	58300	98.6		P
Calcium	ug/Kg	75–125	1490000		973000		583000	88.2		P
Chromium	ug/Kg	75–125	60800		3220		58300	98.8		P
Cobalt	ug/Kg	75–125	56500		705		58300	95.8		P
Copper	ug/Kg	75–125	64200		2550		58300	106		P
Iron	ug/Kg		5710000		4290000		583000	242	N/A	P
Lead	ug/Kg	75–125	61500		4150		58300	98.4		P
Magnesium	ug/Kg	75–125	1450000		701000		583000	128	N	P
Manganese	ug/Kg	75–125	115000		57200		58300	99.9		P
Potassium	ug/Kg	75–125	1340000		544000		583000	136	N	P
Silicon	ug/Kg	75–125	1140000		702000		605000	73.3	N	P
Silver	ug/Kg	75–125	60600		120	U	58300	104		P
Sodium	ug/Kg	75–125	822000		308000		583000	88.1		P
Titanium	ug/Kg	75–125	260000		143000		58300	200	N	P
Vanadium	ug/Kg	75–125	63900		5310		58300	101		P
Zinc	ug/Kg	75–125	75400		14700		58300	104		P

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–577 **Client ID** RE03–09–13959SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241419001 **Spike ID:** 1201977931

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		10200000		5040000		605000	855	N/A	P
Antimony	ug/Kg	75–125	52800		396	U	60500	87.3		P
Barium	ug/Kg	75–125	137000		114000		60500	36.9	N	P
Boron	ug/Kg	75–125	61000		1200	U	60500	99.1		P
Cadmium	ug/Kg	75–125	60800		120	U	60500	100		P
Calcium	ug/Kg	75–125	1590000		973000		605000	102		P
Chromium	ug/Kg	75–125	64400		3220		60500	101		P
Cobalt	ug/Kg	75–125	59900		705		60500	97.9		P
Copper	ug/Kg	75–125	67400		2550		60500	107		P
Iron	ug/Kg		5830000		4290000		605000	254	N/A	P
Lead	ug/Kg	75–125	65200		4150		60500	101		P
Magnesium	ug/Kg	75–125	1600000		701000		605000	149	N	P
Manganese	ug/Kg	75–125	122000		57200		60500	107		P
Potassium	ug/Kg	75–125	1440000		544000		605000	148	N	P
Silicon	ug/Kg	75–125	1310000		702000		558000	109		P
Silver	ug/Kg	75–125	63900		120	U	60500	105		P
Sodium	ug/Kg	75–125	952000		308000		605000	106		P
Titanium	ug/Kg	75–125	237000		143000		60500	155	N	P
Vanadium	ug/Kg	75–125	67300		5310		60500	103		P
Zinc	ug/Kg	75–125	76100		14700		60500	102		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–577 **Client ID** RE03–09–13959S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241419001 **Spike ID:** 1201977936

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	9.53		0.457	J	9.31	97.5		MS
Beryllium	mg/kg	75–125	5.5		0.464		5.82	86.6		MS
Lithium	mg/kg	75–125	11.8		5.33		5.82	111		MS
Nickel	mg/kg	75–125	8.46		2.39		5.82	104		MS
Selenium	mg/kg	75–125	2.38		0.607	U	2.33	102		MS
Thallium	mg/kg	75–125	10.8		0.142	J	11.6	91.6		MS
Uranium	mg/kg	75–125	6.32		0.222		5.82	105		MS

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-577 **Client ID** RE03-09-13959SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 82

Sample ID: 241419001 **Spike ID:** 1201977937

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10.1		0.457	J	9.66	100		MS
Beryllium	mg/kg	75-125	6.15		0.464		6.04	94.1		MS
Lithium	mg/kg	75-125	12.7		5.33		6.04	122		MS
Nickel	mg/kg	75-125	8.5		2.39		6.04	101		MS
Selenium	mg/kg	75-125	2.53		0.607	U	2.42	104		MS
Thallium	mg/kg	75-125	11.3		0.142	J	12.1	92		MS
Uranium	mg/kg	75-125	6.55		0.222		6.04	105		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2131D

Sample ID: 241425001 **Duplicate ID:** 1201977157 **Percent Solids for Dup:** 92.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20%	181		167		8.09		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2131SD

Sample ID: 1201977158 **Duplicate ID:** 1201977160 **Percent Solids for Dup:** 92.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	366		619		51.4	*	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13959D

Sample ID: 241419001 **Duplicate ID:** 1201977928 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	5040000		4760000		5.65		P
Antimony	ug/Kg		396	U	382	U			P
Barium	ug/Kg	+/–20%	114000		50600		77.3	*	P
Boron	ug/Kg		1200	U	1160	U			P
Cadmium	ug/Kg		120	U	116	U			P
Calcium	ug/Kg	+/–20%	973000		839000		14.7		P
Chromium	ug/Kg	+/–578	3220		2640		19.8	*	P
Cobalt	ug/Kg	+/–578	705		725		2.83		P
Copper	ug/Kg	+/–1160	2550		2070		21		P
Iron	ug/Kg	+/–20%	4290000		4290000		.0115		P
Lead	ug/Kg	+/–1160	4150		4040		2.89		P
Magnesium	ug/Kg	+/–20%	701000		604000		14.8		P
Manganese	ug/Kg	+/–20%	57200		64100		11.3		P
Potassium	ug/Kg	+/–20%	544000		470000		14.5		P
Silicon	ug/Kg	+/–20%	702000		670000		4.66		P
Silver	ug/Kg		120	U	116	U			P
Sodium	ug/Kg	+/–20%	308000		256000		18.7		P
Titanium	ug/Kg	+/–20%	143000		165000		14.2		P
Vanadium	ug/Kg	+/–20%	5310		5110		3.93		P
Zinc	ug/Kg	+/–20%	14700		14100		3.89		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13959SD

Sample ID: 1201977930 **Duplicate ID:** 1201977931 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	9690000		10200000		5.26		P
Antimony	ug/Kg	+/–20	51000		52800		3.52		P
Barium	ug/Kg	+/–20	173000		137000		23.2	*	P
Boron	ug/Kg	+/–20	58400		61000		4.4		P
Cadmium	ug/Kg	+/–20	57500		60800		5.56		P
Calcium	ug/Kg	+/–20	1490000		1590000		6.51		P
Chromium	ug/Kg	+/–20	60800		64400		5.75		P
Cobalt	ug/Kg	+/–20	56500		59900		5.84		P
Copper	ug/Kg	+/–20	64200		67400		4.86		P
Iron	ug/Kg	+/–20	5710000		5830000		2.16		P
Lead	ug/Kg	+/–20	61500		65200		5.85		P
Magnesium	ug/Kg	+/–20	1450000		1600000		10.4		P
Manganese	ug/Kg	+/–20	115000		122000		5.49		P
Potassium	ug/Kg	+/–20	1340000		1440000		7.15		P
Silicon	ug/Kg	+/–20	1140000		1310000		13.7		P
Silver	ug/Kg	+/–20	60600		63900		5.3		P
Sodium	ug/Kg	+/–20	822000		952000		14.7		P
Titanium	ug/Kg	+/–20	260000		237000		9.33		P
Vanadium	ug/Kg	+/–20	63900		67300		5.21		P
Zinc	ug/Kg	+/–20	75400		76100		.984		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13959D

Sample ID: 241419001 **Duplicate ID:** 1201977934 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.17	0.457	J	0.688	J	40.5		MS
Beryllium	mg/kg	+/–.117	0.464		0.536		14.3		MS
Lithium	mg/kg	+/–2.35	5.33		6.06		12.9		MS
Nickel	mg/kg	+/–20%	2.39		2.88		18.6		MS
Selenium	mg/kg		0.607	U	0.587	U			MS
Thallium	mg/kg	+/–.235	0.142	J	0.0775	J	58.8		MS
Uranium	mg/kg	+/–.047	0.222		0.256		14		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13959SD

Sample ID: 1201977936 **Duplicate ID:** 1201977937 **Percent Solids for Dup:** 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	9.53		10.1		6.26		MS
Beryllium	mg/kg	+/–20	5.5		6.15		11.1		MS
Lithium	mg/kg	+/–20	11.8		12.7		7.24		MS
Nickel	mg/kg	+/–20	8.46		8.5		.426		MS
Selenium	mg/kg	+/–20	2.38		2.53		6.05		MS
Thallium	mg/kg	+/–20	10.8		11.3		4.14		MS
Uranium	mg/kg	+/–20	6.32		6.55		3.58		MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10-577

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977156								
	Mercury	ug/kg	5150	5650		110	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-577

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977932								
	Aluminum	ug/Kg	7290000	7120000		97.6	63.5-118	P
	Antimony	ug/Kg	121000	82800		68.5	39.1-132.1	P
	Barium	ug/Kg	475000	495000		104	82-110.6	P
	Boron	ug/Kg	139000	139000		99.8	74.9-113.6	P
	Cadmium	ug/Kg	116000	129000		112	77.9-115.2	P
	Calcium	ug/Kg	3720000	3820000		103	77.4-111.7	P
	Chromium	ug/Kg	84000	78100		93	66.6-116.5	P
	Cobalt	ug/Kg	83000	83800		101	79-113.9	P
	Copper	ug/Kg	105000	107000		102	77.6-112	P
	Iron	ug/Kg	20000000	17600000		88	51.5-145.5	P
	Lead	ug/Kg	161000	171000		106	83.1-114.7	P
	Magnesium	ug/Kg	2980000	3130000		105	81-114.3	P
	Manganese	ug/Kg	398000	391000		98.2	76.6-106.6	P
	Potassium	ug/Kg	2390000	2370000		99.1	72.2-111.1	P
	Silver	ug/Kg	133000	140000		105	81.7-115.7	P
	Sodium	ug/Kg	614000	568000		92.5	71.5-109.3	P
	Titanium	ug/Kg	382000	346000		90.5	41.7-148.3	P
	Vanadium	ug/Kg	166000	153000		92.4	65-118.6	P
	Zinc	ug/Kg	195000	205000		105	82.8-111.9	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-577

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977938								
	Arsenic	mg/kg	255	267		105	83-120	MS
	Beryllium	mg/kg	86.4	96.2		111	81.2-126.8	MS
	Lithium	mg/kg	8.01	8.37	J	104	66.7-133.7	MS
	Nickel	mg/kg	101	108		107	83.3-121.4	MS
	Selenium	mg/kg	171	190		111	80.2-125.9	MS
	Thallium	mg/kg	203	193		94.9	78-123.2	MS
	Uranium	mg/kg	2.12	1.65		77.7	61.9-130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-577

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201992150								
	Silicon	ug/Kg	1210000	855000		70.6	10-190	P

METALS
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Serial Dilution Sample Summary

SDG NO. 10-577 **Client ID** WST03-10-2131L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241425001 **Serial Dilution ID:** 1201977159

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	2.86		1.96		31.5	E	10	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-577 **Client ID** RE03-09-13959L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241419001 **Serial Dilution ID:** 1201977929

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	42000		42400		.952		10	P
Antimony	3.3	U	16.5	U				P
Barium	953		1000		4.93		10	P
Boron	10	U	50	U				P
Cadmium	1	U	5	U				P
Calcium	8110		8450		4.19		10	P
Chromium	26.8		27.5		2.61			P
Cobalt	5.87		7.5	U	100			P
Copper	21.3		20.4	J	4.46			P
Iron	35800		36800		2.79		10	P
Lead	34.6		39.1	J	12.9			P
Magnesium	5840		6300		7.88		10	P
Manganese	477		505		5.87		10	P
Potassium	4530		4740		4.53		10	P
Silicon	5820		5950		2.23		10	P
Silver	1	U	5	U				P
Sodium	2570		2530		1.56			P
Titanium	1190		1250		4.62		10	P
Vanadium	44.3		47.8		7.9			P
Zinc	122		127		4.1			P

METALS
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Serial Dilution Sample Summary

SDG NO. 10–577 **Client ID:** RE03–09–13959L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241419001 **Serial Dilution ID:** 1201977935

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	1.88	J	5	U	100			MS
Beryllium	1.91		2.22	J	16.2			MS
Lithium	21.9		26.1	J	19.2			MS
Nickel	9.83		11.3		14.4			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.585	J	1.5	U	100			MS
Uranium	.915		.91	J	.546			MS

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-577 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925190							
1201977927	MB for batch 925190	MB	S	21-NOV-09	.525g	50mL	
1201977932	LCS for batch 925190	LCS	S	21-NOV-09	.504g	50mL	
1201977930	RE03-09-13959S	MS	S	21-NOV-09	.521g	50mL	
1201977931	RE03-09-13959SD	MSD	S	21-NOV-09	.502g	50mL	
1201977928	RE03-09-13959D	DUP	S	21-NOV-09	.525g	50mL	
241419001	RE03-09-13959	SAMPLE	S	21-NOV-09	.506g	50mL	
241419002	RE03-09-13960	SAMPLE	S	21-NOV-09	.508g	50mL	
241419003	RE03-09-13958	SAMPLE	S	21-NOV-09	.519g	50mL	
241419004	RE03-09-13965	SAMPLE	S	21-NOV-09	.525g	50mL	
241419005	RE03-09-13970	SAMPLE	S	21-NOV-09	.501g	50mL	
241419006	RE03-09-13969	SAMPLE	S	21-NOV-09	.508g	50mL	
241419007	RE03-09-13967	SAMPLE	S	21-NOV-09	.502g	50mL	
241419008	RE03-09-13971	SAMPLE	S	21-NOV-09	.521g	50mL	
241419009	RE03-09-13963	SAMPLE	S	21-NOV-09	.504g	50mL	
241419010	RE03-09-13968	SAMPLE	S	21-NOV-09	.521g	50mL	
241419011	RE03-09-13964	SAMPLE	S	21-NOV-09	.524g	50mL	
241419012	RE03-09-13966	SAMPLE	S	21-NOV-09	.517g	50mL	
241419013	RE03-09-13962	SAMPLE	S	21-NOV-09	.503g	50mL	
241419014	RE03-09-13961	SAMPLE	S	21-NOV-09	.503g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-577 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241419015	RE03-10-3914	SAMPLE	S	21-NOV-09	.5g	50mL	
241419016	RE03-10-3913	SAMPLE	S	21-NOV-09	.513g	50mL	
Batch Number	931343						
1201992149	MB for batch 931343	MB	S	10-DEC-09	.518g	50mL	
1201992150	LCS for batch 931343	LCS	S	10-DEC-09	.517g	50mL	
1201977930	RE03-09-13959S	MS	S	10-DEC-09	.502g	50mL	
1201977931	RE03-09-13959SD	MSD	S	10-DEC-09	.544g	50mL	
1201977928	RE03-09-13959D	DUP	S	10-DEC-09	.55g	50mL	
241419001	RE03-09-13959	SAMPLE	S	10-DEC-09	.504g	50mL	
241419002	RE03-09-13960	SAMPLE	S	10-DEC-09	.505g	50mL	
241419003	RE03-09-13958	SAMPLE	S	10-DEC-09	.53g	50mL	
241419004	RE03-09-13965	SAMPLE	S	10-DEC-09	.525g	50mL	
241419005	RE03-09-13970	SAMPLE	S	10-DEC-09	.553g	50mL	
241419006	RE03-09-13969	SAMPLE	S	10-DEC-09	.538g	50mL	
241419007	RE03-09-13967	SAMPLE	S	10-DEC-09	.503g	50mL	
241419008	RE03-09-13971	SAMPLE	S	10-DEC-09	.5g	50mL	
241419009	RE03-09-13963	SAMPLE	S	10-DEC-09	.503g	50mL	
241419010	RE03-09-13968	SAMPLE	S	10-DEC-09	.525g	50mL	
241419011	RE03-09-13964	SAMPLE	S	10-DEC-09	.512g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–577 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241419012	RE03–09–13966	SAMPLE	S	10–DEC–09	.5g	50mL	
241419013	RE03–09–13962	SAMPLE	S	10–DEC–09	.524g	50mL	
241419014	RE03–09–13961	SAMPLE	S	10–DEC–09	.503g	50mL	
241419015	RE03–10–3914	SAMPLE	S	10–DEC–09	.5g	50mL	
241419016	RE03–10–3913	SAMPLE	S	10–DEC–09	.5g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–577 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925192							
1201977933	MB for batch 925192	MB	S	21–NOV–09	.509g	50mL	
1201977938	LCS for batch 925192	LCS	S	21–NOV–09	.506g	50mL	
1201977936	RE03–09–13959S	MS	S	21–NOV–09	.522g	50mL	
1201977937	RE03–09–13959SD	MSD	S	21–NOV–09	.503g	50mL	
1201977934	RE03–09–13959D	DUP	S	21–NOV–09	.517g	50mL	
241419001	RE03–09–13959	SAMPLE	S	21–NOV–09	.5g	50mL	
241419002	RE03–09–13960	SAMPLE	S	21–NOV–09	.507g	50mL	
241419003	RE03–09–13958	SAMPLE	S	21–NOV–09	.5g	50mL	
241419004	RE03–09–13965	SAMPLE	S	21–NOV–09	.503g	50mL	
241419005	RE03–09–13970	SAMPLE	S	21–NOV–09	.52g	50mL	
241419006	RE03–09–13969	SAMPLE	S	21–NOV–09	.5g	50mL	
241419007	RE03–09–13967	SAMPLE	S	21–NOV–09	.525g	50mL	
241419008	RE03–09–13971	SAMPLE	S	21–NOV–09	.517g	50mL	
241419009	RE03–09–13963	SAMPLE	S	21–NOV–09	.507g	50mL	
241419010	RE03–09–13968	SAMPLE	S	21–NOV–09	.509g	50mL	
241419011	RE03–09–13964	SAMPLE	S	21–NOV–09	.5g	50mL	
241419012	RE03–09–13966	SAMPLE	S	21–NOV–09	.525g	50mL	
241419013	RE03–09–13962	SAMPLE	S	21–NOV–09	.513g	50mL	
241419014	RE03–09–13961	SAMPLE	S	21–NOV–09	.508g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–577 **Method Type:** MS

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241419015	RE03–10–3914	SAMPLE	S	21–NOV–09	.509g	50mL	
241419016	RE03–10–3913	SAMPLE	S	21–NOV–09	.501g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–577 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	924861						
1201977155	MB for batch 924861	MB	S	04–DEC–09	.576g	30mL	
1201977156	LCS for batch 924861	LCS	S	04–DEC–09	.203g	30mL	
1201977158	WST03–10–2131S	MS	S	04–DEC–09	.536g	30mL	
1201977160	WST03–10–2131SD	MSD	S	04–DEC–09	.506g	30mL	
1201977157	WST03–10–2131D	DUP	S	04–DEC–09	.514g	30mL	
241419001	RE03–09–13959	SAMPLE	S	04–DEC–09	.544g	30mL	
241419002	RE03–09–13960	SAMPLE	S	04–DEC–09	.548g	30mL	
241419003	RE03–09–13958	SAMPLE	S	04–DEC–09	.526g	30mL	
241419004	RE03–09–13965	SAMPLE	S	04–DEC–09	.5g	30mL	
241419005	RE03–09–13970	SAMPLE	S	04–DEC–09	.565g	30mL	
241419006	RE03–09–13969	SAMPLE	S	04–DEC–09	.534g	30mL	
241419007	RE03–09–13967	SAMPLE	S	04–DEC–09	.548g	30mL	
241419008	RE03–09–13971	SAMPLE	S	04–DEC–09	.575g	30mL	
241419009	RE03–09–13963	SAMPLE	S	04–DEC–09	.504g	30mL	
241419010	RE03–09–13968	SAMPLE	S	04–DEC–09	.564g	30mL	
241419011	RE03–09–13964	SAMPLE	S	04–DEC–09	.502g	30mL	
241419012	RE03–09–13966	SAMPLE	S	04–DEC–09	.511g	30mL	
241419013	RE03–09–13962	SAMPLE	S	04–DEC–09	.513g	30mL	
241419014	RE03–09–13961	SAMPLE	S	04–DEC–09	.523g	30mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-577 **Method Type**: AV

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241419015	RE03-10-3914	SAMPLE	S	04-DEC-09	.536g	30mL	
241419016	RE03-10-3913	SAMPLE	S	04-DEC-09	.553g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 06–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–577
Method MS
Data File: 091205–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:35					X									X				X										
S10	1	06:37					X									X				X										
S100	1	06:39					X									X				X										
ICV01	1	06:40					X									X				X										
ICB01	1	06:42					X									X				X										
CRDL01	1	06:44					X									X				X										
ICSA01	1	06:46					X									X				X										
ICSAB01	1	06:47					X									X				X										
CCV01	1	06:49					X									X				X										
CCB01	1	06:51					X									X				X										
LR01	1	06:53					X									X				X										
CCV02	1	06:54					X									X				X										
CCB02	1	06:56					X									X				X										
1201977933	2	06:58					X									X				X										
1201977938	20	07:00					X									X				X										
241419001	2	07:01					X									X				X										
1201977934	2	07:03					X									X				X										
1201977936	2	07:05					X									X				X										
1201977937	2	07:07					X									X				X										
1201977935	10	07:08					X									X				X										
CCV03	1	07:10					X									X				X										
CCB03	1	07:12					X									X				X										
241419002	2	07:14					X									X				X										
241419003	10	07:16					X									X				X										
241419004	10	07:17					X									X				X										
241419005	10	07:19					X									X				X										
241419006	10	07:21					X									X				X										
241419007	10	07:23					X									X				X										
CCV04	1	07:25					X									X				X										
CCB04	1	07:26					X									X				X										
241419008	10	07:28					X									X				X										
241419009	10	07:30					X									X				X										
241419010	10	07:32					X									X				X										
241419011	10	07:34					X									X				X										
241419012	10	07:35					X									X				X										
CCV05	1	07:37					X									X				X										
CCB05	1	07:39					X									X				X										
241419013	10	07:41					X									X				X										
241419014	2	07:43					X									X				X										
241419015	10	07:44					X									X				X										

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
241419016	2	07:46					X									X				X										
CCV06	1	07:48					X									X				X										
CCB06	1	07:50					X									X				X										

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 07-DEC-09 **End Date:** 07-DEC-09

Client Sdg: 10-577
Method P
Data File: 120709A-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	06:08		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	06:14	X	X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	06:21	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	06:28	X							X				X			X								X					
ICV01	1	06:33	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	06:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	06:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	06:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	07:00	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	07:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	07:12	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV01	1	07:19	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	07:26	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	07:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	07:41	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	07:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR04	1	07:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV03	1	08:02	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	08:09	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	08:26																												
ZZZZZZ	1	08:33																												
ZZZZZZ	1	08:40																												
ZZZZZZ	1	08:47																												
ZZZZZZ	1	08:54																												
ZZZZZZ	1	09:01																												
ZZZZZZ	5	09:08																												
ZZZZZZ	1	09:15																												
CCV04	1	09:22	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	09:29	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	09:36																												
ZZZZZZ	1	09:43																												
ZZZZZZ	1	09:50																												
ZZZZZZ	1	09:57																												
ZZZZZZ	1	10:04																												
ZZZZZZ	1	10:11																												
ZZZZZZ	1	10:18																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:32																												
CCV05	1	10:39	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
CCB05	1	10:46	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:55																												
ZZZZZZ	1	11:02																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:16																												
ZZZZZZ	1	11:23																												
ZZZZZZ	1	11:30																												
ZZZZZZ	5	11:37																												
ZZZZZZ	1	11:44																												
CCV06	1	11:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	11:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	12:05																												
ZZZZZZ	1	12:12																												
ZZZZZZ	1	12:19																												
ZZZZZZ	1	12:26																												
ZZZZZZ	1	12:33																												
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:47																												
ZZZZZZ	1	12:54																												
CCV07	1	13:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	13:08	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	13:19																												
ZZZZZZ	1	13:25																												
ZZZZZZ	1	13:32																												
ZZZZZZ	1	13:39																												
ZZZZZZ	1	13:46																												
ZZZZZZ	1	13:53																												
ZZZZZZ	5	14:00																												
CCV08	1	14:07	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	14:14	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV09	1	14:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	14:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	14:48																												
ZZZZZZ	1	14:55																												
ZZZZZZ	1	15:02																												
ZZZZZZ	1	15:09																												
ZZZZZZ	1	15:16																												
ZZZZZZ	5	15:23																												
CCV10	1	15:29	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB10	1	15:36	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	15:43																												
ZZZZZZ	5	15:50																												
ZZZZZZ	5	15:57																												
ZZZZZZ	5	16:04																												
ZZZZZZ	25	16:10																												
ZZZZZZ	5	16:17																												
CCV11	1	16:23	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB11	1	16:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	10	16:37																												
ZZZZZZ	10	16:44																												
ZZZZZZ	10	16:50																												
ZZZZZZ	50	16:57																												
ZZZZZZ	10	17:04																												
CCV12	1	17:11	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB12	1	17:18	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	2	17:25																												
ZZZZZZ	2	17:31																												
ZZZZZZ	2	17:38																												
ZZZZZZ	2	17:45																												
ZZZZZZ	10	17:52																												
ZZZZZZ	2	17:59																												
ZZZZZZ	2	18:05																												
ZZZZZZ	2	18:12																												
ZZZZZZ	2	18:19																												
CCV13	1	18:26	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB13	1	18:33	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977927	1	18:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977932	2	18:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419001	1	18:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977928	1	19:00	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977930	1	19:07	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977931	1	19:14	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977929	5	19:21	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419002	1	19:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV14	1	19:35	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB14	1	19:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419003	1	19:49	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419004	1	19:56	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419005	1	20:03	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419006	1	20:10	X	X		X		X	X	X	X	X	X	X	X		X							X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
241419007	1	20:17	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419008	1	20:24	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419009	1	20:31	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV15	1	20:38	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB15	1	20:45	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419010	1	20:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419011	1	20:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419012	1	21:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419013	1	21:14	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419014	1	21:21	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419015	1	21:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241419016	1	21:35	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV16	1	21:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB16	1	21:49	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 11–DEC–09 **End Date:** 11–DEC–09

Client Sdg: 10–577
Method P
Data File: 121109A–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	10:35																X			X									
S0.1	1	10:41																X			X									
S0.5	1	10:48																X			X									
SCAL	1	10:55																X			X									
S10	1	11:02																												
ICV01	1	11:07																X			X									
ICB01	1	11:14																X			X									
PQL01	1	11:21																X			X									
ICSA01	1	11:28																X			X									
ICSAB01	1	11:34																X			X									
LR01	1	11:40																X			X									
LR02	1	11:46																X			X									
CCV01	1	11:53																X			X									
CCB01	1	12:00																X			X									
CCV02	1	12:09																X			X									
CCB02	1	12:16																X			X									
LR03	1	12:23																X			X									
CCV03	1	12:30																X			X									
CCB03	1	12:37																X			X									
241419006	5	12:47																X			X									
ZZZZZZ	5	12:54																												
CCV04	1	13:02																X			X									
CCB04	1	13:09																X			X									

Metals
--14--
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 07-DEC-09 **End Date:** 07-DEC-09

Client Sdg: 10-577
Method AV
Data File: 120709S1-7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:55																	X											
S0.2	1	09:57																	X											
S0.5	1	09:59																	X											
S2.0	1	10:01																	X											
S5.0	1	10:03																	X											
S10	1	10:05																	X											
ICV01	1	10:07																	X											
ICB01	1	10:09																	X											
CRDL01	1	10:11																	X											
CCV01	1	10:13																	X											
CCB01	1	10:15																	X											
ZZZZZZ	1	10:17																												
ZZZZZZ	10	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
ZZZZZZ	1	10:35																												
CCV02	1	10:37																	X											
CCB02	1	10:39																	X											
1201977155	1	10:41																	X											
1201977156	10	10:43																	X											
ZZZZZZ	1	10:45																												
ZZZZZZ	1	10:47																												
241419001	1	10:49																	X											
241419002	1	10:51																	X											
241419003	1	10:53																	X											
241419004	1	10:55																	X											
241419005	1	10:57																	X											
241419006	1	10:59																	X											
CCV03	1	11:01																	X											
CCB03	1	11:03																	X											
241419007	1	11:05																	X											
241419008	1	11:07																	X											
241419009	1	11:09																	X											
241419010	1	11:10																	X											
241419011	1	11:12																	X											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
241419012	1	11:14																X											
241419013	1	11:16																X											
241419014	1	11:18																X											
241419015	1	11:20																X											
241419016	1	11:22																X											
CCV04	1	11:24																X											
CCB04	1	11:26																X											
ZZZZZZ	1	11:28																											
1201977157	1	11:30																X											
1201977158	1	11:32																X											
1201977160	1	11:34																X											
1201977159	5	11:36																X											
ZZZZZZ	1	11:38																											
ZZZZZZ	1	11:40																											
ZZZZZZ	10	11:42																											
ZZZZZZ	1	11:44																											
ZZZZZZ	1	11:46																											
CCV05	1	11:48																X											
CCB05	1	11:50																X											

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 03–DEC–09 **End Date:** 03–DEC–09

Client Sdg: 10–577
Method MS
Data File: 091202–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	05:56																								X				
S10	1	06:03																								X				
S100	1	06:09																								X				
ICV01	1	06:15																								X				
ICB01	1	06:21																								X				
CRDL01	1	06:27																								X				
ICSA01	1	06:33																								X				
ICSAB01	1	06:40																								X				
CCV01	1	06:46																								X				
CCB01	1	06:52																								X				
LR01	1	06:58																								X				
CCV02	1	07:04																								X				
CCB02	1	07:11																								X				
ZZZZZZ	2	07:17																												
ZZZZZZ	40	07:23																												
ZZZZZZ	2	07:29																												
ZZZZZZ	2	07:36																												
ZZZZZZ	2	07:42																												
ZZZZZZ	2	07:48																												
ZZZZZZ	10	07:54																												
ZZZZZZ	2	08:01																												
CCV03	1	08:07																								X				
CCB03	1	08:13																								X				
1201977933	2	08:20																								X				
ZZZZZZ	40	08:26																												
1201977938	20	08:32																								X				
241419001	2	08:38																								X				
1201977934	2	08:44																								X				
1201977936	2	08:50																								X				
1201977937	2	08:57																								X				
1201977935	10	09:03																								X				
ZZZZZZ	2	09:09																												
CCV04	1	09:15																								X				
CCB04	1	09:22																								X				

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 03–DEC–09 **End Date:** 03–DEC–09

Client Sdg: 10–577
Method MS
Data File: 091203–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:39			X																	X				X		X		
S10	1	19:46			X																	X				X		X		
S100	1	19:52			X																	X				X		X		
ICV01	1	19:58			X																	X				X		X		
ICB01	1	20:04			X																	X				X		X		
CRDL01	1	20:10			X																	X				X		X		
ICSA01	1	20:16			X																	X				X		X		
ICSAB01	1	20:23			X																	X				X		X		
CCV01	1	20:29			X																	X				X		X		
CCB01	1	20:35			X																	X				X		X		
LR01	1	20:41			X																	X				X		X		
CCV02	1	20:47			X																	X				X		X		
CCB02	1	20:54			X																	X				X		X		
1201977933	2	21:00			X																	X						X		
ZZZZZZ	40	21:06																												
1201977938	20	21:12			X																	X						X		
241419001	2	21:18			X																	X						X		
1201977934	2	21:25			X																	X						X		
1201977936	2	21:31			X																	X						X		
1201977937	2	21:37			X																	X						X		
1201977935	10	21:43			X																	X						X		
CCV03	1	21:49			X																	X				X		X		
CCB03	1	21:56			X																	X				X		X		
241419002	2	22:02			X																	X				X		X		
241419003	2	22:08			X																	X				X		X		
241419004	2	22:14			X																	X				X		X		
241419005	2	22:21			X																	X				X		X		
241419006	2	22:27			X																	X				X		X		
241419007	2	22:33			X																	X				X		X		
241419008	2	22:39			X																	X				X		X		
241419009	2	22:45			X																	X				X		X		
CCV04	1	22:52			X																	X				X		X		
CCB04	1	22:58			X																	X				X		X		
241419010	2	23:04			X																	X				X		X		
241419011	2	23:10			X																	X				X		X		
241419012	2	23:17			X																	X				X		X		
241419013	2	23:23			X																	X				X		X		
241419014	2	23:29			X																	X				X		X		
241419015	2	23:35			X																	X				X		X		
241419016	2	23:41			X																	X				X		X		

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
CCV05	1	23:48			X																X				X		X		
CCB05	1	23:54			X																X				X		X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 11–DEC–09 **End Date:** 11–DEC–09

Client Sdg: 10–577
Method P
Data File: 121109A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:32																					X							
S0.1	1	09:36																					X							
S0.5	1	09:38																					X							
SCAL	1	09:42																					X							
S10	1	09:46																												
ICV01	1	09:48																					X							
ICB01	1	09:52																					X							
PQL01	1	09:55																					X							
ICSA01	1	09:59																					X							
ICSAB01	1	10:02																					X							
LR01	1	10:05																					X							
LR02	1	10:08																					X							
CCV01	1	10:11																					X							
CCB01	1	10:15																					X							
CCV02	1	10:23																					X							
CCB02	1	10:27																					X							
LR03	1	10:30																					X							
CCV03	1	10:34																					X							
CCB03	1	10:37																					X							
CCV04	1	10:51																					X							
CCB04	1	10:55																					X							
1201992149	1	10:58																					X							
1201992150	1	11:02																					X							
241419001	1	11:05																					X							
1201977928	1	11:08																					X							
1201977930	1	11:11																					X							
1201977931	1	11:15																					X							
1201977929	5	11:19																					X							
241419002	1	11:22																					X							
CCV05	1	11:26																					X							
CCB05	1	11:30																					X							
241419003	1	11:33																					X							
241419004	1	11:37																					X							
241419005	1	11:40																					X							
241419006	1	11:43																					X							
241419007	1	11:46																					X							
241419008	1	11:49																					X							
241419009	1	11:52																					X							
CCV06	1	11:55																					X							
CCB06	1	11:59																					X							

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
241419010	1	12:03																				X						
241419011	1	12:06																				X						
241419012	1	12:09																				X						
241419013	1	12:12																				X						
241419014	1	12:16																				X						
241419015	1	12:20																				X						
241419016	1	12:22																				X						
CCV07	1	12:26																				X						
CCB07	1	12:30																				X						

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-577

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-577

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
SOLID	Mercury		0.068	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–577

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-577
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-577
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-577
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–577
Effective Dates: 01–NOV–09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	–0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	–2.33110
Copper	324.752	–0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	–2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	–24.9658
Manganese	257.61	–0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	–0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	–0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	–0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	–4.63400	0.00000
Tin	189.927	–0.09214	0.00000	–0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	–0.08158	0.00000	0.00000	0.00000	–6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-577
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-577

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-577

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-577

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–577

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

Raw Data

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Analysis Begun

Start Time: 12/11/2009 09:32:26 **Plasma On Time: 12/6/2009 23:29:48**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121109B.sif
Batch ID:
Results Data Set: 121109A
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/11/2009 09:32:27**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	111047.6	111047.6	100	%	09:33:07
1	Al 396.153Radial†	153.6	153.2	[0.00]	µg/L	09:33:07
1	Ca 317.933Radial†	410.8	409.9	[0.00]	µg/L	09:33:27
1	Fe 238.204 Radial†	17.4	17.3	[0.00]	µg/L	09:33:27
1	K 766.490 Radial†	726.5	725.0	[0.00]	µg/L	09:33:07
1	Mg 279.077 IEC†	15.4	15.4	[0.00]	µg/L	09:33:27
1	Na 589.592 Radial†	-587.2	-585.9	[0.00]	µg/L	09:33:07
1	Sr 421.552†	-18.3	-18.3	[0.00]	µg/L	09:33:07
1	Sc 361.383	2063063.8	2063063.8	100.49	%	09:34:29
1	Y 371.029	1290446.7	1290446.7	100.48	%	09:34:29
1	Ag 328.068†	188.1	187.2	[0.00]	µg/L	09:34:35
1	As 188.979†	-0.2	-0.2	[0.00]	µg/L	09:34:55
1	B 249.677†	159.6	158.8	[0.00]	µg/L	09:34:55
1	Ba 233.527†	-74.5	-74.1	[0.00]	µg/L	09:34:55
1	Be 313.107†	3650.1	3632.4	[0.00]	µg/L	09:34:35
1	Cd 226.502†	-91.6	-91.2	[0.00]	µg/L	09:34:55
1	Co 228.616†	-72.4	-72.1	[0.00]	µg/L	09:34:55
1	Cr 267.716†	-133.5	-132.8	[0.00]	µg/L	09:34:35
1	Cu 324.752†	4005.8	3986.5	[0.00]	µg/L	09:34:35
1	Mn 257.610†	-243.8	-242.6	[0.00]	µg/L	09:34:55
1	Mo 202.031†	-1.5	-1.5	[0.00]	µg/L	09:34:55
1	Ni 231.604†	319.6	318.1	[0.00]	µg/L	09:34:55
1	P 214.914†	183.7	182.8	[0.00]	µg/L	09:34:55
1	Pb 220.353†	37.0	36.8	[0.00]	µg/L	09:34:55
1	S 181.975 Axial†	24.9	24.8	[0.00]	µg/L	09:34:55
1	Sb 206.836†	23.2	23.1	[0.00]	µg/L	09:34:55
1	Se 196.026†	13.7	13.7	[0.00]	µg/L	09:34:55
1	SiO2†	2611.8	2599.2	[0.00]	µg/L	09:34:35
1	Si 251.611†	378.1	376.2	[0.00]	µg/L	09:34:55
1	Sn 189.927†	22.2	22.1	[0.00]	µg/L	09:34:55
1	Ti 334.940†	1052.0	1046.9	[0.00]	µg/L	09:34:35
1	Tl 190.801†	-20.1	-20.0	[0.00]	µg/L	09:34:55
1	U 409.014†	571.7	568.9	[0.00]	µg/L	09:34:35
1	V 292.402†	-156.7	-156.0	[0.00]	µg/L	09:34:35
1	Zn 213.857†	598.3	595.4	[0.00]	µg/L	09:34:55
2	Sc RADIAL	110815.7	110815.7	100	%	09:33:33
2	Al 396.153Radial†	132.0	132.0	[0.00]	µg/L	09:33:33
2	Ca 317.933Radial†	411.5	411.5	[0.00]	µg/L	09:33:53
2	Fe 238.204 Radial†	14.7	14.7	[0.00]	µg/L	09:33:53
2	K 766.490 Radial†	768.9	768.9	[0.00]	µg/L	09:33:33
2	Mg 279.077 IEC†	17.2	17.2	[0.00]	µg/L	09:33:53
2	Na 589.592 Radial†	-563.4	-563.4	[0.00]	µg/L	09:33:33
2	Sr 421.552†	-52.1	-52.1	[0.00]	µg/L	09:33:33
2	Sc 361.383	2047774.6	2047774.6	99.741	%	09:35:01
2	Y 371.029	1282424.8	1282424.8	99.856	%	09:35:01
2	Ag 328.068†	215.6	216.2	[0.00]	µg/L	09:35:07
2	As 188.979†	-2.6	-2.6	[0.00]	µg/L	09:35:27

2	B 249.677†	175.4	175.9	[0.00]	µg/L	09:35:27
2	Ba 233.527†	-66.8	-67.0	[0.00]	µg/L	09:35:27
2	Be 313.107†	3574.5	3583.8	[0.00]	µg/L	09:35:07
2	Cd 226.502†	-94.1	-94.3	[0.00]	µg/L	09:35:27
2	Co 228.616†	-76.7	-76.9	[0.00]	µg/L	09:35:27
2	Cr 267.716†	-127.4	-127.7	[0.00]	µg/L	09:35:07
2	Cu 324.752†	4031.2	4041.7	[0.00]	µg/L	09:35:07
2	Mn 257.610†	-259.9	-260.5	[0.00]	µg/L	09:35:27
2	Mo 202.031†	-5.2	-5.2	[0.00]	µg/L	09:35:27
2	Ni 231.604†	311.8	312.6	[0.00]	µg/L	09:35:27
2	P 214.914†	179.0	179.5	[0.00]	µg/L	09:35:27
2	Pb 220.353†	38.2	38.3	[0.00]	µg/L	09:35:27
2	S 181.975 Axial†	29.8	29.9	[0.00]	µg/L	09:35:27
2	Sb 206.836†	19.2	19.3	[0.00]	µg/L	09:35:27
2	Se 196.026†	14.0	14.1	[0.00]	µg/L	09:35:27
2	SiO2†	2609.2	2616.0	[0.00]	µg/L	09:35:07
2	Si 251.611†	383.7	384.7	[0.00]	µg/L	09:35:27
2	Sn 189.927†	18.3	18.3	[0.00]	µg/L	09:35:27
2	Ti 334.940†	915.4	917.8	[0.00]	µg/L	09:35:07
2	Tl 190.801†	-21.5	-21.6	[0.00]	µg/L	09:35:27
2	U 409.014†	652.8	654.5	[0.00]	µg/L	09:35:07
2	V 292.402†	-103.1	-103.3	[0.00]	µg/L	09:35:07
2	Zn 213.857†	595.7	597.2	[0.00]	µg/L	09:35:27
3	Sc RADIAL	110571.4	110571.4	99.8	%	09:33:59
3	Al 396.153Radial†	149.5	149.8	[0.00]	µg/L	09:33:59
3	Ca 317.933Radial†	418.8	419.7	[0.00]	µg/L	09:34:19
3	Fe 238.204 Radial†	15.8	15.9	[0.00]	µg/L	09:34:19
3	K 766.490 Radial†	827.4	829.2	[0.00]	µg/L	09:33:59
3	Mg 279.077 IEC†	14.8	14.8	[0.00]	µg/L	09:34:19
3	Na 589.592 Radial†	-545.4	-546.6	[0.00]	µg/L	09:33:59
3	Sr 421.552†	-84.3	-84.5	[0.00]	µg/L	09:33:59
3	Sc 361.383	2048408.1	2048408.1	99.772	%	09:35:33
3	Y 371.029	1279945.9	1279945.9	99.663	%	09:35:33
3	Ag 328.068†	211.8	212.3	[0.00]	µg/L	09:35:39
3	As 188.979†	-1.2	-1.2	[0.00]	µg/L	09:35:59
3	B 249.677†	173.4	173.8	[0.00]	µg/L	09:35:59
3	Ba 233.527†	-66.5	-66.7	[0.00]	µg/L	09:35:59
3	Be 313.107†	3660.6	3669.0	[0.00]	µg/L	09:35:39
3	Cd 226.502†	-103.4	-103.6	[0.00]	µg/L	09:35:59
3	Co 228.616†	-69.8	-69.9	[0.00]	µg/L	09:35:59
3	Cr 267.716†	-149.8	-150.1	[0.00]	µg/L	09:35:39
3	Cu 324.752†	4045.7	4054.9	[0.00]	µg/L	09:35:39
3	Mn 257.610†	-233.3	-233.8	[0.00]	µg/L	09:35:59
3	Mo 202.031†	3.1	3.2	[0.00]	µg/L	09:35:59
3	Ni 231.604†	315.2	315.9	[0.00]	µg/L	09:35:59
3	P 214.914†	180.0	180.4	[0.00]	µg/L	09:35:59
3	Pb 220.353†	36.9	37.0	[0.00]	µg/L	09:35:59
3	S 181.975 Axial†	29.3	29.4	[0.00]	µg/L	09:35:59
3	Sb 206.836†	16.4	16.5	[0.00]	µg/L	09:35:59
3	Se 196.026†	9.8	9.8	[0.00]	µg/L	09:35:59
3	SiO2†	2635.4	2641.4	[0.00]	µg/L	09:35:39
3	Si 251.611†	376.8	377.6	[0.00]	µg/L	09:35:59
3	Sn 189.927†	25.6	25.7	[0.00]	µg/L	09:35:59
3	Ti 334.940†	969.1	971.4	[0.00]	µg/L	09:35:39
3	Tl 190.801†	-24.2	-24.2	[0.00]	µg/L	09:35:59
3	U 409.014†	653.1	654.6	[0.00]	µg/L	09:35:39
3	V 292.402†	-127.6	-127.9	[0.00]	µg/L	09:35:39
3	Zn 213.857†	613.0	614.4	[0.00]	µg/L	09:35:59

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2053082.1	8650.17	0.42%	100.00	%
Sc RADIAL	110811.6	238.11	0.21%	100.0	%
Y 371.029	1284272.5	5488.82	0.43%	100.00	%
Ag 328.068†	205.2	15.72	7.66%	[0.00]	µg/L
Al 396.153Radial†	145.0	11.38	7.84%	[0.00]	µg/L
As 188.979†	-1.3	1.18	87.72%	[0.00]	µg/L
B 249.677†	169.5	9.28	5.47%	[0.00]	µg/L
Ba 233.527†	-69.2	4.22	6.10%	[0.00]	µg/L

Be 313.107†	3628.4	42.73	1.18%	[0.00]	µg/L
Ca 317.933Radial†	413.7	5.25	1.27%	[0.00]	µg/L
Cd 226.502†	-96.4	6.47	6.71%	[0.00]	µg/L
Co 228.616†	-73.0	3.56	4.88%	[0.00]	µg/L
Cr 267.716†	-136.9	11.75	8.58%	[0.00]	µg/L
Cu 324.752†	4027.7	36.30	0.90%	[0.00]	µg/L
Fe 238.204 Radial†	16.0	1.32	8.30%	[0.00]	µg/L
K 766.490 Radial†	774.4	52.34	6.76%	[0.00]	µg/L
Mg 279.077 IEC†	15.8	1.25	7.88%	[0.00]	µg/L
Mn 257.610†	-245.7	13.62	5.54%	[0.00]	µg/L
Mo 202.031†	-1.2	4.18	353.70%	[0.00]	µg/L
Na 589.592 Radial†	-565.3	19.72	3.49%	[0.00]	µg/L
Ni 231.604†	315.5	2.78	0.88%	[0.00]	µg/L
P 214.914†	180.9	1.71	0.95%	[0.00]	µg/L
Pb 220.353†	37.4	0.81	2.17%	[0.00]	µg/L
S 181.975 Axial†	28.0	2.81	10.05%	[0.00]	µg/L
Sb 206.836†	19.6	3.33	16.98%	[0.00]	µg/L
Se 196.026†	12.5	2.35	18.82%	[0.00]	µg/L
SiO2†	2618.9	21.25	0.81%	[0.00]	µg/L
Si 251.611†	379.5	4.53	1.19%	[0.00]	µg/L
Sn 189.927†	22.0	3.70	16.77%	[0.00]	µg/L
Sr 421.552†	-51.6	33.11	64.12%	[0.00]	µg/L
Ti 334.940†	978.7	64.89	6.63%	[0.00]	µg/L
Tl 190.801†	-21.9	2.15	9.80%	[0.00]	µg/L
U 409.014†	626.0	49.45	7.90%	[0.00]	µg/L
V 292.402†	-129.1	26.34	20.41%	[0.00]	µg/L
Zn 213.857†	602.3	10.52	1.75%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/11/2009 09:36:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113882.2	113882.2	103	%	09:36:44
1	K 766.490 Radial†	2589.9	1745.7	[1000]	µg/L	09:36:44
1	Sr 421.552†	18133.4	17696.1	[100]	µg/L	09:36:44
1	Sc 361.383	2069376.0	2069376.0	100.79	%	09:37:06
1	Y 371.029	1293627.3	1293627.3	100.73	%	09:37:06
1	Ag 328.068†	10701.1	10411.6	[100]	µg/L	09:37:11
1	As 188.979†	59.0	59.8	[100]	µg/L	09:37:32
1	B 249.677†	2357.3	2169.2	[100]	µg/L	09:37:11
1	Ba 233.527†	3706.3	3746.3	[100]	µg/L	09:37:11
1	Be 313.107†	159063.9	154183.1	[100]	µg/L	09:37:06
1	Cd 226.502†	3619.7	3687.5	[100]	µg/L	09:37:11
1	Co 228.616†	1949.0	2006.6	[100]	µg/L	09:37:32
1	Cr 267.716†	4522.8	4624.0	[100]	µg/L	09:37:11
1	Cu 324.752†	18067.1	13897.2	[100]	µg/L	09:37:11
1	Mn 257.610†	29924.5	29934.6	[100]	µg/L	09:37:11
1	Mo 202.031†	824.5	819.2	[100]	µg/L	09:37:32
1	Ni 231.604†	2115.8	1783.6	[100]	µg/L	09:37:32
1	P 214.914†	416.0	231.9	[500]	µg/L	09:37:32
1	Pb 220.353†	428.7	387.9	[100]	µg/L	09:37:32
1	S 181.975 Axial†	69.8	41.2	[200]	µg/L	09:37:32
1	Sb 206.836†	122.7	102.2	[100]	µg/L	09:37:32
1	Se 196.026†	88.3	75.1	[100]	µg/L	09:37:32
1	SiO2†	8150.2	5467.2	[1069.5]	µg/L	09:37:11
1	Si 251.611†	6821.9	6388.7	[500]	µg/L	09:37:11
1	Sn 189.927†	222.5	198.8	[100]	µg/L	09:37:32
1	Ti 334.940†	41897.7	40589.1	[100]	µg/L	09:37:11
1	Tl 190.801†	51.0	72.6	[100]	µg/L	09:37:32
1	U 409.014†	1696.4	1057.1	[100]	µg/L	09:37:11
1	V 292.402†	8362.3	8425.5	[100]	µg/L	09:37:11
1	Zn 213.857†	4319.4	3683.1	[100]	µg/L	09:37:11
2	Sc RADIAL	113336.6	113336.6	102	%	09:36:49
2	K 766.490 Radial†	2613.7	1781.1	[1000]	µg/L	09:36:49
2	Sr 421.552†	18070.5	17719.5	[100]	µg/L	09:36:49
2	Sc 361.383	2055870.4	2055870.4	100.14	%	09:37:38
2	Y 371.029	1288486.8	1288486.8	100.33	%	09:37:38
2	Ag 328.068†	10694.7	10475.0	[100]	µg/L	09:37:44
2	As 188.979†	56.5	57.8	[100]	µg/L	09:38:04
2	B 249.677†	2336.1	2163.5	[100]	µg/L	09:37:44
2	Ba 233.527†	3736.8	3801.0	[100]	µg/L	09:37:44
2	Be 313.107†	157886.4	154043.8	[100]	µg/L	09:37:38
2	Cd 226.502†	3665.2	3756.6	[100]	µg/L	09:37:44
2	Co 228.616†	1952.3	2022.6	[100]	µg/L	09:38:04
2	Cr 267.716†	4517.4	4648.1	[100]	µg/L	09:37:44
2	Cu 324.752†	18097.9	14045.7	[100]	µg/L	09:37:44
2	Mn 257.610†	30060.7	30265.6	[100]	µg/L	09:37:44
2	Mo 202.031†	827.8	827.9	[100]	µg/L	09:38:04
2	Ni 231.604†	2106.7	1788.3	[100]	µg/L	09:38:04
2	P 214.914†	417.4	236.0	[500]	µg/L	09:38:04
2	Pb 220.353†	426.4	388.5	[100]	µg/L	09:38:04
2	S 181.975 Axial†	67.1	39.0	[200]	µg/L	09:38:04
2	Sb 206.836†	120.9	101.1	[100]	µg/L	09:38:04
2	Se 196.026†	94.9	82.3	[100]	µg/L	09:38:04
2	SiO2†	8210.0	5580.0	[1069.5]	µg/L	09:37:44
2	Si 251.611†	6793.7	6405.0	[500]	µg/L	09:37:44
2	Sn 189.927†	214.3	192.0	[100]	µg/L	09:38:04
2	Ti 334.940†	41981.4	40945.8	[100]	µg/L	09:37:44
2	Tl 190.801†	47.8	69.7	[100]	µg/L	09:38:04
2	U 409.014†	1667.4	1039.2	[100]	µg/L	09:37:44
2	V 292.402†	8424.2	8541.8	[100]	µg/L	09:37:44

2	Zn 213.857†	4300.6	3692.4	[100]	µg/L	09:37:44
3	Sc RADIAL	114044.2	114044.2	103	%	09:36:55
3	K 766.490 Radial†	2658.0	1808.2	[1000]	µg/L	09:36:55
3	Sr 421.552†	18184.8	17721.0	[100]	µg/L	09:36:55
3	Sc 361.383	2062142.4	2062142.4	100.44	%	09:38:10
3	Y 371.029	1285377.1	1285377.1	100.09	%	09:38:10
3	Ag 328.068†	10770.3	10517.8	[100]	µg/L	09:38:16
3	As 188.979†	52.5	53.7	[100]	µg/L	09:38:36
3	B 249.677†	2340.5	2160.7	[100]	µg/L	09:38:16
3	Ba 233.527†	3723.6	3776.5	[100]	µg/L	09:38:16
3	Be 313.107†	157744.9	153423.5	[100]	µg/L	09:38:10
3	Cd 226.502†	3653.3	3733.6	[100]	µg/L	09:38:16
3	Co 228.616†	1941.0	2005.4	[100]	µg/L	09:38:36
3	Cr 267.716†	4509.1	4626.2	[100]	µg/L	09:38:16
3	Cu 324.752†	18055.7	13948.7	[100]	µg/L	09:38:16
3	Mn 257.610†	30092.9	30206.4	[100]	µg/L	09:38:16
3	Mo 202.031†	822.0	819.6	[100]	µg/L	09:38:36
3	Ni 231.604†	2118.4	1793.5	[100]	µg/L	09:38:36
3	P 214.914†	416.5	233.7	[500]	µg/L	09:38:36
3	Pb 220.353†	429.2	389.9	[100]	µg/L	09:38:36
3	S 181.975 Axial†	63.0	34.8	[200]	µg/L	09:38:36
3	Sb 206.836†	121.9	101.7	[100]	µg/L	09:38:36
3	Se 196.026†	93.3	80.3	[100]	µg/L	09:38:36
3	SiO2†	8251.6	5596.5	[1069.5]	µg/L	09:38:16
3	Si 251.611†	6832.5	6423.0	[500]	µg/L	09:38:16
3	Sn 189.927†	215.2	192.2	[100]	µg/L	09:38:36
3	Ti 334.940†	42099.7	40936.1	[100]	µg/L	09:38:16
3	Tl 190.801†	47.1	68.8	[100]	µg/L	09:38:36
3	U 409.014†	1602.9	969.8	[100]	µg/L	09:38:16
3	V 292.402†	8405.7	8497.8	[100]	µg/L	09:38:16
3	Zn 213.857†	4311.5	3690.3	[100]	µg/L	09:38:16

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2062462.9	6758.49	0.33%	100.46	%
Sc RADIAL	113754.3	370.70	0.33%	103	%
Y 371.029	1289163.7	4166.57	0.32%	100.38	%
Ag 328.068†	10468.1	53.40	0.51%	[100]	µg/L
As 188.979†	57.1	3.15	5.51%	[100]	µg/L
B 249.677†	2164.5	4.36	0.20%	[100]	µg/L
Ba 233.527†	3774.6	27.37	0.73%	[100]	µg/L
Be 313.107†	153883.5	404.42	0.26%	[100]	µg/L
Cd 226.502†	3725.9	35.15	0.94%	[100]	µg/L
Co 228.616†	2011.5	9.61	0.48%	[100]	µg/L
Cr 267.716†	4632.8	13.35	0.29%	[100]	µg/L
Cu 324.752†	13963.8	75.40	0.54%	[100]	µg/L
K 766.490 Radial†	1778.3	31.35	1.76%	[1000]	µg/L
Mn 257.610†	30135.5	176.51	0.59%	[100]	µg/L
Mo 202.031†	822.2	4.89	0.60%	[100]	µg/L
Ni 231.604†	1788.5	4.98	0.28%	[100]	µg/L
P 214.914†	233.9	2.05	0.88%	[500]	µg/L
Pb 220.353†	388.8	1.02	0.26%	[100]	µg/L
S 181.975 Axial†	38.3	3.28	8.57%	[200]	µg/L
Sb 206.836†	101.7	0.53	0.52%	[100]	µg/L
Se 196.026†	79.3	3.70	4.66%	[100]	µg/L
SiO2†	5547.9	70.38	1.27%	[1069.5]	µg/L
Si 251.611†	6405.6	17.14	0.27%	[500]	µg/L
Sn 189.927†	194.3	3.84	1.98%	[100]	µg/L
Sr 421.552†	17712.2	14.00	0.08%	[100]	µg/L
Ti 334.940†	40823.7	203.16	0.50%	[100]	µg/L
Tl 190.801†	70.4	1.97	2.81%	[100]	µg/L
U 409.014†	1022.0	46.10	4.51%	[100]	µg/L
V 292.402†	8488.4	58.72	0.69%	[100]	µg/L
Zn 213.857†	3688.6	4.88	0.13%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2009 09:38:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113467.3	113467.3	102	%	09:39:19
1	Al 396.153Radial†	9850.2	9474.6	[5000]	µg/L	09:39:19
1	Ca 317.933Radial†	12617.7	11908.7	[5000]	µg/L	09:39:39
1	K 766.490 Radial†	9934.3	8927.4	[5000]	µg/L	09:39:19
1	Mg 279.077 IEC†	792.5	758.2	[5000]	µg/L	09:39:39
1	Sr 421.552†	91265.8	89181.4	[500]	µg/L	09:39:19
1	Sc 361.383	2093560.6	2093560.6	101.97	%	09:40:42
1	Y 371.029	1297588.1	1297588.1	101.04	%	09:40:42
1	Ag 328.068†	55192.7	53920.3	[500]	µg/L	09:40:48
1	As 188.979†	275.3	271.3	[500]	µg/L	09:41:08
1	B 249.677†	11625.2	11230.9	[500]	µg/L	09:40:48
1	Ba 233.527†	19297.8	18993.9	[500]	µg/L	09:40:48
1	Be 313.107†	788793.3	769913.8	[500]	µg/L	09:40:42
1	Cd 226.502†	18994.5	18723.6	[500]	µg/L	09:40:48
1	Co 228.616†	10302.3	10176.0	[500]	µg/L	09:40:48
1	Cr 267.716†	23617.7	23298.0	[500]	µg/L	09:40:48
1	Cu 324.752†	74796.1	69322.3	[500]	µg/L	09:40:48
1	Mn 257.610†	151963.7	149271.1	[500]	µg/L	09:40:48
1	Mo 202.031†	4319.2	4236.9	[500]	µg/L	09:41:08
1	Ni 231.604†	9419.0	8921.3	[500]	µg/L	09:40:48
1	P 214.914†	1404.2	1196.1	[2500]	µg/L	09:41:08
1	Pb 220.353†	1996.5	1920.5	[500]	µg/L	09:41:08
1	S 181.975 Axial†	240.4	207.8	[1000]	µg/L	09:41:08
1	Sb 206.836†	537.6	507.6	[500]	µg/L	09:41:08
1	Se 196.026†	423.4	402.8	[500]	µg/L	09:41:08
1	SiO2†	32284.6	29041.6	[5347.5]	µg/L	09:40:48
1	Si 251.611†	34525.4	33478.4	[2500]	µg/L	09:40:48
1	Sn 189.927†	1041.5	999.3	[500]	µg/L	09:41:08
1	Ti 334.940†	217143.7	211966.6	[500]	µg/L	09:40:42
1	Tl 190.801†	312.6	328.5	[500]	µg/L	09:41:08
1	U 409.014†	5925.5	5185.0	[500]	µg/L	09:40:48
1	V 292.402†	43754.2	43037.3	[500]	µg/L	09:40:48
1	Zn 213.857†	19598.9	18617.6	[500]	µg/L	09:40:48
2	Sc RADIAL	114117.5	114117.5	103	%	09:39:45
2	Al 396.153Radial†	9946.2	9513.1	[5000]	µg/L	09:39:45
2	Ca 317.933Radial†	12627.6	11848.1	[5000]	µg/L	09:40:05
2	K 766.490 Radial†	10041.1	8975.9	[5000]	µg/L	09:39:45
2	Mg 279.077 IEC†	801.0	762.0	[5000]	µg/L	09:40:05
2	Sr 421.552†	92238.4	89618.0	[500]	µg/L	09:39:45
2	Sc 361.383	2088587.7	2088587.7	101.73	%	09:41:15
2	Y 371.029	1291851.2	1291851.2	100.59	%	09:41:15
2	Ag 328.068†	54713.9	53578.6	[500]	µg/L	09:41:21
2	As 188.979†	281.7	278.3	[500]	µg/L	09:41:41
2	B 249.677†	11534.0	11168.5	[500]	µg/L	09:41:21
2	Ba 233.527†	19113.0	18857.3	[500]	µg/L	09:41:21
2	Be 313.107†	793939.9	776814.7	[500]	µg/L	09:41:15
2	Cd 226.502†	18781.4	18558.5	[500]	µg/L	09:41:21
2	Co 228.616†	10195.8	10095.4	[500]	µg/L	09:41:21
2	Cr 267.716†	23379.8	23119.2	[500]	µg/L	09:41:21
2	Cu 324.752†	74270.2	68979.9	[500]	µg/L	09:41:21
2	Mn 257.610†	150527.7	148214.4	[500]	µg/L	09:41:21
2	Mo 202.031†	4297.0	4225.1	[500]	µg/L	09:41:41
2	Ni 231.604†	9312.7	8838.9	[500]	µg/L	09:41:21
2	P 214.914†	1404.5	1199.7	[2500]	µg/L	09:41:41
2	Pb 220.353†	1992.9	1921.6	[500]	µg/L	09:41:41
2	S 181.975 Axial†	236.2	204.1	[1000]	µg/L	09:41:41
2	Sb 206.836†	542.5	513.7	[500]	µg/L	09:41:41
2	Se 196.026†	413.4	393.9	[500]	µg/L	09:41:41
2	SiO2†	31970.2	28807.8	[5347.5]	µg/L	09:41:21

2	Si 251.611†	34315.5	33352.6	[2500]	µg/L	09:41:21
2	Sn 189.927†	1035.8	996.1	[500]	µg/L	09:41:41
2	Ti 334.940†	218829.8	214131.0	[500]	µg/L	09:41:15
2	Tl 190.801†	312.0	328.6	[500]	µg/L	09:41:41
2	U 409.014†	5882.6	5156.6	[500]	µg/L	09:41:21
2	V 292.402†	43335.1	42727.4	[500]	µg/L	09:41:21
2	Zn 213.857†	19417.8	18485.3	[500]	µg/L	09:41:21
3	Sc RADIAL	114570.9	114570.9	103	%	09:40:10
3	Al 396.153Radial†	9911.0	9440.8	[5000]	µg/L	09:40:10
3	Ca 317.933Radial†	12677.4	11847.7	[5000]	µg/L	09:40:31
3	K 766.490 Radial†	10093.3	8987.7	[5000]	µg/L	09:40:10
3	Mg 279.077 IEC†	800.4	758.3	[5000]	µg/L	09:40:31
3	Sr 421.552†	92580.8	89594.7	[500]	µg/L	09:40:10
3	Sc 361.383	2076239.0	2076239.0	101.13	%	09:41:48
3	Y 371.029	1286065.8	1286065.8	100.14	%	09:41:48
3	Ag 328.068†	55213.9	54392.8	[500]	µg/L	09:41:53
3	As 188.979†	282.3	280.5	[500]	µg/L	09:42:14
3	B 249.677†	11602.9	11304.0	[500]	µg/L	09:41:53
3	Ba 233.527†	19246.8	19101.4	[500]	µg/L	09:41:53
3	Be 313.107†	792567.2	780099.1	[500]	µg/L	09:41:48
3	Cd 226.502†	18975.4	18860.2	[500]	µg/L	09:41:53
3	Co 228.616†	10280.7	10239.0	[500]	µg/L	09:41:53
3	Cr 267.716†	23535.7	23410.1	[500]	µg/L	09:41:53
3	Cu 324.752†	74813.9	69951.8	[500]	µg/L	09:41:53
3	Mn 257.610†	152207.4	150755.4	[500]	µg/L	09:41:53
3	Mo 202.031†	4297.9	4251.1	[500]	µg/L	09:42:14
3	Ni 231.604†	9422.3	9001.7	[500]	µg/L	09:41:53
3	P 214.914†	1410.2	1213.6	[2500]	µg/L	09:42:14
3	Pb 220.353†	1987.2	1927.6	[500]	µg/L	09:42:14
3	S 181.975 Axial†	235.6	205.0	[1000]	µg/L	09:42:14
3	Sb 206.836†	534.1	508.5	[500]	µg/L	09:42:14
3	Se 196.026†	416.6	399.4	[500]	µg/L	09:42:14
3	SiO2†	32246.7	29268.2	[5347.5]	µg/L	09:41:53
3	Si 251.611†	34588.6	33823.3	[2500]	µg/L	09:41:53
3	Sn 189.927†	1027.8	994.3	[500]	µg/L	09:42:14
3	Ti 334.940†	218553.8	215137.5	[500]	µg/L	09:41:48
3	Tl 190.801†	315.1	333.5	[500]	µg/L	09:42:14
3	U 409.014†	5942.6	5250.4	[500]	µg/L	09:41:53
3	V 292.402†	43793.9	43434.5	[500]	µg/L	09:41:53
3	Zn 213.857†	19638.5	18817.1	[500]	µg/L	09:41:53

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2086129.1	8918.71	0.43%	101.61	%
Sc RADIAL	114051.9	554.70	0.49%	103	%
Y 371.029	1291835.0	5761.19	0.45%	100.59	%
Ag 328.068†	53963.9	408.87	0.76%	[500]	µg/L
Al 396.153Radial†	9476.1	36.17	0.38%	[5000]	µg/L
As 188.979†	276.7	4.81	1.74%	[500]	µg/L
B 249.677†	11234.5	67.84	0.60%	[500]	µg/L
Ba 233.527†	18984.2	122.33	0.64%	[500]	µg/L
Be 313.107†	775609.2	5198.58	0.67%	[500]	µg/L
Ca 317.933Radial†	11868.1	35.10	0.30%	[5000]	µg/L
Cd 226.502†	18714.1	151.06	0.81%	[500]	µg/L
Co 228.616†	10170.2	71.97	0.71%	[500]	µg/L
Cr 267.716†	23275.8	146.71	0.63%	[500]	µg/L
Cu 324.752†	69418.0	492.99	0.71%	[500]	µg/L
K 766.490 Radial†	8963.7	31.97	0.36%	[5000]	µg/L
Mg 279.077 IEC†	759.5	2.17	0.29%	[5000]	µg/L
Mn 257.610†	149413.7	1276.47	0.85%	[500]	µg/L
Mo 202.031†	4237.7	13.05	0.31%	[500]	µg/L
Ni 231.604†	8920.6	81.42	0.91%	[500]	µg/L
P 214.914†	1203.2	9.23	0.77%	[2500]	µg/L
Pb 220.353†	1923.2	3.82	0.20%	[500]	µg/L
S 181.975 Axial†	205.6	1.89	0.92%	[1000]	µg/L
Sb 206.836†	509.9	3.25	0.64%	[500]	µg/L
Se 196.026†	398.7	4.49	1.13%	[500]	µg/L
SiO2†	29039.2	230.18	0.79%	[5347.5]	µg/L
Si 251.611†	33551.4	243.71	0.73%	[2500]	µg/L

Sn 189.927†	996.6	2.57	0.26%	[500] µg/L
Sr 421.552†	89464.7	245.64	0.27%	[500] µg/L
Ti 334.940†	213745.0	1620.31	0.76%	[500] µg/L
Tl 190.801†	330.2	2.87	0.87%	[500] µg/L
U 409.014†	5197.3	48.07	0.92%	[500] µg/L
V 292.402†	43066.4	354.43	0.82%	[500] µg/L
Zn 213.857†	18640.0	167.05	0.90%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/11/2009 09:42:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115048.1	115048.1	104	%	09:42:56
1	Al 396.153Radial†	19466.2	18604.3	[10000]	µg/L	09:42:56
1	Ca 317.933Radial†	25077.6	23740.4	[10000]	µg/L	09:42:56
1	Fe 238.204 Radial†	1462.7	1392.8	[10000]	µg/L	09:43:17
1	K 766.490 Radial†	19183.9	17703.1	[10000]	µg/L	09:42:56
1	Mg 279.077 IEC†	1562.0	1488.7	[10000]	µg/L	09:43:17
1	Na 589.592 Radial†	36883.2	36090.4	[10000]	µg/L	09:42:56
1	Sr 421.552†	182121.9	175467.1	[1000]	µg/L	09:42:56
1	Sc 361.383	2092936.6	2092936.6	101.94	%	09:44:21
1	Y 371.029	1287314.1	1287314.1	100.24	%	09:44:21
1	Ag 328.068†	104993.8	102789.2	[1000]	µg/L	09:44:27
1	As 188.979†	547.6	538.5	[1000]	µg/L	09:44:47
1	B 249.677†	22597.0	21997.2	[1000]	µg/L	09:44:27
1	Ba 233.527†	37790.6	37140.2	[1000]	µg/L	09:44:27
1	Be 313.107†	1565379.3	1531942.4	[1000]	µg/L	09:44:21
1	Cd 226.502†	36806.1	36201.6	[1000]	µg/L	09:44:27
1	Co 228.616†	20090.2	19780.6	[1000]	µg/L	09:44:27
1	Cr 267.716†	46312.9	45567.9	[1000]	µg/L	09:44:27
1	Cu 324.752†	146162.4	139351.5	[1000]	µg/L	09:44:21
1	Mn 257.610†	303208.0	297679.9	[1000]	µg/L	09:44:21
1	Mo 202.031†	8333.3	8175.8	[1000]	µg/L	09:44:27
1	Ni 231.604†	18013.1	17354.5	[1000]	µg/L	09:44:27
1	P 214.914†	2592.8	2362.5	[5000]	µg/L	09:44:47
1	Pb 220.353†	3867.7	3756.7	[1000]	µg/L	09:44:47
1	S 181.975 Axial†	425.6	389.5	[2000]	µg/L	09:44:47
1	Sb 206.836†	1012.7	973.8	[1000]	µg/L	09:44:47
1	Se 196.026†	799.3	771.5	[1000]	µg/L	09:44:47
1	SiO2†	58739.8	55002.4	[10695]	µg/L	09:44:27
1	Si 251.611†	65212.1	63590.8	[5000]	µg/L	09:44:27
1	Sn 189.927†	1982.2	1922.4	[1000]	µg/L	09:44:47
1	Ti 334.940†	424698.5	415632.5	[1000]	µg/L	09:44:21
1	Tl 190.801†	639.9	649.7	[1000]	µg/L	09:44:47
1	U 409.014†	11232.8	10392.9	[1000]	µg/L	09:44:27
1	V 292.402†	85862.6	84356.7	[1000]	µg/L	09:44:27
1	Zn 213.857†	37208.4	35897.5	[1000]	µg/L	09:44:27
2	Sc RADIAL	113827.5	113827.5	103	%	09:43:22
2	Al 396.153Radial†	19477.2	18816.1	[10000]	µg/L	09:43:22
2	Ca 317.933Radial†	24925.5	23851.4	[10000]	µg/L	09:43:22
2	Fe 238.204 Radial†	1468.0	1413.1	[10000]	µg/L	09:43:43
2	K 766.490 Radial†	19070.9	17791.2	[10000]	µg/L	09:43:22
2	Mg 279.077 IEC†	1564.7	1507.5	[10000]	µg/L	09:43:43
2	Na 589.592 Radial†	36825.2	36414.8	[10000]	µg/L	09:43:22
2	Sr 421.552†	181357.0	176603.5	[1000]	µg/L	09:43:22
2	Sc 361.383	2083769.7	2083769.7	101.49	%	09:44:55
2	Y 371.029	1282852.4	1282852.4	99.889	%	09:44:55
2	Ag 328.068†	106055.6	104288.5	[1000]	µg/L	09:45:01
2	As 188.979†	550.7	543.9	[1000]	µg/L	09:45:21
2	B 249.677†	22840.5	22334.6	[1000]	µg/L	09:45:01
2	Ba 233.527†	38261.2	37767.0	[1000]	µg/L	09:45:01
2	Be 313.107†	1566062.3	1539370.6	[1000]	µg/L	09:44:55
2	Cd 226.502†	37317.9	36864.7	[1000]	µg/L	09:45:01
2	Co 228.616†	20252.1	20026.8	[1000]	µg/L	09:45:01
2	Cr 267.716†	46935.5	46381.1	[1000]	µg/L	09:45:01
2	Cu 324.752†	146248.6	140067.2	[1000]	µg/L	09:44:55
2	Mn 257.610†	303497.9	299274.0	[1000]	µg/L	09:44:55
2	Mo 202.031†	8438.0	8315.0	[1000]	µg/L	09:45:01
2	Ni 231.604†	18217.0	17633.2	[1000]	µg/L	09:45:01
2	P 214.914†	2601.1	2381.9	[5000]	µg/L	09:45:21
2	Pb 220.353†	3880.4	3785.8	[1000]	µg/L	09:45:21

2	S 181.975 Axial†	427.0	392.7	[2000]	µg/L	09:45:21
2	Sb 206.836†	1010.8	976.3	[1000]	µg/L	09:45:21
2	Se 196.026†	798.6	774.3	[1000]	µg/L	09:45:21
2	SiO2†	59304.2	55811.9	[10695]	µg/L	09:45:01
2	Si 251.611†	65914.6	64564.4	[5000]	µg/L	09:45:01
2	Sn 189.927†	1990.6	1939.2	[1000]	µg/L	09:45:21
2	Ti 334.940†	425035.3	417797.1	[1000]	µg/L	09:44:55
2	Tl 190.801†	629.7	642.3	[1000]	µg/L	09:45:21
2	U 409.014†	11323.1	10530.4	[1000]	µg/L	09:45:01
2	V 292.402†	86859.1	85709.0	[1000]	µg/L	09:45:01
2	Zn 213.857†	37645.4	36488.6	[1000]	µg/L	09:45:01
3	Sc RADIAL	114460.6	114460.6	103	%	09:43:48
3	Al 396.153Radial†	19580.7	18811.5	[10000]	µg/L	09:43:48
3	Ca 317.933Radial†	25103.5	23889.5	[10000]	µg/L	09:43:48
3	Fe 238.204 Radial†	1465.1	1402.4	[10000]	µg/L	09:44:09
3	K 766.490 Radial†	19222.2	17835.0	[10000]	µg/L	09:43:48
3	Mg 279.077 IEC†	1559.0	1493.5	[10000]	µg/L	09:44:09
3	Na 589.592 Radial†	37042.2	36426.6	[10000]	µg/L	09:43:48
3	Sr 421.552†	182367.0	176604.7	[1000]	µg/L	09:43:48
3	Sc 361.383	2076183.3	2076183.3	101.13	%	09:45:28
3	Y 371.029	1282198.3	1282198.3	99.838	%	09:45:28
3	Ag 328.068†	105956.3	104572.1	[1000]	µg/L	09:45:34
3	As 188.979†	540.7	536.0	[1000]	µg/L	09:45:55
3	B 249.677†	22837.7	22414.1	[1000]	µg/L	09:45:34
3	Ba 233.527†	38281.9	37925.2	[1000]	µg/L	09:45:34
3	Be 313.107†	1562042.3	1541033.4	[1000]	µg/L	09:45:28
3	Cd 226.502†	37340.9	37021.8	[1000]	µg/L	09:45:34
3	Co 228.616†	20310.8	20157.7	[1000]	µg/L	09:45:34
3	Cr 267.716†	46912.4	46527.3	[1000]	µg/L	09:45:34
3	Cu 324.752†	146007.4	140355.1	[1000]	µg/L	09:45:28
3	Mn 257.610†	302953.9	299828.7	[1000]	µg/L	09:45:28
3	Mo 202.031†	8460.4	8367.4	[1000]	µg/L	09:45:34
3	Ni 231.604†	18255.7	17737.0	[1000]	µg/L	09:45:34
3	P 214.914†	2588.7	2379.0	[5000]	µg/L	09:45:55
3	Pb 220.353†	3829.6	3749.6	[1000]	µg/L	09:45:55
3	S 181.975 Axial†	427.6	394.8	[2000]	µg/L	09:45:55
3	Sb 206.836†	1010.2	979.3	[1000]	µg/L	09:45:55
3	Se 196.026†	789.6	768.3	[1000]	µg/L	09:45:55
3	SiO2†	59347.0	56067.8	[10695]	µg/L	09:45:34
3	Si 251.611†	65972.3	64858.7	[5000]	µg/L	09:45:34
3	Sn 189.927†	1960.2	1916.3	[1000]	µg/L	09:45:55
3	Ti 334.940†	424516.3	418814.1	[1000]	µg/L	09:45:28
3	Tl 190.801†	628.4	643.3	[1000]	µg/L	09:45:55
3	U 409.014†	11364.0	10611.6	[1000]	µg/L	09:45:34
3	V 292.402†	86889.6	86051.9	[1000]	µg/L	09:45:34
3	Zn 213.857†	37625.2	36604.3	[1000]	µg/L	09:45:34

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2084296.5	8389.03	0.40%	101.52	%
Sc RADIAL	114445.4	610.46	0.53%	103	%
Y 371.029	1284121.6	2784.08	0.22%	99.988	%
Ag 328.068†	103883.3	958.04	0.92%	[1000]	µg/L
Al 396.153Radial†	18744.0	120.96	0.65%	[10000]	µg/L
As 188.979†	539.5	4.03	0.75%	[1000]	µg/L
B 249.677†	22248.6	221.32	0.99%	[1000]	µg/L
Ba 233.527†	37610.8	415.16	1.10%	[1000]	µg/L
Be 313.107†	1537448.8	4840.61	0.31%	[1000]	µg/L
Ca 317.933Radial†	23827.1	77.44	0.32%	[10000]	µg/L
Cd 226.502†	36696.0	435.34	1.19%	[1000]	µg/L
Co 228.616†	19988.4	191.46	0.96%	[1000]	µg/L
Cr 267.716†	46158.8	516.93	1.12%	[1000]	µg/L
Cu 324.752†	139924.6	516.78	0.37%	[1000]	µg/L
Fe 238.204 Radial†	1402.8	10.15	0.72%	[10000]	µg/L
K 766.490 Radial†	17776.4	67.23	0.38%	[10000]	µg/L
Mg 279.077 IEC†	1496.6	9.75	0.65%	[10000]	µg/L
Mn 257.610†	298927.5	1115.51	0.37%	[1000]	µg/L
Mo 202.031†	8286.1	99.01	1.19%	[1000]	µg/L
Na 589.592 Radial†	36310.6	190.79	0.53%	[10000]	µg/L

Ni 231.604†	17574.9	197.78	1.13%	[1000]	µg/L
P 214.914†	2374.5	10.44	0.44%	[5000]	µg/L
Pb 220.353†	3764.0	19.21	0.51%	[1000]	µg/L
S 181.975 Axial†	392.3	2.68	0.68%	[2000]	µg/L
Sb 206.836†	976.5	2.74	0.28%	[1000]	µg/L
Se 196.026†	771.4	2.97	0.39%	[1000]	µg/L
SiO2†	55627.4	556.16	1.00%	[10695]	µg/L
Si 251.611†	64338.0	663.57	1.03%	[5000]	µg/L
Sn 189.927†	1926.0	11.85	0.62%	[1000]	µg/L
Sr 421.552†	176225.1	656.46	0.37%	[1000]	µg/L
Ti 334.940†	417414.6	1624.92	0.39%	[1000]	µg/L
Tl 190.801†	645.1	3.98	0.62%	[1000]	µg/L
U 409.014†	10511.6	110.57	1.05%	[1000]	µg/L
V 292.402†	85372.5	896.29	1.05%	[1000]	µg/L
Zn 213.857†	36330.1	379.10	1.04%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/11/2009 09:46:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114285.8	114285.8	103	%	09:46:36
1	Al 396.153Radial†	95406.8	92361.5	[50000]	µg/L	09:46:36
1	Ca 317.933Radial†	121877.9	117759.2	[50000]	µg/L	09:46:36
1	Fe 238.204 Radial†	2875.7	2772.3	[20000]	µg/L	09:46:56
1	Mg 279.077 IEC†	7533.9	7289.0	[50000]	µg/L	09:46:56
1	Na 589.592 Radial†	73047.8	71392.5	[20000]	µg/L	09:46:36
1	Sc 361.383	2093711.4	2093711.4	101.98	%	09:48:00
1	Y 371.029	1285513.5	1285513.5	100.10	%	09:48:00
2	Sc RADIAL	113786.5	113786.5	103	%	09:47:02
2	Al 396.153Radial†	95639.0	92993.5	[50000]	µg/L	09:47:02
2	Ca 317.933Radial†	121864.4	118264.6	[50000]	µg/L	09:47:02
2	Fe 238.204 Radial†	2894.0	2802.4	[20000]	µg/L	09:47:22
2	Mg 279.077 IEC†	7571.7	7357.9	[50000]	µg/L	09:47:22
2	Na 589.592 Radial†	73062.1	71717.2	[20000]	µg/L	09:47:02
2	Sc 361.383	2084777.7	2084777.7	101.54	%	09:48:08
2	Y 371.029	1281139.4	1281139.4	99.756	%	09:48:08
3	Sc RADIAL	114490.6	114490.6	103	%	09:47:28
3	Al 396.153Radial†	95512.1	92297.9	[50000]	µg/L	09:47:28
3	Ca 317.933Radial†	121795.3	117467.9	[50000]	µg/L	09:47:28
3	Fe 238.204 Radial†	2906.4	2797.0	[20000]	µg/L	09:47:48
3	Mg 279.077 IEC†	7597.9	7338.0	[50000]	µg/L	09:47:48
3	Na 589.592 Radial†	73228.7	71440.9	[20000]	µg/L	09:47:28
3	Sc 361.383	2077295.1	2077295.1	101.18	%	09:48:16
3	Y 371.029	1277992.5	1277992.5	99.511	%	09:48:16

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2085261.4	8218.83	0.39%	101.57	%
Sc RADIAL	114187.6	362.20	0.32%	103	%
Y 371.029	1281548.5	3777.16	0.29%	99.788	%
Al 396.153Radial†	92551.0	384.60	0.42%	[50000]	µg/L
Ca 317.933Radial†	117830.5	403.14	0.34%	[50000]	µg/L
Fe 238.204 Radial†	2790.6	16.04	0.57%	[20000]	µg/L
Mg 279.077 IEC†	7328.3	35.46	0.48%	[50000]	µg/L
Na 589.592 Radial†	71516.9	175.21	0.24%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	104.7	0.00000	0.999882	
Al 396.153Radial	3	Lin Thru 0	0.0	1.852	0.00000	0.999995	
As 188.979	3	Lin Thru 0	0.0	0.5425	0.00000	0.999937	
B 249.677	3	Lin Thru 0	0.0	22.29	0.00000	0.999989	
Ba 233.527	3	Lin Thru 0	0.0	37.68	0.00000	0.999993	
Be 313.107	3	Lin Thru 0	0.0	1540	0.00000	0.999994	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.358	0.00000	0.999998	
Cd 226.502	3	Lin Thru 0	0.0	36.85	0.00000	0.999968	
Co 228.616	3	Lin Thru 0	0.0	20.06	0.00000	0.999976	
Cr 267.716	3	Lin Thru 0	0.0	46.24	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	139.7	0.00000	0.999995	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1397	0.00000	0.999998	
K 766.490 Radial	3	Lin Thru 0	0.0	1.781	0.00000	0.999994	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1467	0.00000	0.999986	
Mn 257.610	3	Lin Thru 0	0.0	298.9	0.00000	1.000000	
Mo 202.031	3	Lin Thru 0	0.0	8.323	0.00000	0.999958	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.587	0.00000	0.999981	

Ni 231.604	3	Lin Thru 0	0.0	17.63	0.00000	0.999981
P 214.914	3	Lin Thru 0	0.0	0.4761	0.00000	0.999985
Pb 220.353	3	Lin Thru 0	0.0	3.781	0.00000	0.999959
S 181.975 Axial	3	Lin Thru 0	0.0	0.1980	0.00000	0.999815
Sb 206.836	3	Lin Thru 0	0.0	0.9854	0.00000	0.999842
Se 196.026	3	Lin Thru 0	0.0	0.7767	0.00000	0.999910
SiO2	3	Lin Thru 0	0.0	5.247	0.00000	0.999848
Si 251.611	3	Lin Thru 0	0.0	12.98	0.00000	0.999855
Sn 189.927	3	Lin Thru 0	0.0	1.939	0.00000	0.999905
Sr 421.552	3	Lin Thru 0	0.0	176.8	0.00000	0.999981
Ti 334.940	3	Lin Thru 0	0.0	419.3	0.00000	0.999951
Tl 190.801	3	Lin Thru 0	0.0	0.6486	0.00000	0.999927
U 409.014	3	Lin Thru 0	0.0	10.49	0.00000	0.999988
V 292.402	3	Lin Thru 0	0.0	85.52	0.00000	0.999994
Zn 213.857	3	Lin Thru 0	0.0	36.52	0.00000	0.999946

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/11/2009 09:48:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115484.8	115484.8	104	%			09:48:58
1	Al 396.153Radial†	10156.6	9600.5	5161.6	µg/L	5161.6	ppb	09:48:58
1	Ca 317.933Radial†	13017.5	12077.0	5122.2	µg/L	5122.2	ppb	09:48:58
1	Fe 238.204 Radial†	767.1	720.1	5172.5	µg/L	5172.5	ppb	09:49:18
1	K 766.490 Radial†	5381.4	4389.2	2465.0	µg/L	2465.0	ppb	09:48:58
1	Mg 279.077 IEC†	837.4	787.7	5374.3	µg/L	5374.3	ppb	09:49:18
1	Na 589.592 Radial†	8863.0	9069.7	2528.6	µg/L	2528.6	ppb	09:48:58
1	Sr 421.552†	97985.9	94072.5	532.18	µg/L	532.18	ppb	09:48:58
1	Sc 361.383	2093956.1	2093956.1	101.99	%			09:50:22
1	Y 371.029	1299511.9	1299511.9	101.19	%			09:50:22
1	Ag 328.068†	29075.5	28302.8	274.34	µg/L	274.34	ppb	09:50:28
1	As 188.979†	267.0	263.1	483.83	µg/L	483.83	ppb	09:50:48
1	B 249.677†	12104.3	11698.6	523.27	µg/L	523.27	ppb	09:50:28
1	Ba 233.527†	19820.0	19502.3	518.64	µg/L	518.64	ppb	09:50:28
1	Be 313.107†	427650.4	415674.3	269.69	µg/L	269.69	ppb	09:50:22
1	Cd 226.502†	19045.1	18769.7	509.93	µg/L	509.93	ppb	09:50:28
1	Co 228.616†	10560.1	10426.9	520.02	µg/L	520.02	ppb	09:50:28
1	Cr 267.716†	23411.2	23091.1	500.63	µg/L	500.63	ppb	09:50:28
1	Cu 324.752†	76257.2	70741.0	507.46	µg/L	507.46	ppb	09:50:28
1	Mn 257.610†	160779.2	157886.5	528.83	µg/L	528.83	ppb	09:50:22
1	Mo 202.031†	4754.5	4662.9	560.44	µg/L	560.44	ppb	09:50:48
1	Ni 231.604†	9655.2	9151.2	519.04	µg/L	519.04	ppb	09:50:28
1	P 214.914†	1458.4	1249.0	2569.4	µg/L	2569.4	ppb	09:50:48
1	Pb 220.353†	2024.9	1947.9	516.07	µg/L	516.07	ppb	09:50:48
1	S 181.975 Axial†	559.4	520.4	2626.8	µg/L	2626.8	ppb	09:50:48
1	Sb 206.836†	552.1	521.7	527.95	µg/L	527.95	ppb	09:50:48
1	Se 196.026†	2026.8	1974.8	2544.6	µg/L	2544.6	ppb	09:50:48
1	SiO2†	59314.5	55537.8	10585	µg/L	10585	ppb	09:50:28
1	Si 251.611†	65859.4	64194.3	4895.6	µg/L	4895.6	ppb	09:50:28
1	Sn 189.927†	1146.7	1102.3	571.16	µg/L	571.16	ppb	09:50:48
1	Ti 334.940†	223640.2	218296.0	520.28	µg/L	520.28	ppb	09:50:22
1	Tl 190.801†	338.4	353.8	547.93	µg/L	547.93	ppb	09:50:48
1	U 409.014†	5959.2	5216.9	496.66	µg/L	496.66	ppb	09:50:28
1	V 292.402†	45590.1	44829.3	529.33	µg/L	529.33	ppb	09:50:28
1	Zn 213.857†	20165.0	19169.1	520.72	µg/L	520.72	ppb	09:50:28
2	Sc RADIAL	116204.1	116204.1	105	%			09:49:24
2	Al 396.153Radial†	10233.7	9613.8	5169.0	µg/L	5169.0	ppb	09:49:24
2	Ca 317.933Radial†	13093.1	12071.8	5120.0	µg/L	5120.0	ppb	09:49:24
2	Fe 238.204 Radial†	765.7	714.2	5130.1	µg/L	5130.1	ppb	09:49:44
2	K 766.490 Radial†	5423.3	4397.3	2469.5	µg/L	2469.5	ppb	09:49:24
2	Mg 279.077 IEC†	841.3	786.4	5365.8	µg/L	5365.8	ppb	09:49:44
2	Na 589.592 Radial†	8891.6	9044.3	2521.5	µg/L	2521.5	ppb	09:49:24
2	Sr 421.552†	98842.5	94307.3	533.51	µg/L	533.51	ppb	09:49:24
2	Sc 361.383	2103662.5	2103662.5	102.46	%			09:50:55
2	Y 371.029	1296631.7	1296631.7	100.96	%			09:50:55
2	Ag 328.068†	29286.8	28377.4	275.07	µg/L	275.07	ppb	09:51:01
2	As 188.979†	265.8	260.8	479.58	µg/L	479.58	ppb	09:51:21
2	B 249.677†	12264.4	11800.0	527.83	µg/L	527.83	ppb	09:51:01
2	Ba 233.527†	20022.2	19610.0	521.50	µg/L	521.50	ppb	09:51:01
2	Be 313.107†	427925.6	414008.1	268.61	µg/L	268.61	ppb	09:50:55
2	Cd 226.502†	19232.4	18866.3	512.57	µg/L	512.57	ppb	09:51:01
2	Co 228.616†	10612.6	10430.4	520.19	µg/L	520.19	ppb	09:51:01
2	Cr 267.716†	23587.4	23157.1	502.06	µg/L	502.06	ppb	09:51:01
2	Cu 324.752†	76940.9	71063.2	509.76	µg/L	509.76	ppb	09:51:01
2	Mn 257.610†	160861.6	157239.5	526.66	µg/L	526.66	ppb	09:50:55
2	Mo 202.031†	4739.1	4626.3	556.04	µg/L	556.04	ppb	09:51:21
2	Ni 231.604†	9732.6	9183.0	520.85	µg/L	520.85	ppb	09:51:01
2	P 214.914†	1436.0	1220.6	2509.4	µg/L	2509.4	ppb	09:51:21
2	Pb 220.353†	2008.8	1923.1	509.48	µg/L	509.48	ppb	09:51:21

2	S 181.975 Axial†	560.8	519.3	2621.1 µg/L	2621.1 ppb		09:51:21
2	Sb 206.836†	552.3	519.4	525.60 µg/L	525.60 ppb		09:51:21
2	Se 196.026†	2036.1	1974.7	2544.4 µg/L	2544.4 ppb		09:51:21
2	SiO2†	59910.6	55851.3	10645 µg/L	10645 ppb		09:51:01
2	Si 251.611†	66457.1	64479.7	4918.1 µg/L	4918.1 ppb		09:51:01
2	Sn 189.927†	1136.8	1087.4	563.49 µg/L	563.49 ppb		09:51:21
2	Ti 334.940†	223523.0	217169.9	517.60 µg/L	517.60 ppb		09:50:55
2	Tl 190.801†	340.7	354.5	549.00 µg/L	549.00 ppb		09:51:21
2	U 409.014†	6084.1	5311.8	505.73 µg/L	505.73 ppb		09:51:01
2	V 292.402†	46092.2	45113.0	532.63 µg/L	532.63 ppb		09:51:01
2	Zn 213.857†	20445.8	19351.9	525.72 µg/L	525.72 ppb		09:51:01
3	Sc RADIAL	114465.0	114465.0	103 %			09:49:50
3	Al 396.153Radial†	10175.6	9705.8	5218.8 µg/L	5218.8 ppb		09:49:50
3	Ca 317.933Radial†	12942.1	12115.3	5138.5 µg/L	5138.5 ppb		09:49:50
3	Fe 238.204 Radial†	768.5	728.0	5229.4 µg/L	5229.4 ppb		09:50:10
3	K 766.490 Radial†	5408.6	4461.6	2505.6 µg/L	2505.6 ppb		09:49:50
3	Mg 279.077 IEC†	844.0	801.2	5466.5 µg/L	5466.5 ppb		09:50:10
3	Na 589.592 Radial†	8843.6	9126.6	2544.4 µg/L	2544.4 ppb		09:49:50
3	Sr 421.552†	98034.9	94957.6	537.19 µg/L	537.19 ppb		09:49:50
3	Sc 361.383	2103040.6	2103040.6	102.43 %			09:51:29
3	Y 371.029	1298237.0	1298237.0	101.09 %			09:51:29
3	Ag 328.068†	28972.3	28078.8	272.20 µg/L	272.20 ppb		09:51:34
3	As 188.979†	265.3	260.4	478.83 µg/L	478.83 ppb		09:51:55
3	B 249.677†	12108.7	11651.5	521.14 µg/L	521.14 ppb		09:51:34
3	Ba 233.527†	19859.0	19456.5	517.42 µg/L	517.42 ppb		09:51:34
3	Be 313.107†	430816.7	416954.1	270.52 µg/L	270.52 ppb		09:51:29
3	Cd 226.502†	19039.3	18683.4	507.58 µg/L	507.58 ppb		09:51:34
3	Co 228.616†	10547.3	10369.7	517.16 µg/L	517.16 ppb		09:51:34
3	Cr 267.716†	23383.1	22964.5	497.88 µg/L	497.88 ppb		09:51:34
3	Cu 324.752†	76211.6	70373.5	504.84 µg/L	504.84 ppb		09:51:34
3	Mn 257.610†	161925.1	158324.2	530.30 µg/L	530.30 ppb		09:51:29
3	Mo 202.031†	4714.1	4603.3	553.27 µg/L	553.27 ppb		09:51:55
3	Ni 231.604†	9637.0	9092.5	515.71 µg/L	515.71 ppb		09:51:34
3	P 214.914†	1432.3	1217.4	2503.1 µg/L	2503.1 ppb		09:51:55
3	Pb 220.353†	2013.2	1928.0	510.79 µg/L	510.79 ppb		09:51:55
3	S 181.975 Axial†	561.7	520.4	2626.6 µg/L	2626.6 ppb		09:51:55
3	Sb 206.836†	546.5	513.9	520.03 µg/L	520.03 ppb		09:51:55
3	Se 196.026†	2014.4	1954.0	2517.9 µg/L	2517.9 ppb		09:51:55
3	SiO2†	59386.0	55356.4	10551 µg/L	10551 ppb		09:51:34
3	Si 251.611†	65868.8	63924.5	4875.1 µg/L	4875.1 ppb		09:51:34
3	Sn 189.927†	1141.5	1092.4	566.07 µg/L	566.07 ppb		09:51:55
3	Ti 334.940†	224867.7	218547.2	520.88 µg/L	520.88 ppb		09:51:29
3	Tl 190.801†	335.3	349.3	541.01 µg/L	541.01 ppb		09:51:55
3	U 409.014†	5989.3	5221.0	497.05 µg/L	497.05 ppb		09:51:34
3	V 292.402†	45672.3	44716.4	527.97 µg/L	527.97 ppb		09:51:34
3	Zn 213.857†	20237.8	19154.7	520.34 µg/L	520.34 ppb		09:51:34

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2100219.7	102.30	%	0.265				0.26%
Sc RADIAL	115384.6	104	%	0.8				0.76%
Y 371.029	1298126.9	101.08	%	0.112				0.11%
Ag 328.068†	28253.0	273.87	µg/L	1.495	273.87	ppb	1.495	0.55%
QC value within limits for Ag 328.068 Recovery = 109.55%								
Al 396.153Radial†	9640.0	5183.1	µg/L	31.08	5183.1	ppb	31.08	0.60%
QC value within limits for Al 396.153Radial Recovery = 103.66%								
As 188.979†	261.4	480.75	µg/L	2.695	480.75	ppb	2.695	0.56%
QC value within limits for As 188.979 Recovery = 96.15%								
B 249.677†	11716.7	524.08	µg/L	3.419	524.08	ppb	3.419	0.65%
QC value within limits for B 249.677 Recovery = 104.82%								
Ba 233.527†	19522.9	519.19	µg/L	2.096	519.19	ppb	2.096	0.40%
QC value within limits for Ba 233.527 Recovery = 103.84%								
Be 313.107†	415545.5	269.61	µg/L	0.958	269.61	ppb	0.958	0.36%
QC value within limits for Be 313.107 Recovery = 107.84%								
Ca 317.933Radial†	12088.0	5126.9	µg/L	10.08	5126.9	ppb	10.08	0.20%
QC value within limits for Ca 317.933Radial Recovery = 102.54%								
Cd 226.502†	18773.1	510.03	µg/L	2.494	510.03	ppb	2.494	0.49%
QC value within limits for Cd 226.502 Recovery = 102.01%								
Co 228.616†	10409.0	519.12	µg/L	1.707	519.12	ppb	1.707	0.33%

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   QC value within limits for Co 228.616  Recovery = 103.82%
Cr 267.716†            23070.9      500.19 µg/L        2.122      500.19 ppb        2.122   0.42%
   QC value within limits for Cr 267.716  Recovery = 100.04%
Cu 324.752†            70725.9      507.36 µg/L        2.460      507.36 ppb        2.460   0.48%
   QC value within limits for Cu 324.752  Recovery = 101.47%
Fe 238.204 Radial†       720.8      5177.3 µg/L       49.80      5177.3 ppb        49.80   0.96%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.55%
K 766.490 Radial†       4416.0      2480.0 µg/L       22.28      2480.0 ppb        22.28   0.90%
   QC value within limits for K 766.490 Radial  Recovery = 99.20%
Mg 279.077 IEC†          791.8      5402.2 µg/L       55.83      5402.2 ppb        55.83   1.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.04%
Mn 257.610†           157816.7      528.59 µg/L        1.832      528.59 ppb        1.832   0.35%
   QC value within limits for Mn 257.610  Recovery = 105.72%
Mo 202.031†            4630.8      556.58 µg/L        3.613      556.58 ppb        3.613   0.65%
   QC value greater than the upper limit for Mo 202.031  Recovery = 111.32%
Na 589.592 Radial†     9080.2      2531.5 µg/L       11.75      2531.5 ppb        11.75   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 101.26%
Ni 231.604†            9142.2      518.54 µg/L        2.604      518.54 ppb        2.604   0.50%
   QC value within limits for Ni 231.604  Recovery = 103.71%
P 214.914†             1229.0      2527.3 µg/L       36.62      2527.3 ppb        36.62   1.45%
   QC value within limits for P 214.914  Recovery = 101.09%
Pb 220.353†            1933.0      512.11 µg/L        3.490      512.11 ppb        3.490   0.68%
   QC value within limits for Pb 220.353  Recovery = 102.42%
S 181.975 Axial†        520.1      2624.8 µg/L        3.22      2624.8 ppb         3.22   0.12%
   QC value within limits for S 181.975 Axial  Recovery = 104.99%
Sb 206.836†             518.3      524.53 µg/L        4.067      524.53 ppb        4.067   0.78%
   QC value within limits for Sb 206.836  Recovery = 104.91%
Se 196.026†            1967.8      2535.7 µg/L       15.37      2535.7 ppb        15.37   0.61%
   QC value within limits for Se 196.026  Recovery = 101.43%
SiO2†                 55581.8       10594 µg/L        47.7       10594 ppb         47.7   0.45%
   QC value within limits for SiO2  Recovery = 99.05%
Si 251.611†           64199.5      4896.3 µg/L       21.49      4896.3 ppb        21.49   0.44%
   QC value within limits for Si 251.611  Recovery = 97.93%
Sn 189.927†            1094.0      566.91 µg/L        3.906      566.91 ppb        3.906   0.69%
   QC value greater than the upper limit for Sn 189.927  Recovery = 113.38%
Sr 421.552†           94445.8      534.29 µg/L        2.594      534.29 ppb        2.594   0.49%
   QC value within limits for Sr 421.552  Recovery = 106.86%
Ti 334.940†          218004.4      519.59 µg/L        1.749      519.59 ppb        1.749   0.34%
   QC value within limits for Ti 334.940  Recovery = 103.92%
Tl 190.801†             352.5      545.98 µg/L        4.336      545.98 ppb        4.336   0.79%
   QC value within limits for Tl 190.801  Recovery = 109.20%
U 409.014†             5249.9      499.81 µg/L        5.126      499.81 ppb        5.126   1.03%
   QC value within limits for U 409.014  Recovery = 99.96%
V 292.402†            44886.2      529.97 µg/L        2.398      529.97 ppb        2.398   0.45%
   QC value within limits for V 292.402  Recovery = 105.99%
Zn 213.857†           19225.2      522.26 µg/L        3.001      522.26 ppb        3.001   0.57%
   QC value within limits for Zn 213.857  Recovery = 104.45%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/11/2009 09:52:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113091.2	113091.2	102	%			09:52:36
1	Al 396.153Radial†	182.2	33.5	18.111	µg/L	18.111	ppb	09:52:36
1	Ca 317.933Radial†	411.7	-10.3	-4.3759	µg/L	-4.3759	ppb	09:52:57
1	Fe 238.204 Radial†	17.9	1.6	11.394	µg/L	11.394	ppb	09:52:57
1	K 766.490 Radial†	747.9	-41.6	-23.363	µg/L	-23.363	ppb	09:52:36
1	Mg 279.077 IEC†	18.2	2.1	13.988	µg/L	13.988	ppb	09:52:57
1	Na 589.592 Radial†	-600.0	-22.6	-6.3112	µg/L	-6.3112	ppb	09:52:36
1	Sr 421.552†	-21.0	31.1	0.1758	µg/L	0.1758	ppb	09:52:36
1	Sc 361.383	2106083.0	2106083.0	102.58	%			09:53:59
1	Y 371.029	1319165.0	1319165.0	102.72	%			09:53:59
1	Ag 328.068†	190.0	-20.0	-0.1898	µg/L	-0.1898	ppb	09:54:05
1	As 188.979†	-1.8	-0.4	-0.8119	µg/L	-0.8119	ppb	09:54:25
1	B 249.677†	198.8	24.3	1.0882	µg/L	1.0882	ppb	09:54:05
1	Ba 233.527†	-67.7	3.3	0.0877	µg/L	0.0877	ppb	09:54:25
1	Be 313.107†	3625.4	-94.2	-0.0614	µg/L	-0.0614	ppb	09:54:05
1	Cd 226.502†	-96.3	2.5	0.0615	µg/L	0.0615	ppb	09:54:25
1	Co 228.616†	-71.2	3.6	0.1769	µg/L	0.1769	ppb	09:54:25
1	Cr 267.716†	-155.1	-14.3	-0.3083	µg/L	-0.3083	ppb	09:54:05
1	Cu 324.752†	3991.3	-136.8	-0.9766	µg/L	-0.9766	ppb	09:54:05
1	Mn 257.610†	-248.2	3.7	0.0139	µg/L	0.0139	ppb	09:54:25
1	Mo 202.031†	-2.8	-1.6	-0.1899	µg/L	-0.1899	ppb	09:54:25
1	Ni 231.604†	316.7	-6.8	-0.3859	µg/L	-0.3859	ppb	09:54:25
1	P 214.914†	171.1	-14.1	-29.513	µg/L	-29.513	ppb	09:54:25
1	Pb 220.353†	44.6	6.1	1.6167	µg/L	1.6167	ppb	09:54:25
1	S 181.975 Axial†	28.9	0.2	0.7575	µg/L	0.7575	ppb	09:54:25
1	Sb 206.836†	21.7	1.6	1.5849	µg/L	1.5849	ppb	09:54:25
1	Se 196.026†	22.5	9.5	12.194	µg/L	12.194	ppb	09:54:25
1	SiO2†	2609.7	-74.8	-14.261	µg/L	-14.261	ppb	09:54:05
1	Si 251.611†	405.5	15.8	1.1838	µg/L	1.1838	ppb	09:54:25
1	Sn 189.927†	23.9	1.3	0.6598	µg/L	0.6598	ppb	09:54:25
1	Ti 334.940†	1236.7	226.9	0.5413	µg/L	0.5413	ppb	09:54:05
1	Tl 190.801†	-17.5	4.8	7.4630	µg/L	7.4630	ppb	09:54:25
1	U 409.014†	564.6	-75.6	-7.2113	µg/L	-7.2113	ppb	09:54:05
1	V 292.402†	-124.1	8.1	0.0828	µg/L	0.0828	ppb	09:54:05
1	Zn 213.857†	572.1	-44.7	-1.2211	µg/L	-1.2211	ppb	09:54:25
2	Sc RADIAL	112010.2	112010.2	101	%			09:53:02
2	Al 396.153Radial†	161.5	14.7	7.8996	µg/L	7.8996	ppb	09:53:02
2	Ca 317.933Radial†	407.9	-10.2	-4.3278	µg/L	-4.3278	ppb	09:53:23
2	Fe 238.204 Radial†	18.4	2.2	15.997	µg/L	15.997	ppb	09:53:23
2	K 766.490 Radial†	721.9	-60.2	-33.819	µg/L	-33.819	ppb	09:53:02
2	Mg 279.077 IEC†	13.9	-2.1	-14.028	µg/L	-14.028	ppb	09:53:23
2	Na 589.592 Radial†	-576.4	-4.9	-1.3733	µg/L	-1.3733	ppb	09:53:02
2	Sr 421.552†	-87.5	-34.9	-0.1974	µg/L	-0.1974	ppb	09:53:02
2	Sc 361.383	2064093.2	2064093.2	100.54	%			09:54:31
2	Y 371.029	1289850.1	1289850.1	100.43	%			09:54:31
2	Ag 328.068†	218.9	12.5	0.1193	µg/L	0.1193	ppb	09:54:37
2	As 188.979†	3.5	4.8	8.9211	µg/L	8.9211	ppb	09:54:57
2	B 249.677†	181.1	10.7	0.4746	µg/L	0.4746	ppb	09:54:37
2	Ba 233.527†	-66.5	3.1	0.0832	µg/L	0.0832	ppb	09:54:57
2	Be 313.107†	3646.9	-0.9	-0.0008	µg/L	-0.0008	ppb	09:54:37
2	Cd 226.502†	-93.2	3.6	0.0966	µg/L	0.0966	ppb	09:54:57
2	Co 228.616†	-65.4	7.9	0.3973	µg/L	0.3973	ppb	09:54:57
2	Cr 267.716†	-141.4	-3.7	-0.0812	µg/L	-0.0812	ppb	09:54:37
2	Cu 324.752†	4131.8	82.1	0.5911	µg/L	0.5911	ppb	09:54:37
2	Mn 257.610†	-236.3	10.7	0.0377	µg/L	0.0377	ppb	09:54:57
2	Mo 202.031†	7.1	8.2	0.9895	µg/L	0.9895	ppb	09:54:57
2	Ni 231.604†	317.5	0.2	0.0125	µg/L	0.0125	ppb	09:54:57
2	P 214.914†	173.6	-8.2	-17.354	µg/L	-17.354	ppb	09:54:57
2	Pb 220.353†	36.8	-0.7	-0.1941	µg/L	-0.1941	ppb	09:54:57

2	S 181.975 Axial†	26.7	-1.5	-7.3553 µg/L	-7.3553 ppb	09:54:57
2	Sb 206.836†	22.9	3.1	3.1913 µg/L	3.1913 ppb	09:54:57
2	Se 196.026†	11.7	-0.8	-1.0738 µg/L	-1.0738 ppb	09:54:57
2	SiO2†	2650.9	17.9	3.4137 µg/L	3.4137 ppb	09:54:37
2	Si 251.611†	396.6	14.9	1.0946 µg/L	1.0946 ppb	09:54:57
2	Sn 189.927†	24.1	1.9	0.9851 µg/L	0.9851 ppb	09:54:57
2	Ti 334.940†	1152.8	168.0	0.4008 µg/L	0.4008 ppb	09:54:37
2	Tl 190.801†	-19.1	2.9	4.5094 µg/L	4.5094 ppb	09:54:57
2	U 409.014†	626.4	-2.9	-0.2813 µg/L	-0.2813 ppb	09:54:37
2	V 292.402†	-143.8	-14.0	-0.1560 µg/L	-0.1560 ppb	09:54:37
2	Zn 213.857†	572.1	-33.3	-0.9134 µg/L	-0.9134 ppb	09:54:57
3	Sc RADIAL	115385.7	115385.7	104 %		09:53:28
3	Al 396.153Radial†	156.0	4.8	2.5781 µg/L	2.5781 ppb	09:53:28
3	Ca 317.933Radial†	405.4	-24.4	-10.330 µg/L	-10.330 ppb	09:53:49
3	Fe 238.204 Radial†	16.2	-0.4	-2.8814 µg/L	-2.8814 ppb	09:53:49
3	K 766.490 Radial†	738.2	-65.5	-36.776 µg/L	-36.776 ppb	09:53:28
3	Mg 279.077 IEC†	13.9	-2.4	-16.664 µg/L	-16.664 ppb	09:53:49
3	Na 589.592 Radial†	-581.6	6.8	1.8912 µg/L	1.8912 ppb	09:53:28
3	Sr 421.552†	-50.1	3.5	0.0198 µg/L	0.0198 ppb	09:53:28
3	Sc 361.383	2064455.9	2064455.9	100.55 %		09:55:03
3	Y 371.029	1289428.8	1289428.8	100.40 %		09:55:03
3	Ag 328.068†	218.7	12.3	0.1151 µg/L	0.1151 ppb	09:55:09
3	As 188.979†	5.4	6.7	12.391 µg/L	12.391 ppb	09:55:30
3	B 249.677†	171.3	0.9	0.0394 µg/L	0.0394 ppb	09:55:09
3	Ba 233.527†	-65.8	3.8	0.0994 µg/L	0.0994 ppb	09:55:30
3	Be 313.107†	3686.3	37.6	0.0243 µg/L	0.0243 ppb	09:55:09
3	Cd 226.502†	-104.3	-7.3	-0.1984 µg/L	-0.1984 ppb	09:55:30
3	Co 228.616†	-72.5	0.9	0.0432 µg/L	0.0432 ppb	09:55:30
3	Cr 267.716†	-130.1	7.5	0.1610 µg/L	0.1610 ppb	09:55:09
3	Cu 324.752†	4083.0	32.9	0.2347 µg/L	0.2347 ppb	09:55:09
3	Mn 257.610†	-238.2	8.8	0.0290 µg/L	0.0290 ppb	09:55:30
3	Mo 202.031†	0.6	1.8	0.2171 µg/L	0.2171 ppb	09:55:30
3	Ni 231.604†	319.4	2.1	0.1218 µg/L	0.1218 ppb	09:55:30
3	P 214.914†	166.3	-15.5	-32.520 µg/L	-32.520 ppb	09:55:30
3	Pb 220.353†	47.0	9.3	2.4638 µg/L	2.4638 ppb	09:55:30
3	S 181.975 Axial†	28.6	0.4	2.0097 µg/L	2.0097 ppb	09:55:30
3	Sb 206.836†	22.8	3.1	3.1001 µg/L	3.1001 ppb	09:55:30
3	Se 196.026†	14.6	2.0	2.5702 µg/L	2.5702 ppb	09:55:30
3	SiO2†	2602.4	-30.8	-5.8630 µg/L	-5.8630 ppb	09:55:09
3	Si 251.611†	398.5	16.8	1.2587 µg/L	1.2587 ppb	09:55:30
3	Sn 189.927†	23.6	1.5	0.7580 µg/L	0.7580 ppb	09:55:30
3	Ti 334.940†	1161.6	176.5	0.4216 µg/L	0.4216 ppb	09:55:09
3	Tl 190.801†	-21.4	0.7	1.0775 µg/L	1.0775 ppb	09:55:30
3	U 409.014†	636.0	6.5	0.6180 µg/L	0.6180 ppb	09:55:09
3	V 292.402†	-153.2	-23.3	-0.2705 µg/L	-0.2705 ppb	09:55:09
3	Zn 213.857†	575.4	-30.1	-0.8236 µg/L	-0.8236 ppb	09:55:30

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2078210.7	101.22	%	1.176				1.16%
Sc RADIAL	113495.7	102	%	1.6				1.52%
Y 371.029	1299481.3	101.18	%	1.327				1.31%
Ag 328.068†	1.6	0.0149	µg/L	0.17725	0.0149	ppb	0.17725	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.7	9.5294	µg/L	7.89352	9.5294	ppb	7.89352	82.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.7	6.8334	µg/L	6.84457	6.8334	ppb	6.84457	100.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	12.0	0.5341	µg/L	0.52693	0.5341	ppb	0.52693	98.66%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.4	0.0901	µg/L	0.00840	0.0901	ppb	0.00840	9.32%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-19.2	-0.0126	µg/L	0.04404	-0.0126	ppb	0.04404	348.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-15.0	-6.3447	µg/L	3.45184	-6.3447	ppb	3.45184	54.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.4	-0.0135	µg/L	0.16113	-0.0135	ppb	0.16113	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.1	0.2058	µg/L	0.17878	0.2058	ppb	0.17878	86.86%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.5     -0.0762 µg/L      0.23470     -0.0762 ppb       0.23470 308.01%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -7.3     -0.0503 µg/L      0.82179     -0.0503 ppb       0.82179 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.1      8.1699 µg/L      9.84361      8.1699 ppb       9.84361 120.49%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -55.8     -31.319 µg/L       7.0471     -31.319 ppb        7.0471  22.50%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.8     -5.5681 µg/L     16.98737     -5.5681 ppb      16.98737 305.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               7.7      0.0269 µg/L      0.01202      0.0269 ppb       0.01202  44.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.8      0.3389 µg/L      0.59907      0.3389 ppb       0.59907 176.78%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -6.9     -1.9311 µg/L      4.12955     -1.9311 ppb       4.12955 213.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.5     -0.0839 µg/L      0.26718     -0.0839 ppb       0.26718 318.52%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -12.6     -26.462 µg/L       8.0301     -26.462 ppb        8.0301  30.35%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.9      1.2955 µg/L      1.35777      1.2955 ppb       1.35777 104.81%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.3     -1.5294 µg/L      5.08409     -1.5294 ppb       5.08409 332.43%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.6      2.6255 µg/L      0.90227      2.6255 ppb       0.90227  34.37%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.5      4.5634 µg/L      6.85469      4.5634 ppb       6.85469 150.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -29.2     -5.5702 µg/L      8.84115     -5.5702 ppb       8.84115 158.72%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              15.8      1.1790 µg/L      0.08216      1.1790 ppb       0.08216   6.97%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.6      0.8010 µg/L      0.16683      0.8010 ppb       0.16683  20.83%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -0.1     -0.0006 µg/L      0.18743     -0.0006 ppb       0.18743 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             190.5      0.4546 µg/L      0.07583      0.4546 ppb       0.07583  16.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.8      4.3500 µg/L      3.19576      4.3500 ppb       3.19576  73.47%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -24.0     -2.2915 µg/L      4.28428     -2.2915 ppb       4.28428 186.96%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -9.7     -0.1145 µg/L      0.18026     -0.1145 ppb       0.18026 157.37%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -36.0     -0.9860 µg/L      0.20844     -0.9860 ppb       0.20844  21.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/11/2009 09:55:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111908.1	111908.1	101	%			09:56:11
1	Al 396.153Radial†	570.3	419.7	226.15	µg/L	226.15	ppb	09:56:11
1	Ca 317.933Radial†	891.9	469.4	199.10	µg/L	199.10	ppb	09:56:31
1	Fe 238.204 Radial†	33.9	17.6	126.34	µg/L	126.34	ppb	09:56:31
1	K 766.490 Radial†	1002.2	218.0	122.41	µg/L	122.41	ppb	09:56:11
1	Mg 279.077 IEC†	64.3	47.9	326.39	µg/L	326.39	ppb	09:56:31
1	Na 589.592 Radial†	482.8	1043.4	290.88	µg/L	290.88	ppb	09:56:11
1	Sr 421.552†	859.8	903.0	5.1084	µg/L	5.1084	ppb	09:56:11
1	Sc 361.383	2090025.4	2090025.4	101.80	%			09:57:33
1	Y 371.029	1310296.4	1310296.4	102.03	%			09:57:33
1	Ag 328.068†	762.4	543.7	5.2317	µg/L	5.2317	ppb	09:57:39
1	As 188.979†	16.7	17.7	32.612	µg/L	32.612	ppb	09:57:59
1	B 249.677†	1291.9	1099.6	49.297	µg/L	49.297	ppb	09:57:39
1	Ba 233.527†	126.9	193.9	5.1557	µg/L	5.1557	ppb	09:57:59
1	Be 313.107†	11478.0	7646.7	4.9629	µg/L	4.9629	ppb	09:57:39
1	Cd 226.502†	75.8	170.8	4.6725	µg/L	4.6725	ppb	09:57:59
1	Co 228.616†	37.6	109.9	5.4937	µg/L	5.4937	ppb	09:57:59
1	Cr 267.716†	99.6	234.7	5.0860	µg/L	5.0860	ppb	09:57:39
1	Cu 324.752†	5558.7	1432.7	10.282	µg/L	10.282	ppb	09:57:39
1	Mn 257.610†	2866.6	3061.6	10.258	µg/L	10.258	ppb	09:57:39
1	Mo 202.031†	89.0	88.6	10.655	µg/L	10.655	ppb	09:57:59
1	Ni 231.604†	408.8	86.1	4.8817	µg/L	4.8817	ppb	09:57:59
1	P 214.914†	245.6	60.4	125.69	µg/L	125.69	ppb	09:57:59
1	Pb 220.353†	92.2	53.2	14.060	µg/L	14.060	ppb	09:57:59
1	S 181.975 Axial†	44.4	15.6	78.726	µg/L	78.726	ppb	09:57:59
1	Sb 206.836†	35.1	14.8	15.055	µg/L	15.055	ppb	09:57:59
1	Se 196.026†	40.3	27.1	34.888	µg/L	34.888	ppb	09:57:59
1	SiO2†	3769.4	1083.9	206.59	µg/L	206.59	ppb	09:57:39
1	Si 251.611†	1681.8	1272.5	97.283	µg/L	97.283	ppb	09:57:59
1	Sn 189.927†	41.2	18.4	9.6170	µg/L	9.6170	ppb	09:57:59
1	Ti 334.940†	3167.2	2132.5	5.0741	µg/L	5.0741	ppb	09:57:39
1	Tl 190.801†	-5.7	16.3	25.147	µg/L	25.147	ppb	09:57:59
1	U 409.014†	1239.9	592.0	56.437	µg/L	56.437	ppb	09:57:39
1	V 292.402†	233.0	357.9	4.3609	µg/L	4.3609	ppb	09:57:39
1	Zn 213.857†	958.3	339.0	9.2191	µg/L	9.2191	ppb	09:57:59
2	Sc RADIAL	112796.7	112796.7	102	%			09:56:37
2	Al 396.153Radial†	556.9	402.1	216.67	µg/L	216.67	ppb	09:56:37
2	Ca 317.933Radial†	884.5	455.2	193.06	µg/L	193.06	ppb	09:56:57
2	Fe 238.204 Radial†	34.1	17.5	125.62	µg/L	125.62	ppb	09:56:57
2	K 766.490 Radial†	1042.4	249.7	140.21	µg/L	140.21	ppb	09:56:37
2	Mg 279.077 IEC†	58.6	41.8	284.85	µg/L	284.85	ppb	09:56:57
2	Na 589.592 Radial†	483.8	1040.6	290.10	µg/L	290.10	ppb	09:56:37
2	Sr 421.552†	868.6	905.0	5.1195	µg/L	5.1195	ppb	09:56:37
2	Sc 361.383	2078410.8	2078410.8	101.23	%			09:58:05
2	Y 371.029	1298230.0	1298230.0	101.09	%			09:58:05
2	Ag 328.068†	777.4	562.7	5.4196	µg/L	5.4196	ppb	09:58:11
2	As 188.979†	19.5	20.6	37.900	µg/L	37.900	ppb	09:58:32
2	B 249.677†	1298.2	1112.9	49.894	µg/L	49.894	ppb	09:58:11
2	Ba 233.527†	129.0	196.7	5.2304	µg/L	5.2304	ppb	09:58:32
2	Be 313.107†	11393.2	7625.9	4.9494	µg/L	4.9494	ppb	09:58:11
2	Cd 226.502†	73.3	168.8	4.6162	µg/L	4.6162	ppb	09:58:32
2	Co 228.616†	25.3	98.0	4.8971	µg/L	4.8971	ppb	09:58:32
2	Cr 267.716†	118.1	253.5	5.4952	µg/L	5.4952	ppb	09:58:11
2	Cu 324.752†	5544.5	1449.2	10.400	µg/L	10.400	ppb	09:58:11
2	Mn 257.610†	2855.9	3066.7	10.275	µg/L	10.275	ppb	09:58:11
2	Mo 202.031†	84.7	84.8	10.198	µg/L	10.198	ppb	09:58:32
2	Ni 231.604†	414.4	93.9	5.3237	µg/L	5.3237	ppb	09:58:32
2	P 214.914†	250.1	66.2	137.82	µg/L	137.82	ppb	09:58:32
2	Pb 220.353†	88.5	50.0	13.210	µg/L	13.210	ppb	09:58:32

2	S 181.975 Axial†	45.5	17.0	85.565 µg/L	85.565 ppb	09:58:32
2	Sb 206.836†	33.9	13.8	14.044 µg/L	14.044 ppb	09:58:32
2	Se 196.026†	38.9	26.0	33.411 µg/L	33.411 ppb	09:58:32
2	SiO2†	3745.7	1081.2	206.07 µg/L	206.07 ppb	09:58:11
2	Si 251.611†	1678.2	1278.2	97.727 µg/L	97.727 ppb	09:58:32
2	Sn 189.927†	40.5	17.9	9.3655 µg/L	9.3655 ppb	09:58:32
2	Ti 334.940†	3199.3	2181.6	5.1917 µg/L	5.1917 ppb	09:58:11
2	Tl 190.801†	-6.6	15.5	23.847 µg/L	23.847 ppb	09:58:32
2	U 409.014†	1230.4	589.4	56.190 µg/L	56.190 ppb	09:58:11
2	V 292.402†	304.5	429.9	5.1989 µg/L	5.1989 ppb	09:58:11
2	Zn 213.857†	954.0	340.1	9.2476 µg/L	9.2476 ppb	09:58:32
3	Sc RADIAL	112426.7	112426.7	101 %		09:57:03
3	Al 396.153Radial†	570.0	416.8	224.63 µg/L	224.63 ppb	09:57:03
3	Ca 317.933Radial†	892.9	466.3	197.79 µg/L	197.79 ppb	09:57:23
3	Fe 238.204 Radial†	37.4	20.9	150.05 µg/L	150.05 ppb	09:57:23
3	K 766.490 Radial†	1053.3	263.8	148.14 µg/L	148.14 ppb	09:57:03
3	Mg 279.077 IEC†	57.2	40.6	276.50 µg/L	276.50 ppb	09:57:23
3	Na 589.592 Radial†	537.9	1095.5	305.42 µg/L	305.42 ppb	09:57:03
3	Sr 421.552†	854.1	893.5	5.0546 µg/L	5.0546 ppb	09:57:03
3	Sc 361.383	2067089.6	2067089.6	100.68 %		09:58:38
3	Y 371.029	1294464.1	1294464.1	100.79 %		09:58:38
3	Ag 328.068†	818.8	608.0	5.8521 µg/L	5.8521 ppb	09:58:43
3	As 188.979†	18.4	19.6	36.090 µg/L	36.090 ppb	09:59:04
3	B 249.677†	1258.2	1080.2	48.418 µg/L	48.418 ppb	09:58:43
3	Ba 233.527†	129.4	197.8	5.2595 µg/L	5.2595 ppb	09:59:04
3	Be 313.107†	11428.8	7723.0	5.0124 µg/L	5.0124 ppb	09:58:43
3	Cd 226.502†	83.0	178.8	4.8815 µg/L	4.8815 ppb	09:59:04
3	Co 228.616†	29.8	102.6	5.1266 µg/L	5.1266 ppb	09:59:04
3	Cr 267.716†	101.6	237.8	5.1536 µg/L	5.1536 ppb	09:58:43
3	Cu 324.752†	5535.1	1470.0	10.554 µg/L	10.554 ppb	09:58:43
3	Mn 257.610†	2883.3	3109.4	10.421 µg/L	10.421 ppb	09:58:43
3	Mo 202.031†	78.5	79.1	9.5112 µg/L	9.5112 ppb	09:59:04
3	Ni 231.604†	407.7	89.4	5.0690 µg/L	5.0690 ppb	09:59:04
3	P 214.914†	250.4	67.8	141.15 µg/L	141.15 ppb	09:59:04
3	Pb 220.353†	84.0	46.0	12.155 µg/L	12.155 ppb	09:59:04
3	S 181.975 Axial†	44.2	15.9	80.075 µg/L	80.075 ppb	09:59:04
3	Sb 206.836†	32.7	12.8	13.030 µg/L	13.030 ppb	09:59:04
3	Se 196.026†	35.7	22.9	29.515 µg/L	29.515 ppb	09:59:04
3	SiO2†	3799.8	1155.2	220.17 µg/L	220.17 ppb	09:58:43
3	Si 251.611†	1674.7	1283.8	98.166 µg/L	98.166 ppb	09:59:04
3	Sn 189.927†	40.6	18.3	9.5641 µg/L	9.5641 ppb	09:59:04
3	Ti 334.940†	3125.1	2125.3	5.0570 µg/L	5.0570 ppb	09:58:43
3	Tl 190.801†	-9.1	12.9	19.966 µg/L	19.966 ppb	09:59:04
3	U 409.014†	1152.7	518.9	49.465 µg/L	49.465 ppb	09:58:43
3	V 292.402†	279.7	406.8	4.9159 µg/L	4.9159 ppb	09:58:43
3	Zn 213.857†	940.1	331.4	9.0073 µg/L	9.0073 ppb	09:59:04

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2078508.6	101.24	%	0.559				0.55%
Sc RADIAL	112377.2	101	%	0.4				0.40%
Y 371.029	1300996.8	101.30	%	0.644				0.64%
Ag 328.068†	571.5	5.5011	µg/L	0.31813	5.5011	ppb	0.31813	5.78%
QC value within limits for Ag 328.068 Recovery = 110.02%								
Al 396.153Radial†	412.8	222.49	µg/L	5.090	222.49	ppb	5.090	2.29%
QC value within limits for Al 396.153Radial Recovery = 111.24%								
As 188.979†	19.3	35.534	µg/L	2.6872	35.534	ppb	2.6872	7.56%
QC value within limits for As 188.979 Recovery = 118.45%								
B 249.677†	1097.6	49.203	µg/L	0.7423	49.203	ppb	0.7423	1.51%
QC value within limits for B 249.677 Recovery = 98.41%								
Ba 233.527†	196.2	5.2152	µg/L	0.05354	5.2152	ppb	0.05354	1.03%
QC value within limits for Ba 233.527 Recovery = 104.30%								
Be 313.107†	7665.2	4.9749	µg/L	0.03319	4.9749	ppb	0.03319	0.67%
QC value within limits for Be 313.107 Recovery = 99.50%								
Ca 317.933Radial†	463.7	196.65	µg/L	3.178	196.65	ppb	3.178	1.62%
QC value within limits for Ca 317.933Radial Recovery = 98.32%								
Cd 226.502†	172.8	4.7234	µg/L	0.13979	4.7234	ppb	0.13979	2.96%
QC value within limits for Cd 226.502 Recovery = 94.47%								
Co 228.616†	103.5	5.1725	µg/L	0.30096	5.1725	ppb	0.30096	5.82%

```
   QC value within limits for Co 228.616  Recovery = 103.45%
Cr 267.716†              242.0      5.2449 µg/L       0.21938      5.2449 ppb        0.21938   4.18%
   QC value within limits for Cr 267.716  Recovery = 104.90%
Cu 324.752†             1450.6      10.412 µg/L        0.1361      10.412 ppb         0.1361   1.31%
   QC value within limits for Cu 324.752  Recovery = 104.12%
Fe 238.204 Radial†        18.7      134.00 µg/L        13.899      134.00 ppb         13.899  10.37%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 134.00%
K 766.490 Radial†        243.8      136.92 µg/L        13.179      136.92 ppb         13.179   9.63%
   QC value within limits for K 766.490 Radial  Recovery = 91.28%
Mg 279.077 IEC†           43.4      295.91 µg/L        26.725      295.91 ppb         26.725   9.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.64%
Mn 257.610†             3079.3      10.318 µg/L        0.0896      10.318 ppb         0.0896   0.87%
   QC value within limits for Mn 257.610  Recovery = 103.18%
Mo 202.031†               84.2      10.121 µg/L        0.5755      10.121 ppb         0.5755   5.69%
   QC value within limits for Mo 202.031  Recovery = 101.21%
Na 589.592 Radial†      1059.8      295.47 µg/L         8.629      295.47 ppb          8.629   2.92%
   QC value within limits for Na 589.592 Radial  Recovery = 98.49%
Ni 231.604†               89.8      5.0915 µg/L       0.22183      5.0915 ppb        0.22183   4.36%
   QC value within limits for Ni 231.604  Recovery = 101.83%
P 214.914†                64.8      134.89 µg/L         8.138      134.89 ppb          8.138   6.03%
   QC value within limits for P 214.914  Recovery = 89.93%
Pb 220.353†               49.7      13.141 µg/L        0.9547      13.141 ppb         0.9547   7.27%
   QC value greater than the upper limit for Pb 220.353  Recovery = 131.41%
S 181.975 Axial†          16.1      81.455 µg/L        3.6225      81.455 ppb         3.6225   4.45%
   QC value within limits for S 181.975 Axial  Recovery = 81.46%
Sb 206.836†               13.8      14.043 µg/L        1.0125      14.043 ppb         1.0125   7.21%
   QC value greater than the upper limit for Sb 206.836  Recovery = 140.43%
Se 196.026†               25.3      32.605 µg/L        2.7758      32.605 ppb         2.7758   8.51%
   QC value within limits for Se 196.026  Recovery = 108.68%
SiO2†                   1106.7      210.94 µg/L         7.998      210.94 ppb          7.998   3.79%
   QC value within limits for SiO2  Recovery = 99.04%
Si 251.611†             1278.2      97.725 µg/L        0.4417      97.725 ppb         0.4417   0.45%
   QC value within limits for Si 251.611  Recovery = 97.73%
Sn 189.927†               18.2      9.5155 µg/L       0.13258      9.5155 ppb        0.13258   1.39%
   QC value within limits for Sn 189.927  Recovery = 95.16%
Sr 421.552†              900.5      5.0941 µg/L       0.03470      5.0941 ppb        0.03470   0.68%
   QC value within limits for Sr 421.552  Recovery = 101.88%
Ti 334.940†             2146.5      5.1076 µg/L       0.07332      5.1076 ppb        0.07332   1.44%
   QC value within limits for Ti 334.940  Recovery = 102.15%
Tl 190.801†               14.9      22.987 µg/L        2.6956      22.987 ppb         2.6956  11.73%
   QC value within limits for Tl 190.801  Recovery = 114.93%
U 409.014†               566.8      54.031 µg/L        3.9558      54.031 ppb         3.9558   7.32%
   QC value within limits for U 409.014  Recovery = 108.06%
V 292.402†               398.2      4.8252 µg/L       0.42626      4.8252 ppb        0.42626   8.83%
   QC value within limits for V 292.402  Recovery = 96.50%
Zn 213.857†              336.8      9.1580 µg/L       0.13128      9.1580 ppb        0.13128   1.43%
   QC value within limits for Zn 213.857  Recovery = 91.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/11/2009 09:59:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108549.9	108549.9	98.0	%			09:59:55
1	Al 396.153Radial†	956414.4	976196.6	527010	µg/L	527010	ppb	09:59:49
1	Ca 317.933Radial†	1161183.0	1184962.9	502580	µg/L	502580	ppb	09:59:49
1	Fe 238.204 Radial†	26683.0	27223.0	194900	µg/L	194900	ppb	09:59:55
1	K 766.490 Radial†	661.3	-99.3	-55.778	µg/L	-55.778	ppb	09:59:55
1	Mg 279.077 IEC†	72236.7	73726.0	502160	µg/L	502160	ppb	09:59:55
1	Na 589.592 Radial†	-486.3	68.9	19.215	µg/L	19.215	ppb	09:59:55
1	Sr 421.552†	574.2	637.8	3.6083	µg/L	3.6083	ppb	09:59:55
1	Sc 361.383	1919813.7	1919813.7	93.509	%			10:00:29
1	Y 371.029	1172025.6	1172025.6	91.260	%			10:00:29
1	Ag 328.068†	-1722.1	-2046.9	-4.3038	µg/L	-4.3038	ppb	10:00:34
1	As 188.979†	21.1	23.9	-60.577	µg/L	-60.577	ppb	10:00:55
1	B 249.677†	1778.1	1732.0	16.425	µg/L	16.425	ppb	10:00:34
1	Ba 233.527†	133.4	211.9	5.5832	µg/L	5.5832	ppb	10:00:55
1	Be 313.107†	2652.1	-792.2	-0.5240	µg/L	-0.5240	ppb	10:00:34
1	Cd 226.502†	560.0	695.2	3.7637	µg/L	3.7637	ppb	10:00:55
1	Co 228.616†	-84.5	-17.4	-0.9520	µg/L	-0.9520	ppb	10:00:55
1	Cr 267.716†	-255.4	-136.2	-2.9907	µg/L	-2.9907	ppb	10:00:55
1	Cu 324.752†	-378.2	-4432.1	10.139	µg/L	10.139	ppb	10:00:34
1	Mn 257.610†	-2274.5	-2186.8	17.183	µg/L	17.183	ppb	10:00:34
1	Mo 202.031†	-99.0	-104.7	-4.9143	µg/L	-4.9143	ppb	10:00:55
1	Ni 231.604†	292.9	-2.3	-0.1279	µg/L	-0.1279	ppb	10:00:55
1	P 214.914†	191.3	23.7	13.601	µg/L	13.601	ppb	10:00:55
1	Pb 220.353†	-87.1	-130.6	8.9675	µg/L	8.9675	ppb	10:00:55
1	S 181.975 Axial†	59.5	35.6	79.398	µg/L	79.398	ppb	10:00:55
1	Sb 206.836†	60.3	44.9	-1.5161	µg/L	-1.5161	ppb	10:00:55
1	Se 196.026†	32.6	22.4	28.688	µg/L	28.688	ppb	10:00:55
1	SiO2†	2371.0	-83.3	-15.880	µg/L	-15.880	ppb	10:00:55
1	Si 251.611†	463.3	116.0	17.605	µg/L	17.605	ppb	10:00:55
1	Sn 189.927†	-419.9	-471.1	-8.0478	µg/L	-8.0478	ppb	10:00:55
1	Ti 334.940†	11136.3	10930.6	-2.1938	µg/L	-2.1938	ppb	10:00:34
1	Tl 190.801†	13.0	35.8	-11.895	µg/L	-11.895	ppb	10:00:55
1	U 409.014†	552.4	-35.2	-27.839	µg/L	-27.839	ppb	10:00:34
1	V 292.402†	-1638.1	-1622.8	-3.1688	µg/L	-3.1688	ppb	10:00:34
1	Zn 213.857†	1857.7	1384.3	3.4950	µg/L	3.4950	ppb	10:00:55
2	Sc RADIAL	108687.6	108687.6	98.1	%			10:00:07
2	Al 396.153Radial†	961594.3	980240.5	529190	µg/L	529190	ppb	10:00:01
2	Ca 317.933Radial†	1167284.8	1189681.9	504580	µg/L	504580	ppb	10:00:01
2	Fe 238.204 Radial†	26621.0	27125.2	194200	µg/L	194200	ppb	10:00:07
2	K 766.490 Radial†	730.4	-29.7	-16.666	µg/L	-16.666	ppb	10:00:07
2	Mg 279.077 IEC†	71995.3	73386.4	499840	µg/L	499840	ppb	10:00:07
2	Na 589.592 Radial†	-497.9	57.7	16.094	µg/L	16.094	ppb	10:00:07
2	Sr 421.552†	563.7	626.4	3.5435	µg/L	3.5435	ppb	10:00:07
2	Sc 361.383	1914676.0	1914676.0	93.259	%			10:01:01
2	Y 371.029	1173370.9	1173370.9	91.365	%			10:01:01
2	Ag 328.068†	-1703.8	-2032.2	-4.2258	µg/L	-4.2258	ppb	10:01:07
2	As 188.979†	30.7	34.3	-41.589	µg/L	-41.589	ppb	10:01:27
2	B 249.677†	1775.5	1734.3	16.749	µg/L	16.749	ppb	10:01:07
2	Ba 233.527†	134.3	213.2	5.6164	µg/L	5.6164	ppb	10:01:27
2	Be 313.107†	2588.3	-853.0	-0.5635	µg/L	-0.5635	ppb	10:01:07
2	Cd 226.502†	578.5	716.6	4.3912	µg/L	4.3912	ppb	10:01:27
2	Co 228.616†	-94.7	-28.6	-1.5175	µg/L	-1.5175	ppb	10:01:27
2	Cr 267.716†	-290.7	-174.9	-3.8283	µg/L	-3.8283	ppb	10:01:27
2	Cu 324.752†	-335.0	-4386.9	10.313	µg/L	10.313	ppb	10:01:07
2	Mn 257.610†	-2274.2	-2192.9	17.075	µg/L	17.075	ppb	10:01:07
2	Mo 202.031†	-123.1	-130.8	-8.0857	µg/L	-8.0857	ppb	10:01:27
2	Ni 231.604†	269.2	-26.9	-1.5268	µg/L	-1.5268	ppb	10:01:27
2	P 214.914†	189.0	21.8	11.243	µg/L	11.243	ppb	10:01:27
2	Pb 220.353†	-71.5	-114.0	13.541	µg/L	13.541	ppb	10:01:27

2	S 181.975 Axial†	65.0	41.7	110.55	µg/L	110.55	ppb	10:01:27
2	Sb 206.836†	51.4	35.5	-11.247	µg/L	-11.247	ppb	10:01:27
2	Se 196.026†	21.7	10.8	14.491	µg/L	14.491	ppb	10:01:27
2	SiO2†	2400.2	-45.1	-8.6049	µg/L	-8.6049	ppb	10:01:27
2	Si 251.611†	435.9	87.9	15.428	µg/L	15.428	ppb	10:01:27
2	Sn 189.927†	-416.4	-468.5	-6.8342	µg/L	-6.8342	ppb	10:01:27
2	Ti 334.940†	11163.7	10992.0	-2.1599	µg/L	-2.1599	ppb	10:01:07
2	Tl 190.801†	13.7	36.6	-10.951	µg/L	-10.951	ppb	10:01:27
2	U 409.014†	464.8	-127.6	-36.475	µg/L	-36.475	ppb	10:01:07
2	V 292.402†	-1709.8	-1704.3	-4.2153	µg/L	-4.2153	ppb	10:01:07
2	Zn 213.857†	1879.0	1412.5	4.4116	µg/L	4.4116	ppb	10:01:27
3	Sc RADIAL	107545.2	107545.2	97.1	%			10:00:18
3	Al 396.153Radial†	953349.1	982159.3	530230	µg/L	530230	ppb	10:00:13
3	Ca 317.933Radial†	1155259.3	1189933.3	504690	µg/L	504690	ppb	10:00:13
3	Fe 238.204 Radial†	26559.9	27350.7	195810	µg/L	195810	ppb	10:00:18
3	K 766.490 Radial†	700.9	-52.2	-29.297	µg/L	-29.297	ppb	10:00:18
3	Mg 279.077 IEC†	71851.0	74017.4	504140	µg/L	504140	ppb	10:00:18
3	Na 589.592 Radial†	-492.6	57.7	16.094	µg/L	16.094	ppb	10:00:18
3	Sr 421.552†	550.2	618.5	3.4991	µg/L	3.4991	ppb	10:00:18
3	Sc 361.383	1937830.3	1937830.3	94.386	%			10:01:33
3	Y 371.029	1186831.0	1186831.0	92.413	%			10:01:33
3	Ag 328.068†	-1679.9	-1985.0	-3.6480	µg/L	-3.6480	ppb	10:01:39
3	As 188.979†	28.4	31.4	-47.065	µg/L	-47.065	ppb	10:02:00
3	B 249.677†	1717.9	1650.6	12.482	µg/L	12.482	ppb	10:01:39
3	Ba 233.527†	142.8	220.5	5.8092	µg/L	5.8092	ppb	10:02:00
3	Be 313.107†	2605.4	-868.1	-0.5732	µg/L	-0.5732	ppb	10:01:39
3	Cd 226.502†	558.1	687.7	3.4840	µg/L	3.4840	ppb	10:02:00
3	Co 228.616†	-90.3	-22.8	-1.2197	µg/L	-1.2197	ppb	10:02:00
3	Cr 267.716†	-251.7	-129.8	-2.8535	µg/L	-2.8535	ppb	10:02:00
3	Cu 324.752†	-451.0	-4505.5	9.8107	µg/L	9.8107	ppb	10:01:39
3	Mn 257.610†	-2285.0	-2175.3	17.336	µg/L	17.336	ppb	10:01:39
3	Mo 202.031†	-105.7	-110.8	-5.6199	µg/L	-5.6199	ppb	10:02:00
3	Ni 231.604†	276.1	-23.0	-1.3064	µg/L	-1.3064	ppb	10:02:00
3	P 214.914†	197.9	28.8	24.586	µg/L	24.586	ppb	10:02:00
3	Pb 220.353†	-98.7	-142.0	6.2176	µg/L	6.2176	ppb	10:02:00
3	S 181.975 Axial†	60.7	36.3	82.428	µg/L	82.428	ppb	10:02:00
3	Sb 206.836†	55.3	39.0	-7.7176	µg/L	-7.7176	ppb	10:02:00
3	Se 196.026†	20.5	9.2	11.776	µg/L	11.776	ppb	10:02:00
3	SiO2†	2396.3	-80.1	-15.260	µg/L	-15.260	ppb	10:02:00
3	Si 251.611†	452.2	99.6	16.216	µg/L	16.216	ppb	10:02:00
3	Sn 189.927†	-417.3	-464.2	-3.5090	µg/L	-3.5090	ppb	10:02:00
3	Ti 334.940†	11168.0	10853.6	-2.4961	µg/L	-2.4961	ppb	10:01:39
3	Tl 190.801†	24.7	48.1	6.7589	µg/L	6.7589	ppb	10:02:00
3	U 409.014†	528.6	-66.0	-30.897	µg/L	-30.897	ppb	10:01:39
3	V 292.402†	-1736.8	-1711.0	-4.1364	µg/L	-4.1364	ppb	10:01:39
3	Zn 213.857†	1847.1	1354.7	2.5382	µg/L	2.5382	ppb	10:02:00

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1924106.7	93.718	%	0.5923				0.63%
Sc RADIAL	108260.9	97.7	%	0.56				0.58%
Y 371.029	1177409.2	91.679	%	0.6375				0.70%
Ag 328.068†	-2021.4	-4.0592	µg/L	0.35827	-4.0592	ppb	0.35827	8.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	979532.1	528810	µg/L	1643.2	528810	ppb	1643.2	0.31%
QC value within limits for Al 396.153Radial Recovery = 105.76%								
As 188.979†	29.9	-49.744	µg/L	9.7735	-49.744	ppb	9.7735	19.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1705.6	15.219	µg/L	2.3754	15.219	ppb	2.3754	15.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	215.2	5.6696	µg/L	0.12206	5.6696	ppb	0.12206	2.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-837.8	-0.5536	µg/L	0.02607	-0.5536	ppb	0.02607	4.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1188192.7	503950	µg/L	1187.5	503950	ppb	1187.5	0.24%
QC value within limits for Ca 317.933Radial Recovery = 100.79%								
Cd 226.502†	699.8	3.8796	µg/L	0.46457	3.8796	ppb	0.46457	11.97%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-22.9	-1.2298	µg/L	0.28288	-1.2298	ppb	0.28288	23.00%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -146.9     -3.2242 µg/L      0.52767     -3.2242 ppb       0.52767  16.37%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4441.5     10.088 µg/L       0.2551      10.088 ppb        0.2551   2.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    27233.0     194970 µg/L        809.3     194970 ppb         809.3   0.42%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.48%
K 766.490 Radial†       -60.4     -33.914 µg/L      19.9607     -33.914 ppb      19.9607  58.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       73709.9     502050 µg/L       2151.1     502050 ppb        2151.1   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.41%
Mn 257.610†           -2185.0     17.198 µg/L       0.1316      17.198 ppb        0.1316   0.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -115.4     -6.2066 µg/L      1.66513     -6.2066 ppb      1.66513  26.83%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       61.5     17.134 µg/L       1.8017      17.134 ppb        1.8017  10.52%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -17.4     -0.9870 µg/L      0.75212     -0.9870 ppb      0.75212  76.20%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               24.7     16.477 µg/L       7.1208      16.477 ppb        7.1208  43.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -128.9     9.5753 µg/L      3.69930      9.5753 ppb      3.69930  38.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         37.9     90.792 µg/L      17.1786      90.792 ppb      17.1786  18.92%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              39.8     -6.8268 µg/L      4.92604     -6.8268 ppb      4.92604  72.16%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              14.1     18.318 µg/L       9.0826      18.318 ppb        9.0826  49.58%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -69.5     -13.248 µg/L      4.0333     -13.248 ppb       4.0333  30.44%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             101.2     16.416 µg/L       1.1025      16.416 ppb        1.1025   6.72%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -467.9     -6.1303 µg/L      2.34981     -6.1303 ppb      2.34981  38.33%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             627.6     3.5503 µg/L       0.05492      3.5503 ppb      0.05492   1.55%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           10925.4     -2.2832 µg/L      0.18509     -2.2832 ppb      0.18509   8.11%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              40.1     -5.3625 µg/L     10.50800     -5.3625 ppb     10.50800 195.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -76.3     -31.737 µg/L      4.3790     -31.737 ppb       4.3790  13.80%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1679.4     -3.8402 µg/L      0.58280     -3.8402 ppb      0.58280  15.18%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1383.8     3.4816 µg/L       0.93677      3.4816 ppb      0.93677  26.91%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/11/2009 10:02:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108998.2	108998.2	98.4	%			10:02:48
1	Al 396.153Radial†	963198.0	979077.9	528550	µg/L	528550	ppb	10:02:43
1	Ca 317.933Radial†	1165962.1	1184946.7	502570	µg/L	502570	ppb	10:02:43
1	Fe 238.204 Radial†	26841.3	27271.9	195260	µg/L	195260	ppb	10:02:48
1	K 766.490 Radial†	10144.9	9539.3	5357.2	µg/L	5357.2	ppb	10:02:48
1	Mg 279.077 IEC†	73133.4	74334.3	506310	µg/L	506310	ppb	10:02:48
1	Na 589.592 Radial†	18295.8	19165.5	5343.2	µg/L	5343.2	ppb	10:02:48
1	Sr 421.552†	90866.8	92430.2	522.89	µg/L	522.89	ppb	10:02:48
1	Sc 361.383	1927189.2	1927189.2	93.868	%			10:03:23
1	Y 371.029	1180911.3	1180911.3	91.952	%			10:03:23
1	Ag 328.068†	25140.6	26577.7	272.69	µg/L	272.69	ppb	10:03:29
1	As 188.979†	292.6	313.0	472.86	µg/L	472.86	ppb	10:03:49
1	B 249.677†	12802.6	13469.4	542.95	µg/L	542.95	ppb	10:03:29
1	Ba 233.527†	17813.3	19046.1	506.48	µg/L	506.48	ppb	10:03:29
1	Be 313.107†	357713.5	377452.6	244.87	µg/L	244.87	ppb	10:03:23
1	Cd 226.502†	16949.7	18153.3	478.38	µg/L	478.38	ppb	10:03:29
1	Co 228.616†	8199.4	8808.0	439.11	µg/L	439.11	ppb	10:03:49
1	Cr 267.716†	20927.3	22431.2	486.29	µg/L	486.29	ppb	10:03:29
1	Cu 324.752†	72609.1	73324.6	566.79	µg/L	566.79	ppb	10:03:29
1	Mn 257.610†	132058.7	140931.0	496.00	µg/L	496.00	ppb	10:03:29
1	Mo 202.031†	3832.8	4084.4	498.40	µg/L	498.40	ppb	10:03:49
1	Ni 231.604†	7603.2	7784.3	441.52	µg/L	441.52	ppb	10:03:49
1	P 214.914†	1365.1	1273.4	2581.8	µg/L	2581.8	ppb	10:03:49
1	Pb 220.353†	1635.6	1705.1	494.86	µg/L	494.86	ppb	10:03:49
1	S 181.975 Axial†	566.0	575.0	2802.4	µg/L	2802.4	ppb	10:03:49
1	Sb 206.836†	533.4	548.7	508.90	µg/L	508.90	ppb	10:03:49
1	Se 196.026†	1735.3	1836.2	2362.4	µg/L	2362.4	ppb	10:03:49
1	SiO2†	57838.4	58997.8	11245	µg/L	11245	ppb	10:03:29
1	Si 251.611†	64263.4	68081.8	5205.4	µg/L	5205.4	ppb	10:03:29
1	Sn 189.927†	538.1	551.2	519.94	µg/L	519.94	ppb	10:03:49
1	Ti 334.940†	215138.2	228213.3	515.96	µg/L	515.96	ppb	10:03:29
1	Tl 190.801†	306.6	348.6	473.79	µg/L	473.79	ppb	10:03:49
1	U 409.014†	5369.6	5094.3	461.27	µg/L	461.27	ppb	10:03:29
1	V 292.402†	39893.8	42628.9	518.60	µg/L	518.60	ppb	10:03:29
1	Zn 213.857†	18547.0	19156.2	486.84	µg/L	486.84	ppb	10:03:29
2	Sc RADIAL	108936.1	108936.1	98.3	%			10:03:00
2	Al 396.153Radial†	966665.7	983162.9	530750	µg/L	530750	ppb	10:02:54
2	Ca 317.933Radial†	1168022.9	1187718.1	503750	µg/L	503750	ppb	10:02:54
2	Fe 238.204 Radial†	26839.2	27285.4	195360	µg/L	195360	ppb	10:03:00
2	K 766.490 Radial†	10172.5	9573.2	5376.3	µg/L	5376.3	ppb	10:03:00
2	Mg 279.077 IEC†	73023.5	74264.9	505840	µg/L	505840	ppb	10:03:00
2	Na 589.592 Radial†	18295.6	19175.8	5346.1	µg/L	5346.1	ppb	10:03:00
2	Sr 421.552†	90783.6	92398.2	522.71	µg/L	522.71	ppb	10:03:00
2	Sc 361.383	1920992.9	1920992.9	93.566	%			10:03:55
2	Y 371.029	1176287.7	1176287.7	91.592	%			10:03:55
2	Ag 328.068†	25330.7	26867.3	275.48	µg/L	275.48	ppb	10:04:01
2	As 188.979†	289.5	310.8	468.50	µg/L	468.50	ppb	10:04:22
2	B 249.677†	12911.8	13630.1	550.13	µg/L	550.13	ppb	10:04:01
2	Ba 233.527†	17885.2	19184.2	510.15	µg/L	510.15	ppb	10:04:01
2	Be 313.107†	359267.4	380342.6	246.74	µg/L	246.74	ppb	10:03:55
2	Cd 226.502†	17089.7	18361.2	484.02	µg/L	484.02	ppb	10:04:01
2	Co 228.616†	8259.1	8900.0	443.69	µg/L	443.69	ppb	10:04:22
2	Cr 267.716†	21051.7	22636.1	490.73	µg/L	490.73	ppb	10:04:01
2	Cu 324.752†	73166.5	74169.8	572.86	µg/L	572.86	ppb	10:04:01
2	Mn 257.610†	132869.5	142251.3	500.43	µg/L	500.43	ppb	10:04:01
2	Mo 202.031†	3864.6	4131.5	504.07	µg/L	504.07	ppb	10:04:22
2	Ni 231.604†	7626.9	7835.8	444.44	µg/L	444.44	ppb	10:04:22
2	P 214.914†	1355.8	1268.1	2570.6	µg/L	2570.6	ppb	10:04:22
2	Pb 220.353†	1604.2	1677.1	487.67	µg/L	487.67	ppb	10:04:22

2	S 181.975 Axial†	565.8	576.7	2811.2	µg/L	2811.2 ppb	10:04:22
2	Sb 206.836†	546.4	564.4	524.73	µg/L	524.73 ppb	10:04:22
2	Se 196.026†	1744.0	1851.4	2382.4	µg/L	2382.4 ppb	10:04:22
2	SiO2†	58214.3	59598.3	11359	µg/L	11359 ppb	10:04:01
2	Si 251.611†	64678.1	68745.9	5256.3	µg/L	5256.3 ppb	10:04:01
2	Sn 189.927†	538.0	553.0	521.03	µg/L	521.03 ppb	10:04:22
2	Ti 334.940†	216656.2	230575.0	521.53	µg/L	521.53 ppb	10:04:01
2	Tl 190.801†	306.9	349.9	475.74	µg/L	475.74 ppb	10:04:22
2	U 409.014†	5354.6	5096.8	461.52	µg/L	461.52 ppb	10:04:01
2	V 292.402†	39963.3	42840.3	521.12	µg/L	521.12 ppb	10:04:01
2	Zn 213.857†	18620.2	19298.2	490.71	µg/L	490.71 ppb	10:04:01
3	Sc RADIAL	108492.6	108492.6	97.9	%		10:03:12
3	Al 396.153Radial†	962099.9	982519.4	530400	µg/L	530400 ppb	10:03:06
3	Ca 317.933Radial†	1160941.5	1185342.5	502740	µg/L	502740 ppb	10:03:06
3	Fe 238.204 Radial†	26553.4	27105.0	194070	µg/L	194070 ppb	10:03:12
3	K 766.490 Radial†	9999.3	9438.6	5300.7	µg/L	5300.7 ppb	10:03:12
3	Mg 279.077 IEC†	72311.6	73841.4	502960	µg/L	502960 ppb	10:03:12
3	Na 589.592 Radial†	18146.7	19099.9	5324.9	µg/L	5324.9 ppb	10:03:12
3	Sr 421.552†	89914.9	91888.4	519.82	µg/L	519.82 ppb	10:03:12
3	Sc 361.383	1915768.1	1915768.1	93.312	%		10:04:28
3	Y 371.029	1174043.7	1174043.7	91.417	%		10:04:28
3	Ag 328.068†	25104.9	26699.1	273.75	µg/L	273.75 ppb	10:04:34
3	As 188.979†	272.6	293.4	436.95	µg/L	436.95 ppb	10:04:55
3	B 249.677†	12724.3	13466.8	543.21	µg/L	543.21 ppb	10:04:34
3	Ba 233.527†	17727.0	19066.8	507.03	µg/L	507.03 ppb	10:04:34
3	Be 313.107†	358815.7	380905.7	247.11	µg/L	247.11 ppb	10:04:28
3	Cd 226.502†	16872.2	18177.9	479.14	µg/L	479.14 ppb	10:04:34
3	Co 228.616†	8189.0	8848.9	441.14	µg/L	441.14 ppb	10:04:55
3	Cr 267.716†	20836.1	22466.4	487.05	µg/L	487.05 ppb	10:04:34
3	Cu 324.752†	72474.9	73641.9	568.80	µg/L	568.80 ppb	10:04:34
3	Mn 257.610†	131349.2	141009.4	496.11	µg/L	496.11 ppb	10:04:34
3	Mo 202.031†	3805.5	4079.4	497.76	µg/L	497.76 ppb	10:04:55
3	Ni 231.604†	7583.8	7811.9	443.08	µg/L	443.08 ppb	10:04:55
3	P 214.914†	1353.4	1269.6	2575.5	µg/L	2575.5 ppb	10:04:55
3	Pb 220.353†	1611.0	1689.1	490.80	µg/L	490.80 ppb	10:04:55
3	S 181.975 Axial†	560.7	572.8	2792.4	µg/L	2792.4 ppb	10:04:55
3	Sb 206.836†	533.2	551.8	512.09	µg/L	512.09 ppb	10:04:55
3	Se 196.026†	1738.6	1850.8	2381.8	µg/L	2381.8 ppb	10:04:55
3	SiO2†	57529.7	59034.3	11252	µg/L	11252 ppb	10:04:34
3	Si 251.611†	64101.5	68316.5	5223.5	µg/L	5223.5 ppb	10:04:34
3	Sn 189.927†	533.4	549.6	518.34	µg/L	518.34 ppb	10:04:55
3	Ti 334.940†	214817.7	229236.2	518.39	µg/L	518.39 ppb	10:04:34
3	Tl 190.801†	300.1	343.5	465.93	µg/L	465.93 ppb	10:04:55
3	U 409.014†	5298.7	5052.5	457.51	µg/L	457.51 ppb	10:04:34
3	V 292.402†	39645.7	42616.4	518.35	µg/L	518.35 ppb	10:04:34
3	Zn 213.857†	18452.4	19172.6	487.50	µg/L	487.50 ppb	10:04:34

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1921316.8	93.582	%	0.2785				0.30%
Sc RADIAL	108809.0	98.2	%	0.25				0.25%
Y 371.029	1177080.9	91.654	%	0.2727				0.30%
Ag 328.068†	26714.7	273.97	µg/L	1.408	273.97	ppb	1.408	0.51%
QC value within limits for Ag 328.068 Recovery = 109.59%								
Al 396.153Radial†	981586.7	529900	µg/L	1185.7	529900	ppb	1185.7	0.22%
QC value within limits for Al 396.153Radial Recovery = 105.98%								
As 188.979†	305.7	459.43	µg/L	19.598	459.43	ppb	19.598	4.27%
QC value within limits for As 188.979 Recovery = 91.89%								
B 249.677†	13522.1	545.43	µg/L	4.073	545.43	ppb	4.073	0.75%
QC value within limits for B 249.677 Recovery = 109.09%								
Ba 233.527†	19099.1	507.89	µg/L	1.979	507.89	ppb	1.979	0.39%
QC value within limits for Ba 233.527 Recovery = 101.58%								
Be 313.107†	379567.0	246.24	µg/L	1.202	246.24	ppb	1.202	0.49%
QC value within limits for Be 313.107 Recovery = 98.50%								
Ca 317.933Radial†	1186002.4	503020	µg/L	635.7	503020	ppb	635.7	0.13%
QC value within limits for Ca 317.933Radial Recovery = 100.60%								
Cd 226.502†	18230.8	480.52	µg/L	3.059	480.52	ppb	3.059	0.64%
QC value within limits for Cd 226.502 Recovery = 96.10%								
Co 228.616†	8852.3	441.31	µg/L	2.298	441.31	ppb	2.298	0.52%

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   QC value within limits for Co 228.616  Recovery = 88.26%
Cr 267.716†            22511.3      488.03 µg/L         2.373      488.03 ppb          2.373   0.49%
   QC value within limits for Cr 267.716  Recovery = 97.61%
Cu 324.752†            73712.1      569.48 µg/L         3.092      569.48 ppb          3.092   0.54%
   QC value within limits for Cu 324.752  Recovery = 113.90%
Fe 238.204 Radial†     27220.7      194900 µg/L         719.4      194900 ppb          719.4   0.37%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.45%
K 766.490 Radial†       9517.1      5344.7 µg/L         39.31      5344.7 ppb          39.31   0.74%
   QC value within limits for K 766.490 Radial  Recovery = 106.89%
Mg 279.077 IEC†        74146.9      505040 µg/L        1817.3      505040 ppb         1817.3   0.36%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.01%
Mn 257.610†           141397.3      497.51 µg/L         2.525      497.51 ppb          2.525   0.51%
   QC value within limits for Mn 257.610  Recovery = 99.50%
Mo 202.031†             4098.5      500.08 µg/L         3.474      500.08 ppb          3.474   0.69%
   QC value within limits for Mo 202.031  Recovery = 100.02%
Na 589.592 Radial†     19147.1      5338.1 µg/L         11.48      5338.1 ppb          11.48   0.22%
   QC value within limits for Na 589.592 Radial  Recovery = 106.76%
Ni 231.604†             7810.7      443.01 µg/L         1.462      443.01 ppb          1.462   0.33%
   QC value within limits for Ni 231.604  Recovery = 88.60%
P 214.914†              1270.4      2576.0 µg/L          5.61      2576.0 ppb           5.61   0.22%
   QC value within limits for P 214.914  Recovery = 103.04%
Pb 220.353†             1690.4      491.11 µg/L         3.606      491.11 ppb          3.606   0.73%
   QC value within limits for Pb 220.353  Recovery = 98.22%
S 181.975 Axial†         574.8      2802.0 µg/L          9.38      2802.0 ppb           9.38   0.33%
   QC value within limits for S 181.975 Axial  Recovery = 112.08%
Sb 206.836†              555.0      515.24 µg/L         8.375      515.24 ppb          8.375   1.63%
   QC value within limits for Sb 206.836  Recovery = 103.05%
Se 196.026†             1846.1      2375.6 µg/L         11.35      2375.6 ppb          11.35   0.48%
   QC value within limits for Se 196.026  Recovery = 95.02%
SiO2†                  59210.1       11285 µg/L          64.2       11285 ppb           64.2   0.57%
   QC value within limits for SiO2  Recovery = 105.52%
Si 251.611†            68381.4      5228.4 µg/L         25.77      5228.4 ppb          25.77   0.49%
   QC value within limits for Si 251.611  Recovery = 104.57%
Sn 189.927†              551.3      519.77 µg/L         1.354      519.77 ppb          1.354   0.26%
   QC value within limits for Sn 189.927  Recovery = 103.95%
Sr 421.552†            92238.9      521.81 µg/L         1.719      521.81 ppb          1.719   0.33%
   QC value within limits for Sr 421.552  Recovery = 104.36%
Ti 334.940†           229341.5      518.62 µg/L         2.790      518.62 ppb          2.790   0.54%
   QC value within limits for Ti 334.940  Recovery = 103.72%
Tl 190.801†              347.4      471.82 µg/L         5.190      471.82 ppb          5.190   1.10%
   QC value within limits for Tl 190.801  Recovery = 94.36%
U 409.014†              5081.2      460.10 µg/L         2.249      460.10 ppb          2.249   0.49%
   QC value within limits for U 409.014  Recovery = 92.02%
V 292.402†             42695.2      519.36 µg/L         1.534      519.36 ppb          1.534   0.30%
   QC value within limits for V 292.402  Recovery = 103.87%
Zn 213.857†            19209.0      488.35 µg/L         2.070      488.35 ppb          2.070   0.42%
   QC value within limits for Zn 213.857  Recovery = 97.67%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/11/2009 10:05:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108095.2	108095.2	97.5	%			10:05:45
1	Al 396.153Radial†	924676.7	947768.1	511660	µg/L	511660	ppb	10:05:39
1	Ca 317.933Radial†	1122247.9	1150035.4	487760	µg/L	487760	ppb	10:05:39
1	Fe 238.204 Radial†	63799.4	65386.7	468120	µg/L	468120	ppb	10:05:45
1	K 766.490 Radial†	777.6	22.8	12.810	µg/L	12.810	ppb	10:05:45
1	Mg 279.077 IEC†	70760.6	72522.9	493550	µg/L	493550	ppb	10:05:45
1	Na 589.592 Radial†	1729119.7	1773136.4	494340	µg/L	494340	ppb	10:05:39
1	Sr 421.552†	1223.6	1306.0	7.3880	µg/L	7.3880	ppb	10:05:45
1	Sc 361.383	1906648.5	1906648.5	92.868	%			10:06:21
1	Y 371.029	1153709.8	1153709.8	89.834	%			10:06:21
1	Ag 328.068†	-3257.4	-3712.8	1.0378	µg/L	1.0378	ppb	10:06:26
1	As 188.979†	24.2	27.4	-91.425	µg/L	-91.425	ppb	10:06:47
1	B 249.677†	3874.1	4002.2	32.364	µg/L	32.364	ppb	10:06:26
1	Ba 233.527†	342.1	437.6	11.479	µg/L	11.479	ppb	10:06:47
1	Be 313.107†	-1167.0	-4885.0	-3.1890	µg/L	-3.1890	ppb	10:06:26
1	Cd 226.502†	1454.7	1662.7	19.003	µg/L	19.003	ppb	10:06:26
1	Co 228.616†	59.2	136.7	6.6644	µg/L	6.6644	ppb	10:06:47
1	Cr 267.716†	-119.0	8.7	0.0408	µg/L	0.0408	ppb	10:06:47
1	Cu 324.752†	-6999.6	-11564.9	17.773	µg/L	17.773	ppb	10:06:26
1	Mn 257.610†	-12433.0	-13142.2	14.878	µg/L	14.878	ppb	10:06:26
1	Mo 202.031†	-175.1	-187.4	-4.1126	µg/L	-4.1126	ppb	10:06:47
1	Ni 231.604†	276.5	-17.8	-1.0077	µg/L	-1.0077	ppb	10:06:47
1	P 214.914†	363.7	210.7	84.755	µg/L	84.755	ppb	10:06:47
1	Pb 220.353†	-19.0	-57.9	11.511	µg/L	11.511	ppb	10:06:47
1	S 181.975 Axial†	60.4	37.0	47.155	µg/L	47.155	ppb	10:06:47
1	Sb 206.836†	55.6	40.3	3.2710	µg/L	3.2710	ppb	10:06:47
1	Se 196.026†	-126.4	-148.7	1.2167	µg/L	1.2167	ppb	10:06:47
1	SiO2†	2102.6	-354.7	-67.610	µg/L	-67.610	ppb	10:06:47
1	Si 251.611†	-229.0	-626.1	-39.443	µg/L	-39.443	ppb	10:06:47
1	Sn 189.927†	-451.4	-508.1	-0.0337	µg/L	-0.0337	ppb	10:06:47
1	Ti 334.940†	19069.0	19554.8	19.205	µg/L	19.205	ppb	10:06:26
1	Tl 190.801†	9.4	32.1	-15.680	µg/L	-15.680	ppb	10:06:47
1	U 409.014†	139256.6	149325.8	14165	µg/L	14165	ppb	10:06:26
1	V 292.402†	-5142.1	-5408.0	-2.1676	µg/L	-2.1676	ppb	10:06:26
1	Zn 213.857†	3141.9	2780.9	12.942	µg/L	12.942	ppb	10:06:47
2	Sc RADIAL	108262.3	108262.3	97.7	%			10:05:58
2	Al 396.153Radial†	930525.1	952291.4	514110	µg/L	514110	ppb	10:05:52
2	Ca 317.933Radial†	1128314.8	1154469.8	489650	µg/L	489650	ppb	10:05:52
2	Fe 238.204 Radial†	64160.2	65655.0	470040	µg/L	470040	ppb	10:05:58
2	K 766.490 Radial†	667.1	-91.6	-51.437	µg/L	-51.437	ppb	10:05:58
2	Mg 279.077 IEC†	71100.0	72758.4	495160	µg/L	495160	ppb	10:05:58
2	Na 589.592 Radial†	1736964.6	1778430.6	495810	µg/L	495810	ppb	10:05:52
2	Sr 421.552†	1252.7	1333.8	7.5455	µg/L	7.5455	ppb	10:05:58
2	Sc 361.383	1884069.8	1884069.8	91.768	%			10:06:53
2	Y 371.029	1142313.9	1142313.9	88.946	%			10:06:53
2	Ag 328.068†	-3278.7	-3778.1	0.5651	µg/L	0.5651	ppb	10:06:59
2	As 188.979†	28.9	32.8	-82.115	µg/L	-82.115	ppb	10:07:19
2	B 249.677†	3964.7	4150.8	38.431	µg/L	38.431	ppb	10:06:59
2	Ba 233.527†	343.4	443.4	11.634	µg/L	11.634	ppb	10:07:19
2	Be 313.107†	-980.5	-4696.9	-3.0668	µg/L	-3.0668	ppb	10:06:59
2	Cd 226.502†	1500.4	1731.4	20.848	µg/L	20.848	ppb	10:06:59
2	Co 228.616†	49.9	127.3	6.1906	µg/L	6.1906	ppb	10:07:19
2	Cr 267.716†	-103.2	24.4	0.3788	µg/L	0.3788	ppb	10:07:19
2	Cu 324.752†	-6903.0	-11549.9	18.293	µg/L	18.293	ppb	10:06:59
2	Mn 257.610†	-12467.3	-13340.1	14.458	µg/L	14.458	ppb	10:06:59
2	Mo 202.031†	-199.1	-215.8	-7.4529	µg/L	-7.4529	ppb	10:07:19
2	Ni 231.604†	273.7	-17.3	-0.9787	µg/L	-0.9787	ppb	10:07:19
2	P 214.914†	365.5	217.4	97.229	µg/L	97.229	ppb	10:07:19
2	Pb 220.353†	-13.0	-51.6	13.202	µg/L	13.202	ppb	10:07:19

2	S 181.975 Axial†	64.8	42.6	74.637 µg/L	74.637 ppb		10:07:19
2	Sb 206.836†	51.4	36.4	-0.7758 µg/L	-0.7758 ppb		10:07:19
2	Se 196.026†	-134.8	-159.3	-11.602 µg/L	-11.602 ppb		10:07:19
2	SiO2†	2054.7	-379.8	-72.398 µg/L	-72.398 ppb		10:07:19
2	Si 251.611†	-252.7	-654.9	-41.302 µg/L	-41.302 ppb		10:07:19
2	Sn 189.927†	-458.9	-522.1	-6.2612 µg/L	-6.2612 ppb		10:07:19
2	Ti 334.940†	18863.0	19576.4	19.151 µg/L	19.151 ppb		10:06:59
2	Tl 190.801†	15.8	39.1	-5.0618 µg/L	-5.0618 ppb		10:07:19
2	U 409.014†	139374.9	151251.7	14348 µg/L	14348 ppb		10:06:59
2	V 292.402†	-5086.2	-5413.4	-1.8010 µg/L	-1.8010 ppb		10:06:59
2	Zn 213.857†	3155.0	2835.7	14.194 µg/L	14.194 ppb		10:07:19
3	Sc RADIAL	107405.7	107405.7	96.9 %			10:06:10
3	Al 396.153Radial†	930694.4	960061.8	518300 µg/L	518300 ppb		10:06:05
3	Ca 317.933Radial†	1128323.3	1163688.9	493560 µg/L	493560 ppb		10:06:05
3	Fe 238.204 Radial†	63417.7	65412.7	468310 µg/L	468310 ppb		10:06:10
3	K 766.490 Radial†	837.4	89.5	50.284 µg/L	50.284 ppb		10:06:10
3	Mg 279.077 IEC†	70345.3	72560.2	493810 µg/L	493810 ppb		10:06:10
3	Na 589.592 Radial†	1735789.3	1791396.7	499430 µg/L	499430 ppb		10:06:05
3	Sr 421.552†	1242.0	1333.0	7.5410 µg/L	7.5410 ppb		10:06:10
3	Sc 361.383	1886911.3	1886911.3	91.906 %			10:07:25
3	Y 371.029	1144980.2	1144980.2	89.154 %			10:07:25
3	Ag 328.068†	-3310.8	-3807.5	0.1530 µg/L	0.1530 ppb		10:07:31
3	As 188.979†	29.2	33.1	-81.812 µg/L	-81.812 ppb		10:07:52
3	B 249.677†	3890.0	4063.1	35.039 µg/L	35.039 ppb		10:07:31
3	Ba 233.527†	355.0	455.5	11.956 µg/L	11.956 ppb		10:07:52
3	Be 313.107†	-1013.7	-4731.3	-3.0891 µg/L	-3.0891 ppb		10:07:31
3	Cd 226.502†	1474.9	1701.2	20.100 µg/L	20.100 ppb		10:07:31
3	Co 228.616†	58.9	137.1	6.6788 µg/L	6.6788 ppb		10:07:52
3	Cr 267.716†	-105.7	21.9	0.3277 µg/L	0.3277 ppb		10:07:52
3	Cu 324.752†	-7005.9	-11650.5	17.200 µg/L	17.200 ppb		10:07:31
3	Mn 257.610†	-12483.8	-13337.5	14.248 µg/L	14.248 ppb		10:07:31
3	Mo 202.031†	-188.7	-204.1	-6.1230 µg/L	-6.1230 ppb		10:07:52
3	Ni 231.604†	277.0	-14.1	-0.8004 µg/L	-0.8004 ppb		10:07:52
3	P 214.914†	362.0	212.9	91.685 µg/L	91.685 ppb		10:07:52
3	Pb 220.353†	-0.9	-38.3	17.169 µg/L	17.169 ppb		10:07:52
3	S 181.975 Axial†	69.4	47.5	100.11 µg/L	100.11 ppb		10:07:52
3	Sb 206.836†	50.4	35.2	-2.3480 µg/L	-2.3480 ppb		10:07:52
3	Se 196.026†	-116.2	-139.0	14.540 µg/L	14.540 ppb		10:07:52
3	SiO2†	2100.1	-333.9	-63.634 µg/L	-63.634 ppb		10:07:52
3	Si 251.611†	-240.5	-641.2	-40.448 µg/L	-40.448 ppb		10:07:52
3	Sn 189.927†	-452.5	-514.4	-1.9152 µg/L	-1.9152 ppb		10:07:52
3	Ti 334.940†	18756.9	19430.0	18.582 µg/L	18.582 ppb		10:07:31
3	Tl 190.801†	4.0	26.3	-25.361 µg/L	-25.361 ppb		10:07:52
3	U 409.014†	138739.7	150331.9	14261 µg/L	14261 ppb		10:07:31
3	V 292.402†	-5022.4	-5335.7	-1.1660 µg/L	-1.1660 ppb		10:07:31
3	Zn 213.857†	3126.7	2799.7	13.431 µg/L	13.431 ppb		10:07:52

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1892543.2	92.181	%	0.5990				0.65%
Sc RADIAL	107921.1	97.4	%	0.41				0.42%
Y 371.029	1147001.3	89.311	%	0.4641				0.52%
Ag 328.068†	-3766.1	0.5853	µg/L	0.44274	0.5853	ppb	0.44274	75.64%
Al 396.153Radial†	953373.8	514690	µg/L	3356.9	514690	ppb	3356.9	0.65%
QC value within limits for Al 396.153Radial Recovery = 102.94%								
As 188.979†	31.1	-85.117	µg/L	5.4649	-85.117	ppb	5.4649	6.42%
B 249.677†	4072.0	35.278	µg/L	3.0403	35.278	ppb	3.0403	8.62%
Ba 233.527†	445.5	11.689	µg/L	0.2432	11.689	ppb	0.2432	2.08%
Be 313.107†	-4771.1	-3.1149	µg/L	0.06505	-3.1149	ppb	0.06505	2.09%
Ca 317.933Radial†	1156064.7	490320	µg/L	2954.1	490320	ppb	2954.1	0.60%
QC value within limits for Ca 317.933Radial Recovery = 98.06%								
Cd 226.502†	1698.4	19.984	µg/L	0.9279	19.984	ppb	0.9279	4.64%
Co 228.616†	133.7	6.5113	µg/L	0.27779	6.5113	ppb	0.27779	4.27%
Cr 267.716†	18.3	0.2491	µg/L	0.18216	0.2491	ppb	0.18216	73.13%
Cu 324.752†	-11588.4	17.755	µg/L	0.5467	17.755	ppb	0.5467	3.08%
Fe 238.204 Radial†	65484.8	468820	µg/L	1059.4	468820	ppb	1059.4	0.23%
QC value within limits for Fe 238.204 Radial Recovery = 93.76%								
K 766.490 Radial†	6.9	3.8854	µg/L	51.44418	3.8854	ppb	51.44418	>999.9%
Mg 279.077 IEC†	72613.8	494170	µg/L	861.1	494170	ppb	861.1	0.17%

QC value within limits for Mg 279.077 IEC Recovery = 98.83%

Mn 257.610†	-13273.2	14.528	µg/L	0.3208	14.528	ppb	0.3208	2.21%
Mo 202.031†	-202.4	-5.8962	µg/L	1.68165	-5.8962	ppb	1.68165	28.52%
Na 589.592 Radial†	1780987.9	496530	µg/L	2619.3	496530	ppb	2619.3	0.53%

QC value within limits for Na 589.592 Radial Recovery = 99.31%

Ni 231.604†	-16.4	-0.9289	µg/L	0.11225	-0.9289	ppb	0.11225	12.08%
P 214.914†	213.7	91.223	µg/L	6.2502	91.223	ppb	6.2502	6.85%
Pb 220.353†	-49.3	13.961	µg/L	2.9042	13.961	ppb	2.9042	20.80%
S 181.975 Axial†	42.4	73.966	µg/L	26.4820	73.966	ppb	26.4820	35.80%
Sb 206.836†	37.3	0.0491	µg/L	2.89892	0.0491	ppb	2.89892	>999.9%
Se 196.026†	-149.0	1.3849	µg/L	13.07156	1.3849	ppb	13.07156	943.84%
SiO2†	-356.1	-67.881	µg/L	4.3881	-67.881	ppb	4.3881	6.46%
Si 251.611†	-640.7	-40.398	µg/L	0.9306	-40.398	ppb	0.9306	2.30%
Sn 189.927†	-514.9	-2.7367	µg/L	3.19401	-2.7367	ppb	3.19401	116.71%
Sr 421.552†	1324.3	7.4915	µg/L	0.08966	7.4915	ppb	0.08966	1.20%
Ti 334.940†	19520.4	18.979	µg/L	0.3453	18.979	ppb	0.3453	1.82%
Tl 190.801†	32.5	-15.367	µg/L	10.1531	-15.367	ppb	10.1531	66.07%
U 409.014†	150303.1	14258	µg/L	91.7	14258	ppb	91.7	0.64%

QC value within limits for U 409.014 Recovery = 95.05%

V 292.402†	-5385.7	-1.7115	µg/L	0.50674	-1.7115	ppb	0.50674	29.61%
Zn 213.857†	2805.4	13.522	µg/L	0.6306	13.522	ppb	0.6306	4.66%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/11/2009 10:08:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117730.0	117730.0	106	%			10:08:44
1	Al 396.153Radial†	1174.6	960.5	136.79	µg/L	136.79	ppb	10:08:44
1	Ca 317.933Radial†	991.6	519.6	220.39	µg/L	220.39	ppb	10:09:04
1	Fe 238.204 Radial†	44.5	25.9	508.17	µg/L	508.17	ppb	10:09:04
1	K 766.490 Radial†	555183.9	521784.1	293030	µg/L	293030	ppb	10:08:38
1	Mg 279.077 IEC†	-11.9	-27.0	66.322	µg/L	66.322	ppb	10:09:04
1	Na 589.592 Radial†	413.9	954.9	266.22	µg/L	266.22	ppb	10:08:44
1	Sr 421.552†	1796694.9	1691163.6	9567.1	µg/L	9567.1	ppb	10:08:38
1	Sc 361.383	2067224.1	2067224.1	100.69	%			10:10:36
1	Y 371.029	1256875.1	1256875.1	97.867	%			10:10:36
1	Ag 328.068†	-6775.4	-6934.2	3.5236	µg/L	3.5236	ppb	10:10:36
1	As 188.979†	5427.7	5391.9	9948.4	µg/L	9948.4	ppb	10:10:41
1	B 249.677†	112434.8	111496.1	5002.6	µg/L	5002.6	ppb	10:10:36
1	Ba 233.527†	486334.8	483077.0	12841	µg/L	12841	ppb	10:10:36
1	Be 313.107†	4592224.8	4557180.9	2955.1	µg/L	2955.1	ppb	10:10:25
1	Cd 226.502†	366101.2	363693.1	9881.6	µg/L	9881.6	ppb	10:10:36
1	Co 228.616†	196668.1	195395.6	9743.0	µg/L	9743.0	ppb	10:10:36
1	Cr 267.716†	1143087.3	1135404.3	24580	µg/L	24580	ppb	10:10:36
1	Cu 324.752†	2905236.7	2881334.2	20624	µg/L	20624	ppb	10:10:36
1	Mn 257.610†	2880887.7	2861425.1	9572.3	µg/L	9572.3	ppb	10:10:36
1	Mo 202.031†	84123.9	83549.6	10038	µg/L	10038	ppb	10:10:36
1	Ni 231.604†	175931.9	174412.8	9892.5	µg/L	9892.5	ppb	10:10:36
1	P 214.914†	8567.8	8328.3	15197	µg/L	15197	ppb	10:10:41
1	Pb 220.353†	95678.3	94986.3	25121	µg/L	25121	ppb	10:10:36
1	S 181.975 Axial†	10568.9	10468.6	52867	µg/L	52867	ppb	10:10:41
1	Sb 206.836†	10532.0	10440.4	10502	µg/L	10502	ppb	10:10:41
1	Se 196.026†	7681.3	7616.2	9806.0	µg/L	9806.0	ppb	10:10:41
1	SiO2†	537467.3	531171.6	101240	µg/L	101240	ppb	10:10:36
1	Si 251.611†	615941.4	611348.2	46037	µg/L	46037	ppb	10:10:36
1	Sn 189.927†	21520.8	21351.5	11009	µg/L	11009	ppb	10:10:41
1	Ti 334.940†	4311455.4	4280981.9	10209	µg/L	10209	ppb	10:10:25
1	Tl 190.801†	6402.7	6380.8	9900.1	µg/L	9900.1	ppb	10:10:41
1	U 409.014†	1803.5	1165.1	111.08	µg/L	111.08	ppb	10:10:36
1	V 292.402†	876331.5	870465.6	10249	µg/L	10249	ppb	10:10:36
1	Zn 213.857†	553204.1	548817.2	14945	µg/L	14945	ppb	10:10:36
2	Sc RADIAL	114388.5	114388.5	103	%			10:09:16
2	Al 396.153Radial†	1067.8	889.3	94.653	µg/L	94.653	ppb	10:09:16
2	Ca 317.933Radial†	921.1	478.5	202.96	µg/L	202.96	ppb	10:09:36
2	Fe 238.204 Radial†	35.6	18.6	458.35	µg/L	458.35	ppb	10:09:36
2	K 766.490 Radial†	555147.8	537013.8	301580	µg/L	301580	ppb	10:09:10
2	Mg 279.077 IEC†	-16.3	-31.6	37.307	µg/L	37.307	ppb	10:09:36
2	Na 589.592 Radial†	220.3	778.7	217.09	µg/L	217.09	ppb	10:09:16
2	Sr 421.552†	1798870.1	1742670.5	9858.5	µg/L	9858.5	ppb	10:09:10
2	Sc 361.383	2046452.5	2046452.5	99.677	%			10:11:01
2	Y 371.029	1248145.4	1248145.4	97.187	%			10:11:01
2	Ag 328.068†	-6825.0	-7052.3	3.0772	µg/L	3.0772	ppb	10:11:01
2	As 188.979†	5405.8	5424.6	10009	µg/L	10009	ppb	10:11:06
2	B 249.677†	112279.1	112473.3	5046.4	µg/L	5046.4	ppb	10:11:01
2	Ba 233.527†	485649.7	487292.3	12953	µg/L	12953	ppb	10:11:01
2	Be 313.107†	4598422.5	4609691.0	2989.1	µg/L	2989.1	ppb	10:10:50
2	Cd 226.502†	366155.0	367437.6	9983.3	µg/L	9983.3	ppb	10:11:01
2	Co 228.616†	196507.5	197217.1	9833.8	µg/L	9833.8	ppb	10:11:01
2	Cr 267.716†	1142669.9	1146508.5	24820	µg/L	24820	ppb	10:11:01
2	Cu 324.752†	2904770.9	2910153.4	20831	µg/L	20831	ppb	10:11:01
2	Mn 257.610†	2880456.4	2890033.6	9668.0	µg/L	9668.0	ppb	10:11:01
2	Mo 202.031†	84088.1	84361.7	10136	µg/L	10136	ppb	10:11:01
2	Ni 231.604†	175839.0	176093.1	9987.8	µg/L	9987.8	ppb	10:11:01
2	P 214.914†	8508.5	8355.1	15229	µg/L	15229	ppb	10:11:06
2	Pb 220.353†	95517.5	95789.5	25333	µg/L	25333	ppb	10:11:01

2	S 181.975 Axial†	10479.4	10485.3	52952	µg/L	52952 ppb	10:11:06
2	Sb 206.836†	10443.9	10458.1	10519	µg/L	10519 ppb	10:11:06
2	Se 196.026†	7687.2	7699.6	9913.3	µg/L	9913.3 ppb	10:11:06
2	SiO2†	537423.4	536545.6	102270	µg/L	102270 ppb	10:11:01
2	Si 251.611†	615652.2	617267.2	46482	µg/L	46482 ppb	10:11:01
2	Sn 189.927†	21416.5	21463.8	11067	µg/L	11067 ppb	10:11:06
2	Ti 334.940†	4315328.9	4328330.1	10322	µg/L	10322 ppb	10:10:50
2	Tl 190.801†	6359.2	6401.7	9933.1	µg/L	9933.1 ppb	10:11:06
2	U 409.014†	1745.3	1124.9	107.26	µg/L	107.26 ppb	10:11:01
2	V 292.402†	876050.0	879017.1	10349	µg/L	10349 ppb	10:11:01
2	Zn 213.857†	553035.5	554224.8	15093	µg/L	15093 ppb	10:11:01
3	Sc RADIAL	112985.9	112985.9	102	%		10:09:48
3	Al 396.153Radial†	1076.3	910.5	104.55	µg/L	104.55 ppb	10:09:48
3	Ca 317.933Radial†	892.6	461.8	195.84	µg/L	195.84 ppb	10:10:08
3	Fe 238.204 Radial†	33.5	16.9	447.93	µg/L	447.93 ppb	10:10:08
3	K 766.490 Radial†	550523.2	539154.4	302790	µg/L	302790 ppb	10:09:42
3	Mg 279.077 IEC†	-19.1	-34.6	18.338	µg/L	18.338 ppb	10:10:08
3	Na 589.592 Radial†	167.7	729.8	203.45	µg/L	203.45 ppb	10:09:48
3	Sr 421.552†	1782466.2	1748215.5	9889.8	µg/L	9889.8 ppb	10:09:42
3	Sc 361.383	2047034.6	2047034.6	99.705	%		10:11:26
3	Y 371.029	1250484.2	1250484.2	97.369	%		10:11:26
3	Ag 328.068†	-6741.1	-6966.2	4.1250	µg/L	4.1250 ppb	10:11:26
3	As 188.979†	5370.4	5387.7	9940.6	µg/L	9940.6 ppb	10:11:31
3	B 249.677†	112982.6	113146.9	5076.6	µg/L	5076.6 ppb	10:11:26
3	Ba 233.527†	487493.3	489002.8	12998	µg/L	12998 ppb	10:11:26
3	Be 313.107†	4599778.0	4609738.8	2989.1	µg/L	2989.1 ppb	10:11:15
3	Cd 226.502†	367704.4	368887.1	10023	µg/L	10023 ppb	10:11:26
3	Co 228.616†	197299.5	197955.3	9870.7	µg/L	9870.7 ppb	10:11:26
3	Cr 267.716†	1146789.7	1150314.6	24902	µg/L	24902 ppb	10:11:26
3	Cu 324.752†	2916072.4	2920659.7	20906	µg/L	20906 ppb	10:11:26
3	Mn 257.610†	2887081.6	2895856.7	9687.5	µg/L	9687.5 ppb	10:11:26
3	Mo 202.031†	84447.9	84698.6	10176	µg/L	10176 ppb	10:11:26
3	Ni 231.604†	176373.7	176579.2	10015	µg/L	10015 ppb	10:11:26
3	P 214.914†	8448.0	8292.0	15087	µg/L	15087 ppb	10:11:31
3	Pb 220.353†	95883.4	96129.3	25423	µg/L	25423 ppb	10:11:26
3	S 181.975 Axial†	10470.5	10473.4	52892	µg/L	52892 ppb	10:11:31
3	Sb 206.836†	10392.2	10403.3	10463	µg/L	10463 ppb	10:11:31
3	Se 196.026†	7606.4	7616.3	9806.1	µg/L	9806.1 ppb	10:11:31
3	SiO2†	539379.3	538354.0	102610	µg/L	102610 ppb	10:11:26
3	Si 251.611†	617554.1	618999.0	46616	µg/L	46616 ppb	10:11:26
3	Sn 189.927†	21323.2	21364.1	11015	µg/L	11015 ppb	10:11:31
3	Ti 334.940†	4318696.2	4330476.3	10327	µg/L	10327 ppb	10:11:15
3	Tl 190.801†	6314.4	6355.0	9861.0	µg/L	9861.0 ppb	10:11:31
3	U 409.014†	1710.0	1089.1	103.84	µg/L	103.84 ppb	10:11:26
3	V 292.402†	879121.2	881847.5	10383	µg/L	10383 ppb	10:11:26
3	Zn 213.857†	555197.4	556235.3	15147	µg/L	15147 ppb	10:11:26

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2053570.4	100.02	%	0.576				0.58%
Sc RADIAL	115034.8	104	%	2.2				2.12%
Y 371.029	1251834.9	97.474	%	0.3519				0.36%
Ag 328.068†	-6984.2	3.5752	µg/L	0.52581	3.5752	ppb	0.52581	14.71%
Al 396.153Radial†	920.1	112.00	µg/L	22.032	112.00	ppb	22.032	19.67%
As 188.979†	5401.4	9966.0	µg/L	37.36	9966.0	ppb	37.36	0.37%
QC value within limits for As 188.979 Recovery = 99.66%								
B 249.677†	112372.1	5041.9	µg/L	37.25	5041.9	ppb	37.25	0.74%
QC value within limits for B 249.677 Recovery = 100.84%								
Ba 233.527†	486457.3	12931	µg/L	81.1	12931	ppb	81.1	0.63%
QC value less than the lower limit for Ba 233.527 Recovery = 86.21%								
Be 313.107†	4592203.6	2977.8	µg/L	19.67	2977.8	ppb	19.67	0.66%
QC value within limits for Be 313.107 Recovery = 99.26%								
Ca 317.933Radial†	486.6	206.40	µg/L	12.629	206.40	ppb	12.629	6.12%
Cd 226.502†	366672.6	9962.5	µg/L	72.81	9962.5	ppb	72.81	0.73%
QC value within limits for Cd 226.502 Recovery = 99.63%								
Co 228.616†	196856.0	9815.8	µg/L	65.71	9815.8	ppb	65.71	0.67%
QC value within limits for Co 228.616 Recovery = 98.16%								
Cr 267.716†	1144075.8	24767	µg/L	167.7	24767	ppb	167.7	0.68%
QC value within limits for Cr 267.716 Recovery = 99.07%								

Cu 324.752†	2904049.1	20787 µg/L	145.7	20787 ppb	145.7	0.70%
QC value within limits for Cu 324.752 Recovery = 103.93%						
Fe 238.204 Radial†	20.5	471.49 µg/L	32.196	471.49 ppb	32.196	6.83%
K 766.490 Radial†	532650.8	299130 µg/L	5319.1	299130 ppb	5319.1	1.78%
QC value within limits for K 766.490 Radial Recovery = 99.71%						
Mg 279.077 IEC†	-31.1	40.656 µg/L	24.1666	40.656 ppb	24.1666	59.44%
Mn 257.610†	2882438.4	9642.6 µg/L	61.65	9642.6 ppb	61.65	0.64%
QC value within limits for Mn 257.610 Recovery = 96.43%						
Mo 202.031†	84203.3	10117 µg/L	71.0	10117 ppb	71.0	0.70%
QC value within limits for Mo 202.031 Recovery = 101.17%						
Na 589.592 Radial†	821.1	228.92 µg/L	33.013	228.92 ppb	33.013	14.42%
Ni 231.604†	175695.0	9965.2 µg/L	64.47	9965.2 ppb	64.47	0.65%
QC value within limits for Ni 231.604 Recovery = 99.65%						
P 214.914†	8325.2	15171 µg/L	75.0	15171 ppb	75.0	0.49%
QC value within limits for P 214.914 Recovery = 101.14%						
Pb 220.353†	95635.0	25293 µg/L	155.2	25293 ppb	155.2	0.61%
QC value within limits for Pb 220.353 Recovery = 101.17%						
S 181.975 Axial†	10475.8	52904 µg/L	43.6	52904 ppb	43.6	0.08%
QC value within limits for S 181.975 Axial Recovery = 105.81%						
Sb 206.836†	10433.9	10494 µg/L	28.7	10494 ppb	28.7	0.27%
QC value within limits for Sb 206.836 Recovery = 104.94%						
Se 196.026†	7644.1	9841.8 µg/L	61.94	9841.8 ppb	61.94	0.63%
QC value within limits for Se 196.026 Recovery = 98.42%						
SiO2†	535357.1	102040 µg/L	712.0	102040 ppb	712.0	0.70%
QC value within limits for SiO2 Recovery = 95.36%						
Si 251.611†	615871.5	46378 µg/L	303.1	46378 ppb	303.1	0.65%
QC value within limits for Si 251.611 Recovery = 92.76%						
Sn 189.927†	21393.2	11030 µg/L	31.7	11030 ppb	31.7	0.29%
QC value greater than the upper limit for Sn 189.927 Recovery = 110.30%						
Sr 421.552†	1727349.9	9771.8 µg/L	177.98	9771.8 ppb	177.98	1.82%
QC value within limits for Sr 421.552 Recovery = 97.72%						
Ti 334.940†	4313262.8	10286 µg/L	66.7	10286 ppb	66.7	0.65%
QC value within limits for Ti 334.940 Recovery = 102.86%						
Tl 190.801†	6379.2	9898.1 µg/L	36.08	9898.1 ppb	36.08	0.36%
QC value within limits for Tl 190.801 Recovery = 98.98%						
U 409.014†	1126.4	107.39 µg/L	3.622	107.39 ppb	3.622	3.37%
V 292.402†	877110.0	10327 µg/L	69.8	10327 ppb	69.8	0.68%
QC value within limits for V 292.402 Recovery = 103.27%						
Zn 213.857†	553092.4	15062 µg/L	104.5	15062 ppb	104.5	0.69%
QC value within limits for Zn 213.857 Recovery = 100.41%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 10:11:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111106.7	111106.7	100	%			10:12:18
1	Al 396.153Radial†	10359.3	10186.7	5478.9	µg/L	5478.9	ppb	10:12:18
1	Ca 317.933Radial†	13217.9	12769.1	5415.8	µg/L	5415.8	ppb	10:12:18
1	Fe 238.204 Radial†	774.9	756.9	5436.2	µg/L	5436.2	ppb	10:12:38
1	K 766.490 Radial†	10401.6	9599.6	5391.1	µg/L	5391.1	ppb	10:12:18
1	Mg 279.077 IEC†	830.2	812.1	5540.2	µg/L	5540.2	ppb	10:12:38
1	Na 589.592 Radial†	38217.4	38681.2	10784	µg/L	10784	ppb	10:12:18
1	Sr 421.552†	94909.1	94708.7	535.78	µg/L	535.78	ppb	10:12:18
1	Sc 361.383	2034976.9	2034976.9	99.118	%			10:13:42
1	Y 371.029	1283464.4	1283464.4	99.937	%			10:13:42
1	Ag 328.068†	55852.2	56143.9	540.31	µg/L	540.31	ppb	10:13:47
1	As 188.979†	280.3	284.1	522.66	µg/L	522.66	ppb	10:14:08
1	B 249.677†	11972.2	11909.2	532.64	µg/L	532.64	ppb	10:13:47
1	Ba 233.527†	19638.0	19882.0	528.72	µg/L	528.72	ppb	10:13:47
1	Be 313.107†	800708.4	804203.9	521.94	µg/L	521.94	ppb	10:13:42
1	Cd 226.502†	19272.4	19540.3	530.85	µg/L	530.85	ppb	10:13:47
1	Co 228.616†	10431.4	10597.1	528.41	µg/L	528.41	ppb	10:13:47
1	Cr 267.716†	24078.0	24429.1	529.57	µg/L	529.57	ppb	10:13:47
1	Cu 324.752†	76235.1	72885.7	522.87	µg/L	522.87	ppb	10:13:47
1	Mn 257.610†	154294.3	155912.7	522.26	µg/L	522.26	ppb	10:13:47
1	Mo 202.031†	4450.7	4491.5	539.85	µg/L	539.85	ppb	10:14:08
1	Ni 231.604†	9541.8	9311.2	528.12	µg/L	528.12	ppb	10:13:47
1	P 214.914†	1433.2	1265.1	2600.6	µg/L	2600.6	ppb	10:14:08
1	Pb 220.353†	2057.6	2038.5	539.96	µg/L	539.96	ppb	10:14:08
1	S 181.975 Axial†	248.7	222.9	1124.1	µg/L	1124.1	ppb	10:14:08
1	Sb 206.836†	572.3	557.7	564.52	µg/L	564.52	ppb	10:14:08
1	Se 196.026†	431.5	422.8	546.62	µg/L	546.62	ppb	10:14:08
1	SiO2†	32767.4	30440.1	5801.9	µg/L	5801.9	ppb	10:13:47
1	Si 251.611†	35302.0	35236.6	2663.3	µg/L	2663.3	ppb	10:13:47
1	Sn 189.927†	1072.0	1059.5	549.25	µg/L	549.25	ppb	10:14:08
1	Ti 334.940†	228571.7	229626.7	547.28	µg/L	547.28	ppb	10:13:42
1	Tl 190.801†	325.6	350.4	542.88	µg/L	542.88	ppb	10:14:08
1	U 409.014†	5993.2	5420.5	516.04	µg/L	516.04	ppb	10:13:47
1	V 292.402†	44514.2	45039.3	531.69	µg/L	531.69	ppb	10:13:47
1	Zn 213.857†	20057.0	19633.1	533.33	µg/L	533.33	ppb	10:13:47
2	Sc RADIAL	112418.5	112418.5	101	%			10:12:44
2	Al 396.153Radial†	10449.8	10155.4	5462.0	µg/L	5462.0	ppb	10:12:44
2	Ca 317.933Radial†	13394.0	12788.8	5424.1	µg/L	5424.1	ppb	10:12:44
2	Fe 238.204 Radial†	764.7	737.9	5300.0	µg/L	5300.0	ppb	10:13:04
2	K 766.490 Radial†	10465.7	9541.7	5358.6	µg/L	5358.6	ppb	10:12:44
2	Mg 279.077 IEC†	825.7	798.1	5444.5	µg/L	5444.5	ppb	10:13:04
2	Na 589.592 Radial†	38658.1	38670.8	10781	µg/L	10781	ppb	10:12:44
2	Sr 421.552†	96090.2	94768.3	536.11	µg/L	536.11	ppb	10:12:44
2	Sc 361.383	2033394.0	2033394.0	99.041	%			10:14:15
2	Y 371.029	1277429.5	1277429.5	99.467	%			10:14:15
2	Ag 328.068†	55822.2	56157.4	540.42	µg/L	540.42	ppb	10:14:20
2	As 188.979†	284.0	288.1	530.03	µg/L	530.03	ppb	10:14:41
2	B 249.677†	12014.8	11961.6	535.03	µg/L	535.03	ppb	10:14:20
2	Ba 233.527†	19595.7	19854.7	527.99	µg/L	527.99	ppb	10:14:20
2	Be 313.107†	813019.8	817263.4	530.42	µg/L	530.42	ppb	10:14:15
2	Cd 226.502†	19248.3	19531.0	530.62	µg/L	530.62	ppb	10:14:20
2	Co 228.616†	10420.3	10594.2	528.25	µg/L	528.25	ppb	10:14:20
2	Cr 267.716†	23963.0	24331.9	527.47	µg/L	527.47	ppb	10:14:20
2	Cu 324.752†	76072.4	72781.3	522.09	µg/L	522.09	ppb	10:14:20
2	Mn 257.610†	154048.0	155785.3	521.81	µg/L	521.81	ppb	10:14:20
2	Mo 202.031†	4449.8	4494.0	540.15	µg/L	540.15	ppb	10:14:41
2	Ni 231.604†	9523.2	9299.9	527.48	µg/L	527.48	ppb	10:14:20
2	P 214.914†	1444.3	1277.4	2626.7	µg/L	2626.7	ppb	10:14:41
2	Pb 220.353†	2060.0	2042.6	541.02	µg/L	541.02	ppb	10:14:41

2	S 181.975 Axial†	242.8	217.1	1095.0 µg/L	1095.0 ppb	10:14:41
2	Sb 206.836†	559.5	545.3	551.93 µg/L	551.93 ppb	10:14:41
2	Se 196.026†	435.5	427.2	552.24 µg/L	552.24 ppb	10:14:41
2	SiO2†	32786.7	30485.3	5810.5 µg/L	5810.5 ppb	10:14:20
2	Si 251.611†	35215.9	35177.3	2658.7 µg/L	2658.7 ppb	10:14:20
2	Sn 189.927†	1066.4	1054.7	546.71 µg/L	546.71 ppb	10:14:41
2	Ti 334.940†	230151.4	231401.1	551.52 µg/L	551.52 ppb	10:14:15
2	Tl 190.801†	321.7	346.8	537.28 µg/L	537.28 ppb	10:14:41
2	U 409.014†	6157.2	5590.8	532.30 µg/L	532.30 ppb	10:14:20
2	V 292.402†	44385.3	44944.1	530.60 µg/L	530.60 ppb	10:14:20
2	Zn 213.857†	20024.6	19616.1	532.88 µg/L	532.88 ppb	10:14:20
3	Sc RADIAL	112146.6	112146.6	101 %		10:13:10
3	Al 396.153Radial†	10472.6	10202.9	5488.0 µg/L	5488.0 ppb	10:13:10
3	Ca 317.933Radial†	13372.1	12799.2	5428.5 µg/L	5428.5 ppb	10:13:10
3	Fe 238.204 Radial†	779.9	754.6	5420.0 µg/L	5420.0 ppb	10:13:30
3	K 766.490 Radial†	10483.1	9583.9	5382.3 µg/L	5382.3 ppb	10:13:10
3	Mg 279.077 IEC†	827.8	802.2	5472.1 µg/L	5472.1 ppb	10:13:30
3	Na 589.592 Radial†	38439.3	38547.0	10747 µg/L	10747 ppb	10:13:10
3	Sr 421.552†	95679.2	94591.8	535.12 µg/L	535.12 ppb	10:13:10
3	Sc 361.383	2063773.6	2063773.6	100.52 %		10:14:47
3	Y 371.029	1292178.3	1292178.3	100.62 %		10:14:47
3	Ag 328.068†	56423.6	55926.1	538.21 µg/L	538.21 ppb	10:14:53
3	As 188.979†	288.0	287.9	529.53 µg/L	529.53 ppb	10:15:14
3	B 249.677†	12085.7	11853.6	530.15 µg/L	530.15 ppb	10:14:53
3	Ba 233.527†	19794.0	19760.7	525.49 µg/L	525.49 ppb	10:14:53
3	Be 313.107†	821278.9	813395.8	527.91 µg/L	527.91 ppb	10:14:47
3	Cd 226.502†	19528.4	19523.6	530.40 µg/L	530.40 ppb	10:14:53
3	Co 228.616†	10548.4	10566.7	526.87 µg/L	526.87 ppb	10:14:53
3	Cr 267.716†	24308.1	24319.1	527.18 µg/L	527.18 ppb	10:14:53
3	Cu 324.752†	76879.6	72453.7	519.77 µg/L	519.77 ppb	10:14:53
3	Mn 257.610†	155683.3	155122.4	519.61 µg/L	519.61 ppb	10:14:53
3	Mo 202.031†	4435.4	4413.6	530.49 µg/L	530.49 ppb	10:15:14
3	Ni 231.604†	9626.6	9261.2	525.28 µg/L	525.28 ppb	10:14:53
3	P 214.914†	1443.4	1255.0	2579.7 µg/L	2579.7 ppb	10:15:14
3	Pb 220.353†	2050.7	2002.7	530.45 µg/L	530.45 ppb	10:15:14
3	S 181.975 Axial†	251.7	222.4	1121.8 µg/L	1121.8 ppb	10:15:14
3	Sb 206.836†	554.2	531.7	538.12 µg/L	538.12 ppb	10:15:14
3	Se 196.026†	427.6	412.9	533.85 µg/L	533.85 ppb	10:15:14
3	SiO2†	33113.2	30322.8	5779.5 µg/L	5779.5 ppb	10:14:53
3	Si 251.611†	35619.8	35055.8	2649.9 µg/L	2649.9 ppb	10:14:53
3	Sn 189.927†	1070.3	1042.7	540.55 µg/L	540.55 ppb	10:15:14
3	Ti 334.940†	231136.5	228960.4	545.70 µg/L	545.70 ppb	10:14:47
3	Tl 190.801†	323.8	344.1	533.13 µg/L	533.13 ppb	10:15:14
3	U 409.014†	6123.7	5466.0	520.38 µg/L	520.38 ppb	10:14:53
3	V 292.402†	44864.3	44760.9	528.38 µg/L	528.38 ppb	10:14:53
3	Zn 213.857†	20219.9	19512.9	530.06 µg/L	530.06 ppb	10:14:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2044048.2	99.560	%	0.8329				0.84%
Sc RADIAL	111890.6	101	%	0.6				0.62%
Y 371.029	1284357.4	100.01	%	0.577				0.58%
Ag 328.068†	56075.8	539.65	µg/L	1.248	539.65	ppb	1.248	0.23%
QC value within limits for Ag 328.068 Recovery = 107.93%								
Al 396.153Radial†	10181.7	5476.3	µg/L	13.20	5476.3	ppb	13.20	0.24%
QC value within limits for Al 396.153Radial Recovery = 109.53%								
As 188.979†	286.7	527.40	µg/L	4.119	527.40	ppb	4.119	0.78%
QC value within limits for As 188.979 Recovery = 105.48%								
B 249.677†	11908.1	532.61	µg/L	2.443	532.61	ppb	2.443	0.46%
QC value within limits for B 249.677 Recovery = 106.52%								
Ba 233.527†	19832.5	527.40	µg/L	1.693	527.40	ppb	1.693	0.32%
QC value within limits for Ba 233.527 Recovery = 105.48%								
Be 313.107†	811621.1	526.76	µg/L	4.355	526.76	ppb	4.355	0.83%
QC value within limits for Be 313.107 Recovery = 105.35%								
Ca 317.933Radial†	12785.7	5422.8	µg/L	6.49	5422.8	ppb	6.49	0.12%
QC value within limits for Ca 317.933Radial Recovery = 108.46%								
Cd 226.502†	19531.6	530.62	µg/L	0.226	530.62	ppb	0.226	0.04%
QC value within limits for Cd 226.502 Recovery = 106.12%								
Co 228.616†	10586.0	527.84	µg/L	0.846	527.84	ppb	0.846	0.16%

```
   QC value within limits for Co 228.616  Recovery = 105.57%
Cr 267.716†            24360.0      528.07 µg/L        1.304      528.07 ppb          1.304   0.25%
   QC value within limits for Cr 267.716  Recovery = 105.61%
Cu 324.752†            72706.9      521.58 µg/L        1.611      521.58 ppb          1.611   0.31%
   QC value within limits for Cu 324.752  Recovery = 104.32%
Fe 238.204 Radial†       749.8      5385.4 µg/L       74.43      5385.4 ppb          74.43   1.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.71%
K 766.490 Radial†       9575.0      5377.3 µg/L       16.81      5377.3 ppb          16.81   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 107.55%
Mg 279.077 IEC†          804.1      5485.6 µg/L       49.26      5485.6 ppb          49.26   0.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.71%
Mn 257.610†           155606.8      521.23 µg/L        1.417      521.23 ppb          1.417   0.27%
   QC value within limits for Mn 257.610  Recovery = 104.25%
Mo 202.031†             4466.4      536.83 µg/L        5.492      536.83 ppb          5.492   1.02%
   QC value within limits for Mo 202.031  Recovery = 107.37%
Na 589.592 Radial†     38633.0       10771 µg/L         20.8       10771 ppb           20.8   0.19%
   QC value within limits for Na 589.592 Radial  Recovery = 107.71%
Ni 231.604†             9290.8      526.96 µg/L        1.486      526.96 ppb          1.486   0.28%
   QC value within limits for Ni 231.604  Recovery = 105.39%
P 214.914†              1265.8      2602.3 µg/L       23.56      2602.3 ppb          23.56   0.91%
   QC value within limits for P 214.914  Recovery = 104.09%
Pb 220.353†             2027.9      537.14 µg/L        5.817      537.14 ppb          5.817   1.08%
   QC value within limits for Pb 220.353  Recovery = 107.43%
S 181.975 Axial†         220.8      1113.6 µg/L       16.15      1113.6 ppb          16.15   1.45%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 111.36%
Sb 206.836†              544.9      551.52 µg/L      13.209      551.52 ppb         13.209   2.40%
   QC value greater than the upper limit for Sb 206.836  Recovery = 110.30%
Se 196.026†              421.0      544.24 µg/L       9.423      544.24 ppb          9.423   1.73%
   QC value within limits for Se 196.026  Recovery = 108.85%
SiO2†                  30416.1      5797.3 µg/L       15.99      5797.3 ppb          15.99   0.28%
   QC value within limits for SiO2  Recovery = 108.41%
Si 251.611†            35156.6      2657.3 µg/L        6.79      2657.3 ppb           6.79   0.26%
   QC value within limits for Si 251.611  Recovery = 106.29%
Sn 189.927†             1052.3      545.50 µg/L        4.473      545.50 ppb          4.473   0.82%
   QC value within limits for Sn 189.927  Recovery = 109.10%
Sr 421.552†            94689.6      535.67 µg/L        0.508      535.67 ppb          0.508   0.09%
   QC value within limits for Sr 421.552  Recovery = 107.13%
Ti 334.940†           229996.1      548.17 µg/L        3.009      548.17 ppb          3.009   0.55%
   QC value within limits for Ti 334.940  Recovery = 109.63%
Tl 190.801†              347.1      537.76 µg/L        4.891      537.76 ppb          4.891   0.91%
   QC value within limits for Tl 190.801  Recovery = 107.55%
U 409.014†              5492.4      522.91 µg/L        8.422      522.91 ppb          8.422   1.61%
   QC value within limits for U 409.014  Recovery = 104.58%
V 292.402†             44914.8      530.23 µg/L        1.689      530.23 ppb          1.689   0.32%
   QC value within limits for V 292.402  Recovery = 106.05%
Zn 213.857†            19587.4      532.09 µg/L        1.774      532.09 ppb          1.774   0.33%
   QC value within limits for Zn 213.857  Recovery = 106.42%
QC Failed.  Continue with analysis.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 10:15:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112845.4	112845.4	102	%			10:15:55
1	Al 396.153Radial†	163.7	15.8	8.4641	µg/L	8.4641	ppb	10:15:55
1	Ca 317.933Radial†	494.8	72.1	30.589	µg/L	30.589	ppb	10:16:15
1	Fe 238.204 Radial†	22.3	5.9	42.500	µg/L	42.500	ppb	10:16:15
1	K 766.490 Radial†	837.1	47.6	26.731	µg/L	26.731	ppb	10:15:55
1	Mg 279.077 IEC†	21.5	5.3	36.395	µg/L	36.395	ppb	10:16:15
1	Na 589.592 Radial†	-534.5	40.4	11.275	µg/L	11.275	ppb	10:15:55
1	Sr 421.552†	-5.0	46.7	0.2644	µg/L	0.2644	ppb	10:15:55
1	Sc 361.383	2070675.4	2070675.4	100.86	%			10:17:17
1	Y 371.029	1298518.7	1298518.7	101.11	%			10:17:17
1	Ag 328.068†	221.6	14.5	0.1457	µg/L	0.1457	ppb	10:17:23
1	As 188.979†	0.8	2.1	3.8993	µg/L	3.8993	ppb	10:17:44
1	B 249.677†	297.3	125.3	5.6093	µg/L	5.6093	ppb	10:17:23
1	Ba 233.527†	-26.1	43.3	1.1510	µg/L	1.1510	ppb	10:17:44
1	Be 313.107†	4146.3	482.7	0.3115	µg/L	0.3115	ppb	10:17:23
1	Cd 226.502†	-52.6	44.2	1.1932	µg/L	1.1932	ppb	10:17:44
1	Co 228.616†	-47.3	26.1	1.2923	µg/L	1.2923	ppb	10:17:44
1	Cr 267.716†	-70.1	67.4	1.4589	µg/L	1.4589	ppb	10:17:23
1	Cu 324.752†	4314.5	250.2	1.7997	µg/L	1.7997	ppb	10:17:23
1	Mn 257.610†	13.2	258.8	0.8710	µg/L	0.8710	ppb	10:17:44
1	Mo 202.031†	9.4	10.5	1.2626	µg/L	1.2626	ppb	10:17:44
1	Ni 231.604†	330.6	12.2	0.6939	µg/L	0.6939	ppb	10:17:44
1	P 214.914†	177.8	-4.6	-9.7703	µg/L	-9.7703	ppb	10:17:44
1	Pb 220.353†	51.8	14.0	3.7149	µg/L	3.7149	ppb	10:17:44
1	S 181.975 Axial†	28.3	0.1	0.3145	µg/L	0.3145	ppb	10:17:44
1	Sb 206.836†	25.0	5.1	5.2152	µg/L	5.2152	ppb	10:17:44
1	Se 196.026†	12.0	-0.6	-0.7714	µg/L	-0.7714	ppb	10:17:44
1	SiO2†	2715.5	73.6	14.032	µg/L	14.032	ppb	10:17:23
1	Si 251.611†	473.7	90.1	6.6257	µg/L	6.6257	ppb	10:17:44
1	Sn 189.927†	27.8	5.6	2.8938	µg/L	2.8938	ppb	10:17:44
1	Ti 334.940†	3084.4	2079.5	4.9573	µg/L	4.9573	ppb	10:17:23
1	Tl 190.801†	-14.7	7.3	11.332	µg/L	11.332	ppb	10:17:44
1	U 409.014†	558.1	-72.6	-6.9338	µg/L	-6.9338	ppb	10:17:23
1	V 292.402†	-79.8	50.0	0.5852	µg/L	0.5852	ppb	10:17:23
1	Zn 213.857†	686.1	77.9	2.1213	µg/L	2.1213	ppb	10:17:44
2	Sc RADIAL	111422.1	111422.1	101	%			10:16:21
2	Al 396.153Radial†	326.2	179.3	96.734	µg/L	96.734	ppb	10:16:21
2	Ca 317.933Radial†	521.9	105.3	44.677	µg/L	44.677	ppb	10:16:41
2	Fe 238.204 Radial†	21.8	5.7	40.745	µg/L	40.745	ppb	10:16:41
2	K 766.490 Radial†	843.6	64.6	36.265	µg/L	36.265	ppb	10:16:21
2	Mg 279.077 IEC†	19.7	3.8	25.804	µg/L	25.804	ppb	10:16:41
2	Na 589.592 Radial†	-452.7	115.0	32.075	µg/L	32.075	ppb	10:16:21
2	Sr 421.552†	60.3	111.6	0.6315	µg/L	0.6315	ppb	10:16:21
2	Sc 361.383	2070517.7	2070517.7	100.85	%			10:17:50
2	Y 371.029	1299400.5	1299400.5	101.18	%			10:17:50
2	Ag 328.068†	191.3	-15.5	-0.1390	µg/L	-0.1390	ppb	10:17:55
2	As 188.979†	3.3	4.6	8.4886	µg/L	8.4886	ppb	10:18:16
2	B 249.677†	247.9	76.3	3.4096	µg/L	3.4096	ppb	10:17:55
2	Ba 233.527†	-31.2	38.3	1.0183	µg/L	1.0183	ppb	10:18:16
2	Be 313.107†	4101.9	439.0	0.2833	µg/L	0.2833	ppb	10:17:55
2	Cd 226.502†	-58.6	38.3	1.0324	µg/L	1.0324	ppb	10:18:16
2	Co 228.616†	-47.1	26.2	1.3038	µg/L	1.3038	ppb	10:18:16
2	Cr 267.716†	-39.5	97.7	2.1150	µg/L	2.1150	ppb	10:17:55
2	Cu 324.752†	4206.3	143.2	1.0336	µg/L	1.0336	ppb	10:17:55
2	Mn 257.610†	5.3	250.9	0.8446	µg/L	0.8446	ppb	10:18:16
2	Mo 202.031†	18.0	19.0	2.2830	µg/L	2.2830	ppb	10:18:16
2	Ni 231.604†	325.4	7.2	0.4057	µg/L	0.4057	ppb	10:18:16
2	P 214.914†	173.3	-9.1	-19.164	µg/L	-19.164	ppb	10:18:16
2	Pb 220.353†	50.5	12.7	3.3825	µg/L	3.3825	ppb	10:18:16

2	S 181.975 Axial†	28.2	-0.0	-0.0529 µg/L	-0.0529 ppb	10:18:16
2	Sb 206.836†	28.8	8.9	9.0516 µg/L	9.0516 ppb	10:18:16
2	Se 196.026†	17.1	4.5	5.7999 µg/L	5.7999 ppb	10:18:16
2	SiO2†	2730.0	88.2	16.802 µg/L	16.802 ppb	10:17:55
2	Si 251.611†	463.3	79.9	5.8644 µg/L	5.8644 ppb	10:18:16
2	Sn 189.927†	26.0	3.8	1.9621 µg/L	1.9621 ppb	10:18:16
2	Ti 334.940†	2935.8	1932.4	4.6057 µg/L	4.6057 ppb	10:17:55
2	Tl 190.801†	-21.6	0.5	0.7507 µg/L	0.7507 ppb	10:18:16
2	U 409.014†	569.6	-61.2	-5.8407 µg/L	-5.8407 ppb	10:17:55
2	V 292.402†	-52.4	77.1	0.9114 µg/L	0.9114 ppb	10:17:55
2	Zn 213.857†	670.8	62.8	1.7103 µg/L	1.7103 ppb	10:18:16
3	Sc RADIAL	111898.2	111898.2	101 %		10:16:47
3	Al 396.153Radial†	172.8	26.1	14.017 µg/L	14.017 ppb	10:16:47
3	Ca 317.933Radial†	528.3	109.4	46.406 µg/L	46.406 ppb	10:17:07
3	Fe 238.204 Radial†	21.4	5.2	37.286 µg/L	37.286 ppb	10:17:07
3	K 766.490 Radial†	783.1	1.1	0.6221 µg/L	0.6221 ppb	10:16:47
3	Mg 279.077 IEC†	16.7	0.7	4.6480 µg/L	4.6480 ppb	10:17:07
3	Na 589.592 Radial†	-534.7	35.8	9.9681 µg/L	9.9681 ppb	10:16:47
3	Sr 421.552†	21.0	72.4	0.4096 µg/L	0.4096 ppb	10:16:47
3	Sc 361.383	2081498.1	2081498.1	101.38 %		10:18:22
3	Y 371.029	1305511.2	1305511.2	101.65 %		10:18:22
3	Ag 328.068†	269.6	60.7	0.5894 µg/L	0.5894 ppb	10:18:28
3	As 188.979†	5.8	7.0	12.977 µg/L	12.977 ppb	10:18:48
3	B 249.677†	247.2	74.3	3.3215 µg/L	3.3215 ppb	10:18:28
3	Ba 233.527†	-23.8	45.7	1.2157 µg/L	1.2157 ppb	10:18:48
3	Be 313.107†	3940.9	258.7	0.1665 µg/L	0.1665 ppb	10:18:28
3	Cd 226.502†	-60.5	36.7	0.9878 µg/L	0.9878 ppb	10:18:48
3	Co 228.616†	-41.8	31.7	1.5750 µg/L	1.5750 ppb	10:18:48
3	Cr 267.716†	-86.8	51.3	1.1108 µg/L	1.1108 ppb	10:18:28
3	Cu 324.752†	4236.6	151.1	1.0896 µg/L	1.0896 ppb	10:18:28
3	Mn 257.610†	-26.9	219.2	0.7378 µg/L	0.7378 ppb	10:18:48
3	Mo 202.031†	12.7	13.8	1.6541 µg/L	1.6541 ppb	10:18:48
3	Ni 231.604†	332.0	12.0	0.6789 µg/L	0.6789 ppb	10:18:48
3	P 214.914†	173.0	-10.2	-21.554 µg/L	-21.554 ppb	10:18:48
3	Pb 220.353†	46.3	8.2	2.1887 µg/L	2.1887 ppb	10:18:48
3	S 181.975 Axial†	30.6	2.1	10.847 µg/L	10.847 ppb	10:18:48
3	Sb 206.836†	22.4	2.4	2.4735 µg/L	2.4735 ppb	10:18:48
3	Se 196.026†	16.2	3.5	4.5338 µg/L	4.5338 ppb	10:18:48
3	SiO2†	2707.1	51.3	9.7730 µg/L	9.7730 ppb	10:18:28
3	Si 251.611†	464.9	79.1	5.8131 µg/L	5.8131 ppb	10:18:48
3	Sn 189.927†	27.9	5.5	2.8385 µg/L	2.8385 ppb	10:18:48
3	Ti 334.940†	2666.7	1651.6	3.9358 µg/L	3.9358 ppb	10:18:28
3	Tl 190.801†	-15.5	6.6	10.257 µg/L	10.257 ppb	10:18:48
3	U 409.014†	552.5	-81.0	-7.7345 µg/L	-7.7345 ppb	10:18:28
3	V 292.402†	-52.0	77.7	0.9112 µg/L	0.9112 ppb	10:18:28
3	Zn 213.857†	664.9	53.5	1.4547 µg/L	1.4547 ppb	10:18:48

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2074230.4	101.03	%	0.307				0.30%
Sc RADIAL	112055.2	101	%	0.7				0.65%
Y 371.029	1301143.5	101.31	%	0.297				0.29%
Ag 328.068†	19.9	0.1987	µg/L	0.36706	0.1987	ppb	0.36706	184.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	73.7	39.738	µg/L	49.4379	39.738	ppb	49.4379	124.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.6	8.4550	µg/L	4.53899	8.4550	ppb	4.53899	53.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	92.0	4.1135	µg/L	1.29615	4.1135	ppb	1.29615	31.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	42.5	1.1284	µg/L	0.10064	1.1284	ppb	0.10064	8.92%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	393.5	0.2538	µg/L	0.07687	0.2538	ppb	0.07687	30.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	95.6	40.557	µg/L	8.6758	40.557	ppb	8.6758	21.39%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	39.7	1.0711	µg/L	0.10803	1.0711	ppb	0.10803	10.09%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	28.0	1.3904	µg/L	0.15999	1.3904	ppb	0.15999	11.51%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                72.1      1.5616 µg/L       0.50991      1.5616 ppb        0.50991  32.65%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               181.5      1.3076 µg/L       0.42706      1.3076 ppb        0.42706  32.66%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          5.6      40.177 µg/L        2.6530     40.177 ppb         2.6530   6.60%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          37.8      21.206 µg/L       18.4525      21.206 ppb        18.4525  87.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             3.3      22.282 µg/L       16.1637      22.282 ppb        16.1637  72.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               243.0      0.8178 µg/L       0.07048      0.8178 ppb        0.07048   8.62%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                14.4      1.7333 µg/L       0.51477      1.7333 ppb        0.51477  29.70%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         63.7      17.772 µg/L       12.4034      17.772 ppb        12.4034  69.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                10.5      0.5928 µg/L       0.16220      0.5928 ppb        0.16220  27.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.9     -16.829 µg/L        6.2292     -16.829 ppb         6.2292  37.01%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.7      3.0954 µg/L       0.80257      3.0954 ppb        0.80257  25.93%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.7      3.7028 µg/L       6.18969      3.7028 ppb        6.18969 167.16%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.5      5.5801 µg/L       3.30424      5.5801 ppb        3.30424  59.21%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.5      3.1874 µg/L       3.48641      3.1874 ppb        3.48641 109.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      71.0      13.536 µg/L        3.5405      13.536 ppb         3.5405  26.16%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                83.0      6.1011 µg/L       0.45504      6.1011 ppb        0.45504   7.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.9      2.5648 µg/L       0.52269      2.5648 ppb        0.52269  20.38%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                76.9      0.4352 µg/L       0.18485      0.4352 ppb        0.18485  42.48%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              1887.8      4.4996 µg/L       0.51892      4.4996 ppb        0.51892  11.53%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.8      7.4466 µg/L       5.82369      7.4466 ppb        5.82369  78.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -71.6     -6.8363 µg/L       0.95065     -6.8363 ppb        0.95065  13.91%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 68.3      0.8026 µg/L       0.18829      0.8026 ppb        0.18829  23.46%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                64.7      1.7621 µg/L       0.33630      1.7621 ppb        0.33630  19.09%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

==========

Analysis Begun

Start Time: 12/11/2009 10:23:21 **Plasma On Time: 12/6/2009 23:29:48**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121109B.sif
Batch ID:
Results Data Set: 121109A
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/11/2009 09:13:53**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/11/2009 10:23:24**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	113662.9	113662.9	103	%			10:23:58
1	Al 396.153Radial†	10311.7	9908.0	5328.8	µg/L	5328.8	ppb	10:23:58
1	Ca 317.933Radial†	13198.1	12453.3	5281.8	µg/L	5281.8	ppb	10:23:58
1	Fe 238.204 Radial†	769.4	734.2	5273.6	µg/L	5273.6	ppb	10:24:18

1	K 766.490 Radial†	10379.2	9344.4	5247.8 µg/L	5247.8 ppb	10:23:58
1	Mg 279.077 IEC†	821.0	784.6	5352.3 µg/L	5352.3 ppb	10:24:18
1	Na 589.592 Radial†	38193.7	37800.9	10539 µg/L	10539 ppb	10:23:58
1	Sr 421.552†	94799.8	92473.4	523.13 µg/L	523.13 ppb	10:23:58
1	Sc 361.383	2080263.4	2080263.4	101.32 %		10:25:22
1	Y 371.029	1292263.6	1292263.6	100.62 %		10:25:22
1	Ag 328.068†	57174.8	56222.5	541.05 µg/L	541.05 ppb	10:25:27
1	As 188.979†	287.9	285.5	525.13 µg/L	525.13 ppb	10:25:48
1	B 249.677†	12105.8	11778.2	526.81 µg/L	526.81 ppb	10:25:27
1	Ba 233.527†	20076.7	19883.6	528.76 µg/L	528.76 ppb	10:25:27
1	Be 313.107†	830260.4	815783.6	529.46 µg/L	529.46 ppb	10:25:22
1	Cd 226.502†	19727.2	19565.8	531.56 µg/L	531.56 ppb	10:25:27
1	Co 228.616†	10706.4	10639.5	530.51 µg/L	530.51 ppb	10:25:27
1	Cr 267.716†	24492.3	24309.1	526.97 µg/L	526.97 ppb	10:25:27
1	Cu 324.752†	77577.8	72536.5	520.34 µg/L	520.34 ppb	10:25:27
1	Mn 257.610†	159587.5	157747.9	528.37 µg/L	528.37 ppb	10:25:22
1	Mo 202.031†	4471.2	4414.0	530.54 µg/L	530.54 ppb	10:25:48
1	Ni 231.604†	9782.9	9339.5	529.72 µg/L	529.72 ppb	10:25:27
1	P 214.914†	1459.0	1259.0	2588.1 µg/L	2588.1 ppb	10:25:48
1	Pb 220.353†	2057.6	1993.3	527.97 µg/L	527.97 ppb	10:25:48
1	S 181.975 Axial†	246.0	214.8	1083.4 µg/L	1083.4 ppb	10:25:48
1	Sb 206.836†	550.7	523.9	530.20 µg/L	530.20 ppb	10:25:48
1	Se 196.026†	433.3	415.1	536.68 µg/L	536.68 ppb	10:25:48
1	SiO2†	33512.7	30455.9	5804.9 µg/L	5804.9 ppb	10:25:27
1	Si 251.611†	35890.4	35041.9	2649.2 µg/L	2649.2 ppb	10:25:27
1	Sn 189.927†	1074.6	1038.5	538.31 µg/L	538.31 ppb	10:25:48
1	Ti 334.940†	229909.5	225926.8	538.47 µg/L	538.47 ppb	10:25:22
1	Tl 190.801†	323.2	340.9	528.26 µg/L	528.26 ppb	10:25:48
1	U 409.014†	6153.4	5447.0	518.59 µg/L	518.59 ppb	10:25:27
1	V 292.402†	45494.1	45028.7	531.50 µg/L	531.50 ppb	10:25:27
1	Zn 213.857†	20427.0	19557.8	531.28 µg/L	531.28 ppb	10:25:27
2	Sc RADIAL	115402.0	115402.0	104 %		10:24:24
2	Al 396.153Radial†	10461.7	9900.5	5324.5 µg/L	5324.5 ppb	10:24:24
2	Ca 317.933Radial†	13483.1	12533.0	5315.6 µg/L	5315.6 ppb	10:24:24
2	Fe 238.204 Radial†	774.5	727.8	5228.0 µg/L	5228.0 ppb	10:24:44
2	K 766.490 Radial†	10421.4	9232.5	5184.9 µg/L	5184.9 ppb	10:24:24
2	Mg 279.077 IEC†	822.1	773.6	5277.7 µg/L	5277.7 ppb	10:24:44
2	Na 589.592 Radial†	38766.5	37789.8	10536 µg/L	10536 ppb	10:24:24
2	Sr 421.552†	96250.7	92473.7	523.13 µg/L	523.13 ppb	10:24:24
2	Sc 361.383	2070347.6	2070347.6	100.84 %		10:25:55
2	Y 371.029	1289985.4	1289985.4	100.44 %		10:25:55
2	Ag 328.068†	57132.2	56450.5	543.24 µg/L	543.24 ppb	10:26:01
2	As 188.979†	290.4	289.4	532.30 µg/L	532.30 ppb	10:26:21
2	B 249.677†	12111.8	11841.3	529.66 µg/L	529.66 ppb	10:26:01
2	Ba 233.527†	20046.3	19948.4	530.48 µg/L	530.48 ppb	10:26:01
2	Be 313.107†	824433.4	813929.8	528.26 µg/L	528.26 ppb	10:25:55
2	Cd 226.502†	19692.9	19625.0	533.17 µg/L	533.17 ppb	10:26:01
2	Co 228.616†	10697.5	10681.2	532.61 µg/L	532.61 ppb	10:26:01
2	Cr 267.716†	24466.1	24399.0	528.92 µg/L	528.92 ppb	10:26:01
2	Cu 324.752†	77455.5	72781.9	522.08 µg/L	522.08 ppb	10:26:01
2	Mn 257.610†	158533.5	157457.1	527.40 µg/L	527.40 ppb	10:25:55
2	Mo 202.031†	4499.5	4463.2	536.44 µg/L	536.44 ppb	10:26:21
2	Ni 231.604†	9742.2	9345.4	530.06 µg/L	530.06 ppb	10:26:01
2	P 214.914†	1455.8	1262.7	2595.9 µg/L	2595.9 ppb	10:26:21
2	Pb 220.353†	2079.6	2024.9	536.33 µg/L	536.33 ppb	10:26:21
2	S 181.975 Axial†	244.2	214.1	1079.9 µg/L	1079.9 ppb	10:26:21
2	Sb 206.836†	563.8	539.5	546.02 µg/L	546.02 ppb	10:26:21
2	Se 196.026†	446.5	430.3	556.24 µg/L	556.24 ppb	10:26:21
2	SiO2†	33430.5	30532.8	5819.5 µg/L	5819.5 ppb	10:26:01
2	Si 251.611†	35900.3	35221.4	2662.7 µg/L	2662.7 ppb	10:26:01
2	Sn 189.927†	1083.8	1052.7	545.63 µg/L	545.63 ppb	10:26:21
2	Ti 334.940†	228481.1	225597.0	537.68 µg/L	537.68 ppb	10:25:55
2	Tl 190.801†	326.7	345.9	535.85 µg/L	535.85 ppb	10:26:21
2	U 409.014†	6147.0	5469.8	520.77 µg/L	520.77 ppb	10:26:01
2	V 292.402†	45438.2	45188.3	533.40 µg/L	533.40 ppb	10:26:01
2	Zn 213.857†	20430.6	19657.9	534.03 µg/L	534.03 ppb	10:26:01
3	Sc RADIAL	114286.1	114286.1	103 %		10:24:50
3	Al 396.153Radial†	10404.7	9943.4	5347.9 µg/L	5347.9 ppb	10:24:50
3	Ca 317.933Radial†	13338.1	12518.9	5309.6 µg/L	5309.6 ppb	10:24:50
3	Fe 238.204 Radial†	771.9	732.5	5261.5 µg/L	5261.5 ppb	10:25:10
3	K 766.490 Radial†	10325.4	9237.1	5187.5 µg/L	5187.5 ppb	10:24:50

3	Mg 279.077 IEC†	825.3	784.4	5351.4 µg/L	5351.4 ppb	10:25:10
3	Na 589.592 Radial†	38520.8	37915.0	10570 µg/L	10570 ppb	10:24:50
3	Sr 421.552†	95594.3	92739.7	524.64 µg/L	524.64 ppb	10:24:50
3	Sc 361.383	2079580.4	2079580.4	101.29 %		10:26:29
3	Y 371.029	1291193.6	1291193.6	100.54 %		10:26:29
3	Ag 328.068†	56530.9	55605.3	535.11 µg/L	535.11 ppb	10:26:34
3	As 188.979†	292.9	290.5	534.46 µg/L	534.46 ppb	10:26:55
3	B 249.677†	11936.4	11614.8	519.49 µg/L	519.49 ppb	10:26:34
3	Ba 233.527†	19799.9	19616.8	521.67 µg/L	521.67 ppb	10:26:34
3	Be 313.107†	819059.2	804994.3	522.46 µg/L	522.46 ppb	10:26:29
3	Cd 226.502†	19466.4	19314.7	524.74 µg/L	524.74 ppb	10:26:34
3	Co 228.616†	10586.6	10524.6	524.80 µg/L	524.80 ppb	10:26:34
3	Cr 267.716†	24203.7	24032.2	520.97 µg/L	520.97 ppb	10:26:34
3	Cu 324.752†	76689.7	71684.8	514.24 µg/L	514.24 ppb	10:26:34
3	Mn 257.610†	157787.9	156023.0	522.60 µg/L	522.60 ppb	10:26:29
3	Mo 202.031†	4455.0	4399.5	528.79 µg/L	528.79 ppb	10:26:55
3	Ni 231.604†	9647.6	9209.1	522.33 µg/L	522.33 ppb	10:26:34
3	P 214.914†	1450.1	1250.8	2571.5 µg/L	2571.5 ppb	10:26:55
3	Pb 220.353†	2052.8	1989.3	526.89 µg/L	526.89 ppb	10:26:55
3	S 181.975 Axial†	241.1	210.0	1059.1 µg/L	1059.1 ppb	10:26:55
3	Sb 206.836†	560.0	533.2	539.67 µg/L	539.67 ppb	10:26:55
3	Se 196.026†	427.4	409.5	529.43 µg/L	529.43 ppb	10:26:55
3	SiO2†	33025.6	29986.0	5715.3 µg/L	5715.3 ppb	10:26:34
3	Si 251.611†	35496.6	34664.7	2620.5 µg/L	2620.5 ppb	10:26:34
3	Sn 189.927†	1071.9	1036.2	537.13 µg/L	537.13 ppb	10:26:55
3	Ti 334.940†	226954.5	223084.0	531.69 µg/L	531.69 ppb	10:26:29
3	Tl 190.801†	325.3	343.1	531.56 µg/L	531.56 ppb	10:26:55
3	U 409.014†	6181.2	5476.5	521.41 µg/L	521.41 ppb	10:26:34
3	V 292.402†	44979.1	44535.1	525.72 µg/L	525.72 ppb	10:26:34
3	Zn 213.857†	20137.0	19278.1	523.67 µg/L	523.67 ppb	10:26:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2076730.5	101.15	%	0.270				0.27%
Sc RADIAL	114450.3	103	%	0.8				0.77%
Y 371.029	1291147.5	100.54	%	0.089				0.09%
Ag 328.068†	56092.8	539.80	µg/L	4.203	539.80	ppb	4.203	0.78%
QC value within limits for Ag 328.068 Recovery = 107.96%								
Al 396.153Radial†	9917.3	5333.7	µg/L	12.48	5333.7	ppb	12.48	0.23%
QC value within limits for Al 396.153Radial Recovery = 106.67%								
As 188.979†	288.5	530.63	µg/L	4.885	530.63	ppb	4.885	0.92%
QC value within limits for As 188.979 Recovery = 106.13%								
B 249.677†	11744.8	525.32	µg/L	5.247	525.32	ppb	5.247	1.00%
QC value within limits for B 249.677 Recovery = 105.06%								
Ba 233.527†	19816.3	526.97	µg/L	4.671	526.97	ppb	4.671	0.89%
QC value within limits for Ba 233.527 Recovery = 105.39%								
Be 313.107†	811569.2	526.73	µg/L	3.744	526.73	ppb	3.744	0.71%
QC value within limits for Be 313.107 Recovery = 105.35%								
Ca 317.933Radial†	12501.8	5302.4	µg/L	18.03	5302.4	ppb	18.03	0.34%
QC value within limits for Ca 317.933Radial Recovery = 106.05%								
Cd 226.502†	19501.9	529.83	µg/L	4.475	529.83	ppb	4.475	0.84%
QC value within limits for Cd 226.502 Recovery = 105.97%								
Co 228.616†	10615.1	529.31	µg/L	4.042	529.31	ppb	4.042	0.76%
QC value within limits for Co 228.616 Recovery = 105.86%								
Cr 267.716†	24246.8	525.62	µg/L	4.144	525.62	ppb	4.144	0.79%
QC value within limits for Cr 267.716 Recovery = 105.12%								
Cu 324.752†	72334.4	518.89	µg/L	4.119	518.89	ppb	4.119	0.79%
QC value within limits for Cu 324.752 Recovery = 103.78%								
Fe 238.204 Radial†	731.5	5254.4	µg/L	23.65	5254.4	ppb	23.65	0.45%
QC value within limits for Fe 238.204 Radial Recovery = 105.09%								
K 766.490 Radial†	9271.4	5206.8	µg/L	35.56	5206.8	ppb	35.56	0.68%
QC value within limits for K 766.490 Radial Recovery = 104.14%								
Mg 279.077 IEC†	780.9	5327.1	µg/L	42.82	5327.1	ppb	42.82	0.80%
QC value within limits for Mg 279.077 IEC Recovery = 106.54%								
Mn 257.610†	157076.0	526.12	µg/L	3.089	526.12	ppb	3.089	0.59%
QC value within limits for Mn 257.610 Recovery = 105.22%								
Mo 202.031†	4425.5	531.92	µg/L	4.011	531.92	ppb	4.011	0.75%
QC value within limits for Mo 202.031 Recovery = 106.38%								
Na 589.592 Radial†	37835.2	10548	µg/L	19.3	10548	ppb	19.3	0.18%

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   QC value within limits for Na 589.592 Radial  Recovery = 105.48%
Ni 231.604†            9298.0      527.37 µg/L        4.369      527.37 ppb        4.369   0.83%
   QC value within limits for Ni 231.604  Recovery = 105.47%
P 214.914†             1257.5      2585.1 µg/L       12.45      2585.1 ppb        12.45   0.48%
   QC value within limits for P 214.914  Recovery = 103.41%
Pb 220.353†            2002.5      530.40 µg/L        5.167      530.40 ppb        5.167   0.97%
   QC value within limits for Pb 220.353  Recovery = 106.08%
S 181.975 Axial†        213.0      1074.1 µg/L       13.11      1074.1 ppb        13.11   1.22%
   QC value within limits for S 181.975 Axial  Recovery = 107.41%
Sb 206.836†             532.2      538.63 µg/L        7.962      538.63 ppb        7.962   1.48%
   QC value within limits for Sb 206.836  Recovery = 107.73%
Se 196.026†             418.3      540.78 µg/L       13.867      540.78 ppb       13.867   2.56%
   QC value within limits for Se 196.026  Recovery = 108.16%
SiO2†                  30324.9      5779.9 µg/L       56.42      5779.9 ppb        56.42   0.98%
   QC value within limits for SiO2  Recovery = 108.09%
Si 251.611†            34976.0      2644.2 µg/L       21.56      2644.2 ppb        21.56   0.82%
   QC value within limits for Si 251.611  Recovery = 105.77%
Sn 189.927†            1042.5      540.36 µg/L        4.604      540.36 ppb        4.604   0.85%
   QC value within limits for Sn 189.927  Recovery = 108.07%
Sr 421.552†            92562.3      523.63 µg/L        0.869      523.63 ppb        0.869   0.17%
   QC value within limits for Sr 421.552  Recovery = 104.73%
Ti 334.940†           224869.2      535.95 µg/L        3.708      535.95 ppb        3.708   0.69%
   QC value within limits for Ti 334.940  Recovery = 107.19%
Tl 190.801†             343.3      531.89 µg/L        3.804      531.89 ppb        3.804   0.72%
   QC value within limits for Tl 190.801  Recovery = 106.38%
U 409.014†             5464.4      520.26 µg/L        1.478      520.26 ppb        1.478   0.28%
   QC value within limits for U 409.014  Recovery = 104.05%
V 292.402†            44917.4      530.21 µg/L        4.003      530.21 ppb        4.003   0.76%
   QC value within limits for V 292.402  Recovery = 106.04%
Zn 213.857†           19497.9      529.66 µg/L        5.364      529.66 ppb        5.364   1.01%
   QC value within limits for Zn 213.857  Recovery = 105.93%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 10:27:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111748.3	111748.3	101	%			10:27:37
1	Al 396.153Radial†	150.1	3.8	2.0194	µg/L	2.0194	ppb	10:27:37
1	Ca 317.933Radial†	415.1	-2.1	-0.8707	µg/L	-0.8707	ppb	10:27:58
1	Fe 238.204 Radial†	20.5	4.4	31.543	µg/L	31.543	ppb	10:27:58
1	K 766.490 Radial†	793.5	12.4	6.9872	µg/L	6.9872	ppb	10:27:37
1	Mg 279.077 IEC†	10.4	-5.5	-37.312	µg/L	-37.312	ppb	10:27:58
1	Na 589.592 Radial†	-572.9	-2.8	-0.7892	µg/L	-0.7892	ppb	10:27:37
1	Sr 421.552†	-38.3	13.7	0.0774	µg/L	0.0774	ppb	10:27:37
1	Sc 361.383	2057585.7	2057585.7	100.22	%			10:29:00
1	Y 371.029	1292509.0	1292509.0	100.64	%			10:29:00
1	Ag 328.068†	205.3	-0.4	-0.0027	µg/L	-0.0027	ppb	10:29:05
1	As 188.979†	6.4	7.7	14.208	µg/L	14.208	ppb	10:29:26
1	B 249.677†	187.6	17.7	0.7831	µg/L	0.7831	ppb	10:29:05
1	Ba 233.527†	-62.9	6.5	0.1724	µg/L	0.1724	ppb	10:29:26
1	Be 313.107†	3655.2	18.8	0.0116	µg/L	0.0116	ppb	10:29:05
1	Cd 226.502†	-93.9	2.6	0.0675	µg/L	0.0675	ppb	10:29:26
1	Co 228.616†	-57.4	15.7	0.7802	µg/L	0.7802	ppb	10:29:26
1	Cr 267.716†	-140.5	-3.3	-0.0714	µg/L	-0.0714	ppb	10:29:05
1	Cu 324.752†	4038.5	2.0	0.0209	µg/L	0.0209	ppb	10:29:05
1	Mn 257.610†	-235.9	10.3	0.0384	µg/L	0.0384	ppb	10:29:26
1	Mo 202.031†	2.0	3.2	0.3854	µg/L	0.3854	ppb	10:29:26
1	Ni 231.604†	322.6	6.4	0.3623	µg/L	0.3623	ppb	10:29:26
1	P 214.914†	176.6	-4.6	-9.7934	µg/L	-9.7934	ppb	10:29:26
1	Pb 220.353†	42.5	5.0	1.3216	µg/L	1.3216	ppb	10:29:26
1	S 181.975 Axial†	25.6	-2.4	-12.353	µg/L	-12.353	ppb	10:29:26
1	Sb 206.836†	19.0	-0.6	-0.6093	µg/L	-0.6093	ppb	10:29:26
1	Se 196.026†	10.9	-1.6	-2.0300	µg/L	-2.0300	ppb	10:29:26
1	SiO2†	2665.4	40.7	7.7653	µg/L	7.7653	ppb	10:29:05
1	Si 251.611†	398.1	17.7	1.3201	µg/L	1.3201	ppb	10:29:26
1	Sn 189.927†	21.1	-1.0	-0.5302	µg/L	-0.5302	ppb	10:29:26
1	Ti 334.940†	1625.6	643.3	1.5341	µg/L	1.5341	ppb	10:29:05
1	Tl 190.801†	-22.9	-0.9	-1.3735	µg/L	-1.3735	ppb	10:29:26
1	U 409.014†	604.6	-22.7	-2.1738	µg/L	-2.1738	ppb	10:29:05
1	V 292.402†	-150.6	-21.2	-0.2462	µg/L	-0.2462	ppb	10:29:05
1	Zn 213.857†	615.5	11.8	0.3200	µg/L	0.3200	ppb	10:29:26
2	Sc RADIAL	111392.4	111392.4	101	%			10:28:03
2	Al 396.153Radial†	133.5	-12.3	-6.6289	µg/L	-6.6289	ppb	10:28:03
2	Ca 317.933Radial†	416.0	0.1	0.0356	µg/L	0.0356	ppb	10:28:24
2	Fe 238.204 Radial†	15.0	-1.0	-7.5025	µg/L	-7.5025	ppb	10:28:24
2	K 766.490 Radial†	821.9	43.2	24.286	µg/L	24.286	ppb	10:28:03
2	Mg 279.077 IEC†	12.1	-3.8	-25.776	µg/L	-25.776	ppb	10:28:24
2	Na 589.592 Radial†	-523.8	44.2	12.325	µg/L	12.325	ppb	10:28:03
2	Sr 421.552†	-76.9	-24.8	-0.1405	µg/L	-0.1405	ppb	10:28:03
2	Sc 361.383	2081842.8	2081842.8	101.40	%			10:29:32
2	Y 371.029	1300436.6	1300436.6	101.26	%			10:29:32
2	Ag 328.068†	241.5	32.9	0.3146	µg/L	0.3146	ppb	10:29:38
2	As 188.979†	4.0	5.3	9.7155	µg/L	9.7155	ppb	10:29:58
2	B 249.677†	178.4	6.5	0.2919	µg/L	0.2919	ppb	10:29:38
2	Ba 233.527†	-56.5	13.5	0.3585	µg/L	0.3585	ppb	10:29:58
2	Be 313.107†	3741.9	61.9	0.0397	µg/L	0.0397	ppb	10:29:38
2	Cd 226.502†	-93.6	4.0	0.1012	µg/L	0.1012	ppb	10:29:58
2	Co 228.616†	-69.9	4.0	0.1985	µg/L	0.1985	ppb	10:29:58
2	Cr 267.716†	-117.1	21.4	0.4629	µg/L	0.4629	ppb	10:29:38
2	Cu 324.752†	4062.1	-21.7	-0.1570	µg/L	-0.1570	ppb	10:29:38
2	Mn 257.610†	-247.0	2.0	0.0059	µg/L	0.0059	ppb	10:29:58
2	Mo 202.031†	0.1	1.3	0.1545	µg/L	0.1545	ppb	10:29:58
2	Ni 231.604†	320.0	0.0	0.0013	µg/L	0.0013	ppb	10:29:58
2	P 214.914†	179.2	-4.1	-8.6079	µg/L	-8.6079	ppb	10:29:58
2	Pb 220.353†	37.7	-0.2	-0.0495	µg/L	-0.0495	ppb	10:29:58

2	S 181.975 Axial†	27.5	-0.9	-4.6590 µg/L	-4.6590 ppb	10:29:58
2	Sb 206.836†	25.1	5.2	5.2609 µg/L	5.2609 ppb	10:29:58
2	Se 196.026†	18.7	5.9	7.6009 µg/L	7.6009 ppb	10:29:58
2	SiO2†	2698.6	42.4	8.0904 µg/L	8.0904 ppb	10:29:38
2	Si 251.611†	400.7	15.7	1.1255 µg/L	1.1255 ppb	10:29:58
2	Sn 189.927†	23.8	1.4	0.7380 µg/L	0.7380 ppb	10:29:58
2	Ti 334.940†	1473.5	474.5	1.1315 µg/L	1.1315 ppb	10:29:38
2	Tl 190.801†	-15.7	6.5	10.001 µg/L	10.001 ppb	10:29:58
2	U 409.014†	503.1	-129.8	-12.381 µg/L	-12.381 ppb	10:29:38
2	V 292.402†	-121.3	9.4	0.0909 µg/L	0.0909 ppb	10:29:38
2	Zn 213.857†	613.0	2.2	0.0630 µg/L	0.0630 ppb	10:29:58
3	Sc RADIAL	111093.6	111093.6	100 %		10:28:29
3	Al 396.153Radial†	160.9	15.5	8.3160 µg/L	8.3160 ppb	10:28:29
3	Ca 317.933Radial†	406.5	-8.2	-3.4778 µg/L	-3.4778 ppb	10:28:50
3	Fe 238.204 Radial†	15.4	-0.6	-4.4774 µg/L	-4.4774 ppb	10:28:50
3	K 766.490 Radial†	769.9	-6.4	-3.5860 µg/L	-3.5860 ppb	10:28:29
3	Mg 279.077 IEC†	15.3	-0.6	-3.8040 µg/L	-3.8040 ppb	10:28:50
3	Na 589.592 Radial†	-566.0	0.8	0.2096 µg/L	0.2096 ppb	10:28:29
3	Sr 421.552†	-57.7	-5.9	-0.0336 µg/L	-0.0336 ppb	10:28:29
3	Sc 361.383	2060371.8	2060371.8	100.36 %		10:30:04
3	Y 371.029	1290584.2	1290584.2	100.49 %		10:30:04
3	Ag 328.068†	207.9	1.9	0.0156 µg/L	0.0156 ppb	10:30:10
3	As 188.979†	-0.5	0.8	1.5173 µg/L	1.5173 ppb	10:30:30
3	B 249.677†	191.8	21.6	0.9722 µg/L	0.9722 ppb	10:30:10
3	Ba 233.527†	-58.5	11.0	0.2898 µg/L	0.2898 ppb	10:30:30
3	Be 313.107†	3656.2	14.8	0.0091 µg/L	0.0091 ppb	10:30:10
3	Cd 226.502†	-98.5	-1.8	-0.0420 µg/L	-0.0420 ppb	10:30:30
3	Co 228.616†	-69.8	3.4	0.1705 µg/L	0.1705 ppb	10:30:30
3	Cr 267.716†	-139.4	-2.1	-0.0455 µg/L	-0.0455 ppb	10:30:10
3	Cu 324.752†	4132.3	90.0	0.6430 µg/L	0.6430 ppb	10:30:10
3	Mn 257.610†	-225.6	20.8	0.0691 µg/L	0.0691 ppb	10:30:30
3	Mo 202.031†	5.7	6.8	0.8185 µg/L	0.8185 ppb	10:30:30
3	Ni 231.604†	324.7	8.0	0.4533 µg/L	0.4533 ppb	10:30:30
3	P 214.914†	172.6	-8.9	-18.738 µg/L	-18.738 ppb	10:30:30
3	Pb 220.353†	42.8	5.2	1.3794 µg/L	1.3794 ppb	10:30:30
3	S 181.975 Axial†	33.6	5.4	27.503 µg/L	27.503 ppb	10:30:30
3	Sb 206.836†	22.1	2.4	2.4432 µg/L	2.4432 ppb	10:30:30
3	Se 196.026†	15.6	3.1	3.9623 µg/L	3.9623 ppb	10:30:30
3	SiO2†	2651.4	23.1	4.4084 µg/L	4.4084 ppb	10:30:10
3	Si 251.611†	397.3	16.4	1.1742 µg/L	1.1742 ppb	10:30:30
3	Sn 189.927†	23.3	1.2	0.6309 µg/L	0.6309 ppb	10:30:30
3	Ti 334.940†	1552.1	567.9	1.3545 µg/L	1.3545 ppb	10:30:10
3	Tl 190.801†	-19.3	2.7	4.1259 µg/L	4.1259 ppb	10:30:30
3	U 409.014†	707.3	78.8	7.5172 µg/L	7.5172 ppb	10:30:10
3	V 292.402†	-162.1	-32.5	-0.3627 µg/L	-0.3627 ppb	10:30:10
3	Zn 213.857†	611.3	6.8	0.1837 µg/L	0.1837 ppb	10:30:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2066600.1	100.66	%	0.647				0.64%
Sc RADIAL	111411.4	101	%	0.3				0.29%
Y 371.029	1294509.9	100.80	%	0.407				0.40%
Ag 328.068†	11.5	0.1092	µg/L	0.17811	0.1092	ppb	0.17811	163.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.3	1.2355	µg/L	7.50321	1.2355	ppb	7.50321	607.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.6	8.4803	µg/L	6.43500	8.4803	ppb	6.43500	75.88%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	15.3	0.6824	µg/L	0.35116	0.6824	ppb	0.35116	51.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.3	0.2736	µg/L	0.09408	0.2736	ppb	0.09408	34.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.8	0.0202	µg/L	0.01699	0.0202	ppb	0.01699	84.25%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.4	-1.4376	µg/L	1.82403	-1.4376	ppb	1.82403	126.88%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.6	0.0423	µg/L	0.07485	0.0423	ppb	0.07485	177.14%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	7.7	0.3831	µg/L	0.34426	0.3831	ppb	0.34426	89.87%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.4      0.1153 µg/L       0.30129      0.1153 ppb        0.30129 261.27%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                23.4      0.1690 µg/L       0.42004      0.1690 ppb        0.42004 248.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.9      6.5211 µg/L      21.72255      6.5211 ppb       21.72255 333.11%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          16.4      9.2291 µg/L      14.07067      9.2291 ppb       14.07067 152.46%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.3    -22.298 µg/L       17.0227     -22.298 ppb        17.0227  76.34%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                11.1      0.0378 µg/L       0.03161      0.0378 ppb        0.03161  83.58%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4528 µg/L       0.33707      0.4528 ppb        0.33707  74.44%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         14.0      3.9153 µg/L       7.30053      3.9153 ppb        7.30053 186.46%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.8      0.2723 µg/L       0.23908      0.2723 ppb        0.23908  87.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.9    -12.380 µg/L        5.5381     -12.380 ppb         5.5381  44.74%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 3.3      0.8838 µg/L       0.80880      0.8838 ppb        0.80880  91.51%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.7      3.4972 µg/L      21.14266      3.4972 ppb       21.14266 604.57%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      2.3649 µg/L       2.93591      2.3649 ppb        2.93591 124.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.5      3.1777 µg/L       4.86314      3.1777 ppb        4.86314 153.04%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      35.4      6.7547 µg/L       2.03843      6.7547 ppb        2.03843  30.18%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                16.6      1.2066 µg/L       0.10127      1.2066 ppb        0.10127   8.39%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.6      0.2796 µg/L       0.70335      0.2796 ppb        0.70335 251.58%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.7     -0.0322 µg/L       0.10897     -0.0322 ppb        0.10897 337.99%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               561.9      1.3400 µg/L       0.20173      1.3400 ppb        0.20173  15.05%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.8      4.2511 µg/L       5.68832      4.2511 ppb        5.68832 133.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -24.6     -2.3459 µg/L       9.95031     -2.3459 ppb        9.95031 424.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -14.8     -0.1727 µg/L       0.23560     -0.1727 ppb        0.23560 136.46%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 7.0      0.1889 µg/L       0.12855      0.1889 ppb        0.12855  68.06%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: LR2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 12/11/2009 10:30:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112450.9	112450.9	101	%			10:31:14
1	Al 396.153Radial†	119.8	-26.9	-14.551	µg/L	-14.551	ppb	10:31:14
1	Ca 317.933Radial†	419.7	-0.1	-0.0401	µg/L	-0.0401	ppb	10:31:35
1	Fe 238.204 Radial†	18.2	2.0	14.407	µg/L	14.407	ppb	10:31:35
1	K 766.490 Radial†	783.5	-2.3	-1.2717	µg/L	-1.2717	ppb	10:31:14
1	Mg 279.077 IEC†	17.8	1.7	11.790	µg/L	11.790	ppb	10:31:35
1	Na 589.592 Radial†	-645.9	-71.2	-19.840	µg/L	-19.840	ppb	10:31:14
1	Sr 421.552†	-87.6	-34.7	-0.1962	µg/L	-0.1962	ppb	10:31:14
1	Sc 361.383	2056022.7	2056022.7	100.14	%			10:32:37
1	Y 371.029	1284423.3	1284423.3	100.01	%			10:32:37
1	Ag 328.068†	230.4	24.9	0.2376	µg/L	0.2376	ppb	10:32:43
1	As 188.979†	5.4	6.8	12.478	µg/L	12.478	ppb	10:33:03
1	B 249.677†	176.0	6.2	0.2746	µg/L	0.2746	ppb	10:32:43
1	Ba 233.527†	397781.1	397281.4	10543	µg/L	10543	ppb	10:32:37
1	Be 313.107†	3616.6	-16.9	-0.0113	µg/L	-0.0113	ppb	10:32:43
1	Cd 226.502†	-100.8	-4.3	-0.1183	µg/L	-0.1183	ppb	10:33:03
1	Co 228.616†	-5.9	67.0	3.3414	µg/L	3.3414	ppb	10:33:03
1	Cr 267.716†	-126.4	10.7	0.2310	µg/L	0.2310	ppb	10:32:43
1	Cu 324.752†	4003.8	-29.6	-0.2091	µg/L	-0.2091	ppb	10:32:43
1	Mn 257.610†	-249.1	-3.1	-0.0086	µg/L	-0.0086	ppb	10:32:43
1	Mo 202.031†	0.2	1.4	0.1671	µg/L	0.1671	ppb	10:33:03
1	Ni 231.604†	367.2	51.2	2.9024	µg/L	2.9024	ppb	10:33:03
1	P 214.914†	173.5	-7.6	-15.993	µg/L	-15.993	ppb	10:33:03
1	Pb 220.353†	45.9	8.5	2.2480	µg/L	2.2480	ppb	10:33:03
1	S 181.975 Axial†	30.5	2.4	12.324	µg/L	12.324	ppb	10:33:03
1	Sb 206.836†	21.9	2.2	2.2709	µg/L	2.2709	ppb	10:33:03
1	Se 196.026†	14.6	2.1	2.7232	µg/L	2.7232	ppb	10:33:03
1	SiO2†	2606.9	-15.7	-2.9967	µg/L	-2.9967	ppb	10:32:43
1	Si 251.611†	392.2	12.2	0.8896	µg/L	0.8896	ppb	10:33:03
1	Sn 189.927†	23.1	1.0	0.5106	µg/L	0.5106	ppb	10:33:03
1	Ti 334.940†	1274.3	293.8	0.7005	µg/L	0.7005	ppb	10:32:43
1	Tl 190.801†	-14.2	7.7	11.878	µg/L	11.878	ppb	10:33:03
1	U 409.014†	567.6	-59.2	-5.6472	µg/L	-5.6472	ppb	10:32:43
1	V 292.402†	-142.5	-13.3	-0.1617	µg/L	-0.1617	ppb	10:32:43
1	Zn 213.857†	584.2	-19.0	-0.5375	µg/L	-0.5375	ppb	10:33:03
2	Sc RADIAL	111594.0	111594.0	101	%			10:31:40
2	Al 396.153Radial†	160.2	14.1	7.5782	µg/L	7.5782	ppb	10:31:40
2	Ca 317.933Radial†	421.4	4.8	2.0242	µg/L	2.0242	ppb	10:32:00
2	Fe 238.204 Radial†	18.7	2.6	18.929	µg/L	18.929	ppb	10:32:00
2	K 766.490 Radial†	662.8	-116.2	-65.267	µg/L	-65.267	ppb	10:31:40
2	Mg 279.077 IEC†	15.4	-0.5	-3.6630	µg/L	-3.6630	ppb	10:32:00
2	Na 589.592 Radial†	-643.7	-73.8	-20.584	µg/L	-20.584	ppb	10:31:40
2	Sr 421.552†	-79.1	-26.9	-0.1522	µg/L	-0.1522	ppb	10:31:40
2	Sc 361.383	2060685.2	2060685.2	100.37	%			10:33:10
2	Y 371.029	1288981.5	1288981.5	100.37	%			10:33:10
2	Ag 328.068†	207.4	1.4	0.0160	µg/L	0.0160	ppb	10:33:15
2	As 188.979†	-1.2	0.2	0.3312	µg/L	0.3312	ppb	10:33:36
2	B 249.677†	186.9	16.8	0.7463	µg/L	0.7463	ppb	10:33:15
2	Ba 233.527†	392283.5	390905.4	10374	µg/L	10374	ppb	10:33:10
2	Be 313.107†	3585.9	-55.8	-0.0365	µg/L	-0.0365	ppb	10:33:15
2	Cd 226.502†	-102.6	-5.8	-0.1644	µg/L	-0.1644	ppb	10:33:36
2	Co 228.616†	-3.9	69.0	3.4413	µg/L	3.4413	ppb	10:33:36
2	Cr 267.716†	-128.4	8.9	0.1936	µg/L	0.1936	ppb	10:33:15
2	Cu 324.752†	3985.7	-56.6	-0.4014	µg/L	-0.4014	ppb	10:33:15
2	Mn 257.610†	-251.8	-5.3	-0.0152	µg/L	-0.0152	ppb	10:33:15
2	Mo 202.031†	3.6	4.8	0.5788	µg/L	0.5788	ppb	10:33:36
2	Ni 231.604†	351.9	35.0	1.9861	µg/L	1.9861	ppb	10:33:36
2	P 214.914†	172.5	-9.0	-18.832	µg/L	-18.832	ppb	10:33:36
2	Pb 220.353†	46.1	8.6	2.2731	µg/L	2.2731	ppb	10:33:36

2	S 181.975 Axial†	28.7	0.6	3.0071 µg/L	3.0071 ppb	10:33:36
2	Sb 206.836†	20.8	1.1	1.1178 µg/L	1.1178 ppb	10:33:36
2	Se 196.026†	20.8	8.2	10.617 µg/L	10.617 ppb	10:33:36
2	SiO2†	2601.7	-26.7	-5.0935 µg/L	-5.0935 ppb	10:33:15
2	Si 251.611†	378.3	-2.6	-0.2061 µg/L	-0.2061 ppb	10:33:36
2	Sn 189.927†	21.8	-0.3	-0.1484 µg/L	-0.1484 ppb	10:33:36
2	Ti 334.940†	1274.9	291.5	0.6949 µg/L	0.6949 ppb	10:33:15
2	Tl 190.801†	-19.4	2.6	4.0316 µg/L	4.0316 ppb	10:33:36
2	U 409.014†	526.9	-101.1	-9.6405 µg/L	-9.6405 ppb	10:33:15
2	V 292.402†	-113.9	15.6	0.1719 µg/L	0.1719 ppb	10:33:15
2	Zn 213.857†	583.4	-21.1	-0.5898 µg/L	-0.5898 ppb	10:33:36
3	Sc RADIAL	111515.0	111515.0	101 %		10:32:06
3	Al 396.153Radial†	145.9	-0.1	-0.0371 µg/L	-0.0371 ppb	10:32:06
3	Ca 317.933Radial†	420.5	4.2	1.7705 µg/L	1.7705 ppb	10:32:26
3	Fe 238.204 Radial†	16.3	0.3	2.0792 µg/L	2.0792 ppb	10:32:26
3	K 766.490 Radial†	744.4	-34.7	-19.477 µg/L	-19.477 ppb	10:32:06
3	Mg 279.077 IEC†	12.2	-3.7	-24.908 µg/L	-24.908 ppb	10:32:26
3	Na 589.592 Radial†	-589.7	-20.7	-5.7688 µg/L	-5.7688 ppb	10:32:06
3	Sr 421.552†	-77.9	-25.7	-0.1456 µg/L	-0.1456 ppb	10:32:06
3	Sc 361.383	2061740.1	2061740.1	100.42 %		10:33:42
3	Y 371.029	1312037.3	1312037.3	102.16 %		10:33:42
3	Ag 328.068†	245.5	39.3	0.3756 µg/L	0.3756 ppb	10:33:48
3	As 188.979†	7.2	8.5	15.646 µg/L	15.646 ppb	10:34:08
3	B 249.677†	167.3	-2.9	-0.1315 µg/L	-0.1315 ppb	10:33:48
3	Ba 233.527†	364973.0	363509.6	9646.6 µg/L	9646.6 ppb	10:33:42
3	Be 313.107†	3562.7	-80.7	-0.0528 µg/L	-0.0528 ppb	10:33:48
3	Cd 226.502†	-99.3	-2.5	-0.0726 µg/L	-0.0726 ppb	10:34:08
3	Co 228.616†	-9.1	63.9	3.1850 µg/L	3.1850 ppb	10:34:08
3	Cr 267.716†	-115.5	21.9	0.4741 µg/L	0.4741 ppb	10:33:48
3	Cu 324.752†	4006.8	-37.7	-0.2694 µg/L	-0.2694 ppb	10:33:48
3	Mn 257.610†	-243.1	3.6	0.0122 µg/L	0.0122 ppb	10:33:48
3	Mo 202.031†	0.5	1.7	0.2006 µg/L	0.2006 ppb	10:34:08
3	Ni 231.604†	358.1	41.1	2.3293 µg/L	2.3293 ppb	10:34:08
3	P 214.914†	178.0	-3.6	-7.6296 µg/L	-7.6296 ppb	10:34:08
3	Pb 220.353†	39.7	2.2	0.5804 µg/L	0.5804 ppb	10:34:08
3	S 181.975 Axial†	20.6	-7.5	-37.933 µg/L	-37.933 ppb	10:34:08
3	Sb 206.836†	18.9	-0.8	-0.8138 µg/L	-0.8138 ppb	10:34:08
3	Se 196.026†	9.2	-3.3	-4.2851 µg/L	-4.2851 ppb	10:34:08
3	SiO2†	2609.8	-20.0	-3.8100 µg/L	-3.8100 ppb	10:33:48
3	Si 251.611†	392.0	10.8	0.7999 µg/L	0.7999 ppb	10:34:08
3	Sn 189.927†	22.4	0.2	0.1106 µg/L	0.1106 ppb	10:34:08
3	Ti 334.940†	1385.2	400.7	0.9555 µg/L	0.9555 ppb	10:33:48
3	Tl 190.801†	-17.3	4.7	7.2904 µg/L	7.2904 ppb	10:34:08
3	U 409.014†	531.8	-96.4	-9.1971 µg/L	-9.1971 ppb	10:33:48
3	V 292.402†	-124.6	5.0	0.0454 µg/L	0.0454 ppb	10:33:48
3	Zn 213.857†	574.7	-30.1	-0.8340 µg/L	-0.8340 ppb	10:34:08

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2059482.7	100.31	%	0.148				0.15%
Sc RADIAL	111853.3	101	%	0.5				0.46%
Y 371.029	1295147.4	100.85	%	1.153				1.14%
Ag 328.068†	21.8	0.2097	µg/L	0.18144	0.2097	ppb	0.18144	86.52%
Al 396.153Radial†	-4.3	-2.3365	µg/L	11.24218	-2.3365	ppb	11.24218	481.16%
As 188.979†	5.1	9.4851	µg/L	8.08421	9.4851	ppb	8.08421	85.23%
B 249.677†	6.7	0.2965	µg/L	0.43930	0.2965	ppb	0.43930	148.17%
Ba 233.527†	383898.8	10188	µg/L	476.2	10188	ppb	476.2	4.67%
Be 313.107†	-51.1	-0.0335	µg/L	0.02090	-0.0335	ppb	0.02090	62.42%
Ca 317.933Radial†	3.0	1.2515	µg/L	1.12577	1.2515	ppb	1.12577	89.95%
Cd 226.502†	-4.2	-0.1184	µg/L	0.04594	-0.1184	ppb	0.04594	38.79%
Co 228.616†	66.7	3.3225	µg/L	0.12918	3.3225	ppb	0.12918	3.89%
Cr 267.716†	13.8	0.2996	µg/L	0.15232	0.2996	ppb	0.15232	50.84%
Cu 324.752†	-41.3	-0.2933	µg/L	0.09836	-0.2933	ppb	0.09836	33.53%
Fe 238.204 Radial†	1.6	11.805	µg/L	8.7209	11.805	ppb	8.7209	73.87%
K 766.490 Radial†	-51.1	-28.672	µg/L	32.9735	-28.672	ppb	32.9735	115.00%
Mg 279.077 IEC†	-0.8	-5.5939	µg/L	18.42514	-5.5939	ppb	18.42514	329.38%
Mn 257.610†	-1.6	-0.0039	µg/L	0.01429	-0.0039	ppb	0.01429	367.49%
Mo 202.031†	2.6	0.3155	µg/L	0.22862	0.3155	ppb	0.22862	72.46%
Na 589.592 Radial†	-55.2	-15.398	µg/L	8.3472	-15.398	ppb	8.3472	54.21%

Ni 231.604†	42.4	2.4059	µg/L	0.46296	2.4059	ppb	0.46296 19.24%
P 214.914†	-6.7	-14.151	µg/L	5.8236	-14.151	ppb	5.8236 41.15%
Pb 220.353†	6.4	1.7005	µg/L	0.97011	1.7005	ppb	0.97011 57.05%
S 181.975 Axial†	-1.5	-7.5338	µg/L	26.73513	-7.5338	ppb	26.73513 354.87%
Sb 206.836†	0.8	0.8583	µg/L	1.55866	0.8583	ppb	1.55866 181.60%
Se 196.026†	2.3	3.0183	µg/L	7.45530	3.0183	ppb	7.45530 247.00%
SiO2†	-20.8	-3.9667	µg/L	1.05718	-3.9667	ppb	1.05718 26.65%
Si 251.611†	6.8	0.4944	µg/L	0.60838	0.4944	ppb	0.60838 123.04%
Sn 189.927†	0.3	0.1576	µg/L	0.33202	0.1576	ppb	0.33202 210.68%
Sr 421.552†	-29.1	-0.1647	µg/L	0.02750	-0.1647	ppb	0.02750 16.70%
Ti 334.940†	328.7	0.7837	µg/L	0.14887	0.7837	ppb	0.14887 19.00%
Tl 190.801†	5.0	7.7334	µg/L	3.94209	7.7334	ppb	3.94209 50.97%
U 409.014†	-85.6	-8.1616	µg/L	2.18878	-8.1616	ppb	2.18878 26.82%
V 292.402†	2.4	0.0185	µg/L	0.16842	0.0185	ppb	0.16842 909.83%
Zn 213.857†	-23.4	-0.6538	µg/L	0.15831	-0.6538	ppb	0.15831 24.21%

Sequence No.: 4
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 10:34:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114415.5	114415.5	103	%			10:34:53
1	Al 396.153Radial†	10283.1	9814.2	5278.2	µg/L	5278.2	ppb	10:34:53
1	Ca 317.933Radial†	13221.1	12391.0	5255.4	µg/L	5255.4	ppb	10:34:53
1	Fe 238.204 Radial†	758.0	718.2	5159.0	µg/L	5159.0	ppb	10:35:13
1	K 766.490 Radial†	10242.4	9145.4	5136.0	µg/L	5136.0	ppb	10:34:53
1	Mg 279.077 IEC†	803.9	762.8	5203.8	µg/L	5203.8	ppb	10:35:13
1	Na 589.592 Radial†	37981.8	37350.7	10413	µg/L	10413	ppb	10:34:53
1	Sr 421.552†	94571.8	91644.5	518.44	µg/L	518.44	ppb	10:34:53
1	Sc 361.383	2065518.5	2065518.5	100.61	%			10:36:16
1	Y 371.029	1277091.3	1277091.3	99.441	%			10:36:16
1	Ag 328.068†	56381.4	55836.7	537.32	µg/L	537.32	ppb	10:36:22
1	As 188.979†	283.7	283.3	521.20	µg/L	521.20	ppb	10:36:42
1	B 249.677†	11884.2	11643.1	520.79	µg/L	520.79	ppb	10:36:22
1	Ba 233.527†	19805.2	19755.2	525.35	µg/L	525.35	ppb	10:36:22
1	Be 313.107†	806664.8	798179.5	518.04	µg/L	518.04	ppb	10:36:16
1	Cd 226.502†	19378.4	19358.1	525.93	µg/L	525.93	ppb	10:36:22
1	Co 228.616†	10473.8	10483.7	522.77	µg/L	522.77	ppb	10:36:22
1	Cr 267.716†	24099.5	24091.2	522.25	µg/L	522.25	ppb	10:36:22
1	Cu 324.752†	76264.4	71777.6	514.88	µg/L	514.88	ppb	10:36:22
1	Mn 257.610†	155385.8	154695.9	518.15	µg/L	518.15	ppb	10:36:22
1	Mo 202.031†	4408.5	4383.2	526.83	µg/L	526.83	ppb	10:36:42
1	Ni 231.604†	9602.4	9229.1	523.46	µg/L	523.46	ppb	10:36:22
1	P 214.914†	1445.0	1255.4	2581.1	µg/L	2581.1	ppb	10:36:42
1	Pb 220.353†	2048.6	1998.9	529.43	µg/L	529.43	ppb	10:36:42
1	S 181.975 Axial†	241.7	212.3	1070.5	µg/L	1070.5	ppb	10:36:42
1	Sb 206.836†	544.1	521.3	527.48	µg/L	527.48	ppb	10:36:42
1	Se 196.026†	424.0	409.0	528.74	µg/L	528.74	ppb	10:36:42
1	SiO2†	32924.3	30107.2	5738.4	µg/L	5738.4	ppb	10:36:22
1	Si 251.611†	35349.5	34757.1	2628.1	µg/L	2628.1	ppb	10:36:22
1	Sn 189.927†	1056.9	1028.5	533.13	µg/L	533.13	ppb	10:36:42
1	Ti 334.940†	222790.9	220470.7	525.46	µg/L	525.46	ppb	10:36:16
1	Tl 190.801†	315.7	335.7	520.10	µg/L	520.10	ppb	10:36:42
1	U 409.014†	6160.3	5497.2	523.40	µg/L	523.40	ppb	10:36:22
1	V 292.402†	44732.6	44592.3	526.37	µg/L	526.37	ppb	10:36:22
1	Zn 213.857†	20045.6	19322.5	524.90	µg/L	524.90	ppb	10:36:22
2	Sc RADIAL	113220.1	113220.1	102	%			10:35:19
2	Al 396.153Radial†	10167.4	9806.1	5273.9	µg/L	5273.9	ppb	10:35:19
2	Ca 317.933Radial†	13020.2	12329.5	5229.3	µg/L	5229.3	ppb	10:35:19
2	Fe 238.204 Radial†	764.5	732.3	5259.9	µg/L	5259.9	ppb	10:35:39
2	K 766.490 Radial†	10112.0	9122.6	5123.2	µg/L	5123.2	ppb	10:35:19
2	Mg 279.077 IEC†	808.1	775.1	5287.8	µg/L	5287.8	ppb	10:35:39
2	Na 589.592 Radial†	37744.2	37506.6	10457	µg/L	10457	ppb	10:35:19
2	Sr 421.552†	93413.9	91478.3	517.50	µg/L	517.50	ppb	10:35:19
2	Sc 361.383	2067674.1	2067674.1	100.71	%			10:36:49
2	Y 371.029	1281573.4	1281573.4	99.790	%			10:36:49
2	Ag 328.068†	55951.2	55351.1	532.65	µg/L	532.65	ppb	10:36:55
2	As 188.979†	287.6	286.9	527.76	µg/L	527.76	ppb	10:37:15
2	B 249.677†	11794.8	11542.1	516.22	µg/L	516.22	ppb	10:36:55
2	Ba 233.527†	19613.1	19544.0	519.73	µg/L	519.73	ppb	10:36:55
2	Be 313.107†	808737.1	799401.3	518.83	µg/L	518.83	ppb	10:36:49
2	Cd 226.502†	19174.3	19135.4	519.87	µg/L	519.87	ppb	10:36:55
2	Co 228.616†	10394.3	10393.9	518.29	µg/L	518.29	ppb	10:36:55
2	Cr 267.716†	23862.5	23831.0	516.61	µg/L	516.61	ppb	10:36:55
2	Cu 324.752†	75764.2	71201.8	510.78	µg/L	510.78	ppb	10:36:55
2	Mn 257.610†	153946.1	153105.3	512.84	µg/L	512.84	ppb	10:36:55
2	Mo 202.031†	4413.1	4383.2	526.83	µg/L	526.83	ppb	10:37:15
2	Ni 231.604†	9523.9	9141.1	518.47	µg/L	518.47	ppb	10:36:55
2	P 214.914†	1439.6	1248.6	2567.3	µg/L	2567.3	ppb	10:37:15
2	Pb 220.353†	2048.0	1996.1	528.71	µg/L	528.71	ppb	10:37:15

2	S 181.975 Axial†	242.2	212.5	1071.6 µg/L	1071.6 ppb	10:37:15
2	Sb 206.836†	549.4	526.0	532.28 µg/L	532.28 ppb	10:37:15
2	Se 196.026†	424.9	409.4	529.27 µg/L	529.27 ppb	10:37:15
2	SiO2†	32669.1	29819.7	5683.6 µg/L	5683.6 ppb	10:36:55
2	Si 251.611†	35114.2	34486.9	2607.0 µg/L	2607.0 ppb	10:36:55
2	Sn 189.927†	1067.3	1037.8	537.91 µg/L	537.91 ppb	10:37:15
2	Ti 334.940†	223640.9	221083.9	526.92 µg/L	526.92 ppb	10:36:49
2	Tl 190.801†	319.5	339.2	525.43 µg/L	525.43 ppb	10:37:15
2	U 409.014†	6080.4	5411.4	515.20 µg/L	515.20 ppb	10:36:55
2	V 292.402†	44321.2	44137.4	521.04 µg/L	521.04 ppb	10:36:55
2	Zn 213.857†	19886.8	19144.1	520.03 µg/L	520.03 ppb	10:36:55
3	Sc RADIAL	113432.2	113432.2	102 %		10:35:44
3	Al 396.153Radial†	10214.0	9833.0	5288.6 µg/L	5288.6 ppb	10:35:44
3	Ca 317.933Radial†	13126.8	12409.8	5263.4 µg/L	5263.4 ppb	10:35:44
3	Fe 238.204 Radial†	760.0	726.5	5218.5 µg/L	5218.5 ppb	10:36:05
3	K 766.490 Radial†	10217.8	9207.3	5170.8 µg/L	5170.8 ppb	10:35:44
3	Mg 279.077 IEC†	807.7	773.2	5274.8 µg/L	5274.8 ppb	10:36:05
3	Na 589.592 Radial†	37867.8	37558.3	10471 µg/L	10471 ppb	10:35:44
3	Sr 421.552†	94049.3	91928.1	520.05 µg/L	520.05 ppb	10:35:44
3	Sc 361.383	2063716.8	2063716.8	100.52 %		10:37:22
3	Y 371.029	1277989.9	1277989.9	99.511 %		10:37:22
3	Ag 328.068†	56529.0	56032.5	539.21 µg/L	539.21 ppb	10:37:28
3	As 188.979†	282.8	282.7	519.97 µg/L	519.97 ppb	10:37:48
3	B 249.677†	11978.4	11747.2	525.44 µg/L	525.44 ppb	10:37:28
3	Ba 233.527†	19825.7	19792.8	526.35 µg/L	526.35 ppb	10:37:28
3	Be 313.107†	812660.7	804844.5	522.36 µg/L	522.36 ppb	10:37:22
3	Cd 226.502†	19474.9	19470.9	528.99 µg/L	528.99 ppb	10:37:28
3	Co 228.616†	10545.4	10564.0	526.75 µg/L	526.75 ppb	10:37:28
3	Cr 267.716†	24257.1	24268.9	526.10 µg/L	526.10 ppb	10:37:28
3	Cu 324.752†	76665.0	72242.3	518.22 µg/L	518.22 ppb	10:37:28
3	Mn 257.610†	156041.7	155483.3	520.79 µg/L	520.79 ppb	10:37:28
3	Mo 202.031†	4361.0	4339.7	521.60 µg/L	521.60 ppb	10:37:48
3	Ni 231.604†	9672.2	9306.8	527.87 µg/L	527.87 ppb	10:37:28
3	P 214.914†	1415.9	1227.7	2522.5 µg/L	2522.5 ppb	10:37:48
3	Pb 220.353†	2012.2	1964.5	520.31 µg/L	520.31 ppb	10:37:48
3	S 181.975 Axial†	236.0	206.8	1042.8 µg/L	1042.8 ppb	10:37:48
3	Sb 206.836†	547.7	525.3	531.56 µg/L	531.56 ppb	10:37:48
3	Se 196.026†	424.6	410.0	530.01 µg/L	530.01 ppb	10:37:48
3	SiO2†	33109.6	30320.2	5779.0 µg/L	5779.0 ppb	10:37:28
3	Si 251.611†	35556.0	34993.3	2646.4 µg/L	2646.4 ppb	10:37:28
3	Sn 189.927†	1045.2	1017.7	527.59 µg/L	527.59 ppb	10:37:48
3	Ti 334.940†	224672.3	222535.8	530.38 µg/L	530.38 ppb	10:37:22
3	Tl 190.801†	316.8	337.1	522.29 µg/L	522.29 ppb	10:37:48
3	U 409.014†	6142.4	5484.7	522.20 µg/L	522.20 ppb	10:37:28
3	V 292.402†	44900.6	44798.3	528.74 µg/L	528.74 ppb	10:37:28
3	Zn 213.857†	20127.9	19421.9	527.58 µg/L	527.58 ppb	10:37:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2065636.5	100.61	%	0.097				0.10%
Sc RADIAL	113689.3	103	%	0.6				0.56%
Y 371.029	1278884.9	99.580	%	0.1846				0.19%
Ag 328.068†	55740.1	536.40	µg/L	3.375	536.40	ppb	3.375	0.63%
QC value within limits for Ag 328.068 Recovery = 107.28%								
Al 396.153Radial†	9817.7	5280.2	µg/L	7.58	5280.2	ppb	7.58	0.14%
QC value within limits for Al 396.153Radial Recovery = 105.60%								
As 188.979†	284.3	522.98	µg/L	4.188	522.98	ppb	4.188	0.80%
QC value within limits for As 188.979 Recovery = 104.60%								
B 249.677†	11644.1	520.82	µg/L	4.607	520.82	ppb	4.607	0.88%
QC value within limits for B 249.677 Recovery = 104.16%								
Ba 233.527†	19697.3	523.81	µg/L	3.568	523.81	ppb	3.568	0.68%
QC value within limits for Ba 233.527 Recovery = 104.76%								
Be 313.107†	800808.4	519.75	µg/L	2.303	519.75	ppb	2.303	0.44%
QC value within limits for Be 313.107 Recovery = 103.95%								
Ca 317.933Radial†	12376.8	5249.4	µg/L	17.82	5249.4	ppb	17.82	0.34%
QC value within limits for Ca 317.933Radial Recovery = 104.99%								
Cd 226.502†	19321.5	524.93	µg/L	4.644	524.93	ppb	4.644	0.88%
QC value within limits for Cd 226.502 Recovery = 104.99%								
Co 228.616†	10480.6	522.60	µg/L	4.231	522.60	ppb	4.231	0.81%

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   QC value within limits for Co 228.616  Recovery = 104.52%
Cr 267.716†            24063.7      521.65 µg/L        4.773      521.65 ppb          4.773   0.91%
   QC value within limits for Cr 267.716  Recovery = 104.33%
Cu 324.752†            71740.6      514.63 µg/L        3.726      514.63 ppb          3.726   0.72%
   QC value within limits for Cu 324.752  Recovery = 102.93%
Fe 238.204 Radial†       725.7      5212.5 µg/L       50.72      5212.5 ppb          50.72   0.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.25%
K 766.490 Radial†       9158.4      5143.3 µg/L       24.63      5143.3 ppb          24.63   0.48%
   QC value within limits for K 766.490 Radial  Recovery = 102.87%
Mg 279.077 IEC†         770.4      5255.5 µg/L       45.23      5255.5 ppb          45.23   0.86%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           154428.2      517.26 µg/L        4.049      517.26 ppb          4.049   0.78%
   QC value within limits for Mn 257.610  Recovery = 103.45%
Mo 202.031†             4368.7      525.09 µg/L        3.018      525.09 ppb          3.018   0.57%
   QC value within limits for Mo 202.031  Recovery = 105.02%
Na 589.592 Radial†     37471.9       10447 µg/L         30.1       10447 ppb           30.1   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 104.47%
Ni 231.604†             9225.7      523.27 µg/L        4.703      523.27 ppb          4.703   0.90%
   QC value within limits for Ni 231.604  Recovery = 104.65%
P 214.914†              1243.9      2557.0 µg/L       30.67      2557.0 ppb          30.67   1.20%
   QC value within limits for P 214.914  Recovery = 102.28%
Pb 220.353†             1986.5      526.15 µg/L        5.073      526.15 ppb          5.073   0.96%
   QC value within limits for Pb 220.353  Recovery = 105.23%
S 181.975 Axial†         210.5      1061.6 µg/L       16.29      1061.6 ppb          16.29   1.53%
   QC value within limits for S 181.975 Axial  Recovery = 106.16%
Sb 206.836†              524.2      530.44 µg/L        2.590      530.44 ppb          2.590   0.49%
   QC value within limits for Sb 206.836  Recovery = 106.09%
Se 196.026†              409.4      529.34 µg/L        0.638      529.34 ppb          0.638   0.12%
   QC value within limits for Se 196.026  Recovery = 105.87%
SiO2†                  30082.4      5733.7 µg/L       47.87      5733.7 ppb          47.87   0.83%
   QC value within limits for SiO2  Recovery = 107.22%
Si 251.611†            34745.8      2627.1 µg/L       19.70      2627.1 ppb          19.70   0.75%
   QC value within limits for Si 251.611  Recovery = 105.09%
Sn 189.927†             1028.0      532.87 µg/L        5.165      532.87 ppb          5.165   0.97%
   QC value within limits for Sn 189.927  Recovery = 106.57%
Sr 421.552†            91683.7      518.66 µg/L        1.287      518.66 ppb          1.287   0.25%
   QC value within limits for Sr 421.552  Recovery = 103.73%
Ti 334.940†           221363.5      527.59 µg/L        2.529      527.59 ppb          2.529   0.48%
   QC value within limits for Ti 334.940  Recovery = 105.52%
Tl 190.801†              337.3      522.61 µg/L        2.679      522.61 ppb          2.679   0.51%
   QC value within limits for Tl 190.801  Recovery = 104.52%
U 409.014†              5464.5      520.27 µg/L        4.428      520.27 ppb          4.428   0.85%
   QC value within limits for U 409.014  Recovery = 104.05%
V 292.402†             44509.3      525.38 µg/L        3.943      525.38 ppb          3.943   0.75%
   QC value within limits for V 292.402  Recovery = 105.08%
Zn 213.857†            19296.2      524.17 µg/L        3.827      524.17 ppb          3.827   0.73%
   QC value within limits for Zn 213.857  Recovery = 104.83%
All analyte(s) passed QC.
```

Sequence No.: 5
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 10:37:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111302.2	111302.2	100	%			10:38:30
1	Al 396.153Radial†	121.6	-24.0	-12.966	µg/L	-12.966	ppb	10:38:30
1	Ca 317.933Radial†	422.3	6.8	2.8678	µg/L	2.8678	ppb	10:38:50
1	Fe 238.204 Radial†	17.0	0.9	6.6387	µg/L	6.6387	ppb	10:38:50
1	K 766.490 Radial†	845.8	67.7	38.008	µg/L	38.008	ppb	10:38:30
1	Mg 279.077 IEC†	13.7	-2.2	-14.850	µg/L	-14.850	ppb	10:38:50
1	Na 589.592 Radial†	-554.1	13.7	3.8153	µg/L	3.8153	ppb	10:38:30
1	Sr 421.552†	-10.7	41.0	0.2320	µg/L	0.2320	ppb	10:38:30
1	Sc 361.383	2053318.0	2053318.0	100.01	%			10:39:52
1	Y 371.029	1286166.7	1286166.7	100.15	%			10:39:52
1	Ag 328.068†	237.5	32.3	0.3058	µg/L	0.3058	ppb	10:39:58
1	As 188.979†	0.6	1.9	3.5716	µg/L	3.5716	ppb	10:40:18
1	B 249.677†	198.7	29.2	1.3096	µg/L	1.3096	ppb	10:39:58
1	Ba 233.527†	-63.0	6.2	0.1649	µg/L	0.1649	ppb	10:40:18
1	Be 313.107†	3655.8	27.0	0.0172	µg/L	0.0172	ppb	10:39:58
1	Cd 226.502†	-103.5	-7.1	-0.1894	µg/L	-0.1894	ppb	10:40:18
1	Co 228.616†	-66.8	6.2	0.3084	µg/L	0.3084	ppb	10:40:18
1	Cr 267.716†	-152.9	-16.0	-0.3466	µg/L	-0.3466	ppb	10:39:58
1	Cu 324.752†	4053.1	25.0	0.1803	µg/L	0.1803	ppb	10:39:58
1	Mn 257.610†	-251.5	-5.8	-0.0185	µg/L	-0.0185	ppb	10:40:18
1	Mo 202.031†	2.3	3.5	0.4235	µg/L	0.4235	ppb	10:40:18
1	Ni 231.604†	312.0	-3.5	-0.2006	µg/L	-0.2006	ppb	10:40:18
1	P 214.914†	168.7	-12.2	-25.568	µg/L	-25.568	ppb	10:40:18
1	Pb 220.353†	38.2	0.8	0.2080	µg/L	0.2080	ppb	10:40:18
1	S 181.975 Axial†	24.5	-3.5	-17.512	µg/L	-17.512	ppb	10:40:18
1	Sb 206.836†	23.6	4.0	4.0166	µg/L	4.0166	ppb	10:40:18
1	Se 196.026†	12.9	0.4	0.5674	µg/L	0.5674	ppb	10:40:18
1	SiO2†	2636.8	17.6	3.3574	µg/L	3.3574	ppb	10:39:58
1	Si 251.611†	390.8	11.3	0.7858	µg/L	0.7858	ppb	10:40:18
1	Sn 189.927†	23.2	1.2	0.6211	µg/L	0.6211	ppb	10:40:18
1	Ti 334.940†	1402.2	423.3	1.0094	µg/L	1.0094	ppb	10:39:58
1	Tl 190.801†	-18.0	4.0	6.1367	µg/L	6.1367	ppb	10:40:18
1	U 409.014†	688.9	62.9	5.9932	µg/L	5.9932	ppb	10:39:58
1	V 292.402†	-165.5	-36.5	-0.4133	µg/L	-0.4133	ppb	10:39:58
1	Zn 213.857†	632.8	30.4	0.8327	µg/L	0.8327	ppb	10:40:18
2	Sc RADIAL	109793.0	109793.0	99.1	%			10:38:56
2	Al 396.153Radial†	178.6	35.2	19.029	µg/L	19.029	ppb	10:38:56
2	Ca 317.933Radial†	439.1	29.5	12.510	µg/L	12.510	ppb	10:39:16
2	Fe 238.204 Radial†	16.9	1.1	7.8194	µg/L	7.8194	ppb	10:39:16
2	K 766.490 Radial†	728.7	-38.9	-21.870	µg/L	-21.870	ppb	10:38:56
2	Mg 279.077 IEC†	17.2	1.6	10.808	µg/L	10.808	ppb	10:39:16
2	Na 589.592 Radial†	-545.7	14.6	4.0571	µg/L	4.0571	ppb	10:38:56
2	Sr 421.552†	1.3	52.9	0.2994	µg/L	0.2994	ppb	10:38:56
2	Sc 361.383	2063964.7	2063964.7	100.53	%			10:40:24
2	Y 371.029	1293274.4	1293274.4	100.70	%			10:40:24
2	Ag 328.068†	244.5	38.0	0.3605	µg/L	0.3605	ppb	10:40:30
2	As 188.979†	-1.5	-0.2	-0.3203	µg/L	-0.3203	ppb	10:40:51
2	B 249.677†	203.1	32.5	1.4562	µg/L	1.4562	ppb	10:40:30
2	Ba 233.527†	-63.2	6.4	0.1694	µg/L	0.1694	ppb	10:40:51
2	Be 313.107†	3642.2	-5.4	-0.0038	µg/L	-0.0038	ppb	10:40:30
2	Cd 226.502†	-89.9	6.9	0.1822	µg/L	0.1822	ppb	10:40:51
2	Co 228.616†	-66.3	7.0	0.3486	µg/L	0.3486	ppb	10:40:51
2	Cr 267.716†	-105.8	31.7	0.6840	µg/L	0.6840	ppb	10:40:30
2	Cu 324.752†	4065.5	16.4	0.1190	µg/L	0.1190	ppb	10:40:30
2	Mn 257.610†	-235.6	11.3	0.0389	µg/L	0.0389	ppb	10:40:51
2	Mo 202.031†	-1.1	0.1	0.0079	µg/L	0.0079	ppb	10:40:51
2	Ni 231.604†	325.7	8.4	0.4773	µg/L	0.4773	ppb	10:40:51
2	P 214.914†	176.1	-5.7	-11.947	µg/L	-11.947	ppb	10:40:51
2	Pb 220.353†	40.8	3.2	0.8544	µg/L	0.8544	ppb	10:40:51

2	S 181.975 Axial†	24.7	-3.4	-17.331 µg/L	-17.331 ppb	10:40:51
2	Sb 206.836†	26.8	7.0	7.1218 µg/L	7.1218 ppb	10:40:51
2	Se 196.026†	13.2	0.6	0.7692 µg/L	0.7692 ppb	10:40:51
2	SiO2†	2659.1	26.2	5.0006 µg/L	5.0006 ppb	10:40:30
2	Si 251.611†	386.2	4.6	0.3627 µg/L	0.3627 ppb	10:40:51
2	Sn 189.927†	20.7	-1.5	-0.7522 µg/L	-0.7522 ppb	10:40:51
2	Ti 334.940†	1342.2	356.5	0.8494 µg/L	0.8494 ppb	10:40:30
2	Tl 190.801†	-15.5	6.5	10.093 µg/L	10.093 ppb	10:40:51
2	U 409.014†	559.1	-69.9	-6.6634 µg/L	-6.6634 ppb	10:40:30
2	V 292.402†	-167.0	-37.1	-0.4440 µg/L	-0.4440 ppb	10:40:30
2	Zn 213.857†	624.0	18.4	0.4994 µg/L	0.4994 ppb	10:40:51
3	Sc RADIAL	111069.7	111069.7	100 %		10:39:22
3	Al 396.153Radial†	128.4	-17.0	-9.1519 µg/L	-9.1519 ppb	10:39:22
3	Ca 317.933Radial†	430.1	15.4	6.5430 µg/L	6.5430 ppb	10:39:42
3	Fe 238.204 Radial†	15.3	-0.7	-4.8537 µg/L	-4.8537 ppb	10:39:42
3	K 766.490 Radial†	708.6	-67.5	-37.884 µg/L	-37.884 ppb	10:39:22
3	Mg 279.077 IEC†	15.7	-0.1	-0.9487 µg/L	-0.9487 ppb	10:39:42
3	Na 589.592 Radial†	-568.8	-2.2	-0.6029 µg/L	-0.6029 ppb	10:39:22
3	Sr 421.552†	-22.6	29.1	0.1648 µg/L	0.1648 ppb	10:39:22
3	Sc 361.383	2059216.7	2059216.7	100.30 %		10:40:57
3	Y 371.029	1290279.8	1290279.8	100.47 %		10:40:57
3	Ag 328.068†	219.3	13.4	0.1295 µg/L	0.1295 ppb	10:41:02
3	As 188.979†	3.5	4.8	8.8480 µg/L	8.8480 ppb	10:41:23
3	B 249.677†	173.2	3.2	0.1432 µg/L	0.1432 ppb	10:41:02
3	Ba 233.527†	-57.0	12.4	0.3294 µg/L	0.3294 ppb	10:41:23
3	Be 313.107†	3810.2	170.4	0.1104 µg/L	0.1104 ppb	10:41:02
3	Cd 226.502†	-102.0	-5.3	-0.1495 µg/L	-0.1495 ppb	10:41:23
3	Co 228.616†	-64.8	8.4	0.4162 µg/L	0.4162 ppb	10:41:23
3	Cr 267.716†	-132.2	5.0	0.1093 µg/L	0.1093 ppb	10:41:02
3	Cu 324.752†	4107.2	67.3	0.4805 µg/L	0.4805 ppb	10:41:02
3	Mn 257.610†	-239.8	6.6	0.0215 µg/L	0.0215 ppb	10:41:23
3	Mo 202.031†	-3.2	-2.0	-0.2366 µg/L	-0.2366 ppb	10:41:23
3	Ni 231.604†	318.1	1.6	0.0935 µg/L	0.0935 ppb	10:41:23
3	P 214.914†	178.0	-3.4	-7.2129 µg/L	-7.2129 ppb	10:41:23
3	Pb 220.353†	33.9	-3.6	-0.9436 µg/L	-0.9436 ppb	10:41:23
3	S 181.975 Axial†	29.1	1.0	5.0237 µg/L	5.0237 ppb	10:41:23
3	Sb 206.836†	17.5	-2.1	-2.1558 µg/L	-2.1558 ppb	10:41:23
3	Se 196.026†	14.4	1.9	2.4068 µg/L	2.4068 ppb	10:41:23
3	SiO2†	2656.1	29.3	5.5878 µg/L	5.5878 ppb	10:41:02
3	Si 251.611†	388.1	7.4	0.5517 µg/L	0.5517 ppb	10:41:23
3	Sn 189.927†	22.9	0.8	0.4163 µg/L	0.4163 ppb	10:41:23
3	Ti 334.940†	1236.2	253.8	0.6050 µg/L	0.6050 ppb	10:41:02
3	Tl 190.801†	-17.1	4.9	7.5784 µg/L	7.5784 ppb	10:41:23
3	U 409.014†	540.2	-87.4	-8.3376 µg/L	-8.3376 ppb	10:41:02
3	V 292.402†	-107.5	21.9	0.2403 µg/L	0.2403 ppb	10:41:02
3	Zn 213.857†	623.6	19.4	0.5306 µg/L	0.5306 ppb	10:41:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2058833.1	100.28	%	0.260				0.26%
Sc RADIAL	110721.6	99.9	%	0.73				0.73%
Y 371.029	1289907.0	100.44	%	0.278				0.28%
Ag 328.068†	27.9	0.2653	µg/L	0.12074	0.2653	ppb	0.12074	45.51%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.9	-1.0297	µg/L	17.47541	-1.0297	ppb	17.47541	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.2	4.0331	µg/L	4.60154	4.0331	ppb	4.60154	114.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	21.6	0.9696	µg/L	0.71949	0.9696	ppb	0.71949	74.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.4	0.2212	µg/L	0.09368	0.2212	ppb	0.09368	42.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	64.0	0.0413	µg/L	0.06082	0.0413	ppb	0.06082	147.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	17.2	7.3071	µg/L	4.86653	7.3071	ppb	4.86653	66.60%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.8	-0.0522	µg/L	0.20400	-0.0522	ppb	0.20400	390.60%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	7.2	0.3578	µg/L	0.05445	0.3578	ppb	0.05445	15.22%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 6.9      0.1489 µg/L       0.51641      0.1489 ppb        0.51641 346.77%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                36.2      0.2600 µg/L       0.19345      0.2600 ppb        0.19345  74.42%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.4      3.2015 µg/L       7.00095      3.2015 ppb        7.00095 218.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -12.9     -7.2486 µg/L      40.00314     -7.2486 ppb       40.00314 551.87%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.2     -1.6638 µg/L      12.84405     -1.6638 ppb       12.84405 771.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 4.1      0.0140 µg/L       0.02944      0.0140 ppb        0.02944 210.69%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.5      0.0649 µg/L       0.33376      0.0649 ppb        0.33376 514.07%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†          8.7      2.4232 µg/L       2.62344      2.4232 ppb        2.62344 108.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.2      0.1234 µg/L       0.33994      0.1234 ppb        0.33994 275.49%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.1     -14.909 µg/L        9.5292     -14.909 ppb         9.5292  63.91%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.1      0.0396 µg/L       0.91072      0.0396 ppb        0.91072 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.0     -9.9397 µg/L      12.95901     -9.9397 ppb       12.95901 130.38%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.0      2.9942 µg/L       4.72254      2.9942 ppb        4.72254 157.72%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.0      1.2478 µg/L       1.00882      1.2478 ppb        1.00882  80.85%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      24.4      4.6486 µg/L       1.15614      4.6486 ppb        1.15614  24.87%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                 7.8      0.5668 µg/L       0.21196      0.5668 ppb        0.21196  37.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.2      0.0950 µg/L       0.74086      0.0950 ppb        0.74086 779.59%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                41.0      0.2321 µg/L       0.06731      0.2321 ppb        0.06731  29.00%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               344.6      0.8212 µg/L       0.20366      0.8212 ppb        0.20366  24.80%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.1      7.9360 µg/L       2.00218      7.9360 ppb        2.00218  25.23%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -31.5     -3.0026 µg/L       7.83542     -3.0026 ppb        7.83542 260.95%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -17.2     -0.2057 µg/L       0.38649     -0.2057 ppb        0.38649 187.92%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                22.7      0.6209 µg/L       0.18406      0.6209 ppb        0.18406  29.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/11/2009 10:51:35 Plasma On Time: 12/6/2009 23:29:48
Logged In Analyst: optima Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121109C.sif
Batch ID:
Results Data Set: 121109A
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/11/2009 10:51:37
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112444.6	112444.6	101	%			10:52:12
1	Al 396.153Radial†	10227.2	9933.7	5342.7	µg/L	5342.7	ppb	10:52:12
1	Ca 317.933Radial†	13041.6	12438.5	5275.5	µg/L	5275.5	ppb	10:52:12
1	Fe 238.204 Radial†	755.6	728.6	5233.8	µg/L	5233.8	ppb	10:52:32
1	K 766.490 Radial†	10216.9	9294.1	5219.5	µg/L	5219.5	ppb	10:52:12
1	Mg 279.077 IEC†	805.2	777.7	5305.3	µg/L	5305.3	ppb	10:52:32
1	Na 589.592 Radial†	37923.7	37938.2	10577	µg/L	10577	ppb	10:52:12
1	Sr 421.552†	93762.1	92452.1	523.01	µg/L	523.01	ppb	10:52:12
1	Sc 361.383	2052373.6	2052373.6	99.965	%			10:53:35
1	Y 371.029	1282360.8	1282360.8	99.851	%			10:53:35
1	Ag 328.068†	55677.7	55491.8	534.00	µg/L	534.00	ppb	10:53:41
1	As 188.979†	282.7	284.1	522.64	µg/L	522.64	ppb	10:54:01
1	B 249.677†	11724.7	11559.2	517.00	µg/L	517.00	ppb	10:53:41
1	Ba 233.527†	19336.1	19412.0	516.23	µg/L	516.23	ppb	10:53:41
1	Be 313.107†	802482.4	799131.0	518.66	µg/L	518.66	ppb	10:53:35
1	Cd 226.502†	19037.0	19139.9	519.99	µg/L	519.99	ppb	10:53:41
1	Co 228.616†	10345.3	10421.8	519.68	µg/L	519.68	ppb	10:53:41
1	Cr 267.716†	23679.9	23824.9	516.48	µg/L	516.48	ppb	10:53:41
1	Cu 324.752†	75505.2	71503.6	512.93	µg/L	512.93	ppb	10:53:41
1	Mn 257.610†	152566.3	152864.6	512.03	µg/L	512.03	ppb	10:53:41
1	Mo 202.031†	4393.7	4396.4	528.42	µg/L	528.42	ppb	10:54:01
1	Ni 231.604†	9439.1	9126.8	517.66	µg/L	517.66	ppb	10:53:41
1	P 214.914†	1430.7	1250.3	2570.5	µg/L	2570.5	ppb	10:54:01
1	Pb 220.353†	2023.5	1986.8	526.25	µg/L	526.25	ppb	10:54:01
1	S 181.975 Axial†	244.1	216.2	1090.1	µg/L	1090.1	ppb	10:54:01
1	Sb 206.836†	544.0	524.5	530.83	µg/L	530.83	ppb	10:54:01
1	Se 196.026†	425.2	412.8	533.68	µg/L	533.68	ppb	10:54:01
1	SiO2†	32389.4	29781.7	5676.4	µg/L	5676.4	ppb	10:53:41
1	Si 251.611†	34751.4	34383.9	2599.3	µg/L	2599.3	ppb	10:53:41
1	Sn 189.927†	1042.9	1021.2	529.38	µg/L	529.38	ppb	10:54:01
1	Ti 334.940†	221948.9	221046.8	526.83	µg/L	526.83	ppb	10:53:35
1	Tl 190.801†	317.9	340.0	526.66	µg/L	526.66	ppb	10:54:01
1	U 409.014†	6011.7	5387.8	512.96	µg/L	512.96	ppb	10:53:41
1	V 292.402†	44006.1	44150.4	521.20	µg/L	521.20	ppb	10:53:41
1	Zn 213.857†	19758.1	19162.6	520.54	µg/L	520.54	ppb	10:53:41
2	Sc RADIAL	111564.8	111564.8	101	%			10:52:38
2	Al 396.153Radial†	10185.2	9971.4	5363.3	µg/L	5363.3	ppb	10:52:38
2	Ca 317.933Radial†	12992.9	12491.5	5298.0	µg/L	5298.0	ppb	10:52:38
2	Fe 238.204 Radial†	756.0	734.9	5278.9	µg/L	5278.9	ppb	10:52:58
2	K 766.490 Radial†	10180.3	9337.2	5243.7	µg/L	5243.7	ppb	10:52:38
2	Mg 279.077 IEC†	809.3	788.0	5375.8	µg/L	5375.8	ppb	10:52:58
2	Na 589.592 Radial†	37770.6	38080.9	10617	µg/L	10617	ppb	10:52:38
2	Sr 421.552†	93650.8	93070.1	526.51	µg/L	526.51	ppb	10:52:38
2	Sc 361.383	2063372.1	2063372.1	100.50	%			10:54:08
2	Y 371.029	1283229.3	1283229.3	99.919	%			10:54:08
2	Ag 328.068†	55870.9	55387.0	533.01	µg/L	533.01	ppb	10:54:14
2	As 188.979†	280.0	279.9	514.93	µg/L	514.93	ppb	10:54:34

2	B 249.677†	11749.3	11521.2	515.28 µg/L	515.28 ppb	10:54:14
2	Ba 233.527†	19536.1	19507.9	518.77 µg/L	518.77 ppb	10:54:14
2	Be 313.107†	797682.8	790076.3	512.78 µg/L	512.78 ppb	10:54:08
2	Cd 226.502†	19156.9	19157.7	520.47 µg/L	520.47 ppb	10:54:14
2	Co 228.616†	10397.8	10418.9	519.54 µg/L	519.54 ppb	10:54:14
2	Cr 267.716†	23800.1	23818.3	516.34 µg/L	516.34 ppb	10:54:14
2	Cu 324.752†	75743.6	71338.2	511.76 µg/L	511.76 ppb	10:54:14
2	Mn 257.610†	153649.3	153128.7	512.92 µg/L	512.92 ppb	10:54:14
2	Mo 202.031†	4380.7	4360.0	524.05 µg/L	524.05 ppb	10:54:34
2	Ni 231.604†	9496.3	9133.4	518.03 µg/L	518.03 ppb	10:54:14
2	P 214.914†	1426.4	1238.4	2545.6 µg/L	2545.6 ppb	10:54:34
2	Pb 220.353†	2013.9	1966.4	520.85 µg/L	520.85 ppb	10:54:34
2	S 181.975 Axial†	236.7	207.5	1046.3 µg/L	1046.3 ppb	10:54:34
2	Sb 206.836†	549.7	527.3	533.64 µg/L	533.64 ppb	10:54:34
2	Se 196.026†	427.3	412.7	533.52 µg/L	533.52 ppb	10:54:34
2	SiO2†	32701.2	29919.3	5702.6 µg/L	5702.6 ppb	10:54:14
2	Si 251.611†	35041.1	34486.9	2607.7 µg/L	2607.7 ppb	10:54:14
2	Sn 189.927†	1041.6	1014.4	525.90 µg/L	525.90 ppb	10:54:34
2	Ti 334.940†	220687.7	218608.5	521.02 µg/L	521.02 ppb	10:54:08
2	Tl 190.801†	309.8	330.2	511.57 µg/L	511.57 ppb	10:54:34
2	U 409.014†	6022.0	5366.0	510.87 µg/L	510.87 ppb	10:54:14
2	V 292.402†	44335.3	44243.3	522.26 µg/L	522.26 ppb	10:54:14
2	Zn 213.857†	19844.5	19143.2	520.00 µg/L	520.00 ppb	10:54:14
3	Sc RADIAL	111821.2	111821.2	101 %		10:53:03
3	Al 396.153Radial†	10202.9	9965.8	5360.4 µg/L	5360.4 ppb	10:53:03
3	Ca 317.933Radial†	13029.2	12497.9	5300.7 µg/L	5300.7 ppb	10:53:03
3	Fe 238.204 Radial†	752.4	729.6	5240.5 µg/L	5240.5 ppb	10:53:24
3	K 766.490 Radial†	10234.4	9367.6	5260.8 µg/L	5260.8 ppb	10:53:03
3	Mg 279.077 IEC†	808.3	785.2	5356.6 µg/L	5356.6 ppb	10:53:24
3	Na 589.592 Radial†	38008.7	38230.8	10658 µg/L	10658 ppb	10:53:03
3	Sr 421.552†	93793.1	92997.9	526.10 µg/L	526.10 ppb	10:53:03
3	Sc 361.383	2087640.1	2087640.1	101.68 %		10:54:41
3	Y 371.029	1292300.0	1292300.0	100.63 %		10:54:41
3	Ag 328.068†	55895.1	54764.6	527.02 µg/L	527.02 ppb	10:54:47
3	As 188.979†	282.5	279.2	513.49 µg/L	513.49 ppb	10:55:07
3	B 249.677†	11797.4	11432.6	511.32 µg/L	511.32 ppb	10:54:47
3	Ba 233.527†	19537.8	19283.6	512.81 µg/L	512.81 ppb	10:54:47
3	Be 313.107†	801530.4	784633.8	509.25 µg/L	509.25 ppb	10:54:41
3	Cd 226.502†	19147.6	18927.0	514.20 µg/L	514.20 ppb	10:54:47
3	Co 228.616†	10402.8	10303.6	513.79 µg/L	513.79 ppb	10:54:47
3	Cr 267.716†	23867.4	23609.2	511.80 µg/L	511.80 ppb	10:54:47
3	Cu 324.752†	75851.6	70568.3	506.24 µg/L	506.24 ppb	10:54:47
3	Mn 257.610†	153799.2	151498.9	507.47 µg/L	507.47 ppb	10:54:47
3	Mo 202.031†	4387.4	4315.9	518.75 µg/L	518.75 ppb	10:55:07
3	Ni 231.604†	9567.9	9094.0	515.80 µg/L	515.80 ppb	10:54:47
3	P 214.914†	1417.2	1212.9	2492.7 µg/L	2492.7 ppb	10:55:07
3	Pb 220.353†	2011.0	1940.4	513.96 µg/L	513.96 ppb	10:55:07
3	S 181.975 Axial†	231.0	199.2	1004.4 µg/L	1004.4 ppb	10:55:07
3	Sb 206.836†	549.8	521.1	527.34 µg/L	527.34 ppb	10:55:07
3	Se 196.026†	429.7	410.0	530.11 µg/L	530.11 ppb	10:55:07
3	SiO2†	32718.8	29558.3	5633.8 µg/L	5633.8 ppb	10:54:47
3	Si 251.611†	35057.1	34097.2	2577.9 µg/L	2577.9 ppb	10:54:47
3	Sn 189.927†	1054.5	1015.0	526.19 µg/L	526.19 ppb	10:55:07
3	Ti 334.940†	221568.1	216921.6	516.99 µg/L	516.99 ppb	10:54:41
3	Tl 190.801†	317.4	334.1	517.57 µg/L	517.57 ppb	10:55:07
3	U 409.014†	6031.9	5306.1	505.16 µg/L	505.16 ppb	10:54:47
3	V 292.402†	44401.4	43795.4	516.97 µg/L	516.97 ppb	10:54:47
3	Zn 213.857†	19878.0	18946.6	514.64 µg/L	514.64 ppb	10:54:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2067795.3	100.72	%	0.879				0.87%
Sc RADIAL	111943.5	101	%	0.4				0.40%
Y 371.029	1285963.4	100.13	%	0.429				0.43%
Ag 328.068†	55214.5	531.34	µg/L	3.773	531.34	ppb	3.773	0.71%
QC value within limits for Ag 328.068 Recovery = 106.27%								
Al 396.153Radial†	9957.0	5355.5	µg/L	11.13	5355.5	ppb	11.13	0.21%
QC value within limits for Al 396.153Radial Recovery = 107.11%								
As 188.979†	281.1	517.02	µg/L	4.918	517.02	ppb	4.918	0.95%

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   QC value within limits for As 188.979  Recovery = 103.40%
B 249.677†            11504.4      514.53 µg/L        2.914      514.53 ppb          2.914   0.57%
   QC value within limits for B 249.677  Recovery = 102.91%
Ba 233.527†           19401.2      515.94 µg/L        2.992      515.94 ppb          2.992   0.58%
   QC value within limits for Ba 233.527  Recovery = 103.19%
Be 313.107†          791280.4      513.56 µg/L        4.753      513.56 ppb          4.753   0.93%
   QC value within limits for Be 313.107  Recovery = 102.71%
Ca 317.933Radial†     12476.0      5291.4 µg/L       13.82      5291.4 ppb          13.82   0.26%
   QC value within limits for Ca 317.933Radial  Recovery = 105.83%
Cd 226.502†           19074.9      518.22 µg/L        3.487      518.22 ppb          3.487   0.67%
   QC value within limits for Cd 226.502  Recovery = 103.64%
Co 228.616†           10381.4      517.67 µg/L        3.364      517.67 ppb          3.364   0.65%
   QC value within limits for Co 228.616  Recovery = 103.53%
Cr 267.716†           23750.8      514.87 µg/L        2.660      514.87 ppb          2.660   0.52%
   QC value within limits for Cr 267.716  Recovery = 102.97%
Cu 324.752†           71136.7      510.31 µg/L        3.574      510.31 ppb          3.574   0.70%
   QC value within limits for Cu 324.752  Recovery = 102.06%
Fe 238.204 Radial†      731.1      5251.0 µg/L       24.33      5251.0 ppb          24.33   0.46%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.02%
K 766.490 Radial†      9333.0      5241.3 µg/L       20.74      5241.3 ppb          20.74   0.40%
   QC value within limits for K 766.490 Radial  Recovery = 104.83%
Mg 279.077 IEC†         783.6      5345.9 µg/L       36.46      5345.9 ppb          36.46   0.68%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.92%
Mn 257.610†          152497.4      510.81 µg/L        2.928      510.81 ppb          2.928   0.57%
   QC value within limits for Mn 257.610  Recovery = 102.16%
Mo 202.031†            4357.5      523.74 µg/L        4.843      523.74 ppb          4.843   0.92%
   QC value within limits for Mo 202.031  Recovery = 104.75%
Na 589.592 Radial†    38083.3       10617 µg/L         40.8       10617 ppb           40.8   0.38%
   QC value within limits for Na 589.592 Radial  Recovery = 106.17%
Ni 231.604†            9118.1      517.16 µg/L        1.198      517.16 ppb          1.198   0.23%
   QC value within limits for Ni 231.604  Recovery = 103.43%
P 214.914†             1233.9      2536.3 µg/L       39.75      2536.3 ppb          39.75   1.57%
   QC value within limits for P 214.914  Recovery = 101.45%
Pb 220.353†            1964.5      520.35 µg/L        6.161      520.35 ppb          6.161   1.18%
   QC value within limits for Pb 220.353  Recovery = 104.07%
S 181.975 Axial†        207.6      1046.9 µg/L       42.84      1046.9 ppb          42.84   4.09%
   QC value within limits for S 181.975 Axial  Recovery = 104.69%
Sb 206.836†             524.3      530.60 µg/L        3.158      530.60 ppb          3.158   0.60%
   QC value within limits for Sb 206.836  Recovery = 106.12%
Se 196.026†             411.8      532.44 µg/L        2.019      532.44 ppb          2.019   0.38%
   QC value within limits for Se 196.026  Recovery = 106.49%
SiO2†                  29753.1      5670.9 µg/L       34.72      5670.9 ppb          34.72   0.61%
   QC value within limits for SiO2  Recovery = 106.05%
Si 251.611†            34322.7      2595.0 µg/L       15.38      2595.0 ppb          15.38   0.59%
   QC value within limits for Si 251.611  Recovery = 103.80%
Sn 189.927†            1016.9      527.16 µg/L        1.932      527.16 ppb          1.932   0.37%
   QC value within limits for Sn 189.927  Recovery = 105.43%
Sr 421.552†            92840.0      525.21 µg/L        1.912      525.21 ppb          1.912   0.36%
   QC value within limits for Sr 421.552  Recovery = 105.04%
Ti 334.940†           218859.0      521.61 µg/L        4.947      521.61 ppb          4.947   0.95%
   QC value within limits for Ti 334.940  Recovery = 104.32%
Tl 190.801†             334.8      518.60 µg/L        7.597      518.60 ppb          7.597   1.46%
   QC value within limits for Tl 190.801  Recovery = 103.72%
U 409.014†             5353.3      509.66 µg/L        4.034      509.66 ppb          4.034   0.79%
   QC value within limits for U 409.014  Recovery = 101.93%
V 292.402†             44063.0      520.14 µg/L        2.797      520.14 ppb          2.797   0.54%
   QC value within limits for V 292.402  Recovery = 104.03%
Zn 213.857†            19084.1      518.40 µg/L        3.260      518.40 ppb          3.260   0.63%
   QC value within limits for Zn 213.857  Recovery = 103.68%
All analyte(s) passed QC.
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Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 10:55:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110917.2	110917.2	100	%			10:55:49
1	Al 396.153Radial†	158.9	13.7	7.4029	µg/L	7.4029	ppb	10:55:49
1	Ca 317.933Radial†	431.0	16.8	7.1450	µg/L	7.1450	ppb	10:56:10
1	Fe 238.204 Radial†	18.4	2.4	17.425	µg/L	17.425	ppb	10:56:10
1	K 766.490 Radial†	717.1	-58.0	-32.545	µg/L	-32.545	ppb	10:55:49
1	Mg 279.077 IEC†	13.4	-2.4	-16.553	µg/L	-16.553	ppb	10:56:10
1	Na 589.592 Radial†	-570.5	-4.6	-1.2816	µg/L	-1.2816	ppb	10:55:49
1	Sr 421.552†	-13.6	38.0	0.2151	µg/L	0.2151	ppb	10:55:49
1	Sc 361.383	2054806.9	2054806.9	100.08	%			10:57:12
1	Y 371.029	1286485.3	1286485.3	100.17	%			10:57:12
1	Ag 328.068†	211.1	5.7	0.0551	µg/L	0.0551	ppb	10:57:18
1	As 188.979†	1.4	2.7	4.9720	µg/L	4.9720	ppb	10:57:38
1	B 249.677†	187.5	17.8	0.7938	µg/L	0.7938	ppb	10:57:18
1	Ba 233.527†	-62.7	6.6	0.1754	µg/L	0.1754	ppb	10:57:38
1	Be 313.107†	3706.3	74.7	0.0482	µg/L	0.0482	ppb	10:57:18
1	Cd 226.502†	-98.5	-2.1	-0.0660	µg/L	-0.0660	ppb	10:57:38
1	Co 228.616†	-69.4	3.6	0.1760	µg/L	0.1760	ppb	10:57:38
1	Cr 267.716†	-140.7	-3.7	-0.0806	µg/L	-0.0806	ppb	10:57:18
1	Cu 324.752†	4051.2	20.1	0.1478	µg/L	0.1478	ppb	10:57:18
1	Mn 257.610†	-212.8	33.0	0.1126	µg/L	0.1126	ppb	10:57:38
1	Mo 202.031†	-1.5	-0.3	-0.0387	µg/L	-0.0387	ppb	10:57:38
1	Ni 231.604†	315.5	-0.3	-0.0147	µg/L	-0.0147	ppb	10:57:38
1	P 214.914†	174.9	-6.1	-12.813	µg/L	-12.813	ppb	10:57:38
1	Pb 220.353†	39.2	1.8	0.4849	µg/L	0.4849	ppb	10:57:38
1	S 181.975 Axial†	24.4	-3.6	-18.334	µg/L	-18.334	ppb	10:57:38
1	Sb 206.836†	23.9	4.3	4.3720	µg/L	4.3720	ppb	10:57:38
1	Se 196.026†	12.1	-0.4	-0.5465	µg/L	-0.5465	ppb	10:57:38
1	SiO2†	2629.0	7.9	1.5120	µg/L	1.5120	ppb	10:57:18
1	Si 251.611†	375.4	-4.5	-0.3923	µg/L	-0.3923	ppb	10:57:38
1	Sn 189.927†	23.7	1.6	0.8403	µg/L	0.8403	ppb	10:57:38
1	Ti 334.940†	1325.6	345.8	0.8242	µg/L	0.8242	ppb	10:57:18
1	Tl 190.801†	-21.1	0.8	1.2927	µg/L	1.2927	ppb	10:57:38
1	U 409.014†	512.1	-114.4	-10.908	µg/L	-10.908	ppb	10:57:18
1	V 292.402†	-142.3	-13.2	-0.1705	µg/L	-0.1705	ppb	10:57:18
1	Zn 213.857†	621.2	18.3	0.4996	µg/L	0.4996	ppb	10:57:38
2	Sc RADIAL	111713.5	111713.5	101	%			10:56:15
2	Al 396.153Radial†	144.1	-2.1	-1.1249	µg/L	-1.1249	ppb	10:56:15
2	Ca 317.933Radial†	435.4	18.1	7.6960	µg/L	7.6960	ppb	10:56:36
2	Fe 238.204 Radial†	16.7	0.6	4.2341	µg/L	4.2341	ppb	10:56:36
2	K 766.490 Radial†	762.2	-18.3	-10.300	µg/L	-10.300	ppb	10:56:15
2	Mg 279.077 IEC†	17.0	1.1	7.2617	µg/L	7.2617	ppb	10:56:36
2	Na 589.592 Radial†	-545.3	24.5	6.8184	µg/L	6.8184	ppb	10:56:15
2	Sr 421.552†	-53.4	-1.3	-0.0075	µg/L	-0.0075	ppb	10:56:15
2	Sc 361.383	2083816.8	2083816.8	101.50	%			10:57:44
2	Y 371.029	1302942.6	1302942.6	101.45	%			10:57:44
2	Ag 328.068†	233.3	24.6	0.2335	µg/L	0.2335	ppb	10:57:50
2	As 188.979†	-0.7	0.6	1.1779	µg/L	1.1779	ppb	10:58:10
2	B 249.677†	174.5	2.4	0.1070	µg/L	0.1070	ppb	10:57:50
2	Ba 233.527†	-31.0	38.7	1.0266	µg/L	1.0266	ppb	10:58:10
2	Be 313.107†	3763.8	79.9	0.0516	µg/L	0.0516	ppb	10:57:50
2	Cd 226.502†	-88.0	9.7	0.2591	µg/L	0.2591	ppb	10:58:10
2	Co 228.616†	-70.5	3.5	0.1705	µg/L	0.1705	ppb	10:58:10
2	Cr 267.716†	-126.7	12.1	0.2603	µg/L	0.2603	ppb	10:57:50
2	Cu 324.752†	4042.9	-44.4	-0.3170	µg/L	-0.3170	ppb	10:57:50
2	Mn 257.610†	-167.1	81.1	0.2717	µg/L	0.2717	ppb	10:58:10
2	Mo 202.031†	-4.8	-3.6	-0.4314	µg/L	-0.4314	ppb	10:58:10
2	Ni 231.604†	317.4	-2.9	-0.1625	µg/L	-0.1625	ppb	10:58:10
2	P 214.914†	171.4	-12.1	-25.265	µg/L	-25.265	ppb	10:58:10
2	Pb 220.353†	45.9	7.8	2.0655	µg/L	2.0655	ppb	10:58:10

2	S 181.975 Axial†	26.3	-2.1	-10.535 µg/L	-10.535 ppb	10:58:10
2	Sb 206.836†	26.2	6.2	6.3400 µg/L	6.3400 ppb	10:58:10
2	Se 196.026†	4.3	-8.2	-10.619 µg/L	-10.619 ppb	10:58:10
2	SiO2†	2669.7	11.4	2.1787 µg/L	2.1787 ppb	10:57:50
2	Si 251.611†	401.0	15.6	1.1519 µg/L	1.1519 ppb	10:58:10
2	Sn 189.927†	24.3	2.0	1.0091 µg/L	1.0091 ppb	10:58:10
2	Ti 334.940†	1275.9	278.4	0.6635 µg/L	0.6635 ppb	10:57:50
2	Tl 190.801†	-21.0	1.2	1.8587 µg/L	1.8587 ppb	10:58:10
2	U 409.014†	587.4	-47.3	-4.5102 µg/L	-4.5102 ppb	10:57:50
2	V 292.402†	-155.5	-24.2	-0.2929 µg/L	-0.2929 ppb	10:57:50
2	Zn 213.857†	633.2	21.5	0.5894 µg/L	0.5894 ppb	10:58:10
3	Sc RADIAL	110900.2	110900.2	100 %		10:56:41
3	Al 396.153Radial†	153.6	8.5	4.5503 µg/L	4.5503 ppb	10:56:41
3	Ca 317.933Radial†	438.1	24.0	10.184 µg/L	10.184 ppb	10:57:01
3	Fe 238.204 Radial†	16.3	0.3	2.2423 µg/L	2.2423 ppb	10:57:01
3	K 766.490 Radial†	774.6	-0.4	-0.1978 µg/L	-0.1978 ppb	10:56:41
3	Mg 279.077 IEC†	11.6	-4.2	-28.456 µg/L	-28.456 ppb	10:57:01
3	Na 589.592 Radial†	-568.7	-2.9	-0.8205 µg/L	-0.8205 ppb	10:56:41
3	Sr 421.552†	-48.6	3.0	0.0172 µg/L	0.0172 ppb	10:56:41
3	Sc 361.383	2073299.4	2073299.4	100.98 %		10:58:16
3	Y 371.029	1304130.8	1304130.8	101.55 %		10:58:16
3	Ag 328.068†	338.0	129.5	1.2368 µg/L	1.2368 ppb	10:58:22
3	As 188.979†	1.2	2.5	4.6906 µg/L	4.6906 ppb	10:58:42
3	B 249.677†	225.1	53.4	2.3946 µg/L	2.3946 ppb	10:58:22
3	Ba 233.527†	-45.3	24.3	0.6457 µg/L	0.6457 ppb	10:58:42
3	Be 313.107†	3830.2	164.5	0.1065 µg/L	0.1065 ppb	10:58:22
3	Cd 226.502†	-100.8	-3.5	-0.0966 µg/L	-0.0966 ppb	10:58:42
3	Co 228.616†	-65.8	7.8	0.3866 µg/L	0.3866 ppb	10:58:42
3	Cr 267.716†	-101.5	36.3	0.7855 µg/L	0.7855 ppb	10:58:22
3	Cu 324.752†	4126.3	58.3	0.4181 µg/L	0.4181 ppb	10:58:22
3	Mn 257.610†	-203.6	44.1	0.1477 µg/L	0.1477 ppb	10:58:42
3	Mo 202.031†	1.4	2.6	0.3110 µg/L	0.3110 ppb	10:58:42
3	Ni 231.604†	317.2	-1.5	-0.0826 µg/L	-0.0826 ppb	10:58:42
3	P 214.914†	187.2	4.5	9.4031 µg/L	9.4031 ppb	10:58:42
3	Pb 220.353†	49.2	11.3	3.0019 µg/L	3.0019 ppb	10:58:42
3	S 181.975 Axial†	28.0	-0.3	-1.3834 µg/L	-1.3834 ppb	10:58:42
3	Sb 206.836†	21.9	2.0	2.0735 µg/L	2.0735 ppb	10:58:42
3	Se 196.026†	3.0	-9.5	-12.262 µg/L	-12.262 ppb	10:58:42
3	SiO2†	2680.7	35.7	6.8003 µg/L	6.8003 ppb	10:58:22
3	Si 251.611†	383.9	0.6	-0.0784 µg/L	-0.0784 ppb	10:58:42
3	Sn 189.927†	27.1	4.8	2.4762 µg/L	2.4762 ppb	10:58:42
3	Ti 334.940†	1306.8	315.3	0.7514 µg/L	0.7514 ppb	10:58:22
3	Tl 190.801†	-16.4	5.7	8.8405 µg/L	8.8405 ppb	10:58:42
3	U 409.014†	600.5	-31.4	-2.9936 µg/L	-2.9936 ppb	10:58:22
3	V 292.402†	-136.7	-6.3	-0.0764 µg/L	-0.0764 ppb	10:58:22
3	Zn 213.857†	617.0	8.6	0.2360 µg/L	0.2360 ppb	10:58:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2070641.1	100.86	%	0.715				0.71%
Sc RADIAL	111177.0	100	%	0.4				0.42%
Y 371.029	1297852.9	101.06	%	0.768				0.76%
Ag 328.068†	53.3	0.5085	µg/L	0.63704	0.5085	ppb	0.63704	125.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.7	3.6094	µg/L	4.34104	3.6094	ppb	4.34104	120.27%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.0	3.6135	µg/L	2.11399	3.6135	ppb	2.11399	58.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	24.5	1.0985	µg/L	1.17385	1.0985	ppb	1.17385	106.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	23.2	0.6159	µg/L	0.42641	0.6159	ppb	0.42641	69.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.4	0.0688	µg/L	0.03272	0.0688	ppb	0.03272	47.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	19.7	8.3416	µg/L	1.61892	8.3416	ppb	1.61892	19.41%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.4	0.0322	µg/L	0.19715	0.0322	ppb	0.19715	612.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.9	0.2444	µg/L	0.12322	0.2444	ppb	0.12322	50.42%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              14.9      0.3217 µg/L       0.43629      0.3217 ppb        0.43629 135.61%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              11.4      0.0830 µg/L       0.37185      0.0830 ppb        0.37185 448.22%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.1      7.9671 µg/L       8.25103      7.9671 ppb        8.25103 103.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -25.5     -14.347 µg/L       16.5490     -14.347 ppb        16.5490 115.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.8     -12.583 µg/L       18.1870     -12.583 ppb        18.1870 144.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              52.7      0.1773 µg/L       0.08361      0.1773 ppb        0.08361  47.15%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.4     -0.0530 µg/L       0.37141     -0.0530 ppb        0.37141 700.43%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        5.6      1.5721 µg/L       4.54929      1.5721 ppb        4.54929 289.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.5     -0.0866 µg/L       0.07399     -0.0866 ppb        0.07399  85.46%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -4.6     -9.5585 µg/L      17.56187     -9.5585 ppb       17.56187 183.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.0      1.8508 µg/L       1.27216      1.8508 ppb        1.27216  68.74%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.0     -10.084 µg/L        8.4844     -10.084 ppb         8.4844  84.13%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.2      4.2619 µg/L       2.13538      4.2619 ppb        2.13538  50.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -6.1     -7.8091 µg/L       6.34298     -7.8091 ppb        6.34298  81.23%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    18.3      3.4970 µg/L       2.88006      3.4970 ppb        2.88006  82.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               3.9      0.2271 µg/L       0.81615      0.2271 ppb        0.81615 359.44%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.8      1.4419 µg/L       0.89973      1.4419 ppb        0.89973  62.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              13.2      0.0749 µg/L       0.12203      0.0749 ppb        0.12203 162.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             313.2      0.7464 µg/L       0.08044      0.7464 ppb        0.08044  10.78%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.6      3.9973 µg/L       4.20387      3.9973 ppb        4.20387 105.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -64.3     -6.1373 µg/L       4.20065     -6.1373 ppb        4.20065  68.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -14.6     -0.1799 µg/L       0.10859     -0.1799 ppb        0.10859  60.35%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              16.1      0.4417 µg/L       0.18369      0.4417 ppb        0.18369  41.59%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: 1201992149|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 301
Date Collected: 12/11/2009 10:58:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201992149|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114288.1	114288.1	103	%			10:59:27
1	Al 396.153Radial†	210.8	59.4	32.032	µg/L	32.032	ppb	10:59:27
1	Ca 317.933Radial†	436.8	9.8	4.1559	µg/L	4.1559	ppb	10:59:48
1	Fe 238.204 Radial†	24.6	7.9	56.574	µg/L	56.574	ppb	10:59:48
1	K 766.490 Radial†	747.4	-49.7	-27.939	µg/L	-27.939	ppb	10:59:27
1	Mg 279.077 IEC†	14.0	-2.2	-15.113	µg/L	-15.113	ppb	10:59:48
1	Na 589.592 Radial†	-537.9	43.8	12.198	µg/L	12.198	ppb	10:59:27
1	Sr 421.552†	-44.7	8.3	0.0467	µg/L	0.0467	ppb	10:59:27
1	Sc 361.383	2062903.5	2062903.5	100.48	%			11:00:50
1	Y 371.029	1286004.0	1286004.0	100.13	%			11:00:50
1	Ag 328.068†	245.0	38.6	0.3713	µg/L	0.3713	ppb	11:00:56
1	As 188.979†	6.1	7.4	13.704	µg/L	13.704	ppb	11:01:16
1	B 249.677†	193.7	23.2	1.0249	µg/L	1.0249	ppb	11:00:56
1	Ba 233.527†	-51.3	18.2	0.4823	µg/L	0.4823	ppb	11:01:16
1	Be 313.107†	3800.4	153.9	0.0995	µg/L	0.0995	ppb	11:00:56
1	Cd 226.502†	-74.1	22.6	0.6071	µg/L	0.6071	ppb	11:01:16
1	Co 228.616†	-57.0	16.2	0.8073	µg/L	0.8073	ppb	11:01:16
1	Cr 267.716†	-131.2	6.3	0.1349	µg/L	0.1349	ppb	11:00:56
1	Cu 324.752†	4059.7	12.7	0.1030	µg/L	0.1030	ppb	11:00:56
1	Mn 257.610†	-84.1	162.0	0.5490	µg/L	0.5490	ppb	11:00:56
1	Mo 202.031†	1.9	3.1	0.3692	µg/L	0.3692	ppb	11:01:16
1	Ni 231.604†	309.8	-7.3	-0.4114	µg/L	-0.4114	ppb	11:01:16
1	P 214.914†	181.3	-0.4	-0.9377	µg/L	-0.9377	ppb	11:01:16
1	Pb 220.353†	46.3	8.7	2.2973	µg/L	2.2973	ppb	11:01:16
1	S 181.975 Axial†	33.4	5.2	26.467	µg/L	26.467	ppb	11:01:16
1	Sb 206.836†	18.4	-1.3	-1.3122	µg/L	-1.3122	ppb	11:01:16
1	Se 196.026†	15.8	3.2	4.1477	µg/L	4.1477	ppb	11:01:16
1	SiO2†	2812.9	180.7	34.433	µg/L	34.433	ppb	11:00:56
1	Si 251.611†	586.0	203.7	15.662	µg/L	15.662	ppb	11:01:16
1	Sn 189.927†	22.0	-0.1	-0.0536	µg/L	-0.0536	ppb	11:01:16
1	Ti 334.940†	1435.3	449.8	1.0724	µg/L	1.0724	ppb	11:00:56
1	Tl 190.801†	-21.4	0.6	1.0056	µg/L	1.0056	ppb	11:01:16
1	U 409.014†	591.1	-37.7	-3.6027	µg/L	-3.6027	ppb	11:00:56
1	V 292.402†	-155.7	-25.9	-0.3013	µg/L	-0.3013	ppb	11:00:56
1	Zn 213.857†	624.2	18.9	0.5143	µg/L	0.5143	ppb	11:01:16
2	Sc RADIAL	111488.6	111488.6	101	%			10:59:53
2	Al 396.153Radial†	186.6	40.4	21.856	µg/L	21.856	ppb	10:59:53
2	Ca 317.933Radial†	450.2	33.7	14.295	µg/L	14.295	ppb	11:00:14
2	Fe 238.204 Radial†	23.4	7.3	52.184	µg/L	52.184	ppb	11:00:14
2	K 766.490 Radial†	765.0	-14.0	-7.8485	µg/L	-7.8485	ppb	10:59:53
2	Mg 279.077 IEC†	17.2	1.3	8.8178	µg/L	8.8178	ppb	11:00:14
2	Na 589.592 Radial†	-521.9	46.6	12.998	µg/L	12.998	ppb	10:59:53
2	Sr 421.552†	48.9	100.3	0.5674	µg/L	0.5674	ppb	10:59:53
2	Sc 361.383	2054522.5	2054522.5	100.07	%			11:01:22
2	Y 371.029	1284371.0	1284371.0	100.01	%			11:01:22
2	Ag 328.068†	281.4	76.0	0.7313	µg/L	0.7313	ppb	11:01:28
2	As 188.979†	3.2	4.5	8.3273	µg/L	8.3273	ppb	11:01:48
2	B 249.677†	192.4	22.8	1.0045	µg/L	1.0045	ppb	11:01:28
2	Ba 233.527†	-47.9	21.4	0.5674	µg/L	0.5674	ppb	11:01:48
2	Be 313.107†	3689.7	58.8	0.0379	µg/L	0.0379	ppb	11:01:28
2	Cd 226.502†	-92.6	3.9	0.0991	µg/L	0.0991	ppb	11:01:48
2	Co 228.616†	-71.6	1.4	0.0694	µg/L	0.0694	ppb	11:01:48
2	Cr 267.716†	-86.8	50.1	1.0847	µg/L	1.0847	ppb	11:01:28
2	Cu 324.752†	4083.3	52.7	0.3886	µg/L	0.3886	ppb	11:01:28
2	Mn 257.610†	-66.9	178.8	0.6046	µg/L	0.6046	ppb	11:01:28
2	Mo 202.031†	-5.3	-4.2	-0.4973	µg/L	-0.4973	ppb	11:01:48
2	Ni 231.604†	308.9	-6.8	-0.3881	µg/L	-0.3881	ppb	11:01:48
2	P 214.914†	181.4	0.4	0.6362	µg/L	0.6362	ppb	11:01:48
2	Pb 220.353†	54.1	16.7	4.4182	µg/L	4.4182	ppb	11:01:48

2	S 181.975 Axial†	31.1	3.1	15.541 µg/L	15.541 ppb	11:01:48
2	Sb 206.836†	18.7	-1.0	-0.9925 µg/L	-0.9925 ppb	11:01:48
2	Se 196.026†	8.0	-4.5	-5.7140 µg/L	-5.7140 ppb	11:01:48
2	SiO2†	2807.5	186.7	35.580 µg/L	35.580 ppb	11:01:28
2	Si 251.611†	584.3	204.4	15.751 µg/L	15.751 ppb	11:01:48
2	Sn 189.927†	21.4	-0.6	-0.3108 µg/L	-0.3108 ppb	11:01:48
2	Ti 334.940†	1280.5	300.9	0.7168 µg/L	0.7168 ppb	11:01:28
2	Tl 190.801†	-16.6	5.3	8.2085 µg/L	8.2085 ppb	11:01:48
2	U 409.014†	608.3	-18.1	-1.7370 µg/L	-1.7370 ppb	11:01:28
2	V 292.402†	-109.9	19.2	0.2225 µg/L	0.2225 ppb	11:01:28
2	Zn 213.857†	620.7	17.9	0.4870 µg/L	0.4870 ppb	11:01:48
3	Sc RADIAL	112883.0	112883.0	102 %		11:00:19
3	Al 396.153Radial†	162.3	14.3	7.7462 µg/L	7.7462 ppb	11:00:19
3	Ca 317.933Radial†	442.5	20.6	8.7492 µg/L	8.7492 ppb	11:00:40
3	Fe 238.204 Radial†	26.8	10.4	74.211 µg/L	74.211 ppb	11:00:40
3	K 766.490 Radial†	733.1	-54.8	-30.759 µg/L	-30.759 ppb	11:00:19
3	Mg 279.077 IEC†	13.3	-2.7	-18.742 µg/L	-18.742 ppb	11:00:40
3	Na 589.592 Radial†	-516.7	58.1	16.192 µg/L	16.192 ppb	11:00:19
3	Sr 421.552†	-20.0	32.0	0.1813 µg/L	0.1813 ppb	11:00:19
3	Sc 361.383	2060406.3	2060406.3	100.36 %		11:01:54
3	Y 371.029	1287449.6	1287449.6	100.25 %		11:01:54
3	Ag 328.068†	197.9	-8.0	-0.0700 µg/L	-0.0700 ppb	11:02:00
3	As 188.979†	1.2	2.5	4.6605 µg/L	4.6605 ppb	11:02:21
3	B 249.677†	168.7	-1.4	-0.0853 µg/L	-0.0853 ppb	11:02:00
3	Ba 233.527†	-53.1	16.4	0.4347 µg/L	0.4347 ppb	11:02:21
3	Be 313.107†	3807.2	165.2	0.1069 µg/L	0.1069 ppb	11:02:00
3	Cd 226.502†	-93.3	3.4	0.0863 µg/L	0.0863 ppb	11:02:21
3	Co 228.616†	-69.9	3.3	0.1607 µg/L	0.1607 ppb	11:02:21
3	Cr 267.716†	-110.8	26.4	0.5721 µg/L	0.5721 ppb	11:02:00
3	Cu 324.752†	4113.5	71.2	0.5253 µg/L	0.5253 ppb	11:02:00
3	Mn 257.610†	-35.5	210.3	0.7127 µg/L	0.7127 ppb	11:02:00
3	Mo 202.031†	-4.5	-3.3	-0.3966 µg/L	-0.3966 ppb	11:02:21
3	Ni 231.604†	322.3	5.6	0.3164 µg/L	0.3164 ppb	11:02:21
3	P 214.914†	177.3	-4.3	-9.0842 µg/L	-9.0842 ppb	11:02:21
3	Pb 220.353†	38.9	1.3	0.3524 µg/L	0.3524 ppb	11:02:21
3	S 181.975 Axial†	30.6	2.5	12.545 µg/L	12.545 ppb	11:02:21
3	Sb 206.836†	19.2	-0.5	-0.4637 µg/L	-0.4637 ppb	11:02:21
3	Se 196.026†	12.9	0.3	0.4724 µg/L	0.4724 ppb	11:02:21
3	SiO2†	2804.8	176.0	33.547 µg/L	33.547 ppb	11:02:00
3	Si 251.611†	582.3	200.8	15.438 µg/L	15.438 ppb	11:02:21
3	Sn 189.927†	23.0	0.8	0.4380 µg/L	0.4380 ppb	11:02:21
3	Ti 334.940†	1384.8	401.2	0.9561 µg/L	0.9561 ppb	11:02:00
3	Tl 190.801†	-19.2	2.8	4.2788 µg/L	4.2788 ppb	11:02:21
3	U 409.014†	633.6	5.3	0.4954 µg/L	0.4954 ppb	11:02:00
3	V 292.402†	-120.0	9.4	0.1146 µg/L	0.1146 ppb	11:02:00
3	Zn 213.857†	619.8	15.2	0.4073 µg/L	0.4073 ppb	11:02:21

Mean Data: 1201992149|931347|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2059277.4	100.30	%	0.210				0.21%
Sc RADIAL	112886.6	102	%	1.3				1.24%
Y 371.029	1285941.5	100.13	%	0.120				0.12%
Ag 328.068†	35.5	0.3442	µg/L	0.40132	0.3442	ppb	0.40132	116.60%
Al 396.153Radial†	38.0	20.545	µg/L	12.1957	20.545	ppb	12.1957	59.36%
As 188.979†	4.8	8.8972	µg/L	4.54848	8.8972	ppb	4.54848	51.12%
B 249.677†	14.9	0.6480	µg/L	0.63517	0.6480	ppb	0.63517	98.01%
Ba 233.527†	18.6	0.4948	µg/L	0.06727	0.4948	ppb	0.06727	13.59%
Be 313.107†	126.0	0.0815	µg/L	0.03791	0.0815	ppb	0.03791	46.55%
Ca 317.933Radial†	21.4	9.0666	µg/L	5.07681	9.0666	ppb	5.07681	55.99%
Cd 226.502†	10.0	0.2642	µg/L	0.29708	0.2642	ppb	0.29708	112.46%
Co 228.616†	7.0	0.3458	µg/L	0.40228	0.3458	ppb	0.40228	116.34%
Cr 267.716†	27.6	0.5972	µg/L	0.47539	0.5972	ppb	0.47539	79.60%
Cu 324.752†	45.5	0.3390	µg/L	0.21547	0.3390	ppb	0.21547	63.56%
Fe 238.204 Radial†	8.5	60.990	µg/L	11.6586	60.990	ppb	11.6586	19.12%
K 766.490 Radial†	-39.5	-22.182	µg/L	12.4931	-22.182	ppb	12.4931	56.32%
Mg 279.077 IEC†	-1.2	-8.3458	µg/L	14.97451	-8.3458	ppb	14.97451	179.43%
Mn 257.610†	183.7	0.6221	µg/L	0.08324	0.6221	ppb	0.08324	13.38%
Mo 202.031†	-1.5	-0.1749	µg/L	0.47387	-0.1749	ppb	0.47387	270.94%
Na 589.592 Radial†	49.5	13.796	µg/L	2.1133	13.796	ppb	2.1133	15.32%

Ni 231.604†	-2.8	-0.1610	µg/L	0.41360	-0.1610	ppb	0.41360 256.84%
P 214.914†	-1.4	-3.1286	µg/L	5.21739	-3.1286	ppb	5.21739 166.77%
Pb 220.353†	8.9	2.3560	µg/L	2.03353	2.3560	ppb	2.03353 86.31%
S 181.975 Axial†	3.6	18.184	µg/L	7.3276	18.184	ppb	7.3276 40.30%
Sb 206.836†	-0.9	-0.9228	µg/L	0.42853	-0.9228	ppb	0.42853 46.44%
Se 196.026†	-0.3	-0.3646	µg/L	4.98385	-0.3646	ppb	4.98385 >999.9%
SiO2†	181.1	34.520	µg/L	1.0188	34.520	ppb	1.0188 2.95%
Si 251.611†	203.0	15.617	µg/L	0.1610	15.617	ppb	0.1610 1.03%
Sn 189.927†	0.0	0.0245	µg/L	0.38044	0.0245	ppb	0.38044 >999.9%
Sr 421.552†	46.9	0.2651	µg/L	0.27026	0.2651	ppb	0.27026 101.93%
Ti 334.940†	384.0	0.9151	µg/L	0.18130	0.9151	ppb	0.18130 19.81%
Tl 190.801†	2.9	4.4977	µg/L	3.60645	4.4977	ppb	3.60645 80.19%
U 409.014†	-16.8	-1.6147	µg/L	2.05177	-1.6147	ppb	2.05177 127.06%
V 292.402†	0.9	0.0119	µg/L	0.27661	0.0119	ppb	0.27661 >999.9%
Zn 213.857†	17.4	0.4695	µg/L	0.05557	0.4695	ppb	0.05557 11.84%

Sequence No.: 4
Sample ID: 1201992150|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 302
Date Collected: 12/11/2009 11:02:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201992150|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116790.4	116790.4	105	%			11:03:03
1	Al 396.153Radial†	195529.1	185374.4	100050	µg/L	100050	ppb	11:03:03
1	Ca 317.933Radial†	264615.8	250655.8	106310	µg/L	106310	ppb	11:03:03
1	Fe 238.204 Radial†	30782.3	29190.5	209020	µg/L	209020	ppb	11:03:08
1	K 766.490 Radial†	83584.5	78531.2	44103	µg/L	44103	ppb	11:03:03
1	Mg 279.077 IEC†	6433.4	6088.2	41197	µg/L	41197	ppb	11:03:08
1	Na 589.592 Radial†	40523.4	39014.2	10877	µg/L	10877	ppb	11:03:03
1	Sr 421.552†	465092.2	441334.5	2496.7	µg/L	2496.7	ppb	11:03:03
1	Sc 361.383	2063409.3	2063409.3	100.50	%			11:03:43
1	Y 371.029	1299562.0	1299562.0	101.19	%			11:03:43
1	Ag 328.068†	34206.1	33829.7	348.83	µg/L	348.83	ppb	11:03:49
1	As 188.979†	643.9	642.0	1154.4	µg/L	1154.4	ppb	11:04:09
1	B 249.677†	37967.0	37607.4	1621.7	µg/L	1621.7	ppb	11:03:49
1	Ba 233.527†	78442.9	78119.6	2075.9	µg/L	2075.9	ppb	11:03:49
1	Be 313.107†	1339371.3	1329039.5	860.38	µg/L	860.38	ppb	11:03:43
1	Cd 226.502†	24549.5	24523.0	650.90	µg/L	650.90	ppb	11:03:49
1	Co 228.616†	20459.8	20430.4	1005.6	µg/L	1005.6	ppb	11:03:49
1	Cr 267.716†	116420.0	115974.2	2511.4	µg/L	2511.4	ppb	11:03:49
1	Cu 324.752†	275137.7	269733.0	1975.6	µg/L	1975.6	ppb	11:03:49
1	Mn 257.610†	1808771.6	1799964.5	6047.7	µg/L	6047.7	ppb	11:03:43
1	Mo 202.031†	4738.0	4715.5	574.77	µg/L	574.77	ppb	11:04:09
1	Ni 231.604†	25945.3	25500.0	1446.3	µg/L	1446.3	ppb	11:03:49
1	P 214.914†	4511.4	4307.9	8625.5	µg/L	8625.5	ppb	11:04:09
1	Pb 220.353†	3487.5	3432.6	912.98	µg/L	912.98	ppb	11:04:09
1	S 181.975 Axial†	882.7	850.3	4256.9	µg/L	4256.9	ppb	11:04:09
1	Sb 206.836†	2045.5	2015.7	2048.3	µg/L	2048.3	ppb	11:04:09
1	Se 196.026†	2426.5	2401.9	3236.6	µg/L	3236.6	ppb	11:04:09
1	SiO2†	107081.3	103926.5	19808	µg/L	19808	ppb	11:03:49
1	Si 251.611†	120613.6	119630.4	8904.3	µg/L	8904.3	ppb	11:03:49
1	Sn 189.927†	2144.7	2111.9	1145.2	µg/L	1145.2	ppb	11:04:09
1	Ti 334.940†	2878406.5	2863021.6	6821.5	µg/L	6821.5	ppb	11:03:43
1	Tl 190.801†	856.7	874.3	1402.0	µg/L	1402.0	ppb	11:04:09
1	U 409.014†	-17.6	-643.6	-97.871	µg/L	-97.871	ppb	11:03:49
1	V 292.402†	115384.5	114936.1	1364.9	µg/L	1364.9	ppb	11:03:49
1	Zn 213.857†	237153.4	235364.1	6410.6	µg/L	6410.6	ppb	11:03:49
2	Sc RADIAL	115384.4	115384.4	104	%			11:03:14
2	Al 396.153Radial†	195401.0	187512.0	101210	µg/L	101210	ppb	11:03:14
2	Ca 317.933Radial†	263973.9	253098.5	107350	µg/L	107350	ppb	11:03:14
2	Fe 238.204 Radial†	30850.2	29611.7	212030	µg/L	212030	ppb	11:03:19
2	K 766.490 Radial†	83634.1	79545.2	44672	µg/L	44672	ppb	11:03:14
2	Mg 279.077 IEC†	6438.5	6167.5	41733	µg/L	41733	ppb	11:03:19
2	Na 589.592 Radial†	40438.6	39401.3	10985	µg/L	10985	ppb	11:03:14
2	Sr 421.552†	464241.8	445894.8	2522.5	µg/L	2522.5	ppb	11:03:14
2	Sc 361.383	2076703.9	2076703.9	101.15	%			11:04:16
2	Y 371.029	1311944.1	1311944.1	102.15	%			11:04:16
2	Ag 328.068†	33974.1	33382.5	344.66	µg/L	344.66	ppb	11:04:22
2	As 188.979†	647.3	641.3	1152.3	µg/L	1152.3	ppb	11:04:43
2	B 249.677†	37718.3	37119.8	1598.8	µg/L	1598.8	ppb	11:04:22
2	Ba 233.527†	77788.3	76972.8	2045.4	µg/L	2045.4	ppb	11:04:22
2	Be 313.107†	1341781.0	1322890.3	856.40	µg/L	856.40	ppb	11:04:16
2	Cd 226.502†	24275.5	24095.7	639.05	µg/L	639.05	ppb	11:04:22
2	Co 228.616†	20262.4	20104.9	989.41	µg/L	989.41	ppb	11:04:22
2	Cr 267.716†	115464.1	114287.6	2474.8	µg/L	2474.8	ppb	11:04:22
2	Cu 324.752†	273115.4	265981.1	1949.4	µg/L	1949.4	ppb	11:04:22
2	Mn 257.610†	1812102.7	1791736.3	6020.5	µg/L	6020.5	ppb	11:04:16
2	Mo 202.031†	4766.0	4713.0	574.58	µg/L	574.58	ppb	11:04:43
2	Ni 231.604†	25684.3	25076.6	1422.3	µg/L	1422.3	ppb	11:04:22
2	P 214.914†	4540.2	4307.7	8625.1	µg/L	8625.1	ppb	11:04:43
2	Pb 220.353†	3492.2	3415.1	908.43	µg/L	908.43	ppb	11:04:43

2	S 181.975 Axial†	887.8	849.7	4253.4	µg/L	4253.4 ppb	11:04:43
2	Sb 206.836†	2043.6	2000.8	2033.1	µg/L	2033.1 ppb	11:04:43
2	Se 196.026†	2423.5	2383.4	3214.8	µg/L	3214.8 ppb	11:04:43
2	SiO2†	106226.8	102399.6	19517	µg/L	19517 ppb	11:04:22
2	Si 251.611†	119808.6	118066.3	8784.9	µg/L	8784.9 ppb	11:04:22
2	Sn 189.927†	2152.0	2105.5	1142.6	µg/L	1142.6 ppb	11:04:43
2	Ti 334.940†	2882411.4	2848646.3	6787.1	µg/L	6787.1 ppb	11:04:16
2	Tl 190.801†	853.9	866.1	1389.0	µg/L	1389.0 ppb	11:04:43
2	U 409.014†	28.0	-598.3	-94.092	µg/L	-94.092 ppb	11:04:22
2	V 292.402†	114421.3	113248.9	1345.4	µg/L	1345.4 ppb	11:04:22
2	Zn 213.857†	235106.1	231829.5	6313.6	µg/L	6313.6 ppb	11:04:22
3	Sc RADIAL	115519.1	115519.1	104	%		11:03:25
3	Al 396.153Radial†	194390.6	186324.0	100570	µg/L	100570 ppb	11:03:25
3	Ca 317.933Radial†	262534.2	251422.0	106640	µg/L	106640 ppb	11:03:25
3	Fe 238.204 Radial†	31605.8	30301.9	216970	µg/L	216970 ppb	11:03:31
3	K 766.490 Radial†	83272.7	79104.9	44425	µg/L	44425 ppb	11:03:25
3	Mg 279.077 IEC†	6599.2	6314.5	42727	µg/L	42727 ppb	11:03:31
3	Na 589.592 Radial†	40186.3	39114.0	10905	µg/L	10905 ppb	11:03:25
3	Sr 421.552†	461797.0	443030.0	2506.3	µg/L	2506.3 ppb	11:03:25
3	Sc 361.383	2062477.8	2062477.8	100.46	%		11:04:50
3	Y 371.029	1300661.2	1300661.2	101.28	%		11:04:50
3	Ag 328.068†	33995.3	33635.2	347.51	µg/L	347.51 ppb	11:04:56
3	As 188.979†	639.4	637.8	1145.4	µg/L	1145.4 ppb	11:05:16
3	B 249.677†	37604.6	37263.8	1603.7	µg/L	1603.7 ppb	11:04:56
3	Ba 233.527†	77547.5	77263.5	2053.2	µg/L	2053.2 ppb	11:04:56
3	Be 313.107†	1341708.1	1331967.5	862.27	µg/L	862.27 ppb	11:04:50
3	Cd 226.502†	24209.8	24195.9	641.39	µg/L	641.39 ppb	11:04:56
3	Co 228.616†	20301.5	20281.9	998.13	µg/L	998.13 ppb	11:04:56
3	Cr 267.716†	115435.6	115046.6	2491.3	µg/L	2491.3 ppb	11:04:56
3	Cu 324.752†	273031.9	267760.4	1963.2	µg/L	1963.2 ppb	11:04:56
3	Mn 257.610†	1813419.2	1805403.8	6066.9	µg/L	6066.9 ppb	11:04:50
3	Mo 202.031†	4733.9	4713.5	574.84	µg/L	574.84 ppb	11:05:16
3	Ni 231.604†	25644.8	25212.5	1430.0	µg/L	1430.0 ppb	11:04:56
3	P 214.914†	4525.8	4324.3	8652.5	µg/L	8652.5 ppb	11:05:16
3	Pb 220.353†	3467.2	3414.0	908.03	µg/L	908.03 ppb	11:05:16
3	S 181.975 Axial†	872.9	840.9	4208.4	µg/L	4208.4 ppb	11:05:16
3	Sb 206.836†	2044.8	2015.9	2048.6	µg/L	2048.6 ppb	11:05:16
3	Se 196.026†	2424.4	2400.9	3240.2	µg/L	3240.2 ppb	11:05:16
3	SiO2†	106071.6	102969.5	19626	µg/L	19626 ppb	11:04:56
3	Si 251.611†	119550.2	118626.0	8826.2	µg/L	8826.2 ppb	11:04:56
3	Sn 189.927†	2143.2	2111.4	1146.2	µg/L	1146.2 ppb	11:05:16
3	Ti 334.940†	2883632.2	2869517.0	6836.9	µg/L	6836.9 ppb	11:04:50
3	Tl 190.801†	869.9	887.9	1423.1	µg/L	1423.1 ppb	11:05:16
3	U 409.014†	8.6	-617.4	-96.858	µg/L	-96.858 ppb	11:04:56
3	V 292.402†	114173.7	113782.6	1352.0	µg/L	1352.0 ppb	11:04:56
3	Zn 213.857†	234782.2	233110.3	6348.1	µg/L	6348.1 ppb	11:04:56

Mean Data: 1201992150|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2067530.4	100.70	%	0.388				0.38%
Sc RADIAL	115898.0	105	%	0.7				0.67%
Y 371.029	1304055.8	101.54	%	0.534				0.53%
Ag 328.068†	33615.8	347.00	µg/L	2.130	347.00	ppb	2.130	0.61%
Al 396.153Radial†	186403.5	100610	µg/L	578.2	100610	ppb	578.2	0.57%
As 188.979†	640.4	1150.7	µg/L	4.69	1150.7	ppb	4.69	0.41%
B 249.677†	37330.3	1608.1	µg/L	12.02	1608.1	ppb	12.02	0.75%
Ba 233.527†	77451.9	2058.2	µg/L	15.84	2058.2	ppb	15.84	0.77%
Be 313.107†	1327965.8	859.68	µg/L	2.999	859.68	ppb	2.999	0.35%
Ca 317.933Radial†	251725.4	106760	µg/L	529.9	106760	ppb	529.9	0.50%
Cd 226.502†	24271.5	643.78	µg/L	6.278	643.78	ppb	6.278	0.98%
Co 228.616†	20272.4	997.70	µg/L	8.086	997.70	ppb	8.086	0.81%
Cr 267.716†	115102.8	2492.5	µg/L	18.29	2492.5	ppb	18.29	0.73%
Cu 324.752†	267824.8	1962.7	µg/L	13.11	1962.7	ppb	13.11	0.67%
Fe 238.204 Radial†	29701.3	212670	µg/L	4016.7	212670	ppb	4016.7	1.89%
K 766.490 Radial†	79060.4	44400	µg/L	285.6	44400	ppb	285.6	0.64%
Mg 279.077 IEC†	6190.0	41886	µg/L	776.4	41886	ppb	776.4	1.85%
Mn 257.610†	1799034.9	6045.0	µg/L	23.28	6045.0	ppb	23.28	0.39%
Mo 202.031†	4714.0	574.73	µg/L	0.132	574.73	ppb	0.132	0.02%
Na 589.592 Radial†	39176.5	10922	µg/L	56.0	10922	ppb	56.0	0.51%

Ni 231.604†	25263.0	1432.9	µg/L	12.26	1432.9	ppb	12.26	0.86%
P 214.914†	4313.3	8634.4	µg/L	15.69	8634.4	ppb	15.69	0.18%
Pb 220.353†	3420.6	909.81	µg/L	2.748	909.81	ppb	2.748	0.30%
S 181.975 Axial†	846.9	4239.6	µg/L	27.09	4239.6	ppb	27.09	0.64%
Sb 206.836†	2010.8	2043.4	µg/L	8.85	2043.4	ppb	8.85	0.43%
Se 196.026†	2395.4	3230.5	µg/L	13.75	3230.5	ppb	13.75	0.43%
SiO2†	103098.5	19650	µg/L	147.1	19650	ppb	147.1	0.75%
Si 251.611†	118774.2	8838.5	µg/L	60.62	8838.5	ppb	60.62	0.69%
Sn 189.927†	2109.6	1144.7	µg/L	1.88	1144.7	ppb	1.88	0.16%
Sr 421.552†	443419.8	2508.5	µg/L	13.04	2508.5	ppb	13.04	0.52%
Ti 334.940†	2860395.0	6815.2	µg/L	25.49	6815.2	ppb	25.49	0.37%
Tl 190.801†	876.1	1404.7	µg/L	17.21	1404.7	ppb	17.21	1.23%
U 409.014†	-619.8	-96.273	µg/L	1.9559	-96.273	ppb	1.9559	2.03%
V 292.402†	113989.2	1354.1	µg/L	9.90	1354.1	ppb	9.90	0.73%
Zn 213.857†	233434.7	6357.4	µg/L	49.15	6357.4	ppb	49.15	0.77%

Sequence No.: 5
Sample ID: 241419001|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 303
Date Collected: 12/11/2009 11:05:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419001|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114762.1	114762.1	104	%			11:05:58
1	Al 396.153Radial†	116358.6	112208.1	60577	µg/L	60577	ppb	11:05:58
1	Ca 317.933Radial†	54078.2	51802.9	21971	µg/L	21971	ppb	11:06:03
1	Fe 238.204 Radial†	11134.7	10735.5	76860	µg/L	76860	ppb	11:06:03
1	K 766.490 Radial†	9376.8	8279.7	4649.8	µg/L	4649.8	ppb	11:06:03
1	Mg 279.077 IEC†	5612.4	5403.4	36711	µg/L	36711	ppb	11:06:03
1	Na 589.592 Radial†	38015.8	37272.5	10391	µg/L	10391	ppb	11:05:58
1	Sr 421.552†	25888.2	25048.7	141.70	µg/L	141.70	ppb	11:06:03
1	Sc 361.383	2068076.7	2068076.7	100.73	%			11:06:37
1	Y 371.029	1320860.2	1320860.2	102.85	%			11:06:37
1	Ag 328.068†	-495.9	-697.5	0.1622	µg/L	0.1622	ppb	11:06:43
1	As 188.979†	3.5	4.8	3.8058	µg/L	3.8058	ppb	11:07:03
1	B 249.677†	1030.1	853.1	14.108	µg/L	14.108	ppb	11:06:43
1	Ba 233.527†	15685.8	15641.3	415.31	µg/L	415.31	ppb	11:06:43
1	Be 313.107†	15063.6	11326.0	6.0517	µg/L	6.0517	ppb	11:06:43
1	Cd 226.502†	203.1	297.9	2.2142	µg/L	2.2142	ppb	11:07:03
1	Co 228.616†	1194.0	1258.3	55.380	µg/L	55.380	ppb	11:07:03
1	Cr 267.716†	2511.3	2630.0	57.140	µg/L	57.140	ppb	11:07:03
1	Cu 324.752†	8551.3	4461.7	48.445	µg/L	48.445	ppb	11:06:43
1	Mn 257.610†	858811.1	852830.0	2862.6	µg/L	2862.6	ppb	11:06:37
1	Mo 202.031†	-15.4	-14.1	1.3223	µg/L	1.3223	ppb	11:07:03
1	Ni 231.604†	1986.5	1656.6	93.960	µg/L	93.960	ppb	11:07:03
1	P 214.914†	1307.1	1116.7	2271.8	µg/L	2271.8	ppb	11:07:03
1	Pb 220.353†	252.8	213.5	60.766	µg/L	60.766	ppb	11:07:03
1	S 181.975 Axial†	50.9	22.6	97.264	µg/L	97.264	ppb	11:07:03
1	Sb 206.836†	22.8	3.0	13.865	µg/L	13.865	ppb	11:07:03
1	Se 196.026†	0.2	-12.4	25.855	µg/L	25.855	ppb	11:07:03
1	SiO2†	69986.1	66859.8	12743	µg/L	12743	ppb	11:06:43
1	Si 251.611†	77758.0	76814.7	5793.6	µg/L	5793.6	ppb	11:06:43
1	Sn 189.927†	-117.9	-139.1	-50.460	µg/L	-50.460	ppb	11:07:03
1	Ti 334.940†	1486290.9	1474535.9	3515.1	µg/L	3515.1	ppb	11:06:37
1	Tl 190.801†	-40.6	-18.4	5.8630	µg/L	5.8630	ppb	11:07:03
1	U 409.014†	346.8	-281.7	-40.693	µg/L	-40.693	ppb	11:06:43
1	V 292.402†	9430.5	9491.2	117.20	µg/L	117.20	ppb	11:06:43
1	Zn 213.857†	10758.7	10078.3	266.22	µg/L	266.22	ppb	11:06:43
2	Sc RADIAL	113983.5	113983.5	103	%			11:06:09
2	Al 396.153Radial†	117520.4	114105.0	61601	µg/L	61601	ppb	11:06:09
2	Ca 317.933Radial†	54058.3	52140.3	22114	µg/L	22114	ppb	11:06:14
2	Fe 238.204 Radial†	11165.9	10839.2	77603	µg/L	77603	ppb	11:06:14
2	K 766.490 Radial†	9373.3	8338.0	4682.6	µg/L	4682.6	ppb	11:06:14
2	Mg 279.077 IEC†	5649.3	5476.2	37206	µg/L	37206	ppb	11:06:14
2	Na 589.592 Radial†	38001.6	37509.4	10457	µg/L	10457	ppb	11:06:09
2	Sr 421.552†	25970.2	25299.1	143.12	µg/L	143.12	ppb	11:06:14
2	Sc 361.383	2056742.7	2056742.7	100.18	%			11:07:10
2	Y 371.029	1304928.2	1304928.2	101.61	%			11:07:10
2	Ag 328.068†	-426.0	-630.5	0.8627	µg/L	0.8627	ppb	11:07:15
2	As 188.979†	10.2	11.5	16.271	µg/L	16.271	ppb	11:07:36
2	B 249.677†	985.0	813.8	12.110	µg/L	12.110	ppb	11:07:15
2	Ba 233.527†	15669.6	15710.9	417.16	µg/L	417.16	ppb	11:07:15
2	Be 313.107†	15101.5	11446.2	6.1164	µg/L	6.1164	ppb	11:07:15
2	Cd 226.502†	205.1	301.1	2.2444	µg/L	2.2444	ppb	11:07:36
2	Co 228.616†	1189.3	1260.2	55.394	µg/L	55.394	ppb	11:07:36
2	Cr 267.716†	2520.6	2653.0	57.639	µg/L	57.639	ppb	11:07:36
2	Cu 324.752†	8465.0	4422.2	48.322	µg/L	48.322	ppb	11:07:15
2	Mn 257.610†	863303.3	862012.5	2893.4	µg/L	2893.4	ppb	11:07:10
2	Mo 202.031†	-27.8	-26.6	-0.1408	µg/L	-0.1408	ppb	11:07:36
2	Ni 231.604†	1971.8	1652.7	93.743	µg/L	93.743	ppb	11:07:36
2	P 214.914†	1312.3	1129.0	2297.3	µg/L	2297.3	ppb	11:07:36
2	Pb 220.353†	247.5	209.7	59.826	µg/L	59.826	ppb	11:07:36

2	S 181.975 Axial†	48.8	20.7	87.708 µg/L	87.708 ppb		11:07:36
2	Sb 206.836†	27.6	7.9	18.952 µg/L	18.952 ppb		11:07:36
2	Se 196.026†	4.7	-7.8	32.013 µg/L	32.013 ppb		11:07:36
2	SiO2†	69630.9	66888.1	12749 µg/L	12749 ppb		11:07:15
2	Si 251.611†	77455.2	76937.8	5801.8 µg/L	5801.8 ppb		11:07:15
2	Sn 189.927†	-118.2	-140.1	-50.729 µg/L	-50.729 ppb		11:07:36
2	Ti 334.940†	1493348.1	1489711.6	3551.3 µg/L	3551.3 ppb		11:07:10
2	Tl 190.801†	-23.2	-1.2	32.636 µg/L	32.636 ppb		11:07:36
2	U 409.014†	367.2	-259.5	-38.711 µg/L	-38.711 ppb		11:07:15
2	V 292.402†	9398.5	9510.8	117.48 µg/L	117.48 ppb		11:07:15
2	Zn 213.857†	10742.8	10121.4	267.31 µg/L	267.31 ppb		11:07:15
3	Sc RADIAL	113958.0	113958.0	103 %			11:06:20
3	Al 396.153Radial†	117340.4	113955.5	61520 µg/L	61520 ppb		11:06:20
3	Ca 317.933Radial†	53551.6	51659.3	21910 µg/L	21910 ppb		11:06:25
3	Fe 238.204 Radial†	11047.0	10726.0	76793 µg/L	76793 ppb		11:06:25
3	K 766.490 Radial†	9208.0	8179.4	4593.5 µg/L	4593.5 ppb		11:06:25
3	Mg 279.077 IEC†	5583.2	5413.2	36778 µg/L	36778 ppb		11:06:25
3	Na 589.592 Radial†	38093.7	37607.2	10485 µg/L	10485 ppb		11:06:20
3	Sr 421.552†	25620.4	24964.6	141.23 µg/L	141.23 ppb		11:06:25
3	Sc 361.383	2048451.3	2048451.3	99.774 %			11:07:43
3	Y 371.029	1297420.1	1297420.1	101.02 %			11:07:43
3	Ag 328.068†	-383.5	-589.5	1.1944 µg/L	1.1944 ppb		11:07:48
3	As 188.979†	5.4	6.7	7.6475 µg/L	7.6475 ppb		11:08:09
3	B 249.677†	953.1	785.8	11.110 µg/L	11.110 ppb		11:07:48
3	Ba 233.527†	15684.5	15789.2	419.24 µg/L	419.24 ppb		11:07:48
3	Be 313.107†	15137.9	11543.7	6.1700 µg/L	6.1700 ppb		11:07:48
3	Cd 226.502†	203.7	300.5	2.2882 µg/L	2.2882 ppb		11:08:09
3	Co 228.616†	1191.8	1267.4	55.700 µg/L	55.700 ppb		11:08:09
3	Cr 267.716†	2506.7	2649.3	57.559 µg/L	57.559 ppb		11:08:09
3	Cu 324.752†	8531.5	4523.1	48.870 µg/L	48.870 ppb		11:07:48
3	Mn 257.610†	865790.8	867993.7	2913.4 µg/L	2913.4 ppb		11:07:43
3	Mo 202.031†	-30.9	-29.8	-0.5567 µg/L	-0.5567 ppb		11:08:09
3	Ni 231.604†	1982.0	1670.9	94.775 µg/L	94.775 ppb		11:08:09
3	P 214.914†	1317.0	1139.1	2319.2 µg/L	2319.2 ppb		11:08:09
3	Pb 220.353†	270.4	233.7	66.163 µg/L	66.163 ppb		11:08:09
3	S 181.975 Axial†	48.4	20.5	86.852 µg/L	86.852 ppb		11:08:09
3	Sb 206.836†	20.6	1.0	12.119 µg/L	12.119 ppb		11:08:09
3	Se 196.026†	-7.0	-19.6	16.504 µg/L	16.504 ppb		11:08:09
3	SiO2†	70071.4	67610.9	12887 µg/L	12887 ppb		11:07:48
3	Si 251.611†	78016.6	77813.4	5868.3 µg/L	5868.3 ppb		11:07:48
3	Sn 189.927†	-115.3	-137.6	-49.693 µg/L	-49.693 ppb		11:08:09
3	Ti 334.940†	1498212.7	1500621.0	3577.3 µg/L	3577.3 ppb		11:07:43
3	Tl 190.801†	-28.9	-7.0	24.011 µg/L	24.011 ppb		11:08:09
3	U 409.014†	328.8	-296.4	-42.088 µg/L	-42.088 ppb		11:07:48
3	V 292.402†	9419.2	9569.5	118.09 µg/L	118.09 ppb		11:07:48
3	Zn 213.857†	10743.5	10165.5	268.61 µg/L	268.61 ppb		11:07:48

Mean Data: 241419001|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2057756.9	100.23	%	0.480				0.48%
Sc RADIAL	114234.5	103	%	0.4				0.40%
Y 371.029	1307736.2	101.83	%	0.932				0.92%
Ag 328.068†	-639.2	0.7398	µg/L	0.52698	0.7398	ppb	0.52698	71.23%
Al 396.153Radial†	113422.9	61233	µg/L	569.4	61233	ppb	569.4	0.93%
As 188.979†	7.7	9.2413	µg/L	6.38342	9.2413	ppb	6.38342	69.08%
B 249.677†	817.6	12.442	µg/L	1.5265	12.442	ppb	1.5265	12.27%
Ba 233.527†	15713.8	417.24	µg/L	1.964	417.24	ppb	1.964	0.47%
Be 313.107†	11438.6	6.1127	µg/L	0.05925	6.1127	ppb	0.05925	0.97%
Ca 317.933Radial†	51867.5	21999	µg/L	104.7	21999	ppb	104.7	0.48%
Cd 226.502†	299.9	2.2490	µg/L	0.03720	2.2490	ppb	0.03720	1.65%
Co 228.616†	1262.0	55.491	µg/L	0.1810	55.491	ppb	0.1810	0.33%
Cr 267.716†	2644.1	57.446	µg/L	0.2679	57.446	ppb	0.2679	0.47%
Cu 324.752†	4469.0	48.546	µg/L	0.2876	48.546	ppb	0.2876	0.59%
Fe 238.204 Radial†	10766.9	77085	µg/L	449.7	77085	ppb	449.7	0.58%
K 766.490 Radial†	8265.7	4642.0	µg/L	45.07	4642.0	ppb	45.07	0.97%
Mg 279.077 IEC†	5431.0	36898	µg/L	268.7	36898	ppb	268.7	0.73%
Mn 257.610†	860945.4	2889.8	µg/L	25.55	2889.8	ppb	25.55	0.88%
Mo 202.031†	-23.5	0.2083	µg/L	0.98694	0.2083	ppb	0.98694	473.91%
Na 589.592 Radial†	37463.0	10444	µg/L	48.0	10444	ppb	48.0	0.46%

Ni 231.604†	1660.1	94.159	µg/L	0.5443	94.159	ppb	0.5443	0.58%
P 214.914†	1128.3	2296.1	µg/L	23.72	2296.1	ppb	23.72	1.03%
Pb 220.353†	219.0	62.252	µg/L	3.4201	62.252	ppb	3.4201	5.49%
S 181.975 Axial†	21.3	90.608	µg/L	5.7803	90.608	ppb	5.7803	6.38%
Sb 206.836†	4.0	14.979	µg/L	3.5497	14.979	ppb	3.5497	23.70%
Se 196.026†	-13.2	24.791	µg/L	7.8093	24.791	ppb	7.8093	31.50%
SiO2†	67119.6	12793	µg/L	81.1	12793	ppb	81.1	0.63%
Si 251.611†	77188.7	5821.2	µg/L	40.99	5821.2	ppb	40.99	0.70%
Sn 189.927†	-138.9	-50.294	µg/L	0.5379	-50.294	ppb	0.5379	1.07%
Sr 421.552†	25104.1	142.02	µg/L	0.984	142.02	ppb	0.984	0.69%
Ti 334.940†	1488289.5	3547.9	µg/L	31.24	3547.9	ppb	31.24	0.88%
Tl 190.801†	-8.9	20.837	µg/L	13.6659	20.837	ppb	13.6659	65.59%
U 409.014†	-279.2	-40.497	µg/L	1.6969	-40.497	ppb	1.6969	4.19%
V 292.402†	9523.8	117.59	µg/L	0.457	117.59	ppb	0.457	0.39%
Zn 213.857†	10121.7	267.38	µg/L	1.195	267.38	ppb	1.195	0.45%

Sequence No.: 6
Sample ID: 1201977928|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 304
Date Collected: 12/11/2009 11:08:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977928|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113369.1	113369.1	102	%			11:08:51
1	Al 396.153Radial†	70488.2	68753.0	37117	µg/L	37117	ppb	11:08:51
1	Ca 317.933Radial†	27697.1	26658.6	11307	µg/L	11307	ppb	11:08:51
1	Fe 238.204 Radial†	5963.6	5813.2	41618	µg/L	41618	ppb	11:09:11
1	K 766.490 Radial†	7620.6	6674.3	3748.3	µg/L	3748.3	ppb	11:08:51
1	Mg 279.077 IEC†	723.4	691.3	4649.9	µg/L	4649.9	ppb	11:09:11
1	Na 589.592 Radial†	7521.8	7917.4	2207.3	µg/L	2207.3	ppb	11:08:51
1	Sr 421.552†	10502.6	10317.3	58.366	µg/L	58.366	ppb	11:08:51
1	Sc 361.383	2068851.7	2068851.7	100.77	%			11:10:15
1	Y 371.029	1305120.8	1305120.8	101.62	%			11:10:15
1	Ag 328.068†	-139.5	-343.6	0.4181	µg/L	0.4181	ppb	11:10:20
1	As 188.979†	6.0	7.3	9.5310	µg/L	9.5310	ppb	11:10:41
1	B 249.677†	628.2	453.9	7.2772	µg/L	7.2772	ppb	11:10:20
1	Ba 233.527†	15334.1	15286.5	405.79	µg/L	405.79	ppb	11:10:20
1	Be 313.107†	10880.7	7169.4	4.1272	µg/L	4.1272	ppb	11:10:20
1	Cd 226.502†	42.1	138.1	0.5214	µg/L	0.5214	ppb	11:10:41
1	Co 228.616†	167.0	238.7	8.9253	µg/L	8.9253	ppb	11:10:41
1	Cr 267.716†	938.6	1068.4	23.248	µg/L	23.248	ppb	11:10:20
1	Cu 324.752†	5903.9	1831.2	22.047	µg/L	22.047	ppb	11:10:20
1	Mn 257.610†	255046.9	253348.5	852.76	µg/L	852.76	ppb	11:10:15
1	Mo 202.031†	4.7	5.8	2.3362	µg/L	2.3362	ppb	11:10:41
1	Ni 231.604†	773.5	452.1	25.640	µg/L	25.640	ppb	11:10:41
1	P 214.914†	1065.0	876.0	1802.5	µg/L	1802.5	ppb	11:10:41
1	Pb 220.353†	173.9	135.1	38.472	µg/L	38.472	ppb	11:10:41
1	S 181.975 Axial†	61.0	32.5	157.33	µg/L	157.33	ppb	11:10:41
1	Sb 206.836†	24.9	5.1	9.2889	µg/L	9.2889	ppb	11:10:41
1	Se 196.026†	-6.7	-19.1	4.1995	µg/L	4.1995	ppb	11:10:41
1	SiO2†	72730.4	69557.1	13258	µg/L	13258	ppb	11:10:20
1	Si 251.611†	80885.3	79889.3	6104.3	µg/L	6104.3	ppb	11:10:20
1	Sn 189.927†	-20.9	-42.8	-13.762	µg/L	-13.762	ppb	11:10:41
1	Ti 334.940†	603183.8	597607.4	1424.5	µg/L	1424.5	ppb	11:10:15
1	Tl 190.801†	-19.5	2.6	16.600	µg/L	16.600	ppb	11:10:41
1	U 409.014†	182.7	-444.7	-49.912	µg/L	-49.912	ppb	11:10:20
1	V 292.402†	5111.7	5201.8	64.157	µg/L	64.157	ppb	11:10:20
1	Zn 213.857†	5011.4	4370.8	114.96	µg/L	114.96	ppb	11:10:20
2	Sc RADIAL	112184.6	112184.6	101	%			11:09:17
2	Al 396.153Radial†	70839.6	69827.5	37697	µg/L	37697	ppb	11:09:17
2	Ca 317.933Radial†	27585.2	26833.9	11381	µg/L	11381	ppb	11:09:17
2	Fe 238.204 Radial†	5899.4	5811.3	41605	µg/L	41605	ppb	11:09:38
2	K 766.490 Radial†	7645.4	6777.5	3806.2	µg/L	3806.2	ppb	11:09:17
2	Mg 279.077 IEC†	717.7	693.1	4662.5	µg/L	4662.5	ppb	11:09:38
2	Na 589.592 Radial†	7590.7	8063.2	2248.0	µg/L	2248.0	ppb	11:09:17
2	Sr 421.552†	10497.0	10420.1	58.948	µg/L	58.948	ppb	11:09:17
2	Sc 361.383	2068076.9	2068076.9	100.73	%			11:10:48
2	Y 371.029	1304236.2	1304236.2	101.55	%			11:10:48
2	Ag 328.068†	-200.2	-404.0	-0.1599	µg/L	-0.1599	ppb	11:10:53
2	As 188.979†	3.5	4.9	5.0570	µg/L	5.0570	ppb	11:11:14
2	B 249.677†	682.7	508.3	9.7225	µg/L	9.7225	ppb	11:10:53
2	Ba 233.527†	15269.8	15228.4	404.25	µg/L	404.25	ppb	11:10:53
2	Be 313.107†	10798.9	7092.3	4.0756	µg/L	4.0756	ppb	11:10:53
2	Cd 226.502†	49.6	145.6	0.7246	µg/L	0.7246	ppb	11:11:14
2	Co 228.616†	172.2	243.9	9.1725	µg/L	9.1725	ppb	11:11:14
2	Cr 267.716†	919.3	1049.5	22.841	µg/L	22.841	ppb	11:10:53
2	Cu 324.752†	5894.4	1824.0	21.992	µg/L	21.992	ppb	11:10:53
2	Mn 257.610†	255610.6	254002.9	854.95	µg/L	854.95	ppb	11:10:48
2	Mo 202.031†	2.9	4.0	2.1211	µg/L	2.1211	ppb	11:11:14
2	Ni 231.604†	770.0	448.9	25.462	µg/L	25.462	ppb	11:11:14
2	P 214.914†	1061.9	873.3	1797.1	µg/L	1797.1	ppb	11:11:14
2	Pb 220.353†	172.9	134.3	38.304	µg/L	38.304	ppb	11:11:14

2	S 181.975 Axial†	60.5	32.0	154.98 µg/L	154.98 ppb	11:11:14
2	Sb 206.836†	26.0	6.2	10.423 µg/L	10.423 ppb	11:11:14
2	Se 196.026†	-11.5	-23.9	-1.9968 µg/L	-1.9968 ppb	11:11:14
2	SiO2†	72297.4	69154.4	13181 µg/L	13181 ppb	11:10:53
2	Si 251.611†	80429.2	79466.5	6071.6 µg/L	6071.6 ppb	11:10:53
2	Sn 189.927†	-22.2	-44.1	-14.381 µg/L	-14.381 ppb	11:11:14
2	Ti 334.940†	604747.7	599384.2	1428.7 µg/L	1428.7 ppb	11:10:48
2	Tl 190.801†	-23.6	-1.5	10.262 µg/L	10.262 ppb	11:11:14
2	U 409.014†	158.0	-469.2	-52.242 µg/L	-52.242 ppb	11:10:53
2	V 292.402†	5099.9	5191.9	64.036 µg/L	64.036 ppb	11:10:53
2	Zn 213.857†	5010.2	4371.6	114.98 µg/L	114.98 ppb	11:10:53
3	Sc RADIAL	112665.8	112665.8	102 %		11:09:43
3	Al 396.153Radial†	71150.0	69834.0	37701 µg/L	37701 ppb	11:09:43
3	Ca 317.933Radial†	27799.0	26927.8	11421 µg/L	11421 ppb	11:09:43
3	Fe 238.204 Radial†	5891.2	5778.3	41369 µg/L	41369 ppb	11:10:03
3	K 766.490 Radial†	7683.3	6782.5	3809.0 µg/L	3809.0 ppb	11:09:43
3	Mg 279.077 IEC†	713.7	686.2	4615.3 µg/L	4615.3 ppb	11:10:03
3	Na 589.592 Radial†	7616.3	8056.2	2246.0 µg/L	2246.0 ppb	11:09:43
3	Sr 421.552†	10541.2	10419.3	58.943 µg/L	58.943 ppb	11:09:43
3	Sc 361.383	2091473.2	2091473.2	101.87 %		11:11:21
3	Y 371.029	1321745.3	1321745.3	102.92 %		11:11:21
3	Ag 328.068†	-225.2	-426.3	-0.3939 µg/L	-0.3939 ppb	11:11:26
3	As 188.979†	7.8	9.0	12.749 µg/L	12.749 ppb	11:11:47
3	B 249.677†	647.6	466.3	7.9115 µg/L	7.9115 ppb	11:11:26
3	Ba 233.527†	15295.4	15083.9	400.41 µg/L	400.41 ppb	11:11:26
3	Be 313.107†	10946.0	7116.7	4.0943 µg/L	4.0943 ppb	11:11:26
3	Cd 226.502†	55.7	151.0	0.8955 µg/L	0.8955 ppb	11:11:47
3	Co 228.616†	171.5	241.3	9.0601 µg/L	9.0601 ppb	11:11:47
3	Cr 267.716†	920.3	1040.3	22.640 µg/L	22.640 ppb	11:11:26
3	Cu 324.752†	5900.4	1764.4	21.515 µg/L	21.515 ppb	11:11:26
3	Mn 257.610†	257402.5	252923.3	851.30 µg/L	851.30 ppb	11:11:21
3	Mo 202.031†	6.5	7.5	2.5309 µg/L	2.5309 ppb	11:11:47
3	Ni 231.604†	782.8	452.9	25.687 µg/L	25.687 ppb	11:11:47
3	P 214.914†	1072.8	872.2	1795.1 µg/L	1795.1 ppb	11:11:47
3	Pb 220.353†	178.5	137.8	39.228 µg/L	39.228 ppb	11:11:47
3	S 181.975 Axial†	59.0	29.9	144.32 µg/L	144.32 ppb	11:11:47
3	Sb 206.836†	26.4	6.3	10.495 µg/L	10.495 ppb	11:11:47
3	Se 196.026†	-8.3	-20.7	2.0144 µg/L	2.0144 ppb	11:11:47
3	SiO2†	72302.5	68356.4	13029 µg/L	13029 ppb	11:11:26
3	Si 251.611†	80578.8	78720.2	6014.5 µg/L	6014.5 ppb	11:11:26
3	Sn 189.927†	-27.9	-49.4	-17.185 µg/L	-17.185 ppb	11:11:47
3	Ti 334.940†	608371.5	596225.5	1421.2 µg/L	1421.2 ppb	11:11:21
3	Tl 190.801†	-25.5	-3.1	7.7267 µg/L	7.7267 ppb	11:11:47
3	U 409.014†	253.4	-377.3	-43.429 µg/L	-43.429 ppb	11:11:26
3	V 292.402†	5131.5	5166.3	63.734 µg/L	63.734 ppb	11:11:26
3	Zn 213.857†	5023.3	4328.7	113.84 µg/L	113.84 ppb	11:11:26

Mean Data: 1201977928|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2076133.9	101.12	%	0.647				0.64%
Sc RADIAL	112739.9	102	%	0.5				0.53%
Y 371.029	1310367.4	102.03	%	0.768				0.75%
Ag 328.068†	-391.3	-0.0452	µg/L	0.41794	-0.0452	ppb	0.41794	923.65%
Al 396.153Radial†	69471.5	37505	µg/L	335.9	37505	ppb	335.9	0.90%
As 188.979†	7.1	9.1124	µg/L	3.86311	9.1124	ppb	3.86311	42.39%
B 249.677†	476.1	8.3037	µg/L	1.26895	8.3037	ppb	1.26895	15.28%
Ba 233.527†	15199.6	403.48	µg/L	2.769	403.48	ppb	2.769	0.69%
Be 313.107†	7126.1	4.0990	µg/L	0.02614	4.0990	ppb	0.02614	0.64%
Ca 317.933Radial†	26806.8	11370	µg/L	58.0	11370	ppb	58.0	0.51%
Cd 226.502†	144.9	0.7138	µg/L	0.18728	0.7138	ppb	0.18728	26.24%
Co 228.616†	241.3	9.0526	µg/L	0.12376	9.0526	ppb	0.12376	1.37%
Cr 267.716†	1052.7	22.910	µg/L	0.3100	22.910	ppb	0.3100	1.35%
Cu 324.752†	1806.5	21.852	µg/L	0.2925	21.852	ppb	0.2925	1.34%
Fe 238.204 Radial†	5800.9	41531	µg/L	140.4	41531	ppb	140.4	0.34%
K 766.490 Radial†	6744.7	3787.8	µg/L	34.28	3787.8	ppb	34.28	0.91%
Mg 279.077 IEC†	690.2	4642.6	µg/L	24.44	4642.6	ppb	24.44	0.53%
Mn 257.610†	253424.9	853.00	µg/L	1.833	853.00	ppb	1.833	0.21%
Mo 202.031†	5.8	2.3294	µg/L	0.20497	2.3294	ppb	0.20497	8.80%
Na 589.592 Radial†	8012.3	2233.8	µg/L	22.92	2233.8	ppb	22.92	1.03%

Ni 231.604†	451.3	25.597	µg/L	0.1186	25.597	ppb	0.1186	0.46%
P 214.914†	873.8	1798.2	µg/L	3.81	1798.2	ppb	3.81	0.21%
Pb 220.353†	135.7	38.668	µg/L	0.4920	38.668	ppb	0.4920	1.27%
S 181.975 Axial†	31.5	152.21	µg/L	6.933	152.21	ppb	6.933	4.56%
Sb 206.836†	5.8	10.069	µg/L	0.6767	10.069	ppb	0.6767	6.72%
Se 196.026†	-21.2	1.4057	µg/L	3.14265	1.4057	ppb	3.14265	223.56%
SiO2†	69022.7	13156	µg/L	116.5	13156	ppb	116.5	0.89%
Si 251.611†	79358.7	6063.5	µg/L	45.48	6063.5	ppb	45.48	0.75%
Sn 189.927†	-45.4	-15.109	µg/L	1.8241	-15.109	ppb	1.8241	12.07%
Sr 421.552†	10385.6	58.752	µg/L	0.3346	58.752	ppb	0.3346	0.57%
Ti 334.940†	597739.1	1424.8	µg/L	3.78	1424.8	ppb	3.78	0.27%
Tl 190.801†	-0.7	11.529	µg/L	4.5703	11.529	ppb	4.5703	39.64%
U 409.014†	-430.4	-48.528	µg/L	4.5664	-48.528	ppb	4.5664	9.41%
V 292.402†	5186.7	63.976	µg/L	0.2179	63.976	ppb	0.2179	0.34%
Zn 213.857†	4357.0	114.59	µg/L	0.656	114.59	ppb	0.656	0.57%

Sequence No.: 7
Sample ID: 1201977930|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 305
Date Collected: 12/11/2009 11:11:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977930|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114759.4	114759.4	104	%			11:12:29
1	Al 396.153Radial†	206911.9	199648.9	107760	µg/L	107760	ppb	11:12:29
1	Ca 317.933Radial†	36000.8	34348.6	14568	µg/L	14568	ppb	11:12:50
1	Fe 238.204 Radial†	14246.5	13740.5	98390	µg/L	98390	ppb	11:12:50
1	K 766.490 Radial†	26178.7	24503.7	13761	µg/L	13761	ppb	11:12:29
1	Mg 279.077 IEC†	2049.2	1962.9	13245	µg/L	13245	ppb	11:12:50
1	Na 589.592 Radial†	28054.2	27654.4	7709.9	µg/L	7709.9	ppb	11:12:29
1	Sr 421.552†	111043.6	107275.3	606.87	µg/L	606.87	ppb	11:12:29
1	Sc 361.383	2093340.1	2093340.1	101.96	%			11:13:54
1	Y 371.029	1308155.4	1308155.4	101.86	%			11:13:54
1	Ag 328.068†	57121.6	55817.9	545.24	µg/L	545.24	ppb	11:14:00
1	As 188.979†	289.4	285.2	515.34	µg/L	515.34	ppb	11:14:20
1	B 249.677†	12822.9	12406.8	525.73	µg/L	525.73	ppb	11:14:00
1	Ba 233.527†	55792.6	54788.8	1455.3	µg/L	1455.3	ppb	11:14:00
1	Be 313.107†	860729.6	840548.1	544.78	µg/L	544.78	ppb	11:13:54
1	Cd 226.502†	19659.0	19377.2	519.29	µg/L	519.29	ppb	11:14:00
1	Co 228.616†	10952.1	10814.4	534.87	µg/L	534.87	ppb	11:14:20
1	Cr 267.716†	28417.7	28008.0	607.21	µg/L	607.21	ppb	11:14:00
1	Cu 324.752†	85466.4	79795.0	592.29	µg/L	592.29	ppb	11:14:00
1	Mn 257.610†	1097868.5	1077000.5	3615.3	µg/L	3615.3	ppb	11:13:54
1	Mo 202.031†	4350.0	4267.5	516.60	µg/L	516.60	ppb	11:14:20
1	Ni 231.604†	11310.8	10777.8	611.30	µg/L	611.30	ppb	11:14:20
1	P 214.914†	1222.3	1017.9	2003.0	µg/L	2003.0	ppb	11:14:20
1	Pb 220.353†	2301.2	2219.6	595.47	µg/L	595.47	ppb	11:14:20
1	S 181.975 Axial†	1192.9	1142.0	5750.6	µg/L	5750.6	ppb	11:14:20
1	Sb 206.836†	539.2	509.3	521.83	µg/L	521.83	ppb	11:14:20
1	Se 196.026†	394.3	374.2	547.24	µg/L	547.24	ppb	11:14:20
1	SiO2†	111955.1	107183.2	20429	µg/L	20429	ppb	11:14:00
1	Si 251.611†	125931.3	123129.9	9360.7	µg/L	9360.7	ppb	11:14:00
1	Sn 189.927†	1036.4	994.4	530.15	µg/L	530.15	ppb	11:14:20
1	Ti 334.940†	1116048.9	1093607.0	2607.1	µg/L	2607.1	ppb	11:13:54
1	Tl 190.801†	309.7	325.7	532.22	µg/L	532.22	ppb	11:14:20
1	U 409.014†	5782.7	5045.5	463.14	µg/L	463.14	ppb	11:14:00
1	V 292.402†	54756.3	53832.3	641.85	µg/L	641.85	ppb	11:14:00
1	Zn 213.857†	109088.4	106388.1	2898.1	µg/L	2898.1	ppb	11:14:00
2	Sc RADIAL	114020.9	114020.9	103	%			11:12:55
2	Al 396.153Radial†	210169.5	204108.8	110170	µg/L	110170	ppb	11:12:55
2	Ca 317.933Radial†	36232.4	34798.9	14759	µg/L	14759	ppb	11:13:16
2	Fe 238.204 Radial†	14319.6	13900.6	99536	µg/L	99536	ppb	11:13:16
2	K 766.490 Radial†	26636.1	25112.0	14103	µg/L	14103	ppb	11:12:55
2	Mg 279.077 IEC†	2061.7	1987.9	13413	µg/L	13413	ppb	11:13:16
2	Na 589.592 Radial†	28478.3	28242.0	7873.7	µg/L	7873.7	ppb	11:12:55
2	Sr 421.552†	112534.7	109418.8	618.99	µg/L	618.99	ppb	11:12:55
2	Sc 361.383	2063157.0	2063157.0	100.49	%			11:14:28
2	Y 371.029	1295397.7	1295397.7	100.87	%			11:14:28
2	Ag 328.068†	57022.8	56539.1	552.27	µg/L	552.27	ppb	11:14:33
2	As 188.979†	291.9	291.8	527.35	µg/L	527.35	ppb	11:14:54
2	B 249.677†	12818.8	12586.7	533.44	µg/L	533.44	ppb	11:14:33
2	Ba 233.527†	55567.7	55365.6	1470.6	µg/L	1470.6	ppb	11:14:33
2	Be 313.107†	850405.7	842624.6	546.12	µg/L	546.12	ppb	11:14:28
2	Cd 226.502†	19571.8	19572.6	524.51	µg/L	524.51	ppb	11:14:33
2	Co 228.616†	10832.6	10852.6	536.76	µg/L	536.76	ppb	11:14:54
2	Cr 267.716†	28329.6	28328.2	614.15	µg/L	614.15	ppb	11:14:33
2	Cu 324.752†	85307.7	80863.5	600.19	µg/L	600.19	ppb	11:14:33
2	Mn 257.610†	1086031.2	1080973.5	3628.7	µg/L	3628.7	ppb	11:14:28
2	Mo 202.031†	4314.0	4294.2	519.84	µg/L	519.84	ppb	11:14:54
2	Ni 231.604†	11190.6	10820.4	613.72	µg/L	613.72	ppb	11:14:54
2	P 214.914†	1220.1	1033.2	2033.7	µg/L	2033.7	ppb	11:14:54
2	Pb 220.353†	2246.0	2197.6	589.85	µg/L	589.85	ppb	11:14:54

2	S 181.975 Axial†	1186.3	1152.5	5803.8	µg/L	5803.8 ppb	11:14:54
2	Sb 206.836†	529.6	507.4	519.97	µg/L	519.97 ppb	11:14:54
2	Se 196.026†	380.1	365.7	537.04	µg/L	537.04 ppb	11:14:54
2	SiO2†	111490.8	108327.5	20647	µg/L	20647 ppb	11:14:33
2	Si 251.611†	125498.9	124506.5	9466.1	µg/L	9466.1 ppb	11:14:33
2	Sn 189.927†	1029.0	1001.9	534.23	µg/L	534.23 ppb	11:14:54
2	Ti 334.940†	1104252.8	1097881.8	2617.3	µg/L	2617.3 ppb	11:14:28
2	Tl 190.801†	300.5	320.9	525.00	µg/L	525.00 ppb	11:14:54
2	U 409.014†	5786.4	5132.2	471.19	µg/L	471.19 ppb	11:14:33
2	V 292.402†	54659.0	54521.1	650.04	µg/L	650.04 ppb	11:14:33
2	Zn 213.857†	108852.3	107718.4	2934.3	µg/L	2934.3 ppb	11:14:33
3	Sc RADIAL	114832.0	114832.0	104	%		11:13:21
3	Al 396.153Radial†	210747.4	203223.9	109690	µg/L	109690 ppb	11:13:21
3	Ca 317.933Radial†	35977.7	34304.4	14550	µg/L	14550 ppb	11:13:42
3	Fe 238.204 Radial†	14216.8	13703.1	98123	µg/L	98123 ppb	11:13:42
3	K 766.490 Radial†	26721.0	25011.1	14046	µg/L	14046 ppb	11:13:21
3	Mg 279.077 IEC†	2046.1	1958.7	13217	µg/L	13217 ppb	11:13:42
3	Na 589.592 Radial†	28509.1	28076.3	7827.5	µg/L	7827.5 ppb	11:13:21
3	Sr 421.552†	112835.8	108936.9	616.27	µg/L	616.27 ppb	11:13:21
3	Sc 361.383	2066419.7	2066419.7	100.65	%		11:15:01
3	Y 371.029	1291812.9	1291812.9	100.59	%		11:15:01
3	Ag 328.068†	57350.7	56775.3	554.44	µg/L	554.44 ppb	11:15:07
3	As 188.979†	295.8	295.2	533.83	µg/L	533.83 ppb	11:15:28
3	B 249.677†	12925.2	12672.2	537.73	µg/L	537.73 ppb	11:15:07
3	Ba 233.527†	55925.1	55633.4	1477.7	µg/L	1477.7 ppb	11:15:07
3	Be 313.107†	845395.8	836310.9	542.03	µg/L	542.03 ppb	11:15:01
3	Cd 226.502†	19765.9	19734.7	529.03	µg/L	529.03 ppb	11:15:07
3	Co 228.616†	10937.4	10939.8	541.15	µg/L	541.15 ppb	11:15:28
3	Cr 267.716†	28588.0	28540.4	618.75	µg/L	618.75 ppb	11:15:07
3	Cu 324.752†	85840.7	81259.0	602.71	µg/L	602.71 ppb	11:15:07
3	Mn 257.610†	1080243.5	1073516.9	3603.6	µg/L	3603.6 ppb	11:15:01
3	Mo 202.031†	4345.7	4318.9	522.75	µg/L	522.75 ppb	11:15:28
3	Ni 231.604†	11275.6	10887.2	617.51	µg/L	617.51 ppb	11:15:28
3	P 214.914†	1225.6	1036.8	2042.5	µg/L	2042.5 ppb	11:15:28
3	Pb 220.353†	2290.5	2238.3	600.59	µg/L	600.59 ppb	11:15:28
3	S 181.975 Axial†	1201.5	1165.8	5870.7	µg/L	5870.7 ppb	11:15:28
3	Sb 206.836†	540.0	516.9	529.46	µg/L	529.46 ppb	11:15:28
3	Se 196.026†	392.1	377.0	550.71	µg/L	550.71 ppb	11:15:28
3	SiO2†	112562.6	109217.3	20817	µg/L	20817 ppb	11:15:07
3	Si 251.611†	126905.7	125707.1	9559.2	µg/L	9559.2 ppb	11:15:07
3	Sn 189.927†	1033.9	1005.1	535.65	µg/L	535.65 ppb	11:15:28
3	Ti 334.940†	1097848.2	1089783.5	2598.0	µg/L	2598.0 ppb	11:15:01
3	Tl 190.801†	311.9	331.8	541.54	µg/L	541.54 ppb	11:15:28
3	U 409.014†	5887.1	5223.1	480.13	µg/L	480.13 ppb	11:15:07
3	V 292.402†	55006.9	54780.9	652.99	µg/L	652.99 ppb	11:15:07
3	Zn 213.857†	109428.0	108119.4	2945.4	µg/L	2945.4 ppb	11:15:07

Mean Data: 1201977930|931347|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2074305.6	101.03	%	0.807				0.80%
Sc RADIAL	114537.4	103	%	0.4				0.39%
Y 371.029	1298455.4	101.10	%	0.669				0.66%
Ag 328.068†	56377.5	550.65	µg/L	4.810	550.65	ppb	4.810	0.87%
Al 396.153Radial†	202327.2	109210	µg/L	1274.7	109210	ppb	1274.7	1.17%
As 188.979†	290.8	525.50	µg/L	9.385	525.50	ppb	9.385	1.79%
B 249.677†	12555.2	532.30	µg/L	6.078	532.30	ppb	6.078	1.14%
Ba 233.527†	55262.6	1467.9	µg/L	11.47	1467.9	ppb	11.47	0.78%
Be 313.107†	839827.9	544.31	µg/L	2.086	544.31	ppb	2.086	0.38%
Ca 317.933Radial†	34484.0	14626	µg/L	116.0	14626	ppb	116.0	0.79%
Cd 226.502†	19561.5	524.28	µg/L	4.874	524.28	ppb	4.874	0.93%
Co 228.616†	10868.9	537.60	µg/L	3.222	537.60	ppb	3.222	0.60%
Cr 267.716†	28292.2	613.37	µg/L	5.809	613.37	ppb	5.809	0.95%
Cu 324.752†	80639.2	598.40	µg/L	5.436	598.40	ppb	5.436	0.91%
Fe 238.204 Radial†	13781.4	98683	µg/L	750.9	98683	ppb	750.9	0.76%
K 766.490 Radial†	24875.6	13970	µg/L	183.1	13970	ppb	183.1	1.31%
Mg 279.077 IEC†	1969.8	13292	µg/L	106.4	13292	ppb	106.4	0.80%
Mn 257.610†	1077163.6	3615.8	µg/L	12.57	3615.8	ppb	12.57	0.35%
Mo 202.031†	4293.5	519.73	µg/L	3.080	519.73	ppb	3.080	0.59%
Na 589.592 Radial†	27990.9	7803.7	µg/L	84.46	7803.7	ppb	84.46	1.08%

Ni 231.604†	10828.5	614.18	µg/L	3.129	614.18	ppb	3.129	0.51%
P 214.914†	1029.3	2026.4	µg/L	20.77	2026.4	ppb	20.77	1.02%
Pb 220.353†	2218.5	595.30	µg/L	5.371	595.30	ppb	5.371	0.90%
S 181.975 Axial†	1153.4	5808.4	µg/L	60.20	5808.4	ppb	60.20	1.04%
Sb 206.836†	511.2	523.75	µg/L	5.033	523.75	ppb	5.033	0.96%
Se 196.026†	372.3	544.99	µg/L	7.106	544.99	ppb	7.106	1.30%
SiO2†	108242.7	20631	µg/L	194.4	20631	ppb	194.4	0.94%
Si 251.611†	124447.8	9462.0	µg/L	99.31	9462.0	ppb	99.31	1.05%
Sn 189.927†	1000.5	533.34	µg/L	2.856	533.34	ppb	2.856	0.54%
Sr 421.552†	108543.7	614.04	µg/L	6.362	614.04	ppb	6.362	1.04%
Ti 334.940†	1093757.4	2607.5	µg/L	9.66	2607.5	ppb	9.66	0.37%
Tl 190.801†	326.1	532.92	µg/L	8.291	532.92	ppb	8.291	1.56%
U 409.014†	5133.6	471.49	µg/L	8.500	471.49	ppb	8.500	1.80%
V 292.402†	54378.1	648.29	µg/L	5.771	648.29	ppb	5.771	0.89%
Zn 213.857†	107408.6	2926.0	µg/L	24.78	2926.0	ppb	24.78	0.85%

Sequence No.: 8
Sample ID: 1201977931|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 306
Date Collected: 12/11/2009 11:15:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977931|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114396.8	114396.8	103	%			11:16:09
1	Al 396.153Radial†	170359.2	164875.1	88989	µg/L	88989	ppb	11:16:09
1	Ca 317.933Radial†	33855.7	32380.9	13734	µg/L	13734	ppb	11:16:29
1	Fe 238.204 Radial†	8365.0	8086.9	57914	µg/L	57914	ppb	11:16:29
1	K 766.490 Radial†	23230.9	21728.4	12203	µg/L	12203	ppb	11:16:09
1	Mg 279.077 IEC†	2054.5	1974.3	13383	µg/L	13383	ppb	11:16:29
1	Na 589.592 Radial†	28838.3	28499.8	7945.6	µg/L	7945.6	ppb	11:16:09
1	Sr 421.552†	109436.3	106058.2	599.98	µg/L	599.98	ppb	11:16:09
1	Sc 361.383	2062113.1	2062113.1	100.44	%			11:17:34
1	Y 371.029	1303223.7	1303223.7	101.48	%			11:17:34
1	Ag 328.068†	56650.7	56197.4	545.33	µg/L	545.33	ppb	11:17:39
1	As 188.979†	292.0	292.0	534.03	µg/L	534.03	ppb	11:18:00
1	B 249.677†	12739.6	12514.3	543.29	µg/L	543.29	ppb	11:17:39
1	Ba 233.527†	41666.5	41553.3	1103.9	µg/L	1103.9	ppb	11:17:39
1	Be 313.107†	863554.7	856144.4	554.89	µg/L	554.89	ppb	11:17:34
1	Cd 226.502†	19354.8	19366.4	522.07	µg/L	522.07	ppb	11:17:39
1	Co 228.616†	10507.0	10534.0	520.83	µg/L	520.83	ppb	11:17:39
1	Cr 267.716†	25471.6	25497.0	552.79	µg/L	552.79	ppb	11:17:39
1	Cu 324.752†	82246.5	77858.6	569.74	µg/L	569.74	ppb	11:17:39
1	Mn 257.610†	388550.6	387094.6	1302.2	µg/L	1302.2	ppb	11:17:34
1	Mo 202.031†	4409.6	4391.5	529.90	µg/L	529.90	ppb	11:18:00
1	Ni 231.604†	9990.4	9631.2	546.27	µg/L	546.27	ppb	11:17:39
1	P 214.914†	727.6	543.5	1049.3	µg/L	1049.3	ppb	11:18:00
1	Pb 220.353†	2194.4	2147.4	575.31	µg/L	575.31	ppb	11:18:00
1	S 181.975 Axial†	1188.9	1155.7	5826.1	µg/L	5826.1	ppb	11:18:00
1	Sb 206.836†	540.7	518.7	531.89	µg/L	531.89	ppb	11:18:00
1	Se 196.026†	432.3	417.9	575.02	µg/L	575.02	ppb	11:18:00
1	SiO2†	140677.4	137442.5	26196	µg/L	26196	ppb	11:17:34
1	Si 251.611†	153336.5	152285.5	11605	µg/L	11605	ppb	11:17:39
1	Sn 189.927†	1056.7	1030.0	543.62	µg/L	543.62	ppb	11:18:00
1	Ti 334.940†	1117811.2	1111937.1	2650.9	µg/L	2650.9	ppb	11:17:34
1	Tl 190.801†	317.4	338.0	542.20	µg/L	542.20	ppb	11:18:00
1	U 409.014†	5823.7	5172.2	482.76	µg/L	482.76	ppb	11:17:39
1	V 292.402†	49670.5	49582.0	588.97	µg/L	588.97	ppb	11:17:39
1	Zn 213.857†	26153.5	25436.6	686.28	µg/L	686.28	ppb	11:17:39
2	Sc RADIAL	114326.4	114326.4	103	%			11:16:35
2	Al 396.153Radial†	170809.0	165412.7	89280	µg/L	89280	ppb	11:16:35
2	Ca 317.933Radial†	34595.4	33118.1	14046	µg/L	14046	ppb	11:16:55
2	Fe 238.204 Radial†	8529.8	8251.6	59093	µg/L	59093	ppb	11:16:55
2	K 766.490 Radial†	23205.0	21717.2	12196	µg/L	12196	ppb	11:16:35
2	Mg 279.077 IEC†	2090.7	2010.6	13628	µg/L	13628	ppb	11:16:55
2	Na 589.592 Radial†	28889.4	28566.6	7964.2	µg/L	7964.2	ppb	11:16:35
2	Sr 421.552†	109561.5	106244.9	601.04	µg/L	601.04	ppb	11:16:35
2	Sc 361.383	2070479.5	2070479.5	100.85	%			11:18:07
2	Y 371.029	1306796.5	1306796.5	101.75	%			11:18:07
2	Ag 328.068†	57556.2	56867.4	551.87	µg/L	551.87	ppb	11:18:13
2	As 188.979†	287.8	286.8	524.10	µg/L	524.10	ppb	11:18:34
2	B 249.677†	12957.0	12678.6	550.29	µg/L	550.29	ppb	11:18:13
2	Ba 233.527†	42287.0	42000.9	1115.8	µg/L	1115.8	ppb	11:18:13
2	Be 313.107†	868279.9	857355.7	555.67	µg/L	555.67	ppb	11:18:07
2	Cd 226.502†	19610.0	19541.6	526.74	µg/L	526.74	ppb	11:18:13
2	Co 228.616†	10683.6	10666.8	527.44	µg/L	527.44	ppb	11:18:13
2	Cr 267.716†	25900.1	25819.3	559.78	µg/L	559.78	ppb	11:18:13
2	Cu 324.752†	83718.9	78987.7	578.07	µg/L	578.07	ppb	11:18:13
2	Mn 257.610†	390166.5	387133.7	1302.5	µg/L	1302.5	ppb	11:18:07
2	Mo 202.031†	4374.7	4339.1	523.65	µg/L	523.65	ppb	11:18:34
2	Ni 231.604†	10093.7	9693.4	549.80	µg/L	549.80	ppb	11:18:13
2	P 214.914†	725.1	538.1	1035.6	µg/L	1035.6	ppb	11:18:34
2	Pb 220.353†	2173.1	2117.4	567.35	µg/L	567.35	ppb	11:18:34

2	S 181.975 Axial†	1178.3	1140.4	5748.2 µg/L	5748.2 ppb	11:18:34
2	Sb 206.836†	544.8	520.6	533.75 µg/L	533.75 ppb	11:18:34
2	Se 196.026†	421.1	405.0	559.18 µg/L	559.18 ppb	11:18:34
2	SiO2†	140873.1	137070.5	26126 µg/L	26126 ppb	11:18:07
2	Si 251.611†	155488.7	153802.7	11723 µg/L	11723 ppb	11:18:13
2	Sn 189.927†	1052.0	1021.1	539.28 µg/L	539.28 ppb	11:18:34
2	Ti 334.940†	1122578.2	1112166.9	2651.4 µg/L	2651.4 ppb	11:18:07
2	Tl 190.801†	315.7	335.0	537.62 µg/L	537.62 ppb	11:18:34
2	U 409.014†	5923.6	5247.9	489.76 µg/L	489.76 ppb	11:18:13
2	V 292.402†	50433.1	50138.4	595.54 µg/L	595.54 ppb	11:18:13
2	Zn 213.857†	26516.6	25691.5	693.09 µg/L	693.09 ppb	11:18:13
3	Sc RADIAL	114211.9	114211.9	103 %		11:17:01
3	Al 396.153Radial†	172179.4	166908.3	90087 µg/L	90087 ppb	11:17:01
3	Ca 317.933Radial†	34105.6	32676.5	13859 µg/L	13859 ppb	11:17:21
3	Fe 238.204 Radial†	8418.9	8152.3	58382 µg/L	58382 ppb	11:17:21
3	K 766.490 Radial†	23415.5	21944.0	12324 µg/L	12324 ppb	11:17:01
3	Mg 279.077 IEC†	2069.1	1991.7	13500 µg/L	13500 ppb	11:17:21
3	Na 589.592 Radial†	29104.5	28803.3	8030.2 µg/L	8030.2 ppb	11:17:01
3	Sr 421.552†	110455.8	107219.0	606.55 µg/L	606.55 ppb	11:17:01
3	Sc 361.383	2046811.1	2046811.1	99.695 %		11:18:41
3	Y 371.029	1289416.3	1289416.3	100.40 %		11:18:41
3	Ag 328.068†	57755.5	57727.2	560.08 µg/L	560.08 ppb	11:18:47
3	As 188.979†	285.3	287.5	525.57 µg/L	525.57 ppb	11:19:07
3	B 249.677†	12983.0	12853.3	558.35 µg/L	558.35 ppb	11:18:47
3	Ba 233.527†	42433.4	42632.7	1132.6 µg/L	1132.6 ppb	11:18:47
3	Be 313.107†	855306.7	854298.8	553.69 µg/L	553.69 ppb	11:18:41
3	Cd 226.502†	19755.7	19912.6	536.88 µg/L	536.88 ppb	11:18:47
3	Co 228.616†	10762.7	10868.6	537.53 µg/L	537.53 ppb	11:18:47
3	Cr 267.716†	26008.2	26224.8	568.57 µg/L	568.57 ppb	11:18:47
3	Cu 324.752†	83929.8	80159.3	586.31 µg/L	586.31 ppb	11:18:47
3	Mn 257.610†	384415.1	385838.6	1298.1 µg/L	1298.1 ppb	11:18:41
3	Mo 202.031†	4373.4	4388.0	529.50 µg/L	529.50 ppb	11:19:07
3	Ni 231.604†	10177.3	9893.0	561.12 µg/L	561.12 ppb	11:18:47
3	P 214.914†	720.4	541.7	1043.4 µg/L	1043.4 ppb	11:19:07
3	Pb 220.353†	2186.9	2156.2	577.69 µg/L	577.69 ppb	11:19:07
3	S 181.975 Axial†	1187.1	1162.7	5861.1 µg/L	5861.1 ppb	11:19:07
3	Sb 206.836†	534.1	516.1	529.14 µg/L	529.14 ppb	11:19:07
3	Se 196.026†	423.8	412.6	568.39 µg/L	568.39 ppb	11:19:07
3	SiO2†	139223.4	137031.1	26118 µg/L	26118 ppb	11:18:41
3	Si 251.611†	156582.1	156682.3	11944 µg/L	11944 ppb	11:18:47
3	Sn 189.927†	1048.3	1029.5	543.43 µg/L	543.43 ppb	11:19:07
3	Ti 334.940†	1107371.7	1109785.8	2645.7 µg/L	2645.7 ppb	11:18:41
3	Tl 190.801†	314.8	337.7	541.62 µg/L	541.62 ppb	11:19:07
3	U 409.014†	5936.1	5328.3	497.56 µg/L	497.56 ppb	11:18:47
3	V 292.402†	50632.4	50916.5	604.64 µg/L	604.64 ppb	11:18:47
3	Zn 213.857†	26631.4	26110.7	704.58 µg/L	704.58 ppb	11:18:47

Mean Data: 1201977931|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2059801.2	100.33	%	0.585				0.58%
Sc RADIAL	114311.7	103	%	0.1				0.08%
Y 371.029	1299812.2	101.21	%	0.715				0.71%
Ag 328.068†	56930.7	552.43	µg/L	7.394	552.43	ppb	7.394	1.34%
Al 396.153Radial†	165732.0	89452	µg/L	568.7	89452	ppb	568.7	0.64%
As 188.979†	288.8	527.90	µg/L	5.359	527.90	ppb	5.359	1.02%
B 249.677†	12682.1	550.64	µg/L	7.536	550.64	ppb	7.536	1.37%
Ba 233.527†	42062.3	1117.5	µg/L	14.41	1117.5	ppb	14.41	1.29%
Be 313.107†	855933.0	554.75	µg/L	0.998	554.75	ppb	0.998	0.18%
Ca 317.933Radial†	32725.2	13880	µg/L	157.3	13880	ppb	157.3	1.13%
Cd 226.502†	19606.8	528.56	µg/L	7.574	528.56	ppb	7.574	1.43%
Co 228.616†	10689.8	528.60	µg/L	8.407	528.60	ppb	8.407	1.59%
Cr 267.716†	25847.0	560.38	µg/L	7.906	560.38	ppb	7.906	1.41%
Cu 324.752†	79001.9	578.04	µg/L	8.284	578.04	ppb	8.284	1.43%
Fe 238.204 Radial†	8163.6	58463	µg/L	593.7	58463	ppb	593.7	1.02%
K 766.490 Radial†	21796.5	12241	µg/L	71.8	12241	ppb	71.8	0.59%
Mg 279.077 IEC†	1992.2	13504	µg/L	122.8	13504	ppb	122.8	0.91%
Mn 257.610†	386689.0	1300.9	µg/L	2.48	1300.9	ppb	2.48	0.19%
Mo 202.031†	4372.9	527.69	µg/L	3.497	527.69	ppb	3.497	0.66%
Na 589.592 Radial†	28623.2	7980.0	µg/L	44.46	7980.0	ppb	44.46	0.56%

Ni 231.604†	9739.2	552.39 µg/L	7.758	552.39 ppb	7.758	1.40%
P 214.914†	541.1	1042.8 µg/L	6.86	1042.8 ppb	6.86	0.66%
Pb 220.353†	2140.3	573.45 µg/L	5.412	573.45 ppb	5.412	0.94%
S 181.975 Axial†	1152.9	5811.8 µg/L	57.79	5811.8 ppb	57.79	0.99%
Sb 206.836†	518.5	531.59 µg/L	2.318	531.59 ppb	2.318	0.44%
Se 196.026†	411.8	567.53 µg/L	7.951	567.53 ppb	7.951	1.40%
SiO2†	137181.4	26147 µg/L	43.3	26147 ppb	43.3	0.17%
Si 251.611†	154256.8	11758 µg/L	172.2	11758 ppb	172.2	1.46%
Sn 189.927†	1026.9	542.11 µg/L	2.451	542.11 ppb	2.451	0.45%
Sr 421.552†	106507.4	602.52 µg/L	3.526	602.52 ppb	3.526	0.59%
Ti 334.940†	1111296.6	2649.3 µg/L	3.13	2649.3 ppb	3.13	0.12%
Tl 190.801†	336.9	540.48 µg/L	2.496	540.48 ppb	2.496	0.46%
U 409.014†	5249.5	490.03 µg/L	7.406	490.03 ppb	7.406	1.51%
V 292.402†	50212.3	596.39 µg/L	7.866	596.39 ppb	7.866	1.32%
Zn 213.857†	25746.2	694.65 µg/L	9.250	694.65 ppb	9.250	1.33%

Sequence No.: 9
Sample ID: 1201977929|931347|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 307
Date Collected: 12/11/2009 11:19:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977929|931347|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113015.2	113015.2	102	%			11:19:49
1	Al 396.153Radial†	23603.8	22998.5	12416	µg/L	12416	ppb	11:19:49
1	Ca 317.933Radial†	11201.6	10569.5	4482.8	µg/L	4482.8	ppb	11:20:09
1	Fe 238.204 Radial†	2267.8	2207.6	15806	µg/L	15806	ppb	11:20:09
1	K 766.490 Radial†	2530.9	1707.1	958.72	µg/L	958.72	ppb	11:20:09
1	Mg 279.077 IEC†	1148.5	1110.3	7543.2	µg/L	7543.2	ppb	11:20:09
1	Na 589.592 Radial†	7213.0	7637.7	2129.3	µg/L	2129.3	ppb	11:19:49
1	Sr 421.552†	5180.3	5130.9	29.026	µg/L	29.026	ppb	11:20:09
1	Sc 361.383	2060405.8	2060405.8	100.36	%			11:21:12
1	Y 371.029	1289368.1	1289368.1	100.40	%			11:21:12
1	Ag 328.068†	96.2	-109.3	0.3590	µg/L	0.3590	ppb	11:21:18
1	As 188.979†	4.0	5.3	8.7999	µg/L	8.7999	ppb	11:21:38
1	B 249.677†	333.0	162.3	2.3140	µg/L	2.3140	ppb	11:21:18
1	Ba 233.527†	3187.1	3245.0	86.161	µg/L	86.161	ppb	11:21:18
1	Be 313.107†	5941.1	2291.6	1.2193	µg/L	1.2193	ppb	11:21:18
1	Cd 226.502†	-35.2	61.2	0.4497	µg/L	0.4497	ppb	11:21:38
1	Co 228.616†	190.2	262.5	11.568	µg/L	11.568	ppb	11:21:38
1	Cr 267.716†	397.8	533.2	11.586	µg/L	11.586	ppb	11:21:18
1	Cu 324.752†	4866.3	821.3	9.2738	µg/L	9.2738	ppb	11:21:18
1	Mn 257.610†	178812.7	178422.8	598.86	µg/L	598.86	ppb	11:21:12
1	Mo 202.031†	-8.9	-7.7	-0.3055	µg/L	-0.3055	ppb	11:21:38
1	Ni 231.604†	662.3	344.4	19.535	µg/L	19.535	ppb	11:21:38
1	P 214.914†	398.6	216.3	439.29	µg/L	439.29	ppb	11:21:38
1	Pb 220.353†	76.2	38.5	11.066	µg/L	11.066	ppb	11:21:38
1	S 181.975 Axial†	28.7	0.6	-0.3754	µg/L	-0.3754	ppb	11:21:38
1	Sb 206.836†	23.8	4.1	6.3915	µg/L	6.3915	ppb	11:21:38
1	Se 196.026†	5.5	-7.0	-0.4499	µg/L	-0.4499	ppb	11:21:38
1	SiO2†	16553.0	13875.3	2644.6	µg/L	2644.6	ppb	11:21:18
1	Si 251.611†	16370.1	15932.4	1201.8	µg/L	1201.8	ppb	11:21:18
1	Sn 189.927†	-7.9	-29.9	-11.064	µg/L	-11.064	ppb	11:21:38
1	Ti 334.940†	306227.8	304160.6	725.08	µg/L	725.08	ppb	11:21:12
1	Tl 190.801†	-17.0	5.0	14.787	µg/L	14.787	ppb	11:21:38
1	U 409.014†	496.6	-131.2	-15.354	µg/L	-15.354	ppb	11:21:18
1	V 292.402†	1825.8	1948.4	24.045	µg/L	24.045	ppb	11:21:18
1	Zn 213.857†	2576.8	1965.3	51.811	µg/L	51.811	ppb	11:21:38
2	Sc RADIAL	111762.4	111762.4	101	%			11:20:15
2	Al 396.153Radial†	23583.4	23237.7	12545	µg/L	12545	ppb	11:20:15
2	Ca 317.933Radial†	11353.9	10843.6	4599.1	µg/L	4599.1	ppb	11:20:35
2	Fe 238.204 Radial†	2295.5	2260.0	16180	µg/L	16180	ppb	11:20:35
2	K 766.490 Radial†	2549.6	1753.5	984.76	µg/L	984.76	ppb	11:20:35
2	Mg 279.077 IEC†	1151.6	1126.0	7649.6	µg/L	7649.6	ppb	11:20:35
2	Na 589.592 Radial†	7207.1	7711.1	2149.8	µg/L	2149.8	ppb	11:20:15
2	Sr 421.552†	5231.8	5238.9	29.637	µg/L	29.637	ppb	11:20:35
2	Sc 361.383	2077559.6	2077559.6	101.19	%			11:21:45
2	Y 371.029	1295312.5	1295312.5	100.86	%			11:21:45
2	Ag 328.068†	47.0	-158.8	-0.0855	µg/L	-0.0855	ppb	11:21:51
2	As 188.979†	-0.6	0.7	0.1762	µg/L	0.1762	ppb	11:22:11
2	B 249.677†	375.0	201.1	3.9346	µg/L	3.9346	ppb	11:21:51
2	Ba 233.527†	3197.4	3229.0	85.736	µg/L	85.736	ppb	11:21:51
2	Be 313.107†	5929.9	2231.6	1.1845	µg/L	1.1845	ppb	11:21:51
2	Cd 226.502†	-27.6	69.0	0.6325	µg/L	0.6325	ppb	11:22:11
2	Co 228.616†	191.8	262.5	11.594	µg/L	11.594	ppb	11:22:11
2	Cr 267.716†	421.2	553.2	12.016	µg/L	12.016	ppb	11:21:51
2	Cu 324.752†	4900.6	815.2	9.3103	µg/L	9.3103	ppb	11:21:51
2	Mn 257.610†	177718.5	175870.3	590.37	µg/L	590.37	ppb	11:21:45
2	Mo 202.031†	-7.6	-6.3	-0.1226	µg/L	-0.1226	ppb	11:22:11
2	Ni 231.604†	657.3	334.0	18.945	µg/L	18.945	ppb	11:22:11
2	P 214.914†	396.0	210.4	426.46	µg/L	426.46	ppb	11:22:11
2	Pb 220.353†	101.9	63.3	17.622	µg/L	17.622	ppb	11:22:11

2	S 181.975 Axial†	31.6	3.3	12.971	µg/L	12.971 ppb	11:22:11
2	Sb 206.836†	24.8	4.9	7.1439	µg/L	7.1439 ppb	11:22:11
2	Se 196.026†	10.7	-1.9	6.3247	µg/L	6.3247 ppb	11:22:11
2	SiO2†	16427.2	13614.8	2595.0	µg/L	2595.0 ppb	11:21:51
2	Si 251.611†	16333.3	15761.3	1189.2	µg/L	1189.2 ppb	11:21:51
2	Sn 189.927†	-14.2	-36.1	-14.135	µg/L	-14.135 ppb	11:22:11
2	Ti 334.940†	304014.9	299454.4	713.85	µg/L	713.85 ppb	11:21:45
2	Tl 190.801†	-18.3	3.9	12.909	µg/L	12.909 ppb	11:22:11
2	U 409.014†	512.7	-119.3	-14.289	µg/L	-14.289 ppb	11:21:51
2	V 292.402†	1819.6	1927.2	23.831	µg/L	23.831 ppb	11:21:51
2	Zn 213.857†	2590.5	1957.6	51.561	µg/L	51.561 ppb	11:22:11
3	Sc RADIAL	111761.2	111761.2	101	%		11:20:41
3	Al 396.153Radial†	23716.7	23370.1	12617	µg/L	12617 ppb	11:20:41
3	Ca 317.933Radial†	11287.6	10778.0	4571.3	µg/L	4571.3 ppb	11:21:01
3	Fe 238.204 Radial†	2290.6	2255.2	16146	µg/L	16146 ppb	11:21:01
3	K 766.490 Radial†	2551.1	1755.1	985.64	µg/L	985.64 ppb	11:21:01
3	Mg 279.077 IEC†	1152.6	1127.0	7656.6	µg/L	7656.6 ppb	11:21:01
3	Na 589.592 Radial†	7198.8	7703.0	2147.5	µg/L	2147.5 ppb	11:20:41
3	Sr 421.552†	5199.7	5207.2	29.457	µg/L	29.457 ppb	11:21:01
3	Sc 361.383	2073705.0	2073705.0	101.00	%		11:22:18
3	Y 371.029	1295173.9	1295173.9	100.85	%		11:22:18
3	Ag 328.068†	62.7	-143.1	0.0623	µg/L	0.0623 ppb	11:22:23
3	As 188.979†	0.4	1.7	2.0977	µg/L	2.0977 ppb	11:22:44
3	B 249.677†	362.1	189.1	3.4053	µg/L	3.4053 ppb	11:22:23
3	Ba 233.527†	3216.5	3253.8	86.393	µg/L	86.393 ppb	11:22:23
3	Be 313.107†	5875.4	2188.6	1.1567	µg/L	1.1567 ppb	11:22:23
3	Cd 226.502†	-37.1	59.7	0.3832	µg/L	0.3832 ppb	11:22:44
3	Co 228.616†	191.6	262.7	11.600	µg/L	11.600 ppb	11:22:44
3	Cr 267.716†	419.6	552.4	11.999	µg/L	11.999 ppb	11:22:23
3	Cu 324.752†	4915.1	838.6	9.4703	µg/L	9.4703 ppb	11:22:23
3	Mn 257.610†	177138.9	175623.0	589.54	µg/L	589.54 ppb	11:22:18
3	Mo 202.031†	-12.5	-11.2	-0.7082	µg/L	-0.7082 ppb	11:22:44
3	Ni 231.604†	651.0	329.0	18.660	µg/L	18.660 ppb	11:22:44
3	P 214.914†	401.6	216.7	439.60	µg/L	439.60 ppb	11:22:44
3	Pb 220.353†	81.7	43.5	12.405	µg/L	12.405 ppb	11:22:44
3	S 181.975 Axial†	27.8	-0.4	-5.7108	µg/L	-5.7108 ppb	11:22:44
3	Sb 206.836†	24.1	4.2	6.4808	µg/L	6.4808 ppb	11:22:44
3	Se 196.026†	12.5	-0.1	8.6575	µg/L	8.6575 ppb	11:22:44
3	SiO2†	16485.8	13702.9	2611.8	µg/L	2611.8 ppb	11:22:23
3	Si 251.611†	16337.9	15795.9	1191.9	µg/L	1191.9 ppb	11:22:23
3	Sn 189.927†	-17.4	-39.2	-15.783	µg/L	-15.783 ppb	11:22:44
3	Ti 334.940†	303361.8	299366.2	713.64	µg/L	713.64 ppb	11:22:18
3	Tl 190.801†	-23.4	-1.3	5.0145	µg/L	5.0145 ppb	11:22:44
3	U 409.014†	550.6	-80.8	-10.614	µg/L	-10.614 ppb	11:22:23
3	V 292.402†	1827.2	1938.1	23.958	µg/L	23.958 ppb	11:22:23
3	Zn 213.857†	2566.3	1938.5	51.041	µg/L	51.041 ppb	11:22:44

Mean Data: 1201977929|931347|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2070556.8	100.85	%	0.438				0.43%
Sc RADIAL	112179.6	101	%	0.7				0.65%
Y 371.029	1293284.8	100.70	%	0.264				0.26%
Ag 328.068†	-137.1	0.1119	µg/L	0.22633	0.1119	ppb	0.22633	202.19%
Al 396.153Radial†	23202.1	12526	µg/L	101.7	12526	ppb	101.7	0.81%
As 188.979†	2.6	3.6913	µg/L	4.52734	3.6913	ppb	4.52734	122.65%
B 249.677†	184.2	3.2180	µg/L	0.82634	3.2180	ppb	0.82634	25.68%
Ba 233.527†	3242.6	86.097	µg/L	0.3333	86.097	ppb	0.3333	0.39%
Be 313.107†	2237.3	1.1868	µg/L	0.03139	1.1868	ppb	0.03139	2.64%
Ca 317.933Radial†	10730.4	4551.1	µg/L	60.70	4551.1	ppb	60.70	1.33%
Cd 226.502†	63.3	0.4885	µg/L	0.12907	0.4885	ppb	0.12907	26.42%
Co 228.616†	262.6	11.588	µg/L	0.0171	11.588	ppb	0.0171	0.15%
Cr 267.716†	546.3	11.867	µg/L	0.2435	11.867	ppb	0.2435	2.05%
Cu 324.752†	825.0	9.3515	µg/L	0.10450	9.3515	ppb	0.10450	1.12%
Fe 238.204 Radial†	2240.9	16044	µg/L	207.1	16044	ppb	207.1	1.29%
K 766.490 Radial†	1738.6	976.37	µg/L	15.298	976.37	ppb	15.298	1.57%
Mg 279.077 IEC†	1121.1	7616.5	µg/L	63.57	7616.5	ppb	63.57	0.83%
Mn 257.610†	176638.7	592.93	µg/L	5.160	592.93	ppb	5.160	0.87%
Mo 202.031†	-8.4	-0.3788	µg/L	0.29963	-0.3788	ppb	0.29963	79.11%
Na 589.592 Radial†	7683.9	2142.2	µg/L	11.22	2142.2	ppb	11.22	0.52%

Ni 231.604†	335.8	19.047	µg/L	0.4466	19.047	ppb	0.4466	2.34%
P 214.914†	214.5	435.12	µg/L	7.495	435.12	ppb	7.495	1.72%
Pb 220.353†	48.4	13.698	µg/L	3.4638	13.698	ppb	3.4638	25.29%
S 181.975 Axial†	1.1	2.2951	µg/L	9.62311	2.2951	ppb	9.62311	419.30%
Sb 206.836†	4.4	6.6721	µg/L	0.41102	6.6721	ppb	0.41102	6.16%
Se 196.026†	-3.0	4.8441	µg/L	4.73078	4.8441	ppb	4.73078	97.66%
SiO2†	13731.0	2617.1	µg/L	25.25	2617.1	ppb	25.25	0.96%
Si 251.611†	15829.9	1194.3	µg/L	6.66	1194.3	ppb	6.66	0.56%
Sn 189.927†	-35.1	-13.661	µg/L	2.3950	-13.661	ppb	2.3950	17.53%
Sr 421.552†	5192.3	29.374	µg/L	0.3139	29.374	ppb	0.3139	1.07%
Ti 334.940†	300993.7	717.52	µg/L	6.544	717.52	ppb	6.544	0.91%
Tl 190.801†	2.5	10.903	µg/L	5.1857	10.903	ppb	5.1857	47.56%
U 409.014†	-110.4	-13.419	µg/L	2.4867	-13.419	ppb	2.4867	18.53%
V 292.402†	1937.9	23.945	µg/L	0.1075	23.945	ppb	0.1075	0.45%
Zn 213.857†	1953.8	51.471	µg/L	0.3930	51.471	ppb	0.3930	0.76%

Sequence No.: 10
Sample ID: 241419002|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 308
Date Collected: 12/11/2009 11:22:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419002|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113913.5	113913.5	103	%			11:23:26
1	Al 396.153Radial†	35116.4	34015.1	18363	µg/L	18363	ppb	11:23:26
1	Ca 317.933Radial†	21134.2	20144.9	8544.1	µg/L	8544.1	ppb	11:23:46
1	Fe 238.204 Radial†	16202.3	15745.2	112720	µg/L	112720	ppb	11:23:46
1	K 766.490 Radial†	10928.2	9856.2	5535.2	µg/L	5535.2	ppb	11:23:26
1	Mg 279.077 IEC†	1150.0	1102.9	7350.3	µg/L	7350.3	ppb	11:23:46
1	Na 589.592 Radial†	8910.2	9232.9	2574.1	µg/L	2574.1	ppb	11:23:26
1	Sr 421.552†	8048.1	7880.5	44.581	µg/L	44.581	ppb	11:23:46
1	Sc 361.383	2067123.4	2067123.4	100.68	%			11:24:51
1	Y 371.029	1330994.6	1330994.6	103.64	%			11:24:51
1	Ag 328.068†	-885.9	-1085.1	-0.9617	µg/L	-0.9617	ppb	11:24:56
1	As 188.979†	9.5	10.8	19.664	µg/L	19.664	ppb	11:25:17
1	B 249.677†	1217.2	1039.4	11.190	µg/L	11.190	ppb	11:24:56
1	Ba 233.527†	10014.9	10016.1	265.96	µg/L	265.96	ppb	11:24:56
1	Be 313.107†	13012.1	9295.3	3.6449	µg/L	3.6449	ppb	11:24:56
1	Cd 226.502†	296.5	390.8	1.8219	µg/L	1.8219	ppb	11:24:56
1	Co 228.616†	433.4	503.5	11.627	µg/L	11.627	ppb	11:25:17
1	Cr 267.716†	1793.4	1918.1	41.658	µg/L	41.658	ppb	11:24:56
1	Cu 324.752†	2851.9	-1195.1	15.658	µg/L	15.658	ppb	11:24:56
1	Mn 257.610†	1046075.1	1039215.1	3490.7	µg/L	3490.7	ppb	11:24:51
1	Mo 202.031†	52.1	52.9	10.783	µg/L	10.783	ppb	11:25:17
1	Ni 231.604†	795.2	474.3	26.899	µg/L	26.899	ppb	11:25:17
1	P 214.914†	1066.5	878.4	1719.6	µg/L	1719.6	ppb	11:25:17
1	Pb 220.353†	181.4	142.8	38.070	µg/L	38.070	ppb	11:25:17
1	S 181.975 Axial†	29.7	1.5	-9.9904	µg/L	-9.9904	ppb	11:25:17
1	Sb 206.836†	8.4	-11.3	11.635	µg/L	11.635	ppb	11:25:17
1	Se 196.026†	-46.5	-58.7	1.5359	µg/L	1.5359	ppb	11:25:17
1	SiO2†	81094.1	77924.4	14852	µg/L	14852	ppb	11:24:56
1	Si 251.611†	90478.1	89484.0	6661.3	µg/L	6661.3	ppb	11:24:56
1	Sn 189.927†	-14.2	-36.1	-2.0118	µg/L	-2.0118	ppb	11:25:17
1	Ti 334.940†	2726769.6	2707268.9	6455.5	µg/L	6455.5	ppb	11:24:51
1	Tl 190.801†	-52.8	-30.5	12.386	µg/L	12.386	ppb	11:24:56
1	U 409.014†	-540.8	-1163.2	-131.77	µg/L	-131.77	ppb	11:24:51
1	V 292.402†	6265.1	6351.6	83.331	µg/L	83.331	ppb	11:24:56
1	Zn 213.857†	21101.7	20356.0	545.01	µg/L	545.01	ppb	11:24:56
2	Sc RADIAL	112305.3	112305.3	101	%			11:23:52
2	Al 396.153Radial†	35495.3	34878.2	18829	µg/L	18829	ppb	11:23:52
2	Ca 317.933Radial†	21231.7	20535.6	8709.8	µg/L	8709.8	ppb	11:24:12
2	Fe 238.204 Radial†	16313.4	16080.5	115130	µg/L	115130	ppb	11:24:12
2	K 766.490 Radial†	11067.3	10145.7	5697.8	µg/L	5697.8	ppb	11:23:52
2	Mg 279.077 IEC†	1162.0	1130.7	7536.2	µg/L	7536.2	ppb	11:24:12
2	Na 589.592 Radial†	9037.6	9482.7	2643.7	µg/L	2643.7	ppb	11:23:52
2	Sr 421.552†	8119.4	8063.1	45.614	µg/L	45.614	ppb	11:24:12
2	Sc 361.383	2066029.9	2066029.9	100.63	%			11:25:24
2	Y 371.029	1329929.1	1329929.1	103.56	%			11:25:24
2	Ag 328.068†	-825.0	-1025.1	-0.1925	µg/L	-0.1925	ppb	11:25:30
2	As 188.979†	7.8	9.1	16.260	µg/L	16.260	ppb	11:25:50
2	B 249.677†	1245.1	1067.8	11.710	µg/L	11.710	ppb	11:25:30
2	Ba 233.527†	10142.5	10148.2	269.46	µg/L	269.46	ppb	11:25:30
2	Be 313.107†	13171.1	9460.2	3.7454	µg/L	3.7454	ppb	11:25:30
2	Cd 226.502†	340.9	435.1	2.8445	µg/L	2.8445	ppb	11:25:30
2	Co 228.616†	426.1	496.4	11.237	µg/L	11.237	ppb	11:25:50
2	Cr 267.716†	1827.0	1952.4	42.402	µg/L	42.402	ppb	11:25:30
2	Cu 324.752†	2852.3	-1193.3	16.187	µg/L	16.187	ppb	11:25:30
2	Mn 257.610†	1049039.9	1042711.3	3502.7	µg/L	3502.7	ppb	11:25:24
2	Mo 202.031†	52.3	53.2	10.916	µg/L	10.916	ppb	11:25:50
2	Ni 231.604†	817.5	496.9	28.182	µg/L	28.182	ppb	11:25:50
2	P 214.914†	1073.8	886.2	1733.2	µg/L	1733.2	ppb	11:25:50
2	Pb 220.353†	183.2	144.7	38.585	µg/L	38.585	ppb	11:25:50

2	S 181.975 Axial†	38.6	10.3	34.082	µg/L	34.082 ppb	11:25:50
2	Sb 206.836†	12.6	-7.1	15.990	µg/L	15.990 ppb	11:25:50
2	Se 196.026†	-44.2	-56.4	6.0918	µg/L	6.0918 ppb	11:25:50
2	SiO2†	81791.7	78660.3	14993	µg/L	14993 ppb	11:25:30
2	Si 251.611†	91195.2	90244.1	6719.3	µg/L	6719.3 ppb	11:25:30
2	Sn 189.927†	-19.0	-40.9	-4.1258	µg/L	-4.1258 ppb	11:25:50
2	Ti 334.940†	2732790.3	2714685.3	6473.2	µg/L	6473.2 ppb	11:25:24
2	Tl 190.801†	-50.3	-28.0	16.341	µg/L	16.341 ppb	11:25:30
2	U 409.014†	-473.0	-1096.0	-125.81	µg/L	-125.81 ppb	11:25:24
2	V 292.402†	6343.9	6433.2	84.493	µg/L	84.493 ppb	11:25:30
2	Zn 213.857†	21355.2	20619.0	551.95	µg/L	551.95 ppb	11:25:30
3	Sc RADIAL	112095.0	112095.0	101	%		11:24:18
3	Al 396.153Radial†	35601.6	35049.0	18921	µg/L	18921 ppb	11:24:18
3	Ca 317.933Radial†	21063.0	20408.1	8655.7	µg/L	8655.7 ppb	11:24:38
3	Fe 238.204 Radial†	16191.7	15990.3	114480	µg/L	114480 ppb	11:24:38
3	K 766.490 Radial†	11016.2	10115.7	5680.9	µg/L	5680.9 ppb	11:24:18
3	Mg 279.077 IEC†	1159.1	1130.0	7532.5	µg/L	7532.5 ppb	11:24:38
3	Na 589.592 Radial†	9058.9	9520.5	2654.2	µg/L	2654.2 ppb	11:24:18
3	Sr 421.552†	8058.7	8018.0	45.359	µg/L	45.359 ppb	11:24:38
3	Sc 361.383	2073691.1	2073691.1	101.00	%		11:25:58
3	Y 371.029	1334930.4	1334930.4	103.94	%		11:25:58
3	Ag 328.068†	-848.1	-1044.9	-0.4346	µg/L	-0.4346 ppb	11:26:04
3	As 188.979†	7.7	8.9	15.968	µg/L	15.968 ppb	11:26:24
3	B 249.677†	1206.0	1024.6	9.9705	µg/L	9.9705 ppb	11:26:04
3	Ba 233.527†	10107.9	10076.7	267.57	µg/L	267.57 ppb	11:26:04
3	Be 313.107†	13146.3	9387.3	3.7055	µg/L	3.7055 ppb	11:26:04
3	Cd 226.502†	353.0	445.8	3.1847	µg/L	3.1847 ppb	11:26:04
3	Co 228.616†	432.3	500.9	11.506	µg/L	11.506 ppb	11:26:24
3	Cr 267.716†	1783.7	1902.9	41.330	µg/L	41.330 ppb	11:26:04
3	Cu 324.752†	2933.0	-1123.8	16.546	µg/L	16.546 ppb	11:26:04
3	Mn 257.610†	1050234.2	1040042.4	3493.6	µg/L	3493.6 ppb	11:25:58
3	Mo 202.031†	51.3	52.0	10.742	µg/L	10.742 ppb	11:26:24
3	Ni 231.604†	817.1	493.4	27.986	µg/L	27.986 ppb	11:26:24
3	P 214.914†	1065.0	873.5	1707.3	µg/L	1707.3 ppb	11:26:24
3	Pb 220.353†	210.0	170.5	45.433	µg/L	45.433 ppb	11:26:24
3	S 181.975 Axial†	37.9	9.6	30.192	µg/L	30.192 ppb	11:26:24
3	Sb 206.836†	17.0	-2.8	20.274	µg/L	20.274 ppb	11:26:24
3	Se 196.026†	-39.7	-51.8	11.611	µg/L	11.611 ppb	11:26:24
3	SiO2†	81631.6	78201.5	14905	µg/L	14905 ppb	11:26:04
3	Si 251.611†	91032.0	89747.8	6681.9	µg/L	6681.9 ppb	11:26:04
3	Sn 189.927†	-22.4	-44.2	-5.9130	µg/L	-5.9130 ppb	11:26:24
3	Ti 334.940†	2734379.2	2706225.3	6453.0	µg/L	6453.0 ppb	11:25:58
3	Tl 190.801†	-59.9	-37.4	1.7601	µg/L	1.7601 ppb	11:26:04
3	U 409.014†	-487.5	-1108.7	-126.90	µg/L	-126.90 ppb	11:25:58
3	V 292.402†	6341.7	6407.8	84.139	µg/L	84.139 ppb	11:26:04
3	Zn 213.857†	21206.1	20393.0	545.83	µg/L	545.83 ppb	11:26:04

Mean Data: 241419002|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2068948.2	100.77	%	0.202				0.20%
Sc RADIAL	112771.3	102	%	0.9				0.88%
Y 371.029	1331951.4	103.71	%	0.205				0.20%
Ag 328.068†	-1051.7	-0.5296	µg/L	0.39332	-0.5296	ppb	0.39332	74.26%
Al 396.153Radial†	34647.4	18705	µg/L	299.2	18705	ppb	299.2	1.60%
As 188.979†	9.6	17.297	µg/L	2.0549	17.297	ppb	2.0549	11.88%
B 249.677†	1043.9	10.957	µg/L	0.8930	10.957	ppb	0.8930	8.15%
Ba 233.527†	10080.3	267.66	µg/L	1.755	267.66	ppb	1.755	0.66%
Be 313.107†	9380.9	3.6986	µg/L	0.05059	3.6986	ppb	0.05059	1.37%
Ca 317.933Radial†	20362.9	8636.5	µg/L	84.49	8636.5	ppb	84.49	0.98%
Cd 226.502†	423.9	2.6170	µg/L	0.70931	2.6170	ppb	0.70931	27.10%
Co 228.616†	500.3	11.457	µg/L	0.1993	11.457	ppb	0.1993	1.74%
Cr 267.716†	1924.5	41.797	µg/L	0.5491	41.797	ppb	0.5491	1.31%
Cu 324.752†	-1170.7	16.131	µg/L	0.4464	16.131	ppb	0.4464	2.77%
Fe 238.204 Radial†	15938.7	114110	µg/L	1242.3	114110	ppb	1242.3	1.09%
K 766.490 Radial†	10039.2	5638.0	µg/L	89.41	5638.0	ppb	89.41	1.59%
Mg 279.077 IEC†	1121.2	7473.0	µg/L	106.32	7473.0	ppb	106.32	1.42%
Mn 257.610†	1040656.2	3495.7	µg/L	6.25	3495.7	ppb	6.25	0.18%
Mo 202.031†	52.7	10.814	µg/L	0.0909	10.814	ppb	0.0909	0.84%
Na 589.592 Radial†	9412.0	2624.0	µg/L	43.57	2624.0	ppb	43.57	1.66%

Ni 231.604†	488.2	27.689	µg/L	0.6908	27.689	ppb	0.6908	2.49%
P 214.914†	879.3	1720.0	µg/L	12.98	1720.0	ppb	12.98	0.75%
Pb 220.353†	152.7	40.696	µg/L	4.1108	40.696	ppb	4.1108	10.10%
S 181.975 Axial†	7.1	18.095	µg/L	24.4001	18.095	ppb	24.4001	134.85%
Sb 206.836†	-7.0	15.966	µg/L	4.3198	15.966	ppb	4.3198	27.06%
Se 196.026†	-55.6	6.4128	µg/L	5.04504	6.4128	ppb	5.04504	78.67%
SiO2†	78262.0	14917	µg/L	70.8	14917	ppb	70.8	0.47%
Si 251.611†	89825.3	6687.5	µg/L	29.39	6687.5	ppb	29.39	0.44%
Sn 189.927†	-40.4	-4.0169	µg/L	1.95290	-4.0169	ppb	1.95290	48.62%
Sr 421.552†	7987.2	45.185	µg/L	0.5379	45.185	ppb	0.5379	1.19%
Ti 334.940†	2709393.2	6460.6	µg/L	11.00	6460.6	ppb	11.00	0.17%
Tl 190.801†	-32.0	10.163	µg/L	7.5407	10.163	ppb	7.5407	74.20%
U 409.014†	-1122.6	-128.16	µg/L	3.173	-128.16	ppb	3.173	2.48%
V 292.402†	6397.5	83.988	µg/L	0.5953	83.988	ppb	0.5953	0.71%
Zn 213.857†	20456.0	547.60	µg/L	3.790	547.60	ppb	3.790	0.69%

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 11:26:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112443.1	112443.1	101	%			11:27:12
1	Al 396.153Radial†	10196.1	9903.2	5326.4	µg/L	5326.4	ppb	11:27:12
1	Ca 317.933Radial†	12845.1	12245.0	5193.5	µg/L	5193.5	ppb	11:27:12
1	Fe 238.204 Radial†	760.9	733.9	5271.7	µg/L	5271.7	ppb	11:27:32
1	K 766.490 Radial†	10287.1	9363.5	5258.5	µg/L	5258.5	ppb	11:27:12
1	Mg 279.077 IEC†	798.3	770.9	5259.1	µg/L	5259.1	ppb	11:27:32
1	Na 589.592 Radial†	37722.4	37740.4	10522	µg/L	10522	ppb	11:27:12
1	Sr 421.552†	93306.2	92004.0	520.48	µg/L	520.48	ppb	11:27:12
1	Sc 361.383	2057395.1	2057395.1	100.21	%			11:28:36
1	Y 371.029	1286090.9	1286090.9	100.14	%			11:28:36
1	Ag 328.068†	55849.5	55527.2	534.34	µg/L	534.34	ppb	11:28:42
1	As 188.979†	280.4	281.2	517.28	µg/L	517.28	ppb	11:29:02
1	B 249.677†	11690.1	11496.1	514.16	µg/L	514.16	ppb	11:28:42
1	Ba 233.527†	19418.8	19447.3	517.16	µg/L	517.16	ppb	11:28:42
1	Be 313.107†	814213.5	808878.2	524.98	µg/L	524.98	ppb	11:28:36
1	Cd 226.502†	18968.1	19024.7	516.86	µg/L	516.86	ppb	11:28:42
1	Co 228.616†	10351.3	10402.5	518.69	µg/L	518.69	ppb	11:28:42
1	Cr 267.716†	23670.0	23757.2	515.02	µg/L	515.02	ppb	11:28:42
1	Cu 324.752†	75713.9	71527.5	513.11	µg/L	513.11	ppb	11:28:42
1	Mn 257.610†	153101.4	153026.1	512.58	µg/L	512.58	ppb	11:28:42
1	Mo 202.031†	4371.2	4363.2	524.43	µg/L	524.43	ppb	11:29:02
1	Ni 231.604†	9435.6	9100.3	516.15	µg/L	516.15	ppb	11:28:42
1	P 214.914†	1417.8	1234.0	2536.2	µg/L	2536.2	ppb	11:29:02
1	Pb 220.353†	2017.2	1975.6	523.29	µg/L	523.29	ppb	11:29:02
1	S 181.975 Axial†	240.4	211.9	1068.7	µg/L	1068.7	ppb	11:29:02
1	Sb 206.836†	545.2	524.5	530.85	µg/L	530.85	ppb	11:29:02
1	Se 196.026†	414.7	401.3	518.94	µg/L	518.94	ppb	11:29:02
1	SiO2†	32530.0	29842.9	5688.0	µg/L	5688.0	ppb	11:28:42
1	Si 251.611†	34968.5	34515.7	2609.1	µg/L	2609.1	ppb	11:28:42
1	Sn 189.927†	1048.0	1023.8	530.68	µg/L	530.68	ppb	11:29:02
1	Ti 334.940†	227209.8	225754.8	538.06	µg/L	538.06	ppb	11:28:36
1	Tl 190.801†	312.4	333.7	517.02	µg/L	517.02	ppb	11:29:02
1	U 409.014†	5994.2	5355.6	509.88	µg/L	509.88	ppb	11:28:42
1	V 292.402†	44169.1	44205.6	521.82	µg/L	521.82	ppb	11:28:42
1	Zn 213.857†	19761.3	19117.6	519.31	µg/L	519.31	ppb	11:28:42
2	Sc RADIAL	113051.1	113051.1	102	%			11:27:38
2	Al 396.153Radial†	10259.1	9910.9	5330.5	µg/L	5330.5	ppb	11:27:38
2	Ca 317.933Radial†	12973.5	12302.8	5218.0	µg/L	5218.0	ppb	11:27:38
2	Fe 238.204 Radial†	759.5	728.5	5233.1	µg/L	5233.1	ppb	11:27:58
2	K 766.490 Radial†	10236.8	9259.6	5200.2	µg/L	5200.2	ppb	11:27:38
2	Mg 279.077 IEC†	804.0	772.2	5268.2	µg/L	5268.2	ppb	11:27:58
2	Na 589.592 Radial†	37981.2	37794.1	10537	µg/L	10537	ppb	11:27:38
2	Sr 421.552†	94048.9	92237.5	521.80	µg/L	521.80	ppb	11:27:38
2	Sc 361.383	2062264.9	2062264.9	100.45	%			11:29:09
2	Y 371.029	1282445.7	1282445.7	99.858	%			11:29:09
2	Ag 328.068†	56307.0	55851.1	537.46	µg/L	537.46	ppb	11:29:14
2	As 188.979†	287.0	287.1	528.09	µg/L	528.09	ppb	11:29:35
2	B 249.677†	11829.9	11607.7	519.18	µg/L	519.18	ppb	11:29:14
2	Ba 233.527†	19621.7	19603.5	521.32	µg/L	521.32	ppb	11:29:14
2	Be 313.107†	813429.7	806179.3	523.23	µg/L	523.23	ppb	11:29:09
2	Cd 226.502†	19237.0	19247.7	522.92	µg/L	522.92	ppb	11:29:14
2	Co 228.616†	10423.6	10450.2	521.07	µg/L	521.07	ppb	11:29:14
2	Cr 267.716†	23974.6	24004.8	520.38	µg/L	520.38	ppb	11:29:14
2	Cu 324.752†	76351.8	71984.1	516.37	µg/L	516.37	ppb	11:29:14
2	Mn 257.610†	154535.2	154092.8	516.14	µg/L	516.14	ppb	11:29:14
2	Mo 202.031†	4399.6	4381.2	526.59	µg/L	526.59	ppb	11:29:35
2	Ni 231.604†	9529.4	9171.4	520.19	µg/L	520.19	ppb	11:29:14
2	P 214.914†	1430.0	1242.7	2554.3	µg/L	2554.3	ppb	11:29:35
2	Pb 220.353†	2035.9	1989.4	526.92	µg/L	526.92	ppb	11:29:35

2	S 181.975 Axial†	235.3	206.3	1040.3 µg/L	1040.3 ppb	11:29:35
2	Sb 206.836†	550.8	528.7	535.13 µg/L	535.13 ppb	11:29:35
2	Se 196.026†	430.7	416.3	538.17 µg/L	538.17 ppb	11:29:35
2	SiO2†	32983.9	30218.1	5759.5 µg/L	5759.5 ppb	11:29:14
2	Si 251.611†	35334.5	34797.7	2630.8 µg/L	2630.8 ppb	11:29:14
2	Sn 189.927†	1057.8	1031.1	534.46 µg/L	534.46 ppb	11:29:35
2	Ti 334.940†	226553.8	224566.3	535.23 µg/L	535.23 ppb	11:29:09
2	Tl 190.801†	317.1	337.6	523.06 µg/L	523.06 ppb	11:29:35
2	U 409.014†	6078.0	5425.0	516.50 µg/L	516.50 ppb	11:29:14
2	V 292.402†	44593.4	44523.9	525.56 µg/L	525.56 ppb	11:29:14
2	Zn 213.857†	19957.6	19266.4	523.37 µg/L	523.37 ppb	11:29:14
3	Sc RADIAL	111986.4	111986.4	101 %		11:28:04
3	Al 396.153Radial†	10216.3	9964.1	5359.2 µg/L	5359.2 ppb	11:28:04
3	Ca 317.933Radial†	12879.4	12330.6	5229.8 µg/L	5229.8 ppb	11:28:04
3	Fe 238.204 Radial†	766.0	742.1	5329.9 µg/L	5329.9 ppb	11:28:25
3	K 766.490 Radial†	10183.7	9302.5	5224.2 µg/L	5224.2 ppb	11:28:04
3	Mg 279.077 IEC†	808.3	784.0	5348.4 µg/L	5348.4 ppb	11:28:25
3	Na 589.592 Radial†	37860.7	38028.8	10602 µg/L	10602 ppb	11:28:04
3	Sr 421.552†	93812.3	92879.7	525.43 µg/L	525.43 ppb	11:28:04
3	Sc 361.383	2054113.3	2054113.3	100.05 %		11:29:42
3	Y 371.029	1276994.2	1276994.2	99.433 %		11:29:42
3	Ag 328.068†	56027.4	55794.0	536.92 µg/L	536.92 ppb	11:29:47
3	As 188.979†	279.8	281.0	516.87 µg/L	516.87 ppb	11:30:08
3	B 249.677†	11787.4	11612.0	519.34 µg/L	519.34 ppb	11:29:47
3	Ba 233.527†	19442.8	19502.3	518.63 µg/L	518.63 ppb	11:29:47
3	Be 313.107†	811034.8	806999.3	523.76 µg/L	523.76 ppb	11:29:42
3	Cd 226.502†	19152.2	19238.9	522.68 µg/L	522.68 ppb	11:29:47
3	Co 228.616†	10404.2	10471.9	522.16 µg/L	522.16 ppb	11:29:47
3	Cr 267.716†	23866.5	23991.4	520.09 µg/L	520.09 ppb	11:29:47
3	Cu 324.752†	75882.3	71816.6	515.19 µg/L	515.19 ppb	11:29:47
3	Mn 257.610†	153812.4	153980.9	515.78 µg/L	515.78 ppb	11:29:47
3	Mo 202.031†	4376.7	4375.7	525.94 µg/L	525.94 ppb	11:30:08
3	Ni 231.604†	9517.2	9196.8	521.63 µg/L	521.63 ppb	11:29:47
3	P 214.914†	1421.8	1240.2	2548.9 µg/L	2548.9 ppb	11:30:08
3	Pb 220.353†	2030.8	1992.4	527.71 µg/L	527.71 ppb	11:30:08
3	S 181.975 Axial†	232.9	204.8	1032.7 µg/L	1032.7 ppb	11:30:08
3	Sb 206.836†	542.7	522.8	529.13 µg/L	529.13 ppb	11:30:08
3	Se 196.026†	429.8	417.1	539.25 µg/L	539.25 ppb	11:30:08
3	SiO2†	32791.6	30156.3	5747.8 µg/L	5747.8 ppb	11:29:47
3	Si 251.611†	35165.2	34768.1	2628.8 µg/L	2628.8 ppb	11:29:47
3	Sn 189.927†	1038.2	1015.7	526.54 µg/L	526.54 ppb	11:30:08
3	Ti 334.940†	225478.4	224386.5	534.80 µg/L	534.80 ppb	11:29:42
3	Tl 190.801†	315.2	337.0	522.16 µg/L	522.16 ppb	11:30:08
3	U 409.014†	6146.8	5517.8	525.33 µg/L	525.33 ppb	11:29:47
3	V 292.402†	44425.9	44532.7	525.68 µg/L	525.68 ppb	11:29:47
3	Zn 213.857†	19888.5	19276.2	523.62 µg/L	523.62 ppb	11:29:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2057924.5	100.24	%	0.200				0.20%
Sc RADIAL	112493.5	102	%	0.5				0.47%
Y 371.029	1281843.6	99.811	%	0.3565				0.36%
Ag 328.068†	55724.1	536.24	µg/L	1.666	536.24	ppb	1.666	0.31%
QC value within limits for Ag 328.068 Recovery = 107.25%								
Al 396.153Radial†	9926.1	5338.7	µg/L	17.89	5338.7	ppb	17.89	0.34%
QC value within limits for Al 396.153Radial Recovery = 106.77%								
As 188.979†	283.1	520.75	µg/L	6.363	520.75	ppb	6.363	1.22%
QC value within limits for As 188.979 Recovery = 104.15%								
B 249.677†	11572.0	517.56	µg/L	2.946	517.56	ppb	2.946	0.57%
QC value within limits for B 249.677 Recovery = 103.51%								
Ba 233.527†	19517.7	519.04	µg/L	2.106	519.04	ppb	2.106	0.41%
QC value within limits for Ba 233.527 Recovery = 103.81%								
Be 313.107†	807352.3	523.99	µg/L	0.898	523.99	ppb	0.898	0.17%
QC value within limits for Be 313.107 Recovery = 104.80%								
Ca 317.933Radial†	12292.8	5213.7	µg/L	18.52	5213.7	ppb	18.52	0.36%
QC value within limits for Ca 317.933Radial Recovery = 104.27%								
Cd 226.502†	19170.4	520.82	µg/L	3.434	520.82	ppb	3.434	0.66%
QC value within limits for Cd 226.502 Recovery = 104.16%								
Co 228.616†	10441.5	520.64	µg/L	1.775	520.64	ppb	1.775	0.34%

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   QC value within limits for Co 228.616  Recovery = 104.13%
Cr 267.716†            23917.8      518.49 µg/L        3.016      518.49 ppb          3.016   0.58%
   QC value within limits for Cr 267.716  Recovery = 103.70%
Cu 324.752†            71776.1      514.89 µg/L        1.651      514.89 ppb          1.651   0.32%
   QC value within limits for Cu 324.752  Recovery = 102.98%
Fe 238.204 Radial†       734.9      5278.2 µg/L       48.71      5278.2 ppb         48.71   0.92%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.56%
K 766.490 Radial†       9308.6      5227.6 µg/L       29.31      5227.6 ppb         29.31   0.56%
   QC value within limits for K 766.490 Radial  Recovery = 104.55%
Mg 279.077 IEC†          775.7      5291.9 µg/L       49.11      5291.9 ppb         49.11   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.84%
Mn 257.610†           153699.9      514.83 µg/L        1.961      514.83 ppb          1.961   0.38%
   QC value within limits for Mn 257.610  Recovery = 102.97%
Mo 202.031†             4373.4      525.65 µg/L        1.108      525.65 ppb          1.108   0.21%
   QC value within limits for Mo 202.031  Recovery = 105.13%
Na 589.592 Radial†     37854.4       10554 µg/L         42.8       10554 ppb           42.8   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 105.54%
Ni 231.604†             9156.2      519.33 µg/L        2.840      519.33 ppb          2.840   0.55%
   QC value within limits for Ni 231.604  Recovery = 103.87%
P 214.914†              1239.0      2546.5 µg/L         9.28      2546.5 ppb          9.28   0.36%
   QC value within limits for P 214.914  Recovery = 101.86%
Pb 220.353†             1985.8      525.97 µg/L        2.361      525.97 ppb          2.361   0.45%
   QC value within limits for Pb 220.353  Recovery = 105.19%
S 181.975 Axial†         207.7      1047.2 µg/L       18.96      1047.2 ppb         18.96   1.81%
   QC value within limits for S 181.975 Axial  Recovery = 104.72%
Sb 206.836†              525.4      531.70 µg/L        3.091      531.70 ppb          3.091   0.58%
   QC value within limits for Sb 206.836  Recovery = 106.34%
Se 196.026†              411.6      532.12 µg/L       11.423      532.12 ppb         11.423   2.15%
   QC value within limits for Se 196.026  Recovery = 106.42%
SiO2†                  30072.4      5731.8 µg/L       38.34      5731.8 ppb         38.34   0.67%
   QC value within limits for SiO2  Recovery = 107.19%
Si 251.611†            34693.8      2622.9 µg/L       11.99      2622.9 ppb         11.99   0.46%
   QC value within limits for Si 251.611  Recovery = 104.92%
Sn 189.927†             1023.5      530.56 µg/L        3.957      530.56 ppb          3.957   0.75%
   QC value within limits for Sn 189.927  Recovery = 106.11%
Sr 421.552†            92373.7      522.57 µg/L        2.565      522.57 ppb          2.565   0.49%
   QC value within limits for Sr 421.552  Recovery = 104.51%
Ti 334.940†           224902.6      536.03 µg/L        1.774      536.03 ppb          1.774   0.33%
   QC value within limits for Ti 334.940  Recovery = 107.21%
Tl 190.801†              336.1      520.75 µg/L        3.257      520.75 ppb          3.257   0.63%
   QC value within limits for Tl 190.801  Recovery = 104.15%
U 409.014†              5432.8      517.23 µg/L        7.753      517.23 ppb          7.753   1.50%
   QC value within limits for U 409.014  Recovery = 103.45%
V 292.402†             44420.7      524.35 µg/L        2.198      524.35 ppb          2.198   0.42%
   QC value within limits for V 292.402  Recovery = 104.87%
Zn 213.857†            19220.1      522.10 µg/L        2.415      522.10 ppb          2.415   0.46%
   QC value within limits for Zn 213.857  Recovery = 104.42%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 11:30:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110212.4	110212.4	99.5	%			11:30:50
1	Al 396.153Radial†	170.6	26.5	14.262	µg/L	14.262	ppb	11:30:50
1	Ca 317.933Radial†	436.2	24.9	10.543	µg/L	10.543	ppb	11:31:10
1	Fe 238.204 Radial†	19.7	3.9	27.914	µg/L	27.914	ppb	11:31:10
1	K 766.490 Radial†	710.1	-60.4	-33.922	µg/L	-33.922	ppb	11:30:50
1	Mg 279.077 IEC†	17.6	1.9	12.634	µg/L	12.634	ppb	11:31:10
1	Na 589.592 Radial†	-585.0	-22.9	-6.3737	µg/L	-6.3737	ppb	11:30:50
1	Sr 421.552†	-44.6	6.8	0.0384	µg/L	0.0384	ppb	11:30:50
1	Sc 361.383	2064767.7	2064767.7	100.57	%			11:32:13
1	Y 371.029	1291466.8	1291466.8	100.56	%			11:32:13
1	Ag 328.068†	235.5	29.0	0.2814	µg/L	0.2814	ppb	11:32:18
1	As 188.979†	-7.4	-6.1	-11.174	µg/L	-11.174	ppb	11:32:39
1	B 249.677†	180.7	10.2	0.4481	µg/L	0.4481	ppb	11:32:18
1	Ba 233.527†	-57.5	12.1	0.3214	µg/L	0.3214	ppb	11:32:39
1	Be 313.107†	3714.3	64.9	0.0415	µg/L	0.0415	ppb	11:32:18
1	Cd 226.502†	-100.9	-4.0	-0.1146	µg/L	-0.1146	ppb	11:32:39
1	Co 228.616†	-69.1	4.2	0.2088	µg/L	0.2088	ppb	11:32:39
1	Cr 267.716†	-110.4	27.1	0.5871	µg/L	0.5871	ppb	11:32:18
1	Cu 324.752†	4006.8	-43.6	-0.3059	µg/L	-0.3059	ppb	11:32:18
1	Mn 257.610†	2.3	248.0	0.8331	µg/L	0.8331	ppb	11:32:39
1	Mo 202.031†	3.4	4.6	0.5511	µg/L	0.5511	ppb	11:32:39
1	Ni 231.604†	318.4	1.1	0.0607	µg/L	0.0607	ppb	11:32:39
1	P 214.914†	171.6	-10.2	-21.493	µg/L	-21.493	ppb	11:32:39
1	Pb 220.353†	48.7	11.0	2.9178	µg/L	2.9178	ppb	11:32:39
1	S 181.975 Axial†	25.0	-3.2	-16.092	µg/L	-16.092	ppb	11:32:39
1	Sb 206.836†	21.7	1.9	1.9619	µg/L	1.9619	ppb	11:32:39
1	Se 196.026†	22.3	9.7	12.497	µg/L	12.497	ppb	11:32:39
1	SiO2†	2654.6	20.7	3.9545	µg/L	3.9545	ppb	11:32:18
1	Si 251.611†	453.2	71.2	5.5014	µg/L	5.5014	ppb	11:32:39
1	Sn 189.927†	18.4	-3.7	-1.9136	µg/L	-1.9136	ppb	11:32:39
1	Ti 334.940†	1685.7	697.4	1.6626	µg/L	1.6626	ppb	11:32:18
1	Tl 190.801†	-17.9	4.1	6.3208	µg/L	6.3208	ppb	11:32:39
1	U 409.014†	577.3	-51.9	-4.9558	µg/L	-4.9558	ppb	11:32:18
1	V 292.402†	-102.4	27.2	0.3167	µg/L	0.3167	ppb	11:32:18
1	Zn 213.857†	643.1	37.1	1.0135	µg/L	1.0135	ppb	11:32:39
2	Sc RADIAL	110171.9	110171.9	99.4	%			11:31:16
2	Al 396.153Radial†	177.6	33.6	18.135	µg/L	18.135	ppb	11:31:16
2	Ca 317.933Radial†	425.7	14.5	6.1413	µg/L	6.1413	ppb	11:31:36
2	Fe 238.204 Radial†	19.7	3.9	27.990	µg/L	27.990	ppb	11:31:36
2	K 766.490 Radial†	734.5	-35.6	-19.995	µg/L	-19.995	ppb	11:31:16
2	Mg 279.077 IEC†	8.8	-7.0	-47.738	µg/L	-47.738	ppb	11:31:36
2	Na 589.592 Radial†	-571.5	-9.5	-2.6541	µg/L	-2.6541	ppb	11:31:16
2	Sr 421.552†	-48.5	2.9	0.0162	µg/L	0.0162	ppb	11:31:16
2	Sc 361.383	2050970.9	2050970.9	99.897	%			11:32:45
2	Y 371.029	1284584.0	1284584.0	100.02	%			11:32:45
2	Ag 328.068†	248.1	43.1	0.4118	µg/L	0.4118	ppb	11:32:50
2	As 188.979†	9.3	10.6	19.592	µg/L	19.592	ppb	11:33:11
2	B 249.677†	201.1	31.8	1.4182	µg/L	1.4182	ppb	11:32:50
2	Ba 233.527†	-57.8	11.4	0.3011	µg/L	0.3011	ppb	11:33:11
2	Be 313.107†	3668.9	44.3	0.0284	µg/L	0.0284	ppb	11:32:50
2	Cd 226.502†	-112.8	-16.5	-0.4521	µg/L	-0.4521	ppb	11:33:11
2	Co 228.616†	-75.1	-2.3	-0.1143	µg/L	-0.1143	ppb	11:33:11
2	Cr 267.716†	-156.3	-19.6	-0.4251	µg/L	-0.4251	ppb	11:32:50
2	Cu 324.752†	4020.6	-2.9	-0.0147	µg/L	-0.0147	ppb	11:32:50
2	Mn 257.610†	-128.7	116.9	0.3945	µg/L	0.3945	ppb	11:33:11
2	Mo 202.031†	2.1	3.3	0.3930	µg/L	0.3930	ppb	11:33:11
2	Ni 231.604†	317.8	2.6	0.1448	µg/L	0.1448	ppb	11:33:11
2	P 214.914†	178.5	-2.2	-4.6483	µg/L	-4.6483	ppb	11:33:11
2	Pb 220.353†	30.6	-6.7	-1.7741	µg/L	-1.7741	ppb	11:33:11

2	S 181.975 Axial†	22.4	-5.5	-27.938 µg/L	-27.938 ppb		11:33:11
2	Sb 206.836†	20.6	1.0	1.0347 µg/L	1.0347 ppb		11:33:11
2	Se 196.026†	11.0	-1.5	-1.8836 µg/L	-1.8836 ppb		11:33:11
2	SiO2†	2664.5	48.4	9.2226 µg/L	9.2226 ppb		11:32:50
2	Si 251.611†	453.8	74.7	5.8031 µg/L	5.8031 ppb		11:33:11
2	Sn 189.927†	17.9	-4.1	-2.1170 µg/L	-2.1170 ppb		11:33:11
2	Ti 334.940†	1432.3	455.1	1.0849 µg/L	1.0849 ppb		11:32:50
2	Tl 190.801†	-14.9	7.0	10.787 µg/L	10.787 ppb		11:33:11
2	U 409.014†	609.8	-15.5	-1.4879 µg/L	-1.4879 ppb		11:32:50
2	V 292.402†	-156.7	-27.8	-0.3224 µg/L	-0.3224 ppb		11:32:50
2	Zn 213.857†	622.5	20.8	0.5682 µg/L	0.5682 ppb		11:33:11
3	Sc RADIAL	109658.5	109658.5	99.0 %			11:31:42
3	Al 396.153Radial†	220.3	77.5	41.861 µg/L	41.861 ppb		11:31:42
3	Ca 317.933Radial†	428.9	19.7	8.3383 µg/L	8.3383 ppb		11:32:02
3	Fe 238.204 Radial†	20.8	5.0	36.126 µg/L	36.126 ppb		11:32:02
3	K 766.490 Radial†	744.2	-22.3	-12.550 µg/L	-12.550 ppb		11:31:42
3	Mg 279.077 IEC†	16.4	0.8	5.1106 µg/L	5.1106 ppb		11:32:02
3	Na 589.592 Radial†	-568.0	-8.6	-2.4072 µg/L	-2.4072 ppb		11:31:42
3	Sr 421.552†	-13.6	37.9	0.2145 µg/L	0.2145 ppb		11:31:42
3	Sc 361.383	2046166.1	2046166.1	99.663 %			11:33:17
3	Y 371.029	1280750.4	1280750.4	99.726 %			11:33:17
3	Ag 328.068†	207.9	3.4	0.0333 µg/L	0.0333 ppb		11:33:22
3	As 188.979†	6.9	8.3	15.244 µg/L	15.244 ppb		11:33:43
3	B 249.677†	148.6	-20.4	-0.9245 µg/L	-0.9245 ppb		11:33:22
3	Ba 233.527†	-55.1	14.0	0.3700 µg/L	0.3700 ppb		11:33:43
3	Be 313.107†	3791.4	175.8	0.1137 µg/L	0.1137 ppb		11:33:22
3	Cd 226.502†	-98.6	-2.6	-0.0803 µg/L	-0.0803 ppb		11:33:43
3	Co 228.616†	-61.8	10.9	0.5428 µg/L	0.5428 ppb		11:33:43
3	Cr 267.716†	-126.7	9.7	0.2095 µg/L	0.2095 ppb		11:33:22
3	Cu 324.752†	4046.3	32.3	0.2393 µg/L	0.2393 ppb		11:33:22
3	Mn 257.610†	-71.6	173.8	0.5859 µg/L	0.5859 ppb		11:33:43
3	Mo 202.031†	-0.5	0.7	0.0803 µg/L	0.0803 ppb		11:33:43
3	Ni 231.604†	320.9	6.4	0.3652 µg/L	0.3652 ppb		11:33:43
3	P 214.914†	177.9	-2.4	-5.0728 µg/L	-5.0728 ppb		11:33:43
3	Pb 220.353†	39.7	2.4	0.6536 µg/L	0.6536 ppb		11:33:43
3	S 181.975 Axial†	31.5	3.6	18.176 µg/L	18.176 ppb		11:33:43
3	Sb 206.836†	25.7	6.2	6.2535 µg/L	6.2535 ppb		11:33:43
3	Se 196.026†	15.8	3.3	4.2754 µg/L	4.2754 ppb		11:33:43
3	SiO2†	2677.9	68.1	12.971 µg/L	12.971 ppb		11:33:22
3	Si 251.611†	441.2	63.2	4.8396 µg/L	4.8396 ppb		11:33:43
3	Sn 189.927†	21.3	-0.6	-0.3211 µg/L	-0.3211 ppb		11:33:43
3	Ti 334.940†	1531.3	557.8	1.3298 µg/L	1.3298 ppb		11:33:22
3	Tl 190.801†	-18.6	3.3	5.0273 µg/L	5.0273 ppb		11:33:43
3	U 409.014†	511.9	-112.4	-10.723 µg/L	-10.723 ppb		11:33:22
3	V 292.402†	-147.8	-19.2	-0.2383 µg/L	-0.2383 ppb		11:33:22
3	Zn 213.857†	621.2	21.0	0.5690 µg/L	0.5690 ppb		11:33:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2053968.2	100.04	%	0.470				0.47%
Sc RADIAL	110014.3	99.3	%	0.28				0.28%
Y 371.029	1285600.4	100.10	%	0.423				0.42%
Ag 328.068†	25.2	0.2422	µg/L	0.19225	0.2422	ppb	0.19225	79.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	45.9	24.753	µg/L	14.9421	24.753	ppb	14.9421	60.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.3	7.8876	µg/L	16.65016	7.8876	ppb	16.65016	211.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	7.2	0.3139	µg/L	1.17710	0.3139	ppb	1.17710	374.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.5	0.3309	µg/L	0.03541	0.3309	ppb	0.03541	10.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	95.0	0.0612	µg/L	0.04591	0.0612	ppb	0.04591	75.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	19.7	8.3409	µg/L	2.20084	8.3409	ppb	2.20084	26.39%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-7.7	-0.2157	µg/L	0.20550	-0.2157	ppb	0.20550	95.28%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.3	0.2125	µg/L	0.32857	0.2125	ppb	0.32857	154.65%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                5.7      0.1238 µg/L       0.51153      0.1238 ppb        0.51153 413.06%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -4.7     -0.0271 µg/L       0.27279     -0.0271 ppb        0.27279 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         4.3      30.676 µg/L        4.7194      30.676 ppb         4.7194  15.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -39.5     -22.156 µg/L       10.8486     -22.156 ppb        10.8486  48.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.5     -9.9979 µg/L      32.89985     -9.9979 ppb       32.89985 329.07%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              179.6      0.6045 µg/L       0.21989      0.6045 ppb        0.21989  36.38%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.8      0.3414 µg/L       0.23961      0.3414 ppb        0.23961  70.17%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -13.7     -3.8117 µg/L       2.22226     -3.8117 ppb        2.22226  58.30%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                3.4      0.1902 µg/L       0.15726      0.1902 ppb        0.15726  82.68%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.9     -10.405 µg/L        9.6051     -10.405 ppb         9.6051  92.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                2.2      0.5991 µg/L       2.34638      0.5991 ppb        2.34638 391.66%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -1.7     -8.6179 µg/L      23.94848     -8.6179 ppb       23.94848 277.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                3.0      3.0834 µg/L       2.78427      3.0834 ppb        2.78427  90.30%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.8      4.9628 µg/L       7.21474      4.9628 ppb        7.21474 145.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     45.7      8.7159 µg/L       4.52936      8.7159 ppb        4.52936  51.97%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               69.7      5.3814 µg/L       0.49284      5.3814 ppb        0.49284   9.16%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.8     -1.4506 µg/L       0.98343     -1.4506 ppb        0.98343  67.80%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               15.9      0.0897 µg/L       0.10862      0.0897 ppb        0.10862 121.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              570.1      1.3591 µg/L       0.28993      1.3591 ppb        0.28993  21.33%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                4.8      7.3784 µg/L       3.02209      7.3784 ppb        3.02209  40.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -59.9     -5.7223 µg/L       4.66518     -5.7223 ppb        4.66518  81.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -6.6     -0.0813 µg/L       0.34726     -0.0813 ppb        0.34726 426.91%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               26.3      0.7169 µg/L       0.25682      0.7169 ppb        0.25682  35.82%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: 241419003|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 309
Date Collected: 12/11/2009 11:33:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419003|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114765.4	114765.4	104	%			11:34:31
1	Al 396.153Radial†	104023.1	100294.4	54145	µg/L	54145	ppb	11:34:31
1	Ca 317.933Radial†	39905.4	38116.9	16167	µg/L	16167	ppb	11:34:31
1	Fe 238.204 Radial†	10152.4	9786.6	70066	µg/L	70066	ppb	11:34:51
1	K 766.490 Radial†	11159.6	10000.8	5616.4	µg/L	5616.4	ppb	11:34:31
1	Mg 279.077 IEC†	2806.0	2693.5	18253	µg/L	18253	ppb	11:34:51
1	Na 589.592 Radial†	17626.5	17584.5	4902.4	µg/L	4902.4	ppb	11:34:31
1	Sr 421.552†	18011.2	17442.4	98.673	µg/L	98.673	ppb	11:34:31
1	Sc 361.383	2094643.0	2094643.0	102.02	%			11:35:55
1	Y 371.029	1332850.2	1332850.2	103.78	%			11:35:55
1	Ag 328.068†	-423.7	-620.5	0.3134	µg/L	0.3134	ppb	11:36:00
1	As 188.979†	12.8	13.9	15.272	µg/L	15.272	ppb	11:36:21
1	B 249.677†	918.5	730.8	10.755	µg/L	10.755	ppb	11:36:00
1	Ba 233.527†	17508.9	17230.7	457.48	µg/L	457.48	ppb	11:36:00
1	Be 313.107†	13294.6	9402.4	5.7963	µg/L	5.7963	ppb	11:36:00
1	Cd 226.502†	144.6	238.1	1.0783	µg/L	1.0783	ppb	11:36:21
1	Co 228.616†	436.3	500.6	23.217	µg/L	23.217	ppb	11:36:21
1	Cr 267.716†	3090.2	3165.8	68.711	µg/L	68.711	ppb	11:36:21
1	Cu 324.752†	10522.8	6286.4	60.047	µg/L	60.047	ppb	11:36:00
1	Mn 257.610†	244163.5	239564.6	810.22	µg/L	810.22	ppb	11:35:55
1	Mo 202.031†	-2.3	-1.1	2.6236	µg/L	2.6236	ppb	11:36:21
1	Ni 231.604†	1470.7	1126.0	63.865	µg/L	63.865	ppb	11:36:21
1	P 214.914†	1128.1	924.8	1873.5	µg/L	1873.5	ppb	11:36:21
1	Pb 220.353†	177.9	137.0	40.034	µg/L	40.034	ppb	11:36:21
1	S 181.975 Axial†	53.7	24.6	111.43	µg/L	111.43	ppb	11:36:21
1	Sb 206.836†	25.1	5.0	6.3650	µg/L	6.3650	ppb	11:36:21
1	Se 196.026†	-15.0	-27.2	8.8054	µg/L	8.8054	ppb	11:36:21
1	SiO2†	71335.3	67301.1	12828	µg/L	12828	ppb	11:36:00
1	Si 251.611†	79384.5	77429.9	5936.3	µg/L	5936.3	ppb	11:36:00
1	Sn 189.927†	-62.6	-83.4	-27.540	µg/L	-27.540	ppb	11:36:21
1	Ti 334.940†	357369.8	349300.3	832.07	µg/L	832.07	ppb	11:35:55
1	Tl 190.801†	-14.6	7.7	19.389	µg/L	19.389	ppb	11:36:21
1	U 409.014†	275.3	-356.1	-46.659	µg/L	-46.659	ppb	11:36:00
1	V 292.402†	8940.9	8892.6	109.64	µg/L	109.64	ppb	11:36:00
1	Zn 213.857†	9411.6	8622.6	227.73	µg/L	227.73	ppb	11:36:00
2	Sc RADIAL	113754.1	113754.1	103	%			11:34:57
2	Al 396.153Radial†	104914.7	102055.8	55096	µg/L	55096	ppb	11:34:57
2	Ca 317.933Radial†	40040.2	38590.8	16368	µg/L	16368	ppb	11:34:57
2	Fe 238.204 Radial†	10116.8	9839.2	70442	µg/L	70442	ppb	11:35:17
2	K 766.490 Radial†	11215.5	10151.0	5700.8	µg/L	5700.8	ppb	11:34:57
2	Mg 279.077 IEC†	2795.8	2707.7	18349	µg/L	18349	ppb	11:35:17
2	Na 589.592 Radial†	17761.6	17867.4	4981.3	µg/L	4981.3	ppb	11:34:57
2	Sr 421.552†	18175.8	17757.3	100.46	µg/L	100.46	ppb	11:34:57
2	Sc 361.383	2073075.6	2073075.6	100.97	%			11:36:28
2	Y 371.029	1316824.9	1316824.9	102.53	%			11:36:28
2	Ag 328.068†	-452.7	-653.6	0.0231	µg/L	0.0231	ppb	11:36:33
2	As 188.979†	9.6	10.9	9.6327	µg/L	9.6327	ppb	11:36:54
2	B 249.677†	896.8	718.7	10.094	µg/L	10.094	ppb	11:36:33
2	Ba 233.527†	17312.7	17214.9	457.05	µg/L	457.05	ppb	11:36:33
2	Be 313.107†	13135.1	9380.0	5.7791	µg/L	5.7791	ppb	11:36:33
2	Cd 226.502†	158.8	253.6	1.4664	µg/L	1.4664	ppb	11:36:54
2	Co 228.616†	436.2	504.9	23.419	µg/L	23.419	ppb	11:36:54
2	Cr 267.716†	3082.5	3189.7	69.226	µg/L	69.226	ppb	11:36:54
2	Cu 324.752†	10387.5	6259.6	59.936	µg/L	59.936	ppb	11:36:33
2	Mn 257.610†	243521.5	241418.6	816.47	µg/L	816.47	ppb	11:36:28
2	Mo 202.031†	4.1	5.2	3.3950	µg/L	3.3950	ppb	11:36:54
2	Ni 231.604†	1478.8	1149.0	65.174	µg/L	65.174	ppb	11:36:54
2	P 214.914†	1127.9	936.1	1897.1	µg/L	1897.1	ppb	11:36:54
2	Pb 220.353†	189.4	150.2	43.606	µg/L	43.606	ppb	11:36:54

2	S 181.975 Axial†	58.8	30.3	139.82 µg/L	139.82 ppb		11:36:54
2	Sb 206.836†	24.8	4.9	6.2730 µg/L	6.2730 ppb		11:36:54
2	Se 196.026†	-13.8	-26.2	10.323 µg/L	10.323 ppb		11:36:54
2	SiO2†	70789.0	67487.5	12863 µg/L	12863 ppb		11:36:33
2	Si 251.611†	78697.8	77559.3	5945.9 µg/L	5945.9 ppb		11:36:33
2	Sn 189.927†	-60.9	-82.4	-26.892 µg/L	-26.892 ppb		11:36:54
2	Ti 334.940†	356699.4	352280.6	839.16 µg/L	839.16 ppb		11:36:28
2	Tl 190.801†	-17.0	5.1	15.439 µg/L	15.439 ppb		11:36:54
2	U 409.014†	198.8	-429.1	-53.688 µg/L	-53.688 ppb		11:36:33
2	V 292.402†	8792.6	8836.9	109.02 µg/L	109.02 ppb		11:36:33
2	Zn 213.857†	9309.5	8617.3	227.54 µg/L	227.54 ppb		11:36:33
3	Sc RADIAL	113894.7	113894.7	103 %			11:35:23
3	Al 396.153Radial†	105082.1	102092.6	55116 µg/L	55116 ppb		11:35:23
3	Ca 317.933Radial†	40110.1	38610.6	16376 µg/L	16376 ppb		11:35:23
3	Fe 238.204 Radial†	10146.1	9855.5	70559 µg/L	70559 ppb		11:35:43
3	K 766.490 Radial†	11165.3	10088.7	5665.8 µg/L	5665.8 ppb		11:35:23
3	Mg 279.077 IEC†	2808.1	2716.3	18408 µg/L	18408 ppb		11:35:43
3	Na 589.592 Radial†	17856.6	17938.6	5001.2 µg/L	5001.2 ppb		11:35:23
3	Sr 421.552†	18183.3	17742.7	100.37 µg/L	100.37 ppb		11:35:23
3	Sc 361.383	2088589.2	2088589.2	101.73 %			11:37:01
3	Y 371.029	1322121.5	1322121.5	102.95 %			11:37:01
3	Ag 328.068†	-430.9	-628.8	0.2655 µg/L	0.2655 ppb		11:37:06
3	As 188.979†	11.0	12.1	11.838 µg/L	11.838 ppb		11:37:27
3	B 249.677†	892.3	707.6	9.5620 µg/L	9.5620 ppb		11:37:06
3	Ba 233.527†	17304.7	17079.7	453.47 µg/L	453.47 ppb		11:37:06
3	Be 313.107†	13116.3	9264.9	5.7074 µg/L	5.7074 ppb		11:37:06
3	Cd 226.502†	160.8	254.5	1.4802 µg/L	1.4802 ppb		11:37:27
3	Co 228.616†	434.7	500.2	23.201 µg/L	23.201 ppb		11:37:27
3	Cr 267.716†	3108.6	3192.6	69.288 µg/L	69.288 ppb		11:37:27
3	Cu 324.752†	10476.9	6271.1	60.043 µg/L	60.043 ppb		11:37:06
3	Mn 257.610†	243475.2	239581.7	810.34 µg/L	810.34 ppb		11:37:01
3	Mo 202.031†	4.8	5.9	3.4796 µg/L	3.4796 ppb		11:37:27
3	Ni 231.604†	1461.0	1120.6	63.561 µg/L	63.561 ppb		11:37:27
3	P 214.914†	1120.3	920.3	1863.9 µg/L	1863.9 ppb		11:37:27
3	Pb 220.353†	185.3	144.8	42.190 µg/L	42.190 ppb		11:37:27
3	S 181.975 Axial†	62.9	33.8	157.80 µg/L	157.80 ppb		11:37:27
3	Sb 206.836†	34.0	13.8	15.255 µg/L	15.255 ppb		11:37:27
3	Se 196.026†	-12.1	-24.4	12.718 µg/L	12.718 ppb		11:37:27
3	SiO2†	70645.0	66825.1	12737 µg/L	12737 ppb		11:37:06
3	Si 251.611†	78494.0	76780.0	5886.1 µg/L	5886.1 ppb		11:37:06
3	Sn 189.927†	-58.5	-79.6	-25.419 µg/L	-25.419 ppb		11:37:27
3	Ti 334.940†	355970.9	348940.6	831.20 µg/L	831.20 ppb		11:37:01
3	Tl 190.801†	-25.3	-3.0	3.0038 µg/L	3.0038 ppb		11:37:27
3	U 409.014†	218.1	-411.6	-52.036 µg/L	-52.036 ppb		11:37:06
3	V 292.402†	8817.2	8796.4	108.56 µg/L	108.56 ppb		11:37:06
3	Zn 213.857†	9323.1	8562.2	226.02 µg/L	226.02 ppb		11:37:06

Mean Data: 241419003|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2085435.9	101.58	%	0.542				0.53%
Sc RADIAL	114138.0	103	%	0.5				0.48%
Y 371.029	1323932.2	103.09	%	0.636				0.62%
Ag 328.068†	-634.3	0.2007	µg/L	0.15566	0.2007	ppb	0.15566	77.57%
Al 396.153Radial†	101480.9	54786	µg/L	554.8	54786	ppb	554.8	1.01%
As 188.979†	12.3	12.248	µg/L	2.8420	12.248	ppb	2.8420	23.20%
B 249.677†	719.0	10.137	µg/L	0.5977	10.137	ppb	0.5977	5.90%
Ba 233.527†	17175.1	456.00	µg/L	2.203	456.00	ppb	2.203	0.48%
Be 313.107†	9349.1	5.7609	µg/L	0.04718	5.7609	ppb	0.04718	0.82%
Ca 317.933Radial†	38439.4	16303	µg/L	118.5	16303	ppb	118.5	0.73%
Cd 226.502†	248.7	1.3416	µg/L	0.22813	1.3416	ppb	0.22813	17.00%
Co 228.616†	501.9	23.279	µg/L	0.1218	23.279	ppb	0.1218	0.52%
Cr 267.716†	3182.7	69.075	µg/L	0.3171	69.075	ppb	0.3171	0.46%
Cu 324.752†	6272.4	60.009	µg/L	0.0629	60.009	ppb	0.0629	0.10%
Fe 238.204 Radial†	9827.1	70356	µg/L	257.6	70356	ppb	257.6	0.37%
K 766.490 Radial†	10080.2	5661.0	µg/L	42.39	5661.0	ppb	42.39	0.75%
Mg 279.077 IEC†	2705.8	18337	µg/L	78.1	18337	ppb	78.1	0.43%
Mn 257.610†	240188.3	812.35	µg/L	3.574	812.35	ppb	3.574	0.44%
Mo 202.031†	3.3	3.1661	µg/L	0.47168	3.1661	ppb	0.47168	14.90%
Na 589.592 Radial†	17796.8	4961.6	µg/L	52.21	4961.6	ppb	52.21	1.05%

Ni 231.604†	1131.9	64.200	µg/L	0.8572	64.200	ppb	0.8572	1.34%
P 214.914†	927.1	1878.2	µg/L	17.10	1878.2	ppb	17.10	0.91%
Pb 220.353†	144.0	41.943	µg/L	1.7990	41.943	ppb	1.7990	4.29%
S 181.975 Axial†	29.6	136.35	µg/L	23.378	136.35	ppb	23.378	17.15%
Sb 206.836†	7.9	9.2978	µg/L	5.15969	9.2978	ppb	5.15969	55.49%
Se 196.026†	-25.9	10.615	µg/L	1.9724	10.615	ppb	1.9724	18.58%
SiO2†	67204.6	12809	µg/L	65.1	12809	ppb	65.1	0.51%
Si 251.611†	77256.4	5922.8	µg/L	32.11	5922.8	ppb	32.11	0.54%
Sn 189.927†	-81.8	-26.617	µg/L	1.0869	-26.617	ppb	1.0869	4.08%
Sr 421.552†	17647.5	99.834	µg/L	1.0057	99.834	ppb	1.0057	1.01%
Ti 334.940†	350173.8	834.14	µg/L	4.369	834.14	ppb	4.369	0.52%
Tl 190.801†	3.3	12.611	µg/L	8.5510	12.611	ppb	8.5510	67.81%
U 409.014†	-398.9	-50.794	µg/L	3.6751	-50.794	ppb	3.6751	7.24%
V 292.402†	8841.9	109.07	µg/L	0.546	109.07	ppb	0.546	0.50%
Zn 213.857†	8600.7	227.09	µg/L	0.935	227.09	ppb	0.935	0.41%

Sequence No.: 14
Sample ID: 241419004|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 310
Date Collected: 12/11/2009 11:37:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419004|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116244.4	116244.4	105	%			11:38:08
1	Al 396.153Radial†	280145.7	266907.7	144090	µg/L	144090	ppb	11:38:08
1	Ca 317.933Radial†	73666.9	69810.2	29609	µg/L	29609	ppb	11:38:14
1	Fe 238.204 Radial†	17554.8	16718.4	119690	µg/L	119690	ppb	11:38:14
1	K 766.490 Radial†	28137.5	26048.1	14628	µg/L	14628	ppb	11:38:08
1	Mg 279.077 IEC†	3637.8	3451.9	23348	µg/L	23348	ppb	11:38:14
1	Na 589.592 Radial†	25010.0	24406.4	6804.4	µg/L	6804.4	ppb	11:38:08
1	Sr 421.552†	62723.9	59844.1	338.54	µg/L	338.54	ppb	11:38:08
1	Sc 361.383	2078534.8	2078534.8	101.24	%			11:38:49
1	Y 371.029	1321877.3	1321877.3	102.93	%			11:38:49
1	Ag 328.068†	-943.1	-1136.7	-0.2273	µg/L	-0.2273	ppb	11:38:54
1	As 188.979†	15.6	16.7	15.368	µg/L	15.368	ppb	11:39:15
1	B 249.677†	1741.7	1550.8	31.945	µg/L	31.945	ppb	11:38:54
1	Ba 233.527†	56874.5	56247.3	1493.0	µg/L	1493.0	ppb	11:38:54
1	Be 313.107†	26015.1	22068.2	13.445	µg/L	13.445	ppb	11:38:54
1	Cd 226.502†	338.1	430.3	2.4815	µg/L	2.4815	ppb	11:39:15
1	Co 228.616†	1009.2	1069.8	48.350	µg/L	48.350	ppb	11:39:15
1	Cr 267.716†	4984.2	5060.0	109.84	µg/L	109.84	ppb	11:38:54
1	Cu 324.752†	11819.3	7646.9	80.445	µg/L	80.445	ppb	11:38:54
1	Mn 257.610†	958236.4	946748.0	3182.2	µg/L	3182.2	ppb	11:38:49
1	Mo 202.031†	2.2	3.4	5.1089	µg/L	5.1089	ppb	11:39:15
1	Ni 231.604†	2276.2	1932.8	109.63	µg/L	109.63	ppb	11:39:15
1	P 214.914†	507.0	319.9	576.12	µg/L	576.12	ppb	11:39:15
1	Pb 220.353†	477.6	434.4	125.92	µg/L	125.92	ppb	11:39:15
1	S 181.975 Axial†	150.0	120.2	585.88	µg/L	585.88	ppb	11:39:15
1	Sb 206.836†	22.7	2.8	8.4325	µg/L	8.4325	ppb	11:39:15
1	Se 196.026†	-46.7	-58.7	2.7708	µg/L	2.7708	ppb	11:39:15
1	SiO2†	106380.8	102459.3	19529	µg/L	19529	ppb	11:38:54
1	Si 251.611†	119559.1	117715.5	8982.0	µg/L	8982.0	ppb	11:38:54
1	Sn 189.927†	-97.1	-117.9	-35.519	µg/L	-35.519	ppb	11:39:15
1	Ti 334.940†	1013386.4	999998.3	2383.0	µg/L	2383.0	ppb	11:38:49
1	Tl 190.801†	-28.7	-6.4	17.721	µg/L	17.721	ppb	11:39:15
1	U 409.014†	15.6	-610.6	-79.873	µg/L	-79.873	ppb	11:38:49
1	V 292.402†	14865.9	14812.9	182.88	µg/L	182.88	ppb	11:38:54
1	Zn 213.857†	12379.6	11625.7	304.28	µg/L	304.28	ppb	11:38:54
2	Sc RADIAL	116055.1	116055.1	105	%			11:38:20
2	Al 396.153Radial†	282263.5	269365.4	145420	µg/L	145420	ppb	11:38:20
2	Ca 317.933Radial†	72938.1	69228.9	29362	µg/L	29362	ppb	11:38:25
2	Fe 238.204 Radial†	17441.1	16637.1	119110	µg/L	119110	ppb	11:38:25
2	K 766.490 Radial†	28348.0	26292.9	14766	µg/L	14766	ppb	11:38:20
2	Mg 279.077 IEC†	3598.9	3420.5	23135	µg/L	23135	ppb	11:38:25
2	Na 589.592 Radial†	25291.3	24713.9	6890.1	µg/L	6890.1	ppb	11:38:20
2	Sr 421.552†	63259.7	60453.2	341.99	µg/L	341.99	ppb	11:38:20
2	Sc 361.383	2056804.1	2056804.1	100.18	%			11:39:22
2	Y 371.029	1316529.5	1316529.5	102.51	%			11:39:22
2	Ag 328.068†	-891.2	-1094.8	0.1172	µg/L	0.1172	ppb	11:39:28
2	As 188.979†	18.3	19.6	20.886	µg/L	20.886	ppb	11:39:48
2	B 249.677†	1698.5	1526.0	31.012	µg/L	31.012	ppb	11:39:28
2	Ba 233.527†	55634.5	55603.0	1475.9	µg/L	1475.9	ppb	11:39:28
2	Be 313.107†	25994.5	22319.1	13.603	µg/L	13.603	ppb	11:39:28
2	Cd 226.502†	338.7	434.4	2.6426	µg/L	2.6426	ppb	11:39:48
2	Co 228.616†	1012.3	1083.4	49.003	µg/L	49.003	ppb	11:39:48
2	Cr 267.716†	4884.4	5012.4	108.81	µg/L	108.81	ppb	11:39:28
2	Cu 324.752†	11699.0	7650.2	80.344	µg/L	80.344	ppb	11:39:28
2	Mn 257.610†	951841.7	950364.9	3194.2	µg/L	3194.2	ppb	11:39:22
2	Mo 202.031†	0.3	1.5	4.8568	µg/L	4.8568	ppb	11:39:48
2	Ni 231.604†	2270.1	1950.5	110.63	µg/L	110.63	ppb	11:39:48
2	P 214.914†	516.9	335.0	609.17	µg/L	609.17	ppb	11:39:48
2	Pb 220.353†	467.1	428.9	124.58	µg/L	124.58	ppb	11:39:48

2	S 181.975 Axial†	148.4	120.1	585.57	µg/L	585.57 ppb	11:39:48
2	Sb 206.836†	34.0	14.3	20.223	µg/L	20.223 ppb	11:39:48
2	Se 196.026†	-40.7	-53.1	9.5897	µg/L	9.5897 ppb	11:39:48
2	SiO2†	104680.8	101872.5	19417	µg/L	19417 ppb	11:39:28
2	Si 251.611†	117524.9	116932.8	8921.1	µg/L	8921.1 ppb	11:39:28
2	Sn 189.927†	-91.7	-113.6	-33.431	µg/L	-33.431 ppb	11:39:48
2	Ti 334.940†	1008428.4	1005624.9	2396.5	µg/L	2396.5 ppb	11:39:22
2	Tl 190.801†	-27.6	-5.6	19.085	µg/L	19.085 ppb	11:39:48
2	U 409.014†	54.4	-571.6	-76.057	µg/L	-76.057 ppb	11:39:22
2	V 292.402†	14589.3	14692.0	181.43	µg/L	181.43 ppb	11:39:28
2	Zn 213.857†	12144.6	11520.3	301.45	µg/L	301.45 ppb	11:39:28
3	Sc RADIAL	116275.7	116275.7	105	%		11:38:31
3	Al 396.153Radial†	283724.6	270246.6	145900	µg/L	145900 ppb	11:38:31
3	Ca 317.933Radial†	74011.2	70119.5	29740	µg/L	29740 ppb	11:38:36
3	Fe 238.204 Radial†	17685.8	16838.8	120560	µg/L	120560 ppb	11:38:36
3	K 766.490 Radial†	28488.0	26374.9	14812	µg/L	14812 ppb	11:38:31
3	Mg 279.077 IEC†	3622.1	3436.1	23239	µg/L	23239 ppb	11:38:36
3	Na 589.592 Radial†	25310.4	24686.3	6882.4	µg/L	6882.4 ppb	11:38:31
3	Sr 421.552†	63584.0	60647.7	343.09	µg/L	343.09 ppb	11:38:31
3	Sc 361.383	2067394.1	2067394.1	100.70	%		11:39:55
3	Y 371.029	1320990.6	1320990.6	102.86	%		11:39:55
3	Ag 328.068†	-939.8	-1138.5	-0.2053	µg/L	-0.2053 ppb	11:40:01
3	As 188.979†	18.1	19.3	20.039	µg/L	20.039 ppb	11:40:21
3	B 249.677†	1683.0	1501.8	29.474	µg/L	29.474 ppb	11:40:01
3	Ba 233.527†	55205.6	54892.7	1457.1	µg/L	1457.1 ppb	11:40:01
3	Be 313.107†	25254.8	21451.6	13.043	µg/L	13.043 ppb	11:40:01
3	Cd 226.502†	331.7	425.8	2.2912	µg/L	2.2912 ppb	11:40:21
3	Co 228.616†	1024.9	1090.7	49.382	µg/L	49.382 ppb	11:40:21
3	Cr 267.716†	4801.6	4905.2	106.48	µg/L	106.48 ppb	11:40:01
3	Cu 324.752†	11646.0	7537.7	79.849	µg/L	79.849 ppb	11:40:01
3	Mn 257.610†	954396.1	948034.8	3186.6	µg/L	3186.6 ppb	11:39:55
3	Mo 202.031†	-2.2	-1.0	4.6220	µg/L	4.6220 ppb	11:40:21
3	Ni 231.604†	2253.3	1922.2	109.03	µg/L	109.03 ppb	11:40:21
3	P 214.914†	504.8	320.5	577.04	µg/L	577.04 ppb	11:40:21
3	Pb 220.353†	478.4	437.7	126.94	µg/L	126.94 ppb	11:40:21
3	S 181.975 Axial†	146.7	117.7	573.04	µg/L	573.04 ppb	11:40:21
3	Sb 206.836†	25.6	5.8	11.469	µg/L	11.469 ppb	11:40:21
3	Se 196.026†	-50.1	-62.3	-1.2191	µg/L	-1.2191 ppb	11:40:21
3	SiO2†	104164.9	100825.0	19217	µg/L	19217 ppb	11:40:01
3	Si 251.611†	116795.7	115607.6	8819.3	µg/L	8819.3 ppb	11:40:01
3	Sn 189.927†	-96.4	-117.8	-35.324	µg/L	-35.324 ppb	11:40:21
3	Ti 334.940†	1010400.3	1002426.9	2388.8	µg/L	2388.8 ppb	11:39:55
3	Tl 190.801†	-28.8	-6.6	17.405	µg/L	17.405 ppb	11:40:21
3	U 409.014†	1.4	-624.6	-81.366	µg/L	-81.366 ppb	11:39:55
3	V 292.402†	14421.8	14451.0	178.72	µg/L	178.72 ppb	11:40:01
3	Zn 213.857†	12025.0	11339.4	296.35	µg/L	296.35 ppb	11:40:01

Mean Data: 241419004|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2067577.7	100.71	%	0.529				0.53%
Sc RADIAL	116191.7	105	%	0.1				0.10%
Y 371.029	1319799.2	102.77	%	0.223				0.22%
Ag 328.068†	-1123.4	-0.1051	µg/L	0.19285	-0.1051	ppb	0.19285	183.46%
Al 396.153Radial†	268839.9	145140	µg/L	934.2	145140	ppb	934.2	0.64%
As 188.979†	18.6	18.764	µg/L	2.9718	18.764	ppb	2.9718	15.84%
B 249.677†	1526.2	30.811	µg/L	1.2477	30.811	ppb	1.2477	4.05%
Ba 233.527†	55581.0	1475.3	µg/L	17.99	1475.3	ppb	17.99	1.22%
Be 313.107†	21946.3	13.364	µg/L	0.2890	13.364	ppb	0.2890	2.16%
Ca 317.933Radial†	69719.5	29570	µg/L	191.8	29570	ppb	191.8	0.65%
Cd 226.502†	430.2	2.4718	µg/L	0.17591	2.4718	ppb	0.17591	7.12%
Co 228.616†	1081.3	48.912	µg/L	0.5221	48.912	ppb	0.5221	1.07%
Cr 267.716†	4992.6	108.38	µg/L	1.720	108.38	ppb	1.720	1.59%
Cu 324.752†	7611.6	80.213	µg/L	0.3191	80.213	ppb	0.3191	0.40%
Fe 238.204 Radial†	16731.4	119790	µg/L	726.4	119790	ppb	726.4	0.61%
K 766.490 Radial†	26238.6	14735	µg/L	95.5	14735	ppb	95.5	0.65%
Mg 279.077 IEC†	3436.2	23241	µg/L	106.8	23241	ppb	106.8	0.46%
Mn 257.610†	948382.6	3187.7	µg/L	6.08	3187.7	ppb	6.08	0.19%
Mo 202.031†	1.3	4.8626	µg/L	0.24354	4.8626	ppb	0.24354	5.01%
Na 589.592 Radial†	24602.2	6858.9	µg/L	47.43	6858.9	ppb	47.43	0.69%

Ni 231.604†	1935.1	109.76 µg/L	0.810	109.76 ppb	0.810	0.74%
P 214.914†	325.1	587.45 µg/L	18.822	587.45 ppb	18.822	3.20%
Pb 220.353†	433.7	125.81 µg/L	1.184	125.81 ppb	1.184	0.94%
S 181.975 Axial†	119.3	581.50 µg/L	7.325	581.50 ppb	7.325	1.26%
Sb 206.836†	7.6	13.375 µg/L	6.1218	13.375 ppb	6.1218	45.77%
Se 196.026†	-58.0	3.7138 µg/L	5.46576	3.7138 ppb	5.46576	147.17%
SiO2†	101718.9	19388 µg/L	157.8	19388 ppb	157.8	0.81%
Si 251.611†	116752.0	8907.5 µg/L	82.20	8907.5 ppb	82.20	0.92%
Sn 189.927†	-116.4	-34.758 µg/L	1.1534	-34.758 ppb	1.1534	3.32%
Sr 421.552†	60315.0	341.21 µg/L	2.372	341.21 ppb	2.372	0.70%
Ti 334.940†	1002683.4	2389.4 µg/L	6.74	2389.4 ppb	6.74	0.28%
Tl 190.801†	-6.2	18.070 µg/L	0.8928	18.070 ppb	0.8928	4.94%
U 409.014†	-602.3	-79.099 µg/L	2.7379	-79.099 ppb	2.7379	3.46%
V 292.402†	14652.0	181.01 µg/L	2.115	181.01 ppb	2.115	1.17%
Zn 213.857†	11495.1	300.69 µg/L	4.016	300.69 ppb	4.016	1.34%

Sequence No.: 15
Sample ID: 241419005|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 311
Date Collected: 12/11/2009 11:40:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419005|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115239.1	115239.1	104	%			11:41:04
1	Al 396.153Radial†	289496.6	278229.1	150210	µg/L	150210	ppb	11:41:04
1	Ca 317.933Radial†	80420.1	76916.7	32623	µg/L	32623	ppb	11:41:09
1	Fe 238.204 Radial†	23389.6	22475.1	160910	µg/L	160910	ppb	11:41:09
1	K 766.490 Radial†	24262.7	22556.1	12667	µg/L	12667	ppb	11:41:09
1	Mg 279.077 IEC†	4251.3	4072.2	27515	µg/L	27515	ppb	11:41:09
1	Na 589.592 Radial†	7787.4	8053.5	2245.3	µg/L	2245.3	ppb	11:41:09
1	Sr 421.552†	58580.6	56381.6	318.96	µg/L	318.96	ppb	11:41:04
1	Sc 361.383	2087457.4	2087457.4	101.67	%			11:41:44
1	Y 371.029	1314297.5	1314297.5	102.34	%			11:41:44
1	Ag 328.068†	-1312.4	-1496.0	0.1347	µg/L	0.1347	ppb	11:41:49
1	As 188.979†	22.0	23.0	21.193	µg/L	21.193	ppb	11:42:10
1	B 249.677†	1849.7	1649.8	23.425	µg/L	23.425	ppb	11:41:49
1	Ba 233.527†	41009.8	40403.7	1072.7	µg/L	1072.7	ppb	11:41:49
1	Be 313.107†	20795.8	16825.0	9.9401	µg/L	9.9401	ppb	11:41:49
1	Cd 226.502†	496.1	584.3	3.4480	µg/L	3.4480	ppb	11:41:49
1	Co 228.616†	939.1	996.5	44.121	µg/L	44.121	ppb	11:42:10
1	Cr 267.716†	5665.2	5708.8	124.06	µg/L	124.06	ppb	11:41:49
1	Cu 324.752†	12124.8	7897.4	91.091	µg/L	91.091	ppb	11:41:49
1	Mn 257.610†	581977.3	572639.3	1935.9	µg/L	1935.9	ppb	11:41:44
1	Mo 202.031†	-29.1	-27.4	3.0292	µg/L	3.0292	ppb	11:42:10
1	Ni 231.604†	1532.8	1192.0	67.611	µg/L	67.611	ppb	11:42:10
1	P 214.914†	580.3	389.8	676.29	µg/L	676.29	ppb	11:42:10
1	Pb 220.353†	509.2	463.4	133.56	µg/L	133.56	ppb	11:42:10
1	S 181.975 Axial†	139.0	108.7	521.36	µg/L	521.36	ppb	11:42:10
1	Sb 206.836†	27.7	7.6	14.007	µg/L	14.007	ppb	11:42:10
1	Se 196.026†	-56.7	-68.3	17.923	µg/L	17.923	ppb	11:42:10
1	SiO2†	77371.4	73478.5	14005	µg/L	14005	ppb	11:41:49
1	Si 251.611†	86313.1	84512.2	6414.8	µg/L	6414.8	ppb	11:41:49
1	Sn 189.927†	-119.7	-139.7	-40.415	µg/L	-40.415	ppb	11:42:10
1	Ti 334.940†	1134012.1	1114359.1	2655.6	µg/L	2655.6	ppb	11:41:44
1	Tl 190.801†	-28.8	-6.4	14.394	µg/L	14.394	ppb	11:42:10
1	U 409.014†	401.7	-230.9	-51.291	µg/L	-51.291	ppb	11:41:44
1	V 292.402†	21810.3	21580.2	265.41	µg/L	265.41	ppb	11:41:49
1	Zn 213.857†	11970.6	11171.1	287.54	µg/L	287.54	ppb	11:41:49
2	Sc RADIAL	115246.6	115246.6	104	%			11:41:15
2	Al 396.153Radial†	292317.5	280923.3	151660	µg/L	151660	ppb	11:41:15
2	Ca 317.933Radial†	81505.5	77955.3	33063	µg/L	33063	ppb	11:41:20
2	Fe 238.204 Radial†	23680.1	22752.8	162900	µg/L	162900	ppb	11:41:20
2	K 766.490 Radial†	24498.4	22781.2	12794	µg/L	12794	ppb	11:41:20
2	Mg 279.077 IEC†	4282.7	4102.1	27715	µg/L	27715	ppb	11:41:20
2	Na 589.592 Radial†	7952.4	8211.7	2289.4	µg/L	2289.4	ppb	11:41:20
2	Sr 421.552†	59120.6	56897.1	321.87	µg/L	321.87	ppb	11:41:15
2	Sc 361.383	2078235.5	2078235.5	101.23	%			11:42:17
2	Y 371.029	1315906.3	1315906.3	102.46	%			11:42:17
2	Ag 328.068†	-1304.9	-1494.4	0.2955	µg/L	0.2955	ppb	11:42:23
2	As 188.979†	19.5	20.6	16.440	µg/L	16.440	ppb	11:42:43
2	B 249.677†	1884.3	1692.0	24.695	µg/L	24.695	ppb	11:42:23
2	Ba 233.527†	40612.6	40190.3	1067.1	µg/L	1067.1	ppb	11:42:23
2	Be 313.107†	20509.2	16632.6	9.8097	µg/L	9.8097	ppb	11:42:23
2	Cd 226.502†	496.1	586.5	3.3603	µg/L	3.3603	ppb	11:42:23
2	Co 228.616†	941.1	1002.6	44.391	µg/L	44.391	ppb	11:42:43
2	Cr 267.716†	5641.4	5710.0	124.08	µg/L	124.08	ppb	11:42:23
2	Cu 324.752†	12030.5	7857.2	91.230	µg/L	91.230	ppb	11:42:23
2	Mn 257.610†	581757.8	574962.3	1943.9	µg/L	1943.9	ppb	11:42:17
2	Mo 202.031†	-34.9	-33.3	2.4012	µg/L	2.4012	ppb	11:42:43
2	Ni 231.604†	1531.8	1197.7	67.933	µg/L	67.933	ppb	11:42:43
2	P 214.914†	578.8	391.0	676.85	µg/L	676.85	ppb	11:42:43
2	Pb 220.353†	507.5	464.0	133.81	µg/L	133.81	ppb	11:42:43

2	S 181.975 Axial†	141.6	111.9	536.78	µg/L	536.78 ppb	11:42:43
2	Sb 206.836†	23.1	3.2	9.5303	µg/L	9.5303 ppb	11:42:43
2	Se 196.026†	-63.9	-75.6	9.8626	µg/L	9.8626 ppb	11:42:43
2	SiO2†	76286.1	72743.9	13865	µg/L	13865 ppb	11:42:23
2	Si 251.611†	84937.1	83529.6	6338.5	µg/L	6338.5 ppb	11:42:23
2	Sn 189.927†	-118.3	-138.9	-39.617	µg/L	-39.617 ppb	11:42:43
2	Ti 334.940†	1135319.4	1120599.7	2670.4	µg/L	2670.4 ppb	11:42:17
2	Tl 190.801†	-32.3	-9.9	9.0603	µg/L	9.0603 ppb	11:42:43
2	U 409.014†	517.9	-114.4	-40.537	µg/L	-40.537 ppb	11:42:17
2	V 292.402†	21561.8	21429.9	263.83	µg/L	263.83 ppb	11:42:23
2	Zn 213.857†	11863.5	11117.5	285.86	µg/L	285.86 ppb	11:42:23
3	Sc RADIAL	114988.0	114988.0	104	%		11:41:26
3	Al 396.153Radial†	290849.4	280140.6	151240	µg/L	151240 ppb	11:41:26
3	Ca 317.933Radial†	80747.8	77401.2	32828	µg/L	32828 ppb	11:41:31
3	Fe 238.204 Radial†	23461.0	22592.9	161750	µg/L	161750 ppb	11:41:31
3	K 766.490 Radial†	24260.7	22605.1	12695	µg/L	12695 ppb	11:41:31
3	Mg 279.077 IEC†	4269.8	4098.9	27696	µg/L	27696 ppb	11:41:31
3	Na 589.592 Radial†	7853.4	8133.5	2267.6	µg/L	2267.6 ppb	11:41:31
3	Sr 421.552†	58701.1	56620.7	320.31	µg/L	320.31 ppb	11:41:26
3	Sc 361.383	2068668.5	2068668.5	100.76	%		11:42:51
3	Y 371.029	1305990.2	1305990.2	101.69	%		11:42:51
3	Ag 328.068†	-1438.4	-1632.7	-1.0921	µg/L	-1.0921 ppb	11:42:56
3	As 188.979†	25.9	27.0	28.422	µg/L	28.422 ppb	11:43:17
3	B 249.677†	1856.2	1672.7	24.187	µg/L	24.187 ppb	11:42:56
3	Ba 233.527†	40916.4	40677.4	1080.0	µg/L	1080.0 ppb	11:42:56
3	Be 313.107†	20782.4	16997.4	10.060	µg/L	10.060 ppb	11:42:56
3	Cd 226.502†	487.9	580.6	3.2842	µg/L	3.2842 ppb	11:42:56
3	Co 228.616†	941.6	1007.5	44.706	µg/L	44.706 ppb	11:43:17
3	Cr 267.716†	5651.7	5746.0	124.87	µg/L	124.87 ppb	11:42:56
3	Cu 324.752†	12078.8	7960.1	91.721	µg/L	91.721 ppb	11:42:56
3	Mn 257.610†	571671.0	567609.4	1919.2	µg/L	1919.2 ppb	11:42:51
3	Mo 202.031†	-40.1	-38.6	1.7226	µg/L	1.7226 ppb	11:43:17
3	Ni 231.604†	1520.8	1193.8	67.713	µg/L	67.713 ppb	11:43:17
3	P 214.914†	595.7	410.3	718.64	µg/L	718.64 ppb	11:43:17
3	Pb 220.353†	488.3	447.2	129.35	µg/L	129.35 ppb	11:43:17
3	S 181.975 Axial†	130.6	101.6	485.05	µg/L	485.05 ppb	11:43:17
3	Sb 206.836†	25.3	5.5	11.729	µg/L	11.729 ppb	11:43:17
3	Se 196.026†	-56.7	-68.8	17.837	µg/L	17.837 ppb	11:43:17
3	SiO2†	77280.6	74079.4	14119	µg/L	14119 ppb	11:42:56
3	Si 251.611†	86057.1	85029.2	6455.4	µg/L	6455.4 ppb	11:42:56
3	Sn 189.927†	-121.5	-142.7	-41.735	µg/L	-41.735 ppb	11:43:17
3	Ti 334.940†	1114991.7	1105612.1	2634.7	µg/L	2634.7 ppb	11:42:51
3	Tl 190.801†	-22.2	-0.1	23.933	µg/L	23.933 ppb	11:43:17
3	U 409.014†	431.4	-197.8	-48.285	µg/L	-48.285 ppb	11:42:51
3	V 292.402†	21771.1	21736.1	267.30	µg/L	267.30 ppb	11:42:56
3	Zn 213.857†	11927.4	11235.2	289.20	µg/L	289.20 ppb	11:42:56

Mean Data: 241419005|931347|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2078120.5	101.22	%	0.458				0.45%
Sc RADIAL	115157.9	104	%	0.1				0.13%
Y 371.029	1312064.7	102.16	%	0.414				0.41%
Ag 328.068†	-1541.0	-0.2207	µg/L	0.75899	-0.2207	ppb	0.75899	343.98%
Al 396.153Radial†	279764.3	151030	µg/L	748.2	151030	ppb	748.2	0.50%
As 188.979†	23.5	22.019	µg/L	6.0332	22.019	ppb	6.0332	27.40%
B 249.677†	1671.5	24.102	µg/L	0.6395	24.102	ppb	0.6395	2.65%
Ba 233.527†	40423.8	1073.3	µg/L	6.48	1073.3	ppb	6.48	0.60%
Be 313.107†	16818.3	9.9365	µg/L	0.12507	9.9365	ppb	0.12507	1.26%
Ca 317.933Radial†	77424.4	32838	µg/L	220.4	32838	ppb	220.4	0.67%
Cd 226.502†	583.8	3.3642	µg/L	0.08195	3.3642	ppb	0.08195	2.44%
Co 228.616†	1002.2	44.406	µg/L	0.2927	44.406	ppb	0.2927	0.66%
Cr 267.716†	5721.6	124.33	µg/L	0.460	124.33	ppb	0.460	0.37%
Cu 324.752†	7904.9	91.348	µg/L	0.3310	91.348	ppb	0.3310	0.36%
Fe 238.204 Radial†	22606.9	161850	µg/L	998.2	161850	ppb	998.2	0.62%
K 766.490 Radial†	22647.5	12719	µg/L	66.5	12719	ppb	66.5	0.52%
Mg 279.077 IEC†	4091.1	27642	µg/L	110.6	27642	ppb	110.6	0.40%
Mn 257.610†	571737.0	1933.0	µg/L	12.62	1933.0	ppb	12.62	0.65%
Mo 202.031†	-33.1	2.3843	µg/L	0.65346	2.3843	ppb	0.65346	27.41%
Na 589.592 Radial†	8132.9	2267.4	µg/L	22.05	2267.4	ppb	22.05	0.97%

Ni 231.604†	1194.5	67.753	µg/L	0.1645	67.753	ppb	0.1645	0.24%
P 214.914†	397.0	690.59	µg/L	24.293	690.59	ppb	24.293	3.52%
Pb 220.353†	458.2	132.24	µg/L	2.509	132.24	ppb	2.509	1.90%
S 181.975 Axial†	107.4	514.40	µg/L	26.554	514.40	ppb	26.554	5.16%
Sb 206.836†	5.4	11.756	µg/L	2.2387	11.756	ppb	2.2387	19.04%
Se 196.026†	-70.9	15.207	µg/L	4.6290	15.207	ppb	4.6290	30.44%
SiO2†	73433.9	13996	µg/L	127.5	13996	ppb	127.5	0.91%
Si 251.611†	84357.0	6402.9	µg/L	59.38	6402.9	ppb	59.38	0.93%
Sn 189.927†	-140.4	-40.589	µg/L	1.0696	-40.589	ppb	1.0696	2.64%
Sr 421.552†	56633.1	320.38	µg/L	1.460	320.38	ppb	1.460	0.46%
Ti 334.940†	1113523.6	2653.6	µg/L	17.95	2653.6	ppb	17.95	0.68%
Tl 190.801†	-5.5	15.796	µg/L	7.5351	15.796	ppb	7.5351	47.70%
U 409.014†	-181.0	-46.704	µg/L	5.5485	-46.704	ppb	5.5485	11.88%
V 292.402†	21582.1	265.51	µg/L	1.737	265.51	ppb	1.737	0.65%
Zn 213.857†	11174.6	287.53	µg/L	1.672	287.53	ppb	1.672	0.58%

Sequence No.: 16
Sample ID: 241419006|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 312
Date Collected: 12/11/2009 11:43:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419006|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114617.9	114617.9	103	%			11:43:58
1	Al 396.153Radial†	297793.8	287759.5	155350	µg/L	155350	ppb	11:43:58
1	Ca 317.933Radial†	123436.8	118923.9	50439	µg/L	50439	ppb	11:43:58
1	Fe 238.204 Radial†	23151.8	22367.0	160140	µg/L	160140	ppb	11:44:04
1	K 766.490 Radial†	30930.9	29129.4	16359	µg/L	16359	ppb	11:43:58
1	Mg 279.077 IEC†	4843.7	4667.0	31569	µg/L	31569	ppb	11:44:04
1	Na 589.592 Radial†	16909.8	16913.6	4715.4	µg/L	4715.4	ppb	11:44:04
1	Sr 421.552†	87695.1	84834.6	479.92	µg/L	479.92	ppb	11:43:58
1	Sc 361.383	2077420.5	2077420.5	101.19	%			11:44:38
1	Y 371.029	1343747.4	1343747.4	104.63	%			11:44:38
1	Ag 328.068†	-1448.3	-1636.5	-1.0723	µg/L	-1.0723	ppb	11:44:44
1	As 188.979†	27.0	28.0	25.979	µg/L	25.979	ppb	11:45:05
1	B 249.677†	1895.4	1703.7	26.089	µg/L	26.089	ppb	11:44:44
1	Ba 233.527†	119347.9	118018.9	3132.5	µg/L	3132.5	ppb	11:44:44
1	Be 313.107†	32474.8	28466.0	17.761	µg/L	17.761	ppb	11:44:44
1	Cd 226.502†	482.4	573.1	3.2976	µg/L	3.2976	ppb	11:44:44
1	Co 228.616†	2346.9	2392.3	115.20	µg/L	115.20	ppb	11:45:05
1	Cr 267.716†	5201.1	5277.1	114.79	µg/L	114.79	ppb	11:44:44
1	Cu 324.752†	14565.0	10366.7	108.60	µg/L	108.60	ppb	11:44:44
1	Mn 257.610†	2582525.8	2552515.4	8559.1	µg/L	8559.1	ppb	11:44:38
1	Mo 202.031†	-0.0	1.2	6.4341	µg/L	6.4341	ppb	11:45:05
1	Ni 231.604†	4098.2	3734.6	211.83	µg/L	211.83	ppb	11:45:05
1	P 214.914†	526.5	339.5	570.88	µg/L	570.88	ppb	11:45:05
1	Pb 220.353†	692.9	647.4	182.73	µg/L	182.73	ppb	11:45:05
1	S 181.975 Axial†	194.3	164.0	800.15	µg/L	800.15	ppb	11:45:05
1	Sb 206.836†	23.4	3.5	5.5108	µg/L	5.5108	ppb	11:45:05
1	Se 196.026†	-61.8	-73.6	11.359	µg/L	11.359	ppb	11:45:05
1	SiO2†	94504.7	90778.7	17302	µg/L	17302	ppb	11:44:44
1	Si 251.611†	105830.9	104211.5	7957.4	µg/L	7957.4	ppb	11:44:44
1	Sn 189.927†	-142.7	-163.1	-47.799	µg/L	-47.799	ppb	11:45:05
1	Ti 334.940†	827373.6	816701.6	1944.7	µg/L	1944.7	ppb	11:44:38
1	Tl 190.801†	-30.7	-8.4	29.272	µg/L	29.272	ppb	11:45:05
1	U 409.014†	-546.0	-1165.6	-139.85	µg/L	-139.85	ppb	11:44:38
1	V 292.402†	24183.6	24029.3	293.87	µg/L	293.87	ppb	11:44:44
1	Zn 213.857†	13413.8	12654.3	327.35	µg/L	327.35	ppb	11:44:44
2	Sc RADIAL	114970.0	114970.0	104	%			11:44:10
2	Al 396.153Radial†	299302.6	288332.0	155660	µg/L	155660	ppb	11:44:10
2	Ca 317.933Radial†	123718.9	118830.4	50400	µg/L	50400	ppb	11:44:10
2	Fe 238.204 Radial†	23256.0	22398.8	160360	µg/L	160360	ppb	11:44:15
2	K 766.490 Radial†	30986.7	29091.5	16338	µg/L	16338	ppb	11:44:10
2	Mg 279.077 IEC†	4840.2	4649.3	31449	µg/L	31449	ppb	11:44:15
2	Na 589.592 Radial†	16994.4	16945.0	4724.2	µg/L	4724.2	ppb	11:44:15
2	Sr 421.552†	87976.1	84845.7	479.98	µg/L	479.98	ppb	11:44:10
2	Sc 361.383	2074003.9	2074003.9	101.02	%			11:45:12
2	Y 371.029	1345124.0	1345124.0	104.74	%			11:45:12
2	Ag 328.068†	-1453.4	-1643.9	-1.1306	µg/L	-1.1306	ppb	11:45:18
2	As 188.979†	28.7	29.8	29.205	µg/L	29.205	ppb	11:45:38
2	B 249.677†	1884.3	1695.8	25.661	µg/L	25.661	ppb	11:45:18
2	Ba 233.527†	118784.9	117655.8	3122.9	µg/L	3122.9	ppb	11:45:18
2	Be 313.107†	32360.0	28405.2	17.716	µg/L	17.716	ppb	11:45:18
2	Cd 226.502†	474.2	565.8	3.0834	µg/L	3.0834	ppb	11:45:18
2	Co 228.616†	2327.4	2376.9	114.40	µg/L	114.40	ppb	11:45:38
2	Cr 267.716†	5172.2	5256.9	114.35	µg/L	114.35	ppb	11:45:18
2	Cu 324.752†	14492.3	10318.4	108.30	µg/L	108.30	ppb	11:45:18
2	Mn 257.610†	2598539.9	2572572.5	8626.2	µg/L	8626.2	ppb	11:45:12
2	Mo 202.031†	8.0	9.1	7.4006	µg/L	7.4006	ppb	11:45:38
2	Ni 231.604†	4058.6	3702.1	209.98	µg/L	209.98	ppb	11:45:38
2	P 214.914†	518.5	332.4	555.86	µg/L	555.86	ppb	11:45:38
2	Pb 220.353†	674.1	629.9	178.13	µg/L	178.13	ppb	11:45:38

2	S 181.975 Axial†	195.0	165.1	805.31 µg/L	805.31 ppb	11:45:38
2	Sb 206.836†	33.4	13.5	15.684 µg/L	15.684 ppb	11:45:38
2	Se 196.026†	-51.8	-63.8	24.173 µg/L	24.173 ppb	11:45:38
2	SiO2†	94329.5	90759.1	17299 µg/L	17299 ppb	11:45:18
2	Si 251.611†	105683.0	104237.4	7958.9 µg/L	7958.9 ppb	11:45:18
2	Sn 189.927†	-143.0	-163.5	-48.047 µg/L	-48.047 ppb	11:45:38
2	Ti 334.940†	831904.9	822534.3	1958.7 µg/L	1958.7 ppb	11:45:12
2	Tl 190.801†	-39.3	-17.0	16.444 µg/L	16.444 ppb	11:45:38
2	U 409.014†	-490.1	-1111.2	-134.71 µg/L	-134.71 ppb	11:45:12
2	V 292.402†	24073.3	23959.5	293.08 µg/L	293.08 ppb	11:45:18
2	Zn 213.857†	13349.2	12612.2	326.19 µg/L	326.19 ppb	11:45:18
3	Sc RADIAL	116111.0	116111.0	105 %		11:44:21
3	Al 396.153Radial†	296069.5	282411.5	152460 µg/L	152460 ppb	11:44:21
3	Ca 317.933Radial†	122516.5	116511.0	49416 µg/L	49416 ppb	11:44:21
3	Fe 238.204 Radial†	22643.7	21594.3	154600 µg/L	154600 ppb	11:44:26
3	K 766.490 Radial†	30719.9	28543.4	16030 µg/L	16030 ppb	11:44:21
3	Mg 279.077 IEC†	4722.2	4490.9	30377 µg/L	30377 ppb	11:44:26
3	Na 589.592 Radial†	16647.5	16453.0	4587.0 µg/L	4587.0 ppb	11:44:26
3	Sr 421.552†	87185.3	83257.7	471.00 µg/L	471.00 ppb	11:44:21
3	Sc 361.383	2060515.9	2060515.9	100.36 %		11:45:46
3	Y 371.029	1335540.3	1335540.3	103.99 %		11:45:46
3	Ag 328.068†	-1460.0	-1660.0	-1.7231 µg/L	-1.7231 ppb	11:45:51
3	As 188.979†	30.2	31.4	33.166 µg/L	33.166 ppb	11:46:12
3	B 249.677†	1886.6	1710.3	28.120 µg/L	28.120 ppb	11:45:51
3	Ba 233.527†	118842.1	118482.6	3144.8 µg/L	3144.8 ppb	11:45:51
3	Be 313.107†	32368.4	28623.2	17.860 µg/L	17.860 ppb	11:45:51
3	Cd 226.502†	470.7	565.4	3.5120 µg/L	3.5120 ppb	11:45:51
3	Co 228.616†	2333.7	2398.3	115.47 µg/L	115.47 ppb	11:46:12
3	Cr 267.716†	5138.1	5256.5	114.34 µg/L	114.34 ppb	11:45:51
3	Cu 324.752†	14473.9	10394.0	107.61 µg/L	107.61 ppb	11:45:51
3	Mn 257.610†	2575121.8	2566077.1	8603.7 µg/L	8603.7 ppb	11:45:46
3	Mo 202.031†	-9.8	-8.6	5.0480 µg/L	5.0480 ppb	11:46:12
3	Ni 231.604†	4066.2	3736.0	211.91 µg/L	211.91 ppb	11:46:12
3	P 214.914†	529.1	346.3	590.54 µg/L	590.54 ppb	11:46:12
3	Pb 220.353†	694.6	654.7	184.49 µg/L	184.49 ppb	11:46:12
3	S 181.975 Axial†	186.3	157.6	768.68 µg/L	768.68 ppb	11:46:12
3	Sb 206.836†	29.7	10.0	12.229 µg/L	12.229 ppb	11:46:12
3	Se 196.026†	-55.7	-68.0	15.071 µg/L	15.071 ppb	11:46:12
3	SiO2†	94536.5	91576.6	17454 µg/L	17454 ppb	11:45:51
3	Si 251.611†	105786.6	105025.4	8020.0 µg/L	8020.0 ppb	11:45:51
3	Sn 189.927†	-141.1	-162.6	-48.658 µg/L	-48.658 ppb	11:46:12
3	Ti 334.940†	824621.0	820667.3	1954.3 µg/L	1954.3 ppb	11:45:46
3	Tl 190.801†	-44.8	-22.7	7.6188 µg/L	7.6188 ppb	11:46:12
3	U 409.014†	-620.6	-1244.4	-146.36 µg/L	-146.36 ppb	11:45:46
3	V 292.402†	24102.9	24145.0	294.75 µg/L	294.75 ppb	11:45:51
3	Zn 213.857†	13349.9	12699.4	329.21 µg/L	329.21 ppb	11:45:51

Mean Data: 241419006|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2070646.8	100.86	%	0.435				0.43%
Sc RADIAL	115233.0	104	%	0.7				0.68%
Y 371.029	1341470.5	104.45	%	0.403				0.39%
Ag 328.068†	-1646.8	-1.3087	µg/L	0.36011	-1.3087	ppb	0.36011	27.52%
Al 396.153Radial†	286167.6	154490	µg/L	1762.9	154490	ppb	1762.9	1.14%
As 188.979†	29.7	29.450	µg/L	3.5998	29.450	ppb	3.5998	12.22%
B 249.677†	1703.3	26.624	µg/L	1.3139	26.624	ppb	1.3139	4.94%
Ba 233.527†	118052.5	3133.4	µg/L	11.00	3133.4	ppb	11.00	0.35%
Be 313.107†	28498.1	17.779	µg/L	0.0733	17.779	ppb	0.0733	0.41%
Ca 317.933Radial†	118088.4	50085	µg/L	579.8	50085	ppb	579.8	1.16%
Cd 226.502†	568.1	3.2977	µg/L	0.21430	3.2977	ppb	0.21430	6.50%
Co 228.616†	2389.2	115.02	µg/L	0.556	115.02	ppb	0.556	0.48%
Cr 267.716†	5263.5	114.49	µg/L	0.255	114.49	ppb	0.255	0.22%
Cu 324.752†	10359.7	108.17	µg/L	0.510	108.17	ppb	0.510	0.47%
Fe 238.204 Radial†	22120.0	158370	µg/L	3261.7	158370	ppb	3261.7	2.06%
K 766.490 Radial†	28921.5	16242	µg/L	184.2	16242	ppb	184.2	1.13%
Mg 279.077 IEC†	4602.4	31132	µg/L	656.2	31132	ppb	656.2	2.11%
Mn 257.610†	2563721.7	8596.3	µg/L	34.17	8596.3	ppb	34.17	0.40%
Mo 202.031†	0.6	6.2942	µg/L	1.18255	6.2942	ppb	1.18255	18.79%
Na 589.592 Radial†	16770.5	4675.5	µg/L	76.79	4675.5	ppb	76.79	1.64%

Ni 231.604†	3724.2	211.24	µg/L	1.089	211.24	ppb	1.089	0.52%
P 214.914†	339.4	572.43	µg/L	17.389	572.43	ppb	17.389	3.04%
Pb 220.353†	644.0	181.78	µg/L	3.283	181.78	ppb	3.283	1.81%
S 181.975 Axial†	162.2	791.38	µg/L	19.825	791.38	ppb	19.825	2.51%
Sb 206.836†	9.0	11.141	µg/L	5.1732	11.141	ppb	5.1732	46.43%
Se 196.026†	-68.5	16.867	µg/L	6.5933	16.867	ppb	6.5933	39.09%
SiO2†	91038.1	17352	µg/L	88.9	17352	ppb	88.9	0.51%
Si 251.611†	104491.4	7978.8	µg/L	35.67	7978.8	ppb	35.67	0.45%
Sn 189.927†	-163.1	-48.168	µg/L	0.4419	-48.168	ppb	0.4419	0.92%
Sr 421.552†	84312.6	476.97	µg/L	5.169	476.97	ppb	5.169	1.08%
Ti 334.940†	819967.7	1952.6	µg/L	7.11	1952.6	ppb	7.11	0.36%
Tl 190.801†	-16.1	17.778	µg/L	10.8879	17.778	ppb	10.8879	61.24%
U 409.014†	-1173.7	-140.31	µg/L	5.838	-140.31	ppb	5.838	4.16%
V 292.402†	24044.6	293.90	µg/L	0.832	293.90	ppb	0.832	0.28%
Zn 213.857†	12655.3	327.58	µg/L	1.523	327.58	ppb	1.523	0.46%

Sequence No.: 17
Sample ID: 241419007|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 313
Date Collected: 12/11/2009 11:46:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419007|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115120.2	115120.2	104	%			11:46:55
1	Al 396.153Radial†	313051.1	301189.5	162600	µg/L	162600	ppb	11:46:55
1	Ca 317.933Radial†	104954.5	100612.7	42673	µg/L	42673	ppb	11:46:55
1	Fe 238.204 Radial†	16428.0	15797.1	113100	µg/L	113100	ppb	11:47:00
1	K 766.490 Radial†	30045.5	28146.6	15807	µg/L	15807	ppb	11:46:55
1	Mg 279.077 IEC†	3915.1	3752.8	25408	µg/L	25408	ppb	11:47:00
1	Na 589.592 Radial†	12589.8	12683.9	3536.2	µg/L	3536.2	ppb	11:47:00
1	Sr 421.552†	82838.8	79790.0	451.38	µg/L	451.38	ppb	11:46:55
1	Sc 361.383	2078462.4	2078462.4	101.24	%			11:47:35
1	Y 371.029	1347997.9	1347997.9	104.96	%			11:47:35
1	Ag 328.068†	-1036.1	-1228.7	-1.8531	µg/L	-1.8531	ppb	11:47:40
1	As 188.979†	25.1	26.1	29.570	µg/L	29.570	ppb	11:48:01
1	B 249.677†	1701.0	1510.7	32.219	µg/L	32.219	ppb	11:47:40
1	Ba 233.527†	94038.2	92959.1	2467.2	µg/L	2467.2	ppb	11:47:40
1	Be 313.107†	43897.2	39732.8	25.203	µg/L	25.203	ppb	11:47:40
1	Cd 226.502†	291.2	384.0	1.7094	µg/L	1.7094	ppb	11:48:01
1	Co 228.616†	1026.8	1087.2	50.843	µg/L	50.843	ppb	11:48:01
1	Cr 267.716†	3833.9	3924.0	85.194	µg/L	85.194	ppb	11:47:40
1	Cu 324.752†	10115.2	5964.1	66.983	µg/L	66.983	ppb	11:47:40
1	Mn 257.610†	419073.5	414201.8	1399.8	µg/L	1399.8	ppb	11:47:35
1	Mo 202.031†	-16.5	-15.1	2.6330	µg/L	2.6330	ppb	11:48:01
1	Ni 231.604†	2364.1	2019.7	114.56	µg/L	114.56	ppb	11:48:01
1	P 214.914†	570.4	382.5	723.58	µg/L	723.58	ppb	11:48:01
1	Pb 220.353†	355.7	314.0	95.818	µg/L	95.818	ppb	11:48:01
1	S 181.975 Axial†	151.5	121.7	594.07	µg/L	594.07	ppb	11:48:01
1	Sb 206.836†	30.2	10.3	11.950	µg/L	11.950	ppb	11:48:01
1	Se 196.026†	-37.1	-49.2	11.326	µg/L	11.326	ppb	11:48:01
1	SiO2†	99339.5	95507.6	18204	µg/L	18204	ppb	11:47:40
1	Si 251.611†	111337.5	109598.5	8384.6	µg/L	8384.6	ppb	11:47:40
1	Sn 189.927†	-113.5	-134.1	-41.349	µg/L	-41.349	ppb	11:48:01
1	Ti 334.940†	682366.6	673055.5	1602.6	µg/L	1602.6	ppb	11:47:35
1	Tl 190.801†	-22.4	-0.2	12.957	µg/L	12.957	ppb	11:48:01
1	U 409.014†	-462.2	-1082.6	-123.34	µg/L	-123.34	ppb	11:47:35
1	V 292.402†	11997.1	11979.7	149.13	µg/L	149.13	ppb	11:47:40
1	Zn 213.857†	11983.3	11234.6	294.21	µg/L	294.21	ppb	11:47:40
2	Sc RADIAL	114546.0	114546.0	103	%			11:47:06
2	Al 396.153Radial†	313083.1	302730.9	163430	µg/L	163430	ppb	11:47:06
2	Ca 317.933Radial†	104674.7	100848.4	42773	µg/L	42773	ppb	11:47:06
2	Fe 238.204 Radial†	16557.7	16001.9	114560	µg/L	114560	ppb	11:47:11
2	K 766.490 Radial†	30049.4	28295.3	15891	µg/L	15891	ppb	11:47:06
2	Mg 279.077 IEC†	3958.4	3813.6	25821	µg/L	25821	ppb	11:47:11
2	Na 589.592 Radial†	12727.2	12877.6	3590.2	µg/L	3590.2	ppb	11:47:11
2	Sr 421.552†	82797.4	80149.7	453.42	µg/L	453.42	ppb	11:47:06
2	Sc 361.383	2045622.6	2045622.6	99.637	%			11:48:08
2	Y 371.029	1327321.2	1327321.2	103.35	%			11:48:08
2	Ag 328.068†	-1001.9	-1210.8	-1.5456	µg/L	-1.5456	ppb	11:48:14
2	As 188.979†	21.0	22.5	22.586	µg/L	22.586	ppb	11:48:34
2	B 249.677†	1658.3	1494.9	31.047	µg/L	31.047	ppb	11:48:14
2	Ba 233.527†	95134.3	95550.5	2535.9	µg/L	2535.9	ppb	11:48:14
2	Be 313.107†	44220.4	40753.3	25.865	µg/L	25.865	ppb	11:48:14
2	Cd 226.502†	303.1	400.5	2.0528	µg/L	2.0528	ppb	11:48:34
2	Co 228.616†	1033.3	1110.0	51.974	µg/L	51.974	ppb	11:48:34
2	Cr 267.716†	3869.5	4020.5	87.287	µg/L	87.287	ppb	11:48:14
2	Cu 324.752†	10014.7	6023.5	67.724	µg/L	67.724	ppb	11:48:14
2	Mn 257.610†	413014.0	414765.7	1401.9	µg/L	1401.9	ppb	11:48:08
2	Mo 202.031†	-20.8	-19.7	2.1316	µg/L	2.1316	ppb	11:48:34
2	Ni 231.604†	2397.3	2090.5	118.57	µg/L	118.57	ppb	11:48:34
2	P 214.914†	583.0	404.2	767.66	µg/L	767.66	ppb	11:48:34
2	Pb 220.353†	365.8	329.7	100.02	µg/L	100.02	ppb	11:48:34

2	S 181.975 Axial†	148.3	120.9	589.72	µg/L	589.72 ppb	11:48:34
2	Sb 206.836†	23.4	3.9	5.5032	µg/L	5.5032 ppb	11:48:34
2	Se 196.026†	-47.5	-60.2	-1.9229	µg/L	-1.9229 ppb	11:48:34
2	SiO2†	100286.4	98033.2	18685	µg/L	18685 ppb	11:48:14
2	Si 251.611†	112458.7	112489.2	8607.2	µg/L	8607.2 ppb	11:48:14
2	Sn 189.927†	-110.4	-132.8	-40.402	µg/L	-40.402 ppb	11:48:34
2	Ti 334.940†	672344.6	673817.6	1604.4	µg/L	1604.4 ppb	11:48:08
2	Tl 190.801†	-18.1	3.8	19.090	µg/L	19.090 ppb	11:48:34
2	U 409.014†	-398.6	-1026.0	-118.22	µg/L	-118.22 ppb	11:48:08
2	V 292.402†	12068.9	12242.0	152.32	µg/L	152.32 ppb	11:48:14
2	Zn 213.857†	12081.4	11523.1	301.92	µg/L	301.92 ppb	11:48:14
3	Sc RADIAL	114681.2	114681.2	103	%		11:47:17
3	Al 396.153Radial†	315825.6	305024.0	164670	µg/L	164670 ppb	11:47:17
3	Ca 317.933Radial†	105509.6	101535.8	43064	µg/L	43064 ppb	11:47:17
3	Fe 238.204 Radial†	16724.3	16144.0	115580	µg/L	115580 ppb	11:47:22
3	K 766.490 Radial†	30222.2	28428.1	15965	µg/L	15965 ppb	11:47:17
3	Mg 279.077 IEC†	3976.2	3826.3	25906	µg/L	25906 ppb	11:47:22
3	Na 589.592 Radial†	12809.6	12942.7	3608.3	µg/L	3608.3 ppb	11:47:22
3	Sr 421.552†	83510.3	80744.2	456.78	µg/L	456.78 ppb	11:47:17
3	Sc 361.383	2088645.7	2088645.7	101.73	%		11:48:42
3	Y 371.029	1352128.2	1352128.2	105.28	%		11:48:42
3	Ag 328.068†	-1059.9	-1247.1	-1.8234	µg/L	-1.8234 ppb	11:48:47
3	As 188.979†	27.3	28.2	32.929	µg/L	32.929 ppb	11:49:08
3	B 249.677†	1742.7	1543.5	32.911	µg/L	32.911 ppb	11:48:47
3	Ba 233.527†	95330.6	93776.6	2488.9	µg/L	2488.9 ppb	11:48:47
3	Be 313.107†	44416.2	40031.5	25.397	µg/L	25.397 ppb	11:48:47
3	Cd 226.502†	306.8	397.9	1.8938	µg/L	1.8938 ppb	11:49:08
3	Co 228.616†	1035.4	1090.7	51.018	µg/L	51.018 ppb	11:49:08
3	Cr 267.716†	3903.5	3974.0	86.277	µg/L	86.277 ppb	11:48:47
3	Cu 324.752†	10098.0	5898.4	67.046	µg/L	67.046 ppb	11:48:47
3	Mn 257.610†	421315.9	414387.7	1400.8	µg/L	1400.8 ppb	11:48:42
3	Mo 202.031†	-18.8	-17.3	2.4683	µg/L	2.4683 ppb	11:49:08
3	Ni 231.604†	2400.4	2044.0	115.93	µg/L	115.93 ppb	11:49:08
3	P 214.914†	584.5	393.6	744.99	µg/L	744.99 ppb	11:49:08
3	Pb 220.353†	354.4	311.0	95.182	µg/L	95.182 ppb	11:49:08
3	S 181.975 Axial†	146.3	115.8	564.08	µg/L	564.08 ppb	11:49:08
3	Sb 206.836†	32.6	12.4	14.079	µg/L	14.079 ppb	11:49:08
3	Se 196.026†	-43.8	-55.5	4.7886	µg/L	4.7886 ppb	11:49:08
3	SiO2†	100478.7	96149.0	18326	µg/L	18326 ppb	11:48:47
3	Si 251.611†	112623.8	110326.6	8440.4	µg/L	8440.4 ppb	11:48:47
3	Sn 189.927†	-100.7	-121.0	-34.114	µg/L	-34.114 ppb	11:49:08
3	Ti 334.940†	685626.3	672973.4	1602.4	µg/L	1602.4 ppb	11:48:42
3	Tl 190.801†	-18.0	4.3	19.779	µg/L	19.779 ppb	11:49:08
3	U 409.014†	-513.9	-1131.2	-128.43	µg/L	-128.43 ppb	11:48:42
3	V 292.402†	12171.6	12093.4	150.65	µg/L	150.65 ppb	11:48:47
3	Zn 213.857†	12147.9	11338.7	296.77	µg/L	296.77 ppb	11:48:47

Mean Data: 241419007|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2070910.3	100.87	%	1.095				1.09%
Sc RADIAL	114782.5	104	%	0.3				0.26%
Y 371.029	1342482.4	104.53	%	1.035				0.99%
Ag 328.068†	-1228.8	-1.7407	µg/L	0.16962	-1.7407	ppb	0.16962	9.74%
Al 396.153Radial†	302981.5	163570	µg/L	1041.7	163570	ppb	1041.7	0.64%
As 188.979†	25.6	28.362	µg/L	5.2765	28.362	ppb	5.2765	18.60%
B 249.677†	1516.4	32.059	µg/L	0.9419	32.059	ppb	0.9419	2.94%
Ba 233.527†	94095.4	2497.3	µg/L	35.16	2497.3	ppb	35.16	1.41%
Be 313.107†	40172.5	25.488	µg/L	0.3403	25.488	ppb	0.3403	1.33%
Ca 317.933Radial†	100998.9	42837	µg/L	203.4	42837	ppb	203.4	0.47%
Cd 226.502†	394.2	1.8853	µg/L	0.17187	1.8853	ppb	0.17187	9.12%
Co 228.616†	1096.0	51.278	µg/L	0.6090	51.278	ppb	0.6090	1.19%
Cr 267.716†	3972.8	86.253	µg/L	1.0471	86.253	ppb	1.0471	1.21%
Cu 324.752†	5962.0	67.251	µg/L	0.4106	67.251	ppb	0.4106	0.61%
Fe 238.204 Radial†	15981.0	114410	µg/L	1248.5	114410	ppb	1248.5	1.09%
K 766.490 Radial†	28290.0	15888	µg/L	79.1	15888	ppb	79.1	0.50%
Mg 279.077 IEC†	3797.5	25711	µg/L	266.0	25711	ppb	266.0	1.03%
Mn 257.610†	414451.8	1400.8	µg/L	1.04	1400.8	ppb	1.04	0.07%
Mo 202.031†	-17.4	2.4109	µg/L	0.25556	2.4109	ppb	0.25556	10.60%
Na 589.592 Radial†	12834.7	3578.2	µg/L	37.53	3578.2	ppb	37.53	1.05%

Ni 231.604†	2051.4	116.35	µg/L	2.040	116.35	ppb	2.040	1.75%
P 214.914†	393.5	745.41	µg/L	22.044	745.41	ppb	22.044	2.96%
Pb 220.353†	318.2	97.007	µg/L	2.6292	97.007	ppb	2.6292	2.71%
S 181.975 Axial†	119.5	582.63	µg/L	16.205	582.63	ppb	16.205	2.78%
Sb 206.836†	8.9	10.511	µg/L	4.4654	10.511	ppb	4.4654	42.48%
Se 196.026†	-55.0	4.7306	µg/L	6.62461	4.7306	ppb	6.62461	140.04%
SiO2†	96563.3	18405	µg/L	250.2	18405	ppb	250.2	1.36%
Si 251.611†	110804.8	8477.4	µg/L	115.85	8477.4	ppb	115.85	1.37%
Sn 189.927†	-129.3	-38.622	µg/L	3.9324	-38.622	ppb	3.9324	10.18%
Sr 421.552†	80228.0	453.86	µg/L	2.726	453.86	ppb	2.726	0.60%
Ti 334.940†	673282.2	1603.2	µg/L	1.11	1603.2	ppb	1.11	0.07%
Tl 190.801†	2.6	17.275	µg/L	3.7555	17.275	ppb	3.7555	21.74%
U 409.014†	-1079.9	-123.33	µg/L	5.104	-123.33	ppb	5.104	4.14%
V 292.402†	12105.0	150.70	µg/L	1.596	150.70	ppb	1.596	1.06%
Zn 213.857†	11365.5	297.63	µg/L	3.927	297.63	ppb	3.927	1.32%

Sequence No.: 18
Sample ID: 241419008|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 314
Date Collected: 12/11/2009 11:49:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419008|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115446.5	115446.5	104	%			11:49:49
1	Al 396.153Radial†	294625.2	282651.6	152590	µg/L	152590	ppb	11:49:49
1	Ca 317.933Radial†	79627.5	76016.9	32241	µg/L	32241	ppb	11:49:55
1	Fe 238.204 Radial†	18356.2	17603.2	126030	µg/L	126030	ppb	11:49:55
1	K 766.490 Radial†	30841.6	28829.0	16190	µg/L	16190	ppb	11:49:49
1	Mg 279.077 IEC†	4106.9	3926.2	26571	µg/L	26571	ppb	11:49:55
1	Na 589.592 Radial†	25681.6	25215.9	7030.0	µg/L	7030.0	ppb	11:49:49
1	Sr 421.552†	64658.8	62114.5	351.39	µg/L	351.39	ppb	11:49:49
1	Sc 361.383	2072323.6	2072323.6	100.94	%			11:50:29
1	Y 371.029	1326383.9	1326383.9	103.28	%			11:50:29
1	Ag 328.068†	-931.3	-1127.8	0.4463	µg/L	0.4463	ppb	11:50:35
1	As 188.979†	22.8	23.9	26.243	µg/L	26.243	ppb	11:50:55
1	B 249.677†	1645.9	1461.1	25.928	µg/L	25.928	ppb	11:50:35
1	Ba 233.527†	55971.1	55520.7	1473.8	µg/L	1473.8	ppb	11:50:35
1	Be 313.107†	28944.6	25047.5	15.528	µg/L	15.528	ppb	11:50:35
1	Cd 226.502†	360.0	453.1	2.5987	µg/L	2.5987	ppb	11:50:35
1	Co 228.616†	1024.9	1088.4	50.111	µg/L	50.111	ppb	11:50:55
1	Cr 267.716†	3905.3	4005.9	87.073	µg/L	87.073	ppb	11:50:35
1	Cu 324.752†	12098.7	7958.7	84.038	µg/L	84.038	ppb	11:50:35
1	Mn 257.610†	465027.7	460955.6	1557.9	µg/L	1557.9	ppb	11:50:29
1	Mo 202.031†	-18.8	-17.4	2.8577	µg/L	2.8577	ppb	11:50:55
1	Ni 231.604†	2154.7	1819.1	103.18	µg/L	103.18	ppb	11:50:55
1	P 214.914†	413.6	228.9	380.22	µg/L	380.22	ppb	11:50:55
1	Pb 220.353†	563.7	521.1	149.50	µg/L	149.50	ppb	11:50:55
1	S 181.975 Axial†	125.8	96.6	465.53	µg/L	465.53	ppb	11:50:55
1	Sb 206.836†	23.2	3.3	7.3379	µg/L	7.3379	ppb	11:50:55
1	Se 196.026†	-36.8	-48.9	18.782	µg/L	18.782	ppb	11:50:55
1	SiO2†	109879.2	106240.1	20249	µg/L	20249	ppb	11:50:35
1	Si 251.611†	123405.6	121880.3	9317.2	µg/L	9317.2	ppb	11:50:35
1	Sn 189.927†	-107.9	-128.9	-39.210	µg/L	-39.210	ppb	11:50:55
1	Ti 334.940†	840239.6	831459.4	1981.0	µg/L	1981.0	ppb	11:50:29
1	Tl 190.801†	-25.1	-3.0	13.419	µg/L	13.419	ppb	11:50:55
1	U 409.014†	-28.7	-654.4	-85.171	µg/L	-85.171	ppb	11:50:35
1	V 292.402†	15940.5	15921.6	196.34	µg/L	196.34	ppb	11:50:35
1	Zn 213.857†	11598.5	10888.5	283.36	µg/L	283.36	ppb	11:50:35
2	Sc RADIAL	114822.7	114822.7	104	%			11:50:01
2	Al 396.153Radial†	294098.3	283679.4	153150	µg/L	153150	ppb	11:50:01
2	Ca 317.933Radial†	78848.5	75680.3	32098	µg/L	32098	ppb	11:50:06
2	Fe 238.204 Radial†	18191.9	17540.4	125580	µg/L	125580	ppb	11:50:06
2	K 766.490 Radial†	30644.0	28799.1	16173	µg/L	16173	ppb	11:50:01
2	Mg 279.077 IEC†	4097.7	3938.8	26658	µg/L	26658	ppb	11:50:06
2	Na 589.592 Radial†	25602.1	25273.0	7045.9	µg/L	7045.9	ppb	11:50:01
2	Sr 421.552†	64475.1	62274.4	352.29	µg/L	352.29	ppb	11:50:01
2	Sc 361.383	2093761.7	2093761.7	101.98	%			11:51:02
2	Y 371.029	1338220.4	1338220.4	104.20	%			11:51:02
2	Ag 328.068†	-959.3	-1145.8	0.2275	µg/L	0.2275	ppb	11:51:08
2	As 188.979†	23.6	24.4	27.292	µg/L	27.292	ppb	11:51:28
2	B 249.677†	1589.6	1389.2	22.842	µg/L	22.842	ppb	11:51:08
2	Ba 233.527†	56206.3	55183.5	1464.8	µg/L	1464.8	ppb	11:51:08
2	Be 313.107†	29080.6	24887.2	15.423	µg/L	15.423	ppb	11:51:08
2	Cd 226.502†	368.5	457.7	2.7562	µg/L	2.7562	ppb	11:51:08
2	Co 228.616†	1027.9	1080.9	49.729	µg/L	49.729	ppb	11:51:28
2	Cr 267.716†	3968.2	4028.0	87.547	µg/L	87.547	ppb	11:51:08
2	Cu 324.752†	12070.6	7808.4	82.866	µg/L	82.866	ppb	11:51:08
2	Mn 257.610†	470632.9	461734.7	1560.4	µg/L	1560.4	ppb	11:51:02
2	Mo 202.031†	-30.7	-28.9	1.4649	µg/L	1.4649	ppb	11:51:28
2	Ni 231.604†	2160.3	1802.8	102.26	µg/L	102.26	ppb	11:51:28
2	P 214.914†	419.6	230.6	384.75	µg/L	384.75	ppb	11:51:28
2	Pb 220.353†	572.2	523.7	150.23	µg/L	150.23	ppb	11:51:28

2	S 181.975 Axial†	121.3	90.9	436.69	µg/L	436.69 ppb	11:51:28
2	Sb 206.836†	21.4	1.4	5.3668	µg/L	5.3668 ppb	11:51:28
2	Se 196.026†	-38.3	-50.1	16.923	µg/L	16.923 ppb	11:51:28
2	SiO2†	110070.9	105313.5	20073	µg/L	20073 ppb	11:51:08
2	Si 251.611†	123610.8	120829.7	9236.0	µg/L	9236.0 ppb	11:51:08
2	Sn 189.927†	-99.8	-119.9	-34.600	µg/L	-34.600 ppb	11:51:28
2	Ti 334.940†	850036.0	832542.0	1983.6	µg/L	1983.6 ppb	11:51:02
2	Tl 190.801†	-26.7	-4.2	11.526	µg/L	11.526 ppb	11:51:28
2	U 409.014†	-67.1	-691.8	-88.655	µg/L	-88.655 ppb	11:51:08
2	V 292.402†	15961.5	15780.5	194.64	µg/L	194.64 ppb	11:51:08
2	Zn 213.857†	11676.2	10847.0	282.27	µg/L	282.27 ppb	11:51:08
3	Sc RADIAL	116096.2	116096.2	105	%		11:50:12
3	Al 396.153Radial†	299745.6	285956.3	154380	µg/L	154380 ppb	11:50:12
3	Ca 317.933Radial†	79326.8	75302.2	31938	µg/L	31938 ppb	11:50:17
3	Fe 238.204 Radial†	18278.4	17430.4	124790	µg/L	124790 ppb	11:50:17
3	K 766.490 Radial†	31271.7	29073.9	16328	µg/L	16328 ppb	11:50:12
3	Mg 279.077 IEC†	4129.9	3926.1	26572	µg/L	26572 ppb	11:50:17
3	Na 589.592 Radial†	26113.2	25489.9	7106.4	µg/L	7106.4 ppb	11:50:12
3	Sr 421.552†	65874.2	62927.3	355.99	µg/L	355.99 ppb	11:50:12
3	Sc 361.383	2066906.1	2066906.1	100.67	%		11:51:35
3	Y 371.029	1321477.6	1321477.6	102.90	%		11:51:35
3	Ag 328.068†	-944.3	-1143.2	0.2021	µg/L	0.2021 ppb	11:51:41
3	As 188.979†	19.8	21.0	21.118	µg/L	21.118 ppb	11:52:01
3	B 249.677†	1639.9	1459.4	26.240	µg/L	26.240 ppb	11:51:41
3	Ba 233.527†	55937.6	55632.8	1476.7	µg/L	1476.7 ppb	11:51:41
3	Be 313.107†	28998.4	25176.0	15.613	µg/L	15.613 ppb	11:51:41
3	Cd 226.502†	335.7	429.8	2.0647	µg/L	2.0647 ppb	11:51:41
3	Co 228.616†	1031.3	1097.4	50.561	µg/L	50.561 ppb	11:52:01
3	Cr 267.716†	3916.9	4027.6	87.543	µg/L	87.543 ppb	11:51:41
3	Cu 324.752†	12048.8	7940.5	83.642	µg/L	83.642 ppb	11:51:41
3	Mn 257.610†	463303.9	460450.9	1556.0	µg/L	1556.0 ppb	11:51:35
3	Mo 202.031†	-24.9	-23.6	2.0706	µg/L	2.0706 ppb	11:52:01
3	Ni 231.604†	2167.9	1837.9	104.25	µg/L	104.25 ppb	11:52:01
3	P 214.914†	412.6	228.9	382.56	µg/L	382.56 ppb	11:52:01
3	Pb 220.353†	570.6	529.4	151.87	µg/L	151.87 ppb	11:52:01
3	S 181.975 Axial†	123.5	94.7	455.82	µg/L	455.82 ppb	11:52:01
3	Sb 206.836†	27.3	7.5	11.565	µg/L	11.565 ppb	11:52:01
3	Se 196.026†	-45.4	-57.6	6.6588	µg/L	6.6588 ppb	11:52:01
3	SiO2†	109665.1	106312.8	20263	µg/L	20263 ppb	11:51:41
3	Si 251.611†	123294.7	122090.6	9333.3	µg/L	9333.3 ppb	11:51:41
3	Sn 189.927†	-101.1	-122.4	-36.070	µg/L	-36.070 ppb	11:52:01
3	Ti 334.940†	837207.6	830629.5	1979.0	µg/L	1979.0 ppb	11:51:35
3	Tl 190.801†	-21.6	0.5	18.863	µg/L	18.863 ppb	11:52:01
3	U 409.014†	-28.7	-654.5	-84.956	µg/L	-84.956 ppb	11:51:41
3	V 292.402†	15904.3	15927.0	196.30	µg/L	196.30 ppb	11:51:41
3	Zn 213.857†	11637.8	10957.6	285.38	µg/L	285.38 ppb	11:51:41

Mean Data: 241419008|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2077663.8	101.20	%	0.692				0.68%
Sc RADIAL	115455.2	104	%	0.6				0.55%
Y 371.029	1328694.0	103.46	%	0.670				0.65%
Ag 328.068†	-1139.0	0.2920	µg/L	0.13430	0.2920	ppb	0.13430	46.00%
Al 396.153Radial†	284095.8	153370	µg/L	913.0	153370	ppb	913.0	0.60%
As 188.979†	23.1	24.884	µg/L	3.3037	24.884	ppb	3.3037	13.28%
B 249.677†	1436.6	25.003	µg/L	1.8781	25.003	ppb	1.8781	7.51%
Ba 233.527†	55445.6	1471.8	µg/L	6.21	1471.8	ppb	6.21	0.42%
Be 313.107†	25036.9	15.522	µg/L	0.0948	15.522	ppb	0.0948	0.61%
Ca 317.933Radial†	75666.4	32092	µg/L	151.6	32092	ppb	151.6	0.47%
Cd 226.502†	446.9	2.4732	µg/L	0.36248	2.4732	ppb	0.36248	14.66%
Co 228.616†	1088.9	50.134	µg/L	0.4165	50.134	ppb	0.4165	0.83%
Cr 267.716†	4020.5	87.388	µg/L	0.2721	87.388	ppb	0.2721	0.31%
Cu 324.752†	7902.6	83.515	µg/L	0.5963	83.515	ppb	0.5963	0.71%
Fe 238.204 Radial†	17524.7	125470	µg/L	626.2	125470	ppb	626.2	0.50%
K 766.490 Radial†	28900.7	16230	µg/L	84.7	16230	ppb	84.7	0.52%
Mg 279.077 IEC†	3930.4	26600	µg/L	49.6	26600	ppb	49.6	0.19%
Mn 257.610†	461047.1	1558.1	µg/L	2.21	1558.1	ppb	2.21	0.14%
Mo 202.031†	-23.3	2.1311	µg/L	0.69833	2.1311	ppb	0.69833	32.77%
Na 589.592 Radial†	25326.2	7060.8	µg/L	40.30	7060.8	ppb	40.30	0.57%

Ni 231.604†	1820.0	103.23 µg/L	0.996	103.23 ppb	0.996	0.96%
P 214.914†	229.5	382.51 µg/L	2.264	382.51 ppb	2.264	0.59%
Pb 220.353†	524.7	150.54 µg/L	1.216	150.54 ppb	1.216	0.81%
S 181.975 Axial†	94.1	452.68 µg/L	14.672	452.68 ppb	14.672	3.24%
Sb 206.836†	4.1	8.0900 µg/L	3.16699	8.0900 ppb	3.16699	39.15%
Se 196.026†	-52.2	14.121 µg/L	6.5291	14.121 ppb	6.5291	46.24%
SiO2†	105955.5	20195 µg/L	106.2	20195 ppb	106.2	0.53%
Si 251.611†	121600.2	9295.5 µg/L	52.16	9295.5 ppb	52.16	0.56%
Sn 189.927†	-123.7	-36.626 µg/L	2.3550	-36.626 ppb	2.3550	6.43%
Sr 421.552†	62438.7	353.22 µg/L	2.436	353.22 ppb	2.436	0.69%
Ti 334.940†	831543.6	1981.2 µg/L	2.28	1981.2 ppb	2.28	0.12%
Tl 190.801†	-2.2	14.603 µg/L	3.8092	14.603 ppb	3.8092	26.09%
U 409.014†	-666.9	-86.261 µg/L	2.0764	-86.261 ppb	2.0764	2.41%
V 292.402†	15876.3	195.76 µg/L	0.971	195.76 ppb	0.971	0.50%
Zn 213.857†	10897.7	283.67 µg/L	1.575	283.67 ppb	1.575	0.56%

Sequence No.: 19
Sample ID: 241419009|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 315
Date Collected: 12/11/2009 11:52:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419009|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115530.4	115530.4	104	%			11:52:44
1	Al 396.153Radial†	289844.3	277860.7	150010	µg/L	150010	ppb	11:52:44
1	Ca 317.933Radial†	89238.1	85179.4	36127	µg/L	36127	ppb	11:52:44
1	Fe 238.204 Radial†	14733.3	14115.6	101060	µg/L	101060	ppb	11:53:04
1	K 766.490 Radial†	20735.1	19113.8	10734	µg/L	10734	ppb	11:52:44
1	Mg 279.077 IEC†	3226.8	3079.2	20836	µg/L	20836	ppb	11:53:04
1	Na 589.592 Radial†	16239.0	16141.0	4500.0	µg/L	4500.0	ppb	11:52:44
1	Sr 421.552†	64211.6	61640.5	348.71	µg/L	348.71	ppb	11:52:44
1	Sc 361.383	2058067.7	2058067.7	100.24	%			11:54:08
1	Y 371.029	1324752.6	1324752.6	103.15	%			11:54:08
1	Ag 328.068†	-677.6	-881.2	0.4883	µg/L	0.4883	ppb	11:54:14
1	As 188.979†	17.7	19.0	21.242	µg/L	21.242	ppb	11:54:34
1	B 249.677†	1308.3	1135.6	19.176	µg/L	19.176	ppb	11:54:14
1	Ba 233.527†	55414.0	55349.0	1469.1	µg/L	1469.1	ppb	11:54:14
1	Be 313.107†	19942.5	16265.8	9.6758	µg/L	9.6758	ppb	11:54:14
1	Cd 226.502†	249.6	345.3	1.6638	µg/L	1.6638	ppb	11:54:34
1	Co 228.616†	685.6	756.9	32.742	µg/L	32.742	ppb	11:54:34
1	Cr 267.716†	9984.5	10097.2	218.69	µg/L	218.69	ppb	11:54:14
1	Cu 324.752†	11043.9	6989.5	71.737	µg/L	71.737	ppb	11:54:14
1	Mn 257.610†	405202.0	404466.1	1365.8	µg/L	1365.8	ppb	11:54:08
1	Mo 202.031†	10.3	11.5	5.3491	µg/L	5.3491	ppb	11:54:34
1	Ni 231.604†	2846.9	2524.5	143.19	µg/L	143.19	ppb	11:54:34
1	P 214.914†	548.4	366.2	698.02	µg/L	698.02	ppb	11:54:34
1	Pb 220.353†	359.0	320.7	96.599	µg/L	96.599	ppb	11:54:34
1	S 181.975 Axial†	123.2	94.9	461.30	µg/L	461.30	ppb	11:54:34
1	Sb 206.836†	27.3	7.6	12.223	µg/L	12.223	ppb	11:54:34
1	Se 196.026†	-25.8	-38.3	17.944	µg/L	17.944	ppb	11:54:34
1	SiO2†	118150.0	115244.9	21966	µg/L	21966	ppb	11:54:14
1	Si 251.611†	132678.1	131977.2	10082	µg/L	10082	ppb	11:54:14
1	Sn 189.927†	-105.3	-127.0	-41.470	µg/L	-41.470	ppb	11:54:34
1	Ti 334.940†	1005871.3	1002455.9	2388.5	µg/L	2388.5	ppb	11:54:08
1	Tl 190.801†	-24.2	-2.2	16.264	µg/L	16.264	ppb	11:54:34
1	U 409.014†	124.7	-501.6	-65.848	µg/L	-65.848	ppb	11:54:08
1	V 292.402†	11526.2	11627.3	144.14	µg/L	144.14	ppb	11:54:14
1	Zn 213.857†	9117.3	8492.9	220.39	µg/L	220.39	ppb	11:54:14
2	Sc RADIAL	115869.3	115869.3	105	%			11:53:10
2	Al 396.153Radial†	291339.3	278477.2	150340	µg/L	150340	ppb	11:53:10
2	Ca 317.933Radial†	89356.9	85042.8	36069	µg/L	36069	ppb	11:53:10
2	Fe 238.204 Radial†	14647.2	13991.9	100170	µg/L	100170	ppb	11:53:30
2	K 766.490 Radial†	20878.8	19193.0	10779	µg/L	10779	ppb	11:53:10
2	Mg 279.077 IEC†	3209.5	3053.6	20663	µg/L	20663	ppb	11:53:30
2	Na 589.592 Radial†	16340.1	16192.1	4514.3	µg/L	4514.3	ppb	11:53:10
2	Sr 421.552†	64581.1	61813.7	349.69	µg/L	349.69	ppb	11:53:10
2	Sc 361.383	2059480.6	2059480.6	100.31	%			11:54:42
2	Y 371.029	1326256.3	1326256.3	103.27	%			11:54:42
2	Ag 328.068†	-703.7	-906.7	0.1914	µg/L	0.1914	ppb	11:54:47
2	As 188.979†	12.5	13.8	11.834	µg/L	11.834	ppb	11:55:08
2	B 249.677†	1345.6	1171.9	21.082	µg/L	21.082	ppb	11:54:47
2	Ba 233.527†	56011.5	55906.7	1483.9	µg/L	1483.9	ppb	11:54:47
2	Be 313.107†	20157.3	16466.3	9.8046	µg/L	9.8046	ppb	11:54:47
2	Cd 226.502†	238.2	333.9	1.4339	µg/L	1.4339	ppb	11:55:08
2	Co 228.616†	688.5	759.4	32.859	µg/L	32.859	ppb	11:55:08
2	Cr 267.716†	10096.9	10202.4	220.97	µg/L	220.97	ppb	11:54:47
2	Cu 324.752†	11128.4	7066.1	72.095	µg/L	72.095	ppb	11:54:47
2	Mn 257.610†	406356.3	405339.4	1368.6	µg/L	1368.6	ppb	11:54:42
2	Mo 202.031†	18.4	19.5	6.2782	µg/L	6.2782	ppb	11:55:08
2	Ni 231.604†	2848.0	2523.6	143.14	µg/L	143.14	ppb	11:55:08
2	P 214.914†	557.3	374.6	716.81	µg/L	716.81	ppb	11:55:08
2	Pb 220.353†	371.9	333.4	99.971	µg/L	99.971	ppb	11:55:08

2	S 181.975 Axial†	121.2	92.9	451.09	µg/L	451.09 ppb	11:55:08
2	Sb 206.836†	36.5	16.7	21.496	µg/L	21.496 ppb	11:55:08
2	Se 196.026†	-45.9	-58.3	-8.3973	µg/L	-8.3973 ppb	11:55:08
2	SiO2†	119352.6	116363.0	22179	µg/L	22179 ppb	11:54:47
2	Si 251.611†	134179.0	133382.6	10191	µg/L	10191 ppb	11:54:47
2	Sn 189.927†	-105.8	-127.6	-41.888	µg/L	-41.888 ppb	11:55:08
2	Ti 334.940†	1008176.0	1004065.1	2392.4	µg/L	2392.4 ppb	11:54:42
2	Tl 190.801†	-23.8	-1.8	16.980	µg/L	16.980 ppb	11:55:08
2	U 409.014†	311.8	-315.1	-47.901	µg/L	-47.901 ppb	11:54:42
2	V 292.402†	11745.3	11837.8	146.56	µg/L	146.56 ppb	11:54:47
2	Zn 213.857†	9181.4	8550.6	222.06	µg/L	222.06 ppb	11:54:47
3	Sc RADIAL	115103.6	115103.6	104	%		11:53:36
3	Al 396.153Radial†	290276.0	279307.1	150790	µg/L	150790 ppb	11:53:36
3	Ca 317.933Radial†	88769.6	85045.9	36071	µg/L	36071 ppb	11:53:36
3	Fe 238.204 Radial†	14676.7	14113.5	101040	µg/L	101040 ppb	11:53:56
3	K 766.490 Radial†	20771.1	19222.2	10795	µg/L	10795 ppb	11:53:36
3	Mg 279.077 IEC†	3213.3	3077.6	20825	µg/L	20825 ppb	11:53:56
3	Na 589.592 Radial†	16263.1	16222.0	4522.6	µg/L	4522.6 ppb	11:53:36
3	Sr 421.552†	64194.3	61852.2	349.90	µg/L	349.90 ppb	11:53:36
3	Sc 361.383	2059675.8	2059675.8	100.32	%		11:55:15
3	Y 371.029	1327548.9	1327548.9	103.37	%		11:55:15
3	Ag 328.068†	-725.0	-927.9	0.0575	µg/L	0.0575 ppb	11:55:21
3	As 188.979†	19.8	21.0	25.057	µg/L	25.057 ppb	11:55:41
3	B 249.677†	1354.7	1180.8	21.209	µg/L	21.209 ppb	11:55:21
3	Ba 233.527†	56196.4	56085.7	1488.7	µg/L	1488.7 ppb	11:55:21
3	Be 313.107†	20226.8	16533.7	9.8519	µg/L	9.8519 ppb	11:55:21
3	Cd 226.502†	258.2	353.7	1.8974	µg/L	1.8974 ppb	11:55:41
3	Co 228.616†	703.7	774.4	33.628	µg/L	33.628 ppb	11:55:41
3	Cr 267.716†	10138.1	10242.5	221.84	µg/L	221.84 ppb	11:55:21
3	Cu 324.752†	11105.1	7041.9	72.109	µg/L	72.109 ppb	11:55:21
3	Mn 257.610†	404981.3	403930.5	1364.0	µg/L	1364.0 ppb	11:55:15
3	Mo 202.031†	8.7	9.8	5.1537	µg/L	5.1537 ppb	11:55:41
3	Ni 231.604†	2854.7	2530.0	143.50	µg/L	143.50 ppb	11:55:41
3	P 214.914†	553.6	370.9	708.24	µg/L	708.24 ppb	11:55:41
3	Pb 220.353†	360.7	322.1	97.035	µg/L	97.035 ppb	11:55:41
3	S 181.975 Axial†	121.1	92.7	450.11	µg/L	450.11 ppb	11:55:41
3	Sb 206.836†	24.0	4.3	8.8351	µg/L	8.8351 ppb	11:55:41
3	Se 196.026†	-27.6	-40.0	15.708	µg/L	15.708 ppb	11:55:41
3	SiO2†	120022.4	117019.3	22304	µg/L	22304 ppb	11:55:21
3	Si 251.611†	134954.1	134142.5	10249	µg/L	10249 ppb	11:55:21
3	Sn 189.927†	-98.7	-120.4	-38.080	µg/L	-38.080 ppb	11:55:41
3	Ti 334.940†	1004188.4	999995.0	2382.7	µg/L	2382.7 ppb	11:55:15
3	Tl 190.801†	-30.7	-8.7	6.2247	µg/L	6.2247 ppb	11:55:41
3	U 409.014†	179.9	-446.6	-60.604	µg/L	-60.604 ppb	11:55:15
3	V 292.402†	11747.3	11838.7	146.62	µg/L	146.62 ppb	11:55:21
3	Zn 213.857†	9217.6	8585.8	222.93	µg/L	222.93 ppb	11:55:21

Mean Data: 241419009|931347|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2059074.7	100.29	%	0.043				0.04%
Sc RADIAL	115501.1	104	%	0.3				0.33%
Y 371.029	1326185.9	103.26	%	0.109				0.11%
Ag 328.068†	-905.3	0.2457	µg/L	0.22047	0.2457	ppb	0.22047	89.72%
Al 396.153Radial†	278548.3	150380	µg/L	391.8	150380	ppb	391.8	0.26%
As 188.979†	17.9	19.378	µg/L	6.8061	19.378	ppb	6.8061	35.12%
B 249.677†	1162.8	20.489	µg/L	1.1390	20.489	ppb	1.1390	5.56%
Ba 233.527†	55780.5	1480.6	µg/L	10.20	1480.6	ppb	10.20	0.69%
Be 313.107†	16421.9	9.7774	µg/L	0.09112	9.7774	ppb	0.09112	0.93%
Ca 317.933Radial†	85089.4	36089	µg/L	33.1	36089	ppb	33.1	0.09%
Cd 226.502†	344.3	1.6650	µg/L	0.23176	1.6650	ppb	0.23176	13.92%
Co 228.616†	763.6	33.077	µg/L	0.4810	33.077	ppb	0.4810	1.45%
Cr 267.716†	10180.7	220.50	µg/L	1.626	220.50	ppb	1.626	0.74%
Cu 324.752†	7032.5	71.980	µg/L	0.2109	71.980	ppb	0.2109	0.29%
Fe 238.204 Radial†	14073.6	100760	µg/L	507.1	100760	ppb	507.1	0.50%
K 766.490 Radial†	19176.3	10769	µg/L	31.5	10769	ppb	31.5	0.29%
Mg 279.077 IEC†	3070.1	20775	µg/L	96.8	20775	ppb	96.8	0.47%
Mn 257.610†	404578.7	1366.1	µg/L	2.32	1366.1	ppb	2.32	0.17%
Mo 202.031†	13.6	5.5937	µg/L	0.60080	5.5937	ppb	0.60080	10.74%
Na 589.592 Radial†	16185.0	4512.3	µg/L	11.42	4512.3	ppb	11.42	0.25%

Ni 231.604†	2526.0	143.28	µg/L	0.195	143.28	ppb	0.195	0.14%
P 214.914†	370.6	707.69	µg/L	9.404	707.69	ppb	9.404	1.33%
Pb 220.353†	325.4	97.868	µg/L	1.8337	97.868	ppb	1.8337	1.87%
S 181.975 Axial†	93.5	454.16	µg/L	6.197	454.16	ppb	6.197	1.36%
Sb 206.836†	9.6	14.185	µg/L	6.5545	14.185	ppb	6.5545	46.21%
Se 196.026†	-45.5	8.4180	µg/L	14.60534	8.4180	ppb	14.60534	173.50%
SiO2†	116209.1	22149	µg/L	171.0	22149	ppb	171.0	0.77%
Si 251.611†	133167.5	10174	µg/L	84.7	10174	ppb	84.7	0.83%
Sn 189.927†	-125.0	-40.479	µg/L	2.0885	-40.479	ppb	2.0885	5.16%
Sr 421.552†	61768.8	349.43	µg/L	0.638	349.43	ppb	0.638	0.18%
Ti 334.940†	1002172.0	2387.8	µg/L	4.89	2387.8	ppb	4.89	0.20%
Tl 190.801†	-4.2	13.156	µg/L	6.0134	13.156	ppb	6.0134	45.71%
U 409.014†	-421.1	-58.118	µg/L	9.2280	-58.118	ppb	9.2280	15.88%
V 292.402†	11768.0	145.77	µg/L	1.416	145.77	ppb	1.416	0.97%
Zn 213.857†	8543.1	221.79	µg/L	1.293	221.79	ppb	1.293	0.58%

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 11:55:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113879.5	113879.5	103	%			11:56:28
1	Al 396.153Radial†	10347.9	9924.1	5337.8	µg/L	5337.8	ppb	11:56:28
1	Ca 317.933Radial†	13120.8	12353.6	5239.5	µg/L	5239.5	ppb	11:56:28
1	Fe 238.204 Radial†	762.7	726.2	5216.5	µg/L	5216.5	ppb	11:56:48
1	K 766.490 Radial†	10267.0	9216.0	5175.7	µg/L	5175.7	ppb	11:56:28
1	Mg 279.077 IEC†	809.6	771.9	5266.1	µg/L	5266.1	ppb	11:56:48
1	Na 589.592 Radial†	38242.6	37777.6	10532	µg/L	10532	ppb	11:56:28
1	Sr 421.552†	94601.3	92104.4	521.04	µg/L	521.04	ppb	11:56:28
1	Sc 361.383	2065879.3	2065879.3	100.62	%			11:57:51
1	Y 371.029	1292041.6	1292041.6	100.60	%			11:57:51
1	Ag 328.068†	56195.8	55642.5	535.45	µg/L	535.45	ppb	11:57:57
1	As 188.979†	284.7	284.2	522.87	µg/L	522.87	ppb	11:58:18
1	B 249.677†	11788.1	11545.5	516.39	µg/L	516.39	ppb	11:57:57
1	Ba 233.527†	19567.2	19515.3	518.97	µg/L	518.97	ppb	11:57:57
1	Be 313.107†	808239.8	799604.8	518.96	µg/L	518.96	ppb	11:57:51
1	Cd 226.502†	19167.9	19145.5	520.15	µg/L	520.15	ppb	11:57:57
1	Co 228.616†	10447.6	10455.9	521.36	µg/L	521.36	ppb	11:57:57
1	Cr 267.716†	23873.8	23862.8	517.30	µg/L	517.30	ppb	11:57:57
1	Cu 324.752†	76097.7	71598.7	513.61	µg/L	513.61	ppb	11:57:57
1	Mn 257.610†	154461.6	153750.4	514.99	µg/L	514.99	ppb	11:57:57
1	Mo 202.031†	4363.7	4337.8	521.38	µg/L	521.38	ppb	11:58:18
1	Ni 231.604†	9548.5	9173.8	520.32	µg/L	520.32	ppb	11:57:57
1	P 214.914†	1419.0	1229.3	2526.1	µg/L	2526.1	ppb	11:58:18
1	Pb 220.353†	2008.7	1958.8	518.83	µg/L	518.83	ppb	11:58:18
1	S 181.975 Axial†	237.3	207.9	1048.2	µg/L	1048.2	ppb	11:58:18
1	Sb 206.836†	544.8	521.8	528.12	µg/L	528.12	ppb	11:58:18
1	Se 196.026†	421.7	406.6	525.68	µg/L	525.68	ppb	11:58:18
1	SiO2†	32745.4	29923.7	5703.4	µg/L	5703.4	ppb	11:57:57
1	Si 251.611†	35241.8	34644.0	2619.8	µg/L	2619.8	ppb	11:57:57
1	Sn 189.927†	1032.1	1003.7	520.33	µg/L	520.33	ppb	11:58:18
1	Ti 334.940†	224432.4	222063.4	529.26	µg/L	529.26	ppb	11:57:51
1	Tl 190.801†	312.7	332.7	515.42	µg/L	515.42	ppb	11:58:18
1	U 409.014†	6070.7	5407.1	514.80	µg/L	514.80	ppb	11:57:57
1	V 292.402†	44443.6	44297.4	522.87	µg/L	522.87	ppb	11:57:57
1	Zn 213.857†	19922.3	19196.6	521.46	µg/L	521.46	ppb	11:57:57
2	Sc RADIAL	112306.5	112306.5	101	%			11:56:54
2	Al 396.153Radial†	10237.8	9956.5	5355.2	µg/L	5355.2	ppb	11:56:54
2	Ca 317.933Radial†	12940.5	12354.5	5239.9	µg/L	5239.9	ppb	11:56:54
2	Fe 238.204 Radial†	758.7	732.7	5262.6	µg/L	5262.6	ppb	11:57:14
2	K 766.490 Radial†	10172.1	9262.3	5201.7	µg/L	5201.7	ppb	11:56:54
2	Mg 279.077 IEC†	802.6	776.1	5294.5	µg/L	5294.5	ppb	11:57:14
2	Na 589.592 Radial†	37922.1	37982.6	10589	µg/L	10589	ppb	11:56:54
2	Sr 421.552†	93984.4	92785.0	524.89	µg/L	524.89	ppb	11:56:54
2	Sc 361.383	2057991.2	2057991.2	100.24	%			11:58:25
2	Y 371.029	1284098.0	1284098.0	99.986	%			11:58:25
2	Ag 328.068†	55977.0	55638.3	535.42	µg/L	535.42	ppb	11:58:30
2	As 188.979†	281.9	282.5	519.74	µg/L	519.74	ppb	11:58:51
2	B 249.677†	11758.1	11560.5	517.05	µg/L	517.05	ppb	11:58:30
2	Ba 233.527†	19514.4	19537.1	519.55	µg/L	519.55	ppb	11:58:30
2	Be 313.107†	803297.9	797753.3	517.76	µg/L	517.76	ppb	11:58:25
2	Cd 226.502†	19065.5	19116.4	519.35	µg/L	519.35	ppb	11:58:30
2	Co 228.616†	10369.0	10417.2	519.44	µg/L	519.44	ppb	11:58:30
2	Cr 267.716†	23771.9	23852.1	517.07	µg/L	517.07	ppb	11:58:30
2	Cu 324.752†	75880.2	71671.6	514.14	µg/L	514.14	ppb	11:58:30
2	Mn 257.610†	153743.3	153622.2	514.57	µg/L	514.57	ppb	11:58:30
2	Mo 202.031†	4382.0	4372.7	525.58	µg/L	525.58	ppb	11:58:51
2	Ni 231.604†	9489.4	9151.3	519.05	µg/L	519.05	ppb	11:58:30
2	P 214.914†	1427.6	1243.3	2555.7	µg/L	2555.7	ppb	11:58:51
2	Pb 220.353†	2024.8	1982.6	525.14	µg/L	525.14	ppb	11:58:51

2	S 181.975 Axial†	240.0	211.5	1066.4 µg/L	1066.4 ppb	11:58:51
2	Sb 206.836†	548.3	527.4	533.76 µg/L	533.76 ppb	11:58:51
2	Se 196.026†	419.4	405.9	524.82 µg/L	524.82 ppb	11:58:51
2	SiO2†	32782.9	30085.8	5734.3 µg/L	5734.3 ppb	11:58:30
2	Si 251.611†	35190.3	34726.9	2625.7 µg/L	2625.7 ppb	11:58:30
2	Sn 189.927†	1050.7	1026.2	531.94 µg/L	531.94 ppb	11:58:51
2	Ti 334.940†	222872.2	221361.8	527.59 µg/L	527.59 ppb	11:58:25
2	Tl 190.801†	316.0	337.1	522.32 µg/L	522.32 ppb	11:58:51
2	U 409.014†	6025.7	5385.4	512.72 µg/L	512.72 ppb	11:58:30
2	V 292.402†	44356.4	44379.7	523.86 µg/L	523.86 ppb	11:58:30
2	Zn 213.857†	19841.9	19192.2	521.34 µg/L	521.34 ppb	11:58:30
3	Sc RADIAL	113155.3	113155.3	102 %		11:57:20
3	Al 396.153Radial†	10253.6	9896.1	5323.0 µg/L	5323.0 ppb	11:57:20
3	Ca 317.933Radial†	13026.6	12343.1	5235.1 µg/L	5235.1 ppb	11:57:20
3	Fe 238.204 Radial†	762.1	730.4	5245.9 µg/L	5245.9 ppb	11:57:40
3	K 766.490 Radial†	10239.7	9253.3	5196.6 µg/L	5196.6 ppb	11:57:20
3	Mg 279.077 IEC†	810.0	777.5	5303.5 µg/L	5303.5 ppb	11:57:40
3	Na 589.592 Radial†	38042.5	37819.8	10544 µg/L	10544 ppb	11:57:20
3	Sr 421.552†	94173.0	92274.1	522.00 µg/L	522.00 ppb	11:57:20
3	Sc 361.383	2085641.5	2085641.5	101.59 %		11:58:57
3	Y 371.029	1317045.6	1317045.6	102.55 %		11:58:57
3	Ag 328.068†	55194.1	54127.2	520.89 µg/L	520.89 ppb	11:59:03
3	As 188.979†	277.5	274.6	504.93 µg/L	504.93 ppb	11:59:24
3	B 249.677†	11586.7	11236.3	502.51 µg/L	502.51 ppb	11:59:03
3	Ba 233.527†	19373.9	19140.7	509.00 µg/L	509.00 ppb	11:59:03
3	Be 313.107†	742721.8	727498.6	472.16 µg/L	472.16 ppb	11:58:57
3	Cd 226.502†	18842.4	18644.6	506.53 µg/L	506.53 ppb	11:59:03
3	Co 228.616†	10241.4	10154.5	506.41 µg/L	506.41 ppb	11:59:03
3	Cr 267.716†	23564.4	23333.4	505.82 µg/L	505.82 ppb	11:59:03
3	Cu 324.752†	74979.1	69780.9	500.61 µg/L	500.61 ppb	11:59:03
3	Mn 257.610†	153050.2	150906.6	505.49 µg/L	505.49 ppb	11:59:03
3	Mo 202.031†	4353.2	4286.4	515.20 µg/L	515.20 ppb	11:59:24
3	Ni 231.604†	9375.3	8913.4	505.56 µg/L	505.56 ppb	11:59:03
3	P 214.914†	1415.3	1212.3	2492.0 µg/L	2492.0 ppb	11:59:24
3	Pb 220.353†	2001.4	1932.7	511.93 µg/L	511.93 ppb	11:59:24
3	S 181.975 Axial†	236.8	205.1	1034.1 µg/L	1034.1 ppb	11:59:24
3	Sb 206.836†	540.0	512.0	518.02 µg/L	518.02 ppb	11:59:24
3	Se 196.026†	421.6	402.5	520.47 µg/L	520.47 ppb	11:59:24
3	SiO2†	32436.0	29310.8	5586.6 µg/L	5586.6 ppb	11:59:03
3	Si 251.611†	34953.1	34028.0	2574.0 µg/L	2574.0 ppb	11:59:03
3	Sn 189.927†	1039.7	1001.5	519.19 µg/L	519.19 ppb	11:59:24
3	Ti 334.940†	208418.0	204185.7	486.63 µg/L	486.63 ppb	11:58:57
3	Tl 190.801†	313.0	330.0	511.06 µg/L	511.06 ppb	11:59:24
3	U 409.014†	6097.6	5376.4	511.87 µg/L	511.87 ppb	11:59:03
3	V 292.402†	43840.4	43285.0	510.99 µg/L	510.99 ppb	11:59:03
3	Zn 213.857†	19518.9	18611.8	505.54 µg/L	505.54 ppb	11:59:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2069837.3	100.82	%	0.694				0.69%
Sc RADIAL	113113.8	102	%	0.7				0.70%
Y 371.029	1297728.4	101.05	%	1.339				1.32%
Ag 328.068†	55136.0	530.59	µg/L	8.393	530.59	ppb	8.393	1.58%
QC value within limits for Ag 328.068 Recovery = 106.12%								
Al 396.153Radial†	9925.6	5338.6	µg/L	16.12	5338.6	ppb	16.12	0.30%
QC value within limits for Al 396.153Radial Recovery = 106.77%								
As 188.979†	280.4	515.84	µg/L	9.584	515.84	ppb	9.584	1.86%
QC value within limits for As 188.979 Recovery = 103.17%								
B 249.677†	11447.5	511.98	µg/L	8.212	511.98	ppb	8.212	1.60%
QC value within limits for B 249.677 Recovery = 102.40%								
Ba 233.527†	19397.7	515.84	µg/L	5.928	515.84	ppb	5.928	1.15%
QC value within limits for Ba 233.527 Recovery = 103.17%								
Be 313.107†	774952.2	502.96	µg/L	26.680	502.96	ppb	26.680	5.30%
QC value within limits for Be 313.107 Recovery = 100.59%								
Ca 317.933Radial†	12350.4	5238.2	µg/L	2.69	5238.2	ppb	2.69	0.05%
QC value within limits for Ca 317.933Radial Recovery = 104.76%								
Cd 226.502†	18968.8	515.34	µg/L	7.641	515.34	ppb	7.641	1.48%
QC value within limits for Cd 226.502 Recovery = 103.07%								
Co 228.616†	10342.5	515.74	µg/L	8.135	515.74	ppb	8.135	1.58%

QC value within limits for Co 228.616 Recovery = 103.15%

Cr 267.716†	23682.7	513.40 µg/L	6.561	513.40 ppb	6.561	1.28%

QC value within limits for Cr 267.716 Recovery = 102.68%

Cu 324.752†	71017.1	509.45 µg/L	7.666	509.45 ppb	7.666	1.50%

QC value within limits for Cu 324.752 Recovery = 101.89%

Fe 238.204 Radial†	729.8	5241.7 µg/L	23.33	5241.7 ppb	23.33	0.45%

QC value within limits for Fe 238.204 Radial Recovery = 104.83%

K 766.490 Radial†	9243.9	5191.3 µg/L	13.77	5191.3 ppb	13.77	0.27%

QC value within limits for K 766.490 Radial Recovery = 103.83%

Mg 279.077 IEC†	775.2	5288.0 µg/L	19.55	5288.0 ppb	19.55	0.37%

QC value within limits for Mg 279.077 IEC Recovery = 105.76%

Mn 257.610†	152759.7	511.68 µg/L	5.373	511.68 ppb	5.373	1.05%

QC value within limits for Mn 257.610 Recovery = 102.34%

Mo 202.031†	4332.3	520.72 µg/L	5.219	520.72 ppb	5.219	1.00%

QC value within limits for Mo 202.031 Recovery = 104.14%

Na 589.592 Radial†	37860.0	10555 µg/L	30.2	10555 ppb	30.2	0.29%

QC value within limits for Na 589.592 Radial Recovery = 105.55%

Ni 231.604†	9079.5	514.98 µg/L	8.183	514.98 ppb	8.183	1.59%

QC value within limits for Ni 231.604 Recovery = 103.00%

P 214.914†	1228.3	2524.6 µg/L	31.90	2524.6 ppb	31.90	1.26%

QC value within limits for P 214.914 Recovery = 100.98%

Pb 220.353†	1958.1	518.63 µg/L	6.606	518.63 ppb	6.606	1.27%

QC value within limits for Pb 220.353 Recovery = 103.73%

S 181.975 Axial†	208.1	1049.6 µg/L	16.22	1049.6 ppb	16.22	1.54%

QC value within limits for S 181.975 Axial Recovery = 104.96%

Sb 206.836†	520.4	526.63 µg/L	7.972	526.63 ppb	7.972	1.51%

QC value within limits for Sb 206.836 Recovery = 105.33%

Se 196.026†	405.0	523.66 µg/L	2.794	523.66 ppb	2.794	0.53%

QC value within limits for Se 196.026 Recovery = 104.73%

SiO2†	29773.4	5674.8 µg/L	77.92	5674.8 ppb	77.92	1.37%

QC value within limits for SiO2 Recovery = 106.12%

Si 251.611†	34466.3	2606.5 µg/L	28.30	2606.5 ppb	28.30	1.09%

QC value within limits for Si 251.611 Recovery = 104.26%

Sn 189.927†	1010.4	523.82 µg/L	7.057	523.82 ppb	7.057	1.35%

QC value within limits for Sn 189.927 Recovery = 104.76%

Sr 421.552†	92387.8	522.65 µg/L	2.004	522.65 ppb	2.004	0.38%

QC value within limits for Sr 421.552 Recovery = 104.53%

Ti 334.940†	215870.3	514.49 µg/L	24.146	514.49 ppb	24.146	4.69%

QC value within limits for Ti 334.940 Recovery = 102.90%

Tl 190.801†	333.3	516.27 µg/L	5.676	516.27 ppb	5.676	1.10%

QC value within limits for Tl 190.801 Recovery = 103.25%

U 409.014†	5389.6	513.13 µg/L	1.508	513.13 ppb	1.508	0.29%

QC value within limits for U 409.014 Recovery = 102.63%

V 292.402†	43987.3	519.24 µg/L	7.164	519.24 ppb	7.164	1.38%

QC value within limits for V 292.402 Recovery = 103.85%

Zn 213.857†	19000.2	516.11 µg/L	9.157	516.11 ppb	9.157	1.77%

QC value within limits for Zn 213.857 Recovery = 103.22%

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 11:59:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111463.1	111463.1	101	%			12:00:05
1	Al 396.153Radial†	179.3	33.3	17.941	µg/L	17.941	ppb	12:00:05
1	Ca 317.933Radial†	428.9	12.6	5.3651	µg/L	5.3651	ppb	12:00:26
1	Fe 238.204 Radial†	14.8	-1.2	-8.8180	µg/L	-8.8180	ppb	12:00:26
1	K 766.490 Radial†	740.6	-38.2	-21.426	µg/L	-21.426	ppb	12:00:05
1	Mg 279.077 IEC†	17.2	1.3	8.8112	µg/L	8.8112	ppb	12:00:26
1	Na 589.592 Radial†	-594.1	-25.3	-7.0593	µg/L	-7.0593	ppb	12:00:05
1	Sr 421.552†	-22.6	29.1	0.1649	µg/L	0.1649	ppb	12:00:05
1	Sc 361.383	2057771.9	2057771.9	100.23	%			12:01:28
1	Y 371.029	1290778.9	1290778.9	100.51	%			12:01:28
1	Ag 328.068†	224.3	18.6	0.1793	µg/L	0.1793	ppb	12:01:33
1	As 188.979†	-0.8	0.5	1.0108	µg/L	1.0108	ppb	12:01:54
1	B 249.677†	161.5	-8.4	-0.3743	µg/L	-0.3743	ppb	12:01:33
1	Ba 233.527†	-62.9	6.5	0.1726	µg/L	0.1726	ppb	12:01:54
1	Be 313.107†	3734.2	97.3	0.0629	µg/L	0.0629	ppb	12:01:33
1	Cd 226.502†	-106.3	-9.7	-0.2634	µg/L	-0.2634	ppb	12:01:54
1	Co 228.616†	-61.9	11.2	0.5556	µg/L	0.5556	ppb	12:01:54
1	Cr 267.716†	-103.5	33.6	0.7282	µg/L	0.7282	ppb	12:01:33
1	Cu 324.752†	4015.8	-21.0	-0.1524	µg/L	-0.1524	ppb	12:01:33
1	Mn 257.610†	-191.5	54.6	0.1816	µg/L	0.1816	ppb	12:01:54
1	Mo 202.031†	1.8	3.0	0.3632	µg/L	0.3632	ppb	12:01:54
1	Ni 231.604†	306.0	-10.3	-0.5822	µg/L	-0.5822	ppb	12:01:54
1	P 214.914†	176.0	-5.3	-11.120	µg/L	-11.120	ppb	12:01:54
1	Pb 220.353†	49.1	11.6	3.0806	µg/L	3.0806	ppb	12:01:54
1	S 181.975 Axial†	27.2	-0.9	-4.4427	µg/L	-4.4427	ppb	12:01:54
1	Sb 206.836†	26.5	6.8	6.9382	µg/L	6.9382	ppb	12:01:54
1	Se 196.026†	18.8	6.3	8.0498	µg/L	8.0498	ppb	12:01:54
1	SiO2†	2637.9	13.0	2.4802	µg/L	2.4802	ppb	12:01:33
1	Si 251.611†	424.1	43.7	3.3110	µg/L	3.3110	ppb	12:01:54
1	Sn 189.927†	23.3	1.2	0.6126	µg/L	0.6126	ppb	12:01:54
1	Ti 334.940†	1343.7	362.0	0.8629	µg/L	0.8629	ppb	12:01:33
1	Tl 190.801†	-15.3	6.7	10.300	µg/L	10.300	ppb	12:01:54
1	U 409.014†	632.6	5.2	0.4987	µg/L	0.4987	ppb	12:01:33
1	V 292.402†	-97.9	31.4	0.3696	µg/L	0.3696	ppb	12:01:33
1	Zn 213.857†	608.0	4.3	0.1221	µg/L	0.1221	ppb	12:01:54
2	Sc RADIAL	110738.4	110738.4	99.9	%			12:00:31
2	Al 396.153Radial†	182.1	37.2	20.053	µg/L	20.053	ppb	12:00:31
2	Ca 317.933Radial†	431.5	18.1	7.6623	µg/L	7.6623	ppb	12:00:52
2	Fe 238.204 Radial†	17.3	1.4	9.7819	µg/L	9.7819	ppb	12:00:52
2	K 766.490 Radial†	788.0	14.2	7.9591	µg/L	7.9591	ppb	12:00:31
2	Mg 279.077 IEC†	12.7	-3.1	-21.425	µg/L	-21.425	ppb	12:00:52
2	Na 589.592 Radial†	-596.3	-31.4	-8.7622	µg/L	-8.7622	ppb	12:00:31
2	Sr 421.552†	-49.1	2.5	0.0139	µg/L	0.0139	ppb	12:00:31
2	Sc 361.383	2061446.8	2061446.8	100.41	%			12:02:00
2	Y 371.029	1293554.5	1293554.5	100.72	%			12:02:00
2	Ag 328.068†	228.8	22.7	0.2158	µg/L	0.2158	ppb	12:02:05
2	As 188.979†	0.8	2.1	3.8833	µg/L	3.8833	ppb	12:02:26
2	B 249.677†	196.6	26.3	1.1776	µg/L	1.1776	ppb	12:02:05
2	Ba 233.527†	-57.2	12.3	0.3252	µg/L	0.3252	ppb	12:02:26
2	Be 313.107†	3767.3	123.6	0.0800	µg/L	0.0800	ppb	12:02:05
2	Cd 226.502†	-101.3	-4.6	-0.1287	µg/L	-0.1287	ppb	12:02:26
2	Co 228.616†	-65.6	7.6	0.3781	µg/L	0.3781	ppb	12:02:26
2	Cr 267.716†	-154.2	-16.7	-0.3608	µg/L	-0.3608	ppb	12:02:05
2	Cu 324.752†	3960.1	-83.7	-0.5967	µg/L	-0.5967	ppb	12:02:05
2	Mn 257.610†	-187.0	59.4	0.2000	µg/L	0.2000	ppb	12:02:26
2	Mo 202.031†	2.6	3.8	0.4510	µg/L	0.4510	ppb	12:02:26
2	Ni 231.604†	300.6	-16.1	-0.9151	µg/L	-0.9151	ppb	12:02:26
2	P 214.914†	183.0	1.3	2.8712	µg/L	2.8712	ppb	12:02:26
2	Pb 220.353†	35.6	-2.0	-0.5113	µg/L	-0.5113	ppb	12:02:26

2	S 181.975 Axial†	30.3	2.2	10.964 µg/L	10.964 ppb	12:02:26
2	Sb 206.836†	21.6	1.9	1.9277 µg/L	1.9277 ppb	12:02:26
2	Se 196.026†	17.8	5.3	6.7875 µg/L	6.7875 ppb	12:02:26
2	SiO2†	2682.1	52.4	9.9819 µg/L	9.9819 ppb	12:02:05
2	Si 251.611†	400.0	18.8	1.4095 µg/L	1.4095 ppb	12:02:26
2	Sn 189.927†	22.6	0.4	0.2286 µg/L	0.2286 ppb	12:02:26
2	Ti 334.940†	1245.4	261.6	0.6235 µg/L	0.6235 ppb	12:02:05
2	Tl 190.801†	-20.8	1.2	1.9038 µg/L	1.9038 ppb	12:02:26
2	U 409.014†	583.0	-45.4	-4.3321 µg/L	-4.3321 ppb	12:02:05
2	V 292.402†	-150.0	-20.3	-0.2405 µg/L	-0.2405 ppb	12:02:05
2	Zn 213.857†	609.1	4.3	0.1226 µg/L	0.1226 ppb	12:02:26
3	Sc RADIAL	111497.1	111497.1	101 %		12:00:57
3	Al 396.153Radial†	174.8	28.7	15.518 µg/L	15.518 ppb	12:00:57
3	Ca 317.933Radial†	434.4	18.0	7.6352 µg/L	7.6352 ppb	12:01:17
3	Fe 238.204 Radial†	15.2	-0.8	-5.7650 µg/L	-5.7650 ppb	12:01:17
3	K 766.490 Radial†	790.8	11.6	6.4949 µg/L	6.4949 ppb	12:00:57
3	Mg 279.077 IEC†	13.4	-2.5	-17.198 µg/L	-17.198 ppb	12:01:17
3	Na 589.592 Radial†	-624.8	-55.6	-15.510 µg/L	-15.510 ppb	12:00:57
3	Sr 421.552†	-61.9	-9.9	-0.0560 µg/L	-0.0560 ppb	12:00:57
3	Sc 361.383	2047189.8	2047189.8	99.713 %		12:02:32
3	Y 371.029	1285899.0	1285899.0	100.13 %		12:02:32
3	Ag 328.068†	231.1	26.6	0.2533 µg/L	0.2533 ppb	12:02:38
3	As 188.979†	3.8	5.2	9.5904 µg/L	9.5904 ppb	12:02:58
3	B 249.677†	181.0	12.0	0.5397 µg/L	0.5397 ppb	12:02:38
3	Ba 233.527†	-59.2	9.9	0.2617 µg/L	0.2617 ppb	12:02:58
3	Be 313.107†	3626.3	8.3	0.0052 µg/L	0.0052 ppb	12:02:38
3	Cd 226.502†	-102.0	-6.0	-0.1670 µg/L	-0.1670 ppb	12:02:58
3	Co 228.616†	-55.5	17.3	0.8597 µg/L	0.8597 ppb	12:02:58
3	Cr 267.716†	-142.9	-6.5	-0.1398 µg/L	-0.1398 ppb	12:02:38
3	Cu 324.752†	4020.9	4.8	0.0334 µg/L	0.0334 ppb	12:02:38
3	Mn 257.610†	-192.7	52.4	0.1745 µg/L	0.1745 ppb	12:02:58
3	Mo 202.031†	-10.8	-9.7	-1.1631 µg/L	-1.1631 ppb	12:02:58
3	Ni 231.604†	318.4	3.8	0.2139 µg/L	0.2139 ppb	12:02:58
3	P 214.914†	173.8	-6.5	-13.787 µg/L	-13.787 ppb	12:02:58
3	Pb 220.353†	48.4	11.2	2.9542 µg/L	2.9542 ppb	12:02:58
3	S 181.975 Axial†	24.6	-3.3	-16.795 µg/L	-16.795 ppb	12:02:58
3	Sb 206.836†	20.4	0.9	0.8969 µg/L	0.8969 ppb	12:02:58
3	Se 196.026†	14.1	1.7	2.1690 µg/L	2.1690 ppb	12:02:58
3	SiO2†	2631.8	20.5	3.9128 µg/L	3.9128 ppb	12:02:38
3	Si 251.611†	407.3	28.9	2.2968 µg/L	2.2968 ppb	12:02:58
3	Sn 189.927†	18.4	-3.6	-1.8649 µg/L	-1.8649 ppb	12:02:58
3	Ti 334.940†	1243.6	268.4	0.6397 µg/L	0.6397 ppb	12:02:38
3	Tl 190.801†	-20.8	1.0	1.5832 µg/L	1.5832 ppb	12:02:58
3	U 409.014†	542.5	-81.9	-7.8110 µg/L	-7.8110 ppb	12:02:38
3	V 292.402†	-131.7	-3.0	-0.0566 µg/L	-0.0566 ppb	12:02:38
3	Zn 213.857†	609.6	9.0	0.2457 µg/L	0.2457 ppb	12:02:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2055469.5	100.12	%	0.361				0.36%
Sc RADIAL	111232.9	100	%	0.4				0.39%
Y 371.029	1290077.5	100.45	%	0.302				0.30%
Ag 328.068†	22.6	0.2161	µg/L	0.03702	0.2161	ppb	0.03702	17.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	33.0	17.837	µg/L	2.2692	17.837	ppb	2.2692	12.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.6	4.8282	µg/L	4.36715	4.8282	ppb	4.36715	90.45%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	10.0	0.4477	µg/L	0.77999	0.4477	ppb	0.77999	174.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.5	0.2532	µg/L	0.07670	0.2532	ppb	0.07670	30.30%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	76.4	0.0494	µg/L	0.03922	0.0494	ppb	0.03922	79.48%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.2	6.8875	µg/L	1.31850	6.8875	ppb	1.31850	19.14%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-6.8	-0.1864	µg/L	0.06943	-0.1864	ppb	0.06943	37.25%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	12.0	0.5978	µg/L	0.24353	0.5978	ppb	0.24353	40.74%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.5      0.0759 µg/L       0.57563      0.0759 ppb        0.57563 758.77%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -33.3     -0.2385 µg/L       0.32376     -0.2385 ppb        0.32376 135.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.2     -1.6004 µg/L       9.97480     -1.6004 ppb        9.97480 623.28%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -4.1     -2.3241 µg/L      16.55911     -2.3241 ppb       16.55911 712.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.5     -9.9373 µg/L      16.37370     -9.9373 ppb       16.37370 164.77%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                55.5      0.1854 µg/L       0.01318      0.1854 ppb        0.01318   7.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.0     -0.1163 µg/L       0.90763     -0.1163 ppb        0.90763 780.41%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -37.5     -10.444 µg/L        4.4693     -10.444 ppb         4.4693  42.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.5     -0.4278 µg/L       0.58010     -0.4278 ppb        0.58010 135.60%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.5     -7.3453 µg/L       8.94758     -7.3453 ppb        8.94758 121.81%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.9      1.8412 µg/L       2.03831      1.8412 ppb        2.03831 110.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.7     -3.4244 µg/L      13.90743     -3.4244 ppb       13.90743 406.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.2      3.2543 µg/L       3.23171      3.2543 ppb        3.23171  99.31%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 4.4      5.6688 µg/L       3.09587      5.6688 ppb        3.09587  54.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      28.6      5.4583 µg/L       3.98249      5.4583 ppb        3.98249  72.96%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                30.5      2.3391 µg/L       0.95146      2.3391 ppb        0.95146  40.68%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.3412 µg/L       1.33345     -0.3412 ppb        1.33345 390.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 7.2      0.0410 µg/L       0.11287      0.0410 ppb        0.11287 275.61%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               297.3      0.7087 µg/L       0.13378      0.7087 ppb        0.13378  18.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.0      4.5956 µg/L       4.94263      4.5956 ppb        4.94263 107.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -40.7     -3.8815 µg/L       4.17313     -3.8815 ppb        4.17313 107.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  2.7      0.0242 µg/L       0.31294      0.0242 ppb        0.31294 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 5.9      0.1635 µg/L       0.07121      0.1635 ppb        0.07121  43.56%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: 241419010|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 316
Date Collected: 12/11/2009 12:03:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419010|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116086.6	116086.6	105	%			12:03:45
1	Al 396.153Radial†	240107.1	229051.5	123660	µg/L	123660	ppb	12:03:45
1	Ca 317.933Radial†	67464.4	63985.1	27138	µg/L	27138	ppb	12:03:51
1	Fe 238.204 Radial†	23584.9	22497.2	161070	µg/L	161070	ppb	12:03:51
1	K 766.490 Radial†	22664.9	20860.6	11715	µg/L	11715	ppb	12:03:51
1	Mg 279.077 IEC†	3557.4	3379.9	22797	µg/L	22797	ppb	12:03:51
1	Na 589.592 Radial†	4084.9	4464.6	1244.7	µg/L	1244.7	ppb	12:03:51
1	Sr 421.552†	53676.4	51289.0	290.15	µg/L	290.15	ppb	12:03:45
1	Sc 361.383	2070022.2	2070022.2	100.83	%			12:04:25
1	Y 371.029	1309165.5	1309165.5	101.94	%			12:04:25
1	Ag 328.068†	-1382.4	-1576.3	0.1200	µg/L	0.1200	ppb	12:04:31
1	As 188.979†	26.8	27.9	35.540	µg/L	35.540	ppb	12:04:51
1	B 249.677†	2109.0	1922.2	35.599	µg/L	35.599	ppb	12:04:31
1	Ba 233.527†	51501.8	51149.5	1358.1	µg/L	1358.1	ppb	12:04:31
1	Be 313.107†	21861.3	18054.1	10.136	µg/L	10.136	ppb	12:04:31
1	Cd 226.502†	496.8	589.1	3.5598	µg/L	3.5598	ppb	12:04:31
1	Co 228.616†	1717.8	1776.7	79.619	µg/L	79.619	ppb	12:04:51
1	Cr 267.716†	5281.0	5374.6	117.08	µg/L	117.08	ppb	12:04:31
1	Cu 324.752†	9823.7	5715.6	75.508	µg/L	75.508	ppb	12:04:31
1	Mn 257.610†	1256865.1	1246825.2	4191.2	µg/L	4191.2	ppb	12:04:25
1	Mo 202.031†	-18.2	-16.8	4.3073	µg/L	4.3073	ppb	12:04:51
1	Ni 231.604†	1605.7	1277.1	72.432	µg/L	72.432	ppb	12:04:51
1	P 214.914†	773.5	586.3	1080.9	µg/L	1080.9	ppb	12:04:51
1	Pb 220.353†	600.8	558.5	156.44	µg/L	156.44	ppb	12:04:51
1	S 181.975 Axial†	171.9	142.5	692.60	µg/L	692.60	ppb	12:04:51
1	Sb 206.836†	26.2	6.4	19.396	µg/L	19.396	ppb	12:04:51
1	Se 196.026†	-73.3	-85.2	-2.5408	µg/L	-2.5408	ppb	12:04:51
1	SiO2†	126010.2	122360.2	23322	µg/L	23322	ppb	12:04:31
1	Si 251.611†	141549.3	140011.4	10633	µg/L	10633	ppb	12:04:31
1	Sn 189.927†	-117.8	-138.9	-42.105	µg/L	-42.105	ppb	12:04:51
1	Ti 334.940†	1812246.6	1796437.4	4282.4	µg/L	4282.4	ppb	12:04:25
1	Tl 190.801†	-41.6	-19.3	15.365	µg/L	15.365	ppb	12:04:51
1	U 409.014†	226.8	-401.0	-67.671	µg/L	-67.671	ppb	12:04:25
1	V 292.402†	30935.1	30811.0	373.34	µg/L	373.34	ppb	12:04:31
1	Zn 213.857†	11065.3	10372.4	265.78	µg/L	265.78	ppb	12:04:31
2	Sc RADIAL	115241.8	115241.8	104	%			12:03:56
2	Al 396.153Radial†	240649.3	231253.0	124840	µg/L	124840	ppb	12:03:56
2	Ca 317.933Radial†	67783.3	64763.9	27468	µg/L	27468	ppb	12:04:02
2	Fe 238.204 Radial†	23711.0	22783.5	163120	µg/L	163120	ppb	12:04:02
2	K 766.490 Radial†	22798.4	21147.5	11876	µg/L	11876	ppb	12:04:02
2	Mg 279.077 IEC†	3588.8	3435.1	23169	µg/L	23169	ppb	12:04:02
2	Na 589.592 Radial†	4181.4	4586.0	1278.5	µg/L	1278.5	ppb	12:04:02
2	Sr 421.552†	53677.5	51665.6	292.28	µg/L	292.28	ppb	12:03:56
2	Sc 361.383	2083222.9	2083222.9	101.47	%			12:04:59
2	Y 371.029	1321795.3	1321795.3	102.92	%			12:04:59
2	Ag 328.068†	-1317.4	-1503.5	0.9445	µg/L	0.9445	ppb	12:05:04
2	As 188.979†	33.3	34.2	46.684	µg/L	46.684	ppb	12:05:25
2	B 249.677†	2044.1	1845.0	31.490	µg/L	31.490	ppb	12:05:04
2	Ba 233.527†	50834.4	50168.2	1332.1	µg/L	1332.1	ppb	12:05:04
2	Be 313.107†	21662.7	17720.9	9.9173	µg/L	9.9173	ppb	12:05:04
2	Cd 226.502†	519.1	608.0	3.9160	µg/L	3.9160	ppb	12:05:04
2	Co 228.616†	1699.6	1748.0	78.177	µg/L	78.177	ppb	12:05:25
2	Cr 267.716†	5228.0	5289.3	115.23	µg/L	115.23	ppb	12:05:04
2	Cu 324.752†	9803.6	5634.1	75.365	µg/L	75.365	ppb	12:05:04
2	Mn 257.610†	1265748.9	1247681.3	4194.4	µg/L	4194.4	ppb	12:04:59
2	Mo 202.031†	-14.4	-13.1	4.8420	µg/L	4.8420	ppb	12:05:25
2	Ni 231.604†	1606.3	1267.6	71.894	µg/L	71.894	ppb	12:05:25
2	P 214.914†	769.1	577.1	1059.6	µg/L	1059.6	ppb	12:05:25
2	Pb 220.353†	596.0	550.0	154.25	µg/L	154.25	ppb	12:05:25

2	S 181.975 Axial†	173.3	142.8	693.68 µg/L	693.68 ppb	12:05:25
2	Sb 206.836†	30.9	10.9	23.947 µg/L	23.947 ppb	12:05:25
2	Se 196.026†	-64.4	-76.0	10.642 µg/L	10.642 ppb	12:05:25
2	SiO2†	124546.2	120125.4	22896 µg/L	22896 ppb	12:05:04
2	Si 251.611†	140160.2	137752.8	10459 µg/L	10459 ppb	12:05:04
2	Sn 189.927†	-119.9	-140.2	-42.395 µg/L	-42.395 ppb	12:05:25
2	Ti 334.940†	1826399.8	1798996.1	4288.5 µg/L	4288.5 ppb	12:04:59
2	Tl 190.801†	-44.3	-21.7	11.675 µg/L	11.675 ppb	12:05:25
2	U 409.014†	279.4	-350.7	-63.245 µg/L	-63.245 ppb	12:04:59
2	V 292.402†	30721.3	30405.9	368.79 µg/L	368.79 ppb	12:05:04
2	Zn 213.857†	10988.9	10227.5	261.59 µg/L	261.59 ppb	12:05:04
3	Sc RADIAL	116096.3	116096.3	105 %		12:04:07
3	Al 396.153Radial†	243453.9	232226.9	125370 µg/L	125370 ppb	12:04:07
3	Ca 317.933Radial†	67773.9	64275.2	27261 µg/L	27261 ppb	12:04:13
3	Fe 238.204 Radial†	23722.3	22626.5	161990 µg/L	161990 ppb	12:04:13
3	K 766.490 Radial†	22809.1	20996.5	11792 µg/L	11792 ppb	12:04:13
3	Mg 279.077 IEC†	3598.9	3419.2	23063 µg/L	23063 ppb	12:04:13
3	Na 589.592 Radial†	4213.4	4586.9	1278.8 µg/L	1278.8 ppb	12:04:13
3	Sr 421.552†	54370.4	51947.1	293.87 µg/L	293.87 ppb	12:04:07
3	Sc 361.383	2074641.3	2074641.3	101.05 %		12:05:32
3	Y 371.029	1319052.0	1319052.0	102.71 %		12:05:32
3	Ag 328.068†	-1351.1	-1542.2	0.4711 µg/L	0.4711 ppb	12:05:38
3	As 188.979†	31.0	32.0	42.980 µg/L	42.980 ppb	12:05:58
3	B 249.677†	2042.4	1851.7	32.141 µg/L	32.141 ppb	12:05:38
3	Ba 233.527†	50448.3	49993.3	1327.4 µg/L	1327.4 ppb	12:05:38
3	Be 313.107†	21435.7	17584.5	9.8224 µg/L	9.8224 ppb	12:05:38
3	Cd 226.502†	480.2	571.6	3.0139 µg/L	3.0139 ppb	12:05:38
3	Co 228.616†	1708.3	1763.5	78.906 µg/L	78.906 ppb	12:05:58
3	Cr 267.716†	5153.9	5237.2	114.09 µg/L	114.09 ppb	12:05:38
3	Cu 324.752†	9727.0	5598.2	74.867 µg/L	74.867 ppb	12:05:38
3	Mn 257.610†	1264093.2	1251202.7	4206.0 µg/L	4206.0 ppb	12:05:32
3	Mo 202.031†	-34.7	-33.2	2.3830 µg/L	2.3830 ppb	12:05:58
3	Ni 231.604†	1605.9	1273.7	72.239 µg/L	72.239 ppb	12:05:58
3	P 214.914†	765.0	576.1	1059.2 µg/L	1059.2 ppb	12:05:58
3	Pb 220.353†	605.0	561.3	157.30 µg/L	157.30 ppb	12:05:58
3	S 181.975 Axial†	169.7	140.0	679.52 µg/L	679.52 ppb	12:05:58
3	Sb 206.836†	19.1	-0.7	12.295 µg/L	12.295 ppb	12:05:58
3	Se 196.026†	-62.6	-74.5	11.802 µg/L	11.802 ppb	12:05:58
3	SiO2†	123547.2	119644.4	22804 µg/L	22804 ppb	12:05:38
3	Si 251.611†	138810.3	136988.3	10399 µg/L	10399 ppb	12:05:38
3	Sn 189.927†	-116.0	-136.8	-40.865 µg/L	-40.865 ppb	12:05:58
3	Ti 334.940†	1826112.8	1806157.6	4305.6 µg/L	4305.6 ppb	12:05:32
3	Tl 190.801†	-38.3	-16.0	20.727 µg/L	20.727 ppb	12:05:58
3	U 409.014†	249.9	-378.7	-65.713 µg/L	-65.713 ppb	12:05:32
3	V 292.402†	30408.4	30221.4	366.52 µg/L	366.52 ppb	12:05:38
3	Zn 213.857†	10849.8	10134.7	259.17 µg/L	259.17 ppb	12:05:38

Mean Data: 241419010|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2075962.2	101.11	%	0.326				0.32%
Sc RADIAL	115808.2	105	%	0.4				0.42%
Y 371.029	1316671.0	102.52	%	0.517				0.50%
Ag 328.068†	-1540.7	0.5119	µg/L	0.41374	0.5119	ppb	0.41374	80.83%
Al 396.153Radial†	230843.8	124620	µg/L	878.3	124620	ppb	878.3	0.70%
As 188.979†	31.4	41.734	µg/L	5.6756	41.734	ppb	5.6756	13.60%
B 249.677†	1873.0	33.077	µg/L	2.2085	33.077	ppb	2.2085	6.68%
Ba 233.527†	50437.0	1339.2	µg/L	16.55	1339.2	ppb	16.55	1.24%
Be 313.107†	17786.5	9.9585	µg/L	0.16073	9.9585	ppb	0.16073	1.61%
Ca 317.933Radial†	64341.4	27289	µg/L	166.9	27289	ppb	166.9	0.61%
Cd 226.502†	589.6	3.4966	µg/L	0.45436	3.4966	ppb	0.45436	12.99%
Co 228.616†	1762.7	78.901	µg/L	0.7213	78.901	ppb	0.7213	0.91%
Cr 267.716†	5300.4	115.47	µg/L	1.509	115.47	ppb	1.509	1.31%
Cu 324.752†	5649.3	75.246	µg/L	0.3366	75.246	ppb	0.3366	0.45%
Fe 238.204 Radial†	22635.7	162060	µg/L	1026.5	162060	ppb	1026.5	0.63%
K 766.490 Radial†	21001.6	11794	µg/L	80.6	11794	ppb	80.6	0.68%
Mg 279.077 IEC†	3411.4	23010	µg/L	192.0	23010	ppb	192.0	0.83%
Mn 257.610†	1248569.7	4197.2	µg/L	7.78	4197.2	ppb	7.78	0.19%
Mo 202.031†	-21.0	3.8441	µg/L	1.29327	3.8441	ppb	1.29327	33.64%
Na 589.592 Radial†	4545.8	1267.3	µg/L	19.62	1267.3	ppb	19.62	1.55%

Ni 231.604†	1272.8	72.188	µg/L	0.2724	72.188	ppb	0.2724	0.38%
P 214.914†	579.9	1066.6	µg/L	12.42	1066.6	ppb	12.42	1.16%
Pb 220.353†	556.6	156.00	µg/L	1.572	156.00	ppb	1.572	1.01%
S 181.975 Axial†	141.8	688.60	µg/L	7.884	688.60	ppb	7.884	1.14%
Sb 206.836†	5.5	18.546	µg/L	5.8726	18.546	ppb	5.8726	31.67%
Se 196.026†	-78.6	6.6344	µg/L	7.96712	6.6344	ppb	7.96712	120.09%
SiO2†	120710.0	23007	µg/L	276.2	23007	ppb	276.2	1.20%
Si 251.611†	138250.8	10497	µg/L	121.5	10497	ppb	121.5	1.16%
Sn 189.927†	-138.6	-41.788	µg/L	0.8126	-41.788	ppb	0.8126	1.94%
Sr 421.552†	51633.9	292.10	µg/L	1.868	292.10	ppb	1.868	0.64%
Ti 334.940†	1800530.3	4292.2	µg/L	12.01	4292.2	ppb	12.01	0.28%
Tl 190.801†	-19.0	15.922	µg/L	4.5517	15.922	ppb	4.5517	28.59%
U 409.014†	-376.8	-65.543	µg/L	2.2182	-65.543	ppb	2.2182	3.38%
V 292.402†	30479.4	369.55	µg/L	3.478	369.55	ppb	3.478	0.94%
Zn 213.857†	10244.9	262.18	µg/L	3.346	262.18	ppb	3.346	1.28%

Sequence No.: 23
Sample ID: 241419011|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 317
Date Collected: 12/11/2009 12:06:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419011|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116047.7	116047.7	105	%			12:06:40
1	Al 396.153Radial†	298159.7	284561.5	153620	µg/L	153620	ppb	12:06:40
1	Ca 317.933Radial†	69248.9	65710.6	27870	µg/L	27870	ppb	12:06:46
1	Fe 238.204 Radial†	24045.9	22945.0	164270	µg/L	164270	ppb	12:06:46
1	K 766.490 Radial†	25358.5	23439.9	13164	µg/L	13164	ppb	12:06:46
1	Mg 279.077 IEC†	4371.9	4158.8	28100	µg/L	28100	ppb	12:06:46
1	Na 589.592 Radial†	17026.6	16823.7	4690.3	µg/L	4690.3	ppb	12:06:46
1	Sr 421.552†	64939.6	62061.1	351.09	µg/L	351.09	ppb	12:06:40
1	Sc 361.383	2071421.6	2071421.6	100.89	%			12:07:20
1	Y 371.029	1313663.6	1313663.6	102.29	%			12:07:20
1	Ag 328.068†	-1298.4	-1492.2	0.6936	µg/L	0.6936	ppb	12:07:26
1	As 188.979†	34.4	35.5	44.483	µg/L	44.483	ppb	12:07:46
1	B 249.677†	1927.8	1741.3	26.472	µg/L	26.472	ppb	12:07:26
1	Ba 233.527†	56381.5	55951.5	1485.4	µg/L	1485.4	ppb	12:07:26
1	Be 313.107†	22135.1	18310.7	10.905	µg/L	10.905	ppb	12:07:26
1	Cd 226.502†	504.5	596.4	3.5500	µg/L	3.5500	ppb	12:07:26
1	Co 228.616†	2931.2	2978.2	142.91	µg/L	142.91	ppb	12:07:46
1	Cr 267.716†	5557.5	5645.2	122.77	µg/L	122.77	ppb	12:07:26
1	Cu 324.752†	11719.8	7588.4	89.602	µg/L	89.602	ppb	12:07:26
1	Mn 257.610†	2767887.5	2743627.4	9198.9	µg/L	9198.9	ppb	12:07:20
1	Mo 202.031†	-29.5	-28.1	3.0844	µg/L	3.0844	ppb	12:07:46
1	Ni 231.604†	2284.5	1948.7	110.53	µg/L	110.53	ppb	12:07:46
1	P 214.914†	574.8	388.8	671.78	µg/L	671.78	ppb	12:07:46
1	Pb 220.353†	783.0	738.7	206.64	µg/L	206.64	ppb	12:07:46
1	S 181.975 Axial†	105.7	76.7	359.06	µg/L	359.06	ppb	12:07:46
1	Sb 206.836†	33.9	14.0	20.947	µg/L	20.947	ppb	12:07:46
1	Se 196.026†	-49.6	-61.7	27.944	µg/L	27.944	ppb	12:07:46
1	SiO2†	74314.9	71038.1	13540	µg/L	13540	ppb	12:07:26
1	Si 251.611†	82763.8	81651.5	6193.9	µg/L	6193.9	ppb	12:07:26
1	Sn 189.927†	-106.9	-128.0	-34.893	µg/L	-34.893	ppb	12:07:46
1	Ti 334.940†	1125068.5	1114128.9	2655.3	µg/L	2655.3	ppb	12:07:20
1	Tl 190.801†	-52.7	-30.3	6.4690	µg/L	6.4690	ppb	12:07:46
1	U 409.014†	220.8	-407.2	-68.839	µg/L	-68.839	ppb	12:07:20
1	V 292.402†	24872.4	24781.3	303.09	µg/L	303.09	ppb	12:07:26
1	Zn 213.857†	12351.4	11639.7	299.78	µg/L	299.78	ppb	12:07:26
2	Sc RADIAL	115798.6	115798.6	105	%			12:06:51
2	Al 396.153Radial†	299222.5	286191.0	154500	µg/L	154500	ppb	12:06:51
2	Ca 317.933Radial†	69257.1	65860.7	27934	µg/L	27934	ppb	12:06:57
2	Fe 238.204 Radial†	24024.8	22974.2	164480	µg/L	164480	ppb	12:06:57
2	K 766.490 Radial†	25345.9	23480.0	13186	µg/L	13186	ppb	12:06:57
2	Mg 279.077 IEC†	4346.9	4143.9	27998	µg/L	27998	ppb	12:06:57
2	Na 589.592 Radial†	17110.5	16938.9	4722.4	µg/L	4722.4	ppb	12:06:57
2	Sr 421.552†	65192.4	62436.4	353.21	µg/L	353.21	ppb	12:06:51
2	Sc 361.383	2075120.1	2075120.1	101.07	%			12:07:54
2	Y 371.029	1303937.4	1303937.4	101.53	%			12:07:54
2	Ag 328.068†	-1277.1	-1468.8	0.9563	µg/L	0.9563	ppb	12:07:59
2	As 188.979†	24.6	25.7	26.327	µg/L	26.327	ppb	12:08:20
2	B 249.677†	1944.0	1753.9	26.971	µg/L	26.971	ppb	12:07:59
2	Ba 233.527†	57115.3	56577.9	1502.0	µg/L	1502.0	ppb	12:07:59
2	Be 313.107†	22364.9	18499.0	11.031	µg/L	11.031	ppb	12:07:59
2	Cd 226.502†	499.0	590.1	3.3677	µg/L	3.3677	ppb	12:07:59
2	Co 228.616†	2933.5	2975.3	142.79	µg/L	142.79	ppb	12:08:20
2	Cr 267.716†	5641.6	5718.5	124.36	µg/L	124.36	ppb	12:07:59
2	Cu 324.752†	11815.7	7662.6	90.178	µg/L	90.178	ppb	12:07:59
2	Mn 257.610†	2763308.4	2734207.5	9167.4	µg/L	9167.4	ppb	12:07:54
2	Mo 202.031†	-34.8	-33.2	2.4721	µg/L	2.4721	ppb	12:08:20
2	Ni 231.604†	2287.1	1947.3	110.45	µg/L	110.45	ppb	12:08:20
2	P 214.914†	560.4	373.6	639.83	µg/L	639.83	ppb	12:08:20
2	Pb 220.353†	782.5	736.8	206.20	µg/L	206.20	ppb	12:08:20

2	S 181.975 Axial†	93.9	64.9	299.49	µg/L	299.49 ppb	12:08:20
2	Sb 206.836†	24.0	4.2	10.926	µg/L	10.926 ppb	12:08:20
2	Se 196.026†	-52.1	-64.0	25.076	µg/L	25.076 ppb	12:08:20
2	SiO2†	75431.6	72011.6	13725	µg/L	13725 ppb	12:07:59
2	Si 251.611†	84056.6	82784.4	6281.7	µg/L	6281.7 ppb	12:07:59
2	Sn 189.927†	-112.5	-133.3	-37.632	µg/L	-37.632 ppb	12:08:20
2	Ti 334.940†	1122447.3	1109548.1	2644.4	µg/L	2644.4 ppb	12:07:54
2	Tl 190.801†	-47.8	-25.3	13.999	µg/L	13.999 ppb	12:08:20
2	U 409.014†	290.9	-338.2	-62.301	µg/L	-62.301 ppb	12:07:54
2	V 292.402†	25207.7	25069.0	306.48	µg/L	306.48 ppb	12:07:59
2	Zn 213.857†	12508.8	11773.6	303.43	µg/L	303.43 ppb	12:07:59
3	Sc RADIAL	115736.9	115736.9	104	%		12:07:03
3	Al 396.153Radial†	298947.8	286080.7	154440	µg/L	154440 ppb	12:07:03
3	Ca 317.933Radial†	68331.3	65009.6	27573	µg/L	27573 ppb	12:07:08
3	Fe 238.204 Radial†	23760.3	22733.2	162760	µg/L	162760 ppb	12:07:08
3	K 766.490 Radial†	25154.2	23309.4	13090	µg/L	13090 ppb	12:07:08
3	Mg 279.077 IEC†	4288.3	4090.0	27633	µg/L	27633 ppb	12:07:08
3	Na 589.592 Radial†	17043.1	16883.1	4706.9	µg/L	4706.9 ppb	12:07:08
3	Sr 421.552†	65085.5	62367.4	352.82	µg/L	352.82 ppb	12:07:03
3	Sc 361.383	2068985.1	2068985.1	100.77	%		12:08:27
3	Y 371.029	1312070.5	1312070.5	102.16	%		12:08:27
3	Ag 328.068†	-1328.0	-1523.0	0.2999	µg/L	0.2999 ppb	12:08:33
3	As 188.979†	25.1	26.3	27.817	µg/L	27.817 ppb	12:08:53
3	B 249.677†	1972.1	1787.4	29.018	µg/L	29.018 ppb	12:08:33
3	Ba 233.527†	56938.9	56570.4	1501.8	µg/L	1501.8 ppb	12:08:33
3	Be 313.107†	22347.1	18546.9	11.056	µg/L	11.056 ppb	12:08:33
3	Cd 226.502†	498.9	591.5	3.5344	µg/L	3.5344 ppb	12:08:33
3	Co 228.616†	2945.0	2995.3	143.75	µg/L	143.75 ppb	12:08:53
3	Cr 267.716†	5610.4	5704.2	124.05	µg/L	124.05 ppb	12:08:33
3	Cu 324.752†	11841.2	7722.5	90.236	µg/L	90.236 ppb	12:08:33
3	Mn 257.610†	2770887.5	2749835.2	9219.5	µg/L	9219.5 ppb	12:08:27
3	Mo 202.031†	-32.2	-30.7	2.7051	µg/L	2.7051 ppb	12:08:53
3	Ni 231.604†	2291.2	1958.1	111.06	µg/L	111.06 ppb	12:08:53
3	P 214.914†	566.8	381.6	658.49	µg/L	658.49 ppb	12:08:53
3	Pb 220.353†	771.7	728.4	204.01	µg/L	204.01 ppb	12:08:53
3	S 181.975 Axial†	99.5	70.7	329.10	µg/L	329.10 ppb	12:08:53
3	Sb 206.836†	29.0	9.1	16.060	µg/L	16.060 ppb	12:08:53
3	Se 196.026†	-54.5	-66.5	20.733	µg/L	20.733 ppb	12:08:53
3	SiO2†	75272.7	72075.2	13737	µg/L	13737 ppb	12:08:33
3	Si 251.611†	83726.5	82703.4	6274.9	µg/L	6274.9 ppb	12:08:33
3	Sn 189.927†	-113.5	-134.6	-38.654	µg/L	-38.654 ppb	12:08:53
3	Ti 334.940†	1126834.1	1117194.1	2662.6	µg/L	2662.6 ppb	12:08:27
3	Tl 190.801†	-54.4	-32.0	4.0689	µg/L	4.0689 ppb	12:08:53
3	U 409.014†	218.3	-409.4	-68.776	µg/L	-68.776 ppb	12:08:27
3	V 292.402†	25105.3	25041.4	306.00	µg/L	306.00 ppb	12:08:33
3	Zn 213.857†	12496.7	11798.3	304.29	µg/L	304.29 ppb	12:08:33

Mean Data: 241419011|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2071842.3	100.91	%	0.150				0.15%
Sc RADIAL	115861.1	105	%	0.1				0.14%
Y 371.029	1309890.5	101.99	%	0.406				0.40%
Ag 328.068†	-1494.7	0.6500	µg/L	0.33038	0.6500	ppb	0.33038	50.83%
Al 396.153Radial†	285611.0	154190	µg/L	491.6	154190	ppb	491.6	0.32%
As 188.979†	29.1	32.876	µg/L	10.0799	32.876	ppb	10.0799	30.66%
B 249.677†	1760.9	27.487	µg/L	1.3493	27.487	ppb	1.3493	4.91%
Ba 233.527†	56366.6	1496.4	µg/L	9.54	1496.4	ppb	9.54	0.64%
Be 313.107†	18452.2	10.997	µg/L	0.0809	10.997	ppb	0.0809	0.74%
Ca 317.933Radial†	65527.0	27792	µg/L	192.7	27792	ppb	192.7	0.69%
Cd 226.502†	592.7	3.4841	µg/L	0.10106	3.4841	ppb	0.10106	2.90%
Co 228.616†	2982.9	143.15	µg/L	0.524	143.15	ppb	0.524	0.37%
Cr 267.716†	5689.3	123.73	µg/L	0.845	123.73	ppb	0.845	0.68%
Cu 324.752†	7657.8	90.005	µg/L	0.3506	90.005	ppb	0.3506	0.39%
Fe 238.204 Radial†	22884.1	163840	µg/L	941.6	163840	ppb	941.6	0.57%
K 766.490 Radial†	23409.8	13147	µg/L	50.1	13147	ppb	50.1	0.38%
Mg 279.077 IEC†	4130.9	27910	µg/L	245.6	27910	ppb	245.6	0.88%
Mn 257.610†	2742556.7	9195.3	µg/L	26.22	9195.3	ppb	26.22	0.29%
Mo 202.031†	-30.7	2.7538	µg/L	0.30906	2.7538	ppb	0.30906	11.22%
Na 589.592 Radial†	16881.9	4706.6	µg/L	16.06	4706.6	ppb	16.06	0.34%

Ni 231.604†	1951.4	110.68	µg/L	0.332	110.68	ppb	0.332	0.30%
P 214.914†	381.3	656.70	µg/L	16.050	656.70	ppb	16.050	2.44%
Pb 220.353†	734.6	205.62	µg/L	1.409	205.62	ppb	1.409	0.69%
S 181.975 Axial†	70.8	329.22	µg/L	29.787	329.22	ppb	29.787	9.05%
Sb 206.836†	9.1	15.978	µg/L	5.0109	15.978	ppb	5.0109	31.36%
Se 196.026†	-64.1	24.584	µg/L	3.6305	24.584	ppb	3.6305	14.77%
SiO2†	71708.3	13668	µg/L	110.8	13668	ppb	110.8	0.81%
Si 251.611†	82379.8	6250.2	µg/L	48.84	6250.2	ppb	48.84	0.78%
Sn 189.927†	-132.0	-37.060	µg/L	1.9446	-37.060	ppb	1.9446	5.25%
Sr 421.552†	62288.3	352.37	µg/L	1.130	352.37	ppb	1.130	0.32%
Ti 334.940†	1113623.7	2654.1	µg/L	9.19	2654.1	ppb	9.19	0.35%
Tl 190.801†	-29.2	8.1790	µg/L	5.18120	8.1790	ppb	5.18120	63.35%
U 409.014†	-384.9	-66.639	µg/L	3.7566	-66.639	ppb	3.7566	5.64%
V 292.402†	24963.9	305.19	µg/L	1.835	305.19	ppb	1.835	0.60%
Zn 213.857†	11737.2	302.50	µg/L	2.395	302.50	ppb	2.395	0.79%

Sequence No.: 24
Sample ID: 241419012|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 318
Date Collected: 12/11/2009 12:09:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419012|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113373.2	113373.2	102	%			12:09:35
1	Al 396.153Radial†	186189.7	181837.8	98167	µg/L	98167	ppb	12:09:35
1	Ca 317.933Radial†	49370.5	47841.3	20291	µg/L	20291	ppb	12:09:35
1	Fe 238.204 Radial†	19656.5	19196.4	137430	µg/L	137430	ppb	12:09:56
1	K 766.490 Radial†	25452.7	24103.2	13536	µg/L	13536	ppb	12:09:35
1	Mg 279.077 IEC†	2845.6	2765.5	18644	µg/L	18644	ppb	12:09:56
1	Na 589.592 Radial†	1577.2	2106.8	587.37	µg/L	587.37	ppb	12:09:56
1	Sr 421.552†	44000.3	43057.8	243.58	µg/L	243.58	ppb	12:09:35
1	Sc 361.383	2059711.8	2059711.8	100.32	%			12:11:00
1	Y 371.029	1309477.2	1309477.2	101.96	%			12:11:00
1	Ag 328.068†	-1091.7	-1293.4	0.4951	µg/L	0.4951	ppb	12:11:06
1	As 188.979†	26.4	27.7	39.098	µg/L	39.098	ppb	12:11:26
1	B 249.677†	1767.5	1592.4	28.229	µg/L	28.229	ppb	12:11:06
1	Ba 233.527†	50033.8	49942.0	1325.9	µg/L	1325.9	ppb	12:11:06
1	Be 313.107†	18688.7	15000.2	8.2130	µg/L	8.2130	ppb	12:11:06
1	Cd 226.502†	374.9	470.0	2.1617	µg/L	2.1617	ppb	12:11:06
1	Co 228.616†	1542.4	1610.4	71.664	µg/L	71.664	ppb	12:11:26
1	Cr 267.716†	4479.1	4601.6	100.21	µg/L	100.21	ppb	12:11:06
1	Cu 324.752†	9471.8	5413.6	68.271	µg/L	68.271	ppb	12:11:06
1	Mn 257.610†	1414360.7	1410054.0	4734.3	µg/L	4734.3	ppb	12:11:00
1	Mo 202.031†	-25.1	-23.9	2.5342	µg/L	2.5342	ppb	12:11:26
1	Ni 231.604†	1514.8	1194.4	67.746	µg/L	67.746	ppb	12:11:26
1	P 214.914†	855.5	671.8	1279.4	µg/L	1279.4	ppb	12:11:26
1	Pb 220.353†	524.2	485.1	135.08	µg/L	135.08	ppb	12:11:26
1	S 181.975 Axial†	153.0	124.5	605.48	µg/L	605.48	ppb	12:11:26
1	Sb 206.836†	23.5	3.8	16.941	µg/L	16.941	ppb	12:11:26
1	Se 196.026†	-43.3	-55.7	19.716	µg/L	19.716	ppb	12:11:26
1	SiO2†	119546.5	116542.9	22213	µg/L	22213	ppb	12:11:06
1	Si 251.611†	134371.1	133559.1	10141	µg/L	10141	ppb	12:11:06
1	Sn 189.927†	-97.9	-119.6	-37.317	µg/L	-37.317	ppb	12:11:26
1	Ti 334.940†	1735108.2	1728544.7	4120.9	µg/L	4120.9	ppb	12:11:00
1	Tl 190.801†	-48.1	-26.0	6.7039	µg/L	6.7039	ppb	12:11:26
1	U 409.014†	334.6	-292.4	-53.065	µg/L	-53.065	ppb	12:11:00
1	V 292.402†	24992.7	25041.3	303.96	µg/L	303.96	ppb	12:11:06
1	Zn 213.857†	10574.7	9938.4	256.56	µg/L	256.56	ppb	12:11:06
2	Sc RADIAL	115204.5	115204.5	104	%			12:10:01
2	Al 396.153Radial†	186446.1	179191.6	96739	µg/L	96739	ppb	12:10:01
2	Ca 317.933Radial†	49294.1	47000.7	19934	µg/L	19934	ppb	12:10:01
2	Fe 238.204 Radial†	19781.4	19011.1	136110	µg/L	136110	ppb	12:10:22
2	K 766.490 Radial†	25594.1	23843.8	13391	µg/L	13391	ppb	12:10:01
2	Mg 279.077 IEC†	2858.0	2733.3	18426	µg/L	18426	ppb	12:10:22
2	Na 589.592 Radial†	1582.2	2087.2	581.89	µg/L	581.89	ppb	12:10:22
2	Sr 421.552†	44033.5	42406.1	239.90	µg/L	239.90	ppb	12:10:01
2	Sc 361.383	2064601.5	2064601.5	100.56	%			12:11:34
2	Y 371.029	1313690.3	1313690.3	102.29	%			12:11:34
2	Ag 328.068†	-1161.7	-1360.5	-0.2664	µg/L	-0.2664	ppb	12:11:39
2	As 188.979†	28.4	29.6	42.929	µg/L	42.929	ppb	12:12:00
2	B 249.677†	1756.1	1576.8	27.948	µg/L	27.948	ppb	12:11:39
2	Ba 233.527†	49779.3	49570.8	1316.1	µg/L	1316.1	ppb	12:11:39
2	Be 313.107†	18691.1	14958.5	8.1812	µg/L	8.1812	ppb	12:11:39
2	Cd 226.502†	403.4	497.5	3.0165	µg/L	3.0165	ppb	12:11:39
2	Co 228.616†	1548.9	1613.2	71.776	µg/L	71.776	ppb	12:12:00
2	Cr 267.716†	4467.7	4579.7	99.726	µg/L	99.726	ppb	12:11:39
2	Cu 324.752†	9526.7	5445.9	68.216	µg/L	68.216	ppb	12:11:39
2	Mn 257.610†	1422264.1	1414574.3	4749.3	µg/L	4749.3	ppb	12:11:34
2	Mo 202.031†	-23.0	-21.7	2.7420	µg/L	2.7420	ppb	12:12:00
2	Ni 231.604†	1527.4	1203.4	68.254	µg/L	68.254	ppb	12:12:00
2	P 214.914†	863.7	678.0	1293.5	µg/L	1293.5	ppb	12:12:00
2	Pb 220.353†	539.6	499.2	138.71	µg/L	138.71	ppb	12:12:00

2	S 181.975 Axial†	157.3	128.4	625.62 µg/L	625.62 ppb	12:12:00
2	Sb 206.836†	23.4	3.7	16.883 µg/L	16.883 ppb	12:12:00
2	Se 196.026†	-41.5	-53.8	21.242 µg/L	21.242 ppb	12:12:00
2	SiO2†	118885.8	115603.6	22034 µg/L	22034 ppb	12:11:39
2	Si 251.611†	133448.2	132324.2	10045 µg/L	10045 ppb	12:11:39
2	Sn 189.927†	-91.3	-112.9	-34.099 µg/L	-34.099 ppb	12:12:00
2	Ti 334.940†	1744650.6	1733937.7	4133.8 µg/L	4133.8 ppb	12:11:34
2	Tl 190.801†	-40.4	-18.2	18.852 µg/L	18.852 ppb	12:12:00
2	U 409.014†	433.4	-195.0	-43.538 µg/L	-43.538 ppb	12:11:34
2	V 292.402†	24844.4	24834.9	301.46 µg/L	301.46 ppb	12:11:39
2	Zn 213.857†	10508.3	9847.3	254.21 µg/L	254.21 ppb	12:11:39
3	Sc RADIAL	114997.2	114997.2	104 %		12:10:27
3	Al 396.153Radial†	185507.1	178610.1	96425 µg/L	96425 ppb	12:10:27
3	Ca 317.933Radial†	49109.7	46908.6	19895 µg/L	19895 ppb	12:10:27
3	Fe 238.204 Radial†	19842.5	19104.4	136780 µg/L	136780 ppb	12:10:48
3	K 766.490 Radial†	25286.5	23591.7	13249 µg/L	13249 ppb	12:10:27
3	Mg 279.077 IEC†	2854.8	2735.1	18438 µg/L	18438 ppb	12:10:48
3	Na 589.592 Radial†	1582.2	2089.9	582.65 µg/L	582.65 ppb	12:10:48
3	Sr 421.552†	43770.2	42228.7	238.89 µg/L	238.89 ppb	12:10:27
3	Sc 361.383	2089544.0	2089544.0	101.78 %		12:12:07
3	Y 371.029	1332500.9	1332500.9	103.76 %		12:12:07
3	Ag 328.068†	-1123.6	-1309.2	0.2680 µg/L	0.2680 ppb	12:12:13
3	As 188.979†	29.6	30.4	44.014 µg/L	44.014 ppb	12:12:33
3	B 249.677†	1731.0	1531.3	25.699 µg/L	25.699 ppb	12:12:13
3	Ba 233.527†	50316.6	49507.9	1314.4 µg/L	1314.4 ppb	12:12:13
3	Be 313.107†	18738.1	14782.7	8.1067 µg/L	8.1067 ppb	12:12:13
3	Cd 226.502†	399.0	488.4	2.7124 µg/L	2.7124 ppb	12:12:13
3	Co 228.616†	1535.5	1581.7	70.434 µg/L	70.434 ppb	12:12:33
3	Cr 267.716†	4474.2	4533.0	98.714 µg/L	98.714 ppb	12:12:13
3	Cu 324.752†	9563.0	5368.4	67.806 µg/L	67.806 ppb	12:12:13
3	Mn 257.610†	1401214.6	1377009.5	4623.7 µg/L	4623.7 ppb	12:12:07
3	Mo 202.031†	-12.0	-10.6	4.0966 µg/L	4.0966 ppb	12:12:33
3	Ni 231.604†	1525.7	1183.6	67.130 µg/L	67.130 ppb	12:12:33
3	P 214.914†	855.1	659.3	1253.4 µg/L	1253.4 ppb	12:12:33
3	Pb 220.353†	533.5	486.8	135.40 µg/L	135.40 ppb	12:12:33
3	S 181.975 Axial†	154.6	123.9	602.58 µg/L	602.58 ppb	12:12:33
3	Sb 206.836†	26.1	6.0	18.840 µg/L	18.840 ppb	12:12:33
3	Se 196.026†	-41.1	-52.8	22.906 µg/L	22.906 ppb	12:12:33
3	SiO2†	120399.5	115679.7	22048 µg/L	22048 ppb	12:12:13
3	Si 251.611†	135256.1	132516.4	10064 µg/L	10064 ppb	12:12:13
3	Sn 189.927†	-93.0	-113.4	-34.296 µg/L	-34.296 ppb	12:12:33
3	Ti 334.940†	1720009.9	1689017.5	4026.7 µg/L	4026.7 ppb	12:12:07
3	Tl 190.801†	-41.9	-19.2	16.001 µg/L	16.001 ppb	12:12:33
3	U 409.014†	375.3	-257.2	-49.593 µg/L	-49.593 ppb	12:12:07
3	V 292.402†	25039.2	24731.3	300.30 µg/L	300.30 ppb	12:12:13
3	Zn 213.857†	10591.6	9804.5	252.97 µg/L	252.97 ppb	12:12:13

Mean Data: 241419012|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2071285.8	100.89	%	0.779				0.77%
Sc RADIAL	114525.0	103	%	0.9				0.88%
Y 371.029	1318556.1	102.67	%	0.955				0.93%
Ag 328.068†	-1321.0	0.1656	µg/L	0.39094	0.1656	ppb	0.39094	236.10%
Al 396.153Radial†	179879.9	97110	µg/L	928.8	97110	ppb	928.8	0.96%
As 188.979†	29.2	42.013	µg/L	2.5825	42.013	ppb	2.5825	6.15%
B 249.677†	1566.8	27.292	µg/L	1.3870	27.292	ppb	1.3870	5.08%
Ba 233.527†	49673.6	1318.8	µg/L	6.23	1318.8	ppb	6.23	0.47%
Be 313.107†	14913.8	8.1670	µg/L	0.05456	8.1670	ppb	0.05456	0.67%
Ca 317.933Radial†	47250.2	20040	µg/L	218.0	20040	ppb	218.0	1.09%
Cd 226.502†	485.3	2.6302	µg/L	0.43329	2.6302	ppb	0.43329	16.47%
Co 228.616†	1601.7	71.291	µg/L	0.7450	71.291	ppb	0.7450	1.04%
Cr 267.716†	4571.4	99.549	µg/L	0.7616	99.549	ppb	0.7616	0.77%
Cu 324.752†	5409.3	68.098	µg/L	0.2543	68.098	ppb	0.2543	0.37%
Fe 238.204 Radial†	19104.0	136770	µg/L	663.1	136770	ppb	663.1	0.48%
K 766.490 Radial†	23846.3	13392	µg/L	143.6	13392	ppb	143.6	1.07%
Mg 279.077 IEC†	2744.6	18503	µg/L	122.7	18503	ppb	122.7	0.66%
Mn 257.610†	1400545.9	4702.4	µg/L	68.60	4702.4	ppb	68.60	1.46%
Mo 202.031†	-18.7	3.1243	µg/L	0.84847	3.1243	ppb	0.84847	27.16%
Na 589.592 Radial†	2094.6	583.97	µg/L	2.968	583.97	ppb	2.968	0.51%

Ni 231.604†	1193.8	67.710	µg/L	0.5630	67.710	ppb	0.5630	0.83%
P 214.914†	669.7	1275.4	µg/L	20.36	1275.4	ppb	20.36	1.60%
Pb 220.353†	490.4	136.40	µg/L	2.008	136.40	ppb	2.008	1.47%
S 181.975 Axial†	125.6	611.23	µg/L	12.548	611.23	ppb	12.548	2.05%
Sb 206.836†	4.5	17.555	µg/L	1.1137	17.555	ppb	1.1137	6.34%
Se 196.026†	-54.1	21.288	µg/L	1.5957	21.288	ppb	1.5957	7.50%
SiO2†	115942.1	22098	µg/L	99.4	22098	ppb	99.4	0.45%
Si 251.611†	132799.9	10083	µg/L	50.7	10083	ppb	50.7	0.50%
Sn 189.927†	-115.3	-35.237	µg/L	1.8034	-35.237	ppb	1.8034	5.12%
Sr 421.552†	42564.2	240.79	µg/L	2.470	240.79	ppb	2.470	1.03%
Ti 334.940†	1717166.7	4093.8	µg/L	58.48	4093.8	ppb	58.48	1.43%
Tl 190.801†	-21.1	13.852	µg/L	6.3528	13.852	ppb	6.3528	45.86%
U 409.014†	-248.2	-48.732	µg/L	4.8212	-48.732	ppb	4.8212	9.89%
V 292.402†	24869.2	301.90	µg/L	1.872	301.90	ppb	1.872	0.62%
Zn 213.857†	9863.4	254.58	µg/L	1.822	254.58	ppb	1.822	0.72%

Sequence No.: 25
Sample ID: 241419013|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 319
Date Collected: 12/11/2009 12:12:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419013|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114061.3	114061.3	103	%			12:13:15
1	Al 396.153Radial†	167266.8	162356.2	87650	µg/L	87650	ppb	12:13:15
1	Ca 317.933Radial†	41897.0	40289.6	17088	µg/L	17088	ppb	12:13:15
1	Fe 238.204 Radial†	17931.9	17405.0	124610	µg/L	124610	ppb	12:13:35
1	K 766.490 Radial†	20385.4	19030.2	10687	µg/L	10687	ppb	12:13:15
1	Mg 279.077 IEC†	2709.1	2616.1	17645	µg/L	17645	ppb	12:13:35
1	Na 589.592 Radial†	4619.9	5053.5	1408.9	µg/L	1408.9	ppb	12:13:35
1	Sr 421.552†	44421.5	43207.5	244.43	µg/L	244.43	ppb	12:13:15
1	Sc 361.383	2103406.5	2103406.5	102.45	%			12:14:40
1	Y 371.029	1338860.3	1338860.3	104.25	%			12:14:40
1	Ag 328.068†	-1044.3	-1224.5	-0.0297	µg/L	-0.0297	ppb	12:14:45
1	As 188.979†	11.3	12.4	14.721	µg/L	14.721	ppb	12:15:06
1	B 249.677†	1548.3	1341.8	21.020	µg/L	21.020	ppb	12:14:45
1	Ba 233.527†	43861.8	42881.7	1138.5	µg/L	1138.5	ppb	12:14:45
1	Be 313.107†	18977.8	14895.4	7.9498	µg/L	7.9498	ppb	12:14:45
1	Cd 226.502†	370.2	457.7	2.8410	µg/L	2.8410	ppb	12:15:06
1	Co 228.616†	1342.5	1383.4	59.247	µg/L	59.247	ppb	12:15:06
1	Cr 267.716†	5751.1	5750.4	124.99	µg/L	124.99	ppb	12:14:45
1	Cu 324.752†	8922.6	4681.5	60.275	µg/L	60.275	ppb	12:14:45
1	Mn 257.610†	1296926.7	1266143.1	4251.3	µg/L	4251.3	ppb	12:14:40
1	Mo 202.031†	-16.1	-14.6	3.1487	µg/L	3.1487	ppb	12:15:06
1	Ni 231.604†	1805.1	1446.3	82.035	µg/L	82.035	ppb	12:15:06
1	P 214.914†	733.8	535.4	1004.7	µg/L	1004.7	ppb	12:15:06
1	Pb 220.353†	482.9	433.9	120.80	µg/L	120.80	ppb	12:15:06
1	S 181.975 Axial†	142.3	110.9	539.00	µg/L	539.00	ppb	12:15:06
1	Sb 206.836†	16.0	-4.0	11.178	µg/L	11.178	ppb	12:15:06
1	Se 196.026†	-40.8	-52.3	14.999	µg/L	14.999	ppb	12:15:06
1	SiO2†	128263.4	122575.8	23363	µg/L	23363	ppb	12:14:45
1	Si 251.611†	144105.2	140278.0	10640	µg/L	10640	ppb	12:14:45
1	Sn 189.927†	-91.8	-111.7	-35.619	µg/L	-35.619	ppb	12:15:06
1	Ti 334.940†	1998455.6	1949663.6	4648.4	µg/L	4648.4	ppb	12:14:40
1	Tl 190.801†	-41.0	-18.1	21.118	µg/L	21.118	ppb	12:15:06
1	U 409.014†	420.6	-215.4	-43.403	µg/L	-43.403	ppb	12:14:40
1	V 292.402†	23330.5	22901.4	277.91	µg/L	277.91	ppb	12:14:45
1	Zn 213.857†	9325.9	8500.4	218.51	µg/L	218.51	ppb	12:14:45
2	Sc RADIAL	114076.1	114076.1	103	%			12:13:41
2	Al 396.153Radial†	169519.2	164523.1	88820	µg/L	88820	ppb	12:13:41
2	Ca 317.933Radial†	42401.1	40774.0	17293	µg/L	17293	ppb	12:13:41
2	Fe 238.204 Radial†	17862.8	17335.7	124110	µg/L	124110	ppb	12:14:01
2	K 766.490 Radial†	20589.0	19225.5	10797	µg/L	10797	ppb	12:13:41
2	Mg 279.077 IEC†	2697.2	2604.2	17565	µg/L	17565	ppb	12:14:01
2	Na 589.592 Radial†	4615.9	5049.1	1407.7	µg/L	1407.7	ppb	12:14:01
2	Sr 421.552†	45105.5	43866.4	248.16	µg/L	248.16	ppb	12:13:41
2	Sc 361.383	2086993.3	2086993.3	101.65	%			12:15:13
2	Y 371.029	1327092.5	1327092.5	103.33	%			12:15:13
2	Ag 328.068†	-1013.3	-1202.0	0.1512	µg/L	0.1512	ppb	12:15:19
2	As 188.979†	13.9	15.1	19.841	µg/L	19.841	ppb	12:15:39
2	B 249.677†	1596.3	1400.9	23.828	µg/L	23.828	ppb	12:15:19
2	Ba 233.527†	43518.8	42880.9	1138.5	µg/L	1138.5	ppb	12:15:19
2	Be 313.107†	18935.2	14999.1	7.9948	µg/L	7.9948	ppb	12:15:19
2	Cd 226.502†	370.5	460.9	2.9631	µg/L	2.9631	ppb	12:15:39
2	Co 228.616†	1333.8	1385.1	59.208	µg/L	59.208	ppb	12:15:39
2	Cr 267.716†	5714.2	5758.3	125.17	µg/L	125.17	ppb	12:15:19
2	Cu 324.752†	8920.7	4748.0	60.645	µg/L	60.645	ppb	12:15:19
2	Mn 257.610†	1304387.6	1283438.5	4309.1	µg/L	4309.1	ppb	12:15:13
2	Mo 202.031†	-16.5	-15.1	3.0686	µg/L	3.0686	ppb	12:15:39
2	Ni 231.604†	1782.4	1437.9	81.556	µg/L	81.556	ppb	12:15:39
2	P 214.914†	741.8	548.9	1034.0	µg/L	1034.0	ppb	12:15:39
2	Pb 220.353†	483.9	438.7	122.17	µg/L	122.17	ppb	12:15:39

2	S 181.975 Axial†	145.6	115.3	561.24	µg/L	561.24 ppb	12:15:39
2	Sb 206.836†	26.5	6.5	22.002	µg/L	22.002 ppb	12:15:39
2	Se 196.026†	-40.4	-52.3	14.795	µg/L	14.795 ppb	12:15:39
2	SiO2†	127317.4	122629.8	23373	µg/L	23373 ppb	12:15:19
2	Si 251.611†	143065.9	140361.7	10645	µg/L	10645 ppb	12:15:19
2	Sn 189.927†	-86.5	-107.1	-33.310	µg/L	-33.310 ppb	12:15:39
2	Ti 334.940†	2008609.9	1974993.7	4708.8	µg/L	4708.8 ppb	12:15:13
2	Tl 190.801†	-46.5	-23.8	13.044	µg/L	13.044 ppb	12:15:39
2	U 409.014†	388.8	-243.5	-45.986	µg/L	-45.986 ppb	12:15:13
2	V 292.402†	23215.2	22967.0	278.63	µg/L	278.63 ppb	12:15:19
2	Zn 213.857†	9227.1	8474.9	217.87	µg/L	217.87 ppb	12:15:19
3	Sc RADIAL	113548.3	113548.3	102	%		12:14:07
3	Al 396.153Radial†	169071.4	164851.4	88997	µg/L	88997 ppb	12:14:07
3	Ca 317.933Radial†	42134.5	40705.2	17264	µg/L	17264 ppb	12:14:07
3	Fe 238.204 Radial†	17832.5	17386.8	124480	µg/L	124480 ppb	12:14:27
3	K 766.490 Radial†	20641.4	19369.6	10878	µg/L	10878 ppb	12:14:07
3	Mg 279.077 IEC†	2698.4	2617.5	17655	µg/L	17655 ppb	12:14:27
3	Na 589.592 Radial†	4596.0	5050.6	1408.1	µg/L	1408.1 ppb	12:14:27
3	Sr 421.552†	44847.2	43817.9	247.88	µg/L	247.88 ppb	12:14:07
3	Sc 361.383	2068311.2	2068311.2	100.74	%		12:15:47
3	Y 371.029	1318794.1	1318794.1	102.69	%		12:15:47
3	Ag 328.068†	-976.5	-1174.6	0.4475	µg/L	0.4475 ppb	12:15:52
3	As 188.979†	17.1	18.4	26.083	µg/L	26.083 ppb	12:16:13
3	B 249.677†	1553.3	1372.3	22.431	µg/L	22.431 ppb	12:15:52
3	Ba 233.527†	43155.6	42907.1	1139.2	µg/L	1139.2 ppb	12:15:52
3	Be 313.107†	18799.0	15032.2	7.9877	µg/L	7.9877 ppb	12:15:52
3	Cd 226.502†	366.5	460.2	2.9143	µg/L	2.9143 ppb	12:16:13
3	Co 228.616†	1331.3	1394.5	59.517	µg/L	59.517 ppb	12:16:13
3	Cr 267.716†	5725.2	5819.9	126.50	µg/L	126.50 ppb	12:15:52
3	Cu 324.752†	8856.3	4763.4	60.834	µg/L	60.834 ppb	12:15:52
3	Mn 257.610†	1312393.7	1302976.2	4374.5	µg/L	4374.5 ppb	12:15:47
3	Mo 202.031†	-7.6	-6.3	4.1332	µg/L	4.1332 ppb	12:16:13
3	Ni 231.604†	1781.0	1452.3	82.376	µg/L	82.376 ppb	12:16:13
3	P 214.914†	735.6	549.3	1034.6	µg/L	1034.6 ppb	12:16:13
3	Pb 220.353†	499.9	458.8	127.52	µg/L	127.52 ppb	12:16:13
3	S 181.975 Axial†	143.8	114.7	558.26	µg/L	558.26 ppb	12:16:13
3	Sb 206.836†	16.9	-2.9	12.777	µg/L	12.777 ppb	12:16:13
3	Se 196.026†	-31.6	-43.9	25.754	µg/L	25.754 ppb	12:16:13
3	SiO2†	125645.6	122101.6	23272	µg/L	23272 ppb	12:15:52
3	Si 251.611†	141299.6	139879.7	10605	µg/L	10605 ppb	12:15:52
3	Sn 189.927†	-85.7	-107.1	-33.244	µg/L	-33.244 ppb	12:16:13
3	Ti 334.940†	2023184.0	2007308.6	4785.8	µg/L	4785.8 ppb	12:15:47
3	Tl 190.801†	-54.6	-32.3	0.7722	µg/L	0.7722 ppb	12:16:13
3	U 409.014†	345.6	-283.0	-49.818	µg/L	-49.818 ppb	12:15:47
3	V 292.402†	23075.2	23034.4	279.45	µg/L	279.45 ppb	12:15:52
3	Zn 213.857†	9156.3	8486.5	218.14	µg/L	218.14 ppb	12:15:52

Mean Data: 241419013|931347|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2086237.0	101.61	%	0.855				0.84%
Sc RADIAL	113895.2	103	%	0.3				0.26%
Y 371.029	1328249.0	103.42	%	0.785				0.76%
Ag 328.068†	-1200.4	0.1897	µg/L	0.24091	0.1897	ppb	0.24091	127.01%
Al 396.153Radial†	163910.2	88489	µg/L	731.9	88489	ppb	731.9	0.83%
As 188.979†	15.3	20.215	µg/L	5.6901	20.215	ppb	5.6901	28.15%
B 249.677†	1371.7	22.426	µg/L	1.4042	22.426	ppb	1.4042	6.26%
Ba 233.527†	42889.9	1138.7	µg/L	0.40	1138.7	ppb	0.40	0.03%
Be 313.107†	14975.6	7.9774	µg/L	0.02420	7.9774	ppb	0.02420	0.30%
Ca 317.933Radial†	40589.6	17215	µg/L	111.2	17215	ppb	111.2	0.65%
Cd 226.502†	459.6	2.9061	µg/L	0.06149	2.9061	ppb	0.06149	2.12%
Co 228.616†	1387.6	59.324	µg/L	0.1681	59.324	ppb	0.1681	0.28%
Cr 267.716†	5776.2	125.55	µg/L	0.825	125.55	ppb	0.825	0.66%
Cu 324.752†	4731.0	60.585	µg/L	0.2841	60.585	ppb	0.2841	0.47%
Fe 238.204 Radial†	17375.8	124400	µg/L	257.2	124400	ppb	257.2	0.21%
K 766.490 Radial†	19208.4	10787	µg/L	95.6	10787	ppb	95.6	0.89%
Mg 279.077 IEC†	2612.6	17621	µg/L	49.5	17621	ppb	49.5	0.28%
Mn 257.610†	1284185.9	4311.6	µg/L	61.64	4311.6	ppb	61.64	1.43%
Mo 202.031†	-12.0	3.4502	µg/L	0.59289	3.4502	ppb	0.59289	17.18%
Na 589.592 Radial†	5051.1	1408.2	µg/L	0.63	1408.2	ppb	0.63	0.04%

Ni 231.604†	1445.5	81.989	µg/L	0.4118	81.989	ppb	0.4118	0.50%
P 214.914†	544.5	1024.5	µg/L	17.09	1024.5	ppb	17.09	1.67%
Pb 220.353†	443.8	123.50	µg/L	3.547	123.50	ppb	3.547	2.87%
S 181.975 Axial†	113.6	552.83	µg/L	12.075	552.83	ppb	12.075	2.18%
Sb 206.836†	-0.1	15.319	µg/L	5.8425	15.319	ppb	5.8425	38.14%
Se 196.026†	-49.5	18.516	µg/L	6.2689	18.516	ppb	6.2689	33.86%
SiO2†	122435.7	23336	µg/L	55.4	23336	ppb	55.4	0.24%
Si 251.611†	140173.1	10630	µg/L	22.0	10630	ppb	22.0	0.21%
Sn 189.927†	-108.6	-34.058	µg/L	1.3524	-34.058	ppb	1.3524	3.97%
Sr 421.552†	43630.6	246.82	µg/L	2.077	246.82	ppb	2.077	0.84%
Ti 334.940†	1977321.9	4714.3	µg/L	68.90	4714.3	ppb	68.90	1.46%
Tl 190.801†	-24.7	11.645	µg/L	10.2448	11.645	ppb	10.2448	87.98%
U 409.014†	-247.3	-46.402	µg/L	3.2275	-46.402	ppb	3.2275	6.96%
V 292.402†	22967.6	278.67	µg/L	0.771	278.67	ppb	0.771	0.28%
Zn 213.857†	8487.3	218.18	µg/L	0.322	218.18	ppb	0.322	0.15%

Sequence No.: 26
Sample ID: 241419014|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 320
Date Collected: 12/11/2009 12:16:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419014|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112423.6	112423.6	101	%			12:16:54
1	Al 396.153Radial†	17860.3	17459.2	9425.4	µg/L	9425.4	ppb	12:16:54
1	Ca 317.933Radial†	13827.2	13215.2	5605.0	µg/L	5605.0	ppb	12:17:14
1	Fe 238.204 Radial†	11834.0	11648.4	83395	µg/L	83395	ppb	12:17:14
1	K 766.490 Radial†	6315.9	5451.0	3061.3	µg/L	3061.3	ppb	12:16:54
1	Mg 279.077 IEC†	580.3	556.2	3667.3	µg/L	3667.3	ppb	12:17:14
1	Na 589.592 Radial†	7081.8	7545.6	2103.7	µg/L	2103.7	ppb	12:16:54
1	Sr 421.552†	7163.0	7112.0	40.233	µg/L	40.233	ppb	12:16:54
1	Sc 361.383	2071695.0	2071695.0	100.91	%			12:18:18
1	Y 371.029	1343093.1	1343093.1	104.58	%			12:18:18
1	Ag 328.068†	-584.7	-784.6	-0.6309	µg/L	-0.6309	ppb	12:18:24
1	As 188.979†	-1.1	0.3	1.3593	µg/L	1.3593	ppb	12:18:44
1	B 249.677†	901.1	723.5	6.2391	µg/L	6.2391	ppb	12:18:24
1	Ba 233.527†	5476.8	5496.9	145.96	µg/L	145.96	ppb	12:18:24
1	Be 313.107†	10965.5	7238.6	2.8145	µg/L	2.8145	ppb	12:18:24
1	Cd 226.502†	206.6	301.1	1.6638	µg/L	1.6638	ppb	12:18:24
1	Co 228.616†	302.1	372.3	7.9344	µg/L	7.9344	ppb	12:18:44
1	Cr 267.716†	1332.0	1456.9	31.606	µg/L	31.606	ppb	12:18:24
1	Cu 324.752†	3129.3	-926.5	11.281	µg/L	11.281	ppb	12:18:24
1	Mn 257.610†	640900.9	635388.5	2136.0	µg/L	2136.0	ppb	12:18:18
1	Mo 202.031†	40.7	41.6	8.2702	µg/L	8.2702	ppb	12:18:44
1	Ni 231.604†	653.0	331.6	18.807	µg/L	18.807	ppb	12:18:44
1	P 214.914†	854.1	665.5	1303.5	µg/L	1303.5	ppb	12:18:44
1	Pb 220.353†	143.8	105.1	27.687	µg/L	27.687	ppb	12:18:44
1	S 181.975 Axial†	38.2	9.9	37.071	µg/L	37.071	ppb	12:18:44
1	Sb 206.836†	12.3	-7.4	10.791	µg/L	10.791	ppb	12:18:44
1	Se 196.026†	-31.6	-43.9	1.1825	µg/L	1.1825	ppb	12:18:44
1	SiO2†	65793.3	62583.3	11928	µg/L	11928	ppb	12:18:24
1	Si 251.611†	72966.7	71931.6	5358.8	µg/L	5358.8	ppb	12:18:24
1	Sn 189.927†	-11.3	-33.2	-5.3491	µg/L	-5.3491	ppb	12:18:44
1	Ti 334.940†	2155688.6	2135342.5	5091.8	µg/L	5091.8	ppb	12:18:18
1	Tl 190.801†	-39.5	-17.2	17.993	µg/L	17.993	ppb	12:18:24
1	U 409.014†	-372.1	-994.7	-110.30	µg/L	-110.30	ppb	12:18:18
1	V 292.402†	3446.9	3545.0	48.137	µg/L	48.137	ppb	12:18:24
1	Zn 213.857†	15652.4	14909.4	399.15	µg/L	399.15	ppb	12:18:24
2	Sc RADIAL	112795.5	112795.5	102	%			12:17:20
2	Al 396.153Radial†	18114.1	17650.5	9528.6	µg/L	9528.6	ppb	12:17:20
2	Ca 317.933Radial†	13793.9	13137.6	5572.0	µg/L	5572.0	ppb	12:17:40
2	Fe 238.204 Radial†	11798.0	11574.6	82866	µg/L	82866	ppb	12:17:40
2	K 766.490 Radial†	6355.3	5469.1	3071.4	µg/L	3071.4	ppb	12:17:20
2	Mg 279.077 IEC†	582.2	556.1	3667.8	µg/L	3667.8	ppb	12:17:40
2	Na 589.592 Radial†	7081.5	7522.2	2097.2	µg/L	2097.2	ppb	12:17:20
2	Sr 421.552†	7258.4	7182.4	40.631	µg/L	40.631	ppb	12:17:20
2	Sc 361.383	2059108.8	2059108.8	100.29	%			12:18:52
2	Y 371.029	1336250.6	1336250.6	104.05	%			12:18:52
2	Ag 328.068†	-660.4	-863.7	-1.4288	µg/L	-1.4288	ppb	12:18:58
2	As 188.979†	-2.2	-0.9	-0.5637	µg/L	-0.5637	ppb	12:19:18
2	B 249.677†	890.6	718.5	6.1789	µg/L	6.1789	ppb	12:18:58
2	Ba 233.527†	5497.6	5550.8	147.39	µg/L	147.39	ppb	12:18:58
2	Be 313.107†	11030.0	7369.3	2.8752	µg/L	2.8752	ppb	12:18:58
2	Cd 226.502†	201.1	296.9	1.5886	µg/L	1.5886	ppb	12:18:58
2	Co 228.616†	303.9	375.9	7.9789	µg/L	7.9789	ppb	12:19:18
2	Cr 267.716†	1371.9	1504.7	32.640	µg/L	32.640	ppb	12:18:58
2	Cu 324.752†	3024.2	-1012.3	10.554	µg/L	10.554	ppb	12:18:58
2	Mn 257.610†	644384.4	642744.0	2160.6	µg/L	2160.6	ppb	12:18:52
2	Mo 202.031†	37.6	38.7	7.9067	µg/L	7.9067	ppb	12:19:18
2	Ni 231.604†	657.2	339.7	19.268	µg/L	19.268	ppb	12:19:18
2	P 214.914†	849.2	665.8	1305.0	µg/L	1305.0	ppb	12:19:18
2	Pb 220.353†	139.1	101.3	26.702	µg/L	26.702	ppb	12:19:18

2	S 181.975 Axial†	39.1	10.9	42.448 µg/L	42.448 ppb	12:19:18
2	Sb 206.836†	18.2	-1.4	17.109 µg/L	17.109 ppb	12:19:18
2	Se 196.026†	-29.2	-41.7	3.6521 µg/L	3.6521 ppb	12:19:18
2	SiO2†	65638.2	62827.2	11975 µg/L	11975 ppb	12:18:58
2	Si 251.611†	72820.0	72227.4	5379.2 µg/L	5379.2 ppb	12:18:58
2	Sn 189.927†	-7.6	-29.6	-3.5455 µg/L	-3.5455 ppb	12:19:18
2	Ti 334.940†	2170010.2	2162680.2	5157.0 µg/L	5157.0 ppb	12:18:52
2	Tl 190.801†	-38.0	-15.9	20.489 µg/L	20.489 ppb	12:18:58
2	U 409.014†	-383.5	-1008.4	-111.50 µg/L	-111.50 ppb	12:18:52
2	V 292.402†	3414.2	3533.3	47.953 µg/L	47.953 ppb	12:18:58
2	Zn 213.857†	15754.2	15105.7	404.58 µg/L	404.58 ppb	12:18:58
3	Sc RADIAL	111934.4	111934.4	101 %		12:17:45
3	Al 396.153Radial†	17983.7	17658.3	9532.8 µg/L	9532.8 ppb	12:17:45
3	Ca 317.933Radial†	13795.0	13242.9	5616.7 µg/L	5616.7 ppb	12:18:06
3	Fe 238.204 Radial†	11799.8	11665.4	83517 µg/L	83517 ppb	12:18:06
3	K 766.490 Radial†	6371.9	5533.6	3107.7 µg/L	3107.7 ppb	12:17:45
3	Mg 279.077 IEC†	590.8	569.0	3754.9 µg/L	3754.9 ppb	12:18:06
3	Na 589.592 Radial†	7068.9	7563.3	2108.6 µg/L	2108.6 ppb	12:17:45
3	Sr 421.552†	7224.4	7203.5	40.751 µg/L	40.751 ppb	12:17:45
3	Sc 361.383	2083851.5	2083851.5	101.50 %		12:19:25
3	Y 371.029	1345432.3	1345432.3	104.76 %		12:19:25
3	Ag 328.068†	-589.7	-786.2	-0.6362 µg/L	-0.6362 ppb	12:19:31
3	As 188.979†	10.6	11.8	22.511 µg/L	22.511 ppb	12:19:52
3	B 249.677†	920.0	737.0	6.8041 µg/L	6.8041 ppb	12:19:31
3	Ba 233.527†	5471.9	5460.3	144.99 µg/L	144.99 ppb	12:19:31
3	Be 313.107†	10901.6	7112.3	2.7388 µg/L	2.7388 ppb	12:19:31
3	Cd 226.502†	206.6	299.9	1.6246 µg/L	1.6246 ppb	12:19:31
3	Co 228.616†	295.6	364.2	7.5647 µg/L	7.5647 ppb	12:19:52
3	Cr 267.716†	1365.4	1482.1	32.152 µg/L	32.152 ppb	12:19:31
3	Cu 324.752†	3036.9	-1035.7	10.526 µg/L	10.526 ppb	12:19:31
3	Mn 257.610†	641903.6	632671.1	2127.0 µg/L	2127.0 ppb	12:19:25
3	Mo 202.031†	40.3	40.9	8.1932 µg/L	8.1932 ppb	12:19:52
3	Ni 231.604†	662.1	336.8	19.103 µg/L	19.103 ppb	12:19:52
3	P 214.914†	844.2	650.9	1272.9 µg/L	1272.9 ppb	12:19:52
3	Pb 220.353†	143.6	104.1	27.420 µg/L	27.420 ppb	12:19:52
3	S 181.975 Axial†	39.6	11.0	42.680 µg/L	42.680 ppb	12:19:52
3	Sb 206.836†	10.3	-9.5	8.6221 µg/L	8.6221 ppb	12:19:52
3	Se 196.026†	-30.7	-42.8	2.6375 µg/L	2.6375 ppb	12:19:52
3	SiO2†	66024.0	62430.2	11899 µg/L	11899 ppb	12:19:31
3	Si 251.611†	73254.2	71793.0	5348.5 µg/L	5348.5 ppb	12:19:31
3	Sn 189.927†	-0.9	-22.9	0.0078 µg/L	0.0078 ppb	12:19:52
3	Ti 334.940†	2161045.1	2128157.2	5074.7 µg/L	5074.7 ppb	12:19:25
3	Tl 190.801†	-48.5	-25.8	4.4965 µg/L	4.4965 ppb	12:19:31
3	U 409.014†	-337.2	-958.2	-106.84 µg/L	-106.84 ppb	12:19:25
3	V 292.402†	3465.3	3543.2	48.131 µg/L	48.131 ppb	12:19:31
3	Zn 213.857†	15651.4	14818.0	396.63 µg/L	396.63 ppb	12:19:31

Mean Data: 241419014|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2071551.8	100.90	%	0.603				0.60%
Sc RADIAL	112384.5	101	%	0.4				0.38%
Y 371.029	1341592.0	104.46	%	0.372				0.36%
Ag 328.068†	-811.5	-0.8986	µg/L	0.45916	-0.8986	ppb	0.45916	51.10%
Al 396.153Radial†	17589.3	9495.6	µg/L	60.87	9495.6	ppb	60.87	0.64%
As 188.979†	3.7	7.7687	µg/L	12.80305	7.7687	ppb	12.80305	164.80%
B 249.677†	726.3	6.4074	µg/L	0.34487	6.4074	ppb	0.34487	5.38%
Ba 233.527†	5502.7	146.11	µg/L	1.207	146.11	ppb	1.207	0.83%
Be 313.107†	7240.1	2.8095	µg/L	0.06835	2.8095	ppb	0.06835	2.43%
Ca 317.933Radial†	13198.6	5597.9	µg/L	23.16	5597.9	ppb	23.16	0.41%
Cd 226.502†	299.3	1.6257	µg/L	0.03763	1.6257	ppb	0.03763	2.31%
Co 228.616†	370.8	7.8260	µg/L	0.22740	7.8260	ppb	0.22740	2.91%
Cr 267.716†	1481.2	32.132	µg/L	0.5174	32.132	ppb	0.5174	1.61%
Cu 324.752†	-991.5	10.787	µg/L	0.4282	10.787	ppb	0.4282	3.97%
Fe 238.204 Radial†	11629.5	83259	µg/L	345.8	83259	ppb	345.8	0.42%
K 766.490 Radial†	5484.6	3080.1	µg/L	24.40	3080.1	ppb	24.40	0.79%
Mg 279.077 IEC†	560.4	3696.7	µg/L	50.42	3696.7	ppb	50.42	1.36%
Mn 257.610†	636934.6	2141.2	µg/L	17.39	2141.2	ppb	17.39	0.81%
Mo 202.031†	40.4	8.1233	µg/L	0.19155	8.1233	ppb	0.19155	2.36%
Na 589.592 Radial†	7543.7	2103.1	µg/L	5.74	2103.1	ppb	5.74	0.27%

Ni 231.604†	336.0	19.059	µg/L	0.2334	19.059	ppb	0.2334	1.22%
P 214.914†	660.7	1293.8	µg/L	18.12	1293.8	ppb	18.12	1.40%
Pb 220.353†	103.5	27.270	µg/L	0.5091	27.270	ppb	0.5091	1.87%
S 181.975 Axial†	10.6	40.733	µg/L	3.1736	40.733	ppb	3.1736	7.79%
Sb 206.836†	-6.1	12.174	µg/L	4.4094	12.174	ppb	4.4094	36.22%
Se 196.026†	-42.8	2.4907	µg/L	1.24133	2.4907	ppb	1.24133	49.84%
SiO2†	62613.6	11934	µg/L	38.2	11934	ppb	38.2	0.32%
Si 251.611†	71984.0	5362.2	µg/L	15.60	5362.2	ppb	15.60	0.29%
Sn 189.927†	-28.6	-2.9623	µg/L	2.72565	-2.9623	ppb	2.72565	92.01%
Sr 421.552†	7166.0	40.539	µg/L	0.2712	40.539	ppb	0.2712	0.67%
Ti 334.940†	2142060.0	5107.8	µg/L	43.44	5107.8	ppb	43.44	0.85%
Tl 190.801†	-19.7	14.326	µg/L	8.6036	14.326	ppb	8.6036	60.06%
U 409.014†	-987.1	-109.55	µg/L	2.420	-109.55	ppb	2.420	2.21%
V 292.402†	3540.5	48.073	µg/L	0.1045	48.073	ppb	0.1045	0.22%
Zn 213.857†	14944.4	400.12	µg/L	4.062	400.12	ppb	4.062	1.02%

Sequence No.: 27
Sample ID: 241419015|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 321
Date Collected: 12/11/2009 12:20:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419015|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114596.7	114596.7	103	%			12:20:34
1	Al 396.153Radial†	301912.2	291795.0	157530	µg/L	157530	ppb	12:20:34
1	Ca 317.933Radial†	70171.2	67439.8	28603	µg/L	28603	ppb	12:20:39
1	Fe 238.204 Radial†	24431.4	23608.4	169020	µg/L	169020	ppb	12:20:39
1	K 766.490 Radial†	26379.2	24733.5	13890	µg/L	13890	ppb	12:20:39
1	Mg 279.077 IEC†	4297.8	4140.0	27965	µg/L	27965	ppb	12:20:39
1	Na 589.592 Radial†	15867.8	15909.0	4435.3	µg/L	4435.3	ppb	12:20:39
1	Sr 421.552†	62544.0	60529.8	342.42	µg/L	342.42	ppb	12:20:34
1	Sc 361.383	2094015.2	2094015.2	101.99	%			12:21:13
1	Y 371.029	1331285.0	1331285.0	103.66	%			12:21:13
1	Ag 328.068†	-1282.1	-1462.2	1.3376	µg/L	1.3376	ppb	12:21:19
1	As 188.979†	23.0	23.9	23.222	µg/L	23.222	ppb	12:21:39
1	B 249.677†	2069.2	1859.3	30.273	µg/L	30.273	ppb	12:21:19
1	Ba 233.527†	43583.4	42800.7	1136.4	µg/L	1136.4	ppb	12:21:19
1	Be 313.107†	22268.1	18204.4	10.706	µg/L	10.706	ppb	12:21:19
1	Cd 226.502†	467.8	555.0	2.0602	µg/L	2.0602	ppb	12:21:19
1	Co 228.616†	1077.4	1129.3	50.008	µg/L	50.008	ppb	12:21:39
1	Cr 267.716†	8315.5	8289.8	179.96	µg/L	179.96	ppb	12:21:19
1	Cu 324.752†	12676.7	8401.3	96.440	µg/L	96.440	ppb	12:21:19
1	Mn 257.610†	1021246.3	1001529.0	3371.7	µg/L	3371.7	ppb	12:21:13
1	Mo 202.031†	-26.7	-25.0	3.6378	µg/L	3.6378	ppb	12:21:39
1	Ni 231.604†	2108.6	1751.8	99.362	µg/L	99.362	ppb	12:21:39
1	P 214.914†	649.7	456.1	808.29	µg/L	808.29	ppb	12:21:39
1	Pb 220.353†	503.6	456.3	132.22	µg/L	132.22	ppb	12:21:39
1	S 181.975 Axial†	124.3	93.8	444.75	µg/L	444.75	ppb	12:21:39
1	Sb 206.836†	38.8	18.4	26.403	µg/L	26.403	ppb	12:21:39
1	Se 196.026†	-67.9	-79.1	9.0117	µg/L	9.0117	ppb	12:21:39
1	SiO2†	93729.6	89278.6	17016	µg/L	17016	ppb	12:21:19
1	Si 251.611†	104881.9	102452.2	7783.9	µg/L	7783.9	ppb	12:21:19
1	Sn 189.927†	-109.1	-129.0	-34.719	µg/L	-34.719	ppb	12:21:39
1	Ti 334.940†	1287173.9	1261034.0	3005.6	µg/L	3005.6	ppb	12:21:13
1	Tl 190.801†	-39.9	-17.2	6.6658	µg/L	6.6658	ppb	12:21:39
1	U 409.014†	435.2	-199.3	-49.884	µg/L	-49.884	ppb	12:21:13
1	V 292.402†	24933.8	24575.4	301.10	µg/L	301.10	ppb	12:21:19
1	Zn 213.857†	12326.5	11483.2	295.04	µg/L	295.04	ppb	12:21:19
2	Sc RADIAL	115755.8	115755.8	104	%			12:20:45
2	Al 396.153Radial†	306663.1	293419.8	158410	µg/L	158410	ppb	12:20:45
2	Ca 317.933Radial†	71190.8	67736.4	28729	µg/L	28729	ppb	12:20:50
2	Fe 238.204 Radial†	24764.4	23690.6	169610	µg/L	169610	ppb	12:20:50
2	K 766.490 Radial†	26573.7	24664.3	13851	µg/L	13851	ppb	12:20:50
2	Mg 279.077 IEC†	4364.7	4162.5	28117	µg/L	28117	ppb	12:20:50
2	Na 589.592 Radial†	15958.8	15842.4	4416.8	µg/L	4416.8	ppb	12:20:50
2	Sr 421.552†	63473.3	60813.9	344.03	µg/L	344.03	ppb	12:20:45
2	Sc 361.383	2065287.7	2065287.7	100.59	%			12:21:47
2	Y 371.029	1313901.7	1313901.7	102.31	%			12:21:47
2	Ag 328.068†	-1406.2	-1603.1	0.0745	µg/L	0.0745	ppb	12:21:52
2	As 188.979†	29.4	30.6	35.639	µg/L	35.639	ppb	12:22:13
2	B 249.677†	2054.1	1872.4	30.678	µg/L	30.678	ppb	12:21:52
2	Ba 233.527†	43771.8	43582.4	1157.2	µg/L	1157.2	ppb	12:21:52
2	Be 313.107†	22272.6	18512.6	10.881	µg/L	10.881	ppb	12:21:52
2	Cd 226.502†	528.3	621.5	3.8212	µg/L	3.8212	ppb	12:21:52
2	Co 228.616†	1082.4	1148.9	50.844	µg/L	50.844	ppb	12:22:13
2	Cr 267.716†	8392.8	8480.1	184.09	µg/L	184.09	ppb	12:21:52
2	Cu 324.752†	12640.8	8538.4	97.548	µg/L	97.548	ppb	12:21:52
2	Mn 257.610†	1030207.5	1024364.7	3448.1	µg/L	3448.1	ppb	12:21:47
2	Mo 202.031†	-29.0	-27.7	3.3424	µg/L	3.3424	ppb	12:22:13
2	Ni 231.604†	2091.6	1763.7	100.04	µg/L	100.04	ppb	12:22:13
2	P 214.914†	656.2	471.4	839.85	µg/L	839.85	ppb	12:22:13
2	Pb 220.353†	507.9	467.5	135.23	µg/L	135.23	ppb	12:22:13

2	S 181.975 Axial†	122.9	94.2	446.35	µg/L	446.35 ppb	12:22:13
2	Sb 206.836†	17.9	-1.9	6.0594	µg/L	6.0594 ppb	12:22:13
2	Se 196.026†	-60.4	-72.6	17.718	µg/L	17.718 ppb	12:22:13
2	SiO2†	94143.7	90968.4	17339	µg/L	17339 ppb	12:21:52
2	Si 251.611†	105374.9	104372.7	7929.6	µg/L	7929.6 ppb	12:21:52
2	Sn 189.927†	-110.8	-132.2	-36.244	µg/L	-36.244 ppb	12:22:13
2	Ti 334.940†	1298279.2	1289627.9	3073.8	µg/L	3073.8 ppb	12:21:47
2	Tl 190.801†	-37.7	-15.5	10.075	µg/L	10.075 ppb	12:22:13
2	U 409.014†	438.9	-189.7	-49.072	µg/L	-49.072 ppb	12:21:47
2	V 292.402†	25045.7	25026.7	306.43	µg/L	306.43 ppb	12:21:52
2	Zn 213.857†	12334.0	11658.7	299.78	µg/L	299.78 ppb	12:21:52
3	Sc RADIAL	115436.3	115436.3	104	%		12:20:56
3	Al 396.153Radial†	306763.1	294328.3	158900	µg/L	158900 ppb	12:20:56
3	Ca 317.933Radial†	69941.5	66725.7	28300	µg/L	28300 ppb	12:21:01
3	Fe 238.204 Radial†	24350.7	23359.2	167240	µg/L	167240 ppb	12:21:01
3	K 766.490 Radial†	26128.9	24307.8	13651	µg/L	13651 ppb	12:21:01
3	Mg 279.077 IEC†	4320.9	4132.0	27913	µg/L	27913 ppb	12:21:01
3	Na 589.592 Radial†	15784.4	15717.3	4381.9	µg/L	4381.9 ppb	12:21:01
3	Sr 421.552†	63480.8	60989.3	345.02	µg/L	345.02 ppb	12:20:56
3	Sc 361.383	2067728.0	2067728.0	100.71	%		12:22:20
3	Y 371.029	1316496.0	1316496.0	102.51	%		12:22:20
3	Ag 328.068†	-1346.5	-1542.2	0.4488	µg/L	0.4488 ppb	12:22:26
3	As 188.979†	29.8	30.9	36.628	µg/L	36.628 ppb	12:22:46
3	B 249.677†	2079.9	1895.7	32.466	µg/L	32.466 ppb	12:22:26
3	Ba 233.527†	43375.9	43137.9	1145.4	µg/L	1145.4 ppb	12:22:26
3	Be 313.107†	22138.7	18353.5	10.783	µg/L	10.783 ppb	12:22:26
3	Cd 226.502†	488.7	581.6	2.9187	µg/L	2.9187 ppb	12:22:26
3	Co 228.616†	1082.2	1147.5	50.801	µg/L	50.801 ppb	12:22:46
3	Cr 267.716†	8257.7	8336.1	180.97	µg/L	180.97 ppb	12:22:26
3	Cu 324.752†	12559.1	8442.4	96.352	µg/L	96.352 ppb	12:22:26
3	Mn 257.610†	1027650.5	1020617.2	3435.3	µg/L	3435.3 ppb	12:22:20
3	Mo 202.031†	-26.6	-25.2	3.5463	µg/L	3.5463 ppb	12:22:46
3	Ni 231.604†	2106.5	1776.0	100.73	µg/L	100.73 ppb	12:22:46
3	P 214.914†	650.1	464.6	828.71	µg/L	828.71 ppb	12:22:46
3	Pb 220.353†	508.3	467.3	135.27	µg/L	135.27 ppb	12:22:46
3	S 181.975 Axial†	124.0	95.2	451.81	µg/L	451.81 ppb	12:22:46
3	Sb 206.836†	22.9	3.1	11.112	µg/L	11.112 ppb	12:22:46
3	Se 196.026†	-47.4	-59.6	32.851	µg/L	32.851 ppb	12:22:46
3	SiO2†	93213.6	89934.5	17141	µg/L	17141 ppb	12:22:26
3	Si 251.611†	104254.6	103136.6	7834.9	µg/L	7834.9 ppb	12:22:26
3	Sn 189.927†	-111.5	-132.7	-36.917	µg/L	-36.917 ppb	12:22:46
3	Ti 334.940†	1294360.5	1284213.8	3060.9	µg/L	3060.9 ppb	12:22:20
3	Tl 190.801†	-41.8	-19.5	3.8002	µg/L	3.8002 ppb	12:22:46
3	U 409.014†	363.1	-265.5	-55.869	µg/L	-55.869 ppb	12:22:20
3	V 292.402†	24815.3	24768.6	303.21	µg/L	303.21 ppb	12:22:26
3	Zn 213.857†	12254.0	11564.9	297.46	µg/L	297.46 ppb	12:22:26

Mean Data: 241419015|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2075677.0	101.10	%	0.776				0.77%
Sc RADIAL	115262.9	104	%	0.5				0.52%
Y 371.029	1320560.9	102.83	%	0.730				0.71%
Ag 328.068†	-1535.8	0.6203	µg/L	0.64877	0.6203	ppb	0.64877	104.59%
Al 396.153Radial†	293181.0	158280	µg/L	692.9	158280	ppb	692.9	0.44%
As 188.979†	28.4	31.830	µg/L	7.4708	31.830	ppb	7.4708	23.47%
B 249.677†	1875.8	31.139	µg/L	1.1674	31.139	ppb	1.1674	3.75%
Ba 233.527†	43173.7	1146.3	µg/L	10.41	1146.3	ppb	10.41	0.91%
Be 313.107†	18356.8	10.790	µg/L	0.0877	10.790	ppb	0.0877	0.81%
Ca 317.933Radial†	67300.6	28544	µg/L	220.3	28544	ppb	220.3	0.77%
Cd 226.502†	586.0	2.9334	µg/L	0.88056	2.9334	ppb	0.88056	30.02%
Co 228.616†	1141.9	50.551	µg/L	0.4709	50.551	ppb	0.4709	0.93%
Cr 267.716†	8368.7	181.67	µg/L	2.152	181.67	ppb	2.152	1.18%
Cu 324.752†	8460.7	96.780	µg/L	0.6667	96.780	ppb	0.6667	0.69%
Fe 238.204 Radial†	23552.7	168620	µg/L	1235.9	168620	ppb	1235.9	0.73%
K 766.490 Radial†	24568.5	13798	µg/L	128.3	13798	ppb	128.3	0.93%
Mg 279.077 IEC†	4144.8	27998	µg/L	106.2	27998	ppb	106.2	0.38%
Mn 257.610†	1015503.6	3418.4	µg/L	40.95	3418.4	ppb	40.95	1.20%
Mo 202.031†	-26.0	3.5088	µg/L	0.15125	3.5088	ppb	0.15125	4.31%
Na 589.592 Radial†	15822.9	4411.3	µg/L	27.13	4411.3	ppb	27.13	0.62%

Ni 231.604†	1763.8	100.04	µg/L	0.687	100.04	ppb	0.687	0.69%
P 214.914†	464.0	825.62	µg/L	16.008	825.62	ppb	16.008	1.94%
Pb 220.353†	463.7	134.24	µg/L	1.750	134.24	ppb	1.750	1.30%
S 181.975 Axial†	94.4	447.64	µg/L	3.703	447.64	ppb	3.703	0.83%
Sb 206.836†	6.6	14.525	µg/L	10.5925	14.525	ppb	10.5925	72.93%
Se 196.026†	-70.4	19.860	µg/L	12.0632	19.860	ppb	12.0632	60.74%
SiO2†	90060.5	17165	µg/L	162.4	17165	ppb	162.4	0.95%
Si 251.611†	103320.5	7849.5	µg/L	73.90	7849.5	ppb	73.90	0.94%
Sn 189.927†	-131.3	-35.960	µg/L	1.1263	-35.960	ppb	1.1263	3.13%
Sr 421.552†	60777.7	343.83	µg/L	1.312	343.83	ppb	1.312	0.38%
Ti 334.940†	1278291.9	3046.7	µg/L	36.22	3046.7	ppb	36.22	1.19%
Tl 190.801†	-17.4	6.8469	µg/L	3.14118	6.8469	ppb	3.14118	45.88%
U 409.014†	-218.1	-51.608	µg/L	3.7120	-51.608	ppb	3.7120	7.19%
V 292.402†	24790.3	303.58	µg/L	2.682	303.58	ppb	2.682	0.88%
Zn 213.857†	11568.9	297.43	µg/L	2.368	297.43	ppb	2.368	0.80%

Sequence No.: 28
Sample ID: 241419016|931347|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 322
Date Collected: 12/11/2009 12:22:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419016|931347|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112640.3	112640.3	102	%			12:23:28
1	Al 396.153Radial†	84824.1	83302.0	44971	µg/L	44971	ppb	12:23:28
1	Ca 317.933Radial†	17267.0	16572.9	7029.1	µg/L	7029.1	ppb	12:23:28
1	Fe 238.204 Radial†	5852.8	5741.9	41108	µg/L	41108	ppb	12:23:48
1	K 766.490 Radial†	8684.7	7769.3	4363.2	µg/L	4363.2	ppb	12:23:28
1	Mg 279.077 IEC†	800.4	771.6	5197.8	µg/L	5197.8	ppb	12:23:48
1	Na 589.592 Radial†	7834.0	8272.1	2306.2	µg/L	2306.2	ppb	12:23:28
1	Sr 421.552†	11284.5	11152.9	63.093	µg/L	63.093	ppb	12:23:28
1	Sc 361.383	2057843.3	2057843.3	100.23	%			12:24:52
1	Y 371.029	1295500.9	1295500.9	100.87	%			12:24:52
1	Ag 328.068†	-129.3	-334.2	0.5311	µg/L	0.5311	ppb	12:24:57
1	As 188.979†	6.1	7.4	10.342	µg/L	10.342	ppb	12:25:18
1	B 249.677†	631.9	460.9	7.7540	µg/L	7.7540	ppb	12:24:57
1	Ba 233.527†	22120.7	22138.7	587.65	µg/L	587.65	ppb	12:24:57
1	Be 313.107†	11553.9	7898.8	4.6155	µg/L	4.6155	ppb	12:24:57
1	Cd 226.502†	49.0	145.3	0.7531	µg/L	0.7531	ppb	12:24:57
1	Co 228.616†	161.4	234.0	8.7718	µg/L	8.7718	ppb	12:25:18
1	Cr 267.716†	921.1	1055.8	22.999	µg/L	22.999	ppb	12:24:57
1	Cu 324.752†	6018.1	1976.5	22.977	µg/L	22.977	ppb	12:24:57
1	Mn 257.610†	168200.4	168056.9	567.37	µg/L	567.37	ppb	12:24:52
1	Mo 202.031†	4.7	5.9	2.3185	µg/L	2.3185	ppb	12:25:18
1	Ni 231.604†	754.0	436.7	24.772	µg/L	24.772	ppb	12:25:18
1	P 214.914†	397.5	215.7	419.11	µg/L	419.11	ppb	12:25:18
1	Pb 220.353†	174.8	137.0	39.666	µg/L	39.666	ppb	12:25:18
1	S 181.975 Axial†	57.7	29.6	142.48	µg/L	142.48	ppb	12:25:18
1	Sb 206.836†	22.5	2.9	7.3048	µg/L	7.3048	ppb	12:25:18
1	Se 196.026†	-2.2	-14.7	8.6849	µg/L	8.6849	ppb	12:25:18
1	SiO2†	100580.8	97729.3	18627	µg/L	18627	ppb	12:24:57
1	Si 251.611†	112723.2	112082.8	8586.3	µg/L	8586.3	ppb	12:24:57
1	Sn 189.927†	-17.1	-39.1	-12.729	µg/L	-12.729	ppb	12:25:18
1	Ti 334.940†	583297.4	580969.1	1385.0	µg/L	1385.0	ppb	12:24:52
1	Tl 190.801†	-23.8	-1.8	9.1193	µg/L	9.1193	ppb	12:25:18
1	U 409.014†	169.4	-457.0	-51.092	µg/L	-51.092	ppb	12:24:57
1	V 292.402†	5879.8	5995.3	73.392	µg/L	73.392	ppb	12:24:57
1	Zn 213.857†	5128.2	4514.0	118.92	µg/L	118.92	ppb	12:24:57
2	Sc RADIAL	113283.1	113283.1	102	%			12:23:54
2	Al 396.153Radial†	86447.1	84416.0	45573	µg/L	45573	ppb	12:23:54
2	Ca 317.933Radial†	17621.7	16823.6	7135.4	µg/L	7135.4	ppb	12:23:54
2	Fe 238.204 Radial†	5845.5	5702.0	40823	µg/L	40823	ppb	12:24:14
2	K 766.490 Radial†	8878.5	7910.4	4442.4	µg/L	4442.4	ppb	12:23:54
2	Mg 279.077 IEC†	810.6	777.1	5235.7	µg/L	5235.7	ppb	12:24:14
2	Na 589.592 Radial†	8036.6	8426.6	2349.3	µg/L	2349.3	ppb	12:23:54
2	Sr 421.552†	11517.2	11317.6	64.025	µg/L	64.025	ppb	12:23:54
2	Sc 361.383	2038671.0	2038671.0	99.298	%			12:25:25
2	Y 371.029	1289138.9	1289138.9	100.38	%			12:25:25
2	Ag 328.068†	-171.9	-378.4	0.0922	µg/L	0.0922	ppb	12:25:30
2	As 188.979†	3.2	4.5	5.0675	µg/L	5.0675	ppb	12:25:51
2	B 249.677†	650.2	485.3	8.9381	µg/L	8.9381	ppb	12:25:30
2	Ba 233.527†	22071.8	22297.0	591.85	µg/L	591.85	ppb	12:25:30
2	Be 313.107†	11423.8	7876.1	4.5997	µg/L	4.5997	ppb	12:25:30
2	Cd 226.502†	47.4	144.1	0.7588	µg/L	0.7588	ppb	12:25:30
2	Co 228.616†	175.0	249.2	9.5223	µg/L	9.5223	ppb	12:25:51
2	Cr 267.716†	941.3	1084.9	23.629	µg/L	23.629	ppb	12:25:30
2	Cu 324.752†	6032.4	2047.4	23.424	µg/L	23.424	ppb	12:25:30
2	Mn 257.610†	167682.7	169113.7	570.87	µg/L	570.87	ppb	12:25:25
2	Mo 202.031†	1.0	2.2	1.8721	µg/L	1.8721	ppb	12:25:51
2	Ni 231.604†	751.4	441.2	25.023	µg/L	25.023	ppb	12:25:51
2	P 214.914†	399.5	221.4	431.71	µg/L	431.71	ppb	12:25:51
2	Pb 220.353†	169.7	133.5	38.767	µg/L	38.767	ppb	12:25:51

2	S 181.975 Axial†	64.2	36.6	178.11 µg/L	178.11 ppb	12:25:51
2	Sb 206.836†	21.4	1.9	6.3293 µg/L	6.3293 ppb	12:25:51
2	Se 196.026†	-10.2	-22.8	-1.9370 µg/L	-1.9370 ppb	12:25:51
2	SiO2†	100576.1	98668.2	18806 µg/L	18806 ppb	12:25:30
2	Si 251.611†	112653.7	113070.5	8662.2 µg/L	8662.2 ppb	12:25:30
2	Sn 189.927†	-11.3	-33.5	-9.8293 µg/L	-9.8293 ppb	12:25:51
2	Ti 334.940†	579128.9	582244.0	1388.1 µg/L	1388.1 ppb	12:25:25
2	Tl 190.801†	-25.1	-3.4	6.7811 µg/L	6.7811 ppb	12:25:51
2	U 409.014†	394.1	-229.1	-29.304 µg/L	-29.304 ppb	12:25:30
2	V 292.402†	5887.1	6057.7	74.131 µg/L	74.131 ppb	12:25:30
2	Zn 213.857†	5116.3	4550.1	119.94 µg/L	119.94 ppb	12:25:30
3	Sc RADIAL	113027.5	113027.5	102 %		12:24:20
3	Al 396.153Radial†	86046.6	84214.7	45464 µg/L	45464 ppb	12:24:20
3	Ca 317.933Radial†	17501.4	16744.6	7101.9 µg/L	7101.9 ppb	12:24:20
3	Fe 238.204 Radial†	5849.0	5718.4	40940 µg/L	40940 ppb	12:24:40
3	K 766.490 Radial†	8853.4	7905.4	4439.6 µg/L	4439.6 ppb	12:24:20
3	Mg 279.077 IEC†	814.6	782.9	5274.8 µg/L	5274.8 ppb	12:24:40
3	Na 589.592 Radial†	8029.2	8437.1	2352.2 µg/L	2352.2 ppb	12:24:20
3	Sr 421.552†	11444.8	11272.1	63.767 µg/L	63.767 ppb	12:24:20
3	Sc 361.383	2061217.6	2061217.6	100.40 %		12:25:58
3	Y 371.029	1301467.6	1301467.6	101.34 %		12:25:58
3	Ag 328.068†	-190.2	-394.7	-0.0586 µg/L	-0.0586 ppb	12:26:03
3	As 188.979†	2.5	3.8	3.8217 µg/L	3.8217 ppb	12:26:24
3	B 249.677†	648.6	476.5	8.5059 µg/L	8.5059 ppb	12:26:03
3	Ba 233.527†	22451.4	22432.1	595.43 µg/L	595.43 ppb	12:26:03
3	Be 313.107†	11591.1	7916.9	4.6251 µg/L	4.6251 ppb	12:26:03
3	Cd 226.502†	55.8	151.9	0.9548 µg/L	0.9548 ppb	12:26:03
3	Co 228.616†	167.8	240.1	9.0656 µg/L	9.0656 ppb	12:26:24
3	Cr 267.716†	950.7	1083.9	23.605 µg/L	23.605 ppb	12:26:03
3	Cu 324.752†	6009.2	1957.8	22.807 µg/L	22.807 ppb	12:26:03
3	Mn 257.610†	169866.6	169441.8	571.98 µg/L	571.98 ppb	12:25:58
3	Mo 202.031†	6.0	7.1	2.4666 µg/L	2.4666 ppb	12:26:24
3	Ni 231.604†	758.8	440.3	24.973 µg/L	24.973 ppb	12:26:24
3	P 214.914†	396.0	213.6	414.96 µg/L	414.96 ppb	12:26:24
3	Pb 220.353†	162.6	124.6	36.415 µg/L	36.415 ppb	12:26:24
3	S 181.975 Axial†	58.6	30.4	146.72 µg/L	146.72 ppb	12:26:24
3	Sb 206.836†	18.1	-1.6	2.7935 µg/L	2.7935 ppb	12:26:24
3	Se 196.026†	-12.9	-25.4	-5.2052 µg/L	-5.2052 ppb	12:26:24
3	SiO2†	102010.7	98989.3	18867 µg/L	18867 ppb	12:26:03
3	Si 251.611†	114201.2	113371.0	8685.3 µg/L	8685.3 ppb	12:26:03
3	Sn 189.927†	-17.5	-39.4	-12.902 µg/L	-12.902 ppb	12:26:24
3	Ti 334.940†	586673.7	583379.4	1390.8 µg/L	1390.8 ppb	12:25:58
3	Tl 190.801†	-25.3	-3.2	6.9977 µg/L	6.9977 ppb	12:26:24
3	U 409.014†	285.7	-341.4	-40.032 µg/L	-40.032 ppb	12:26:03
3	V 292.402†	5897.4	6003.2	73.490 µg/L	73.490 ppb	12:26:03
3	Zn 213.857†	5165.3	4542.6	119.72 µg/L	119.72 ppb	12:26:03

Mean Data: 241419016|931347|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2052577.3	99.975	%	0.5923				0.59%
Sc RADIAL	112983.6	102	%	0.3				0.29%
Y 371.029	1295369.1	100.86	%	0.480				0.48%
Ag 328.068†	-369.1	0.1883	µg/L	0.30637	0.1883	ppb	0.30637	162.74%
Al 396.153Radial†	83977.5	45336	µg/L	320.5	45336	ppb	320.5	0.71%
As 188.979†	5.3	6.4106	µg/L	3.46164	6.4106	ppb	3.46164	54.00%
B 249.677†	474.2	8.3994	µg/L	0.59920	8.3994	ppb	0.59920	7.13%
Ba 233.527†	22289.3	591.64	µg/L	3.896	591.64	ppb	3.896	0.66%
Be 313.107†	7897.3	4.6134	µg/L	0.01286	4.6134	ppb	0.01286	0.28%
Ca 317.933Radial†	16713.7	7088.8	µg/L	54.34	7088.8	ppb	54.34	0.77%
Cd 226.502†	147.1	0.8222	µg/L	0.11480	0.8222	ppb	0.11480	13.96%
Co 228.616†	241.1	9.1199	µg/L	0.37816	9.1199	ppb	0.37816	4.15%
Cr 267.716†	1074.8	23.411	µg/L	0.3570	23.411	ppb	0.3570	1.52%
Cu 324.752†	1993.9	23.069	µg/L	0.3183	23.069	ppb	0.3183	1.38%
Fe 238.204 Radial†	5720.7	40957	µg/L	143.4	40957	ppb	143.4	0.35%
K 766.490 Radial†	7861.7	4415.1	µg/L	44.96	4415.1	ppb	44.96	1.02%
Mg 279.077 IEC†	777.2	5236.1	µg/L	38.49	5236.1	ppb	38.49	0.74%
Mn 257.610†	168870.8	570.07	µg/L	2.407	570.07	ppb	2.407	0.42%
Mo 202.031†	5.1	2.2191	µg/L	0.30947	2.2191	ppb	0.30947	13.95%
Na 589.592 Radial†	8378.6	2335.9	µg/L	25.75	2335.9	ppb	25.75	1.10%

Ni 231.604†	439.4	24.922	µg/L	0.1329	24.922	ppb	0.1329	0.53%
P 214.914†	216.9	421.93	µg/L	8.724	421.93	ppb	8.724	2.07%
Pb 220.353†	131.7	38.283	µg/L	1.6791	38.283	ppb	1.6791	4.39%
S 181.975 Axial†	32.2	155.77	µg/L	19.465	155.77	ppb	19.465	12.50%
Sb 206.836†	1.1	5.4759	µg/L	2.37367	5.4759	ppb	2.37367	43.35%
Se 196.026†	-21.0	0.5142	µg/L	7.26225	0.5142	ppb	7.26225	>999.9%
SiO2†	98462.2	18767	µg/L	124.8	18767	ppb	124.8	0.66%
Si 251.611†	112841.4	8644.6	µg/L	51.80	8644.6	ppb	51.80	0.60%
Sn 189.927†	-37.3	-11.820	µg/L	1.7262	-11.820	ppb	1.7262	14.60%
Sr 421.552†	11247.5	63.628	µg/L	0.4811	63.628	ppb	0.4811	0.76%
Ti 334.940†	582197.5	1388.0	µg/L	2.87	1388.0	ppb	2.87	0.21%
Tl 190.801†	-2.8	7.6327	µg/L	1.29198	7.6327	ppb	1.29198	16.93%
U 409.014†	-342.5	-40.143	µg/L	10.8947	-40.143	ppb	10.8947	27.14%
V 292.402†	6018.7	73.671	µg/L	0.4017	73.671	ppb	0.4017	0.55%
Zn 213.857†	4535.6	119.53	µg/L	0.534	119.53	ppb	0.534	0.45%

Sequence No.: 29
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:26:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111304.9	111304.9	100	%			12:27:13
1	Al 396.153Radial†	10250.0	10059.6	5410.7	µg/L	5410.7	ppb	12:27:13
1	Ca 317.933Radial†	12898.0	12427.1	5270.7	µg/L	5270.7	ppb	12:27:13
1	Fe 238.204 Radial†	760.1	740.8	5321.2	µg/L	5321.2	ppb	12:27:33
1	K 766.490 Radial†	10131.6	9312.3	5229.8	µg/L	5229.8	ppb	12:27:13
1	Mg 279.077 IEC†	812.3	792.9	5409.1	µg/L	5409.1	ppb	12:27:33
1	Na 589.592 Radial†	38075.7	38472.2	10726	µg/L	10726	ppb	12:27:13
1	Sr 421.552†	93793.4	93429.3	528.54	µg/L	528.54	ppb	12:27:13
1	Sc 361.383	2044396.9	2044396.9	99.577	%			12:28:37
1	Y 371.029	1279911.9	1279911.9	99.660	%			12:28:37
1	Ag 328.068†	56390.0	56424.3	542.98	µg/L	542.98	ppb	12:28:42
1	As 188.979†	280.2	282.8	520.14	µg/L	520.14	ppb	12:29:03
1	B 249.677†	11828.9	11709.7	523.72	µg/L	523.72	ppb	12:28:42
1	Ba 233.527†	19699.5	19852.5	527.94	µg/L	527.94	ppb	12:28:42
1	Be 313.107†	807761.5	807564.7	524.13	µg/L	524.13	ppb	12:28:37
1	Cd 226.502†	19281.6	19459.8	528.68	µg/L	528.68	ppb	12:28:42
1	Co 228.616†	10505.6	10623.2	529.70	µg/L	529.70	ppb	12:28:42
1	Cr 267.716†	24088.0	24327.2	527.37	µg/L	527.37	ppb	12:28:42
1	Cu 324.752†	76424.0	72721.0	521.67	µg/L	521.67	ppb	12:28:42
1	Mn 257.610†	155561.8	156468.3	524.10	µg/L	524.10	ppb	12:28:42
1	Mo 202.031†	4364.0	4383.7	526.90	µg/L	526.90	ppb	12:29:03
1	Ni 231.604†	9626.5	9351.9	530.42	µg/L	530.42	ppb	12:28:42
1	P 214.914†	1416.9	1242.0	2552.0	µg/L	2552.0	ppb	12:29:03
1	Pb 220.353†	2008.2	1979.3	524.25	µg/L	524.25	ppb	12:29:03
1	S 181.975 Axial†	240.8	213.8	1078.1	µg/L	1078.1	ppb	12:29:03
1	Sb 206.836†	543.3	526.0	532.27	µg/L	532.27	ppb	12:29:03
1	Se 196.026†	409.2	398.4	515.14	µg/L	515.14	ppb	12:29:03
1	SiO2†	32979.7	30501.0	5813.5	µg/L	5813.5	ppb	12:28:42
1	Si 251.611†	35439.4	35210.4	2662.6	µg/L	2662.6	ppb	12:28:42
1	Sn 189.927†	1043.0	1025.3	531.55	µg/L	531.55	ppb	12:29:03
1	Ti 334.940†	225027.7	225005.0	536.27	µg/L	536.27	ppb	12:28:37
1	Tl 190.801†	314.4	337.6	523.12	µg/L	523.12	ppb	12:29:03
1	U 409.014†	6074.0	5473.8	521.14	µg/L	521.14	ppb	12:28:42
1	V 292.402†	44743.7	45062.9	531.88	µg/L	531.88	ppb	12:28:42
1	Zn 213.857†	19972.2	19454.7	528.45	µg/L	528.45	ppb	12:28:42
2	Sc RADIAL	111573.3	111573.3	101	%			12:27:39
2	Al 396.153Radial†	10304.9	10089.5	5426.9	µg/L	5426.9	ppb	12:27:39
2	Ca 317.933Radial†	12985.6	12483.2	5294.5	µg/L	5294.5	ppb	12:27:39
2	Fe 238.204 Radial†	760.7	739.5	5311.8	µg/L	5311.8	ppb	12:27:59
2	K 766.490 Radial†	10205.2	9361.2	5257.2	µg/L	5257.2	ppb	12:27:39
2	Mg 279.077 IEC†	801.9	780.6	5325.0	µg/L	5325.0	ppb	12:27:59
2	Na 589.592 Radial†	38128.4	38433.4	10715	µg/L	10715	ppb	12:27:39
2	Sr 421.552†	94308.0	93715.8	530.16	µg/L	530.16	ppb	12:27:39
2	Sc 361.383	2040604.5	2040604.5	99.392	%			12:29:10
2	Y 371.029	1275743.8	1275743.8	99.336	%			12:29:10
2	Ag 328.068†	56006.5	56143.8	540.27	µg/L	540.27	ppb	12:29:15
2	As 188.979†	281.2	284.3	522.95	µg/L	522.95	ppb	12:29:36
2	B 249.677†	11727.1	11629.3	520.12	µg/L	520.12	ppb	12:29:15
2	Ba 233.527†	19592.1	19781.1	526.03	µg/L	526.03	ppb	12:29:15
2	Be 313.107†	807139.1	808446.1	524.70	µg/L	524.70	ppb	12:29:10
2	Cd 226.502†	19050.8	19263.7	523.36	µg/L	523.36	ppb	12:29:15
2	Co 228.616†	10375.2	10511.6	524.14	µg/L	524.14	ppb	12:29:15
2	Cr 267.716†	23792.9	24075.2	521.91	µg/L	521.91	ppb	12:29:15
2	Cu 324.752†	75943.7	72380.4	519.23	µg/L	519.23	ppb	12:29:15
2	Mn 257.610†	153851.1	155037.5	519.31	µg/L	519.31	ppb	12:29:15
2	Mo 202.031†	4369.3	4397.2	528.52	µg/L	528.52	ppb	12:29:36
2	Ni 231.604†	9495.8	9238.3	523.99	µg/L	523.99	ppb	12:29:15
2	P 214.914†	1424.2	1252.0	2573.5	µg/L	2573.5	ppb	12:29:36
2	Pb 220.353†	2019.7	1994.7	528.32	µg/L	528.32	ppb	12:29:36

2	S 181.975 Axial†	240.5	214.0	1079.1 µg/L	1079.1 ppb	12:29:36
2	Sb 206.836†	550.9	534.7	541.17 µg/L	541.17 ppb	12:29:36
2	Se 196.026†	423.1	413.2	534.28 µg/L	534.28 ppb	12:29:36
2	SiO2†	32706.8	30287.9	5772.9 µg/L	5772.9 ppb	12:29:15
2	Si 251.611†	35104.6	34939.8	2641.5 µg/L	2641.5 ppb	12:29:15
2	Sn 189.927†	1050.3	1034.7	536.34 µg/L	536.34 ppb	12:29:36
2	Ti 334.940†	224796.5	225192.4	536.72 µg/L	536.72 ppb	12:29:10
2	Tl 190.801†	317.4	341.3	528.76 µg/L	528.76 ppb	12:29:36
2	U 409.014†	6087.6	5498.8	523.53 µg/L	523.53 ppb	12:29:15
2	V 292.402†	44275.1	44674.9	527.36 µg/L	527.36 ppb	12:29:15
2	Zn 213.857†	19850.0	19369.0	526.14 µg/L	526.14 ppb	12:29:15
3	Sc RADIAL	112371.2	112371.2	101 %		12:28:05
3	Al 396.153Radial†	10299.2	10011.2	5384.5 µg/L	5384.5 ppb	12:28:05
3	Ca 317.933Radial†	13007.4	12413.2	5264.8 µg/L	5264.8 ppb	12:28:05
3	Fe 238.204 Radial†	760.4	733.9	5271.1 µg/L	5271.1 ppb	12:28:25
3	K 766.490 Radial†	10276.0	9359.0	5256.0 µg/L	5256.0 ppb	12:28:05
3	Mg 279.077 IEC†	809.0	782.0	5334.6 µg/L	5334.6 ppb	12:28:25
3	Na 589.592 Radial†	38045.5	38082.8	10617 µg/L	10617 ppb	12:28:05
3	Sr 421.552†	94295.3	93038.2	526.33 µg/L	526.33 ppb	12:28:05
3	Sc 361.383	2042752.8	2042752.8	99.497 %		12:29:42
3	Y 371.029	1278483.8	1278483.8	99.549 %		12:29:42
3	Ag 328.068†	55486.1	55561.5	534.68 µg/L	534.68 ppb	12:29:48
3	As 188.979†	279.7	282.4	519.55 µg/L	519.55 ppb	12:30:09
3	B 249.677†	11664.4	11553.9	516.75 µg/L	516.75 ppb	12:29:48
3	Ba 233.527†	19326.1	19493.1	518.38 µg/L	518.38 ppb	12:29:48
3	Be 313.107†	805387.8	805831.9	523.00 µg/L	523.00 ppb	12:29:42
3	Cd 226.502†	18895.3	19087.2	518.56 µg/L	518.56 ppb	12:29:48
3	Co 228.616†	10268.1	10393.0	518.23 µg/L	518.23 ppb	12:29:48
3	Cr 267.716†	23621.1	23877.4	517.62 µg/L	517.62 ppb	12:29:48
3	Cu 324.752†	75226.0	71578.7	513.48 µg/L	513.48 ppb	12:29:48
3	Mn 257.610†	152553.1	153570.1	514.40 µg/L	514.40 ppb	12:29:48
3	Mo 202.031†	4385.1	4408.5	529.87 µg/L	529.87 ppb	12:30:09
3	Ni 231.604†	9452.1	9184.3	520.92 µg/L	520.92 ppb	12:29:48
3	P 214.914†	1431.7	1258.0	2586.7 µg/L	2586.7 ppb	12:30:09
3	Pb 220.353†	2017.5	1990.3	527.19 µg/L	527.19 ppb	12:30:09
3	S 181.975 Axial†	239.1	212.3	1070.5 µg/L	1070.5 ppb	12:30:09
3	Sb 206.836†	538.2	521.3	527.61 µg/L	527.61 ppb	12:30:09
3	Se 196.026†	417.3	406.9	526.14 µg/L	526.14 ppb	12:30:09
3	SiO2†	32440.7	29985.9	5715.3 µg/L	5715.3 ppb	12:29:48
3	Si 251.611†	34813.3	34609.8	2616.2 µg/L	2616.2 ppb	12:29:48
3	Sn 189.927†	1049.6	1032.8	535.39 µg/L	535.39 ppb	12:30:09
3	Ti 334.940†	224228.9	224384.0	534.79 µg/L	534.79 ppb	12:29:42
3	Tl 190.801†	318.6	342.2	530.14 µg/L	530.14 ppb	12:30:09
3	U 409.014†	6026.1	5430.6	517.03 µg/L	517.03 ppb	12:29:48
3	V 292.402†	43949.1	44300.4	522.97 µg/L	522.97 ppb	12:29:48
3	Zn 213.857†	19648.1	19145.1	520.04 µg/L	520.04 ppb	12:29:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2042584.8	99.489	%	0.0926				0.09%
Sc RADIAL	111749.8	101	%	0.5				0.50%
Y 371.029	1278046.5	99.515	%	0.1649				0.17%
Ag 328.068†	56043.2	539.31	µg/L	4.236	539.31	ppb	4.236	0.79%
QC value within limits for Ag 328.068 Recovery = 107.86%								
Al 396.153Radial†	10053.4	5407.4	µg/L	21.37	5407.4	ppb	21.37	0.40%
QC value within limits for Al 396.153Radial Recovery = 108.15%								
As 188.979†	283.2	520.88	µg/L	1.819	520.88	ppb	1.819	0.35%
QC value within limits for As 188.979 Recovery = 104.18%								
B 249.677†	11631.0	520.20	µg/L	3.487	520.20	ppb	3.487	0.67%
QC value within limits for B 249.677 Recovery = 104.04%								
Ba 233.527†	19708.9	524.12	µg/L	5.058	524.12	ppb	5.058	0.96%
QC value within limits for Ba 233.527 Recovery = 104.82%								
Be 313.107†	807280.9	523.94	µg/L	0.863	523.94	ppb	0.863	0.16%
QC value within limits for Be 313.107 Recovery = 104.79%								
Ca 317.933Radial†	12441.2	5276.7	µg/L	15.72	5276.7	ppb	15.72	0.30%
QC value within limits for Ca 317.933Radial Recovery = 105.53%								
Cd 226.502†	19270.3	523.53	µg/L	5.063	523.53	ppb	5.063	0.97%
QC value within limits for Cd 226.502 Recovery = 104.71%								
Co 228.616†	10509.2	524.02	µg/L	5.734	524.02	ppb	5.734	1.09%

```
   QC value within limits for Co 228.616  Recovery = 104.80%
Cr 267.716†            24093.3      522.30 µg/L        4.887      522.30 ppb          4.887   0.94%
   QC value within limits for Cr 267.716  Recovery = 104.46%
Cu 324.752†            72226.7      518.12 µg/L        4.204      518.12 ppb          4.204   0.81%
   QC value within limits for Cu 324.752  Recovery = 103.62%
Fe 238.204 Radial†       738.1      5301.4 µg/L       26.65      5301.4 ppb         26.65   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.03%
K 766.490 Radial†       9344.2      5247.6 µg/L       15.50      5247.6 ppb         15.50   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 104.95%
Mg 279.077 IEC†          785.2      5356.3 µg/L       46.05      5356.3 ppb         46.05   0.86%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.13%
Mn 257.610†           155025.3      519.27 µg/L        4.851      519.27 ppb          4.851   0.93%
   QC value within limits for Mn 257.610  Recovery = 103.85%
Mo 202.031†             4396.5      528.43 µg/L        1.489      528.43 ppb          1.489   0.28%
   QC value within limits for Mo 202.031  Recovery = 105.69%
Na 589.592 Radial†     38329.5       10686 µg/L         59.8       10686 ppb           59.8   0.56%
   QC value within limits for Na 589.592 Radial  Recovery = 106.86%
Ni 231.604†             9258.2      525.11 µg/L        4.850      525.11 ppb          4.850   0.92%
   QC value within limits for Ni 231.604  Recovery = 105.02%
P 214.914†              1250.7      2570.7 µg/L       17.55      2570.7 ppb         17.55   0.68%
   QC value within limits for P 214.914  Recovery = 102.83%
Pb 220.353†             1988.1      526.59 µg/L        2.101      526.59 ppb          2.101   0.40%
   QC value within limits for Pb 220.353  Recovery = 105.32%
S 181.975 Axial†         213.4      1075.9 µg/L        4.75      1075.9 ppb          4.75   0.44%
   QC value within limits for S 181.975 Axial  Recovery = 107.59%
Sb 206.836†              527.3      533.68 µg/L        6.890      533.68 ppb          6.890   1.29%
   QC value within limits for Sb 206.836  Recovery = 106.74%
Se 196.026†              406.2      525.19 µg/L        9.605      525.19 ppb          9.605   1.83%
   QC value within limits for Se 196.026  Recovery = 105.04%
SiO2†                  30258.3      5767.2 µg/L       49.33      5767.2 ppb         49.33   0.86%
   QC value within limits for SiO2  Recovery = 107.85%
Si 251.611†            34920.0      2640.1 µg/L       23.25      2640.1 ppb         23.25   0.88%
   QC value within limits for Si 251.611  Recovery = 105.60%
Sn 189.927†             1031.0      534.43 µg/L        2.539      534.43 ppb          2.539   0.48%
   QC value within limits for Sn 189.927  Recovery = 106.89%
Sr 421.552†            93394.4      528.34 µg/L        1.924      528.34 ppb          1.924   0.36%
   QC value within limits for Sr 421.552  Recovery = 105.67%
Ti 334.940†           224860.5      535.93 µg/L        1.008      535.93 ppb          1.008   0.19%
   QC value within limits for Ti 334.940  Recovery = 107.19%
Tl 190.801†              340.4      527.34 µg/L        3.716      527.34 ppb          3.716   0.70%
   QC value within limits for Tl 190.801  Recovery = 105.47%
U 409.014†              5467.7      520.56 µg/L        3.287      520.56 ppb          3.287   0.63%
   QC value within limits for U 409.014  Recovery = 104.11%
V 292.402†             44679.4      527.40 µg/L        4.453      527.40 ppb          4.453   0.84%
   QC value within limits for V 292.402  Recovery = 105.48%
Zn 213.857†            19322.9      524.88 µg/L        4.345      524.88 ppb          4.345   0.83%
   QC value within limits for Zn 213.857  Recovery = 104.98%
All analyte(s) passed QC.
```

Sequence No.: 30
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:30:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111283.1	111283.1	100	%			12:30:50
1	Al 396.153Radial†	212.2	66.3	35.770	µg/L	35.770	ppb	12:30:50
1	Ca 317.933Radial†	437.4	21.8	9.2504	µg/L	9.2504	ppb	12:31:11
1	Fe 238.204 Radial†	23.4	7.3	52.343	µg/L	52.343	ppb	12:31:11
1	K 766.490 Radial†	696.8	-80.5	-45.235	µg/L	-45.235	ppb	12:30:50
1	Mg 279.077 IEC†	17.7	1.8	12.359	µg/L	12.359	ppb	12:31:11
1	Na 589.592 Radial†	-624.2	-56.3	-15.688	µg/L	-15.688	ppb	12:30:50
1	Sr 421.552†	-16.4	35.3	0.1996	µg/L	0.1996	ppb	12:30:50
1	Sc 361.383	2041168.2	2041168.2	99.420	%			12:32:13
1	Y 371.029	1282845.8	1282845.8	99.889	%			12:32:13
1	Ag 328.068†	209.4	5.4	0.0555	µg/L	0.0555	ppb	12:32:18
1	As 188.979†	3.4	4.7	8.7030	µg/L	8.7030	ppb	12:32:39
1	B 249.677†	156.8	-11.8	-0.5450	µg/L	-0.5450	ppb	12:32:18
1	Ba 233.527†	-64.8	4.1	0.1091	µg/L	0.1091	ppb	12:32:39
1	Be 313.107†	3699.8	93.0	0.0598	µg/L	0.0598	ppb	12:32:18
1	Cd 226.502†	-108.4	-12.7	-0.3495	µg/L	-0.3495	ppb	12:32:39
1	Co 228.616†	-68.3	4.2	0.2087	µg/L	0.2087	ppb	12:32:39
1	Cr 267.716†	-177.7	-41.9	-0.9061	µg/L	-0.9061	ppb	12:32:18
1	Cu 324.752†	4041.9	37.8	0.2819	µg/L	0.2819	ppb	12:32:18
1	Mn 257.610†	-136.7	108.2	0.3686	µg/L	0.3686	ppb	12:32:39
1	Mo 202.031†	1.4	2.5	0.3075	µg/L	0.3075	ppb	12:32:39
1	Ni 231.604†	312.0	-1.7	-0.0950	µg/L	-0.0950	ppb	12:32:39
1	P 214.914†	169.7	-10.2	-21.508	µg/L	-21.508	ppb	12:32:39
1	Pb 220.353†	48.9	11.8	3.1231	µg/L	3.1231	ppb	12:32:39
1	S 181.975 Axial†	19.1	-8.8	-44.595	µg/L	-44.595	ppb	12:32:39
1	Sb 206.836†	21.1	1.6	1.6700	µg/L	1.6700	ppb	12:32:39
1	Se 196.026†	12.8	0.4	0.5169	µg/L	0.5169	ppb	12:32:39
1	SiO2†	2691.7	88.6	16.881	µg/L	16.881	ppb	12:32:18
1	Si 251.611†	425.1	48.0	3.7074	µg/L	3.7074	ppb	12:32:39
1	Sn 189.927†	19.5	-2.4	-1.2230	µg/L	-1.2230	ppb	12:32:39
1	Ti 334.940†	1596.1	626.7	1.4940	µg/L	1.4940	ppb	12:32:18
1	Tl 190.801†	-20.9	0.9	1.3931	µg/L	1.3931	ppb	12:32:39
1	U 409.014†	599.7	-22.8	-2.1841	µg/L	-2.1841	ppb	12:32:18
1	V 292.402†	-127.0	1.3	0.0183	µg/L	0.0183	ppb	12:32:18
1	Zn 213.857†	598.4	-0.4	-0.0180	µg/L	-0.0180	ppb	12:32:39
2	Sc RADIAL	110454.5	110454.5	99.7	%			12:31:16
2	Al 396.153Radial†	204.8	60.5	32.634	µg/L	32.634	ppb	12:31:16
2	Ca 317.933Radial†	431.4	19.1	8.0810	µg/L	8.0810	ppb	12:31:37
2	Fe 238.204 Radial†	21.3	5.4	38.753	µg/L	38.753	ppb	12:31:37
2	K 766.490 Radial†	735.3	-36.7	-20.609	µg/L	-20.609	ppb	12:31:16
2	Mg 279.077 IEC†	16.7	1.0	6.7026	µg/L	6.7026	ppb	12:31:37
2	Na 589.592 Radial†	-572.7	-9.3	-2.5836	µg/L	-2.5836	ppb	12:31:16
2	Sr 421.552†	-14.4	37.2	0.2105	µg/L	0.2105	ppb	12:31:16
2	Sc 361.383	2104261.7	2104261.7	102.49	%			12:32:45
2	Y 371.029	1308173.1	1308173.1	101.86	%			12:32:45
2	Ag 328.068†	210.8	0.5	0.0068	µg/L	0.0068	ppb	12:32:51
2	As 188.979†	1.5	2.8	5.1478	µg/L	5.1478	ppb	12:33:11
2	B 249.677†	160.1	-13.3	-0.6083	µg/L	-0.6083	ppb	12:32:51
2	Ba 233.527†	-68.9	2.0	0.0525	µg/L	0.0525	ppb	12:33:11
2	Be 313.107†	3667.3	-50.3	-0.0332	µg/L	-0.0332	ppb	12:32:51
2	Cd 226.502†	-88.0	10.5	0.2707	µg/L	0.2707	ppb	12:33:11
2	Co 228.616†	-71.5	3.2	0.1570	µg/L	0.1570	ppb	12:33:11
2	Cr 267.716†	-124.2	15.7	0.3396	µg/L	0.3396	ppb	12:32:51
2	Cu 324.752†	4065.6	-61.0	-0.4280	µg/L	-0.4280	ppb	12:32:51
2	Mn 257.610†	-177.5	72.5	0.2474	µg/L	0.2474	ppb	12:33:11
2	Mo 202.031†	2.4	3.5	0.4191	µg/L	0.4191	ppb	12:33:11
2	Ni 231.604†	317.3	-5.9	-0.3369	µg/L	-0.3369	ppb	12:33:11
2	P 214.914†	174.7	-10.5	-21.962	µg/L	-21.962	ppb	12:33:11
2	Pb 220.353†	41.7	3.3	0.8968	µg/L	0.8968	ppb	12:33:11

2	S 181.975 Axial†	26.3	-2.3	-11.665 µg/L	-11.665 ppb	12:33:11
2	Sb 206.836†	24.9	4.7	4.7427 µg/L	4.7427 ppb	12:33:11
2	Se 196.026†	16.1	3.2	4.1039 µg/L	4.1039 ppb	12:33:11
2	SiO2†	2697.6	13.2	2.5106 µg/L	2.5106 ppb	12:32:51
2	Si 251.611†	418.3	28.6	2.0900 µg/L	2.0900 ppb	12:33:11
2	Sn 189.927†	25.8	3.1	1.6026 µg/L	1.6026 ppb	12:33:11
2	Ti 334.940†	1668.1	648.8	1.5469 µg/L	1.5469 ppb	12:32:51
2	Tl 190.801†	-18.1	4.3	6.6229 µg/L	6.6229 ppb	12:33:11
2	U 409.014†	489.6	-148.3	-14.147 µg/L	-14.147 ppb	12:32:51
2	V 292.402†	-143.8	-11.3	-0.1485 µg/L	-0.1485 ppb	12:32:51
2	Zn 213.857†	601.0	-16.0	-0.4388 µg/L	-0.4388 ppb	12:33:11
3	Sc RADIAL	110667.4	110667.4	99.9 %		12:31:42
3	Al 396.153Radial†	204.1	59.3	32.008 µg/L	32.008 ppb	12:31:42
3	Ca 317.933Radial†	417.8	4.6	1.9543 µg/L	1.9543 ppb	12:32:03
3	Fe 238.204 Radial†	17.5	1.5	10.935 µg/L	10.935 ppb	12:32:03
3	K 766.490 Radial†	736.3	-37.1	-20.834 µg/L	-20.834 ppb	12:31:42
3	Mg 279.077 IEC†	13.2	-2.6	-17.867 µg/L	-17.867 ppb	12:32:03
3	Na 589.592 Radial†	-608.1	-43.6	-12.152 µg/L	-12.152 ppb	12:31:42
3	Sr 421.552†	-42.9	8.7	0.0490 µg/L	0.0490 ppb	12:31:42
3	Sc 361.383	2046377.2	2046377.2	99.673 %		12:33:17
3	Y 371.029	1279292.2	1279292.2	99.612 %		12:33:17
3	Ag 328.068†	257.6	53.3	0.5091 µg/L	0.5091 ppb	12:33:23
3	As 188.979†	2.1	3.5	6.3755 µg/L	6.3755 ppb	12:33:44
3	B 249.677†	141.9	-27.1	-1.2202 µg/L	-1.2202 ppb	12:33:23
3	Ba 233.527†	-60.8	8.3	0.2191 µg/L	0.2191 ppb	12:33:44
3	Be 313.107†	3621.8	5.2	0.0032 µg/L	0.0032 ppb	12:33:23
3	Cd 226.502†	-103.3	-7.2	-0.1998 µg/L	-0.1998 ppb	12:33:44
3	Co 228.616†	-70.4	2.3	0.1153 µg/L	0.1153 ppb	12:33:44
3	Cr 267.716†	-106.2	30.3	0.6562 µg/L	0.6562 ppb	12:33:23
3	Cu 324.752†	4073.4	59.1	0.4253 µg/L	0.4253 ppb	12:33:23
3	Mn 257.610†	-151.5	93.7	0.3148 µg/L	0.3148 ppb	12:33:44
3	Mo 202.031†	2.0	3.1	0.3779 µg/L	0.3779 ppb	12:33:44
3	Ni 231.604†	313.5	-1.0	-0.0564 µg/L	-0.0564 ppb	12:33:44
3	P 214.914†	175.7	-4.6	-9.6846 µg/L	-9.6846 ppb	12:33:44
3	Pb 220.353†	38.6	1.4	0.3712 µg/L	0.3712 ppb	12:33:44
3	S 181.975 Axial†	23.7	-4.2	-21.451 µg/L	-21.451 ppb	12:33:44
3	Sb 206.836†	21.6	2.0	2.0439 µg/L	2.0439 ppb	12:33:44
3	Se 196.026†	11.0	-1.5	-1.8795 µg/L	-1.8795 ppb	12:33:44
3	SiO2†	2648.8	38.7	7.3707 µg/L	7.3707 ppb	12:33:23
3	Si 251.611†	418.5	40.3	3.0164 µg/L	3.0164 ppb	12:33:44
3	Sn 189.927†	25.6	3.6	1.8767 µg/L	1.8767 ppb	12:33:44
3	Ti 334.940†	1219.0	244.3	0.5825 µg/L	0.5825 ppb	12:33:23
3	Tl 190.801†	-18.4	3.5	5.3646 µg/L	5.3646 ppb	12:33:44
3	U 409.014†	593.1	-31.0	-2.9581 µg/L	-2.9581 ppb	12:33:23
3	V 292.402†	-135.5	-6.9	-0.0817 µg/L	-0.0817 ppb	12:33:23
3	Zn 213.857†	602.2	1.9	0.0502 µg/L	0.0502 ppb	12:33:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2063935.7	100.53	%	1.706				1.70%
Sc RADIAL	110801.7	100.0	%	0.39				0.39%
Y 371.029	1290103.7	100.45	%	1.226				1.22%
Ag 328.068†	19.7	0.1905	µg/L	0.27702	0.1905	ppb	0.27702	145.45%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	62.0	33.471	µg/L	2.0159	33.471	ppb	2.0159	6.02%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.7	6.7421	µg/L	1.80571	6.7421	ppb	1.80571	26.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-17.4	-0.7911	µg/L	0.37289	-0.7911	ppb	0.37289	47.13%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.8	0.1269	µg/L	0.08471	0.1269	ppb	0.08471	66.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	16.0	0.0099	µg/L	0.04690	0.0099	ppb	0.04690	472.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.2	6.4286	µg/L	3.91869	6.4286	ppb	3.91869	60.96%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-3.1	-0.0929	µg/L	0.32363	-0.0929	ppb	0.32363	348.43%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.2	0.1603	µg/L	0.04679	0.1603	ppb	0.04679	29.19%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.4      0.0299 µg/L       0.82592      0.0299 ppb        0.82592 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               12.0      0.0930 µg/L       0.45691      0.0930 ppb        0.45691 491.09%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         4.7      34.010 µg/L       21.1072      34.010 ppb        21.1072  62.06%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -51.4     -28.893 µg/L       14.1531     -28.893 ppb        14.1531  48.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      0.3984 µg/L      16.06873      0.3984 ppb       16.06873 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               91.5      0.3103 µg/L       0.06071      0.3103 ppb        0.06071  19.57%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.1      0.3682 µg/L       0.05644      0.3682 ppb        0.05644  15.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -36.4     -10.141 µg/L        6.7796     -10.141 ppb         6.7796  66.85%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -2.9      -0.1628 µg/L       0.15205      -0.1628 ppb        0.15205  93.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -8.4     -17.718 µg/L        6.9610     -17.718 ppb         6.9610  39.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.5      1.4637 µg/L       1.46087      1.4637 ppb        1.46087  99.81%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -25.904 µg/L       16.9103     -25.904 ppb        16.9103  65.28%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.8      2.8188 µg/L       1.67653      2.8188 ppb        1.67653  59.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.7      0.9138 µg/L       3.01136      0.9138 ppb        3.01136 329.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     46.8      8.9209 µg/L       7.30973      8.9209 ppb        7.30973  81.94%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               39.0      2.9379 µg/L       0.81155      2.9379 ppb        0.81155  27.62%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.4      0.7521 µg/L       1.71595      0.7521 ppb        1.71595 228.15%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               27.1      0.1531 µg/L       0.09027      0.1531 ppb        0.09027  58.98%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              506.6      1.2078 µg/L       0.54217      1.2078 ppb        0.54217  44.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.9      4.4602 µg/L       2.72967      4.4602 ppb        2.72967  61.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -67.4     -6.4298 µg/L       6.69455     -6.4298 ppb        6.69455 104.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.6     -0.0707 µg/L       0.08394     -0.0707 ppb        0.08394 118.80%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -4.8     -0.1356 µg/L       0.26486     -0.1356 ppb        0.26486 195.39%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120709
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120709A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/7/2009 08:20:00**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/7/2009 06:01:22**
Analyst: **Data Type: Reprocessed on 12/7/2009 08:21:18**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	900524.0	900524.0	99.912	%	06:04:31
1	Sc Radial	5710.5	5710.5	101	%	06:03:14
1	Y 371.029	750034.9	750034.9	99.766	%	06:04:31
1	Y RADIAL	6131.4	6131.4	100.5	%	06:03:14
1	Ag 328.068†	294.7	295.0	[0.00]	ug/L	06:04:31

1	Al 396.153Radial†	-15.8	-15.8	[0.00]	ug/L	06:03:14
1	As 188.979†	-20.9	-20.9	[0.00]	ug/L	06:04:51
1	B 249.677†	-593.2	-593.7	[0.00]	ug/L	06:04:51
1	Ba 233.527†	-16.7	-16.7	[0.00]	ug/L	06:04:51
1	Be 313.107†	-5276.3	-5280.9	[0.00]	ug/L	06:04:31
1	Ca 317.933Radial†	14.8	14.8	[0.00]	ug/L	06:03:34
1	Cd 226.502†	-209.8	-210.0	[0.00]	ug/L	06:04:51
1	Co 228.616†	-84.9	-85.0	[0.00]	ug/L	06:04:51
1	Cr 267.716†	89.5	89.5	[0.00]	ug/L	06:04:51
1	Cu 324.752†	6867.9	6873.9	[0.00]	ug/L	06:04:31
1	Fe 238.204 Radial†	8.1	8.1	[0.00]	ug/L	06:03:34
1	K 766.490 Radial†	2237.0	2225.7	[0.00]	ug/L	06:03:14
1	Mg 279.077 IEC†	0.1	0.1	[0.00]	ug/L	06:03:34
1	Mn 257.610†	499.5	499.9	[0.00]	ug/L	06:04:51
1	Mo 202.031†	32.6	32.6	[0.00]	ug/L	06:04:51
1	Na 589.592 Radial†	-1133.3	-1127.6	[0.00]	ug/L	06:03:14
1	Ni 231.604†	82.5	82.5	[0.00]	ug/L	06:04:51
1	P 214.914†	232.6	232.8	[0.00]	ug/L	06:04:51
1	Pb 220.353†	-67.0	-67.0	[0.00]	ug/L	06:04:51
1	S 181.975 Axial†	41.7	41.7	[0.00]	ug/L	06:04:51
1	Sb 206.836†	28.3	28.3	[0.00]	ug/L	06:04:51
1	Se 196.026†	-18.1	-18.1	[0.00]	ug/L	06:04:51
1	Si 251.611†	531.5	531.9	[0.00]	ug/L	06:04:51
1	Sn 189.927†	2.2	2.2	[0.00]	ug/L	06:04:51
1	Sr 421.552†	21.5	21.4	[0.00]	ug/L	06:03:14
1	Ti 334.940†	-1147.8	-1148.8	[0.00]	ug/L	06:04:31
1	Tl 190.801†	-34.8	-34.8	[0.00]	ug/L	06:04:51
1	U 409.014†	-2625.6	-2627.9	[0.00]	ug/L	06:04:31
1	V 292.402†	-1410.6	-1411.8	[0.00]	ug/L	06:04:31
1	Zn 213.857†	649.2	649.8	[0.00]	ug/L	06:04:51
1	SiO2†	499.9	500.4	[0.00]	ug/L	06:05:47
2	Sc 361.383	899183.7	899183.7	99.763	%	06:04:57
2	Sc Radial	5652.6	5652.6	99.5	%	06:03:39
2	Y 371.029	750852.8	750852.8	99.875	%	06:04:57
2	Y RADIAL	6058.7	6058.7	99.35	%	06:03:39
2	Ag 328.068†	372.9	373.8	[0.00]	ug/L	06:04:57
2	Al 396.153Radial†	-13.2	-13.2	[0.00]	ug/L	06:03:39
2	As 188.979†	-24.3	-24.3	[0.00]	ug/L	06:05:17
2	B 249.677†	-642.9	-644.5	[0.00]	ug/L	06:05:17
2	Ba 233.527†	-24.9	-24.9	[0.00]	ug/L	06:05:17
2	Be 313.107†	-5204.5	-5216.8	[0.00]	ug/L	06:04:57
2	Ca 317.933Radial†	16.7	16.8	[0.00]	ug/L	06:04:00
2	Cd 226.502†	-198.3	-198.8	[0.00]	ug/L	06:05:17
2	Co 228.616†	-63.9	-64.0	[0.00]	ug/L	06:05:17
2	Cr 267.716†	64.3	64.5	[0.00]	ug/L	06:05:17
2	Cu 324.752†	6764.2	6780.3	[0.00]	ug/L	06:04:57
2	Fe 238.204 Radial†	4.0	4.0	[0.00]	ug/L	06:04:00
2	K 766.490 Radial†	2248.0	2259.6	[0.00]	ug/L	06:03:39
2	Mg 279.077 IEC†	1.6	1.7	[0.00]	ug/L	06:04:00
2	Mn 257.610†	514.7	516.0	[0.00]	ug/L	06:05:17
2	Mo 202.031†	15.5	15.6	[0.00]	ug/L	06:05:17
2	Na 589.592 Radial†	-1067.2	-1072.7	[0.00]	ug/L	06:03:39
2	Ni 231.604†	90.0	90.2	[0.00]	ug/L	06:05:17
2	P 214.914†	222.3	222.8	[0.00]	ug/L	06:05:17
2	Pb 220.353†	-75.5	-75.7	[0.00]	ug/L	06:05:17
2	S 181.975 Axial†	49.2	49.3	[0.00]	ug/L	06:05:17
2	Sb 206.836†	31.8	31.9	[0.00]	ug/L	06:05:17
2	Se 196.026†	-25.0	-25.1	[0.00]	ug/L	06:05:17
2	Si 251.611†	523.7	525.0	[0.00]	ug/L	06:05:17
2	Sn 189.927†	7.0	7.0	[0.00]	ug/L	06:05:17
2	Sr 421.552†	-4.1	-4.1	[0.00]	ug/L	06:03:39
2	Ti 334.940†	-1207.3	-1210.1	[0.00]	ug/L	06:04:57
2	Tl 190.801†	-40.5	-40.6	[0.00]	ug/L	06:05:17
2	U 409.014†	-2608.6	-2614.8	[0.00]	ug/L	06:04:57
2	V 292.402†	-1426.7	-1430.0	[0.00]	ug/L	06:04:57
2	Zn 213.857†	649.8	651.4	[0.00]	ug/L	06:05:17
2	SiO2†	548.7	550.0	[0.00]	ug/L	06:05:52
3	Sc 361.383	904251.6	904251.6	100.33	%	06:05:22
3	Sc Radial	5682.0	5682.0	100	%	06:04:05
3	Y 371.029	754499.0	754499.0	100.36	%	06:05:22
3	Y RADIAL	6105.7	6105.7	100.1	%	06:04:05

3	Ag 328.068†	276.9	276.0	[0.00]	ug/L	06:05:22
3	Al 396.153Radial†	-32.4	-32.4	[0.00]	ug/L	06:04:05
3	As 188.979†	-28.0	-27.9	[0.00]	ug/L	06:05:42
3	B 249.677†	-621.2	-619.2	[0.00]	ug/L	06:05:42
3	Ba 233.527†	-9.3	-9.3	[0.00]	ug/L	06:05:42
3	Be 313.107†	-5335.7	-5318.4	[0.00]	ug/L	06:05:22
3	Ca 317.933Radial†	19.3	19.3	[0.00]	ug/L	06:04:25
3	Cd 226.502†	-210.1	-209.4	[0.00]	ug/L	06:05:42
3	Co 228.616†	-73.5	-73.2	[0.00]	ug/L	06:05:42
3	Cr 267.716†	88.8	88.5	[0.00]	ug/L	06:05:42
3	Cu 324.752†	6981.0	6958.3	[0.00]	ug/L	06:05:22
3	Fe 238.204 Radial†	6.0	6.0	[0.00]	ug/L	06:04:25
3	K 766.490 Radial†	2160.5	2160.4	[0.00]	ug/L	06:04:05
3	Mg 279.077 IEC†	-0.9	-0.9	[0.00]	ug/L	06:04:25
3	Mn 257.610†	467.0	465.5	[0.00]	ug/L	06:05:42
3	Mo 202.031†	32.2	32.1	[0.00]	ug/L	06:05:42
3	Na 589.592 Radial†	-1045.7	-1045.6	[0.00]	ug/L	06:04:05
3	Ni 231.604†	100.2	99.8	[0.00]	ug/L	06:05:42
3	P 214.914†	219.8	219.0	[0.00]	ug/L	06:05:42
3	Pb 220.353†	-75.8	-75.6	[0.00]	ug/L	06:05:42
3	S 181.975 Axial†	48.6	48.4	[0.00]	ug/L	06:05:42
3	Sb 206.836†	22.7	22.6	[0.00]	ug/L	06:05:42
3	Se 196.026†	-23.7	-23.7	[0.00]	ug/L	06:05:42
3	Si 251.611†	575.0	573.2	[0.00]	ug/L	06:05:42
3	Sn 189.927†	7.1	7.1	[0.00]	ug/L	06:05:42
3	Sr 421.552†	4.9	4.9	[0.00]	ug/L	06:04:05
3	Ti 334.940†	-1248.5	-1244.4	[0.00]	ug/L	06:05:22
3	Tl 190.801†	-38.6	-38.5	[0.00]	ug/L	06:05:42
3	U 409.014†	-2415.9	-2408.0	[0.00]	ug/L	06:05:22
3	V 292.402†	-1428.2	-1423.5	[0.00]	ug/L	06:05:22
3	Zn 213.857†	653.0	650.9	[0.00]	ug/L	06:05:42
3	SiO2†	485.9	484.3	[0.00]	ug/L	06:05:57

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	901319.8	2626.01	0.29%	100.00	%
Sc Radial	5681.7	28.95	0.51%	100	%
Y 371.029	751795.5	2376.68	0.32%	100.00	%
Y RADIAL	6098.6	36.88	0.60%	100.00	%
Ag 328.068†	314.9	51.87	16.47%	[0.00]	ug/L
Al 396.153Radial†	-20.4	10.39	50.81%	[0.00]	ug/L
As 188.979†	-24.4	3.53	14.48%	[0.00]	ug/L
B 249.677†	-619.1	25.36	4.10%	[0.00]	ug/L
Ba 233.527†	-17.0	7.83	46.06%	[0.00]	ug/L
Be 313.107†	-5272.1	51.36	0.97%	[0.00]	ug/L
Ca 317.933Radial†	17.0	2.30	13.55%	[0.00]	ug/L
Cd 226.502†	-206.1	6.32	3.07%	[0.00]	ug/L
Co 228.616†	-74.1	10.51	14.19%	[0.00]	ug/L
Cr 267.716†	80.8	14.16	17.52%	[0.00]	ug/L
Cu 324.752†	6870.9	89.06	1.30%	[0.00]	ug/L
Fe 238.204 Radial†	6.0	2.03	33.74%	[0.00]	ug/L
K 766.490 Radial†	2215.2	50.43	2.28%	[0.00]	ug/L
Mg 279.077 IEC†	0.3	1.30	476.64%	[0.00]	ug/L
Mn 257.610†	493.8	25.78	5.22%	[0.00]	ug/L
Mo 202.031†	26.8	9.69	36.22%	[0.00]	ug/L
Na 589.592 Radial†	-1082.0	41.77	3.86%	[0.00]	ug/L
Ni 231.604†	90.9	8.67	9.54%	[0.00]	ug/L
P 214.914†	224.9	7.12	3.16%	[0.00]	ug/L
Pb 220.353†	-72.8	4.97	6.83%	[0.00]	ug/L
S 181.975 Axial†	46.5	4.14	8.90%	[0.00]	ug/L
Sb 206.836†	27.6	4.66	16.88%	[0.00]	ug/L
Se 196.026†	-22.3	3.71	16.64%	[0.00]	ug/L
Si 251.611†	543.4	26.05	4.79%	[0.00]	ug/L
Sn 189.927†	5.4	2.81	51.81%	[0.00]	ug/L
Sr 421.552†	7.4	12.93	174.04%	[0.00]	ug/L
Ti 334.940†	-1201.1	48.42	4.03%	[0.00]	ug/L
Tl 190.801†	-38.0	2.94	7.74%	[0.00]	ug/L
U 409.014†	-2550.3	123.34	4.84%	[0.00]	ug/L
V 292.402†	-1421.8	9.22	0.65%	[0.00]	ug/L

Zn 213.857†	650.7	0.80	0.12%	[0.00]	ug/L
SiO2†	511.5	34.24	6.69%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/7/2009 06:08:08
Data Type: Reprocessed on 12/7/2009 08:21:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	892495.6	892495.6	99.021	%	06:10:33
1	Sc Radial	5826.6	5826.6	103	%	06:10:06
1	Y 371.029	738697.9	738697.9	98.258	%	06:10:33
1	Y RADIAL	6222.5	6222.5	102.0	%	06:10:06
1	Ag 328.068†	22035.7	21938.7	[100]	ug/L	06:10:33
1	As 188.979†	237.5	264.2	[100]	ug/L	06:10:53
1	B 249.677†	3822.6	4479.5	[100]	ug/L	06:10:33
1	Ba 233.527†	13563.9	13715.0	[100]	ug/L	06:10:33
1	Be 313.107†	266048.6	273951.1	[100]	ug/L	06:10:33
1	Cd 226.502†	9336.3	9634.7	[100]	ug/L	06:10:33
1	Co 228.616†	5166.9	5292.0	[100]	ug/L	06:10:53
1	Cr 267.716†	9569.7	9583.5	[100]	ug/L	06:10:33
1	Cu 324.752†	41428.6	34967.3	[100]	ug/L	06:10:33
1	K 766.490 Radial†	8144.2	5726.5	[1000]	ug/L	06:10:01
1	Mn 257.610†	95560.3	96011.3	[100]	ug/L	06:10:33
1	Mo 202.031†	1577.5	1566.4	[100]	ug/L	06:10:53
1	Ni 231.604†	4487.7	4441.2	[100]	ug/L	06:10:33
1	P 214.914†	1093.1	879.0	[500]	ug/L	06:10:53
1	Pb 220.353†	821.3	902.2	[100]	ug/L	06:10:53
1	S 181.975 Axial†	198.6	154.1	[200]	ug/L	06:10:53
1	Sb 206.836†	355.3	331.3	[100]	ug/L	06:10:53
1	Se 196.026†	155.7	179.5	[100]	ug/L	06:10:53
1	Si 251.611†	16968.9	16593.3	[500]	ug/L	06:10:33
1	Sn 189.927†	604.3	604.8	[100]	ug/L	06:10:53
1	Sr 421.552†	16864.7	16437.9	[100]	ug/L	06:10:06
1	Ti 334.940†	61063.4	62868.3	[100]	ug/L	06:10:33
1	Tl 190.801†	325.2	366.4	[100]	ug/L	06:10:53
1	U 409.014†	988.6	3548.7	[100]	ug/L	06:10:33
1	V 292.402†	13253.9	14806.8	[100]	ug/L	06:10:33
1	Zn 213.857†	12160.5	11630.1	[100]	ug/L	06:10:33
1	SiO2†	16901.3	16556.9	[1069.5]	ug/L	06:11:50
2	Sc 361.383	884554.5	884554.5	98.140	%	06:10:59
2	Sc Radial	5990.5	5990.5	105	%	06:10:16
2	Y 371.029	731622.1	731622.1	97.317	%	06:10:59
2	Y RADIAL	6433.9	6433.9	105.5	%	06:10:16
2	Ag 328.068†	22179.5	22285.0	[100]	ug/L	06:10:59
2	As 188.979†	218.7	247.3	[100]	ug/L	06:11:19
2	B 249.677†	3936.1	4629.8	[100]	ug/L	06:10:59
2	Ba 233.527†	13624.2	13899.4	[100]	ug/L	06:10:59
2	Be 313.107†	266329.0	276648.9	[100]	ug/L	06:10:59
2	Cd 226.502†	9360.8	9744.3	[100]	ug/L	06:10:59
2	Co 228.616†	5130.8	5302.1	[100]	ug/L	06:11:19
2	Cr 267.716†	9598.2	9699.3	[100]	ug/L	06:10:59
2	Cu 324.752†	41365.1	35278.2	[100]	ug/L	06:10:59
2	K 766.490 Radial†	8292.0	5649.4	[1000]	ug/L	06:10:11
2	Mn 257.610†	95666.6	96986.0	[100]	ug/L	06:10:59
2	Mo 202.031†	1560.9	1563.8	[100]	ug/L	06:11:19
2	Ni 231.604†	4476.3	4470.3	[100]	ug/L	06:10:59
2	P 214.914†	1076.8	872.4	[500]	ug/L	06:11:19
2	Pb 220.353†	806.2	894.2	[100]	ug/L	06:11:19
2	S 181.975 Axial†	186.0	143.1	[200]	ug/L	06:11:19
2	Sb 206.836†	325.5	304.1	[100]	ug/L	06:11:19
2	Se 196.026†	144.4	169.4	[100]	ug/L	06:11:19
2	Si 251.611†	16989.4	16768.1	[500]	ug/L	06:10:59
2	Sn 189.927†	618.0	624.2	[100]	ug/L	06:11:19
2	Sr 421.552†	17166.4	16274.2	[100]	ug/L	06:10:16
2	Ti 334.940†	61105.0	63464.3	[100]	ug/L	06:10:59
2	Tl 190.801†	328.0	372.2	[100]	ug/L	06:11:19

2	U 409.014†	931.9	3499.8	[100]	ug/L	06:10:59
2	V 292.402†	13318.1	14992.3	[100]	ug/L	06:10:59
2	Zn 213.857†	12169.9	11749.9	[100]	ug/L	06:10:59
2	SiO2†	16909.3	16718.2	[1069.5]	ug/L	06:11:55
3	Sc 361.383	890710.0	890710.0	98.823	%	06:11:24
3	Sc Radial	5846.2	5846.2	103	%	06:10:26
3	Y 371.029	737557.2	737557.2	98.106	%	06:11:24
3	Y RADIAL	6187.5	6187.5	101.5	%	06:10:26
3	Ag 328.068†	22119.0	22067.5	[100]	ug/L	06:11:24
3	As 188.979†	229.1	256.2	[100]	ug/L	06:11:44
3	B 249.677†	3981.1	4647.7	[100]	ug/L	06:11:24
3	Ba 233.527†	13690.3	13870.4	[100]	ug/L	06:11:24
3	Be 313.107†	268547.6	277018.5	[100]	ug/L	06:11:24
3	Cd 226.502†	9450.4	9769.1	[100]	ug/L	06:11:24
3	Co 228.616†	5116.2	5251.2	[100]	ug/L	06:11:44
3	Cr 267.716†	9612.5	9646.2	[100]	ug/L	06:11:24
3	Cu 324.752†	41609.6	35234.4	[100]	ug/L	06:11:24
3	K 766.490 Radial†	8269.9	5822.0	[1000]	ug/L	06:10:21
3	Mn 257.610†	96279.2	96932.2	[100]	ug/L	06:11:24
3	Mo 202.031†	1556.6	1548.4	[100]	ug/L	06:11:44
3	Ni 231.604†	4522.2	4485.3	[100]	ug/L	06:11:24
3	P 214.914†	1068.5	856.3	[500]	ug/L	06:11:44
3	Pb 220.353†	800.9	883.2	[100]	ug/L	06:11:44
3	S 181.975 Axial†	194.2	150.0	[200]	ug/L	06:11:44
3	Sb 206.836†	324.4	300.7	[100]	ug/L	06:11:44
3	Se 196.026†	132.3	156.2	[100]	ug/L	06:11:44
3	Si 251.611†	17080.8	16740.9	[500]	ug/L	06:11:24
3	Sn 189.927†	594.9	596.6	[100]	ug/L	06:11:44
3	Sr 421.552†	16711.6	16234.0	[100]	ug/L	06:10:26
3	Ti 334.940†	61542.2	63476.4	[100]	ug/L	06:11:24
3	Tl 190.801†	320.5	362.3	[100]	ug/L	06:11:44
3	U 409.014†	1130.5	3694.2	[100]	ug/L	06:11:24
3	V 292.402†	13441.8	15023.8	[100]	ug/L	06:11:24
3	Zn 213.857†	12160.8	11655.0	[100]	ug/L	06:11:24
3	SiO2†	17004.6	16695.6	[1069.5]	ug/L	06:12:00

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	889253.4	4166.14	0.47%	98.661	%
Sc Radial	5887.8	89.48	1.52%	104	%
Y 371.029	735959.1	3798.96	0.52%	97.894	%
Y RADIAL	6281.3	133.32	2.12%	103.0	%
Ag 328.068†	22097.1	175.03	0.79%	[100]	ug/L
As 188.979†	255.9	8.49	3.32%	[100]	ug/L
B 249.677†	4585.7	92.37	2.01%	[100]	ug/L
Ba 233.527†	13828.2	99.17	0.72%	[100]	ug/L
Be 313.107†	275872.8	1674.51	0.61%	[100]	ug/L
Cd 226.502†	9716.0	71.51	0.74%	[100]	ug/L
Co 228.616†	5281.8	26.98	0.51%	[100]	ug/L
Cr 267.716†	9643.0	57.94	0.60%	[100]	ug/L
Cu 324.752†	35160.0	168.28	0.48%	[100]	ug/L
K 766.490 Radial†	5732.6	86.45	1.51%	[1000]	ug/L
Mn 257.610†	96643.2	547.90	0.57%	[100]	ug/L
Mo 202.031†	1559.5	9.71	0.62%	[100]	ug/L
Ni 231.604†	4465.6	22.42	0.50%	[100]	ug/L
P 214.914†	869.2	11.67	1.34%	[500]	ug/L
Pb 220.353†	893.2	9.53	1.07%	[100]	ug/L
S 181.975 Axial†	149.1	5.59	3.75%	[200]	ug/L
Sb 206.836†	312.0	16.76	5.37%	[100]	ug/L
Se 196.026†	168.4	11.69	6.94%	[100]	ug/L
Si 251.611†	16700.8	94.04	0.56%	[500]	ug/L
Sn 189.927†	608.5	14.21	2.33%	[100]	ug/L
Sr 421.552†	16315.4	107.99	0.66%	[100]	ug/L
Ti 334.940†	63269.7	347.65	0.55%	[100]	ug/L
Tl 190.801†	366.9	4.96	1.35%	[100]	ug/L
U 409.014†	3580.9	101.12	2.82%	[100]	ug/L
V 292.402†	14941.0	117.27	0.78%	[100]	ug/L
Zn 213.857†	11678.3	63.21	0.54%	[100]	ug/L
SiO2†	16656.9	87.37	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/7/2009 06:14:10
Data Type: Reprocessed on 12/7/2009 08:21:23

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	863002.9	863002.9	95.749	%	06:17:20
1	Sc Radial	5460.4	5460.4	96.1	%	06:16:02
1	Y 371.029	699809.7	699809.7	93.085	%	06:17:20
1	Y RADIAL	5768.3	5768.3	94.58	%	06:16:02
1	Ag 328.068†	109009.1	113534.1	[500]	ug/L	06:17:25
1	Al 396.153Radial†	6657.4	6947.7	[5000]	ug/L	06:16:02
1	As 188.979†	1261.9	1342.3	[500]	ug/L	06:17:45
1	B 249.677†	22856.9	24490.8	[500]	ug/L	06:17:25
1	Ba 233.527†	66730.7	69710.5	[500]	ug/L	06:17:25
1	Be 313.107†	1353585.2	1418955.8	[500]	ug/L	06:17:20
1	Ca 317.933Radial†	3352.4	3471.3	[5000]	ug/L	06:16:23
1	Cd 226.502†	48000.7	50338.0	[500]	ug/L	06:17:25
1	Co 228.616†	26532.7	27784.8	[500]	ug/L	06:17:25
1	Cr 267.716†	46909.8	48911.7	[500]	ug/L	06:17:25
1	Cu 324.752†	176075.6	177022.4	[500]	ug/L	06:17:25
1	K 766.490 Radial†	30123.4	29129.2	[5000]	ug/L	06:16:02
1	Mg 279.077 IEC†	150.7	156.6	[5000]	ug/L	06:16:23
1	Mn 257.610†	460709.6	480671.0	[500]	ug/L	06:17:20
1	Mo 202.031†	7801.6	8121.2	[500]	ug/L	06:17:45
1	Ni 231.604†	21801.0	22678.1	[500]	ug/L	06:17:25
1	P 214.914†	4664.3	4646.5	[2500]	ug/L	06:17:45
1	Pb 220.353†	4337.9	4603.3	[500]	ug/L	06:17:45
1	S 181.975 Axial†	803.2	792.4	[1000]	ug/L	06:17:45
1	Sb 206.836†	1614.8	1658.9	[500]	ug/L	06:17:45
1	Se 196.026†	851.3	911.4	[500]	ug/L	06:17:45
1	Si 251.611†	83581.5	86749.1	[2500]	ug/L	06:17:25
1	Sn 189.927†	3115.6	3248.5	[500]	ug/L	06:17:45
1	Sr 421.552†	77837.3	80985.0	[500]	ug/L	06:16:02
1	Ti 334.940†	307305.1	322150.4	[500]	ug/L	06:17:25
1	Tl 190.801†	1744.3	1859.7	[500]	ug/L	06:17:45
1	U 409.014†	13967.1	17137.5	[500]	ug/L	06:17:25
1	V 292.402†	71825.2	76436.0	[500]	ug/L	06:17:25
1	Zn 213.857†	58053.8	59980.7	[500]	ug/L	06:17:25
1	SiO2†	82191.4	85329.1	[5347.5]	ug/L	06:18:53
2	Sc 361.383	872073.6	872073.6	96.755	%	06:17:51
2	Sc Radial	5500.9	5500.9	96.8	%	06:16:28
2	Y 371.029	707393.0	707393.0	94.094	%	06:17:51
2	Y RADIAL	5797.7	5797.7	95.07	%	06:16:28
2	Ag 328.068†	107100.5	110377.3	[500]	ug/L	06:17:56
2	Al 396.153Radial†	6648.2	6887.2	[5000]	ug/L	06:16:28
2	As 188.979†	1250.2	1316.5	[500]	ug/L	06:18:16
2	B 249.677†	22364.5	23733.6	[500]	ug/L	06:17:56
2	Ba 233.527†	65470.7	67683.4	[500]	ug/L	06:17:56
2	Be 313.107†	1355922.3	1406667.1	[500]	ug/L	06:17:51
2	Ca 317.933Radial†	3336.5	3429.2	[5000]	ug/L	06:16:48
2	Cd 226.502†	46993.6	48775.6	[500]	ug/L	06:17:56
2	Co 228.616†	26031.3	26978.4	[500]	ug/L	06:17:56
2	Cr 267.716†	46114.9	47580.6	[500]	ug/L	06:17:56
2	Cu 324.752†	172480.8	171394.3	[500]	ug/L	06:17:56
2	K 766.490 Radial†	30237.0	29015.9	[5000]	ug/L	06:16:28
2	Mg 279.077 IEC†	145.4	149.9	[5000]	ug/L	06:16:48
2	Mn 257.610†	463440.6	478488.9	[500]	ug/L	06:17:51
2	Mo 202.031†	7769.4	8003.2	[500]	ug/L	06:18:16
2	Ni 231.604†	21371.4	21997.2	[500]	ug/L	06:17:56
2	P 214.914†	4612.0	4541.7	[2500]	ug/L	06:18:16
2	Pb 220.353†	4322.9	4540.7	[500]	ug/L	06:18:16
2	S 181.975 Axial†	792.4	772.5	[1000]	ug/L	06:18:16
2	Sb 206.836†	1590.7	1616.5	[500]	ug/L	06:18:16

2	Se 196.026†	838.3	888.7	[500]	ug/L	06:18:16
2	Si 251.611†	81684.1	83880.1	[2500]	ug/L	06:17:56
2	Sn 189.927†	3099.6	3198.1	[500]	ug/L	06:18:16
2	Sr 421.552†	77518.4	80059.6	[500]	ug/L	06:16:28
2	Ti 334.940†	301480.4	312792.1	[500]	ug/L	06:17:56
2	Tl 190.801†	1721.6	1817.3	[500]	ug/L	06:18:16
2	U 409.014†	13997.5	17017.2	[500]	ug/L	06:17:56
2	V 292.402†	70549.5	74337.3	[500]	ug/L	06:17:56
2	Zn 213.857†	56891.2	58148.5	[500]	ug/L	06:17:56
2	SiO2†	82080.7	84321.8	[5347.5]	ug/L	06:18:58
3	Sc 361.383	863751.3	863751.3	95.832	%	06:18:22
3	Sc Radial	5509.1	5509.1	97.0	%	06:16:53
3	Y 371.029	702407.9	702407.9	93.431	%	06:18:22
3	Y RADIAL	5831.9	5831.9	95.63	%	06:16:53
3	Ag 328.068†	108353.6	112751.5	[500]	ug/L	06:18:27
3	Al 396.153Radial†	6731.0	6962.3	[5000]	ug/L	06:16:53
3	As 188.979†	1258.2	1337.3	[500]	ug/L	06:18:47
3	B 249.677†	22676.7	24282.1	[500]	ug/L	06:18:27
3	Ba 233.527†	66173.3	69068.5	[500]	ug/L	06:18:27
3	Be 313.107†	1335871.3	1399246.5	[500]	ug/L	06:18:22
3	Ca 317.933Radial†	3372.3	3461.0	[5000]	ug/L	06:17:13
3	Cd 226.502†	47287.2	49550.0	[500]	ug/L	06:18:27
3	Co 228.616†	26176.8	27389.5	[500]	ug/L	06:18:27
3	Cr 267.716†	46611.3	48557.8	[500]	ug/L	06:18:27
3	Cu 324.752†	174522.1	175242.0	[500]	ug/L	06:18:27
3	K 766.490 Radial†	30529.8	29271.2	[5000]	ug/L	06:16:53
3	Mg 279.077 IEC†	151.9	156.4	[5000]	ug/L	06:17:13
3	Mn 257.610†	456632.1	475999.3	[500]	ug/L	06:18:22
3	Mo 202.031†	7785.4	8097.3	[500]	ug/L	06:18:47
3	Ni 231.604†	21559.4	22406.3	[500]	ug/L	06:18:27
3	P 214.914†	4630.1	4606.6	[2500]	ug/L	06:18:47
3	Pb 220.353†	4324.8	4585.7	[500]	ug/L	06:18:47
3	S 181.975 Axial†	790.9	778.8	[1000]	ug/L	06:18:47
3	Sb 206.836†	1597.7	1639.6	[500]	ug/L	06:18:47
3	Se 196.026†	841.9	900.8	[500]	ug/L	06:18:47
3	Si 251.611†	82340.2	85378.2	[2500]	ug/L	06:18:27
3	Sn 189.927†	3098.7	3228.0	[500]	ug/L	06:18:47
3	Sr 421.552†	78213.5	80656.7	[500]	ug/L	06:16:53
3	Ti 334.940†	304926.4	319390.2	[500]	ug/L	06:18:27
3	Tl 190.801†	1741.4	1855.1	[500]	ug/L	06:18:47
3	U 409.014†	14108.6	17272.5	[500]	ug/L	06:18:27
3	V 292.402†	71420.3	75948.5	[500]	ug/L	06:18:27
3	Zn 213.857†	57404.7	59250.9	[500]	ug/L	06:18:27
3	SiO2†	81562.6	84598.6	[5347.5]	ug/L	06:19:03

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	866275.9	5034.86	0.58%	96.112	%
Sc Radial	5490.1	26.08	0.48%	96.6	%
Y 371.029	703203.5	3853.75	0.55%	93.537	%
Y RADIAL	5799.3	31.80	0.55%	95.09	%
Ag 328.068†	112221.0	1643.87	1.46%	[500]	ug/L
Al 396.153Radial†	6932.4	39.82	0.57%	[5000]	ug/L
As 188.979†	1332.1	13.68	1.03%	[500]	ug/L
B 249.677†	24168.9	391.08	1.62%	[500]	ug/L
Ba 233.527†	68820.8	1036.02	1.51%	[500]	ug/L
Be 313.107†	1408289.8	9954.31	0.71%	[500]	ug/L
Ca 317.933Radial†	3453.9	21.93	0.64%	[5000]	ug/L
Cd 226.502†	49554.5	781.18	1.58%	[500]	ug/L
Co 228.616†	27384.2	403.23	1.47%	[500]	ug/L
Cr 267.716†	48350.0	689.46	1.43%	[500]	ug/L
Cu 324.752†	174552.9	2876.65	1.65%	[500]	ug/L
K 766.490 Radial†	29138.8	127.89	0.44%	[5000]	ug/L
Mg 279.077 IEC†	154.3	3.82	2.48%	[5000]	ug/L
Mn 257.610†	478386.4	2337.57	0.49%	[500]	ug/L
Mo 202.031†	8073.9	62.37	0.77%	[500]	ug/L
Ni 231.604†	22360.5	342.72	1.53%	[500]	ug/L
P 214.914†	4598.3	52.89	1.15%	[2500]	ug/L
Pb 220.353†	4576.5	32.28	0.71%	[500]	ug/L

S 181.975 Axial†	781.2	10.17	1.30%	[1000]	ug/L
Sb 206.836†	1638.3	21.25	1.30%	[500]	ug/L
Se 196.026†	900.3	11.35	1.26%	[500]	ug/L
Si 251.611†	85335.8	1434.97	1.68%	[2500]	ug/L
Sn 189.927†	3224.9	25.35	0.79%	[500]	ug/L
Sr 421.552†	80567.1	469.18	0.58%	[500]	ug/L
Ti 334.940†	318110.9	4808.53	1.51%	[500]	ug/L
Tl 190.801†	1844.0	23.29	1.26%	[500]	ug/L
U 409.014†	17142.4	127.76	0.75%	[500]	ug/L
V 292.402†	75573.9	1098.36	1.45%	[500]	ug/L
Zn 213.857†	59126.7	922.40	1.56%	[500]	ug/L
SiO2†	84749.8	520.41	0.61%	[5347.5]	ug/L

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Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/7/2009 06:21:13
Data Type: Reprocessed on 12/7/2009 08:21:24

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	855164.6	855164.6	94.879	%	06:24:29
1	Sc Radial	5594.6	5594.6	98.5	%	06:23:06
1	Y 371.029	706435.5	706435.5	93.966	%	06:24:29
1	Y RADIAL	5879.1	5879.1	96.40	%	06:23:06
1	Ag 328.068†	213054.8	224238.9	[1000]	ug/L	06:24:29
1	Al 396.153Radial†	13475.5	13705.8	[10000]	ug/L	06:23:06
1	As 188.979†	2475.6	2633.6	[1000]	ug/L	06:24:49
1	B 249.677†	46272.6	49389.1	[1000]	ug/L	06:24:29
1	Ba 233.527†	131754.2	138882.3	[1000]	ug/L	06:24:29
1	Be 313.107†	2666197.8	2815370.8	[1000]	ug/L	06:24:24
1	Ca 317.933Radial†	6648.8	6735.4	[10000]	ug/L	06:23:06
1	Cd 226.502†	92897.8	98117.8	[1000]	ug/L	06:24:29
1	Co 228.616†	51724.4	54590.1	[1000]	ug/L	06:24:29
1	Cr 267.716†	92670.0	97590.8	[1000]	ug/L	06:24:29
1	Cu 324.752†	345498.6	357275.1	[1000]	ug/L	06:24:29
1	Fe 238.204 Radial†	1086.0	1096.9	[10000]	ug/L	06:23:26
1	K 766.490 Radial†	58015.0	56703.0	[10000]	ug/L	06:23:06
1	Mg 279.077 IEC†	288.0	292.2	[10000]	ug/L	06:23:26
1	Mn 257.610†	910356.4	958996.7	[1000]	ug/L	06:24:24
1	Mo 202.031†	15248.9	16045.2	[1000]	ug/L	06:24:49
1	Na 589.592 Radial†	28949.2	30481.9	[10000]	ug/L	06:23:06
1	Ni 231.604†	42262.2	44452.4	[1000]	ug/L	06:24:29
1	P 214.914†	8823.0	9074.3	[5000]	ug/L	06:24:49
1	Pb 220.353†	8613.5	9151.1	[1000]	ug/L	06:24:49
1	S 181.975 Axial†	1473.9	1506.9	[2000]	ug/L	06:24:49
1	Sb 206.836†	3093.8	3233.2	[1000]	ug/L	06:24:49
1	Se 196.026†	1667.1	1779.4	[1000]	ug/L	06:24:49
1	Si 251.611†	163167.5	171430.7	[5000]	ug/L	06:24:29
1	Sn 189.927†	5946.8	6262.3	[1000]	ug/L	06:24:49
1	Sr 421.552†	159731.6	162211.0	[1000]	ug/L	06:23:06
1	Ti 334.940†	603619.9	637399.8	[1000]	ug/L	06:24:29
1	Tl 190.801†	3471.8	3697.2	[1000]	ug/L	06:24:49
1	U 409.014†	32117.4	36401.2	[1000]	ug/L	06:24:29
1	V 292.402†	145272.4	154534.9	[1000]	ug/L	06:24:29
1	Zn 213.857†	112629.4	118057.6	[1000]	ug/L	06:24:29
1	SiO2†	162722.6	170993.6	[10695]	ug/L	06:25:58
2	Sc 361.383	857825.9	857825.9	95.174	%	06:25:01
2	Sc Radial	5612.9	5612.9	98.8	%	06:23:31
2	Y 371.029	710271.6	710271.6	94.477	%	06:25:01
2	Y RADIAL	5965.7	5965.7	97.82	%	06:23:31
2	Ag 328.068†	213900.7	224431.1	[1000]	ug/L	06:25:01
2	Al 396.153Radial†	13564.8	13751.5	[10000]	ug/L	06:23:31
2	As 188.979†	2479.1	2629.2	[1000]	ug/L	06:25:21
2	B 249.677†	46447.6	49421.7	[1000]	ug/L	06:25:01
2	Ba 233.527†	131654.5	138346.7	[1000]	ug/L	06:25:01
2	Be 313.107†	2692823.8	2834628.8	[1000]	ug/L	06:24:55
2	Ca 317.933Radial†	6749.7	6815.4	[10000]	ug/L	06:23:31
2	Cd 226.502†	92518.2	97415.1	[1000]	ug/L	06:25:01
2	Co 228.616†	51572.8	54261.7	[1000]	ug/L	06:25:01
2	Cr 267.716†	92869.0	97496.8	[1000]	ug/L	06:25:01
2	Cu 324.752†	347542.8	358293.2	[1000]	ug/L	06:25:01
2	Fe 238.204 Radial†	1094.2	1101.6	[10000]	ug/L	06:23:51
2	K 766.490 Radial†	58599.9	57102.8	[10000]	ug/L	06:23:31
2	Mg 279.077 IEC†	291.7	295.0	[10000]	ug/L	06:23:51
2	Mn 257.610†	917199.3	963209.7	[1000]	ug/L	06:24:55
2	Mo 202.031†	15264.6	16011.8	[1000]	ug/L	06:25:21
2	Na 589.592 Radial†	29006.8	30444.2	[10000]	ug/L	06:23:31
2	Ni 231.604†	42184.7	44232.7	[1000]	ug/L	06:25:01

2	P 214.914†	8789.0	9009.7	[5000]	ug/L	06:25:21
2	Pb 220.353†	8621.9	9131.8	[1000]	ug/L	06:25:21
2	S 181.975 Axial†	1452.0	1479.1	[2000]	ug/L	06:25:21
2	Sb 206.836†	3093.5	3222.8	[1000]	ug/L	06:25:21
2	Se 196.026†	1665.2	1771.9	[1000]	ug/L	06:25:21
2	Si 251.611†	163255.6	170989.7	[5000]	ug/L	06:25:01
2	Sn 189.927†	5941.8	6237.6	[1000]	ug/L	06:25:21
2	Sr 421.552†	160778.0	162740.9	[1000]	ug/L	06:23:31
2	Ti 334.940†	605361.1	637255.5	[1000]	ug/L	06:25:01
2	Tl 190.801†	3463.2	3676.7	[1000]	ug/L	06:25:21
2	U 409.014†	32344.5	36534.7	[1000]	ug/L	06:25:01
2	V 292.402†	145541.5	154342.6	[1000]	ug/L	06:25:01
2	Zn 213.857†	112565.3	117622.0	[1000]	ug/L	06:25:01
2	SiO2†	163755.3	171546.5	[10695]	ug/L	06:26:03
3	Sc 361.383	858924.6	858924.6	95.296	%	06:25:32
3	Sc Radial	5633.4	5633.4	99.1	%	06:23:57
3	Y 371.029	712490.8	712490.8	94.772	%	06:25:32
3	Y RADIAL	5964.7	5964.7	97.80	%	06:23:57
3	Ag 328.068†	214825.9	225114.4	[1000]	ug/L	06:25:32
3	Al 396.153Radial†	13628.7	13766.0	[10000]	ug/L	06:23:57
3	As 188.979†	2507.5	2655.6	[1000]	ug/L	06:25:52
3	B 249.677†	46659.9	49582.1	[1000]	ug/L	06:25:32
3	Ba 233.527†	132232.2	138776.0	[1000]	ug/L	06:25:32
3	Be 313.107†	2719632.3	2859141.1	[1000]	ug/L	06:25:27
3	Ca 317.933Radial†	6749.7	6790.6	[10000]	ug/L	06:23:57
3	Cd 226.502†	92891.2	97682.3	[1000]	ug/L	06:25:32
3	Co 228.616†	51830.7	54463.1	[1000]	ug/L	06:25:32
3	Cr 267.716†	93104.1	97618.7	[1000]	ug/L	06:25:32
3	Cu 324.752†	350295.9	360715.1	[1000]	ug/L	06:25:32
3	Fe 238.204 Radial†	1078.6	1081.8	[10000]	ug/L	06:24:17
3	K 766.490 Radial†	58606.9	56894.3	[10000]	ug/L	06:23:57
3	Mg 279.077 IEC†	288.4	290.6	[10000]	ug/L	06:24:17
3	Mn 257.610†	923285.0	968363.1	[1000]	ug/L	06:25:27
3	Mo 202.031†	15354.7	16085.8	[1000]	ug/L	06:25:52
3	Na 589.592 Radial†	28975.2	30305.7	[10000]	ug/L	06:23:57
3	Ni 231.604†	42390.5	44392.0	[1000]	ug/L	06:25:32
3	P 214.914†	8908.5	9123.3	[5000]	ug/L	06:25:52
3	Pb 220.353†	8649.2	9148.9	[1000]	ug/L	06:25:52
3	S 181.975 Axial†	1474.3	1500.6	[2000]	ug/L	06:25:52
3	Sb 206.836†	3123.3	3249.8	[1000]	ug/L	06:25:52
3	Se 196.026†	1681.1	1786.4	[1000]	ug/L	06:25:52
3	Si 251.611†	164255.4	171819.5	[5000]	ug/L	06:25:32
3	Sn 189.927†	5985.7	6275.8	[1000]	ug/L	06:25:52
3	Sr 421.552†	160800.3	162172.0	[1000]	ug/L	06:23:57
3	Ti 334.940†	608503.0	639738.8	[1000]	ug/L	06:25:32
3	Tl 190.801†	3508.2	3719.4	[1000]	ug/L	06:25:52
3	U 409.014†	32649.0	36810.8	[1000]	ug/L	06:25:32
3	V 292.402†	146072.5	154704.2	[1000]	ug/L	06:25:32
3	Zn 213.857†	113065.5	117995.5	[1000]	ug/L	06:25:32
3	SiO2†	163033.8	170569.4	[10695]	ug/L	06:26:08

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	857305.0	1933.38	0.23%	95.117	%
Sc Radial	5613.6	19.40	0.35%	98.8	%
Y 371.029	709732.6	3063.39	0.43%	94.405	%
Y RADIAL	5936.5	49.70	0.84%	97.34	%
Ag 328.068†	224594.8	460.13	0.20%	[1000]	ug/L
Al 396.153Radial†	13741.1	31.42	0.23%	[10000]	ug/L
As 188.979†	2639.5	14.17	0.54%	[1000]	ug/L
B 249.677†	49464.3	103.31	0.21%	[1000]	ug/L
Ba 233.527†	138668.3	283.54	0.20%	[1000]	ug/L
Be 313.107†	2836380.2	21937.69	0.77%	[1000]	ug/L
Ca 317.933Radial†	6780.5	40.97	0.60%	[10000]	ug/L
Cd 226.502†	97738.4	354.66	0.36%	[1000]	ug/L
Co 228.616†	54438.3	165.61	0.30%	[1000]	ug/L
Cr 267.716†	97568.8	63.84	0.07%	[1000]	ug/L
Cu 324.752†	358761.2	1767.08	0.49%	[1000]	ug/L
Fe 238.204 Radial†	1093.4	10.37	0.95%	[10000]	ug/L

K 766.490 Radial†	56900.1	199.98	0.35%	[10000]	ug/L
Mg 279.077 IEC†	292.6	2.21	0.75%	[10000]	ug/L
Mn 257.610†	963523.2	4691.08	0.49%	[1000]	ug/L
Mo 202.031†	16047.6	37.08	0.23%	[1000]	ug/L
Na 589.592 Radial†	30410.6	92.75	0.30%	[10000]	ug/L
Ni 231.604†	44359.0	113.50	0.26%	[1000]	ug/L
P 214.914†	9069.1	57.00	0.63%	[5000]	ug/L
Pb 220.353†	9144.0	10.57	0.12%	[1000]	ug/L
S 181.975 Axial†	1495.6	14.57	0.97%	[2000]	ug/L
Sb 206.836†	3235.3	13.64	0.42%	[1000]	ug/L
Se 196.026†	1779.2	7.23	0.41%	[1000]	ug/L
Si 251.611†	171413.3	415.16	0.24%	[5000]	ug/L
Sn 189.927†	6258.6	19.35	0.31%	[1000]	ug/L
Sr 421.552†	162374.7	317.80	0.20%	[1000]	ug/L
Ti 334.940†	638131.4	1393.96	0.22%	[1000]	ug/L
Tl 190.801†	3697.8	21.32	0.58%	[1000]	ug/L
U 409.014†	36582.2	208.90	0.57%	[1000]	ug/L
V 292.402†	154527.2	180.89	0.12%	[1000]	ug/L
Zn 213.857†	117891.7	235.64	0.20%	[1000]	ug/L
SiO2†	171036.5	489.97	0.29%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/7/2009 06:28:20
Data Type: Reprocessed on 12/7/2009 08:21:25
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	867106.5	867106.5	96.204	%	06:31:31
1	Sc Radial	5539.7	5539.7	97.5	%	06:30:33
1	Y 371.029	703978.8	703978.8	93.640	%	06:31:31
1	Y RADIAL	5858.0	5858.0	96.05	%	06:30:33
1	Al 396.153Radial†	68810.2	70595.0	[50000]	ug/L	06:30:13
1	Ca 317.933Radial†	32795.2	33619.2	[50000]	ug/L	06:30:13
1	Fe 238.204 Radial†	2122.6	2171.1	[20000]	ug/L	06:30:33
1	Mg 279.077 IEC†	1378.2	1413.3	[50000]	ug/L	06:30:33
1	Na 589.592 Radial†	60137.4	62761.4	[20000]	ug/L	06:30:13
2	Sc 361.383	875928.4	875928.4	97.183	%	06:31:36
2	Sc Radial	5644.8	5644.8	99.4	%	06:30:59
2	Y 371.029	710659.4	710659.4	94.528	%	06:31:36
2	Y RADIAL	5968.5	5968.5	97.87	%	06:30:59
2	Al 396.153Radial†	68421.3	68889.1	[50000]	ug/L	06:30:39
2	Ca 317.933Radial†	32538.8	32734.7	[50000]	ug/L	06:30:39
2	Fe 238.204 Radial†	2151.6	2159.6	[20000]	ug/L	06:30:59
2	Mg 279.077 IEC†	1393.8	1402.7	[50000]	ug/L	06:30:59
2	Na 589.592 Radial†	59427.8	60898.4	[20000]	ug/L	06:30:39
3	Sc 361.383	871346.0	871346.0	96.674	%	06:31:42
3	Sc Radial	5569.7	5569.7	98.0	%	06:31:24
3	Y 371.029	707245.1	707245.1	94.074	%	06:31:42
3	Y RADIAL	5882.3	5882.3	96.45	%	06:31:24
3	Al 396.153Radial†	70532.3	71970.8	[50000]	ug/L	06:31:04
3	Ca 317.933Radial†	33570.2	34228.2	[50000]	ug/L	06:31:04
3	Fe 238.204 Radial†	2126.9	2163.7	[20000]	ug/L	06:31:24
3	Mg 279.077 IEC†	1370.7	1398.0	[50000]	ug/L	06:31:24
3	Na 589.592 Radial†	61534.2	63853.3	[20000]	ug/L	06:31:04

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	871460.3	4412.05	0.51%	96.687	%
Sc Radial	5584.7	54.15	0.97%	98.3	%
Y 371.029	707294.4	3340.60	0.47%	94.081	%
Y RADIAL	5902.9	58.06	0.98%	96.79	%
Al 396.153Radial†	70485.0	1543.79	2.19%	[50000]	ug/L
Ca 317.933Radial†	33527.3	751.00	2.24%	[50000]	ug/L
Fe 238.204 Radial†	2164.8	5.78	0.27%	[20000]	ug/L
Mg 279.077 IEC†	1404.6	7.83	0.56%	[50000]	ug/L
Na 589.592 Radial†	62504.4	1494.12	2.39%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	224.5	0.00000	0.999999	
Al 396.153Radial	3	Lin Thru 0	0.0	1.408	0.00000	0.999987	
As 188.979	3	Lin Thru 0	0.0	2.644	0.00000	0.999989	
B 249.677	3	Lin Thru 0	0.0	49.21	0.00000	0.999940	
Ba 233.527	3	Lin Thru 0	0.0	138.5	0.00000	0.999996	
Be 313.107	3	Lin Thru 0	0.0	2832	0.00000	0.999993	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6710	0.00000	0.999994	
Cd 226.502	3	Lin Thru 0	0.0	98.01	0.00000	0.999984	
Co 228.616	3	Lin Thru 0	0.0	54.49	0.00000	0.999993	
Cr 267.716	3	Lin Thru 0	0.0	97.39	0.00000	0.999993	
Cu 324.752	3	Lin Thru 0	0.0	356.8	0.00000	0.999941	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1085	0.00000	0.999992	

K 766.490 Radial	3	Lin Thru 0	0.0	5.718	0.00000	0.999954
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0282	0.00000	0.999925
Mn 257.610	3	Lin Thru 0	0.0	962.2	0.00000	0.999996
Mo 202.031	3	Lin Thru 0	0.0	16.06	0.00000	0.999994
Na 589.592 Radia	2	Lin Thru 0	0.0	3.108	0.00000	0.999941
Ni 231.604	3	Lin Thru 0	0.0	44.43	0.00000	0.999995
P 214.914	3	Lin Thru 0	0.0	1.818	0.00000	0.999977
Pb 220.353	3	Lin Thru 0	0.0	9.144	0.00000	0.999998
S 181.975 Axial	3	Lin Thru 0	0.0	0.7544	0.00000	0.999843
Sb 206.836	3	Lin Thru 0	0.0	3.243	0.00000	0.999981
Se 196.026	3	Lin Thru 0	0.0	1.783	0.00000	0.999976
Si 251.611	3	Lin Thru 0	0.0	34.25	0.00000	0.999996
Sn 189.927	3	Lin Thru 0	0.0	6.295	0.00000	0.999922
Sr 421.552	3	Lin Thru 0	0.0	162.1	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	637.7	0.00000	0.999999
Tl 190.801	3	Lin Thru 0	0.0	3.696	0.00000	0.999999
U 409.014	3	Lin Thru 0	0.0	36.12	0.00000	0.999679
V 292.402	3	Lin Thru 0	0.0	153.8	0.00000	0.999958
Zn 213.857	3	Lin Thru 0	0.0	118.0	0.00000	0.999999
SiO2	3	Lin Thru 0	0.0	15.96	0.00000	0.999991

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/7/2009 06:33:53
Data Type: Reprocessed on 12/7/2009 08:21:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896859.1	896859.1	99.505	%			06:37:03
1	Sc Radial	5737.3	5737.3	101	%			06:35:45
1	Y 371.029	736555.2	736555.2	97.973	%			06:37:03
1	Y RADIAL	6146.6	6146.6	100.8	%			06:35:45
1	Ag 328.068†	58997.5	58976.0	265.78	ug/L	265.78	ppb	06:37:03
1	Al 396.153Radial†	7213.3	7163.9	5064.2	ug/L	5064.2	ppb	06:35:45
1	As 188.979†	1181.9	1212.2	462.94	ug/L	462.94	ppb	06:37:23
1	B 249.677†	24732.0	25474.1	515.69	ug/L	515.69	ppb	06:37:03
1	Ba 233.527†	70117.9	70483.7	510.38	ug/L	510.38	ppb	06:37:03
1	Be 313.107†	723666.4	732537.8	259.69	ug/L	259.69	ppb	06:37:03
1	Ca 317.933Radial†	3406.4	3356.5	5002.0	ug/L	5002.0	ppb	06:36:05
1	Cd 226.502†	48110.6	48556.0	495.25	ug/L	495.25	ppb	06:37:03
1	Co 228.616†	26981.6	27189.9	499.29	ug/L	499.29	ppb	06:37:23
1	Cr 267.716†	47351.2	47505.9	488.63	ug/L	488.63	ppb	06:37:03
1	Cu 324.752†	187632.9	181695.2	509.51	ug/L	509.51	ppb	06:37:03
1	Fe 238.204 Radial†	564.9	553.4	5117.9	ug/L	5117.9	ppb	06:36:05
1	K 766.490 Radial†	16770.6	14392.9	2512.1	ug/L	2512.1	ppb	06:35:45
1	Mg 279.077 IEC†	151.7	150.0	5332.4	ug/L	5332.4	ppb	06:36:05
1	Mn 257.610†	490252.3	492196.8	511.94	ug/L	511.94	ppb	06:37:03
1	Mo 202.031†	8740.1	8756.8	545.49	ug/L	545.49	ppb	06:37:23
1	Na 589.592 Radial†	6375.2	7395.4	2379.2	ug/L	2379.2	ppb	06:35:45
1	Ni 231.604†	21974.9	21993.3	494.66	ug/L	494.66	ppb	06:37:23
1	P 214.914†	4688.7	4487.1	2391.2	ug/L	2391.2	ppb	06:37:23
1	Pb 220.353†	4463.4	4558.4	500.16	ug/L	500.16	ppb	06:37:23
1	S 181.975 Axial†	1894.9	1857.9	2461.7	ug/L	2461.7	ppb	06:37:23
1	Sb 206.836†	1654.0	1634.7	513.39	ug/L	513.39	ppb	06:37:23
1	Se 196.026†	4503.5	4548.2	2570.0	ug/L	2570.0	ppb	06:37:23
1	Si 251.611†	164672.6	164948.3	4804.5	ug/L	4804.5	ppb	06:37:03
1	Sn 189.927†	3393.6	3405.0	541.48	ug/L	541.48	ppb	06:37:23
1	Sr 421.552†	86744.7	85897.1	529.74	ug/L	529.74	ppb	06:35:45
1	Ti 334.940†	326121.6	328944.7	515.70	ug/L	515.70	ppb	06:37:03
1	Tl 190.801†	1892.8	1940.2	528.39	ug/L	528.39	ppb	06:37:23
1	U 409.014†	15124.3	17749.8	489.82	ug/L	489.82	ppb	06:37:03
1	V 292.402†	76148.0	77948.6	514.09	ug/L	514.09	ppb	06:37:03
1	Zn 213.857†	60201.3	59850.0	502.96	ug/L	502.96	ppb	06:37:03
1	SiO2†	165141.0	165450.8	10340	ug/L	10340	ppb	06:38:21
2	Sc 361.383	898142.2	898142.2	99.647	%			06:37:29
2	Sc Radial	5603.6	5603.6	98.6	%			06:36:11
2	Y 371.029	738812.2	738812.2	98.273	%			06:37:29
2	Y RADIAL	5962.4	5962.4	97.77	%			06:36:11
2	Ag 328.068†	58862.5	58755.8	264.83	ug/L	264.83	ppb	06:37:29
2	Al 396.153Radial†	7104.1	7223.5	5106.6	ug/L	5106.6	ppb	06:36:11
2	As 188.979†	1194.7	1223.3	467.14	ug/L	467.14	ppb	06:37:49
2	B 249.677†	24536.6	25242.5	510.97	ug/L	510.97	ppb	06:37:29
2	Ba 233.527†	69878.8	70143.0	507.92	ug/L	507.92	ppb	06:37:29
2	Be 313.107†	721643.7	729468.9	258.60	ug/L	258.60	ppb	06:37:29
2	Ca 317.933Radial†	3402.8	3433.3	5116.5	ug/L	5116.5	ppb	06:36:31
2	Cd 226.502†	47831.6	48206.9	491.67	ug/L	491.67	ppb	06:37:29
2	Co 228.616†	27031.3	27201.0	499.49	ug/L	499.49	ppb	06:37:49
2	Cr 267.716†	47209.9	47296.1	486.47	ug/L	486.47	ppb	06:37:29
2	Cu 324.752†	187009.0	180799.8	507.01	ug/L	507.01	ppb	06:37:29
2	Fe 238.204 Radial†	564.2	566.0	5234.2	ug/L	5234.2	ppb	06:36:31
2	K 766.490 Radial†	16635.8	14652.4	2557.4	ug/L	2557.4	ppb	06:36:11
2	Mg 279.077 IEC†	153.4	155.3	5519.2	ug/L	5519.2	ppb	06:36:31
2	Mn 257.610†	488505.9	489740.5	509.39	ug/L	509.39	ppb	06:37:29
2	Mo 202.031†	8736.1	8740.2	544.46	ug/L	544.46	ppb	06:37:49
2	Na 589.592 Radial†	6379.1	7550.0	2428.9	ug/L	2428.9	ppb	06:36:11
2	Ni 231.604†	21954.6	21941.5	493.49	ug/L	493.49	ppb	06:37:49

2	P 214.914†	4695.8	4487.5	2391.7 ug/L	2391.7 ppb	06:37:49
2	Pb 220.353†	4448.8	4537.3	497.86 ug/L	497.86 ppb	06:37:49
2	S 181.975 Axial†	1898.6	1858.8	2463.0 ug/L	2463.0 ppb	06:37:49
2	Sb 206.836†	1655.0	1633.2	512.93 ug/L	512.93 ppb	06:37:49
2	Se 196.026†	4517.4	4555.7	2574.6 ug/L	2574.6 ppb	06:37:49
2	Si 251.611†	163894.6	163931.1	4774.8 ug/L	4774.8 ppb	06:37:29
2	Sn 189.927†	3385.6	3392.2	539.46 ug/L	539.46 ppb	06:37:49
2	Sr 421.552†	85598.3	86783.4	535.21 ug/L	535.21 ppb	06:36:11
2	Ti 334.940†	324841.2	327191.6	512.95 ug/L	512.95 ppb	06:37:29
2	Tl 190.801†	1887.6	1932.3	526.19 ug/L	526.19 ppb	06:37:49
2	U 409.014†	15208.5	17812.6	491.55 ug/L	491.55 ppb	06:37:29
2	V 292.402†	75994.1	77684.7	512.36 ug/L	512.36 ppb	06:37:29
2	Zn 213.857†	60018.7	59580.4	500.67 ug/L	500.67 ppb	06:37:29
2	SiO2†	163074.9	163140.3	10195 ug/L	10195 ppb	06:38:26
3	Sc 361.383	899695.2	899695.2	99.820 %		06:37:55
3	Sc Radial	5615.6	5615.6	98.8 %		06:36:36
3	Y 371.029	738265.2	738265.2	98.200 %		06:37:55
3	Y RADIAL	5929.0	5929.0	97.22 %		06:36:36
3	Ag 328.068†	58859.5	58650.8	264.35 ug/L	264.35 ppb	06:37:55
3	Al 396.153Radial†	7135.1	7239.5	5118.0 ug/L	5118.0 ppb	06:36:36
3	As 188.979†	1194.7	1221.2	466.37 ug/L	466.37 ppb	06:38:15
3	B 249.677†	24746.3	25410.1	514.39 ug/L	514.39 ppb	06:37:55
3	Ba 233.527†	70201.6	70345.4	509.38 ug/L	509.38 ppb	06:37:55
3	Be 313.107†	722197.7	728773.9	258.36 ug/L	258.36 ppb	06:37:55
3	Ca 317.933Radial†	3419.3	3442.6	5130.3 ug/L	5130.3 ppb	06:36:56
3	Cd 226.502†	48214.5	48507.6	494.74 ug/L	494.74 ppb	06:37:55
3	Co 228.616†	26885.1	27007.7	495.94 ug/L	495.94 ppb	06:38:15
3	Cr 267.716†	47278.5	47283.1	486.34 ug/L	486.34 ppb	06:37:55
3	Cu 324.752†	186953.6	180420.4	505.94 ug/L	505.94 ppb	06:37:55
3	Fe 238.204 Radial†	563.7	564.4	5219.1 ug/L	5219.1 ppb	06:36:56
3	K 766.490 Radial†	16691.0	14672.3	2560.9 ug/L	2560.9 ppb	06:36:36
3	Mg 279.077 IEC†	154.3	155.9	5540.6 ug/L	5540.6 ppb	06:36:56
3	Mn 257.610†	490982.2	491374.9	511.09 ug/L	511.09 ppb	06:37:55
3	Mo 202.031†	8732.0	8721.0	543.26 ug/L	543.26 ppb	06:38:15
3	Na 589.592 Radial†	6348.2	7504.9	2414.4 ug/L	2414.4 ppb	06:36:36
3	Ni 231.604†	21874.6	21823.3	490.83 ug/L	490.83 ppb	06:38:15
3	P 214.914†	4684.2	4467.7	2381.0 ug/L	2381.0 ppb	06:38:15
3	Pb 220.353†	4457.4	4538.2	497.96 ug/L	497.96 ppb	06:38:15
3	S 181.975 Axial†	1889.2	1846.1	2446.1 ug/L	2446.1 ppb	06:38:15
3	Sb 206.836†	1642.9	1618.3	508.29 ug/L	508.29 ppb	06:38:15
3	Se 196.026†	4458.5	4488.8	2537.0 ug/L	2537.0 ppb	06:38:15
3	Si 251.611†	164583.5	164337.3	4786.7 ug/L	4786.7 ppb	06:37:55
3	Sn 189.927†	3386.8	3387.5	538.72 ug/L	538.72 ppb	06:38:15
3	Sr 421.552†	85778.6	86781.0	535.19 ug/L	535.19 ppb	06:36:36
3	Ti 334.940†	326081.8	327871.8	514.02 ug/L	514.02 ppb	06:37:55
3	Tl 190.801†	1887.9	1929.3	525.43 ug/L	525.43 ppb	06:38:15
3	U 409.014†	15225.8	17803.6	491.30 ug/L	491.30 ppb	06:37:55
3	V 292.402†	76093.5	77652.8	512.13 ug/L	512.13 ppb	06:37:55
3	Zn 213.857†	60239.2	59697.3	501.68 ug/L	501.68 ppb	06:37:55
3	SiO2†	162678.9	162461.2	10153 ug/L	10153 ppb	06:38:31

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898232.1	99.657	%	0.1576				0.16%
Sc Radial	5652.2	99.5	%	1.30				1.31%
Y 371.029	737877.5	98.149	%	0.1566				0.16%
Y RADIAL	6012.7	98.59	%	1.921				1.95%
Ag 328.068†	58794.2	264.99	ug/L	0.727	264.99	ppb	0.727	0.27%
QC value within limits for Ag 328.068 Recovery = 105.99%								
Al 396.153Radial†	7209.0	5096.3	ug/L	28.36	5096.3	ppb	28.36	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.93%								
As 188.979†	1218.9	465.48	ug/L	2.233	465.48	ppb	2.233	0.48%
QC value within limits for As 188.979 Recovery = 93.10%								
B 249.677†	25375.6	513.69	ug/L	2.438	513.69	ppb	2.438	0.47%
QC value within limits for B 249.677 Recovery = 102.74%								
Ba 233.527†	70324.0	509.22	ug/L	1.237	509.22	ppb	1.237	0.24%
QC value within limits for Ba 233.527 Recovery = 101.84%								
Be 313.107†	730260.2	258.89	ug/L	0.710	258.89	ppb	0.710	0.27%
QC value within limits for Be 313.107 Recovery = 103.55%								

Ca 317.933Radial†	3410.8	5082.9 ug/L	70.41	5082.9 ppb	70.41	1.39%
QC value within limits for Ca 317.933Radial Recovery = 101.66%						
Cd 226.502†	48423.5	493.89 ug/L	1.934	493.89 ppb	1.934	0.39%
QC value within limits for Cd 226.502 Recovery = 98.78%						
Co 228.616†	27132.9	498.24 ug/L	1.994	498.24 ppb	1.994	0.40%
QC value within limits for Co 228.616 Recovery = 99.65%						
Cr 267.716†	47361.7	487.15 ug/L	1.285	487.15 ppb	1.285	0.26%
QC value within limits for Cr 267.716 Recovery = 97.43%						
Cu 324.752†	180971.8	507.49 ug/L	1.832	507.49 ppb	1.832	0.36%
QC value within limits for Cu 324.752 Recovery = 101.50%						
Fe 238.204 Radial†	561.3	5190.4 ug/L	63.23	5190.4 ppb	63.23	1.22%
QC value within limits for Fe 238.204 Radial Recovery = 103.81%						
K 766.490 Radial†	14572.5	2543.5 ug/L	27.25	2543.5 ppb	27.25	1.07%
QC value within limits for K 766.490 Radial Recovery = 101.74%						
Mg 279.077 IEC†	153.7	5464.1 ug/L	114.51	5464.1 ppb	114.51	2.10%
QC value within limits for Mg 279.077 IEC Recovery = 109.28%						
Mn 257.610†	491104.1	510.81 ug/L	1.296	510.81 ppb	1.296	0.25%
QC value within limits for Mn 257.610 Recovery = 102.16%						
Mo 202.031†	8739.3	544.40 ug/L	1.113	544.40 ppb	1.113	0.20%
QC value within limits for Mo 202.031 Recovery = 108.88%						
Na 589.592 Radial†	7483.4	2407.5 ug/L	25.57	2407.5 ppb	25.57	1.06%
QC value within limits for Na 589.592 Radial Recovery = 96.30%						
Ni 231.604†	21919.4	492.99 ug/L	1.960	492.99 ppb	1.960	0.40%
QC value within limits for Ni 231.604 Recovery = 98.60%						
P 214.914†	4480.8	2388.0 ug/L	6.04	2388.0 ppb	6.04	0.25%
QC value within limits for P 214.914 Recovery = 95.52%						
Pb 220.353†	4544.7	498.66 ug/L	1.301	498.66 ppb	1.301	0.26%
QC value within limits for Pb 220.353 Recovery = 99.73%						
S 181.975 Axial†	1854.3	2456.9 ug/L	9.38	2456.9 ppb	9.38	0.38%
QC value within limits for S 181.975 Axial Recovery = 98.28%						
Sb 206.836†	1628.7	511.53 ug/L	2.822	511.53 ppb	2.822	0.55%
QC value within limits for Sb 206.836 Recovery = 102.31%						
Se 196.026†	4530.9	2560.5 ug/L	20.50	2560.5 ppb	20.50	0.80%
QC value within limits for Se 196.026 Recovery = 102.42%						
Si 251.611†	164405.6	4788.7 ug/L	14.94	4788.7 ppb	14.94	0.31%
QC value within limits for Si 251.611 Recovery = 95.77%						
Sn 189.927†	3394.9	539.89 ug/L	1.431	539.89 ppb	1.431	0.27%
QC value within limits for Sn 189.927 Recovery = 107.98%						
Sr 421.552†	86487.2	533.38 ug/L	3.151	533.38 ppb	3.151	0.59%
QC value within limits for Sr 421.552 Recovery = 106.68%						
Ti 334.940†	328002.7	514.22 ug/L	1.383	514.22 ppb	1.383	0.27%
QC value within limits for Ti 334.940 Recovery = 102.84%						
Tl 190.801†	1933.9	526.67 ug/L	1.535	526.67 ppb	1.535	0.29%
QC value within limits for Tl 190.801 Recovery = 105.33%						
U 409.014†	17788.6	490.89 ug/L	0.934	490.89 ppb	0.934	0.19%
QC value within limits for U 409.014 Recovery = 98.18%						
V 292.402†	77762.0	512.86 ug/L	1.073	512.86 ppb	1.073	0.21%
QC value within limits for V 292.402 Recovery = 102.57%						
Zn 213.857†	59709.2	501.77 ug/L	1.149	501.77 ppb	1.149	0.23%
QC value within limits for Zn 213.857 Recovery = 100.35%						
SiO2†	163684.1	10230 ug/L	98.2	10230 ppb	98.2	0.96%
QC value within limits for SiO2 Recovery = 95.65%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/7/2009 06:40:42
Data Type: Reprocessed on 12/7/2009 08:21:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899324.1	899324.1	99.779	%			06:43:52
1	Sc Radial	5841.8	5841.8	103	%			06:42:35
1	Y 371.029	749098.7	749098.7	99.641	%			06:43:52
1	Y RADIAL	6241.2	6241.2	102.3	%			06:42:35
1	Ag 328.068†	355.7	41.6	0.1905	ug/L	0.1905	ppb	06:43:52
1	Al 396.153Radial†	-26.3	-5.2	-3.6428	ug/L	-3.6428	ppb	06:42:35
1	As 188.979†	-25.9	-1.6	-0.6056	ug/L	-0.6056	ppb	06:44:12
1	B 249.677†	-366.9	251.4	5.1051	ug/L	5.1051	ppb	06:44:12
1	Ba 233.527†	-9.8	7.2	0.0528	ug/L	0.0528	ppb	06:44:12
1	Be 313.107†	-5191.6	69.0	0.0245	ug/L	0.0245	ppb	06:43:52
1	Ca 317.933Radial†	15.5	-1.9	-2.7702	ug/L	-2.7702	ppb	06:42:55
1	Cd 226.502†	-203.3	2.3	0.0205	ug/L	0.0205	ppb	06:44:12
1	Co 228.616†	-78.3	-4.4	-0.0837	ug/L	-0.0837	ppb	06:44:12
1	Cr 267.716†	66.6	-14.1	-0.1458	ug/L	-0.1458	ppb	06:44:12
1	Cu 324.752†	7009.2	153.9	0.4329	ug/L	0.4329	ppb	06:43:52
1	Fe 238.204 Radial†	9.3	3.0	27.936	ug/L	27.936	ppb	06:42:55
1	K 766.490 Radial†	2277.5	-0.1	-0.0217	ug/L	-0.0217	ppb	06:42:35
1	Mg 279.077 IEC†	1.4	1.1	38.824	ug/L	38.824	ppb	06:42:55
1	Mn 257.610†	587.7	95.2	0.1010	ug/L	0.1010	ppb	06:44:12
1	Mo 202.031†	16.0	-10.7	-0.6661	ug/L	-0.6661	ppb	06:44:12
1	Na 589.592 Radial†	-1168.2	-54.2	-17.438	ug/L	-17.438	ppb	06:42:35
1	Ni 231.604†	86.2	-4.5	-0.1013	ug/L	-0.1013	ppb	06:44:12
1	P 214.914†	219.4	-5.0	-2.8155	ug/L	-2.8155	ppb	06:44:12
1	Pb 220.353†	-70.5	2.1	0.2235	ug/L	0.2235	ppb	06:44:12
1	S 181.975 Axial†	47.0	0.7	0.8796	ug/L	0.8796	ppb	06:44:12
1	Sb 206.836†	46.8	19.3	5.9497	ug/L	5.9497	ppb	06:44:12
1	Se 196.026†	-23.5	-1.3	-0.6280	ug/L	-0.6280	ppb	06:44:12
1	Si 251.611†	513.8	-28.4	-0.8206	ug/L	-0.8206	ppb	06:44:12
1	Sn 189.927†	9.2	3.7	0.5951	ug/L	0.5951	ppb	06:44:12
1	Sr 421.552†	-46.8	-53.0	-0.3266	ug/L	-0.3266	ppb	06:42:35
1	Ti 334.940†	-1152.2	46.3	0.0710	ug/L	0.0710	ppb	06:43:52
1	Tl 190.801†	-27.9	10.0	2.6988	ug/L	2.6988	ppb	06:44:12
1	U 409.014†	-2418.4	126.5	3.4980	ug/L	3.4980	ppb	06:43:52
1	V 292.402†	-1438.4	-19.8	-0.1347	ug/L	-0.1347	ppb	06:43:52
1	Zn 213.857†	651.1	1.9	0.0121	ug/L	0.0121	ppb	06:44:12
1	SiO2†	539.4	29.1	1.8421	ug/L	1.8421	ppb	06:45:08
2	Sc 361.383	889691.6	889691.6	98.710	%			06:44:17
2	Sc Radial	5716.5	5716.5	101	%			06:43:00
2	Y 371.029	741790.3	741790.3	98.669	%			06:44:17
2	Y RADIAL	6119.7	6119.7	100.3	%			06:43:00
2	Ag 328.068†	375.9	65.9	0.2992	ug/L	0.2992	ppb	06:44:17
2	Al 396.153Radial†	-22.1	-1.6	-1.0760	ug/L	-1.0760	ppb	06:43:00
2	As 188.979†	-16.1	8.1	3.0744	ug/L	3.0744	ppb	06:44:37
2	B 249.677†	-393.5	220.5	4.4774	ug/L	4.4774	ppb	06:44:37
2	Ba 233.527†	-11.9	4.9	0.0365	ug/L	0.0365	ppb	06:44:37
2	Be 313.107†	-5088.8	116.8	0.0412	ug/L	0.0412	ppb	06:44:17
2	Ca 317.933Radial†	17.5	0.4	0.6229	ug/L	0.6229	ppb	06:43:20
2	Cd 226.502†	-210.4	-7.1	-0.0738	ug/L	-0.0738	ppb	06:44:37
2	Co 228.616†	-59.2	14.1	0.2559	ug/L	0.2559	ppb	06:44:37
2	Cr 267.716†	74.1	-5.7	-0.0582	ug/L	-0.0582	ppb	06:44:37
2	Cu 324.752†	6885.2	104.3	0.2932	ug/L	0.2932	ppb	06:44:17
2	Fe 238.204 Radial†	7.8	1.7	15.961	ug/L	15.961	ppb	06:43:20
2	K 766.490 Radial†	2349.3	119.7	20.940	ug/L	20.940	ppb	06:43:00
2	Mg 279.077 IEC†	1.0	0.7	26.516	ug/L	26.516	ppb	06:43:20
2	Mn 257.610†	548.8	62.2	0.0657	ug/L	0.0657	ppb	06:44:37
2	Mo 202.031†	14.6	-12.0	-0.7438	ug/L	-0.7438	ppb	06:44:37
2	Na 589.592 Radial†	-1119.7	-30.9	-9.9514	ug/L	-9.9514	ppb	06:43:00
2	Ni 231.604†	88.2	-1.5	-0.0331	ug/L	-0.0331	ppb	06:44:37

2	P 214.914†	212.4	-9.7	-5.3935 ug/L	-5.3935 ppb	06:44:37
2	Pb 220.353†	-61.6	10.3	1.1267 ug/L	1.1267 ppb	06:44:37
2	S 181.975 Axial†	44.0	-1.9	-2.5340 ug/L	-2.5340 ppb	06:44:37
2	Sb 206.836†	31.6	4.5	1.3573 ug/L	1.3573 ppb	06:44:37
2	Se 196.026†	-27.2	-5.3	-2.9087 ug/L	-2.9087 ppb	06:44:37
2	Si 251.611†	556.9	20.8	0.6150 ug/L	0.6150 ppb	06:44:37
2	Sn 189.927†	4.5	-0.9	-0.1449 ug/L	-0.1449 ppb	06:44:37
2	Sr 421.552†	14.3	6.7	0.0416 ug/L	0.0416 ppb	06:43:00
2	Ti 334.940†	-1189.6	-4.0	-0.0063 ug/L	-0.0063 ppb	06:44:17
2	Tl 190.801†	-31.6	6.0	1.6234 ug/L	1.6234 ppb	06:44:37
2	U 409.014†	-2519.1	-1.7	-0.0495 ug/L	-0.0495 ppb	06:44:17
2	V 292.402†	-1383.8	19.9	0.1171 ug/L	0.1171 ppb	06:44:17
2	Zn 213.857†	673.7	31.8	0.2672 ug/L	0.2672 ppb	06:44:37
2	SiO2†	546.9	42.5	2.6739 ug/L	2.6739 ppb	06:45:13
3	Sc 361.383	889381.2	889381.2	98.675 %		06:44:42
3	Sc Radial	5753.2	5753.2	101 %		06:43:25
3	Y 371.029	740414.0	740414.0	98.486 %		06:44:42
3	Y RADIAL	6187.1	6187.1	101.5 %		06:43:25
3	Ag 328.068†	401.5	91.9	0.4149 ug/L	0.4149 ppb	06:44:42
3	Al 396.153Radial†	-36.9	-16.0	-11.333 ug/L	-11.333 ppb	06:43:25
3	As 188.979†	-25.8	-1.8	-0.6696 ug/L	-0.6696 ppb	06:45:02
3	B 249.677†	-446.6	166.5	3.3817 ug/L	3.3817 ppb	06:45:02
3	Ba 233.527†	-18.0	-1.2	-0.0087 ug/L	-0.0087 ppb	06:45:02
3	Be 313.107†	-5153.8	49.1	0.0174 ug/L	0.0174 ppb	06:44:42
3	Ca 317.933Radial†	16.7	-0.5	-0.6963 ug/L	-0.6963 ppb	06:43:45
3	Cd 226.502†	-197.3	6.2	0.0613 ug/L	0.0613 ppb	06:45:02
3	Co 228.616†	-67.1	6.1	0.1089 ug/L	0.1089 ppb	06:45:02
3	Cr 267.716†	79.4	-0.4	-0.0035 ug/L	-0.0035 ppb	06:45:02
3	Cu 324.752†	6812.8	33.4	0.0943 ug/L	0.0943 ppb	06:44:42
3	Fe 238.204 Radial†	7.9	1.8	16.246 ug/L	16.246 ppb	06:43:45
3	K 766.490 Radial†	2274.9	31.5	5.5057 ug/L	5.5057 ppb	06:43:25
3	Mg 279.077 IEC†	-1.4	-1.6	-58.457 ug/L	-58.457 ppb	06:43:45
3	Mn 257.610†	545.4	58.9	0.0639 ug/L	0.0639 ppb	06:45:02
3	Mo 202.031†	15.5	-11.0	-0.6865 ug/L	-0.6865 ppb	06:45:02
3	Na 589.592 Radial†	-1130.1	-34.1	-10.967 ug/L	-10.967 ppb	06:43:25
3	Ni 231.604†	95.6	6.1	0.1362 ug/L	0.1362 ppb	06:45:02
3	P 214.914†	221.6	-0.3	-0.2316 ug/L	-0.2316 ppb	06:45:02
3	Pb 220.353†	-65.1	6.8	0.7350 ug/L	0.7350 ppb	06:45:02
3	S 181.975 Axial†	43.2	-2.7	-3.5931 ug/L	-3.5931 ppb	06:45:02
3	Sb 206.836†	27.7	0.5	0.1141 ug/L	0.1141 ppb	06:45:02
3	Se 196.026†	-28.0	-6.1	-3.3685 ug/L	-3.3685 ppb	06:45:02
3	Si 251.611†	530.2	-6.1	-0.1644 ug/L	-0.1644 ppb	06:45:02
3	Sn 189.927†	0.4	-5.0	-0.7922 ug/L	-0.7922 ppb	06:45:02
3	Sr 421.552†	-66.9	-73.5	-0.4532 ug/L	-0.4532 ppb	06:43:25
3	Ti 334.940†	-1159.3	26.2	0.0414 ug/L	0.0414 ppb	06:44:42
3	Tl 190.801†	-34.4	3.1	0.8460 ug/L	0.8460 ppb	06:45:02
3	U 409.014†	-2544.8	-28.6	-0.7952 ug/L	-0.7952 ppb	06:44:42
3	V 292.402†	-1420.3	-17.6	-0.1295 ug/L	-0.1295 ppb	06:44:42
3	Zn 213.857†	661.7	19.9	0.1685 ug/L	0.1685 ppb	06:45:02
3	SiO2†	538.2	33.9	2.1490 ug/L	2.1490 ppb	06:45:18

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892799.0	99.055	%	0.6272				0.63%
Sc Radial	5770.5	102	%	1.1				1.12%
Y 371.029	743767.7	98.932	%	0.6209				0.63%
Y RADIAL	6182.6	101.4	%	1.00				0.98%
Ag 328.068†	66.5	0.3015	ug/L	0.11222	0.3015	ppb	0.11222	37.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.6	-5.3506	ug/L	5.33763	-5.3506	ppb	5.33763	99.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.6	0.5997	ug/L	2.14338	0.5997	ppb	2.14338	357.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	212.8	4.3214	ug/L	0.87222	4.3214	ppb	0.87222	20.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.6	0.0269	ug/L	0.03182	0.0269	ppb	0.03182	118.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.3	0.0277	ug/L	0.01222	0.0277	ppb	0.01222	44.09%
QC value within limits for Be 313.107 Recovery = Not calculated								

```
Ca 317.933Radial†          -0.6     -0.9479 ug/L       1.71045     -0.9479 ppb        1.71045 180.45%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 0.5      0.0027 ug/L       0.06929      0.0027 ppb        0.06929 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0937 ug/L       0.17032      0.0937 ppb        0.17032 181.82%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -6.7     -0.0692 ug/L       0.07179     -0.0692 ppb        0.07179 103.77%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                97.2      0.2735 ug/L       0.17013      0.2735 ppb        0.17013  62.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.2      20.048 ug/L        6.8329      20.048 ppb         6.8329  34.08%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          50.3      8.8080 ug/L      10.86408      8.8080 ppb       10.86408 123.34%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.1      2.2943 ug/L      52.97096      2.2943 ppb       52.97096 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                72.1      0.0769 ug/L       0.02093      0.0769 ppb        0.02093  27.22%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -11.2     -0.6988 ug/L       0.04030     -0.6988 ppb        0.04030   5.77%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -39.7    -12.785 ug/L        4.0610    -12.785 ppb         4.0610  31.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.0      0.0006 ug/L       0.12225      0.0006 ppb        0.12225 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.0     -2.8135 ug/L       2.58097     -2.8135 ppb        2.58097  91.74%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.4      0.6951 ug/L       0.45293      0.6951 ppb        0.45293  65.16%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.3     -1.7492 ug/L       2.33736     -1.7492 ppb        2.33736 133.62%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 8.1      2.4737 ug/L       3.07379      2.4737 ppb        3.07379 124.26%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.2     -2.3017 ug/L       1.46763     -2.3017 ppb        1.46763  63.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                -4.6     -0.1233 ug/L       0.71865     -0.1233 ppb        0.71865 582.66%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.1140 ug/L       0.69417     -0.1140 ppb        0.69417 608.99%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -39.9     -0.2461 ug/L       0.25704     -0.2461 ppb        0.25704 104.46%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.8      0.0354 ug/L       0.03899      0.0354 ppb        0.03899 110.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.4      1.7227 ug/L       0.93039      1.7227 ppb        0.93039  54.01%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 32.0      0.8845 ug/L       2.29394      0.8845 ppb        2.29394 259.36%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.8     -0.0490 ug/L       0.14389     -0.0490 ppb        0.14389 293.57%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                17.9      0.1493 ug/L       0.12866      0.1493 ppb        0.12866  86.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      35.1      2.2217 ug/L       0.42067      2.2217 ppb        0.42067  18.94%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/7/2009 06:47:28
Data Type: Reprocessed on 12/7/2009 08:21:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	901972.4	901972.4	100.07	%			06:50:38
1	Sc Radial	5826.6	5826.6	103	%			06:49:21
1	Y 371.029	752309.7	752309.7	100.07	%			06:50:38
1	Y RADIAL	6244.6	6244.6	102.4	%			06:49:21
1	Ag 328.068†	1433.0	1117.0	4.9875	ug/L	4.9875	ppb	06:50:38
1	Al 396.153Radial†	279.0	292.5	207.33	ug/L	207.33	ppb	06:49:21
1	As 188.979†	46.2	70.5	26.703	ug/L	26.703	ppb	06:50:58
1	B 249.677†	1776.0	2393.9	48.615	ug/L	48.615	ppb	06:50:38
1	Ba 233.527†	666.5	683.0	4.9481	ug/L	4.9481	ppb	06:50:58
1	Be 313.107†	8294.3	13560.3	4.7987	ug/L	4.7987	ppb	06:50:38
1	Ca 317.933Radial†	151.5	130.8	194.90	ug/L	194.90	ppb	06:49:41
1	Cd 226.502†	255.7	461.6	4.7008	ug/L	4.7008	ppb	06:50:58
1	Co 228.616†	173.9	247.9	4.5620	ug/L	4.5620	ppb	06:50:58
1	Cr 267.716†	535.2	453.9	4.6555	ug/L	4.6555	ppb	06:50:58
1	Cu 324.752†	10496.0	3617.6	10.146	ug/L	10.146	ppb	06:50:38
1	Fe 238.204 Radial†	20.2	13.7	126.43	ug/L	126.43	ppb	06:49:41
1	K 766.490 Radial†	3257.8	961.6	167.97	ug/L	167.97	ppb	06:49:21
1	Mg 279.077 IEC†	9.8	9.3	330.44	ug/L	330.44	ppb	06:49:41
1	Mn 257.610†	10210.5	9709.3	10.097	ug/L	10.097	ppb	06:50:38
1	Mo 202.031†	184.3	157.4	9.8089	ug/L	9.8089	ppb	06:50:58
1	Na 589.592 Radial†	-249.7	838.5	269.76	ug/L	269.76	ppb	06:49:21
1	Ni 231.604†	331.4	240.3	5.4045	ug/L	5.4045	ppb	06:50:58
1	P 214.914†	455.4	230.2	125.09	ug/L	125.09	ppb	06:50:58
1	Pb 220.353†	25.9	98.7	10.841	ug/L	10.841	ppb	06:50:58
1	S 181.975 Axial†	114.5	67.9	90.011	ug/L	90.011	ppb	06:50:58
1	Sb 206.836†	69.1	41.4	13.056	ug/L	13.056	ppb	06:50:58
1	Se 196.026†	17.7	40.0	22.888	ug/L	22.888	ppb	06:50:58
1	Si 251.611†	3667.7	3121.7	90.895	ug/L	90.895	ppb	06:50:58
1	Sn 189.927†	70.4	65.0	10.340	ug/L	10.340	ppb	06:50:58
1	Sr 421.552†	826.5	798.5	4.9232	ug/L	4.9232	ppb	06:49:21
1	Ti 334.940†	2095.2	3294.8	5.1529	ug/L	5.1529	ppb	06:50:38
1	Tl 190.801†	26.8	64.8	17.593	ug/L	17.593	ppb	06:50:58
1	U 409.014†	-726.3	1824.5	50.488	ug/L	50.488	ppb	06:50:38
1	V 292.402†	-697.8	724.5	4.9289	ug/L	4.9289	ppb	06:50:38
1	Zn 213.857†	1782.6	1130.6	9.5153	ug/L	9.5153	ppb	06:50:58
1	SiO2†	3846.5	3332.1	208.21	ug/L	208.21	ppb	06:51:54
2	Sc 361.383	906033.1	906033.1	100.52	%			06:51:04
2	Sc Radial	5772.5	5772.5	102	%			06:49:46
2	Y 371.029	755745.1	755745.1	100.53	%			06:51:04
2	Y RADIAL	6157.3	6157.3	101.0	%			06:49:46
2	Ag 328.068†	1493.8	1171.1	5.2227	ug/L	5.2227	ppb	06:51:04
2	Al 396.153Radial†	243.0	259.6	184.00	ug/L	184.00	ppb	06:49:46
2	As 188.979†	56.3	80.4	30.449	ug/L	30.449	ppb	06:51:24
2	B 249.677†	1802.6	2412.4	48.992	ug/L	48.992	ppb	06:51:04
2	Ba 233.527†	679.5	692.9	5.0202	ug/L	5.0202	ppb	06:51:24
2	Be 313.107†	8484.8	13712.8	4.8521	ug/L	4.8521	ppb	06:51:04
2	Ca 317.933Radial†	155.8	136.4	203.23	ug/L	203.23	ppb	06:50:06
2	Cd 226.502†	250.9	455.6	4.6405	ug/L	4.6405	ppb	06:51:24
2	Co 228.616†	191.6	264.7	4.8690	ug/L	4.8690	ppb	06:51:24
2	Cr 267.716†	551.6	467.9	4.7974	ug/L	4.7974	ppb	06:51:24
2	Cu 324.752†	10525.2	3599.6	10.095	ug/L	10.095	ppb	06:51:04
2	Fe 238.204 Radial†	19.0	12.7	117.05	ug/L	117.05	ppb	06:50:06
2	K 766.490 Radial†	3271.1	1004.4	175.45	ug/L	175.45	ppb	06:49:46
2	Mg 279.077 IEC†	10.6	10.2	361.68	ug/L	361.68	ppb	06:50:06
2	Mn 257.610†	10259.6	9712.5	10.099	ug/L	10.099	ppb	06:51:04
2	Mo 202.031†	171.2	143.5	8.9425	ug/L	8.9425	ppb	06:51:24
2	Na 589.592 Radial†	-195.8	889.3	286.09	ug/L	286.09	ppb	06:49:46
2	Ni 231.604†	307.2	214.8	4.8307	ug/L	4.8307	ppb	06:51:24

2	P 214.914†	467.1	239.8	130.33 ug/L	130.33 ppb	06:51:24
2	Pb 220.353†	19.2	91.9	10.096 ug/L	10.096 ppb	06:51:24
2	S 181.975 Axial†	111.0	63.9	84.732 ug/L	84.732 ppb	06:51:24
2	Sb 206.836†	63.1	35.1	11.074 ug/L	11.074 ppb	06:51:24
2	Se 196.026†	35.8	57.9	32.920 ug/L	32.920 ppb	06:51:24
2	Si 251.611†	3721.5	3158.8	91.994 ug/L	91.994 ppb	06:51:24
2	Sn 189.927†	63.9	58.1	9.2515 ug/L	9.2515 ppb	06:51:24
2	Sr 421.552†	786.7	766.9	4.7281 ug/L	4.7281 ppb	06:49:46
2	Ti 334.940†	1983.0	3173.8	4.9614 ug/L	4.9614 ppb	06:51:04
2	Tl 190.801†	46.6	84.3	22.883 ug/L	22.883 ppb	06:51:24
2	U 409.014†	-556.8	1996.4	55.247 ug/L	55.247 ppb	06:51:04
2	V 292.402†	-641.3	783.9	5.3142 ug/L	5.3142 ppb	06:51:04
2	Zn 213.857†	1792.5	1132.5	9.5345 ug/L	9.5345 ppb	06:51:24
2	SiO2†	3855.7	3324.1	207.74 ug/L	207.74 ppb	06:51:59
3	Sc 361.383	899474.8	899474.8	99.795 %		06:51:29
3	Sc Radial	5788.8	5788.8	102 %		06:50:12
3	Y 371.029	748910.7	748910.7	99.616 %		06:51:29
3	Y RADIAL	6213.1	6213.1	101.9 %		06:50:12
3	Ag 328.068†	1470.8	1158.9	5.1779 ug/L	5.1779 ppb	06:51:29
3	Al 396.153Radial†	239.9	255.9	181.33 ug/L	181.33 ppb	06:50:12
3	As 188.979†	45.8	70.3	26.622 ug/L	26.622 ppb	06:51:49
3	B 249.677†	1807.1	2429.9	49.349 ug/L	49.349 ppb	06:51:29
3	Ba 233.527†	655.5	673.8	4.8832 ug/L	4.8832 ppb	06:51:49
3	Be 313.107†	8296.8	13585.9	4.8074 ug/L	4.8074 ppb	06:51:29
3	Ca 317.933Radial†	154.6	134.8	200.94 ug/L	200.94 ppb	06:50:32
3	Cd 226.502†	270.8	477.4	4.8622 ug/L	4.8622 ppb	06:51:49
3	Co 228.616†	178.8	253.2	4.6600 ug/L	4.6600 ppb	06:51:49
3	Cr 267.716†	530.1	450.4	4.6207 ug/L	4.6207 ppb	06:51:49
3	Cu 324.752†	10459.9	3610.5	10.126 ug/L	10.126 ppb	06:51:29
3	Fe 238.204 Radial†	19.8	13.4	124.05 ug/L	124.05 ppb	06:50:32
3	K 766.490 Radial†	3297.8	1021.6	178.46 ug/L	178.46 ppb	06:50:12
3	Mg 279.077 IEC†	10.8	10.3	366.17 ug/L	366.17 ppb	06:50:32
3	Mn 257.610†	10232.8	9760.0	10.149 ug/L	10.149 ppb	06:51:29
3	Mo 202.031†	175.7	149.3	9.3024 ug/L	9.3024 ppb	06:51:49
3	Na 589.592 Radial†	-212.0	874.0	281.16 ug/L	281.16 ppb	06:50:12
3	Ni 231.604†	307.7	217.5	4.8912 ug/L	4.8912 ppb	06:51:49
3	P 214.914†	477.1	253.1	137.70 ug/L	137.70 ppb	06:51:49
3	Pb 220.353†	21.0	93.9	10.309 ug/L	10.309 ppb	06:51:49
3	S 181.975 Axial†	120.8	74.5	98.749 ug/L	98.749 ppb	06:51:49
3	Sb 206.836†	63.6	36.2	11.421 ug/L	11.421 ppb	06:51:49
3	Se 196.026†	25.7	48.1	27.412 ug/L	27.412 ppb	06:51:49
3	Si 251.611†	3686.1	3150.3	91.737 ug/L	91.737 ppb	06:51:49
3	Sn 189.927†	69.7	64.4	10.250 ug/L	10.250 ppb	06:51:49
3	Sr 421.552†	799.1	776.9	4.7897 ug/L	4.7897 ppb	06:50:12
3	Ti 334.940†	1986.0	3191.2	4.9917 ug/L	4.9917 ppb	06:51:29
3	Tl 190.801†	37.4	75.4	20.481 ug/L	20.481 ppb	06:51:49
3	U 409.014†	-806.7	1741.9	48.201 ug/L	48.201 ppb	06:51:29
3	V 292.402†	-593.8	826.8	5.5836 ug/L	5.5836 ppb	06:51:29
3	Zn 213.857†	1787.1	1140.1	9.5981 ug/L	9.5981 ppb	06:51:49
3	SiO2†	3873.3	3369.7	210.58 ug/L	210.58 ppb	06:52:05

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902493.4	100.13	%	0.367				0.37%
Sc Radial	5796.0	102	%	0.5				0.48%
Y 371.029	752321.8	100.07	%	0.455				0.45%
Y RADIAL	6205.0	101.7	%	0.73				0.71%
Ag 328.068†	1149.0	5.1294	ug/L	0.12487	5.1294	ppb	0.12487	2.43%
QC value within limits for Ag 328.068 Recovery = 102.59%								
Al 396.153Radial†	269.4	190.89	ug/L	14.302	190.89	ppb	14.302	7.49%
QC value within limits for Al 396.153Radial Recovery = 95.44%								
As 188.979†	73.8	27.924	ug/L	2.1866	27.924	ppb	2.1866	7.83%
QC value within limits for As 188.979 Recovery = 93.08%								
B 249.677†	2412.1	48.985	ug/L	0.3668	48.985	ppb	0.3668	0.75%
QC value within limits for B 249.677 Recovery = 97.97%								
Ba 233.527†	683.3	4.9505	ug/L	0.06853	4.9505	ppb	0.06853	1.38%
QC value within limits for Ba 233.527 Recovery = 99.01%								
Be 313.107†	13619.7	4.8194	ug/L	0.02868	4.8194	ppb	0.02868	0.60%
QC value within limits for Be 313.107 Recovery = 96.39%								

Ca 317.933Radial†	134.0	199.69 ug/L	4.303	199.69 ppb	4.303	2.15%
QC value within limits for Ca 317.933Radial Recovery = 99.85%						
Cd 226.502†	464.9	4.7345 ug/L	0.11460	4.7345 ppb	0.11460	2.42%
QC value within limits for Cd 226.502 Recovery = 94.69%						
Co 228.616†	255.3	4.6970 ug/L	0.15678	4.6970 ppb	0.15678	3.34%
QC value within limits for Co 228.616 Recovery = 93.94%						
Cr 267.716†	457.4	4.6912 ug/L	0.09355	4.6912 ppb	0.09355	1.99%
QC value within limits for Cr 267.716 Recovery = 93.82%						
Cu 324.752†	3609.2	10.122 ug/L	0.0256	10.122 ppb	0.0256	0.25%
QC value within limits for Cu 324.752 Recovery = 101.22%						
Fe 238.204 Radial†	13.3	122.51 ug/L	4.879	122.51 ppb	4.879	3.98%
QC value within limits for Fe 238.204 Radial Recovery = 122.51%						
K 766.490 Radial†	995.9	173.96 ug/L	5.400	173.96 ppb	5.400	3.10%
QC value within limits for K 766.490 Radial Recovery = 115.97%						
Mg 279.077 IEC†	9.9	352.76 ug/L	19.460	352.76 ppb	19.460	5.52%
QC value within limits for Mg 279.077 IEC Recovery = 117.59%						
Mn 257.610†	9727.3	10.115 ug/L	0.0294	10.115 ppb	0.0294	0.29%
QC value within limits for Mn 257.610 Recovery = 101.15%						
Mo 202.031†	150.1	9.3513 ug/L	0.43528	9.3513 ppb	0.43528	4.65%
QC value within limits for Mo 202.031 Recovery = 93.51%						
Na 589.592 Radial†	867.3	279.00 ug/L	8.377	279.00 ppb	8.377	3.00%
QC value within limits for Na 589.592 Radial Recovery = 93.00%						
Ni 231.604†	224.2	5.0422 ug/L	0.31529	5.0422 ppb	0.31529	6.25%
QC value within limits for Ni 231.604 Recovery = 100.84%						
P 214.914†	241.0	131.04 ug/L	6.332	131.04 ppb	6.332	4.83%
QC value within limits for P 214.914 Recovery = 87.36%						
Pb 220.353†	94.8	10.415 ug/L	0.3839	10.415 ppb	0.3839	3.69%
QC value within limits for Pb 220.353 Recovery = 104.15%						
S 181.975 Axial†	68.8	91.164 ug/L	7.0794	91.164 ppb	7.0794	7.77%
QC value within limits for S 181.975 Axial Recovery = 91.16%						
Sb 206.836†	37.6	11.850 ug/L	1.0589	11.850 ppb	1.0589	8.94%
QC value within limits for Sb 206.836 Recovery = 118.50%						
Se 196.026†	48.7	27.740 ug/L	5.0241	27.740 ppb	5.0241	18.11%
QC value within limits for Se 196.026 Recovery = 92.47%						
Si 251.611†	3143.6	91.542 ug/L	0.5751	91.542 ppb	0.5751	0.63%
QC value within limits for Si 251.611 Recovery = 91.54%						
Sn 189.927†	62.5	9.9471 ug/L	0.60413	9.9471 ppb	0.60413	6.07%
QC value within limits for Sn 189.927 Recovery = 99.47%						
Sr 421.552†	780.8	4.8137 ug/L	0.09970	4.8137 ppb	0.09970	2.07%
QC value within limits for Sr 421.552 Recovery = 96.27%						
Ti 334.940†	3219.9	5.0353 ug/L	0.10295	5.0353 ppb	0.10295	2.04%
QC value within limits for Ti 334.940 Recovery = 100.71%						
Tl 190.801†	74.8	20.319 ug/L	2.6486	20.319 ppb	2.6486	13.03%
QC value within limits for Tl 190.801 Recovery = 101.60%						
U 409.014†	1854.3	51.312 ug/L	3.5947	51.312 ppb	3.5947	7.01%
QC value within limits for U 409.014 Recovery = 102.62%						
V 292.402†	778.4	5.2755 ug/L	0.32906	5.2755 ppb	0.32906	6.24%
QC value within limits for V 292.402 Recovery = 105.51%						
Zn 213.857†	1134.4	9.5493 ug/L	0.04333	9.5493 ppb	0.04333	0.45%
QC value within limits for Zn 213.857 Recovery = 95.49%						
SiO2†	3342.0	208.84 ug/L	1.519	208.84 ppb	1.519	0.73%
QC value within limits for SiO2 Recovery = 98.05%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/7/2009 06:54:16
Data Type: Reprocessed on 12/7/2009 08:21:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	764798.9	764798.9	84.853	%			06:56:42
1	Sc Radial	5183.6	5183.6	91.2	%			06:56:14
1	Y 371.029	619575.8	619575.8	82.413	%			06:56:42
1	Y RADIAL	5521.6	5521.6	90.54	%			06:56:14
1	Ag 328.068†	-9635.7	-11670.7	-1.3060	ug/L	-1.3060	ppb	06:56:42
1	Al 396.153Radial†	657161.9	720328.2	511550	ug/L	511550	ppb	06:56:09
1	As 188.979†	-91.5	-83.4	-3.8575	ug/L	-3.8575	ppb	06:57:02
1	B 249.677†	459.2	1160.4	-0.3848	ug/L	-0.3848	ppb	06:56:42
1	Ba 233.527†	-491.8	-562.6	2.6744	ug/L	2.6744	ppb	06:57:02
1	Be 313.107†	-5563.0	-1283.9	-0.5057	ug/L	-0.5057	ppb	06:56:42
1	Ca 317.933Radial†	286391.3	313893.4	467780	ug/L	467780	ppb	06:56:09
1	Cd 226.502†	1406.7	1863.8	0.9614	ug/L	0.9614	ppb	06:57:02
1	Co 228.616†	-32.6	35.7	-1.9117	ug/L	-1.9117	ppb	06:57:02
1	Cr 267.716†	-84.3	-180.2	1.3992	ug/L	1.3992	ppb	06:57:02
1	Cu 324.752†	4203.6	-1916.9	3.8415	ug/L	3.8415	ppb	06:56:42
1	Fe 238.204 Radial†	17879.1	19591.1	180630	ug/L	180630	ppb	06:56:14
1	K 766.490 Radial†	2088.7	74.1	29.384	ug/L	29.384	ppb	06:56:14
1	Mg 279.077 IEC†	12303.1	13485.0	478650	ug/L	478650	ppb	06:56:14
1	Mn 257.610†	497.9	92.9	9.1950	ug/L	9.1950	ppb	06:56:42
1	Mo 202.031†	-221.6	-287.9	-5.1098	ug/L	-5.1098	ppb	06:57:02
1	Na 589.592 Radial†	-987.6	-0.6	-0.1790	ug/L	-0.1790	ppb	06:56:14
1	Ni 231.604†	201.3	146.4	3.2935	ug/L	3.2935	ppb	06:57:02
1	P 214.914†	137.6	-62.7	-6.8602	ug/L	-6.8602	ppb	06:57:02
1	Pb 220.353†	-798.7	-868.5	4.9532	ug/L	4.9532	ppb	06:57:02
1	S 181.975 Axial†	61.2	25.6	-66.679	ug/L	-66.679	ppb	06:57:02
1	Sb 206.836†	77.2	63.4	7.0720	ug/L	7.0720	ppb	06:57:02
1	Se 196.026†	-1013.0	-1171.6	4.5293	ug/L	4.5293	ppb	06:57:02
1	Si 251.611†	506.5	53.5	2.0833	ug/L	2.0833	ppb	06:57:02
1	Sn 189.927†	-359.6	-429.3	-16.927	ug/L	-16.927	ppb	06:57:02
1	Sr 421.552†	524.6	567.6	-0.8353	ug/L	-0.8353	ppb	06:56:14
1	Ti 334.940†	-15427.6	-16980.4	-2.2407	ug/L	-2.2407	ppb	06:56:42
1	Tl 190.801†	-95.4	-74.5	-6.3955	ug/L	-6.3955	ppb	06:57:02
1	U 409.014†	-1151.1	1193.6	10.325	ug/L	10.325	ppb	06:56:42
1	V 292.402†	1040.5	2648.1	0.3781	ug/L	0.3781	ppb	06:57:02
1	Zn 213.857†	3277.3	3211.7	-6.4233	ug/L	-6.4233	ppb	06:57:02
1	SiO2†	414.9	-22.6	-0.2849	ug/L	-0.2849	ppb	06:57:58
2	Sc 361.383	770538.4	770538.4	85.490	%			06:57:07
2	Sc Radial	5187.7	5187.7	91.3	%			06:56:25
2	Y 371.029	624536.7	624536.7	83.073	%			06:57:07
2	Y RADIAL	5524.2	5524.2	90.58	%			06:56:25
2	Ag 328.068†	-9772.2	-11745.7	-1.7537	ug/L	-1.7537	ppb	06:57:07
2	Al 396.153Radial†	666720.8	730225.6	518580	ug/L	518580	ppb	06:56:20
2	As 188.979†	-90.1	-80.9	-2.9457	ug/L	-2.9457	ppb	06:57:27
2	B 249.677†	394.7	1080.8	-1.9882	ug/L	-1.9882	ppb	06:57:07
2	Ba 233.527†	-527.8	-600.4	2.3970	ug/L	2.3970	ppb	06:57:27
2	Be 313.107†	-5604.6	-1283.7	-0.5059	ug/L	-0.5059	ppb	06:57:07
2	Ca 317.933Radial†	290070.8	317674.0	473420	ug/L	473420	ppb	06:56:20
2	Cd 226.502†	1427.7	1876.1	1.0957	ug/L	1.0957	ppb	06:57:27
2	Co 228.616†	-41.8	25.2	-2.1026	ug/L	-2.1026	ppb	06:57:27
2	Cr 267.716†	-91.8	-188.3	1.3149	ug/L	1.3149	ppb	06:57:27
2	Cu 324.752†	4207.3	-1949.4	3.7453	ug/L	3.7453	ppb	06:57:07
2	Fe 238.204 Radial†	17883.6	19580.4	180530	ug/L	180530	ppb	06:56:25
2	K 766.490 Radial†	1976.5	-50.5	7.8943	ug/L	7.8943	ppb	06:56:25
2	Mg 279.077 IEC†	12378.6	13557.0	481210	ug/L	481210	ppb	06:56:25
2	Mn 257.610†	293.2	-150.8	8.8843	ug/L	8.8843	ppb	06:57:07
2	Mo 202.031†	-220.0	-284.1	-4.8772	ug/L	-4.8772	ppb	06:57:27
2	Na 589.592 Radial†	-965.1	25.0	8.0364	ug/L	8.0364	ppb	06:56:25
2	Ni 231.604†	196.4	138.9	3.1265	ug/L	3.1265	ppb	06:57:27

2	P 214.914†	148.2	-51.5	1.7534 ug/L	1.7534 ppb	06:57:27
2	Pb 220.353†	-790.9	-852.3	8.3073 ug/L	8.3073 ppb	06:57:27
2	S 181.975 Axial†	60.4	24.2	-69.898 ug/L	-69.898 ppb	06:57:27
2	Sb 206.836†	59.7	42.2	0.3684 ug/L	0.3684 ppb	06:57:27
2	Se 196.026†	-1032.1	-1185.0	-2.0244 ug/L	-2.0244 ppb	06:57:27
2	Si 251.611†	480.3	18.4	1.0597 ug/L	1.0597 ppb	06:57:27
2	Sn 189.927†	-359.6	-426.1	-15.831 ug/L	-15.831 ppb	06:57:27
2	Sr 421.552†	565.3	611.7	-0.6151 ug/L	-0.6151 ppb	06:56:25
2	Ti 334.940†	-15606.1	-17053.8	-2.0610 ug/L	-2.0610 ppb	06:57:07
2	Tl 190.801†	-81.8	-57.7	-1.6533 ug/L	-1.6533 ppb	06:57:27
2	U 409.014†	-1216.6	1127.2	8.4976 ug/L	8.4976 ppb	06:57:07
2	V 292.402†	994.9	2585.6	0.0442 ug/L	0.0442 ppb	06:57:27
2	Zn 213.857†	3272.9	3177.7	-6.7882 ug/L	-6.7882 ppb	06:57:27
2	SiO2†	467.3	35.1	3.3338 ug/L	3.3338 ppb	06:58:03
3	Sc 361.383	767560.1	767560.1	85.160 %		06:57:32
3	Sc Radial	5202.6	5202.6	91.6 %		06:56:35
3	Y 371.029	623707.5	623707.5	82.962 %		06:57:32
3	Y RADIAL	5560.7	5560.7	91.18 %		06:56:35
3	Ag 328.068†	-9534.0	-11510.4	-0.3411 ug/L	-0.3411 ppb	06:57:32
3	Al 396.153Radial†	652006.8	712072.9	505690 ug/L	505690 ppb	06:56:30
3	As 188.979†	-80.5	-70.2	1.2260 ug/L	1.2260 ppb	06:57:53
3	B 249.677†	275.1	942.2	-4.8983 ug/L	-4.8983 ppb	06:57:32
3	Ba 233.527†	-508.8	-580.5	2.5669 ug/L	2.5669 ppb	06:57:53
3	Be 313.107†	-5581.8	-1282.5	-0.5059 ug/L	-0.5059 ppb	06:57:32
3	Ca 317.933Radial†	284881.8	311100.6	463620 ug/L	463620 ppb	06:56:30
3	Cd 226.502†	1435.0	1891.2	1.1812 ug/L	1.1812 ppb	06:57:53
3	Co 228.616†	-15.8	55.5	-1.5528 ug/L	-1.5528 ppb	06:57:53
3	Cr 267.716†	-146.2	-252.5	0.6681 ug/L	0.6681 ppb	06:57:53
3	Cu 324.752†	4154.2	-1992.8	3.6592 ug/L	3.6592 ppb	06:57:32
3	Fe 238.204 Radial†	18003.6	19655.6	181220 ug/L	181220 ppb	06:56:35
3	K 766.490 Radial†	2119.2	99.2	33.383 ug/L	33.383 ppb	06:56:35
3	Mg 279.077 IEC†	12410.2	13552.8	481060 ug/L	481060 ppb	06:56:35
3	Mn 257.610†	238.3	-214.0	8.8905 ug/L	8.8905 ppb	06:57:32
3	Mo 202.031†	-209.2	-272.5	-4.1067 ug/L	-4.1067 ppb	06:57:53
3	Na 589.592 Radial†	-931.1	65.2	20.970 ug/L	20.970 ppb	06:56:35
3	Ni 231.604†	216.4	163.2	3.6725 ug/L	3.6725 ppb	06:57:53
3	P 214.914†	181.9	-11.3	18.938 ug/L	18.938 ppb	06:57:53
3	Pb 220.353†	-797.0	-863.2	4.1736 ug/L	4.1736 ppb	06:57:53
3	S 181.975 Axial†	68.2	33.6	-54.994 ug/L	-54.994 ppb	06:57:53
3	Sb 206.836†	75.3	60.8	6.4607 ug/L	6.4607 ppb	06:57:53
3	Se 196.026†	-1028.6	-1185.6	-2.4899 ug/L	-2.4899 ppb	06:57:53
3	Si 251.611†	456.1	-7.8	0.2758 ug/L	0.2758 ppb	06:57:53
3	Sn 189.927†	-363.6	-432.4	-17.856 ug/L	-17.856 ppb	06:57:53
3	Sr 421.552†	546.7	589.6	-0.6606 ug/L	-0.6606 ppb	06:56:35
3	Ti 334.940†	-15662.0	-17190.3	-2.7855 ug/L	-2.7855 ppb	06:57:32
3	Tl 190.801†	-62.7	-35.6	3.9561 ug/L	3.9561 ppb	06:57:53
3	U 409.014†	-1234.2	1100.9	7.6851 ug/L	7.6851 ppb	06:57:32
3	V 292.402†	1002.8	2599.4	0.0346 ug/L	0.0346 ppb	06:57:53
3	Zn 213.857†	3281.1	3202.2	-6.6452 ug/L	-6.6452 ppb	06:57:53
3	SiO2†	552.1	136.8	9.6658 ug/L	9.6658 ppb	06:58:08

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	767632.5	85.168	%	0.3185				0.37%
Sc Radial	5191.3	91.4	%	0.18				0.19%
Y 371.029	622606.7	82.816	%	0.3535				0.43%
Y RADIAL	5535.5	90.77	%	0.359				0.40%
Ag 328.068†	-11642.3	-1.1336	ug/L	0.72191	-1.1336	ppb	0.72191	63.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	720875.6	511940	ug/L	6454.5	511940	ppb	6454.5	1.26%
QC value within limits for Al 396.153Radial Recovery = 102.39%								
As 188.979†	-78.2	-1.8591	ug/L	2.71034	-1.8591	ppb	2.71034	145.79%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1061.1	-2.4237	ug/L	2.28803	-2.4237	ppb	2.28803	94.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-581.2	2.5461	ug/L	0.13989	2.5461	ppb	0.13989	5.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1283.4	-0.5058	ug/L	0.00008	-0.5058	ppb	0.00008	0.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	314222.7	468270 ug/L	4916.4	468270 ppb	4916.4	1.05%
QC value within limits for Ca 317.933Radial Recovery = 93.65%						
Cd 226.502†	1877.0	1.0794 ug/L	0.11077	1.0794 ppb	0.11077	10.26%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	38.8	-1.8557 ug/L	0.27915	-1.8557 ppb	0.27915	15.04%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-207.0	1.1274 ug/L	0.39998	1.1274 ppb	0.39998	35.48%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1953.0	3.7487 ug/L	0.09122	3.7487 ppb	0.09122	2.43%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	19609.0	180790 ug/L	374.8	180790 ppb	374.8	0.21%
QC value within limits for Fe 238.204 Radial Recovery = 90.40%						
K 766.490 Radial†	41.0	23.554 ug/L	13.7084	23.554 ppb	13.7084	58.20%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	13531.6	480310 ug/L	1433.7	480310 ppb	1433.7	0.30%
QC value within limits for Mg 279.077 IEC Recovery = 96.06%						
Mn 257.610†	-90.6	8.9899 ug/L	0.17761	8.9899 ppb	0.17761	1.98%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-281.5	-4.6979 ug/L	0.52505	-4.6979 ppb	0.52505	11.18%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	29.9	9.6090 ug/L	10.66160	9.6090 ppb	10.66160	110.95%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	149.5	3.3642 ug/L	0.27977	3.3642 ppb	0.27977	8.32%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-41.9	4.6103 ug/L	13.13406	4.6103 ppb	13.13406	284.89%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-861.3	5.8114 ug/L	2.19642	5.8114 ppb	2.19642	37.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	27.8	-63.857 ug/L	7.8429	-63.857 ppb	7.8429	12.28%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	55.5	4.6337 ug/L	3.70646	4.6337 ppb	3.70646	79.99%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1180.7	0.0050 ug/L	3.92506	0.0050 ppb	3.92506	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	21.4	1.1396 ug/L	0.90639	1.1396 ppb	0.90639	79.53%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-429.2	-16.871 ug/L	1.0139	-16.871 ppb	1.0139	6.01%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	589.6	-0.7037 ug/L	0.11627	-0.7037 ppb	0.11627	16.52%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-17074.8	-2.3624 ug/L	0.37725	-2.3624 ppb	0.37725	15.97%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-55.9	-1.3642 ug/L	5.18187	-1.3642 ppb	5.18187	379.83%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1140.6	8.8358 ug/L	1.35189	8.8358 ppb	1.35189	15.30%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2611.0	0.1523 ug/L	0.19559	0.1523 ppb	0.19559	128.44%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	3197.2	-6.6189 ug/L	0.18385	-6.6189 ppb	0.18385	2.78%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	49.8	4.2382 ug/L	5.03666	4.2382 ppb	5.03666	118.84%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/7/2009 07:00:19
Data Type: Reprocessed on 12/7/2009 08:21:30
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	762063.6	762063.6	84.550	%			07:02:44
1	Sc Radial	5022.9	5022.9	88.4	%			07:02:16
1	Y 371.029	615272.9	615272.9	81.840	%			07:02:44
1	Y RADIAL	5359.1	5359.1	87.87	%			07:02:16
1	Ag 328.068†	41747.2	49060.9	272.75	ug/L	272.75	ppb	07:02:44
1	Al 396.153Radial†	649992.0	735267.2	522140	ug/L	522140	ppb	07:02:11
1	As 188.979†	1034.1	1247.5	504.47	ug/L	504.47	ppb	07:03:04
1	B 249.677†	21378.9	25904.7	500.31	ug/L	500.31	ppb	07:02:44
1	Ba 233.527†	56648.3	67017.0	492.14	ug/L	492.14	ppb	07:02:44
1	Be 313.107†	573199.0	683214.9	242.23	ug/L	242.23	ppb	07:02:44
1	Ca 317.933Radial†	290926.9	329068.7	490400	ug/L	490400	ppb	07:02:11
1	Cd 226.502†	40557.7	48175.1	473.04	ug/L	473.04	ppb	07:02:44
1	Co 228.616†	20439.9	24249.0	442.57	ug/L	442.57	ppb	07:03:04
1	Cr 267.716†	39174.1	46251.8	479.03	ug/L	479.03	ppb	07:02:44
1	Cu 324.752†	167642.2	191405.6	546.06	ug/L	546.06	ppb	07:02:44
1	Fe 238.204 Radial†	18038.3	20398.3	188080	ug/L	188080	ppb	07:02:16
1	K 766.490 Radial†	30370.2	32138.4	5629.7	ug/L	5629.7	ppb	07:02:11
1	Mg 279.077 IEC†	12552.5	14198.7	504000	ug/L	504000	ppb	07:02:16
1	Mn 257.610†	389598.9	460298.7	487.75	ug/L	487.75	ppb	07:02:44
1	Mo 202.031†	6486.7	7645.2	489.27	ug/L	489.27	ppb	07:03:04
1	Na 589.592 Radial†	13197.3	16010.2	5150.7	ug/L	5150.7	ppb	07:02:16
1	Ni 231.604†	16872.0	19864.3	446.78	ug/L	446.78	ppb	07:03:04
1	P 214.914†	4087.0	4609.0	2480.0	ug/L	2480.0	ppb	07:03:04
1	Pb 220.353†	2708.5	3276.3	460.78	ug/L	460.78	ppb	07:03:04
1	S 181.975 Axial†	1803.5	2086.6	2663.2	ug/L	2663.2	ppb	07:03:04
1	Sb 206.836†	1501.9	1748.8	534.28	ug/L	534.28	ppb	07:03:04
1	Se 196.026†	2860.3	3405.2	2598.8	ug/L	2598.8	ppb	07:03:04
1	Si 251.611†	151944.6	179166.9	5220.2	ug/L	5220.2	ppb	07:02:44
1	Sn 189.927†	2274.1	2684.3	480.12	ug/L	480.12	ppb	07:03:04
1	Sr 421.552†	73121.3	82704.7	505.55	ug/L	505.55	ppb	07:02:11
1	Ti 334.940†	265057.5	314694.1	518.67	ug/L	518.67	ppb	07:02:44
1	Tl 190.801†	1363.3	1650.4	464.02	ug/L	464.02	ppb	07:03:04
1	U 409.014†	13180.8	18139.7	477.62	ug/L	477.62	ppb	07:02:44
1	V 292.402†	65409.6	78784.1	502.01	ug/L	502.01	ppb	07:02:44
1	Zn 213.857†	52659.5	61631.6	483.79	ug/L	483.79	ppb	07:02:44
1	SiO2†	151752.6	178971.6	11188	ug/L	11188	ppb	07:04:02
2	Sc 361.383	771543.4	771543.4	85.602	%			07:03:10
2	Sc Radial	5093.8	5093.8	89.7	%			07:02:27
2	Y 371.029	621945.4	621945.4	82.728	%			07:03:10
2	Y RADIAL	5433.3	5433.3	89.09	%			07:02:27
2	Ag 328.068†	40763.4	47305.0	265.63	ug/L	265.63	ppb	07:03:10
2	Al 396.153Radial†	647568.6	722324.4	512950	ug/L	512950	ppb	07:02:22
2	As 188.979†	1049.2	1250.1	505.61	ug/L	505.61	ppb	07:03:30
2	B 249.677†	21025.9	25181.7	485.36	ug/L	485.36	ppb	07:03:10
2	Ba 233.527†	55839.5	65248.9	479.41	ug/L	479.41	ppb	07:03:10
2	Be 313.107†	563888.3	664008.4	235.42	ug/L	235.42	ppb	07:03:10
2	Ca 317.933Radial†	290277.9	323761.7	482490	ug/L	482490	ppb	07:02:22
2	Cd 226.502†	39997.1	46930.8	460.15	ug/L	460.15	ppb	07:03:10
2	Co 228.616†	20703.6	24260.1	442.77	ug/L	442.77	ppb	07:03:30
2	Cr 267.716†	38606.7	45019.6	466.40	ug/L	466.40	ppb	07:03:10
2	Cu 324.752†	164155.2	184895.9	527.92	ug/L	527.92	ppb	07:03:10
2	Fe 238.204 Radial†	18481.5	20608.4	190020	ug/L	190020	ppb	07:02:27
2	K 766.490 Radial†	30442.6	31740.8	5559.8	ug/L	5559.8	ppb	07:02:22
2	Mg 279.077 IEC†	12847.9	14330.4	508670	ug/L	508670	ppb	07:02:27
2	Mn 257.610†	383127.0	447076.5	474.11	ug/L	474.11	ppb	07:03:10
2	Mo 202.031†	6549.4	7624.3	488.10	ug/L	488.10	ppb	07:03:30
2	Na 589.592 Radial†	13562.2	16209.4	5214.7	ug/L	5214.7	ppb	07:02:27
2	Ni 231.604†	17047.6	19824.3	445.87	ug/L	445.87	ppb	07:03:30

2	P 214.914†	4141.1	4612.7	2480.3	ug/L	2480.3 ppb	07:03:30
2	Pb 220.353†	2784.2	3325.3	463.93	ug/L	463.93 ppb	07:03:30
2	S 181.975 Axial†	1811.7	2070.0	2643.0	ug/L	2643.0 ppb	07:03:30
2	Sb 206.836†	1516.2	1743.6	533.33	ug/L	533.33 ppb	07:03:30
2	Se 196.026†	2888.2	3396.3	2598.2	ug/L	2598.2 ppb	07:03:30
2	Si 251.611†	149175.8	173724.3	5061.3	ug/L	5061.3 ppb	07:03:10
2	Sn 189.927†	2331.9	2718.7	484.79	ug/L	484.79 ppb	07:03:30
2	Sr 421.552†	72643.2	81019.4	495.23	ug/L	495.23 ppb	07:02:22
2	Ti 334.940†	260126.0	305081.3	503.20	ug/L	503.20 ppb	07:03:10
2	Tl 190.801†	1376.8	1646.3	462.50	ug/L	462.50 ppb	07:03:30
2	U 409.014†	12562.1	17225.4	452.09	ug/L	452.09 ppb	07:03:10
2	V 292.402†	64279.4	76513.3	487.01	ug/L	487.01 ppb	07:03:10
2	Zn 213.857†	51875.5	59950.5	469.22	ug/L	469.22 ppb	07:03:10
2	SiO2†	152837.6	178033.9	11130	ug/L	11130 ppb	07:04:07
3	Sc 361.383	767853.2	767853.2	85.192	%		07:03:36
3	Sc Radial	5003.0	5003.0	88.1	%		07:02:37
3	Y 371.029	618877.0	618877.0	82.320	%		07:03:36
3	Y RADIAL	5321.8	5321.8	87.26	%		07:02:37
3	Ag 328.068†	41689.9	48621.4	271.36	ug/L	271.36 ppb	07:03:36
3	Al 396.153Radial†	656812.0	745943.5	529720	ug/L	529720 ppb	07:02:32
3	As 188.979†	1040.9	1246.2	504.30	ug/L	504.30 ppb	07:03:57
3	B 249.677†	21548.8	25913.5	500.20	ug/L	500.20 ppb	07:03:36
3	Ba 233.527†	57124.5	67070.8	492.60	ug/L	492.60 ppb	07:03:36
3	Be 313.107†	576209.9	681637.5	241.67	ug/L	241.67 ppb	07:03:36
3	Ca 317.933Radial†	294436.8	334366.7	498290	ug/L	498290 ppb	07:02:32
3	Cd 226.502†	40826.3	48128.7	472.35	ug/L	472.35 ppb	07:03:36
3	Co 228.616†	20598.5	24253.0	442.61	ug/L	442.61 ppb	07:03:57
3	Cr 267.716†	39441.6	46216.4	478.70	ug/L	478.70 ppb	07:03:36
3	Cu 324.752†	168246.2	190619.6	543.97	ug/L	543.97 ppb	07:03:36
3	Fe 238.204 Radial†	18172.4	20631.8	190240	ug/L	190240 ppb	07:02:37
3	K 766.490 Radial†	30735.4	32690.2	5726.3	ug/L	5726.3 ppb	07:02:32
3	Mg 279.077 IEC†	12646.0	14361.4	509770	ug/L	509770 ppb	07:02:37
3	Mn 257.610†	392416.4	460131.5	487.68	ug/L	487.68 ppb	07:03:36
3	Mo 202.031†	6522.8	7629.8	488.46	ug/L	488.46 ppb	07:03:57
3	Na 589.592 Radial†	13314.5	16202.9	5212.6	ug/L	5212.6 ppb	07:02:37
3	Ni 231.604†	16996.9	19860.4	446.69	ug/L	446.69 ppb	07:03:57
3	P 214.914†	4103.5	4591.8	2471.7	ug/L	2471.7 ppb	07:03:57
3	Pb 220.353†	2773.7	3328.6	468.03	ug/L	468.03 ppb	07:03:57
3	S 181.975 Axial†	1796.0	2061.7	2628.7	ug/L	2628.7 ppb	07:03:57
3	Sb 206.836†	1501.0	1734.2	529.64	ug/L	529.64 ppb	07:03:57
3	Se 196.026†	2898.8	3425.0	2618.1	ug/L	2618.1 ppb	07:03:57
3	Si 251.611†	152662.8	178655.0	5205.3	ug/L	5205.3 ppb	07:03:36
3	Sn 189.927†	2303.7	2698.7	483.26	ug/L	483.26 ppb	07:03:57
3	Sr 421.552†	73698.5	83689.9	511.56	ug/L	511.56 ppb	07:02:32
3	Ti 334.940†	266234.5	313711.9	517.54	ug/L	517.54 ppb	07:03:36
3	Tl 190.801†	1378.7	1656.3	465.83	ug/L	465.83 ppb	07:03:57
3	U 409.014†	13022.2	17835.9	468.94	ug/L	468.94 ppb	07:03:36
3	V 292.402†	65667.9	78503.9	499.96	ug/L	499.96 ppb	07:03:36
3	Zn 213.857†	53070.0	61643.9	483.49	ug/L	483.49 ppb	07:03:36
3	SiO2†	152592.9	178604.7	11165	ug/L	11165 ppb	07:04:13

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	767153.4	85.114	%	0.5302				0.62%
Sc Radial	5039.9	88.7	%	0.84				0.95%
Y 371.029	618698.4	82.296	%	0.4442				0.54%
Y RADIAL	5371.4	88.08	%	0.931				1.06%
Ag 328.068†	48329.1	269.91	ug/L	3.777	269.91	ppb	3.777	1.40%
QC value within limits for Ag 328.068 Recovery = 107.97%								
Al 396.153Radial†	734511.7	521600	ug/L	8399.6	521600	ppb	8399.6	1.61%
QC value within limits for Al 396.153Radial Recovery = 104.32%								
As 188.979†	1247.9	504.79	ug/L	0.717	504.79	ppb	0.717	0.14%
QC value within limits for As 188.979 Recovery = 100.96%								
B 249.677†	25666.6	495.29	ug/L	8.600	495.29	ppb	8.600	1.74%
QC value within limits for B 249.677 Recovery = 99.06%								
Ba 233.527†	66445.6	488.05	ug/L	7.488	488.05	ppb	7.488	1.53%
QC value within limits for Ba 233.527 Recovery = 97.61%								
Be 313.107†	676286.9	239.77	ug/L	3.782	239.77	ppb	3.782	1.58%
QC value within limits for Be 313.107 Recovery = 95.91%								

Ca 317.933Radial†	329065.7	490390 ug/L	7902.0	490390 ppb	7902.0	1.61%
QC value within limits for Ca 317.933Radial Recovery = 98.08%						
Cd 226.502†	47744.9	468.51 ug/L	7.251	468.51 ppb	7.251	1.55%
QC value within limits for Cd 226.502 Recovery = 93.70%						
Co 228.616†	24254.0	442.65 ug/L	0.107	442.65 ppb	0.107	0.02%
QC value within limits for Co 228.616 Recovery = 88.53%						
Cr 267.716†	45829.3	474.71 ug/L	7.203	474.71 ppb	7.203	1.52%
QC value within limits for Cr 267.716 Recovery = 94.94%						
Cu 324.752†	188973.7	539.32 ug/L	9.928	539.32 ppb	9.928	1.84%
QC value within limits for Cu 324.752 Recovery = 107.86%						
Fe 238.204 Radial†	20546.2	189450 ug/L	1185.9	189450 ppb	1185.9	0.63%
QC value within limits for Fe 238.204 Radial Recovery = 94.72%						
K 766.490 Radial†	32189.8	5638.6 ug/L	83.58	5638.6 ppb	83.58	1.48%
QC value within limits for K 766.490 Radial Recovery = 112.77%						
Mg 279.077 IEC†	14296.8	507480 ug/L	3067.5	507480 ppb	3067.5	0.60%
QC value within limits for Mg 279.077 IEC Recovery = 101.50%						
Mn 257.610†	455835.6	483.18 ug/L	7.853	483.18 ppb	7.853	1.63%
QC value within limits for Mn 257.610 Recovery = 96.64%						
Mo 202.031†	7633.1	488.61 ug/L	0.597	488.61 ppb	0.597	0.12%
QC value within limits for Mo 202.031 Recovery = 97.72%						
Na 589.592 Radial†	16140.9	5192.7 ug/L	36.41	5192.7 ppb	36.41	0.70%
QC value within limits for Na 589.592 Radial Recovery = 103.85%						
Ni 231.604†	19849.6	446.45 ug/L	0.497	446.45 ppb	0.497	0.11%
QC value within limits for Ni 231.604 Recovery = 89.29%						
P 214.914†	4604.5	2477.3 ug/L	4.87	2477.3 ppb	4.87	0.20%
QC value within limits for P 214.914 Recovery = 99.09%						
Pb 220.353†	3310.1	464.25 ug/L	3.637	464.25 ppb	3.637	0.78%
QC value within limits for Pb 220.353 Recovery = 92.85%						
S 181.975 Axial†	2072.8	2645.0 ug/L	17.33	2645.0 ppb	17.33	0.66%
QC value within limits for S 181.975 Axial Recovery = 105.80%						
Sb 206.836†	1742.2	532.42 ug/L	2.449	532.42 ppb	2.449	0.46%
QC value within limits for Sb 206.836 Recovery = 106.48%						
Se 196.026†	3408.8	2605.0 ug/L	11.28	2605.0 ppb	11.28	0.43%
QC value within limits for Se 196.026 Recovery = 104.20%						
Si 251.611†	177182.1	5162.3 ug/L	87.74	5162.3 ppb	87.74	1.70%
QC value within limits for Si 251.611 Recovery = 103.25%						
Sn 189.927†	2700.6	482.73 ug/L	2.383	482.73 ppb	2.383	0.49%
QC value within limits for Sn 189.927 Recovery = 96.55%						
Sr 421.552†	82471.4	504.11 ug/L	8.257	504.11 ppb	8.257	1.64%
QC value within limits for Sr 421.552 Recovery = 100.82%						
Ti 334.940†	311162.4	513.14 ug/L	8.626	513.14 ppb	8.626	1.68%
QC value within limits for Ti 334.940 Recovery = 102.63%						
Tl 190.801†	1651.0	464.12 ug/L	1.669	464.12 ppb	1.669	0.36%
QC value within limits for Tl 190.801 Recovery = 92.82%						
U 409.014†	17733.7	466.22 ug/L	12.982	466.22 ppb	12.982	2.78%
QC value within limits for U 409.014 Recovery = 93.24%						
V 292.402†	77933.7	496.33 ug/L	8.133	496.33 ppb	8.133	1.64%
QC value within limits for V 292.402 Recovery = 99.27%						
Zn 213.857†	61075.3	478.84 ug/L	8.328	478.84 ppb	8.328	1.74%
QC value within limits for Zn 213.857 Recovery = 95.77%						
SiO2†	178536.7	11161 ug/L	29.6	11161 ppb	29.6	0.26%
QC value within limits for SiO2 Recovery = 104.36%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/7/2009 07:06:22
Data Type: Reprocessed on 12/7/2009 08:21:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	757222.3	757222.3	84.013	%			07:08:48
1	Sc Radial	5049.7	5049.7	88.9	%			07:08:20
1	Y 371.029	613676.1	613676.1	81.628	%			07:08:48
1	Y RADIAL	5412.0	5412.0	88.74	%			07:08:20
1	Ag 328.068†	-22609.5	-27226.9	-2.1059	ug/L	-2.1059	ppb	07:08:48
1	Al 396.153Radial†	624753.8	702966.2	499220	ug/L	499220	ppb	07:08:15
1	As 188.979†	-202.5	-216.6	-14.982	ug/L	-14.982	ppb	07:09:08
1	B 249.677†	1877.6	2854.0	0.4025	ug/L	0.4025	ppb	07:08:48
1	Ba 233.527†	-1559.7	-1839.5	2.8752	ug/L	2.8752	ppb	07:09:08
1	Be 313.107†	-12116.2	-9149.8	-3.2560	ug/L	-3.2560	ppb	07:08:48
1	Ca 317.933Radial†	278885.6	313772.9	467600	ug/L	467600	ppb	07:08:15
1	Cd 226.502†	3534.8	4413.5	1.6444	ug/L	1.6444	ppb	07:09:08
1	Co 228.616†	189.1	299.1	-0.7796	ug/L	-0.7796	ppb	07:09:08
1	Cr 267.716†	48.4	-23.3	2.9588	ug/L	2.9588	ppb	07:09:08
1	Cu 324.752†	1520.4	-5061.1	7.9555	ug/L	7.9555	ppb	07:08:48
1	Fe 238.204 Radial†	41844.3	47075.3	434030	ug/L	434030	ppb	07:08:20
1	K 766.490 Radial†	3348.8	1552.7	75.047	ug/L	75.047	ppb	07:08:20
1	Mg 279.077 IEC†	12172.5	13695.7	485920	ug/L	485920	ppb	07:08:20
1	Mn 257.610†	-23461.3	-28419.7	4.6933	ug/L	4.6933	ppb	07:08:48
1	Mo 202.031†	-509.0	-632.7	-8.5968	ug/L	-8.5968	ppb	07:09:08
1	Na 589.592 Radial†	1375758.9	1549026.0	498340	ug/L	498340	ppb	07:08:15
1	Ni 231.604†	305.2	272.5	6.1285	ug/L	6.1285	ppb	07:09:08
1	P 214.914†	581.9	467.7	77.637	ug/L	77.637	ppb	07:09:08
1	Pb 220.353†	-552.2	-584.5	12.401	ug/L	12.401	ppb	07:09:08
1	S 181.975 Axial†	109.0	83.3	12.195	ug/L	12.195	ppb	07:09:08
1	Sb 206.836†	77.5	64.7	11.290	ug/L	11.290	ppb	07:09:08
1	Se 196.026†	-2369.6	-2798.2	-111.85	ug/L	-111.85	ppb	07:09:08
1	Si 251.611†	-195.3	-775.9	-21.823	ug/L	-21.823	ppb	07:09:08
1	Sn 189.927†	-397.6	-478.7	-21.416	ug/L	-21.416	ppb	07:09:08
1	Sr 421.552†	766.4	854.9	0.9388	ug/L	0.9388	ppb	07:08:20
1	Ti 334.940†	-7810.0	-8095.1	5.3687	ug/L	5.3687	ppb	07:08:48
1	Tl 190.801†	-127.1	-113.3	-17.341	ug/L	-17.341	ppb	07:09:08
1	U 409.014†	432878.9	517804.9	14281	ug/L	14281	ppb	07:08:48
1	V 292.402†	2432.5	4317.2	0.3034	ug/L	0.3034	ppb	07:09:08
1	Zn 213.857†	6102.3	6612.8	-2.0469	ug/L	-2.0469	ppb	07:09:08
1	SiO2†	-437.7	-1032.6	-62.893	ug/L	-62.893	ppb	07:10:05
2	Sc 361.383	761976.8	761976.8	84.540	%			07:09:14
2	Sc Radial	5078.7	5078.7	89.4	%			07:08:30
2	Y 371.029	617928.0	617928.0	82.194	%			07:09:14
2	Y RADIAL	5408.6	5408.6	88.69	%			07:08:30
2	Ag 328.068†	-22719.7	-27189.3	-2.5343	ug/L	-2.5343	ppb	07:09:14
2	Al 396.153Radial†	638345.0	714162.9	507180	ug/L	507180	ppb	07:08:25
2	As 188.979†	-194.8	-206.0	-11.256	ug/L	-11.256	ppb	07:09:34
2	B 249.677†	1856.6	2815.2	-0.1403	ug/L	-0.1403	ppb	07:09:14
2	Ba 233.527†	-1531.7	-1794.8	3.1285	ug/L	3.1285	ppb	07:09:34
2	Be 313.107†	-12097.3	-9037.5	-3.2164	ug/L	-3.2164	ppb	07:09:14
2	Ca 317.933Radial†	283606.8	317265.5	472810	ug/L	472810	ppb	07:08:25
2	Cd 226.502†	3611.4	4477.8	2.4852	ug/L	2.4852	ppb	07:09:34
2	Co 228.616†	189.1	297.8	-0.7813	ug/L	-0.7813	ppb	07:09:34
2	Cr 267.716†	83.2	17.5	3.3704	ug/L	3.3704	ppb	07:09:34
2	Cu 324.752†	1370.4	-5249.9	7.3321	ug/L	7.3321	ppb	07:09:14
2	Fe 238.204 Radial†	41904.9	46874.7	432180	ug/L	432180	ppb	07:08:30
2	K 766.490 Radial†	3383.3	1569.8	74.620	ug/L	74.620	ppb	07:08:30
2	Mg 279.077 IEC†	12176.3	13621.9	483300	ug/L	483300	ppb	07:08:30
2	Mn 257.610†	-23962.5	-28838.3	4.1226	ug/L	4.1226	ppb	07:09:14
2	Mo 202.031†	-526.9	-650.0	-9.8086	ug/L	-9.8086	ppb	07:09:34
2	Na 589.592 Radial†	1408518.0	1576848.3	507290	ug/L	507290	ppb	07:08:25
2	Ni 231.604†	267.3	225.3	5.0671	ug/L	5.0671	ppb	07:09:34

2	P 214.914†	563.4	441.6	67.563	ug/L	67.563 ppb	07:09:34
2	Pb 220.353†	-538.4	-564.1	16.559	ug/L	16.559 ppb	07:09:34
2	S 181.975 Axial†	109.6	83.2	10.485	ug/L	10.485 ppb	07:09:34
2	Sb 206.836†	52.3	34.3	1.6628	ug/L	1.6628 ppb	07:09:34
2	Se 196.026†	-2386.7	-2800.9	-117.74	ug/L	-117.74 ppb	07:09:34
2	Si 251.611†	-513.1	-1150.3	-32.746	ug/L	-32.746 ppb	07:09:34
2	Sn 189.927†	-386.5	-462.7	-18.351	ug/L	-18.351 ppb	07:09:34
2	Sr 421.552†	742.0	822.6	0.6914	ug/L	0.6914 ppb	07:08:30
2	Ti 334.940†	-7882.3	-8122.6	5.6333	ug/L	5.6333 ppb	07:09:14
2	Tl 190.801†	-121.8	-106.1	-15.177	ug/L	-15.177 ppb	07:09:34
2	U 409.014†	433078.3	514825.7	14199	ug/L	14199 ppb	07:09:14
2	V 292.402†	2400.9	4261.7	-0.0111	ug/L	-0.0111 ppb	07:09:34
2	Zn 213.857†	6132.9	6603.8	-1.8500	ug/L	-1.8500 ppb	07:09:34
2	SiO2†	-549.1	-1161.0	-70.920	ug/L	-70.920 ppb	07:10:10
3	Sc 361.383	756768.3	756768.3	83.962	%		07:09:39
3	Sc Radial	5040.5	5040.5	88.7	%		07:08:41
3	Y 371.029	614637.5	614637.5	81.756	%		07:09:39
3	Y RADIAL	5421.0	5421.0	88.89	%		07:08:41
3	Ag 328.068†	-22709.1	-27361.8	-2.8138	ug/L	-2.8138 ppb	07:09:39
3	Al 396.153Radial†	627037.1	706817.6	501960	ug/L	501960 ppb	07:08:36
3	As 188.979†	-200.5	-214.4	-14.141	ug/L	-14.141 ppb	07:10:00
3	B 249.677†	1729.0	2678.4	-3.1833	ug/L	-3.1833 ppb	07:09:39
3	Ba 233.527†	-1572.8	-1856.2	2.7592	ug/L	2.7592 ppb	07:10:00
3	Be 313.107†	-12100.8	-9140.1	-3.2542	ug/L	-3.2542 ppb	07:09:39
3	Ca 317.933Radial†	278619.5	314043.3	468010	ug/L	468010 ppb	07:08:36
3	Cd 226.502†	3601.0	4494.9	2.4621	ug/L	2.4621 ppb	07:10:00
3	Co 228.616†	188.2	298.3	-0.7970	ug/L	-0.7970 ppb	07:10:00
3	Cr 267.716†	53.0	-17.7	2.9652	ug/L	2.9652 ppb	07:10:00
3	Cu 324.752†	1365.6	-5244.5	7.4480	ug/L	7.4480 ppb	07:09:39
3	Fe 238.204 Radial†	41780.4	47089.0	434160	ug/L	434160 ppb	07:08:41
3	K 766.490 Radial†	3425.4	1645.9	90.268	ug/L	90.268 ppb	07:08:41
3	Mg 279.077 IEC†	12121.2	13662.8	484750	ug/L	484750 ppb	07:08:41
3	Mn 257.610†	-24360.9	-29507.9	3.5967	ug/L	3.5967 ppb	07:09:39
3	Mo 202.031†	-515.6	-640.8	-9.0938	ug/L	-9.0938 ppb	07:10:00
3	Na 589.592 Radial†	1382383.9	1559307.2	501650	ug/L	501650 ppb	07:08:36
3	Ni 231.604†	307.3	275.2	6.1891	ug/L	6.1891 ppb	07:10:00
3	P 214.914†	562.2	444.6	65.882	ug/L	65.882 ppb	07:10:00
3	Pb 220.353†	-554.7	-587.8	12.633	ug/L	12.633 ppb	07:10:00
3	S 181.975 Axial†	118.5	94.7	26.771	ug/L	26.771 ppb	07:10:00
3	Sb 206.836†	57.3	40.7	3.8238	ug/L	3.8238 ppb	07:10:00
3	Se 196.026†	-2393.0	-2827.8	-127.56	ug/L	-127.56 ppb	07:10:00
3	Si 251.611†	-394.6	-1013.4	-28.759	ug/L	-28.759 ppb	07:10:00
3	Sn 189.927†	-390.1	-470.0	-19.997	ug/L	-19.997 ppb	07:10:00
3	Sr 421.552†	787.7	880.5	1.0926	ug/L	1.0926 ppb	07:08:41
3	Ti 334.940†	-8253.0	-8628.3	4.4801	ug/L	4.4801 ppb	07:09:39
3	Tl 190.801†	-116.4	-100.7	-13.870	ug/L	-13.870 ppb	07:10:00
3	U 409.014†	437663.7	523812.8	14447	ug/L	14447 ppb	07:09:39
3	V 292.402†	2447.9	4337.3	0.7048	ug/L	0.7048 ppb	07:10:00
3	Zn 213.857†	6169.1	6696.8	-1.3066	ug/L	-1.3066 ppb	07:10:00
3	SiO2†	-518.4	-1129.0	-68.939	ug/L	-68.939 ppb	07:10:15

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	758655.8	84.172	%	0.3201				0.38%
Sc Radial	5056.3	89.0	%	0.35				0.39%
Y 371.029	615413.8	81.859	%	0.2966				0.36%
Y RADIAL	5413.9	88.77	%	0.105				0.12%
Ag 328.068†	-27259.3	-2.4846	ug/L	0.35653	-2.4846	ppb	0.35653	14.35%
Al 396.153Radial†	707982.2	502790	ug/L	4039.8	502790	ppb	4039.8	0.80%
QC value within limits for Al 396.153Radial Recovery = 100.56%								
As 188.979†	-212.4	-13.460	ug/L	1.9546	-13.460	ppb	1.9546	14.52%
B 249.677†	2782.5	-0.9737	ug/L	1.93272	-0.9737	ppb	1.93272	198.49%
Ba 233.527†	-1830.2	2.9210	ug/L	0.18890	2.9210	ppb	0.18890	6.47%
Be 313.107†	-9109.1	-3.2422	ug/L	0.02235	-3.2422	ppb	0.02235	0.69%
Ca 317.933Radial†	315027.3	469470	ug/L	2895.7	469470	ppb	2895.7	0.62%
QC value within limits for Ca 317.933Radial Recovery = 93.89%								
Cd 226.502†	4462.1	2.1972	ug/L	0.47886	2.1972	ppb	0.47886	21.79%
Co 228.616†	298.4	-0.7860	ug/L	0.00959	-0.7860	ppb	0.00959	1.22%
Cr 267.716†	-7.8	3.0981	ug/L	0.23584	3.0981	ppb	0.23584	7.61%

Cu 324.752†	-5185.1	7.5785	ug/L	0.33158	7.5785	ppb	0.33158	4.38%
Fe 238.204 Radial†	47013.0	433460	ug/L	1105.9	433460	ppb	1105.9	0.26%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.69%								
K 766.490 Radial†	1589.5	79.978	ug/L	8.9140	79.978	ppb	8.9140	11.15%
Mg 279.077 IEC†	13660.1	484650	ug/L	1312.2	484650	ppb	1312.2	0.27%
QC value within limits for Mg 279.077 IEC Recovery = 96.93%								
Mn 257.610†	-28922.0	4.1375	ug/L	0.54849	4.1375	ppb	0.54849	13.26%
Mo 202.031†	-641.2	-9.1664	ug/L	0.60913	-9.1664	ppb	0.60913	6.65%
Na 589.592 Radial†	1561727.1	502420	ug/L	4525.9	502420	ppb	4525.9	0.90%
QC value within limits for Na 589.592 Radial Recovery = 100.48%								
Ni 231.604†	257.6	5.7949	ug/L	0.63106	5.7949	ppb	0.63106	10.89%
P 214.914†	451.3	70.361	ug/L	6.3576	70.361	ppb	6.3576	9.04%
Pb 220.353†	-578.8	13.865	ug/L	2.3366	13.865	ppb	2.3366	16.85%
S 181.975 Axial†	87.0	16.484	ug/L	8.9499	16.484	ppb	8.9499	54.30%
Sb 206.836†	46.6	5.5921	ug/L	5.05124	5.5921	ppb	5.05124	90.33%
Se 196.026†	-2809.0	-119.05	ug/L	7.935	-119.05	ppb	7.935	6.67%
Si 251.611†	-979.9	-27.776	ug/L	5.5275	-27.776	ppb	5.5275	19.90%
Sn 189.927†	-470.5	-19.921	ug/L	1.5339	-19.921	ppb	1.5339	7.70%
Sr 421.552†	852.7	0.9076	ug/L	0.20242	0.9076	ppb	0.20242	22.30%
Ti 334.940†	-8282.0	5.1607	ug/L	0.60407	5.1607	ppb	0.60407	11.71%
Tl 190.801†	-106.7	-15.463	ug/L	1.7532	-15.463	ppb	1.7532	11.34%
U 409.014†	518814.5	14309	ug/L	126.6	14309	ppb	126.6	0.88%
QC value within limits for U 409.014 Recovery = 95.39%								
V 292.402†	4305.4	0.3324	ug/L	0.35882	0.3324	ppb	0.35882	107.96%
Zn 213.857†	6637.8	-1.7345	ug/L	0.38339	-1.7345	ppb	0.38339	22.10%
SiO2†	-1107.5	-67.584	ug/L	4.1816	-67.584	ppb	4.1816	6.19%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/7/2009 07:12:26
Data Type: Reprocessed on 12/7/2009 08:21:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	864268.7	864268.7	95.889	%			07:16:01
1	Sc Radial	5393.0	5393.0	94.9	%			07:14:24
1	Y 371.029	699224.8	699224.8	93.007	%			07:16:01
1	Y RADIAL	5737.3	5737.3	94.08	%			07:14:24
1	Ag 328.068†	-7451.1	-8085.5	2.0415	ug/L	2.0415	ppb	07:16:06
1	Al 396.153Radial†	614.2	667.6	67.908	ug/L	67.908	ppb	07:14:24
1	As 188.979†	23757.6	24800.5	9463.6	ug/L	9463.6	ppb	07:16:06
1	B 249.677†	224644.4	234894.1	4750.6	ug/L	4750.6	ppb	07:16:01
1	Ba 233.527†	1827660.9	1906029.5	13788	ug/L	13788	ppb	07:16:01
1	Be 313.107†	7416478.4	7739694.2	2752.4	ug/L	2752.4	ppb	07:15:55
1	Ca 317.933Radial†	37.0	22.0	32.846	ug/L	32.846	ppb	07:14:44
1	Cd 226.502†	872310.5	909912.4	9290.2	ug/L	9290.2	ppb	07:16:01
1	Co 228.616†	463480.2	483423.7	8872.9	ug/L	8872.9	ppb	07:16:06
1	Cr 267.716†	2160948.5	2253507.3	23157	ug/L	23157	ppb	07:16:01
1	Cu 324.752†	6616468.5	6893245.1	19320	ug/L	19320	ppb	07:15:55
1	Fe 238.204 Radial†	-18.5	-25.5	44.314	ug/L	44.314	ppb	07:14:44
1	K 766.490 Radial†	1627963.3	1712906.3	299500	ug/L	299500	ppb	07:14:19
1	Mg 279.077 IEC†	-4.6	-5.2	9.2480	ug/L	9.2480	ppb	07:14:44
1	Mn 257.610†	8299026.8	8654311.5	8994.2	ug/L	8994.2	ppb	07:15:55
1	Mo 202.031†	146163.9	152403.1	9487.3	ug/L	9487.3	ppb	07:16:06
1	Na 589.592 Radial†	-457.6	599.9	193.00	ug/L	193.00	ppb	07:14:24
1	Ni 231.604†	390294.8	406935.9	9152.7	ug/L	9152.7	ppb	07:16:06
1	P 214.914†	30546.0	31630.6	14437	ug/L	14437	ppb	07:16:06
1	Pb 220.353†	202416.5	211166.8	23102	ug/L	23102	ppb	07:16:06
1	S 181.975 Axial†	35781.1	37268.6	49402	ug/L	49402	ppb	07:16:06
1	Sb 206.836†	31485.4	32807.6	9932.0	ug/L	9932.0	ppb	07:16:06
1	Se 196.026†	16498.2	17227.8	9693.3	ug/L	9693.3	ppb	07:16:06
1	Si 251.611†	1531898.6	1597027.5	46337	ug/L	46337	ppb	07:16:01
1	Sn 189.927†	61059.0	63671.1	10114	ug/L	10114	ppb	07:16:06
1	Sr 421.552†	1486520.3	1566098.5	9659.2	ug/L	9659.2	ppb	07:14:19
1	Ti 334.940†	6018108.4	6277305.3	9835.4	ug/L	9835.4	ppb	07:15:55
1	Tl 190.801†	32609.6	34045.5	9273.0	ug/L	9273.0	ppb	07:16:06
1	U 409.014†	-1367.0	1124.6	-13.531	ug/L	-13.531	ppb	07:16:06
1	V 292.402†	1431076.4	1493848.3	9827.7	ug/L	9827.7	ppb	07:16:01
1	Zn 213.857†	1535747.2	1600933.9	13491	ug/L	13491	ppb	07:16:01
1	SiO2†	1560594.8	1626985.8	101290	ug/L	101290	ppb	07:16:53
2	Sc 361.383	868196.0	868196.0	96.325	%			07:16:21
2	Sc Radial	5475.7	5475.7	96.4	%			07:14:54
2	Y 371.029	703352.8	703352.8	93.556	%			07:16:21
2	Y RADIAL	5837.8	5837.8	95.72	%			07:14:54
2	Ag 328.068†	-7399.4	-7996.7	2.2792	ug/L	2.2792	ppb	07:16:26
2	Al 396.153Radial†	595.8	638.7	45.797	ug/L	45.797	ppb	07:14:54
2	As 188.979†	23975.9	24915.0	9506.0	ug/L	9506.0	ppb	07:16:26
2	B 249.677†	225109.1	234316.6	4738.8	ug/L	4738.8	ppb	07:16:21
2	Ba 233.527†	1825475.2	1895138.5	13709	ug/L	13709	ppb	07:16:21
2	Be 313.107†	7383996.6	7670986.0	2728.0	ug/L	2728.0	ppb	07:16:14
2	Ca 317.933Radial†	34.0	18.4	27.369	ug/L	27.369	ppb	07:15:14
2	Cd 226.502†	871641.3	905102.6	9241.1	ug/L	9241.1	ppb	07:16:21
2	Co 228.616†	466475.3	484346.5	8890.2	ug/L	8890.2	ppb	07:16:26
2	Cr 267.716†	2161182.0	2243555.5	23054	ug/L	23054	ppb	07:16:21
2	Cu 324.752†	6593261.4	6837939.5	19165	ug/L	19165	ppb	07:16:14
2	Fe 238.204 Radial†	-21.2	-28.1	21.751	ug/L	21.751	ppb	07:15:14
2	K 766.490 Radial†	1647424.1	1707203.8	298510	ug/L	298510	ppb	07:14:49
2	Mg 279.077 IEC†	-0.4	-0.7	168.81	ug/L	168.81	ppb	07:15:14
2	Mn 257.610†	8241949.7	8555906.3	8891.9	ug/L	8891.9	ppb	07:16:14
2	Mo 202.031†	147414.2	153011.6	9525.2	ug/L	9525.2	ppb	07:16:26
2	Na 589.592 Radial†	-478.2	585.8	188.46	ug/L	188.46	ppb	07:14:54
2	Ni 231.604†	393095.4	408002.1	9176.7	ug/L	9176.7	ppb	07:16:26

2	P 214.914†	30765.2	31714.1	14508	ug/L	14508 ppb	07:16:26
2	Pb 220.353†	203637.7	211479.8	23136	ug/L	23136 ppb	07:16:26
2	S 181.975 Axial†	36156.4	37489.4	49694	ug/L	49694 ppb	07:16:26
2	Sb 206.836†	31798.4	32984.0	9990.2	ug/L	9990.2 ppb	07:16:26
2	Se 196.026†	16661.3	17319.2	9744.7	ug/L	9744.7 ppb	07:16:26
2	Si 251.611†	1533353.1	1591310.9	46170	ug/L	46170 ppb	07:16:21
2	Sn 189.927†	61442.6	63781.4	10132	ug/L	10132 ppb	07:16:26
2	Sr 421.552†	1497484.6	1553829.7	9583.6	ug/L	9583.6 ppb	07:14:49
2	Ti 334.940†	5986681.9	6216289.5	9739.7	ug/L	9739.7 ppb	07:16:14
2	Tl 190.801†	32776.5	34065.0	9276.9	ug/L	9276.9 ppb	07:16:26
2	U 409.014†	-1071.7	1437.7	-4.6635	ug/L	-4.6635 ppb	07:16:26
2	V 292.402†	1432180.5	1488243.5	9791.9	ug/L	9791.9 ppb	07:16:21
2	Zn 213.857†	1534211.1	1592094.3	13416	ug/L	13416 ppb	07:16:21
2	SiO2†	1545372.0	1603820.2	99838	ug/L	99838 ppb	07:17:01
3	Sc 361.383	870709.0	870709.0	96.604	%		07:16:41
3	Sc Radial	5572.1	5572.1	98.1	%		07:15:25
3	Y 371.029	704837.3	704837.3	93.754	%		07:16:41
3	Y RADIAL	5879.6	5879.6	96.41	%		07:15:25
3	Ag 328.068†	-7498.3	-8076.9	1.9849	ug/L	1.9849 ppb	07:16:46
3	Al 396.153Radial†	608.9	641.3	49.649	ug/L	49.649 ppb	07:15:25
3	As 188.979†	24009.0	24877.5	9492.3	ug/L	9492.3 ppb	07:16:46
3	B 249.677†	226028.4	234593.9	4744.5	ug/L	4744.5 ppb	07:16:41
3	Ba 233.527†	1835637.7	1900188.6	13745	ug/L	13745 ppb	07:16:41
3	Be 313.107†	7463078.4	7730723.5	2749.2	ug/L	2749.2 ppb	07:16:34
3	Ca 317.933Radial†	41.3	25.1	37.450	ug/L	37.450 ppb	07:15:45
3	Cd 226.502†	877715.6	908778.8	9278.6	ug/L	9278.6 ppb	07:16:41
3	Co 228.616†	466023.7	482481.3	8855.7	ug/L	8855.7 ppb	07:16:46
3	Cr 267.716†	2170691.3	2246923.6	23089	ug/L	23089 ppb	07:16:41
3	Cu 324.752†	6630853.4	6857097.8	19219	ug/L	19219 ppb	07:16:34
3	Fe 238.204 Radial†	-20.2	-26.6	33.655	ug/L	33.655 ppb	07:15:45
3	K 766.490 Radial†	1628677.3	1658515.7	289990	ug/L	289990 ppb	07:15:20
3	Mg 279.077 IEC†	-7.6	-8.0	-91.960	ug/L	-91.960 ppb	07:15:45
3	Mn 257.610†	8319367.5	8611350.6	8949.6	ug/L	8949.6 ppb	07:16:34
3	Mo 202.031†	147118.8	152264.2	9478.6	ug/L	9478.6 ppb	07:16:46
3	Na 589.592 Radial†	-401.2	672.9	216.49	ug/L	216.49 ppb	07:15:25
3	Ni 231.604†	392739.0	406455.3	9141.9	ug/L	9141.9 ppb	07:16:46
3	P 214.914†	30832.6	31691.7	14487	ug/L	14487 ppb	07:16:46
3	Pb 220.353†	203724.8	210959.7	23079	ug/L	23079 ppb	07:16:46
3	S 181.975 Axial†	36073.9	37295.7	49438	ug/L	49438 ppb	07:16:46
3	Sb 206.836†	31800.7	32891.1	9959.2	ug/L	9959.2 ppb	07:16:46
3	Se 196.026†	16614.1	17220.5	9689.2	ug/L	9689.2 ppb	07:16:46
3	Si 251.611†	1541764.3	1595423.4	46294	ug/L	46294 ppb	07:16:41
3	Sn 189.927†	61484.7	63640.8	10110	ug/L	10110 ppb	07:16:46
3	Sr 421.552†	1477578.0	1506650.5	9292.6	ug/L	9292.6 ppb	07:15:20
3	Ti 334.940†	6034822.2	6248184.4	9789.7	ug/L	9789.7 ppb	07:16:34
3	Tl 190.801†	32836.6	34029.0	9268.1	ug/L	9268.1 ppb	07:16:46
3	U 409.014†	-1484.6	1013.5	-16.477	ug/L	-16.477 ppb	07:16:46
3	V 292.402†	1438169.4	1490151.8	9803.6	ug/L	9803.6 ppb	07:16:41
3	Zn 213.857†	1543115.8	1596715.1	13455	ug/L	13455 ppb	07:16:41
3	SiO2†	1548748.6	1602685.1	99775	ug/L	99775 ppb	07:17:08

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867724.6	96.273	%	0.3601				0.37%
Sc Radial	5480.2	96.5	%	1.58				1.64%
Y 371.029	702471.7	93.439	%	0.3868				0.41%
Y RADIAL	5818.2	95.40	%	1.199				1.26%
Ag 328.068†	-8053.0	2.1018	ug/L	0.15615	2.1018	ppb	0.15615	7.43%
Al 396.153Radial†	649.2	54.451	ug/L	11.8121	54.451	ppb	11.8121	21.69%
As 188.979†	24864.3	9487.3	ug/L	21.64	9487.3	ppb	21.64	0.23%
QC value within limits for As 188.979 Recovery = 94.87%								
B 249.677†	234601.5	4744.6	ug/L	5.89	4744.6	ppb	5.89	0.12%
QC value within limits for B 249.677 Recovery = 94.89%								
Ba 233.527†	1900452.2	13747	ug/L	39.4	13747	ppb	39.4	0.29%
QC value within limits for Ba 233.527 Recovery = 91.65%								
Be 313.107†	7713801.2	2743.2	ug/L	13.28	2743.2	ppb	13.28	0.48%
QC value within limits for Be 313.107 Recovery = 91.44%								
Ca 317.933Radial†	21.8	32.555	ug/L	5.0471	32.555	ppb	5.0471	15.50%
Cd 226.502†	907931.3	9270.0	ug/L	25.65	9270.0	ppb	25.65	0.28%

```
   QC value within limits for Cd 226.502  Recovery = 92.70%
Co 228.616†          483417.2      8873.0 ug/L        17.23      8873.0 ppb        17.23   0.19%
   QC value less than the lower limit for Co 228.616  Recovery = 88.73%
Cr 267.716†         2247995.4       23100 ug/L        52.0       23100 ppb        52.0   0.23%
   QC value within limits for Cr 267.716  Recovery = 92.40%
Cu 324.752†         6862760.8       19235 ug/L        78.7       19235 ppb        78.7   0.41%
   QC value within limits for Cu 324.752  Recovery = 96.17%
Fe 238.204 Radial†      -26.7      33.240 ug/L      11.2873      33.240 ppb     11.2873  33.96%
K 766.490 Radial†   1692875.3      296000 ug/L      5228.1      296000 ppb      5228.1   1.77%
   QC value within limits for K 766.490 Radial  Recovery = 98.67%
Mg 279.077 IEC†         -4.6      28.698 ug/L     131.4665      28.698 ppb    131.4665 458.10%
Mn 257.610†         8607189.5      8945.2 ug/L        51.27      8945.2 ppb        51.27   0.57%
   QC value less than the lower limit for Mn 257.610  Recovery = 89.45%
Mo 202.031†          152559.7      9497.0 ug/L        24.75      9497.0 ppb        24.75   0.26%
   QC value within limits for Mo 202.031  Recovery = 94.97%
Na 589.592 Radial†      619.5      199.32 ug/L       15.042      199.32 ppb      15.042   7.55%
Ni 231.604†          407131.1      9157.1 ug/L        17.81      9157.1 ppb        17.81   0.19%
   QC value within limits for Ni 231.604  Recovery = 91.57%
P 214.914†            31678.8       14478 ug/L        36.5       14478 ppb        36.5   0.25%
   QC value within limits for P 214.914  Recovery = 96.52%
Pb 220.353†          211202.1       23105 ug/L        28.7       23105 ppb        28.7   0.12%
   QC value within limits for Pb 220.353  Recovery = 92.42%
S 181.975 Axial†      37351.2       49511 ug/L       159.6       49511 ppb       159.6   0.32%
   QC value within limits for S 181.975 Axial  Recovery = 99.02%
Sb 206.836†           32894.2      9960.5 ug/L        29.14      9960.5 ppb        29.14   0.29%
   QC value within limits for Sb 206.836  Recovery = 99.60%
Se 196.026†           17255.8      9709.0 ug/L        30.91      9709.0 ppb        30.91   0.32%
   QC value within limits for Se 196.026  Recovery = 97.09%
Si 251.611†         1594587.3       46267 ug/L        86.8       46267 ppb        86.8   0.19%
   QC value within limits for Si 251.611  Recovery = 92.53%
Sn 189.927†           63697.8       10119 ug/L        11.7       10119 ppb        11.7   0.12%
   QC value within limits for Sn 189.927  Recovery = 101.19%
Sr 421.552†         1542192.9      9511.8 ug/L       193.58      9511.8 ppb       193.58   2.04%
   QC value within limits for Sr 421.552  Recovery = 95.12%
Ti 334.940†         6247259.7      9788.3 ug/L        47.84      9788.3 ppb        47.84   0.49%
   QC value within limits for Ti 334.940  Recovery = 97.88%
Tl 190.801†           34046.5      9272.7 ug/L         4.45      9272.7 ppb         4.45   0.05%
   QC value within limits for Tl 190.801  Recovery = 92.73%
U 409.014†             1191.9     -11.557 ug/L       6.1490     -11.557 ppb      6.1490  53.21%
V 292.402†          1490747.8      9807.7 ug/L        18.22      9807.7 ppb        18.22   0.19%
   QC value within limits for V 292.402  Recovery = 98.08%
Zn 213.857†         1596581.1       13454 ug/L        37.5       13454 ppb        37.5   0.28%
   QC value less than the lower limit for Zn 213.857  Recovery = 89.69%
SiO2†               1611163.7      100300 ug/L       857.2      100300 ppb       857.2   0.85%
   QC value within limits for SiO2  Recovery = 93.74%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 07:19:17
Data Type: Reprocessed on 12/7/2009 08:21:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	913249.4	913249.4	101.32	%			07:22:27
1	Sc Radial	5694.2	5694.2	100	%			07:21:10
1	Y 371.029	746406.4	746406.4	99.283	%			07:22:27
1	Y RADIAL	6078.5	6078.5	99.67	%			07:21:10
1	Ag 328.068†	110997.9	109233.1	489.45	ug/L	489.45	ppb	07:22:32
1	Al 396.153Radial†	6967.4	6972.5	4930.8	ug/L	4930.8	ppb	07:21:10
1	As 188.979†	1322.3	1329.5	507.11	ug/L	507.11	ppb	07:22:52
1	B 249.677†	24270.3	24572.4	497.45	ug/L	497.45	ppb	07:22:32
1	Ba 233.527†	66983.2	66125.2	478.83	ug/L	478.83	ppb	07:22:32
1	Be 313.107†	1365354.5	1352791.2	478.66	ug/L	478.66	ppb	07:22:27
1	Ca 317.933Radial†	3383.9	3359.5	5006.5	ug/L	5006.5	ppb	07:21:30
1	Cd 226.502†	47000.1	46592.2	475.21	ug/L	475.21	ppb	07:22:32
1	Co 228.616†	26199.2	25931.1	476.09	ug/L	476.09	ppb	07:22:32
1	Cr 267.716†	47286.2	46587.7	479.15	ug/L	479.15	ppb	07:22:32
1	Cu 324.752†	178406.3	169204.9	474.50	ug/L	474.50	ppb	07:22:32
1	Fe 238.204 Radial†	546.3	539.1	4985.2	ug/L	4985.2	ppb	07:21:30
1	K 766.490 Radial†	33253.5	30965.1	5407.6	ug/L	5407.6	ppb	07:21:10
1	Mg 279.077 IEC†	144.2	143.6	5105.9	ug/L	5105.9	ppb	07:21:30
1	Mn 257.610†	470579.6	463938.8	482.56	ug/L	482.56	ppb	07:22:27
1	Mo 202.031†	7960.3	7829.5	487.75	ug/L	487.75	ppb	07:22:52
1	Na 589.592 Radial†	27549.3	28570.6	9191.5	ug/L	9191.5	ppb	07:21:10
1	Ni 231.604†	21576.1	21203.4	476.89	ug/L	476.89	ppb	07:22:32
1	P 214.914†	4521.8	4237.9	2259.0	ug/L	2259.0	ppb	07:22:52
1	Pb 220.353†	4377.5	4393.1	481.96	ug/L	481.96	ppb	07:22:52
1	S 181.975 Axial†	773.9	717.3	949.88	ug/L	949.88	ppb	07:22:52
1	Sb 206.836†	1678.8	1629.2	509.72	ug/L	509.72	ppb	07:22:52
1	Se 196.026†	841.8	853.1	496.67	ug/L	496.67	ppb	07:22:52
1	Si 251.611†	83336.6	81704.6	2374.0	ug/L	2374.0	ppb	07:22:32
1	Sn 189.927†	3103.1	3057.1	486.22	ug/L	486.22	ppb	07:22:52
1	Sr 421.552†	79394.9	79212.7	488.51	ug/L	488.51	ppb	07:21:10
1	Ti 334.940†	312274.2	309396.1	485.05	ug/L	485.05	ppb	07:22:32
1	Tl 190.801†	1756.9	1772.0	482.63	ug/L	482.63	ppb	07:22:52
1	U 409.014†	15291.7	17642.2	486.88	ug/L	486.88	ppb	07:22:32
1	V 292.402†	73000.6	73468.8	484.19	ug/L	484.19	ppb	07:22:32
1	Zn 213.857†	57705.8	56301.4	473.05	ug/L	473.05	ppb	07:22:32
1	SiO2†	84175.6	82564.5	5147.4	ug/L	5147.4	ppb	07:24:00
2	Sc 361.383	909010.0	909010.0	100.85	%			07:22:58
2	Sc Radial	5737.4	5737.4	101	%			07:21:35
2	Y 371.029	743483.8	743483.8	98.894	%			07:22:58
2	Y RADIAL	6128.5	6128.5	100.5	%			07:21:35
2	Ag 328.068†	112126.5	110862.9	496.69	ug/L	496.69	ppb	07:23:03
2	Al 396.153Radial†	7035.2	6987.4	4941.3	ug/L	4941.3	ppb	07:21:35
2	As 188.979†	1311.0	1324.3	505.20	ug/L	505.20	ppb	07:23:23
2	B 249.677†	24497.0	24908.8	504.28	ug/L	504.28	ppb	07:23:03
2	Ba 233.527†	67689.2	67133.5	486.12	ug/L	486.12	ppb	07:23:03
2	Be 313.107†	1360679.2	1354439.9	479.26	ug/L	479.26	ppb	07:22:58
2	Ca 317.933Radial†	3353.8	3304.4	4924.3	ug/L	4924.3	ppb	07:21:55
2	Cd 226.502†	47372.0	47177.3	481.20	ug/L	481.20	ppb	07:23:03
2	Co 228.616†	26476.0	26326.1	483.33	ug/L	483.33	ppb	07:23:03
2	Cr 267.716†	47755.9	47271.1	486.17	ug/L	486.17	ppb	07:23:03
2	Cu 324.752†	180659.9	172260.7	483.06	ug/L	483.06	ppb	07:23:03
2	Fe 238.204 Radial†	538.2	527.0	4873.9	ug/L	4873.9	ppb	07:21:55
2	K 766.490 Radial†	33263.0	30725.2	5365.7	ug/L	5365.7	ppb	07:21:35
2	Mg 279.077 IEC†	144.2	142.5	5066.3	ug/L	5066.3	ppb	07:21:55
2	Mn 257.610†	467782.1	463330.9	481.92	ug/L	481.92	ppb	07:22:58
2	Mo 202.031†	7936.9	7843.0	488.58	ug/L	488.58	ppb	07:23:23
2	Na 589.592 Radial†	27628.9	28442.9	9150.4	ug/L	9150.4	ppb	07:21:35
2	Ni 231.604†	21734.2	21459.5	482.65	ug/L	482.65	ppb	07:23:03

2	P 214.914†	4487.0	4224.2	2250.2 ug/L	2250.2 ppb	07:23:23
2	Pb 220.353†	4352.9	4388.9	481.50 ug/L	481.50 ppb	07:23:23
2	S 181.975 Axial†	763.3	710.4	940.71 ug/L	940.71 ppb	07:23:23
2	Sb 206.836†	1647.2	1605.6	502.25 ug/L	502.25 ppb	07:23:23
2	Se 196.026†	833.4	848.6	493.78 ug/L	493.78 ppb	07:23:23
2	Si 251.611†	84098.1	82843.3	2407.2 ug/L	2407.2 ppb	07:23:03
2	Sn 189.927†	3080.2	3048.7	484.88 ug/L	484.88 ppb	07:23:23
2	Sr 421.552†	79785.2	79003.9	487.23 ug/L	487.23 ppb	07:21:35
2	Ti 334.940†	316044.4	314571.7	493.15 ug/L	493.15 ppb	07:23:03
2	Tl 190.801†	1753.0	1776.2	483.77 ug/L	483.77 ppb	07:23:23
2	U 409.014†	15733.4	18150.6	500.96 ug/L	500.96 ppb	07:23:03
2	V 292.402†	73771.0	74568.7	491.39 ug/L	491.39 ppb	07:23:03
2	Zn 213.857†	58205.7	57062.6	479.47 ug/L	479.47 ppb	07:23:03
2	SiO2†	83357.4	82140.7	5120.8 ug/L	5120.8 ppb	07:24:05
3	Sc 361.383	915743.7	915743.7	101.60 %		07:23:29
3	Sc Radial	5800.0	5800.0	102 %		07:22:00
3	Y 371.029	749542.2	749542.2	99.700 %		07:23:29
3	Y RADIAL	6171.5	6171.5	101.2 %		07:22:00
3	Ag 328.068†	112954.9	110860.8	496.68 ug/L	496.68 ppb	07:23:34
3	Al 396.153Radial†	7112.1	6987.5	4941.5 ug/L	4941.5 ppb	07:22:00
3	As 188.979†	1302.7	1306.6	498.50 ug/L	498.50 ppb	07:23:54
3	B 249.677†	24697.9	24928.0	504.67 ug/L	504.67 ppb	07:23:34
3	Ba 233.527†	68054.2	66999.3	485.15 ug/L	485.15 ppb	07:23:34
3	Be 313.107†	1371758.2	1355423.7	479.61 ug/L	479.61 ppb	07:23:29
3	Ca 317.933Radial†	3352.8	3267.5	4869.4 ug/L	4869.4 ppb	07:22:20
3	Cd 226.502†	47664.6	47119.9	480.61 ug/L	480.61 ppb	07:23:34
3	Co 228.616†	26615.3	26270.1	482.30 ug/L	482.30 ppb	07:23:34
3	Cr 267.716†	47983.2	47146.6	484.89 ug/L	484.89 ppb	07:23:34
3	Cu 324.752†	182132.9	172393.3	483.43 ug/L	483.43 ppb	07:23:34
3	Fe 238.204 Radial†	543.4	526.3	4867.5 ug/L	4867.5 ppb	07:22:20
3	K 766.490 Radial†	33449.4	30552.3	5335.4 ug/L	5335.4 ppb	07:22:00
3	Mg 279.077 IEC†	146.8	143.5	5100.5 ug/L	5100.5 ppb	07:22:20
3	Mn 257.610†	471894.3	463967.7	482.58 ug/L	482.58 ppb	07:23:29
3	Mo 202.031†	7974.5	7822.2	487.28 ug/L	487.28 ppb	07:23:54
3	Na 589.592 Radial†	27901.6	28414.8	9141.3 ug/L	9141.3 ppb	07:22:00
3	Ni 231.604†	21870.3	21435.0	482.10 ug/L	482.10 ppb	07:23:34
3	P 214.914†	4525.2	4229.1	2252.9 ug/L	2252.9 ppb	07:23:54
3	Pb 220.353†	4368.0	4371.9	479.64 ug/L	479.64 ppb	07:23:54
3	S 181.975 Axial†	780.8	722.1	956.15 ug/L	956.15 ppb	07:23:54
3	Sb 206.836†	1673.1	1619.1	506.45 ug/L	506.45 ppb	07:23:54
3	Se 196.026†	834.1	843.3	490.77 ug/L	490.77 ppb	07:23:54
3	Si 251.611†	84704.2	82826.7	2406.8 ug/L	2406.8 ppb	07:23:34
3	Sn 189.927†	3115.6	3061.1	486.83 ug/L	486.83 ppb	07:23:54
3	Sr 421.552†	80744.8	79091.3	487.77 ug/L	487.77 ppb	07:22:00
3	Ti 334.940†	317977.4	314170.0	492.52 ug/L	492.52 ppb	07:23:34
3	Tl 190.801†	1771.8	1781.9	485.32 ug/L	485.32 ppb	07:23:54
3	U 409.014†	15873.4	18173.6	501.60 ug/L	501.60 ppb	07:23:34
3	V 292.402†	74282.1	74533.9	491.15 ug/L	491.15 ppb	07:23:34
3	Zn 213.857†	58579.6	57006.2	478.99 ug/L	478.99 ppb	07:23:34
3	SiO2†	83094.0	81273.6	5066.6 ug/L	5066.6 ppb	07:24:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912667.7	101.26	%	0.378				0.37%
Sc Radial	5743.9	101	%	0.9				0.93%
Y 371.029	746477.5	99.293	%	0.4030				0.41%
Y RADIAL	6126.2	100.5	%	0.76				0.76%
Ag 328.068†	110318.9	494.28	ug/L	4.177	494.28	ppb	4.177	0.85%
QC value within limits for Ag 328.068 Recovery = 98.86%								
Al 396.153Radial†	6982.5	4937.8	ug/L	6.13	4937.8	ppb	6.13	0.12%
QC value within limits for Al 396.153Radial Recovery = 98.76%								
As 188.979†	1320.1	503.60	ug/L	4.523	503.60	ppb	4.523	0.90%
QC value within limits for As 188.979 Recovery = 100.72%								
B 249.677†	24803.1	502.13	ug/L	4.064	502.13	ppb	4.064	0.81%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	66752.7	483.37	ug/L	3.961	483.37	ppb	3.961	0.82%
QC value within limits for Ba 233.527 Recovery = 96.67%								
Be 313.107†	1354218.3	479.18	ug/L	0.478	479.18	ppb	0.478	0.10%
QC value within limits for Be 313.107 Recovery = 95.84%								

Ca 317.933Radial†	3310.4	4933.4 ug/L	69.01	4933.4 ppb	69.01	1.40%
QC value within limits for Ca 317.933Radial Recovery = 98.67%						
Cd 226.502†	46963.1	479.01 ug/L	3.299	479.01 ppb	3.299	0.69%
QC value within limits for Cd 226.502 Recovery = 95.80%						
Co 228.616†	26175.8	480.57 ug/L	3.915	480.57 ppb	3.915	0.81%
QC value within limits for Co 228.616 Recovery = 96.11%						
Cr 267.716†	47001.8	483.40 ug/L	3.741	483.40 ppb	3.741	0.77%
QC value within limits for Cr 267.716 Recovery = 96.68%						
Cu 324.752†	171286.3	480.33 ug/L	5.052	480.33 ppb	5.052	1.05%
QC value within limits for Cu 324.752 Recovery = 96.07%						
Fe 238.204 Radial†	530.8	4908.9 ug/L	66.21	4908.9 ppb	66.21	1.35%
QC value within limits for Fe 238.204 Radial Recovery = 98.18%						
K 766.490 Radial†	30747.5	5369.6 ug/L	36.24	5369.6 ppb	36.24	0.67%
QC value within limits for K 766.490 Radial Recovery = 107.39%						
Mg 279.077 IEC†	143.2	5090.9 ug/L	21.48	5090.9 ppb	21.48	0.42%
QC value within limits for Mg 279.077 IEC Recovery = 101.82%						
Mn 257.610†	463745.8	482.35 ug/L	0.376	482.35 ppb	0.376	0.08%
QC value within limits for Mn 257.610 Recovery = 96.47%						
Mo 202.031†	7831.6	487.87 ug/L	0.656	487.87 ppb	0.656	0.13%
QC value within limits for Mo 202.031 Recovery = 97.57%						
Na 589.592 Radial†	28476.1	9161.1 ug/L	26.71	9161.1 ppb	26.71	0.29%
QC value within limits for Na 589.592 Radial Recovery = 91.61%						
Ni 231.604†	21366.0	480.55 ug/L	3.177	480.55 ppb	3.177	0.66%
QC value within limits for Ni 231.604 Recovery = 96.11%						
P 214.914†	4230.4	2254.0 ug/L	4.53	2254.0 ppb	4.53	0.20%
QC value within limits for P 214.914 Recovery = 90.16%						
Pb 220.353†	4384.6	481.03 ug/L	1.225	481.03 ppb	1.225	0.25%
QC value within limits for Pb 220.353 Recovery = 96.21%						
S 181.975 Axial†	716.6	948.92 ug/L	7.761	948.92 ppb	7.761	0.82%
QC value within limits for S 181.975 Axial Recovery = 94.89%						
Sb 206.836†	1618.0	506.14 ug/L	3.744	506.14 ppb	3.744	0.74%
QC value within limits for Sb 206.836 Recovery = 101.23%						
Se 196.026†	848.3	493.74 ug/L	2.950	493.74 ppb	2.950	0.60%
QC value within limits for Se 196.026 Recovery = 98.75%						
Si 251.611†	82458.2	2396.0 ug/L	19.07	2396.0 ppb	19.07	0.80%
QC value within limits for Si 251.611 Recovery = 95.84%						
Sn 189.927†	3055.6	485.98 ug/L	0.999	485.98 ppb	0.999	0.21%
QC value within limits for Sn 189.927 Recovery = 97.20%						
Sr 421.552†	79102.6	487.84 ug/L	0.646	487.84 ppb	0.646	0.13%
QC value within limits for Sr 421.552 Recovery = 97.57%						
Ti 334.940†	312712.6	490.24 ug/L	4.507	490.24 ppb	4.507	0.92%
QC value within limits for Ti 334.940 Recovery = 98.05%						
Tl 190.801†	1776.7	483.91 ug/L	1.355	483.91 ppb	1.355	0.28%
QC value within limits for Tl 190.801 Recovery = 96.78%						
U 409.014†	17988.8	496.48 ug/L	8.317	496.48 ppb	8.317	1.68%
QC value within limits for U 409.014 Recovery = 99.30%						
V 292.402†	74190.5	488.91 ug/L	4.086	488.91 ppb	4.086	0.84%
QC value within limits for V 292.402 Recovery = 97.78%						
Zn 213.857†	56790.0	477.17 ug/L	3.576	477.17 ppb	3.576	0.75%
QC value within limits for Zn 213.857 Recovery = 95.43%						
SiO2†	81992.9	5111.6 ug/L	41.19	5111.6 ppb	41.19	0.81%
QC value within limits for SiO2 Recovery = 95.59%						

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 07:26:20
Data Type: Reprocessed on 12/7/2009 08:21:35

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	898377.7	898377.7	99.674	%			07:29:29
1	Sc Radial	5830.4	5830.4	103	%			07:28:12
1	Y 371.029	749237.1	749237.1	99.660	%			07:29:29
1	Y RADIAL	6285.9	6285.9	103.1	%			07:28:12
1	Ag 328.068†	337.5	23.7	0.1065	ug/L	0.1065	ppb	07:29:29
1	Al 396.153Radial†	-24.8	-3.7	-2.6478	ug/L	-2.6478	ppb	07:28:12
1	As 188.979†	-6.1	18.3	6.9221	ug/L	6.9221	ppb	07:29:49
1	B 249.677†	65.4	684.7	13.913	ug/L	13.913	ppb	07:29:49
1	Ba 233.527†	-17.8	-0.9	-0.0053	ug/L	-0.0053	ppb	07:29:49
1	Be 313.107†	-5062.6	192.9	0.0682	ug/L	0.0682	ppb	07:29:29
1	Ca 317.933Radial†	21.0	3.5	5.1856	ug/L	5.1856	ppb	07:28:32
1	Cd 226.502†	-174.6	30.9	0.3152	ug/L	0.3152	ppb	07:29:49
1	Co 228.616†	-57.6	16.3	0.2985	ug/L	0.2985	ppb	07:29:49
1	Cr 267.716†	74.8	-5.8	-0.0593	ug/L	-0.0593	ppb	07:29:49
1	Cu 324.752†	6849.4	1.0	0.0027	ug/L	0.0027	ppb	07:29:29
1	Fe 238.204 Radial†	6.0	-0.2	-1.4087	ug/L	-1.4087	ppb	07:28:32
1	K 766.490 Radial†	3314.7	1014.9	177.48	ug/L	177.48	ppb	07:28:12
1	Mg 279.077 IEC†	2.1	1.8	63.261	ug/L	63.261	ppb	07:28:32
1	Mn 257.610†	478.1	-14.1	-0.0160	ug/L	-0.0160	ppb	07:29:49
1	Mo 202.031†	27.7	1.0	0.0627	ug/L	0.0627	ppb	07:29:49
1	Na 589.592 Radial†	-910.8	194.5	62.560	ug/L	62.560	ppb	07:28:12
1	Ni 231.604†	96.5	5.9	0.1333	ug/L	0.1333	ppb	07:29:49
1	P 214.914†	221.5	-2.7	-1.4445	ug/L	-1.4445	ppb	07:29:49
1	Pb 220.353†	-40.3	32.4	3.5394	ug/L	3.5394	ppb	07:29:49
1	S 181.975 Axial†	40.5	-5.8	-7.7508	ug/L	-7.7508	ppb	07:29:49
1	Sb 206.836†	48.5	21.1	6.5229	ug/L	6.5229	ppb	07:29:49
1	Se 196.026†	-29.7	-7.6	-4.2415	ug/L	-4.2415	ppb	07:29:49
1	Si 251.611†	629.3	87.9	2.5033	ug/L	2.5033	ppb	07:29:49
1	Sn 189.927†	15.1	9.7	1.5372	ug/L	1.5372	ppb	07:29:49
1	Sr 421.552†	-24.6	-31.4	-0.1938	ug/L	-0.1938	ppb	07:28:12
1	Ti 334.940†	-1167.0	30.3	0.0477	ug/L	0.0477	ppb	07:29:29
1	Tl 190.801†	-22.4	15.5	4.1853	ug/L	4.1853	ppb	07:29:49
1	U 409.014†	-2524.6	17.4	0.4824	ug/L	0.4824	ppb	07:29:29
1	V 292.402†	-1340.4	77.1	0.5045	ug/L	0.5045	ppb	07:29:29
1	Zn 213.857†	732.2	83.9	0.7085	ug/L	0.7085	ppb	07:29:49
1	SiO2†	688.5	179.2	11.081	ug/L	11.081	ppb	07:30:45
2	Sc 361.383	899100.2	899100.2	99.754	%			07:29:54
2	Sc Radial	5826.4	5826.4	103	%			07:28:37
2	Y 371.029	750664.6	750664.6	99.850	%			07:29:54
2	Y RADIAL	6252.0	6252.0	102.5	%			07:28:37
2	Ag 328.068†	293.1	-21.2	-0.0958	ug/L	-0.0958	ppb	07:29:54
2	Al 396.153Radial†	-24.6	-3.5	-2.4989	ug/L	-2.4989	ppb	07:28:37
2	As 188.979†	-4.9	19.5	7.3598	ug/L	7.3598	ppb	07:30:14
2	B 249.677†	39.6	658.8	13.388	ug/L	13.388	ppb	07:30:14
2	Ba 233.527†	6.2	23.2	0.1685	ug/L	0.1685	ppb	07:30:14
2	Be 313.107†	-4946.8	313.0	0.1107	ug/L	0.1107	ppb	07:29:54
2	Ca 317.933Radial†	20.1	2.7	3.9935	ug/L	3.9935	ppb	07:28:57
2	Cd 226.502†	-175.2	30.5	0.3107	ug/L	0.3107	ppb	07:30:14
2	Co 228.616†	-84.2	-10.4	-0.1897	ug/L	-0.1897	ppb	07:30:14
2	Cr 267.716†	100.5	19.9	0.2037	ug/L	0.2037	ppb	07:30:14
2	Cu 324.752†	6784.0	-70.2	-0.1966	ug/L	-0.1966	ppb	07:29:54
2	Fe 238.204 Radial†	6.3	0.2	1.3816	ug/L	1.3816	ppb	07:28:57
2	K 766.490 Radial†	3323.5	1025.8	179.39	ug/L	179.39	ppb	07:28:37
2	Mg 279.077 IEC†	0.9	0.6	23.053	ug/L	23.053	ppb	07:28:57
2	Mn 257.610†	465.9	-26.8	-0.0281	ug/L	-0.0281	ppb	07:30:14
2	Mo 202.031†	30.9	4.3	0.2652	ug/L	0.2652	ppb	07:30:14
2	Na 589.592 Radial†	-979.3	127.0	40.867	ug/L	40.867	ppb	07:28:37
2	Ni 231.604†	85.7	-4.9	-0.1110	ug/L	-0.1110	ppb	07:30:14

2	P 214.914†	208.0	-16.4	-8.9801 ug/L	-8.9801 ppb	07:30:14
2	Pb 220.353†	-38.4	34.3	3.7481 ug/L	3.7481 ppb	07:30:14
2	S 181.975 Axial†	41.9	-4.5	-5.9260 ug/L	-5.9260 ppb	07:30:14
2	Sb 206.836†	53.9	26.5	8.1963 ug/L	8.1963 ppb	07:30:14
2	Se 196.026†	-24.3	-2.1	-1.1756 ug/L	-1.1756 ppb	07:30:14
2	Si 251.611†	640.4	98.6	2.8106 ug/L	2.8106 ppb	07:30:14
2	Sn 189.927†	16.4	11.0	1.7439 ug/L	1.7439 ppb	07:30:14
2	Sr 421.552†	13.3	5.5	0.0340 ug/L	0.0340 ppb	07:28:37
2	Ti 334.940†	-1135.7	62.7	0.0967 ug/L	0.0967 ppb	07:29:54
2	Tl 190.801†	-31.0	6.9	1.8549 ug/L	1.8549 ppb	07:30:14
2	U 409.014†	-2403.1	141.2	3.9090 ug/L	3.9090 ppb	07:29:54
2	V 292.402†	-1366.4	52.1	0.3499 ug/L	0.3499 ppb	07:29:54
2	Zn 213.857†	746.0	97.2	0.8242 ug/L	0.8242 ppb	07:30:14
2	SiO2†	635.1	125.1	7.6858 ug/L	7.6858 ppb	07:30:50
3	Sc 361.383	905010.6	905010.6	100.41 %		07:30:20
3	Sc Radial	5829.3	5829.3	103 %		07:29:02
3	Y 371.029	755425.1	755425.1	100.48 %		07:30:20
3	Y RADIAL	6232.6	6232.6	102.2 %		07:29:02
3	Ag 328.068†	272.0	-44.0	-0.1898 ug/L	-0.1898 ppb	07:30:20
3	Al 396.153Radial†	-16.5	4.4	3.1494 ug/L	3.1494 ppb	07:29:02
3	As 188.979†	-5.0	19.4	7.3474 ug/L	7.3474 ppb	07:30:40
3	B 249.677†	3.9	623.0	12.657 ug/L	12.657 ppb	07:30:40
3	Ba 233.527†	-1.0	16.0	0.1167 ug/L	0.1167 ppb	07:30:40
3	Be 313.107†	-5048.5	244.2	0.0864 ug/L	0.0864 ppb	07:30:20
3	Ca 317.933Radial†	22.9	5.3	7.9624 ug/L	7.9624 ppb	07:29:22
3	Cd 226.502†	-181.6	25.2	0.2551 ug/L	0.2551 ppb	07:30:40
3	Co 228.616†	-62.5	11.9	0.2160 ug/L	0.2160 ppb	07:30:40
3	Cr 267.716†	78.9	-2.3	-0.0224 ug/L	-0.0224 ppb	07:30:40
3	Cu 324.752†	6954.0	54.8	0.1544 ug/L	0.1544 ppb	07:30:20
3	Fe 238.204 Radial†	8.0	1.8	16.294 ug/L	16.294 ppb	07:29:22
3	K 766.490 Radial†	3139.6	844.9	147.74 ug/L	147.74 ppb	07:29:02
3	Mg 279.077 IEC†	1.5	1.2	43.004 ug/L	43.004 ppb	07:29:22
3	Mn 257.610†	485.8	-10.0	-0.0095 ug/L	-0.0095 ppb	07:30:40
3	Mo 202.031†	19.2	-7.7	-0.4762 ug/L	-0.4762 ppb	07:30:40
3	Na 589.592 Radial†	-874.1	230.0	73.994 ug/L	73.994 ppb	07:29:02
3	Ni 231.604†	87.2	-4.0	-0.0897 ug/L	-0.0897 ppb	07:30:40
3	P 214.914†	229.6	3.7	2.0445 ug/L	2.0445 ppb	07:30:40
3	Pb 220.353†	-27.7	45.2	4.9435 ug/L	4.9435 ppb	07:30:40
3	S 181.975 Axial†	41.8	-4.9	-6.4451 ug/L	-6.4451 ppb	07:30:40
3	Sb 206.836†	57.5	29.6	9.1609 ug/L	9.1609 ppb	07:30:40
3	Se 196.026†	-21.1	1.3	0.7588 ug/L	0.7588 ppb	07:30:40
3	Si 251.611†	654.5	108.5	3.1219 ug/L	3.1219 ppb	07:30:40
3	Sn 189.927†	16.1	10.6	1.6891 ug/L	1.6891 ppb	07:30:40
3	Sr 421.552†	-17.0	-24.0	-0.1483 ug/L	-0.1483 ppb	07:29:02
3	Ti 334.940†	-1144.7	61.0	0.0963 ug/L	0.0963 ppb	07:30:20
3	Tl 190.801†	-34.2	3.9	1.0622 ug/L	1.0622 ppb	07:30:40
3	U 409.014†	-2571.1	-10.4	-0.2895 ug/L	-0.2895 ppb	07:30:20
3	V 292.402†	-1393.2	34.3	0.2142 ug/L	0.2142 ppb	07:30:20
3	Zn 213.857†	740.3	86.6	0.7313 ug/L	0.7313 ppb	07:30:40
3	SiO2†	661.9	147.7	9.1509 ug/L	9.1509 ppb	07:30:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900829.5	99.946	%	0.4037				0.40%
Sc Radial	5828.7	103	%	0.0				0.04%
Y 371.029	751775.6	99.997	%	0.4310				0.43%
Y RADIAL	6256.8	102.6	%	0.44				0.43%
Ag 328.068†	-13.8	-0.0597	ug/L	0.15142	-0.0597	ppb	0.15142	253.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.9	-0.6657	ug/L	3.30486	-0.6657	ppb	3.30486	496.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	19.1	7.2098	ug/L	0.24920	7.2098	ppb	0.24920	3.46%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	655.5	13.319	ug/L	0.6307	13.319	ppb	0.6307	4.74%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.8	0.0933	ug/L	0.08923	0.0933	ppb	0.08923	95.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	250.0	0.0884	ug/L	0.02133	0.0884	ppb	0.02133	24.12%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          3.8      5.7138 ug/L       2.03648      5.7138 ppb        2.03648  35.64%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               28.8      0.2937 ug/L       0.03349      0.2937 ppb        0.03349  11.40%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                5.9      0.1083 ug/L       0.26130      0.1083 ppb        0.26130 241.37%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                3.9      0.0407 ug/L       0.14238      0.0407 ppb        0.14238 350.17%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -4.8     -0.0132 ug/L       0.17599     -0.0132 ppb        0.17599 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.6      5.4224 ug/L       9.51808      5.4224 ppb        9.51808 175.53%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        961.9      168.20 ug/L        17.748      168.20 ppb         17.748  10.55%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.2      43.106 ug/L       20.1042      43.106 ppb        20.1042  46.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -17.0     -0.0179 ug/L       0.00943     -0.0179 ppb        0.00943  52.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.8     -0.0494 ug/L       0.38322     -0.0494 ppb        0.38322 775.62%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       183.8      59.140 ug/L       16.8262      59.140 ppb        16.8262  28.45%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -1.0     -0.0225 ug/L       0.13530     -0.0225 ppb        0.13530 602.38%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -5.1     -2.7933 ug/L       5.63470     -2.7933 ppb        5.63470 201.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               37.3      4.0770 ug/L       0.75765      4.0770 ppb        0.75765  18.58%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -6.7073 ug/L       0.94019     -6.7073 ppb        0.94019  14.02%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               25.7      7.9600 ug/L       1.33476      7.9600 ppb        1.33476  16.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.8     -1.5528 ug/L       2.52141     -1.5528 ppb        2.52141 162.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               98.4      2.8119 ug/L       0.30932      2.8119 ppb        0.30932  11.00%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               10.4      1.6567 ug/L       0.10709      1.6567 ppb        0.10709   6.46%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -16.6     -0.1027 ug/L       0.12058     -0.1027 ppb        0.12058 117.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               51.4      0.0802 ug/L       0.02818      0.0802 ppb        0.02818  35.13%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                8.8      2.3675 ug/L       1.62342      2.3675 ppb        1.62342  68.57%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                49.4      1.3673 ug/L       2.23476      1.3673 ppb        2.23476 163.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                54.5      0.3562 ug/L       0.14524      0.3562 ppb        0.14524  40.77%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               89.2      0.7547 ug/L       0.06125      0.7547 ppb        0.06125   8.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    150.7      9.3058 ug/L       1.70269      9.3058 ppb        1.70269  18.30%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 07:34:51
Data Type: Reprocessed on 12/7/2009 08:21:36
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	916024.9	916024.9	101.63	%			07:38:01
1	Sc Radial	5795.5	5795.5	102	%			07:36:43
1	Y 371.029	748778.1	748778.1	99.599	%			07:38:01
1	Y RADIAL	6177.8	6177.8	101.3	%			07:36:43
1	Ag 328.068†	112720.6	110596.2	495.54	ug/L	495.54	ppb	07:38:06
1	Al 396.153Radial†	7014.8	6897.6	4877.6	ug/L	4877.6	ppb	07:36:43
1	As 188.979†	1261.5	1265.7	483.04	ug/L	483.04	ppb	07:38:26
1	B 249.677†	23441.8	23684.6	479.40	ug/L	479.40	ppb	07:38:06
1	Ba 233.527†	67624.5	66555.9	481.95	ug/L	481.95	ppb	07:38:06
1	Be 313.107†	1365441.5	1348793.9	477.26	ug/L	477.26	ppb	07:38:01
1	Ca 317.933Radial†	3412.2	3328.3	4960.0	ug/L	4960.0	ppb	07:37:03
1	Cd 226.502†	47409.5	46854.5	477.89	ug/L	477.89	ppb	07:38:06
1	Co 228.616†	26452.8	26102.2	479.22	ug/L	479.22	ppb	07:38:06
1	Cr 267.716†	47714.1	46867.3	482.03	ug/L	482.03	ppb	07:38:06
1	Cu 324.752†	181007.5	171230.9	480.18	ug/L	480.18	ppb	07:38:06
1	Fe 238.204 Radial†	553.7	536.8	4964.6	ug/L	4964.6	ppb	07:37:03
1	K 766.490 Radial†	31564.8	28730.1	5016.6	ug/L	5016.6	ppb	07:36:43
1	Mg 279.077 IEC†	149.9	146.6	5212.5	ug/L	5212.5	ppb	07:37:03
1	Mn 257.610†	469590.6	461558.4	480.08	ug/L	480.08	ppb	07:38:01
1	Mo 202.031†	7963.8	7809.2	486.48	ug/L	486.48	ppb	07:38:26
1	Na 589.592 Radial†	28991.1	29504.1	9491.8	ug/L	9491.8	ppb	07:36:43
1	Ni 231.604†	21740.8	21301.0	479.09	ug/L	479.09	ppb	07:38:06
1	P 214.914†	4523.0	4225.4	2251.3	ug/L	2251.3	ppb	07:38:26
1	Pb 220.353†	4364.2	4366.9	479.07	ug/L	479.07	ppb	07:38:26
1	S 181.975 Axial†	774.8	715.9	947.96	ug/L	947.96	ppb	07:38:26
1	Sb 206.836†	1637.4	1583.5	495.54	ug/L	495.54	ppb	07:38:26
1	Se 196.026†	834.8	843.7	491.31	ug/L	491.31	ppb	07:38:26
1	Si 251.611†	83675.6	81789.0	2376.6	ug/L	2376.6	ppb	07:38:06
1	Sn 189.927†	3116.0	3060.6	486.76	ug/L	486.76	ppb	07:38:26
1	Sr 421.552†	81138.6	79538.7	490.53	ug/L	490.53	ppb	07:36:43
1	Ti 334.940†	316513.3	312633.3	490.12	ug/L	490.12	ppb	07:38:06
1	Tl 190.801†	1758.9	1768.6	481.72	ug/L	481.72	ppb	07:38:26
1	U 409.014†	15569.6	17869.9	493.18	ug/L	493.18	ppb	07:38:06
1	V 292.402†	74215.5	74445.9	490.54	ug/L	490.54	ppb	07:38:06
1	Zn 213.857†	58216.9	56631.7	475.83	ug/L	475.83	ppb	07:38:06
1	SiO2†	83869.6	82011.7	5113.1	ug/L	5113.1	ppb	07:39:33
2	Sc 361.383	923076.3	923076.3	102.41	%			07:38:32
2	Sc Radial	5639.7	5639.7	99.3	%			07:37:08
2	Y 371.029	755649.4	755649.4	100.51	%			07:38:32
2	Y RADIAL	6006.2	6006.2	98.48	%			07:37:08
2	Ag 328.068†	112728.1	109756.2	491.83	ug/L	491.83	ppb	07:38:37
2	Al 396.153Radial†	6818.3	6889.5	4872.1	ug/L	4872.1	ppb	07:37:08
2	As 188.979†	1253.2	1248.1	476.38	ug/L	476.38	ppb	07:38:57
2	B 249.677†	23510.5	23575.5	477.17	ug/L	477.17	ppb	07:38:37
2	Ba 233.527†	67814.6	66233.3	479.62	ug/L	479.62	ppb	07:38:37
2	Be 313.107†	1376301.2	1349134.5	477.37	ug/L	477.37	ppb	07:38:32
2	Ca 317.933Radial†	3395.4	3403.8	5072.5	ug/L	5072.5	ppb	07:37:28
2	Cd 226.502†	47383.6	46472.8	473.98	ug/L	473.98	ppb	07:38:37
2	Co 228.616†	26500.6	25950.1	476.42	ug/L	476.42	ppb	07:38:37
2	Cr 267.716†	47760.2	46553.7	478.80	ug/L	478.80	ppb	07:38:37
2	Cu 324.752†	181115.1	169975.4	476.66	ug/L	476.66	ppb	07:38:37
2	Fe 238.204 Radial†	554.6	552.8	5111.5	ug/L	5111.5	ppb	07:37:28
2	K 766.490 Radial†	30758.6	28772.7	5024.0	ug/L	5024.0	ppb	07:37:08
2	Mg 279.077 IEC†	150.6	151.5	5383.6	ug/L	5383.6	ppb	07:37:28
2	Mn 257.610†	472771.8	461135.0	479.66	ug/L	479.66	ppb	07:38:32
2	Mo 202.031†	7948.8	7734.7	481.86	ug/L	481.86	ppb	07:38:57
2	Na 589.592 Radial†	28296.2	29589.2	9519.1	ug/L	9519.1	ppb	07:37:08
2	Ni 231.604†	21846.1	21240.4	477.73	ug/L	477.73	ppb	07:38:37

2	P 214.914†	4511.9	4180.6	2227.0	ug/L	2227.0 ppb	07:38:57
2	Pb 220.353†	4355.4	4325.5	474.52	ug/L	474.52 ppb	07:38:57
2	S 181.975 Axial†	772.6	707.9	937.44	ug/L	937.44 ppb	07:38:57
2	Sb 206.836†	1626.2	1560.3	488.24	ug/L	488.24 ppb	07:38:57
2	Se 196.026†	840.6	843.0	491.37	ug/L	491.37 ppb	07:38:57
2	Si 251.611†	83738.6	81221.5	2360.1	ug/L	2360.1 ppb	07:38:37
2	Sn 189.927†	3101.6	3023.0	480.82	ug/L	480.82 ppb	07:38:57
2	Sr 421.552†	79177.4	79760.3	491.89	ug/L	491.89 ppb	07:37:08
2	Ti 334.940†	316855.3	310588.3	486.92	ug/L	486.92 ppb	07:38:37
2	Tl 190.801†	1752.2	1748.9	476.37	ug/L	476.37 ppb	07:38:57
2	U 409.014†	15650.5	17831.9	492.12	ug/L	492.12 ppb	07:38:37
2	V 292.402†	74193.7	73866.8	486.69	ug/L	486.69 ppb	07:38:37
2	Zn 213.857†	58271.3	56247.2	472.56	ug/L	472.56 ppb	07:38:37
2	SiO2†	82994.2	80526.6	5020.2	ug/L	5020.2 ppb	07:39:38
3	Sc 361.383	911561.4	911561.4	101.14	%		07:39:03
3	Sc Radial	5778.3	5778.3	102	%		07:37:33
3	Y 371.029	746073.2	746073.2	99.239	%		07:39:03
3	Y RADIAL	6120.6	6120.6	100.4	%		07:37:33
3	Ag 328.068†	112139.1	110564.2	495.40	ug/L	495.40 ppb	07:39:08
3	Al 396.153Radial†	6991.3	6894.8	4875.6	ug/L	4875.6 ppb	07:37:33
3	As 188.979†	1245.2	1255.6	479.25	ug/L	479.25 ppb	07:39:28
3	B 249.677†	23470.9	23826.3	482.27	ug/L	482.27 ppb	07:39:08
3	Ba 233.527†	67661.7	66918.5	484.57	ug/L	484.57 ppb	07:39:08
3	Be 313.107†	1360400.1	1350387.7	477.82	ug/L	477.82 ppb	07:39:03
3	Ca 317.933Radial†	3357.3	3284.2	4894.3	ug/L	4894.3 ppb	07:37:54
3	Cd 226.502†	47453.4	47126.3	480.67	ug/L	480.67 ppb	07:39:08
3	Co 228.616†	26412.2	26189.5	480.82	ug/L	480.82 ppb	07:39:08
3	Cr 267.716†	47614.0	46998.2	483.37	ug/L	483.37 ppb	07:39:08
3	Cu 324.752†	180197.9	171302.5	480.38	ug/L	480.38 ppb	07:39:08
3	Fe 238.204 Radial†	554.2	538.9	4983.6	ug/L	4983.6 ppb	07:37:54
3	K 766.490 Radial†	31501.8	28759.9	5021.8	ug/L	5021.8 ppb	07:37:33
3	Mg 279.077 IEC†	144.7	142.0	5046.4	ug/L	5046.4 ppb	07:37:54
3	Mn 257.610†	468032.1	462279.8	480.84	ug/L	480.84 ppb	07:39:03
3	Mo 202.031†	7932.3	7816.4	486.94	ug/L	486.94 ppb	07:39:28
3	Na 589.592 Radial†	29154.5	29749.0	9570.6	ug/L	9570.6 ppb	07:37:33
3	Ni 231.604†	21807.5	21471.6	482.93	ug/L	482.93 ppb	07:39:08
3	P 214.914†	4522.0	4246.3	2262.7	ug/L	2262.7 ppb	07:39:28
3	Pb 220.353†	4362.3	4386.0	481.16	ug/L	481.16 ppb	07:39:28
3	S 181.975 Axial†	773.1	717.9	950.66	ug/L	950.66 ppb	07:39:28
3	Sb 206.836†	1626.2	1580.4	494.51	ug/L	494.51 ppb	07:39:28
3	Se 196.026†	827.1	840.1	489.32	ug/L	489.32 ppb	07:39:28
3	Si 251.611†	83650.7	82167.5	2387.7	ug/L	2387.7 ppb	07:39:08
3	Sn 189.927†	3091.7	3051.5	485.32	ug/L	485.32 ppb	07:39:28
3	Sr 421.552†	81422.8	80054.0	493.70	ug/L	493.70 ppb	07:37:33
3	Ti 334.940†	315428.3	313085.5	490.82	ug/L	490.82 ppb	07:39:08
3	Tl 190.801†	1770.6	1788.7	487.14	ug/L	487.14 ppb	07:39:28
3	U 409.014†	15586.6	17961.7	495.72	ug/L	495.72 ppb	07:39:08
3	V 292.402†	73929.9	74521.1	491.03	ug/L	491.03 ppb	07:39:08
3	Zn 213.857†	58171.0	56866.8	477.80	ug/L	477.80 ppb	07:39:08
3	SiO2†	82204.7	80769.5	5035.2	ug/L	5035.2 ppb	07:39:44

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916887.5	101.73	%	0.644				0.63%
Sc Radial	5737.8	101	%	1.5				1.49%
Y 371.029	750166.9	99.783	%	0.6567				0.66%
Y RADIAL	6101.5	100.0	%	1.43				1.43%
Ag 328.068†	110305.5	494.25	ug/L	2.104	494.25	ppb	2.104	0.43%
QC value within limits for Ag 328.068 Recovery = 98.85%								
Al 396.153Radial†	6894.0	4875.1	ug/L	2.79	4875.1	ppb	2.79	0.06%
QC value within limits for Al 396.153Radial Recovery = 97.50%								
As 188.979†	1256.5	479.56	ug/L	3.340	479.56	ppb	3.340	0.70%
QC value within limits for As 188.979 Recovery = 95.91%								
B 249.677†	23695.5	479.62	ug/L	2.558	479.62	ppb	2.558	0.53%
QC value within limits for B 249.677 Recovery = 95.92%								
Ba 233.527†	66569.2	482.05	ug/L	2.478	482.05	ppb	2.478	0.51%
QC value within limits for Ba 233.527 Recovery = 96.41%								
Be 313.107†	1349438.7	477.49	ug/L	0.298	477.49	ppb	0.298	0.06%
QC value within limits for Be 313.107 Recovery = 95.50%								

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Ca 317.933Radial†       3338.8      4975.6 ug/L         90.08      4975.6 ppb          90.08   1.81%
   QC value within limits for Ca 317.933Radial  Recovery = 99.51%
Cd 226.502†            46817.9      477.51 ug/L         3.358      477.51 ppb          3.358   0.70%
   QC value within limits for Cd 226.502  Recovery = 95.50%
Co 228.616†            26080.6      478.82 ug/L         2.227      478.82 ppb          2.227   0.47%
   QC value within limits for Co 228.616  Recovery = 95.76%
Cr 267.716†            46806.4      481.40 ug/L         2.348      481.40 ppb          2.348   0.49%
   QC value within limits for Cr 267.716  Recovery = 96.28%
Cu 324.752†           170836.3      479.07 ug/L         2.088      479.07 ppb          2.088   0.44%
   QC value within limits for Cu 324.752  Recovery = 95.81%
Fe 238.204 Radial†       542.8      5019.9 ug/L         79.90      5019.9 ppb          79.90   1.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.40%
K 766.490 Radial†      28754.2      5020.8 ug/L          3.81      5020.8 ppb           3.81   0.08%
   QC value within limits for K 766.490 Radial  Recovery = 100.42%
Mg 279.077 IEC†          146.7      5214.2 ug/L        168.59      5214.2 ppb         168.59   3.23%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.28%
Mn 257.610†           461657.7      480.19 ug/L         0.599      480.19 ppb          0.599   0.12%
   QC value within limits for Mn 257.610  Recovery = 96.04%
Mo 202.031†             7786.8      485.09 ug/L         2.810      485.09 ppb          2.810   0.58%
   QC value within limits for Mo 202.031  Recovery = 97.02%
Na 589.592 Radial†     29614.1      9527.2 ug/L         40.01      9527.2 ppb          40.01   0.42%
   QC value within limits for Na 589.592 Radial  Recovery = 95.27%
Ni 231.604†            21337.6      479.91 ug/L         2.697      479.91 ppb          2.697   0.56%
   QC value within limits for Ni 231.604  Recovery = 95.98%
P 214.914†              4217.5      2247.0 ug/L         18.23      2247.0 ppb          18.23   0.81%
   QC value less than the lower limit for P 214.914  Recovery = 89.88%
Pb 220.353†             4359.5      478.25 ug/L         3.397      478.25 ppb          3.397   0.71%
   QC value within limits for Pb 220.353  Recovery = 95.65%
S 181.975 Axial†         713.9      945.35 ug/L         6.982      945.35 ppb          6.982   0.74%
   QC value within limits for S 181.975 Axial  Recovery = 94.54%
Sb 206.836†             1574.7      492.76 ug/L         3.952      492.76 ppb          3.952   0.80%
   QC value within limits for Sb 206.836  Recovery = 98.55%
Se 196.026†              842.3      490.67 ug/L         1.167      490.67 ppb          1.167   0.24%
   QC value within limits for Se 196.026  Recovery = 98.13%
Si 251.611†            81726.0      2374.8 ug/L         13.85      2374.8 ppb          13.85   0.58%
   QC value within limits for Si 251.611  Recovery = 94.99%
Sn 189.927†             3045.0      484.30 ug/L         3.102      484.30 ppb          3.102   0.64%
   QC value within limits for Sn 189.927  Recovery = 96.86%
Sr 421.552†            79784.3      492.04 ug/L         1.595      492.04 ppb          1.595   0.32%
   QC value within limits for Sr 421.552  Recovery = 98.41%
Ti 334.940†           312102.4      489.28 ug/L         2.080      489.28 ppb          2.080   0.43%
   QC value within limits for Ti 334.940  Recovery = 97.86%
Tl 190.801†             1768.7      481.74 ug/L         5.384      481.74 ppb          5.384   1.12%
   QC value within limits for Tl 190.801  Recovery = 96.35%
U 409.014†             17887.9      493.67 ug/L         1.850      493.67 ppb          1.850   0.37%
   QC value within limits for U 409.014  Recovery = 98.73%
V 292.402†             74277.9      489.42 ug/L         2.376      489.42 ppb          2.376   0.49%
   QC value within limits for V 292.402  Recovery = 97.88%
Zn 213.857†            56581.9      475.40 ug/L         2.646      475.40 ppb          2.646   0.56%
   QC value within limits for Zn 213.857  Recovery = 95.08%
SiO2†                  81102.6      5056.2 ug/L         49.84      5056.2 ppb          49.84   0.99%
   QC value within limits for SiO2  Recovery = 94.55%
QC Failed.  Continue with analysis.
```

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 07:41:54
Data Type: Reprocessed on 12/7/2009 08:21:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	903669.2	903669.2	100.26	%			07:45:03
1	Sc Radial	5896.4	5896.4	104	%			07:43:47
1	Y 371.029	756436.5	756436.5	100.62	%			07:45:03
1	Y RADIAL	6321.5	6321.5	103.7	%			07:43:47
1	Ag 328.068†	322.7	7.0	0.0362	ug/L	0.0362	ppb	07:45:03
1	Al 396.153Radial†	6.9	27.1	19.218	ug/L	19.218	ppb	07:43:47
1	As 188.979†	-9.8	14.6	5.5314	ug/L	5.5314	ppb	07:45:23
1	B 249.677†	-256.9	362.9	7.3716	ug/L	7.3716	ppb	07:45:23
1	Ba 233.527†	-16.2	0.8	0.0082	ug/L	0.0082	ppb	07:45:23
1	Be 313.107†	-4947.0	338.0	0.1194	ug/L	0.1194	ppb	07:45:03
1	Ca 317.933Radial†	16.5	-1.0	-1.5349	ug/L	-1.5349	ppb	07:44:07
1	Cd 226.502†	-193.5	13.0	0.1309	ug/L	0.1309	ppb	07:45:23
1	Co 228.616†	-77.1	-2.8	-0.0526	ug/L	-0.0526	ppb	07:45:23
1	Cr 267.716†	116.0	34.8	0.3573	ug/L	0.3573	ppb	07:45:23
1	Cu 324.752†	6816.6	-72.0	-0.2005	ug/L	-0.2005	ppb	07:45:03
1	Fe 238.204 Radial†	9.0	2.7	24.785	ug/L	24.785	ppb	07:44:07
1	K 766.490 Radial†	2705.4	391.6	68.482	ug/L	68.482	ppb	07:43:47
1	Mg 279.077 IEC†	3.8	3.4	120.25	ug/L	120.25	ppb	07:44:07
1	Mn 257.610†	499.7	4.6	0.0050	ug/L	0.0050	ppb	07:45:23
1	Mo 202.031†	25.5	-1.4	-0.0824	ug/L	-0.0824	ppb	07:45:23
1	Na 589.592 Radial†	-1002.1	116.4	37.453	ug/L	37.453	ppb	07:43:47
1	Ni 231.604†	103.6	12.5	0.2803	ug/L	0.2803	ppb	07:45:23
1	P 214.914†	211.4	-14.1	-7.6875	ug/L	-7.6875	ppb	07:45:23
1	Pb 220.353†	-58.6	14.3	1.5679	ug/L	1.5679	ppb	07:45:23
1	S 181.975 Axial†	39.4	-7.2	-9.5646	ug/L	-9.5646	ppb	07:45:23
1	Sb 206.836†	41.7	14.0	4.3427	ug/L	4.3427	ppb	07:45:23
1	Se 196.026†	-19.4	2.9	1.7350	ug/L	1.7350	ppb	07:45:23
1	Si 251.611†	516.5	-28.2	-0.8500	ug/L	-0.8500	ppb	07:45:23
1	Sn 189.927†	18.2	12.8	2.0282	ug/L	2.0282	ppb	07:45:23
1	Sr 421.552†	10.1	2.3	0.0140	ug/L	0.0140	ppb	07:43:47
1	Ti 334.940†	-1191.6	12.6	0.0169	ug/L	0.0169	ppb	07:45:03
1	Tl 190.801†	-39.9	-1.8	-0.4894	ug/L	-0.4894	ppb	07:45:23
1	U 409.014†	-2333.5	222.8	6.1652	ug/L	6.1652	ppb	07:45:03
1	V 292.402†	-1325.0	100.2	0.6612	ug/L	0.6612	ppb	07:45:03
1	Zn 213.857†	703.2	50.7	0.4220	ug/L	0.4220	ppb	07:45:23
1	SiO2†	510.1	-2.8	-0.2347	ug/L	-0.2347	ppb	07:46:19
2	Sc 361.383	895764.2	895764.2	99.384	%			07:45:29
2	Sc Radial	5732.9	5732.9	101	%			07:44:12
2	Y 371.029	748620.6	748620.6	99.578	%			07:45:29
2	Y RADIAL	6145.3	6145.3	100.8	%			07:44:12
2	Ag 328.068†	384.5	71.9	0.3281	ug/L	0.3281	ppb	07:45:29
2	Al 396.153Radial†	-24.7	-4.0	-2.8359	ug/L	-2.8359	ppb	07:44:12
2	As 188.979†	-12.6	11.7	4.4357	ug/L	4.4357	ppb	07:45:49
2	B 249.677†	-268.6	348.9	7.0852	ug/L	7.0852	ppb	07:45:49
2	Ba 233.527†	-2.4	14.6	0.1079	ug/L	0.1079	ppb	07:45:49
2	Be 313.107†	-5004.4	236.6	0.0838	ug/L	0.0838	ppb	07:45:29
2	Ca 317.933Radial†	16.1	-1.0	-1.4761	ug/L	-1.4761	ppb	07:44:32
2	Cd 226.502†	-180.8	24.1	0.2439	ug/L	0.2439	ppb	07:45:49
2	Co 228.616†	-63.9	9.7	0.1771	ug/L	0.1771	ppb	07:45:49
2	Cr 267.716†	112.8	32.6	0.3358	ug/L	0.3358	ppb	07:45:49
2	Cu 324.752†	6720.2	-108.9	-0.3041	ug/L	-0.3041	ppb	07:45:29
2	Fe 238.204 Radial†	8.6	2.5	23.373	ug/L	23.373	ppb	07:44:32
2	K 766.490 Radial†	2753.2	513.4	89.784	ug/L	89.784	ppb	07:44:12
2	Mg 279.077 IEC†	2.5	2.2	77.842	ug/L	77.842	ppb	07:44:32
2	Mn 257.610†	496.1	5.4	0.0064	ug/L	0.0064	ppb	07:45:49
2	Mo 202.031†	21.1	-5.6	-0.3455	ug/L	-0.3455	ppb	07:45:49
2	Na 589.592 Radial†	-1029.8	61.4	19.746	ug/L	19.746	ppb	07:44:12
2	Ni 231.604†	112.5	22.4	0.5029	ug/L	0.5029	ppb	07:45:49

2	P 214.914†	214.9	-8.6	-4.6872 ug/L	-4.6872 ppb	07:45:49
2	Pb 220.353†	-51.1	21.3	2.3269 ug/L	2.3269 ppb	07:45:49
2	S 181.975 Axial†	41.4	-4.9	-6.4579 ug/L	-6.4579 ppb	07:45:49
2	Sb 206.836†	54.6	27.3	8.4468 ug/L	8.4468 ppb	07:45:49
2	Se 196.026†	-26.3	-4.2	-2.2745 ug/L	-2.2745 ppb	07:45:49
2	Si 251.611†	524.7	-15.4	-0.4775 ug/L	-0.4775 ppb	07:45:49
2	Sn 189.927†	15.8	10.4	1.6575 ug/L	1.6575 ppb	07:45:49
2	Sr 421.552†	-24.1	-31.3	-0.1933 ug/L	-0.1933 ppb	07:44:12
2	Ti 334.940†	-1112.0	82.2	0.1276 ug/L	0.1276 ppb	07:45:29
2	Tl 190.801†	-27.1	10.7	2.8960 ug/L	2.8960 ppb	07:45:49
2	U 409.014†	-2442.6	92.6	2.5592 ug/L	2.5592 ppb	07:45:29
2	V 292.402†	-1315.0	98.6	0.6391 ug/L	0.6391 ppb	07:45:29
2	Zn 213.857†	707.8	61.5	0.5135 ug/L	0.5135 ppb	07:45:49
2	SiO2†	477.2	-31.4	-2.0299 ug/L	-2.0299 ppb	07:46:24
3	Sc 361.383	900340.6	900340.6	99.891 %		07:45:54
3	Sc Radial	5972.7	5972.7	105 %		07:44:37
3	Y 371.029	751756.9	751756.9	99.995 %		07:45:54
3	Y RADIAL	6390.1	6390.1	104.8 %		07:44:37
3	Ag 328.068†	351.2	36.7	0.1743 ug/L	0.1743 ppb	07:45:54
3	Al 396.153Radial†	-19.5	1.9	1.3708 ug/L	1.3708 ppb	07:44:37
3	As 188.979†	-24.3	0.1	0.0407 ug/L	0.0407 ppb	07:46:14
3	B 249.677†	-263.0	355.9	7.2275 ug/L	7.2275 ppb	07:46:14
3	Ba 233.527†	-5.7	11.3	0.0844 ug/L	0.0844 ppb	07:46:14
3	Be 313.107†	-4908.0	358.7	0.1267 ug/L	0.1267 ppb	07:45:54
3	Ca 317.933Radial†	21.7	3.7	5.4702 ug/L	5.4702 ppb	07:44:57
3	Cd 226.502†	-185.3	20.6	0.2069 ug/L	0.2069 ppb	07:46:14
3	Co 228.616†	-70.8	3.2	0.0561 ug/L	0.0561 ppb	07:46:14
3	Cr 267.716†	109.1	28.4	0.2929 ug/L	0.2929 ppb	07:46:14
3	Cu 324.752†	6786.0	-77.5	-0.2158 ug/L	-0.2158 ppb	07:45:54
3	Fe 238.204 Radial†	9.7	3.2	29.363 ug/L	29.363 ppb	07:44:57
3	K 766.490 Radial†	2764.5	414.6	72.484 ug/L	72.484 ppb	07:44:37
3	Mg 279.077 IEC†	1.7	1.4	47.921 ug/L	47.921 ppb	07:44:57
3	Mn 257.610†	516.5	23.3	0.0262 ug/L	0.0262 ppb	07:46:14
3	Mo 202.031†	18.3	-8.5	-0.5261 ug/L	-0.5261 ppb	07:46:14
3	Na 589.592 Radial†	-968.5	160.7	51.689 ug/L	51.689 ppb	07:44:37
3	Ni 231.604†	97.3	6.5	0.1469 ug/L	0.1469 ppb	07:46:14
3	P 214.914†	212.0	-12.6	-6.9302 ug/L	-6.9302 ppb	07:46:14
3	Pb 220.353†	-43.6	29.1	3.1835 ug/L	3.1835 ppb	07:46:14
3	S 181.975 Axial†	43.6	-2.8	-3.7665 ug/L	-3.7665 ppb	07:46:14
3	Sb 206.836†	47.1	19.6	6.0211 ug/L	6.0211 ppb	07:46:14
3	Se 196.026†	-25.4	-3.1	-1.6653 ug/L	-1.6653 ppb	07:46:14
3	Si 251.611†	536.2	-6.6	-0.2080 ug/L	-0.2080 ppb	07:46:14
3	Sn 189.927†	7.0	1.6	0.2494 ug/L	0.2494 ppb	07:46:14
3	Sr 421.552†	-13.5	-20.2	-0.1249 ug/L	-0.1249 ppb	07:44:37
3	Ti 334.940†	-1200.1	-0.3	-0.0010 ug/L	-0.0010 ppb	07:45:54
3	Tl 190.801†	-33.9	4.0	1.0865 ug/L	1.0865 ppb	07:46:14
3	U 409.014†	-2489.0	58.5	1.6165 ug/L	1.6165 ppb	07:45:54
3	V 292.402†	-1300.5	119.9	0.7713 ug/L	0.7713 ppb	07:45:54
3	Zn 213.857†	706.5	56.6	0.4750 ug/L	0.4750 ppb	07:46:14
3	SiO2†	498.5	-12.5	-0.8177 ug/L	-0.8177 ppb	07:46:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899924.7	99.845	%	0.4403				0.44%
Sc Radial	5867.3	103	%	2.2				2.09%
Y 371.029	752271.4	100.06	%	0.523				0.52%
Y RADIAL	6285.6	103.1	%	2.07				2.01%
Ag 328.068†	38.5	0.1795	ug/L	0.14599	0.1795	ppb	0.14599	81.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.3	5.9177	ug/L	11.70915	5.9177	ppb	11.70915	197.87%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.3359	ug/L	2.90587	3.3359	ppb	2.90587	87.11%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	355.9	7.2281	ug/L	0.14318	7.2281	ppb	0.14318	1.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.9	0.0669	ug/L	0.05212	0.0669	ppb	0.05212	77.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	311.1	0.1100	ug/L	0.02293	0.1100	ppb	0.02293	20.85%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          0.6      0.8197 ug/L       4.02751      0.8197 ppb        4.02751 491.33%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.2      0.1939 ug/L       0.05765      0.1939 ppb        0.05765  29.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                3.4      0.0602 ug/L       0.11488      0.0602 ppb        0.11488 190.85%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               32.0      0.3287 ug/L       0.03275      0.3287 ppb        0.03275   9.96%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -86.1     -0.2401 ug/L       0.05595     -0.2401 ppb        0.05595  23.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.8      25.840 ug/L        3.1310      25.840 ppb         3.1310  12.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        439.9      76.916 ug/L       11.3216      76.916 ppb        11.3216  14.72%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.3      82.005 ug/L       36.3443      82.005 ppb        36.3443  44.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               11.1      0.0125 ug/L       0.01186      0.0125 ppb        0.01186  94.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -5.1     -0.3180 ug/L       0.22312     -0.3180 ppb        0.22312  70.16%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       112.8      36.296 ug/L       16.0030      36.296 ppb        16.0030  44.09%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               13.8      0.3101 ug/L       0.17985      0.3101 ppb        0.17985  58.00%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -11.8     -6.4350 ug/L       1.56024     -6.4350 ppb        1.56024  24.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               21.6      2.3594 ug/L       0.80831      2.3594 ppb        0.80831  34.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.0     -6.5964 ug/L       2.90153     -6.5964 ppb        2.90153  43.99%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               20.3      6.2702 ug/L       2.06331      6.2702 ppb        2.06331  32.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.5     -0.7349 ug/L       2.16060     -0.7349 ppb        2.16060 293.99%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -16.7     -0.5119 ug/L       0.32238     -0.5119 ppb        0.32238  62.98%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.3      1.3117 ug/L       0.93844      1.3117 ppb        0.93844  71.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -16.4     -0.1014 ug/L       0.10563     -0.1014 ppb        0.10563 104.16%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               31.5      0.0478 ug/L       0.06963      0.0478 ppb        0.06963 145.56%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                4.3      1.1643 ug/L       1.69406      1.1643 ppb        1.69406 145.49%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               124.6      3.4469 ug/L       2.40078      3.4469 ppb        2.40078  69.65%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               106.2      0.6906 ug/L       0.07080      0.6906 ppb        0.07080  10.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               56.3      0.4702 ug/L       0.04593      0.4702 ppb        0.04593   9.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -15.5     -1.0274 ug/L       0.91577     -1.0274 ppb        0.91577  89.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/7/2009 07:48:40
Data Type: Reprocessed on 12/7/2009 08:21:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	882784.2	882784.2	97.944	%			07:51:51
1	Sc Radial	5811.6	5811.6	102	%			07:50:33
1	Y 371.029	729656.7	729656.7	97.055	%			07:51:51
1	Y RADIAL	6264.9	6264.9	102.7	%			07:50:33
1	Ag 328.068†	-25696.7	-26551.2	-2.7234	ug/L	-2.7234	ppb	07:51:51
1	Al 396.153Radial†	-36.3	-15.1	-9.5206	ug/L	-9.5206	ppb	07:50:33
1	As 188.979†	-219.7	-199.9	-19.628	ug/L	-19.628	ppb	07:52:11
1	B 249.677†	2081.0	2743.8	7.6562	ug/L	7.6562	ppb	07:51:51
1	Ba 233.527†	-1811.4	-1832.4	0.3338	ug/L	0.3338	ppb	07:51:51
1	Be 313.107†	-4863.1	306.9	0.1083	ug/L	0.1083	ppb	07:51:51
1	Ca 317.933Radial†	3.8	-13.2	-19.661	ug/L	-19.661	ppb	07:50:53
1	Cd 226.502†	3616.0	3898.0	3.5363	ug/L	3.5363	ppb	07:51:51
1	Co 228.616†	211.8	290.3	0.0852	ug/L	0.0852	ppb	07:52:11
1	Cr 267.716†	-502.3	-593.7	0.4653	ug/L	0.4653	ppb	07:51:51
1	Cu 324.752†	-17.1	-6888.3	-0.8161	ug/L	-0.8161	ppb	07:51:51
1	Fe 238.204 Radial†	40219.2	39314.1	362470	ug/L	362470	ppb	07:50:33
1	K 766.490 Radial†	2243.2	-22.2	8.0046	ug/L	8.0046	ppb	07:50:33
1	Mg 279.077 IEC†	10.0	9.5	27.544	ug/L	27.544	ppb	07:50:53
1	Mn 257.610†	-37189.8	-38464.4	-3.8345	ug/L	-3.8345	ppb	07:51:51
1	Mo 202.031†	-405.3	-440.6	-1.7149	ug/L	-1.7149	ppb	07:51:51
1	Na 589.592 Radial†	-976.3	127.5	41.020	ug/L	41.020	ppb	07:50:33
1	Ni 231.604†	169.0	81.7	1.8346	ug/L	1.8346	ppb	07:52:11
1	P 214.914†	742.7	533.4	4.0598	ug/L	4.0598	ppb	07:52:11
1	Pb 220.353†	246.1	324.1	5.6337	ug/L	5.6337	ppb	07:52:11
1	S 181.975 Axial†	59.6	14.4	19.048	ug/L	19.048	ppb	07:52:11
1	Sb 206.836†	18.8	-8.4	2.9053	ug/L	2.9053	ppb	07:52:11
1	Se 196.026†	-2132.2	-2154.7	-66.728	ug/L	-66.728	ppb	07:52:11
1	Si 251.611†	-764.4	-1323.8	-38.155	ug/L	-38.155	ppb	07:51:51
1	Sn 189.927†	-33.6	-39.8	-1.4766	ug/L	-1.4766	ppb	07:52:11
1	Sr 421.552†	50.9	42.3	0.2612	ug/L	0.2612	ppb	07:50:33
1	Ti 334.940†	-1183.1	-6.8	-0.0345	ug/L	-0.0345	ppb	07:51:51
1	Tl 190.801†	-48.1	-11.1	-3.3968	ug/L	-3.3968	ppb	07:52:11
1	U 409.014†	-494.6	2045.3	11.034	ug/L	11.034	ppb	07:51:51
1	V 292.402†	6939.3	8506.8	-0.1030	ug/L	-0.1030	ppb	07:51:51
1	Zn 213.857†	4835.1	4286.0	1.7273	ug/L	1.7273	ppb	07:52:11
1	SiO2†	-814.4	-1343.0	-83.067	ug/L	-83.067	ppb	07:53:08
2	Sc 361.383	885820.6	885820.6	98.280	%			07:52:17
2	Sc Radial	5602.0	5602.0	98.6	%			07:50:58
2	Y 371.029	732677.2	732677.2	97.457	%			07:52:17
2	Y RADIAL	6018.4	6018.4	98.68	%			07:50:58
2	Ag 328.068†	-25673.2	-26437.3	2.0376	ug/L	2.0376	ppb	07:52:17
2	Al 396.153Radial†	-62.4	-42.8	-29.294	ug/L	-29.294	ppb	07:50:58
2	As 188.979†	-226.3	-205.9	-19.814	ug/L	-19.814	ppb	07:52:37
2	B 249.677†	2152.6	2809.4	7.2150	ug/L	7.2150	ppb	07:52:17
2	Ba 233.527†	-1816.5	-1831.2	0.8382	ug/L	0.8382	ppb	07:52:17
2	Be 313.107†	-4835.8	351.7	0.1241	ug/L	0.1241	ppb	07:52:17
2	Ca 317.933Radial†	1.5	-15.4	-22.953	ug/L	-22.953	ppb	07:51:18
2	Cd 226.502†	3545.5	3813.6	1.3377	ug/L	1.3377	ppb	07:52:17
2	Co 228.616†	206.2	283.9	-0.2179	ug/L	-0.2179	ppb	07:52:37
2	Cr 267.716†	-576.5	-667.4	-0.0538	ug/L	-0.0538	ppb	07:52:17
2	Cu 324.752†	-124.6	-6997.6	-0.4399	ug/L	-0.4399	ppb	07:52:17
2	Fe 238.204 Radial†	40199.3	40765.0	375850	ug/L	375850	ppb	07:50:58
2	K 766.490 Radial†	2411.2	230.2	52.599	ug/L	52.599	ppb	07:50:58
2	Mg 279.077 IEC†	12.6	12.5	123.20	ug/L	123.20	ppb	07:51:18
2	Mn 257.610†	-37490.4	-38640.1	-2.6850	ug/L	-2.6850	ppb	07:52:17
2	Mo 202.031†	-377.8	-411.2	1.0640	ug/L	1.0640	ppb	07:52:17
2	Na 589.592 Radial†	-1042.5	24.7	7.9359	ug/L	7.9359	ppb	07:50:58
2	Ni 231.604†	176.6	88.9	1.9968	ug/L	1.9968	ppb	07:52:37

2	P 214.914†	755.6	543.9	-0.8393	ug/L	-0.8393 ppb	07:52:37
2	Pb 220.353†	264.3	341.7	6.4612	ug/L	6.4612 ppb	07:52:37
2	S 181.975 Axial†	49.2	3.6	4.7631	ug/L	4.7631 ppb	07:52:37
2	Sb 206.836†	17.7	-9.6	2.8201	ug/L	2.8201 ppb	07:52:37
2	Se 196.026†	-2133.7	-2148.7	-21.217	ug/L	-21.217 ppb	07:52:37
2	Si 251.611†	-851.0	-1409.2	-40.702	ug/L	-40.702 ppb	07:52:17
2	Sn 189.927†	-24.5	-30.3	0.2003	ug/L	0.2003 ppb	07:52:37
2	Sr 421.552†	36.9	30.0	0.1851	ug/L	0.1851 ppb	07:50:58
2	Ti 334.940†	-1199.5	-19.4	-0.0558	ug/L	-0.0558 ppb	07:52:17
2	Tl 190.801†	-47.4	-10.3	-3.1680	ug/L	-3.1680 ppb	07:52:37
2	U 409.014†	-360.7	2183.2	13.170	ug/L	13.170 ppb	07:52:17
2	V 292.402†	6957.0	8500.5	-2.1424	ug/L	-2.1424 ppb	07:52:17
2	Zn 213.857†	4815.4	4249.0	0.1324	ug/L	0.1324 ppb	07:52:37
2	SiO2†	-760.7	-1285.6	-79.581	ug/L	-79.581 ppb	07:53:13
3	Sc 361.383	883588.4	883588.4	98.033	%		07:52:43
3	Sc Radial	5604.1	5604.1	98.6	%		07:51:23
3	Y 371.029	729832.4	729832.4	97.079	%		07:52:43
3	Y RADIAL	6006.8	6006.8	98.49	%		07:51:23
3	Ag 328.068†	-26101.5	-26940.2	-0.2210	ug/L	-0.2210 ppb	07:52:43
3	Al 396.153Radial†	-51.6	-31.8	-21.428	ug/L	-21.428 ppb	07:51:23
3	As 188.979†	-219.0	-199.0	-17.233	ug/L	-17.233 ppb	07:53:03
3	B 249.677†	2288.9	2953.9	10.166	ug/L	10.166 ppb	07:52:43
3	Ba 233.527†	-1889.9	-1910.8	0.2646	ug/L	0.2646 ppb	07:52:43
3	Be 313.107†	-4994.6	177.2	0.0625	ug/L	0.0625 ppb	07:52:43
3	Ca 317.933Radial†	11.2	-5.6	-8.3590	ug/L	-8.3590 ppb	07:51:43
3	Cd 226.502†	3631.8	3910.8	2.3401	ug/L	2.3401 ppb	07:52:43
3	Co 228.616†	223.0	301.6	0.1022	ug/L	0.1022 ppb	07:53:03
3	Cr 267.716†	-562.6	-654.7	0.0815	ug/L	0.0815 ppb	07:52:43
3	Cu 324.752†	46.6	-6823.3	0.0430	ug/L	0.0430 ppb	07:52:43
3	Fe 238.204 Radial†	40202.0	40753.0	375740	ug/L	375740 ppb	07:51:23
3	K 766.490 Radial†	2132.5	-53.2	3.0162	ug/L	3.0162 ppb	07:51:23
3	Mg 279.077 IEC†	10.4	10.3	42.329	ug/L	42.329 ppb	07:51:43
3	Mn 257.610†	-37517.8	-38764.5	-2.8239	ug/L	-2.8239 ppb	07:52:43
3	Mo 202.031†	-409.2	-444.2	-0.9994	ug/L	-0.9994 ppb	07:52:43
3	Na 589.592 Radial†	-1006.4	61.7	19.846	ug/L	19.846 ppb	07:51:23
3	Ni 231.604†	188.9	101.8	2.2882	ug/L	2.2882 ppb	07:53:03
3	P 214.914†	744.9	534.9	-5.7940	ug/L	-5.7940 ppb	07:53:03
3	Pb 220.353†	226.0	303.3	2.2730	ug/L	2.2730 ppb	07:53:03
3	S 181.975 Axial†	61.3	16.1	21.328	ug/L	21.328 ppb	07:53:03
3	Sb 206.836†	14.2	-13.2	1.6747	ug/L	1.6747 ppb	07:53:03
3	Se 196.026†	-2114.5	-2134.7	-13.696	ug/L	-13.696 ppb	07:53:03
3	Si 251.611†	-729.4	-1287.4	-37.090	ug/L	-37.090 ppb	07:52:43
3	Sn 189.927†	-29.2	-35.2	-0.5713	ug/L	-0.5713 ppb	07:53:03
3	Sr 421.552†	38.4	31.5	0.1943	ug/L	0.1943 ppb	07:51:23
3	Ti 334.940†	-1194.6	-17.5	-0.0483	ug/L	-0.0483 ppb	07:52:43
3	Tl 190.801†	-49.7	-12.8	-3.8487	ug/L	-3.8487 ppb	07:53:03
3	U 409.014†	-668.9	1867.9	4.4551	ug/L	4.4551 ppb	07:52:43
3	V 292.402†	7288.8	8856.8	0.1427	ug/L	0.1427 ppb	07:52:43
3	Zn 213.857†	4830.7	4277.0	0.3807	ug/L	0.3807 ppb	07:53:03
3	SiO2†	-756.8	-1283.5	-79.329	ug/L	-79.329 ppb	07:53:18

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884064.4	98.086	%	0.1745				0.18%
Sc Radial	5672.6	99.8	%	2.12				2.12%
Y 371.029	730722.1	97.197	%	0.2255				0.23%
Y RADIAL	6096.7	99.97	%	2.390				2.39%
Ag 328.068†	-26642.9	-0.3023	ug/L	2.38151	-0.3023	ppb	2.38151	787.92%
Al 396.153Radial†	-29.9	-20.081	ug/L	9.9551	-20.081	ppb	9.9551	49.58%
As 188.979†	-201.6	-18.892	ug/L	1.4396	-18.892	ppb	1.4396	7.62%
B 249.677†	2835.7	8.3457	ug/L	1.59160	8.3457	ppb	1.59160	19.07%
Ba 233.527†	-1858.1	0.4788	ug/L	0.31310	0.4788	ppb	0.31310	65.39%
Be 313.107†	278.6	0.0983	ug/L	0.03200	0.0983	ppb	0.03200	32.54%
Ca 317.933Radial†	-11.4	-16.991	ug/L	7.6545	-16.991	ppb	7.6545	45.05%
Cd 226.502†	3874.1	2.4047	ug/L	1.10069	2.4047	ppb	1.10069	45.77%
Co 228.616†	291.9	-0.0102	ug/L	0.18010	-0.0102	ppb	0.18010	>999.9%
Cr 267.716†	-638.6	0.1643	ug/L	0.26927	0.1643	ppb	0.26927	163.85%
Cu 324.752†	-6903.1	-0.4044	ug/L	0.43064	-0.4044	ppb	0.43064	106.50%
Fe 238.204 Radial†	40277.3	371350	ug/L	7691.6	371350	ppb	7691.6	2.07%

K 766.490 Radial†	51.6	21.207	ug/L	27.3008	21.207	ppb	27.3008 128.74%
Mg 279.077 IEC†	10.8	64.358	ug/L	51.4936	64.358	ppb	51.4936 80.01%
Mn 257.610†	-38623.0	-3.1145	ug/L	0.62741	-3.1145	ppb	0.62741 20.15%
Mo 202.031†	-432.0	-0.5501	ug/L	1.44289	-0.5501	ppb	1.44289 262.30%
Na 589.592 Radial†	71.3	22.934	ug/L	16.7569	22.934	ppb	16.7569 73.07%
Ni 231.604†	90.8	2.0399	ug/L	0.22988	2.0399	ppb	0.22988 11.27%
P 214.914†	537.4	-0.8578	ug/L	4.92695	-0.8578	ppb	4.92695 574.34%
Pb 220.353†	323.0	4.7893	ug/L	2.21813	4.7893	ppb	2.21813 46.31%
S 181.975 Axial†	11.3	15.046	ug/L	8.9782	15.046	ppb	8.9782 59.67%
Sb 206.836†	-10.4	2.4667	ug/L	0.68724	2.4667	ppb	0.68724 27.86%
Se 196.026†	-2146.0	-33.880	ug/L	28.6941	-33.880	ppb	28.6941 84.69%
Si 251.611†	-1340.1	-38.649	ug/L	1.8561	-38.649	ppb	1.8561 4.80%
Sn 189.927†	-35.1	-0.6159	ug/L	0.83935	-0.6159	ppb	0.83935 136.28%
Sr 421.552†	34.6	0.2135	ug/L	0.04156	0.2135	ppb	0.04156 19.46%
Ti 334.940†	-14.5	-0.0462	ug/L	0.01082	-0.0462	ppb	0.01082 23.40%
Tl 190.801†	-11.4	-3.4712	ug/L	0.34637	-3.4712	ppb	0.34637 9.98%
U 409.014†	2032.2	9.5530	ug/L	4.54221	9.5530	ppb	4.54221 47.55%
V 292.402†	8621.4	-0.7009	ug/L	1.25440	-0.7009	ppb	1.25440 178.97%
Zn 213.857†	4270.7	0.7468	ug/L	0.85816	0.7468	ppb	0.85816 114.91%
SiO2†	-1304.0	-80.659	ug/L	2.0892	-80.659	ppb	2.0892 2.59%

Sequence No.: 18
Sample ID: LR2
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/7/2009 07:55:29
Data Type: Reprocessed on 12/7/2009 08:21:39
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	914902.0	914902.0	101.51	%			07:58:40
1	Sc Radial	5818.7	5818.7	102	%			07:57:23
1	Y 371.029	762333.9	762333.9	101.40	%			07:58:40
1	Y RADIAL	6276.3	6276.3	102.9	%			07:57:23
1	Ag 328.068†	480.8	158.7	0.6718	ug/L	0.6718	ppb	07:58:46
1	Al 396.153Radial†	-16.2	4.6	3.3262	ug/L	3.3262	ppb	07:57:23
1	As 188.979†	-17.1	7.5	2.8155	ug/L	2.8155	ppb	07:59:06
1	B 249.677†	273.5	888.6	6.1639	ug/L	6.1639	ppb	07:59:06
1	Ba 233.527†	-11.0	6.1	0.0408	ug/L	0.0408	ppb	07:59:06
1	Be 313.107†	-4960.2	385.5	0.1366	ug/L	0.1366	ppb	07:58:46
1	Ca 317.933Radial†	19.8	2.4	3.5760	ug/L	3.5760	ppb	07:57:43
1	Cd 226.502†	-224.4	-15.1	-0.1394	ug/L	-0.1394	ppb	07:59:06
1	Co 228.616†	259220.1	255445.9	4687.9	ug/L	4687.9	ppb	07:58:46
1	Cr 267.716†	292.4	207.2	2.1272	ug/L	2.1272	ppb	07:58:46
1	Cu 324.752†	6059.0	-901.8	-2.5339	ug/L	-2.5339	ppb	07:58:46
1	Fe 238.204 Radial†	-7.5	-13.3	24.879	ug/L	24.879	ppb	07:57:43
1	K 766.490 Radial†	2547.0	271.8	-12.594	ug/L	-12.594	ppb	07:57:23
1	Mg 279.077 IEC†	-0.9	-1.1	-39.477	ug/L	-39.477	ppb	07:57:43
1	Mn 257.610†	4725167.9	4654526.4	4837.3	ug/L	4837.3	ppb	07:58:40
1	Mo 202.031†	14.9	-12.1	-0.7629	ug/L	-0.7629	ppb	07:59:06
1	Na 589.592 Radial†	-1046.4	60.2	19.381	ug/L	19.381	ppb	07:57:23
1	Ni 231.604†	228.0	133.8	0.0173	ug/L	0.0173	ppb	07:59:06
1	P 214.914†	207.9	-20.1	-10.549	ug/L	-10.549	ppb	07:59:06
1	Pb 220.353†	-45.1	28.3	3.1081	ug/L	3.1081	ppb	07:59:06
1	S 181.975 Axial†	61.8	14.4	19.150	ug/L	19.150	ppb	07:59:06
1	Sb 206.836†	33.4	5.3	1.5629	ug/L	1.5629	ppb	07:59:06
1	Se 196.026†	-20.7	1.9	0.6621	ug/L	0.6621	ppb	07:59:06
1	Si 251.611†	600.9	48.6	1.4165	ug/L	1.4165	ppb	07:58:46
1	Sn 189.927†	4.9	-0.6	-0.0979	ug/L	-0.0979	ppb	07:59:06
1	Sr 421.552†	-42.3	-48.7	-0.3005	ug/L	-0.3005	ppb	07:57:23
1	Ti 334.940†	-1059.1	157.7	0.2480	ug/L	0.2480	ppb	07:58:46
1	Tl 190.801†	-42.2	-3.6	2.8520	ug/L	2.8520	ppb	07:59:06
1	U 409.014†	-2691.0	-100.8	-2.7786	ug/L	-2.7786	ppb	07:58:46
1	V 292.402†	-1373.9	68.3	0.4448	ug/L	0.4448	ppb	07:58:46
1	Zn 213.857†	667.3	6.7	0.0537	ug/L	0.0537	ppb	07:59:06
1	SiO2†	696.7	174.8	10.948	ug/L	10.948	ppb	08:00:13
2	Sc 361.383	909102.6	909102.6	100.86	%			07:59:12
2	Sc Radial	5750.0	5750.0	101	%			07:57:48
2	Y 371.029	757054.1	757054.1	100.70	%			07:59:12
2	Y RADIAL	6170.2	6170.2	101.2	%			07:57:48
2	Ag 328.068†	561.1	241.3	1.0385	ug/L	1.0385	ppb	07:59:17
2	Al 396.153Radial†	-32.9	-12.1	-8.5740	ug/L	-8.5740	ppb	07:57:48
2	As 188.979†	-20.7	3.8	1.4321	ug/L	1.4321	ppb	07:59:37
2	B 249.677†	208.0	825.3	4.5463	ug/L	4.5463	ppb	07:59:37
2	Ba 233.527†	-1.9	15.2	0.1039	ug/L	0.1039	ppb	07:59:37
2	Be 313.107†	-4931.3	382.9	0.1358	ug/L	0.1358	ppb	07:59:17
2	Ca 317.933Radial†	23.8	6.5	9.7558	ug/L	9.7558	ppb	07:58:08
2	Cd 226.502†	-223.9	-16.0	-0.1490	ug/L	-0.1490	ppb	07:59:37
2	Co 228.616†	264761.9	262569.3	4818.6	ug/L	4818.6	ppb	07:59:17
2	Cr 267.716†	252.8	169.8	1.7419	ug/L	1.7419	ppb	07:59:17
2	Cu 324.752†	6166.1	-757.6	-2.1296	ug/L	-2.1296	ppb	07:59:17
2	Fe 238.204 Radial†	-7.3	-13.2	30.340	ug/L	30.340	ppb	07:58:08
2	K 766.490 Radial†	2606.1	359.9	2.4227	ug/L	2.4227	ppb	07:57:48
2	Mg 279.077 IEC†	0.1	-0.1	-4.3721	ug/L	-4.3721	ppb	07:58:08
2	Mn 257.610†	4725798.9	4684847.6	4868.8	ug/L	4868.8	ppb	07:59:12
2	Mo 202.031†	22.1	-4.8	-0.3074	ug/L	-0.3074	ppb	07:59:37
2	Na 589.592 Radial†	-1112.4	-17.2	-5.5185	ug/L	-5.5185	ppb	07:57:48
2	Ni 231.604†	215.0	122.3	-0.3245	ug/L	-0.3245	ppb	07:59:37

2	P 214.914†	197.9	-28.7	-15.313	ug/L	-15.313 ppb	07:59:37
2	Pb 220.353†	-31.2	41.9	4.5895	ug/L	4.5895 ppb	07:59:37
2	S 181.975 Axial†	68.7	21.7	28.705	ug/L	28.705 ppb	07:59:37
2	Sb 206.836†	40.1	12.2	3.7105	ug/L	3.7105 ppb	07:59:37
2	Se 196.026†	-22.8	-0.3	-0.5427	ug/L	-0.5427 ppb	07:59:37
2	Si 251.611†	593.2	44.7	1.2879	ug/L	1.2879 ppb	07:59:17
2	Sn 189.927†	9.7	4.2	0.6586	ug/L	0.6586 ppb	07:59:37
2	Sr 421.552†	-1.0	-8.4	-0.0521	ug/L	-0.0521 ppb	07:57:48
2	Ti 334.940†	-1036.7	173.3	0.2739	ug/L	0.2739 ppb	07:59:17
2	Tl 190.801†	-34.7	3.5	4.2899	ug/L	4.2899 ppb	07:59:37
2	U 409.014†	-2755.3	-181.4	-5.0107	ug/L	-5.0107 ppb	07:59:17
2	V 292.402†	-1504.7	-70.0	-0.4515	ug/L	-0.4515 ppb	07:59:17
2	Zn 213.857†	680.1	23.6	0.1970	ug/L	0.1970 ppb	07:59:37
2	SiO2†	651.9	134.8	8.4059	ug/L	8.4059 ppb	08:00:18
3	Sc 361.383	898129.1	898129.1	99.646	%		07:59:43
3	Sc Radial	5837.4	5837.4	103	%		07:58:13
3	Y 371.029	745377.7	745377.7	99.146	%		07:59:43
3	Y RADIAL	6292.3	6292.3	103.2	%		07:58:13
3	Ag 328.068†	511.6	198.5	0.8485	ug/L	0.8485 ppb	07:59:48
3	Al 396.153Radial†	-49.2	-27.4	-19.425	ug/L	-19.425 ppb	07:58:13
3	As 188.979†	-7.9	16.5	6.2122	ug/L	6.2122 ppb	08:00:08
3	B 249.677†	263.5	883.5	5.5645	ug/L	5.5645 ppb	08:00:08
3	Ba 233.527†	-20.4	-3.4	-0.0304	ug/L	-0.0304 ppb	08:00:08
3	Be 313.107†	-4955.0	299.4	0.1059	ug/L	0.1059 ppb	07:59:48
3	Ca 317.933Radial†	17.3	-0.1	-0.1236	ug/L	-0.1236 ppb	07:58:33
3	Cd 226.502†	-223.3	-18.1	-0.1700	ug/L	-0.1700 ppb	08:00:08
3	Co 228.616†	265076.4	266092.2	4883.2	ug/L	4883.2 ppb	07:59:48
3	Cr 267.716†	268.7	188.9	1.9381	ug/L	1.9381 ppb	07:59:48
3	Cu 324.752†	6180.9	-668.0	-1.8785	ug/L	-1.8785 ppb	07:59:48
3	Fe 238.204 Radial†	-7.4	-13.2	32.266	ug/L	32.266 ppb	07:58:33
3	K 766.490 Radial†	2681.3	394.6	8.0561	ug/L	8.0561 ppb	07:58:13
3	Mg 279.077 IEC†	1.5	1.2	43.787	ug/L	43.787 ppb	07:58:33
3	Mn 257.610†	4700414.7	4716619.4	4901.9	ug/L	4901.9 ppb	07:59:43
3	Mo 202.031†	8.2	-18.5	-1.1611	ug/L	-1.1611 ppb	08:00:08
3	Na 589.592 Radial†	-1024.3	85.0	27.346	ug/L	27.346 ppb	07:58:13
3	Ni 231.604†	229.1	139.1	0.0114	ug/L	0.0114 ppb	08:00:08
3	P 214.914†	215.9	-8.2	-4.1202	ug/L	-4.1202 ppb	08:00:08
3	Pb 220.353†	-40.6	32.0	3.5022	ug/L	3.5022 ppb	08:00:08
3	S 181.975 Axial†	69.1	22.8	30.253	ug/L	30.253 ppb	08:00:08
3	Sb 206.836†	38.1	10.6	3.1974	ug/L	3.1974 ppb	08:00:08
3	Se 196.026†	-35.5	-13.3	-7.8527	ug/L	-7.8527 ppb	08:00:08
3	Si 251.611†	716.3	175.5	5.1225	ug/L	5.1225 ppb	07:59:48
3	Sn 189.927†	5.3	-0.1	-0.0170	ug/L	-0.0170 ppb	08:00:08
3	Sr 421.552†	-41.8	-48.1	-0.2968	ug/L	-0.2968 ppb	07:58:13
3	Ti 334.940†	-1151.6	45.4	0.0731	ug/L	0.0731 ppb	07:59:48
3	Tl 190.801†	-46.0	-8.2	0.9790	ug/L	0.9790 ppb	08:00:08
3	U 409.014†	-2754.1	-213.6	-5.9010	ug/L	-5.9010 ppb	07:59:48
3	V 292.402†	-1485.8	-69.3	-0.4597	ug/L	-0.4597 ppb	07:59:48
3	Zn 213.857†	681.1	32.9	0.2711	ug/L	0.2711 ppb	08:00:08
3	SiO2†	657.8	148.6	9.3018	ug/L	9.3018 ppb	08:00:24

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907377.9	100.67	%	0.945				0.94%
Sc Radial	5802.0	102	%	0.8				0.79%
Y 371.029	754921.9	100.42	%	1.154				1.15%
Y RADIAL	6246.3	102.4	%	1.09				1.06%
Ag 328.068†	199.5	0.8529	ug/L	0.18340	0.8529	ppb	0.18340	21.50%
Al 396.153Radial†	-11.6	-8.2242	ug/L	11.37949	-8.2242	ppb	11.37949	138.37%
As 188.979†	9.3	3.4866	ug/L	2.45970	3.4866	ppb	2.45970	70.55%
B 249.677†	865.8	5.4249	ug/L	0.81777	5.4249	ppb	0.81777	15.07%
Ba 233.527†	6.0	0.0381	ug/L	0.06722	0.0381	ppb	0.06722	176.34%
Be 313.107†	356.0	0.1261	ug/L	0.01751	0.1261	ppb	0.01751	13.89%
Ca 317.933Radial†	3.0	4.4027	ug/L	4.99134	4.4027	ppb	4.99134	113.37%
Cd 226.502†	-16.4	-0.1528	ug/L	0.01566	-0.1528	ppb	0.01566	10.25%
Co 228.616†	261369.1	4796.6	ug/L	99.53	4796.6	ppb	99.53	2.08%
Cr 267.716†	188.6	1.9357	ug/L	0.19266	1.9357	ppb	0.19266	9.95%
Cu 324.752†	-775.8	-2.1806	ug/L	0.33066	-2.1806	ppb	0.33066	15.16%
Fe 238.204 Radial†	-13.2	29.162	ug/L	3.8316	29.162	ppb	3.8316	13.14%

K 766.490 Radial†	342.1	-0.7051	ug/L	10.67448	-0.7051	ppb	10.67448 >999.9%
Mg 279.077 IEC†	-0.0	-0.0207	ug/L	41.80191	-0.0207	ppb	41.80191 >999.9%
Mn 257.610†	4685331.1	4869.3	ug/L	32.27	4869.3	ppb	32.27 0.66%
Mo 202.031†	-11.8	-0.7438	ug/L	0.42716	-0.7438	ppb	0.42716 57.43%
Na 589.592 Radial†	42.7	13.736	ug/L	17.1439	13.736	ppb	17.1439 124.81%
Ni 231.604†	131.7	-0.0986	ug/L	0.19565	-0.0986	ppb	0.19565 198.41%
P 214.914†	-19.0	-9.9940	ug/L	5.61712	-9.9940	ppb	5.61712 56.20%
Pb 220.353†	34.1	3.7333	ug/L	0.76727	3.7333	ppb	0.76727 20.55%
S 181.975 Axial†	19.6	26.036	ug/L	6.0136	26.036	ppb	6.0136 23.10%
Sb 206.836†	9.4	2.8236	ug/L	1.12157	2.8236	ppb	1.12157 39.72%
Se 196.026†	-3.9	-2.5778	ug/L	4.60779	-2.5778	ppb	4.60779 178.75%
Si 251.611†	89.6	2.6090	ug/L	2.17777	2.6090	ppb	2.17777 83.47%
Sn 189.927†	1.1	0.1812	ug/L	0.41542	0.1812	ppb	0.41542 229.21%
Sr 421.552†	-35.1	-0.2165	ug/L	0.14234	-0.2165	ppb	0.14234 65.76%
Ti 334.940†	125.5	0.1983	ug/L	0.10920	0.1983	ppb	0.10920 55.06%
Tl 190.801†	-2.8	2.7070	ug/L	1.66021	2.7070	ppb	1.66021 61.33%
U 409.014†	-165.3	-4.5635	ug/L	1.60853	-4.5635	ppb	1.60853 35.25%
V 292.402†	-23.6	-0.1555	ug/L	0.51986	-0.1555	ppb	0.51986 334.33%
Zn 213.857†	21.1	0.1739	ug/L	0.11051	0.1739	ppb	0.11051 63.54%
SiO2†	152.7	9.5520	ug/L	1.28950	9.5520	ppb	1.28950 13.50%

Sequence No.: 19
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 08:02:35
Data Type: Reprocessed on 12/7/2009 08:21:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	881714.6	881714.6	97.825	%			08:05:45
1	Sc Radial	5597.8	5597.8	98.5	%			08:04:27
1	Y 371.029	722502.0	722502.0	96.104	%			08:05:45
1	Y RADIAL	5960.0	5960.0	97.73	%			08:04:27
1	Ag 328.068†	110044.0	112176.0	502.65	ug/L	502.65	ppb	08:05:50
1	Al 396.153Radial†	6864.3	6987.7	4941.2	ug/L	4941.2	ppb	08:04:27
1	As 188.979†	1273.9	1326.6	506.16	ug/L	506.16	ppb	08:06:10
1	B 249.677†	23949.5	25101.1	508.14	ug/L	508.14	ppb	08:05:50
1	Ba 233.527†	66606.2	68104.3	493.16	ug/L	493.16	ppb	08:05:50
1	Be 313.107†	1334330.8	1369272.1	484.51	ug/L	484.51	ppb	08:05:45
1	Ca 317.933Radial†	3326.4	3359.4	5006.3	ug/L	5006.3	ppb	08:04:47
1	Cd 226.502†	47143.6	48397.9	493.64	ug/L	493.64	ppb	08:05:50
1	Co 228.616†	26128.0	26783.0	491.72	ug/L	491.72	ppb	08:05:50
1	Cr 267.716†	47116.3	48083.1	494.53	ug/L	494.53	ppb	08:05:50
1	Cu 324.752†	176709.9	173768.2	487.29	ug/L	487.29	ppb	08:05:50
1	Fe 238.204 Radial†	549.3	551.5	5100.7	ug/L	5100.7	ppb	08:04:47
1	K 766.490 Radial†	30726.4	28972.1	5058.8	ug/L	5058.8	ppb	08:04:27
1	Mg 279.077 IEC†	143.9	145.8	5181.5	ug/L	5181.5	ppb	08:04:47
1	Mn 257.610†	457311.1	466985.7	485.74	ug/L	485.74	ppb	08:05:45
1	Mo 202.031†	7830.9	7978.2	497.02	ug/L	497.02	ppb	08:06:10
1	Na 589.592 Radial†	28734.9	30247.9	9731.1	ug/L	9731.1	ppb	08:04:27
1	Ni 231.604†	21667.9	22058.8	496.14	ug/L	496.14	ppb	08:05:50
1	P 214.914†	4518.8	4394.3	2343.1	ug/L	2343.1	ppb	08:06:10
1	Pb 220.353†	4327.1	4496.1	493.23	ug/L	493.23	ppb	08:06:10
1	S 181.975 Axial†	763.8	734.3	972.41	ug/L	972.41	ppb	08:06:10
1	Sb 206.836†	1618.2	1626.6	508.98	ug/L	508.98	ppb	08:06:10
1	Se 196.026†	829.4	870.1	506.59	ug/L	506.59	ppb	08:06:10
1	Si 251.611†	82356.4	83644.3	2430.5	ug/L	2430.5	ppb	08:05:50
1	Sn 189.927†	3087.5	3150.7	501.09	ug/L	501.09	ppb	08:06:10
1	Sr 421.552†	79658.2	80845.5	498.59	ug/L	498.59	ppb	08:04:27
1	Ti 334.940†	309283.8	317362.0	497.53	ug/L	497.53	ppb	08:05:50
1	Tl 190.801†	1743.6	1820.3	495.70	ug/L	495.70	ppb	08:06:10
1	U 409.014†	15140.8	18027.7	497.51	ug/L	497.51	ppb	08:05:50
1	V 292.402†	72752.3	75791.7	499.41	ug/L	499.41	ppb	08:05:50
1	Zn 213.857†	57469.8	58097.0	488.12	ug/L	488.12	ppb	08:05:50
1	SiO2†	81245.7	82540.6	5145.7	ug/L	5145.7	ppb	08:07:17
2	Sc 361.383	880289.1	880289.1	97.667	%			08:06:16
2	Sc Radial	5583.0	5583.0	98.3	%			08:04:52
2	Y 371.029	719500.9	719500.9	95.704	%			08:06:16
2	Y RADIAL	5935.4	5935.4	97.32	%			08:04:52
2	Ag 328.068†	109078.4	111369.4	499.06	ug/L	499.06	ppb	08:06:21
2	Al 396.153Radial†	6794.0	6934.6	4903.4	ug/L	4903.4	ppb	08:04:52
2	As 188.979†	1260.2	1314.7	501.61	ug/L	501.61	ppb	08:06:41
2	B 249.677†	23688.9	24874.0	503.52	ug/L	503.52	ppb	08:06:21
2	Ba 233.527†	66098.6	67694.7	490.20	ug/L	490.20	ppb	08:06:21
2	Be 313.107†	1332779.5	1369892.6	484.72	ug/L	484.72	ppb	08:06:16
2	Ca 317.933Radial†	3335.6	3377.6	5033.5	ug/L	5033.5	ppb	08:05:12
2	Cd 226.502†	46679.5	48000.8	489.58	ug/L	489.58	ppb	08:06:21
2	Co 228.616†	25925.3	26618.8	488.72	ug/L	488.72	ppb	08:06:21
2	Cr 267.716†	46782.0	47818.8	491.81	ug/L	491.81	ppb	08:06:21
2	Cu 324.752†	174489.3	171787.1	481.74	ug/L	481.74	ppb	08:06:21
2	Fe 238.204 Radial†	553.0	556.8	5148.8	ug/L	5148.8	ppb	08:05:12
2	K 766.490 Radial†	30754.1	29082.9	5078.1	ug/L	5078.1	ppb	08:04:52
2	Mg 279.077 IEC†	143.9	146.1	5194.8	ug/L	5194.8	ppb	08:05:12
2	Mn 257.610†	458045.2	468494.4	487.31	ug/L	487.31	ppb	08:06:16
2	Mo 202.031†	7822.1	7982.2	497.27	ug/L	497.27	ppb	08:06:41
2	Na 589.592 Radial†	28758.1	30348.8	9763.5	ug/L	9763.5	ppb	08:04:52
2	Ni 231.604†	21458.5	21880.3	492.12	ug/L	492.12	ppb	08:06:21

2	P 214.914†	4521.1	4404.2	2349.4 ug/L	2349.4 ppb	08:06:41
2	Pb 220.353†	4307.1	4482.8	491.76 ug/L	491.76 ppb	08:06:41
2	S 181.975 Axial†	762.1	733.8	971.74 ug/L	971.74 ppb	08:06:41
2	Sb 206.836†	1614.2	1625.1	508.59 ug/L	508.59 ppb	08:06:41
2	Se 196.026†	824.4	866.3	504.61 ug/L	504.61 ppb	08:06:41
2	Si 251.611†	81612.0	83018.4	2412.3 ug/L	2412.3 ppb	08:06:21
2	Sn 189.927†	3074.9	3142.9	499.86 ug/L	499.86 ppb	08:06:41
2	Sr 421.552†	79185.6	80578.9	496.94 ug/L	496.94 ppb	08:04:52
2	Ti 334.940†	306300.1	314818.9	493.55 ug/L	493.55 ppb	08:06:21
2	Tl 190.801†	1728.9	1808.2	492.43 ug/L	492.43 ppb	08:06:41
2	U 409.014†	14598.2	17497.2	482.82 ug/L	482.82 ppb	08:06:21
2	V 292.402†	72023.8	75166.3	495.32 ug/L	495.32 ppb	08:06:21
2	Zn 213.857†	56998.2	57709.2	484.86 ug/L	484.86 ppb	08:06:21
2	SiO2†	82246.5	83699.9	5218.3 ug/L	5218.3 ppb	08:07:22
3	Sc 361.383	879007.7	879007.7	97.525 %		08:06:47
3	Sc Radial	5618.5	5618.5	98.9 %		08:05:17
3	Y 371.029	719329.4	719329.4	95.682 %		08:06:47
3	Y RADIAL	5962.3	5962.3	97.76 %		08:05:17
3	Ag 328.068†	110016.6	112494.3	504.05 ug/L	504.05 ppb	08:06:52
3	Al 396.153Radial†	6852.2	6949.8	4914.3 ug/L	4914.3 ppb	08:05:17
3	As 188.979†	1252.2	1308.3	499.23 ug/L	499.23 ppb	08:07:12
3	B 249.677†	23822.1	25045.9	507.02 ug/L	507.02 ppb	08:06:52
3	Ba 233.527†	66545.7	68251.8	494.22 ug/L	494.22 ppb	08:06:52
3	Be 313.107†	1331779.0	1370856.0	485.07 ug/L	485.07 ppb	08:06:47
3	Ca 317.933Radial†	3312.5	3332.8	4966.8 ug/L	4966.8 ppb	08:05:37
3	Cd 226.502†	47070.8	48471.6	494.40 ug/L	494.40 ppb	08:06:52
3	Co 228.616†	26107.7	26844.4	492.85 ug/L	492.85 ppb	08:06:52
3	Cr 267.716†	47104.1	48218.9	495.92 ug/L	495.92 ppb	08:06:52
3	Cu 324.752†	176235.1	173837.6	487.48 ug/L	487.48 ppb	08:06:52
3	Fe 238.204 Radial†	544.0	544.1	5032.4 ug/L	5032.4 ppb	08:05:37
3	K 766.490 Radial†	30682.5	28812.6	5030.9 ug/L	5030.9 ppb	08:05:17
3	Mg 279.077 IEC†	145.7	147.1	5228.4 ug/L	5228.4 ppb	08:05:37
3	Mn 257.610†	458036.1	469168.8	488.00 ug/L	488.00 ppb	08:06:47
3	Mo 202.031†	7779.8	7950.5	495.29 ug/L	495.29 ppb	08:07:12
3	Na 589.592 Radial†	28745.1	30150.6	9699.8 ug/L	9699.8 ppb	08:05:17
3	Ni 231.604†	21583.5	22040.5	495.72 ug/L	495.72 ppb	08:06:52
3	P 214.914†	4461.0	4349.3	2318.4 ug/L	2318.4 ppb	08:07:12
3	Pb 220.353†	4281.1	4462.6	489.55 ug/L	489.55 ppb	08:07:12
3	S 181.975 Axial†	758.5	731.3	968.35 ug/L	968.35 ppb	08:07:12
3	Sb 206.836†	1608.4	1621.6	507.31 ug/L	507.31 ppb	08:07:12
3	Se 196.026†	802.3	844.9	492.22 ug/L	492.22 ppb	08:07:12
3	Si 251.611†	82176.7	83719.2	2432.8 ug/L	2432.8 ppb	08:06:52
3	Sn 189.927†	3053.7	3125.7	497.12 ug/L	497.12 ppb	08:07:12
3	Sr 421.552†	79946.2	80838.6	498.54 ug/L	498.54 ppb	08:05:17
3	Ti 334.940†	308708.2	317745.3	498.13 ug/L	498.13 ppb	08:06:52
3	Tl 190.801†	1708.1	1789.4	487.37 ug/L	487.37 ppb	08:07:12
3	U 409.014†	14902.5	17831.1	492.07 ug/L	492.07 ppb	08:06:52
3	V 292.402†	72540.1	75803.2	499.46 ug/L	499.46 ppb	08:06:52
3	Zn 213.857†	57353.7	58158.8	488.65 ug/L	488.65 ppb	08:06:52
3	SiO2†	81038.2	82583.6	5148.5 ug/L	5148.5 ppb	08:07:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	880337.1	97.672	%	0.1502				0.15%
Sc Radial	5599.7	98.6	%	0.31				0.32%
Y 371.029	720444.1	95.830	%	0.2373				0.25%
Y RADIAL	5952.6	97.61	%	0.244				0.25%
Ag 328.068†	112013.2	501.92	ug/L	2.569	501.92	ppb	2.569	0.51%
QC value within limits for Ag 328.068 Recovery = 100.38%								
Al 396.153Radial†	6957.3	4919.6	ug/L	19.42	4919.6	ppb	19.42	0.39%
QC value within limits for Al 396.153Radial Recovery = 98.39%								
As 188.979†	1316.5	502.33	ug/L	3.518	502.33	ppb	3.518	0.70%
QC value within limits for As 188.979 Recovery = 100.47%								
B 249.677†	25007.0	506.23	ug/L	2.407	506.23	ppb	2.407	0.48%
QC value within limits for B 249.677 Recovery = 101.25%								
Ba 233.527†	68016.9	492.53	ug/L	2.088	492.53	ppb	2.088	0.42%
QC value within limits for Ba 233.527 Recovery = 98.51%								
Be 313.107†	1370006.9	484.76	ug/L	0.283	484.76	ppb	0.283	0.06%
QC value within limits for Be 313.107 Recovery = 96.95%								

Ca 317.933Radial†	3356.6	5002.2 ug/L	33.58	5002.2 ppb	33.58	0.67%
QC value within limits for Ca 317.933Radial Recovery = 100.04%						
Cd 226.502†	48290.1	492.54 ug/L	2.591	492.54 ppb	2.591	0.53%
QC value within limits for Cd 226.502 Recovery = 98.51%						
Co 228.616†	26748.8	491.10 ug/L	2.135	491.10 ppb	2.135	0.43%
QC value within limits for Co 228.616 Recovery = 98.22%						
Cr 267.716†	48040.3	494.09 ug/L	2.091	494.09 ppb	2.091	0.42%
QC value within limits for Cr 267.716 Recovery = 98.82%						
Cu 324.752†	173131.0	485.51 ug/L	3.261	485.51 ppb	3.261	0.67%
QC value within limits for Cu 324.752 Recovery = 97.10%						
Fe 238.204 Radial†	550.8	5094.0 ug/L	58.48	5094.0 ppb	58.48	1.15%
QC value within limits for Fe 238.204 Radial Recovery = 101.88%						
K 766.490 Radial†	28955.9	5055.9 ug/L	23.76	5055.9 ppb	23.76	0.47%
QC value within limits for K 766.490 Radial Recovery = 101.12%						
Mg 279.077 IEC†	146.3	5201.6 ug/L	24.20	5201.6 ppb	24.20	0.47%
QC value within limits for Mg 279.077 IEC Recovery = 104.03%						
Mn 257.610†	468216.3	487.02 ug/L	1.159	487.02 ppb	1.159	0.24%
QC value within limits for Mn 257.610 Recovery = 97.40%						
Mo 202.031†	7970.3	496.52 ug/L	1.078	496.52 ppb	1.078	0.22%
QC value within limits for Mo 202.031 Recovery = 99.30%						
Na 589.592 Radial†	30249.1	9731.4 ug/L	31.88	9731.4 ppb	31.88	0.33%
QC value within limits for Na 589.592 Radial Recovery = 97.31%						
Ni 231.604†	21993.2	494.66 ug/L	2.209	494.66 ppb	2.209	0.45%
QC value within limits for Ni 231.604 Recovery = 98.93%						
P 214.914†	4382.6	2337.0 ug/L	16.41	2337.0 ppb	16.41	0.70%
QC value within limits for P 214.914 Recovery = 93.48%						
Pb 220.353†	4480.5	491.51 ug/L	1.850	491.51 ppb	1.850	0.38%
QC value within limits for Pb 220.353 Recovery = 98.30%						
S 181.975 Axial†	733.1	970.83 ug/L	2.176	970.83 ppb	2.176	0.22%
QC value within limits for S 181.975 Axial Recovery = 97.08%						
Sb 206.836†	1624.4	508.30 ug/L	0.875	508.30 ppb	0.875	0.17%
QC value within limits for Sb 206.836 Recovery = 101.66%						
Se 196.026†	860.5	501.14 ug/L	7.786	501.14 ppb	7.786	1.55%
QC value within limits for Se 196.026 Recovery = 100.23%						
Si 251.611†	83460.6	2425.2 ug/L	11.26	2425.2 ppb	11.26	0.46%
QC value within limits for Si 251.611 Recovery = 97.01%						
Sn 189.927†	3139.8	499.36 ug/L	2.035	499.36 ppb	2.035	0.41%
QC value within limits for Sn 189.927 Recovery = 99.87%						
Sr 421.552†	80754.3	498.02 ug/L	0.937	498.02 ppb	0.937	0.19%
QC value within limits for Sr 421.552 Recovery = 99.60%						
Ti 334.940†	316642.1	496.40 ug/L	2.489	496.40 ppb	2.489	0.50%
QC value within limits for Ti 334.940 Recovery = 99.28%						
Tl 190.801†	1806.0	491.83 ug/L	4.200	491.83 ppb	4.200	0.85%
QC value within limits for Tl 190.801 Recovery = 98.37%						
U 409.014†	17785.3	490.80 ug/L	7.427	490.80 ppb	7.427	1.51%
QC value within limits for U 409.014 Recovery = 98.16%						
V 292.402†	75587.1	498.06 ug/L	2.377	498.06 ppb	2.377	0.48%
QC value within limits for V 292.402 Recovery = 99.61%						
Zn 213.857†	57988.3	487.21 ug/L	2.053	487.21 ppb	2.053	0.42%
QC value within limits for Zn 213.857 Recovery = 97.44%						
SiO2†	82941.4	5170.8 ug/L	41.14	5170.8 ppb	41.14	0.80%
QC value within limits for SiO2 Recovery = 96.70%						

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 08:09:37
Data Type: Reprocessed on 12/7/2009 08:21:42

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895332.6	895332.6	99.336	%			08:12:47
1	Sc Radial	5740.2	5740.2	101	%			08:11:30
1	Y 371.029	749109.2	749109.2	99.643	%			08:12:47
1	Y RADIAL	6159.5	6159.5	101.0	%			08:11:30
1	Ag 328.068†	346.8	34.2	0.1601	ug/L	0.1601	ppb	08:12:47
1	Al 396.153Radial†	-31.1	-10.4	-7.3558	ug/L	-7.3558	ppb	08:11:30
1	As 188.979†	-11.9	12.4	4.6758	ug/L	4.6758	ppb	08:13:07
1	B 249.677†	357.7	979.2	19.894	ug/L	19.894	ppb	08:13:07
1	Ba 233.527†	0.1	17.1	0.1255	ug/L	0.1255	ppb	08:13:07
1	Be 313.107†	-4921.6	317.5	0.1123	ug/L	0.1123	ppb	08:12:47
1	Ca 317.933Radial†	21.4	4.2	6.2978	ug/L	6.2978	ppb	08:11:50
1	Cd 226.502†	-202.2	2.5	0.0229	ug/L	0.0229	ppb	08:13:07
1	Co 228.616†	-71.3	2.3	0.0417	ug/L	0.0417	ppb	08:13:07
1	Cr 267.716†	93.8	13.5	0.1396	ug/L	0.1396	ppb	08:13:07
1	Cu 324.752†	6797.9	-27.5	-0.0758	ug/L	-0.0758	ppb	08:12:47
1	Fe 238.204 Radial†	8.8	2.7	24.952	ug/L	24.952	ppb	08:11:50
1	K 766.490 Radial†	2703.4	460.6	80.569	ug/L	80.569	ppb	08:11:30
1	Mg 279.077 IEC†	1.6	1.3	45.520	ug/L	45.520	ppb	08:11:50
1	Mn 257.610†	451.5	-39.3	-0.0392	ug/L	-0.0392	ppb	08:13:07
1	Mo 202.031†	22.9	-3.7	-0.2268	ug/L	-0.2268	ppb	08:13:07
1	Na 589.592 Radial†	-1158.4	-64.6	-20.777	ug/L	-20.777	ppb	08:11:30
1	Ni 231.604†	89.5	-0.7	-0.0160	ug/L	-0.0160	ppb	08:13:07
1	P 214.914†	223.7	0.3	0.1908	ug/L	0.1908	ppb	08:13:07
1	Pb 220.353†	-53.5	18.9	2.0667	ug/L	2.0667	ppb	08:13:07
1	S 181.975 Axial†	35.3	-10.9	-14.501	ug/L	-14.501	ppb	08:13:07
1	Sb 206.836†	48.8	21.5	6.6573	ug/L	6.6573	ppb	08:13:07
1	Se 196.026†	-19.4	2.8	1.6391	ug/L	1.6391	ppb	08:13:07
1	Si 251.611†	535.1	-4.7	-0.1649	ug/L	-0.1649	ppb	08:13:07
1	Sn 189.927†	17.0	11.6	1.8516	ug/L	1.8516	ppb	08:13:07
1	Sr 421.552†	-9.2	-16.5	-0.1017	ug/L	-0.1017	ppb	08:11:30
1	Ti 334.940†	-1140.4	53.1	0.0827	ug/L	0.0827	ppb	08:12:47
1	Tl 190.801†	-38.2	-0.5	-0.1294	ug/L	-0.1294	ppb	08:13:07
1	U 409.014†	-2463.7	70.1	1.9368	ug/L	1.9368	ppb	08:12:47
1	V 292.402†	-1355.6	57.1	0.3691	ug/L	0.3691	ppb	08:12:47
1	Zn 213.857†	695.7	49.6	0.4170	ug/L	0.4170	ppb	08:13:07
1	SiO2†	510.8	2.7	0.1052	ug/L	0.1052	ppb	08:14:03
2	Sc 361.383	892104.4	892104.4	98.978	%			08:13:12
2	Sc Radial	5575.6	5575.6	98.1	%			08:11:55
2	Y 371.029	745836.4	745836.4	99.207	%			08:13:12
2	Y RADIAL	6003.0	6003.0	98.43	%			08:11:55
2	Ag 328.068†	328.1	16.5	0.0857	ug/L	0.0857	ppb	08:13:12
2	Al 396.153Radial†	-19.5	0.5	0.3946	ug/L	0.3946	ppb	08:11:55
2	As 188.979†	-17.7	6.5	2.4623	ug/L	2.4623	ppb	08:13:32
2	B 249.677†	363.4	986.3	20.037	ug/L	20.037	ppb	08:13:32
2	Ba 233.527†	-12.9	3.9	0.0308	ug/L	0.0308	ppb	08:13:32
2	Be 313.107†	-4887.0	334.6	0.1182	ug/L	0.1182	ppb	08:13:12
2	Ca 317.933Radial†	18.8	2.3	3.3557	ug/L	3.3557	ppb	08:12:15
2	Cd 226.502†	-195.7	8.4	0.0818	ug/L	0.0818	ppb	08:13:32
2	Co 228.616†	-76.6	-3.3	-0.0617	ug/L	-0.0617	ppb	08:13:32
2	Cr 267.716†	124.4	44.8	0.4607	ug/L	0.4607	ppb	08:13:32
2	Cu 324.752†	6838.4	38.1	0.1089	ug/L	0.1089	ppb	08:13:12
2	Fe 238.204 Radial†	10.2	4.3	39.933	ug/L	39.933	ppb	08:12:15
2	K 766.490 Radial†	2629.7	464.5	81.254	ug/L	81.254	ppb	08:11:55
2	Mg 279.077 IEC†	2.7	2.5	89.734	ug/L	89.734	ppb	08:12:15
2	Mn 257.610†	495.3	6.6	0.0092	ug/L	0.0092	ppb	08:13:32
2	Mo 202.031†	22.2	-4.3	-0.2644	ug/L	-0.2644	ppb	08:13:32
2	Na 589.592 Radial†	-1181.7	-122.2	-39.299	ug/L	-39.299	ppb	08:11:55
2	Ni 231.604†	115.6	26.0	0.5844	ug/L	0.5844	ppb	08:13:32

2	P 214.914†	214.2	-8.4	-4.6803	ug/L	-4.6803 ppb	08:13:32
2	Pb 220.353†	-34.5	37.9	4.1415	ug/L	4.1415 ppb	08:13:32
2	S 181.975 Axial†	46.7	0.7	0.9322	ug/L	0.9322 ppb	08:13:32
2	Sb 206.836†	58.7	31.7	9.7710	ug/L	9.7710 ppb	08:13:32
2	Se 196.026†	-15.9	6.2	3.6093	ug/L	3.6093 ppb	08:13:32
2	Si 251.611†	551.5	13.9	0.3804	ug/L	0.3804 ppb	08:13:32
2	Sn 189.927†	10.1	4.8	0.7629	ug/L	0.7629 ppb	08:13:32
2	Sr 421.552†	-31.1	-39.1	-0.2411	ug/L	-0.2411 ppb	08:11:55
2	Ti 334.940†	-1168.4	20.6	0.0312	ug/L	0.0312 ppb	08:13:12
2	Tl 190.801†	-39.2	-1.7	-0.4521	ug/L	-0.4521 ppb	08:13:32
2	U 409.014†	-2435.9	89.2	2.4641	ug/L	2.4641 ppb	08:13:12
2	V 292.402†	-1343.8	64.1	0.4137	ug/L	0.4137 ppb	08:13:12
2	Zn 213.857†	701.0	57.6	0.4773	ug/L	0.4773 ppb	08:13:32
2	SiO2†	561.4	55.7	3.4318	ug/L	3.4318 ppb	08:14:08
3	Sc 361.383	897488.2	897488.2	99.575	%		08:13:37
3	Sc Radial	5698.7	5698.7	100	%		08:12:20
3	Y 371.029	749010.9	749010.9	99.630	%		08:13:37
3	Y RADIAL	6098.4	6098.4	100.00	%		08:12:20
3	Ag 328.068†	378.7	65.3	0.3052	ug/L	0.3052 ppb	08:13:37
3	Al 396.153Radial†	-22.4	-1.9	-1.3380	ug/L	-1.3380 ppb	08:12:20
3	As 188.979†	-18.7	5.6	2.1329	ug/L	2.1329 ppb	08:13:57
3	B 249.677†	280.3	900.6	18.295	ug/L	18.295 ppb	08:13:57
3	Ba 233.527†	11.7	28.8	0.2100	ug/L	0.2100 ppb	08:13:57
3	Be 313.107†	-4925.5	325.5	0.1149	ug/L	0.1149 ppb	08:13:37
3	Ca 317.933Radial†	21.3	4.3	6.3725	ug/L	6.3725 ppb	08:12:40
3	Cd 226.502†	-196.1	9.1	0.0889	ug/L	0.0889 ppb	08:13:57
3	Co 228.616†	-76.9	-3.1	-0.0586	ug/L	-0.0586 ppb	08:13:57
3	Cr 267.716†	94.3	13.9	0.1439	ug/L	0.1439 ppb	08:13:57
3	Cu 324.752†	6762.8	-79.2	-0.2198	ug/L	-0.2198 ppb	08:13:37
3	Fe 238.204 Radial†	10.3	4.3	39.525	ug/L	39.525 ppb	08:12:40
3	K 766.490 Radial†	2673.4	450.2	78.738	ug/L	78.738 ppb	08:12:20
3	Mg 279.077 IEC†	1.6	1.3	46.784	ug/L	46.784 ppb	08:12:40
3	Mn 257.610†	451.9	-40.0	-0.0385	ug/L	-0.0385 ppb	08:13:57
3	Mo 202.031†	21.6	-5.1	-0.3124	ug/L	-0.3124 ppb	08:13:57
3	Na 589.592 Radial†	-1122.7	-37.3	-12.006	ug/L	-12.006 ppb	08:12:20
3	Ni 231.604†	89.1	-1.3	-0.0298	ug/L	-0.0298 ppb	08:13:57
3	P 214.914†	219.8	-4.2	-2.2874	ug/L	-2.2874 ppb	08:13:57
3	Pb 220.353†	-61.1	11.4	1.2442	ug/L	1.2442 ppb	08:13:57
3	S 181.975 Axial†	42.7	-3.6	-4.8125	ug/L	-4.8125 ppb	08:13:57
3	Sb 206.836†	51.3	24.0	7.3888	ug/L	7.3888 ppb	08:13:57
3	Se 196.026†	-25.5	-3.3	-1.7224	ug/L	-1.7224 ppb	08:13:57
3	Si 251.611†	516.9	-24.2	-0.7291	ug/L	-0.7291 ppb	08:13:57
3	Sn 189.927†	8.0	2.6	0.4075	ug/L	0.4075 ppb	08:13:57
3	Sr 421.552†	-25.9	-33.3	-0.2052	ug/L	-0.2052 ppb	08:12:20
3	Ti 334.940†	-1209.2	-13.2	-0.0202	ug/L	-0.0202 ppb	08:13:37
3	Tl 190.801†	-35.2	2.6	0.7044	ug/L	0.7044 ppb	08:13:57
3	U 409.014†	-2561.0	-21.6	-0.6038	ug/L	-0.6038 ppb	08:13:37
3	V 292.402†	-1370.1	45.9	0.2877	ug/L	0.2877 ppb	08:13:37
3	Zn 213.857†	708.5	60.8	0.5109	ug/L	0.5109 ppb	08:13:57
3	SiO2†	524.5	15.2	0.9030	ug/L	0.9030 ppb	08:14:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894975.1	99.296	%	0.3006				0.30%
Sc Radial	5671.5	99.8	%	1.51				1.51%
Y 371.029	747985.5	99.493	%	0.2476				0.25%
Y RADIAL	6087.0	99.81	%	1.294				1.30%
Ag 328.068†	38.7	0.1837	ug/L	0.11162	0.1837	ppb	0.11162	60.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.9	-2.7664	ug/L	4.06788	-2.7664	ppb	4.06788	147.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.2	3.0904	ug/L	1.38290	3.0904	ppb	1.38290	44.75%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	955.4	19.409	ug/L	0.9670	19.409	ppb	0.9670	4.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	16.6	0.1221	ug/L	0.08966	0.1221	ppb	0.08966	73.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	325.9	0.1151	ug/L	0.00297	0.1151	ppb	0.00297	2.58%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          3.6      5.3420 ug/L       1.72056      5.3420 ppb        1.72056  32.21%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                6.7      0.0646 ug/L       0.03624      0.0646 ppb        0.03624  56.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -1.4     -0.0262 ug/L       0.05886     -0.0262 ppb        0.05886 224.71%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               24.1      0.2481 ug/L       0.18420      0.2481 ppb        0.18420  74.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -22.8     -0.0622 ug/L       0.16481     -0.0622 ppb        0.16481 264.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.8      34.804 ug/L        8.5340      34.804 ppb         8.5340  24.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        458.4      80.187 ug/L        1.3012      80.187 ppb         1.3012   1.62%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.7      60.679 ug/L       25.1701      60.679 ppb        25.1701  41.48%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -24.2     -0.0228 ug/L       0.02772     -0.0228 ppb        0.02772 121.40%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -4.3     -0.2679 ug/L       0.04290     -0.2679 ppb        0.04290  16.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -74.7     -24.027 ug/L       13.9336     -24.027 ppb        13.9336  57.99%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                8.0      0.1795 ug/L       0.35072      0.1795 ppb        0.35072 195.34%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1     -2.2590 ug/L       2.43566     -2.2590 ppb        2.43566 107.82%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               22.8      2.4841 ug/L       1.49308      2.4841 ppb        1.49308  60.10%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.6     -6.1272 ug/L       7.80016     -6.1272 ppb        7.80016 127.30%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               25.7      7.9390 ug/L       1.62814      7.9390 ppb        1.62814  20.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                1.9      1.1753 ug/L       2.69598      1.1753 ppb        2.69598 229.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -5.0     -0.1712 ug/L       0.55478     -0.1712 ppb        0.55478 324.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                6.3      1.0074 ug/L       0.75242      1.0074 ppb        0.75242  74.69%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -29.6     -0.1827 ug/L       0.07237     -0.1827 ppb        0.07237  39.61%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               20.2      0.0313 ug/L       0.05145      0.0313 ppb        0.05145 164.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.2      0.0410 ug/L       0.59677      0.0410 ppb        0.59677 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                45.9      1.2657 ug/L       1.64038      1.2657 ppb        1.64038 129.60%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                55.7      0.3568 ug/L       0.06386      0.3568 ppb        0.06386  17.90%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               56.0      0.4684 ug/L       0.04757      0.4684 ppb        0.04757  10.16%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     24.5      1.4800 ug/L       1.73673      1.4800 ppb        1.73673 117.35%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 09:22:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5562.2	5562.2	97.9	%			09:24:08
1	Y RADIAL	5917.4	5917.4	97.03	%			09:24:08
1	Al 396.153Radial†	6839.5	7006.9	4955.1	ug/L	4955.1	ppb	09:24:08
1	Ca 317.933Radial†	3356.7	3411.9	5084.6	ug/L	5084.6	ppb	09:24:28
1	Fe 238.204 Radial†	548.3	554.0	5123.4	ug/L	5123.4	ppb	09:24:28
1	K 766.490 Radial†	30447.1	28886.1	5043.8	ug/L	5043.8	ppb	09:24:08
1	Mg 279.077 IEC†	144.1	147.0	5223.3	ug/L	5223.3	ppb	09:24:28
1	Na 589.592 Radial†	27880.4	29561.5	9510.2	ug/L	9510.2	ppb	09:24:08
1	Sr 421.552†	78570.9	80251.7	494.92	ug/L	494.92	ppb	09:24:08
1	Sc 361.383	901505.7	901505.7	100.02	%			09:25:25
1	Y 371.029	737449.9	737449.9	98.092	%			09:25:25
1	Ag 328.068†	110513.8	110176.1	493.71	ug/L	493.71	ppb	09:25:30
1	As 188.979†	1223.1	1247.2	476.08	ug/L	476.08	ppb	09:25:50
1	B 249.677†	22754.8	23369.2	472.96	ug/L	472.96	ppb	09:25:30
1	Ba 233.527†	66880.4	66883.6	484.32	ug/L	484.32	ppb	09:25:30
1	Be 313.107†	1358417.6	1363409.5	482.42	ug/L	482.42	ppb	09:25:25
1	Cd 226.502†	47080.2	47276.6	482.19	ug/L	482.19	ppb	09:25:30
1	Co 228.616†	26201.3	26269.9	482.30	ug/L	482.30	ppb	09:25:30
1	Cr 267.716†	47169.9	47079.3	484.21	ug/L	484.21	ppb	09:25:30
1	Cu 324.752†	176766.9	169859.6	476.34	ug/L	476.34	ppb	09:25:30
1	Mn 257.610†	468412.6	467822.2	486.61	ug/L	486.61	ppb	09:25:25
1	Mo 202.031†	7867.3	7838.9	488.35	ug/L	488.35	ppb	09:25:50
1	Ni 231.604†	21607.9	21512.6	483.85	ug/L	483.85	ppb	09:25:30
1	P 214.914†	4497.2	4271.3	2277.1	ug/L	2277.1	ppb	09:25:50
1	Pb 220.353†	4302.5	4374.4	479.91	ug/L	479.91	ppb	09:25:50
1	S 181.975 Axial†	771.8	725.2	960.30	ug/L	960.30	ppb	09:25:50
1	Sb 206.836†	1578.4	1550.5	485.34	ug/L	485.34	ppb	09:25:50
1	Se 196.026†	822.5	844.6	492.30	ug/L	492.30	ppb	09:25:50
1	Si 251.611†	82692.6	82132.2	2386.6	ug/L	2386.6	ppb	09:25:30
1	Sn 189.927†	3069.6	3063.6	487.25	ug/L	487.25	ppb	09:25:50
1	Ti 334.940†	310816.1	311953.1	489.05	ug/L	489.05	ppb	09:25:30
1	Tl 190.801†	1730.0	1767.6	481.45	ug/L	481.45	ppb	09:25:50
1	U 409.014†	15314.0	17861.1	492.91	ug/L	492.91	ppb	09:25:30
1	V 292.402†	72892.9	74299.7	489.59	ug/L	489.59	ppb	09:25:30
1	Zn 213.857†	57481.3	56818.8	477.37	ug/L	477.37	ppb	09:25:30
1	SiO2†	83393.4	82864.7	5166.4	ug/L	5166.4	ppb	09:26:58
2	Sc Radial	5666.0	5666.0	99.7	%			09:24:33
2	Y RADIAL	6022.1	6022.1	98.75	%			09:24:33
2	Al 396.153Radial†	7034.4	7074.4	5003.1	ug/L	5003.1	ppb	09:24:33
2	Ca 317.933Radial†	3383.6	3376.0	5031.1	ug/L	5031.1	ppb	09:24:53
2	Fe 238.204 Radial†	555.9	551.4	5099.0	ug/L	5099.0	ppb	09:24:53
2	K 766.490 Radial†	30816.7	28687.0	5009.0	ug/L	5009.0	ppb	09:24:33
2	Mg 279.077 IEC†	147.2	147.3	5235.9	ug/L	5235.9	ppb	09:24:53
2	Na 589.592 Radial†	28235.3	29395.7	9456.9	ug/L	9456.9	ppb	09:24:33
2	Sr 421.552†	79975.0	80189.6	494.54	ug/L	494.54	ppb	09:24:33
2	Sc 361.383	908997.9	908997.9	100.85	%			09:25:56
2	Y 371.029	743172.5	743172.5	98.853	%			09:25:56
2	Ag 328.068†	110997.2	109744.7	491.78	ug/L	491.78	ppb	09:26:01
2	As 188.979†	1237.1	1251.1	477.53	ug/L	477.53	ppb	09:26:21
2	B 249.677†	22875.6	23301.5	471.60	ug/L	471.60	ppb	09:26:01
2	Ba 233.527†	67356.1	66804.2	483.75	ug/L	483.75	ppb	09:26:01
2	Be 313.107†	1365855.9	1359590.9	481.07	ug/L	481.07	ppb	09:25:56
2	Cd 226.502†	47331.6	47137.9	480.77	ug/L	480.77	ppb	09:26:01
2	Co 228.616†	26307.8	26159.7	480.28	ug/L	480.28	ppb	09:26:01
2	Cr 267.716†	47520.8	47038.5	483.79	ug/L	483.79	ppb	09:26:01
2	Cu 324.752†	178169.0	169793.2	476.15	ug/L	476.15	ppb	09:26:01
2	Mn 257.610†	470652.7	466183.4	484.90	ug/L	484.90	ppb	09:25:56
2	Mo 202.031†	7935.1	7841.3	488.49	ug/L	488.49	ppb	09:26:21
2	Ni 231.604†	21745.6	21471.0	482.91	ug/L	482.91	ppb	09:26:01

2	P 214.914†	4517.6	4254.5	2267.8 ug/L	2267.8 ppb	09:26:21
2	Pb 220.353†	4335.9	4372.1	479.66 ug/L	479.66 ppb	09:26:21
2	S 181.975 Axial†	765.1	712.2	943.04 ug/L	943.04 ppb	09:26:21
2	Sb 206.836†	1610.3	1569.1	491.04 ug/L	491.04 ppb	09:26:21
2	Se 196.026†	830.2	845.4	492.72 ug/L	492.72 ppb	09:26:21
2	Si 251.611†	83135.4	81889.8	2379.5 ug/L	2379.5 ppb	09:26:01
2	Sn 189.927†	3075.7	3044.3	484.19 ug/L	484.19 ppb	09:26:21
2	Ti 334.940†	312934.5	311492.4	488.33 ug/L	488.33 ppb	09:26:01
2	Tl 190.801†	1751.3	1774.5	483.32 ug/L	483.32 ppb	09:26:21
2	U 409.014†	15306.2	17727.1	489.21 ug/L	489.21 ppb	09:26:01
2	V 292.402†	73313.7	74116.2	488.40 ug/L	488.40 ppb	09:26:01
2	Zn 213.857†	57805.9	56667.0	476.09 ug/L	476.09 ppb	09:26:01
2	SiO2†	83526.8	82309.7	5131.7 ug/L	5131.7 ppb	09:27:03
3	Sc Radial	5687.9	5687.9	100 %		09:24:58
3	Y RADIAL	6077.5	6077.5	99.65 %		09:24:58
3	Al 396.153Radial†	7008.7	7021.5	4965.4 ug/L	4965.4 ppb	09:24:58
3	Ca 317.933Radial†	3371.6	3351.0	4993.8 ug/L	4993.8 ppb	09:25:18
3	Fe 238.204 Radial†	547.0	540.4	4997.7 ug/L	4997.7 ppb	09:25:18
3	K 766.490 Radial†	31202.6	28953.6	5055.6 ug/L	5055.6 ppb	09:24:58
3	Mg 279.077 IEC†	145.5	145.1	5157.9 ug/L	5157.9 ppb	09:25:18
3	Na 589.592 Radial†	28548.1	29599.2	9522.4 ug/L	9522.4 ppb	09:24:58
3	Sr 421.552†	80619.4	80524.8	496.61 ug/L	496.61 ppb	09:24:58
3	Sc 361.383	900386.5	900386.5	99.896 %		09:26:27
3	Y 371.029	735857.7	735857.7	97.880 %		09:26:27
3	Ag 328.068†	110775.0	110574.9	495.45 ug/L	495.45 ppb	09:26:32
3	As 188.979†	1233.0	1258.6	480.38 ug/L	480.38 ppb	09:26:52
3	B 249.677†	22829.5	23472.3	475.07 ug/L	475.07 ppb	09:26:32
3	Ba 233.527†	66992.4	67078.9	485.73 ug/L	485.73 ppb	09:26:32
3	Be 313.107†	1356479.3	1363157.4	482.33 ug/L	482.33 ppb	09:26:27
3	Cd 226.502†	46996.2	47251.0	481.94 ug/L	481.94 ppb	09:26:32
3	Co 228.616†	26200.2	26301.4	482.89 ug/L	482.89 ppb	09:26:32
3	Cr 267.716†	47190.9	47159.0	485.02 ug/L	485.02 ppb	09:26:32
3	Cu 324.752†	177740.2	171053.6	479.68 ug/L	479.68 ppb	09:26:32
3	Mn 257.610†	468064.1	468055.5	486.84 ug/L	486.84 ppb	09:26:27
3	Mo 202.031†	7916.9	7898.4	492.04 ug/L	492.04 ppb	09:26:52
3	Ni 231.604†	21532.2	21463.7	482.75 ug/L	482.75 ppb	09:26:32
3	P 214.914†	4522.9	4302.7	2293.9 ug/L	2293.9 ppb	09:26:52
3	Pb 220.353†	4340.8	4418.0	484.70 ug/L	484.70 ppb	09:26:52
3	S 181.975 Axial†	768.2	722.5	956.73 ug/L	956.73 ppb	09:26:52
3	Sb 206.836†	1591.1	1565.2	489.97 ug/L	489.97 ppb	09:26:52
3	Se 196.026†	835.3	858.5	499.73 ug/L	499.73 ppb	09:26:52
3	Si 251.611†	82713.5	82255.9	2390.1 ug/L	2390.1 ppb	09:26:32
3	Sn 189.927†	3084.7	3082.5	490.25 ug/L	490.25 ppb	09:26:52
3	Ti 334.940†	311243.5	312767.3	490.33 ug/L	490.33 ppb	09:26:32
3	Tl 190.801†	1754.8	1794.5	488.76 ug/L	488.76 ppb	09:26:52
3	U 409.014†	15216.7	17782.8	490.76 ug/L	490.76 ppb	09:26:32
3	V 292.402†	72851.3	74348.6	489.97 ug/L	489.97 ppb	09:26:32
3	Zn 213.857†	57478.8	56887.7	477.97 ug/L	477.97 ppb	09:26:32
3	SiO2†	82893.4	82467.8	5141.4 ug/L	5141.4 ppb	09:27:08

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903630.0	100.26	%	0.519				0.52%
Sc Radial	5638.7	99.2	%	1.18				1.19%
Y 371.029	738826.7	98.275	%	0.5117				0.52%
Y RADIAL	6005.7	98.48	%	1.333				1.35%
Ag 328.068†	110165.2	493.65	ug/L	1.836	493.65	ppb	1.836	0.37%
QC value within limits for Ag 328.068 Recovery = 98.73%								
Al 396.153Radial†	7034.3	4974.5	ug/L	25.25	4974.5	ppb	25.25	0.51%
QC value within limits for Al 396.153Radial Recovery = 99.49%								
As 188.979†	1252.3	478.00	ug/L	2.188	478.00	ppb	2.188	0.46%
QC value within limits for As 188.979 Recovery = 95.60%								
B 249.677†	23381.0	473.21	ug/L	1.752	473.21	ppb	1.752	0.37%
QC value within limits for B 249.677 Recovery = 94.64%								
Ba 233.527†	66922.2	484.60	ug/L	1.020	484.60	ppb	1.020	0.21%
QC value within limits for Ba 233.527 Recovery = 96.92%								
Be 313.107†	1362052.6	481.94	ug/L	0.756	481.94	ppb	0.756	0.16%
QC value within limits for Be 313.107 Recovery = 96.39%								
Ca 317.933Radial†	3379.6	5036.5	ug/L	45.62	5036.5	ppb	45.62	0.91%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†            47221.8      481.63 ug/L        0.755      481.63 ppb        0.755   0.16%
   QC value within limits for Cd 226.502  Recovery = 96.33%
Co 228.616†            26243.7      481.82 ug/L        1.368      481.82 ppb        1.368   0.28%
   QC value within limits for Co 228.616  Recovery = 96.36%
Cr 267.716†            47092.3      484.34 ug/L        0.629      484.34 ppb        0.629   0.13%
   QC value within limits for Cr 267.716  Recovery = 96.87%
Cu 324.752†           170235.5      477.39 ug/L        1.985      477.39 ppb        1.985   0.42%
   QC value within limits for Cu 324.752  Recovery = 95.48%
Fe 238.204 Radial†       548.6      5073.4 ug/L       66.65      5073.4 ppb       66.65   1.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.47%
K 766.490 Radial†      28842.2      5036.2 ug/L       24.21      5036.2 ppb       24.21   0.48%
   QC value within limits for K 766.490 Radial  Recovery = 100.72%
Mg 279.077 IEC†          146.5      5205.7 ug/L       41.89      5205.7 ppb       41.89   0.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.11%
Mn 257.610†           467353.7      486.12 ug/L        1.058      486.12 ppb        1.058   0.22%
   QC value within limits for Mn 257.610  Recovery = 97.22%
Mo 202.031†             7859.5      489.63 ug/L        2.091      489.63 ppb        2.091   0.43%
   QC value within limits for Mo 202.031  Recovery = 97.93%
Na 589.592 Radial†     29518.8      9496.5 ug/L       34.83      9496.5 ppb       34.83   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 94.96%
Ni 231.604†            21482.4      483.17 ug/L        0.593      483.17 ppb        0.593   0.12%
   QC value within limits for Ni 231.604  Recovery = 96.63%
P 214.914†              4276.2      2279.6 ug/L       13.22      2279.6 ppb       13.22   0.58%
   QC value within limits for P 214.914  Recovery = 91.18%
Pb 220.353†             4388.2      481.42 ug/L        2.839      481.42 ppb        2.839   0.59%
   QC value within limits for Pb 220.353  Recovery = 96.28%
S 181.975 Axial†         720.0      953.36 ug/L        9.110      953.36 ppb        9.110   0.96%
   QC value within limits for S 181.975 Axial  Recovery = 95.34%
Sb 206.836†             1561.6      488.78 ug/L        3.033      488.78 ppb        3.033   0.62%
   QC value within limits for Sb 206.836  Recovery = 97.76%
Se 196.026†              849.5      494.92 ug/L        4.171      494.92 ppb        4.171   0.84%
   QC value within limits for Se 196.026  Recovery = 98.98%
Si 251.611†            82092.6      2385.4 ug/L         5.39      2385.4 ppb         5.39   0.23%
   QC value within limits for Si 251.611  Recovery = 95.42%
Sn 189.927†             3063.5      487.23 ug/L        3.028      487.23 ppb        3.028   0.62%
   QC value within limits for Sn 189.927  Recovery = 97.45%
Sr 421.552†            80322.0      495.36 ug/L        1.100      495.36 ppb        1.100   0.22%
   QC value within limits for Sr 421.552  Recovery = 99.07%
Ti 334.940†           312070.9      489.24 ug/L        1.011      489.24 ppb        1.011   0.21%
   QC value within limits for Ti 334.940  Recovery = 97.85%
Tl 190.801†             1778.9      484.51 ug/L        3.795      484.51 ppb        3.795   0.78%
   QC value within limits for Tl 190.801  Recovery = 96.90%
U 409.014†             17790.4      490.96 ug/L        1.861      490.96 ppb        1.861   0.38%
   QC value within limits for U 409.014  Recovery = 98.19%
V 292.402†             74254.9      489.32 ug/L        0.822      489.32 ppb        0.822   0.17%
   QC value within limits for V 292.402  Recovery = 97.86%
Zn 213.857†            56791.2      477.15 ug/L        0.961      477.15 ppb        0.961   0.20%
   QC value within limits for Zn 213.857  Recovery = 95.43%
SiO2†                  82547.4      5146.5 ug/L       17.92      5146.5 ppb       17.92   0.35%
   QC value within limits for SiO2  Recovery = 96.24%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 09:29:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5706.2	5706.2	100	%			09:31:10
1	Y RADIAL	6145.9	6145.9	100.8	%			09:31:10
1	Al 396.153Radial†	9.5	29.9	21.241	ug/L	21.241	ppb	09:31:10
1	Ca 317.933Radial†	22.4	5.3	7.9582	ug/L	7.9582	ppb	09:31:30
1	Fe 238.204 Radial†	7.0	1.0	9.0894	ug/L	9.0894	ppb	09:31:30
1	K 766.490 Radial†	2521.2	295.2	51.638	ug/L	51.638	ppb	09:31:10
1	Mg 279.077 IEC†	0.5	0.2	7.1836	ug/L	7.1836	ppb	09:31:30
1	Na 589.592 Radial†	-1123.5	-36.7	-11.810	ug/L	-11.810	ppb	09:31:10
1	Sr 421.552†	7.1	-0.4	-0.0022	ug/L	-0.0022	ppb	09:31:10
1	Sc 361.383	895637.4	895637.4	99.370	%			09:32:27
1	Y 371.029	744820.0	744820.0	99.072	%			09:32:27
1	Ag 328.068†	385.5	73.0	0.3276	ug/L	0.3276	ppb	09:32:27
1	As 188.979†	-23.3	0.9	0.3369	ug/L	0.3369	ppb	09:32:47
1	B 249.677†	-283.2	334.2	6.7882	ug/L	6.7882	ppb	09:32:47
1	Ba 233.527†	-12.3	4.6	0.0349	ug/L	0.0349	ppb	09:32:47
1	Be 313.107†	-5144.1	95.3	0.0336	ug/L	0.0336	ppb	09:32:27
1	Cd 226.502†	-191.0	13.9	0.1407	ug/L	0.1407	ppb	09:32:47
1	Co 228.616†	-54.9	18.9	0.3455	ug/L	0.3455	ppb	09:32:47
1	Cr 267.716†	97.6	17.4	0.1789	ug/L	0.1789	ppb	09:32:47
1	Cu 324.752†	6879.7	52.5	0.1475	ug/L	0.1475	ppb	09:32:27
1	Mn 257.610†	519.1	28.6	0.0305	ug/L	0.0305	ppb	09:32:47
1	Mo 202.031†	23.4	-3.2	-0.2006	ug/L	-0.2006	ppb	09:32:47
1	Ni 231.604†	85.7	-4.6	-0.1037	ug/L	-0.1037	ppb	09:32:47
1	P 214.914†	218.1	-5.5	-3.0384	ug/L	-3.0384	ppb	09:32:47
1	Pb 220.353†	-55.6	16.8	1.8416	ug/L	1.8416	ppb	09:32:47
1	S 181.975 Axial†	45.7	-0.5	-0.6090	ug/L	-0.6090	ppb	09:32:47
1	Sb 206.836†	37.9	10.5	3.2270	ug/L	3.2270	ppb	09:32:47
1	Se 196.026†	-32.5	-10.4	-5.8192	ug/L	-5.8192	ppb	09:32:47
1	Si 251.611†	587.4	47.7	1.3823	ug/L	1.3823	ppb	09:32:47
1	Sn 189.927†	0.5	-5.0	-0.7892	ug/L	-0.7892	ppb	09:32:47
1	Ti 334.940†	-1212.1	-18.7	-0.0302	ug/L	-0.0302	ppb	09:32:27
1	Tl 190.801†	-29.2	8.6	2.3262	ug/L	2.3262	ppb	09:32:47
1	U 409.014†	-2432.2	102.6	2.8398	ug/L	2.8398	ppb	09:32:27
1	V 292.402†	-1333.7	79.7	0.5192	ug/L	0.5192	ppb	09:32:27
1	Zn 213.857†	714.1	67.9	0.5753	ug/L	0.5753	ppb	09:32:47
1	SiO2†	559.7	51.7	3.2115	ug/L	3.2115	ppb	09:33:43
2	Sc Radial	5711.3	5711.3	101	%			09:31:35
2	Y RADIAL	6133.5	6133.5	100.6	%			09:31:35
2	Al 396.153Radial†	-17.1	3.4	2.4442	ug/L	2.4442	ppb	09:31:35
2	Ca 317.933Radial†	16.8	-0.3	-0.3847	ug/L	-0.3847	ppb	09:31:55
2	Fe 238.204 Radial†	5.1	-0.9	-8.6951	ug/L	-8.6951	ppb	09:31:55
2	K 766.490 Radial†	2564.4	335.9	58.758	ug/L	58.758	ppb	09:31:35
2	Mg 279.077 IEC†	1.5	1.2	41.746	ug/L	41.746	ppb	09:31:55
2	Na 589.592 Radial†	-1141.6	-53.7	-17.284	ug/L	-17.284	ppb	09:31:35
2	Sr 421.552†	8.1	0.6	0.0037	ug/L	0.0037	ppb	09:31:35
2	Sc 361.383	880171.7	880171.7	97.654	%			09:32:52
2	Y 371.029	734269.5	734269.5	97.669	%			09:32:52
2	Ag 328.068†	297.0	-10.8	-0.0481	ug/L	-0.0481	ppb	09:32:52
2	As 188.979†	-13.6	10.5	3.9679	ug/L	3.9679	ppb	09:33:12
2	B 249.677†	-294.1	318.0	6.4627	ug/L	6.4627	ppb	09:33:12
2	Ba 233.527†	1.8	18.9	0.1376	ug/L	0.1376	ppb	09:33:12
2	Be 313.107†	-4985.9	166.4	0.0587	ug/L	0.0587	ppb	09:32:52
2	Cd 226.502†	-190.3	11.2	0.1149	ug/L	0.1149	ppb	09:33:12
2	Co 228.616†	-70.3	2.1	0.0371	ug/L	0.0371	ppb	09:33:12
2	Cr 267.716†	89.0	10.3	0.1073	ug/L	0.1073	ppb	09:33:12
2	Cu 324.752†	6692.6	-17.5	-0.0494	ug/L	-0.0494	ppb	09:32:52
2	Mn 257.610†	515.2	33.8	0.0335	ug/L	0.0335	ppb	09:33:12
2	Mo 202.031†	15.5	-10.9	-0.6794	ug/L	-0.6794	ppb	09:33:12
2	Ni 231.604†	94.2	5.6	0.1254	ug/L	0.1254	ppb	09:33:12

2	P 214.914†	204.1	-15.9	-8.6852 ug/L	-8.6852 ppb	09:33:12
2	Pb 220.353†	-56.6	14.8	1.6201 ug/L	1.6201 ppb	09:33:12
2	S 181.975 Axial†	46.8	1.5	1.9333 ug/L	1.9333 ppb	09:33:12
2	Sb 206.836†	45.2	18.7	5.7744 ug/L	5.7744 ppb	09:33:12
2	Se 196.026†	-28.6	-7.0	-3.9800 ug/L	-3.9800 ppb	09:33:12
2	Si 251.611†	558.2	28.3	0.8140 ug/L	0.8140 ppb	09:33:12
2	Sn 189.927†	12.9	7.8	1.2375 ug/L	1.2375 ppb	09:33:12
2	Ti 334.940†	-1186.8	-14.2	-0.0222 ug/L	-0.0222 ppb	09:32:52
2	Tl 190.801†	-36.4	0.7	0.1759 ug/L	0.1759 ppb	09:33:12
2	U 409.014†	-2494.2	-3.9	-0.1073 ug/L	-0.1073 ppb	09:32:52
2	V 292.402†	-1285.5	105.4	0.6777 ug/L	0.6777 ppb	09:32:52
2	Zn 213.857†	708.2	74.6	0.6309 ug/L	0.6309 ppb	09:33:12
2	SiO2†	598.9	101.8	6.3502 ug/L	6.3502 ppb	09:33:48
3	Sc Radial	5791.0	5791.0	102 %		09:32:00
3	Y RADIAL	6174.7	6174.7	101.2 %		09:32:00
3	Al 396.153Radial†	-43.9	-22.6	-16.069 ug/L	-16.069 ppb	09:32:00
3	Ca 317.933Radial†	26.1	8.7	12.933 ug/L	12.933 ppb	09:32:20
3	Fe 238.204 Radial†	9.7	3.5	31.964 ug/L	31.964 ppb	09:32:20
3	K 766.490 Radial†	2680.4	414.6	72.500 ug/L	72.500 ppb	09:32:00
3	Mg 279.077 IEC†	1.0	0.7	25.898 ug/L	25.898 ppb	09:32:20
3	Na 589.592 Radial†	-1073.6	28.6	9.2041 ug/L	9.2041 ppb	09:32:00
3	Sr 421.552†	-45.6	-52.1	-0.3217 ug/L	-0.3217 ppb	09:32:00
3	Sc 361.383	884463.0	884463.0	98.130 %		09:33:17
3	Y 371.029	737139.6	737139.6	98.051 %		09:33:17
3	Ag 328.068†	280.8	-28.7	-0.1192 ug/L	-0.1192 ppb	09:33:17
3	As 188.979†	-20.1	4.0	1.4979 ug/L	1.4979 ppb	09:33:37
3	B 249.677†	-288.9	324.7	6.5934 ug/L	6.5934 ppb	09:33:37
3	Ba 233.527†	-15.1	1.6	0.0129 ug/L	0.0129 ppb	09:33:37
3	Be 313.107†	-4963.1	214.4	0.0756 ug/L	0.0756 ppb	09:33:17
3	Cd 226.502†	-187.5	15.0	0.1501 ug/L	0.1501 ppb	09:33:37
3	Co 228.616†	-70.9	1.8	0.0316 ug/L	0.0316 ppb	09:33:37
3	Cr 267.716†	91.4	12.3	0.1265 ug/L	0.1265 ppb	09:33:37
3	Cu 324.752†	6631.0	-113.4	-0.3163 ug/L	-0.3163 ppb	09:33:17
3	Mn 257.610†	498.9	14.6	0.0179 ug/L	0.0179 ppb	09:33:37
3	Mo 202.031†	23.1	-3.2	-0.1973 ug/L	-0.1973 ppb	09:33:37
3	Ni 231.604†	98.3	9.3	0.2087 ug/L	0.2087 ppb	09:33:37
3	P 214.914†	215.6	-5.2	-2.8572 ug/L	-2.8572 ppb	09:33:37
3	Pb 220.353†	-61.5	10.1	1.0944 ug/L	1.0944 ppb	09:33:37
3	S 181.975 Axial†	48.7	3.1	4.1147 ug/L	4.1147 ppb	09:33:37
3	Sb 206.836†	43.3	16.5	5.0795 ug/L	5.0795 ppb	09:33:37
3	Se 196.026†	-24.4	-2.6	-1.3361 ug/L	-1.3361 ppb	09:33:37
3	Si 251.611†	560.0	27.3	0.7775 ug/L	0.7775 ppb	09:33:37
3	Sn 189.927†	5.0	-0.3	-0.0479 ug/L	-0.0479 ppb	09:33:37
3	Ti 334.940†	-1197.0	-18.7	-0.0293 ug/L	-0.0293 ppb	09:33:17
3	Tl 190.801†	-31.0	6.4	1.7289 ug/L	1.7289 ppb	09:33:37
3	U 409.014†	-2453.1	50.5	1.3926 ug/L	1.3926 ppb	09:33:17
3	V 292.402†	-1394.3	1.0	0.0019 ug/L	0.0019 ppb	09:33:17
3	Zn 213.857†	716.5	79.5	0.6687 ug/L	0.6687 ppb	09:33:37
3	SiO2†	576.3	75.8	4.7011 ug/L	4.7011 ppb	09:33:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	886757.4	98.384	%	0.8858				0.90%
Sc Radial	5736.1	101	%	0.8				0.83%
Y 371.029	738743.0	98.264	%	0.7256				0.74%
Y RADIAL	6151.4	100.9	%	0.35				0.34%
Ag 328.068†	11.2	0.0535	ug/L	0.24007	0.0535	ppb	0.24007	449.06%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.6	2.5388	ug/L	18.65527	2.5388	ppb	18.65527	734.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.1	1.9342	ug/L	1.85441	1.9342	ppb	1.85441	95.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	325.6	6.6148	ug/L	0.16383	6.6148	ppb	0.16383	2.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.4	0.0618	ug/L	0.06655	0.0618	ppb	0.06655	107.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	158.7	0.0560	ug/L	0.02116	0.0560	ppb	0.02116	37.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.6	6.8356	ug/L	6.72953	6.8356	ppb	6.72953	98.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.4      0.1353 ug/L       0.01821      0.1353 ppb        0.01821  13.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               7.6      0.1381 ug/L       0.17966      0.1381 ppb        0.17966 130.13%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              13.3      0.1375 ug/L       0.03707      0.1375 ppb        0.03707  26.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -26.2     -0.0728 ug/L       0.23280     -0.0728 ppb        0.23280 319.97%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.2      10.786 ug/L       20.3825      10.786 ppb        20.3825 188.97%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       348.6      60.965 ug/L       10.6049      60.965 ppb        10.6049  17.39%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.7      24.942 ug/L       17.3009      24.942 ppb        17.3009  69.36%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              25.7      0.0273 ug/L       0.00829      0.0273 ppb        0.00829  30.36%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -5.8     -0.3591 ug/L       0.27738     -0.3591 ppb        0.27738  77.25%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -20.6     -6.6301 ug/L      13.98335     -6.6301 ppb       13.98335 210.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               3.4      0.0768 ug/L       0.16176      0.0768 ppb        0.16176 210.63%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -8.8     -4.8603 ug/L       3.31373     -4.8603 ppb        3.31373  68.18%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              13.9      1.5187 ug/L       0.38377      1.5187 ppb        0.38377  25.27%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.4      1.8130 ug/L       2.36415      1.8130 ppb        2.36415 130.40%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              15.2      4.6936 ug/L       1.31682      4.6936 ppb        1.31682  28.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -6.7     -3.7117 ug/L       2.25355     -3.7117 ppb        2.25355  60.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              34.4      0.9912 ug/L       0.33916      0.9912 ppb        0.33916  34.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.8      0.1335 ug/L       1.02546      0.1335 ppb        1.02546 768.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -17.3     -0.1067 ug/L       0.18619     -0.1067 ppb        0.18619 174.44%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -17.2     -0.0272 ug/L       0.00438     -0.0272 ppb        0.00438  16.07%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               5.2      1.4103 ug/L       1.11001      1.4103 ppb        1.11001  78.71%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               49.7      1.3751 ug/L       1.47365      1.3751 ppb        1.47365 107.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               62.0      0.3996 ug/L       0.35340      0.3996 ppb        0.35340  88.43%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              74.0      0.6249 ug/L       0.04697      0.6249 ppb        0.04697   7.52%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    76.4      4.7543 ug/L       1.57003      4.7543 ppb        1.57003  33.02%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 10:39:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5614.0	5614.0	98.8	%			10:41:39
1	Y RADIAL	6020.5	6020.5	98.72	%			10:41:39
1	Al 396.153Radial†	7058.4	7164.1	5066.2	ug/L	5066.2	ppb	10:41:39
1	Ca 317.933Radial†	3404.1	3428.3	5109.0	ug/L	5109.0	ppb	10:41:59
1	Fe 238.204 Radial†	554.0	554.7	5129.5	ug/L	5129.5	ppb	10:41:59
1	K 766.490 Radial†	30848.2	29005.3	5064.7	ug/L	5064.7	ppb	10:41:39
1	Mg 279.077 IEC†	150.4	151.9	5400.0	ug/L	5400.0	ppb	10:41:59
1	Na 589.592 Radial†	27696.0	29112.2	9365.7	ug/L	9365.7	ppb	10:41:39
1	Sr 421.552†	80066.3	81025.2	499.69	ug/L	499.69	ppb	10:41:39
1	Sc 361.383	901302.9	901302.9	99.998	%			10:42:56
1	Y 371.029	738953.0	738953.0	98.292	%			10:42:56
1	Ag 328.068†	110845.4	110532.5	495.31	ug/L	495.31	ppb	10:43:01
1	As 188.979†	1248.0	1272.4	485.62	ug/L	485.62	ppb	10:43:21
1	B 249.677†	22591.3	23210.9	469.75	ug/L	469.75	ppb	10:43:01
1	Ba 233.527†	66892.4	66910.7	484.52	ug/L	484.52	ppb	10:43:01
1	Be 313.107†	1381439.3	1386737.3	490.66	ug/L	490.66	ppb	10:42:56
1	Cd 226.502†	46786.3	46993.2	479.29	ug/L	479.29	ppb	10:43:01
1	Co 228.616†	26091.9	26166.5	480.43	ug/L	480.43	ppb	10:43:01
1	Cr 267.716†	47390.3	47310.3	486.58	ug/L	486.58	ppb	10:43:01
1	Cu 324.752†	177915.8	171048.3	479.67	ug/L	479.67	ppb	10:43:01
1	Mn 257.610†	474315.9	473831.0	492.85	ug/L	492.85	ppb	10:42:56
1	Mo 202.031†	8074.7	8048.1	501.37	ug/L	501.37	ppb	10:43:21
1	Ni 231.604†	21476.2	21385.8	480.99	ug/L	480.99	ppb	10:43:01
1	P 214.914†	4572.6	4347.8	2318.7	ug/L	2318.7	ppb	10:43:21
1	Pb 220.353†	4404.3	4477.2	491.20	ug/L	491.20	ppb	10:43:21
1	S 181.975 Axial†	769.9	723.5	957.99	ug/L	957.99	ppb	10:43:21
1	Sb 206.836†	1630.2	1602.7	501.84	ug/L	501.84	ppb	10:43:21
1	Se 196.026†	838.1	860.4	501.27	ug/L	501.27	ppb	10:43:21
1	Si 251.611†	82728.6	82186.8	2387.9	ug/L	2387.9	ppb	10:43:01
1	Sn 189.927†	3135.3	3129.9	497.79	ug/L	497.79	ppb	10:43:21
1	Ti 334.940†	311989.1	313196.1	491.00	ug/L	491.00	ppb	10:43:01
1	Tl 190.801†	1770.4	1808.4	492.55	ug/L	492.55	ppb	10:43:21
1	U 409.014†	15333.8	17884.3	493.55	ug/L	493.55	ppb	10:43:01
1	V 292.402†	73116.6	74539.8	491.34	ug/L	491.34	ppb	10:43:01
1	Zn 213.857†	57565.0	56915.4	478.20	ug/L	478.20	ppb	10:43:01
1	SiO2†	83022.3	82512.3	5143.8	ug/L	5143.8	ppb	10:44:29
2	Sc Radial	5581.6	5581.6	98.2	%			10:42:04
2	Y RADIAL	5952.2	5952.2	97.60	%			10:42:04
2	Al 396.153Radial†	7096.4	7244.2	5123.3	ug/L	5123.3	ppb	10:42:04
2	Ca 317.933Radial†	3396.1	3440.0	5126.5	ug/L	5126.5	ppb	10:42:24
2	Fe 238.204 Radial†	549.2	553.0	5114.4	ug/L	5114.4	ppb	10:42:24
2	K 766.490 Radial†	30992.9	29333.6	5122.0	ug/L	5122.0	ppb	10:42:04
2	Mg 279.077 IEC†	147.7	150.1	5333.6	ug/L	5333.6	ppb	10:42:24
2	Na 589.592 Radial†	27972.0	29555.6	9508.4	ug/L	9508.4	ppb	10:42:04
2	Sr 421.552†	80350.7	81784.4	504.37	ug/L	504.37	ppb	10:42:04
2	Sc 361.383	895175.3	895175.3	99.318	%			10:43:27
2	Y 371.029	733063.7	733063.7	97.508	%			10:43:27
2	Ag 328.068†	112137.0	112591.8	504.49	ug/L	504.49	ppb	10:43:32
2	As 188.979†	1234.7	1267.6	483.87	ug/L	483.87	ppb	10:43:52
2	B 249.677†	22953.8	23730.4	480.29	ug/L	480.29	ppb	10:43:32
2	Ba 233.527†	67721.8	68203.6	493.88	ug/L	493.88	ppb	10:43:32
2	Be 313.107†	1377746.8	1392475.7	492.71	ug/L	492.71	ppb	10:43:27
2	Cd 226.502†	47348.7	47879.7	488.35	ug/L	488.35	ppb	10:43:32
2	Co 228.616†	26458.9	26714.6	490.46	ug/L	490.46	ppb	10:43:32
2	Cr 267.716†	47830.2	48077.7	494.47	ug/L	494.47	ppb	10:43:32
2	Cu 324.752†	180574.1	174942.7	490.59	ug/L	490.59	ppb	10:43:32
2	Mn 257.610†	473887.3	476646.3	495.78	ug/L	495.78	ppb	10:43:27
2	Mo 202.031†	7963.1	7991.0	497.81	ug/L	497.81	ppb	10:43:52
2	Ni 231.604†	21864.7	21923.9	493.10	ug/L	493.10	ppb	10:43:32

2	P 214.914†	4502.4	4308.4	2295.3 ug/L	2295.3 ppb	10:43:52
2	Pb 220.353†	4345.4	4448.0	488.00 ug/L	488.00 ppb	10:43:52
2	S 181.975 Axial†	761.3	720.1	953.47 ug/L	953.47 ppb	10:43:52
2	Sb 206.836†	1616.0	1599.5	500.51 ug/L	500.51 ppb	10:43:52
2	Se 196.026†	842.0	870.1	506.64 ug/L	506.64 ppb	10:43:52
2	Si 251.611†	83734.3	83765.7	2434.1 ug/L	2434.1 ppb	10:43:32
2	Sn 189.927†	3084.8	3100.5	493.13 ug/L	493.13 ppb	10:43:52
2	Ti 334.940†	316062.8	319433.3	500.78 ug/L	500.78 ppb	10:43:32
2	Tl 190.801†	1756.2	1806.2	491.99 ug/L	491.99 ppb	10:43:52
2	U 409.014†	15792.3	18451.0	509.23 ug/L	509.23 ppb	10:43:32
2	V 292.402†	74013.3	75943.1	500.43 ug/L	500.43 ppb	10:43:32
2	Zn 213.857†	58329.0	58078.7	487.97 ug/L	487.97 ppb	10:43:32
2	SiO2†	82814.9	82871.8	5166.4 ug/L	5166.4 ppb	10:44:34
3	Sc Radial	5643.0	5643.0	99.3 %		10:42:29
3	Y RADIAL	6003.4	6003.4	98.44 %		10:42:29
3	Al 396.153Radial†	7083.8	7152.9	5058.4 ug/L	5058.4 ppb	10:42:29
3	Ca 317.933Radial†	3401.4	3407.8	5078.5 ug/L	5078.5 ppb	10:42:49
3	Fe 238.204 Radial†	552.7	550.5	5090.4 ug/L	5090.4 ppb	10:42:49
3	K 766.490 Radial†	31114.1	29112.6	5083.4 ug/L	5083.4 ppb	10:42:29
3	Mg 279.077 IEC†	149.3	150.0	5333.5 ug/L	5333.5 ppb	10:42:49
3	Na 589.592 Radial†	28068.4	29343.2	9440.0 ug/L	9440.0 ppb	10:42:29
3	Sr 421.552†	80745.8	81292.9	501.34 ug/L	501.34 ppb	10:42:29
3	Sc 361.383	896708.8	896708.8	99.488 %		10:43:58
3	Y 371.029	733383.2	733383.2	97.551 %		10:43:58
3	Ag 328.068†	110199.6	110451.3	494.94 ug/L	494.94 ppb	10:44:03
3	As 188.979†	1250.8	1281.6	489.08 ug/L	489.08 ppb	10:44:23
3	B 249.677†	22582.3	23317.5	471.91 ug/L	471.91 ppb	10:44:03
3	Ba 233.527†	66903.1	67264.1	487.08 ug/L	487.08 ppb	10:44:03
3	Be 313.107†	1379236.2	1391600.5	492.38 ug/L	492.38 ppb	10:43:58
3	Cd 226.502†	46961.6	47409.1	483.54 ug/L	483.54 ppb	10:44:03
3	Co 228.616†	26188.3	26397.0	484.66 ug/L	484.66 ppb	10:44:03
3	Cr 267.716†	47269.1	47431.4	487.83 ug/L	487.83 ppb	10:44:03
3	Cu 324.752†	176354.2	170390.2	477.83 ug/L	477.83 ppb	10:44:03
3	Mn 257.610†	476299.3	478254.7	497.45 ug/L	497.45 ppb	10:43:58
3	Mo 202.031†	8014.6	8029.0	500.18 ug/L	500.18 ppb	10:44:23
3	Ni 231.604†	21568.2	21588.3	485.55 ug/L	485.55 ppb	10:44:03
3	P 214.914†	4541.5	4340.0	2314.7 ug/L	2314.7 ppb	10:44:23
3	Pb 220.353†	4349.1	4444.2	487.59 ug/L	487.59 ppb	10:44:23
3	S 181.975 Axial†	775.9	733.4	971.19 ug/L	971.19 ppb	10:44:23
3	Sb 206.836†	1619.9	1600.6	501.11 ug/L	501.11 ppb	10:44:23
3	Se 196.026†	837.3	863.9	503.07 ug/L	503.07 ppb	10:44:23
3	Si 251.611†	82248.1	82127.7	2386.2 ug/L	2386.2 ppb	10:44:03
3	Sn 189.927†	3104.2	3114.7	495.38 ug/L	495.38 ppb	10:44:23
3	Ti 334.940†	310825.9	313625.3	491.68 ug/L	491.68 ppb	10:44:03
3	Tl 190.801†	1745.4	1792.4	488.23 ug/L	488.23 ppb	10:44:23
3	U 409.014†	15250.3	17879.0	493.41 ug/L	493.41 ppb	10:44:03
3	V 292.402†	73107.1	74904.8	493.70 ug/L	493.70 ppb	10:44:03
3	Zn 213.857†	57498.9	57143.8	480.11 ug/L	480.11 ppb	10:44:03
3	SiO2†	83538.3	83456.3	5203.0 ug/L	5203.0 ppb	10:44:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897729.0	99.602	%	0.3538				0.36%
Sc Radial	5612.8	98.8	%	0.54				0.55%
Y 371.029	735133.3	97.784	%	0.4405				0.45%
Y RADIAL	5992.0	98.25	%	0.583				0.59%
Ag 328.068†	111191.9	498.25	ug/L	5.413	498.25	ppb	5.413	1.09%
QC value within limits for Ag 328.068 Recovery = 99.65%								
Al 396.153Radial†	7187.0	5082.6	ug/L	35.42	5082.6	ppb	35.42	0.70%
QC value within limits for Al 396.153Radial Recovery = 101.65%								
As 188.979†	1273.9	486.19	ug/L	2.648	486.19	ppb	2.648	0.54%
QC value within limits for As 188.979 Recovery = 97.24%								
B 249.677†	23419.6	473.98	ug/L	5.564	473.98	ppb	5.564	1.17%
QC value within limits for B 249.677 Recovery = 94.80%								
Ba 233.527†	67459.5	488.49	ug/L	4.837	488.49	ppb	4.837	0.99%
QC value within limits for Ba 233.527 Recovery = 97.70%								
Be 313.107†	1390271.1	491.92	ug/L	1.099	491.92	ppb	1.099	0.22%
QC value within limits for Be 313.107 Recovery = 98.38%								
Ca 317.933Radial†	3425.3	5104.6	ug/L	24.30	5104.6	ppb	24.30	0.48%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.09%
Cd 226.502†            47427.4      483.73 ug/L         4.530      483.73 ppb          4.530   0.94%
   QC value within limits for Cd 226.502  Recovery = 96.75%
Co 228.616†            26426.0      485.19 ug/L         5.036      485.19 ppb          5.036   1.04%
   QC value within limits for Co 228.616  Recovery = 97.04%
Cr 267.716†            47606.5      489.63 ug/L         4.242      489.63 ppb          4.242   0.87%
   QC value within limits for Cr 267.716  Recovery = 97.93%
Cu 324.752†           172127.1      482.69 ug/L         6.897      482.69 ppb          6.897   1.43%
   QC value within limits for Cu 324.752  Recovery = 96.54%
Fe 238.204 Radial†       552.7      5111.4 ug/L         19.70      5111.4 ppb          19.70   0.39%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.23%
K 766.490 Radial†      29150.5      5090.0 ug/L         29.23      5090.0 ppb          29.23   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 101.80%
Mg 279.077 IEC†          150.7      5355.7 ug/L         38.35      5355.7 ppb          38.35   0.72%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.11%
Mn 257.610†           476244.0      495.36 ug/L         2.326      495.36 ppb          2.326   0.47%
   QC value within limits for Mn 257.610  Recovery = 99.07%
Mo 202.031†            8022.7      499.79 ug/L         1.809      499.79 ppb          1.809   0.36%
   QC value within limits for Mo 202.031  Recovery = 99.96%
Na 589.592 Radial†     29337.0      9438.0 ug/L         71.34      9438.0 ppb          71.34   0.76%
   QC value within limits for Na 589.592 Radial  Recovery = 94.38%
Ni 231.604†            21632.7      486.55 ug/L         6.114      486.55 ppb          6.114   1.26%
   QC value within limits for Ni 231.604  Recovery = 97.31%
P 214.914†              4332.1      2309.6 ug/L         12.53      2309.6 ppb          12.53   0.54%
   QC value within limits for P 214.914  Recovery = 92.38%
Pb 220.353†             4456.5      488.93 ug/L         1.974      488.93 ppb          1.974   0.40%
   QC value within limits for Pb 220.353  Recovery = 97.79%
S 181.975 Axial†         725.6      960.88 ug/L         9.203      960.88 ppb          9.203   0.96%
   QC value within limits for S 181.975 Axial  Recovery = 96.09%
Sb 206.836†             1600.9      501.15 ug/L         0.665      501.15 ppb          0.665   0.13%
   QC value within limits for Sb 206.836  Recovery = 100.23%
Se 196.026†              864.8      503.66 ug/L         2.733      503.66 ppb          2.733   0.54%
   QC value within limits for Se 196.026  Recovery = 100.73%
Si 251.611†            82693.4      2402.7 ug/L         27.16      2402.7 ppb          27.16   1.13%
   QC value within limits for Si 251.611  Recovery = 96.11%
Sn 189.927†             3115.1      495.44 ug/L         2.332      495.44 ppb          2.332   0.47%
   QC value within limits for Sn 189.927  Recovery = 99.09%
Sr 421.552†            81367.5      501.80 ug/L         2.375      501.80 ppb          2.375   0.47%
   QC value within limits for Sr 421.552  Recovery = 100.36%
Ti 334.940†           315418.3      494.49 ug/L         5.458      494.49 ppb          5.458   1.10%
   QC value within limits for Ti 334.940  Recovery = 98.90%
Tl 190.801†             1802.3      490.92 ug/L         2.352      490.92 ppb          2.352   0.48%
   QC value within limits for Tl 190.801  Recovery = 98.18%
U 409.014†             18071.4      498.73 ug/L         9.092      498.73 ppb          9.092   1.82%
   QC value within limits for U 409.014  Recovery = 99.75%
V 292.402†             75129.3      495.15 ug/L         4.717      495.15 ppb          4.717   0.95%
   QC value within limits for V 292.402  Recovery = 99.03%
Zn 213.857†            57379.3      482.10 ug/L         5.180      482.10 ppb          5.180   1.07%
   QC value within limits for Zn 213.857  Recovery = 96.42%
SiO2†                  82946.8      5171.0 ug/L         29.87      5171.0 ppb          29.87   0.58%
   QC value within limits for SiO2  Recovery = 96.70%
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 10:46:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5862.5	5862.5	103	%			10:48:41
1	Y RADIAL	6299.9	6299.9	103.3	%			10:48:41
1	Al 396.153Radial†	-40.4	-18.7	-13.279	ug/L	-13.279	ppb	10:48:41
1	Ca 317.933Radial†	26.2	8.4	12.503	ug/L	12.503	ppb	10:49:02
1	Fe 238.204 Radial†	8.0	1.8	16.154	ug/L	16.154	ppb	10:49:02
1	K 766.490 Radial†	2599.8	304.4	53.232	ug/L	53.232	ppb	10:48:41
1	Mg 279.077 IEC†	1.2	0.9	32.528	ug/L	32.528	ppb	10:49:02
1	Na 589.592 Radial†	-1138.0	-20.9	-6.7171	ug/L	-6.7171	ppb	10:48:41
1	Sr 421.552†	-8.4	-15.6	-0.0961	ug/L	-0.0961	ppb	10:48:41
1	Sc 361.383	891634.0	891634.0	98.925	%			10:49:58
1	Y 371.029	745476.2	745476.2	99.159	%			10:49:58
1	Ag 328.068†	403.2	92.7	0.4172	ug/L	0.4172	ppb	10:49:58
1	As 188.979†	-25.7	-1.6	-0.6121	ug/L	-0.6121	ppb	10:50:18
1	B 249.677†	-405.8	208.9	4.2428	ug/L	4.2428	ppb	10:50:18
1	Ba 233.527†	-4.1	12.8	0.0942	ug/L	0.0942	ppb	10:50:18
1	Be 313.107†	-4933.0	285.5	0.1013	ug/L	0.1013	ppb	10:49:58
1	Cd 226.502†	-191.2	12.7	0.1286	ug/L	0.1286	ppb	10:50:18
1	Co 228.616†	-72.5	0.8	0.0145	ug/L	0.0145	ppb	10:50:18
1	Cr 267.716†	101.0	21.2	0.2181	ug/L	0.2181	ppb	10:50:18
1	Cu 324.752†	6735.9	-61.7	-0.1722	ug/L	-0.1722	ppb	10:49:58
1	Mn 257.610†	533.1	45.1	0.0479	ug/L	0.0479	ppb	10:50:18
1	Mo 202.031†	30.7	4.3	0.2660	ug/L	0.2660	ppb	10:50:18
1	Ni 231.604†	100.2	10.4	0.2342	ug/L	0.2342	ppb	10:50:18
1	P 214.914†	218.2	-4.3	-2.3590	ug/L	-2.3590	ppb	10:50:18
1	Pb 220.353†	-58.6	13.6	1.4809	ug/L	1.4809	ppb	10:50:18
1	S 181.975 Axial†	52.0	6.0	8.0006	ug/L	8.0006	ppb	10:50:18
1	Sb 206.836†	26.3	-1.0	-0.3090	ug/L	-0.3090	ppb	10:50:18
1	Se 196.026†	-32.8	-10.9	-6.0686	ug/L	-6.0686	ppb	10:50:18
1	Si 251.611†	648.0	111.7	3.2392	ug/L	3.2392	ppb	10:50:18
1	Sn 189.927†	3.0	-2.4	-0.3726	ug/L	-0.3726	ppb	10:50:18
1	Ti 334.940†	-1037.0	152.8	0.2392	ug/L	0.2392	ppb	10:49:58
1	Tl 190.801†	-32.6	5.0	1.3593	ug/L	1.3593	ppb	10:50:18
1	U 409.014†	-2436.0	87.8	2.4296	ug/L	2.4296	ppb	10:49:58
1	V 292.402†	-1346.1	61.1	0.4039	ug/L	0.4039	ppb	10:49:58
1	Zn 213.857†	759.3	116.9	0.9871	ug/L	0.9871	ppb	10:50:18
1	SiO2†	628.5	123.8	7.7110	ug/L	7.7110	ppb	10:51:14
2	Sc Radial	5786.5	5786.5	102	%			10:49:07
2	Y RADIAL	6222.4	6222.4	102.0	%			10:49:07
2	Al 396.153Radial†	-44.8	-23.6	-16.724	ug/L	-16.724	ppb	10:49:07
2	Ca 317.933Radial†	23.1	5.7	8.4620	ug/L	8.4620	ppb	10:49:27
2	Fe 238.204 Radial†	8.3	2.2	19.924	ug/L	19.924	ppb	10:49:27
2	K 766.490 Radial†	2483.7	223.5	39.080	ug/L	39.080	ppb	10:49:07
2	Mg 279.077 IEC†	3.4	3.1	109.88	ug/L	109.88	ppb	10:49:27
2	Na 589.592 Radial†	-1100.5	1.4	0.4470	ug/L	0.4470	ppb	10:49:07
2	Sr 421.552†	-24.9	-31.9	-0.1969	ug/L	-0.1969	ppb	10:49:07
2	Sc 361.383	903989.0	903989.0	100.30	%			10:50:24
2	Y 371.029	754737.4	754737.4	100.39	%			10:50:24
2	Ag 328.068†	377.0	60.9	0.2740	ug/L	0.2740	ppb	10:50:24
2	As 188.979†	-20.4	4.0	1.5202	ug/L	1.5202	ppb	10:50:44
2	B 249.677†	-434.3	186.2	3.7795	ug/L	3.7795	ppb	10:50:44
2	Ba 233.527†	-12.3	4.7	0.0357	ug/L	0.0357	ppb	10:50:44
2	Be 313.107†	-4972.9	313.9	0.1111	ug/L	0.1111	ppb	10:50:24
2	Cd 226.502†	-182.6	24.0	0.2433	ug/L	0.2433	ppb	10:50:44
2	Co 228.616†	-61.9	12.4	0.2258	ug/L	0.2258	ppb	10:50:44
2	Cr 267.716†	97.6	16.5	0.1682	ug/L	0.1682	ppb	10:50:44
2	Cu 324.752†	6702.6	-188.0	-0.5260	ug/L	-0.5260	ppb	10:50:24
2	Mn 257.610†	568.3	72.8	0.0756	ug/L	0.0756	ppb	10:50:44
2	Mo 202.031†	25.2	-1.6	-0.0990	ug/L	-0.0990	ppb	10:50:44
2	Ni 231.604†	109.5	18.3	0.4128	ug/L	0.4128	ppb	10:50:44

2	P 214.914†	198.7	-26.8	-14.631	ug/L	-14.631 ppb	10:50:44
2	Pb 220.353†	-49.3	23.6	2.5789	ug/L	2.5789 ppb	10:50:44
2	S 181.975 Axial†	46.9	0.3	0.4059	ug/L	0.4059 ppb	10:50:44
2	Sb 206.836†	39.9	12.1	3.7720	ug/L	3.7720 ppb	10:50:44
2	Se 196.026†	-15.9	6.4	3.6691	ug/L	3.6691 ppb	10:50:44
2	Si 251.611†	635.8	90.5	2.6268	ug/L	2.6268 ppb	10:50:44
2	Sn 189.927†	16.7	11.2	1.7817	ug/L	1.7817 ppb	10:50:44
2	Ti 334.940†	-1115.9	88.5	0.1364	ug/L	0.1364 ppb	10:50:24
2	Tl 190.801†	-30.0	8.1	2.1885	ug/L	2.1885 ppb	10:50:44
2	U 409.014†	-2323.4	233.7	6.4672	ug/L	6.4672 ppb	10:50:24
2	V 292.402†	-1350.3	75.5	0.5014	ug/L	0.5014 ppb	10:50:24
2	Zn 213.857†	762.5	109.6	0.9212	ug/L	0.9212 ppb	10:50:44
2	SiO2†	636.2	122.7	7.6532	ug/L	7.6532 ppb	10:51:19
3	Sc Radial	5749.6	5749.6	101	%		10:49:32
3	Y RADIAL	6167.1	6167.1	101.1	%		10:49:32
3	Al 396.153Radial†	-17.8	2.9	2.0762	ug/L	2.0762 ppb	10:49:32
3	Ca 317.933Radial†	29.4	12.1	18.085	ug/L	18.085 ppb	10:49:52
3	Fe 238.204 Radial†	9.4	3.3	30.099	ug/L	30.099 ppb	10:49:52
3	K 766.490 Radial†	2507.2	262.4	45.888	ug/L	45.888 ppb	10:49:32
3	Mg 279.077 IEC†	0.9	0.6	21.827	ug/L	21.827 ppb	10:49:52
3	Na 589.592 Radial†	-1149.5	-53.9	-17.352	ug/L	-17.352 ppb	10:49:32
3	Sr 421.552†	-26.1	-33.2	-0.2048	ug/L	-0.2048 ppb	10:49:32
3	Sc 361.383	890056.7	890056.7	98.750	%		10:50:49
3	Y 371.029	742638.9	742638.9	98.782	%		10:50:49
3	Ag 328.068†	387.0	77.0	0.3469	ug/L	0.3469 ppb	10:50:49
3	As 188.979†	-26.7	-2.7	-1.0077	ug/L	-1.0077 ppb	10:51:09
3	B 249.677†	-424.2	189.5	3.8466	ug/L	3.8466 ppb	10:51:09
3	Ba 233.527†	0.6	17.6	0.1292	ug/L	0.1292 ppb	10:51:09
3	Be 313.107†	-5055.2	152.9	0.0543	ug/L	0.0543 ppb	10:50:49
3	Cd 226.502†	-194.2	9.4	0.0931	ug/L	0.0931 ppb	10:51:09
3	Co 228.616†	-60.6	12.7	0.2297	ug/L	0.2297 ppb	10:51:09
3	Cr 267.716†	90.1	10.4	0.1059	ug/L	0.1059 ppb	10:51:09
3	Cu 324.752†	6704.3	-81.7	-0.2275	ug/L	-0.2275 ppb	10:50:49
3	Mn 257.610†	541.9	54.9	0.0597	ug/L	0.0597 ppb	10:51:09
3	Mo 202.031†	13.7	-12.9	-0.8000	ug/L	-0.8000 ppb	10:51:09
3	Ni 231.604†	92.3	2.7	0.0597	ug/L	0.0597 ppb	10:51:09
3	P 214.914†	229.8	7.8	4.3146	ug/L	4.3146 ppb	10:51:09
3	Pb 220.353†	-64.6	7.4	0.8008	ug/L	0.8008 ppb	10:51:09
3	S 181.975 Axial†	41.9	-4.0	-5.3407	ug/L	-5.3407 ppb	10:51:09
3	Sb 206.836†	25.7	-1.6	-0.4993	ug/L	-0.4993 ppb	10:51:09
3	Se 196.026†	-25.7	-3.8	-2.0136	ug/L	-2.0136 ppb	10:51:09
3	Si 251.611†	617.4	81.8	2.3853	ug/L	2.3853 ppb	10:51:09
3	Sn 189.927†	11.0	5.8	0.9164	ug/L	0.9164 ppb	10:51:09
3	Ti 334.940†	-1095.2	92.1	0.1416	ug/L	0.1416 ppb	10:50:49
3	Tl 190.801†	-39.6	-2.1	-0.5771	ug/L	-0.5771 ppb	10:51:09
3	U 409.014†	-2214.2	308.0	8.5234	ug/L	8.5234 ppb	10:50:49
3	V 292.402†	-1329.0	76.0	0.4949	ug/L	0.4949 ppb	10:50:49
3	Zn 213.857†	773.0	132.1	1.1159	ug/L	1.1159 ppb	10:51:09
3	SiO2†	634.9	131.4	8.2222	ug/L	8.2222 ppb	10:51:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895226.6	99.324	%	0.8465				0.85%
Sc Radial	5799.6	102	%	1.0				0.99%
Y 371.029	747617.5	99.444	%	0.8416				0.85%
Y RADIAL	6229.8	102.2	%	1.09				1.07%
Ag 328.068†	76.9	0.3460	ug/L	0.07159	0.3460	ppb	0.07159	20.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-13.1	-9.3088	ug/L	10.00904	-9.3088	ppb	10.00904	107.52%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0332	ug/L	1.35975	-0.0332	ppb	1.35975	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	194.9	3.9563	ug/L	0.25038	3.9563	ppb	0.25038	6.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.7	0.0864	ug/L	0.04724	0.0864	ppb	0.04724	54.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	250.8	0.0889	ug/L	0.03038	0.0889	ppb	0.03038	34.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.7	13.017	ug/L	4.8319	13.017	ppb	4.8319	37.12%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.4      0.1550 ug/L       0.07854      0.1550 ppb        0.07854  50.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               8.6      0.1567 ug/L       0.12311      0.1567 ppb        0.12311  78.57%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              16.0      0.1640 ug/L       0.05623      0.1640 ppb        0.05623  34.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -110.5     -0.3086 ug/L       0.19030     -0.3086 ppb        0.19030  61.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.4      22.059 ug/L        7.2135      22.059 ppb         7.2135  32.70%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       263.4      46.067 ug/L        7.0777      46.067 ppb         7.0777  15.36%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.5      54.747 ug/L       48.0498      54.747 ppb        48.0498  87.77%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              57.6      0.0610 ug/L       0.01391      0.0610 ppb        0.01391  22.78%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -3.4     -0.2110 ug/L       0.54174     -0.2110 ppb        0.54174 256.79%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -24.5     -7.8741 ug/L       8.95586     -7.8741 ppb        8.95586 113.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              10.5      0.2356 ug/L       0.17655      0.2356 ppb        0.17655  74.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.8     -4.2252 ug/L       9.60980     -4.2252 ppb        9.60980 227.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              14.9      1.6202 ug/L       0.89716      1.6202 ppb        0.89716  55.37%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.8      1.0219 ug/L       6.69196      1.0219 ppb        6.69196 654.84%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.2      0.9879 ug/L       2.41300      0.9879 ppb        2.41300 244.25%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -2.7     -1.4710 ug/L       4.89144     -1.4710 ppb        4.89144 332.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              94.7      2.7504 ug/L       0.44018      2.7504 ppb        0.44018  16.00%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.9      0.7751 ug/L       1.08409      0.7751 ppb        1.08409 139.86%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -26.9     -0.1659 ug/L       0.06060     -0.1659 ppb        0.06060  36.52%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             111.2      0.1724 ug/L       0.05792      0.1724 ppb        0.05792  33.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.7      0.9902 ug/L       1.41923      0.9902 ppb        1.41923 143.32%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              209.9      5.8067 ug/L       3.10012      5.8067 ppb        3.10012  53.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               70.9      0.4667 ug/L       0.05450      0.4667 ppb        0.05450  11.68%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             119.5      1.0080 ug/L       0.09904      1.0080 ppb        0.09904   9.82%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   126.0      7.8622 ug/L       0.31317      7.8622 ppb        0.31317   3.98%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 11:52:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5906.5	5906.5	104	%			11:53:52
1	Y RADIAL	6290.6	6290.6	103.1	%			11:53:52
1	Al 396.153Radial†	7028.5	6781.5	4794.9	ug/L	4794.9	ppb	11:53:52
1	Ca 317.933Radial†	3384.0	3238.2	4825.8	ug/L	4825.8	ppb	11:54:12
1	Fe 238.204 Radial†	550.8	523.8	4844.6	ug/L	4844.6	ppb	11:54:12
1	K 766.490 Radial†	30890.2	27499.6	4801.5	ug/L	4801.5	ppb	11:53:52
1	Mg 279.077 IEC†	148.0	142.1	5050.0	ug/L	5050.0	ppb	11:54:12
1	Na 589.592 Radial†	28562.8	28558.0	9187.4	ug/L	9187.4	ppb	11:53:52
1	Sr 421.552†	81004.5	77914.9	480.51	ug/L	480.51	ppb	11:53:52
1	Sc 361.383	906792.6	906792.6	100.61	%			11:55:10
1	Y 371.029	742450.0	742450.0	98.757	%			11:55:10
1	Ag 328.068†	111732.1	110742.8	496.16	ug/L	496.16	ppb	11:55:15
1	As 188.979†	1240.2	1257.1	479.83	ug/L	479.83	ppb	11:55:35
1	B 249.677†	22896.1	23377.1	473.15	ug/L	473.15	ppb	11:55:15
1	Ba 233.527†	67624.7	67233.6	486.85	ug/L	486.85	ppb	11:55:15
1	Be 313.107†	1351928.2	1349040.9	477.37	ug/L	477.37	ppb	11:55:10
1	Cd 226.502†	47398.7	47318.7	482.64	ug/L	482.64	ppb	11:55:15
1	Co 228.616†	26504.1	26418.2	485.02	ug/L	485.02	ppb	11:55:15
1	Cr 267.716†	47702.6	47333.8	486.82	ug/L	486.82	ppb	11:55:15
1	Cu 324.752†	178828.3	170878.1	479.18	ug/L	479.18	ppb	11:55:15
1	Mn 257.610†	466524.3	463214.9	481.80	ug/L	481.80	ppb	11:55:10
1	Mo 202.031†	7997.1	7922.1	493.51	ug/L	493.51	ppb	11:55:35
1	Ni 231.604†	21806.9	21584.4	485.46	ug/L	485.46	ppb	11:55:15
1	P 214.914†	4545.0	4292.7	2288.5	ug/L	2288.5	ppb	11:55:35
1	Pb 220.353†	4382.8	4429.1	485.88	ug/L	485.88	ppb	11:55:35
1	S 181.975 Axial†	765.3	714.2	945.78	ug/L	945.78	ppb	11:55:35
1	Sb 206.836†	1630.0	1592.5	498.38	ug/L	498.38	ppb	11:55:35
1	Se 196.026†	830.3	847.6	493.12	ug/L	493.12	ppb	11:55:35
1	Si 251.611†	83513.6	82466.2	2396.3	ug/L	2396.3	ppb	11:55:15
1	Sn 189.927†	3103.9	3079.8	489.80	ug/L	489.80	ppb	11:55:35
1	Ti 334.940†	319032.3	318307.9	499.00	ug/L	499.00	ppb	11:55:10
1	Tl 190.801†	1766.4	1793.7	488.55	ug/L	488.55	ppb	11:55:35
1	U 409.014†	15495.0	17951.8	495.45	ug/L	495.45	ppb	11:55:15
1	V 292.402†	73732.3	74709.1	492.36	ug/L	492.36	ppb	11:55:15
1	Zn 213.857†	58190.1	57188.2	480.52	ug/L	480.52	ppb	11:55:15
1	SiO2†	83471.5	82456.2	5140.8	ug/L	5140.8	ppb	11:56:43
2	Sc Radial	5843.6	5843.6	103	%			11:54:18
2	Y RADIAL	6238.5	6238.5	102.3	%			11:54:18
2	Al 396.153Radial†	7042.1	6867.4	4856.1	ug/L	4856.1	ppb	11:54:18
2	Ca 317.933Radial†	3391.9	3280.9	4889.4	ug/L	4889.4	ppb	11:54:38
2	Fe 238.204 Radial†	555.8	534.3	4941.9	ug/L	4941.9	ppb	11:54:38
2	K 766.490 Radial†	31160.7	28082.0	4903.3	ug/L	4903.3	ppb	11:54:18
2	Mg 279.077 IEC†	148.8	144.4	5131.4	ug/L	5131.4	ppb	11:54:38
2	Na 589.592 Radial†	28598.0	28887.5	9293.4	ug/L	9293.4	ppb	11:54:18
2	Sr 421.552†	81346.3	79084.7	487.73	ug/L	487.73	ppb	11:54:18
2	Sc 361.383	905200.8	905200.8	100.43	%			11:55:41
2	Y 371.029	741180.4	741180.4	98.588	%			11:55:41
2	Ag 328.068†	112246.0	111449.8	499.35	ug/L	499.35	ppb	11:55:46
2	As 188.979†	1217.9	1237.1	472.33	ug/L	472.33	ppb	11:56:07
2	B 249.677†	22992.4	23512.9	475.90	ug/L	475.90	ppb	11:55:46
2	Ba 233.527†	67628.0	67355.0	487.73	ug/L	487.73	ppb	11:55:46
2	Be 313.107†	1358820.0	1358266.1	480.63	ug/L	480.63	ppb	11:55:41
2	Cd 226.502†	47446.8	47449.4	483.97	ug/L	483.97	ppb	11:55:46
2	Co 228.616†	26397.6	26358.4	483.90	ug/L	483.90	ppb	11:55:46
2	Cr 267.716†	47770.2	47484.6	488.37	ug/L	488.37	ppb	11:55:46
2	Cu 324.752†	180090.2	172447.2	483.58	ug/L	483.58	ppb	11:55:46
2	Mn 257.610†	468737.1	466233.6	484.94	ug/L	484.94	ppb	11:55:41
2	Mo 202.031†	7890.9	7830.3	487.80	ug/L	487.80	ppb	11:56:07
2	Ni 231.604†	21820.8	21636.3	486.63	ug/L	486.63	ppb	11:55:46

2	P 214.914†	4481.0	4236.9	2257.0 ug/L	2257.0 ppb	11:56:07
2	Pb 220.353†	4299.2	4353.6	477.61 ug/L	477.61 ppb	11:56:07
2	S 181.975 Axial†	758.3	708.5	938.26 ug/L	938.26 ppb	11:56:07
2	Sb 206.836†	1600.9	1566.4	490.07 ug/L	490.07 ppb	11:56:07
2	Se 196.026†	814.0	832.8	485.10 ug/L	485.10 ppb	11:56:07
2	Si 251.611†	83674.7	82772.6	2405.3 ug/L	2405.3 ppb	11:55:46
2	Sn 189.927†	3068.5	3049.9	485.06 ug/L	485.06 ppb	11:56:07
2	Ti 334.940†	321071.6	320896.1	503.06 ug/L	503.06 ppb	11:55:41
2	Tl 190.801†	1745.1	1775.6	483.70 ug/L	483.70 ppb	11:56:07
2	U 409.014†	15619.2	18102.5	499.61 ug/L	499.61 ppb	11:55:46
2	V 292.402†	74081.2	75185.4	495.36 ug/L	495.36 ppb	11:55:46
2	Zn 213.857†	58274.1	57373.6	482.07 ug/L	482.07 ppb	11:55:46
2	SiO2†	83390.8	82521.7	5145.1 ug/L	5145.1 ppb	11:56:48
3	Sc Radial	5583.0	5583.0	98.3 %		11:54:43
3	Y RADIAL	5954.5	5954.5	97.64 %		11:54:43
3	Al 396.153Radial†	6873.9	7015.9	4961.4 ug/L	4961.4 ppb	11:54:43
3	Ca 317.933Radial†	3400.9	3444.1	5132.6 ug/L	5132.6 ppb	11:55:03
3	Fe 238.204 Radial†	556.3	560.1	5179.8 ug/L	5179.8 ppb	11:55:03
3	K 766.490 Radial†	30472.9	28796.5	5028.2 ug/L	5028.2 ppb	11:54:43
3	Mg 279.077 IEC†	147.3	149.6	5317.1 ug/L	5317.1 ppb	11:55:03
3	Na 589.592 Radial†	27808.7	29382.3	9452.6 ug/L	9452.6 ppb	11:54:43
3	Sr 421.552†	78998.1	80387.4	495.76 ug/L	495.76 ppb	11:54:43
3	Sc 361.383	903681.4	903681.4	100.26 %		11:56:12
3	Y 371.029	740901.5	740901.5	98.551 %		11:56:12
3	Ag 328.068†	113243.1	112632.2	504.70 ug/L	504.70 ppb	11:56:18
3	As 188.979†	1238.1	1259.2	480.76 ug/L	480.76 ppb	11:56:38
3	B 249.677†	23333.1	23891.2	483.55 ug/L	483.55 ppb	11:56:18
3	Ba 233.527†	68178.6	68017.4	492.54 ug/L	492.54 ppb	11:56:18
3	Be 313.107†	1364798.9	1366504.3	483.54 ug/L	483.54 ppb	11:56:12
3	Cd 226.502†	47830.9	47912.0	488.67 ug/L	488.67 ppb	11:56:18
3	Co 228.616†	26667.7	26672.0	489.66 ug/L	489.66 ppb	11:56:18
3	Cr 267.716†	48248.6	48041.7	494.10 ug/L	494.10 ppb	11:56:18
3	Cu 324.752†	182256.7	174909.5	490.50 ug/L	490.50 ppb	11:56:18
3	Mn 257.610†	469164.2	467444.3	486.22 ug/L	486.22 ppb	11:56:12
3	Mo 202.031†	7945.1	7897.6	492.00 ug/L	492.00 ppb	11:56:38
3	Ni 231.604†	21984.6	21836.3	491.13 ug/L	491.13 ppb	11:56:18
3	P 214.914†	4516.2	4279.5	2279.3 ug/L	2279.3 ppb	11:56:38
3	Pb 220.353†	4352.3	4413.6	484.19 ug/L	484.19 ppb	11:56:38
3	S 181.975 Axial†	764.2	715.7	947.74 ug/L	947.74 ppb	11:56:38
3	Sb 206.836†	1598.2	1566.4	490.09 ug/L	490.09 ppb	11:56:38
3	Se 196.026†	823.8	844.0	492.16 ug/L	492.16 ppb	11:56:38
3	Si 251.611†	84587.8	83823.4	2435.9 ug/L	2435.9 ppb	11:56:18
3	Sn 189.927†	3082.9	3069.4	488.19 ug/L	488.19 ppb	11:56:38
3	Ti 334.940†	321677.1	322037.6	504.86 ug/L	504.86 ppb	11:56:12
3	Tl 190.801†	1757.2	1790.6	487.74 ug/L	487.74 ppb	11:56:38
3	U 409.014†	15947.0	18455.6	509.35 ug/L	509.35 ppb	11:56:18
3	V 292.402†	74757.5	75984.0	500.60 ug/L	500.60 ppb	11:56:18
3	Zn 213.857†	58813.0	58008.6	487.39 ug/L	487.39 ppb	11:56:18
3	SiO2†	84033.9	83302.8	5193.7 ug/L	5193.7 ppb	11:56:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905224.9	100.43	%	0.173				0.17%
Sc Radial	5777.7	102	%	3.0				2.97%
Y 371.029	741510.6	98.632	%	0.1098				0.11%
Y RADIAL	6161.2	101.0	%	2.97				2.94%
Ag 328.068†	111608.2	500.07	ug/L	4.314	500.07	ppb	4.314	0.86%
QC value within limits for Ag 328.068 Recovery = 100.01%								
Al 396.153Radial†	6888.2	4870.8	ug/L	84.24	4870.8	ppb	84.24	1.73%
QC value within limits for Al 396.153Radial Recovery = 97.42%								
As 188.979†	1251.1	477.64	ug/L	4.624	477.64	ppb	4.624	0.97%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	23593.7	477.53	ug/L	5.384	477.53	ppb	5.384	1.13%
QC value within limits for B 249.677 Recovery = 95.51%								
Ba 233.527†	67535.3	489.04	ug/L	3.062	489.04	ppb	3.062	0.63%
QC value within limits for Ba 233.527 Recovery = 97.81%								
Be 313.107†	1357937.1	480.51	ug/L	3.091	480.51	ppb	3.091	0.64%
QC value within limits for Be 313.107 Recovery = 96.10%								
Ca 317.933Radial†	3321.1	4949.3	ug/L	161.91	4949.3	ppb	161.91	3.27%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.99%
Cd 226.502†            47560.0      485.09 ug/L        3.165      485.09 ppb        3.165   0.65%
   QC value within limits for Cd 226.502  Recovery = 97.02%
Co 228.616†            26482.9      486.19 ug/L        3.053      486.19 ppb        3.053   0.63%
   QC value within limits for Co 228.616  Recovery = 97.24%
Cr 267.716†            47620.0      489.77 ug/L        3.837      489.77 ppb        3.837   0.78%
   QC value within limits for Cr 267.716  Recovery = 97.95%
Cu 324.752†           172744.9      484.42 ug/L        5.704      484.42 ppb        5.704   1.18%
   QC value within limits for Cu 324.752  Recovery = 96.88%
Fe 238.204 Radial†       539.4      4988.7 ug/L       172.48      4988.7 ppb       172.48   3.46%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.77%
K 766.490 Radial†      28126.1      4911.0 ug/L       113.52      4911.0 ppb       113.52   2.31%
   QC value within limits for K 766.490 Radial  Recovery = 98.22%
Mg 279.077 IEC†          145.3      5166.2 ug/L       136.89      5166.2 ppb       136.89   2.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.32%
Mn 257.610†           465630.9      484.32 ug/L        2.277      484.32 ppb        2.277   0.47%
   QC value within limits for Mn 257.610  Recovery = 96.86%
Mo 202.031†             7883.4      491.10 ug/L        2.957      491.10 ppb        2.957   0.60%
   QC value within limits for Mo 202.031  Recovery = 98.22%
Na 589.592 Radial†     28942.6      9311.1 ug/L       133.49      9311.1 ppb       133.49   1.43%
   QC value within limits for Na 589.592 Radial  Recovery = 93.11%
Ni 231.604†            21685.7      487.74 ug/L        2.991      487.74 ppb        2.991   0.61%
   QC value within limits for Ni 231.604  Recovery = 97.55%
P 214.914†              4269.7      2274.9 ug/L       16.19      2274.9 ppb       16.19   0.71%
   QC value within limits for P 214.914  Recovery = 91.00%
Pb 220.353†             4398.8      482.56 ug/L        4.369      482.56 ppb        4.369   0.91%
   QC value within limits for Pb 220.353  Recovery = 96.51%
S 181.975 Axial†         712.8      943.93 ug/L        5.007      943.93 ppb        5.007   0.53%
   QC value within limits for S 181.975 Axial  Recovery = 94.39%
Sb 206.836†             1575.1      492.85 ug/L        4.791      492.85 ppb        4.791   0.97%
   QC value within limits for Sb 206.836  Recovery = 98.57%
Se 196.026†              841.5      490.13 ug/L        4.379      490.13 ppb        4.379   0.89%
   QC value within limits for Se 196.026  Recovery = 98.03%
Si 251.611†            83020.7      2412.5 ug/L       20.75      2412.5 ppb       20.75   0.86%
   QC value within limits for Si 251.611  Recovery = 96.50%
Sn 189.927†             3066.3      487.68 ug/L        2.410      487.68 ppb        2.410   0.49%
   QC value within limits for Sn 189.927  Recovery = 97.54%
Sr 421.552†            79129.0      488.00 ug/L        7.627      488.00 ppb        7.627   1.56%
   QC value within limits for Sr 421.552  Recovery = 97.60%
Ti 334.940†           320413.9      502.31 ug/L        3.000      502.31 ppb        3.000   0.60%
   QC value within limits for Ti 334.940  Recovery = 100.46%
Tl 190.801†             1786.6      486.66 ug/L        2.599      486.66 ppb        2.599   0.53%
   QC value within limits for Tl 190.801  Recovery = 97.33%
U 409.014†             18170.0      501.47 ug/L        7.129      501.47 ppb        7.129   1.42%
   QC value within limits for U 409.014  Recovery = 100.29%
V 292.402†             75292.8      496.10 ug/L        4.170      496.10 ppb        4.170   0.84%
   QC value within limits for V 292.402  Recovery = 99.22%
Zn 213.857†            57523.5      483.33 ug/L        3.601      483.33 ppb        3.601   0.74%
   QC value within limits for Zn 213.857  Recovery = 96.67%
SiO2†                  82760.2      5159.9 ug/L       29.41      5159.9 ppb       29.41   0.57%
   QC value within limits for SiO2  Recovery = 96.49%
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 11:59:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5778.0	5778.0	102	%			12:00:56
1	Y RADIAL	6210.7	6210.7	101.8	%			12:00:56
1	Al 396.153Radial†	-31.7	-10.8	-7.6268	ug/L	-7.6268	ppb	12:00:56
1	Ca 317.933Radial†	34.2	16.7	24.883	ug/L	24.883	ppb	12:01:16
1	Fe 238.204 Radial†	8.3	2.1	19.447	ug/L	19.447	ppb	12:01:16
1	K 766.490 Radial†	2599.1	340.6	59.575	ug/L	59.575	ppb	12:00:56
1	Mg 279.077 IEC†	0.8	0.5	17.313	ug/L	17.313	ppb	12:01:16
1	Na 589.592 Radial†	-1142.4	-41.4	-13.322	ug/L	-13.322	ppb	12:00:56
1	Sr 421.552†	1.4	-6.1	-0.0377	ug/L	-0.0377	ppb	12:00:56
1	Sc 361.383	880666.9	880666.9	97.709	%			12:02:13
1	Y 371.029	734635.7	734635.7	97.717	%			12:02:13
1	Ag 328.068†	327.6	20.4	0.0950	ug/L	0.0950	ppb	12:02:13
1	As 188.979†	-26.5	-2.8	-1.0389	ug/L	-1.0389	ppb	12:02:33
1	B 249.677†	-382.3	227.8	4.6264	ug/L	4.6264	ppb	12:02:33
1	Ba 233.527†	-11.4	5.3	0.0401	ug/L	0.0401	ppb	12:02:33
1	Be 313.107†	-4993.2	161.8	0.0574	ug/L	0.0574	ppb	12:02:13
1	Cd 226.502†	-195.8	5.7	0.0562	ug/L	0.0562	ppb	12:02:33
1	Co 228.616†	-62.9	9.7	0.1766	ug/L	0.1766	ppb	12:02:33
1	Cr 267.716†	98.8	20.2	0.2078	ug/L	0.2078	ppb	12:02:33
1	Cu 324.752†	6648.8	-66.1	-0.1843	ug/L	-0.1843	ppb	12:02:13
1	Mn 257.610†	570.3	89.9	0.0950	ug/L	0.0950	ppb	12:02:33
1	Mo 202.031†	18.1	-8.2	-0.5095	ug/L	-0.5095	ppb	12:02:33
1	Ni 231.604†	103.6	15.1	0.3407	ug/L	0.3407	ppb	12:02:33
1	P 214.914†	222.6	2.9	1.6211	ug/L	1.6211	ppb	12:02:33
1	Pb 220.353†	-71.4	-0.3	-0.0379	ug/L	-0.0379	ppb	12:02:33
1	S 181.975 Axial†	39.7	-5.8	-7.6975	ug/L	-7.6975	ppb	12:02:33
1	Sb 206.836†	29.3	2.4	0.7401	ug/L	0.7401	ppb	12:02:33
1	Se 196.026†	-30.9	-9.3	-5.1830	ug/L	-5.1830	ppb	12:02:33
1	Si 251.611†	609.4	80.3	2.3322	ug/L	2.3322	ppb	12:02:33
1	Sn 189.927†	7.5	2.3	0.3650	ug/L	0.3650	ppb	12:02:33
1	Ti 334.940†	-1100.3	75.1	0.1173	ug/L	0.1173	ppb	12:02:13
1	Tl 190.801†	-42.6	-5.7	-1.5374	ug/L	-1.5374	ppb	12:02:33
1	U 409.014†	-2361.2	133.7	3.6997	ug/L	3.6997	ppb	12:02:13
1	V 292.402†	-1329.6	61.0	0.3939	ug/L	0.3939	ppb	12:02:13
1	Zn 213.857†	742.9	109.6	0.9249	ug/L	0.9249	ppb	12:02:33
1	SiO2†	636.4	139.8	8.7316	ug/L	8.7316	ppb	12:03:29
2	Sc Radial	5736.8	5736.8	101	%			12:01:21
2	Y RADIAL	6130.9	6130.9	100.5	%			12:01:21
2	Al 396.153Radial†	-34.9	-14.1	-9.9946	ug/L	-9.9946	ppb	12:01:21
2	Ca 317.933Radial†	32.7	15.4	22.926	ug/L	22.926	ppb	12:01:41
2	Fe 238.204 Radial†	7.9	1.8	16.587	ug/L	16.587	ppb	12:01:41
2	K 766.490 Radial†	2527.3	287.8	50.326	ug/L	50.326	ppb	12:01:21
2	Mg 279.077 IEC†	2.6	2.3	81.972	ug/L	81.972	ppb	12:01:41
2	Na 589.592 Radial†	-1122.8	-30.0	-9.6543	ug/L	-9.6543	ppb	12:01:21
2	Sr 421.552†	-17.3	-24.5	-0.1514	ug/L	-0.1514	ppb	12:01:21
2	Sc 361.383	882124.7	882124.7	97.870	%			12:02:38
2	Y 371.029	736859.0	736859.0	98.013	%			12:02:38
2	Ag 328.068†	461.1	156.2	0.7004	ug/L	0.7004	ppb	12:02:38
2	As 188.979†	-26.0	-2.2	-0.8410	ug/L	-0.8410	ppb	12:02:58
2	B 249.677†	-353.1	258.4	5.2479	ug/L	5.2479	ppb	12:02:58
2	Ba 233.527†	-1.6	15.4	0.1123	ug/L	0.1123	ppb	12:02:58
2	Be 313.107†	-4901.5	263.9	0.0933	ug/L	0.0933	ppb	12:02:38
2	Cd 226.502†	-201.5	0.2	0.0006	ug/L	0.0006	ppb	12:02:58
2	Co 228.616†	-73.4	-1.0	-0.0184	ug/L	-0.0184	ppb	12:02:58
2	Cr 267.716†	108.1	29.6	0.3041	ug/L	0.3041	ppb	12:02:58
2	Cu 324.752†	6769.7	46.1	0.1301	ug/L	0.1301	ppb	12:02:38
2	Mn 257.610†	564.1	82.6	0.0859	ug/L	0.0859	ppb	12:02:58
2	Mo 202.031†	24.1	-2.1	-0.1309	ug/L	-0.1309	ppb	12:02:58
2	Ni 231.604†	98.5	9.8	0.2196	ug/L	0.2196	ppb	12:02:58

2	P 214.914†	221.0	0.9	0.4434 ug/L	0.4434 ppb	12:02:58
2	Pb 220.353†	-67.7	3.6	0.3861 ug/L	0.3861 ppb	12:02:58
2	S 181.975 Axial†	37.7	-8.0	-10.581 ug/L	-10.581 ppb	12:02:58
2	Sb 206.836†	26.7	-0.3	-0.0898 ug/L	-0.0898 ppb	12:02:58
2	Se 196.026†	-28.5	-6.8	-3.7661 ug/L	-3.7661 ppb	12:02:58
2	Si 251.611†	629.3	99.6	2.8947 ug/L	2.8947 ppb	12:02:58
2	Sn 189.927†	6.1	0.8	0.1372 ug/L	0.1372 ppb	12:02:58
2	Ti 334.940†	-1148.3	27.9	0.0443 ug/L	0.0443 ppb	12:02:38
2	Tl 190.801†	-32.4	4.9	1.3294 ug/L	1.3294 ppb	12:02:58
2	U 409.014†	-2453.8	43.1	1.1904 ug/L	1.1904 ppb	12:02:38
2	V 292.402†	-1355.8	36.5	0.2368 ug/L	0.2368 ppb	12:02:38
2	Zn 213.857†	759.5	125.4	1.0569 ug/L	1.0569 ppb	12:02:58
2	SiO2†	625.9	128.0	7.9848 ug/L	7.9848 ppb	12:03:34
3	Sc Radial	5707.2	5707.2	100 %		12:01:46
3	Y RADIAL	6134.6	6134.6	100.6 %		12:01:46
3	Al 396.153Radial†	-33.4	-12.8	-9.0646 ug/L	-9.0646 ppb	12:01:46
3	Ca 317.933Radial†	34.3	17.2	25.605 ug/L	25.605 ppb	12:02:06
3	Fe 238.204 Radial†	7.9	1.9	17.461 ug/L	17.461 ppb	12:02:06
3	K 766.490 Radial†	2556.2	329.6	57.647 ug/L	57.647 ppb	12:01:46
3	Mg 279.077 IEC†	5.5	5.3	186.39 ug/L	186.39 ppb	12:02:06
3	Na 589.592 Radial†	-1143.2	-56.1	-18.053 ug/L	-18.053 ppb	12:01:46
3	Sr 421.552†	-30.7	-38.0	-0.2344 ug/L	-0.2344 ppb	12:01:46
3	Sc 361.383	882453.4	882453.4	97.907 %		12:03:04
3	Y 371.029	737944.6	737944.6	98.158 %		12:03:04
3	Ag 328.068†	292.3	-16.3	-0.0699 ug/L	-0.0699 ppb	12:03:04
3	As 188.979†	-28.8	-5.0	-1.8952 ug/L	-1.8952 ppb	12:03:24
3	B 249.677†	-380.1	230.9	4.6899 ug/L	4.6899 ppb	12:03:24
3	Ba 233.527†	-8.1	8.8	0.0645 ug/L	0.0645 ppb	12:03:24
3	Be 313.107†	-4938.3	228.2	0.0808 ug/L	0.0808 ppb	12:03:04
3	Cd 226.502†	-190.2	11.8	0.1192 ug/L	0.1192 ppb	12:03:24
3	Co 228.616†	-64.6	8.1	0.1461 ug/L	0.1461 ppb	12:03:24
3	Cr 267.716†	86.4	7.4	0.0753 ug/L	0.0753 ppb	12:03:24
3	Cu 324.752†	6681.4	-46.7	-0.1299 ug/L	-0.1299 ppb	12:03:04
3	Mn 257.610†	553.0	71.0	0.0721 ug/L	0.0721 ppb	12:03:24
3	Mo 202.031†	18.8	-7.6	-0.4699 ug/L	-0.4699 ppb	12:03:24
3	Ni 231.604†	103.3	14.7	0.3307 ug/L	0.3307 ppb	12:03:24
3	P 214.914†	209.5	-10.9	-6.0028 ug/L	-6.0028 ppb	12:03:24
3	Pb 220.353†	-69.9	1.4	0.1470 ug/L	0.1470 ppb	12:03:24
3	S 181.975 Axial†	41.9	-3.7	-4.8950 ug/L	-4.8950 ppb	12:03:24
3	Sb 206.836†	31.5	4.6	1.3982 ug/L	1.3982 ppb	12:03:24
3	Se 196.026†	-19.0	2.9	1.6658 ug/L	1.6658 ppb	12:03:24
3	Si 251.611†	585.3	54.5	1.5786 ug/L	1.5786 ppb	12:03:24
3	Sn 189.927†	7.6	2.3	0.3729 ug/L	0.3729 ppb	12:03:24
3	Ti 334.940†	-1099.7	77.9	0.1217 ug/L	0.1217 ppb	12:03:04
3	Tl 190.801†	-36.0	1.2	0.3243 ug/L	0.3243 ppb	12:03:24
3	U 409.014†	-2362.5	137.3	3.7992 ug/L	3.7992 ppb	12:03:04
3	V 292.402†	-1354.9	38.0	0.2488 ug/L	0.2488 ppb	12:03:04
3	Zn 213.857†	755.5	121.0	1.0158 ug/L	1.0158 ppb	12:03:24
3	SiO2†	597.1	98.3	6.1328 ug/L	6.1328 ppb	12:03:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881748.3	97.829	%	0.1055				0.11%
Sc Radial	5740.7	101	%	0.6				0.62%
Y 371.029	736479.8	97.963	%	0.2244				0.23%
Y RADIAL	6158.7	101.0	%	0.74				0.73%
Ag 328.068†	53.4	0.2418	ug/L	0.40560	0.2418	ppb	0.40560	167.71%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-12.5	-8.8954	ug/L	1.19293	-8.8954	ppb	1.19293	13.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.2583	ug/L	0.56033	-1.2583	ppb	0.56033	44.53%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	239.0	4.8548	ug/L	0.34195	4.8548	ppb	0.34195	7.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.8	0.0723	ug/L	0.03675	0.0723	ppb	0.03675	50.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	217.9	0.0771	ug/L	0.01824	0.0771	ppb	0.01824	23.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.4	24.472	ug/L	1.3860	24.472	ppb	1.3860	5.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 5.9      0.0587 ug/L       0.05931      0.0587 ppb        0.05931 101.12%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.6      0.1014 ug/L       0.10489      0.1014 ppb        0.10489 103.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.1      0.1957 ug/L       0.11487      0.1957 ppb        0.11487  58.68%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -22.2     -0.0613 ug/L       0.16803     -0.0613 ppb        0.16803 273.94%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.9      17.832 ug/L        1.4652      17.832 ppb         1.4652   8.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         319.3      55.849 ug/L        4.8796      55.849 ppb         4.8796   8.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.7      95.224 ug/L       85.3118      95.224 ppb        85.3118  89.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                81.2      0.0843 ug/L       0.01154      0.0843 ppb        0.01154  13.68%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.0     -0.3701 ug/L       0.20810     -0.3701 ppb        0.20810  56.23%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -42.5     -13.676 ug/L        4.2106     -13.676 ppb         4.2106  30.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.2      0.2970 ug/L       0.06721      0.2970 ppb        0.06721  22.63%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.4     -1.3128 ug/L       4.10415     -1.3128 ppb        4.10415 312.63%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.5      0.1651 ug/L       0.21260      0.1651 ppb        0.21260 128.81%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -5.8     -7.7246 ug/L       2.84335     -7.7246 ppb        2.84335  36.81%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.2      0.6829 ug/L       0.74566      0.6829 ppb        0.74566 109.20%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.4278 ug/L       3.61521     -2.4278 ppb        3.61521 148.91%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                78.1      2.2685 ug/L       0.66034      2.2685 ppb        0.66034  29.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.8      0.2917 ug/L       0.13385      0.2917 ppb        0.13385  45.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -22.9     -0.1412 ug/L       0.09876     -0.1412 ppb        0.09876  69.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                60.3      0.0944 ug/L       0.04350      0.0944 ppb        0.04350  46.07%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.1      0.0388 ug/L       1.45458      0.0388 ppb        1.45458 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                104.7      2.8964 ug/L       1.47833      2.8964 ppb        1.47833  51.04%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 45.2      0.2932 ug/L       0.08745      0.2932 ppb        0.08745  29.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               118.7      0.9992 ug/L       0.06754      0.9992 ppb        0.06754   6.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     122.0      7.6164 ug/L       1.33796      7.6164 ppb        1.33796  17.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 13:01:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5743.6	5743.6	101	%			13:03:47
1	Y RADIAL	6094.5	6094.5	99.93	%			13:03:47
1	Al 396.153Radial†	7097.1	7041.1	4979.1	ug/L	4979.1	ppb	13:03:47
1	Ca 317.933Radial†	3346.9	3293.9	4908.7	ug/L	4908.7	ppb	13:04:07
1	Fe 238.204 Radial†	547.5	535.6	4953.7	ug/L	4953.7	ppb	13:04:07
1	K 766.490 Radial†	31255.6	28703.6	5011.9	ug/L	5011.9	ppb	13:03:47
1	Mg 279.077 IEC†	146.7	144.9	5149.9	ug/L	5149.9	ppb	13:04:07
1	Na 589.592 Radial†	29073.2	29841.9	9600.5	ug/L	9600.5	ppb	13:03:47
1	Sr 421.552†	82394.9	81499.7	502.62	ug/L	502.62	ppb	13:03:47
1	Sc 361.383	901648.1	901648.1	100.04	%			13:05:04
1	Y 371.029	737918.2	737918.2	98.154	%			13:05:04
1	Ag 328.068†	111788.8	111433.1	499.27	ug/L	499.27	ppb	13:05:09
1	As 188.979†	1227.6	1251.6	477.74	ug/L	477.74	ppb	13:05:29
1	B 249.677†	22780.1	23390.9	473.42	ug/L	473.42	ppb	13:05:09
1	Ba 233.527†	67414.1	67406.5	488.11	ug/L	488.11	ppb	13:05:09
1	Be 313.107†	1364698.9	1369474.0	484.57	ug/L	484.57	ppb	13:05:04
1	Cd 226.502†	47232.7	47421.6	483.68	ug/L	483.68	ppb	13:05:09
1	Co 228.616†	26364.5	26429.0	485.23	ug/L	485.23	ppb	13:05:09
1	Cr 267.716†	47629.6	47531.4	488.85	ug/L	488.85	ppb	13:05:09
1	Cu 324.752†	179533.6	172597.4	484.00	ug/L	484.00	ppb	13:05:09
1	Mn 257.610†	471130.9	470465.5	489.34	ug/L	489.34	ppb	13:05:04
1	Mo 202.031†	7999.6	7970.0	496.49	ug/L	496.49	ppb	13:05:29
1	Ni 231.604†	21725.5	21626.8	486.42	ug/L	486.42	ppb	13:05:09
1	P 214.914†	4546.4	4319.8	2302.7	ug/L	2302.7	ppb	13:05:29
1	Pb 220.353†	4374.7	4445.8	487.75	ug/L	487.75	ppb	13:05:29
1	S 181.975 Axial†	769.9	723.2	957.60	ug/L	957.60	ppb	13:05:29
1	Sb 206.836†	1620.9	1592.7	498.51	ug/L	498.51	ppb	13:05:29
1	Se 196.026†	835.5	857.5	499.06	ug/L	499.06	ppb	13:05:29
1	Si 251.611†	83471.9	82898.1	2408.8	ug/L	2408.8	ppb	13:05:09
1	Sn 189.927†	3100.1	3093.5	492.00	ug/L	492.00	ppb	13:05:29
1	Ti 334.940†	315099.5	316185.9	495.68	ug/L	495.68	ppb	13:05:09
1	Tl 190.801†	1756.4	1793.7	488.56	ug/L	488.56	ppb	13:05:29
1	U 409.014†	15686.0	18230.5	503.15	ug/L	503.15	ppb	13:05:09
1	V 292.402†	73736.4	75131.4	495.15	ug/L	495.15	ppb	13:05:09
1	Zn 213.857†	58039.0	57367.2	482.01	ug/L	482.01	ppb	13:05:09
1	SiO2†	83471.7	82929.7	5170.2	ug/L	5170.2	ppb	13:06:37
2	Sc Radial	5811.6	5811.6	102	%			13:04:12
2	Y RADIAL	6158.1	6158.1	101.0	%			13:04:12
2	Al 396.153Radial†	7072.7	6935.0	4904.0	ug/L	4904.0	ppb	13:04:12
2	Ca 317.933Radial†	3388.4	3295.7	4911.5	ug/L	4911.5	ppb	13:04:32
2	Fe 238.204 Radial†	553.6	535.2	4950.0	ug/L	4950.0	ppb	13:04:32
2	K 766.490 Radial†	31337.9	28422.1	4962.6	ug/L	4962.6	ppb	13:04:12
2	Mg 279.077 IEC†	150.2	146.6	5209.8	ug/L	5209.8	ppb	13:04:32
2	Na 589.592 Radial†	29032.5	29465.4	9479.3	ug/L	9479.3	ppb	13:04:12
2	Sr 421.552†	82450.3	80599.5	497.07	ug/L	497.07	ppb	13:04:12
2	Sc 361.383	910243.4	910243.4	100.99	%			13:05:35
2	Y 371.029	744211.5	744211.5	98.991	%			13:05:35
2	Ag 328.068†	112524.3	111106.2	497.80	ug/L	497.80	ppb	13:05:40
2	As 188.979†	1239.5	1251.7	477.80	ug/L	477.80	ppb	13:06:00
2	B 249.677†	22898.4	23293.1	471.43	ug/L	471.43	ppb	13:05:40
2	Ba 233.527†	67847.2	67199.0	486.60	ug/L	486.60	ppb	13:05:40
2	Be 313.107†	1374593.6	1366389.8	483.48	ug/L	483.48	ppb	13:05:35
2	Cd 226.502†	47543.4	47283.4	482.27	ug/L	482.27	ppb	13:05:40
2	Co 228.616†	26611.5	26424.7	485.14	ug/L	485.14	ppb	13:05:40
2	Cr 267.716†	47861.3	47311.3	486.59	ug/L	486.59	ppb	13:05:40
2	Cu 324.752†	180924.2	172279.6	483.11	ug/L	483.11	ppb	13:05:40
2	Mn 257.610†	474803.9	469655.3	488.50	ug/L	488.50	ppb	13:05:35
2	Mo 202.031†	7968.8	7863.9	489.89	ug/L	489.89	ppb	13:06:00
2	Ni 231.604†	21851.7	21546.6	484.61	ug/L	484.61	ppb	13:05:40

2	P 214.914†	4525.3	4256.0	2267.6 ug/L	2267.6 ppb	13:06:00
2	Pb 220.353†	4318.2	4348.6	477.09 ug/L	477.09 ppb	13:06:00
2	S 181.975 Axial†	757.8	703.9	932.04 ug/L	932.04 ppb	13:06:00
2	Sb 206.836†	1625.1	1581.6	494.86 ug/L	494.86 ppb	13:06:00
2	Se 196.026†	843.2	857.2	498.85 ug/L	498.85 ppb	13:06:00
2	Si 251.611†	84029.4	82662.2	2402.1 ug/L	2402.1 ppb	13:05:40
2	Sn 189.927†	3085.9	3050.2	485.11 ug/L	485.11 ppb	13:06:00
2	Ti 334.940†	317047.4	315140.3	494.04 ug/L	494.04 ppb	13:05:40
2	Tl 190.801†	1739.4	1760.3	479.52 ug/L	479.52 ppb	13:06:00
2	U 409.014†	16094.4	18486.9	510.26 ug/L	510.26 ppb	13:05:40
2	V 292.402†	74140.9	74835.9	493.15 ug/L	493.15 ppb	13:05:40
2	Zn 213.857†	58420.4	57197.0	480.58 ug/L	480.58 ppb	13:05:40
2	SiO2†	83729.7	82397.3	5137.2 ug/L	5137.2 ppb	13:06:42
3	Sc Radial	5745.2	5745.2	101 %		13:04:37
3	Y RADIAL	6092.6	6092.6	99.90 %		13:04:37
3	Al 396.153Radial†	7104.0	7046.0	4982.5 ug/L	4982.5 ppb	13:04:37
3	Ca 317.933Radial†	3406.4	3351.8	4995.0 ug/L	4995.0 ppb	13:04:57
3	Fe 238.204 Radial†	557.7	545.6	5045.5 ug/L	5045.5 ppb	13:04:57
3	K 766.490 Radial†	31213.4	28653.4	5003.1 ug/L	5003.1 ppb	13:04:37
3	Mg 279.077 IEC†	148.2	146.2	5198.6 ug/L	5198.6 ppb	13:04:57
3	Na 589.592 Radial†	28874.4	29637.4	9534.6 ug/L	9534.6 ppb	13:04:37
3	Sr 421.552†	82164.8	81249.7	501.08 ug/L	501.08 ppb	13:04:37
3	Sc 361.383	898728.0	898728.0	99.712 %		13:06:06
3	Y 371.029	735688.4	735688.4	97.858 %		13:06:06
3	Ag 328.068†	112651.3	112661.2	504.78 ug/L	504.78 ppb	13:06:11
3	As 188.979†	1236.2	1264.2	482.57 ug/L	482.57 ppb	13:06:31
3	B 249.677†	23020.0	23705.5	479.79 ug/L	479.79 ppb	13:06:11
3	Ba 233.527†	67735.8	67948.1	492.03 ug/L	492.03 ppb	13:06:11
3	Be 313.107†	1358515.8	1367705.5	483.96 ug/L	483.96 ppb	13:06:06
3	Cd 226.502†	47549.3	47892.4	488.48 ug/L	488.48 ppb	13:06:11
3	Co 228.616†	26461.0	26611.3	488.57 ug/L	488.57 ppb	13:06:11
3	Cr 267.716†	47985.8	48043.4	494.12 ug/L	494.12 ppb	13:06:11
3	Cu 324.752†	181151.7	174803.2	490.19 ug/L	490.19 ppb	13:06:11
3	Mn 257.610†	469453.6	470313.6	489.19 ug/L	489.19 ppb	13:06:06
3	Mo 202.031†	7989.5	7985.8	497.49 ug/L	497.49 ppb	13:06:31
3	Ni 231.604†	21756.2	21728.1	488.69 ug/L	488.69 ppb	13:06:11
3	P 214.914†	4531.4	4319.6	2301.5 ug/L	2301.5 ppb	13:06:31
3	Pb 220.353†	4363.4	4448.7	488.06 ug/L	488.06 ppb	13:06:31
3	S 181.975 Axial†	753.8	709.5	939.45 ug/L	939.45 ppb	13:06:31
3	Sb 206.836†	1625.8	1602.9	501.54 ug/L	501.54 ppb	13:06:31
3	Se 196.026†	837.0	861.7	501.69 ug/L	501.69 ppb	13:06:31
3	Si 251.611†	84038.5	83737.5	2433.3 ug/L	2433.3 ppb	13:06:11
3	Sn 189.927†	3092.9	3096.3	492.45 ug/L	492.45 ppb	13:06:31
3	Ti 334.940†	317327.8	319444.0	500.78 ug/L	500.78 ppb	13:06:11
3	Tl 190.801†	1754.6	1797.6	489.63 ug/L	489.63 ppb	13:06:31
3	U 409.014†	16204.3	18801.3	518.94 ug/L	518.94 ppb	13:06:11
3	V 292.402†	74327.6	75963.8	500.58 ug/L	500.58 ppb	13:06:11
3	Zn 213.857†	58351.9	57869.5	486.24 ug/L	486.24 ppb	13:06:11
3	SiO2†	84001.4	83732.1	5220.4 ug/L	5220.4 ppb	13:06:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903539.8	100.25	%	0.664				0.66%
Sc Radial	5766.8	101	%	0.7				0.67%
Y 371.029	739272.7	98.334	%	0.5879				0.60%
Y RADIAL	6115.0	100.3	%	0.61				0.61%
Ag 328.068†	111733.5	500.62	ug/L	3.677	500.62	ppb	3.677	0.73%
QC value within limits for Ag 328.068 Recovery = 100.12%								
Al 396.153Radial†	7007.3	4955.2	ug/L	44.36	4955.2	ppb	44.36	0.90%
QC value within limits for Al 396.153Radial Recovery = 99.10%								
As 188.979†	1255.8	479.37	ug/L	2.769	479.37	ppb	2.769	0.58%
QC value within limits for As 188.979 Recovery = 95.87%								
B 249.677†	23463.2	474.88	ug/L	4.367	474.88	ppb	4.367	0.92%
QC value within limits for B 249.677 Recovery = 94.98%								
Ba 233.527†	67517.9	488.91	ug/L	2.804	488.91	ppb	2.804	0.57%
QC value within limits for Ba 233.527 Recovery = 97.78%								
Be 313.107†	1367856.4	484.01	ug/L	0.548	484.01	ppb	0.548	0.11%
QC value within limits for Be 313.107 Recovery = 96.80%								
Ca 317.933Radial†	3313.8	4938.4	ug/L	49.04	4938.4	ppb	49.04	0.99%

```
   QC value within limits for Ca 317.933Radial  Recovery = 98.77%
Cd 226.502†            47532.5      484.81 ug/L        3.254      484.81 ppb          3.254   0.67%
   QC value within limits for Cd 226.502  Recovery = 96.96%
Co 228.616†            26488.4      486.31 ug/L        1.953      486.31 ppb          1.953   0.40%
   QC value within limits for Co 228.616  Recovery = 97.26%
Cr 267.716†            47628.7      489.85 ug/L        3.863      489.85 ppb          3.863   0.79%
   QC value within limits for Cr 267.716  Recovery = 97.97%
Cu 324.752†           173226.7      485.77 ug/L        3.855      485.77 ppb          3.855   0.79%
   QC value within limits for Cu 324.752  Recovery = 97.15%
Fe 238.204 Radial†       538.8      4983.1 ug/L       54.09      4983.1 ppb         54.09   1.09%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.66%
K 766.490 Radial†      28593.0      4992.5 ug/L       26.25      4992.5 ppb         26.25   0.53%
   QC value within limits for K 766.490 Radial  Recovery = 99.85%
Mg 279.077 IEC†          145.9      5186.1 ug/L       31.84      5186.1 ppb         31.84   0.61%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.72%
Mn 257.610†           470144.8      489.01 ug/L        0.450      489.01 ppb          0.450   0.09%
   QC value within limits for Mn 257.610  Recovery = 97.80%
Mo 202.031†             7939.9      494.62 ug/L        4.129      494.62 ppb          4.129   0.83%
   QC value within limits for Mo 202.031  Recovery = 98.92%
Na 589.592 Radial†     29648.2      9538.1 ug/L       60.64      9538.1 ppb         60.64   0.64%
   QC value within limits for Na 589.592 Radial  Recovery = 95.38%
Ni 231.604†            21633.8      486.57 ug/L        2.046      486.57 ppb          2.046   0.42%
   QC value within limits for Ni 231.604  Recovery = 97.31%
P 214.914†              4298.5      2290.6 ug/L       19.91      2290.6 ppb         19.91   0.87%
   QC value within limits for P 214.914  Recovery = 91.62%
Pb 220.353†             4414.4      484.30 ug/L        6.247      484.30 ppb          6.247   1.29%
   QC value within limits for Pb 220.353  Recovery = 96.86%
S 181.975 Axial†         712.2      943.03 ug/L       13.152      943.03 ppb         13.152   1.39%
   QC value within limits for S 181.975 Axial  Recovery = 94.30%
Sb 206.836†             1592.4      498.30 ug/L        3.345      498.30 ppb          3.345   0.67%
   QC value within limits for Sb 206.836  Recovery = 99.66%
Se 196.026†              858.8      499.87 ug/L        1.580      499.87 ppb          1.580   0.32%
   QC value within limits for Se 196.026  Recovery = 99.97%
Si 251.611†            83099.3      2414.7 ug/L       16.43      2414.7 ppb         16.43   0.68%
   QC value within limits for Si 251.611  Recovery = 96.59%
Sn 189.927†             3080.0      489.85 ug/L        4.112      489.85 ppb          4.112   0.84%
   QC value within limits for Sn 189.927  Recovery = 97.97%
Sr 421.552†            81116.3      500.26 ug/L        2.866      500.26 ppb          2.866   0.57%
   QC value within limits for Sr 421.552  Recovery = 100.05%
Ti 334.940†           316923.4      496.83 ug/L        3.518      496.83 ppb          3.518   0.71%
   QC value within limits for Ti 334.940  Recovery = 99.37%
Tl 190.801†             1783.9      485.90 ug/L        5.553      485.90 ppb          5.553   1.14%
   QC value within limits for Tl 190.801  Recovery = 97.18%
U 409.014†             18506.3      510.78 ug/L        7.904      510.78 ppb          7.904   1.55%
   QC value within limits for U 409.014  Recovery = 102.16%
V 292.402†             75310.4      496.29 ug/L        3.847      496.29 ppb          3.847   0.78%
   QC value within limits for V 292.402  Recovery = 99.26%
Zn 213.857†            57477.9      482.95 ug/L        2.942      482.95 ppb          2.942   0.61%
   QC value within limits for Zn 213.857  Recovery = 96.59%
SiO2†                  83019.7      5175.9 ug/L       41.93      5175.9 ppb         41.93   0.81%
   QC value within limits for SiO2  Recovery = 96.79%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 13:08:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5651.9	5651.9	99.5	%			13:10:49
1	Y RADIAL	6051.1	6051.1	99.22	%			13:10:49
1	Al 396.153Radial†	4.6	25.1	17.825	ug/L	17.825	ppb	13:10:49
1	Ca 317.933Radial†	28.7	11.9	17.676	ug/L	17.676	ppb	13:11:09
1	Fe 238.204 Radial†	9.5	3.5	32.159	ug/L	32.159	ppb	13:11:09
1	K 766.490 Radial†	2557.4	355.7	62.214	ug/L	62.214	ppb	13:10:49
1	Mg 279.077 IEC†	0.8	0.6	19.985	ug/L	19.985	ppb	13:11:09
1	Na 589.592 Radial†	-1072.5	3.9	1.2450	ug/L	1.2450	ppb	13:10:49
1	Sr 421.552†	-13.9	-21.4	-0.1322	ug/L	-0.1322	ppb	13:10:49
1	Sc 361.383	888448.5	888448.5	98.572	%			13:12:06
1	Y 371.029	739794.1	739794.1	98.404	%			13:12:06
1	Ag 328.068†	329.9	19.8	0.0953	ug/L	0.0953	ppb	13:12:06
1	As 188.979†	-21.7	2.4	0.9157	ug/L	0.9157	ppb	13:12:26
1	B 249.677†	-431.9	181.0	3.6739	ug/L	3.6739	ppb	13:12:26
1	Ba 233.527†	-2.8	14.1	0.1045	ug/L	0.1045	ppb	13:12:26
1	Be 313.107†	-5022.4	176.9	0.0627	ug/L	0.0627	ppb	13:12:06
1	Cd 226.502†	-187.8	15.5	0.1554	ug/L	0.1554	ppb	13:12:26
1	Co 228.616†	-75.0	-2.0	-0.0366	ug/L	-0.0366	ppb	13:12:26
1	Cr 267.716†	96.4	17.0	0.1741	ug/L	0.1741	ppb	13:12:26
1	Cu 324.752†	6686.4	-87.6	-0.2439	ug/L	-0.2439	ppb	13:12:06
1	Mn 257.610†	591.1	105.9	0.1129	ug/L	0.1129	ppb	13:12:26
1	Mo 202.031†	30.4	4.0	0.2535	ug/L	0.2535	ppb	13:12:26
1	Ni 231.604†	98.4	8.9	0.2012	ug/L	0.2012	ppb	13:12:26
1	P 214.914†	224.5	2.9	1.6049	ug/L	1.6049	ppb	13:12:26
1	Pb 220.353†	-57.4	14.5	1.5911	ug/L	1.5911	ppb	13:12:26
1	S 181.975 Axial†	49.6	3.8	5.0324	ug/L	5.0324	ppb	13:12:26
1	Sb 206.836†	40.7	13.7	4.2417	ug/L	4.2417	ppb	13:12:26
1	Se 196.026†	-16.4	5.7	3.2817	ug/L	3.2817	ppb	13:12:26
1	Si 251.611†	556.3	21.0	0.5877	ug/L	0.5877	ppb	13:12:26
1	Sn 189.927†	7.4	2.1	0.3348	ug/L	0.3348	ppb	13:12:26
1	Ti 334.940†	-1104.8	80.3	0.1244	ug/L	0.1244	ppb	13:12:06
1	Tl 190.801†	-32.4	5.1	1.3784	ug/L	1.3784	ppb	13:12:26
1	U 409.014†	-2322.1	194.6	5.3820	ug/L	5.3820	ppb	13:12:06
1	V 292.402†	-1324.5	78.2	0.5176	ug/L	0.5176	ppb	13:12:06
1	Zn 213.857†	748.7	108.9	0.9184	ug/L	0.9184	ppb	13:12:26
1	SiO2†	535.2	31.4	1.9100	ug/L	1.9100	ppb	13:13:22
2	Sc Radial	5661.6	5661.6	99.6	%			13:11:14
2	Y RADIAL	6063.1	6063.1	99.42	%			13:11:14
2	Al 396.153Radial†	-15.4	5.0	3.5614	ug/L	3.5614	ppb	13:11:14
2	Ca 317.933Radial†	30.0	13.1	19.555	ug/L	19.555	ppb	13:11:34
2	Fe 238.204 Radial†	9.2	3.2	29.713	ug/L	29.713	ppb	13:11:34
2	K 766.490 Radial†	2504.8	298.5	52.213	ug/L	52.213	ppb	13:11:14
2	Mg 279.077 IEC†	2.5	2.2	79.366	ug/L	79.366	ppb	13:11:34
2	Na 589.592 Radial†	-1135.5	-57.6	-18.515	ug/L	-18.515	ppb	13:11:14
2	Sr 421.552†	-16.4	-23.8	-0.1472	ug/L	-0.1472	ppb	13:11:14
2	Sc 361.383	883780.7	883780.7	98.054	%			13:12:31
2	Y 371.029	736350.4	736350.4	97.946	%			13:12:31
2	Ag 328.068†	345.8	37.7	0.1754	ug/L	0.1754	ppb	13:12:31
2	As 188.979†	-23.7	0.3	0.1041	ug/L	0.1041	ppb	13:12:51
2	B 249.677†	-412.0	198.9	4.0377	ug/L	4.0377	ppb	13:12:51
2	Ba 233.527†	-9.1	7.7	0.0588	ug/L	0.0588	ppb	13:12:51
2	Be 313.107†	-5015.2	157.3	0.0558	ug/L	0.0558	ppb	13:12:31
2	Cd 226.502†	-191.0	11.2	0.1116	ug/L	0.1116	ppb	13:12:51
2	Co 228.616†	-63.2	9.6	0.1752	ug/L	0.1752	ppb	13:12:51
2	Cr 267.716†	86.6	7.5	0.0771	ug/L	0.0771	ppb	13:12:51
2	Cu 324.752†	6732.1	-5.2	-0.0131	ug/L	-0.0131	ppb	13:12:31
2	Mn 257.610†	623.0	141.6	0.1486	ug/L	0.1486	ppb	13:12:51
2	Mo 202.031†	20.2	-6.2	-0.3832	ug/L	-0.3832	ppb	13:12:51
2	Ni 231.604†	83.6	-5.6	-0.1259	ug/L	-0.1259	ppb	13:12:51

2	P 214.914†	226.6	6.2	3.3767	ug/L	3.3767 ppb	13:12:51
2	Pb 220.353†	-53.3	18.4	2.0114	ug/L	2.0114 ppb	13:12:51
2	S 181.975 Axial†	45.3	-0.3	-0.3518	ug/L	-0.3518 ppb	13:12:51
2	Sb 206.836†	39.8	12.9	3.9884	ug/L	3.9884 ppb	13:12:51
2	Se 196.026†	-22.2	-0.4	-0.1322	ug/L	-0.1322 ppb	13:12:51
2	Si 251.611†	547.2	14.7	0.4171	ug/L	0.4171 ppb	13:12:51
2	Sn 189.927†	6.9	1.6	0.2608	ug/L	0.2608 ppb	13:12:51
2	Ti 334.940†	-1101.3	77.9	0.1205	ug/L	0.1205 ppb	13:12:31
2	Tl 190.801†	-40.9	-3.8	-1.0238	ug/L	-1.0238 ppb	13:12:51
2	U 409.014†	-2285.6	219.3	6.0680	ug/L	6.0680 ppb	13:12:31
2	V 292.402†	-1256.8	140.0	0.9138	ug/L	0.9138 ppb	13:12:31
2	Zn 213.857†	747.5	111.6	0.9418	ug/L	0.9418 ppb	13:12:51
2	SiO2†	582.4	82.4	5.1395	ug/L	5.1395 ppb	13:13:27
3	Sc Radial	5757.6	5757.6	101	%		13:11:39
3	Y RADIAL	6154.0	6154.0	100.9	%		13:11:39
3	Al 396.153Radial†	-36.9	-16.0	-11.344	ug/L	-11.344 ppb	13:11:39
3	Ca 317.933Radial†	28.8	11.4	17.030	ug/L	17.030 ppb	13:11:59
3	Fe 238.204 Radial†	8.7	2.6	23.926	ug/L	23.926 ppb	13:11:59
3	K 766.490 Radial†	2537.1	288.4	50.438	ug/L	50.438 ppb	13:11:39
3	Mg 279.077 IEC†	0.6	0.3	12.001	ug/L	12.001 ppb	13:11:59
3	Na 589.592 Radial†	-1076.0	20.2	6.4858	ug/L	6.4858 ppb	13:11:39
3	Sr 421.552†	14.8	7.1	0.0438	ug/L	0.0438 ppb	13:11:39
3	Sc 361.383	888451.3	888451.3	98.572	%		13:12:57
3	Y 371.029	741018.6	741018.6	98.567	%		13:12:57
3	Ag 328.068†	396.1	87.0	0.3878	ug/L	0.3878 ppb	13:12:57
3	As 188.979†	-18.0	6.1	2.3211	ug/L	2.3211 ppb	13:13:17
3	B 249.677†	-462.1	150.3	3.0515	ug/L	3.0515 ppb	13:13:17
3	Ba 233.527†	-17.6	-0.9	-0.0053	ug/L	-0.0053 ppb	13:13:17
3	Be 313.107†	-5007.4	192.1	0.0681	ug/L	0.0681 ppb	13:12:57
3	Cd 226.502†	-198.4	4.8	0.0466	ug/L	0.0466 ppb	13:13:17
3	Co 228.616†	-69.1	4.0	0.0734	ug/L	0.0734 ppb	13:13:17
3	Cr 267.716†	77.7	-2.0	-0.0230	ug/L	-0.0230 ppb	13:13:17
3	Cu 324.752†	6788.9	16.3	0.0470	ug/L	0.0470 ppb	13:12:57
3	Mn 257.610†	575.3	89.8	0.0955	ug/L	0.0955 ppb	13:13:17
3	Mo 202.031†	28.6	2.2	0.1393	ug/L	0.1393 ppb	13:13:17
3	Ni 231.604†	101.7	12.3	0.2777	ug/L	0.2777 ppb	13:13:17
3	P 214.914†	216.3	-5.4	-3.0041	ug/L	-3.0041 ppb	13:13:17
3	Pb 220.353†	-50.0	22.0	2.4062	ug/L	2.4062 ppb	13:13:17
3	S 181.975 Axial†	42.8	-3.1	-4.0742	ug/L	-4.0742 ppb	13:13:17
3	Sb 206.836†	41.5	14.5	4.4804	ug/L	4.4804 ppb	13:13:17
3	Se 196.026†	-22.9	-1.0	-0.4749	ug/L	-0.4749 ppb	13:13:17
3	Si 251.611†	557.8	22.5	0.6377	ug/L	0.6377 ppb	13:13:17
3	Sn 189.927†	8.6	3.3	0.5329	ug/L	0.5329 ppb	13:13:17
3	Ti 334.940†	-1117.0	67.9	0.1037	ug/L	0.1037 ppb	13:12:57
3	Tl 190.801†	-33.1	4.4	1.1928	ug/L	1.1928 ppb	13:13:17
3	U 409.014†	-2212.6	305.7	8.4596	ug/L	8.4596 ppb	13:12:57
3	V 292.402†	-1386.6	15.1	0.1131	ug/L	0.1131 ppb	13:12:57
3	Zn 213.857†	751.1	111.3	0.9389	ug/L	0.9389 ppb	13:13:17
3	SiO2†	545.2	41.6	2.5590	ug/L	2.5590 ppb	13:13:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	886893.5	98.399	%	0.2991				0.30%
Sc Radial	5690.4	100	%	1.0				1.03%
Y 371.029	739054.4	98.305	%	0.3220				0.33%
Y RADIAL	6089.4	99.85	%	0.923				0.92%
Ag 328.068†	48.1	0.2195	ug/L	0.15112	0.2195	ppb	0.15112	68.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.7	3.3474	ug/L	14.58563	3.3474	ppb	14.58563	435.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.9	1.1136	ug/L	1.12170	1.1136	ppb	1.12170	100.72%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	176.8	3.5877	ug/L	0.49872	3.5877	ppb	0.49872	13.90%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0527	ug/L	0.05515	0.0527	ppb	0.05515	104.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	175.4	0.0622	ug/L	0.00615	0.0622	ppb	0.00615	9.89%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.1	18.087	ug/L	1.3114	18.087	ppb	1.3114	7.25%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              10.5      0.1045 ug/L       0.05474      0.1045 ppb        0.05474  52.37%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               3.9      0.0707 ug/L       0.10593      0.0707 ppb        0.10593 149.88%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               7.5      0.0761 ug/L       0.09857      0.0761 ppb        0.09857 129.61%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -25.5     -0.0700 ug/L       0.15359     -0.0700 ppb        0.15359 219.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        3.1      28.599 ug/L        4.2276      28.599 ppb         4.2276  14.78%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       314.2      54.955 ug/L        6.3491      54.955 ppb         6.3491  11.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.0      37.117 ug/L       36.8057      37.117 ppb        36.8057  99.16%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             112.4      0.1190 ug/L       0.02708      0.1190 ppb        0.02708  22.76%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.0      0.0032 ug/L       0.33947      0.0032 ppb        0.33947 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -11.2     -3.5948 ug/L      13.18445     -3.5948 ppb       13.18445 366.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.2      0.1177 ug/L       0.21436      0.1177 ppb        0.21436 182.19%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                1.2      0.6592 ug/L       3.29382      0.6592 ppb        3.29382 499.68%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              18.3      2.0029 ug/L       0.40762      2.0029 ppb        0.40762  20.35%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.2      0.2021 ug/L       4.57852      0.2021 ppb        4.57852 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              13.7      4.2368 ug/L       0.24603      4.2368 ppb        0.24603   5.81%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.4      0.8915 ug/L       2.07701      0.8915 ppb        2.07701 232.97%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              19.4      0.5475 ug/L       0.11566      0.5475 ppb        0.11566  21.13%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.4      0.3762 ug/L       0.14070      0.3762 ppb        0.14070  37.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -12.7     -0.0785 ug/L       0.10624     -0.0785 ppb        0.10624 135.28%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              75.4      0.1162 ug/L       0.01101      0.1162 ppb        0.01101   9.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.9      0.5158 ug/L       1.33656      0.5158 ppb        1.33656 259.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              239.8      6.6365 ug/L       1.61564      6.6365 ppb        1.61564  24.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               77.8      0.5148 ug/L       0.40035      0.5148 ppb        0.40035  77.76%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             110.6      0.9330 ug/L       0.01278      0.9330 ppb        0.01278   1.37%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    51.8      3.2028 ug/L       1.70833      3.2028 ppb        1.70833  53.34%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 14:07:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5731.5	5731.5	101	%			14:09:16
1	Y RADIAL	6116.5	6116.5	100.3	%			14:09:16
1	Al 396.153Radial†	7032.3	6991.7	4944.0	ug/L	4944.0	ppb	14:09:16
1	Ca 317.933Radial†	3387.7	3341.3	4979.4	ug/L	4979.4	ppb	14:09:36
1	Fe 238.204 Radial†	548.5	537.7	4973.6	ug/L	4973.6	ppb	14:09:36
1	K 766.490 Radial†	31067.9	28582.8	4990.8	ug/L	4990.8	ppb	14:09:16
1	Mg 279.077 IEC†	146.2	144.7	5143.2	ug/L	5143.2	ppb	14:09:36
1	Na 589.592 Radial†	27631.4	28473.4	9160.2	ug/L	9160.2	ppb	14:09:16
1	Sr 421.552†	80072.1	79369.1	489.48	ug/L	489.48	ppb	14:09:16
1	Sc 361.383	892320.6	892320.6	99.002	%			14:10:33
1	Y 371.029	728724.7	728724.7	96.931	%			14:10:33
1	Ag 328.068†	112536.5	113356.5	507.86	ug/L	507.86	ppb	14:10:38
1	As 188.979†	1233.5	1270.4	484.93	ug/L	484.93	ppb	14:10:58
1	B 249.677†	23189.9	24042.9	486.64	ug/L	486.64	ppb	14:10:38
1	Ba 233.527†	67962.9	68665.3	497.21	ug/L	497.21	ppb	14:10:38
1	Be 313.107†	1358968.3	1377945.8	487.58	ug/L	487.58	ppb	14:10:33
1	Cd 226.502†	47527.3	48212.6	491.76	ug/L	491.76	ppb	14:10:38
1	Co 228.616†	26651.1	26993.9	495.58	ug/L	495.58	ppb	14:10:38
1	Cr 267.716†	47832.8	48234.3	496.08	ug/L	496.08	ppb	14:10:38
1	Cu 324.752†	180771.9	175724.2	492.77	ug/L	492.77	ppb	14:10:38
1	Mn 257.610†	472190.6	476458.9	495.57	ug/L	495.57	ppb	14:10:33
1	Mo 202.031†	7921.4	7974.6	496.78	ug/L	496.78	ppb	14:10:58
1	Ni 231.604†	21916.1	22046.3	495.85	ug/L	495.85	ppb	14:10:38
1	P 214.914†	4531.6	4352.4	2319.2	ug/L	2319.2	ppb	14:10:58
1	Pb 220.353†	4341.9	4458.4	489.11	ug/L	489.11	ppb	14:10:58
1	S 181.975 Axial†	752.4	713.5	944.83	ug/L	944.83	ppb	14:10:58
1	Sb 206.836†	1618.0	1606.7	502.70	ug/L	502.70	ppb	14:10:58
1	Se 196.026†	839.5	870.2	506.25	ug/L	506.25	ppb	14:10:58
1	Si 251.611†	83916.7	84219.6	2447.4	ug/L	2447.4	ppb	14:10:38
1	Sn 189.927†	3092.6	3118.4	495.95	ug/L	495.95	ppb	14:10:58
1	Ti 334.940†	317377.1	321779.0	504.44	ug/L	504.44	ppb	14:10:38
1	Tl 190.801†	1753.9	1809.6	492.89	ug/L	492.89	ppb	14:10:58
1	U 409.014†	15840.1	18550.1	511.99	ug/L	511.99	ppb	14:10:38
1	V 292.402†	73924.8	76092.2	501.40	ug/L	501.40	ppb	14:10:38
1	Zn 213.857†	58344.7	58282.5	489.70	ug/L	489.70	ppb	14:10:38
1	SiO2†	83989.3	84324.8	5257.6	ug/L	5257.6	ppb	14:12:06
2	Sc Radial	5541.5	5541.5	97.5	%			14:09:41
2	Y RADIAL	5865.8	5865.8	96.18	%			14:09:41
2	Al 396.153Radial†	7078.8	7278.4	5147.4	ug/L	5147.4	ppb	14:09:41
2	Ca 317.933Radial†	3379.4	3448.0	5138.4	ug/L	5138.4	ppb	14:10:01
2	Fe 238.204 Radial†	546.8	554.6	5129.1	ug/L	5129.1	ppb	14:10:01
2	K 766.490 Radial†	31283.5	29859.9	5214.1	ug/L	5214.1	ppb	14:09:41
2	Mg 279.077 IEC†	150.3	153.8	5466.2	ug/L	5466.2	ppb	14:10:01
2	Na 589.592 Radial†	27535.3	29314.0	9430.6	ug/L	9430.6	ppb	14:09:41
2	Sr 421.552†	80220.5	82242.9	507.20	ug/L	507.20	ppb	14:09:41
2	Sc 361.383	894623.5	894623.5	99.257	%			14:11:04
2	Y 371.029	731408.9	731408.9	97.288	%			14:11:04
2	Ag 328.068†	112288.9	112814.4	505.50	ug/L	505.50	ppb	14:11:09
2	As 188.979†	1241.6	1275.3	486.79	ug/L	486.79	ppb	14:11:29
2	B 249.677†	23074.9	23866.7	483.05	ug/L	483.05	ppb	14:11:09
2	Ba 233.527†	67930.2	68455.7	495.70	ug/L	495.70	ppb	14:11:09
2	Be 313.107†	1360130.7	1375583.5	486.75	ug/L	486.75	ppb	14:11:04
2	Cd 226.502†	47594.4	48156.7	491.17	ug/L	491.17	ppb	14:11:09
2	Co 228.616†	26547.9	26820.7	492.41	ug/L	492.41	ppb	14:11:09
2	Cr 267.716†	47868.5	48145.9	495.18	ug/L	495.18	ppb	14:11:09
2	Cu 324.752†	180326.2	174805.1	490.20	ug/L	490.20	ppb	14:11:09
2	Mn 257.610†	471871.1	474909.3	493.97	ug/L	493.97	ppb	14:11:04
2	Mo 202.031†	8002.3	8035.4	500.58	ug/L	500.58	ppb	14:11:29
2	Ni 231.604†	21833.1	21905.6	492.69	ug/L	492.69	ppb	14:11:09

2	P 214.914†	4549.1	4358.2	2322.8 ug/L	2322.8 ppb	14:11:29
2	Pb 220.353†	4380.6	4486.1	492.19 ug/L	492.19 ppb	14:11:29
2	S 181.975 Axial†	769.3	728.6	964.78 ug/L	964.78 ppb	14:11:29
2	Sb 206.836†	1636.7	1621.3	507.33 ug/L	507.33 ppb	14:11:29
2	Se 196.026†	831.3	859.8	500.92 ug/L	500.92 ppb	14:11:29
2	Si 251.611†	83962.5	84047.6	2442.2 ug/L	2442.2 ppb	14:11:09
2	Sn 189.927†	3099.2	3117.0	495.74 ug/L	495.74 ppb	14:11:29
2	Ti 334.940†	317123.5	320698.3	502.76 ug/L	502.76 ppb	14:11:09
2	Tl 190.801†	1767.2	1818.4	495.28 ug/L	495.28 ppb	14:11:29
2	U 409.014†	15725.5	18393.5	507.63 ug/L	507.63 ppb	14:11:09
2	V 292.402†	74154.9	76131.8	501.69 ug/L	501.69 ppb	14:11:09
2	Zn 213.857†	58303.4	58089.1	488.06 ug/L	488.06 ppb	14:11:09
2	SiO2†	83672.8	83787.5	5223.6 ug/L	5223.6 ppb	14:12:11
3	Sc Radial	5725.1	5725.1	101 %		14:10:06
3	Y RADIAL	6123.6	6123.6	100.4 %		14:10:06
3	Al 396.153Radial†	7053.5	7020.5	4964.4 ug/L	4964.4 ppb	14:10:06
3	Ca 317.933Radial†	3391.2	3348.6	4990.3 ug/L	4990.3 ppb	14:10:26
3	Fe 238.204 Radial†	545.7	535.6	4953.5 ug/L	4953.5 ppb	14:10:26
3	K 766.490 Radial†	31065.8	28615.3	4996.6 ug/L	4996.6 ppb	14:10:06
3	Mg 279.077 IEC†	144.9	143.5	5101.7 ug/L	5101.7 ppb	14:10:26
3	Na 589.592 Radial†	27480.0	28353.9	9121.7 ug/L	9121.7 ppb	14:10:06
3	Sr 421.552†	79996.8	79383.6	489.57 ug/L	489.57 ppb	14:10:06
3	Sc 361.383	889089.4	889089.4	98.643 %		14:11:35
3	Y 371.029	726984.1	726984.1	96.700 %		14:11:35
3	Ag 328.068†	112085.4	113312.3	507.67 ug/L	507.67 ppb	14:11:40
3	As 188.979†	1241.1	1282.6	489.54 ug/L	489.54 ppb	14:12:00
3	B 249.677†	23156.5	24094.2	487.69 ug/L	487.69 ppb	14:11:40
3	Ba 233.527†	67616.7	68563.8	496.48 ug/L	496.48 ppb	14:11:40
3	Be 313.107†	1353284.7	1377172.7	487.31 ug/L	487.31 ppb	14:11:35
3	Cd 226.502†	47322.3	48179.4	491.42 ug/L	491.42 ppb	14:11:40
3	Co 228.616†	26494.6	26933.1	494.47 ug/L	494.47 ppb	14:11:40
3	Cr 267.716†	47813.1	48390.0	497.68 ug/L	497.68 ppb	14:11:40
3	Cu 324.752†	180316.5	175926.1	493.33 ug/L	493.33 ppb	14:11:40
3	Mn 257.610†	468500.0	474450.9	493.48 ug/L	493.48 ppb	14:11:35
3	Mo 202.031†	7941.3	8023.8	499.84 ug/L	499.84 ppb	14:12:00
3	Ni 231.604†	21812.3	22021.5	495.29 ug/L	495.29 ppb	14:11:40
3	P 214.914†	4517.7	4355.0	2320.6 ug/L	2320.6 ppb	14:12:00
3	Pb 220.353†	4325.9	4458.2	489.10 ug/L	489.10 ppb	14:12:00
3	S 181.975 Axial†	757.4	721.4	955.26 ug/L	955.26 ppb	14:12:00
3	Sb 206.836†	1614.7	1609.3	503.55 ug/L	503.55 ppb	14:12:00
3	Se 196.026†	829.3	863.0	502.16 ug/L	502.16 ppb	14:12:00
3	Si 251.611†	83763.4	84372.3	2451.8 ug/L	2451.8 ppb	14:11:40
3	Sn 189.927†	3086.6	3123.6	496.78 ug/L	496.78 ppb	14:12:00
3	Ti 334.940†	316745.3	322303.6	505.27 ug/L	505.27 ppb	14:11:40
3	Tl 190.801†	1756.7	1818.8	495.39 ug/L	495.39 ppb	14:12:00
3	U 409.014†	15656.5	18422.1	508.44 ug/L	508.44 ppb	14:11:40
3	V 292.402†	73953.5	76392.6	503.39 ug/L	503.39 ppb	14:11:40
3	Zn 213.857†	58193.4	58343.2	490.22 ug/L	490.22 ppb	14:11:40
3	SiO2†	83163.3	83795.7	5224.3 ug/L	5224.3 ppb	14:12:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892011.1	98.967	%	0.3084				0.31%
Sc Radial	5666.0	99.7	%	1.90				1.90%
Y 371.029	729039.2	96.973	%	0.2965				0.31%
Y RADIAL	6035.3	98.96	%	2.408				2.43%
Ag 328.068†	113161.1	507.01	ug/L	1.312	507.01	ppb	1.312	0.26%
QC value within limits for Ag 328.068 Recovery = 101.40%								
Al 396.153Radial†	7096.9	5018.6	ug/L	112.05	5018.6	ppb	112.05	2.23%
QC value within limits for Al 396.153Radial Recovery = 100.37%								
As 188.979†	1276.1	487.09	ug/L	2.323	487.09	ppb	2.323	0.48%
QC value within limits for As 188.979 Recovery = 97.42%								
B 249.677†	24001.3	485.79	ug/L	2.434	485.79	ppb	2.434	0.50%
QC value within limits for B 249.677 Recovery = 97.16%								
Ba 233.527†	68561.6	496.47	ug/L	0.754	496.47	ppb	0.754	0.15%
QC value within limits for Ba 233.527 Recovery = 99.29%								
Be 313.107†	1376900.7	487.21	ug/L	0.427	487.21	ppb	0.427	0.09%
QC value within limits for Be 313.107 Recovery = 97.44%								
Ca 317.933Radial†	3379.3	5036.0	ug/L	88.82	5036.0	ppb	88.82	1.76%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.72%
Cd 226.502†            48182.9      491.45 ug/L         0.296      491.45 ppb          0.296   0.06%
   QC value within limits for Cd 226.502  Recovery = 98.29%
Co 228.616†            26915.9      494.16 ug/L         1.607      494.16 ppb          1.607   0.33%
   QC value within limits for Co 228.616  Recovery = 98.83%
Cr 267.716†            48256.8      496.31 ug/L         1.269      496.31 ppb          1.269   0.26%
   QC value within limits for Cr 267.716  Recovery = 99.26%
Cu 324.752†           175485.1      492.10 ug/L         1.670      492.10 ppb          1.670   0.34%
   QC value within limits for Cu 324.752  Recovery = 98.42%
Fe 238.204 Radial†       542.6      5018.7 ug/L        96.09      5018.7 ppb         96.09   1.91%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.37%
K 766.490 Radial†      29019.4      5067.2 ug/L       127.29      5067.2 ppb        127.29   2.51%
   QC value within limits for K 766.490 Radial  Recovery = 101.34%
Mg 279.077 IEC†          147.3      5237.0 ug/L       199.55      5237.0 ppb        199.55   3.81%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.74%
Mn 257.610†           475273.0      494.34 ug/L         1.092      494.34 ppb          1.092   0.22%
   QC value within limits for Mn 257.610  Recovery = 98.87%
Mo 202.031†             8011.2      499.07 ug/L         2.014      499.07 ppb          2.014   0.40%
   QC value within limits for Mo 202.031  Recovery = 99.81%
Na 589.592 Radial†     28713.8      9237.5 ug/L       168.34      9237.5 ppb        168.34   1.82%
   QC value within limits for Na 589.592 Radial  Recovery = 92.38%
Ni 231.604†            21991.1      494.61 ug/L         1.689      494.61 ppb          1.689   0.34%
   QC value within limits for Ni 231.604  Recovery = 98.92%
P 214.914†              4355.2      2320.9 ug/L          1.81      2320.9 ppb           1.81   0.08%
   QC value within limits for P 214.914  Recovery = 92.83%
Pb 220.353†             4467.6      490.13 ug/L         1.780      490.13 ppb          1.780   0.36%
   QC value within limits for Pb 220.353  Recovery = 98.03%
S 181.975 Axial†         721.2      954.96 ug/L         9.978      954.96 ppb          9.978   1.04%
   QC value within limits for S 181.975 Axial  Recovery = 95.50%
Sb 206.836†             1612.4      504.53 ug/L         2.461      504.53 ppb          2.461   0.49%
   QC value within limits for Sb 206.836  Recovery = 100.91%
Se 196.026†              864.3      503.11 ug/L         2.791      503.11 ppb          2.791   0.55%
   QC value within limits for Se 196.026  Recovery = 100.62%
Si 251.611†            84213.2      2447.1 ug/L          4.79      2447.1 ppb           4.79   0.20%
   QC value within limits for Si 251.611  Recovery = 97.89%
Sn 189.927†             3119.7      496.16 ug/L         0.552      496.16 ppb          0.552   0.11%
   QC value within limits for Sn 189.927  Recovery = 99.23%
Sr 421.552†            80331.9      495.42 ug/L        10.207      495.42 ppb         10.207   2.06%
   QC value within limits for Sr 421.552  Recovery = 99.08%
Ti 334.940†           321593.6      504.16 ug/L         1.278      504.16 ppb          1.278   0.25%
   QC value within limits for Ti 334.940  Recovery = 100.83%
Tl 190.801†             1815.6      494.52 ug/L         1.415      494.52 ppb          1.415   0.29%
   QC value within limits for Tl 190.801  Recovery = 98.90%
U 409.014†             18455.3      509.35 ug/L         2.316      509.35 ppb          2.316   0.45%
   QC value within limits for U 409.014  Recovery = 101.87%
V 292.402†             76205.5      502.16 ug/L         1.075      502.16 ppb          1.075   0.21%
   QC value within limits for V 292.402  Recovery = 100.43%
Zn 213.857†            58238.3      489.33 ug/L         1.129      489.33 ppb          1.129   0.23%
   QC value within limits for Zn 213.857  Recovery = 97.87%
SiO2†                  83969.4      5235.2 ug/L         19.41      5235.2 ppb         19.41   0.37%
   QC value within limits for SiO2  Recovery = 97.90%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 14:14:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5626.5	5626.5	99.0	%			14:16:18
1	Y RADIAL	6024.7	6024.7	98.79	%			14:16:18
1	Al 396.153Radial†	-25.1	-4.9	-3.5067	ug/L	-3.5067	ppb	14:16:18
1	Ca 317.933Radial†	37.1	20.5	30.507	ug/L	30.507	ppb	14:16:38
1	Fe 238.204 Radial†	6.5	0.5	5.0458	ug/L	5.0458	ppb	14:16:38
1	K 766.490 Radial†	2417.0	225.5	39.428	ug/L	39.428	ppb	14:16:18
1	Mg 279.077 IEC†	0.4	0.1	4.3539	ug/L	4.3539	ppb	14:16:38
1	Na 589.592 Radial†	-1028.2	43.7	14.052	ug/L	14.052	ppb	14:16:18
1	Sr 421.552†	-4.1	-11.6	-0.0716	ug/L	-0.0716	ppb	14:16:18
1	Sc 361.383	893146.8	893146.8	99.093	%			14:17:35
1	Y 371.029	743144.3	743144.3	98.849	%			14:17:35
1	Ag 328.068†	321.0	9.1	0.0377	ug/L	0.0377	ppb	14:17:35
1	As 188.979†	-22.5	1.7	0.6456	ug/L	0.6456	ppb	14:17:55
1	B 249.677†	-300.8	315.6	6.4112	ug/L	6.4112	ppb	14:17:55
1	Ba 233.527†	-5.5	11.4	0.0847	ug/L	0.0847	ppb	14:17:55
1	Be 313.107†	-5118.8	106.4	0.0379	ug/L	0.0379	ppb	14:17:35
1	Cd 226.502†	-190.2	14.1	0.1432	ug/L	0.1432	ppb	14:17:55
1	Co 228.616†	-64.0	9.5	0.1739	ug/L	0.1739	ppb	14:17:55
1	Cr 267.716†	75.6	-4.5	-0.0478	ug/L	-0.0478	ppb	14:17:55
1	Cu 324.752†	6706.5	-103.0	-0.2883	ug/L	-0.2883	ppb	14:17:35
1	Mn 257.610†	551.0	62.2	0.0651	ug/L	0.0651	ppb	14:17:55
1	Mo 202.031†	29.3	2.8	0.1740	ug/L	0.1740	ppb	14:17:55
1	Ni 231.604†	76.7	-13.4	-0.3024	ug/L	-0.3024	ppb	14:17:55
1	P 214.914†	217.9	-5.1	-2.7339	ug/L	-2.7339	ppb	14:17:55
1	Pb 220.353†	-73.0	-0.9	-0.0993	ug/L	-0.0993	ppb	14:17:55
1	S 181.975 Axial†	48.6	2.5	3.3383	ug/L	3.3383	ppb	14:17:55
1	Sb 206.836†	35.4	8.1	2.5159	ug/L	2.5159	ppb	14:17:55
1	Se 196.026†	-27.7	-5.7	-3.1925	ug/L	-3.1925	ppb	14:17:55
1	Si 251.611†	549.5	11.1	0.3081	ug/L	0.3081	ppb	14:17:55
1	Sn 189.927†	7.0	1.6	0.2554	ug/L	0.2554	ppb	14:17:55
1	Ti 334.940†	-1081.7	109.5	0.1694	ug/L	0.1694	ppb	14:17:35
1	Tl 190.801†	-32.8	4.8	1.3062	ug/L	1.3062	ppb	14:17:55
1	U 409.014†	-2203.2	326.9	9.0495	ug/L	9.0495	ppb	14:17:35
1	V 292.402†	-1257.1	153.2	1.0151	ug/L	1.0151	ppb	14:17:35
1	Zn 213.857†	743.1	99.2	0.8424	ug/L	0.8424	ppb	14:17:55
1	SiO2†	539.4	32.8	2.0191	ug/L	2.0191	ppb	14:18:51
2	Sc Radial	5901.8	5901.8	104	%			14:16:43
2	Y RADIAL	6313.7	6313.7	103.5	%			14:16:43
2	Al 396.153Radial†	-46.4	-24.3	-17.209	ug/L	-17.209	ppb	14:16:43
2	Ca 317.933Radial†	42.7	24.2	36.013	ug/L	36.013	ppb	14:17:03
2	Fe 238.204 Radial†	6.9	0.6	5.5183	ug/L	5.5183	ppb	14:17:03
2	K 766.490 Radial†	2281.6	-18.7	-3.3012	ug/L	-3.3012	ppb	14:16:43
2	Mg 279.077 IEC†	4.1	3.7	130.22	ug/L	130.22	ppb	14:17:03
2	Na 589.592 Radial†	-996.3	122.9	39.527	ug/L	39.527	ppb	14:16:43
2	Sr 421.552†	3.5	-4.1	-0.0256	ug/L	-0.0256	ppb	14:16:43
2	Sc 361.383	884159.3	884159.3	98.096	%			14:18:00
2	Y 371.029	735491.6	735491.6	97.831	%			14:18:00
2	Ag 328.068†	411.8	104.9	0.4658	ug/L	0.4658	ppb	14:18:00
2	As 188.979†	-26.4	-2.5	-0.9489	ug/L	-0.9489	ppb	14:18:20
2	B 249.677†	-275.9	337.9	6.8649	ug/L	6.8649	ppb	14:18:20
2	Ba 233.527†	-10.3	6.5	0.0496	ug/L	0.0496	ppb	14:18:20
2	Be 313.107†	-5059.4	114.5	0.0408	ug/L	0.0408	ppb	14:18:00
2	Cd 226.502†	-181.2	21.3	0.2167	ug/L	0.2167	ppb	14:18:20
2	Co 228.616†	-58.0	14.9	0.2724	ug/L	0.2724	ppb	14:18:20
2	Cr 267.716†	95.0	16.0	0.1638	ug/L	0.1638	ppb	14:18:20
2	Cu 324.752†	6690.6	-50.4	-0.1410	ug/L	-0.1410	ppb	14:18:00
2	Mn 257.610†	534.0	50.6	0.0507	ug/L	0.0507	ppb	14:18:20
2	Mo 202.031†	21.1	-5.2	-0.3245	ug/L	-0.3245	ppb	14:18:20
2	Ni 231.604†	85.2	-4.0	-0.0902	ug/L	-0.0902	ppb	14:18:20

2	P 214.914†	217.4	-3.2	-1.7514 ug/L	-1.7514 ppb	14:18:20
2	Pb 220.353†	-60.4	11.2	1.2160 ug/L	1.2160 ppb	14:18:20
2	S 181.975 Axial†	44.1	-1.5	-1.9751 ug/L	-1.9751 ppb	14:18:20
2	Sb 206.836†	45.3	18.6	5.7454 ug/L	5.7454 ppb	14:18:20
2	Se 196.026†	-27.4	-5.7	-3.1627 ug/L	-3.1627 ppb	14:18:20
2	Si 251.611†	544.7	11.9	0.3504 ug/L	0.3504 ppb	14:18:20
2	Sn 189.927†	12.1	6.9	1.0963 ug/L	1.0963 ppb	14:18:20
2	Ti 334.940†	-1047.9	132.9	0.2067 ug/L	0.2067 ppb	14:18:00
2	Tl 190.801†	-40.7	-3.5	-0.9440 ug/L	-0.9440 ppb	14:18:20
2	U 409.014†	-2222.6	284.5	7.8754 ug/L	7.8754 ppb	14:18:00
2	V 292.402†	-1239.4	158.4	1.0420 ug/L	1.0420 ppb	14:18:00
2	Zn 213.857†	740.8	104.5	0.8817 ug/L	0.8817 ppb	14:18:20
2	SiO2†	553.6	52.8	3.3156 ug/L	3.3156 ppb	14:18:56
3	Sc Radial	5763.8	5763.8	101 %		14:17:08
3	Y RADIAL	6195.0	6195.0	101.6 %		14:17:08
3	Al 396.153Radial†	-18.5	2.2	1.6031 ug/L	1.6031 ppb	14:17:08
3	Ca 317.933Radial†	33.7	16.3	24.222 ug/L	24.222 ppb	14:17:28
3	Fe 238.204 Radial†	7.1	1.0	9.2530 ug/L	9.2530 ppb	14:17:28
3	K 766.490 Radial†	2422.0	172.3	30.129 ug/L	30.129 ppb	14:17:08
3	Mg 279.077 IEC†	2.2	1.9	67.725 ug/L	67.725 ppb	14:17:28
3	Na 589.592 Radial†	-1049.1	47.8	15.389 ug/L	15.389 ppb	14:17:08
3	Sr 421.552†	-32.6	-39.6	-0.2443 ug/L	-0.2443 ppb	14:17:08
3	Sc 361.383	896578.6	896578.6	99.474 %		14:18:26
3	Y 371.029	747132.9	747132.9	99.380 %		14:18:26
3	Ag 328.068†	344.4	31.3	0.1375 ug/L	0.1375 ppb	14:18:26
3	As 188.979†	-26.7	-2.5	-0.9368 ug/L	-0.9368 ppb	14:18:46
3	B 249.677†	-324.9	292.6	5.9433 ug/L	5.9433 ppb	14:18:46
3	Ba 233.527†	17.5	34.6	0.2525 ug/L	0.2525 ppb	14:18:46
3	Be 313.107†	-5108.1	136.9	0.0489 ug/L	0.0489 ppb	14:18:26
3	Cd 226.502†	-189.1	15.9	0.1619 ug/L	0.1619 ppb	14:18:46
3	Co 228.616†	-69.4	4.3	0.0774 ug/L	0.0774 ppb	14:18:46
3	Cr 267.716†	75.2	-5.2	-0.0551 ug/L	-0.0551 ppb	14:18:46
3	Cu 324.752†	6700.0	-135.5	-0.3792 ug/L	-0.3792 ppb	14:18:26
3	Mn 257.610†	539.0	48.1	0.0496 ug/L	0.0496 ppb	14:18:46
3	Mo 202.031†	19.9	-6.8	-0.4219 ug/L	-0.4219 ppb	14:18:46
3	Ni 231.604†	105.9	15.6	0.3513 ug/L	0.3513 ppb	14:18:46
3	P 214.914†	221.8	-1.9	-0.9866 ug/L	-0.9866 ppb	14:18:46
3	Pb 220.353†	-62.8	9.6	1.0526 ug/L	1.0526 ppb	14:18:46
3	S 181.975 Axial†	42.4	-3.9	-5.1075 ug/L	-5.1075 ppb	14:18:46
3	Sb 206.836†	38.6	11.2	3.4407 ug/L	3.4407 ppb	14:18:46
3	Se 196.026†	-25.8	-3.6	-1.9936 ug/L	-1.9936 ppb	14:18:46
3	Si 251.611†	558.2	17.8	0.5174 ug/L	0.5174 ppb	14:18:46
3	Sn 189.927†	2.4	-3.0	-0.4716 ug/L	-0.4716 ppb	14:18:46
3	Ti 334.940†	-1020.8	174.9	0.2710 ug/L	0.2710 ppb	14:18:26
3	Tl 190.801†	-37.7	0.1	0.0132 ug/L	0.0132 ppb	14:18:46
3	U 409.014†	-2169.0	369.8	10.236 ug/L	10.236 ppb	14:18:26
3	V 292.402†	-1250.6	164.7	1.0841 ug/L	1.0841 ppb	14:18:26
3	Zn 213.857†	740.9	94.1	0.7928 ug/L	0.7928 ppb	14:18:46
3	SiO2†	520.3	11.5	0.7168 ug/L	0.7168 ppb	14:19:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891294.9	98.888	%	0.7116				0.72%
Sc Radial	5764.0	101	%	2.4				2.39%
Y 371.029	741922.9	98.687	%	0.7869				0.80%
Y RADIAL	6177.8	101.3	%	2.38				2.35%
Ag 328.068†	48.4	0.2136	ug/L	0.22397	0.2136	ppb	0.22397	104.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-9.0	-6.3709	ug/L	9.72763	-6.3709	ppb	9.72763	152.69%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.1	-0.4134	ug/L	0.91713	-0.4134	ppb	0.91713	221.85%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	315.3	6.4065	ug/L	0.46085	6.4065	ppb	0.46085	7.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	17.5	0.1290	ug/L	0.10844	0.1290	ppb	0.10844	84.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	119.3	0.0425	ug/L	0.00569	0.0425	ppb	0.00569	13.38%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	20.3	30.247	ug/L	5.8999	30.247	ppb	5.8999	19.51%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                17.1      0.1739 ug/L       0.03817      0.1739 ppb        0.03817  21.94%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 9.6      0.1746 ug/L       0.09751      0.1746 ppb        0.09751  55.86%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 2.1      0.0203 ug/L       0.12428      0.0203 ppb        0.12428 611.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -96.3     -0.2695 ug/L       0.12023     -0.2695 ppb        0.12023  44.61%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.7      6.6057 ug/L       2.30477      6.6057 ppb        2.30477  34.89%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         126.4     22.085 ug/L       22.4716     22.085 ppb        22.4716 101.75%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.9     67.432 ug/L       62.9325     67.432 ppb        62.9325  93.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                53.6      0.0551 ug/L       0.00863      0.0551 ppb        0.00863  15.66%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -3.1     -0.1908 ug/L       0.31965     -0.1908 ppb        0.31965 167.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         71.5     22.989 ug/L       14.3376     22.989 ppb        14.3376  62.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.6     -0.0138 ug/L       0.33349     -0.0138 ppb        0.33349 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.4     -1.8240 ug/L       0.87595     -1.8240 ppb        0.87595  48.02%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.6      0.7231 ug/L       0.71689      0.7231 ppb        0.71689  99.14%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.9     -1.2481 ug/L       4.26958     -1.2481 ppb        4.26958 342.09%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.6      3.9006 ug/L       1.66313      3.9006 ppb        1.66313  42.64%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.0     -2.7829 ug/L       0.68376     -2.7829 ppb        0.68376  24.57%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                13.6      0.3920 ug/L       0.11066      0.3920 ppb        0.11066  28.23%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.8      0.2934 ug/L       0.78462      0.2934 ppb        0.78462 267.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.4     -0.1138 ug/L       0.11532     -0.1138 ppb        0.11532 101.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               139.1      0.2157 ug/L       0.05142      0.2157 ppb        0.05142  23.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.5      0.1252 ug/L       1.12929      0.1252 ppb        1.12929 902.28%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                327.0      9.0535 ug/L       1.18012      9.0535 ppb        1.18012  13.03%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                158.7      1.0471 ug/L       0.03479      1.0471 ppb        0.03479   3.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                99.3      0.8390 ug/L       0.04458      0.8390 ppb        0.04458   5.31%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      32.4      2.0172 ug/L       1.29939      2.0172 ppb        1.29939  64.42%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/7/2009 14:34:58
Logged In Analyst: Optima3
Spectrometer Model: Optima 5300 DV, S/N 077C7090601

Plasma On Time: 12/7/2009 05:17:52
Technique: ICP Continuous
Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120709A.sif
Batch ID:
Results Data Set: 120709A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 14:34:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5673.6	5673.6	99.9	%			14:36:51
1	Y RADIAL	6006.5	6006.5	98.49	%			14:36:51
1	Al 396.153Radial†	6951.8	6982.2	4937.9	ug/L	4937.9	ppb	14:36:51
1	Ca 317.933Radial†	3362.6	3350.4	4993.0	ug/L	4993.0	ppb	14:37:11
1	Fe 238.204 Radial†	560.7	555.5	5136.5	ug/L	5136.5	ppb	14:37:11
1	K 766.490 Radial†	30719.8	28548.5	4984.7	ug/L	4984.7	ppb	14:36:51
1	Mg 279.077 IEC†	147.2	147.1	5228.5	ug/L	5228.5	ppb	14:37:11
1	Na 589.592 Radial†	29382.1	30506.1	9814.1	ug/L	9814.1	ppb	14:36:51
1	Sr 421.552†	82101.9	82211.8	507.01	ug/L	507.01	ppb	14:36:51
1	Sc 361.383	916365.1	916365.1	101.67	%			14:38:08
1	Y 371.029	747917.3	747917.3	99.484	%			14:38:08
1	Ag 328.068†	110953.6	108816.9	487.63	ug/L	487.63	ppb	14:38:13
1	As 188.979†	1206.0	1210.6	462.18	ug/L	462.18	ppb	14:38:34
1	B 249.677†	22834.8	23079.0	467.09	ug/L	467.09	ppb	14:38:13
1	Ba 233.527†	66764.4	65685.3	475.65	ug/L	475.65	ppb	14:38:13
1	Be 313.107†	1340533.9	1323796.5	468.42	ug/L	468.42	ppb	14:38:08
1	Cd 226.502†	46793.8	46231.6	471.52	ug/L	471.52	ppb	14:38:13
1	Co 228.616†	26168.8	25813.2	473.91	ug/L	473.91	ppb	14:38:13
1	Cr 267.716†	46974.3	46122.3	474.37	ug/L	474.37	ppb	14:38:13
1	Cu 324.752†	178018.3	168224.7	471.76	ug/L	471.76	ppb	14:38:13
1	Mn 257.610†	465705.4	457565.4	475.95	ug/L	475.95	ppb	14:38:08
1	Mo 202.031†	7876.3	7720.3	480.96	ug/L	480.96	ppb	14:38:34
1	Ni 231.604†	21545.2	21100.6	474.58	ug/L	474.58	ppb	14:38:13
1	P 214.914†	4477.9	4179.5	2227.2	ug/L	2227.2	ppb	14:38:34
1	Pb 220.353†	4279.1	4281.6	469.73	ug/L	469.73	ppb	14:38:34
1	S 181.975 Axial†	752.0	693.2	917.85	ug/L	917.85	ppb	14:38:34
1	Sb 206.836†	1605.9	1551.9	485.71	ug/L	485.71	ppb	14:38:34
1	Se 196.026†	819.4	828.3	483.17	ug/L	483.17	ppb	14:38:34
1	Si 251.611†	82768.2	80865.9	2349.8	ug/L	2349.8	ppb	14:38:13
1	Sn 189.927†	3062.6	3006.9	478.24	ug/L	478.24	ppb	14:38:34
1	Ti 334.940†	312592.7	308661.5	483.89	ug/L	483.89	ppb	14:38:13
1	Tl 190.801†	1724.7	1734.3	472.42	ug/L	472.42	ppb	14:38:34
1	U 409.014†	15659.4	17952.6	495.46	ug/L	495.46	ppb	14:38:13
1	V 292.402†	72933.9	73158.3	482.08	ug/L	482.08	ppb	14:38:13
1	Zn 213.857†	57396.3	55803.3	468.83	ug/L	468.83	ppb	14:38:13
1	SiO2†	82894.2	81021.6	5051.3	ug/L	5051.3	ppb	14:39:41
2	Sc Radial	5856.1	5856.1	103	%			14:37:16
2	Y RADIAL	6168.8	6168.8	101.2	%			14:37:16
2	Al 396.153Radial†	6963.7	6776.8	4791.8	ug/L	4791.8	ppb	14:37:16
2	Ca 317.933Radial†	3346.5	3229.9	4813.4	ug/L	4813.4	ppb	14:37:36
2	Fe 238.204 Radial†	560.7	538.0	4975.4	ug/L	4975.4	ppb	14:37:36
2	K 766.490 Radial†	31090.9	27949.9	4880.1	ug/L	4880.1	ppb	14:37:16
2	Mg 279.077 IEC†	143.4	138.9	4936.8	ug/L	4936.8	ppb	14:37:36
2	Na 589.592 Radial†	29424.2	29629.9	9532.3	ug/L	9532.3	ppb	14:37:16
2	Sr 421.552†	82542.6	80077.1	493.85	ug/L	493.85	ppb	14:37:16
2	Sc 361.383	909219.9	909219.9	100.88	%			14:38:39
2	Y 371.029	742665.2	742665.2	98.786	%			14:38:39

2	Ag 328.068†	112585.5	111292.3	498.65 ug/L	498.65 ppb	14:38:44
2	As 188.979†	1222.4	1236.2	471.93 ug/L	471.93 ppb	14:39:04
2	B 249.677†	23247.3	23664.5	478.98 ug/L	478.98 ppb	14:38:44
2	Ba 233.527†	67646.2	67075.4	485.71 ug/L	485.71 ppb	14:38:44
2	Be 313.107†	1347555.7	1341119.0	474.56 ug/L	474.56 ppb	14:38:39
2	Cd 226.502†	47370.9	47165.3	481.07 ug/L	481.07 ppb	14:38:44
2	Co 228.616†	26442.5	26286.8	482.60 ug/L	482.60 ppb	14:38:44
2	Cr 267.716†	47676.6	47181.5	485.26 ug/L	485.26 ppb	14:38:44
2	Cu 324.752†	180991.2	172547.7	483.87 ug/L	483.87 ppb	14:38:44
2	Mn 257.610†	466909.2	462358.4	480.92 ug/L	480.92 ppb	14:38:39
2	Mo 202.031†	7920.3	7824.8	487.45 ug/L	487.45 ppb	14:39:04
2	Ni 231.604†	21775.7	21495.7	483.47 ug/L	483.47 ppb	14:38:44
2	P 214.914†	4509.0	4244.9	2261.3 ug/L	2261.3 ppb	14:39:04
2	Pb 220.353†	4302.3	4337.7	475.86 ug/L	475.86 ppb	14:39:04
2	S 181.975 Axial†	756.3	703.3	931.27 ug/L	931.27 ppb	14:39:04
2	Sb 206.836†	1618.8	1577.2	493.42 ug/L	493.42 ppb	14:39:04
2	Se 196.026†	831.6	846.6	492.96 ug/L	492.96 ppb	14:39:04
2	Si 251.611†	83994.0	82720.8	2403.9 ug/L	2403.9 ppb	14:38:44
2	Sn 189.927†	3059.2	3027.2	481.45 ug/L	481.45 ppb	14:39:04
2	Ti 334.940†	316993.7	315440.5	494.50 ug/L	494.50 ppb	14:38:44
2	Tl 190.801†	1752.6	1775.3	483.54 ug/L	483.54 ppb	14:39:04
2	U 409.014†	15869.2	18281.6	504.57 ug/L	504.57 ppb	14:38:44
2	V 292.402†	74238.2	75015.0	494.26 ug/L	494.26 ppb	14:38:44
2	Zn 213.857†	57975.0	56820.6	477.40 ug/L	477.40 ppb	14:38:44
2	SiO2†	81701.5	80480.0	5017.2 ug/L	5017.2 ppb	14:39:46
3	Sc Radial	5790.3	5790.3	102 %		14:37:41
3	Y RADIAL	6116.8	6116.8	100.3 %		14:37:41
3	Al 396.153Radial†	6915.1	6805.9	4812.6 ug/L	4812.6 ppb	14:37:41
3	Ca 317.933Radial†	3402.0	3321.2	4949.4 ug/L	4949.4 ppb	14:38:01
3	Fe 238.204 Radial†	564.7	548.1	5068.2 ug/L	5068.2 ppb	14:38:01
3	K 766.490 Radial†	30569.4	27780.8	4850.5 ug/L	4850.5 ppb	14:37:41
3	Mg 279.077 IEC†	143.2	140.2	4983.3 ug/L	4983.3 ppb	14:38:01
3	Na 589.592 Radial†	29300.8	29833.2	9597.6 ug/L	9597.6 ppb	14:37:41
3	Sr 421.552†	81852.8	80310.1	495.28 ug/L	495.28 ppb	14:37:41
3	Sc 361.383	912482.7	912482.7	101.24 %		14:39:10
3	Y 371.029	746822.0	746822.0	99.338 %		14:39:10
3	Ag 328.068†	112461.2	110770.4	496.34 ug/L	496.34 ppb	14:39:15
3	As 188.979†	1221.5	1231.0	469.96 ug/L	469.96 ppb	14:39:35
3	B 249.677†	23269.0	23603.5	477.73 ug/L	477.73 ppb	14:39:15
3	Ba 233.527†	67593.4	66783.5	483.60 ug/L	483.60 ppb	14:39:15
3	Be 313.107†	1351099.4	1339842.6	474.10 ug/L	474.10 ppb	14:39:10
3	Cd 226.502†	47359.6	46986.2	479.23 ug/L	479.23 ppb	14:39:15
3	Co 228.616†	26502.1	26251.9	481.95 ug/L	481.95 ppb	14:39:15
3	Cr 267.716†	47814.8	47149.0	484.92 ug/L	484.92 ppb	14:39:15
3	Cu 324.752†	180759.1	171676.9	481.43 ug/L	481.43 ppb	14:39:15
3	Mn 257.610†	467251.3	461041.3	479.56 ug/L	479.56 ppb	14:39:10
3	Mo 202.031†	7888.7	7765.4	483.77 ug/L	483.77 ppb	14:39:35
3	Ni 231.604†	21795.3	21437.8	482.17 ug/L	482.17 ppb	14:39:15
3	P 214.914†	4498.7	4218.8	2247.2 ug/L	2247.2 ppb	14:39:35
3	Pb 220.353†	4278.0	4298.5	471.56 ug/L	471.56 ppb	14:39:35
3	S 181.975 Axial†	752.7	697.0	922.99 ug/L	922.99 ppb	14:39:35
3	Sb 206.836†	1613.8	1566.4	490.02 ug/L	490.02 ppb	14:39:35
3	Se 196.026†	824.1	836.3	487.46 ug/L	487.46 ppb	14:39:35
3	Si 251.611†	84103.3	82531.0	2398.4 ug/L	2398.4 ppb	14:39:15
3	Sn 189.927†	3067.7	3024.7	481.07 ug/L	481.07 ppb	14:39:35
3	Ti 334.940†	316861.7	314186.4	492.55 ug/L	492.55 ppb	14:39:15
3	Tl 190.801†	1743.2	1759.9	479.34 ug/L	479.34 ppb	14:39:35
3	U 409.014†	15845.7	18202.1	502.36 ug/L	502.36 ppb	14:39:15
3	V 292.402†	74126.7	74641.7	491.76 ug/L	491.76 ppb	14:39:15
3	Zn 213.857†	58155.8	56793.7	477.18 ug/L	477.18 ppb	14:39:15
3	SiO2†	82693.1	81169.9	5060.6 ug/L	5060.6 ppb	14:39:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912689.2	101.26	%	0.397				0.39%
Sc Radial	5773.3	102	%	1.6				1.60%
Y 371.029	745801.5	99.203	%	0.3686				0.37%
Y RADIAL	6097.4	99.98	%	1.358				1.36%
Ag 328.068†	110293.2	494.21	ug/L	5.810	494.21	ppb	5.810	1.18%

```
   QC value within limits for Ag 328.068  Recovery = 98.84%
Al 396.153Radial†       6854.9      4847.4 ug/L         79.06      4847.4 ppb          79.06   1.63%
   QC value within limits for Al 396.153Radial  Recovery = 96.95%
As 188.979†             1225.9      468.02 ug/L         5.154      468.02 ppb          5.154   1.10%
   QC value within limits for As 188.979  Recovery = 93.60%
B 249.677†             23449.0      474.60 ug/L         6.538      474.60 ppb          6.538   1.38%
   QC value within limits for B 249.677  Recovery = 94.92%
Ba 233.527†            66514.7      481.66 ug/L         5.306      481.66 ppb          5.306   1.10%
   QC value within limits for Ba 233.527  Recovery = 96.33%
Be 313.107†          1334919.4      472.36 ug/L         3.420      472.36 ppb          3.420   0.72%
   QC value within limits for Be 313.107  Recovery = 94.47%
Ca 317.933Radial†       3300.5      4918.6 ug/L         93.72      4918.6 ppb          93.72   1.91%
   QC value within limits for Ca 317.933Radial  Recovery = 98.37%
Cd 226.502†            46794.4      477.27 ug/L         5.067      477.27 ppb          5.067   1.06%
   QC value within limits for Cd 226.502  Recovery = 95.45%
Co 228.616†            26117.3      479.49 ug/L         4.840      479.49 ppb          4.840   1.01%
   QC value within limits for Co 228.616  Recovery = 95.90%
Cr 267.716†            46817.6      481.52 ug/L         6.194      481.52 ppb          6.194   1.29%
   QC value within limits for Cr 267.716  Recovery = 96.30%
Cu 324.752†           170816.4      479.02 ug/L         6.404      479.02 ppb          6.404   1.34%
   QC value within limits for Cu 324.752  Recovery = 95.80%
Fe 238.204 Radial†       547.2      5060.0 ug/L         80.88      5060.0 ppb          80.88   1.60%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.20%
K 766.490 Radial†      28093.1      4905.1 ug/L         70.51      4905.1 ppb          70.51   1.44%
   QC value within limits for K 766.490 Radial  Recovery = 98.10%
Mg 279.077 IEC†          142.1      5049.5 ug/L        156.71      5049.5 ppb         156.71   3.10%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.99%
Mn 257.610†           460321.7      478.81 ug/L         2.569      478.81 ppb          2.569   0.54%
   QC value within limits for Mn 257.610  Recovery = 95.76%
Mo 202.031†             7770.2      484.06 ug/L         3.256      484.06 ppb          3.256   0.67%
   QC value within limits for Mo 202.031  Recovery = 96.81%
Na 589.592 Radial†     29989.7      9648.0 ug/L        147.53      9648.0 ppb         147.53   1.53%
   QC value within limits for Na 589.592 Radial  Recovery = 96.48%
Ni 231.604†            21344.7      480.07 ug/L         4.798      480.07 ppb          4.798   1.00%
   QC value within limits for Ni 231.604  Recovery = 96.01%
P 214.914†              4214.4      2245.2 ug/L         17.16      2245.2 ppb          17.16   0.76%
   QC value less than the lower limit for P 214.914  Recovery = 89.81%
Pb 220.353†             4305.9      472.38 ug/L         3.145      472.38 ppb          3.145   0.67%
   QC value within limits for Pb 220.353  Recovery = 94.48%
S 181.975 Axial†         697.8      924.04 ug/L         6.770      924.04 ppb          6.770   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 92.40%
Sb 206.836†             1565.2      489.72 ug/L         3.867      489.72 ppb          3.867   0.79%
   QC value within limits for Sb 206.836  Recovery = 97.94%
Se 196.026†              837.1      487.86 ug/L         4.908      487.86 ppb          4.908   1.01%
   QC value within limits for Se 196.026  Recovery = 97.57%
Si 251.611†            82039.2      2384.0 ug/L         29.77      2384.0 ppb          29.77   1.25%
   QC value within limits for Si 251.611  Recovery = 95.36%
Sn 189.927†             3019.6      480.25 ug/L         1.755      480.25 ppb          1.755   0.37%
   QC value within limits for Sn 189.927  Recovery = 96.05%
Sr 421.552†            80866.3      498.71 ug/L         7.222      498.71 ppb          7.222   1.45%
   QC value within limits for Sr 421.552  Recovery = 99.74%
Ti 334.940†           312762.8      490.31 ug/L         5.648      490.31 ppb          5.648   1.15%
   QC value within limits for Ti 334.940  Recovery = 98.06%
Tl 190.801†             1756.5      478.43 ug/L         5.615      478.43 ppb          5.615   1.17%
   QC value within limits for Tl 190.801  Recovery = 95.69%
U 409.014†             18145.4      500.80 ug/L         4.750      500.80 ppb          4.750   0.95%
   QC value within limits for U 409.014  Recovery = 100.16%
V 292.402†             74271.6      489.37 ug/L         6.436      489.37 ppb          6.436   1.32%
   QC value within limits for V 292.402  Recovery = 97.87%
Zn 213.857†            56472.5      474.47 ug/L         4.888      474.47 ppb          4.888   1.03%
   QC value within limits for Zn 213.857  Recovery = 94.89%
SiO2†                  80890.5      5043.0 ug/L         22.85      5043.0 ppb          22.85   0.45%
   QC value within limits for SiO2  Recovery = 94.31%
QC Failed.  Continue with analysis.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 14:42:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5708.9	5708.9	100	%			14:43:53
1	Y RADIAL	6141.4	6141.4	100.7	%			14:43:53
1	Al 396.153Radial†	-30.1	-9.5	-6.7868	ug/L	-6.7868	ppb	14:43:53
1	Ca 317.933Radial†	36.7	19.6	29.170	ug/L	29.170	ppb	14:44:13
1	Fe 238.204 Radial†	5.9	-0.2	-1.6076	ug/L	-1.6076	ppb	14:44:13
1	K 766.490 Radial†	2356.9	130.5	22.811	ug/L	22.811	ppb	14:43:53
1	Mg 279.077 IEC†	0.9	0.6	21.483	ug/L	21.483	ppb	14:44:13
1	Na 589.592 Radial†	-1040.4	46.5	14.960	ug/L	14.960	ppb	14:43:53
1	Sr 421.552†	-15.2	-22.5	-0.1393	ug/L	-0.1393	ppb	14:43:53
1	Sc 361.383	900047.4	900047.4	99.859	%			14:45:10
1	Y 371.029	748489.3	748489.3	99.560	%			14:45:10
1	Ag 328.068†	297.6	-16.9	-0.0802	ug/L	-0.0802	ppb	14:45:10
1	As 188.979†	-16.8	7.5	2.8462	ug/L	2.8462	ppb	14:45:30
1	B 249.677†	-404.1	214.4	4.3568	ug/L	4.3568	ppb	14:45:30
1	Ba 233.527†	-15.3	1.7	0.0135	ug/L	0.0135	ppb	14:45:30
1	Be 313.107†	-5089.6	175.3	0.0622	ug/L	0.0622	ppb	14:45:10
1	Cd 226.502†	-202.2	3.6	0.0369	ug/L	0.0369	ppb	14:45:30
1	Co 228.616†	-59.3	14.7	0.2696	ug/L	0.2696	ppb	14:45:30
1	Cr 267.716†	89.0	8.3	0.0837	ug/L	0.0837	ppb	14:45:30
1	Cu 324.752†	6646.0	-215.5	-0.6039	ug/L	-0.6039	ppb	14:45:10
1	Mn 257.610†	527.6	34.5	0.0353	ug/L	0.0353	ppb	14:45:30
1	Mo 202.031†	29.2	2.5	0.1559	ug/L	0.1559	ppb	14:45:30
1	Ni 231.604†	96.0	5.3	0.1180	ug/L	0.1180	ppb	14:45:30
1	P 214.914†	213.3	-11.3	-6.1414	ug/L	-6.1414	ppb	14:45:30
1	Pb 220.353†	-48.0	24.7	2.6977	ug/L	2.6977	ppb	14:45:30
1	S 181.975 Axial†	54.2	7.8	10.367	ug/L	10.367	ppb	14:45:30
1	Sb 206.836†	45.6	18.0	5.5621	ug/L	5.5621	ppb	14:45:30
1	Se 196.026†	-24.8	-2.6	-1.4435	ug/L	-1.4435	ppb	14:45:30
1	Si 251.611†	512.1	-30.6	-0.9024	ug/L	-0.9024	ppb	14:45:30
1	Sn 189.927†	4.5	-1.0	-0.1491	ug/L	-0.1491	ppb	14:45:30
1	Ti 334.940†	-1089.3	110.3	0.1711	ug/L	0.1711	ppb	14:45:10
1	Tl 190.801†	-35.7	2.2	0.5930	ug/L	0.5930	ppb	14:45:30
1	U 409.014†	-2274.0	273.0	7.5594	ug/L	7.5594	ppb	14:45:10
1	V 292.402†	-1328.9	91.0	0.6092	ug/L	0.6092	ppb	14:45:10
1	Zn 213.857†	753.9	104.3	0.8835	ug/L	0.8835	ppb	14:45:30
1	SiO2†	559.5	48.8	3.0352	ug/L	3.0352	ppb	14:46:26
2	Sc Radial	5776.6	5776.6	102	%			14:44:18
2	Y RADIAL	6214.2	6214.2	101.9	%			14:44:18
2	Al 396.153Radial†	-12.3	8.3	5.9370	ug/L	5.9370	ppb	14:44:18
2	Ca 317.933Radial†	37.8	20.2	30.149	ug/L	30.149	ppb	14:44:38
2	Fe 238.204 Radial†	6.8	0.7	6.2257	ug/L	6.2257	ppb	14:44:38
2	K 766.490 Radial†	2329.8	76.3	13.334	ug/L	13.334	ppb	14:44:18
2	Mg 279.077 IEC†	3.2	2.8	100.65	ug/L	100.65	ppb	14:44:38
2	Na 589.592 Radial†	-1039.5	59.5	19.150	ug/L	19.150	ppb	14:44:18
2	Sr 421.552†	-19.3	-26.4	-0.1632	ug/L	-0.1632	ppb	14:44:18
2	Sc 361.383	898631.0	898631.0	99.702	%			14:45:35
2	Y 371.029	747955.1	747955.1	99.489	%			14:45:35
2	Ag 328.068†	360.6	46.7	0.2101	ug/L	0.2101	ppb	14:45:35
2	As 188.979†	-29.0	-4.7	-1.7601	ug/L	-1.7601	ppb	14:45:55
2	B 249.677†	-382.2	235.8	4.7909	ug/L	4.7909	ppb	14:45:55
2	Ba 233.527†	-0.5	16.5	0.1212	ug/L	0.1212	ppb	14:45:55
2	Be 313.107†	-4983.3	273.9	0.0972	ug/L	0.0972	ppb	14:45:35
2	Cd 226.502†	-197.6	7.8	0.0798	ug/L	0.0798	ppb	14:45:55
2	Co 228.616†	-79.0	-5.1	-0.0961	ug/L	-0.0961	ppb	14:45:55
2	Cr 267.716†	85.6	5.1	0.0524	ug/L	0.0524	ppb	14:45:55
2	Cu 324.752†	6642.8	-208.2	-0.5831	ug/L	-0.5831	ppb	14:45:35
2	Mn 257.610†	530.0	37.8	0.0380	ug/L	0.0380	ppb	14:45:55
2	Mo 202.031†	17.3	-9.4	-0.5841	ug/L	-0.5841	ppb	14:45:55
2	Ni 231.604†	119.3	28.8	0.6490	ug/L	0.6490	ppb	14:45:55

2	P 214.914†	223.3	-0.9	-0.4312	ug/L	-0.4312	ppb	14:45:55
2	Pb 220.353†	-63.2	9.4	1.0285	ug/L	1.0285	ppb	14:45:55
2	S 181.975 Axial†	51.1	4.8	6.3352	ug/L	6.3352	ppb	14:45:55
2	Sb 206.836†	32.4	4.9	1.4772	ug/L	1.4772	ppb	14:45:55
2	Se 196.026†	-23.4	-1.2	-0.6451	ug/L	-0.6451	ppb	14:45:55
2	Si 251.611†	528.1	-13.7	-0.3895	ug/L	-0.3895	ppb	14:45:55
2	Sn 189.927†	-4.2	-9.6	-1.5281	ug/L	-1.5281	ppb	14:45:55
2	Ti 334.940†	-1037.8	160.3	0.2514	ug/L	0.2514	ppb	14:45:35
2	Tl 190.801†	-33.9	4.0	1.0748	ug/L	1.0748	ppb	14:45:55
2	U 409.014†	-2424.7	118.3	3.2750	ug/L	3.2750	ppb	14:45:35
2	V 292.402†	-1292.7	125.3	0.8135	ug/L	0.8135	ppb	14:45:35
2	Zn 213.857†	737.7	89.3	0.7494	ug/L	0.7494	ppb	14:45:55
2	SiO2†	508.8	-1.2	-0.0529	ug/L	-0.0529	ppb	14:46:31
3	Sc Radial	5831.4	5831.4	103	%			14:44:43
3	Y RADIAL	6211.1	6211.1	101.8	%			14:44:43
3	Al 396.153Radial†	-11.8	8.9	6.3511	ug/L	6.3511	ppb	14:44:43
3	Ca 317.933Radial†	33.9	16.1	23.947	ug/L	23.947	ppb	14:45:03
3	Fe 238.204 Radial†	6.6	0.4	4.0263	ug/L	4.0263	ppb	14:45:03
3	K 766.490 Radial†	2304.2	29.8	5.1966	ug/L	5.1966	ppb	14:44:43
3	Mg 279.077 IEC†	1.0	0.7	26.096	ug/L	26.096	ppb	14:45:03
3	Na 589.592 Radial†	-1014.4	93.6	30.109	ug/L	30.109	ppb	14:44:43
3	Sr 421.552†	19.7	11.8	0.0723	ug/L	0.0723	ppb	14:44:43
3	Sc 361.383	892181.3	892181.3	98.986	%			14:46:00
3	Y 371.029	744507.8	744507.8	99.031	%			14:46:00
3	Ag 328.068†	353.5	42.1	0.1858	ug/L	0.1858	ppb	14:46:00
3	As 188.979†	-23.5	0.6	0.2431	ug/L	0.2431	ppb	14:46:20
3	B 249.677†	-391.4	223.8	4.5459	ug/L	4.5459	ppb	14:46:20
3	Ba 233.527†	-6.1	10.8	0.0802	ug/L	0.0802	ppb	14:46:20
3	Be 313.107†	-4969.2	252.0	0.0893	ug/L	0.0893	ppb	14:46:00
3	Cd 226.502†	-187.7	16.5	0.1677	ug/L	0.1677	ppb	14:46:20
3	Co 228.616†	-67.7	5.7	0.1037	ug/L	0.1037	ppb	14:46:20
3	Cr 267.716†	91.5	11.6	0.1186	ug/L	0.1186	ppb	14:46:20
3	Cu 324.752†	6814.5	13.4	0.0378	ug/L	0.0378	ppb	14:46:00
3	Mn 257.610†	539.5	51.2	0.0532	ug/L	0.0532	ppb	14:46:20
3	Mo 202.031†	26.1	-0.4	-0.0246	ug/L	-0.0246	ppb	14:46:20
3	Ni 231.604†	78.9	-11.1	-0.2502	ug/L	-0.2502	ppb	14:46:20
3	P 214.914†	216.8	-5.9	-3.2314	ug/L	-3.2314	ppb	14:46:20
3	Pb 220.353†	-63.1	9.0	0.9849	ug/L	0.9849	ppb	14:46:20
3	S 181.975 Axial†	42.7	-3.3	-4.4215	ug/L	-4.4215	ppb	14:46:20
3	Sb 206.836†	39.5	12.3	3.8142	ug/L	3.8142	ppb	14:46:20
3	Se 196.026†	-21.2	0.8	0.4762	ug/L	0.4762	ppb	14:46:20
3	Si 251.611†	521.9	-16.1	-0.4729	ug/L	-0.4729	ppb	14:46:20
3	Sn 189.927†	9.4	4.0	0.6434	ug/L	0.6434	ppb	14:46:20
3	Ti 334.940†	-1096.1	93.8	0.1452	ug/L	0.1452	ppb	14:46:00
3	Tl 190.801†	-30.3	7.4	1.9956	ug/L	1.9956	ppb	14:46:20
3	U 409.014†	-2275.4	251.6	6.9646	ug/L	6.9646	ppb	14:46:00
3	V 292.402†	-1287.3	121.4	0.8020	ug/L	0.8020	ppb	14:46:00
3	Zn 213.857†	737.6	94.5	0.8012	ug/L	0.8012	ppb	14:46:20
3	SiO2†	525.5	19.3	1.2043	ug/L	1.2043	ppb	14:46:36

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	896953.2	99.516	%	0.4652				0.47%
Sc Radial	5772.3	102	%	1.1				1.06%
Y 371.029	746984.1	99.360	%	0.2875				0.29%
Y RADIAL	6188.9	101.5	%	0.68				0.67%
Ag 328.068†	24.0	0.1052	ug/L	0.16107	0.1052	ppb	0.16107	153.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.6	1.8338	ug/L	7.46852	1.8338	ppb	7.46852	407.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	0.4431	ug/L	2.30964	0.4431	ppb	2.30964	521.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.5645	ug/L	0.21766	4.5645	ppb	0.21766	4.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.7	0.0717	ug/L	0.05434	0.0717	ppb	0.05434	75.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	233.7	0.0829	ug/L	0.01833	0.0829	ppb	0.01833	22.11%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	18.6	27.755	ug/L	3.3342	27.755	ppb	3.3342	12.01%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.3      0.0948 ug/L       0.06664      0.0948 ppb        0.06664  70.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.1      0.0924 ug/L       0.18308      0.0924 ppb        0.18308 198.12%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 8.3      0.0849 ug/L       0.03313      0.0849 ppb        0.03313  39.01%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -136.7     -0.3831 ug/L       0.36464     -0.3831 ppb        0.36464  95.18%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.3      2.8815 ug/L       4.04016      2.8815 ppb        4.04016 140.21%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          78.9     13.780 ug/L        8.8154     13.780 ppb         8.8154  63.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.4     49.410 ug/L       44.4369     49.410 ppb        44.4369  89.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                41.2      0.0421 ug/L       0.00964      0.0421 ppb        0.00964  22.87%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.4     -0.1509 ug/L       0.38585     -0.1509 ppb        0.38585 255.62%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         66.5     21.406 ug/L        7.8228     21.406 ppb         7.8228  36.54%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.7      0.1723 ug/L       0.45205      0.1723 ppb        0.45205 262.37%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.0     -3.2680 ug/L       2.85524     -3.2680 ppb        2.85524  87.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                14.4      1.5703 ug/L       0.97654      1.5703 ppb        0.97654  62.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.1      4.0934 ug/L       7.64468      4.0934 ppb        7.64468 186.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                11.8      3.6178 ug/L       2.04949      3.6178 ppb        2.04949  56.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.0     -0.5374 ug/L       0.96435     -0.5374 ppb        0.96435 179.43%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -20.1     -0.5883 ug/L       0.27525     -0.5883 ppb        0.27525  46.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.2     -0.3446 ug/L       1.09888     -0.3446 ppb        1.09888 318.87%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -12.4     -0.0767 ug/L       0.12964     -0.0767 ppb        0.12964 168.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               121.5      0.1892 ug/L       0.05536      0.1892 ppb        0.05536  29.25%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.5      1.2211 ug/L       0.71269      1.2211 ppb        0.71269  58.36%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                214.3      5.9330 ug/L       2.32101      5.9330 ppb        2.32101  39.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                112.6      0.7416 ug/L       0.11477      0.7416 ppb        0.11477  15.48%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                96.0      0.8114 ug/L       0.06766      0.8114 ppb        0.06766   8.34%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      22.3      1.3955 ug/L       1.55292      1.3955 ppb        1.55292 111.28%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 15:29:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5583.5	5583.5	98.3	%			15:31:44
1	Y RADIAL	5926.3	5926.3	97.18	%			15:31:44
1	Al 396.153Radial†	6896.6	7038.3	4977.2	ug/L	4977.2	ppb	15:31:44
1	Ca 317.933Radial†	3374.3	3416.6	5091.6	ug/L	5091.6	ppb	15:32:04
1	Fe 238.204 Radial†	557.6	561.4	5190.9	ug/L	5190.9	ppb	15:32:04
1	K 766.490 Radial†	30619.7	28942.8	5053.5	ug/L	5053.5	ppb	15:31:44
1	Mg 279.077 IEC†	150.3	152.7	5427.3	ug/L	5427.3	ppb	15:32:04
1	Na 589.592 Radial†	29672.8	31276.4	10062	ug/L	10062	ppb	15:31:44
1	Sr 421.552†	81686.0	83114.7	512.58	ug/L	512.58	ppb	15:31:44
1	Sc 361.383	900901.0	900901.0	99.954	%			15:33:01
1	Y 371.029	737933.5	737933.5	98.156	%			15:33:01
1	Ag 328.068†	111019.9	110756.6	496.33	ug/L	496.33	ppb	15:33:07
1	As 188.979†	1222.6	1247.5	476.22	ug/L	476.22	ppb	15:33:27
1	B 249.677†	22795.4	23425.1	474.09	ug/L	474.09	ppb	15:33:07
1	Ba 233.527†	66944.9	66993.1	485.12	ug/L	485.12	ppb	15:33:07
1	Be 313.107†	1353924.1	1359825.6	481.16	ug/L	481.16	ppb	15:33:01
1	Cd 226.502†	47110.0	47337.9	482.81	ug/L	482.81	ppb	15:33:07
1	Co 228.616†	26193.1	26279.4	482.49	ug/L	482.49	ppb	15:33:07
1	Cr 267.716†	47438.1	47379.3	487.29	ug/L	487.29	ppb	15:33:07
1	Cu 324.752†	177417.1	170628.7	478.50	ug/L	478.50	ppb	15:33:07
1	Mn 257.610†	466591.1	466314.2	485.05	ug/L	485.05	ppb	15:33:01
1	Mo 202.031†	7960.9	7937.8	494.51	ug/L	494.51	ppb	15:33:27
1	Ni 231.604†	21643.2	21562.4	484.97	ug/L	484.97	ppb	15:33:07
1	P 214.914†	4512.4	4289.6	2286.7	ug/L	2286.7	ppb	15:33:27
1	Pb 220.353†	4341.5	4416.3	484.49	ug/L	484.49	ppb	15:33:27
1	S 181.975 Axial†	762.3	716.2	948.40	ug/L	948.40	ppb	15:33:27
1	Sb 206.836†	1614.0	1587.2	496.79	ug/L	496.79	ppb	15:33:27
1	Se 196.026†	823.9	846.5	493.64	ug/L	493.64	ppb	15:33:27
1	Si 251.611†	82984.5	82479.7	2396.6	ug/L	2396.6	ppb	15:33:07
1	Sn 189.927†	3095.1	3091.1	491.63	ug/L	491.63	ppb	15:33:27
1	Ti 334.940†	311910.6	313256.7	491.10	ug/L	491.10	ppb	15:33:07
1	Tl 190.801†	1763.0	1801.8	490.71	ug/L	490.71	ppb	15:33:27
1	U 409.014†	15360.3	17917.8	494.47	ug/L	494.47	ppb	15:33:07
1	V 292.402†	73341.2	74797.1	492.90	ug/L	492.90	ppb	15:33:07
1	Zn 213.857†	57621.5	56997.7	478.87	ug/L	478.87	ppb	15:33:07
1	SiO2†	84199.6	83727.2	5220.2	ug/L	5220.2	ppb	15:34:34
2	Sc Radial	5723.6	5723.6	101	%			15:32:09
2	Y RADIAL	6065.9	6065.9	99.46	%			15:32:09
2	Al 396.153Radial†	6969.8	6939.3	4906.9	ug/L	4906.9	ppb	15:32:09
2	Ca 317.933Radial†	3411.5	3369.6	5021.6	ug/L	5021.6	ppb	15:32:29
2	Fe 238.204 Radial†	568.4	558.2	5161.9	ug/L	5161.9	ppb	15:32:29
2	K 766.490 Radial†	30895.3	28454.0	4968.1	ug/L	4968.1	ppb	15:32:09
2	Mg 279.077 IEC†	150.9	149.6	5315.9	ug/L	5315.9	ppb	15:32:29
2	Na 589.592 Radial†	29860.4	30723.9	9884.2	ug/L	9884.2	ppb	15:32:09
2	Sr 421.552†	82605.8	81993.9	505.67	ug/L	505.67	ppb	15:32:09
2	Sc 361.383	896829.2	896829.2	99.502	%			15:33:32
2	Y 371.029	734419.4	734419.4	97.689	%			15:33:32
2	Ag 328.068†	111166.4	111408.1	499.23	ug/L	499.23	ppb	15:33:38
2	As 188.979†	1212.9	1243.4	474.67	ug/L	474.67	ppb	15:33:58
2	B 249.677†	22907.3	23641.1	478.47	ug/L	478.47	ppb	15:33:38
2	Ba 233.527†	67104.5	67457.5	488.48	ug/L	488.48	ppb	15:33:38
2	Be 313.107†	1349469.7	1361498.8	481.76	ug/L	481.76	ppb	15:33:32
2	Cd 226.502†	47249.3	47692.0	486.42	ug/L	486.42	ppb	15:33:38
2	Co 228.616†	26255.4	26460.9	485.81	ug/L	485.81	ppb	15:33:38
2	Cr 267.716†	47402.9	47559.4	489.15	ug/L	489.15	ppb	15:33:38
2	Cu 324.752†	177757.1	171776.3	481.71	ug/L	481.71	ppb	15:33:38
2	Mn 257.610†	465857.4	467696.2	486.48	ug/L	486.48	ppb	15:33:32
2	Mo 202.031†	7905.2	7918.0	493.27	ug/L	493.27	ppb	15:33:58
2	Ni 231.604†	21755.8	21773.9	489.73	ug/L	489.73	ppb	15:33:38

2	P 214.914†	4492.4	4290.0	2286.5 ug/L	2286.5 ppb	15:33:58
2	Pb 220.353†	4317.3	4411.7	483.98 ug/L	483.98 ppb	15:33:58
2	S 181.975 Axial†	752.4	709.7	939.82 ug/L	939.82 ppb	15:33:58
2	Sb 206.836†	1621.0	1601.6	501.14 ug/L	501.14 ppb	15:33:58
2	Se 196.026†	820.3	846.7	493.65 ug/L	493.65 ppb	15:33:58
2	Si 251.611†	83011.8	82884.1	2408.5 ug/L	2408.5 ppb	15:33:38
2	Sn 189.927†	3076.7	3086.6	490.92 ug/L	490.92 ppb	15:33:58
2	Ti 334.940†	312622.6	315389.1	494.43 ug/L	494.43 ppb	15:33:38
2	Tl 190.801†	1743.0	1789.7	487.44 ug/L	487.44 ppb	15:33:58
2	U 409.014†	15528.2	18156.2	501.07 ug/L	501.07 ppb	15:33:38
2	V 292.402†	73431.5	75221.0	495.65 ug/L	495.65 ppb	15:33:38
2	Zn 213.857†	57672.7	57310.8	481.49 ug/L	481.49 ppb	15:33:38
2	SiO2†	84348.5	84259.3	5253.7 ug/L	5253.7 ppb	15:34:39
3	Sc Radial	5784.7	5784.7	102 %		15:32:34
3	Y RADIAL	6124.4	6124.4	100.4 %		15:32:34
3	Al 396.153Radial†	7032.2	6927.4	4898.7 ug/L	4898.7 ppb	15:32:34
3	Ca 317.933Radial†	3401.1	3323.6	4953.1 ug/L	4953.1 ppb	15:32:54
3	Fe 238.204 Radial†	563.6	547.6	5063.7 ug/L	5063.7 ppb	15:32:54
3	K 766.490 Radial†	31138.2	28368.5	4953.2 ug/L	4953.2 ppb	15:32:34
3	Mg 279.077 IEC†	149.6	146.6	5212.1 ug/L	5212.1 ppb	15:32:54
3	Na 589.592 Radial†	30056.0	30602.8	9845.2 ug/L	9845.2 ppb	15:32:34
3	Sr 421.552†	83428.2	81935.1	505.31 ug/L	505.31 ppb	15:32:34
3	Sc 361.383	912350.5	912350.5	101.22 %		15:34:03
3	Y 371.029	748142.9	748142.9	99.514 %		15:34:03
3	Ag 328.068†	111318.3	109657.4	491.38 ug/L	491.38 ppb	15:34:09
3	As 188.979†	1236.5	1245.9	475.55 ug/L	475.55 ppb	15:34:29
3	B 249.677†	22955.7	23297.2	471.52 ug/L	471.52 ppb	15:34:09
3	Ba 233.527†	67084.8	66290.8	480.04 ug/L	480.04 ppb	15:34:09
3	Be 313.107†	1362569.8	1351367.8	478.16 ug/L	478.16 ppb	15:34:03
3	Cd 226.502†	47158.1	46794.0	477.27 ug/L	477.27 ppb	15:34:09
3	Co 228.616†	26249.4	26006.2	477.47 ug/L	477.47 ppb	15:34:09
3	Cr 267.716†	47538.0	46882.4	482.18 ug/L	482.18 ppb	15:34:09
3	Cu 324.752†	178254.2	169228.2	474.57 ug/L	474.57 ppb	15:34:09
3	Mn 257.610†	469000.8	462836.5	481.42 ug/L	481.42 ppb	15:34:03
3	Mo 202.031†	7957.7	7834.7	488.08 ug/L	488.08 ppb	15:34:29
3	Ni 231.604†	21643.7	21291.2	478.87 ug/L	478.87 ppb	15:34:09
3	P 214.914†	4515.0	4235.5	2257.6 ug/L	2257.6 ppb	15:34:29
3	Pb 220.353†	4342.1	4362.4	478.59 ug/L	478.59 ppb	15:34:29
3	S 181.975 Axial†	765.1	709.3	939.29 ug/L	939.29 ppb	15:34:29
3	Sb 206.836†	1624.2	1577.0	493.54 ug/L	493.54 ppb	15:34:29
3	Se 196.026†	824.0	836.4	487.50 ug/L	487.50 ppb	15:34:29
3	Si 251.611†	83078.8	81530.9	2369.1 ug/L	2369.1 ppb	15:34:09
3	Sn 189.927†	3100.0	3057.1	486.21 ug/L	486.21 ppb	15:34:29
3	Ti 334.940†	312954.0	310371.4	486.57 ug/L	486.57 ppb	15:34:09
3	Tl 190.801†	1745.6	1762.5	480.05 ug/L	480.05 ppb	15:34:29
3	U 409.014†	15644.8	18005.9	496.93 ug/L	496.93 ppb	15:34:09
3	V 292.402†	73577.8	74110.0	488.37 ug/L	488.37 ppb	15:34:09
3	Zn 213.857†	57658.2	56310.4	473.10 ug/L	473.10 ppb	15:34:09
3	SiO2†	83843.1	82317.9	5132.2 ug/L	5132.2 ppb	15:34:44

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903360.2	100.23	%	0.893				0.89%
Sc Radial	5697.3	100	%	1.8				1.81%
Y 371.029	740165.3	98.453	%	0.9482				0.96%
Y RADIAL	6038.9	99.02	%	1.669				1.69%
Ag 328.068†	110607.4	495.64	ug/L	3.971	495.64	ppb	3.971	0.80%
QC value within limits for Ag 328.068 Recovery = 99.13%								
Al 396.153Radial†	6968.3	4927.6	ug/L	43.13	4927.6	ppb	43.13	0.88%
QC value within limits for Al 396.153Radial Recovery = 98.55%								
As 188.979†	1245.6	475.48	ug/L	0.776	475.48	ppb	0.776	0.16%
QC value within limits for As 188.979 Recovery = 95.10%								
B 249.677†	23454.5	474.70	ug/L	3.516	474.70	ppb	3.516	0.74%
QC value within limits for B 249.677 Recovery = 94.94%								
Ba 233.527†	66913.8	484.55	ug/L	4.253	484.55	ppb	4.253	0.88%
QC value within limits for Ba 233.527 Recovery = 96.91%								
Be 313.107†	1357564.0	480.36	ug/L	1.925	480.36	ppb	1.925	0.40%
QC value within limits for Be 313.107 Recovery = 96.07%								
Ca 317.933Radial†	3370.0	5022.1	ug/L	69.30	5022.1	ppb	69.30	1.38%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.44%
Cd 226.502†            47274.6      482.17 ug/L         4.613      482.17 ppb          4.613   0.96%
   QC value within limits for Cd 226.502  Recovery = 96.43%
Co 228.616†            26248.8      481.92 ug/L         4.200      481.92 ppb          4.200   0.87%
   QC value within limits for Co 228.616  Recovery = 96.38%
Cr 267.716†            47273.7      486.21 ug/L         3.608      486.21 ppb          3.608   0.74%
   QC value within limits for Cr 267.716  Recovery = 97.24%
Cu 324.752†           170544.4      478.26 ug/L         3.579      478.26 ppb          3.579   0.75%
   QC value within limits for Cu 324.752  Recovery = 95.65%
Fe 238.204 Radial†       555.7      5138.8 ug/L        66.69      5138.8 ppb         66.69   1.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.78%
K 766.490 Radial†      28588.4      4991.6 ug/L        54.14      4991.6 ppb         54.14   1.08%
   QC value within limits for K 766.490 Radial  Recovery = 99.83%
Mg 279.077 IEC†          149.6      5318.4 ug/L       107.64      5318.4 ppb        107.64   2.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.37%
Mn 257.610†           465615.7      484.32 ug/L         2.607      484.32 ppb          2.607   0.54%
   QC value within limits for Mn 257.610  Recovery = 96.86%
Mo 202.031†            7896.8       491.95 ug/L         3.412      491.95 ppb          3.412   0.69%
   QC value within limits for Mo 202.031  Recovery = 98.39%
Na 589.592 Radial†     30867.7      9930.5 ug/L       115.53      9930.5 ppb        115.53   1.16%
   QC value within limits for Na 589.592 Radial  Recovery = 99.30%
Ni 231.604†            21542.5      484.52 ug/L         5.443      484.52 ppb          5.443   1.12%
   QC value within limits for Ni 231.604  Recovery = 96.90%
P 214.914†              4271.7      2277.0 ug/L        16.73      2277.0 ppb         16.73   0.73%
   QC value within limits for P 214.914  Recovery = 91.08%
Pb 220.353†             4396.8      482.35 ug/L         3.273      482.35 ppb          3.273   0.68%
   QC value within limits for Pb 220.353  Recovery = 96.47%
S 181.975 Axial†         711.8      942.50 ug/L         5.115      942.50 ppb          5.115   0.54%
   QC value within limits for S 181.975 Axial  Recovery = 94.25%
Sb 206.836†             1588.6      497.16 ug/L         3.814      497.16 ppb          3.814   0.77%
   QC value within limits for Sb 206.836  Recovery = 99.43%
Se 196.026†              843.2      491.60 ug/L         3.547      491.60 ppb          3.547   0.72%
   QC value within limits for Se 196.026  Recovery = 98.32%
Si 251.611†            82298.3      2391.4 ug/L        20.21      2391.4 ppb         20.21   0.85%
   QC value within limits for Si 251.611  Recovery = 95.66%
Sn 189.927†             3078.3      489.59 ug/L         2.946      489.59 ppb          2.946   0.60%
   QC value within limits for Sn 189.927  Recovery = 97.92%
Sr 421.552†            82347.9      507.85 ug/L         4.099      507.85 ppb          4.099   0.81%
   QC value within limits for Sr 421.552  Recovery = 101.57%
Ti 334.940†           313005.7      490.70 ug/L         3.949      490.70 ppb          3.949   0.80%
   QC value within limits for Ti 334.940  Recovery = 98.14%
Tl 190.801†             1784.7      486.07 ug/L         5.461      486.07 ppb          5.461   1.12%
   QC value within limits for Tl 190.801  Recovery = 97.21%
U 409.014†             18026.6      497.49 ug/L         3.335      497.49 ppb          3.335   0.67%
   QC value within limits for U 409.014  Recovery = 99.50%
V 292.402†             74709.4      492.31 ug/L         3.677      492.31 ppb          3.677   0.75%
   QC value within limits for V 292.402  Recovery = 98.46%
Zn 213.857†            56873.0      477.82 ug/L         4.292      477.82 ppb          4.292   0.90%
   QC value within limits for Zn 213.857  Recovery = 95.56%
SiO2†                  83434.8      5202.0 ug/L        62.71      5202.0 ppb         62.71   1.21%
   QC value within limits for SiO2  Recovery = 97.28%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 15:36:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5830.1	5830.1	103	%			15:38:47
1	Y RADIAL	6246.5	6246.5	102.4	%			15:38:47
1	Al 396.153Radial†	-13.1	7.7	5.4743	ug/L	5.4743	ppb	15:38:47
1	Ca 317.933Radial†	37.6	19.7	29.377	ug/L	29.377	ppb	15:39:07
1	Fe 238.204 Radial†	5.3	-0.8	-7.4556	ug/L	-7.4556	ppb	15:39:07
1	K 766.490 Radial†	2357.1	81.9	14.310	ug/L	14.310	ppb	15:38:47
1	Mg 279.077 IEC†	4.0	3.7	130.09	ug/L	130.09	ppb	15:39:07
1	Na 589.592 Radial†	-1039.3	69.1	22.244	ug/L	22.244	ppb	15:38:47
1	Sr 421.552†	-16.3	-23.3	-0.1438	ug/L	-0.1438	ppb	15:38:47
1	Sc 361.383	897230.3	897230.3	99.546	%			15:40:04
1	Y 371.029	748571.5	748571.5	99.571	%			15:40:04
1	Ag 328.068†	381.7	68.5	0.3040	ug/L	0.3040	ppb	15:40:04
1	As 188.979†	-21.9	2.4	0.9006	ug/L	0.9006	ppb	15:40:24
1	B 249.677†	-399.7	217.6	4.4215	ug/L	4.4215	ppb	15:40:24
1	Ba 233.527†	2.3	19.3	0.1409	ug/L	0.1409	ppb	15:40:24
1	Be 313.107†	-5038.0	211.1	0.0750	ug/L	0.0750	ppb	15:40:04
1	Cd 226.502†	-197.2	8.0	0.0825	ug/L	0.0825	ppb	15:40:24
1	Co 228.616†	-67.6	6.2	0.1115	ug/L	0.1115	ppb	15:40:24
1	Cr 267.716†	76.9	-3.6	-0.0362	ug/L	-0.0362	ppb	15:40:24
1	Cu 324.752†	6705.9	-134.4	-0.3770	ug/L	-0.3770	ppb	15:40:04
1	Mn 257.610†	525.2	33.8	0.0319	ug/L	0.0319	ppb	15:40:24
1	Mo 202.031†	20.2	-6.5	-0.4044	ug/L	-0.4044	ppb	15:40:24
1	Ni 231.604†	99.7	9.3	0.2097	ug/L	0.2097	ppb	15:40:24
1	P 214.914†	219.5	-4.4	-2.3501	ug/L	-2.3501	ppb	15:40:24
1	Pb 220.353†	-52.8	19.7	2.1575	ug/L	2.1575	ppb	15:40:24
1	S 181.975 Axial†	54.4	8.2	10.883	ug/L	10.883	ppb	15:40:24
1	Sb 206.836†	54.9	27.5	8.4860	ug/L	8.4860	ppb	15:40:24
1	Se 196.026†	-25.5	-3.3	-1.8752	ug/L	-1.8752	ppb	15:40:24
1	Si 251.611†	549.7	8.9	0.2620	ug/L	0.2620	ppb	15:40:24
1	Sn 189.927†	4.6	-0.8	-0.1277	ug/L	-0.1277	ppb	15:40:24
1	Ti 334.940†	-1036.5	159.9	0.2518	ug/L	0.2518	ppb	15:40:04
1	Tl 190.801†	-39.0	-1.2	-0.3352	ug/L	-0.3352	ppb	15:40:24
1	U 409.014†	-2506.6	32.3	0.8942	ug/L	0.8942	ppb	15:40:04
1	V 292.402†	-1313.1	102.8	0.6679	ug/L	0.6679	ppb	15:40:04
1	Zn 213.857†	738.8	91.5	0.7711	ug/L	0.7711	ppb	15:40:24
1	SiO2†	552.2	43.2	2.7126	ug/L	2.7126	ppb	15:41:20
2	Sc Radial	5833.6	5833.6	103	%			15:39:12
2	Y RADIAL	6254.3	6254.3	102.6	%			15:39:12
2	Al 396.153Radial†	-60.9	-38.9	-27.592	ug/L	-27.592	ppb	15:39:12
2	Ca 317.933Radial†	36.6	18.6	27.791	ug/L	27.791	ppb	15:39:32
2	Fe 238.204 Radial†	11.7	5.4	49.771	ug/L	49.771	ppb	15:39:32
2	K 766.490 Radial†	2356.3	79.8	13.934	ug/L	13.934	ppb	15:39:12
2	Mg 279.077 IEC†	5.9	5.5	195.20	ug/L	195.20	ppb	15:39:32
2	Na 589.592 Radial†	-1071.6	38.3	12.322	ug/L	12.322	ppb	15:39:12
2	Sr 421.552†	1.0	-6.4	-0.0400	ug/L	-0.0400	ppb	15:39:12
2	Sc 361.383	901930.0	901930.0	100.07	%			15:40:29
2	Y 371.029	753508.7	753508.7	100.23	%			15:40:29
2	Ag 328.068†	372.5	57.3	0.2676	ug/L	0.2676	ppb	15:40:29
2	As 188.979†	-17.9	6.5	2.4740	ug/L	2.4740	ppb	15:40:49
2	B 249.677†	-403.9	215.5	4.3706	ug/L	4.3706	ppb	15:40:49
2	Ba 233.527†	-8.4	8.6	0.0659	ug/L	0.0659	ppb	15:40:49
2	Be 313.107†	-5071.3	204.2	0.0726	ug/L	0.0726	ppb	15:40:29
2	Cd 226.502†	-188.0	18.2	0.1805	ug/L	0.1805	ppb	15:40:49
2	Co 228.616†	-51.3	22.8	0.4168	ug/L	0.4168	ppb	15:40:49
2	Cr 267.716†	89.0	8.1	0.0831	ug/L	0.0831	ppb	15:40:49
2	Cu 324.752†	6772.7	-102.8	-0.2855	ug/L	-0.2855	ppb	15:40:29
2	Mn 257.610†	523.7	29.5	0.0320	ug/L	0.0320	ppb	15:40:49
2	Mo 202.031†	20.5	-6.3	-0.3890	ug/L	-0.3890	ppb	15:40:49
2	Ni 231.604†	96.1	5.2	0.1170	ug/L	0.1170	ppb	15:40:49

2	P 214.914†	211.9	-13.1	-7.2235 ug/L	-7.2235 ppb	15:40:49
2	Pb 220.353†	-62.8	10.0	1.0815 ug/L	1.0815 ppb	15:40:49
2	S 181.975 Axial†	50.6	4.1	5.4261 ug/L	5.4261 ppb	15:40:49
2	Sb 206.836†	31.3	3.7	1.1198 ug/L	1.1198 ppb	15:40:49
2	Se 196.026†	-23.4	-1.1	-0.4850 ug/L	-0.4850 ppb	15:40:49
2	Si 251.611†	587.9	44.1	1.2920 ug/L	1.2920 ppb	15:40:49
2	Sn 189.927†	0.4	-5.1	-0.8025 ug/L	-0.8025 ppb	15:40:49
2	Ti 334.940†	-1051.6	150.2	0.2337 ug/L	0.2337 ppb	15:40:29
2	Tl 190.801†	-34.1	3.9	1.0412 ug/L	1.0412 ppb	15:40:49
2	U 409.014†	-2285.7	266.1	7.3607 ug/L	7.3607 ppb	15:40:29
2	V 292.402†	-1296.0	126.7	0.8291 ug/L	0.8291 ppb	15:40:29
2	Zn 213.857†	756.0	104.8	0.8767 ug/L	0.8767 ppb	15:40:49
2	SiO2†	554.9	43.0	2.7017 ug/L	2.7017 ppb	15:41:25
3	Sc Radial	5814.8	5814.8	102 %		15:39:37
3	Y RADIAL	6244.1	6244.1	102.4 %		15:39:37
3	Al 396.153Radial†	-35.3	-14.0	-9.9369 ug/L	-9.9369 ppb	15:39:37
3	Ca 317.933Radial†	36.6	18.8	28.020 ug/L	28.020 ppb	15:39:57
3	Fe 238.204 Radial†	6.6	0.4	3.6781 ug/L	3.6781 ppb	15:39:57
3	K 766.490 Radial†	2373.1	103.6	18.096 ug/L	18.096 ppb	15:39:37
3	Mg 279.077 IEC†	1.5	1.2	41.703 ug/L	41.703 ppb	15:39:57
3	Na 589.592 Radial†	-1035.5	70.2	22.575 ug/L	22.575 ppb	15:39:37
3	Sr 421.552†	-28.2	-35.0	-0.2162 ug/L	-0.2162 ppb	15:39:37
3	Sc 361.383	885228.0	885228.0	98.215 %		15:40:54
3	Y 371.029	738679.4	738679.4	98.255 %		15:40:54
3	Ag 328.068†	374.5	66.4	0.2910 ug/L	0.2910 ppb	15:40:54
3	As 188.979†	-31.9	-8.1	-3.0611 ug/L	-3.0611 ppb	15:41:14
3	B 249.677†	-433.4	177.9	3.6143 ug/L	3.6143 ppb	15:41:14
3	Ba 233.527†	-14.6	2.1	0.0156 ug/L	0.0156 ppb	15:41:14
3	Be 313.107†	-5015.9	165.0	0.0586 ug/L	0.0586 ppb	15:40:54
3	Cd 226.502†	-202.1	0.3	0.0025 ug/L	0.0025 ppb	15:41:14
3	Co 228.616†	-81.4	-8.8	-0.1619 ug/L	-0.1619 ppb	15:41:14
3	Cr 267.716†	81.6	2.2	0.0207 ug/L	0.0207 ppb	15:41:14
3	Cu 324.752†	6752.3	4.2	0.0120 ug/L	0.0120 ppb	15:40:54
3	Mn 257.610†	528.5	44.3	0.0456 ug/L	0.0456 ppb	15:41:14
3	Mo 202.031†	24.3	-2.0	-0.1251 ug/L	-0.1251 ppb	15:41:14
3	Ni 231.604†	99.7	10.7	0.2402 ug/L	0.2402 ppb	15:41:14
3	P 214.914†	207.5	-13.6	-7.4706 ug/L	-7.4706 ppb	15:41:14
3	Pb 220.353†	-51.3	20.5	2.2394 ug/L	2.2394 ppb	15:41:14
3	S 181.975 Axial†	49.0	3.4	4.5557 ug/L	4.5557 ppb	15:41:14
3	Sb 206.836†	36.2	9.2	2.8718 ug/L	2.8718 ppb	15:41:14
3	Se 196.026†	-24.1	-2.2	-1.2488 ug/L	-1.2488 ppb	15:41:14
3	Si 251.611†	553.1	19.8	0.5684 ug/L	0.5684 ppb	15:41:14
3	Sn 189.927†	15.3	10.1	1.6110 ug/L	1.6110 ppb	15:41:14
3	Ti 334.940†	-1074.9	106.7	0.1659 ug/L	0.1659 ppb	15:40:54
3	Tl 190.801†	-42.1	-4.9	-1.3221 ug/L	-1.3221 ppb	15:41:14
3	U 409.014†	-2273.0	235.9	6.5312 ug/L	6.5312 ppb	15:40:54
3	V 292.402†	-1390.2	6.3	0.0523 ug/L	0.0523 ppb	15:40:54
3	Zn 213.857†	731.3	93.9	0.7928 ug/L	0.7928 ppb	15:41:14
3	SiO2†	599.5	98.9	6.1740 ug/L	6.1740 ppb	15:41:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894796.1	99.276	%	0.9556				0.96%
Sc Radial	5826.2	103	%	0.2				0.17%
Y 371.029	746919.9	99.351	%	1.0044				1.01%
Y RADIAL	6248.3	102.5	%	0.09				0.09%
Ag 328.068†	64.1	0.2875	ug/L	0.01843	0.2875	ppb	0.01843	6.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-15.1	-10.685	ug/L	16.5458	-10.685	ppb	16.5458	154.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.3	0.1045	ug/L	2.85211	0.1045	ppb	2.85211	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	203.6	4.1355	ug/L	0.45206	4.1355	ppb	0.45206	10.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0741	ug/L	0.06303	0.0741	ppb	0.06303	85.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	193.4	0.0687	ug/L	0.00887	0.0687	ppb	0.00887	12.90%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	19.1	28.396	ug/L	0.8571	28.396	ppb	0.8571	3.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.8      0.0885 ug/L       0.08912      0.0885 ppb        0.08912 100.71%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.7      0.1221 ug/L       0.28951      0.1221 ppb        0.28951 237.04%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 2.2      0.0225 ug/L       0.05967      0.0225 ppb        0.05967 265.07%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -77.6     -0.2168 ug/L       0.20336     -0.2168 ppb        0.20336  93.79%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.7      15.331 ug/L       30.3410      15.331 ppb        30.3410 197.90%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          88.4      15.447 ug/L        2.3019      15.447 ppb         2.3019  14.90%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             3.4      122.33 ug/L        77.041      122.33 ppb         77.041  62.98%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                35.9      0.0365 ug/L       0.00785      0.0365 ppb        0.00785  21.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -4.9     -0.3062 ug/L       0.15700     -0.3062 ppb        0.15700  51.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         59.2      19.047 ug/L        5.8263      19.047 ppb         5.8263  30.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.4      0.1890 ug/L       0.06418      0.1890 ppb        0.06418  33.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -10.4     -5.6814 ug/L       2.88762     -5.6814 ppb        2.88762  50.83%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                16.7      1.8261 ug/L       0.64617      1.8261 ppb        0.64617  35.38%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            5.2      6.9549 ug/L       3.42956      6.9549 ppb        3.42956  49.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                13.5      4.1592 ug/L       3.84813      4.1592 ppb        3.84813  92.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.2     -1.2030 ug/L       0.69620     -1.2030 ppb        0.69620  57.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.2      0.7075 ug/L       0.52890      0.7075 ppb        0.52890  74.76%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.4      0.2269 ug/L       1.24518      0.2269 ppb        1.24518 548.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -21.6     -0.1333 ug/L       0.08858     -0.1333 ppb        0.08858  66.43%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               138.9      0.2172 ug/L       0.04531      0.2172 ppb        0.04531  20.86%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.8     -0.2054 ug/L       1.18700     -0.2054 ppb        1.18700 577.94%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                178.1      4.9287 ug/L       3.51853      4.9287 ppb        3.51853  71.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 78.6      0.5164 ug/L       0.40996      0.5164 ppb        0.40996  79.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                96.7      0.8135 ug/L       0.05574      0.8135 ppb        0.05574   6.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      61.7      3.8628 ug/L       2.00158      3.8628 ppb        2.00158  51.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/7/2009 16:23:23 Plasma On Time: 12/7/2009 05:17:52
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120709A.sif
Batch ID:
Results Data Set: 120709A
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/7/2009 16:23:25
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5709.5	5709.5	100	%			16:25:17
1	Y RADIAL	6096.6	6096.6	99.97	%			16:25:17
1	Al 396.153Radial†	7087.3	7073.2	5002.2	ug/L	5002.2	ppb	16:25:17
1	Ca 317.933Radial†	3377.2	3343.8	4983.1	ug/L	4983.1	ppb	16:25:37
1	Fe 238.204 Radial†	544.7	536.0	4957.1	ug/L	4957.1	ppb	16:25:37
1	K 766.490 Radial†	31034.9	28668.5	5005.8	ug/L	5005.8	ppb	16:25:17
1	Mg 279.077 IEC†	145.2	144.2	5127.5	ug/L	5127.5	ppb	16:25:37
1	Na 589.592 Radial†	27921.8	28867.8	9287.1	ug/L	9287.1	ppb	16:25:17
1	Sr 421.552†	80858.9	80457.6	496.19	ug/L	496.19	ppb	16:25:17
1	Sc 361.383	908430.6	908430.6	100.79	%			16:26:35
1	Y 371.029	741314.5	741314.5	98.606	%			16:26:35
1	Ag 328.068†	111566.0	110377.8	494.55	ug/L	494.55	ppb	16:26:40
1	As 188.979†	1242.0	1256.7	479.63	ug/L	479.63	ppb	16:27:00
1	B 249.677†	23038.8	23477.6	475.19	ug/L	475.19	ppb	16:26:40
1	Ba 233.527†	67420.3	66909.6	484.51	ug/L	484.51	ppb	16:26:40
1	Be 313.107†	1373125.0	1367648.8	483.92	ug/L	483.92	ppb	16:26:35
1	Cd 226.502†	47303.6	47139.4	480.80	ug/L	480.80	ppb	16:26:40
1	Co 228.616†	26378.7	26246.3	481.87	ug/L	481.87	ppb	16:26:40
1	Cr 267.716†	47568.4	47115.2	484.57	ug/L	484.57	ppb	16:26:40
1	Cu 324.752†	178816.8	170546.2	478.26	ug/L	478.26	ppb	16:26:40
1	Mn 257.610†	474828.9	470618.3	489.50	ug/L	489.50	ppb	16:26:35
1	Mo 202.031†	7940.4	7851.5	489.12	ug/L	489.12	ppb	16:27:00
1	Ni 231.604†	21743.6	21482.6	483.17	ug/L	483.17	ppb	16:26:40
1	P 214.914†	4531.2	4270.9	2276.7	ug/L	2276.7	ppb	16:27:00
1	Pb 220.353†	4361.7	4400.4	482.77	ug/L	482.77	ppb	16:27:00
1	S 181.975 Axial†	765.6	713.1	944.32	ug/L	944.32	ppb	16:27:00
1	Sb 206.836†	1615.6	1575.3	493.05	ug/L	493.05	ppb	16:27:00
1	Se 196.026†	830.8	846.6	492.93	ug/L	492.93	ppb	16:27:00
1	Si 251.611†	83443.1	82246.6	2389.9	ug/L	2389.9	ppb	16:26:40
1	Sn 189.927†	3109.8	3080.0	489.85	ug/L	489.85	ppb	16:27:00
1	Ti 334.940†	313919.7	312663.6	490.16	ug/L	490.16	ppb	16:26:40
1	Tl 190.801†	1741.4	1765.7	480.97	ug/L	480.97	ppb	16:27:00
1	U 409.014†	15615.1	18043.2	497.98	ug/L	497.98	ppb	16:26:40
1	V 292.402†	73460.5	74307.2	489.68	ug/L	489.68	ppb	16:26:40
1	Zn 213.857†	57890.0	56786.1	477.12	ug/L	477.12	ppb	16:26:40
1	SiO2†	83295.0	82131.4	5120.5	ug/L	5120.5	ppb	16:28:07
2	Sc Radial	5617.5	5617.5	98.9	%			16:25:42
2	Y RADIAL	5975.0	5975.0	97.97	%			16:25:42
2	Al 396.153Radial†	6933.6	7033.3	4973.9	ug/L	4973.9	ppb	16:25:42
2	Ca 317.933Radial†	3362.5	3384.0	5043.0	ug/L	5043.0	ppb	16:26:02
2	Fe 238.204 Radial†	537.2	537.3	4969.2	ug/L	4969.2	ppb	16:26:02
2	K 766.490 Radial†	30517.8	28651.3	5002.9	ug/L	5002.9	ppb	16:25:42
2	Mg 279.077 IEC†	146.7	148.1	5263.5	ug/L	5263.5	ppb	16:26:02
2	Na 589.592 Radial†	27214.2	28607.1	9203.2	ug/L	9203.2	ppb	16:25:42
2	Sr 421.552†	79051.7	79947.5	493.05	ug/L	493.05	ppb	16:25:42
2	Sc 361.383	912104.3	912104.3	101.20	%			16:27:06
2	Y 371.029	745684.6	745684.6	99.187	%			16:27:06

2	Ag 328.068†	112125.6	110484.9	495.04 ug/L	495.04 ppb	16:27:11
2	As 188.979†	1223.6	1233.5	470.87 ug/L	470.87 ppb	16:27:31
2	B 249.677†	23195.4	23540.2	476.46 ug/L	476.46 ppb	16:27:11
2	Ba 233.527†	67633.6	66850.9	484.09 ug/L	484.09 ppb	16:27:11
2	Be 313.107†	1374650.5	1363669.0	482.52 ug/L	482.52 ppb	16:27:06
2	Cd 226.502†	47607.1	47250.3	481.93 ug/L	481.93 ppb	16:27:11
2	Co 228.616†	26469.3	26230.4	481.57 ug/L	481.57 ppb	16:27:11
2	Cr 267.716†	47814.7	47168.5	485.12 ug/L	485.12 ppb	16:27:11
2	Cu 324.752†	179958.7	170960.0	479.42 ug/L	479.42 ppb	16:27:11
2	Mn 257.610†	474177.1	468076.8	486.86 ug/L	486.86 ppb	16:27:06
2	Mo 202.031†	7945.4	7824.7	487.45 ug/L	487.45 ppb	16:27:31
2	Ni 231.604†	21819.9	21471.1	482.91 ug/L	482.91 ppb	16:27:11
2	P 214.914†	4511.5	4233.2	2255.7 ug/L	2255.7 ppb	16:27:31
2	Pb 220.353†	4326.7	4348.3	477.06 ug/L	477.06 ppb	16:27:31
2	S 181.975 Axial†	758.7	703.3	931.25 ug/L	931.25 ppb	16:27:31
2	Sb 206.836†	1632.0	1585.1	495.89 ug/L	495.89 ppb	16:27:31
2	Se 196.026†	832.9	845.3	492.24 ug/L	492.24 ppb	16:27:31
2	Si 251.611†	83856.2	82321.3	2392.1 ug/L	2392.1 ppb	16:27:11
2	Sn 189.927†	3079.2	3037.4	483.09 ug/L	483.09 ppb	16:27:31
2	Ti 334.940†	315830.3	313297.1	491.16 ug/L	491.16 ppb	16:27:11
2	Tl 190.801†	1738.1	1755.5	478.20 ug/L	478.20 ppb	16:27:31
2	U 409.014†	15725.3	18089.7	499.26 ug/L	499.26 ppb	16:27:11
2	V 292.402†	74121.1	74666.5	492.00 ug/L	492.00 ppb	16:27:11
2	Zn 213.857†	58216.5	56877.5	477.89 ug/L	477.89 ppb	16:27:11
2	SiO2†	82800.9	81310.3	5069.1 ug/L	5069.1 ppb	16:28:12
3	Sc Radial	5713.2	5713.2	101 %		16:26:07
3	Y RADIAL	6107.4	6107.4	100.1 %		16:26:07
3	Al 396.153Radial†	7136.4	7117.6	5033.7 ug/L	5033.7 ppb	16:26:07
3	Ca 317.933Radial†	3366.8	3331.3	4964.5 ug/L	4964.5 ppb	16:26:27
3	Fe 238.204 Radial†	542.6	533.6	4935.2 ug/L	4935.2 ppb	16:26:27
3	K 766.490 Radial†	31127.3	28740.8	5018.5 ug/L	5018.5 ppb	16:26:07
3	Mg 279.077 IEC†	148.6	147.5	5241.9 ug/L	5241.9 ppb	16:26:27
3	Na 589.592 Radial†	27908.8	28837.2	9277.2 ug/L	9277.2 ppb	16:26:07
3	Sr 421.552†	81129.6	80675.7	497.54 ug/L	497.54 ppb	16:26:07
3	Sc 361.383	913410.7	913410.7	101.34 %		16:27:37
3	Y 371.029	747490.4	747490.4	99.427 %		16:27:37
3	Ag 328.068†	111770.3	109975.9	492.76 ug/L	492.76 ppb	16:27:42
3	As 188.979†	1240.1	1248.1	476.37 ug/L	476.37 ppb	16:28:02
3	B 249.677†	23144.5	23457.2	474.79 ug/L	474.79 ppb	16:27:42
3	Ba 233.527†	67441.6	66565.8	482.02 ug/L	482.02 ppb	16:27:42
3	Be 313.107†	1371757.2	1358871.2	480.82 ug/L	480.82 ppb	16:27:37
3	Cd 226.502†	47308.7	46888.5	478.24 ug/L	478.24 ppb	16:27:42
3	Co 228.616†	26357.5	26082.6	478.87 ug/L	478.87 ppb	16:27:42
3	Cr 267.716†	47639.1	46927.7	482.65 ug/L	482.65 ppb	16:27:42
3	Cu 324.752†	179197.4	169954.5	476.60 ug/L	476.60 ppb	16:27:42
3	Mn 257.610†	472784.3	466032.2	484.73 ug/L	484.73 ppb	16:27:37
3	Mo 202.031†	7982.9	7850.5	489.05 ug/L	489.05 ppb	16:28:02
3	Ni 231.604†	21748.0	21369.3	480.62 ug/L	480.62 ppb	16:27:42
3	P 214.914†	4537.0	4252.0	2266.5 ug/L	2266.5 ppb	16:28:02
3	Pb 220.353†	4360.0	4375.0	480.01 ug/L	480.01 ppb	16:28:02
3	S 181.975 Axial†	760.2	703.7	931.74 ug/L	931.74 ppb	16:28:02
3	Sb 206.836†	1636.6	1587.3	496.70 ug/L	496.70 ppb	16:28:02
3	Se 196.026†	840.7	851.9	495.83 ug/L	495.83 ppb	16:28:02
3	Si 251.611†	83561.2	81911.8	2380.2 ug/L	2380.2 ppb	16:27:42
3	Sn 189.927†	3091.4	3045.0	484.30 ug/L	484.30 ppb	16:28:02
3	Ti 334.940†	314607.0	311643.7	488.56 ug/L	488.56 ppb	16:27:42
3	Tl 190.801†	1764.8	1779.4	484.65 ug/L	484.65 ppb	16:28:02
3	U 409.014†	15483.3	17828.6	492.04 ug/L	492.04 ppb	16:27:42
3	V 292.402†	73797.5	74242.4	489.26 ug/L	489.26 ppb	16:27:42
3	Zn 213.857†	58032.1	56613.2	475.67 ug/L	475.67 ppb	16:27:42
3	SiO2†	84089.5	82464.8	5141.4 ug/L	5141.4 ppb	16:28:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911315.2	101.11	%	0.286				0.28%
Sc Radial	5680.1	100.0	%	0.95				0.95%
Y 371.029	744829.8	99.073	%	0.4224				0.43%
Y RADIAL	6059.7	99.36	%	1.206				1.21%
Ag 328.068†	110279.5	494.12	ug/L	1.201	494.12	ppb	1.201	0.24%

```
   QC value within limits for Ag 328.068  Recovery = 98.82%
Al 396.153Radial†       7074.7      5003.3 ug/L        29.92      5003.3 ppb          29.92   0.60%
   QC value within limits for Al 396.153Radial  Recovery = 100.07%
As 188.979†             1246.1      475.62 ug/L        4.424      475.62 ppb          4.424   0.93%
   QC value within limits for As 188.979  Recovery = 95.12%
B 249.677†             23491.7      475.48 ug/L        0.874      475.48 ppb          0.874   0.18%
   QC value within limits for B 249.677  Recovery = 95.10%
Ba 233.527†            66775.4      483.54 ug/L        1.330      483.54 ppb          1.330   0.28%
   QC value within limits for Ba 233.527  Recovery = 96.71%
Be 313.107†          1363396.3      482.42 ug/L        1.554      482.42 ppb          1.554   0.32%
   QC value within limits for Be 313.107  Recovery = 96.48%
Ca 317.933Radial†       3353.0      4996.9 ug/L        41.02      4996.9 ppb          41.02   0.82%
   QC value within limits for Ca 317.933Radial  Recovery = 99.94%
Cd 226.502†            47092.7      480.33 ug/L        1.890      480.33 ppb          1.890   0.39%
   QC value within limits for Cd 226.502  Recovery = 96.07%
Co 228.616†            26186.5      480.77 ug/L        1.653      480.77 ppb          1.653   0.34%
   QC value within limits for Co 228.616  Recovery = 96.15%
Cr 267.716†            47070.5      484.11 ug/L        1.300      484.11 ppb          1.300   0.27%
   QC value within limits for Cr 267.716  Recovery = 96.82%
Cu 324.752†           170486.9      478.09 ug/L        1.417      478.09 ppb          1.417   0.30%
   QC value within limits for Cu 324.752  Recovery = 95.62%
Fe 238.204 Radial†       535.7      4953.8 ug/L        17.27      4953.8 ppb          17.27   0.35%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.08%
K 766.490 Radial†      28686.8      5009.1 ug/L         8.32      5009.1 ppb           8.32   0.17%
   QC value within limits for K 766.490 Radial  Recovery = 100.18%
Mg 279.077 IEC†          146.6      5211.0 ug/L        73.07      5211.0 ppb          73.07   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.22%
Mn 257.610†           468242.4      487.03 ug/L        2.390      487.03 ppb          2.390   0.49%
   QC value within limits for Mn 257.610  Recovery = 97.41%
Mo 202.031†             7842.2      488.54 ug/L        0.944      488.54 ppb          0.944   0.19%
   QC value within limits for Mo 202.031  Recovery = 97.71%
Na 589.592 Radial†     28770.7      9255.8 ug/L        45.84      9255.8 ppb          45.84   0.50%
   QC value within limits for Na 589.592 Radial  Recovery = 92.56%
Ni 231.604†            21441.0      482.24 ug/L        1.402      482.24 ppb          1.402   0.29%
   QC value within limits for Ni 231.604  Recovery = 96.45%
P 214.914†              4252.0      2266.3 ug/L        10.51      2266.3 ppb          10.51   0.46%
   QC value within limits for P 214.914  Recovery = 90.65%
Pb 220.353†             4374.6      479.94 ug/L        2.854      479.94 ppb          2.854   0.59%
   QC value within limits for Pb 220.353  Recovery = 95.99%
S 181.975 Axial†         706.7      935.77 ug/L        7.405      935.77 ppb          7.405   0.79%
   QC value within limits for S 181.975 Axial  Recovery = 93.58%
Sb 206.836†             1582.6      495.21 ug/L        1.919      495.21 ppb          1.919   0.39%
   QC value within limits for Sb 206.836  Recovery = 99.04%
Se 196.026†              847.9      493.67 ug/L        1.902      493.67 ppb          1.902   0.39%
   QC value within limits for Se 196.026  Recovery = 98.73%
Si 251.611†            82159.9      2387.4 ug/L         6.38      2387.4 ppb           6.38   0.27%
   QC value within limits for Si 251.611  Recovery = 95.50%
Sn 189.927†             3054.1      485.75 ug/L        3.608      485.75 ppb          3.608   0.74%
   QC value within limits for Sn 189.927  Recovery = 97.15%
Sr 421.552†            80360.3      495.59 ug/L        2.305      495.59 ppb          2.305   0.47%
   QC value within limits for Sr 421.552  Recovery = 99.12%
Ti 334.940†           312534.8      489.96 ug/L        1.308      489.96 ppb          1.308   0.27%
   QC value within limits for Ti 334.940  Recovery = 97.99%
Tl 190.801†             1766.9      481.28 ug/L        3.237      481.28 ppb          3.237   0.67%
   QC value within limits for Tl 190.801  Recovery = 96.26%
U 409.014†             17987.2      496.43 ug/L        3.851      496.43 ppb          3.851   0.78%
   QC value within limits for U 409.014  Recovery = 99.29%
V 292.402†             74405.4      490.31 ug/L        1.474      490.31 ppb          1.474   0.30%
   QC value within limits for V 292.402  Recovery = 98.06%
Zn 213.857†            56758.9      476.89 ug/L        1.126      476.89 ppb          1.126   0.24%
   QC value within limits for Zn 213.857  Recovery = 95.38%
SiO2†                  81968.9      5110.3 ug/L        37.18      5110.3 ppb          37.18   0.73%
   QC value within limits for SiO2  Recovery = 95.56%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 16:30:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5769.3	5769.3	102	%			16:32:20
1	Y RADIAL	6202.5	6202.5	101.7	%			16:32:20
1	Al 396.153Radial†	-29.4	-8.5	-6.0564	ug/L	-6.0564	ppb	16:32:20
1	Ca 317.933Radial†	33.1	15.6	23.250	ug/L	23.250	ppb	16:32:40
1	Fe 238.204 Radial†	8.0	1.9	17.518	ug/L	17.518	ppb	16:32:40
1	K 766.490 Radial†	2370.9	119.7	20.910	ug/L	20.910	ppb	16:32:20
1	Mg 279.077 IEC†	2.4	2.1	75.334	ug/L	75.334	ppb	16:32:40
1	Na 589.592 Radial†	-1015.8	81.6	26.262	ug/L	26.262	ppb	16:32:20
1	Sr 421.552†	-20.5	-27.6	-0.1704	ug/L	-0.1704	ppb	16:32:20
1	Sc 361.383	883983.4	883983.4	98.077	%			16:33:37
1	Y 371.029	737132.0	737132.0	98.050	%			16:33:37
1	Ag 328.068†	367.9	60.1	0.2719	ug/L	0.2719	ppb	16:33:37
1	As 188.979†	-28.1	-4.2	-1.5973	ug/L	-1.5973	ppb	16:33:57
1	B 249.677†	-443.2	167.3	3.3961	ug/L	3.3961	ppb	16:33:57
1	Ba 233.527†	-5.3	11.6	0.0854	ug/L	0.0854	ppb	16:33:57
1	Be 313.107†	-5024.2	149.3	0.0530	ug/L	0.0530	ppb	16:33:37
1	Cd 226.502†	-189.3	13.0	0.1312	ug/L	0.1312	ppb	16:33:57
1	Co 228.616†	-60.7	12.1	0.2217	ug/L	0.2217	ppb	16:33:57
1	Cr 267.716†	94.1	15.1	0.1548	ug/L	0.1548	ppb	16:33:57
1	Cu 324.752†	6698.1	-41.4	-0.1151	ug/L	-0.1151	ppb	16:33:37
1	Mn 257.610†	510.1	26.3	0.0277	ug/L	0.0277	ppb	16:33:57
1	Mo 202.031†	23.7	-2.6	-0.1616	ug/L	-0.1616	ppb	16:33:57
1	Ni 231.604†	88.8	-0.3	-0.0060	ug/L	-0.0060	ppb	16:33:57
1	P 214.914†	215.6	-5.0	-2.7569	ug/L	-2.7569	ppb	16:33:57
1	Pb 220.353†	-55.2	16.5	1.7979	ug/L	1.7979	ppb	16:33:57
1	S 181.975 Axial†	46.2	0.6	0.8224	ug/L	0.8224	ppb	16:33:57
1	Sb 206.836†	38.4	11.5	3.5479	ug/L	3.5479	ppb	16:33:57
1	Se 196.026†	-26.6	-4.8	-2.6497	ug/L	-2.6497	ppb	16:33:57
1	Si 251.611†	537.8	5.0	0.1413	ug/L	0.1413	ppb	16:33:57
1	Sn 189.927†	7.2	1.9	0.3072	ug/L	0.3072	ppb	16:33:57
1	Ti 334.940†	-1088.5	91.3	0.1427	ug/L	0.1427	ppb	16:33:37
1	Tl 190.801†	-36.7	0.6	0.1567	ug/L	0.1567	ppb	16:33:57
1	U 409.014†	-2367.5	136.4	3.7724	ug/L	3.7724	ppb	16:33:37
1	V 292.402†	-1315.8	80.2	0.5254	ug/L	0.5254	ppb	16:33:37
1	Zn 213.857†	728.2	91.8	0.7742	ug/L	0.7742	ppb	16:33:57
1	SiO2†	579.0	78.8	4.9270	ug/L	4.9270	ppb	16:34:53
2	Sc Radial	5753.9	5753.9	101	%			16:32:45
2	Y RADIAL	6180.1	6180.1	101.3	%			16:32:45
2	Al 396.153Radial†	-26.8	-6.0	-4.2706	ug/L	-4.2706	ppb	16:32:45
2	Ca 317.933Radial†	39.5	22.0	32.800	ug/L	32.800	ppb	16:33:05
2	Fe 238.204 Radial†	8.5	2.3	21.583	ug/L	21.583	ppb	16:33:05
2	K 766.490 Radial†	2468.8	222.7	38.935	ug/L	38.935	ppb	16:32:45
2	Mg 279.077 IEC†	3.9	3.6	126.49	ug/L	126.49	ppb	16:33:05
2	Na 589.592 Radial†	-1055.7	39.6	12.726	ug/L	12.726	ppb	16:32:45
2	Sr 421.552†	-18.0	-25.2	-0.1555	ug/L	-0.1555	ppb	16:32:45
2	Sc 361.383	889866.1	889866.1	98.729	%			16:34:02
2	Y 371.029	743390.7	743390.7	98.882	%			16:34:02
2	Ag 328.068†	418.5	108.9	0.4872	ug/L	0.4872	ppb	16:34:02
2	As 188.979†	-21.2	2.9	1.1132	ug/L	1.1132	ppb	16:34:22
2	B 249.677†	-447.5	165.9	3.3672	ug/L	3.3672	ppb	16:34:22
2	Ba 233.527†	-19.2	-2.4	-0.0165	ug/L	-0.0165	ppb	16:34:22
2	Be 313.107†	-4935.2	273.3	0.0968	ug/L	0.0968	ppb	16:34:02
2	Cd 226.502†	-191.0	12.6	0.1264	ug/L	0.1264	ppb	16:34:22
2	Co 228.616†	-71.5	1.6	0.0315	ug/L	0.0315	ppb	16:34:22
2	Cr 267.716†	74.1	-5.8	-0.0605	ug/L	-0.0605	ppb	16:34:22
2	Cu 324.752†	6674.7	-110.2	-0.3078	ug/L	-0.3078	ppb	16:34:02
2	Mn 257.610†	495.8	8.4	0.0085	ug/L	0.0085	ppb	16:34:22
2	Mo 202.031†	37.5	11.3	0.7032	ug/L	0.7032	ppb	16:34:22
2	Ni 231.604†	98.5	9.0	0.2017	ug/L	0.2017	ppb	16:34:22

2	P 214.914†	212.5	-9.6	-5.2436	ug/L	-5.2436 ppb	16:34:22
2	Pb 220.353†	-55.5	16.5	1.8069	ug/L	1.8069 ppb	16:34:22
2	S 181.975 Axial†	48.5	2.7	3.5264	ug/L	3.5264 ppb	16:34:22
2	Sb 206.836†	40.5	13.4	4.1677	ug/L	4.1677 ppb	16:34:22
2	Se 196.026†	-31.1	-9.2	-5.0728	ug/L	-5.0728 ppb	16:34:22
2	Si 251.611†	545.3	9.0	0.2329	ug/L	0.2329 ppb	16:34:22
2	Sn 189.927†	12.8	7.6	1.2043	ug/L	1.2043 ppb	16:34:22
2	Ti 334.940†	-1094.9	92.1	0.1437	ug/L	0.1437 ppb	16:34:02
2	Tl 190.801†	-32.5	5.1	1.3688	ug/L	1.3688 ppb	16:34:22
2	U 409.014†	-2320.2	200.2	5.5392	ug/L	5.5392 ppb	16:34:02
2	V 292.402†	-1383.0	21.0	0.1566	ug/L	0.1566 ppb	16:34:02
2	Zn 213.857†	733.4	92.2	0.7740	ug/L	0.7740 ppb	16:34:22
2	SiO2†	523.1	18.3	1.0851	ug/L	1.0851 ppb	16:34:58
3	Sc Radial	5790.3	5790.3	102	%		16:33:10
3	Y RADIAL	6202.6	6202.6	101.7	%		16:33:10
3	Al 396.153Radial†	-18.8	2.0	1.3953	ug/L	1.3953 ppb	16:33:10
3	Ca 317.933Radial†	36.7	19.1	28.428	ug/L	28.428 ppb	16:33:30
3	Fe 238.204 Radial†	8.0	1.9	17.203	ug/L	17.203 ppb	16:33:30
3	K 766.490 Radial†	2422.3	161.7	28.265	ug/L	28.265 ppb	16:33:10
3	Mg 279.077 IEC†	5.3	4.9	174.46	ug/L	174.46 ppb	16:33:30
3	Na 589.592 Radial†	-1043.4	58.1	18.697	ug/L	18.697 ppb	16:33:10
3	Sr 421.552†	-24.5	-31.4	-0.1941	ug/L	-0.1941 ppb	16:33:10
3	Sc 361.383	889929.2	889929.2	98.736	%		16:34:28
3	Y 371.029	742603.9	742603.9	98.777	%		16:34:28
3	Ag 328.068†	465.5	156.6	0.6996	ug/L	0.6996 ppb	16:34:28
3	As 188.979†	-22.3	1.8	0.6733	ug/L	0.6733 ppb	16:34:48
3	B 249.677†	-455.2	158.1	3.2110	ug/L	3.2110 ppb	16:34:48
3	Ba 233.527†	-0.2	16.8	0.1241	ug/L	0.1241 ppb	16:34:48
3	Be 313.107†	-5039.2	168.4	0.0598	ug/L	0.0598 ppb	16:34:28
3	Cd 226.502†	-202.0	1.5	0.0136	ug/L	0.0136 ppb	16:34:48
3	Co 228.616†	-77.2	-4.1	-0.0766	ug/L	-0.0766 ppb	16:34:48
3	Cr 267.716†	88.7	9.0	0.0923	ug/L	0.0923 ppb	16:34:48
3	Cu 324.752†	6655.6	-130.1	-0.3636	ug/L	-0.3636 ppb	16:34:28
3	Mn 257.610†	520.5	33.4	0.0331	ug/L	0.0331 ppb	16:34:48
3	Mo 202.031†	24.5	-1.9	-0.1201	ug/L	-0.1201 ppb	16:34:48
3	Ni 231.604†	95.7	6.1	0.1375	ug/L	0.1375 ppb	16:34:48
3	P 214.914†	221.0	-1.1	-0.5275	ug/L	-0.5275 ppb	16:34:48
3	Pb 220.353†	-41.2	31.1	3.3966	ug/L	3.3966 ppb	16:34:48
3	S 181.975 Axial†	49.4	3.5	4.6727	ug/L	4.6727 ppb	16:34:48
3	Sb 206.836†	39.8	12.8	3.9416	ug/L	3.9416 ppb	16:34:48
3	Se 196.026†	-22.8	-0.8	-0.3990	ug/L	-0.3990 ppb	16:34:48
3	Si 251.611†	542.6	6.2	0.1710	ug/L	0.1710 ppb	16:34:48
3	Sn 189.927†	8.9	3.5	0.5650	ug/L	0.5650 ppb	16:34:48
3	Ti 334.940†	-1089.2	98.0	0.1519	ug/L	0.1519 ppb	16:34:28
3	Tl 190.801†	-39.7	-2.3	-0.6162	ug/L	-0.6162 ppb	16:34:48
3	U 409.014†	-2265.6	255.7	7.0763	ug/L	7.0763 ppb	16:34:28
3	V 292.402†	-1274.2	131.4	0.8671	ug/L	0.8671 ppb	16:34:28
3	Zn 213.857†	725.6	84.2	0.7056	ug/L	0.7056 ppb	16:34:48
3	SiO2†	564.8	60.5	3.7675	ug/L	3.7675 ppb	16:35:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	887926.2	98.514	%	0.3789				0.38%
Sc Radial	5771.2	102	%	0.3				0.32%
Y 371.029	741042.2	98.570	%	0.4535				0.46%
Y RADIAL	6195.1	101.6	%	0.21				0.21%
Ag 328.068†	108.5	0.4863	ug/L	0.21384	0.4863	ppb	0.21384	43.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.2	-2.9772	ug/L	3.89060	-2.9772	ppb	3.89060	130.68%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0631	ug/L	1.45464	0.0631	ppb	1.45464	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	163.7	3.3248	ug/L	0.09960	3.3248	ppb	0.09960	3.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.7	0.0643	ug/L	0.07267	0.0643	ppb	0.07267	112.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	197.0	0.0699	ug/L	0.02358	0.0699	ppb	0.02358	33.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	18.9	28.159	ug/L	4.7808	28.159	ppb	4.7808	16.98%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.0      0.0904 ug/L       0.06656      0.0904 ppb        0.06656  73.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0589 ug/L       0.15103      0.0589 ppb        0.15103 256.46%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 6.1      0.0622 ug/L       0.11072      0.0622 ppb        0.11072 178.03%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -93.9     -0.2622 ug/L       0.13040     -0.2622 ppb        0.13040  49.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.0      18.768 ug/L        2.4427      18.768 ppb         2.4427  13.02%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         168.0      29.370 ug/L        9.0630      29.370 ppb         9.0630  30.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             3.5      125.43 ug/L        49.571      125.43 ppb         49.571  39.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.7      0.0231 ug/L       0.01294      0.0231 ppb        0.01294  55.99%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.2      0.1405 ug/L       0.48773      0.1405 ppb        0.48773 347.14%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         59.8      19.228 ug/L        6.7836      19.228 ppb         6.7836  35.28%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.9      0.1110 ug/L       0.10636      0.1110 ppb        0.10636  95.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.2     -2.8427 ug/L       2.35919     -2.8427 ppb        2.35919  82.99%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                21.4      2.3338 ug/L       0.92046      2.3338 ppb        0.92046  39.44%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.3      3.0072 ug/L       1.97698      3.0072 ppb        1.97698  65.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.6      3.8857 ug/L       0.31365      3.8857 ppb        0.31365   8.07%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.9     -2.7072 ug/L       2.33740     -2.7072 ppb        2.33740  86.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                 6.7      0.1817 ug/L       0.04674      0.1817 ppb        0.04674  25.72%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.3      0.6921 ug/L       0.46189      0.6921 ppb        0.46189  66.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -28.1     -0.1733 ug/L       0.01946     -0.1733 ppb        0.01946  11.23%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                93.8      0.1461 ug/L       0.00508      0.1461 ppb        0.00508   3.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.1      0.3031 ug/L       1.00059      0.3031 ppb        1.00059 330.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                197.4      5.4626 ug/L       1.65325      5.4626 ppb        1.65325  30.26%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 77.5      0.5164 ug/L       0.35533      0.5164 ppb        0.35533  68.82%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                89.4      0.7513 ug/L       0.03957      0.7513 ppb        0.03957   5.27%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.5      3.2599 ug/L       1.97061      3.2599 ppb        1.97061  60.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 17:11:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5700.8	5700.8	100	%			17:13:12
1	Y RADIAL	6073.1	6073.1	99.58	%			17:13:12
1	Al 396.153Radial†	6982.9	6979.9	4936.0	ug/L	4936.0	ppb	17:13:12
1	Ca 317.933Radial†	3415.4	3387.0	5047.5	ug/L	5047.5	ppb	17:13:32
1	Fe 238.204 Radial†	563.8	555.9	5140.4	ug/L	5140.4	ppb	17:13:32
1	K 766.490 Radial†	30654.8	28336.8	4947.7	ug/L	4947.7	ppb	17:13:12
1	Mg 279.077 IEC†	146.1	145.3	5165.2	ug/L	5165.2	ppb	17:13:32
1	Na 589.592 Radial†	29336.3	30320.0	9754.3	ug/L	9754.3	ppb	17:13:12
1	Sr 421.552†	81821.2	81539.6	502.87	ug/L	502.87	ppb	17:13:12
1	Sc 361.383	915598.3	915598.3	101.58	%			17:14:30
1	Y 371.029	749046.0	749046.0	99.634	%			17:14:30
1	Ag 328.068†	113081.2	111002.8	497.41	ug/L	497.41	ppb	17:14:35
1	As 188.979†	1232.2	1237.4	472.47	ug/L	472.47	ppb	17:14:55
1	B 249.677†	23453.9	23707.3	479.83	ug/L	479.83	ppb	17:14:35
1	Ba 233.527†	68247.7	67200.4	486.62	ug/L	486.62	ppb	17:14:35
1	Be 313.107†	1371781.8	1355661.2	479.71	ug/L	479.71	ppb	17:14:30
1	Cd 226.502†	47979.0	47436.8	483.82	ug/L	483.82	ppb	17:14:35
1	Co 228.616†	26717.1	26374.6	484.19	ug/L	484.19	ppb	17:14:35
1	Cr 267.716†	48196.5	47364.0	487.13	ug/L	487.13	ppb	17:14:35
1	Cu 324.752†	181478.7	171777.7	481.72	ug/L	481.72	ppb	17:14:35
1	Mn 257.610†	472783.2	464916.5	483.59	ug/L	483.59	ppb	17:14:30
1	Mo 202.031†	7987.5	7836.2	488.18	ug/L	488.18	ppb	17:14:55
1	Ni 231.604†	21981.7	21548.0	484.64	ug/L	484.64	ppb	17:14:35
1	P 214.914†	4549.1	4253.2	2266.2	ug/L	2266.2	ppb	17:14:55
1	Pb 220.353†	4365.7	4370.4	479.46	ug/L	479.46	ppb	17:14:55
1	S 181.975 Axial†	761.3	702.9	930.81	ug/L	930.81	ppb	17:14:55
1	Sb 206.836†	1629.6	1576.6	493.27	ug/L	493.27	ppb	17:14:55
1	Se 196.026†	832.0	841.3	490.50	ug/L	490.50	ppb	17:14:55
1	Si 251.611†	84769.2	82903.9	2409.2	ug/L	2409.2	ppb	17:14:35
1	Sn 189.927†	3114.7	3060.7	486.79	ug/L	486.79	ppb	17:14:55
1	Ti 334.940†	323844.1	319995.0	501.66	ug/L	501.66	ppb	17:14:30
1	Tl 190.801†	1767.1	1777.5	484.19	ug/L	484.19	ppb	17:14:55
1	U 409.014†	15850.4	18153.5	501.00	ug/L	501.00	ppb	17:14:35
1	V 292.402†	74628.2	74886.2	493.40	ug/L	493.40	ppb	17:14:35
1	Zn 213.857†	58857.9	57289.4	481.35	ug/L	481.35	ppb	17:14:35
1	SiO2†	83830.1	82011.2	5113.0	ug/L	5113.0	ppb	17:16:03
2	Sc Radial	5675.0	5675.0	99.9	%			17:13:37
2	Y RADIAL	6063.8	6063.8	99.43	%			17:13:37
2	Al 396.153Radial†	7042.3	7071.1	5000.7	ug/L	5000.7	ppb	17:13:37
2	Ca 317.933Radial†	3395.0	3382.1	5040.2	ug/L	5040.2	ppb	17:13:57
2	Fe 238.204 Radial†	558.8	553.4	5117.8	ug/L	5117.8	ppb	17:13:57
2	K 766.490 Radial†	30684.5	28505.8	4977.2	ug/L	4977.2	ppb	17:13:37
2	Mg 279.077 IEC†	148.3	148.2	5269.3	ug/L	5269.3	ppb	17:13:57
2	Na 589.592 Radial†	29502.2	30619.3	9850.5	ug/L	9850.5	ppb	17:13:37
2	Sr 421.552†	82325.5	82416.0	508.27	ug/L	508.27	ppb	17:13:37
2	Sc 361.383	901870.8	901870.8	100.06	%			17:15:01
2	Y 371.029	738373.8	738373.8	98.215	%			17:15:01
2	Ag 328.068†	111775.0	111391.7	499.14	ug/L	499.14	ppb	17:15:06
2	As 188.979†	1226.2	1249.9	477.18	ug/L	477.18	ppb	17:15:26
2	B 249.677†	23046.1	23651.1	478.69	ug/L	478.69	ppb	17:15:06
2	Ba 233.527†	67321.4	67297.3	487.32	ug/L	487.32	ppb	17:15:06
2	Be 313.107†	1354611.7	1359056.1	480.91	ug/L	480.91	ppb	17:15:01
2	Cd 226.502†	47145.5	47322.8	482.66	ug/L	482.66	ppb	17:15:06
2	Co 228.616†	26336.7	26394.7	484.57	ug/L	484.57	ppb	17:15:06
2	Cr 267.716†	47570.4	47460.5	488.13	ug/L	488.13	ppb	17:15:06
2	Cu 324.752†	179254.5	172274.1	483.11	ug/L	483.11	ppb	17:15:06
2	Mn 257.610†	466649.8	465870.8	484.58	ug/L	484.58	ppb	17:15:01
2	Mo 202.031†	7916.1	7884.5	491.19	ug/L	491.19	ppb	17:15:26
2	Ni 231.604†	21687.6	21583.5	485.44	ug/L	485.44	ppb	17:15:06

2	P 214.914†	4481.8	4254.2	2266.6 ug/L	2266.6 ppb	17:15:26
2	Pb 220.353†	4316.4	4386.5	481.24 ug/L	481.24 ppb	17:15:26
2	S 181.975 Axial†	748.2	701.3	928.58 ug/L	928.58 ppb	17:15:26
2	Sb 206.836†	1608.6	1580.0	494.40 ug/L	494.40 ppb	17:15:26
2	Se 196.026†	822.8	844.6	492.33 ug/L	492.33 ppb	17:15:26
2	Si 251.611†	83429.8	82835.4	2407.1 ug/L	2407.1 ppb	17:15:06
2	Sn 189.927†	3078.4	3071.1	488.44 ug/L	488.44 ppb	17:15:26
2	Ti 334.940†	319705.0	320710.8	502.78 ug/L	502.78 ppb	17:15:01
2	Tl 190.801†	1726.4	1763.3	480.36 ug/L	480.36 ppb	17:15:26
2	U 409.014†	15692.6	18233.2	503.21 ug/L	503.21 ppb	17:15:06
2	V 292.402†	73822.9	75199.6	495.49 ug/L	495.49 ppb	17:15:06
2	Zn 213.857†	58016.4	57330.3	481.69 ug/L	481.69 ppb	17:15:06
2	SiO2†	83941.8	83378.9	5198.6 ug/L	5198.6 ppb	17:16:08
3	Sc Radial	5844.7	5844.7	103 %		17:14:02
3	Y RADIAL	6200.0	6200.0	101.7 %		17:14:02
3	Al 396.153Radial†	7067.7	6891.0	4873.0 ug/L	4873.0 ppb	17:14:02
3	Ca 317.933Radial†	3403.3	3291.4	4905.1 ug/L	4905.1 ppb	17:14:22
3	Fe 238.204 Radial†	564.8	543.1	5022.0 ug/L	5022.0 ppb	17:14:22
3	K 766.490 Radial†	31047.8	27966.9	4883.0 ug/L	4883.0 ppb	17:14:02
3	Mg 279.077 IEC†	151.1	146.7	5212.7 ug/L	5212.7 ppb	17:14:22
3	Na 589.592 Radial†	29845.2	30095.1	9681.9 ug/L	9681.9 ppb	17:14:02
3	Sr 421.552†	83233.0	80904.9	498.95 ug/L	498.95 ppb	17:14:02
3	Sc 361.383	913729.7	913729.7	101.38 %		17:15:32
3	Y 371.029	748137.9	748137.9	99.513 %		17:15:32
3	Ag 328.068†	111829.2	109995.4	492.87 ug/L	492.87 ppb	17:15:37
3	As 188.979†	1245.1	1252.6	478.21 ug/L	478.21 ppb	17:15:57
3	B 249.677†	23151.2	23455.9	474.75 ug/L	474.75 ppb	17:15:37
3	Ba 233.527†	67432.3	66533.4	481.79 ug/L	481.79 ppb	17:15:37
3	Be 313.107†	1375402.9	1361994.7	481.95 ug/L	481.95 ppb	17:15:32
3	Cd 226.502†	47256.3	46820.6	477.54 ug/L	477.54 ppb	17:15:37
3	Co 228.616†	26281.5	25998.6	477.29 ug/L	477.29 ppb	17:15:37
3	Cr 267.716†	47693.5	46964.9	483.03 ug/L	483.03 ppb	17:15:37
3	Cu 324.752†	179421.1	170113.4	477.05 ug/L	477.05 ppb	17:15:37
3	Mn 257.610†	472470.5	465559.8	484.25 ug/L	484.25 ppb	17:15:32
3	Mo 202.031†	7936.8	7802.2	486.06 ug/L	486.06 ppb	17:15:57
3	Ni 231.604†	21726.9	21341.0	479.99 ug/L	479.99 ppb	17:15:37
3	P 214.914†	4495.9	4210.0	2243.2 ug/L	2243.2 ppb	17:15:57
3	Pb 220.353†	4348.7	4362.4	478.57 ug/L	478.57 ppb	17:15:57
3	S 181.975 Axial†	767.9	711.0	941.53 ug/L	941.53 ppb	17:15:57
3	Sb 206.836†	1631.6	1581.8	494.83 ug/L	494.83 ppb	17:15:57
3	Se 196.026†	837.0	847.9	493.82 ug/L	493.82 ppb	17:15:57
3	Si 251.611†	83503.2	81825.8	2377.7 ug/L	2377.7 ppb	17:15:37
3	Sn 189.927†	3069.8	3022.7	480.75 ug/L	480.75 ppb	17:15:57
3	Ti 334.940†	323727.8	320532.1	502.50 ug/L	502.50 ppb	17:15:32
3	Tl 190.801†	1741.5	1755.8	478.37 ug/L	478.37 ppb	17:15:57
3	U 409.014†	15686.6	18023.8	497.43 ug/L	497.43 ppb	17:15:37
3	V 292.402†	73869.6	74288.2	489.49 ug/L	489.49 ppb	17:15:37
3	Zn 213.857†	58135.8	56695.5	476.36 ug/L	476.36 ppb	17:15:37
3	SiO2†	84365.7	82708.4	5156.9 ug/L	5156.9 ppb	17:16:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910399.6	101.01	%	0.826				0.82%
Sc Radial	5740.2	101	%	1.6				1.59%
Y 371.029	745185.9	99.121	%	0.7870				0.79%
Y RADIAL	6112.3	100.2	%	1.25				1.25%
Ag 328.068†	110796.6	496.47	ug/L	3.236	496.47	ppb	3.236	0.65%
QC value within limits for Ag 328.068 Recovery = 99.29%								
Al 396.153Radial†	6980.7	4936.6	ug/L	63.84	4936.6	ppb	63.84	1.29%
QC value within limits for Al 396.153Radial Recovery = 98.73%								
As 188.979†	1246.6	475.96	ug/L	3.059	475.96	ppb	3.059	0.64%
QC value within limits for As 188.979 Recovery = 95.19%								
B 249.677†	23604.8	477.76	ug/L	2.663	477.76	ppb	2.663	0.56%
QC value within limits for B 249.677 Recovery = 95.55%								
Ba 233.527†	67010.4	485.25	ug/L	3.012	485.25	ppb	3.012	0.62%
QC value within limits for Ba 233.527 Recovery = 97.05%								
Be 313.107†	1358904.0	480.85	ug/L	1.120	480.85	ppb	1.120	0.23%
QC value within limits for Be 313.107 Recovery = 96.17%								
Ca 317.933Radial†	3353.5	4997.6	ug/L	80.20	4997.6	ppb	80.20	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.95%
Cd 226.502†            47193.4      481.34 ug/L         3.341      481.34 ppb          3.341   0.69%
   QC value within limits for Cd 226.502  Recovery = 96.27%
Co 228.616†            26256.0      482.02 ug/L         4.100      482.02 ppb          4.100   0.85%
   QC value within limits for Co 228.616  Recovery = 96.40%
Cr 267.716†            47263.1      486.10 ug/L         2.703      486.10 ppb          2.703   0.56%
   QC value within limits for Cr 267.716  Recovery = 97.22%
Cu 324.752†           171388.4      480.62 ug/L         3.175      480.62 ppb          3.175   0.66%
   QC value within limits for Cu 324.752  Recovery = 96.12%
Fe 238.204 Radial†       550.8      5093.4 ug/L        62.84      5093.4 ppb         62.84   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.87%
K 766.490 Radial†      28269.8      4935.9 ug/L        48.18      4935.9 ppb         48.18   0.98%
   QC value within limits for K 766.490 Radial  Recovery = 98.72%
Mg 279.077 IEC†          146.7      5215.7 ug/L        52.08      5215.7 ppb         52.08   1.00%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.31%
Mn 257.610†           465449.0      484.14 ug/L         0.503      484.14 ppb          0.503   0.10%
   QC value within limits for Mn 257.610  Recovery = 96.83%
Mo 202.031†             7841.0      488.47 ug/L         2.578      488.47 ppb          2.578   0.53%
   QC value within limits for Mo 202.031  Recovery = 97.69%
Na 589.592 Radial†     30344.8      9762.2 ug/L        84.60      9762.2 ppb         84.60   0.87%
   QC value within limits for Na 589.592 Radial  Recovery = 97.62%
Ni 231.604†            21490.8      483.36 ug/L         2.946      483.36 ppb          2.946   0.61%
   QC value within limits for Ni 231.604  Recovery = 96.67%
P 214.914†              4239.1      2258.6 ug/L        13.41      2258.6 ppb         13.41   0.59%
   QC value within limits for P 214.914  Recovery = 90.35%
Pb 220.353†             4373.1      479.76 ug/L         1.360      479.76 ppb          1.360   0.28%
   QC value within limits for Pb 220.353  Recovery = 95.95%
S 181.975 Axial†         705.1      933.64 ug/L         6.927      933.64 ppb          6.927   0.74%
   QC value within limits for S 181.975 Axial  Recovery = 93.36%
Sb 206.836†             1579.5      494.17 ug/L         0.804      494.17 ppb          0.804   0.16%
   QC value within limits for Sb 206.836  Recovery = 98.83%
Se 196.026†              844.6      492.22 ug/L         1.663      492.22 ppb          1.663   0.34%
   QC value within limits for Se 196.026  Recovery = 98.44%
Si 251.611†            82521.7      2398.0 ug/L        17.57      2398.0 ppb         17.57   0.73%
   QC value within limits for Si 251.611  Recovery = 95.92%
Sn 189.927†             3051.5      485.33 ug/L         4.052      485.33 ppb          4.052   0.83%
   QC value within limits for Sn 189.927  Recovery = 97.07%
Sr 421.552†            81620.2      503.36 ug/L         4.679      503.36 ppb          4.679   0.93%
   QC value within limits for Sr 421.552  Recovery = 100.67%
Ti 334.940†           320412.6      502.31 ug/L         0.583      502.31 ppb          0.583   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.46%
Tl 190.801†             1765.5      480.97 ug/L         2.956      480.97 ppb          2.956   0.61%
   QC value within limits for Tl 190.801  Recovery = 96.19%
U 409.014†             18136.8      500.55 ug/L         2.915      500.55 ppb          2.915   0.58%
   QC value within limits for U 409.014  Recovery = 100.11%
V 292.402†             74791.3      492.79 ug/L         3.043      492.79 ppb          3.043   0.62%
   QC value within limits for V 292.402  Recovery = 98.56%
Zn 213.857†            57105.1      479.80 ug/L         2.983      479.80 ppb          2.983   0.62%
   QC value within limits for Zn 213.857  Recovery = 95.96%
SiO2†                  82699.5      5156.2 ug/L        42.78      5156.2 ppb         42.78   0.83%
   QC value within limits for SiO2  Recovery = 96.42%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 17:18:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5761.2	5761.2	101	%			17:20:15
1	Y RADIAL	6201.7	6201.7	101.7	%			17:20:15
1	Al 396.153Radial†	-42.1	-21.1	-14.963	ug/L	-14.963	ppb	17:20:15
1	Ca 317.933Radial†	43.1	25.6	38.108	ug/L	38.108	ppb	17:20:35
1	Fe 238.204 Radial†	5.3	-0.7	-6.8527	ug/L	-6.8527	ppb	17:20:35
1	K 766.490 Radial†	2326.3	79.0	13.808	ug/L	13.808	ppb	17:20:15
1	Mg 279.077 IEC†	4.0	3.7	129.80	ug/L	129.80	ppb	17:20:35
1	Na 589.592 Radial†	-1082.6	14.3	4.6021	ug/L	4.6021	ppb	17:20:15
1	Sr 421.552†	-7.5	-14.8	-0.0915	ug/L	-0.0915	ppb	17:20:15
1	Sc 361.383	895601.9	895601.9	99.366	%			17:21:32
1	Y 371.029	747872.7	747872.7	99.478	%			17:21:32
1	Ag 328.068†	422.1	109.8	0.4849	ug/L	0.4849	ppb	17:21:32
1	As 188.979†	-23.3	1.0	0.3629	ug/L	0.3629	ppb	17:21:52
1	B 249.677†	-458.8	157.4	3.1987	ug/L	3.1987	ppb	17:21:52
1	Ba 233.527†	-16.7	0.2	0.0022	ug/L	0.0022	ppb	17:21:52
1	Be 313.107†	-5043.8	196.1	0.0694	ug/L	0.0694	ppb	17:21:32
1	Cd 226.502†	-199.3	5.5	0.0568	ug/L	0.0568	ppb	17:21:52
1	Co 228.616†	-65.1	8.6	0.1557	ug/L	0.1557	ppb	17:21:52
1	Cr 267.716†	78.1	-2.2	-0.0232	ug/L	-0.0232	ppb	17:21:52
1	Cu 324.752†	6769.3	-58.3	-0.1638	ug/L	-0.1638	ppb	17:21:32
1	Mn 257.610†	543.6	53.2	0.0522	ug/L	0.0522	ppb	17:21:52
1	Mo 202.031†	19.5	-7.2	-0.4463	ug/L	-0.4463	ppb	17:21:52
1	Ni 231.604†	98.5	8.3	0.1856	ug/L	0.1856	ppb	17:21:52
1	P 214.914†	206.3	-17.2	-9.4506	ug/L	-9.4506	ppb	17:21:52
1	Pb 220.353†	-60.4	12.0	1.3046	ug/L	1.3046	ppb	17:21:52
1	S 181.975 Axial†	45.9	-0.2	-0.3130	ug/L	-0.3130	ppb	17:21:52
1	Sb 206.836†	53.8	26.5	8.1857	ug/L	8.1857	ppb	17:21:52
1	Se 196.026†	-31.1	-9.0	-5.0971	ug/L	-5.0971	ppb	17:21:52
1	Si 251.611†	534.0	-5.9	-0.1708	ug/L	-0.1708	ppb	17:21:52
1	Sn 189.927†	7.7	2.3	0.3692	ug/L	0.3692	ppb	17:21:52
1	Ti 334.940†	-1137.1	56.7	0.0890	ug/L	0.0890	ppb	17:21:32
1	Tl 190.801†	-23.9	13.9	3.7573	ug/L	3.7573	ppb	17:21:52
1	U 409.014†	-2378.0	157.1	4.3512	ug/L	4.3512	ppb	17:21:32
1	V 292.402†	-1323.6	89.7	0.5892	ug/L	0.5892	ppb	17:21:32
1	Zn 213.857†	755.2	109.3	0.9220	ug/L	0.9220	ppb	17:21:52
1	SiO2†	523.6	15.4	0.9713	ug/L	0.9713	ppb	17:22:48
2	Sc Radial	5771.9	5771.9	102	%			17:20:40
2	Y RADIAL	6203.7	6203.7	101.7	%			17:20:40
2	Al 396.153Radial†	-26.3	-5.4	-3.8120	ug/L	-3.8120	ppb	17:20:40
2	Ca 317.933Radial†	36.6	19.1	28.486	ug/L	28.486	ppb	17:21:00
2	Fe 238.204 Radial†	6.8	0.7	6.5634	ug/L	6.5634	ppb	17:21:00
2	K 766.490 Radial†	2354.7	102.7	17.949	ug/L	17.949	ppb	17:20:40
2	Mg 279.077 IEC†	4.7	4.3	153.79	ug/L	153.79	ppb	17:21:00
2	Na 589.592 Radial†	-1083.2	15.7	5.0567	ug/L	5.0567	ppb	17:20:40
2	Sr 421.552†	14.7	7.1	0.0434	ug/L	0.0434	ppb	17:20:40
2	Sc 361.383	892439.9	892439.9	99.015	%			17:21:57
2	Y 371.029	744921.0	744921.0	99.086	%			17:21:57
2	Ag 328.068†	321.9	10.2	0.0430	ug/L	0.0430	ppb	17:21:57
2	As 188.979†	-24.4	-0.3	-0.1112	ug/L	-0.1112	ppb	17:22:17
2	B 249.677†	-453.1	161.5	3.2809	ug/L	3.2809	ppb	17:22:17
2	Ba 233.527†	-16.6	0.3	0.0025	ug/L	0.0025	ppb	17:22:17
2	Be 313.107†	-4934.7	288.3	0.1019	ug/L	0.1019	ppb	17:21:57
2	Cd 226.502†	-191.4	12.8	0.1302	ug/L	0.1302	ppb	17:22:17
2	Co 228.616†	-70.6	2.7	0.0483	ug/L	0.0483	ppb	17:22:17
2	Cr 267.716†	77.4	-2.7	-0.0286	ug/L	-0.0286	ppb	17:22:17
2	Cu 324.752†	6653.1	-151.6	-0.4245	ug/L	-0.4245	ppb	17:21:57
2	Mn 257.610†	523.4	34.8	0.0339	ug/L	0.0339	ppb	17:22:17
2	Mo 202.031†	17.1	-9.5	-0.5922	ug/L	-0.5922	ppb	17:22:17
2	Ni 231.604†	104.3	14.5	0.3255	ug/L	0.3255	ppb	17:22:17

2	P 214.914†	218.7	-4.0	-2.1489 ug/L	-2.1489 ppb	17:22:17
2	Pb 220.353†	-72.0	0.1	0.0040 ug/L	0.0040 ppb	17:22:17
2	S 181.975 Axial†	51.9	5.9	7.8267 ug/L	7.8267 ppb	17:22:17
2	Sb 206.836†	39.5	12.3	3.7761 ug/L	3.7761 ppb	17:22:17
2	Se 196.026†	-25.6	-3.6	-1.9996 ug/L	-1.9996 ppb	17:22:17
2	Si 251.611†	523.4	-14.8	-0.4274 ug/L	-0.4274 ppb	17:22:17
2	Sn 189.927†	5.8	0.4	0.0691 ug/L	0.0691 ppb	17:22:17
2	Ti 334.940†	-1151.3	38.4	0.0593 ug/L	0.0593 ppb	17:21:57
2	Tl 190.801†	-42.6	-5.1	-1.3819 ug/L	-1.3819 ppb	17:22:17
2	U 409.014†	-2327.2	199.9	5.5332 ug/L	5.5332 ppb	17:21:57
2	V 292.402†	-1379.1	28.9	0.1929 ug/L	0.1929 ppb	17:21:57
2	Zn 213.857†	749.6	106.4	0.8945 ug/L	0.8945 ppb	17:22:17
2	SiO2†	589.2	83.5	5.2406 ug/L	5.2406 ppb	17:22:53
3	Sc Radial	5691.0	5691.0	100 %		17:21:05
3	Y RADIAL	6146.8	6146.8	100.8 %		17:21:05
3	Al 396.153Radial†	-27.6	-7.1	-4.9792 ug/L	-4.9792 ppb	17:21:05
3	Ca 317.933Radial†	39.5	22.5	33.483 ug/L	33.483 ppb	17:21:25
3	Fe 238.204 Radial†	8.8	2.8	25.982 ug/L	25.982 ppb	17:21:25
3	K 766.490 Radial†	2425.3	206.1	36.046 ug/L	36.046 ppb	17:21:05
3	Mg 279.077 IEC†	1.6	1.4	48.233 ug/L	48.233 ppb	17:21:25
3	Na 589.592 Radial†	-1090.3	-6.6	-2.1125 ug/L	-2.1125 ppb	17:21:05
3	Sr 421.552†	-23.6	-30.9	-0.1912 ug/L	-0.1912 ppb	17:21:05
3	Sc 361.383	893367.3	893367.3	99.118 %		17:22:22
3	Y 371.029	747117.8	747117.8	99.378 %		17:22:22
3	Ag 328.068†	259.7	-52.9	-0.2276 ug/L	-0.2276 ppb	17:22:22
3	As 188.979†	-18.8	5.4	2.0556 ug/L	2.0556 ppb	17:22:42
3	B 249.677†	-469.3	145.7	2.9568 ug/L	2.9568 ppb	17:22:42
3	Ba 233.527†	-7.4	9.6	0.0724 ug/L	0.0724 ppb	17:22:42
3	Be 313.107†	-4900.7	327.8	0.1158 ug/L	0.1158 ppb	17:22:22
3	Cd 226.502†	-189.7	14.7	0.1471 ug/L	0.1471 ppb	17:22:42
3	Co 228.616†	-74.6	-1.2	-0.0248 ug/L	-0.0248 ppb	17:22:42
3	Cr 267.716†	98.0	18.1	0.1865 ug/L	0.1865 ppb	17:22:42
3	Cu 324.752†	6669.0	-142.5	-0.3980 ug/L	-0.3980 ppb	17:22:22
3	Mn 257.610†	507.8	18.5	0.0209 ug/L	0.0209 ppb	17:22:42
3	Mo 202.031†	13.3	-13.4	-0.8309 ug/L	-0.8309 ppb	17:22:42
3	Ni 231.604†	85.3	-4.8	-0.1088 ug/L	-0.1088 ppb	17:22:42
3	P 214.914†	224.1	1.2	0.7238 ug/L	0.7238 ppb	17:22:42
3	Pb 220.353†	-61.0	11.3	1.2269 ug/L	1.2269 ppb	17:22:42
3	S 181.975 Axial†	52.0	6.0	7.9376 ug/L	7.9376 ppb	17:22:42
3	Sb 206.836†	43.9	16.7	5.1614 ug/L	5.1614 ppb	17:22:42
3	Se 196.026†	-25.3	-3.2	-1.7293 ug/L	-1.7293 ppb	17:22:42
3	Si 251.611†	537.9	-0.7	-0.0223 ug/L	-0.0223 ppb	17:22:42
3	Sn 189.927†	14.4	9.1	1.4458 ug/L	1.4458 ppb	17:22:42
3	Ti 334.940†	-1166.5	24.2	0.0376 ug/L	0.0376 ppb	17:22:22
3	Tl 190.801†	-21.1	16.7	4.5166 ug/L	4.5166 ppb	17:22:42
3	U 409.014†	-2363.3	165.9	4.5898 ug/L	4.5898 ppb	17:22:22
3	V 292.402†	-1245.9	164.8	1.0654 ug/L	1.0654 ppb	17:22:22
3	Zn 213.857†	756.6	112.7	0.9524 ug/L	0.9524 ppb	17:22:42
3	SiO2†	541.9	35.2	2.1992 ug/L	2.1992 ppb	17:22:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	893803.1	99.166	%	0.1803				0.18%
Sc Radial	5741.4	101	%	0.8				0.77%
Y 371.029	746637.2	99.314	%	0.2040				0.21%
Y RADIAL	6184.1	101.4	%	0.53				0.52%
Ag 328.068†	22.4	0.1001	ug/L	0.35970	0.1001	ppb	0.35970	359.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.2	-7.9182	ug/L	6.12916	-7.9182	ppb	6.12916	77.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.0	0.7691	ug/L	1.13911	0.7691	ppb	1.13911	148.11%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	154.9	3.1455	ug/L	0.16849	3.1455	ppb	0.16849	5.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.3	0.0257	ug/L	0.04039	0.0257	ppb	0.04039	157.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	270.7	0.0957	ug/L	0.02381	0.0957	ppb	0.02381	24.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	22.4	33.359	ug/L	4.8122	33.359	ppb	4.8122	14.43%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              11.0      0.1114 ug/L       0.04800      0.1114 ppb        0.04800  43.10%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               3.4      0.0597 ug/L       0.09078      0.0597 ppb        0.09078 152.00%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               4.4      0.0449 ug/L       0.12266      0.0449 ppb        0.12266 273.47%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -117.5     -0.3288 ug/L       0.14346     -0.3288 ppb        0.14346  43.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.9      8.5642 ug/L      16.50844      8.5642 ppb       16.50844 192.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       129.3      22.601 ug/L       11.8263      22.601 ppb        11.8263  52.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           3.1      110.61 ug/L        55.336      110.61 ppb         55.336  50.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              35.5      0.0357 ug/L       0.01572      0.0357 ppb        0.01572  44.04%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -10.0     -0.6231 ug/L       0.19417     -0.6231 ppb        0.19417  31.16%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        7.8      2.5155 ug/L       4.01433      2.5155 ppb        4.01433 159.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               6.0      0.1341 ug/L       0.22169      0.1341 ppb        0.22169 165.31%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -6.7     -3.6252 ug/L       5.24542     -3.6252 ppb        5.24542 144.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.8      0.8452 ug/L       0.72947      0.8452 ppb        0.72947  86.31%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.9      5.1505 ug/L       4.73179      5.1505 ppb        4.73179  91.87%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              18.5      5.7077 ug/L       2.25501      5.7077 ppb        2.25501  39.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.3     -2.9420 ug/L       1.87126     -2.9420 ppb        1.87126  63.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -7.1     -0.2068 ug/L       0.20492     -0.2068 ppb        0.20492  99.08%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.9      0.6280 ug/L       0.72396      0.6280 ppb        0.72396 115.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -12.9     -0.0798 ug/L       0.11773     -0.0798 ppb        0.11773 147.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              39.8      0.0620 ug/L       0.02579      0.0620 ppb        0.02579  41.62%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               8.5      2.2973 ug/L       3.20881      2.2973 ppb        3.20881 139.68%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               174.3      4.8247 ug/L       0.62505      4.8247 ppb        0.62505  12.96%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               94.5      0.6158 ug/L       0.43685      0.6158 ppb        0.43685  70.94%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             109.5      0.9230 ug/L       0.02894      0.9230 ppb        0.02894   3.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    44.7      2.8037 ug/L       2.19791      2.8037 ppb        2.19791  78.39%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/7/2009 18:26:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5761.6	5761.6	101	%			18:28:24
1	Y RADIAL	6140.2	6140.2	100.7	%			18:28:24
1	Al 396.153Radial†	7109.1	7031.0	4972.0	ug/L	4972.0	ppb	18:28:24
1	Ca 317.933Radial†	3416.2	3351.9	4995.2	ug/L	4995.2	ppb	18:28:44
1	Fe 238.204 Radial†	551.7	538.1	4976.5	ug/L	4976.5	ppb	18:28:44
1	K 766.490 Radial†	31107.4	28461.0	4969.6	ug/L	4969.6	ppb	18:28:24
1	Mg 279.077 IEC†	148.3	145.9	5187.7	ug/L	5187.7	ppb	18:28:44
1	Na 589.592 Radial†	28059.5	28752.6	9250.0	ug/L	9250.0	ppb	18:28:24
1	Sr 421.552†	80845.8	79717.9	491.63	ug/L	491.63	ppb	18:28:24
1	Sc 361.383	900969.3	900969.3	99.961	%			18:29:41
1	Y 371.029	738202.5	738202.5	98.192	%			18:29:41
1	Ag 328.068†	112453.5	112182.3	502.63	ug/L	502.63	ppb	18:29:47
1	As 188.979†	1233.9	1258.7	480.48	ug/L	480.48	ppb	18:30:07
1	B 249.677†	23351.0	23979.2	485.36	ug/L	485.36	ppb	18:29:47
1	Ba 233.527†	67915.1	67958.5	492.10	ug/L	492.10	ppb	18:29:47
1	Be 313.107†	1362860.5	1368662.8	484.29	ug/L	484.29	ppb	18:29:41
1	Cd 226.502†	47670.3	47894.9	488.51	ug/L	488.51	ppb	18:29:47
1	Co 228.616†	26557.5	26641.9	489.13	ug/L	489.13	ppb	18:29:47
1	Cr 267.716†	48015.1	47953.0	493.19	ug/L	493.19	ppb	18:29:47
1	Cu 324.752†	180563.6	173763.0	487.27	ug/L	487.27	ppb	18:29:47
1	Mn 257.610†	469351.9	469040.7	487.86	ug/L	487.86	ppb	18:29:41
1	Mo 202.031†	7961.4	7937.8	494.49	ug/L	494.49	ppb	18:30:07
1	Ni 231.604†	21908.3	21826.0	490.90	ug/L	490.90	ppb	18:29:47
1	P 214.914†	4522.1	4298.9	2290.7	ug/L	2290.7	ppb	18:30:07
1	Pb 220.353†	4357.2	4431.7	486.19	ug/L	486.19	ppb	18:30:07
1	S 181.975 Axial†	768.6	722.4	956.59	ug/L	956.59	ppb	18:30:07
1	Sb 206.836†	1618.8	1591.8	498.06	ug/L	498.06	ppb	18:30:07
1	Se 196.026†	833.8	856.4	498.52	ug/L	498.52	ppb	18:30:07
1	Si 251.611†	84363.0	83852.4	2436.7	ug/L	2436.7	ppb	18:29:47
1	Sn 189.927†	3093.6	3089.4	491.34	ug/L	491.34	ppb	18:30:07
1	Ti 334.940†	316671.3	317995.6	498.52	ug/L	498.52	ppb	18:29:47
1	Tl 190.801†	1765.7	1804.4	491.43	ug/L	491.43	ppb	18:30:07
1	U 409.014†	15524.6	18080.9	499.00	ug/L	499.00	ppb	18:29:47
1	V 292.402†	74218.7	75669.4	498.60	ug/L	498.60	ppb	18:29:47
1	Zn 213.857†	58641.8	58013.9	487.46	ug/L	487.46	ppb	18:29:47
1	SiO2†	84302.9	83824.2	5226.3	ug/L	5226.3	ppb	18:31:14
2	Sc Radial	5702.1	5702.1	100	%			18:28:49
2	Y RADIAL	6057.0	6057.0	99.32	%			18:28:49
2	Al 396.153Radial†	7059.2	7054.3	4988.9	ug/L	4988.9	ppb	18:28:49
2	Ca 317.933Radial†	3384.0	3354.9	4999.7	ug/L	4999.7	ppb	18:29:09
2	Fe 238.204 Radial†	541.2	533.3	4931.9	ug/L	4931.9	ppb	18:29:09
2	K 766.490 Radial†	30807.7	28482.1	4973.3	ug/L	4973.3	ppb	18:28:49
2	Mg 279.077 IEC†	147.2	146.4	5202.2	ug/L	5202.2	ppb	18:29:09
2	Na 589.592 Radial†	27702.1	28684.8	9228.2	ug/L	9228.2	ppb	18:28:49
2	Sr 421.552†	80134.6	79840.0	492.38	ug/L	492.38	ppb	18:28:49
2	Sc 361.383	909229.0	909229.0	100.88	%			18:30:12
2	Y 371.029	745060.3	745060.3	99.104	%			18:30:12
2	Ag 328.068†	112009.6	110720.3	496.08	ug/L	496.08	ppb	18:30:18
2	As 188.979†	1230.1	1243.8	474.79	ug/L	474.79	ppb	18:30:38
2	B 249.677†	23065.0	23483.4	475.31	ug/L	475.31	ppb	18:30:18
2	Ba 233.527†	67696.3	67124.4	486.06	ug/L	486.06	ppb	18:30:18
2	Be 313.107†	1371629.8	1364970.3	482.98	ug/L	482.98	ppb	18:30:12
2	Cd 226.502†	47462.2	47255.4	481.99	ug/L	481.99	ppb	18:30:18
2	Co 228.616†	26408.7	26253.0	481.99	ug/L	481.99	ppb	18:30:18
2	Cr 267.716†	47818.3	47321.5	486.69	ug/L	486.69	ppb	18:30:18
2	Cu 324.752†	179826.5	171391.4	480.62	ug/L	480.62	ppb	18:30:18
2	Mn 257.610†	471931.2	467332.1	486.08	ug/L	486.08	ppb	18:30:12
2	Mo 202.031†	7930.8	7835.0	488.09	ug/L	488.09	ppb	18:30:38
2	Ni 231.604†	21810.3	21529.7	484.23	ug/L	484.23	ppb	18:30:18

2	P 214.914†	4518.4	4254.2	2267.1 ug/L	2267.1 ppb	18:30:38
2	Pb 220.353†	4336.3	4371.3	479.59 ug/L	479.59 ppb	18:30:38
2	S 181.975 Axial†	763.0	709.8	939.96 ug/L	939.96 ppb	18:30:38
2	Sb 206.836†	1620.5	1578.8	494.00 ug/L	494.00 ppb	18:30:38
2	Se 196.026†	832.3	847.4	493.27 ug/L	493.27 ppb	18:30:38
2	Si 251.611†	84058.7	82784.1	2405.6 ug/L	2405.6 ppb	18:30:18
2	Sn 189.927†	3100.4	3068.0	487.95 ug/L	487.95 ppb	18:30:38
2	Ti 334.940†	315347.7	313805.6	491.95 ug/L	491.95 ppb	18:30:18
2	Tl 190.801†	1744.4	1767.2	481.35 ug/L	481.35 ppb	18:30:38
2	U 409.014†	15554.0	17969.0	495.92 ug/L	495.92 ppb	18:30:18
2	V 292.402†	74000.4	74778.5	492.73 ug/L	492.73 ppb	18:30:18
2	Zn 213.857†	58343.6	57185.4	480.49 ug/L	480.49 ppb	18:30:18
2	SiO2†	83200.8	81965.5	5110.1 ug/L	5110.1 ppb	18:31:19
3	Sc Radial	5660.9	5660.9	99.6 %		18:29:14
3	Y RADIAL	6049.9	6049.9	99.20 %		18:29:14
3	Al 396.153Radial†	7036.7	7083.0	5009.1 ug/L	5009.1 ppb	18:29:14
3	Ca 317.933Radial†	3370.1	3365.6	5015.5 ug/L	5015.5 ppb	18:29:34
3	Fe 238.204 Radial†	539.1	535.1	4948.9 ug/L	4948.9 ppb	18:29:34
3	K 766.490 Radial†	30806.0	28704.1	5012.1 ug/L	5012.1 ppb	18:29:14
3	Mg 279.077 IEC†	146.6	146.8	5218.8 ug/L	5218.8 ppb	18:29:34
3	Na 589.592 Radial†	27474.0	28657.0	9219.3 ug/L	9219.3 ppb	18:29:14
3	Sr 421.552†	79749.4	80035.2	493.59 ug/L	493.59 ppb	18:29:14
3	Sc 361.383	909273.5	909273.5	100.88 %		18:30:43
3	Y 371.029	745325.0	745325.0	99.139 %		18:30:43
3	Ag 328.068†	112339.4	111041.8	497.52 ug/L	497.52 ppb	18:30:49
3	As 188.979†	1240.0	1253.5	478.46 ug/L	478.46 ppb	18:31:09
3	B 249.677†	23223.4	23639.4	478.47 ug/L	478.47 ppb	18:30:49
3	Ba 233.527†	67865.7	67289.1	487.26 ug/L	487.26 ppb	18:30:49
3	Be 313.107†	1371857.5	1365129.6	483.04 ug/L	483.04 ppb	18:30:43
3	Cd 226.502†	47595.5	47385.3	483.31 ug/L	483.31 ppb	18:30:49
3	Co 228.616†	26513.2	26355.3	483.87 ug/L	483.87 ppb	18:30:49
3	Cr 267.716†	47934.4	47434.3	487.85 ug/L	487.85 ppb	18:30:49
3	Cu 324.752†	180430.1	171981.0	482.28 ug/L	482.28 ppb	18:30:49
3	Mn 257.610†	471905.4	467283.7	486.03 ug/L	486.03 ppb	18:30:43
3	Mo 202.031†	7982.9	7886.3	491.28 ug/L	491.28 ppb	18:31:09
3	Ni 231.604†	21897.5	21615.1	486.15 ug/L	486.15 ppb	18:30:49
3	P 214.914†	4533.9	4269.4	2275.2 ug/L	2275.2 ppb	18:31:09
3	Pb 220.353†	4371.9	4406.4	483.43 ug/L	483.43 ppb	18:31:09
3	S 181.975 Axial†	766.6	713.4	944.72 ug/L	944.72 ppb	18:31:09
3	Sb 206.836†	1638.8	1596.8	499.65 ug/L	499.65 ppb	18:31:09
3	Se 196.026†	824.5	839.5	488.95 ug/L	488.95 ppb	18:31:09
3	Si 251.611†	84190.3	82910.5	2409.3 ug/L	2409.3 ppb	18:30:49
3	Sn 189.927†	3111.8	3079.1	489.72 ug/L	489.72 ppb	18:31:09
3	Ti 334.940†	316243.9	314678.7	493.32 ug/L	493.32 ppb	18:30:49
3	Tl 190.801†	1746.6	1769.2	481.92 ug/L	481.92 ppb	18:31:09
3	U 409.014†	15833.1	18244.8	503.55 ug/L	503.55 ppb	18:30:49
3	V 292.402†	74161.6	74934.7	493.80 ug/L	493.80 ppb	18:30:49
3	Zn 213.857†	58493.4	57331.1	481.71 ug/L	481.71 ppb	18:30:49
3	SiO2†	84190.4	82942.4	5171.2 ug/L	5171.2 ppb	18:31:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906490.6	100.57	%	0.531				0.53%
Sc Radial	5708.2	100	%	0.9				0.89%
Y 371.029	742862.6	98.812	%	0.5371				0.54%
Y RADIAL	6082.3	99.73	%	0.823				0.83%
Ag 328.068†	111314.8	498.74	ug/L	3.441	498.74	ppb	3.441	0.69%
QC value within limits for Ag 328.068 Recovery = 99.75%								
Al 396.153Radial†	7056.1	4990.0	ug/L	18.55	4990.0	ppb	18.55	0.37%
QC value within limits for Al 396.153Radial Recovery = 99.80%								
As 188.979†	1252.0	477.91	ug/L	2.888	477.91	ppb	2.888	0.60%
QC value within limits for As 188.979 Recovery = 95.58%								
B 249.677†	23700.7	479.72	ug/L	5.139	479.72	ppb	5.139	1.07%
QC value within limits for B 249.677 Recovery = 95.94%								
Ba 233.527†	67457.3	488.47	ug/L	3.198	488.47	ppb	3.198	0.65%
QC value within limits for Ba 233.527 Recovery = 97.69%								
Be 313.107†	1366254.2	483.43	ug/L	0.744	483.43	ppb	0.744	0.15%
QC value within limits for Be 313.107 Recovery = 96.69%								
Ca 317.933Radial†	3357.5	5003.5	ug/L	10.69	5003.5	ppb	10.69	0.21%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.07%
Cd 226.502†            47511.8      484.61 ug/L         3.449      484.61 ppb          3.449   0.71%
   QC value within limits for Cd 226.502  Recovery = 96.92%
Co 228.616†            26416.8      485.00 ug/L         3.700      485.00 ppb          3.700   0.76%
   QC value within limits for Co 228.616  Recovery = 97.00%
Cr 267.716†            47569.6      489.25 ug/L         3.464      489.25 ppb          3.464   0.71%
   QC value within limits for Cr 267.716  Recovery = 97.85%
Cu 324.752†           172378.5      483.39 ug/L         3.462      483.39 ppb          3.462   0.72%
   QC value within limits for Cu 324.752  Recovery = 96.68%
Fe 238.204 Radial†       535.5      4952.4 ug/L         22.49      4952.4 ppb          22.49   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.05%
K 766.490 Radial†      28549.1      4985.0 ug/L         23.56      4985.0 ppb          23.56   0.47%
   QC value within limits for K 766.490 Radial  Recovery = 99.70%
Mg 279.077 IEC†          146.4      5202.9 ug/L         15.60      5202.9 ppb          15.60   0.30%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.06%
Mn 257.610†           467885.5      486.66 ug/L         1.042      486.66 ppb          1.042   0.21%
   QC value within limits for Mn 257.610  Recovery = 97.33%
Mo 202.031†             7886.4      491.29 ug/L         3.199      491.29 ppb          3.199   0.65%
   QC value within limits for Mo 202.031  Recovery = 98.26%
Na 589.592 Radial†     28698.1      9232.5 ug/L         15.81      9232.5 ppb          15.81   0.17%
   QC value within limits for Na 589.592 Radial  Recovery = 92.32%
Ni 231.604†            21656.9      487.09 ug/L         3.430      487.09 ppb          3.430   0.70%
   QC value within limits for Ni 231.604  Recovery = 97.42%
P 214.914†              4274.1      2277.7 ug/L         11.98      2277.7 ppb          11.98   0.53%
   QC value within limits for P 214.914  Recovery = 91.11%
Pb 220.353†             4403.1      483.07 ug/L         3.316      483.07 ppb          3.316   0.69%
   QC value within limits for Pb 220.353  Recovery = 96.61%
S 181.975 Axial†         715.2      947.09 ug/L         8.568      947.09 ppb          8.568   0.90%
   QC value within limits for S 181.975 Axial  Recovery = 94.71%
Sb 206.836†             1589.1      497.24 ug/L         2.911      497.24 ppb          2.911   0.59%
   QC value within limits for Sb 206.836  Recovery = 99.45%
Se 196.026†              847.8      493.58 ug/L         4.796      493.58 ppb          4.796   0.97%
   QC value within limits for Se 196.026  Recovery = 98.72%
Si 251.611†            83182.4      2417.2 ug/L         16.99      2417.2 ppb          16.99   0.70%
   QC value within limits for Si 251.611  Recovery = 96.69%
Sn 189.927†             3078.8      489.67 ug/L         1.697      489.67 ppb          1.697   0.35%
   QC value within limits for Sn 189.927  Recovery = 97.93%
Sr 421.552†            79864.4      492.53 ug/L         0.987      492.53 ppb          0.987   0.20%
   QC value within limits for Sr 421.552  Recovery = 98.51%
Ti 334.940†           315493.3      494.60 ug/L         3.465      494.60 ppb          3.465   0.70%
   QC value within limits for Ti 334.940  Recovery = 98.92%
Tl 190.801†             1780.3      484.90 ug/L         5.662      484.90 ppb          5.662   1.17%
   QC value within limits for Tl 190.801  Recovery = 96.98%
U 409.014†             18098.3      499.49 ug/L         3.840      499.49 ppb          3.840   0.77%
   QC value within limits for U 409.014  Recovery = 99.90%
V 292.402†             75127.6      495.04 ug/L         3.127      495.04 ppb          3.127   0.63%
   QC value within limits for V 292.402  Recovery = 99.01%
Zn 213.857†            57510.1      483.22 ug/L         3.723      483.22 ppb          3.723   0.77%
   QC value within limits for Zn 213.857  Recovery = 96.64%
SiO2†                  82910.7      5169.2 ug/L         58.12      5169.2 ppb          58.12   1.12%
   QC value within limits for SiO2  Recovery = 96.67%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/7/2009 18:33:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5753.1	5753.1	101	%			18:35:27
1	Y RADIAL	6227.2	6227.2	102.1	%			18:35:27
1	Al 396.153Radial†	-14.1	6.5	4.6442	ug/L	4.6442	ppb	18:35:27
1	Ca 317.933Radial†	48.7	31.1	46.418	ug/L	46.418	ppb	18:35:47
1	Fe 238.204 Radial†	7.5	1.4	13.222	ug/L	13.222	ppb	18:35:47
1	K 766.490 Radial†	2321.9	77.9	13.614	ug/L	13.614	ppb	18:35:27
1	Mg 279.077 IEC†	3.1	2.8	98.595	ug/L	98.595	ppb	18:35:47
1	Na 589.592 Radial†	-1056.2	38.9	12.522	ug/L	12.522	ppb	18:35:27
1	Sr 421.552†	-14.9	-22.2	-0.1371	ug/L	-0.1371	ppb	18:35:27
1	Sc 361.383	892375.6	892375.6	99.008	%			18:36:44
1	Y 371.029	743746.1	743746.1	98.929	%			18:36:44
1	Ag 328.068†	442.3	131.8	0.5887	ug/L	0.5887	ppb	18:36:44
1	As 188.979†	-19.9	4.3	1.6106	ug/L	1.6106	ppb	18:37:04
1	B 249.677†	-459.3	155.2	3.1516	ug/L	3.1516	ppb	18:37:04
1	Ba 233.527†	9.2	26.2	0.1913	ug/L	0.1913	ppb	18:37:04
1	Be 313.107†	-4951.2	271.3	0.0959	ug/L	0.0959	ppb	18:36:44
1	Cd 226.502†	-183.9	20.3	0.2055	ug/L	0.2055	ppb	18:37:04
1	Co 228.616†	-64.0	9.4	0.1726	ug/L	0.1726	ppb	18:37:04
1	Cr 267.716†	87.0	7.0	0.0717	ug/L	0.0717	ppb	18:37:04
1	Cu 324.752†	6632.9	-171.4	-0.4798	ug/L	-0.4798	ppb	18:36:44
1	Mn 257.610†	548.5	60.2	0.0620	ug/L	0.0620	ppb	18:37:04
1	Mo 202.031†	24.0	-2.5	-0.1560	ug/L	-0.1560	ppb	18:37:04
1	Ni 231.604†	82.1	-7.9	-0.1779	ug/L	-0.1779	ppb	18:37:04
1	P 214.914†	233.2	10.7	5.9404	ug/L	5.9404	ppb	18:37:04
1	Pb 220.353†	-66.6	5.5	0.5969	ug/L	0.5969	ppb	18:37:04
1	S 181.975 Axial†	42.6	-3.5	-4.5857	ug/L	-4.5857	ppb	18:37:04
1	Sb 206.836†	40.4	13.2	4.0559	ug/L	4.0559	ppb	18:37:04
1	Se 196.026†	-28.5	-6.5	-3.6053	ug/L	-3.6053	ppb	18:37:04
1	Si 251.611†	588.5	51.0	1.4886	ug/L	1.4886	ppb	18:37:04
1	Sn 189.927†	5.7	0.3	0.0494	ug/L	0.0494	ppb	18:37:04
1	Ti 334.940†	-1169.1	20.3	0.0322	ug/L	0.0322	ppb	18:36:44
1	Tl 190.801†	-33.5	4.1	1.1179	ug/L	1.1179	ppb	18:37:04
1	U 409.014†	-2360.7	165.9	4.5902	ug/L	4.5902	ppb	18:36:44
1	V 292.402†	-1319.7	88.9	0.5846	ug/L	0.5846	ppb	18:36:44
1	Zn 213.857†	742.0	98.7	0.8340	ug/L	0.8340	ppb	18:37:04
1	SiO2†	627.9	122.7	7.6821	ug/L	7.6821	ppb	18:38:00
2	Sc Radial	5803.5	5803.5	102	%			18:35:52
2	Y RADIAL	6244.3	6244.3	102.4	%			18:35:52
2	Al 396.153Radial†	-34.2	-13.0	-9.2375	ug/L	-9.2375	ppb	18:35:52
2	Ca 317.933Radial†	44.0	26.2	38.992	ug/L	38.992	ppb	18:36:12
2	Fe 238.204 Radial†	7.4	1.2	11.038	ug/L	11.038	ppb	18:36:12
2	K 766.490 Radial†	2386.7	121.4	21.224	ug/L	21.224	ppb	18:35:52
2	Mg 279.077 IEC†	0.1	-0.2	-7.3556	ug/L	-7.3556	ppb	18:36:12
2	Na 589.592 Radial†	-1073.7	30.8	9.9088	ug/L	9.9088	ppb	18:35:52
2	Sr 421.552†	22.5	14.6	0.0896	ug/L	0.0896	ppb	18:35:52
2	Sc 361.383	891217.5	891217.5	98.879	%			18:37:09
2	Y 371.029	743581.5	743581.5	98.907	%			18:37:09
2	Ag 328.068†	275.2	-36.6	-0.1617	ug/L	-0.1617	ppb	18:37:09
2	As 188.979†	-17.6	6.6	2.4804	ug/L	2.4804	ppb	18:37:29
2	B 249.677†	-458.0	155.9	3.1665	ug/L	3.1665	ppb	18:37:29
2	Ba 233.527†	-1.3	15.7	0.1148	ug/L	0.1148	ppb	18:37:29
2	Be 313.107†	-4899.5	317.1	0.1121	ug/L	0.1121	ppb	18:37:09
2	Cd 226.502†	-196.7	7.2	0.0722	ug/L	0.0722	ppb	18:37:29
2	Co 228.616†	-66.8	6.5	0.1178	ug/L	0.1178	ppb	18:37:29
2	Cr 267.716†	95.7	15.9	0.1633	ug/L	0.1633	ppb	18:37:29
2	Cu 324.752†	6723.1	-71.5	-0.1999	ug/L	-0.1999	ppb	18:37:09
2	Mn 257.610†	563.4	76.0	0.0802	ug/L	0.0802	ppb	18:37:29
2	Mo 202.031†	21.2	-5.3	-0.3306	ug/L	-0.3306	ppb	18:37:29
2	Ni 231.604†	93.9	4.1	0.0916	ug/L	0.0916	ppb	18:37:29

2	P 214.914†	221.7	-0.7	-0.3563	ug/L	-0.3563 ppb	18:37:29
2	Pb 220.353†	-54.0	18.2	1.9852	ug/L	1.9852 ppb	18:37:29
2	S 181.975 Axial†	48.0	2.1	2.7228	ug/L	2.7228 ppb	18:37:29
2	Sb 206.836†	39.8	12.6	3.8936	ug/L	3.8936 ppb	18:37:29
2	Se 196.026†	-20.7	1.4	0.7993	ug/L	0.7993 ppb	18:37:29
2	Si 251.611†	585.8	49.1	1.4301	ug/L	1.4301 ppb	18:37:29
2	Sn 189.927†	8.4	3.1	0.4912	ug/L	0.4912 ppb	18:37:29
2	Ti 334.940†	-1140.6	47.6	0.0750	ug/L	0.0750 ppb	18:37:09
2	Tl 190.801†	-45.0	-7.5	-2.0312	ug/L	-2.0312 ppb	18:37:29
2	U 409.014†	-2384.7	138.5	3.8333	ug/L	3.8333 ppb	18:37:09
2	V 292.402†	-1334.5	72.2	0.4700	ug/L	0.4700 ppb	18:37:09
2	Zn 213.857†	759.0	116.9	0.9898	ug/L	0.9898 ppb	18:37:29
2	SiO2†	561.6	56.4	3.5265	ug/L	3.5265 ppb	18:38:05
3	Sc Radial	5780.8	5780.8	102	%		18:36:17
3	Y RADIAL	6230.8	6230.8	102.2	%		18:36:17
3	Al 396.153Radial†	-16.4	4.3	3.0763	ug/L	3.0763 ppb	18:36:17
3	Ca 317.933Radial†	48.1	30.4	45.249	ug/L	45.249 ppb	18:36:37
3	Fe 238.204 Radial†	6.0	-0.1	-1.1310	ug/L	-1.1310 ppb	18:36:37
3	K 766.490 Radial†	2304.1	49.4	8.6179	ug/L	8.6179 ppb	18:36:17
3	Mg 279.077 IEC†	1.8	1.5	52.820	ug/L	52.820 ppb	18:36:37
3	Na 589.592 Radial†	-1025.0	74.5	23.975	ug/L	23.975 ppb	18:36:17
3	Sr 421.552†	-32.4	-39.3	-0.2427	ug/L	-0.2427 ppb	18:36:17
3	Sc 361.383	902090.3	902090.3	100.09	%		18:37:34
3	Y 371.029	753573.2	753573.2	100.24	%		18:37:34
3	Ag 328.068†	321.5	6.3	0.0258	ug/L	0.0258 ppb	18:37:34
3	As 188.979†	-19.0	5.5	2.0607	ug/L	2.0607 ppb	18:37:54
3	B 249.677†	-461.4	158.2	3.2134	ug/L	3.2134 ppb	18:37:54
3	Ba 233.527†	8.0	25.0	0.1825	ug/L	0.1825 ppb	18:37:54
3	Be 313.107†	-4973.0	303.3	0.1073	ug/L	0.1073 ppb	18:37:34
3	Cd 226.502†	-195.8	10.4	0.1061	ug/L	0.1061 ppb	18:37:54
3	Co 228.616†	-56.4	17.7	0.3248	ug/L	0.3248 ppb	18:37:54
3	Cr 267.716†	89.5	8.6	0.0877	ug/L	0.0877 ppb	18:37:54
3	Cu 324.752†	6681.7	-194.8	-0.5461	ug/L	-0.5461 ppb	18:37:34
3	Mn 257.610†	539.3	45.0	0.0457	ug/L	0.0457 ppb	18:37:54
3	Mo 202.031†	27.9	1.2	0.0719	ug/L	0.0719 ppb	18:37:54
3	Ni 231.604†	87.1	-3.8	-0.0860	ug/L	-0.0860 ppb	18:37:54
3	P 214.914†	211.5	-13.5	-7.3604	ug/L	-7.3604 ppb	18:37:54
3	Pb 220.353†	-57.1	15.8	1.7254	ug/L	1.7254 ppb	18:37:54
3	S 181.975 Axial†	40.8	-5.7	-7.5131	ug/L	-7.5131 ppb	18:37:54
3	Sb 206.836†	37.6	10.0	3.0822	ug/L	3.0822 ppb	18:37:54
3	Se 196.026†	-22.0	0.3	0.1773	ug/L	0.1773 ppb	18:37:54
3	Si 251.611†	660.9	116.9	3.4110	ug/L	3.4110 ppb	18:37:54
3	Sn 189.927†	3.6	-1.9	-0.2914	ug/L	-0.2914 ppb	18:37:54
3	Ti 334.940†	-1134.3	67.7	0.1063	ug/L	0.1063 ppb	18:37:34
3	Tl 190.801†	-36.3	1.7	0.4532	ug/L	0.4532 ppb	18:37:54
3	U 409.014†	-2364.3	188.0	5.2048	ug/L	5.2048 ppb	18:37:34
3	V 292.402†	-1299.7	123.2	0.8136	ug/L	0.8136 ppb	18:37:34
3	Zn 213.857†	753.0	101.7	0.8615	ug/L	0.8615 ppb	18:37:54
3	SiO2†	568.4	56.3	3.5229	ug/L	3.5229 ppb	18:38:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895227.8	99.324	%	0.6625				0.67%
Sc Radial	5779.1	102	%	0.4				0.44%
Y 371.029	746966.9	99.358	%	0.7611				0.77%
Y RADIAL	6234.1	102.2	%	0.15				0.14%
Ag 328.068†	33.8	0.1509	ug/L	0.39050	0.1509	ppb	0.39050	258.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.5057	ug/L	7.60252	-0.5057	ppb	7.60252	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.4	2.0506	ug/L	0.43497	2.0506	ppb	0.43497	21.21%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	156.4	3.1772	ug/L	0.03222	3.1772	ppb	0.03222	1.01%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.3	0.1629	ug/L	0.04186	0.1629	ppb	0.04186	25.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	297.2	0.1051	ug/L	0.00835	0.1051	ppb	0.00835	7.94%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	29.2	43.553	ug/L	3.9928	43.553	ppb	3.9928	9.17%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              12.6      0.1279 ug/L       0.06930      0.1279 ppb        0.06930  54.17%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              11.2      0.2050 ug/L       0.10724      0.2050 ppb        0.10724  52.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              10.5      0.1076 ug/L       0.04894      0.1076 ppb        0.04894  45.48%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -145.9     -0.4086 ug/L       0.18377     -0.4086 ppb        0.18377  44.98%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.8      7.7098 ug/L       7.73384      7.7098 ppb        7.73384 100.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        82.9     14.485 ug/L        6.3481      14.485 ppb         6.3481  43.82%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.4     48.020 ug/L       53.1380      48.020 ppb        53.1380 110.66%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              60.4      0.0627 ug/L       0.01726      0.0627 ppb        0.01726  27.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -2.2     -0.1382 ug/L       0.20186     -0.1382 ppb        0.20186 146.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       48.1     15.469 ug/L        7.4817      15.469 ppb         7.4817  48.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -2.5     -0.0574 ug/L       0.13699     -0.0574 ppb        0.13699 238.61%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -1.2     -0.5921 ug/L       6.65353     -0.5921 ppb        6.65353 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              13.1      1.4359 ug/L       0.73809      1.4359 ppb        0.73809  51.40%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.4     -3.1253 ug/L       5.27188     -3.1253 ppb        5.27188 168.68%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              11.9      3.6772 ug/L       0.52166      3.6772 ppb        0.52166  14.19%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.6     -0.8762 ug/L       2.38382     -0.8762 ppb        2.38382 272.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              72.3      2.1099 ug/L       1.12714      2.1099 ppb        1.12714  53.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.5      0.0831 ug/L       0.39240      0.0831 ppb        0.39240 472.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -15.6     -0.0967 ug/L       0.16981     -0.0967 ppb        0.16981 175.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              45.2      0.0712 ug/L       0.03715      0.0712 ppb        0.03715  52.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.6     -0.1534 ug/L       1.65988     -0.1534 ppb        1.65988 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              164.1      4.5428 ug/L       0.68700      4.5428 ppb        0.68700  15.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               94.8      0.6227 ug/L       0.17492      0.6227 ppb        0.17492  28.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             105.8      0.8951 ug/L       0.08314      0.8951 ppb        0.08314   9.29%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    78.5      4.9105 ug/L       2.40025      4.9105 ppb        2.40025  48.88%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 21
Sample ID: 1201977927|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 12/7/2009 18:40:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977927|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5681.8	5681.8	100	%			18:42:13
1	Y RADIAL	6111.3	6111.3	100.2	%			18:42:13
1	Al 396.153Radial†	-40.9	-20.4	-14.490	ug/L	-14.490	ppb	18:42:13
1	Ca 317.933Radial†	34.5	17.5	26.079	ug/L	26.079	ppb	18:42:33
1	Fe 238.204 Radial†	10.4	4.4	40.758	ug/L	40.758	ppb	18:42:33
1	K 766.490 Radial†	2347.6	132.4	23.136	ug/L	23.136	ppb	18:42:13
1	Mg 279.077 IEC†	1.9	1.6	57.011	ug/L	57.011	ppb	18:42:33
1	Na 589.592 Radial†	-1072.8	9.2	2.9577	ug/L	2.9577	ppb	18:42:13
1	Sr 421.552†	38.7	31.3	0.1929	ug/L	0.1929	ppb	18:42:13
1	Sc 361.383	898279.2	898279.2	99.663	%			18:43:30
1	Y 371.029	747885.8	747885.8	99.480	%			18:43:30
1	Ag 328.068†	277.1	-36.9	-0.1555	ug/L	-0.1555	ppb	18:43:30
1	As 188.979†	-22.0	2.3	0.8789	ug/L	0.8789	ppb	18:43:50
1	B 249.677†	-511.1	106.3	2.1548	ug/L	2.1548	ppb	18:43:50
1	Ba 233.527†	18.8	35.9	0.2618	ug/L	0.2618	ppb	18:43:50
1	Be 313.107†	-4887.4	368.1	0.1308	ug/L	0.1308	ppb	18:43:30
1	Cd 226.502†	-211.0	-5.6	-0.0615	ug/L	-0.0615	ppb	18:43:50
1	Co 228.616†	-69.9	3.9	0.0686	ug/L	0.0686	ppb	18:43:50
1	Cr 267.716†	127.5	47.1	0.4834	ug/L	0.4834	ppb	18:43:50
1	Cu 324.752†	6628.3	-220.1	-0.6148	ug/L	-0.6148	ppb	18:43:30
1	Mn 257.610†	1023.7	533.3	0.5573	ug/L	0.5573	ppb	18:43:50
1	Mo 202.031†	18.9	-7.8	-0.4818	ug/L	-0.4818	ppb	18:43:50
1	Ni 231.604†	85.6	-5.0	-0.1116	ug/L	-0.1116	ppb	18:43:50
1	P 214.914†	218.9	-5.3	-2.8346	ug/L	-2.8346	ppb	18:43:50
1	Pb 220.353†	-48.7	23.9	2.6079	ug/L	2.6079	ppb	18:43:50
1	S 181.975 Axial†	48.6	2.3	3.0771	ug/L	3.0771	ppb	18:43:50
1	Sb 206.836†	33.4	5.9	1.8231	ug/L	1.8231	ppb	18:43:50
1	Se 196.026†	-31.4	-9.2	-5.0440	ug/L	-5.0440	ppb	18:43:50
1	Si 251.611†	839.7	299.2	8.7355	ug/L	8.7355	ppb	18:43:50
1	Sn 189.927†	10.7	5.3	0.8420	ug/L	0.8420	ppb	18:43:50
1	Ti 334.940†	-930.2	267.8	0.4182	ug/L	0.4182	ppb	18:43:30
1	Tl 190.801†	-32.8	5.1	1.3849	ug/L	1.3849	ppb	18:43:50
1	U 409.014†	-2308.0	234.4	6.4839	ug/L	6.4839	ppb	18:43:30
1	V 292.402†	-1341.7	75.5	0.4912	ug/L	0.4912	ppb	18:43:30
1	Zn 213.857†	974.5	327.1	2.7689	ug/L	2.7689	ppb	18:43:50
1	SiO2†	895.5	387.0	24.244	ug/L	24.244	ppb	18:44:46
2	Sc Radial	5843.2	5843.2	103	%			18:42:38
2	Y RADIAL	6282.8	6282.8	103.0	%			18:42:38
2	Al 396.153Radial†	-22.2	-1.1	-0.7694	ug/L	-0.7694	ppb	18:42:38
2	Ca 317.933Radial†	30.3	12.5	18.602	ug/L	18.602	ppb	18:42:58
2	Fe 238.204 Radial†	13.0	6.6	61.130	ug/L	61.130	ppb	18:42:58
2	K 766.490 Radial†	2342.7	62.7	10.948	ug/L	10.948	ppb	18:42:38
2	Mg 279.077 IEC†	3.1	2.8	98.253	ug/L	98.253	ppb	18:42:58
2	Na 589.592 Radial†	-1005.9	103.9	33.424	ug/L	33.424	ppb	18:42:38
2	Sr 421.552†	-29.1	-35.7	-0.2204	ug/L	-0.2204	ppb	18:42:38
2	Sc 361.383	903601.9	903601.9	100.25	%			18:43:55
2	Y 371.029	753309.1	753309.1	100.20	%			18:43:55
2	Ag 328.068†	402.3	86.3	0.4002	ug/L	0.4002	ppb	18:43:55
2	As 188.979†	-19.2	5.3	2.0046	ug/L	2.0046	ppb	18:44:15
2	B 249.677†	-521.7	98.7	1.9972	ug/L	1.9972	ppb	18:44:15
2	Ba 233.527†	6.2	23.2	0.1712	ug/L	0.1712	ppb	18:44:15
2	Be 313.107†	-5008.5	276.2	0.0981	ug/L	0.0981	ppb	18:43:55
2	Cd 226.502†	-188.6	17.9	0.1769	ug/L	0.1769	ppb	18:44:15
2	Co 228.616†	-61.8	12.5	0.2255	ug/L	0.2255	ppb	18:44:15
2	Cr 267.716†	89.9	8.9	0.0909	ug/L	0.0909	ppb	18:44:15
2	Cu 324.752†	6665.5	-222.2	-0.6197	ug/L	-0.6197	ppb	18:43:55
2	Mn 257.610†	1029.7	533.3	0.5585	ug/L	0.5585	ppb	18:44:15
2	Mo 202.031†	14.5	-12.3	-0.7585	ug/L	-0.7585	ppb	18:44:15
2	Ni 231.604†	104.1	13.0	0.2920	ug/L	0.2920	ppb	18:44:15

2	P 214.914†	214.7	-10.7	-5.8419	ug/L	-5.8419 ppb	18:44:15
2	Pb 220.353†	-46.8	26.1	2.8469	ug/L	2.8469 ppb	18:44:15
2	S 181.975 Axial†	44.1	-2.5	-3.2605	ug/L	-3.2605 ppb	18:44:15
2	Sb 206.836†	33.5	5.8	1.7672	ug/L	1.7672 ppb	18:44:15
2	Se 196.026†	-22.1	0.2	0.3142	ug/L	0.3142 ppb	18:44:15
2	Si 251.611†	828.8	283.3	8.2827	ug/L	8.2827 ppb	18:44:15
2	Sn 189.927†	4.3	-1.1	-0.1796	ug/L	-0.1796 ppb	18:44:15
2	Ti 334.940†	-1018.3	185.3	0.2885	ug/L	0.2885 ppb	18:43:55
2	Tl 190.801†	-32.1	6.0	1.6257	ug/L	1.6257 ppb	18:44:15
2	U 409.014†	-2304.9	251.2	6.9458	ug/L	6.9458 ppb	18:43:55
2	V 292.402†	-1325.5	99.7	0.6432	ug/L	0.6432 ppb	18:43:55
2	Zn 213.857†	992.3	339.1	2.8649	ug/L	2.8649 ppb	18:44:15
2	SiO2†	847.4	333.7	20.932	ug/L	20.932 ppb	18:44:51
3	Sc Radial	5794.7	5794.7	102	%		18:43:03
3	Y RADIAL	6222.2	6222.2	102.0	%		18:43:03
3	Al 396.153Radial†	-5.9	14.7	10.482	ug/L	10.482 ppb	18:43:03
3	Ca 317.933Radial†	30.7	13.1	19.581	ug/L	19.581 ppb	18:43:23
3	Fe 238.204 Radial†	11.6	5.4	49.832	ug/L	49.832 ppb	18:43:23
3	K 766.490 Radial†	2261.7	2.4	0.3961	ug/L	0.3961 ppb	18:43:03
3	Mg 279.077 IEC†	2.3	2.0	71.155	ug/L	71.155 ppb	18:43:23
3	Na 589.592 Radial†	-1046.6	55.8	17.941	ug/L	17.941 ppb	18:43:03
3	Sr 421.552†	4.9	-2.6	-0.0162	ug/L	-0.0162 ppb	18:43:03
3	Sc 361.383	900896.3	900896.3	99.953	%		18:44:20
3	Y 371.029	751193.4	751193.4	99.920	%		18:44:20
3	Ag 328.068†	344.5	29.7	0.1448	ug/L	0.1448 ppb	18:44:20
3	As 188.979†	-33.4	-9.0	-3.4026	ug/L	-3.4026 ppb	18:44:40
3	B 249.677†	-502.3	116.6	2.3626	ug/L	2.3626 ppb	18:44:40
3	Ba 233.527†	26.6	43.6	0.3188	ug/L	0.3188 ppb	18:44:40
3	Be 313.107†	-4854.6	415.2	0.1472	ug/L	0.1472 ppb	18:44:20
3	Cd 226.502†	-189.4	16.6	0.1642	ug/L	0.1642 ppb	18:44:40
3	Co 228.616†	-71.6	2.4	0.0405	ug/L	0.0405 ppb	18:44:40
3	Cr 267.716†	105.8	25.0	0.2572	ug/L	0.2572 ppb	18:44:40
3	Cu 324.752†	6744.5	-123.2	-0.3427	ug/L	-0.3427 ppb	18:44:20
3	Mn 257.610†	1049.5	556.2	0.5817	ug/L	0.5817 ppb	18:44:40
3	Mo 202.031†	10.9	-15.8	-0.9812	ug/L	-0.9812 ppb	18:44:40
3	Ni 231.604†	92.5	1.7	0.0377	ug/L	0.0377 ppb	18:44:40
3	P 214.914†	211.9	-12.9	-7.0782	ug/L	-7.0782 ppb	18:44:40
3	Pb 220.353†	-62.9	9.8	1.0695	ug/L	1.0695 ppb	18:44:40
3	S 181.975 Axial†	45.3	-1.2	-1.5296	ug/L	-1.5296 ppb	18:44:40
3	Sb 206.836†	22.9	-4.7	-1.4629	ug/L	-1.4629 ppb	18:44:40
3	Se 196.026†	-21.8	0.5	0.4304	ug/L	0.4304 ppb	18:44:40
3	Si 251.611†	826.2	283.2	8.2867	ug/L	8.2867 ppb	18:44:40
3	Sn 189.927†	4.5	-0.9	-0.1385	ug/L	-0.1385 ppb	18:44:40
3	Ti 334.940†	-998.2	202.5	0.3149	ug/L	0.3149 ppb	18:44:20
3	Tl 190.801†	-38.4	-0.5	-0.1243	ug/L	-0.1243 ppb	18:44:40
3	U 409.014†	-2262.7	286.5	7.9244	ug/L	7.9244 ppb	18:44:20
3	V 292.402†	-1276.4	144.8	0.9364	ug/L	0.9364 ppb	18:44:20
3	Zn 213.857†	1001.1	350.9	2.9680	ug/L	2.9680 ppb	18:44:40
3	SiO2†	824.4	313.3	19.666	ug/L	19.666 ppb	18:44:56

Mean Data: 1201977927|925191|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900925.8	99.956	%	0.2953				0.30%
Sc Radial	5773.2	102	%	1.5				1.43%
Y 371.029	750796.1	99.867	%	0.3636				0.36%
Y RADIAL	6205.4	101.8	%	1.43				1.40%
Ag 328.068†	26.4	0.1298	ug/L	0.27819	0.1298	ppb	0.27819	214.28%
Al 396.153Radial†	-2.3	-1.5928	ug/L	12.50629	-1.5928	ppb	12.50629	785.20%
As 188.979†	-0.5	-0.1731	ug/L	2.85294	-0.1731	ppb	2.85294	>999.9%
B 249.677†	107.2	2.1715	ug/L	0.18327	2.1715	ppb	0.18327	8.44%
Ba 233.527†	34.2	0.2506	ug/L	0.07444	0.2506	ppb	0.07444	29.70%
Be 313.107†	353.2	0.1254	ug/L	0.02502	0.1254	ppb	0.02502	19.95%
Ca 317.933Radial†	14.4	21.421	ug/L	4.0637	21.421	ppb	4.0637	18.97%
Cd 226.502†	9.6	0.0932	ug/L	0.13415	0.0932	ppb	0.13415	143.93%
Co 228.616†	6.3	0.1115	ug/L	0.09968	0.1115	ppb	0.09968	89.37%
Cr 267.716†	27.0	0.2772	ug/L	0.19701	0.2772	ppb	0.19701	71.08%
Cu 324.752†	-188.5	-0.5257	ug/L	0.15855	-0.5257	ppb	0.15855	30.16%
Fe 238.204 Radial†	5.5	50.573	ug/L	10.2061	50.573	ppb	10.2061	20.18%
K 766.490 Radial†	65.8	11.493	ug/L	11.3795	11.493	ppb	11.3795	99.01%

Mg 279.077 IEC†	2.1	75.473	ug/L	20.9576	75.473	ppb	20.9576 27.77%
Mn 257.610†	541.0	0.5658	ug/L	0.01374	0.5658	ppb	0.01374 2.43%
Mo 202.031†	-12.0	-0.7405	ug/L	0.25017	-0.7405	ppb	0.25017 33.78%
Na 589.592 Radial†	56.3	18.108	ug/L	15.2336	18.108	ppb	15.2336 84.13%
Ni 231.604†	3.2	0.0727	ug/L	0.20408	0.0727	ppb	0.20408 280.61%
P 214.914†	-9.6	-5.2516	ug/L	2.18249	-5.2516	ppb	2.18249 41.56%
Pb 220.353†	19.9	2.1748	ug/L	0.96464	2.1748	ppb	0.96464 44.36%
S 181.975 Axial†	-0.4	-0.5710	ug/L	3.27570	-0.5710	ppb	3.27570 573.68%
Sb 206.836†	2.4	0.7092	ug/L	1.88125	0.7092	ppb	1.88125 265.28%
Se 196.026†	-2.8	-1.4331	ug/L	3.12764	-1.4331	ppb	3.12764 218.24%
Si 251.611†	288.6	8.4350	ug/L	0.26025	8.4350	ppb	0.26025 3.09%
Sn 189.927†	1.1	0.1746	ug/L	0.57832	0.1746	ppb	0.57832 331.23%
Sr 421.552†	-2.3	-0.0146	ug/L	0.20665	-0.0146	ppb	0.20665 >999.9%
Ti 334.940†	218.5	0.3405	ug/L	0.06854	0.3405	ppb	0.06854 20.13%
Tl 190.801†	3.5	0.9621	ug/L	0.94849	0.9621	ppb	0.94849 98.59%
U 409.014†	257.4	7.1180	ug/L	0.73556	7.1180	ppb	0.73556 10.33%
V 292.402†	106.7	0.6903	ug/L	0.22631	0.6903	ppb	0.22631 32.79%
Zn 213.857†	339.1	2.8673	ug/L	0.09957	2.8673	ppb	0.09957 3.47%
SiO2†	344.7	21.614	ug/L	2.3639	21.614	ppb	2.3639 10.94%

Sequence No.: 22
Sample ID: 1201977932|925191|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 12/7/2009 18:47:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977932|925191|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5709.3	5709.3	100	%			18:49:19
1	Y RADIAL	6467.1	6467.1	106.0	%			18:49:19
1	Al 396.153Radial†	51163.0	50936.1	36154	ug/L	36154	ppb	18:48:59
1	Ca 317.933Radial†	13132.3	13051.9	19451	ug/L	19451	ppb	18:48:59
1	Fe 238.204 Radial†	9767.4	9714.2	89578	ug/L	89578	ppb	18:48:59
1	K 766.490 Radial†	71420.1	68859.6	12024	ug/L	12024	ppb	18:48:59
1	Mg 279.077 IEC†	450.6	448.1	15844	ug/L	15844	ppb	18:49:19
1	Na 589.592 Radial†	7985.4	9028.8	2904.7	ug/L	2904.7	ppb	18:48:59
1	Sr 421.552†	143494.7	142793.6	880.53	ug/L	880.53	ppb	18:48:59
1	Sc 361.383	892688.2	892688.2	99.042	%			18:50:18
1	Y 371.029	781358.8	781358.8	103.93	%			18:50:18
1	Ag 328.068†	155863.7	157055.8	730.98	ug/L	730.98	ppb	18:50:18
1	As 188.979†	3505.2	3563.4	1376.1	ug/L	1376.1	ppb	18:50:38
1	B 249.677†	35347.4	36308.4	724.80	ug/L	724.80	ppb	18:50:18
1	Ba 233.527†	353677.4	357114.2	2584.3	ug/L	2584.3	ppb	18:50:18
1	Be 313.107†	1352523.0	1370873.0	487.64	ug/L	487.64	ppb	18:50:18
1	Cd 226.502†	66166.2	67012.1	675.15	ug/L	675.15	ppb	18:50:18
1	Co 228.616†	23484.0	23785.1	433.56	ug/L	433.56	ppb	18:50:38
1	Cr 267.716†	39103.8	39401.1	407.65	ug/L	407.65	ppb	18:50:18
1	Cu 324.752†	204214.6	199318.3	563.21	ug/L	563.21	ppb	18:50:18
1	Mn 257.610†	1936269.2	1954497.7	2039.9	ug/L	2039.9	ppb	18:50:18
1	Mo 202.031†	7114.7	7156.7	451.87	ug/L	451.87	ppb	18:50:38
1	Ni 231.604†	23798.6	23937.9	538.46	ug/L	538.46	ppb	18:50:38
1	P 214.914†	7233.8	7078.8	3751.5	ug/L	3751.5	ppb	18:50:38
1	Pb 220.353†	7934.6	8084.1	885.50	ug/L	885.50	ppb	18:50:38
1	S 181.975 Axial†	893.0	855.2	1126.4	ug/L	1126.4	ppb	18:50:38
1	Sb 206.836†	1358.1	1343.6	421.75	ug/L	421.75	ppb	18:50:38
1	Se 196.026†	1256.5	1291.0	1014.3	ug/L	1014.3	ppb	18:50:38
1	Si 251.611†	666864.3	672769.0	19632	ug/L	19632	ppb	18:50:18
1	Sn 189.927†	3582.2	3611.4	576.92	ug/L	576.92	ppb	18:50:38
1	Ti 334.940†	1138864.1	1151077.2	1805.9	ug/L	1805.9	ppb	18:50:18
1	Tl 190.801†	4154.9	4233.0	1168.1	ug/L	1168.1	ppb	18:50:38
1	U 409.014†	-7242.8	-4762.5	-143.90	ug/L	-143.90	ppb	18:50:18
1	V 292.402†	122068.4	124670.5	801.22	ug/L	801.22	ppb	18:50:18
1	Zn 213.857†	127424.9	128006.3	1072.0	ug/L	1072.0	ppb	18:50:18
1	SiO2†	652351.6	658147.8	41207	ug/L	41207	ppb	18:51:39
2	Sc Radial	5766.3	5766.3	101	%			18:49:44
2	Y RADIAL	6519.0	6519.0	106.9	%			18:49:44
2	Al 396.153Radial†	50487.1	49766.7	35324	ug/L	35324	ppb	18:49:24
2	Ca 317.933Radial†	12889.6	12683.5	18902	ug/L	18902	ppb	18:49:24
2	Fe 238.204 Radial†	9594.3	9447.5	87118	ug/L	87118	ppb	18:49:24
2	K 766.490 Radial†	70467.1	67217.9	11738	ug/L	11738	ppb	18:49:24
2	Mg 279.077 IEC†	450.4	443.5	15682	ug/L	15682	ppb	18:49:44
2	Na 589.592 Radial†	7749.9	8718.2	2804.7	ug/L	2804.7	ppb	18:49:24
2	Sr 421.552†	140710.9	138638.7	854.91	ug/L	854.91	ppb	18:49:24
2	Sc 361.383	927895.9	927895.9	102.95	%			18:50:46
2	Y 371.029	807781.9	807781.9	107.45	%			18:50:46
2	Ag 328.068†	152656.4	147969.2	689.55	ug/L	689.55	ppb	18:50:46
2	As 188.979†	3499.0	3423.2	1321.8	ug/L	1321.8	ppb	18:51:06
2	B 249.677†	34577.4	34206.2	682.46	ug/L	682.46	ppb	18:50:46
2	Ba 233.527†	346981.8	337060.8	2439.3	ug/L	2439.3	ppb	18:50:46
2	Be 313.107†	1323189.2	1290563.4	459.07	ug/L	459.07	ppb	18:50:46
2	Cd 226.502†	64978.6	63323.6	637.74	ug/L	637.74	ppb	18:50:46
2	Co 228.616†	23358.7	22763.8	414.98	ug/L	414.98	ppb	18:51:06
2	Cr 267.716†	38339.3	37160.4	384.52	ug/L	384.52	ppb	18:50:46
2	Cu 324.752†	198634.2	186074.2	525.97	ug/L	525.97	ppb	18:50:46
2	Mn 257.610†	1897296.1	1842461.3	1923.2	ug/L	1923.2	ppb	18:50:46
2	Mo 202.031†	7087.9	6858.2	433.11	ug/L	433.11	ppb	18:51:06
2	Ni 231.604†	23726.2	22955.8	516.37	ug/L	516.37	ppb	18:51:06

2	P 214.914†	7212.0	6780.5	3594.8	ug/L	3594.8 ppb	18:51:06
2	Pb 220.353†	7913.0	7759.2	849.96	ug/L	849.96 ppb	18:51:06
2	S 181.975 Axial†	892.7	820.7	1080.9	ug/L	1080.9 ppb	18:51:06
2	Sb 206.836†	1388.1	1320.8	414.58	ug/L	414.58 ppb	18:51:06
2	Se 196.026†	1248.9	1235.5	975.22	ug/L	975.22 ppb	18:51:06
2	Si 251.611†	652229.1	633005.0	18471	ug/L	18471 ppb	18:50:46
2	Sn 189.927†	3559.9	3452.5	551.58	ug/L	551.58 ppb	18:51:06
2	Ti 334.940†	1112823.1	1082151.5	1697.8	ug/L	1697.8 ppb	18:50:46
2	Tl 190.801†	4120.6	4040.6	1114.7	ug/L	1114.7 ppb	18:51:06
2	U 409.014†	-7294.5	-4535.3	-137.26	ug/L	-137.26 ppb	18:50:46
2	V 292.402†	119368.5	117371.4	754.01	ug/L	754.01 ppb	18:50:46
2	Zn 213.857†	124798.3	120573.2	1009.4	ug/L	1009.4 ppb	18:50:46
2	SiO2†	648637.0	629547.7	39416	ug/L	39416 ppb	18:51:44
3	Sc Radial	5711.9	5711.9	101	%		18:50:09
3	Y RADIAL	6466.8	6466.8	106.0	%		18:50:09
3	Al 396.153Radial†	51126.5	50877.2	36113	ug/L	36113 ppb	18:49:49
3	Ca 317.933Radial†	13058.8	12973.0	19333	ug/L	19333 ppb	18:49:49
3	Fe 238.204 Radial†	9694.7	9637.5	88871	ug/L	88871 ppb	18:49:49
3	K 766.490 Radial†	71378.0	68786.1	12012	ug/L	12012 ppb	18:49:49
3	Mg 279.077 IEC†	447.5	444.8	15727	ug/L	15727 ppb	18:50:09
3	Na 589.592 Radial†	7903.4	8943.7	2877.3	ug/L	2877.3 ppb	18:49:49
3	Sr 421.552†	142298.4	141539.9	872.80	ug/L	872.80 ppb	18:49:49
3	Sc 361.383	918635.5	918635.5	101.92	%		18:51:13
3	Y 371.029	802844.1	802844.1	106.79	%		18:51:13
3	Ag 328.068†	153148.0	149946.3	698.94	ug/L	698.94 ppb	18:51:13
3	As 188.979†	3483.8	3442.5	1329.6	ug/L	1329.6 ppb	18:51:33
3	B 249.677†	34662.6	34628.3	690.80	ug/L	690.80 ppb	18:51:13
3	Ba 233.527†	347432.9	340901.0	2467.1	ug/L	2467.1 ppb	18:51:13
3	Be 313.107†	1329575.9	1309786.4	465.91	ug/L	465.91 ppb	18:51:13
3	Cd 226.502†	64902.6	63885.3	643.30	ug/L	643.30 ppb	18:51:13
3	Co 228.616†	23290.9	22926.0	417.89	ug/L	417.89 ppb	18:51:33
3	Cr 267.716†	38364.2	37560.3	388.67	ug/L	388.67 ppb	18:51:13
3	Cu 324.752†	200201.2	189556.6	535.82	ug/L	535.82 ppb	18:51:13
3	Mn 257.610†	1900733.9	1864412.5	1946.2	ug/L	1946.2 ppb	18:51:13
3	Mo 202.031†	7051.8	6892.1	435.35	ug/L	435.35 ppb	18:51:33
3	Ni 231.604†	23568.2	23033.1	518.11	ug/L	518.11 ppb	18:51:33
3	P 214.914†	7193.9	6833.4	3621.1	ug/L	3621.1 ppb	18:51:33
3	Pb 220.353†	7868.9	7793.4	853.73	ug/L	853.73 ppb	18:51:33
3	S 181.975 Axial†	880.5	817.4	1076.5	ug/L	1076.5 ppb	18:51:33
3	Sb 206.836†	1379.8	1326.2	416.18	ug/L	416.18 ppb	18:51:33
3	Se 196.026†	1250.4	1249.1	988.56	ug/L	988.56 ppb	18:51:33
3	Si 251.611†	654164.3	641290.4	18713	ug/L	18713 ppb	18:51:13
3	Sn 189.927†	3531.5	3459.5	552.77	ug/L	552.77 ppb	18:51:33
3	Ti 334.940†	1117478.5	1097615.9	1722.1	ug/L	1722.1 ppb	18:51:13
3	Tl 190.801†	4103.8	4064.4	1121.4	ug/L	1121.4 ppb	18:51:33
3	U 409.014†	-7137.5	-4452.7	-135.20	ug/L	-135.20 ppb	18:51:13
3	V 292.402†	119785.2	118949.1	764.01	ug/L	764.01 ppb	18:51:13
3	Zn 213.857†	124968.3	121962.1	1021.0	ug/L	1021.0 ppb	18:51:13
3	SiO2†	649147.4	636399.8	39845	ug/L	39845 ppb	18:51:50

Mean Data: 1201977932|925191|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	913073.2	101.30	%	2.025				2.00%
Sc Radial	5729.2	101	%	0.6				0.56%
Y 371.029	797328.2	106.06	%	1.869				1.76%
Y RADIAL	6484.3	106.3	%	0.49				0.46%
Ag 328.068†	151657.1	706.49	ug/L	21.724	706.49	ppb	21.724	3.07%
Al 396.153Radial†	50526.7	35864	ug/L	467.6	35864	ppb	467.6	1.30%
As 188.979†	3476.4	1342.5	ug/L	29.37	1342.5	ppb	29.37	2.19%
B 249.677†	35047.6	699.35	ug/L	22.430	699.35	ppb	22.430	3.21%
Ba 233.527†	345025.3	2496.9	ug/L	76.97	2496.9	ppb	76.97	3.08%
Be 313.107†	1323740.9	470.87	ug/L	14.920	470.87	ppb	14.920	3.17%
Ca 317.933Radial†	12902.8	19228	ug/L	289.1	19228	ppb	289.1	1.50%
Cd 226.502†	64740.3	652.07	ug/L	20.183	652.07	ppb	20.183	3.10%
Co 228.616†	23158.3	422.14	ug/L	9.995	422.14	ppb	9.995	2.37%
Cr 267.716†	38040.6	393.61	ug/L	12.336	393.61	ppb	12.336	3.13%
Cu 324.752†	191649.7	541.67	ug/L	19.299	541.67	ppb	19.299	3.56%
Fe 238.204 Radial†	9599.7	88522	ug/L	1266.3	88522	ppb	1266.3	1.43%
K 766.490 Radial†	68287.9	11925	ug/L	161.7	11925	ppb	161.7	1.36%

Mg 279.077 IEC†	445.5	15751	ug/L	83.3	15751	ppb	83.3	0.53%
Mn 257.610†	1887123.8	1969.8	ug/L	61.81	1969.8	ppb	61.81	3.14%
Mo 202.031†	6969.0	440.11	ug/L	10.245	440.11	ppb	10.245	2.33%
Na 589.592 Radial†	8896.9	2862.2	ug/L	51.64	2862.2	ppb	51.64	1.80%
Ni 231.604†	23308.9	524.31	ug/L	12.282	524.31	ppb	12.282	2.34%
P 214.914†	6897.6	3655.8	ug/L	83.92	3655.8	ppb	83.92	2.30%
Pb 220.353†	7878.9	863.07	ug/L	19.521	863.07	ppb	19.521	2.26%
S 181.975 Axial†	831.1	1094.6	ug/L	27.67	1094.6	ppb	27.67	2.53%
Sb 206.836†	1330.2	417.50	ug/L	3.766	417.50	ppb	3.766	0.90%
Se 196.026†	1258.5	992.70	ug/L	19.876	992.70	ppb	19.876	2.00%
Si 251.611†	649021.5	18938	ug/L	612.3	18938	ppb	612.3	3.23%
Sn 189.927†	3507.8	560.42	ug/L	14.298	560.42	ppb	14.298	2.55%
Sr 421.552†	140990.8	869.41	ug/L	13.142	869.41	ppb	13.142	1.51%
Ti 334.940†	1110281.5	1742.0	ug/L	56.72	1742.0	ppb	56.72	3.26%
Tl 190.801†	4112.7	1134.8	ug/L	29.09	1134.8	ppb	29.09	2.56%
U 409.014†	-4583.5	-138.79	ug/L	4.549	-138.79	ppb	4.549	3.28%
V 292.402†	120330.4	773.08	ug/L	24.877	773.08	ppb	24.877	3.22%
Zn 213.857†	123513.9	1034.1	ug/L	33.30	1034.1	ppb	33.30	3.22%
SiO2†	641365.1	40156	ug/L	935.0	40156	ppb	935.0	2.33%

Sequence No.: 23
Sample ID: 241419001|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 12/7/2009 18:54:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419001|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5835.1	5835.1	103	%			18:55:53
1	Y RADIAL	6816.1	6816.1	111.8	%			18:55:53
1	Al 396.153Radial†	60403.7	58836.7	41784	ug/L	41784	ppb	18:55:53
1	Ca 317.933Radial†	5568.0	5404.7	8054.4	ug/L	8054.4	ppb	18:55:53
1	Fe 238.204 Radial†	3981.5	3870.8	35689	ug/L	35689	ppb	18:55:53
1	K 766.490 Radial†	28724.7	25754.6	4503.2	ug/L	4503.2	ppb	18:55:53
1	Mg 279.077 IEC†	166.9	162.3	5730.8	ug/L	5730.8	ppb	18:56:13
1	Na 589.592 Radial†	7115.9	8010.9	2577.2	ug/L	2577.2	ppb	18:55:53
1	Sr 421.552†	12859.4	12514.0	77.108	ug/L	77.108	ppb	18:55:53
1	Sc 361.383	916899.1	916899.1	101.73	%			18:57:10
1	Y 371.029	826318.6	826318.6	109.91	%			18:57:10
1	Ag 328.068†	-2119.6	-2398.5	0.8294	ug/L	0.8294	ppb	18:57:10
1	As 188.979†	-39.1	-14.0	10.226	ug/L	10.226	ppb	18:57:30
1	B 249.677†	98.0	715.5	9.7828	ug/L	9.7828	ppb	18:57:10
1	Ba 233.527†	133920.6	131662.1	952.33	ug/L	952.33	ppb	18:57:10
1	Be 313.107†	294.1	5561.1	4.3104	ug/L	4.3104	ppb	18:57:10
1	Cd 226.502†	198.8	401.5	0.5447	ug/L	0.5447	ppb	18:57:30
1	Co 228.616†	394.7	462.1	5.8483	ug/L	5.8483	ppb	18:57:30
1	Cr 267.716†	2672.8	2546.5	26.903	ug/L	26.903	ppb	18:57:30
1	Cu 324.752†	14062.0	6952.2	21.306	ug/L	21.306	ppb	18:57:10
1	Mn 257.610†	464560.1	456172.8	477.54	ug/L	477.54	ppb	18:57:10
1	Mo 202.031†	17.6	-9.5	1.9401	ug/L	1.9401	ppb	18:57:30
1	Ni 231.604†	1203.6	1092.3	24.578	ug/L	24.578	ppb	18:57:30
1	P 214.914†	1203.4	958.0	509.00	ug/L	509.00	ppb	18:57:30
1	Pb 220.353†	200.9	270.3	35.988	ug/L	35.988	ppb	18:57:30
1	S 181.975 Axial†	216.9	166.7	212.82	ug/L	212.82	ppb	18:57:30
1	Sb 206.836†	38.8	10.5	-1.2721	ug/L	-1.2721	ppb	18:57:30
1	Se 196.026†	-223.7	-197.6	9.1865	ug/L	9.1865	ppb	18:57:30
1	Si 251.611†	1207906.6	1186839.3	34655	ug/L	34655	ppb	18:57:10
1	Sn 189.927†	-53.3	-57.8	-7.8431	ug/L	-7.8431	ppb	18:57:30
1	Ti 334.940†	773269.4	761331.6	1194.3	ug/L	1194.3	ppb	18:57:10
1	Tl 190.801†	-74.9	-35.7	3.2765	ug/L	3.2765	ppb	18:57:30
1	U 409.014†	-5680.1	-3033.3	-88.518	ug/L	-88.518	ppb	18:57:10
1	V 292.402†	6517.5	7828.6	44.100	ug/L	44.100	ppb	18:57:10
1	Zn 213.857†	15783.9	14865.1	122.24	ug/L	122.24	ppb	18:57:10
1	SiO2†	1223003.9	1201711.9	75290	ug/L	75290	ppb	18:58:28
2	Sc Radial	5776.7	5776.7	102	%			18:56:18
2	Y RADIAL	6787.7	6787.7	111.3	%			18:56:18
2	Al 396.153Radial†	60286.0	59315.7	42124	ug/L	42124	ppb	18:56:18
2	Ca 317.933Radial†	5570.0	5461.5	8139.0	ug/L	8139.0	ppb	18:56:18
2	Fe 238.204 Radial†	3964.7	3893.5	35898	ug/L	35898	ppb	18:56:18
2	K 766.490 Radial†	28632.5	25946.7	4536.9	ug/L	4536.9	ppb	18:56:18
2	Mg 279.077 IEC†	170.9	167.9	5929.3	ug/L	5929.3	ppb	18:56:38
2	Na 589.592 Radial†	6985.6	7952.7	2558.5	ug/L	2558.5	ppb	18:56:18
2	Sr 421.552†	12825.4	12607.1	77.682	ug/L	77.682	ppb	18:56:18
2	Sc 361.383	916954.7	916954.7	101.73	%			18:57:36
2	Y 371.029	825495.4	825495.4	109.80	%			18:57:36
2	Ag 328.068†	-2195.0	-2472.5	0.5693	ug/L	0.5693	ppb	18:57:36
2	As 188.979†	-32.9	-7.9	12.572	ug/L	12.572	ppb	18:57:56
2	B 249.677†	49.3	667.6	8.7816	ug/L	8.7816	ppb	18:57:36
2	Ba 233.527†	134098.8	131829.3	953.55	ug/L	953.55	ppb	18:57:36
2	Be 313.107†	330.7	5597.1	4.3219	ug/L	4.3219	ppb	18:57:36
2	Cd 226.502†	205.8	408.3	0.5928	ug/L	0.5928	ppb	18:57:56
2	Co 228.616†	403.8	471.0	6.0110	ug/L	6.0110	ppb	18:57:56
2	Cr 267.716†	2634.6	2508.9	26.522	ug/L	26.522	ppb	18:57:56
2	Cu 324.752†	14019.2	6909.3	21.197	ug/L	21.197	ppb	18:57:36
2	Mn 257.610†	463913.9	455509.9	476.87	ug/L	476.87	ppb	18:57:36
2	Mo 202.031†	14.9	-12.1	1.7926	ug/L	1.7926	ppb	18:57:56
2	Ni 231.604†	1186.0	1075.0	24.187	ug/L	24.187	ppb	18:57:56

2	P 214.914†	1208.5	963.0	511.68	ug/L	511.68 ppb	18:57:56
2	Pb 220.353†	171.5	241.4	32.886	ug/L	32.886 ppb	18:57:56
2	S 181.975 Axial†	213.7	163.5	208.48	ug/L	208.48 ppb	18:57:56
2	Sb 206.836†	44.8	16.4	0.5067	ug/L	0.5067 ppb	18:57:56
2	Se 196.026†	-223.4	-197.3	10.073	ug/L	10.073 ppb	18:57:56
2	Si 251.611†	1207168.1	1186041.4	34631	ug/L	34631 ppb	18:57:36
2	Sn 189.927†	-67.1	-71.4	-9.9876	ug/L	-9.9876 ppb	18:57:56
2	Ti 334.940†	772944.5	760966.2	1193.7	ug/L	1193.7 ppb	18:57:36
2	Tl 190.801†	-86.0	-46.5	0.3404	ug/L	0.3404 ppb	18:57:56
2	U 409.014†	-5784.9	-3136.0	-91.387	ug/L	-91.387 ppb	18:57:36
2	V 292.402†	6583.2	7892.8	44.483	ug/L	44.483 ppb	18:57:36
2	Zn 213.857†	15810.2	14890.0	122.43	ug/L	122.43 ppb	18:57:36
2	SiO2†	1220477.5	1199155.7	75130	ug/L	75130 ppb	18:58:34
3	Sc Radial	5806.9	5806.9	102	%		18:56:43
3	Y RADIAL	6813.5	6813.5	111.7	%		18:56:43
3	Al 396.153Radial†	60447.9	59165.6	42017	ug/L	42017 ppb	18:56:43
3	Ca 317.933Radial†	5588.4	5451.1	8123.5	ug/L	8123.5 ppb	18:56:43
3	Fe 238.204 Radial†	3962.4	3871.0	35691	ug/L	35691 ppb	18:56:43
3	K 766.490 Radial†	28853.8	26016.7	4549.1	ug/L	4549.1 ppb	18:56:43
3	Mg 279.077 IEC†	170.1	166.2	5870.4	ug/L	5870.4 ppb	18:57:03
3	Na 589.592 Radial†	7062.6	7992.3	2571.2	ug/L	2571.2 ppb	18:56:43
3	Sr 421.552†	12798.6	12515.3	77.115	ug/L	77.115 ppb	18:56:43
3	Sc 361.383	907259.5	907259.5	100.66	%		18:58:02
3	Y 371.029	818426.1	818426.1	108.86	%		18:58:02
3	Ag 328.068†	-2048.0	-2349.6	1.0486	ug/L	1.0486 ppb	18:58:02
3	As 188.979†	-32.4	-7.8	12.576	ug/L	12.576 ppb	18:58:22
3	B 249.677†	20.2	639.2	8.2322	ug/L	8.2322 ppb	18:58:02
3	Ba 233.527†	132503.6	131653.1	952.27	ug/L	952.27 ppb	18:58:02
3	Be 313.107†	305.3	5575.3	4.3099	ug/L	4.3099 ppb	18:58:02
3	Cd 226.502†	185.9	390.8	0.4350	ug/L	0.4350 ppb	18:58:22
3	Co 228.616†	385.3	456.8	5.7559	ug/L	5.7559 ppb	18:58:22
3	Cr 267.716†	2657.7	2559.5	27.037	ug/L	27.037 ppb	18:58:22
3	Cu 324.752†	13907.8	6945.9	21.289	ug/L	21.289 ppb	18:58:02
3	Mn 257.610†	458511.3	455015.7	476.34	ug/L	476.34 ppb	18:58:02
3	Mo 202.031†	7.9	-18.9	1.3566	ug/L	1.3566 ppb	18:58:22
3	Ni 231.604†	1201.8	1103.1	24.821	ug/L	24.821 ppb	18:58:22
3	P 214.914†	1186.3	953.6	506.65	ug/L	506.65 ppb	18:58:22
3	Pb 220.353†	189.0	260.5	34.969	ug/L	34.969 ppb	18:58:22
3	S 181.975 Axial†	201.9	154.0	195.94	ug/L	195.94 ppb	18:58:22
3	Sb 206.836†	46.7	18.8	1.2519	ug/L	1.2519 ppb	18:58:22
3	Se 196.026†	-224.4	-200.7	7.4995	ug/L	7.4995 ppb	18:58:22
3	Si 251.611†	1191511.9	1183167.8	34547	ug/L	34547 ppb	18:58:02
3	Sn 189.927†	-55.9	-61.0	-8.3472	ug/L	-8.3472 ppb	18:58:22
3	Ti 334.940†	763338.4	759542.0	1191.5	ug/L	1191.5 ppb	18:58:02
3	Tl 190.801†	-85.3	-46.8	0.2449	ug/L	0.2449 ppb	18:58:22
3	U 409.014†	-5677.1	-3089.7	-90.079	ug/L	-90.079 ppb	18:58:02
3	V 292.402†	6461.6	7841.1	44.176	ug/L	44.176 ppb	18:58:02
3	Zn 213.857†	15594.1	14841.3	122.03	ug/L	122.03 ppb	18:58:02
3	SiO2†	1232799.6	1224217.1	76700	ug/L	76700 ppb	18:58:40

Mean Data: 241419001|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	913704.4	101.37	%	0.619				0.61%
Sc Radial	5806.2	102	%	0.5				0.50%
Y 371.029	823413.4	109.53	%	0.577				0.53%
Y RADIAL	6805.8	111.6	%	0.26				0.23%
Ag 328.068†	-2406.9	0.8158	ug/L	0.23995	0.8158	ppb	0.23995	29.41%
Al 396.153Radial†	59106.0	41975	ug/L	174.0	41975	ppb	174.0	0.41%
As 188.979†	-9.9	11.791	ug/L	1.3558	11.791	ppb	1.3558	11.50%
B 249.677†	674.1	8.9322	ug/L	0.78622	8.9322	ppb	0.78622	8.80%
Ba 233.527†	131714.8	952.71	ug/L	0.722	952.71	ppb	0.722	0.08%
Be 313.107†	5577.8	4.3141	ug/L	0.00683	4.3141	ppb	0.00683	0.16%
Ca 317.933Radial†	5439.1	8105.6	ug/L	45.04	8105.6	ppb	45.04	0.56%
Cd 226.502†	400.2	0.5242	ug/L	0.08088	0.5242	ppb	0.08088	15.43%
Co 228.616†	463.3	5.8717	ug/L	0.12911	5.8717	ppb	0.12911	2.20%
Cr 267.716†	2538.3	26.821	ug/L	0.2673	26.821	ppb	0.2673	1.00%
Cu 324.752†	6935.8	21.264	ug/L	0.0588	21.264	ppb	0.0588	0.28%
Fe 238.204 Radial†	3878.5	35759	ug/L	120.4	35759	ppb	120.4	0.34%
K 766.490 Radial†	25906.0	4529.7	ug/L	23.76	4529.7	ppb	23.76	0.52%

Mg 279.077 IEC†	165.4	5843.5	ug/L	101.95	5843.5	ppb	101.95	1.74%
Mn 257.610†	455566.1	476.92	ug/L	0.604	476.92	ppb	0.604	0.13%
Mo 202.031†	-13.5	1.6965	ug/L	0.30339	1.6965	ppb	0.30339	17.88%
Na 589.592 Radial†	7985.3	2569.0	ug/L	9.56	2569.0	ppb	9.56	0.37%
Ni 231.604†	1090.1	24.529	ug/L	0.3196	24.529	ppb	0.3196	1.30%
P 214.914†	958.2	509.11	ug/L	2.519	509.11	ppb	2.519	0.49%
Pb 220.353†	257.4	34.614	ug/L	1.5816	34.614	ppb	1.5816	4.57%
S 181.975 Axial†	161.4	205.74	ug/L	8.766	205.74	ppb	8.766	4.26%
Sb 206.836†	15.2	0.1621	ug/L	1.29678	0.1621	ppb	1.29678	799.83%
Se 196.026†	-198.5	8.9198	ug/L	1.30751	8.9198	ppb	1.30751	14.66%
Si 251.611†	1185349.5	34611	ug/L	56.4	34611	ppb	56.4	0.16%
Sn 189.927†	-63.4	-8.7260	ug/L	1.12133	-8.7260	ppb	1.12133	12.85%
Sr 421.552†	12545.5	77.302	ug/L	0.3291	77.302	ppb	0.3291	0.43%
Ti 334.940†	760613.3	1193.2	ug/L	1.48	1193.2	ppb	1.48	0.12%
Tl 190.801†	-43.0	1.2873	ug/L	1.72341	1.2873	ppb	1.72341	133.88%
U 409.014†	-3086.3	-89.995	ug/L	1.4362	-89.995	ppb	1.4362	1.60%
V 292.402†	7854.2	44.253	ug/L	0.2027	44.253	ppb	0.2027	0.46%
Zn 213.857†	14865.5	122.23	ug/L	0.197	122.23	ppb	0.197	0.16%
SiO2†	1208361.6	75707	ug/L	864.1	75707	ppb	864.1	1.14%

Sequence No.: 24
Sample ID: 1201977928|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 12/7/2009 19:00:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977928|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5771.3	5771.3	102	%			19:02:43
1	Y RADIAL	6837.0	6837.0	112.1	%			19:02:43
1	Al 396.153Radial†	58767.6	57875.4	41101	ug/L	41101	ppb	19:02:43
1	Ca 317.933Radial†	4946.9	4853.2	7232.5	ug/L	7232.5	ppb	19:02:43
1	Fe 238.204 Radial†	4094.0	4024.4	37105	ug/L	37105	ppb	19:02:43
1	K 766.490 Radial†	25820.0	23203.8	4056.3	ug/L	4056.3	ppb	19:02:43
1	Mg 279.077 IEC†	152.5	149.8	5288.1	ug/L	5288.1	ppb	19:03:03
1	Na 589.592 Radial†	5887.8	6878.4	2212.8	ug/L	2212.8	ppb	19:02:43
1	Sr 421.552†	10221.1	10055.0	61.949	ug/L	61.949	ppb	19:02:43
1	Sc 361.383	903729.8	903729.8	100.27	%			19:04:00
1	Y 371.029	824730.1	824730.1	109.70	%			19:04:00
1	Ag 328.068†	-2209.1	-2518.1	0.7643	ug/L	0.7643	ppb	19:04:00
1	As 188.979†	-46.7	-22.2	9.2892	ug/L	9.2892	ppb	19:04:20
1	B 249.677†	-78.5	540.9	6.0439	ug/L	6.0439	ppb	19:04:00
1	Ba 233.527†	60584.6	60440.1	438.00	ug/L	438.00	ppb	19:04:00
1	Be 313.107†	-2073.0	3204.5	3.9334	ug/L	3.9334	ppb	19:04:00
1	Cd 226.502†	230.9	436.3	0.7566	ug/L	0.7566	ppb	19:04:20
1	Co 228.616†	455.8	528.7	6.3265	ug/L	6.3265	ppb	19:04:20
1	Cr 267.716†	2264.4	2177.6	23.142	ug/L	23.142	ppb	19:04:20
1	Cu 324.752†	12628.9	5724.4	17.937	ug/L	17.937	ppb	19:04:00
1	Mn 257.610†	531447.2	529536.2	553.94	ug/L	553.94	ppb	19:04:00
1	Mo 202.031†	8.7	-18.0	1.5084	ug/L	1.5084	ppb	19:04:20
1	Ni 231.604†	1082.7	988.9	22.250	ug/L	22.250	ppb	19:04:20
1	P 214.914†	1110.5	882.7	466.76	ug/L	466.76	ppb	19:04:20
1	Pb 220.353†	196.6	268.8	35.563	ug/L	35.563	ppb	19:04:20
1	S 181.975 Axial†	117.1	70.3	85.105	ug/L	85.105	ppb	19:04:20
1	Sb 206.836†	43.9	16.2	-0.0123	ug/L	-0.0123	ppb	19:04:20
1	Se 196.026†	-238.9	-215.9	3.2187	ug/L	3.2187	ppb	19:04:20
1	Si 251.611†	1150092.9	1146482.6	33476	ug/L	33476	ppb	19:04:00
1	Sn 189.927†	-47.9	-53.2	-7.1774	ug/L	-7.1774	ppb	19:04:20
1	Ti 334.940†	910255.8	909029.6	1425.9	ug/L	1425.9	ppb	19:04:00
1	Tl 190.801†	-86.6	-48.4	2.0299	ug/L	2.0299	ppb	19:04:20
1	U 409.014†	-5664.9	-3099.5	-90.522	ug/L	-90.522	ppb	19:04:00
1	V 292.402†	6543.6	7948.0	44.386	ug/L	44.386	ppb	19:04:00
1	Zn 213.857†	15596.7	14904.5	122.47	ug/L	122.47	ppb	19:04:00
1	SiO2†	1177237.2	1173586.3	73528	ug/L	73528	ppb	19:05:18
2	Sc Radial	5865.2	5865.2	103	%			19:03:08
2	Y RADIAL	6989.4	6989.4	114.6	%			19:03:08
2	Al 396.153Radial†	59856.1	58004.2	41193	ug/L	41193	ppb	19:03:08
2	Ca 317.933Radial†	5047.8	4873.0	7262.0	ug/L	7262.0	ppb	19:03:08
2	Fe 238.204 Radial†	4156.2	4020.2	37066	ug/L	37066	ppb	19:03:08
2	K 766.490 Radial†	26276.4	23239.2	4062.6	ug/L	4062.6	ppb	19:03:08
2	Mg 279.077 IEC†	152.5	147.4	5202.9	ug/L	5202.9	ppb	19:03:28
2	Na 589.592 Radial†	5917.4	6814.3	2192.2	ug/L	2192.2	ppb	19:03:08
2	Sr 421.552†	10408.1	10075.1	62.073	ug/L	62.073	ppb	19:03:08
2	Sc 361.383	913519.1	913519.1	101.35	%			19:04:26
2	Y 371.029	832032.1	832032.1	110.67	%			19:04:26
2	Ag 328.068†	-2289.4	-2573.7	0.5019	ug/L	0.5019	ppb	19:04:26
2	As 188.979†	-41.9	-17.0	11.287	ug/L	11.287	ppb	19:04:46
2	B 249.677†	2.9	622.0	7.6976	ug/L	7.6976	ppb	19:04:26
2	Ba 233.527†	61188.8	60388.7	437.63	ug/L	437.63	ppb	19:04:26
2	Be 313.107†	-1989.4	3309.2	3.9748	ug/L	3.9748	ppb	19:04:26
2	Cd 226.502†	232.1	435.0	0.7472	ug/L	0.7472	ppb	19:04:46
2	Co 228.616†	445.1	513.2	6.0402	ug/L	6.0402	ppb	19:04:46
2	Cr 267.716†	2255.1	2144.1	22.797	ug/L	22.797	ppb	19:04:46
2	Cu 324.752†	12734.9	5694.0	17.850	ug/L	17.850	ppb	19:04:26
2	Mn 257.610†	537931.0	530253.6	554.68	ug/L	554.68	ppb	19:04:26
2	Mo 202.031†	16.2	-10.7	1.9603	ug/L	1.9603	ppb	19:04:46
2	Ni 231.604†	1069.1	964.0	21.689	ug/L	21.689	ppb	19:04:46

2	P 214.914†	1119.4	879.6	465.12 ug/L	465.12 ppb	19:04:46
2	Pb 220.353†	190.5	260.8	34.706 ug/L	34.706 ppb	19:04:46
2	S 181.975 Axial†	125.2	77.0	94.020 ug/L	94.020 ppb	19:04:46
2	Sb 206.836†	44.3	16.1	-0.0375 ug/L	-0.0375 ppb	19:04:46
2	Se 196.026†	-237.1	-211.7	5.5064 ug/L	5.5064 ppb	19:04:46
2	Si 251.611†	1164247.6	1148156.6	33525 ug/L	33525 ppb	19:04:26
2	Sn 189.927†	-50.8	-55.5	-7.5494 ug/L	-7.5494 ppb	19:04:46
2	Ti 334.940†	921560.2	910454.6	1428.1 ug/L	1428.1 ppb	19:04:26
2	Tl 190.801†	-86.4	-47.3	2.3660 ug/L	2.3660 ppb	19:04:46
2	U 409.014†	-5726.2	-3099.5	-90.517 ug/L	-90.517 ppb	19:04:26
2	V 292.402†	6546.3	7880.7	43.957 ug/L	43.957 ppb	19:04:26
2	Zn 213.857†	15627.8	14768.4	121.33 ug/L	121.33 ppb	19:04:26
2	SiO2†	1177053.5	1160823.4	72729 ug/L	72729 ppb	19:05:24
3	Sc Radial	5863.2	5863.2	103 %		19:03:33
3	Y RADIAL	6991.7	6991.7	114.6 %		19:03:33
3	Al 396.153Radial†	59821.9	57991.1	41183 ug/L	41183 ppb	19:03:33
3	Ca 317.933Radial†	5051.3	4878.0	7269.5 ug/L	7269.5 ppb	19:03:33
3	Fe 238.204 Radial†	4163.7	4028.9	37146 ug/L	37146 ppb	19:03:33
3	K 766.490 Radial†	26305.8	23276.5	4069.1 ug/L	4069.1 ppb	19:03:33
3	Mg 279.077 IEC†	151.9	146.9	5183.6 ug/L	5183.6 ppb	19:03:53
3	Na 589.592 Radial†	6018.8	6914.6	2224.5 ug/L	2224.5 ppb	19:03:33
3	Sr 421.552†	10386.7	10057.8	61.966 ug/L	61.966 ppb	19:03:33
3	Sc 361.383	914901.9	914901.9	101.51 %		19:04:52
3	Y 371.029	834853.8	834853.8	111.05 %		19:04:52
3	Ag 328.068†	-2213.4	-2495.5	0.8760 ug/L	0.8760 ppb	19:04:52
3	As 188.979†	-37.6	-12.6	12.926 ug/L	12.926 ppb	19:05:12
3	B 249.677†	0.6	619.7	7.6397 ug/L	7.6397 ppb	19:04:52
3	Ba 233.527†	61179.4	60288.1	436.91 ug/L	436.91 ppb	19:04:52
3	Be 313.107†	-2034.2	3268.1	3.9579 ug/L	3.9579 ppb	19:04:52
3	Cd 226.502†	207.1	410.1	0.4846 ug/L	0.4846 ppb	19:05:12
3	Co 228.616†	467.4	534.6	6.4336 ug/L	6.4336 ppb	19:05:12
3	Cr 267.716†	2231.1	2117.2	22.522 ug/L	22.522 ppb	19:05:12
3	Cu 324.752†	12741.8	5681.8	17.820 ug/L	17.820 ppb	19:04:52
3	Mn 257.610†	537664.3	529188.6	553.58 ug/L	553.58 ppb	19:04:52
3	Mo 202.031†	20.7	-6.4	2.2372 ug/L	2.2372 ppb	19:05:12
3	Ni 231.604†	1058.8	952.2	21.423 ug/L	21.423 ppb	19:05:12
3	P 214.914†	1122.5	880.9	465.80 ug/L	465.80 ppb	19:05:12
3	Pb 220.353†	188.1	258.0	34.399 ug/L	34.399 ppb	19:05:12
3	S 181.975 Axial†	116.8	68.6	82.825 ug/L	82.825 ppb	19:05:12
3	Sb 206.836†	49.2	20.9	1.4525 ug/L	1.4525 ppb	19:05:12
3	Se 196.026†	-242.2	-216.3	3.1616 ug/L	3.1616 ppb	19:05:12
3	Si 251.611†	1163751.9	1145932.2	33460 ug/L	33460 ppb	19:04:52
3	Sn 189.927†	-51.3	-56.0	-7.6190 ug/L	-7.6190 ppb	19:05:12
3	Ti 334.940†	922187.9	909698.7	1426.9 ug/L	1426.9 ppb	19:04:52
3	Tl 190.801†	-92.9	-53.5	0.6444 ug/L	0.6444 ppb	19:05:12
3	U 409.014†	-5726.3	-3091.1	-90.292 ug/L	-90.292 ppb	19:04:52
3	V 292.402†	6577.4	7901.6	44.086 ug/L	44.086 ppb	19:04:52
3	Zn 213.857†	15747.6	14863.1	122.13 ug/L	122.13 ppb	19:04:52
3	SiO2†	1177204.3	1159216.6	72628 ug/L	72628 ppb	19:05:30

Mean Data: 1201977928|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910716.9	101.04	%	0.676				0.67%
Sc Radial	5833.2	103	%	0.9				0.92%
Y 371.029	830538.6	110.47	%	0.695				0.63%
Y RADIAL	6939.3	113.8	%	1.45				1.28%
Ag 328.068†	-2529.1	0.7141	ug/L	0.19203	0.7141	ppb	0.19203	26.89%
Al 396.153Radial†	57956.9	41159	ug/L	50.3	41159	ppb	50.3	0.12%
As 188.979†	-17.3	11.167	ug/L	1.8212	11.167	ppb	1.8212	16.31%
B 249.677†	594.2	7.1271	ug/L	0.93850	7.1271	ppb	0.93850	13.17%
Ba 233.527†	60372.3	437.51	ug/L	0.557	437.51	ppb	0.557	0.13%
Be 313.107†	3260.6	3.9554	ug/L	0.02080	3.9554	ppb	0.02080	0.53%
Ca 317.933Radial†	4868.1	7254.7	ug/L	19.60	7254.7	ppb	19.60	0.27%
Cd 226.502†	427.2	0.6628	ug/L	0.15439	0.6628	ppb	0.15439	23.29%
Co 228.616†	525.5	6.2668	ug/L	0.20337	6.2668	ppb	0.20337	3.25%
Cr 267.716†	2146.3	22.820	ug/L	0.3106	22.820	ppb	0.3106	1.36%
Cu 324.752†	5700.0	17.869	ug/L	0.0610	17.869	ppb	0.0610	0.34%
Fe 238.204 Radial†	4024.5	37106	ug/L	40.1	37106	ppb	40.1	0.11%
K 766.490 Radial†	23239.8	4062.7	ug/L	6.37	4062.7	ppb	6.37	0.16%

Mg 279.077 IEC†	148.0	5224.9	ug/L	55.60	5224.9	ppb	55.60	1.06%
Mn 257.610†	529659.4	554.07	ug/L	0.561	554.07	ppb	0.561	0.10%
Mo 202.031†	-11.7	1.9020	ug/L	0.36786	1.9020	ppb	0.36786	19.34%
Na 589.592 Radial†	6869.1	2209.8	ug/L	16.34	2209.8	ppb	16.34	0.74%
Ni 231.604†	968.4	21.788	ug/L	0.4222	21.788	ppb	0.4222	1.94%
P 214.914†	881.1	465.89	ug/L	0.827	465.89	ppb	0.827	0.18%
Pb 220.353†	262.6	34.889	ug/L	0.6032	34.889	ppb	0.6032	1.73%
S 181.975 Axial†	72.0	87.317	ug/L	5.9162	87.317	ppb	5.9162	6.78%
Sb 206.836†	17.8	0.4676	ug/L	0.85303	0.4676	ppb	0.85303	182.44%
Se 196.026†	-214.6	3.9622	ug/L	1.33758	3.9622	ppb	1.33758	33.76%
Si 251.611†	1146857.1	33487	ug/L	33.8	33487	ppb	33.8	0.10%
Sn 189.927†	-54.9	-7.4486	ug/L	0.23744	-7.4486	ppb	0.23744	3.19%
Sr 421.552†	10062.6	61.996	ug/L	0.0673	61.996	ppb	0.0673	0.11%
Ti 334.940†	909727.6	1427.0	ug/L	1.12	1427.0	ppb	1.12	0.08%
Tl 190.801†	-49.7	1.6801	ug/L	0.91254	1.6801	ppb	0.91254	54.31%
U 409.014†	-3096.7	-90.444	ug/L	0.1311	-90.444	ppb	0.1311	0.14%
V 292.402†	7910.1	44.143	ug/L	0.2201	44.143	ppb	0.2201	0.50%
Zn 213.857†	14845.3	121.98	ug/L	0.586	121.98	ppb	0.586	0.48%
SiO2†	1164542.1	72962	ug/L	493.3	72962	ppb	493.3	0.68%

Sequence No.: 25
Sample ID: 1201977930|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 12/7/2009 19:07:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977930|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5700.3	5700.3	100	%			19:09:53
1	Y RADIAL	6519.2	6519.2	106.9	%			19:09:53
1	Al 396.153Radial†	118249.7	117885.2	83697	ug/L	83697	ppb	19:09:33
1	Ca 317.933Radial†	8668.7	8623.5	12851	ug/L	12851	ppb	19:09:33
1	Fe 238.204 Radial†	5344.1	5320.7	49072	ug/L	49072	ppb	19:09:53
1	K 766.490 Radial†	68723.5	66284.6	11591	ug/L	11591	ppb	19:09:33
1	Mg 279.077 IEC†	353.2	351.7	12457	ug/L	12457	ppb	19:09:53
1	Na 589.592 Radial†	21192.4	22205.4	7143.7	ug/L	7143.7	ppb	19:09:33
1	Sr 421.552†	95912.5	95592.8	589.47	ug/L	589.47	ppb	19:09:33
1	Sc 361.383	906128.9	906128.9	100.53	%			19:10:52
1	Y 371.029	800965.2	800965.2	106.54	%			19:10:52
1	Ag 328.068†	114147.6	113226.9	521.50	ug/L	521.50	ppb	19:10:52
1	As 188.979†	1222.9	1240.8	495.05	ug/L	495.05	ppb	19:11:12
1	B 249.677†	24495.9	24985.0	499.95	ug/L	499.95	ppb	19:10:52
1	Ba 233.527†	205921.1	204845.2	1482.5	ug/L	1482.5	ppb	19:10:52
1	Be 313.107†	1447786.7	1445374.9	514.79	ug/L	514.79	ppb	19:10:52
1	Cd 226.502†	49063.1	49008.8	495.48	ug/L	495.48	ppb	19:10:52
1	Co 228.616†	26802.8	26734.7	486.92	ug/L	486.92	ppb	19:11:12
1	Cr 267.716†	51145.6	50793.3	523.27	ug/L	523.27	ppb	19:10:52
1	Cu 324.752†	203623.2	195671.7	550.93	ug/L	550.93	ppb	19:10:52
1	Mn 257.610†	955667.5	950101.6	992.08	ug/L	992.08	ppb	19:10:52
1	Mo 202.031†	7868.7	7800.2	489.05	ug/L	489.05	ppb	19:11:12
1	Ni 231.604†	22803.8	22591.9	508.13	ug/L	508.13	ppb	19:11:12
1	P 214.914†	2162.8	1926.4	967.26	ug/L	967.26	ppb	19:11:12
1	Pb 220.353†	4655.5	4703.6	529.90	ug/L	529.90	ppb	19:11:12
1	S 181.975 Axial†	3981.9	3914.3	5172.2	ug/L	5172.2	ppb	19:11:12
1	Sb 206.836†	1458.3	1423.0	439.26	ug/L	439.26	ppb	19:11:12
1	Se 196.026†	607.9	627.0	522.97	ug/L	522.97	ppb	19:11:12
1	Si 251.611†	1322904.5	1315340.0	38394	ug/L	38394	ppb	19:10:52
1	Sn 189.927†	3182.4	3160.1	504.03	ug/L	504.03	ppb	19:11:12
1	Ti 334.940†	1429938.3	1423550.3	2232.6	ug/L	2232.6	ppb	19:10:52
1	Tl 190.801†	1721.4	1750.2	495.04	ug/L	495.04	ppb	19:11:12
1	U 409.014†	12881.2	15363.2	418.15	ug/L	418.15	ppb	19:10:52
1	V 292.402†	83856.9	84833.6	549.45	ug/L	549.45	ppb	19:10:52
1	Zn 213.857†	78613.6	77545.7	648.40	ug/L	648.40	ppb	19:10:52
1	SiO2†	1339428.7	1331808.4	83414	ug/L	83414	ppb	19:12:13
2	Sc Radial	5733.0	5733.0	101	%			19:10:18
2	Y RADIAL	6577.2	6577.2	107.8	%			19:10:18
2	Al 396.153Radial†	118076.4	117040.5	83097	ug/L	83097	ppb	19:09:58
2	Ca 317.933Radial†	8643.5	8549.2	12741	ug/L	12741	ppb	19:09:58
2	Fe 238.204 Radial†	5345.5	5291.7	48804	ug/L	48804	ppb	19:10:18
2	K 766.490 Radial†	68318.2	65491.8	11452	ug/L	11452	ppb	19:09:58
2	Mg 279.077 IEC†	350.1	346.7	12278	ug/L	12278	ppb	19:10:18
2	Na 589.592 Radial†	20984.9	21879.1	7038.7	ug/L	7038.7	ppb	19:09:58
2	Sr 421.552†	95266.8	94407.1	582.16	ug/L	582.16	ppb	19:09:58
2	Sc 361.383	909377.0	909377.0	100.89	%			19:11:19
2	Y 371.029	801907.2	801907.2	106.67	%			19:11:19
2	Ag 328.068†	114181.6	112855.0	519.76	ug/L	519.76	ppb	19:11:19
2	As 188.979†	1231.6	1245.1	496.63	ug/L	496.63	ppb	19:11:39
2	B 249.677†	24702.9	25103.2	502.39	ug/L	502.39	ppb	19:11:19
2	Ba 233.527†	206717.6	204903.1	1482.9	ug/L	1482.9	ppb	19:11:19
2	Be 313.107†	1451829.1	1444237.6	514.39	ug/L	514.39	ppb	19:11:19
2	Cd 226.502†	49189.4	48959.6	495.01	ug/L	495.01	ppb	19:11:19
2	Co 228.616†	26831.7	26668.1	485.70	ug/L	485.70	ppb	19:11:39
2	Cr 267.716†	51261.1	50726.0	522.58	ug/L	522.58	ppb	19:11:19
2	Cu 324.752†	204109.8	195430.5	550.24	ug/L	550.24	ppb	19:11:19
2	Mn 257.610†	959429.3	950434.7	992.40	ug/L	992.40	ppb	19:11:19
2	Mo 202.031†	7867.7	7771.3	487.23	ug/L	487.23	ppb	19:11:39
2	Ni 231.604†	22877.2	22583.6	507.95	ug/L	507.95	ppb	19:11:39

2	P 214.914†	2152.4	1908.4	957.47	ug/L	957.47 ppb	19:11:39
2	Pb 220.353†	4676.4	4707.8	530.25	ug/L	530.25 ppb	19:11:39
2	S 181.975 Axial†	3986.6	3904.8	5159.7	ug/L	5159.7 ppb	19:11:39
2	Sb 206.836†	1457.4	1416.9	437.32	ug/L	437.32 ppb	19:11:39
2	Se 196.026†	607.2	624.1	520.42	ug/L	520.42 ppb	19:11:39
2	Si 251.611†	1327883.7	1315575.0	38401	ug/L	38401 ppb	19:11:19
2	Sn 189.927†	3177.0	3143.4	501.36	ug/L	501.36 ppb	19:11:39
2	Ti 334.940†	1434728.4	1423217.5	2232.1	ug/L	2232.1 ppb	19:11:19
2	Tl 190.801†	1716.2	1738.9	491.96	ug/L	491.96 ppb	19:11:39
2	U 409.014†	12840.0	15276.5	415.79	ug/L	415.79 ppb	19:11:19
2	V 292.402†	84113.2	84789.8	549.17	ug/L	549.17 ppb	19:11:19
2	Zn 213.857†	78866.5	77517.1	648.20	ug/L	648.20 ppb	19:11:19
2	SiO2†	1318305.1	1306113.1	81805	ug/L	81805 ppb	19:12:19
3	Sc Radial	5697.4	5697.4	100	%		19:10:43
3	Y RADIAL	6546.6	6546.6	107.3	%		19:10:43
3	Al 396.153Radial†	116588.3	116287.8	82563	ug/L	82563 ppb	19:10:23
3	Ca 317.933Radial†	8547.4	8506.9	12678	ug/L	12678 ppb	19:10:23
3	Fe 238.204 Radial†	5328.2	5307.5	48950	ug/L	48950 ppb	19:10:43
3	K 766.490 Radial†	67609.3	65208.0	11402	ug/L	11402 ppb	19:10:23
3	Mg 279.077 IEC†	353.5	352.2	12474	ug/L	12474 ppb	19:10:43
3	Na 589.592 Radial†	20624.9	21650.1	6965.1	ug/L	6965.1 ppb	19:10:23
3	Sr 421.552†	93776.6	93511.0	576.63	ug/L	576.63 ppb	19:10:23
3	Sc 361.383	911726.4	911726.4	101.15	%		19:11:47
3	Y 371.029	804958.1	804958.1	107.07	%		19:11:47
3	Ag 328.068†	114138.1	112520.4	518.30	ug/L	518.30 ppb	19:11:47
3	As 188.979†	1230.9	1241.2	495.16	ug/L	495.16 ppb	19:12:07
3	B 249.677†	24690.4	25027.7	500.84	ug/L	500.84 ppb	19:11:47
3	Ba 233.527†	206029.9	203695.2	1474.2	ug/L	1474.2 ppb	19:11:47
3	Be 313.107†	1451008.6	1439718.6	512.78	ug/L	512.78 ppb	19:11:47
3	Cd 226.502†	48826.5	48475.2	490.05	ug/L	490.05 ppb	19:11:47
3	Co 228.616†	26691.8	26461.2	481.91	ug/L	481.91 ppb	19:12:07
3	Cr 267.716†	50998.7	50335.7	518.57	ug/L	518.57 ppb	19:11:47
3	Cu 324.752†	204453.8	195249.3	549.74	ug/L	549.74 ppb	19:11:47
3	Mn 257.610†	956553.4	945141.3	986.91	ug/L	986.91 ppb	19:11:47
3	Mo 202.031†	7828.7	7712.5	483.59	ug/L	483.59 ppb	19:12:07
3	Ni 231.604†	22762.6	22412.0	504.09	ug/L	504.09 ppb	19:12:07
3	P 214.914†	2156.9	1907.4	956.62	ug/L	956.62 ppb	19:12:07
3	Pb 220.353†	4624.3	4644.3	523.17	ug/L	523.17 ppb	19:12:07
3	S 181.975 Axial†	3975.2	3883.4	5131.4	ug/L	5131.4 ppb	19:12:07
3	Sb 206.836†	1456.5	1412.3	435.85	ug/L	435.85 ppb	19:12:07
3	Se 196.026†	616.3	631.6	524.94	ug/L	524.94 ppb	19:12:07
3	Si 251.611†	1325002.7	1309335.5	38219	ug/L	38219 ppb	19:11:47
3	Sn 189.927†	3153.0	3111.6	496.30	ug/L	496.30 ppb	19:12:07
3	Ti 334.940†	1434434.3	1419262.6	2225.9	ug/L	2225.9 ppb	19:11:47
3	Tl 190.801†	1720.3	1738.7	491.82	ug/L	491.82 ppb	19:12:07
3	U 409.014†	12981.1	15383.2	418.73	ug/L	418.73 ppb	19:11:47
3	V 292.402†	83909.6	84373.7	546.41	ug/L	546.41 ppb	19:11:47
3	Zn 213.857†	78488.2	76941.7	643.32	ug/L	643.32 ppb	19:11:47
3	SiO2†	1329010.5	1313329.3	82257	ug/L	82257 ppb	19:12:25

Mean Data: 1201977930|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	909077.4	100.86	%	0.312				0.31%
Sc Radial	5710.2	101	%	0.3				0.35%
Y 371.029	802610.2	106.76	%	0.278				0.26%
Y RADIAL	6547.7	107.4	%	0.48				0.44%
Ag 328.068†	112867.4	519.85	ug/L	1.600	519.85	ppb	1.600	0.31%
Al 396.153Radial†	117071.2	83119	ug/L	567.4	83119	ppb	567.4	0.68%
As 188.979†	1242.4	495.61	ug/L	0.884	495.61	ppb	0.884	0.18%
B 249.677†	25038.6	501.06	ug/L	1.234	501.06	ppb	1.234	0.25%
Ba 233.527†	204481.1	1479.9	ug/L	4.92	1479.9	ppb	4.92	0.33%
Be 313.107†	1443110.4	513.99	ug/L	1.064	513.99	ppb	1.064	0.21%
Ca 317.933Radial†	8559.9	12756	ug/L	87.9	12756	ppb	87.9	0.69%
Cd 226.502†	48814.6	493.51	ug/L	3.010	493.51	ppb	3.010	0.61%
Co 228.616†	26621.3	484.84	ug/L	2.618	484.84	ppb	2.618	0.54%
Cr 267.716†	50618.4	521.47	ug/L	2.540	521.47	ppb	2.540	0.49%
Cu 324.752†	195450.5	550.30	ug/L	0.597	550.30	ppb	0.597	0.11%
Fe 238.204 Radial†	5306.6	48942	ug/L	134.1	48942	ppb	134.1	0.27%
K 766.490 Radial†	65661.4	11482	ug/L	97.6	11482	ppb	97.6	0.85%

Mg 279.077 IEC†	350.2	12403	ug/L	108.3	12403	ppb	108.3	0.87%
Mn 257.610†	948559.2	990.46	ug/L	3.081	990.46	ppb	3.081	0.31%
Mo 202.031†	7761.3	486.63	ug/L	2.784	486.63	ppb	2.784	0.57%
Na 589.592 Radial†	21911.5	7049.2	ug/L	89.77	7049.2	ppb	89.77	1.27%
Ni 231.604†	22529.2	506.72	ug/L	2.285	506.72	ppb	2.285	0.45%
P 214.914†	1914.1	960.45	ug/L	5.916	960.45	ppb	5.916	0.62%
Pb 220.353†	4685.2	527.77	ug/L	3.991	527.77	ppb	3.991	0.76%
S 181.975 Axial†	3900.8	5154.4	ug/L	20.92	5154.4	ppb	20.92	0.41%
Sb 206.836†	1417.4	437.48	ug/L	1.709	437.48	ppb	1.709	0.39%
Se 196.026†	627.6	522.78	ug/L	2.266	522.78	ppb	2.266	0.43%
Si 251.611†	1313416.8	38338	ug/L	103.2	38338	ppb	103.2	0.27%
Sn 189.927†	3138.3	500.56	ug/L	3.926	500.56	ppb	3.926	0.78%
Sr 421.552†	94503.6	582.75	ug/L	6.440	582.75	ppb	6.440	1.11%
Ti 334.940†	1422010.1	2230.2	ug/L	3.74	2230.2	ppb	3.74	0.17%
Tl 190.801†	1742.6	492.94	ug/L	1.816	492.94	ppb	1.816	0.37%
U 409.014†	15341.0	417.56	ug/L	1.559	417.56	ppb	1.559	0.37%
V 292.402†	84665.7	548.34	ug/L	1.680	548.34	ppb	1.680	0.31%
Zn 213.857†	77334.8	646.64	ug/L	2.876	646.64	ppb	2.876	0.44%
SiO2†	1317083.6	82492	ug/L	830.2	82492	ppb	830.2	1.01%

Sequence No.: 26
Sample ID: 1201977931|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 12/7/2009 19:14:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977931|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5562.2	5562.2	97.9	%			19:16:49
1	Y RADIAL	6405.2	6405.2	105.0	%			19:16:49
1	Al 396.153Radial†	121783.4	124421.2	88339	ug/L	88339	ppb	19:16:28
1	Ca 317.933Radial†	9028.1	9205.1	13718	ug/L	13718	ppb	19:16:28
1	Fe 238.204 Radial†	5212.5	5318.5	49052	ug/L	49052	ppb	19:16:49
1	K 766.490 Radial†	71436.2	70756.3	12373	ug/L	12373	ppb	19:16:28
1	Mg 279.077 IEC†	373.4	381.1	13500	ug/L	13500	ppb	19:16:49
1	Na 589.592 Radial†	23887.1	25482.4	8198.0	ug/L	8198.0	ppb	19:16:28
1	Sr 421.552†	104932.2	107179.9	660.93	ug/L	660.93	ppb	19:16:28
1	Sc 361.383	906297.8	906297.8	100.55	%			19:17:48
1	Y 371.029	803804.9	803804.9	106.92	%			19:17:48
1	Ag 328.068†	115801.7	114850.7	528.73	ug/L	528.73	ppb	19:17:48
1	As 188.979†	1272.0	1289.4	511.17	ug/L	511.17	ppb	19:18:08
1	B 249.677†	24709.4	25192.8	504.15	ug/L	504.15	ppb	19:17:48
1	Ba 233.527†	157264.3	156417.5	1132.8	ug/L	1132.8	ppb	19:17:48
1	Be 313.107†	1462401.0	1459640.5	519.29	ug/L	519.29	ppb	19:17:48
1	Cd 226.502†	49975.2	49906.8	504.65	ug/L	504.65	ppb	19:17:48
1	Co 228.616†	27254.6	27178.9	495.51	ug/L	495.51	ppb	19:18:08
1	Cr 267.716†	52124.7	51757.6	533.18	ug/L	533.18	ppb	19:17:48
1	Cu 324.752†	205728.2	197727.3	556.69	ug/L	556.69	ppb	19:17:48
1	Mn 257.610†	974198.4	968353.7	1011.0	ug/L	1011.0	ppb	19:17:48
1	Mo 202.031†	7974.6	7904.0	495.52	ug/L	495.52	ppb	19:18:08
1	Ni 231.604†	23315.4	23096.5	519.48	ug/L	519.48	ppb	19:18:08
1	P 214.914†	2086.3	1849.9	925.99	ug/L	925.99	ppb	19:18:08
1	Pb 220.353†	4750.4	4797.1	541.18	ug/L	541.18	ppb	19:18:08
1	S 181.975 Axial†	3963.8	3895.6	5146.4	ug/L	5146.4	ppb	19:18:08
1	Sb 206.836†	1441.1	1405.6	434.59	ug/L	434.59	ppb	19:18:08
1	Se 196.026†	627.1	645.9	534.39	ug/L	534.39	ppb	19:18:08
1	Si 251.611†	1271001.6	1263477.0	36880	ug/L	36880	ppb	19:17:48
1	Sn 189.927†	3241.9	3218.7	513.43	ug/L	513.43	ppb	19:18:08
1	Ti 334.940†	1256079.0	1250380.8	1961.1	ug/L	1961.1	ppb	19:17:48
1	Tl 190.801†	1769.2	1797.5	505.92	ug/L	505.92	ppb	19:18:08
1	U 409.014†	13238.7	15716.2	427.91	ug/L	427.91	ppb	19:17:48
1	V 292.402†	85003.9	85958.8	557.20	ug/L	557.20	ppb	19:17:48
1	Zn 213.857†	76579.3	75508.0	631.02	ug/L	631.02	ppb	19:17:48
1	SiO2†	1262162.3	1254718.1	78583	ug/L	78583	ppb	19:19:09
2	Sc Radial	5760.9	5760.9	101	%			19:17:14
2	Y RADIAL	6638.1	6638.1	108.8	%			19:17:14
2	Al 396.153Radial†	116291.5	114713.5	81444	ug/L	81444	ppb	19:16:54
2	Ca 317.933Radial†	8624.2	8488.7	12650	ug/L	12650	ppb	19:16:54
2	Fe 238.204 Radial†	5252.2	5173.9	47719	ug/L	47719	ppb	19:17:14
2	K 766.490 Radial†	69037.7	65873.6	11518	ug/L	11518	ppb	19:16:54
2	Mg 279.077 IEC†	376.6	371.2	13149	ug/L	13149	ppb	19:17:14
2	Na 589.592 Radial†	22935.7	23702.4	7625.3	ug/L	7625.3	ppb	19:16:54
2	Sr 421.552†	100337.5	98950.9	610.18	ug/L	610.18	ppb	19:16:54
2	Sc 361.383	900739.5	900739.5	99.936	%			19:18:15
2	Y 371.029	799520.6	799520.6	106.35	%			19:18:15
2	Ag 328.068†	115232.2	114991.5	528.95	ug/L	528.95	ppb	19:18:15
2	As 188.979†	1239.2	1264.4	501.45	ug/L	501.45	ppb	19:18:35
2	B 249.677†	24642.0	25277.0	506.03	ug/L	506.03	ppb	19:18:15
2	Ba 233.527†	155754.0	155871.3	1128.8	ug/L	1128.8	ppb	19:18:15
2	Be 313.107†	1450884.3	1457091.0	518.38	ug/L	518.38	ppb	19:18:15
2	Cd 226.502†	49535.8	49773.7	503.43	ug/L	503.43	ppb	19:18:15
2	Co 228.616†	27201.1	27292.7	497.63	ug/L	497.63	ppb	19:18:35
2	Cr 267.716†	51817.0	51769.6	533.28	ug/L	533.28	ppb	19:18:15
2	Cu 324.752†	204461.6	197722.4	556.61	ug/L	556.61	ppb	19:18:15
2	Mn 257.610†	964855.7	964983.5	1007.4	ug/L	1007.4	ppb	19:18:15
2	Mo 202.031†	7945.4	7923.7	496.65	ug/L	496.65	ppb	19:18:35
2	Ni 231.604†	23232.0	23156.1	520.82	ug/L	520.82	ppb	19:18:35

2	P 214.914†	2089.3	1865.7	933.43	ug/L	933.43 ppb	19:18:35
2	Pb 220.353†	4726.1	4801.9	540.28	ug/L	540.28 ppb	19:18:35
2	S 181.975 Axial†	3973.3	3929.4	5192.6	ug/L	5192.6 ppb	19:18:35
2	Sb 206.836†	1446.0	1419.3	439.02	ug/L	439.02 ppb	19:18:35
2	Se 196.026†	610.8	633.5	521.99	ug/L	521.99 ppb	19:18:35
2	Si 251.611†	1259246.0	1259513.9	36764	ug/L	36764 ppb	19:18:15
2	Sn 189.927†	3221.8	3218.5	513.26	ug/L	513.26 ppb	19:18:35
2	Ti 334.940†	1244832.0	1246835.1	1955.5	ug/L	1955.5 ppb	19:18:15
2	Tl 190.801†	1765.5	1804.6	507.58	ug/L	507.58 ppb	19:18:35
2	U 409.014†	13251.6	15810.4	430.69	ug/L	430.69 ppb	19:18:15
2	V 292.402†	84469.3	85945.5	557.33	ug/L	557.33 ppb	19:18:15
2	Zn 213.857†	75847.4	75245.6	628.92	ug/L	628.92 ppb	19:18:15
2	SiO2†	1253882.4	1254178.6	78550	ug/L	78550 ppb	19:19:14
3	Sc Radial	5758.1	5758.1	101	%		19:17:39
3	Y RADIAL	6600.3	6600.3	108.2	%		19:17:39
3	Al 396.153Radial†	119100.0	117541.0	83453	ug/L	83453 ppb	19:17:19
3	Ca 317.933Radial†	8848.6	8714.3	12987	ug/L	12987 ppb	19:17:19
3	Fe 238.204 Radial†	5257.0	5181.3	47787	ug/L	47787 ppb	19:17:39
3	K 766.490 Radial†	70420.4	67271.4	11763	ug/L	11763 ppb	19:17:19
3	Mg 279.077 IEC†	375.6	370.4	13120	ug/L	13120 ppb	19:17:39
3	Na 589.592 Radial†	23429.8	24201.1	7785.7	ug/L	7785.7 ppb	19:17:19
3	Sr 421.552†	102580.2	101212.5	624.13	ug/L	624.13 ppb	19:17:19
3	Sc 361.383	904795.1	904795.1	100.39	%		19:18:42
3	Y 371.029	801033.4	801033.4	106.55	%		19:18:42
3	Ag 328.068†	115266.3	114508.7	526.81	ug/L	526.81 ppb	19:18:42
3	As 188.979†	1239.9	1259.5	499.61	ug/L	499.61 ppb	19:19:02
3	B 249.677†	24621.0	25145.5	503.37	ug/L	503.37 ppb	19:18:42
3	Ba 233.527†	156273.1	155689.9	1127.5	ug/L	1127.5 ppb	19:18:42
3	Be 313.107†	1450985.7	1450684.5	516.12	ug/L	516.12 ppb	19:18:42
3	Cd 226.502†	49427.6	49443.8	500.05	ug/L	500.05 ppb	19:18:42
3	Co 228.616†	27047.1	27017.2	492.56	ug/L	492.56 ppb	19:19:02
3	Cr 267.716†	51750.0	51470.4	530.21	ug/L	530.21 ppb	19:18:42
3	Cu 324.752†	205412.5	197752.6	556.69	ug/L	556.69 ppb	19:18:42
3	Mn 257.610†	967900.9	963689.4	1006.1	ug/L	1006.1 ppb	19:18:42
3	Mo 202.031†	7912.1	7855.0	492.37	ug/L	492.37 ppb	19:19:02
3	Ni 231.604†	23142.6	22962.8	516.48	ug/L	516.48 ppb	19:19:02
3	P 214.914†	2063.0	1830.2	914.47	ug/L	914.47 ppb	19:19:02
3	Pb 220.353†	4704.2	4758.9	536.01	ug/L	536.01 ppb	19:19:02
3	S 181.975 Axial†	3937.3	3875.7	5121.0	ug/L	5121.0 ppb	19:19:02
3	Sb 206.836†	1443.8	1410.7	436.22	ug/L	436.22 ppb	19:19:02
3	Se 196.026†	623.8	643.7	528.25	ug/L	528.25 ppb	19:19:02
3	Si 251.611†	1264695.6	1259294.6	36758	ug/L	36758 ppb	19:18:42
3	Sn 189.927†	3215.4	3197.7	509.99	ug/L	509.99 ppb	19:19:02
3	Ti 334.940†	1250597.9	1246995.5	1955.7	ug/L	1955.7 ppb	19:18:42
3	Tl 190.801†	1745.8	1777.1	500.21	ug/L	500.21 ppb	19:19:02
3	U 409.014†	13081.8	15581.8	424.36	ug/L	424.36 ppb	19:18:42
3	V 292.402†	84554.9	85651.9	555.34	ug/L	555.34 ppb	19:18:42
3	Zn 213.857†	76043.5	75100.7	627.72	ug/L	627.72 ppb	19:18:42
3	SiO2†	1253066.6	1247742.1	78147	ug/L	78147 ppb	19:19:20

Mean Data: 1201977931|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903944.1	100.29	%	0.319				0.32%
Sc Radial	5693.7	100	%	2.0				2.00%
Y 371.029	801453.0	106.61	%	0.289				0.27%
Y RADIAL	6547.8	107.4	%	2.05				1.91%
Ag 328.068†	114783.6	528.16	ug/L	1.176	528.16	ppb	1.176	0.22%
Al 396.153Radial†	118891.9	84412	ug/L	3545.7	84412	ppb	3545.7	4.20%
As 188.979†	1271.1	504.08	ug/L	6.209	504.08	ppb	6.209	1.23%
B 249.677†	25205.1	504.52	ug/L	1.371	504.52	ppb	1.371	0.27%
Ba 233.527†	155992.9	1129.7	ug/L	2.76	1129.7	ppb	2.76	0.24%
Be 313.107†	1455805.4	517.93	ug/L	1.634	517.93	ppb	1.634	0.32%
Ca 317.933Radial†	8802.7	13118	ug/L	545.9	13118	ppb	545.9	4.16%
Cd 226.502†	49708.1	502.71	ug/L	2.382	502.71	ppb	2.382	0.47%
Co 228.616†	27162.9	495.24	ug/L	2.545	495.24	ppb	2.545	0.51%
Cr 267.716†	51665.8	532.22	ug/L	1.746	532.22	ppb	1.746	0.33%
Cu 324.752†	197734.1	556.66	ug/L	0.049	556.66	ppb	0.049	0.01%
Fe 238.204 Radial†	5224.6	48186	ug/L	750.7	48186	ppb	750.7	1.56%
K 766.490 Radial†	67967.1	11884	ug/L	440.1	11884	ppb	440.1	3.70%

Mg 279.077 IEC†	374.2	13256	ug/L	211.4	13256	ppb	211.4	1.60%
Mn 257.610†	965675.5	1008.2	ug/L	2.57	1008.2	ppb	2.57	0.25%
Mo 202.031†	7894.2	494.84	ug/L	2.215	494.84	ppb	2.215	0.45%
Na 589.592 Radial†	24462.0	7869.7	ug/L	295.40	7869.7	ppb	295.40	3.75%
Ni 231.604†	23071.8	518.93	ug/L	2.226	518.93	ppb	2.226	0.43%
P 214.914†	1848.6	924.63	ug/L	9.555	924.63	ppb	9.555	1.03%
Pb 220.353†	4786.0	539.16	ug/L	2.765	539.16	ppb	2.765	0.51%
S 181.975 Axial†	3900.2	5153.3	ug/L	36.27	5153.3	ppb	36.27	0.70%
Sb 206.836†	1411.9	436.61	ug/L	2.241	436.61	ppb	2.241	0.51%
Se 196.026†	641.0	528.21	ug/L	6.201	528.21	ppb	6.201	1.17%
Si 251.611†	1260761.8	36801	ug/L	68.6	36801	ppb	68.6	0.19%
Sn 189.927†	3211.6	512.23	ug/L	1.939	512.23	ppb	1.939	0.38%
Sr 421.552†	102447.8	631.75	ug/L	26.216	631.75	ppb	26.216	4.15%
Ti 334.940†	1248070.5	1957.4	ug/L	3.17	1957.4	ppb	3.17	0.16%
Tl 190.801†	1793.1	504.57	ug/L	3.865	504.57	ppb	3.865	0.77%
U 409.014†	15702.8	427.65	ug/L	3.173	427.65	ppb	3.173	0.74%
V 292.402†	85852.1	556.62	ug/L	1.113	556.62	ppb	1.113	0.20%
Zn 213.857†	75284.8	629.22	ug/L	1.670	629.22	ppb	1.670	0.27%
SiO2†	1252212.9	78427	ug/L	243.0	78427	ppb	243.0	0.31%

Sequence No.: 27
Sample ID: 1201977929|925191|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 12/7/2009 19:21:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977929|925191|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5755.8	5755.8	101	%			19:23:24
1	Y RADIAL	6286.4	6286.4	103.1	%			19:23:24
1	Al 396.153Radial†	12077.8	11942.8	8481.4	ug/L	8481.4	ppb	19:23:24
1	Ca 317.933Radial†	1169.2	1137.2	1694.7	ug/L	1694.7	ppb	19:23:44
1	Fe 238.204 Radial†	818.3	801.7	7392.0	ug/L	7392.0	ppb	19:23:44
1	K 766.490 Radial†	7758.9	5443.8	951.81	ug/L	951.81	ppb	19:23:24
1	Mg 279.077 IEC†	39.2	38.5	1359.5	ug/L	1359.5	ppb	19:23:44
1	Na 589.592 Radial†	528.8	1604.0	516.03	ug/L	516.03	ppb	19:23:24
1	Sr 421.552†	2526.9	2487.0	15.323	ug/L	15.323	ppb	19:23:24
1	Sc 361.383	888643.3	888643.3	98.594	%			19:24:41
1	Y 371.029	748846.5	748846.5	99.608	%			19:24:41
1	Ag 328.068†	-269.3	-588.1	-0.2367	ug/L	-0.2367	ppb	19:24:41
1	As 188.979†	-19.8	4.3	4.8580	ug/L	4.8580	ppb	19:25:01
1	B 249.677†	-221.5	394.4	7.0296	ug/L	7.0296	ppb	19:24:41
1	Ba 233.527†	27192.2	27597.1	199.61	ug/L	199.61	ppb	19:24:41
1	Be 313.107†	-3981.8	1233.5	0.9240	ug/L	0.9240	ppb	19:24:41
1	Cd 226.502†	-117.8	86.6	0.1480	ug/L	0.1480	ppb	19:25:01
1	Co 228.616†	28.2	102.6	1.3367	ug/L	1.3367	ppb	19:25:01
1	Cr 267.716†	575.4	502.8	5.3187	ug/L	5.3187	ppb	19:25:01
1	Cu 324.752†	8051.0	1295.0	4.0066	ug/L	4.0066	ppb	19:24:41
1	Mn 257.610†	95274.7	96140.0	100.63	ug/L	100.63	ppb	19:24:41
1	Mo 202.031†	21.6	-4.9	0.2202	ug/L	0.2202	ppb	19:25:01
1	Ni 231.604†	309.3	222.8	5.0137	ug/L	5.0137	ppb	19:25:01
1	P 214.914†	416.9	197.9	105.14	ug/L	105.14	ppb	19:25:01
1	Pb 220.353†	-11.7	60.9	7.9528	ug/L	7.9528	ppb	19:25:01
1	S 181.975 Axial†	75.9	30.5	38.728	ug/L	38.728	ppb	19:25:01
1	Sb 206.836†	35.9	8.8	1.7788	ug/L	1.7788	ppb	19:25:01
1	Se 196.026†	-67.1	-45.8	-0.8790	ug/L	-0.8790	ppb	19:25:01
1	Si 251.611†	246700.7	249676.5	7290.3	ug/L	7290.3	ppb	19:24:41
1	Sn 189.927†	-11.0	-16.6	-2.3606	ug/L	-2.3606	ppb	19:25:01
1	Ti 334.940†	155043.4	158456.2	248.57	ug/L	248.57	ppb	19:24:41
1	Tl 190.801†	-50.9	-13.7	-1.0163	ug/L	-1.0163	ppb	19:25:01
1	U 409.014†	-3040.4	-533.5	-15.710	ug/L	-15.710	ppb	19:24:41
1	V 292.402†	230.6	1655.7	9.3620	ug/L	9.3620	ppb	19:24:41
1	Zn 213.857†	3693.2	3095.2	25.452	ug/L	25.452	ppb	19:25:01
1	SiO2†	246197.0	249197.5	15613	ug/L	15613	ppb	19:25:58
2	Sc Radial	5812.0	5812.0	102	%			19:23:49
2	Y RADIAL	6338.3	6338.3	103.9	%			19:23:49
2	Al 396.153Radial†	12129.6	11878.2	8435.5	ug/L	8435.5	ppb	19:23:49
2	Ca 317.933Radial†	1168.4	1125.2	1676.9	ug/L	1676.9	ppb	19:24:09
2	Fe 238.204 Radial†	816.1	791.8	7300.3	ug/L	7300.3	ppb	19:24:09
2	K 766.490 Radial†	7726.8	5338.4	933.38	ug/L	933.38	ppb	19:23:49
2	Mg 279.077 IEC†	32.9	31.9	1127.0	ug/L	1127.0	ppb	19:24:09
2	Na 589.592 Radial†	461.5	1533.2	493.24	ug/L	493.24	ppb	19:23:49
2	Sr 421.552†	2541.3	2476.9	15.261	ug/L	15.261	ppb	19:23:49
2	Sc 361.383	893908.1	893908.1	99.178	%			19:25:07
2	Y 371.029	753109.8	753109.8	100.17	%			19:25:07
2	Ag 328.068†	-150.2	-466.4	0.2805	ug/L	0.2805	ppb	19:25:07
2	As 188.979†	-35.6	-11.5	-1.1306	ug/L	-1.1306	ppb	19:25:27
2	B 249.677†	-333.0	283.4	4.7851	ug/L	4.7851	ppb	19:25:07
2	Ba 233.527†	27549.2	27794.6	201.04	ug/L	201.04	ppb	19:25:07
2	Be 313.107†	-3941.6	1297.7	0.9502	ug/L	0.9502	ppb	19:25:07
2	Cd 226.502†	-100.8	104.4	0.3391	ug/L	0.3391	ppb	19:25:27
2	Co 228.616†	27.8	102.1	1.3238	ug/L	1.3238	ppb	19:25:27
2	Cr 267.716†	599.3	523.4	5.5306	ug/L	5.5306	ppb	19:25:27
2	Cu 324.752†	8147.2	1343.9	4.1389	ug/L	4.1389	ppb	19:25:07
2	Mn 257.610†	96385.8	96691.2	101.20	ug/L	101.20	ppb	19:25:07
2	Mo 202.031†	16.5	-10.1	-0.1130	ug/L	-0.1130	ppb	19:25:27
2	Ni 231.604†	316.9	228.7	5.1456	ug/L	5.1456	ppb	19:25:27

2	P 214.914†	414.4	192.9	102.43	ug/L	102.43 ppb	19:25:27
2	Pb 220.353†	-14.2	58.5	7.6868	ug/L	7.6868 ppb	19:25:27
2	S 181.975 Axial†	76.1	30.3	38.492	ug/L	38.492 ppb	19:25:27
2	Sb 206.836†	27.8	0.4	-0.8458	ug/L	-0.8458 ppb	19:25:27
2	Se 196.026†	-67.7	-46.0	-1.2843	ug/L	-1.2843 ppb	19:25:27
2	Si 251.611†	249406.8	250931.3	7327.0	ug/L	7327.0 ppb	19:25:07
2	Sn 189.927†	-14.8	-20.4	-2.9629	ug/L	-2.9629 ppb	19:25:27
2	Ti 334.940†	157089.8	159593.4	250.35	ug/L	250.35 ppb	19:25:07
2	Tl 190.801†	-54.9	-17.4	-1.9905	ug/L	-1.9905 ppb	19:25:27
2	U 409.014†	-3150.7	-626.5	-18.274	ug/L	-18.274 ppb	19:25:07
2	V 292.402†	304.1	1728.4	9.8316	ug/L	9.8316 ppb	19:25:07
2	Zn 213.857†	3692.2	3072.2	25.272	ug/L	25.272 ppb	19:25:27
2	SiO2†	248305.1	249852.3	15654	ug/L	15654 ppb	19:26:03
3	Sc Radial	5724.6	5724.6	101	%		19:24:14
3	Y RADIAL	6264.2	6264.2	102.7	%		19:24:14
3	Al 396.153Radial†	12055.3	11985.5	8511.7	ug/L	8511.7 ppb	19:24:14
3	Ca 317.933Radial†	1163.5	1137.9	1695.7	ug/L	1695.7 ppb	19:24:35
3	Fe 238.204 Radial†	814.9	802.8	7401.4	ug/L	7401.4 ppb	19:24:35
3	K 766.490 Radial†	7733.5	5460.3	954.72	ug/L	954.72 ppb	19:24:14
3	Mg 279.077 IEC†	37.2	36.6	1294.3	ug/L	1294.3 ppb	19:24:35
3	Na 589.592 Radial†	502.7	1580.9	508.59	ug/L	508.59 ppb	19:24:14
3	Sr 421.552†	2576.6	2549.9	15.711	ug/L	15.711 ppb	19:24:14
3	Sc 361.383	885959.9	885959.9	98.296	%		19:25:32
3	Y 371.029	747937.6	747937.6	99.487	%		19:25:32
3	Ag 328.068†	-132.2	-449.4	0.3807	ug/L	0.3807 ppb	19:25:32
3	As 188.979†	-20.9	3.2	4.4296	ug/L	4.4296 ppb	19:25:52
3	B 249.677†	-336.9	276.4	4.6302	ug/L	4.6302 ppb	19:25:32
3	Ba 233.527†	27073.5	27559.9	199.34	ug/L	199.34 ppb	19:25:32
3	Be 313.107†	-3938.1	1265.7	0.9356	ug/L	0.9356 ppb	19:25:32
3	Cd 226.502†	-116.5	87.6	0.1568	ug/L	0.1568 ppb	19:25:52
3	Co 228.616†	22.7	97.1	1.2349	ug/L	1.2349 ppb	19:25:52
3	Cr 267.716†	604.3	533.9	5.6375	ug/L	5.6375 ppb	19:25:52
3	Cu 324.752†	8047.9	1316.6	4.0677	ug/L	4.0677 ppb	19:25:32
3	Mn 257.610†	94690.9	95838.8	100.32	ug/L	100.32 ppb	19:25:32
3	Mo 202.031†	20.0	-6.4	0.1282	ug/L	0.1282 ppb	19:25:52
3	Ni 231.604†	314.4	229.0	5.1535	ug/L	5.1535 ppb	19:25:52
3	P 214.914†	402.1	184.2	97.577	ug/L	97.577 ppb	19:25:52
3	Pb 220.353†	-13.1	59.4	7.7940	ug/L	7.7940 ppb	19:25:52
3	S 181.975 Axial†	74.5	29.3	37.132	ug/L	37.132 ppb	19:25:52
3	Sb 206.836†	22.1	-5.2	-2.5558	ug/L	-2.5558 ppb	19:25:52
3	Se 196.026†	-72.4	-51.3	-3.9339	ug/L	-3.9339 ppb	19:25:52
3	Si 251.611†	245441.6	249153.5	7275.1	ug/L	7275.1 ppb	19:25:32
3	Sn 189.927†	-15.2	-20.9	-3.0433	ug/L	-3.0433 ppb	19:25:52
3	Ti 334.940†	154654.2	158536.6	248.69	ug/L	248.69 ppb	19:25:32
3	Tl 190.801†	-46.0	-8.8	0.3009	ug/L	0.3009 ppb	19:25:52
3	U 409.014†	-2872.5	-372.0	-11.240	ug/L	-11.240 ppb	19:25:32
3	V 292.402†	247.2	1673.3	9.4807	ug/L	9.4807 ppb	19:25:32
3	Zn 213.857†	3688.4	3101.6	25.507	ug/L	25.507 ppb	19:25:52
3	SiO2†	247666.9	251449.1	15754	ug/L	15754 ppb	19:26:08

Mean Data: 1201977929|925191|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	889503.8	98.689	%	0.4486				0.45%
Sc Radial	5764.1	101	%	0.8				0.77%
Y 371.029	749964.7	99.756	%	0.3673				0.37%
Y RADIAL	6296.3	103.2	%	0.62				0.60%
Ag 328.068†	-501.3	0.1415	ug/L	0.33135	0.1415	ppb	0.33135	234.19%
Al 396.153Radial†	11935.5	8476.2	ug/L	38.36	8476.2	ppb	38.36	0.45%
As 188.979†	-1.3	2.7190	ug/L	3.34073	2.7190	ppb	3.34073	122.87%
B 249.677†	318.1	5.4816	ug/L	1.34284	5.4816	ppb	1.34284	24.50%
Ba 233.527†	27650.6	200.00	ug/L	0.910	200.00	ppb	0.910	0.45%
Be 313.107†	1265.6	0.9366	ug/L	0.01313	0.9366	ppb	0.01313	1.40%
Ca 317.933Radial†	1133.4	1689.1	ug/L	10.60	1689.1	ppb	10.60	0.63%
Cd 226.502†	92.9	0.2146	ug/L	0.10789	0.2146	ppb	0.10789	50.27%
Co 228.616†	100.6	1.2985	ug/L	0.05540	1.2985	ppb	0.05540	4.27%
Cr 267.716†	520.0	5.4956	ug/L	0.16226	5.4956	ppb	0.16226	2.95%
Cu 324.752†	1318.5	4.0711	ug/L	0.06623	4.0711	ppb	0.06623	1.63%
Fe 238.204 Radial†	798.8	7364.6	ug/L	55.89	7364.6	ppb	55.89	0.76%
K 766.490 Radial†	5414.2	946.64	ug/L	11.572	946.64	ppb	11.572	1.22%

Mg 279.077 IEC†	35.7	1260.3	ug/L	119.92	1260.3	ppb	119.92	9.52%
Mn 257.610†	96223.3	100.71	ug/L	0.446	100.71	ppb	0.446	0.44%
Mo 202.031†	-7.1	0.0784	ug/L	0.17207	0.0784	ppb	0.17207	219.38%
Na 589.592 Radial†	1572.7	505.95	ug/L	11.619	505.95	ppb	11.619	2.30%
Ni 231.604†	226.9	5.1042	ug/L	0.07852	5.1042	ppb	0.07852	1.54%
P 214.914†	191.7	101.71	ug/L	3.830	101.71	ppb	3.830	3.77%
Pb 220.353†	59.6	7.8112	ug/L	0.13383	7.8112	ppb	0.13383	1.71%
S 181.975 Axial†	30.0	38.117	ug/L	0.8611	38.117	ppb	0.8611	2.26%
Sb 206.836†	1.4	-0.5409	ug/L	2.18332	-0.5409	ppb	2.18332	403.62%
Se 196.026†	-47.7	-2.0324	ug/L	1.65918	-2.0324	ppb	1.65918	81.64%
Si 251.611†	249920.4	7297.5	ug/L	26.69	7297.5	ppb	26.69	0.37%
Sn 189.927†	-19.3	-2.7889	ug/L	0.37311	-2.7889	ppb	0.37311	13.38%
Sr 421.552†	2504.6	15.432	ug/L	0.2439	15.432	ppb	0.2439	1.58%
Ti 334.940†	158862.1	249.21	ug/L	0.996	249.21	ppb	0.996	0.40%
Tl 190.801†	-13.3	-0.9020	ug/L	1.15000	-0.9020	ppb	1.15000	127.50%
U 409.014†	-510.7	-15.075	ug/L	3.5596	-15.075	ppb	3.5596	23.61%
V 292.402†	1685.8	9.5581	ug/L	0.24416	9.5581	ppb	0.24416	2.55%
Zn 213.857†	3089.7	25.410	ug/L	0.1227	25.410	ppb	0.1227	0.48%
SiO2†	250166.3	15674	ug/L	72.6	15674	ppb	72.6	0.46%

Sequence No.: 28
Sample ID: 241419002|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 12/7/2009 19:28:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419002|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5855.8	5855.8	103	%			19:30:13
1	Y RADIAL	7097.7	7097.7	116.4	%			19:30:13
1	Al 396.153Radial†	25838.2	25090.7	17818	ug/L	17818	ppb	19:30:13
1	Ca 317.933Radial†	8538.7	8268.0	12321	ug/L	12321	ppb	19:30:13
1	Fe 238.204 Radial†	8848.0	8579.0	79098	ug/L	79098	ppb	19:30:13
1	K 766.490 Radial†	29312.8	26226.3	4564.7	ug/L	4564.7	ppb	19:30:13
1	Mg 279.077 IEC†	128.8	124.7	4360.3	ug/L	4360.3	ppb	19:30:33
1	Na 589.592 Radial†	9061.3	9873.9	3176.5	ug/L	3176.5	ppb	19:30:13
1	Sr 421.552†	7240.2	7017.5	43.168	ug/L	43.168	ppb	19:30:13
1	Sc 361.383	923377.4	923377.4	102.45	%			19:31:30
1	Y 371.029	853428.4	853428.4	113.52	%			19:31:30
1	Ag 328.068†	-5194.6	-5385.4	1.4927	ug/L	1.4927	ppb	19:31:36
1	As 188.979†	-66.2	-40.2	28.422	ug/L	28.422	ppb	19:31:56
1	B 249.677†	318.6	930.1	8.3709	ug/L	8.3709	ppb	19:31:36
1	Ba 233.527†	29887.5	29190.5	213.89	ug/L	213.89	ppb	19:31:36
1	Be 313.107†	-21046.1	-15271.3	1.9701	ug/L	1.9701	ppb	19:31:36
1	Cd 226.502†	698.7	888.1	1.1676	ug/L	1.1676	ppb	19:31:56
1	Co 228.616†	709.9	767.0	5.0696	ug/L	5.0696	ppb	19:31:56
1	Cr 267.716†	2910.2	2759.8	29.953	ug/L	29.953	ppb	19:31:56
1	Cu 324.752†	9426.7	2330.7	10.567	ug/L	10.567	ppb	19:31:36
1	Mn 257.610†	1931000.4	1884379.0	1966.2	ug/L	1966.2	ppb	19:31:30
1	Mo 202.031†	38.5	10.8	6.2848	ug/L	6.2848	ppb	19:31:56
1	Ni 231.604†	1070.0	953.6	21.452	ug/L	21.452	ppb	19:31:56
1	P 214.914†	2736.2	2446.0	1286.4	ug/L	1286.4	ppb	19:31:56
1	Pb 220.353†	177.9	246.4	24.450	ug/L	24.450	ppb	19:31:56
1	S 181.975 Axial†	107.8	58.7	74.330	ug/L	74.330	ppb	19:31:56
1	Sb 206.836†	57.3	28.4	-1.2515	ug/L	-1.2515	ppb	19:31:56
1	Se 196.026†	-475.3	-441.6	4.7045	ug/L	4.7045	ppb	19:31:56
1	Si 251.611†	982824.6	958803.6	27996	ug/L	27996	ppb	19:31:30
1	Sn 189.927†	-8.3	-13.6	0.1926	ug/L	0.1926	ppb	19:31:56
1	Ti 334.940†	2446035.3	2388805.7	3746.7	ug/L	3746.7	ppb	19:31:30
1	Tl 190.801†	-191.7	-149.2	0.1400	ug/L	0.1400	ppb	19:31:56
1	U 409.014†	-13259.6	-10392.6	-297.73	ug/L	-297.73	ppb	19:31:30
1	V 292.402†	8149.1	9376.2	44.340	ug/L	44.340	ppb	19:31:36
1	Zn 213.857†	40320.2	38706.3	320.30	ug/L	320.30	ppb	19:31:36
1	SiO2†	981919.0	957951.5	60017	ug/L	60017	ppb	19:33:04
2	Sc Radial	5708.8	5708.8	100	%			19:30:38
2	Y RADIAL	6937.6	6937.6	113.8	%			19:30:38
2	Al 396.153Radial†	25638.6	25537.5	18136	ug/L	18136	ppb	19:30:38
2	Ca 317.933Radial†	8423.1	8366.2	12468	ug/L	12468	ppb	19:30:38
2	Fe 238.204 Radial†	8804.9	8757.1	80741	ug/L	80741	ppb	19:30:38
2	K 766.490 Radial†	29040.9	26688.0	4645.6	ug/L	4645.6	ppb	19:30:38
2	Mg 279.077 IEC†	133.3	132.4	4633.6	ug/L	4633.6	ppb	19:30:58
2	Na 589.592 Radial†	8804.8	9845.0	3167.2	ug/L	3167.2	ppb	19:30:38
2	Sr 421.552†	7095.6	7054.5	43.395	ug/L	43.395	ppb	19:30:38
2	Sc 361.383	921224.8	921224.8	102.21	%			19:32:01
2	Y 371.029	851478.3	851478.3	113.26	%			19:32:01
2	Ag 328.068†	-5075.7	-5280.9	2.4785	ug/L	2.4785	ppb	19:32:07
2	As 188.979†	-68.1	-42.2	27.839	ug/L	27.839	ppb	19:32:27
2	B 249.677†	293.7	906.5	7.6736	ug/L	7.6736	ppb	19:32:07
2	Ba 233.527†	29991.1	29360.1	215.18	ug/L	215.18	ppb	19:32:07
2	Be 313.107†	-21335.2	-15602.1	1.8333	ug/L	1.8333	ppb	19:32:07
2	Cd 226.502†	699.8	890.7	1.0301	ug/L	1.0301	ppb	19:32:27
2	Co 228.616†	713.8	772.5	5.1691	ug/L	5.1691	ppb	19:32:27
2	Cr 267.716†	2885.5	2742.3	29.803	ug/L	29.803	ppb	19:32:27
2	Cu 324.752†	9506.3	2430.0	10.930	ug/L	10.930	ppb	19:32:07
2	Mn 257.610†	1920278.7	1878293.1	1960.0	ug/L	1960.0	ppb	19:32:01
2	Mo 202.031†	41.9	14.3	6.6146	ug/L	6.6146	ppb	19:32:27
2	Ni 231.604†	1071.2	957.2	21.534	ug/L	21.534	ppb	19:32:27

2	P 214.914†	2700.8	2417.6	1269.5 ug/L	1269.5 ppb	19:32:27
2	Pb 220.353†	166.3	235.5	23.192 ug/L	23.192 ppb	19:32:27
2	S 181.975 Axial†	88.9	40.5	50.150 ug/L	50.150 ppb	19:32:27
2	Sb 206.836†	51.5	22.8	-2.9139 ug/L	-2.9139 ppb	19:32:27
2	Se 196.026†	-472.0	-439.5	11.133 ug/L	11.133 ppb	19:32:27
2	Si 251.611†	976669.2	955022.8	27885 ug/L	27885 ppb	19:32:01
2	Sn 189.927†	-4.2	-9.5	0.8740 ug/L	0.8740 ppb	19:32:27
2	Ti 334.940†	2433715.1	2382330.6	3736.5 ug/L	3736.5 ppb	19:32:01
2	Tl 190.801†	-189.7	-147.7	0.4419 ug/L	0.4419 ppb	19:32:27
2	U 409.014†	-13132.8	-10298.8	-295.34 ug/L	-295.34 ppb	19:32:01
2	V 292.402†	8217.5	9461.8	44.671 ug/L	44.671 ppb	19:32:07
2	Zn 213.857†	40265.7	38745.0	320.46 ug/L	320.46 ppb	19:32:07
2	SiO2†	973179.9	951640.7	59622 ug/L	59622 ppb	19:33:10
3	Sc Radial	5784.8	5784.8	102 %		19:31:03
3	Y RADIAL	7029.7	7029.7	115.3 %		19:31:03
3	Al 396.153Radial†	25571.4	25136.1	17851 ug/L	17851 ppb	19:31:03
3	Ca 317.933Radial†	8433.4	8266.1	12319 ug/L	12319 ppb	19:31:03
3	Fe 238.204 Radial†	8789.3	8626.7	79538 ug/L	79538 ppb	19:31:03
3	K 766.490 Radial†	28954.2	26223.0	4564.3 ug/L	4564.3 ppb	19:31:03
3	Mg 279.077 IEC†	129.4	126.8	4435.1 ug/L	4435.1 ppb	19:31:23
3	Na 589.592 Radial†	8860.5	9784.5	3147.8 ug/L	3147.8 ppb	19:31:03
3	Sr 421.552†	7113.8	6979.6	42.934 ug/L	42.934 ppb	19:31:03
3	Sc 361.383	923386.8	923386.8	102.45 %		19:32:33
3	Y 371.029	854609.2	854609.2	113.68 %		19:32:33
3	Ag 328.068†	-5171.6	-5362.9	1.7312 ug/L	1.7312 ppb	19:32:38
3	As 188.979†	-68.8	-42.7	27.344 ug/L	27.344 ppb	19:32:58
3	B 249.677†	290.3	902.5	7.7519 ug/L	7.7519 ppb	19:32:38
3	Ba 233.527†	30048.6	29347.5	215.04 ug/L	215.04 ppb	19:32:38
3	Be 313.107†	-21409.4	-15625.7	1.7988 ug/L	1.7988 ppb	19:32:38
3	Cd 226.502†	683.0	872.8	0.9669 ug/L	0.9669 ppb	19:32:58
3	Co 228.616†	712.3	769.4	5.1559 ug/L	5.1559 ppb	19:32:58
3	Cr 267.716†	2889.9	2740.0	29.757 ug/L	29.757 ppb	19:32:58
3	Cu 324.752†	9481.1	2383.6	10.738 ug/L	10.738 ppb	19:32:38
3	Mn 257.610†	1917067.0	1870759.4	1952.1 ug/L	1952.1 ppb	19:32:33
3	Mo 202.031†	33.6	6.1	6.0198 ug/L	6.0198 ppb	19:32:58
3	Ni 231.604†	1037.8	922.2	20.745 ug/L	20.745 ppb	19:32:58
3	P 214.914†	2731.9	2441.7	1283.7 ug/L	1283.7 ppb	19:32:58
3	Pb 220.353†	189.0	257.3	25.608 ug/L	25.608 ppb	19:32:58
3	S 181.975 Axial†	103.5	54.6	68.842 ug/L	68.842 ppb	19:32:58
3	Sb 206.836†	54.3	25.4	-2.1045 ug/L	-2.1045 ppb	19:32:58
3	Se 196.026†	-473.1	-439.6	7.2634 ug/L	7.2634 ppb	19:32:58
3	Si 251.611†	975387.7	951534.7	27784 ug/L	27784 ppb	19:32:33
3	Sn 189.927†	-6.8	-12.0	0.4414 ug/L	0.4414 ppb	19:32:58
3	Ti 334.940†	2430725.0	2373837.0	3723.2 ug/L	3723.2 ppb	19:32:33
3	Tl 190.801†	-196.5	-153.8	-1.3755 ug/L	-1.3755 ppb	19:32:58
3	U 409.014†	-13023.2	-10161.7	-291.39 ug/L	-291.39 ppb	19:32:33
3	V 292.402†	8304.4	9527.7	45.293 ug/L	45.293 ppb	19:32:38
3	Zn 213.857†	40540.0	38920.5	322.07 ug/L	322.07 ppb	19:32:38
3	SiO2†	986917.0	962820.3	60322 ug/L	60322 ppb	19:33:16

Mean Data: 241419002|925191|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922663.0	102.37	%	0.138				0.13%
Sc Radial	5783.1	102	%	1.3				1.27%
Y 371.029	853172.0	113.48	%	0.210				0.19%
Y RADIAL	7021.6	115.1	%	1.32				1.14%
Ag 328.068†	-5343.1	1.9008	ug/L	0.51435	1.9008	ppb	0.51435	27.06%
Al 396.153Radial†	25254.7	17935	ug/L	174.6	17935	ppb	174.6	0.97%
As 188.979†	-41.7	27.868	ug/L	0.5392	27.868	ppb	0.5392	1.93%
B 249.677†	913.0	7.9321	ug/L	0.38203	7.9321	ppb	0.38203	4.82%
Ba 233.527†	29299.4	214.70	ug/L	0.707	214.70	ppb	0.707	0.33%
Be 313.107†	-15499.7	1.8674	ug/L	0.09060	1.8674	ppb	0.09060	4.85%
Ca 317.933Radial†	8300.1	12369	ug/L	85.3	12369	ppb	85.3	0.69%
Cd 226.502†	883.9	1.0549	ug/L	0.10259	1.0549	ppb	0.10259	9.73%
Co 228.616†	769.6	5.1315	ug/L	0.05404	5.1315	ppb	0.05404	1.05%
Cr 267.716†	2747.4	29.838	ug/L	0.1024	29.838	ppb	0.1024	0.34%
Cu 324.752†	2381.5	10.745	ug/L	0.1812	10.745	ppb	0.1812	1.69%
Fe 238.204 Radial†	8654.3	79792	ug/L	850.4	79792	ppb	850.4	1.07%
K 766.490 Radial†	26379.1	4591.5	ug/L	46.82	4591.5	ppb	46.82	1.02%

Mg 279.077 IEC†	128.0	4476.3	ug/L	141.23	4476.3	ppb	141.23	3.16%
Mn 257.610†	1877810.5	1959.4	ug/L	7.07	1959.4	ppb	7.07	0.36%
Mo 202.031†	10.4	6.3064	ug/L	0.29802	6.3064	ppb	0.29802	4.73%
Na 589.592 Radial†	9834.5	3163.9	ug/L	14.67	3163.9	ppb	14.67	0.46%
Ni 231.604†	944.3	21.244	ug/L	0.4338	21.244	ppb	0.4338	2.04%
P 214.914†	2435.1	1279.9	ug/L	9.07	1279.9	ppb	9.07	0.71%
Pb 220.353†	246.4	24.416	ug/L	1.2082	24.416	ppb	1.2082	4.95%
S 181.975 Axial†	51.3	64.441	ug/L	12.6764	64.441	ppb	12.6764	19.67%
Sb 206.836†	25.5	-2.0900	ug/L	0.83130	-2.0900	ppb	0.83130	39.78%
Se 196.026†	-440.2	7.7004	ug/L	3.23669	7.7004	ppb	3.23669	42.03%
Si 251.611†	955120.4	27888	ug/L	106.2	27888	ppb	106.2	0.38%
Sn 189.927†	-11.7	0.5027	ug/L	0.34481	0.5027	ppb	0.34481	68.60%
Sr 421.552†	7017.2	43.165	ug/L	0.2304	43.165	ppb	0.2304	0.53%
Ti 334.940†	2381657.8	3735.5	ug/L	11.77	3735.5	ppb	11.77	0.32%
Tl 190.801†	-150.2	-0.2645	ug/L	0.97386	-0.2645	ppb	0.97386	368.15%
U 409.014†	-10284.4	-294.82	ug/L	3.200	-294.82	ppb	3.200	1.09%
V 292.402†	9455.2	44.768	ug/L	0.4843	44.768	ppb	0.4843	1.08%
Zn 213.857†	38790.6	320.94	ug/L	0.982	320.94	ppb	0.982	0.31%
SiO2†	957470.8	59987	ug/L	351.2	59987	ppb	351.2	0.59%

Sequence No.: 29
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/7/2009 19:35:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5736.7	5736.7	101	%			19:37:20
1	Y RADIAL	6152.7	6152.7	100.9	%			19:37:20
1	Al 396.153Radial†	7091.5	7044.0	4981.0	ug/L	4981.0	ppb	19:37:20
1	Ca 317.933Radial†	3418.6	3368.9	5020.5	ug/L	5020.5	ppb	19:37:40
1	Fe 238.204 Radial†	548.7	537.4	4970.4	ug/L	4970.4	ppb	19:37:40
1	K 766.490 Radial†	30836.0	28325.2	4945.9	ug/L	4945.9	ppb	19:37:20
1	Mg 279.077 IEC†	146.7	145.0	5155.5	ug/L	5155.5	ppb	19:37:40
1	Na 589.592 Radial†	27582.4	28400.0	9136.6	ug/L	9136.6	ppb	19:37:20
1	Sr 421.552†	80128.1	79352.6	489.38	ug/L	489.38	ppb	19:37:20
1	Sc 361.383	896339.0	896339.0	99.447	%			19:38:37
1	Y 371.029	732666.8	732666.8	97.456	%			19:38:37
1	Ag 328.068†	112570.4	112881.0	505.74	ug/L	505.74	ppb	19:38:43
1	As 188.979†	1252.4	1283.8	489.96	ug/L	489.96	ppb	19:39:03
1	B 249.677†	23097.3	23844.8	482.63	ug/L	482.63	ppb	19:38:43
1	Ba 233.527†	67828.4	68222.3	494.01	ug/L	494.01	ppb	19:38:43
1	Be 313.107†	1363365.3	1376213.3	486.96	ug/L	486.96	ppb	19:38:37
1	Cd 226.502†	47565.6	48036.0	489.95	ug/L	489.95	ppb	19:38:43
1	Co 228.616†	26495.3	26716.6	490.51	ug/L	490.51	ppb	19:38:43
1	Cr 267.716†	47861.7	48046.8	494.15	ug/L	494.15	ppb	19:38:43
1	Cu 324.752†	180350.0	174481.4	489.29	ug/L	489.29	ppb	19:38:43
1	Mn 257.610†	470242.4	472361.6	491.31	ug/L	491.31	ppb	19:38:37
1	Mo 202.031†	8012.9	8030.7	500.27	ug/L	500.27	ppb	19:39:03
1	Ni 231.604†	21836.7	21867.2	491.82	ug/L	491.82	ppb	19:38:43
1	P 214.914†	4563.1	4363.5	2325.9	ug/L	2325.9	ppb	19:39:03
1	Pb 220.353†	4360.4	4457.4	489.02	ug/L	489.02	ppb	19:39:03
1	S 181.975 Axial†	761.5	719.2	952.37	ug/L	952.37	ppb	19:39:03
1	Sb 206.836†	1629.0	1610.4	503.99	ug/L	503.99	ppb	19:39:03
1	Se 196.026†	834.8	861.8	501.50	ug/L	501.50	ppb	19:39:03
1	Si 251.611†	84322.8	84248.0	2448.2	ug/L	2448.2	ppb	19:38:43
1	Sn 189.927†	3109.4	3121.2	496.41	ug/L	496.41	ppb	19:39:03
1	Ti 334.940†	316649.5	319610.2	501.05	ug/L	501.05	ppb	19:38:43
1	Tl 190.801†	1752.8	1800.6	490.43	ug/L	490.43	ppb	19:39:03
1	U 409.014†	15647.8	18285.1	504.65	ug/L	504.65	ppb	19:38:43
1	V 292.402†	74107.8	75941.4	500.46	ug/L	500.46	ppb	19:38:43
1	Zn 213.857†	58299.5	57972.8	487.11	ug/L	487.11	ppb	19:38:43
1	SiO2†	83956.2	83911.2	5231.6	ug/L	5231.6	ppb	19:40:10
2	Sc Radial	5670.8	5670.8	99.8	%			19:37:45
2	Y RADIAL	6021.5	6021.5	98.74	%			19:37:45
2	Al 396.153Radial†	7085.7	7119.7	5034.9	ug/L	5034.9	ppb	19:37:45
2	Ca 317.933Radial†	3412.7	3402.3	5070.3	ug/L	5070.3	ppb	19:38:05
2	Fe 238.204 Radial†	545.4	540.5	4998.5	ug/L	4998.5	ppb	19:38:05
2	K 766.490 Radial†	30863.7	28707.7	5012.8	ug/L	5012.8	ppb	19:37:45
2	Mg 279.077 IEC†	147.1	147.1	5228.9	ug/L	5228.9	ppb	19:38:05
2	Na 589.592 Radial†	27317.3	28451.7	9153.2	ug/L	9153.2	ppb	19:37:45
2	Sr 421.552†	79770.6	79916.2	492.85	ug/L	492.85	ppb	19:37:45
2	Sc 361.383	906437.4	906437.4	100.57	%			19:39:08
2	Y 371.029	741630.7	741630.7	98.648	%			19:39:08
2	Ag 328.068†	113395.5	112440.3	503.78	ug/L	503.78	ppb	19:39:13
2	As 188.979†	1253.5	1270.8	485.06	ug/L	485.06	ppb	19:39:34
2	B 249.677†	23476.0	23962.6	485.02	ug/L	485.02	ppb	19:39:13
2	Ba 233.527†	68317.4	67948.7	492.03	ug/L	492.03	ppb	19:39:13
2	Be 313.107†	1364569.3	1362137.2	481.99	ug/L	481.99	ppb	19:39:08
2	Cd 226.502†	47818.0	47754.0	487.07	ug/L	487.07	ppb	19:39:13
2	Co 228.616†	26684.0	26607.4	488.49	ug/L	488.49	ppb	19:39:13
2	Cr 267.716†	48144.0	47791.4	491.53	ug/L	491.53	ppb	19:39:13
2	Cu 324.752†	182497.4	174596.2	489.61	ug/L	489.61	ppb	19:39:13
2	Mn 257.610†	469848.4	466701.9	485.43	ug/L	485.43	ppb	19:39:08
2	Mo 202.031†	8041.2	7969.0	496.44	ug/L	496.44	ppb	19:39:34
2	Ni 231.604†	22001.5	21786.4	490.01	ug/L	490.01	ppb	19:39:13

2	P 214.914†	4574.3	4323.6	2303.9 ug/L	2303.9 ppb	19:39:34
2	Pb 220.353†	4379.3	4427.3	485.73 ug/L	485.73 ppb	19:39:34
2	S 181.975 Axial†	770.1	719.3	952.46 ug/L	952.46 ppb	19:39:34
2	Sb 206.836†	1642.2	1605.3	502.31 ug/L	502.31 ppb	19:39:34
2	Se 196.026†	844.4	861.9	501.69 ug/L	501.69 ppb	19:39:34
2	Si 251.611†	85411.1	84385.5	2452.2 ug/L	2452.2 ppb	19:39:13
2	Sn 189.927†	3117.4	3094.4	492.14 ug/L	492.14 ppb	19:39:34
2	Ti 334.940†	320382.6	319774.9	501.31 ug/L	501.31 ppb	19:39:13
2	Tl 190.801†	1766.0	1794.0	488.64 ug/L	488.64 ppb	19:39:34
2	U 409.014†	15986.3	18446.3	509.12 ug/L	509.12 ppb	19:39:13
2	V 292.402†	74770.9	75770.6	499.30 ug/L	499.30 ppb	19:39:13
2	Zn 213.857†	58765.8	57783.4	485.51 ug/L	485.51 ppb	19:39:13
2	SiO2†	83937.3	82951.9	5171.6 ug/L	5171.6 ppb	19:40:15
3	Sc Radial	5695.7	5695.7	100 %		19:38:10
3	Y RADIAL	6083.3	6083.3	99.75 %		19:38:10
3	Al 396.153Radial†	7095.5	7098.5	5020.0 ug/L	5020.0 ppb	19:38:10
3	Ca 317.933Radial†	3403.6	3378.3	5034.5 ug/L	5034.5 ppb	19:38:30
3	Fe 238.204 Radial†	553.7	546.4	5052.8 ug/L	5052.8 ppb	19:38:30
3	K 766.490 Radial†	30746.7	28455.9	4968.7 ug/L	4968.7 ppb	19:38:10
3	Mg 279.077 IEC†	148.5	147.9	5257.4 ug/L	5257.4 ppb	19:38:30
3	Na 589.592 Radial†	27271.2	28286.1	9099.9 ug/L	9099.9 ppb	19:38:10
3	Sr 421.552†	79641.8	79438.5	489.91 ug/L	489.91 ppb	19:38:10
3	Sc 361.383	903597.7	903597.7	100.25 %		19:39:39
3	Y 371.029	740020.2	740020.2	98.434 %		19:39:39
3	Ag 328.068†	112090.8	111493.3	499.57 ug/L	499.57 ppb	19:39:44
3	As 188.979†	1229.5	1250.8	477.45 ug/L	477.45 ppb	19:40:05
3	B 249.677†	23211.1	23771.8	481.14 ug/L	481.14 ppb	19:39:44
3	Ba 233.527†	67645.4	67491.9	488.73 ug/L	488.73 ppb	19:39:44
3	Be 313.107†	1370858.6	1372674.8	485.70 ug/L	485.70 ppb	19:39:39
3	Cd 226.502†	47406.7	47493.3	484.41 ug/L	484.41 ppb	19:39:44
3	Co 228.616†	26468.4	26475.7	486.08 ug/L	486.08 ppb	19:39:44
3	Cr 267.716†	47752.7	47551.4	489.06 ug/L	489.06 ppb	19:39:44
3	Cu 324.752†	179502.9	172179.5	482.84 ug/L	482.84 ppb	19:39:44
3	Mn 257.610†	471163.0	469481.5	488.33 ug/L	488.33 ppb	19:39:39
3	Mo 202.031†	7969.3	7922.4	493.54 ug/L	493.54 ppb	19:40:05
3	Ni 231.604†	21841.5	21695.6	487.96 ug/L	487.96 ppb	19:39:44
3	P 214.914†	4533.9	4297.6	2290.6 ug/L	2290.6 ppb	19:40:05
3	Pb 220.353†	4351.6	4413.4	484.19 ug/L	484.19 ppb	19:40:05
3	S 181.975 Axial†	767.7	719.3	952.49 ug/L	952.49 ppb	19:40:05
3	Sb 206.836†	1625.0	1593.3	498.58 ug/L	498.58 ppb	19:40:05
3	Se 196.026†	833.4	853.6	497.16 ug/L	497.16 ppb	19:40:05
3	Si 251.611†	84201.7	83446.1	2424.9 ug/L	2424.9 ppb	19:39:44
3	Sn 189.927†	3097.3	3084.1	490.51 ug/L	490.51 ppb	19:40:05
3	Ti 334.940†	315601.3	316006.8	495.41 ug/L	495.41 ppb	19:39:44
3	Tl 190.801†	1752.5	1786.1	486.48 ug/L	486.48 ppb	19:40:05
3	U 409.014†	15493.0	18004.3	496.88 ug/L	496.88 ppb	19:39:44
3	V 292.402†	73918.3	75153.8	495.23 ug/L	495.23 ppb	19:39:44
3	Zn 213.857†	58307.7	57510.1	483.20 ug/L	483.20 ppb	19:39:44
3	SiO2†	84071.4	83347.9	5196.5 ug/L	5196.5 ppb	19:40:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902124.7	100.09	%	0.578				0.58%
Sc Radial	5701.1	100	%	0.6				0.58%
Y 371.029	738105.9	98.179	%	0.6356				0.65%
Y RADIAL	6085.8	99.79	%	1.077				1.08%
Ag 328.068†	112271.6	503.03	ug/L	3.151	503.03	ppb	3.151	0.63%
QC value within limits for Ag 328.068 Recovery = 100.61%								
Al 396.153Radial†	7087.4	5012.0	ug/L	27.85	5012.0	ppb	27.85	0.56%
QC value within limits for Al 396.153Radial Recovery = 100.24%								
As 188.979†	1268.4	484.15	ug/L	6.303	484.15	ppb	6.303	1.30%
QC value within limits for As 188.979 Recovery = 96.83%								
B 249.677†	23859.7	482.93	ug/L	1.957	482.93	ppb	1.957	0.41%
QC value within limits for B 249.677 Recovery = 96.59%								
Ba 233.527†	67887.6	491.59	ug/L	2.670	491.59	ppb	2.670	0.54%
QC value within limits for Ba 233.527 Recovery = 98.32%								
Be 313.107†	1370341.8	484.89	ug/L	2.584	484.89	ppb	2.584	0.53%
QC value within limits for Be 313.107 Recovery = 96.98%								
Ca 317.933Radial†	3383.1	5041.7	ug/L	25.68	5041.7	ppb	25.68	0.51%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.83%
Cd 226.502†            47761.1      487.15 ug/L         2.775      487.15 ppb          2.775   0.57%
   QC value within limits for Cd 226.502  Recovery = 97.43%
Co 228.616†            26599.9      488.36 ug/L         2.217      488.36 ppb          2.217   0.45%
   QC value within limits for Co 228.616  Recovery = 97.67%
Cr 267.716†            47796.6      491.58 ug/L         2.546      491.58 ppb          2.546   0.52%
   QC value within limits for Cr 267.716  Recovery = 98.32%
Cu 324.752†           173752.4      487.24 ug/L         3.819      487.24 ppb          3.819   0.78%
   QC value within limits for Cu 324.752  Recovery = 97.45%
Fe 238.204 Radial†       541.4      5007.2 ug/L        41.91      5007.2 ppb         41.91   0.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.14%
K 766.490 Radial†      28496.3      4975.8 ug/L        34.03      4975.8 ppb         34.03   0.68%
   QC value within limits for K 766.490 Radial  Recovery = 99.52%
Mg 279.077 IEC†          146.7      5213.9 ug/L        52.58      5213.9 ppb         52.58   1.01%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.28%
Mn 257.610†           469515.0      488.36 ug/L         2.940      488.36 ppb          2.940   0.60%
   QC value within limits for Mn 257.610  Recovery = 97.67%
Mo 202.031†             7974.1      496.75 ug/L         3.377      496.75 ppb          3.377   0.68%
   QC value within limits for Mo 202.031  Recovery = 99.35%
Na 589.592 Radial†     28379.3      9129.9 ug/L        27.25      9129.9 ppb         27.25   0.30%
   QC value within limits for Na 589.592 Radial  Recovery = 91.30%
Ni 231.604†            21783.1      489.93 ug/L         1.931      489.93 ppb          1.931   0.39%
   QC value within limits for Ni 231.604  Recovery = 97.99%
P 214.914†              4328.2      2306.8 ug/L        17.86      2306.8 ppb         17.86   0.77%
   QC value within limits for P 214.914  Recovery = 92.27%
Pb 220.353†             4432.7      486.31 ug/L         2.466      486.31 ppb          2.466   0.51%
   QC value within limits for Pb 220.353  Recovery = 97.26%
S 181.975 Axial†         719.3      952.44 ug/L         0.063      952.44 ppb          0.063   0.01%
   QC value within limits for S 181.975 Axial  Recovery = 95.24%
Sb 206.836†             1603.0      501.63 ug/L         2.770      501.63 ppb          2.770   0.55%
   QC value within limits for Sb 206.836  Recovery = 100.33%
Se 196.026†              859.1      500.11 ug/L         2.564      500.11 ppb          2.564   0.51%
   QC value within limits for Se 196.026  Recovery = 100.02%
Si 251.611†            84026.5      2441.8 ug/L        14.76      2441.8 ppb         14.76   0.60%
   QC value within limits for Si 251.611  Recovery = 97.67%
Sn 189.927†             3099.9      493.02 ug/L         3.045      493.02 ppb          3.045   0.62%
   QC value within limits for Sn 189.927  Recovery = 98.60%
Sr 421.552†            79569.1      490.71 ug/L         1.873      490.71 ppb          1.873   0.38%
   QC value within limits for Sr 421.552  Recovery = 98.14%
Ti 334.940†           318464.0      499.26 ug/L         3.336      499.26 ppb          3.336   0.67%
   QC value within limits for Ti 334.940  Recovery = 99.85%
Tl 190.801†             1793.5      488.52 ug/L         1.977      488.52 ppb          1.977   0.40%
   QC value within limits for Tl 190.801  Recovery = 97.70%
U 409.014†             18245.2      503.55 ug/L         6.194      503.55 ppb          6.194   1.23%
   QC value within limits for U 409.014  Recovery = 100.71%
V 292.402†             75621.9      498.33 ug/L         2.749      498.33 ppb          2.749   0.55%
   QC value within limits for V 292.402  Recovery = 99.67%
Zn 213.857†            57755.4      485.27 ug/L         1.961      485.27 ppb          1.961   0.40%
   QC value within limits for Zn 213.857  Recovery = 97.05%
SiO2†                  83403.7      5199.9 ug/L        30.13      5199.9 ppb         30.13   0.58%
   QC value within limits for SiO2  Recovery = 97.24%
All analyte(s) passed QC.
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Sequence No.: 30
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/7/2009 19:42:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5740.4	5740.4	101	%			19:44:22
1	Y RADIAL	6195.0	6195.0	101.6	%			19:44:22
1	Al 396.153Radial†	-34.4	-13.6	-9.6355	ug/L	-9.6355	ppb	19:44:22
1	Ca 317.933Radial†	23.9	6.7	10.056	ug/L	10.056	ppb	19:44:42
1	Fe 238.204 Radial†	9.3	3.2	29.274	ug/L	29.274	ppb	19:44:42
1	K 766.490 Radial†	2274.3	35.8	6.2634	ug/L	6.2634	ppb	19:44:22
1	Mg 279.077 IEC†	3.8	3.5	122.79	ug/L	122.79	ppb	19:44:42
1	Na 589.592 Radial†	-1098.6	-5.3	-1.7206	ug/L	-1.7206	ppb	19:44:22
1	Sr 421.552†	-7.0	-14.4	-0.0887	ug/L	-0.0887	ppb	19:44:22
1	Sc 361.383	878673.4	878673.4	97.487	%			19:45:39
1	Y 371.029	744539.1	744539.1	99.035	%			19:45:39
1	Ag 328.068†	388.9	84.0	0.3842	ug/L	0.3842	ppb	19:45:39
1	As 188.979†	-26.4	-2.7	-1.0268	ug/L	-1.0268	ppb	19:45:59
1	B 249.677†	-386.9	222.3	4.5120	ug/L	4.5120	ppb	19:45:59
1	Ba 233.527†	-2.2	14.7	0.1085	ug/L	0.1085	ppb	19:45:59
1	Be 313.107†	-4995.7	147.6	0.0525	ug/L	0.0525	ppb	19:45:39
1	Cd 226.502†	-198.8	2.1	0.0192	ug/L	0.0192	ppb	19:45:59
1	Co 228.616†	-64.5	7.9	0.1445	ug/L	0.1445	ppb	19:45:59
1	Cr 267.716†	57.9	-21.4	-0.2188	ug/L	-0.2188	ppb	19:45:59
1	Cu 324.752†	6625.7	-74.4	-0.2070	ug/L	-0.2070	ppb	19:45:39
1	Mn 257.610†	497.2	16.2	0.0174	ug/L	0.0174	ppb	19:45:59
1	Mo 202.031†	22.7	-3.5	-0.2172	ug/L	-0.2172	ppb	19:45:59
1	Ni 231.604†	109.3	21.3	0.4788	ug/L	0.4788	ppb	19:45:59
1	P 214.914†	208.3	-11.2	-6.1635	ug/L	-6.1635	ppb	19:45:59
1	Pb 220.353†	-55.5	15.9	1.7305	ug/L	1.7305	ppb	19:45:59
1	S 181.975 Axial†	37.4	-8.1	-10.740	ug/L	-10.740	ppb	19:45:59
1	Sb 206.836†	27.3	0.4	0.1007	ug/L	0.1007	ppb	19:45:59
1	Se 196.026†	-29.7	-8.2	-4.4839	ug/L	-4.4839	ppb	19:45:59
1	Si 251.611†	617.7	90.3	2.6420	ug/L	2.6420	ppb	19:45:59
1	Sn 189.927†	-3.4	-9.0	-1.4211	ug/L	-1.4211	ppb	19:45:59
1	Ti 334.940†	-1056.1	117.8	0.1848	ug/L	0.1848	ppb	19:45:39
1	Tl 190.801†	-34.9	2.2	0.5869	ug/L	0.5869	ppb	19:45:59
1	U 409.014†	-2440.8	46.6	1.2861	ug/L	1.2861	ppb	19:45:39
1	V 292.402†	-1301.8	86.5	0.5598	ug/L	0.5598	ppb	19:45:39
1	Zn 213.857†	773.2	142.5	1.1982	ug/L	1.1982	ppb	19:45:59
1	SiO2†	631.5	136.2	8.5499	ug/L	8.5499	ppb	19:46:55
2	Sc Radial	5760.9	5760.9	101	%			19:44:47
2	Y RADIAL	6154.7	6154.7	100.9	%			19:44:47
2	Al 396.153Radial†	-13.1	7.6	5.3682	ug/L	5.3682	ppb	19:44:47
2	Ca 317.933Radial†	23.0	5.7	8.4953	ug/L	8.4953	ppb	19:45:08
2	Fe 238.204 Radial†	8.0	1.8	16.887	ug/L	16.887	ppb	19:45:08
2	K 766.490 Radial†	2368.9	121.2	21.189	ug/L	21.189	ppb	19:44:47
2	Mg 279.077 IEC†	0.1	-0.2	-7.2750	ug/L	-7.2750	ppb	19:45:08
2	Na 589.592 Radial†	-1089.8	7.1	2.2895	ug/L	2.2895	ppb	19:44:47
2	Sr 421.552†	-42.5	-49.3	-0.3044	ug/L	-0.3044	ppb	19:44:47
2	Sc 361.383	880765.8	880765.8	97.720	%			19:46:05
2	Y 371.029	750697.1	750697.1	99.854	%			19:46:05
2	Ag 328.068†	405.3	99.8	0.4477	ug/L	0.4477	ppb	19:46:05
2	As 188.979†	-20.5	3.4	1.2920	ug/L	1.2920	ppb	19:46:25
2	B 249.677†	-356.2	254.6	5.1708	ug/L	5.1708	ppb	19:46:25
2	Ba 233.527†	-3.8	13.1	0.0960	ug/L	0.0960	ppb	19:46:25
2	Be 313.107†	-4975.3	180.6	0.0642	ug/L	0.0642	ppb	19:46:05
2	Cd 226.502†	-188.2	13.4	0.1356	ug/L	0.1356	ppb	19:46:25
2	Co 228.616†	-71.4	1.1	0.0186	ug/L	0.0186	ppb	19:46:25
2	Cr 267.716†	67.5	-11.8	-0.1212	ug/L	-0.1212	ppb	19:46:25
2	Cu 324.752†	6756.6	43.5	0.1227	ug/L	0.1227	ppb	19:46:05
2	Mn 257.610†	466.1	-16.9	-0.0157	ug/L	-0.0157	ppb	19:46:25
2	Mo 202.031†	25.6	-0.6	-0.0361	ug/L	-0.0361	ppb	19:46:25
2	Ni 231.604†	102.4	13.9	0.3126	ug/L	0.3126	ppb	19:46:25

2	P 214.914†	212.6	-7.4	-4.0911 ug/L	-4.0911 ppb	19:46:25
2	Pb 220.353†	-67.5	3.7	0.3995 ug/L	0.3995 ppb	19:46:25
2	S 181.975 Axial†	42.4	-3.1	-4.0454 ug/L	-4.0454 ppb	19:46:25
2	Sb 206.836†	36.2	9.5	2.9145 ug/L	2.9145 ppb	19:46:25
2	Se 196.026†	-30.7	-9.1	-5.0775 ug/L	-5.0775 ppb	19:46:25
2	Si 251.611†	602.8	73.5	2.1408 ug/L	2.1408 ppb	19:46:25
2	Sn 189.927†	2.9	-2.4	-0.3868 ug/L	-0.3868 ppb	19:46:25
2	Ti 334.940†	-1052.8	123.7	0.1926 ug/L	0.1926 ppb	19:46:05
2	Tl 190.801†	-34.8	2.4	0.6487 ug/L	0.6487 ppb	19:46:25
2	U 409.014†	-2339.0	156.6	4.3347 ug/L	4.3347 ppb	19:46:05
2	V 292.402†	-1322.8	68.1	0.4480 ug/L	0.4480 ppb	19:46:05
2	Zn 213.857†	753.8	120.8	1.0202 ug/L	1.0202 ppb	19:46:25
2	SiO2†	626.8	129.9	8.1255 ug/L	8.1255 ppb	19:47:00
3	Sc Radial	5866.0	5866.0	103 %		19:45:13
3	Y RADIAL	6308.3	6308.3	103.4 %		19:45:13
3	Al 396.153Radial†	-37.1	-15.5	-11.024 ug/L	-11.024 ppb	19:45:13
3	Ca 317.933Radial†	22.2	4.6	6.8197 ug/L	6.8197 ppb	19:45:33
3	Fe 238.204 Radial†	6.8	0.6	5.2660 ug/L	5.2660 ppb	19:45:33
3	K 766.490 Radial†	2271.9	-14.7	-2.5821 ug/L	-2.5821 ppb	19:45:13
3	Mg 279.077 IEC†	1.1	0.8	27.154 ug/L	27.154 ppb	19:45:33
3	Na 589.592 Radial†	-1072.3	43.4	13.958 ug/L	13.958 ppb	19:45:13
3	Sr 421.552†	-39.7	-45.9	-0.2830 ug/L	-0.2830 ppb	19:45:13
3	Sc 361.383	877932.4	877932.4	97.405 %		19:46:30
3	Y 371.029	746406.5	746406.5	99.283 %		19:46:30
3	Ag 328.068†	422.5	118.9	0.5274 ug/L	0.5274 ppb	19:46:30
3	As 188.979†	-20.2	3.6	1.3709 ug/L	1.3709 ppb	19:46:50
3	B 249.677†	-388.0	220.8	4.4847 ug/L	4.4847 ppb	19:46:50
3	Ba 233.527†	-2.1	14.9	0.1076 ug/L	0.1076 ppb	19:46:50
3	Be 313.107†	-5055.6	81.8	0.0293 ug/L	0.0293 ppb	19:46:30
3	Cd 226.502†	-191.7	9.3	0.0942 ug/L	0.0942 ppb	19:46:50
3	Co 228.616†	-59.8	12.6	0.2316 ug/L	0.2316 ppb	19:46:50
3	Cr 267.716†	74.3	-4.6	-0.0485 ug/L	-0.0485 ppb	19:46:50
3	Cu 324.752†	6751.9	60.9	0.1710 ug/L	0.1710 ppb	19:46:30
3	Mn 257.610†	476.2	-5.0	-0.0051 ug/L	-0.0051 ppb	19:46:50
3	Mo 202.031†	26.5	0.5	0.0299 ug/L	0.0299 ppb	19:46:50
3	Ni 231.604†	91.7	3.3	0.0738 ug/L	0.0738 ppb	19:46:50
3	P 214.914†	220.3	1.3	0.6670 ug/L	0.6670 ppb	19:46:50
3	Pb 220.353†	-73.0	-2.2	-0.2443 ug/L	-0.2443 ppb	19:46:50
3	S 181.975 Axial†	47.2	2.0	2.5917 ug/L	2.5917 ppb	19:46:50
3	Sb 206.836†	32.7	6.0	1.8520 ug/L	1.8520 ppb	19:46:50
3	Se 196.026†	-19.9	1.8	1.0502 ug/L	1.0502 ppb	19:46:50
3	Si 251.611†	605.2	78.0	2.2769 ug/L	2.2769 ppb	19:46:50
3	Sn 189.927†	7.1	1.9	0.3027 ug/L	0.3027 ppb	19:46:50
3	Ti 334.940†	-1023.2	150.7	0.2348 ug/L	0.2348 ppb	19:46:30
3	Tl 190.801†	-37.7	-0.8	-0.2046 ug/L	-0.2046 ppb	19:46:50
3	U 409.014†	-2334.3	153.8	4.2567 ug/L	4.2567 ppb	19:46:30
3	V 292.402†	-1379.8	5.3	0.0425 ug/L	0.0425 ppb	19:46:30
3	Zn 213.857†	763.5	133.1	1.1266 ug/L	1.1266 ppb	19:46:50
3	SiO2†	610.5	115.2	7.2150 ug/L	7.2150 ppb	19:47:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	879123.9	97.537	%	0.1630				0.17%
Sc Radial	5789.1	102	%	1.2				1.16%
Y 371.029	747214.2	99.391	%	0.4200				0.42%
Y RADIAL	6219.3	102.0	%	1.31				1.28%
Ag 328.068†	100.9	0.4531	ug/L	0.07175	0.4531	ppb	0.07175	15.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.2	-5.0972	ug/L	9.08986	-5.0972	ppb	9.08986	178.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.4	0.5454	ug/L	1.36210	0.5454	ppb	1.36210	249.76%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	232.5	4.7225	ug/L	0.38845	4.7225	ppb	0.38845	8.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.2	0.1040	ug/L	0.00696	0.1040	ppb	0.00696	6.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	136.7	0.0487	ug/L	0.01773	0.0487	ppb	0.01773	36.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.7	8.4568	ug/L	1.61825	8.4568	ppb	1.61825	19.14%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.3      0.0830 ug/L       0.05900      0.0830 ppb        0.05900  71.11%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 7.2      0.1316 ug/L       0.10708      0.1316 ppb        0.10708  81.39%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.6     -0.1295 ug/L       0.08549     -0.1295 ppb        0.08549  66.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                10.0      0.0289 ug/L       0.20572      0.0289 ppb        0.20572 711.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.9      17.142 ug/L       12.0059      17.142 ppb        12.0059  70.04%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          47.4      8.2900 ug/L      12.01432      8.2900 ppb       12.01432 144.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.3      47.555 ug/L       67.3882      47.555 ppb        67.3882 141.70%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -1.9     -0.0011 ug/L       0.01693     -0.0011 ppb        0.01693 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.2     -0.0745 ug/L       0.12796     -0.0745 ppb        0.12796 171.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         15.1      4.8422 ug/L       8.14497      4.8422 ppb        8.14497 168.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                12.8      0.2884 ug/L       0.20357      0.2884 ppb        0.20357  70.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.8     -3.1959 ug/L       3.50212     -3.1959 ppb        3.50212 109.58%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 5.8      0.6286 ug/L       1.00711      0.6286 ppb        1.00711 160.22%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.1     -4.0647 ug/L       6.66606     -4.0647 ppb        6.66606 164.00%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.3      1.6224 ug/L       1.42088      1.6224 ppb        1.42088  87.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.2     -2.8370 ug/L       3.37950     -2.8370 ppb        3.37950 119.12%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                80.6      2.3532 ug/L       0.25921      2.3532 ppb        0.25921  11.02%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -3.2     -0.5017 ug/L       0.86762     -0.5017 ppb        0.86762 172.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -36.5     -0.2254 ug/L       0.11888     -0.2254 ppb        0.11888  52.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               130.8      0.2041 ug/L       0.02692      0.2041 ppb        0.02692  13.19%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.3      0.3437 ug/L       0.47583      0.3437 ppb        0.47583 138.45%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                119.0      3.2925 ug/L       1.73802      3.2925 ppb        1.73802  52.79%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 53.3      0.3501 ug/L       0.27220      0.3501 ppb        0.27220  77.75%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               132.1      1.1150 ug/L       0.08956      1.1150 ppb        0.08956   8.03%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     127.1      7.9635 ug/L       0.68205      7.9635 ppb        0.68205   8.56%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 31
Sample ID: 241419003|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 12/7/2009 19:49:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419003|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5709.0	5709.0	100	%			19:51:29
1	Y RADIAL	7158.3	7158.3	117.4	%			19:51:29
1	Al 396.153Radial†	94618.8	94187.2	66889	ug/L	66889	ppb	19:51:09
1	Ca 317.933Radial†	10295.7	10229.5	15245	ug/L	15245	ppb	19:51:09
1	Fe 238.204 Radial†	6042.1	6007.2	55386	ug/L	55386	ppb	19:51:29
1	K 766.490 Radial†	47694.4	45251.3	7908.5	ug/L	7908.5	ppb	19:51:09
1	Mg 279.077 IEC†	348.3	346.4	12252	ug/L	12252	ppb	19:51:29
1	Na 589.592 Radial†	13949.4	14964.7	4814.3	ug/L	4814.3	ppb	19:51:09
1	Sr 421.552†	18384.7	18289.4	112.66	ug/L	112.66	ppb	19:51:09
1	Sc 361.383	914637.4	914637.4	101.48	%			19:52:26
1	Y 371.029	885252.6	885252.6	117.75	%			19:52:26
1	Ag 328.068†	-3709.9	-3970.8	0.1482	ug/L	0.1482	ppb	19:52:26
1	As 188.979†	-38.1	-13.2	10.717	ug/L	10.717	ppb	19:52:46
1	B 249.677†	325.6	939.9	11.710	ug/L	11.710	ppb	19:52:26
1	Ba 233.527†	63095.8	62194.1	451.42	ug/L	451.42	ppb	19:52:26
1	Be 313.107†	11514.5	16618.9	7.5387	ug/L	7.5387	ppb	19:52:26
1	Cd 226.502†	417.2	617.2	0.7929	ug/L	0.7929	ppb	19:52:46
1	Co 228.616†	846.7	908.5	14.254	ug/L	14.254	ppb	19:52:46
1	Cr 267.716†	5233.3	5076.3	53.301	ug/L	53.301	ppb	19:52:46
1	Cu 324.752†	23973.8	16753.9	49.783	ug/L	49.783	ppb	19:52:26
1	Mn 257.610†	993890.7	978925.4	1022.7	ug/L	1022.7	ppb	19:52:26
1	Mo 202.031†	3.0	-23.8	2.4500	ug/L	2.4500	ppb	19:52:46
1	Ni 231.604†	2352.6	2227.5	50.120	ug/L	50.120	ppb	19:52:46
1	P 214.914†	2153.1	1896.9	1013.5	ug/L	1013.5	ppb	19:52:46
1	Pb 220.353†	276.7	345.4	48.199	ug/L	48.199	ppb	19:52:46
1	S 181.975 Axial†	95.3	47.4	49.709	ug/L	49.709	ppb	19:52:46
1	Sb 206.836†	51.5	23.2	2.4885	ug/L	2.4885	ppb	19:52:46
1	Se 196.026†	-356.6	-329.1	2.0201	ug/L	2.0201	ppb	19:52:46
1	Si 251.611†	1334162.3	1314192.9	38372	ug/L	38372	ppb	19:52:26
1	Sn 189.927†	-103.3	-107.2	-14.670	ug/L	-14.670	ppb	19:52:46
1	Ti 334.940†	548642.8	541855.4	850.52	ug/L	850.52	ppb	19:52:26
1	Tl 190.801†	-84.8	-45.6	1.7115	ug/L	1.7115	ppb	19:52:46
1	U 409.014†	-6792.9	-4143.7	-121.79	ug/L	-121.79	ppb	19:52:26
1	V 292.402†	11739.9	12990.8	75.109	ug/L	75.109	ppb	19:52:26
1	Zn 213.857†	24083.5	23082.1	189.60	ug/L	189.60	ppb	19:52:26
1	SiO2†	1359045.6	1338745.7	83874	ug/L	83874	ppb	19:53:44
2	Sc Radial	5627.4	5627.4	99.0	%			19:51:54
2	Y RADIAL	7067.0	7067.0	115.9	%			19:51:54
2	Al 396.153Radial†	93658.4	94582.1	67169	ug/L	67169	ppb	19:51:34
2	Ca 317.933Radial†	10206.6	10288.1	15332	ug/L	15332	ppb	19:51:34
2	Fe 238.204 Radial†	6014.7	6066.7	55935	ug/L	55935	ppb	19:51:54
2	K 766.490 Radial†	47154.0	45393.6	7933.4	ug/L	7933.4	ppb	19:51:34
2	Mg 279.077 IEC†	349.0	352.1	12455	ug/L	12455	ppb	19:51:54
2	Na 589.592 Radial†	13676.7	14890.6	4790.5	ug/L	4790.5	ppb	19:51:34
2	Sr 421.552†	18156.4	18324.1	112.88	ug/L	112.88	ppb	19:51:34
2	Sc 361.383	902635.3	902635.3	100.15	%			19:52:52
2	Y 371.029	875247.0	875247.0	116.42	%			19:52:52
2	Ag 328.068†	-3609.6	-3919.2	0.5505	ug/L	0.5505	ppb	19:52:52
2	As 188.979†	-21.9	2.6	16.751	ug/L	16.751	ppb	19:53:12
2	B 249.677†	291.2	909.9	11.027	ug/L	11.027	ppb	19:52:52
2	Ba 233.527†	62582.6	62508.3	453.71	ug/L	453.71	ppb	19:52:52
2	Be 313.107†	11364.1	16619.6	7.5372	ug/L	7.5372	ppb	19:52:52
2	Cd 226.502†	422.0	627.5	0.8430	ug/L	0.8430	ppb	19:53:12
2	Co 228.616†	838.7	911.5	14.303	ug/L	14.303	ppb	19:53:12
2	Cr 267.716†	5259.6	5171.1	54.284	ug/L	54.284	ppb	19:53:12
2	Cu 324.752†	23531.4	16626.2	49.453	ug/L	49.453	ppb	19:52:52
2	Mn 257.610†	983400.7	981473.7	1025.4	ug/L	1025.4	ppb	19:52:52
2	Mo 202.031†	-5.7	-32.5	1.9463	ug/L	1.9463	ppb	19:53:12
2	Ni 231.604†	2366.0	2271.7	51.116	ug/L	51.116	ppb	19:53:12

2	P 214.914†	2167.2	1939.1	1036.4	ug/L	1036.4 ppb	19:53:12
2	Pb 220.353†	282.5	354.9	49.252	ug/L	49.252 ppb	19:53:12
2	S 181.975 Axial†	100.8	54.2	58.640	ug/L	58.640 ppb	19:53:12
2	Sb 206.836†	49.1	21.4	1.9016	ug/L	1.9016 ppb	19:53:12
2	Se 196.026†	-357.4	-334.5	0.7333	ug/L	0.7333 ppb	19:53:12
2	Si 251.611†	1316629.4	1314167.2	38372	ug/L	38372 ppb	19:52:52
2	Sn 189.927†	-107.3	-112.6	-15.513	ug/L	-15.513 ppb	19:53:12
2	Ti 334.940†	540882.7	541295.5	849.64	ug/L	849.64 ppb	19:52:52
2	Tl 190.801†	-92.2	-54.1	-0.5728	ug/L	-0.5728 ppb	19:53:12
2	U 409.014†	-6759.5	-4199.4	-123.40	ug/L	-123.40 ppb	19:52:52
2	V 292.402†	11498.4	12903.4	74.452	ug/L	74.452 ppb	19:52:52
2	Zn 213.857†	23933.0	23247.5	190.94	ug/L	190.94 ppb	19:52:52
2	SiO2†	1358416.1	1355924.8	84950	ug/L	84950 ppb	19:53:50
3	Sc Radial	5611.4	5611.4	98.8	%		19:52:19
3	Y RADIAL	7069.0	7069.0	115.9	%		19:52:19
3	Al 396.153Radial†	94260.6	95462.5	67794	ug/L	67794 ppb	19:51:59
3	Ca 317.933Radial†	10209.6	10320.6	15380	ug/L	15380 ppb	19:51:59
3	Fe 238.204 Radial†	6008.4	6077.7	56037	ug/L	56037 ppb	19:52:19
3	K 766.490 Radial†	47211.3	45587.8	7967.5	ug/L	7967.5 ppb	19:51:59
3	Mg 279.077 IEC†	348.6	352.7	12475	ug/L	12475 ppb	19:52:19
3	Na 589.592 Radial†	13732.1	14986.2	4821.2	ug/L	4821.2 ppb	19:51:59
3	Sr 421.552†	18282.3	18504.0	113.98	ug/L	113.98 ppb	19:51:59
3	Sc 361.383	917855.1	917855.1	101.83	%		19:53:18
3	Y 371.029	887636.2	887636.2	118.07	%		19:53:18
3	Ag 328.068†	-3717.6	-3965.6	0.3822	ug/L	0.3822 ppb	19:53:18
3	As 188.979†	-24.5	0.3	15.937	ug/L	15.937 ppb	19:53:38
3	B 249.677†	369.3	981.7	12.473	ug/L	12.473 ppb	19:53:18
3	Ba 233.527†	63467.0	62340.7	452.51	ug/L	452.51 ppb	19:53:18
3	Be 313.107†	11507.3	16572.0	7.5236	ug/L	7.5236 ppb	19:53:18
3	Cd 226.502†	419.8	618.3	0.7389	ug/L	0.7389 ppb	19:53:38
3	Co 228.616†	851.6	910.3	14.275	ug/L	14.275 ppb	19:53:38
3	Cr 267.716†	5222.5	5047.6	53.020	ug/L	53.020 ppb	19:53:38
3	Cu 324.752†	24089.4	16784.6	49.902	ug/L	49.902 ppb	19:53:18
3	Mn 257.610†	999023.2	980531.9	1024.4	ug/L	1024.4 ppb	19:53:18
3	Mo 202.031†	-7.7	-34.4	1.8361	ug/L	1.8361 ppb	19:53:38
3	Ni 231.604†	2362.8	2229.3	50.162	ug/L	50.162 ppb	19:53:38
3	P 214.914†	2155.2	1891.5	1010.3	ug/L	1010.3 ppb	19:53:38
3	Pb 220.353†	279.5	347.2	48.546	ug/L	48.546 ppb	19:53:38
3	S 181.975 Axial†	99.4	51.1	54.443	ug/L	54.443 ppb	19:53:38
3	Sb 206.836†	58.8	30.1	4.5981	ug/L	4.5981 ppb	19:53:38
3	Se 196.026†	-359.1	-330.3	3.5477	ug/L	3.5477 ppb	19:53:38
3	Si 251.611†	1341217.6	1316512.1	38440	ug/L	38440 ppb	19:53:18
3	Sn 189.927†	-109.8	-113.3	-15.608	ug/L	-15.608 ppb	19:53:38
3	Ti 334.940†	551043.2	542317.2	851.25	ug/L	851.25 ppb	19:53:18
3	Tl 190.801†	-90.6	-51.0	0.2906	ug/L	0.2906 ppb	19:53:38
3	U 409.014†	-6967.9	-4292.1	-125.98	ug/L	-125.98 ppb	19:53:18
3	V 292.402†	11862.2	13070.3	75.514	ug/L	75.514 ppb	19:53:18
3	Zn 213.857†	24232.7	23145.4	190.07	ug/L	190.07 ppb	19:53:18
3	SiO2†	1361650.5	1336608.7	83740	ug/L	83740 ppb	19:53:56

Mean Data: 241419003|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911709.2	101.15	%	0.890				0.88%
Sc Radial	5649.3	99.4	%	0.92				0.93%
Y 371.029	882711.9	117.41	%	0.874				0.74%
Y RADIAL	7098.1	116.4	%	0.85				0.73%
Ag 328.068†	-3951.9	0.3603	ug/L	0.20205	0.3603	ppb	0.20205	56.08%
Al 396.153Radial†	94743.9	67284	ug/L	463.7	67284	ppb	463.7	0.69%
As 188.979†	-3.4	14.469	ug/L	3.2740	14.469	ppb	3.2740	22.63%
B 249.677†	943.9	11.737	ug/L	0.7232	11.737	ppb	0.7232	6.16%
Ba 233.527†	62347.7	452.55	ug/L	1.145	452.55	ppb	1.145	0.25%
Be 313.107†	16603.5	7.5332	ug/L	0.00835	7.5332	ppb	0.00835	0.11%
Ca 317.933Radial†	10279.4	15319	ug/L	68.8	15319	ppb	68.8	0.45%
Cd 226.502†	621.0	0.7916	ug/L	0.05204	0.7916	ppb	0.05204	6.57%
Co 228.616†	910.1	14.277	ug/L	0.0248	14.277	ppb	0.0248	0.17%
Cr 267.716†	5098.3	53.535	ug/L	0.6634	53.535	ppb	0.6634	1.24%
Cu 324.752†	16721.6	49.713	ug/L	0.2326	49.713	ppb	0.2326	0.47%
Fe 238.204 Radial†	6050.5	55786	ug/L	349.8	55786	ppb	349.8	0.63%
K 766.490 Radial†	45410.9	7936.5	ug/L	29.59	7936.5	ppb	29.59	0.37%

Mg 279.077 IEC†	350.4	12394	ug/L	123.3	12394	ppb	123.3	0.99%
Mn 257.610†	980310.3	1024.1	ug/L	1.37	1024.1	ppb	1.37	0.13%
Mo 202.031†	-30.2	2.0775	ug/L	0.32732	2.0775	ppb	0.32732	15.76%
Na 589.592 Radial†	14947.2	4808.7	ug/L	16.14	4808.7	ppb	16.14	0.34%
Ni 231.604†	2242.8	50.466	ug/L	0.5636	50.466	ppb	0.5636	1.12%
P 214.914†	1909.2	1020.0	ug/L	14.26	1020.0	ppb	14.26	1.40%
Pb 220.353†	349.2	48.666	ug/L	0.5364	48.666	ppb	0.5364	1.10%
S 181.975 Axial†	50.9	54.264	ug/L	4.4682	54.264	ppb	4.4682	8.23%
Sb 206.836†	24.9	2.9961	ug/L	1.41810	2.9961	ppb	1.41810	47.33%
Se 196.026†	-331.3	2.1004	ug/L	1.40892	2.1004	ppb	1.40892	67.08%
Si 251.611†	1314957.4	38395	ug/L	39.3	38395	ppb	39.3	0.10%
Sn 189.927†	-111.0	-15.264	ug/L	0.5162	-15.264	ppb	0.5162	3.38%
Sr 421.552†	18372.5	113.17	ug/L	0.710	113.17	ppb	0.710	0.63%
Ti 334.940†	541822.7	850.47	ug/L	0.804	850.47	ppb	0.804	0.09%
Tl 190.801†	-50.2	0.4764	ug/L	1.15340	0.4764	ppb	1.15340	242.09%
U 409.014†	-4211.8	-123.72	ug/L	2.114	-123.72	ppb	2.114	1.71%
V 292.402†	12988.2	75.025	ug/L	0.5361	75.025	ppb	0.5361	0.71%
Zn 213.857†	23158.3	190.20	ug/L	0.678	190.20	ppb	0.678	0.36%
SiO2†	1343759.7	84188	ug/L	663.5	84188	ppb	663.5	0.79%

Sequence No.: 32
Sample ID: 241419004|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 12/7/2009 19:56:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419004|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5762.2	5762.2	101	%			19:58:20
1	Y RADIAL	6989.6	6989.6	114.6	%			19:58:20
1	Al 396.153Radial†	172654.5	170263.8	120920	ug/L	120920	ppb	19:58:00
1	Ca 317.933Radial†	20294.7	19994.3	29797	ug/L	29797	ppb	19:58:00
1	Fe 238.204 Radial†	10402.3	10251.0	94515	ug/L	94515	ppb	19:58:00
1	K 766.490 Radial†	73191.3	69954.0	12215	ug/L	12215	ppb	19:58:00
1	Mg 279.077 IEC†	551.2	543.2	19206	ug/L	19206	ppb	19:58:20
1	Na 589.592 Radial†	16916.4	17762.2	5714.3	ug/L	5714.3	ppb	19:58:00
1	Sr 421.552†	46456.4	45800.2	282.21	ug/L	282.21	ppb	19:58:00
1	Sc 361.383	911207.0	911207.0	101.10	%			19:59:17
1	Y 371.029	846658.3	846658.3	112.62	%			19:59:17
1	Ag 328.068†	-6226.4	-6473.8	1.5917	ug/L	1.5917	ppb	19:59:22
1	As 188.979†	-34.6	-9.8	28.642	ug/L	28.642	ppb	19:59:43
1	B 249.677†	1090.3	1697.6	21.859	ug/L	21.859	ppb	19:59:22
1	Ba 233.527†	150999.9	149378.4	1082.7	ug/L	1082.7	ppb	19:59:22
1	Be 313.107†	11958.3	17100.6	10.193	ug/L	10.193	ppb	19:59:22
1	Cd 226.502†	816.9	1014.0	0.9557	ug/L	0.9557	ppb	19:59:43
1	Co 228.616†	2054.7	2106.5	33.259	ug/L	33.259	ppb	19:59:43
1	Cr 267.716†	8245.5	8075.2	84.946	ug/L	84.946	ppb	19:59:22
1	Cu 324.752†	26953.7	19790.4	60.289	ug/L	60.289	ppb	19:59:22
1	Mn 257.610†	2616946.7	2588057.3	2698.8	ug/L	2698.8	ppb	19:59:17
1	Mo 202.031†	-35.3	-61.7	2.8635	ug/L	2.8635	ppb	19:59:43
1	Ni 231.604†	4145.3	4009.5	90.211	ug/L	90.211	ppb	19:59:43
1	P 214.914†	1172.5	934.8	469.68	ug/L	469.68	ppb	19:59:43
1	Pb 220.353†	694.2	759.4	102.38	ug/L	102.38	ppb	19:59:43
1	S 181.975 Axial†	377.9	327.3	410.09	ug/L	410.09	ppb	19:59:43
1	Sb 206.836†	52.1	23.9	-2.3236	ug/L	-2.3236	ppb	19:59:43
1	Se 196.026†	-573.9	-545.4	13.760	ug/L	13.760	ppb	19:59:43
1	Si 251.611†	1484207.9	1467559.9	42849	ug/L	42849	ppb	19:59:17
1	Sn 189.927†	-140.5	-144.4	-18.509	ug/L	-18.509	ppb	19:59:43
1	Ti 334.940†	1361504.1	1347932.0	2115.3	ug/L	2115.3	ppb	19:59:17
1	Tl 190.801†	-156.4	-116.8	3.1606	ug/L	3.1606	ppb	19:59:43
1	U 409.014†	-10384.2	-7721.3	-225.82	ug/L	-225.82	ppb	19:59:22
1	V 292.402†	22260.7	23441.0	135.62	ug/L	135.62	ppb	19:59:22
1	Zn 213.857†	32614.2	31609.6	257.65	ug/L	257.65	ppb	19:59:22
1	SiO2†	1504180.1	1487347.3	93181	ug/L	93181	ppb	20:00:51
2	Sc Radial	5776.7	5776.7	102	%			19:58:45
2	Y RADIAL	6976.1	6976.1	114.4	%			19:58:45
2	Al 396.153Radial†	176656.2	173771.4	123410	ug/L	123410	ppb	19:58:25
2	Ca 317.933Radial†	20699.1	20341.8	30314	ug/L	30314	ppb	19:58:25
2	Fe 238.204 Radial†	10660.9	10479.5	96622	ug/L	96622	ppb	19:58:25
2	K 766.490 Radial†	74813.7	71368.1	12462	ug/L	12462	ppb	19:58:25
2	Mg 279.077 IEC†	544.8	535.6	18933	ug/L	18933	ppb	19:58:45
2	Na 589.592 Radial†	17361.3	18157.7	5841.5	ug/L	5841.5	ppb	19:58:25
2	Sr 421.552†	47621.1	46830.5	288.56	ug/L	288.56	ppb	19:58:25
2	Sc 361.383	915728.9	915728.9	101.60	%			19:59:48
2	Y 371.029	851824.4	851824.4	113.31	%			19:59:48
2	Ag 328.068†	-6344.8	-6559.9	1.8686	ug/L	1.8686	ppb	19:59:54
2	As 188.979†	-42.2	-17.2	26.163	ug/L	26.163	ppb	20:00:14
2	B 249.677†	1135.3	1736.5	22.370	ug/L	22.370	ppb	19:59:54
2	Ba 233.527†	152232.3	149853.9	1086.2	ug/L	1086.2	ppb	19:59:54
2	Be 313.107†	12081.7	17163.6	10.209	ug/L	10.209	ppb	19:59:54
2	Cd 226.502†	797.3	990.8	0.5080	ug/L	0.5080	ppb	20:00:14
2	Co 228.616†	2078.7	2120.1	33.487	ug/L	33.487	ppb	20:00:14
2	Cr 267.716†	8357.3	8144.9	85.699	ug/L	85.699	ppb	19:59:54
2	Cu 324.752†	27227.9	19928.6	60.784	ug/L	60.784	ppb	19:59:54
2	Mn 257.610†	2624050.1	2582266.4	2693.0	ug/L	2693.0	ppb	19:59:48
2	Mo 202.031†	-29.6	-55.9	3.3725	ug/L	3.3725	ppb	20:00:14
2	Ni 231.604†	4180.5	4023.9	90.536	ug/L	90.536	ppb	20:00:14

2	P 214.914†	1207.5	963.6	484.56 ug/L	484.56 ppb	20:00:14
2	Pb 220.353†	713.2	774.7	104.43 ug/L	104.43 ppb	20:00:14
2	S 181.975 Axial†	369.7	317.4	396.51 ug/L	396.51 ppb	20:00:14
2	Sb 206.836†	61.5	32.9	0.4144 ug/L	0.4144 ppb	20:00:14
2	Se 196.026†	-576.0	-544.7	21.238 ug/L	21.238 ppb	20:00:14
2	Si 251.611†	1487217.8	1463272.8	42724 ug/L	42724 ppb	19:59:48
2	Sn 189.927†	-139.7	-142.9	-18.193 ug/L	-18.193 ppb	20:00:14
2	Ti 334.940†	1366130.5	1345835.3	2112.1 ug/L	2112.1 ppb	19:59:48
2	Tl 190.801†	-154.5	-114.1	3.8873 ug/L	3.8873 ppb	20:00:14
2	U 409.014†	-10266.8	-7555.0	-221.48 ug/L	-221.48 ppb	19:59:54
2	V 292.402†	22438.3	23507.1	135.74 ug/L	135.74 ppb	19:59:54
2	Zn 213.857†	32999.2	31829.3	259.32 ug/L	259.32 ppb	19:59:54
2	SiO2†	1512862.8	1488546.1	93256 ug/L	93256 ppb	20:00:57
3	Sc Radial	5786.7	5786.7	102 %		19:59:10
3	Y RADIAL	6992.2	6992.2	114.7 %		19:59:10
3	Al 396.153Radial†	172833.6	169717.1	120530 ug/L	120530 ppb	19:58:50
3	Ca 317.933Radial†	20284.2	19899.1	29655 ug/L	29655 ppb	19:58:50
3	Fe 238.204 Radial†	10415.7	10220.6	94235 ug/L	94235 ppb	19:58:50
3	K 766.490 Radial†	73334.0	69787.8	12186 ug/L	12186 ppb	19:58:50
3	Mg 279.077 IEC†	552.4	542.1	19166 ug/L	19166 ppb	19:59:10
3	Na 589.592 Radial†	16999.6	17773.0	5717.8 ug/L	5717.8 ppb	19:58:50
3	Sr 421.552†	46498.4	45647.1	281.26 ug/L	281.26 ppb	19:58:50
3	Sc 361.383	923304.5	923304.5	102.44 %		20:00:19
3	Y 371.029	856975.0	856975.0	113.99 %		20:00:19
3	Ag 328.068†	-6274.1	-6439.7	1.6501 ug/L	1.6501 ppb	20:00:25
3	As 188.979†	-21.9	3.0	33.471 ug/L	33.471 ppb	20:00:45
3	B 249.677†	1157.2	1748.8	22.937 ug/L	22.937 ppb	20:00:25
3	Ba 233.527†	152198.0	148591.0	1077.0 ug/L	1077.0 ppb	20:00:25
3	Be 313.107†	12162.5	17145.0	10.212 ug/L	10.212 ppb	20:00:25
3	Cd 226.502†	810.1	996.8	0.8076 ug/L	0.8076 ppb	20:00:45
3	Co 228.616†	2069.6	2094.4	33.034 ug/L	33.034 ppb	20:00:45
3	Cr 267.716†	8345.0	8065.4	84.838 ug/L	84.838 ppb	20:00:25
3	Cu 324.752†	27159.3	19641.8	59.859 ug/L	59.859 ppb	20:00:25
3	Mn 257.610†	2653956.7	2590269.7	2701.0 ug/L	2701.0 ppb	20:00:19
3	Mo 202.031†	-40.5	-66.3	2.5556 ug/L	2.5556 ppb	20:00:45
3	Ni 231.604†	4166.9	3976.8	89.476 ug/L	89.476 ppb	20:00:45
3	P 214.914†	1191.9	938.6	471.92 ug/L	471.92 ppb	20:00:45
3	Pb 220.353†	709.8	765.7	102.99 ug/L	102.99 ppb	20:00:45
3	S 181.975 Axial†	377.5	322.1	403.20 ug/L	403.20 ppb	20:00:45
3	Sb 206.836†	61.2	32.2	0.2276 ug/L	0.2276 ppb	20:00:45
3	Se 196.026†	-581.5	-545.3	12.820 ug/L	12.820 ppb	20:00:45
3	Si 251.611†	1505748.3	1469351.6	42902 ug/L	42902 ppb	20:00:19
3	Sn 189.927†	-134.6	-136.8	-17.332 ug/L	-17.332 ppb	20:00:45
3	Ti 334.940†	1380716.3	1349041.3	2117.1 ug/L	2117.1 ppb	20:00:19
3	Tl 190.801†	-167.6	-125.7	0.7693 ug/L	0.7693 ppb	20:00:45
3	U 409.014†	-10347.7	-7551.0	-221.07 ug/L	-221.07 ppb	20:00:25
3	V 292.402†	22464.1	23351.0	135.08 ug/L	135.08 ppb	20:00:25
3	Zn 213.857†	32936.1	31501.2	256.77 ug/L	256.77 ppb	20:00:25
3	SiO2†	1502624.4	1466333.9	91865 ug/L	91865 ppb	20:01:03

Mean Data: 241419004|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916746.8	101.71	%	0.678				0.67%
Sc Radial	5775.2	102	%	0.2				0.21%
Y 371.029	851819.2	113.30	%	0.686				0.61%
Y RADIAL	6986.0	114.6	%	0.14				0.12%
Ag 328.068†	-6491.1	1.7035	ug/L	0.14597	1.7035	ppb	0.14597	8.57%
Al 396.153Radial†	171250.8	121620	ug/L	1562.3	121620	ppb	1562.3	1.28%
As 188.979†	-8.0	29.425	ug/L	3.7162	29.425	ppb	3.7162	12.63%
B 249.677†	1727.6	22.389	ug/L	0.5393	22.389	ppb	0.5393	2.41%
Ba 233.527†	149274.4	1082.0	ug/L	4.65	1082.0	ppb	4.65	0.43%
Be 313.107†	17136.4	10.205	ug/L	0.0102	10.205	ppb	0.0102	0.10%
Ca 317.933Radial†	20078.4	29922	ug/L	347.3	29922	ppb	347.3	1.16%
Cd 226.502†	1000.6	0.7571	ug/L	0.22809	0.7571	ppb	0.22809	30.13%
Co 228.616†	2107.0	33.260	ug/L	0.2263	33.260	ppb	0.2263	0.68%
Cr 267.716†	8095.2	85.161	ug/L	0.4690	85.161	ppb	0.4690	0.55%
Cu 324.752†	19786.9	60.311	ug/L	0.4632	60.311	ppb	0.4632	0.77%
Fe 238.204 Radial†	10317.1	95124	ug/L	1304.7	95124	ppb	1304.7	1.37%
K 766.490 Radial†	70370.0	12288	ug/L	152.1	12288	ppb	152.1	1.24%

Mg 279.077 IEC†	540.3	19102	ug/L	147.5	19102	ppb	147.5	0.77%
Mn 257.610†	2586864.5	2697.6	ug/L	4.16	2697.6	ppb	4.16	0.15%
Mo 202.031†	-61.3	2.9305	ug/L	0.41255	2.9305	ppb	0.41255	14.08%
Na 589.592 Radial†	17897.6	5757.9	ug/L	72.49	5757.9	ppb	72.49	1.26%
Ni 231.604†	4003.4	90.074	ug/L	0.5431	90.074	ppb	0.5431	0.60%
P 214.914†	945.7	475.39	ug/L	8.023	475.39	ppb	8.023	1.69%
Pb 220.353†	766.6	103.27	ug/L	1.055	103.27	ppb	1.055	1.02%
S 181.975 Axial†	322.3	403.27	ug/L	6.789	403.27	ppb	6.789	1.68%
Sb 206.836†	29.7	-0.5605	ug/L	1.52973	-0.5605	ppb	1.52973	272.92%
Se 196.026†	-545.1	15.939	ug/L	4.6125	15.939	ppb	4.6125	28.94%
Si 251.611†	1466728.1	42825	ug/L	91.3	42825	ppb	91.3	0.21%
Sn 189.927†	-141.4	-18.011	ug/L	0.6092	-18.011	ppb	0.6092	3.38%
Sr 421.552†	46092.6	284.01	ug/L	3.966	284.01	ppb	3.966	1.40%
Ti 334.940†	1347602.9	2114.8	ug/L	2.54	2114.8	ppb	2.54	0.12%
Tl 190.801†	-118.9	2.6057	ug/L	1.63139	2.6057	ppb	1.63139	62.61%
U 409.014†	-7609.1	-222.79	ug/L	2.631	-222.79	ppb	2.631	1.18%
V 292.402†	23433.0	135.48	ug/L	0.352	135.48	ppb	0.352	0.26%
Zn 213.857†	31646.7	257.91	ug/L	1.297	257.91	ppb	1.297	0.50%
SiO2†	1480742.4	92767	ug/L	782.6	92767	ppb	782.6	0.84%

Sequence No.: 33
Sample ID: 241419005|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 12/7/2009 20:03:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419005|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5886.5	5886.5	104	%			20:05:26
1	Y RADIAL	6825.9	6825.9	111.9	%			20:05:26
1	Al 396.153Radial†	212930.4	205543.3	145970	ug/L	145970	ppb	20:05:06
1	Ca 317.933Radial†	21252.0	20495.7	30544	ug/L	30544	ppb	20:05:06
1	Fe 238.204 Radial†	16911.8	16317.4	150450	ug/L	150450	ppb	20:05:06
1	K 766.490 Radial†	74797.0	69979.7	12221	ug/L	12221	ppb	20:05:06
1	Mg 279.077 IEC†	765.7	738.8	26104	ug/L	26104	ppb	20:05:26
1	Na 589.592 Radial†	4913.0	5824.1	1873.7	ug/L	1873.7	ppb	20:05:06
1	Sr 421.552†	48103.3	46422.4	286.04	ug/L	286.04	ppb	20:05:06
1	Sc 361.383	923950.3	923950.3	102.51	%			20:06:25
1	Y 371.029	824183.3	824183.3	109.63	%			20:06:25
1	Ag 328.068†	-10219.0	-10283.6	2.9783	ug/L	2.9783	ppb	20:06:25
1	As 188.979†	-16.9	7.9	44.967	ug/L	44.967	ppb	20:06:45
1	B 249.677†	1463.7	2047.0	21.495	ug/L	21.495	ppb	20:06:25
1	Ba 233.527†	151253.0	147565.4	1072.0	ug/L	1072.0	ppb	20:06:25
1	Be 313.107†	10488.1	15503.3	9.8532	ug/L	9.8532	ppb	20:06:25
1	Cd 226.502†	1411.8	1583.2	1.1570	ug/L	1.1570	ppb	20:06:45
1	Co 228.616†	3047.2	3046.6	49.437	ug/L	49.437	ppb	20:06:45
1	Cr 267.716†	11314.7	10956.8	115.79	ug/L	115.79	ppb	20:06:45
1	Cu 324.752†	35132.5	27401.1	84.474	ug/L	84.474	ppb	20:06:25
1	Mn 257.610†	3031047.5	2956313.6	3086.9	ug/L	3086.9	ppb	20:06:25
1	Mo 202.031†	-143.5	-166.8	0.2910	ug/L	0.2910	ppb	20:06:45
1	Ni 231.604†	3153.9	2985.8	67.162	ug/L	67.162	ppb	20:06:45
1	P 214.914†	1559.5	1296.4	628.48	ug/L	628.48	ppb	20:06:45
1	Pb 220.353†	971.2	1020.2	131.89	ug/L	131.89	ppb	20:06:45
1	S 181.975 Axial†	431.4	374.4	467.54	ug/L	467.54	ppb	20:06:45
1	Sb 206.836†	58.5	29.4	-1.2729	ug/L	-1.2729	ppb	20:06:45
1	Se 196.026†	-917.1	-872.3	11.089	ug/L	11.089	ppb	20:06:45
1	Si 251.611†	1572665.6	1533602.6	44778	ug/L	44778	ppb	20:06:25
1	Sn 189.927†	-160.3	-161.8	-20.438	ug/L	-20.438	ppb	20:06:45
1	Ti 334.940†	1455031.6	1420594.3	2229.3	ug/L	2229.3	ppb	20:06:25
1	Tl 190.801†	-170.4	-128.3	3.4275	ug/L	3.4275	ppb	20:06:45
1	U 409.014†	-8808.8	-6042.8	-186.44	ug/L	-186.44	ppb	20:06:25
1	V 292.402†	46844.8	47119.2	281.07	ug/L	281.07	ppb	20:06:25
1	Zn 213.857†	32274.6	30833.5	245.62	ug/L	245.62	ppb	20:06:45
1	SiO2†	1601204.8	1561474.6	97826	ug/L	97826	ppb	20:07:47
2	Sc Radial	5903.3	5903.3	104	%			20:05:52
2	Y RADIAL	6850.4	6850.4	112.3	%			20:05:52
2	Al 396.153Radial†	215602.8	207531.4	147380	ug/L	147380	ppb	20:05:32
2	Ca 317.933Radial†	21535.2	20710.0	30863	ug/L	30863	ppb	20:05:32
2	Fe 238.204 Radial†	17114.3	16466.0	151820	ug/L	151820	ppb	20:05:32
2	K 766.490 Radial†	76124.7	71052.4	12409	ug/L	12409	ppb	20:05:32
2	Mg 279.077 IEC†	756.8	728.1	25723	ug/L	25723	ppb	20:05:52
2	Na 589.592 Radial†	5063.9	5955.8	1916.0	ug/L	1916.0	ppb	20:05:32
2	Sr 421.552†	48946.7	47102.2	290.23	ug/L	290.23	ppb	20:05:32
2	Sc 361.383	921583.1	921583.1	102.25	%			20:06:52
2	Y 371.029	821891.4	821891.4	109.32	%			20:06:52
2	Ag 328.068†	-10204.3	-10294.9	3.3714	ug/L	3.3714	ppb	20:06:52
2	As 188.979†	-29.7	-4.7	40.455	ug/L	40.455	ppb	20:07:12
2	B 249.677†	1281.1	1872.0	17.757	ug/L	17.757	ppb	20:06:52
2	Ba 233.527†	151423.2	148110.7	1076.0	ug/L	1076.0	ppb	20:06:52
2	Be 313.107†	10513.5	15554.4	9.8752	ug/L	9.8752	ppb	20:06:52
2	Cd 226.502†	1425.3	1600.0	1.1915	ug/L	1.1915	ppb	20:07:12
2	Co 228.616†	3077.0	3083.4	50.088	ug/L	50.088	ppb	20:07:12
2	Cr 267.716†	11411.2	11079.5	117.08	ug/L	117.08	ppb	20:07:12
2	Cu 324.752†	34977.1	27337.1	84.364	ug/L	84.364	ppb	20:06:52
2	Mn 257.610†	3033937.5	2966735.1	3097.9	ug/L	3097.9	ppb	20:06:52
2	Mo 202.031†	-156.6	-179.9	-0.4295	ug/L	-0.4295	ppb	20:07:12
2	Ni 231.604†	3165.4	3005.0	67.593	ug/L	67.593	ppb	20:07:12

2	P 214.914†	1572.0	1312.6	636.77 ug/L	636.77 ppb	20:07:12
2	Pb 220.353†	979.5	1030.7	133.24 ug/L	133.24 ppb	20:07:12
2	S 181.975 Axial†	423.5	367.7	458.46 ug/L	458.46 ppb	20:07:12
2	Sb 206.836†	51.7	23.0	-3.3093 ug/L	-3.3093 ppb	20:07:12
2	Se 196.026†	-913.3	-870.9	16.436 ug/L	16.436 ppb	20:07:12
2	Si 251.611†	1572500.1	1537381.5	44888 ug/L	44888 ppb	20:06:52
2	Sn 189.927†	-153.8	-155.9	-19.446 ug/L	-19.446 ppb	20:07:12
2	Ti 334.940†	1452628.6	1421890.1	2231.3 ug/L	2231.3 ppb	20:06:52
2	Tl 190.801†	-165.8	-124.2	4.6279 ug/L	4.6279 ppb	20:07:12
2	U 409.014†	-9034.1	-6285.2	-193.33 ug/L	-193.33 ppb	20:06:52
2	V 292.402†	46975.8	47364.7	282.42 ug/L	282.42 ppb	20:06:52
2	Zn 213.857†	32602.6	31235.1	248.90 ug/L	248.90 ppb	20:07:12
2	SiO2†	1594584.0	1559011.5	97672 ug/L	97672 ppb	20:07:54
3	Sc Radial	5860.8	5860.8	103 %		20:06:17
3	Y RADIAL	6795.7	6795.7	111.4 %		20:06:17
3	Al 396.153Radial†	210014.4	203616.4	144600 ug/L	144600 ppb	20:05:57
3	Ca 317.933Radial†	20922.5	20266.1	30202 ug/L	30202 ppb	20:05:57
3	Fe 238.204 Radial†	16627.0	16112.9	148560 ug/L	148560 ppb	20:05:57
3	K 766.490 Radial†	73953.3	69477.9	12133 ug/L	12133 ppb	20:05:57
3	Mg 279.077 IEC†	754.4	731.1	25832 ug/L	25832 ppb	20:06:17
3	Na 589.592 Radial†	4820.5	5755.2	1851.5 ug/L	1851.5 ppb	20:05:57
3	Sr 421.552†	47546.9	46086.3	283.97 ug/L	283.97 ppb	20:05:57
3	Sc 361.383	927344.0	927344.0	102.89 %		20:07:19
3	Y 371.029	825636.2	825636.2	109.82 %		20:07:19
3	Ag 328.068†	-10266.6	-10293.4	2.3482 ug/L	2.3482 ppb	20:07:19
3	As 188.979†	-15.2	9.7	45.373 ug/L	45.373 ppb	20:07:39
3	B 249.677†	1432.2	2011.1	21.017 ug/L	21.017 ppb	20:07:19
3	Ba 233.527†	152310.9	148053.6	1075.5 ug/L	1075.5 ppb	20:07:19
3	Be 313.107†	10672.9	15645.4	9.9100 ug/L	9.9100 ppb	20:07:19
3	Cd 226.502†	1409.9	1576.4	1.2753 ug/L	1.2753 ppb	20:07:39
3	Co 228.616†	3059.5	3047.7	49.480 ug/L	49.480 ppb	20:07:39
3	Cr 267.716†	11335.0	10936.1	115.55 ug/L	115.55 ppb	20:07:39
3	Cu 324.752†	35231.5	27371.9	84.296 ug/L	84.296 ppb	20:07:19
3	Mn 257.610†	3052544.5	2966386.6	3097.2 ug/L	3097.2 ppb	20:07:19
3	Mo 202.031†	-136.7	-159.6	0.6035 ug/L	0.6035 ppb	20:07:39
3	Ni 231.604†	3135.9	2957.0	66.514 ug/L	66.514 ppb	20:07:39
3	P 214.914†	1564.0	1295.2	628.90 ug/L	628.90 ppb	20:07:39
3	Pb 220.353†	969.9	1015.5	131.22 ug/L	131.22 ppb	20:07:39
3	S 181.975 Axial†	423.6	365.2	455.67 ug/L	455.67 ppb	20:07:39
3	Sb 206.836†	60.4	31.1	-0.6816 ug/L	-0.6816 ppb	20:07:39
3	Se 196.026†	-894.0	-846.6	19.315 ug/L	19.315 ppb	20:07:39
3	Si 251.611†	1584909.0	1539888.1	44961 ug/L	44961 ppb	20:07:19
3	Sn 189.927†	-140.0	-141.5	-17.273 ug/L	-17.273 ppb	20:07:39
3	Ti 334.940†	1462595.7	1422751.8	2232.6 ug/L	2232.6 ppb	20:07:19
3	Tl 190.801†	-181.5	-138.4	0.7210 ug/L	0.7210 ppb	20:07:39
3	U 409.014†	-9099.5	-6293.9	-193.15 ug/L	-193.15 ppb	20:07:19
3	V 292.402†	47123.0	47222.4	282.01 ug/L	282.01 ppb	20:07:19
3	Zn 213.857†	32206.0	30651.5	244.27 ug/L	244.27 ppb	20:07:39
3	SiO2†	1584501.0	1539523.4	96451 ug/L	96451 ppb	20:08:01

Mean Data: 241419005|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	924292.5	102.55	%	0.321				0.31%
Sc Radial	5883.5	104	%	0.4				0.36%
Y 371.029	823903.6	109.59	%	0.251				0.23%
Y RADIAL	6824.0	111.9	%	0.45				0.40%
Ag 328.068†	-10290.6	2.8993	ug/L	0.51614	2.8993	ppb	0.51614	17.80%
Al 396.153Radial†	205563.7	145980	ug/L	1390.2	145980	ppb	1390.2	0.95%
As 188.979†	4.3	43.599	ug/L	2.7297	43.599	ppb	2.7297	6.26%
B 249.677†	1976.7	20.090	ug/L	2.0344	20.090	ppb	2.0344	10.13%
Ba 233.527†	147909.9	1074.5	ug/L	2.17	1074.5	ppb	2.17	0.20%
Be 313.107†	15567.7	9.8795	ug/L	0.02866	9.8795	ppb	0.02866	0.29%
Ca 317.933Radial†	20490.6	30536	ug/L	330.8	30536	ppb	330.8	1.08%
Cd 226.502†	1586.6	1.2079	ug/L	0.06084	1.2079	ppb	0.06084	5.04%
Co 228.616†	3059.2	49.668	ug/L	0.3639	49.668	ppb	0.3639	0.73%
Cr 267.716†	10990.8	116.14	ug/L	0.824	116.14	ppb	0.824	0.71%
Cu 324.752†	27370.1	84.378	ug/L	0.0898	84.378	ppb	0.0898	0.11%
Fe 238.204 Radial†	16298.7	150280	ug/L	1634.7	150280	ppb	1634.7	1.09%
K 766.490 Radial†	70170.0	12254	ug/L	140.8	12254	ppb	140.8	1.15%

Mg 279.077 IEC†	732.7	25886	ug/L	196.3	25886	ppb	196.3	0.76%
Mn 257.610†	2963145.1	3094.0	ug/L	6.15	3094.0	ppb	6.15	0.20%
Mo 202.031†	-168.7	0.1550	ug/L	0.52976	0.1550	ppb	0.52976	341.80%
Na 589.592 Radial†	5845.0	1880.4	ug/L	32.80	1880.4	ppb	32.80	1.74%
Ni 231.604†	2982.6	67.090	ug/L	0.5430	67.090	ppb	0.5430	0.81%
P 214.914†	1301.4	631.38	ug/L	4.666	631.38	ppb	4.666	0.74%
Pb 220.353†	1022.1	132.12	ug/L	1.029	132.12	ppb	1.029	0.78%
S 181.975 Axial†	369.1	460.56	ug/L	6.204	460.56	ppb	6.204	1.35%
Sb 206.836†	27.9	-1.7546	ug/L	1.37847	-1.7546	ppb	1.37847	78.56%
Se 196.026†	-863.3	15.613	ug/L	4.1742	15.613	ppb	4.1742	26.73%
Si 251.611†	1536957.4	44876	ug/L	92.4	44876	ppb	92.4	0.21%
Sn 189.927†	-153.1	-19.052	ug/L	1.6189	-19.052	ppb	1.6189	8.50%
Sr 421.552†	46537.0	286.74	ug/L	3.189	286.74	ppb	3.189	1.11%
Ti 334.940†	1421745.4	2231.1	ug/L	1.70	2231.1	ppb	1.70	0.08%
Tl 190.801†	-130.3	2.9255	ug/L	2.00129	2.9255	ppb	2.00129	68.41%
U 409.014†	-6207.3	-190.97	ug/L	3.927	-190.97	ppb	3.927	2.06%
V 292.402†	47235.5	281.84	ug/L	0.693	281.84	ppb	0.693	0.25%
Zn 213.857†	30906.7	246.26	ug/L	2.383	246.26	ppb	2.383	0.97%
SiO2†	1553336.5	97316	ug/L	753.4	97316	ppb	753.4	0.77%

Sequence No.: 34
Sample ID: 241419006|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 12/7/2009 20:10:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419006|925191|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5891.9	5891.9	104	%			20:12:25
1	Y RADIAL	7454.6	7454.6	122.2	%			20:12:25
1	Al 396.153Radial†	180913.7	174481.7	123910	ug/L	123910	ppb	20:12:05
1	Ca 317.933Radial†	34665.2	33411.9	49792	ug/L	49792	ppb	20:12:05
1	Fe 238.204 Radial†	13774.0	13276.7	122410	ug/L	122410	ppb	20:12:25
1	K 766.490 Radial†	85387.9	80127.2	13891	ug/L	13891	ppb	20:12:05
1	Mg 279.077 IEC†	766.6	739.0	26135	ug/L	26135	ppb	20:12:25
1	Na 589.592 Radial†	11486.9	12159.2	3911.7	ug/L	3911.7	ppb	20:12:05
1	Sr 421.552†	68079.0	65643.5	404.41	ug/L	404.41	ppb	20:12:05
1	Sc 361.383	930530.9	930530.9	103.24	%			20:13:30
1	Y 371.029	898627.2	898627.2	119.53	%			20:13:30
1	Ag 328.068†	-8073.3	-8134.8	3.5823	ug/L	3.5823	ppb	20:13:50
1	As 188.979†	3.8	28.1	38.261	ug/L	38.261	ppb	20:13:50
1	B 249.677†	986.1	1574.2	15.537	ug/L	15.537	ppb	20:13:30
1	Ba 233.527†	410963.9	398079.9	2880.2	ug/L	2880.2	ppb	20:13:30
1	Be 313.107†	31921.4	36191.4	14.815	ug/L	14.815	ppb	20:13:30
1	Cd 226.502†	1099.6	1271.2	0.9189	ug/L	0.9189	ppb	20:13:50
1	Co 228.616†	4632.4	4561.1	80.998	ug/L	80.998	ppb	20:13:50
1	Cr 267.716†	9623.0	9240.1	97.745	ug/L	97.745	ppb	20:13:50
1	Cu 324.752†	38756.7	30669.2	92.203	ug/L	92.203	ppb	20:13:30
1	Mn 257.610†	10858554.0	10517189.6	10942	ug/L	10942	ppb	20:13:23
1	Mo 202.031†	-68.9	-93.5	2.8640	ug/L	2.8640	ppb	20:13:50
1	Ni 231.604†	13395.2	12883.9	289.91	ug/L	289.91	ppb	20:13:50
1	P 214.914†	1110.9	851.1	397.15	ug/L	397.15	ppb	20:13:50
1	Pb 220.353†	1114.6	1152.4	143.70	ug/L	143.70	ppb	20:13:50
1	S 181.975 Axial†	582.0	517.3	661.29	ug/L	661.29	ppb	20:13:50
1	Sb 206.836†	56.7	27.3	1.8372	ug/L	1.8372	ppb	20:13:50
1	Se 196.026†	-763.9	-717.7	5.5281	ug/L	5.5281	ppb	20:13:50
1	Si 251.611†	1681952.9	1628609.9	47551	ug/L	47551	ppb	20:13:30
1	Sn 189.927†	-202.4	-201.5	-25.132	ug/L	-25.132	ppb	20:13:50
1	Ti 334.940†	680181.0	660029.9	1037.8	ug/L	1037.8	ppb	20:13:30
1	Tl 190.801†	-325.3	-277.1	-0.6646	ug/L	-0.6646	ppb	20:13:50
1	U 409.014†	-23426.6	-20141.0	-573.19	ug/L	-573.19	ppb	20:13:30
1	V 292.402†	43339.5	43400.8	261.79	ug/L	261.79	ppb	20:13:30
1	Zn 213.857†	30225.0	28625.5	228.14	ug/L	228.14	ppb	20:13:50
1	SiO2†	1699780.8	1645909.9	103110	ug/L	103110	ppb	20:15:03
2	Sc Radial	5860.6	5860.6	103	%			20:12:50
2	Y RADIAL	7407.6	7407.6	121.5	%			20:12:50
2	Al 396.153Radial†	178058.7	172645.2	122610	ug/L	122610	ppb	20:12:30
2	Ca 317.933Radial†	34103.9	33046.1	49247	ug/L	49247	ppb	20:12:30
2	Fe 238.204 Radial†	13686.5	13262.8	122280	ug/L	122280	ppb	20:12:50
2	K 766.490 Radial†	84175.9	79391.8	13761	ug/L	13761	ppb	20:12:30
2	Mg 279.077 IEC†	767.5	743.8	26306	ug/L	26306	ppb	20:12:50
2	Na 589.592 Radial†	11181.3	11922.1	3835.5	ug/L	3835.5	ppb	20:12:30
2	Sr 421.552†	67023.5	64970.6	400.26	ug/L	400.26	ppb	20:12:30
2	Sc 361.383	924220.7	924220.7	102.54	%			20:14:02
2	Y 371.029	891795.9	891795.9	118.62	%			20:14:02
2	Ag 328.068†	-8094.2	-8208.5	3.2294	ug/L	3.2294	ppb	20:14:22
2	As 188.979†	7.8	32.0	39.712	ug/L	39.712	ppb	20:14:22
2	B 249.677†	897.7	1494.6	13.935	ug/L	13.935	ppb	20:14:02
2	Ba 233.527†	408328.5	398227.7	2881.3	ug/L	2881.3	ppb	20:14:02
2	Be 313.107†	31676.5	36163.7	14.803	ug/L	14.803	ppb	20:14:02
2	Cd 226.502†	1089.4	1268.4	0.9046	ug/L	0.9046	ppb	20:14:22
2	Co 228.616†	4624.4	4583.9	81.420	ug/L	81.420	ppb	20:14:22
2	Cr 267.716†	9609.1	9290.2	98.261	ug/L	98.261	ppb	20:14:22
2	Cu 324.752†	38425.7	30602.7	92.010	ug/L	92.010	ppb	20:14:02
2	Mn 257.610†	10892128.4	10621742.7	11051	ug/L	11051	ppb	20:13:56
2	Mo 202.031†	-74.8	-99.7	2.4653	ug/L	2.4653	ppb	20:14:22
2	Ni 231.604†	13385.3	12962.8	291.68	ug/L	291.68	ppb	20:14:22

2	P 214.914†	1107.6	855.2	399.12 ug/L	399.12 ppb	20:14:22
2	Pb 220.353†	1087.2	1133.1	141.31 ug/L	141.31 ppb	20:14:22
2	S 181.975 Axial†	573.0	512.3	654.96 ug/L	654.96 ppb	20:14:22
2	Sb 206.836†	37.0	8.5	-3.8898 ug/L	-3.8898 ppb	20:14:22
2	Se 196.026†	-751.4	-710.5	8.9022 ug/L	8.9022 ppb	20:14:22
2	Si 251.611†	1670132.0	1628205.0	47540 ug/L	47540 ppb	20:14:02
2	Sn 189.927†	-183.4	-184.3	-22.456 ug/L	-22.456 ppb	20:14:22
2	Ti 334.940†	675036.9	659511.5	1037.0 ug/L	1037.0 ppb	20:14:02
2	Tl 190.801†	-323.8	-277.8	-0.2532 ug/L	-0.2532 ppb	20:14:22
2	U 409.014†	-23599.7	-20464.7	-582.14 ug/L	-582.14 ppb	20:14:02
2	V 292.402†	43061.0	43415.8	261.89 ug/L	261.89 ppb	20:14:02
2	Zn 213.857†	30081.3	28685.2	228.64 ug/L	228.64 ppb	20:14:22
2	SiO2†	1676427.4	1634376.3	102390 ug/L	102390 ppb	20:15:10
3	Sc Radial	5880.9	5880.9	104 %		20:13:15
3	Y RADIAL	7467.1	7467.1	122.4 %		20:13:15
3	Al 396.153Radial†	178646.1	172617.1	122590 ug/L	122590 ppb	20:12:55
3	Ca 317.933Radial†	34354.9	33174.6	49439 ug/L	49439 ppb	20:12:55
3	Fe 238.204 Radial†	13721.5	13250.8	122170 ug/L	122170 ppb	20:13:15
3	K 766.490 Radial†	84675.6	79593.1	13794 ug/L	13794 ppb	20:12:55
3	Mg 279.077 IEC†	765.8	739.6	26156 ug/L	26156 ppb	20:13:15
3	Na 589.592 Radial†	11330.0	12028.3	3869.6 ug/L	3869.6 ppb	20:12:55
3	Sr 421.552†	67300.4	65014.0	400.53 ug/L	400.53 ppb	20:12:55
3	Sc 361.383	914540.5	914540.5	101.47 %		20:14:35
3	Y 371.029	884245.2	884245.2	117.62 %		20:14:35
3	Ag 328.068†	-8027.2	-8226.1	3.1084 ug/L	3.1084 ppb	20:14:55
3	As 188.979†	0.5	24.8	36.988 ug/L	36.988 ppb	20:14:55
3	B 249.677†	977.8	1582.8	15.740 ug/L	15.740 ppb	20:14:35
3	Ba 233.527†	404351.6	398523.3	2883.4 ug/L	2883.4 ppb	20:14:35
3	Be 313.107†	31300.3	36119.9	14.786 ug/L	14.786 ppb	20:14:35
3	Cd 226.502†	1077.1	1267.6	0.9083 ug/L	0.9083 ppb	20:14:55
3	Co 228.616†	4590.2	4597.9	81.682 ug/L	81.682 ppb	20:14:55
3	Cr 267.716†	9568.5	9349.4	98.865 ug/L	98.865 ppb	20:14:55
3	Cu 324.752†	37981.1	30561.2	91.889 ug/L	91.889 ppb	20:14:35
3	Mn 257.610†	10987923.8	10828587.7	11266 ug/L	11266 ppb	20:14:29
3	Mo 202.031†	-58.3	-84.2	3.4245 ug/L	3.4245 ppb	20:14:55
3	Ni 231.604†	13348.4	13064.6	293.97 ug/L	293.97 ppb	20:14:55
3	P 214.914†	1110.3	869.4	406.97 ug/L	406.97 ppb	20:14:55
3	Pb 220.353†	1137.4	1193.8	147.95 ug/L	147.95 ppb	20:14:55
3	S 181.975 Axial†	581.4	526.6	673.87 ug/L	673.87 ppb	20:14:55
3	Sb 206.836†	41.4	13.2	-2.4797 ug/L	-2.4797 ppb	20:14:55
3	Se 196.026†	-773.9	-740.4	-8.2163 ug/L	-8.2163 ppb	20:14:55
3	Si 251.611†	1651285.6	1626871.2	47501 ug/L	47501 ppb	20:14:35
3	Sn 189.927†	-200.4	-202.9	-25.395 ug/L	-25.395 ppb	20:14:55
3	Ti 334.940†	667498.0	659049.7	1036.3 ug/L	1036.3 ppb	20:14:35
3	Tl 190.801†	-329.0	-286.3	-1.3045 ug/L	-1.3045 ppb	20:14:55
3	U 409.014†	-23165.4	-20280.2	-577.02 ug/L	-577.02 ppb	20:14:35
3	V 292.402†	42600.0	43406.0	261.86 ug/L	261.86 ppb	20:14:35
3	Zn 213.857†	30000.1	28915.8	230.60 ug/L	230.60 ppb	20:14:55
3	SiO2†	1699394.2	1674316.1	104890 ug/L	104890 ppb	20:15:17

Mean Data: 241419006|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	923097.4	102.42	%	0.894				0.87%
Sc Radial	5877.8	103	%	0.3				0.27%
Y 371.029	891556.1	118.59	%	0.957				0.81%
Y RADIAL	7443.1	122.0	%	0.51				0.42%
Ag 328.068†	-8189.8	3.3067	ug/L	0.24622	3.3067	ppb	0.24622	7.45%
Al 396.153Radial†	173248.0	123030	ug/L	758.8	123030	ppb	758.8	0.62%
As 188.979†	28.3	38.320	ug/L	1.3629	38.320	ppb	1.3629	3.56%
B 249.677†	1550.5	15.071	ug/L	0.9888	15.071	ppb	0.9888	6.56%
Ba 233.527†	398277.0	2881.6	ug/L	1.63	2881.6	ppb	1.63	0.06%
Be 313.107†	36158.3	14.801	ug/L	0.0142	14.801	ppb	0.0142	0.10%
Ca 317.933Radial†	33210.9	49493	ug/L	276.5	49493	ppb	276.5	0.56%
Cd 226.502†	1269.1	0.9106	ug/L	0.00741	0.9106	ppb	0.00741	0.81%
Co 228.616†	4581.0	81.367	ug/L	0.3453	81.367	ppb	0.3453	0.42%
Cr 267.716†	9293.2	98.290	ug/L	0.5602	98.290	ppb	0.5602	0.57%
Cu 324.752†	30611.0	92.034	ug/L	0.1587	92.034	ppb	0.1587	0.17%
Fe 238.204 Radial†	13263.4	122290	ug/L	119.3	122290	ppb	119.3	0.10%
K 766.490 Radial†	79704.0	13815	ug/L	67.7	13815	ppb	67.7	0.49%

Mg 279.077 IEC†	740.8	26199	ug/L	93.4	26199	ppb	93.4	0.36%
Mn 257.610†	10655840.0	11086	ug/L	164.7	11086	ppb	164.7	1.49%
Mo 202.031†	-92.5	2.9179	ug/L	0.48187	2.9179	ppb	0.48187	16.51%
Na 589.592 Radial†	12036.5	3872.3	ug/L	38.21	3872.3	ppb	38.21	0.99%
Ni 231.604†	12970.4	291.85	ug/L	2.039	291.85	ppb	2.039	0.70%
P 214.914†	858.6	401.08	ug/L	5.196	401.08	ppb	5.196	1.30%
Pb 220.353†	1159.7	144.32	ug/L	3.366	144.32	ppb	3.366	2.33%
S 181.975 Axial†	518.7	663.37	ug/L	9.625	663.37	ppb	9.625	1.45%
Sb 206.836†	16.4	-1.5108	ug/L	2.98394	-1.5108	ppb	2.98394	197.51%
Se 196.026†	-722.9	2.0714	ug/L	9.06766	2.0714	ppb	9.06766	437.76%
Si 251.611†	1627895.4	47531	ug/L	26.6	47531	ppb	26.6	0.06%
Sn 189.927†	-196.2	-24.327	ug/L	1.6263	-24.327	ppb	1.6263	6.69%
Sr 421.552†	65209.4	401.73	ug/L	2.320	401.73	ppb	2.320	0.58%
Ti 334.940†	659530.4	1037.0	ug/L	0.78	1037.0	ppb	0.78	0.08%
Tl 190.801†	-280.4	-0.7408	ug/L	0.52975	-0.7408	ppb	0.52975	71.51%
U 409.014†	-20295.3	-577.45	ug/L	4.489	-577.45	ppb	4.489	0.78%
V 292.402†	43407.6	261.85	ug/L	0.051	261.85	ppb	0.051	0.02%
Zn 213.857†	28742.2	229.13	ug/L	1.298	229.13	ppb	1.298	0.57%
SiO2†	1651534.1	103470	ug/L	1287.9	103470	ppb	1287.9	1.24%

Sequence No.: 35
Sample ID: 241419007|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 12/7/2009 20:17:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419007|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5716.8	5716.8	101	%			20:19:42
1	Y RADIAL	7399.4	7399.4	121.3	%			20:19:42
1	Al 396.153Radial†	200563.1	199354.0	141570	ug/L	141570	ppb	20:19:22
1	Ca 317.933Radial†	28019.6	27830.9	41475	ug/L	41475	ppb	20:19:22
1	Fe 238.204 Radial†	9667.2	9601.9	88530	ug/L	88530	ppb	20:19:22
1	K 766.490 Radial†	80630.1	77920.6	13628	ug/L	13628	ppb	20:19:22
1	Mg 279.077 IEC†	632.2	628.0	22224	ug/L	22224	ppb	20:19:42
1	Na 589.592 Radial†	9073.2	10099.6	3249.1	ug/L	3249.1	ppb	20:19:22
1	Sr 421.552†	68880.3	68450.6	421.80	ug/L	421.80	ppb	20:19:22
1	Sc 361.383	944758.0	944758.0	104.82	%			20:20:40
1	Y 371.029	932328.5	932328.5	124.01	%			20:20:40
1	Ag 328.068†	-6024.5	-6062.4	1.6255	ug/L	1.6255	ppb	20:20:45
1	As 188.979†	5.2	29.3	31.810	ug/L	31.810	ppb	20:21:05
1	B 249.677†	1048.3	1619.2	21.036	ug/L	21.036	ppb	20:20:45
1	Ba 233.527†	505562.4	482334.6	3487.1	ug/L	3487.1	ppb	20:20:40
1	Be 313.107†	57360.1	59994.9	22.829	ug/L	22.829	ppb	20:20:45
1	Cd 226.502†	683.5	858.2	-0.0310	ug/L	-0.0310	ppb	20:21:05
1	Co 228.616†	2679.2	2630.1	46.750	ug/L	46.750	ppb	20:21:05
1	Cr 267.716†	6738.8	6348.1	67.209	ug/L	67.209	ppb	20:20:45
1	Cu 324.752†	24010.8	16036.0	49.461	ug/L	49.461	ppb	20:20:45
1	Mn 257.610†	1305645.6	1245120.6	1302.4	ug/L	1302.4	ppb	20:20:40
1	Mo 202.031†	-78.9	-102.0	-0.0712	ug/L	-0.0712	ppb	20:21:05
1	Ni 231.604†	4701.1	4394.1	98.862	ug/L	98.862	ppb	20:21:05
1	P 214.914†	1378.2	1089.9	568.43	ug/L	568.43	ppb	20:21:05
1	Pb 220.353†	586.0	631.8	93.552	ug/L	93.552	ppb	20:21:05
1	S 181.975 Axial†	609.8	535.3	681.76	ug/L	681.76	ppb	20:21:05
1	Sb 206.836†	40.1	10.6	-3.3105	ug/L	-3.3105	ppb	20:21:05
1	Se 196.026†	-537.4	-490.4	29.451	ug/L	29.451	ppb	20:21:05
1	Si 251.611†	1589784.7	1516145.9	44268	ug/L	44268	ppb	20:20:40
1	Sn 189.927†	-177.1	-174.4	-22.134	ug/L	-22.134	ppb	20:21:05
1	Ti 334.940†	557520.5	533087.9	838.32	ug/L	838.32	ppb	20:20:40
1	Tl 190.801†	-146.7	-102.0	-10.293	ug/L	-10.293	ppb	20:21:05
1	U 409.014†	-23445.1	-19816.9	-559.90	ug/L	-559.90	ppb	20:20:40
1	V 292.402†	22745.3	23121.3	135.25	ug/L	135.25	ppb	20:20:45
1	Zn 213.857†	27086.3	25190.3	203.66	ug/L	203.66	ppb	20:20:45
1	SiO2†	1578012.6	1504946.9	94283	ug/L	94283	ppb	20:22:15
2	Sc Radial	5779.2	5779.2	102	%			20:20:07
2	Y RADIAL	7500.5	7500.5	123.0	%			20:20:07
2	Al 396.153Radial†	201450.9	198074.7	140670	ug/L	140670	ppb	20:19:47
2	Ca 317.933Radial†	28072.9	27582.6	41105	ug/L	41105	ppb	20:19:47
2	Fe 238.204 Radial†	9666.0	9497.0	87563	ug/L	87563	ppb	20:19:47
2	K 766.490 Radial†	80833.4	77255.3	13511	ug/L	13511	ppb	20:19:47
2	Mg 279.077 IEC†	638.0	626.9	22185	ug/L	22185	ppb	20:20:07
2	Na 589.592 Radial†	8977.2	9907.9	3187.5	ug/L	3187.5	ppb	20:19:47
2	Sr 421.552†	69101.6	67929.1	418.59	ug/L	418.59	ppb	20:19:47
2	Sc 361.383	914500.7	914500.7	101.46	%			20:21:11
2	Y 371.029	907756.1	907756.1	120.75	%			20:21:11
2	Ag 328.068†	-6067.9	-6295.4	0.3280	ug/L	0.3280	ppb	20:21:16
2	As 188.979†	-6.8	17.7	27.493	ug/L	27.493	ppb	20:21:36
2	B 249.677†	1053.7	1657.6	21.942	ug/L	21.942	ppb	20:21:16
2	Ba 233.527†	505810.3	498537.0	3604.1	ug/L	3604.1	ppb	20:21:11
2	Be 313.107†	58004.2	62440.2	23.749	ug/L	23.749	ppb	20:21:16
2	Cd 226.502†	681.8	878.0	0.2708	ug/L	0.2708	ppb	20:21:36
2	Co 228.616†	2661.7	2697.4	47.992	ug/L	47.992	ppb	20:21:36
2	Cr 267.716†	6709.7	6532.2	69.099	ug/L	69.099	ppb	20:21:16
2	Cu 324.752†	24096.3	16878.1	51.772	ug/L	51.772	ppb	20:21:16
2	Mn 257.610†	1305862.5	1286547.0	1345.4	ug/L	1345.4	ppb	20:21:11
2	Mo 202.031†	-66.8	-92.6	0.4460	ug/L	0.4460	ppb	20:21:36
2	Ni 231.604†	4716.7	4557.9	102.55	ug/L	102.55	ppb	20:21:36

2	P 214.914†	1405.7	1160.6	607.36 ug/L	607.36 ppb	20:21:36
2	Pb 220.353†	611.8	675.8	98.231 ug/L	98.231 ppb	20:21:36
2	S 181.975 Axial†	611.0	555.7	708.90 ug/L	708.90 ppb	20:21:36
2	Sb 206.836†	46.0	17.8	-1.2202 ug/L	-1.2202 ppb	20:21:36
2	Se 196.026†	-550.2	-520.0	9.6456 ug/L	9.6456 ppb	20:21:36
2	Si 251.611†	1589286.2	1565836.1	45719 ug/L	45719 ppb	20:21:11
2	Sn 189.927†	-179.8	-182.7	-23.501 ug/L	-23.501 ppb	20:21:36
2	Ti 334.940†	558168.1	551324.2	866.91 ug/L	866.91 ppb	20:21:11
2	Tl 190.801†	-144.0	-103.9	-10.396 ug/L	-10.396 ppb	20:21:36
2	U 409.014†	-23562.7	-20672.8	-583.48 ug/L	-583.48 ppb	20:21:11
2	V 292.402†	22902.7	23994.5	141.01 ug/L	141.01 ppb	20:21:16
2	Zn 213.857†	27354.9	26309.9	213.22 ug/L	213.22 ppb	20:21:16
2	SiO2†	1594098.2	1570610.5	98397 ug/L	98397 ppb	20:22:22
3	Sc Radial	5770.7	5770.7	102 %		20:20:32
3	Y RADIAL	7479.3	7479.3	122.6 %		20:20:32
3	Al 396.153Radial†	198292.6	195255.3	138660 ug/L	138660 ppb	20:20:12
3	Ca 317.933Radial†	27721.8	27277.4	40650 ug/L	40650 ppb	20:20:12
3	Fe 238.204 Radial†	9547.8	9394.5	86618 ug/L	86618 ppb	20:20:12
3	K 766.490 Radial†	79935.3	76487.5	13376 ug/L	13376 ppb	20:20:12
3	Mg 279.077 IEC†	636.4	626.3	22165 ug/L	22165 ppb	20:20:32
3	Na 589.592 Radial†	8928.7	9873.0	3176.2 ug/L	3176.2 ppb	20:20:12
3	Sr 421.552†	68143.4	67085.2	413.39 ug/L	413.39 ppb	20:20:12
3	Sc 361.383	914579.7	914579.7	101.47 %		20:21:42
3	Y 371.029	908576.9	908576.9	120.85 %		20:21:42
3	Ag 328.068†	-6043.4	-6270.7	0.1424 ug/L	0.1424 ppb	20:21:48
3	As 188.979†	-7.1	17.4	27.141 ug/L	27.141 ppb	20:22:08
3	B 249.677†	1031.3	1635.5	21.616 ug/L	21.616 ppb	20:21:48
3	Ba 233.527†	498644.4	491431.8	3552.8 ug/L	3552.8 ppb	20:21:42
3	Be 313.107†	58649.0	63070.7	23.945 ug/L	23.945 ppb	20:21:48
3	Cd 226.502†	696.6	892.6	0.5139 ug/L	0.5139 ppb	20:22:08
3	Co 228.616†	2698.6	2733.6	48.674 ug/L	48.674 ppb	20:22:08
3	Cr 267.716†	6819.9	6640.2	70.191 ug/L	70.191 ppb	20:21:48
3	Cu 324.752†	24328.1	17104.5	52.359 ug/L	52.359 ppb	20:21:48
3	Mn 257.610†	1286567.5	1267420.6	1325.4 ug/L	1325.4 ppb	20:21:42
3	Mo 202.031†	-75.2	-100.9	-0.1376 ug/L	-0.1376 ppb	20:22:08
3	Ni 231.604†	4722.1	4562.7	102.66 ug/L	102.66 ppb	20:22:08
3	P 214.914†	1401.7	1156.4	605.05 ug/L	605.05 ppb	20:22:08
3	Pb 220.353†	614.6	678.5	98.153 ug/L	98.153 ppb	20:22:08
3	S 181.975 Axial†	610.0	554.7	707.95 ug/L	707.95 ppb	20:22:08
3	Sb 206.836†	33.3	5.3	-5.0580 ug/L	-5.0580 ppb	20:22:08
3	Se 196.026†	-552.7	-522.4	4.9882 ug/L	4.9882 ppb	20:22:08
3	Si 251.611†	1565447.0	1542207.2	45029 ug/L	45029 ppb	20:21:42
3	Sn 189.927†	-187.1	-189.9	-24.703 ug/L	-24.703 ppb	20:22:08
3	Ti 334.940†	549449.2	542684.2	853.33 ug/L	853.33 ppb	20:21:42
3	Tl 190.801†	-135.5	-95.5	-8.4105 ug/L	-8.4105 ppb	20:22:08
3	U 409.014†	-23237.7	-20350.5	-574.44 ug/L	-574.44 ppb	20:21:42
3	V 292.402†	23139.3	24225.7	142.68 ug/L	142.68 ppb	20:21:48
3	Zn 213.857†	27500.3	26451.0	214.50 ug/L	214.50 ppb	20:21:48
3	SiO2†	1589877.6	1566315.3	98128 ug/L	98128 ppb	20:22:30

Mean Data: 241419007|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	924612.8	102.58	%	1.936				1.89%
Sc Radial	5755.5	101	%	0.6				0.59%
Y 371.029	916220.5	121.87	%	1.856				1.52%
Y RADIAL	7459.8	122.3	%	0.87				0.71%
Ag 328.068†	-6209.5	0.6986	ug/L	0.80802	0.6986	ppb	0.80802	115.65%
Al 396.153Radial†	197561.3	140300	ug/L	1489.2	140300	ppb	1489.2	1.06%
As 188.979†	21.5	28.814	ug/L	2.5999	28.814	ppb	2.5999	9.02%
B 249.677†	1637.5	21.532	ug/L	0.4588	21.532	ppb	0.4588	2.13%
Ba 233.527†	490767.8	3548.0	ug/L	58.64	3548.0	ppb	58.64	1.65%
Be 313.107†	61835.3	23.507	ug/L	0.5957	23.507	ppb	0.5957	2.53%
Ca 317.933Radial†	27563.6	41077	ug/L	413.1	41077	ppb	413.1	1.01%
Cd 226.502†	876.2	0.2512	ug/L	0.27295	0.2512	ppb	0.27295	108.65%
Co 228.616†	2687.0	47.805	ug/L	0.9754	47.805	ppb	0.9754	2.04%
Cr 267.716†	6506.8	68.833	ug/L	1.5090	68.833	ppb	1.5090	2.19%
Cu 324.752†	16672.9	51.197	ug/L	1.5318	51.197	ppb	1.5318	2.99%
Fe 238.204 Radial†	9497.8	87571	ug/L	955.9	87571	ppb	955.9	1.09%
K 766.490 Radial†	77221.1	13505	ug/L	125.7	13505	ppb	125.7	0.93%

Mg 279.077 IEC†	627.1	22191	ug/L	30.2	22191	ppb	30.2	0.14%
Mn 257.610†	1266362.7	1324.4	ug/L	21.50	1324.4	ppb	21.50	1.62%
Mo 202.031†	-98.5	0.0791	ug/L	0.31951	0.0791	ppb	0.31951	404.18%
Na 589.592 Radial†	9960.2	3204.3	ug/L	39.26	3204.3	ppb	39.26	1.23%
Ni 231.604†	4504.9	101.35	ug/L	2.160	101.35	ppb	2.160	2.13%
P 214.914†	1135.7	593.61	ug/L	21.839	593.61	ppb	21.839	3.68%
Pb 220.353†	662.0	96.645	ug/L	2.6795	96.645	ppb	2.6795	2.77%
S 181.975 Axial†	548.5	699.54	ug/L	15.403	699.54	ppb	15.403	2.20%
Sb 206.836†	11.2	-3.1962	ug/L	1.92149	-3.1962	ppb	1.92149	60.12%
Se 196.026†	-510.9	14.695	ug/L	12.9897	14.695	ppb	12.9897	88.40%
Si 251.611†	1541396.4	45005	ug/L	725.8	45005	ppb	725.8	1.61%
Sn 189.927†	-182.3	-23.446	ug/L	1.2851	-23.446	ppb	1.2851	5.48%
Sr 421.552†	67821.6	417.92	ug/L	4.246	417.92	ppb	4.246	1.02%
Ti 334.940†	542365.4	852.86	ug/L	14.300	852.86	ppb	14.300	1.68%
Tl 190.801†	-100.5	-9.6998	ug/L	1.11770	-9.6998	ppb	1.11770	11.52%
U 409.014†	-20280.1	-572.61	ug/L	11.896	-572.61	ppb	11.896	2.08%
V 292.402†	23780.5	139.64	ug/L	3.894	139.64	ppb	3.894	2.79%
Zn 213.857†	25983.7	210.46	ug/L	5.925	210.46	ppb	5.925	2.82%
SiO2†	1547290.9	96936	ug/L	2301.6	96936	ppb	2301.6	2.37%

Sequence No.: 36
Sample ID: 241419008|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 12/7/2009 20:24:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419008|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5757.4	5757.4	101	%			20:26:53
1	Y RADIAL	6923.7	6923.7	113.5	%			20:26:53
1	Al 396.153Radial†	168955.4	166753.6	118420	ug/L	118420	ppb	20:26:33
1	Ca 317.933Radial†	20215.7	19932.9	29705	ug/L	29705	ppb	20:26:33
1	Fe 238.204 Radial†	10718.1	10571.1	97465	ug/L	97465	ppb	20:26:33
1	K 766.490 Radial†	79356.8	76097.8	13310	ug/L	13310	ppb	20:26:33
1	Mg 279.077 IEC†	610.1	601.8	21284	ug/L	21284	ppb	20:26:53
1	Na 589.592 Radial†	19949.6	20769.2	6681.7	ug/L	6681.7	ppb	20:26:33
1	Sr 421.552†	63178.1	62339.7	384.22	ug/L	384.22	ppb	20:26:33
1	Sc 361.383	922943.8	922943.8	102.40	%			20:27:51
1	Y 371.029	851895.6	851895.6	113.31	%			20:27:51
1	Ag 328.068†	-6158.2	-6328.9	3.1755	ug/L	3.1755	ppb	20:27:56
1	As 188.979†	-7.5	17.1	32.408	ug/L	32.408	ppb	20:28:16
1	B 249.677†	617.8	1222.4	11.844	ug/L	11.844	ppb	20:27:56
1	Ba 233.527†	189635.1	185209.0	1341.6	ug/L	1341.6	ppb	20:27:56
1	Be 313.107†	23267.7	27994.6	12.432	ug/L	12.432	ppb	20:27:56
1	Cd 226.502†	766.4	954.5	0.0490	ug/L	0.0490	ppb	20:28:16
1	Co 228.616†	1374.0	1415.9	22.403	ug/L	22.403	ppb	20:28:16
1	Cr 267.716†	6711.5	6473.4	68.554	ug/L	68.554	ppb	20:27:56
1	Cu 324.752†	28275.4	20742.1	63.107	ug/L	63.107	ppb	20:27:56
1	Mn 257.610†	980259.8	956799.1	1003.7	ug/L	1003.7	ppb	20:27:51
1	Mo 202.031†	-50.3	-75.9	2.1891	ug/L	2.1891	ppb	20:28:16
1	Ni 231.604†	3881.3	3699.5	83.243	ug/L	83.243	ppb	20:28:16
1	P 214.914†	884.8	639.2	303.40	ug/L	303.40	ppb	20:28:16
1	Pb 220.353†	505.3	566.3	80.447	ug/L	80.447	ppb	20:28:16
1	S 181.975 Axial†	328.2	274.0	339.92	ug/L	339.92	ppb	20:28:16
1	Sb 206.836†	58.1	29.2	2.0097	ug/L	2.0097	ppb	20:28:16
1	Se 196.026†	-577.5	-541.7	24.668	ug/L	24.668	ppb	20:28:16
1	Si 251.611†	1593212.3	1555340.8	45412	ug/L	45412	ppb	20:27:51
1	Sn 189.927†	-159.6	-161.3	-21.164	ug/L	-21.164	ppb	20:28:16
1	Ti 334.940†	844755.6	826164.5	1297.1	ug/L	1297.1	ppb	20:27:51
1	Tl 190.801†	-103.1	-62.7	1.5500	ug/L	1.5500	ppb	20:28:16
1	U 409.014†	-7772.1	-5039.8	-151.92	ug/L	-151.92	ppb	20:27:56
1	V 292.402†	25009.7	25845.5	151.89	ug/L	151.89	ppb	20:27:56
1	Zn 213.857†	28482.2	27164.2	219.66	ug/L	219.66	ppb	20:27:56
1	SiO2†	1603859.0	1565770.0	98094	ug/L	98094	ppb	20:29:26
2	Sc Radial	5820.7	5820.7	102	%			20:27:18
2	Y RADIAL	6974.4	6974.4	114.4	%			20:27:18
2	Al 396.153Radial†	165773.2	161834.2	114930	ug/L	114930	ppb	20:26:58
2	Ca 317.933Radial†	19897.6	19405.4	28919	ug/L	28919	ppb	20:26:58
2	Fe 238.204 Radial†	10506.6	10249.7	94502	ug/L	94502	ppb	20:26:58
2	K 766.490 Radial†	77939.3	73862.5	12918	ug/L	12918	ppb	20:26:58
2	Mg 279.077 IEC†	618.0	603.0	21330	ug/L	21330	ppb	20:27:18
2	Na 589.592 Radial†	19450.0	20067.4	6455.9	ug/L	6455.9	ppb	20:26:58
2	Sr 421.552†	61653.9	60173.9	370.87	ug/L	370.87	ppb	20:26:58
2	Sc 361.383	914538.0	914538.0	101.47	%			20:28:22
2	Y 371.029	845147.2	845147.2	112.42	%			20:28:22
2	Ag 328.068†	-6388.6	-6611.2	1.0215	ug/L	1.0215	ppb	20:28:27
2	As 188.979†	-6.2	18.3	32.412	ug/L	32.412	ppb	20:28:47
2	B 249.677†	784.2	1392.0	15.682	ug/L	15.682	ppb	20:28:27
2	Ba 233.527†	194140.4	191351.4	1385.9	ug/L	1385.9	ppb	20:28:27
2	Be 313.107†	24130.7	29054.0	12.805	ug/L	12.805	ppb	20:28:27
2	Cd 226.502†	764.2	959.2	0.3930	ug/L	0.3930	ppb	20:28:47
2	Co 228.616†	1374.4	1428.6	22.695	ug/L	22.695	ppb	20:28:47
2	Cr 267.716†	6791.0	6612.0	69.940	ug/L	69.940	ppb	20:28:27
2	Cu 324.752†	29179.2	21886.6	66.164	ug/L	66.164	ppb	20:28:27
2	Mn 257.610†	971002.6	956474.4	1003.1	ug/L	1003.1	ppb	20:28:22
2	Mo 202.031†	-77.4	-103.1	0.2867	ug/L	0.2867	ppb	20:28:47
2	Ni 231.604†	3868.7	3721.9	83.747	ug/L	83.747	ppb	20:28:47

2	P 214.914†	875.9	638.4	303.66	ug/L	303.66 ppb	20:28:47
2	Pb 220.353†	534.0	599.1	83.486	ug/L	83.486 ppb	20:28:47
2	S 181.975 Axial†	338.9	287.5	358.46	ug/L	358.46 ppb	20:28:47
2	Sb 206.836†	52.2	23.8	0.3695	ug/L	0.3695 ppb	20:28:47
2	Se 196.026†	-573.2	-542.6	14.180	ug/L	14.180 ppb	20:28:47
2	Si 251.611†	1577241.3	1553901.3	45370	ug/L	45370 ppb	20:28:22
2	Sn 189.927†	-151.0	-154.2	-20.168	ug/L	-20.168 ppb	20:28:47
2	Ti 334.940†	836635.9	825744.7	1296.4	ug/L	1296.4 ppb	20:28:22
2	Tl 190.801†	-108.6	-69.0	-0.2873	ug/L	-0.2873 ppb	20:28:47
2	U 409.014†	-8101.4	-5434.0	-162.46	ug/L	-162.46 ppb	20:28:27
2	V 292.402†	25803.8	26852.7	158.85	ug/L	158.85 ppb	20:28:27
2	Zn 213.857†	29164.5	28092.3	227.80	ug/L	227.80 ppb	20:28:27
2	SiO2†	1591907.6	1568387.4	98258	ug/L	98258 ppb	20:29:33
3	Sc Radial	5790.6	5790.6	102	%		20:27:43
3	Y RADIAL	6948.2	6948.2	113.9	%		20:27:43
3	Al 396.153Radial†	164570.7	161497.8	114690	ug/L	114690 ppb	20:27:23
3	Ca 317.933Radial†	19745.3	19357.2	28847	ug/L	28847 ppb	20:27:23
3	Fe 238.204 Radial†	10439.6	10237.4	94389	ug/L	94389 ppb	20:27:23
3	K 766.490 Radial†	77297.9	73629.8	12878	ug/L	12878 ppb	20:27:23
3	Mg 279.077 IEC†	618.6	606.7	21461	ug/L	21461 ppb	20:27:43
3	Na 589.592 Radial†	19294.3	20013.6	6438.6	ug/L	6438.6 ppb	20:27:23
3	Sr 421.552†	61173.9	60016.6	369.90	ug/L	369.90 ppb	20:27:23
3	Sc 361.383	928076.7	928076.7	102.97	%		20:28:53
3	Y 371.029	855915.6	855915.6	113.85	%		20:28:53
3	Ag 328.068†	-6212.4	-6348.2	2.1235	ug/L	2.1235 ppb	20:28:58
3	As 188.979†	-19.2	5.8	27.666	ug/L	27.666 ppb	20:29:18
3	B 249.677†	615.6	1217.0	12.143	ug/L	12.143 ppb	20:28:58
3	Ba 233.527†	189892.9	184435.2	1335.9	ug/L	1335.9 ppb	20:28:58
3	Be 313.107†	23361.1	27959.6	12.419	ug/L	12.419 ppb	20:28:58
3	Cd 226.502†	758.2	942.4	0.2331	ug/L	0.2331 ppb	20:29:18
3	Co 228.616†	1360.7	1395.5	22.069	ug/L	22.069 ppb	20:29:18
3	Cr 267.716†	6680.3	6406.9	67.817	ug/L	67.817 ppb	20:28:58
3	Cu 324.752†	28518.5	20825.5	63.184	ug/L	63.184 ppb	20:28:58
3	Mn 257.610†	984818.8	955932.2	1002.5	ug/L	1002.5 ppb	20:28:53
3	Mo 202.031†	-69.2	-94.0	0.8466	ug/L	0.8466 ppb	20:29:18
3	Ni 231.604†	3898.3	3695.0	83.143	ug/L	83.143 ppb	20:29:18
3	P 214.914†	887.3	636.8	303.30	ug/L	303.30 ppb	20:29:18
3	Pb 220.353†	507.9	566.1	79.835	ug/L	79.835 ppb	20:29:18
3	S 181.975 Axial†	331.6	275.5	342.67	ug/L	342.67 ppb	20:29:18
3	Sb 206.836†	58.3	29.0	2.0167	ug/L	2.0167 ppb	20:29:18
3	Se 196.026†	-573.8	-535.0	18.029	ug/L	18.029 ppb	20:29:18
3	Si 251.611†	1603184.5	1556420.6	45444	ug/L	45444 ppb	20:28:53
3	Sn 189.927†	-155.0	-156.0	-20.460	ug/L	-20.460 ppb	20:29:18
3	Ti 334.940†	849233.6	825950.9	1296.7	ug/L	1296.7 ppb	20:28:53
3	Tl 190.801†	-99.1	-58.3	2.6220	ug/L	2.6220 ppb	20:29:18
3	U 409.014†	-7839.7	-5063.4	-152.18	ug/L	-152.18 ppb	20:28:58
3	V 292.402†	25163.7	25860.0	152.44	ug/L	152.44 ppb	20:28:58
3	Zn 213.857†	28562.7	27088.5	219.30	ug/L	219.30 ppb	20:28:58
3	SiO2†	1596311.6	1549777.6	97092	ug/L	97092 ppb	20:29:40

Mean Data: 241419008|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	921852.9	102.28	%	0.758				0.74%
Sc Radial	5789.6	102	%	0.6				0.55%
Y 371.029	850986.1	113.19	%	0.724				0.64%
Y RADIAL	6948.8	113.9	%	0.42				0.37%
Ag 328.068†	-6429.5	2.1068	ug/L	1.07708	2.1068	ppb	1.07708	51.12%
Al 396.153Radial†	163361.9	116010	ug/L	2089.4	116010	ppb	2089.4	1.80%
As 188.979†	13.7	30.828	ug/L	2.7391	30.828	ppb	2.7391	8.88%
B 249.677†	1277.1	13.223	ug/L	2.1351	13.223	ppb	2.1351	16.15%
Ba 233.527†	186998.5	1354.5	ug/L	27.35	1354.5	ppb	27.35	2.02%
Be 313.107†	28336.1	12.552	ug/L	0.2191	12.552	ppb	0.2191	1.75%
Ca 317.933Radial†	19565.2	29157	ug/L	476.0	29157	ppb	476.0	1.63%
Cd 226.502†	952.1	0.2251	ug/L	0.17213	0.2251	ppb	0.17213	76.48%
Co 228.616†	1413.4	22.389	ug/L	0.3137	22.389	ppb	0.3137	1.40%
Cr 267.716†	6497.4	68.770	ug/L	1.0777	68.770	ppb	1.0777	1.57%
Cu 324.752†	21151.4	64.152	ug/L	1.7431	64.152	ppb	1.7431	2.72%
Fe 238.204 Radial†	10352.7	95452	ug/L	1744.6	95452	ppb	1744.6	1.83%
K 766.490 Radial†	74530.0	13035	ug/L	238.6	13035	ppb	238.6	1.83%

Mg 279.077 IEC†	603.8	21358	ug/L	91.9	21358	ppb	91.9	0.43%
Mn 257.610†	956401.9	1003.1	ug/L	0.61	1003.1	ppb	0.61	0.06%
Mo 202.031†	-91.0	1.1075	ug/L	0.97768	1.1075	ppb	0.97768	88.28%
Na 589.592 Radial†	20283.4	6525.4	ug/L	135.63	6525.4	ppb	135.63	2.08%
Ni 231.604†	3705.5	83.378	ug/L	0.3239	83.378	ppb	0.3239	0.39%
P 214.914†	638.1	303.45	ug/L	0.186	303.45	ppb	0.186	0.06%
Pb 220.353†	577.1	81.256	ug/L	1.9554	81.256	ppb	1.9554	2.41%
S 181.975 Axial†	279.0	347.02	ug/L	10.004	347.02	ppb	10.004	2.88%
Sb 206.836†	27.3	1.4653	ug/L	0.94902	1.4653	ppb	0.94902	64.77%
Se 196.026†	-539.8	18.959	ug/L	5.3055	18.959	ppb	5.3055	27.98%
Si 251.611†	1555220.9	45409	ug/L	36.9	45409	ppb	36.9	0.08%
Sn 189.927†	-157.2	-20.597	ug/L	0.5122	-20.597	ppb	0.5122	2.49%
Sr 421.552†	60843.4	374.99	ug/L	8.003	374.99	ppb	8.003	2.13%
Ti 334.940†	825953.4	1296.7	ug/L	0.35	1296.7	ppb	0.35	0.03%
Tl 190.801†	-63.3	1.2949	ug/L	1.47134	1.2949	ppb	1.47134	113.63%
U 409.014†	-5179.1	-155.52	ug/L	6.012	-155.52	ppb	6.012	3.87%
V 292.402†	26186.1	154.40	ug/L	3.866	154.40	ppb	3.866	2.50%
Zn 213.857†	27448.4	222.25	ug/L	4.807	222.25	ppb	4.807	2.16%
SiO2†	1561311.7	97815	ug/L	631.1	97815	ppb	631.1	0.65%

Sequence No.: 37
Sample ID: 241419009|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 12/7/2009 20:31:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419009|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5717.2	5717.2	101	%			20:34:04
1	Y RADIAL	6682.1	6682.1	109.6	%			20:34:04
1	Al 396.153Radial†	182830.7	181715.6	129050	ug/L	129050	ppb	20:33:44
1	Ca 317.933Radial†	20601.8	20456.8	30486	ug/L	30486	ppb	20:33:44
1	Fe 238.204 Radial†	9542.0	9476.7	87375	ug/L	87375	ppb	20:33:44
1	K 766.490 Radial†	55063.8	52506.6	9185.0	ug/L	9185.0	ppb	20:33:44
1	Mg 279.077 IEC†	494.9	491.5	17378	ug/L	17378	ppb	20:34:04
1	Na 589.592 Radial†	10884.3	11898.7	3827.9	ug/L	3827.9	ppb	20:33:44
1	Sr 421.552†	46592.0	46295.2	285.25	ug/L	285.25	ppb	20:33:44
1	Sc 361.383	907013.7	907013.7	100.63	%			20:35:02
1	Y 371.029	815113.8	815113.8	108.42	%			20:35:02
1	Ag 328.068†	-5630.3	-5909.9	1.7328	ug/L	1.7328	ppb	20:35:02
1	As 188.979†	-25.3	-0.8	28.071	ug/L	28.071	ppb	20:35:22
1	B 249.677†	540.4	1156.1	11.844	ug/L	11.844	ppb	20:35:02
1	Ba 233.527†	167267.2	166234.2	1204.2	ug/L	1204.2	ppb	20:35:02
1	Be 313.107†	8343.4	13563.1	8.2612	ug/L	8.2612	ppb	20:35:02
1	Cd 226.502†	671.1	872.9	0.2253	ug/L	0.2253	ppb	20:35:22
1	Co 228.616†	1184.1	1250.8	18.437	ug/L	18.437	ppb	20:35:22
1	Cr 267.716†	10776.3	10627.9	111.00	ug/L	111.00	ppb	20:35:02
1	Cu 324.752†	25368.5	18338.4	55.856	ug/L	55.856	ppb	20:35:02
1	Mn 257.610†	1035154.3	1028162.1	1076.9	ug/L	1076.9	ppb	20:35:02
1	Mo 202.031†	-53.6	-80.0	1.2181	ug/L	1.2181	ppb	20:35:22
1	Ni 231.604†	3849.5	3734.5	84.032	ug/L	84.032	ppb	20:35:22
1	P 214.914†	1131.6	899.6	459.45	ug/L	459.45	ppb	20:35:22
1	Pb 220.353†	514.1	583.6	85.562	ug/L	85.562	ppb	20:35:22
1	S 181.975 Axial†	280.3	232.0	282.17	ug/L	282.17	ppb	20:35:22
1	Sb 206.836†	50.1	22.2	-2.9273	ug/L	-2.9273	ppb	20:35:22
1	Se 196.026†	-521.1	-495.6	20.658	ug/L	20.658	ppb	20:35:22
1	Si 251.611†	1439768.8	1430187.1	41759	ug/L	41759	ppb	20:35:02
1	Sn 189.927†	-143.1	-147.6	-19.043	ug/L	-19.043	ppb	20:35:22
1	Ti 334.940†	1132259.3	1126352.5	1767.9	ug/L	1767.9	ppb	20:35:02
1	Tl 190.801†	-116.2	-77.5	1.9315	ug/L	1.9315	ppb	20:35:22
1	U 409.014†	-7114.3	-4519.3	-136.32	ug/L	-136.32	ppb	20:35:02
1	V 292.402†	21664.6	22950.4	134.01	ug/L	134.01	ppb	20:35:02
1	Zn 213.857†	22367.9	21576.8	173.39	ug/L	173.39	ppb	20:35:02
1	SiO2†	1464903.7	1455196.0	91169	ug/L	91169	ppb	20:36:20
2	Sc Radial	5656.4	5656.4	99.6	%			20:34:30
2	Y RADIAL	6611.6	6611.6	108.4	%			20:34:30
2	Al 396.153Radial†	182372.6	183210.0	130110	ug/L	130110	ppb	20:34:10
2	Ca 317.933Radial†	20618.7	20694.1	30840	ug/L	30840	ppb	20:34:10
2	Fe 238.204 Radial†	9553.7	9590.5	88424	ug/L	88424	ppb	20:34:10
2	K 766.490 Radial†	54823.1	52853.5	9245.8	ug/L	9245.8	ppb	20:34:10
2	Mg 279.077 IEC†	483.6	485.5	17164	ug/L	17164	ppb	20:34:30
2	Na 589.592 Radial†	10876.8	12007.5	3862.9	ug/L	3862.9	ppb	20:34:10
2	Sr 421.552†	46486.3	46687.1	287.67	ug/L	287.67	ppb	20:34:10
2	Sc 361.383	899834.0	899834.0	99.835	%			20:35:28
2	Y 371.029	809081.6	809081.6	107.62	%			20:35:28
2	Ag 328.068†	-5526.6	-5850.7	2.3338	ug/L	2.3338	ppb	20:35:28
2	As 188.979†	-44.1	-19.8	21.028	ug/L	21.028	ppb	20:35:48
2	B 249.677†	602.2	1222.3	13.049	ug/L	13.049	ppb	20:35:28
2	Ba 233.527†	166306.3	166597.9	1206.8	ug/L	1206.8	ppb	20:35:28
2	Be 313.107†	8215.5	13501.1	8.2369	ug/L	8.2369	ppb	20:35:28
2	Cd 226.502†	681.8	889.0	0.2856	ug/L	0.2856	ppb	20:35:48
2	Co 228.616†	1182.0	1258.0	18.558	ug/L	18.558	ppb	20:35:48
2	Cr 267.716†	10750.7	10687.6	111.63	ug/L	111.63	ppb	20:35:28
2	Cu 324.752†	25047.5	18218.0	55.572	ug/L	55.572	ppb	20:35:28
2	Mn 257.610†	1028649.6	1029854.3	1078.8	ug/L	1078.8	ppb	20:35:28
2	Mo 202.031†	-52.4	-79.3	1.3362	ug/L	1.3362	ppb	20:35:48
2	Ni 231.604†	3878.8	3794.4	85.381	ug/L	85.381	ppb	20:35:48

2	P 214.914†	1148.6	925.6	473.29 ug/L	473.29 ppb	20:35:48
2	Pb 220.353†	511.8	585.5	85.914 ug/L	85.914 ppb	20:35:48
2	S 181.975 Axial†	280.4	234.4	285.14 ug/L	285.14 ppb	20:35:48
2	Sb 206.836†	66.6	39.1	2.2161 ug/L	2.2161 ppb	20:35:48
2	Se 196.026†	-526.5	-505.1	18.820 ug/L	18.820 ppb	20:35:48
2	Si 251.611†	1429228.9	1431045.4	41784 ug/L	41784 ppb	20:35:28
2	Sn 189.927†	-161.3	-167.0	-22.076 ug/L	-22.076 ppb	20:35:48
2	Ti 334.940†	1122533.3	1125588.0	1766.7 ug/L	1766.7 ppb	20:35:28
2	Tl 190.801†	-123.4	-85.6	-0.2440 ug/L	-0.2440 ppb	20:35:48
2	U 409.014†	-7285.3	-4747.1	-142.76 ug/L	-142.76 ppb	20:35:28
2	V 292.402†	21620.1	23077.7	134.66 ug/L	134.66 ppb	20:35:28
2	Zn 213.857†	22188.1	21574.0	173.26 ug/L	173.26 ppb	20:35:28
2	SiO2†	1460111.8	1462011.2	91596 ug/L	91596 ppb	20:36:26
3	Sc Radial	5749.3	5749.3	101 %		20:34:55
3	Y RADIAL	6704.9	6704.9	109.9 %		20:34:55
3	Al 396.153Radial†	185304.2	183146.7	130060 ug/L	130060 ppb	20:34:35
3	Ca 317.933Radial†	20912.5	20649.8	30773 ug/L	30773 ppb	20:34:35
3	Fe 238.204 Radial†	9684.7	9564.8	88188 ug/L	88188 ppb	20:34:35
3	K 766.490 Radial†	55848.8	52977.2	9267.4 ug/L	9267.4 ppb	20:34:35
3	Mg 279.077 IEC†	488.7	482.7	17064 ug/L	17064 ppb	20:34:55
3	Na 589.592 Radial†	11060.0	12012.0	3864.4 ug/L	3864.4 ppb	20:34:35
3	Sr 421.552†	47386.5	46822.1	288.50 ug/L	288.50 ppb	20:34:35
3	Sc 361.383	909948.7	909948.7	100.96 %		20:35:54
3	Y 371.029	816356.5	816356.5	108.59 %		20:35:54
3	Ag 328.068†	-5595.5	-5857.4	2.2293 ug/L	2.2293 ppb	20:35:54
3	As 188.979†	-28.5	-3.9	27.030 ug/L	27.030 ppb	20:36:14
3	B 249.677†	574.6	1188.2	12.389 ug/L	12.389 ppb	20:35:54
3	Ba 233.527†	168339.6	166760.2	1208.0 ug/L	1208.0 ppb	20:35:54
3	Be 313.107†	8479.1	13670.8	8.2996 ug/L	8.2996 ppb	20:35:54
3	Cd 226.502†	666.2	865.9	0.0730 ug/L	0.0730 ppb	20:36:14
3	Co 228.616†	1176.2	1239.1	18.212 ug/L	18.212 ppb	20:36:14
3	Cr 267.716†	10818.5	10635.0	111.09 ug/L	111.09 ppb	20:35:54
3	Cu 324.752†	25332.6	18221.5	55.570 ug/L	55.570 ppb	20:35:54
3	Mn 257.610†	1041458.4	1031088.5	1080.1 ug/L	1080.1 ppb	20:35:54
3	Mo 202.031†	-56.1	-82.3	1.1323 ug/L	1.1323 ppb	20:36:14
3	Ni 231.604†	3857.8	3730.4	83.941 ug/L	83.941 ppb	20:36:14
3	P 214.914†	1120.5	885.0	451.13 ug/L	451.13 ppb	20:36:14
3	Pb 220.353†	515.0	582.9	85.639 ug/L	85.639 ppb	20:36:14
3	S 181.975 Axial†	273.3	224.3	271.67 ug/L	271.67 ppb	20:36:14
3	Sb 206.836†	68.6	40.3	2.6099 ug/L	2.6099 ppb	20:36:14
3	Se 196.026†	-513.0	-485.9	28.859 ug/L	28.859 ppb	20:36:14
3	Si 251.611†	1446059.6	1431803.4	41806 ug/L	41806 ppb	20:35:54
3	Sn 189.927†	-152.0	-156.0	-20.328 ug/L	-20.328 ppb	20:36:14
3	Ti 334.940†	1136047.4	1126475.5	1768.1 ug/L	1768.1 ppb	20:35:54
3	Tl 190.801†	-125.2	-86.0	-0.3279 ug/L	-0.3279 ppb	20:36:14
3	U 409.014†	-7393.2	-4772.8	-143.44 ug/L	-143.44 ppb	20:35:54
3	V 292.402†	21827.6	23042.5	134.46 ug/L	134.46 ppb	20:35:54
3	Zn 213.857†	22384.6	21521.7	172.85 ug/L	172.85 ppb	20:35:54
3	SiO2†	1458486.5	1444144.3	90477 ug/L	90477 ppb	20:36:32

Mean Data: 241419009|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905598.8	100.47	%	0.577				0.57%
Sc Radial	5707.6	100	%	0.8				0.83%
Y 371.029	813517.3	108.21	%	0.518				0.48%
Y RADIAL	6666.2	109.3	%	0.80				0.73%
Ag 328.068†	-5872.6	2.0987	ug/L	0.32112	2.0987	ppb	0.32112	15.30%
Al 396.153Radial†	182690.8	129740	ug/L	600.2	129740	ppb	600.2	0.46%
As 188.979†	-8.2	25.376	ug/L	3.8014	25.376	ppb	3.8014	14.98%
B 249.677†	1188.9	12.427	ug/L	0.6035	12.427	ppb	0.6035	4.86%
Ba 233.527†	166530.8	1206.3	ug/L	1.96	1206.3	ppb	1.96	0.16%
Be 313.107†	13578.3	8.2659	ug/L	0.03159	8.2659	ppb	0.03159	0.38%
Ca 317.933Radial†	20600.3	30700	ug/L	188.0	30700	ppb	188.0	0.61%
Cd 226.502†	875.9	0.1946	ug/L	0.10958	0.1946	ppb	0.10958	56.30%
Co 228.616†	1249.3	18.402	ug/L	0.1755	18.402	ppb	0.1755	0.95%
Cr 267.716†	10650.2	111.24	ug/L	0.344	111.24	ppb	0.344	0.31%
Cu 324.752†	18259.3	55.666	ug/L	0.1645	55.666	ppb	0.1645	0.30%
Fe 238.204 Radial†	9544.0	87996	ug/L	550.3	87996	ppb	550.3	0.63%
K 766.490 Radial†	52779.1	9232.7	ug/L	42.71	9232.7	ppb	42.71	0.46%

Mg 279.077 IEC†	486.6	17202	ug/L	160.8	17202	ppb	160.8	0.93%
Mn 257.610†	1029701.7	1078.6	ug/L	1.57	1078.6	ppb	1.57	0.15%
Mo 202.031†	-80.5	1.2289	ug/L	0.10238	1.2289	ppb	0.10238	8.33%
Na 589.592 Radial†	11972.8	3851.8	ug/L	20.64	3851.8	ppb	20.64	0.54%
Ni 231.604†	3753.1	84.451	ug/L	0.8064	84.451	ppb	0.8064	0.95%
P 214.914†	903.4	461.29	ug/L	11.191	461.29	ppb	11.191	2.43%
Pb 220.353†	584.0	85.705	ug/L	0.1851	85.705	ppb	0.1851	0.22%
S 181.975 Axial†	230.2	279.66	ug/L	7.076	279.66	ppb	7.076	2.53%
Sb 206.836†	33.9	0.6329	ug/L	3.08948	0.6329	ppb	3.08948	488.16%
Se 196.026†	-495.5	22.779	ug/L	5.3450	22.779	ppb	5.3450	23.46%
Si 251.611†	1431012.0	41783	ug/L	23.6	41783	ppb	23.6	0.06%
Sn 189.927†	-156.9	-20.483	ug/L	1.5224	-20.483	ppb	1.5224	7.43%
Sr 421.552†	46601.5	287.14	ug/L	1.687	287.14	ppb	1.687	0.59%
Ti 334.940†	1126138.7	1767.5	ug/L	0.75	1767.5	ppb	0.75	0.04%
Tl 190.801†	-83.1	0.4532	ug/L	1.28091	0.4532	ppb	1.28091	282.63%
U 409.014†	-4679.7	-140.84	ug/L	3.929	-140.84	ppb	3.929	2.79%
V 292.402†	23023.5	134.38	ug/L	0.334	134.38	ppb	0.334	0.25%
Zn 213.857†	21557.5	173.17	ug/L	0.279	173.17	ppb	0.279	0.16%
SiO2†	1453783.8	91081	ug/L	565.0	91081	ppb	565.0	0.62%

Sequence No.: 38
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/7/2009 20:38:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5689.3	5689.3	100	%			20:40:34
1	Y RADIAL	6088.9	6088.9	99.84	%			20:40:34
1	Al 396.153Radial†	7083.4	7094.4	5016.8	ug/L	5016.8	ppb	20:40:34
1	Ca 317.933Radial†	3363.9	3342.4	4981.1	ug/L	4981.1	ppb	20:40:54
1	Fe 238.204 Radial†	543.0	536.3	4960.2	ug/L	4960.2	ppb	20:40:54
1	K 766.490 Radial†	30869.5	28613.1	4996.2	ug/L	4996.2	ppb	20:40:34
1	Mg 279.077 IEC†	147.5	147.1	5227.6	ug/L	5227.6	ppb	20:40:54
1	Na 589.592 Radial†	27732.5	28777.5	9258.0	ug/L	9258.0	ppb	20:40:34
1	Sr 421.552†	80318.7	80204.2	494.63	ug/L	494.63	ppb	20:40:34
1	Sc 361.383	895742.3	895742.3	99.381	%			20:41:52
1	Y 371.029	734172.7	734172.7	97.656	%			20:41:52
1	Ag 328.068†	112979.9	113368.4	507.92	ug/L	507.92	ppb	20:41:57
1	As 188.979†	1247.1	1279.3	488.29	ug/L	488.29	ppb	20:42:17
1	B 249.677†	23260.4	24024.4	486.27	ug/L	486.27	ppb	20:41:57
1	Ba 233.527†	68034.5	68475.1	495.84	ug/L	495.84	ppb	20:41:57
1	Be 313.107†	1357350.3	1371074.1	485.16	ug/L	485.16	ppb	20:41:52
1	Cd 226.502†	47582.6	48084.9	490.46	ug/L	490.46	ppb	20:41:57
1	Co 228.616†	26582.2	26821.8	492.43	ug/L	492.43	ppb	20:41:57
1	Cr 267.716†	48020.4	48238.6	496.13	ug/L	496.13	ppb	20:41:57
1	Cu 324.752†	181912.3	176174.2	494.03	ug/L	494.03	ppb	20:41:57
1	Mn 257.610†	466651.3	469063.2	487.88	ug/L	487.88	ppb	20:41:52
1	Mo 202.031†	7990.1	8013.1	499.18	ug/L	499.18	ppb	20:42:17
1	Ni 231.604†	21941.6	21987.3	494.53	ug/L	494.53	ppb	20:41:57
1	P 214.914†	4535.4	4338.8	2311.6	ug/L	2311.6	ppb	20:42:17
1	Pb 220.353†	4349.9	4449.8	488.19	ug/L	488.19	ppb	20:42:17
1	S 181.975 Axial†	769.7	728.0	964.05	ug/L	964.05	ppb	20:42:17
1	Sb 206.836†	1617.2	1599.7	500.60	ug/L	500.60	ppb	20:42:17
1	Se 196.026†	828.5	855.9	498.21	ug/L	498.21	ppb	20:42:17
1	Si 251.611†	84872.8	84857.9	2466.0	ug/L	2466.0	ppb	20:41:57
1	Sn 189.927†	3105.9	3119.8	496.18	ug/L	496.18	ppb	20:42:17
1	Ti 334.940†	318803.3	321989.4	504.78	ug/L	504.78	ppb	20:41:57
1	Tl 190.801†	1762.5	1811.5	493.37	ug/L	493.37	ppb	20:42:17
1	U 409.014†	15810.1	18458.8	509.46	ug/L	509.46	ppb	20:41:57
1	V 292.402†	74615.6	76502.0	504.10	ug/L	504.10	ppb	20:41:57
1	Zn 213.857†	58643.0	58357.4	490.34	ug/L	490.34	ppb	20:41:57
1	SiO2†	84104.7	84116.9	5244.4	ug/L	5244.4	ppb	20:43:24
2	Sc Radial	5788.7	5788.7	102	%			20:40:59
2	Y RADIAL	6144.7	6144.7	100.8	%			20:40:59
2	Al 396.153Radial†	7149.3	7037.7	4976.7	ug/L	4976.7	ppb	20:40:59
2	Ca 317.933Radial†	3400.4	3320.6	4948.5	ug/L	4948.5	ppb	20:41:19
2	Fe 238.204 Radial†	551.9	535.7	4954.7	ug/L	4954.7	ppb	20:41:19
2	K 766.490 Radial†	31228.1	28435.8	4965.2	ug/L	4965.2	ppb	20:40:59
2	Mg 279.077 IEC†	149.8	146.8	5218.2	ug/L	5218.2	ppb	20:41:19
2	Na 589.592 Radial†	28199.7	28760.6	9252.6	ug/L	9252.6	ppb	20:40:59
2	Sr 421.552†	81620.3	80104.6	494.02	ug/L	494.02	ppb	20:40:59
2	Sc 361.383	906435.6	906435.6	100.57	%			20:42:23
2	Y 371.029	742114.8	742114.8	98.712	%			20:42:23
2	Ag 328.068†	113451.2	112495.9	504.02	ug/L	504.02	ppb	20:42:28
2	As 188.979†	1229.2	1246.6	475.90	ug/L	475.90	ppb	20:42:48
2	B 249.677†	23239.3	23727.3	480.24	ug/L	480.24	ppb	20:42:28
2	Ba 233.527†	68361.7	67992.8	492.35	ug/L	492.35	ppb	20:42:28
2	Be 313.107†	1373229.4	1370751.1	485.03	ug/L	485.03	ppb	20:42:23
2	Cd 226.502†	47946.5	47881.9	488.38	ug/L	488.38	ppb	20:42:28
2	Co 228.616†	26756.6	26679.6	489.82	ug/L	489.82	ppb	20:42:28
2	Cr 267.716†	48320.6	47967.0	493.33	ug/L	493.33	ppb	20:42:28
2	Cu 324.752†	181887.0	173989.6	487.91	ug/L	487.91	ppb	20:42:28
2	Mn 257.610†	472205.1	469046.2	487.86	ug/L	487.86	ppb	20:42:23
2	Mo 202.031†	8019.8	7947.8	495.11	ug/L	495.11	ppb	20:42:48
2	Ni 231.604†	22071.3	21855.9	491.57	ug/L	491.57	ppb	20:42:28

2	P 214.914†	4528.6	4278.2	2279.1 ug/L	2279.1 ppb	20:42:48
2	Pb 220.353†	4359.4	4407.5	483.55 ug/L	483.55 ppb	20:42:48
2	S 181.975 Axial†	765.7	714.9	946.68 ug/L	946.68 ppb	20:42:48
2	Sb 206.836†	1632.1	1595.2	499.09 ug/L	499.09 ppb	20:42:48
2	Se 196.026†	832.5	850.1	494.87 ug/L	494.87 ppb	20:42:48
2	Si 251.611†	85157.7	84133.7	2444.9 ug/L	2444.9 ppb	20:42:28
2	Sn 189.927†	3096.4	3073.5	488.82 ug/L	488.82 ppb	20:42:48
2	Ti 334.940†	319177.2	318576.9	499.43 ug/L	499.43 ppb	20:42:28
2	Tl 190.801†	1760.2	1788.3	487.08 ug/L	487.08 ppb	20:42:48
2	U 409.014†	15843.4	18304.2	505.19 ug/L	505.19 ppb	20:42:28
2	V 292.402†	74899.8	75898.9	500.12 ug/L	500.12 ppb	20:42:28
2	Zn 213.857†	59098.0	58113.8	488.30 ug/L	488.30 ppb	20:42:28
2	SiO2†	84527.9	83539.3	5208.5 ug/L	5208.5 ppb	20:43:29
3	Sc Radial	5746.2	5746.2	101 %		20:41:24
3	Y RADIAL	6127.5	6127.5	100.5 %		20:41:24
3	Al 396.153Radial†	7125.7	7066.3	4997.3 ug/L	4997.3 ppb	20:41:24
3	Ca 317.933Radial†	3392.9	3337.9	4974.3 ug/L	4974.3 ppb	20:41:44
3	Fe 238.204 Radial†	544.8	532.7	4926.6 ug/L	4926.6 ppb	20:41:44
3	K 766.490 Radial†	30933.3	28371.2	4953.9 ug/L	4953.9 ppb	20:41:24
3	Mg 279.077 IEC†	143.4	141.5	5029.9 ug/L	5029.9 ppb	20:41:44
3	Na 589.592 Radial†	27678.0	28449.6	9152.5 ug/L	9152.5 ppb	20:41:24
3	Sr 421.552†	80753.8	79840.8	492.39 ug/L	492.39 ppb	20:41:24
3	Sc 361.383	915006.7	915006.7	101.52 %		20:42:53
3	Y 371.029	748452.4	748452.4	99.555 %		20:42:53
3	Ag 328.068†	112955.9	110951.3	497.11 ug/L	497.11 ppb	20:42:59
3	As 188.979†	1238.4	1244.3	474.97 ug/L	474.97 ppb	20:43:19
3	B 249.677†	23182.4	23454.7	474.73 ug/L	474.73 ppb	20:42:59
3	Ba 233.527†	67999.3	66999.1	485.16 ug/L	485.16 ppb	20:42:59
3	Be 313.107†	1379512.3	1364149.2	482.69 ug/L	482.69 ppb	20:42:53
3	Cd 226.502†	47606.7	47100.6	480.41 ug/L	480.41 ppb	20:42:59
3	Co 228.616†	26586.7	26263.1	482.17 ug/L	482.17 ppb	20:42:59
3	Cr 267.716†	48022.2	47223.0	485.68 ug/L	485.68 ppb	20:42:59
3	Cu 324.752†	181087.8	171508.2	480.95 ug/L	480.95 ppb	20:42:59
3	Mn 257.610†	475153.7	467552.4	486.31 ug/L	486.31 ppb	20:42:53
3	Mo 202.031†	8013.0	7866.4	490.04 ug/L	490.04 ppb	20:43:19
3	Ni 231.604†	21915.9	21497.2	483.50 ug/L	483.50 ppb	20:42:59
3	P 214.914†	4552.3	4259.3	2269.9 ug/L	2269.9 ppb	20:43:19
3	Pb 220.353†	4368.3	4375.7	480.08 ug/L	480.08 ppb	20:43:19
3	S 181.975 Axial†	765.8	707.9	937.32 ug/L	937.32 ppb	20:43:19
3	Sb 206.836†	1631.7	1579.7	494.34 ug/L	494.34 ppb	20:43:19
3	Se 196.026†	849.5	859.1	499.82 ug/L	499.82 ppb	20:43:19
3	Si 251.611†	84633.6	82824.3	2406.8 ug/L	2406.8 ppb	20:42:59
3	Sn 189.927†	3112.3	3060.3	486.72 ug/L	486.72 ppb	20:43:19
3	Ti 334.940†	318321.7	314761.3	493.45 ug/L	493.45 ppb	20:42:59
3	Tl 190.801†	1765.7	1777.2	484.09 ug/L	484.09 ppb	20:43:19
3	U 409.014†	15887.3	18200.0	502.32 ug/L	502.32 ppb	20:42:59
3	V 292.402†	74500.3	74807.8	492.95 ug/L	492.95 ppb	20:42:59
3	Zn 213.857†	58653.7	57125.7	480.00 ug/L	480.00 ppb	20:42:59
3	SiO2†	84761.4	82982.0	5173.8 ug/L	5173.8 ppb	20:43:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905728.2	100.49	%	1.071				1.07%
Sc Radial	5741.4	101	%	0.9				0.87%
Y 371.029	741580.0	98.641	%	0.9517				0.96%
Y RADIAL	6120.4	100.4	%	0.47				0.47%
Ag 328.068†	112271.9	503.02	ug/L	5.476	503.02	ppb	5.476	1.09%
QC value within limits for Ag 328.068 Recovery = 100.60%								
Al 396.153Radial†	7066.1	4996.9	ug/L	20.05	4996.9	ppb	20.05	0.40%
QC value within limits for Al 396.153Radial Recovery = 99.94%								
As 188.979†	1256.7	479.72	ug/L	7.433	479.72	ppb	7.433	1.55%
QC value within limits for As 188.979 Recovery = 95.94%								
B 249.677†	23735.5	480.42	ug/L	5.774	480.42	ppb	5.774	1.20%
QC value within limits for B 249.677 Recovery = 96.08%								
Ba 233.527†	67822.3	491.12	ug/L	5.449	491.12	ppb	5.449	1.11%
QC value within limits for Ba 233.527 Recovery = 98.22%								
Be 313.107†	1368658.1	484.29	ug/L	1.390	484.29	ppb	1.390	0.29%
QC value within limits for Be 313.107 Recovery = 96.86%								
Ca 317.933Radial†	3333.6	4968.0	ug/L	17.20	4968.0	ppb	17.20	0.35%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.36%
Cd 226.502†            47689.1      486.42 ug/L         5.304      486.42 ppb          5.304   1.09%
   QC value within limits for Cd 226.502  Recovery = 97.28%
Co 228.616†            26588.2      488.14 ug/L         5.329      488.14 ppb          5.329   1.09%
   QC value within limits for Co 228.616  Recovery = 97.63%
Cr 267.716†            47809.5      491.71 ug/L         5.408      491.71 ppb          5.408   1.10%
   QC value within limits for Cr 267.716  Recovery = 98.34%
Cu 324.752†           173890.7      487.63 ug/L         6.544      487.63 ppb          6.544   1.34%
   QC value within limits for Cu 324.752  Recovery = 97.53%
Fe 238.204 Radial†       534.9      4947.2 ug/L        17.99      4947.2 ppb          17.99   0.36%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.94%
K 766.490 Radial†      28473.4      4971.8 ug/L        21.90      4971.8 ppb          21.90   0.44%
   QC value within limits for K 766.490 Radial  Recovery = 99.44%
Mg 279.077 IEC†          145.1      5158.5 ug/L       111.53      5158.5 ppb         111.53   2.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.17%
Mn 257.610†           468553.9      487.35 ug/L         0.901      487.35 ppb          0.901   0.18%
   QC value within limits for Mn 257.610  Recovery = 97.47%
Mo 202.031†             7942.4      494.78 ug/L         4.576      494.78 ppb          4.576   0.92%
   QC value within limits for Mo 202.031  Recovery = 98.96%
Na 589.592 Radial†     28662.5      9221.0 ug/L        59.40      9221.0 ppb          59.40   0.64%
   QC value within limits for Na 589.592 Radial  Recovery = 92.21%
Ni 231.604†            21780.1      489.87 ug/L         5.706      489.87 ppb          5.706   1.16%
   QC value within limits for Ni 231.604  Recovery = 97.97%
P 214.914†              4292.1      2286.9 ug/L        21.91      2286.9 ppb          21.91   0.96%
   QC value within limits for P 214.914  Recovery = 91.47%
Pb 220.353†             4411.0      483.94 ug/L         4.070      483.94 ppb          4.070   0.84%
   QC value within limits for Pb 220.353  Recovery = 96.79%
S 181.975 Axial†         716.9      949.35 ug/L        13.565      949.35 ppb         13.565   1.43%
   QC value within limits for S 181.975 Axial  Recovery = 94.94%
Sb 206.836†             1591.6      498.01 ug/L         3.270      498.01 ppb          3.270   0.66%
   QC value within limits for Sb 206.836  Recovery = 99.60%
Se 196.026†              855.0      497.63 ug/L         2.524      497.63 ppb          2.524   0.51%
   QC value within limits for Se 196.026  Recovery = 99.53%
Si 251.611†            83938.6      2439.2 ug/L        30.00      2439.2 ppb          30.00   1.23%
   QC value within limits for Si 251.611  Recovery = 97.57%
Sn 189.927†             3084.5      490.57 ug/L         4.969      490.57 ppb          4.969   1.01%
   QC value within limits for Sn 189.927  Recovery = 98.11%
Sr 421.552†            80049.8      493.68 ug/L         1.158      493.68 ppb          1.158   0.23%
   QC value within limits for Sr 421.552  Recovery = 98.74%
Ti 334.940†           318442.5      499.22 ug/L         5.667      499.22 ppb          5.667   1.14%
   QC value within limits for Ti 334.940  Recovery = 99.84%
Tl 190.801†             1792.3      488.18 ug/L         4.738      488.18 ppb          4.738   0.97%
   QC value within limits for Tl 190.801  Recovery = 97.64%
U 409.014†             18321.0      505.65 ug/L         3.594      505.65 ppb          3.594   0.71%
   QC value within limits for U 409.014  Recovery = 101.13%
V 292.402†             75736.2      499.06 ug/L         5.646      499.06 ppb          5.646   1.13%
   QC value within limits for V 292.402  Recovery = 99.81%
Zn 213.857†            57865.6      486.21 ug/L         5.481      486.21 ppb          5.481   1.13%
   QC value within limits for Zn 213.857  Recovery = 97.24%
SiO2†                  83546.0      5208.9 ug/L        35.34      5208.9 ppb          35.34   0.68%
   QC value within limits for SiO2  Recovery = 97.41%
All analyte(s) passed QC.
```

Sequence No.: 39
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/7/2009 20:45:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5815.4	5815.4	102	%			20:47:36
1	Y RADIAL	6266.7	6266.7	102.8	%			20:47:36
1	Al 396.153Radial†	-21.7	-0.8	-0.5659	ug/L	-0.5659	ppb	20:47:36
1	Ca 317.933Radial†	22.2	4.7	6.9966	ug/L	6.9966	ppb	20:47:56
1	Fe 238.204 Radial†	6.8	0.6	5.6107	ug/L	5.6107	ppb	20:47:56
1	K 766.490 Radial†	2478.2	206.0	36.031	ug/L	36.031	ppb	20:47:36
1	Mg 279.077 IEC†	2.6	2.3	81.684	ug/L	81.684	ppb	20:47:56
1	Na 589.592 Radial†	-1073.5	33.1	10.660	ug/L	10.660	ppb	20:47:36
1	Sr 421.552†	-18.8	-25.8	-0.1590	ug/L	-0.1590	ppb	20:47:36
1	Sc 361.383	890693.4	890693.4	98.821	%			20:48:53
1	Y 371.029	744263.8	744263.8	98.998	%			20:48:53
1	Ag 328.068†	366.9	56.3	0.2463	ug/L	0.2463	ppb	20:48:53
1	As 188.979†	-21.9	2.2	0.8485	ug/L	0.8485	ppb	20:49:13
1	B 249.677†	-428.4	185.6	3.7710	ug/L	3.7710	ppb	20:49:13
1	Ba 233.527†	-14.6	2.2	0.0168	ug/L	0.0168	ppb	20:49:13
1	Be 313.107†	-4933.3	279.9	0.0990	ug/L	0.0990	ppb	20:48:53
1	Cd 226.502†	-207.9	-4.3	-0.0443	ug/L	-0.0443	ppb	20:49:13
1	Co 228.616†	-68.5	4.8	0.0876	ug/L	0.0876	ppb	20:49:13
1	Cr 267.716†	80.5	0.6	0.0038	ug/L	0.0038	ppb	20:49:13
1	Cu 324.752†	6652.2	-139.3	-0.3901	ug/L	-0.3901	ppb	20:48:53
1	Mn 257.610†	471.6	-16.6	-0.0182	ug/L	-0.0182	ppb	20:49:13
1	Mo 202.031†	29.4	3.0	0.1895	ug/L	0.1895	ppb	20:49:13
1	Ni 231.604†	85.0	-4.9	-0.1099	ug/L	-0.1099	ppb	20:49:13
1	P 214.914†	214.6	-7.7	-4.1801	ug/L	-4.1801	ppb	20:49:13
1	Pb 220.353†	-47.4	24.8	2.7174	ug/L	2.7174	ppb	20:49:13
1	S 181.975 Axial†	38.6	-7.5	-9.8796	ug/L	-9.8796	ppb	20:49:13
1	Sb 206.836†	29.2	1.9	0.5836	ug/L	0.5836	ppb	20:49:13
1	Se 196.026†	-30.0	-8.1	-4.5180	ug/L	-4.5180	ppb	20:49:13
1	Si 251.611†	524.1	-13.1	-0.3953	ug/L	-0.3953	ppb	20:49:13
1	Sn 189.927†	2.9	-2.5	-0.3934	ug/L	-0.3934	ppb	20:49:13
1	Ti 334.940†	-1144.3	43.1	0.0642	ug/L	0.0642	ppb	20:48:53
1	Tl 190.801†	-31.2	6.4	1.7388	ug/L	1.7388	ppb	20:49:13
1	U 409.014†	-2213.1	310.7	8.6022	ug/L	8.6022	ppb	20:48:53
1	V 292.402†	-1359.7	45.9	0.3186	ug/L	0.3186	ppb	20:48:53
1	Zn 213.857†	773.1	131.7	1.1141	ug/L	1.1141	ppb	20:49:13
1	SiO2†	542.8	37.8	2.3344	ug/L	2.3344	ppb	20:50:09
2	Sc Radial	5871.3	5871.3	103	%			20:48:01
2	Y RADIAL	6346.1	6346.1	104.1	%			20:48:01
2	Al 396.153Radial†	-22.8	-1.6	-1.1499	ug/L	-1.1499	ppb	20:48:01
2	Ca 317.933Radial†	26.2	8.4	12.490	ug/L	12.490	ppb	20:48:21
2	Fe 238.204 Radial†	9.4	3.1	28.373	ug/L	28.373	ppb	20:48:21
2	K 766.490 Radial†	2430.4	136.7	23.894	ug/L	23.894	ppb	20:48:01
2	Mg 279.077 IEC†	5.8	5.3	189.10	ug/L	189.10	ppb	20:48:21
2	Na 589.592 Radial†	-1068.0	48.5	15.588	ug/L	15.588	ppb	20:48:01
2	Sr 421.552†	-7.4	-14.6	-0.0904	ug/L	-0.0904	ppb	20:48:01
2	Sc 361.383	898435.2	898435.2	99.680	%			20:49:18
2	Y 371.029	750608.3	750608.3	99.842	%			20:49:18
2	Ag 328.068†	341.2	27.4	0.1288	ug/L	0.1288	ppb	20:49:18
2	As 188.979†	-19.3	5.1	1.9197	ug/L	1.9197	ppb	20:49:39
2	B 249.677†	-454.7	163.0	3.3085	ug/L	3.3085	ppb	20:49:39
2	Ba 233.527†	-10.0	7.0	0.0523	ug/L	0.0523	ppb	20:49:39
2	Be 313.107†	-5003.8	252.2	0.0895	ug/L	0.0895	ppb	20:49:18
2	Cd 226.502†	-195.2	10.2	0.1011	ug/L	0.1011	ppb	20:49:39
2	Co 228.616†	-84.5	-10.7	-0.1976	ug/L	-0.1976	ppb	20:49:39
2	Cr 267.716†	88.5	7.9	0.0810	ug/L	0.0810	ppb	20:49:39
2	Cu 324.752†	6684.1	-165.3	-0.4619	ug/L	-0.4619	ppb	20:49:18
2	Mn 257.610†	489.8	-2.5	-0.0032	ug/L	-0.0032	ppb	20:49:39
2	Mo 202.031†	20.6	-6.1	-0.3773	ug/L	-0.3773	ppb	20:49:39
2	Ni 231.604†	89.9	-0.7	-0.0152	ug/L	-0.0152	ppb	20:49:39

2	P 214.914†	218.0	-6.2	-3.3560 ug/L	-3.3560 ppb	20:49:39
2	Pb 220.353†	-67.2	5.3	0.5797 ug/L	0.5797 ppb	20:49:39
2	S 181.975 Axial†	38.8	-7.6	-10.022 ug/L	-10.022 ppb	20:49:39
2	Sb 206.836†	37.3	9.8	3.0044 ug/L	3.0044 ppb	20:49:39
2	Se 196.026†	-22.4	-0.2	-0.0149 ug/L	-0.0149 ppb	20:49:39
2	Si 251.611†	527.4	-14.3	-0.4193 ug/L	-0.4193 ppb	20:49:39
2	Sn 189.927†	5.7	0.3	0.0527 ug/L	0.0527 ppb	20:49:39
2	Ti 334.940†	-1057.4	140.3	0.2186 ug/L	0.2186 ppb	20:49:18
2	Tl 190.801†	-32.8	5.0	1.3614 ug/L	1.3614 ppb	20:49:39
2	U 409.014†	-2381.7	160.9	4.4513 ug/L	4.4513 ppb	20:49:18
2	V 292.402†	-1350.4	67.1	0.4392 ug/L	0.4392 ppb	20:49:18
2	Zn 213.857†	759.8	111.5	0.9369 ug/L	0.9369 ppb	20:49:39
2	SiO2†	552.0	42.2	2.6427 ug/L	2.6427 ppb	20:50:14
3	Sc Radial	5794.9	5794.9	102 %		20:48:26
3	Y RADIAL	6220.7	6220.7	102.0 %		20:48:26
3	Al 396.153Radial†	-12.7	8.0	5.6848 ug/L	5.6848 ppb	20:48:26
3	Ca 317.933Radial†	23.3	5.9	8.7658 ug/L	8.7658 ppb	20:48:47
3	Fe 238.204 Radial†	6.8	0.6	5.7368 ug/L	5.7368 ppb	20:48:47
3	K 766.490 Radial†	2458.3	195.1	34.105 ug/L	34.105 ppb	20:48:26
3	Mg 279.077 IEC†	3.6	3.2	115.09 ug/L	115.09 ppb	20:48:47
3	Na 589.592 Radial†	-1065.9	36.9	11.876 ug/L	11.876 ppb	20:48:26
3	Sr 421.552†	-12.7	-19.9	-0.1225 ug/L	-0.1225 ppb	20:48:26
3	Sc 361.383	886912.1	886912.1	98.401 %		20:49:44
3	Y 371.029	738978.0	738978.0	98.295 %		20:49:44
3	Ag 328.068†	292.1	-18.1	-0.0816 ug/L	-0.0816 ppb	20:49:44
3	As 188.979†	-29.6	-5.6	-2.1337 ug/L	-2.1337 ppb	20:50:04
3	B 249.677†	-452.4	159.4	3.2380 ug/L	3.2380 ppb	20:50:04
3	Ba 233.527†	-14.0	2.8	0.0212 ug/L	0.0212 ppb	20:50:04
3	Be 313.107†	-5034.2	156.1	0.0552 ug/L	0.0552 ppb	20:49:44
3	Cd 226.502†	-195.2	7.7	0.0778 ug/L	0.0778 ppb	20:50:04
3	Co 228.616†	-74.8	-1.9	-0.0367 ug/L	-0.0367 ppb	20:50:04
3	Cr 267.716†	68.9	-10.8	-0.1117 ug/L	-0.1117 ppb	20:50:04
3	Cu 324.752†	6598.7	-165.0	-0.4622 ug/L	-0.4622 ppb	20:49:44
3	Mn 257.610†	457.9	-28.5	-0.0311 ug/L	-0.0311 ppb	20:50:04
3	Mo 202.031†	19.0	-7.4	-0.4606 ug/L	-0.4606 ppb	20:50:04
3	Ni 231.604†	101.7	12.5	0.2807 ug/L	0.2807 ppb	20:50:04
3	P 214.914†	219.1	-2.3	-1.1775 ug/L	-1.1775 ppb	20:50:04
3	Pb 220.353†	-59.5	12.3	1.3407 ug/L	1.3407 ppb	20:50:04
3	S 181.975 Axial†	39.8	-6.1	-8.0237 ug/L	-8.0237 ppb	20:50:04
3	Sb 206.836†	29.1	2.0	0.6063 ug/L	0.6063 ppb	20:50:04
3	Se 196.026†	-30.4	-8.6	-4.8162 ug/L	-4.8162 ppb	20:50:04
3	Si 251.611†	508.9	-26.2	-0.7688 ug/L	-0.7688 ppb	20:50:04
3	Sn 189.927†	8.0	2.7	0.4324 ug/L	0.4324 ppb	20:50:04
3	Ti 334.940†	-1169.3	12.8	0.0185 ug/L	0.0185 ppb	20:49:44
3	Tl 190.801†	-32.2	5.2	1.4077 ug/L	1.4077 ppb	20:50:04
3	U 409.014†	-2340.4	171.9	4.7578 ug/L	4.7578 ppb	20:49:44
3	V 292.402†	-1353.2	46.6	0.3074 ug/L	0.3074 ppb	20:49:44
3	Zn 213.857†	754.2	115.8	0.9761 ug/L	0.9761 ppb	20:50:04
3	SiO2†	543.1	40.3	2.5161 ug/L	2.5161 ppb	20:50:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892013.6	98.967	%	0.6517				0.66%
Sc Radial	5827.2	103	%	0.7				0.68%
Y 371.029	744616.7	99.045	%	0.7746				0.78%
Y RADIAL	6277.8	102.9	%	1.04				1.01%
Ag 328.068†	21.9	0.0978	ug/L	0.16612	0.0978	ppb	0.16612	169.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.8	1.3230	ug/L	3.78871	1.3230	ppb	3.78871	286.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.6	0.2115	ug/L	2.10040	0.2115	ppb	2.10040	993.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	169.3	3.4392	ug/L	0.28953	3.4392	ppb	0.28953	8.42%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.0	0.0301	ug/L	0.01937	0.0301	ppb	0.01937	64.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	229.4	0.0812	ug/L	0.02306	0.0812	ppb	0.02306	28.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	9.4175	ug/L	2.80403	9.4175	ppb	2.80403	29.77%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.5      0.0448 ug/L       0.07812      0.0448 ppb        0.07812 174.17%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.6     -0.0489 ug/L       0.14301     -0.0489 ppb        0.14301 292.62%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -0.8     -0.0090 ug/L       0.09695     -0.0090 ppb        0.09695 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -156.5     -0.4381 ug/L       0.04157     -0.4381 ppb        0.04157   9.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.4      13.240 ug/L       13.1055      13.240 ppb        13.1055  98.98%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         179.3      31.343 ug/L        6.5227      31.343 ppb         6.5227  20.81%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             3.6      128.62 ug/L        54.971      128.62 ppb         54.971  42.74%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -15.8     -0.0175 ug/L       0.01396     -0.0175 ppb        0.01396  79.66%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -3.5     -0.2161 ug/L       0.35372     -0.2161 ppb        0.35372 163.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         39.5      12.708 ug/L        2.5674      12.708 ppb         2.5674  20.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.3      0.0519 ug/L       0.20376      0.0519 ppb        0.20376 392.90%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.4     -2.9045 ug/L       1.55137     -2.9045 ppb        1.55137  53.41%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                14.1      1.5460 ug/L       1.08351      1.5460 ppb        1.08351  70.09%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -7.0     -9.3084 ug/L       1.11486     -9.3084 ppb        1.11486  11.98%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.5      1.3981 ug/L       1.39113      1.3981 ppb        1.39113  99.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.6     -3.1164 ug/L       2.69009     -3.1164 ppb        2.69009  86.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -17.8     -0.5278 ug/L       0.20901     -0.5278 ppb        0.20901  39.60%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.2      0.0306 ug/L       0.41332      0.0306 ppb        0.41332 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -20.1     -0.1240 ug/L       0.03437     -0.1240 ppb        0.03437  27.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                65.4      0.1005 ug/L       0.10487      0.1005 ppb        0.10487 104.40%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.6      1.5026 ug/L       0.20581      1.5026 ppb        0.20581  13.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                214.5      5.9371 ug/L       2.31313      5.9371 ppb        2.31313  38.96%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 53.2      0.3551 ug/L       0.07306      0.3551 ppb        0.07306  20.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               119.7      1.0090 ug/L       0.09309      1.0090 ppb        0.09309   9.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      40.1      2.4977 ug/L       0.15500      2.4977 ppb        0.15500   6.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 40
Sample ID: 241419010|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 12/7/2009 20:52:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419010|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5668.4	5668.4	99.8	%			20:54:43
1	Y RADIAL	6806.6	6806.6	111.6	%			20:54:43
1	Al 396.153Radial†	148051.2	148420.0	105400	ug/L	105400	ppb	20:54:23
1	Ca 317.933Radial†	16017.0	16037.7	23900	ug/L	23900	ppb	20:54:23
1	Fe 238.204 Radial†	15854.1	15885.4	146460	ug/L	146460	ppb	20:54:23
1	K 766.490 Radial†	61738.1	59668.2	10348	ug/L	10348	ppb	20:54:23
1	Mg 279.077 IEC†	552.8	553.9	19541	ug/L	19541	ppb	20:54:43
1	Na 589.592 Radial†	2154.8	3241.9	1042.9	ug/L	1042.9	ppb	20:54:23
1	Sr 421.552†	39905.2	39991.7	246.44	ug/L	246.44	ppb	20:54:23
1	Sc 361.383	929083.0	929083.0	103.08	%			20:55:47
1	Y 371.029	857594.6	857594.6	114.07	%			20:55:47
1	Ag 328.068†	-9136.7	-9178.6	7.0538	ug/L	7.0538	ppb	20:56:07
1	As 188.979†	23.8	47.5	64.925	ug/L	64.925	ppb	20:56:07
1	B 249.677†	1305.2	1885.4	18.667	ug/L	18.667	ppb	20:55:47
1	Ba 233.527†	245103.8	237796.5	1723.7	ug/L	1723.7	ppb	20:55:47
1	Be 313.107†	3298.7	8472.2	8.6834	ug/L	8.6834	ppb	20:55:47
1	Cd 226.502†	1317.2	1483.9	0.5398	ug/L	0.5398	ppb	20:56:07
1	Co 228.616†	4665.1	4599.8	76.887	ug/L	76.887	ppb	20:56:07
1	Cr 267.716†	9471.3	9107.4	96.874	ug/L	96.874	ppb	20:56:07
1	Cu 324.752†	26319.4	18662.0	59.777	ug/L	59.777	ppb	20:55:47
1	Mn 257.610†	8243640.7	7996807.6	8325.1	ug/L	8325.1	ppb	20:55:40
1	Mo 202.031†	-81.7	-106.0	3.7906	ug/L	3.7906	ppb	20:56:07
1	Ni 231.604†	3032.4	2850.9	64.107	ug/L	64.107	ppb	20:56:07
1	P 214.914†	2153.2	1864.0	934.03	ug/L	934.03	ppb	20:56:07
1	Pb 220.353†	2095.3	2105.4	241.82	ug/L	241.82	ppb	20:56:07
1	S 181.975 Axial†	510.0	448.3	573.55	ug/L	573.55	ppb	20:56:07
1	Sb 206.836†	68.6	38.9	1.6209	ug/L	1.6209	ppb	20:56:07
1	Se 196.026†	-836.8	-789.5	37.661	ug/L	37.661	ppb	20:56:07
1	Si 251.611†	1414027.2	1371229.4	40037	ug/L	40037	ppb	20:55:47
1	Sn 189.927†	-152.2	-153.1	-19.817	ug/L	-19.817	ppb	20:56:07
1	Ti 334.940†	1902269.8	1846626.7	2897.0	ug/L	2897.0	ppb	20:55:47
1	Tl 190.801†	-299.6	-252.7	4.1452	ug/L	4.1452	ppb	20:56:07
1	U 409.014†	-10019.5	-7169.8	-217.10	ug/L	-217.10	ppb	20:55:47
1	V 292.402†	59132.2	58787.0	356.65	ug/L	356.65	ppb	20:55:47
1	Zn 213.857†	26590.6	25145.3	198.05	ug/L	198.05	ppb	20:56:07
1	SiO2†	1394273.9	1352098.2	84709	ug/L	84709	ppb	20:57:19
2	Sc Radial	5824.4	5824.4	103	%			20:55:08
2	Y RADIAL	6971.3	6971.3	114.3	%			20:55:08
2	Al 396.153Radial†	146601.0	143029.9	101580	ug/L	101580	ppb	20:54:48
2	Ca 317.933Radial†	15820.7	15416.2	22974	ug/L	22974	ppb	20:54:48
2	Fe 238.204 Radial†	15682.8	15292.6	141000	ug/L	141000	ppb	20:54:48
2	K 766.490 Radial†	60792.0	57087.5	9895.8	ug/L	9895.8	ppb	20:54:48
2	Mg 279.077 IEC†	549.0	535.3	18887	ug/L	18887	ppb	20:55:08
2	Na 589.592 Radial†	2153.1	3182.4	1023.8	ug/L	1023.8	ppb	20:54:48
2	Sr 421.552†	39327.6	38356.8	236.36	ug/L	236.36	ppb	20:54:48
2	Sc 361.383	920223.4	920223.4	102.10	%			20:56:20
2	Y 371.029	848186.8	848186.8	112.82	%			20:56:20
2	Ag 328.068†	-9175.0	-9301.5	4.7884	ug/L	4.7884	ppb	20:56:40
2	As 188.979†	26.1	49.9	65.008	ug/L	65.008	ppb	20:56:40
2	B 249.677†	1235.2	1829.0	18.243	ug/L	18.243	ppb	20:56:20
2	Ba 233.527†	242720.2	237751.1	1723.2	ug/L	1723.2	ppb	20:56:20
2	Be 313.107†	3355.3	8558.4	8.7165	ug/L	8.7165	ppb	20:56:20
2	Cd 226.502†	1327.4	1506.2	1.3144	ug/L	1.3144	ppb	20:56:40
2	Co 228.616†	4694.5	4672.2	78.291	ug/L	78.291	ppb	20:56:40
2	Cr 267.716†	9491.1	9215.3	97.888	ug/L	97.888	ppb	20:56:40
2	Cu 324.752†	26175.4	18766.9	59.792	ug/L	59.792	ppb	20:56:20
2	Mn 257.610†	8194694.6	8025862.2	8354.8	ug/L	8354.8	ppb	20:56:13
2	Mo 202.031†	-78.4	-103.6	3.5533	ug/L	3.5533	ppb	20:56:40
2	Ni 231.604†	3052.4	2898.8	65.186	ug/L	65.186	ppb	20:56:40

2	P 214.914†	2138.8	1869.9	940.36 ug/L	940.36 ppb	20:56:40
2	Pb 220.353†	2117.6	2146.9	245.95 ug/L	245.95 ppb	20:56:40
2	S 181.975 Axial†	502.5	445.7	570.87 ug/L	570.87 ppb	20:56:40
2	Sb 206.836†	65.1	36.2	0.7650 ug/L	0.7650 ppb	20:56:40
2	Se 196.026†	-850.7	-811.0	7.7056 ug/L	7.7056 ppb	20:56:40
2	Si 251.611†	1400826.0	1371506.3	40045 ug/L	40045 ppb	20:56:20
2	Sn 189.927†	-148.5	-150.9	-19.645 ug/L	-19.645 ppb	20:56:40
2	Ti 334.940†	1884994.8	1847473.6	2898.3 ug/L	2898.3 ppb	20:56:20
2	Tl 190.801†	-297.8	-253.7	3.9484 ug/L	3.9484 ppb	20:56:40
2	U 409.014†	-10050.7	-7294.0	-219.86 ug/L	-219.86 ppb	20:56:20
2	V 292.402†	58744.1	58959.2	358.58 ug/L	358.58 ppb	20:56:20
2	Zn 213.857†	26805.1	25603.8	202.47 ug/L	202.47 ppb	20:56:40
2	SiO2†	1421744.0	1392026.5	87211 ug/L	87211 ppb	20:57:25
3	Sc Radial	5765.3	5765.3	101 %		20:55:33
3	Y RADIAL	6902.6	6902.6	113.2 %		20:55:33
3	Al 396.153Radial†	148488.3	146356.2	103940 ug/L	103940 ppb	20:55:13
3	Ca 317.933Radial†	15974.8	15726.3	23436 ug/L	23436 ppb	20:55:13
3	Fe 238.204 Radial†	15875.9	15639.7	144200 ug/L	144200 ppb	20:55:13
3	K 766.490 Radial†	61352.4	58247.8	10100 ug/L	10100 ppb	20:55:13
3	Mg 279.077 IEC†	550.3	542.0	19122 ug/L	19122 ppb	20:55:33
3	Na 589.592 Radial†	2115.5	3166.9	1018.8 ug/L	1018.8 ppb	20:55:13
3	Sr 421.552†	39830.4	39245.6	241.84 ug/L	241.84 ppb	20:55:13
3	Sc 361.383	931316.3	931316.3	103.33 %		20:56:52
3	Y 371.029	859295.5	859295.5	114.30 %		20:56:52
3	Ag 328.068†	-9166.2	-9185.9	6.3124 ug/L	6.3124 ppb	20:57:13
3	As 188.979†	26.6	50.2	65.605 ug/L	65.605 ppb	20:57:13
3	B 249.677†	1442.8	2015.4	21.610 ug/L	21.610 ppb	20:56:52
3	Ba 233.527†	245761.8	237863.1	1724.1 ug/L	1724.1 ppb	20:56:52
3	Be 313.107†	3248.6	8416.0	8.6690 ug/L	8.6690 ppb	20:56:52
3	Cd 226.502†	1341.7	1504.5	0.9762 ug/L	0.9762 ppb	20:57:13
3	Co 228.616†	4693.1	4616.1	77.213 ug/L	77.213 ppb	20:57:13
3	Cr 267.716†	9493.3	9106.7	96.828 ug/L	96.828 ppb	20:57:13
3	Cu 324.752†	26408.6	18687.1	59.732 ug/L	59.732 ppb	20:56:52
3	Mn 257.610†	8222066.8	7956750.7	8283.3 ug/L	8283.3 ppb	20:56:46
3	Mo 202.031†	-80.4	-104.5	3.7213 ug/L	3.7213 ppb	20:57:13
3	Ni 231.604†	3041.3	2852.5	64.144 ug/L	64.144 ppb	20:57:13
3	P 214.914†	2144.7	1850.7	928.05 ug/L	928.05 ppb	20:57:13
3	Pb 220.353†	2099.5	2104.6	241.59 ug/L	241.59 ppb	20:57:13
3	S 181.975 Axial†	503.9	441.2	564.35 ug/L	564.35 ppb	20:57:13
3	Sb 206.836†	65.1	35.4	0.5629 ug/L	0.5629 ppb	20:57:13
3	Se 196.026†	-849.2	-799.6	24.615 ug/L	24.615 ppb	20:57:13
3	Si 251.611†	1418245.4	1372022.2	40060 ug/L	40060 ppb	20:56:52
3	Sn 189.927†	-144.7	-145.4	-18.685 ug/L	-18.685 ppb	20:57:13
3	Ti 334.940†	1908650.2	1848376.2	2899.7 ug/L	2899.7 ppb	20:56:52
3	Tl 190.801†	-292.1	-244.8	6.0334 ug/L	6.0334 ppb	20:57:13
3	U 409.014†	-10028.0	-7154.8	-216.40 ug/L	-216.40 ppb	20:56:52
3	V 292.402†	59484.1	58990.1	358.30 ug/L	358.30 ppb	20:56:52
3	Zn 213.857†	26765.4	25252.6	199.19 ug/L	199.19 ppb	20:57:13
3	SiO2†	1415384.1	1369284.8	85786 ug/L	85786 ppb	20:57:31

Mean Data: 241419010|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	926874.2	102.84	%	0.651				0.63%
Sc Radial	5752.7	101	%	1.4				1.37%
Y 371.029	855025.6	113.73	%	0.796				0.70%
Y RADIAL	6893.5	113.0	%	1.36				1.20%
Ag 328.068†	-9222.0	6.0515	ug/L	1.15501	6.0515	ppb	1.15501	19.09%
Al 396.153Radial†	145935.4	103640	ug/L	1931.3	103640	ppb	1931.3	1.86%
As 188.979†	49.2	65.179	ug/L	0.3712	65.179	ppb	0.3712	0.57%
B 249.677†	1909.9	19.507	ug/L	1.8336	19.507	ppb	1.8336	9.40%
Ba 233.527†	237803.6	1723.7	ug/L	0.47	1723.7	ppb	0.47	0.03%
Be 313.107†	8482.2	8.6896	ug/L	0.02436	8.6896	ppb	0.02436	0.28%
Ca 317.933Radial†	15726.7	23437	ug/L	463.1	23437	ppb	463.1	1.98%
Cd 226.502†	1498.2	0.9435	ug/L	0.38833	0.9435	ppb	0.38833	41.16%
Co 228.616†	4629.3	77.463	ug/L	0.7347	77.463	ppb	0.7347	0.95%
Cr 267.716†	9143.1	97.197	ug/L	0.5987	97.197	ppb	0.5987	0.62%
Cu 324.752†	18705.3	59.767	ug/L	0.0314	59.767	ppb	0.0314	0.05%
Fe 238.204 Radial†	15605.9	143890	ug/L	2745.8	143890	ppb	2745.8	1.91%
K 766.490 Radial†	58334.5	10115	ug/L	226.5	10115	ppb	226.5	2.24%

Mg 279.077 IEC†	543.7	19183	ug/L	331.4	19183	ppb	331.4	1.73%
Mn 257.610†	7993140.2	8321.1	ug/L	35.93	8321.1	ppb	35.93	0.43%
Mo 202.031†	-104.7	3.6884	ug/L	0.12199	3.6884	ppb	0.12199	3.31%
Na 589.592 Radial†	3197.0	1028.5	ug/L	12.74	1028.5	ppb	12.74	1.24%
Ni 231.604†	2867.4	64.479	ug/L	0.6124	64.479	ppb	0.6124	0.95%
P 214.914†	1861.5	934.15	ug/L	6.156	934.15	ppb	6.156	0.66%
Pb 220.353†	2119.0	243.12	ug/L	2.452	243.12	ppb	2.452	1.01%
S 181.975 Axial†	445.1	569.59	ug/L	4.730	569.59	ppb	4.730	0.83%
Sb 206.836†	36.8	0.9829	ug/L	0.56169	0.9829	ppb	0.56169	57.14%
Se 196.026†	-800.0	23.327	ug/L	15.0191	23.327	ppb	15.0191	64.38%
Si 251.611†	1371586.0	40048	ug/L	11.8	40048	ppb	11.8	0.03%
Sn 189.927†	-149.8	-19.382	ug/L	0.6102	-19.382	ppb	0.6102	3.15%
Sr 421.552†	39198.0	241.54	ug/L	5.044	241.54	ppb	5.044	2.09%
Ti 334.940†	1847492.2	2898.4	ug/L	1.36	2898.4	ppb	1.36	0.05%
Tl 190.801†	-250.4	4.7090	ug/L	1.15119	4.7090	ppb	1.15119	24.45%
U 409.014†	-7206.2	-217.79	ug/L	1.826	-217.79	ppb	1.826	0.84%
V 292.402†	58912.1	357.84	ug/L	1.044	357.84	ppb	1.044	0.29%
Zn 213.857†	25333.9	199.90	ug/L	2.297	199.90	ppb	2.297	1.15%
SiO2†	1371136.5	85902	ug/L	1255.0	85902	ppb	1255.0	1.46%

Sequence No.: 41
Sample ID: 241419011|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 12/7/2009 20:59:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419011|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5616.3	5616.3	98.8	%			21:01:55
1	Y RADIAL	7005.9	7005.9	114.9	%			21:01:55
1	Al 396.153Radial†	193757.1	196034.0	139220	ug/L	139220	ppb	21:01:35
1	Ca 317.933Radial†	19309.0	19516.9	29085	ug/L	29085	ppb	21:01:35
1	Fe 238.204 Radial†	16964.8	17156.4	158180	ug/L	158180	ppb	21:01:35
1	K 766.490 Radial†	74208.6	72857.7	12710	ug/L	12710	ppb	21:01:35
1	Mg 279.077 IEC†	783.7	792.5	28005	ug/L	28005	ppb	21:01:55
1	Na 589.592 Radial†	12613.8	13842.7	4453.3	ug/L	4453.3	ppb	21:01:35
1	Sr 421.552†	53641.1	54258.4	334.38	ug/L	334.38	ppb	21:01:35
1	Sc 361.383	937123.1	937123.1	103.97	%			21:02:53
1	Y 371.029	852222.9	852222.9	113.36	%			21:02:58
1	Ag 328.068†	-10734.7	-10639.5	4.0114	ug/L	4.0114	ppb	21:02:58
1	As 188.979†	-18.1	7.0	48.792	ug/L	48.792	ppb	21:03:18
1	B 249.677†	1748.8	2301.1	25.597	ug/L	25.597	ppb	21:02:58
1	Ba 233.527†	152838.1	147015.8	1068.4	ug/L	1068.4	ppb	21:02:58
1	Be 313.107†	7640.4	12620.6	9.5330	ug/L	9.5330	ppb	21:02:58
1	Cd 226.502†	1496.1	1645.0	1.0229	ug/L	1.0229	ppb	21:03:18
1	Co 228.616†	3880.6	3806.4	62.512	ug/L	62.512	ppb	21:03:18
1	Cr 267.716†	12733.9	12166.5	128.41	ug/L	128.41	ppb	21:03:18
1	Cu 324.752†	38402.2	30064.2	92.332	ug/L	92.332	ppb	21:02:58
1	Mn 257.610†	4111644.8	3954063.2	4124.6	ug/L	4124.6	ppb	21:02:53
1	Mo 202.031†	-127.1	-149.0	1.9470	ug/L	1.9470	ppb	21:03:18
1	Ni 231.604†	3853.3	3615.3	81.319	ug/L	81.319	ppb	21:03:18
1	P 214.914†	1779.2	1486.3	723.20	ug/L	723.20	ppb	21:03:18
1	Pb 220.353†	1027.8	1061.3	134.23	ug/L	134.23	ppb	21:03:18
1	S 181.975 Axial†	374.5	313.7	388.47	ug/L	388.47	ppb	21:03:18
1	Sb 206.836†	61.3	31.4	-1.5155	ug/L	-1.5155	ppb	21:03:18
1	Se 196.026†	-962.3	-903.2	16.900	ug/L	16.900	ppb	21:03:18
1	Si 251.611†	1480992.4	1423866.9	41573	ug/L	41573	ppb	21:02:53
1	Sn 189.927†	-154.6	-154.1	-19.271	ug/L	-19.271	ppb	21:03:18
1	Ti 334.940†	1711172.4	1646997.2	2584.2	ug/L	2584.2	ppb	21:02:53
1	Tl 190.801†	-197.2	-151.7	5.5535	ug/L	5.5535	ppb	21:03:18
1	U 409.014†	-9296.7	-6391.2	-197.09	ug/L	-197.09	ppb	21:02:58
1	V 292.402†	52670.4	52079.9	311.79	ug/L	311.79	ppb	21:02:58
1	Zn 213.857†	33308.9	31385.7	249.40	ug/L	249.40	ppb	21:02:58
1	SiO2†	1459284.7	1403020.3	87898	ug/L	87898	ppb	21:04:30
2	Sc Radial	5836.5	5836.5	103	%			21:02:20
2	Y RADIAL	7221.5	7221.5	118.4	%			21:02:20
2	Al 396.153Radial†	206149.7	200703.4	142530	ug/L	142530	ppb	21:02:00
2	Ca 317.933Radial†	20389.7	19832.0	29555	ug/L	29555	ppb	21:02:00
2	Fe 238.204 Radial†	17979.5	17496.7	161320	ug/L	161320	ppb	21:02:00
2	K 766.490 Radial†	78320.7	74028.6	12915	ug/L	12915	ppb	21:02:00
2	Mg 279.077 IEC†	772.3	751.5	26547	ug/L	26547	ppb	21:02:20
2	Na 589.592 Radial†	13368.8	14096.3	4534.9	ug/L	4534.9	ppb	21:02:00
2	Sr 421.552†	57057.3	55536.8	342.26	ug/L	342.26	ppb	21:02:00
2	Sc 361.383	927077.9	927077.9	102.86	%			21:03:25
2	Y 371.029	850936.1	850936.1	113.19	%			21:03:30
2	Ag 328.068†	-10785.4	-10800.7	4.2962	ug/L	4.2962	ppb	21:03:30
2	As 188.979†	-6.7	17.9	53.396	ug/L	53.396	ppb	21:03:50
2	B 249.677†	1847.3	2415.1	27.497	ug/L	27.497	ppb	21:03:30
2	Ba 233.527†	151991.2	147785.3	1074.1	ug/L	1074.1	ppb	21:03:30
2	Be 313.107†	7813.8	12868.7	9.6184	ug/L	9.6184	ppb	21:03:30
2	Cd 226.502†	1480.6	1645.5	0.7144	ug/L	0.7144	ppb	21:03:50
2	Co 228.616†	3862.8	3829.6	62.900	ug/L	62.900	ppb	21:03:50
2	Cr 267.716†	12724.2	12289.8	129.74	ug/L	129.74	ppb	21:03:50
2	Cu 324.752†	38210.7	30278.2	93.092	ug/L	93.092	ppb	21:03:30
2	Mn 257.610†	4068699.6	3955160.5	4126.1	ug/L	4126.1	ppb	21:03:25
2	Mo 202.031†	-108.7	-132.4	3.1990	ug/L	3.1990	ppb	21:03:50
2	Ni 231.604†	3840.4	3642.8	81.939	ug/L	81.939	ppb	21:03:50

2	P 214.914†	1782.1	1507.7	733.51	ug/L	733.51 ppb	21:03:50
2	Pb 220.353†	1027.8	1072.0	135.89	ug/L	135.89 ppb	21:03:50
2	S 181.975 Axial†	366.0	309.4	382.07	ug/L	382.07 ppb	21:03:50
2	Sb 206.836†	63.8	34.5	-0.5576	ug/L	-0.5576 ppb	21:03:50
2	Se 196.026†	-951.2	-902.5	27.804	ug/L	27.804 ppb	21:03:50
2	Si 251.611†	1463191.0	1421994.1	41519	ug/L	41519 ppb	21:03:25
2	Sn 189.927†	-134.4	-136.1	-16.313	ug/L	-16.313 ppb	21:03:50
2	Ti 334.940†	1692075.2	1646263.4	2583.1	ug/L	2583.1 ppb	21:03:25
2	Tl 190.801†	-208.2	-164.4	2.1926	ug/L	2.1926 ppb	21:03:50
2	U 409.014†	-9316.9	-6507.8	-200.71	ug/L	-200.71 ppb	21:03:30
2	V 292.402†	52427.4	52392.5	313.32	ug/L	313.32 ppb	21:03:30
2	Zn 213.857†	33130.4	31559.3	250.61	ug/L	250.61 ppb	21:03:30
2	SiO2†	1468883.3	1427560.1	89435	ug/L	89435 ppb	21:04:37
3	Sc Radial	5851.3	5851.3	103	%		21:02:45
3	Y RADIAL	7258.3	7258.3	119.0	%		21:02:45
3	Al 396.153Radial†	202532.8	196682.6	139680	ug/L	139680 ppb	21:02:25
3	Ca 317.933Radial†	20054.1	19455.9	28994	ug/L	28994 ppb	21:02:25
3	Fe 238.204 Radial†	17585.1	17069.3	157380	ug/L	157380 ppb	21:02:25
3	K 766.490 Radial†	76824.5	72382.5	12627	ug/L	12627 ppb	21:02:25
3	Mg 279.077 IEC†	771.8	749.2	26467	ug/L	26467 ppb	21:02:45
3	Na 589.592 Radial†	13063.0	13766.3	4428.8	ug/L	4428.8 ppb	21:02:25
3	Sr 421.552†	55948.9	54319.7	334.76	ug/L	334.76 ppb	21:02:25
3	Sc 361.383	924339.0	924339.0	102.55	%		21:03:57
3	Y 371.029	854555.7	854555.7	113.67	%		21:04:02
3	Ag 328.068†	-10954.2	-10996.3	2.1912	ug/L	2.1912 ppb	21:04:02
3	As 188.979†	-18.3	6.6	48.465	ug/L	48.465 ppb	21:04:22
3	B 249.677†	1772.9	2347.8	26.652	ug/L	26.652 ppb	21:04:02
3	Ba 233.527†	152840.3	149051.1	1083.1	ug/L	1083.1 ppb	21:04:02
3	Be 313.107†	7778.8	12857.1	9.6028	ug/L	9.6028 ppb	21:04:02
3	Cd 226.502†	1473.7	1643.0	1.0834	ug/L	1.0834 ppb	21:04:22
3	Co 228.616†	3876.9	3854.4	63.428	ug/L	63.428 ppb	21:04:22
3	Cr 267.716†	12717.3	12319.7	129.98	ug/L	129.98 ppb	21:04:22
3	Cu 324.752†	38382.1	30555.4	93.668	ug/L	93.668 ppb	21:04:02
3	Mn 257.610†	4043544.4	3942352.6	4112.4	ug/L	4112.4 ppb	21:03:57
3	Mo 202.031†	-113.7	-137.6	2.5960	ug/L	2.5960 ppb	21:04:22
3	Ni 231.604†	3838.4	3651.9	82.144	ug/L	82.144 ppb	21:04:22
3	P 214.914†	1770.6	1501.6	732.18	ug/L	732.18 ppb	21:04:22
3	Pb 220.353†	1030.7	1077.8	136.20	ug/L	136.20 ppb	21:04:22
3	S 181.975 Axial†	381.2	325.2	403.58	ug/L	403.58 ppb	21:04:22
3	Sb 206.836†	69.2	39.9	1.0630	ug/L	1.0630 ppb	21:04:22
3	Se 196.026†	-943.8	-898.0	17.408	ug/L	17.408 ppb	21:04:22
3	Si 251.611†	1455772.1	1418975.0	41431	ug/L	41431 ppb	21:03:57
3	Sn 189.927†	-162.1	-163.5	-20.783	ug/L	-20.783 ppb	21:04:22
3	Ti 334.940†	1683224.9	1642508.0	2577.2	ug/L	2577.2 ppb	21:03:57
3	Tl 190.801†	-205.1	-162.1	2.6267	ug/L	2.6267 ppb	21:04:22
3	U 409.014†	-9362.5	-6579.1	-202.19	ug/L	-202.19 ppb	21:04:02
3	V 292.402†	52700.0	52809.4	316.63	ug/L	316.63 ppb	21:04:02
3	Zn 213.857†	33194.7	31717.4	252.33	ug/L	252.33 ppb	21:04:02
3	SiO2†	1460029.5	1423158.3	89159	ug/L	89159 ppb	21:04:44

Mean Data: 241419011|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	929513.3	103.13	%	0.747				0.72%
Sc Radial	5768.0	102	%	2.3				2.28%
Y 371.029	852571.6	113.40	%	0.244				0.22%
Y RADIAL	7161.9	117.4	%	2.24				1.90%
Ag 328.068†	-10812.2	3.4996	ug/L	1.14199	3.4996	ppb	1.14199	32.63%
Al 396.153Radial†	197806.7	140480	ug/L	1796.4	140480	ppb	1796.4	1.28%
As 188.979†	10.5	50.218	ug/L	2.7569	50.218	ppb	2.7569	5.49%
B 249.677†	2354.7	26.582	ug/L	0.9521	26.582	ppb	0.9521	3.58%
Ba 233.527†	147950.7	1075.2	ug/L	7.40	1075.2	ppb	7.40	0.69%
Be 313.107†	12782.1	9.5847	ug/L	0.04545	9.5847	ppb	0.04545	0.47%
Ca 317.933Radial†	19601.6	29211	ug/L	300.8	29211	ppb	300.8	1.03%
Cd 226.502†	1644.5	0.9402	ug/L	0.19790	0.9402	ppb	0.19790	21.05%
Co 228.616†	3830.1	62.946	ug/L	0.4595	62.946	ppb	0.4595	0.73%
Cr 267.716†	12258.7	129.38	ug/L	0.844	129.38	ppb	0.844	0.65%
Cu 324.752†	30299.3	93.031	ug/L	0.6700	93.031	ppb	0.6700	0.72%
Fe 238.204 Radial†	17240.8	158960	ug/L	2082.4	158960	ppb	2082.4	1.31%
K 766.490 Radial†	73089.6	12751	ug/L	148.3	12751	ppb	148.3	1.16%

Mg 279.077 IEC†	764.4	27006	ug/L	865.8	27006	ppb	865.8	3.21%
Mn 257.610†	3950525.4	4121.0	ug/L	7.52	4121.0	ppb	7.52	0.18%
Mo 202.031†	-139.7	2.5807	ug/L	0.62610	2.5807	ppb	0.62610	24.26%
Na 589.592 Radial†	13901.8	4472.3	ug/L	55.57	4472.3	ppb	55.57	1.24%
Ni 231.604†	3636.7	81.801	ug/L	0.4292	81.801	ppb	0.4292	0.52%
P 214.914†	1498.6	729.63	ug/L	5.611	729.63	ppb	5.611	0.77%
Pb 220.353†	1070.4	135.44	ug/L	1.058	135.44	ppb	1.058	0.78%
S 181.975 Axial†	316.1	391.37	ug/L	11.043	391.37	ppb	11.043	2.82%
Sb 206.836†	35.2	-0.3367	ug/L	1.30335	-0.3367	ppb	1.30335	387.08%
Se 196.026†	-901.2	20.704	ug/L	6.1543	20.704	ppb	6.1543	29.73%
Si 251.611†	1421612.0	41507	ug/L	72.1	41507	ppb	72.1	0.17%
Sn 189.927†	-151.2	-18.789	ug/L	2.2734	-18.789	ppb	2.2734	12.10%
Sr 421.552†	54705.0	337.13	ug/L	4.444	337.13	ppb	4.444	1.32%
Ti 334.940†	1645256.2	2581.5	ug/L	3.78	2581.5	ppb	3.78	0.15%
Tl 190.801†	-159.4	3.4576	ug/L	1.82802	3.4576	ppb	1.82802	52.87%
U 409.014†	-6492.7	-199.99	ug/L	2.625	-199.99	ppb	2.625	1.31%
V 292.402†	52427.3	313.91	ug/L	2.472	313.91	ppb	2.472	0.79%
Zn 213.857†	31554.1	250.78	ug/L	1.474	250.78	ppb	1.474	0.59%
SiO2†	1417912.9	88831	ug/L	819.7	88831	ppb	819.7	0.92%

Sequence No.: 42
Sample ID: 241419012|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 12/7/2009 21:06:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419012|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5693.2	5693.2	100	%			21:09:07
1	Y RADIAL	6896.8	6896.8	113.1	%			21:09:07
1	Al 396.153Radial†	130059.7	129818.2	92193	ug/L	92193	ppb	21:08:47
1	Ca 317.933Radial†	14690.8	14644.2	21824	ug/L	21824	ppb	21:08:47
1	Fe 238.204 Radial†	14673.9	14638.4	134970	ug/L	134970	ppb	21:08:47
1	K 766.490 Radial†	82642.2	80260.5	13988	ug/L	13988	ppb	21:08:47
1	Mg 279.077 IEC†	502.8	501.5	17691	ug/L	17691	ppb	21:09:07
1	Na 589.592 Radial†	783.6	1864.0	599.67	ug/L	599.67	ppb	21:08:47
1	Sr 421.552†	39482.1	39395.2	242.78	ug/L	242.78	ppb	21:08:47
1	Sc 361.383	921782.8	921782.8	102.27	%			21:10:06
1	Y 371.029	854988.2	854988.2	113.73	%			21:10:06
1	Ag 328.068†	-8621.4	-8745.0	5.1030	ug/L	5.1030	ppb	21:10:11
1	As 188.979†	-13.8	10.9	51.058	ug/L	51.058	ppb	21:10:31
1	B 249.677†	1306.9	1897.0	20.464	ug/L	20.464	ppb	21:10:11
1	Ba 233.527†	185548.7	181446.7	1316.2	ug/L	1316.2	ppb	21:10:11
1	Be 313.107†	-1774.3	3537.2	7.3500	ug/L	7.3500	ppb	21:10:11
1	Cd 226.502†	1156.6	1337.0	0.1912	ug/L	0.1912	ppb	21:10:31
1	Co 228.616†	3880.1	3868.0	63.000	ug/L	63.000	ppb	21:10:31
1	Cr 267.716†	9148.3	8864.4	94.060	ug/L	94.060	ppb	21:10:11
1	Cu 324.752†	28147.4	20651.7	64.767	ug/L	64.767	ppb	21:10:11
1	Mn 257.610†	5041706.9	4929290.4	5136.0	ug/L	5136.0	ppb	21:10:06
1	Mo 202.031†	-67.8	-93.1	3.7808	ug/L	3.7808	ppb	21:10:31
1	Ni 231.604†	3087.3	2927.9	65.848	ug/L	65.848	ppb	21:10:31
1	P 214.914†	2533.8	2252.6	1151.7	ug/L	1151.7	ppb	21:10:31
1	Pb 220.353†	1244.9	1290.1	150.63	ug/L	150.63	ppb	21:10:31
1	S 181.975 Axial†	523.8	465.7	599.22	ug/L	599.22	ppb	21:10:31
1	Sb 206.836†	58.3	29.5	-1.6866	ug/L	-1.6866	ppb	21:10:31
1	Se 196.026†	-758.5	-719.4	38.378	ug/L	38.378	ppb	21:10:31
1	Si 251.611†	1380484.5	1349295.3	39395	ug/L	39395	ppb	21:10:06
1	Sn 189.927†	-126.0	-128.6	-16.312	ug/L	-16.312	ppb	21:10:31
1	Ti 334.940†	2023100.9	1979390.4	3105.1	ug/L	3105.1	ppb	21:10:06
1	Tl 190.801†	-238.9	-195.6	2.3548	ug/L	2.3548	ppb	21:10:31
1	U 409.014†	-9333.4	-6575.9	-199.21	ug/L	-199.21	ppb	21:10:06
1	V 292.402†	49071.6	49404.1	297.17	ug/L	297.17	ppb	21:10:11
1	Zn 213.857†	30237.4	28915.5	231.15	ug/L	231.15	ppb	21:10:11
1	SiO2†	1394706.3	1363233.2	85404	ug/L	85404	ppb	21:11:43
2	Sc Radial	5828.1	5828.1	103	%			21:09:32
2	Y RADIAL	7028.8	7028.8	115.3	%			21:09:32
2	Al 396.153Radial†	128040.2	124844.3	88660	ug/L	88660	ppb	21:09:12
2	Ca 317.933Radial†	14437.8	14058.2	20950	ug/L	20950	ppb	21:09:12
2	Fe 238.204 Radial†	14423.8	14055.4	129590	ug/L	129590	ppb	21:09:12
2	K 766.490 Radial†	81830.0	77559.2	13515	ug/L	13515	ppb	21:09:12
2	Mg 279.077 IEC†	514.2	501.0	17677	ug/L	17677	ppb	21:09:32
2	Na 589.592 Radial†	761.6	1824.5	586.95	ug/L	586.95	ppb	21:09:12
2	Sr 421.552†	38755.9	37774.9	232.79	ug/L	232.79	ppb	21:09:12
2	Sc 361.383	922872.0	922872.0	102.39	%			21:10:38
2	Y 371.029	855799.4	855799.4	113.83	%			21:10:38
2	Ag 328.068†	-8555.8	-8670.9	3.7229	ug/L	3.7229	ppb	21:10:43
2	As 188.979†	-11.0	13.6	51.166	ug/L	51.166	ppb	21:11:03
2	B 249.677†	1233.6	1823.9	19.691	ug/L	19.691	ppb	21:10:43
2	Ba 233.527†	184381.7	180092.7	1306.2	ug/L	1306.2	ppb	21:10:43
2	Be 313.107†	-1979.3	3339.0	7.2595	ug/L	7.2595	ppb	21:10:43
2	Cd 226.502†	1171.1	1349.8	0.8588	ug/L	0.8588	ppb	21:11:03
2	Co 228.616†	3889.8	3873.1	63.184	ug/L	63.184	ppb	21:11:03
2	Cr 267.716†	9124.2	8830.3	93.608	ug/L	93.608	ppb	21:10:43
2	Cu 324.752†	27845.4	20324.3	63.575	ug/L	63.575	ppb	21:10:43
2	Mn 257.610†	5027423.4	4909522.3	5114.9	ug/L	5114.9	ppb	21:10:38
2	Mo 202.031†	-87.0	-111.7	2.2367	ug/L	2.2367	ppb	21:11:03
2	Ni 231.604†	3086.6	2923.6	65.753	ug/L	65.753	ppb	21:11:03

2	P 214.914†	2525.9	2242.0	1149.2	ug/L	1149.2 ppb	21:11:03
2	Pb 220.353†	1234.6	1278.6	149.02	ug/L	149.02 ppb	21:11:03
2	S 181.975 Axial†	525.2	466.4	600.86	ug/L	600.86 ppb	21:11:03
2	Sb 206.836†	65.9	36.7	0.5733	ug/L	0.5733 ppb	21:11:03
2	Se 196.026†	-752.2	-712.3	24.768	ug/L	24.768 ppb	21:11:03
2	Si 251.611†	1376146.8	1343465.7	39225	ug/L	39225 ppb	21:10:38
2	Sn 189.927†	-125.7	-128.2	-16.407	ug/L	-16.407 ppb	21:11:03
2	Ti 334.940†	2018685.6	1972743.6	3094.6	ug/L	3094.6 ppb	21:10:38
2	Tl 190.801†	-229.8	-186.4	4.5509	ug/L	4.5509 ppb	21:11:03
2	U 409.014†	-9364.1	-6595.2	-199.07	ug/L	-199.07 ppb	21:10:38
2	V 292.402†	48623.5	48909.8	294.77	ug/L	294.77 ppb	21:10:43
2	Zn 213.857†	30081.2	28728.0	230.08	ug/L	230.08 ppb	21:10:43
2	SiO2†	1383014.3	1350204.7	84588	ug/L	84588 ppb	21:11:50
3	Sc Radial	5824.5	5824.5	103	%		21:09:58
3	Y RADIAL	7031.1	7031.1	115.3	%		21:09:58
3	Al 396.153Radial†	127051.5	123956.7	88030	ug/L	88030 ppb	21:09:38
3	Ca 317.933Radial†	14357.0	13988.0	20846	ug/L	20846 ppb	21:09:38
3	Fe 238.204 Radial†	14370.9	14012.5	129200	ug/L	129200 ppb	21:09:38
3	K 766.490 Radial†	81416.9	77205.4	13453	ug/L	13453 ppb	21:09:38
3	Mg 279.077 IEC†	514.8	501.9	17710	ug/L	17710 ppb	21:09:58
3	Na 589.592 Radial†	766.2	1829.4	588.52	ug/L	588.52 ppb	21:09:38
3	Sr 421.552†	38494.1	37542.8	231.36	ug/L	231.36 ppb	21:09:38
3	Sc 361.383	923695.7	923695.7	102.48	%		21:11:10
3	Y 371.029	856983.6	856983.6	113.99	%		21:11:10
3	Ag 328.068†	-8560.4	-8668.0	3.6202	ug/L	3.6202 ppb	21:11:15
3	As 188.979†	-6.5	18.0	52.725	ug/L	52.725 ppb	21:11:35
3	B 249.677†	1339.0	1925.7	21.811	ug/L	21.811 ppb	21:11:15
3	Ba 233.527†	186028.2	181538.8	1316.6	ug/L	1316.6 ppb	21:11:15
3	Be 313.107†	-1928.3	3390.4	7.2673	ug/L	7.2673 ppb	21:11:15
3	Cd 226.502†	1157.0	1335.0	0.7478	ug/L	0.7478 ppb	21:11:35
3	Co 228.616†	3882.7	3862.8	63.015	ug/L	63.015 ppb	21:11:35
3	Cr 267.716†	9196.3	8892.7	94.247	ug/L	94.247 ppb	21:11:15
3	Cu 324.752†	28122.8	20570.7	64.246	ug/L	64.246 ppb	21:11:15
3	Mn 257.610†	5026249.7	4903998.6	5109.2	ug/L	5109.2 ppb	21:11:10
3	Mo 202.031†	-87.2	-111.8	2.2017	ug/L	2.2017 ppb	21:11:35
3	Ni 231.604†	3084.3	2918.7	65.643	ug/L	65.643 ppb	21:11:35
3	P 214.914†	2542.5	2256.1	1156.9	ug/L	1156.9 ppb	21:11:35
3	Pb 220.353†	1249.3	1291.8	150.36	ug/L	150.36 ppb	21:11:35
3	S 181.975 Axial†	525.3	466.1	600.57	ug/L	600.57 ppb	21:11:35
3	Sb 206.836†	59.3	30.3	-1.4257	ug/L	-1.4257 ppb	21:11:35
3	Se 196.026†	-745.1	-704.8	27.626	ug/L	27.626 ppb	21:11:35
3	Si 251.611†	1374288.6	1340454.0	39137	ug/L	39137 ppb	21:11:10
3	Sn 189.927†	-133.6	-135.8	-17.624	ug/L	-17.624 ppb	21:11:35
3	Ti 334.940†	2017060.3	1969399.6	3089.4	ug/L	3089.4 ppb	21:11:10
3	Tl 190.801†	-238.7	-195.0	2.1422	ug/L	2.1422 ppb	21:11:35
3	U 409.014†	-9233.9	-6460.0	-195.28	ug/L	-195.28 ppb	21:11:10
3	V 292.402†	49144.5	49375.8	297.87	ug/L	297.87 ppb	21:11:15
3	Zn 213.857†	30347.2	28961.3	232.10	ug/L	232.10 ppb	21:11:15
3	SiO2†	1370441.8	1336732.3	83744	ug/L	83744 ppb	21:11:57

Mean Data: 241419012|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922783.5	102.38	%	0.106				0.10%
Sc Radial	5781.9	102	%	1.4				1.33%
Y 371.029	855923.7	113.85	%	0.133				0.12%
Y RADIAL	6985.5	114.5	%	1.26				1.10%
Ag 328.068†	-8694.6	4.1487	ug/L	0.82801	4.1487	ppb	0.82801	19.96%
Al 396.153Radial†	126206.4	89628	ug/L	2243.6	89628	ppb	2243.6	2.50%
As 188.979†	14.2	51.650	ug/L	0.9328	51.650	ppb	0.9328	1.81%
B 249.677†	1882.2	20.655	ug/L	1.0730	20.655	ppb	1.0730	5.19%
Ba 233.527†	181026.1	1313.0	ug/L	5.90	1313.0	ppb	5.90	0.45%
Be 313.107†	3422.2	7.2923	ug/L	0.05012	7.2923	ppb	0.05012	0.69%
Ca 317.933Radial†	14230.2	21207	ug/L	536.9	21207	ppb	536.9	2.53%
Cd 226.502†	1340.6	0.5993	ug/L	0.35771	0.5993	ppb	0.35771	59.69%
Co 228.616†	3868.0	63.066	ug/L	0.1020	63.066	ppb	0.1020	0.16%
Cr 267.716†	8862.5	93.972	ug/L	0.3282	93.972	ppb	0.3282	0.35%
Cu 324.752†	20515.6	64.196	ug/L	0.5975	64.196	ppb	0.5975	0.93%
Fe 238.204 Radial†	14235.4	131250	ug/L	3223.3	131250	ppb	3223.3	2.46%
K 766.490 Radial†	78341.7	13652	ug/L	292.5	13652	ppb	292.5	2.14%

Mg 279.077 IEC†	501.5	17693	ug/L	16.3	17693	ppb	16.3	0.09%
Mn 257.610†	4914270.4	5120.0	ug/L	14.14	5120.0	ppb	14.14	0.28%
Mo 202.031†	-105.5	2.7397	ug/L	0.90175	2.7397	ppb	0.90175	32.91%
Na 589.592 Radial†	1839.3	591.71	ug/L	6.934	591.71	ppb	6.934	1.17%
Ni 231.604†	2923.4	65.748	ug/L	0.1028	65.748	ppb	0.1028	0.16%
P 214.914†	2250.2	1152.6	ug/L	3.93	1152.6	ppb	3.93	0.34%
Pb 220.353†	1286.8	150.01	ug/L	0.863	150.01	ppb	0.863	0.58%
S 181.975 Axial†	466.1	600.22	ug/L	0.874	600.22	ppb	0.874	0.15%
Sb 206.836†	32.2	-0.8463	ug/L	1.23632	-0.8463	ppb	1.23632	146.08%
Se 196.026†	-712.2	30.257	ug/L	7.1765	30.257	ppb	7.1765	23.72%
Si 251.611†	1344405.0	39253	ug/L	131.1	39253	ppb	131.1	0.33%
Sn 189.927†	-130.9	-16.781	ug/L	0.7320	-16.781	ppb	0.7320	4.36%
Sr 421.552†	38237.6	235.64	ug/L	6.219	235.64	ppb	6.219	2.64%
Ti 334.940†	1973844.5	3096.4	ug/L	8.00	3096.4	ppb	8.00	0.26%
Tl 190.801†	-192.3	3.0160	ug/L	1.33355	3.0160	ppb	1.33355	44.22%
U 409.014†	-6543.7	-197.85	ug/L	2.232	-197.85	ppb	2.232	1.13%
V 292.402†	49229.9	296.60	ug/L	1.628	296.60	ppb	1.628	0.55%
Zn 213.857†	28868.3	231.11	ug/L	1.008	231.11	ppb	1.008	0.44%
SiO2†	1350056.7	84578	ug/L	830.0	84578	ppb	830.0	0.98%

Sequence No.: 43
Sample ID: 241419013|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 12/7/2009 21:14:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419013|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5842.1	5842.1	103	%			21:16:21
1	Y RADIAL	6956.8	6956.8	114.1	%			21:16:21
1	Al 396.153Radial†	102404.9	99614.1	70743	ug/L	70743	ppb	21:16:01
1	Ca 317.933Radial†	11218.1	10893.2	16234	ug/L	16234	ppb	21:16:01
1	Fe 238.204 Radial†	12868.0	12508.8	115330	ug/L	115330	ppb	21:16:01
1	K 766.490 Radial†	56893.5	53116.4	9240.2	ug/L	9240.2	ppb	21:16:01
1	Mg 279.077 IEC†	445.8	433.3	15287	ug/L	15287	ppb	21:16:21
1	Na 589.592 Radial†	2871.4	3874.5	1246.5	ug/L	1246.5	ppb	21:16:01
1	Sr 421.552†	34098.6	33155.0	204.34	ug/L	204.34	ppb	21:16:01
1	Sc 361.383	925140.8	925140.8	102.64	%			21:17:20
1	Y 371.029	850819.3	850819.3	113.17	%			21:17:20
1	Ag 328.068†	-7717.3	-7833.5	2.8850	ug/L	2.8850	ppb	21:17:25
1	As 188.979†	-24.2	0.8	45.164	ug/L	45.164	ppb	21:17:45
1	B 249.677†	912.8	1508.4	15.174	ug/L	15.174	ppb	21:17:25
1	Ba 233.527†	145691.0	141956.7	1030.2	ug/L	1030.2	ppb	21:17:25
1	Be 313.107†	-4638.2	753.2	6.5784	ug/L	6.5784	ppb	21:17:25
1	Cd 226.502†	1020.8	1200.6	0.7913	ug/L	0.7913	ppb	21:17:45
1	Co 228.616†	3826.0	3801.5	61.675	ug/L	61.675	ppb	21:17:45
1	Cr 267.716†	18162.7	17614.2	183.51	ug/L	183.51	ppb	21:17:25
1	Cu 324.752†	24145.6	16653.0	52.558	ug/L	52.558	ppb	21:17:25
1	Mn 257.610†	4796931.9	4672924.1	4867.7	ug/L	4867.7	ppb	21:17:20
1	Mo 202.031†	-23.0	-49.2	5.1180	ug/L	5.1180	ppb	21:17:45
1	Ni 231.604†	5172.4	4948.3	111.32	ug/L	111.32	ppb	21:17:45
1	P 214.914†	2079.7	1801.3	913.89	ug/L	913.89	ppb	21:17:45
1	Pb 220.353†	1021.2	1067.7	123.12	ug/L	123.12	ppb	21:17:45
1	S 181.975 Axial†	406.9	350.0	449.97	ug/L	449.97	ppb	21:17:45
1	Sb 206.836†	62.2	33.0	-2.7881	ug/L	-2.7881	ppb	21:17:45
1	Se 196.026†	-687.9	-648.0	12.708	ug/L	12.708	ppb	21:17:45
1	Si 251.611†	1315177.6	1280770.3	37396	ug/L	37396	ppb	21:17:20
1	Sn 189.927†	-112.8	-115.3	-15.046	ug/L	-15.046	ppb	21:17:45
1	Ti 334.940†	2100916.0	2048021.6	3212.4	ug/L	3212.4	ppb	21:17:20
1	Tl 190.801†	-211.5	-168.1	8.5477	ug/L	8.5477	ppb	21:17:45
1	U 409.014†	-9386.9	-6595.0	-197.44	ug/L	-197.44	ppb	21:17:25
1	V 292.402†	44799.5	45067.8	271.80	ug/L	271.80	ppb	21:17:25
1	Zn 213.857†	23683.4	22422.9	177.79	ug/L	177.79	ppb	21:17:25
1	SiO2†	1311487.1	1277206.7	80017	ug/L	80017	ppb	21:18:55
2	Sc Radial	5807.1	5807.1	102	%			21:16:47
2	Y RADIAL	6912.2	6912.2	113.3	%			21:16:47
2	Al 396.153Radial†	103656.6	101438.5	72038	ug/L	72038	ppb	21:16:27
2	Ca 317.933Radial†	11324.6	11063.0	16487	ug/L	16487	ppb	21:16:27
2	Fe 238.204 Radial†	13035.7	12748.1	117540	ug/L	117540	ppb	21:16:27
2	K 766.490 Radial†	57538.1	54080.3	9408.9	ug/L	9408.9	ppb	21:16:27
2	Mg 279.077 IEC†	441.0	431.2	15212	ug/L	15212	ppb	21:16:47
2	Na 589.592 Radial†	2872.9	3892.8	1252.4	ug/L	1252.4	ppb	21:16:27
2	Sr 421.552†	34527.8	33774.7	208.16	ug/L	208.16	ppb	21:16:27
2	Sc 361.383	921243.3	921243.3	102.21	%			21:17:52
2	Y 371.029	846971.6	846971.6	112.66	%			21:17:52
2	Ag 328.068†	-7640.8	-7790.5	3.7657	ug/L	3.7657	ppb	21:17:57
2	As 188.979†	-24.0	0.9	45.590	ug/L	45.590	ppb	21:18:17
2	B 249.677†	812.8	1414.3	12.968	ug/L	12.968	ppb	21:17:57
2	Ba 233.527†	143744.7	140653.0	1020.8	ug/L	1020.8	ppb	21:17:57
2	Be 313.107†	-4555.6	814.9	6.6172	ug/L	6.6172	ppb	21:17:57
2	Cd 226.502†	1018.1	1202.1	0.5867	ug/L	0.5867	ppb	21:18:17
2	Co 228.616†	3844.0	3834.9	62.235	ug/L	62.235	ppb	21:18:17
2	Cr 267.716†	17812.3	17346.2	180.79	ug/L	180.79	ppb	21:17:57
2	Cu 324.752†	23650.7	16268.4	51.592	ug/L	51.592	ppb	21:17:57
2	Mn 257.610†	4790010.1	4685924.1	4881.4	ug/L	4881.4	ppb	21:17:52
2	Mo 202.031†	-17.4	-43.8	5.6134	ug/L	5.6134	ppb	21:18:17
2	Ni 231.604†	5162.2	4959.7	111.58	ug/L	111.58	ppb	21:18:17

2	P 214.914†	2073.5	1803.8	914.09	ug/L	914.09 ppb	21:18:17
2	Pb 220.353†	1042.7	1092.9	126.00	ug/L	126.00 ppb	21:18:17
2	S 181.975 Axial†	415.8	360.3	463.45	ug/L	463.45 ppb	21:18:17
2	Sb 206.836†	65.7	36.7	-1.6242	ug/L	-1.6242 ppb	21:18:17
2	Se 196.026†	-685.8	-648.7	19.475	ug/L	19.475 ppb	21:18:17
2	Si 251.611†	1313725.8	1284770.8	37513	ug/L	37513 ppb	21:17:52
2	Sn 189.927†	-114.8	-117.7	-15.376	ug/L	-15.376 ppb	21:18:17
2	Ti 334.940†	2097696.4	2053531.2	3221.0	ug/L	3221.0 ppb	21:17:52
2	Tl 190.801†	-240.8	-197.6	0.7540	ug/L	0.7540 ppb	21:18:17
2	U 409.014†	-9500.0	-6744.3	-201.85	ug/L	-201.85 ppb	21:17:57
2	V 292.402†	44081.7	44550.2	268.08	ug/L	268.08 ppb	21:17:57
2	Zn 213.857†	23307.9	22153.2	175.30	ug/L	175.30 ppb	21:17:57
2	SiO2†	1308715.7	1279900.9	80186	ug/L	80186 ppb	21:19:01
3	Sc Radial	5754.3	5754.3	101	%		21:17:12
3	Y RADIAL	6839.9	6839.9	112.2	%		21:17:12
3	Al 396.153Radial†	101552.8	100291.5	71224	ug/L	71224 ppb	21:16:52
3	Ca 317.933Radial†	11123.0	10965.7	16342	ug/L	16342 ppb	21:16:52
3	Fe 238.204 Radial†	12715.3	12548.8	115700	ug/L	115700 ppb	21:16:52
3	K 766.490 Radial†	56549.6	53620.6	9328.1	ug/L	9328.1 ppb	21:16:52
3	Mg 279.077 IEC†	438.2	432.4	15254	ug/L	15254 ppb	21:17:12
3	Na 589.592 Radial†	2827.4	3873.7	1246.2	ug/L	1246.2 ppb	21:16:52
3	Sr 421.552†	33747.5	33314.2	205.32	ug/L	205.32 ppb	21:16:52
3	Sc 361.383	918128.8	918128.8	101.86	%		21:18:24
3	Y 371.029	843139.7	843139.7	112.15	%		21:18:24
3	Ag 328.068†	-7659.4	-7834.1	2.9978	ug/L	2.9978 ppb	21:18:29
3	As 188.979†	-30.4	-5.5	42.968	ug/L	42.968 ppb	21:18:49
3	B 249.677†	857.3	1460.7	14.155	ug/L	14.155 ppb	21:18:29
3	Ba 233.527†	145013.5	142375.6	1033.2	ug/L	1033.2 ppb	21:18:29
3	Be 313.107†	-4427.0	926.1	6.6681	ug/L	6.6681 ppb	21:18:29
3	Cd 226.502†	1040.4	1227.4	1.0277	ug/L	1.0277 ppb	21:18:49
3	Co 228.616†	3818.3	3822.5	62.025	ug/L	62.025 ppb	21:18:49
3	Cr 267.716†	18026.9	17616.0	183.53	ug/L	183.53 ppb	21:18:29
3	Cu 324.752†	23862.5	16554.8	52.301	ug/L	52.301 ppb	21:18:29
3	Mn 257.610†	4787366.6	4699226.1	4895.1	ug/L	4895.1 ppb	21:18:24
3	Mo 202.031†	-15.8	-42.3	5.5738	ug/L	5.5738 ppb	21:18:49
3	Ni 231.604†	5114.0	4929.5	110.90	ug/L	110.90 ppb	21:18:49
3	P 214.914†	2051.1	1788.6	906.79	ug/L	906.79 ppb	21:18:49
3	Pb 220.353†	1028.6	1082.6	124.83	ug/L	124.83 ppb	21:18:49
3	S 181.975 Axial†	406.3	352.4	453.09	ug/L	453.09 ppb	21:18:49
3	Sb 206.836†	63.6	34.8	-2.3219	ug/L	-2.3219 ppb	21:18:49
3	Se 196.026†	-668.5	-633.9	21.818	ug/L	21.818 ppb	21:18:49
3	Si 251.611†	1312042.5	1287478.3	37592	ug/L	37592 ppb	21:18:24
3	Sn 189.927†	-128.0	-131.1	-17.536	ug/L	-17.536 ppb	21:18:49
3	Ti 334.940†	2094482.3	2057337.9	3227.0	ug/L	3227.0 ppb	21:18:24
3	Tl 190.801†	-220.6	-178.6	5.9788	ug/L	5.9788 ppb	21:18:49
3	U 409.014†	-9348.6	-6627.2	-198.38	ug/L	-198.38 ppb	21:18:29
3	V 292.402†	44411.8	45020.5	271.42	ug/L	271.42 ppb	21:18:29
3	Zn 213.857†	23514.2	22433.0	177.85	ug/L	177.85 ppb	21:18:29
3	SiO2†	1296696.9	1272445.5	79719	ug/L	79719 ppb	21:19:07

Mean Data: 241419013|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	921504.3	102.24	%	0.390				0.38%
Sc Radial	5801.2	102	%	0.8				0.76%
Y 371.029	846976.8	112.66	%	0.511				0.45%
Y RADIAL	6903.0	113.2	%	0.97				0.86%
Ag 328.068†	-7819.4	3.2161	ug/L	0.47924	3.2161	ppb	0.47924	14.90%
Al 396.153Radial†	100448.0	71335	ug/L	655.0	71335	ppb	655.0	0.92%
As 188.979†	-1.3	44.574	ug/L	1.4071	44.574	ppb	1.4071	3.16%
B 249.677†	1461.1	14.099	ug/L	1.1041	14.099	ppb	1.1041	7.83%
Ba 233.527†	141661.8	1028.1	ug/L	6.45	1028.1	ppb	6.45	0.63%
Be 313.107†	831.4	6.6212	ug/L	0.04501	6.6212	ppb	0.04501	0.68%
Ca 317.933Radial†	10974.0	16354	ug/L	127.0	16354	ppb	127.0	0.78%
Cd 226.502†	1210.0	0.8019	ug/L	0.22071	0.8019	ppb	0.22071	27.52%
Co 228.616†	3819.7	61.978	ug/L	0.2834	61.978	ppb	0.2834	0.46%
Cr 267.716†	17525.5	182.61	ug/L	1.576	182.61	ppb	1.576	0.86%
Cu 324.752†	16492.1	52.151	ug/L	0.5001	52.151	ppb	0.5001	0.96%
Fe 238.204 Radial†	12601.9	116190	ug/L	1182.1	116190	ppb	1182.1	1.02%
K 766.490 Radial†	53605.8	9325.7	ug/L	84.34	9325.7	ppb	84.34	0.90%

Mg 279.077 IEC†	432.3	15251	ug/L	37.6	15251	ppb	37.6	0.25%
Mn 257.610†	4686024.8	4881.4	ug/L	13.69	4881.4	ppb	13.69	0.28%
Mo 202.031†	-45.1	5.4351	ug/L	0.27529	5.4351	ppb	0.27529	5.06%
Na 589.592 Radial†	3880.4	1248.4	ug/L	3.47	1248.4	ppb	3.47	0.28%
Ni 231.604†	4945.8	111.27	ug/L	0.343	111.27	ppb	0.343	0.31%
P 214.914†	1797.9	911.59	ug/L	4.158	911.59	ppb	4.158	0.46%
Pb 220.353†	1081.0	124.65	ug/L	1.445	124.65	ppb	1.445	1.16%
S 181.975 Axial†	354.2	455.50	ug/L	7.058	455.50	ppb	7.058	1.55%
Sb 206.836†	34.8	-2.2447	ug/L	0.58580	-2.2447	ppb	0.58580	26.10%
Se 196.026†	-643.5	18.000	ug/L	4.7304	18.000	ppb	4.7304	26.28%
Si 251.611†	1284339.8	37500	ug/L	98.5	37500	ppb	98.5	0.26%
Sn 189.927†	-121.4	-15.986	ug/L	1.3525	-15.986	ppb	1.3525	8.46%
Sr 421.552†	33414.6	205.94	ug/L	1.984	205.94	ppb	1.984	0.96%
Ti 334.940†	2052963.5	3220.1	ug/L	7.35	3220.1	ppb	7.35	0.23%
Tl 190.801†	-181.4	5.0935	ug/L	3.97156	5.0935	ppb	3.97156	77.97%
U 409.014†	-6655.5	-199.22	ug/L	2.321	-199.22	ppb	2.321	1.17%
V 292.402†	44879.5	270.43	ug/L	2.045	270.43	ppb	2.045	0.76%
Zn 213.857†	22336.4	176.98	ug/L	1.457	176.98	ppb	1.457	0.82%
SiO2†	1276517.7	79974	ug/L	236.5	79974	ppb	236.5	0.30%

Sequence No.: 44
Sample ID: 241419014|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 12/7/2009 21:21:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419014|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5777.8	5777.8	102	%			21:23:12
1	Y RADIAL	7008.5	7008.5	114.9	%			21:23:12
1	Al 396.153Radial†	17707.5	17433.5	12381	ug/L	12381	ppb	21:23:12
1	Ca 317.933Radial†	4087.9	4003.0	5965.4	ug/L	5965.4	ppb	21:23:12
1	Fe 238.204 Radial†	6814.3	6695.0	61728	ug/L	61728	ppb	21:23:12
1	K 766.490 Radial†	30242.2	27524.1	4793.5	ug/L	4793.5	ppb	21:23:12
1	Mg 279.077 IEC†	105.5	103.5	3622.4	ug/L	3622.4	ppb	21:23:32
1	Na 589.592 Radial†	9903.5	10820.9	3481.2	ug/L	3481.2	ppb	21:23:12
1	Sr 421.552†	7418.0	7287.2	44.890	ug/L	44.890	ppb	21:23:12
1	Sc 361.383	918301.9	918301.9	101.88	%			21:24:30
1	Y 371.029	850209.5	850209.5	113.09	%			21:24:30
1	Ag 328.068†	-3881.6	-4124.7	1.5353	ug/L	1.5353	ppb	21:24:35
1	As 188.979†	-63.7	-38.1	21.815	ug/L	21.815	ppb	21:24:55
1	B 249.677†	-10.8	608.5	4.1460	ug/L	4.1460	ppb	21:24:35
1	Ba 233.527†	27833.0	27335.3	199.82	ug/L	199.82	ppb	21:24:35
1	Be 313.107†	-19138.1	-13512.2	1.4849	ug/L	1.4849	ppb	21:24:35
1	Cd 226.502†	498.9	695.7	0.9386	ug/L	0.9386	ppb	21:24:55
1	Co 228.616†	586.3	649.5	4.3512	ug/L	4.3512	ppb	21:24:55
1	Cr 267.716†	2680.0	2549.6	27.428	ug/L	27.428	ppb	21:24:55
1	Cu 324.752†	9089.4	2050.4	8.8958	ug/L	8.8958	ppb	21:24:35
1	Mn 257.610†	1718066.0	1685800.1	1758.1	ug/L	1758.1	ppb	21:24:30
1	Mo 202.031†	32.8	5.4	4.7141	ug/L	4.7141	ppb	21:24:55
1	Ni 231.604†	869.8	762.9	17.162	ug/L	17.162	ppb	21:24:55
1	P 214.914†	2374.1	2105.3	1111.4	ug/L	1111.4	ppb	21:24:55
1	Pb 220.353†	152.1	222.1	21.994	ug/L	21.994	ppb	21:24:55
1	S 181.975 Axial†	90.7	42.5	53.902	ug/L	53.902	ppb	21:24:55
1	Sb 206.836†	66.6	37.7	3.1712	ug/L	3.1712	ppb	21:24:55
1	Se 196.026†	-368.4	-339.3	6.4123	ug/L	6.4123	ppb	21:24:55
1	Si 251.611†	1019948.4	1000543.2	29215	ug/L	29215	ppb	21:24:30
1	Sn 189.927†	35.6	29.5	6.1396	ug/L	6.1396	ppb	21:24:55
1	Ti 334.940†	2066871.2	2029849.8	3183.4	ug/L	3183.4	ppb	21:24:30
1	Tl 190.801†	-168.2	-127.2	0.4559	ug/L	0.4559	ppb	21:24:55
1	U 409.014†	-9577.8	-6850.4	-197.47	ug/L	-197.47	ppb	21:24:35
1	V 292.402†	5977.1	7288.3	34.197	ug/L	34.197	ppb	21:24:35
1	Zn 213.857†	36452.5	35127.7	291.67	ug/L	291.67	ppb	21:24:35
1	SiO2†	1015679.4	996384.9	62425	ug/L	62425	ppb	21:26:03
2	Sc Radial	5827.0	5827.0	103	%			21:23:37
2	Y RADIAL	7044.4	7044.4	115.5	%			21:23:37
2	Al 396.153Radial†	17843.9	17419.6	12371	ug/L	12371	ppb	21:23:37
2	Ca 317.933Radial†	4139.4	4019.3	5989.8	ug/L	5989.8	ppb	21:23:37
2	Fe 238.204 Radial†	6860.9	6683.8	61625	ug/L	61625	ppb	21:23:37
2	K 766.490 Radial†	30480.3	27505.3	4790.1	ug/L	4790.1	ppb	21:23:37
2	Mg 279.077 IEC†	106.0	103.0	3606.1	ug/L	3606.1	ppb	21:23:57
2	Na 589.592 Radial†	10045.9	10877.4	3499.4	ug/L	3499.4	ppb	21:23:37
2	Sr 421.552†	7546.5	7351.0	45.283	ug/L	45.283	ppb	21:23:37
2	Sc 361.383	928028.0	928028.0	102.96	%			21:25:01
2	Y 371.029	858097.5	858097.5	114.14	%			21:25:01
2	Ag 328.068†	-3769.1	-3975.5	2.1626	ug/L	2.1626	ppb	21:25:06
2	As 188.979†	-70.0	-43.6	19.781	ug/L	19.781	ppb	21:25:26
2	B 249.677†	-34.7	585.4	3.6907	ug/L	3.6907	ppb	21:25:06
2	Ba 233.527†	27625.6	26847.6	196.29	ug/L	196.29	ppb	21:25:06
2	Be 313.107†	-18905.8	-13089.6	1.6475	ug/L	1.6475	ppb	21:25:06
2	Cd 226.502†	481.0	673.2	0.7191	ug/L	0.7191	ppb	21:25:26
2	Co 228.616†	592.6	649.7	4.3395	ug/L	4.3395	ppb	21:25:26
2	Cr 267.716†	2671.9	2514.2	27.061	ug/L	27.061	ppb	21:25:26
2	Cu 324.752†	8996.1	1866.4	8.3746	ug/L	8.3746	ppb	21:25:06
2	Mn 257.610†	1742300.7	1691664.3	1764.2	ug/L	1764.2	ppb	21:25:01
2	Mo 202.031†	32.6	4.9	4.6787	ug/L	4.6787	ppb	21:25:26
2	Ni 231.604†	873.2	757.3	17.035	ug/L	17.035	ppb	21:25:26

2	P 214.914†	2405.3	2111.2	1114.8	ug/L	1114.8 ppb	21:25:26
2	Pb 220.353†	161.0	229.2	22.777	ug/L	22.777 ppb	21:25:26
2	S 181.975 Axial†	77.2	28.5	35.403	ug/L	35.403 ppb	21:25:26
2	Sb 206.836†	47.3	18.4	-2.8247	ug/L	-2.8247 ppb	21:25:26
2	Se 196.026†	-367.5	-334.6	8.6950	ug/L	8.6950 ppb	21:25:26
2	Si 251.611†	1035056.0	1004724.2	29337	ug/L	29337 ppb	21:25:01
2	Sn 189.927†	31.6	25.3	5.4639	ug/L	5.4639 ppb	21:25:26
2	Ti 334.940†	2093236.6	2034195.3	3190.2	ug/L	3190.2 ppb	21:25:01
2	Tl 190.801†	-167.7	-124.9	1.1553	ug/L	1.1553 ppb	21:25:26
2	U 409.014†	-9588.7	-6762.5	-195.02	ug/L	-195.02 ppb	21:25:06
2	V 292.402†	5964.2	7214.4	33.729	ug/L	33.729 ppb	21:25:06
2	Zn 213.857†	36305.6	34610.1	287.29	ug/L	287.29 ppb	21:25:06
2	SiO2†	1028860.9	998739.2	62573	ug/L	62573 ppb	21:26:09
3	Sc Radial	5787.7	5787.7	102	%		21:24:02
3	Y RADIAL	7025.6	7025.6	115.2	%		21:24:02
3	Al 396.153Radial†	17717.5	17413.5	12366	ug/L	12366 ppb	21:24:02
3	Ca 317.933Radial†	4108.7	4016.5	5985.6	ug/L	5985.6 ppb	21:24:02
3	Fe 238.204 Radial†	6769.2	6639.2	61214	ug/L	61214 ppb	21:24:02
3	K 766.490 Radial†	30149.4	27382.0	4768.6	ug/L	4768.6 ppb	21:24:02
3	Mg 279.077 IEC†	105.7	103.5	3623.8	ug/L	3623.8 ppb	21:24:22
3	Na 589.592 Radial†	9840.4	10742.2	3455.9	ug/L	3455.9 ppb	21:24:02
3	Sr 421.552†	7460.5	7316.5	45.070	ug/L	45.070 ppb	21:24:02
3	Sc 361.383	915711.8	915711.8	101.60	%		21:25:32
3	Y 371.029	847790.8	847790.8	112.77	%		21:25:32
3	Ag 328.068†	-3841.9	-4096.4	1.4968	ug/L	1.4968 ppb	21:25:37
3	As 188.979†	-58.6	-33.3	23.541	ug/L	23.541 ppb	21:25:57
3	B 249.677†	40.7	659.2	5.2428	ug/L	5.2428 ppb	21:25:37
3	Ba 233.527†	27618.7	27201.6	198.83	ug/L	198.83 ppb	21:25:37
3	Be 313.107†	-19050.0	-13478.6	1.4953	ug/L	1.4953 ppb	21:25:37
3	Cd 226.502†	499.4	697.6	1.0094	ug/L	1.0094 ppb	21:25:57
3	Co 228.616†	600.0	664.6	4.6394	ug/L	4.6394 ppb	21:25:57
3	Cr 267.716†	2687.7	2564.6	27.573	ug/L	27.573 ppb	21:25:57
3	Cu 324.752†	9047.3	2034.2	8.8241	ug/L	8.8241 ppb	21:25:37
3	Mn 257.610†	1713644.5	1686217.7	1758.5	ug/L	1758.5 ppb	21:25:32
3	Mo 202.031†	46.7	19.2	5.5387	ug/L	5.5387 ppb	21:25:57
3	Ni 231.604†	889.1	784.2	17.642	ug/L	17.642 ppb	21:25:57
3	P 214.914†	2411.6	2148.8	1135.7	ug/L	1135.7 ppb	21:25:57
3	Pb 220.353†	162.4	232.6	23.186	ug/L	23.186 ppb	21:25:57
3	S 181.975 Axial†	92.0	44.1	56.044	ug/L	56.044 ppb	21:25:57
3	Sb 206.836†	62.0	33.4	1.8114	ug/L	1.8114 ppb	21:25:57
3	Se 196.026†	-374.9	-346.7	0.6245	ug/L	0.6245 ppb	21:25:57
3	Si 251.611†	1016914.3	1000388.3	29210	ug/L	29210 ppb	21:25:32
3	Sn 189.927†	22.8	17.0	4.1438	ug/L	4.1438 ppb	21:25:57
3	Ti 334.940†	2060571.5	2029387.1	3182.7	ug/L	3182.7 ppb	21:25:32
3	Tl 190.801†	-166.8	-126.2	0.7131	ug/L	0.7131 ppb	21:25:57
3	U 409.014†	-9537.2	-6837.0	-197.04	ug/L	-197.04 ppb	21:25:37
3	V 292.402†	5942.3	7270.7	34.174	ug/L	34.174 ppb	21:25:37
3	Zn 213.857†	36264.8	35044.1	291.01	ug/L	291.01 ppb	21:25:37
3	SiO2†	1030715.8	1014004.7	63529	ug/L	63529 ppb	21:26:15

Mean Data: 241419014|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	920680.6	102.15	%	0.720				0.71%
Sc Radial	5797.5	102	%	0.5				0.45%
Y 371.029	852032.6	113.33	%	0.717				0.63%
Y RADIAL	7026.1	115.2	%	0.29				0.26%
Ag 328.068†	-4065.6	1.7316	ug/L	0.37378	1.7316	ppb	0.37378	21.59%
Al 396.153Radial†	17422.2	12373	ug/L	7.3	12373	ppb	7.3	0.06%
As 188.979†	-38.3	21.712	ug/L	1.8822	21.712	ppb	1.8822	8.67%
B 249.677†	617.7	4.3598	ug/L	0.79786	4.3598	ppb	0.79786	18.30%
Ba 233.527†	27128.2	198.31	ug/L	1.820	198.31	ppb	1.820	0.92%
Be 313.107†	-13360.1	1.5426	ug/L	0.09102	1.5426	ppb	0.09102	5.90%
Ca 317.933Radial†	4012.9	5980.3	ug/L	13.00	5980.3	ppb	13.00	0.22%
Cd 226.502†	688.8	0.8890	ug/L	0.15135	0.8890	ppb	0.15135	17.02%
Co 228.616†	654.6	4.4434	ug/L	0.16988	4.4434	ppb	0.16988	3.82%
Cr 267.716†	2542.8	27.354	ug/L	0.2639	27.354	ppb	0.2639	0.96%
Cu 324.752†	1983.7	8.6982	ug/L	0.28247	8.6982	ppb	0.28247	3.25%
Fe 238.204 Radial†	6672.7	61522	ug/L	271.9	61522	ppb	271.9	0.44%
K 766.490 Radial†	27470.5	4784.1	ug/L	13.48	4784.1	ppb	13.48	0.28%

Mg 279.077 IEC†	103.4	3617.4	ug/L	9.86	3617.4	ppb	9.86	0.27%
Mn 257.610†	1687894.0	1760.3	ug/L	3.41	1760.3	ppb	3.41	0.19%
Mo 202.031†	9.8	4.9771	ug/L	0.48663	4.9771	ppb	0.48663	9.78%
Na 589.592 Radial†	10813.5	3478.8	ug/L	21.85	3478.8	ppb	21.85	0.63%
Ni 231.604†	768.1	17.280	ug/L	0.3203	17.280	ppb	0.3203	1.85%
P 214.914†	2121.8	1120.7	ug/L	13.17	1120.7	ppb	13.17	1.18%
Pb 220.353†	227.9	22.652	ug/L	0.6058	22.652	ppb	0.6058	2.67%
S 181.975 Axial†	38.4	48.449	ug/L	11.3494	48.449	ppb	11.3494	23.43%
Sb 206.836†	29.8	0.7193	ug/L	3.14358	0.7193	ppb	3.14358	437.03%
Se 196.026†	-340.2	5.2439	ug/L	4.16019	5.2439	ppb	4.16019	79.33%
Si 251.611†	1001885.2	29254	ug/L	71.8	29254	ppb	71.8	0.25%
Sn 189.927†	23.9	5.2491	ug/L	1.01510	5.2491	ppb	1.01510	19.34%
Sr 421.552†	7318.2	45.081	ug/L	0.1967	45.081	ppb	0.1967	0.44%
Ti 334.940†	2031144.1	3185.4	ug/L	4.16	3185.4	ppb	4.16	0.13%
Tl 190.801†	-126.1	0.7747	ug/L	0.35375	0.7747	ppb	0.35375	45.66%
U 409.014†	-6816.6	-196.51	ug/L	1.306	-196.51	ppb	1.306	0.66%
V 292.402†	7257.8	34.034	ug/L	0.2642	34.034	ppb	0.2642	0.78%
Zn 213.857†	34927.3	289.99	ug/L	2.359	289.99	ppb	2.359	0.81%
SiO2†	1003042.9	62842	ug/L	599.3	62842	ppb	599.3	0.95%

Sequence No.: 45
Sample ID: 241419015|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 12/7/2009 21:28:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419015|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5519.2	5519.2	97.1	%			21:30:40
1	Y RADIAL	6791.9	6791.9	111.4	%			21:30:40
1	Al 396.153Radial†	125357.0	129068.6	91660	ug/L	91660	ppb	21:30:20
1	Ca 317.933Radial†	16869.1	17348.8	25854	ug/L	25854	ppb	21:30:20
1	Fe 238.204 Radial†	14006.3	14412.7	132890	ug/L	132890	ppb	21:30:20
1	K 766.490 Radial†	58505.1	58012.6	10082	ug/L	10082	ppb	21:30:20
1	Mg 279.077 IEC†	580.8	597.6	21105	ug/L	21105	ppb	21:30:40
1	Na 589.592 Radial†	10190.3	11572.3	3722.9	ug/L	3722.9	ppb	21:30:20
1	Sr 421.552†	45376.2	46704.9	287.82	ug/L	287.82	ppb	21:30:20
1	Sc 361.383	911171.9	911171.9	101.09	%			21:31:38
1	Y 371.029	861011.6	861011.6	114.53	%			21:31:38
1	Ag 328.068†	-8188.7	-8415.1	5.8332	ug/L	5.8332	ppb	21:31:43
1	As 188.979†	18.4	42.6	54.154	ug/L	54.154	ppb	21:32:03
1	B 249.677†	1068.8	1676.3	16.214	ug/L	16.214	ppb	21:31:43
1	Ba 233.527†	160951.0	159227.7	1155.6	ug/L	1155.6	ppb	21:31:43
1	Be 313.107†	8548.6	13728.3	8.9356	ug/L	8.9356	ppb	21:31:43
1	Cd 226.502†	1120.3	1314.3	0.1862	ug/L	0.1862	ppb	21:32:03
1	Co 228.616†	4734.4	4757.3	81.432	ug/L	81.432	ppb	21:32:03
1	Cr 267.716†	13857.5	13626.8	142.92	ug/L	142.92	ppb	21:31:43
1	Cu 324.752†	28606.3	21426.2	66.831	ug/L	66.831	ppb	21:31:43
1	Mn 257.610†	5930206.3	5865591.7	6108.8	ug/L	6108.8	ppb	21:31:38
1	Mo 202.031†	-85.4	-111.2	2.5027	ug/L	2.5027	ppb	21:32:03
1	Ni 231.604†	4375.5	4237.3	95.308	ug/L	95.308	ppb	21:32:03
1	P 214.914†	1713.8	1470.4	722.65	ug/L	722.65	ppb	21:32:03
1	Pb 220.353†	1266.6	1325.7	154.57	ug/L	154.57	ppb	21:32:03
1	S 181.975 Axial†	389.3	338.6	430.76	ug/L	430.76	ppb	21:32:03
1	Sb 206.836†	53.5	25.3	-1.4781	ug/L	-1.4781	ppb	21:32:03
1	Se 196.026†	-730.9	-700.7	42.207	ug/L	42.207	ppb	21:32:03
1	Si 251.611†	1511654.5	1494766.2	43644	ug/L	43644	ppb	21:31:38
1	Sn 189.927†	-138.9	-142.9	-18.182	ug/L	-18.182	ppb	21:32:03
1	Ti 334.940†	1339529.9	1326247.3	2081.1	ug/L	2081.1	ppb	21:31:38
1	Tl 190.801†	-238.5	-197.9	-0.5084	ug/L	-0.5084	ppb	21:32:03
1	U 409.014†	-10123.7	-7463.9	-223.63	ug/L	-223.63	ppb	21:31:43
1	V 292.402†	46969.7	47883.6	288.72	ug/L	288.72	ppb	21:31:43
1	Zn 213.857†	25820.2	24890.4	196.92	ug/L	196.92	ppb	21:31:43
1	SiO2†	1506862.6	1490058.0	93353	ug/L	93353	ppb	21:33:15
2	Sc Radial	5757.3	5757.3	101	%			21:31:05
2	Y RADIAL	7047.4	7047.4	115.6	%			21:31:05
2	Al 396.153Radial†	125461.9	123834.2	87943	ug/L	87943	ppb	21:30:45
2	Ca 317.933Radial†	16946.8	16707.2	24898	ug/L	24898	ppb	21:30:45
2	Fe 238.204 Radial†	14027.8	13837.5	127580	ug/L	127580	ppb	21:30:45
2	K 766.490 Radial†	58573.9	55589.2	9658.2	ug/L	9658.2	ppb	21:30:45
2	Mg 279.077 IEC†	571.3	563.5	19900	ug/L	19900	ppb	21:31:05
2	Na 589.592 Radial†	10205.6	11153.5	3588.2	ug/L	3588.2	ppb	21:30:45
2	Sr 421.552†	45408.2	44804.3	276.11	ug/L	276.11	ppb	21:30:45
2	Sc 361.383	911320.5	911320.5	101.11	%			21:32:10
2	Y 371.029	859175.4	859175.4	114.28	%			21:32:10
2	Ag 328.068†	-8386.5	-8609.4	3.3164	ug/L	3.3164	ppb	21:32:15
2	As 188.979†	15.9	40.1	52.321	ug/L	52.321	ppb	21:32:35
2	B 249.677†	1049.3	1656.9	16.524	ug/L	16.524	ppb	21:32:15
2	Ba 233.527†	163274.9	161500.1	1171.8	ug/L	1171.8	ppb	21:32:15
2	Be 313.107†	8767.5	13943.3	8.9962	ug/L	8.9962	ppb	21:32:15
2	Cd 226.502†	1105.6	1299.5	0.5662	ug/L	0.5662	ppb	21:32:35
2	Co 228.616†	4692.1	4714.7	80.752	ug/L	80.752	ppb	21:32:35
2	Cr 267.716†	14047.6	13812.6	144.74	ug/L	144.74	ppb	21:32:15
2	Cu 324.752†	29020.2	21830.9	67.695	ug/L	67.695	ppb	21:32:15
2	Mn 257.610†	5911685.6	5846317.6	6088.3	ug/L	6088.3	ppb	21:32:10
2	Mo 202.031†	-70.4	-96.4	3.0482	ug/L	3.0482	ppb	21:32:35
2	Ni 231.604†	4380.7	4241.7	95.408	ug/L	95.408	ppb	21:32:35

2	P 214.914†	1705.8	1462.2	720.95	ug/L	720.95 ppb	21:32:35
2	Pb 220.353†	1243.2	1302.3	151.62	ug/L	151.62 ppb	21:32:35
2	S 181.975 Axial†	389.8	339.1	432.17	ug/L	432.17 ppb	21:32:35
2	Sb 206.836†	55.7	27.5	-0.7783	ug/L	-0.7783 ppb	21:32:35
2	Se 196.026†	-746.4	-715.9	16.301	ug/L	16.301 ppb	21:32:35
2	Si 251.611†	1505778.4	1488710.7	43468	ug/L	43468 ppb	21:32:10
2	Sn 189.927†	-138.8	-142.7	-18.329	ug/L	-18.329 ppb	21:32:35
2	Ti 334.940†	1334720.0	1321274.0	2073.2	ug/L	2073.2 ppb	21:32:10
2	Tl 190.801†	-226.8	-186.3	2.3437	ug/L	2.3437 ppb	21:32:35
2	U 409.014†	-10191.6	-7529.5	-224.78	ug/L	-224.78 ppb	21:32:15
2	V 292.402†	47806.9	48704.1	294.86	ug/L	294.86 ppb	21:32:15
2	Zn 213.857†	26135.0	25197.5	200.07	ug/L	200.07 ppb	21:32:15
2	SiO2†	1525241.7	1507992.4	94477	ug/L	94477 ppb	21:33:22
3	Sc Radial	5765.1	5765.1	101	%		21:31:30
3	Y RADIAL	7054.7	7054.7	115.7	%		21:31:30
3	Al 396.153Radial†	128254.7	126419.2	89779	ug/L	89779 ppb	21:31:10
3	Ca 317.933Radial†	17299.5	17032.2	25382	ug/L	25382 ppb	21:31:10
3	Fe 238.204 Radial†	14270.6	14058.0	129620	ug/L	129620 ppb	21:31:10
3	K 766.490 Radial†	59785.0	56704.6	9853.6	ug/L	9853.6 ppb	21:31:10
3	Mg 279.077 IEC†	570.7	562.2	19849	ug/L	19849 ppb	21:31:30
3	Na 589.592 Radial†	10393.6	11325.2	3643.4	ug/L	3643.4 ppb	21:31:10
3	Sr 421.552†	46397.5	45718.7	281.74	ug/L	281.74 ppb	21:31:10
3	Sc 361.383	906482.0	906482.0	100.57	%		21:32:42
3	Y 371.029	857044.2	857044.2	114.00	%		21:32:42
3	Ag 328.068†	-8188.8	-8457.1	4.6184	ug/L	4.6184 ppb	21:32:47
3	As 188.979†	22.7	47.0	55.249	ug/L	55.249 ppb	21:33:07
3	B 249.677†	950.2	1563.9	14.365	ug/L	14.365 ppb	21:32:47
3	Ba 233.527†	160791.2	159892.6	1160.3	ug/L	1160.3 ppb	21:32:47
3	Be 313.107†	8379.2	13603.6	8.8744	ug/L	8.8744 ppb	21:32:47
3	Cd 226.502†	1069.5	1269.4	0.0558	ug/L	0.0558 ppb	21:33:07
3	Co 228.616†	4664.3	4711.8	80.668	ug/L	80.668 ppb	21:33:07
3	Cr 267.716†	13925.1	13765.0	144.28	ug/L	144.28 ppb	21:32:47
3	Cu 324.752†	28637.1	21603.2	67.161	ug/L	67.161 ppb	21:32:47
3	Mn 257.610†	5876625.1	5842665.2	6084.7	ug/L	6084.7 ppb	21:32:42
3	Mo 202.031†	-65.5	-91.9	3.4734	ug/L	3.4734 ppb	21:33:07
3	Ni 231.604†	4357.9	4242.3	95.420	ug/L	95.420 ppb	21:33:07
3	P 214.914†	1698.4	1463.8	720.92	ug/L	720.92 ppb	21:33:07
3	Pb 220.353†	1255.1	1320.7	153.88	ug/L	153.88 ppb	21:33:07
3	S 181.975 Axial†	380.0	331.3	421.54	ug/L	421.54 ppb	21:33:07
3	Sb 206.836†	59.7	31.8	0.4993	ug/L	0.4993 ppb	21:33:07
3	Se 196.026†	-743.0	-716.5	22.705	ug/L	22.705 ppb	21:33:07
3	Si 251.611†	1495526.6	1486466.5	43402	ug/L	43402 ppb	21:32:42
3	Sn 189.927†	-155.1	-159.7	-20.947	ug/L	-20.947 ppb	21:33:07
3	Ti 334.940†	1327021.3	1320665.3	2072.3	ug/L	2072.3 ppb	21:32:42
3	Tl 190.801†	-229.4	-190.1	1.3612	ug/L	1.3612 ppb	21:33:07
3	U 409.014†	-10093.3	-7485.6	-223.82	ug/L	-223.82 ppb	21:32:47
3	V 292.402†	46943.6	48098.1	290.61	ug/L	290.61 ppb	21:32:47
3	Zn 213.857†	25661.5	24864.7	197.06	ug/L	197.06 ppb	21:32:47
3	SiO2†	1502454.5	1493386.8	93561	ug/L	93561 ppb	21:33:29

Mean Data: 241419015|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	909658.1	100.93	%	0.305				0.30%
Sc Radial	5680.6	100.0	%	2.46				2.46%
Y 371.029	859077.0	114.27	%	0.264				0.23%
Y RADIAL	6964.6	114.2	%	2.45				2.15%
Ag 328.068†	-8493.8	4.5894	ug/L	1.25866	4.5894	ppb	1.25866	27.43%
Al 396.153Radial†	126440.7	89794	ug/L	1858.7	89794	ppb	1858.7	2.07%
As 188.979†	43.2	53.908	ug/L	1.4793	53.908	ppb	1.4793	2.74%
B 249.677†	1632.4	15.701	ug/L	1.1674	15.701	ppb	1.1674	7.43%
Ba 233.527†	160206.8	1162.6	ug/L	8.35	1162.6	ppb	8.35	0.72%
Be 313.107†	13758.4	8.9354	ug/L	0.06092	8.9354	ppb	0.06092	0.68%
Ca 317.933Radial†	17029.4	25378	ug/L	478.1	25378	ppb	478.1	1.88%
Cd 226.502†	1294.4	0.2694	ug/L	0.26518	0.2694	ppb	0.26518	98.44%
Co 228.616†	4728.0	80.951	ug/L	0.4191	80.951	ppb	0.4191	0.52%
Cr 267.716†	13734.8	143.98	ug/L	0.948	143.98	ppb	0.948	0.66%
Cu 324.752†	21620.1	67.229	ug/L	0.4360	67.229	ppb	0.4360	0.65%
Fe 238.204 Radial†	14102.8	130030	ug/L	2675.5	130030	ppb	2675.5	2.06%
K 766.490 Radial†	56768.8	9864.7	ug/L	212.26	9864.7	ppb	212.26	2.15%

Mg 279.077 IEC†	574.4	20285	ug/L	710.8	20285	ppb	710.8	3.50%
Mn 257.610†	5851524.8	6093.9	ug/L	13.02	6093.9	ppb	13.02	0.21%
Mo 202.031†	-99.8	3.0081	ug/L	0.48657	3.0081	ppb	0.48657	16.18%
Na 589.592 Radial†	11350.3	3651.5	ug/L	67.73	3651.5	ppb	67.73	1.85%
Ni 231.604†	4240.4	95.379	ug/L	0.0612	95.379	ppb	0.0612	0.06%
P 214.914†	1465.5	721.50	ug/L	0.990	721.50	ppb	0.990	0.14%
Pb 220.353†	1316.2	153.36	ug/L	1.542	153.36	ppb	1.542	1.01%
S 181.975 Axial†	336.3	428.16	ug/L	5.775	428.16	ppb	5.775	1.35%
Sb 206.836†	28.2	-0.5857	ug/L	1.00265	-0.5857	ppb	1.00265	171.19%
Se 196.026†	-711.0	27.071	ug/L	13.4936	27.071	ppb	13.4936	49.85%
Si 251.611†	1489981.1	43505	ug/L	125.3	43505	ppb	125.3	0.29%
Sn 189.927†	-148.4	-19.153	ug/L	1.5560	-19.153	ppb	1.5560	8.12%
Sr 421.552†	45742.6	281.89	ug/L	5.858	281.89	ppb	5.858	2.08%
Ti 334.940†	1322728.9	2075.6	ug/L	4.82	2075.6	ppb	4.82	0.23%
Tl 190.801†	-191.5	1.0655	ug/L	1.44889	1.0655	ppb	1.44889	135.98%
U 409.014†	-7493.0	-224.08	ug/L	0.617	-224.08	ppb	0.617	0.28%
V 292.402†	48228.6	291.40	ug/L	3.140	291.40	ppb	3.140	1.08%
Zn 213.857†	24984.2	198.02	ug/L	1.780	198.02	ppb	1.780	0.90%
SiO2†	1497145.7	93797	ug/L	597.8	93797	ppb	597.8	0.64%

Sequence No.: 46
Sample ID: 241419016|925191|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 12/7/2009 21:35:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241419016|925191|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5710.8	5710.8	101	%			21:37:34
1	Y RADIAL	6737.6	6737.6	110.5	%			21:37:34
1	Al 396.153Radial†	45753.0	45540.2	32341	ug/L	32341	ppb	21:37:34
1	Ca 317.933Radial†	5172.3	5129.0	7643.5	ug/L	7643.5	ppb	21:37:34
1	Fe 238.204 Radial†	3349.1	3326.0	30666	ug/L	30666	ppb	21:37:34
1	K 766.490 Radial†	22270.0	19941.2	3483.1	ug/L	3483.1	ppb	21:37:34
1	Mg 279.077 IEC†	151.5	150.5	5316.4	ug/L	5316.4	ppb	21:37:54
1	Na 589.592 Radial†	5422.6	6476.9	2083.7	ug/L	2083.7	ppb	21:37:34
1	Sr 421.552†	9969.0	9910.8	61.056	ug/L	61.056	ppb	21:37:34
1	Sc 361.383	904901.4	904901.4	100.40	%			21:38:52
1	Y 371.029	820173.9	820173.9	109.10	%			21:38:52
1	Ag 328.068†	-1803.4	-2111.2	0.5071	ug/L	0.5071	ppb	21:38:52
1	As 188.979†	-40.2	-15.7	9.0925	ug/L	9.0925	ppb	21:39:12
1	B 249.677†	-272.5	347.7	2.9704	ug/L	2.9704	ppb	21:38:52
1	Ba 233.527†	80242.3	79941.7	578.61	ug/L	578.61	ppb	21:38:52
1	Be 313.107†	-1714.8	3564.1	3.6658	ug/L	3.6658	ppb	21:38:52
1	Cd 226.502†	146.7	352.2	0.5426	ug/L	0.5426	ppb	21:39:12
1	Co 228.616†	515.0	587.1	7.9840	ug/L	7.9840	ppb	21:39:12
1	Cr 267.716†	2378.2	2287.9	24.154	ug/L	24.154	ppb	21:39:12
1	Cu 324.752†	15874.8	8941.1	26.624	ug/L	26.624	ppb	21:38:52
1	Mn 257.610†	627256.7	624280.1	651.76	ug/L	651.76	ppb	21:38:52
1	Mo 202.031†	31.5	4.6	2.4636	ug/L	2.4636	ppb	21:39:12
1	Ni 231.604†	1096.6	1001.4	22.530	ug/L	22.530	ppb	21:39:12
1	P 214.914†	1190.7	961.1	510.61	ug/L	510.61	ppb	21:39:12
1	Pb 220.353†	204.9	276.9	35.001	ug/L	35.001	ppb	21:39:12
1	S 181.975 Axial†	129.9	82.9	103.58	ug/L	103.58	ppb	21:39:12
1	Sb 206.836†	41.8	14.0	-0.0490	ug/L	-0.0490	ppb	21:39:12
1	Se 196.026†	-196.4	-173.3	5.2541	ug/L	5.2541	ppb	21:39:12
1	Si 251.611†	1121850.9	1116867.2	32612	ug/L	32612	ppb	21:38:52
1	Sn 189.927†	-63.8	-69.0	-9.7363	ug/L	-9.7363	ppb	21:39:12
1	Ti 334.940†	782909.1	781011.4	1225.1	ug/L	1225.1	ppb	21:38:52
1	Tl 190.801†	-72.9	-34.6	4.5564	ug/L	4.5564	ppb	21:39:12
1	U 409.014†	-5267.4	-2696.2	-78.550	ug/L	-78.550	ppb	21:38:52
1	V 292.402†	6368.1	7764.7	44.438	ug/L	44.438	ppb	21:38:52
1	Zn 213.857†	16904.3	16186.7	133.94	ug/L	133.94	ppb	21:38:52
1	SiO2†	1146401.7	1141352.7	71509	ug/L	71509	ppb	21:40:10
2	Sc Radial	5674.5	5674.5	99.9	%			21:37:59
2	Y RADIAL	6698.9	6698.9	109.8	%			21:37:59
2	Al 396.153Radial†	45829.9	45909.0	32603	ug/L	32603	ppb	21:37:59
2	Ca 317.933Radial†	5198.5	5188.2	7731.7	ug/L	7731.7	ppb	21:37:59
2	Fe 238.204 Radial†	3372.7	3371.0	31081	ug/L	31081	ppb	21:37:59
2	K 766.490 Radial†	22356.9	20170.3	3523.3	ug/L	3523.3	ppb	21:37:59
2	Mg 279.077 IEC†	152.2	152.1	5373.4	ug/L	5373.4	ppb	21:38:19
2	Na 589.592 Radial†	5366.3	6455.2	2076.7	ug/L	2076.7	ppb	21:37:59
2	Sr 421.552†	9956.3	9961.6	61.369	ug/L	61.369	ppb	21:37:59
2	Sc 361.383	892388.0	892388.0	99.009	%			21:39:17
2	Y 371.029	810420.5	810420.5	107.80	%			21:39:17
2	Ag 328.068†	-1719.3	-2051.5	0.9065	ug/L	0.9065	ppb	21:39:17
2	As 188.979†	-37.7	-13.7	9.8975	ug/L	9.8975	ppb	21:39:38
2	B 249.677†	-206.0	411.1	4.2021	ug/L	4.2021	ppb	21:39:17
2	Ba 233.527†	79012.3	79820.1	577.74	ug/L	577.74	ppb	21:39:17
2	Be 313.107†	-1838.1	3415.5	3.6108	ug/L	3.6108	ppb	21:39:17
2	Cd 226.502†	153.3	360.9	0.5894	ug/L	0.5894	ppb	21:39:38
2	Co 228.616†	519.3	598.6	8.1875	ug/L	8.1875	ppb	21:39:38
2	Cr 267.716†	2377.0	2320.0	24.492	ug/L	24.492	ppb	21:39:38
2	Cu 324.752†	15722.1	9008.6	26.835	ug/L	26.835	ppb	21:39:17
2	Mn 257.610†	616893.0	622573.6	650.03	ug/L	650.03	ppb	21:39:17
2	Mo 202.031†	10.8	-15.9	1.2179	ug/L	1.2179	ppb	21:39:38
2	Ni 231.604†	1083.2	1003.2	22.570	ug/L	22.570	ppb	21:39:38

2	P 214.914†	1188.9	975.9	518.51	ug/L	518.51 ppb	21:39:38
2	Pb 220.353†	192.8	267.5	33.994	ug/L	33.994 ppb	21:39:38
2	S 181.975 Axial†	143.2	98.2	123.71	ug/L	123.71 ppb	21:39:38
2	Sb 206.836†	49.1	22.0	2.3707	ug/L	2.3707 ppb	21:39:38
2	Se 196.026†	-203.2	-182.9	1.2223	ug/L	1.2223 ppb	21:39:38
2	Si 251.611†	1104527.5	1115039.2	32558	ug/L	32558 ppb	21:39:17
2	Sn 189.927†	-62.2	-68.3	-9.6066	ug/L	-9.6066 ppb	21:39:38
2	Ti 334.940†	771265.7	780186.3	1223.8	ug/L	1223.8 ppb	21:39:17
2	Tl 190.801†	-79.4	-42.2	2.4872	ug/L	2.4872 ppb	21:39:38
2	U 409.014†	-5355.5	-2858.8	-83.104	ug/L	-83.104 ppb	21:39:17
2	V 292.402†	6246.4	7730.7	44.129	ug/L	44.129 ppb	21:39:17
2	Zn 213.857†	16679.2	16195.4	133.98	ug/L	133.98 ppb	21:39:17
2	SiO2†	1147206.3	1158177.1	72563	ug/L	72563 ppb	21:40:16
3	Sc Radial	5739.8	5739.8	101	%		21:38:24
3	Y RADIAL	6809.0	6809.0	111.6	%		21:38:24
3	Al 396.153Radial†	46250.0	45802.1	32527	ug/L	32527 ppb	21:38:24
3	Ca 317.933Radial†	5224.9	5155.0	7682.3	ug/L	7682.3 ppb	21:38:24
3	Fe 238.204 Radial†	3382.3	3342.0	30814	ug/L	30814 ppb	21:38:24
3	K 766.490 Radial†	22540.6	20097.1	3510.4	ug/L	3510.4 ppb	21:38:24
3	Mg 279.077 IEC†	154.0	152.2	5378.3	ug/L	5378.3 ppb	21:38:44
3	Na 589.592 Radial†	5439.5	6466.4	2080.3	ug/L	2080.3 ppb	21:38:24
3	Sr 421.552†	10061.3	9952.0	61.310	ug/L	61.310 ppb	21:38:24
3	Sc 361.383	893990.7	893990.7	99.187	%		21:39:43
3	Y 371.029	813244.1	813244.1	108.17	%		21:39:43
3	Ag 328.068†	-1776.0	-2105.5	0.5771	ug/L	0.5771 ppb	21:39:43
3	As 188.979†	-42.7	-18.7	7.9739	ug/L	7.9739 ppb	21:40:03
3	B 249.677†	-207.5	409.9	4.2147	ug/L	4.2147 ppb	21:39:43
3	Ba 233.527†	79429.5	80097.6	579.74	ug/L	579.74 ppb	21:39:43
3	Be 313.107†	-1716.8	3541.2	3.6584	ug/L	3.6584 ppb	21:39:43
3	Cd 226.502†	159.1	366.5	0.6731	ug/L	0.6731 ppb	21:40:03
3	Co 228.616†	517.3	595.6	8.1361	ug/L	8.1361 ppb	21:40:03
3	Cr 267.716†	2380.3	2319.0	24.475	ug/L	24.475 ppb	21:40:03
3	Cu 324.752†	15586.4	8843.3	26.358	ug/L	26.358 ppb	21:39:43
3	Mn 257.610†	619250.6	623833.5	651.31	ug/L	651.31 ppb	21:39:43
3	Mo 202.031†	18.4	-8.2	1.6747	ug/L	1.6747 ppb	21:40:03
3	Ni 231.604†	1093.0	1011.1	22.748	ug/L	22.748 ppb	21:40:03
3	P 214.914†	1192.1	977.0	519.37	ug/L	519.37 ppb	21:40:03
3	Pb 220.353†	184.8	259.1	33.082	ug/L	33.082 ppb	21:40:03
3	S 181.975 Axial†	134.5	89.1	111.73	ug/L	111.73 ppb	21:40:03
3	Sb 206.836†	41.7	14.5	0.0899	ug/L	0.0899 ppb	21:40:03
3	Se 196.026†	-195.6	-174.9	4.8443	ug/L	4.8443 ppb	21:40:03
3	Si 251.611†	1107563.5	1116100.1	32589	ug/L	32589 ppb	21:39:43
3	Sn 189.927†	-50.2	-56.0	-7.6725	ug/L	-7.6725 ppb	21:40:03
3	Ti 334.940†	773696.6	781240.6	1225.5	ug/L	1225.5 ppb	21:39:43
3	Tl 190.801†	-97.1	-59.9	-2.2797	ug/L	-2.2797 ppb	21:40:03
3	U 409.014†	-5231.3	-2723.9	-79.335	ug/L	-79.335 ppb	21:39:43
3	V 292.402†	6208.9	7681.6	43.863	ug/L	43.863 ppb	21:39:43
3	Zn 213.857†	16715.2	16201.6	134.05	ug/L	134.05 ppb	21:39:43
3	SiO2†	1146564.2	1155452.4	72393	ug/L	72393 ppb	21:40:21

Mean Data: 241419016|925191|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897093.4	99.531	%	0.7555				0.76%
Sc Radial	5708.4	100	%	0.6				0.57%
Y 371.029	814612.8	108.36	%	0.668				0.62%
Y RADIAL	6748.5	110.7	%	0.92				0.83%
Ag 328.068†	-2089.4	0.6636	ug/L	0.21326	0.6636	ppb	0.21326	32.14%
Al 396.153Radial†	45750.4	32490	ug/L	134.8	32490	ppb	134.8	0.41%
As 188.979†	-16.0	8.9880	ug/L	0.96604	8.9880	ppb	0.96604	10.75%
B 249.677†	389.6	3.7958	ug/L	0.71480	3.7958	ppb	0.71480	18.83%
Ba 233.527†	79953.1	578.70	ug/L	1.000	578.70	ppb	1.000	0.17%
Be 313.107†	3506.9	3.6450	ug/L	0.02985	3.6450	ppb	0.02985	0.82%
Ca 317.933Radial†	5157.4	7685.8	ug/L	44.23	7685.8	ppb	44.23	0.58%
Cd 226.502†	359.8	0.6017	ug/L	0.06616	0.6017	ppb	0.06616	11.00%
Co 228.616†	593.8	8.1025	ug/L	0.10583	8.1025	ppb	0.10583	1.31%
Cr 267.716†	2309.0	24.374	ug/L	0.1903	24.374	ppb	0.1903	0.78%
Cu 324.752†	8931.0	26.606	ug/L	0.2390	26.606	ppb	0.2390	0.90%
Fe 238.204 Radial†	3346.4	30853	ug/L	210.1	30853	ppb	210.1	0.68%
K 766.490 Radial†	20069.5	3505.6	ug/L	20.49	3505.6	ppb	20.49	0.58%

Mg 279.077 IEC†	151.6	5356.0	ug/L	34.40	5356.0	ppb	34.40	0.64%
Mn 257.610†	623562.4	651.03	ug/L	0.899	651.03	ppb	0.899	0.14%
Mo 202.031†	-6.5	1.7854	ug/L	0.63021	1.7854	ppb	0.63021	35.30%
Na 589.592 Radial†	6466.2	2080.2	ug/L	3.50	2080.2	ppb	3.50	0.17%
Ni 231.604†	1005.2	22.616	ug/L	0.1162	22.616	ppb	0.1162	0.51%
P 214.914†	971.3	516.16	ug/L	4.830	516.16	ppb	4.830	0.94%
Pb 220.353†	267.8	34.026	ug/L	0.9600	34.026	ppb	0.9600	2.82%
S 181.975 Axial†	90.1	113.01	ug/L	10.125	113.01	ppb	10.125	8.96%
Sb 206.836†	16.8	0.8039	ug/L	1.35869	0.8039	ppb	1.35869	169.01%
Se 196.026†	-177.1	3.7736	ug/L	2.21893	3.7736	ppb	2.21893	58.80%
Si 251.611†	1116002.2	32586	ug/L	26.8	32586	ppb	26.8	0.08%
Sn 189.927†	-64.4	-9.0051	ug/L	1.15591	-9.0051	ppb	1.15591	12.84%
Sr 421.552†	9941.5	61.245	ug/L	0.1662	61.245	ppb	0.1662	0.27%
Ti 334.940†	780812.8	1224.8	ug/L	0.87	1224.8	ppb	0.87	0.07%
Tl 190.801†	-45.6	1.5880	ug/L	3.50568	1.5880	ppb	3.50568	220.76%
U 409.014†	-2759.7	-80.330	ug/L	2.4346	-80.330	ppb	2.4346	3.03%
V 292.402†	7725.7	44.143	ug/L	0.2876	44.143	ppb	0.2876	0.65%
Zn 213.857†	16194.6	133.99	ug/L	0.056	133.99	ppb	0.056	0.04%
SiO2†	1151660.7	72155	ug/L	565.8	72155	ppb	565.8	0.78%

Sequence No.: 47
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/7/2009 21:42:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5663.1	5663.1	99.7	%			21:44:25
1	Y RADIAL	6030.9	6030.9	98.89	%			21:44:25
1	Al 396.153Radial†	7040.2	7083.8	5009.3	ug/L	5009.3	ppb	21:44:25
1	Ca 317.933Radial†	3394.1	3388.3	5049.4	ug/L	5049.4	ppb	21:44:45
1	Fe 238.204 Radial†	545.3	541.1	5004.3	ug/L	5004.3	ppb	21:44:45
1	K 766.490 Radial†	30519.9	28405.0	4959.8	ug/L	4959.8	ppb	21:44:25
1	Mg 279.077 IEC†	149.1	149.4	5308.9	ug/L	5308.9	ppb	21:44:45
1	Na 589.592 Radial†	27497.4	28669.8	9223.4	ug/L	9223.4	ppb	21:44:25
1	Sr 421.552†	79803.2	80058.2	493.73	ug/L	493.73	ppb	21:44:25
1	Sc 361.383	895502.8	895502.8	99.355	%			21:45:42
1	Y 371.029	731934.0	731934.0	97.358	%			21:45:42
1	Ag 328.068†	112191.5	112605.3	504.52	ug/L	504.52	ppb	21:45:47
1	As 188.979†	1238.7	1271.2	485.20	ug/L	485.20	ppb	21:46:07
1	B 249.677†	22930.6	23698.7	479.65	ug/L	479.65	ppb	21:45:47
1	Ba 233.527†	67592.7	68048.8	492.76	ug/L	492.76	ppb	21:45:47
1	Be 313.107†	1362547.9	1376670.8	487.13	ug/L	487.13	ppb	21:45:42
1	Cd 226.502†	47460.7	47975.0	489.33	ug/L	489.33	ppb	21:45:47
1	Co 228.616†	26485.9	26732.1	490.79	ug/L	490.79	ppb	21:45:47
1	Cr 267.716†	47849.9	48079.8	494.49	ug/L	494.49	ppb	21:45:47
1	Cu 324.752†	179790.7	174087.8	488.18	ug/L	488.18	ppb	21:45:47
1	Mn 257.610†	469677.3	472234.4	491.18	ug/L	491.18	ppb	21:45:42
1	Mo 202.031†	8006.4	8031.6	500.33	ug/L	500.33	ppb	21:46:07
1	Ni 231.604†	21831.6	21882.5	492.17	ug/L	492.17	ppb	21:45:47
1	P 214.914†	4545.7	4350.3	2318.8	ug/L	2318.8	ppb	21:46:07
1	Pb 220.353†	4363.6	4464.8	489.83	ug/L	489.83	ppb	21:46:07
1	S 181.975 Axial†	767.9	726.4	961.94	ug/L	961.94	ppb	21:46:07
1	Sb 206.836†	1620.7	1603.6	501.90	ug/L	501.90	ppb	21:46:07
1	Se 196.026†	834.5	862.2	501.84	ug/L	501.84	ppb	21:46:07
1	Si 251.611†	84156.0	84159.3	2445.6	ug/L	2445.6	ppb	21:45:47
1	Sn 189.927†	3114.3	3129.1	497.66	ug/L	497.66	ppb	21:46:07
1	Ti 334.940†	316372.4	319628.6	501.08	ug/L	501.08	ppb	21:45:47
1	Tl 190.801†	1767.5	1816.9	494.86	ug/L	494.86	ppb	21:46:07
1	U 409.014†	15781.0	18433.8	508.76	ug/L	508.76	ppb	21:45:47
1	V 292.402†	74111.0	76014.2	500.94	ug/L	500.94	ppb	21:45:47
1	Zn 213.857†	58293.7	58021.7	487.51	ug/L	487.51	ppb	21:45:47
1	SiO2†	84147.0	84182.0	5248.5	ug/L	5248.5	ppb	21:47:15
2	Sc Radial	5768.2	5768.2	102	%			21:44:50
2	Y RADIAL	6165.7	6165.7	101.1	%			21:44:50
2	Al 396.153Radial†	7144.7	7058.1	4991.1	ug/L	4991.1	ppb	21:44:50
2	Ca 317.933Radial†	3441.3	3372.7	5026.2	ug/L	5026.2	ppb	21:45:10
2	Fe 238.204 Radial†	557.5	543.2	5023.5	ug/L	5023.5	ppb	21:45:10
2	K 766.490 Radial†	30975.1	28295.6	4940.7	ug/L	4940.7	ppb	21:44:50
2	Mg 279.077 IEC†	154.2	151.6	5387.7	ug/L	5387.7	ppb	21:45:10
2	Na 589.592 Radial†	27776.4	28442.1	9150.1	ug/L	9150.1	ppb	21:44:50
2	Sr 421.552†	80788.1	79569.8	490.72	ug/L	490.72	ppb	21:44:50
2	Sc 361.383	903593.2	903593.2	100.25	%			21:46:13
2	Y 371.029	738994.7	738994.7	98.297	%			21:46:13
2	Ag 328.068†	113428.7	112828.4	505.53	ug/L	505.53	ppb	21:46:18
2	As 188.979†	1236.6	1257.9	480.21	ug/L	480.21	ppb	21:46:38
2	B 249.677†	23178.1	23738.9	480.47	ug/L	480.47	ppb	21:46:18
2	Ba 233.527†	68298.9	68144.1	493.45	ug/L	493.45	ppb	21:46:18
2	Be 313.107†	1377670.1	1379476.0	488.12	ug/L	488.12	ppb	21:46:13
2	Cd 226.502†	47933.6	48019.0	489.78	ug/L	489.78	ppb	21:46:18
2	Co 228.616†	26699.2	26706.1	490.30	ug/L	490.30	ppb	21:46:18
2	Cr 267.716†	48316.1	48113.6	494.84	ug/L	494.84	ppb	21:46:18
2	Cu 324.752†	182384.6	175054.8	490.90	ug/L	490.90	ppb	21:46:18
2	Mn 257.610†	474075.0	472388.4	491.34	ug/L	491.34	ppb	21:46:13
2	Mo 202.031†	8032.1	7985.1	497.44	ug/L	497.44	ppb	21:46:38
2	Ni 231.604†	21990.0	21843.8	491.30	ug/L	491.30	ppb	21:46:18

2	P 214.914†	4536.6	4300.3	2290.8 ug/L	2290.8 ppb	21:46:38
2	Pb 220.353†	4363.4	4425.2	485.49 ug/L	485.49 ppb	21:46:38
2	S 181.975 Axial†	766.5	718.1	950.92 ug/L	950.92 ppb	21:46:38
2	Sb 206.836†	1621.1	1589.4	497.35 ug/L	497.35 ppb	21:46:38
2	Se 196.026†	839.2	859.4	500.32 ug/L	500.32 ppb	21:46:38
2	Si 251.611†	85063.9	84306.5	2449.9 ug/L	2449.9 ppb	21:46:18
2	Sn 189.927†	3108.6	3095.3	492.29 ug/L	492.29 ppb	21:46:38
2	Ti 334.940†	319764.3	320160.9	501.91 ug/L	501.91 ppb	21:46:18
2	Tl 190.801†	1762.0	1795.6	489.08 ug/L	489.08 ppb	21:46:38
2	U 409.014†	15949.7	18459.8	509.48 ug/L	509.48 ppb	21:46:18
2	V 292.402†	74922.3	76155.6	501.82 ug/L	501.82 ppb	21:46:18
2	Zn 213.857†	58787.1	57988.5	487.23 ug/L	487.23 ppb	21:46:18
2	SiO2†	83509.1	82787.4	5161.3 ug/L	5161.3 ppb	21:47:20
3	Sc Radial	5667.7	5667.7	99.8 %		21:45:15
3	Y RADIAL	6030.7	6030.7	98.89 %		21:45:15
3	Al 396.153Radial†	7076.0	7114.0	5030.7 ug/L	5030.7 ppb	21:45:15
3	Ca 317.933Radial†	3421.9	3413.4	5086.8 ug/L	5086.8 ppb	21:45:35
3	Fe 238.204 Radial†	549.6	544.9	5039.7 ug/L	5039.7 ppb	21:45:35
3	K 766.490 Radial†	30641.9	28502.6	4976.9 ug/L	4976.9 ppb	21:45:15
3	Mg 279.077 IEC†	148.9	149.0	5296.6 ug/L	5296.6 ppb	21:45:35
3	Na 589.592 Radial†	27461.0	28611.0	9204.5 ug/L	9204.5 ppb	21:45:15
3	Sr 421.552†	79830.2	80020.5	493.50 ug/L	493.50 ppb	21:45:15
3	Sc 361.383	897589.7	897589.7	99.586 %		21:46:44
3	Y 371.029	736278.7	736278.7	97.936 %		21:46:44
3	Ag 328.068†	112154.3	112305.5	503.20 ug/L	503.20 ppb	21:46:49
3	As 188.979†	1239.1	1268.6	484.22 ug/L	484.22 ppb	21:47:09
3	B 249.677†	22886.2	23600.4	477.66 ug/L	477.66 ppb	21:46:49
3	Ba 233.527†	67437.8	67735.1	490.49 ug/L	490.49 ppb	21:46:49
3	Be 313.107†	1372198.0	1383172.5	489.42 ug/L	489.42 ppb	21:46:44
3	Cd 226.502†	47340.1	47742.9	486.96 ug/L	486.96 ppb	21:46:49
3	Co 228.616†	26381.9	26565.6	487.74 ug/L	487.74 ppb	21:46:49
3	Cr 267.716†	47850.3	47968.3	493.35 ug/L	493.35 ppb	21:46:49
3	Cu 324.752†	179758.5	173634.7	486.92 ug/L	486.92 ppb	21:46:49
3	Mn 257.610†	470362.6	471823.5	490.76 ug/L	490.76 ppb	21:46:44
3	Mo 202.031†	8027.9	8034.5	500.52 ug/L	500.52 ppb	21:47:09
3	Ni 231.604†	21789.3	21789.0	490.06 ug/L	490.06 ppb	21:46:49
3	P 214.914†	4570.1	4364.1	2326.6 ug/L	2326.6 ppb	21:47:09
3	Pb 220.353†	4383.1	4474.0	490.85 ug/L	490.85 ppb	21:47:09
3	S 181.975 Axial†	769.7	726.4	961.87 ug/L	961.87 ppb	21:47:09
3	Sb 206.836†	1631.9	1611.0	504.22 ug/L	504.22 ppb	21:47:09
3	Se 196.026†	833.0	858.8	500.05 ug/L	500.05 ppb	21:47:09
3	Si 251.611†	83984.3	83789.9	2434.8 ug/L	2434.8 ppb	21:46:49
3	Sn 189.927†	3115.1	3122.7	496.64 ug/L	496.64 ppb	21:47:09
3	Ti 334.940†	315587.4	318100.0	498.69 ug/L	498.69 ppb	21:46:49
3	Tl 190.801†	1770.6	1815.9	494.59 ug/L	494.59 ppb	21:47:09
3	U 409.014†	15633.8	18249.1	503.65 ug/L	503.65 ppb	21:46:49
3	V 292.402†	74055.3	75784.8	499.44 ug/L	499.44 ppb	21:46:49
3	Zn 213.857†	58257.7	57849.2	486.06 ug/L	486.06 ppb	21:46:49
3	SiO2†	84234.3	84072.8	5241.6 ug/L	5241.6 ppb	21:47:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898895.2	99.731	%	0.4660				0.47%
Sc Radial	5699.6	100	%	1.0				1.04%
Y 371.029	735735.8	97.864	%	0.4737				0.48%
Y RADIAL	6075.8	99.63	%	1.277				1.28%
Ag 328.068†	112579.7	504.41	ug/L	1.168	504.41	ppb	1.168	0.23%
QC value within limits for Ag 328.068 Recovery = 100.88%								
Al 396.153Radial†	7085.3	5010.4	ug/L	19.82	5010.4	ppb	19.82	0.40%
QC value within limits for Al 396.153Radial Recovery = 100.21%								
As 188.979†	1265.9	483.21	ug/L	2.646	483.21	ppb	2.646	0.55%
QC value within limits for As 188.979 Recovery = 96.64%								
B 249.677†	23679.3	479.26	ug/L	1.445	479.26	ppb	1.445	0.30%
QC value within limits for B 249.677 Recovery = 95.85%								
Ba 233.527†	67976.0	492.23	ug/L	1.548	492.23	ppb	1.548	0.31%
QC value within limits for Ba 233.527 Recovery = 98.45%								
Be 313.107†	1379773.1	488.22	ug/L	1.149	488.22	ppb	1.149	0.24%
QC value within limits for Be 313.107 Recovery = 97.64%								
Ca 317.933Radial†	3391.5	5054.2	ug/L	30.56	5054.2	ppb	30.56	0.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.08%
Cd 226.502†            47912.3      488.69 ug/L         1.516      488.69 ppb          1.516   0.31%
   QC value within limits for Cd 226.502  Recovery = 97.74%
Co 228.616†            26667.9      489.61 ug/L         1.639      489.61 ppb          1.639   0.33%
   QC value within limits for Co 228.616  Recovery = 97.92%
Cr 267.716†            48053.9      494.23 ug/L         0.782      494.23 ppb          0.782   0.16%
   QC value within limits for Cr 267.716  Recovery = 98.85%
Cu 324.752†           174259.1      488.67 ug/L         2.033      488.67 ppb          2.033   0.42%
   QC value within limits for Cu 324.752  Recovery = 97.73%
Fe 238.204 Radial†       543.1      5022.5 ug/L        17.73      5022.5 ppb         17.73   0.35%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.45%
K 766.490 Radial†      28401.1      4959.1 ug/L        18.10      4959.1 ppb         18.10   0.37%
   QC value within limits for K 766.490 Radial  Recovery = 99.18%
Mg 279.077 IEC†          150.0      5331.1 ug/L        49.42      5331.1 ppb         49.42   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.62%
Mn 257.610†           472148.8      491.09 ug/L         0.302      491.09 ppb          0.302   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.22%
Mo 202.031†             8017.1      499.43 ug/L         1.727      499.43 ppb          1.727   0.35%
   QC value within limits for Mo 202.031  Recovery = 99.89%
Na 589.592 Radial†     28574.3      9192.6 ug/L        38.03      9192.6 ppb         38.03   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 91.93%
Ni 231.604†            21838.4      491.18 ug/L         1.057      491.18 ppb          1.057   0.22%
   QC value within limits for Ni 231.604  Recovery = 98.24%
P 214.914†              4338.2      2312.1 ug/L        18.84      2312.1 ppb         18.84   0.81%
   QC value within limits for P 214.914  Recovery = 92.48%
Pb 220.353†             4454.7      488.72 ug/L         2.845      488.72 ppb          2.845   0.58%
   QC value within limits for Pb 220.353  Recovery = 97.74%
S 181.975 Axial†         723.6      958.24 ug/L         6.340      958.24 ppb          6.340   0.66%
   QC value within limits for S 181.975 Axial  Recovery = 95.82%
Sb 206.836†             1601.3      501.16 ug/L         3.491      501.16 ppb          3.491   0.70%
   QC value within limits for Sb 206.836  Recovery = 100.23%
Se 196.026†              860.1      500.74 ug/L         0.966      500.74 ppb          0.966   0.19%
   QC value within limits for Se 196.026  Recovery = 100.15%
Si 251.611†            84085.2      2443.4 ug/L         7.80      2443.4 ppb          7.80   0.32%
   QC value within limits for Si 251.611  Recovery = 97.74%
Sn 189.927†             3115.7      495.53 ug/L         2.848      495.53 ppb          2.848   0.57%
   QC value within limits for Sn 189.927  Recovery = 99.11%
Sr 421.552†            79882.8      492.65 ug/L         1.676      492.65 ppb          1.676   0.34%
   QC value within limits for Sr 421.552  Recovery = 98.53%
Ti 334.940†           319296.5      500.56 ug/L         1.674      500.56 ppb          1.674   0.33%
   QC value within limits for Ti 334.940  Recovery = 100.11%
Tl 190.801†             1809.5      492.84 ug/L         3.260      492.84 ppb          3.260   0.66%
   QC value within limits for Tl 190.801  Recovery = 98.57%
U 409.014†             18380.9      507.30 ug/L         3.181      507.30 ppb          3.181   0.63%
   QC value within limits for U 409.014  Recovery = 101.46%
V 292.402†             75984.9      500.73 ug/L         1.203      500.73 ppb          1.203   0.24%
   QC value within limits for V 292.402  Recovery = 100.15%
Zn 213.857†            57953.1      486.93 ug/L         0.769      486.93 ppb          0.769   0.16%
   QC value within limits for Zn 213.857  Recovery = 97.39%
SiO2†                  83680.8      5217.1 ug/L        48.50      5217.1 ppb         48.50   0.93%
   QC value within limits for SiO2  Recovery = 97.56%
All analyte(s) passed QC.
```

Sequence No.: 48
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/7/2009 21:49:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5697.6	5697.6	100	%			21:51:26
1	Y RADIAL	6119.3	6119.3	100.3	%			21:51:26
1	Al 396.153Radial†	-11.9	8.6	6.1027	ug/L	6.1027	ppb	21:51:26
1	Ca 317.933Radial†	28.9	11.9	17.707	ug/L	17.707	ppb	21:51:46
1	Fe 238.204 Radial†	8.7	2.6	24.420	ug/L	24.420	ppb	21:51:46
1	K 766.490 Radial†	2261.2	39.6	6.9355	ug/L	6.9355	ppb	21:51:26
1	Mg 279.077 IEC†	1.8	1.5	52.688	ug/L	52.688	ppb	21:51:46
1	Na 589.592 Radial†	-1116.3	-31.2	-10.026	ug/L	-10.026	ppb	21:51:26
1	Sr 421.552†	-14.6	-22.0	-0.1360	ug/L	-0.1360	ppb	21:51:26
1	Sc 361.383	891564.8	891564.8	98.918	%			21:52:43
1	Y 371.029	743410.3	743410.3	98.885	%			21:52:43
1	Ag 328.068†	284.4	-27.5	-0.1192	ug/L	-0.1192	ppb	21:52:43
1	As 188.979†	-32.2	-8.2	-3.0958	ug/L	-3.0958	ppb	21:53:03
1	B 249.677†	-433.6	180.7	3.6693	ug/L	3.6693	ppb	21:53:03
1	Ba 233.527†	-5.2	11.8	0.0858	ug/L	0.0858	ppb	21:53:03
1	Be 313.107†	-4960.1	257.7	0.0915	ug/L	0.0915	ppb	21:52:43
1	Cd 226.502†	-191.2	12.8	0.1279	ug/L	0.1279	ppb	21:53:03
1	Co 228.616†	-69.1	4.2	0.0754	ug/L	0.0754	ppb	21:53:03
1	Cr 267.716†	78.5	-1.5	-0.0164	ug/L	-0.0164	ppb	21:53:03
1	Cu 324.752†	6646.7	-151.4	-0.4232	ug/L	-0.4232	ppb	21:52:43
1	Mn 257.610†	501.1	12.8	0.0148	ug/L	0.0148	ppb	21:53:03
1	Mo 202.031†	23.2	-3.3	-0.2058	ug/L	-0.2058	ppb	21:53:03
1	Ni 231.604†	89.1	-0.8	-0.0184	ug/L	-0.0184	ppb	21:53:03
1	P 214.914†	200.9	-21.8	-11.955	ug/L	-11.955	ppb	21:53:03
1	Pb 220.353†	-71.6	0.4	0.0387	ug/L	0.0387	ppb	21:53:03
1	S 181.975 Axial†	38.2	-7.9	-10.468	ug/L	-10.468	ppb	21:53:03
1	Sb 206.836†	37.1	9.9	3.0533	ug/L	3.0533	ppb	21:53:03
1	Se 196.026†	-25.9	-3.9	-2.1322	ug/L	-2.1322	ppb	21:53:03
1	Si 251.611†	525.5	-12.1	-0.3521	ug/L	-0.3521	ppb	21:53:03
1	Sn 189.927†	5.3	-0.1	-0.0062	ug/L	-0.0062	ppb	21:53:03
1	Ti 334.940†	-1036.9	152.8	0.2383	ug/L	0.2383	ppb	21:52:43
1	Tl 190.801†	-26.2	11.5	3.1204	ug/L	3.1204	ppb	21:53:03
1	U 409.014†	-2336.8	187.9	5.1988	ug/L	5.1988	ppb	21:52:43
1	V 292.402†	-1406.4	-0.0	0.0043	ug/L	0.0043	ppb	21:52:43
1	Zn 213.857†	776.7	134.6	1.1373	ug/L	1.1373	ppb	21:53:03
1	SiO2†	532.6	26.8	1.6841	ug/L	1.6841	ppb	21:53:59
2	Sc Radial	5751.3	5751.3	101	%			21:51:51
2	Y RADIAL	6189.4	6189.4	101.5	%			21:51:51
2	Al 396.153Radial†	-38.3	-17.4	-12.324	ug/L	-12.324	ppb	21:51:51
2	Ca 317.933Radial†	20.4	3.2	4.7347	ug/L	4.7347	ppb	21:52:11
2	Fe 238.204 Radial†	6.1	0.1	0.4772	ug/L	0.4772	ppb	21:52:11
2	K 766.490 Radial†	2370.0	126.1	22.062	ug/L	22.062	ppb	21:51:51
2	Mg 279.077 IEC†	-0.5	-0.8	-28.884	ug/L	-28.884	ppb	21:52:11
2	Na 589.592 Radial†	-1141.0	-45.2	-14.546	ug/L	-14.546	ppb	21:51:51
2	Sr 421.552†	-2.0	-9.4	-0.0581	ug/L	-0.0581	ppb	21:51:51
2	Sc 361.383	886278.5	886278.5	98.331	%			21:53:08
2	Y 371.029	740031.8	740031.8	98.435	%			21:53:08
2	Ag 328.068†	317.9	8.4	0.0337	ug/L	0.0337	ppb	21:53:08
2	As 188.979†	-23.0	1.0	0.3794	ug/L	0.3794	ppb	21:53:28
2	B 249.677†	-460.6	150.7	3.0618	ug/L	3.0618	ppb	21:53:28
2	Ba 233.527†	-0.5	16.5	0.1194	ug/L	0.1194	ppb	21:53:28
2	Be 313.107†	-4978.6	209.0	0.0742	ug/L	0.0742	ppb	21:53:08
2	Cd 226.502†	-196.7	6.0	0.0612	ug/L	0.0612	ppb	21:53:28
2	Co 228.616†	-58.0	15.1	0.2763	ug/L	0.2763	ppb	21:53:28
2	Cr 267.716†	92.3	13.0	0.1324	ug/L	0.1324	ppb	21:53:28
2	Cu 324.752†	6651.5	-106.5	-0.2984	ug/L	-0.2984	ppb	21:53:08
2	Mn 257.610†	481.9	-3.8	-0.0033	ug/L	-0.0033	ppb	21:53:28
2	Mo 202.031†	25.3	-1.0	-0.0639	ug/L	-0.0639	ppb	21:53:28
2	Ni 231.604†	99.4	10.3	0.2309	ug/L	0.2309	ppb	21:53:28

2	P 214.914†	207.9	-13.4	-7.3368	ug/L	-7.3368 ppb	21:53:28
2	Pb 220.353†	-48.6	23.4	2.5524	ug/L	2.5524 ppb	21:53:28
2	S 181.975 Axial†	33.5	-12.4	-16.414	ug/L	-16.414 ppb	21:53:28
2	Sb 206.836†	25.3	-1.8	-0.5543	ug/L	-0.5543 ppb	21:53:28
2	Se 196.026†	-21.3	0.6	0.3334	ug/L	0.3334 ppb	21:53:28
2	Si 251.611†	521.5	-13.0	-0.3893	ug/L	-0.3893 ppb	21:53:28
2	Sn 189.927†	9.5	4.2	0.6672	ug/L	0.6672 ppb	21:53:28
2	Ti 334.940†	-1066.1	116.9	0.1813	ug/L	0.1813 ppb	21:53:08
2	Tl 190.801†	-38.1	-0.8	-0.2237	ug/L	-0.2237 ppb	21:53:28
2	U 409.014†	-2327.6	183.2	5.0718	ug/L	5.0718 ppb	21:53:08
2	V 292.402†	-1376.2	22.3	0.1528	ug/L	0.1528 ppb	21:53:08
2	Zn 213.857†	774.1	136.6	1.1579	ug/L	1.1579 ppb	21:53:28
2	SiO2†	538.9	36.5	2.2708	ug/L	2.2708 ppb	21:54:04
3	Sc Radial	5824.9	5824.9	103	%		21:52:16
3	Y RADIAL	6206.6	6206.6	101.8	%		21:52:16
3	Al 396.153Radial†	-27.5	-6.4	-4.5190	ug/L	-4.5190 ppb	21:52:16
3	Ca 317.933Radial†	27.9	10.3	15.298	ug/L	15.298 ppb	21:52:36
3	Fe 238.204 Radial†	9.1	2.9	26.415	ug/L	26.415 ppb	21:52:36
3	K 766.490 Radial†	2272.9	1.8	0.3185	ug/L	0.3185 ppb	21:52:16
3	Mg 279.077 IEC†	1.7	1.3	47.519	ug/L	47.519 ppb	21:52:36
3	Na 589.592 Radial†	-1118.9	-9.4	-3.0250	ug/L	-3.0250 ppb	21:52:16
3	Sr 421.552†	-8.6	-15.8	-0.0977	ug/L	-0.0977 ppb	21:52:16
3	Sc 361.383	891761.1	891761.1	98.939	%		21:53:34
3	Y 371.029	745366.9	745366.9	99.145	%		21:53:34
3	Ag 328.068†	318.7	7.2	0.0342	ug/L	0.0342 ppb	21:53:34
3	As 188.979†	-26.7	-2.6	-0.9789	ug/L	-0.9789 ppb	21:53:54
3	B 249.677†	-463.2	150.9	3.0630	ug/L	3.0630 ppb	21:53:54
3	Ba 233.527†	-3.6	13.3	0.0989	ug/L	0.0989 ppb	21:53:54
3	Be 313.107†	-4960.9	258.0	0.0912	ug/L	0.0912 ppb	21:53:34
3	Cd 226.502†	-204.6	-0.7	-0.0102	ug/L	-0.0102 ppb	21:53:54
3	Co 228.616†	-62.0	11.4	0.2097	ug/L	0.2097 ppb	21:53:54
3	Cr 267.716†	83.8	3.9	0.0383	ug/L	0.0383 ppb	21:53:54
3	Cu 324.752†	6709.1	-89.9	-0.2506	ug/L	-0.2506 ppb	21:53:34
3	Mn 257.610†	485.9	-2.7	-0.0010	ug/L	-0.0010 ppb	21:53:54
3	Mo 202.031†	27.7	1.2	0.0790	ug/L	0.0790 ppb	21:53:54
3	Ni 231.604†	87.0	-2.9	-0.0650	ug/L	-0.0650 ppb	21:53:54
3	P 214.914†	215.8	-6.8	-3.6929	ug/L	-3.6929 ppb	21:53:54
3	Pb 220.353†	-61.0	11.1	1.2097	ug/L	1.2097 ppb	21:53:54
3	S 181.975 Axial†	43.6	-2.4	-3.1648	ug/L	-3.1648 ppb	21:53:54
3	Sb 206.836†	37.7	10.5	3.2456	ug/L	3.2456 ppb	21:53:54
3	Se 196.026†	-22.2	-0.1	0.0201	ug/L	0.0201 ppb	21:53:54
3	Si 251.611†	519.6	-18.2	-0.5335	ug/L	-0.5335 ppb	21:53:54
3	Sn 189.927†	7.0	1.7	0.2697	ug/L	0.2697 ppb	21:53:54
3	Ti 334.940†	-1159.0	29.7	0.0428	ug/L	0.0428 ppb	21:53:34
3	Tl 190.801†	-30.6	7.1	1.9139	ug/L	1.9139 ppb	21:53:54
3	U 409.014†	-2156.8	370.4	10.250	ug/L	10.250 ppb	21:53:34
3	V 292.402†	-1300.3	107.5	0.7171	ug/L	0.7171 ppb	21:53:34
3	Zn 213.857†	773.6	131.2	1.1086	ug/L	1.1086 ppb	21:53:54
3	SiO2†	542.5	36.8	2.2990	ug/L	2.2990 ppb	21:54:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	889868.1	98.729	%	0.3451				0.35%
Sc Radial	5757.9	101	%	1.1				1.11%
Y 371.029	742936.4	98.822	%	0.3590				0.36%
Y RADIAL	6171.8	101.2	%	0.76				0.75%
Ag 328.068†	-4.0	-0.0171	ug/L	0.08839	-0.0171	ppb	0.08839	516.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.0	-3.5800	ug/L	9.24892	-3.5800	ppb	9.24892	258.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.2318	ug/L	1.75136	-1.2318	ppb	1.75136	142.18%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.8	3.2647	ug/L	0.35043	3.2647	ppb	0.35043	10.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.9	0.1014	ug/L	0.01695	0.1014	ppb	0.01695	16.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	241.5	0.0856	ug/L	0.00991	0.0856	ppb	0.00991	11.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.4	12.580	ug/L	6.9002	12.580	ppb	6.9002	54.85%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                6.0      0.0596 ug/L       0.06907      0.0596 ppb        0.06907 115.80%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.2      0.1871 ug/L       0.10234      0.1871 ppb        0.10234  54.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                5.1      0.0514 ug/L       0.07528      0.0514 ppb        0.07528 146.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -115.9     -0.3240 ug/L       0.08915     -0.3240 ppb        0.08915  27.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.9     17.104 ug/L       14.4339      17.104 ppb        14.4339  84.39%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         55.9      9.7720 ug/L      11.14583      9.7720 ppb       11.14583 114.06%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.7     23.774 ug/L       45.6768      23.774 ppb        45.6768 192.13%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                2.1      0.0035 ug/L       0.00985      0.0035 ppb        0.00985 284.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.0     -0.0635 ug/L       0.14241     -0.0635 ppb        0.14241 224.15%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -28.6     -9.1988 ug/L       5.80482     -9.1988 ppb        5.80482  63.10%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.2      0.0492 ug/L       0.15910      0.0492 ppb        0.15910 323.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -14.0     -7.6616 ug/L       4.14068     -7.6616 ppb        4.14068  54.04%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               11.6      1.2670 ug/L       1.25782      1.2670 ppb        1.25782  99.28%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -7.6    -10.016 ug/L        6.6360     -10.016 ppb         6.6360  66.26%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                6.2      1.9149 ug/L       2.14053      1.9149 ppb        2.14053 111.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.2     -0.5929 ug/L       1.34223     -0.5929 ppb        1.34223 226.39%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -14.4     -0.4250 ug/L       0.09578     -0.4250 ppb        0.09578  22.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.9      0.3102 ug/L       0.33849      0.3102 ppb        0.33849 109.11%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -15.8     -0.0973 ug/L       0.03897     -0.0973 ppb        0.03897  40.06%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               99.8      0.1542 ug/L       0.10053      0.1542 ppb        0.10053  65.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                5.9      1.6035 ug/L       1.69352      1.6035 ppb        1.69352 105.61%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               247.2      6.8403 ug/L       2.95390      6.8403 ppb        2.95390  43.18%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                43.3      0.2914 ug/L       0.37608      0.2914 ppb        0.37608 129.07%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              134.1      1.1346 ug/L       0.02474      1.1346 ppb        0.02474   2.18%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     33.4      2.0846 ug/L       0.34714      2.0846 ppb        0.34714  16.65%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 121109
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 121109A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/11/2009 12:44:17**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/11/2009 10:35:01**
Analyst: **Data Type: Reprocessed on 12/11/2009 12:45:49**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	867384.7	867384.7	99.939	%	10:38:11
1	Sc Radial	5608.5	5608.5	101	%	10:36:54
1	Y 371.029	729366.4	729366.4	99.988	%	10:38:11
1	Y RADIAL	6113.1	6113.1	101.2	%	10:36:54
1	Ag 328.068†	291.2	291.4	[0.00]	ug/L	10:38:11

1	Al 396.153Radial†	-27.8	-27.7	[0.00] ug/L	10:36:54
1	As 188.979†	-33.2	-33.2	[0.00] ug/L	10:38:31
1	B 249.677†	-500.0	-500.3	[0.00] ug/L	10:38:31
1	Ba 233.527†	-23.0	-23.0	[0.00] ug/L	10:38:31
1	Be 313.107†	-4673.8	-4676.6	[0.00] ug/L	10:38:11
1	Ca 317.933Radial†	18.4	18.3	[0.00] ug/L	10:37:14
1	Cd 226.502†	-195.7	-195.8	[0.00] ug/L	10:38:31
1	Co 228.616†	-73.5	-73.5	[0.00] ug/L	10:38:31
1	Cr 267.716†	98.1	98.1	[0.00] ug/L	10:38:31
1	Cu 324.752†	6710.6	6714.7	[0.00] ug/L	10:38:11
1	Fe 238.204 Radial†	11.2	11.2	[0.00] ug/L	10:37:14
1	K 766.490 Radial†	2781.3	2765.0	[0.00] ug/L	10:36:54
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	10:37:14
1	Mn 257.610†	514.8	515.2	[0.00] ug/L	10:38:31
1	Mo 202.031†	16.4	16.4	[0.00] ug/L	10:38:31
1	Na 589.592 Radial†	-1549.4	-1540.3	[0.00] ug/L	10:36:54
1	Ni 231.604†	92.4	92.4	[0.00] ug/L	10:38:31
1	P 214.914†	242.5	242.6	[0.00] ug/L	10:38:31
1	Pb 220.353†	-68.7	-68.7	[0.00] ug/L	10:38:31
1	S 181.975 Axial†	46.0	46.1	[0.00] ug/L	10:38:31
1	Sb 206.836†	43.0	43.0	[0.00] ug/L	10:38:31
1	Se 196.026†	-23.4	-23.4	[0.00] ug/L	10:38:31
1	Si 251.611†	471.9	472.2	[0.00] ug/L	10:38:31
1	Sn 189.927†	5.3	5.3	[0.00] ug/L	10:38:31
1	Sr 421.552†	8.4	8.3	[0.00] ug/L	10:36:54
1	Ti 334.940†	-1298.5	-1299.3	[0.00] ug/L	10:38:11
1	Tl 190.801†	-28.3	-28.3	[0.00] ug/L	10:38:31
1	U 409.014†	-2617.2	-2618.8	[0.00] ug/L	10:38:11
1	V 292.402†	-1364.9	-1365.7	[0.00] ug/L	10:38:11
1	Zn 213.857†	737.5	738.0	[0.00] ug/L	10:38:31
1	SiO2†	543.0	543.4	[0.00] ug/L	10:39:27
2	Sc 361.383	873164.9	873164.9	100.60 %	10:38:36
2	Sc Radial	5567.4	5567.4	99.9 %	10:37:19
2	Y 371.029	733929.4	733929.4	100.61 %	10:38:36
2	Y RADIAL	6042.1	6042.1	100.0 %	10:37:19
2	Ag 328.068†	268.9	267.3	[0.00] ug/L	10:38:36
2	Al 396.153Radial†	-36.3	-36.3	[0.00] ug/L	10:37:19
2	As 188.979†	-30.2	-30.0	[0.00] ug/L	10:38:56
2	B 249.677†	-501.5	-498.5	[0.00] ug/L	10:38:56
2	Ba 233.527†	-11.8	-11.7	[0.00] ug/L	10:38:56
2	Be 313.107†	-4652.0	-4624.1	[0.00] ug/L	10:38:36
2	Ca 317.933Radial†	14.4	14.4	[0.00] ug/L	10:37:39
2	Cd 226.502†	-208.8	-207.6	[0.00] ug/L	10:38:56
2	Co 228.616†	-74.9	-74.4	[0.00] ug/L	10:38:56
2	Cr 267.716†	76.0	75.5	[0.00] ug/L	10:38:56
2	Cu 324.752†	6865.2	6823.9	[0.00] ug/L	10:38:36
2	Fe 238.204 Radial†	8.6	8.6	[0.00] ug/L	10:37:39
2	K 766.490 Radial†	2732.7	2736.8	[0.00] ug/L	10:37:19
2	Mg 279.077 IEC†	0.6	0.6	[0.00] ug/L	10:37:39
2	Mn 257.610†	513.2	510.1	[0.00] ug/L	10:38:56
2	Mo 202.031†	21.4	21.3	[0.00] ug/L	10:38:56
2	Na 589.592 Radial†	-1616.8	-1619.2	[0.00] ug/L	10:37:19
2	Ni 231.604†	82.6	82.1	[0.00] ug/L	10:38:56
2	P 214.914†	229.0	227.6	[0.00] ug/L	10:38:56
2	Pb 220.353†	-75.5	-75.1	[0.00] ug/L	10:38:56
2	S 181.975 Axial†	49.2	48.9	[0.00] ug/L	10:38:56
2	Sb 206.836†	34.6	34.4	[0.00] ug/L	10:38:56
2	Se 196.026†	-27.5	-27.3	[0.00] ug/L	10:38:56
2	Si 251.611†	487.6	484.7	[0.00] ug/L	10:38:56
2	Sn 189.927†	9.1	9.1	[0.00] ug/L	10:38:56
2	Sr 421.552†	-10.9	-10.9	[0.00] ug/L	10:37:19
2	Ti 334.940†	-1175.8	-1168.7	[0.00] ug/L	10:38:36
2	Tl 190.801†	-31.7	-31.5	[0.00] ug/L	10:38:56
2	U 409.014†	-2571.7	-2556.3	[0.00] ug/L	10:38:36
2	V 292.402†	-1358.1	-1349.9	[0.00] ug/L	10:38:36
2	Zn 213.857†	758.6	754.0	[0.00] ug/L	10:38:56
2	SiO2†	515.7	512.6	[0.00] ug/L	10:39:32
3	Sc 361.383	863198.0	863198.0	99.456 %	10:39:02
3	Sc Radial	5551.4	5551.4	99.6 %	10:37:44
3	Y 371.029	725074.5	725074.5	99.399 %	10:39:02
3	Y RADIAL	5962.3	5962.3	98.73 %	10:37:44

3	Ag 328.068†	261.9	263.4	[0.00]	ug/L	10:39:02
3	Al 396.153Radial†	-41.8	-41.9	[0.00]	ug/L	10:37:44
3	As 188.979†	-30.5	-30.7	[0.00]	ug/L	10:39:22
3	B 249.677†	-478.2	-480.8	[0.00]	ug/L	10:39:22
3	Ba 233.527†	1.4	1.4	[0.00]	ug/L	10:39:22
3	Be 313.107†	-4661.7	-4687.2	[0.00]	ug/L	10:39:02
3	Ca 317.933Radial†	18.0	18.0	[0.00]	ug/L	10:38:05
3	Cd 226.502†	-192.4	-193.4	[0.00]	ug/L	10:39:22
3	Co 228.616†	-72.0	-72.4	[0.00]	ug/L	10:39:22
3	Cr 267.716†	84.0	84.5	[0.00]	ug/L	10:39:22
3	Cu 324.752†	6698.3	6734.9	[0.00]	ug/L	10:39:02
3	Fe 238.204 Radial†	9.9	9.9	[0.00]	ug/L	10:38:05
3	K 766.490 Radial†	2704.9	2716.8	[0.00]	ug/L	10:37:44
3	Mg 279.077 IEC†	3.2	3.2	[0.00]	ug/L	10:38:05
3	Mn 257.610†	532.3	535.3	[0.00]	ug/L	10:39:22
3	Mo 202.031†	17.4	17.5	[0.00]	ug/L	10:39:22
3	Na 589.592 Radial†	-1496.3	-1502.9	[0.00]	ug/L	10:37:44
3	Ni 231.604†	82.9	83.3	[0.00]	ug/L	10:39:22
3	P 214.914†	254.4	255.8	[0.00]	ug/L	10:39:22
3	Pb 220.353†	-59.8	-60.1	[0.00]	ug/L	10:39:22
3	S 181.975 Axial†	52.9	53.2	[0.00]	ug/L	10:39:22
3	Sb 206.836†	34.5	34.7	[0.00]	ug/L	10:39:22
3	Se 196.026†	-29.5	-29.6	[0.00]	ug/L	10:39:22
3	Si 251.611†	485.7	488.4	[0.00]	ug/L	10:39:22
3	Sn 189.927†	12.1	12.1	[0.00]	ug/L	10:39:22
3	Sr 421.552†	1.9	1.9	[0.00]	ug/L	10:37:44
3	Ti 334.940†	-1293.7	-1300.8	[0.00]	ug/L	10:39:02
3	Tl 190.801†	-43.7	-43.9	[0.00]	ug/L	10:39:22
3	U 409.014†	-2562.9	-2576.9	[0.00]	ug/L	10:39:02
3	V 292.402†	-1365.1	-1372.6	[0.00]	ug/L	10:39:02
3	Zn 213.857†	765.4	769.6	[0.00]	ug/L	10:39:22
3	SiO2†	514.6	517.4	[0.00]	ug/L	10:39:37

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	867915.8	5004.66	0.58%	100.00	%
Sc Radial	5575.8	29.49	0.53%	100	%
Y 371.029	729456.7	4428.18	0.61%	100.00	%
Y RADIAL	6039.2	75.46	1.25%	100.0	%
Ag 328.068†	274.0	15.19	5.54%	[0.00]	ug/L
Al 396.153Radial†	-35.3	7.20	20.40%	[0.00]	ug/L
As 188.979†	-31.3	1.70	5.42%	[0.00]	ug/L
B 249.677†	-493.2	10.80	2.19%	[0.00]	ug/L
Ba 233.527†	-11.1	12.19	109.76%	[0.00]	ug/L
Be 313.107†	-4662.6	33.82	0.73%	[0.00]	ug/L
Ca 317.933Radial†	16.9	2.17	12.81%	[0.00]	ug/L
Cd 226.502†	-198.9	7.58	3.81%	[0.00]	ug/L
Co 228.616†	-73.4	1.03	1.40%	[0.00]	ug/L
Cr 267.716†	86.0	11.38	13.22%	[0.00]	ug/L
Cu 324.752†	6757.8	58.13	0.86%	[0.00]	ug/L
Fe 238.204 Radial†	9.9	1.30	13.13%	[0.00]	ug/L
K 766.490 Radial†	2739.5	24.23	0.88%	[0.00]	ug/L
Mg 279.077 IEC†	1.9	1.29	67.77%	[0.00]	ug/L
Mn 257.610†	520.2	13.31	2.56%	[0.00]	ug/L
Mo 202.031†	18.4	2.55	13.83%	[0.00]	ug/L
Na 589.592 Radial†	-1554.1	59.38	3.82%	[0.00]	ug/L
Ni 231.604†	85.9	5.65	6.58%	[0.00]	ug/L
P 214.914†	242.0	14.10	5.83%	[0.00]	ug/L
Pb 220.353†	-68.0	7.50	11.03%	[0.00]	ug/L
S 181.975 Axial†	49.4	3.61	7.31%	[0.00]	ug/L
Sb 206.836†	37.4	4.89	13.08%	[0.00]	ug/L
Se 196.026†	-26.8	3.12	11.65%	[0.00]	ug/L
Si 251.611†	481.7	8.49	1.76%	[0.00]	ug/L
Sn 189.927†	8.8	3.41	38.63%	[0.00]	ug/L
Sr 421.552†	-0.2	9.82	>999.9%	[0.00]	ug/L
Ti 334.940†	-1256.2	75.82	6.04%	[0.00]	ug/L
Tl 190.801†	-34.6	8.24	23.82%	[0.00]	ug/L
U 409.014†	-2584.0	31.88	1.23%	[0.00]	ug/L
V 292.402†	-1362.7	11.62	0.85%	[0.00]	ug/L

Zn 213.857†	753.9	15.79	2.09%	[0.00] ug/L
SiO2†	524.5	16.53	3.15%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/11/2009 10:41:48
Data Type: Reprocessed on 12/11/2009 12:45:50

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	875842.7	875842.7	100.91	%	10:44:12
1	Sc Radial	5490.5	5490.5	98.5	%	10:43:46
1	Y 371.029	731965.3	731965.3	100.34	%	10:44:12
1	Y RADIAL	5960.4	5960.4	98.70	%	10:43:46
1	Ag 328.068†	21744.6	21273.8	[100]	ug/L	10:44:17
1	As 188.979†	217.4	246.7	[100]	ug/L	10:44:37
1	B 249.677†	3900.4	4358.3	[100]	ug/L	10:44:17
1	Ba 233.527†	13083.6	12976.3	[100]	ug/L	10:44:17
1	Be 313.107†	259024.2	261342.5	[100]	ug/L	10:44:12
1	Cd 226.502†	9235.0	9350.4	[100]	ug/L	10:44:17
1	Co 228.616†	4935.1	4963.9	[100]	ug/L	10:44:37
1	Cr 267.716†	9393.3	9222.2	[100]	ug/L	10:44:17
1	Cu 324.752†	39672.7	32555.8	[100]	ug/L	10:44:17
1	K 766.490 Radial†	8407.4	5798.4	[1000]	ug/L	10:43:40
1	Mn 257.610†	91938.6	90586.4	[100]	ug/L	10:44:17
1	Mo 202.031†	1522.8	1490.6	[100]	ug/L	10:44:37
1	Ni 231.604†	4178.8	4055.1	[100]	ug/L	10:44:37
1	P 214.914†	1076.2	824.4	[500]	ug/L	10:44:37
1	Pb 220.353†	785.2	846.1	[100]	ug/L	10:44:37
1	S 181.975 Axial†	185.0	134.0	[200]	ug/L	10:44:37
1	Sb 206.836†	324.9	284.5	[100]	ug/L	10:44:37
1	Se 196.026†	139.6	165.1	[100]	ug/L	10:44:37
1	Si 251.611†	16386.5	15756.4	[500]	ug/L	10:44:17
1	Sn 189.927†	584.6	570.5	[100]	ug/L	10:44:37
1	Sr 421.552†	15716.8	15961.0	[100]	ug/L	10:43:46
1	Ti 334.940†	58684.5	59409.6	[100]	ug/L	10:44:17
1	Tl 190.801†	306.5	338.3	[100]	ug/L	10:44:37
1	U 409.014†	652.2	3230.3	[100]	ug/L	10:44:12
1	V 292.402†	13019.5	14264.4	[100]	ug/L	10:44:17
1	Zn 213.857†	12046.1	11183.3	[100]	ug/L	10:44:17
1	SiO2†	16331.5	15659.2	[1069.5]	ug/L	10:45:44
2	Sc 361.383	876251.3	876251.3	100.96	%	10:44:43
2	Sc Radial	5517.6	5517.6	99.0	%	10:43:56
2	Y 371.029	732181.8	732181.8	100.37	%	10:44:43
2	Y RADIAL	6014.9	6014.9	99.60	%	10:43:56
2	Ag 328.068†	21438.3	20960.3	[100]	ug/L	10:44:48
2	As 188.979†	215.7	244.9	[100]	ug/L	10:45:08
2	B 249.677†	3806.3	4263.3	[100]	ug/L	10:44:48
2	Ba 233.527†	12864.3	12753.0	[100]	ug/L	10:44:48
2	Be 313.107†	258711.3	260912.9	[100]	ug/L	10:44:43
2	Cd 226.502†	9036.0	9149.0	[100]	ug/L	10:44:48
2	Co 228.616†	4922.9	4949.5	[100]	ug/L	10:45:08
2	Cr 267.716†	9233.9	9060.1	[100]	ug/L	10:44:48
2	Cu 324.752†	38791.5	31664.6	[100]	ug/L	10:44:48
2	K 766.490 Radial†	8506.7	5856.8	[1000]	ug/L	10:43:51
2	Mn 257.610†	90655.4	89272.9	[100]	ug/L	10:44:48
2	Mo 202.031†	1526.9	1494.0	[100]	ug/L	10:45:08
2	Ni 231.604†	4185.8	4060.0	[100]	ug/L	10:45:08
2	P 214.914†	1063.0	810.8	[500]	ug/L	10:45:08
2	Pb 220.353†	786.4	846.9	[100]	ug/L	10:45:08
2	S 181.975 Axial†	193.4	142.2	[200]	ug/L	10:45:08
2	Sb 206.836†	328.4	287.9	[100]	ug/L	10:45:08
2	Se 196.026†	143.4	168.9	[100]	ug/L	10:45:08
2	Si 251.611†	16134.8	15499.6	[500]	ug/L	10:44:48
2	Sn 189.927†	595.0	580.5	[100]	ug/L	10:45:08
2	Sr 421.552†	15803.8	15970.6	[100]	ug/L	10:43:56
2	Ti 334.940†	57870.5	58576.2	[100]	ug/L	10:44:48
2	Tl 190.801†	304.5	336.2	[100]	ug/L	10:45:08

2	U 409.014†	865.7	3441.5	[100]	ug/L	10:44:43
2	V 292.402†	12746.3	13987.8	[100]	ug/L	10:44:48
2	Zn 213.857†	11880.2	11013.4	[100]	ug/L	10:44:48
2	SiO2†	16234.1	15555.2	[1069.5]	ug/L	10:45:49
3	Sc 361.383	871070.4	871070.4	100.36	%	10:45:13
3	Sc Radial	5463.9	5463.9	98.0	%	10:44:06
3	Y 371.029	728966.6	728966.6	99.933	%	10:45:13
3	Y RADIAL	5953.0	5953.0	98.57	%	10:44:06
3	Ag 328.068†	21625.9	21273.6	[100]	ug/L	10:45:18
3	As 188.979†	218.8	249.3	[100]	ug/L	10:45:38
3	B 249.677†	3831.9	4311.2	[100]	ug/L	10:45:18
3	Ba 233.527†	13046.8	13010.7	[100]	ug/L	10:45:18
3	Be 313.107†	258070.6	261798.7	[100]	ug/L	10:45:13
3	Cd 226.502†	9135.9	9301.8	[100]	ug/L	10:45:18
3	Co 228.616†	4918.9	4974.6	[100]	ug/L	10:45:38
3	Cr 267.716†	9344.1	9224.2	[100]	ug/L	10:45:18
3	Cu 324.752†	39512.1	32611.2	[100]	ug/L	10:45:18
3	K 766.490 Radial†	8464.4	5898.1	[1000]	ug/L	10:44:01
3	Mn 257.610†	91873.8	91020.9	[100]	ug/L	10:45:18
3	Mo 202.031†	1534.5	1510.6	[100]	ug/L	10:45:38
3	Ni 231.604†	4204.2	4103.0	[100]	ug/L	10:45:38
3	P 214.914†	1070.9	824.9	[500]	ug/L	10:45:38
3	Pb 220.353†	786.1	851.2	[100]	ug/L	10:45:38
3	S 181.975 Axial†	186.1	136.0	[200]	ug/L	10:45:38
3	Sb 206.836†	327.2	288.7	[100]	ug/L	10:45:38
3	Se 196.026†	154.0	180.3	[100]	ug/L	10:45:38
3	Si 251.611†	16375.9	15834.9	[500]	ug/L	10:45:18
3	Sn 189.927†	604.1	593.1	[100]	ug/L	10:45:38
3	Sr 421.552†	15771.1	16094.2	[100]	ug/L	10:44:06
3	Ti 334.940†	58689.0	59732.7	[100]	ug/L	10:45:18
3	Tl 190.801†	303.8	337.3	[100]	ug/L	10:45:38
3	U 409.014†	486.0	3068.3	[100]	ug/L	10:45:13
3	V 292.402†	12958.4	14274.2	[100]	ug/L	10:45:18
3	Zn 213.857†	11966.3	11169.1	[100]	ug/L	10:45:18
3	SiO2†	16008.2	15425.8	[1069.5]	ug/L	10:45:54

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	874388.1	2880.49	0.33%	100.75	%
Sc Radial	5490.7	26.84	0.49%	98.5	%
Y 371.029	731037.9	1797.06	0.25%	100.22	%
Y RADIAL	5976.1	33.76	0.56%	98.96	%
Ag 328.068†	21169.2	180.92	0.85%	[100]	ug/L
As 188.979†	247.0	2.22	0.90%	[100]	ug/L
B 249.677†	4310.9	47.50	1.10%	[100]	ug/L
Ba 233.527†	12913.3	139.90	1.08%	[100]	ug/L
Be 313.107†	261351.4	442.96	0.17%	[100]	ug/L
Cd 226.502†	9267.0	105.10	1.13%	[100]	ug/L
Co 228.616†	4962.6	12.57	0.25%	[100]	ug/L
Cr 267.716†	9168.8	94.20	1.03%	[100]	ug/L
Cu 324.752†	32277.2	531.23	1.65%	[100]	ug/L
K 766.490 Radial†	5851.1	50.10	0.86%	[1000]	ug/L
Mn 257.610†	90293.4	910.10	1.01%	[100]	ug/L
Mo 202.031†	1498.4	10.66	0.71%	[100]	ug/L
Ni 231.604†	4072.7	26.39	0.65%	[100]	ug/L
P 214.914†	820.1	8.01	0.98%	[500]	ug/L
Pb 220.353†	848.1	2.78	0.33%	[100]	ug/L
S 181.975 Axial†	137.4	4.26	3.10%	[200]	ug/L
Sb 206.836†	287.0	2.20	0.77%	[100]	ug/L
Se 196.026†	171.4	7.91	4.62%	[100]	ug/L
Si 251.611†	15697.0	175.35	1.12%	[500]	ug/L
Sn 189.927†	581.4	11.35	1.95%	[100]	ug/L
Sr 421.552†	16008.6	74.27	0.46%	[100]	ug/L
Ti 334.940†	59239.5	596.69	1.01%	[100]	ug/L
Tl 190.801†	337.2	1.06	0.31%	[100]	ug/L
U 409.014†	3246.7	187.14	5.76%	[100]	ug/L
V 292.402†	14175.5	162.60	1.15%	[100]	ug/L
Zn 213.857†	11121.9	94.26	0.85%	[100]	ug/L
SiO2†	15546.7	116.97	0.75%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2009 10:48:04
Data Type: Reprocessed on 12/11/2009 12:45:56

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	862154.4	862154.4	99.336	%	10:51:14
1	Sc Radial	5481.4	5481.4	98.3	%	10:49:57
1	Y 371.029	712144.1	712144.1	97.627	%	10:51:14
1	Y RADIAL	5921.2	5921.2	98.05	%	10:49:57
1	Ag 328.068†	113189.5	113671.8	[500]	ug/L	10:51:19
1	Al 396.153Radial†	7182.3	7341.3	[5000]	ug/L	10:49:57
1	As 188.979†	1282.0	1321.9	[500]	ug/L	10:51:39
1	B 249.677†	23230.2	23878.7	[500]	ug/L	10:51:19
1	Ba 233.527†	67975.9	68441.2	[500]	ug/L	10:51:19
1	Be 313.107†	1405181.5	1419234.3	[500]	ug/L	10:51:14
1	Ca 317.933Radial†	3492.8	3536.1	[5000]	ug/L	10:50:17
1	Cd 226.502†	49155.7	49683.2	[500]	ug/L	10:51:19
1	Co 228.616†	26963.6	27217.2	[500]	ug/L	10:51:19
1	Cr 267.716†	48603.2	48842.0	[500]	ug/L	10:51:19
1	Cu 324.752†	179701.3	174144.3	[500]	ug/L	10:51:19
1	K 766.490 Radial†	32539.6	30360.4	[5000]	ug/L	10:49:57
1	Mg 279.077 IEC†	159.8	160.7	[5000]	ug/L	10:50:17
1	Mn 257.610†	480086.9	482774.9	[500]	ug/L	10:51:14
1	Mo 202.031†	8055.5	8090.9	[500]	ug/L	10:51:39
1	Ni 231.604†	22326.2	22389.5	[500]	ug/L	10:51:19
1	P 214.914†	4773.9	4563.8	[2500]	ug/L	10:51:39
1	Pb 220.353†	4475.4	4573.3	[500]	ug/L	10:51:39
1	S 181.975 Axial†	839.9	796.1	[1000]	ug/L	10:51:39
1	Sb 206.836†	1659.7	1633.4	[500]	ug/L	10:51:39
1	Se 196.026†	882.8	915.5	[500]	ug/L	10:51:39
1	Si 251.611†	87899.1	88004.8	[2500]	ug/L	10:51:19
1	Sn 189.927†	3195.2	3207.7	[500]	ug/L	10:51:39
1	Sr 421.552†	85559.7	87033.4	[500]	ug/L	10:49:57
1	Ti 334.940†	315692.6	319058.5	[500]	ug/L	10:51:19
1	Tl 190.801†	1768.4	1814.8	[500]	ug/L	10:51:39
1	U 409.014†	14815.3	17498.3	[500]	ug/L	10:51:19
1	V 292.402†	74574.4	76435.5	[500]	ug/L	10:51:19
1	Zn 213.857†	60376.0	60025.6	[500]	ug/L	10:51:19
1	SiO2†	86990.1	87046.9	[5347.5]	ug/L	10:52:47
2	Sc 361.383	869710.7	869710.7	100.21	%	10:51:45
2	Sc Radial	5365.2	5365.2	96.2	%	10:50:22
2	Y 371.029	718941.2	718941.2	98.558	%	10:51:45
2	Y RADIAL	5826.9	5826.9	96.48	%	10:50:22
2	Ag 328.068†	113787.1	113278.3	[500]	ug/L	10:51:50
2	Al 396.153Radial†	7081.8	7395.0	[5000]	ug/L	10:50:22
2	As 188.979†	1283.1	1311.8	[500]	ug/L	10:52:10
2	B 249.677†	23348.0	23793.0	[500]	ug/L	10:51:50
2	Ba 233.527†	68259.7	68130.0	[500]	ug/L	10:51:50
2	Be 313.107†	1417482.9	1419220.2	[500]	ug/L	10:51:45
2	Ca 317.933Radial†	3479.3	3599.0	[5000]	ug/L	10:50:42
2	Cd 226.502†	49266.7	49363.9	[500]	ug/L	10:51:50
2	Co 228.616†	27019.5	27037.1	[500]	ug/L	10:51:50
2	Cr 267.716†	48764.9	48578.2	[500]	ug/L	10:51:50
2	Cu 324.752†	180993.9	173862.5	[500]	ug/L	10:51:50
2	K 766.490 Radial†	32284.5	30811.7	[5000]	ug/L	10:50:22
2	Mg 279.077 IEC†	158.5	162.8	[5000]	ug/L	10:50:42
2	Mn 257.610†	482638.4	481122.2	[500]	ug/L	10:51:45
2	Mo 202.031†	8034.1	7999.1	[500]	ug/L	10:52:10
2	Ni 231.604†	22414.2	22282.0	[500]	ug/L	10:51:50
2	P 214.914†	4776.3	4524.5	[2500]	ug/L	10:52:10
2	Pb 220.353†	4468.2	4526.9	[500]	ug/L	10:52:10
2	S 181.975 Axial†	825.9	774.7	[1000]	ug/L	10:52:10
2	Sb 206.836†	1651.7	1610.9	[500]	ug/L	10:52:10

2	Se 196.026†	877.5	902.4	[500]	ug/L	10:52:10
2	Si 251.611†	88332.2	87668.2	[2500]	ug/L	10:51:50
2	Sn 189.927†	3195.2	3179.8	[500]	ug/L	10:52:10
2	Sr 421.552†	83941.4	87235.3	[500]	ug/L	10:50:22
2	Ti 334.940†	317719.6	318320.1	[500]	ug/L	10:51:50
2	Tl 190.801†	1766.5	1797.5	[500]	ug/L	10:52:10
2	U 409.014†	15164.8	17717.5	[500]	ug/L	10:51:50
2	V 292.402†	75076.8	76284.6	[500]	ug/L	10:51:50
2	Zn 213.857†	60583.5	59704.6	[500]	ug/L	10:51:50
2	SiO2†	88381.8	87675.0	[5347.5]	ug/L	10:52:52
3	Sc 361.383	879497.5	879497.5	101.33	%	10:52:16
3	Sc Radial	5472.2	5472.2	98.1	%	10:50:47
3	Y 371.029	727729.6	727729.6	99.763	%	10:52:16
3	Y RADIAL	5921.7	5921.7	98.05	%	10:50:47
3	Ag 328.068†	113888.3	112114.5	[500]	ug/L	10:52:21
3	Al 396.153Radial†	7240.2	7412.5	[5000]	ug/L	10:50:47
3	As 188.979†	1290.5	1304.8	[500]	ug/L	10:52:41
3	B 249.677†	23462.3	23646.5	[500]	ug/L	10:52:21
3	Ba 233.527†	68134.9	67248.8	[500]	ug/L	10:52:21
3	Be 313.107†	1436756.2	1422498.9	[500]	ug/L	10:52:16
3	Ca 317.933Radial†	3445.1	3493.4	[5000]	ug/L	10:51:07
3	Cd 226.502†	49122.3	48674.3	[500]	ug/L	10:52:21
3	Co 228.616†	27027.0	26744.5	[500]	ug/L	10:52:21
3	Cr 267.716†	48752.2	48024.1	[500]	ug/L	10:52:21
3	Cu 324.752†	181069.6	171927.4	[500]	ug/L	10:52:21
3	K 766.490 Radial†	32771.2	30651.6	[5000]	ug/L	10:50:47
3	Mg 279.077 IEC†	155.8	156.8	[5000]	ug/L	10:51:07
3	Mn 257.610†	487896.6	480951.6	[500]	ug/L	10:52:16
3	Mo 202.031†	8036.7	7912.5	[500]	ug/L	10:52:41
3	Ni 231.604†	22306.3	21926.6	[500]	ug/L	10:52:21
3	P 214.914†	4778.5	4473.5	[2500]	ug/L	10:52:41
3	Pb 220.353†	4426.8	4436.5	[500]	ug/L	10:52:41
3	S 181.975 Axial†	816.1	756.0	[1000]	ug/L	10:52:41
3	Sb 206.836†	1659.4	1600.2	[500]	ug/L	10:52:41
3	Se 196.026†	884.8	900.0	[500]	ug/L	10:52:41
3	Si 251.611†	88184.8	86541.8	[2500]	ug/L	10:52:21
3	Sn 189.927†	3185.0	3134.3	[500]	ug/L	10:52:41
3	Sr 421.552†	85571.7	87190.7	[500]	ug/L	10:50:47
3	Ti 334.940†	317393.1	314469.8	[500]	ug/L	10:52:21
3	Tl 190.801†	1768.6	1779.8	[500]	ug/L	10:52:41
3	U 409.014†	15098.8	17484.0	[500]	ug/L	10:52:21
3	V 292.402†	74801.1	75178.8	[500]	ug/L	10:52:21
3	Zn 213.857†	60531.6	58980.6	[500]	ug/L	10:52:21
3	SiO2†	87774.3	86094.0	[5347.5]	ug/L	10:52:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	870454.2	8695.40	1.00%	100.29	%
Sc Radial	5439.6	64.57	1.19%	97.6	%
Y 371.029	719605.0	7813.91	1.09%	98.649	%
Y RADIAL	5889.9	54.59	0.93%	97.53	%
Ag 328.068†	113021.5	809.76	0.72%	[500]	ug/L
Al 396.153Radial†	7382.9	37.08	0.50%	[5000]	ug/L
As 188.979†	1312.8	8.58	0.65%	[500]	ug/L
B 249.677†	23772.7	117.39	0.49%	[500]	ug/L
Ba 233.527†	67940.0	618.48	0.91%	[500]	ug/L
Be 313.107†	1420317.8	1888.90	0.13%	[500]	ug/L
Ca 317.933Radial†	3542.8	53.11	1.50%	[5000]	ug/L
Cd 226.502†	49240.5	515.63	1.05%	[500]	ug/L
Co 228.616†	26999.6	238.58	0.88%	[500]	ug/L
Cr 267.716†	48481.4	417.42	0.86%	[500]	ug/L
Cu 324.752†	173311.4	1206.87	0.70%	[500]	ug/L
K 766.490 Radial†	30607.9	228.83	0.75%	[5000]	ug/L
Mg 279.077 IEC†	160.1	3.01	1.88%	[5000]	ug/L
Mn 257.610†	481616.2	1007.05	0.21%	[500]	ug/L
Mo 202.031†	8000.8	89.21	1.12%	[500]	ug/L
Ni 231.604†	22199.3	242.25	1.09%	[500]	ug/L
P 214.914†	4520.6	45.26	1.00%	[2500]	ug/L
Pb 220.353†	4512.2	69.56	1.54%	[500]	ug/L

S 181.975 Axial†	775.6	20.09	2.59%	[1000]	ug/L
Sb 206.836†	1614.8	16.98	1.05%	[500]	ug/L
Se 196.026†	906.0	8.34	0.92%	[500]	ug/L
Si 251.611†	87404.9	766.17	0.88%	[2500]	ug/L
Sn 189.927†	3173.9	37.08	1.17%	[500]	ug/L
Sr 421.552†	87153.1	106.08	0.12%	[500]	ug/L
Ti 334.940†	317282.8	2463.95	0.78%	[500]	ug/L
Tl 190.801†	1797.4	17.50	0.97%	[500]	ug/L
U 409.014†	17566.6	130.90	0.75%	[500]	ug/L
V 292.402†	75966.3	686.14	0.90%	[500]	ug/L
Zn 213.857†	59570.3	535.28	0.90%	[500]	ug/L
SiO2†	86938.6	796.02	0.92%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/11/2009 10:55:08
Data Type: Reprocessed on 12/11/2009 12:45:57

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	853185.0	853185.0	98.303	%	10:58:24
1	Sc Radial	5453.9	5453.9	97.8	%	10:57:01
1	Y 371.029	706727.3	706727.3	96.884	%	10:58:24
1	Y RADIAL	5894.8	5894.8	97.61	%	10:57:01
1	Ag 328.068†	216668.2	220135.1	[1000]	ug/L	10:58:24
1	Al 396.153Radial†	13864.0	14209.2	[10000]	ug/L	10:57:01
1	As 188.979†	2487.8	2562.1	[1000]	ug/L	10:58:44
1	B 249.677†	45672.0	46953.8	[1000]	ug/L	10:58:24
1	Ba 233.527†	131213.3	133489.8	[1000]	ug/L	10:58:24
1	Be 313.107†	2694496.8	2745681.6	[1000]	ug/L	10:58:19
1	Ca 317.933Radial†	6738.5	6872.2	[10000]	ug/L	10:57:01
1	Cd 226.502†	94285.2	96112.0	[1000]	ug/L	10:58:24
1	Co 228.616†	51927.8	52897.8	[1000]	ug/L	10:58:24
1	Cr 267.716†	93794.4	95327.8	[1000]	ug/L	10:58:24
1	Cu 324.752†	345381.4	344586.8	[1000]	ug/L	10:58:24
1	Fe 238.204 Radial†	1097.6	1112.3	[10000]	ug/L	10:57:21
1	K 766.490 Radial†	60558.7	59172.9	[10000]	ug/L	10:57:01
1	Mg 279.077 IEC†	298.3	303.0	[10000]	ug/L	10:57:21
1	Mn 257.610†	915562.2	930849.8	[1000]	ug/L	10:58:19
1	Mo 202.031†	15288.8	15534.4	[1000]	ug/L	10:58:44
1	Na 589.592 Radial†	29494.4	31707.9	[10000]	ug/L	10:57:01
1	Ni 231.604†	42800.5	43453.5	[1000]	ug/L	10:58:24
1	P 214.914†	8932.9	8845.1	[5000]	ug/L	10:58:44
1	Pb 220.353†	8650.8	8868.2	[1000]	ug/L	10:58:44
1	S 181.975 Axial†	1510.1	1486.8	[2000]	ug/L	10:58:44
1	Sb 206.836†	3111.7	3128.0	[1000]	ug/L	10:58:44
1	Se 196.026†	1704.5	1760.7	[1000]	ug/L	10:58:44
1	Si 251.611†	164115.4	166467.2	[5000]	ug/L	10:58:24
1	Sn 189.927†	6048.0	6143.6	[1000]	ug/L	10:58:44
1	Sr 421.552†	160418.7	164004.8	[1000]	ug/L	10:57:01
1	Ti 334.940†	616360.4	628258.5	[1000]	ug/L	10:58:19
1	Tl 190.801†	3412.4	3505.9	[1000]	ug/L	10:58:44
1	U 409.014†	31688.2	34819.3	[1000]	ug/L	10:58:24
1	V 292.402†	146096.9	149982.1	[1000]	ug/L	10:58:24
1	Zn 213.857†	114549.0	115772.9	[1000]	ug/L	10:58:24
1	SiO2†	162872.7	165160.3	[10695]	ug/L	10:59:54
2	Sc 361.383	845212.1	845212.1	97.384	%	10:58:56
2	Sc Radial	5375.1	5375.1	96.4	%	10:57:26
2	Y 371.029	702106.8	702106.8	96.251	%	10:58:56
2	Y RADIAL	5817.0	5817.0	96.32	%	10:57:26
2	Ag 328.068†	214228.6	219709.1	[1000]	ug/L	10:58:56
2	Al 396.153Radial†	13767.3	14316.5	[10000]	ug/L	10:57:26
2	As 188.979†	2504.5	2603.1	[1000]	ug/L	10:59:16
2	B 249.677†	44921.9	46621.8	[1000]	ug/L	10:58:56
2	Ba 233.527†	129473.4	132962.3	[1000]	ug/L	10:58:56
2	Be 313.107†	2728112.9	2806057.1	[1000]	ug/L	10:58:51
2	Ca 317.933Radial†	6632.8	6863.5	[10000]	ug/L	10:57:26
2	Cd 226.502†	92841.3	95534.1	[1000]	ug/L	10:58:56
2	Co 228.616†	51178.4	52626.6	[1000]	ug/L	10:58:56
2	Cr 267.716†	92627.1	95029.1	[1000]	ug/L	10:58:56
2	Cu 324.752†	341207.0	343614.6	[1000]	ug/L	10:58:56
2	Fe 238.204 Radial†	1089.7	1120.5	[10000]	ug/L	10:57:46
2	K 766.490 Radial†	59733.1	59223.1	[10000]	ug/L	10:57:26
2	Mg 279.077 IEC†	297.7	306.9	[10000]	ug/L	10:57:46
2	Mn 257.610†	925258.4	949592.2	[1000]	ug/L	10:58:51
2	Mo 202.031†	15392.0	15787.0	[1000]	ug/L	10:59:16
2	Na 589.592 Radial†	28816.5	31446.2	[10000]	ug/L	10:57:26
2	Ni 231.604†	42127.9	43173.6	[1000]	ug/L	10:58:56

2	P 214.914†	9025.3	9025.7	[5000]	ug/L	10:59:16
2	Pb 220.353†	8677.8	8978.9	[1000]	ug/L	10:59:16
2	S 181.975 Axial†	1524.6	1516.2	[2000]	ug/L	10:59:16
2	Sb 206.836†	3130.8	3177.5	[1000]	ug/L	10:59:16
2	Se 196.026†	1708.5	1781.2	[1000]	ug/L	10:59:16
2	Si 251.611†	161974.9	165844.1	[5000]	ug/L	10:58:56
2	Sn 189.927†	6084.3	6238.9	[1000]	ug/L	10:59:16
2	Sr 421.552†	157729.9	163617.5	[1000]	ug/L	10:57:26
2	Ti 334.940†	622983.8	640974.4	[1000]	ug/L	10:58:51
2	Tl 190.801†	3442.1	3569.1	[1000]	ug/L	10:59:16
2	U 409.014†	31177.9	34599.3	[1000]	ug/L	10:58:56
2	V 292.402†	144580.6	149827.0	[1000]	ug/L	10:58:56
2	Zn 213.857†	112917.6	115196.9	[1000]	ug/L	10:58:56
2	SiO2†	162491.3	166331.6	[10695]	ug/L	10:59:59
3	Sc 361.383	853864.7	853864.7	98.381	%	10:59:28
3	Sc Radial	5464.8	5464.8	98.0	%	10:57:51
3	Y 371.029	708211.8	708211.8	97.088	%	10:59:28
3	Y RADIAL	5914.4	5914.4	97.93	%	10:57:51
3	Ag 328.068†	216589.6	219879.7	[1000]	ug/L	10:59:28
3	Al 396.153Radial†	13938.9	14257.2	[10000]	ug/L	10:57:51
3	As 188.979†	2508.7	2581.3	[1000]	ug/L	10:59:48
3	B 249.677†	45602.5	46846.2	[1000]	ug/L	10:59:28
3	Ba 233.527†	131477.4	133652.1	[1000]	ug/L	10:59:28
3	Be 313.107†	2717028.2	2766401.9	[1000]	ug/L	10:59:23
3	Ca 317.933Radial†	6728.8	6848.6	[10000]	ug/L	10:57:51
3	Cd 226.502†	94433.2	96186.1	[1000]	ug/L	10:59:28
3	Co 228.616†	52001.9	52931.1	[1000]	ug/L	10:59:28
3	Cr 267.716†	93825.2	95283.1	[1000]	ug/L	10:59:28
3	Cu 324.752†	344619.5	343532.6	[1000]	ug/L	10:59:28
3	Fe 238.204 Radial†	1090.9	1103.2	[10000]	ug/L	10:58:11
3	K 766.490 Radial†	60752.2	59246.2	[10000]	ug/L	10:57:51
3	Mg 279.077 IEC†	298.0	302.1	[10000]	ug/L	10:58:11
3	Mn 257.610†	921996.7	936648.8	[1000]	ug/L	10:59:23
3	Mo 202.031†	15392.5	15627.4	[1000]	ug/L	10:59:48
3	Na 589.592 Radial†	29549.3	31703.5	[10000]	ug/L	10:57:51
3	Ni 231.604†	42734.9	43352.2	[1000]	ug/L	10:59:28
3	P 214.914†	9045.5	8952.4	[5000]	ug/L	10:59:48
3	Pb 220.353†	8686.4	8897.3	[1000]	ug/L	10:59:48
3	S 181.975 Axial†	1538.7	1514.6	[2000]	ug/L	10:59:48
3	Sb 206.836†	3146.0	3160.4	[1000]	ug/L	10:59:48
3	Se 196.026†	1711.8	1766.8	[1000]	ug/L	10:59:48
3	Si 251.611†	164219.2	166439.8	[5000]	ug/L	10:59:28
3	Sn 189.927†	6088.8	6180.2	[1000]	ug/L	10:59:48
3	Sr 421.552†	160324.3	163579.9	[1000]	ug/L	10:57:51
3	Ti 334.940†	620417.6	631883.3	[1000]	ug/L	10:59:23
3	Tl 190.801†	3452.1	3543.5	[1000]	ug/L	10:59:48
3	U 409.014†	31628.3	34732.7	[1000]	ug/L	10:59:28
3	V 292.402†	146327.9	150098.6	[1000]	ug/L	10:59:28
3	Zn 213.857†	114636.0	115768.6	[1000]	ug/L	10:59:28
3	SiO2†	164626.4	166811.0	[10695]	ug/L	11:00:04

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	850753.9	4811.42	0.57%	98.023	%
Sc Radial	5431.3	48.92	0.90%	97.4	%
Y 371.029	705682.0	3183.94	0.45%	96.741	%
Y RADIAL	5875.4	51.52	0.88%	97.29	%
Ag 328.068†	219908.0	214.38	0.10%	[1000]	ug/L
Al 396.153Radial†	14260.9	53.73	0.38%	[10000]	ug/L
As 188.979†	2582.1	20.52	0.79%	[1000]	ug/L
B 249.677†	46807.3	169.38	0.36%	[1000]	ug/L
Ba 233.527†	133368.1	360.63	0.27%	[1000]	ug/L
Be 313.107†	2772713.6	30678.59	1.11%	[1000]	ug/L
Ca 317.933Radial†	6861.4	11.95	0.17%	[10000]	ug/L
Cd 226.502†	95944.1	356.96	0.37%	[1000]	ug/L
Co 228.616†	52818.5	167.02	0.32%	[1000]	ug/L
Cr 267.716†	95213.3	161.08	0.17%	[1000]	ug/L
Cu 324.752†	343911.3	586.41	0.17%	[1000]	ug/L
Fe 238.204 Radial†	1112.0	8.69	0.78%	[10000]	ug/L

K 766.490 Radial†	59214.1	37.52	0.06%	[10000]	ug/L
Mg 279.077 IEC†	304.0	2.54	0.83%	[10000]	ug/L
Mn 257.610†	939030.3	9595.46	1.02%	[1000]	ug/L
Mo 202.031†	15649.6	127.78	0.82%	[1000]	ug/L
Na 589.592 Radial†	31619.2	149.79	0.47%	[10000]	ug/L
Ni 231.604†	43326.4	141.72	0.33%	[1000]	ug/L
P 214.914†	8941.0	90.83	1.02%	[5000]	ug/L
Pb 220.353†	8914.8	57.38	0.64%	[1000]	ug/L
S 181.975 Axial†	1505.8	16.54	1.10%	[2000]	ug/L
Sb 206.836†	3155.3	25.11	0.80%	[1000]	ug/L
Se 196.026†	1769.6	10.54	0.60%	[1000]	ug/L
Si 251.611†	166250.4	352.13	0.21%	[5000]	ug/L
Sn 189.927†	6187.5	48.07	0.78%	[1000]	ug/L
Sr 421.552†	163734.0	235.21	0.14%	[1000]	ug/L
Ti 334.940†	633705.4	6550.82	1.03%	[1000]	ug/L
Tl 190.801†	3539.5	31.82	0.90%	[1000]	ug/L
U 409.014†	34717.1	110.82	0.32%	[1000]	ug/L
V 292.402†	149969.2	136.25	0.09%	[1000]	ug/L
Zn 213.857†	115579.5	331.33	0.29%	[1000]	ug/L
SiO2†	166101.0	849.19	0.51%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/11/2009 11:02:15
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860963.7	860963.7	99.199	%	11:05:26
1	Sc Radial	5387.2	5387.2	96.6	%	11:04:29
1	Y 371.029	709124.8	709124.8	97.213	%	11:05:26
1	Y RADIAL	5822.0	5822.0	96.40	%	11:04:29
1	Al 396.153Radial†	68975.6	71425.6	[50000]	ug/L	11:04:09
1	Ca 317.933Radial†	32653.3	33779.6	[50000]	ug/L	11:04:09
1	Fe 238.204 Radial†	2164.6	2230.5	[20000]	ug/L	11:04:29
1	Mg 279.077 IEC†	1433.3	1481.6	[50000]	ug/L	11:04:29
1	Na 589.592 Radial†	61862.2	65582.1	[20000]	ug/L	11:04:09
2	Sc 361.383	854136.3	854136.3	98.412	%	11:05:32
2	Sc Radial	5350.4	5350.4	96.0	%	11:04:54
2	Y 371.029	702699.8	702699.8	96.332	%	11:05:32
2	Y RADIAL	5769.4	5769.4	95.53	%	11:04:54
2	Al 396.153Radial†	70067.2	73053.7	[50000]	ug/L	11:04:34
2	Ca 317.933Radial†	32982.7	34355.0	[50000]	ug/L	11:04:34
2	Fe 238.204 Radial†	2153.5	2234.3	[20000]	ug/L	11:04:54
2	Mg 279.077 IEC†	1432.1	1490.5	[50000]	ug/L	11:04:54
2	Na 589.592 Radial†	62754.2	66951.5	[20000]	ug/L	11:04:34
3	Sc 361.383	843792.7	843792.7	97.221	%	11:05:38
3	Sc Radial	5364.3	5364.3	96.2	%	11:05:19
3	Y 371.029	695516.3	695516.3	95.347	%	11:05:38
3	Y RADIAL	5786.0	5786.0	95.81	%	11:05:19
3	Al 396.153Radial†	70617.8	73437.3	[50000]	ug/L	11:04:59
3	Ca 317.933Radial†	33303.8	34599.9	[50000]	ug/L	11:04:59
3	Fe 238.204 Radial†	2163.3	2238.8	[20000]	ug/L	11:05:19
3	Mg 279.077 IEC†	1426.7	1481.1	[50000]	ug/L	11:05:19
3	Na 589.592 Radial†	63458.0	67514.1	[20000]	ug/L	11:04:59

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	852964.2	8645.27	1.01%	98.277	%
Sc Radial	5367.3	18.56	0.35%	96.3	%
Y 371.029	702447.0	6807.78	0.97%	96.297	%
Y RADIAL	5792.4	26.90	0.46%	95.91	%
Al 396.153Radial†	72638.9	1068.08	1.47%	[50000]	ug/L
Ca 317.933Radial†	34244.8	421.13	1.23%	[50000]	ug/L
Fe 238.204 Radial†	2234.5	4.14	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1484.4	5.33	0.36%	[50000]	ug/L
Na 589.592 Radial†	66682.5	993.69	1.49%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	221.1	0.00000	0.999932	
Al 396.153Radial	3	Lin Thru 0	0.0	1.452	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	2.590	0.00000	0.999969	
B 249.677	3	Lin Thru 0	0.0	46.92	0.00000	0.999954	
Ba 233.527	3	Lin Thru 0	0.0	133.8	0.00000	0.999967	
Be 313.107	3	Lin Thru 0	0.0	2785	0.00000	0.999938	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6852	0.00000	0.999994	
Cd 226.502	3	Lin Thru 0	0.0	96.42	0.00000	0.999939	
Co 228.616	3	Lin Thru 0	0.0	53.03	0.00000	0.999944	
Cr 267.716	3	Lin Thru 0	0.0	95.53	0.00000	0.999967	
Cu 324.752	3	Lin Thru 0	0.0	344.3	0.00000	0.999979	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1116	0.00000	0.999998	

K 766.490 Radial	3	Lin Thru 0	0.0	5.961	0.00000	0.999909
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0297	0.00000	0.999961
Mn 257.610	3	Lin Thru 0	0.0	943.5	0.00000	0.999940
Mo 202.031	3	Lin Thru 0	0.0	15.71	0.00000	0.999952
Na 589.592 Radia	2	Lin Thru 0	0.0	3.300	0.00000	0.999782
Ni 231.604	3	Lin Thru 0	0.0	43.52	0.00000	0.999935
P 214.914	3	Lin Thru 0	0.0	1.791	0.00000	0.999962
Pb 220.353	3	Lin Thru 0	0.0	8.933	0.00000	0.999978
S 181.975 Axial	3	Lin Thru 0	0.0	0.7569	0.00000	0.999894
Sb 206.836	3	Lin Thru 0	0.0	3.168	0.00000	0.999921
Se 196.026	3	Lin Thru 0	0.0	1.778	0.00000	0.999950
Si 251.611	3	Lin Thru 0	0.0	33.58	0.00000	0.999777
Sn 189.927	3	Lin Thru 0	0.0	6.216	0.00000	0.999930
Sr 421.552	3	Lin Thru 0	0.0	165.8	0.00000	0.999673
Ti 334.940	3	Lin Thru 0	0.0	633.5	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	3.549	0.00000	0.999971
U 409.014	3	Lin Thru 0	0.0	34.78	0.00000	0.999971
V 292.402	3	Lin Thru 0	0.0	150.3	0.00000	0.999974
Zn 213.857	3	Lin Thru 0	0.0	116.3	0.00000	0.999918
SiO2	3	Lin Thru 0	0.0	15.67	0.00000	0.999808

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/11/2009 11:07:49
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	874645.6	874645.6	100.78	%			11:10:59
1	Sc Radial	5587.3	5587.3	100	%			11:09:42
1	Y 371.029	728574.2	728574.2	99.879	%			11:10:59
1	Y RADIAL	6058.4	6058.4	100.3	%			11:09:42
1	Ag 328.068†	58053.1	57332.4	262.49	ug/L	262.49	ppb	11:10:59
1	Al 396.153Radial†	7264.0	7284.3	4993.5	ug/L	4993.5	ppb	11:09:42
1	As 188.979†	1218.1	1240.0	483.13	ug/L	483.13	ppb	11:11:20
1	B 249.677†	23759.8	24070.2	511.00	ug/L	511.00	ppb	11:10:59
1	Ba 233.527†	68791.2	68273.0	511.47	ug/L	511.47	ppb	11:10:59
1	Be 313.107†	723572.8	722668.1	260.48	ug/L	260.48	ppb	11:10:59
1	Ca 317.933Radial†	3406.8	3382.8	4937.2	ug/L	4937.2	ppb	11:10:02
1	Cd 226.502†	48503.8	48329.6	501.04	ug/L	501.04	ppb	11:10:59
1	Co 228.616†	26736.9	26604.6	502.05	ug/L	502.05	ppb	11:11:20
1	Cr 267.716†	47283.2	46833.4	491.07	ug/L	491.07	ppb	11:10:59
1	Cu 324.752†	182267.7	174107.5	505.97	ug/L	505.97	ppb	11:10:59
1	Fe 238.204 Radial†	582.9	571.8	5139.0	ug/L	5139.0	ppb	11:10:02
1	K 766.490 Radial†	17719.4	14943.3	2501.7	ug/L	2501.7	ppb	11:09:42
1	Mg 279.077 IEC†	162.2	160.0	5385.9	ug/L	5385.9	ppb	11:10:02
1	Mn 257.610†	487398.0	483127.7	512.44	ug/L	512.44	ppb	11:10:59
1	Mo 202.031†	8653.5	8568.5	545.63	ug/L	545.63	ppb	11:11:20
1	Na 589.592 Radial†	6915.1	8455.0	2562.4	ug/L	2562.4	ppb	11:09:42
1	Ni 231.604†	22000.8	21745.5	499.36	ug/L	499.36	ppb	11:11:20
1	P 214.914†	4771.1	4492.3	2432.3	ug/L	2432.3	ppb	11:11:20
1	Pb 220.353†	4457.3	4491.0	504.37	ug/L	504.37	ppb	11:11:20
1	S 181.975 Axial†	1968.6	1904.0	2514.6	ug/L	2514.6	ppb	11:11:20
1	Sb 206.836†	1636.5	1586.5	510.11	ug/L	510.11	ppb	11:11:20
1	Se 196.026†	4530.0	4521.9	2562.2	ug/L	2562.2	ppb	11:11:20
1	Si 251.611†	163300.9	161562.7	4800.0	ug/L	4800.0	ppb	11:10:59
1	Sn 189.927†	3417.0	3381.9	544.62	ug/L	544.62	ppb	11:11:20
1	Sr 421.552†	89500.9	89316.4	538.64	ug/L	538.64	ppb	11:09:42
1	Ti 334.940†	319392.4	318191.1	502.11	ug/L	502.11	ppb	11:10:59
1	Tl 190.801†	1859.2	1879.5	532.82	ug/L	532.82	ppb	11:11:20
1	U 409.014†	14369.1	16842.5	482.64	ug/L	482.64	ppb	11:10:59
1	V 292.402†	75659.8	76440.4	515.94	ug/L	515.94	ppb	11:10:59
1	Zn 213.857†	60676.5	59455.8	506.97	ug/L	506.97	ppb	11:10:59
1	SiO2†	162240.8	160468.0	10216	ug/L	10216	ppb	11:12:17
2	Sc 361.383	878001.3	878001.3	101.16	%			11:11:26
2	Sc Radial	5467.5	5467.5	98.1	%			11:10:07
2	Y 371.029	730239.8	730239.8	100.11	%			11:11:26
2	Y RADIAL	5921.3	5921.3	98.05	%			11:10:07
2	Ag 328.068†	58405.7	57460.7	263.11	ug/L	263.11	ppb	11:11:26
2	Al 396.153Radial†	7160.7	7337.8	5030.5	ug/L	5030.5	ppb	11:10:07
2	As 188.979†	1203.4	1220.8	475.74	ug/L	475.74	ppb	11:11:46
2	B 249.677†	24050.9	24267.9	515.21	ug/L	515.21	ppb	11:11:26
2	Ba 233.527†	69257.7	68473.2	512.97	ug/L	512.97	ppb	11:11:26
2	Be 313.107†	727003.0	723314.6	260.71	ug/L	260.71	ppb	11:11:26
2	Ca 317.933Radial†	3402.8	3453.3	5040.0	ug/L	5040.0	ppb	11:10:27
2	Cd 226.502†	48761.4	48400.2	501.76	ug/L	501.76	ppb	11:11:26
2	Co 228.616†	26605.2	26373.1	497.67	ug/L	497.67	ppb	11:11:46
2	Cr 267.716†	47507.9	46876.1	491.52	ug/L	491.52	ppb	11:11:26
2	Cu 324.752†	183955.9	175085.0	508.82	ug/L	508.82	ppb	11:11:26
2	Fe 238.204 Radial†	581.1	582.8	5236.6	ug/L	5236.6	ppb	11:10:27
2	K 766.490 Radial†	17421.0	15026.4	2515.6	ug/L	2515.6	ppb	11:10:07
2	Mg 279.077 IEC†	160.2	161.5	5437.4	ug/L	5437.4	ppb	11:10:27
2	Mn 257.610†	490051.8	483902.5	513.27	ug/L	513.27	ppb	11:11:26
2	Mo 202.031†	8613.8	8496.5	541.06	ug/L	541.06	ppb	11:11:46
2	Na 589.592 Radial†	6700.5	8387.3	2541.8	ug/L	2541.8	ppb	11:10:07
2	Ni 231.604†	21861.8	21524.8	494.29	ug/L	494.29	ppb	11:11:46

2	P 214.914†	4761.7	4464.9	2416.4	ug/L	2416.4 ppb	11:11:46
2	Pb 220.353†	4437.6	4454.6	500.29	ug/L	500.29 ppb	11:11:46
2	S 181.975 Axial†	1950.1	1878.3	2480.6	ug/L	2480.6 ppb	11:11:46
2	Sb 206.836†	1631.7	1575.5	506.43	ug/L	506.43 ppb	11:11:46
2	Se 196.026†	4526.8	4501.6	2551.0	ug/L	2551.0 ppb	11:11:46
2	Si 251.611†	164658.6	162285.4	4821.6	ug/L	4821.6 ppb	11:11:26
2	Sn 189.927†	3387.7	3339.9	537.87	ug/L	537.87 ppb	11:11:46
2	Sr 421.552†	87524.2	89257.6	538.29	ug/L	538.29 ppb	11:10:07
2	Ti 334.940†	321061.9	318630.1	502.80	ug/L	502.80 ppb	11:11:26
2	Tl 190.801†	1840.7	1854.1	525.70	ug/L	525.70 ppb	11:11:46
2	U 409.014†	14592.1	17008.4	487.40	ug/L	487.40 ppb	11:11:26
2	V 292.402†	76145.1	76633.1	517.15	ug/L	517.15 ppb	11:11:26
2	Zn 213.857†	61065.8	59610.5	508.32	ug/L	508.32 ppb	11:11:26
2	SiO2†	162458.2	160067.6	10191	ug/L	10191 ppb	11:12:22
3	Sc 361.383	870914.4	870914.4	100.35	%		11:11:52
3	Sc Radial	5417.4	5417.4	97.2	%		11:10:32
3	Y 371.029	722870.7	722870.7	99.097	%		11:11:52
3	Y RADIAL	5860.9	5860.9	97.05	%		11:10:32
3	Ag 328.068†	57902.4	57429.0	262.99	ug/L	262.99 ppb	11:11:52
3	Al 396.153Radial†	7053.3	7294.8	5000.5	ug/L	5000.5 ppb	11:10:32
3	As 188.979†	1214.7	1241.8	483.83	ug/L	483.83 ppb	11:12:12
3	B 249.677†	23877.0	24288.0	515.61	ug/L	515.61 ppb	11:11:52
3	Ba 233.527†	68734.2	68508.7	513.24	ug/L	513.24 ppb	11:11:52
3	Be 313.107†	720723.4	722904.6	260.57	ug/L	260.57 ppb	11:11:52
3	Ca 317.933Radial†	3424.3	3507.5	5119.1	ug/L	5119.1 ppb	11:10:52
3	Cd 226.502†	48419.6	48451.8	502.29	ug/L	502.29 ppb	11:11:52
3	Co 228.616†	26795.1	26776.3	505.30	ug/L	505.30 ppb	11:12:12
3	Cr 267.716†	47171.2	46922.8	492.00	ug/L	492.00 ppb	11:11:52
3	Cu 324.752†	182186.1	174800.9	508.00	ug/L	508.00 ppb	11:11:52
3	Fe 238.204 Radial†	587.6	594.9	5345.6	ug/L	5345.6 ppb	11:10:52
3	K 766.490 Radial†	17277.6	15043.0	2518.4	ug/L	2518.4 ppb	11:10:32
3	Mg 279.077 IEC†	161.6	164.4	5535.9	ug/L	5535.9 ppb	11:10:52
3	Mn 257.610†	487073.8	484876.7	514.32	ug/L	514.32 ppb	11:11:52
3	Mo 202.031†	8691.2	8642.8	550.38	ug/L	550.38 ppb	11:12:12
3	Na 589.592 Radial†	6591.4	8338.2	2527.0	ug/L	2527.0 ppb	11:10:32
3	Ni 231.604†	22035.2	21873.4	502.30	ug/L	502.30 ppb	11:12:12
3	P 214.914†	4774.7	4516.2	2445.2	ug/L	2445.2 ppb	11:12:12
3	Pb 220.353†	4472.6	4525.2	508.20	ug/L	508.20 ppb	11:12:12
3	S 181.975 Axial†	1963.5	1907.3	2519.0	ug/L	2519.0 ppb	11:12:12
3	Sb 206.836†	1653.4	1610.3	517.77	ug/L	517.77 ppb	11:12:12
3	Se 196.026†	4555.5	4566.6	2587.9	ug/L	2587.9 ppb	11:12:12
3	Si 251.611†	163499.9	162455.2	4826.4	ug/L	4826.4 ppb	11:11:52
3	Sn 189.927†	3416.9	3396.3	546.95	ug/L	546.95 ppb	11:12:12
3	Sr 421.552†	86670.2	89203.7	537.96	ug/L	537.96 ppb	11:10:32
3	Ti 334.940†	318502.9	318662.5	502.86	ug/L	502.86 ppb	11:11:52
3	Tl 190.801†	1856.3	1884.5	534.22	ug/L	534.22 ppb	11:12:12
3	U 409.014†	14588.1	17121.9	490.65	ug/L	490.65 ppb	11:11:52
3	V 292.402†	75362.7	76466.0	516.16	ug/L	516.16 ppb	11:11:52
3	Zn 213.857†	60732.2	59769.3	509.62	ug/L	509.62 ppb	11:11:52
3	SiO2†	163681.3	162593.3	10352	ug/L	10352 ppb	11:12:28

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874520.4	100.76	%	0.408				0.41%
Sc Radial	5490.7	98.5	%	1.57				1.59%
Y 371.029	727228.3	99.695	%	0.5298				0.53%
Y RADIAL	5946.9	98.47	%	1.676				1.70%
Ag 328.068†	57407.4	262.86	ug/L	0.324	262.86	ppb	0.324	0.12%
QC value within limits for Ag 328.068 Recovery = 105.15%								
Al 396.153Radial†	7305.6	5008.1	ug/L	19.66	5008.1	ppb	19.66	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.16%								
As 188.979†	1234.2	480.90	ug/L	4.484	480.90	ppb	4.484	0.93%
QC value within limits for As 188.979 Recovery = 96.18%								
B 249.677†	24208.7	513.94	ug/L	2.553	513.94	ppb	2.553	0.50%
QC value within limits for B 249.677 Recovery = 102.79%								
Ba 233.527†	68418.3	512.56	ug/L	0.954	512.56	ppb	0.954	0.19%
QC value within limits for Ba 233.527 Recovery = 102.51%								
Be 313.107†	722962.4	260.59	ug/L	0.118	260.59	ppb	0.118	0.05%
QC value within limits for Be 313.107 Recovery = 104.23%								

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Ca 317.933Radial†        3447.9      5032.1 ug/L        91.20      5032.1 ppb        91.20   1.81%
   QC value within limits for Ca 317.933Radial  Recovery = 100.64%
Cd 226.502†             48393.9       501.70 ug/L       0.627       501.70 ppb        0.627   0.13%
   QC value within limits for Cd 226.502  Recovery = 100.34%
Co 228.616†             26584.7       501.67 ug/L       3.827       501.67 ppb        3.827   0.76%
   QC value within limits for Co 228.616  Recovery = 100.33%
Cr 267.716†             46877.4       491.53 ug/L       0.469       491.53 ppb        0.469   0.10%
   QC value within limits for Cr 267.716  Recovery = 98.31%
Cu 324.752†            174664.5       507.60 ug/L       1.464       507.60 ppb        1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 101.52%
Fe 238.204 Radial†       583.2       5240.4 ug/L      103.38      5240.4 ppb       103.38   1.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.81%
K 766.490 Radial†       15004.3      2511.9 ug/L        8.96      2511.9 ppb         8.96   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 100.48%
Mg 279.077 IEC†           162.0      5453.1 ug/L       76.21      5453.1 ppb        76.21   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.06%
Mn 257.610†            483968.9       513.35 ug/L       0.938       513.35 ppb        0.938   0.18%
   QC value within limits for Mn 257.610  Recovery = 102.67%
Mo 202.031†             8569.3       545.69 ug/L       4.661       545.69 ppb        4.661   0.85%
   QC value within limits for Mo 202.031  Recovery = 109.14%
Na 589.592 Radial†      8393.5      2543.7 ug/L       17.76      2543.7 ppb        17.76   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 101.75%
Ni 231.604†             21714.6       498.65 ug/L       4.050       498.65 ppb        4.050   0.81%
   QC value within limits for Ni 231.604  Recovery = 99.73%
P 214.914†               4491.2      2431.3 ug/L       14.43      2431.3 ppb        14.43   0.59%
   QC value within limits for P 214.914  Recovery = 97.25%
Pb 220.353†              4490.3       504.29 ug/L       3.953       504.29 ppb        3.953   0.78%
   QC value within limits for Pb 220.353  Recovery = 100.86%
S 181.975 Axial†         1896.6      2504.7 ug/L       21.01      2504.7 ppb        21.01   0.84%
   QC value within limits for S 181.975 Axial  Recovery = 100.19%
Sb 206.836†              1590.8       511.44 ug/L       5.783       511.44 ppb        5.783   1.13%
   QC value within limits for Sb 206.836  Recovery = 102.29%
Se 196.026†              4530.0      2567.0 ug/L       18.93      2567.0 ppb        18.93   0.74%
   QC value within limits for Se 196.026  Recovery = 102.68%
Si 251.611†             162101.1      4816.0 ug/L       14.10      4816.0 ppb        14.10   0.29%
   QC value within limits for Si 251.611  Recovery = 96.32%
Sn 189.927†              3372.7       543.15 ug/L       4.717       543.15 ppb        4.717   0.87%
   QC value within limits for Sn 189.927  Recovery = 108.63%
Sr 421.552†             89259.2       538.30 ug/L       0.341       538.30 ppb        0.341   0.06%
   QC value within limits for Sr 421.552  Recovery = 107.66%
Ti 334.940†            318494.6       502.59 ug/L       0.418       502.59 ppb        0.418   0.08%
   QC value within limits for Ti 334.940  Recovery = 100.52%
Tl 190.801†              1872.7       530.91 ug/L       4.567       530.91 ppb        4.567   0.86%
   QC value within limits for Tl 190.801  Recovery = 106.18%
U 409.014†              16991.0       486.90 ug/L       4.025       486.90 ppb        4.025   0.83%
   QC value within limits for U 409.014  Recovery = 97.38%
V 292.402†              76513.2       516.42 ug/L       0.645       516.42 ppb        0.645   0.12%
   QC value within limits for V 292.402  Recovery = 103.28%
Zn 213.857†             59611.8       508.30 ug/L       1.325       508.30 ppb        1.325   0.26%
   QC value within limits for Zn 213.857  Recovery = 101.66%
SiO2†                  161043.0        10253 ug/L        86.5        10253 ppb         86.5   0.84%
   QC value within limits for SiO2  Recovery = 95.87%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/11/2009 11:14:38
Data Type: Reprocessed on 12/11/2009 12:46:00

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	871028.0	871028.0	100.36	%			11:17:48
1	Sc Radial	5612.3	5612.3	101	%			11:16:31
1	Y 371.029	732501.0	732501.0	100.42	%			11:17:48
1	Y RADIAL	6085.8	6085.8	100.8	%			11:16:31
1	Ag 328.068†	348.8	73.5	0.3353	ug/L	0.3353	ppb	11:17:48
1	Al 396.153Radial†	-12.8	22.6	15.521	ug/L	15.521	ppb	11:16:31
1	As 188.979†	-27.4	3.9	1.5214	ug/L	1.5214	ppb	11:18:08
1	B 249.677†	-289.2	205.0	4.3696	ug/L	4.3696	ppb	11:18:08
1	Ba 233.527†	-12.6	-1.4	-0.0107	ug/L	-0.0107	ppb	11:18:08
1	Be 313.107†	-4511.2	167.5	0.0602	ug/L	0.0602	ppb	11:17:48
1	Ca 317.933Radial†	19.7	2.7	3.9544	ug/L	3.9544	ppb	11:16:51
1	Cd 226.502†	-200.3	-0.7	-0.0070	ug/L	-0.0070	ppb	11:18:08
1	Co 228.616†	-84.2	-10.4	-0.1945	ug/L	-0.1945	ppb	11:18:08
1	Cr 267.716†	88.4	2.1	0.0230	ug/L	0.0230	ppb	11:18:08
1	Cu 324.752†	6779.9	-2.2	-0.0063	ug/L	-0.0063	ppb	11:17:48
1	Fe 238.204 Radial†	9.9	-0.0	-0.0536	ug/L	-0.0536	ppb	11:16:51
1	K 766.490 Radial†	2839.1	81.1	13.610	ug/L	13.610	ppb	11:16:31
1	Mg 279.077 IEC†	4.7	2.8	94.399	ug/L	94.399	ppb	11:16:51
1	Mn 257.610†	522.8	0.8	-0.0009	ug/L	-0.0009	ppb	11:18:08
1	Mo 202.031†	31.5	13.0	0.8243	ug/L	0.8243	ppb	11:18:08
1	Na 589.592 Radial†	-1625.7	-61.0	-18.490	ug/L	-18.490	ppb	11:16:31
1	Ni 231.604†	94.7	8.4	0.1942	ug/L	0.1942	ppb	11:18:08
1	P 214.914†	228.2	-14.7	-8.1967	ug/L	-8.1967	ppb	11:18:08
1	Pb 220.353†	-63.2	5.0	0.5673	ug/L	0.5673	ppb	11:18:08
1	S 181.975 Axial†	48.3	-1.3	-1.7250	ug/L	-1.7250	ppb	11:18:08
1	Sb 206.836†	49.7	12.2	3.8364	ug/L	3.8364	ppb	11:18:08
1	Se 196.026†	-30.8	-3.9	-2.1655	ug/L	-2.1655	ppb	11:18:08
1	Si 251.611†	550.8	67.1	1.9835	ug/L	1.9835	ppb	11:18:08
1	Sn 189.927†	3.0	-5.8	-0.9386	ug/L	-0.9386	ppb	11:18:08
1	Sr 421.552†	-20.8	-20.5	-0.1236	ug/L	-0.1236	ppb	11:16:31
1	Ti 334.940†	-1250.7	10.0	0.0175	ug/L	0.0175	ppb	11:17:48
1	Tl 190.801†	-23.1	11.6	3.2610	ug/L	3.2610	ppb	11:18:08
1	U 409.014†	-2714.8	-121.1	-3.4828	ug/L	-3.4828	ppb	11:17:48
1	V 292.402†	-1376.0	-8.3	-0.0481	ug/L	-0.0481	ppb	11:17:48
1	Zn 213.857†	753.9	-2.6	-0.0268	ug/L	-0.0268	ppb	11:18:08
1	SiO2†	514.4	-11.9	-0.7943	ug/L	-0.7943	ppb	11:19:04
2	Sc 361.383	868979.5	868979.5	100.12	%			11:18:13
2	Sc Radial	5550.9	5550.9	99.6	%			11:16:56
2	Y 371.029	731655.6	731655.6	100.30	%			11:18:13
2	Y RADIAL	6018.6	6018.6	99.66	%			11:16:56
2	Ag 328.068†	291.0	16.6	0.0729	ug/L	0.0729	ppb	11:18:13
2	Al 396.153Radial†	-9.6	25.7	17.661	ug/L	17.661	ppb	11:16:56
2	As 188.979†	-32.4	-1.1	-0.4345	ug/L	-0.4345	ppb	11:18:33
2	B 249.677†	-299.4	194.2	4.1401	ug/L	4.1401	ppb	11:18:33
2	Ba 233.527†	-11.9	-0.8	-0.0064	ug/L	-0.0064	ppb	11:18:33
2	Be 313.107†	-4488.3	179.8	0.0646	ug/L	0.0646	ppb	11:18:13
2	Ca 317.933Radial†	17.4	0.6	0.9006	ug/L	0.9006	ppb	11:17:16
2	Cd 226.502†	-198.1	1.1	0.0125	ug/L	0.0125	ppb	11:18:33
2	Co 228.616†	-81.8	-8.2	-0.1526	ug/L	-0.1526	ppb	11:18:33
2	Cr 267.716†	97.0	10.9	0.1143	ug/L	0.1143	ppb	11:18:33
2	Cu 324.752†	6774.6	8.5	0.0240	ug/L	0.0240	ppb	11:18:13
2	Fe 238.204 Radial†	8.3	-1.6	-14.202	ug/L	-14.202	ppb	11:17:16
2	K 766.490 Radial†	2861.4	134.7	22.618	ug/L	22.618	ppb	11:16:56
2	Mg 279.077 IEC†	4.5	2.6	89.132	ug/L	89.132	ppb	11:17:16
2	Mn 257.610†	557.3	36.5	0.0356	ug/L	0.0356	ppb	11:18:33
2	Mo 202.031†	31.0	12.6	0.8003	ug/L	0.8003	ppb	11:18:33
2	Na 589.592 Radial†	-1655.0	-108.2	-32.804	ug/L	-32.804	ppb	11:16:56
2	Ni 231.604†	91.5	5.5	0.1258	ug/L	0.1258	ppb	11:18:33

2	P 214.914†	235.1	-7.2	-4.0257 ug/L	-4.0257 ppb		11:18:33
2	Pb 220.353†	-70.1	-2.0	-0.2169 ug/L	-0.2169 ppb		11:18:33
2	S 181.975 Axial†	48.6	-0.8	-1.1038 ug/L	-1.1038 ppb		11:18:33
2	Sb 206.836†	24.2	-13.2	-4.1820 ug/L	-4.1820 ppb		11:18:33
2	Se 196.026†	-25.5	1.3	0.6912 ug/L	0.6912 ppb		11:18:33
2	Si 251.611†	542.2	59.8	1.7624 ug/L	1.7624 ppb		11:18:33
2	Sn 189.927†	1.4	-7.5	-1.2016 ug/L	-1.2016 ppb		11:18:33
2	Sr 421.552†	-48.0	-48.0	-0.2897 ug/L	-0.2897 ppb		11:16:56
2	Ti 334.940†	-1247.0	10.8	0.0184 ug/L	0.0184 ppb		11:18:13
2	Tl 190.801†	-32.9	1.7	0.4765 ug/L	0.4765 ppb		11:18:33
2	U 409.014†	-2695.5	-108.2	-3.1097 ug/L	-3.1097 ppb		11:18:13
2	V 292.402†	-1381.9	-17.4	-0.1066 ug/L	-0.1066 ppb		11:18:13
2	Zn 213.857†	749.9	-4.9	-0.0444 ug/L	-0.0444 ppb		11:18:33
2	SiO2†	585.7	60.5	3.8244 ug/L	3.8244 ppb		11:19:09
3	Sc 361.383	873513.7	873513.7	100.64 %			11:18:38
3	Sc Radial	5529.5	5529.5	99.2 %			11:17:21
3	Y 371.029	733605.4	733605.4	100.57 %			11:18:38
3	Y RADIAL	5996.7	5996.7	99.30 %			11:17:21
3	Ag 328.068†	326.3	50.2	0.2326 ug/L	0.2326 ppb		11:18:38
3	Al 396.153Radial†	-32.8	2.3	1.5538 ug/L	1.5538 ppb		11:17:21
3	As 188.979†	-28.7	2.8	1.0687 ug/L	1.0687 ppb		11:18:58
3	B 249.677†	-285.2	209.8	4.4719 ug/L	4.4719 ppb		11:18:58
3	Ba 233.527†	-12.3	-1.1	-0.0082 ug/L	-0.0082 ppb		11:18:58
3	Be 313.107†	-4603.0	89.1	0.0321 ug/L	0.0321 ppb		11:18:38
3	Ca 317.933Radial†	16.9	0.1	0.1833 ug/L	0.1833 ppb		11:17:41
3	Cd 226.502†	-199.6	0.6	0.0061 ug/L	0.0061 ppb		11:18:58
3	Co 228.616†	-76.0	-2.1	-0.0391 ug/L	-0.0391 ppb		11:18:58
3	Cr 267.716†	79.0	-7.6	-0.0771 ug/L	-0.0771 ppb		11:18:58
3	Cu 324.752†	6812.4	10.9	0.0317 ug/L	0.0317 ppb		11:18:38
3	Fe 238.204 Radial†	9.9	0.1	1.1664 ug/L	1.1664 ppb		11:17:41
3	K 766.490 Radial†	2728.0	11.3	1.9062 ug/L	1.9062 ppb		11:17:21
3	Mg 279.077 IEC†	3.0	1.1	38.007 ug/L	38.007 ppb		11:17:41
3	Mn 257.610†	543.0	19.3	0.0199 ug/L	0.0199 ppb		11:18:58
3	Mo 202.031†	19.4	0.8	0.0534 ug/L	0.0534 ppb		11:18:58
3	Na 589.592 Radial†	-1614.2	-73.6	-22.309 ug/L	-22.309 ppb		11:17:21
3	Ni 231.604†	89.0	2.4	0.0563 ug/L	0.0563 ppb		11:18:58
3	P 214.914†	235.9	-7.7	-4.2936 ug/L	-4.2936 ppb		11:18:58
3	Pb 220.353†	-62.0	6.3	0.7110 ug/L	0.7110 ppb		11:18:58
3	S 181.975 Axial†	42.5	-7.2	-9.5340 ug/L	-9.5340 ppb		11:18:58
3	Sb 206.836†	32.1	-5.5	-1.7119 ug/L	-1.7119 ppb		11:18:58
3	Se 196.026†	-31.9	-4.9	-2.7624 ug/L	-2.7624 ppb		11:18:58
3	Si 251.611†	524.2	39.1	1.1628 ug/L	1.1628 ppb		11:18:58
3	Sn 189.927†	12.1	3.2	0.5085 ug/L	0.5085 ppb		11:18:58
3	Sr 421.552†	-25.5	-25.5	-0.1539 ug/L	-0.1539 ppb		11:17:21
3	Ti 334.940†	-1240.4	23.8	0.0402 ug/L	0.0402 ppb		11:18:38
3	Tl 190.801†	-46.1	-11.3	-3.1726 ug/L	-3.1726 ppb		11:18:58
3	U 409.014†	-2816.5	-214.4	-6.1647 ug/L	-6.1647 ppb		11:18:38
3	V 292.402†	-1369.5	2.0	0.0030 ug/L	0.0030 ppb		11:18:38
3	Zn 213.857†	769.9	11.2	0.0941 ug/L	0.0941 ppb		11:18:58
3	SiO2†	579.8	51.6	3.2857 ug/L	3.2857 ppb		11:19:14

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871173.7	100.38	%	0.262				0.26%
Sc Radial	5564.2	99.8	%	0.77				0.77%
Y 371.029	732587.3	100.43	%	0.134				0.13%
Y RADIAL	6033.7	99.91	%	0.768				0.77%
Ag 328.068†	46.8	0.2136	ug/L	0.13224	0.2136	ppb	0.13224	61.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.8	11.578	ug/L	8.7473	11.578	ppb	8.7473	75.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	0.7185	ug/L	1.02385	0.7185	ppb	1.02385	142.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	203.0	4.3272	ug/L	0.16987	4.3272	ppb	0.16987	3.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.1	-0.0084	ug/L	0.00213	-0.0084	ppb	0.00213	25.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.5	0.0523	ug/L	0.01764	0.0523	ppb	0.01764	33.74%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.2      1.6794 ug/L       2.00260      1.6794 ppb        2.00260 119.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                0.3      0.0039 ug/L       0.00993      0.0039 ppb        0.00993 256.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -6.9     -0.1287 ug/L       0.08042     -0.1287 ppb        0.08042  62.47%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.8      0.0201 ug/L       0.09576      0.0201 ppb        0.09576 477.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                5.7      0.0165 ug/L       0.02006      0.0165 ppb        0.02006 121.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.5     -4.3629 ug/L       8.54236     -4.3629 ppb        8.54236 195.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         75.7      12.712 ug/L       10.3853      12.712 ppb        10.3853  81.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      73.846 ug/L       31.1487      73.846 ppb        31.1487  42.18%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.9      0.0182 ug/L       0.01832      0.0182 ppb        0.01832 100.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                8.8      0.5593 ug/L       0.43831      0.5593 ppb        0.43831  78.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -81.0     -24.534 ug/L        7.4119     -24.534 ppb         7.4119  30.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.5      0.1254 ug/L       0.06896      0.1254 ppb        0.06896  54.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.9     -5.5053 ug/L       2.33463     -5.5053 ppb        2.33463  42.41%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.1      0.3538 ug/L       0.49945      0.3538 ppb        0.49945 141.18%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.1     -4.1209 ug/L       4.69812     -4.1209 ppb        4.69812 114.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.2     -0.6858 ug/L       4.10651     -0.6858 ppb        4.10651 598.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.5     -1.4122 ug/L       1.84594     -1.4122 ppb        1.84594 130.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.3      1.6362 ug/L       0.42468      1.6362 ppb        0.42468  25.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.4     -0.5439 ug/L       0.92085     -0.5439 ppb        0.92085 169.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -31.3     -0.1891 ug/L       0.08845     -0.1891 ppb        0.08845  46.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               14.8      0.0254 ug/L       0.01288      0.0254 ppb        0.01288  50.72%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.7      0.1883 ug/L       3.22645      0.1883 ppb        3.22645 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -147.9     -4.2524 ug/L       1.66656     -4.2524 ppb        1.66656  39.19%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -7.9     -0.0506 ug/L       0.05485     -0.0506 ppb        0.05485 108.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                1.2      0.0076 ug/L       0.07540      0.0076 ppb        0.07540 985.80%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     33.4      2.1053 ug/L       2.52552      2.1053 ppb        2.52552 119.96%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/11/2009 11:21:24
Data Type: Reprocessed on 12/11/2009 12:46:01

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	869577.2	869577.2	100.19	%			11:24:35
1	Sc Radial	4842.6	4842.6	86.9	%			11:23:18
1	Y 371.029	732644.8	732644.8	100.44	%			11:24:35
1	Y RADIAL	5290.9	5290.9	87.61	%			11:23:18
1	Ag 328.068†	1484.8	1207.9	5.4853	ug/L	5.4853	ppb	11:24:35
1	Al 396.153Radial†	270.1	346.3	238.07	ug/L	238.07	ppb	11:23:18
1	As 188.979†	45.7	76.9	29.713	ug/L	29.713	ppb	11:24:55
1	B 249.677†	1805.2	2294.9	48.874	ug/L	48.874	ppb	11:24:35
1	Ba 233.527†	656.4	666.2	4.9940	ug/L	4.9940	ppb	11:24:55
1	Be 313.107†	8959.2	13604.7	4.8949	ug/L	4.8949	ppb	11:24:35
1	Ca 317.933Radial†	156.2	162.9	237.79	ug/L	237.79	ppb	11:23:38
1	Cd 226.502†	291.1	489.5	5.0649	ug/L	5.0649	ppb	11:24:55
1	Co 228.616†	188.2	261.3	4.9417	ug/L	4.9417	ppb	11:24:55
1	Cr 267.716†	549.7	462.6	4.8376	ug/L	4.8376	ppb	11:24:55
1	Cu 324.752†	10209.9	3432.6	9.9779	ug/L	9.9779	ppb	11:24:35
1	Fe 238.204 Radial†	23.2	16.8	150.52	ug/L	150.52	ppb	11:23:38
1	K 766.490 Radial†	3786.4	1620.1	271.59	ug/L	271.59	ppb	11:23:18
1	Mg 279.077 IEC†	11.2	11.0	370.57	ug/L	370.57	ppb	11:23:38
1	Mn 257.610†	10186.4	9646.7	10.232	ug/L	10.232	ppb	11:24:35
1	Mo 202.031†	176.0	157.3	10.020	ug/L	10.020	ppb	11:24:55
1	Na 589.592 Radial†	-576.3	890.6	269.91	ug/L	269.91	ppb	11:23:18
1	Ni 231.604†	329.7	243.2	5.5841	ug/L	5.5841	ppb	11:24:55
1	P 214.914†	488.2	245.2	135.36	ug/L	135.36	ppb	11:24:55
1	Pb 220.353†	16.0	83.9	9.4534	ug/L	9.4534	ppb	11:24:55
1	S 181.975 Axial†	123.8	74.2	97.933	ug/L	97.933	ppb	11:24:55
1	Sb 206.836†	67.5	30.0	9.6730	ug/L	9.6730	ppb	11:24:55
1	Se 196.026†	20.2	47.0	26.973	ug/L	26.973	ppb	11:24:55
1	Si 251.611†	3706.6	3217.8	95.552	ug/L	95.552	ppb	11:24:55
1	Sn 189.927†	52.2	43.3	6.9935	ug/L	6.9935	ppb	11:24:55
1	Sr 421.552†	845.7	974.0	5.8722	ug/L	5.8722	ppb	11:23:18
1	Ti 334.940†	1903.6	3156.2	4.9711	ug/L	4.9711	ppb	11:24:35
1	Tl 190.801†	37.1	71.6	20.243	ug/L	20.243	ppb	11:24:55
1	U 409.014†	-899.4	1686.3	48.455	ug/L	48.455	ppb	11:24:35
1	V 292.402†	-670.0	694.0	4.8329	ug/L	4.8329	ppb	11:24:35
1	Zn 213.857†	1936.5	1179.0	10.067	ug/L	10.067	ppb	11:24:55
1	SiO2†	3854.5	3322.7	211.45	ug/L	211.45	ppb	11:25:51
2	Sc 361.383	867433.3	867433.3	99.944	%			11:25:00
2	Sc Radial	5581.3	5581.3	100	%			11:23:43
2	Y 371.029	729901.6	729901.6	100.06	%			11:25:00
2	Y RADIAL	6092.4	6092.4	100.9	%			11:23:43
2	Ag 328.068†	1380.6	1107.4	5.0231	ug/L	5.0231	ppb	11:25:00
2	Al 396.153Radial†	293.4	328.5	225.78	ug/L	225.78	ppb	11:23:43
2	As 188.979†	51.9	83.2	32.155	ug/L	32.155	ppb	11:25:20
2	B 249.677†	1788.5	2282.7	48.616	ug/L	48.616	ppb	11:25:00
2	Ba 233.527†	665.1	676.6	5.0706	ug/L	5.0706	ppb	11:25:20
2	Be 313.107†	9192.1	13859.8	4.9863	ug/L	4.9863	ppb	11:25:00
2	Ca 317.933Radial†	158.3	141.3	206.21	ug/L	206.21	ppb	11:24:03
2	Cd 226.502†	279.4	478.5	4.9534	ug/L	4.9534	ppb	11:25:20
2	Co 228.616†	178.1	251.7	4.7607	ug/L	4.7607	ppb	11:25:20
2	Cr 267.716†	555.4	469.6	4.9105	ug/L	4.9105	ppb	11:25:20
2	Cu 324.752†	10097.0	3344.8	9.7219	ug/L	9.7219	ppb	11:25:00
2	Fe 238.204 Radial†	24.3	14.4	129.38	ug/L	129.38	ppb	11:24:03
2	K 766.490 Radial†	3728.1	984.8	165.00	ug/L	165.00	ppb	11:23:43
2	Mg 279.077 IEC†	10.0	8.1	272.93	ug/L	272.93	ppb	11:24:03
2	Mn 257.610†	10271.6	9757.1	10.349	ug/L	10.349	ppb	11:25:00
2	Mo 202.031†	178.1	159.8	10.178	ug/L	10.178	ppb	11:25:20
2	Na 589.592 Radial†	-538.0	1016.7	308.11	ug/L	308.11	ppb	11:23:43
2	Ni 231.604†	312.7	226.9	5.2112	ug/L	5.2112	ppb	11:25:20

2	P 214.914†	496.2	254.4	140.61 ug/L	140.61 ppb	11:25:20
2	Pb 220.353†	27.1	95.1	10.699 ug/L	10.699 ppb	11:25:20
2	S 181.975 Axial†	124.6	75.3	99.446 ug/L	99.446 ppb	11:25:20
2	Sb 206.836†	73.8	36.5	11.769 ug/L	11.769 ppb	11:25:20
2	Se 196.026†	26.0	52.8	30.186 ug/L	30.186 ppb	11:25:20
2	Si 251.611†	3692.9	3213.2	95.442 ug/L	95.442 ppb	11:25:20
2	Sn 189.927†	66.8	58.0	9.3598 ug/L	9.3598 ppb	11:25:20
2	Sr 421.552†	852.9	852.3	5.1383 ug/L	5.1383 ppb	11:23:43
2	Ti 334.940†	1843.4	3100.7	4.8813 ug/L	4.8813 ppb	11:25:00
2	Tl 190.801†	30.2	64.8	18.334 ug/L	18.334 ppb	11:25:20
2	U 409.014†	-858.9	1724.6	49.557 ug/L	49.557 ppb	11:25:00
2	V 292.402†	-676.1	686.3	4.7869 ug/L	4.7869 ppb	11:25:00
2	Zn 213.857†	1919.3	1166.5	9.9676 ug/L	9.9676 ppb	11:25:20
2	SiO2†	3846.8	3324.4	211.62 ug/L	211.62 ppb	11:25:56
3	Sc 361.383	881014.9	881014.9	101.51 %		11:25:25
3	Sc Radial	5538.1	5538.1	99.3 %		11:24:08
3	Y 371.029	740744.8	740744.8	101.55 %		11:25:25
3	Y RADIAL	6054.5	6054.5	100.3 %		11:24:08
3	Ag 328.068†	1438.5	1143.1	5.1803 ug/L	5.1803 ppb	11:25:25
3	Al 396.153Radial†	274.4	311.6	214.13 ug/L	214.13 ppb	11:24:08
3	As 188.979†	58.8	89.2	34.480 ug/L	34.480 ppb	11:25:45
3	B 249.677†	1856.1	2321.7	49.451 ug/L	49.451 ppb	11:25:25
3	Ba 233.527†	669.2	670.3	5.0232 ug/L	5.0232 ppb	11:25:45
3	Be 313.107†	9258.8	13783.7	4.9590 ug/L	4.9590 ppb	11:25:25
3	Ca 317.933Radial†	153.8	137.9	201.33 ug/L	201.33 ppb	11:24:28
3	Cd 226.502†	277.4	472.2	4.8893 ug/L	4.8893 ppb	11:25:45
3	Co 228.616†	180.1	250.9	4.7470 ug/L	4.7470 ppb	11:25:45
3	Cr 267.716†	571.0	476.5	4.9824 ug/L	4.9824 ppb	11:25:45
3	Cu 324.752†	10294.2	3383.3	9.8327 ug/L	9.8327 ppb	11:25:25
3	Fe 238.204 Radial†	21.9	12.2	109.35 ug/L	109.35 ppb	11:24:28
3	K 766.490 Radial†	3707.0	992.7	166.32 ug/L	166.32 ppb	11:24:08
3	Mg 279.077 IEC†	11.8	10.0	334.97 ug/L	334.97 ppb	11:24:28
3	Mn 257.610†	10367.7	9693.4	10.278 ug/L	10.278 ppb	11:25:25
3	Mo 202.031†	181.2	160.1	10.198 ug/L	10.198 ppb	11:25:45
3	Na 589.592 Radial†	-596.5	953.6	289.00 ug/L	289.00 ppb	11:24:08
3	Ni 231.604†	309.3	218.8	5.0239 ug/L	5.0239 ppb	11:25:45
3	P 214.914†	479.9	230.7	127.35 ug/L	127.35 ppb	11:25:45
3	Pb 220.353†	37.2	104.6	11.769 ug/L	11.769 ppb	11:25:45
3	S 181.975 Axial†	132.5	81.1	107.13 ug/L	107.13 ppb	11:25:45
3	Sb 206.836†	66.0	27.6	8.9622 ug/L	8.9622 ppb	11:25:45
3	Se 196.026†	27.9	54.3	30.951 ug/L	30.951 ppb	11:25:45
3	Si 251.611†	3731.0	3193.8	94.865 ug/L	94.865 ppb	11:25:45
3	Sn 189.927†	61.6	51.8	8.3624 ug/L	8.3624 ppb	11:25:45
3	Sr 421.552†	820.1	825.9	4.9794 ug/L	4.9794 ppb	11:24:08
3	Ti 334.940†	1869.5	3098.0	4.8776 ug/L	4.8776 ppb	11:25:25
3	Tl 190.801†	30.3	64.4	18.212 ug/L	18.212 ppb	11:25:45
3	U 409.014†	-942.7	1655.3	47.568 ug/L	47.568 ppb	11:25:25
3	V 292.402†	-679.5	693.3	4.8348 ug/L	4.8348 ppb	11:25:25
3	Zn 213.857†	1935.7	1153.1	9.8533 ug/L	9.8533 ppb	11:25:45
3	SiO2†	3816.3	3235.1	205.92 ug/L	205.92 ppb	11:26:01

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	872675.2	100.55	%	0.841				0.84%
Sc Radial	5320.7	95.4	%	7.44				7.79%
Y 371.029	734430.4	100.68	%	0.773				0.77%
Y RADIAL	5812.6	96.25	%	7.488				7.78%
Ag 328.068†	1152.8	5.2296	ug/L	0.23498	5.2296	ppb	0.23498	4.49%
QC value within limits for Ag 328.068 Recovery = 104.59%								
Al 396.153Radial†	328.8	225.99	ug/L	11.970	225.99	ppb	11.970	5.30%
QC value within limits for Al 396.153Radial Recovery = 113.00%								
As 188.979†	83.1	32.116	ug/L	2.3836	32.116	ppb	2.3836	7.42%
QC value within limits for As 188.979 Recovery = 107.05%								
B 249.677†	2299.8	48.981	ug/L	0.4272	48.981	ppb	0.4272	0.87%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	671.1	5.0293	ug/L	0.03861	5.0293	ppb	0.03861	0.77%
QC value within limits for Ba 233.527 Recovery = 100.59%								
Be 313.107†	13749.4	4.9468	ug/L	0.04694	4.9468	ppb	0.04694	0.95%
QC value within limits for Be 313.107 Recovery = 98.94%								

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Ca 317.933Radial†        147.4      215.11 ug/L        19.794      215.11 ppb        19.794   9.20%
   QC value within limits for Ca 317.933Radial  Recovery = 107.56%
Cd 226.502†              480.1      4.9692 ug/L       0.08885      4.9692 ppb       0.08885   1.79%
   QC value within limits for Cd 226.502  Recovery = 99.38%
Co 228.616†              254.6      4.8165 ug/L       0.10864      4.8165 ppb       0.10864   2.26%
   QC value within limits for Co 228.616  Recovery = 96.33%
Cr 267.716†              469.6      4.9101 ug/L       0.07240      4.9101 ppb       0.07240   1.47%
   QC value within limits for Cr 267.716  Recovery = 98.20%
Cu 324.752†             3386.9      9.8442 ug/L       0.12836      9.8442 ppb       0.12836   1.30%
   QC value within limits for Cu 324.752  Recovery = 98.44%
Fe 238.204 Radial†        14.5      129.75 ug/L        20.588      129.75 ppb        20.588  15.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.75%
K 766.490 Radial†       1199.2      200.97 ug/L        61.163      200.97 ppb        61.163  30.43%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 133.98%
Mg 279.077 IEC†           9.7      326.16 ug/L        49.410      326.16 ppb        49.410  15.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.72%
Mn 257.610†             9699.1      10.286 ug/L        0.0588      10.286 ppb        0.0588   0.57%
   QC value within limits for Mn 257.610  Recovery = 102.86%
Mo 202.031†              159.1      10.132 ug/L        0.0975      10.132 ppb        0.0975   0.96%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†       953.6      289.00 ug/L        19.101      289.00 ppb        19.101   6.61%
   QC value within limits for Na 589.592 Radial  Recovery = 96.33%
Ni 231.604†              229.6      5.2731 ug/L       0.28518      5.2731 ppb       0.28518   5.41%
   QC value within limits for Ni 231.604  Recovery = 105.46%
P 214.914†               243.5      134.44 ug/L         6.678      134.44 ppb         6.678   4.97%
   QC value within limits for P 214.914  Recovery = 89.63%
Pb 220.353†               94.5      10.641 ug/L        1.1591      10.641 ppb        1.1591  10.89%
   QC value within limits for Pb 220.353  Recovery = 106.41%
S 181.975 Axial†          76.9      101.50 ug/L         4.930      101.50 ppb         4.930   4.86%
   QC value within limits for S 181.975 Axial  Recovery = 101.50%
Sb 206.836†               31.3      10.135 ug/L        1.4595      10.135 ppb        1.4595  14.40%
   QC value within limits for Sb 206.836  Recovery = 101.35%
Se 196.026†               51.4      29.370 ug/L        2.1103      29.370 ppb        2.1103   7.19%
   QC value within limits for Se 196.026  Recovery = 97.90%
Si 251.611†             3208.3      95.286 ug/L        0.3691      95.286 ppb        0.3691   0.39%
   QC value within limits for Si 251.611  Recovery = 95.29%
Sn 189.927†               51.1      8.2386 ug/L       1.18799      8.2386 ppb       1.18799  14.42%
   QC value within limits for Sn 189.927  Recovery = 82.39%
Sr 421.552†              884.1      5.3300 ug/L       0.47629      5.3300 ppb       0.47629   8.94%
   QC value within limits for Sr 421.552  Recovery = 106.60%
Ti 334.940†             3118.3      4.9100 ug/L       0.05293      4.9100 ppb       0.05293   1.08%
   QC value within limits for Ti 334.940  Recovery = 98.20%
Tl 190.801†               66.9      18.930 ug/L        1.1388      18.930 ppb        1.1388   6.02%
   QC value within limits for Tl 190.801  Recovery = 94.65%
U 409.014†              1688.7      48.527 ug/L        0.9963      48.527 ppb        0.9963   2.05%
   QC value within limits for U 409.014  Recovery = 97.05%
V 292.402†               691.2      4.8182 ug/L       0.02710      4.8182 ppb       0.02710   0.56%
   QC value within limits for V 292.402  Recovery = 96.36%
Zn 213.857†             1166.2      9.9626 ug/L       0.10681      9.9626 ppb       0.10681   1.07%
   QC value within limits for Zn 213.857  Recovery = 99.63%
SiO2†                   3294.1      209.67 ug/L         3.241      209.67 ppb         3.241   1.55%
   QC value within limits for SiO2  Recovery = 98.43%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/11/2009 11:28:12
Data Type: Reprocessed on 12/11/2009 12:46:02

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	756993.4	756993.4	87.220	%			11:30:38
1	Sc Radial	4880.9	4880.9	87.5	%			11:30:10
1	Y 371.029	620548.2	620548.2	85.070	%			11:30:38
1	Y RADIAL	5338.7	5338.7	88.40	%			11:30:10
1	Ag 328.068†	-9919.8	-11647.4	1.5150	ug/L	1.5150	ppb	11:30:38
1	Al 396.153Radial†	689990.2	788262.9	542890	ug/L	542890	ppb	11:30:05
1	As 188.979†	-105.2	-89.4	-4.8296	ug/L	-4.8296	ppb	11:30:58
1	B 249.677†	600.4	1181.6	-0.4812	ug/L	-0.4812	ppb	11:30:38
1	Ba 233.527†	-572.8	-645.6	2.3899	ug/L	2.3899	ppb	11:30:58
1	Be 313.107†	-4945.1	-1007.1	-0.4108	ug/L	-0.4108	ppb	11:30:38
1	Ca 317.933Radial†	302719.8	345802.7	504700	ug/L	504700	ppb	11:30:05
1	Cd 226.502†	1418.0	1824.8	-0.4092	ug/L	-0.4092	ppb	11:30:58
1	Co 228.616†	-4.8	68.0	-1.4714	ug/L	-1.4714	ppb	11:30:58
1	Cr 267.716†	-70.1	-166.4	1.7380	ug/L	1.7380	ppb	11:30:58
1	Cu 324.752†	4107.1	-2048.9	3.9153	ug/L	3.9153	ppb	11:30:38
1	Fe 238.204 Radial†	18907.2	21589.2	193420	ug/L	193420	ppb	11:30:10
1	K 766.490 Radial†	2657.0	295.8	66.366	ug/L	66.366	ppb	11:30:05
1	Mg 279.077 IEC†	13012.5	14863.3	499660	ug/L	499660	ppb	11:30:10
1	Mn 257.610†	1219.3	877.7	10.913	ug/L	10.913	ppb	11:30:38
1	Mo 202.031†	-231.7	-284.0	-4.3540	ug/L	-4.3540	ppb	11:30:58
1	Na 589.592 Radial†	-1428.1	-77.3	-23.415	ug/L	-23.415	ppb	11:30:10
1	Ni 231.604†	240.6	189.9	4.3628	ug/L	4.3628	ppb	11:30:58
1	P 214.914†	197.0	-16.2	18.997	ug/L	18.997	ppb	11:30:58
1	Pb 220.353†	-811.3	-862.2	9.3939	ug/L	9.3939	ppb	11:30:58
1	S 181.975 Axial†	76.0	37.7	-56.928	ug/L	-56.928	ppb	11:30:58
1	Sb 206.836†	86.2	61.4	6.2629	ug/L	6.2629	ppb	11:30:58
1	Se 196.026†	-1040.9	-1166.6	19.008	ug/L	19.008	ppb	11:30:58
1	Si 251.611†	466.9	53.5	2.1022	ug/L	2.1022	ppb	11:30:58
1	Sn 189.927†	-357.2	-418.4	-12.019	ug/L	-12.019	ppb	11:30:58
1	Sr 421.552†	575.5	657.7	-0.7113	ug/L	-0.7113	ppb	11:30:10
1	Ti 334.940†	-14931.3	-15862.9	1.2743	ug/L	1.2743	ppb	11:30:38
1	Tl 190.801†	-93.8	-72.9	-5.9073	ug/L	-5.9073	ppb	11:30:58
1	U 409.014†	-1285.6	1110.0	7.5826	ug/L	7.5826	ppb	11:30:38
1	V 292.402†	1155.9	2688.0	-0.4308	ug/L	-0.4308	ppb	11:30:58
1	Zn 213.857†	3322.4	3055.4	-9.3150	ug/L	-9.3150	ppb	11:30:58
1	SiO2†	472.1	16.8	2.1784	ug/L	2.1784	ppb	11:31:54
2	Sc 361.383	748375.7	748375.7	86.227	%			11:31:03
2	Sc Radial	5137.5	5137.5	92.1	%			11:30:21
2	Y 371.029	613588.1	613588.1	84.116	%			11:31:03
2	Y RADIAL	5544.8	5544.8	91.81	%			11:30:21
2	Ag 328.068†	-10027.9	-11903.8	-1.3768	ug/L	-1.3768	ppb	11:31:03
2	Al 396.153Radial†	643630.0	698570.9	481110	ug/L	481110	ppb	11:30:16
2	As 188.979†	-72.9	-53.2	7.9134	ug/L	7.9134	ppb	11:31:23
2	B 249.677†	650.9	1248.1	1.9790	ug/L	1.9790	ppb	11:31:03
2	Ba 233.527†	-566.8	-646.3	2.0929	ug/L	2.0929	ppb	11:31:23
2	Be 313.107†	-5112.7	-1266.8	-0.5041	ug/L	-0.5041	ppb	11:31:03
2	Ca 317.933Radial†	285126.3	309432.5	451610	ug/L	451610	ppb	11:30:16
2	Cd 226.502†	1400.8	1823.5	0.3625	ug/L	0.3625	ppb	11:31:23
2	Co 228.616†	7.3	81.9	-1.0956	ug/L	-1.0956	ppb	11:31:23
2	Cr 267.716†	-95.1	-196.3	1.2811	ug/L	1.2811	ppb	11:31:23
2	Cu 324.752†	4033.3	-2080.2	3.4233	ug/L	3.4233	ppb	11:31:03
2	Fe 238.204 Radial†	19093.0	20711.9	185560	ug/L	185560	ppb	11:30:21
2	K 766.490 Radial†	2667.1	155.0	40.166	ug/L	40.166	ppb	11:30:16
2	Mg 279.077 IEC†	13097.5	14212.9	477790	ug/L	477790	ppb	11:30:21
2	Mn 257.610†	1083.5	736.5	10.386	ug/L	10.386	ppb	11:31:03
2	Mo 202.031†	-226.6	-281.2	-4.7343	ug/L	-4.7343	ppb	11:31:23
2	Na 589.592 Radial†	-1350.8	88.1	26.712	ug/L	26.712	ppb	11:30:21
2	Ni 231.604†	192.9	137.8	3.1652	ug/L	3.1652	ppb	11:31:23

2	P 214.914†	167.9	-47.4	-13.017 ug/L	-13.017 ppb	11:31:23
2	Pb 220.353†	-834.9	-900.3	-8.0877 ug/L	-8.0877 ppb	11:31:23
2	S 181.975 Axial†	68.2	29.7	-55.392 ug/L	-55.392 ppb	11:31:23
2	Sb 206.836†	67.4	40.8	1.3270 ug/L	1.3270 ppb	11:31:23
2	Se 196.026†	-1013.6	-1148.8	-4.2965 ug/L	-4.2965 ppb	11:31:23
2	Si 251.611†	467.8	60.8	2.3247 ug/L	2.3247 ppb	11:31:23
2	Sn 189.927†	-357.8	-423.8	-18.546 ug/L	-18.546 ppb	11:31:23
2	Sr 421.552†	520.6	565.2	-0.7770 ug/L	-0.7770 ppb	11:30:21
2	Ti 334.940†	-14753.1	-15853.5	-1.4837 ug/L	-1.4837 ppb	11:31:03
2	Tl 190.801†	-62.9	-38.4	2.1377 ug/L	2.1377 ppb	11:31:23
2	U 409.014†	-990.6	1435.1	17.919 ug/L	17.919 ppb	11:31:03
2	V 292.402†	1127.3	2670.1	0.1734 ug/L	0.1734 ppb	11:31:23
2	Zn 213.857†	3343.9	3124.2	-7.2162 ug/L	-7.2162 ppb	11:31:23
2	SiO2†	472.1	23.0	2.5906 ug/L	2.5906 ppb	11:31:59
3	Sc 361.383	731671.0	731671.0	84.302 %		11:31:28
3	Sc Radial	5024.3	5024.3	90.1 %		11:30:31
3	Y 371.029	601193.9	601193.9	82.417 %		11:31:28
3	Y RADIAL	5440.1	5440.1	90.08 %		11:30:31
3	Ag 328.068†	-10018.7	-12158.3	-1.0690 ug/L	-1.0690 ppb	11:31:28
3	Al 396.153Radial†	664641.7	737630.5	508020 ug/L	508020 ppb	11:30:26
3	As 188.979†	-72.7	-54.9	8.1410 ug/L	8.1410 ppb	11:31:48
3	B 249.677†	582.2	1183.8	-0.1430 ug/L	-0.1430 ppb	11:31:28
3	Ba 233.527†	-531.7	-619.6	2.5022 ug/L	2.5022 ppb	11:31:48
3	Be 313.107†	-5001.9	-1270.7	-0.5069 ug/L	-0.5069 ppb	11:31:28
3	Ca 317.933Radial†	294034.9	326292.3	476220 ug/L	476220 ppb	11:30:26
3	Cd 226.502†	1410.2	1871.8	0.2962 ug/L	0.2962 ppb	11:31:48
3	Co 228.616†	-32.8	34.5	-2.0714 ug/L	-2.0714 ppb	11:31:48
3	Cr 267.716†	-82.7	-184.1	1.5151 ug/L	1.5151 ppb	11:31:48
3	Cu 324.752†	4076.9	-1921.8	4.1731 ug/L	4.1731 ppb	11:31:28
3	Fe 238.204 Radial†	19243.2	21345.6	191230 ug/L	191230 ppb	11:30:31
3	K 766.490 Radial†	2570.1	112.6	33.988 ug/L	33.988 ppb	11:30:26
3	Mg 279.077 IEC†	13195.9	14642.4	492230 ug/L	492230 ppb	11:30:31
3	Mn 257.610†	1029.6	701.2	10.646 ug/L	10.646 ppb	11:31:28
3	Mo 202.031†	-233.6	-295.5	-5.2381 ug/L	-5.2381 ppb	11:31:48
3	Na 589.592 Radial†	-1340.0	67.0	20.318 ug/L	20.318 ppb	11:30:31
3	Ni 231.604†	214.7	168.8	3.8778 ug/L	3.8778 ppb	11:31:48
3	P 214.914†	163.9	-47.6	-8.7638 ug/L	-8.7638 ppb	11:31:48
3	Pb 220.353†	-816.2	-900.2	-2.5019 ug/L	-2.5019 ppb	11:31:48
3	S 181.975 Axial†	74.1	38.5	-49.071 ug/L	-49.071 ppb	11:31:48
3	Sb 206.836†	58.8	32.3	-2.1131 ug/L	-2.1131 ppb	11:31:48
3	Se 196.026†	-1038.8	-1205.4	-14.715 ug/L	-14.715 ppb	11:31:48
3	Si 251.611†	431.0	29.5	1.4270 ug/L	1.4270 ppb	11:31:48
3	Sn 189.927†	-376.1	-455.0	-20.917 ug/L	-20.917 ppb	11:31:48
3	Sr 421.552†	554.7	615.8	-0.6998 ug/L	-0.6998 ppb	11:30:31
3	Ti 334.940†	-14815.5	-16318.0	-0.9262 ug/L	-0.9262 ppb	11:31:28
3	Tl 190.801†	-106.1	-91.3	-12.048 ug/L	-12.048 ppb	11:31:48
3	U 409.014†	-1449.0	865.2	0.8188 ug/L	0.8188 ppb	11:31:28
3	V 292.402†	1066.8	2628.1	-0.6876 ug/L	-0.6876 ppb	11:31:48
3	Zn 213.857†	3344.7	3213.7	-7.4880 ug/L	-7.4880 ppb	11:31:48
3	SiO2†	364.7	-91.9	-4.6727 ug/L	-4.6727 ppb	11:32:04

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	745680.1	85.916	%	1.4834				1.73%
Sc Radial	5014.2	89.9	%	2.31				2.57%
Y 371.029	611776.7	83.867	%	1.3439				1.60%
Y RADIAL	5441.2	90.10	%	1.707				1.89%
Ag 328.068†	-11903.1	-0.3103	ug/L	1.58818	-0.3103	ppb	1.58818	511.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	741488.1	510670	ug/L	30971.5	510670	ppb	30971.5	6.06%
QC value within limits for Al 396.153Radial Recovery = 102.13%								
As 188.979†	-65.8	3.7416	ug/L	7.42374	3.7416	ppb	7.42374	198.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1204.5	0.4516	ug/L	1.33353	0.4516	ppb	1.33353	295.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-637.1	2.3283	ug/L	0.21149	2.3283	ppb	0.21149	9.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1181.5	-0.4739	ug/L	0.05467	-0.4739	ppb	0.05467	11.53%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     327175.8      477510 ug/L       26564.5      477510 ppb        26564.5   5.56%
   QC value within limits for Ca 317.933Radial  Recovery = 95.50%
Cd 226.502†             1840.0      0.0832 ug/L       0.42771      0.0832 ppb        0.42771 514.38%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.5     -1.5462 ug/L       0.49217     -1.5462 ppb        0.49217  31.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -182.3      1.5114 ug/L       0.22845      1.5114 ppb        0.22845  15.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -2017.0      3.8372 ug/L       0.38095      3.8372 ppb        0.38095   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     21215.6      190070 ug/L        4057.3      190070 ppb         4057.3   2.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.03%
K 766.490 Radial†        187.8      46.840 ug/L       17.1898      46.840 ppb        17.1898  36.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        14572.9      489890 ug/L       11118.2      489890 ppb        11118.2   2.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.98%
Mn 257.610†              771.8      10.648 ug/L        0.2632      10.648 ppb         0.2632   2.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -286.9     -4.7755 ug/L       0.44349     -4.7755 ppb        0.44349   9.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        26.0      7.8718 ug/L      27.28290      7.8718 ppb       27.28290 346.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              165.5      3.8019 ug/L       0.60243      3.8019 ppb        0.60243  15.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -37.1     -0.9278 ug/L      17.38629     -0.9278 ppb       17.38629 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -887.6     -0.3986 ug/L       8.92859     -0.3986 ppb        8.92859 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          35.3     -53.797 ug/L        4.1643     -53.797 ppb         4.1643   7.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               44.9      1.8256 ug/L       4.21020      1.8256 ppb        4.21020 230.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1173.6     -0.0013 ug/L      17.26716     -0.0013 ppb       17.26716 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               47.9      1.9513 ug/L       0.46751      1.9513 ppb        0.46751  23.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -432.4     -17.161 ug/L        4.6077     -17.161 ppb         4.6077  26.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              612.9     -0.7293 ug/L       0.04164     -0.7293 ppb        0.04164   5.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16011.5     -0.3785 ug/L       1.45827     -0.3785 ppb        1.45827 385.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -67.5     -5.2725 ug/L       7.11413     -5.2725 ppb        7.11413 134.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1136.8      8.7736 ug/L       8.61226      8.7736 ppb        8.61226  98.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2662.1     -0.3150 ug/L       0.44201     -0.3150 ppb        0.44201 140.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3131.1     -8.0064 ug/L       1.14141     -8.0064 ppb        1.14141  14.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -17.3      0.0321 ug/L       4.07969      0.0321 ppb        4.07969 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/11/2009 11:34:15
Data Type: Reprocessed on 12/11/2009 12:46:03

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	758951.0	758951.0	87.445	%			11:36:41
1	Sc Radial	4987.2	4987.2	89.4	%			11:36:13
1	Y 371.029	621080.9	621080.9	85.143	%			11:36:41
1	Y RADIAL	5400.8	5400.8	89.43	%			11:36:13
1	Ag 328.068†	42647.1	48496.1	274.60	ug/L	274.60	ppb	11:36:41
1	Al 396.153Radial†	660949.3	738982.6	508930	ug/L	508930	ppb	11:36:08
1	As 188.979†	1049.6	1231.6	508.39	ug/L	508.39	ppb	11:37:01
1	B 249.677†	21526.7	25110.5	508.75	ug/L	508.75	ppb	11:36:41
1	Ba 233.527†	57172.2	65391.7	496.83	ug/L	496.83	ppb	11:36:41
1	Be 313.107†	582917.2	671270.9	242.00	ug/L	242.00	ppb	11:36:41
1	Ca 317.933Radial†	289405.7	323541.3	472210	ug/L	472210	ppb	11:36:08
1	Cd 226.502†	40964.3	47044.6	469.17	ug/L	469.17	ppb	11:36:41
1	Co 228.616†	20702.3	23748.1	445.38	ug/L	445.38	ppb	11:37:01
1	Cr 267.716†	39985.1	45639.8	481.89	ug/L	481.89	ppb	11:36:41
1	Cu 324.752†	171387.9	189236.7	559.36	ug/L	559.36	ppb	11:36:41
1	Fe 238.204 Radial†	19000.6	21233.0	190240	ug/L	190240	ppb	11:36:13
1	K 766.490 Radial†	31877.7	32900.0	5528.6	ug/L	5528.6	ppb	11:36:08
1	Mg 279.077 IEC†	13124.0	14670.8	493200	ug/L	493200	ppb	11:36:13
1	Mn 257.610†	396615.6	453038.6	489.93	ug/L	489.93	ppb	11:36:41
1	Mo 202.031†	6533.4	7453.0	487.78	ug/L	487.78	ppb	11:37:01
1	Na 589.592 Radial†	15252.2	18606.2	5638.8	ug/L	5638.8	ppb	11:36:13
1	Ni 231.604†	17062.5	19426.2	446.10	ug/L	446.10	ppb	11:37:01
1	P 214.914†	4156.3	4511.0	2455.5	ug/L	2455.5	ppb	11:37:01
1	Pb 220.353†	2780.9	3248.2	462.94	ug/L	462.94	ppb	11:37:01
1	S 181.975 Axial†	1860.9	2078.6	2646.2	ug/L	2646.2	ppb	11:37:01
1	Sb 206.836†	1514.6	1694.6	530.20	ug/L	530.20	ppb	11:37:01
1	Se 196.026†	2895.9	3338.4	2540.1	ug/L	2540.1	ppb	11:37:01
1	Si 251.611†	154917.7	176677.9	5250.8	ug/L	5250.8	ppb	11:36:41
1	Sn 189.927†	2316.7	2640.5	476.61	ug/L	476.61	ppb	11:37:01
1	Sr 421.552†	76362.9	85374.7	510.54	ug/L	510.54	ppb	11:36:08
1	Ti 334.940†	268916.2	308781.5	511.62	ug/L	511.62	ppb	11:36:41
1	Tl 190.801†	1350.0	1578.3	461.73	ug/L	461.73	ppb	11:37:01
1	U 409.014†	13317.1	17813.1	487.28	ug/L	487.28	ppb	11:36:41
1	V 292.402†	66843.3	77803.0	506.91	ug/L	506.91	ppb	11:36:41
1	Zn 213.857†	53716.7	60675.1	483.37	ug/L	483.37	ppb	11:36:41
1	SiO2†	156111.1	178000.0	11337	ug/L	11337	ppb	11:37:58
2	Sc 361.383	760073.7	760073.7	87.575	%			11:37:07
2	Sc Radial	5036.8	5036.8	90.3	%			11:36:23
2	Y 371.029	622660.3	622660.3	85.359	%			11:37:07
2	Y RADIAL	5470.1	5470.1	90.58	%			11:36:23
2	Ag 328.068†	42822.9	48624.8	275.06	ug/L	275.06	ppb	11:37:07
2	Al 396.153Radial†	668783.0	740388.7	509890	ug/L	509890	ppb	11:36:18
2	As 188.979†	1057.7	1239.1	511.27	ug/L	511.27	ppb	11:37:27
2	B 249.677†	21772.6	25355.0	514.00	ug/L	514.00	ppb	11:37:07
2	Ba 233.527†	57342.2	65489.2	497.55	ug/L	497.55	ppb	11:37:07
2	Be 313.107†	584422.8	672005.6	242.26	ug/L	242.26	ppb	11:37:07
2	Ca 317.933Radial†	293875.9	325308.4	474790	ug/L	474790	ppb	11:36:18
2	Cd 226.502†	41033.4	47054.3	469.30	ug/L	469.30	ppb	11:37:07
2	Co 228.616†	20775.3	23796.5	446.31	ug/L	446.31	ppb	11:37:27
2	Cr 267.716†	40113.5	45718.9	482.71	ug/L	482.71	ppb	11:37:07
2	Cu 324.752†	171912.4	189546.1	560.25	ug/L	560.25	ppb	11:37:07
2	Fe 238.204 Radial†	19164.0	21205.0	189990	ug/L	189990	ppb	11:36:23
2	K 766.490 Radial†	32285.0	33000.4	5545.3	ug/L	5545.3	ppb	11:36:18
2	Mg 279.077 IEC†	13200.4	14611.1	491190	ug/L	491190	ppb	11:36:23
2	Mn 257.610†	397691.3	453597.1	490.53	ug/L	490.53	ppb	11:37:07
2	Mo 202.031†	6575.2	7489.6	490.09	ug/L	490.09	ppb	11:37:27
2	Na 589.592 Radial†	15268.6	18456.7	5593.5	ug/L	5593.5	ppb	11:36:23
2	Ni 231.604†	17120.7	19463.9	446.97	ug/L	446.97	ppb	11:37:27

2	P 214.914†	4170.4	4520.0	2461.0 ug/L	2461.0 ppb	11:37:27
2	Pb 220.353†	2775.6	3237.4	461.98 ug/L	461.98 ppb	11:37:27
2	S 181.975 Axial†	1850.2	2063.3	2625.7 ug/L	2625.7 ppb	11:37:27
2	Sb 206.836†	1535.4	1715.9	536.97 ug/L	536.97 ppb	11:37:27
2	Se 196.026†	2927.9	3370.1	2557.4 ug/L	2557.4 ppb	11:37:27
2	Si 251.611†	155531.8	177117.5	5263.8 ug/L	5263.8 ppb	11:37:07
2	Sn 189.927†	2340.2	2663.4	480.56 ug/L	480.56 ppb	11:37:27
2	Sr 421.552†	77355.4	85633.9	512.08 ug/L	512.08 ppb	11:36:18
2	Ti 334.940†	269367.0	308842.1	511.85 ug/L	511.85 ppb	11:37:07
2	Tl 190.801†	1353.2	1579.7	462.15 ug/L	462.15 ppb	11:37:27
2	U 409.014†	13457.9	17951.4	491.29 ug/L	491.29 ppb	11:37:07
2	V 292.402†	66938.6	77798.8	506.92 ug/L	506.92 ppb	11:37:07
2	Zn 213.857†	53878.9	60769.5	484.27 ug/L	484.27 ppb	11:37:07
2	SiO2†	154326.5	175698.4	11189 ug/L	11189 ppb	11:38:04
3	Sc 361.383	753121.3	753121.3	86.774 %		11:37:33
3	Sc Radial	4947.8	4947.8	88.7 %		11:36:33
3	Y 371.029	616563.3	616563.3	84.524 %		11:37:33
3	Y RADIAL	5419.6	5419.6	89.74 %		11:36:33
3	Ag 328.068†	42451.5	48648.2	275.53 ug/L	275.53 ppb	11:37:33
3	Al 396.153Radial†	669785.4	754825.5	519840 ug/L	519840 ppb	11:36:28
3	As 188.979†	1063.9	1257.4	518.56 ug/L	518.56 ppb	11:37:53
3	B 249.677†	21521.5	25295.1	512.51 ug/L	512.51 ppb	11:37:33
3	Ba 233.527†	56818.0	65489.6	497.61 ug/L	497.61 ppb	11:37:33
3	Be 313.107†	578443.8	671275.7	242.00 ug/L	242.00 ppb	11:37:33
3	Ca 317.933Radial†	293749.8	331013.8	483110 ug/L	483110 ppb	11:36:28
3	Cd 226.502†	40771.4	47184.9	470.51 ug/L	470.51 ppb	11:37:33
3	Co 228.616†	20701.7	23930.6	448.82 ug/L	448.82 ppb	11:37:53
3	Cr 267.716†	39768.4	45744.0	483.00 ug/L	483.00 ppb	11:37:33
3	Cu 324.752†	169859.6	188992.6	558.72 ug/L	558.72 ppb	11:37:33
3	Fe 238.204 Radial†	18976.5	21375.0	191510 ug/L	191510 ppb	11:36:33
3	K 766.490 Radial†	32308.4	33669.2	5657.9 ug/L	5657.9 ppb	11:36:28
3	Mg 279.077 IEC†	13082.5	14741.0	495550 ug/L	495550 ppb	11:36:33
3	Mn 257.610†	394294.3	453874.5	490.90 ug/L	490.90 ppb	11:37:33
3	Mo 202.031†	6534.9	7512.6	491.66 ug/L	491.66 ppb	11:37:53
3	Na 589.592 Radial†	15175.1	18655.2	5653.6 ug/L	5653.6 ppb	11:36:33
3	Ni 231.604†	17057.9	19572.1	449.45 ug/L	449.45 ppb	11:37:53
3	P 214.914†	4154.4	4545.6	2477.7 ug/L	2477.7 ppb	11:37:53
3	Pb 220.353†	2759.8	3248.5	465.32 ug/L	465.32 ppb	11:37:53
3	S 181.975 Axial†	1869.6	2105.2	2679.0 ug/L	2679.0 ppb	11:37:53
3	Sb 206.836†	1520.7	1715.1	536.53 ug/L	536.53 ppb	11:37:53
3	Se 196.026†	2889.0	3356.2	2555.7 ug/L	2555.7 ppb	11:37:53
3	Si 251.611†	153939.2	176921.7	5257.9 ug/L	5257.9 ppb	11:37:33
3	Sn 189.927†	2327.8	2673.7	483.12 ug/L	483.12 ppb	11:37:53
3	Sr 421.552†	77374.4	87194.4	521.41 ug/L	521.41 ppb	11:36:28
3	Ti 334.940†	267159.7	309137.7	512.75 ug/L	512.75 ppb	11:37:33
3	Tl 190.801†	1350.3	1590.7	465.49 ug/L	465.49 ppb	11:37:53
3	U 409.014†	13410.7	18038.8	493.61 ug/L	493.61 ppb	11:37:33
3	V 292.402†	66385.9	77867.5	507.27 ug/L	507.27 ppb	11:37:33
3	Zn 213.857†	53341.8	60718.6	483.52 ug/L	483.52 ppb	11:37:33
3	SiO2†	156041.1	179301.1	11419 ug/L	11419 ppb	11:38:09

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757382.0	87.264	%	0.4300				0.49%
Sc Radial	4990.6	89.5	%	0.80				0.89%
Y 371.029	620101.5	85.009	%	0.4338				0.51%
Y RADIAL	5430.1	89.92	%	0.593				0.66%
Ag 328.068†	48589.7	275.06	ug/L	0.465	275.06	ppb	0.465	0.17%
QC value within limits for Ag 328.068 Recovery = 110.02%								
Al 396.153Radial†	744732.3	512880	ug/L	6039.4	512880	ppb	6039.4	1.18%
QC value within limits for Al 396.153Radial Recovery = 102.58%								
As 188.979†	1242.7	512.74	ug/L	5.241	512.74	ppb	5.241	1.02%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	25253.5	511.75	ug/L	2.701	511.75	ppb	2.701	0.53%
QC value within limits for B 249.677 Recovery = 102.35%								
Ba 233.527†	65456.8	497.33	ug/L	0.434	497.33	ppb	0.434	0.09%
QC value within limits for Ba 233.527 Recovery = 99.47%								
Be 313.107†	671517.4	242.08	ug/L	0.152	242.08	ppb	0.152	0.06%
QC value within limits for Be 313.107 Recovery = 96.83%								

Ca 317.933Radial†	326621.2	476700 ug/L	5699.8	476700 ppb	5699.8	1.20%
QC value within limits for Ca 317.933Radial Recovery = 95.34%						
Cd 226.502†	47094.6	469.66 ug/L	0.734	469.66 ppb	0.734	0.16%
QC value within limits for Cd 226.502 Recovery = 93.93%						
Co 228.616†	23825.1	446.84 ug/L	1.777	446.84 ppb	1.777	0.40%
QC value within limits for Co 228.616 Recovery = 89.37%						
Cr 267.716†	45700.9	482.54 ug/L	0.577	482.54 ppb	0.577	0.12%
QC value within limits for Cr 267.716 Recovery = 96.51%						
Cu 324.752†	189258.5	559.44 ug/L	0.768	559.44 ppb	0.768	0.14%
QC value within limits for Cu 324.752 Recovery = 111.89%						
Fe 238.204 Radial†	21271.0	190580 ug/L	816.7	190580 ppb	816.7	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 95.29%						
K 766.490 Radial†	33189.9	5577.3 ug/L	70.35	5577.3 ppb	70.35	1.26%
QC value within limits for K 766.490 Radial Recovery = 111.55%						
Mg 279.077 IEC†	14674.3	493310 ug/L	2184.9	493310 ppb	2184.9	0.44%
QC value within limits for Mg 279.077 IEC Recovery = 98.66%						
Mn 257.610†	453503.4	490.45 ug/L	0.489	490.45 ppb	0.489	0.10%
QC value within limits for Mn 257.610 Recovery = 98.09%						
Mo 202.031†	7485.1	489.84 ug/L	1.955	489.84 ppb	1.955	0.40%
QC value within limits for Mo 202.031 Recovery = 97.97%						
Na 589.592 Radial†	18572.7	5628.6 ug/L	31.33	5628.6 ppb	31.33	0.56%
QC value within limits for Na 589.592 Radial Recovery = 112.57%						
Ni 231.604†	19487.4	447.51 ug/L	1.739	447.51 ppb	1.739	0.39%
QC value within limits for Ni 231.604 Recovery = 89.50%						
P 214.914†	4525.5	2464.7 ug/L	11.55	2464.7 ppb	11.55	0.47%
QC value within limits for P 214.914 Recovery = 98.59%						
Pb 220.353†	3244.7	463.41 ug/L	1.722	463.41 ppb	1.722	0.37%
QC value within limits for Pb 220.353 Recovery = 92.68%						
S 181.975 Axial†	2082.4	2650.3 ug/L	26.93	2650.3 ppb	26.93	1.02%
QC value within limits for S 181.975 Axial Recovery = 106.01%						
Sb 206.836†	1708.5	534.57 ug/L	3.789	534.57 ppb	3.789	0.71%
QC value within limits for Sb 206.836 Recovery = 106.91%						
Se 196.026†	3354.9	2551.1 ug/L	9.50	2551.1 ppb	9.50	0.37%
QC value within limits for Se 196.026 Recovery = 102.04%						
Si 251.611†	176905.7	5257.5 ug/L	6.53	5257.5 ppb	6.53	0.12%
QC value within limits for Si 251.611 Recovery = 105.15%						
Sn 189.927†	2659.2	480.10 ug/L	3.278	480.10 ppb	3.278	0.68%
QC value within limits for Sn 189.927 Recovery = 96.02%						
Sr 421.552†	86067.7	514.68 ug/L	5.884	514.68 ppb	5.884	1.14%
QC value within limits for Sr 421.552 Recovery = 102.94%						
Ti 334.940†	308920.4	512.07 ug/L	0.596	512.07 ppb	0.596	0.12%
QC value within limits for Ti 334.940 Recovery = 102.41%						
Tl 190.801†	1582.9	463.12 ug/L	2.059	463.12 ppb	2.059	0.44%
QC value within limits for Tl 190.801 Recovery = 92.62%						
U 409.014†	17934.4	490.73 ug/L	3.200	490.73 ppb	3.200	0.65%
QC value within limits for U 409.014 Recovery = 98.15%						
V 292.402†	77823.1	507.03 ug/L	0.203	507.03 ppb	0.203	0.04%
QC value within limits for V 292.402 Recovery = 101.41%						
Zn 213.857†	60721.1	483.72 ug/L	0.481	483.72 ppb	0.481	0.10%
QC value within limits for Zn 213.857 Recovery = 96.74%						
SiO2†	177666.5	11315 ug/L	116.4	11315 ppb	116.4	1.03%
QC value within limits for SiO2 Recovery = 105.80%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/11/2009 11:40:18
Data Type: Reprocessed on 12/11/2009 12:46:04

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	740552.4	740552.4	85.325	%			11:42:45
1	Sc Radial	4969.6	4969.6	89.1	%			11:42:16
1	Y 371.029	607165.9	607165.9	83.235	%			11:42:45
1	Y RADIAL	5424.0	5424.0	89.81	%			11:42:16
1	Ag 328.068†	-23489.1	-27802.9	-2.8641	ug/L	-2.8641	ppb	11:42:45
1	Al 396.153Radial†	644142.1	722747.2	497770	ug/L	497770	ppb	11:42:11
1	As 188.979†	-201.4	-204.8	-10.167	ug/L	-10.167	ppb	11:43:05
1	B 249.677†	1984.5	2819.0	0.8022	ug/L	0.8022	ppb	11:42:45
1	Ba 233.527†	-1613.5	-1879.9	2.5961	ug/L	2.5961	ppb	11:43:05
1	Be 313.107†	-11598.1	-8930.2	-3.2347	ug/L	-3.2347	ppb	11:42:45
1	Ca 317.933Radial†	284191.5	318839.1	465340	ug/L	465340	ppb	11:42:11
1	Cd 226.502†	3571.9	4385.1	0.8224	ug/L	0.8224	ppb	11:43:05
1	Co 228.616†	194.7	301.7	-0.7620	ug/L	-0.7620	ppb	11:43:05
1	Cr 267.716†	42.7	-36.0	2.9304	ug/L	2.9304	ppb	11:43:05
1	Cu 324.752†	1283.7	-5253.3	7.5286	ug/L	7.5286	ppb	11:42:45
1	Fe 238.204 Radial†	44449.7	49861.6	446710	ug/L	446710	ppb	11:42:16
1	K 766.490 Radial†	3284.2	945.3	-49.160	ug/L	-49.160	ppb	11:42:11
1	Mg 279.077 IEC†	12857.3	14423.7	484660	ug/L	484660	ppb	11:42:16
1	Mn 257.610†	-23452.1	-28005.7	5.8356	ug/L	5.8356	ppb	11:42:45
1	Mo 202.031†	-533.6	-643.7	-9.2781	ug/L	-9.2781	ppb	11:43:05
1	Na 589.592 Radial†	1542374.9	1732061.6	524920	ug/L	524920	ppb	11:42:11
1	Ni 231.604†	297.4	262.6	6.0309	ug/L	6.0309	ppb	11:43:05
1	P 214.914†	601.0	462.3	67.963	ug/L	67.963	ppb	11:43:05
1	Pb 220.353†	-588.5	-621.7	5.3514	ug/L	5.3514	ppb	11:43:05
1	S 181.975 Axial†	129.4	102.3	37.240	ug/L	37.240	ppb	11:43:05
1	Sb 206.836†	52.1	23.7	-1.0104	ug/L	-1.0104	ppb	11:43:05
1	Se 196.026†	-2373.2	-2754.5	-102.71	ug/L	-102.71	ppb	11:43:05
1	Si 251.611†	-568.9	-1148.5	-33.299	ug/L	-33.299	ppb	11:43:05
1	Sn 189.927†	-412.7	-492.5	-24.674	ug/L	-24.674	ppb	11:43:05
1	Sr 421.552†	806.9	905.5	1.1481	ug/L	1.1481	ppb	11:42:16
1	Ti 334.940†	-8809.8	-9068.7	3.4577	ug/L	3.4577	ppb	11:42:45
1	Tl 190.801†	-125.0	-111.9	-18.286	ug/L	-18.286	ppb	11:43:05
1	U 409.014†	434877.4	512253.5	14671	ug/L	14671	ppb	11:42:45
1	V 292.402†	3110.2	5007.9	4.3404	ug/L	4.3404	ppb	11:42:45
1	Zn 213.857†	6282.7	6609.4	-2.4207	ug/L	-2.4207	ppb	11:43:05
1	SiO2†	-560.3	-1181.2	-73.425	ug/L	-73.425	ppb	11:44:02
2	Sc 361.383	731220.0	731220.0	84.250	%			11:43:10
2	Sc Radial	4811.2	4811.2	86.3	%			11:42:27
2	Y 371.029	599802.7	599802.7	82.226	%			11:43:10
2	Y RADIAL	5273.6	5273.6	87.32	%			11:42:27
2	Ag 328.068†	-22989.1	-27560.7	-0.4938	ug/L	-0.4938	ppb	11:43:10
2	Al 396.153Radial†	654324.4	758342.3	522280	ug/L	522280	ppb	11:42:22
2	As 188.979†	-189.0	-193.1	-4.8776	ug/L	-4.8776	ppb	11:43:31
2	B 249.677†	1680.6	2487.9	-6.9076	ug/L	-6.9076	ppb	11:43:10
2	Ba 233.527†	-1578.3	-1862.2	2.9075	ug/L	2.9075	ppb	11:43:31
2	Be 313.107†	-11555.5	-9053.0	-3.2781	ug/L	-3.2781	ppb	11:43:10
2	Ca 317.933Radial†	287901.6	333636.9	486940	ug/L	486940	ppb	11:42:22
2	Cd 226.502†	3576.5	4444.1	0.9420	ug/L	0.9420	ppb	11:43:31
2	Co 228.616†	205.6	317.5	-0.5340	ug/L	-0.5340	ppb	11:43:31
2	Cr 267.716†	39.3	-39.4	2.9922	ug/L	2.9922	ppb	11:43:31
2	Cu 324.752†	1345.1	-5161.3	8.0471	ug/L	8.0471	ppb	11:43:10
2	Fe 238.204 Radial†	43507.1	50411.2	451630	ug/L	451630	ppb	11:42:27
2	K 766.490 Radial†	3352.4	1145.6	-25.351	ug/L	-25.351	ppb	11:42:22
2	Mg 279.077 IEC†	12571.2	14567.0	489470	ug/L	489470	ppb	11:42:27
2	Mn 257.610†	-23090.5	-27927.3	6.3199	ug/L	6.3199	ppb	11:43:10
2	Mo 202.031†	-519.0	-634.4	-8.3347	ug/L	-8.3347	ppb	11:43:31
2	Na 589.592 Radial†	1563595.8	1813630.2	549640	ug/L	549640	ppb	11:42:22
2	Ni 231.604†	306.0	277.3	6.3685	ug/L	6.3685	ppb	11:43:31

2	P 214.914†	575.4	440.9	60.292	ug/L	60.292 ppb	11:43:31
2	Pb 220.353†	-591.1	-633.6	9.1208	ug/L	9.1208 ppb	11:43:31
2	S 181.975 Axial†	121.8	95.2	23.018	ug/L	23.018 ppb	11:43:31
2	Sb 206.836†	70.4	46.2	5.5298	ug/L	5.5298 ppb	11:43:31
2	Se 196.026†	-2383.3	-2802.0	-110.63	ug/L	-110.63 ppb	11:43:31
2	Si 251.611†	-547.0	-1131.0	-32.801	ug/L	-32.801 ppb	11:43:31
2	Sn 189.927†	-404.0	-488.4	-21.688	ug/L	-21.688 ppb	11:43:31
2	Sr 421.552†	781.2	905.6	0.9485	ug/L	0.9485 ppb	11:42:27
2	Ti 334.940†	-8483.5	-8813.2	5.0026	ug/L	5.0026 ppb	11:43:10
2	Tl 190.801†	-107.4	-92.9	-12.247	ug/L	-12.247 ppb	11:43:31
2	U 409.014†	428397.3	511066.8	14637	ug/L	14637 ppb	11:43:10
2	V 292.402†	2914.2	4821.7	2.4034	ug/L	2.4034 ppb	11:43:10
2	Zn 213.857†	6285.7	6707.0	-2.2191	ug/L	-2.2191 ppb	11:43:31
2	SiO2†	-609.5	-1247.9	-77.734	ug/L	-77.734 ppb	11:44:07
3	Sc 361.383	733959.0	733959.0	84.566	%		11:43:36
3	Sc Radial	4847.4	4847.4	86.9	%		11:42:38
3	Y 371.029	603107.7	603107.7	82.679	%		11:43:36
3	Y RADIAL	5267.1	5267.1	87.22	%		11:42:38
3	Ag 328.068†	-23001.8	-27473.9	0.0752	ug/L	0.0752 ppb	11:43:36
3	Al 396.153Radial†	642180.4	738704.7	508760	ug/L	508760 ppb	11:42:33
3	As 188.979†	-201.1	-206.5	-10.095	ug/L	-10.095 ppb	11:43:56
3	B 249.677†	1627.2	2417.4	-8.3983	ug/L	-8.3983 ppb	11:43:36
3	Ba 233.527†	-1605.5	-1887.4	2.7148	ug/L	2.7148 ppb	11:43:56
3	Be 313.107†	-11402.2	-8820.6	-3.1955	ug/L	-3.1955 ppb	11:43:36
3	Ca 317.933Radial†	282744.6	325210.7	474640	ug/L	474640 ppb	11:42:33
3	Cd 226.502†	3580.9	4433.3	0.8396	ug/L	0.8396 ppb	11:43:56
3	Co 228.616†	208.9	320.5	-0.4742	ug/L	-0.4742 ppb	11:43:56
3	Cr 267.716†	-1.4	-87.7	2.4940	ug/L	2.4940 ppb	11:43:56
3	Cu 324.752†	1152.4	-5395.1	7.3634	ug/L	7.3634 ppb	11:43:36
3	Fe 238.204 Radial†	43826.3	50401.4	451550	ug/L	451550 ppb	11:42:38
3	K 766.490 Radial†	3322.7	1082.4	-30.604	ug/L	-30.604 ppb	11:42:33
3	Mg 279.077 IEC†	12659.1	14559.3	489210	ug/L	489210 ppb	11:42:38
3	Mn 257.610†	-23139.4	-27882.8	6.3632	ug/L	6.3632 ppb	11:43:36
3	Mo 202.031†	-519.4	-632.6	-8.2254	ug/L	-8.2254 ppb	11:43:56
3	Na 589.592 Radial†	1537159.2	1769674.9	536320	ug/L	536320 ppb	11:42:33
3	Ni 231.604†	313.0	284.2	6.5265	ug/L	6.5265 ppb	11:43:56
3	P 214.914†	574.5	437.3	53.897	ug/L	53.897 ppb	11:43:56
3	Pb 220.353†	-582.2	-620.5	7.5575	ug/L	7.5575 ppb	11:43:56
3	S 181.975 Axial†	122.3	95.2	25.688	ug/L	25.688 ppb	11:43:56
3	Sb 206.836†	69.5	44.8	5.4590	ug/L	5.4590 ppb	11:43:56
3	Se 196.026†	-2374.6	-2781.2	-101.23	ug/L	-101.23 ppb	11:43:56
3	Si 251.611†	-568.1	-1153.6	-33.468	ug/L	-33.468 ppb	11:43:56
3	Sn 189.927†	-412.6	-496.7	-24.312	ug/L	-24.312 ppb	11:43:56
3	Sr 421.552†	811.0	933.0	1.2279	ug/L	1.2279 ppb	11:42:38
3	Ti 334.940†	-8748.4	-9088.9	3.9399	ug/L	3.9399 ppb	11:43:36
3	Tl 190.801†	-111.6	-97.4	-13.906	ug/L	-13.906 ppb	11:43:56
3	U 409.014†	429086.3	509984.0	14606	ug/L	14606 ppb	11:43:36
3	V 292.402†	2838.4	4719.2	1.6707	ug/L	1.6707 ppb	11:43:36
3	Zn 213.857†	6258.4	6646.8	-2.7197	ug/L	-2.7197 ppb	11:43:56
3	SiO2†	-683.4	-1332.6	-83.127	ug/L	-83.127 ppb	11:44:12

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	735243.8	84.714	%	0.5527				0.65%
Sc Radial	4876.1	87.5	%	1.49				1.70%
Y 371.029	603358.7	82.713	%	0.5056				0.61%
Y RADIAL	5321.5	88.12	%	1.470				1.67%
Ag 328.068†	-27612.5	-1.0942	ug/L	1.55893	-1.0942	ppb	1.55893	142.47%
Al 396.153Radial†	739931.4	509600	ug/L	12279.1	509600	ppb	12279.1	2.41%
QC value within limits for Al 396.153Radial Recovery = 101.92%								
As 188.979†	-201.5	-8.3797	ug/L	3.03311	-8.3797	ppb	3.03311	36.20%
B 249.677†	2574.8	-4.8346	ug/L	4.93817	-4.8346	ppb	4.93817	102.14%
Ba 233.527†	-1876.5	2.7395	ug/L	0.15716	2.7395	ppb	0.15716	5.74%
Be 313.107†	-8934.6	-3.2361	ug/L	0.04133	-3.2361	ppb	0.04133	1.28%
Ca 317.933Radial†	325895.6	475640	ug/L	10833.3	475640	ppb	10833.3	2.28%
QC value within limits for Ca 317.933Radial Recovery = 95.13%								
Cd 226.502†	4420.8	0.8680	ug/L	0.06461	0.8680	ppb	0.06461	7.44%
Co 228.616†	313.2	-0.5900	ug/L	0.15184	-0.5900	ppb	0.15184	25.73%
Cr 267.716†	-54.4	2.8055	ug/L	0.27155	2.8055	ppb	0.27155	9.68%

Cu 324.752†	-5269.9	7.6464	ug/L	0.35675	7.6464	ppb	0.35675	4.67%
Fe 238.204 Radial†	50224.7	449960	ug/L	2817.5	449960	ppb	2817.5	0.63%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.99%								
K 766.490 Radial†	1057.8	-35.039	ug/L	12.5088	-35.039	ppb	12.5088	35.70%
Mg 279.077 IEC†	14516.7	487780	ug/L	2708.0	487780	ppb	2708.0	0.56%
QC value within limits for Mg 279.077 IEC Recovery = 97.56%								
Mn 257.610†	-27938.6	6.1729	ug/L	0.29292	6.1729	ppb	0.29292	4.75%
Mo 202.031†	-636.9	-8.6128	ug/L	0.57883	-8.6128	ppb	0.57883	6.72%
Na 589.592 Radial†	1771788.9	536960	ug/L	12372.5	536960	ppb	12372.5	2.30%
QC value within limits for Na 589.592 Radial Recovery = 107.39%								
Ni 231.604†	274.7	6.3086	ug/L	0.25318	6.3086	ppb	0.25318	4.01%
P 214.914†	446.9	60.717	ug/L	7.0429	60.717	ppb	7.0429	11.60%
Pb 220.353†	-625.3	7.3432	ug/L	1.89385	7.3432	ppb	1.89385	25.79%
S 181.975 Axial†	97.6	28.649	ug/L	7.5591	28.649	ppb	7.5591	26.39%
Sb 206.836†	38.2	3.3262	ug/L	3.75571	3.3262	ppb	3.75571	112.91%
Se 196.026†	-2779.3	-104.85	ug/L	5.054	-104.85	ppb	5.054	4.82%
Si 251.611†	-1144.3	-33.189	ug/L	0.3467	-33.189	ppb	0.3467	1.04%
Sn 189.927†	-492.6	-23.558	ug/L	1.6298	-23.558	ppb	1.6298	6.92%
Sr 421.552†	914.7	1.1082	ug/L	0.14389	1.1082	ppb	0.14389	12.98%
Ti 334.940†	-8990.3	4.1334	ug/L	0.79042	4.1334	ppb	0.79042	19.12%
Tl 190.801†	-100.8	-14.813	ug/L	3.1200	-14.813	ppb	3.1200	21.06%
U 409.014†	511101.5	14638	ug/L	32.9	14638	ppb	32.9	0.23%
QC value within limits for U 409.014 Recovery = 97.59%								
V 292.402†	4849.6	2.8048	ug/L	1.37938	2.8048	ppb	1.37938	49.18%
Zn 213.857†	6654.4	-2.4532	ug/L	0.25188	-2.4532	ppb	0.25188	10.27%
SiO2†	-1253.9	-78.095	ug/L	4.8613	-78.095	ppb	4.8613	6.22%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/11/2009 11:46:21
Data Type: Reprocessed on 12/11/2009 12:46:06

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	837251.0	837251.0	96.467	%			11:49:56
1	Sc Radial	5347.5	5347.5	95.9	%			11:48:19
1	Y 371.029	683255.2	683255.2	93.666	%			11:49:56
1	Y RADIAL	5762.6	5762.6	95.42	%			11:48:19
1	Ag 328.068†	-8049.0	-8617.8	0.3257	ug/L	0.3257	ppb	11:50:01
1	Al 396.153Radial†	621.7	683.6	45.489	ug/L	45.489	ppb	11:48:19
1	As 188.979†	25286.5	26243.9	10217	ug/L	10217	ppb	11:50:01
1	B 249.677†	225772.5	234534.8	4974.0	ug/L	4974.0	ppb	11:49:56
1	Ba 233.527†	1845481.4	1913084.5	14317	ug/L	14317	ppb	11:49:56
1	Be 313.107†	7686962.2	7973164.7	2882.6	ug/L	2882.6	ppb	11:49:50
1	Ca 317.933Radial†	39.3	24.1	35.124	ug/L	35.124	ppb	11:48:39
1	Cd 226.502†	906122.1	939508.4	9750.1	ug/L	9750.1	ppb	11:49:56
1	Co 228.616†	486152.4	504031.5	9507.2	ug/L	9507.2	ppb	11:50:01
1	Cr 267.716†	2213381.5	2294361.9	24034	ug/L	24034	ppb	11:49:56
1	Cu 324.752†	6710633.2	6949656.6	20186	ug/L	20186	ppb	11:49:50
1	Fe 238.204 Radial†	-20.8	-31.6	17.073	ug/L	17.073	ppb	11:48:39
1	K 766.490 Radial†	1732609.8	1803834.1	302550	ug/L	302550	ppb	11:48:14
1	Mg 279.077 IEC†	-4.0	-6.0	-1.3443	ug/L	-1.3443	ppb	11:48:39
1	Mn 257.610†	8551310.9	8863987.9	9394.3	ug/L	9394.3	ppb	11:49:50
1	Mo 202.031†	150610.7	156108.5	9934.2	ug/L	9934.2	ppb	11:50:01
1	Na 589.592 Radial†	-779.4	741.4	224.70	ug/L	224.70	ppb	11:48:19
1	Ni 231.604†	412809.2	427842.6	9825.2	ug/L	9825.2	ppb	11:49:56
1	P 214.914†	33067.1	34036.2	15914	ug/L	15914	ppb	11:50:01
1	Pb 220.353†	211539.7	219355.4	24564	ug/L	24564	ppb	11:50:01
1	S 181.975 Axial†	39022.2	40402.1	53378	ug/L	53378	ppb	11:50:01
1	Sb 206.836†	32817.6	33982.2	10540	ug/L	10540	ppb	11:50:01
1	Se 196.026†	17638.7	18311.5	10332	ug/L	10332	ppb	11:50:01
1	Si 251.611†	1577623.0	1634922.7	48388	ug/L	48388	ppb	11:49:56
1	Sn 189.927†	63790.0	66117.5	10636	ug/L	10636	ppb	11:50:01
1	Sr 421.552†	1570688.8	1637740.6	9877.6	ug/L	9877.6	ppb	11:48:14
1	Ti 334.940†	6094708.6	6319187.5	9965.8	ug/L	9965.8	ppb	11:49:50
1	Tl 190.801†	33633.3	34899.7	9893.2	ug/L	9893.2	ppb	11:50:01
1	U 409.014†	-1295.4	1241.1	-10.671	ug/L	-10.671	ppb	11:50:01
1	V 292.402†	1453895.5	1508508.1	10159	ug/L	10159	ppb	11:49:56
1	Zn 213.857†	1587837.1	1645238.8	14065	ug/L	14065	ppb	11:49:56
1	SiO2†	1596693.8	1654649.3	104940	ug/L	104940	ppb	11:50:49
2	Sc 361.383	842169.8	842169.8	97.034	%			11:50:16
2	Sc Radial	5370.5	5370.5	96.3	%			11:48:49
2	Y 371.029	688325.6	688325.6	94.361	%			11:50:16
2	Y RADIAL	5799.1	5799.1	96.03	%			11:48:49
2	Ag 328.068†	-8067.9	-8588.6	0.4127	ug/L	0.4127	ppb	11:50:21
2	Al 396.153Radial†	619.6	678.6	48.109	ug/L	48.109	ppb	11:48:49
2	As 188.979†	24976.6	25771.4	10035	ug/L	10035	ppb	11:50:21
2	B 249.677†	227113.3	234549.6	4974.7	ug/L	4974.7	ppb	11:50:16
2	Ba 233.527†	1849328.5	1905875.6	14263	ug/L	14263	ppb	11:50:16
2	Be 313.107†	7743416.3	7984803.5	2886.8	ug/L	2886.8	ppb	11:50:10
2	Ca 317.933Radial†	37.1	21.6	31.569	ug/L	31.569	ppb	11:49:09
2	Cd 226.502†	906906.5	934830.6	9701.6	ug/L	9701.6	ppb	11:50:16
2	Co 228.616†	482505.6	497329.7	9380.4	ug/L	9380.4	ppb	11:50:21
2	Cr 267.716†	2219678.0	2287449.9	23962	ug/L	23962	ppb	11:50:16
2	Cu 324.752†	6770226.2	6970441.5	20246	ug/L	20246	ppb	11:50:10
2	Fe 238.204 Radial†	-22.3	-33.0	0.3162	ug/L	0.3162	ppb	11:49:09
2	K 766.490 Radial†	1752650.9	1816897.6	304740	ug/L	304740	ppb	11:48:44
2	Mg 279.077 IEC†	-2.7	-4.8	38.628	ug/L	38.628	ppb	11:49:09
2	Mn 257.610†	8593488.9	8855681.0	9385.5	ug/L	9385.5	ppb	11:50:10
2	Mo 202.031†	149327.0	153873.7	9792.0	ug/L	9792.0	ppb	11:50:21
2	Na 589.592 Radial†	-789.4	734.5	222.61	ug/L	222.61	ppb	11:48:49
2	Ni 231.604†	413677.8	426238.5	9788.4	ug/L	9788.4	ppb	11:50:16

2	P 214.914†	32679.1	33436.1	15567	ug/L	15567 ppb	11:50:21
2	Pb 220.353†	209886.8	216371.2	24230	ug/L	24230 ppb	11:50:21
2	S 181.975 Axial†	38581.7	39711.8	52466	ug/L	52466 ppb	11:50:21
2	Sb 206.836†	32499.6	33455.8	10369	ug/L	10369 ppb	11:50:21
2	Se 196.026†	17411.4	17970.5	10140	ug/L	10140 ppb	11:50:21
2	Si 251.611†	1584599.5	1632560.7	48320	ug/L	48320 ppb	11:50:16
2	Sn 189.927†	63289.6	65215.5	10491	ug/L	10491 ppb	11:50:21
2	Sr 421.552†	1595897.7	1656893.1	9993.2	ug/L	9993.2 ppb	11:48:44
2	Ti 334.940†	6138412.0	6327326.1	9978.7	ug/L	9978.7 ppb	11:50:10
2	Tl 190.801†	33440.6	34497.5	9780.6	ug/L	9780.6 ppb	11:50:21
2	U 409.014†	-1543.1	993.7	-17.644	ug/L	-17.644 ppb	11:50:21
2	V 292.402†	1460677.7	1506694.9	10145	ug/L	10145 ppb	11:50:16
2	Zn 213.857†	1590430.7	1638298.1	14006	ug/L	14006 ppb	11:50:16
2	SiO2†	1605901.9	1654471.6	104930	ug/L	104930 ppb	11:50:56
3	Sc 361.383	837288.5	837288.5	96.471	%		11:50:36
3	Sc Radial	5294.4	5294.4	95.0	%		11:49:20
3	Y 371.029	684764.8	684764.8	93.873	%		11:50:36
3	Y RADIAL	5705.6	5705.6	94.48	%		11:49:20
3	Ag 328.068†	-8049.9	-8618.4	0.2868	ug/L	0.2868 ppb	11:50:41
3	Al 396.153Radial†	638.7	708.0	63.575	ug/L	63.575 ppb	11:49:20
3	As 188.979†	25083.6	26032.4	10135	ug/L	10135 ppb	11:50:41
3	B 249.677†	225219.1	233950.7	4961.7	ug/L	4961.7 ppb	11:50:36
3	Ba 233.527†	1838531.9	1905795.1	14263	ug/L	14263 ppb	11:50:36
3	Be 313.107†	7707648.1	7994250.8	2890.2	ug/L	2890.2 ppb	11:50:29
3	Ca 317.933Radial†	37.4	22.5	32.782	ug/L	32.782 ppb	11:49:40
3	Cd 226.502†	902023.4	935217.7	9705.6	ug/L	9705.6 ppb	11:50:36
3	Co 228.616†	484907.3	502718.3	9482.3	ug/L	9482.3 ppb	11:50:41
3	Cr 267.716†	2209225.0	2289950.7	23988	ug/L	23988 ppb	11:50:36
3	Cu 324.752†	6725933.8	6965205.7	20231	ug/L	20231 ppb	11:50:29
3	Fe 238.204 Radial†	-23.4	-34.5	-10.387	ug/L	-10.387 ppb	11:49:40
3	K 766.490 Radial†	1724455.2	1813374.3	304150	ug/L	304150 ppb	11:49:15
3	Mg 279.077 IEC†	-3.7	-5.8	5.8542	ug/L	5.8542 ppb	11:49:40
3	Mn 257.610†	8548946.0	8861140.0	9391.3	ug/L	9391.3 ppb	11:50:29
3	Mo 202.031†	150164.3	155638.8	9904.3	ug/L	9904.3 ppb	11:50:41
3	Na 589.592 Radial†	-873.1	634.6	192.33	ug/L	192.33 ppb	11:49:20
3	Ni 231.604†	411099.0	426050.8	9784.0	ug/L	9784.0 ppb	11:50:36
3	P 214.914†	32871.0	33831.4	15792	ug/L	15792 ppb	11:50:41
3	Pb 220.353†	210969.1	218754.1	24497	ug/L	24497 ppb	11:50:41
3	S 181.975 Axial†	38817.6	40188.1	53096	ug/L	53096 ppb	11:50:41
3	Sb 206.836†	32632.9	33789.2	10478	ug/L	10478 ppb	11:50:41
3	Se 196.026†	17505.7	18172.8	10254	ug/L	10254 ppb	11:50:41
3	Si 251.611†	1572697.9	1629744.3	48234	ug/L	48234 ppb	11:50:36
3	Sn 189.927†	63614.8	65933.0	10606	ug/L	10606 ppb	11:50:41
3	Sr 421.552†	1564038.8	1647171.2	9934.5	ug/L	9934.5 ppb	11:49:15
3	Ti 334.940†	6103807.6	6328336.6	9980.3	ug/L	9980.3 ppb	11:50:29
3	Tl 190.801†	33596.9	34860.4	9882.4	ug/L	9882.4 ppb	11:50:41
3	U 409.014†	-1533.3	994.6	-17.667	ug/L	-17.667 ppb	11:50:41
3	V 292.402†	1452717.8	1507219.9	10150	ug/L	10150 ppb	11:50:36
3	Zn 213.857†	1581952.4	1639065.2	14013	ug/L	14013 ppb	11:50:36
3	SiO2†	1590163.2	1647805.7	104500	ug/L	104500 ppb	11:51:03

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	838903.1	96.657	%	0.3260				0.34%
Sc Radial	5337.5	95.7	%	0.70				0.73%
Y 371.029	685448.5	93.967	%	0.3569				0.38%
Y RADIAL	5755.8	95.31	%	0.780				0.82%
Ag 328.068†	-8608.3	0.3418	ug/L	0.06447	0.3418	ppb	0.06447	18.86%
Al 396.153Radial†	690.1	52.391	ug/L	9.7738	52.391	ppb	9.7738	18.66%
As 188.979†	26015.9	10129	ug/L	91.3	10129	ppb	91.3	0.90%
QC value within limits for As 188.979 Recovery = 101.29%								
B 249.677†	234345.0	4970.1	ug/L	7.34	4970.1	ppb	7.34	0.15%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	1908251.7	14281	ug/L	31.3	14281	ppb	31.3	0.22%
QC value within limits for Ba 233.527 Recovery = 95.21%								
Be 313.107†	7984073.0	2886.5	ug/L	3.81	2886.5	ppb	3.81	0.13%
QC value within limits for Be 313.107 Recovery = 96.22%								
Ca 317.933Radial†	22.7	33.158	ug/L	1.8072	33.158	ppb	1.8072	5.45%
Cd 226.502†	936518.9	9719.1	ug/L	26.94	9719.1	ppb	26.94	0.28%

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   QC value within limits for Cd 226.502  Recovery = 97.19%
Co 228.616†          501359.9      9456.7 ug/L        67.18      9456.7 ppb         67.18   0.71%
   QC value within limits for Co 228.616  Recovery = 94.57%
Cr 267.716†         2290587.5       23995 ug/L         36.6       23995 ppb          36.6   0.15%
   QC value within limits for Cr 267.716  Recovery = 95.98%
Cu 324.752†         6961767.9       20221 ug/L         31.4       20221 ppb          31.4   0.16%
   QC value within limits for Cu 324.752  Recovery = 101.11%
Fe 238.204 Radial†      -33.0      2.3340 ug/L     13.84073      2.3340 ppb      13.84073 592.99%
K 766.490 Radial†   1811368.7      303810 ug/L       1133.7      303810 ppb        1133.7   0.37%
   QC value within limits for K 766.490 Radial  Recovery = 101.27%
Mg 279.077 IEC†          -5.5      14.379 ug/L      21.3060      14.379 ppb       21.3060 148.17%
Mn 257.610†         8860269.6      9390.4 ug/L         4.47      9390.4 ppb          4.47   0.05%
   QC value within limits for Mn 257.610  Recovery = 93.90%
Mo 202.031†          155207.0      9876.9 ug/L        74.99      9876.9 ppb         74.99   0.76%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†      703.5      213.21 ug/L       18.115      213.21 ppb        18.115   8.50%
Ni 231.604†          426710.6      9799.2 ug/L        22.61      9799.2 ppb         22.61   0.23%
   QC value within limits for Ni 231.604  Recovery = 97.99%
P 214.914†            33767.9       15758 ug/L        175.9       15758 ppb         175.9   1.12%
   QC value within limits for P 214.914  Recovery = 105.05%
Pb 220.353†          218160.3       24430 ug/L        176.9       24430 ppb         176.9   0.72%
   QC value within limits for Pb 220.353  Recovery = 97.72%
S 181.975 Axial†      40100.6       52980 ug/L        466.9       52980 ppb         466.9   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 105.96%
Sb 206.836†           33742.4       10462 ug/L         86.2       10462 ppb          86.2   0.82%
   QC value within limits for Sb 206.836  Recovery = 104.62%
Se 196.026†           18151.6       10242 ug/L         96.7       10242 ppb          96.7   0.94%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†         1632409.3       48314 ug/L         77.2       48314 ppb          77.2   0.16%
   QC value within limits for Si 251.611  Recovery = 96.63%
Sn 189.927†           65755.4       10578 ug/L         76.7       10578 ppb          76.7   0.72%
   QC value within limits for Sn 189.927  Recovery = 105.78%
Sr 421.552†         1647268.3      9935.1 ug/L        57.76      9935.1 ppb         57.76   0.58%
   QC value within limits for Sr 421.552  Recovery = 99.35%
Ti 334.940†         6324950.1      9974.9 ug/L         7.93      9974.9 ppb          7.93   0.08%
   QC value within limits for Ti 334.940  Recovery = 99.75%
Tl 190.801†           34752.5      9852.1 ug/L        62.12      9852.1 ppb         62.12   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             1076.5     -15.327 ug/L       4.0323     -15.327 ppb        4.0323  26.31%
V 292.402†          1507474.3       10151 ug/L          7.1       10151 ppb           7.1   0.07%
   QC value within limits for V 292.402  Recovery = 101.51%
Zn 213.857†         1640867.3       14028 ug/L         32.6       14028 ppb          32.6   0.23%
   QC value within limits for Zn 213.857  Recovery = 93.52%
SiO2†               1652308.8      104790 ug/L        250.2      104790 ppb         250.2   0.24%
   QC value within limits for SiO2  Recovery = 97.94%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 11:53:12
Data Type: Reprocessed on 12/11/2009 12:46:07

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	863964.4	863964.4	99.545	%			11:56:22
1	Sc Radial	5504.0	5504.0	98.7	%			11:55:04
1	Y 371.029	714434.9	714434.9	97.941	%			11:56:22
1	Y RADIAL	5955.5	5955.5	98.61	%			11:55:04
1	Ag 328.068†	111593.8	111830.1	508.99	ug/L	508.99	ppb	11:56:27
1	Al 396.153Radial†	7082.6	7210.2	4944.1	ug/L	4944.1	ppb	11:55:04
1	As 188.979†	1327.3	1364.6	531.23	ug/L	531.23	ppb	11:56:47
1	B 249.677†	24139.7	24743.3	525.33	ug/L	525.33	ppb	11:56:27
1	Ba 233.527†	66828.8	67145.6	503.03	ug/L	503.03	ppb	11:56:27
1	Be 313.107†	1371508.7	1382444.2	497.37	ug/L	497.37	ppb	11:56:22
1	Ca 317.933Radial†	3415.6	3443.2	5025.3	ug/L	5025.3	ppb	11:55:24
1	Cd 226.502†	48442.8	48863.3	506.57	ug/L	506.57	ppb	11:56:27
1	Co 228.616†	26549.5	26744.4	504.59	ug/L	504.59	ppb	11:56:27
1	Cr 267.716†	47819.0	47951.7	502.75	ug/L	502.75	ppb	11:56:27
1	Cu 324.752†	177055.2	171107.1	497.26	ug/L	497.26	ppb	11:56:27
1	Fe 238.204 Radial†	580.6	578.3	5196.7	ug/L	5196.7	ppb	11:55:24
1	K 766.490 Radial†	35101.9	32819.8	5497.4	ug/L	5497.4	ppb	11:55:04
1	Mg 279.077 IEC†	157.0	157.1	5288.6	ug/L	5288.6	ppb	11:55:24
1	Mn 257.610†	468210.9	469832.1	498.36	ug/L	498.36	ppb	11:56:22
1	Mo 202.031†	7925.6	7943.4	505.86	ug/L	505.86	ppb	11:56:47
1	Na 589.592 Radial†	32449.4	34426.4	10433	ug/L	10433	ppb	11:55:04
1	Ni 231.604†	21952.5	21967.0	504.45	ug/L	504.45	ppb	11:56:27
1	P 214.914†	4693.5	4473.0	2422.3	ug/L	2422.3	ppb	11:56:47
1	Pb 220.353†	4391.9	4480.0	503.04	ug/L	503.04	ppb	11:56:47
1	S 181.975 Axial†	829.8	784.2	1035.1	ug/L	1035.1	ppb	11:56:47
1	Sb 206.836†	1666.9	1637.2	524.33	ug/L	524.33	ppb	11:56:47
1	Se 196.026†	864.2	895.0	521.77	ug/L	521.77	ppb	11:56:47
1	Si 251.611†	86606.4	86520.8	2564.7	ug/L	2564.7	ppb	11:56:27
1	Sn 189.927†	3156.9	3162.5	509.33	ug/L	509.33	ppb	11:56:47
1	Sr 421.552†	83999.5	85094.4	513.18	ug/L	513.18	ppb	11:55:04
1	Ti 334.940†	310688.6	313365.8	494.49	ug/L	494.49	ppb	11:56:27
1	Tl 190.801†	1750.4	1792.9	508.30	ug/L	508.30	ppb	11:56:47
1	U 409.014†	14719.6	17370.9	497.80	ug/L	497.80	ppb	11:56:27
1	V 292.402†	73286.6	74984.5	505.70	ug/L	505.70	ppb	11:56:27
1	Zn 213.857†	59525.8	59044.2	503.41	ug/L	503.41	ppb	11:56:27
1	SiO2†	86672.4	86544.3	5497.3	ug/L	5497.3	ppb	11:57:54
2	Sc 361.383	867146.6	867146.6	99.911	%			11:56:53
2	Sc Radial	5452.5	5452.5	97.8	%			11:55:30
2	Y 371.029	716354.7	716354.7	98.204	%			11:56:53
2	Y RADIAL	5873.6	5873.6	97.26	%			11:55:30
2	Ag 328.068†	112371.5	112197.2	510.67	ug/L	510.67	ppb	11:56:58
2	Al 396.153Radial†	7048.5	7243.2	4966.9	ug/L	4966.9	ppb	11:55:30
2	As 188.979†	1324.7	1357.2	528.38	ug/L	528.38	ppb	11:57:18
2	B 249.677†	24316.6	24831.4	527.20	ug/L	527.20	ppb	11:56:58
2	Ba 233.527†	67384.3	67455.2	505.35	ug/L	505.35	ppb	11:56:58
2	Be 313.107†	1375274.0	1381156.7	496.92	ug/L	496.92	ppb	11:56:53
2	Ca 317.933Radial†	3411.4	3471.7	5066.9	ug/L	5066.9	ppb	11:55:50
2	Cd 226.502†	48848.4	49090.6	508.93	ug/L	508.93	ppb	11:56:58
2	Co 228.616†	26707.2	26804.4	505.71	ug/L	505.71	ppb	11:56:58
2	Cr 267.716†	48238.9	48195.7	505.31	ug/L	505.31	ppb	11:56:58
2	Cu 324.752†	178605.9	172006.5	499.88	ug/L	499.88	ppb	11:56:58
2	Fe 238.204 Radial†	580.4	583.6	5244.8	ug/L	5244.8	ppb	11:55:50
2	K 766.490 Radial†	34520.6	32561.4	5454.1	ug/L	5454.1	ppb	11:55:30
2	Mg 279.077 IEC†	159.9	161.6	5440.3	ug/L	5440.3	ppb	11:55:50
2	Mn 257.610†	469700.5	469597.0	498.11	ug/L	498.11	ppb	11:56:53
2	Mo 202.031†	7936.3	7924.9	504.69	ug/L	504.69	ppb	11:57:18
2	Na 589.592 Radial†	31804.2	34077.3	10327	ug/L	10327	ppb	11:55:30
2	Ni 231.604†	22133.8	22067.5	506.76	ug/L	506.76	ppb	11:56:58

2	P 214.914†	4705.8	4467.9	2419.0	ug/L	2419.0 ppb	11:57:18
2	Pb 220.353†	4409.9	4481.8	503.24	ug/L	503.24 ppb	11:57:18
2	S 181.975 Axial†	841.2	792.5	1046.0	ug/L	1046.0 ppb	11:57:18
2	Sb 206.836†	1680.1	1644.2	526.44	ug/L	526.44 ppb	11:57:18
2	Se 196.026†	875.2	902.8	526.32	ug/L	526.32 ppb	11:57:18
2	Si 251.611†	87501.2	87097.1	2581.9	ug/L	2581.9 ppb	11:56:58
2	Sn 189.927†	3165.9	3159.9	508.91	ug/L	508.91 ppb	11:57:18
2	Sr 421.552†	82795.3	84667.2	510.60	ug/L	510.60 ppb	11:55:30
2	Ti 334.940†	313440.0	314974.3	497.03	ug/L	497.03 ppb	11:56:58
2	Tl 190.801†	1737.0	1773.1	502.71	ug/L	502.71 ppb	11:57:18
2	U 409.014†	14815.4	17412.5	498.99	ug/L	498.99 ppb	11:56:58
2	V 292.402†	73939.9	75368.2	508.23	ug/L	508.23 ppb	11:56:58
2	Zn 213.857†	60005.1	59304.4	505.62	ug/L	505.62 ppb	11:56:58
2	SiO2†	85548.6	85100.0	5405.2	ug/L	5405.2 ppb	11:58:00
3	Sc 361.383	865766.7	865766.7	99.752	%		11:57:24
3	Sc Radial	5487.2	5487.2	98.4	%		11:55:55
3	Y 371.029	715205.5	715205.5	98.046	%		11:57:24
3	Y RADIAL	5904.0	5904.0	97.76	%		11:55:55
3	Ag 328.068†	111370.8	111373.2	506.94	ug/L	506.94 ppb	11:57:29
3	Al 396.153Radial†	7047.4	7196.4	4934.6	ug/L	4934.6 ppb	11:55:55
3	As 188.979†	1320.8	1355.3	527.66	ug/L	527.66 ppb	11:57:49
3	B 249.677†	24128.9	24682.0	524.02	ug/L	524.02 ppb	11:57:29
3	Ba 233.527†	66953.3	67130.6	502.91	ug/L	502.91 ppb	11:57:29
3	Be 313.107†	1371679.0	1379746.6	496.41	ug/L	496.41 ppb	11:57:24
3	Ca 317.933Radial†	3432.1	3470.6	5065.2	ug/L	5065.2 ppb	11:56:15
3	Cd 226.502†	48351.6	48670.6	504.57	ug/L	504.57 ppb	11:57:29
3	Co 228.616†	26573.8	26713.2	504.00	ug/L	504.00 ppb	11:57:29
3	Cr 267.716†	47762.2	47794.8	501.11	ug/L	501.11 ppb	11:57:29
3	Cu 324.752†	177287.9	170970.2	496.87	ug/L	496.87 ppb	11:57:29
3	Fe 238.204 Radial†	585.1	584.7	5253.8	ug/L	5253.8 ppb	11:56:15
3	K 766.490 Radial†	34816.4	32638.6	5467.0	ug/L	5467.0 ppb	11:55:55
3	Mg 279.077 IEC†	156.0	156.6	5271.2	ug/L	5271.2 ppb	11:56:15
3	Mn 257.610†	468391.6	469034.1	497.52	ug/L	497.52 ppb	11:57:24
3	Mo 202.031†	7936.6	7937.9	505.51	ug/L	505.51 ppb	11:57:49
3	Na 589.592 Radial†	32093.4	34165.3	10354	ug/L	10354 ppb	11:55:55
3	Ni 231.604†	21970.5	21939.1	503.81	ug/L	503.81 ppb	11:57:29
3	P 214.914†	4712.3	4481.9	2427.3	ug/L	2427.3 ppb	11:57:49
3	Pb 220.353†	4397.4	4476.3	502.62	ug/L	502.62 ppb	11:57:49
3	S 181.975 Axial†	824.6	777.3	1025.9	ug/L	1025.9 ppb	11:57:49
3	Sb 206.836†	1662.7	1629.5	521.92	ug/L	521.92 ppb	11:57:49
3	Se 196.026†	871.9	900.8	525.23	ug/L	525.23 ppb	11:57:49
3	Si 251.611†	86694.0	86427.5	2562.0	ug/L	2562.0 ppb	11:57:29
3	Sn 189.927†	3160.2	3159.2	508.80	ug/L	508.80 ppb	11:57:49
3	Sr 421.552†	83348.7	84693.6	510.76	ug/L	510.76 ppb	11:55:55
3	Ti 334.940†	311161.4	313190.1	494.21	ug/L	494.21 ppb	11:57:29
3	Tl 190.801†	1745.5	1784.4	505.88	ug/L	505.88 ppb	11:57:49
3	U 409.014†	14530.8	17150.9	491.47	ug/L	491.47 ppb	11:57:29
3	V 292.402†	73265.1	74809.7	504.52	ug/L	504.52 ppb	11:57:29
3	Zn 213.857†	59407.5	58801.1	501.32	ug/L	501.32 ppb	11:57:29
3	SiO2†	86760.1	86451.0	5491.4	ug/L	5491.4 ppb	11:58:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865625.9	99.736	%	0.1839				0.18%
Sc Radial	5481.3	98.3	%	0.47				0.48%
Y 371.029	715331.7	98.064	%	0.1324				0.14%
Y RADIAL	5911.0	97.88	%	0.685				0.70%
Ag 328.068†	111800.2	508.87	ug/L	1.869	508.87	ppb	1.869	0.37%
QC value within limits for Ag 328.068 Recovery = 101.77%								
Al 396.153Radial†	7216.6	4948.5	ug/L	16.56	4948.5	ppb	16.56	0.33%
QC value within limits for Al 396.153Radial Recovery = 98.97%								
As 188.979†	1359.0	529.09	ug/L	1.890	529.09	ppb	1.890	0.36%
QC value within limits for As 188.979 Recovery = 105.82%								
B 249.677†	24752.3	525.52	ug/L	1.598	525.52	ppb	1.598	0.30%
QC value within limits for B 249.677 Recovery = 105.10%								
Ba 233.527†	67243.8	503.76	ug/L	1.374	503.76	ppb	1.374	0.27%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	1381115.8	496.90	ug/L	0.485	496.90	ppb	0.485	0.10%
QC value within limits for Be 313.107 Recovery = 99.38%								

Ca 317.933Radial†	3461.8	5052.5 ug/L	23.53	5052.5 ppb	23.53	0.47%
QC value within limits for Ca 317.933Radial Recovery = 101.05%						
Cd 226.502†	48874.8	506.69 ug/L	2.182	506.69 ppb	2.182	0.43%
QC value within limits for Cd 226.502 Recovery = 101.34%						
Co 228.616†	26754.0	504.77 ug/L	0.869	504.77 ppb	0.869	0.17%
QC value within limits for Co 228.616 Recovery = 100.95%						
Cr 267.716†	47980.7	503.06 ug/L	2.117	503.06 ppb	2.117	0.42%
QC value within limits for Cr 267.716 Recovery = 100.61%						
Cu 324.752†	171361.3	498.00 ug/L	1.636	498.00 ppb	1.636	0.33%
QC value within limits for Cu 324.752 Recovery = 99.60%						
Fe 238.204 Radial†	582.2	5231.7 ug/L	30.70	5231.7 ppb	30.70	0.59%
QC value within limits for Fe 238.204 Radial Recovery = 104.63%						
K 766.490 Radial†	32673.3	5472.8 ug/L	22.23	5472.8 ppb	22.23	0.41%
QC value within limits for K 766.490 Radial Recovery = 109.46%						
Mg 279.077 IEC†	158.4	5333.3 ug/L	93.05	5333.3 ppb	93.05	1.74%
QC value within limits for Mg 279.077 IEC Recovery = 106.67%						
Mn 257.610†	469487.8	498.00 ug/L	0.432	498.00 ppb	0.432	0.09%
QC value within limits for Mn 257.610 Recovery = 99.60%						
Mo 202.031†	7935.4	505.35 ug/L	0.601	505.35 ppb	0.601	0.12%
QC value within limits for Mo 202.031 Recovery = 101.07%						
Na 589.592 Radial†	34223.0	10372 ug/L	55.0	10372 ppb	55.0	0.53%
QC value within limits for Na 589.592 Radial Recovery = 103.72%						
Ni 231.604†	21991.2	505.01 ug/L	1.551	505.01 ppb	1.551	0.31%
QC value within limits for Ni 231.604 Recovery = 101.00%						
P 214.914†	4474.3	2422.9 ug/L	4.18	2422.9 ppb	4.18	0.17%
QC value within limits for P 214.914 Recovery = 96.92%						
Pb 220.353†	4479.4	502.97 ug/L	0.318	502.97 ppb	0.318	0.06%
QC value within limits for Pb 220.353 Recovery = 100.59%						
S 181.975 Axial†	784.7	1035.7 ug/L	10.06	1035.7 ppb	10.06	0.97%
QC value within limits for S 181.975 Axial Recovery = 103.57%						
Sb 206.836†	1636.9	524.23 ug/L	2.261	524.23 ppb	2.261	0.43%
QC value within limits for Sb 206.836 Recovery = 104.85%						
Se 196.026†	899.5	524.44 ug/L	2.375	524.44 ppb	2.375	0.45%
QC value within limits for Se 196.026 Recovery = 104.89%						
Si 251.611†	86681.8	2569.5 ug/L	10.82	2569.5 ppb	10.82	0.42%
QC value within limits for Si 251.611 Recovery = 102.78%						
Sn 189.927†	3160.5	509.02 ug/L	0.281	509.02 ppb	0.281	0.06%
QC value within limits for Sn 189.927 Recovery = 101.80%						
Sr 421.552†	84818.4	511.52 ug/L	1.444	511.52 ppb	1.444	0.28%
QC value within limits for Sr 421.552 Recovery = 102.30%						
Ti 334.940†	313843.4	495.24 ug/L	1.551	495.24 ppb	1.551	0.31%
QC value within limits for Ti 334.940 Recovery = 99.05%						
Tl 190.801†	1783.5	505.63 ug/L	2.802	505.63 ppb	2.802	0.55%
QC value within limits for Tl 190.801 Recovery = 101.13%						
U 409.014†	17311.4	496.09 ug/L	4.041	496.09 ppb	4.041	0.81%
QC value within limits for U 409.014 Recovery = 99.22%						
V 292.402†	75054.1	506.15 ug/L	1.900	506.15 ppb	1.900	0.38%
QC value within limits for V 292.402 Recovery = 101.23%						
Zn 213.857†	59049.9	503.45 ug/L	2.152	503.45 ppb	2.152	0.43%
QC value within limits for Zn 213.857 Recovery = 100.69%						
SiO2†	86031.8	5464.7 ug/L	51.56	5464.7 ppb	51.56	0.94%
QC value within limits for SiO2 Recovery = 102.19%						

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:00:14
Data Type: Reprocessed on 12/11/2009 12:46:08

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	899225.0	899225.0	103.61	%			12:03:24
1	Sc Radial	5574.2	5574.2	100.0	%			12:02:07
1	Y 371.029	754915.1	754915.1	103.49	%			12:03:24
1	Y RADIAL	6020.5	6020.5	99.69	%			12:02:07
1	Ag 328.068†	314.4	29.5	0.1304	ug/L	0.1304	ppb	12:03:29
1	Al 396.153Radial†	-17.9	17.4	11.952	ug/L	11.952	ppb	12:02:07
1	As 188.979†	14.4	45.2	17.457	ug/L	17.457	ppb	12:03:49
1	B 249.677†	293.3	776.3	16.543	ug/L	16.543	ppb	12:03:29
1	Ba 233.527†	6.6	17.5	0.1304	ug/L	0.1304	ppb	12:03:49
1	Be 313.107†	-4567.3	254.3	0.0916	ug/L	0.0916	ppb	12:03:29
1	Ca 317.933Radial†	17.6	0.7	1.0760	ug/L	1.0760	ppb	12:02:27
1	Cd 226.502†	-176.2	28.9	0.2995	ug/L	0.2995	ppb	12:03:49
1	Co 228.616†	-65.4	10.4	0.1985	ug/L	0.1985	ppb	12:03:49
1	Cr 267.716†	96.4	7.0	0.0723	ug/L	0.0723	ppb	12:03:49
1	Cu 324.752†	6796.9	-197.6	-0.5739	ug/L	-0.5739	ppb	12:03:29
1	Fe 238.204 Radial†	9.9	0.1	0.4846	ug/L	0.4846	ppb	12:02:27
1	K 766.490 Radial†	4296.7	1558.4	261.42	ug/L	261.42	ppb	12:02:07
1	Mg 279.077 IEC†	0.5	-1.4	-46.595	ug/L	-46.595	ppb	12:02:27
1	Mn 257.610†	514.9	-23.2	-0.0237	ug/L	-0.0237	ppb	12:03:49
1	Mo 202.031†	39.3	19.5	1.2426	ug/L	1.2426	ppb	12:03:49
1	Na 589.592 Radial†	-1274.1	279.7	84.765	ug/L	84.765	ppb	12:02:07
1	Ni 231.604†	98.6	9.2	0.2118	ug/L	0.2118	ppb	12:03:49
1	P 214.914†	223.6	-26.2	-14.556	ug/L	-14.556	ppb	12:03:49
1	Pb 220.353†	-60.4	9.7	1.0905	ug/L	1.0905	ppb	12:03:49
1	S 181.975 Axial†	55.7	4.4	5.8074	ug/L	5.8074	ppb	12:03:49
1	Sb 206.836†	46.7	7.7	2.4698	ug/L	2.4698	ppb	12:03:49
1	Se 196.026†	-35.7	-7.6	-4.2827	ug/L	-4.2827	ppb	12:03:49
1	Si 251.611†	600.7	98.1	2.8129	ug/L	2.8129	ppb	12:03:49
1	Sn 189.927†	9.8	0.6	0.0926	ug/L	0.0926	ppb	12:03:49
1	Sr 421.552†	-31.0	-30.8	-0.1858	ug/L	-0.1858	ppb	12:02:07
1	Ti 334.940†	-1214.4	84.2	0.1318	ug/L	0.1318	ppb	12:03:29
1	Tl 190.801†	-38.3	-2.4	-0.6739	ug/L	-0.6739	ppb	12:03:49
1	U 409.014†	-2588.1	86.0	2.4729	ug/L	2.4729	ppb	12:03:24
1	V 292.402†	-1446.3	-33.2	-0.1995	ug/L	-0.1995	ppb	12:03:29
1	Zn 213.857†	841.2	58.1	0.5003	ug/L	0.5003	ppb	12:03:49
1	SiO2†	574.8	30.3	1.6953	ug/L	1.6953	ppb	12:04:55
2	Sc 361.383	856785.8	856785.8	98.718	%			12:03:54
2	Sc Radial	5655.9	5655.9	101	%			12:02:32
2	Y 371.029	718466.2	718466.2	98.493	%			12:03:54
2	Y RADIAL	6136.2	6136.2	101.6	%			12:02:32
2	Ag 328.068†	299.0	28.8	0.1308	ug/L	0.1308	ppb	12:03:59
2	Al 396.153Radial†	-15.1	20.5	14.040	ug/L	14.040	ppb	12:02:32
2	As 188.979†	11.6	43.0	16.603	ug/L	16.603	ppb	12:04:19
2	B 249.677†	232.0	728.2	15.520	ug/L	15.520	ppb	12:03:59
2	Ba 233.527†	-0.0	11.1	0.0824	ug/L	0.0824	ppb	12:04:19
2	Be 313.107†	-4589.5	13.5	0.0048	ug/L	0.0048	ppb	12:03:59
2	Ca 317.933Radial†	14.3	-2.8	-4.0322	ug/L	-4.0322	ppb	12:02:52
2	Cd 226.502†	-158.9	38.0	0.3951	ug/L	0.3951	ppb	12:04:19
2	Co 228.616†	-77.3	-4.8	-0.0877	ug/L	-0.0877	ppb	12:04:19
2	Cr 267.716†	95.3	10.5	0.1112	ug/L	0.1112	ppb	12:04:19
2	Cu 324.752†	6921.7	253.8	0.7367	ug/L	0.7367	ppb	12:03:59
2	Fe 238.204 Radial†	9.0	-1.0	-8.9708	ug/L	-8.9708	ppb	12:02:52
2	K 766.490 Radial†	4372.5	1571.0	263.54	ug/L	263.54	ppb	12:02:32
2	Mg 279.077 IEC†	-0.8	-2.7	-91.143	ug/L	-91.143	ppb	12:02:52
2	Mn 257.610†	528.4	15.1	0.0168	ug/L	0.0168	ppb	12:04:19
2	Mo 202.031†	38.2	20.3	1.2890	ug/L	1.2890	ppb	12:04:19
2	Na 589.592 Radial†	-1331.0	242.0	73.329	ug/L	73.329	ppb	12:02:32
2	Ni 231.604†	98.9	14.2	0.3272	ug/L	0.3272	ppb	12:04:19

2	P 214.914†	223.3	-15.9	-8.9718	ug/L	-8.9718 ppb	12:04:19
2	Pb 220.353†	-72.0	-5.0	-0.5491	ug/L	-0.5491 ppb	12:04:19
2	S 181.975 Axial†	55.5	6.8	8.9914	ug/L	8.9914 ppb	12:04:19
2	Sb 206.836†	43.2	6.4	2.0316	ug/L	2.0316 ppb	12:04:19
2	Se 196.026†	-27.2	-0.8	-0.4531	ug/L	-0.4531 ppb	12:04:19
2	Si 251.611†	626.0	152.4	4.4304	ug/L	4.4304 ppb	12:04:19
2	Sn 189.927†	7.8	-1.0	-0.1582	ug/L	-0.1582 ppb	12:04:19
2	Sr 421.552†	-48.0	-47.1	-0.2843	ug/L	-0.2843 ppb	12:02:32
2	Ti 334.940†	-1259.2	-19.4	-0.0290	ug/L	-0.0290 ppb	12:03:59
2	Tl 190.801†	-31.3	2.9	0.8168	ug/L	0.8168 ppb	12:04:19
2	U 409.014†	-2693.0	-144.0	-4.1394	ug/L	-4.1394 ppb	12:03:54
2	V 292.402†	-1353.6	-8.4	-0.0465	ug/L	-0.0465 ppb	12:03:59
2	Zn 213.857†	856.0	113.3	0.9754	ug/L	0.9754 ppb	12:04:19
2	SiO2†	577.0	60.1	3.5906	ug/L	3.5906 ppb	12:05:00
3	Sc 361.383	880066.8	880066.8	101.40	%		12:04:25
3	Sc Radial	5379.1	5379.1	96.5	%		12:02:57
3	Y 371.029	738261.2	738261.2	101.21	%		12:04:25
3	Y RADIAL	5820.9	5820.9	96.39	%		12:02:57
3	Ag 328.068†	302.6	24.4	0.1168	ug/L	0.1168 ppb	12:04:30
3	Al 396.153Radial†	-28.2	6.1	4.1223	ug/L	4.1223 ppb	12:02:57
3	As 188.979†	1.7	33.0	12.719	ug/L	12.719 ppb	12:04:50
3	B 249.677†	226.9	716.9	15.276	ug/L	15.276 ppb	12:04:30
3	Ba 233.527†	6.0	17.0	0.1280	ug/L	0.1280 ppb	12:04:50
3	Be 313.107†	-4594.7	131.3	0.0474	ug/L	0.0474 ppb	12:04:30
3	Ca 317.933Radial†	17.6	1.3	1.9409	ug/L	1.9409 ppb	12:03:17
3	Cd 226.502†	-167.9	33.3	0.3435	ug/L	0.3435 ppb	12:04:50
3	Co 228.616†	-74.7	-0.3	-0.0019	ug/L	-0.0019 ppb	12:04:50
3	Cr 267.716†	74.1	-12.9	-0.1349	ug/L	-0.1349 ppb	12:04:50
3	Cu 324.752†	6940.3	86.7	0.2527	ug/L	0.2527 ppb	12:04:30
3	Fe 238.204 Radial†	11.8	2.3	20.828	ug/L	20.828 ppb	12:03:17
3	K 766.490 Radial†	4141.7	1553.6	260.63	ug/L	260.63 ppb	12:02:57
3	Mg 279.077 IEC†	3.6	1.9	62.406	ug/L	62.406 ppb	12:03:17
3	Mn 257.610†	548.2	20.4	0.0226	ug/L	0.0226 ppb	12:04:50
3	Mo 202.031†	40.7	21.7	1.3849	ug/L	1.3849 ppb	12:04:50
3	Na 589.592 Radial†	-1288.7	218.3	66.150	ug/L	66.150 ppb	12:02:57
3	Ni 231.604†	81.3	-5.8	-0.1326	ug/L	-0.1326 ppb	12:04:50
3	P 214.914†	240.1	-5.3	-2.9996	ug/L	-2.9996 ppb	12:04:50
3	Pb 220.353†	-70.5	-1.5	-0.1701	ug/L	-0.1701 ppb	12:04:50
3	S 181.975 Axial†	49.8	-0.3	-0.4468	ug/L	-0.4468 ppb	12:04:50
3	Sb 206.836†	51.7	13.6	4.3256	ug/L	4.3256 ppb	12:04:50
3	Se 196.026†	-19.6	7.5	4.2930	ug/L	4.2930 ppb	12:04:50
3	Si 251.611†	567.3	77.7	2.2042	ug/L	2.2042 ppb	12:04:50
3	Sn 189.927†	9.6	0.6	0.0948	ug/L	0.0948 ppb	12:04:50
3	Sr 421.552†	-13.4	-13.6	-0.0822	ug/L	-0.0822 ppb	12:02:57
3	Ti 334.940†	-1193.7	79.0	0.1244	ug/L	0.1244 ppb	12:04:30
3	Tl 190.801†	-35.3	-0.2	-0.0538	ug/L	-0.0538 ppb	12:04:50
3	U 409.014†	-2587.8	31.9	0.9148	ug/L	0.9148 ppb	12:04:25
3	V 292.402†	-1356.8	24.7	0.1838	ug/L	0.1838 ppb	12:04:30
3	Zn 213.857†	818.6	53.4	0.4561	ug/L	0.4561 ppb	12:04:50
3	SiO2†	591.0	58.4	3.4822	ug/L	3.4822 ppb	12:05:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878692.5	101.24	%	2.449				2.42%
Sc Radial	5536.4	99.3	%	2.55				2.57%
Y 371.029	737214.2	101.06	%	2.501				2.48%
Y RADIAL	5992.5	99.23	%	2.641				2.66%
Ag 328.068†	27.5	0.1260	ug/L	0.00800	0.1260	ppb	0.00800	6.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	10.038	ug/L	5.2286	10.038	ppb	5.2286	52.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	40.4	15.593	ug/L	2.5253	15.593	ppb	2.5253	16.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	740.5	15.779	ug/L	0.6721	15.779	ppb	0.6721	4.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.1136	ug/L	0.02706	0.1136	ppb	0.02706	23.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	133.0	0.0479	ug/L	0.04341	0.0479	ppb	0.04341	90.58%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -0.2     -0.3384 ug/L       3.22799     -0.3384 ppb        3.22799 953.84%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               33.4      0.3460 ug/L       0.04784      0.3460 ppb        0.04784  13.82%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.8      0.0363 ug/L       0.14688      0.0363 ppb        0.14688 404.85%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.5      0.0162 ug/L       0.13233      0.0162 ppb        0.13233 816.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               47.6      0.1385 ug/L       0.66271      0.1385 ppb        0.66271 478.48%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      4.1140 ug/L      15.22749      4.1140 ppb       15.22749 370.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       1561.0      261.86 ug/L         1.506      261.86 ppb          1.506   0.58%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.7     -25.111 ug/L       78.9972     -25.111 ppb        78.9972 314.60%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                4.1      0.0052 ug/L       0.02523      0.0052 ppb        0.02523 482.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               20.5      1.3055 ug/L       0.07254      1.3055 ppb        0.07254   5.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       246.6     74.748 ug/L        9.3882     74.748 ppb         9.3882  12.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.9      0.1355 ug/L       0.23922      0.1355 ppb        0.23922 176.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.8     -8.8423 ug/L       5.77912     -8.8423 ppb        5.77912  65.36%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.1      0.1238 ug/L       0.85841      0.1238 ppb        0.85841 693.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           3.6      4.7840 ug/L       4.80157      4.7840 ppb        4.80157 100.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.2      2.9423 ug/L       1.21781      2.9423 ppb        1.21781  41.39%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.3     -0.1476 ug/L       4.29600     -0.1476 ppb        4.29600 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              109.4      3.1492 ug/L       1.15055      3.1492 ppb        1.15055  36.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.1      0.0098 ug/L       0.14543      0.0098 ppb        0.14543 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -30.5     -0.1841 ug/L       0.10103     -0.1841 ppb        0.10103  54.87%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               47.9      0.0757 ug/L       0.09077      0.0757 ppb        0.09077 119.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.1      0.0297 ug/L       0.74885      0.0297 ppb        0.74885 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -8.7     -0.2506 ug/L       3.45672     -0.2506 ppb        3.45672 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.7     -0.0207 ug/L       0.19295     -0.0207 ppb        0.19295 931.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               74.9      0.6439 ug/L       0.28788      0.6439 ppb        0.28788  44.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     49.6      2.9227 ug/L       1.06435      2.9227 ppb        1.06435  36.42%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:09:40
Data Type: Reprocessed on 12/11/2009 12:46:09

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	875638.3	875638.3	100.89	%			12:12:50
1	Sc Radial	5429.2	5429.2	97.4	%			12:11:32
1	Y 371.029	723807.3	723807.3	99.226	%			12:12:50
1	Y RADIAL	5896.7	5896.7	97.64	%			12:11:32
1	Ag 328.068†	110582.1	109332.8	497.68	ug/L	497.68	ppb	12:12:55
1	Al 396.153Radial†	7008.0	7232.6	4959.8	ug/L	4959.8	ppb	12:11:32
1	As 188.979†	1277.0	1297.0	505.08	ug/L	505.08	ppb	12:13:15
1	B 249.677†	23016.5	23306.7	494.74	ug/L	494.74	ppb	12:12:55
1	Ba 233.527†	66448.8	65873.9	493.50	ug/L	493.50	ppb	12:12:55
1	Be 313.107†	1392693.8	1385073.8	498.30	ug/L	498.30	ppb	12:12:50
1	Ca 317.933Radial†	3425.4	3501.0	5109.7	ug/L	5109.7	ppb	12:11:52
1	Cd 226.502†	48048.2	47823.4	495.78	ug/L	495.78	ppb	12:12:55
1	Co 228.616†	26374.2	26215.0	494.61	ug/L	494.61	ppb	12:12:55
1	Cr 267.716†	47569.7	47064.2	493.45	ug/L	493.45	ppb	12:12:55
1	Cu 324.752†	175534.7	167228.8	486.00	ug/L	486.00	ppb	12:12:55
1	Fe 238.204 Radial†	578.2	583.9	5247.1	ug/L	5247.1	ppb	12:11:52
1	K 766.490 Radial†	33041.0	31193.5	5224.6	ug/L	5224.6	ppb	12:11:32
1	Mg 279.077 IEC†	153.6	155.9	5246.7	ug/L	5246.7	ppb	12:11:52
1	Mn 257.610†	475093.7	470383.6	498.95	ug/L	498.95	ppb	12:12:50
1	Mo 202.031†	7936.1	7847.7	499.77	ug/L	499.77	ppb	12:13:15
1	Na 589.592 Radial†	31411.3	33813.5	10247	ug/L	10247	ppb	12:11:32
1	Ni 231.604†	21807.3	21529.1	494.39	ug/L	494.39	ppb	12:12:55
1	P 214.914†	4705.5	4422.0	2395.5	ug/L	2395.5	ppb	12:13:15
1	Pb 220.353†	4423.0	4452.0	499.90	ug/L	499.90	ppb	12:13:15
1	S 181.975 Axial†	813.0	756.5	998.44	ug/L	998.44	ppb	12:13:15
1	Sb 206.836†	1660.3	1608.3	515.20	ug/L	515.20	ppb	12:13:15
1	Se 196.026†	867.5	886.7	517.22	ug/L	517.22	ppb	12:13:15
1	Si 251.611†	85830.4	84591.7	2507.5	ug/L	2507.5	ppb	12:12:55
1	Sn 189.927†	3158.9	3122.2	502.85	ug/L	502.85	ppb	12:13:15
1	Sr 421.552†	82692.5	84925.3	512.16	ug/L	512.16	ppb	12:11:32
1	Ti 334.940†	308600.9	307135.5	484.66	ug/L	484.66	ppb	12:12:55
1	Tl 190.801†	1747.6	1766.7	500.92	ug/L	500.92	ppb	12:13:15
1	U 409.014†	14535.8	16991.6	486.91	ug/L	486.91	ppb	12:12:55
1	V 292.402†	72837.9	73558.2	496.11	ug/L	496.11	ppb	12:12:55
1	Zn 213.857†	58972.5	57698.5	491.91	ug/L	491.91	ppb	12:12:55
1	SiO2†	85357.0	84079.8	5340.5	ug/L	5340.5	ppb	12:14:22
2	Sc 361.383	875573.2	875573.2	100.88	%			12:13:21
2	Sc Radial	5960.6	5960.6	107	%			12:11:57
2	Y 371.029	724459.8	724459.8	99.315	%			12:13:21
2	Y RADIAL	6427.7	6427.7	106.4	%			12:11:57
2	Ag 328.068†	111738.3	110487.1	502.78	ug/L	502.78	ppb	12:13:26
2	Al 396.153Radial†	6723.0	6324.3	4334.2	ug/L	4334.2	ppb	12:11:57
2	As 188.979†	1290.9	1310.9	510.41	ug/L	510.41	ppb	12:13:46
2	B 249.677†	23369.6	23658.4	502.28	ug/L	502.28	ppb	12:13:26
2	Ba 233.527†	67099.8	66524.1	498.36	ug/L	498.36	ppb	12:13:26
2	Be 313.107†	1396730.2	1389177.7	499.78	ug/L	499.78	ppb	12:13:21
2	Ca 317.933Radial†	3417.0	3179.6	4640.5	ug/L	4640.5	ppb	12:12:17
2	Cd 226.502†	48317.9	48094.3	498.63	ug/L	498.63	ppb	12:13:26
2	Co 228.616†	26608.6	26449.3	499.03	ug/L	499.03	ppb	12:13:26
2	Cr 267.716†	47929.9	47424.7	497.22	ug/L	497.22	ppb	12:13:26
2	Cu 324.752†	177929.5	169615.6	492.91	ug/L	492.91	ppb	12:13:26
2	Fe 238.204 Radial†	581.1	533.7	4797.4	ug/L	4797.4	ppb	12:12:17
2	K 766.490 Radial†	32020.2	27213.5	4557.4	ug/L	4557.4	ppb	12:11:57
2	Mg 279.077 IEC†	152.9	141.1	4750.6	ug/L	4750.6	ppb	12:12:17
2	Mn 257.610†	474874.7	470201.5	498.72	ug/L	498.72	ppb	12:13:21
2	Mo 202.031†	7963.5	7875.4	501.50	ug/L	501.50	ppb	12:13:46
2	Na 589.592 Radial†	29968.0	29587.5	8966.8	ug/L	8966.8	ppb	12:11:57
2	Ni 231.604†	21971.3	21693.2	498.16	ug/L	498.16	ppb	12:13:26

2	P 214.914†	4711.5	4428.2	2398.0 ug/L	2398.0 ppb	12:13:46
2	Pb 220.353†	4428.3	4457.5	500.41 ug/L	500.41 ppb	12:13:46
2	S 181.975 Axial†	820.7	764.1	1008.6 ug/L	1008.6 ppb	12:13:46
2	Sb 206.836†	1650.6	1598.8	512.15 ug/L	512.15 ppb	12:13:46
2	Se 196.026†	874.7	893.8	519.77 ug/L	519.77 ppb	12:13:46
2	Si 251.611†	86883.9	85642.3	2539.0 ug/L	2539.0 ppb	12:13:26
2	Sn 189.927†	3160.1	3123.7	503.04 ug/L	503.04 ppb	12:13:46
2	Sr 421.552†	78610.6	73536.0	443.47 ug/L	443.47 ppb	12:11:57
2	Ti 334.940†	312119.6	310646.2	490.18 ug/L	490.18 ppb	12:13:26
2	Tl 190.801†	1745.7	1765.0	500.42 ug/L	500.42 ppb	12:13:46
2	U 409.014†	14686.0	17141.6	491.27 ug/L	491.27 ppb	12:13:26
2	V 292.402†	73499.2	74219.2	500.59 ug/L	500.59 ppb	12:13:26
2	Zn 213.857†	59423.7	58150.1	495.82 ug/L	495.82 ppb	12:13:26
2	SiO2†	86519.8	85238.7	5414.9 ug/L	5414.9 ppb	12:14:27
3	Sc 361.383	861169.5	861169.5	99.223 %		12:13:52
3	Sc Radial	6087.9	6087.9	109 %		12:12:22
3	Y 371.029	712398.4	712398.4	97.662 %		12:13:52
3	Y RADIAL	6565.2	6565.2	108.7 %		12:12:22
3	Ag 328.068†	112865.7	113475.9	516.31 ug/L	516.31 ppb	12:13:57
3	Al 396.153Radial†	6721.6	6191.4	4242.3 ug/L	4242.3 ppb	12:12:22
3	As 188.979†	1276.6	1317.9	513.19 ug/L	513.19 ppb	12:14:17
3	B 249.677†	23748.1	24427.3	518.65 ug/L	518.65 ppb	12:13:57
3	Ba 233.527†	67856.0	68398.6	512.39 ug/L	512.39 ppb	12:13:57
3	Be 313.107†	1374575.3	1390006.3	500.11 ug/L	500.11 ppb	12:13:52
3	Ca 317.933Radial†	3396.0	3093.4	4514.8 ug/L	4514.8 ppb	12:12:42
3	Cd 226.502†	49074.6	49657.9	514.87 ug/L	514.87 ppb	12:13:57
3	Co 228.616†	26890.6	27174.7	512.70 ug/L	512.70 ppb	12:13:57
3	Cr 267.716†	48434.3	48727.7	510.88 ug/L	510.88 ppb	12:13:57
3	Cu 324.752†	179617.3	174266.5	506.41 ug/L	506.41 ppb	12:13:57
3	Fe 238.204 Radial†	577.1	518.7	4663.1 ug/L	4663.1 ppb	12:12:42
3	K 766.490 Radial†	32203.3	26754.7	4480.5 ug/L	4480.5 ppb	12:12:22
3	Mg 279.077 IEC†	156.7	141.6	4767.3 ug/L	4767.3 ppb	12:12:42
3	Mn 257.610†	468651.1	471802.3	500.41 ug/L	500.41 ppb	12:13:52
3	Mo 202.031†	7954.1	7998.0	509.30 ug/L	509.30 ppb	12:14:17
3	Na 589.592 Radial†	30250.4	29259.7	8867.4 ug/L	8867.4 ppb	12:12:22
3	Ni 231.604†	22247.5	22335.8	512.92 ug/L	512.92 ppb	12:13:57
3	P 214.914†	4734.4	4529.5	2452.6 ug/L	2452.6 ppb	12:14:17
3	Pb 220.353†	4407.6	4510.2	506.31 ug/L	506.31 ppb	12:14:17
3	S 181.975 Axial†	827.2	784.3	1035.4 ug/L	1035.4 ppb	12:14:17
3	Sb 206.836†	1656.2	1631.8	522.55 ug/L	522.55 ppb	12:14:17
3	Se 196.026†	871.8	905.5	525.93 ug/L	525.93 ppb	12:14:17
3	Si 251.611†	87807.2	88013.3	2609.4 ug/L	2609.4 ppb	12:13:57
3	Sn 189.927†	3156.1	3172.0	510.80 ug/L	510.80 ppb	12:14:17
3	Sr 421.552†	79155.7	72496.9	437.21 ug/L	437.21 ppb	12:12:22
3	Ti 334.940†	315664.1	319393.2	503.97 ug/L	503.97 ppb	12:13:57
3	Tl 190.801†	1759.7	1808.1	512.57 ug/L	512.57 ppb	12:14:17
3	U 409.014†	14688.7	17387.8	498.34 ug/L	498.34 ppb	12:13:57
3	V 292.402†	74374.7	76320.1	514.70 ug/L	514.70 ppb	12:13:57
3	Zn 213.857†	60227.6	59945.6	511.16 ug/L	511.16 ppb	12:13:57
3	SiO2†	85613.7	85760.0	5447.9 ug/L	5447.9 ppb	12:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870793.7	100.33	%	0.960				0.96%
Sc Radial	5825.9	104	%	6.3				6.00%
Y 371.029	720221.8	98.734	%	0.9299				0.94%
Y RADIAL	6296.6	104.3	%	5.85				5.61%
Ag 328.068†	111098.6	505.59	ug/L	9.626	505.59	ppb	9.626	1.90%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	6582.8	4512.1	ug/L	390.42	4512.1	ppb	390.42	8.65%
QC value within limits for Al 396.153Radial Recovery = 90.24%								
As 188.979†	1308.6	509.56	ug/L	4.123	509.56	ppb	4.123	0.81%
QC value within limits for As 188.979 Recovery = 101.91%								
B 249.677†	23797.5	505.22	ug/L	12.224	505.22	ppb	12.224	2.42%
QC value within limits for B 249.677 Recovery = 101.04%								
Ba 233.527†	66932.2	501.42	ug/L	9.807	501.42	ppb	9.807	1.96%
QC value within limits for Ba 233.527 Recovery = 100.28%								
Be 313.107†	1388085.9	499.40	ug/L	0.965	499.40	ppb	0.965	0.19%
QC value within limits for Be 313.107 Recovery = 99.88%								

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Ca 317.933Radial†       3258.0      4755.0 ug/L        313.50      4755.0 ppb        313.50   6.59%
   QC value within limits for Ca 317.933Radial  Recovery = 95.10%
Cd 226.502†            48525.2      503.10 ug/L        10.300      503.10 ppb        10.300   2.05%
   QC value within limits for Cd 226.502  Recovery = 100.62%
Co 228.616†            26613.0      502.11 ug/L         9.433      502.11 ppb         9.433   1.88%
   QC value within limits for Co 228.616  Recovery = 100.42%
Cr 267.716†            47738.9      500.52 ug/L         9.171      500.52 ppb         9.171   1.83%
   QC value within limits for Cr 267.716  Recovery = 100.10%
Cu 324.752†           170370.3      495.11 ug/L        10.382      495.11 ppb        10.382   2.10%
   QC value within limits for Cu 324.752  Recovery = 99.02%
Fe 238.204 Radial†       545.5      4902.5 ug/L        305.83      4902.5 ppb        305.83   6.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.05%
K 766.490 Radial†      28387.2      4754.2 ug/L        409.22      4754.2 ppb        409.22   8.61%
   QC value within limits for K 766.490 Radial  Recovery = 95.08%
Mg 279.077 IEC†          146.2      4921.6 ug/L        281.71      4921.6 ppb        281.71   5.72%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.43%
Mn 257.610†           470795.8      499.36 ug/L         0.913      499.36 ppb         0.913   0.18%
   QC value within limits for Mn 257.610  Recovery = 99.87%
Mo 202.031†             7907.0      503.52 ug/L         5.074      503.52 ppb         5.074   1.01%
   QC value within limits for Mo 202.031  Recovery = 100.70%
Na 589.592 Radial†     30886.9      9360.6 ug/L        769.70      9360.6 ppb        769.70   8.22%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†            21852.7      501.83 ug/L         9.792      501.83 ppb         9.792   1.95%
   QC value within limits for Ni 231.604  Recovery = 100.37%
P 214.914†              4459.9      2415.4 ug/L        32.24      2415.4 ppb        32.24   1.33%
   QC value within limits for P 214.914  Recovery = 96.62%
Pb 220.353†             4473.2      502.21 ug/L         3.560      502.21 ppb         3.560   0.71%
   QC value within limits for Pb 220.353  Recovery = 100.44%
S 181.975 Axial†         768.3      1014.1 ug/L        19.07      1014.1 ppb        19.07   1.88%
   QC value within limits for S 181.975 Axial  Recovery = 101.41%
Sb 206.836†             1612.9      516.63 ug/L         5.345      516.63 ppb         5.345   1.03%
   QC value within limits for Sb 206.836  Recovery = 103.33%
Se 196.026†              895.3      520.97 ug/L         4.475      520.97 ppb         4.475   0.86%
   QC value within limits for Se 196.026  Recovery = 104.19%
Si 251.611†            86082.5      2552.0 ug/L        52.21      2552.0 ppb        52.21   2.05%
   QC value within limits for Si 251.611  Recovery = 102.08%
Sn 189.927†             3139.3      505.56 ug/L         4.534      505.56 ppb         4.534   0.90%
   QC value within limits for Sn 189.927  Recovery = 101.11%
Sr 421.552†            76986.1      464.28 ug/L        41.584      464.28 ppb        41.584   8.96%
   QC value within limits for Sr 421.552  Recovery = 92.86%
Ti 334.940†           312391.7      492.94 ug/L         9.944      492.94 ppb         9.944   2.02%
   QC value within limits for Ti 334.940  Recovery = 98.59%
Tl 190.801†             1780.0      504.64 ug/L         6.878      504.64 ppb         6.878   1.36%
   QC value within limits for Tl 190.801  Recovery = 100.93%
U 409.014†             17173.7      492.17 ug/L         5.768      492.17 ppb         5.768   1.17%
   QC value within limits for U 409.014  Recovery = 98.43%
V 292.402†             74699.2      503.80 ug/L         9.699      503.80 ppb         9.699   1.93%
   QC value within limits for V 292.402  Recovery = 100.76%
Zn 213.857†            58598.1      499.63 ug/L        10.179      499.63 ppb        10.179   2.04%
   QC value within limits for Zn 213.857  Recovery = 99.93%
SiO2†                  85026.1      5401.1 ug/L        55.01      5401.1 ppb        55.01   1.02%
   QC value within limits for SiO2  Recovery = 101.00%
All analyte(s) passed QC.
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Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:16:43
Data Type: Reprocessed on 12/11/2009 12:46:10

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	878516.8	878516.8	101.22	%			12:19:52
1	Sc Radial	5246.4	5246.4	94.1	%			12:18:35
1	Y 371.029	738877.4	738877.4	101.29	%			12:19:52
1	Y RADIAL	5741.2	5741.2	95.07	%			12:18:35
1	Ag 328.068†	305.4	27.7	0.1333	ug/L	0.1333	ppb	12:19:52
1	Al 396.153Radial†	-14.2	20.2	13.882	ug/L	13.882	ppb	12:18:35
1	As 188.979†	-18.9	12.7	4.8840	ug/L	4.8840	ppb	12:20:12
1	B 249.677†	-12.7	480.6	10.239	ug/L	10.239	ppb	12:20:12
1	Ba 233.527†	-12.1	-0.8	-0.0053	ug/L	-0.0053	ppb	12:20:12
1	Be 313.107†	-4609.0	109.3	0.0393	ug/L	0.0393	ppb	12:19:52
1	Ca 317.933Radial†	21.3	5.7	8.3750	ug/L	8.3750	ppb	12:18:55
1	Cd 226.502†	-166.1	34.8	0.3581	ug/L	0.3581	ppb	12:20:12
1	Co 228.616†	-73.8	0.5	0.0115	ug/L	0.0115	ppb	12:20:12
1	Cr 267.716†	73.1	-13.8	-0.1441	ug/L	-0.1441	ppb	12:20:12
1	Cu 324.752†	6826.6	-13.7	-0.0383	ug/L	-0.0383	ppb	12:19:52
1	Fe 238.204 Radial†	12.2	3.1	27.577	ug/L	27.577	ppb	12:18:55
1	K 766.490 Radial†	3558.7	1042.6	174.91	ug/L	174.91	ppb	12:18:35
1	Mg 279.077 IEC†	3.9	2.2	73.687	ug/L	73.687	ppb	12:18:55
1	Mn 257.610†	509.3	-17.0	-0.0166	ug/L	-0.0166	ppb	12:20:12
1	Mo 202.031†	30.7	11.9	0.7590	ug/L	0.7590	ppb	12:20:12
1	Na 589.592 Radial†	-1422.0	42.8	12.984	ug/L	12.984	ppb	12:18:35
1	Ni 231.604†	79.2	-7.7	-0.1779	ug/L	-0.1779	ppb	12:20:12
1	P 214.914†	227.9	-16.8	-9.4048	ug/L	-9.4048	ppb	12:20:12
1	Pb 220.353†	-58.5	10.2	1.1427	ug/L	1.1427	ppb	12:20:12
1	S 181.975 Axial†	54.2	4.2	5.5186	ug/L	5.5186	ppb	12:20:12
1	Sb 206.836†	45.0	7.1	2.2641	ug/L	2.2641	ppb	12:20:12
1	Se 196.026†	-25.5	1.6	0.9949	ug/L	0.9949	ppb	12:20:12
1	Si 251.611†	534.3	46.2	1.3013	ug/L	1.3013	ppb	12:20:12
1	Sn 189.927†	13.2	4.2	0.6808	ug/L	0.6808	ppb	12:20:12
1	Sr 421.552†	-6.1	-6.2	-0.0377	ug/L	-0.0377	ppb	12:18:35
1	Ti 334.940†	-1262.3	9.1	0.0146	ug/L	0.0146	ppb	12:19:52
1	Tl 190.801†	-34.3	0.7	0.1981	ug/L	0.1981	ppb	12:20:12
1	U 409.014†	-2594.1	21.2	0.6055	ug/L	0.6055	ppb	12:19:52
1	V 292.402†	-1385.1	-5.6	-0.0278	ug/L	-0.0278	ppb	12:19:52
1	Zn 213.857†	777.0	13.8	0.1149	ug/L	0.1149	ppb	12:20:12
1	SiO2†	508.9	-21.7	-1.5475	ug/L	-1.5475	ppb	12:21:08
2	Sc 361.383	869660.2	869660.2	100.20	%			12:20:17
2	Sc Radial	5600.5	5600.5	100	%			12:19:00
2	Y 371.029	732581.1	732581.1	100.43	%			12:20:17
2	Y RADIAL	6095.4	6095.4	100.9	%			12:19:00
2	Ag 328.068†	253.6	-21.0	-0.0988	ug/L	-0.0988	ppb	12:20:17
2	Al 396.153Radial†	-17.0	18.4	12.629	ug/L	12.629	ppb	12:19:00
2	As 188.979†	-13.8	17.6	6.7688	ug/L	6.7688	ppb	12:20:37
2	B 249.677†	-24.0	469.2	10.001	ug/L	10.001	ppb	12:20:37
2	Ba 233.527†	-3.7	7.4	0.0550	ug/L	0.0550	ppb	12:20:37
2	Be 313.107†	-4553.9	117.8	0.0422	ug/L	0.0422	ppb	12:20:17
2	Ca 317.933Radial†	15.4	-1.6	-2.3484	ug/L	-2.3484	ppb	12:19:20
2	Cd 226.502†	-174.0	25.3	0.2635	ug/L	0.2635	ppb	12:20:37
2	Co 228.616†	-57.8	15.7	0.2990	ug/L	0.2990	ppb	12:20:37
2	Cr 267.716†	89.4	3.2	0.0333	ug/L	0.0333	ppb	12:20:37
2	Cu 324.752†	6852.1	80.5	0.2333	ug/L	0.2333	ppb	12:20:17
2	Fe 238.204 Radial†	8.6	-1.3	-11.614	ug/L	-11.614	ppb	12:19:20
2	K 766.490 Radial†	3590.6	835.2	140.10	ug/L	140.10	ppb	12:19:00
2	Mg 279.077 IEC†	1.5	-0.5	-15.361	ug/L	-15.361	ppb	12:19:20
2	Mn 257.610†	517.5	-3.7	-0.0048	ug/L	-0.0048	ppb	12:20:37
2	Mo 202.031†	30.9	12.4	0.7895	ug/L	0.7895	ppb	12:20:37
2	Na 589.592 Radial†	-1378.6	181.6	55.033	ug/L	55.033	ppb	12:19:00
2	Ni 231.604†	89.1	3.0	0.0682	ug/L	0.0682	ppb	12:20:37

2	P 214.914†	225.0	-17.5	-9.7541 ug/L	-9.7541 ppb	12:20:37
2	Pb 220.353†	-61.1	7.0	0.7929 ug/L	0.7929 ppb	12:20:37
2	S 181.975 Axial†	43.2	-6.3	-8.3044 ug/L	-8.3044 ppb	12:20:37
2	Sb 206.836†	38.4	1.0	0.3394 ug/L	0.3394 ppb	12:20:37
2	Se 196.026†	-25.2	1.7	0.9088 ug/L	0.9088 ppb	12:20:37
2	Si 251.611†	522.4	39.7	1.1172 ug/L	1.1172 ppb	12:20:37
2	Sn 189.927†	16.4	7.5	1.2041 ug/L	1.2041 ppb	12:20:37
2	Sr 421.552†	-13.3	-13.0	-0.0785 ug/L	-0.0785 ppb	12:19:00
2	Ti 334.940†	-1286.3	-27.5	-0.0436 ug/L	-0.0436 ppb	12:20:17
2	Tl 190.801†	-38.6	-4.0	-1.1227 ug/L	-1.1227 ppb	12:20:37
2	U 409.014†	-2583.2	6.0	0.1727 ug/L	0.1727 ppb	12:20:17
2	V 292.402†	-1371.0	-5.6	-0.0240 ug/L	-0.0240 ppb	12:20:17
2	Zn 213.857†	789.8	34.4	0.2969 ug/L	0.2969 ppb	12:20:37
2	SiO2†	538.3	12.7	0.6702 ug/L	0.6702 ppb	12:21:13
3	Sc 361.383	874124.6	874124.6	100.72 %		12:20:43
3	Sc Radial	5577.2	5577.2	100 %		12:19:25
3	Y 371.029	735292.9	735292.9	100.80 %		12:20:43
3	Y RADIAL	6069.2	6069.2	100.5 %		12:19:25
3	Ag 328.068†	287.0	10.9	0.0521 ug/L	0.0521 ppb	12:20:43
3	Al 396.153Radial†	-29.2	6.1	4.1795 ug/L	4.1795 ppb	12:19:25
3	As 188.979†	-18.2	13.3	5.1209 ug/L	5.1209 ppb	12:21:03
3	B 249.677†	-91.2	402.7	8.5816 ug/L	8.5816 ppb	12:21:03
3	Ba 233.527†	-11.0	0.2	0.0011 ug/L	0.0011 ppb	12:21:03
3	Be 313.107†	-4503.8	190.8	0.0688 ug/L	0.0688 ppb	12:20:43
3	Ca 317.933Radial†	9.5	-7.4	-10.864 ug/L	-10.864 ppb	12:19:45
3	Cd 226.502†	-182.9	17.4	0.1803 ug/L	0.1803 ppb	12:21:03
3	Co 228.616†	-82.9	-8.8	-0.1652 ug/L	-0.1652 ppb	12:21:03
3	Cr 267.716†	90.0	3.3	0.0360 ug/L	0.0360 ppb	12:21:03
3	Cu 324.752†	6801.4	-4.8	-0.0139 ug/L	-0.0139 ppb	12:20:43
3	Fe 238.204 Radial†	9.7	-0.2	-1.6037 ug/L	-1.6037 ppb	12:19:45
3	K 766.490 Radial†	3534.0	793.5	133.11 ug/L	133.11 ppb	12:19:25
3	Mg 279.077 IEC†	2.1	0.1	4.8443 ug/L	4.8443 ppb	12:19:45
3	Mn 257.610†	500.5	-23.2	-0.0249 ug/L	-0.0249 ppb	12:21:03
3	Mo 202.031†	29.8	11.2	0.7112 ug/L	0.7112 ppb	12:21:03
3	Na 589.592 Radial†	-1391.4	163.1	49.427 ug/L	49.427 ppb	12:19:25
3	Ni 231.604†	87.3	0.7	0.0161 ug/L	0.0161 ppb	12:21:03
3	P 214.914†	237.0	-6.7	-3.7174 ug/L	-3.7174 ppb	12:21:03
3	Pb 220.353†	-47.4	20.9	2.3410 ug/L	2.3410 ppb	12:21:03
3	S 181.975 Axial†	48.8	-0.9	-1.2359 ug/L	-1.2359 ppb	12:21:03
3	Sb 206.836†	36.7	-1.0	-0.2826 ug/L	-0.2826 ppb	12:21:03
3	Se 196.026†	-23.7	3.3	1.8454 ug/L	1.8454 ppb	12:21:03
3	Si 251.611†	540.5	54.9	1.5760 ug/L	1.5760 ppb	12:21:03
3	Sn 189.927†	13.9	5.0	0.8044 ug/L	0.8044 ppb	12:21:03
3	Sr 421.552†	-21.1	-20.9	-0.1259 ug/L	-0.1259 ppb	12:19:25
3	Ti 334.940†	-1179.6	85.0	0.1353 ug/L	0.1353 ppb	12:20:43
3	Tl 190.801†	-31.4	3.4	0.9565 ug/L	0.9565 ppb	12:21:03
3	U 409.014†	-2735.1	-131.7	-3.7860 ug/L	-3.7860 ppb	12:20:43
3	V 292.402†	-1376.4	-3.9	-0.0231 ug/L	-0.0231 ppb	12:20:43
3	Zn 213.857†	804.2	44.6	0.3838 ug/L	0.3838 ppb	12:21:03
3	SiO2†	544.3	15.9	0.8859 ug/L	0.8859 ppb	12:21:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874100.5	100.71	%	0.510				0.51%
Sc Radial	5474.7	98.2	%	3.55				3.62%
Y 371.029	735583.8	100.84	%	0.433				0.43%
Y RADIAL	5968.6	98.83	%	3.269				3.31%
Ag 328.068†	5.9	0.0289	ug/L	0.11774	0.0289	ppb	0.11774	407.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.9	10.230	ug/L	5.2772	10.230	ppb	5.2772	51.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	14.5	5.5912	ug/L	1.02664	5.5912	ppb	1.02664	18.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	450.8	9.6072	ug/L	0.89611	9.6072	ppb	0.89611	9.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.3	0.0169	ug/L	0.03314	0.0169	ppb	0.03314	195.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	139.3	0.0501	ug/L	0.01626	0.0501	ppb	0.01626	32.45%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.1     -1.6125 ug/L       9.64065     -1.6125 ppb        9.64065 597.87%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                25.8      0.2673 ug/L       0.08895      0.2673 ppb        0.08895  33.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.5      0.0484 ug/L       0.23428      0.0484 ppb        0.23428 483.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -2.4     -0.0249 ug/L       0.10322     -0.0249 ppb        0.10322 414.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.7      0.0603 ug/L       0.15025      0.0603 ppb        0.15025 248.96%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.7863 ug/L      20.36173      4.7863 ppb       20.36173 425.41%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         890.4      149.38 ug/L        22.389      149.38 ppb         22.389  14.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.057 ug/L       46.6852      21.057 ppb        46.6852 221.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -14.6     -0.0154 ug/L       0.01009     -0.0154 ppb        0.01009  65.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                11.8      0.7533 ug/L       0.03947      0.7533 ppb        0.03947   5.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        129.2      39.148 ug/L       22.8314      39.148 ppb        22.8314  58.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.4     -0.0312 ug/L       0.12971     -0.0312 ppb        0.12971 415.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -13.7     -7.6254 ug/L       3.38898     -7.6254 ppb        3.38898  44.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.7      1.4256 ug/L       0.81188      1.4256 ppb        0.81188  56.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0     -1.3406 ug/L       6.91208     -1.3406 ppb        6.91208 515.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7736 ug/L       1.32771      0.7736 ppb        1.32771 171.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.2      1.2497 ug/L       0.51768      1.2497 ppb        0.51768  41.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                46.9      1.3315 ug/L       0.23091      1.3315 ppb        0.23091  17.34%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.8965 ug/L       0.27351      0.8965 ppb        0.27351  30.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -13.4     -0.0807 ug/L       0.04413     -0.0807 ppb        0.04413  54.68%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.2      0.0355 ug/L       0.09123      0.0355 ppb        0.09123 257.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.0      0.0106 ug/L       1.05217      0.0106 ppb        1.05217 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -34.9     -1.0026 ug/L       2.42018     -1.0026 ppb        2.42018 241.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.0     -0.0250 ug/L       0.00250     -0.0250 ppb        0.00250  10.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.9      0.2652 ug/L       0.13722      0.2652 ppb        0.13722  51.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       2.3      0.0029 ug/L       1.34702      0.0029 ppb        1.34702 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/11/2009 12:23:28
Data Type: Reprocessed on 12/11/2009 12:46:11
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	861705.9	861705.9	99.284	%			12:26:39
1	Sc Radial	5356.0	5356.0	96.1	%			12:25:22
1	Y 371.029	718237.7	718237.7	98.462	%			12:26:39
1	Y RADIAL	5821.6	5821.6	96.40	%			12:25:22
1	Ag 328.068†	-25788.0	-26247.8	4.5515	ug/L	4.5515	ppb	12:26:39
1	Al 396.153Radial†	-58.7	-25.8	-16.754	ug/L	-16.754	ppb	12:25:22
1	As 188.979†	-219.6	-189.9	-13.581	ug/L	-13.581	ppb	12:26:59
1	B 249.677†	2608.9	3120.9	15.176	ug/L	15.176	ppb	12:26:39
1	Ba 233.527†	-1736.5	-1737.9	1.4933	ug/L	1.4933	ppb	12:26:39
1	Be 313.107†	-4122.4	510.6	0.1831	ug/L	0.1831	ppb	12:26:39
1	Ca 317.933Radial†	8.8	-7.7	-11.255	ug/L	-11.255	ppb	12:25:42
1	Cd 226.502†	3508.9	3733.1	0.0438	ug/L	0.0438	ppb	12:26:39
1	Co 228.616†	244.3	319.5	0.4449	ug/L	0.4449	ppb	12:26:59
1	Cr 267.716†	-583.7	-673.9	-0.0534	ug/L	-0.0534	ppb	12:26:39
1	Cu 324.752†	453.7	-6300.8	1.4319	ug/L	1.4319	ppb	12:26:39
1	Fe 238.204 Radial†	41486.5	43178.9	386840	ug/L	386840	ppb	12:25:22
1	K 766.490 Radial†	3092.8	480.1	93.208	ug/L	93.208	ppb	12:25:22
1	Mg 279.077 IEC†	15.4	14.1	143.65	ug/L	143.65	ppb	12:25:42
1	Mn 257.610†	-35683.4	-36460.7	-0.0742	ug/L	-0.0742	ppb	12:26:39
1	Mo 202.031†	-356.2	-377.2	3.4378	ug/L	3.4378	ppb	12:26:39
1	Na 589.592 Radial†	-1407.6	88.8	26.914	ug/L	26.914	ppb	12:25:22
1	Ni 231.604†	178.6	93.9	2.1545	ug/L	2.1545	ppb	12:26:59
1	P 214.914†	743.8	507.2	-25.892	ug/L	-25.892	ppb	12:26:59
1	Pb 220.353†	227.0	296.6	1.3987	ug/L	1.3987	ppb	12:26:59
1	S 181.975 Axial†	70.3	21.4	28.312	ug/L	28.312	ppb	12:26:59
1	Sb 206.836†	21.4	-15.9	1.0130	ug/L	1.0130	ppb	12:26:59
1	Se 196.026†	-2056.6	-2044.7	38.448	ug/L	38.448	ppb	12:26:59
1	Si 251.611†	-787.4	-1274.8	-37.562	ug/L	-37.562	ppb	12:26:39
1	Sn 189.927†	-21.3	-30.2	0.3038	ug/L	0.3038	ppb	12:26:59
1	Sr 421.552†	64.7	67.6	0.4076	ug/L	0.4076	ppb	12:25:22
1	Ti 334.940†	-1316.7	-69.9	-0.1365	ug/L	-0.1365	ppb	12:26:39
1	Tl 190.801†	-46.9	-12.7	-3.9619	ug/L	-3.9619	ppb	12:26:59
1	U 409.014†	-376.4	2204.9	14.736	ug/L	14.736	ppb	12:26:39
1	V 292.402†	7414.8	8831.0	-0.2906	ug/L	-0.2906	ppb	12:26:39
1	Zn 213.857†	4916.8	4198.4	-0.8283	ug/L	-0.8283	ppb	12:26:59
1	SiO2†	-780.4	-1310.5	-82.767	ug/L	-82.767	ppb	12:27:57
2	Sc 361.383	860218.2	860218.2	99.113	%			12:27:05
2	Sc Radial	5513.5	5513.5	98.9	%			12:25:47
2	Y 371.029	717273.7	717273.7	98.330	%			12:27:05
2	Y RADIAL	5987.8	5987.8	99.15	%			12:25:47
2	Ag 328.068†	-25878.0	-26383.6	3.2131	ug/L	3.2131	ppb	12:27:05
2	Al 396.153Radial†	-33.1	1.8	2.3584	ug/L	2.3584	ppb	12:25:47
2	As 188.979†	-233.0	-203.8	-19.307	ug/L	-19.307	ppb	12:27:25
2	B 249.677†	2427.4	2942.3	11.675	ug/L	11.675	ppb	12:27:05
2	Ba 233.527†	-1834.7	-1840.0	0.6453	ug/L	0.6453	ppb	12:27:05
2	Be 313.107†	-4135.8	489.8	0.1759	ug/L	0.1759	ppb	12:27:05
2	Ca 317.933Radial†	7.2	-9.6	-14.036	ug/L	-14.036	ppb	12:26:07
2	Cd 226.502†	3495.6	3725.8	0.1960	ug/L	0.1960	ppb	12:27:05
2	Co 228.616†	199.9	275.1	-0.3648	ug/L	-0.3648	ppb	12:27:25
2	Cr 267.716†	-581.4	-672.7	-0.0809	ug/L	-0.0809	ppb	12:27:05
2	Cu 324.752†	320.9	-6434.0	0.9288	ug/L	0.9288	ppb	12:27:05
2	Fe 238.204 Radial†	42455.2	42924.5	384560	ug/L	384560	ppb	12:25:47
2	K 766.490 Radial†	3107.1	402.6	80.127	ug/L	80.127	ppb	12:25:47
2	Mg 279.077 IEC†	12.8	11.1	43.037	ug/L	43.037	ppb	12:26:07
2	Mn 257.610†	-36042.6	-36885.3	-0.7496	ug/L	-0.7496	ppb	12:27:05
2	Mo 202.031†	-385.2	-407.1	1.3735	ug/L	1.3735	ppb	12:27:05
2	Na 589.592 Radial†	-1391.5	147.0	44.541	ug/L	44.541	ppb	12:25:47
2	Ni 231.604†	176.9	92.5	2.1221	ug/L	2.1221	ppb	12:27:25

2	P 214.914†	751.8	516.5	-18.782 ug/L	-18.782 ppb	12:27:25
2	Pb 220.353†	260.1	330.4	5.3728 ug/L	5.3728 ppb	12:27:25
2	S 181.975 Axial†	73.1	24.3	32.140 ug/L	32.140 ppb	12:27:25
2	Sb 206.836†	21.7	-15.5	1.0522 ug/L	1.0522 ppb	12:27:25
2	Se 196.026†	-2057.2	-2048.9	29.075 ug/L	29.075 ppb	12:27:25
2	Si 251.611†	-690.5	-1178.4	-34.651 ug/L	-34.651 ppb	12:27:05
2	Sn 189.927†	-23.0	-32.0	-0.0145 ug/L	-0.0145 ppb	12:27:25
2	Sr 421.552†	111.1	112.5	0.6788 ug/L	0.6788 ppb	12:25:47
2	Ti 334.940†	-1239.0	6.2	-0.0155 ug/L	-0.0155 ppb	12:27:05
2	Tl 190.801†	-45.5	-11.4	-3.5871 ug/L	-3.5871 ppb	12:27:25
2	U 409.014†	-457.8	2122.1	12.643 ug/L	12.643 ppb	12:27:05
2	V 292.402†	7362.4	8791.0	-0.2444 ug/L	-0.2444 ppb	12:27:05
2	Zn 213.857†	4870.6	4160.3	-0.9335 ug/L	-0.9335 ppb	12:27:25
2	SiO2†	-581.7	-1111.4	-69.976 ug/L	-69.976 ppb	12:28:02
3	Sc 361.383	855218.9	855218.9	98.537 %		12:27:31
3	Sc Radial	5682.5	5682.5	102 %		12:26:12
3	Y 371.029	712850.6	712850.6	97.723 %		12:27:31
3	Y RADIAL	6133.6	6133.6	101.6 %		12:26:12
3	Ag 328.068†	-25694.0	-26349.5	-2.5804 ug/L	-2.5804 ppb	12:27:31
3	Al 396.153Radial†	-39.2	-3.2	-1.0218 ug/L	-1.0218 ppb	12:26:12
3	As 188.979†	-227.7	-199.7	-20.616 ug/L	-20.616 ppb	12:27:51
3	B 249.677†	2486.5	3016.7	15.739 ug/L	15.739 ppb	12:27:31
3	Ba 233.527†	-1842.5	-1858.7	-0.1875 ug/L	-0.1875 ppb	12:27:31
3	Be 313.107†	-4027.5	575.4	0.2066 ug/L	0.2066 ppb	12:27:31
3	Ca 317.933Radial†	5.7	-11.3	-16.464 ug/L	-16.464 ppb	12:26:32
3	Cd 226.502†	3457.9	3708.2	1.8822 ug/L	1.8822 ppb	12:27:31
3	Co 228.616†	204.3	280.8	0.0046 ug/L	0.0046 ppb	12:27:51
3	Cr 267.716†	-622.3	-717.5	-0.8845 ug/L	-0.8845 ppb	12:27:31
3	Cu 324.752†	486.8	-6263.8	0.4695 ug/L	0.4695 ppb	12:27:31
3	Fe 238.204 Radial†	41629.6	40838.0	365870 ug/L	365870 ppb	12:26:12
3	K 766.490 Radial†	3141.6	343.1	69.553 ug/L	69.553 ppb	12:26:12
3	Mg 279.077 IEC†	10.9	8.8	-18.363 ug/L	-18.363 ppb	12:26:32
3	Mn 257.610†	-35630.1	-36679.3	-2.3939 ug/L	-2.3939 ppb	12:27:31
3	Mo 202.031†	-403.3	-427.7	-1.2629 ug/L	-1.2629 ppb	12:27:31
3	Na 589.592 Radial†	-1501.4	81.0	24.540 ug/L	24.540 ppb	12:26:12
3	Ni 231.604†	172.6	89.2	2.0466 ug/L	2.0466 ppb	12:27:51
3	P 214.914†	741.7	510.7	-7.0329 ug/L	-7.0329 ppb	12:27:51
3	Pb 220.353†	240.5	312.0	4.8421 ug/L	4.8421 ppb	12:27:51
3	S 181.975 Axial†	62.5	14.0	18.505 ug/L	18.505 ppb	12:27:51
3	Sb 206.836†	35.6	-1.3	5.2054 ug/L	5.2054 ppb	12:27:51
3	Se 196.026†	-2059.5	-2063.3	-36.500 ug/L	-36.500 ppb	12:27:51
3	Si 251.611†	-699.2	-1191.4	-35.013 ug/L	-35.013 ppb	12:27:31
3	Sn 189.927†	-20.5	-29.7	0.1133 ug/L	0.1133 ppb	12:27:51
3	Sr 421.552†	91.2	89.7	0.5413 ug/L	0.5413 ppb	12:26:12
3	Ti 334.940†	-1228.4	9.6	-0.0098 ug/L	-0.0098 ppb	12:27:31
3	Tl 190.801†	-48.5	-14.6	-4.5105 ug/L	-4.5105 ppb	12:27:51
3	U 409.014†	-476.8	2100.1	14.364 ug/L	14.364 ppb	12:27:31
3	V 292.402†	7338.9	8810.5	2.7077 ug/L	2.7077 ppb	12:27:31
3	Zn 213.857†	4894.2	4213.0	1.3067 ug/L	1.3067 ppb	12:27:51
3	SiO2†	-786.8	-1322.9	-83.424 ug/L	-83.424 ppb	12:28:07

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859047.7	98.978	%	0.3915				0.40%
Sc Radial	5517.3	99.0	%	2.93				2.96%
Y 371.029	716120.7	98.172	%	0.3938				0.40%
Y RADIAL	5981.0	99.04	%	2.585				2.61%
Ag 328.068†	-26327.0	1.7281	ug/L	3.79081	1.7281	ppb	3.79081	219.37%
Al 396.153Radial†	-9.1	-5.1393	ug/L	10.20005	-5.1393	ppb	10.20005	198.47%
As 188.979†	-197.8	-17.835	ug/L	3.7414	-17.835	ppb	3.7414	20.98%
B 249.677†	3026.6	14.197	ug/L	2.2019	14.197	ppb	2.2019	15.51%
Ba 233.527†	-1812.2	0.6504	ug/L	0.84043	0.6504	ppb	0.84043	129.22%
Be 313.107†	525.3	0.1886	ug/L	0.01607	0.1886	ppb	0.01607	8.52%
Ca 317.933Radial†	-9.5	-13.918	ug/L	2.6066	-13.918	ppb	2.6066	18.73%
Cd 226.502†	3722.4	0.7073	ug/L	1.02032	0.7073	ppb	1.02032	144.25%
Co 228.616†	291.8	0.0282	ug/L	0.40539	0.0282	ppb	0.40539	>999.9%
Cr 267.716†	-688.0	-0.3396	ug/L	0.47210	-0.3396	ppb	0.47210	139.01%
Cu 324.752†	-6332.9	0.9434	ug/L	0.48134	0.9434	ppb	0.48134	51.02%
Fe 238.204 Radial†	42313.8	379090	ug/L	11507.0	379090	ppb	11507.0	3.04%

K 766.490 Radial†	408.6	80.963	ug/L	11.8498	80.963	ppb	11.8498 14.64%
Mg 279.077 IEC†	11.3	56.108	ug/L	81.7938	56.108	ppb	81.7938 145.78%
Mn 257.610†	-36675.1	-1.0726	ug/L	1.19309	-1.0726	ppb	1.19309 111.24%
Mo 202.031†	-404.0	1.1828	ug/L	2.35610	1.1828	ppb	2.35610 199.20%
Na 589.592 Radial†	105.6	31.999	ug/L	10.9271	31.999	ppb	10.9271 34.15%
Ni 231.604†	91.9	2.1077	ug/L	0.05540	2.1077	ppb	0.05540 2.63%
P 214.914†	511.4	-17.236	ug/L	9.5241	-17.236	ppb	9.5241 55.26%
Pb 220.353†	313.0	3.8712	ug/L	2.15762	3.8712	ppb	2.15762 55.73%
S 181.975 Axial†	19.9	26.319	ug/L	7.0329	26.319	ppb	7.0329 26.72%
Sb 206.836†	-10.9	2.4235	ug/L	2.40924	2.4235	ppb	2.40924 99.41%
Se 196.026†	-2052.3	10.341	ug/L	40.8356	10.341	ppb	40.8356 394.88%
Si 251.611†	-1214.8	-35.742	ug/L	1.5862	-35.742	ppb	1.5862 4.44%
Sn 189.927†	-30.7	0.1342	ug/L	0.16017	0.1342	ppb	0.16017 119.34%
Sr 421.552†	89.9	0.5426	ug/L	0.13561	0.5426	ppb	0.13561 24.99%
Ti 334.940†	-18.1	-0.0539	ug/L	0.07156	-0.0539	ppb	0.07156 132.74%
Tl 190.801†	-12.9	-4.0198	ug/L	0.46438	-4.0198	ppb	0.46438 11.55%
U 409.014†	2142.4	13.914	ug/L	1.1168	13.914	ppb	1.1168 8.03%
V 292.402†	8810.8	0.7242	ug/L	1.71790	0.7242	ppb	1.71790 237.21%
Zn 213.857†	4190.6	-0.1517	ug/L	1.26412	-0.1517	ppb	1.26412 833.32%
SiO2†	-1248.3	-78.722	ug/L	7.5817	-78.722	ppb	7.5817 9.63%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:30:18
Data Type: Reprocessed on 12/11/2009 12:46:12

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874709.1	874709.1	100.78	%			12:33:28
1	Sc Radial	5563.9	5563.9	99.8	%			12:32:10
1	Y 371.029	722977.6	722977.6	99.112	%			12:33:28
1	Y RADIAL	6026.8	6026.8	99.79	%			12:32:10
1	Ag 328.068†	111391.2	110252.1	501.81	ug/L	501.81	ppb	12:33:33
1	Al 396.153Radial†	7064.0	7114.4	4878.3	ug/L	4878.3	ppb	12:32:10
1	As 188.979†	1272.7	1294.1	503.96	ug/L	503.96	ppb	12:33:53
1	B 249.677†	23228.1	23541.0	499.74	ug/L	499.74	ppb	12:33:33
1	Ba 233.527†	66804.5	66296.8	496.67	ug/L	496.67	ppb	12:33:33
1	Be 313.107†	1388852.3	1382728.6	497.47	ug/L	497.47	ppb	12:33:28
1	Ca 317.933Radial†	3365.3	3355.5	4897.4	ug/L	4897.4	ppb	12:32:30
1	Cd 226.502†	48309.9	48133.7	499.01	ug/L	499.01	ppb	12:33:33
1	Co 228.616†	26539.2	26406.5	498.22	ug/L	498.22	ppb	12:33:33
1	Cr 267.716†	47776.1	47319.0	496.12	ug/L	496.12	ppb	12:33:33
1	Cu 324.752†	177379.4	169244.0	491.85	ug/L	491.85	ppb	12:33:33
1	Fe 238.204 Radial†	578.8	570.1	5123.5	ug/L	5123.5	ppb	12:32:30
1	K 766.490 Radial†	32804.6	30134.8	5047.0	ug/L	5047.0	ppb	12:32:10
1	Mg 279.077 IEC†	152.2	150.6	5070.1	ug/L	5070.1	ppb	12:32:30
1	Mn 257.610†	473929.3	469728.5	498.25	ug/L	498.25	ppb	12:33:28
1	Mo 202.031†	7939.6	7859.5	500.52	ug/L	500.52	ppb	12:33:53
1	Na 589.592 Radial†	32525.7	34149.0	10349	ug/L	10349	ppb	12:32:10
1	Ni 231.604†	21887.3	21631.3	496.74	ug/L	496.74	ppb	12:33:33
1	P 214.914†	4726.0	4447.3	2408.7	ug/L	2408.7	ppb	12:33:53
1	Pb 220.353†	4384.0	4417.9	496.08	ug/L	496.08	ppb	12:33:53
1	S 181.975 Axial†	821.4	765.6	1010.5	ug/L	1010.5	ppb	12:33:53
1	Sb 206.836†	1643.6	1593.4	510.43	ug/L	510.43	ppb	12:33:53
1	Se 196.026†	863.8	883.9	515.28	ug/L	515.28	ppb	12:33:53
1	Si 251.611†	86522.9	85369.2	2530.7	ug/L	2530.7	ppb	12:33:33
1	Sn 189.927†	3148.6	3115.3	501.72	ug/L	501.72	ppb	12:33:53
1	Sr 421.552†	84421.0	84600.7	510.20	ug/L	510.20	ppb	12:32:10
1	Ti 334.940†	310984.2	309825.2	488.90	ug/L	488.90	ppb	12:33:33
1	Tl 190.801†	1743.6	1764.7	500.33	ug/L	500.33	ppb	12:33:53
1	U 409.014†	14618.2	17088.7	489.71	ug/L	489.71	ppb	12:33:33
1	V 292.402†	73236.0	74030.0	499.28	ug/L	499.28	ppb	12:33:33
1	Zn 213.857†	59285.0	58070.7	495.10	ug/L	495.10	ppb	12:33:33
1	SiO2†	86443.9	85248.1	5415.2	ug/L	5415.2	ppb	12:35:00
2	Sc 361.383	871455.0	871455.0	100.41	%			12:33:59
2	Sc Radial	5511.6	5511.6	98.8	%			12:32:36
2	Y 371.029	721889.3	721889.3	98.963	%			12:33:59
2	Y RADIAL	5973.0	5973.0	98.90	%			12:32:36
2	Ag 328.068†	111979.3	111250.5	506.37	ug/L	506.37	ppb	12:34:04
2	Al 396.153Radial†	7134.0	7252.3	4973.4	ug/L	4973.4	ppb	12:32:36
2	As 188.979†	1267.8	1293.9	503.94	ug/L	503.94	ppb	12:34:24
2	B 249.677†	23257.8	23656.5	502.18	ug/L	502.18	ppb	12:34:04
2	Ba 233.527†	67214.9	66953.0	501.59	ug/L	501.59	ppb	12:34:04
2	Be 313.107†	1382869.5	1381916.0	497.18	ug/L	497.18	ppb	12:33:59
2	Ca 317.933Radial†	3403.2	3425.9	5000.1	ug/L	5000.1	ppb	12:32:56
2	Cd 226.502†	48455.7	48457.8	502.37	ug/L	502.37	ppb	12:34:04
2	Co 228.616†	26689.7	26654.8	502.88	ug/L	502.88	ppb	12:34:04
2	Cr 267.716†	47985.5	47704.6	500.17	ug/L	500.17	ppb	12:34:04
2	Cu 324.752†	177894.6	170414.3	495.25	ug/L	495.25	ppb	12:34:04
2	Fe 238.204 Radial†	582.6	579.5	5207.7	ug/L	5207.7	ppb	12:32:56
2	K 766.490 Radial†	33027.5	30672.4	5137.1	ug/L	5137.1	ppb	12:32:36
2	Mg 279.077 IEC†	152.2	152.0	5118.7	ug/L	5118.7	ppb	12:32:56
2	Mn 257.610†	470267.0	467837.0	496.25	ug/L	496.25	ppb	12:33:59
2	Mo 202.031†	7879.3	7828.8	498.57	ug/L	498.57	ppb	12:34:24
2	Na 589.592 Radial†	32681.8	34616.4	10491	ug/L	10491	ppb	12:32:36
2	Ni 231.604†	21939.9	21764.8	499.81	ug/L	499.81	ppb	12:34:04

2	P 214.914†	4707.7	4446.5	2407.8	ug/L	2407.8 ppb	12:34:24
2	Pb 220.353†	4386.3	4436.5	498.16	ug/L	498.16 ppb	12:34:24
2	S 181.975 Axial†	812.0	759.3	1002.2	ug/L	1002.2 ppb	12:34:24
2	Sb 206.836†	1641.9	1597.9	511.72	ug/L	511.72 ppb	12:34:24
2	Se 196.026†	864.8	888.1	517.90	ug/L	517.90 ppb	12:34:24
2	Si 251.611†	86976.6	86141.7	2553.7	ug/L	2553.7 ppb	12:34:04
2	Sn 189.927†	3145.1	3123.5	503.05	ug/L	503.05 ppb	12:34:24
2	Sr 421.552†	84743.4	85730.0	517.01	ug/L	517.01 ppb	12:32:36
2	Ti 334.940†	312388.6	312376.2	492.93	ug/L	492.93 ppb	12:34:04
2	Tl 190.801†	1740.7	1768.2	501.32	ug/L	501.32 ppb	12:34:24
2	U 409.014†	14640.0	17164.5	491.87	ug/L	491.87 ppb	12:34:04
2	V 292.402†	73801.7	74864.7	504.79	ug/L	504.79 ppb	12:34:04
2	Zn 213.857†	59575.7	58579.9	499.45	ug/L	499.45 ppb	12:34:04
2	SiO2†	86190.0	85315.5	5419.5	ug/L	5419.5 ppb	12:35:06
3	Sc 361.383	868637.4	868637.4	100.08	%		12:34:30
3	Sc Radial	5484.0	5484.0	98.4	%		12:33:01
3	Y 371.029	718522.2	718522.2	98.501	%		12:34:30
3	Y RADIAL	5942.8	5942.8	98.40	%		12:33:01
3	Ag 328.068†	111539.4	111172.7	506.01	ug/L	506.01 ppb	12:34:35
3	Al 396.153Radial†	6980.7	7132.8	4890.9	ug/L	4890.9 ppb	12:33:01
3	As 188.979†	1269.6	1299.8	506.21	ug/L	506.21 ppb	12:34:55
3	B 249.677†	23148.6	23622.6	501.45	ug/L	501.45 ppb	12:34:35
3	Ba 233.527†	67128.5	67083.9	502.56	ug/L	502.56 ppb	12:34:35
3	Be 313.107†	1381302.3	1384817.6	498.22	ug/L	498.22 ppb	12:34:30
3	Ca 317.933Radial†	3378.4	3418.1	4988.7	ug/L	4988.7 ppb	12:33:21
3	Cd 226.502†	48625.2	48783.7	505.75	ug/L	505.75 ppb	12:34:35
3	Co 228.616†	26670.3	26721.6	504.16	ug/L	504.16 ppb	12:34:35
3	Cr 267.716†	47975.8	47849.9	501.69	ug/L	501.69 ppb	12:34:35
3	Cu 324.752†	176857.8	169953.1	493.91	ug/L	493.91 ppb	12:34:35
3	Fe 238.204 Radial†	575.7	575.5	5171.7	ug/L	5171.7 ppb	12:33:21
3	K 766.490 Radial†	32329.9	30131.5	5046.4	ug/L	5046.4 ppb	12:33:01
3	Mg 279.077 IEC†	157.8	158.5	5336.5	ug/L	5336.5 ppb	12:33:21
3	Mn 257.610†	470878.8	469967.5	498.50	ug/L	498.50 ppb	12:34:30
3	Mo 202.031†	7939.5	7914.5	504.02	ug/L	504.02 ppb	12:34:55
3	Na 589.592 Radial†	31935.8	34024.5	10311	ug/L	10311 ppb	12:33:01
3	Ni 231.604†	22062.0	21957.7	504.24	ug/L	504.24 ppb	12:34:35
3	P 214.914†	4718.4	4472.4	2422.5	ug/L	2422.5 ppb	12:34:55
3	Pb 220.353†	4401.9	4466.3	501.49	ug/L	501.49 ppb	12:34:55
3	S 181.975 Axial†	821.4	771.3	1018.1	ug/L	1018.1 ppb	12:34:55
3	Sb 206.836†	1653.3	1614.5	517.12	ug/L	517.12 ppb	12:34:55
3	Se 196.026†	868.2	894.3	521.29	ug/L	521.29 ppb	12:34:55
3	Si 251.611†	86644.6	86090.9	2552.1	ug/L	2552.1 ppb	12:34:35
3	Sn 189.927†	3156.0	3144.6	506.44	ug/L	506.44 ppb	12:34:55
3	Sr 421.552†	83013.6	84403.4	509.01	ug/L	509.01 ppb	12:33:01
3	Ti 334.940†	311422.2	312419.8	492.99	ug/L	492.99 ppb	12:34:35
3	Tl 190.801†	1738.0	1771.1	502.13	ug/L	502.13 ppb	12:34:55
3	U 409.014†	14591.5	17163.4	491.84	ug/L	491.84 ppb	12:34:35
3	V 292.402†	73520.9	74822.6	504.60	ug/L	504.60 ppb	12:34:35
3	Zn 213.857†	59543.0	58739.7	500.79	ug/L	500.79 ppb	12:34:35
3	SiO2†	86642.0	86045.6	5465.9	ug/L	5465.9 ppb	12:35:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871600.5	100.42	%	0.350				0.35%
Sc Radial	5519.8	99.0	%	0.73				0.74%
Y 371.029	721129.7	98.858	%	0.3184				0.32%
Y RADIAL	5980.8	99.03	%	0.704				0.71%
Ag 328.068†	110891.8	504.73	ug/L	2.535	504.73	ppb	2.535	0.50%
QC value within limits for Ag 328.068 Recovery = 100.95%								
Al 396.153Radial†	7166.5	4914.2	ug/L	51.66	4914.2	ppb	51.66	1.05%
QC value within limits for Al 396.153Radial Recovery = 98.28%								
As 188.979†	1296.0	504.71	ug/L	1.305	504.71	ppb	1.305	0.26%
QC value within limits for As 188.979 Recovery = 100.94%								
B 249.677†	23606.7	501.12	ug/L	1.254	501.12	ppb	1.254	0.25%
QC value within limits for B 249.677 Recovery = 100.22%								
Ba 233.527†	66777.9	500.27	ug/L	3.160	500.27	ppb	3.160	0.63%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 313.107†	1383154.1	497.62	ug/L	0.539	497.62	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 99.52%								

Ca 317.933Radial†	3399.8	4962.1 ug/L	56.32	4962.1 ppb	56.32	1.14%
QC value within limits for Ca 317.933Radial Recovery = 99.24%						
Cd 226.502†	48458.4	502.38 ug/L	3.371	502.38 ppb	3.371	0.67%
QC value within limits for Cd 226.502 Recovery = 100.48%						
Co 228.616†	26594.3	501.75 ug/L	3.128	501.75 ppb	3.128	0.62%
QC value within limits for Co 228.616 Recovery = 100.35%						
Cr 267.716†	47624.5	499.32 ug/L	2.877	499.32 ppb	2.877	0.58%
QC value within limits for Cr 267.716 Recovery = 99.86%						
Cu 324.752†	169870.4	493.67 ug/L	1.714	493.67 ppb	1.714	0.35%
QC value within limits for Cu 324.752 Recovery = 98.73%						
Fe 238.204 Radial†	575.0	5167.6 ug/L	42.23	5167.6 ppb	42.23	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 103.35%						
K 766.490 Radial†	30312.9	5076.8 ug/L	52.21	5076.8 ppb	52.21	1.03%
QC value within limits for K 766.490 Radial Recovery = 101.54%						
Mg 279.077 IEC†	153.7	5175.1 ug/L	141.91	5175.1 ppb	141.91	2.74%
QC value within limits for Mg 279.077 IEC Recovery = 103.50%						
Mn 257.610†	469177.7	497.67 ug/L	1.233	497.67 ppb	1.233	0.25%
QC value within limits for Mn 257.610 Recovery = 99.53%						
Mo 202.031†	7867.6	501.04 ug/L	2.761	501.04 ppb	2.761	0.55%
QC value within limits for Mo 202.031 Recovery = 100.21%						
Na 589.592 Radial†	34263.3	10384 ug/L	94.6	10384 ppb	94.6	0.91%
QC value within limits for Na 589.592 Radial Recovery = 103.84%						
Ni 231.604†	21784.6	500.26 ug/L	3.768	500.26 ppb	3.768	0.75%
QC value within limits for Ni 231.604 Recovery = 100.05%						
P 214.914†	4455.4	2413.0 ug/L	8.23	2413.0 ppb	8.23	0.34%
QC value within limits for P 214.914 Recovery = 96.52%						
Pb 220.353†	4440.2	498.58 ug/L	2.732	498.58 ppb	2.732	0.55%
QC value within limits for Pb 220.353 Recovery = 99.72%						
S 181.975 Axial†	765.4	1010.2 ug/L	7.95	1010.2 ppb	7.95	0.79%
QC value within limits for S 181.975 Axial Recovery = 101.02%						
Sb 206.836†	1601.9	513.09 ug/L	3.551	513.09 ppb	3.551	0.69%
QC value within limits for Sb 206.836 Recovery = 102.62%						
Se 196.026†	888.8	518.16 ug/L	3.012	518.16 ppb	3.012	0.58%
QC value within limits for Se 196.026 Recovery = 103.63%						
Si 251.611†	85867.3	2545.5 ug/L	12.85	2545.5 ppb	12.85	0.50%
QC value within limits for Si 251.611 Recovery = 101.82%						
Sn 189.927†	3127.8	503.74 ug/L	2.435	503.74 ppb	2.435	0.48%
QC value within limits for Sn 189.927 Recovery = 100.75%						
Sr 421.552†	84911.4	512.08 ug/L	4.317	512.08 ppb	4.317	0.84%
QC value within limits for Sr 421.552 Recovery = 102.42%						
Ti 334.940†	311540.4	491.61 ug/L	2.346	491.61 ppb	2.346	0.48%
QC value within limits for Ti 334.940 Recovery = 98.32%						
Tl 190.801†	1768.0	501.26 ug/L	0.902	501.26 ppb	0.902	0.18%
QC value within limits for Tl 190.801 Recovery = 100.25%						
U 409.014†	17138.9	491.14 ug/L	1.239	491.14 ppb	1.239	0.25%
QC value within limits for U 409.014 Recovery = 98.23%						
V 292.402†	74572.4	502.89 ug/L	3.128	502.89 ppb	3.128	0.62%
QC value within limits for V 292.402 Recovery = 100.58%						
Zn 213.857†	58463.4	498.45 ug/L	2.974	498.45 ppb	2.974	0.60%
QC value within limits for Zn 213.857 Recovery = 99.69%						
SiO2†	85536.4	5433.5 ug/L	28.13	5433.5 ppb	28.13	0.52%
QC value within limits for SiO2 Recovery = 101.61%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:37:20
Data Type: Reprocessed on 12/11/2009 12:46:13

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	847568.2	847568.2	97.656	%			12:40:30
1	Sc Radial	5624.4	5624.4	101	%			12:39:13
1	Y 371.029	713720.6	713720.6	97.843	%			12:40:30
1	Y RADIAL	6144.5	6144.5	101.7	%			12:39:13
1	Ag 328.068†	378.1	113.2	0.5160	ug/L	0.5160	ppb	12:40:30
1	Al 396.153Radial†	-18.5	16.9	11.642	ug/L	11.642	ppb	12:39:13
1	As 188.979†	-22.0	8.7	3.3641	ug/L	3.3641	ppb	12:40:50
1	B 249.677†	-169.4	319.7	6.8141	ug/L	6.8141	ppb	12:40:50
1	Ba 233.527†	-26.0	-15.5	-0.1172	ug/L	-0.1172	ppb	12:40:50
1	Be 313.107†	-4472.9	82.3	0.0296	ug/L	0.0296	ppb	12:40:30
1	Ca 317.933Radial†	13.7	-3.3	-4.8029	ug/L	-4.8029	ppb	12:39:33
1	Cd 226.502†	-181.9	12.7	0.1317	ug/L	0.1317	ppb	12:40:50
1	Co 228.616†	-85.9	-14.5	-0.2722	ug/L	-0.2722	ppb	12:40:50
1	Cr 267.716†	63.8	-20.7	-0.2157	ug/L	-0.2157	ppb	12:40:50
1	Cu 324.752†	6713.9	117.3	0.3406	ug/L	0.3406	ppb	12:40:30
1	Fe 238.204 Radial†	10.0	-0.0	-0.1211	ug/L	-0.1211	ppb	12:39:33
1	K 766.490 Radial†	3088.5	322.2	54.063	ug/L	54.063	ppb	12:39:13
1	Mg 279.077 IEC†	2.0	0.1	3.4114	ug/L	3.4114	ppb	12:39:33
1	Mn 257.610†	485.0	-23.5	-0.0250	ug/L	-0.0250	ppb	12:40:50
1	Mo 202.031†	26.8	9.0	0.5714	ug/L	0.5714	ppb	12:40:50
1	Na 589.592 Radial†	-1538.6	28.8	8.7370	ug/L	8.7370	ppb	12:39:13
1	Ni 231.604†	75.9	-8.2	-0.1882	ug/L	-0.1882	ppb	12:40:50
1	P 214.914†	227.6	-9.0	-5.0728	ug/L	-5.0728	ppb	12:40:50
1	Pb 220.353†	-58.9	7.7	0.8665	ug/L	0.8665	ppb	12:40:50
1	S 181.975 Axial†	54.1	6.0	7.9430	ug/L	7.9430	ppb	12:40:50
1	Sb 206.836†	38.0	1.5	0.4847	ug/L	0.4847	ppb	12:40:50
1	Se 196.026†	-33.4	-7.5	-4.1895	ug/L	-4.1895	ppb	12:40:50
1	Si 251.611†	528.4	59.3	1.7391	ug/L	1.7391	ppb	12:40:50
1	Sn 189.927†	7.8	-0.8	-0.1315	ug/L	-0.1315	ppb	12:40:50
1	Sr 421.552†	-51.0	-50.3	-0.3033	ug/L	-0.3033	ppb	12:39:13
1	Ti 334.940†	-1231.0	-4.3	-0.0037	ug/L	-0.0037	ppb	12:40:30
1	Tl 190.801†	-32.0	1.8	0.4998	ug/L	0.4998	ppb	12:40:50
1	U 409.014†	-2775.7	-258.4	-7.4274	ug/L	-7.4274	ppb	12:40:30
1	V 292.402†	-1414.2	-85.5	-0.5746	ug/L	-0.5746	ppb	12:40:30
1	Zn 213.857†	779.8	44.7	0.3849	ug/L	0.3849	ppb	12:40:50
1	SiO2†	535.2	23.5	1.4416	ug/L	1.4416	ppb	12:41:46
2	Sc 361.383	850980.6	850980.6	98.049	%			12:40:55
2	Sc Radial	5226.4	5226.4	93.7	%			12:39:38
2	Y 371.029	716574.3	716574.3	98.234	%			12:40:55
2	Y RADIAL	5690.7	5690.7	94.23	%			12:39:38
2	Ag 328.068†	348.6	81.5	0.3744	ug/L	0.3744	ppb	12:40:55
2	Al 396.153Radial†	-36.8	-3.9	-2.7236	ug/L	-2.7236	ppb	12:39:38
2	As 188.979†	-23.9	6.9	2.6793	ug/L	2.6793	ppb	12:41:15
2	B 249.677†	-177.9	311.8	6.6422	ug/L	6.6422	ppb	12:41:15
2	Ba 233.527†	-10.5	0.4	0.0019	ug/L	0.0019	ppb	12:41:15
2	Be 313.107†	-4484.6	88.8	0.0319	ug/L	0.0319	ppb	12:40:55
2	Ca 317.933Radial†	13.4	-2.6	-3.7376	ug/L	-3.7376	ppb	12:39:58
2	Cd 226.502†	-190.0	5.2	0.0527	ug/L	0.0527	ppb	12:41:15
2	Co 228.616†	-65.8	6.4	0.1208	ug/L	0.1208	ppb	12:41:15
2	Cr 267.716†	81.6	-2.8	-0.0290	ug/L	-0.0290	ppb	12:41:15
2	Cu 324.752†	6807.4	185.0	0.5381	ug/L	0.5381	ppb	12:40:55
2	Fe 238.204 Radial†	10.7	1.5	13.644	ug/L	13.644	ppb	12:39:58
2	K 766.490 Radial†	3279.1	758.8	127.31	ug/L	127.31	ppb	12:39:38
2	Mg 279.077 IEC†	2.5	0.7	24.525	ug/L	24.525	ppb	12:39:58
2	Mn 257.610†	508.2	-1.8	-0.0010	ug/L	-0.0010	ppb	12:41:15
2	Mo 202.031†	24.8	6.9	0.4417	ug/L	0.4417	ppb	12:41:15
2	Na 589.592 Radial†	-1499.3	-45.4	-13.764	ug/L	-13.764	ppb	12:39:38
2	Ni 231.604†	91.9	7.8	0.1795	ug/L	0.1795	ppb	12:41:15

2	P 214.914†	236.7	-0.7	-0.4870 ug/L	-0.4870 ppb	12:41:15
2	Pb 220.353†	-67.3	-0.7	-0.0795 ug/L	-0.0795 ppb	12:41:15
2	S 181.975 Axial†	47.6	-0.8	-1.0703 ug/L	-1.0703 ppb	12:41:15
2	Sb 206.836†	35.8	-0.9	-0.2940 ug/L	-0.2940 ppb	12:41:15
2	Se 196.026†	-15.0	11.5	6.5280 ug/L	6.5280 ppb	12:41:15
2	Si 251.611†	497.0	25.2	0.7024 ug/L	0.7024 ppb	12:41:15
2	Sn 189.927†	2.4	-6.3	-1.0202 ug/L	-1.0202 ppb	12:41:15
2	Sr 421.552†	-16.5	-17.4	-0.1049 ug/L	-0.1049 ppb	12:39:38
2	Ti 334.940†	-1223.0	8.9	0.0158 ug/L	0.0158 ppb	12:40:55
2	Tl 190.801†	-29.5	4.5	1.2547 ug/L	1.2547 ppb	12:41:15
2	U 409.014†	-2678.8	-148.1	-4.2607 ug/L	-4.2607 ppb	12:40:55
2	V 292.402†	-1420.0	-85.5	-0.5724 ug/L	-0.5724 ppb	12:40:55
2	Zn 213.857†	767.0	28.4	0.2403 ug/L	0.2403 ppb	12:41:15
2	SiO2†	543.1	29.4	1.7730 ug/L	1.7730 ppb	12:41:51
3	Sc 361.383	871743.4	871743.4	100.44 %		12:41:20
3	Sc Radial	5613.5	5613.5	101 %		12:40:03
3	Y 371.029	732016.1	732016.1	100.35 %		12:41:20
3	Y RADIAL	6098.6	6098.6	101.0 %		12:40:03
3	Ag 328.068†	321.4	45.9	0.2161 ug/L	0.2161 ppb	12:41:20
3	Al 396.153Radial†	-14.4	21.0	14.465 ug/L	14.465 ppb	12:40:03
3	As 188.979†	-28.8	2.6	0.9995 ug/L	0.9995 ppb	12:41:40
3	B 249.677†	-175.0	319.0	6.7956 ug/L	6.7956 ppb	12:41:40
3	Ba 233.527†	3.9	15.0	0.1125 ug/L	0.1125 ppb	12:41:40
3	Be 313.107†	-4613.2	69.7	0.0249 ug/L	0.0249 ppb	12:41:20
3	Ca 317.933Radial†	14.9	-2.1	-3.0652 ug/L	-3.0652 ppb	12:40:23
3	Cd 226.502†	-191.1	8.7	0.0878 ug/L	0.0878 ppb	12:41:40
3	Co 228.616†	-73.5	0.2	0.0045 ug/L	0.0045 ppb	12:41:40
3	Cr 267.716†	66.6	-19.7	-0.2057 ug/L	-0.2057 ppb	12:41:40
3	Cu 324.752†	6808.2	20.5	0.0606 ug/L	0.0606 ppb	12:41:20
3	Fe 238.204 Radial†	12.3	2.4	21.114 ug/L	21.114 ppb	12:40:23
3	K 766.490 Radial†	3159.7	398.9	66.917 ug/L	66.917 ppb	12:40:03
3	Mg 279.077 IEC†	3.2	1.3	43.185 ug/L	43.185 ppb	12:40:23
3	Mn 257.610†	509.9	-12.5	-0.0119 ug/L	-0.0119 ppb	12:41:40
3	Mo 202.031†	20.7	2.1	0.1378 ug/L	0.1378 ppb	12:41:40
3	Na 589.592 Radial†	-1474.7	89.3	27.067 ug/L	27.067 ppb	12:40:03
3	Ni 231.604†	71.5	-14.8	-0.3389 ug/L	-0.3389 ppb	12:41:40
3	P 214.914†	230.9	-12.2	-6.8179 ug/L	-6.8179 ppb	12:41:40
3	Pb 220.353†	-60.8	7.4	0.8329 ug/L	0.8329 ppb	12:41:40
3	S 181.975 Axial†	52.2	2.6	3.4239 ug/L	3.4239 ppb	12:41:40
3	Sb 206.836†	43.9	6.3	2.0264 ug/L	2.0264 ppb	12:41:40
3	Se 196.026†	-38.8	-11.8	-6.5690 ug/L	-6.5690 ppb	12:41:40
3	Si 251.611†	527.2	43.2	1.2583 ug/L	1.2583 ppb	12:41:40
3	Sn 189.927†	14.2	5.3	0.8595 ug/L	0.8595 ppb	12:41:40
3	Sr 421.552†	-37.7	-37.2	-0.2243 ug/L	-0.2243 ppb	12:40:03
3	Ti 334.940†	-1298.4	-36.4	-0.0565 ug/L	-0.0565 ppb	12:41:20
3	Tl 190.801†	-27.3	7.4	2.0781 ug/L	2.0781 ppb	12:41:40
3	U 409.014†	-2681.9	-86.1	-2.4777 ug/L	-2.4777 ppb	12:41:20
3	V 292.402†	-1391.1	-22.3	-0.1531 ug/L	-0.1531 ppb	12:41:20
3	Zn 213.857†	776.4	19.1	0.1631 ug/L	0.1631 ppb	12:41:40
3	SiO2†	530.9	4.1	0.2003 ug/L	0.2003 ppb	12:41:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856764.1	98.715	%	1.5075				1.53%
Sc Radial	5488.1	98.4	%	4.07				4.13%
Y 371.029	720770.3	98.809	%	1.3494				1.37%
Y RADIAL	5977.9	98.99	%	4.137				4.18%
Ag 328.068†	80.2	0.3689	ug/L	0.15003	0.3689	ppb	0.15003	40.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.3	7.7943	ug/L	9.21744	7.7943	ppb	9.21744	118.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.1	2.3476	ug/L	1.21668	2.3476	ppb	1.21668	51.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	316.8	6.7506	ug/L	0.09438	6.7506	ppb	0.09438	1.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0009	ug/L	0.11484	-0.0009	ppb	0.11484	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.3	0.0288	ug/L	0.00356	0.0288	ppb	0.00356	12.36%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -2.7     -3.8686 ug/L       0.87624     -3.8686 ppb        0.87624  22.65%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.9      0.0907 ug/L       0.03961      0.0907 ppb        0.03961  43.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.6     -0.0490 ug/L       0.20189     -0.0490 ppb        0.20189 412.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -14.4     -0.1501 ug/L       0.10498     -0.1501 ppb        0.10498  69.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               107.6      0.3131 ug/L       0.23993      0.3131 ppb        0.23993  76.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3     11.546 ug/L       10.7720     11.546 ppb        10.7720  93.30%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         493.3     82.763 ug/L       39.1107     82.763 ppb        39.1107  47.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7     23.707 ug/L       19.8994     23.707 ppb        19.8994  83.94%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -12.6     -0.0127 ug/L       0.01201     -0.0127 ppb        0.01201  94.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.0      0.3837 ug/L       0.22256      0.3837 ppb        0.22256  58.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         24.2      7.3467 ug/L      20.45092      7.3467 ppb       20.45092 278.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.0     -0.1159 ug/L       0.26666     -0.1159 ppb        0.26666 230.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.3     -4.1259 ug/L       3.26994     -4.1259 ppb        3.26994  79.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.8      0.5399 ug/L       0.53675      0.5399 ppb        0.53675  99.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.6      3.4322 ug/L       4.50668      3.4322 ppb        4.50668 131.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7390 ug/L       1.18090      0.7390 ppb        1.18090 159.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.6     -1.4101 ug/L       6.97685     -1.4101 ppb        6.97685 494.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                42.5      1.2332 ug/L       0.51879      1.2332 ppb        0.51879  42.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.6     -0.0974 ug/L       0.94032     -0.0974 ppb        0.94032 965.25%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -35.0     -0.2108 ug/L       0.09986     -0.2108 ppb        0.09986  47.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -10.6     -0.0148 ug/L       0.03737     -0.0148 ppb        0.03737 252.28%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.5      1.2775 ug/L       0.78940      1.2775 ppb        0.78940  61.79%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -164.2     -4.7219 ug/L       2.50685     -4.7219 ppb        2.50685  53.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -64.4     -0.4334 ug/L       0.24273     -0.4334 ppb        0.24273  56.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.7      0.2628 ug/L       0.11259      0.2628 ppb        0.11259  42.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      19.0      1.1383 ug/L       0.82903      1.1383 ppb        0.82903  72.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/11/2009 12:47:48 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\121109.sif
Batch ID:
Results Data Set: 121109A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 36**
Sample ID: 241419006|925191|5 **Date Collected: 12/11/2009 12:47:50**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 241419006|925191|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5443.9	5443.9	97.6	%			12:49:43
1	Y RADIAL	6077.1	6077.1	100.6	%			12:49:43
1	Al 396.153Radial†	35853.7	36757.7	25316	ug/L	25316	ppb	12:49:43
1	Ca 317.933Radial†	6862.6	7011.9	10234	ug/L	10234	ppb	12:49:43
1	Fe 238.204 Radial†	3116.9	3182.5	28512	ug/L	28512	ppb	12:50:03
1	K 766.490 Radial†	19853.4	17594.9	2924.6	ug/L	2924.6	ppb	12:49:43
1	Mg 279.077 IEC†	169.6	171.8	5753.1	ug/L	5753.1	ppb	12:50:03
1	Na 589.592 Radial†	1403.8	2992.0	906.75	ug/L	906.75	ppb	12:49:43
1	Sr 421.552†	13789.6	14124.0	85.091	ug/L	85.091	ppb	12:49:43
1	Sc 361.383	886037.6	886037.6	102.09	%			12:51:00
1	Y 371.029	760167.7	760167.7	104.21	%			12:51:00
1	Ag 328.068†	-1423.4	-1668.3	1.7089	ug/L	1.7089	ppb	12:51:05
1	As 188.979†	-24.5	7.3	8.9792	ug/L	8.9792	ppb	12:51:25
1	B 249.677†	59.3	551.3	7.9212	ug/L	7.9212	ppb	12:51:05
1	Ba 233.527†	89339.1	87523.0	655.16	ug/L	655.16	ppb	12:51:05
1	Be 313.107†	3053.4	7653.6	3.1590	ug/L	3.1590	ppb	12:51:05
1	Cd 226.502†	61.6	259.2	-0.1207	ug/L	-0.1207	ppb	12:51:25
1	Co 228.616†	902.9	957.9	17.495	ug/L	17.495	ppb	12:51:25
1	Cr 267.716†	2083.3	1954.6	21.112	ug/L	21.112	ppb	12:51:25
1	Cu 324.752†	12927.0	5904.8	18.605	ug/L	18.605	ppb	12:51:05
1	Mn 257.610†	2324668.9	2276603.1	2415.6	ug/L	2415.6	ppb	12:51:00
1	Mo 202.031†	-5.5	-23.8	0.5100	ug/L	0.5100	ppb	12:51:25
1	Ni 231.604†	2923.3	2777.6	63.813	ug/L	63.813	ppb	12:51:25
1	P 214.914†	411.5	161.0	72.550	ug/L	72.550	ppb	12:51:25
1	Pb 220.353†	181.6	245.9	30.850	ug/L	30.850	ppb	12:51:25
1	S 181.975 Axial†	178.0	125.0	160.14	ug/L	160.14	ppb	12:51:25
1	Sb 206.836†	46.6	8.3	1.1487	ug/L	1.1487	ppb	12:51:25
1	Se 196.026†	-158.2	-128.2	19.284	ug/L	19.284	ppb	12:51:25
1	Si 251.611†	372191.5	364097.5	10843	ug/L	10843	ppb	12:51:05
1	Sn 189.927†	-85.2	-92.3	-13.386	ug/L	-13.386	ppb	12:51:25
1	Ti 334.940†	133892.8	132410.6	209.58	ug/L	209.58	ppb	12:51:05
1	Tl 190.801†	-91.5	-55.1	0.6915	ug/L	0.6915	ppb	12:51:25
1	U 409.014†	-6888.7	-4163.9	-123.34	ug/L	-123.34	ppb	12:51:05
1	V 292.402†	7582.9	8790.5	53.790	ug/L	53.790	ppb	12:51:05
1	Zn 213.857†	7026.8	6129.3	49.376	ug/L	49.376	ppb	12:51:25
1	SiO2†	376247.6	368027.8	23488	ug/L	23488	ppb	12:52:33
2	Sc Radial	5374.4	5374.4	96.4	%			12:50:08
2	Y RADIAL	6045.1	6045.1	100.1	%			12:50:08
2	Al 396.153Radial†	36865.9	38282.7	26366	ug/L	26366	ppb	12:50:08
2	Ca 317.933Radial†	6995.4	7240.7	10568	ug/L	10568	ppb	12:50:08
2	Fe 238.204 Radial†	3124.9	3232.1	28957	ug/L	28957	ppb	12:50:28
2	K 766.490 Radial†	20172.7	18189.2	3025.6	ug/L	3025.6	ppb	12:50:08
2	Mg 279.077 IEC†	170.3	174.8	5851.7	ug/L	5851.7	ppb	12:50:28
2	Na 589.592 Radial†	1543.3	3155.3	956.23	ug/L	956.23	ppb	12:50:08
2	Sr 421.552†	14196.4	14728.6	88.734	ug/L	88.734	ppb	12:50:08
2	Sc 361.383	919727.4	919727.4	105.97	%			12:51:31
2	Y 371.029	787527.5	787527.5	107.96	%			12:51:31

2	Ag 328.068†	-1494.5	-1684.3	1.7599 ug/L	1.7599 ppb	12:51:36
2	As 188.979†	-11.6	20.4	14.016 ug/L	14.016 ppb	12:51:56
2	B 249.677†	57.6	547.6	7.7847 ug/L	7.7847 ppb	12:51:36
2	Ba 233.527†	88645.6	83663.0	626.33 ug/L	626.33 ppb	12:51:36
2	Be 313.107†	2902.2	7401.3	3.0478 ug/L	3.0478 ppb	12:51:36
2	Cd 226.502†	55.1	250.9	-0.2535 ug/L	-0.2535 ppb	12:51:56
2	Co 228.616†	897.6	920.5	16.793 ug/L	16.793 ppb	12:51:56
2	Cr 267.716†	2059.7	1857.7	20.099 ug/L	20.099 ppb	12:51:56
2	Cu 324.752†	12914.7	5429.3	17.247 ug/L	17.247 ppb	12:51:36
2	Mn 257.610†	2320941.1	2189674.0	2323.5 ug/L	2323.5 ppb	12:51:31
2	Mo 202.031†	-1.0	-19.3	0.8230 ug/L	0.8230 ppb	12:51:56
2	Ni 231.604†	2885.5	2637.0	60.583 ug/L	60.583 ppb	12:51:56
2	P 214.914†	421.1	155.3	69.560 ug/L	69.560 ppb	12:51:56
2	Pb 220.353†	179.9	237.7	30.134 ug/L	30.134 ppb	12:51:56
2	S 181.975 Axial†	155.0	96.9	122.78 ug/L	122.78 ppb	12:51:56
2	Sb 206.836†	36.6	-2.8	-2.3381 ug/L	-2.3381 ppb	12:51:56
2	Se 196.026†	-177.0	-140.2	14.046 ug/L	14.046 ppb	12:51:56
2	Si 251.611†	368272.6	347044.8	10335 ug/L	10335 ppb	12:51:36
2	Sn 189.927†	-97.7	-101.0	-14.752 ug/L	-14.752 ppb	12:51:56
2	Ti 334.940†	131948.8	125771.9	199.12 ug/L	199.12 ppb	12:51:36
2	Tl 190.801†	-105.6	-65.1	-2.7008 ug/L	-2.7008 ppb	12:51:56
2	U 409.014†	-6980.3	-4003.1	-118.77 ug/L	-118.77 ppb	12:51:36
2	V 292.402†	7492.8	8433.4	51.374 ug/L	51.374 ppb	12:51:36
2	Zn 213.857†	6999.4	5851.2	46.961 ug/L	46.961 ppb	12:51:56
2	SiO2†	376163.8	354448.7	22622 ug/L	22622 ppb	12:52:38
3	Sc Radial	5697.6	5697.6	102 %		12:50:33
3	Y RADIAL	6371.6	6371.6	105.5 %		12:50:33
3	Al 396.153Radial†	35749.4	35020.1	24119 ug/L	24119 ppb	12:50:33
3	Ca 317.933Radial†	6864.6	6700.8	9779.8 ug/L	9779.8 ppb	12:50:33
3	Fe 238.204 Radial†	3136.2	3059.3	27408 ug/L	27408 ppb	12:50:53
3	K 766.490 Radial†	19861.3	16697.0	2773.7 ug/L	2773.7 ppb	12:50:33
3	Mg 279.077 IEC†	175.3	169.7	5681.8 ug/L	5681.8 ppb	12:50:53
3	Na 589.592 Radial†	1429.8	2953.4	895.04 ug/L	895.04 ppb	12:50:33
3	Sr 421.552†	13840.6	13544.8	81.601 ug/L	81.601 ppb	12:50:33
3	Sc 361.383	888527.3	888527.3	102.37 %		12:52:02
3	Y 371.029	761035.3	761035.3	104.33 %		12:52:02
3	Ag 328.068†	-1541.9	-1780.1	0.8613 ug/L	0.8613 ppb	12:52:07
3	As 188.979†	-21.4	10.4	10.002 ug/L	10.002 ppb	12:52:27
3	B 249.677†	85.6	576.8	8.6111 ug/L	8.6111 ppb	12:52:07
3	Ba 233.527†	89508.2	87443.0	654.52 ug/L	654.52 ppb	12:52:07
3	Be 313.107†	3034.0	7626.3	3.1480 ug/L	3.1480 ppb	12:52:07
3	Cd 226.502†	65.4	262.9	0.0263 ug/L	0.0263 ppb	12:52:27
3	Co 228.616†	898.9	951.5	17.392 ug/L	17.392 ppb	12:52:27
3	Cr 267.716†	2059.0	1925.2	20.786 ug/L	20.786 ppb	12:52:27
3	Cu 324.752†	12954.8	5896.5	18.525 ug/L	18.525 ppb	12:52:07
3	Mn 257.610†	2340971.2	2286146.8	2425.6 ug/L	2425.6 ppb	12:52:02
3	Mo 202.031†	-0.6	-19.0	0.7333 ug/L	0.7333 ppb	12:52:27
3	Ni 231.604†	2873.4	2720.8	62.508 ug/L	62.508 ppb	12:52:27
3	P 214.914†	406.8	155.3	69.839 ug/L	69.839 ppb	12:52:27
3	Pb 220.353†	186.5	250.2	31.151 ug/L	31.151 ppb	12:52:27
3	S 181.975 Axial†	165.9	112.6	144.03 ug/L	144.03 ppb	12:52:27
3	Sb 206.836†	36.3	-1.9	-2.0156 ug/L	-2.0156 ppb	12:52:27
3	Se 196.026†	-183.1	-152.1	2.2782 ug/L	2.2782 ppb	12:52:27
3	Si 251.611†	372646.7	363520.6	10826 ug/L	10826 ppb	12:52:07
3	Sn 189.927†	-83.9	-90.8	-13.205 ug/L	-13.205 ppb	12:52:27
3	Ti 334.940†	133855.3	132006.5	208.92 ug/L	208.92 ppb	12:52:07
3	Tl 190.801†	-103.2	-66.2	-2.4276 ug/L	-2.4276 ppb	12:52:27
3	U 409.014†	-6923.5	-4178.9	-123.63 ug/L	-123.63 ppb	12:52:07
3	V 292.402†	7704.5	8888.5	54.612 ug/L	54.612 ppb	12:52:07
3	Zn 213.857†	6980.5	6064.7	48.937 ug/L	48.937 ppb	12:52:27
3	SiO2†	378023.3	368729.7	23533 ug/L	23533 ppb	12:52:44

Mean Data: 241419006|925191|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898097.4	103.48	%	2.163				2.09%
Sc Radial	5505.3	98.7	%	3.05				3.09%
Y 371.029	769576.8	105.50	%	2.132				2.02%
Y RADIAL	6164.6	102.1	%	2.98				2.92%
Ag 328.068†	-1710.9	1.4434	ug/L	0.50469	1.4434	ppb	0.50469	34.97%

Al 396.153Radial†	36686.9	25267	ug/L	1124.3	25267	ppb	1124.3	4.45%
As 188.979†	12.7	10.999	ug/L	2.6624	10.999	ppb	2.6624	24.21%
B 249.677†	558.6	8.1057	ug/L	0.44304	8.1057	ppb	0.44304	5.47%
Ba 233.527†	86209.7	645.34	ug/L	16.465	645.34	ppb	16.465	2.55%
Be 313.107†	7560.4	3.1183	ug/L	0.06125	3.1183	ppb	0.06125	1.96%
Ca 317.933Radial†	6984.5	10194	ug/L	395.5	10194	ppb	395.5	3.88%
Cd 226.502†	257.7	-0.1160	ug/L	0.13996	-0.1160	ppb	0.13996	120.70%
Co 228.616†	943.3	17.227	ug/L	0.3788	17.227	ppb	0.3788	2.20%
Cr 267.716†	1912.5	20.666	ug/L	0.5170	20.666	ppb	0.5170	2.50%
Cu 324.752†	5743.5	18.126	ug/L	0.7621	18.126	ppb	0.7621	4.20%
Fe 238.204 Radial†	3158.0	28293	ug/L	797.3	28293	ppb	797.3	2.82%
K 766.490 Radial†	17493.7	2908.0	ug/L	126.75	2908.0	ppb	126.75	4.36%
Mg 279.077 IEC†	172.1	5762.2	ug/L	85.34	5762.2	ppb	85.34	1.48%
Mn 257.610†	2250808.0	2388.2	ug/L	56.28	2388.2	ppb	56.28	2.36%
Mo 202.031†	-20.7	0.6887	ug/L	0.16116	0.6887	ppb	0.16116	23.40%
Na 589.592 Radial†	3033.5	919.34	ug/L	32.479	919.34	ppb	32.479	3.53%
Ni 231.604†	2711.8	62.302	ug/L	1.6251	62.302	ppb	1.6251	2.61%
P 214.914†	157.2	70.649	ug/L	1.6515	70.649	ppb	1.6515	2.34%
Pb 220.353†	244.6	30.712	ug/L	0.5225	30.712	ppb	0.5225	1.70%
S 181.975 Axial†	111.5	142.31	ug/L	18.740	142.31	ppb	18.740	13.17%
Sb 206.836†	1.2	-1.0683	ug/L	1.92673	-1.0683	ppb	1.92673	180.35%
Se 196.026†	-140.1	11.869	ug/L	8.7094	11.869	ppb	8.7094	73.38%
Si 251.611†	358220.9	10668	ug/L	288.4	10668	ppb	288.4	2.70%
Sn 189.927†	-94.7	-13.781	ug/L	0.8458	-13.781	ppb	0.8458	6.14%
Sr 421.552†	14132.4	85.142	ug/L	3.5666	85.142	ppb	3.5666	4.19%
Ti 334.940†	130063.0	205.87	ug/L	5.859	205.87	ppb	5.859	2.85%
Tl 190.801†	-62.1	-1.4790	ug/L	1.88461	-1.4790	ppb	1.88461	127.43%
U 409.014†	-4115.3	-121.91	ug/L	2.727	-121.91	ppb	2.727	2.24%
V 292.402†	8704.1	53.259	ug/L	1.6835	53.259	ppb	1.6835	3.16%
Zn 213.857†	6015.1	48.425	ug/L	1.2867	48.425	ppb	1.2867	2.66%
SiO2†	363735.4	23215	ug/L	513.9	23215	ppb	513.9	2.21%

Sequence No.: 3
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 13:02:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5959.4	5959.4	107	%			13:03:53
1	Y RADIAL	6433.9	6433.9	106.5	%			13:03:53
1	Al 396.153Radial†	6880.1	6472.5	4436.2	ug/L	4436.2	ppb	13:03:53
1	Ca 317.933Radial†	3391.0	3155.8	4605.9	ug/L	4605.9	ppb	13:04:13
1	Fe 238.204 Radial†	580.6	533.3	4793.9	ug/L	4793.9	ppb	13:04:13
1	K 766.490 Radial†	32130.2	27322.1	4575.4	ug/L	4575.4	ppb	13:03:53
1	Mg 279.077 IEC†	154.9	143.0	4815.3	ug/L	4815.3	ppb	13:04:13
1	Na 589.592 Radial†	31940.4	31438.2	9527.6	ug/L	9527.6	ppb	13:03:53
1	Sr 421.552†	82353.6	77051.8	464.68	ug/L	464.68	ppb	13:03:53
1	Sc 361.383	868304.2	868304.2	100.04	%			13:05:11
1	Y 371.029	718002.5	718002.5	98.430	%			13:05:11
1	Ag 328.068†	111566.0	111242.1	506.20	ug/L	506.20	ppb	13:05:16
1	As 188.979†	1272.4	1303.2	507.45	ug/L	507.45	ppb	13:05:36
1	B 249.677†	23032.5	23515.4	499.22	ug/L	499.22	ppb	13:05:16
1	Ba 233.527†	66943.7	66924.9	501.36	ug/L	501.36	ppb	13:05:16
1	Be 313.107†	1385036.2	1389079.4	499.76	ug/L	499.76	ppb	13:05:11
1	Cd 226.502†	48353.2	48530.5	503.16	ug/L	503.16	ppb	13:05:16
1	Co 228.616†	26620.9	26682.5	503.42	ug/L	503.42	ppb	13:05:16
1	Cr 267.716†	47781.5	47674.1	499.84	ug/L	499.84	ppb	13:05:16
1	Cu 324.752†	177423.8	170586.6	495.73	ug/L	495.73	ppb	13:05:16
1	Mn 257.610†	472521.3	471789.8	500.40	ug/L	500.40	ppb	13:05:11
1	Mo 202.031†	7896.7	7874.7	501.46	ug/L	501.46	ppb	13:05:36
1	Ni 231.604†	21927.6	21831.9	501.35	ug/L	501.35	ppb	13:05:16
1	P 214.914†	4708.4	4464.3	2417.8	ug/L	2417.8	ppb	13:05:36
1	Pb 220.353†	4390.4	4456.4	500.31	ug/L	500.31	ppb	13:05:36
1	S 181.975 Axial†	819.1	769.4	1015.6	ug/L	1015.6	ppb	13:05:36
1	Sb 206.836†	1637.0	1598.9	512.13	ug/L	512.13	ppb	13:05:36
1	Se 196.026†	868.5	894.9	520.39	ug/L	520.39	ppb	13:05:36
1	Si 251.611†	86739.6	86219.0	2556.1	ug/L	2556.1	ppb	13:05:16
1	Sn 189.927†	3142.3	3132.1	504.39	ug/L	504.39	ppb	13:05:36
1	Ti 334.940†	311670.3	312787.2	493.55	ug/L	493.55	ppb	13:05:16
1	Tl 190.801†	1745.1	1778.9	504.35	ug/L	504.35	ppb	13:05:36
1	U 409.014†	14952.8	17530.1	502.44	ug/L	502.44	ppb	13:05:16
1	V 292.402†	73449.6	74779.4	504.34	ug/L	504.34	ppb	13:05:16
1	Zn 213.857†	59419.1	58638.7	500.00	ug/L	500.00	ppb	13:05:16
1	SiO2†	86119.9	85556.9	5435.2	ug/L	5435.2	ppb	13:06:43
2	Sc Radial	5427.5	5427.5	97.3	%			13:04:18
2	Y RADIAL	5846.3	5846.3	96.81	%			13:04:18
2	Al 396.153Radial†	6976.9	7202.8	4939.2	ug/L	4939.2	ppb	13:04:18
2	Ca 317.933Radial†	3369.6	3444.7	5027.6	ug/L	5027.6	ppb	13:04:38
2	Fe 238.204 Radial†	578.6	584.5	5252.6	ug/L	5252.6	ppb	13:04:38
2	K 766.490 Radial†	32118.8	30256.5	5067.3	ug/L	5067.3	ppb	13:04:18
2	Mg 279.077 IEC†	152.0	154.3	5194.1	ug/L	5194.1	ppb	13:04:38
2	Na 589.592 Radial†	32122.3	34553.8	10472	ug/L	10472	ppb	13:04:18
2	Sr 421.552†	83110.6	85380.7	514.91	ug/L	514.91	ppb	13:04:18
2	Sc 361.383	868381.1	868381.1	100.05	%			13:05:42
2	Y 371.029	717381.1	717381.1	98.345	%			13:05:42
2	Ag 328.068†	112619.5	112285.1	511.08	ug/L	511.08	ppb	13:05:47
2	As 188.979†	1257.8	1288.4	501.86	ug/L	501.86	ppb	13:06:07
2	B 249.677†	23342.0	23822.7	505.69	ug/L	505.69	ppb	13:05:47
2	Ba 233.527†	67721.2	67696.0	507.15	ug/L	507.15	ppb	13:05:47
2	Be 313.107†	1385484.5	1389404.7	499.88	ug/L	499.88	ppb	13:05:42
2	Cd 226.502†	48926.1	49098.8	509.01	ug/L	509.01	ppb	13:05:47
2	Co 228.616†	26952.7	27011.7	509.61	ug/L	509.61	ppb	13:05:47
2	Cr 267.716†	48407.5	48295.6	506.36	ug/L	506.36	ppb	13:05:47
2	Cu 324.752†	178880.8	172027.1	499.94	ug/L	499.94	ppb	13:05:47
2	Mn 257.610†	474037.8	473263.6	502.01	ug/L	502.01	ppb	13:05:42
2	Mo 202.031†	7887.5	7864.8	500.86	ug/L	500.86	ppb	13:06:07
2	Ni 231.604†	22264.6	22166.7	509.04	ug/L	509.04	ppb	13:05:47

2	P 214.914†	4697.4	4452.8	2410.5 ug/L	2410.5 ppb	13:06:07
2	Pb 220.353†	4377.4	4443.0	498.88 ug/L	498.88 ppb	13:06:07
2	S 181.975 Axial†	810.4	760.6	1003.9 ug/L	1003.9 ppb	13:06:07
2	Sb 206.836†	1617.5	1579.2	505.76 ug/L	505.76 ppb	13:06:07
2	Se 196.026†	870.1	896.5	522.76 ug/L	522.76 ppb	13:06:07
2	Si 251.611†	87756.7	87227.9	2586.0 ug/L	2586.0 ppb	13:05:47
2	Sn 189.927†	3143.0	3132.5	504.51 ug/L	504.51 ppb	13:06:07
2	Ti 334.940†	314645.2	315732.8	498.22 ug/L	498.22 ppb	13:05:47
2	Tl 190.801†	1726.0	1759.6	498.92 ug/L	498.92 ppb	13:06:07
2	U 409.014†	14759.9	17336.0	496.78 ug/L	496.78 ppb	13:05:47
2	V 292.402†	74164.6	75487.6	508.96 ug/L	508.96 ppb	13:05:47
2	Zn 213.857†	60106.5	59320.4	505.75 ug/L	505.75 ppb	13:05:47
2	SiO2†	85989.9	85419.4	5426.1 ug/L	5426.1 ppb	13:06:48
3	Sc Radial	5434.7	5434.7	97.5 %		13:04:43
3	Y RADIAL	5906.3	5906.3	97.80 %		13:04:43
3	Al 396.153Radial†	6977.6	7194.0	4933.5 ug/L	4933.5 ppb	13:04:43
3	Ca 317.933Radial†	3381.9	3452.7	5039.3 ug/L	5039.3 ppb	13:05:03
3	Fe 238.204 Radial†	573.9	578.9	5202.1 ug/L	5202.1 ppb	13:05:03
3	K 766.490 Radial†	32398.3	30499.8	5108.1 ug/L	5108.1 ppb	13:04:43
3	Mg 279.077 IEC†	158.1	160.3	5397.0 ug/L	5397.0 ppb	13:05:03
3	Na 589.592 Radial†	32068.4	34455.0	10442 ug/L	10442 ppb	13:04:43
3	Sr 421.552†	83420.9	85586.6	516.15 ug/L	516.15 ppb	13:04:43
3	Sc 361.383	875985.1	875985.1	100.93 %		13:06:12
3	Y 371.029	723429.5	723429.5	99.174 %		13:06:12
3	Ag 328.068†	112126.0	110819.1	504.41 ug/L	504.41 ppb	13:06:18
3	As 188.979†	1252.0	1271.7	495.36 ug/L	495.36 ppb	13:06:38
3	B 249.677†	23210.9	23490.3	498.64 ug/L	498.64 ppb	13:06:18
3	Ba 233.527†	67343.9	66734.7	499.95 ug/L	499.95 ppb	13:06:18
3	Be 313.107†	1399333.1	1391105.5	500.48 ug/L	500.48 ppb	13:06:12
3	Cd 226.502†	48639.6	48390.5	501.67 ug/L	501.67 ppb	13:06:18
3	Co 228.616†	26704.2	26531.7	500.55 ug/L	500.55 ppb	13:06:18
3	Cr 267.716†	48090.7	47561.6	498.67 ug/L	498.67 ppb	13:06:18
3	Cu 324.752†	177858.7	169462.5	492.49 ug/L	492.49 ppb	13:06:18
3	Mn 257.610†	477719.8	472799.0	501.50 ug/L	501.50 ppb	13:06:12
3	Mo 202.031†	7834.2	7743.6	493.15 ug/L	493.15 ppb	13:06:38
3	Ni 231.604†	22095.0	21805.5	500.74 ug/L	500.74 ppb	13:06:18
3	P 214.914†	4653.0	4368.1	2364.3 ug/L	2364.3 ppb	13:06:38
3	Pb 220.353†	4359.3	4387.1	492.61 ug/L	492.61 ppb	13:06:38
3	S 181.975 Axial†	806.7	749.9	989.80 ug/L	989.80 ppb	13:06:38
3	Sb 206.836†	1607.0	1554.8	497.90 ug/L	497.90 ppb	13:06:38
3	Se 196.026†	864.5	883.3	515.16 ug/L	515.16 ppb	13:06:38
3	Si 251.611†	87004.1	85720.9	2541.3 ug/L	2541.3 ppb	13:06:18
3	Sn 189.927†	3112.4	3074.9	495.24 ug/L	495.24 ppb	13:06:38
3	Ti 334.940†	312623.4	310999.9	490.76 ug/L	490.76 ppb	13:06:18
3	Tl 190.801†	1725.5	1744.2	494.58 ug/L	494.58 ppb	13:06:38
3	U 409.014†	14588.3	17037.9	488.24 ug/L	488.24 ppb	13:06:18
3	V 292.402†	73779.3	74462.4	502.04 ug/L	502.04 ppb	13:06:18
3	Zn 213.857†	59657.7	58354.3	497.50 ug/L	497.50 ppb	13:06:18
3	SiO2†	86650.3	85327.7	5420.5 ug/L	5420.5 ppb	13:06:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870890.1	100.34	%	0.508				0.51%
Sc Radial	5607.2	101	%	5.5				5.44%
Y 371.029	719604.4	98.649	%	0.4561				0.46%
Y RADIAL	6062.2	100.4	%	5.35				5.33%
Ag 328.068†	111448.8	507.23	ug/L	3.451	507.23	ppb	3.451	0.68%
QC value within limits for Ag 328.068 Recovery = 101.45%								
Al 396.153Radial†	6956.4	4769.6	ug/L	288.77	4769.6	ppb	288.77	6.05%
QC value within limits for Al 396.153Radial Recovery = 95.39%								
As 188.979†	1287.8	501.56	ug/L	6.050	501.56	ppb	6.050	1.21%
QC value within limits for As 188.979 Recovery = 100.31%								
B 249.677†	23609.5	501.19	ug/L	3.915	501.19	ppb	3.915	0.78%
QC value within limits for B 249.677 Recovery = 100.24%								
Ba 233.527†	67118.5	502.82	ug/L	3.816	502.82	ppb	3.816	0.76%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1389863.2	500.04	ug/L	0.386	500.04	ppb	0.386	0.08%
QC value within limits for Be 313.107 Recovery = 100.01%								
Ca 317.933Radial†	3351.1	4890.9	ug/L	246.91	4890.9	ppb	246.91	5.05%

```
   QC value within limits for Ca 317.933Radial  Recovery = 97.82%
Cd 226.502†            48673.3      504.61 ug/L         3.883      504.61 ppb          3.883   0.77%
   QC value within limits for Cd 226.502  Recovery = 100.92%
Co 228.616†            26741.9      504.53 ug/L         4.628      504.53 ppb          4.628   0.92%
   QC value within limits for Co 228.616  Recovery = 100.91%
Cr 267.716†            47843.8      501.62 ug/L         4.145      501.62 ppb          4.145   0.83%
   QC value within limits for Cr 267.716  Recovery = 100.32%
Cu 324.752†           170692.1      496.05 ug/L         3.736      496.05 ppb          3.736   0.75%
   QC value within limits for Cu 324.752  Recovery = 99.21%
Fe 238.204 Radial†       565.6      5082.9 ug/L        251.53      5082.9 ppb         251.53   4.95%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.66%
K 766.490 Radial†      29359.4      4916.9 ug/L        296.48      4916.9 ppb         296.48   6.03%
   QC value within limits for K 766.490 Radial  Recovery = 98.34%
Mg 279.077 IEC†          152.5      5135.5 ug/L        295.22      5135.5 ppb         295.22   5.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.71%
Mn 257.610†           472617.5      501.30 ug/L         0.819      501.30 ppb          0.819   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.26%
Mo 202.031†             7827.7      498.49 ug/L         4.638      498.49 ppb          4.638   0.93%
   QC value within limits for Mo 202.031  Recovery = 99.70%
Na 589.592 Radial†     33482.3       10147 ug/L         536.7       10147 ppb          536.7   5.29%
   QC value within limits for Na 589.592 Radial  Recovery = 101.47%
Ni 231.604†            21934.7      503.71 ug/L         4.624      503.71 ppb          4.624   0.92%
   QC value within limits for Ni 231.604  Recovery = 100.74%
P 214.914†              4428.4      2397.5 ug/L        29.00      2397.5 ppb         29.00   1.21%
   QC value within limits for P 214.914  Recovery = 95.90%
Pb 220.353†             4428.9      497.27 ug/L         4.095      497.27 ppb          4.095   0.82%
   QC value within limits for Pb 220.353  Recovery = 99.45%
S 181.975 Axial†         760.0      1003.1 ug/L        12.91      1003.1 ppb         12.91   1.29%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1577.6      505.26 ug/L         7.131      505.26 ppb          7.131   1.41%
   QC value within limits for Sb 206.836  Recovery = 101.05%
Se 196.026†              891.6      519.44 ug/L         3.887      519.44 ppb          3.887   0.75%
   QC value within limits for Se 196.026  Recovery = 103.89%
Si 251.611†            86389.3      2561.1 ug/L        22.79      2561.1 ppb         22.79   0.89%
   QC value within limits for Si 251.611  Recovery = 102.45%
Sn 189.927†             3113.2      501.38 ug/L         5.315      501.38 ppb          5.315   1.06%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†            82673.1      498.58 ug/L        29.365      498.58 ppb         29.365   5.89%
   QC value within limits for Sr 421.552  Recovery = 99.72%
Ti 334.940†           313173.3      494.18 ug/L         3.771      494.18 ppb          3.771   0.76%
   QC value within limits for Ti 334.940  Recovery = 98.84%
Tl 190.801†             1760.9      499.28 ug/L         4.891      499.28 ppb          4.891   0.98%
   QC value within limits for Tl 190.801  Recovery = 99.86%
U 409.014†             17301.3      495.82 ug/L         7.149      495.82 ppb          7.149   1.44%
   QC value within limits for U 409.014  Recovery = 99.16%
V 292.402†             74909.8      505.11 ug/L         3.526      505.11 ppb          3.526   0.70%
   QC value within limits for V 292.402  Recovery = 101.02%
Zn 213.857†            58771.1      501.08 ug/L         4.231      501.08 ppb          4.231   0.84%
   QC value within limits for Zn 213.857  Recovery = 100.22%
SiO2†                  85434.7      5427.3 ug/L          7.40      5427.3 ppb           7.40   0.14%
   QC value within limits for SiO2  Recovery = 101.49%
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:09:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5692.7	5692.7	102	%			13:10:56
1	Y RADIAL	6161.1	6161.1	102.0	%			13:10:56
1	Al 396.153Radial†	-4.7	30.7	21.091	ug/L	21.091	ppb	13:10:56
1	Ca 317.933Radial†	14.8	-2.4	-3.5139	ug/L	-3.5139	ppb	13:11:16
1	Fe 238.204 Radial†	10.4	0.3	2.2803	ug/L	2.2803	ppb	13:11:16
1	K 766.490 Radial†	3060.7	258.3	43.330	ug/L	43.330	ppb	13:10:56
1	Mg 279.077 IEC†	1.8	-0.2	-5.6613	ug/L	-5.6613	ppb	13:11:16
1	Na 589.592 Radial†	-1535.5	50.2	15.210	ug/L	15.210	ppb	13:10:56
1	Sr 421.552†	-33.8	-32.9	-0.1981	ug/L	-0.1981	ppb	13:10:56
1	Sc 361.383	871003.4	871003.4	100.36	%			13:12:13
1	Y 371.029	732360.3	732360.3	100.40	%			13:12:13
1	Ag 328.068†	372.0	96.6	0.4413	ug/L	0.4413	ppb	13:12:13
1	As 188.979†	-24.9	6.5	2.4896	ug/L	2.4896	ppb	13:12:33
1	B 249.677†	-214.7	279.3	5.9514	ug/L	5.9514	ppb	13:12:33
1	Ba 233.527†	-16.6	-5.5	-0.0405	ug/L	-0.0405	ppb	13:12:33
1	Be 313.107†	-4604.9	74.1	0.0264	ug/L	0.0264	ppb	13:12:13
1	Cd 226.502†	-198.1	1.5	0.0154	ug/L	0.0154	ppb	13:12:33
1	Co 228.616†	-80.2	-6.4	-0.1176	ug/L	-0.1176	ppb	13:12:33
1	Cr 267.716†	77.2	-9.1	-0.0937	ug/L	-0.0937	ppb	13:12:33
1	Cu 324.752†	6713.5	-68.1	-0.1977	ug/L	-0.1977	ppb	13:12:13
1	Mn 257.610†	529.1	7.1	0.0078	ug/L	0.0078	ppb	13:12:33
1	Mo 202.031†	38.8	20.2	1.2860	ug/L	1.2860	ppb	13:12:33
1	Ni 231.604†	88.0	1.7	0.0399	ug/L	0.0399	ppb	13:12:33
1	P 214.914†	228.1	-14.7	-8.1756	ug/L	-8.1756	ppb	13:12:33
1	Pb 220.353†	-68.0	0.3	0.0364	ug/L	0.0364	ppb	13:12:33
1	S 181.975 Axial†	50.5	0.9	1.1638	ug/L	1.1638	ppb	13:12:33
1	Sb 206.836†	41.3	3.8	1.2370	ug/L	1.2370	ppb	13:12:33
1	Se 196.026†	-22.9	4.0	2.2601	ug/L	2.2601	ppb	13:12:33
1	Si 251.611†	525.7	42.1	1.2169	ug/L	1.2169	ppb	13:12:33
1	Sn 189.927†	10.7	1.8	0.2965	ug/L	0.2965	ppb	13:12:33
1	Ti 334.940†	-1314.7	-53.8	-0.0836	ug/L	-0.0836	ppb	13:12:13
1	Tl 190.801†	-30.7	3.9	1.1088	ug/L	1.1088	ppb	13:12:33
1	U 409.014†	-2705.0	-111.4	-3.2038	ug/L	-3.2038	ppb	13:12:13
1	V 292.402†	-1342.9	24.5	0.1751	ug/L	0.1751	ppb	13:12:13
1	Zn 213.857†	767.1	10.5	0.0901	ug/L	0.0901	ppb	13:12:33
1	SiO2†	529.1	2.8	0.0943	ug/L	0.0943	ppb	13:13:29
2	Sc Radial	5700.2	5700.2	102	%			13:11:21
2	Y RADIAL	6213.4	6213.4	102.9	%			13:11:21
2	Al 396.153Radial†	-10.8	24.8	17.055	ug/L	17.055	ppb	13:11:21
2	Ca 317.933Radial†	15.8	-1.5	-2.1535	ug/L	-2.1535	ppb	13:11:41
2	Fe 238.204 Radial†	9.2	-0.9	-7.6609	ug/L	-7.6609	ppb	13:11:41
2	K 766.490 Radial†	2798.1	-2.5	-0.4269	ug/L	-0.4269	ppb	13:11:21
2	Mg 279.077 IEC†	2.7	0.7	24.628	ug/L	24.628	ppb	13:11:41
2	Na 589.592 Radial†	-1529.9	57.6	17.451	ug/L	17.451	ppb	13:11:21
2	Sr 421.552†	-26.4	-25.6	-0.1543	ug/L	-0.1543	ppb	13:11:21
2	Sc 361.383	872038.6	872038.6	100.48	%			13:12:38
2	Y 371.029	733622.4	733622.4	100.57	%			13:12:38
2	Ag 328.068†	320.6	45.1	0.2030	ug/L	0.2030	ppb	13:12:38
2	As 188.979†	-22.8	8.6	3.2992	ug/L	3.2992	ppb	13:12:58
2	B 249.677†	-230.0	264.3	5.6346	ug/L	5.6346	ppb	13:12:58
2	Ba 233.527†	8.3	19.3	0.1443	ug/L	0.1443	ppb	13:12:58
2	Be 313.107†	-4567.0	117.2	0.0416	ug/L	0.0416	ppb	13:12:38
2	Cd 226.502†	-203.4	-3.5	-0.0359	ug/L	-0.0359	ppb	13:12:58
2	Co 228.616†	-81.0	-7.2	-0.1340	ug/L	-0.1340	ppb	13:12:58
2	Cr 267.716†	99.3	12.8	0.1348	ug/L	0.1348	ppb	13:12:58
2	Cu 324.752†	6802.2	12.2	0.0349	ug/L	0.0349	ppb	13:12:38
2	Mn 257.610†	510.0	-12.5	-0.0145	ug/L	-0.0145	ppb	13:12:58
2	Mo 202.031†	24.2	5.6	0.3573	ug/L	0.3573	ppb	13:12:58
2	Ni 231.604†	86.6	0.3	0.0063	ug/L	0.0063	ppb	13:12:58

2	P 214.914†	234.4	-8.7	-4.8677 ug/L	-4.8677 ppb	13:12:58
2	Pb 220.353†	-70.9	-2.5	-0.2794 ug/L	-0.2794 ppb	13:12:58
2	S 181.975 Axial†	55.4	5.8	7.6105 ug/L	7.6105 ppb	13:12:58
2	Sb 206.836†	44.5	6.9	2.1847 ug/L	2.1847 ppb	13:12:58
2	Se 196.026†	-23.7	3.2	1.7875 ug/L	1.7875 ppb	13:12:58
2	Si 251.611†	536.1	51.8	1.5376 ug/L	1.5376 ppb	13:12:58
2	Sn 189.927†	8.9	0.0	0.0028 ug/L	0.0028 ppb	13:12:58
2	Ti 334.940†	-1408.1	-145.2	-0.2288 ug/L	-0.2288 ppb	13:12:38
2	Tl 190.801†	-33.2	1.6	0.4399 ug/L	0.4399 ppb	13:12:58
2	U 409.014†	-2635.5	-39.1	-1.1224 ug/L	-1.1224 ppb	13:12:38
2	V 292.402†	-1352.5	16.7	0.1158 ug/L	0.1158 ppb	13:12:38
2	Zn 213.857†	763.5	6.0	0.0514 ug/L	0.0514 ppb	13:12:58
2	SiO2†	500.5	-26.3	-1.6927 ug/L	-1.6927 ppb	13:13:34
3	Sc Radial	5765.8	5765.8	103 %		13:11:46
3	Y RADIAL	6256.3	6256.3	103.6 %		13:11:46
3	Al 396.153Radial†	-22.4	13.7	9.4289 ug/L	9.4289 ppb	13:11:46
3	Ca 317.933Radial†	17.9	0.5	0.6607 ug/L	0.6607 ppb	13:12:06
3	Fe 238.204 Radial†	12.7	2.4	21.299 ug/L	21.299 ppb	13:12:06
3	K 766.490 Radial†	2860.1	26.2	4.3980 ug/L	4.3980 ppb	13:11:46
3	Mg 279.077 IEC†	-2.3	-4.1	-138.65 ug/L	-138.65 ppb	13:12:06
3	Na 589.592 Radial†	-1539.2	65.6	19.891 ug/L	19.891 ppb	13:11:46
3	Sr 421.552†	-2.4	-2.1	-0.0129 ug/L	-0.0129 ppb	13:11:46
3	Sc 361.383	872446.7	872446.7	100.52 %		13:13:03
3	Y 371.029	732965.3	732965.3	100.48 %		13:13:03
3	Ag 328.068†	318.3	42.6	0.2025 ug/L	0.2025 ppb	13:13:03
3	As 188.979†	-23.2	8.2	3.1715 ug/L	3.1715 ppb	13:13:23
3	B 249.677†	-263.8	230.8	4.9152 ug/L	4.9152 ppb	13:13:23
3	Ba 233.527†	-9.1	2.0	0.0155 ug/L	0.0155 ppb	13:13:23
3	Be 313.107†	-4495.3	190.6	0.0686 ug/L	0.0686 ppb	13:13:03
3	Cd 226.502†	-207.0	-6.9	-0.0741 ug/L	-0.0741 ppb	13:13:23
3	Co 228.616†	-74.5	-0.7	-0.0138 ug/L	-0.0138 ppb	13:13:23
3	Cr 267.716†	100.0	13.5	0.1427 ug/L	0.1427 ppb	13:13:23
3	Cu 324.752†	6737.6	-55.3	-0.1594 ug/L	-0.1594 ppb	13:13:03
3	Mn 257.610†	521.7	-1.1	0.0035 ug/L	0.0035 ppb	13:13:23
3	Mo 202.031†	19.5	0.9	0.0618 ug/L	0.0618 ppb	13:13:23
3	Ni 231.604†	86.5	0.1	0.0035 ug/L	0.0035 ppb	13:13:23
3	P 214.914†	237.5	-5.8	-3.2263 ug/L	-3.2263 ppb	13:13:23
3	Pb 220.353†	-64.6	3.7	0.4120 ug/L	0.4120 ppb	13:13:23
3	S 181.975 Axial†	48.2	-1.4	-1.9171 ug/L	-1.9171 ppb	13:13:23
3	Sb 206.836†	42.0	4.4	1.3982 ug/L	1.3982 ppb	13:13:23
3	Se 196.026†	-31.6	-4.6	-2.5419 ug/L	-2.5419 ppb	13:13:23
3	Si 251.611†	507.6	23.2	0.6874 ug/L	0.6874 ppb	13:13:23
3	Sn 189.927†	10.5	1.6	0.2586 ug/L	0.2586 ppb	13:13:23
3	Ti 334.940†	-1214.3	48.3	0.0781 ug/L	0.0781 ppb	13:13:03
3	Tl 190.801†	-37.5	-2.7	-0.7700 ug/L	-0.7700 ppb	13:13:23
3	U 409.014†	-2746.4	-148.2	-4.2625 ug/L	-4.2625 ppb	13:13:03
3	V 292.402†	-1394.8	-24.8	-0.1789 ug/L	-0.1789 ppb	13:13:03
3	Zn 213.857†	770.0	12.1	0.1071 ug/L	0.1071 ppb	13:13:23
3	SiO2†	529.8	2.6	0.1564 ug/L	0.1564 ppb	13:13:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871829.6	100.45	%	0.086				0.09%
Sc Radial	5719.6	103	%	0.7				0.70%
Y 371.029	732982.7	100.48	%	0.087				0.09%
Y RADIAL	6210.3	102.8	%	0.79				0.77%
Ag 328.068†	61.4	0.2823	ug/L	0.13775	0.2823	ppb	0.13775	48.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.1	15.858	ug/L	5.9224	15.858	ppb	5.9224	37.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.7	2.9868	ug/L	0.43527	2.9868	ppb	0.43527	14.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	258.1	5.5004	ug/L	0.53096	5.5004	ppb	0.53096	9.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.3	0.0398	ug/L	0.09476	0.0398	ppb	0.09476	238.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.3	0.0456	ug/L	0.02136	0.0456	ppb	0.02136	46.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.1	-1.6689	ug/L	2.12910	-1.6689	ppb	2.12910	127.57%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -3.0     -0.0315 ug/L       0.04492     -0.0315 ppb        0.04492 142.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -4.8     -0.0885 ug/L       0.06521     -0.0885 ppb        0.06521  73.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.7      0.0612 ug/L       0.13427      0.0612 ppb        0.13427 219.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -37.1     -0.1074 ug/L       0.12473     -0.1074 ppb        0.12473 116.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      5.3062 ug/L      14.71531      5.3062 ppb       14.71531 277.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          94.0     15.767 ug/L       23.9916      15.767 ppb        23.9916 152.16%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -39.896 ug/L       86.8579     -39.896 ppb        86.8579 217.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -2.2     -0.0011 ug/L       0.01184     -0.0011 ppb        0.01184 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.9      0.5684 ug/L       0.63883      0.5684 ppb        0.63883 112.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.8     17.517 ug/L        2.3410      17.517 ppb         2.3410  13.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.7      0.0165 ug/L       0.02025      0.0165 ppb        0.02025 122.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -9.8     -5.4232 ug/L       2.52099     -5.4232 ppb        2.52099  46.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.5      0.0564 ug/L       0.34614      0.0564 ppb        0.34614 614.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      2.2858 ug/L       4.86186      2.2858 ppb        4.86186 212.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.0      1.6066 ug/L       0.50705      1.6066 ppb        0.50705  31.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5019 ug/L       2.64660      0.5019 ppb        2.64660 527.33%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                39.0      1.1473 ug/L       0.42932      1.1473 ppb        0.42932  37.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.1860 ug/L       0.15974      0.1860 ppb        0.15974  85.89%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -20.2     -0.1218 ug/L       0.09679     -0.1218 ppb        0.09679  79.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -50.2     -0.0781 ug/L       0.15353     -0.0781 ppb        0.15353 196.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      0.2596 ug/L       0.95230      0.2596 ppb        0.95230 366.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -99.5     -2.8629 ug/L       1.59755     -2.8629 ppb        1.59755  55.80%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  5.5      0.0373 ug/L       0.18959      0.0373 ppb        0.18959 507.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.5      0.0829 ug/L       0.02853      0.0829 ppb        0.02853  34.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -7.0     -0.4806 ug/L       1.05009     -0.4806 ppb        1.05009 218.47%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, December 02, 2009 11:08:47
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.289
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	640.8	640.814	23.764	3.7
	Mg	24.0	15762.5	15762.491	87.307	0.6
	Co	58.9	43805.3	43805.266	504.892	1.2
	Rh	102.9	65936.0	65936.026	662.717	1.0
	In	114.9	80210.2	80210.159	625.585	0.8
	Pb	208.0	37810.4	37810.374	329.126	0.9
⌈>	Ba	137.9	67292.2	67292.172	736.411	1.1
⌊	Ba++	69.0	1339.8	0.020	0.000	1.8
⌈>	Ce	139.9	80497.2	80497.159	344.045	0.4
⌊	CeO	155.9	1439.2	0.018	0.001	3.9
	Bkgd	220.0	6.6	6.600	1.782	27.0

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
5.50	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	5.5	755.4
Co	59	21	6.8	27586.6
In	115	21	8.0	59160.2

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	604	2050	0.711
Be	9.0	9.1	2056	2055	0.613
Mg	24.0	24.0	5685	2085	0.600
Mg	25.0	25.0	5935	2080	0.635
Mg	26.0	26.0	6158	2095	0.630
Co	58.9	58.9	14163	2100	0.773
Rh	102.9	102.9	24876	2220	0.680
In	114.9	114.8	27768	2255	0.676
Ce	139.9	139.9	33850	2300	0.671
Pb	206.0	206.0	49928	2460	0.768
Pb	207.0	207.0	50101	2380	0.724
Pb	208.0	208.0	50436	2490	0.718
U	238.1	238.0	57682	2480	0.781

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, December 03, 2009 05:56:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\Blank.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		18	
	Be	9		ug/L		5	
	B	11		ug/L		49	
	Na	23		ug/L		53769	
	Mg	24		ug/L		5668	
	Al	27		ug/L		9337	
	P	31		ug/L		3090	
	K	39		ug/L		564262	
	Ca	43		ug/L		543	
>	Sc	45		ug/L		204911	
	Ti	47		ug/L		234	
	V	51		ug/L		6219	
	Cr	52		ug/L		-4731	
	Cr	53		ug/L		223455	
	Mn	55		ug/L		1347	
	Fe	57		ug/L		4873	
	Co	59		ug/L		322	
	Ni	60		ug/L		99	
	Cu	63		ug/L		221	
	Cu	65		ug/L		130	
	Zn	66		ug/L		364	
	Zn	67		ug/L		10223	
	Zn	68		ug/L		1126	
>	Ge	74		ug/L		186521	
	As	75		ug/L		255	
	Se	77		ug/L		8726	
	Se	82		ug/L		7	
	Kr	83		ug/L		62	
	Sr	88		ug/L		535	
	Y	89		ug/L		19	
	Zr	90		ug/L		277	
	Mo	98		ug/L		133	
	Ag	107		ug/L		130	
	Cd	111		ug/L		28	
	Cd	114		ug/L		74	
>	In	115		ug/L		106206	
	Sn	120		ug/L		219	
	Sb	121		ug/L		250	
	Sb	123		ug/L		213	
	Ba	135		ug/L		41	
	Ba	137		ug/L		62	
	Ho	165		ug/L		15	
>	Lu	175		ug/L		108013	
	Tl	205		ug/L		520	
	Pb	208		ug/L		990	
	Bi	209		ug/L		27	
	Th	232		ug/L		717	
	U	238		ug/L		754	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9996
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, December 03, 2009 06:03:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\Standard 1.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	9.922	957	0.004
	Be	9	10.000	ug/L	3.580	382	0.002
	B	11	20.000	ug/L	4.106	850	0.004
	Na	23	1000.000	ug/L	0.965	1262437	5.670
	Mg	24	1000.000	ug/L	12.054	976284	4.555
	Al	27	1000.000	ug/L	3.685	1384329	6.462
	P	31	1000.000	ug/L	0.530	80437	0.363
	K	39	1000.000	ug/L	5.888	3297632	12.746
	Ca	43	1000.000	ug/L	2.243	6250	0.027
>	Sc	45		ug/L		212803	212802.945
	Ti	47	10.000	ug/L	0.491	2986	0.013
	V	51	10.000	ug/L	6.912	38655	0.151
	Cr	52	10.000	ug/L	2.578	22089	0.127
	Cr	53		ug/L		241803	0.046
	Mn	55	10.000	ug/L	3.066	45297	0.206
	Fe	57	1000.000	ug/L	2.718	95006	0.423
	Co	59	10.000	ug/L	3.186	34685	0.161
	Ni	60	10.000	ug/L	1.570	7367	0.034
	Cu	63		ug/L		16692	0.077
	Cu	65	10.000	ug/L	3.142	7993	0.037
	Zn	66	10.000	ug/L	1.694	3974	0.019
	Zn	67		ug/L		11766	0.007
	Zn	68		ug/L		3624	0.013
>	Ge	74		ug/L		191927	191926.582
	As	75	10.000	ug/L	3.204	5233	0.026
	Se	77		ug/L		10103	0.006
	Se	82	10.000	ug/L	8.029	420	0.002
	Kr	83		ug/L		68	0.000
	Sr	88	10.000	ug/L	2.508	68318	0.631
	Y	89		ug/L		27	0.000
	Zr	90	10.000	ug/L	1.467	37421	0.346
	Mo	98	10.000	ug/L	1.512	15515	0.143
	Ag	107	10.000	ug/L	3.312	24067	0.223
	Cd	111	10.000	ug/L	0.595	5162	0.048
	Cd	114		ug/L		11652	0.108
>	In	115		ug/L		107360	107360.084
	Sn	120	10.000	ug/L	0.850	23783	0.219
	Sb	121	10.000	ug/L	2.396	18475	0.170
	Sb	123		ug/L		14099	0.129
	Ba	135		ug/L		5766	0.053
	Ba	137	10.000	ug/L	2.055	9968	0.091
	Ho	165		ug/L		17	0.000
>	Lu	175		ug/L		108944	108943.586
	Tl	205	10.000	ug/L	0.850	33554	0.303
	Pb	208	10.000	ug/L	1.357	69290	0.627
	Bi	209		ug/L		31	0.000
	Th	232	10.000	ug/L	0.952	81327	0.740
	U	238	10.000	ug/L	1.042	81978	0.745

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, December 03, 2009 06:09:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\Standard 2.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.980**	ug/L	9.554	9241	0.043
	Be	9	**100.023**	ug/L	2.840	3876	0.018
	B	11	**200.120**	ug/L	2.602	8576	0.040
	Na	23	**10008.074**	ug/L	1.710	13219479	61.726
	Mg	24	**9995.249**	ug/L	5.430	9271096	43.460
	Al	27	**9999.971**	ug/L	5.562	13782267	64.599
	P	31	**9996.589**	ug/L	1.068	751435	3.508
	K	39	**10000.025**	ug/L	4.047	27769531	127.495
	Ca	43	**9996.150**	ug/L	0.859	55404	0.257
>	Sc	45		ug/L		213253	213252.787
	Ti	47	**99.995**	ug/L	0.652	27608	0.128
	V	51	**99.919**	ug/L	1.444	304812	1.399
	Cr	52	**99.993**	ug/L	1.877	263762	1.260
	Cr	53		ug/L		256317	0.111
	Mn	55	**99.994**	ug/L	1.507	438599	2.050
	Fe	57	**9998.057**	ug/L	1.394	889237	4.146
	Co	59	**99.976**	ug/L	1.441	336642	1.577
	Ni	60	**99.963**	ug/L	1.433	70263	0.329
	Cu	63		ug/L		157911	0.739
	Cu	65	**99.957**	ug/L	1.876	75627	0.354
	Zn	66	**100.010**	ug/L	0.308	36679	0.189
	Zn	67		ug/L		17176	0.035
	Zn	68		ug/L		27173	0.136
>	Ge	74		ug/L		191694	191694.210
	As	75	**99.909**	ug/L	1.966	45715	0.237
	Se	77		ug/L		11913	0.015
	Se	82	**100.017**	ug/L	2.018	4206	0.022
	Kr	83		ug/L		82	0.000
	Sr	88	**99.987**	ug/L	1.573	662484	6.232
	Y	89		ug/L		81	0.001
	Zr	90	**100.001**	ug/L	1.859	368140	3.463
	Mo	98	**100.014**	ug/L	2.441	154458	1.453
	Ag	107	**99.978**	ug/L	1.759	231900	2.182
	Cd	111	**100.002**	ug/L	1.241	50929	0.479
	Cd	114		ug/L		114926	1.081
>	In	115		ug/L		106233	106232.832
	Sn	120	**99.982**	ug/L	0.943	229135	2.155
	Sb	121	**100.016**	ug/L	0.749	183492	1.725
	Sb	123		ug/L		140574	1.321
	Ba	135		ug/L		56713	0.514
	Ba	137	**99.979**	ug/L	0.792	98154	0.890
	Ho	165		ug/L		14	-0.000
>	Lu	175		ug/L		110169	110169.296
	Tl	205	**99.991**	ug/L	1.159	331438	3.004
	Pb	208	**99.991**	ug/L	0.983	685436	6.213
	Bi	209		ug/L		73	0.000
	Th	232	**99.999**	ug/L	2.339	814995	7.392
	U	238	**99.987**	ug/L	1.839	811131	7.356

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, December 03, 2009 06:15:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 1.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.064**	**ug/L**	8.717	4693	0.022
	Be	9	**52.139**	**ug/L**	5.843	2048	0.009
	B	11	**105.678**	**ug/L**	3.142	4608	0.021
	Na	23	**5238.634**	**ug/L**	8.905	7031169	32.310
	Mg	24	**5428.418**	**ug/L**	7.402	5102899	23.603
	Al	27	**5012.016**	**ug/L**	3.449	7001119	32.377
	P	31	**5073.172**	**ug/L**	0.687	387647	1.780
	K	39	**5034.378**	**ug/L**	4.950	14450149	64.186
	Ca	43	**5108.426**	**ug/L**	0.973	28943	0.131
>	Sc	45		**ug/L**		215894	215894.333
	Ti	47	**49.769**	**ug/L**	0.658	14034	0.064
	V	51	**49.914**	**ug/L**	2.967	157425	0.699
	Cr	52	**51.627**	**ug/L**	0.959	135470	0.651
	Cr	53		**ug/L**		240000	0.021
	Mn	55	**51.945**	**ug/L**	0.837	231361	1.065
	Fe	57	**5005.819**	**ug/L**	1.336	453314	2.076
	Co	59	**50.036**	**ug/L**	0.571	170749	0.789
	Ni	60	**50.583**	**ug/L**	1.733	36047	0.166
	Cu	63		**ug/L**		83653	0.386
	Cu	65	**52.136**	**ug/L**	0.296	40005	0.185
	Zn	66	**51.629**	**ug/L**	1.149	19235	0.098
	Zn	67		**ug/L**		13951	0.018
	Zn	68		**ug/L**		14722	0.070
>	Ge	74		**ug/L**		192892	192892.133
	As	75	**49.512**	**ug/L**	1.682	22931	0.118
	Se	77		**ug/L**		10140	0.006
	Se	82	**51.649**	**ug/L**	1.247	2189	0.011
	Kr	83		**ug/L**		67	0.000
	Sr	88	**50.924**	**ug/L**	1.206	334652	3.174
	Y	89		**ug/L**		53	0.000
	Zr	90	**51.374**	**ug/L**	2.284	187551	1.779
	Mo	98	**50.840**	**ug/L**	1.953	77875	0.739
	Ag	107	**51.544**	**ug/L**	2.491	118538	1.125
	Cd	111	**51.154**	**ug/L**	2.592	25828	0.245
	Cd	114		**ug/L**		57583	0.546
>	In	115		**ug/L**		105291	105290.570
	Sn	120	**51.513**	**ug/L**	1.552	117099	1.110
	Sb	121	**51.100**	**ug/L**	1.994	93021	0.881
	Sb	123		**ug/L**		70566	0.668
	Ba	135		**ug/L**		28708	0.260
	Ba	137	**50.569**	**ug/L**	1.378	49703	0.450
	Ho	165		**ug/L**		28	0.000
>	Lu	175		**ug/L**		110234	110234.152
	Tl	205	**47.564**	**ug/L**	1.307	158030	1.429
	Pb	208	**52.120**	**ug/L**	1.859	357946	3.238
	Bi	209		**ug/L**		50	0.000
	Th	232	**50.833**	**ug/L**	2.753	414846	3.758
	U	238	**53.242**	**ug/L**	2.034	432491	3.917

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	100.128				
	Be	9	104.277				
	B	11	105.678				
	Na	23	104.773				
	Mg	24	108.568				
	Al	27	99.248				
	P	31	101.463				
	K	39	100.688				
	Ca	43	102.169				
>	Sc	45		105.4			
	Ti	47	99.537				
	V	51	99.828				
	Cr	52	103.254				
	Cr	53					
	Mn	55	103.890				
	Fe	57	100.116				
	Co	59	100.072				
	Ni	60	101.166				
	Cu	63					
	Cu	65	104.272				
	Zn	66	103.257				
	Zn	67					
	Zn	68					
>	Ge	74		103.4			
	As	75	99.024				
	Se	77					
	Se	82	103.297				
	Kr	83					
	Sr	88	101.847				
	Y	89					
	Zr	90	102.747				
	Mo	98	101.680				
	Ag	107	103.089				
	Cd	111	102.308				
	Cd	114					
>	In	115		99.1			
	Sn	120	103.027				
	Sb	121	102.200				
	Sb	123					
	Ba	135					
	Ba	137	101.137				
	Ho	165					
>	Lu	175		102.1			
	Tl	205	95.128				
	Pb	208	104.241				
	Bi	209					
	Th	232	101.667				
	U	238	106.485				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, December 03, 2009 06:21:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 2.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.045**	ug/L	79.326	14	-0.000
	Be	9	**0.038**	ug/L	101.786	6	0.000
	B	11	**3.658**	ug/L	7.434	207	0.001
	Na	23	**-8.540**	ug/L	64.994	44403	-0.053
	Mg	24	**0.926**	ug/L	293.351	6668	0.004
	Al	27	**0.236**	ug/L	584.040	10004	0.002
	P	31	**0.389**	ug/L	1064.748	3230	0.000
	K	39	**-3.030**	ug/L	667.321	577845	-0.039
	Ca	43	**8.474**	ug/L	135.116	609	0.000
>	Sc	45		ug/L		213270	213270.252
	Ti	47	**0.010**	ug/L	325.819	246	0.000
	V	51	**-0.099**	ug/L	1815.586	6128	-0.001
	Cr	52	**0.050**	ug/L	174.624	-4777	0.001
	Cr	53		ug/L		214672	-0.081
	Mn	55	**0.013**	ug/L	211.408	1456	0.000
	Fe	57	**-2.797**	ug/L	103.109	4812	-0.001
	Co	59	**0.011**	ug/L	174.515	369	0.000
	Ni	60	**-0.006**	ug/L	415.960	98	-0.000
	Cu	63		ug/L		264	0.000
	Cu	65	**0.016**	ug/L	131.433	147	0.000
	Zn	66	**0.078**	ug/L	24.840	394	0.000
	Zn	67		ug/L		10165	-0.001
	Zn	68		ug/L		1082	-0.000
>	Ge	74		ug/L		187641	187641.014
	As	75	**-0.553**	ug/L	293.714	-4	-0.001
	Se	77		ug/L		7869	-0.005
	Se	82	**-0.281**	ug/L	54.305	-5	-0.000
	Kr	83		ug/L		76	0.000
	Sr	88	**0.014**	ug/L	77.096	625	0.001
	Y	89		ug/L		18	-0.000
	Zr	90	**0.105**	ug/L	18.483	659	0.004
	Mo	98	**0.051**	ug/L	29.632	209	0.001
	Ag	107	**0.034**	ug/L	53.572	206	0.001
	Cd	111	**0.012**	ug/L	82.543	33	0.000
	Cd	114		ug/L		87	0.000
>	In	115		ug/L		105352	105352.344
	Sn	120	**0.041**	ug/L	30.791	310	0.001
	Sb	121	**0.590**	ug/L	9.657	1320	0.010
	Sb	123		ug/L		1022	0.008
	Ba	135		ug/L		45	0.000
	Ba	137	**0.017**	ug/L	130.599	78	0.000
	Ho	165		ug/L		14	-0.000
>	Lu	175		ug/L		107956	107956.066
	Tl	205	**0.136**	ug/L	22.186	962	0.004
	Pb	208	**0.023**	ug/L	86.722	1143	0.001
	Bi	209		ug/L		28	0.000
	Th	232	**0.097**	ug/L	16.300	1489	0.007
	U	238	**0.019**	ug/L	70.020	902	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, December 03, 2009 06:27:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 3.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.804**	ug/L	9.380	1005	0.005
	Be	9	**0.572**	ug/L	27.698	27	0.000
	B	11	**16.144**	ug/L	2.573	731	0.003
	Na	23	**253.405**	ug/L	10.984	385145	1.563
	Mg	24	**16.522**	ug/L	39.950	21016	0.072
	Al	27	**25.226**	ug/L	13.944	44069	0.163
	P	31	**42.719**	ug/L	4.897	6349	0.015
	K	39	**300.168**	ug/L	10.059	1389172	3.827
	Ca	43	**210.292**	ug/L	4.956	1702	0.005
>	Sc	45		ug/L		211181	211181.091
	Ti	47	**9.198**	ug/L	1.358	2734	0.012
	V	51	**11.429**	ug/L	18.758	40188	0.160
	Cr	52	**10.678**	ug/L	1.077	23540	0.135
	Cr	53		ug/L		202556	-0.131
	Mn	55	**5.459**	ug/L	1.773	25023	0.112
	Fe	57	**102.768**	ug/L	5.199	14018	0.043
	Co	59	**1.030**	ug/L	3.561	3764	0.016
	Ni	60	**2.208**	ug/L	4.983	1636	0.007
	Cu	63		ug/L		2019	0.008
	Cu	65	**1.086**	ug/L	3.774	947	0.004
	Zn	66	**11.666**	ug/L	1.138	4650	0.022
	Zn	67		ug/L		10010	-0.003
	Zn	68		ug/L		4036	0.015
>	Ge	74		ug/L		193413	193413.484
	As	75	**5.781**	ug/L	2.512	2919	0.014
	Se	77		ug/L		7127	-0.010
	Se	82	**5.456**	ug/L	13.315	238	0.001
	Kr	83		ug/L		76	0.000
	Sr	88	**10.711**	ug/L	1.392	73178	0.668
	Y	89		ug/L		19	-0.000
	Zr	90	**1.881**	ug/L	3.552	7371	0.065
	Mo	98	**0.474**	ug/L	1.388	885	0.007
	Ag	107	**1.019**	ug/L	0.125	2552	0.022
	Cd	111	**1.067**	ug/L	3.557	585	0.005
	Cd	114		ug/L		1306	0.011
>	In	115		ug/L		108803	108803.032
	Sn	120	**5.174**	ug/L	0.917	12359	0.112
	Sb	121	**2.837**	ug/L	4.544	5579	0.049
	Sb	123		ug/L		4296	0.037
	Ba	135		ug/L		1214	0.011
	Ba	137	**2.048**	ug/L	0.889	2059	0.018
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		109441	109441.046
	Tl	205	**1.038**	ug/L	2.833	3939	0.031
	Pb	208	**2.053**	ug/L	1.434	14961	0.128
	Bi	209		ug/L		27	-0.000
	Th	232	**0.983**	ug/L	3.570	8680	0.073
	U	238	**0.138**	ug/L	5.669	1878	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	108.037				
	Be	9	114.367				
	B	11	107.625				
	Na	23	101.362				
	Mg	24	110.148				
	Al	27	84.086				
	P	31	85.438				
	K	39	100.056				
	Ca	43	105.146				
>	Sc	45		103.1			
	Ti	47	91.980				
	V	51	114.294				
	Cr	52	106.784				
	Cr	53					
	Mn	55	109.179				
	Fe	57	102.768				
	Co	59	103.041				
	Ni	60	110.377				
	Cu	63					
	Cu	65	108.570				
	Zn	66	116.659				
	Zn	67					
	Zn	68					
>	Ge	74		103.7			
	As	75	115.615				
	Se	77					
	Se	82	109.130				
	Kr	83					
	Sr	88	107.111				
	Y	89					
	Zr	90	94.038				
	Mo	98	94.751				
	Ag	107	101.891				
	Cd	111	106.685				
	Cd	114					
>	In	115		102.4			
	Sn	120	103.488				
	Sb	121	94.554				
	Sb	123					
	Ba	135					
	Ba	137	102.394				
	Ho	165					
>	Lu	175		101.3			
	Tl	205	103.766				
	Pb	208	102.625				
	Bi	209					
	Th	232	98.324				
	U	238	69.174				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, December 03, 2009 06:33:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 4.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.138**	**ug/L**	50.295	32	0.000
	Be	9	**0.025**	**ug/L**	171.845	6	0.000
	B	11	**1.734**	**ug/L**	28.746	128	0.000
	Na	23	**109633.262**	**ug/L**	1.427	148589846	676.174
	Mg	24	**99672.893**	**ug/L**	2.190	95197171	433.384
	Al	27	**100018.225**	**ug/L**	2.353	141913613	646.110
	P	31	**102432.868**	**ug/L**	0.783	7899294	35.949
	K	39	**99009.844**	**ug/L**	1.102	277863615	1262.325
	Ca	43	**98522.894**	**ug/L**	0.582	557251	2.534
>	Sc	45		**ug/L**		219650	219650.309
	Ti	47	**1503.585**	**ug/L**	1.003	424040	1.929
	V	51	**0.797**	**ug/L**	267.740	9138	0.011
	Cr	52	**3.403**	**ug/L**	4.010	4346	0.043
	Cr	53		**ug/L**		200794	-0.176
	Mn	55	**5.584**	**ug/L**	2.761	26592	0.115
	Fe	57	**96947.989**	**ug/L**	1.742	8836152	40.207
	Co	59	**0.228**	**ug/L**	0.547	1135	0.004
	Ni	60	**3.216**	**ug/L**	2.970	2431	0.011
	Cu	63		**ug/L**		6950	0.031
	Cu	65	**4.443**	**ug/L**	4.459	3596	0.016
	Zn	66	**4.084**	**ug/L**	4.105	1788	0.008
	Zn	67		**ug/L**		10078	-0.000
	Zn	68		**ug/L**		1131	0.000
>	Ge	74		**ug/L**		184674	184673.946
	As	75	**-0.245**	**ug/L**	211.176	147	-0.001
	Se	77		**ug/L**		8394	-0.001
	Se	82	**-0.773**	**ug/L**	52.467	-25	-0.000
	Kr	83		**ug/L**		114	0.000
	Sr	88	**1.169**	**ug/L**	1.984	7734	0.073
	Y	89		**ug/L**		210	0.002
	Zr	90	**0.326**	**ug/L**	45.377	1383	0.011
	Mo	98	**2112.381**	**ug/L**	2.415	3047387	30.686
	Ag	107	**0.041**	**ug/L**	12.415	210	0.001
	Cd	111	**0.289**	**ug/L**	38.891	163	0.001
	Cd	114		**ug/L**		3091	0.030
>	In	115		**ug/L**		99319	99318.697
	Sn	120	**0.151**	**ug/L**	7.239	528	0.003
	Sb	121	**0.343**	**ug/L**	19.457	822	0.006
	Sb	123		**ug/L**		670	0.005
	Ba	135		**ug/L**		401	0.003
	Ba	137	**0.615**	**ug/L**	2.323	659	0.005
	Ho	165		**ug/L**		312	0.003
>	Lu	175		**ug/L**		108869	108868.690
	Tl	205	**-0.032**	**ug/L**	26.505	421	-0.001
	Pb	208	**0.077**	**ug/L**	10.476	1518	0.005
	Bi	209		**ug/L**		238	0.002
	Th	232	**0.039**	**ug/L**	82.772	1035	0.003
	U	238	**-0.079**	**ug/L**	3.242	124	-0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	109.633				
	Mg	24	99.673				
	Al	27	100.018				
	P	31	102.433				
	K	39	99.010				
	Ca	43	98.523				
>	Sc	45		107.2			
	Ti	47	75.179				
	V	51					
	Cr	52	91.963				
	Cr	53					
	Mn	55	96.280				
	Fe	57	96.948				
	Co	59	91.144				
	Ni	60	119.115				
	Cu	63					
	Cu	65	153.216				
	Zn	66	113.440				
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	97.398				
	Y	89					
	Zr	90					
	Mo	98	105.619				
	Ag	107					
	Cd	111	72.360				
	Cd	114					
>	In	115		93.5			
	Sn	120					
	Sb	121	342.987				
	Sb	123					
	Ba	135					
	Ba	137	91.822				
	Ho	165					
>	Lu	175		100.8			
	Tl	205					
	Pb	208	38.480				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, December 03, 2009 06:40:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 5.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**22.466**	ug/L	8.168	2210	0.010
	Be	9	**24.463**	ug/L	1.229	1005	0.004
	B	11	**24.548**	ug/L	4.914	1158	0.005
	Na	23	**108193.795**	ug/L	3.149	150420811	667.296
	Mg	24	**102442.088**	ug/L	4.453	100359378	445.425
	Al	27	**104946.591**	ug/L	4.392	152755360	677.947
	P	31	**103307.244**	ug/L	1.561	8173097	36.256
	K	39	**103167.067**	ug/L	2.112	297049837	1315.327
	Ca	43	**99510.206**	ug/L	0.704	577433	2.560
>	Sc	45		ug/L		225354	225353.554
	Ti	47	**1504.964**	ug/L	1.031	435435	1.931
	V	51	**20.123**	ug/L	13.515	70309	0.282
	Cr	52	**23.168**	ug/L	2.515	60579	0.292
	Cr	53		ug/L		211564	-0.152
	Mn	55	**25.459**	ug/L	1.896	119112	0.522
	Fe	57	**97239.680**	ug/L	2.408	9092299	40.328
	Co	59	**19.090**	ug/L	2.532	68211	0.301
	Ni	60	**21.626**	ug/L	1.029	16149	0.071
	Cu	63		ug/L		37760	0.166
	Cu	65	**22.545**	ug/L	1.961	18138	0.080
	Zn	66	**24.445**	ug/L	1.321	9010	0.046
	Zn	67		ug/L		11113	0.005
	Zn	68		ug/L		6334	0.028
>	Ge	74		ug/L		186754	186754.354
	As	75	**21.926**	ug/L	2.621	9974	0.052
	Se	77		ug/L		9623	0.005
	Se	82	**20.689**	ug/L	1.674	853	0.005
	Kr	83		ug/L		122	0.000
	Sr	88	**23.524**	ug/L	0.674	147159	1.466
	Y	89		ug/L		210	0.002
	Zr	90	**21.986**	ug/L	1.565	76416	0.761
	Mo	98	**2106.169**	ug/L	0.789	3060500	30.596
	Ag	107	**19.299**	ug/L	0.894	42251	0.421
	Cd	111	**20.619**	ug/L	0.755	9909	0.099
	Cd	114		ug/L		24901	0.248
>	In	115		ug/L		100031	100031.386
	Sn	120	**20.851**	ug/L	0.050	45160	0.449
	Sb	121	**21.801**	ug/L	0.404	37845	0.376
	Sb	123		ug/L		28674	0.285
	Ba	135		ug/L		11455	0.106
	Ba	137	**20.486**	ug/L	2.868	19782	0.182
	Ho	165		ug/L		300	0.003
>	Lu	175		ug/L		108100	108099.903
	Tl	205	**18.212**	ug/L	1.169	59667	0.547
	Pb	208	**19.626**	ug/L	0.985	132813	1.219
	Bi	209		ug/L		327	0.003
	Th	232	**20.695**	ug/L	0.619	166074	1.530
	U	238	**21.103**	ug/L	1.180	168575	1.553

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	112.329				
	Be	9	122.314				
	B	11	122.739				
	Na	23	108.194				
	Mg	24	102.442				
	Al	27	104.947				
	P	31	103.307				
	K	39	103.167				
	Ca	43	99.510				
>	Sc	45		110.0			
	Ti	47	75.248				
	V	51	100.613				
	Cr	52	97.754				
	Cr	53					
	Mn	55	98.680				
	Fe	57	97.240				
	Co	59	94.274				
	Ni	60	95.268				
	Cu	63					
	Cu	65	98.451				
	Zn	66	103.580				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75	109.629				
	Se	77					
	Se	82	103.447				
	Kr	83					
	Sr	88	110.963				
	Y	89					
	Zr	90	109.928				
	Mo	98	105.308				
	Ag	107	96.493				
	Cd	111	101.074				
	Cd	114					
>	In	115		94.2			
	Sn	120	104.253				
	Sb	121	108.460				
	Sb	123					
	Ba	135					
	Ba	137	99.111				
	Ho	165					
>	Lu	175		100.1			
	Tl	205	91.062				
	Pb	208	97.160				
	Bi	209					
	Th	232	103.473				
	U	238	105.517				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Be	9ICSAB is out of limits
QC Std 5	B	11ICSAB is out of limits
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 03, 2009 06:46:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 6.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.521**	**ug/L**	7.058	5496	0.023
	Be	9	**58.256**	**ug/L**	2.400	2507	0.011
	B	11	**111.244**	**ug/L**	1.140	5314	0.022
	Na	23	**5362.127**	**ug/L**	2.734	7887234	33.071
	Mg	24	**5513.693**	**ug/L**	2.866	5679377	23.974
	Al	27	**5227.146**	**ug/L**	6.918	7999834	33.767
	P	31	**5149.897**	**ug/L**	1.936	431228	1.807
	K	39	**5225.459**	**ug/L**	2.799	16417158	66.622
	Ca	43	**5258.044**	**ug/L**	1.034	32633	0.135
>	Sc	45		**ug/L**		236638	236637.883
	Ti	47	**49.730**	**ug/L**	1.643	15371	0.064
	V	51	**48.664**	**ug/L**	2.091	168416	0.681
	Cr	52	**50.021**	**ug/L**	3.037	143679	0.630
	Cr	53		**ug/L**		229962	-0.119
	Mn	55	**50.473**	**ug/L**	3.106	246434	1.035
	Fe	57	**4928.824**	**ug/L**	2.969	489299	2.044
	Co	59	**47.471**	**ug/L**	3.040	177564	0.749
	Ni	60	**48.084**	**ug/L**	3.945	37560	0.158
	Cu	63		**ug/L**		86504	0.365
	Cu	65	**49.161**	**ug/L**	2.705	41352	0.174
	Zn	66	**52.060**	**ug/L**	2.467	20347	0.099
	Zn	67		**ug/L**		13309	0.011
	Zn	68		**ug/L**		14985	0.068
>	Ge	74		**ug/L**		202422	202422.188
	As	75	**48.213**	**ug/L**	2.802	23439	0.114
	Se	77		**ug/L**		9821	0.002
	Se	82	**51.234**	**ug/L**	2.899	2279	0.011
	Kr	83		**ug/L**		70	0.000
	Sr	88	**51.098**	**ug/L**	1.659	344611	3.185
	Y	89		**ug/L**		47	0.000
	Zr	90	**50.979**	**ug/L**	1.419	191056	1.765
	Mo	98	**50.886**	**ug/L**	1.336	80014	0.739
	Ag	107	**50.504**	**ug/L**	1.350	119232	1.102
	Cd	111	**49.759**	**ug/L**	1.265	25791	0.238
	Cd	114		**ug/L**		57760	0.534
>	In	115		**ug/L**		108051	108051.065
	Sn	120	**49.922**	**ug/L**	1.566	116478	1.076
	Sb	121	**50.429**	**ug/L**	0.635	94230	0.870
	Sb	123		**ug/L**		72687	0.671
	Ba	135		**ug/L**		28945	0.256
	Ba	137	**49.632**	**ug/L**	1.939	50017	0.442
	Ho	165		**ug/L**		27	0.000
>	Lu	175		**ug/L**		113007	113006.675
	Tl	205	**45.842**	**ug/L**	0.177	156169	1.377
	Pb	208	**49.826**	**ug/L**	0.900	350884	3.096
	Bi	209		**ug/L**		46	0.000
	Th	232	**49.309**	**ug/L**	0.934	412643	3.645
	U	238	**51.152**	**ug/L**	0.783	426083	3.763

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	107.042				
	Be	9	116.512				
	B	11	111.244				
	Na	23	107.243				
	Mg	24	110.274				
	Al	27	103.508				
	P	31	102.998				
	K	39	104.509				
	Ca	43	105.161				
>	Sc	45			115.5		
	Ti	47	99.460				
	V	51	97.328				
	Cr	52	100.042				
	Cr	53					
	Mn	55	100.945				
	Fe	57	98.576				
	Co	59	94.943				
	Ni	60	96.168				
	Cu	63					
	Cu	65	98.323				
	Zn	66	104.121				
	Zn	67					
	Zn	68					
>	Ge	74			108.5		
	As	75	96.426				
	Se	77					
	Se	82	102.468				
	Kr	83					
	Sr	88	102.195				
	Y	89					
	Zr	90	101.958				
	Mo	98	101.772				
	Ag	107	101.008				
	Cd	111	99.517				
	Cd	114					
>	In	115			101.7		
	Sn	120	99.843				
	Sb	121	100.858				
	Sb	123					
	Ba	135					
	Ba	137	99.264				
	Ho	165					
>	Lu	175			104.6		
	Tl	205	91.683				
	Pb	208	99.652				
	Bi	209					
	Th	232	98.618				
	U	238	102.305				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 03, 2009 06:52:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 7.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.121	ug/L	90.187	32	0.000
	Be	9	-0.031	ug/L	3.603	4	-0.000
	B	11	2.544	ug/L	34.112	174	0.001
	Na	23	-1.145	ug/L	1177.094	59801	-0.007
	Mg	24	6.741	ug/L	56.456	13340	0.029
	Al	27	0.483	ug/L	647.331	11338	0.003
	P	31	0.831	ug/L	166.513	3591	0.000
	K	39	-6.426	ug/L	104.325	624369	-0.082
	Ca	43	4.769	ug/L	65.508	648	0.000
>	Sc	45		ug/L		233633	233633.121
	Ti	47	-0.048	ug/L	86.780	252	-0.000
	V	51	1.294	ug/L	109.868	11321	0.018
	Cr	52	0.342	ug/L	36.413	-4384	0.004
	Cr	53		ug/L		207904	-0.200
	Mn	55	-0.025	ug/L	42.442	1417	-0.001
	Fe	57	0.352	ug/L	810.498	5592	0.000
	Co	59	0.006	ug/L	53.955	389	0.000
	Ni	60	-0.008	ug/L	189.003	107	-0.000
	Cu	63		ug/L		249	-0.000
	Cu	65	0.021	ug/L	25.250	166	0.000
	Zn	66	0.036	ug/L	177.456	406	0.000
	Zn	67		ug/L		9631	-0.007
	Zn	68		ug/L		1017	-0.001
>	Ge	74		ug/L		201122	201122.245
	As	75	-0.356	ug/L	90.441	105	-0.001
	Se	77		ug/L		7538	-0.009
	Se	82	-0.091	ug/L	784.516	3	-0.000
	Kr	83		ug/L		69	0.000
	Sr	88	0.014	ug/L	31.073	647	0.001
	Y	89		ug/L		21	0.000
	Zr	90	0.089	ug/L	29.387	620	0.003
	Mo	98	0.153	ug/L	2.851	379	0.002
	Ag	107	0.021	ug/L	21.475	183	0.000
	Cd	111	0.039	ug/L	19.658	49	0.000
	Cd	114		ug/L		92	0.000
>	In	115		ug/L		109391	109391.271
	Sn	120	0.039	ug/L	46.076	316	0.001
	Sb	121	0.235	ug/L	21.071	699	0.004
	Sb	123		ug/L		539	0.003
	Ba	135		ug/L		42	0.000
	Ba	137	0.006	ug/L	168.482	70	0.000
	Ho	165		ug/L		14	-0.000
>	Lu	175		ug/L		111045	111045.059
	Tl	205	0.242	ug/L	28.538	1342	0.007
	Pb	208	0.007	ug/L	150.564	1062	0.000
	Bi	209		ug/L		22	-0.000
	Th	232	0.051	ug/L	33.294	1153	0.004
	U	238	0.014	ug/L	50.270	891	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		114.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, December 03, 2009 06:58:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 10.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1032.971**	ug/L	11.080	104373	0.447
	Be	9	**1110.054**	ug/L	5.754	47074	0.201
	B	11	**3.167**	ug/L	15.042	203	0.001
	Na	23	**51255.868**	ug/L	5.979	73942814	316.126
	Mg	24	**49600.784**	ug/L	3.715	50407434	215.667
	Al	27	**49508.197**	ug/L	2.462	74759509	319.819
	P	31	**24594.486**	ug/L	4.115	2020559	8.632
	K	39	**50219.637**	ug/L	2.431	150292070	640.275
	Ca	43	**49880.219**	ug/L	0.100	300489	1.283
>	Sc	45		ug/L		233703	233703.457
	Ti	47	**31.664**	ug/L	1.234	9762	0.041
	V	51	**972.902**	ug/L	1.344	3190675	13.623
	Cr	52	**958.663**	ug/L	1.396	2817699	12.080
	Cr	53		ug/L		521862	1.143
	Mn	55	**953.463**	ug/L	0.422	4570440	19.550
	Fe	57	**48265.328**	ug/L	0.709	4683450	20.017
	Co	59	**902.064**	ug/L	0.362	3326062	14.231
	Ni	60	**882.823**	ug/L	0.718	679193	2.906
	Cu	63		ug/L		1490534	6.377
	Cu	65	**869.641**	ug/L	0.805	720023	3.080
	Zn	66	**2432.336**	ug/L	0.998	910945	4.606
	Zn	67		ug/L		155506	0.732
	Zn	68		ug/L		651008	3.287
>	Ge	74		ug/L		197686	197685.691
	As	75	**943.676**	ug/L	0.666	443060	2.240
	Se	77		ug/L		24233	0.076
	Se	82	**499.767**	ug/L	0.276	21646	0.109
	Kr	83		ug/L		93	0.000
	Sr	88	**1063.053**	ug/L	0.469	6860923	66.254
	Y	89		ug/L		214	0.002
	Zr	90	**527.207**	ug/L	1.059	1890647	18.258
	Mo	98	**1005.100**	ug/L	0.762	1511934	14.601
	Ag	107	**256.979**	ug/L	2.139	580734	5.608
	Cd	111	**982.451**	ug/L	0.876	487474	4.708
	Cd	114		ug/L		1088193	10.509
>	In	115		ug/L		103551	103551.046
	Sn	120	**1104.240**	ug/L	1.517	2464714	23.800
	Sb	121	**254.414**	ug/L	1.217	454639	4.388
	Sb	123		ug/L		348478	3.363
	Ba	135		ug/L		545688	4.835
	Ba	137	**931.405**	ug/L	1.547	936291	8.295
	Ho	165		ug/L		88	0.001
>	Lu	175		ug/L		112881	112881.399
	Tl	205	**457.688**	ug/L	1.403	1552399	13.749
	Pb	208	**4581.327**	ug/L	1.643	32131026	284.657
	Bi	209		ug/L		772	0.007
	Th	232	**2423.972**	ug/L	0.367	20226601	179.180
	U	238	**5072.498**	ug/L	0.926	42123598	373.189

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.297				
	Be	9	111.005				
	B	11					
	Na	23	102.512				
	Mg	24	99.202				
	Al	27	99.016				
	P	31	98.378				
	K	39	100.439				
	Ca	43	99.760				
>	Sc	45		114.1			
	Ti	47					
	V	51	97.290				
	Cr	52	95.866				
	Cr	53					
	Mn	55	95.346				
	Fe	57	96.531				
	Co	59	90.206				
	Ni	60	88.282				
	Cu	63					
	Cu	65	86.964				
	Zn	66	97.293				
	Zn	67					
	Zn	68					
>	Ge	74		106.0			
	As	75	94.368				
	Se	77					
	Se	82	99.953				
	Kr	83					
	Sr	88	106.305				
	Y	89					
	Zr	90	105.441				
	Mo	98	100.510				
	Ag	107	102.791				
	Cd	111	98.245				
	Cd	114					
>	In	115		97.5			
	Sn	120	110.424				
	Sb	121	101.766				
	Sb	123					
	Ba	135					
	Ba	137	93.141				
	Ho	165					
>	Lu	175		104.5			
	Tl	205	91.538				
	Pb	208	91.627				
	Bi	209					
	Th	232	96.959				
	U	238	101.450				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 10	Be	9LRS is out of limits (+/- 10%)
QC Std 10	Ni	60LRS is out of limits (+/- 10%)
QC Std 10	Cu	65LRS is out of limits (+/- 10%)
QC Std 10	Sn	120LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, December 03, 2009 07:04:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 11.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.038**	**ug/L**	9.628	5483	0.023
	Be	9	**57.542**	**ug/L**	4.322	2448	0.010
	B	11	**111.199**	**ug/L**	4.624	5250	0.022
	Na	23	**5740.860**	**ug/L**	7.825	8338373	35.407
	Mg	24	**5355.376**	**ug/L**	5.781	5456377	23.286
	Al	27	**5209.667**	**ug/L**	1.874	7886056	33.654
	P	31	**5141.299**	**ug/L**	1.412	425662	1.804
	K	39	**5091.788**	**ug/L**	6.178	15822848	64.918
	Ca	43	**5166.853**	**ug/L**	0.697	31718	0.133
>	Sc	45		**ug/L**		233971	233971.442
	Ti	47	**49.721**	**ug/L**	1.508	15195	0.064
	V	51	**49.791**	**ug/L**	6.648	170109	0.697
	Cr	52	**51.647**	**ug/L**	1.726	146844	0.651
	Cr	53		**ug/L**		229635	-0.109
	Mn	55	**52.045**	**ug/L**	0.912	251199	1.067
	Fe	57	**5043.423**	**ug/L**	0.799	494904	2.092
	Co	59	**48.963**	**ug/L**	1.388	181073	0.772
	Ni	60	**49.254**	**ug/L**	0.752	38044	0.162
	Cu	63		**ug/L**		88950	0.379
	Cu	65	**50.928**	**ug/L**	1.326	42349	0.180
	Zn	66	**52.981**	**ug/L**	1.783	20897	0.100
	Zn	67		**ug/L**		13390	0.011
	Zn	68		**ug/L**		15640	0.071
>	Ge	74		**ug/L**		204334	204334.261
	As	75	**48.466**	**ug/L**	2.596	23782	0.115
	Se	77		**ug/L**		9585	0.000
	Se	82	**51.238**	**ug/L**	1.319	2301	0.011
	Kr	83		**ug/L**		71	0.000
	Sr	88	**52.008**	**ug/L**	0.223	354566	3.241
	Y	89		**ug/L**		42	0.000
	Zr	90	**52.091**	**ug/L**	1.552	197290	1.804
	Mo	98	**50.963**	**ug/L**	0.673	80989	0.740
	Ag	107	**50.909**	**ug/L**	0.416	121476	1.111
	Cd	111	**50.875**	**ug/L**	0.447	26655	0.244
	Cd	114		**ug/L**		59942	0.548
>	In	115		**ug/L**		109219	109219.163
	Sn	120	**51.581**	**ug/L**	0.458	121654	1.112
	Sb	121	**52.140**	**ug/L**	1.873	98484	0.899
	Sb	123		**ug/L**		75880	0.693
	Ba	135		**ug/L**		29474	0.260
	Ba	137	**50.031**	**ug/L**	1.464	50457	0.446
	Ho	165		**ug/L**		30	0.000
>	Lu	175		**ug/L**		113108	113108.213
	Tl	205	**47.633**	**ug/L**	2.388	162353	1.431
	Pb	208	**52.700**	**ug/L**	2.385	371351	3.274
	Bi	209		**ug/L**		55	0.000
	Th	232	**50.905**	**ug/L**	1.890	426290	3.763
	U	238	**53.211**	**ug/L**	2.125	443484	3.915

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	108.077				
	Be	9	115.084				
	B	11	111.199				
	Na	23	114.817				
	Mg	24	107.108				
	Al	27	103.162				
	P	31	102.826				
	K	39	101.836				
	Ca	43	103.337				
>	Sc	45		114.2			
	Ti	47	99.441				
	V	51	99.582				
	Cr	52	103.294				
	Cr	53					
	Mn	55	104.090				
	Fe	57	100.868				
	Co	59	97.926				
	Ni	60	98.507				
	Cu	63					
	Cu	65	101.857				
	Zn	66	105.962				
	Zn	67					
	Zn	68					
>	Ge	74		109.6			
	As	75	96.931				
	Se	77					
	Se	82	102.476				
	Kr	83					
	Sr	88	104.017				
	Y	89					
	Zr	90	104.182				
	Mo	98	101.926				
	Ag	107	101.819				
	Cd	111	101.750				
	Cd	114					
>	In	115		102.8			
	Sn	120	103.162				
	Sb	121	104.279				
	Sb	123					
	Ba	135					
	Ba	137	100.062				
	Ho	165					
>	Lu	175		104.7			
	Tl	205	95.265				
	Pb	208	105.401				
	Bi	209					
	Th	232	101.810				
	U	238	106.422				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Be	9	CCV is out of limits (+/- 10%)
QC Std 11	B	11	CCV is out of limits (+/- 10%)
QC Std 11	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, December 03, 2009 07:11:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 12.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.119**	ug/L	34.134	32	0.000
	Be	9	**0.001**	ug/L	1537.650	5	0.000
	B	11	**2.695**	ug/L	18.477	180	0.001
	Na	23	**-8.367**	ug/L	95.489	49087	-0.052
	Mg	24	**4.524**	ug/L	22.552	11004	0.020
	Al	27	**2.718**	ug/L	17.046	14674	0.018
	P	31	**-0.898**	ug/L	296.256	3434	-0.000
	K	39	**-8.718**	ug/L	66.594	614622	-0.111
	Ca	43	**9.264**	ug/L	49.212	672	0.000
>	Sc	45		ug/L		232544	232543.510
	Ti	47	**-0.157**	ug/L	35.054	218	-0.000
	V	51	**2.336**	ug/L	48.613	14689	0.033
	Cr	52	**0.398**	ug/L	20.135	-4201	0.005
	Cr	53		ug/L		203776	-0.214
	Mn	55	**-0.010**	ug/L	130.292	1482	-0.000
	Fe	57	**-0.408**	ug/L	239.955	5491	-0.000
	Co	59	**0.019**	ug/L	50.913	436	0.000
	Ni	60	**0.010**	ug/L	158.848	120	0.000
	Cu	63		ug/L		350	0.000
	Cu	65	**0.060**	ug/L	6.305	197	0.000
	Zn	66	**0.145**	ug/L	64.217	446	0.000
	Zn	67		ug/L		9507	-0.007
	Zn	68		ug/L		1016	-0.001
>	Ge	74		ug/L		200682	200681.733
	As	75	**0.049**	ug/L	991.604	299	0.000
	Se	77		ug/L		7335	-0.010
	Se	82	**-0.220**	ug/L	29.757	-2	-0.000
	Kr	83		ug/L		77	0.000
	Sr	88	**0.029**	ug/L	30.231	743	0.002
	Y	89		ug/L		19	-0.000
	Zr	90	**0.130**	ug/L	13.557	769	0.004
	Mo	98	**0.169**	ug/L	8.282	401	0.002
	Ag	107	**0.038**	ug/L	5.346	223	0.001
	Cd	111	**0.047**	ug/L	39.190	53	0.000
	Cd	114		ug/L		117	0.000
>	In	115		ug/L		108408	108408.460
	Sn	120	**0.200**	ug/L	11.550	692	0.004
	Sb	121	**1.119**	ug/L	8.342	2346	0.019
	Sb	123		ug/L		1810	0.015
	Ba	135		ug/L		59	0.000
	Ba	137	**0.027**	ug/L	32.169	90	0.000
	Ho	165		ug/L		14	-0.000
>	Lu	175		ug/L		111197	111196.557
	Tl	205	**0.333**	ug/L	11.834	1647	0.010
	Pb	208	**0.221**	ug/L	11.032	2549	0.014
	Bi	209		ug/L		21	-0.000
	Th	232	**0.167**	ug/L	18.251	2108	0.012
	U	238	**0.094**	ug/L	19.953	1541	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		113.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 03, 2009 08:07:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 6.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**60.437**	ug/L	8.332	6764	0.026
	Be	9	**66.393**	ug/L	3.292	3115	0.012
	B	11	**120.856**	ug/L	1.991	6291	0.024
	Na	23	**5615.968**	ug/L	5.103	9009580	34.637
	Mg	24	**5408.817**	ug/L	3.667	6077929	23.518
	Al	27	**5355.923**	ug/L	3.294	8940396	34.599
	P	31	**5169.670**	ug/L	0.640	472155	1.814
	K	39	**5108.505**	ug/L	10.780	17513739	65.131
	Ca	43	**5264.014**	ug/L	0.657	35634	0.135
>	Sc	45		ug/L		258097	258096.581
	Ti	47	**48.257**	ug/L	1.959	16277	0.062
	V	51	**46.332**	ug/L	5.409	175297	0.649
	Cr	52	**50.089**	ug/L	1.779	156959	0.631
	Cr	53		ug/L		214800	-0.258
	Mn	55	**50.172**	ug/L	1.491	267218	1.029
	Fe	57	**4844.570**	ug/L	2.106	524706	2.009
	Co	59	**45.931**	ug/L	1.211	187422	0.725
	Ni	60	**46.551**	ug/L	1.511	39672	0.153
	Cu	63		ug/L		91355	0.353
	Cu	65	**47.461**	ug/L	2.095	43550	0.168
	Zn	66	**51.982**	ug/L	1.877	21419	0.098
	Zn	67		ug/L		12317	0.003
	Zn	68		ug/L		16018	0.069
>	Ge	74		ug/L		213395	213395.481
	As	75	**48.961**	ug/L	3.578	25085	0.116
	Se	77		ug/L		9848	-0.001
	Se	82	**49.340**	ug/L	2.688	2313	0.011
	Kr	83		ug/L		66	-0.000
	Sr	88	**51.952**	ug/L	1.338	357500	3.238
	Y	89		ug/L		120	0.001
	Zr	90	**51.514**	ug/L	1.317	196945	1.784
	Mo	98	**50.516**	ug/L	2.661	81023	0.734
	Ag	107	**51.355**	ug/L	0.728	123700	1.121
	Cd	111	**50.112**	ug/L	0.464	26501	0.240
	Cd	114		ug/L		59879	0.542
>	In	115		ug/L		110249	110248.605
	Sn	120	**49.861**	ug/L	1.542	118700	1.075
	Sb	121	**51.307**	ug/L	1.961	97822	0.885
	Sb	123		ug/L		74809	0.676
	Ba	135		ug/L		28870	0.254
	Ba	137	**49.038**	ug/L	1.821	49570	0.437
	Ho	165		ug/L		26	0.000
>	Lu	175		ug/L		113356	113356.426
	Tl	205	**45.143**	ug/L	1.574	154270	1.356
	Pb	208	**49.792**	ug/L	0.381	351736	3.094
	Bi	209		ug/L		46	0.000
	Th	232	**48.803**	ug/L	0.759	409689	3.607
	U	238	**50.334**	ug/L	0.759	420572	3.703

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	120.875				
	Be	9	132.786				
	B	11	120.856				
	Na	23	112.319				
	Mg	24	108.176				
	Al	27	106.058				
	P	31	103.393				
	K	39	102.170				
	Ca	43	105.280				
>	Sc	45		126.0			
	Ti	47	96.514				
	V	51	92.665				
	Cr	52	100.179				
	Cr	53					
	Mn	55	100.344				
	Fe	57	96.891				
	Co	59	91.862				
	Ni	60	93.103				
	Cu	63					
	Cu	65	94.921				
	Zn	66	103.965				
	Zn	67					
	Zn	68					
>	Ge	74		114.4			
	As	75	97.923				
	Se	77					
	Se	82	98.680				
	Kr	83					
	Sr	88	103.904				
	Y	89					
	Zr	90	103.028				
	Mo	98	101.033				
	Ag	107	102.711				
	Cd	111	100.223				
	Cd	114					
>	In	115		103.8			
	Sn	120	99.721				
	Sb	121	102.615				
	Sb	123					
	Ba	135					
	Ba	137	98.076				
	Ho	165					
>	Lu	175		104.9			
	Tl	205	90.287				
	Pb	208	99.584				
	Bi	209					
	Th	232	97.606				
	U	238	100.669				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 03, 2009 08:13:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 7.230

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.144	ug/L	33.327	38	0.000
	Be	9	0.066	ug/L	195.199	9	0.000
	B	11	2.567	ug/L	19.542	194	0.001
	Na	23	-6.263	ug/L	77.785	57785	-0.039
	Mg	24	-0.109	ug/L	2224.135	7002	-0.000
	Al	27	-0.258	ug/L	535.198	11338	-0.002
	P	31	-4.708	ug/L	7.890	3468	-0.002
	K	39	-14.465	ug/L	57.778	663759	-0.184
	Ca	43	-14.071	ug/L	13.002	591	-0.000
>	Sc	45		ug/L		258301	258300.674
	Ti	47	-0.148	ug/L	19.771	245	-0.000
	V	51	0.470	ug/L	309.141	9515	0.007
	Cr	52	1.098	ug/L	5.501	-2389	0.014
	Cr	53		ug/L		198537	-0.322
	Mn	55	-0.025	ug/L	39.972	1565	-0.001
	Fe	57	1.490	ug/L	57.426	6301	0.001
	Co	59	-0.004	ug/L	77.124	390	-0.000
	Ni	60	-0.004	ug/L	364.992	121	-0.000
	Cu	63		ug/L		270	-0.000
	Cu	65	-0.020	ug/L	131.191	146	-0.000
	Zn	66	0.024	ug/L	120.178	427	0.000
	Zn	67		ug/L		8912	-0.013
	Zn	68		ug/L		984	-0.001
>	Ge	74		ug/L		214248	214247.746
	As	75	-0.219	ug/L	342.892	182	-0.001
	Se	77		ug/L		7752	-0.011
	Se	82	0.005	ug/L	3785.587	8	0.000
	Kr	83		ug/L		69	-0.000
	Sr	88	0.015	ug/L	19.074	669	0.001
	Y	89		ug/L		30	0.000
	Zr	90	0.100	ug/L	23.586	681	0.003
	Mo	98	0.060	ug/L	35.598	237	0.001
	Ag	107	0.023	ug/L	30.337	193	0.000
	Cd	111	0.037	ug/L	61.596	49	0.000
	Cd	114		ug/L		97	0.000
>	In	115		ug/L		112407	112406.750
	Sn	120	0.056	ug/L	10.515	368	0.001
	Sb	121	0.153	ug/L	25.306	560	0.003
	Sb	123		ug/L		421	0.002
	Ba	135		ug/L		52	0.000
	Ba	137	0.012	ug/L	68.915	75	0.000
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		111439	111439.440
	Tl	205	0.251	ug/L	27.132	1375	0.008
	Pb	208	0.049	ug/L	19.168	1362	0.003
	Bi	209		ug/L		20	-0.000
	Th	232	0.056	ug/L	26.902	1202	0.004
	U	238	0.033	ug/L	15.897	1049	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		114.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		105.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201977933
Sample Date/Time: Thursday, December 03, 2009 08:20:00
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925193|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\1201977933.231

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.045**	**ug/L**	203.916	27	0.000
	Be	9	**-0.069**	**ug/L**	36.720	3	-0.000
	B	11	**1.133**	**ug/L**	34.663	120	0.000
	Na	23	**-13.265**	**ug/L**	55.799	46746	-0.082
	Mg	24	**-5.185**	**ug/L**	19.649	1333	-0.023
	Al	27	**2.300**	**ug/L**	35.621	15675	0.015
	P	31	**10.229**	**ug/L**	25.971	4840	0.004
	K	39	**-22.523**	**ug/L**	34.015	639698	-0.287
	Ca	43	**-19.384**	**ug/L**	39.943	558	-0.000
>	Sc	45		**ug/L**		259280	259279.816
	Ti	47	**-0.078**	**ug/L**	51.914	270	-0.000
	V	51	**-0.088**	**ug/L**	2272.419	7501	-0.001
	Cr	52	**1.845**	**ug/L**	10.663	46	0.023
	Cr	53		**ug/L**		156976	-0.485
	Mn	55	**0.007**	**ug/L**	104.101	1743	0.000
	Fe	57	**3.413**	**ug/L**	31.412	6532	0.001
	Co	59	**-0.050**	**ug/L**	3.551	203	-0.001
	Ni	60	**-0.015**	**ug/L**	172.958	113	-0.000
	Cu	63		**ug/L**		457	0.001
	Cu	65	**0.085**	**ug/L**	24.763	243	0.000
	Zn	66	**0.522**	**ug/L**	12.779	638	0.001
	Zn	67		**ug/L**		7243	-0.021
	Zn	68		**ug/L**		1043	-0.001
>	Ge	74		**ug/L**		217000	217000.132
	As	75	**-0.366**	**ug/L**	7.946	109	-0.001
	Se	77		**ug/L**		5652	-0.021
	Se	82	**-0.030**	**ug/L**	611.863	6	-0.000
	Kr	83		**ug/L**		69	-0.000
	Sr	88	**-0.037**	**ug/L**	3.613	310	-0.002
	Y	89		**ug/L**		46	0.000
	Zr	90	**0.095**	**ug/L**	33.281	663	0.003
	Mo	98	**-0.034**	**ug/L**	9.686	84	-0.000
	Ag	107	**-0.034**	**ug/L**	7.696	53	-0.001
	Cd	111	**-0.031**	**ug/L**	13.686	13	-0.000
	Cd	114		**ug/L**		23	-0.000
>	In	115		**ug/L**		112697	112697.458
	Sn	120	**0.076**	**ug/L**	1.432	418	0.002
	Sb	121	**-0.034**	**ug/L**	16.728	199	-0.001
	Sb	123		**ug/L**		191	-0.000
	Ba	135		**ug/L**		45	0.000
	Ba	137	**0.003**	**ug/L**	42.785	68	0.000
	Ho	165		**ug/L**		16	0.000
>	Lu	175		**ug/L**		113024	113024.265
	Tl	205	**0.039**	**ug/L**	27.625	675	0.001
	Pb	208	**-0.058**	**ug/L**	5.567	625	-0.004
	Bi	209		**ug/L**		45	0.000
	Th	232	**-0.038**	**ug/L**	27.652	431	-0.003
	U	238	**-0.090**	**ug/L**	0.442	40	-0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		116.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		106.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201977938
Sample Date/Time: Thursday, December 03, 2009 08:32:25
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925193|20|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\1201977938.233

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**5.589**	ug/L	9.880	670	0.002
	Be	9	**61.796**	ug/L	3.267	3009	0.011
	B	11	**89.726**	ug/L	2.923	4863	0.018
	Na	23	**362.464**	ug/L	15.707	669184	2.236
	Mg	24	**1769.609**	ug/L	11.164	2068402	7.694
	Al	27	**5203.256**	ug/L	1.365	9013719	33.613
	P	31	**398.425**	ug/L	1.958	41485	0.140
	K	39	**1405.537**	ug/L	6.784	5535498	17.920
	Ca	43	**1969.684**	ug/L	0.654	14279	0.051
>	Sc	45		ug/L		267798	267797.765
	Ti	47	**140.284**	ug/L	0.683	48514	0.180
	V	51	**67.358**	ug/L	2.299	260727	0.943
	Cr	52	**35.458**	ug/L	1.729	113482	0.447
	Cr	53		ug/L		191870	-0.374
	Mn	55	**181.823**	ug/L	0.519	1000174	3.728
	Fe	57	**5462.062**	ug/L	0.638	613011	2.265
	Co	59	**40.484**	ug/L	0.223	171451	0.639
	Ni	60	**49.872**	ug/L	1.865	44086	0.164
	Cu	63		ug/L		95849	0.357
	Cu	65	**47.952**	ug/L	1.316	45652	0.170
	Zn	66	**112.611**	ug/L	2.321	47232	0.213
	Zn	67		ug/L		16013	0.018
	Zn	68		ug/L		35607	0.156
>	Ge	74		ug/L		219538	219537.540
	As	75	**133.640**	ug/L	2.089	69929	0.317
	Se	77		ug/L		10558	0.001
	Se	82	**95.163**	ug/L	1.227	4583	0.021
	Kr	83		ug/L		75	0.000
	Sr	88	**92.373**	ug/L	1.157	645406	5.757
	Y	89		ug/L		54914	0.490
	Zr	90	**3.861**	ug/L	1.178	15271	0.134
	Mo	98	**44.018**	ug/L	0.916	71768	0.639
	Ag	107	**11.185**	ug/L	0.653	27482	0.244
	Cd	111	**63.364**	ug/L	1.309	34038	0.304
	Cd	114		ug/L		77472	0.691
>	In	115		ug/L		112020	112019.718
	Sn	120	**23.636**	ug/L	1.673	57301	0.509
	Sb	121	**14.892**	ug/L	1.438	29032	0.257
	Sb	123		ug/L		22474	0.199
	Ba	135		ug/L		152720	1.327
	Ba	137	**254.630**	ug/L	0.238	260887	2.268
	Ho	165		ug/L		2023	0.017
>	Lu	175		ug/L		115014	115013.623
	Tl	205	**97.529**	ug/L	0.835	337523	2.930
	Pb	208	**88.365**	ug/L	1.378	632494	5.490
	Bi	209		ug/L		986	0.008
	Th	232	**5.843**	ug/L	2.870	50431	0.432
	U	238	**0.724**	ug/L	2.181	6925	0.053

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		130.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		117.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		105.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419001
Sample Date/Time: Thursday, December 03, 2009 08:38:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\241419001.234

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**29.085**	**ug/L**	8.243	3588	0.013
	Be	9	**2.571**	**ug/L**	1.064	139	0.000
	B	11	**9.127**	**ug/L**	2.164	584	0.002
	Na	23	**1529.862**	**ug/L**	1.725	2748648	9.436
	Mg	24	**3183.262**	**ug/L**	1.001	3930964	13.841
	Al	27	**33661.893**	**ug/L**	2.934	61652322	217.453
	P	31	**221.180**	**ug/L**	1.109	26274	0.078
	K	39	**3173.490**	**ug/L**	5.079	12246469	40.460
	Ca	43	**3117.369**	**ug/L**	2.685	23479	0.080
>	Sc	45		**ug/L**		283433	283433.270
	Ti	47	**354.902**	**ug/L**	1.398	129408	0.455
	V	51	**19.127**	**ug/L**	4.198	84516	0.268
	Cr	52	**12.887**	**ug/L**	0.730	39485	0.162
	Cr	53		**ug/L**		142471	-0.588
	Mn	55	**170.740**	**ug/L**	0.399	994145	3.501
	Fe	57	**14553.063**	**ug/L**	0.511	1717386	6.036
	Co	59	**2.778**	**ug/L**	0.639	12868	0.044
	Ni	60	**9.462**	**ug/L**	2.418	8963	0.031
	Cu	63		**ug/L**		18833	0.065
	Cu	65	**8.899**	**ug/L**	0.263	9114	0.032
	Zn	66	**61.131**	**ug/L**	0.714	24713	0.116
	Zn	67		**ug/L**		11078	-0.002
	Zn	68		**ug/L**		20326	0.091
>	Ge	74		**ug/L**		209940	209940.121
	As	75	**2.468**	**ug/L**	12.435	1517	0.006
	Se	77		**ug/L**		5073	-0.023
	Se	82	**-0.026**	**ug/L**	1587.567	6	-0.000
	Kr	83		**ug/L**		100	0.000
	Sr	88	**34.043**	**ug/L**	0.487	232439	2.122
	Y	89		**ug/L**		219201	2.005
	Zr	90	**54.093**	**ug/L**	0.439	205027	1.873
	Mo	98	**0.752**	**ug/L**	3.816	1330	0.011
	Ag	107	**0.183**	**ug/L**	9.344	569	0.004
	Cd	111	**0.804**	**ug/L**	5.838	449	0.004
	Cd	114		**ug/L**		105	0.000
>	In	115		**ug/L**		109295	109294.866
	Sn	120	**0.671**	**ug/L**	2.679	1807	0.014
	Sb	121	**0.025**	**ug/L**	32.388	305	0.000
	Sb	123		**ug/L**		265	0.000
	Ba	135		**ug/L**		173028	1.466
	Ba	137	**282.648**	**ug/L**	1.890	297121	2.517
	Ho	165		**ug/L**		7574	0.064
>	Lu	175		**ug/L**		118004	118004.214
	Tl	205	**0.585**	**ug/L**	13.661	2643	0.018
	Pb	208	**14.016**	**ug/L**	0.327	103848	0.871
	Bi	209		**ug/L**		3594	0.030
	Th	232	**12.579**	**ug/L**	0.533	110506	0.930
	U	238	**0.842**	**ug/L**	1.948	8137	0.062

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		138.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		112.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201977934
Sample Date/Time: Thursday, December 03, 2009 08:44:47
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\1201977934.235

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**33.130**	**ug/L**	5.378	4046	0.014
	Be	9	**3.166**	**ug/L**	4.742	168	0.001
	B	11	**8.171**	**ug/L**	2.272	525	0.002
	Na	23	**1688.687**	**ug/L**	6.315	2997325	10.415
	Mg	24	**3771.553**	**ug/L**	3.120	4611825	16.399
	Al	27	**36941.225**	**ug/L**	4.088	66992287	238.637
	P	31	**250.356**	**ug/L**	1.442	28894	0.088
	K	39	**3418.140**	**ug/L**	3.465	13009079	43.580
	Ca	43	**3583.861**	**ug/L**	0.974	26622	0.092
>	Sc	45		**ug/L**		280710	280710.172
	Ti	47	**413.545**	**ug/L**	0.714	149280	0.531
	V	51	**20.605**	**ug/L**	5.222	89493	0.289
	Cr	52	**14.679**	**ug/L**	1.724	45436	0.185
	Cr	53		**ug/L**		133866	-0.614
	Mn	55	**197.668**	**ug/L**	1.639	1139445	4.053
	Fe	57	**16781.930**	**ug/L**	1.801	1960100	6.960
	Co	59	**3.384**	**ug/L**	2.909	15423	0.053
	Ni	60	**11.019**	**ug/L**	2.810	10315	0.036
	Cu	63		**ug/L**		21614	0.076
	Cu	65	**10.464**	**ug/L**	0.717	10582	0.037
	Zn	66	**120.119**	**ug/L**	1.502	47716	0.227
	Zn	67		**ug/L**		14118	0.013
	Zn	68		**ug/L**		36355	0.169
>	Ge	74		**ug/L**		207991	207991.248
	As	75	**2.683**	**ug/L**	15.143	1609	0.006
	Se	77		**ug/L**		4764	-0.024
	Se	82	**0.174**	**ug/L**	170.889	15	0.000
	Kr	83		**ug/L**		97	0.000
	Sr	88	**39.076**	**ug/L**	1.706	263498	2.435
	Y	89		**ug/L**		256116	2.372
	Zr	90	**53.614**	**ug/L**	1.169	200761	1.857
	Mo	98	**0.754**	**ug/L**	2.773	1318	0.011
	Ag	107	**0.175**	**ug/L**	7.237	544	0.004
	Cd	111	**0.818**	**ug/L**	8.076	451	0.004
	Cd	114		**ug/L**		105	0.000
>	In	115		**ug/L**		107977	107976.586
	Sn	120	**0.657**	**ug/L**	2.728	1752	0.014
	Sb	121	**0.015**	**ug/L**	71.455	282	0.000
	Sb	123		**ug/L**		254	0.000
	Ba	135		**ug/L**		184881	1.551
	Ba	137	**299.765**	**ug/L**	1.534	318177	2.670
	Ho	165		**ug/L**		9007	0.075
>	Lu	175		**ug/L**		119169	119168.881
	Tl	205	**0.330**	**ug/L**	2.216	1756	0.010
	Pb	208	**18.150**	**ug/L**	0.445	135489	1.128
	Bi	209		**ug/L**		3898	0.032
	Th	232	**13.941**	**ug/L**	1.024	123587	1.031
	U	238	**0.990**	**ug/L**	2.696	9509	0.073

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		137.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		111.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201977936
Sample Date/Time: Thursday, December 03, 2009 08:50:59
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\1201977936.236

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**67.172**	**ug/L**	7.377	8214	0.029
	Be	9	**34.855**	**ug/L**	5.241	1790	0.006
	B	11	**64.347**	**ug/L**	0.965	3693	0.013
	Na	23	**2715.929**	**ug/L**	4.917	4801882	16.751
	Mg	24	**5246.860**	**ug/L**	2.407	6445642	22.814
	Al	27	**41088.825**	**ug/L**	5.273	74921326	265.431
	P	31	**1270.179**	**ug/L**	0.848	130023	0.446
	K	39	**4445.997**	**ug/L**	4.119	16772166	56.684
	Ca	43	**4720.080**	**ug/L**	1.199	35009	0.121
>	Sc	45		**ug/L**		282144	282143.975
	Ti	47	**499.409**	**ug/L**	0.277	181137	0.641
	V	51	**45.479**	**ug/L**	2.945	188273	0.637
	Cr	52	**37.227**	**ug/L**	2.040	125863	0.469
	Cr	53		**ug/L**		140062	-0.594
	Mn	55	**326.502**	**ug/L**	0.245	1890700	6.695
	Fe	57	**17881.583**	**ug/L**	3.591	2099633	7.416
	Co	59	**25.256**	**ug/L**	0.990	112850	0.398
	Ni	60	**33.816**	**ug/L**	0.458	31539	0.111
	Cu	63		**ug/L**		62927	0.222
	Cu	65	**30.234**	**ug/L**	1.752	30390	0.107
	Zn	66	**93.611**	**ug/L**	0.760	37551	0.177
	Zn	67		**ug/L**		13216	0.008
	Zn	68		**ug/L**		31157	0.143
>	Ge	74		**ug/L**		209534	209533.992
	As	75	**41.458**	**ug/L**	0.200	20906	0.098
	Se	77		**ug/L**		5008	-0.023
	Se	82	**9.146**	**ug/L**	7.636	427	0.002
	Kr	83		**ug/L**		102	0.000
	Sr	88	**76.372**	**ug/L**	0.995	512021	4.760
	Y	89		**ug/L**		252463	2.349
	Zr	90	**87.792**	**ug/L**	0.556	326982	3.040
	Mo	98	**25.226**	**ug/L**	1.181	39511	0.366
	Ag	107	**25.648**	**ug/L**	1.120	60284	0.560
	Cd	111	**6.389**	**ug/L**	0.644	3318	0.031
	Cd	114		**ug/L**		5997	0.055
>	In	115		**ug/L**		107458	107457.621
	Sn	120	**17.472**	**ug/L**	2.570	40689	0.377
	Sb	121	**57.261**	**ug/L**	1.160	106371	0.988
	Sb	123		**ug/L**		81734	0.759
	Ba	135		**ug/L**		351689	2.960
	Ba	137	**567.156**	**ug/L**	0.717	600194	5.051
	Ho	165		**ug/L**		8875	0.075
>	Lu	175		**ug/L**		118818	118818.004
	Tl	205	**46.393**	**ug/L**	0.849	166152	1.394
	Pb	208	**113.640**	**ug/L**	2.529	839837	7.061
	Bi	209		**ug/L**		3754	0.031
	Th	232	**37.630**	**ug/L**	1.744	331244	2.782
	U	238	**26.303**	**ug/L**	1.727	230716	1.935

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		137.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		112.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201977937
Sample Date/Time: Thursday, December 03, 2009 08:57:12
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\1201977937.237

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**68.024**	ug/L	4.645	8341	0.029
	Be	9	**34.024**	ug/L	2.145	1752	0.006
	B	11	**66.318**	ug/L	1.351	3813	0.013
	Na	23	**2622.544**	ug/L	2.494	4647834	16.175
	Mg	24	**4601.405**	ug/L	5.911	5665143	20.007
	Al	27	**41002.859**	ug/L	1.393	74921326	264.875
	P	31	**1209.305**	ug/L	0.356	124280	0.424
	K	39	**4988.512**	ug/L	8.683	18773360	63.601
	Ca	43	**4416.602**	ug/L	1.772	32881	0.114
>	Sc	45		ug/L		282784	282784.376
	Ti	47	**503.201**	ug/L	0.792	182922	0.646
	V	51	**46.201**	ug/L	1.918	191507	0.647
	Cr	52	**36.813**	ug/L	1.113	124648	0.464
	Cr	53		ug/L		138486	-0.601
	Mn	55	**308.564**	ug/L	0.947	1790977	6.327
	Fe	57	**17899.898**	ug/L	5.002	2106270	7.424
	Co	59	**24.823**	ug/L	0.725	111179	0.392
	Ni	60	**31.856**	ug/L	0.549	29788	0.105
	Cu	63		ug/L		64713	0.228
	Cu	65	**30.763**	ug/L	0.597	30994	0.109
	Zn	66	**91.164**	ug/L	1.749	36276	0.173
	Zn	67		ug/L		12581	0.006
	Zn	68		ug/L		29056	0.134
>	Ge	74		ug/L		207808	207807.724
	As	75	**40.873**	ug/L	1.491	20441	0.097
	Se	77		ug/L		4921	-0.023
	Se	82	**9.295**	ug/L	3.034	430	0.002
	Kr	83		ug/L		104	0.000
	Sr	88	**67.733**	ug/L	1.915	458867	4.221
	Y	89		ug/L		235156	2.166
	Zr	90	**91.905**	ug/L	2.872	345819	3.183
	Mo	98	**25.151**	ug/L	2.500	39809	0.365
	Ag	107	**25.546**	ug/L	0.467	60680	0.558
	Cd	111	**6.418**	ug/L	2.513	3367	0.031
	Cd	114		ug/L		6115	0.056
>	In	115		ug/L		108596	108595.726
	Sn	120	**17.540**	ug/L	1.507	41269	0.378
	Sb	121	**59.218**	ug/L	1.847	111138	1.021
	Sb	123		ug/L		85384	0.784
	Ba	135		ug/L		254890	2.150
	Ba	137	**414.956**	ug/L	0.998	438108	3.696
	Ho	165		ug/L		8245	0.069
>	Lu	175		ug/L		118550	118549.607
	Tl	205	**46.594**	ug/L	1.254	166479	1.400
	Pb	208	**114.875**	ug/L	1.357	847101	7.138
	Bi	209		ug/L		3982	0.033
	Th	232	**37.711**	ug/L	1.715	331150	2.788
	U	238	**26.076**	ug/L	1.457	228199	1.918

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		138.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		111.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201977935
Sample Date/Time: Thursday, December 03, 2009 09:03:25
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925193|10|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\1201977935.238

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**6.981**	ug/L	3.843	804	0.003
	Be	9	**0.505**	ug/L	15.118	30	0.000
	B	11	**3.373**	ug/L	5.048	236	0.001
	Na	23	**322.256**	ug/L	7.730	582674	1.988
	Mg	24	**632.151**	ug/L	6.873	719028	2.749
	Al	27	**7151.265**	ug/L	4.034	11979524	46.197
	P	31	**40.572**	ug/L	3.338	7595	0.014
	K	39	**620.037**	ug/L	0.594	2761175	7.905
	Ca	43	**652.857**	ug/L	2.037	5038	0.017
>	Sc	45		ug/L		259051	259051.306
	Ti	47	**76.471**	ug/L	1.151	25717	0.098
	V	51	**3.436**	ug/L	19.311	20316	0.048
	Cr	52	**3.960**	ug/L	1.744	6948	0.050
	Cr	53		ug/L		152590	-0.501
	Mn	55	**38.041**	ug/L	0.801	203767	0.780
	Fe	57	**3301.058**	ug/L	1.160	360800	1.369
	Co	59	**0.563**	ug/L	4.147	2707	0.009
	Ni	60	**2.041**	ug/L	2.235	1866	0.007
	Cu	63		ug/L		3959	0.014
	Cu	65	**1.907**	ug/L	1.523	1914	0.007
	Zn	66	**12.967**	ug/L	2.300	5543	0.025
	Zn	67		ug/L		7698	-0.018
	Zn	68		ug/L		4727	0.017
>	Ge	74		ug/L		209162	209161.993
	As	75	**0.138**	ug/L	439.390	357	0.000
	Se	77		ug/L		6345	-0.016
	Se	82	**0.101**	ug/L	428.314	12	0.000
	Kr	83		ug/L		68	-0.000
	Sr	88	**6.750**	ug/L	1.033	46264	0.421
	Y	89		ug/L		43081	0.396
	Zr	90	**10.357**	ug/L	0.414	39260	0.359
	Mo	98	**0.102**	ug/L	20.741	297	0.001
	Ag	107	**0.018**	ug/L	35.496	176	0.000
	Cd	111	**0.119**	ug/L	35.541	91	0.001
	Cd	114		ug/L		40	-0.000
>	In	115		ug/L		108672	108672.144
	Sn	120	**0.098**	ug/L	11.824	454	0.002
	Sb	121	**0.014**	ug/L	55.225	281	0.000
	Sb	123		ug/L		259	0.000
	Ba	135		ug/L		34301	0.296
	Ba	137	**57.718**	ug/L	2.561	59527	0.514
	Ho	165		ug/L		1536	0.013
>	Lu	175		ug/L		115705	115704.898
	Tl	205	**0.136**	ug/L	24.419	1030	0.004
	Pb	208	**2.811**	ug/L	1.945	21262	0.175
	Bi	209		ug/L		740	0.006
	Th	232	**2.479**	ug/L	3.420	21966	0.183
	U	238	**0.100**	ug/L	10.273	1657	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		112.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 03, 2009 09:15:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 6.240

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**69.008**	ug/L	8.526	7680	0.030
	Be	9	**70.604**	ug/L	3.815	3296	0.013
	B	11	**125.008**	ug/L	1.076	6474	0.025
	Na	23	**5422.945**	ug/L	6.097	8657471	33.447
	Mg	24	**5187.839**	ug/L	1.615	5800366	22.557
	Al	27	**5478.750**	ug/L	3.909	9099685	35.392
	P	31	**5090.562**	ug/L	1.340	462765	1.787
	K	39	**5084.640**	ug/L	2.418	17358587	64.827
	Ca	43	**5311.219**	ug/L	0.719	35777	0.137
>	Sc	45		ug/L		256865	256864.867
	Ti	47	**48.837**	ug/L	1.371	16391	0.063
	V	51	**47.372**	ug/L	3.096	178198	0.663
	Cr	52	**49.660**	ug/L	0.542	154805	0.626
	Cr	53		ug/L		198876	-0.316
	Mn	55	**50.211**	ug/L	0.929	266158	1.030
	Fe	57	**4823.151**	ug/L	0.765	519941	2.000
	Co	59	**46.249**	ug/L	0.630	187824	0.730
	Ni	60	**46.065**	ug/L	0.752	39072	0.152
	Cu	63		ug/L		90497	0.351
	Cu	65	**46.957**	ug/L	0.843	42888	0.166
	Zn	66	**52.229**	ug/L	1.926	21499	0.099
	Zn	67		ug/L		11580	-0.000
	Zn	68		ug/L		15764	0.068
>	Ge	74		ug/L		213198	213198.024
	As	75	**48.648**	ug/L	2.322	24912	0.115
	Se	77		ug/L		9470	-0.002
	Se	82	**50.364**	ug/L	2.410	2359	0.011
	Kr	83		ug/L		63	-0.000
	Sr	88	**53.238**	ug/L	0.173	364774	3.318
	Y	89		ug/L		148	0.001
	Zr	90	**52.265**	ug/L	0.661	198964	1.810
	Mo	98	**50.777**	ug/L	1.193	81102	0.738
	Ag	107	**50.320**	ug/L	1.548	120675	1.098
	Cd	111	**49.863**	ug/L	0.739	26255	0.239
	Cd	114		ug/L		59234	0.539
>	In	115		ug/L		109769	109769.445
	Sn	120	**50.373**	ug/L	0.467	119407	1.086
	Sb	121	**50.819**	ug/L	0.268	96467	0.876
	Sb	123		ug/L		73998	0.672
	Ba	135		ug/L		28794	0.251
	Ba	137	**48.894**	ug/L	0.856	49934	0.435
	Ho	165		ug/L		36	0.000
>	Lu	175		ug/L		114530	114530.159
	Tl	205	**44.923**	ug/L	1.228	155100	1.350
	Pb	208	**49.195**	ug/L	1.856	351058	3.057
	Bi	209		ug/L		105	0.001
	Th	232	**48.860**	ug/L	0.705	414383	3.612
	U	238	**50.219**	ug/L	1.557	423904	3.695

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	138.016				
	Be	9	141.207				
	B	11	125.008				
	Na	23	108.459				
	Mg	24	103.757				
	Al	27	108.490				
	P	31	101.811				
	K	39	101.693				
	Ca	43	106.224				
>	Sc	45			125.4		
	Ti	47	97.675				
	V	51	94.745				
	Cr	52	99.319				
	Cr	53					
	Mn	55	100.421				
	Fe	57	96.463				
	Co	59	92.498				
	Ni	60	92.130				
	Cu	63					
	Cu	65	93.914				
	Zn	66	104.458				
	Zn	67					
	Zn	68					
>	Ge	74			114.3		
	As	75	97.295				
	Se	77					
	Se	82	100.729				
	Kr	83					
	Sr	88	106.477				
	Y	89					
	Zr	90	104.530				
	Mo	98	101.554				
	Ag	107	100.641				
	Cd	111	99.725				
	Cd	114					
>	In	115			103.4		
	Sn	120	100.745				
	Sb	121	101.639				
	Sb	123					
	Ba	135					
	Ba	137	97.789				
	Ho	165					
>	Lu	175			106.0		
	Tl	205	89.845				
	Pb	208	98.389				
	Bi	209					
	Th	232	97.721				
	U	238	100.439				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 6	Tl	205	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 03, 2009 09:22:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091202\QC Std 7.241

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.219**	ug/L	16.773	47	0.000
	Be	9	**0.072**	ug/L	72.612	9	0.000
	B	11	**3.118**	ug/L	24.380	223	0.001
	Na	23	**-12.325**	ug/L	19.652	48416	-0.076
	Mg	24	**4.853**	ug/L	36.930	12672	0.021
	Al	27	**4.286**	ug/L	62.008	19013	0.028
	P	31	**-2.356**	ug/L	210.236	3704	-0.001
	K	39	**-17.177**	ug/L	40.060	658516	-0.219
	Ca	43	**-17.603**	ug/L	56.453	571	-0.000
>	Sc	45		ug/L		259783	259782.733
	Ti	47	**-0.162**	ug/L	58.617	242	-0.000
	V	51	**-0.329**	ug/L	238.459	6697	-0.005
	Cr	52	**1.148**	ug/L	6.359	-2239	0.014
	Cr	53		ug/L		187897	-0.367
	Mn	55	**-0.009**	ug/L	255.741	1658	-0.000
	Fe	57	**0.147**	ug/L	654.301	6194	0.000
	Co	59	**0.003**	ug/L	268.046	420	0.000
	Ni	60	**0.003**	ug/L	829.083	128	0.000
	Cu	63		ug/L		274	-0.000
	Cu	65	**-0.014**	ug/L	143.351	152	-0.000
	Zn	66	**0.055**	ug/L	70.764	446	0.000
	Zn	67		ug/L		8601	-0.015
	Zn	68		ug/L		897	-0.002
>	Ge	74		ug/L		217292	217291.912
	As	75	**0.048**	ug/L	582.427	322	0.000
	Se	77		ug/L		7426	-0.013
	Se	82	**0.109**	ug/L	292.659	13	0.000
	Kr	83		ug/L		64	-0.000
	Sr	88	**0.024**	ug/L	42.517	726	0.001
	Y	89		ug/L		32	0.000
	Zr	90	**0.107**	ug/L	8.734	702	0.004
	Mo	98	**0.068**	ug/L	21.446	250	0.001
	Ag	107	**0.036**	ug/L	16.749	223	0.001
	Cd	111	**0.034**	ug/L	33.720	47	0.000
	Cd	114		ug/L		98	0.000
>	In	115		ug/L		111434	111434.281
	Sn	120	**0.048**	ug/L	29.454	344	0.001
	Sb	121	**0.154**	ug/L	19.575	557	0.003
	Sb	123		ug/L		474	0.002
	Ba	135		ug/L		73	0.000
	Ba	137	**0.034**	ug/L	29.050	97	0.000
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		111167	111166.718
	Tl	205	**0.229**	ug/L	24.032	1299	0.007
	Pb	208	**0.050**	ug/L	16.554	1362	0.003
	Bi	209		ug/L		36	0.000
	Th	232	**0.063**	ug/L	13.665	1251	0.005
	U	238	**0.032**	ug/L	35.322	1037	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		116.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		104.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, December 03, 2009 12:14:23
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.290
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1127.0	1127.044	34.845	3.1
	Mg	24.0	23356.5	23356.478	112.292	0.5
	Co	58.9	65380.7	65380.685	709.182	1.1
	Rh	102.9	103620.9	103620.859	672.626	0.6
	In	114.9	130518.5	130518.525	552.163	0.4
	Pb	208.0	63930.8	63930.754	924.097	1.4
⌈>	Ba	137.9	108788.3	108788.309	819.944	0.8
⌊	Ba++	69.0	2141.6	0.020	0.000	1.5
⌈>	Ce	139.9	129666.4	129666.413	329.228	0.3
⌊	CeO	155.9	2991.1	0.023	0.000	1.8
	Bkgd	220.0	8.5	8.500	2.264	26.6

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
5.50	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	5.8	1220.4
Co	59	21	6.5	42453.0
In	115	21	7.8	95202.8

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	606	2050	0.707
Be	9.0	9.0	2059	2055	0.651
Mg	24.0	24.0	5683	2085	0.626
Mg	25.0	24.9	5921	2080	0.659
Mg	26.0	26.0	6156	2095	0.621
Co	58.9	58.9	14161	2100	0.778
Rh	102.9	102.9	24869	2220	0.678
In	114.9	115.0	27786	2255	0.646
Ce	139.9	139.9	33855	2300	0.661
Pb	206.0	206.0	49929	2460	0.683
Pb	207.0	207.0	50101	2380	0.657
Pb	208.0	208.0	50436	2490	0.679
U	238.1	238.1	57688	2480	0.711

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, December 03, 2009 19:39:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\Blank.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		23	
	Be	9		ug/L		7	
	B	11		ug/L		69	
	Na	23		ug/L		46746	
	Mg	24		ug/L		2667	
	Al	27		ug/L		4667	
	P	31		ug/L		2573	
	K	39		ug/L		532764	
	Ca	43		ug/L		649	
>	Sc	45		ug/L		237963	
	Ti	47		ug/L		217	
	V	51		ug/L		8657	
	Cr	52		ug/L		-4956	
	Cr	53		ug/L		238828	
	Mn	55		ug/L		1374	
	Fe	57		ug/L		5161	
	Co	59		ug/L		193	
	Ni	60		ug/L		92	
	Cu	63		ug/L		236	
	Cu	65		ug/L		127	
	Zn	66		ug/L		306	
	Zn	67		ug/L		9871	
	Zn	68		ug/L		905	
>	Ge	74		ug/L		187552	
	As	75		ug/L		613	
	Se	77		ug/L		10281	
	Se	82		ug/L		-12	
	Kr	83		ug/L		68	
	Sr	88		ug/L		224	
	Y	89		ug/L		17	
	Zr	90		ug/L		272	
	Mo	98		ug/L		42	
	Ag	107		ug/L		79	
	Cd	111		ug/L		23	
	Cd	114		ug/L		40	
>	In	115		ug/L		98069	
	Sn	120		ug/L		145	
	Sb	121		ug/L		314	
	Sb	123		ug/L		249	
	Ba	135		ug/L		20	
	Ba	137		ug/L		38	
	Ho	165		ug/L		12	
>	Lu	175		ug/L		92383	
	Tl	205		ug/L		237	
	Pb	208		ug/L		506	
	Bi	209		ug/L		22	
	Th	232		ug/L		341	
	U	238		ug/L		166	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Zr	90	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, December 03, 2009 19:46:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\Standard 1.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.407	2270	0.009
	Be	9	10.000	ug/L	3.780	707	0.003
	B	11	20.000	ug/L	1.803	1302	0.005
	Na	23	1000.000	ug/L	1.771	1439034	5.833
	Mg	24	1000.000	ug/L	1.498	1034852	4.325
	Al	27	1000.000	ug/L	1.612	1404107	5.864
	P	31	1000.000	ug/L	1.481	82456	0.335
	K	39	1000.000	ug/L	4.836	3295107	11.572
	Ca	43	1000.000	ug/L	1.707	6668	0.025
>	Sc	45		ug/L		238658	238658.213
	Ti	47	10.000	ug/L	0.571	3010	0.012
	V	51	10.000	ug/L	19.534	33173	0.103
	Cr	52	10.000	ug/L	2.294	22648	0.116
	Cr	53		ug/L		270205	0.129
	Mn	55	10.000	ug/L	1.222	47233	0.192
	Fe	57	1000.000	ug/L	1.614	98010	0.389
	Co	59	10.000	ug/L	1.052	34110	0.142
	Ni	60	10.000	ug/L	1.856	7097	0.029
	Cu	63		ug/L		16014	0.066
	Cu	65	10.000	ug/L	1.697	7662	0.032
	Zn	66	10.000	ug/L	0.623	4133	0.020
	Zn	67		ug/L		11521	0.009
	Zn	68		ug/L		3689	0.015
>	Ge	74		ug/L		188211	188211.281
	As	75	10.000	ug/L	12.139	4925	0.023
	Se	77		ug/L		12526	0.012
	Se	82	10.000	ug/L	2.535	413	0.002
	Kr	83		ug/L		68	-0.000
	Sr	88	10.000	ug/L	2.356	65077	0.660
	Y	89		ug/L		31	0.000
	Zr	90	10.000	ug/L	0.276	35259	0.356
	Mo	98	10.000	ug/L	0.128	14500	0.147
	Ag	107	10.000	ug/L	1.632	21885	0.222
	Cd	111	10.000	ug/L	3.367	4835	0.049
	Cd	114		ug/L		10818	0.110
>	In	115		ug/L		98286	98285.639
	Sn	120	10.000	ug/L	0.738	22109	0.223
	Sb	121	10.000	ug/L	1.963	17856	0.178
	Sb	123		ug/L		13691	0.137
	Ba	135		ug/L		5278	0.056
	Ba	137	10.000	ug/L	1.090	9099	0.097
	Ho	165		ug/L		14	0.000
>	Lu	175		ug/L		93689	93689.199
	Tl	205	10.000	ug/L	0.974	27273	0.289
	Pb	208	10.000	ug/L	0.362	59885	0.634
	Bi	209		ug/L		24	0.000
	Th	232	10.000	ug/L	0.358	69674	0.740
	U	238	10.000	ug/L	0.932	69514	0.740

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, December 03, 2009 19:52:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\Standard 2.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.004**	**ug/L**	3.644	22438	0.095
	Be	9	**100.006**	**ug/L**	2.940	7014	0.030
	B	11	**200.008**	**ug/L**	1.506	12370	0.052
	Na	23	**10002.170**	**ug/L**	0.365	14195804	59.633
	Mg	24	**9995.940**	**ug/L**	1.340	9860546	41.542
	Al	27	**10001.651**	**ug/L**	3.140	14150952	59.638
	P	31	**10000.303**	**ug/L**	1.612	799100	3.358
	K	39	**10004.131**	**ug/L**	3.103	29174073	120.752
	Ca	43	**9999.274**	**ug/L**	0.936	60013	0.250
>	Sc	45		**ug/L**		237268	237268.150
	Ti	47	**99.994**	**ug/L**	0.739	27804	0.116
	V	51	**100.178**	**ug/L**	2.041	305755	1.252
	Cr	52	**99.989**	**ug/L**	1.073	266790	1.145
	Cr	53		**ug/L**		258414	0.086
	Mn	55	**99.981**	**ug/L**	1.453	448644	1.885
	Fe	57	**9996.611**	**ug/L**	1.564	897478	3.761
	Co	59	**99.984**	**ug/L**	1.818	332123	1.399
	Ni	60	**99.989**	**ug/L**	2.487	68972	0.290
	Cu	63		**ug/L**		157044	0.661
	Cu	65	**99.993**	**ug/L**	1.626	74482	0.313
	Zn	66	**100.008**	**ug/L**	1.682	38850	0.205
	Zn	67		**ug/L**		15895	0.032
	Zn	68		**ug/L**		28301	0.146
>	Ge	74		**ug/L**		188032	188032.084
	As	75	**100.056**	**ug/L**	1.438	46219	0.243
	Se	77		**ug/L**		12598	0.012
	Se	82	**99.949**	**ug/L**	0.695	4029	0.021
	Kr	83		**ug/L**		69	0.000
	Sr	88	**99.983**	**ug/L**	1.666	634197	6.485
	Y	89		**ug/L**		62	0.000
	Zr	90	**99.989**	**ug/L**	2.346	344373	3.520
	Mo	98	**100.001**	**ug/L**	2.175	143988	1.472
	Ag	107	**99.976**	**ug/L**	0.942	211941	2.167
	Cd	111	**99.998**	**ug/L**	1.540	47791	0.489
	Cd	114		**ug/L**		109834	1.123
>	In	115		**ug/L**		97771	97771.413
	Sn	120	**99.986**	**ug/L**	1.567	215639	2.204
	Sb	121	**99.999**	**ug/L**	2.685	174702	1.784
	Sb	123		**ug/L**		133045	1.358
	Ba	135		**ug/L**		51278	0.546
	Ba	137	**99.982**	**ug/L**	1.520	89209	0.950
	Ho	165		**ug/L**		17	0.000
>	Lu	175		**ug/L**		93866	93865.992
	Tl	205	**99.990**	**ug/L**	1.305	268437	2.857
	Pb	208	**99.983**	**ug/L**	1.477	585240	6.230
	Bi	209		**ug/L**		65	0.000
	Th	232	**99.992**	**ug/L**	1.389	689268	7.340
	U	238	**99.985**	**ug/L**	1.236	684896	7.295

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, December 03, 2009 19:58:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 1.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.080**	ug/L	1.767	11296	0.047
	Be	9	**50.980**	ug/L	0.430	3594	0.015
	B	11	**100.957**	ug/L	3.713	6303	0.026
	Na	23	**4880.695**	ug/L	3.042	6977562	29.099
	Mg	24	**5005.933**	ug/L	6.166	4958299	20.804
	Al	27	**5373.085**	ug/L	1.695	7636033	32.039
	P	31	**5008.236**	ug/L	2.459	403085	1.681
	K	39	**5072.043**	ug/L	1.344	15115816	61.221
	Ca	43	**4993.045**	ug/L	1.289	30412	0.125
>	Sc	45		ug/L		238209	238208.694
	Ti	47	**50.107**	ug/L	1.281	14098	0.058
	V	51	**51.953**	ug/L	3.623	163357	0.649
	Cr	52	**51.821**	ug/L	1.176	136424	0.594
	Cr	53		ug/L		246708	0.032
	Mn	55	**51.827**	ug/L	0.657	234188	0.977
	Fe	57	**5091.757**	ug/L	0.749	461547	1.916
	Co	59	**49.071**	ug/L	1.233	163776	0.687
	Ni	60	**50.662**	ug/L	1.439	35139	0.147
	Cu	63		ug/L		80964	0.339
	Cu	65	**51.613**	ug/L	0.333	38666	0.162
	Zn	66	**51.527**	ug/L	1.544	20133	0.106
	Zn	67		ug/L		12683	0.015
	Zn	68		ug/L		14889	0.075
>	Ge	74		ug/L		187713	187712.831
	As	75	**47.764**	ug/L	1.601	22350	0.116
	Se	77		ug/L		11447	0.006
	Se	82	**50.971**	ug/L	1.821	2045	0.011
	Kr	83		ug/L		70	0.000
	Sr	88	**49.667**	ug/L	1.060	313745	3.221
	Y	89		ug/L		31	0.000
	Zr	90	**50.545**	ug/L	0.856	173454	1.779
	Mo	98	**50.046**	ug/L	0.117	71763	0.737
	Ag	107	**51.356**	ug/L	0.401	108422	1.113
	Cd	111	**50.062**	ug/L	0.726	23830	0.245
	Cd	114		ug/L		54745	0.562
>	In	115		ug/L		97332	97332.474
	Sn	120	**50.945**	ug/L	0.358	109458	1.123
	Sb	121	**50.414**	ug/L	1.278	87848	0.899
	Sb	123		ug/L		66853	0.684
	Ba	135		ug/L		25844	0.273
	Ba	137	**49.741**	ug/L	2.365	44672	0.473
	Ho	165		ug/L		25	0.000
>	Lu	175		ug/L		94458	94457.940
	Tl	205	**47.419**	ug/L	1.346	128223	1.355
	Pb	208	**50.674**	ug/L	1.552	298715	3.157
	Bi	209		ug/L		37	0.000
	Th	232	**50.255**	ug/L	1.144	348757	3.689
	U	238	**52.099**	ug/L	2.280	359127	3.801

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	100.161				
	Be	9	101.960				
	B	11	100.957				
	Na	23	97.614				
	Mg	24	100.119				
	Al	27	106.398				
	P	31	100.165				
	K	39	101.441				
	Ca	43	99.861				
>	Sc	45		100.1			
	Ti	47	100.213				
	V	51	103.906				
	Cr	52	103.642				
	Cr	53					
	Mn	55	103.653				
	Fe	57	101.835				
	Co	59	98.143				
	Ni	60	101.325				
	Cu	63					
	Cu	65	103.226				
	Zn	66	103.055				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75	95.528				
	Se	77					
	Se	82	101.941				
	Kr	83					
	Sr	88	99.334				
	Y	89					
	Zr	90	101.090				
	Mo	98	100.091				
	Ag	107	102.713				
	Cd	111	100.123				
	Cd	114					
>	In	115		99.2			
	Sn	120	101.890				
	Sb	121	100.828				
	Sb	123					
	Ba	135					
	Ba	137	99.481				
	Ho	165					
>	Lu	175		102.2			
	Tl	205	94.838				
	Pb	208	101.348				
	Bi	209					
	Th	232	100.510				
	U	238	104.198				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, December 03, 2009 20:04:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 2.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	**ug/L**	13.221	26	0.000
	Be	9	**-0.014**	**ug/L**	11.018	6	-0.000
	B	11	**3.611**	**ug/L**	16.638	290	0.001
	Na	23	**-5.479**	**ug/L**	47.038	38719	-0.033
	Mg	24	**2.056**	**ug/L**	31.670	4667	0.009
	Al	27	**-0.473**	**ug/L**	385.123	4001	-0.003
	P	31	**1.558**	**ug/L**	51.357	2683	0.001
	K	39	**-1.867**	**ug/L**	416.449	524467	-0.023
	Ca	43	**-1.207**	**ug/L**	674.945	638	-0.000
>	Sc	45		**ug/L**		236632	236632.464
	Ti	47	**-0.003**	**ug/L**	2305.338	215	-0.000
	V	51	**2.197**	**ug/L**	57.367	15071	0.027
	Cr	52	**0.316**	**ug/L**	27.692	-4069	0.004
	Cr	53		**ug/L**		223323	-0.060
	Mn	55	**-0.013**	**ug/L**	90.740	1308	-0.000
	Fe	57	**1.045**	**ug/L**	105.564	5224	0.000
	Co	59	**0.005**	**ug/L**	83.979	209	0.000
	Ni	60	**0.002**	**ug/L**	389.370	93	0.000
	Cu	63		**ug/L**		255	0.000
	Cu	65	**0.017**	**ug/L**	67.514	138	0.000
	Zn	66	**0.049**	**ug/L**	182.812	327	0.000
	Zn	67		**ug/L**		9061	-0.005
	Zn	68		**ug/L**		855	-0.000
>	Ge	74		**ug/L**		189066	189065.983
	As	75	**-0.081**	**ug/L**	1065.480	579	-0.000
	Se	77		**ug/L**		10066	-0.002
	Se	82	**0.113**	**ug/L**	334.291	-8	0.000
	Kr	83		**ug/L**		69	0.000
	Sr	88	**0.003**	**ug/L**	5.584	242	0.000
	Y	89		**ug/L**		15	-0.000
	Zr	90	**0.094**	**ug/L**	26.530	597	0.003
	Mo	98	**0.049**	**ug/L**	19.748	113	0.001
	Ag	107	**0.013**	**ug/L**	46.330	107	0.000
	Cd	111	**-0.003**	**ug/L**	190.290	22	-0.000
	Cd	114		**ug/L**		37	-0.000
>	In	115		**ug/L**		97966	97965.843
	Sn	120	**0.057**	**ug/L**	30.478	267	0.001
	Sb	121	**0.559**	**ug/L**	17.100	1289	0.010
	Sb	123		**ug/L**		976	0.007
	Ba	135		**ug/L**		30	0.000
	Ba	137	**-0.007**	**ug/L**	21.578	32	-0.000
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		92948	92948.333
	Tl	205	**0.219**	**ug/L**	20.328	819	0.006
	Pb	208	**0.002**	**ug/L**	284.168	521	0.000
	Bi	209		**ug/L**		24	0.000
	Th	232	**0.071**	**ug/L**	32.008	825	0.005
	U	238	**0.007**	**ug/L**	21.653	213	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, December 03, 2009 20:10:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 3.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.476**	ug/L	0.562	2591	0.011
	Be	9	**0.496**	ug/L	14.532	42	0.000
	B	11	**17.150**	ug/L	2.107	1122	0.004
	Na	23	**262.526**	ug/L	10.656	417384	1.565
	Mg	24	**14.975**	ug/L	44.563	17345	0.062
	Al	27	**46.290**	ug/L	25.435	70179	0.276
	P	31	**61.050**	ug/L	3.650	7413	0.020
	K	39	**324.876**	ug/L	9.277	1458660	3.921
	Ca	43	**213.019**	ug/L	5.175	1908	0.005
>	Sc	45		ug/L		236828	236827.959
	Ti	47	**9.536**	ug/L	1.884	2842	0.011
	V	51	**11.258**	ug/L	34.391	41864	0.141
	Cr	52	**10.776**	ug/L	1.741	24293	0.123
	Cr	53		ug/L		272662	0.148
	Mn	55	**5.657**	ug/L	0.813	26632	0.107
	Fe	57	**112.340**	ug/L	1.222	15146	0.042
	Co	59	**1.048**	ug/L	3.381	3665	0.015
	Ni	60	**2.186**	ug/L	4.999	1594	0.006
	Cu	63		ug/L		2013	0.008
	Cu	65	**1.127**	ug/L	5.639	963	0.004
	Zn	66	**10.903**	ug/L	0.946	4514	0.022
	Zn	67		ug/L		11466	0.008
	Zn	68		ug/L		3969	0.016
>	Ge	74		ug/L		188246	188246.239
	As	75	**6.107**	ug/L	19.870	3399	0.015
	Se	77		ug/L		13087	0.015
	Se	82	**5.361**	ug/L	15.443	204	0.001
	Kr	83		ug/L		70	0.000
	Sr	88	**10.993**	ug/L	3.003	70378	0.713
	Y	89		ug/L		18	0.000
	Zr	90	**2.146**	ug/L	2.752	7706	0.076
	Mo	98	**0.573**	ug/L	3.374	873	0.008
	Ag	107	**1.017**	ug/L	2.188	2248	0.022
	Cd	111	**0.965**	ug/L	9.008	487	0.005
	Cd	114		ug/L		1141	0.011
>	In	115		ug/L		98400	98400.202
	Sn	120	**5.310**	ug/L	2.168	11663	0.117
	Sb	121	**3.390**	ug/L	1.940	6264	0.060
	Sb	123		ug/L		4822	0.046
	Ba	135		ug/L		1075	0.011
	Ba	137	**2.140**	ug/L	1.416	1933	0.020
	Ho	165		ug/L		19	0.000
>	Lu	175		ug/L		93230	93229.570
	Tl	205	**1.088**	ug/L	2.869	3138	0.031
	Pb	208	**2.144**	ug/L	2.174	12962	0.134
	Bi	209		ug/L		27	0.000
	Th	232	**1.079**	ug/L	0.819	7731	0.079
	U	238	**0.207**	ug/L	3.292	1575	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	114.765				
	Be	9	99.246				
	B	11	114.336				
	Na	23	105.010				
	Mg	24	99.835				
	Al	27	154.300				
	P	31	122.101				
	K	39	108.292				
	Ca	43	106.509				
>	Sc	45		99.5			
	Ti	47	95.365				
	V	51	112.585				
	Cr	52	107.758				
	Cr	53					
	Mn	55	113.149				
	Fe	57	112.340				
	Co	59	104.789				
	Ni	60	109.288				
	Cu	63					
	Cu	65	112.706				
	Zn	66	109.027				
	Zn	67					
	Zn	68					
>	Ge	74		100.4			
	As	75	122.145				
	Se	77					
	Se	82	107.225				
	Kr	83					
	Sr	88	109.932				
	Y	89					
	Zr	90	107.305				
	Mo	98	114.663				
	Ag	107	101.706				
	Cd	111	96.490				
	Cd	114					
>	In	115		100.3			
	Sn	120	106.200				
	Sb	121	112.995				
	Sb	123					
	Ba	135					
	Ba	137	107.000				
	Ho	165					
>	Lu	175		100.9			
	Tl	205	108.850				
	Pb	208	107.201				
	Bi	209					
	Th	232	107.942				
	U	238	103.462				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Al	27	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, December 03, 2009 20:16:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 4.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.085**	**ug/L**	37.385	40	0.000
	Be	9	**-0.005**	**ug/L**	968.734	6	-0.000
	B	11	**1.559**	**ug/L**	12.898	157	0.000
	Na	23	**98974.806**	**ug/L**	4.283	133219830	590.087
	Mg	24	**97683.768**	**ug/L**	3.091	91626938	405.958
	Al	27	**97865.017**	**ug/L**	4.285	131703512	583.551
	P	31	**97360.353**	**ug/L**	2.899	7379933	32.688
	K	39	**97959.865**	**ug/L**	2.078	267401215	1182.394
	Ca	43	**97697.402**	**ug/L**	0.782	552446	2.445
>	Sc	45		**ug/L**		225712	225712.058
	Ti	47	**1546.583**	**ug/L**	1.215	406127	1.798
	V	51	**-0.510**	**ug/L**	539.723	6753	-0.006
	Cr	52	**4.837**	**ug/L**	4.925	7802	0.055
	Cr	53		**ug/L**		201054	-0.113
	Mn	55	**5.742**	**ug/L**	1.328	25743	0.108
	Fe	57	**97278.155**	**ug/L**	1.908	8266364	36.603
	Co	59	**0.253**	**ug/L**	2.040	982	0.004
	Ni	60	**2.975**	**ug/L**	3.666	2037	0.009
	Cu	63		**ug/L**		6343	0.027
	Cu	65	**4.365**	**ug/L**	0.953	3208	0.014
	Zn	66	**3.494**	**ug/L**	0.400	1551	0.007
	Zn	67		**ug/L**		9088	-0.001
	Zn	68		**ug/L**		1037	0.001
>	Ge	74		**ug/L**		176418	176418.393
	As	75	**-0.662**	**ug/L**	127.767	293	-0.002
	Se	77		**ug/L**		8703	-0.005
	Se	82	**-0.432**	**ug/L**	48.923	-28	-0.000
	Kr	83		**ug/L**		106	0.000
	Sr	88	**1.145**	**ug/L**	1.255	6949	0.074
	Y	89		**ug/L**		180	0.002
	Zr	90	**0.314**	**ug/L**	43.231	1257	0.011
	Mo	98	**2025.664**	**ug/L**	1.710	2708418	29.826
	Ag	107	**0.047**	**ug/L**	7.959	165	0.001
	Cd	111	**0.478**	**ug/L**	31.104	234	0.002
	Cd	114		**ug/L**		2638	0.029
>	In	115		**ug/L**		90811	90811.047
	Sn	120	**0.140**	**ug/L**	8.242	416	0.003
	Sb	121	**0.133**	**ug/L**	24.579	505	0.002
	Sb	123		**ug/L**		414	0.002
	Ba	135		**ug/L**		355	0.004
	Ba	137	**0.629**	**ug/L**	2.925	586	0.006
	Ho	165		**ug/L**		254	0.003
>	Lu	175		**ug/L**		91784	91784.167
	Tl	205	**0.041**	**ug/L**	31.307	342	0.001
	Pb	208	**0.151**	**ug/L**	0.578	1367	0.009
	Bi	209		**ug/L**		201	0.002
	Th	232	**0.050**	**ug/L**	59.779	676	0.004
	U	238	**-0.013**	**ug/L**	14.939	80	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	98.975				
	Mg	24	97.684				
	Al	27	97.865				
	P	31	97.360				
	K	39	97.960				
	Ca	43	97.697				
>	Sc	45			94.9		
	Ti	47	77.329				
	V	51					
	Cr	52	130.720				
	Cr	53					
	Mn	55	99.002				
	Fe	57	97.278				
	Co	59	101.184				
	Ni	60	110.199				
	Cu	63					
	Cu	65	150.500				
	Zn	66	97.055				
	Zn	67					
	Zn	68					
>	Ge	74			94.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	95.378				
	Y	89					
	Zr	90					
	Mo	98	101.283				
	Ag	107					
	Cd	111	119.599				
	Cd	114					
>	In	115			92.6		
	Sn	120					
	Sb	121	132.681				
	Sb	123					
	Ba	135					
	Ba	137	93.931				
	Ho	165					
>	Lu	175			99.4		
	Tl	205					
	Pb	208	75.536				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, December 03, 2009 20:23:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 5.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.728**	ug/L	4.110	4297	0.019
	Be	9	**20.541**	ug/L	1.828	1398	0.006
	B	11	**21.508**	ug/L	4.581	1345	0.006
	Na	23	**97813.057**	ug/L	2.064	133774913	583.160
	Mg	24	**95351.579**	ug/L	1.211	90879573	396.266
	Al	27	**97916.901**	ug/L	4.532	133935775	583.861
	P	31	**95966.789**	ug/L	0.959	7391889	32.220
	K	39	**94852.190**	ug/L	1.294	263066781	1144.884
	Ca	43	**97152.578**	ug/L	0.864	558226	2.431
>	Sc	45		ug/L		229341	229340.641
	Ti	47	**1537.281**	ug/L	0.768	410209	1.788
	V	51	**20.510**	ug/L	5.474	67153	0.256
	Cr	52	**24.520**	ug/L	1.267	59640	0.281
	Cr	53		ug/L		228012	-0.009
	Mn	55	**25.930**	ug/L	0.458	113468	0.489
	Fe	57	**96515.389**	ug/L	0.316	8333892	36.316
	Co	59	**19.853**	ug/L	0.792	63906	0.278
	Ni	60	**22.165**	ug/L	1.111	14852	0.064
	Cu	63		ug/L		34663	0.150
	Cu	65	**22.965**	ug/L	1.485	16630	0.072
	Zn	66	**23.505**	ug/L	0.661	8777	0.048
	Zn	67		ug/L		11179	0.011
	Zn	68		ug/L		6232	0.031
>	Ge	74		ug/L		176195	176195.037
	As	75	**21.747**	ug/L	7.654	9869	0.053
	Se	77		ug/L		11078	0.008
	Se	82	**22.603**	ug/L	4.220	845	0.005
	Kr	83		ug/L		106	0.000
	Sr	88	**23.173**	ug/L	0.942	136375	1.503
	Y	89		ug/L		204	0.002
	Zr	90	**22.380**	ug/L	1.183	71633	0.788
	Mo	98	**2056.691**	ug/L	0.555	2743691	30.282
	Ag	107	**19.341**	ug/L	0.199	38055	0.419
	Cd	111	**20.982**	ug/L	0.633	9310	0.103
	Cd	114		ug/L		23152	0.255
>	In	115		ug/L		90600	90599.526
	Sn	120	**20.880**	ug/L	0.410	41837	0.460
	Sb	121	**21.960**	ug/L	0.262	35781	0.392
	Sb	123		ug/L		27231	0.298
	Ba	135		ug/L		10347	0.112
	Ba	137	**20.402**	ug/L	1.829	17837	0.194
	Ho	165		ug/L		239	0.002
>	Lu	175		ug/L		91833	91832.859
	Tl	205	**18.601**	ug/L	0.277	49052	0.532
	Pb	208	**19.598**	ug/L	1.442	112624	1.221
	Bi	209		ug/L		279	0.003
	Th	232	**21.075**	ug/L	0.989	142393	1.547
	U	238	**21.391**	ug/L	1.630	143471	1.561

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	98.640				
	Be	9	102.703				
	B	11	107.539				
	Na	23	97.813				
	Mg	24	95.352				
	Al	27	97.917				
	P	31	95.967				
	K	39	94.852				
	Ca	43	97.153				
>	Sc	45		96.4			
	Ti	47	76.864				
	V	51	102.548				
	Cr	52	103.462				
	Cr	53					
	Mn	55	100.504				
	Fe	57	96.515				
	Co	59	98.040				
	Ni	60	97.643				
	Cu	63					
	Cu	65	100.282				
	Zn	66	99.596				
	Zn	67					
	Zn	68					
>	Ge	74		93.9			
	As	75	108.735				
	Se	77					
	Se	82	113.013				
	Kr	83					
	Sr	88	109.305				
	Y	89					
	Zr	90	111.902				
	Mo	98	102.835				
	Ag	107	96.707				
	Cd	111	102.851				
	Cd	114					
>	In	115		92.4			
	Sn	120	104.399				
	Sb	121	109.255				
	Sb	123					
	Ba	135					
	Ba	137	98.701				
	Ho	165					
>	Lu	175		99.4			
	Tl	205	93.005				
	Pb	208	97.018				
	Bi	209					
	Th	232	105.375				
	U	238	106.956				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 03, 2009 20:29:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 6.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.767**	ug/L	0.773	11105	0.047
	Be	9	**50.277**	ug/L	2.336	3507	0.015
	B	11	**95.498**	ug/L	2.961	5903	0.025
	Na	23	**5131.709**	ug/L	2.260	7255103	30.595
	Mg	24	**5018.633**	ug/L	4.592	4916260	20.857
	Al	27	**5316.393**	ug/L	6.290	7479077	31.701
	P	31	**5007.204**	ug/L	0.516	398707	1.681
	K	39	**4918.170**	ug/L	3.668	14519311	59.363
	Ca	43	**5137.284**	ug/L	0.863	30939	0.129
>	Sc	45		ug/L		235662	235661.759
	Ti	47	**51.552**	ug/L	2.845	14341	0.060
	V	51	**51.447**	ug/L	2.603	160101	0.643
	Cr	52	**51.156**	ug/L	1.206	133166	0.586
	Cr	53		ug/L		240025	0.015
	Mn	55	**51.866**	ug/L	1.125	231830	0.978
	Fe	57	**5092.133**	ug/L	1.392	456598	1.916
	Co	59	**49.261**	ug/L	1.340	162634	0.689
	Ni	60	**49.801**	ug/L	0.057	34174	0.145
	Cu	63		ug/L		79505	0.336
	Cu	65	**51.270**	ug/L	1.472	37999	0.161
	Zn	66	**50.274**	ug/L	1.420	19556	0.103
	Zn	67		ug/L		12376	0.014
	Zn	68		ug/L		14543	0.073
>	Ge	74		ug/L		186809	186809.052
	As	75	**46.566**	ug/L	1.214	21701	0.113
	Se	77		ug/L		11447	0.006
	Se	82	**50.098**	ug/L	1.428	2001	0.011
	Kr	83		ug/L		68	0.000
	Sr	88	**49.068**	ug/L	1.575	307765	3.182
	Y	89		ug/L		137	0.001
	Zr	90	**50.163**	ug/L	1.384	170910	1.766
	Mo	98	**50.637**	ug/L	1.118	72090	0.746
	Ag	107	**50.513**	ug/L	0.715	105884	1.095
	Cd	111	**49.277**	ug/L	1.552	23289	0.241
	Cd	114		ug/L		54213	0.561
>	In	115		ug/L		96641	96640.591
	Sn	120	**51.329**	ug/L	0.351	109496	1.132
	Sb	121	**49.778**	ug/L	1.236	86118	0.888
	Sb	123		ug/L		65725	0.678
	Ba	135		ug/L		25580	0.272
	Ba	137	**49.335**	ug/L	1.701	44045	0.469
	Ho	165		ug/L		27	0.000
>	Lu	175		ug/L		93883	93883.451
	Tl	205	**47.420**	ug/L	0.383	127463	1.355
	Pb	208	**50.643**	ug/L	0.986	296744	3.156
	Bi	209		ug/L		49	0.000
	Th	232	**50.441**	ug/L	0.034	347966	3.703
	U	238	**51.901**	ug/L	1.792	355660	3.787

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	99.534				
	Be	9	100.554				
	B	11	95.498				
	Na	23	102.634				
	Mg	24	100.373				
	Al	27	105.275				
	P	31	100.144				
	K	39	98.363				
	Ca	43	102.746				
>	Sc	45			99.0		
	Ti	47	103.104				
	V	51	102.893				
	Cr	52	102.313				
	Cr	53					
	Mn	55	103.732				
	Fe	57	101.843				
	Co	59	98.523				
	Ni	60	99.601				
	Cu	63					
	Cu	65	102.539				
	Zn	66	100.548				
	Zn	67					
	Zn	68					
>	Ge	74			99.6		
	As	75	93.132				
	Se	77					
	Se	82	100.195				
	Kr	83					
	Sr	88	98.136				
	Y	89					
	Zr	90	100.326				
	Mo	98	101.274				
	Ag	107	101.027				
	Cd	111	98.555				
	Cd	114					
>	In	115			98.5		
	Sn	120	102.658				
	Sb	121	99.555				
	Sb	123					
	Ba	135					
	Ba	137	98.670				
	Ho	165					
>	Lu	175			101.6		
	Tl	205	94.840				
	Pb	208	101.286				
	Bi	209					
	Th	232	100.881				
	U	238	103.802				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 03, 2009 20:35:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 7.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.053**	ug/L	59.835	34	0.000
	Be	9	**-0.042**	ug/L	88.384	4	-0.000
	B	11	**2.030**	ug/L	16.486	193	0.001
	Na	23	**-5.175**	ug/L	28.599	39053	-0.031
	Mg	24	**1.047**	ug/L	58.247	3667	0.004
	Al	27	**-0.220**	ug/L	660.469	4334	-0.001
	P	31	**2.963**	ug/L	88.137	2784	0.001
	K	39	**-0.927**	ug/L	347.616	525494	-0.011
	Ca	43	**-6.349**	ug/L	58.609	606	-0.000
>	Sc	45		ug/L		235883	235882.677
	Ti	47	**0.170**	ug/L	52.346	262	0.000
	V	51	**0.638**	ug/L	203.893	10446	0.008
	Cr	52	**0.321**	ug/L	35.189	-4044	0.004
	Cr	53		ug/L		214862	-0.093
	Mn	55	**-0.022**	ug/L	66.984	1266	-0.000
	Fe	57	**7.401**	ug/L	21.813	5774	0.003
	Co	59	**0.008**	ug/L	53.280	219	0.000
	Ni	60	**0.005**	ug/L	367.841	94	0.000
	Cu	63		ug/L		232	-0.000
	Cu	65	**0.001**	ug/L	483.665	126	0.000
	Zn	66	**0.032**	ug/L	120.465	316	0.000
	Zn	67		ug/L		8623	-0.006
	Zn	68		ug/L		816	-0.000
>	Ge	74		ug/L		186250	186250.178
	As	75	**0.366**	ug/L	260.252	773	0.001
	Se	77		ug/L		9670	-0.003
	Se	82	**0.083**	ug/L	174.781	-9	0.000
	Kr	83		ug/L		64	-0.000
	Sr	88	**0.003**	ug/L	93.364	245	0.000
	Y	89		ug/L		19	0.000
	Zr	90	**0.072**	ug/L	27.454	519	0.003
	Mo	98	**0.129**	ug/L	14.601	229	0.002
	Ag	107	**0.010**	ug/L	77.212	100	0.000
	Cd	111	**-0.017**	ug/L	104.299	15	-0.000
	Cd	114		ug/L		42	0.000
>	In	115		ug/L		97967	97966.653
	Sn	120	**0.040**	ug/L	28.904	232	0.001
	Sb	121	**0.281**	ug/L	21.787	805	0.005
	Sb	123		ug/L		652	0.004
	Ba	135		ug/L		23	0.000
	Ba	137	**-0.009**	ug/L	75.977	30	-0.000
	Ho	165		ug/L		11	-0.000
>	Lu	175		ug/L		93109	93109.400
	Tl	205	**0.199**	ug/L	11.595	768	0.006
	Pb	208	**-0.003**	ug/L	100.385	495	-0.000
	Bi	209		ug/L		19	-0.000
	Th	232	**0.042**	ug/L	38.309	629	0.003
	U	238	**0.006**	ug/L	25.315	207	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, December 03, 2009 20:41:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 10.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	976.678	ug/L	3.719	211503	0.923
	Be	9	982.498	ug/L	2.672	66507	0.290
	B	11	1.512	ug/L	22.648	156	0.000
	Na	23	48603.653	ug/L	1.393	66471144	289.774
	Mg	24	48830.727	ug/L	4.863	46486098	202.933
	Al	27	48416.274	ug/L	4.849	66170651	288.697
	P	31	23393.119	ug/L	1.389	1802580	7.854
	K	39	49558.461	ug/L	2.933	137701623	598.180
	Ca	43	48928.617	ug/L	0.639	281301	1.224
>	Sc	45		ug/L		229243	229243.383
	Ti	47	30.490	ug/L	1.300	8336	0.035
	V	51	951.499	ug/L	2.553	2734083	11.895
	Cr	52	968.421	ug/L	2.402	2537246	11.092
	Cr	53		ug/L		528288	1.301
	Mn	55	973.976	ug/L	2.867	4209803	18.367
	Fe	57	49388.486	ug/L	2.760	4263256	18.584
	Co	59	920.423	ug/L	2.191	2952034	12.881
	Ni	60	940.224	ug/L	2.581	625778	2.731
	Cu	63		ug/L		1370280	5.979
	Cu	65	921.097	ug/L	2.860	661720	2.887
	Zn	66	2355.346	ug/L	0.507	875279	4.828
	Zn	67		ug/L		147887	0.763
	Zn	68		ug/L		621221	3.423
>	Ge	74		ug/L		181218	181218.293
	As	75	943.917	ug/L	0.948	415287	2.288
	Se	77		ug/L		25207	0.084
	Se	82	509.796	ug/L	2.605	19856	0.110
	Kr	83		ug/L		85	0.000
	Sr	88	1005.852	ug/L	1.479	6047113	65.238
	Y	89		ug/L		213	0.002
	Zr	90	526.794	ug/L	1.275	1719136	18.544
	Mo	98	1013.767	ug/L	1.257	1383576	14.927
	Ag	107	257.262	ug/L	0.526	516925	5.576
	Cd	111	969.873	ug/L	0.881	439252	4.739
	Cd	114		ug/L		1008513	10.880
>	In	115		ug/L		92690	92689.661
	Sn	120	1049.698	ug/L	1.263	2145078	23.141
	Sb	121	265.047	ug/L	1.025	438535	4.728
	Sb	123		ug/L		337046	3.634
	Ba	135		ug/L		485755	5.160
	Ba	137	935.282	ug/L	1.497	836613	8.887
	Ho	165		ug/L		82	0.001
>	Lu	175		ug/L		94136	94136.096
	Tl	205	470.790	ug/L	1.024	1266729	13.454
	Pb	208	4762.603	ug/L	1.487	27934437	296.757
	Bi	209		ug/L		646	0.007
	Th	232	2423.798	ug/L	0.622	16748859	177.922
	U	238	5005.833	ug/L	1.651	34379533	365.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	97.668				
	Be	9	98.250				
	B	11					
	Na	23	97.207				
	Mg	24	97.661				
	Al	27	96.833				
	P	31	93.572				
	K	39	99.117				
	Ca	43	97.857				
>	Sc	45		96.3			
	Ti	47					
	V	51	95.150				
	Cr	52	96.842				
	Cr	53					
	Mn	55	97.398				
	Fe	57	98.777				
	Co	59	92.042				
	Ni	60	94.022				
	Cu	63					
	Cu	65	92.110				
	Zn	66	94.214				
	Zn	67					
	Zn	68					
>	Ge	74		96.6			
	As	75	94.392				
	Se	77					
	Se	82	101.959				
	Kr	83					
	Sr	88	100.585				
	Y	89					
	Zr	90	105.359				
	Mo	98	101.377				
	Ag	107	102.905				
	Cd	111	96.987				
	Cd	114					
>	In	115		94.5			
	Sn	120	104.970				
	Sb	121	106.019				
	Sb	123					
	Ba	135					
	Ba	137	93.528				
	Ho	165					
>	Lu	175		101.9			
	Tl	205	94.158				
	Pb	208	95.252				
	Bi	209					
	Th	232	96.952				
	U	238	100.117				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, December 03, 2009 20:47:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 11.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.329**	ug/L	2.073	10958	0.047
	Be	9	**49.077**	ug/L	0.762	3408	0.014
	B	11	**97.761**	ug/L	2.718	6014	0.025
	Na	23	**5381.355**	ug/L	6.478	7569506	32.084
	Mg	24	**5231.302**	ug/L	1.359	5103101	21.740
	Al	27	**5012.792**	ug/L	0.788	7018175	29.890
	P	31	**4992.303**	ug/L	0.708	395802	1.676
	K	39	**4939.445**	ug/L	3.348	14508892	59.620
	Ca	43	**4987.357**	ug/L	1.521	29920	0.125
>	Sc	45		ug/L		234634	234634.204
	Ti	47	**50.193**	ug/L	0.853	13910	0.058
	V	51	**51.758**	ug/L	6.523	160236	0.647
	Cr	52	**51.298**	ug/L	1.654	132955	0.588
	Cr	53		ug/L		234478	-0.004
	Mn	55	**51.990**	ug/L	1.804	231348	0.980
	Fe	57	**5076.324**	ug/L	2.456	453135	1.910
	Co	59	**49.160**	ug/L	2.272	161567	0.688
	Ni	60	**49.982**	ug/L	1.523	34143	0.145
	Cu	63		ug/L		79450	0.338
	Cu	65	**51.252**	ug/L	1.180	37815	0.161
	Zn	66	**50.617**	ug/L	0.714	19676	0.104
	Zn	67		ug/L		12388	0.014
	Zn	68		ug/L		14746	0.074
>	Ge	74		ug/L		186696	186695.571
	As	75	**47.121**	ug/L	2.347	21939	0.114
	Se	77		ug/L		10566	0.002
	Se	82	**50.815**	ug/L	2.108	2028	0.011
	Kr	83		ug/L		66	-0.000
	Sr	88	**49.098**	ug/L	1.125	309178	3.184
	Y	89		ug/L		36	0.000
	Zr	90	**50.814**	ug/L	0.890	173820	1.789
	Mo	98	**49.934**	ug/L	2.050	71370	0.735
	Ag	107	**50.827**	ug/L	1.146	106963	1.102
	Cd	111	**49.783**	ug/L	0.568	23624	0.243
	Cd	114		ug/L		53917	0.555
>	In	115		ug/L		97026	97025.879
	Sn	120	**51.259**	ug/L	2.233	109778	1.130
	Sb	121	**50.677**	ug/L	2.298	88020	0.904
	Sb	123		ug/L		66846	0.686
	Ba	135		ug/L		25344	0.269
	Ba	137	**49.645**	ug/L	2.157	44376	0.472
	Ho	165		ug/L		25	0.000
>	Lu	175		ug/L		94009	94009.303
	Tl	205	**48.903**	ug/L	1.772	131597	1.398
	Pb	208	**51.372**	ug/L	1.792	301378	3.201
	Bi	209		ug/L		41	0.000
	Th	232	**50.762**	ug/L	1.991	350570	3.726
	U	238	**52.586**	ug/L	3.010	360742	3.837

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	98.658				
	Be	9	98.154				
	B	11	97.761				
	Na	23	107.627				
	Mg	24	104.626				
	Al	27	99.263				
	P	31	99.846				
	K	39	98.789				
	Ca	43	99.747				
>	Sc	45		98.6			
	Ti	47	100.386				
	V	51	103.516				
	Cr	52	102.597				
	Cr	53					
	Mn	55	103.979				
	Fe	57	101.526				
	Co	59	98.319				
	Ni	60	99.964				
	Cu	63					
	Cu	65	102.505				
	Zn	66	101.233				
	Zn	67					
	Zn	68					
>	Ge	74		99.5			
	As	75	94.241				
	Se	77					
	Se	82	101.630				
	Kr	83					
	Sr	88	98.197				
	Y	89					
	Zr	90	101.629				
	Mo	98	99.869				
	Ag	107	101.653				
	Cd	111	99.566				
	Cd	114					
>	In	115		98.9			
	Sn	120	102.518				
	Sb	121	101.355				
	Sb	123					
	Ba	135					
	Ba	137	99.290				
	Ho	165					
>	Lu	175		101.8			
	Tl	205	97.806				
	Pb	208	102.745				
	Bi	209					
	Th	232	101.523				
	U	238	105.171				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, December 03, 2009 20:54:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 12.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.098**	ug/L	38.194	44	0.000
	Be	9	**-0.038**	ug/L	20.997	4	-0.000
	B	11	**2.147**	ug/L	19.445	200	0.001
	Na	23	**-9.478**	ug/L	34.891	33039	-0.057
	Mg	24	**1.710**	ug/L	190.731	4334	0.007
	Al	27	**2.620**	ug/L	85.651	8336	0.016
	P	31	**2.044**	ug/L	90.177	2718	0.001
	K	39	**3.329**	ug/L	356.392	538307	0.040
	Ca	43	**-1.371**	ug/L	415.552	637	-0.000
>	Sc	45		ug/L		236281	236281.415
	Ti	47	**0.023**	ug/L	188.474	222	0.000
	V	51	**0.253**	ug/L	183.187	9348	0.003
	Cr	52	**0.349**	ug/L	14.278	-3978	0.004
	Cr	53		ug/L		215208	-0.093
	Mn	55	**-0.000**	ug/L	2720.481	1362	-0.000
	Fe	57	**2.158**	ug/L	106.106	5316	0.001
	Co	59	**0.013**	ug/L	12.977	236	0.000
	Ni	60	**0.024**	ug/L	86.055	108	0.000
	Cu	63		ug/L		302	0.000
	Cu	65	**0.034**	ug/L	82.134	151	0.000
	Zn	66	**0.151**	ug/L	31.846	365	0.000
	Zn	67		ug/L		8868	-0.005
	Zn	68		ug/L		933	0.000
>	Ge	74		ug/L		188051	188050.729
	As	75	**0.509**	ug/L	135.182	850	0.001
	Se	77		ug/L		9236	-0.006
	Se	82	**0.142**	ug/L	161.935	-7	0.000
	Kr	83		ug/L		63	-0.000
	Sr	88	**0.009**	ug/L	46.869	279	0.001
	Y	89		ug/L		19	0.000
	Zr	90	**0.112**	ug/L	19.745	656	0.004
	Mo	98	**0.118**	ug/L	2.863	212	0.002
	Ag	107	**0.024**	ug/L	17.414	129	0.001
	Cd	111	**0.028**	ug/L	85.204	36	0.000
	Cd	114		ug/L		58	0.000
>	In	115		ug/L		97596	97595.923
	Sn	120	**0.168**	ug/L	10.781	505	0.004
	Sb	121	**0.632**	ug/L	14.908	1411	0.011
	Sb	123		ug/L		1138	0.009
	Ba	135		ug/L		28	0.000
	Ba	137	**0.009**	ug/L	120.561	45	0.000
	Ho	165		ug/L		13	0.000
>	Lu	175		ug/L		92263	92263.232
	Tl	205	**0.612**	ug/L	14.551	1849	0.017
	Pb	208	**0.175**	ug/L	8.998	1510	0.011
	Bi	209		ug/L		20	-0.000
	Th	232	**0.139**	ug/L	22.065	1284	0.010
	U	238	**0.057**	ug/L	9.951	549	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201977933
Sample Date/Time: Thursday, December 03, 2009 21:00:21
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\1201977933.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.046**	ug/L	30.736	33	0.000
	Be	9	**-0.004**	ug/L	857.388	7	-0.000
	B	11	**0.692**	ug/L	16.739	112	0.000
	Na	23	**-13.835**	ug/L	18.470	27026	-0.082
	Mg	24	**-1.000**	ug/L	119.255	1667	-0.004
	Al	27	**3.791**	ug/L	68.380	10004	0.023
	P	31	**18.483**	ug/L	6.238	4038	0.006
	K	39	**0.630**	ug/L	2673.882	533155	0.008
	Ca	43	**-17.520**	ug/L	50.333	543	-0.000
>	Sc	45		ug/L		237289	237288.595
	Ti	47	**0.123**	ug/L	47.754	251	0.000
	V	51	**-0.194**	ug/L	344.662	8054	-0.002
	Cr	52	**1.155**	ug/L	13.612	-1800	0.013
	Cr	53		ug/L		165929	-0.304
	Mn	55	**0.085**	ug/L	19.519	1751	0.002
	Fe	57	**13.242**	ug/L	9.660	6328	0.005
	Co	59	**-0.002**	ug/L	112.194	185	-0.000
	Ni	60	**0.022**	ug/L	31.636	107	0.000
	Cu	63		ug/L		417	0.001
	Cu	65	**0.145**	ug/L	19.898	234	0.000
	Zn	66	**0.816**	ug/L	4.373	609	0.002
	Zn	67		ug/L		6995	-0.015
	Zn	68		ug/L		942	0.000
>	Ge	74		ug/L		184226	184225.834
	As	75	**-0.099**	ug/L	896.742	560	-0.000
	Se	77		ug/L		6332	-0.020
	Se	82	**-0.014**	ug/L	537.782	-13	-0.000
	Kr	83		ug/L		69	0.000
	Sr	88	**0.009**	ug/L	27.475	279	0.001
	Y	89		ug/L		56	0.000
	Zr	90	**0.163**	ug/L	23.654	836	0.006
	Mo	98	**0.063**	ug/L	17.718	133	0.001
	Ag	107	**-0.002**	ug/L	59.164	76	-0.000
	Cd	111	**-0.007**	ug/L	6.400	20	-0.000
	Cd	114		ug/L		36	-0.000
>	In	115		ug/L		98266	98265.533
	Sn	120	**0.155**	ug/L	9.381	481	0.003
	Sb	121	**0.232**	ug/L	19.961	720	0.004
	Sb	123		ug/L		589	0.003
	Ba	135		ug/L		46	0.000
	Ba	137	**0.039**	ug/L	45.374	73	0.000
	Ho	165		ug/L		19	0.000
>	Lu	175		ug/L		93864	93864.317
	Tl	205	**0.303**	ug/L	20.649	1054	0.009
	Pb	208	**0.082**	ug/L	13.731	994	0.005
	Bi	209		ug/L		40	0.000
	Th	232	**0.085**	ug/L	28.506	928	0.006
	U	238	**0.003**	ug/L	78.598	193	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201977938
Sample Date/Time: Thursday, December 03, 2009 21:12:46
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925193|20|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\1201977938.153

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.507**	ug/L	3.859	1057	0.004
	Be	9	**47.797**	ug/L	1.404	3435	0.014
	B	11	**69.971**	ug/L	3.004	4475	0.018
	Na	23	**337.145**	ug/L	21.741	535419	2.010
	Mg	24	**1637.558**	ug/L	1.868	1654960	6.805
	Al	27	**4888.593**	ug/L	3.069	7082950	29.150
	P	31	**398.189**	ug/L	1.877	35085	0.134
	K	39	**1345.076**	ug/L	1.652	4485514	16.235
	Ca	43	**1917.571**	ug/L	1.280	12313	0.048
>	Sc	45		ug/L		242792	242792.252
	Ti	47	**149.497**	ug/L	0.364	42430	0.174
	V	51	**72.593**	ug/L	0.573	229161	0.907
	Cr	52	**37.004**	ug/L	0.442	97853	0.424
	Cr	53		ug/L		206555	-0.153
	Mn	55	**193.971**	ug/L	1.023	889495	3.658
	Fe	57	**5881.946**	ug/L	0.477	542617	2.213
	Co	59	**44.258**	ug/L	0.303	150573	0.619
	Ni	60	**54.717**	ug/L	1.508	38675	0.159
	Cu	63		ug/L		84127	0.346
	Cu	65	**52.380**	ug/L	0.127	39994	0.164
	Zn	66	**109.301**	ug/L	0.988	42658	0.224
	Zn	67		ug/L		15082	0.027
	Zn	68		ug/L		32182	0.165
>	Ge	74		ug/L		189013	189013.126
	As	75	**135.252**	ug/L	1.343	62598	0.328
	Se	77		ug/L		11259	0.005
	Se	82	**96.207**	ug/L	3.314	3898	0.021
	Kr	83		ug/L		66	-0.000
	Sr	88	**89.108**	ug/L	1.287	567791	5.779
	Y	89		ug/L		49024	0.499
	Zr	90	**3.837**	ug/L	2.374	13538	0.135
	Mo	98	**43.412**	ug/L	1.817	62810	0.639
	Ag	107	**11.093**	ug/L	1.061	23693	0.240
	Cd	111	**62.330**	ug/L	1.508	29931	0.305
	Cd	114		ug/L		69363	0.706
>	In	115		ug/L		98217	98216.941
	Sn	120	**23.907**	ug/L	2.086	51900	0.527
	Sb	121	**15.166**	ug/L	1.836	26881	0.271
	Sb	123		ug/L		20353	0.205
	Ba	135		ug/L		133953	1.418
	Ba	137	**256.630**	ug/L	1.697	230327	2.439
	Ho	165		ug/L		1740	0.018
>	Lu	175		ug/L		94448	94448.179
	Tl	205	**103.145**	ug/L	1.371	278606	2.948
	Pb	208	**91.098**	ug/L	0.699	536594	5.676
	Bi	209		ug/L		841	0.009
	Th	232	**6.153**	ug/L	2.548	42999	0.452
	U	238	**0.833**	ug/L	2.549	5911	0.061

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241419001
Sample Date/Time: Thursday, December 03, 2009 21:18:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419001.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**24.325**	ug/L	2.203	5875	0.023
	Be	9	**2.055**	ug/L	0.870	162	0.001
	B	11	**7.252**	ug/L	9.774	553	0.002
	Na	23	**1589.208**	ug/L	5.228	2461011	9.475
	Mg	24	**3007.171**	ug/L	1.490	3183307	12.497
	Al	27	**33519.454**	ug/L	4.803	50863705	199.870
	P	31	**226.834**	ug/L	2.045	22133	0.076
	K	39	**2994.659**	ug/L	1.714	9768105	36.146
	Ca	43	**3037.105**	ug/L	1.798	20035	0.076
>	Sc	45		ug/L		254489	254488.635
	Ti	47	**372.999**	ug/L	0.192	110616	0.434
	V	51	**19.943**	ug/L	11.212	72725	0.249
	Cr	52	**13.347**	ug/L	1.811	33605	0.153
	Cr	53		ug/L		149498	-0.416
	Mn	55	**180.649**	ug/L	0.941	868386	3.407
	Fe	57	**15585.776**	ug/L	0.669	1497975	5.865
	Co	59	**3.048**	ug/L	0.509	11061	0.043
	Ni	60	**10.399**	ug/L	1.888	7783	0.030
	Cu	63		ug/L		16290	0.063
	Cu	65	**9.714**	ug/L	1.390	7885	0.030
	Zn	66	**59.121**	ug/L	0.969	22507	0.121
	Zn	67		ug/L		10161	0.003
	Zn	68		ug/L		18146	0.094
>	Ge	74		ug/L		183254	183253.745
	As	75	**1.879**	ug/L	44.124	1432	0.005
	Se	77		ug/L		5582	-0.024
	Se	82	**0.013**	ug/L	1401.474	-11	0.000
	Kr	83		ug/L		95	0.000
	Sr	88	**31.584**	ug/L	0.743	199198	2.048
	Y	89		ug/L		189013	1.946
	Zr	90	**51.008**	ug/L	0.693	174682	1.796
	Mo	98	**0.795**	ug/L	1.661	1179	0.012
	Ag	107	**0.180**	ug/L	0.836	458	0.004
	Cd	111	**0.708**	ug/L	21.548	359	0.003
	Cd	114		ug/L		107	0.001
>	In	115		ug/L		97133	97133.102
	Sn	120	**0.668**	ug/L	1.681	1573	0.015
	Sb	121	**0.116**	ug/L	17.272	511	0.002
	Sb	123		ug/L		413	0.002
	Ba	135		ug/L		150225	1.535
	Ba	137	**281.312**	ug/L	1.501	261690	2.673
	Ho	165		ug/L		6288	0.064
>	Lu	175		ug/L		97890	97889.565
	Tl	205	**1.032**	ug/L	14.054	3141	0.030
	Pb	208	**14.223**	ug/L	2.384	87276	0.886
	Bi	209		ug/L		3083	0.031
	Th	232	**12.958**	ug/L	2.566	93459	0.951
	U	238	**0.915**	ug/L	4.999	6710	0.067

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201977934
Sample Date/Time: Thursday, December 03, 2009 21:25:08
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\1201977934.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**28.356**	ug/L	3.691	6620	0.027
	Be	9	**2.283**	ug/L	4.398	173	0.001
	B	11	**6.912**	ug/L	6.507	513	0.002
	Na	23	**1556.282**	ug/L	0.690	2333082	9.279
	Mg	24	**3664.746**	ug/L	6.489	3755509	15.230
	Al	27	**34552.303**	ug/L	6.395	50704258	206.029
	P	31	**258.162**	ug/L	0.806	24004	0.087
	K	39	**3268.813**	ug/L	4.882	10265627	39.455
	Ca	43	**3584.769**	ug/L	2.236	22757	0.090
>	Sc	45		ug/L		246235	246234.768
	Ti	47	**434.122**	ug/L	1.558	124510	0.505
	V	51	**21.947**	ug/L	6.486	76557	0.274
	Cr	52	**15.264**	ug/L	1.349	37915	0.175
	Cr	53		ug/L		136984	-0.447
	Mn	55	**211.460**	ug/L	0.924	983235	3.988
	Fe	57	**18133.270**	ug/L	1.201	1685244	6.823
	Co	59	**3.808**	ug/L	2.201	13320	0.053
	Ni	60	**12.072**	ug/L	1.211	8727	0.035
	Cu	63		ug/L		18633	0.075
	Cu	65	**11.325**	ug/L	0.774	8872	0.035
	Zn	66	**115.293**	ug/L	0.655	42432	0.236
	Zn	67		ug/L		12669	0.018
	Zn	68		ug/L		31936	0.174
>	Ge	74		ug/L		178306	178305.623
	As	75	**2.929**	ug/L	11.722	1849	0.007
	Se	77		ug/L		5089	-0.026
	Se	82	**0.834**	ug/L	38.278	20	0.000
	Kr	83		ug/L		74	0.000
	Sr	88	**36.025**	ug/L	0.779	221585	2.337
	Y	89		ug/L		219380	2.315
	Zr	90	**50.094**	ug/L	1.641	167331	1.763
	Mo	98	**0.769**	ug/L	1.326	1114	0.011
	Ag	107	**0.174**	ug/L	6.283	434	0.004
	Cd	111	**0.772**	ug/L	9.797	380	0.004
	Cd	114		ug/L		93	0.001
>	In	115		ug/L		94743	94742.738
	Sn	120	**0.717**	ug/L	2.247	1638	0.016
	Sb	121	**0.070**	ug/L	15.382	421	0.001
	Sb	123		ug/L		348	0.001
	Ba	135		ug/L		159207	1.649
	Ba	137	**300.950**	ug/L	0.852	276137	2.860
	Ho	165		ug/L		7407	0.077
>	Lu	175		ug/L		96547	96547.466
	Tl	205	**0.541**	ug/L	4.331	1740	0.015
	Pb	208	**18.973**	ug/L	0.519	114669	1.182
	Bi	209		ug/L		3267	0.034
	Th	232	**14.688**	ug/L	1.269	104448	1.078
	U	238	**1.089**	ug/L	1.902	7846	0.079

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201977936
Sample Date/Time: Thursday, December 03, 2009 21:31:20
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\1201977936.156

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**60.965**	**ug/L**	0.366	13995	0.058
	Be	9	**27.416**	**ug/L**	1.053	1971	0.008
	B	11	**54.727**	**ug/L**	2.370	3512	0.014
	Na	23	**2410.571**	**ug/L**	2.611	3532147	14.372
	Mg	24	**4974.966**	**ug/L**	4.936	5014351	20.675
	Al	27	**38932.598**	**ug/L**	5.596	56284915	232.148
	P	31	**1247.432**	**ug/L**	0.906	104183	0.419
	K	39	**4442.547**	**ug/L**	2.567	13545105	53.622
	Ca	43	**4580.336**	**ug/L**	0.559	28458	0.115
>	Sc	45		**ug/L**		242510	242510.076
	Ti	47	**526.896**	**ug/L**	0.629	148800	0.613
	V	51	**49.714**	**ug/L**	3.447	159485	0.621
	Cr	52	**38.880**	**ug/L**	1.305	102943	0.445
	Cr	53		**ug/L**		138708	-0.431
	Mn	55	**351.021**	**ug/L**	1.270	1606717	6.619
	Fe	57	**18576.554**	**ug/L**	1.412	1700231	6.990
	Co	59	**27.651**	**ug/L**	0.928	94030	0.387
	Ni	60	**37.706**	**ug/L**	1.281	26648	0.110
	Cu	63		**ug/L**		54099	0.222
	Cu	65	**33.724**	**ug/L**	1.284	25765	0.106
	Zn	66	**91.373**	**ug/L**	0.841	33189	0.187
	Zn	67		**ug/L**		11607	0.013
	Zn	68		**ug/L**		27413	0.151
>	Ge	74		**ug/L**		175656	175656.076
	As	75	**40.967**	**ug/L**	1.343	18020	0.099
	Se	77		**ug/L**		5087	-0.026
	Se	82	**10.221**	**ug/L**	3.256	375	0.002
	Kr	83		**ug/L**		81	0.000
	Sr	88	**70.387**	**ug/L**	1.149	425702	4.565
	Y	89		**ug/L**		213649	2.292
	Zr	90	**84.151**	**ug/L**	0.216	276367	2.962
	Mo	98	**24.899**	**ug/L**	1.124	34211	0.367
	Ag	107	**24.988**	**ug/L**	1.379	50553	0.542
	Cd	111	**6.209**	**ug/L**	1.947	2849	0.030
	Cd	114		**ug/L**		5351	0.057
>	In	115		**ug/L**		93206	93206.418
	Sn	120	**17.743**	**ug/L**	1.371	36595	0.391
	Sb	121	**57.531**	**ug/L**	0.186	95950	1.026
	Sb	123		**ug/L**		72586	0.776
	Ba	135		**ug/L**		300157	3.081
	Ba	137	**560.384**	**ug/L**	0.489	518747	5.325
	Ho	165		**ug/L**		7337	0.075
>	Lu	175		**ug/L**		97414	97413.664
	Tl	205	**47.324**	**ug/L**	0.409	131993	1.352
	Pb	208	**114.158**	**ug/L**	0.880	693406	7.113
	Bi	209		**ug/L**		3123	0.032
	Th	232	**38.911**	**ug/L**	0.830	278592	2.856
	U	238	**27.150**	**ug/L**	1.132	193130	1.981

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201977937
Sample Date/Time: Thursday, December 03, 2009 21:37:33
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\1201977937.157

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**62.425**	ug/L	2.970	13976	0.059
	Be	9	**27.588**	ug/L	7.175	1933	0.008
	B	11	**56.297**	ug/L	6.453	3519	0.015
	Na	23	**2557.837**	ug/L	12.630	3649235	15.250
	Mg	24	**4286.589**	ug/L	7.053	4213270	17.814
	Al	27	**38099.996**	ug/L	3.516	53733757	227.183
	P	31	**1212.163**	ug/L	2.960	98815	0.407
	K	39	**4471.611**	ug/L	4.923	13292437	53.973
	Ca	43	**4319.357**	ug/L	3.474	26211	0.108
>	Sc	45		ug/L		236629	236629.438
	Ti	47	**537.358**	ug/L	4.177	147994	0.625
	V	51	**49.319**	ug/L	1.349	154466	0.617
	Cr	52	**39.461**	ug/L	2.840	101978	0.452
	Cr	53		ug/L		134572	-0.435
	Mn	55	**337.631**	ug/L	3.766	1507100	6.367
	Fe	57	**19007.035**	ug/L	2.881	1696699	7.152
	Co	59	**27.770**	ug/L	2.507	92114	0.389
	Ni	60	**35.930**	ug/L	2.198	24774	0.104
	Cu	63		ug/L		53293	0.224
	Cu	65	**34.201**	ug/L	2.756	25483	0.107
	Zn	66	**89.969**	ug/L	4.512	31783	0.184
	Zn	67		ug/L		10978	0.012
	Zn	68		ug/L		25243	0.143
>	Ge	74		ug/L		170998	170998.220
	As	75	**42.026**	ug/L	4.121	17964	0.102
	Se	77		ug/L		4845	-0.026
	Se	82	**10.463**	ug/L	1.366	374	0.002
	Kr	83		ug/L		87	0.000
	Sr	88	**64.553**	ug/L	3.547	381508	4.187
	Y	89		ug/L		198464	2.179
	Zr	90	**89.522**	ug/L	1.876	287329	3.151
	Mo	98	**25.396**	ug/L	3.623	34093	0.374
	Ag	107	**25.329**	ug/L	1.672	50086	0.549
	Cd	111	**6.101**	ug/L	2.594	2737	0.030
	Cd	114		ug/L		5350	0.058
>	In	115		ug/L		91118	91117.692
	Sn	120	**18.057**	ug/L	2.278	36394	0.398
	Sb	121	**61.005**	ug/L	2.910	99408	1.088
	Sb	123		ug/L		75558	0.827
	Ba	135		ug/L		218189	2.280
	Ba	137	**411.154**	ug/L	3.625	373807	3.907
	Ho	165		ug/L		6808	0.071
>	Lu	175		ug/L		95724	95724.074
	Tl	205	**48.222**	ug/L	3.417	132080	1.378
	Pb	208	**116.923**	ug/L	2.804	697573	7.285
	Bi	209		ug/L		3295	0.034
	Th	232	**39.614**	ug/L	3.526	278535	2.908
	U	238	**27.115**	ug/L	2.862	189456	1.978

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			91.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			103.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201977935
Sample Date/Time: Thursday, December 03, 2009 21:43:46
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925193|10|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\1201977935.158

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**6.578**	ug/L	2.693	1345	0.006
	Be	9	**0.451**	ug/L	23.916	35	0.000
	B	11	**2.702**	ug/L	15.315	211	0.001
	Na	23	**325.461**	ug/L	12.194	455186	1.940
	Mg	24	**679.694**	ug/L	5.694	604557	2.825
	Al	27	**7193.981**	ug/L	5.695	9148292	42.896
	P	31	**51.419**	ug/L	5.528	5984	0.017
	K	39	**649.928**	ug/L	6.128	2148983	7.845
	Ca	43	**642.258**	ug/L	2.282	4007	0.016
>	Sc	45		ug/L		213144	213144.139
	Ti	47	**82.002**	ug/L	0.841	20519	0.095
	V	51	**4.700**	ug/L	35.501	20300	0.059
	Cr	52	**3.592**	ug/L	3.065	4330	0.041
	Cr	53		ug/L		145295	-0.322
	Mn	55	**40.523**	ug/L	1.583	164102	0.764
	Fe	57	**3529.906**	ug/L	0.422	287719	1.328
	Co	59	**0.673**	ug/L	2.825	2181	0.009
	Ni	60	**2.389**	ug/L	0.965	1561	0.007
	Cu	63		ug/L		3258	0.014
	Cu	65	**2.181**	ug/L	3.123	1570	0.007
	Zn	66	**12.391**	ug/L	2.862	4665	0.025
	Zn	67		ug/L		6652	-0.014
	Zn	68		ug/L		3989	0.018
>	Ge	74		ug/L		172584	172583.624
	As	75	**0.390**	ug/L	156.888	728	0.001
	Se	77		ug/L		6041	-0.020
	Se	82	**0.399**	ug/L	57.934	4	0.000
	Kr	83		ug/L		51	-0.000
	Sr	88	**6.351**	ug/L	1.419	37951	0.412
	Y	89		ug/L		36023	0.393
	Zr	90	**9.954**	ug/L	2.073	32360	0.350
	Mo	98	**0.161**	ug/L	1.070	256	0.002
	Ag	107	**0.030**	ug/L	16.723	134	0.001
	Cd	111	**0.090**	ug/L	17.127	62	0.000
	Cd	114		ug/L		38	0.000
>	In	115		ug/L		91641	91640.838
	Sn	120	**0.149**	ug/L	6.864	437	0.003
	Sb	121	**0.063**	ug/L	30.531	397	0.001
	Sb	123		ug/L		319	0.001
	Ba	135		ug/L		29190	0.318
	Ba	137	**57.505**	ug/L	1.561	50168	0.546
	Ho	165		ug/L		1222	0.013
>	Lu	175		ug/L		91749	91748.949
	Tl	205	**0.465**	ug/L	12.382	1454	0.013
	Pb	208	**3.042**	ug/L	1.903	17888	0.190
	Bi	209		ug/L		635	0.007
	Th	232	**2.688**	ug/L	0.931	18441	0.197
	U	238	**0.182**	ug/L	3.215	1384	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			89.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.3		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 03, 2009 21:49:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 6.159

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**61.446**	ug/L	3.669	12442	0.058
	Be	9	**54.704**	ug/L	0.388	3464	0.016
	B	11	**100.811**	ug/L	1.419	5654	0.026
	Na	23	**4735.152**	ug/L	2.441	6082058	28.231
	Mg	24	**5202.074**	ug/L	4.747	4631327	21.619
	Al	27	**4866.551**	ug/L	1.634	6213464	29.018
	P	31	**4889.936**	ug/L	1.050	353692	1.642
	K	39	**4788.346**	ug/L	3.322	12849616	57.796
	Ca	43	**4986.098**	ug/L	1.035	27285	0.125
>	Sc	45		ug/L		214012	214011.616
	Ti	47	**50.424**	ug/L	0.441	12743	0.059
	V	51	**49.227**	ug/L	1.591	139511	0.615
	Cr	52	**52.135**	ug/L	0.737	123335	0.597
	Cr	53		ug/L		190331	-0.114
	Mn	55	**52.487**	ug/L	1.100	213048	0.990
	Fe	57	**5152.509**	ug/L	1.284	419565	1.939
	Co	59	**49.400**	ug/L	0.740	148127	0.691
	Ni	60	**50.340**	ug/L	0.894	31371	0.146
	Cu	63		ug/L		72848	0.339
	Cu	65	**51.715**	ug/L	1.778	34806	0.162
	Zn	66	**50.474**	ug/L	1.083	18379	0.103
	Zn	67		ug/L		10180	0.006
	Zn	68		ug/L		13451	0.072
>	Ge	74		ug/L		174854	174854.404
	As	75	**46.967**	ug/L	2.698	20482	0.114
	Se	77		ug/L		9322	-0.002
	Se	82	**50.280**	ug/L	1.239	1879	0.011
	Kr	83		ug/L		58	-0.000
	Sr	88	**48.686**	ug/L	0.695	292640	3.158
	Y	89		ug/L		143	0.001
	Zr	90	**49.269**	ug/L	1.719	160862	1.734
	Mo	98	**48.884**	ug/L	1.784	66688	0.720
	Ag	107	**49.642**	ug/L	2.070	99707	1.076
	Cd	111	**49.391**	ug/L	0.674	22369	0.241
	Cd	114		ug/L		51462	0.555
>	In	115		ug/L		92603	92603.226
	Sn	120	**50.441**	ug/L	1.335	103104	1.112
	Sb	121	**49.744**	ug/L	1.703	82468	0.887
	Sb	123		ug/L		62196	0.669
	Ba	135		ug/L		23717	0.261
	Ba	137	**47.767**	ug/L	1.978	41263	0.454
	Ho	165		ug/L		25	0.000
>	Lu	175		ug/L		90843	90842.567
	Tl	205	**47.922**	ug/L	1.868	124612	1.369
	Pb	208	**50.692**	ug/L	2.024	287357	3.159
	Bi	209		ug/L		44	0.000
	Th	232	**51.410**	ug/L	2.430	343053	3.774
	U	238	**52.771**	ug/L	2.137	349842	3.850

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	122.893				
	Be	9	109.408				
	B	11	100.811				
	Na	23	94.703				
	Mg	24	104.041				
	Al	27	96.367				
	P	31	97.799				
	K	39	95.767				
	Ca	43	99.722				
>	Sc	45			89.9		
	Ti	47	100.847				
	V	51	98.454				
	Cr	52	104.270				
	Cr	53					
	Mn	55	104.973				
	Fe	57	103.050				
	Co	59	98.801				
	Ni	60	100.679				
	Cu	63					
	Cu	65	103.430				
	Zn	66	100.948				
	Zn	67					
	Zn	68					
>	Ge	74			93.2		
	As	75	93.933				
	Se	77					
	Se	82	100.561				
	Kr	83					
	Sr	88	97.372				
	Y	89					
	Zr	90	98.538				
	Mo	98	97.768				
	Ag	107	99.284				
	Cd	111	98.783				
	Cd	114					
>	In	115			94.4		
	Sn	120	100.882				
	Sb	121	99.487				
	Sb	123					
	Ba	135					
	Ba	137	95.533				
	Ho	165					
>	Lu	175			98.3		
	Tl	205	95.843				
	Pb	208	101.384				
	Bi	209					
	Th	232	102.821				
	U	238	105.542				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 03, 2009 21:56:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 7.160

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.138**	ug/L	16.712	47	0.000
	Be	9	**-0.046**	ug/L	89.131	3	-0.000
	B	11	**2.360**	ug/L	25.466	189	0.001
	Na	23	**-10.531**	ug/L	20.717	28028	-0.063
	Mg	24	**-0.033**	ug/L	8715.403	2334	-0.000
	Al	27	**-0.620**	ug/L	197.882	3334	-0.004
	P	31	**1.364**	ug/L	141.573	2364	0.000
	K	39	**-17.517**	ug/L	5.254	425236	-0.211
	Ca	43	**-12.887**	ug/L	40.899	505	-0.000
>	Sc	45		ug/L		209749	209749.133
	Ti	47	**-0.017**	ug/L	403.514	187	-0.000
	V	51	**1.263**	ug/L	62.020	10929	0.016
	Cr	52	**0.836**	ug/L	8.409	-2360	0.010
	Cr	53		ug/L		172965	-0.179
	Mn	55	**-0.018**	ug/L	43.266	1138	-0.000
	Fe	57	**10.288**	ug/L	27.987	5360	0.004
	Co	59	**0.012**	ug/L	18.710	206	0.000
	Ni	60	**0.018**	ug/L	142.674	92	0.000
	Cu	63		ug/L		217	0.000
	Cu	65	**0.010**	ug/L	146.325	118	0.000
	Zn	66	**0.015**	ug/L	303.839	289	0.000
	Zn	67		ug/L		7032	-0.012
	Zn	68		ug/L		653	-0.001
>	Ge	74		ug/L		173958	173957.874
	As	75	**0.141**	ug/L	328.169	629	0.000
	Se	77		ug/L		7766	-0.010
	Se	82	**0.175**	ug/L	71.295	-5	0.000
	Kr	83		ug/L		58	-0.000
	Sr	88	**0.003**	ug/L	13.329	230	0.000
	Y	89		ug/L		23	0.000
	Zr	90	**0.097**	ug/L	16.702	566	0.003
	Mo	98	**0.043**	ug/L	5.345	97	0.001
	Ag	107	**0.007**	ug/L	63.321	87	0.000
	Cd	111	**-0.004**	ug/L	434.910	20	-0.000
	Cd	114		ug/L		46	0.000
>	In	115		ug/L		91599	91599.277
	Sn	120	**0.049**	ug/L	20.573	235	0.001
	Sb	121	**0.307**	ug/L	20.906	793	0.005
	Sb	123		ug/L		627	0.004
	Ba	135		ug/L		25	0.000
	Ba	137	**0.003**	ug/L	89.784	39	0.000
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		89030	89030.469
	Tl	205	**0.245**	ug/L	18.286	850	0.007
	Pb	208	**0.029**	ug/L	18.913	646	0.002
	Bi	209		ug/L		19	-0.000
	Th	232	**0.053**	ug/L	26.324	672	0.004
	U	238	**0.014**	ug/L	17.000	250	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			88.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241419002
Sample Date/Time: Thursday, December 03, 2009 22:02:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419002.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.182**	**ug/L**	1.426	10531	0.044
	Be	9	**1.316**	**ug/L**	14.814	101	0.000
	B	11	**2.799**	**ug/L**	8.632	245	0.001
	Na	23	**1011.096**	**ug/L**	5.639	1500091	6.028
	Mg	24	**2501.366**	**ug/L**	6.374	2506008	10.395
	Al	27	**9658.809**	**ug/L**	4.607	13871920	57.594
	P	31	**585.002**	**ug/L**	1.549	49892	0.196
	K	39	**1869.957**	**ug/L**	6.787	5970266	22.571
	Ca	43	**3266.695**	**ug/L**	1.060	20342	0.082
>	Sc	45		**ug/L**		240805	240804.924
	Ti	47	**1190.010**	**ug/L**	0.677	333419	1.384
	V	51	**17.979**	**ug/L**	8.508	62830	0.225
	Cr	52	**12.220**	**ug/L**	0.264	28689	0.140
	Cr	53		**ug/L**		128240	-0.471
	Mn	55	**771.046**	**ug/L**	1.793	3502016	14.540
	Fe	57	**31283.911**	**ug/L**	2.109	2839026	11.771
	Co	59	**3.098**	**ug/L**	1.863	10634	0.043
	Ni	60	**8.581**	**ug/L**	0.855	6094	0.025
	Cu	63		**ug/L**		9847	0.040
	Cu	65	**6.459**	**ug/L**	1.736	5003	0.020
	Zn	66	**133.365**	**ug/L**	1.880	47893	0.273
	Zn	67		**ug/L**		12524	0.019
	Zn	68		**ug/L**		34482	0.193
>	Ge	74		**ug/L**		174185	174184.860
	As	75	**4.774**	**ug/L**	9.977	2582	0.012
	Se	77		**ug/L**		4904	-0.027
	Se	82	**0.843**	**ug/L**	53.000	20	0.000
	Kr	83		**ug/L**		106	0.000
	Sr	88	**23.264**	**ug/L**	0.425	142846	1.509
	Y	89		**ug/L**		396741	4.197
	Zr	90	**58.359**	**ug/L**	1.980	194428	2.054
	Mo	98	**2.756**	**ug/L**	1.028	3876	0.041
	Ag	107	**0.210**	**ug/L**	5.137	505	0.005
	Cd	111	**0.865**	**ug/L**	1.668	422	0.004
	Cd	114		**ug/L**		74	0.000
>	In	115		**ug/L**		94530	94530.487
	Sn	120	**6.541**	**ug/L**	3.823	13765	0.144
	Sb	121	**0.266**	**ug/L**	16.746	750	0.005
	Sb	123		**ug/L**		564	0.003
	Ba	135		**ug/L**		45820	0.471
	Ba	137	**85.970**	**ug/L**	0.795	79528	0.817
	Ho	165		**ug/L**		15425	0.158
>	Lu	175		**ug/L**		97307	97306.613
	Tl	205	**0.287**	**ug/L**	2.935	1048	0.008
	Pb	208	**9.306**	**ug/L**	0.366	56958	0.580
	Bi	209		**ug/L**		241491	2.482
	Th	232	**17.435**	**ug/L**	0.983	124892	1.280
	U	238	**1.493**	**ug/L**	1.455	10773	0.109

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241419003
Sample Date/Time: Thursday, December 03, 2009 22:08:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419003.162

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.213**	ug/L	1.950	10215	0.040
	Be	9	**4.091**	ug/L	7.509	316	0.001
	B	11	**11.139**	ug/L	4.093	812	0.003
	Na	23	**2766.784**	ug/L	11.391	4262861	16.496
	Mg	24	**7249.369**	ug/L	1.262	7700194	30.127
	Al	27	**61516.069**	ug/L	5.489	93755043	366.809
	P	31	**259.429**	ug/L	0.685	25018	0.087
	K	39	**6045.261**	ug/L	3.244	19215816	72.967
	Ca	43	**5903.512**	ug/L	0.926	38444	0.148
>	Sc	45		ug/L		255494	255494.029
	Ti	47	**429.943**	ug/L	0.840	127962	0.500
	V	51	**40.730**	ug/L	3.519	139345	0.509
	Cr	52	**27.621**	ug/L	1.726	75506	0.316
	Cr	53		ug/L		130272	-0.494
	Mn	55	**449.589**	ug/L	2.189	2167256	8.478
	Fe	57	**31089.469**	ug/L	2.039	2993880	11.698
	Co	59	**6.554**	ug/L	2.042	23638	0.092
	Ni	60	**25.682**	ug/L	1.018	19154	0.075
	Cu	63		ug/L		41333	0.161
	Cu	65	**24.546**	ug/L	2.545	19790	0.077
	Zn	66	**119.562**	ug/L	1.584	42587	0.245
	Zn	67		ug/L		11971	0.017
	Zn	68		ug/L		31629	0.178
>	Ge	74		ug/L		172607	172606.911
	As	75	**4.227**	ug/L	14.992	2333	0.010
	Se	77		ug/L		4659	-0.028
	Se	82	**0.469**	ug/L	39.704	6	0.000
	Kr	83		ug/L		97	0.000
	Sr	88	**60.413**	ug/L	1.179	364031	3.918
	Y	89		ug/L		394855	4.253
	Zr	90	**61.300**	ug/L	2.704	200611	2.158
	Mo	98	**0.820**	ug/L	2.320	1161	0.012
	Ag	107	**0.264**	ug/L	2.711	606	0.006
	Cd	111	**1.096**	ug/L	6.211	519	0.005
	Cd	114		ug/L		231	0.002
>	In	115		ug/L		92857	92856.601
	Sn	120	**0.429**	ug/L	5.636	1015	0.009
	Sb	121	**0.102**	ug/L	9.960	465	0.002
	Sb	123		ug/L		382	0.002
	Ba	135		ug/L		130750	1.317
	Ba	137	**238.868**	ug/L	1.607	225252	2.270
	Ho	165		ug/L		13602	0.137
>	Lu	175		ug/L		99231	99231.127
	Tl	205	**0.551**	ug/L	2.499	1817	0.016
	Pb	208	**21.213**	ug/L	1.133	131693	1.322
	Bi	209		ug/L		2961	0.030
	Th	232	**18.410**	ug/L	0.751	134468	1.351
	U	238	**1.484**	ug/L	1.663	10923	0.108

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419004
Sample Date/Time: Thursday, December 03, 2009 22:14:50
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419004.163

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**56.886**	**ug/L**	3.733	15094	0.054
	Be	9	**5.431**	**ug/L**	4.235	458	0.002
	B	11	**20.290**	**ug/L**	1.216	1557	0.005
	Na	23	**2902.839**	**ug/L**	2.272	4906844	17.307
	Mg	24	**11269.566**	**ug/L**	4.304	13144280	46.835
	Al	27	**88189.394**	**ug/L**	6.637	147488800	525.857
	P	31	**246.681**	**ug/L**	1.695	26251	0.083
	K	39	**8137.723**	**ug/L**	3.608	28173819	98.224
	Ca	43	**13025.151**	**ug/L**	1.578	92155	0.326
>	Sc	45		**ug/L**		280414	280413.987
	Ti	47	**867.552**	**ug/L**	0.840	283178	1.009
	V	51	**69.989**	**ug/L**	1.066	255574	0.875
	Cr	52	**43.427**	**ug/L**	0.873	133625	0.497
	Cr	53		**ug/L**		136691	-0.516
	Mn	55	**1148.282**	**ug/L**	0.305	6073846	21.654
	Fe	57	**47860.006**	**ug/L**	0.807	5055998	18.008
	Co	59	**14.859**	**ug/L**	0.267	58538	0.208
	Ni	60	**42.518**	**ug/L**	1.310	34728	0.123
	Cu	63		**ug/L**		53979	0.192
	Cu	65	**29.364**	**ug/L**	0.306	25960	0.092
	Zn	66	**163.018**	**ug/L**	0.854	58493	0.334
	Zn	67		**ug/L**		15366	0.036
	Zn	68		**ug/L**		44940	0.253
>	Ge	74		**ug/L**		174188	174187.655
	As	75	**7.570**	**ug/L**	10.798	3764	0.018
	Se	77		**ug/L**		4730	-0.028
	Se	82	**0.620**	**ug/L**	40.605	12	0.000
	Kr	83		**ug/L**		100	0.000
	Sr	88	**160.239**	**ug/L**	1.141	959300	10.393
	Y	89		**ug/L**		382679	4.147
	Zr	90	**110.687**	**ug/L**	1.090	359811	3.896
	Mo	98	**1.863**	**ug/L**	2.410	2571	0.027
	Ag	107	**0.433**	**ug/L**	5.084	940	0.009
	Cd	111	**1.611**	**ug/L**	4.190	748	0.008
	Cd	114		**ug/L**		191	0.002
>	In	115		**ug/L**		92291	92290.762
	Sn	120	**0.677**	**ug/L**	4.469	1512	0.015
	Sb	121	**0.136**	**ug/L**	3.842	518	0.002
	Sb	123		**ug/L**		404	0.002
	Ba	135		**ug/L**		269557	2.739
	Ba	137	**497.460**	**ug/L**	0.849	465153	4.727
	Ho	165		**ug/L**		13121	0.133
>	Lu	175		**ug/L**		98401	98401.097
	Tl	205	**1.260**	**ug/L**	2.558	3797	0.036
	Pb	208	**44.601**	**ug/L**	0.762	273991	2.779
	Bi	209		**ug/L**		5012	0.051
	Th	232	**30.585**	**ug/L**	0.197	221289	2.245
	U	238	**2.627**	**ug/L**	0.937	19040	0.192

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		117.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419005
Sample Date/Time: Thursday, December 03, 2009 22:21:02
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419005.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**72.703**	**ug/L**	2.727	21014	0.069
	Be	9	**4.971**	**ug/L**	8.132	457	0.001
	B	11	**20.395**	**ug/L**	2.470	1705	0.005
	Na	23	**884.476**	**ug/L**	7.614	1669279	5.273
	Mg	24	**14360.646**	**ug/L**	5.764	18254388	59.681
	Al	27	**101134.101**	**ug/L**	3.622	184161691	603.044
	P	31	**443.202**	**ug/L**	2.675	48750	0.149
	K	39	**8268.382**	**ug/L**	3.697	31174581	99.801
	Ca	43	**12026.615**	**ug/L**	1.696	92767	0.301
>	Sc	45		**ug/L**		305542	305541.766
	Ti	47	**1142.433**	**ug/L**	0.660	406148	1.328
	V	51	**132.442**	**ug/L**	2.194	516847	1.656
	Cr	52	**66.304**	**ug/L**	1.946	225619	0.759
	Cr	53		**ug/L**		149127	-0.515
	Mn	55	**1123.139**	**ug/L**	2.310	6470995	21.180
	Fe	57	**71844.769**	**ug/L**	1.692	8264295	27.033
	Co	59	**24.346**	**ug/L**	2.183	104310	0.341
	Ni	60	**35.965**	**ug/L**	2.316	32019	0.104
	Cu	63		**ug/L**		64977	0.212
	Cu	65	**32.760**	**ug/L**	0.424	31541	0.103
	Zn	66	**194.350**	**ug/L**	0.971	69348	0.398
	Zn	67		**ug/L**		17511	0.048
	Zn	68		**ug/L**		52263	0.297
>	Ge	74		**ug/L**		173359	173359.331
	As	75	**12.301**	**ug/L**	3.080	5737	0.030
	Se	77		**ug/L**		4803	-0.027
	Se	82	**1.051**	**ug/L**	56.661	28	0.000
	Kr	83		**ug/L**		123	0.000
	Sr	88	**170.530**	**ug/L**	0.581	1033191	11.060
	Y	89		**ug/L**		464221	4.971
	Zr	90	**94.398**	**ug/L**	1.475	310576	3.323
	Mo	98	**1.075**	**ug/L**	2.653	1518	0.016
	Ag	107	**0.469**	**ug/L**	3.265	1025	0.010
	Cd	111	**1.488**	**ug/L**	3.175	701	0.007
	Cd	114		**ug/L**		297	0.003
>	In	115		**ug/L**		93393	93393.265
	Sn	120	**0.476**	**ug/L**	4.978	1119	0.011
	Sb	121	**0.105**	**ug/L**	10.173	474	0.002
	Sb	123		**ug/L**		368	0.001
	Ba	135		**ug/L**		296228	3.024
	Ba	137	**548.522**	**ug/L**	2.028	510604	5.212
	Ho	165		**ug/L**		16628	0.170
>	Lu	175		**ug/L**		97971	97970.509
	Tl	205	**1.034**	**ug/L**	1.174	3146	0.030
	Pb	208	**62.563**	**ug/L**	0.950	382408	3.898
	Bi	209		**ug/L**		5316	0.054
	Th	232	**40.807**	**ug/L**	0.685	293805	2.995
	U	238	**4.945**	**ug/L**	0.981	35522	0.361

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		128.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

Fe	57Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419006
Sample Date/Time: Thursday, December 03, 2009 22:27:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419006.165

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**70.654**	**ug/L**	3.949	21481	0.067
	Be	9	**6.580**	**ug/L**	1.858	634	0.002
	B	11	**19.217**	**ug/L**	3.182	1694	0.005
	Na	23	**1734.913**	**ug/L**	10.645	3391208	10.344
	Mg	24	**15785.141**	**ug/L**	4.945	21096710	65.601
	Al	27	**106544.884**	**ug/L**	1.098	204252057	635.308
	P	31	**256.226**	**ug/L**	0.799	31126	0.086
	K	39	**10046.218**	**ug/L**	3.554	39676739	121.260
	Ca	43	**15329.589**	**ug/L**	0.799	124199	0.384
>	Sc	45		**ug/L**		321437	321437.100
	Ti	47	**918.260**	**ug/L**	2.250	343429	1.068
	V	51	**120.172**	**ug/L**	1.634	494514	1.502
	Cr	52	**63.891**	**ug/L**	1.337	228502	0.732
	Cr	53		**ug/L**		152613	-0.529
	Mn	55	**1664.066**	**ug/L**	1.661	10086908	31.380
	Fe	57	**71893.893**	**ug/L**	2.295	8700775	27.052
	Co	59	**28.664**	**ug/L**	2.252	129169	0.401
	Ni	60	**51.464**	**ug/L**	1.429	48161	0.149
	Cu	63		**ug/L**		85227	0.264
	Cu	65	**40.702**	**ug/L**	2.793	41166	0.128
	Zn	66	**217.495**	**ug/L**	1.315	79099	0.446
	Zn	67		**ug/L**		22905	0.077
	Zn	68		**ug/L**		71562	0.400
>	Ge	74		**ug/L**		176765	176764.994
	As	75	**14.570**	**ug/L**	2.570	6822	0.035
	Se	77		**ug/L**		4924	-0.027
	Se	82	**1.500**	**ug/L**	9.484	45	0.000
	Kr	83		**ug/L**		140	0.000
	Sr	88	**259.260**	**ug/L**	1.580	1556708	16.815
	Y	89		**ug/L**		630554	6.812
	Zr	90	**93.975**	**ug/L**	0.545	306500	3.308
	Mo	98	**1.156**	**ug/L**	4.884	1615	0.017
	Ag	107	**0.458**	**ug/L**	2.515	993	0.010
	Cd	111	**1.569**	**ug/L**	12.719	731	0.008
	Cd	114		**ug/L**		237	0.002
>	In	115		**ug/L**		92577	92577.248
	Sn	120	**0.372**	**ug/L**	3.211	896	0.008
	Sb	121	**0.133**	**ug/L**	9.338	516	0.002
	Sb	123		**ug/L**		431	0.002
	Ba	135		**ug/L**		1273186	12.467
	Ba	137	**2346.484**	**ug/L**	0.722	2277112	22.297
	Ho	165		**ug/L**		24523	0.240
>	Lu	175		**ug/L**		102123	102122.774
	Tl	205	**1.299**	**ug/L**	1.590	4053	0.037
	Pb	208	**91.481**	**ug/L**	1.582	582623	5.700
	Bi	209		**ug/L**		5518	0.054
	Th	232	**41.171**	**ug/L**	1.062	308990	3.022
	U	238	**2.261**	**ug/L**	1.643	17026	0.165

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		135.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

Fe	57Sample is out of limits (over linear range)
Ba	137Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419007
Sample Date/Time: Thursday, December 03, 2009 22:33:28
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419007.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**58.107**	**ug/L**	2.391	16943	0.055
	Be	9	**10.056**	**ug/L**	3.698	924	0.003
	B	11	**22.442**	**ug/L**	3.616	1881	0.006
	Na	23	**1892.111**	**ug/L**	6.336	3536483	11.281
	Mg	24	**13891.882**	**ug/L**	0.268	17787285	57.732
	Al	27	**109364.754**	**ug/L**	1.639	200903663	652.122
	P	31	**324.528**	**ug/L**	1.896	36894	0.109
	K	39	**10080.817**	**ug/L**	3.427	38176358	121.677
	Ca	43	**16965.063**	**ug/L**	0.649	131614	0.425
>	Sc	45		**ug/L**		308048	308048.201
	Ti	47	**625.857**	**ug/L**	0.325	224481	0.728
	V	51	**71.437**	**ug/L**	1.761	286248	0.893
	Cr	52	**51.574**	**ug/L**	1.437	175553	0.591
	Cr	53		**ug/L**		145644	-0.531
	Mn	55	**519.032**	**ug/L**	0.300	3016891	9.788
	Fe	57	**54108.029**	**ug/L**	0.654	6278503	20.359
	Co	59	**17.749**	**ug/L**	0.856	76756	0.248
	Ni	60	**52.405**	**ug/L**	1.035	46996	0.152
	Cu	63		**ug/L**		51491	0.166
	Cu	65	**25.800**	**ug/L**	0.634	25078	0.081
	Zn	66	**200.307**	**ug/L**	0.382	72267	0.411
	Zn	67		**ug/L**		19843	0.061
	Zn	68		**ug/L**		61152	0.344
>	Ge	74		**ug/L**		175295	175294.781
	As	75	**7.166**	**ug/L**	5.048	3619	0.017
	Se	77		**ug/L**		4898	-0.027
	Se	82	**0.939**	**ug/L**	50.632	24	0.000
	Kr	83		**ug/L**		139	0.000
	Sr	88	**244.501**	**ug/L**	0.621	1471457	15.858
	Y	89		**ug/L**		569816	6.141
	Zr	90	**83.812**	**ug/L**	1.002	273981	2.950
	Mo	98	**0.828**	**ug/L**	1.599	1171	0.012
	Ag	107	**0.559**	**ug/L**	1.885	1198	0.012
	Cd	111	**1.320**	**ug/L**	5.496	620	0.006
	Cd	114		**ug/L**		203	0.002
>	In	115		**ug/L**		92783	92782.994
	Sn	120	**0.335**	**ug/L**	7.433	823	0.007
	Sb	121	**0.096**	**ug/L**	19.466	455	0.002
	Sb	123		**ug/L**		372	0.001
	Ba	135		**ug/L**		807677	7.893
	Ba	137	**1419.834**	**ug/L**	0.854	1380581	13.492
	Ho	165		**ug/L**		20899	0.204
>	Lu	175		**ug/L**		102323	102323.205
	Tl	205	**1.087**	**ug/L**	2.387	3442	0.031
	Pb	208	**40.791**	**ug/L**	1.553	260609	2.542
	Bi	209		**ug/L**		4796	0.047
	Th	232	**32.879**	**ug/L**	0.240	247338	2.414
	U	238	**1.883**	**ug/L**	0.706	14244	0.137

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		129.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)
	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419008
Sample Date/Time: Thursday, December 03, 2009 22:39:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419008.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**58.746**	ug/L	3.235	17122	0.056
	Be	9	**6.058**	ug/L	3.192	560	0.002
	B	11	**18.921**	ug/L	1.965	1600	0.005
	Na	23	**3705.771**	ug/L	6.054	6869147	22.094
	Mg	24	**12988.552**	ug/L	4.349	16628869	53.978
	Al	27	**102206.789**	ug/L	2.142	187669533	609.441
	P	31	**162.581**	ug/L	0.597	20143	0.055
	K	39	**10392.474**	ug/L	4.815	39343321	125.439
	Ca	43	**11602.821**	ug/L	0.576	90273	0.290
>	Sc	45		ug/L		307992	307991.936
	Ti	47	**793.787**	ug/L	0.397	284575	0.923
	V	51	**81.798**	ug/L	1.450	326188	1.023
	Cr	52	**48.925**	ug/L	0.408	166183	0.560
	Cr	53		ug/L		140097	-0.549
	Mn	55	**407.584**	ug/L	1.204	2368922	7.686
	Fe	57	**55020.984**	ug/L	1.331	6382910	20.703
	Co	59	**11.567**	ug/L	0.700	50109	0.162
	Ni	60	**45.465**	ug/L	0.404	40787	0.132
	Cu	63		ug/L		60431	0.195
	Cu	65	**29.744**	ug/L	1.027	28876	0.093
	Zn	66	**185.636**	ug/L	0.759	68295	0.381
	Zn	67		ug/L		17426	0.045
	Zn	68		ug/L		53326	0.294
>	Ge	74		ug/L		178693	178693.140
	As	75	**10.769**	ug/L	4.645	5250	0.026
	Se	77		ug/L		4459	-0.030
	Se	82	**0.439**	ug/L	134.219	5	0.000
	Kr	83		ug/L		119	0.000
	Sr	88	**180.513**	ug/L	1.019	1101217	11.708
	Y	89		ug/L		398382	4.236
	Zr	90	**107.851**	ug/L	1.259	357291	3.797
	Mo	98	**1.039**	ug/L	2.255	1479	0.015
	Ag	107	**0.461**	ug/L	1.168	1016	0.010
	Cd	111	**1.453**	ug/L	1.700	690	0.007
	Cd	114		ug/L		149	0.001
>	In	115		ug/L		94042	94041.896
	Sn	120	**0.455**	ug/L	2.351	1083	0.010
	Sb	121	**0.068**	ug/L	6.984	414	0.001
	Sb	123		ug/L		379	0.001
	Ba	135		ug/L		414479	4.135
	Ba	137	**748.661**	ug/L	0.687	713199	7.114
	Ho	165		ug/L		13663	0.136
>	Lu	175		ug/L		100242	100242.487
	Tl	205	**1.049**	ug/L	4.603	3263	0.030
	Pb	208	**39.053**	ug/L	1.045	244466	2.433
	Bi	209		ug/L		5144	0.051
	Th	232	**34.207**	ug/L	0.938	252065	2.511
	U	238	**2.432**	ug/L	1.216	17970	0.177

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		129.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419009
Sample Date/Time: Thursday, December 03, 2009 22:45:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419009.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**45.325**	**ug/L**	3.493	12410	0.043
	Be	9	**4.002**	**ug/L**	2.325	350	0.001
	B	11	**14.774**	**ug/L**	2.495	1192	0.004
	Na	23	**2197.733**	**ug/L**	5.400	3846549	13.103
	Mg	24	**11371.482**	**ug/L**	5.717	13672107	47.258
	Al	27	**95561.588**	**ug/L**	9.598	165028009	569.816
	P	31	**276.569**	**ug/L**	0.572	29985	0.093
	K	39	**6934.514**	**ug/L**	4.894	24839639	83.701
	Ca	43	**16503.126**	**ug/L**	1.085	120220	0.413
>	Sc	45		**ug/L**		289214	289213.671
	Ti	47	**814.276**	**ug/L**	0.560	274119	0.947
	V	51	**61.193**	**ug/L**	1.831	231716	0.765
	Cr	52	**45.437**	**ug/L**	1.063	144472	0.520
	Cr	53		**ug/L**		135339	-0.535
	Mn	55	**488.668**	**ug/L**	1.123	2666370	9.215
	Fe	57	**44425.976**	**ug/L**	1.170	4840046	16.716
	Co	59	**13.436**	**ug/L**	1.472	54605	0.188
	Ni	60	**37.403**	**ug/L**	2.068	31518	0.109
	Cu	63		**ug/L**		50132	0.172
	Cu	65	**26.309**	**ug/L**	1.694	23999	0.082
	Zn	66	**135.226**	**ug/L**	2.087	49918	0.277
	Zn	67		**ug/L**		14207	0.027
	Zn	68		**ug/L**		39979	0.218
>	Ge	74		**ug/L**		179058	179057.759
	As	75	**5.606**	**ug/L**	20.221	3017	0.014
	Se	77		**ug/L**		4306	-0.031
	Se	82	**0.663**	**ug/L**	44.289	14	0.000
	Kr	83		**ug/L**		109	0.000
	Sr	88	**163.717**	**ug/L**	2.240	999449	10.618
	Y	89		**ug/L**		377450	4.010
	Zr	90	**107.241**	**ug/L**	1.691	355535	3.775
	Mo	98	**1.158**	**ug/L**	2.367	1646	0.017
	Ag	107	**0.438**	**ug/L**	3.140	970	0.010
	Cd	111	**1.470**	**ug/L**	6.837	699	0.007
	Cd	114		**ug/L**		138	0.001
>	In	115		**ug/L**		94129	94129.437
	Sn	120	**0.500**	**ug/L**	1.647	1177	0.011
	Sb	121	**0.021**	**ug/L**	35.846	336	0.000
	Sb	123		**ug/L**		311	0.001
	Ba	135		**ug/L**		355135	3.646
	Ba	137	**667.513**	**ug/L**	0.653	617839	6.343
	Ho	165		**ug/L**		12699	0.130
>	Lu	175		**ug/L**		97402	97401.591
	Tl	205	**0.816**	**ug/L**	3.656	2521	0.023
	Pb	208	**39.953**	**ug/L**	0.472	243009	2.489
	Bi	209		**ug/L**		4722	0.048
	Th	232	**30.302**	**ug/L**	1.909	216997	2.224
	U	238	**2.614**	**ug/L**	1.426	18753	0.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		121.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for san	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 03, 2009 22:52:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 6.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.964**	ug/L	2.129	11057	0.049
	Be	9	**50.270**	ug/L	1.646	3344	0.015
	B	11	**97.362**	ug/L	2.310	5737	0.025
	Na	23	**5141.147**	ug/L	2.070	6932028	30.651
	Mg	24	**5244.835**	ug/L	3.871	4899911	21.797
	Al	27	**5409.230**	ug/L	3.589	7254854	32.254
	P	31	**4932.823**	ug/L	1.446	374620	1.656
	K	39	**5018.831**	ug/L	0.290	14118167	60.578
	Ca	43	**5061.375**	ug/L	1.298	29082	0.127
>	Sc	45		ug/L		224747	224746.787
	Ti	47	**50.253**	ug/L	1.259	13339	0.058
	V	51	**48.203**	ug/L	5.032	143567	0.603
	Cr	52	**52.066**	ug/L	0.648	129348	0.596
	Cr	53		ug/L		199637	-0.115
	Mn	55	**52.465**	ug/L	0.927	223651	0.989
	Fe	57	**5129.620**	ug/L	0.517	438660	1.930
	Co	59	**49.775**	ug/L	0.157	156732	0.697
	Ni	60	**50.765**	ug/L	0.947	33219	0.147
	Cu	63		ug/L		77316	0.343
	Cu	65	**51.502**	ug/L	0.816	36402	0.161
	Zn	66	**49.766**	ug/L	1.105	18878	0.102
	Zn	67		ug/L		10216	0.003
	Zn	68		ug/L		13942	0.072
>	Ge	74		ug/L		182138	182138.359
	As	75	**46.708**	ug/L	2.203	21216	0.113
	Se	77		ug/L		9378	-0.003
	Se	82	**50.855**	ug/L	3.057	1980	0.011
	Kr	83		ug/L		63	-0.000
	Sr	88	**49.755**	ug/L	0.665	302299	3.227
	Y	89		ug/L		182	0.002
	Zr	90	**51.678**	ug/L	1.193	170543	1.819
	Mo	98	**50.043**	ug/L	0.755	69014	0.737
	Ag	107	**50.021**	ug/L	1.811	101557	1.084
	Cd	111	**50.202**	ug/L	0.646	22983	0.245
	Cd	114		ug/L		51425	0.549
>	In	115		ug/L		93610	93609.507
	Sn	120	**50.884**	ug/L	0.824	105149	1.122
	Sb	121	**49.657**	ug/L	0.954	83222	0.886
	Sb	123		ug/L		63460	0.675
	Ba	135		ug/L		24312	0.268
	Ba	137	**48.958**	ug/L	0.712	42173	0.465
	Ho	165		ug/L		28	0.000
>	Lu	175		ug/L		90575	90574.799
	Tl	205	**47.687**	ug/L	0.801	123666	1.363
	Pb	208	**50.822**	ug/L	0.295	287318	3.167
	Bi	209		ug/L		38	0.000
	Th	232	**50.481**	ug/L	1.631	335960	3.706
	U	238	**52.966**	ug/L	0.726	350187	3.865

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.928				
	Be	9	100.540				
	B	11	97.362				
	Na	23	102.823				
	Mg	24	104.897				
	Al	27	107.113				
	P	31	98.656				
	K	39	100.377				
	Ca	43	101.228				
>	Sc	45		94.4			
	Ti	47	100.506				
	V	51	96.407				
	Cr	52	104.133				
	Cr	53					
	Mn	55	104.930				
	Fe	57	102.592				
	Co	59	99.549				
	Ni	60	101.530				
	Cu	63					
	Cu	65	103.004				
	Zn	66	99.533				
	Zn	67					
	Zn	68					
>	Ge	74		97.1			
	As	75	93.416				
	Se	77					
	Se	82	101.710				
	Kr	83					
	Sr	88	99.509				
	Y	89					
	Zr	90	103.357				
	Mo	98	100.086				
	Ag	107	100.042				
	Cd	111	100.404				
	Cd	114					
>	In	115		95.5			
	Sn	120	101.768				
	Sb	121	99.313				
	Sb	123					
	Ba	135					
	Ba	137	97.916				
	Ho	165					
>	Lu	175		98.0			
	Tl	205	95.374				
	Pb	208	101.644				
	Bi	209					
	Th	232	100.962				
	U	238	105.931				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 03, 2009 22:58:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 7.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.117**	**ug/L**	20.760	47	0.000
	Be	9	**-0.024**	**ug/L**	214.044	5	-0.000
	B	11	**2.053**	**ug/L**	21.368	187	0.001
	Na	23	**-15.182**	**ug/L**	12.137	24020	-0.091
	Mg	24	**0.142**	**ug/L**	1574.559	2667	0.001
	Al	27	**3.138**	**ug/L**	91.222	8670	0.019
	P	31	**-0.187**	**ug/L**	784.178	2437	-0.000
	K	39	**-0.936**	**ug/L**	1014.066	505132	-0.011
	Ca	43	**-11.809**	**ug/L**	37.608	551	-0.000
>	Sc	45		**ug/L**		226670	226669.570
	Ti	47	**0.016**	**ug/L**	232.849	211	0.000
	V	51	**0.246**	**ug/L**	720.874	8945	0.003
	Cr	52	**0.752**	**ug/L**	8.371	-2768	0.009
	Cr	53		**ug/L**		183507	-0.194
	Mn	55	**0.001**	**ug/L**	824.202	1311	0.000
	Fe	57	**8.987**	**ug/L**	21.394	5681	0.003
	Co	59	**0.008**	**ug/L**	74.112	209	0.000
	Ni	60	**0.002**	**ug/L**	223.113	89	0.000
	Cu	63		**ug/L**		262	0.000
	Cu	65	**0.008**	**ug/L**	113.313	126	0.000
	Zn	66	**0.058**	**ug/L**	76.960	320	0.000
	Zn	67		**ug/L**		7248	-0.013
	Zn	68		**ug/L**		646	-0.001
>	Ge	74		**ug/L**		183059	183058.726
	As	75	**0.102**	**ug/L**	584.076	646	0.000
	Se	77		**ug/L**		7791	-0.012
	Se	82	**0.213**	**ug/L**	84.500	-4	0.000
	Kr	83		**ug/L**		61	-0.000
	Sr	88	**0.007**	**ug/L**	10.614	261	0.000
	Y	89		**ug/L**		30	0.000
	Zr	90	**0.111**	**ug/L**	17.814	630	0.004
	Mo	98	**0.040**	**ug/L**	14.151	97	0.001
	Ag	107	**0.012**	**ug/L**	26.288	101	0.000
	Cd	111	**0.001**	**ug/L**	1200.746	23	0.000
	Cd	114		**ug/L**		44	0.000
>	In	115		**ug/L**		94504	94503.714
	Sn	120	**0.041**	**ug/L**	38.692	226	0.001
	Sb	121	**0.267**	**ug/L**	22.699	753	0.005
	Sb	123		**ug/L**		604	0.004
	Ba	135		**ug/L**		35	0.000
	Ba	137	**0.023**	**ug/L**	64.453	57	0.000
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		90953	90953.202
	Tl	205	**0.179**	**ug/L**	25.706	699	0.005
	Pb	208	**0.026**	**ug/L**	22.769	645	0.002
	Bi	209		**ug/L**		21	0.000
	Th	232	**0.042**	**ug/L**	44.272	616	0.003
	U	238	**0.012**	**ug/L**	22.131	246	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241419010
Sample Date/Time: Thursday, December 03, 2009 23:04:35
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419010.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**57.565**	ug/L	2.167	15292	0.054
	Be	9	**4.413**	ug/L	4.802	374	0.001
	B	11	**16.008**	ug/L	3.441	1246	0.004
	Na	23	**509.171**	ug/L	2.852	906903	3.036
	Mg	24	**10781.097**	ug/L	3.057	12574415	44.805
	Al	27	**69155.105**	ug/L	2.030	115758777	412.359
	P	31	**522.038**	ug/L	1.273	52225	0.175
	K	39	**7390.822**	ug/L	2.582	25673184	89.209
	Ca	43	**9527.819**	ug/L	0.765	67689	0.238
>	Sc	45		ug/L		280669	280669.189
	Ti	47	**1262.296**	ug/L	1.247	412214	1.468
	V	51	**177.224**	ug/L	1.061	631953	2.215
	Cr	52	**55.645**	ug/L	0.450	173038	0.637
	Cr	53		ug/L		140845	-0.501
	Mn	55	**2019.068**	ug/L	0.630	10687333	38.075
	Fe	57	**72568.981**	ug/L	1.292	7668972	27.306
	Co	59	**31.609**	ug/L	1.566	124362	0.442
	Ni	60	**32.788**	ug/L	1.299	26831	0.095
	Cu	63		ug/L		46808	0.166
	Cu	65	**25.778**	ug/L	1.972	22825	0.081
	Zn	66	**144.039**	ug/L	0.480	51974	0.295
	Zn	67		ug/L		14740	0.032
	Zn	68		ug/L		40262	0.225
>	Ge	74		ug/L		175057	175057.473
	As	75	**22.192**	ug/L	4.068	9991	0.054
	Se	77		ug/L		4426	-0.030
	Se	82	**1.462**	ug/L	35.909	44	0.000
	Kr	83		ug/L		118	0.000
	Sr	88	**135.432**	ug/L	1.037	814809	8.784
	Y	89		ug/L		385866	4.161
	Zr	90	**84.100**	ug/L	1.495	274787	2.961
	Mo	98	**2.066**	ug/L	2.768	2861	0.030
	Ag	107	**0.380**	ug/L	0.923	839	0.008
	Cd	111	**1.319**	ug/L	6.261	620	0.006
	Cd	114		ug/L		314	0.003
>	In	115		ug/L		92742	92742.107
	Sn	120	**0.610**	ug/L	1.033	1385	0.013
	Sb	121	**0.262**	ug/L	14.999	730	0.005
	Sb	123		ug/L		602	0.004
	Ba	135		ug/L		316634	3.294
	Ba	137	**596.024**	ug/L	1.311	544410	5.664
	Ho	165		ug/L		13868	0.144
>	Lu	175		ug/L		96117	96116.589
	Tl	205	**0.861**	ug/L	1.155	2610	0.025
	Pb	208	**83.175**	ug/L	1.257	498611	5.183
	Bi	209		ug/L		4262	0.044
	Th	232	**37.111**	ug/L	0.951	262177	2.724
	U	238	**5.069**	ug/L	2.279	35716	0.370

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		117.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419011
Sample Date/Time: Thursday, December 03, 2009 23:10:47
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419011.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**70.984**	ug/L	3.202	20244	0.067
	Be	9	**4.133**	ug/L	9.316	377	0.001
	B	11	**25.307**	ug/L	1.776	2066	0.007
	Na	23	**1950.943**	ug/L	3.372	3566840	11.632
	Mg	24	**14785.855**	ug/L	3.345	18534650	61.448
	Al	27	**104418.278**	ug/L	11.651	187988427	622.627
	P	31	**362.668**	ug/L	0.932	39964	0.122
	K	39	**8842.110**	ug/L	2.139	32841670	106.726
	Ca	43	**11009.833**	ug/L	0.851	83889	0.276
>	Sc	45		ug/L		301475	301474.666
	Ti	47	**1340.949**	ug/L	0.765	470344	1.559
	V	51	**135.184**	ug/L	1.533	520496	1.690
	Cr	52	**66.337**	ug/L	1.137	222765	0.760
	Cr	53		ug/L		142703	-0.530
	Mn	55	**1646.082**	ug/L	1.005	9358872	31.041
	Fe	57	**73999.328**	ug/L	1.467	8400400	27.844
	Co	59	**26.135**	ug/L	1.596	110497	0.366
	Ni	60	**36.995**	ug/L	1.262	32502	0.107
	Cu	63		ug/L		78067	0.258
	Cu	65	**39.561**	ug/L	0.896	37541	0.124
	Zn	66	**187.483**	ug/L	1.762	67444	0.384
	Zn	67		ug/L		17138	0.045
	Zn	68		ug/L		52167	0.294
>	Ge	74		ug/L		174762	174761.705
	As	75	**13.248**	ug/L	7.838	6180	0.032
	Se	77		ug/L		4263	-0.030
	Se	82	**0.710**	ug/L	28.274	15	0.000
	Kr	83		ug/L		131	0.000
	Sr	88	**192.469**	ug/L	0.571	1153041	12.483
	Y	89		ug/L		469927	5.088
	Zr	90	**94.872**	ug/L	1.067	308701	3.340
	Mo	98	**1.306**	ug/L	1.692	1815	0.019
	Ag	107	**0.484**	ug/L	4.159	1044	0.010
	Cd	111	**1.601**	ug/L	1.544	744	0.008
	Cd	114		ug/L		236	0.002
>	In	115		ug/L		92352	92352.223
	Sn	120	**0.584**	ug/L	1.796	1326	0.013
	Sb	121	**0.096**	ug/L	9.324	453	0.002
	Sb	123		ug/L		368	0.001
	Ba	135		ug/L		371217	3.792
	Ba	137	**685.338**	ug/L	1.466	637625	6.512
	Ho	165		ug/L		16264	0.166
>	Lu	175		ug/L		97910	97910.393
	Tl	205	**1.118**	ug/L	5.000	3379	0.032
	Pb	208	**59.154**	ug/L	1.801	361363	3.686
	Bi	209		ug/L		5275	0.054
	Th	232	**39.337**	ug/L	1.050	283068	2.888
	U	238	**3.194**	ug/L	1.284	22992	0.233

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419012
Sample Date/Time: Thursday, December 03, 2009 23:17:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419012.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.592**	ug/L	1.034	14707	0.053
	Be	9	**3.926**	ug/L	8.637	332	0.001
	B	11	**16.440**	ug/L	0.922	1272	0.004
	Na	23	**306.667**	ug/L	7.096	566033	1.828
	Mg	24	**10137.403**	ug/L	2.637	11778004	42.129
	Al	27	**69276.517**	ug/L	1.413	115439882	413.083
	P	31	**653.316**	ug/L	1.479	64317	0.219
	K	39	**8712.485**	ug/L	2.675	30007618	105.161
	Ca	43	**9016.043**	ug/L	0.472	63812	0.226
>	Sc	45		ug/L		279447	279446.621
	Ti	47	**1240.308**	ug/L	0.386	403295	1.442
	V	51	**142.268**	ug/L	1.118	507169	1.778
	Cr	52	**51.907**	ug/L	0.362	160328	0.595
	Cr	53		ug/L		133694	-0.525
	Mn	55	**2476.499**	ug/L	0.146	13051884	46.701
	Fe	57	**63496.093**	ug/L	1.380	6682020	23.892
	Co	59	**30.987**	ug/L	1.155	121412	0.434
	Ni	60	**35.770**	ug/L	0.945	29137	0.104
	Cu	63		ug/L		52991	0.189
	Cu	65	**28.734**	ug/L	1.110	25319	0.090
	Zn	66	**162.495**	ug/L	0.742	58811	0.333
	Zn	67		ug/L		15555	0.036
	Zn	68		ug/L		46266	0.259
>	Ge	74		ug/L		175695	175694.892
	As	75	**15.348**	ug/L	4.146	7111	0.037
	Se	77		ug/L		4214	-0.031
	Se	82	**1.159**	ug/L	34.405	32	0.000
	Kr	83		ug/L		120	0.000
	Sr	88	**137.604**	ug/L	1.098	831501	8.925
	Y	89		ug/L		413373	4.438
	Zr	90	**74.070**	ug/L	1.151	243105	2.607
	Mo	98	**1.699**	ug/L	3.919	2369	0.025
	Ag	107	**0.352**	ug/L	3.596	785	0.008
	Cd	111	**1.358**	ug/L	5.576	640	0.007
	Cd	114		ug/L		325	0.003
>	In	115		ug/L		93143	93143.038
	Sn	120	**0.582**	ug/L	1.874	1333	0.013
	Sb	121	**0.161**	ug/L	10.344	565	0.003
	Sb	123		ug/L		435	0.002
	Ba	135		ug/L		375752	3.885
	Ba	137	**710.832**	ug/L	1.075	653333	6.755
	Ho	165		ug/L		14867	0.154
>	Lu	175		ug/L		96722	96721.635
	Tl	205	**0.818**	ug/L	3.684	2508	0.023
	Pb	208	**72.114**	ug/L	1.382	435110	4.493
	Bi	209		ug/L		4371	0.045
	Th	232	**35.413**	ug/L	1.006	251778	2.600
	U	238	**5.060**	ug/L	1.737	35882	0.369

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		117.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419013
Sample Date/Time: Thursday, December 03, 2009 23:23:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419013.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.975**	ug/L	1.588	12438	0.046
	Be	9	**3.819**	ug/L	5.196	310	0.001
	B	11	**12.173**	ug/L	3.772	925	0.003
	Na	23	**679.250**	ug/L	12.685	1137516	4.050
	Mg	24	**8898.181**	ug/L	2.795	9923605	36.979
	Al	27	**53749.187**	ug/L	3.170	85942122	320.497
	P	31	**551.069**	ug/L	0.517	52524	0.185
	K	39	**6557.461**	ug/L	6.046	21838877	79.150
	Ca	43	**7245.409**	ug/L	2.150	49375	0.181
>	Sc	45		ug/L		268220	268219.908
	Ti	47	**1267.337**	ug/L	1.345	395561	1.474
	V	51	**132.220**	ug/L	1.181	453052	1.653
	Cr	52	**59.494**	ug/L	0.883	177189	0.681
	Cr	53		ug/L		130271	-0.518
	Mn	55	**2289.656**	ug/L	0.868	11582010	43.177
	Fe	57	**59702.734**	ug/L	1.977	6030871	22.465
	Co	59	**30.351**	ug/L	1.278	114145	0.425
	Ni	60	**38.526**	ug/L	0.561	30115	0.112
	Cu	63		ug/L		42806	0.159
	Cu	65	**24.495**	ug/L	1.575	20734	0.077
	Zn	66	**127.611**	ug/L	1.028	45876	0.262
	Zn	67		ug/L		12971	0.022
	Zn	68		ug/L		35892	0.201
>	Ge	74		ug/L		174294	174294.295
	As	75	**11.933**	ug/L	2.299	5611	0.029
	Se	77		ug/L		3901	-0.032
	Se	82	**1.353**	ug/L	26.608	39	0.000
	Kr	83		ug/L		112	0.000
	Sr	88	**121.228**	ug/L	0.738	726156	7.863
	Y	89		ug/L		390250	4.226
	Zr	90	**68.757**	ug/L	1.685	223731	2.420
	Mo	98	**1.940**	ug/L	1.643	2678	0.029
	Ag	107	**0.310**	ug/L	3.856	695	0.007
	Cd	111	**1.187**	ug/L	3.936	558	0.006
	Cd	114		ug/L		324	0.003
>	In	115		ug/L		92331	92331.292
	Sn	120	**0.654**	ug/L	3.789	1467	0.014
	Sb	121	**0.119**	ug/L	5.483	491	0.002
	Sb	123		ug/L		419	0.002
	Ba	135		ug/L		301132	3.110
	Ba	137	**564.419**	ug/L	0.674	519268	5.363
	Ho	165		ug/L		14053	0.145
>	Lu	175		ug/L		96817	96817.005
	Tl	205	**0.737**	ug/L	1.654	2287	0.021
	Pb	208	**64.529**	ug/L	0.046	389810	4.021
	Bi	209		ug/L		3952	0.041
	Th	232	**33.750**	ug/L	1.555	240177	2.477
	U	238	**5.307**	ug/L	0.664	37662	0.387

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		112.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419014
Sample Date/Time: Thursday, December 03, 2009 23:29:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419014.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.741**	**ug/L**	1.939	12689	0.052
	Be	9	**1.200**	**ug/L**	4.550	94	0.000
	B	11	**1.494**	**ug/L**	9.869	166	0.000
	Na	23	**1111.540**	**ug/L**	6.611	1669231	6.627
	Mg	24	**2499.479**	**ug/L**	4.556	2548047	10.387
	Al	27	**5987.290**	**ug/L**	6.554	8742199	35.701
	P	31	**741.627**	**ug/L**	1.530	63607	0.249
	K	39	**1789.540**	**ug/L**	3.068	5840024	21.600
	Ca	43	**3211.701**	**ug/L**	0.677	20348	0.080
>	Sc	45		**ug/L**		244880	244880.210
	Ti	47	**1444.854**	**ug/L**	0.647	411620	1.680
	V	51	**18.817**	**ug/L**	2.498	66488	0.235
	Cr	52	**15.094**	**ug/L**	0.431	37235	0.173
	Cr	53		**ug/L**		113594	-0.539
	Mn	55	**969.785**	**ug/L**	2.366	4478017	18.288
	Fe	57	**31787.749**	**ug/L**	1.070	2933801	11.961
	Co	59	**3.316**	**ug/L**	3.033	11557	0.046
	Ni	60	**7.618**	**ug/L**	2.061	5510	0.022
	Cu	63		**ug/L**		8956	0.036
	Cu	65	**5.810**	**ug/L**	1.934	4590	0.018
	Zn	66	**157.832**	**ug/L**	2.274	58322	0.324
	Zn	67		**ug/L**		13348	0.022
	Zn	68		**ug/L**		42455	0.232
>	Ge	74		**ug/L**		179343	179342.917
	As	75	**4.124**	**ug/L**	16.064	2381	0.010
	Se	77		**ug/L**		3894	-0.033
	Se	82	**1.179**	**ug/L**	1.821	34	0.000
	Kr	83		**ug/L**		106	0.000
	Sr	88	**21.599**	**ug/L**	1.541	134698	1.401
	Y	89		**ug/L**		460249	4.794
	Zr	90	**54.347**	**ug/L**	1.012	183917	1.913
	Mo	98	**2.876**	**ug/L**	0.615	4107	0.042
	Ag	107	**0.175**	**ug/L**	8.309	443	0.004
	Cd	111	**0.887**	**ug/L**	10.965	439	0.004
	Cd	114		**ug/L**		111	0.001
>	In	115		**ug/L**		96005	96005.061
	Sn	120	**7.881**	**ug/L**	1.150	16819	0.174
	Sb	121	**0.071**	**ug/L**	15.188	429	0.001
	Sb	123		**ug/L**		400	0.002
	Ba	135		**ug/L**		65615	0.664
	Ba	137	**121.219**	**ug/L**	1.196	113786	1.152
	Ho	165		**ug/L**		18097	0.183
>	Lu	175		**ug/L**		98744	98743.747
	Tl	205	**0.141**	**ug/L**	4.591	652	0.004
	Pb	208	**8.463**	**ug/L**	0.811	52608	0.527
	Bi	209		**ug/L**		228868	2.318
	Th	232	**16.409**	**ug/L**	0.073	119305	1.205
	U	238	**1.444**	**ug/L**	2.210	10583	0.105

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241419015
Sample Date/Time: Thursday, December 03, 2009 23:35:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419015.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**67.084**	**ug/L**	1.882	18927	0.063
	Be	9	**4.353**	**ug/L**	3.966	392	0.001
	B	11	**19.428**	**ug/L**	0.759	1588	0.005
	Na	23	**1670.079**	**ug/L**	2.758	3026935	9.957
	Mg	24	**13772.228**	**ug/L**	6.198	17060940	57.235
	Al	27	**95526.556**	**ug/L**	1.300	169811429	569.608
	P	31	**437.596**	**ug/L**	1.283	47028	0.147
	K	39	**8663.426**	**ug/L**	1.076	31841416	104.569
	Ca	43	**10600.326**	**ug/L**	1.058	79906	0.265
>	Sc	45		**ug/L**		298156	298155.915
	Ti	47	**1270.466**	**ug/L**	0.291	440752	1.477
	V	51	**149.303**	**ug/L**	1.420	567296	1.866
	Cr	52	**65.069**	**ug/L**	2.124	215957	0.745
	Cr	53		**ug/L**		136238	-0.546
	Mn	55	**3639.619**	**ug/L**	0.495	20464948	68.634
	Fe	57	**74713.959**	**ug/L**	1.012	8387685	28.113
	Co	59	**44.523**	**ug/L**	1.408	185986	0.623
	Ni	60	**44.195**	**ug/L**	0.396	38382	0.128
	Cu	63		**ug/L**		66618	0.222
	Cu	65	**34.049**	**ug/L**	1.581	31975	0.107
	Zn	66	**187.178**	**ug/L**	0.696	67571	0.384
	Zn	67		**ug/L**		16950	0.044
	Zn	68		**ug/L**		52536	0.295
>	Ge	74		**ug/L**		175368	175367.709
	As	75	**16.496**	**ug/L**	1.899	7586	0.040
	Se	77		**ug/L**		4074	-0.032
	Se	82	**0.711**	**ug/L**	37.104	15	0.000
	Kr	83		**ug/L**		146	0.000
	Sr	88	**181.239**	**ug/L**	0.868	1095798	11.755
	Y	89		**ug/L**		464420	4.983
	Zr	90	**101.287**	**ug/L**	1.787	332535	3.566
	Mo	98	**1.844**	**ug/L**	2.834	2571	0.027
	Ag	107	**0.478**	**ug/L**	3.830	1040	0.010
	Cd	111	**1.609**	**ug/L**	8.676	755	0.008
	Cd	114		**ug/L**		316	0.003
>	In	115		**ug/L**		93201	93201.165
	Sn	120	**0.607**	**ug/L**	4.958	1385	0.013
	Sb	121	**0.096**	**ug/L**	14.470	458	0.002
	Sb	123		**ug/L**		393	0.002
	Ba	135		**ug/L**		412136	4.206
	Ba	137	**766.442**	**ug/L**	1.561	713625	7.283
	Ho	165		**ug/L**		16639	0.170
>	Lu	175		**ug/L**		97991	97990.942
	Tl	205	**1.155**	**ug/L**	2.301	3486	0.033
	Pb	208	**89.114**	**ug/L**	1.390	544594	5.553
	Bi	209		**ug/L**		5259	0.053
	Th	232	**39.657**	**ug/L**	1.075	285601	2.911
	U	238	**3.975**	**ug/L**	1.426	28596	0.290

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		125.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241419016
Sample Date/Time: Thursday, December 03, 2009 23:41:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\241419016.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**29.563**	ug/L	2.201	6767	0.028
	Be	9	**2.290**	ug/L	8.210	170	0.001
	B	11	**6.877**	ug/L	6.058	501	0.002
	Na	23	**1625.917**	ug/L	2.491	2387289	9.694
	Mg	24	**3441.072**	ug/L	0.405	3454227	14.301
	Al	27	**36999.066**	ug/L	3.510	53255415	220.619
	P	31	**212.037**	ug/L	2.258	19792	0.071
	K	39	**3396.415**	ug/L	7.505	10434941	40.995
	Ca	43	**3166.078**	ug/L	1.184	19782	0.079
>	Sc	45		ug/L		241359	241358.919
	Ti	47	**435.641**	ug/L	1.780	122497	0.507
	V	51	**23.178**	ug/L	4.413	78711	0.290
	Cr	52	**15.133**	ug/L	1.239	36811	0.173
	Cr	53		ug/L		112517	-0.537
	Mn	55	**203.228**	ug/L	0.270	926360	3.832
	Fe	57	**17337.239**	ug/L	0.283	1579770	6.524
	Co	59	**3.467**	ug/L	0.506	11905	0.049
	Ni	60	**11.729**	ug/L	0.976	8315	0.034
	Cu	63		ug/L		17494	0.071
	Cu	65	**10.950**	ug/L	2.128	8412	0.034
	Zn	66	**71.706**	ug/L	0.921	25946	0.147
	Zn	67		ug/L		8812	-0.002
	Zn	68		ug/L		19877	0.109
>	Ge	74		ug/L		174583	174583.084
	As	75	**1.768**	ug/L	17.477	1319	0.004
	Se	77		ug/L		3776	-0.033
	Se	82	**-0.025**	ug/L	1802.248	-12	-0.000
	Kr	83		ug/L		84	0.000
	Sr	88	**31.349**	ug/L	1.978	188962	2.033
	Y	89		ug/L		202266	2.179
	Zr	90	**55.396**	ug/L	1.899	181288	1.950
	Mo	98	**0.733**	ug/L	4.046	1042	0.011
	Ag	107	**0.178**	ug/L	5.386	432	0.004
	Cd	111	**0.783**	ug/L	4.026	378	0.004
	Cd	114		ug/L		77	0.000
>	In	115		ug/L		92854	92853.955
	Sn	120	**0.767**	ug/L	2.457	1708	0.017
	Sb	121	**-0.021**	ug/L	24.868	263	-0.000
	Sb	123		ug/L		233	-0.000
	Ba	135		ug/L		112327	1.175
	Ba	137	**212.953**	ug/L	1.187	193487	2.024
	Ho	165		ug/L		6810	0.071
>	Lu	175		ug/L		95604	95603.853
	Tl	205	**0.249**	ug/L	5.175	925	0.007
	Pb	208	**15.285**	ug/L	0.987	91572	0.952
	Bi	209		ug/L		3135	0.033
	Th	232	**14.100**	ug/L	0.815	99294	1.035
	U	238	**1.036**	ug/L	2.109	7399	0.076

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 03, 2009 23:48:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 6.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.637**	ug/L	1.832	11636	0.053
	Be	9	**51.360**	ug/L	1.907	3358	0.015
	B	11	**96.566**	ug/L	1.399	5596	0.025
	Na	23	**5147.914**	ug/L	6.984	6823613	30.692
	Mg	24	**4944.298**	ug/L	0.777	4542577	20.548
	Al	27	**5139.305**	ug/L	3.810	6776512	30.645
	P	31	**4862.293**	ug/L	1.194	363141	1.632
	K	39	**4932.914**	ug/L	2.512	13654508	59.541
	Ca	43	**5019.677**	ug/L	1.299	28358	0.126
>	Sc	45		ug/L		220954	220953.502
	Ti	47	**50.112**	ug/L	0.933	13076	0.058
	V	51	**48.740**	ug/L	1.238	142672	0.609
	Cr	52	**51.513**	ug/L	0.885	125775	0.590
	Cr	53		ug/L		182081	-0.180
	Mn	55	**52.263**	ug/L	1.709	219005	0.986
	Fe	57	**5155.291**	ug/L	1.409	433338	1.940
	Co	59	**49.344**	ug/L	1.264	152742	0.691
	Ni	60	**50.251**	ug/L	0.633	32331	0.146
	Cu	63		ug/L		74832	0.338
	Cu	65	**50.887**	ug/L	2.244	35357	0.160
	Zn	66	**49.516**	ug/L	0.514	18396	0.102
	Zn	67		ug/L		9514	0.001
	Zn	68		ug/L		13490	0.071
>	Ge	74		ug/L		178373	178372.942
	As	75	**45.939**	ug/L	1.422	20449	0.111
	Se	77		ug/L		8278	-0.008
	Se	82	**49.418**	ug/L	2.925	1884	0.011
	Kr	83		ug/L		59	-0.000
	Sr	88	**49.282**	ug/L	1.306	299552	3.196
	Y	89		ug/L		201	0.002
	Zr	90	**49.779**	ug/L	0.253	164358	1.752
	Mo	98	**49.095**	ug/L	0.860	67731	0.723
	Ag	107	**48.908**	ug/L	0.603	99343	1.060
	Cd	111	**49.045**	ug/L	1.027	22464	0.240
	Cd	114		ug/L		51357	0.548
>	In	115		ug/L		93645	93644.711
	Sn	120	**50.092**	ug/L	0.879	103553	1.104
	Sb	121	**48.858**	ug/L	1.068	81920	0.872
	Sb	123		ug/L		62771	0.668
	Ba	135		ug/L		24066	0.262
	Ba	137	**47.539**	ug/L	1.740	41441	0.452
	Ho	165		ug/L		29	0.000
>	Lu	175		ug/L		91670	91670.128
	Tl	205	**47.776**	ug/L	2.872	125370	1.365
	Pb	208	**51.067**	ug/L	1.532	292155	3.182
	Bi	209		ug/L		54	0.000
	Th	232	**51.182**	ug/L	2.771	344666	3.757
	U	238	**53.039**	ug/L	2.973	354830	3.870

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	111.274				
	Be	9	102.719				
	B	11	96.566				
	Na	23	102.958				
	Mg	24	98.886				
	Al	27	101.768				
	P	31	97.246				
	K	39	98.658				
	Ca	43	100.394				
>	Sc	45		92.9			
	Ti	47	100.224				
	V	51	97.480				
	Cr	52	103.026				
	Cr	53					
	Mn	55	104.525				
	Fe	57	103.106				
	Co	59	98.688				
	Ni	60	100.501				
	Cu	63					
	Cu	65	101.774				
	Zn	66	99.031				
	Zn	67					
	Zn	68					
>	Ge	74		95.1			
	As	75	91.878				
	Se	77					
	Se	82	98.836				
	Kr	83					
	Sr	88	98.564				
	Y	89					
	Zr	90	99.558				
	Mo	98	98.189				
	Ag	107	97.816				
	Cd	111	98.090				
	Cd	114					
>	In	115		95.5			
	Sn	120	100.183				
	Sb	121	97.716				
	Sb	123					
	Ba	135					
	Ba	137	95.077				
	Ho	165					
>	Lu	175		99.2			
	Tl	205	95.553				
	Pb	208	102.134				
	Bi	209					
	Th	232	102.364				
	U	238	106.079				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 03, 2009 23:54:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091203\QC Std 7.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.075**	**ug/L**	33.526	37	0.000
	Be	9	**-0.023**	**ug/L**	66.784	5	-0.000
	B	11	**2.142**	**ug/L**	19.127	186	0.001
	Na	23	**-20.497**	**ug/L**	18.355	16343	-0.122
	Mg	24	**2.414**	**ug/L**	114.523	4668	0.010
	Al	27	**2.288**	**ug/L**	100.144	7335	0.014
	P	31	**4.457**	**ug/L**	61.974	2710	0.001
	K	39	**-8.691**	**ug/L**	123.311	469608	-0.105
	Ca	43	**-24.195**	**ug/L**	12.505	467	-0.001
>	Sc	45		**ug/L**		220130	220130.287
	Ti	47	**0.026**	**ug/L**	251.005	208	0.000
	V	51	**-0.653**	**ug/L**	121.973	6200	-0.008
	Cr	52	**0.606**	**ug/L**	23.457	-3057	0.007
	Cr	53		**ug/L**		173325	-0.216
	Mn	55	**0.025**	**ug/L**	26.685	1376	0.000
	Fe	57	**4.736**	**ug/L**	8.703	5166	0.002
	Co	59	**0.008**	**ug/L**	53.505	204	0.000
	Ni	60	**0.012**	**ug/L**	42.415	93	0.000
	Cu	63		**ug/L**		266	0.000
	Cu	65	**0.003**	**ug/L**	143.969	119	0.000
	Zn	66	**0.023**	**ug/L**	72.130	299	0.000
	Zn	67		**ug/L**		6791	-0.014
	Zn	68		**ug/L**		613	-0.001
>	Ge	74		**ug/L**		178004	178003.618
	As	75	**-0.128**	**ug/L**	109.261	527	-0.000
	Se	77		**ug/L**		7124	-0.015
	Se	82	**0.177**	**ug/L**	177.670	-5	0.000
	Kr	83		**ug/L**		55	-0.000
	Sr	88	**0.010**	**ug/L**	9.111	275	0.001
	Y	89		**ug/L**		38	0.000
	Zr	90	**0.099**	**ug/L**	17.834	581	0.003
	Mo	98	**0.040**	**ug/L**	20.207	95	0.001
	Ag	107	**0.012**	**ug/L**	57.814	100	0.000
	Cd	111	**0.003**	**ug/L**	493.417	24	0.000
	Cd	114		**ug/L**		41	0.000
>	In	115		**ug/L**		92957	92956.838
	Sn	120	**0.047**	**ug/L**	21.193	234	0.001
	Sb	121	**0.235**	**ug/L**	23.015	686	0.004
	Sb	123		**ug/L**		562	0.004
	Ba	135		**ug/L**		29	0.000
	Ba	137	**0.007**	**ug/L**	142.278	43	0.000
	Ho	165		**ug/L**		12	0.000
>	Lu	175		**ug/L**		89719	89719.086
	Tl	205	**0.167**	**ug/L**	21.042	658	0.005
	Pb	208	**0.022**	**ug/L**	22.911	617	0.001
	Bi	209		**ug/L**		25	0.000
	Th	232	**0.047**	**ug/L**	37.556	639	0.003
	U	238	**0.014**	**ug/L**	26.542	251	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9998
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 11:20:22
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1404
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6084.1	6084.096	126.122	2.1
	Mg	24.0	37933.7	37933.699	246.062	0.6
	Co	58.9	131465.5	131465.545	391.169	0.3
	Rh	102.9	287728.9	287728.860	2520.918	0.9
	In	114.9	384046.5	384046.542	2719.920	0.7
	Pb	208.0	227115.9	227115.942	904.488	0.4
⌈>	Ba	137.9	372943.0	372943.011	2197.849	0.6
⌊	Ba++	69.0	6670.6	0.018	0.000	0.7
⌈>	Ce	139.9	452582.0	452582.036	2432.404	0.5
⌊	CeO	155.9	10781.5	0.024	0.001	2.4
	Bkgd	220.0	29.1	29.100	2.485	8.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	7.0	5548.1
Co	59	9	7.0	144363.8
In	115	9	7.3	374732.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	604	2060	0.615
Be	9.0	9.1	2061	2070	0.655
Mg	24.0	24.0	5671	2080	0.651
Mg	25.0	25.0	5923	2075	0.623
Mg	26.0	26.0	6187	2070	0.695
Co	58.9	58.9	14186	2110	0.657
Rh	102.9	102.9	24872	2160	0.653
In	114.9	114.9	27786	2180	0.652
Ce	139.9	139.9	33870	2195	0.677
Pb	206.0	206.0	49948	2290	0.663
Pb	207.0	207.0	50159	2260	0.626
Pb	208.0	208.0	50451	2280	0.672
U	238.1	238.0	57718	2285	0.714

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 06:35:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\Blank.326

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7		ug/L		73	
|	Be	9		ug/L		25	
|>	Sc	45		ug/L		549996	
⌊	Ni	60		ug/L		198	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45					
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 06:37:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\Standard 1.327

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	3.258	19487	0.036
	Be	9	10.000	ug/L	0.301	4537	0.008
>	Sc	45		ug/L		533252	533252.345
	Ni	60	10.000	ug/L	4.873	18474	0.034

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 06:39:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\Standard 2.328

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	99.941	ug/L	2.083	184819	0.344
	Be	9	99.953	ug/L	1.092	43450	0.081
>	Sc	45		ug/L		537471	537471.471
	Ni	60	99.923	ug/L	1.119	171147	0.318

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 06:40:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 1.329

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**51.813**	**ug/L**	6.119	94601	0.178
|	Be	9	**51.920**	**ug/L**	3.706	22301	0.042
|>	Sc	45		**ug/L**		531198	531197.776
⌊	Ni	60	**51.950**	**ug/L**	4.287	87965	0.165

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7	103.627				
|	Be	9	103.841				
|>	Sc	45			96.6		
⌊	Ni	60	103.900				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 06:42:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 2.330

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	-0.000	ug/L	6535.681	73	-0.000
|	Be	9	0.020	ug/L	91.214	33	0.000
|>	Sc	45		ug/L		544408	544408.365
⌊	Ni	60	-0.006	ug/L	18.533	186	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		99.0			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 06:44:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 3.331

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.418**	**ug/L**	4.530	21146	0.039
	Be	9	**0.571**	**ug/L**	10.234	272	0.000
>	Sc	45		**ug/L**		536868	536868.320
	Ni	60	**2.254**	**ug/L**	5.749	4042	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	114.177				
	Be	9	114.110				
>	Sc	45		97.6			
	Ni	60	112.680				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 06:46:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 4.332

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.076	ug/L	8.978	213	0.000
	Be	9	0.077	ug/L	11.933	58	0.000
>	Sc	45		ug/L		540107	540106.935
	Ni	60	3.099	ug/L	5.531	5520	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45			98.2		
	Ni	60	114.778				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 06:47:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 5.333

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.561**	**ug/L**	2.693	35960	0.071
	Be	9	**20.148**	**ug/L**	1.105	8290	0.016
>	Sc	45		**ug/L**		507543	507543.050
	Ni	60	**24.850**	**ug/L**	2.890	40323	0.079

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.804				
	Be	9	100.739				
>	Sc	45		92.3			
	Ni	60	109.473				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 06:49:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.334

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.498**	**ug/L**	2.465	88905	0.174
	Be	9	**52.536**	**ug/L**	0.440	21748	0.042
>	Sc	45		**ug/L**		511523	511522.798
	Ni	60	**52.224**	**ug/L**	2.779	85206	0.166

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.996				
	Be	9	105.072				
>	Sc	45		93.0			
	Ni	60	104.449				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 06:51:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.335

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.022**	**ug/L**	37.358	106	0.000
|	Be	9	**0.022**	**ug/L**	11.844	32	0.000
|>	Sc	45		**ug/L**		507738	507738.233
⌊	Ni	60	**-0.001**	**ug/L**	1501.371	181	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		92.3			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Sunday, December 06, 2009 06:53:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 10.336

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**928.929**	**ug/L**	0.860	1560484	3.195
	Be	9	**1000.942**	**ug/L**	1.747	395182	0.809
>	Sc	45		**ug/L**		488359	488359.199
	Ni	60	**904.191**	**ug/L**	1.263	1405844	2.878

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	92.893				
	Be	9	100.094				
>	Sc	45		88.8			
	Ni	60	90.419				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Sunday, December 06, 2009 06:54:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 11.337

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.445**	**ug/L**	1.467	92238	0.180
	Be	9	**53.887**	**ug/L**	1.185	22281	0.044
>	Sc	45		**ug/L**		511017	511016.949
	Ni	60	**54.011**	**ug/L**	2.108	88022	0.172

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.890				
	Be	9	107.774				
>	Sc	45		92.9			
	Ni	60	108.023				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Sunday, December 06, 2009 06:56:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 12.338

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.107**	**ug/L**	7.924	256	0.000
	Be	9	**0.072**	**ug/L**	48.320	53	0.000
>	Sc	45		**ug/L**		511605	511604.705
	Ni	60	**0.057**	**ug/L**	15.330	276	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45			93.0		
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977933
Sample Date/Time: Sunday, December 06, 2009 06:58:20
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201977933.339

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.013	ug/L	41.474	97	0.000
	Be	9	0.008	ug/L	30.329	28	0.000
>	Sc	45		ug/L		541973	541972.670
	Ni	60	0.040	ug/L	29.283	264	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		98.5			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977938
Sample Date/Time: Sunday, December 06, 2009 07:00:05
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925193|20|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201977938.340

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	4.235	ug/L	2.425	7737	0.015
	Be	9	48.675	ug/L	3.094	20731	0.039
>	Sc	45		ug/L		526415	526414.515
	Ni	60	54.863	ug/L	2.286	92118	0.175

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45			95.7		
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419001
Sample Date/Time: Sunday, December 06, 2009 07:01:51
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419001.341

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	21.944	ug/L	4.484	45166	0.075
	Be	9	1.911	ug/L	6.549	949	0.002
>	Sc	45		ug/L		597852	597852.492
	Ni	60	9.828	ug/L	2.702	18909	0.031

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		108.7			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977934
Sample Date/Time: Sunday, December 06, 2009 07:03:37
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201977934.342

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**25.806**	**ug/L**	0.938	52285	0.089
	Be	9	**2.280**	**ug/L**	5.231	1110	0.002
>	Sc	45		**ug/L**		588129	588129.329
	Ni	60	**12.248**	**ug/L**	1.491	23142	0.039

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		106.9			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977936
Sample Date/Time: Sunday, December 06, 2009 07:05:24
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201977936.343

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.766**	**ug/L**	4.267	101777	0.175
	Be	9	**23.641**	**ug/L**	2.392	11159	0.019
>	Sc	45		**ug/L**		582691	582690.662
	Ni	60	**36.366**	**ug/L**	3.263	67636	0.116

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		105.9			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977937
Sample Date/Time: Sunday, December 06, 2009 07:07:11
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201977937.344

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.594**	**ug/L**	3.269	103690	0.181
	Be	9	**25.450**	**ug/L**	2.921	11810	0.021
>	Sc	45		**ug/L**		573108	573108.382
	Ni	60	**35.192**	**ug/L**	2.040	64386	0.112

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		104.2			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977935
Sample Date/Time: Sunday, December 06, 2009 07:08:59
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201977935.345

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	5.217	ug/L	1.058	8626	0.018
	Be	9	0.444	ug/L	6.402	193	0.000
>	Sc	45		ug/L		477099	477098.738
	Ni	60	2.253	ug/L	2.847	3593	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		86.7			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:10:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.346

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	52.567	ug/L	2.514	87342	0.181
	Be	9	53.320	ug/L	0.386	20830	0.043
>	Sc	45		ug/L		482756	482756.340
	Ni	60	52.434	ug/L	1.967	80727	0.167

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.135				
	Be	9	106.641				
>	Sc	45		87.8			
	Ni	60	104.868				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:12:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.347

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.035**	**ug/L**	9.067	120	0.000
|	Be	9	**0.024**	**ug/L**	30.829	30	0.000
|>	Sc	45		**ug/L**		471571	471571.273
⌊	Ni	60	**0.003**	**ug/L**	624.149	174	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		85.7			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419002
Sample Date/Time: Sunday, December 06, 2009 07:14:24
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419002.348

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**36.735**	**ug/L**	2.220	72801	0.126
|	Be	9	**1.210**	**ug/L**	1.496	589	0.001
|>	Sc	45		**ug/L**		575624	575623.925
⌊	Ni	60	**8.485**	**ug/L**	1.403	15756	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		104.7			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419003
Sample Date/Time: Sunday, December 06, 2009 07:16:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419003.349

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	8.602	ug/L	4.478	15300	0.030
	Be	9	1.017	ug/L	2.945	446	0.001
>	Sc	45		ug/L		515130	515129.956
	Ni	60	6.351	ug/L	2.476	10599	0.020

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		93.7			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419004
Sample Date/Time: Sunday, December 06, 2009 07:17:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419004.350

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	12.805	ug/L	5.735	22891	0.044
|	Be	9	1.263	ug/L	6.550	553	0.001
|>	Sc	45		ug/L		518727	518726.523
⌊	Ni	60	11.361	ug/L	4.509	18929	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45			94.3		
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419005
Sample Date/Time: Sunday, December 06, 2009 07:19:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419005.351

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	17.914	ug/L	3.219	32623	0.062
	Be	9	1.288	ug/L	6.020	574	0.001
>	Sc	45		ug/L		528439	528439.481
	Ni	60	10.196	ug/L	1.514	17340	0.032

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		96.1			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419006
Sample Date/Time: Sunday, December 06, 2009 07:21:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|ba|
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419006.352

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**17.756**	**ug/L**	4.071	32351	0.061
	Be	9	**1.769**	**ug/L**	5.258	780	0.001
>	Sc	45		**ug/L**		528802	528802.007
	Ni	60	**14.663**	**ug/L**	3.705	24874	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		96.1			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419007
Sample Date/Time: Sunday, December 06, 2009 07:23:17
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419007.353

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**14.556**	**ug/L**	1.836	26607	0.050
|	Be	9	**2.729**	**ug/L**	4.995	1192	0.002
|>	Sc	45		**ug/L**		530141	530140.657
⌊	Ni	60	**14.264**	**ug/L**	1.569	24256	0.045

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		96.4			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:25:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.354

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	49.807	ug/L	1.577	88147	0.171
	Be	9	51.743	ug/L	1.229	21526	0.042
>	Sc	45		ug/L		514084	514083.868
	Ni	60	54.147	ug/L	0.791	88800	0.172

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	99.613				
	Be	9	103.486				
>	Sc	45		93.5			
	Ni	60	108.295				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:26:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.355

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.022**	**ug/L**	13.266	105	0.000
	Be	9	**0.018**	**ug/L**	120.072	30	0.000
>	Sc	45		**ug/L**		501783	501782.624
	Ni	60	**-0.000**	**ug/L**	5184.672	180	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		91.2			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419008
Sample Date/Time: Sunday, December 06, 2009 07:28:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|ba|
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419008.356

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**15.591**	**ug/L**	3.413	28534	0.054
	Be	9	**1.678**	**ug/L**	5.671	744	0.001
>	Sc	45		**ug/L**		530901	530900.869
	Ni	60	**12.823**	**ug/L**	3.376	21859	0.041

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		96.5			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419009
Sample Date/Time: Sunday, December 06, 2009 07:30:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419009.357

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.862**	**ug/L**	1.573	19334	0.037
	Be	9	**1.016**	**ug/L**	1.474	447	0.001
>	Sc	45		**ug/L**		515711	515710.688
	Ni	60	**9.700**	**ug/L**	2.063	16107	0.031

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		93.8			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419010
Sample Date/Time: Sunday, December 06, 2009 07:32:22
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419010.358

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	13.166	ug/L	3.457	23191	0.045
|	Be	9	1.071	ug/L	9.102	465	0.001
|>	Sc	45		ug/L		510748	510747.910
⌊	Ni	60	8.606	ug/L	1.599	14174	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		92.9			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419011
Sample Date/Time: Sunday, December 06, 2009 07:34:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419011.359

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**17.782**	**ug/L**	2.057	31580	0.061
|	Be	9	**1.104**	**ug/L**	2.515	483	0.001
|>	Sc	45		**ug/L**		515244	515244.237
⌊	Ni	60	**10.466**	**ug/L**	3.099	17347	0.033

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		93.7			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419012
Sample Date/Time: Sunday, December 06, 2009 07:35:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419012.360

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**12.897**	**ug/L**	3.868	22579	0.044
|	Be	9	**0.961**	**ug/L**	3.175	417	0.001
|>	Sc	45		**ug/L**		507692	507692.297
⌊	Ni	60	**10.197**	**ug/L**	3.978	16658	0.032

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		92.3			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:37:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.361

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	51.914	ug/L	1.318	89587	0.179
	Be	9	52.695	ug/L	0.368	21374	0.043
>	Sc	45		ug/L		501238	501237.517
	Ni	60	53.623	ug/L	2.600	85723	0.171

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	103.828				
	Be	9	105.390				
>	Sc	45		91.1			
	Ni	60	107.247				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:39:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.362

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.028	ug/L	24.943	113	0.000
	Be	9	0.034	ug/L	36.558	35	0.000
>	Sc	45		ug/L		488849	488848.885
	Ni	60	0.011	ug/L	113.336	194	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		88.9			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419013
Sample Date/Time: Sunday, December 06, 2009 07:41:16
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419013.363

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.677	ug/L	3.625	18727	0.037
	Be	9	0.873	ug/L	2.346	382	0.001
>	Sc	45		ug/L		508199	508198.541
	Ni	60	9.365	ug/L	2.389	15328	0.030

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		92.4			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419014
Sample Date/Time: Sunday, December 06, 2009 07:43:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419014.364

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**48.745**	**ug/L**	0.705	95093	0.168
|	Be	9	**1.126**	**ug/L**	5.866	541	0.001
|>	Sc	45		**ug/L**		566695	566694.789
⌊	Ni	60	**7.643**	**ug/L**	2.154	13989	0.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		103.0			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419015
Sample Date/Time: Sunday, December 06, 2009 07:44:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|10|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419015.365

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	15.864	ug/L	4.414	28940	0.055
	Be	9	1.203	ug/L	3.724	539	0.001
>	Sc	45		ug/L		529364	529364.325
	Ni	60	12.250	ug/L	2.108	20828	0.039

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		96.2			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241419016
Sample Date/Time: Sunday, December 06, 2009 07:46:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925193|2|baj
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241419016.366

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	25.656	ug/L	3.226	49415	0.088
|	Be	9	2.107	ug/L	4.843	977	0.002
|>	Sc	45		ug/L		559357	559356.879
⌊	Ni	60	11.675	ug/L	3.839	20979	0.037

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		101.7			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:48:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.367

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**52.910**	**ug/L**	1.572	89830	0.182
|	Be	9	**53.725**	**ug/L**	2.103	21442	0.043
|>	Sc	45		**ug/L**		493216	493216.341
⌊	Ni	60	**54.154**	**ug/L**	0.445	85206	0.172

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	105.820				
|	Be	9	107.451				
|>	Sc	45		89.7			
⌊	Ni	60	108.309				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:50:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.368

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	0.023	ug/L	12.288	104	0.000
|	Be	9	0.024	ug/L	101.493	31	0.000
|>	Sc	45		ug/L		487600	487600.303
⌊	Ni	60	0.007	ug/L	40.347	186	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|>	Sc	45		88.7			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/07/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120709S1.SIF Results Data Set Name: 120709S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/07/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0043	09:54:40	No
2			0.0044	0.0044	09:55:15	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.5786			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/07/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0056	09:56:37	No
2			0.0017	0.0060	09:57:13	No
Mean:			0.0014			
SD :			0.0003			
%RSD:			21.7220			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00720
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/07/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0041	0.0085	09:58:35	No
2			0.0040	0.0084	09:59:11	No
Mean:			0.0041			
SD :			0.0001			
%RSD:			1.6133			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99849 Slope: 0.00824
Intercept : -0.00008

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/07/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0165	0.0209	10:00:35	No
2			0.0168	0.0211	10:01:10	No
Mean:			0.0166			
SD :			0.0002			
%RSD:			1.1765			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99992 Slope: 0.00837
Intercept : -0.00010

==========

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/07/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0406	0.0449	10:02:36	No
2			0.0407	0.0451	10:03:10	No
Mean:			0.0406			
SD :			0.0001			
%RSD:			0.2535			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99993 Slope: 0.00815
Intercept : 0.00001

==========

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/07/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0801	0.0845	10:04:36	No
2			0.0817	0.0860	10:05:11	No
Mean:			0.0809			
SD :			0.0011			
%RSD:			1.3799			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00809
Intercept : 0.00008

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0014	0.200	0.168	0.0003	21.7
S0.5	0.0041	0.500	0.497	0.0001	1.6
S2.0	0.0166	2.000	2.047	0.0002	1.2
S5.0	0.0406	5.000	5.011	0.0001	0.3
S10	0.0809	10.000	9.986	0.0011	1.4
Calib Blank	0.0044	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00809 Intercept: 0.0001

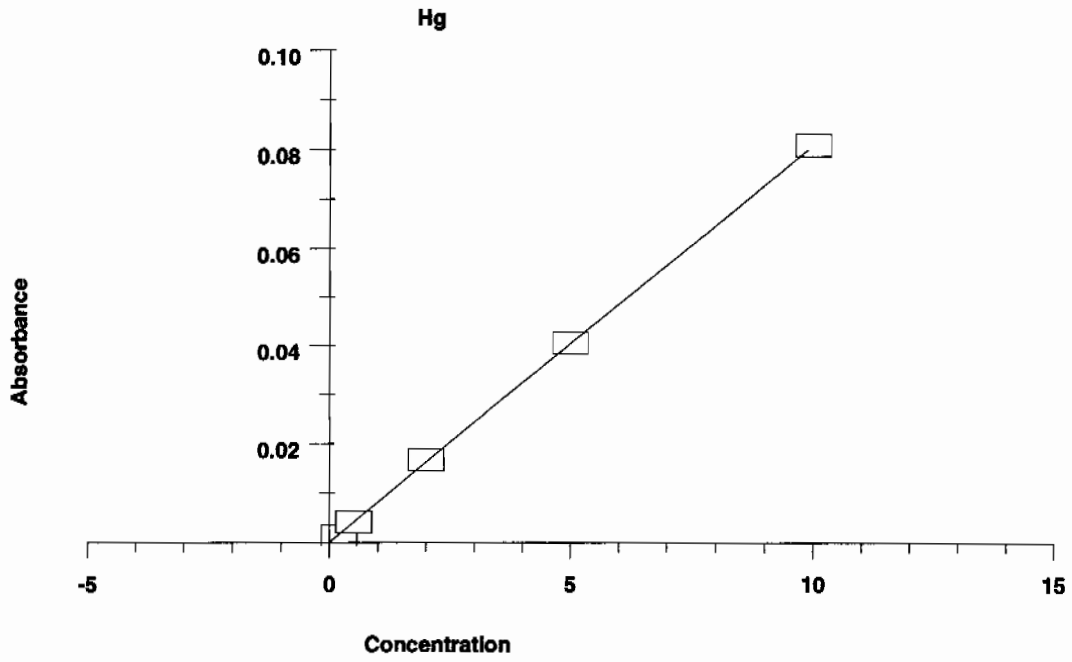

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/07/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0421	0.0465	10:06:40	No
2	5.181	5.181	0.0420	0.0464	10:07:15	No
Mean:	5.188	5.188	0.0421			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.2	0.2	0.2028			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/07/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:08:38	No
2	-0.104	-0.104	-0.0008	0.0036	10:09:13	No
Mean:	-0.096	-0.096	-0.0007			
SD :	0.0124	0.0124	0.0001			
%RSD:	13.0	13.0	14.4602			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/07/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0014	0.0057	10:10:35	No
2	0.148	0.148	0.0013	0.0056	10:11:10	No
Mean:	0.155	0.155	0.0013			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.9	5.9	5.5112			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0420	0.0463	10:12:35	No
2	5.181	5.181	0.0420	0.0464	10:13:09	No
Mean:	5.178	5.178	0.0420			
SD :	0.0040	0.0040	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0006	0.0037	10:14:37	No
2	-0.106	-0.106	-0.0008	0.0036	10:15:12	No
Mean:	-0.098	-0.098	-0.0007			
SD :	0.0123	0.0123	0.0001			
%RSD:	12.5	12.5	13.8998			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978905|i||925609|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0039	10:16:38	No
2	-0.093	-0.093	-0.0007	0.0037	10:17:13	No
Mean:	-0.077	-0.077	-0.0005			
SD :	0.0218	0.0218	0.0002			
%RSD:	28.2	28.2	32.1293			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978906|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.940	3.940	0.0320	0.0363	10:18:37	No
2	3.939	3.939	0.0319	0.0363	10:19:12	No
Mean:	3.939	3.939	0.0320			
SD :	0.0008	0.0008	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241604001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0057	10:20:38	No
2	0.157	0.157	0.0014	0.0057	10:21:14	No
Mean:	0.158	0.158	0.0014			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.5109			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241604002|i|||

%RSD: 7.6 7.6 8.0893

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/07/2009
Sample ID: 241608002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0013	0.0057	10:34:28	No
2	0.136	0.136	0.0012	0.0055	10:35:03	No
Mean:	0.143	0.143	0.0012			
SD :	0.0106	0.0106	0.0001			
%RSD:	7.4	7.4	6.9743			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.376	5.376	0.0436	0.0479	10:36:28	No
2	5.389	5.389	0.0437	0.0481	10:37:02	No
Mean:	5.383	5.383	0.0436			
SD :	0.0096	0.0096	0.0001			
%RSD:	0.2	0.2	0.1786			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:38:30	No
2	-0.095	-0.095	-0.0007	0.0037	10:39:04	No
Mean:	-0.091	-0.091	-0.0007			
SD :	0.0058	0.0058	0.0000			
%RSD:	6.4	6.4	7.1360			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201977155|i||924862|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0038	10:40:29	No
2	-0.083	-0.083	-0.0006	0.0038	10:41:04	No
Mean:	-0.083	-0.083	-0.0006			
SD :	0.0010	0.0010	0.0000			
%RSD:	1.2	1.2	1.4027			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201977156|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.825	3.825	0.0310	0.0354	10:42:28	No
2	3.817	3.817	0.0310	0.0353	10:43:02	No
Mean:	3.821	3.821	0.0310			
SD :	0.0054	0.0054	0.0000			
%RSD:	0.1	0.1	0.1420			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/07/2009
Sample ID: 241417001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.888	2.888	0.0235	0.0278	10:44:27	No
2	2.900	2.900	0.0235	0.0279	10:45:02	No
Mean:	2.894	2.894	0.0235			
SD :	0.0086	0.0086	0.0001			
%RSD:	0.3	0.3	0.2966			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 12/07/2009
Sample ID: 241417002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.116	0.116	0.0010	0.0054	10:46:26	No
2	0.109	0.109	0.0010	0.0053	10:47:01	No
Mean:	0.113	0.113	0.0010			
SD :	0.0053	0.0053	0.0000			
%RSD:	4.7	4.7	4.3036			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 12/07/2009
Sample ID: 241419001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0001	0.0043	10:48:25	No
2	-0.051	-0.051	-0.0003	0.0040	10:49:00	No
Mean:	-0.033	-0.033	-0.0002			
SD :	0.0246	0.0246	0.0002			
%RSD:	74.3	74.3	104.1788			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 12/07/2009
Sample ID: 241419002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.058	-0.058	-0.0004	0.0040	10:50:25	No
2	-0.076	-0.076	-0.0005	0.0038	10:51:00	No
Mean:	-0.067	-0.067	-0.0005			
SD :	0.0124	0.0124	0.0001			
%RSD:	18.5	18.5	21.6076			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 12/07/2009
Sample ID: 241419003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.053	-0.053	-0.0004	0.0040	10:52:26	No
2	-0.059	-0.059	-0.0004	0.0040	10:53:01	No
Mean:	-0.056	-0.056	-0.0004			
SD :	0.0042	0.0042	0.0000			
%RSD:	7.5	7.5	8.9936			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 12/07/2009
Sample ID: 241419004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.313	0.313	0.0026	0.0070	10:54:27	No
2	0.305	0.305	0.0025	0.0069	10:55:03	No
Mean:	0.309	0.309	0.0026			
SD :	0.0058	0.0058	0.0000			

%RSD: 1.9 1.9 1.8136

==========

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 12/07/2009
Sample ID: 241419005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.410	0.410	0.0034	0.0078	10:56:30	No
2	0.392	0.392	0.0033	0.0076	10:57:05	No
Mean:	0.401	0.401	0.0033			
SD :	0.0126	0.0126	0.0001			
%RSD:	3.1	3.1	3.0692			

==========

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 12/07/2009
Sample ID: 241419006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.446	0.446	0.0037	0.0080	10:58:33	No
2	0.430	0.430	0.0036	0.0079	10:59:07	No
Mean:	0.438	0.438	0.0036			
SD :	0.0109	0.0109	0.0001			
%RSD:	2.5	2.5	2.4393			

==========

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.212	5.212	0.0423	0.0466	11:00:33	No
2	5.240	5.240	0.0425	0.0468	11:01:08	No
Mean:	5.226	5.226	0.0424			
SD :	0.0193	0.0193	0.0002			
%RSD:	0.4	0.4	0.3682			

QC value within specified limits.

==========

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.122	-0.122	-0.0009	0.0035	11:02:36	No
2	-0.111	-0.111	-0.0008	0.0035	11:03:10	No
Mean:	-0.116	-0.116	-0.0009			
SD :	0.0079	0.0079	0.0001			
%RSD:	6.8	6.8	7.3534			

QC value within specified limits.

==========

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 12/07/2009
Sample ID: 241419007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.387	0.387	0.0032	0.0076	11:04:34	No
2	0.368	0.368	0.0031	0.0074	11:05:09	No
Mean:	0.377	0.377	0.0031			
SD :	0.0133	0.0133	0.0001			
%RSD:	3.5	3.5	3.4418			

==========

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 12/07/2009
Sample ID: 241419008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.252	0.252	0.0021	0.0065	11:06:29	No
2	0.247	0.247	0.0021	0.0064	11:07:05	No
Mean:	0.249	0.249	0.0021			
SD :	0.0040	0.0040	0.0000			
%RSD:	1.6	1.6	1.5448			

Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 12/07/2009
Sample ID: 241419009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.411	0.411	0.0034	0.0078	11:08:25	No
2	0.407	0.407	0.0034	0.0077	11:09:00	No
Mean:	0.409	0.409	0.0034			
SD :	0.0024	0.0024	0.0000			
%RSD:	0.6	0.6	0.5750			

Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 12/07/2009
Sample ID: 241419010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.224	0.224	0.0019	0.0063	11:10:21	No
2	0.221	0.221	0.0019	0.0062	11:10:56	No
Mean:	0.223	0.223	0.0019			
SD :	0.0020	0.0020	0.0000			
%RSD:	0.9	0.9	0.8466			

Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 12/07/2009
Sample ID: 241419011|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.377	0.377	0.0031	0.0075	11:12:17	No
2	0.377	0.377	0.0031	0.0075	11:12:51	No
Mean:	0.377	0.377	0.0031			
SD :	0.0004	0.0004	0.0000			
%RSD:	0.1	0.1	0.1029			

Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 12/07/2009
Sample ID: 241419012|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.241	0.241	0.0020	0.0064	11:14:13	No
2	0.212	0.212	0.0018	0.0062	11:14:48	No
Mean:	0.227	0.227	0.0019			
SD :	0.0208	0.0208	0.0002			
%RSD:	9.2	9.2	8.7970			

Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 12/07/2009
Sample ID: 241419013|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.215	0.215	0.0018	0.0062	11:16:11	No
2	0.210	0.210	0.0018	0.0061	11:16:45	No
Mean:	0.212	0.212	0.0018			
SD :	0.0038	0.0038	0.0000			

%RSD: 1.8 1.8 1.7307

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/07/2009
Sample ID: 241419014|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0000	0.0043	11:18:08	No
2	-0.016	-0.016	-0.0001	0.0043	11:18:43	No
Mean:	-0.015	-0.015	0.0000			
SD :	0.0014	0.0014	0.0000			
%RSD:	9.3	9.3	24.9239			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/07/2009
Sample ID: 241419015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.432	0.432	0.0036	0.0079	11:20:06	No
2	0.415	0.415	0.0034	0.0078	11:20:41	No
Mean:	0.423	0.423	0.0035			
SD :	0.0118	0.0118	0.0001			
%RSD:	2.8	2.8	2.7227			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/07/2009
Sample ID: 241419016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0045	11:22:05	No
2	0.006	0.006	0.0001	0.0045	11:22:40	No
Mean:	0.004	0.004	0.0001			
SD :	0.0027	0.0027	0.0000			
%RSD:	70.3	70.3	20.4054			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.803	5.803	0.0470	0.0514	11:24:05	No
2	5.786	5.786	0.0469	0.0513	11:24:40	No
Mean:	5.795	5.795	0.0470			
SD :	0.0123	0.0123	0.0001			
%RSD:	0.2	0.2	0.2123			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0009	0.0034	11:26:08	No
2	-0.150	-0.150	-0.0011	0.0032	11:26:43	No
Mean:	-0.136	-0.136	-0.0010			
SD :	0.0186	0.0186	0.0002			
%RSD:	13.6	13.6	14.6683			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/07/2009
Sample ID: 241425001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.868	2.868	0.0233	0.0276	11:28:09	No
2	2.861	2.861	0.0232	0.0276	11:28:44	No
Mean:	2.865	2.865	0.0233			
SD :	0.0046	0.0046	0.0000			
%RSD:	0.2	0.2	0.1589			

Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 12/07/2009
Sample ID: 1201977157|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.634	2.634	0.0214	0.0258	11:30:10	No
2	2.629	2.629	0.0214	0.0257	11:30:45	No
Mean:	2.632	2.632	0.0214			
SD :	0.0036	0.0036	0.0000			
%RSD:	0.1	0.1	0.1374			

Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 12/07/2009
Sample ID: 1201977158|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	6.031	6.031	0.0489	0.0532	11:32:10	No
2	6.016	6.016	0.0488	0.0531	11:32:44	No
Mean:	6.023	6.023	0.0488			
SD :	0.0102	0.0102	0.0001			
%RSD:	0.2	0.2	0.1685			

Element: Hg Seq. No.: 51 AS Loc.: 45 Date: 12/07/2009
Sample ID: 1201977160|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	9.631	9.631	0.0780	0.0824	11:34:10	No
2	9.609	9.609	0.0778	0.0822	11:34:45	No
Mean:	9.620	9.620	0.0779			
SD :	0.0155	0.0155	0.0001			
%RSD:	0.2	0.2	0.1611			

Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 12/07/2009
Sample ID: 1201977159|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.402	0.402	0.0033	0.0077	11:36:11	No
2	0.382	0.382	0.0032	0.0075	11:36:46	No
Mean:	0.392	0.392	0.0032			
SD :	0.0147	0.0147	0.0001			
%RSD:	3.8	3.8	3.6721			

Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 12/07/2009
Sample ID: 241425002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	1.093	1.093	0.0089	0.0133	11:38:13	No
2	1.079	1.079	0.0088	0.0132	11:38:48	No
Mean:	1.086	1.086	0.0089			
SD :	0.0101	0.0101	0.0001			

```
%RSD:        0.9         0.9    0.9205

==========================================================================================
Element: Hg    Seq. No.: 54       AS Loc.: 48   Date: 12/07/2009
Sample ID: 1201978947|i||925629|MB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.099    -0.099   -0.0007     0.0036   11:40:13  No
 2       -0.115    -0.115   -0.0009     0.0035   11:40:47  No
Mean:    -0.107    -0.107   -0.0008
SD  :    0.0110    0.0110    0.0001
%RSD:      10.2       10.2   11.2501

==========================================================================================
Element: Hg    Seq. No.: 55       AS Loc.: 49   Date: 12/07/2009
Sample ID: 1201978948|i|10||LCS
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        4.055     4.055    0.0329     0.0373   11:42:08  No
 2        4.065     4.065    0.0330     0.0373   11:42:43  No
Mean:     4.060     4.060    0.0329
SD  :    0.0066    0.0066    0.0001
%RSD:       0.2        0.2    0.1622

==========================================================================================
Element: Hg    Seq. No.: 56       AS Loc.: 50   Date: 12/07/2009
Sample ID: 241539001|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.375     0.375    0.0031     0.0075   11:44:03  No
 2        0.392     0.392    0.0032     0.0076   11:44:38  No
Mean:     0.383     0.383    0.0032
SD  :    0.0119    0.0119    0.0001
%RSD:       3.1        3.1    3.0346

==========================================================================================
Element: Hg    Seq. No.: 57       AS Loc.: 51   Date: 12/07/2009
Sample ID: 241539002|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.144     0.144    0.0012     0.0056   11:45:59  No
 2        0.120     0.120    0.0010     0.0054   11:46:34  No
Mean:     0.132     0.132    0.0011
SD  :    0.0167    0.0167    0.0001
%RSD:      12.7       12.7   11.8118

==========================================================================================
Element: Hg    Seq. No.: 58       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.520     5.520    0.0447     0.0491   11:47:58  No
 2        5.454     5.454    0.0442     0.0486   11:48:33  No
Mean:     5.487     5.487    0.0445
SD  :    0.0470    0.0470    0.0004
%RSD:       0.9        0.9    0.8544
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 59       AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
------------------------------------------------------------------------------------------
```

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0043	11:50:01	No
2	-0.023	-0.023	-0.0001	0.0042	11:50:36	No
Mean:	-0.022	-0.022	-0.0001			
SD :	0.0019	0.0019	0.0000			
%RSD:	8.7	8.7	15.3097			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/07/2009
Sample ID: 241539003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.086	0.086	0.0008	0.0051	11:52:01	No
2	0.084	0.084	0.0008	0.0051	11:52:37	No
Mean:	0.085	0.085	0.0008			
SD :	0.0009	0.0009	0.0000			
%RSD:	1.1	1.1	0.9509			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/07/2009
Sample ID: 241539004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.221	0.221	0.0019	0.0062	11:53:59	No
2	0.209	0.209	0.0018	0.0061	11:54:34	No
Mean:	0.215	0.215	0.0018			
SD :	0.0083	0.0083	0.0001			
%RSD:	3.8	3.8	3.6864			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/07/2009
Sample ID: 241541001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.546	0.546	0.0045	0.0089	11:55:56	No
2	0.545	0.545	0.0045	0.0089	11:56:31	No
Mean:	0.546	0.546	0.0045			
SD :	0.0002	0.0002	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/07/2009
Sample ID: 1201978949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.487	0.487	0.0040	0.0084	11:57:54	No
2	0.483	0.483	0.0040	0.0083	11:58:29	No
Mean:	0.485	0.485	0.0040			
SD :	0.0026	0.0026	0.0000			
%RSD:	0.5	0.5	0.5236			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/07/2009
Sample ID: 1201978950|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	11:59:52	No
2	3.254	3.254	0.0264	0.0308	12:00:27	No
Mean:	3.240	3.240	0.0263			
SD :	0.0199	0.0199	0.0002			

Miscellaneous

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925192

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977938	UI647733-01	.506	g
MS	1201977936	UI091015-A	.5	mL
MS	1201977936	UI091015-B	.5	mL
MSD	1201977937	UI091015-A	.5	mL
MSD	1201977937	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977933		SW846 3050B	21-NOV-2009 09:49	0.509 g	50 mL	98.23183	SOIL
LCS	1201977938		SW846 3050B	21-NOV-2009 09:49	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241419001		SW846 3050B	21-NOV-2009 09:49	0.5 g	50 mL	100	SOIL
DUP	1201977934	241419001	SW846 3050B	21-NOV-2009 09:49	0.517 g	50 mL	96.7118	SOIL
SDILT	1201977935	241419001	SW846 3050B	21-NOV-2009 09:49	0.5 g	50 mL	100	SOIL
MS	1201977936	241419001	SW846 3050B	21-NOV-2009 09:49	0.522 g	50 mL	95.78544	SOIL
MSD	1201977937	241419001	SW846 3050B	21-NOV-2009 09:49	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241419002		SW846 3050B	21-NOV-2009 09:49	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241419003		SW846 3050B	21-NOV-2009 09:49	0.5 g	50 mL	100	SOIL
SAMPLE	241419004		SW846 3050B	21-NOV-2009 09:49	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241419005		SW846 3050B	21-NOV-2009 09:49	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241419006		SW846 3050B	21-NOV-2009 09:49	0.5 g	50 mL	100	SOIL
SAMPLE	241419007		SW846 3050B	21-NOV-2009 09:49	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241419008		SW846 3050B	21-NOV-2009 09:49	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241419009		SW846 3050B	21-NOV-2009 09:49	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241419010		SW846 3050B	21-NOV-2009 09:49	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241419011		SW846 3050B	21-NOV-2009 09:49	0.5 g	50 mL	100	SOIL
SAMPLE	241419012		SW846 3050B	21-NOV-2009 09:49	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241419013		SW846 3050B	21-NOV-2009 09:49	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241419014		SW846 3050B	21-NOV-2009 09:49	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241419015		SW846 3050B	21-NOV-2009 09:49	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241419016		SW846 3050B	21-NOV-2009 09:49	0.501 g	50 mL	99.8004	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: The QC sample is a brown soil with small rocks.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925190

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977932	UI652380	.504	g
MS	1201977930	UI091119-01	.25	mL
MS	1201977930	UI091119-06	.25	mL
MSD	1201977931	UI091119-01	.25	mL
MSD	1201977931	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977927		SW846 3050B	21-NOV-2009 10:33	0.525 g	50 mL	95.2381	SOIL
LCS	1201977932		SW846 3050B	21-NOV-2009 10:33	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241419001		SW846 3050B	21-NOV-2009 10:33	0.506 g	50 mL	98.81423	SOIL
DUP	1201977928	241419001	SW846 3050B	21-NOV-2009 10:33	0.525 g	50 mL	95.2381	SOIL
SDILT	1201977929	241419001	SW846 3050B	21-NOV-2009 10:33	0.506 g	50 mL	98.81423	SOIL
MS	1201977930	241419001	SW846 3050B	21-NOV-2009 10:33	0.521 g	50 mL	95.96929	SOIL
MSD	1201977931	241419001	SW846 3050B	21-NOV-2009 10:33	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241419002		SW846 3050B	21-NOV-2009 10:33	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241419003		SW846 3050B	21-NOV-2009 10:33	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241419004		SW846 3050B	21-NOV-2009 10:33	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241419005		SW846 3050B	21-NOV-2009 10:33	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241419006		SW846 3050B	21-NOV-2009 10:33	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241419007		SW846 3050B	21-NOV-2009 10:33	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241419008		SW846 3050B	21-NOV-2009 10:33	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241419009		SW846 3050B	21-NOV-2009 10:33	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241419010		SW846 3050B	21-NOV-2009 10:33	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241419011		SW846 3050B	21-NOV-2009 10:33	0.524 g	50 mL	95.41985	SOIL
SAMPLE	241419012		SW846 3050B	21-NOV-2009 10:33	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241419013		SW846 3050B	21-NOV-2009 10:33	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241419014		SW846 3050B	21-NOV-2009 10:33	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241419015		SW846 3050B	21-NOV-2009 10:33	0.5 g	50 mL	100	SOIL
SAMPLE	241419016		SW846 3050B	21-NOV-2009 10:33	0.513 g	50 mL	97.46589	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments The QC sample is a brown soil with small rocks.

Prep LogBook

Analyst: BCDI Verified by:_____

Batch: 931343

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201992150	UI062540-I	.517	g
MS	1201977930	UI091124-01	.25	mL
MS	1201977930	UI091124-06	.25	mL
MSD	1201977931	UI091124-01	.25	mL
MSD	1201977931	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201992149		SW846 3050B	10-DEC-2009 15:03	0.518 g	50 mL	96.5251	SOIL
LCS	1201992150		SW846 3050B	10-DEC-2009 15:03	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241419001		SW846 3050B	10-DEC-2009 15:03	0.504 g	50 mL	99.20635	SOIL
DUP	1201977928	241419001	SW846 3050B	10-DEC-2009 15:03	0.55 g	50 mL	90.90909	SOIL
SDILT	1201977929	241419001	SW846 3050B	10-DEC-2009 15:03	0.504 g	50 mL	99.20635	SOIL
MS	1201977930	241419001	SW846 3050B	10-DEC-2009 15:03	0.502 g	50 mL	99.60159	SOIL
MSD	1201977931	241419001	SW846 3050B	10-DEC-2009 15:03	0.544 g	50 mL	91.91176	SOIL
SAMPLE	241419002		SW846 3050B	10-DEC-2009 15:03	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241419003		SW846 3050B	10-DEC-2009 15:03	0.53 g	50 mL	94.33962	SOIL
SAMPLE	241419004		SW846 3050B	10-DEC-2009 15:03	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241419005		SW846 3050B	10-DEC-2009 15:03	0.553 g	50 mL	90.41591	SOIL
SAMPLE	241419006		SW846 3050B	10-DEC-2009 15:03	0.538 g	50 mL	92.9368	SOIL
SAMPLE	241419007		SW846 3050B	10-DEC-2009 15:03	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241419008		SW846 3050B	10-DEC-2009 15:03	0.5 g	50 mL	100	SOIL
SAMPLE	241419009		SW846 3050B	10-DEC-2009 15:03	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241419010		SW846 3050B	10-DEC-2009 15:03	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241419011		SW846 3050B	10-DEC-2009 15:03	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241419012		SW846 3050B	10-DEC-2009 15:03	0.5 g	50 mL	100	SOIL
SAMPLE	241419013		SW846 3050B	10-DEC-2009 15:03	0.524 g	50 mL	95.41985	SOIL
SAMPLE	241419014		SW846 3050B	10-DEC-2009 15:03	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241419015		SW846 3050B	10-DEC-2009 15:03	0.5 g	50 mL	100	SOIL
SAMPLE	241419016		SW846 3050B	10-DEC-2009 15:03	0.5 g	50 mL	100	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238343	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: The QC sample is a brown, rocky soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 924861

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977156	UI031809A	.203	g
MS	1201977158	WHG091204-14	.3	mL
MSD	1201977160	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977155		SW846 7471A Prep	04-DEC-2009 10:35	0.576 g	30 mL	52.08333	SOIL
LCS	1201977156		SW846 7471A Prep	04-DEC-2009 10:35	0.203 g	30 mL	147.78325	SOIL
SAMPLE	241417001		SW846 7471A Prep	04-DEC-2009 10:35	0.58 g	30 mL	51.72414	SOIL
SAMPLE	241417002		SW846 7471A Prep	04-DEC-2009 10:35	0.52 g	30 mL	57.69231	SOIL
SAMPLE	241419001		SW846 7471A Prep	04-DEC-2009 10:35	0.544 g	30 mL	55.14706	SOIL
SAMPLE	241419002		SW846 7471A Prep	04-DEC-2009 10:35	0.548 g	30 mL	54.74453	SOIL
SAMPLE	241419003		SW846 7471A Prep	04-DEC-2009 10:35	0.526 g	30 mL	57.03422	SOIL
SAMPLE	241419004		SW846 7471A Prep	04-DEC-2009 10:35	0.5 g	30 mL	60	SOIL
SAMPLE	241419005		SW846 7471A Prep	04-DEC-2009 10:35	0.565 g	30 mL	53.09735	SOIL
SAMPLE	241419006		SW846 7471A Prep	04-DEC-2009 10:35	0.534 g	30 mL	56.17978	SOIL
SAMPLE	241419007		SW846 7471A Prep	04-DEC-2009 10:35	0.548 g	30 mL	54.74453	SOIL
SAMPLE	241419008		SW846 7471A Prep	04-DEC-2009 10:35	0.575 g	30 mL	52.17391	SOIL
SAMPLE	241419009		SW846 7471A Prep	04-DEC-2009 10:35	0.504 g	30 mL	59.52381	SOIL
SAMPLE	241419010		SW846 7471A Prep	04-DEC-2009 10:35	0.564 g	30 mL	53.19149	SOIL
SAMPLE	241419011		SW846 7471A Prep	04-DEC-2009 10:35	0.502 g	30 mL	59.76096	SOIL
SAMPLE	241419012		SW846 7471A Prep	04-DEC-2009 10:35	0.511 g	30 mL	58.70841	SOIL
SAMPLE	241419013		SW846 7471A Prep	04-DEC-2009 10:35	0.513 g	30 mL	58.47953	SOIL
SAMPLE	241419014		SW846 7471A Prep	04-DEC-2009 10:35	0.523 g	30 mL	57.36138	SOIL
SAMPLE	241419015		SW846 7471A Prep	04-DEC-2009 10:35	0.536 g	30 mL	55.97015	SOIL
SAMPLE	241419016		SW846 7471A Prep	04-DEC-2009 10:35	0.553 g	30 mL	54.24955	SOIL
SAMPLE	241425001		SW846 7471A Prep	04-DEC-2009 10:35	0.516 g	30 mL	58.13953	SOIL
DUP	1201977157	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.514 g	30 mL	58.36576	SOIL
MS	1201977158	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.536 g	30 mL	55.97015	SOIL
MSD	1201977160	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.506 g	30 mL	59.28854	SOIL
SDILT	1201977159	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.516 g	30 mL	58.13953	SOIL
SAMPLE	241425002		SW846 7471A Prep	04-DEC-2009 10:35	0.513 g	30 mL	58.47953	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution

Comments: Sample 241425001 is a brown soil.
Digestion Start Date: 04-DEC-09 10:35
Digestion End Date: 04-DEC-09 11:05

Prep LogBook

1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7471A	Solid	LANL
Batch ID:	**Sample Numbers:**		
924862	See Below		

Potentially affected work order(s)(SDG): 241417(10-575),241419(10-577),241425(10-579)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201977158MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1201977160MSD 3. Failed Recovery for MSD/PSD: QC 1201977160MSD	1. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Hg due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix dup spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Jason Loy 07-DEC-09

Data Validator/Group Leader:
Eric Lawson 08-DEC-09

NCR Report No.: 767841
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925191	See Below		

Potentially affected work order(s)(SDG): 241419(10-577)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201977930MS 2. Failed RPD for DUP: QC 1201977928DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1201977931MSD 4. Failed Recovery for MSD/PSD: QC 1201977931MSD	1. The matrix spike recovery failed outside of the control limits for magnesium,potassium and titanium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for barium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for barium due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 4. The matrix spike duplicate recovery failed outside of the control limits for barium,magnesium,potassium and titanium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 11-DEC-09

Data Validator/Group Leader:

Jamie Johnson 12-DEC-09

GEL Laboratories LLC
Form GEL-NCR

NCR Report No.: 769212
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
931347	See Below		

Potentially affected work order(s)(SDG): 241419(10-577)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201977930MS	1. The matrix spike recovery failed outside of the control limits for silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 12-DEC-09

Data Validator/Group Leader:

Jamie Johnson 12-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si

Standard Logbook

Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI

Standard Logbook

Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Standard Logbook

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091130-49.11 **Opened:** 11-DEC-09 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 01-DEC-09 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 12-DEC-09 **Lot Number :** 1018046
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Standard Logbook

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: UMS090929-01 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 29-SEP-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-31CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090929-02 **Opened:** 29-SEP-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 29-SEP-09 **Lot Number :** 19-174JB
Type: Source Material **Expires:** 29-SEP-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090929-03 **Opened:** 29-SEP-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 29-SEP-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-30CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Standard Logbook

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Standard Logbook

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091207-43 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091207-46 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091207-47 **Opened:** 07-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091211-42 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091211-43 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091211-44 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091211-45 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091211-46 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091211-47 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091202-04 **Opened:** 02-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 02-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 03-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091202-04A **Opened:** 02-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 02-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 03-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091202-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091202-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091202-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091202-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091202-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091202-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091202-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091202-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091202-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091202-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091202-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091202-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091202-05 **Opened:** 02-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 02-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 03-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091202-06 **Opened:** 02-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 02-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 03-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091202-07 **Opened:** 02-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 02-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 03-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091202-08 **Opened:** 02-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 02-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 03-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091202-70 **Opened:** 02-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 02-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 03-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091203-04 **Opened:** 03-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 03-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 04-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091203-04A **Opened:** 03-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 03-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091203-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091203-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091203-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091203-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091203-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091203-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091203-05 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 03-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091203-06 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 03-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091203-07 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 03-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 04-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091203-08 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 03-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091203-70 **Opened:** 03-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 03-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 04-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091205-04 **Opened:** 05-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 05-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091205-04A **Opened:** 05-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091205-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091205-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091205-05 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091205-06 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 05-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091205-07 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 05-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091205-08 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 05-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091205-70 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 05-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER

Standard Logbook

Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Standard Logbook

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-577-1

Sample Analysis

Sample ID	Client ID
241420001	RE03-10-3933
241420002	RE03-10-3934
241420003	RE03-10-3923
241420004	RE03-10-3924
1201978326	Method Blank (MB) **ICP**
1201978327	Laboratory Control Sample (LCS)
1201978330	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978328	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978329	241325001(RE03-10-6088S) Matrix Spike (MS)
1201978333	Method Blank (MB) **ICP-MS**
1201978334	Laboratory Control Sample (LCS)
1201978337	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978335	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978336	241325001(RE03-10-6088S) Matrix Spike (MS)
1201977150	Method Blank (MB) **CVAA**
1201977151	Laboratory Control Sample (LCS)
1201977154	241420001(RE03-10-3933L) Serial Dilution (SD)
1201977152	241420001(RE03-10-3933D) Sample Duplicate (DUP)
1201977153	241420001(RE03-10-3933S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	925377, 925379 and 924857
Prep Batch :	925376, 925378 and 924856
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23

Analytical Method: SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method : SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS analyzed with this SDG met the acceptance criteria of percent recovery with the exception of mercury. Mercury recovered slightly high in the laboratory control sample (LCS), however, the sample in this SDG did not contain mercury above the RDL, therefore the implied high bias did not adversely affect the results.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241325001 (RE03-10-6088)-ICP and ICP-MS and 241420001 (RE03-10-3933)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 732537. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Dick Cole A. Elmore **Date:** 12.15.09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241420001 **BASIS:** As Received **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3933 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	92.9	ug/L	J	68	200	200	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:38	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-39-3	Barium	1.76	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:30	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7440-70-2	Calcium	71.6	ug/L	J	50	200	200	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-47-3	Chromium	1.88	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:19	120409A-1	925377
7439-89-6	Iron	80.6	ug/L	J	30	100	100	1	P	HSC	12/04/09 17:19	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:19	120409A-1	925377
7439-96-5	Manganese	3.77	ug/L	J	1	5	5	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:50	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:19	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-21-3	Silicon	184	ug/L		25	100	100	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-23-5	Sodium	533	ug/L		100	300	300	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:26	091204-5	925379
7440-32-6	Titanium	1.68	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:43	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:19	120409A-1	925377
7440-66-6	Zinc	4.06	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 17:19	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-577-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241420002 **BASIS:** As Received **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-10-3934 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	174	ug/L	J	68	200	200	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:41	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-39-3	Barium	3.11	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:32	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7440-70-2	Calcium	96.7	ug/L	J	50	200	200	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-47-3	Chromium	5.86	ug/L		1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:26	120409A-1	925377
7439-89-6	Iron	131	ug/L		30	100	100	1	P	HSC	12/04/09 17:26	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:26	120409A-1	925377
7439-96-5	Manganese	7.69	ug/L		1	5	5	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:58	112509W1-7	924857
7440-02-0	Nickel	3.78	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:26	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-21-3	Silicon	281	ug/L		25	100	100	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-23-5	Sodium	291	ug/L	J	100	300	300	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:32	091204-5	925379
7440-32-6	Titanium	3.49	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:46	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:26	120409A-1	925377
7440-66-6	Zinc	7.55	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 17:26	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.1	ug/L	5	ug/L	101.9	90.0 – 110.0	AV	25–NOV–09 07:57	112509W1–7
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Nickel	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Selenium	2660	ug/L	2500	ug/L	106.6	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Silicon	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Lead	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Lithium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Manganese	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Thallium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Beryllium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	05–DEC–09 19:59	091205–6
	Uranium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	06–DEC–09 01:58	091205–2
	Antimony	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	06–DEC–09 06:55	091205–4
CCV01										
	Mercury	4.94	ug/L	5	ug/L	98.9	80.0 – 120.0	AV	25–NOV–09 08:02	112509W1–7

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Barium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Boron	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Selenium	519	ug/L	500	ug/L	103.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Titanium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Zinc	495	ug/L	500	ug/L	99	90.0 - 110.0	P	04-DEC-09 10:35	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Lead	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Lithium	51.5	ug/L	50	ug/L	103	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Manganese	52.7	ug/L	50	ug/L	105.3	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Thallium	51.2	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	05-DEC-09 03:18	091204-5
	Beryllium	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	05-DEC-09 20:08	091205-6
	Uranium	52.3	ug/L	50	ug/L	104.5	90.0 - 110.0	MS	06-DEC-09 02:10	091205-2
	Antimony	45.1	ug/L	50	ug/L	90.3	90.0 - 110.0	MS	06-DEC-09 07:07	091205-4
CCV02										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 - 120.0	AV	25-NOV-09 08:25	112509W1-7
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Boron	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Nickel	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Selenium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Cadmium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Lead	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Lithium	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Manganese	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Thallium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Beryllium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	05–DEC–09 20:23	091205–6
	Uranium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	06–DEC–09 02:33	091205–2
	Antimony	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	06–DEC–09 07:28	091205–4
CCV03										
	Mercury	5.15	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	25–NOV–09 08:48	112509W1–7
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Arsenic	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Nickel	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Selenium	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Cadmium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Lead	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Lithium	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Manganese	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Thallium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	05-DEC-09 04:38	091204-5
	Beryllium	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	05-DEC-09 20:40	091205-6
	Uranium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	06-DEC-09 02:58	091205-2
	Antimony	51.9	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	06-DEC-09 07:53	091205-4
CCV04										
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 – 120.0	AV	25-NOV-09 09:12	112509W1-7
	Aluminum	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Arsenic	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Selenium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lead	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lithium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Manganese	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Thallium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
CCV05										
	Mercury	5.14	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	25-NOV-09 09:35	112509W1-7
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Copper	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Selenium	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Cadmium	49.8	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Lead	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Lithium	54.8	ug/L	50	ug/L	109.5	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Manganese	52.5	ug/L	50	ug/L	105	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
CCV06										
	Mercury	5.33	ug/L	5	ug/L	106.5	80.0 - 120.0	AV	25-NOV-09 09:58	112509W1-7
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Boron	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Copper	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Nickel	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Selenium	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silicon	2500	ug/L	2500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Cadmium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Lead	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Lithium	55.2	ug/L	50	ug/L	110.3	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Manganese	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Thallium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
CCV07										
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 – 120.0	AV	25–NOV–09 10:21	112509W1–7
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Boron	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Copper	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Nickel	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Selenium	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silicon	2520	ug/L	2500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Cadmium	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	05–DEC–09 08:02	091204–5
	Lead	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	05–DEC–09 08:02	091204–5
	Lithium	53.3	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	05–DEC–09 08:02	091204–5
	Manganese	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	05–DEC–09 08:02	091204–5
	Thallium	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	05–DEC–09 08:02	091204–5
CCV08										
	Mercury	5.19	ug/L	5	ug/L	103.8	80.0 – 120.0	AV	25–NOV–09 10:44	112509W1–7
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Arsenic	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Chromium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Nickel	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Selenium	528	ug/L	500	ug/L	105.7	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Silicon	2520	ug/L	2500	ug/L	101	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-577-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Lead	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Lithium	54.9	ug/L	50	ug/L	109.9	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Manganese	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Thallium	47.1	ug/L	50	ug/L	94.2	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
CCV09										
	Mercury	5.19	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	25-NOV-09 11:08	112509W1-7
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Arsenic	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Boron	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Nickel	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Selenium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.206	ug/L	.2	ug/L	103	70.0 – 130.0	AV	25–NOV–09 08:00	112509W1–7
	Cadmium	1.11	ug/L	1	ug/L	111.3	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Lead	2.3	ug/L	2	ug/L	115.2	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Lithium	11.4	ug/L	10	ug/L	114.1	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Thallium	1.2	ug/L	1	ug/L	119.6	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Manganese	5.72	ug/L	5	ug/L	114.5	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Beryllium	.573	ug/L	.5	ug/L	114.6	70.0 – 130.0	MS	05–DEC–09 20:03	091205–6
	Uranium	.218	ug/L	.2	ug/L	109	70.0 – 130.0	MS	06–DEC–09 02:03	091205–2
	Antimony	3	ug/L	3	ug/L	100.1	70.0 – 130.0	MS	06–DEC–09 07:00	091205–4
PQL01										
	Aluminum	206	ug/L	200	ug/L	103	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Nickel	5.43	ug/L	5	ug/L	108.5	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Potassium	162	ug/L	150	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Arsenic	29.2	ug/L	30	ug/L	97.5	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Barium	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Chromium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Calcium	203	ug/L	200	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Selenium	29.4	ug/L	30	ug/L	98	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Silicon	103	ug/L	100	ug/L	102.8	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 07:58	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 09:41	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 09:41	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 09:41	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 09:41	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 09:41	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 09:41	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 09:41	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:01	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 02:00	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 06:57	091205–4
CCB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 08:04	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 10:42	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 10:42	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Potassium	101.63	+/–150	J	50.0	150	LIQ	P	04–DEC–09 10:42	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:09	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 02:13	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 07:09	091205–4
CCB02										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 08:27	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 11:03	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 11:03	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 11:03	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 11:03	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 11:03	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 11:03	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 11:03	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 03:43	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 03:43	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 03:43	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 03:43	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 03:43	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:25	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 02:35	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 07:31	091205–4
CCB03										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 08:50	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 12:20	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 12:20	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 12:20	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:42	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 03:01	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 07:55	091205–4
CCB04										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 09:13	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-577-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 12:55	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
CCB05										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 09:37	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 14:03	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 14:03	120409A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 14:03	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 14:03	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 06:29	091204–5
CCB06										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 10:00	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 14:59	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 14:59	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 14:59	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 14:59	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 14:59	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 14:59	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 14:59	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–577–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 07:12	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 07:12	091204–5
CCB07	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 10:23	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 15:55	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 15:55	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 15:55	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 15:55	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 15:55	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 15:55	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 15:55	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 08:08	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 08:08	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 08:08	091204–5

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-577-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 08:08	091204-5
	Thallium	0.523	+/-1	J	0.3	1.0	LIQ	MS	05-DEC-09 08:08	091204-5
CCB08										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 10:46	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 17:05	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 17:05	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 17:05	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 17:05	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 17:05	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 17:05	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 17:05	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 17:05	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 09:16	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 09:16	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 09:16	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 09:16	091204-5
	Thallium	0.735	+/-1	J	0.3	1.0	LIQ	MS	05-DEC-09 09:16	091204-5
CCB09										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 11:09	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 18:08	120409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-577-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 18:08	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 18:08	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 18:08	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 18:08	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 18:08	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 18:08	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 18:08	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 18:08	120409A-1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–577–1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201977150								
	Mercury	0.066	ug/L	+/–0.2	U	AV	0.066	0.2
1201978326								
	Aluminum	68	ug/L	+/–200	U	P	68	200
	Arsenic	5	ug/L	+/–30.0	U	P	5	30
	Barium	1	ug/L	+/–5.0	U	P	1	5
	Boron	15	ug/L	+/–50.0	U	P	15	50
	Calcium	50	ug/L	+/–200	U	P	50	200
	Chromium	1	ug/L	+/–5.0	U	P	1	5
	Cobalt	1	ug/L	+/–5.0	U	P	1	5
	Copper	3	ug/L	+/–10.0	U	P	3	10
	Iron	30	ug/L	+/–100	U	P	30	100
	Magnesium	85	ug/L	+/–300	U	P	85	300
	Nickel	1.5	ug/L	+/–5.0	U	P	1.5	5
	Potassium	50	ug/L	+/–150	U	P	50	150
	Selenium	5	ug/L	+/–30.0	U	P	5	30
	Silicon	25	ug/L	+/–100	U	P	25	100
	Silver	1	ug/L	+/–5.0	U	P	1	5
	Sodium	100	ug/L	+/–300	U	P	100	300
	Titanium	1	ug/L	+/–5.0	U	P	1	5
	Vanadium	1	ug/L	+/–5.0	U	P	1	5
	Zinc	3.3	ug/L	+/–10.0	U	P	3.3	10
1201978333								
	Antimony	1	ug/L	+/–3.0	U	MS	1	3
	Beryllium	0.1	ug/L	+/–0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/–1.0	U	MS	0.11	1
	Lead	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Lithium	2	ug/L	+/–10.0	U	MS	2	10
	Manganese	1	ug/L	+/–5.0	U	MS	1	5
	Thallium	0.3	ug/L	+/–1.0	U	MS	0.3	1
	Uranium	0.05	ug/L	+/–0.2	U	MS	0.05	0.2

METALS
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Interference Check Sample

SDG No: 10-577-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Arsenic	-0.564	ug/L					04-DEC-09 09:55	120409A-1
	Barium	1.92	ug/L					04-DEC-09 09:55	120409A-1
	Boron	-5.89	ug/L					04-DEC-09 09:55	120409A-1
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Chromium	1.28	ug/L					04-DEC-09 09:55	120409A-1
	Cobalt	-1.39	ug/L					04-DEC-09 09:55	120409A-1
	Copper	1.06	ug/L					04-DEC-09 09:55	120409A-1
	Iron	184000	ug/L	200000	ug/L	92	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Nickel	3.73	ug/L					04-DEC-09 09:55	120409A-1
	Potassium	-19.7	ug/L					04-DEC-09 09:55	120409A-1
	Selenium	-0.0013	ug/L					04-DEC-09 09:55	120409A-1
	Silicon	0.455	ug/L					04-DEC-09 09:55	120409A-1
	Silver	-1.58	ug/L					04-DEC-09 09:55	120409A-1
	Sodium	24.7	ug/L					04-DEC-09 09:55	120409A-1
	Titanium	-0.536	ug/L					04-DEC-09 09:55	120409A-1
	Vanadium	-1.65	ug/L					04-DEC-09 09:55	120409A-1
	Zinc	-7.1	ug/L					04-DEC-09 09:55	120409A-1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Arsenic	512	ug/L	500	ug/L	102	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Barium	505	ug/L	500	ug/L	101	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Boron	519	ug/L	500	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Chromium	482	ug/L	500	ug/L	96.3	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Copper	574	ug/L	500	ug/L	115	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 - 120.0	04-DEC-09 10:01	120409A-1

METALS
-4-
Interference Check Sample

SDG No: 10-577-1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Nickel	462	ug/L	500	ug/L	92.4	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Potassium	5530	ug/L	5000	ug/L	111	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Selenium	2610	ug/L	2500	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Silicon	5370	ug/L	5000	ug/L	107	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Silver	274	ug/L	250	ug/L	110	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Sodium	5210	ug/L	5000	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Titanium	514	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Vanadium	513	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Zinc	488	ug/L	500	ug/L	97.7	80.0 – 120.0	04-DEC-09 10:01	120409A-1

METALS
–4–
Interference Check Sample

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	–0.012	ug/L					06–DEC–09 02:05	091205–2
ICSAB01									
	Uranium	21.8	ug/L	20	ug/L	109	80.0 – 120.0	06–DEC–09 02:08	091205–2

METALS
–4–
Interference Check Sample

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.157	ug/L					06–DEC–09 07:02	091205–4
ICSAB01									
	Antimony	22.4	ug/L	20.1	ug/L	111	80.0 – 120.0	06–DEC–09 07:04	091205–4

METALS
–4–
Interference Check Sample

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Cadmium	0.546	ug/L					05–DEC–09 03:06	091204–5
	Lead	0.294	ug/L					05–DEC–09 03:06	091204–5
	Lithium	0.133	ug/L					05–DEC–09 03:06	091204–5
	Manganese	6.12	ug/L					05–DEC–09 03:06	091204–5
	Thallium	0.046	ug/L					05–DEC–09 03:06	091204–5
ICSAB01									
	Cadmium	20.4	ug/L	20.4	ug/L	100	80.0 – 120.0	05–DEC–09 03:12	091204–5
	Lead	21.5	ug/L	20.5	ug/L	105	80.0 – 120.0	05–DEC–09 03:12	091204–5
	Lithium	20.3	ug/L	20	ug/L	102	80.0 – 120.0	05–DEC–09 03:12	091204–5
	Manganese	27.6	ug/L	25.8	ug/L	107	80.0 – 120.0	05–DEC–09 03:12	091204–5
	Thallium	21.4	ug/L	20	ug/L	107	80.0 – 120.0	05–DEC–09 03:12	091204–5

METALS
–4–
Interference Check Sample

SDG No: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.079	ug/L					05–DEC–09 20:04	091205–6
ICSAB01									
	Beryllium	21.3	ug/L	20	ug/L	106	80.0 – 120.0	05–DEC–09 20:06	091205–6

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-577-1 **Client ID** RE03-10-3933S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241420001 **Spike ID:** 1201977153

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.13		0.066	U	2	106		AV

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-577-1 **Client ID** RE03-10-6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978329

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5270		68	U	5000	105		P
Arsenic	ug/L	75-125	515		5	U	500	103		P
Barium	ug/L	75-125	534		1	U	500	107		P
Boron	ug/L	75-125	513		15	U	500	102		P
Calcium	ug/L	75-125	5180		50	U	5000	103		P
Chromium	ug/L	75-125	521		1	U	500	104		P
Cobalt	ug/L	75-125	508		1	U	500	102		P
Copper	ug/L	75-125	532		3	U	500	106		P
Iron	ug/L	75-125	5240		30	U	5000	105		P
Magnesium	ug/L	75-125	5350		85	U	5000	107		P
Nickel	ug/L	75-125	517		1.5	U	500	103		P
Potassium	ug/L	75-125	5100		50	U	5000	102		P
Selenium	ug/L	75-125	519		5	U	500	104		P
Silicon	ug/L	75-125	5170		25	U	5000	103		P
Silver	ug/L	75-125	519		1	U	500	104		P
Sodium	ug/L	75-125	5160		100	U	5000	102		P
Titanium	ug/L	75-125	527		1	U	500	105		P
Vanadium	ug/L	75-125	533		1	U	500	107		P
Zinc	ug/L	75-125	511		9.12	J	500	100		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-577-1 **Client ID** RE03-10-6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978336

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	233		1	U	200	116		MS
Beryllium	ug/L	75-125	47.7		0.1	U	50	95.5		MS
Cadmium	ug/L	75-125	10.9		0.11	U	10	109		MS
Lead	ug/L	75-125	43.6		0.5	U	40	109		MS
Lithium	ug/L	75-125	53.8		2	U	50	108		MS
Manganese	ug/L	75-125	51.7		1	U	50	103		MS
Thallium	ug/L	75-125	96.5		0.49	J	100	96		MS
Uranium	ug/L	75-125	56.7		0.05	U	50	113		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–3933D

Sample ID: 241420001 **Duplicate ID:** 1201977152 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–6088D

Sample ID: 241325001 **Duplicate ID:** 1201978328 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Boron	ug/L		15	U	15	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L		50	U	50	U			P
Selenium	ug/L		5	U	5	U			P
Silicon	ug/L		25	U	25	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L		100	U	100	U			P
Titanium	ug/L		1	U	1	U			P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		9.12	J	3.3	U	200		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–577–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–6088D

Sample ID: 241325001 **Duplicate ID:** 1201978335 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Lithium	ug/L		2	U	2	U			MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.49	J	0.3	U	200		MS
Uranium	ug/L		0.05	U	0.05	U			MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–577–1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977151								
	Mercury	ug/L	2	2.48		124	80–120	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-577-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978327								
	Aluminum	ug/L	5000	5310		106	80-120	P
	Arsenic	ug/L	500	519		104	80-120	P
	Barium	ug/L	500	535		107	80-120	P
	Boron	ug/L	500	514		103	80-120	P
	Calcium	ug/L	5000	5280		106	80-120	P
	Chromium	ug/L	500	519		104	80-120	P
	Cobalt	ug/L	500	510		102	80-120	P
	Copper	ug/L	500	529		106	80-120	P
	Iron	ug/L	5000	5280		106	80-120	P
	Magnesium	ug/L	5000	5300		106	80-120	P
	Nickel	ug/L	500	516		103	80-120	P
	Potassium	ug/L	5000	5140		103	80-120	P
	Selenium	ug/L	500	519		104	80-120	P
	Silicon	ug/L	5000	5150		103	80-120	P
	Silver	ug/L	500	520		104	80-120	P
	Sodium	ug/L	5000	5200		104	80-120	P
	Titanium	ug/L	500	525		105	80-120	P
	Vanadium	ug/L	500	530		106	80-120	P
	Zinc	ug/L	500	510		102	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-577-1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978334								
	Antimony	ug/L	50	57.4		115	80-120	MS
	Beryllium	ug/L	50	50.6		101	80-120	MS
	Cadmium	ug/L	50	52.9		106	80-120	MS
	Lead	ug/L	50	53.4		107	80-120	MS
	Lithium	ug/L	50	52.5		105	80-120	MS
	Manganese	ug/L	50	51.1		102	80-120	MS
	Thallium	ug/L	50	49.7		99.5	80-120	MS
	Uranium	ug/L	50	58.9		118	80-120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-577-1 **Client ID** RE03-10-3933L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241420001 **Serial Dilution ID:** 1201977154

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-577-1 **Client ID** RE03-10-6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978330

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Boron	15	U	75	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silicon	25	U	125	U				P
Silver	1	U	5	U				P
Sodium	100	U	500	U				P
Titanium	1	U	5	U				P
Vanadium	1	U	5	U				P
Zinc	9.12	J	16.5	U	100			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-577-1 **Client ID** RE03-10-6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978337

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Lithium	2	U	10	U				MS
Manganese	1	U	5	U				MS
Thallium	.49	J	6.35		1200			MS
Uranium	.05	U	.25	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-577-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925376						
1201978326	MB for batch 925376	MB	W	22-NOV-09	50mL	50mL	
1201978327	LCS for batch 925376	LCS	W	22-NOV-09	50mL	50mL	
1201978329	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978328	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241420001	RE03-10-3933	SAMPLE	W	22-NOV-09	50mL	50mL	
241420002	RE03-10-3934	SAMPLE	W	22-NOV-09	50mL	50mL	
241420003	RE03-10-3923	SAMPLE	W	22-NOV-09	50mL	50mL	
241420004	RE03-10-3924	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-577-1 **Method Type**: MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925378						
1201978333	MB for batch 925378	MB	W	22-NOV-09	50mL	50mL	
1201978334	LCS for batch 925378	LCS	W	22-NOV-09	50mL	50mL	
1201978336	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978335	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241420001	RE03-10-3933	SAMPLE	W	22-NOV-09	50mL	50mL	
241420002	RE03-10-3934	SAMPLE	W	22-NOV-09	50mL	50mL	
241420003	RE03-10-3923	SAMPLE	W	22-NOV-09	50mL	50mL	
241420004	RE03-10-3924	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-577-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	924856						
1201977150	MB for batch 924856	MB	W	24-NOV-09	20mL	20mL	
1201977151	LCS for batch 924856	LCS	W	24-NOV-09	20mL	20mL	
1201977153	RE03-10-3933S	MS	W	24-NOV-09	20mL	20mL	
1201977152	RE03-10-3933D	DUP	W	24-NOV-09	20mL	20mL	
241420001	RE03-10-3933	SAMPLE	W	24-NOV-09	20mL	20mL	
241420002	RE03-10-3934	SAMPLE	W	24-NOV-09	20mL	20mL	
241420003	RE03-10-3923	SAMPLE	W	24-NOV-09	20mL	20mL	
241420004	RE03-10-3924	SAMPLE	W	24-NOV-09	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–577–1
Method MS
Data File: 091204–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:29							X						X	X		X								X				
S10	1	02:36							X						X	X		X								X				
S100	1	02:42							X						X	X		X								X				
ICV01	1	02:48							X						X	X		X								X				
ICB01	1	02:54							X						X	X		X								X				
CRDL01	1	03:00							X						X	X		X								X				
ICSA01	1	03:06							X						X	X		X								X				
ICSAB01	1	03:12							X						X	X		X								X				
CCV01	1	03:18							X						X	X		X								X				
CCB01	1	03:24							X						X	X		X								X				
LR01	1	03:31							X						X	X		X								X				
CCV02	1	03:37							X						X	X		X								X				
CCB02	1	03:43							X						X	X		X								X				
ZZZZZZ	2	03:49																												
ZZZZZZ	20	03:55																												
ZZZZZZ	40	04:01																												
ZZZZZZ	2	04:07																												
ZZZZZZ	2	04:14																												
ZZZZZZ	2	04:20																												
ZZZZZZ	2	04:26																												
ZZZZZZ	10	04:32																												
CCV03	1	04:38							X						X	X		X								X				
CCB03	1	04:44							X						X	X		X								X				
ZZZZZZ	2	04:50																												
ZZZZZZ	2	04:57																												
ZZZZZZ	2	05:03																												
ZZZZZZ	2	05:09																												
ZZZZZZ	2	05:15																												
ZZZZZZ	2	05:21																												
ZZZZZZ	2	05:27																												
CCV04	1	05:34							X						X	X		X								X				
CCB04	1	05:40							X						X	X		X								X				
ZZZZZZ	2	05:46																												
ZZZZZZ	2	05:52																												
ZZZZZZ	2	05:58																												
ZZZZZZ	2	06:04																												
ZZZZZZ	2	06:11																												
ZZZZZZ	2	06:17																												
CCV05	1	06:23							X						X	X		X								X				
CCB05	1	06:29							X						X	X		X								X				

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	2	06:35																										
ZZZZZZ	2	06:41																										
ZZZZZZ	2	06:48																										
ZZZZZZ	2	06:54																										
ZZZZZZ	2	07:00																										
CCV06	1	07:06						X					X	X		X								X				
CCB06	1	07:12						X					X	X		X								X				
1201978333	1	07:18						X					X	X		X								X				
1201978334	1	07:24						X					X	X		X								X				
ZZZZZZ	1	07:31																										
1201978335	1	07:37						X					X	X		X								X				
1201978336	1	07:43						X					X	X		X								X				
1201978337	5	07:49						X					X	X		X								X				
ZZZZZZ	1	07:55																										
CCV07	1	08:02						X					X	X		X								X				
CCB07	1	08:08						X					X	X		X								X				
ZZZZZZ	1	08:14																										
ZZZZZZ	1	08:20																										
241420001	1	08:26						X					X	X		X								X				
241420002	1	08:32						X					X	X		X								X				
241420003	1	08:39						X					X	X		X								X				
241420004	1	08:45						X					X	X		X								X				
ZZZZZZ	1	08:51																										
ZZZZZZ	1	08:57																										
ZZZZZZ	10	09:03																										
CCV08	1	09:10						X					X	X		X								X				
CCB08	1	09:16						X					X	X		X								X				

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–577–1
Method MS
Data File: 091205–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:54					X																							
S10	1	19:56					X																							
S100	1	19:58					X																							
ICV01	1	19:59					X																							
ICB01	1	20:01					X																							
CRDL01	1	20:03					X																							
ICSA01	1	20:04					X																							
ICSAB01	1	20:06					X																							
CCV01	1	20:08					X																							
CCB01	1	20:09					X																							
1201978333	1	20:11					X																							
1201978334	1	20:13					X																							
ZZZZZZ	1	20:14																												
1201978335	1	20:16					X																							
1201978336	1	20:18					X																							
1201978337	5	20:20					X																							
ZZZZZZ	1	20:21																												
CCV02	1	20:23					X																							
CCB02	1	20:25					X																							
ZZZZZZ	1	20:27																												
ZZZZZZ	1	20:28																												
241420001	1	20:30					X																							
241420002	1	20:32					X																							
241420003	1	20:33					X																							
241420004	1	20:35					X																							
ZZZZZZ	1	20:37																												
ZZZZZZ	1	20:39																												
CCV03	1	20:40					X																							
CCB03	1	20:42					X																							

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 04–DEC–09

Client Sdg: 10–577–1
Method P
Data File: 120409A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S0.1	1	09:08			X	X		X			X	X	X							X	X	X	X	X			X		X	X
S0.5	1	09:14	X		X	X		X		X	X	X	X				X			X	X	X	X	X			X		X	X
SCAL	1	09:21	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S10	1	09:28	X							X				X			X								X					
ICV01	1	09:34	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICB01	1	09:41	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
PQL01	1	09:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSA01	1	09:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSAB01	1	10:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR01	1	10:06	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR02	1	10:12	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB01	1	10:42	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR03	1	10:49	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV02	1	10:56	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB02	1	11:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB03	1	12:20	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV04	1	12:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB04	1	12:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	14:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
ZZZZZZ	1	14:45																												
CCV06	1	14:52	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB06	1	14:59	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	15:06																												
ZZZZZZ	1	15:13																												
ZZZZZZ	5	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB07	1	15:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978326	1	16:02	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978327	1	16:09	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:16																												
1201978328	1	16:23	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978329	1	16:30	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978330	5	16:37	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:44																												
ZZZZZZ	1	16:51																												
CCV08	1	16:58	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB08	1	17:05	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	17:12																												
241420001	1	17:19	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241420002	1	17:26	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241420003	1	17:33	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241420004	1	17:40	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	17:47																												
ZZZZZZ	1	17:54																												
CCV09	1	18:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB09	1	18:08	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 25–NOV–09 **End Date:** 25–NOV–09

Client Sdg: 10–577–1
Method AV
Data File: 112509W1–7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:45																	X											
S0.2	1	07:47																	X											
S0.5	1	07:49																	X											
S2.0	1	07:51																	X											
S5.0	1	07:53																	X											
S10.0	1	07:55																	X											
ICV01	1	07:57																	X											
ICB01	1	07:58																	X											
CRDL01	1	08:00																	X											
CCV01	1	08:02																	X											
CCB01	1	08:04																	X											
ZZZZZZ	1	08:06																												
ZZZZZZ	1	08:08																												
ZZZZZZ	1	08:10																												
ZZZZZZ	1	08:12																												
ZZZZZZ	1	08:14																												
ZZZZZZ	1	08:16																												
ZZZZZZ	1	08:18																												
ZZZZZZ	1	08:20																												
ZZZZZZ	1	08:22																												
ZZZZZZ	5	08:23																												
CCV02	1	08:25																	X											
CCB02	1	08:27																	X											
ZZZZZZ	1	08:29																												
ZZZZZZ	1	08:31																												
ZZZZZZ	1	08:33																												
ZZZZZZ	1	08:35																												
ZZZZZZ	1	08:37																												
ZZZZZZ	1	08:39																												
ZZZZZZ	1	08:41																												
ZZZZZZ	1	08:43																												
ZZZZZZ	5	08:45																												
ZZZZZZ	1	08:47																												
CCV03	1	08:48																	X											
CCB03	1	08:50																	X											
ZZZZZZ	1	08:52																												
ZZZZZZ	1	08:54																												
ZZZZZZ	1	08:56																												
ZZZZZZ	1	08:58																												
ZZZZZZ	1	09:00																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	09:02																											
ZZZZZZ	1	09:04																											
ZZZZZZ	5	09:06																											
ZZZZZZ	1	09:08																											
ZZZZZZ	1	09:10																											
CCV04	1	09:12																X											
CCB04	1	09:13																X											
ZZZZZZ	1	09:15																											
ZZZZZZ	1	09:17																											
ZZZZZZ	1	09:19																											
ZZZZZZ	1	09:21																											
ZZZZZZ	1	09:23																											
ZZZZZZ	1	09:25																											
ZZZZZZ	1	09:27																											
ZZZZZZ	5	09:29																											
ZZZZZZ	1	09:31																											
ZZZZZZ	1	09:33																											
CCV05	1	09:35																X											
CCB05	1	09:37																X											
ZZZZZZ	1	09:39																											
ZZZZZZ	1	09:40																											
ZZZZZZ	1	09:42																											
ZZZZZZ	1	09:44																											
ZZZZZZ	1	09:46																											
ZZZZZZ	1	09:48																											
ZZZZZZ	1	09:50																											
ZZZZZZ	1	09:52																											
ZZZZZZ	1	09:54																											
ZZZZZZ	1	09:56																											
CCV06	1	09:58																X											
CCB06	1	10:00																X											
ZZZZZZ	1	10:02																											
ZZZZZZ	1	10:04																											
ZZZZZZ	1	10:06																											
ZZZZZZ	1	10:07																											
ZZZZZZ	1	10:09																											
ZZZZZZ	5	10:11																											
ZZZZZZ	1	10:13																											
ZZZZZZ	1	10:15																											
ZZZZZZ	1	10:17																											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	10:19																												
CCV07	1	10:21																	X											
CCB07	1	10:23																	X											
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
1201977150	1	10:35																	X											
1201977151	1	10:37																	X											
ZZZZZZ	1	10:38																												
ZZZZZZ	1	10:40																												
ZZZZZZ	1	10:42																												
CCV08	1	10:44																	X											
CCB08	1	10:46																	X											
ZZZZZZ	1	10:48																												
241420001	1	10:50																	X											
1201977152	1	10:52																	X											
1201977153	1	10:54																	X											
1201977154	5	10:56																	X											
241420002	1	10:58																	X											
241420003	1	11:00																	X											
241420004	1	11:02																	X											
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:06																												
CCV09	1	11:08																	X											
CCB09	1	11:09																	X											

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–577–1
Method MS
Data File: 091205–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	01:51																										X		
S10	1	01:53																										X		
S100	1	01:55																										X		
ICV01	1	01:58																										X		
ICB01	1	02:00																										X		
CRDL01	1	02:03																										X		
ICSA01	1	02:05																										X		
ICSAB01	1	02:08																										X		
CCV01	1	02:10																										X		
CCB01	1	02:13																										X		
1201978333	1	02:15																										X		
1201978334	1	02:18																										X		
ZZZZZZ	1	02:20																												
1201978335	1	02:23																										X		
1201978336	1	02:25																										X		
1201978337	5	02:28																										X		
ZZZZZZ	1	02:30																												
CCV02	1	02:33																										X		
CCB02	1	02:35																										X		
ZZZZZZ	1	02:38																												
ZZZZZZ	1	02:40																												
241420001	1	02:43																										X		
241420002	1	02:46																										X		
241420003	1	02:48																										X		
241420004	1	02:51																										X		
ZZZZZZ	1	02:53																												
ZZZZZZ	1	02:56																												
CCV03	1	02:58																										X		
CCB03	1	03:01																										X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–577–1
Method MS
Data File: 091205–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:48		X																										
S10	1	06:50		X																										
S100	1	06:53		X																										
ICV01	1	06:55		X																										
ICB01	1	06:57		X																										
CRDL01	1	07:00		X																										
ICSA01	1	07:02		X																										
ICSAB01	1	07:04		X																										
CCV01	1	07:07		X																										
CCB01	1	07:09		X																										
1201978333	1	07:11		X																										
1201978334	1	07:14		X																										
ZZZZZZ	1	07:16																												
1201978335	1	07:19		X																										
1201978336	1	07:21		X																										
1201978337	5	07:24		X																										
ZZZZZZ	1	07:26																												
CCV02	1	07:28		X																										
CCB02	1	07:31		X																										
ZZZZZZ	1	07:33																												
ZZZZZZ	1	07:36																												
241420001	1	07:38		X																										
241420002	1	07:41		X																										
241420003	1	07:43		X																										
241420004	1	07:45		X																										
ZZZZZZ	1	07:48																												
ZZZZZZ	1	07:50																												
CCV03	1	07:53		X																										
CCB03	1	07:55		X																										

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–577–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-577-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-577-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	15.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silicon	251.611	25.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-577-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-577-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-577-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-577-1
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-577-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Seleuium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-577-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–577–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–577–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

Raw Data

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00]	ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00]	ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00]	ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00]	ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00]	ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00]	ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00]	ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00]	ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00]	ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00]	ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00]	ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00]	ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00]	ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00]	ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00]	ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00]	ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00]	ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00]	ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00]	ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00]	ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00]	ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00]	ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00]	ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00]	ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00]	ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00]	ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00]	ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00]	ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00]	ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00]	ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43	%	09:04:58
2	Sc Radial	4907.6	4907.6	100.0	%	09:03:36
2	Y 371.029	887859.3	887859.3	100.38	%	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74	%	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00]	ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00]	ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00]	ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00]	ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00]	ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00]	ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00]	ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00]	ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00]	ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00]	ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00]	ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00]	ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00]	ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00]	ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00]	ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00]	ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00]	ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00]	ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00]	ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00]	ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00]	ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00]	ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00]	ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00]	ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00]	ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00]	ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00]	ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00]	ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00]	ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00]	ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00]	ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260	%	09:05:29
3	Sc Radial	4823.8	4823.8	98.2	%	09:04:01
3	Y 371.029	877949.7	877949.7	99.263	%	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13	%	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7 ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22 ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3 ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80 ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2 ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9 ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52 ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75 ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38 ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56 ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50 ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65 ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16 ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453 ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293 %		09:38:03
3	Sc Radial	4901.3	4901.3	99.8 %		09:36:44
3	Y 371.029	861618.1	861618.1	97.417 %		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79 %		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44 ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6 ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49 ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04 ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71 ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45 ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3 ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32 ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52 ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91 ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13 ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4 ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2 ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8 ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16 ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72 ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3 ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30 ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6 ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68 ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4 ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17 ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8 ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3 ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45 ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46 ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68 ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65 ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14 ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35 ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97 ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560 ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

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Ca 317.933Radial†        2844.7      5036.6 ug/L        62.48      5036.6 ppb        62.48   1.24%
   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†             58712.0      511.84 ug/L        0.548      511.84 ppb        0.548   0.11%
   QC value within limits for Cd 226.502  Recovery = 102.37%
Co 228.616†             31299.0      515.85 ug/L        4.347      515.85 ppb        4.347   0.84%
   QC value within limits for Co 228.616  Recovery = 103.17%
Cr 267.716†             55808.3      502.22 ug/L        0.664      502.22 ppb        0.664   0.13%
   QC value within limits for Cr 267.716  Recovery = 100.44%
Cu 324.752†            194870.1      520.66 ug/L        0.629      520.66 ppb        0.629   0.12%
   QC value within limits for Cu 324.752  Recovery = 104.13%
Fe 238.204 Radial†        417.6      5064.8 ug/L        94.14      5064.8 ppb        94.14   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.30%
K 766.490 Radial†       13749.0      2500.5 ug/L         7.68      2500.5 ppb         7.68   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.02%
Mg 279.077 IEC†           117.5      5266.4 ug/L        91.10      5266.4 ppb        91.10   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†            554773.8      525.75 ug/L        0.407      525.75 ppb        0.407   0.08%
   QC value within limits for Mn 257.610  Recovery = 105.15%
Mo 202.031†             10431.0      553.90 ug/L        4.052      553.90 ppb        4.052   0.73%
   QC value greater than the upper limit for Mo 202.031  Recovery = 110.78%
Na 589.592 Radial†       8728.4      2448.3 ug/L        22.68      2448.3 ppb        22.68   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 97.93%
Ni 231.604†             26132.9      511.71 ug/L        4.139      511.71 ppb        4.139   0.81%
   QC value within limits for Ni 231.604  Recovery = 102.34%
P 214.914†               5812.7      2521.9 ug/L        18.35      2521.9 ppb        18.35   0.73%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              5504.1      518.39 ug/L        2.831      518.39 ppb        2.831   0.55%
   QC value within limits for Pb 220.353  Recovery = 103.68%
S 181.975 Axial†         2375.5      2558.4 ug/L        15.13      2558.4 ppb        15.13   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†              1947.3      522.68 ug/L        3.231      522.68 ppb        3.231   0.62%
   QC value within limits for Sb 206.836  Recovery = 104.54%
Se 196.026†              5969.5      2664.5 ug/L        20.95      2664.5 ppb        20.95   0.79%
   QC value within limits for Se 196.026  Recovery = 106.58%
Si 251.611†            193620.3      4905.1 ug/L         2.68      4905.1 ppb         2.68   0.05%
   QC value within limits for Si 251.611  Recovery = 98.10%
Sn 189.927†              4161.1      550.94 ug/L        4.468      550.94 ppb        4.468   0.81%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.19%
Sr 421.552†            100372.3      526.55 ug/L        0.859      526.55 ppb        0.859   0.16%
   QC value within limits for Sr 421.552  Recovery = 105.31%
Ti 334.940†            367149.6      506.26 ug/L        0.490      506.26 ppb        0.490   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.25%
Tl 190.801†              2251.7      547.80 ug/L        5.406      547.80 ppb        5.406   0.99%
   QC value within limits for Tl 190.801  Recovery = 109.56%
U 409.014†              19450.3      501.27 ug/L        1.183      501.27 ppb        1.183   0.24%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†              90935.8      528.06 ug/L        0.368      528.06 ppb        0.368   0.07%
   QC value within limits for V 292.402  Recovery = 105.61%
Zn 213.857†             71271.1      519.16 ug/L        0.195      519.16 ppb        0.195   0.04%
   QC value within limits for Zn 213.857  Recovery = 103.83%
SiO2†                  194471.8       10543 ug/L         82.7       10543 ppb         82.7   0.78%
   QC value within limits for SiO2  Recovery = 98.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573 ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874 ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858 ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828 ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035 ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137 ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619 ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177 ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430 ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693 ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067 ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993 ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191 ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448 ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62 %		09:45:16
3	Sc Radial	4809.8	4809.8	98.0 %		09:43:49
3	Y 371.029	891134.4	891134.4	100.75 %		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29 %		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441 ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723 ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610 ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180 ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992 ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472 ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457 ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343 ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153 ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058 ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762 ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825 ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115 ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478 ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335 ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760 ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264 ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146 ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869 ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168 ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676 ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895 ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168 ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177 ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090 ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625 ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335 ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911 ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862 ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122 ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761 ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033 ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L		145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L		9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L		88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L		11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L		27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L		101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L		10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L		4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L		4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L		19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L		47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L		4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L		10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L		216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %			09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %			09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %			09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %			09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L		5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L		206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L		29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L		51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L		5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L		5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L		209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L		5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L		5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L		5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L		10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L		60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L		189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L		331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L		10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L		11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L		281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L		5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L		152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L		10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L		98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L		12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L		32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L		102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L		10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L		4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L		4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L		19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L		49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L		5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L		10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L		220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

Ca 317.933Radial†	114.9	203.44 ug/L	5.843	203.44 ppb	5.843	2.87%
QC value within limits for Ca 317.933Radial Recovery = 101.72%						
Cd 226.502†	583.9	5.0878 ug/L	0.03067	5.0878 ppb	0.03067	0.60%
QC value within limits for Cd 226.502 Recovery = 101.76%						
Co 228.616†	304.8	5.0359 ug/L	0.08115	5.0359 ppb	0.08115	1.61%
QC value within limits for Co 228.616 Recovery = 100.72%						
Cr 267.716†	568.2	5.0983 ug/L	0.10423	5.0983 ppb	0.10423	2.04%
QC value within limits for Cr 267.716 Recovery = 101.97%						
Cu 324.752†	3983.8	10.643 ug/L	0.4808	10.643 ppb	0.4808	4.52%
QC value within limits for Cu 324.752 Recovery = 106.43%						
Fe 238.204 Radial†	6.6	79.730 ug/L	29.0033	79.730 ppb	29.0033	36.38%
QC value within limits for Fe 238.204 Radial Recovery = 79.73%						
K 766.490 Radial†	889.4	161.88 ug/L	26.810	161.88 ppb	26.810	16.56%
QC value within limits for K 766.490 Radial Recovery = 107.92%						
Mg 279.077 IEC†	7.3	326.69 ug/L	36.025	326.69 ppb	36.025	11.03%
QC value within limits for Mg 279.077 IEC Recovery = 108.90%						
Mn 257.610†	11132.0	10.543 ug/L	0.1659	10.543 ppb	0.1659	1.57%
QC value within limits for Mn 257.610 Recovery = 105.43%						
Mo 202.031†	195.8	10.395 ug/L	0.7057	10.395 ppb	0.7057	6.79%
QC value within limits for Mo 202.031 Recovery = 103.95%						
Na 589.592 Radial†	1041.2	292.04 ug/L	11.429	292.04 ppb	11.429	3.91%
QC value within limits for Na 589.592 Radial Recovery = 97.35%						
Ni 231.604†	277.1	5.4266 ug/L	0.08048	5.4266 ppb	0.08048	1.48%
QC value within limits for Ni 231.604 Recovery = 108.53%						
P 214.914†	338.0	149.63 ug/L	3.816	149.63 ppb	3.816	2.55%
QC value within limits for P 214.914 Recovery = 99.75%						
Pb 220.353†	96.3	9.0961 ug/L	1.14169	9.0961 ppb	1.14169	12.55%
QC value within limits for Pb 220.353 Recovery = 90.96%						
S 181.975 Axial†	89.5	96.357 ug/L	7.4396	96.357 ppb	7.4396	7.72%
QC value within limits for S 181.975 Axial Recovery = 96.36%						
Sb 206.836†	43.7	11.807 ug/L	0.5867	11.807 ppb	0.5867	4.97%
QC value within limits for Sb 206.836 Recovery = 118.07%						
Se 196.026†	65.7	29.405 ug/L	2.6665	29.405 ppb	2.6665	9.07%
QC value within limits for Se 196.026 Recovery = 98.02%						
Si 251.611†	4059.5	102.83 ug/L	1.217	102.83 ppb	1.217	1.18%
QC value within limits for Si 251.611 Recovery = 102.83%						
Sn 189.927†	80.0	10.600 ug/L	0.2084	10.600 ppb	0.2084	1.97%
QC value within limits for Sn 189.927 Recovery = 106.00%						
Sr 421.552†	936.7	4.9127 ug/L	0.04891	4.9127 ppb	0.04891	1.00%
QC value within limits for Sr 421.552 Recovery = 98.25%						
Ti 334.940†	3574.6	4.9172 ug/L	0.11528	4.9172 ppb	0.11528	2.34%
QC value within limits for Ti 334.940 Recovery = 98.34%						
Tl 190.801†	82.0	19.906 ug/L	0.6555	19.906 ppb	0.6555	3.29%
QC value within limits for Tl 190.801 Recovery = 99.53%						
U 409.014†	1925.7	49.768 ug/L	2.3685	49.768 ppb	2.3685	4.76%
QC value within limits for U 409.014 Recovery = 99.54%						
V 292.402†	835.7	5.0170 ug/L	0.03359	5.0170 ppb	0.03359	0.67%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	1408.8	10.286 ug/L	0.1748	10.286 ppb	0.1748	1.70%
QC value within limits for Zn 213.857 Recovery = 102.86%						
SiO2†	4025.3	218.19 ug/L	1.897	218.19 ppb	1.897	0.87%
QC value within limits for SiO2 Recovery = 102.44%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125	ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358	ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332	ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716	ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926	ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720	ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740	ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396	ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397	ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291	ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433	ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413	ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610	ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770	ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657	%		09:58:28
3	Sc Radial	4452.3	4452.3	90.7	%		09:57:29
3	Y 371.029	763138.6	763138.6	86.282	%		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26	%		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167	ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860	ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512	ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439	ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675	ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922	ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820	ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732	ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789	ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279	ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638	ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310	ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175	ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750	ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540	ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843	ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311	ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227	ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915	ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746	ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932	ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176	ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896	ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226	ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013	ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829	ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545	ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683	ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715	ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573	ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528	ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768	ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

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Ca 317.933Radial†     272506.6      482480 ug/L        5269.3      482480 ppb        5269.3   1.09%
   QC value within limits for Ca 317.933Radial  Recovery = 96.50%
Cd 226.502†            56301.0      472.81 ug/L         3.758      472.81 ppb         3.758   0.79%
   QC value within limits for Cd 226.502  Recovery = 94.56%
Co 228.616†            28228.3      462.55 ug/L         3.948      462.55 ppb         3.948   0.85%
   QC value within limits for Co 228.616  Recovery = 92.51%
Cr 267.716†            53154.8      481.60 ug/L         2.521      481.60 ppb         2.521   0.52%
   QC value within limits for Cr 267.716  Recovery = 96.32%
Cu 324.752†           211552.8      574.38 ug/L         6.835      574.38 ppb         6.835   1.19%
   QC value within limits for Cu 324.752  Recovery = 114.88%
Fe 238.204 Radial†     15285.8      184820 ug/L        1613.6      184820 ppb        1613.6   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.41%
K 766.490 Radial†      30276.9      5529.3 ug/L         61.46      5529.3 ppb         61.46   1.11%
   QC value within limits for K 766.490 Radial  Recovery = 110.59%
Mg 279.077 IEC†        11072.2      495270 ug/L        3223.1      495270 ppb        3223.1   0.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.05%
Mn 257.610†           519055.3      500.72 ug/L         5.664      500.72 ppb         5.664   1.13%
   QC value within limits for Mn 257.610  Recovery = 100.14%
Mo 202.031†             9037.2      492.69 ug/L         3.967      492.69 ppb         3.967   0.81%
   QC value within limits for Mo 202.031  Recovery = 98.54%
Na 589.592 Radial†     18579.3      5211.5 ug/L         48.18      5211.5 ppb         48.18   0.92%
   QC value within limits for Na 589.592 Radial  Recovery = 104.23%
Ni 231.604†            23602.9      462.17 ug/L         3.523      462.17 ppb         3.523   0.76%
   QC value within limits for Ni 231.604  Recovery = 92.43%
P 214.914†              5752.3      2520.4 ug/L         39.08      2520.4 ppb         39.08   1.55%
   QC value within limits for P 214.914  Recovery = 100.81%
Pb 220.353†             3920.0      473.36 ug/L         5.165      473.36 ppb         5.165   1.09%
   QC value within limits for Pb 220.353  Recovery = 94.67%
S 181.975 Axial†        2522.0      2612.1 ug/L         33.01      2612.1 ppb         33.01   1.26%
   QC value within limits for S 181.975 Axial  Recovery = 104.49%
Sb 206.836†             2110.6      551.22 ug/L         2.592      551.22 ppb         2.592   0.47%
   QC value within limits for Sb 206.836  Recovery = 110.24%
Se 196.026†             4382.9      2608.9 ug/L         24.27      2608.9 ppb         24.27   0.93%
   QC value within limits for Se 196.026  Recovery = 104.36%
Si 251.611†           211822.2      5368.0 ug/L         59.89      5368.0 ppb         59.89   1.12%
   QC value within limits for Si 251.611  Recovery = 107.36%
Sn 189.927†             3306.5      490.18 ug/L         5.219      490.18 ppb         5.219   1.06%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            95213.6      495.06 ug/L         5.584      495.06 ppb         5.584   1.13%
   QC value within limits for Sr 421.552  Recovery = 99.01%
Ti 334.940†           354526.5      513.76 ug/L         5.094      513.76 ppb         5.094   0.99%
   QC value within limits for Ti 334.940  Recovery = 102.75%
Tl 190.801†             1932.2      484.94 ug/L         3.312      484.94 ppb         3.312   0.68%
   QC value within limits for Tl 190.801  Recovery = 96.99%
U 409.014†             20126.5      496.18 ug/L         5.005      496.18 ppb         5.005   1.01%
   QC value within limits for U 409.014  Recovery = 99.24%
V 292.402†             91259.0      512.63 ug/L         5.805      512.63 ppb         5.805   1.13%
   QC value within limits for V 292.402  Recovery = 102.53%
Zn 213.857†            71647.8      488.25 ug/L         4.200      488.25 ppb         4.200   0.86%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                 212042.7       11499 ug/L         145.5       11499 ppb         145.5   1.27%
   QC value within limits for SiO2  Recovery = 107.52%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756	ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667	ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135	ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848	ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093	ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797	ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198	ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818	ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763	ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182	ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618	ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359	ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817	ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239	ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303	%		10:09:54
3	Sc Radial	4249.7	4249.7	86.6	%		10:08:52
3	Y 371.029	725964.8	725964.8	82.079	%		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68	%		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798	ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190	ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643	ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484	ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540	ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451	ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510	ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493	ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166	ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306	ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824	ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920	ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523	ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000	ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543	ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915	ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130	ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607	ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07	ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769	ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606	ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498	ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648	ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634	ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188	ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173	ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661	ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929	ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598	ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512	ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635	ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674	ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731 ug/L	14731 ppb	10:16:40
2	Pb 220.353†	248482.1	260348.9	24447 ug/L	24447 ppb	10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788 ug/L	51788 ppb	10:16:40
2	Sb 206.836†	38447.2	40237.0	10413 ug/L	10413 ppb	10:16:40
2	Se 196.026†	22029.2	23096.0	10261 ug/L	10261 ppb	10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861 ug/L	47861 ppb	10:16:35
2	Sn 189.927†	75436.2	79020.2	10451 ug/L	10451 ppb	10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6 ug/L	9440.6 ppb	10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9 ug/L	9887.9 ppb	10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4 ug/L	9993.4 ppb	10:16:40
2	U 409.014†	-1890.4	793.9	-25.762 ug/L	-25.762 ppb	10:16:40
2	V 292.402†	1672052.7	1753005.2	10154 ug/L	10154 ppb	10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064 ug/L	14064 ppb	10:16:35
2	SiO2†	1854816.0	1942233.7	104910 ug/L	104910 ppb	10:17:14
3	Sc 361.383	988641.8	988641.8	95.109 %		10:16:54
3	Sc Radial	4729.3	4729.3	96.3 %		10:15:38
3	Y 371.029	819320.7	819320.7	92.634 %		10:16:54
3	Y RADIAL	5365.7	5365.7	95.02 %		10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602 ug/L	3.2602 ppb	10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512 ug/L	89.512 ppb	10:15:38
3	As 188.979†	30234.5	31825.9	10000 ug/L	10000 ppb	10:17:00
3	B 249.677†	253820.4	267339.4	5029.4 ug/L	5029.4 ppb	10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711 ug/L	13711 ppb	10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8 ug/L	2949.8 ppb	10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255 ug/L	41.255 ppb	10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7 ug/L	9764.7 ppb	10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6 ug/L	9048.6 ppb	10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049 ug/L	24049 ppb	10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842 ug/L	20842 ppb	10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040 ug/L	-4.8040 ppb	10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920 ug/L	288920 ppb	10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120 ug/L	67.120 ppb	10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3 ug/L	9608.3 ppb	10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1 ug/L	9732.1 ppb	10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49 ug/L	158.49 ppb	10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0 ug/L	9890.0 ppb	10:16:54
3	P 214.914†	38530.7	40247.0	14805 ug/L	14805 ppb	10:17:00
3	Pb 220.353†	247695.8	260509.3	24462 ug/L	24462 ppb	10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768 ug/L	51768 ppb	10:17:00
3	Sb 206.836†	38484.3	40428.7	10462 ug/L	10462 ppb	10:17:00
3	Se 196.026†	22001.3	23154.1	10287 ug/L	10287 ppb	10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957 ug/L	47957 ppb	10:16:54
3	Sn 189.927†	75099.1	78965.5	10444 ug/L	10444 ppb	10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4 ug/L	9338.4 ppb	10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1 ug/L	9968.1 ppb	10:16:48
3	Tl 190.801†	39204.4	41264.8	10043 ug/L	10043 ppb	10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525 ug/L	-16.525 ppb	10:17:00
3	V 292.402†	1668512.3	1755925.1	10171 ug/L	10171 ppb	10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095 ug/L	14095 ppb	10:16:54
3	SiO2†	1844505.7	1938761.5	104720 ug/L	104720 ppb	10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

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   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb        20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L        28.6       24016 ppb         28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L        68.9       20784 ppb         68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L     12.73507      7.1483 ppb     12.73507 178.15%
K 766.490 Radial†    1604818.8      292410 ug/L      3446.4      292410 ppb       3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†          -5.2     -33.655 ug/L      97.1262     -33.655 ppb      97.1262 288.59%
Mn 257.610†         10099618.1      9563.8 ug/L        44.75      9563.8 ppb        44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb         5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb        0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb        11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb         37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb         16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb         14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb         35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb         21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb         48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb          3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb       113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb        40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb         24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb       5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb          8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb         18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb       1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

Ca 317.933Radial†	2842.6	5033.0 ug/L	38.86	5033.0 ppb	38.86	0.77%
QC value within limits for Ca 317.933Radial Recovery = 100.66%						
Cd 226.502†	57296.6	499.49 ug/L	1.604	499.49 ppb	1.604	0.32%
QC value within limits for Cd 226.502 Recovery = 99.90%						
Co 228.616†	29764.2	490.44 ug/L	1.510	490.44 ppb	1.510	0.31%
QC value within limits for Co 228.616 Recovery = 98.09%						
Cr 267.716†	55373.5	498.28 ug/L	1.039	498.28 ppb	1.039	0.21%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	186833.2	499.20 ug/L	1.013	499.20 ppb	1.013	0.20%
QC value within limits for Cu 324.752 Recovery = 99.84%						
Fe 238.204 Radial†	413.6	5016.3 ug/L	43.97	5016.3 ppb	43.97	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 100.33%						
K 766.490 Radial†	27646.2	5030.3 ug/L	29.10	5030.3 ppb	29.10	0.58%
QC value within limits for K 766.490 Radial Recovery = 100.61%						
Mg 279.077 IEC†	115.0	5152.7 ug/L	45.64	5152.7 ppb	45.64	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 103.05%						
Mn 257.610†	527884.4	500.28 ug/L	0.793	500.28 ppb	0.793	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%						
Mo 202.031†	9375.3	497.87 ug/L	2.477	497.87 ppb	2.477	0.50%
QC value within limits for Mo 202.031 Recovery = 99.57%						
Na 589.592 Radial†	34004.4	9538.2 ug/L	12.76	9538.2 ppb	12.76	0.13%
QC value within limits for Na 589.592 Radial Recovery = 95.38%						
Ni 231.604†	25164.0	492.74 ug/L	1.916	492.74 ppb	1.916	0.39%
QC value within limits for Ni 231.604 Recovery = 98.55%						
P 214.914†	5537.8	2401.6 ug/L	5.33	2401.6 ppb	5.33	0.22%
QC value within limits for P 214.914 Recovery = 96.06%						
Pb 220.353†	5333.7	502.25 ug/L	2.030	502.25 ppb	2.030	0.40%
QC value within limits for Pb 220.353 Recovery = 100.45%						
S 181.975 Axial†	914.8	984.56 ug/L	14.228	984.56 ppb	14.228	1.45%
QC value within limits for S 181.975 Axial Recovery = 98.46%						
Sb 206.836†	1878.1	502.30 ug/L	0.614	502.30 ppb	0.614	0.12%
QC value within limits for Sb 206.836 Recovery = 100.46%						
Se 196.026†	1126.1	518.56 ug/L	3.244	518.56 ppb	3.244	0.63%
QC value within limits for Se 196.026 Recovery = 103.71%						
Si 251.611†	97340.7	2460.2 ug/L	4.93	2460.2 ppb	4.93	0.20%
QC value within limits for Si 251.611 Recovery = 98.41%						
Sn 189.927†	3741.6	495.45 ug/L	2.400	495.45 ppb	2.400	0.48%
QC value within limits for Sn 189.927 Recovery = 99.09%						
Sr 421.552†	93386.6	489.90 ug/L	1.389	489.90 ppb	1.389	0.28%
QC value within limits for Sr 421.552 Recovery = 97.98%						
Ti 334.940†	359415.4	495.61 ug/L	0.472	495.61 ppb	0.472	0.10%
QC value within limits for Ti 334.940 Recovery = 99.12%						
Tl 190.801†	2062.9	502.10 ug/L	2.272	502.10 ppb	2.272	0.45%
QC value within limits for Tl 190.801 Recovery = 100.42%						
U 409.014†	18512.1	477.03 ug/L	1.407	477.03 ppb	1.407	0.29%
QC value within limits for U 409.014 Recovery = 95.41%						
V 292.402†	86553.8	502.14 ug/L	0.660	502.14 ppb	0.660	0.13%
QC value within limits for V 292.402 Recovery = 100.43%						
Zn 213.857†	67981.0	495.14 ug/L	0.700	495.14 ppb	0.700	0.14%
QC value within limits for Zn 213.857 Recovery = 99.03%						
SiO2†	97459.5	5271.0 ug/L	21.25	5271.0 ppb	21.25	0.40%
QC value within limits for SiO2 Recovery = 98.57%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142 ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204 ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748 ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236 ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607 ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238 ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416 ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924 ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677 ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894 ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750 ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873 ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359 ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940 ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70 %		10:46:30
3	Sc Radial	4898.4	4898.4	99.8 %		10:45:03
3	Y 371.029	891482.0	891482.0	100.79 %		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70 %		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626 ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479 ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415 ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651 ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466 ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383 ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758 ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172 ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063 ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401 ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056 ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671 ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339 ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75 ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452 ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415 ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775 ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537 ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081 ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238 ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446 ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873 ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933 ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715 ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116 ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563 ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284 ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025 ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651 ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454 ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553 ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424 ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5      -1.5484 ug/L       2.77737      -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2      -4.5703 ug/L       5.15146      -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2       3.7743 ug/L       1.87844       3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3      -1.9597 ug/L       2.16197      -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2       1.5615 ug/L       0.21151       1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5       1.5214 ug/L       0.96781       1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5      -0.0343 ug/L       0.07167      -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1      -0.0500 ug/L       0.01994      -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446       0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -175.7      -4.5411 ug/L       3.27969      -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -22.7      -0.1300 ug/L       0.15236      -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217       0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3       2.3658 ug/L       1.17872       2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753	ug/L	-8.3753 ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374	ug/L	0.9374 ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728	ug/L	17.728 ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640	ug/L	1.8640 ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03	ug/L	183.03 ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144	ug/L	-36.144 ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244	ug/L	-0.8244 ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527	ug/L	0.3527 ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635	ug/L	-0.1635 ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719	ug/L	-3.3719 ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309	ug/L	4.2309 ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606	ug/L	-6.7606 ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455	ug/L	-0.4455 ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451	ug/L	-81.451 ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220	%		10:53:23
3	Sc Radial	4812.6	4812.6	98.0	%		10:52:05
3	Y 371.029	862360.3	862360.3	97.500	%		10:53:23
3	Y RADIAL	5507.3	5507.3	97.52	%		10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149	ug/L	-2.3149 ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070	ug/L	-4.1070 ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627	ug/L	-11.627 ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198	ug/L	1.4198 ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813	ug/L	-0.0813 ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080	ug/L	0.0080 ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437	ug/L	21.437 ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926	ug/L	-0.8926 ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116	ug/L	0.0116 ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157	ug/L	0.1157 ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678	ug/L	-5.1678 ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140	ug/L	382140 ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864	ug/L	62.864 ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088	ug/L	-8.8088 ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260	ug/L	-6.2260 ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035	ug/L	0.0035 ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218	ug/L	10.218 ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003	ug/L	2.5003 ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049	ug/L	-17.049 ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633	ug/L	0.8633 ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577	ug/L	16.577 ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703	ug/L	1.2703 ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98	ug/L	187.98 ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230	ug/L	-36.230 ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851	ug/L	0.0851 ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075	ug/L	0.5075 ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587	ug/L	-0.1587 ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379	ug/L	-1.5379 ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506	ug/L	6.4506 ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115	ug/L	-7.3115 ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488	ug/L	-0.5488 ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404	ug/L	-87.404 ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774 13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122 678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903 2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898 87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095 54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575 16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955 33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103 38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019 16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134 87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174 2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643 0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699 166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835 18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037 6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860 37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671 54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332 7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455 68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899 5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8 ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07 ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86 ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37 ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66 ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8 ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84 ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95 ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61 ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62 ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09 ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56 ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99 ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0 ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71 %		11:00:17
3	Sc Radial	4925.8	4925.8	100 %		10:58:53
3	Y 371.029	877905.3	877905.3	99.258 %		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84 %		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35 ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8 ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79 ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35 ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61 ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82 ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2 ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62 ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69 ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61 ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06 ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7 ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2 ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0 ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71 ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33 ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1 ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55 ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1 ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20 ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00 ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56 ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51 ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1 ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74 ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39 ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24 ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29 ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34 ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66 ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31 ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1 ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

Ca 317.933Radial†	2795.2	4949.0 ug/L	61.06	4949.0 ppb	61.06	1.23%
QC value within limits for Ca 317.933Radial Recovery = 98.98%						
Cd 226.502†	57300.2	499.53 ug/L	1.852	499.53 ppb	1.852	0.37%
QC value within limits for Cd 226.502 Recovery = 99.91%						
Co 228.616†	29608.9	487.87 ug/L	1.689	487.87 ppb	1.689	0.35%
QC value within limits for Co 228.616 Recovery = 97.57%						
Cr 267.716†	55297.6	497.60 ug/L	1.743	497.60 ppb	1.743	0.35%
QC value within limits for Cr 267.716 Recovery = 99.52%						
Cu 324.752†	186009.6	496.99 ug/L	1.464	496.99 ppb	1.464	0.29%
QC value within limits for Cu 324.752 Recovery = 99.40%						
Fe 238.204 Radial†	405.0	4912.1 ug/L	80.46	4912.1 ppb	80.46	1.64%
QC value within limits for Fe 238.204 Radial Recovery = 98.24%						
K 766.490 Radial†	27016.4	4915.6 ug/L	26.56	4915.6 ppb	26.56	0.54%
QC value within limits for K 766.490 Radial Recovery = 98.31%						
Mg 279.077 IEC†	111.4	4989.5 ug/L	96.39	4989.5 ppb	96.39	1.93%
QC value within limits for Mg 279.077 IEC Recovery = 99.79%						
Mn 257.610†	527731.1	500.13 ug/L	1.476	500.13 ppb	1.476	0.30%
QC value within limits for Mn 257.610 Recovery = 100.03%						
Mo 202.031†	9298.8	493.81 ug/L	2.195	493.81 ppb	2.195	0.44%
QC value within limits for Mo 202.031 Recovery = 98.76%						
Na 589.592 Radial†	33372.8	9361.1 ug/L	50.41	9361.1 ppb	50.41	0.54%
QC value within limits for Na 589.592 Radial Recovery = 93.61%						
Ni 231.604†	25005.0	489.63 ug/L	1.726	489.63 ppb	1.726	0.35%
QC value within limits for Ni 231.604 Recovery = 97.93%						
P 214.914†	5502.4	2386.1 ug/L	11.15	2386.1 ppb	11.15	0.47%
QC value within limits for P 214.914 Recovery = 95.45%						
Pb 220.353†	5299.9	499.06 ug/L	1.860	499.06 ppb	1.860	0.37%
QC value within limits for Pb 220.353 Recovery = 99.81%						
S 181.975 Axial†	903.8	972.73 ug/L	4.706	972.73 ppb	4.706	0.48%
QC value within limits for S 181.975 Axial Recovery = 97.27%						
Sb 206.836†	1847.1	494.01 ug/L	3.403	494.01 ppb	3.403	0.69%
QC value within limits for Sb 206.836 Recovery = 98.80%						
Se 196.026†	1106.9	509.66 ug/L	6.212	509.66 ppb	6.212	1.22%
QC value within limits for Se 196.026 Recovery = 101.93%						
Si 251.611†	97204.8	2456.9 ug/L	7.70	2456.9 ppb	7.70	0.31%
QC value within limits for Si 251.611 Recovery = 98.28%						
Sn 189.927†	3719.5	492.52 ug/L	2.434	492.52 ppb	2.434	0.49%
QC value within limits for Sn 189.927 Recovery = 98.50%						
Sr 421.552†	92292.4	484.16 ug/L	1.112	484.16 ppb	1.112	0.23%
QC value within limits for Sr 421.552 Recovery = 96.83%						
Ti 334.940†	358750.6	494.69 ug/L	1.509	494.69 ppb	1.509	0.31%
QC value within limits for Ti 334.940 Recovery = 98.94%						
Tl 190.801†	2050.0	498.98 ug/L	1.719	498.98 ppb	1.719	0.34%
QC value within limits for Tl 190.801 Recovery = 99.80%						
U 409.014†	18423.6	474.75 ug/L	1.188	474.75 ppb	1.188	0.25%
QC value within limits for U 409.014 Recovery = 94.95%						
V 292.402†	86361.9	501.00 ug/L	1.491	501.00 ppb	1.491	0.30%
QC value within limits for V 292.402 Recovery = 100.20%						
Zn 213.857†	67835.2	494.11 ug/L	1.146	494.11 ppb	1.146	0.23%
QC value within limits for Zn 213.857 Recovery = 98.82%						
SiO2†	96661.6	5227.9 ug/L	22.02	5227.9 ppb	22.02	0.42%
QC value within limits for SiO2 Recovery = 97.76%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951	ug/L	0.9951 ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458	ug/L	1.7458 ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298	ug/L	-2.7298 ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989	ug/L	2.8989 ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951	ug/L	-3.2951 ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309	ug/L	0.5309 ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661	ug/L	1.2661 ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167	ug/L	-0.1167 ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867	ug/L	-0.0867 ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171	ug/L	-1.7171 ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062	ug/L	0.7062 ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749	ug/L	-0.3749 ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912	ug/L	0.1912 ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073	ug/L	2.4073 ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43	%		11:07:13
3	Sc Radial	4909.9	4909.9	100	%		11:05:46
3	Y 371.029	889449.2	889449.2	100.56	%		11:07:13
3	Y RADIAL	5657.3	5657.3	100.2	%		11:05:46
3	Ag 328.068†	489.6	13.4	0.0605	ug/L	0.0605 ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350	ug/L	22.350 ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242	ug/L	0.7242 ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618	ug/L	7.2618 ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758	ug/L	0.0758 ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242	ug/L	0.0242 ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990	ug/L	3.8990 ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798	ug/L	0.1798 ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058	ug/L	0.0058 ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718	ug/L	0.1718 ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108	ug/L	-0.2108 ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976	ug/L	16.976 ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709	ug/L	25.709 ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52	ug/L	-176.52 ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313	ug/L	0.0313 ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939	ug/L	0.1939 ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755	ug/L	1.0755 ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707	ug/L	-0.0707 ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232	ug/L	0.5232 ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380	ug/L	0.5380 ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618	ug/L	-7.9618 ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903	ug/L	2.2903 ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492	ug/L	0.3492 ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962	ug/L	0.5962 ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103	ug/L	2.2103 ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222	ug/L	-0.0222 ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947	ug/L	-0.0947 ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125	ug/L	-2.2125 ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983	ug/L	-2.0983 ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210	ug/L	0.0210 ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153	ug/L	0.3153 ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484	ug/L	1.7484 ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5	ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62	ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4	ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79	ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50	ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7	ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14	ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22	ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73	ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06	ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23	ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73	ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1	ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2	%		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86	%		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9	ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9	ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0	ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6	ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3	ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8	ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49	ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849	%		12:17:52
3	Y 371.029	872084.7	872084.7	98.600	%		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61	ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35	ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70	ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37	ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30	ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46	ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38	ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43	ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62	ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50	ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54	ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00	ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1	ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64	ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0	ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03	ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64	ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1	ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18	ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49	ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93	ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25	ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98	ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35	ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4	ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L        3.149      507.31 ppb        3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L        3.818      500.79 ppb        3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L        3.018      504.61 ppb        3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L        2.623      506.08 ppb        2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L       45.45      5082.5 ppb       45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L       68.50      4957.3 ppb       68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L       11.74      5217.9 ppb       11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L        3.320      507.64 ppb        3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L        3.216      507.25 ppb        3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L      135.46      9625.8 ppb      135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L        3.555      502.09 ppb        3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L       11.55      2454.7 ppb       11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L        3.072      511.03 ppb        3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L        2.21      1000.2 ppb         2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L        3.960      508.48 ppb        3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L        3.225      525.79 ppb        3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L       14.63      2500.7 ppb       14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L        3.651      502.21 ppb        3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L        6.861      494.05 ppb        6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L        2.661      502.89 ppb        2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L        2.825      511.74 ppb        2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L        2.617      485.15 ppb        2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L        2.757      508.62 ppb        2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L        3.269      502.43 ppb        3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L       57.67      5346.1 ppb       57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5    -23.990 ug/L       73.3513     -23.990 ppb        73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time:** 11/30/2009 06:07:59
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/4/2009 12:48:33
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L         53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L         85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L        105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L         48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L        151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L         43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L         52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L         47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750	ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466	ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347	ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960	ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216	ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014	ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740	ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164	ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635	ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594	ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408	ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073	ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106	ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8	%		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0	%		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013	ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244	ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453	ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928	ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436	ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845	ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165	ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628	%		12:59:35
3	Y 371.029	880903.4	880903.4	99.597	%		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441	ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565	ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068	ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624	ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288	ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633	ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888	ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060	ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141	ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162	ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630	ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537	ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106	ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791	ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859	ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539	ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160	ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207	ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458	ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330	ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739	ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096	ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533	ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302	ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247	ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        187.8      34.227 ug/L       24.6248      34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758	ug/L	7.6758 ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119	ug/L	2.2119 ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324	ug/L	-7.1324 ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069	ug/L	3.1069 ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363	ug/L	-1.9363 ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149	ug/L	1.8149 ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313	ug/L	0.4313 ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017	ug/L	0.1017 ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009	ug/L	-1.3009 ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491	ug/L	-1.7491 ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527	ug/L	0.3527 ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144	ug/L	0.3144 ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249	ug/L	3.2249 ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0	%		14:06:39
3	Y RADIAL	5653.4	5653.4	100.1	%		14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078	ug/L	9.0078 ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238	ug/L	25.238 ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557	ug/L	-11.557 ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614	ug/L	26.614 ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277	ug/L	-67.277 ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433	ug/L	13.433 ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743	ug/L	-0.0743 ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53	%		14:08:07
3	Y 371.029	887847.1	887847.1	100.38	%		14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092	ug/L	-0.0092 ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368	ug/L	0.7368 ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077	ug/L	3.0077 ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964	ug/L	0.0964 ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077	ug/L	-0.0077 ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791	ug/L	0.1791 ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226	ug/L	-0.0226 ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834	ug/L	0.0834 ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251	ug/L	0.3251 ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064	ug/L	0.0064 ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662	ug/L	-0.0662 ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191	ug/L	-0.1191 ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622	ug/L	-4.6622 ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536	ug/L	-1.2536 ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407	ug/L	-6.9407 ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302	ug/L	2.5302 ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220	ug/L	-5.9220 ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899	ug/L	2.1899 ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576	ug/L	-0.1576 ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379	ug/L	0.0379 ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674	ug/L	-2.8674 ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636	ug/L	2.5636 ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930	ug/L	-0.1930 ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247	ug/L	0.2247 ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671	ug/L	4.2671 ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       141.0      25.699 ug/L        9.7077      25.699 ppb        9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.9     -40.386 ug/L       44.6154     -40.386 ppb       44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       56.4      15.809 ug/L       12.6890      15.809 ppb       12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb          59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb          14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb         179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb          10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb          13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L         5.14      2504.1 ppb           5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb          40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
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Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237	ug/L	8.7237 ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503	ug/L	-0.7503 ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231	ug/L	-7.3231 ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716	ug/L	4.0716 ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231	ug/L	-1.9231 ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718	ug/L	1.4718 ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274	ug/L	1.5274 ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146	ug/L	-0.1146 ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667	ug/L	-0.1667 ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992	ug/L	-4.3992 ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848	ug/L	-0.0848 ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817	ug/L	0.1817 ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213	ug/L	3.4213 ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101	%		15:02:30
3	Y RADIAL	5692.8	5692.8	100.8	%		15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650	ug/L	-1.9650 ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501	ug/L	16.501 ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962	ug/L	-12.962 ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364	ug/L	13.364 ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663	ug/L	48.663 ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078	ug/L	36.078 ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131	ug/L	-0.1131 ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06	%		15:03:57
3	Y 371.029	884765.2	884765.2	100.03	%		15:03:57
3	Ag 328.068†	546.5	72.1	0.2822	ug/L	0.2822 ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412	ug/L	1.2412 ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362	ug/L	0.7362 ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116	ug/L	-0.0116 ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116	ug/L	0.0116 ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212	ug/L	0.0212 ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510	ug/L	0.2510 ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157	ug/L	0.3157 ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543	ug/L	0.3543 ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154	ug/L	0.0154 ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656	ug/L	-0.0656 ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330	ug/L	-0.1330 ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179	ug/L	1.9179 ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499	ug/L	-1.5499 ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618	ug/L	-1.6618 ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470	ug/L	1.9470 ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666	ug/L	-1.0666 ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213	ug/L	1.7213 ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060	ug/L	-0.0060 ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030	ug/L	0.0030 ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751	ug/L	1.5751 ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249	ug/L	-2.0249 ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440	ug/L	-0.2440 ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181	ug/L	0.3181 ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869	ug/L	1.9869 ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3     -15.423 ug/L        6.5866     -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2      20.428 ug/L       19.9912      20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      29.809 ug/L       20.4595      29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2      32.884 ug/L        2.9232      32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb	15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb	15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb	15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb	15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb	15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb	15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb	15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb	15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb	15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb	15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb	15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb	15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb	15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %		15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %		15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb	15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb	15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb	15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb	15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb	15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb	15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb	15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %		15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %		15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb	15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb	15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb	15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb	15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb	15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb	15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb	15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb	15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb	15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb	15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb	15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb	15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb	15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb	15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb	15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb	15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb	15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb	15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb	15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb	15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb	15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb	15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb	15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb	15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb	15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L         2.287      511.43 ppb          2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L         1.146      503.91 ppb          1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L         1.662      508.31 ppb          1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L         2.326      511.16 ppb          2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L        25.16      5027.1 ppb         25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L        44.05      4939.1 ppb         44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L        81.91      5126.5 ppb         81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L         2.081      512.46 ppb          2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L         1.419      507.72 ppb          1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L        66.05      9820.7 ppb         66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L         1.302      503.63 ppb          1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L        10.07      2478.2 ppb         10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L         0.126      512.95 ppb          0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L         2.77      1003.1 ppb          2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L         3.500      515.53 ppb          3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L         2.058      527.42 ppb          2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L         9.97      2519.4 ppb          9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L         1.147      506.74 ppb          1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L         3.343      499.14 ppb          3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L         2.319      508.04 ppb          2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L         1.578      508.52 ppb          1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L         2.387      493.42 ppb          2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L         2.377      512.95 ppb          2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L         1.824      506.84 ppb          1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L        37.27      5379.2 ppb         37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120	ug/L	2.5120 ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279	ug/L	-1.9279 ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495	ug/L	-0.1495 ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770	ug/L	1.6770 ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989	ug/L	-2.4989 ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415	ug/L	1.7415 ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240	ug/L	2.0240 ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840	ug/L	0.0840 ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260	ug/L	-1.7260 ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950	ug/L	0.4950 ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658	ug/L	0.1658 ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793	ug/L	0.3793 ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045	ug/L	1.4045 ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9	%		15:58:24
3	Y RADIAL	5536.8	5536.8	98.05	%		15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014	ug/L	-2.7014 ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137	ug/L	10.137 ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928	ug/L	-19.928 ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858	ug/L	37.858 ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734	ug/L	69.734 ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211	ug/L	45.211 ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220	ug/L	-0.2220 ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773	%		15:59:52
3	Y 371.029	882258.7	882258.7	99.750	%		15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838	ug/L	-0.2838 ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697	ug/L	0.9697 ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790	ug/L	1.1790 ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208	ug/L	0.0208 ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339	ug/L	0.0339 ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026	ug/L	0.1026 ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501	ug/L	-0.2501 ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010	ug/L	0.1010 ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474	ug/L	0.1474 ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012	ug/L	0.0012 ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361	ug/L	0.1361 ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230	ug/L	0.2230 ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402	ug/L	3.5402 ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038	ug/L	1.3038 ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872	ug/L	-2.2872 ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858	ug/L	5.1858 ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930	ug/L	-1.6930 ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103	ug/L	1.3103 ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187	ug/L	1.9187 ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536	ug/L	0.0536 ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928	ug/L	-0.6928 ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296	ug/L	1.2296 ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732	ug/L	-0.2732 ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459	ug/L	0.3459 ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862	ug/L	3.4862 ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -20.252 ug/L       10.1579     -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0001 ug/L       0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1199 ug/L       0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7      0.1902 ug/L       0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      4.1321 ug/L       1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4     -0.1226 ug/L       1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0     -0.0008 ug/L       2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      2.4728 ug/L       2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1     -2.3223 ug/L       0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0      1.3081 ug/L       0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.3975 ug/L       0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5     -0.0971 ug/L       0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5      0.0132 ug/L       0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -0.5672 ug/L       1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9      0.7761 ug/L       0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4     -0.0073 ug/L       0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0      0.3381 ug/L       0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6      2.8325 ug/L       1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 29
Sample ID: 1201978326|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 16:02:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978326|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4932.6	4932.6	100	%			16:04:35
1	Y RADIAL	5701.0	5701.0	101.0	%			16:04:35
1	Al 396.153Radial†	-28.2	15.7	10.406	ug/L	10.406	ppb	16:04:35
1	Ca 317.933Radial†	22.5	4.6	8.0674	ug/L	8.0674	ppb	16:04:55
1	Fe 238.204 Radial†	10.8	-0.3	-3.4536	ug/L	-3.4536	ppb	16:04:55
1	K 766.490 Radial†	2630.1	48.4	8.8026	ug/L	8.8026	ppb	16:04:35
1	Mg 279.077 IEC†	3.4	0.9	39.158	ug/L	39.158	ppb	16:04:55
1	Na 589.592 Radial†	-1152.5	132.8	37.244	ug/L	37.244	ppb	16:04:35
1	Sr 421.552†	4.1	11.5	0.0602	ug/L	0.0602	ppb	16:04:35
1	Sc 361.383	1047796.0	1047796.0	100.80	%			16:05:52
1	Y 371.029	890128.2	890128.2	100.64	%			16:05:52
1	Ag 328.068†	470.6	-7.2	-0.0322	ug/L	-0.0322	ppb	16:05:57
1	As 188.979†	-45.4	-8.4	-2.6125	ug/L	-2.6125	ppb	16:06:17
1	B 249.677†	-465.2	4.6	0.0868	ug/L	0.0868	ppb	16:06:17
1	Ba 233.527†	33.4	33.2	0.2130	ug/L	0.2130	ppb	16:06:17
1	Be 313.107†	-4907.8	5.1	0.0022	ug/L	0.0022	ppb	16:05:57
1	Cd 226.502†	-245.2	-7.6	-0.0657	ug/L	-0.0657	ppb	16:06:17
1	Co 228.616†	-85.7	1.3	0.0199	ug/L	0.0199	ppb	16:06:17
1	Cr 267.716†	99.7	11.1	0.0987	ug/L	0.0987	ppb	16:06:17
1	Cu 324.752†	9071.5	62.0	0.1655	ug/L	0.1655	ppb	16:05:57
1	Mn 257.610†	701.4	119.2	0.1118	ug/L	0.1118	ppb	16:06:17
1	Mo 202.031†	24.4	-5.0	-0.2655	ug/L	-0.2655	ppb	16:06:17
1	Ni 231.604†	152.3	19.2	0.3755	ug/L	0.3755	ppb	16:06:17
1	P 214.914†	287.8	20.4	9.1377	ug/L	9.1377	ppb	16:06:17
1	Pb 220.353†	-83.3	-7.0	-0.6596	ug/L	-0.6596	ppb	16:06:17
1	S 181.975 Axial†	54.2	-6.4	-6.8784	ug/L	-6.8784	ppb	16:06:17
1	Sb 206.836†	50.2	15.2	4.0336	ug/L	4.0336	ppb	16:06:17
1	Se 196.026†	-19.6	1.9	0.8388	ug/L	0.8388	ppb	16:06:17
1	Si 251.611†	842.9	278.6	7.0704	ug/L	7.0704	ppb	16:06:17
1	Sn 189.927†	11.3	15.5	2.0556	ug/L	2.0556	ppb	16:06:17
1	Ti 334.940†	-1063.2	205.7	0.2829	ug/L	0.2829	ppb	16:05:57
1	Tl 190.801†	-47.9	-3.2	-0.7814	ug/L	-0.7814	ppb	16:06:17
1	U 409.014†	-2690.0	105.4	2.7241	ug/L	2.7241	ppb	16:05:52
1	V 292.402†	-1632.0	-10.5	-0.0575	ug/L	-0.0575	ppb	16:05:57
1	Zn 213.857†	1197.6	302.5	2.2192	ug/L	2.2192	ppb	16:06:17
1	SiO2†	871.6	265.6	14.426	ug/L	14.426	ppb	16:07:23
2	Sc Radial	4922.9	4922.9	100	%			16:05:00
2	Y RADIAL	5665.1	5665.1	100.3	%			16:05:00
2	Al 396.153Radial†	-44.3	-0.4	-0.2733	ug/L	-0.2733	ppb	16:05:00
2	Ca 317.933Radial†	19.5	1.6	2.8673	ug/L	2.8673	ppb	16:05:20
2	Fe 238.204 Radial†	10.8	-0.2	-2.4500	ug/L	-2.4500	ppb	16:05:20
2	K 766.490 Radial†	2568.4	-7.9	-1.4645	ug/L	-1.4645	ppb	16:05:00
2	Mg 279.077 IEC†	3.0	0.5	23.514	ug/L	23.514	ppb	16:05:20
2	Na 589.592 Radial†	-1173.1	110.0	30.847	ug/L	30.847	ppb	16:05:00
2	Sr 421.552†	-1.2	6.2	0.0326	ug/L	0.0326	ppb	16:05:00
2	Sc 361.383	1045732.5	1045732.5	100.60	%			16:06:22
2	Y 371.029	888127.7	888127.7	100.41	%			16:06:22
2	Ag 328.068†	411.6	-64.9	-0.2604	ug/L	-0.2604	ppb	16:06:27
2	As 188.979†	-33.8	3.0	0.9431	ug/L	0.9431	ppb	16:06:47
2	B 249.677†	-464.8	4.1	0.0771	ug/L	0.0771	ppb	16:06:47
2	Ba 233.527†	9.7	9.7	0.0619	ug/L	0.0619	ppb	16:06:47
2	Be 313.107†	-4970.4	-66.8	-0.0202	ug/L	-0.0202	ppb	16:06:27
2	Cd 226.502†	-238.1	-1.0	-0.0083	ug/L	-0.0083	ppb	16:06:47
2	Co 228.616†	-82.8	4.0	0.0642	ug/L	0.0642	ppb	16:06:47
2	Cr 267.716†	150.6	61.9	0.5551	ug/L	0.5551	ppb	16:06:47
2	Cu 324.752†	9047.6	56.1	0.1496	ug/L	0.1496	ppb	16:06:27
2	Mn 257.610†	695.9	115.1	0.1083	ug/L	0.1083	ppb	16:06:47
2	Mo 202.031†	22.4	-7.0	-0.3715	ug/L	-0.3715	ppb	16:06:47
2	Ni 231.604†	141.5	8.8	0.1717	ug/L	0.1717	ppb	16:06:47

2	P 214.914†	298.8	31.9	14.259	ug/L	14.259 ppb	16:06:47
2	Pb 220.353†	-91.7	-15.5	-1.4603	ug/L	-1.4603 ppb	16:06:47
2	S 181.975 Axial†	56.1	-4.4	-4.7179	ug/L	-4.7179 ppb	16:06:47
2	Sb 206.836†	62.0	27.0	7.1139	ug/L	7.1139 ppb	16:06:47
2	Se 196.026†	-25.3	-3.7	-1.6687	ug/L	-1.6687 ppb	16:06:47
2	Si 251.611†	833.7	271.1	6.8868	ug/L	6.8868 ppb	16:06:47
2	Sn 189.927†	9.2	13.5	1.7797	ug/L	1.7797 ppb	16:06:47
2	Ti 334.940†	-1036.3	230.3	0.3164	ug/L	0.3164 ppb	16:06:27
2	Tl 190.801†	-48.5	-4.0	-0.9635	ug/L	-0.9635 ppb	16:06:47
2	U 409.014†	-2683.6	106.4	2.7500	ug/L	2.7500 ppb	16:06:22
2	V 292.402†	-1620.0	-1.8	-0.0100	ug/L	-0.0100 ppb	16:06:27
2	Zn 213.857†	1174.4	281.8	2.0687	ug/L	2.0687 ppb	16:06:47
2	SiO2†	829.9	225.9	12.283	ug/L	12.283 ppb	16:07:28
3	Sc Radial	4880.5	4880.5	99.4	%		16:05:25
3	Y RADIAL	5628.3	5628.3	99.67	%		16:05:25
3	Al 396.153Radial†	-54.2	-10.8	-7.0720	ug/L	-7.0720 ppb	16:05:25
3	Ca 317.933Radial†	25.5	7.8	13.789	ug/L	13.789 ppb	16:05:45
3	Fe 238.204 Radial†	11.9	0.9	11.439	ug/L	11.439 ppb	16:05:45
3	K 766.490 Radial†	2528.4	-26.0	-4.7596	ug/L	-4.7596 ppb	16:05:25
3	Mg 279.077 IEC†	3.8	1.3	58.615	ug/L	58.615 ppb	16:05:45
3	Na 589.592 Radial†	-1099.0	174.4	48.923	ug/L	48.923 ppb	16:05:25
3	Sr 421.552†	-12.5	-5.2	-0.0274	ug/L	-0.0274 ppb	16:05:25
3	Sc 361.383	1052110.0	1052110.0	101.21	%		16:06:53
3	Y 371.029	894573.2	894573.2	101.14	%		16:06:53
3	Ag 328.068†	477.4	-2.4	-0.0078	ug/L	-0.0078 ppb	16:06:58
3	As 188.979†	-40.0	-2.9	-0.9061	ug/L	-0.9061 ppb	16:07:18
3	B 249.677†	-462.1	9.5	0.1785	ug/L	0.1785 ppb	16:07:18
3	Ba 233.527†	19.2	19.0	0.1226	ug/L	0.1226 ppb	16:07:18
3	Be 313.107†	-4864.4	67.9	0.0218	ug/L	0.0218 ppb	16:06:58
3	Cd 226.502†	-235.8	2.6	0.0219	ug/L	0.0219 ppb	16:07:18
3	Co 228.616†	-84.9	2.4	0.0368	ug/L	0.0368 ppb	16:07:18
3	Cr 267.716†	131.5	42.1	0.3779	ug/L	0.3779 ppb	16:07:18
3	Cu 324.752†	9038.5	-7.4	-0.0193	ug/L	-0.0193 ppb	16:06:58
3	Mn 257.610†	703.9	118.8	0.1125	ug/L	0.1125 ppb	16:07:18
3	Mo 202.031†	15.2	-14.2	-0.7520	ug/L	-0.7520 ppb	16:07:18
3	Ni 231.604†	134.1	0.6	0.0112	ug/L	0.0112 ppb	16:07:18
3	P 214.914†	282.0	13.5	6.0665	ug/L	6.0665 ppb	16:07:18
3	Pb 220.353†	-81.6	-5.1	-0.4804	ug/L	-0.4804 ppb	16:07:18
3	S 181.975 Axial†	62.9	2.1	2.2393	ug/L	2.2393 ppb	16:07:18
3	Sb 206.836†	61.1	25.7	6.8028	ug/L	6.8028 ppb	16:07:18
3	Se 196.026†	-16.2	5.4	2.4187	ug/L	2.4187 ppb	16:07:18
3	Si 251.611†	849.1	281.3	7.1499	ug/L	7.1499 ppb	16:07:18
3	Sn 189.927†	16.7	20.8	2.7541	ug/L	2.7541 ppb	16:07:18
3	Ti 334.940†	-1053.5	219.6	0.3025	ug/L	0.3025 ppb	16:06:58
3	Tl 190.801†	-36.3	8.4	2.0381	ug/L	2.0381 ppb	16:07:18
3	U 409.014†	-2722.0	84.7	2.1866	ug/L	2.1866 ppb	16:06:53
3	V 292.402†	-1627.7	0.3	-0.0055	ug/L	-0.0055 ppb	16:06:58
3	Zn 213.857†	1207.3	307.2	2.2544	ug/L	2.2544 ppb	16:07:18
3	SiO2†	828.4	219.4	11.939	ug/L	11.939 ppb	16:07:33

Mean Data: 1201978326|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048546.1	100.87	%	0.313				0.31%
Sc Radial	4912.0	100	%	0.6				0.56%
Y 371.029	890943.0	100.73	%	0.373				0.37%
Y RADIAL	5664.8	100.3	%	0.64				0.64%
Ag 328.068†	-24.8	-0.1001	ug/L	0.13934	-0.1001	ppb	0.13934	139.15%
Al 396.153Radial†	1.5	1.0203	ug/L	8.81059	1.0203	ppb	8.81059	863.51%
As 188.979†	-2.8	-0.8585	ug/L	1.77824	-0.8585	ppb	1.77824	207.13%
B 249.677†	6.1	0.1141	ug/L	0.05597	0.1141	ppb	0.05597	49.05%
Ba 233.527†	20.6	0.1325	ug/L	0.07601	0.1325	ppb	0.07601	57.37%
Be 313.107†	2.1	0.0012	ug/L	0.02100	0.0012	ppb	0.02100	>999.9%
Ca 317.933Radial†	4.7	8.2412	ug/L	5.46291	8.2412	ppb	5.46291	66.29%
Cd 226.502†	-2.0	-0.0174	ug/L	0.04451	-0.0174	ppb	0.04451	256.23%
Co 228.616†	2.6	0.0403	ug/L	0.02233	0.0403	ppb	0.02233	55.42%
Cr 267.716†	38.4	0.3439	ug/L	0.23006	0.3439	ppb	0.23006	66.90%
Cu 324.752†	36.9	0.0986	ug/L	0.10239	0.0986	ppb	0.10239	103.84%
Fe 238.204 Radial†	0.2	1.8453	ug/L	8.32389	1.8453	ppb	8.32389	451.10%
K 766.490 Radial†	4.8	0.8595	ug/L	7.07346	0.8595	ppb	7.07346	822.99%

Mg 279.077 IEC†	0.9	40.429	ug/L	17.5850	40.429	ppb	17.5850 43.50%
Mn 257.610†	117.7	0.1109	ug/L	0.00225	0.1109	ppb	0.00225 2.03%
Mo 202.031†	-8.7	-0.4630	ug/L	0.25584	-0.4630	ppb	0.25584 55.26%
Na 589.592 Radial†	139.1	39.005	ug/L	9.1656	39.005	ppb	9.1656 23.50%
Ni 231.604†	9.5	0.1861	ug/L	0.18257	0.1861	ppb	0.18257 98.11%
P 214.914†	21.9	9.8210	ug/L	4.13868	9.8210	ppb	4.13868 42.14%
Pb 220.353†	-9.2	-0.8668	ug/L	0.52173	-0.8668	ppb	0.52173 60.19%
S 181.975 Axial†	-2.9	-3.1190	ug/L	4.76449	-3.1190	ppb	4.76449 152.76%
Sb 206.836†	22.6	5.9834	ug/L	1.69577	5.9834	ppb	1.69577 28.34%
Se 196.026†	1.2	0.5296	ug/L	2.06114	0.5296	ppb	2.06114 389.18%
Si 251.611†	277.0	7.0357	ug/L	0.13492	7.0357	ppb	0.13492 1.92%
Sn 189.927†	16.6	2.1965	ug/L	0.50223	2.1965	ppb	0.50223 22.87%
Sr 421.552†	4.2	0.0218	ug/L	0.04480	0.0218	ppb	0.04480 205.23%
Ti 334.940†	218.5	0.3006	ug/L	0.01686	0.3006	ppb	0.01686 5.61%
Tl 190.801†	0.4	0.0977	ug/L	1.68287	0.0977	ppb	1.68287 >999.9%
U 409.014†	98.8	2.5536	ug/L	0.31806	2.5536	ppb	0.31806 12.46%
V 292.402†	-4.0	-0.0243	ug/L	0.02883	-0.0243	ppb	0.02883 118.46%
Zn 213.857†	297.2	2.1808	ug/L	0.09862	2.1808	ppb	0.09862 4.52%
SiO2†	237.0	12.883	ug/L	1.3476	12.883	ppb	1.3476 10.46%

Sequence No.: 30
Sample ID: 1201978327|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 12/4/2009 16:09:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978327|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4958.9	4958.9	101	%			16:11:38
1	Y RADIAL	5669.9	5669.9	100.4	%			16:11:38
1	Al 396.153Radial†	8113.0	8076.3	5311.1	ug/L	5311.1	ppb	16:11:38
1	Ca 317.933Radial†	3022.8	2975.0	5267.3	ug/L	5267.3	ppb	16:11:58
1	Fe 238.204 Radial†	449.9	434.4	5267.9	ug/L	5267.9	ppb	16:11:58
1	K 766.490 Radial†	31238.0	28358.5	5161.7	ug/L	5161.7	ppb	16:11:38
1	Mg 279.077 IEC†	123.0	119.3	5343.4	ug/L	5343.4	ppb	16:11:58
1	Na 589.592 Radial†	17471.8	18578.4	5211.2	ug/L	5211.2	ppb	16:11:38
1	Sr 421.552†	101178.1	100181.7	525.55	ug/L	525.55	ppb	16:11:38
1	Sc 361.383	1050652.2	1050652.2	101.07	%			16:12:57
1	Y 371.029	879674.3	879674.3	99.458	%			16:12:57
1	Ag 328.068†	132265.3	130385.2	520.02	ug/L	520.02	ppb	16:12:57
1	As 188.979†	1620.6	1640.0	515.61	ug/L	515.61	ppb	16:13:17
1	B 249.677†	27101.4	27279.4	513.56	ug/L	513.56	ppb	16:12:57
1	Ba 233.527†	84009.8	83116.8	535.34	ug/L	535.34	ppb	16:12:57
1	Be 313.107†	1679850.3	1666866.9	520.75	ug/L	520.75	ppb	16:12:57
1	Cd 226.502†	59978.0	59576.1	519.36	ug/L	519.36	ppb	16:12:57
1	Co 228.616†	31004.2	30760.9	506.83	ug/L	506.83	ppb	16:13:17
1	Cr 267.716†	58436.2	57727.2	519.46	ug/L	519.46	ppb	16:12:57
1	Cu 324.752†	209196.2	198034.9	529.12	ug/L	529.12	ppb	16:12:57
1	Mn 257.610†	566653.9	560053.5	530.77	ug/L	530.77	ppb	16:12:57
1	Mo 202.031†	9717.9	9585.4	509.04	ug/L	509.04	ppb	16:13:17
1	Ni 231.604†	26636.3	26221.2	513.44	ug/L	513.44	ppb	16:13:17
1	P 214.914†	1593.6	1311.6	506.78	ug/L	506.78	ppb	16:13:17
1	Pb 220.353†	5528.1	5544.9	522.11	ug/L	522.11	ppb	16:13:17
1	S 181.975 Axial†	4891.6	4779.5	5148.4	ug/L	5148.4	ppb	16:13:17
1	Sb 206.836†	2085.9	2029.1	542.45	ug/L	542.45	ppb	16:13:17
1	Se 196.026†	1103.9	1113.6	513.95	ug/L	513.95	ppb	16:13:17
1	Si 251.611†	206012.2	203264.6	5150.0	ug/L	5150.0	ppb	16:12:57
1	Sn 189.927†	4058.0	4019.2	532.19	ug/L	532.19	ppb	16:13:17
1	Ti 334.940†	383578.9	380761.7	525.03	ug/L	525.03	ppb	16:12:57
1	Tl 190.801†	2102.4	2124.3	517.21	ug/L	517.21	ppb	16:13:17
1	U 409.014†	18070.3	20652.2	532.28	ug/L	532.28	ppb	16:12:57
1	V 292.402†	90867.9	91510.5	530.71	ug/L	530.71	ppb	16:12:57
1	Zn 213.857†	71715.8	70067.8	510.28	ug/L	510.28	ppb	16:12:57
1	SiO2†	206309.8	203517.6	11035	ug/L	11035	ppb	16:14:18
2	Sc Radial	4963.2	4963.2	101	%			16:12:03
2	Y RADIAL	5655.3	5655.3	100.1	%			16:12:03
2	Al 396.153Radial†	8080.8	8037.5	5285.3	ug/L	5285.3	ppb	16:12:03
2	Ca 317.933Radial†	2994.5	2944.4	5213.1	ug/L	5213.1	ppb	16:12:23
2	Fe 238.204 Radial†	447.3	431.5	5232.9	ug/L	5232.9	ppb	16:12:23
2	K 766.490 Radial†	30944.8	28041.7	5104.0	ug/L	5104.0	ppb	16:12:03
2	Mg 279.077 IEC†	119.6	115.8	5189.1	ug/L	5189.1	ppb	16:12:23
2	Na 589.592 Radial†	17434.6	18526.6	5196.7	ug/L	5196.7	ppb	16:12:03
2	Sr 421.552†	100365.2	99290.5	520.87	ug/L	520.87	ppb	16:12:03
2	Sc 361.383	1045640.0	1045640.0	100.59	%			16:13:24
2	Y 371.029	876102.0	876102.0	99.054	%			16:13:24
2	Ag 328.068†	131586.0	130337.2	519.82	ug/L	519.82	ppb	16:13:24
2	As 188.979†	1635.5	1662.5	522.59	ug/L	522.59	ppb	16:13:45
2	B 249.677†	26997.6	27304.7	514.03	ug/L	514.03	ppb	16:13:24
2	Ba 233.527†	83542.1	83050.2	534.91	ug/L	534.91	ppb	16:13:24
2	Be 313.107†	1672613.6	1667639.4	520.99	ug/L	520.99	ppb	16:13:24
2	Cd 226.502†	59555.6	59440.5	518.18	ug/L	518.18	ppb	16:13:24
2	Co 228.616†	31088.2	30991.5	510.64	ug/L	510.64	ppb	16:13:45
2	Cr 267.716†	58139.2	57709.1	519.30	ug/L	519.30	ppb	16:13:24
2	Cu 324.752†	208437.3	198272.5	529.76	ug/L	529.76	ppb	16:13:24
2	Mn 257.610†	563467.5	559573.2	530.31	ug/L	530.31	ppb	16:13:24
2	Mo 202.031†	9765.4	9678.6	513.99	ug/L	513.99	ppb	16:13:45
2	Ni 231.604†	26665.8	26376.8	516.49	ug/L	516.49	ppb	16:13:45

2	P 214.914†	1603.2	1328.6	514.37 ug/L	514.37 ppb	16:13:45
2	Pb 220.353†	5546.0	5588.9	526.25 ug/L	526.25 ppb	16:13:45
2	S 181.975 Axial†	4888.7	4799.8	5170.3 ug/L	5170.3 ppb	16:13:45
2	Sb 206.836†	2089.5	2042.5	546.17 ug/L	546.17 ppb	16:13:45
2	Se 196.026†	1106.1	1121.0	517.11 ug/L	517.11 ppb	16:13:45
2	Si 251.611†	205001.7	203237.0	5149.2 ug/L	5149.2 ppb	16:13:24
2	Sn 189.927†	4063.4	4043.8	535.45 ug/L	535.45 ppb	16:13:45
2	Ti 334.940†	381741.4	380754.2	525.02 ug/L	525.02 ppb	16:13:24
2	Tl 190.801†	2126.4	2158.1	525.37 ug/L	525.37 ppb	16:13:45
2	U 409.014†	17926.3	20594.7	530.80 ug/L	530.80 ppb	16:13:24
2	V 292.402†	90378.3	91454.7	530.46 ug/L	530.46 ppb	16:13:24
2	Zn 213.857†	71330.6	70025.1	509.95 ug/L	509.95 ppb	16:13:24
2	SiO2†	206080.2	204267.8	11075 ug/L	11075 ppb	16:14:23
3	Sc Radial	4914.8	4914.8	100 %		16:12:28
3	Y RADIAL	5625.1	5625.1	99.61 %		16:12:28
3	Al 396.153Radial†	8063.4	8098.9	5325.8 ug/L	5325.8 ppb	16:12:28
3	Ca 317.933Radial†	3041.7	3020.7	5348.3 ug/L	5348.3 ppb	16:12:48
3	Fe 238.204 Radial†	452.2	440.8	5345.2 ug/L	5345.2 ppb	16:12:48
3	K 766.490 Radial†	30932.4	28331.0	5156.8 ug/L	5156.8 ppb	16:12:28
3	Mg 279.077 IEC†	122.5	119.9	5370.1 ug/L	5370.1 ppb	16:12:48
3	Na 589.592 Radial†	17300.1	18562.2	5206.7 ug/L	5206.7 ppb	16:12:28
3	Sr 421.552†	99856.3	99760.7	523.34 ug/L	523.34 ppb	16:12:28
3	Sc 361.383	1051624.1	1051624.1	101.17 %		16:13:52
3	Y 371.029	882020.4	882020.4	99.723 %		16:13:52
3	Ag 328.068†	132258.1	130257.2	519.54 ug/L	519.54 ppb	16:13:52
3	As 188.979†	1636.9	1654.6	520.16 ug/L	520.16 ppb	16:14:12
3	B 249.677†	27226.7	27378.4	515.40 ug/L	515.40 ppb	16:13:52
3	Ba 233.527†	84017.1	83047.2	534.89 ug/L	534.89 ppb	16:13:52
3	Be 313.107†	1682549.8	1667999.2	521.10 ug/L	521.10 ppb	16:13:52
3	Cd 226.502†	59890.8	59435.0	518.12 ug/L	518.12 ppb	16:13:52
3	Co 228.616†	31439.2	31162.6	513.46 ug/L	513.46 ppb	16:14:12
3	Cr 267.716†	58446.0	57683.5	519.07 ug/L	519.07 ppb	16:13:52
3	Cu 324.752†	209521.8	198165.4	529.48 ug/L	529.48 ppb	16:13:52
3	Mn 257.610†	565740.6	558632.6	529.43 ug/L	529.43 ppb	16:13:52
3	Mo 202.031†	9864.9	9721.8	516.29 ug/L	516.29 ppb	16:14:12
3	Ni 231.604†	26968.8	26525.5	519.40 ug/L	519.40 ppb	16:14:12
3	P 214.914†	1624.7	1340.8	519.84 ug/L	519.84 ppb	16:14:12
3	Pb 220.353†	5608.9	5619.7	529.15 ug/L	529.15 ppb	16:14:12
3	S 181.975 Axial†	4949.8	4832.6	5205.5 ug/L	5205.5 ppb	16:14:12
3	Sb 206.836†	2101.2	2042.3	546.21 ug/L	546.21 ppb	16:14:12
3	Se 196.026†	1130.6	1138.9	525.48 ug/L	525.48 ppb	16:14:12
3	Si 251.611†	205851.2	202917.1	5141.0 ug/L	5141.0 ppb	16:13:52
3	Sn 189.927†	4109.2	4066.1	538.41 ug/L	538.41 ppb	16:14:12
3	Ti 334.940†	383544.0	380376.6	524.50 ug/L	524.50 ppb	16:13:52
3	Tl 190.801†	2140.4	2160.0	525.79 ug/L	525.79 ppb	16:14:12
3	U 409.014†	18073.3	20638.6	531.92 ug/L	531.92 ppb	16:13:52
3	V 292.402†	90832.3	91392.2	530.13 ug/L	530.13 ppb	16:13:52
3	Zn 213.857†	71564.1	69852.3	508.65 ug/L	508.65 ppb	16:13:52
3	SiO2†	206714.7	203729.2	11046 ug/L	11046 ppb	16:14:28

Mean Data: 1201978327|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049305.4	100.94	%	0.309				0.31%
Sc Radial	4945.6	101	%	0.5				0.54%
Y 371.029	879265.6	99.412	%	0.3370				0.34%
Y RADIAL	5650.1	100.1	%	0.40				0.40%
Ag 328.068†	130326.5	519.80	ug/L	0.245	519.80	ppb	0.245	0.05%
Al 396.153Radial†	8070.9	5307.4	ug/L	20.48	5307.4	ppb	20.48	0.39%
As 188.979†	1652.4	519.45	ug/L	3.545	519.45	ppb	3.545	0.68%
B 249.677†	27320.8	514.33	ug/L	0.958	514.33	ppb	0.958	0.19%
Ba 233.527†	83071.4	535.04	ug/L	0.253	535.04	ppb	0.253	0.05%
Be 313.107†	1667501.8	520.95	ug/L	0.180	520.95	ppb	0.180	0.03%
Ca 317.933Radial†	2980.0	5276.3	ug/L	68.03	5276.3	ppb	68.03	1.29%
Cd 226.502†	59483.9	518.55	ug/L	0.696	518.55	ppb	0.696	0.13%
Co 228.616†	30971.7	510.31	ug/L	3.329	510.31	ppb	3.329	0.65%
Cr 267.716†	57706.6	519.28	ug/L	0.197	519.28	ppb	0.197	0.04%
Cu 324.752†	198157.6	529.45	ug/L	0.317	529.45	ppb	0.317	0.06%
Fe 238.204 Radial†	435.6	5282.0	ug/L	57.45	5282.0	ppb	57.45	1.09%
K 766.490 Radial†	28243.7	5140.9	ug/L	31.98	5140.9	ppb	31.98	0.62%

Mg 279.077 IEC†	118.3	5300.9	ug/L	97.74	5300.9	ppb	97.74	1.84%
Mn 257.610†	559419.8	530.17	ug/L	0.680	530.17	ppb	0.680	0.13%
Mo 202.031†	9661.9	513.11	ug/L	3.701	513.11	ppb	3.701	0.72%
Na 589.592 Radial†	18555.8	5204.9	ug/L	7.43	5204.9	ppb	7.43	0.14%
Ni 231.604†	26374.5	516.45	ug/L	2.979	516.45	ppb	2.979	0.58%
P 214.914†	1327.0	513.66	ug/L	6.563	513.66	ppb	6.563	1.28%
Pb 220.353†	5584.5	525.83	ug/L	3.537	525.83	ppb	3.537	0.67%
S 181.975 Axial†	4804.0	5174.7	ug/L	28.85	5174.7	ppb	28.85	0.56%
Sb 206.836†	2038.0	544.94	ug/L	2.158	544.94	ppb	2.158	0.40%
Se 196.026†	1124.5	518.85	ug/L	5.955	518.85	ppb	5.955	1.15%
Si 251.611†	203139.6	5146.7	ug/L	4.97	5146.7	ppb	4.97	0.10%
Sn 189.927†	4043.0	535.35	ug/L	3.108	535.35	ppb	3.108	0.58%
Sr 421.552†	99744.3	523.25	ug/L	2.339	523.25	ppb	2.339	0.45%
Ti 334.940†	380630.8	524.85	ug/L	0.301	524.85	ppb	0.301	0.06%
Tl 190.801†	2147.5	522.79	ug/L	4.838	522.79	ppb	4.838	0.93%
U 409.014†	20628.5	531.67	ug/L	0.773	531.67	ppb	0.773	0.15%
V 292.402†	91452.4	530.43	ug/L	0.294	530.43	ppb	0.294	0.06%
Zn 213.857†	69981.7	509.63	ug/L	0.863	509.63	ppb	0.863	0.17%
SiO2†	203838.2	11052	ug/L	21.0	11052	ppb	21.0	0.19%

Sequence No.: 32
Sample ID: 1201978328|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 12/4/2009 16:23:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978328|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4948.8	4948.8	101	%			16:25:32
1	Y RADIAL	5689.1	5689.1	100.7	%			16:25:32
1	Al 396.153Radial†	-43.8	0.3	0.2043	ug/L	0.2043	ppb	16:25:32
1	Ca 317.933Radial†	23.6	5.6	9.8315	ug/L	9.8315	ppb	16:25:52
1	Fe 238.204 Radial†	12.6	1.5	17.696	ug/L	17.696	ppb	16:25:52
1	K 766.490 Radial†	2581.7	-8.2	-1.5491	ug/L	-1.5491	ppb	16:25:32
1	Mg 279.077 IEC†	5.7	3.1	139.57	ug/L	139.57	ppb	16:25:52
1	Na 589.592 Radial†	-1111.9	176.8	49.599	ug/L	49.599	ppb	16:25:32
1	Sr 421.552†	21.2	28.4	0.1489	ug/L	0.1489	ppb	16:25:32
1	Sc 361.383	1061054.4	1061054.4	102.08	%			16:26:48
1	Y 371.029	900097.4	900097.4	101.77	%			16:26:48
1	Ag 328.068†	495.2	11.1	0.0469	ug/L	0.0469	ppb	16:26:53
1	As 188.979†	-36.4	0.9	0.2997	ug/L	0.2997	ppb	16:27:14
1	B 249.677†	-491.0	-14.9	-0.2843	ug/L	-0.2843	ppb	16:27:14
1	Ba 233.527†	3.3	3.2	0.0216	ug/L	0.0216	ppb	16:27:14
1	Be 313.107†	-4910.6	63.1	0.0205	ug/L	0.0205	ppb	16:26:53
1	Cd 226.502†	-227.8	12.4	0.1065	ug/L	0.1065	ppb	16:27:14
1	Co 228.616†	-84.8	3.2	0.0506	ug/L	0.0506	ppb	16:27:14
1	Cr 267.716†	141.5	50.9	0.4565	ug/L	0.4565	ppb	16:27:14
1	Cu 324.752†	9070.6	-51.3	-0.1360	ug/L	-0.1360	ppb	16:26:53
1	Mn 257.610†	3120.7	2480.5	2.3481	ug/L	2.3481	ppb	16:26:53
1	Mo 202.031†	24.0	-5.7	-0.3034	ug/L	-0.3034	ppb	16:27:14
1	Ni 231.604†	129.3	-5.2	-0.1023	ug/L	-0.1023	ppb	16:27:14
1	P 214.914†	276.6	5.9	2.6490	ug/L	2.6490	ppb	16:27:14
1	Pb 220.353†	-82.4	-5.2	-0.4874	ug/L	-0.4874	ppb	16:27:14
1	S 181.975 Axial†	51.9	-9.3	-9.9671	ug/L	-9.9671	ppb	16:27:14
1	Sb 206.836†	49.3	13.6	3.5927	ug/L	3.5927	ppb	16:27:14
1	Se 196.026†	-18.1	3.7	1.6896	ug/L	1.6896	ppb	16:27:14
1	Si 251.611†	1109.6	529.4	13.448	ug/L	13.448	ppb	16:27:14
1	Sn 189.927†	3.2	7.5	0.9932	ug/L	0.9932	ppb	16:27:14
1	Ti 334.940†	-996.5	284.2	0.3909	ug/L	0.3909	ppb	16:26:53
1	Tl 190.801†	-42.3	2.8	0.7035	ug/L	0.7035	ppb	16:27:14
1	U 409.014†	-2705.8	123.2	3.1828	ug/L	3.1828	ppb	16:26:48
1	V 292.402†	-1627.2	14.4	0.0844	ug/L	0.0844	ppb	16:26:53
1	Zn 213.857†	1036.1	129.4	0.9454	ug/L	0.9454	ppb	16:27:14
1	SiO2†	1177.3	554.3	30.133	ug/L	30.133	ppb	16:28:20
2	Sc Radial	5027.2	5027.2	102	%			16:25:57
2	Y RADIAL	5771.3	5771.3	102.2	%			16:25:57
2	Al 396.153Radial†	-27.9	16.6	10.921	ug/L	10.921	ppb	16:25:57
2	Ca 317.933Radial†	30.5	12.0	21.199	ug/L	21.199	ppb	16:26:17
2	Fe 238.204 Radial†	11.3	0.1	1.0451	ug/L	1.0451	ppb	16:26:17
2	K 766.490 Radial†	2506.0	-122.0	-22.288	ug/L	-22.288	ppb	16:25:57
2	Mg 279.077 IEC†	3.0	0.4	20.081	ug/L	20.081	ppb	16:26:17
2	Na 589.592 Radial†	-1140.9	165.7	46.469	ug/L	46.469	ppb	16:25:57
2	Sr 421.552†	29.2	35.9	0.1881	ug/L	0.1881	ppb	16:25:57
2	Sc 361.383	1057285.3	1057285.3	101.71	%			16:27:19
2	Y 371.029	897680.4	897680.4	101.49	%			16:27:19
2	Ag 328.068†	541.1	57.9	0.2287	ug/L	0.2287	ppb	16:27:24
2	As 188.979†	-41.2	-3.9	-1.2033	ug/L	-1.2033	ppb	16:27:44
2	B 249.677†	-498.8	-24.3	-0.4589	ug/L	-0.4589	ppb	16:27:44
2	Ba 233.527†	3.7	3.7	0.0241	ug/L	0.0241	ppb	16:27:44
2	Be 313.107†	-4893.1	63.2	0.0204	ug/L	0.0204	ppb	16:27:24
2	Cd 226.502†	-227.8	11.7	0.1017	ug/L	0.1017	ppb	16:27:44
2	Co 228.616†	-84.5	3.2	0.0528	ug/L	0.0528	ppb	16:27:44
2	Cr 267.716†	130.8	40.8	0.3666	ug/L	0.3666	ppb	16:27:44
2	Cu 324.752†	8992.4	-96.5	-0.2577	ug/L	-0.2577	ppb	16:27:24
2	Mn 257.610†	3172.4	2542.3	2.4071	ug/L	2.4071	ppb	16:27:24
2	Mo 202.031†	37.8	7.9	0.4219	ug/L	0.4219	ppb	16:27:44
2	Ni 231.604†	148.9	14.4	0.2830	ug/L	0.2830	ppb	16:27:44

2	P 214.914†	293.7	23.6	10.636	ug/L	10.636 ppb	16:27:44
2	Pb 220.353†	-77.9	-1.0	-0.0932	ug/L	-0.0932 ppb	16:27:44
2	S 181.975 Axial†	64.1	2.9	3.1341	ug/L	3.1341 ppb	16:27:44
2	Sb 206.836†	57.7	22.1	5.8439	ug/L	5.8439 ppb	16:27:44
2	Se 196.026†	-19.5	2.2	0.9744	ug/L	0.9744 ppb	16:27:44
2	Si 251.611†	1120.5	544.0	13.811	ug/L	13.811 ppb	16:27:44
2	Sn 189.927†	5.8	10.1	1.3318	ug/L	1.3318 ppb	16:27:44
2	Ti 334.940†	-1008.6	268.8	0.3709	ug/L	0.3709 ppb	16:27:24
2	Tl 190.801†	-52.0	-6.8	-1.6369	ug/L	-1.6369 ppb	16:27:44
2	U 409.014†	-2749.2	71.0	1.8354	ug/L	1.8354 ppb	16:27:19
2	V 292.402†	-1602.8	32.7	0.1966	ug/L	0.1966 ppb	16:27:24
2	Zn 213.857†	1048.6	145.4	1.0658	ug/L	1.0658 ppb	16:27:44
2	SiO2†	1160.5	541.9	29.446	ug/L	29.446 ppb	16:28:25
3	Sc Radial	4996.7	4996.7	102	%		16:26:22
3	Y RADIAL	5739.5	5739.5	101.6	%		16:26:22
3	Al 396.153Radial†	-49.7	-5.1	-3.3500	ug/L	-3.3500 ppb	16:26:22
3	Ca 317.933Radial†	31.4	13.1	23.131	ug/L	23.131 ppb	16:26:42
3	Fe 238.204 Radial†	12.5	1.3	15.775	ug/L	15.775 ppb	16:26:42
3	K 766.490 Radial†	2650.6	35.0	6.3180	ug/L	6.3180 ppb	16:26:22
3	Mg 279.077 IEC†	2.8	0.3	12.304	ug/L	12.304 ppb	16:26:42
3	Na 589.592 Radial†	-1144.9	155.0	43.467	ug/L	43.467 ppb	16:26:22
3	Sr 421.552†	35.1	41.9	0.2197	ug/L	0.2197 ppb	16:26:22
3	Sc 361.383	1051991.8	1051991.8	101.20	%		16:27:49
3	Y 371.029	894184.1	894184.1	101.10	%		16:27:49
3	Ag 328.068†	459.0	-20.5	-0.0795	ug/L	-0.0795 ppb	16:27:54
3	As 188.979†	-45.5	-8.3	-2.5901	ug/L	-2.5901 ppb	16:28:14
3	B 249.677†	-493.9	-22.0	-0.4173	ug/L	-0.4173 ppb	16:28:14
3	Ba 233.527†	18.9	18.7	0.1204	ug/L	0.1204 ppb	16:28:14
3	Be 313.107†	-4954.2	-21.4	-0.0059	ug/L	-0.0059 ppb	16:27:54
3	Cd 226.502†	-258.6	-19.9	-0.1748	ug/L	-0.1748 ppb	16:28:14
3	Co 228.616†	-80.4	6.9	0.1117	ug/L	0.1117 ppb	16:28:14
3	Cr 267.716†	134.7	45.3	0.4061	ug/L	0.4061 ppb	16:28:14
3	Cu 324.752†	9031.2	-13.7	-0.0357	ug/L	-0.0357 ppb	16:27:54
3	Mn 257.610†	3241.8	2626.6	2.4886	ug/L	2.4886 ppb	16:27:54
3	Mo 202.031†	25.7	-3.8	-0.2014	ug/L	-0.2014 ppb	16:28:14
3	Ni 231.604†	150.2	16.5	0.3233	ug/L	0.3233 ppb	16:28:14
3	P 214.914†	279.5	11.1	4.9720	ug/L	4.9720 ppb	16:28:14
3	Pb 220.353†	-81.8	-5.3	-0.5011	ug/L	-0.5011 ppb	16:28:14
3	S 181.975 Axial†	63.7	2.8	3.0579	ug/L	3.0579 ppb	16:28:14
3	Sb 206.836†	43.3	8.2	2.1557	ug/L	2.1557 ppb	16:28:14
3	Se 196.026†	-29.1	-7.4	-3.2137	ug/L	-3.2137 ppb	16:28:14
3	Si 251.611†	1140.6	569.4	14.461	ug/L	14.461 ppb	16:28:14
3	Sn 189.927†	0.9	5.3	0.6987	ug/L	0.6987 ppb	16:28:14
3	Ti 334.940†	-984.9	287.2	0.3963	ug/L	0.3963 ppb	16:27:54
3	Tl 190.801†	-48.3	-3.5	-0.8221	ug/L	-0.8221 ppb	16:28:14
3	U 409.014†	-2724.1	82.3	2.1252	ug/L	2.1252 ppb	16:27:49
3	V 292.402†	-1677.7	-49.3	-0.2835	ug/L	-0.2835 ppb	16:27:54
3	Zn 213.857†	1046.0	148.0	1.0835	ug/L	1.0835 ppb	16:28:14
3	SiO2†	2257.1	1631.3	88.657	ug/L	88.657 ppb	16:28:30

Mean Data: 1201978328|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1056777.2	101.66	%	0.438				0.43%
Sc Radial	4990.9	102	%	0.8				0.79%
Y 371.029	897320.7	101.45	%	0.336				0.33%
Y RADIAL	5733.3	101.5	%	0.73				0.72%
Ag 328.068†	16.2	0.0654	ug/L	0.15495	0.0654	ppb	0.15495	237.01%
Al 396.153Radial†	3.9	2.5918	ug/L	7.42912	2.5918	ppb	7.42912	286.63%
As 188.979†	-3.8	-1.1646	ug/L	1.44530	-1.1646	ppb	1.44530	124.11%
B 249.677†	-20.4	-0.3868	ug/L	0.09116	-0.3868	ppb	0.09116	23.57%
Ba 233.527†	8.6	0.0554	ug/L	0.05632	0.0554	ppb	0.05632	101.70%
Be 313.107†	35.0	0.0117	ug/L	0.01521	0.0117	ppb	0.01521	130.34%
Ca 317.933Radial†	10.2	18.054	ug/L	7.1861	18.054	ppb	7.1861	39.80%
Cd 226.502†	1.4	0.0111	ug/L	0.16107	0.0111	ppb	0.16107	>999.9%
Co 228.616†	4.4	0.0717	ug/L	0.03463	0.0717	ppb	0.03463	48.29%
Cr 267.716†	45.7	0.4097	ug/L	0.04503	0.4097	ppb	0.04503	10.99%
Cu 324.752†	-53.8	-0.1431	ug/L	0.11118	-0.1431	ppb	0.11118	77.70%
Fe 238.204 Radial†	1.0	11.505	ug/L	9.1094	11.505	ppb	9.1094	79.18%
K 766.490 Radial†	-31.8	-5.8397	ug/L	14.77781	-5.8397	ppb	14.77781	253.06%

Mg 279.077 IEC†	1.3	57.318	ug/L	71.3369	57.318	ppb	71.3369 124.46%
Mn 257.610†	2549.8	2.4146	ug/L	0.07055	2.4146	ppb	0.07055 2.92%
Mo 202.031†	-0.5	-0.0277	ug/L	0.39266	-0.0277	ppb	0.39266 >999.9%
Na 589.592 Radial†	165.8	46.512	ug/L	3.0663	46.512	ppb	3.0663 6.59%
Ni 231.604†	8.6	0.1680	ug/L	0.23491	0.1680	ppb	0.23491 139.83%
P 214.914†	13.5	6.0858	ug/L	4.10843	6.0858	ppb	4.10843 67.51%
Pb 220.353†	-3.8	-0.3606	ug/L	0.23167	-0.3606	ppb	0.23167 64.25%
S 181.975 Axial†	-1.2	-1.2584	ug/L	7.54206	-1.2584	ppb	7.54206 599.34%
Sb 206.836†	14.6	3.8641	ug/L	1.85902	3.8641	ppb	1.85902 48.11%
Se 196.026†	-0.5	-0.1832	ug/L	2.64869	-0.1832	ppb	2.64869 >999.9%
Si 251.611†	547.6	13.907	ug/L	0.5133	13.907	ppb	0.5133 3.69%
Sn 189.927†	7.6	1.0079	ug/L	0.31682	1.0079	ppb	0.31682 31.43%
Sr 421.552†	35.4	0.1856	ug/L	0.03546	0.1856	ppb	0.03546 19.11%
Ti 334.940†	280.1	0.3860	ug/L	0.01335	0.3860	ppb	0.01335 3.46%
Tl 190.801†	-2.5	-0.5852	ug/L	1.18804	-0.5852	ppb	1.18804 203.03%
U 409.014†	92.2	2.3811	ug/L	0.70923	2.3811	ppb	0.70923 29.79%
V 292.402†	-0.7	-0.0008	ug/L	0.25111	-0.0008	ppb	0.25111 >999.9%
Zn 213.857†	140.9	1.0316	ug/L	0.07514	1.0316	ppb	0.07514 7.28%
SiO2†	909.2	49.412	ug/L	33.9890	49.412	ppb	33.9890 68.79%

Sequence No.: 33
Sample ID: 1201978329|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/4/2009 16:30:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978329|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5008.2	5008.2	102	%			16:32:33
1	Y RADIAL	5680.8	5680.8	100.6	%			16:32:33
1	Al 396.153Radial†	8081.3	7966.2	5238.1	ug/L	5238.1	ppb	16:32:33
1	Ca 317.933Radial†	2981.7	2905.2	5143.8	ug/L	5143.8	ppb	16:32:53
1	Fe 238.204 Radial†	449.9	430.0	5215.1	ug/L	5215.1	ppb	16:32:53
1	K 766.490 Radial†	31041.5	27861.5	5071.2	ug/L	5071.2	ppb	16:32:33
1	Mg 279.077 IEC†	122.3	117.4	5259.8	ug/L	5259.8	ppb	16:32:53
1	Na 589.592 Radial†	17360.2	18298.8	5132.8	ug/L	5132.8	ppb	16:32:33
1	Sr 421.552†	100638.6	98666.9	517.60	ug/L	517.60	ppb	16:32:33
1	Sc 361.383	1046617.3	1046617.3	100.69	%			16:33:52
1	Y 371.029	876052.0	876052.0	99.048	%			16:33:52
1	Ag 328.068†	131428.1	130058.3	518.72	ug/L	518.72	ppb	16:33:52
1	As 188.979†	1624.6	1650.1	518.76	ug/L	518.76	ppb	16:34:12
1	B 249.677†	26944.4	27226.9	512.56	ug/L	512.56	ppb	16:33:52
1	Ba 233.527†	83633.9	83063.9	535.00	ug/L	535.00	ppb	16:33:52
1	Be 313.107†	1667156.9	1660667.3	518.82	ug/L	518.82	ppb	16:33:52
1	Cd 226.502†	59533.6	59363.5	517.51	ug/L	517.51	ppb	16:33:52
1	Co 228.616†	31106.7	30981.0	510.47	ug/L	510.47	ppb	16:34:12
1	Cr 267.716†	58467.2	57980.9	521.75	ug/L	521.75	ppb	16:33:52
1	Cu 324.752†	209336.2	198971.8	531.62	ug/L	531.62	ppb	16:33:52
1	Mn 257.610†	565692.9	561260.4	531.90	ug/L	531.90	ppb	16:33:52
1	Mo 202.031†	9822.2	9726.1	516.50	ug/L	516.50	ppb	16:34:12
1	Ni 231.604†	26806.7	26492.0	518.75	ug/L	518.75	ppb	16:34:12
1	P 214.914†	1610.2	1334.1	516.57	ug/L	516.57	ppb	16:34:12
1	Pb 220.353†	5554.0	5591.7	526.50	ug/L	526.50	ppb	16:34:12
1	S 181.975 Axial†	4924.9	4831.2	5204.1	ug/L	5204.1	ppb	16:34:12
1	Sb 206.836†	2097.5	2048.5	547.81	ug/L	547.81	ppb	16:34:12
1	Se 196.026†	1126.7	1140.4	525.67	ug/L	525.67	ppb	16:34:12
1	Si 251.611†	206056.6	204094.4	5170.9	ug/L	5170.9	ppb	16:33:52
1	Sn 189.927†	4094.4	4070.8	539.00	ug/L	539.00	ppb	16:34:12
1	Ti 334.940†	383148.6	381797.5	526.45	ug/L	526.45	ppb	16:33:52
1	Tl 190.801†	2114.9	2144.8	522.15	ug/L	522.15	ppb	16:34:12
1	U 409.014†	17989.8	20641.2	532.00	ug/L	532.00	ppb	16:33:52
1	V 292.402†	90934.8	91923.5	533.18	ug/L	533.18	ppb	16:33:52
1	Zn 213.857†	71475.4	70102.7	510.51	ug/L	510.51	ppb	16:33:52
1	SiO2†	209406.5	207380.1	11244	ug/L	11244	ppb	16:35:12
2	Sc Radial	4964.3	4964.3	101	%			16:32:58
2	Y RADIAL	5653.8	5653.8	100.1	%			16:32:58
2	Al 396.153Radial†	8042.2	7997.5	5258.9	ug/L	5258.9	ppb	16:32:58
2	Ca 317.933Radial†	2982.8	2932.2	5191.5	ug/L	5191.5	ppb	16:33:18
2	Fe 238.204 Radial†	450.9	434.9	5274.2	ug/L	5274.2	ppb	16:33:18
2	K 766.490 Radial†	30939.6	28029.8	5101.9	ug/L	5101.9	ppb	16:32:58
2	Mg 279.077 IEC†	125.9	122.0	5464.4	ug/L	5464.4	ppb	16:33:18
2	Na 589.592 Radial†	17289.1	18378.9	5155.3	ug/L	5155.3	ppb	16:32:58
2	Sr 421.552†	100182.3	99087.7	519.81	ug/L	519.81	ppb	16:32:58
2	Sc 361.383	1048828.2	1048828.2	100.90	%			16:34:19
2	Y 371.029	879039.3	879039.3	99.386	%			16:34:19
2	Ag 328.068†	131959.3	130309.5	519.73	ug/L	519.73	ppb	16:34:19
2	As 188.979†	1608.6	1630.8	512.76	ug/L	512.76	ppb	16:34:39
2	B 249.677†	27082.9	27307.7	514.09	ug/L	514.09	ppb	16:34:19
2	Ba 233.527†	83768.5	83022.2	534.73	ug/L	534.73	ppb	16:34:19
2	Be 313.107†	1671718.8	1661698.1	519.14	ug/L	519.14	ppb	16:34:19
2	Cd 226.502†	59784.9	59487.9	518.59	ug/L	518.59	ppb	16:34:19
2	Co 228.616†	31041.0	30850.7	508.31	ug/L	508.31	ppb	16:34:39
2	Cr 267.716†	58576.4	57966.7	521.62	ug/L	521.62	ppb	16:34:19
2	Cu 324.752†	210269.6	199458.6	532.93	ug/L	532.93	ppb	16:34:19
2	Mn 257.610†	567207.7	561577.3	532.21	ug/L	532.21	ppb	16:34:19
2	Mo 202.031†	9806.8	9690.2	514.60	ug/L	514.60	ppb	16:34:39
2	Ni 231.604†	26777.4	26406.8	517.08	ug/L	517.08	ppb	16:34:39

2	P 214.914†	1589.6	1310.3	505.64 ug/L	505.64 ppb	16:34:39
2	Pb 220.353†	5524.8	5551.1	522.69 ug/L	522.69 ppb	16:34:39
2	S 181.975 Axial†	4889.8	4786.1	5155.5 ug/L	5155.5 ppb	16:34:39
2	Sb 206.836†	2083.0	2029.8	542.79 ug/L	542.79 ppb	16:34:39
2	Se 196.026†	1102.4	1114.0	514.16 ug/L	514.16 ppb	16:34:39
2	Si 251.611†	206514.0	204116.4	5171.5 ug/L	5171.5 ppb	16:34:19
2	Sn 189.927†	4084.1	4052.1	536.53 ug/L	536.53 ppb	16:34:39
2	Ti 334.940†	384627.7	382461.2	527.37 ug/L	527.37 ppb	16:34:19
2	Tl 190.801†	2122.2	2147.6	522.84 ug/L	522.84 ppb	16:34:39
2	U 409.014†	18118.0	20730.5	534.30 ug/L	534.30 ppb	16:34:19
2	V 292.402†	91078.7	91875.7	532.88 ug/L	532.88 ppb	16:34:19
2	Zn 213.857†	71725.7	70201.1	511.23 ug/L	511.23 ppb	16:34:19
2	SiO2†	205788.1	203355.5	11026 ug/L	11026 ppb	16:35:18
3	Sc Radial	4951.9	4951.9	101 %		16:33:23
3	Y RADIAL	5645.1	5645.1	99.96 %		16:33:23
3	Al 396.153Radial†	8095.8	8070.7	5307.3 ug/L	5307.3 ppb	16:33:23
3	Ca 317.933Radial†	2982.8	2939.6	5204.6 ug/L	5204.6 ppb	16:33:43
3	Fe 238.204 Radial†	446.0	431.2	5229.5 ug/L	5229.5 ppb	16:33:43
3	K 766.490 Radial†	30946.0	28113.1	5117.0 ug/L	5117.0 ppb	16:33:23
3	Mg 279.077 IEC†	122.7	119.2	5337.4 ug/L	5337.4 ppb	16:33:43
3	Na 589.592 Radial†	17339.1	18471.4	5181.2 ug/L	5181.2 ppb	16:33:23
3	Sr 421.552†	100380.7	99533.5	522.15 ug/L	522.15 ppb	16:33:23
3	Sc 361.383	1049768.6	1049768.6	100.99 %		16:34:47
3	Y 371.029	880675.4	880675.4	99.571 %		16:34:47
3	Ag 328.068†	131636.5	129872.8	517.99 ug/L	517.99 ppb	16:34:47
3	As 188.979†	1614.7	1635.4	514.19 ug/L	514.19 ppb	16:35:07
3	B 249.677†	27083.3	27284.1	513.65 ug/L	513.65 ppb	16:34:47
3	Ba 233.527†	83678.8	82859.0	533.68 ug/L	533.68 ppb	16:34:47
3	Be 313.107†	1675494.3	1663952.4	519.84 ug/L	519.84 ppb	16:34:47
3	Cd 226.502†	59601.0	59252.7	516.54 ug/L	516.54 ppb	16:34:47
3	Co 228.616†	30954.0	30737.0	506.44 ug/L	506.44 ppb	16:35:07
3	Cr 267.716†	58547.9	57886.5	520.90 ug/L	520.90 ppb	16:34:47
3	Cu 324.752†	210297.3	199299.4	532.50 ug/L	532.50 ppb	16:34:47
3	Mn 257.610†	566805.3	560675.2	531.35 ug/L	531.35 ppb	16:34:47
3	Mo 202.031†	9775.1	9650.1	512.47 ug/L	512.47 ppb	16:35:07
3	Ni 231.604†	26699.0	26305.5	515.10 ug/L	515.10 ppb	16:35:07
3	P 214.914†	1596.3	1315.6	508.10 ug/L	508.10 ppb	16:35:07
3	Pb 220.353†	5516.1	5537.6	521.43 ug/L	521.43 ppb	16:35:07
3	S 181.975 Axial†	4874.1	4766.2	5134.1 ug/L	5134.1 ppb	16:35:07
3	Sb 206.836†	2094.9	2039.7	545.36 ug/L	545.36 ppb	16:35:07
3	Se 196.026†	1111.7	1122.2	517.65 ug/L	517.65 ppb	16:35:07
3	Si 251.611†	206327.9	203748.7	5162.2 ug/L	5162.2 ppb	16:34:47
3	Sn 189.927†	4078.5	4042.9	535.32 ug/L	535.32 ppb	16:35:07
3	Ti 334.940†	384623.3	382115.4	526.89 ug/L	526.89 ppb	16:34:47
3	Tl 190.801†	2112.7	2136.3	520.13 ug/L	520.13 ppb	16:35:07
3	U 409.014†	18127.3	20723.7	534.13 ug/L	534.13 ppb	16:34:47
3	V 292.402†	91179.5	91894.7	532.97 ug/L	532.97 ppb	16:34:47
3	Zn 213.857†	71660.1	70072.5	510.30 ug/L	510.30 ppb	16:34:47
3	SiO2†	206766.5	204141.7	11068 ug/L	11068 ppb	16:35:23

Mean Data: 1201978329|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048404.7	100.86	%	0.156				0.15%
Sc Radial	4974.8	101	%	0.6				0.59%
Y 371.029	878588.9	99.335	%	0.2651				0.27%
Y RADIAL	5659.9	100.2	%	0.33				0.33%
Ag 328.068†	130080.2	518.82	ug/L	0.876	518.82	ppb	0.876	0.17%
Al 396.153Radial†	8011.5	5268.1	ug/L	35.50	5268.1	ppb	35.50	0.67%
As 188.979†	1638.8	515.24	ug/L	3.134	515.24	ppb	3.134	0.61%
B 249.677†	27272.9	513.43	ug/L	0.786	513.43	ppb	0.786	0.15%
Ba 233.527†	82981.7	534.47	ug/L	0.696	534.47	ppb	0.696	0.13%
Be 313.107†	1662105.9	519.27	ug/L	0.524	519.27	ppb	0.524	0.10%
Ca 317.933Radial†	2925.7	5180.0	ug/L	32.02	5180.0	ppb	32.02	0.62%
Cd 226.502†	59368.0	517.55	ug/L	1.024	517.55	ppb	1.024	0.20%
Co 228.616†	30856.2	508.40	ug/L	2.017	508.40	ppb	2.017	0.40%
Cr 267.716†	57944.7	521.42	ug/L	0.458	521.42	ppb	0.458	0.09%
Cu 324.752†	199243.3	532.35	ug/L	0.664	532.35	ppb	0.664	0.12%
Fe 238.204 Radial†	432.1	5239.6	ug/L	30.80	5239.6	ppb	30.80	0.59%
K 766.490 Radial†	28001.5	5096.7	ug/L	23.34	5096.7	ppb	23.34	0.46%

Mg 279.077 IEC†	119.5	5353.9	ug/L	103.27	5353.9	ppb	103.27	1.93%
Mn 257.610†	561171.0	531.82	ug/L	0.434	531.82	ppb	0.434	0.08%
Mo 202.031†	9688.8	514.53	ug/L	2.017	514.53	ppb	2.017	0.39%
Na 589.592 Radial†	18383.1	5156.4	ug/L	24.23	5156.4	ppb	24.23	0.47%
Ni 231.604†	26401.4	516.98	ug/L	1.829	516.98	ppb	1.829	0.35%
P 214.914†	1320.0	510.10	ug/L	5.737	510.10	ppb	5.737	1.12%
Pb 220.353†	5560.1	523.54	ug/L	2.640	523.54	ppb	2.640	0.50%
S 181.975 Axial†	4794.5	5164.6	ug/L	35.89	5164.6	ppb	35.89	0.69%
Sb 206.836†	2039.4	545.32	ug/L	2.510	545.32	ppb	2.510	0.46%
Se 196.026†	1125.5	519.16	ug/L	5.904	519.16	ppb	5.904	1.14%
Si 251.611†	203986.5	5168.2	ug/L	5.21	5168.2	ppb	5.21	0.10%
Sn 189.927†	4055.2	536.95	ug/L	1.877	536.95	ppb	1.877	0.35%
Sr 421.552†	99096.1	519.85	ug/L	2.273	519.85	ppb	2.273	0.44%
Ti 334.940†	382124.7	526.91	ug/L	0.459	526.91	ppb	0.459	0.09%
Tl 190.801†	2142.9	521.71	ug/L	1.413	521.71	ppb	1.413	0.27%
U 409.014†	20698.5	533.48	ug/L	1.283	533.48	ppb	1.283	0.24%
V 292.402†	91898.0	533.01	ug/L	0.156	533.01	ppb	0.156	0.03%
Zn 213.857†	70125.4	510.68	ug/L	0.485	510.68	ppb	0.485	0.09%
SiO2†	204959.1	11113	ug/L	115.9	11113	ppb	115.9	1.04%

Sequence No.: 34
Sample ID: 1201978330|925377|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/4/2009 16:37:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978330|925377|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4846.6	4846.6	98.7	%			16:39:26
1	Y RADIAL	5589.9	5589.9	98.99	%			16:39:26
1	Al 396.153Radial†	-22.3	21.2	14.008	ug/L	14.008	ppb	16:39:26
1	Ca 317.933Radial†	19.2	1.6	2.8537	ug/L	2.8537	ppb	16:39:46
1	Fe 238.204 Radial†	12.8	2.0	24.335	ug/L	24.335	ppb	16:39:46
1	K 766.490 Radial†	2652.4	117.4	21.402	ug/L	21.402	ppb	16:39:26
1	Mg 279.077 IEC†	1.2	-1.3	-58.635	ug/L	-58.635	ppb	16:39:46
1	Na 589.592 Radial†	-1206.5	57.8	16.205	ug/L	16.205	ppb	16:39:26
1	Sr 421.552†	-23.5	-16.4	-0.0860	ug/L	-0.0860	ppb	16:39:26
1	Sc 361.383	1028230.0	1028230.0	98.917	%			16:40:42
1	Y 371.029	872841.8	872841.8	98.686	%			16:40:42
1	Ag 328.068†	426.6	-42.8	-0.1581	ug/L	-0.1581	ppb	16:40:48
1	As 188.979†	-39.9	-3.8	-1.1745	ug/L	-1.1745	ppb	16:41:08
1	B 249.677†	-388.3	73.5	1.3863	ug/L	1.3863	ppb	16:41:08
1	Ba 233.527†	-5.9	-6.0	-0.0378	ug/L	-0.0378	ppb	16:41:08
1	Be 313.107†	-4930.2	-110.2	-0.0340	ug/L	-0.0340	ppb	16:40:48
1	Cd 226.502†	-218.8	14.5	0.1239	ug/L	0.1239	ppb	16:41:08
1	Co 228.616†	-92.5	-7.2	-0.1180	ug/L	-0.1180	ppb	16:41:08
1	Cr 267.716†	116.4	29.9	0.2707	ug/L	0.2707	ppb	16:41:08
1	Cu 324.752†	9019.7	180.9	0.4843	ug/L	0.4843	ppb	16:40:48
1	Mn 257.610†	622.0	52.1	0.0528	ug/L	0.0528	ppb	16:41:08
1	Mo 202.031†	36.9	8.0	0.4289	ug/L	0.4289	ppb	16:41:08
1	Ni 231.604†	127.6	-2.9	-0.0566	ug/L	-0.0566	ppb	16:41:08
1	P 214.914†	286.1	24.1	10.695	ug/L	10.695	ppb	16:41:08
1	Pb 220.353†	-61.2	13.7	1.2909	ug/L	1.2909	ppb	16:41:08
1	S 181.975 Axial†	56.8	-2.6	-2.8489	ug/L	-2.8489	ppb	16:41:08
1	Sb 206.836†	39.7	5.5	1.4711	ug/L	1.4711	ppb	16:41:08
1	Se 196.026†	-26.6	-5.5	-2.3643	ug/L	-2.3643	ppb	16:41:08
1	Si 251.611†	691.0	140.9	3.5606	ug/L	3.5606	ppb	16:41:08
1	Sn 189.927†	6.5	10.9	1.4397	ug/L	1.4397	ppb	16:41:08
1	Ti 334.940†	-1117.1	131.2	0.1832	ug/L	0.1832	ppb	16:40:48
1	Tl 190.801†	-51.5	-7.9	-1.8965	ug/L	-1.8965	ppb	16:41:08
1	U 409.014†	-2935.2	-193.4	-5.0029	ug/L	-5.0029	ppb	16:40:42
1	V 292.402†	-1617.3	-26.5	-0.1607	ug/L	-0.1607	ppb	16:40:48
1	Zn 213.857†	952.4	77.3	0.5673	ug/L	0.5673	ppb	16:41:08
1	SiO2†	728.6	137.5	7.4320	ug/L	7.4320	ppb	16:42:14
2	Sc Radial	4930.9	4930.9	100	%			16:39:51
2	Y RADIAL	5661.0	5661.0	100.2	%			16:39:51
2	Al 396.153Radial†	-16.1	27.8	18.353	ug/L	18.353	ppb	16:39:51
2	Ca 317.933Radial†	23.3	5.4	9.4787	ug/L	9.4787	ppb	16:40:11
2	Fe 238.204 Radial†	8.2	-2.8	-34.265	ug/L	-34.265	ppb	16:40:11
2	K 766.490 Radial†	2594.4	13.8	2.4919	ug/L	2.4919	ppb	16:39:51
2	Mg 279.077 IEC†	2.4	-0.1	-4.9919	ug/L	-4.9919	ppb	16:40:11
2	Na 589.592 Radial†	-1160.8	124.1	34.820	ug/L	34.820	ppb	16:39:51
2	Sr 421.552†	-27.7	-20.2	-0.1058	ug/L	-0.1058	ppb	16:39:51
2	Sc 361.383	1050220.0	1050220.0	101.03	%			16:41:13
2	Y 371.029	890516.9	890516.9	100.68	%			16:41:13
2	Ag 328.068†	400.4	-77.7	-0.3198	ug/L	-0.3198	ppb	16:41:18
2	As 188.979†	-41.5	-4.5	-1.4023	ug/L	-1.4023	ppb	16:41:38
2	B 249.677†	-420.8	49.6	0.9424	ug/L	0.9424	ppb	16:41:38
2	Ba 233.527†	9.3	9.3	0.0580	ug/L	0.0580	ppb	16:41:38
2	Be 313.107†	-4881.4	42.4	0.0134	ug/L	0.0134	ppb	16:41:18
2	Cd 226.502†	-230.3	7.7	0.0702	ug/L	0.0702	ppb	16:41:38
2	Co 228.616†	-90.2	-3.0	-0.0490	ug/L	-0.0490	ppb	16:41:38
2	Cr 267.716†	105.2	16.4	0.1462	ug/L	0.1462	ppb	16:41:38
2	Cu 324.752†	8877.3	-151.0	-0.4050	ug/L	-0.4050	ppb	16:41:18
2	Mn 257.610†	625.4	42.4	0.0368	ug/L	0.0368	ppb	16:41:38
2	Mo 202.031†	31.1	1.5	0.0781	ug/L	0.0781	ppb	16:41:38
2	Ni 231.604†	129.4	-3.9	-0.0760	ug/L	-0.0760	ppb	16:41:38

2	P 214.914†	275.3	7.4	3.3965	ug/L	3.3965 ppb	16:41:38
2	Pb 220.353†	-75.4	0.9	0.0924	ug/L	0.0924 ppb	16:41:38
2	S 181.975 Axial†	53.3	-7.4	-7.9256	ug/L	-7.9256 ppb	16:41:38
2	Sb 206.836†	30.5	-4.5	-1.1699	ug/L	-1.1699 ppb	16:41:38
2	Se 196.026†	-16.4	5.2	2.1600	ug/L	2.1600 ppb	16:41:38
2	Si 251.611†	733.1	168.0	4.2623	ug/L	4.2623 ppb	16:41:38
2	Sn 189.927†	-1.2	3.1	0.4142	ug/L	0.4142 ppb	16:41:38
2	Ti 334.940†	-1195.6	77.1	0.1067	ug/L	0.1067 ppb	16:41:18
2	Tl 190.801†	-43.9	0.8	0.2024	ug/L	0.2024 ppb	16:41:38
2	U 409.014†	-2799.8	2.8	0.0771	ug/L	0.0771 ppb	16:41:13
2	V 292.402†	-1649.3	-23.9	-0.1306	ug/L	-0.1306 ppb	16:41:18
2	Zn 213.857†	945.9	50.7	0.3770	ug/L	0.3770 ppb	16:41:38
2	SiO2†	753.9	147.2	7.9901	ug/L	7.9901 ppb	16:42:19
3	Sc Radial	4870.2	4870.2	99.2	%		16:40:16
3	Y RADIAL	5605.3	5605.3	99.26	%		16:40:16
3	Al 396.153Radial†	-42.0	1.5	0.9971	ug/L	0.9971 ppb	16:40:16
3	Ca 317.933Radial†	22.6	4.9	8.7091	ug/L	8.7091 ppb	16:40:36
3	Fe 238.204 Radial†	9.5	-1.4	-16.794	ug/L	-16.794 ppb	16:40:36
3	K 766.490 Radial†	2644.7	96.6	17.592	ug/L	17.592 ppb	16:40:16
3	Mg 279.077 IEC†	6.3	3.8	171.40	ug/L	171.40 ppb	16:40:36
3	Na 589.592 Radial†	-1154.3	116.3	32.612	ug/L	32.612 ppb	16:40:16
3	Sr 421.552†	-51.0	-44.0	-0.2308	ug/L	-0.2308 ppb	16:40:16
3	Sc 361.383	1040755.4	1040755.4	100.12	%		16:41:43
3	Y 371.029	884432.9	884432.9	99.996	%		16:41:43
3	Ag 328.068†	473.7	-1.0	-0.0113	ug/L	-0.0113 ppb	16:41:48
3	As 188.979†	-38.5	-1.9	-0.5903	ug/L	-0.5903 ppb	16:42:08
3	B 249.677†	-441.2	25.4	0.4826	ug/L	0.4826 ppb	16:42:08
3	Ba 233.527†	-12.6	-12.6	-0.0809	ug/L	-0.0809 ppb	16:42:08
3	Be 313.107†	-4808.8	71.0	0.0223	ug/L	0.0223 ppb	16:41:48
3	Cd 226.502†	-247.4	-11.5	-0.0984	ug/L	-0.0984 ppb	16:42:08
3	Co 228.616†	-72.9	13.5	0.2223	ug/L	0.2223 ppb	16:42:08
3	Cr 267.716†	103.8	15.9	0.1417	ug/L	0.1417 ppb	16:42:08
3	Cu 324.752†	8963.3	14.9	0.0389	ug/L	0.0389 ppb	16:41:48
3	Mn 257.610†	616.2	38.7	0.0318	ug/L	0.0318 ppb	16:42:08
3	Mo 202.031†	24.2	-5.0	-0.2688	ug/L	-0.2688 ppb	16:42:08
3	Ni 231.604†	130.3	-1.8	-0.0350	ug/L	-0.0350 ppb	16:42:08
3	P 214.914†	268.5	3.0	1.3911	ug/L	1.3911 ppb	16:42:08
3	Pb 220.353†	-64.2	11.5	1.0773	ug/L	1.0773 ppb	16:42:08
3	S 181.975 Axial†	61.6	1.4	1.5125	ug/L	1.5125 ppb	16:42:08
3	Sb 206.836†	38.6	3.9	1.0492	ug/L	1.0492 ppb	16:42:08
3	Se 196.026†	-9.2	12.2	5.3446	ug/L	5.3446 ppb	16:42:08
3	Si 251.611†	702.4	143.9	3.6481	ug/L	3.6481 ppb	16:42:08
3	Sn 189.927†	7.6	11.9	1.5797	ug/L	1.5797 ppb	16:42:08
3	Ti 334.940†	-1204.9	57.1	0.0775	ug/L	0.0775 ppb	16:41:48
3	Tl 190.801†	-37.6	6.7	1.6179	ug/L	1.6179 ppb	16:42:08
3	U 409.014†	-2635.6	141.6	3.6619	ug/L	3.6619 ppb	16:41:43
3	V 292.402†	-1555.1	55.3	0.3262	ug/L	0.3262 ppb	16:41:48
3	Zn 213.857†	936.3	49.6	0.3601	ug/L	0.3601 ppb	16:42:08
3	SiO2†	729.1	129.2	7.0056	ug/L	7.0056 ppb	16:42:24

Mean Data: 1201978330|925377|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1039735.1	100.02	%	1.061				1.06%
Sc Radial	4882.6	99.4	%	0.89				0.89%
Y 371.029	882597.2	99.788	%	1.0152				1.02%
Y RADIAL	5618.7	99.50	%	0.662				0.67%
Ag 328.068†	-40.5	-0.1631	ug/L	0.15432	-0.1631	ppb	0.15432	94.64%
Al 396.153Radial†	16.8	11.119	ug/L	9.0313	11.119	ppb	9.0313	81.22%
As 188.979†	-3.4	-1.0557	ug/L	0.41884	-1.0557	ppb	0.41884	39.68%
B 249.677†	49.5	0.9371	ug/L	0.45186	0.9371	ppb	0.45186	48.22%
Ba 233.527†	-3.1	-0.0202	ug/L	0.07108	-0.0202	ppb	0.07108	351.58%
Be 313.107†	1.1	0.0006	ug/L	0.03027	0.0006	ppb	0.03027	>999.9%
Ca 317.933Radial†	4.0	7.0139	ug/L	3.62329	7.0139	ppb	3.62329	51.66%
Cd 226.502†	3.6	0.0319	ug/L	0.11599	0.0319	ppb	0.11599	363.86%
Co 228.616†	1.1	0.0184	ug/L	0.17988	0.0184	ppb	0.17988	976.55%
Cr 267.716†	20.7	0.1862	ug/L	0.07317	0.1862	ppb	0.07317	39.30%
Cu 324.752†	14.9	0.0394	ug/L	0.44463	0.0394	ppb	0.44463	>999.9%
Fe 238.204 Radial†	-0.7	-8.9079	ug/L	30.08502	-8.9079	ppb	30.08502	337.73%
K 766.490 Radial†	75.9	13.829	ug/L	10.0010	13.829	ppb	10.0010	72.32%

Mg 279.077 IEC†	0.8	35.925	ug/L	120.3538	35.925	ppb	120.3538 335.01%
Mn 257.610†	44.4	0.0405	ug/L	0.01100	0.0405	ppb	0.01100 27.17%
Mo 202.031†	1.5	0.0794	ug/L	0.34888	0.0794	ppb	0.34888 439.47%
Na 589.592 Radial†	99.4	27.879	ug/L	10.1700	27.879	ppb	10.1700 36.48%
Ni 231.604†	-2.9	-0.0559	ug/L	0.02049	-0.0559	ppb	0.02049 36.68%
P 214.914†	11.5	5.1609	ug/L	4.89650	5.1609	ppb	4.89650 94.88%
Pb 220.353†	8.7	0.8202	ug/L	0.63926	0.8202	ppb	0.63926 77.94%
S 181.975 Axial†	-2.9	-3.0873	ug/L	4.72358	-3.0873	ppb	4.72358 153.00%
Sb 206.836†	1.6	0.4501	ug/L	1.41878	0.4501	ppb	1.41878 315.20%
Se 196.026†	3.9	1.7134	ug/L	3.87381	1.7134	ppb	3.87381 226.09%
Si 251.611†	150.9	3.8237	ug/L	0.38238	3.8237	ppb	0.38238 10.00%
Sn 189.927†	8.6	1.1445	ug/L	0.63631	1.1445	ppb	0.63631 55.60%
Sr 421.552†	-26.8	-0.1409	ug/L	0.07847	-0.1409	ppb	0.07847 55.70%
Ti 334.940†	88.4	0.1224	ug/L	0.05457	0.1224	ppb	0.05457 44.57%
Tl 190.801†	-0.1	-0.0254	ug/L	1.76825	-0.0254	ppb	1.76825 >999.9%
U 409.014†	-16.3	-0.4213	ug/L	4.35384	-0.4213	ppb	4.35384 >999.9%
V 292.402†	1.6	0.0116	ug/L	0.27286	0.0116	ppb	0.27286 >999.9%
Zn 213.857†	59.2	0.4348	ug/L	0.11505	0.4348	ppb	0.11505 26.46%
SiO2†	137.9	7.4759	ug/L	0.49372	7.4759	ppb	0.49372 6.60%

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0 ug/L	2467.0 ppb		17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00 ug/L	510.00 ppb		17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08 ug/L	988.08 ppb		17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65 ug/L	511.65 ppb		17:02:35
2	Se 196.026†	1101.6	1134.9	522.91 ug/L	522.91 ppb		17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9 ug/L	2523.9 ppb		17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00 ug/L	505.00 ppb		17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34 ug/L	508.34 ppb		17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32 ug/L	505.32 ppb		17:02:35
2	U 409.014†	16132.6	19081.4	491.71 ug/L	491.71 ppb		17:02:15
2	V 292.402†	85992.6	88533.4	513.61 ug/L	513.61 ppb		17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27 ug/L	506.27 ppb		17:02:15
2	SiO2†	99096.4	99571.7	5385.4 ug/L	5385.4 ppb		17:03:13
3	Sc Radial	4783.8	4783.8	97.4 %			17:01:19
3	Y RADIAL	5474.3	5474.3	96.94 %			17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1 ug/L	5154.1 ppb		17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7 ug/L	5093.7 ppb		17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5 ug/L	5010.5 ppb		17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8 ug/L	5005.8 ppb		17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6 ug/L	5244.6 ppb		17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6 ug/L	9733.6 ppb		17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13 ug/L	501.13 ppb		17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474 %			17:02:43
3	Y 371.029	860032.6	860032.6	97.237 %			17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06 ug/L	509.06 ppb		17:02:43
3	As 188.979†	1574.3	1635.3	513.94 ug/L	513.94 ppb		17:03:03
3	B 249.677†	25888.6	26755.8	503.69 ug/L	503.69 ppb		17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18 ug/L	511.18 ppb		17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43 ug/L	511.43 ppb		17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37 ug/L	511.37 ppb		17:02:43
3	Co 228.616†	30331.0	30887.2	508.95 ug/L	508.95 ppb		17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88 ug/L	509.88 ppb		17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19 ug/L	511.19 ppb		17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05 ug/L	512.05 ppb		17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93 ug/L	513.93 ppb		17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25 ug/L	508.25 ppb		17:03:03
3	P 214.914†	5929.5	5756.2	2497.7 ug/L	2497.7 ppb		17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78 ug/L	517.78 ppb		17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4 ug/L	1006.4 ppb		17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71 ug/L	516.71 ppb		17:03:03
3	Se 196.026†	1126.1	1164.9	535.77 ug/L	535.77 ppb		17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5 ug/L	2520.5 ppb		17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39 ug/L	512.39 ppb		17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94 ug/L	507.94 ppb		17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85 ug/L	515.85 ppb		17:03:03
3	U 409.014†	16138.4	19162.4	493.81 ug/L	493.81 ppb		17:02:43
3	V 292.402†	85723.1	88659.8	514.45 ug/L	514.45 ppb		17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31 ug/L	506.31 ppb		17:02:43
3	SiO2†	99466.9	100408.9	5430.6 ug/L	5430.6 ppb		17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L         1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L         3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L         0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L         0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L        62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L        18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L        10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L         0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L         3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L        43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L         2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L        15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L         4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L        13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L         3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L         6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L          3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L         3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L         1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L         0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L         5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L         2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L         0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L         1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L        22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
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Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628 ug/L	-2.1628 ppb	17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982 ug/L	1.3982 ppb	17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236 ug/L	2.6236 ppb	17:09:34
2	Sb 206.836†	49.9	15.7	4.1740 ug/L	4.1740 ppb	17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105 ug/L	-1.6105 ppb	17:09:34
2	Si 251.611†	628.2	76.8	1.9315 ug/L	1.9315 ppb	17:09:34
2	Sn 189.927†	5.3	9.7	1.2851 ug/L	1.2851 ppb	17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699 ug/L	0.0699 ppb	17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234 ug/L	-0.2234 ppb	17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719 ug/L	-3.0719 ppb	17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052 ug/L	-0.4052 ppb	17:09:14
2	Zn 213.857†	959.6	83.5	0.6171 ug/L	0.6171 ppb	17:09:34
2	SiO2†	603.8	10.7	0.5423 ug/L	0.5423 ppb	17:10:14
3	Sc Radial	4823.8	4823.8	98.3 %		17:08:12
3	Y RADIAL	5537.0	5537.0	98.05 %		17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834 ug/L	11.834 ppb	17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300 ug/L	10.300 ppb	17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132 ug/L	-18.132 ppb	17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822 ug/L	13.822 ppb	17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369 ug/L	60.369 ppb	17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232 ug/L	30.232 ppb	17:08:12
3	Sr 421.552†	12.6	20.3	0.1063 ug/L	0.1063 ppb	17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05 %		17:09:39
3	Y 371.029	885792.9	885792.9	100.15 %		17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296 ug/L	-0.3296 ppb	17:09:44
3	As 188.979†	-34.7	1.9	0.5789 ug/L	0.5789 ppb	17:10:04
3	B 249.677†	-424.2	42.1	0.7986 ug/L	0.7986 ppb	17:10:04
3	Ba 233.527†	12.8	12.8	0.0818 ug/L	0.0818 ppb	17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557 ug/L	0.0557 ppb	17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147 ug/L	0.1147 ppb	17:10:04
3	Co 228.616†	-81.4	5.0	0.0830 ug/L	0.0830 ppb	17:10:04
3	Cr 267.716†	106.9	19.1	0.1704 ug/L	0.1704 ppb	17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477 ug/L	0.1477 ppb	17:09:44
3	Mn 257.610†	610.1	33.1	0.0284 ug/L	0.0284 ppb	17:10:04
3	Mo 202.031†	31.4	2.1	0.1121 ug/L	0.1121 ppb	17:10:04
3	Ni 231.604†	133.0	1.0	0.0189 ug/L	0.0189 ppb	17:10:04
3	P 214.914†	272.4	7.2	3.2450 ug/L	3.2450 ppb	17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314 ug/L	0.1314 ppb	17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316 ug/L	-0.9316 ppb	17:10:04
3	Sb 206.836†	35.8	1.1	0.3268 ug/L	0.3268 ppb	17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605 ug/L	-2.1605 ppb	17:10:04
3	Si 251.611†	612.6	54.6	1.3742 ug/L	1.3742 ppb	17:10:04
3	Sn 189.927†	12.1	16.5	2.1777 ug/L	2.1777 ppb	17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180 ug/L	-0.0180 ppb	17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673 ug/L	-1.9673 ppb	17:10:04
3	U 409.014†	-2701.8	73.4	1.9008 ug/L	1.9008 ppb	17:09:39
3	V 292.402†	-1606.8	2.4	0.0234 ug/L	0.0234 ppb	17:09:44
3	Zn 213.857†	941.9	55.9	0.4102 ug/L	0.4102 ppb	17:10:04
3	SiO2†	646.1	46.8	2.5143 ug/L	2.5143 ppb	17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       115.7     21.072 ug/L        7.6270     21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.0    -42.772 ug/L       91.5125    -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      125.9     35.327 ug/L        6.6209     35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 40
Sample ID: 241420001|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 12/4/2009 17:19:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241420001|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4961.5	4961.5	101	%			17:21:25
1	Y RADIAL	5713.3	5713.3	101.2	%			17:21:25
1	Al 396.153Radial†	102.7	145.5	96.028	ug/L	96.028	ppb	17:21:25
1	Ca 317.933Radial†	59.6	41.1	72.772	ug/L	72.772	ppb	17:21:45
1	Fe 238.204 Radial†	18.5	7.3	88.522	ug/L	88.522	ppb	17:21:45
1	K 766.490 Radial†	2735.7	137.7	24.822	ug/L	24.822	ppb	17:21:25
1	Mg 279.077 IEC†	0.5	-2.0	-88.770	ug/L	-88.770	ppb	17:21:45
1	Na 589.592 Radial†	636.5	1909.8	535.70	ug/L	535.70	ppb	17:21:25
1	Sr 421.552†	235.5	240.4	1.2607	ug/L	1.2607	ppb	17:21:25
1	Sc 361.383	1056510.0	1056510.0	101.64	%			17:22:41
1	Y 371.029	895765.4	895765.4	101.28	%			17:22:41
1	Ag 328.068†	443.1	-38.1	-0.1228	ug/L	-0.1228	ppb	17:22:46
1	As 188.979†	-42.0	-4.8	-1.4549	ug/L	-1.4549	ppb	17:23:06
1	B 249.677†	-496.6	-22.5	-0.4382	ug/L	-0.4382	ppb	17:23:06
1	Ba 233.527†	282.7	278.2	1.7910	ug/L	1.7910	ppb	17:23:06
1	Be 313.107†	-4918.3	34.9	0.0141	ug/L	0.0141	ppb	17:22:46
1	Cd 226.502†	-228.9	10.4	0.0822	ug/L	0.0822	ppb	17:23:06
1	Co 228.616†	-66.3	21.1	0.3435	ug/L	0.3435	ppb	17:23:06
1	Cr 267.716†	303.3	210.6	1.8942	ug/L	1.8942	ppb	17:23:06
1	Cu 324.752†	9278.7	191.7	0.5165	ug/L	0.5165	ppb	17:22:46
1	Mn 257.610†	4365.7	3718.6	3.5318	ug/L	3.5318	ppb	17:22:46
1	Mo 202.031†	39.2	9.3	0.4988	ug/L	0.4988	ppb	17:23:06
1	Ni 231.604†	168.6	33.9	0.6643	ug/L	0.6643	ppb	17:23:06
1	P 214.914†	287.6	17.9	7.8911	ug/L	7.8911	ppb	17:23:06
1	Pb 220.353†	-70.5	6.2	0.5982	ug/L	0.5982	ppb	17:23:06
1	S 181.975 Axial†	85.4	24.0	25.788	ug/L	25.788	ppb	17:23:06
1	Sb 206.836†	49.6	14.2	3.7008	ug/L	3.7008	ppb	17:23:06
1	Se 196.026†	-24.3	-2.5	-0.7923	ug/L	-0.7923	ppb	17:23:06
1	Si 251.611†	8016.2	7329.4	186.12	ug/L	186.12	ppb	17:22:46
1	Sn 189.927†	-1.4	2.9	0.3952	ug/L	0.3952	ppb	17:23:06
1	Ti 334.940†	-93.3	1168.6	1.6150	ug/L	1.6150	ppb	17:22:46
1	Tl 190.801†	-35.7	9.1	2.2439	ug/L	2.2439	ppb	17:23:06
1	U 409.014†	-2823.9	-4.5	-0.1300	ug/L	-0.1300	ppb	17:22:41
1	V 292.402†	-1592.5	41.7	0.2275	ug/L	0.2275	ppb	17:22:46
1	Zn 213.857†	1475.0	565.7	4.1464	ug/L	4.1464	ppb	17:23:06
1	SiO2†	7946.4	7219.3	392.33	ug/L	392.33	ppb	17:24:12
2	Sc Radial	4990.6	4990.6	102	%			17:21:50
2	Y RADIAL	5741.1	5741.1	101.7	%			17:21:50
2	Al 396.153Radial†	99.6	141.8	93.611	ug/L	93.611	ppb	17:21:50
2	Ca 317.933Radial†	55.8	37.1	65.698	ug/L	65.698	ppb	17:22:10
2	Fe 238.204 Radial†	18.1	6.9	82.864	ug/L	82.864	ppb	17:22:10
2	K 766.490 Radial†	2714.5	101.0	18.136	ug/L	18.136	ppb	17:21:50
2	Mg 279.077 IEC†	1.8	-0.7	-32.516	ug/L	-32.516	ppb	17:22:10
2	Na 589.592 Radial†	684.1	1952.9	547.80	ug/L	547.80	ppb	17:21:50
2	Sr 421.552†	230.6	234.2	1.2283	ug/L	1.2283	ppb	17:21:50
2	Sc 361.383	1064480.6	1064480.6	102.40	%			17:23:12
2	Y 371.029	901923.4	901923.4	101.97	%			17:23:12
2	Ag 328.068†	432.9	-51.3	-0.1788	ug/L	-0.1788	ppb	17:23:17
2	As 188.979†	-46.7	-9.0	-2.7757	ug/L	-2.7757	ppb	17:23:37
2	B 249.677†	-478.1	-0.8	-0.0261	ug/L	-0.0261	ppb	17:23:37
2	Ba 233.527†	283.2	276.6	1.7805	ug/L	1.7805	ppb	17:23:37
2	Be 313.107†	-4941.4	48.6	0.0184	ug/L	0.0184	ppb	17:23:17
2	Cd 226.502†	-241.6	-0.3	-0.0103	ug/L	-0.0103	ppb	17:23:37
2	Co 228.616†	-84.4	3.9	0.0591	ug/L	0.0591	ppb	17:23:37
2	Cr 267.716†	299.6	204.7	1.8407	ug/L	1.8407	ppb	17:23:37
2	Cu 324.752†	9229.0	74.8	0.2039	ug/L	0.2039	ppb	17:23:17
2	Mn 257.610†	4312.0	3634.0	3.4501	ug/L	3.4501	ppb	17:23:17
2	Mo 202.031†	26.7	-3.1	-0.1607	ug/L	-0.1607	ppb	17:23:37
2	Ni 231.604†	196.0	59.4	1.1646	ug/L	1.1646	ppb	17:23:37

2	P 214.914†	288.2	16.3	7.2430 ug/L	7.2430 ppb	17:23:37
2	Pb 220.353†	-69.8	7.4	0.7088 ug/L	0.7088 ppb	17:23:37
2	S 181.975 Axial†	70.7	8.9	9.5675 ug/L	9.5675 ppb	17:23:37
2	Sb 206.836†	60.0	24.0	6.2767 ug/L	6.2767 ppb	17:23:37
2	Se 196.026†	-17.9	3.9	2.0208 ug/L	2.0208 ppb	17:23:37
2	Si 251.611†	7911.3	7167.9	182.03 ug/L	182.03 ppb	17:23:17
2	Sn 189.927†	1.2	5.5	0.7370 ug/L	0.7370 ppb	17:23:37
2	Ti 334.940†	-65.9	1196.1	1.6516 ug/L	1.6516 ppb	17:23:17
2	Tl 190.801†	-44.6	0.7	0.1955 ug/L	0.1955 ppb	17:23:37
2	U 409.014†	-2757.9	80.9	2.0767 ug/L	2.0767 ppb	17:23:12
2	V 292.402†	-1601.3	44.8	0.2425 ug/L	0.2425 ppb	17:23:17
2	Zn 213.857†	1456.9	537.1	3.9323 ug/L	3.9323 ppb	17:23:37
2	SiO2†	7941.7	7156.2	388.93 ug/L	388.93 ppb	17:24:18
3	Sc Radial	4967.8	4967.8	101 %		17:22:15
3	Y RADIAL	5707.8	5707.8	101.1 %		17:22:15
3	Al 396.153Radial†	92.0	134.7	88.927 ug/L	88.927 ppb	17:22:15
3	Ca 317.933Radial†	61.6	43.1	76.273 ug/L	76.273 ppb	17:22:35
3	Fe 238.204 Radial†	17.0	5.8	70.534 ug/L	70.534 ppb	17:22:35
3	K 766.490 Radial†	2870.7	267.6	48.511 ug/L	48.511 ppb	17:22:15
3	Mg 279.077 IEC†	3.2	0.6	28.947 ug/L	28.947 ppb	17:22:35
3	Na 589.592 Radial†	564.5	1837.8	515.51 ug/L	515.51 ppb	17:22:15
3	Sr 421.552†	189.1	194.3	1.0188 ug/L	1.0188 ppb	17:22:15
3	Sc 361.383	1055571.8	1055571.8	101.55 %		17:23:42
3	Y 371.029	896217.9	896217.9	101.33 %		17:23:42
3	Ag 328.068†	469.7	-11.5	-0.0251 ug/L	-0.0251 ppb	17:23:47
3	As 188.979†	-38.3	-1.1	-0.3271 ug/L	-0.3271 ppb	17:24:07
3	B 249.677†	-480.9	-7.5	-0.1522 ug/L	-0.1522 ppb	17:24:07
3	Ba 233.527†	271.1	267.0	1.7187 ug/L	1.7187 ppb	17:24:07
3	Be 313.107†	-4963.5	-13.9	-0.0008 ug/L	-0.0008 ppb	17:23:47
3	Cd 226.502†	-242.8	-3.5	-0.0369 ug/L	-0.0369 ppb	17:24:07
3	Co 228.616†	-61.3	25.9	0.4244 ug/L	0.4244 ppb	17:24:07
3	Cr 267.716†	305.5	213.1	1.9156 ug/L	1.9156 ppb	17:24:07
3	Cu 324.752†	9332.8	253.0	0.6793 ug/L	0.6793 ppb	17:23:47
3	Mn 257.610†	4360.4	3717.3	3.5266 ug/L	3.5266 ppb	17:23:47
3	Mo 202.031†	43.2	13.3	0.7104 ug/L	0.7104 ppb	17:24:07
3	Ni 231.604†	187.0	52.3	1.0237 ug/L	1.0237 ppb	17:24:07
3	P 214.914†	292.4	22.8	10.107 ug/L	10.107 ppb	17:24:07
3	Pb 220.353†	-76.2	0.5	0.0664 ug/L	0.0664 ppb	17:24:07
3	S 181.975 Axial†	79.6	18.3	19.658 ug/L	19.658 ppb	17:24:07
3	Sb 206.836†	56.3	20.8	5.4762 ug/L	5.4762 ppb	17:24:07
3	Se 196.026†	-18.3	3.3	1.7371 ug/L	1.7371 ppb	17:24:07
3	Si 251.611†	7969.8	7290.7	185.13 ug/L	185.13 ppb	17:23:47
3	Sn 189.927†	8.3	12.5	1.6686 ug/L	1.6686 ppb	17:24:07
3	Ti 334.940†	24.2	1284.3	1.7738 ug/L	1.7738 ppb	17:23:47
3	Tl 190.801†	-43.3	1.6	0.4298 ug/L	0.4298 ppb	17:24:07
3	U 409.014†	-2739.4	76.3	1.9607 ug/L	1.9607 ppb	17:23:42
3	V 292.402†	-1588.4	44.3	0.2550 ug/L	0.2550 ppb	17:23:47
3	Zn 213.857†	1469.2	561.2	4.1090 ug/L	4.1090 ppb	17:24:07
3	SiO2†	7985.1	7264.3	394.74 ug/L	394.74 ppb	17:24:23

Mean Data: 241420001|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1058854.1	101.86	%	0.471				0.46%
Sc Radial	4973.3	101	%	0.3				0.31%
Y 371.029	897968.9	101.53	%	0.388				0.38%
Y RADIAL	5720.7	101.3	%	0.32				0.31%
Ag 328.068†	-33.6	-0.1089	ug/L	0.07781	-0.1089	ppb	0.07781	71.46%
Al 396.153Radial†	140.6	92.855	ug/L	3.6103	92.855	ppb	3.6103	3.89%
As 188.979†	-5.0	-1.5193	ug/L	1.22557	-1.5193	ppb	1.22557	80.67%
B 249.677†	-10.3	-0.2055	ug/L	0.21112	-0.2055	ppb	0.21112	102.74%
Ba 233.527†	273.9	1.7634	ug/L	0.03906	1.7634	ppb	0.03906	2.21%
Be 313.107†	23.2	0.0105	ug/L	0.01009	0.0105	ppb	0.01009	95.78%
Ca 317.933Radial†	40.4	71.581	ug/L	5.3873	71.581	ppb	5.3873	7.53%
Cd 226.502†	2.2	0.0117	ug/L	0.06253	0.0117	ppb	0.06253	536.41%
Co 228.616†	17.0	0.2757	ug/L	0.19189	0.2757	ppb	0.19189	69.61%
Cr 267.716†	209.5	1.8835	ug/L	0.03859	1.8835	ppb	0.03859	2.05%
Cu 324.752†	173.2	0.4666	ug/L	0.24158	0.4666	ppb	0.24158	51.78%
Fe 238.204 Radial†	6.7	80.640	ug/L	9.1980	80.640	ppb	9.1980	11.41%
K 766.490 Radial†	168.8	30.490	ug/L	15.9608	30.490	ppb	15.9608	52.35%

Mg 279.077 IEC†	-0.7	-30.780	ug/L	58.8780	-30.780	ppb	58.8780 191.29%
Mn 257.610†	3690.0	3.5028	ug/L	0.04572	3.5028	ppb	0.04572 1.31%
Mo 202.031†	6.5	0.3495	ug/L	0.45432	0.3495	ppb	0.45432 129.98%
Na 589.592 Radial†	1900.2	533.00	ug/L	16.310	533.00	ppb	16.310 3.06%
Ni 231.604†	48.5	0.9509	ug/L	0.25796	0.9509	ppb	0.25796 27.13%
P 214.914†	19.0	8.4137	ug/L	1.50176	8.4137	ppb	1.50176 17.85%
Pb 220.353†	4.7	0.4578	ug/L	0.34348	0.4578	ppb	0.34348 75.03%
S 181.975 Axial†	17.0	18.338	ug/L	8.1903	18.338	ppb	8.1903 44.66%
Sb 206.836†	19.6	5.1512	ug/L	1.31834	5.1512	ppb	1.31834 25.59%
Se 196.026†	1.6	0.9885	ug/L	1.54877	0.9885	ppb	1.54877 156.67%
Si 251.611†	7262.7	184.43	ug/L	2.132	184.43	ppb	2.132 1.16%
Sn 189.927†	7.0	0.9336	ug/L	0.65906	0.9336	ppb	0.65906 70.59%
Sr 421.552†	223.0	1.1693	ug/L	0.13133	1.1693	ppb	0.13133 11.23%
Ti 334.940†	1216.3	1.6801	ug/L	0.08315	1.6801	ppb	0.08315 4.95%
Tl 190.801†	3.8	0.9564	ug/L	1.12112	0.9564	ppb	1.12112 117.22%
U 409.014†	50.9	1.3025	ug/L	1.24191	1.3025	ppb	1.24191 95.35%
V 292.402†	43.6	0.2417	ug/L	0.01378	0.2417	ppb	0.01378 5.70%
Zn 213.857†	554.7	4.0626	ug/L	0.11439	4.0626	ppb	0.11439 2.82%
SiO2†	7213.3	392.00	ug/L	2.922	392.00	ppb	2.922 0.75%

Sequence No.: 41
Sample ID: 241420002|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 12/4/2009 17:26:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241420002|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4859.4	4859.4	99.0	%			17:28:27
1	Y RADIAL	5554.3	5554.3	98.36	%			17:28:27
1	Al 396.153Radial†	205.9	251.8	166.30	ug/L	166.30	ppb	17:28:27
1	Ca 317.933Radial†	67.3	50.2	88.890	ug/L	88.890	ppb	17:28:47
1	Fe 238.204 Radial†	23.2	12.5	150.80	ug/L	150.80	ppb	17:28:47
1	K 766.490 Radial†	2838.7	298.6	54.219	ug/L	54.219	ppb	17:28:27
1	Mg 279.077 IEC†	4.6	2.2	97.911	ug/L	97.911	ppb	17:28:47
1	Na 589.592 Radial†	-196.4	1081.5	303.36	ug/L	303.36	ppb	17:28:27
1	Sr 421.552†	201.3	210.8	1.1050	ug/L	1.1050	ppb	17:28:27
1	Sc 361.383	1055171.1	1055171.1	101.51	%			17:29:44
1	Y 371.029	896114.6	896114.6	101.32	%			17:29:44
1	Ag 328.068†	467.7	-13.3	-0.0008	ug/L	-0.0008	ppb	17:29:49
1	As 188.979†	-37.3	-0.2	0.0067	ug/L	0.0067	ppb	17:30:09
1	B 249.677†	-490.3	-16.9	-0.3399	ug/L	-0.3399	ppb	17:30:09
1	Ba 233.527†	491.0	483.8	3.1150	ug/L	3.1150	ppb	17:30:09
1	Be 313.107†	-4886.8	59.8	0.0259	ug/L	0.0259	ppb	17:29:49
1	Cd 226.502†	-230.3	8.8	0.0642	ug/L	0.0642	ppb	17:30:09
1	Co 228.616†	-73.6	13.8	0.2154	ug/L	0.2154	ppb	17:30:09
1	Cr 267.716†	758.6	659.5	5.9301	ug/L	5.9301	ppb	17:30:09
1	Cu 324.752†	9114.6	41.6	0.1188	ug/L	0.1188	ppb	17:29:49
1	Mn 257.610†	7993.5	7297.9	6.9240	ug/L	6.9240	ppb	17:29:49
1	Mo 202.031†	23.5	-6.1	-0.3129	ug/L	-0.3129	ppb	17:30:09
1	Ni 231.604†	336.4	199.4	3.9072	ug/L	3.9072	ppb	17:30:09
1	P 214.914†	287.0	17.6	7.8162	ug/L	7.8162	ppb	17:30:09
1	Pb 220.353†	-70.4	6.2	0.6053	ug/L	0.6053	ppb	17:30:09
1	S 181.975 Axial†	67.9	6.8	7.2980	ug/L	7.2980	ppb	17:30:09
1	Sb 206.836†	38.6	3.4	0.7340	ug/L	0.7340	ppb	17:30:09
1	Se 196.026†	-29.0	-7.2	-2.6303	ug/L	-2.6303	ppb	17:30:09
1	Si 251.611†	11657.2	10926.2	277.47	ug/L	277.47	ppb	17:29:49
1	Sn 189.927†	0.0	4.4	0.5903	ug/L	0.5903	ppb	17:30:09
1	Ti 334.940†	1448.8	2687.7	3.7108	ug/L	3.7108	ppb	17:29:49
1	Tl 190.801†	-54.9	-9.8	-2.3111	ug/L	-2.3111	ppb	17:30:09
1	U 409.014†	-2929.5	-112.0	-2.9251	ug/L	-2.9251	ppb	17:29:44
1	V 292.402†	-1509.1	121.9	0.6602	ug/L	0.6602	ppb	17:29:49
1	Zn 213.857†	1925.4	1011.2	7.3879	ug/L	7.3879	ppb	17:30:09
1	SiO2†	11666.7	10894.2	592.07	ug/L	592.07	ppb	17:31:15
2	Sc Radial	4921.6	4921.6	100	%			17:28:52
2	Y RADIAL	5663.4	5663.4	100.3	%			17:28:52
2	Al 396.153Radial†	238.1	281.3	185.77	ug/L	185.77	ppb	17:28:52
2	Ca 317.933Radial†	75.7	57.7	102.16	ug/L	102.16	ppb	17:29:12
2	Fe 238.204 Radial†	21.0	10.0	120.92	ug/L	120.92	ppb	17:29:12
2	K 766.490 Radial†	2746.0	169.8	30.756	ug/L	30.756	ppb	17:28:52
2	Mg 279.077 IEC†	0.8	-1.7	-78.282	ug/L	-78.282	ppb	17:29:12
2	Na 589.592 Radial†	-230.0	1050.6	294.68	ug/L	294.68	ppb	17:28:52
2	Sr 421.552†	230.2	237.1	1.2429	ug/L	1.2429	ppb	17:28:52
2	Sc 361.383	1041340.4	1041340.4	100.18	%			17:30:14
2	Y 371.029	884116.2	884116.2	99.960	%			17:30:14
2	Ag 328.068†	361.9	-112.8	-0.4072	ug/L	-0.4072	ppb	17:30:19
2	As 188.979†	-31.2	5.5	1.7595	ug/L	1.7595	ppb	17:30:39
2	B 249.677†	-489.8	-22.8	-0.4487	ug/L	-0.4487	ppb	17:30:39
2	Ba 233.527†	492.6	491.7	3.1642	ug/L	3.1642	ppb	17:30:39
2	Be 313.107†	-4904.9	-22.3	-0.0002	ug/L	-0.0002	ppb	17:30:19
2	Cd 226.502†	-248.6	-12.5	-0.1192	ug/L	-0.1192	ppb	17:30:39
2	Co 228.616†	-58.8	27.6	0.4452	ug/L	0.4452	ppb	17:30:39
2	Cr 267.716†	752.5	663.3	5.9626	ug/L	5.9626	ppb	17:30:39
2	Cu 324.752†	9199.1	245.2	0.6611	ug/L	0.6611	ppb	17:30:19
2	Mn 257.610†	7975.5	7384.6	7.0063	ug/L	7.0063	ppb	17:30:19
2	Mo 202.031†	30.6	1.3	0.0752	ug/L	0.0752	ppb	17:30:39
2	Ni 231.604†	313.8	181.3	3.5515	ug/L	3.5515	ppb	17:30:39

2	P 214.914†	290.4	24.7	10.935 ug/L	10.935 ppb	17:30:39
2	Pb 220.353†	-80.6	-4.9	-0.4268 ug/L	-0.4268 ppb	17:30:39
2	S 181.975 Axial†	60.7	0.5	0.5051 ug/L	0.5051 ppb	17:30:39
2	Sb 206.836†	45.0	10.2	2.5490 ug/L	2.5490 ppb	17:30:39
2	Se 196.026†	-29.3	-7.9	-3.0687 ug/L	-3.0687 ppb	17:30:39
2	Si 251.611†	11762.6	11184.0	284.02 ug/L	284.02 ppb	17:30:19
2	Sn 189.927†	-1.8	2.5	0.3479 ug/L	0.3479 ppb	17:30:39
2	Ti 334.940†	1245.4	2503.6	3.4572 ug/L	3.4572 ppb	17:30:19
2	Tl 190.801†	-46.2	-1.9	-0.3783 ug/L	-0.3783 ppb	17:30:39
2	U 409.014†	-2850.7	-71.6	-1.8783 ug/L	-1.8783 ppb	17:30:14
2	V 292.402†	-1558.9	52.3	0.2707 ug/L	0.2707 ppb	17:30:19
2	Zn 213.857†	1945.4	1056.4	7.7301 ug/L	7.7301 ppb	17:30:39
2	SiO2†	11595.3	10975.6	596.50 ug/L	596.50 ppb	17:31:20
3	Sc Radial	4896.7	4896.7	99.7 %		17:29:17
3	Y RADIAL	5664.1	5664.1	100.3 %		17:29:17
3	Al 396.153Radial†	215.1	259.5	171.33 ug/L	171.33 ppb	17:29:17
3	Ca 317.933Radial†	73.6	56.0	99.127 ug/L	99.127 ppb	17:29:37
3	Fe 238.204 Radial†	21.1	10.1	122.73 ug/L	122.73 ppb	17:29:37
3	K 766.490 Radial†	2716.8	154.6	27.982 ug/L	27.982 ppb	17:29:17
3	Mg 279.077 IEC†	1.3	-1.2	-51.721 ug/L	-51.721 ppb	17:29:37
3	Na 589.592 Radial†	-297.0	982.2	275.50 ug/L	275.50 ppb	17:29:17
3	Sr 421.552†	179.7	187.6	0.9831 ug/L	0.9831 ppb	17:29:17
3	Sc 361.383	1049603.7	1049603.7	100.97 %		17:30:44
3	Y 371.029	892275.0	892275.0	100.88 %		17:30:44
3	Ag 328.068†	466.5	-12.0	-0.0143 ug/L	-0.0143 ppb	17:30:49
3	As 188.979†	-41.2	-4.2	-1.2526 ug/L	-1.2526 ppb	17:31:09
3	B 249.677†	-514.0	-42.9	-0.8288 ug/L	-0.8288 ppb	17:31:09
3	Ba 233.527†	476.9	472.3	3.0387 ug/L	3.0387 ppb	17:31:09
3	Be 313.107†	-4857.6	63.2	0.0262 ug/L	0.0262 ppb	17:30:49
3	Cd 226.502†	-231.8	6.1	0.0435 ug/L	0.0435 ppb	17:31:09
3	Co 228.616†	-64.0	22.9	0.3683 ug/L	0.3683 ppb	17:31:09
3	Cr 267.716†	729.2	634.4	5.7003 ug/L	5.7003 ppb	17:31:09
3	Cu 324.752†	9156.4	130.6	0.3550 ug/L	0.3550 ppb	17:30:49
3	Mn 257.610†	7935.2	7282.0	6.9088 ug/L	6.9088 ppb	17:30:49
3	Mo 202.031†	36.0	6.4	0.3477 ug/L	0.3477 ppb	17:31:09
3	Ni 231.604†	332.9	197.7	3.8740 ug/L	3.8740 ppb	17:31:09
3	P 214.914†	273.4	5.7	2.4384 ug/L	2.4384 ppb	17:31:09
3	Pb 220.353†	-88.2	-11.8	-1.0791 ug/L	-1.0791 ppb	17:31:09
3	S 181.975 Axial†	72.2	11.4	12.281 ug/L	12.281 ppb	17:31:09
3	Sb 206.836†	43.4	8.4	2.0740 ug/L	2.0740 ppb	17:31:09
3	Se 196.026†	-19.4	2.2	1.4248 ug/L	1.4248 ppb	17:31:09
3	Si 251.611†	11736.2	11065.4	281.01 ug/L	281.01 ppb	17:30:49
3	Sn 189.927†	-1.0	3.4	0.4594 ug/L	0.4594 ppb	17:31:09
3	Ti 334.940†	1135.7	2385.2	3.2908 ug/L	3.2908 ppb	17:30:49
3	Tl 190.801†	-52.5	-7.8	-1.8095 ug/L	-1.8095 ppb	17:31:09
3	U 409.014†	-2601.2	197.9	5.0897 ug/L	5.0897 ppb	17:30:44
3	V 292.402†	-1618.3	5.9	0.0227 ug/L	0.0227 ppb	17:30:49
3	Zn 213.857†	1932.2	1028.0	7.5190 ug/L	7.5190 ppb	17:31:09
3	SiO2†	11689.8	10978.0	596.62 ug/L	596.62 ppb	17:31:25

Mean Data: 241420002|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048705.1	100.89	%	0.669				0.66%
Sc Radial	4892.6	99.7	%	0.64				0.64%
Y 371.029	890835.3	100.72	%	0.693				0.69%
Y RADIAL	5627.3	99.65	%	1.119				1.12%
Ag 328.068†	-46.0	-0.1408	ug/L	0.23086	-0.1408	ppb	0.23086	163.98%
Al 396.153Radial†	264.2	174.47	ug/L	10.105	174.47	ppb	10.105	5.79%
As 188.979†	0.4	0.1712	ug/L	1.51280	0.1712	ppb	1.51280	883.56%
B 249.677†	-27.6	-0.5391	ug/L	0.25669	-0.5391	ppb	0.25669	47.61%
Ba 233.527†	482.6	3.1060	ug/L	0.06325	3.1060	ppb	0.06325	2.04%
Be 313.107†	33.6	0.0173	ug/L	0.01513	0.0173	ppb	0.01513	87.36%
Ca 317.933Radial†	54.6	96.725	ug/L	6.9526	96.725	ppb	6.9526	7.19%
Cd 226.502†	0.8	-0.0038	ug/L	0.10045	-0.0038	ppb	0.10045	>999.9%
Co 228.616†	21.4	0.3430	ug/L	0.11701	0.3430	ppb	0.11701	34.12%
Cr 267.716†	652.4	5.8643	ug/L	0.14303	5.8643	ppb	0.14303	2.44%
Cu 324.752†	139.1	0.3783	ug/L	0.27191	0.3783	ppb	0.27191	71.88%
Fe 238.204 Radial†	10.9	131.48	ug/L	16.758	131.48	ppb	16.758	12.75%
K 766.490 Radial†	207.7	37.652	ug/L	14.4143	37.652	ppb	14.4143	38.28%

Mg 279.077 IEC†	-0.2	-10.697	ug/L	94.9903	-10.697	ppb	94.9903 887.97%
Mn 257.610†	7321.5	6.9464	ug/L	0.05246	6.9464	ppb	0.05246 0.76%
Mo 202.031†	0.5	0.0367	ug/L	0.33194	0.0367	ppb	0.33194 904.87%
Na 589.592 Radial†	1038.1	291.18	ug/L	14.256	291.18	ppb	14.256 4.90%
Ni 231.604†	192.8	3.7776	ug/L	0.19651	3.7776	ppb	0.19651 5.20%
P 214.914†	16.0	7.0633	ug/L	4.29819	7.0633	ppb	4.29819 60.85%
Pb 220.353†	-3.5	-0.3002	ug/L	0.84930	-0.3002	ppb	0.84930 282.88%
S 181.975 Axial†	6.2	6.6947	ug/L	5.91114	6.6947	ppb	5.91114 88.30%
Sb 206.836†	7.3	1.7857	ug/L	0.94120	1.7857	ppb	0.94120 52.71%
Se 196.026†	-4.3	-1.4247	ug/L	2.47746	-1.4247	ppb	2.47746 173.89%
Si 251.611†	11058.5	280.83	ug/L	3.278	280.83	ppb	3.278 1.17%
Sn 189.927†	3.4	0.4659	ug/L	0.12132	0.4659	ppb	0.12132 26.04%
Sr 421.552†	211.8	1.1103	ug/L	0.13000	1.1103	ppb	0.13000 11.71%
Ti 334.940†	2525.5	3.4863	ug/L	0.21155	3.4863	ppb	0.21155 6.07%
Tl 190.801†	-6.5	-1.4996	ug/L	1.00294	-1.4996	ppb	1.00294 66.88%
U 409.014†	4.8	0.0954	ug/L	4.35675	0.0954	ppb	4.35675 >999.9%
V 292.402†	60.0	0.3179	ug/L	0.32139	0.3179	ppb	0.32139 101.10%
Zn 213.857†	1031.9	7.5456	ug/L	0.17265	7.5456	ppb	0.17265 2.29%
SiO2†	10949.3	595.06	ug/L	2.592	595.06	ppb	2.592 0.44%

Sequence No.: 42
Sample ID: 241420003|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 12/4/2009 17:33:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241420003|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4908.8	4908.8	100.0	%			17:35:29
1	Y RADIAL	5637.0	5637.0	99.82	%			17:35:29
1	Al 396.153Radial†	-29.3	14.5	9.5699	ug/L	9.5699	ppb	17:35:29
1	Ca 317.933Radial†	29.1	11.3	20.019	ug/L	20.019	ppb	17:35:49
1	Fe 238.204 Radial†	15.0	4.0	48.023	ug/L	48.023	ppb	17:35:49
1	K 766.490 Radial†	2628.7	59.7	10.864	ug/L	10.864	ppb	17:35:29
1	Mg 279.077 IEC†	1.5	-1.0	-45.419	ug/L	-45.419	ppb	17:35:49
1	Na 589.592 Radial†	-1190.8	88.9	24.939	ug/L	24.939	ppb	17:35:29
1	Sr 421.552†	-33.8	-26.4	-0.1385	ug/L	-0.1385	ppb	17:35:29
1	Sc 361.383	1060864.6	1060864.6	102.06	%			17:36:46
1	Y 371.029	900247.1	900247.1	101.78	%			17:36:46
1	Ag 328.068†	473.4	-10.2	-0.0273	ug/L	-0.0273	ppb	17:36:51
1	As 188.979†	-43.3	-5.8	-1.8031	ug/L	-1.8031	ppb	17:37:11
1	B 249.677†	-516.6	-40.1	-0.7650	ug/L	-0.7650	ppb	17:37:11
1	Ba 233.527†	93.3	91.4	0.5898	ug/L	0.5898	ppb	17:37:11
1	Be 313.107†	-4897.2	75.5	0.0240	ug/L	0.0240	ppb	17:36:51
1	Cd 226.502†	-247.1	-6.4	-0.0607	ug/L	-0.0607	ppb	17:37:11
1	Co 228.616†	-69.6	18.1	0.2962	ug/L	0.2962	ppb	17:37:11
1	Cr 267.716†	128.8	38.4	0.3454	ug/L	0.3454	ppb	17:37:11
1	Cu 324.752†	8986.7	-131.9	-0.3498	ug/L	-0.3498	ppb	17:36:51
1	Mn 257.610†	843.2	249.5	0.2419	ug/L	0.2419	ppb	17:37:11
1	Mo 202.031†	25.0	-4.7	-0.2473	ug/L	-0.2473	ppb	17:37:11
1	Ni 231.604†	155.8	20.7	0.4063	ug/L	0.4063	ppb	17:37:11
1	P 214.914†	299.3	28.2	12.623	ug/L	12.623	ppb	17:37:11
1	Pb 220.353†	-77.4	-0.2	-0.0241	ug/L	-0.0241	ppb	17:37:11
1	S 181.975 Axial†	63.9	2.5	2.6910	ug/L	2.6910	ppb	17:37:11
1	Sb 206.836†	37.5	2.2	0.5539	ug/L	0.5539	ppb	17:37:11
1	Se 196.026†	-22.4	-0.6	-0.0986	ug/L	-0.0986	ppb	17:37:11
1	Si 251.611†	1739.9	1147.1	29.134	ug/L	29.134	ppb	17:37:11
1	Sn 189.927†	-4.7	-0.2	-0.0274	ug/L	-0.0274	ppb	17:37:11
1	Ti 334.940†	-1097.6	184.9	0.2544	ug/L	0.2544	ppb	17:36:51
1	Tl 190.801†	-56.3	-10.9	-2.6285	ug/L	-2.6285	ppb	17:37:11
1	U 409.014†	-2685.1	143.0	3.6915	ug/L	3.6915	ppb	17:36:46
1	V 292.402†	-1586.7	53.8	0.3029	ug/L	0.3029	ppb	17:36:51
1	Zn 213.857†	1049.1	142.4	1.0414	ug/L	1.0414	ppb	17:37:11
1	SiO2†	1817.5	1181.9	64.237	ug/L	64.237	ppb	17:38:17
2	Sc Radial	4921.8	4921.8	100	%			17:35:54
2	Y RADIAL	5650.8	5650.8	100.1	%			17:35:54
2	Al 396.153Radial†	-25.4	18.5	12.193	ug/L	12.193	ppb	17:35:54
2	Ca 317.933Radial†	31.3	13.4	23.673	ug/L	23.673	ppb	17:36:14
2	Fe 238.204 Radial†	12.9	1.9	22.802	ug/L	22.802	ppb	17:36:14
2	K 766.490 Radial†	2507.2	-68.4	-12.486	ug/L	-12.486	ppb	17:35:54
2	Mg 279.077 IEC†	2.3	-0.2	-7.7527	ug/L	-7.7527	ppb	17:36:14
2	Na 589.592 Radial†	-1191.6	91.3	25.601	ug/L	25.601	ppb	17:35:54
2	Sr 421.552†	-3.8	3.6	0.0186	ug/L	0.0186	ppb	17:35:54
2	Sc 361.383	1071871.5	1071871.5	103.12	%			17:37:16
2	Y 371.029	908976.6	908976.6	102.77	%			17:37:16
2	Ag 328.068†	495.3	6.2	0.0308	ug/L	0.0308	ppb	17:37:21
2	As 188.979†	-33.8	3.8	1.1855	ug/L	1.1855	ppb	17:37:41
2	B 249.677†	-503.3	-22.0	-0.4195	ug/L	-0.4195	ppb	17:37:41
2	Ba 233.527†	91.2	88.5	0.5698	ug/L	0.5698	ppb	17:37:41
2	Be 313.107†	-4870.3	150.8	0.0474	ug/L	0.0474	ppb	17:37:21
2	Cd 226.502†	-240.4	2.5	0.0197	ug/L	0.0197	ppb	17:37:41
2	Co 228.616†	-81.8	7.0	0.1151	ug/L	0.1151	ppb	17:37:41
2	Cr 267.716†	134.6	42.7	0.3840	ug/L	0.3840	ppb	17:37:41
2	Cu 324.752†	8971.0	-237.5	-0.6331	ug/L	-0.6331	ppb	17:37:21
2	Mn 257.610†	817.5	216.2	0.2071	ug/L	0.2071	ppb	17:37:41
2	Mo 202.031†	34.9	4.6	0.2477	ug/L	0.2477	ppb	17:37:41
2	Ni 231.604†	142.9	6.6	0.1296	ug/L	0.1296	ppb	17:37:41

2	P 214.914†	290.1	16.2	7.3515	ug/L	7.3515 ppb	17:37:41
2	Pb 220.353†	-57.1	20.2	1.8993	ug/L	1.8993 ppb	17:37:41
2	S 181.975 Axial†	59.0	-2.9	-3.1378	ug/L	-3.1378 ppb	17:37:41
2	Sb 206.836†	46.0	9.9	2.6212	ug/L	2.6212 ppb	17:37:41
2	Se 196.026†	-24.7	-2.6	-1.0505	ug/L	-1.0505 ppb	17:37:41
2	Si 251.611†	1750.0	1139.5	28.937	ug/L	28.937 ppb	17:37:41
2	Sn 189.927†	-2.7	1.7	0.2263	ug/L	0.2263 ppb	17:37:41
2	Ti 334.940†	-1174.7	121.3	0.1675	ug/L	0.1675 ppb	17:37:21
2	Tl 190.801†	-58.6	-12.5	-3.0288	ug/L	-3.0288 ppb	17:37:41
2	U 409.014†	-2785.1	73.0	1.8835	ug/L	1.8835 ppb	17:37:16
2	V 292.402†	-1623.4	34.1	0.1986	ug/L	0.1986 ppb	17:37:21
2	Zn 213.857†	1060.0	142.4	1.0443	ug/L	1.0443 ppb	17:37:41
2	SiO2†	1837.5	1183.0	64.294	ug/L	64.294 ppb	17:38:22
3	Sc Radial	5027.8	5027.8	102	%		17:36:19
3	Y RADIAL	5807.3	5807.3	102.8	%		17:36:19
3	Al 396.153Radial†	-49.6	-4.7	-3.0811	ug/L	-3.0811 ppb	17:36:19
3	Ca 317.933Radial†	27.8	9.3	16.421	ug/L	16.421 ppb	17:36:39
3	Fe 238.204 Radial†	14.3	3.0	36.034	ug/L	36.034 ppb	17:36:39
3	K 766.490 Radial†	2606.6	-24.1	-4.4203	ug/L	-4.4203 ppb	17:36:19
3	Mg 279.077 IEC†	2.5	-0.1	-2.5167	ug/L	-2.5167 ppb	17:36:39
3	Na 589.592 Radial†	-1161.9	145.4	40.776	ug/L	40.776 ppb	17:36:19
3	Sr 421.552†	21.5	28.4	0.1488	ug/L	0.1488 ppb	17:36:19
3	Sc 361.383	1057931.1	1057931.1	101.77	%		17:37:46
3	Y 371.029	898405.3	898405.3	101.58	%		17:37:46
3	Ag 328.068†	459.5	-22.5	-0.0819	ug/L	-0.0819 ppb	17:37:51
3	As 188.979†	-54.1	-16.5	-5.1402	ug/L	-5.1402 ppb	17:38:11
3	B 249.677†	-522.1	-46.9	-0.8912	ug/L	-0.8912 ppb	17:38:11
3	Ba 233.527†	79.3	77.9	0.5007	ug/L	0.5007 ppb	17:38:11
3	Be 313.107†	-4812.8	145.1	0.0457	ug/L	0.0457 ppb	17:37:51
3	Cd 226.502†	-234.2	5.6	0.0449	ug/L	0.0449 ppb	17:38:11
3	Co 228.616†	-88.8	-0.9	-0.0166	ug/L	-0.0166 ppb	17:38:11
3	Cr 267.716†	127.1	37.1	0.3321	ug/L	0.3321 ppb	17:38:11
3	Cu 324.752†	9040.1	-55.0	-0.1451	ug/L	-0.1451 ppb	17:37:51
3	Mn 257.610†	825.9	234.8	0.2260	ug/L	0.2260 ppb	17:38:11
3	Mo 202.031†	23.4	-6.3	-0.3292	ug/L	-0.3292 ppb	17:38:11
3	Ni 231.604†	139.8	5.4	0.1061	ug/L	0.1061 ppb	17:38:11
3	P 214.914†	281.9	11.8	5.2976	ug/L	5.2976 ppb	17:38:11
3	Pb 220.353†	-80.2	-3.2	-0.3060	ug/L	-0.3060 ppb	17:38:11
3	S 181.975 Axial†	69.4	8.1	8.7196	ug/L	8.7196 ppb	17:38:11
3	Sb 206.836†	39.4	4.1	1.0764	ug/L	1.0764 ppb	17:38:11
3	Se 196.026†	-28.9	-7.0	-2.9887	ug/L	-2.9887 ppb	17:38:11
3	Si 251.611†	1755.2	1167.0	29.644	ug/L	29.644 ppb	17:38:11
3	Sn 189.927†	-1.6	2.8	0.3670	ug/L	0.3670 ppb	17:38:11
3	Ti 334.940†	-1096.2	183.3	0.2528	ug/L	0.2528 ppb	17:37:51
3	Tl 190.801†	-42.1	2.8	0.6924	ug/L	0.6924 ppb	17:38:11
3	U 409.014†	-2750.0	71.9	1.8540	ug/L	1.8540 ppb	17:37:46
3	V 292.402†	-1736.3	-97.5	-0.5653	ug/L	-0.5653 ppb	17:37:51
3	Zn 213.857†	1044.2	140.5	1.0283	ug/L	1.0283 ppb	17:38:11
3	SiO2†	1860.9	1229.4	66.833	ug/L	66.833 ppb	17:38:27

Mean Data: 241420003|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1063555.7	102.32	%	0.707				0.69%
Sc Radial	4952.8	101	%	1.3				1.32%
Y 371.029	902543.0	102.04	%	0.638				0.63%
Y RADIAL	5698.3	100.9	%	1.67				1.66%
Ag 328.068†	-8.8	-0.0261	ug/L	0.05635	-0.0261	ppb	0.05635	215.53%
Al 396.153Radial†	9.4	6.2272	ug/L	8.16717	6.2272	ppb	8.16717	131.15%
As 188.979†	-6.2	-1.9193	ug/L	3.16445	-1.9193	ppb	3.16445	164.88%
B 249.677†	-36.3	-0.6919	ug/L	0.24419	-0.6919	ppb	0.24419	35.29%
Ba 233.527†	86.0	0.5535	ug/L	0.04677	0.5535	ppb	0.04677	8.45%
Be 313.107†	123.8	0.0390	ug/L	0.01303	0.0390	ppb	0.01303	33.36%
Ca 317.933Radial†	11.3	20.038	ug/L	3.6260	20.038	ppb	3.6260	18.10%
Cd 226.502†	0.5	0.0013	ug/L	0.05514	0.0013	ppb	0.05514	>999.9%
Co 228.616†	8.1	0.1315	ug/L	0.15705	0.1315	ppb	0.15705	119.40%
Cr 267.716†	39.4	0.3538	ug/L	0.02696	0.3538	ppb	0.02696	7.62%
Cu 324.752†	-141.5	-0.3760	ug/L	0.24506	-0.3760	ppb	0.24506	65.17%
Fe 238.204 Radial†	2.9	35.620	ug/L	12.6160	35.620	ppb	12.6160	35.42%
K 766.490 Radial†	-11.0	-2.0142	ug/L	11.85921	-2.0142	ppb	11.85921	588.79%

Mg 279.077 IEC†	-0.4	-18.563	ug/L	23.4051	-18.563	ppb	23.4051 126.09%
Mn 257.610†	233.5	0.2250	ug/L	0.01742	0.2250	ppb	0.01742 7.74%
Mo 202.031†	-2.1	-0.1096	ug/L	0.31215	-0.1096	ppb	0.31215 284.84%
Na 589.592 Radial†	108.5	30.439	ug/L	8.9585	30.439	ppb	8.9585 29.43%
Ni 231.604†	10.9	0.2140	ug/L	0.16694	0.2140	ppb	0.16694 78.01%
P 214.914†	18.8	8.4239	ug/L	3.77839	8.4239	ppb	3.77839 44.85%
Pb 220.353†	5.6	0.5231	ug/L	1.20018	0.5231	ppb	1.20018 229.44%
S 181.975 Axial†	2.6	2.7576	ug/L	5.92899	2.7576	ppb	5.92899 215.00%
Sb 206.836†	5.4	1.4172	ug/L	1.07495	1.4172	ppb	1.07495 75.85%
Se 196.026†	-3.4	-1.3793	ug/L	1.47282	-1.3793	ppb	1.47282 106.78%
Si 251.611†	1151.2	29.239	ug/L	0.3645	29.239	ppb	0.3645 1.25%
Sn 189.927†	1.4	0.1886	ug/L	0.19988	0.1886	ppb	0.19988 105.96%
Sr 421.552†	1.9	0.0097	ug/L	0.14385	0.0097	ppb	0.14385 >999.9%
Ti 334.940†	163.2	0.2249	ug/L	0.04968	0.2249	ppb	0.04968 22.09%
Tl 190.801†	-6.9	-1.6550	ug/L	2.04272	-1.6550	ppb	2.04272 123.43%
U 409.014†	96.0	2.4763	ug/L	1.05246	2.4763	ppb	1.05246 42.50%
V 292.402†	-3.2	-0.0213	ug/L	0.47402	-0.0213	ppb	0.47402 >999.9%
Zn 213.857†	141.8	1.0380	ug/L	0.00853	1.0380	ppb	0.00853 0.82%
SiO2†	1198.1	65.121	ug/L	1.4827	65.121	ppb	1.4827 2.28%

Sequence No.: 43
Sample ID: 241420004|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 12/4/2009 17:40:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241420004|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4995.6	4995.6	102	%			17:42:31
1	Y RADIAL	5730.1	5730.1	101.5	%			17:42:31
1	Al 396.153Radial†	-51.3	-6.6	-4.3647	ug/L	-4.3647	ppb	17:42:31
1	Ca 317.933Radial†	23.8	5.6	9.8788	ug/L	9.8788	ppb	17:42:51
1	Fe 238.204 Radial†	9.8	-1.4	-16.559	ug/L	-16.559	ppb	17:42:51
1	K 766.490 Radial†	2626.8	12.1	2.1989	ug/L	2.1989	ppb	17:42:31
1	Mg 279.077 IEC†	2.2	-0.4	-15.703	ug/L	-15.703	ppb	17:42:51
1	Na 589.592 Radial†	-1249.3	52.1	14.627	ug/L	14.627	ppb	17:42:31
1	Sr 421.552†	-22.8	-15.0	-0.0789	ug/L	-0.0789	ppb	17:42:31
1	Sc 361.383	1056412.6	1056412.6	101.63	%			17:43:48
1	Y 371.029	896854.2	896854.2	101.40	%			17:43:48
1	Ag 328.068†	521.2	38.8	0.1486	ug/L	0.1486	ppb	17:43:53
1	As 188.979†	-45.6	-8.2	-2.5618	ug/L	-2.5618	ppb	17:44:13
1	B 249.677†	-539.0	-64.3	-1.2133	ug/L	-1.2133	ppb	17:44:13
1	Ba 233.527†	20.0	19.7	0.1267	ug/L	0.1267	ppb	17:44:13
1	Be 313.107†	-4936.8	16.2	0.0056	ug/L	0.0056	ppb	17:43:53
1	Cd 226.502†	-229.8	9.5	0.0849	ug/L	0.0849	ppb	17:44:13
1	Co 228.616†	-76.4	11.1	0.1829	ug/L	0.1829	ppb	17:44:13
1	Cr 267.716†	115.7	26.1	0.2342	ug/L	0.2342	ppb	17:44:13
1	Cu 324.752†	8802.8	-275.8	-0.7373	ug/L	-0.7373	ppb	17:43:53
1	Mn 257.610†	763.5	174.6	0.1640	ug/L	0.1640	ppb	17:44:13
1	Mo 202.031†	30.9	1.2	0.0629	ug/L	0.0629	ppb	17:44:13
1	Ni 231.604†	156.2	21.7	0.4258	ug/L	0.4258	ppb	17:44:13
1	P 214.914†	275.2	5.7	2.6927	ug/L	2.6927	ppb	17:44:13
1	Pb 220.353†	-88.6	-11.6	-1.0913	ug/L	-1.0913	ppb	17:44:13
1	S 181.975 Axial†	62.5	1.4	1.5311	ug/L	1.5311	ppb	17:44:13
1	Sb 206.836†	43.1	7.7	2.0672	ug/L	2.0672	ppb	17:44:13
1	Se 196.026†	-20.4	1.3	0.5314	ug/L	0.5314	ppb	17:44:13
1	Si 251.611†	1723.4	1138.1	28.896	ug/L	28.896	ppb	17:44:13
1	Sn 189.927†	10.2	14.4	1.9012	ug/L	1.9012	ppb	17:44:13
1	Ti 334.940†	-1059.6	217.8	0.3001	ug/L	0.3001	ppb	17:43:53
1	Tl 190.801†	-49.8	-4.8	-1.1528	ug/L	-1.1528	ppb	17:44:13
1	U 409.014†	-2754.7	63.4	1.6416	ug/L	1.6416	ppb	17:43:48
1	V 292.402†	-1563.1	70.4	0.4090	ug/L	0.4090	ppb	17:43:53
1	Zn 213.857†	1015.6	113.8	0.8365	ug/L	0.8365	ppb	17:44:13
1	SiO2†	1750.5	1123.4	61.038	ug/L	61.038	ppb	17:45:19
2	Sc Radial	5079.6	5079.6	103	%			17:42:56
2	Y RADIAL	5827.7	5827.7	103.2	%			17:42:56
2	Al 396.153Radial†	-42.7	2.5	1.6823	ug/L	1.6823	ppb	17:42:56
2	Ca 317.933Radial†	24.2	5.5	9.7647	ug/L	9.7647	ppb	17:43:16
2	Fe 238.204 Radial†	11.7	0.3	4.2211	ug/L	4.2211	ppb	17:43:16
2	K 766.490 Radial†	2561.0	-94.2	-17.189	ug/L	-17.189	ppb	17:42:56
2	Mg 279.077 IEC†	2.4	-0.2	-9.3820	ug/L	-9.3820	ppb	17:43:16
2	Na 589.592 Radial†	-1214.9	105.7	29.655	ug/L	29.655	ppb	17:42:56
2	Sr 421.552†	-21.9	-13.8	-0.0723	ug/L	-0.0723	ppb	17:42:56
2	Sc 361.383	1035209.2	1035209.2	99.589	%			17:44:18
2	Y 371.029	879113.8	879113.8	99.395	%			17:44:18
2	Ag 328.068†	407.2	-65.2	-0.2537	ug/L	-0.2537	ppb	17:44:23
2	As 188.979†	-37.2	-0.8	-0.2463	ug/L	-0.2463	ppb	17:44:43
2	B 249.677†	-533.2	-69.3	-1.3111	ug/L	-1.3111	ppb	17:44:43
2	Ba 233.527†	1.8	1.8	0.0131	ug/L	0.0131	ppb	17:44:43
2	Be 313.107†	-4894.8	-41.1	-0.0124	ug/L	-0.0124	ppb	17:44:23
2	Cd 226.502†	-240.9	-6.2	-0.0547	ug/L	-0.0547	ppb	17:44:43
2	Co 228.616†	-87.9	-2.0	-0.0333	ug/L	-0.0333	ppb	17:44:43
2	Cr 267.716†	110.2	22.9	0.2074	ug/L	0.2074	ppb	17:44:43
2	Cu 324.752†	8942.7	42.2	0.1128	ug/L	0.1128	ppb	17:44:23
2	Mn 257.610†	740.3	166.7	0.1584	ug/L	0.1584	ppb	17:44:43
2	Mo 202.031†	26.8	-2.3	-0.1219	ug/L	-0.1219	ppb	17:44:43
2	Ni 231.604†	122.4	-9.0	-0.1768	ug/L	-0.1768	ppb	17:44:43

2	P 214.914†	285.8	21.8	9.7517	ug/L	9.7517	ppb	17:44:43
2	Pb 220.353†	-93.8	-18.6	-1.7491	ug/L	-1.7491	ppb	17:44:43
2	S 181.975 Axial†	55.8	-4.0	-4.3383	ug/L	-4.3383	ppb	17:44:43
2	Sb 206.836†	49.3	14.9	3.9209	ug/L	3.9209	ppb	17:44:43
2	Se 196.026†	-29.5	-8.3	-3.6530	ug/L	-3.6530	ppb	17:44:43
2	Si 251.611†	1717.1	1166.5	29.633	ug/L	29.633	ppb	17:44:43
2	Sn 189.927†	-1.3	3.1	0.4053	ug/L	0.4053	ppb	17:44:43
2	Ti 334.940†	-1092.7	163.3	0.2262	ug/L	0.2262	ppb	17:44:23
2	Tl 190.801†	-48.8	-4.8	-1.1496	ug/L	-1.1496	ppb	17:44:43
2	U 409.014†	-2814.8	-52.5	-1.3579	ug/L	-1.3579	ppb	17:44:18
2	V 292.402†	-1504.7	97.6	0.5533	ug/L	0.5533	ppb	17:44:23
2	Zn 213.857†	1029.4	148.1	1.0890	ug/L	1.0890	ppb	17:44:43
2	SiO2†	1748.4	1156.6	62.873	ug/L	62.873	ppb	17:45:24
3	Sc Radial	5168.8	5168.8	105	%			17:43:21
3	Y RADIAL	5925.4	5925.4	104.9	%			17:43:21
3	Al 396.153Radial†	-38.7	7.0	4.6580	ug/L	4.6580	ppb	17:43:21
3	Ca 317.933Radial†	26.0	6.9	12.153	ug/L	12.153	ppb	17:43:41
3	Fe 238.204 Radial†	14.1	2.4	29.267	ug/L	29.267	ppb	17:43:41
3	K 766.490 Radial†	2591.7	-107.7	-19.631	ug/L	-19.631	ppb	17:43:21
3	Mg 279.077 IEC†	1.8	-0.8	-37.420	ug/L	-37.420	ppb	17:43:41
3	Na 589.592 Radial†	-1272.6	71.1	19.955	ug/L	19.955	ppb	17:43:21
3	Sr 421.552†	0.3	7.7	0.0402	ug/L	0.0402	ppb	17:43:21
3	Sc 361.383	1052651.9	1052651.9	101.27	%			17:44:49
3	Y 371.029	894578.5	894578.5	101.14	%			17:44:49
3	Ag 328.068†	379.7	-99.1	-0.3868	ug/L	-0.3868	ppb	17:44:54
3	As 188.979†	-32.9	4.1	1.2811	ug/L	1.2811	ppb	17:45:14
3	B 249.677†	-526.7	-54.0	-1.0255	ug/L	-1.0255	ppb	17:45:14
3	Ba 233.527†	24.7	24.4	0.1578	ug/L	0.1578	ppb	17:45:14
3	Be 313.107†	-4907.6	27.7	0.0090	ug/L	0.0090	ppb	17:44:54
3	Cd 226.502†	-244.7	-5.9	-0.0546	ug/L	-0.0546	ppb	17:45:14
3	Co 228.616†	-67.1	20.0	0.3283	ug/L	0.3283	ppb	17:45:14
3	Cr 267.716†	123.8	34.4	0.3087	ug/L	0.3087	ppb	17:45:14
3	Cu 324.752†	9000.9	-49.2	-0.1299	ug/L	-0.1299	ppb	17:44:54
3	Mn 257.610†	734.0	148.2	0.1439	ug/L	0.1439	ppb	17:45:14
3	Mo 202.031†	24.4	-5.2	-0.2717	ug/L	-0.2717	ppb	17:45:14
3	Ni 231.604†	148.5	14.7	0.2885	ug/L	0.2885	ppb	17:45:14
3	P 214.914†	261.8	-6.6	-2.9463	ug/L	-2.9463	ppb	17:45:14
3	Pb 220.353†	-74.5	2.0	0.1828	ug/L	0.1828	ppb	17:45:14
3	S 181.975 Axial†	58.9	-2.0	-2.1339	ug/L	-2.1339	ppb	17:45:14
3	Sb 206.836†	45.5	10.3	2.7165	ug/L	2.7165	ppb	17:45:14
3	Se 196.026†	-19.3	2.3	1.1182	ug/L	1.1182	ppb	17:45:14
3	Si 251.611†	1722.0	1142.8	29.034	ug/L	29.034	ppb	17:45:14
3	Sn 189.927†	-0.3	4.0	0.5363	ug/L	0.5363	ppb	17:45:14
3	Ti 334.940†	-1130.9	143.7	0.1973	ug/L	0.1973	ppb	17:44:54
3	Tl 190.801†	-54.0	-9.1	-2.2018	ug/L	-2.2018	ppb	17:45:14
3	U 409.014†	-2683.7	123.8	3.1968	ug/L	3.1968	ppb	17:44:49
3	V 292.402†	-1646.0	-16.9	-0.1001	ug/L	-0.1001	ppb	17:44:54
3	Zn 213.857†	1023.8	125.4	0.9185	ug/L	0.9185	ppb	17:45:14
3	SiO2†	1738.7	1117.9	60.778	ug/L	60.778	ppb	17:45:29

Mean Data: 241420004|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048091.2	100.83	%	1.088				1.08%
Sc Radial	5081.4	103	%	1.8				1.70%
Y 371.029	890182.2	100.65	%	1.091				1.08%
Y RADIAL	5827.7	103.2	%	1.73				1.68%
Ag 328.068†	-41.8	-0.1640	ug/L	0.27877	-0.1640	ppb	0.27877	170.02%
Al 396.153Radial†	1.0	0.6585	ug/L	4.59765	0.6585	ppb	4.59765	698.20%
As 188.979†	-1.6	-0.5090	ug/L	1.93484	-0.5090	ppb	1.93484	380.13%
B 249.677†	-62.6	-1.1833	ug/L	0.14513	-1.1833	ppb	0.14513	12.27%
Ba 233.527†	15.3	0.0992	ug/L	0.07615	0.0992	ppb	0.07615	76.76%
Be 313.107†	0.9	0.0008	ug/L	0.01150	0.0008	ppb	0.01150	>999.9%
Ca 317.933Radial†	6.0	10.599	ug/L	1.3470	10.599	ppb	1.3470	12.71%
Cd 226.502†	-0.9	-0.0082	ug/L	0.08054	-0.0082	ppb	0.08054	988.21%
Co 228.616†	9.7	0.1593	ug/L	0.18199	0.1593	ppb	0.18199	114.24%
Cr 267.716†	27.8	0.2501	ug/L	0.05245	0.2501	ppb	0.05245	20.97%
Cu 324.752†	-94.3	-0.2515	ug/L	0.43792	-0.2515	ppb	0.43792	174.14%
Fe 238.204 Radial†	0.5	5.6431	ug/L	22.94570	5.6431	ppb	22.94570	406.62%
K 766.490 Radial†	-63.3	-11.540	ug/L	11.9611	-11.540	ppb	11.9611	103.65%

Mg 279.077 IEC†	-0.5	-20.835	ug/L	14.7065	-20.835	ppb	14.7065 70.59%
Mn 257.610†	163.2	0.1555	ug/L	0.01036	0.1555	ppb	0.01036 6.67%
Mo 202.031†	-2.1	-0.1103	ug/L	0.16759	-0.1103	ppb	0.16759 152.01%
Na 589.592 Radial†	76.3	21.413	ug/L	7.6192	21.413	ppb	7.6192 35.58%
Ni 231.604†	9.1	0.1791	ug/L	0.31585	0.1791	ppb	0.31585 176.31%
P 214.914†	7.0	3.1660	ug/L	6.36224	3.1660	ppb	6.36224 200.95%
Pb 220.353†	-9.4	-0.8859	ug/L	0.98217	-0.8859	ppb	0.98217 110.87%
S 181.975 Axial†	-1.5	-1.6471	ug/L	2.96485	-1.6471	ppb	2.96485 180.01%
Sb 206.836†	11.0	2.9016	ug/L	0.94057	2.9016	ppb	0.94057 32.42%
Se 196.026†	-1.6	-0.6678	ug/L	2.60183	-0.6678	ppb	2.60183 389.61%
Si 251.611†	1149.2	29.188	ug/L	0.3916	29.188	ppb	0.3916 1.34%
Sn 189.927†	7.2	0.9476	ug/L	0.82841	0.9476	ppb	0.82841 87.42%
Sr 421.552†	-7.0	-0.0370	ug/L	0.06694	-0.0370	ppb	0.06694 180.72%
Ti 334.940†	174.9	0.2412	ug/L	0.05302	0.2412	ppb	0.05302 21.98%
Tl 190.801†	-6.2	-1.5014	ug/L	0.60656	-1.5014	ppb	0.60656 40.40%
U 409.014†	44.9	1.1602	ug/L	2.31520	1.1602	ppb	2.31520 199.56%
V 292.402†	50.4	0.2874	ug/L	0.34322	0.2874	ppb	0.34322 119.42%
Zn 213.857†	129.1	0.9480	ug/L	0.12880	0.9480	ppb	0.12880 13.59%
SiO2†	1132.6	61.563	ug/L	1.1422	61.563	ppb	1.1422 1.86%

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 18:01:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4830.0	4830.0	98.4	%			18:03:34
1	Y RADIAL	5529.5	5529.5	97.92	%			18:03:34
1	Al 396.153Radial†	7608.5	7777.9	5114.3	ug/L	5114.3	ppb	18:03:34
1	Ca 317.933Radial†	2838.8	2867.8	5077.6	ug/L	5077.6	ppb	18:03:54
1	Fe 238.204 Radial†	423.3	419.3	5084.9	ug/L	5084.9	ppb	18:03:54
1	K 766.490 Radial†	29286.1	27199.9	4948.8	ug/L	4948.8	ppb	18:03:34
1	Mg 279.077 IEC†	113.0	112.4	5035.0	ug/L	5035.0	ppb	18:03:54
1	Na 589.592 Radial†	33434.5	35266.2	9892.2	ug/L	9892.2	ppb	18:03:34
1	Sr 421.552†	94452.4	96018.5	503.71	ug/L	503.71	ppb	18:03:34
1	Sc 361.383	1035614.3	1035614.3	99.628	%			18:04:53
1	Y 371.029	868981.8	868981.8	98.249	%			18:04:53
1	Ag 328.068†	126389.0	126387.2	504.08	ug/L	504.08	ppb	18:04:53
1	As 188.979†	1566.5	1609.0	505.73	ug/L	505.73	ppb	18:05:13
1	B 249.677†	25789.7	26352.1	496.08	ug/L	496.08	ppb	18:04:53
1	Ba 233.527†	78461.3	78754.5	507.26	ug/L	507.26	ppb	18:04:53
1	Be 313.107†	1611683.8	1622579.0	506.90	ug/L	506.90	ppb	18:04:53
1	Cd 226.502†	57528.7	57979.3	505.44	ug/L	505.44	ppb	18:04:53
1	Co 228.616†	30048.6	30247.1	498.39	ug/L	498.39	ppb	18:05:13
1	Cr 267.716†	55897.5	56018.6	504.09	ug/L	504.09	ppb	18:04:53
1	Cu 324.752†	197518.4	189318.8	505.84	ug/L	505.84	ppb	18:04:53
1	Mn 257.610†	534062.2	535480.8	507.48	ug/L	507.48	ppb	18:04:53
1	Mo 202.031†	9485.8	9492.0	504.07	ug/L	504.07	ppb	18:05:13
1	Ni 231.604†	25499.9	25463.2	498.60	ug/L	498.60	ppb	18:05:13
1	P 214.914†	5884.7	5641.6	2447.0	ug/L	2447.0	ppb	18:05:13
1	Pb 220.353†	5298.3	5393.7	507.89	ug/L	507.89	ppb	18:05:13
1	S 181.975 Axial†	974.6	918.2	988.21	ug/L	988.21	ppb	18:05:13
1	Sb 206.836†	1936.0	1908.6	510.46	ug/L	510.46	ppb	18:05:13
1	Se 196.026†	1104.7	1130.2	520.64	ug/L	520.64	ppb	18:05:13
1	Si 251.611†	99034.8	98847.1	2498.4	ug/L	2498.4	ppb	18:04:53
1	Sn 189.927†	3777.7	3796.2	502.67	ug/L	502.67	ppb	18:05:13
1	Ti 334.940†	362106.9	364720.2	502.92	ug/L	502.92	ppb	18:04:53
1	Tl 190.801†	2016.9	2068.7	503.55	ug/L	503.55	ppb	18:05:13
1	U 409.014†	15956.3	18789.9	484.19	ug/L	484.19	ppb	18:04:53
1	V 292.402†	85828.1	87757.3	509.11	ug/L	509.11	ppb	18:04:53
1	Zn 213.857†	69570.7	68945.1	502.18	ug/L	502.18	ppb	18:04:53
1	SiO2†	99394.4	99166.7	5363.6	ug/L	5363.6	ppb	18:06:13
2	Sc Radial	4837.6	4837.6	98.5	%			18:03:59
2	Y RADIAL	5523.5	5523.5	97.81	%			18:03:59
2	Al 396.153Radial†	7635.5	7793.2	5124.5	ug/L	5124.5	ppb	18:03:59
2	Ca 317.933Radial†	2827.0	2851.3	5048.3	ug/L	5048.3	ppb	18:04:19
2	Fe 238.204 Radial†	425.3	420.7	5101.5	ug/L	5101.5	ppb	18:04:19
2	K 766.490 Radial†	29236.2	27102.5	4931.0	ug/L	4931.0	ppb	18:03:59
2	Mg 279.077 IEC†	116.1	115.4	5167.3	ug/L	5167.3	ppb	18:04:19
2	Na 589.592 Radial†	33358.2	35135.5	9855.5	ug/L	9855.5	ppb	18:03:59
2	Sr 421.552†	94046.6	95456.0	500.76	ug/L	500.76	ppb	18:03:59
2	Sc 361.383	1035808.6	1035808.6	99.646	%			18:05:20
2	Y 371.029	867528.3	867528.3	98.085	%			18:05:20
2	Ag 328.068†	126769.6	126745.3	505.50	ug/L	505.50	ppb	18:05:20
2	As 188.979†	1557.5	1599.7	502.84	ug/L	502.84	ppb	18:05:41
2	B 249.677†	25701.8	26259.1	494.32	ug/L	494.32	ppb	18:05:20
2	Ba 233.527†	78605.2	78884.1	508.09	ug/L	508.09	ppb	18:05:20
2	Be 313.107†	1608110.3	1618689.4	505.69	ug/L	505.69	ppb	18:05:20
2	Cd 226.502†	57666.3	58106.5	506.55	ug/L	506.55	ppb	18:05:20
2	Co 228.616†	29927.7	30120.2	496.29	ug/L	496.29	ppb	18:05:41
2	Cr 267.716†	55912.4	56023.0	504.13	ug/L	504.13	ppb	18:05:20
2	Cu 324.752†	197921.4	189686.1	506.82	ug/L	506.82	ppb	18:05:20
2	Mn 257.610†	534944.8	536266.0	508.23	ug/L	508.23	ppb	18:05:20
2	Mo 202.031†	9432.8	9437.1	501.16	ug/L	501.16	ppb	18:05:41
2	Ni 231.604†	25444.8	25403.1	497.42	ug/L	497.42	ppb	18:05:41

2	P 214.914†	5862.9	5618.6	2436.5 ug/L	2436.5 ppb	18:05:41
2	Pb 220.353†	5283.8	5378.1	506.42 ug/L	506.42 ppb	18:05:41
2	S 181.975 Axial†	962.8	906.1	975.23 ug/L	975.23 ppb	18:05:41
2	Sb 206.836†	1917.4	1889.5	505.30 ug/L	505.30 ppb	18:05:41
2	Se 196.026†	1087.0	1112.2	512.72 ug/L	512.72 ppb	18:05:41
2	Si 251.611†	99182.7	98977.0	2501.8 ug/L	2501.8 ppb	18:05:20
2	Sn 189.927†	3754.3	3771.9	499.47 ug/L	499.47 ppb	18:05:41
2	Ti 334.940†	362842.0	365389.7	503.84 ug/L	503.84 ppb	18:05:20
2	Tl 190.801†	1992.7	2044.0	497.59 ug/L	497.59 ppb	18:05:41
2	U 409.014†	15978.8	18809.5	484.69 ug/L	484.69 ppb	18:05:20
2	V 292.402†	85852.5	87765.6	509.12 ug/L	509.12 ppb	18:05:20
2	Zn 213.857†	69526.6	68887.7	501.76 ug/L	501.76 ppb	18:05:20
2	SiO2†	99499.1	99253.0	5368.4 ug/L	5368.4 ppb	18:06:19
3	Sc Radial	4799.2	4799.2	97.7 %		18:04:24
3	Y RADIAL	5498.6	5498.6	97.37 %		18:04:24
3	Al 396.153Radial†	7619.7	7839.0	5154.6 ug/L	5154.6 ppb	18:04:24
3	Ca 317.933Radial†	2853.2	2901.0	5136.3 ug/L	5136.3 ppb	18:04:44
3	Fe 238.204 Radial†	431.9	430.9	5225.2 ug/L	5225.2 ppb	18:04:44
3	K 766.490 Radial†	29093.2	27193.5	4947.7 ug/L	4947.7 ppb	18:04:24
3	Mg 279.077 IEC†	119.0	119.2	5339.1 ug/L	5339.1 ppb	18:04:44
3	Na 589.592 Radial†	32907.5	34945.0	9802.1 ug/L	9802.1 ppb	18:04:24
3	Sr 421.552†	93251.9	95406.2	500.50 ug/L	500.50 ppb	18:04:24
3	Sc 361.383	1038206.6	1038206.6	99.877 %		18:05:48
3	Y 371.029	871182.2	871182.2	98.498 %		18:05:48
3	Ag 328.068†	126926.4	126608.4	504.99 ug/L	504.99 ppb	18:05:48
3	As 188.979†	1576.5	1615.1	507.65 ug/L	507.65 ppb	18:06:08
3	B 249.677†	25829.6	26327.4	495.59 ug/L	495.59 ppb	18:05:48
3	Ba 233.527†	78220.4	78316.7	504.45 ug/L	504.45 ppb	18:05:48
3	Be 313.107†	1610405.9	1617260.4	505.24 ug/L	505.24 ppb	18:05:48
3	Cd 226.502†	57420.6	57726.9	503.22 ug/L	503.22 ppb	18:05:48
3	Co 228.616†	30208.3	30331.8	499.79 ug/L	499.79 ppb	18:06:08
3	Cr 267.716†	55861.2	55842.1	502.50 ug/L	502.50 ppb	18:05:48
3	Cu 324.752†	198284.6	189591.0	506.57 ug/L	506.57 ppb	18:05:48
3	Mn 257.610†	533597.1	533676.7	505.78 ug/L	505.78 ppb	18:05:48
3	Mo 202.031†	9542.9	9525.4	505.86 ug/L	505.86 ppb	18:06:08
3	Ni 231.604†	25662.7	25562.4	500.54 ug/L	500.54 ppb	18:06:08
3	P 214.914†	5892.8	5635.0	2443.9 ug/L	2443.9 ppb	18:06:08
3	Pb 220.353†	5325.7	5407.8	509.22 ug/L	509.22 ppb	18:06:08
3	S 181.975 Axial†	987.2	928.3	999.15 ug/L	999.15 ppb	18:06:08
3	Sb 206.836†	1957.6	1925.3	514.98 ug/L	514.98 ppb	18:06:08
3	Se 196.026†	1116.3	1139.0	525.06 ug/L	525.06 ppb	18:06:08
3	Si 251.611†	98993.5	98557.6	2491.0 ug/L	2491.0 ppb	18:05:48
3	Sn 189.927†	3799.2	3808.2	504.27 ug/L	504.27 ppb	18:06:08
3	Ti 334.940†	362935.3	364642.1	502.82 ug/L	502.82 ppb	18:05:48
3	Tl 190.801†	2018.1	2064.8	502.60 ug/L	502.60 ppb	18:06:08
3	U 409.014†	16280.7	19074.7	491.53 ug/L	491.53 ppb	18:05:48
3	V 292.402†	85865.0	87579.2	508.12 ug/L	508.12 ppb	18:05:48
3	Zn 213.857†	69400.3	68600.1	499.61 ug/L	499.61 ppb	18:05:48
3	SiO2†	98935.3	98458.0	5325.0 ug/L	5325.0 ppb	18:06:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1036543.2	99.717	%	0.1389				0.14%
Sc Radial	4822.3	98.2	%	0.41				0.42%
Y 371.029	869230.8	98.277	%	0.2080				0.21%
Y RADIAL	5517.2	97.70	%	0.290				0.30%
Ag 328.068†	126580.3	504.86	ug/L	0.722	504.86	ppb	0.722	0.14%
QC value within limits for Ag 328.068 Recovery = 100.97%								
Al 396.153Radial†	7803.3	5131.1	ug/L	20.93	5131.1	ppb	20.93	0.41%
QC value within limits for Al 396.153Radial Recovery = 102.62%								
As 188.979†	1607.9	505.41	ug/L	2.420	505.41	ppb	2.420	0.48%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	26312.9	495.33	ug/L	0.906	495.33	ppb	0.906	0.18%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	78651.7	506.60	ug/L	1.909	506.60	ppb	1.909	0.38%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1619509.6	505.94	ug/L	0.858	505.94	ppb	0.858	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	2873.4	5087.4	ug/L	44.83	5087.4	ppb	44.83	0.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.75%
Cd 226.502†            57937.6      505.07 ug/L         1.691      505.07 ppb          1.691   0.33%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†            30233.1      498.16 ug/L         1.760      498.16 ppb          1.760   0.35%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            55961.2      503.57 ug/L         0.928      503.57 ppb          0.928   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.71%
Cu 324.752†           189532.0      506.41 ug/L         0.510      506.41 ppb          0.510   0.10%
   QC value within limits for Cu 324.752  Recovery = 101.28%
Fe 238.204 Radial†       423.6      5137.2 ug/L        76.66      5137.2 ppb          76.66   1.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27165.3      4942.5 ug/L         9.94      4942.5 ppb           9.94   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          115.6      5180.4 ug/L       152.48      5180.4 ppb         152.48   2.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.61%
Mn 257.610†           535141.2      507.16 ug/L         1.252      507.16 ppb          1.252   0.25%
   QC value within limits for Mn 257.610  Recovery = 101.43%
Mo 202.031†             9484.8      503.70 ug/L         2.371      503.70 ppb          2.371   0.47%
   QC value within limits for Mo 202.031  Recovery = 100.74%
Na 589.592 Radial†     35115.6      9849.9 ug/L        45.31      9849.9 ppb          45.31   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†            25476.2      498.85 ug/L         1.575      498.85 ppb          1.575   0.32%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              5631.7      2442.5 ug/L         5.37      2442.5 ppb           5.37   0.22%
   QC value within limits for P 214.914  Recovery = 97.70%
Pb 220.353†             5393.2      507.84 ug/L         1.401      507.84 ppb          1.401   0.28%
   QC value within limits for Pb 220.353  Recovery = 101.57%
S 181.975 Axial†         917.5      987.53 ug/L        11.972      987.53 ppb         11.972   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 98.75%
Sb 206.836†             1907.8      510.25 ug/L         4.840      510.25 ppb          4.840   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.05%
Se 196.026†             1127.2      519.48 ug/L         6.252      519.48 ppb          6.252   1.20%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            98793.9      2497.0 ug/L         5.50      2497.0 ppb           5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 99.88%
Sn 189.927†             3792.1      502.14 ug/L         2.448      502.14 ppb          2.448   0.49%
   QC value within limits for Sn 189.927  Recovery = 100.43%
Sr 421.552†            95626.9      501.65 ug/L         1.784      501.65 ppb          1.784   0.36%
   QC value within limits for Sr 421.552  Recovery = 100.33%
Ti 334.940†           364917.3      503.19 ug/L         0.566      503.19 ppb          0.566   0.11%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†             2059.2      501.25 ug/L         3.199      501.25 ppb          3.199   0.64%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†             18891.3      486.80 ug/L         4.105      486.80 ppb          4.105   0.84%
   QC value within limits for U 409.014  Recovery = 97.36%
V 292.402†             87700.7      508.78 ug/L         0.576      508.78 ppb          0.576   0.11%
   QC value within limits for V 292.402  Recovery = 101.76%
Zn 213.857†            68811.0      501.18 ug/L         1.379      501.18 ppb          1.379   0.28%
   QC value within limits for Zn 213.857  Recovery = 100.24%
SiO2†                  98959.2      5352.4 ug/L        23.80      5352.4 ppb          23.80   0.44%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
```

Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 18:08:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4766.6	4766.6	97.1	%			18:10:25
1	Y RADIAL	5473.3	5473.3	96.92	%			18:10:25
1	Al 396.153Radial†	-20.4	22.8	15.038	ug/L	15.038	ppb	18:10:25
1	Ca 317.933Radial†	22.5	5.3	9.4050	ug/L	9.4050	ppb	18:10:45
1	Fe 238.204 Radial†	8.0	-2.8	-33.253	ug/L	-33.253	ppb	18:10:45
1	K 766.490 Radial†	2545.0	51.9	9.4686	ug/L	9.4686	ppb	18:10:25
1	Mg 279.077 IEC†	4.0	1.6	72.341	ug/L	72.341	ppb	18:10:45
1	Na 589.592 Radial†	-1272.2	-30.5	-8.5443	ug/L	-8.5443	ppb	18:10:25
1	Sr 421.552†	-32.1	-25.7	-0.1348	ug/L	-0.1348	ppb	18:10:25
1	Sc 361.383	1034609.2	1034609.2	99.531	%			18:11:42
1	Y 371.029	881696.7	881696.7	99.687	%			18:11:42
1	Ag 328.068†	446.5	-25.5	-0.1118	ug/L	-0.1118	ppb	18:11:47
1	As 188.979†	-33.8	2.6	0.8128	ug/L	0.8128	ppb	18:12:07
1	B 249.677†	-454.8	9.1	0.1770	ug/L	0.1770	ppb	18:12:07
1	Ba 233.527†	-2.6	-2.6	-0.0192	ug/L	-0.0192	ppb	18:12:07
1	Be 313.107†	-4791.6	59.7	0.0187	ug/L	0.0187	ppb	18:11:47
1	Cd 226.502†	-228.8	5.7	0.0536	ug/L	0.0536	ppb	18:12:07
1	Co 228.616†	-84.4	1.6	0.0263	ug/L	0.0263	ppb	18:12:07
1	Cr 267.716†	106.0	18.8	0.1679	ug/L	0.1679	ppb	18:12:07
1	Cu 324.752†	8941.8	46.4	0.1223	ug/L	0.1223	ppb	18:11:47
1	Mn 257.610†	570.8	-3.2	-0.0077	ug/L	-0.0077	ppb	18:12:07
1	Mo 202.031†	29.9	0.8	0.0391	ug/L	0.0391	ppb	18:12:07
1	Ni 231.604†	151.8	20.6	0.4030	ug/L	0.4030	ppb	18:12:07
1	P 214.914†	248.4	-15.6	-6.9397	ug/L	-6.9397	ppb	18:12:07
1	Pb 220.353†	-71.0	4.3	0.4060	ug/L	0.4060	ppb	18:12:07
1	S 181.975 Axial†	60.8	0.9	1.0132	ug/L	1.0132	ppb	18:12:07
1	Sb 206.836†	49.6	15.2	4.0184	ug/L	4.0184	ppb	18:12:07
1	Se 196.026†	-29.1	-7.9	-3.6032	ug/L	-3.6032	ppb	18:12:07
1	Si 251.611†	580.7	25.8	0.6494	ug/L	0.6494	ppb	18:12:07
1	Sn 189.927†	0.4	4.7	0.6278	ug/L	0.6278	ppb	18:12:07
1	Ti 334.940†	-1230.3	24.3	0.0350	ug/L	0.0350	ppb	18:11:47
1	Tl 190.801†	-42.1	1.9	0.4708	ug/L	0.4708	ppb	18:12:07
1	U 409.014†	-2850.8	-90.3	-2.3302	ug/L	-2.3302	ppb	18:11:42
1	V 292.402†	-1689.4	-88.8	-0.5058	ug/L	-0.5058	ppb	18:11:47
1	Zn 213.857†	887.3	5.9	0.0415	ug/L	0.0415	ppb	18:12:07
1	SiO2†	594.9	-1.3	-0.0849	ug/L	-0.0849	ppb	18:13:13
2	Sc Radial	4831.6	4831.6	98.4	%			18:10:50
2	Y RADIAL	5539.0	5539.0	98.08	%			18:10:50
2	Al 396.153Radial†	-19.9	23.6	15.571	ug/L	15.571	ppb	18:10:50
2	Ca 317.933Radial†	20.6	3.1	5.4395	ug/L	5.4395	ppb	18:11:10
2	Fe 238.204 Radial†	12.0	1.2	14.105	ug/L	14.105	ppb	18:11:10
2	K 766.490 Radial†	2640.1	113.3	20.647	ug/L	20.647	ppb	18:10:50
2	Mg 279.077 IEC†	6.5	4.1	183.27	ug/L	183.27	ppb	18:11:10
2	Na 589.592 Radial†	-1259.8	-0.2	-0.0693	ug/L	-0.0693	ppb	18:10:50
2	Sr 421.552†	-7.2	0.1	0.0004	ug/L	0.0004	ppb	18:10:50
2	Sc 361.383	1027067.1	1027067.1	98.806	%			18:12:12
2	Y 371.029	874594.2	874594.2	98.884	%			18:12:12
2	Ag 328.068†	449.8	-18.9	-0.0704	ug/L	-0.0704	ppb	18:12:17
2	As 188.979†	-40.3	-4.2	-1.3039	ug/L	-1.3039	ppb	18:12:37
2	B 249.677†	-427.8	33.1	0.6230	ug/L	0.6230	ppb	18:12:37
2	Ba 233.527†	-2.6	-2.6	-0.0166	ug/L	-0.0166	ppb	18:12:37
2	Be 313.107†	-4776.7	39.5	0.0122	ug/L	0.0122	ppb	18:12:17
2	Cd 226.502†	-219.3	13.7	0.1183	ug/L	0.1183	ppb	18:12:37
2	Co 228.616†	-75.9	9.5	0.1565	ug/L	0.1565	ppb	18:12:37
2	Cr 267.716†	97.6	11.0	0.0989	ug/L	0.0989	ppb	18:12:37
2	Cu 324.752†	8954.3	125.1	0.3347	ug/L	0.3347	ppb	18:12:17
2	Mn 257.610†	567.3	-2.6	-0.0044	ug/L	-0.0044	ppb	18:12:37
2	Mo 202.031†	27.2	-1.7	-0.0888	ug/L	-0.0888	ppb	18:12:37
2	Ni 231.604†	137.1	6.8	0.1336	ug/L	0.1336	ppb	18:12:37

2	P 214.914†	289.4	27.8	12.395	ug/L	12.395 ppb	18:12:37
2	Pb 220.353†	-86.1	-11.5	-1.0822	ug/L	-1.0822 ppb	18:12:37
2	S 181.975 Axial†	51.7	-7.8	-8.3923	ug/L	-8.3923 ppb	18:12:37
2	Sb 206.836†	34.7	0.5	0.1412	ug/L	0.1412 ppb	18:12:37
2	Se 196.026†	-20.9	0.2	0.1369	ug/L	0.1369 ppb	18:12:37
2	Si 251.611†	575.3	24.6	0.6161	ug/L	0.6161 ppb	18:12:37
2	Sn 189.927†	3.8	8.2	1.0891	ug/L	1.0891 ppb	18:12:37
2	Ti 334.940†	-1271.1	-26.0	-0.0353	ug/L	-0.0353 ppb	18:12:17
2	Tl 190.801†	-40.7	3.1	0.7471	ug/L	0.7471 ppb	18:12:37
2	U 409.014†	-2766.3	-25.8	-0.6692	ug/L	-0.6692 ppb	18:12:12
2	V 292.402†	-1617.8	-28.8	-0.1657	ug/L	-0.1657 ppb	18:12:17
2	Zn 213.857†	888.8	14.0	0.0937	ug/L	0.0937 ppb	18:12:37
2	SiO2†	620.8	29.3	1.5731	ug/L	1.5731 ppb	18:13:18
3	Sc Radial	4720.5	4720.5	96.1	%		18:11:15
3	Y RADIAL	5456.3	5456.3	96.62	%		18:11:15
3	Al 396.153Radial†	-34.8	7.6	5.0192	ug/L	5.0192 ppb	18:11:15
3	Ca 317.933Radial†	12.2	-5.1	-9.1137	ug/L	-9.1137 ppb	18:11:35
3	Fe 238.204 Radial†	9.7	-0.9	-10.769	ug/L	-10.769 ppb	18:11:35
3	K 766.490 Radial†	2595.0	129.5	23.622	ug/L	23.622 ppb	18:11:15
3	Mg 279.077 IEC†	2.1	-0.3	-11.938	ug/L	-11.938 ppb	18:11:35
3	Na 589.592 Radial†	-1312.6	-85.3	-23.919	ug/L	-23.919 ppb	18:11:15
3	Sr 421.552†	1.0	8.4	0.0443	ug/L	0.0443 ppb	18:11:15
3	Sc 361.383	1017127.6	1017127.6	97.849	%		18:12:42
3	Y 371.029	865924.7	865924.7	97.903	%		18:12:42
3	Ag 328.068†	366.4	-99.6	-0.4011	ug/L	-0.4011 ppb	18:12:47
3	As 188.979†	-29.3	6.6	2.0560	ug/L	2.0560 ppb	18:13:07
3	B 249.677†	-440.2	16.3	0.3089	ug/L	0.3089 ppb	18:13:07
3	Ba 233.527†	9.3	9.5	0.0592	ug/L	0.0592 ppb	18:13:07
3	Be 313.107†	-4801.3	-32.9	-0.0104	ug/L	-0.0104 ppb	18:12:47
3	Cd 226.502†	-236.4	-5.9	-0.0502	ug/L	-0.0502 ppb	18:13:07
3	Co 228.616†	-91.6	-7.3	-0.1196	ug/L	-0.1196 ppb	18:13:07
3	Cr 267.716†	114.8	29.6	0.2642	ug/L	0.2642 ppb	18:13:07
3	Cu 324.752†	8925.1	183.8	0.4903	ug/L	0.4903 ppb	18:12:47
3	Mn 257.610†	576.7	12.7	0.0111	ug/L	0.0111 ppb	18:13:07
3	Mo 202.031†	31.1	2.6	0.1363	ug/L	0.1363 ppb	18:13:07
3	Ni 231.604†	141.1	12.2	0.2399	ug/L	0.2399 ppb	18:13:07
3	P 214.914†	272.2	13.1	5.7950	ug/L	5.7950 ppb	18:13:07
3	Pb 220.353†	-73.4	0.5	0.0523	ug/L	0.0523 ppb	18:13:07
3	S 181.975 Axial†	54.0	-4.9	-5.2941	ug/L	-5.2941 ppb	18:13:07
3	Sb 206.836†	34.2	0.3	0.1003	ug/L	0.1003 ppb	18:13:07
3	Se 196.026†	-20.9	0.0	-0.0283	ug/L	-0.0283 ppb	18:13:07
3	Si 251.611†	567.7	22.6	0.5592	ug/L	0.5592 ppb	18:13:07
3	Sn 189.927†	3.6	8.0	1.0610	ug/L	1.0610 ppb	18:13:07
3	Ti 334.940†	-1272.2	-39.7	-0.0555	ug/L	-0.0555 ppb	18:12:47
3	Tl 190.801†	-39.6	3.8	0.9126	ug/L	0.9126 ppb	18:13:07
3	U 409.014†	-2696.8	17.9	0.4644	ug/L	0.4644 ppb	18:12:42
3	V 292.402†	-1683.0	-111.5	-0.6339	ug/L	-0.6339 ppb	18:12:47
3	Zn 213.857†	892.5	26.6	0.1945	ug/L	0.1945 ppb	18:13:07
3	SiO2†	608.0	22.3	1.1842	ug/L	1.1842 ppb	18:13:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026268.0	98.729	%	0.8435				0.85%
Sc Radial	4772.9	97.2	%	1.14				1.17%
Y 371.029	874071.9	98.825	%	0.8931				0.90%
Y RADIAL	5489.5	97.21	%	0.774				0.80%
Ag 328.068†	-48.0	-0.1945	ug/L	0.18018	-0.1945	ppb	0.18018	92.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.0	11.876	ug/L	5.9441	11.876	ppb	5.9441	50.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	0.5216	ug/L	1.69881	0.5216	ppb	1.69881	325.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.5	0.3696	ug/L	0.22913	0.3696	ppb	0.22913	61.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0078	ug/L	0.04452	0.0078	ppb	0.04452	572.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.1	0.0069	ug/L	0.01526	0.0069	ppb	0.01526	222.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	1.9103	ug/L	9.75075	1.9103	ppb	9.75075	510.44%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.5      0.0406 ug/L       0.08501      0.0406 ppb        0.08501 209.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.3      0.0211 ug/L       0.13814      0.0211 ppb        0.13814 655.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.8      0.1770 ug/L       0.08304      0.1770 ppb        0.08304  46.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               118.4      0.3158 ug/L       0.18470      0.3158 ppb        0.18470  58.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -9.9724 ug/L      23.68902     -9.9724 ppb       23.68902 237.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          98.3      17.912 ug/L        7.4622      17.912 ppb         7.4622  41.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.8      81.225 ug/L       97.9077      81.225 ppb        97.9077 120.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0003 ug/L       0.01006     -0.0003 ppb        0.01006 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0289 ug/L       0.11291      0.0289 ppb        0.11291 390.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -38.7     -10.844 ug/L      12.0902     -10.844 ppb        12.0902 111.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.2      0.2588 ug/L       0.13570      0.2588 ppb        0.13570  52.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7502 ug/L       9.82845      3.7502 ppb        9.82845 262.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.3     -0.2079 ug/L       0.77747     -0.2079 ppb        0.77747 373.89%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.9     -4.2244 ug/L       4.79313     -4.2244 ppb        4.79313 113.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.3      1.4200 ug/L       2.25041      1.4200 ppb        2.25041 158.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.5     -1.1649 ug/L       2.11326     -1.1649 ppb        2.11326 181.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.3      0.6082 ug/L       0.04564      0.6082 ppb        0.04564   7.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.0      0.9260 ug/L       0.25857      0.9260 ppb        0.25857  27.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.7     -0.0300 ug/L       0.09336     -0.0300 ppb        0.09336 310.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.8     -0.0186 ug/L       0.04751     -0.0186 ppb        0.04751 255.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      0.7102 ug/L       0.22320      0.7102 ppb        0.22320  31.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.7     -0.8450 ug/L       1.40556     -0.8450 ppb        1.40556 166.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -76.4     -0.4351 ug/L       0.24200     -0.4351 ppb        0.24200  55.62%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                15.5      0.1099 ug/L       0.07776      0.1099 ppb        0.07776  70.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      16.8      0.8908 ug/L       0.86705      0.8908 ppb        0.86705  97.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 14:45:06
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.293
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1083.0	1083.041	31.331	2.9
	Mg	24.0	17160.1	17160.100	83.179	0.5
	Co	58.9	41851.8	41851.817	233.658	0.6
	Rh	102.9	69668.7	69668.682	726.654	1.0
	In	114.9	88317.6	88317.573	728.115	0.8
	Pb	208.0	54128.4	54128.357	444.880	0.8
⌈>	Ba	137.9	76857.7	76857.668	361.085	0.5
⌊	Ba++	69.0	1192.0	0.016	0.000	2.2
⌈>	Ce	139.9	92145.2	92145.232	645.220	0.7
⌊	CeO	155.9	1941.5	0.021	0.000	1.3
	Bkgd	220.0	4.6	4.600	1.710	37.2

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.0	649.7
Co	59	15	7.0	23678.9
In	115	15	8.3	56319.1

ICPMS #4 TUNING REPORT

File Name: 091205.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	604	2060	0.678
Be	9.0	9.0	2044	2055	0.677
Mg	24.0	24.0	5675	2085	0.609
Mg	25.0	25.0	5949	2080	0.649
Mg	26.0	26.0	6152	2095	0.653
Co	58.9	58.9	14166	2120	0.711
Rh	102.9	102.9	24871	2220	0.689
In	114.9	114.9	27780	2255	0.676
Ce	139.9	139.9	33857	2300	0.664
Pb	206.0	206.0	49925	2460	0.687
Pb	207.0	207.0	50113	2380	0.647
Pb	208.0	208.0	50436	2490	0.665
U	238.1	238.0	57686	2480	0.669

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 01:51:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Blank.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94881	
|	Sb	121		ug/L		206	
⌊	Sb	123		ug/L		168	
⌈>	Lu	175		ug/L		124843	
⌊	U	238		ug/L		274	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 01:53:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		93794	93794.222
|	Sb	121	10.000	ug/L	1.806	14981	0.158
⌊	Sb	123		ug/L		11540	0.121
⌈>	Lu	175		ug/L		124991	124991.001
⌊	U	238	10.000	ug/L	1.907	105780	0.844

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 01:55:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97726	97726.327
|	Sb	121	100.045	ug/L	2.339	161443	1.650
⌊	Sb	123		ug/L		123252	1.259
⌈>	Lu	175		ug/L		131325	131324.849
⌊	U	238	99.969	ug/L	1.560	1075405	8.186

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 01:58:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101548	101548.169
|	Sb	121	47.532	ug/L	3.319	79808	0.784
⌊	Sb	123		ug/L		60743	0.596
⌈>	Lu	175		ug/L		131776	131776.014
⌊	U	238	52.464	ug/L	0.204	566416	4.296

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.0			
|	Sb	121	95.063				
⌊	Sb	123					
⌈>	Lu	175		105.6			
⌊	U	238	104.928				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 02:00:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99963	99963.314
|	Sb	121	**0.646**	ug/L	2.928	1282	0.011
⌊	Sb	123		ug/L		1016	0.008
⌈>	Lu	175		ug/L		129577	129576.659
⌊	U	238	**0.007**	ug/L	20.004	363	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		105.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		103.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 02:03:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99922	99922.127
|	Sb	121	3.019	ug/L	2.978	5191	0.050
⌊	Sb	123		ug/L		4004	0.038
⌈>	Lu	175		ug/L		130370	130370.500
⌊	U	238	0.218	ug/L	0.590	2617	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			105.3		
|	Sb	121	100.629				
⌊	Sb	123					
⌈>	Lu	175			104.4		
⌊	U	238	109.180				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 02:05:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96099	96098.868
|	Sb	121	0.275	ug/L	5.749	645	0.005
⌊	Sb	123		ug/L		499	0.003
⌈>	Lu	175		ug/L		136251	136251.066
⌊	U	238	-0.012	ug/L	5.267	161	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.3			
|	Sb	121	275.478				
⌊	Sb	123					
⌈>	Lu	175		109.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 02:08:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		95824	95823.967
|	Sb	121	22.746	ug/L	1.165	36149	0.375
⌊	Sb	123		ug/L		27696	0.287
⌈>	Lu	175		ug/L		134971	134970.625
⌊	U	238	21.753	ug/L	0.441	240717	1.781

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.0			
|	Sb	121	113.163				
⌊	Sb	123					
⌈>	Lu	175		108.1			
⌊	U	238	108.764				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:10:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.667

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		105255	105255.407
|	Sb	121	**46.271**	ug/L	3.521	80528	0.763
⌊	Sb	123		ug/L		61839	0.586
⌈>	Lu	175		ug/L		137607	137607.309
⌊	U	238	**52.272**	ug/L	0.865	589321	4.280

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.9			
|	Sb	121	92.543				
⌊	Sb	123					
⌈>	Lu	175		110.2			
⌊	U	238	104.544				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:13:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.668

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103341	103341.175
|	Sb	121	0.466	ug/L	1.179	1019	0.008
⌊	Sb	123		ug/L		786	0.006
⌈>	Lu	175		ug/L		134147	134146.585
⌊	U	238	0.007	ug/L	53.173	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.9			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 02:15:39
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.669

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98677	98677.061
|	Sb	121	0.297	ug/L	11.519	697	0.005
⌊	Sb	123		ug/L		532	0.004
⌈>	Lu	175		ug/L		134491	134490.586
⌊	U	238	-0.019	ug/L	6.656	81	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		104.0			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 02:18:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.670

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94240	94239.748
|	Sb	121	60.514	ug/L	4.873	94098	0.998
⌊	Sb	123		ug/L		71790	0.761
⌈>	Lu	175		ug/L		131309	131309.045
⌊	U	238	58.935	ug/L	4.695	633198	4.826

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.3			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		105.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 02:23:17
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.672

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97907	97907.017
|	Sb	121	0.053	ug/L	29.941	298	0.001
⌊	Sb	123		ug/L		221	0.000
⌈>	Lu	175		ug/L		134933	134932.994
⌊	U	238	-0.021	ug/L	3.566	68	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			103.2		
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175			108.1		
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 02:25:49
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.673

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97276	97275.842
|	Sb	121	230.692	ug/L	1.853	370180	3.804
⌊	Sb	123		ug/L		285040	2.929
⌈>	Lu	175		ug/L		138254	138254.229
⌊	U	238	56.663	ug/L	0.828	641847	4.640

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115			102.5		
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175			110.7		
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 02:28:20
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.674

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102303	102302.909
|	Sb	121	0.116	ug/L	8.019	418	0.002
⌊	Sb	123		ug/L		342	0.002
⌈>	Lu	175		ug/L		133000	132999.932
⌊	U	238	-0.011	ug/L	8.371	173	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		106.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:33:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104645	104645.062
|	Sb	121	44.663	ug/L	3.625	77290	0.736
⌊	Sb	123		ug/L		58955	0.562
⌈>	Lu	175		ug/L		135843	135843.408
⌊	U	238	52.000	ug/L	1.107	578638	4.258

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.3			
|	Sb	121	89.325				
⌊	Sb	123					
⌈>	Lu	175		108.8			
⌊	U	238	103.999				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:35:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.677

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102840	102840.323
|	Sb	121	**0.475**	ug/L	4.081	1029	0.008
⌊	Sb	123		ug/L		832	0.006
⌈>	Lu	175		ug/L		134766	134766.026
⌊	U	238	**0.007**	ug/L	27.530	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420001
Sample Date/Time: Sunday, December 06, 2009 02:43:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241420001.680

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98785	98784.902
|	Sb	121	0.017	ug/L	31.529	243	0.000
⌊	Sb	123		ug/L		203	0.000
⌈>	Lu	175		ug/L		136789	136789.225
⌊	U	238	-0.014	ug/L	4.264	148	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		104.1			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		109.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420002
Sample Date/Time: Sunday, December 06, 2009 02:46:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241420002.681

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		88255	88255.444
|	Sb	121	0.012	ug/L	221.457	207	0.000
⌊	Sb	123		ug/L		168	0.000
⌈>	Lu	175		ug/L		124656	124656.324
⌊	U	238	-0.001	ug/L	106.262	259	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		93.0			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		99.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420003
Sample Date/Time: Sunday, December 06, 2009 02:48:32
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241420003.682

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97086	97086.348
|	Sb	121	-0.024	ug/L	18.547	172	-0.000
⌊	Sb	123		ug/L		148	-0.000
⌈>	Lu	175		ug/L		134855	134854.548
⌊	U	238	-0.023	ug/L	2.339	37	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		102.3			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		108.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420004
Sample Date/Time: Sunday, December 06, 2009 02:51:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241420004.683

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96619	96619.032
|	Sb	121	-0.022	ug/L	28.356	175	-0.000
⌊	Sb	123		ug/L		137	-0.000
⌈>	Lu	175		ug/L		134440	134439.696
⌊	U	238	-0.022	ug/L	3.362	50	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:58:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.686

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103529	103529.259
|	Sb	121	**44.137**	ug/L	2.888	75555	0.728
⌊	Sb	123		ug/L		57698	0.556
⌈>	Lu	175		ug/L		134829	134828.672
⌊	U	238	**52.172**	ug/L	1.163	576272	4.272

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		109.1			
|	Sb	121	88.274				
⌊	Sb	123					
⌈>	Lu	175		108.0			
⌊	U	238	104.345				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 03:01:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.687

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102555	102554.905
|	Sb	121	0.469	ug/L	4.748	1016	0.008
⌊	Sb	123		ug/L		811	0.006
⌈>	Lu	175		ug/L		132021	132021.280
⌊	U	238	0.008	ug/L	9.369	378	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.1			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		105.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 06:48:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Blank.698

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		103990	
Sb	121		ug/L		387	
Sb	123		ug/L		284	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115					
Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 06:50:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.699

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104439	104438.648
|	Sb	121	10.000	ug/L	3.353	15696	0.147
⌊	Sb	123		ug/L		12228	0.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 06:53:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.700

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102809	102808.739
|	Sb	121	100.057	ug/L	1.734	160268	1.555
⌊	Sb	123		ug/L		122687	1.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 06:55:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.701

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		104936	104936.382
Sb	121	47.429	ug/L	2.427	77727	0.737
Sb	123		ug/L		59633	0.566

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		100.9			
Sb	121	94.858				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 06:57:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103664	103664.345
|	Sb	121	0.577	ug/L	6.610	1314	0.009
⌊	Sb	123		ug/L		1011	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.7			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 07:00:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.703

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103667	103667.137
|	Sb	121	3.003	ug/L	2.855	5223	0.047
⌊	Sb	123		ug/L		4048	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.7			
|	Sb	121	100.103				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 07:02:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.704

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		96888	96888.062
Sb	121	0.157	ug/L	17.849	596	0.002
Sb	123		ug/L		456	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		93.2			
Sb	121	156.604				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 07:04:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.705

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		97262	97261.862
Sb	121	22.379	ug/L	2.910	34184	0.348
Sb	123		ug/L		26455	0.269

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		93.5			
Sb	121	111.337				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:07:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.706

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		104423	104422.693
Sb	121	45.130	ug/L	0.662	73637	0.702
Sb	123		ug/L		56804	0.541

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		100.4			
Sb	121	90.261				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:09:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.707

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		103475	103475.010
Sb	121	0.373	ug/L	6.997	985	0.006
Sb	123		ug/L		765	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		99.5			
Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 07:11:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99218	99217.948
|	Sb	121	0.232	ug/L	1.796	727	0.004
⌊	Sb	123		ug/L		547	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.4			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 07:14:23
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		98264	98264.209
	Sb	121	57.361	ug/L	4.434	87916	0.892
	Sb	123		ug/L		66805	0.677

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		94.5			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 07:19:16
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.711

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		98799	98799.490
	Sb	121	-0.050	ug/L	7.222	290	-0.001
	Sb	123		ug/L		239	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		95.0			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 07:21:42
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.712

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		98020	98019.587
	Sb	121	232.616	ug/L	5.328	354564	3.616
	Sb	123		ug/L		273620	2.790

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		94.3			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 07:24:06
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.713

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101812	101811.784
|	Sb	121	0.073	ug/L	16.762	494	0.001
⌊	Sb	123		ug/L		385	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		97.9			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:28:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.715

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102894	102894.081
|	Sb	121	52.491	ug/L	4.276	84269	0.816
⌊	Sb	123		ug/L		63858	0.618

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		98.9			
|	Sb	121	104.981				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:31:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.716

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		103848	103848.492
	Sb	121	0.180	ug/L	15.753	676	0.003
	Sb	123		ug/L		524	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		99.9			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420001
Sample Date/Time: Sunday, December 06, 2009 07:38:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241420001.719

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98839	98839.182
|	Sb	121	-0.097	ug/L	9.896	218	-0.002
⌊	Sb	123		ug/L		190	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.0			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420002
Sample Date/Time: Sunday, December 06, 2009 07:41:03
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241420002.720

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		97874	97874.368
	Sb	121	-0.106	ug/L	1.484	203	-0.002
	Sb	123		ug/L		171	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		94.1			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420003
Sample Date/Time: Sunday, December 06, 2009 07:43:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241420003.721

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96138	96138.106
|	Sb	121	-0.123	ug/L	3.405	173	-0.002
⌊	Sb	123		ug/L		143	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		92.4			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241420004
Sample Date/Time: Sunday, December 06, 2009 07:45:55
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241420004.722

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97028	97027.786
|	Sb	121	-0.134	ug/L	5.284	159	-0.002
⌊	Sb	123		ug/L		145	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		93.3			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:53:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.725

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		100744	100743.848
Sb	121	51.860	ug/L	4.854	81554	0.806
Sb	123		ug/L		62632	0.619

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		96.9			
Sb	121	103.720				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:55:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.726

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101982	101982.020
|	Sb	121	0.146	ug/L	15.157	610	0.002
⌊	Sb	123		ug/L		466	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		98.1			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, December 04, 2009 17:10:05
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1393
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3656.5	3656.468	46.959	1.3
	Mg	24.0	33148.4	33148.415	197.622	0.6
	Co	58.9	77411.2	77411.206	1133.042	1.5
	Rh	102.9	141123.3	141123.253	984.846	0.7
	In	114.9	192067.3	192067.328	2730.625	1.4
	Pb	208.0	142811.1	142811.081	483.021	0.3
⌈>	Ba	137.9	191898.6	191898.598	1606.226	0.8
⌊	Ba++	69.0	3033.7	0.016	0.000	1.1
⌈>	Ce	139.9	239168.6	239168.575	2249.215	0.9
⌊	CeO	155.9	4645.9	0.019	0.000	1.3
	Bkgd	220.0	17.2	17.200	2.280	13.3

Current Optimization File Data

Current Value	Description
0.82	Nebulizer Gas Flow
6.25	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	5.8	3946.9
Co	59	9	6.0	76591.8
In	115	9	6.5	198967.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2060	0.592
Be	9.0	9.0	2066	2070	0.631
Mg	24.0	24.0	5699	2070	0.696
Mg	25.0	25.0	5915	2075	0.626
Mg	26.0	26.0	6201	2070	0.658
Co	58.9	59.0	14190	2095	0.653
Rh	102.9	102.9	24874	2160	0.628
In	114.9	114.9	27788	2180	0.627
Ce	139.9	139.9	33872	2195	0.644
Pb	206.0	206.0	49948	2290	0.613
Pb	207.0	207.0	50159	2260	0.606
Pb	208.0	208.0	50451	2280	0.640
U	238.1	238.1	57732	2295	0.653

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 02:29:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Blank.654

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		83	
	Be	9		ug/L		12	
	B	11		ug/L		565	
	Na	23		ug/L		7002	
	Mg	24		ug/L		3000	
	Al	27		ug/L		8003	
	P	31		ug/L		3471	
	K	39		ug/L		457208	
	Ca	43		ug/L		213	
>	Sc	45		ug/L		325296	
	Ti	47		ug/L		307	
	V	51		ug/L		5688	
	Cr	52		ug/L		-1171	
	Cr	53		ug/L		67764	
	Mn	55		ug/L		1013	
	Fe	57		ug/L		6366	
	Co	59		ug/L		113	
	Ni	60		ug/L		81	
	Cu	63		ug/L		175	
	Cu	65		ug/L		94	
	Zn	66		ug/L		258	
	Zn	67		ug/L		6067	
	Zn	68		ug/L		747	
>	Ge	74		ug/L		367892	
	As	75		ug/L		147	
	Se	77		ug/L		3492	
	Se	82		ug/L		-11	
	Kr	83		ug/L		110	
	Sr	88		ug/L		189	
	Y	89		ug/L		59	
	Mo	98		ug/L		110	
	Ag	107		ug/L		55	
	Cd	111		ug/L		24	
	Cd	114		ug/L		54	
>	In	115		ug/L		223674	
	Sn	120		ug/L		439	
	Sb	121		ug/L		548	
	Sb	123		ug/L		448	
	Ba	135		ug/L		38	
	Ba	137		ug/L		61	
	Ho	165		ug/L		40	
>	Lu	175		ug/L		367322	
	Tl	205		ug/L		712	
	Pb	208		ug/L		984	
	Bi	209		ug/L		376	
	Th	232		ug/L		1896	
	U	238		ug/L		408	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 02:36:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 1.655

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.268	15542	0.048
	Be	9	10.000	ug/L	0.927	3331	0.010
	B	11	20.000	ug/L	4.411	6183	0.017
	Na	23	1000.000	ug/L	2.304	2871399	8.893
	Mg	24	1000.000	ug/L	0.121	1863055	5.774
	Al	27	1000.000	ug/L	7.415	2926472	9.062
	P	31	1000.000	ug/L	3.205	182352	0.555
	K	39	1000.000	ug/L	11.422	4958549	13.998
	Ca	43	1000.000	ug/L	1.960	9893	0.030
>	Sc	45		ug/L		322144	322144.200
	Ti	47	10.000	ug/L	1.104	5000	0.015
	V	51	10.000	ug/L	8.230	62190	0.176
	Cr	52	10.000	ug/L	0.249	43558	0.139
	Cr	53		ug/L		79619	0.039
	Mn	55	10.000	ug/L	0.164	78434	0.240
	Fe	57	1000.000	ug/L	1.712	164717	0.492
	Co	59	10.000	ug/L	2.061	58983	0.183
	Ni	60	10.000	ug/L	2.986	12462	0.038
	Cu	63		ug/L		30558	0.094
	Cu	65	10.000	ug/L	1.703	14838	0.046
	Zn	66	10.000	ug/L	2.419	10687	0.028
	Zn	67		ug/L		8046	0.005
	Zn	68		ug/L		8364	0.021
>	Ge	74		ug/L		367660	367660.467
	As	75	10.000	ug/L	0.994	10809	0.029
	Se	77		ug/L		4931	0.004
	Se	82	10.000	ug/L	4.356	1088	0.003
	Kr	83		ug/L		106	-0.000
	Sr	88	10.000	ug/L	0.458	124702	0.559
	Y	89		ug/L		63	0.000
	Mo	98	10.000	ug/L	0.600	28839	0.129
	Ag	107	10.000	ug/L	0.886	49442	0.222
	Cd	111	10.000	ug/L	0.816	12165	0.055
	Cd	114		ug/L		28717	0.129
>	In	115		ug/L		222563	222563.256
	Sn	120	10.000	ug/L	4.055	49744	0.222
	Sb	121	10.000	ug/L	11.691	35653	0.158
	Sb	123		ug/L		28005	0.124
	Ba	135		ug/L		13512	0.037
	Ba	137	10.000	ug/L	0.828	24071	0.066
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		364712	364711.741
	Tl	205	10.000	ug/L	1.179	153881	0.420
	Pb	208	10.000	ug/L	1.449	235761	0.644
	Bi	209		ug/L		384	0.000
	Th	232	10.000	ug/L	1.876	272227	0.741
	U	238	10.000	ug/L	1.851	300336	0.822

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 02:42:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 2.656

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.980**	**ug/L**	0.704	156240	0.470
	Be	9	**99.961**	**ug/L**	0.979	32944	0.099
	B	11	**200.020**	**ug/L**	3.536	59127	0.176
	Na	23	**10006.696**	**ug/L**	2.940	31684406	95.373
	Mg	24	**10011.906**	**ug/L**	5.136	21789350	65.623
	Al	27	**10002.905**	**ug/L**	10.624	30963959	93.355
	P	31	**9989.801**	**ug/L**	1.904	1675066	5.035
	K	39	**9997.962**	**ug/L**	7.215	45973459	137.155
	Ca	43	**9997.517**	**ug/L**	3.951	97522	0.293
>	Sc	45		**ug/L**		332045	332045.124
	Ti	47	**100.007**	**ug/L**	2.350	49067	0.147
	V	51	**99.984**	**ug/L**	3.276	579381	1.728
	Cr	52	**99.982**	**ug/L**	2.030	451432	1.364
	Cr	53		**ug/L**		145292	0.229
	Mn	55	**99.966**	**ug/L**	1.870	772327	2.323
	Fe	57	**9988.172**	**ug/L**	4.279	1464426	4.393
	Co	59	**99.957**	**ug/L**	0.728	581507	1.751
	Ni	60	**99.981**	**ug/L**	0.989	125275	0.377
	Cu	63		**ug/L**		299907	0.903
	Cu	65	**99.971**	**ug/L**	2.592	147706	0.445
	Zn	66	**99.987**	**ug/L**	1.708	104895	0.280
	Zn	67		**ug/L**		24828	0.050
	Zn	68		**ug/L**		76488	0.203
>	Ge	74		**ug/L**		373529	373528.738
	As	75	**100.010**	**ug/L**	0.969	109601	0.293
	Se	77		**ug/L**		13814	0.027
	Se	82	**99.964**	**ug/L**	1.181	10769	0.029
	Kr	83		**ug/L**		138	0.000
	Sr	88	**99.942**	**ug/L**	0.937	1178005	5.282
	Y	89		**ug/L**		156	0.000
	Mo	98	**99.993**	**ug/L**	2.875	285749	1.281
	Ag	107	**99.956**	**ug/L**	1.702	473704	2.124
	Cd	111	**99.976**	**ug/L**	1.185	118713	0.532
	Cd	114		**ug/L**		279353	1.253
>	In	115		**ug/L**		222981	222980.818
	Sn	120	**99.993**	**ug/L**	1.690	490793	2.199
	Sb	121	**100.112**	**ug/L**	9.451	396906	1.779
	Sb	123		**ug/L**		312221	1.399
	Ba	135		**ug/L**		133607	0.375
	Ba	137	**99.998**	**ug/L**	0.628	234019	0.657
	Ho	165		**ug/L**		53	0.000
>	Lu	175		**ug/L**		356006	356005.501
	Tl	205	**99.865**	**ug/L**	1.271	1316358	3.696
	Pb	208	**99.921**	**ug/L**	0.369	2123639	5.963
	Bi	209		**ug/L**		521	0.000
	Th	232	**99.954**	**ug/L**	1.354	2524233	7.085
	U	238	**99.877**	**ug/L**	2.285	2604978	7.316

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 02:48:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 1.657

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.754**	ug/L	1.871	81520	0.243
	Be	9	**52.697**	ug/L	3.657	17497	0.052
	B	11	**109.542**	ug/L	3.920	32884	0.097
	Na	23	**4602.047**	ug/L	2.954	14687911	43.862
	Mg	24	**4978.796**	ug/L	2.172	10917581	32.633
	Al	27	**4758.204**	ug/L	3.854	14862464	44.407
	P	31	**5275.789**	ug/L	1.572	893070	2.659
	K	39	**4730.387**	ug/L	10.830	22204413	64.893
	Ca	43	**5059.015**	ug/L	0.813	49855	0.148
>	Sc	45		ug/L		334573	334573.295
	Ti	47	**50.275**	ug/L	4.388	24999	0.074
	V	51	**51.547**	ug/L	1.584	303857	0.891
	Cr	52	**51.730**	ug/L	3.000	234714	0.705
	Cr	53		ug/L		112569	0.128
	Mn	55	**51.930**	ug/L	3.638	404616	1.207
	Fe	57	**5181.134**	ug/L	0.099	768921	2.279
	Co	59	**49.440**	ug/L	2.075	289817	0.866
	Ni	60	**50.089**	ug/L	0.920	63283	0.189
	Cu	63		ug/L		157248	0.470
	Cu	65	**51.541**	ug/L	2.414	76765	0.229
	Zn	66	**51.172**	ug/L	0.975	53884	0.143
	Zn	67		ug/L		16218	0.027
	Zn	68		ug/L		39964	0.105
>	Ge	74		ug/L		374072	374071.882
	As	75	**47.863**	ug/L	3.253	52598	0.140
	Se	77		ug/L		9276	0.015
	Se	82	**49.996**	ug/L	1.532	5389	0.014
	Kr	83		ug/L		129	0.000
	Sr	88	**51.089**	ug/L	1.916	599434	2.700
	Y	89		ug/L		107	0.000
	Mo	98	**50.405**	ug/L	3.850	143408	0.646
	Ag	107	**50.413**	ug/L	1.470	237837	1.071
	Cd	111	**50.386**	ug/L	2.430	59555	0.268
	Cd	114		ug/L		141968	0.639
>	In	115		ug/L		221956	221955.880
	Sn	120	**51.024**	ug/L	3.316	249445	1.122
	Sb	121	**48.038**	ug/L	11.255	189857	0.854
	Sb	123		ug/L		148988	0.670
	Ba	135		ug/L		67472	0.186
	Ba	137	**49.832**	ug/L	2.258	118635	0.327
	Ho	165		ug/L		81	0.000
>	Lu	175		ug/L		362133	362133.114
	Tl	205	**51.019**	ug/L	1.264	684350	1.888
	Pb	208	**52.132**	ug/L	1.299	1127496	3.111
	Bi	209		ug/L		421	0.000
	Th	232	**50.374**	ug/L	2.626	1294845	3.571
	U	238	**52.866**	ug/L	1.221	1402577	3.872

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	103.509				
	Be	9	105.394				
	B	11	109.542				
	Na	23	92.041				
	Mg	24	99.576				
	Al	27	94.222				
	P	31	105.516				
	K	39	94.608				
	Ca	43	101.180				
>	Sc	45		102.9			
	Ti	47	100.551				
	V	51	103.094				
	Cr	52	103.461				
	Cr	53					
	Mn	55	103.859				
	Fe	57	103.623				
	Co	59	98.879				
	Ni	60	100.178				
	Cu	63					
	Cu	65	103.083				
	Zn	66	102.345				
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75	95.725				
	Se	77					
	Se	82	99.991				
	Kr	83					
	Sr	88	102.179				
	Y	89					
	Mo	98	100.809				
	Ag	107	100.826				
	Cd	111	100.772				
	Cd	114					
>	In	115		99.2			
	Sn	120	102.048				
	Sb	121	96.075				
	Sb	123					
	Ba	135					
	Ba	137	99.663				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	102.038				
	Pb	208	104.263				
	Bi	209					
	Th	232	100.747				
	U	238	105.731				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 02:54:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 2.658

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.040**	ug/L	30.669	143	0.000
	Be	9	**0.026**	ug/L	6.323	20	0.000
	B	11	**5.314**	ug/L	12.145	2075	0.005
	Na	23	**2.832**	ug/L	53.845	15676	0.027
	Mg	24	**3.017**	ug/L	34.751	9336	0.020
	Al	27	**2.320**	ug/L	66.584	15008	0.022
	P	31	**4.079**	ug/L	25.449	4108	0.002
	K	39	**2.526**	ug/L	154.623	464775	0.035
	Ca	43	**3.164**	ug/L	69.386	242	0.000
>	Sc	45		ug/L		322887	322886.661
	Ti	47	**0.013**	ug/L	216.146	311	0.000
	V	51	**0.258**	ug/L	166.985	7071	0.004
	Cr	52	**0.066**	ug/L	188.033	-879	0.001
	Cr	53		ug/L		67393	0.000
	Mn	55	**0.007**	ug/L	122.333	1059	0.000
	Fe	57	**4.316**	ug/L	9.005	6932	0.002
	Co	59	**0.022**	ug/L	26.589	237	0.000
	Ni	60	**0.013**	ug/L	110.042	96	0.000
	Cu	63		ug/L		245	0.000
	Cu	65	**0.027**	ug/L	18.534	133	0.000
	Zn	66	**0.045**	ug/L	46.386	303	0.000
	Zn	67		ug/L		5908	-0.000
	Zn	68		ug/L		772	0.000
>	Ge	74		ug/L		366642	366641.550
	As	75	**0.023**	ug/L	543.824	171	0.000
	Se	77		ug/L		3691	0.001
	Se	82	**-0.112**	ug/L	125.363	-23	-0.000
	Kr	83		ug/L		114	0.000
	Sr	88	**0.015**	ug/L	47.178	366	0.001
	Y	89		ug/L		43	-0.000
	Mo	98	**0.122**	ug/L	24.449	459	0.002
	Ag	107	**0.018**	ug/L	52.088	142	0.000
	Cd	111	**0.016**	ug/L	42.009	43	0.000
	Cd	114		ug/L		91	0.000
>	In	115		ug/L		223944	223944.208
	Sn	120	**0.512**	ug/L	12.937	2964	0.011
	Sb	121	**1.427**	ug/L	17.965	6227	0.025
	Sb	123		ug/L		4924	0.020
	Ba	135		ug/L		60	0.000
	Ba	137	**0.014**	ug/L	29.189	95	0.000
	Ho	165		ug/L		45	0.000
>	Lu	175		ug/L		368839	368839.171
	Tl	205	**0.159**	ug/L	21.683	2880	0.006
	Pb	208	**0.021**	ug/L	20.418	1446	0.001
	Bi	209		ug/L		372	-0.000
	Th	232	**0.322**	ug/L	13.552	10321	0.023
	U	238	**0.031**	ug/L	26.660	1247	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 03:00:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 3.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.411**	ug/L	1.528	17552	0.054
	Be	9	**0.577**	ug/L	7.263	198	0.001
	B	11	**19.046**	ug/L	0.638	6032	0.017
	Na	23	**244.917**	ug/L	4.909	767110	2.334
	Mg	24	**16.048**	ug/L	41.204	37052	0.105
	Al	27	**35.032**	ug/L	22.710	114132	0.327
	P	31	**67.507**	ug/L	1.242	14546	0.034
	K	39	**270.704**	ug/L	2.625	1666197	3.714
	Ca	43	**223.743**	ug/L	0.846	2349	0.007
>	Sc	45		ug/L		325470	325469.703
	Ti	47	**9.230**	ug/L	0.659	4718	0.014
	V	51	**11.156**	ug/L	3.134	68473	0.193
	Cr	52	**11.116**	ug/L	3.279	48147	0.152
	Cr	53		ug/L		91452	0.073
	Mn	55	**5.723**	ug/L	0.910	44304	0.133
	Fe	57	**118.097**	ug/L	4.311	23275	0.052
	Co	59	**1.104**	ug/L	2.631	6408	0.019
	Ni	60	**2.183**	ug/L	1.528	2761	0.008
	Cu	63		ug/L		3563	0.010
	Cu	65	**1.144**	ug/L	2.964	1750	0.005
	Zn	66	**10.934**	ug/L	1.179	11539	0.031
	Zn	67		ug/L		9355	0.009
	Zn	68		ug/L		8951	0.022
>	Ge	74		ug/L		368286	368286.456
	As	75	**5.201**	ug/L	6.037	5759	0.015
	Se	77		ug/L		5651	0.006
	Se	82	**5.408**	ug/L	4.211	564	0.002
	Kr	83		ug/L		106	-0.000
	Sr	88	**11.419**	ug/L	0.805	135019	0.604
	Y	89		ug/L		49	-0.000
	Mo	98	**0.552**	ug/L	1.856	1690	0.007
	Ag	107	**1.046**	ug/L	1.917	5021	0.022
	Cd	111	**1.113**	ug/L	2.266	1348	0.006
	Cd	114		ug/L		3061	0.013
>	In	115		ug/L		223405	223405.298
	Sn	120	**5.656**	ug/L	1.025	28228	0.124
	Sb	121	**3.626**	ug/L	6.710	14937	0.064
	Sb	123		ug/L		11721	0.050
	Ba	135		ug/L		2907	0.008
	Ba	137	**2.127**	ug/L	2.383	5138	0.014
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		363271	363271.336
	Tl	205	**1.196**	ug/L	3.137	16779	0.044
	Pb	208	**2.304**	ug/L	0.713	50921	0.137
	Bi	209		ug/L		331	-0.000
	Th	232	**1.387**	ug/L	2.932	37591	0.098
	U	238	**0.254**	ug/L	0.539	7174	0.019

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	114.107				
	Be	9	115.481				
	B	11	126.974				
	Na	23	97.967				
	Mg	24	106.988				
	Al	27	116.775				
	P	31	135.015				
	K	39	90.235				
	Ca	43	111.871				
>	Sc	45		100.1			
	Ti	47	92.299				
	V	51	111.558				
	Cr	52	111.162				
	Cr	53					
	Mn	55	114.459				
	Fe	57	118.097				
	Co	59	110.421				
	Ni	60	109.174				
	Cu	63					
	Cu	65	114.420				
	Zn	66	109.339				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75	104.012				
	Se	77					
	Se	82	108.157				
	Kr	83					
	Sr	88	114.185				
	Y	89					
	Mo	98	110.406				
	Ag	107	104.600				
	Cd	111	111.251				
	Cd	114					
>	In	115		99.9			
	Sn	120	113.113				
	Sb	121	120.876				
	Sb	123					
	Ba	135					
	Ba	137	106.332				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	119.589				
	Pb	208	115.210				
	Bi	209					
	Th	232	138.716				
	U	238	127.215				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	P	31	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 03:06:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 4.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.133**	**ug/L**	14.153	292	0.001
	Be	9	**0.113**	**ug/L**	20.921	49	0.000
	B	11	**1.915**	**ug/L**	17.624	1134	0.002
	Na	23	**91260.194**	**ug/L**	3.361	287994573	869.794
	Mg	24	**100461.732**	**ug/L**	3.250	218065300	658.473
	Al	27	**93009.750**	**ug/L**	5.819	287171837	868.037
	P	31	**95325.534**	**ug/L**	1.753	15906388	48.048
	K	39	**92215.233**	**ug/L**	2.892	419158827	1265.037
	Ca	43	**93932.565**	**ug/L**	0.771	912162	2.755
>	Sc	45		**ug/L**		331040	331040.369
	Ti	47	**1477.981**	**ug/L**	1.342	718635	2.170
	V	51	**0.472**	**ug/L**	68.934	8469	0.008
	Cr	52	**3.074**	**ug/L**	7.610	12673	0.042
	Cr	53		**ug/L**		68952	-0.000
	Mn	55	**6.121**	**ug/L**	0.917	48129	0.142
	Fe	57	**102215.553**	**ug/L**	1.374	14885439	44.953
	Co	59	**0.281**	**ug/L**	1.957	1745	0.005
	Ni	60	**2.754**	**ug/L**	3.278	3521	0.010
	Cu	63		**ug/L**		11685	0.035
	Cu	65	**4.604**	**ug/L**	1.479	6873	0.020
	Zn	66	**3.428**	**ug/L**	0.594	3788	0.010
	Zn	67		**ug/L**		7368	0.004
	Zn	68		**ug/L**		1695	0.003
>	Ge	74		**ug/L**		367679	367679.141
	As	75	**-0.007**	**ug/L**	7431.206	138	-0.000
	Se	77		**ug/L**		5679	0.006
	Se	82	**-0.917**	**ug/L**	20.413	-108	-0.000
	Kr	83		**ug/L**		280	0.000
	Sr	88	**1.292**	**ug/L**	2.333	14842	0.068
	Y	89		**ug/L**		411	0.002
	Mo	98	**2147.326**	**ug/L**	3.297	5906088	27.516
	Ag	107	**0.081**	**ug/L**	14.652	421	0.002
	Cd	111	**0.546**	**ug/L**	24.541	647	0.003
	Cd	114		**ug/L**		6856	0.032
>	In	115		**ug/L**		214699	214699.337
	Sn	120	**0.426**	**ug/L**	4.235	2433	0.009
	Sb	121	**0.384**	**ug/L**	16.642	1990	0.007
	Sb	123		**ug/L**		1617	0.006
	Ba	135		**ug/L**		978	0.003
	Ba	137	**0.712**	**ug/L**	3.113	1649	0.005
	Ho	165		**ug/L**		901	0.003
>	Lu	175		**ug/L**		340404	340404.446
	Tl	205	**0.046**	**ug/L**	20.645	1244	0.002
	Pb	208	**0.294**	**ug/L**	1.368	6874	0.018
	Bi	209		**ug/L**		965	0.002
	Th	232	**0.786**	**ug/L**	33.527	20691	0.056
	U	238	**0.112**	**ug/L**	3.389	3183	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	91.260				
	Mg	24	100.462				
	Al	27	93.010				
	P	31	95.326				
	K	39	92.215				
	Ca	43	93.933				
>	Sc	45		101.8			
	Ti	47	73.899				
	V	51					
	Cr	52	83.076				
	Cr	53					
	Mn	55	105.531				
	Fe	57	102.216				
	Co	59	112.408				
	Ni	60	102.016				
	Cu	63					
	Cu	65	158.753				
	Zn	66	95.211				
	Zn	67					
	Zn	68					
>	Ge	74		99.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	107.674				
	Y	89					
	Mo	98	107.366				
	Ag	107					
	Cd	111	136.404				
	Cd	114					
>	In	115		96.0			
	Sn	120					
	Sb	121	383.649				
	Sb	123					
	Ba	135					
	Ba	137	106.311				
	Ho	165					
>	Lu	175		92.7			
	Tl	205					
	Pb	208	146.765				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 03:12:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 5.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.317**	ug/L	3.364	31107	0.096
	Be	9	**19.234**	ug/L	2.507	6207	0.019
	B	11	**19.438**	ug/L	4.152	6129	0.017
	Na	23	**99073.516**	ug/L	2.909	306838457	944.262
	Mg	24	**99557.273**	ug/L	5.522	212018111	652.545
	Al	27	**97347.246**	ug/L	3.062	295101632	908.518
	P	31	**97263.889**	ug/L	4.180	15913691	49.025
	K	39	**95834.052**	ug/L	3.850	427720686	1314.681
	Ca	43	**94651.729**	ug/L	1.177	901545	2.776
>	Sc	45		ug/L		324774	324773.835
	Ti	47	**1483.017**	ug/L	2.999	707138	2.178
	V	51	**22.137**	ug/L	5.218	129828	0.383
	Cr	52	**24.375**	ug/L	5.139	106693	0.332
	Cr	53		ug/L		79180	0.036
	Mn	55	**27.581**	ug/L	2.597	209115	0.641
	Fe	57	**104028.057**	ug/L	3.311	14856281	45.751
	Co	59	**20.901**	ug/L	4.184	118938	0.366
	Ni	60	**22.341**	ug/L	3.932	27425	0.084
	Cu	63		ug/L		68141	0.209
	Cu	65	**23.987**	ug/L	1.450	34734	0.107
	Zn	66	**22.497**	ug/L	2.661	23239	0.063
	Zn	67		ug/L		10617	0.013
	Zn	68		ug/L		15807	0.041
>	Ge	74		ug/L		364770	364770.358
	As	75	**20.757**	ug/L	3.324	22334	0.061
	Se	77		ug/L		7124	0.010
	Se	82	**19.872**	ug/L	1.839	2082	0.006
	Kr	83		ug/L		272	0.000
	Sr	88	**24.222**	ug/L	0.723	277534	1.280
	Y	89		ug/L		411	0.002
	Mo	98	**2114.437**	ug/L	2.469	5868610	27.094
	Ag	107	**19.515**	ug/L	1.933	89895	0.415
	Cd	111	**20.422**	ug/L	3.892	23573	0.109
	Cd	114		ug/L		62939	0.290
>	In	115		ug/L		216625	216624.562
	Sn	120	**21.335**	ug/L	1.907	102070	0.469
	Sb	121	**23.795**	ug/L	3.631	92110	0.423
	Sb	123		ug/L		72711	0.334
	Ba	135		ug/L		28466	0.083
	Ba	137	**21.907**	ug/L	2.821	49653	0.144
	Ho	165		ug/L		942	0.003
>	Lu	175		ug/L		344588	344587.864
	Tl	205	**21.387**	ug/L	2.823	273330	0.791
	Pb	208	**21.492**	ug/L	2.381	442728	1.282
	Bi	209		ug/L		1322	0.003
	Th	232	**22.551**	ug/L	2.588	552478	1.599
	U	238	**23.826**	ug/L	1.602	601675	1.745

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.584				
	Be	9	96.172				
	B	11	97.188				
	Na	23	99.074				
	Mg	24	99.557				
	Al	27	97.347				
	P	31	97.264				
	K	39	95.834				
	Ca	43	94.652				
>	Sc	45		99.8			
	Ti	47	74.151				
	V	51	110.683				
	Cr	52	102.849				
	Cr	53					
	Mn	55	106.905				
	Fe	57	104.028				
	Co	59	103.213				
	Ni	60	98.416				
	Cu	63					
	Cu	65	104.745				
	Zn	66	95.326				
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75	103.787				
	Se	77					
	Se	82	99.362				
	Kr	83					
	Sr	88	114.255				
	Y	89					
	Mo	98	105.722				
	Ag	107	97.573				
	Cd	111	100.108				
	Cd	114					
>	In	115		96.8			
	Sn	120	106.675				
	Sb	121	118.384				
	Sb	123					
	Ba	135					
	Ba	137	105.985				
	Ho	165					
>	Lu	175		93.8			
	Tl	205	106.933				
	Pb	208	106.394				
	Bi	209					
	Th	232	112.757				
	U	238	119.129				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 03:18:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.494**	**ug/L**	1.475	76824	0.242
	Be	9	**52.602**	**ug/L**	1.232	16550	0.052
	B	11	**101.515**	**ug/L**	2.435	28913	0.090
	Na	23	**4945.476**	**ug/L**	4.582	14935445	47.135
	Mg	24	**5121.495**	**ug/L**	1.922	10642709	33.569
	Al	27	**5030.481**	**ug/L**	5.042	14894915	46.948
	P	31	**5320.040**	**ug/L**	2.105	853081	2.682
	K	39	**4897.029**	**ug/L**	11.192	21739095	67.179
	Ca	43	**5067.031**	**ug/L**	2.885	47277	0.149
>	Sc	45		**ug/L**		316880	316879.709
	Ti	47	**54.881**	**ug/L**	0.833	25832	0.081
	V	51	**52.971**	**ug/L**	3.490	295517	0.916
	Cr	52	**52.559**	**ug/L**	2.303	225926	0.717
	Cr	53		**ug/L**		106918	0.129
	Mn	55	**52.667**	**ug/L**	1.091	388822	1.224
	Fe	57	**5350.264**	**ug/L**	2.101	751603	2.353
	Co	59	**50.209**	**ug/L**	1.694	278766	0.880
	Ni	60	**50.819**	**ug/L**	0.999	60805	0.192
	Cu	63		**ug/L**		149098	0.470
	Cu	65	**51.728**	**ug/L**	0.743	72990	0.230
	Zn	66	**50.620**	**ug/L**	2.959	51955	0.142
	Zn	67		**ug/L**		15315	0.026
	Zn	68		**ug/L**		38309	0.103
>	Ge	74		**ug/L**		364622	364621.590
	As	75	**46.755**	**ug/L**	0.945	50100	0.137
	Se	77		**ug/L**		9049	0.015
	Se	82	**50.789**	**ug/L**	1.729	5336	0.015
	Kr	83		**ug/L**		100	-0.000
	Sr	88	**49.973**	**ug/L**	1.263	585667	2.641
	Y	89		**ug/L**		111	0.000
	Mo	98	**49.883**	**ug/L**	2.153	141774	0.639
	Ag	107	**50.353**	**ug/L**	1.063	237302	1.070
	Cd	111	**50.612**	**ug/L**	1.832	59753	0.269
	Cd	114		**ug/L**		140960	0.636
>	In	115		**ug/L**		221686	221685.874
	Sn	120	**49.763**	**ug/L**	2.159	243020	1.095
	Sb	121	**46.864**	**ug/L**	12.040	184895	0.833
	Sb	123		**ug/L**		147008	0.662
	Ba	135		**ug/L**		67344	0.185
	Ba	137	**49.462**	**ug/L**	1.848	118185	0.325
	Ho	165		**ug/L**		76	0.000
>	Lu	175		**ug/L**		363415	363415.120
	Tl	205	**51.231**	**ug/L**	1.287	689658	1.896
	Pb	208	**52.410**	**ug/L**	0.685	1137510	3.127
	Bi	209		**ug/L**		380	0.000
	Th	232	**50.296**	**ug/L**	0.506	1297506	3.565
	U	238	**52.593**	**ug/L**	1.504	1400414	3.852

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.987				
	Be	9	105.204				
	B	11	101.515				
	Na	23	98.910				
	Mg	24	102.430				
	Al	27	99.613				
	P	31	106.401				
	K	39	97.941				
	Ca	43	101.341				
>	Sc	45		97.4			
	Ti	47	109.762				
	V	51	105.942				
	Cr	52	105.119				
	Cr	53					
	Mn	55	105.333				
	Fe	57	107.005				
	Co	59	100.419				
	Ni	60	101.638				
	Cu	63					
	Cu	65	103.457				
	Zn	66	101.240				
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75	93.510				
	Se	77					
	Se	82	101.577				
	Kr	83					
	Sr	88	99.947				
	Y	89					
	Mo	98	99.766				
	Ag	107	100.707				
	Cd	111	101.225				
	Cd	114					
>	In	115		99.1			
	Sn	120	99.526				
	Sb	121	93.728				
	Sb	123					
	Ba	135					
	Ba	137	98.924				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	102.462				
	Pb	208	104.821				
	Bi	209					
	Th	232	100.592				
	U	238	105.187				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 03:24:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.022**	**ug/L**	13.690	111	0.000
	Be	9	**0.034**	**ug/L**	62.996	22	0.000
	B	11	**3.237**	**ug/L**	15.543	1420	0.003
	Na	23	**4.991**	**ug/L**	18.503	21349	0.048
	Mg	24	**4.170**	**ug/L**	76.122	11339	0.027
	Al	27	**2.916**	**ug/L**	42.035	16009	0.027
	P	31	**8.263**	**ug/L**	13.037	4587	0.004
	K	39	**20.166**	**ug/L**	34.334	519974	0.277
	Ca	43	**8.140**	**ug/L**	23.358	277	0.000
>	Sc	45		**ug/L**		309216	309215.594
	Ti	47	**1.062**	**ug/L**	6.669	774	0.002
	V	51	**0.160**	**ug/L**	179.355	6263	0.003
	Cr	52	**-0.137**	**ug/L**	67.510	-1692	-0.002
	Cr	53		**ug/L**		66434	0.006
	Mn	55	**-0.006**	**ug/L**	149.171	919	-0.000
	Fe	57	**9.839**	**ug/L**	4.340	7389	0.004
	Co	59	**0.016**	**ug/L**	18.081	193	0.000
	Ni	60	**0.019**	**ug/L**	36.518	100	0.000
	Cu	63		**ug/L**		219	0.000
	Cu	65	**0.028**	**ug/L**	26.941	127	0.000
	Zn	66	**0.038**	**ug/L**	18.968	290	0.000
	Zn	67		**ug/L**		5847	-0.000
	Zn	68		**ug/L**		758	0.000
>	Ge	74		**ug/L**		359437	359437.203
	As	75	**-0.013**	**ug/L**	2600.637	130	-0.000
	Se	77		**ug/L**		3779	0.001
	Se	82	**0.001**	**ug/L**	15902.475	-11	0.000
	Kr	83		**ug/L**		101	-0.000
	Sr	88	**0.011**	**ug/L**	42.023	312	0.001
	Y	89		**ug/L**		43	-0.000
	Mo	98	**0.312**	**ug/L**	15.361	985	0.004
	Ag	107	**0.014**	**ug/L**	52.884	117	0.000
	Cd	111	**0.022**	**ug/L**	30.796	50	0.000
	Cd	114		**ug/L**		91	0.000
>	In	115		**ug/L**		219100	219100.424
	Sn	120	**0.408**	**ug/L**	10.406	2401	0.009
	Sb	121	**1.078**	**ug/L**	19.874	4739	0.019
	Sb	123		**ug/L**		3744	0.015
	Ba	135		**ug/L**		57	0.000
	Ba	137	**0.012**	**ug/L**	13.306	90	0.000
	Ho	165		**ug/L**		50	0.000
>	Lu	175		**ug/L**		372286	372286.021
	Tl	205	**0.155**	**ug/L**	25.073	2853	0.006
	Pb	208	**0.018**	**ug/L**	32.192	1395	0.001
	Bi	209		**ug/L**		325	-0.000
	Th	232	**0.218**	**ug/L**	16.886	7670	0.015
	U	238	**0.026**	**ug/L**	24.830	1117	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Saturday, December 05, 2009 03:31:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 10.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**939.329**	ug/L	1.435	1352503	4.419
	Be	9	**954.770**	ug/L	3.872	289915	0.947
	B	11	**1.277**	ug/L	10.583	876	0.001
	Na	23	**45361.556**	ug/L	10.553	132240704	432.338
	Mg	24	**50831.691**	ug/L	8.514	101885972	333.175
	Al	27	**46812.174**	ug/L	8.484	133673676	436.886
	P	31	**24705.045**	ug/L	5.970	3812517	12.452
	K	39	**45977.597**	ug/L	7.344	193386333	630.735
	Ca	43	**48648.703**	ug/L	2.229	436815	1.427
>	Sc	45		ug/L		306128	306127.946
	Ti	47	**41.466**	ug/L	4.428	18921	0.061
	V	51	**1014.760**	ug/L	5.544	5371038	17.539
	Cr	52	**1006.360**	ug/L	5.710	4197108	13.724
	Cr	53		ug/L		548118	1.583
	Mn	55	**973.610**	ug/L	4.661	6923815	22.629
	Fe	57	**52320.330**	ug/L	5.538	7044387	23.010
	Co	59	**958.254**	ug/L	5.712	5134913	16.787
	Ni	60	**892.271**	ug/L	1.615	1029972	3.365
	Cu	63		ug/L		2653237	8.668
	Cu	65	**870.883**	ug/L	3.082	1185360	3.873
	Zn	66	**1978.436**	ug/L	1.943	1933522	5.542
	Zn	67		ug/L		358473	1.011
	Zn	68		ug/L		1490911	4.272
>	Ge	74		ug/L		348856	348855.810
	As	75	**879.135**	ug/L	2.456	898633	2.576
	Se	77		ug/L		41384	0.109
	Se	82	**490.934**	ug/L	1.206	49435	0.142
	Kr	83		ug/L		170	0.000
	Sr	88	**1053.959**	ug/L	4.960	11442443	55.708
	Y	89		ug/L		359	0.001
	Mo	98	**1125.540**	ug/L	4.030	2963250	14.423
	Ag	107	**243.655**	ug/L	3.473	1063928	5.179
	Cd	111	**924.588**	ug/L	0.950	1011612	4.923
	Cd	114		ug/L		2628242	12.791
>	In	115		ug/L		205493	205492.547
	Sn	120	**1054.640**	ug/L	3.536	4766031	23.197
	Sb	121	**227.169**	ug/L	15.925	829420	4.037
	Sb	123		ug/L		662613	3.225
	Ba	135		ug/L		1177832	3.361
	Ba	137	**828.898**	ug/L	2.739	1909272	5.448
	Ho	165		ug/L		294	0.001
>	Lu	175		ug/L		350570	350569.865
	Tl	205	**489.283**	ug/L	2.690	6346450	18.107
	Pb	208	**4923.827**	ug/L	2.596	102978605	293.817
	Bi	209		ug/L		2898	0.007
	Th	232	**2519.921**	ug/L	3.264	62599943	178.623
	U	238	**5241.764**	ug/L	2.995	134559502	383.954

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	93.933				
	Be	9	95.477				
	B	11					
	Na	23	90.723				
	Mg	24	101.663				
	Al	27	93.624				
	P	31	98.820				
	K	39	91.955				
	Ca	43	97.297				
>	Sc	45		94.1			
	Ti	47					
	V	51	101.476				
	Cr	52	100.636				
	Cr	53					
	Mn	55	97.361				
	Fe	57	104.641				
	Co	59	95.825				
	Ni	60	89.227				
	Cu	63					
	Cu	65	87.088				
	Zn	66	79.137				
	Zn	67					
	Zn	68					
>	Ge	74		94.8			
	As	75	87.913				
	Se	77					
	Se	82	98.187				
	Kr	83					
	Sr	88	105.396				
	Y	89					
	Mo	98	112.554				
	Ag	107	97.462				
	Cd	111	92.459				
	Cd	114					
>	In	115		91.9			
	Sn	120	105.464				
	Sb	121	90.868				
	Sb	123					
	Ba	135					
	Ba	137	82.890				
	Ho	165					
>	Lu	175		95.4			
	Tl	205	97.857				
	Pb	208	98.477				
	Bi	209					
	Th	232	100.797				
	U	238	104.835				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Saturday, December 05, 2009 03:37:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 11.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.653**	ug/L	3.012	79823	0.248
	Be	9	**53.503**	ug/L	3.175	17102	0.053
	B	11	**103.696**	ug/L	4.014	29993	0.091
	Na	23	**4884.243**	ug/L	1.219	14997980	46.551
	Mg	24	**5447.889**	ug/L	4.082	11498821	35.708
	Al	27	**5132.455**	ug/L	10.084	15408228	47.900
	P	31	**5461.456**	ug/L	2.871	889829	2.753
	K	39	**4565.749**	ug/L	2.784	20622330	62.634
	Ca	43	**5159.513**	ug/L	1.591	48941	0.151
>	Sc	45		ug/L		322104	322104.480
	Ti	47	**52.244**	ug/L	3.454	24999	0.077
	V	51	**53.576**	ug/L	4.504	303658	0.926
	Cr	52	**52.869**	ug/L	3.491	230980	0.721
	Cr	53		ug/L		108298	0.128
	Mn	55	**53.716**	ug/L	2.410	402972	1.248
	Fe	57	**5405.725**	ug/L	3.413	771590	2.377
	Co	59	**51.009**	ug/L	2.294	287857	0.894
	Ni	60	**50.991**	ug/L	2.336	62000	0.192
	Cu	63		ug/L		154728	0.480
	Cu	65	**52.764**	ug/L	2.153	75655	0.235
	Zn	66	**52.240**	ug/L	2.584	54255	0.146
	Zn	67		ug/L		16628	0.029
	Zn	68		ug/L		40051	0.107
>	Ge	74		ug/L		369038	369038.162
	As	75	**48.738**	ug/L	1.537	52839	0.143
	Se	77		ug/L		8749	0.014
	Se	82	**50.840**	ug/L	1.260	5405	0.015
	Kr	83		ug/L		114	0.000
	Sr	88	**51.453**	ug/L	1.274	602065	2.720
	Y	89		ug/L		101	0.000
	Mo	98	**51.247**	ug/L	0.387	145456	0.657
	Ag	107	**51.580**	ug/L	1.779	242651	1.096
	Cd	111	**52.035**	ug/L	0.643	61346	0.277
	Cd	114		ug/L		144853	0.654
>	In	115		ug/L		221331	221330.607
	Sn	120	**60.262**	ug/L	2.190	293836	1.325
	Sb	121	**53.667**	ug/L	6.738	211474	0.954
	Sb	123		ug/L		168000	0.758
	Ba	135		ug/L		68486	0.187
	Ba	137	**49.838**	ug/L	1.072	119671	0.328
	Ho	165		ug/L		80	0.000
>	Lu	175		ug/L		365175	365175.476
	Tl	205	**51.474**	ug/L	0.723	696296	1.905
	Pb	208	**53.947**	ug/L	0.905	1176558	3.219
	Bi	209		ug/L		347	-0.000
	Th	232	**55.162**	ug/L	1.308	1429815	3.910
	U	238	**53.765**	ug/L	0.978	1438529	3.938

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	105.307				
	Be	9	107.007				
	B	11	103.696				
	Na	23	97.685				
	Mg	24	108.958				
	Al	27	101.633				
	P	31	109.229				
	K	39	91.315				
	Ca	43	103.190				
>	Sc	45		99.0			
	Ti	47	104.488				
	V	51	107.153				
	Cr	52	105.738				
	Cr	53					
	Mn	55	107.431				
	Fe	57	108.114				
	Co	59	102.017				
	Ni	60	101.981				
	Cu	63					
	Cu	65	105.528				
	Zn	66	104.479				
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75	97.476				
	Se	77					
	Se	82	101.680				
	Kr	83					
	Sr	88	102.907				
	Y	89					
	Mo	98	102.495				
	Ag	107	103.160				
	Cd	111	104.070				
	Cd	114					
>	In	115		99.0			
	Sn	120	120.523				
	Sb	121	107.334				
	Sb	123					
	Ba	135					
	Ba	137	99.675				
	Ho	165					
>	Lu	175		99.4			
	Tl	205	102.947				
	Pb	208	107.893				
	Bi	209					
	Th	232	110.323				
	U	238	107.530				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Saturday, December 05, 2009 03:43:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 12.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.153**	**ug/L**	7.571	307	0.001
	Be	9	**0.073**	**ug/L**	15.887	34	0.000
	B	11	**3.163**	**ug/L**	17.669	1424	0.003
	Na	23	**6.167**	**ug/L**	39.723	25357	0.059
	Mg	24	**4.108**	**ug/L**	20.018	11338	0.027
	Al	27	**2.590**	**ug/L**	23.286	15342	0.024
	P	31	**7.508**	**ug/L**	13.284	4542	0.004
	K	39	**10.052**	**ug/L**	18.490	484759	0.138
	Ca	43	**6.999**	**ug/L**	17.215	271	0.000
>	Sc	45		**ug/L**		314096	314095.650
	Ti	47	**0.173**	**ug/L**	6.221	377	0.000
	V	51	**0.242**	**ug/L**	105.715	6783	0.004
	Cr	52	**-0.072**	**ug/L**	64.549	-1442	-0.001
	Cr	53		**ug/L**		66165	0.002
	Mn	55	**0.035**	**ug/L**	45.916	1232	0.001
	Fe	57	**4.208**	**ug/L**	8.909	6728	0.002
	Co	59	**0.062**	**ug/L**	20.896	451	0.001
	Ni	60	**0.065**	**ug/L**	21.719	155	0.000
	Cu	63		**ug/L**		371	0.001
	Cu	65	**0.083**	**ug/L**	26.235	207	0.000
	Zn	66	**0.157**	**ug/L**	19.964	415	0.000
	Zn	67		**ug/L**		6279	0.001
	Zn	68		**ug/L**		924	0.001
>	Ge	74		**ug/L**		364366	364365.801
	As	75	**0.054**	**ug/L**	282.304	205	0.000
	Se	77		**ug/L**		3504	0.000
	Se	82	**0.022**	**ug/L**	641.535	-9	0.000
	Kr	83		**ug/L**		105	-0.000
	Sr	88	**0.049**	**ug/L**	23.904	763	0.003
	Y	89		**ug/L**		47	-0.000
	Mo	98	**0.359**	**ug/L**	11.203	1132	0.005
	Ag	107	**0.064**	**ug/L**	22.653	357	0.001
	Cd	111	**0.053**	**ug/L**	41.196	87	0.000
	Cd	114		**ug/L**		196	0.001
>	In	115		**ug/L**		222678	222678.180
	Sn	120	**2.415**	**ug/L**	7.302	12266	0.053
	Sb	121	**2.130**	**ug/L**	13.300	8975	0.038
	Sb	123		**ug/L**		7138	0.030
	Ba	135		**ug/L**		98	0.000
	Ba	137	**0.053**	**ug/L**	19.840	189	0.000
	Ho	165		**ug/L**		39	-0.000
>	Lu	175		**ug/L**		366395	366395.215
	Tl	205	**0.244**	**ug/L**	17.652	4022	0.009
	Pb	208	**0.226**	**ug/L**	24.890	5941	0.014
	Bi	209		**ug/L**		294	-0.000
	Th	232	**0.824**	**ug/L**	4.329	23305	0.058
	U	238	**0.304**	**ug/L**	15.992	8568	0.022

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 04:38:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.675

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.850**	**ug/L**	1.999	68742	0.249
	Be	9	**56.200**	**ug/L**	1.543	15415	0.056
	B	11	**107.689**	**ug/L**	4.076	26715	0.095
	Na	23	**4869.724**	**ug/L**	7.435	12824889	46.413
	Mg	24	**5021.295**	**ug/L**	5.303	9093689	32.912
	Al	27	**4817.219**	**ug/L**	0.836	12425704	44.958
	P	31	**5241.512**	**ug/L**	0.721	732748	2.642
	K	39	**4627.687**	**ug/L**	2.497	17926392	63.484
	Ca	43	**4942.719**	**ug/L**	2.302	40219	0.145
>	Sc	45		**ug/L**		276241	276241.453
	Ti	47	**49.518**	**ug/L**	2.905	20349	0.073
	V	51	**51.637**	**ug/L**	3.461	251408	0.892
	Cr	52	**52.169**	**ug/L**	2.699	195519	0.711
	Cr	53		**ug/L**		89339	0.115
	Mn	55	**52.294**	**ug/L**	1.047	336598	1.215
	Fe	57	**5334.610**	**ug/L**	1.840	653553	2.346
	Co	59	**49.480**	**ug/L**	1.457	239544	0.867
	Ni	60	**49.869**	**ug/L**	0.979	52019	0.188
	Cu	63		**ug/L**		129521	0.468
	Cu	65	**51.664**	**ug/L**	2.072	63553	0.230
	Zn	66	**49.017**	**ug/L**	3.326	44712	0.137
	Zn	67		**ug/L**		12831	0.023
	Zn	68		**ug/L**		33421	0.101
>	Ge	74		**ug/L**		324100	324100.463
	As	75	**46.373**	**ug/L**	2.220	44147	0.136
	Se	77		**ug/L**		7394	0.013
	Se	82	**49.035**	**ug/L**	2.877	4576	0.014
	Kr	83		**ug/L**		115	0.000
	Sr	88	**48.162**	**ug/L**	1.971	516562	2.546
	Y	89		**ug/L**		190	0.001
	Mo	98	**47.939**	**ug/L**	1.518	124700	0.614
	Ag	107	**49.879**	**ug/L**	2.551	215097	1.060
	Cd	111	**49.816**	**ug/L**	0.806	53824	0.265
	Cd	114		**ug/L**		128662	0.634
>	In	115		**ug/L**		202844	202843.635
	Sn	120	**49.959**	**ug/L**	1.832	223298	1.099
	Sb	121	**46.314**	**ug/L**	9.947	167462	0.823
	Sb	123		**ug/L**		132949	0.653
	Ba	135		**ug/L**		61565	0.171
	Ba	137	**45.705**	**ug/L**	0.190	108417	0.300
	Ho	165		**ug/L**		91	0.000
>	Lu	175		**ug/L**		360743	360743.002
	Tl	205	**50.008**	**ug/L**	0.374	668276	1.851
	Pb	208	**51.424**	**ug/L**	1.219	1107878	3.069
	Bi	209		**ug/L**		417	0.000
	Th	232	**50.118**	**ug/L**	1.302	1283480	3.553
	U	238	**53.114**	**ug/L**	2.487	1403737	3.891

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	105.701				
	Be	9	112.399				
	B	11	107.689				
	Na	23	97.394				
	Mg	24	100.426				
	Al	27	95.390				
	P	31	104.830				
	K	39	92.554				
	Ca	43	98.854				
>	Sc	45		84.9			
	Ti	47	99.036				
	V	51	103.275				
	Cr	52	104.337				
	Cr	53					
	Mn	55	104.588				
	Fe	57	106.692				
	Co	59	98.960				
	Ni	60	99.737				
	Cu	63					
	Cu	65	103.328				
	Zn	66	98.034				
	Zn	67					
	Zn	68					
>	Ge	74		88.1			
	As	75	92.746				
	Se	77					
	Se	82	98.070				
	Kr	83					
	Sr	88	96.324				
	Y	89					
	Mo	98	95.878				
	Ag	107	99.757				
	Cd	111	99.633				
	Cd	114					
>	In	115		90.7			
	Sn	120	99.917				
	Sb	121	92.627				
	Sb	123					
	Ba	135					
	Ba	137	91.411				
	Ho	165					
>	Lu	175		98.2			
	Tl	205	100.015				
	Pb	208	102.848				
	Bi	209					
	Th	232	100.237				
	U	238	106.228				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 04:44:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.048**	ug/L	5.628	135	0.000
	Be	9	**0.044**	ug/L	21.979	22	0.000
	B	11	**3.394**	ug/L	16.213	1324	0.003
	Na	23	**1.014**	ug/L	100.846	8669	0.010
	Mg	24	**-0.120**	ug/L	549.825	2334	-0.001
	Al	27	**1.070**	ug/L	17.342	9670	0.010
	P	31	**4.174**	ug/L	37.874	3566	0.002
	K	39	**16.585**	ug/L	51.399	457253	0.228
	Ca	43	**4.590**	ug/L	59.187	221	0.000
>	Sc	45		ug/L		279579	279579.140
	Ti	47	**0.134**	ug/L	59.967	319	0.000
	V	51	**0.250**	ug/L	23.475	6099	0.004
	Cr	52	**-0.038**	ug/L	169.419	-1157	-0.001
	Cr	53		ug/L		56733	-0.006
	Mn	55	**0.030**	ug/L	9.083	1064	0.001
	Fe	57	**5.253**	ug/L	20.816	6115	0.002
	Co	59	**0.013**	ug/L	23.099	163	0.000
	Ni	60	**0.030**	ug/L	5.695	101	0.000
	Cu	63		ug/L		189	0.000
	Cu	65	**0.014**	ug/L	10.528	98	0.000
	Zn	66	**-0.010**	ug/L	166.663	223	-0.000
	Zn	67		ug/L		4898	-0.002
	Zn	68		ug/L		605	-0.000
>	Ge	74		ug/L		332786	332786.420
	As	75	**0.109**	ug/L	304.216	240	0.000
	Se	77		ug/L		3021	-0.000
	Se	82	**-0.175**	ug/L	103.504	-27	-0.000
	Kr	83		ug/L		101	0.000
	Sr	88	**0.010**	ug/L	14.257	285	0.001
	Y	89		ug/L		65	0.000
	Mo	98	**0.104**	ug/L	26.890	380	0.001
	Ag	107	**0.014**	ug/L	13.749	111	0.000
	Cd	111	**0.018**	ug/L	31.640	43	0.000
	Cd	114		ug/L		82	0.000
>	In	115		ug/L		208746	208745.770
	Sn	120	**0.473**	ug/L	14.260	2580	0.010
	Sb	121	**1.206**	ug/L	18.865	4981	0.021
	Sb	123		ug/L		4022	0.017
	Ba	135		ug/L		48	0.000
	Ba	137	**0.006**	ug/L	66.946	77	0.000
	Ho	165		ug/L		45	0.000
>	Lu	175		ug/L		368604	368603.926
	Tl	205	**0.130**	ug/L	19.964	2493	0.005
	Pb	208	**0.017**	ug/L	11.052	1354	0.001
	Bi	209		ug/L		332	-0.000
	Th	232	**0.252**	ug/L	12.191	8491	0.018
	U	238	**0.027**	ug/L	21.121	1152	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		85.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 05:34:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.684

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.696**	**ug/L**	1.490	71287	0.243
	Be	9	**53.305**	**ug/L**	2.182	15498	0.053
	B	11	**102.608**	**ug/L**	1.636	27007	0.090
	Na	23	**4903.533**	**ug/L**	0.506	13692562	46.735
	Mg	24	**6002.867**	**ug/L**	2.176	11524591	39.346
	Al	27	**4862.918**	**ug/L**	4.870	13298926	45.384
	P	31	**5283.363**	**ug/L**	1.151	782978	2.663
	K	39	**4829.137**	**ug/L**	1.557	19810931	66.248
	Ca	43	**5018.657**	**ug/L**	1.455	43295	0.147
>	Sc	45		**ug/L**		292854	292853.693
	Ti	47	**50.562**	**ug/L**	0.909	22018	0.074
	V	51	**53.533**	**ug/L**	3.087	276055	0.925
	Cr	52	**53.214**	**ug/L**	3.170	211455	0.726
	Cr	53		**ug/L**		92412	0.107
	Mn	55	**53.277**	**ug/L**	1.250	363516	1.238
	Fe	57	**5450.161**	**ug/L**	0.915	707638	2.397
	Co	59	**52.132**	**ug/L**	1.315	267560	0.913
	Ni	60	**52.374**	**ug/L**	0.941	57916	0.198
	Cu	63		**ug/L**		141140	0.481
	Cu	65	**53.192**	**ug/L**	1.184	69375	0.237
	Zn	66	**50.327**	**ug/L**	1.388	49311	0.141
	Zn	67		**ug/L**		13344	0.022
	Zn	68		**ug/L**		36293	0.102
>	Ge	74		**ug/L**		348053	348052.722
	As	75	**46.394**	**ug/L**	0.595	47448	0.136
	Se	77		**ug/L**		7951	0.013
	Se	82	**50.222**	**ug/L**	2.905	5036	0.015
	Kr	83		**ug/L**		110	0.000
	Sr	88	**49.273**	**ug/L**	1.290	557786	2.604
	Y	89		**ug/L**		316	0.001
	Mo	98	**49.220**	**ug/L**	1.560	135146	0.631
	Ag	107	**50.184**	**ug/L**	1.780	228412	1.067
	Cd	111	**50.603**	**ug/L**	1.337	57709	0.269
	Cd	114		**ug/L**		135299	0.632
>	In	115		**ug/L**		214117	214116.913
	Sn	120	**50.030**	**ug/L**	1.713	236013	1.100
	Sb	121	**46.558**	**ug/L**	10.132	177710	0.827
	Sb	123		**ug/L**		141215	0.657
	Ba	135		**ug/L**		65597	0.178
	Ba	137	**47.784**	**ug/L**	1.843	115546	0.314
	Ho	165		**ug/L**		102	0.000
>	Lu	175		**ug/L**		367804	367803.711
	Tl	205	**50.301**	**ug/L**	1.232	685286	1.861
	Pb	208	**52.250**	**ug/L**	1.960	1147506	3.118
	Bi	209		**ug/L**		367	-0.000
	Th	232	**50.158**	**ug/L**	2.573	1309378	3.555
	U	238	**52.913**	**ug/L**	1.852	1425887	3.876

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	103.392				
	Be	9	106.610				
	B	11	102.608				
	Na	23	98.071				
	Mg	24	120.057				
	Al	27	96.295				
	P	31	105.667				
	K	39	96.583				
	Ca	43	100.373				
>	Sc	45		90.0			
	Ti	47	101.125				
	V	51	107.067				
	Cr	52	106.429				
	Cr	53					
	Mn	55	106.554				
	Fe	57	109.003				
	Co	59	104.265				
	Ni	60	104.748				
	Cu	63					
	Cu	65	106.384				
	Zn	66	100.654				
	Zn	67					
	Zn	68					
>	Ge	74		94.6			
	As	75	92.787				
	Se	77					
	Se	82	100.445				
	Kr	83					
	Sr	88	98.545				
	Y	89					
	Mo	98	98.441				
	Ag	107	100.369				
	Cd	111	101.205				
	Cd	114					
>	In	115		95.7			
	Sn	120	100.061				
	Sb	121	93.117				
	Sb	123					
	Ba	135					
	Ba	137	95.569				
	Ho	165					
>	Lu	175		100.1			
	Tl	205	100.603				
	Pb	208	104.499				
	Bi	209					
	Th	232	100.317				
	U	238	105.825				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 05:40:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.685

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.029**	ug/L	44.690	113	0.000
	Be	9	**0.041**	ug/L	45.890	22	0.000
	B	11	**2.657**	ug/L	22.350	1178	0.002
	Na	23	**2.212**	ug/L	77.112	12339	0.021
	Mg	24	**0.359**	ug/L	92.092	3334	0.002
	Al	27	**0.454**	ug/L	329.332	8336	0.004
	P	31	**3.821**	ug/L	18.252	3634	0.002
	K	39	**0.206**	ug/L	4680.265	406053	0.003
	Ca	43	**6.446**	ug/L	55.421	244	0.000
>	Sc	45		ug/L		288410	288409.997
	Ti	47	**0.223**	ug/L	24.477	367	0.000
	V	51	**0.158**	ug/L	183.019	5843	0.003
	Cr	52	**0.077**	ug/L	220.020	-741	0.001
	Cr	53		ug/L		56675	-0.012
	Mn	55	**0.090**	ug/L	18.231	1502	0.002
	Fe	57	**5.220**	ug/L	24.247	6307	0.002
	Co	59	**0.017**	ug/L	26.559	187	0.000
	Ni	60	**0.020**	ug/L	36.139	93	0.000
	Cu	63		ug/L		233	0.000
	Cu	65	**0.024**	ug/L	42.124	115	0.000
	Zn	66	**-0.039**	ug/L	26.672	204	-0.000
	Zn	67		ug/L		4786	-0.003
	Zn	68		ug/L		575	-0.000
>	Ge	74		ug/L		345254	345253.604
	As	75	**0.106**	ug/L	67.301	245	0.000
	Se	77		ug/L		3020	-0.001
	Se	82	**0.028**	ug/L	426.250	-8	0.000
	Kr	83		ug/L		97	-0.000
	Sr	88	**0.011**	ug/L	24.874	312	0.001
	Y	89		ug/L		84	0.000
	Mo	98	**0.093**	ug/L	28.653	365	0.001
	Ag	107	**0.015**	ug/L	31.500	123	0.000
	Cd	111	**0.016**	ug/L	24.637	42	0.000
	Cd	114		ug/L		84	0.000
>	In	115		ug/L		216744	216743.639
	Sn	120	**0.389**	ug/L	16.579	2282	0.009
	Sb	121	**1.082**	ug/L	20.808	4695	0.019
	Sb	123		ug/L		3600	0.015
	Ba	135		ug/L		54	0.000
	Ba	137	**0.013**	ug/L	5.579	92	0.000
	Ho	165		ug/L		39	-0.000
>	Lu	175		ug/L		370019	370018.765
	Tl	205	**0.111**	ug/L	30.588	2237	0.004
	Pb	208	**0.021**	ug/L	27.601	1452	0.001
	Bi	209		ug/L		325	-0.000
	Th	232	**0.235**	ug/L	17.350	8064	0.017
	U	238	**0.025**	ug/L	33.856	1094	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 06:23:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.692

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.764**	ug/L	1.305	66893	0.258
	Be	9	**57.929**	ug/L	1.753	14916	0.057
	B	11	**108.525**	ug/L	1.125	25272	0.096
	Na	23	**5222.250**	ug/L	3.523	12910874	49.773
	Mg	24	**4888.939**	ug/L	2.309	8314885	32.044
	Al	27	**4827.205**	ug/L	11.045	11688186	45.051
	P	31	**5251.882**	ug/L	2.836	689278	2.647
	K	39	**4375.393**	ug/L	1.045	15931339	60.023
	Ca	43	**4931.862**	ug/L	0.753	37684	0.145
>	Sc	45		ug/L		259380	259379.985
	Ti	47	**49.740**	ug/L	2.618	19182	0.073
	V	51	**51.265**	ug/L	1.990	234316	0.886
	Cr	52	**50.965**	ug/L	1.484	179325	0.695
	Cr	53		ug/L		80036	0.100
	Mn	55	**52.484**	ug/L	1.532	317149	1.220
	Fe	57	**5398.651**	ug/L	2.426	620749	2.374
	Co	59	**50.193**	ug/L	1.805	228120	0.879
	Ni	60	**49.900**	ug/L	2.957	48866	0.188
	Cu	63		ug/L		121025	0.466
	Cu	65	**50.416**	ug/L	0.996	58242	0.224
	Zn	66	**49.656**	ug/L	2.267	42333	0.139
	Zn	67		ug/L		11802	0.022
	Zn	68		ug/L		30818	0.100
>	Ge	74		ug/L		302922	302921.955
	As	75	**45.643**	ug/L	1.049	40624	0.134
	Se	77		ug/L		6454	0.012
	Se	82	**50.322**	ug/L	2.740	4392	0.015
	Kr	83		ug/L		91	0.000
	Sr	88	**48.212**	ug/L	1.327	487151	2.548
	Y	89		ug/L		250	0.001
	Mo	98	**47.973**	ug/L	0.493	117583	0.615
	Ag	107	**49.158**	ug/L	1.331	199711	1.045
	Cd	111	**49.832**	ug/L	1.358	50726	0.265
	Cd	114		ug/L		119820	0.627
>	In	115		ug/L		191133	191133.325
	Sn	120	**50.705**	ug/L	0.713	213520	1.115
	Sb	121	**46.766**	ug/L	10.039	159502	0.831
	Sb	123		ug/L		126470	0.659
	Ba	135		ug/L		58608	0.166
	Ba	137	**44.657**	ug/L	2.069	103837	0.293
	Ho	165		ug/L		85	0.000
>	Lu	175		ug/L		353658	353658.350
	Tl	205	**50.607**	ug/L	1.386	662935	1.873
	Pb	208	**52.083**	ug/L	2.358	1099876	3.108
	Bi	209		ug/L		317	-0.000
	Th	232	**50.493**	ug/L	1.469	1267573	3.579
	U	238	**53.831**	ug/L	2.139	1394705	3.943

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	109.529				
	Be	9	115.857				
	B	11	108.525				
	Na	23	104.445				
	Mg	24	97.779				
	Al	27	95.588				
	P	31	105.038				
	K	39	87.508				
	Ca	43	98.637				
>	Sc	45		79.7			
	Ti	47	99.479				
	V	51	102.530				
	Cr	52	101.929				
	Cr	53					
	Mn	55	104.968				
	Fe	57	107.973				
	Co	59	100.385				
	Ni	60	99.800				
	Cu	63					
	Cu	65	100.832				
	Zn	66	99.312				
	Zn	67					
	Zn	68					
>	Ge	74		82.3			
	As	75	91.286				
	Se	77					
	Se	82	100.643				
	Kr	83					
	Sr	88	96.424				
	Y	89					
	Mo	98	95.946				
	Ag	107	98.315				
	Cd	111	99.664				
	Cd	114					
>	In	115		85.5			
	Sn	120	101.411				
	Sb	121	93.532				
	Sb	123					
	Ba	135					
	Ba	137	89.314				
	Ho	165					
>	Lu	175		96.3			
	Tl	205	101.214				
	Pb	208	104.166				
	Bi	209					
	Th	232	100.987				
	U	238	107.663				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 8	Ba	137	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 06:29:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.693

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	**ug/L**	15.535	100	0.000
	Be	9	**0.041**	**ug/L**	43.779	20	0.000
	B	11	**2.753**	**ug/L**	26.393	1098	0.002
	Na	23	**4.242**	**ug/L**	38.678	16343	0.040
	Mg	24	**0.920**	**ug/L**	168.385	4001	0.006
	Al	27	**1.276**	**ug/L**	139.491	9670	0.012
	P	31	**7.261**	**ug/L**	38.555	3781	0.004
	K	39	**8.894**	**ug/L**	116.746	403666	0.122
	Ca	43	**1.594**	**ug/L**	227.833	185	0.000
>	Sc	45		**ug/L**		264028	264027.913
	Ti	47	**0.262**	**ug/L**	21.057	351	0.000
	V	51	**-0.100**	**ug/L**	435.334	4139	-0.002
	Cr	52	**-0.104**	**ug/L**	72.478	-1325	-0.001
	Cr	53		**ug/L**		51233	-0.014
	Mn	55	**0.126**	**ug/L**	11.095	1595	0.003
	Fe	57	**4.274**	**ug/L**	32.692	5663	0.002
	Co	59	**0.019**	**ug/L**	6.544	179	0.000
	Ni	60	**0.015**	**ug/L**	106.152	81	0.000
	Cu	63		**ug/L**		247	0.000
	Cu	65	**0.018**	**ug/L**	12.694	98	0.000
	Zn	66	**-0.027**	**ug/L**	67.595	195	-0.000
	Zn	67		**ug/L**		4570	-0.002
	Zn	68		**ug/L**		616	-0.000
>	Ge	74		**ug/L**		311952	311951.776
	As	75	**-0.143**	**ug/L**	71.276	-7	-0.000
	Se	77		**ug/L**		2400	-0.002
	Se	82	**-0.137**	**ug/L**	119.966	-21	-0.000
	Kr	83		**ug/L**		93	0.000
	Sr	88	**0.011**	**ug/L**	25.483	280	0.001
	Y	89		**ug/L**		83	0.000
	Mo	98	**0.098**	**ug/L**	35.184	345	0.001
	Ag	107	**0.015**	**ug/L**	14.087	112	0.000
	Cd	111	**0.016**	**ug/L**	5.995	39	0.000
	Cd	114		**ug/L**		74	0.000
>	In	115		**ug/L**		197686	197685.845
	Sn	120	**0.394**	**ug/L**	14.690	2102	0.009
	Sb	121	**1.149**	**ug/L**	21.160	4524	0.020
	Sb	123		**ug/L**		3613	0.016
	Ba	135		**ug/L**		53	0.000
	Ba	137	**0.011**	**ug/L**	38.304	85	0.000
	Ho	165		**ug/L**		42	0.000
>	Lu	175		**ug/L**		357093	357092.754
	Tl	205	**0.110**	**ug/L**	33.828	2148	0.004
	Pb	208	**0.024**	**ug/L**	9.125	1475	0.001
	Bi	209		**ug/L**		277	-0.000
	Th	232	**0.259**	**ug/L**	17.994	8414	0.018
	U	238	**0.028**	**ug/L**	16.514	1123	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		81.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 07:06:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.699

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.149**	ug/L	1.620	68555	0.259
	Be	9	**57.821**	ug/L	2.854	15155	0.057
	B	11	**109.310**	ug/L	2.660	25907	0.096
	Na	23	**4906.560**	ug/L	7.329	12340242	46.764
	Mg	24	**5266.264**	ug/L	13.438	9116596	34.518
	Al	27	**5235.395**	ug/L	2.083	12912466	48.861
	P	31	**5327.683**	ug/L	0.288	711930	2.685
	K	39	**4481.359**	ug/L	5.684	16617684	61.477
	Ca	43	**5070.137**	ug/L	2.275	39449	0.149
>	Sc	45		ug/L		264055	264054.803
	Ti	47	**51.309**	ug/L	4.556	20133	0.075
	V	51	**52.670**	ug/L	3.730	244860	0.910
	Cr	52	**53.032**	ug/L	3.197	189935	0.723
	Cr	53		ug/L		81214	0.099
	Mn	55	**53.774**	ug/L	3.959	330780	1.250
	Fe	57	**5398.743**	ug/L	2.474	631997	2.374
	Co	59	**51.052**	ug/L	1.939	236179	0.894
	Ni	60	**50.803**	ug/L	0.758	50663	0.192
	Cu	63		ug/L		127160	0.481
	Cu	65	**52.573**	ug/L	2.581	61807	0.234
	Zn	66	**49.910**	ug/L	1.582	43747	0.140
	Zn	67		ug/L		12111	0.022
	Zn	68		ug/L		32502	0.102
>	Ge	74		ug/L		311314	311314.455
	As	75	**47.404**	ug/L	0.787	43366	0.139
	Se	77		ug/L		6464	0.011
	Se	82	**50.942**	ug/L	0.913	4569	0.015
	Kr	83		ug/L		110	0.000
	Sr	88	**48.827**	ug/L	0.747	502847	2.581
	Y	89		ug/L		299	0.001
	Mo	98	**48.344**	ug/L	1.029	120744	0.619
	Ag	107	**49.946**	ug/L	1.491	206811	1.062
	Cd	111	**50.570**	ug/L	0.584	52464	0.269
	Cd	114		ug/L		124100	0.637
>	In	115		ug/L		194771	194770.825
	Sn	120	**51.456**	ug/L	1.806	220793	1.132
	Sb	121	**47.443**	ug/L	11.499	164727	0.843
	Sb	123		ug/L		130663	0.669
	Ba	135		ug/L		60386	0.171
	Ba	137	**45.880**	ug/L	0.929	106348	0.302
	Ho	165		ug/L		103	0.000
>	Lu	175		ug/L		352530	352530.376
	Tl	205	**51.765**	ug/L	1.396	675918	1.916
	Pb	208	**52.577**	ug/L	0.533	1106925	3.137
	Bi	209		ug/L		341	-0.000
	Th	232	**51.192**	ug/L	3.103	1280750	3.629
	U	238	**53.918**	ug/L	1.377	1392522	3.949

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	110.298				
	Be	9	115.643				
	B	11	109.310				
	Na	23	98.131				
	Mg	24	105.325				
	Al	27	103.671				
	P	31	106.554				
	K	39	89.627				
	Ca	43	101.403				
>	Sc	45		81.2			
	Ti	47	102.617				
	V	51	105.340				
	Cr	52	106.064				
	Cr	53					
	Mn	55	107.548				
	Fe	57	107.975				
	Co	59	102.105				
	Ni	60	101.606				
	Cu	63					
	Cu	65	105.146				
	Zn	66	99.820				
	Zn	67					
	Zn	68					
>	Ge	74		84.6			
	As	75	94.808				
	Se	77					
	Se	82	101.884				
	Kr	83					
	Sr	88	97.654				
	Y	89					
	Mo	98	96.688				
	Ag	107	99.893				
	Cd	111	101.140				
	Cd	114					
>	In	115		87.1			
	Sn	120	102.912				
	Sb	121	94.885				
	Sb	123					
	Ba	135					
	Ba	137	91.760				
	Ho	165					
>	Lu	175		96.0			
	Tl	205	103.530				
	Pb	208	105.154				
	Bi	209					
	Th	232	102.384				
	U	238	107.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	CCV is out of limits (+/- 10%)
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 07:12:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.700

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.023**	ug/L	30.318	100	0.000
	Be	9	**0.020**	ug/L	61.049	15	0.000
	B	11	**2.674**	ug/L	23.866	1126	0.002
	Na	23	**3.090**	ug/L	46.022	14007	0.029
	Mg	24	**0.256**	ug/L	5.076	3000	0.002
	Al	27	**-0.170**	ug/L	347.673	6335	-0.002
	P	31	**5.820**	ug/L	13.237	3743	0.003
	K	39	**12.703**	ug/L	66.968	434528	0.174
	Ca	43	**1.353**	ug/L	323.516	191	0.000
>	Sc	45		ug/L		275154	275154.062
	Ti	47	**0.266**	ug/L	29.793	367	0.000
	V	51	**-0.135**	ug/L	166.461	4171	-0.002
	Cr	52	**-0.052**	ug/L	76.021	-1185	-0.001
	Cr	53		ug/L		52244	-0.018
	Mn	55	**0.087**	ug/L	12.775	1413	0.002
	Fe	57	**3.432**	ug/L	14.992	5800	0.002
	Co	59	**0.014**	ug/L	40.615	164	0.000
	Ni	60	**0.015**	ug/L	69.744	84	0.000
	Cu	63		ug/L		247	0.000
	Cu	65	**0.015**	ug/L	28.098	98	0.000
	Zn	66	**-0.017**	ug/L	35.618	211	-0.000
	Zn	67		ug/L		4681	-0.002
	Zn	68		ug/L		595	-0.000
>	Ge	74		ug/L		322731	322731.006
	As	75	**-0.159**	ug/L	111.724	-22	-0.000
	Se	77		ug/L		2600	-0.001
	Se	82	**-0.005**	ug/L	1841.843	-10	-0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	**0.012**	ug/L	34.372	297	0.001
	Y	89		ug/L		75	0.000
	Mo	98	**0.096**	ug/L	30.109	350	0.001
	Ag	107	**0.013**	ug/L	41.846	106	0.000
	Cd	111	**0.030**	ug/L	12.815	54	0.000
	Cd	114		ug/L		86	0.000
>	In	115		ug/L		203252	203252.473
	Sn	120	**0.391**	ug/L	14.389	2148	0.009
	Sb	121	**1.125**	ug/L	22.148	4566	0.020
	Sb	123		ug/L		3598	0.016
	Ba	135		ug/L		57	0.000
	Ba	137	**0.007**	ug/L	87.275	75	0.000
	Ho	165		ug/L		38	-0.000
>	Lu	175		ug/L		360284	360283.717
	Tl	205	**0.115**	ug/L	31.082	2232	0.004
	Pb	208	**0.025**	ug/L	14.324	1499	0.001
	Bi	209		ug/L		275	-0.000
	Th	232	**0.247**	ug/L	16.506	8169	0.018
	U	238	**0.025**	ug/L	23.317	1063	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		84.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 07:18:48
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978333.701

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.076	ug/L	13.263	186	0.000
	Be	9	0.015	ug/L	164.326	15	0.000
	B	11	1.179	ug/L	10.398	840	0.001
	Na	23	3.765	ug/L	36.521	17344	0.036
	Mg	24	-0.903	ug/L	1.374	1000	-0.006
	Al	27	-1.346	ug/L	38.308	3667	-0.013
	P	31	3.451	ug/L	51.913	3754	0.002
	K	39	9.770	ug/L	35.450	466161	0.134
	Ca	43	21.676	ug/L	9.353	391	0.001
>	Sc	45		ug/L		302722	302721.671
	Ti	47	0.674	ug/L	5.493	586	0.001
	V	51	-2.438	ug/L	84.274	-7546	-0.042
	Cr	52	-1.450	ug/L	14.710	-7065	-0.020
	Cr	53		ug/L		222197	0.527
	Mn	55	0.196	ug/L	3.898	2319	0.005
	Fe	57	3.328	ug/L	54.979	6365	0.001
	Co	59	0.001	ug/L	243.566	109	0.000
	Ni	60	0.024	ug/L	48.510	102	0.000
	Cu	63		ug/L		283	0.000
	Cu	65	0.028	ug/L	41.735	125	0.000
	Zn	66	0.993	ug/L	7.224	1137	0.003
	Zn	67		ug/L		30480	0.077
	Zn	68		ug/L		2685	0.006
>	Ge	74		ug/L		326630	326629.610
	As	75	-0.222	ug/L	186.772	-81	-0.001
	Se	77		ug/L		15105	0.037
	Se	82	0.103	ug/L	164.798	-0	0.000
	Kr	83		ug/L		81	-0.000
	Sr	88	0.014	ug/L	4.687	314	0.001
	Y	89		ug/L		58	0.000
	Mo	98	0.003	ug/L	67.762	103	0.000
	Ag	107	0.002	ug/L	52.475	59	0.000
	Cd	111	0.012	ug/L	93.401	34	0.000
	Cd	114		ug/L		22	-0.000
>	In	115		ug/L		197388	197387.639
	Sn	120	1.246	ug/L	26.841	5800	0.027
	Sb	121	0.536	ug/L	31.358	2365	0.010
	Sb	123		ug/L		1827	0.007
	Ba	135		ug/L		36	0.000
	Ba	137	-0.001	ug/L	153.767	52	-0.000
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		332931	332931.155
	Tl	205	0.006	ug/L	88.321	722	0.000
	Pb	208	-0.010	ug/L	25.396	688	-0.001
	Bi	209		ug/L		320	-0.000
	Th	232	0.289	ug/L	21.629	8539	0.020
	U	238	-0.007	ug/L	18.225	201	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 07:24:59
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978334.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.474**	ug/L	3.162	74411	0.247
	Be	9	**56.061**	ug/L	2.016	16768	0.056
	B	11	**111.074**	ug/L	3.758	30024	0.098
	Na	23	**1925.567**	ug/L	10.301	5526532	18.352
	Mg	24	**2107.333**	ug/L	5.817	4160306	13.812
	Al	27	**1903.180**	ug/L	7.131	5354381	17.762
	P	31	**2165.864**	ug/L	3.879	331920	1.092
	K	39	**2108.461**	ug/L	12.656	9149323	28.925
	Ca	43	**2094.955**	ug/L	2.510	18704	0.061
>	Sc	45		ug/L		301309	301308.535
	Ti	47	**46.342**	ug/L	2.914	20778	0.068
	V	51	**46.689**	ug/L	5.039	248251	0.807
	Cr	52	**47.962**	ug/L	4.193	195858	0.654
	Cr	53		ug/L		265005	0.672
	Mn	55	**51.145**	ug/L	3.601	358878	1.189
	Fe	57	**2138.970**	ug/L	3.653	289170	0.941
	Co	59	**49.887**	ug/L	3.980	263244	0.874
	Ni	60	**51.082**	ug/L	4.304	58077	0.193
	Cu	63		ug/L		137053	0.455
	Cu	65	**49.625**	ug/L	4.325	66540	0.221
	Zn	66	**53.981**	ug/L	3.127	48708	0.151
	Zn	67		ug/L		42557	0.116
	Zn	68		ug/L		36914	0.113
>	Ge	74		ug/L		320725	320725.138
	As	75	**49.095**	ug/L	2.983	46248	0.144
	Se	77		ug/L		19317	0.051
	Se	82	**54.433**	ug/L	2.005	5032	0.016
	Kr	83		ug/L		106	0.000
	Sr	88	**53.598**	ug/L	1.729	537157	2.833
	Y	89		ug/L		306	0.001
	Mo	98	**50.341**	ug/L	1.578	122403	0.645
	Ag	107	**52.552**	ug/L	2.363	211748	1.117
	Cd	111	**52.862**	ug/L	1.165	53377	0.281
	Cd	114		ug/L		127478	0.672
>	In	115		ug/L		189582	189581.558
	Sn	120	**55.127**	ug/L	1.519	230245	1.213
	Sb	121	**60.838**	ug/L	0.683	205394	1.081
	Sb	123		ug/L		162601	0.856
	Ba	135		ug/L		59727	0.179
	Ba	137	**47.639**	ug/L	2.297	104322	0.313
	Ho	165		ug/L		75	0.000
>	Lu	175		ug/L		333082	333081.650
	Tl	205	**49.737**	ug/L	0.550	613733	1.841
	Pb	208	**53.406**	ug/L	1.363	1062256	3.187
	Bi	209		ug/L		880264	2.642
	Th	232	**52.488**	ug/L	0.140	1240960	3.721
	U	238	**56.093**	ug/L	2.189	1368663	4.109

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 07:37:19
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978335.704

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.069**	**ug/L**	9.101	173	0.000
	Be	9	**0.010**	**ug/L**	56.584	14	0.000
	B	11	**1.350**	**ug/L**	13.214	871	0.001
	Na	23	**5.759**	**ug/L**	51.495	22686	0.055
	Mg	24	**-0.728**	**ug/L**	80.710	1333	-0.005
	Al	27	**0.124**	**ug/L**	171.089	7669	0.001
	P	31	**11.971**	**ug/L**	10.798	4974	0.006
	K	39	**14.797**	**ug/L**	18.999	478898	0.203
	Ca	43	**26.350**	**ug/L**	5.463	425	0.001
>	Sc	45		**ug/L**		297730	297730.141
	Ti	47	**0.518**	**ug/L**	11.417	508	0.001
	V	51	**-3.360**	**ug/L**	41.851	-12024	-0.058
	Cr	52	**-1.675**	**ug/L**	7.990	-7871	-0.023
	Cr	53		**ug/L**		246505	0.620
	Mn	55	**0.216**	**ug/L**	1.474	2424	0.005
	Fe	57	**5.615**	**ug/L**	21.587	6562	0.002
	Co	59	**-0.004**	**ug/L**	13.434	84	-0.000
	Ni	60	**0.034**	**ug/L**	29.228	112	0.000
	Cu	63		**ug/L**		380	0.001
	Cu	65	**0.083**	**ug/L**	12.918	196	0.000
	Zn	66	**1.040**	**ug/L**	4.247	1130	0.003
	Zn	67		**ug/L**		36507	0.100
	Zn	68		**ug/L**		2998	0.008
>	Ge	74		**ug/L**		312562	312561.671
	As	75	**-0.398**	**ug/L**	59.578	-241	-0.001
	Se	77		**ug/L**		15683	0.041
	Se	82	**-0.068**	**ug/L**	15.756	-15	-0.000
	Kr	83		**ug/L**		89	-0.000
	Sr	88	**0.018**	**ug/L**	21.766	342	0.001
	Y	89		**ug/L**		47	-0.000
	Mo	98	**-0.004**	**ug/L**	54.280	83	-0.000
	Ag	107	**0.009**	**ug/L**	9.158	82	0.000
	Cd	111	**-0.004**	**ug/L**	204.056	17	-0.000
	Cd	114		**ug/L**		31	-0.000
>	In	115		**ug/L**		191581	191581.401
	Sn	120	**0.281**	**ug/L**	5.906	1558	0.006
	Sb	121	**0.107**	**ug/L**	20.901	833	0.002
	Sb	123		**ug/L**		647	0.001
	Ba	135		**ug/L**		74	0.000
	Ba	137	**0.027**	**ug/L**	21.823	113	0.000
	Ho	165		**ug/L**		44	0.000
>	Lu	175		**ug/L**		332090	332090.331
	Tl	205	**0.163**	**ug/L**	7.474	2647	0.006
	Pb	208	**0.026**	**ug/L**	11.067	1403	0.002
	Bi	209		**ug/L**		237	-0.000
	Th	232	**0.267**	**ug/L**	20.239	7989	0.019
	U	238	**-0.010**	**ug/L**	1.368	130	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 07:43:29
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978336.705

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.826**	ug/L	1.329	75150	0.253
	Be	9	**56.678**	ug/L	1.865	16686	0.056
	B	11	**116.608**	ug/L	4.909	30994	0.103
	Na	23	**2050.666**	ug/L	5.051	5802728	19.545
	Mg	24	**2031.353**	ug/L	4.667	3951288	13.314
	Al	27	**1963.631**	ug/L	5.634	5442883	18.326
	P	31	**2113.617**	ug/L	0.350	319061	1.065
	K	39	**1834.666**	ug/L	9.096	7875514	25.169
	Ca	43	**2091.185**	ug/L	4.741	18373	0.061
>	Sc	45		ug/L		296524	296524.133
	Ti	47	**46.891**	ug/L	2.244	20692	0.069
	V	51	**45.784**	ug/L	4.016	239752	0.791
	Cr	52	**50.085**	ug/L	2.275	201424	0.683
	Cr	53		ug/L		273515	0.714
	Mn	55	**51.725**	ug/L	1.348	357367	1.202
	Fe	57	**2213.557**	ug/L	2.416	294424	0.974
	Co	59	**50.179**	ug/L	2.036	260713	0.879
	Ni	60	**50.825**	ug/L	1.450	56903	0.192
	Cu	63		ug/L		135466	0.456
	Cu	65	**49.478**	ug/L	1.094	65341	0.220
	Zn	66	**53.193**	ug/L	2.232	46714	0.149
	Zn	67		ug/L		45180	0.128
	Zn	68		ug/L		35314	0.111
>	Ge	74		ug/L		312049	312048.794
	As	75	**77.830**	ug/L	3.717	71274	0.228
	Se	77		ug/L		17244	0.046
	Se	82	**20.603**	ug/L	2.149	1847	0.006
	Kr	83		ug/L		113	0.000
	Sr	88	**54.495**	ug/L	0.852	544589	2.880
	Y	89		ug/L		85	0.000
	Mo	98	**50.668**	ug/L	2.361	122797	0.649
	Ag	107	**52.827**	ug/L	1.717	212261	1.123
	Cd	111	**10.927**	ug/L	1.695	11018	0.058
	Cd	114		ug/L		25001	0.132
>	In	115		ug/L		189021	189021.386
	Sn	120	**55.844**	ug/L	1.668	232521	1.228
	Sb	121	**235.133**	ug/L	0.868	790160	4.178
	Sb	123		ug/L		639056	3.379
	Ba	135		ug/L		60386	0.180
	Ba	137	**48.137**	ug/L	2.744	106038	0.316
	Ho	165		ug/L		240	0.001
>	Lu	175		ug/L		335064	335063.825
	Tl	205	**96.512**	ug/L	0.770	1197287	3.572
	Pb	208	**43.612**	ug/L	0.743	872841	2.602
	Bi	209		ug/L		495	0.000
	Th	232	**55.066**	ug/L	0.733	1309533	3.903
	U	238	**57.627**	ug/L	2.013	1414520	4.221

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 07:49:41
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978337.706

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	ug/L	75.472	87	0.000
	Be	9	**0.030**	ug/L	78.276	18	0.000
	B	11	**3.012**	ug/L	17.136	1183	0.003
	Na	23	**2.186**	ug/L	63.165	11338	0.021
	Mg	24	**-1.034**	ug/L	31.220	667	-0.007
	Al	27	**-1.309**	ug/L	16.609	3334	-0.012
	P	31	**5.214**	ug/L	9.524	3578	0.003
	K	39	**11.539**	ug/L	28.981	420781	0.158
	Ca	43	**17.241**	ug/L	13.964	313	0.001
>	Sc	45		ug/L		269039	269038.703
	Ti	47	**0.258**	ug/L	8.504	356	0.000
	V	51	**0.112**	ug/L	600.727	5185	0.002
	Cr	52	**-0.743**	ug/L	5.523	-3698	-0.010
	Cr	53		ug/L		104933	0.182
	Mn	55	**0.062**	ug/L	7.989	1226	0.001
	Fe	57	**0.739**	ug/L	297.514	5348	0.000
	Co	59	**0.002**	ug/L	211.496	102	0.000
	Ni	60	**0.018**	ug/L	66.933	85	0.000
	Cu	63		ug/L		388	0.001
	Cu	65	**0.088**	ug/L	14.728	183	0.000
	Zn	66	**0.429**	ug/L	11.110	589	0.001
	Zn	67		ug/L		10754	0.018
	Zn	68		ug/L		1381	0.002
>	Ge	74		ug/L		309597	309596.511
	As	75	**0.224**	ug/L	154.882	325	0.001
	Se	77		ug/L		5548	0.008
	Se	82	**-0.168**	ug/L	153.703	-24	-0.000
	Kr	83		ug/L		99	0.000
	Sr	88	**0.006**	ug/L	16.143	229	0.000
	Y	89		ug/L		49	-0.000
	Mo	98	**0.032**	ug/L	24.990	176	0.000
	Ag	107	**0.004**	ug/L	38.739	63	0.000
	Cd	111	**0.001**	ug/L	483.564	23	0.000
	Cd	114		ug/L		41	-0.000
>	In	115		ug/L		195783	195783.457
	Sn	120	**0.293**	ug/L	1.896	1645	0.006
	Sb	121	**0.658**	ug/L	15.029	2774	0.012
	Sb	123		ug/L		2185	0.009
	Ba	135		ug/L		71	0.000
	Ba	137	**0.022**	ug/L	25.138	108	0.000
	Ho	165		ug/L		47	0.000
>	Lu	175		ug/L		351452	351451.990
	Tl	205	**1.267**	ug/L	23.890	17137	0.047
	Pb	208	**0.013**	ug/L	7.298	1224	0.001
	Bi	209		ug/L		288	-0.000
	Th	232	**0.210**	ug/L	16.907	7040	0.015
	U	238	**0.003**	ug/L	14.631	479	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		82.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 08:02:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.249**	**ug/L**	0.829	68705	0.250
	Be	9	**56.325**	**ug/L**	1.034	15323	0.056
	B	11	**105.974**	**ug/L**	2.611	26081	0.093
	Na	23	**5113.312**	**ug/L**	5.666	13356436	48.735
	Mg	24	**5227.783**	**ug/L**	1.615	9391468	34.265
	Al	27	**5147.637**	**ug/L**	2.947	13172073	48.042
	P	31	**5238.448**	**ug/L**	0.988	726386	2.640
	K	39	**4422.767**	**ug/L**	4.189	17013205	60.673
	Ca	43	**4920.187**	**ug/L**	1.171	39718	0.144
>	Sc	45		**ug/L**		274010	274009.674
	Ti	47	**49.100**	**ug/L**	2.577	20011	0.072
	V	51	**51.034**	**ug/L**	3.178	246450	0.882
	Cr	52	**50.565**	**ug/L**	4.764	187932	0.690
	Cr	53		**ug/L**		110660	0.195
	Mn	55	**52.352**	**ug/L**	3.091	334215	1.217
	Fe	57	**5243.039**	**ug/L**	2.542	637115	2.306
	Co	59	**49.376**	**ug/L**	3.405	237083	0.865
	Ni	60	**49.730**	**ug/L**	1.204	51457	0.188
	Cu	63		**ug/L**		127977	0.466
	Cu	65	**51.580**	**ug/L**	1.650	62937	0.229
	Zn	66	**49.626**	**ug/L**	1.898	44784	0.139
	Zn	67		**ug/L**		15634	0.032
	Zn	68		**ug/L**		33492	0.102
>	Ge	74		**ug/L**		320532	320532.294
	As	75	**46.148**	**ug/L**	3.519	43471	0.135
	Se	77		**ug/L**		7906	0.015
	Se	82	**50.277**	**ug/L**	2.704	4643	0.015
	Kr	83		**ug/L**		98	0.000
	Sr	88	**49.254**	**ug/L**	0.313	516792	2.603
	Y	89		**ug/L**		163	0.001
	Mo	98	**48.149**	**ug/L**	1.785	122513	0.617
	Ag	107	**49.779**	**ug/L**	2.535	209970	1.058
	Cd	111	**50.744**	**ug/L**	2.887	53620	0.270
	Cd	114		**ug/L**		126834	0.639
>	In	115		**ug/L**		198436	198435.927
	Sn	120	**49.928**	**ug/L**	2.977	218248	1.098
	Sb	121	**46.236**	**ug/L**	10.067	163636	0.822
	Sb	123		**ug/L**		130797	0.657
	Ba	135		**ug/L**		60641	0.171
	Ba	137	**45.839**	**ug/L**	1.338	106559	0.301
	Ho	165		**ug/L**		88	0.000
>	Lu	175		**ug/L**		353540	353539.945
	Tl	205	**50.163**	**ug/L**	2.971	656857	1.856
	Pb	208	**52.146**	**ug/L**	0.638	1101016	3.112
	Bi	209		**ug/L**		327	-0.000
	Th	232	**49.480**	**ug/L**	2.526	1241625	3.507
	U	238	**53.968**	**ug/L**	1.569	1397845	3.953

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	106.499				
	Be	9	112.650				
	B	11	105.974				
	Na	23	102.266				
	Mg	24	104.556				
	Al	27	101.933				
	P	31	104.769				
	K	39	88.455				
	Ca	43	98.404				
>	Sc	45		84.2			
	Ti	47	98.200				
	V	51	102.067				
	Cr	52	101.131				
	Cr	53					
	Mn	55	104.705				
	Fe	57	104.861				
	Co	59	98.752				
	Ni	60	99.459				
	Cu	63					
	Cu	65	103.160				
	Zn	66	99.251				
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75	92.297				
	Se	77					
	Se	82	100.555				
	Kr	83					
	Sr	88	98.509				
	Y	89					
	Mo	98	96.298				
	Ag	107	99.557				
	Cd	111	101.489				
	Cd	114					
>	In	115		88.7			
	Sn	120	99.856				
	Sb	121	92.472				
	Sb	123					
	Ba	135					
	Ba	137	91.677				
	Ho	165					
>	Lu	175		96.2			
	Tl	205	100.327				
	Pb	208	104.293				
	Bi	209					
	Th	232	98.961				
	U	238	107.936				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 08:08:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	**ug/L**	44.018	81	0.000
	Be	9	**0.034**	**ug/L**	76.649	19	0.000
	B	11	**3.193**	**ug/L**	18.494	1214	0.003
	Na	23	**1.547**	**ug/L**	81.007	9670	0.015
	Mg	24	**1.061**	**ug/L**	185.551	4334	0.007
	Al	27	**0.723**	**ug/L**	92.807	8336	0.007
	P	31	**5.062**	**ug/L**	23.750	3525	0.003
	K	39	**12.990**	**ug/L**	49.749	421811	0.178
	Ca	43	**5.886**	**ug/L**	39.322	221	0.000
>	Sc	45		**ug/L**		266467	266467.294
	Ti	47	**0.092**	**ug/L**	62.201	287	0.000
	V	51	**0.195**	**ug/L**	212.424	5575	0.003
	Cr	52	**-0.275**	**ug/L**	22.904	-1959	-0.004
	Cr	53		**ug/L**		67198	0.044
	Mn	55	**0.017**	**ug/L**	2.424	935	0.000
	Fe	57	**5.339**	**ug/L**	9.158	5840	0.002
	Co	59	**0.011**	**ug/L**	10.492	146	0.000
	Ni	60	**0.018**	**ug/L**	46.382	84	0.000
	Cu	63		**ug/L**		187	0.000
	Cu	65	**0.009**	**ug/L**	22.584	88	0.000
	Zn	66	**0.085**	**ug/L**	36.840	299	0.000
	Zn	67		**ug/L**		6142	0.003
	Zn	68		**ug/L**		809	0.001
>	Ge	74		**ug/L**		319019	319019.264
	As	75	**0.020**	**ug/L**	342.803	147	0.000
	Se	77		**ug/L**		3181	0.000
	Se	82	**-0.026**	**ug/L**	414.347	-12	-0.000
	Kr	83		**ug/L**		93	-0.000
	Sr	88	**0.007**	**ug/L**	8.563	241	0.000
	Y	89		**ug/L**		44	-0.000
	Mo	98	**0.109**	**ug/L**	29.189	382	0.001
	Ag	107	**0.012**	**ug/L**	23.916	102	0.000
	Cd	111	**0.018**	**ug/L**	37.546	41	0.000
	Cd	114		**ug/L**		69	0.000
>	In	115		**ug/L**		201770	201770.025
	Sn	120	**0.392**	**ug/L**	18.681	2137	0.009
	Sb	121	**1.257**	**ug/L**	22.869	5002	0.022
	Sb	123		**ug/L**		3911	0.017
	Ba	135		**ug/L**		46	0.000
	Ba	137	**0.000**	**ug/L**	1660.599	59	0.000
	Ho	165		**ug/L**		39	0.000
>	Lu	175		**ug/L**		351683	351682.748
	Tl	205	**0.523**	**ug/L**	17.405	7477	0.019
	Pb	208	**0.018**	**ug/L**	12.624	1330	0.001
	Bi	209		**ug/L**		266	-0.000
	Th	232	**0.485**	**ug/L**	13.683	13899	0.034
	U	238	**0.025**	**ug/L**	20.325	1046	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		81.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420001
Sample Date/Time: Saturday, December 05, 2009 08:26:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241420001.712

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.112**	**ug/L**	4.464	228	0.001
	Be	9	**0.025**	**ug/L**	27.702	18	0.000
	B	11	**0.245**	**ug/L**	40.391	570	0.000
	Na	23	**475.451**	**ug/L**	5.361	1327283	4.531
	Mg	24	**17.969**	**ug/L**	2.950	37048	0.118
	Al	27	**102.938**	**ug/L**	7.912	287892	0.961
	P	31	**14.198**	**ug/L**	17.765	5198	0.007
	K	39	**59.131**	**ug/L**	32.495	646422	0.811
	Ca	43	**92.541**	**ug/L**	8.656	982	0.003
>	Sc	45		**ug/L**		291791	291790.888
	Ti	47	**2.216**	**ug/L**	3.958	1224	0.003
	V	51	**-0.581**	**ug/L**	334.129	2042	-0.010
	Cr	52	**1.374**	**ug/L**	3.696	4420	0.019
	Cr	53		**ug/L**		229750	0.580
	Mn	55	**3.773**	**ug/L**	5.171	26472	0.088
	Fe	57	**115.892**	**ug/L**	3.738	20572	0.051
	Co	59	**0.098**	**ug/L**	4.982	601	0.002
	Ni	60	**1.181**	**ug/L**	3.799	1371	0.004
	Cu	63		**ug/L**		1611	0.005
	Cu	65	**0.551**	**ug/L**	3.884	799	0.002
	Zn	66	**4.930**	**ug/L**	2.690	4647	0.014
	Zn	67		**ug/L**		30413	0.078
	Zn	68		**ug/L**		5252	0.014
>	Ge	74		**ug/L**		320241	320240.898
	As	75	**-0.052**	**ug/L**	1143.203	79	-0.000
	Se	77		**ug/L**		14562	0.036
	Se	82	**-0.159**	**ug/L**	38.104	-24	-0.000
	Kr	83		**ug/L**		101	0.000
	Sr	88	**1.448**	**ug/L**	2.796	14891	0.077
	Y	89		**ug/L**		1958	0.010
	Mo	98	**0.110**	**ug/L**	4.139	366	0.001
	Ag	107	**0.011**	**ug/L**	14.725	90	0.000
	Cd	111	**0.010**	**ug/L**	31.502	31	0.000
	Cd	114		**ug/L**		51	0.000
>	In	115		**ug/L**		192496	192495.501
	Sn	120	**0.184**	**ug/L**	3.325	1156	0.004
	Sb	121	**0.056**	**ug/L**	20.711	664	0.001
	Sb	123		**ug/L**		530	0.001
	Ba	135		**ug/L**		2854	0.008
	Ba	137	**2.261**	**ug/L**	2.446	5054	0.015
	Ho	165		**ug/L**		186	0.000
>	Lu	175		**ug/L**		336513	336513.294
	Tl	205	**0.047**	**ug/L**	5.795	1240	0.002
	Pb	208	**0.323**	**ug/L**	1.960	7383	0.019
	Bi	209		**ug/L**		454	0.000
	Th	232	**0.181**	**ug/L**	15.741	6051	0.013
	U	238	**-0.002**	**ug/L**	47.592	327	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		86.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420002
Sample Date/Time: Saturday, December 05, 2009 08:32:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241420002.713

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.223**	ug/L	5.854	378	0.001
	Be	9	**0.030**	ug/L	68.221	19	0.000
	B	11	**0.103**	ug/L	79.031	529	0.000
	Na	23	**293.318**	ug/L	8.216	815705	2.796
	Mg	24	**41.067**	ug/L	16.382	80563	0.269
	Al	27	**287.016**	ug/L	17.006	783652	2.679
	P	31	**14.695**	ug/L	17.161	5235	0.007
	K	39	**85.373**	ug/L	16.399	747130	1.171
	Ca	43	**118.068**	ug/L	10.404	1193	0.003
>	Sc	45		ug/L		289781	289780.828
	Ti	47	**5.279**	ug/L	2.751	2520	0.008
	V	51	**-1.596**	ug/L	94.208	-2998	-0.028
	Cr	52	**10.202**	ug/L	4.722	39256	0.139
	Cr	53		ug/L		264941	0.706
	Mn	55	**7.689**	ug/L	0.993	52683	0.179
	Fe	57	**252.621**	ug/L	1.199	37864	0.111
	Co	59	**0.319**	ug/L	7.816	1718	0.006
	Ni	60	**6.390**	ug/L	1.449	7055	0.024
	Cu	63		ug/L		2410	0.008
	Cu	65	**0.834**	ug/L	2.903	1159	0.004
	Zn	66	**8.144**	ug/L	1.364	7278	0.023
	Zn	67		ug/L		37566	0.105
	Zn	68		ug/L		7360	0.022
>	Ge	74		ug/L		309568	309568.271
	As	75	**0.115**	ug/L	385.863	234	0.000
	Se	77		ug/L		17315	0.046
	Se	82	**-0.146**	ug/L	172.224	-22	-0.000
	Kr	83		ug/L		94	0.000
	Sr	88	**1.353**	ug/L	3.638	13434	0.072
	Y	89		ug/L		3589	0.019
	Mo	98	**0.208**	ug/L	4.536	585	0.003
	Ag	107	**0.007**	ug/L	19.013	72	0.000
	Cd	111	**0.019**	ug/L	60.760	39	0.000
	Cd	114		ug/L		52	0.000
>	In	115		ug/L		185693	185692.559
	Sn	120	**0.147**	ug/L	7.060	967	0.003
	Sb	121	**0.014**	ug/L	34.117	502	0.000
	Sb	123		ug/L		418	0.000
	Ba	135		ug/L		3944	0.012
	Ba	137	**3.203**	ug/L	2.406	6958	0.021
	Ho	165		ug/L		270	0.001
>	Lu	175		ug/L		328104	328104.381
	Tl	205	**0.043**	ug/L	2.054	1160	0.002
	Pb	208	**0.319**	ug/L	1.638	7131	0.019
	Bi	209		ug/L		275	-0.000
	Th	232	**0.168**	ug/L	12.254	5589	0.012
	U	238	**0.011**	ug/L	4.443	635	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		83.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420003
Sample Date/Time: Saturday, December 05, 2009 08:39:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241420003.714

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.020**	**ug/L**	69.058	100	0.000
	Be	9	**0.001**	**ug/L**	1094.795	11	0.000
	B	11	**-0.277**	**ug/L**	27.029	428	-0.000
	Na	23	**4.851**	**ug/L**	59.704	19348	0.046
	Mg	24	**-0.525**	**ug/L**	113.794	1667	-0.003
	Al	27	**-0.267**	**ug/L**	81.588	6335	-0.002
	P	31	**10.822**	**ug/L**	28.897	4620	0.005
	K	39	**10.961**	**ug/L**	39.066	445858	0.150
	Ca	43	**34.901**	**ug/L**	10.424	481	0.001
>	Sc	45		**ug/L**		286564	286563.608
	Ti	47	**0.571**	**ug/L**	5.536	511	0.001
	V	51	**-3.050**	**ug/L**	30.820	-10111	-0.053
	Cr	52	**-0.994**	**ug/L**	13.791	-4922	-0.014
	Cr	53		**ug/L**		263861	0.713
	Mn	55	**0.231**	**ug/L**	1.715	2431	0.005
	Fe	57	**15.367**	**ug/L**	5.322	7545	0.007
	Co	59	**-0.002**	**ug/L**	182.870	91	-0.000
	Ni	60	**0.031**	**ug/L**	27.239	104	0.000
	Cu	63		**ug/L**		570	0.001
	Cu	65	**0.166**	**ug/L**	6.181	294	0.001
	Zn	66	**1.239**	**ug/L**	1.215	1289	0.003
	Zn	67		**ug/L**		37611	0.105
	Zn	68		**ug/L**		3155	0.008
>	Ge	74		**ug/L**		309027	309026.501
	As	75	**-0.010**	**ug/L**	9260.971	113	-0.000
	Se	77		**ug/L**		17235	0.046
	Se	82	**-0.145**	**ug/L**	38.076	-22	-0.000
	Kr	83		**ug/L**		96	0.000
	Sr	88	**0.022**	**ug/L**	4.887	368	0.001
	Y	89		**ug/L**		60	0.000
	Mo	98	**0.007**	**ug/L**	43.591	107	0.000
	Ag	107	**0.011**	**ug/L**	40.759	87	0.000
	Cd	111	**-0.005**	**ug/L**	107.806	15	-0.000
	Cd	114		**ug/L**		31	-0.000
>	In	115		**ug/L**		184246	184245.904
	Sn	120	**0.100**	**ug/L**	4.999	768	0.002
	Sb	121	**-0.021**	**ug/L**	10.464	384	-0.000
	Sb	123		**ug/L**		314	-0.000
	Ba	135		**ug/L**		59	0.000
	Ba	137	**0.022**	**ug/L**	10.354	103	0.000
	Ho	165		**ug/L**		39	0.000
>	Lu	175		**ug/L**		331109	331108.911
	Tl	205	**0.044**	**ug/L**	7.731	1181	0.002
	Pb	208	**0.051**	**ug/L**	5.989	1895	0.003
	Bi	209		**ug/L**		189	-0.000
	Th	232	**0.078**	**ug/L**	27.474	3528	0.006
	U	238	**-0.012**	**ug/L**	6.849	86	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		82.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420004
Sample Date/Time: Saturday, December 05, 2009 08:45:16
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241420004.715

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.029**	**ug/L**	47.558	112	0.000
	Be	9	**0.014**	**ug/L**	84.388	14	0.000
	B	11	**-0.468**	**ug/L**	17.634	379	-0.000
	Na	23	**4.872**	**ug/L**	59.623	19348	0.046
	Mg	24	**0.026**	**ug/L**	5210.063	2667	0.000
	Al	27	**3.002**	**ug/L**	45.983	15008	0.028
	P	31	**12.015**	**ug/L**	15.521	4787	0.006
	K	39	**17.484**	**ug/L**	42.846	470651	0.240
	Ca	43	**30.262**	**ug/L**	1.281	441	0.001
>	Sc	45		**ug/L**		285991	285991.496
	Ti	47	**0.558**	**ug/L**	8.864	505	0.001
	V	51	**-4.209**	**ug/L**	26.424	-15762	-0.073
	Cr	52	**-1.188**	**ug/L**	22.584	-5652	-0.016
	Cr	53		**ug/L**		263130	0.712
	Mn	55	**0.233**	**ug/L**	7.100	2437	0.005
	Fe	57	**13.674**	**ug/L**	12.377	7315	0.006
	Co	59	**-0.002**	**ug/L**	94.560	91	-0.000
	Ni	60	**0.058**	**ug/L**	22.823	133	0.000
	Cu	63		**ug/L**		549	0.001
	Cu	65	**0.141**	**ug/L**	5.609	262	0.001
	Zn	66	**6.914**	**ug/L**	2.567	6172	0.019
	Zn	67		**ug/L**		38277	0.108
	Zn	68		**ug/L**		6723	0.020
>	Ge	74		**ug/L**		307611	307610.909
	As	75	**-0.230**	**ug/L**	270.197	-88	-0.001
	Se	77		**ug/L**		17427	0.047
	Se	82	**0.063**	**ug/L**	495.274	-4	0.000
	Kr	83		**ug/L**		93	0.000
	Sr	88	**0.028**	**ug/L**	10.371	434	0.001
	Y	89		**ug/L**		59	0.000
	Mo	98	**-0.015**	**ug/L**	0.516	56	-0.000
	Ag	107	**0.010**	**ug/L**	21.799	86	0.000
	Cd	111	**0.001**	**ug/L**	558.738	21	0.000
	Cd	114		**ug/L**		31	-0.000
>	In	115		**ug/L**		185844	185843.904
	Sn	120	**0.086**	**ug/L**	3.417	716	0.002
	Sb	121	**-0.035**	**ug/L**	11.819	340	-0.001
	Sb	123		**ug/L**		255	-0.001
	Ba	135		**ug/L**		87	0.000
	Ba	137	**0.034**	**ug/L**	8.638	128	0.000
	Ho	165		**ug/L**		42	0.000
>	Lu	175		**ug/L**		330302	330302.220
	Tl	205	**0.031**	**ug/L**	8.303	1014	0.001
	Pb	208	**0.057**	**ug/L**	1.853	2016	0.003
	Bi	209		**ug/L**		177	-0.000
	Th	232	**0.047**	**ug/L**	28.223	2813	0.003
	U	238	**-0.011**	**ug/L**	2.511	104	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		87.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		83.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		83.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 09:10:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.719

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.925**	ug/L	2.862	69681	0.258
	Be	9	**57.176**	ug/L	4.121	15292	0.057
	B	11	**107.126**	ug/L	3.241	25920	0.094
	Na	23	**5011.631**	ug/L	1.930	12882212	47.765
	Mg	24	**5259.759**	ug/L	4.387	9288391	34.475
	Al	27	**4914.337**	ug/L	8.831	12354903	45.864
	P	31	**5380.620**	ug/L	1.737	733709	2.712
	K	39	**4396.917**	ug/L	1.242	16640950	60.318
	Ca	43	**5075.773**	ug/L	1.548	40299	0.149
>	Sc	45		ug/L		269555	269555.443
	Ti	47	**50.539**	ug/L	2.706	20251	0.074
	V	51	**53.718**	ug/L	2.489	254879	0.928
	Cr	52	**52.821**	ug/L	2.262	193126	0.720
	Cr	53		ug/L		105323	0.183
	Mn	55	**53.655**	ug/L	3.287	336800	1.247
	Fe	57	**5411.348**	ug/L	3.229	646423	2.380
	Co	59	**51.384**	ug/L	3.280	242602	0.900
	Ni	60	**51.792**	ug/L	1.061	52709	0.195
	Cu	63		ug/L		128655	0.477
	Cu	65	**53.011**	ug/L	4.729	63585	0.236
	Zn	66	**50.566**	ug/L	1.359	45104	0.142
	Zn	67		ug/L		14785	0.030
	Zn	68		ug/L		33507	0.104
>	Ge	74		ug/L		316855	316854.836
	As	75	**47.700**	ug/L	2.204	44410	0.140
	Se	77		ug/L		7851	0.015
	Se	82	**51.201**	ug/L	1.757	4674	0.015
	Kr	83		ug/L		99	0.000
	Sr	88	**49.193**	ug/L	1.878	519603	2.600
	Y	89		ug/L		162	0.001
	Mo	98	**49.016**	ug/L	0.618	125561	0.628
	Ag	107	**50.128**	ug/L	0.412	212876	1.065
	Cd	111	**50.318**	ug/L	0.571	53540	0.268
	Cd	114		ug/L		126488	0.633
>	In	115		ug/L		199761	199760.505
	Sn	120	**49.910**	ug/L	1.102	219684	1.098
	Sb	121	**47.154**	ug/L	9.955	167924	0.838
	Sb	123		ug/L		133000	0.664
	Ba	135		ug/L		61011	0.176
	Ba	137	**47.092**	ug/L	2.051	107049	0.309
	Ho	165		ug/L		84	0.000
>	Lu	175		ug/L		345804	345804.222
	Tl	205	**47.089**	ug/L	3.332	603036	1.743
	Pb	208	**53.511**	ug/L	1.605	1104883	3.193
	Bi	209		ug/L		267	-0.000
	Th	232	**51.732**	ug/L	3.460	1269337	3.667
	U	238	**54.525**	ug/L	3.313	1380898	3.994

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	109.850				
	Be	9	114.352				
	B	11	107.126				
	Na	23	100.233				
	Mg	24	105.195				
	Al	27	97.314				
	P	31	107.612				
	K	39	87.938				
	Ca	43	101.515				
>	Sc	45		82.9			
	Ti	47	101.078				
	V	51	107.436				
	Cr	52	105.642				
	Cr	53					
	Mn	55	107.309				
	Fe	57	108.227				
	Co	59	102.768				
	Ni	60	103.585				
	Cu	63					
	Cu	65	106.021				
	Zn	66	101.132				
	Zn	67					
	Zn	68					
>	Ge	74		86.1			
	As	75	95.401				
	Se	77					
	Se	82	102.401				
	Kr	83					
	Sr	88	98.385				
	Y	89					
	Mo	98	98.032				
	Ag	107	100.257				
	Cd	111	100.636				
	Cd	114					
>	In	115		89.3			
	Sn	120	99.821				
	Sb	121	94.309				
	Sb	123					
	Ba	135					
	Ba	137	94.184				
	Ho	165					
>	Lu	175		94.1			
	Tl	205	94.179				
	Pb	208	107.022				
	Bi	209					
	Th	232	103.464				
	U	238	109.050				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 09:16:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.720

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.000**	**ug/L**	2116.398	70	0.000
	Be	9	**0.022**	**ug/L**	81.337	16	0.000
	B	11	**2.246**	**ug/L**	22.111	1010	0.002
	Na	23	**2.378**	**ug/L**	14.749	12005	0.023
	Mg	24	**0.460**	**ug/L**	251.864	3334	0.003
	Al	27	**-0.135**	**ug/L**	459.321	6335	-0.001
	P	31	**3.492**	**ug/L**	39.071	3375	0.002
	K	39	**14.687**	**ug/L**	102.816	436297	0.201
	Ca	43	**3.429**	**ug/L**	81.571	205	0.000
>	Sc	45		**ug/L**		271572	271571.780
	Ti	47	**0.131**	**ug/L**	52.100	309	0.000
	V	51	**0.015**	**ug/L**	2772.675	4812	0.000
	Cr	52	**-0.142**	**ug/L**	69.544	-1506	-0.002
	Cr	53		**ug/L**		65365	0.032
	Mn	55	**0.001**	**ug/L**	209.247	853	0.000
	Fe	57	**3.331**	**ug/L**	7.139	5712	0.001
	Co	59	**0.006**	**ug/L**	58.721	121	0.000
	Ni	60	**0.024**	**ug/L**	31.081	93	0.000
	Cu	63		**ug/L**		176	0.000
	Cu	65	**0.010**	**ug/L**	28.364	90	0.000
	Zn	66	**0.196**	**ug/L**	12.543	407	0.001
	Zn	67		**ug/L**		6106	0.002
	Zn	68		**ug/L**		816	0.000
>	Ge	74		**ug/L**		325870	325869.827
	As	75	**0.216**	**ug/L**	36.958	337	0.001
	Se	77		**ug/L**		3190	0.000
	Se	82	**-0.186**	**ug/L**	60.039	-27	-0.000
	Kr	83		**ug/L**		110	0.000
	Sr	88	**0.005**	**ug/L**	34.700	222	0.000
	Y	89		**ug/L**		46	-0.000
	Mo	98	**0.108**	**ug/L**	18.790	381	0.001
	Ag	107	**0.007**	**ug/L**	31.586	81	0.000
	Cd	111	**0.013**	**ug/L**	45.021	36	0.000
	Cd	114		**ug/L**		79	0.000
>	In	115		**ug/L**		203584	203583.894
	Sn	120	**0.367**	**ug/L**	18.181	2037	0.008
	Sb	121	**1.198**	**ug/L**	22.608	4822	0.021
	Sb	123		**ug/L**		3869	0.017
	Ba	135		**ug/L**		42	0.000
	Ba	137	**0.001**	**ug/L**	649.837	60	0.000
	Ho	165		**ug/L**		41	0.000
>	Lu	175		**ug/L**		356257	356256.772
	Tl	205	**0.735**	**ug/L**	11.085	10387	0.027
	Pb	208	**0.034**	**ug/L**	7.436	1668	0.002
	Bi	209		**ug/L**		157	-0.001
	Th	232	**0.348**	**ug/L**	8.559	10626	0.025
	U	238	**0.022**	**ug/L**	7.120	962	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		83.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 11:20:22
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1404
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6084.1	6084.096	126.122	2.1
	Mg	24.0	37933.7	37933.699	246.062	0.6
	Co	58.9	131465.5	131465.545	391.169	0.3
	Rh	102.9	287728.9	287728.860	2520.918	0.9
	In	114.9	384046.5	384046.542	2719.920	0.7
	Pb	208.0	227115.9	227115.942	904.488	0.4
⌈>	Ba	137.9	372943.0	372943.011	2197.849	0.6
⌊	Ba++	69.0	6670.6	0.018	0.000	0.7
⌈>	Ce	139.9	452582.0	452582.036	2432.404	0.5
⌊	CeO	155.9	10781.5	0.024	0.001	2.4
	Bkgd	220.0	29.1	29.100	2.485	8.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	7.0	5548.1
Co	59	9	7.0	144363.8
In	115	9	7.3	374732.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	604	2060	0.615
Be	9.0	9.1	2061	2070	0.655
Mg	24.0	24.0	5671	2080	0.651
Mg	25.0	25.0	5923	2075	0.623
Mg	26.0	26.0	6187	2070	0.695
Co	58.9	58.9	14186	2110	0.657
Rh	102.9	102.9	24872	2160	0.653
In	114.9	114.9	27786	2180	0.652
Ce	139.9	139.9	33870	2195	0.677
Pb	206.0	206.0	49948	2290	0.663
Pb	207.0	207.0	50159	2260	0.626
Pb	208.0	208.0	50451	2280	0.672
U	238.1	238.0	57718	2285	0.714

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 19:54:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Blank.201

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		26	
Sc	45		ug/L		451819	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 19:56:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 1.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	10.000	ug/L	1.504	4291	0.010
⌊>	Sc	45		ug/L		448236	448236.284

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 19:58:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 2.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	99.950	ug/L	1.387	41554	0.091
⌊>	Sc	45		ug/L		458207	458206.717

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 19:59:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 1.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	51.550	ug/L	2.261	21535	0.047
⌊>	Sc	45		ug/L		460155	460154.758

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	103.100				
⌊>	Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 20:01:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 2.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.007	ug/L	87.518	30	0.000
⌊>	Sc	45		ug/L		468270	468269.954

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 20:03:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 3.206

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.573	ug/L	13.614	270	0.001
Sc	45		ug/L		468826	468826.477

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	114.555				
Sc	45		103.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 20:04:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 4.207

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.079	ug/L	26.149	60	0.000
Sc	45		ug/L		458641	458641.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		101.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 20:06:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 5.208

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	21.293	ug/L	2.059	8369	0.019
Sc	45		ug/L		432165	432164.506

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	106.466				
Sc	45		95.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 20:08:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**52.874**	**ug/L**	4.235	21543	0.048
⌊>	Sc	45		**ug/L**		449096	449096.234

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	105.748				
⌊>	Sc	45		99.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 20:09:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.210

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.019	ug/L	39.713	35	0.000
Sc	45		ug/L		460215	460215.149

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		101.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 20:11:27
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978333.211

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.003	ug/L	279.819	26	-0.000
Sc	45		ug/L		468278	468278.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 20:13:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978334.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	50.558	ug/L	1.108	21913	0.046
⌊>	Sc	45		ug/L		477347	477346.608

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		105.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 20:16:38
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978335.214

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.016	ug/L	56.833	22	-0.000
Sc	45		ug/L		495941	495941.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		109.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 20:18:22
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978336.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	47.743	ug/L	2.253	21693	0.043
⌊>	Sc	45		ug/L		500478	500478.200

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		110.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 20:20:07
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978337.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.022	ug/L	50.979	36	0.000
⌊>	Sc	45		ug/L		459820	459820.282

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 20:23:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 8.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	49.475	ug/L	2.143	21229	0.045
⌊>	Sc	45		ug/L		472626	472625.711

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	98.949				
⌊>	Sc	45		104.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 20:25:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 9.219

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.026	ug/L	41.795	38	0.000
Sc	45		ug/L		463752	463751.924

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420001
Sample Date/Time: Saturday, December 05, 2009 20:30:28
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241420001.222

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.003	ug/L	389.715	30	0.000
>	Sc	45		ug/L		483139	483139.238

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		106.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420002
Sample Date/Time: Saturday, December 05, 2009 20:32:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241420002.223

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.020**	**ug/L**	67.591	37	0.000
⌊>	Sc	45		**ug/L**		487855	487854.536

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		108.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420003
Sample Date/Time: Saturday, December 05, 2009 20:33:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241420003.224

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.000	ug/L	43800.601	28	0.000
Sc	45		ug/L		486813	486813.202

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		107.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241420004
Sample Date/Time: Saturday, December 05, 2009 20:35:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241420004.225

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.004	ug/L	165.100	27	-0.000
Sc	45		ug/L		496882	496881.604

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		110.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 20:40:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.228

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.048	ug/L	1.726	21635	0.044
Sc	45		ug/L		485814	485813.776

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	98.096				
Sc	45		107.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 20:42:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.229

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.020	ug/L	5.543	35	0.000
Sc	45		ug/L		459706	459705.881

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		101.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\112509W1.SIF
Batch ID:
Results Data Set: 112509W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

Method Loaded
Method Name: WATER **Method Last Saved: 10/28/2009 09:43:18**
Method Description: 7470A, 245.2, ILM04 ANALYST JXL1

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 11/25/2009 07:43:51**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	07:44:53	Yes
2		[0.00]	0.0000	-0.0012	0.0000	07:45:28	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0001				
%RSD:		0.00	79.37				

Auto-zero performed.

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 11/25/2009 07:45:47**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0022	0.0098	0.0023	07:46:47	Yes
2		[0.2]	0.0021	0.0090	0.0022	07:47:22	Yes
Mean:		[0.2]	0.0022				
SD:		0.0	0.0001				
%RSD:		0.0	2.65				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01093 Intercept: 0.00000

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 11/25/2009 07:47:41**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0055	0.0237	0.0055	07:48:42	Yes
2		[0.5]	0.0054	0.0235	0.0055	07:49:18	Yes
Mean:		[0.5]	0.0054				
SD:		0.0	0.0000				
%RSD:		0.0	0.63				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999997 Slope: 0.01087 Intercept: 0.00000

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 11/25/2009 07:49:37**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0221	0.0989	0.0222	07:50:39	Yes
2		[2.0]	0.0218	0.0966	0.0219	07:51:13	Yes
Mean:		[2.0]	0.0219				
SD:		0.0	0.0002				
%RSD:		0.0	0.98				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999997 Slope: 0.01098 Intercept: -0.00002

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 11/25/2009 07:51:33**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0544	0.2419	0.0545	07:52:35	Yes
2		[5.0]	0.0541	0.2417	0.0542	07:53:10	Yes
Mean:		[5.0]	0.0543				
SD:		0.0	0.0003				
%RSD:		0.0	0.47				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999989 Slope: 0.01086 Intercept: 0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 11/25/2009 07:53:31**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1094	0.4861	0.1095	07:54:31	Yes
2		[10.0]	0.1082	0.4828	0.1083	07:55:06	Yes
Mean:		[10.0]	0.1088				
SD:		0.0	0.0008				
%RSD:		0.0	0.75				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999997 Slope: 0.01088 Intercept: 0.00002

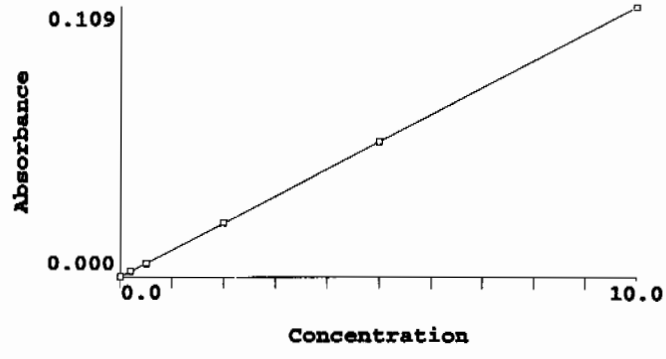

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.002	0.00	79.4
S0.2	0.0022	0.2	0.199	0.00	2.6
S0.5	0.0054	0.5	0.498	0.00	0.6
S2.0	0.0219	2.0	2.015	0.00	1.0

S5.0	0.0543	5.0	4.987	0.00	0.5
S10.0	0.1088	10.0	10.004	0.00	0.8

Correlation Coef.: 0.999997 Slope: 0.01088 Intercept: 0.00002

==========

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 11/25/2009 07:55:25**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.095	5.095	0.0554	0.2474	0.0555	07:56:26	Yes
2	5.098	5.098	0.0555	0.2472	0.0555	07:57:00	Yes
Mean:	5.096	5.096	0.0554				
SD:	0.002	0.002	0.0000				
%RSD:	0.045	0.045	0.04				

QC value within limits for Hg 253.7 Recovery = 101.92%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 11/25/2009 07:57:20**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	-0.0005	0.0002	07:58:21	Yes
2	0.001	0.001	0.0000	-0.0003	0.0001	07:58:56	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	94.87	94.87	62.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 11/25/2009 07:59:16**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.202	0.202	0.0022	0.0098	0.0023	08:00:17	Yes
2	0.209	0.209	0.0023	0.0107	0.0024	08:00:52	Yes
Mean:	0.206	0.206	0.0023				
SD:	0.005	0.005	0.0001				
%RSD:	2.487	2.487	2.46				

QC value within limits for Hg 253.7 Recovery = 102.90%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 08:01:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.971	4.971	0.0541	0.2417	0.0542	08:02:13	Yes
2	4.915	4.915	0.0535	0.2403	0.0536	08:02:48	Yes
Mean:	4.943	4.943	0.0538				
SD:	0.040	0.040	0.0004				
%RSD:	0.800	0.800	0.80				

QC value within limits for Hg 253.7 Recovery = 98.86%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 11/25/2009 08:03:08
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	-0.0001	0.0001	08:04:08	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	08:04:43	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	139.3	139.3	46.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201975633|924182|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 11/25/2009 08:05:03
Data Type: Original

Replicate Data: 1201975633|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0003	0.0001	08:06:04	Yes
2	0.005	0.005	0.0001	0.0007	0.0002	08:06:39	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	35.89	35.89	22.80				

Sequence No.: 13
Sample ID: 1201975634|924182|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 11/25/2009 08:06:59
Data Type: Original

Replicate Data: 1201975634|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.004	2.004	0.0218	0.0979	0.0219	08:08:01	Yes
2	1.969	1.969	0.0214	0.0960	0.0215	08:08:36	Yes
Mean:	1.986	1.986	0.0216				
SD:	0.025	0.025	0.0003				
%RSD:	1.251	1.251	1.25				

Sequence No.: 14
Sample ID: 241023001|924182|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 11/25/2009 08:08:57
Data Type: Original

Replicate Data: 241023001|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0004	0.0001	08:09:57	Yes
2	0.006	0.006	0.0001	0.0006	0.0002	08:10:32	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.007	0.007	0.0001				
%RSD:	397.9	397.9	171.58				

Sequence No.: 15
Sample ID: 241023002|924182|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 11/25/2009 08:10:51
Data Type: Original

Replicate Data: 241023002|924182|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1201975636|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.066	2.066	0.0225	0.1030	0.0226	08:21:25	Yes
2	2.062	2.062	0.0224	0.1024	0.0225	08:22:00	Yes
Mean:	2.064	2.064	0.0225				
SD:	0.003	0.003	0.0000				
%RSD:	0.147	0.147	0.15				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1201975637|924182|5 **Date Collected: 11/25/2009 08:22:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975637|924182|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	-0.0000	0.0001	08:23:21	Yes
2	0.002	0.002	0.0000	0.0003	0.0001	08:23:55	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	440.4	440.4	69.93				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 08:24:15**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.059	5.059	0.0550	0.2479	0.0551	08:25:15	Yes
2	5.059	5.059	0.0550	0.2474	0.0551	08:25:50	Yes
Mean:	5.059	5.059	0.0550				
SD:	0.000	0.000	0.0000				
%RSD:	0.001	0.001	0.00				

QC value within limits for Hg 253.7 Recovery = 101.18%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 08:26:09**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0003	0.0001	08:27:10	Yes
2	0.001	0.001	0.0000	0.0002	0.0001	08:27:45	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.88	11.88	4.76				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 241100002|924182|1 **Date Collected: 11/25/2009 08:28:04**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241100002|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0009	0.0002	08:29:05	Yes
2	0.000	0.000	0.0000	0.0001	0.0001	08:29:40	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	-0.0003	0.0000	08:38:45	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0001	08:39:20	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	43.78	43.78	90.87				

==========

Sequence No.: 30 Autosampler Location: 28
Sample ID: 1201975651|924188|1 Date Collected: 11/25/2009 08:39:40
Analyst: JXL1 Data Type: Original

Replicate Data: 1201975651|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0002	0.0001	08:40:40	Yes
2	0.001	0.001	0.0000	-0.0001	0.0001	08:41:15	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	501.1	501.1	177.48				

==========

Sequence No.: 31 Autosampler Location: 29
Sample ID: 1201975652|924188|1 Date Collected: 11/25/2009 08:41:34
Analyst: JXL1 Data Type: Original

Replicate Data: 1201975652|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.133	2.133	0.0232	0.1045	0.0233	08:42:35	Yes
2	2.123	2.123	0.0231	0.1029	0.0232	08:43:10	Yes
Mean:	2.128	2.128	0.0232				
SD:	0.007	0.007	0.0001				
%RSD:	0.330	0.330	0.33				

==========

Sequence No.: 32 Autosampler Location: 30
Sample ID: 1201975653|924188|5 Date Collected: 11/25/2009 08:43:29
Analyst: JXL1 Data Type: Original

Replicate Data: 1201975653|924188|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	08:44:30	Yes
2	0.000	0.000	0.0000	0.0002	0.0001	08:45:04	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	189.6	189.6	57.77				

==========

Sequence No.: 33 Autosampler Location: 31
Sample ID: 241113002|924188|1 Date Collected: 11/25/2009 08:45:23
Analyst: JXL1 Data Type: Original

Replicate Data: 241113002|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0001	0.0001	08:46:24	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	08:47:00	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	110.4	110.4	28.08				

==========

Sequence No.: 34 Autosampler Location: 7
Sample ID: CCV Date Collected: 11/25/2009 08:47:19

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.185	5.185	0.0564	0.2539	0.0565	08:48:19	Yes
2	5.121	5.121	0.0557	0.2508	0.0558	08:48:54	Yes
Mean:	5.153	5.153	0.0561				
SD:	0.045	0.045	0.0005				
%RSD:	0.870	0.870	0.87				

QC value within limits for Hg 253.7 Recovery = 103.06%
All analyte(s) passed QC.

==========

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 08:49:13
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0007	0.0002	08:50:14	Yes
2	0.006	0.006	0.0001	0.0010	0.0002	08:50:49	Yes
Mean:	0.006	0.006	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	5.555	5.555	4.04				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 36 Autosampler Location: 32
Sample ID: 241113003|924188|1 Date Collected: 11/25/2009 08:51:08
Analyst: JXL1 Data Type: Original

Replicate Data: 241113003|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0009	0.0001	08:52:09	Yes
2	0.005	0.005	0.0001	0.0009	0.0002	08:52:44	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	8.282	8.282	5.65				

==========

Sequence No.: 37 Autosampler Location: 33
Sample ID: 241113004|924188|1 Date Collected: 11/25/2009 08:53:03
Analyst: JXL1 Data Type: Original

Replicate Data: 241113004|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	08:54:04	Yes
2	0.002	0.002	0.0001	0.0004	0.0001	08:54:39	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	9.874	9.874	5.09				

==========

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1201980105|926110|1 Date Collected: 11/25/2009 08:54:59
Analyst: JXL1 Data Type: Original

Replicate Data: 1201980105|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0005	0.0001	08:56:00	Yes

Replicate Data: 1201980109|926110|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0007	0.0002	09:05:41	Yes
2	0.006	0.006	0.0001	0.0006	0.0002	09:06:16	Yes
Mean:	0.007	0.007	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	15.16	15.16	11.56				

==========

Sequence No.: 44 Autosampler Location: 40
Sample ID: 241679002|926110|1 Date Collected: 11/25/2009 09:06:36
Analyst: JXL1 Data Type: Original

Replicate Data: 241679002|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0001	0.0008	0.0002	09:07:37	Yes
2	0.011	0.011	0.0001	0.0010	0.0002	09:08:12	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	13.90	13.90	11.50				

==========

Sequence No.: 45 Autosampler Location: 41
Sample ID: 241679003|926110|1 Date Collected: 11/25/2009 09:08:31
Analyst: JXL1 Data Type: Original

Replicate Data: 241679003|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0004	0.0001	09:09:32	Yes
2	0.001	0.001	0.0000	0.0003	0.0001	09:10:07	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.63	11.63	3.80				

==========

Sequence No.: 46 Autosampler Location: 7
Sample ID: CCV Date Collected: 11/25/2009 09:10:26
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.175	5.175	0.0563	0.2548	0.0564	09:11:27	Yes
2	5.142	5.142	0.0559	0.2518	0.0560	09:12:01	Yes
Mean:	5.158	5.158	0.0561				
SD:	0.024	0.024	0.0003				
%RSD:	0.459	0.459	0.46				

QC value within limits for Hg 253.7 Recovery = 103.17%
All analyte(s) passed QC.

==========

Sequence No.: 47 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 09:12:20
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0002	0.0001	09:13:21	Yes
2	0.004	0.004	0.0001	0.0008	0.0001	09:13:56	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	63.63	63.63	37.18				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 240662013|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0006	0.0001	09:32:41	Yes
2	0.003	0.003	0.0001	0.0006	0.0001	09:33:16	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	5.342	5.342	2.96				

Sequence No.: 58 Autosampler Location: 7
Sample ID: CCV Date Collected: 11/25/2009 09:33:35
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.156	5.156	0.0561	0.2550	0.0562	09:34:36	Yes
2	5.115	5.115	0.0556	0.2512	0.0557	09:35:11	Yes
Mean:	5.135	5.135	0.0559				
SD:	0.029	0.029	0.0003				
%RSD:	0.565	0.565	0.57				

QC value within limits for Hg 253.7 Recovery = 102.70%
All analyte(s) passed QC.

Sequence No.: 59 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 09:35:30
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0007	0.0001	09:36:31	Yes
2	0.002	0.002	0.0001	0.0004	0.0001	09:37:05	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	22.74	22.74	13.18				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 Autosampler Location: 52
Sample ID: 240662014|926084|1 Date Collected: 11/25/2009 09:37:25
Analyst: JXL1 Data Type: Original

Replicate Data: 240662014|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	09:38:26	Yes
2	0.003	0.003	0.0001	0.0005	0.0001	09:39:01	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	35.16	35.16	18.82				

Sequence No.: 61 Autosampler Location: 53
Sample ID: 240662015|926084|1 Date Collected: 11/25/2009 09:39:20
Analyst: JXL1 Data Type: Original

Replicate Data: 240662015|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	09:40:21	Yes
2	0.000	0.000	0.0000	0.0003	0.0001	09:40:56	Yes
Mean:	0.000	0.000	0.0000				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	0.0001	0.0006	0.0001	09:50:01	Yes
2	0.002	0.002	0.0000	0.0005	0.0001	09:50:36	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	6.220	6.220	3.35				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 240662021|926084|1 **Date Collected: 11/25/2009 09:50:56**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 240662021|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0003	0.0001	09:51:57	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	09:52:32	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	87.29	87.29	24.88				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 1201975681|924202|1 **Date Collected: 11/25/2009 09:52:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975681|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	-0.0001	0.0001	09:53:54	Yes
2	-0.001	-0.001	0.0000	0.0003	0.0001	09:54:28	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	77.75	77.75	539.91				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201975682|924202|1 **Date Collected: 11/25/2009 09:54:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975682|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.158	2.158	0.0235	0.1039	0.0236	09:55:50	Yes
2	2.147	2.147	0.0234	0.1040	0.0234	09:56:25	Yes
Mean:	2.152	2.152	0.0234				
SD:	0.008	0.008	0.0001				
%RSD:	0.366	0.366	0.37				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 09:56:46**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.325	5.325	0.0579	0.2583	0.0580	09:57:46	Yes
2	5.328	5.328	0.0580	0.2568	0.0580	09:58:21	Yes
Mean:	5.326	5.326	0.0579				
SD:	0.002	0.002	0.0000				
%RSD:	0.042	0.042	0.04				

QC value within limits for Hg 253.7 Recovery = 106.52%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 11/25/2009 09:58:40
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0005	0.0001	09:59:41	Yes
2	0.002	0.002	0.0000	0.0003	0.0001	10:00:16	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	32.93	32.93	19.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 241181001|924202|1
Analyst: JXL1
Autosampler Location: 62
Date Collected: 11/25/2009 10:00:35
Data Type: Original

Replicate Data: 241181001|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	10:01:36	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:02:11	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	15.93	15.93	6.59				

Sequence No.: 73
Sample ID: 241181002|924202|1
Analyst: JXL1
Autosampler Location: 63
Date Collected: 11/25/2009 10:02:31
Data Type: Original

Replicate Data: 241181002|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0008	0.0001	10:03:32	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:04:07	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	84.39	84.39	47.31				

Sequence No.: 74
Sample ID: 241187001|924202|1
Analyst: JXL1
Autosampler Location: 64
Date Collected: 11/25/2009 10:04:27
Data Type: Original

Replicate Data: 241187001|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0005	0.0001	10:05:28	Yes
2	0.003	0.003	0.0001	0.0008	0.0001	10:06:03	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	103.3	103.3	43.30				

Sequence No.: 75
Sample ID: 1201975683|924202|1
Analyst: JXL1
Autosampler Location: 65
Date Collected: 11/25/2009 10:06:22
Data Type: Original

Replicate Data: 1201975683|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0008	0.0001	10:07:24	Yes
2	0.003	0.003	0.0001	0.0008	0.0001	10:07:58	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0003	0.0001	10:17:05	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0001	10:17:41	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	67.15	67.15	339.04				

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201978915|925614|1 **Date Collected: 11/25/2009 10:18:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978915|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0001	0.0001	10:19:02	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	10:19:38	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	>999.9%	>999.9%	74.32				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 10:19:58**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.062	5.062	0.0551	0.2465	0.0552	10:20:58	Yes
2	5.120	5.120	0.0557	0.2483	0.0558	10:21:33	Yes
Mean:	5.091	5.091	0.0554				
SD:	0.041	0.041	0.0004				
%RSD:	0.801	0.801	0.80				

QC value within limits for Hg 253.7 Recovery = 101.83%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 10:21:52**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0005	0.0001	10:22:53	Yes
2	0.004	0.004	0.0001	0.0006	0.0001	10:23:27	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	11.13	11.13	7.31				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201978916|925614|1 **Date Collected: 11/25/2009 10:23:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978916|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.156	2.156	0.0235	0.1050	0.0236	10:24:48	Yes
2	2.157	2.157	0.0235	0.1044	0.0236	10:25:24	Yes
Mean:	2.156	2.156	0.0235				
SD:	0.000	0.000	0.0000				
%RSD:	0.012	0.012	0.01				

Sequence No.: 85
Sample ID: 241606001|925614|1
Analyst: JXL1
Autosampler Location: 73
Date Collected: 11/25/2009 10:25:44
Data Type: Original

Replicate Data: 241606001|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	10:26:46	Yes
2	0.003	0.003	0.0001	0.0005	0.0001	10:27:21	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	16.67	16.67	9.23				

Sequence No.: 86
Sample ID: 1201978917|925614|1
Analyst: JXL1
Autosampler Location: 74
Date Collected: 11/25/2009 10:27:41
Data Type: Original

Replicate Data: 1201978917|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0001	0.0001	10:28:43	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	10:29:17	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.33	11.33	4.94				

Sequence No.: 87
Sample ID: 1201978918|925614|1
Analyst: JXL1
Autosampler Location: 75
Date Collected: 11/25/2009 10:29:37
Data Type: Original

Replicate Data: 1201978918|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.268	2.268	0.0247	0.1098	0.0248	10:30:39	Yes
2	2.264	2.264	0.0246	0.1091	0.0247	10:31:14	Yes
Mean:	2.266	2.266	0.0247				
SD:	0.003	0.003	0.0000				
%RSD:	0.132	0.132	0.13				

Sequence No.: 88
Sample ID: 1201978923|925614|5
Analyst: JXL1
Autosampler Location: 76
Date Collected: 11/25/2009 10:31:34
Data Type: Original

Replicate Data: 1201978923|925614|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0007	0.0002	10:32:35	Yes
2	0.003	0.003	0.0001	0.0003	0.0001	10:33:10	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	32.84	32.84	22.27				

Sequence No.: 89
Sample ID: 1201977150|924857|1
Analyst: JXL1
Autosampler Location: 77
Date Collected: 11/25/2009 10:33:30
Data Type: Original

Replicate Data: 1201977150|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0006	0.0002	10:34:32	Yes

2	0.003	0.003	0.0001	0.0006	0.0001	10:35:07	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	22.06	22.06	14.18				

==========

Sequence No.: 90 **Autosampler Location: 78**
Sample ID: 1201977151|924857|1 **Date Collected: 11/25/2009 10:35:27**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977151|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.485	2.485	0.0271	0.1189	0.0271	10:36:28	Yes
2	2.477	2.477	0.0270	0.1182	0.0270	10:37:03	Yes
Mean:	2.481	2.481	0.0270				
SD:	0.006	0.006	0.0001				
%RSD:	0.237	0.237	0.24				

==========

Sequence No.: 91 **Autosampler Location: 79**
Sample ID: 241325001|924857|1 **Date Collected: 11/25/2009 10:37:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241325001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0004	0.0001	10:38:25	Yes
2	0.003	0.003	0.0001	0.0006	0.0001	10:38:59	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	6.270	6.270	3.75				

==========

Sequence No.: 92 **Autosampler Location: 80**
Sample ID: 241325002|924857|1 **Date Collected: 11/25/2009 10:39:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241325002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0006	0.0001	10:40:21	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:40:56	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	24.41	24.41	10.34				

==========

Sequence No.: 93 **Autosampler Location: 81**
Sample ID: 241337001|924857|1 **Date Collected: 11/25/2009 10:41:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241337001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	10:42:17	Yes
2	0.003	0.003	0.0001	0.0004	0.0001	10:42:52	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	88.77	88.77	40.99				

==========

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 10:43:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.197	5.197	0.0565	0.2547	0.0566	10:44:12	Yes
2	5.185	5.185	0.0564	0.2530	0.0565	10:44:47	Yes
Mean:	5.191	5.191	0.0565				
SD:	0.009	0.009	0.0001				
%RSD:	0.167	0.167	0.17				

QC value within limits for Hg 253.7 Recovery = 103.81%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 10:45:06**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	-0.0000	0.0001	10:46:07	Yes
2	0.001	0.001	0.0000	0.0001	0.0001	10:46:42	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	21.36	21.36	5.58				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 241337002|924857|1 **Date Collected: 11/25/2009 10:47:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241337002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0001	0.0001	10:48:03	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	10:48:38	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	429.1	429.1	60.58				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 241420001|924857|1 **Date Collected: 11/25/2009 10:48:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241420001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0004	0.0001	10:49:59	Yes
2	0.003	0.003	0.0001	0.0007	0.0001	10:50:34	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	69.81	69.81	32.63				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 1201977152|924857|1 **Date Collected: 11/25/2009 10:50:54**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977152|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0006	0.0001	10:51:55	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	10:52:30	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				

%RSD: 14.51 14.51 7.82

==========

Sequence No.: 99
Sample ID: 1201977153|924857|1
Analyst: JXL1

Autosampler Location: 85
Date Collected: 11/25/2009 10:52:51
Data Type: Original

Replicate Data: 1201977153|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.116	2.116	0.0230	0.1043	0.0231	10:53:52	Yes
2	2.134	2.134	0.0232	0.1045	0.0233	10:54:27	Yes
Mean:	2.125	2.125	0.0231				
SD:	0.013	0.013	0.0001				
%RSD:	0.603	0.603	0.60				

==========

Sequence No.: 100
Sample ID: 1201977154|924857|5
Analyst: JXL1

Autosampler Location: 86
Date Collected: 11/25/2009 10:54:48
Data Type: Original

Replicate Data: 1201977154|924857|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0005	0.0001	10:55:49	Yes
2	0.004	0.004	0.0001	0.0006	0.0001	10:56:24	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	24.95	24.95	14.79				

==========

Sequence No.: 101
Sample ID: 241420002|924857|1
Analyst: JXL1

Autosampler Location: 87
Date Collected: 11/25/2009 10:56:44
Data Type: Original

Replicate Data: 241420002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0008	0.0002	10:57:46	Yes
2	0.005	0.005	0.0001	0.0008	0.0002	10:58:21	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	12.03	12.03	8.35				

==========

Sequence No.: 102
Sample ID: 241420003|924857|1
Analyst: JXL1

Autosampler Location: 88
Date Collected: 11/25/2009 10:58:41
Data Type: Original

Replicate Data: 241420003|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	10:59:42	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	11:00:17	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	80.81	80.81	30.60				

==========

Sequence No.: 103
Sample ID: 241420004|924857|1
Analyst: JXL1

Autosampler Location: 89
Date Collected: 11/25/2009 11:00:37
Data Type: Original

Replicate Data: 241420004|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.001	-0.001	0.0000	0.0002	0.0001	11:01:39	Yes
2	0.001	0.001	0.0000	0.0002	0.0001	11:02:14	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	>999.9%	>999.9%	46.29				

==========

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 1201978859|925586|1 **Date Collected: 11/25/2009 11:02:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978859|925586|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	11:03:36	Yes
2	0.003	0.003	0.0001	0.0004	0.0001	11:04:11	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	68.64	68.64	31.44				

==========

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 1201978860|925586|1 **Date Collected: 11/25/2009 11:04:31**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978860|925586|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.182	2.182	0.0238	0.1068	0.0238	11:05:32	Yes
2	2.176	2.176	0.0237	0.1064	0.0238	11:06:07	Yes
Mean:	2.179	2.179	0.0237				
SD:	0.004	0.004	0.0000				
%RSD:	0.188	0.188	0.19				

==========

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 11:06:27**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.191	5.191	0.0565	0.2553	0.0566	11:07:28	Yes
2	5.183	5.183	0.0564	0.2535	0.0565	11:08:03	Yes
Mean:	5.187	5.187	0.0564				
SD:	0.006	0.006	0.0001				
%RSD:	0.110	0.110	0.11				

QC value within limits for Hg 253.7 Recovery = 103.75%
All analyte(s) passed QC.

==========

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 11:08:22**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	11:09:22	Yes
2	0.005	0.005	0.0001	0.0006	0.0002	11:09:57	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	56.28	56.28	35.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 924856

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977151	WHG091124-13	.2	mL
MS	1201977153	WHG091124-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977150		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
LCS	1201977151		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241325001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241325002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241337001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241337002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
DUP	1201977152	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
MS	1201977153	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SDILT	1201977154	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420003		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420004		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1191649-C	1.5 mL	5% Potassium Persulfate
1214179-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091124-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091124-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091124-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091124-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091124-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091124-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments: Digestion Start Date: 24-NOV-09 12:40
Digestion End Date: 24-NOV-09 14:40

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925376

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978327	UI091119-01	.25	mL
LCS	1201978327	UI091119-06	.25	mL
MS	1201978329	UI091119-01	.25	mL
MS	1201978329	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978326		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
LCS	1201978327		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
DUP	1201978328	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
MS	1201978329	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SDILT	1201978330	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments:

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925378

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978334	UI091119-A00	.5	mL
LCS	1201978334	UI091119-B	.5	mL
MS	1201978336	UI090930-A	.5	mL
MS	1201978336	UI090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978333		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
LCS	1201978334		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
DUP	1201978335	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
MS	1201978336	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SDILT	1201978337	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
25-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7470A	Liquid	LANL
Batch ID:	**Sample Numbers:**		
924857	See Below		

Potentially affected work order(s)(SDG): 241325(10-544-1),241337(10-546-1),241420(10-577-1)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for LCS/LCSD: QC 1201977151LCS	1. The above noted analytes recovered slightly high in the laboratory control sample (LCS), however, the sample in this SDG did not contain those analytes above the RDL, therefore the implied high bias did not adversely affect the results.

Originator's Name:

Eric Lawson 25-NOV-09

Data Validator/Group Leader:

Jason Loy 30-NOV-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID:	UI090701-09	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #1	**Received:**	01-JUL-09	**Catalog Number :**	160044-09-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016477
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Master Soln #1				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID:	UI090701-10	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #2	**Received:**	01-JUL-09	**Catalog Number :**	160044-08-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016476
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Soln #2				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID:	UI090701-40	**Opened:**	01-JUL-09	**Amount :**	500 mL
Name:	TRACE ICP Stock PQL St	**Received:**	30-JUN-09	**Catalog Number :**	160543-01-03
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016475
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3+TrHF
Supplier:	02si				
Description:	TRACE ICP Stock PQL Standard				
Comments:	None				

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID:	UI091102-42	**Opened:**	17-NOV-09	**Amount :**	200 mL
Name:	SILICON	**Received:**	02-NOV-09	**Catalog Number :**	HP100050-4F
Type:	Source Material	**Expires:**	17-NOV-10	**Lot Number :**	0921924
Employee:	Helen Camello			**Solvent :**	H20/tr HF
Supplier:	ENVIRNMENTAL EXPRESS				
Description:	SILICON 1000mg/L H20/tr HF				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID:	UI091110-11	**Opened:**	10-NOV-09	**Amount :**	1000 mL
Name:	ICP-MS ICSA Master A	**Received:**	10-NOV-09	**Catalog Number :**	160013-01-01L
Type:	Source Material	**Expires:**	10-NOV-10	**Lot Number :**	1015303
Employee:	Paul Boyd			**Solvent :**	2% HNO3
Supplier:	02SI				
Description:	ICP-MS ICSA Master A				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID:	UI091119-01	**Opened:**	19-NOV-09	**Lot Number :**	1017642
Name:	METALSPIKE-1	**Received:**	19-NOV-09		
Type:	Source Material	**Expires:**	19-NOV-10		
Employee:	Francena Armstrong				
Supplier:	OS2I				
Description:	Metals Spike Mix I				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091119-A00 **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091119-B **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091124-01 **Opened:** 24-NOV-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 24-NOV-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 25-NOV-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091124-02 **Opened:** 24-NOV-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 25-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091124-01 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG091124-02 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091124-03 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091124-04 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG091124-05 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG091124-06 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091124-13 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091204-04 **Opened:** 04-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 04-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091204-04A **Opened:** 04-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091204-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091204-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091204-05 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091204-06 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 04-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091204-07 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 04-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-08 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-70 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091205-04 **Opened:** 05-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 05-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091205-04A **Opened:** 05-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091205-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091205-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091205-05 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091205-06 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 05-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091205-07 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 05-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091205-08 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 05-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1116812 **Opened:** 29-APR-09 **Lot Number :** E45475
Name: B-K2S2O8S-MER **Received:** 29-APR-09
Type: Reagent/Solvent **Expires:** 29-APR-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1191649-C **Opened:** 17-SEP-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 17-SEP-09
Type: Reagent/Solvent **Expires:** 17-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1116812	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID

Comments: None

Serial ID: 1214179-C **Opened:** 03-NOV-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 03-NOV-09
Type: Reagent/Solvent **Expires:** 03-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL

Standard Logbook

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-577

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	924475 and 924909	**Method:**	SW846 9012A
Prep Batch :	924474 and 924908	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241419001	RE03-09-13959
241419002	RE03-09-13960
241419003	RE03-09-13958
241419004	RE03-09-13965
241419005	RE03-09-13970
241419006	RE03-09-13969
241419007	RE03-09-13967
241419008	RE03-09-13971
241419009	RE03-09-13963
241419010	RE03-09-13968
241419011	RE03-09-13964
241419012	RE03-09-13966
241419013	RE03-09-13962
241419014	RE03-09-13961
241419015	RE03-10-3914
241419016	RE03-10-3913
1201976322	Method Blank (MB)
1201976323	241322004(RE03-09-13619) Sample Duplicate (DUP)
1201976324	241322005(RE03-09-13624) Sample Duplicate (DUP)
1201976325	241322004(RE03-09-13619) Matrix Spike (MS)
1201976326	241322005(RE03-09-13624) Matrix Spike (MS)
1201976327	241322004(RE03-09-13619) Matrix Spike Duplicate (MSD)
1201976328	241322005(RE03-09-13624) Matrix Spike Duplicate (MSD)
1201976329	Laboratory Control Sample (LCS)
1201977256	Method Blank (MB)
1201977257	241419006(RE03-09-13969) Sample Duplicate (DUP)
1201977258	241419007(RE03-09-13967) Sample Duplicate (DUP)
1201977259	241419006(RE03-09-13969) Matrix Spike (MS)
1201977260	241419007(RE03-09-13967) Matrix Spike (MS)
1201977261	241419006(RE03-09-13969) Matrix Spike Duplicate (MSD)
1201977262	241419007(RE03-09-13967) Matrix Spike Duplicate (MSD)
1201977263	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 241322004 (RE03-09-13619), 241322005 (RE03-09-13624)- Batch 924475, 241419006 (RE03-09-13969) and 241419007 (RE03-09-13967)- Batch 924909.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable. 1201976326 (RE03-09-13624) and 1201976328 (RE03-09-13624)- Batch 924475.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201976323 (RE03-09-13619)- Batch 924475, 1201977257 (RE03-09-13969), 1201977258 (RE03-09-13967), 241419006 (RE03-09-13969) and 241419007 (RE03-09-13967)- Batch 924909.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration: 1201976329 (LCS)- Batch 924475 and 1201977263 (LCS)- Batch 924909.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 762014 1201976326 (RE03-09-13624), 1201976328 (RE03-09-13624), 241419001 (RE03-09-13959), 241419002 (RE03-09-13960), 241419003 (RE03-09-13958), 241419004 (RE03-09-13965) and 241419005 (RE03-09-13970)- Batch 924475.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 15Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-577 GEL Work Order: 241419

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13959	Project:	LANL01004
Sample ID:	241419001	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.1	276	ug/kg	1	AXC2 11/23/09	1538	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13960	Project:	LANL01004
Sample ID:	241419002	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	14.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.4	292	ug/kg	1	AXC2 11/23/09	1539	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13958	Project:	LANL01004
Sample ID:	241419003	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	27.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	91.6	337	ug/kg	1	AXC2 11/23/09	1540	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13965	Project:	LANL01004
Sample ID:	241419004	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	11.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2 11/23/09	1541	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13970	Project:	LANL01004
Sample ID:	241419005	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	10.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.6	274	ug/kg	1	AXC2 11/23/09	1542	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13969	Project:	LANL01004
Sample ID:	241419006	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	13.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	76.8	282	ug/kg	1	AXC2 11/27/09	1017	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13967	Project:	LANL01004
Sample ID:	241419007	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	78.1	287	ug/kg	1	AXC2 11/27/09	1021	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13971	Project:	LANL01004
Sample ID:	241419008	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	19%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.2	291	ug/kg	1	AXC2 11/27/09	1028	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13963	Project:	LANL01004
Sample ID:	241419009	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.0	265	ug/kg	1	AXC2 11/27/09	1029	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13968	Project:	LANL01004
Sample ID:	241419010	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	8.55%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.2	240	ug/kg	1	AXC2 11/27/09	1029	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13964	Project:	LANL01004
Sample ID:	241419011	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	12.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.5	252	ug/kg	1	AXC2 11/27/09	1030	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13966	Project:	LANL01004
Sample ID:	241419012	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	7.61%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	64.6	237	ug/kg	1	AXC2 11/27/09	1031	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13962	Project:	LANL01004
Sample ID:	241419013	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	12.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.7	275	ug/kg	1	AXC2 11/27/09	1032	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-09-13961	Project:	LANL01004
Sample ID:	241419014	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	81.9	301	ug/kg	1	AXC2 11/27/09	1033	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-10-3914	Project:	LANL01004
Sample ID:	241419015	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	12.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	77.9	287	ug/kg	1	AXC2 11/27/09	1034	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577

Client Sample ID:	RE03-10-3913	Project:	LANL01004
Sample ID:	241419016	Client ID:	LANL010
Matrix:	S		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	17.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		1900	73.2	269	ug/kg	1	AXC2 11/27/09	1035	924909	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1559	924908

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: November 27, 2009

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241419

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 924475											
QC1201976323 241322004 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	11/23/09 15:13
QC1201976324 241322005 DUP											
Cyanide, Total			1540		1460	ug/kg	5.29 ^		(+/-311)		11/23/09 15:17
QC1201976329 LCS											
Cyanide, Total	67900				64300	ug/kg		94.6	(46%-145%)		11/23/09 15:12
QC1201976322 MB											
Cyanide, Total				U	250	ug/kg					11/23/09 15:11
QC1201976325 241322004 MS											
Cyanide, Total	5740	U	ND		4940	ug/kg		86.1	(50%-130%)		11/23/09 15:14
QC1201976326 241322005 MS											
Cyanide, Total	5570		1540		6020	ug/kg		80.4	(50%-130%)		11/23/09 15:18
QC1201976327 241322004 MSD											
Cyanide, Total	5850	U	ND		5190	ug/kg	4.84	88.6	(0%-30%)		11/23/09 15:15
QC1201976328 241322005 MSD											
Cyanide, Total	6220		1540		9020	ug/kg	39.8*	120	(0%-30%)		11/23/09 15:19
Batch 924909											
QC1201977257 241419006 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	11/27/09 10:18
QC1201977258 241419007 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				11/27/09 10:21
QC1201977263 LCS											
Cyanide, Total	67900				64000	ug/kg		94.3	(46%-145%)		11/27/09 10:16
QC1201977256 MB											
Cyanide, Total				U	250	ug/kg					11/27/09 10:15
QC1201977259 241419006 MS											
Cyanide, Total	5330	U	ND		4920	ug/kg		92.3	(50%-130%)		11/27/09 10:19
QC1201977260 241419007 MS											
Cyanide, Total	5860	U	ND		5530	ug/kg		94.1	(50%-130%)		11/27/09 10:22
QC1201977261 241419006 MSD											
Cyanide, Total	5540	U	ND		6320	ug/kg	24.8	114	(0%-30%)		11/27/09 10:20
QC1201977262 241419007 MSD											
Cyanide, Total	5340	U	ND		5050	ug/kg	9.07	94.1	(0%-30%)		11/27/09 10:23

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

QC Summary

Workorder: 241419

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 27-NOV-2009 22:06

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-577

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**23-NOV-2009 13:51:02**	**OM_11-23-2009_13-43-07**	**146**	**150**	**97**	**(90%-110%)**	**Yes**
CCV	23-NOV-2009 15:07:34	OM_11-23-2009_13-43-07	102	100	102	(90%-110%)	Yes
CCV	23-NOV-2009 15:20:06	OM_11-23-2009_13-43-07	105	100	105	(90%-110%)	Yes
CCV	23-NOV-2009 15:32:38	OM_11-23-2009_13-43-07	101	100	101	(90%-110%)	Yes
CCV	23-NOV-2009 15:45:15	OM_11-23-2009_13-43-07	100	100	100	(90%-110%)	Yes
ICV	**27-NOV-2009 10:10:16**	**OM_11-27-2009_10-01-36**	**136**	**150**	**91**	**(90%-110%)**	**Yes**
CCV	27-NOV-2009 10:24:34	OM_11-27-2009_10-01-36	102	100	102	(90%-110%)	Yes
CCV	27-NOV-2009 10:36:59	OM_11-27-2009_10-01-36	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-NOV-2009 13:52:52**	**OM_11-23-2009_13-43-07**	**0.99**	**5**	**Yes**
CCB	23-NOV-2009 15:09:25	OM_11-23-2009_13-43-07	-0.0136	5	Yes
CCB	23-NOV-2009 15:21:55	OM_11-23-2009_13-43-07	0.299	5	Yes
CCB	23-NOV-2009 15:34:28	OM_11-23-2009_13-43-07	0.197	5	Yes
CCB	23-NOV-2009 15:47:06	OM_11-23-2009_13-43-07	-0.667	5	Yes
ICB	**27-NOV-2009 10:12:07**	**OM_11-27-2009_10-01-36**	**2.2**	**5**	**Yes**
CCB	27-NOV-2009 10:26:23	OM_11-27-2009_10-01-36	1.61	5	Yes
CCB	27-NOV-2009 10:38:49	OM_11-27-2009_10-01-36	0.566	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 924474

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201976329	URF1200957-01	.25	g
MS	1201976325	URF1184831-02	.025	mL
MS	1201976326	URF1184831-02	.025	mL
MSD	1201976327	URF1184831-02	.025	mL
MSD	1201976328	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201976322		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
LCS	1201976329		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241322004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1201976323	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.57 g	25 mL	43.85965	SOIL
MS	1201976325	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1201976327	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241322005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201976324	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
MS	1201976326	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.58 g	25 mL	43.10345	SOIL
MSD	1201976328	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322006		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322007		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322008		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322009		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322010		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241322011		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322012		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241336001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241336002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241351001		SW846 9010C Distillation	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOLID
SAMPLE	241358001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.511 g	25 mL	48.92368	MISC SOLID
SAMPLE	241417001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241417002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241419001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241419002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419003		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241419004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091120-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 924908

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977263	URF1200957-01	.25	g
MS	1201977259	URF1184831-02	.025	mL
MS	1201977260	URF1184831-02	.025	mL
MSD	1201977261	URF1184831-02	.025	mL
MSD	1201977262	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977256		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
LCS	1201977263		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241419006		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201977257	241419006	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.55 g	25 mL	45.45455	SOIL
MS	1201977259	241419006	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.54 g	25 mL	46.2963	SOIL
MSD	1201977261	241419006	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419007		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL
DUP	1201977258	241419007	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
MS	1201977260	241419007	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
MSD	1201977262	241419007	SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419008		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241419009		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419010		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419011		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419012		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241419013		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419014		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419015		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419016		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241425001		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241425002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241506001		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	241506002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241506003		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241524002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241620001		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241620002		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241620003		SW846 9010B Prep	25-NOV-2009 15:59	>12	0.53 g	25 mL	47.16981	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/23/2009 13:43:53	OM_11-23-2009_13-43-07
150 ppb		1	axc2	11/23/2009 13:44:44	OM_11-23-2009_13-43-07
100 ppb		1	axc2	11/23/2009 13:45:37	OM_11-23-2009_13-43-07
50 ppb		1	axc2	11/23/2009 13:46:30	OM_11-23-2009_13-43-07
10 ppb		1	axc2	11/23/2009 13:47:23	OM_11-23-2009_13-43-07
CRDL 5.0 ppb		1	axc2	11/23/2009 13:48:17	OM_11-23-2009_13-43-07
ICAL-00		1	axc2	11/23/2009 13:49:11	OM_11-23-2009_13-43-07
ICV		1	axc2	11/23/2009 13:51:02	OM_11-23-2009_13-43-07
ICB		1	axc2	11/23/2009 13:52:52	OM_11-23-2009_13-43-07
CRDL		1	axc2	11/23/2009 13:54:42	OM_11-23-2009_13-43-07
1201977264	924911	1	axc2	11/23/2009 13:56:32	OM_11-23-2009_13-43-07
1201977271	924911	25	axc2	11/23/2009 13:57:25	OM_11-23-2009_13-43-07
240999001	924911	1	axc2	11/23/2009 13:58:18	OM_11-23-2009_13-43-07
1201977265	924911	1	axc2	11/23/2009 13:59:11	OM_11-23-2009_13-43-07
1201977267	924911	1	axc2	11/23/2009 14:00:04	OM_11-23-2009_13-43-07
1201977269	924911	1	axc2	11/23/2009 14:00:57	OM_11-23-2009_13-43-07
241414003	924911	1	axc2	11/23/2009 14:01:50	OM_11-23-2009_13-43-07
1201977266	924911	1	axc2	11/23/2009 14:02:42	OM_11-23-2009_13-43-07
1201977268	924911	1	axc2	11/23/2009 14:03:34	OM_11-23-2009_13-43-07
1201977270	924911	1	axc2	11/23/2009 14:04:27	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:05:20	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:07:09	OM_11-23-2009_13-43-07
241414004	924911	1	axc2	11/23/2009 14:08:57	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:09:49	OM_11-23-2009_13-43-07
1201974823	923850	25	axc2	11/23/2009 14:10:42	OM_11-23-2009_13-43-07
241029014	923850	1	axc2	11/23/2009 14:11:33	OM_11-23-2009_13-43-07
1201974817	923850	1	axc2	11/23/2009 14:12:25	OM_11-23-2009_13-43-07
1201974819	923850	1	axc2	11/23/2009 14:13:19	OM_11-23-2009_13-43-07
1201974821*	923850	1	axc2	11/23/2009 14:14:12	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:15:04	OM_11-23-2009_13-43-07
241105010	923850	1	axc2	11/23/2009 14:15:57	OM_11-23-2009_13-43-07
241105011	923850	1	axc2	11/23/2009 14:16:51	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:17:43	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:19:34	OM_11-23-2009_13-43-07
1201974816	923850	1	axc2	11/23/2009 14:21:21	OM_11-23-2009_13-43-07
1201974821	923850	1	axc2	11/23/2009 14:22:15	OM_11-23-2009_13-43-07
241105012	923850	1	axc2	11/23/2009 14:23:09	OM_11-23-2009_13-43-07
241106001	923850	1	axc2	11/23/2009 14:24:01	OM_11-23-2009_13-43-07
241106002	923850	1	axc2	11/23/2009 14:24:54	OM_11-23-2009_13-43-07
241178001	923850	1	axc2	11/23/2009 14:25:47	OM_11-23-2009_13-43-07
241178002*	923850	1	axc2	11/23/2009 14:26:40	OM_11-23-2009_13-43-07
241178003	923850	1	axc2	11/23/2009 14:27:32	OM_11-23-2009_13-43-07
241178004	923850	1	axc2	11/23/2009 14:28:24	OM_11-23-2009_13-43-07
241178005	923850	1	axc2	11/23/2009 14:29:17	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:30:10	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:31:59	OM_11-23-2009_13-43-07
241178002	923850	1	axc2	11/23/2009 14:33:48	OM_11-23-2009_13-43-07
241178006	923850	1	axc2	11/23/2009 14:34:40	OM_11-23-2009_13-43-07
241178007	923850	1	axc2	11/23/2009 14:35:31	OM_11-23-2009_13-43-07
241178008	923850	1	axc2	11/23/2009 14:36:24	OM_11-23-2009_13-43-07
241178009	923850	1	axc2	11/23/2009 14:37:18	OM_11-23-2009_13-43-07
241227001	923850	1	axc2	11/23/2009 14:38:11	OM_11-23-2009_13-43-07
1201974818	923850	1	axc2	11/23/2009 14:39:05	OM_11-23-2009_13-43-07
1201974820	923850	1	axc2	11/23/2009 14:39:59	OM_11-23-2009_13-43-07
1201974822	923850	1	axc2	11/23/2009 14:40:52	OM_11-23-2009_13-43-07
241227002	923850	1	axc2	11/23/2009 14:41:45	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:42:37	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:44:27	OM_11-23-2009_13-43-07

241227007	923850	1	axc2	11/23/2009	14:46:17	OM_11-23-2009_13-43-07
241227008	923850	1	axc2	11/23/2009	14:47:10	OM_11-23-2009_13-43-07
241227009	923850	1	axc2	11/23/2009	14:48:03	OM_11-23-2009_13-43-07
1201972404	922839	1	axc2	11/23/2009	14:48:55	OM_11-23-2009_13-43-07
1201972411*	922839	25	axc2	11/23/2009	14:49:47	OM_11-23-2009_13-43-07
241044009	922839	1	axc2	11/23/2009	14:50:40	OM_11-23-2009_13-43-07
1201972405	922839	1	axc2	11/23/2009	14:51:32	OM_11-23-2009_13-43-07
1201972407	922839	1	axc2	11/23/2009	14:52:24	OM_11-23-2009_13-43-07
1201972409	922839	1	axc2	11/23/2009	14:53:16	OM_11-23-2009_13-43-07
241044010	922839	1	axc2	11/23/2009	14:54:10	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	14:55:02	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	14:56:52	OM_11-23-2009_13-43-07
1201972406	922839	1	axc2	11/23/2009	14:58:43	OM_11-23-2009_13-43-07
1201972408	922839	1	axc2	11/23/2009	14:59:37	OM_11-23-2009_13-43-07
1201972410	922839	1	axc2	11/23/2009	15:00:31	OM_11-23-2009_13-43-07
1201972411	922839	1	axc2	11/23/2009	15:01:23	OM_11-23-2009_13-43-07
241044011	922839	1	axc2	11/23/2009	15:02:17	OM_11-23-2009_13-43-07
241044012	922839	1	axc2	11/23/2009	15:03:10	OM_11-23-2009_13-43-07
241044013	922839	1	axc2	11/23/2009	15:04:03	OM_11-23-2009_13-43-07
241044014	922839	1	axc2	11/23/2009	15:04:56	OM_11-23-2009_13-43-07
241044015	922839	1	axc2	11/23/2009	15:05:49	OM_11-23-2009_13-43-07
241044016	922839	1	axc2	11/23/2009	15:06:42	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:07:34	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:09:25	OM_11-23-2009_13-43-07
1201976322	924475	1	axc2	11/23/2009	15:11:16	OM_11-23-2009_13-43-07
1201976329	924475	25	axc2	11/23/2009	15:12:08	OM_11-23-2009_13-43-07
241322004	924475	1	axc2	11/23/2009	15:13:01	OM_11-23-2009_13-43-07
1201976323	924475	1	axc2	11/23/2009	15:13:53	OM_11-23-2009_13-43-07
1201976325	924475	1	axc2	11/23/2009	15:14:46	OM_11-23-2009_13-43-07
1201976327	924475	1	axc2	11/23/2009	15:15:39	OM_11-23-2009_13-43-07
241322005	924475	1	axc2	11/23/2009	15:16:31	OM_11-23-2009_13-43-07
1201976324	924475	1	axc2	11/23/2009	15:17:24	OM_11-23-2009_13-43-07
1201976326	924475	1	axc2	11/23/2009	15:18:19	OM_11-23-2009_13-43-07
1201976328	924475	1	axc2	11/23/2009	15:19:13	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:20:06	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:21:55	OM_11-23-2009_13-43-07
241322006	924475	1	axc2	11/23/2009	15:23:45	OM_11-23-2009_13-43-07
241322007	924475	1	axc2	11/23/2009	15:24:40	OM_11-23-2009_13-43-07
241322008	924475	1	axc2	11/23/2009	15:25:33	OM_11-23-2009_13-43-07
241322009	924475	1	axc2	11/23/2009	15:26:27	OM_11-23-2009_13-43-07
241322010	924475	1	axc2	11/23/2009	15:27:20	OM_11-23-2009_13-43-07
241322011	924475	1	axc2	11/23/2009	15:28:14	OM_11-23-2009_13-43-07
241322012	924475	1	axc2	11/23/2009	15:29:07	OM_11-23-2009_13-43-07
241336001	924475	1	axc2	11/23/2009	15:30:00	OM_11-23-2009_13-43-07
241336002	924475	1	axc2	11/23/2009	15:30:53	OM_11-23-2009_13-43-07
241351001	924475	1	axc2	11/23/2009	15:31:46	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:32:38	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:34:28	OM_11-23-2009_13-43-07
241358001	924475	1	axc2	11/23/2009	15:36:17	OM_11-23-2009_13-43-07
241417001	924475	1	axc2	11/23/2009	15:37:10	OM_11-23-2009_13-43-07
241417002	924475	1	axc2	11/23/2009	15:38:02	OM_11-23-2009_13-43-07
241419001	924475	1	axc2	11/23/2009	15:38:57	OM_11-23-2009_13-43-07
241419002	924475	1	axc2	11/23/2009	15:39:51	OM_11-23-2009_13-43-07
241419003	924475	1	axc2	11/23/2009	15:40:45	OM_11-23-2009_13-43-07
241419004	924475	1	axc2	11/23/2009	15:41:39	OM_11-23-2009_13-43-07
241419005	924475	1	axc2	11/23/2009	15:42:34	OM_11-23-2009_13-43-07
1201976319	924469	1	axc2	11/23/2009	15:43:28	OM_11-23-2009_13-43-07
1201976321	924469	1	axc2	11/23/2009	15:44:22	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:45:15	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:47:06	OM_11-23-2009_13-43-07

241351001	924469	1	axc2	11/23/2009	15:48:58	OM_11-23-2009_13-43-07
241358001	924469	1	axc2	11/23/2009	15:49:51	OM_11-23-2009_13-43-07
1201976320	924469	1	axc2	11/23/2009	15:50:44	OM_11-23-2009_13-43-07
1201977272	924915	1	axc2	11/23/2009	15:51:37	OM_11-23-2009_13-43-07
1201977274	924915	1	axc2	11/23/2009	15:52:31	OM_11-23-2009_13-43-07
241372013	924915	1	axc2	11/23/2009	15:53:24	OM_11-23-2009_13-43-07
1201977273	924915	1	axc2	11/23/2009	15:54:17	OM_11-23-2009_13-43-07
1201974883*	923869	1	axc2	11/23/2009	15:55:10	OM_11-23-2009_13-43-07
1201974885	923869	250	axc2	11/23/2009	15:56:05	OM_11-23-2009_13-43-07
241243008	923869	1	axc2	11/23/2009	15:56:59	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:57:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:59:42	OM_11-23-2009_13-43-07
1201974884	923869	1	axc2	11/23/2009	16:01:33	OM_11-23-2009_13-43-07
241305001	923869	1	axc2	11/23/2009	16:02:27	OM_11-23-2009_13-43-07
241310001	923869	1	axc2	11/23/2009	16:03:21	OM_11-23-2009_13-43-07
1201974883	923869	1	axc2	11/23/2009	16:04:14	OM_11-23-2009_13-43-07
241372013	924915	25	axc2	11/23/2009	16:05:07	OM_11-23-2009_13-43-07
1201977273	924915	25	axc2	11/23/2009	16:06:00	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	16:06:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	16:08:43	OM_11-23-2009_13-43-07

Author: axc2 Date : 11/23/2009

Original Run Filename: OM_11-23-2009_13-43-07.OMN created 11/23/2009 13:43:07
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-23-2009_13-43-07.OMN last modified 11/23/2009 16:09:47
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091123-01	1	S1	200	7.32	11/23/2009@13:43:53			200 ppb
WCN091123-02	1	S2	150	5.67	11/23/2009@13:44:44			150 ppb
WCN091123-03	1	S3	100	3.86	11/23/2009@13:45:37			100 ppb
WCN091123-04	1	S4	50.0	2.03	11/23/2009@13:46:30			50 ppb
WCN091123-05	1	S5	10.0	0.478	11/23/2009@13:47:23			10 ppb
WCN091123-06	1	S6	5.00	0.278	11/23/2009@13:48:17			CRDL 5.0 ppb
WCN091123-08	1	S7	0.00	0.0410	11/23/2009@13:49:11			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99962 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091123-07	1	S8	146	5.46	11/23/2009@13:51:02			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091123-08	1	S7	0.990	0.157	11/23/2009@13:52:52			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.990 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.990 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091123-06	1	S6	3.65	0.254	11/23/2009@13:54:42			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.65 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.65 > 2.50					
		Message	Pass					
		Action	None					
1201977264|924911|MB	1	1	-1.60	0.0619	11/23/2009@13:56:32			
1201977271||LCS	1	2	47.2	1.85	11/23/2009@13:57:25			
240999001	1	3	1.47	0.174	11/23/2009@13:58:18			
1201977265||DUP	1	4	-0.419	0.105	11/23/2009@13:59:11			
1201977267||MS	1	5	96.0	3.63	11/23/2009@14:00:04			
1201977269||MSD	1	6	100	3.79	11/23/2009@14:00:57			
241414003	1	7	0.930	0.154	11/23/2009@14:01:50			
1201977266||DUP	1	8	-1.21	0.0761	11/23/2009@14:02:42			
1201977268||MS	1	9	97.9	3.70	11/23/2009@14:03:34			
1201977270||MSD	1	10	100	3.79	11/23/2009@14:04:27			
WCN091123-03	1	S3	102	3.84	11/23/2009@14:05:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.820	0.0904	11/23/2009@14:07:09			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-0.820 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.820 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241414004	1	11	-1.68	0.0592	11/23/2009@14:08:57			
1201974816|923850|MB	1	12	329	12.2	11/23/2009@14:09:49			
1201974823||LCS	1	13	32.8	1.32	11/23/2009@14:10:42		25.00	
241029014	1	14	-0.305	0.109	11/23/2009@14:11:33			
1201974817||DUP	1	15	-0.427	0.105	11/23/2009@14:12:25			
1201974819||MS	1	16	87.8	3.33	11/23/2009@14:13:19			
1201974821||MSD	1	17	1.31e+3	48.0	11/23/2009@14:14:12			
1201974816|923850|MB	1	12	37.3	1.49	11/23/2009@14:15:04			
241105010	1	18	1.27	0.167	11/23/2009@14:15:57			
241105011	1	19	4.57	0.288	11/23/2009@14:16:51			
WCN091123-03	1	S3	98.7	3.73	11/23/2009@14:17:43			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.283	0.131	11/23/2009@14:19:34			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.283 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.283 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974816|923850|MB	1	12	-0.327	0.108	11/23/2009@14:21:21			
1201974821||MSD	1	17	86.6	3.29	11/23/2009@14:22:15			
241105012	1	20	7.92	0.410	11/23/2009@14:23:09			
241106001	1	21	3.76	0.258	11/23/2009@14:24:01			
241106002	1	22	3.78	0.259	11/23/2009@14:24:54			
241178001	1	23	1.84	0.188	11/23/2009@14:25:47			
241178002	1	24	11.2	0.532	11/23/2009@14:26:40			
241178003	1	25	0.189	0.127	11/23/2009@14:27:32			
241178004	1	26	1.98	0.193	11/23/2009@14:28:24			
241178005	1	27	0.997	0.157	11/23/2009@14:29:17			
WCN091123-03	1	S3	100	3.78	11/23/2009@14:30:10			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.825	0.0902	11/23/2009@14:31:59			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	-0.825 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.825 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241178002	1	24	5.73	0.330	11/23/2009@14:33:48			
241178006	1	28	5.86	0.335	11/23/2009@14:34:40			
241178007	1	29	-0.190	0.113	11/23/2009@14:35:31			
241178008	1	30	-1.36	0.0706	11/23/2009@14:36:24			
241178009	1	31	1.84	0.188	11/23/2009@14:37:18			
241227001	1	32	-0.273	0.110	11/23/2009@14:38:11			
1201974818||DUP	1	33	-0.588	0.0989	11/23/2009@14:39:05			
1201974820||MS	1	34	75.0	2.86	11/23/2009@14:39:59			
1201974822||MSD	1	35	94.3	3.57	11/23/2009@14:40:52			
241227002	1	36	2.66	0.218	11/23/2009@14:41:45			
WCN091123-03	1	S3	103	3.90	11/23/2009@14:42:37			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.0197	0.121	11/23/2009@14:44:27			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.0197 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.0197 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241227007	1	37	-0.734	0.0936	11/23/2009@14:46:17			
241227008	1	38	-0.129	0.116	11/23/2009@14:47:10			
241227009	1	39	-1.21	0.0763	11/23/2009@14:48:03			
1201972404|922839|MB	1	40	-1.55	0.0639	11/23/2009@14:48:55			
1201972411||LCS	1	41	6.31	0.351	11/23/2009@14:49:47		25.00	
241044009	1	42	1.63	0.180	11/23/2009@14:50:40			
1201972405||DUP	1	43	3.10	0.234	11/23/2009@14:51:32			
1201972407||MS	1	44	96.7	3.66	11/23/2009@14:52:24			
1201972409||MSD	1	45	57.8	2.23	11/23/2009@14:53:16			
241044010	1	46	35.5	1.42	11/23/2009@14:54:10			
WCN091123-03	1	S3	103	3.89	11/23/2009@14:55:02			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.383	0.134	11/23/2009@14:56:52			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.383 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.383 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1201972406||DUP	1	47	104	3.93	11/23/2009@14:58:43			
1201972408||MS	1	48	83.1	3.16	11/23/2009@14:59:37			
1201972410||MSD	1	49	124	4.64	11/23/2009@15:00:31			
1201972411||LCS	1	41	30.2	1.22	11/23/2009@15:01:23		25.00	
241044011	1	50	1.28	0.167	11/23/2009@15:02:17			
241044012	1	51	130	4.88	11/23/2009@15:03:10			
241044013	1	52	84.2	3.20	11/23/2009@15:04:03			
241044014	1	53	43.9	1.73	11/23/2009@15:04:56			
241044015	1	54	3.47	0.247	11/23/2009@15:05:49			
241044016	1	55	1.61	0.179	11/23/2009@15:06:42			
WCN091123-03	1	S3	102	3.84	11/23/2009@15:07:34			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	-0.0136	0.120	11/23/2009@15:09:25			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.0136 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.0136 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1201976322|924475|MB	1	68	-1.93	0.0498	11/23/2009@15:11:16			
1201976329||LCS	1	69	25.7	1.06	11/23/2009@15:12:08		25.00	
241322004	1	70	-0.0665	0.118	11/23/2009@15:13:01			
1201976323||DUP	1	71	-0.966	0.0851	11/23/2009@15:13:53			
1201976325||MS	1	72	86.1	3.27	11/23/2009@15:14:46			
1201976327||MSD	1	73	88.6	3.36	11/23/2009@15:15:39			
241322005	1	74	24.3	1.01	11/23/2009@15:16:31			
1201976324||DUP	1	75	23.5	0.978	11/23/2009@15:17:24			
1201976326||MS	1	76	108	4.06	11/23/2009@15:18:19			
1201976328||MSD	1	77	145	5.43	11/23/2009@15:19:13			
WCN091123-03	1	S3	105	3.97	11/23/2009@15:20:06			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		5.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		5.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	0.299	0.131	11/23/2009@15:21:55			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		0.299 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.299 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241322006	1	78	-1.16	0.0778	11/23/2009@15:23:45			
241322007	1	79	20.1	0.856	11/23/2009@15:24:40			
241322008	1	80	-0.573	0.0995	11/23/2009@15:25:33			
241322009	1	81	31.1	1.26	11/23/2009@15:26:27			
241322010	1	82	5.38	0.317	11/23/2009@15:27:20			
241322011	1	83	-0.970	0.0849	11/23/2009@15:28:14			
241322012	1	84	-1.30	0.0730	11/23/2009@15:29:07			
241336001	1	85	-0.872	0.0885	11/23/2009@15:30:00			

241336002	1	86	-1.18	0.0773	11/23/2009@15:30:53			
241351001	1	87	-0.356	0.107	11/23/2009@15:31:46			
WCN091123-03	1	S3	101	3.80	11/23/2009@15:32:38			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.197	0.128	11/23/2009@15:34:28			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.197 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.197 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241358001	1	88	-0.601	0.0984	11/23/2009@15:36:17			
241417001	1	89	10.7	0.512	11/23/2009@15:37:10			
241417002	1	90	-0.304	0.109	11/23/2009@15:38:02			
241419001	1	91	-1.19	0.0767	11/23/2009@15:38:57			
241419002	1	92	-0.704	0.0946	11/23/2009@15:39:51			
241419003	1	93	-1.52	0.0648	11/23/2009@15:40:45			
241419004	1	94	-1.69	0.0587	11/23/2009@15:41:39			
241419005	1	95	-0.486	0.103	11/23/2009@15:42:34			
1201976319|924469|MB	1	96	-1.53	0.0643	11/23/2009@15:43:28			
1201976321||LCS	1	97	-1.96	0.0489	11/23/2009@15:44:22			
WCN091123-03	1	S3	100	3.78	11/23/2009@15:45:15			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.667	0.0960	11/23/2009@15:47:06			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.667 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.667 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241351001	1	98	7.19	0.383	11/23/2009@15:48:58			
241358001	1	99	1.09	0.160	11/23/2009@15:49:51			
1201976320||DUP	1	100	2.18	0.200	11/23/2009@15:50:44			
1201977272|924915|MB	1	101	-1.40	0.0691	11/23/2009@15:51:37			
1201977274||LCS	1	102	-1.86	0.0525	11/23/2009@15:52:31			
241372013	1	103	1.47e+3	53.8	11/23/2009@15:53:24			
1201977273||DUP	1	104	1.37e+3	50.2	11/23/2009@15:54:17			
1201974883|923869|MB	1	105	37.0	1.47	11/23/2009@15:55:10			
1201974885||LCS	1	106	77.3	2.94	11/23/2009@15:56:05			
241243008	1	107	2.12	0.198	11/23/2009@15:56:59			
WCN091123-03	1	S3	103	3.88	11/23/2009@15:57:52			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					

DQM Test: < - Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.854	0.152	11/23/2009@15:59:42			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.854 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.854 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974884||DUP	1	108	-2.22	0.0393	11/23/2009@16:01:33			
241305001	1	109	-1.40	0.0694	11/23/2009@16:02:27			
241310001	1	110	-0.820	0.0904	11/23/2009@16:03:21			
1201974883|923869|MB	1	105	-0.331	0.108	11/23/2009@16:04:14			
241372013|924915|	1	103	98.6	3.73	11/23/2009@16:05:07		25.00	
1201977273||DUP	1	104	70.4	2.70	11/23/2009@16:06:00		25.00	
WCN091123-03	1	S3	102	3.86	11/23/2009@16:06:52			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	1.27	0.167	11/23/2009@16:08:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.27 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.27 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_11-23-2009_13-43-07.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 11/23/2009

Channel 1: Current View

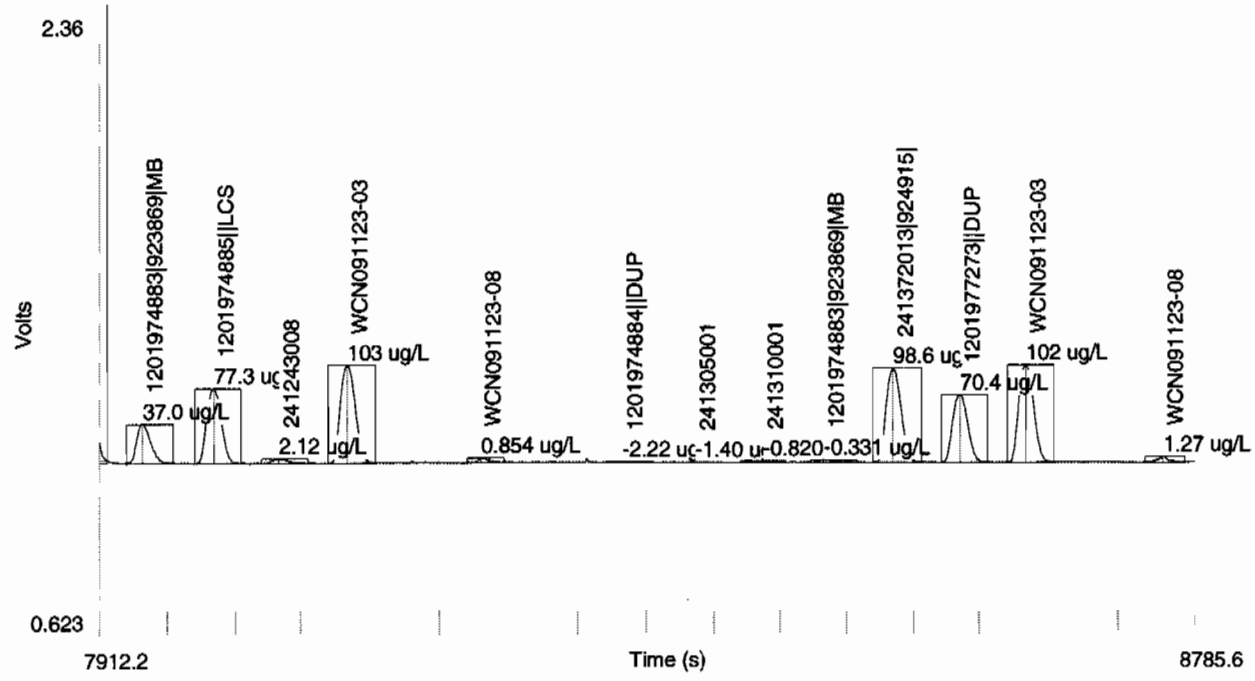

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.32	0.539	1.5	11/23/2009	13:44:56
2	150	1	5.67	0.419	-1.2	11/23/2009	13:45:48
3	100	1	3.86	0.284	-2.2	11/23/2009	13:46:40
4	50.0	1	2.03	0.148	-3.9	11/23/2009	13:47:33
5	10.0	1	0.478	0.0334	2.0	11/23/2009	13:48:26
6	5.00	1	0.278	0.0178	8.7	11/23/2009	13:49:20
7	0.00	1	0.0410	0.00186		11/23/2009	13:50:14

Figure 1: TCYANIDE

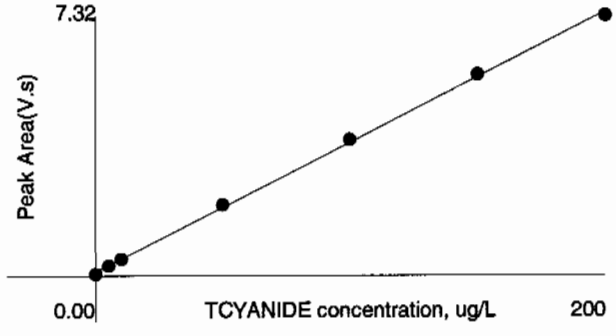

Area = 0.0365 * Conc + 0.122
Conc = 27.4 * Area - 3.29
Correlation Coefficient (r) = 0.99962

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/27/2009 10:03:07	OM_11-27-2009_10-01-36
150 ppb		1	axc2	11/27/2009 10:03:59	OM_11-27-2009_10-01-36
100 ppb		1	axc2	11/27/2009 10:04:51	OM_11-27-2009_10-01-36
50 ppb		1	axc2	11/27/2009 10:05:44	OM_11-27-2009_10-01-36
10 ppb		1	axc2	11/27/2009 10:06:38	OM_11-27-2009_10-01-36
CRDL 5.0 ppb		1	axc2	11/27/2009 10:07:31	OM_11-27-2009_10-01-36
ICAL-00		1	axc2	11/27/2009 10:08:25	OM_11-27-2009_10-01-36
ICV		1	axc2	11/27/2009 10:10:16	OM_11-27-2009_10-01-36
ICB		1	axc2	11/27/2009 10:12:07	OM_11-27-2009_10-01-36
CRDL		1	axc2	11/27/2009 10:13:56	OM_11-27-2009_10-01-36
1201977256	924909	1	axc2	11/27/2009 10:15:46	OM_11-27-2009_10-01-36
1201977263	924909	25	axc2	11/27/2009 10:16:39	OM_11-27-2009_10-01-36
241419006	924909	1	axc2	11/27/2009 10:17:32	OM_11-27-2009_10-01-36
1201977257	924909	1	axc2	11/27/2009 10:18:25	OM_11-27-2009_10-01-36
1201977259	924909	1	axc2	11/27/2009 10:19:18	OM_11-27-2009_10-01-36
1201977261	924909	1	axc2	11/27/2009 10:20:11	OM_11-27-2009_10-01-36
241419007	924909	1	axc2	11/27/2009 10:21:03	OM_11-27-2009_10-01-36
1201977258	924909	1	axc2	11/27/2009 10:21:56	OM_11-27-2009_10-01-36
1201977260	924909	1	axc2	11/27/2009 10:22:49	OM_11-27-2009_10-01-36
1201977262	924909	1	axc2	11/27/2009 10:23:41	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:24:34	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:26:23	OM_11-27-2009_10-01-36
241419008	924909	1	axc2	11/27/2009 10:28:12	OM_11-27-2009_10-01-36
241419009	924909	1	axc2	11/27/2009 10:29:03	OM_11-27-2009_10-01-36
241419010	924909	1	axc2	11/27/2009 10:29:55	OM_11-27-2009_10-01-36
241419011	924909	1	axc2	11/27/2009 10:30:47	OM_11-27-2009_10-01-36
241419012	924909	1	axc2	11/27/2009 10:31:38	OM_11-27-2009_10-01-36
241419013	924909	1	axc2	11/27/2009 10:32:32	OM_11-27-2009_10-01-36
241419014	924909	1	axc2	11/27/2009 10:33:26	OM_11-27-2009_10-01-36
241419015	924909	1	axc2	11/27/2009 10:34:20	OM_11-27-2009_10-01-36
241419016	924909	1	axc2	11/27/2009 10:35:12	OM_11-27-2009_10-01-36
241425001	924909	1	axc2	11/27/2009 10:36:06	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:36:59	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:38:49	OM_11-27-2009_10-01-36
241425002	924909	1	axc2	11/27/2009 10:40:38	OM_11-27-2009_10-01-36
241506001	924909	1	axc2	11/27/2009 10:41:31	OM_11-27-2009_10-01-36
241506002	924909	1	axc2	11/27/2009 10:42:24	OM_11-27-2009_10-01-36
241506003	924909	1	axc2	11/27/2009 10:43:16	OM_11-27-2009_10-01-36
241524002	924909	1	axc2	11/27/2009 10:44:08	OM_11-27-2009_10-01-36
241620001	924909	1	axc2	11/27/2009 10:45:01	OM_11-27-2009_10-01-36
241620002	924909	1	axc2	11/27/2009 10:45:53	OM_11-27-2009_10-01-36
241620003	924909	1	axc2	11/27/2009 10:46:45	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:47:37	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:49:28	OM_11-27-2009_10-01-36

Author: axc2 Date : 11/27/2009

Original Run Filename: OM_11-27-2009_10-01-36.OMN created 11/27/2009 10:01:36
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-27-2009_10-01-36.OMN last modified 11/27/2009 10:50:33
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091127-01	1	S1	200	5.88	11/27/2009@10:03:07			200 ppb
WCN091127-02	1	S2	150	4.51	11/27/2009@10:03:59			150 ppb
WCN091127-03	1	S3	100	3.08	11/27/2009@10:04:51			100 ppb
WCN091127-04	1	S4	50.0	1.57	11/27/2009@10:05:44			50 ppb
WCN091127-05	1	S5	10.0	0.412	11/27/2009@10:06:38			10 ppb
WCN091127-06	1	S6	5.00	0.234	11/27/2009@10:07:31			CRDL 5.0 ppb
WCN091127-08	1	S7	0.00	0.0432	11/27/2009@10:08:25			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99982 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091127-07	1	S8	136	4.06	11/27/2009@10:10:16			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-9.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-9.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091127-08	1	S7	2.20	0.162	11/27/2009@10:12:07			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091127-06	1	S6	3.74	0.207	11/27/2009@10:13:56			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.74 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.74 > 2.50					
		Message	Pass					
		Action	None					
1201977256|924909|MB	1	1	-1.74	0.0468	11/27/2009@10:15:46			
1201977263||LCS	1	2	25.6	0.844	11/27/2009@10:16:39		25.00	
241419006	1	3	-0.168	0.0926	11/27/2009@10:17:32			
1201977257||DUP	1	4	-1.37	0.0576	11/27/2009@10:18:25			
1201977259||MS	1	5	92.3	2.79	11/27/2009@10:19:18			
1201977261||MSD	1	6	114	3.43	11/27/2009@10:20:11			
241419007	1	7	0.444	0.110	11/27/2009@10:21:03			
1201977258||DUP	1	8	-1.07	0.0662	11/27/2009@10:21:56			
1201977260||MS	1	9	94.5	2.86	11/27/2009@10:22:49			
1201977262||MSD	1	10	94.6	2.86	11/27/2009@10:23:41			
WCN091127-03	1	S3	102	3.08	11/27/2009@10:24:34			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.1 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	1.61	0.145	11/27/2009@10:26:23			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241419008	1	11	-1.21	0.0622	11/27/2009@10:28:12			
241419009	1	12	-1.78	0.0454	11/27/2009@10:29:03			
241419010	1	13	-0.932	0.0703	11/27/2009@10:29:55			
241419011	1	14	-0.480	0.0835	11/27/2009@10:30:47			
241419012	1	15	-0.681	0.0776	11/27/2009@10:31:38			
241419013	1	16	-0.600	0.0800	11/27/2009@10:32:32			
241419014	1	17	-1.90	0.0420	11/27/2009@10:33:26			
241419015	1	18	-0.00651	0.0973	11/27/2009@10:34:20			
241419016	1	19	35.2	1.13	11/27/2009@10:35:12			
241425001	1	20	50.3	1.57	11/27/2009@10:36:06			
WCN091127-03	1	S3	101	3.05	11/27/2009@10:36:59			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	0.566	0.114	11/27/2009@10:38:49			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.566 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.566 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241425002	1	21	2.41	0.168	11/27/2009@10:40:38			
241506001	1	22	-1.73	0.0471	11/27/2009@10:41:31			
241506002	1	23	-0.925	0.0705	11/27/2009@10:42:24			
241506003	1	24	-1.33	0.0588	11/27/2009@10:43:16			
241524002	1	25	-1.12	0.0647	11/27/2009@10:44:08			
241620001	1	26	-2.08	0.0366	11/27/2009@10:45:01			
241620002	1	27	-1.34	0.0584	11/27/2009@10:45:53			
241620003	1	28	-1.61	0.0505	11/27/2009@10:46:45			
WCN091127-03	1	S3	101	3.04	11/27/2009@10:47:37			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	1.36	0.137	11/27/2009@10:49:28			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.36 < 5.00					

Author: axc2 Date : 11/27/2009

Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.36 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-27-2009_10-01-36.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

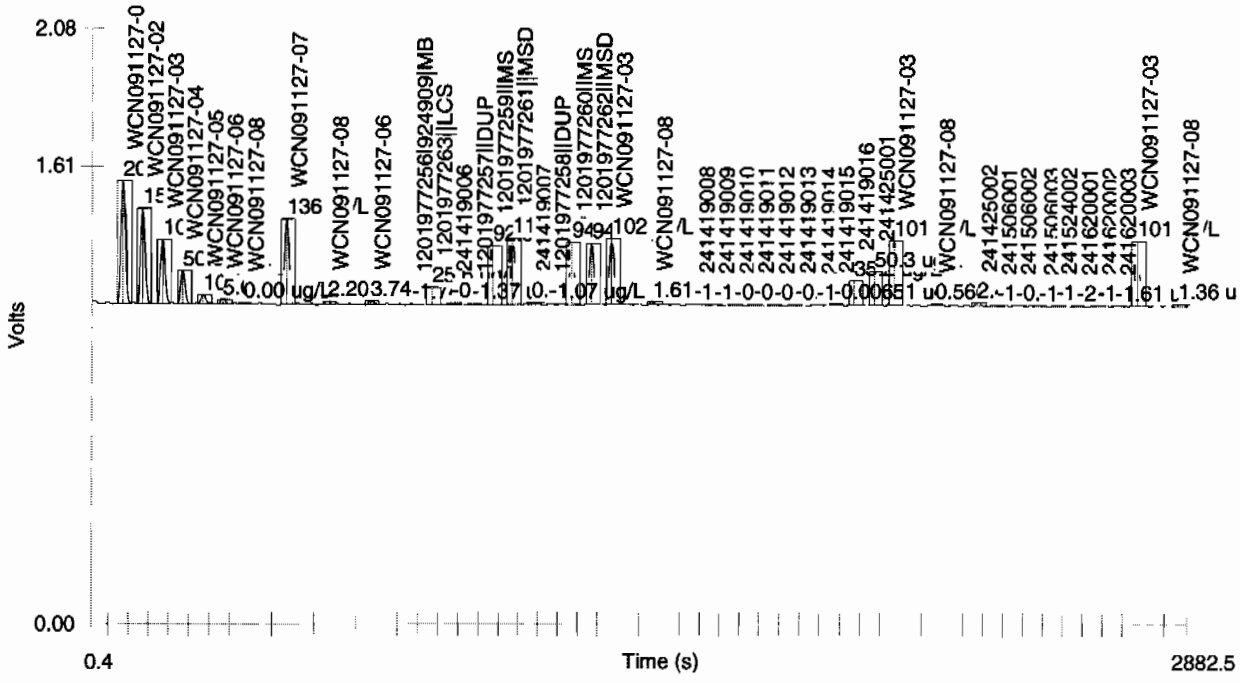

Author: axc2 Date : 11/27/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	5.88	0.431	1.0	11/27/2009	10:04:10
2	150	1	4.51	0.335	-0.8	11/27/2009	10:05:02
3	100	1	3.08	0.224	-1.9	11/27/2009	10:05:54
4	50.0	1	1.57	0.116	-0.6	11/27/2009	10:06:47
5	10.0	1	0.412	0.0289	-5.6	11/27/2009	10:07:41
6	5.00	1	0.234	0.0149	4.2	11/27/2009	10:08:34
7	0.00	1	0.0432	0.00308		11/27/2009	10:09:28

Figure 1: TCYANIDE

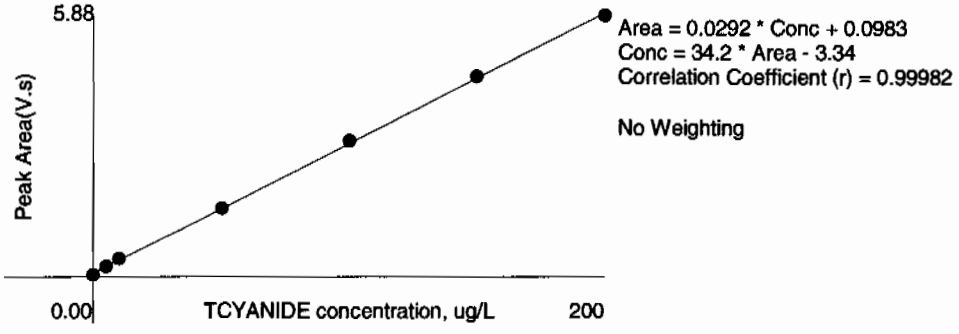

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
24-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	SW846 9012A	Solid	CARE, LANL, MECP
Batch ID:	**Sample Numbers:**		
924475	See Below		

Potentially affected work order(s)(SDG): 241322(10-544),241336(10-546),241351(EUI-7395),241358,241417(10-575),241419(10-577)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. Failed RPD for MS/MSD: QC 1201976326MS QC 1201976328MSD	1. The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable.
2. Container scanning event for custody missed: 241322 004, 005, 006, 007, 008, 009, 010, 011, 012 241336 001, 002 241417 001, 002, 241419 001, 002, 003, 004, 005	2. The following samples were not scanned prior to analysis. However samples were in custody of analyst during time of analysis.

Originator's Name:

Ashley Earl 24-NOV-09

Data Validator/Group Leader:

Elzbieta Szulc 24-NOV-09

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-577-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	923864	**Method:**	SW846 9012A
Prep Batch :	923862	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241420001	RE03-10-3933
241420002	RE03-10-3934
241420003	RE03-10-3923
241420004	RE03-10-3924
1201974863	Method Blank (MB)
1201974864	241181002(RE03-10-5526) Sample Duplicate (DUP)
1201974865	241173002(CAMO-10-3225) Sample Duplicate (DUP)
1201974866	241181002(RE03-10-5526) Matrix Spike (MS)
1201974867	241173002(CAMO-10-3225) Matrix Spike (MS)
1201974868	241181002(RE03-10-5526) Matrix Spike Duplicate (MSD)
1201974869	241173002(CAMO-10-3225) Matrix Spike Duplicate (MSD)
1201974870	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241173002 (CAMO-10-3225) and 241181002 (RE03-10-5526).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201974864 (RE03-10-5526) and 1201974865 (CAMO-10-3225).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 15Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-577-1 GEL Work Order: 241420

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID:	RE03-10-3933	Project:	LANL01004
Sample ID:	241420001	Client ID:	LANL010
Matrix:	W		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	J	2.45	1.66	5.00	ug/L	1	AXC2 11/24/09	1709	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID:	RE03-10-3934	Project:	LANL01004
Sample ID:	241420002	Client ID:	LANL010
Matrix:	W		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1710	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID:	RE03-10-3923	Project:	LANL01004
Sample ID:	241420003	Client ID:	LANL010
Matrix:	W		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1711	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 27, 2009

Client SDG: 10-577-1

Client Sample ID:	RE03-10-3924	Project:	LANL01004
Sample ID:	241420004	Client ID:	LANL010
Matrix:	W		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	J	3.67	1.66	5.00	ug/L	1	AXC2 11/24/09	1716	923864	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: November 27, 2009

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241420

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 923864										
QC1201974864 241181002 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A			AXC2	11/24/09 16:52
QC1201974865 241173002 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A				11/24/09 16:43
QC1201974870 LCS										
Cyanide, Total	50.0			54.7	ug/L		109	(90%-110%)		11/24/09 16:41
QC1201974863 MB										
Cyanide, Total			U	5.00	ug/L					11/24/09 16:40
QC1201974866 241181002 MS										
Cyanide, Total	100 U	ND		107	ug/L		107	(60%-127%)		11/24/09 16:53
QC1201974867 241173002 MS										
Cyanide, Total	100 U	ND		101	ug/L		101	(60%-127%)		11/24/09 16:44
QC1201974868 241181002 MSD										
Cyanide, Total	100 U	ND		102	ug/L	4.78	102	(0%-20%)		11/24/09 16:54
QC1201974869 241173002 MSD										
Cyanide, Total	100 U	ND		99.6	ug/L	1.40	99.6	(0%-20%)		11/24/09 16:45

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

QC Summary

Workorder: 241420

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 27-NOV-2009 22:06

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-577-1**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**24-NOV-2009 13:50:59**	**OM_11-24-2009_13-43-04**	**145**	**150**	**97**	**(90%-110%)**	**Yes**
CCV	24-NOV-2009 16:34:27	OM_11-24-2009_16-32-55	94	100	94	(90%-110%)	Yes
CCV	24-NOV-2009 16:46:55	OM_11-24-2009_16-32-55	91.9	100	92	(90%-110%)	Yes
CCV	24-NOV-2009 16:59:20	OM_11-24-2009_16-32-55	92	100	92	(90%-110%)	Yes
CCV	24-NOV-2009 17:11:53	OM_11-24-2009_16-32-55	92.4	100	92	(90%-110%)	Yes
CCV	24-NOV-2009 17:19:56	OM_11-24-2009_16-32-55	94	100	94	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**24-NOV-2009 13:52:49**	**OM_11-24-2009_13-43-04**	**1.98**	**5**	**Yes**
CCB	24-NOV-2009 16:36:18	OM_11-24-2009_16-32-55	-0.718	5	Yes
CCB	24-NOV-2009 16:48:45	OM_11-24-2009_16-32-55	0.186	5	Yes
CCB	24-NOV-2009 17:01:10	OM_11-24-2009_16-32-55	0.178	5	Yes
CCB	24-NOV-2009 17:13:43	OM_11-24-2009_16-32-55	-0.0981	5	Yes
CCB	24-NOV-2009 17:21:47	OM_11-24-2009_16-32-55	0.419	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 923862

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201974870	URF1184831-02	.0125	mL
MS	1201974866	URF1184831-02	.025	mL
MS	1201974867	URF1184831-02	.025	mL
MSD	1201974868	URF1184831-02	.025	mL
MSD	1201974869	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201974863		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
LCS	1201974870		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241173002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201974865	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
MS	1201974867	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201974869	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241173004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241176002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241181002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
DUP	1201974864	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
MS	1201974866	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
MSD	1201974868	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241218001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	MISC LIQUID
SAMPLE	241308001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241308004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241312002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241312004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241325001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241325002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241337001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241337002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241340001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241372013		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241420001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420003		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420004		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241430001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WASTE WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/24/2009 13:43:49	OM_11-24-2009_13-43-04
150 ppb		1	axc2	11/24/2009 13:44:42	OM_11-24-2009_13-43-04
100 ppb		1	axc2	11/24/2009 13:45:34	OM_11-24-2009_13-43-04
50 ppb		1	axc2	11/24/2009 13:46:27	OM_11-24-2009_13-43-04
10 ppb		1	axc2	11/24/2009 13:47:20	OM_11-24-2009_13-43-04
CRDL 5.0 ppb		1	axc2	11/24/2009 13:48:14	OM_11-24-2009_13-43-04
ICAL-00		1	axc2	11/24/2009 13:49:08	OM_11-24-2009_13-43-04
ICV		1	axc2	11/24/2009 13:50:59	OM_11-24-2009_13-43-04
ICB		1	axc2	11/24/2009 13:52:49	OM_11-24-2009_13-43-04
CRDL		1	axc2	11/24/2009 13:54:39	OM_11-24-2009_13-43-04
1201974838	923855	1	axc2	11/24/2009 13:56:29	OM_11-24-2009_13-43-04
1201974840	923855	1	axc2	11/24/2009 13:57:22	OM_11-24-2009_13-43-04
1201974842	923855	1	axc2	11/24/2009 13:58:15	OM_11-24-2009_13-43-04
241187002	923855	1	axc2	11/24/2009 13:59:09	OM_11-24-2009_13-43-04
241187003	923855	1	axc2	11/24/2009 14:00:02	OM_11-24-2009_13-43-04
241187004	923855	1	axc2	11/24/2009 14:00:55	OM_11-24-2009_13-43-04
241223001	923855	1	axc2	11/24/2009 14:01:48	OM_11-24-2009_13-43-04
1201974839	923855	1	axc2	11/24/2009 14:02:40	OM_11-24-2009_13-43-04
1201974841	923855	1	axc2	11/24/2009 14:03:32	OM_11-24-2009_13-43-04
1201974843	923855	1	axc2	11/24/2009 14:04:25	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:05:17	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:07:08	OM_11-24-2009_13-43-04
241223002	923855	1	axc2	11/24/2009 14:08:55	OM_11-24-2009_13-43-04
241223003	923855	1	axc2	11/24/2009 14:09:47	OM_11-24-2009_13-43-04
241223004	923855	1	axc2	11/24/2009 14:10:40	OM_11-24-2009_13-43-04
241223005	923855	1	axc2	11/24/2009 14:11:34	OM_11-24-2009_13-43-04
241223006	923855	1	axc2	11/24/2009 14:12:28	OM_11-24-2009_13-43-04
241223007	923855	1	axc2	11/24/2009 14:13:22	OM_11-24-2009_13-43-04
241223008	923855	1	axc2	11/24/2009 14:14:15	OM_11-24-2009_13-43-04
241223009	923855	1	axc2	11/24/2009 14:15:08	OM_11-24-2009_13-43-04
241234001	923855	1	axc2	11/24/2009 14:16:02	OM_11-24-2009_13-43-04
241234002	923855	1	axc2	11/24/2009 14:16:55	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:17:48	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:19:38	OM_11-24-2009_13-43-04
241234003	923855	1	axc2	11/24/2009 14:21:27	OM_11-24-2009_13-43-04
241234004	923855	1	axc2	11/24/2009 14:22:20	OM_11-24-2009_13-43-04
241234005	923855	1	axc2	11/24/2009 14:23:13	OM_11-24-2009_13-43-04
241234006	923855	1	axc2	11/24/2009 14:24:05	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:24:58	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:26:48	OM_11-24-2009_13-43-04

Author: axc2 Date : 11/24/2009

Original Run Filename: OM_11-24-2009_13-43-04.OMN created 11/24/2009 13:43:04
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-24-2009_13-43-04.OMN last modified 11/24/2009 14:27:53
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091124-01	1	S1	200	4.18	11/24/2009@13:43:49			200 ppb
WCN091124-02	1	S2	150	3.20	11/24/2009@13:44:42			150 ppb
WCN091124-03	1	S3	100	2.16	11/24/2009@13:45:34			100 ppb
WCN091124-04	1	S4	50.0	1.09	11/24/2009@13:46:27			50 ppb
WCN091124-05	1	S5	10.0	0.307	11/24/2009@13:47:20			10 ppb
WCN091124-06	1	S6	5.00	0.207	11/24/2009@13:48:14			CRDL 5.0 ppb
WCN091124-08	1	S7	0.00	0.0224	11/24/2009@13:49:08			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99979 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091124-07	1	S8	145	3.07	11/24/2009@13:50:59			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-3.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-3.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091124-08	1	S7	1.98	0.116	11/24/2009@13:52:49			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.98 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.98 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091124-06	1	S6	5.07	0.180	11/24/2009@13:54:39			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	5.07 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	5.07 > 2.50					
		Message	Pass					
		Action	None					
1201974838|923855|DUP	1	33	-2.51	0.0229	11/24/2009@13:56:29			
1201974840||MS	1	34	105	2.25	11/24/2009@13:57:22			
1201974842||MSD	1	35	111	2.37	11/24/2009@13:58:15			
241187002	1	36	0.929	0.0940	11/24/2009@13:59:09			
241187003	1	37	-3.63	-1.34e-4	11/24/2009@14:00:02			
241187004	1	38	-3.90	-0.00567	11/24/2009@14:00:55			
241223001	1	39	5.27	0.184	11/24/2009@14:01:48			
1201974839||DUP	1	40	5.12	0.181	11/24/2009@14:02:40			
1201974841||MS	1	41	78.3	1.69	11/24/2009@14:03:32			
1201974843||MSD	1	42	78.5	1.70	11/24/2009@14:04:25			
WCN091124-03	1	S3	100	2.14	11/24/2009@14:05:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.0 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	-0.278	0.0691	11/24/2009@14:07:08			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.278 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.278 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241223002	1	43	-2.44	0.0244	11/24/2009@14:08:55			
241223003	1	44	-2.53	0.0226	11/24/2009@14:09:47			
241223004	1	45	1.66	0.109	11/24/2009@14:10:40			
241223005	1	46	-0.692	0.0605	11/24/2009@14:11:34			
241223006	1	47	2.97	0.136	11/24/2009@14:12:28			
241223007	1	48	-1.72	0.0392	11/24/2009@14:13:22			
241223008	1	49	-1.42	0.0454	11/24/2009@14:14:15			
241223009	1	50	-1.94	0.0347	11/24/2009@14:15:08			
241234001	1	51	13.2	0.348	11/24/2009@14:16:02			
241234002	1	52	15.1	0.387	11/24/2009@14:16:55			
WCN091124-03	1	S3	99.3	2.13	11/24/2009@14:17:48			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.383	0.0827	11/24/2009@14:19:38			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.383 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.383 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241234003	1	53	182	3.84	11/24/2009@14:21:27			
241234004	1	54	126	2.67	11/24/2009@14:22:20			
241234005	1	55	44.2	0.988	11/24/2009@14:23:13			
241234006	1	56	1.64	0.109	11/24/2009@14:24:05			
WCN091124-03	1	S3	101	2.15	11/24/2009@14:24:58			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.634	0.0879	11/24/2009@14:26:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.634 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.634 > -5.00					

Author: axc2 Date : 11/24/2009

Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-24-2009_13-43-04.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

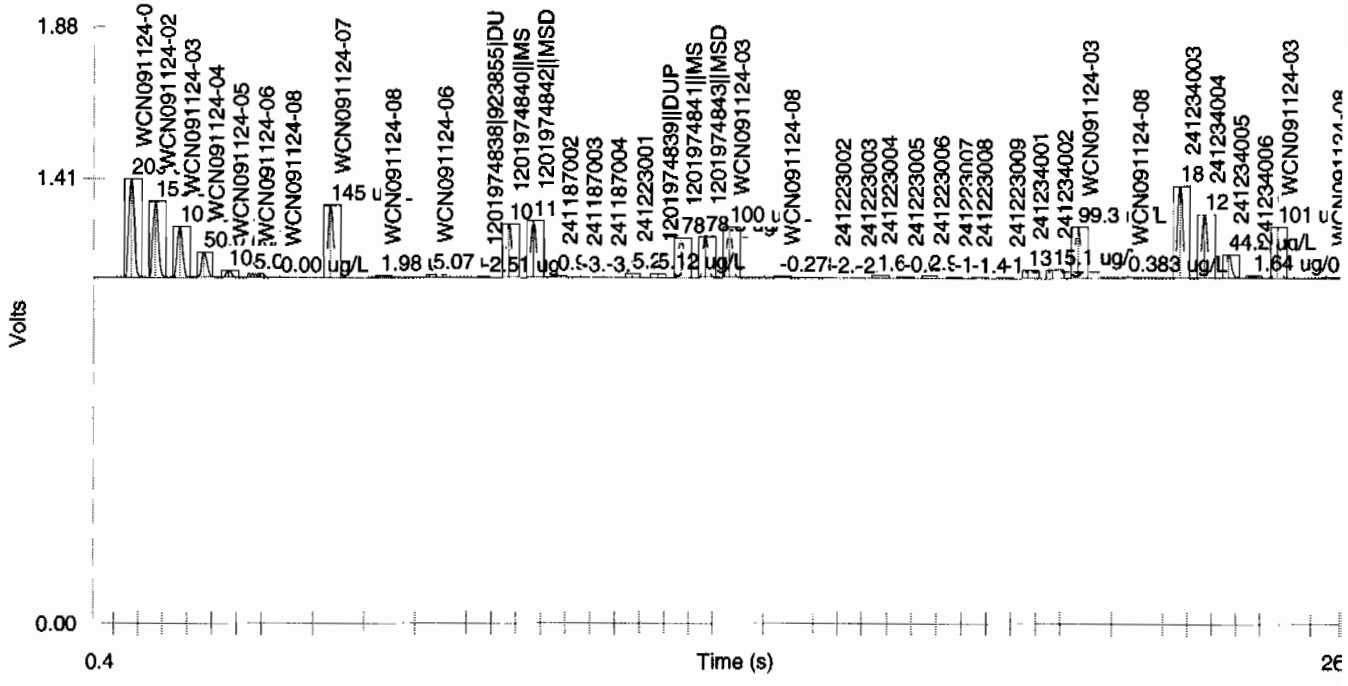

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	4.18	0.310	0.7	11/24/2009	13:44:53
2	150	1	3.20	0.240	-0.9	11/24/2009	13:45:45
3	100	1	2.16	0.161	-0.8	11/24/2009	13:46:37
4	50.0	1	1.09	0.0801	1.7	11/24/2009	13:47:30
5	10.0	1	0.307	0.0241	-8.7	11/24/2009	13:48:23
6	5.00	1	0.207	0.0121	-15.7	11/24/2009	13:49:17
7	0.00	1	0.0224	5.28e-4		11/24/2009	13:50:11

Author: axc2

Date : 11/24/2009

Figure 1: TCYANIDE

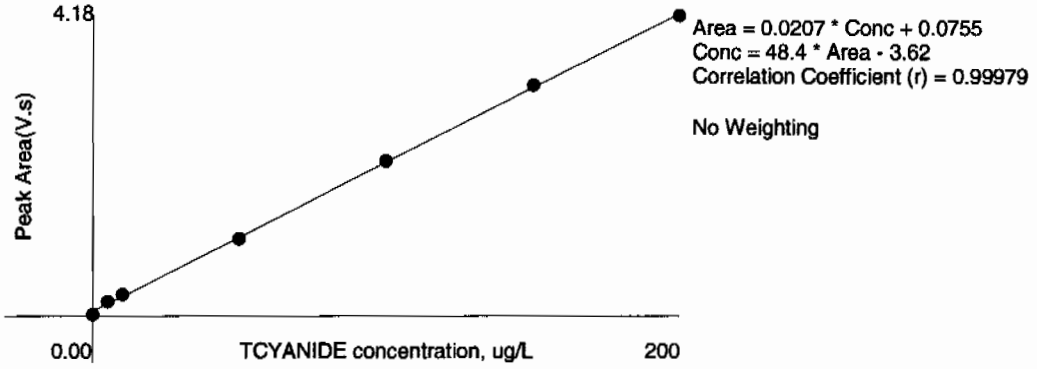

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	11/24/2009 16:34:27	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 16:36:18	OM_11-24-2009_16-32-55
241053004	922839	1	axc2	11/24/2009 16:38:07	OM_11-24-2009_16-32-55
241053009	922839	1	axc2	11/24/2009 16:38:59	OM_11-24-2009_16-32-55
241053011	922839	1	axc2	11/24/2009 16:39:51	OM_11-24-2009_16-32-55
1201974863	923864	1	axc2	11/24/2009 16:40:43	OM_11-24-2009_16-32-55
1201974870	923864	1	axc2	11/24/2009 16:41:35	OM_11-24-2009_16-32-55
241173002	923864	1	axc2	11/24/2009 16:42:29	OM_11-24-2009_16-32-55
1201974865	923864	1	axc2	11/24/2009 16:43:23	OM_11-24-2009_16-32-55
1201974867	923864	1	axc2	11/24/2009 16:44:16	OM_11-24-2009_16-32-55
1201974869	923864	1	axc2	11/24/2009 16:45:10	OM_11-24-2009_16-32-55
241173004	923864	1	axc2	11/24/2009 16:46:03	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 16:46:55	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 16:48:45	OM_11-24-2009_16-32-55
241176002	923864	1	axc2	11/24/2009 16:50:35	OM_11-24-2009_16-32-55
241181002	923864	1	axc2	11/24/2009 16:51:28	OM_11-24-2009_16-32-55
1201974864	923864	1	axc2	11/24/2009 16:52:21	OM_11-24-2009_16-32-55
1201974866	923864	1	axc2	11/24/2009 16:53:13	OM_11-24-2009_16-32-55
1201974868	923864	1	axc2	11/24/2009 16:54:06	OM_11-24-2009_16-32-55
241218001	923864	1	axc2	11/24/2009 16:54:58	OM_11-24-2009_16-32-55
241308001*	923864	1	axc2	11/24/2009 16:55:51	OM_11-24-2009_16-32-55
241308004	923864	1	axc2	11/24/2009 16:56:43	OM_11-24-2009_16-32-55
241312002	923864	1	axc2	11/24/2009 16:57:35	OM_11-24-2009_16-32-55
241312004	923864	1	axc2	11/24/2009 16:58:27	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 16:59:20	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:01:10	OM_11-24-2009_16-32-55
241308001	923864	1	axc2	11/24/2009 17:02:58	OM_11-24-2009_16-32-55
241325001	923864	1	axc2	11/24/2009 17:03:52	OM_11-24-2009_16-32-55
241325002	923864	1	axc2	11/24/2009 17:04:47	OM_11-24-2009_16-32-55
241337001	923864	1	axc2	11/24/2009 17:05:41	OM_11-24-2009_16-32-55
241337002	923864	1	axc2	11/24/2009 17:06:34	OM_11-24-2009_16-32-55
241340001	923864	1	axc2	11/24/2009 17:07:28	OM_11-24-2009_16-32-55
241372013*	923864	1	axc2	11/24/2009 17:08:21	OM_11-24-2009_16-32-55
241420001	923864	1	axc2	11/24/2009 17:09:14	OM_11-24-2009_16-32-55
241420002	923864	1	axc2	11/24/2009 17:10:08	OM_11-24-2009_16-32-55
241420003	923864	1	axc2	11/24/2009 17:11:00	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 17:11:53	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:13:43	OM_11-24-2009_16-32-55
241372013	923864	1	axc2	11/24/2009 17:15:33	OM_11-24-2009_16-32-55
241420004	923864	1	axc2	11/24/2009 17:16:25	OM_11-24-2009_16-32-55
241430001	923864	1	axc2	11/24/2009 17:17:18	OM_11-24-2009_16-32-55
241218001	923864	5	axc2	11/24/2009 17:18:11	OM_11-24-2009_16-32-55
241340001	923864	5	axc2	11/24/2009 17:19:04	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 17:19:56	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:21:47	OM_11-24-2009_16-32-55

Author: axc2 Date : 11/24/2009

Original Run Filename: OM_11-24-2009_16-32-55.OMN created 11/24/2009 16:32:55
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-24-2009_16-32-55.OMN last modified 11/24/2009 17:22:52
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091124-03	1	S3	94.0	2.02	11/24/2009@16:34:27			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	-0.718	0.0600	11/24/2009@16:36:18			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.718 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.718 > -5.00					
		Message	CCB Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
241053004|922839|	1	21	110	2.35	11/24/2009@16:38:07			
241053009	1	26	7.48	0.229	11/24/2009@16:38:59			
241053011	1	28	1.23	0.100	11/24/2009@16:39:51			
1201974863|923864|MB	1	29	-1.71	0.0395	11/24/2009@16:40:43			
1201974870||LCS	1	30	54.7	1.21	11/24/2009@16:41:35			
241173002	1	31	-0.479	0.0649	11/24/2009@16:42:29			
1201974865||DUP	1	32	-1.98	0.0339	11/24/2009@16:43:23			
1201974867||MS	1	33	101	2.17	11/24/2009@16:44:16			
1201974869||MSD	1	34	99.6	2.13	11/24/2009@16:45:10			
241173004	1	35	0.314	0.0813	11/24/2009@16:46:03			
WCN091124-03	1	S3	91.9	1.97	11/24/2009@16:46:55			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.186	0.0787	11/24/2009@16:48:45			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.186 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.186 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241176002	1	36	-2.34	0.0265	11/24/2009@16:50:35			
241181002	1	37	-2.73	0.0183	11/24/2009@16:51:28			
1201974864||DUP	1	38	-4.33	-0.0146	11/24/2009@16:52:21			
1201974866||MS	1	39	107	2.29	11/24/2009@16:53:13			
1201974868||MSD	1	40	102	2.19	11/24/2009@16:54:06			

241218001	1	41	436	9.08	11/24/2009@16:54:58			
241308001	1	42	7.18	0.223	11/24/2009@16:55:51			
241308004	1	43	-2.29	0.0276	11/24/2009@16:56:43			
241312002	1	44	-2.28	0.0276	11/24/2009@16:57:35			
241312004	1	45	-3.02	0.0123	11/24/2009@16:58:27			
WCN091124-03	1	S3	92.0	1.98	11/24/2009@16:59:20			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
		Result:	-8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.178	0.0785	11/24/2009@17:01:10			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
		Result:	0.178 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.178 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241308001	1	42	-2.06	0.0323	11/24/2009@17:02:58			
241325001	1	46	-3.02	0.0123	11/24/2009@17:03:52			
241325002	1	47	-2.38	0.0256	11/24/2009@17:04:47			
241337001	1	48	-2.22	0.0289	11/24/2009@17:05:41			
241337002	1	49	-2.25	0.0283	11/24/2009@17:06:34			
241340001	1	50	318	6.64	11/24/2009@17:07:28			
241372013	1	51	187	3.94	11/24/2009@17:08:21			
241420001	1	52	2.45	0.125	11/24/2009@17:09:14			
241420002	1	53	-1.58	0.0422	11/24/2009@17:10:08			
241420003	1	54	-2.08	0.0318	11/24/2009@17:11:00			
WCN091124-03	1	S3	92.4	1.98	11/24/2009@17:11:53			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
		Result:	-7.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-7.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	-0.0981	0.0728	11/24/2009@17:13:43			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.0981 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.0981 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241372013	1	51	176	3.72	11/24/2009@17:15:33			
241420004	1	55	3.67	0.151	11/24/2009@17:16:25			
241430001	1	56	1.20	0.0997	11/24/2009@17:17:18			
241218001	1	41	74.8	1.62	11/24/2009@17:18:11		5.00	
241340001	1	50	60.7	1.33	11/24/2009@17:19:04		5.00	
WCN091124-03	1	S3	94.0	2.02	11/24/2009@17:19:56			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
		Result:	-6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-6.0 < 10.0					

Author: axc2 Date : 11/24/2009

		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.419	0.0835	11/24/2009@17:21:47			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.419 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.419 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_11-24-2009_16-32-55.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

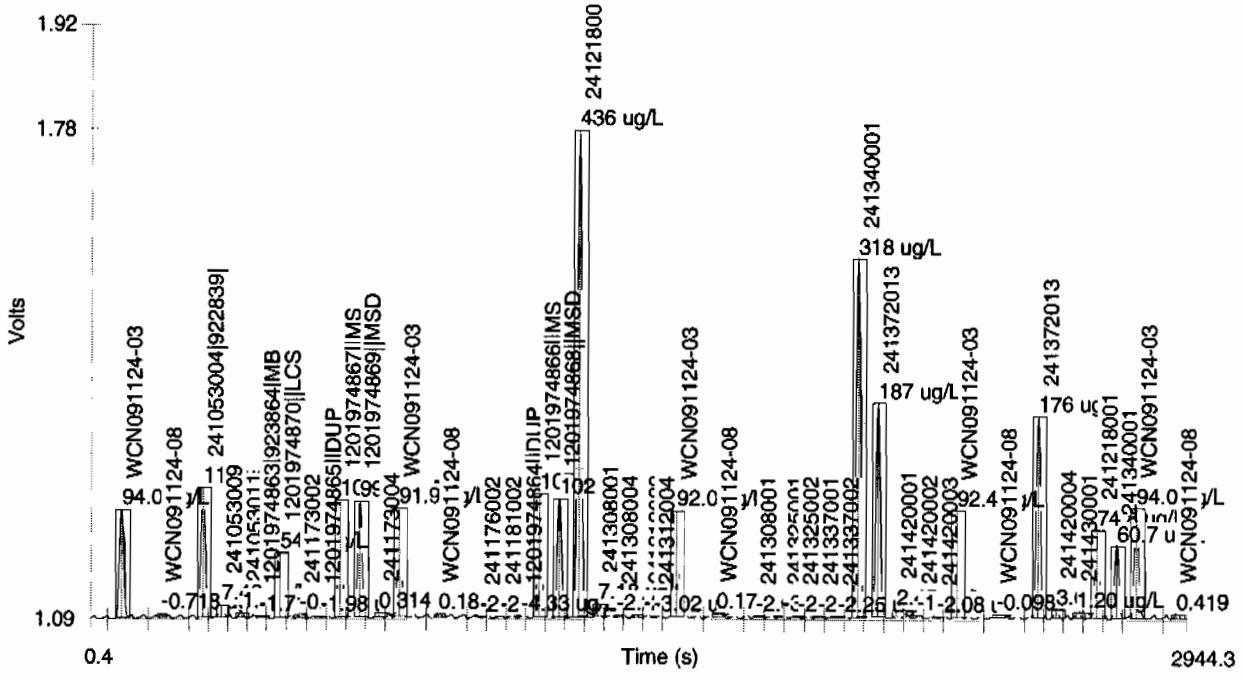

Author: axc2 Date : 11/24/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	4.18	0.310	0.7	11/24/2009	13:44:53
2	150	1	3.20	0.240	-0.9	11/24/2009	13:45:45
3	100	1	2.16	0.161	-0.8	11/24/2009	13:46:37
4	50.0	1	1.09	0.0801	1.7	11/24/2009	13:47:30
5	10.0	1	0.307	0.0241	-8.7	11/24/2009	13:48:23
6	5.00	1	0.207	0.0121	-15.7	11/24/2009	13:49:17
7	0.00	1	0.0224	5.28e-4		11/24/2009	13:50:11

Figure 1: TCYANIDE

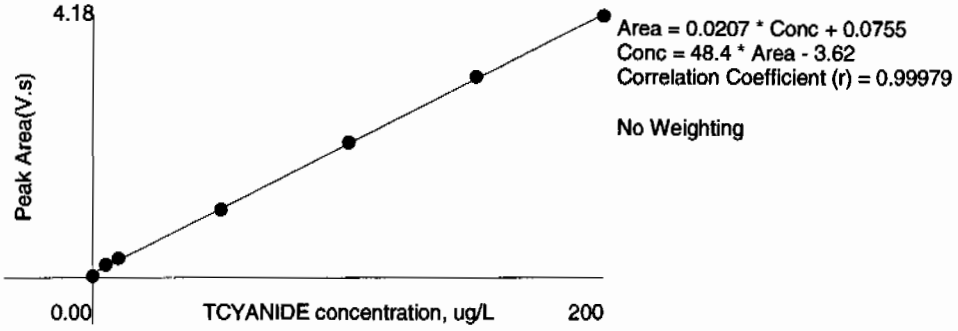

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-576

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	ONTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	
		1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	SW-846:8260B	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	
		1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	
		1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	SW-846:8270C	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	
		1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	8260 B	1	RE03-09-13032	S	11/17/09	

Final Page of REQUEST NUMBER 10-576

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-576

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 10-576

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/18/2009

General Engineering Laboratories, Inc., Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13961	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13961	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13960	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13960	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13959	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13959	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13958	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13958	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13965	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13965	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13970	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13970	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13962	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13962	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13971	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13971	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13969	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13969	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13968	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13968	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13964	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13964	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13966	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13966	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13967	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13967	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13963	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13963	1	AMBER GLASS	8270C+8082	Ice	S
RE03-10-3914	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-3914	1	AMBER GLASS	8270C+8082	Ice	S
RE03-10-3913	1	SEPTUM AMBER GLASS	8260B	Ice	S
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]

10-576

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible] cy		11/18/01	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

RE03-09-14032 1 sept Amber 8260B Ice S

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-14032 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	AIR
TIME COLLECTED (HH:MM)		0935	SUB-MEDIA:	OTHER	OK
PRS ID:	03-056(d) + 03-052(b)	OK	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 JLS 11-17-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13811
RE03-09-13958

SAMPLE COMMENTS:

LOCATION DESC: 56d-1, 52b-16

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sherdo **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan	11-17-09	(Printed Name) K. Greene	11-17-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13958 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	ALL 14
TIME COLLECTED (HH:MM)		1020	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608330		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	3'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	4'	SCREEN/PORT DESC:		—
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SAND, GRAVEL ALLUVIUM w/ ASPHALT. LIGHT BROWN (7.5 YR 6/4)

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: 0 MW 526-16

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background:
α: 60
β: 1273
Samples: MDA >

COLLECTED BY (PRINT) D. Thomas, M. Shendo

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/17/09	(Printed Name)	11/17/09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13959 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1024	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608330		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	5'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	6'	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand Strong Brown 7.5YR 4/6

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: 52b-16

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background:
α: 60 DPM
β: 1273 DPM
Samples: MDA>

COLLECTED BY (PRINT) D. Thomas, M. Sherdo **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13960 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	~~NA~~	QBt3
TIME COLLECTED (HH:MM)		1036	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608331		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	3'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	4'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Rock, Tuff. QBt3 Light Brown 7.5YR 5/2

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: 52b-17

FIELD SCREENING/MEASUREMENT RESULTS: PID: 30.4 ppm
Background:
α 60 DPM
β 1273 DPM
Samples: MDA>

COLLECTED BY (PRINT) C. Horne **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13961 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	~~NA~~	QB+3
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608331		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	5'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	6'	SCREEN/PORT DESC:		
FIELD MATRIX:	~~S~~ MN R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Rock, Tuff QB+3. Reddish gray 7.5YR 5/2

SAMPLE COMMENTS: Samples to be collected near historical sampling locations 03-03291 and 03-03286.

LOCATION DESC: 52b-17

FIELD SCREENING/MEASUREMENT RESULTS: PID: 694 ppm
Background:
α: 60 DPM
β: 1273 DPM
Samples: MDA>

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13962 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	alc H
TIME COLLECTED (HH:MM)		~~1149~~ 1247	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608332	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: CLAYEY SAND. very dark brown (7.5YR 2.5/3)

SAMPLE COMMENTS: ~~NA~~ 11/17/09 sample location was changed 2 feet west due to steamline pipe below original location

LOCATION DESC: 03-052(b)-7

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND α: 60 DPM β: 1273 DPM

SAMPLES: MDA >

COLLECTED BY (PRINT) L. Horre, M. Shendo, D. Thomas

REVIEWED BY (PRINT) M. Hauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains (Signature) Megan Rains	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13963 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1300	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608332	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand fill. Reddish Yellow 5YR6/3

SAMPLE COMMENTS: NA

LOCATION DESC: 03-052(b)-7

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND α: 60 DPM β: 1273 DPM

SAMPLES: MDA>

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains (Signature) Megan R	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13964 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1317	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608333	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY CLAY SAND. BROWN (7.5 YR 5/3)

SAMPLE COMMENTS: location moved 5 feet North

LOCATION DESC: 03-052(b)-8

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
BACKGROUND
α: 60 DPM
β: 1273 DPM

SAMPLES:
MDA >

COLLECTED BY (PRINT) D. Thomas

REVIEWED BY (PRINT) M. Nbuck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-17-09 1630	(Printed Name) Sherri Sherwood	11-17-09 1630
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13965 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1329	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608333	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SAND, GRAVEL FILL. Light reddish yellow (7.5 YR 6/6)

SAMPLE COMMENTS: location moved 5 feet north

LOCATION DESC: 03-052(b)-8

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND α: 60 DPM β: 1273 DPM SAMPLES: MDA>

COLLECTED BY (PRINT) M. Shendo REVIEWED BY (PRINT) M. Vaut

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-17-09	(Printed Name) Sherri Sherwood	11-17-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13966 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		~~11-9~~ MW 11-17-09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1405	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608334		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand. Brown 7.5YR 4/4

SAMPLE COMMENTS: NA

LOCATION DESC: 52(b)-15

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background
α: 60 DPM
β: 1273 DPM
Samples: MDA7

COLLECTED BY (PRINT) L. Horne, D. Thomas, M. Shende **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13967 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	QTB3
TIME COLLECTED (HH:MM)		1414	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608334	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	SR me 11/17/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: REDDISH BROWN TUFF (2.5 YR 4/4)

SAMPLE COMMENTS: Hit tuff @ 4'

LOCATION DESC: 03-052(b)-15

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm SAMPLES
BACKGROUND <MDA
α: 60
β: 1273

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Vavek

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-17-09	(Printed Name)	11-17-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13968 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1428	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608335	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY CLAY SAND. LIGHT YELLOWISH BROWN. (10 YR 6/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-052(b)-14

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND SAMPLES

α: 60 MDA

β: 1273

COLLECTED BY (PRINT) M. Shendo REVIEWED BY (PRINT) M. Daut

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13969 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		me 11/17/09 ~~1435~~ 11/17/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1435	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608335	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: SILTY SAND FILL . LIGHT BROWN (7.5YR 6/6)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-052(b) - 14

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND α: 60 β: 1273 SAMPLES: <MDA

COLLECTED BY (PRINT) D. Thomas, L. Horne **REVIEWED BY (PRINT)** M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-17-09 1630	(Printed Name)	11-17-09 1630
(Signature)		(Signature) [signature]	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13970 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1449	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608336	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: CLAY SAND. LIGHT BROWN (7.5 YR 6/4)

SAMPLE COMMENTS: ~~NA~~ ~~TUFF~~ NA ne 11/17/09

LOCATION DESC: 03-052(b)-13

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.0 ppm BACKGROUND
α: 60 DPM
β: 1273 DPM

SAMPLES: MDA >

COLLECTED BY (PRINT) M. Shendo, L. Horne, D. Thomas

REVIEWED BY (PRINT) M. Nack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-17-09	(Printed Name)	11-17-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-09-13971 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	CTB3
TIME COLLECTED (HH:MM)		1455	SUB-MEDIA:	OTHER	NA
PRS ID:	03-052(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608336	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR mr 11/17/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: LT. REDDISH YELLOW (7.5 YR 6/6) TUFF

SAMPLE COMMENTS: NA HIT TUFF @ 4'

LOCATION DESC: 03-052(b)-13

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm BACKGROUND SAMPLES:
α: 60 DPM MDA >
β: 1273 DPM

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3913 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1024	SUB-MEDIA:	SOIL	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608330	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	5'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	6'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: QC Sample of RE03-09-13959

SAMPLE COMMENTS: NA

LOCATION DESC: ~~NA~~ me 11/17/09 03-052(b)-16

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm SAMPLES
Background < α: 60 β: 1273 mDA >

COLLECTED BY (PRINT) L. Horne, D. Thomas, M. Shendo

REVIEWED BY (PRINT) M. Vanek

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/17/09 1630	(Printed Name)	11/17/09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3914 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1317.	SUB-MEDIA:	SOIL	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608333	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082	250 ML AMBER GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: QC Sample of RE03-09-13964

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Yanick **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-17-09	(Printed Name) Sherri Sherwood	11-17-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3923 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608331	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13961

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Vauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3924 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1340	SUB-MEDIA:	OTHER	↓
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	↓
LOCATION ID:	UNK	03-608333	FIELD QC TYPE:	FB	↓
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	↓
TOP DEPTH:	0	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	↓	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13965

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-17-09 1630	(Printed Name) Sherri Sherwood	11-17-09 1630
(Signature) [illegible]		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3933 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1137	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608331	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13961

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains (Signature)	11-17-09 1630	(Printed Name) (Signature)	11-17-09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2274 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 2

SAMPLE ID: RE03-10-3934 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/17/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1350	SUB-MEDIA:	OTHER	
PRS ID:	03-052(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608333	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13965

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-17-09	(Printed Name) Sherri Sherwood	11-17-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-576 VALIDATION DATE: 1/26/09 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the FTB, sample RE03-09-14032, associated with samples -09-13958, -09-13959 and -10-3913, acetone was detected. All the associated sample results were NDs and, thus, were not qualified.
2. The ICV %Ds were >20% for acetone, 2-butanone and 2-hexanone. In the CCV associated with all the samples except -10-3914 %Ds were >20% for 1,1-dichloropropene and carbon tetrachloride. The associated sample results that were detects were qualified J,V7c and those that were NDs were qualified UJ,V7c.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/26/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	27.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13958	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 01:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:35	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m212.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.467	1.37	
74-87-3	Chloromethane	U	1.37	ug/kg	0.412	1.37	
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.412	1.37	
74-83-9	Bromomethane	U	1.37	ug/kg	0.412	1.37	
75-00-3	Chloroethane	U	1.37	ug/kg	0.412	1.37	
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.412	1.37	
67-64-1	Acetone		17.5	ug/kg	2.28	6.87	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.412	1.37	
74-88-4	Iodomethane	U	6.87	ug/kg	2.20	6.87	
75-09-2	Methylene chloride	U	6.87	ug/kg	2.75	6.87	
75-15-0	Carbon disulfide	U	6.87	ug/kg	1.72	6.87	
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37	
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.412	1.37	
78-93-3	2-Butanone	U	6.87	ug/kg	2.06	6.87	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37	
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37	
67-66-3	Chloroform	U	1.37	ug/kg	0.412	1.37	
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.454	1.37	
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.412	1.37	
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.412	1.37	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.412	1.37	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.412	1.37	
71-43-2	Benzene	U	1.37	ug/kg	0.412	1.37	
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.454	1.37	
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37	
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.412	1.37	
74-95-3	Dibromomethane	U	1.37	ug/kg	0.412	1.37	
108-10-1	4-Methyl-2-pentanone	U	6.87	ug/kg	1.72	6.87	
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37	
108-88-3	Toluene	U	1.37	ug/kg	0.412	1.37	
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37	
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.412	1.37	
591-78-6	2-Hexanone	U	6.87	ug/kg	2.06	6.87	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.412	1.37	
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.412	1.37	
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.412	1.37	
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.412	1.37	
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.412	1.37	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	27.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13958	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 01:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:35	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m212.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.412	1.37
179601-23-1	m,p-Xylenes	U	2.75	ug/kg	0.412	2.75
95-47-6	o-Xylene	U	1.37	ug/kg	0.412	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.412	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.412	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.412	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.412	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.412	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.412	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.412	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.412	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.412	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.412	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.412	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.87	ug/kg	2.20	6.87
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:34	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m211.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.413	1.21	
74-87-3	Chloromethane	U	1.21	ug/kg	0.364	1.21	
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.364	1.21	
74-83-9	Bromomethane	U	1.21	ug/kg	0.364	1.21	
75-00-3	Chloroethane	U	1.21	ug/kg	0.364	1.21	
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.364	1.21	
67-64-1	Acetone		11.6	ug/kg	2.02	6.07	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.364	1.21	
74-88-4	Iodomethane	U	6.07	ug/kg	1.94	6.07	
75-09-2	Methylene chloride	U	6.07	ug/kg	2.43	6.07	
75-15-0	Carbon disulfide	U	6.07	ug/kg	1.52	6.07	
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.364	1.21	
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.364	1.21	
78-93-3	2-Butanone	U	6.07	ug/kg	1.82	6.07	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.364	1.21	
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.364	1.21	
67-66-3	Chloroform	U	1.21	ug/kg	0.364	1.21	
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.401	1.21	
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.364	1.21	
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.364	1.21	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.364	1.21	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.364	1.21	
71-43-2	Benzene	U	1.21	ug/kg	0.364	1.21	
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.401	1.21	
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.364	1.21	
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.364	1.21	
74-95-3	Dibromomethane	U	1.21	ug/kg	0.364	1.21	
108-10-1	4-Methyl-2-pentanone	U	6.07	ug/kg	1.52	6.07	
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.364	1.21	
108-88-3	Toluene	U	1.21	ug/kg	0.364	1.21	
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.364	1.21	
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.364	1.21	
591-78-6	2-Hexanone	U	6.07	ug/kg	1.82	6.07	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.364	1.21	
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.364	1.21	
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.364	1.21	
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.364	1.21	
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.364	1.21	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:34	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m211.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.364	1.21
179601-23-1	m,p-Xylenes	U	2.43	ug/kg	0.364	2.43
95-47-6	o-Xylene	U	1.21	ug/kg	0.364	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.364	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.364	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.364	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.364	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.364	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.364	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.364	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.364	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.364	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.364	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.364	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.364	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.364	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.364	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.364	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.364	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.07	ug/kg	1.94	6.07
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.364	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	15.8	ug/kg		J

ETM
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 00:22**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:33**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m210.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17	
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17	
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17	
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17	
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17	
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17	
67-64-1	Acetone		6.77	ug/kg	1.94	5.84	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
74-88-4	Iodomethane	U	5.84	ug/kg	1.87	5.84	
75-09-2	Methylene chloride	U	5.84	ug/kg	2.34	5.84	
75-15-0	Carbon disulfide	U	5.84	ug/kg	1.46	5.84	
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17	
78-93-3	2-Butanone	U	5.84	ug/kg	1.75	5.84	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17	
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17	
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17	
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17	
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17	
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17	
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17	
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17	
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17	
108-10-1	4-Methyl-2-pentanone	U	5.84	ug/kg	1.46	5.84	
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17	
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17	
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17	
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17	
591-78-6	2-Hexanone	U	5.84	ug/kg	1.75	5.84	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17	
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17	
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17	
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17	
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17	

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Volatile
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Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	14.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13960	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:33	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m210.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.350	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.84	ug/kg	1.87	5.84
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
87-44-5	Caryophyllene	14.17	34.9	ug/kg	99	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13961	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/24/2009 23:55	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m209.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.410	1.20	
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20	
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20	
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20	
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20	
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20	
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20	
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02	
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02	
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.51	6.02	
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20	
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20	
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20	
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20	
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20	
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20	
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20	
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20	
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20	
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20	
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20	
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20	
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20	
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.51	6.02	
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20	
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20	
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20	
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20	
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20	
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20	
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20	
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20	
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 23:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	12.3	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418007**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13962**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 02:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:38**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m215.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14	
74-87-3	Chloromethane	U	1.14	ug/kg	0.343	1.14	
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.343	1.14	
74-83-9	Bromomethane	U	1.14	ug/kg	0.343	1.14	
75-00-3	Chloroethane	U	1.14	ug/kg	0.343	1.14	
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.343	1.14	
67-64-1	Acetone	U	5.71	ug/kg	1.90	5.71	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.343	1.14	
74-88-4	Iodomethane	U	5.71	ug/kg	1.83	5.71	
75-09-2	Methylene chloride	U	5.71	ug/kg	2.28	5.71	
75-15-0	Carbon disulfide	U	5.71	ug/kg	1.43	5.71	
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14	
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.343	1.14	
78-93-3	2-Butanone	U	5.71	ug/kg	1.71	5.71	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14	
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14	
67-66-3	Chloroform	U	1.14	ug/kg	0.343	1.14	
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.377	1.14	
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.343	1.14	
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.343	1.14	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.343	1.14	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.343	1.14	
71-43-2	Benzene	U	1.14	ug/kg	0.343	1.14	
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.377	1.14	
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14	
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.343	1.14	
74-95-3	Dibromomethane	U	1.14	ug/kg	0.343	1.14	
108-10-1	4-Methyl-2-pentanone	U	5.71	ug/kg	1.43	5.71	
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14	
108-88-3	Toluene	U	1.14	ug/kg	0.343	1.14	
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14	
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.343	1.14	
591-78-6	2-Hexanone	U	5.71	ug/kg	1.71	5.71	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.343	1.14	
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.343	1.14	
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.343	1.14	
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.343	1.14	
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.343	1.14	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418007	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13962	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 02:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:38	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m215.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.343	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.343	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.343	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.343	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.343	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.343	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.343	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.343	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.343	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.343	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.343	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.343	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.343	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.343	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.71	ug/kg	1.83	5.71
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418014	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13963	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 05:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:45	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m222.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.410	1.21	
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21	
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21	
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21	
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21	
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21	
67-64-1	Acetone	J	2.30	ug/kg	2.00	6.04	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21	
74-88-4	Iodomethane	U	6.04	ug/kg	1.93	6.04	
75-09-2	Methylene chloride	U	6.04	ug/kg	2.41	6.04	
75-15-0	Carbon disulfide	U	6.04	ug/kg	1.51	6.04	
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21	
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21	
78-93-3	2-Butanone	U	6.04	ug/kg	1.81	6.04	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21	
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21	
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21	
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.398	1.21	
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21	
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21	
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21	
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.398	1.21	
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21	
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21	
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21	
108-10-1	4-Methyl-2-pentanone	U	6.04	ug/kg	1.51	6.04	
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21	
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21	
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21	
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21	
591-78-6	2-Hexanone	U	6.04	ug/kg	1.81	6.04	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21	
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.362	1.21	
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21	
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21	
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418014	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13963	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 05:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:45	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m222.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.362	2.41
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.04	ug/kg	1.93	6.04
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
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Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m219.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15	
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15	
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15	
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15	
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15	
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15	
67-64-1	Acetone	U	5.74	ug/kg	1.91	5.74	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15	
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74	
75-09-2	Methylene chloride	U	5.74	ug/kg	2.30	5.74	
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.44	5.74	
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15	
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15	
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15	
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15	
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15	
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15	
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15	
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15	
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15	
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15	
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15	
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15	
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15	
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.44	5.74	
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15	
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15	
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15	
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15	
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15	
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15	
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15	
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15	
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m219.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.74	ug/kg	1.84	5.74
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5989-27-5	D-Limonene	16.03	7.36	ug/kg	96	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 01:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:36**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m213.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13	
74-87-3	Chloromethane	U	1.13	ug/kg	0.339	1.13	
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.339	1.13	
74-83-9	Bromomethane	U	1.13	ug/kg	0.339	1.13	
75-00-3	Chloroethane	U	1.13	ug/kg	0.339	1.13	
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.339	1.13	
67-64-1	Acetone	J	2.54	ug/kg	1.87	5.65	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.339	1.13	
74-88-4	Iodomethane	U	5.65	ug/kg	1.81	5.65	
75-09-2	Methylene chloride	U	5.65	ug/kg	2.26	5.65	
75-15-0	Carbon disulfide	U	5.65	ug/kg	1.41	5.65	
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13	
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.339	1.13	
78-93-3	2-Butanone	U	5.65	ug/kg	1.69	5.65	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13	
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13	
67-66-3	Chloroform	U	1.13	ug/kg	0.339	1.13	
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.373	1.13	
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.339	1.13	
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.339	1.13	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.339	1.13	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.339	1.13	
71-43-2	Benzene	U	1.13	ug/kg	0.339	1.13	
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.373	1.13	
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13	
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.339	1.13	
74-95-3	Dibromomethane	U	1.13	ug/kg	0.339	1.13	
108-10-1	4-Methyl-2-pentanone	U	5.65	ug/kg	1.41	5.65	
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13	
108-88-3	Toluene	U	1.13	ug/kg	0.339	1.13	
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13	
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.339	1.13	
591-78-6	2-Hexanone	U	5.65	ug/kg	1.69	5.65	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.339	1.13	
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.339	1.13	
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.339	1.13	
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.339	1.13	
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.339	1.13	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13965	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 01:45	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:36	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m213.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.339	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.339	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.339	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.339	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.339	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.339	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.339	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.339	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.339	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.339	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.339	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.339	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.339	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.339	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.65	ug/kg	1.81	5.65
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	8.48	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418012	Date Received:	11/19/2009 08:45	%Moisture:	7.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13966	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926499	Inst:	VOA4.I	Dilution:	1
Run Date:	11/25/2009 04:55	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/24/2009 21:43	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4m220.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.368	1.08	
74-87-3	Chloromethane	U	1.08	ug/kg	0.325	1.08	
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.325	1.08	
74-83-9	Bromomethane	U	1.08	ug/kg	0.325	1.08	
75-00-3	Chloroethane	U	1.08	ug/kg	0.325	1.08	
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.325	1.08	
67-64-1	Acetone	U	5.41	ug/kg	1.80	5.41	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.325	1.08	
74-88-4	Iodomethane	U	5.41	ug/kg	1.73	5.41	
75-09-2	Methylene chloride	U	5.41	ug/kg	2.16	5.41	
75-15-0	Carbon disulfide	U	5.41	ug/kg	1.35	5.41	
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08	
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.325	1.08	
78-93-3	2-Butanone	U	5.41	ug/kg	1.62	5.41	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08	
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08	
67-66-3	Chloroform	U	1.08	ug/kg	0.325	1.08	
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.357	1.08	
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.325	1.08	
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.325	1.08	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.325	1.08	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.325	1.08	
71-43-2	Benzene	U	1.08	ug/kg	0.325	1.08	
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.357	1.08	
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08	
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.325	1.08	
74-95-3	Dibromomethane	U	1.08	ug/kg	0.325	1.08	
108-10-1	4-Methyl-2-pentanone	U	5.41	ug/kg	1.35	5.41	
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08	
108-88-3	Toluene	U	1.08	ug/kg	0.325	1.08	
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08	
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.325	1.08	
591-78-6	2-Hexanone	U	5.41	ug/kg	1.62	5.41	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.325	1.08	
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.325	1.08	
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.325	1.08	
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.325	1.08	
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.325	1.08	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418012**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13966**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:43**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m220.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.325	1.08
179601-23-1	m,p-Xylenes	U	2.16	ug/kg	0.325	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.325	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.325	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.325	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.325	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.325	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.325	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.325	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.325	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.325	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.325	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.325	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.325	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.41	ug/kg	1.73	5.41
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418013	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13967	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 05:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:44	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m221.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.414	1.22	
74-87-3	Chloromethane	U	1.22	ug/kg	0.365	1.22	
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.365	1.22	
74-83-9	Bromomethane	U	1.22	ug/kg	0.365	1.22	
75-00-3	Chloroethane	U	1.22	ug/kg	0.365	1.22	
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.365	1.22	
67-64-1	Acetone	J	2.06	ug/kg	2.02	6.09	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.365	1.22	
74-88-4	Iodomethane	U	6.09	ug/kg	1.95	6.09	
75-09-2	Methylene chloride	U	6.09	ug/kg	2.44	6.09	
75-15-0	Carbon disulfide	U	6.09	ug/kg	1.52	6.09	
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22	
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.365	1.22	
78-93-3	2-Butanone	U	6.09	ug/kg	1.83	6.09	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22	
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22	
67-66-3	Chloroform	U	1.22	ug/kg	0.365	1.22	
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.402	1.22	
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.365	1.22	
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.365	1.22	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.365	1.22	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.365	1.22	
71-43-2	Benzene	U	1.22	ug/kg	0.365	1.22	
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.402	1.22	
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22	
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.365	1.22	
74-95-3	Dibromomethane	U	1.22	ug/kg	0.365	1.22	
108-10-1	4-Methyl-2-pentanone	U	6.09	ug/kg	1.52	6.09	
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22	
108-88-3	Toluene	U	1.22	ug/kg	0.365	1.22	
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22	
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.365	1.22	
591-78-6	2-Hexanone	U	6.09	ug/kg	1.83	6.09	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.365	1.22	
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.365	1.22	
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.365	1.22	
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.365	1.22	
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.365	1.22	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418013	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13967	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 05:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:44	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m221.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes	U	2.44	ug/kg	0.365	2.44
95-47-6	o-Xylene	U	1.22	ug/kg	0.365	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.365	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.365	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418010	Date Received:	11/19/2009 08:45	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13968	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926499	Inst:	VOA4.I	Dilution:	1
Run Date:	11/25/2009 04:01	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/24/2009 21:41	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4m218.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09	
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09	
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09	
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09	
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09	
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09	
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47	
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47	
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47	
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09	
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09	
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09	
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09	
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09	
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09	
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09	
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09	
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09	
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47	
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09	
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09	
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09	
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09	
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09	
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09	
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09	
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418010**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13968**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:41**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m218.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m217.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.392	1.15	
74-87-3	Chloromethane	U	1.15	ug/kg	0.346	1.15	
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.346	1.15	
74-83-9	Bromomethane	U	1.15	ug/kg	0.346	1.15	
75-00-3	Chloroethane	U	1.15	ug/kg	0.346	1.15	
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.346	1.15	
67-64-1	Acetone		9.43	ug/kg	1.91	5.76	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.346	1.15	
74-88-4	Iodomethane	U	5.76	ug/kg	1.84	5.76	
75-09-2	Methylene chloride	U	5.76	ug/kg	2.30	5.76	
75-15-0	Carbon disulfide	U	5.76	ug/kg	1.44	5.76	
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.346	1.15	
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.346	1.15	
78-93-3	2-Butanone	U	5.76	ug/kg	1.73	5.76	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.346	1.15	
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.346	1.15	
67-66-3	Chloroform	U	1.15	ug/kg	0.346	1.15	
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.380	1.15	
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.346	1.15	
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.346	1.15	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.346	1.15	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.346	1.15	
71-43-2	Benzene	U	1.15	ug/kg	0.346	1.15	
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.380	1.15	
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.346	1.15	
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.346	1.15	
74-95-3	Dibromomethane	U	1.15	ug/kg	0.346	1.15	
108-10-1	4-Methyl-2-pentanone	U	5.76	ug/kg	1.44	5.76	
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.346	1.15	
108-88-3	Toluene	U	1.15	ug/kg	0.346	1.15	
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.346	1.15	
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.346	1.15	
591-78-6	2-Hexanone	U	5.76	ug/kg	1.73	5.76	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.346	1.15	
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.346	1.15	
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.346	1.15	
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.346	1.15	
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.346	1.15	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m217.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.346	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.346	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.346	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.346	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.346	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.346	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.346	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.346	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.346	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.346	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.346	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.346	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.346	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.346	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.346	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.346	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.346	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.346	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.346	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.76	ug/kg	1.84	5.76
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.346	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 02:12	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:37	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m214.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12	
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12	
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12	
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12	
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12	
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12	
67-64-1	Acetone	J	4.00	ug/kg	1.86	5.59	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12	
74-88-4	Iodomethane	U	5.59	ug/kg	1.79	5.59	
75-09-2	Methylene chloride	U	5.59	ug/kg	2.24	5.59	
75-15-0	Carbon disulfide	U	5.59	ug/kg	1.40	5.59	
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12	
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12	
78-93-3	2-Butanone	U	5.59	ug/kg	1.68	5.59	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12	
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12	
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12	
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12	
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12	
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12	
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12	
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12	
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12	
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12	
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12	
108-10-1	4-Methyl-2-pentanone	U	5.59	ug/kg	1.40	5.59	
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12	
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12	
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12	
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12	
591-78-6	2-Hexanone	U	5.59	ug/kg	1.68	5.59	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12	
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12	
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12	
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12	
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13970**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 02:12**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:37**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m214.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.59	ug/kg	1.79	5.59
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Alcohol	6.77	8.52	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418008	Date Received:	11/19/2009 08:45	%Moisture:	19
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13971	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926499	Inst:	VOA4.I	Dilution:	1
Run Date:	11/25/2009 03:07	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/24/2009 21:39	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4m216.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.420	1.23	
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23	
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23	
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23	
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23	
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23	
67-64-1	Acetone	J	3.61	ug/kg	2.05	6.17	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23	
74-88-4	Iodomethane	U	6.17	ug/kg	1.98	6.17	
75-09-2	Methylene chloride	U	6.17	ug/kg	2.47	6.17	
75-15-0	Carbon disulfide	U	6.17	ug/kg	1.54	6.17	
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23	
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23	
78-93-3	2-Butanone	U	6.17	ug/kg	1.85	6.17	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23	
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23	
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23	
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.407	1.23	
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23	
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23	
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23	
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.407	1.23	
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23	
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23	
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23	
108-10-1	4-Methyl-2-pentanone	U	6.17	ug/kg	1.54	6.17	
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23	
108-88-3	Toluene	U	1.23	ug/kg	0.370	1.23	
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23	
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23	
591-78-6	2-Hexanone	U	6.17	ug/kg	1.85	6.17	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23	
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.370	1.23	
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23	
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23	
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:39	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m216.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	U	2.47	ug/kg	0.370	2.47
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.17	ug/kg	1.98	6.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418017**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14032**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 23:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m208.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene		1.37	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418017	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14032	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/24/2009 23:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:48	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m208.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418016	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3913	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 06:45	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:47	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m224.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.410	1.21	
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21	
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21	
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21	
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21	
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21	
67-64-1	Acetone	U	6.03	ug/kg	2.00	6.03	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21	
74-88-4	Iodomethane	U	6.03	ug/kg	1.93	6.03	
75-09-2	Methylene chloride	U	6.03	ug/kg	2.41	6.03	
75-15-0	Carbon disulfide	U	6.03	ug/kg	1.51	6.03	
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21	
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21	
78-93-3	2-Butanone	U	6.03	ug/kg	1.81	6.03	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21	
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21	
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21	
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.398	1.21	
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21	
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21	UJ,V7c
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21	
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21	
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.398	1.21	
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21	
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21	
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21	
108-10-1	4-Methyl-2-pentanone	U	6.03	ug/kg	1.51	6.03	
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21	
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21	
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21	
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21	
591-78-6	2-Hexanone	U	6.03	ug/kg	1.81	6.03	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21	
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.362	1.21	
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21	
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21	
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418016	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3913	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 06:45	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:47	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m224.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.362	2.41
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.03	ug/kg	1.93	6.03
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	13.4	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/27/2009 19:21	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 19:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m508.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15	
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15	
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15	
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15	
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15	
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15	
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73	
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73	
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73	
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15	
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15	
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15	
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15	
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15	
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15	
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15	
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15	
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15	
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73	
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15	
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15	
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15	
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15	
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15	
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/27/2009 19:21	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 19:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m508.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	No Tentatively Identified Compounds Found			ug/kg		

ETM
1/26/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-576 VALIDATION DATE: 1/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV %D was >20% for hexachlorocyclopentadiene. In the CCV associated with samples RE03-10-3913 and -10-3914, the %Ds were N-methyl-N-nitrosomethylamine; pyridine; benzyl alcohol and 2,4-dinitrophenol. In the CCV associated with all the other samples, the %Ds were 2,4-dinitrophenol and benzo(g,h,i)perylene. The benzo(g,h,i)perylene results for samples -09-13959 and -09-139641 were detects and, thus, were qualified J,SV7c. All the other associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. It should be noted that the MS/MSD RPD for benzyl alcohol was not within the laboratory's QC limit. It should be noted that the MS/MSD analyses were performed on a LANL sample from a different RN. Also, the raw data for the parent sample was not provided in the data package. However, MS/MSD analyses are not required for this analysis and, thus, no sample data were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/26/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	27.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13958	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 16:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s6l0415.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	457	ug/kg	91.5	457	
108-95-2	Phenol	U	457	ug/kg	91.5	457	
95-57-8	2-Chlorophenol	U	457	ug/kg	91.5	457	
106-46-7	1,4-Dichlorobenzene	U	457	ug/kg	91.5	457	
621-64-7	N-Nitrosodipropylamine	U	457	ug/kg	91.5	457	
59-50-7	4-Chloro-3-methylphenol	U	457	ug/kg	91.5	457	
83-32-9	Acenaphthene	U	45.7	ug/kg	15.1	45.7	
121-14-2	2,4-Dinitrotoluene	U	457	ug/kg	45.7	457	
100-02-7	4-Nitrophenol	U	457	ug/kg	151	457	
87-86-5	Pentachlorophenol	U	457	ug/kg	114	457	
129-00-0	Pyrene	U	45.7	ug/kg	13.7	45.7	
110-86-1	Pyridine	U	457	ug/kg	91.5	457	
62-53-3	Aniline	U	457	ug/kg	137	457	
111-44-4	bis(2-Chloroethyl) ether	U	457	ug/kg	91.5	457	
541-73-1	1,3-Dichlorobenzene	U	457	ug/kg	91.5	457	
100-51-6	Benzyl alcohol	U	457	ug/kg	137	457	
95-50-1	1,2-Dichlorobenzene	U	457	ug/kg	91.5	457	
108-60-1	bis(2-Chloroisopropyl)ether	U	457	ug/kg	91.5	457	
95-48-7	o-Cresol	U	457	ug/kg	91.5	457	
65794-96-9	m,p-Cresols	U	457	ug/kg	137	457	
67-72-1	Hexachloroethane	U	457	ug/kg	91.5	457	
98-95-3	Nitrobenzene	U	457	ug/kg	91.5	457	
78-59-1	Isophorone	U	457	ug/kg	91.5	457	
88-75-5	2-Nitrophenol	U	457	ug/kg	91.5	457	
105-67-9	2,4-Dimethylphenol	U	457	ug/kg	160	457	
111-91-1	bis(2-Chloroethoxy)methane	U	457	ug/kg	91.5	457	
120-83-2	2,4-Dichlorophenol	U	457	ug/kg	91.5	457	
65-85-0	Benzoic acid	U	915	ug/kg	229	915	
91-20-3	Naphthalene	U	45.7	ug/kg	13.7	45.7	
106-47-8	4-Chloroaniline	U	457	ug/kg	91.5	457	
87-68-3	Hexachlorobutadiene	U	457	ug/kg	91.5	457	
91-57-6	2-Methylnaphthalene	U	45.7	ug/kg	9.15	45.7	
77-47-4	Hexachlorocyclopentadiene	U	457	ug/kg	91.5	457	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	457	ug/kg	91.5	457	
95-95-4	2,4,5-Trichlorophenol	U	457	ug/kg	91.5	457	
91-58-7	2-Chloronaphthalene	U	45.7	ug/kg	15.1	45.7	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	457	ug/kg	91.5	457	
99-09-2	3-Nitroaniline	U	457	ug/kg	91.5	457	

ETM
1/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418004	Date Received:	11/19/2009 08:45	%Moisture:	27.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13958	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 16:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s6l0415.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	457	ug/kg	91.5	457	
606-20-2	2,6-Dinitrotoluene	U	457	ug/kg	45.7	457	
208-96-8	Acenaphthylene	U	45.7	ug/kg	13.7	45.7	
51-28-5	2,4-Dinitrophenol	U	915	ug/kg	174	915	UJ,SV7c
132-64-9	Dibenzofuran	U	457	ug/kg	91.5	457	
84-66-2	Diethylphthalate	U	457	ug/kg	91.5	457	
86-73-7	Fluorene	U	45.7	ug/kg	13.7	45.7	
7005-72-3	4-Chlorophenylphenylether	U	457	ug/kg	91.5	457	
534-52-1	2-Methyl-4,6-dinitrophenol	U	457	ug/kg	91.5	457	
100-01-6	4-Nitroaniline	U	457	ug/kg	137	457	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457	
122-66-7	Azobenzene	U	457	ug/kg	91.5	457	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	457	ug/kg	91.5	457	
118-74-1	Hexachlorobenzene	U	457	ug/kg	91.5	457	
85-01-8	Phenanthrene	U	45.7	ug/kg	13.7	45.7	
120-12-7	Anthracene	U	45.7	ug/kg	9.15	45.7	
84-74-2	Di-n-butylphthalate	U	457	ug/kg	91.5	457	
206-44-0	Fluoranthene	U	45.7	ug/kg	13.7	45.7	
85-68-7	Butylbenzylphthalate	U	457	ug/kg	91.5	457	
56-55-3	Benzo(a)anthracene	U	45.7	ug/kg	13.7	45.7	
91-94-1	3,3'-Dichlorobenzidine	U	457	ug/kg	137	457	
218-01-9	Chrysene	U	45.7	ug/kg	13.7	45.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	457	ug/kg	91.5	457	
117-84-0	Di-n-octylphthalate	U	457	ug/kg	91.5	457	
205-99-2	Benzo(b)fluoranthene	U	45.7	ug/kg	13.7	45.7	
207-08-9	Benzo(k)fluoranthene	U	45.7	ug/kg	13.7	45.7	
50-32-8	Benzo(a)pyrene	U	45.7	ug/kg	13.7	45.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.7	ug/kg	13.7	45.7	
53-70-3	Dibenzo(a,h)anthracene	U	45.7	ug/kg	13.7	45.7	
191-24-2	Benzo(ghi)perylene	U	45.7	ug/kg	13.7	45.7	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	457	ug/kg	91.5	457	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	456	ug/kg		J
	Unknown Aldol Condensate	3.38	445	ug/kg		JA

ETM
1/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418003**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13959**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:41**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0414.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.8	404	
108-95-2	Phenol	U	404	ug/kg	80.8	404	
95-57-8	2-Chlorophenol	U	404	ug/kg	80.8	404	
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.8	404	
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.8	404	
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.8	404	
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4	
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404	
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404	
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404	
129-00-0	Pyrene		135	ug/kg	12.1	40.4	
110-86-1	Pyridine	U	404	ug/kg	80.8	404	
62-53-3	Aniline	U	404	ug/kg	121	404	
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.8	404	
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.8	404	
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404	
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.8	404	
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.8	404	
95-48-7	o-Cresol	U	404	ug/kg	80.8	404	
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404	
67-72-1	Hexachloroethane	U	404	ug/kg	80.8	404	
98-95-3	Nitrobenzene	U	404	ug/kg	80.8	404	
78-59-1	Isophorone	U	404	ug/kg	80.8	404	
88-75-5	2-Nitrophenol	U	404	ug/kg	80.8	404	
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404	
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.8	404	
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.8	404	
65-85-0	Benzoic acid	U	808	ug/kg	202	808	
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4	
106-47-8	4-Chloroaniline	U	404	ug/kg	80.8	404	
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.8	404	
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.08	40.4	
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.8	404	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.8	404	
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.8	404	
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	404	ug/kg	80.8	404	
99-09-2	3-Nitroaniline	U	404	ug/kg	80.8	404	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 15:41	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s610414.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	404	ug/kg	80.8	404	
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404	
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4	
51-28-5	2,4-Dinitrophenol	U	808	ug/kg	154	808	UJ,SV7c
132-64-9	Dibenzofuran	U	404	ug/kg	80.8	404	
84-66-2	Diethylphthalate	U	404	ug/kg	80.8	404	
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4	
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.8	404	
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.8	404	
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	404	ug/kg	80.8	404	
122-66-7	Azobenzene	U	404	ug/kg	80.8	404	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.8	404	
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.8	404	
85-01-8	Phenanthrene		71.5	ug/kg	12.1	40.4	
120-12-7	Anthracene	J	10.6	ug/kg	8.08	40.4	
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.8	404	
206-44-0	Fluoranthene		184	ug/kg	12.1	40.4	
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.8	404	
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4	
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404	
218-01-9	Chrysene		69.0	ug/kg	12.1	40.4	
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.8	404	
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.8	404	
205-99-2	Benzo(b)fluoranthene		90.3	ug/kg	12.1	40.4	
207-08-9	Benzo(k)fluoranthene		41.0	ug/kg	12.1	40.4	
50-32-8	Benzo(a)pyrene		65.1	ug/kg	12.1	40.4	
193-39-5	Indeno(1,2,3-cd)pyrene		150	ug/kg	12.1	40.4	
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4	
191-24-2	Benzo(ghi)perylene	J	34.1	ug/kg	12.1	40.4	J,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.8	404	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.24	615	ug/kg		J
	Unknown Aldol Condensate	3.38	422	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418002	Date Received:	11/19/2009 08:45	%Moisture:	14.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13960	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 15:13	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	s610413.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.5	388	
108-95-2	Phenol	U	388	ug/kg	77.5	388	
95-57-8	2-Chlorophenol	U	388	ug/kg	77.5	388	
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.5	388	
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.5	388	
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.5	388	
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8	
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388	
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388	
87-86-5	Pentachlorophenol	U	388	ug/kg	96.9	388	
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8	
110-86-1	Pyridine	U	388	ug/kg	77.5	388	
62-53-3	Aniline	U	388	ug/kg	116	388	
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.5	388	
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.5	388	
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388	
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.5	388	
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.5	388	
95-48-7	o-Cresol	U	388	ug/kg	77.5	388	
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388	
67-72-1	Hexachloroethane	U	388	ug/kg	77.5	388	
98-95-3	Nitrobenzene	U	388	ug/kg	77.5	388	
78-59-1	Isophorone	U	388	ug/kg	77.5	388	
88-75-5	2-Nitrophenol	U	388	ug/kg	77.5	388	
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388	
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.5	388	
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.5	388	
65-85-0	Benzoic acid	U	775	ug/kg	194	775	
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8	
106-47-8	4-Chloroaniline	U	388	ug/kg	77.5	388	
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.5	388	
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.75	38.8	
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.5	388	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.5	388	
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.5	388	
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8	
88-74-4	2-Nitroaniline	U	388	ug/kg	77.5	388	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	388	ug/kg	77.5	388	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s610413.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	388	ug/kg	77.5	388	
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388	
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8	
51-28-5	2,4-Dinitrophenol	U	775	ug/kg	147	775	UJ,SV7c
132-64-9	Dibenzofuran	U	388	ug/kg	77.5	388	
84-66-2	Diethylphthalate	U	388	ug/kg	77.5	388	
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8	
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.5	388	
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.5	388	
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	388	ug/kg	77.5	388	
122-66-7	Azobenzene	U	388	ug/kg	77.5	388	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.5	388	
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.5	388	
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8	
120-12-7	Anthracene	U	38.8	ug/kg	7.75	38.8	
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.5	388	
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8	
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.5	388	
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8	
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388	
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.5	388	
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.5	388	
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8	
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8	
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8	
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8	
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.5	388	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	347	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Allquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s610412.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401	
108-95-2	Phenol	U	401	ug/kg	80.2	401	
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401	
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401	
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401	
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401	
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1	
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401	
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401	
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401	
129-00-0	Pyrene	J	39.3	ug/kg	12.0	40.1	
110-86-1	Pyridine	U	401	ug/kg	80.2	401	
62-53-3	Aniline	U	401	ug/kg	120	401	
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401	
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401	
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401	
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401	
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401	
95-48-7	o-Cresol	U	401	ug/kg	80.2	401	
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401	
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401	
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401	
78-59-1	Isophorone	U	401	ug/kg	80.2	401	
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401	
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401	
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401	
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401	
65-85-0	Benzoic acid	U	802	ug/kg	201	802	
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1	
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401	
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401	
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1	
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401	
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401	
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	401	ug/kg	80.2	401	
99-09-2	3-Nitroaniline	U	401	ug/kg	80.2	401	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418001	Date Received:	11/19/2009 08:45	%Moisture:	17
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13961	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 14:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s610412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401	
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401	
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1	
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802	UJ,SV7c
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401	
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401	
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1	
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401	
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401	
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401	
122-66-7	Azobenzene	U	401	ug/kg	80.2	401	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401	
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401	
85-01-8	Phenanthrene	J	17.1	ug/kg	12.0	40.1	
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1	
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401	
206-44-0	Fluoranthene		55.4	ug/kg	12.0	40.1	
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401	
56-55-3	Benzo(a)anthracene	J	17.8	ug/kg	12.0	40.1	
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401	
218-01-9	Chrysene	J	32.8	ug/kg	12.0	40.1	
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401	
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401	
205-99-2	Benzo(b)fluoranthene		46.2	ug/kg	12.0	40.1	
207-08-9	Benzo(k)fluoranthene	J	13.3	ug/kg	12.0	40.1	
50-32-8	Benzo(a)pyrene	J	27.7	ug/kg	12.0	40.1	
193-39-5	Indeno(1,2,3-cd)pyrene		140	ug/kg	12.0	40.1	
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1	
191-24-2	Benzo(ghi)perylene	J	21.1	ug/kg	12.0	40.1	J,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	342	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418007**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13962**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:34**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s610418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	381	ug/kg	76.1	381	
108-95-2	Phenol	U	381	ug/kg	76.1	381	
95-57-8	2-Chlorophenol	U	381	ug/kg	76.1	381	
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.1	381	
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.1	381	
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.1	381	
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1	
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381	
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381	
87-86-5	Pentachlorophenol	U	381	ug/kg	95.2	381	
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1	
110-86-1	Pyridine	U	381	ug/kg	76.1	381	
62-53-3	Aniline	U	381	ug/kg	114	381	
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.1	381	
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.1	381	
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381	
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.1	381	
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.1	381	
95-48-7	o-Cresol	U	381	ug/kg	76.1	381	
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381	
67-72-1	Hexachloroethane	U	381	ug/kg	76.1	381	
98-95-3	Nitrobenzene	U	381	ug/kg	76.1	381	
78-59-1	Isophorone	U	381	ug/kg	76.1	381	
88-75-5	2-Nitrophenol	U	381	ug/kg	76.1	381	
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381	
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.1	381	
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.1	381	
65-85-0	Benzoic acid	U	761	ug/kg	190	761	
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1	
106-47-8	4-Chloroaniline	U	381	ug/kg	76.1	381	
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.1	381	
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.61	38.1	
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.1	381	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.1	381	
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.1	381	
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	381	ug/kg	76.1	381	
99-09-2	3-Nitroaniline	U	381	ug/kg	76.1	381	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418007	Date Received:	11/19/2009 08:45	%Moisture:	12.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13962	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 17:34	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s6l0418.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	381	ug/kg	76.1	381	
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381	
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1	
51-28-5	2,4-Dinitrophenol	U	761	ug/kg	145	761	UJ,SV7c
132-64-9	Dibenzofuran	U	381	ug/kg	76.1	381	
84-66-2	Diethylphthalate	U	381	ug/kg	76.1	381	
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1	
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.1	381	
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.1	381	
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	381	ug/kg	76.1	381	
122-66-7	Azobenzene	U	381	ug/kg	76.1	381	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.1	381	
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.1	381	
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1	
120-12-7	Anthracene	U	38.1	ug/kg	7.61	38.1	
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.1	381	
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1	
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.1	381	
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1	
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381	
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1	
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.1	381	
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.1	381	
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1	
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1	
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1	
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1	
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.1	381	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.23	226	ug/kg		J
	Unknown Aldol Condensate	3.37	333	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418014	Date Received:	11/19/2009 08:45	%Moisture:	17.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13963	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 20:45	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s610425.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.0	400	
108-95-2	Phenol	U	400	ug/kg	80.0	400	
95-57-8	2-Chlorophenol	U	400	ug/kg	80.0	400	
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.0	400	
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.0	400	
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.0	400	
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0	
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400	
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400	
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400	
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0	
110-86-1	Pyridine	U	400	ug/kg	80.0	400	
62-53-3	Aniline	U	400	ug/kg	120	400	
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.0	400	
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.0	400	
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400	
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.0	400	
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.0	400	
95-48-7	o-Cresol	U	400	ug/kg	80.0	400	
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400	
67-72-1	Hexachloroethane	U	400	ug/kg	80.0	400	
98-95-3	Nitrobenzene	U	400	ug/kg	80.0	400	
78-59-1	Isophorone	U	400	ug/kg	80.0	400	
88-75-5	2-Nitrophenol	U	400	ug/kg	80.0	400	
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400	
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.0	400	
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.0	400	
65-85-0	Benzoic acid	U	800	ug/kg	200	800	
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0	
106-47-8	4-Chloroaniline	U	400	ug/kg	80.0	400	
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.0	400	
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.00	40.0	
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.0	400	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.0	400	
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.0	400	
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	400	ug/kg	80.0	400	
99-09-2	3-Nitroaniline	U	400	ug/kg	80.0	400	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418014**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13963**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**s610425.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	400	ug/kg	80.0	400	
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400	
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0	
51-28-5	2,4-Dinitrophenol	U	800	ug/kg	152	800	UJ,SV7c
132-64-9	Dibenzofuran	U	400	ug/kg	80.0	400	
84-66-2	Diethylphthalate	U	400	ug/kg	80.0	400	
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0	
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.0	400	
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.0	400	
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	400	ug/kg	80.0	400	
122-66-7	Azobenzene	U	400	ug/kg	80.0	400	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.0	400	
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.0	400	
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0	
120-12-7	Anthracene	U	40.0	ug/kg	8.00	40.0	
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.0	400	
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0	
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.0	400	
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0	
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400	
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.0	400	
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.0	400	
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0	
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0	
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0	
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0	
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.0	400	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	331	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s6l0422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	383	ug/kg	76.5	383	
108-95-2	Phenol	U	383	ug/kg	76.5	383	
95-57-8	2-Chlorophenol	U	383	ug/kg	76.5	383	
106-46-7	1,4-Dichlorobenzene	U	383	ug/kg	76.5	383	
621-64-7	N-Nitrosodipropylamine	U	383	ug/kg	76.5	383	
59-50-7	4-Chloro-3-methylphenol	U	383	ug/kg	76.5	383	
83-32-9	Acenaphthene	U	38.3	ug/kg	12.6	38.3	
121-14-2	2,4-Dinitrotoluene	U	383	ug/kg	38.3	383	
100-02-7	4-Nitrophenol	U	383	ug/kg	126	383	
87-86-5	Pentachlorophenol	U	383	ug/kg	95.6	383	
129-00-0	Pyrene	U	38.3	ug/kg	11.5	38.3	
110-86-1	Pyridine	U	383	ug/kg	76.5	383	
62-53-3	Aniline	U	383	ug/kg	115	383	
111-44-4	bis(2-Chloroethyl) ether	U	383	ug/kg	76.5	383	
541-73-1	1,3-Dichlorobenzene	U	383	ug/kg	76.5	383	
100-51-6	Benzyl alcohol	U	383	ug/kg	115	383	
95-50-1	1,2-Dichlorobenzene	U	383	ug/kg	76.5	383	
108-60-1	bis(2-Chloroisopropyl)ether	U	383	ug/kg	76.5	383	
95-48-7	o-Cresol	U	383	ug/kg	76.5	383	
65794-96-9	m,p-Cresols	U	383	ug/kg	115	383	
67-72-1	Hexachloroethane	U	383	ug/kg	76.5	383	
98-95-3	Nitrobenzene	U	383	ug/kg	76.5	383	
78-59-1	Isophorone	U	383	ug/kg	76.5	383	
88-75-5	2-Nitrophenol	U	383	ug/kg	76.5	383	
105-67-9	2,4-Dimethylphenol	U	383	ug/kg	134	383	
111-91-1	bis(2-Chloroethoxy)methane	U	383	ug/kg	76.5	383	
120-83-2	2,4-Dichlorophenol	U	383	ug/kg	76.5	383	
65-85-0	Benzoic acid	U	765	ug/kg	191	765	
91-20-3	Naphthalene	U	38.3	ug/kg	11.5	38.3	
106-47-8	4-Chloroaniline	U	383	ug/kg	76.5	383	
87-68-3	Hexachlorobutadiene	U	383	ug/kg	76.5	383	
91-57-6	2-Methylnaphthalene	U	38.3	ug/kg	7.65	38.3	
77-47-4	Hexachlorocyclopentadiene	U	383	ug/kg	76.5	383	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	383	ug/kg	76.5	383	
95-95-4	2,4,5-Trichlorophenol	U	383	ug/kg	76.5	383	
91-58-7	2-Chloronaphthalene	U	38.3	ug/kg	12.6	38.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	383	ug/kg	76.5	383	
99-09-2	3-Nitroaniline	U	383	ug/kg	76.5	383	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418011	Date Received:	11/19/2009 08:45	%Moisture:	12.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13964	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 19:23	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s6l0422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	383	ug/kg	76.5	383	
606-20-2	2,6-Dinitrotoluene	U	383	ug/kg	38.3	383	
208-96-8	Acenaphthylene	U	38.3	ug/kg	11.5	38.3	
51-28-5	2,4-Dinitrophenol	U	765	ug/kg	145	765	UJ,SV7c
132-64-9	Dibenzofuran	U	383	ug/kg	76.5	383	
84-66-2	Diethylphthalate	U	383	ug/kg	76.5	383	
86-73-7	Fluorene	U	38.3	ug/kg	11.5	38.3	
7005-72-3	4-Chlorophenylphenylether	U	383	ug/kg	76.5	383	
534-52-1	2-Methyl-4,6-dinitrophenol	U	383	ug/kg	76.5	383	
100-01-6	4-Nitroaniline	U	383	ug/kg	115	383	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	383	ug/kg	76.5	383	
122-66-7	Azobenzene	U	383	ug/kg	76.5	383	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	383	ug/kg	76.5	383	
118-74-1	Hexachlorobenzene	U	383	ug/kg	76.5	383	
85-01-8	Phenanthrene	U	38.3	ug/kg	11.5	38.3	
120-12-7	Anthracene	U	38.3	ug/kg	7.65	38.3	
84-74-2	Di-n-butylphthalate	U	383	ug/kg	76.5	383	
206-44-0	Fluoranthene	U	38.3	ug/kg	11.5	38.3	
85-68-7	Butylbenzylphthalate	U	383	ug/kg	76.5	383	
56-55-3	Benzo(a)anthracene	U	38.3	ug/kg	11.5	38.3	
91-94-1	3,3'-Dichlorobenzidine	U	383	ug/kg	115	383	
218-01-9	Chrysene	U	38.3	ug/kg	11.5	38.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	383	ug/kg	76.5	383	
117-84-0	Di-n-octylphthalate	U	383	ug/kg	76.5	383	
205-99-2	Benzo(b)fluoranthene	U	38.3	ug/kg	11.5	38.3	
207-08-9	Benzo(k)fluoranthene	U	38.3	ug/kg	11.5	38.3	
50-32-8	Benzo(a)pyrene	U	38.3	ug/kg	11.5	38.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.3	ug/kg	11.5	38.3	
53-70-3	Dibenzo(a,h)anthracene	U	38.3	ug/kg	11.5	38.3	
191-24-2	Benzo(ghi)perylene	U	38.3	ug/kg	11.5	38.3	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	383	ug/kg	76.5	383	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.24	160	ug/kg		J
	Unknown Aldol Condensate	3.38	344	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s610422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	712	ug/kg		J
	Unknown	17.12	259	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418005	Date Received:	11/19/2009 08:45	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13965	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 16:38	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s6l0416.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.0	375	
108-95-2	Phenol	U	375	ug/kg	75.0	375	
95-57-8	2-Chlorophenol	U	375	ug/kg	75.0	375	
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.0	375	
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.0	375	
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.0	375	
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5	
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375	
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375	
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375	
129-00-0	Pyrene	U	37.5	ug/kg	11.2	37.5	
110-86-1	Pyridine	U	375	ug/kg	75.0	375	
62-53-3	Aniline	U	375	ug/kg	112	375	
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.0	375	
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.0	375	
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375	
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.0	375	
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.0	375	
95-48-7	o-Cresol	U	375	ug/kg	75.0	375	
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375	
67-72-1	Hexachloroethane	U	375	ug/kg	75.0	375	
98-95-3	Nitrobenzene	U	375	ug/kg	75.0	375	
78-59-1	Isophorone	U	375	ug/kg	75.0	375	
88-75-5	2-Nitrophenol	U	375	ug/kg	75.0	375	
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375	
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.0	375	
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.0	375	
65-85-0	Benzoic acid	U	750	ug/kg	187	750	
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5	
106-47-8	4-Chloroaniline	U	375	ug/kg	75.0	375	
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.0	375	
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.50	37.5	
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.0	375	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.0	375	
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.0	375	
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	375	ug/kg	75.0	375	
99-09-2	3-Nitroaniline	U	375	ug/kg	75.0	375	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:38**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**s610416.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	375	ug/kg	75.0	375	
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375	
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5	
51-28-5	2,4-Dinitrophenol	U	750	ug/kg	142	750	UJ,SV7c
132-64-9	Dibenzofuran	U	375	ug/kg	75.0	375	
84-66-2	Diethylphthalate	U	375	ug/kg	75.0	375	
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5	
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.0	375	
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.0	375	
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	375	ug/kg	75.0	375	
122-66-7	Azobenzene	U	375	ug/kg	75.0	375	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.0	375	
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.0	375	
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5	
120-12-7	Anthracene	U	37.5	ug/kg	7.50	37.5	
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.0	375	
206-44-0	Fluoranthene	U	37.5	ug/kg	11.2	37.5	
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.0	375	
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5	
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375	
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.0	375	
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.0	375	
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5	
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5	
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5	
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5	
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.0	375	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	345	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418012	Date Received:	11/19/2009 08:45	%Moisture:	7.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13966	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 19:51	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s610423.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.0	360	
108-95-2	Phenol	U	360	ug/kg	72.0	360	
95-57-8	2-Chlorophenol	U	360	ug/kg	72.0	360	
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.0	360	
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.0	360	
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.0	360	
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0	
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360	
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360	
87-86-5	Pentachlorophenol	U	360	ug/kg	90.0	360	
129-00-0	Pyrene	J	17.4	ug/kg	10.8	36.0	
110-86-1	Pyridine	U	360	ug/kg	72.0	360	
62-53-3	Aniline	U	360	ug/kg	108	360	
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.0	360	
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.0	360	
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360	
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.0	360	
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.0	360	
95-48-7	o-Cresol	U	360	ug/kg	72.0	360	
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360	
67-72-1	Hexachloroethane	U	360	ug/kg	72.0	360	
98-95-3	Nitrobenzene	U	360	ug/kg	72.0	360	
78-59-1	Isophorone	U	360	ug/kg	72.0	360	
88-75-5	2-Nitrophenol	U	360	ug/kg	72.0	360	
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360	
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.0	360	
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.0	360	
65-85-0	Benzoic acid	U	720	ug/kg	180	720	
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0	
106-47-8	4-Chloroaniline	U	360	ug/kg	72.0	360	
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.0	360	
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.20	36.0	
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.0	360	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.0	360	
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.0	360	
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0	
88-74-4	2-Nitroaniline	U	360	ug/kg	72.0	360	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	360	ug/kg	72.0	360	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418012	Date Received:	11/19/2009 08:45	%Moisture:	7.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13966	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 19:51	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s610423.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	360	ug/kg	72.0	360	
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360	
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0	
51-28-5	2,4-Dinitrophenol	U	720	ug/kg	137	720	UJ,SV7c
132-64-9	Dibenzofuran	U	360	ug/kg	72.0	360	
84-66-2	Diethylphthalate	U	360	ug/kg	72.0	360	
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0	
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.0	360	
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.0	360	
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	360	ug/kg	72.0	360	
122-66-7	Azobenzene	U	360	ug/kg	72.0	360	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.0	360	
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.0	360	
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0	
120-12-7	Anthracene	U	36.0	ug/kg	7.20	36.0	
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.0	360	
206-44-0	Fluoranthene	J	24.2	ug/kg	10.8	36.0	
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.0	360	
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0	
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360	
218-01-9	Chrysene	J	13.0	ug/kg	10.8	36.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.0	360	
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.0	360	
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0	
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0	
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0	
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0	
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.0	360	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	324	ug/kg		JA
16327-22-3	1,4-Cyclooctadiene, (Z,Z)-	8.68	186	ug/kg	87	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418013	Date Received:	11/19/2009 08:45	%Moisture:	17.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13967	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 20:17	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s6l0424.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.7	404	
108-95-2	Phenol	U	404	ug/kg	80.7	404	
95-57-8	2-Chlorophenol	U	404	ug/kg	80.7	404	
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.7	404	
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.7	404	
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.7	404	
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4	
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404	
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404	
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404	
129-00-0	Pyrene	J	13.6	ug/kg	12.1	40.4	
110-86-1	Pyridine	U	404	ug/kg	80.7	404	
62-53-3	Aniline	U	404	ug/kg	121	404	
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.7	404	
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.7	404	
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404	
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.7	404	
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.7	404	
95-48-7	o-Cresol	U	404	ug/kg	80.7	404	
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404	
67-72-1	Hexachloroethane	U	404	ug/kg	80.7	404	
98-95-3	Nitrobenzene	U	404	ug/kg	80.7	404	
78-59-1	Isophorone	U	404	ug/kg	80.7	404	
88-75-5	2-Nitrophenol	U	404	ug/kg	80.7	404	
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404	
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.7	404	
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.7	404	
65-85-0	Benzoic acid	U	807	ug/kg	202	807	
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4	
106-47-8	4-Chloroaniline	U	404	ug/kg	80.7	404	
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.7	404	
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.07	40.4	
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.7	404	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.7	404	
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.7	404	
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	404	ug/kg	80.7	404	
99-09-2	3-Nitroaniline	U	404	ug/kg	80.7	404	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418013	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13967	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 20:17	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s610424.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	404	ug/kg	80.7	404	
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404	
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4	
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807	UJ,SV7c
132-64-9	Dibenzofuran	U	404	ug/kg	80.7	404	
84-66-2	Diethylphthalate	U	404	ug/kg	80.7	404	
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4	
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.7	404	
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.7	404	
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	404	ug/kg	80.7	404	
122-66-7	Azobenzene	U	404	ug/kg	80.7	404	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.7	404	
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.7	404	
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4	
120-12-7	Anthracene	U	40.4	ug/kg	8.07	40.4	
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.7	404	
206-44-0	Fluoranthene	J	18.3	ug/kg	12.1	40.4	
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.7	404	
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4	
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404	
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4	
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.7	404	
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.7	404	
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4	
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4	
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4	
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4	
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4	
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.7	404	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	280	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418010	Date Received:	11/19/2009 08:45	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13968	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 18:56	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s610421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.5	363	
108-95-2	Phenol	U	363	ug/kg	72.5	363	
95-57-8	2-Chlorophenol	U	363	ug/kg	72.5	363	
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.5	363	
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.5	363	
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.5	363	
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3	
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363	
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363	
87-86-5	Pentachlorophenol	U	363	ug/kg	90.7	363	
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3	
110-86-1	Pyridine	U	363	ug/kg	72.5	363	
62-53-3	Aniline	U	363	ug/kg	109	363	
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.5	363	
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.5	363	
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363	
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.5	363	
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.5	363	
95-48-7	o-Cresol	U	363	ug/kg	72.5	363	
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363	
67-72-1	Hexachloroethane	U	363	ug/kg	72.5	363	
98-95-3	Nitrobenzene	U	363	ug/kg	72.5	363	
78-59-1	Isophorone	U	363	ug/kg	72.5	363	
88-75-5	2-Nitrophenol	U	363	ug/kg	72.5	363	
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363	
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.5	363	
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.5	363	
65-85-0	Benzoic acid	U	725	ug/kg	181	725	
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3	
106-47-8	4-Chloroaniline	U	363	ug/kg	72.5	363	
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.5	363	
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.25	36.3	
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.5	363	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.5	363	
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.5	363	
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	363	ug/kg	72.5	363	
99-09-2	3-Nitroaniline	U	363	ug/kg	72.5	363	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418010	Date Received:	11/19/2009 08:45	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13968	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 18:56	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s610421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	363	ug/kg	72.5	363	
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363	
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3	
51-28-5	2,4-Dinitrophenol	U	725	ug/kg	138	725	UJ,SV7c
132-64-9	Dibenzofuran	U	363	ug/kg	72.5	363	
84-66-2	Diethylphthalate	U	363	ug/kg	72.5	363	
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3	
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.5	363	
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.5	363	
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	363	ug/kg	72.5	363	
122-66-7	Azobenzene	U	363	ug/kg	72.5	363	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.5	363	
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.5	363	
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3	
120-12-7	Anthracene	U	36.3	ug/kg	7.25	36.3	
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.5	363	
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3	
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.5	363	
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3	
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363	
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.5	363	
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.5	363	
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3	
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3	
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3	
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3	
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.5	363	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	435	ug/kg		J
	Unknown Aldol Condensate	3.37	325	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 18:56	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s610421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	741	ug/kg		J
	Unknown	17.12	269	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418009**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**13.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13969**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:29**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s610420.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.5	382	
108-95-2	Phenol	U	382	ug/kg	76.5	382	
95-57-8	2-Chlorophenol	U	382	ug/kg	76.5	382	
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.5	382	
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.5	382	
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.5	382	
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2	
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382	
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382	
87-86-5	Pentachlorophenol	U	382	ug/kg	95.6	382	
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2	
110-86-1	Pyridine	U	382	ug/kg	76.5	382	
62-53-3	Aniline	U	382	ug/kg	115	382	
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.5	382	
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.5	382	
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382	
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.5	382	
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.5	382	
95-48-7	o-Cresol	U	382	ug/kg	76.5	382	
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382	
67-72-1	Hexachloroethane	U	382	ug/kg	76.5	382	
98-95-3	Nitrobenzene	U	382	ug/kg	76.5	382	
78-59-1	Isophorone	U	382	ug/kg	76.5	382	
88-75-5	2-Nitrophenol	U	382	ug/kg	76.5	382	
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382	
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.5	382	
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.5	382	
65-85-0	Benzoic acid	U	765	ug/kg	191	765	
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2	
106-47-8	4-Chloroaniline	U	382	ug/kg	76.5	382	
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.5	382	
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.65	38.2	
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.5	382	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.5	382	
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.5	382	
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	382	ug/kg	76.5	382	
99-09-2	3-Nitroaniline	U	382	ug/kg	76.5	382	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418009	Date Received:	11/19/2009 08:45	%Moisture:	13.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13969	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 18:29	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s6l0420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	382	ug/kg	76.5	382	
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382	
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2	
51-28-5	2,4-Dinitrophenol	U	765	ug/kg	145	765	UJ,SV7c
132-64-9	Dibenzofuran	U	382	ug/kg	76.5	382	
84-66-2	Diethylphthalate	U	382	ug/kg	76.5	382	
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2	
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.5	382	
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.5	382	
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	382	ug/kg	76.5	382	
122-66-7	Azobenzene	U	382	ug/kg	76.5	382	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.5	382	
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.5	382	
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2	
120-12-7	Anthracene	U	38.2	ug/kg	7.65	38.2	
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.5	382	
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2	
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.5	382	
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2	
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382	
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.5	382	
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.5	382	
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2	
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2	
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2	
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2	
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.5	382	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	316	ug/kg		JA
	Unknown	16.92	431	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 18:29	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s610420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	17.12	374	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418006	Date Received:	11/19/2009 08:45	%Moisture:	10.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13970	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 17:06	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s610417.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.5	372	
108-95-2	Phenol	U	372	ug/kg	74.5	372	
95-57-8	2-Chlorophenol	U	372	ug/kg	74.5	372	
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.5	372	
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.5	372	
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.5	372	
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2	
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372	
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372	
87-86-5	Pentachlorophenol	U	372	ug/kg	93.1	372	
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2	
110-86-1	Pyridine	U	372	ug/kg	74.5	372	
62-53-3	Aniline	U	372	ug/kg	112	372	
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.5	372	
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.5	372	
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372	
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.5	372	
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.5	372	
95-48-7	o-Cresol	U	372	ug/kg	74.5	372	
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372	
67-72-1	Hexachloroethane	U	372	ug/kg	74.5	372	
98-95-3	Nitrobenzene	U	372	ug/kg	74.5	372	
78-59-1	Isophorone	U	372	ug/kg	74.5	372	
88-75-5	2-Nitrophenol	U	372	ug/kg	74.5	372	
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372	
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.5	372	
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.5	372	
65-85-0	Benzoic acid	U	745	ug/kg	186	745	
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2	
106-47-8	4-Chloroaniline	U	372	ug/kg	74.5	372	
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.5	372	
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.45	37.2	
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.5	372	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.5	372	
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.5	372	
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	372	ug/kg	74.5	372	
99-09-2	3-Nitroaniline	U	372	ug/kg	74.5	372	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13970**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:06**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	372	ug/kg	74.5	372	
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372	
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2	
51-28-5	2,4-Dinitrophenol	U	745	ug/kg	142	745	UJ,SV7c
132-64-9	Dibenzofuran	U	372	ug/kg	74.5	372	
84-66-2	Diethylphthalate	U	372	ug/kg	74.5	372	
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2	
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.5	372	
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.5	372	
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	372	ug/kg	74.5	372	
122-66-7	Azobenzene	U	372	ug/kg	74.5	372	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.5	372	
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.5	372	
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2	
120-12-7	Anthracene	U	37.2	ug/kg	7.45	37.2	
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.5	372	
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2	
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.5	372	
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2	
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372	
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.5	372	
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.5	372	
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2	
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2	
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2	
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2	
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.5	372	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.22	942	ug/kg		J
	Unknown Aldol Condensate	3.37	353	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 17:06	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s6l0417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.93	1010	ug/kg		J
	Unknown	17.12	535	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418008	Date Received:	11/19/2009 08:45	%Moisture:	19
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13971	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/05/2009 13:41	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s610508.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	411	ug/kg	82.2	411	
108-95-2	Phenol	U	411	ug/kg	82.2	411	
95-57-8	2-Chlorophenol	U	411	ug/kg	82.2	411	
106-46-7	1,4-Dichlorobenzene	U	411	ug/kg	82.2	411	
621-64-7	N-Nitrosodipropylamine	U	411	ug/kg	82.2	411	
59-50-7	4-Chloro-3-methylphenol	U	411	ug/kg	82.2	411	
83-32-9	Acenaphthene	U	41.1	ug/kg	13.6	41.1	
121-14-2	2,4-Dinitrotoluene	U	411	ug/kg	41.1	411	
100-02-7	4-Nitrophenol	U	411	ug/kg	136	411	
87-86-5	Pentachlorophenol	U	411	ug/kg	103	411	
129-00-0	Pyrene	U	41.1	ug/kg	12.3	41.1	
110-86-1	Pyridine	U	411	ug/kg	82.2	411	
62-53-3	Aniline	U	411	ug/kg	123	411	
111-44-4	bis(2-Chloroethyl) ether	U	411	ug/kg	82.2	411	
541-73-1	1,3-Dichlorobenzene	U	411	ug/kg	82.2	411	
100-51-6	Benzyl alcohol	U	411	ug/kg	123	411	
95-50-1	1,2-Dichlorobenzene	U	411	ug/kg	82.2	411	
108-60-1	bis(2-Chloroisopropyl)ether	U	411	ug/kg	82.2	411	
95-48-7	o-Cresol	U	411	ug/kg	82.2	411	
65794-96-9	m,p-Cresols	U	411	ug/kg	123	411	
67-72-1	Hexachloroethane	U	411	ug/kg	82.2	411	
98-95-3	Nitrobenzene	U	411	ug/kg	82.2	411	
78-59-1	Isophorone	U	411	ug/kg	82.2	411	
88-75-5	2-Nitrophenol	U	411	ug/kg	82.2	411	
105-67-9	2,4-Dimethylphenol	U	411	ug/kg	144	411	
111-91-1	bis(2-Chloroethoxy)methane	U	411	ug/kg	82.2	411	
120-83-2	2,4-Dichlorophenol	U	411	ug/kg	82.2	411	
65-85-0	Benzoic acid	U	822	ug/kg	205	822	
91-20-3	Naphthalene	U	41.1	ug/kg	12.3	41.1	
106-47-8	4-Chloroaniline	U	411	ug/kg	82.2	411	
87-68-3	Hexachlorobutadiene	U	411	ug/kg	82.2	411	
91-57-6	2-Methylnaphthalene	U	41.1	ug/kg	8.22	41.1	
77-47-4	Hexachlorocyclopentadiene	U	411	ug/kg	82.2	411	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	411	ug/kg	82.2	411	
95-95-4	2,4,5-Trichlorophenol	U	411	ug/kg	82.2	411	
91-58-7	2-Chloronaphthalene	U	41.1	ug/kg	13.6	41.1	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	411	ug/kg	82.2	411	
99-09-2	3-Nitroaniline	U	411	ug/kg	82.2	411	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418008**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**19**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13971**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 13:41**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s610508.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	411	ug/kg	82.2	411	
606-20-2	2,6-Dinitrotoluene	U	411	ug/kg	41.1	411	
208-96-8	Acenaphthylene	U	41.1	ug/kg	12.3	41.1	
51-28-5	2,4-Dinitrophenol	U	822	ug/kg	156	822	UJ,SV7c
132-64-9	Dibenzofuran	U	411	ug/kg	82.2	411	
84-66-2	Diethylphthalate	U	411	ug/kg	82.2	411	
86-73-7	Fluorene	U	41.1	ug/kg	12.3	41.1	
7005-72-3	4-Chlorophenylphenylether	U	411	ug/kg	82.2	411	
534-52-1	2-Methyl-4,6-dinitrophenol	U	411	ug/kg	82.2	411	
100-01-6	4-Nitroaniline	U	411	ug/kg	123	411	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	411	ug/kg	82.2	411	
122-66-7	Azobenzene	U	411	ug/kg	82.2	411	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	411	ug/kg	82.2	411	
118-74-1	Hexachlorobenzene	U	411	ug/kg	82.2	411	
85-01-8	Phenanthrene	U	41.1	ug/kg	12.3	41.1	
120-12-7	Anthracene	U	41.1	ug/kg	8.22	41.1	
84-74-2	Di-n-butylphthalate	U	411	ug/kg	82.2	411	
206-44-0	Fluoranthene	U	41.1	ug/kg	12.3	41.1	
85-68-7	Butylbenzylphthalate	U	411	ug/kg	82.2	411	
56-55-3	Benzo(a)anthracene	U	41.1	ug/kg	12.3	41.1	
91-94-1	3,3'-Dichlorobenzidine	U	411	ug/kg	123	411	
218-01-9	Chrysene	U	41.1	ug/kg	12.3	41.1	
117-81-7	bis(2-Ethylhexyl)phthalate	U	411	ug/kg	82.2	411	
117-84-0	Di-n-octylphthalate	U	411	ug/kg	82.2	411	
205-99-2	Benzo(b)fluoranthene	U	41.1	ug/kg	12.3	41.1	
207-08-9	Benzo(k)fluoranthene	U	41.1	ug/kg	12.3	41.1	
50-32-8	Benzo(a)pyrene	U	41.1	ug/kg	12.3	41.1	
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.1	ug/kg	12.3	41.1	
53-70-3	Dibenzo(a,h)anthracene	U	41.1	ug/kg	12.3	41.1	
191-24-2	Benzo(ghi)perylene	U	41.1	ug/kg	12.3	41.1	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	411	ug/kg	82.2	411	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.36	201	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418016	Date Received:	11/19/2009 08:45	%Moisture:	17.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3913	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/05/2009 14:08	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s610509.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401	UJ,SV7c
108-95-2	Phenol	U	401	ug/kg	80.2	401	
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401	
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401	
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401	
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401	
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1	
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401	
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401	
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401	
129-00-0	Pyrene		56.6	ug/kg	12.0	40.1	
110-86-1	Pyridine	U	401	ug/kg	80.2	401	UJ,SV7c
62-53-3	Aniline	U	401	ug/kg	120	401	
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401	
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401	
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401	
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401	
95-48-7	o-Cresol	U	401	ug/kg	80.2	401	
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401	
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401	
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401	
78-59-1	Isophorone	U	401	ug/kg	80.2	401	
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401	
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401	
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401	
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401	
65-85-0	Benzoic acid	U	802	ug/kg	201	802	
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1	
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401	
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401	
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1	
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401	
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401	
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	401	ug/kg	80.2	401	
99-09-2	3-Nitroaniline	U	401	ug/kg	80.2	401	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418016	Date Received:	11/19/2009 08:45	%Moisture:	17.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3913	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/05/2009 14:08	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s610509.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401	
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401	
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1	
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802	UJ,SV7c
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401	
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401	
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1	
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401	
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401	
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401	
122-66-7	Azobenzene	U	401	ug/kg	80.2	401	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401	
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401	
85-01-8	Phenanthrene	J	24.3	ug/kg	12.0	40.1	
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1	
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401	
206-44-0	Fluoranthene		79.7	ug/kg	12.0	40.1	
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401	
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1	
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401	
218-01-9	Chrysene		47.7	ug/kg	12.0	40.1	
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401	
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401	
205-99-2	Benzo(b)fluoranthene		43.7	ug/kg	12.0	40.1	
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1	
50-32-8	Benzo(a)pyrene	J	20.9	ug/kg	12.0	40.1	
193-39-5	Indeno(1,2,3-cd)pyrene		140	ug/kg	12.0	40.1	
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1	
191-24-2	Benzo(ghi)perylene	J	21.4	ug/kg	12.0	40.1	
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	221	ug/kg		JA

ETM
1/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418015	Date Received:	11/19/2009 08:45	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3914	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 21:13	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s610426.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382	UJ,SV7c
108-95-2	Phenol	U	382	ug/kg	76.4	382	
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382	
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382	
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382	
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382	
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2	
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382	
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382	
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382	
129-00-0	Pyrene	J	13.3	ug/kg	11.5	38.2	
110-86-1	Pyridine	U	382	ug/kg	76.4	382	UJ,SV7c
62-53-3	Aniline	U	382	ug/kg	115	382	
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382	
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382	
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382	
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382	
95-48-7	o-Cresol	U	382	ug/kg	76.4	382	
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382	
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382	
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382	
78-59-1	Isophorone	U	382	ug/kg	76.4	382	
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382	
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382	
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382	
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382	
65-85-0	Benzoic acid	U	764	ug/kg	191	764	
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2	
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382	
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382	
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2	
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382	
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382	
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	382	ug/kg	76.4	382	
99-09-2	3-Nitroaniline	U	382	ug/kg	76.4	382	

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418015	Date Received:	11/19/2009 08:45	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3914	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 21:13	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s610426.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	382	ug/kg	76.4	382	
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382	
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2	
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764	UJ,SV7c
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382	
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382	
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2	
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382	
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382	
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382	
122-66-7	Azobenzene	U	382	ug/kg	76.4	382	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382	
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382	
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2	
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2	
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.4	382	
206-44-0	Fluoranthene	J	15.3	ug/kg	11.5	38.2	
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382	
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2	
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382	
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382	
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382	
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2	
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2	
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2	
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2	
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2	
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.22	198	ug/kg		J
	Unknown Aldol Condensate	3.37	275	ug/kg		JA

ETM
1/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 21:13	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s610426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	643	ug/kg		J
	Unknown	17.12	202	ug/kg		J

ETM
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DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-576 VALIDATION DATE: 1/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/26/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	27.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13958	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 19:05	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	060f6001.d	**Column:**	1 CLP1	**Level:**	LOW
	060b6001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.57	ug/kg	1.52	4.57	1
11104-28-2	Aroclor-1221	U	4.57	ug/kg	1.52	4.57	1
11141-16-5	Aroclor-1232	U	4.57	ug/kg	1.52	4.57	1
53469-21-9	Aroclor-1242	U	4.57	ug/kg	1.52	4.57	1
12672-29-6	Aroclor-1248	U	4.57	ug/kg	1.52	4.57	1
11097-69-1	Aroclor-1254	J	1.80	ug/kg	1.52	4.57	1
11096-82-5	Aroclor-1260	U	4.57	ug/kg	1.52	4.57	1

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13959	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 18:31	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	057f5701.d	**Column:**	1 CLP1	**Level:**	LOW
	057b5701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.04	ug/kg	1.35	4.04	1
11104–28–2	Aroclor–1221	U	4.04	ug/kg	1.35	4.04	1
11141–16–5	Aroclor–1232	U	4.04	ug/kg	1.35	4.04	1
53469–21–9	Aroclor–1242	U	4.04	ug/kg	1.35	4.04	1
12672–29–6	Aroclor–1248	U	4.04	ug/kg	1.35	4.04	1
11097–69–1	Aroclor–1254	U	4.04	ug/kg	1.35	4.04	1
11096–82–5	Aroclor–1260	U	4.04	ug/kg	1.35	4.04	1

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	14.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13960	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 17:58	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	054f5401.d	**Column:**	1 CLP1	**Level:**	LOW
	054b5401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.88	ug/kg	1.29	3.88	1
11104-28-2	Aroclor-1221	U	3.88	ug/kg	1.29	3.88	1
11141-16-5	Aroclor-1232	U	3.88	ug/kg	1.29	3.88	1
53469-21-9	Aroclor-1242	U	3.88	ug/kg	1.29	3.88	1
12672-29-6	Aroclor-1248	U	3.88	ug/kg	1.29	3.88	1
11097-69-1	Aroclor-1254	U	3.88	ug/kg	1.29	3.88	1
11096-82-5	Aroclor-1260	U	3.88	ug/kg	1.29	3.88	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13961	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/03/2009 17:47	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	053f5301.d	**Column:**	1 CLP1	**Level:**	LOW
	053b5301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	20.0	ug/kg	6.66	20.0	1
11104-28-2	Aroclor-1221	U	20.0	ug/kg	6.66	20.0	1
11141-16-5	Aroclor-1232	U	20.0	ug/kg	6.66	20.0	1
53469-21-9	Aroclor-1242	U	20.0	ug/kg	6.66	20.0	1
12672-29-6	Aroclor-1248	U	20.0	ug/kg	6.66	20.0	1
11097-69-1	Aroclor-1254	U	20.0	ug/kg	6.66	20.0	1
11096-82-5	Aroclor-1260	U	20.0	ug/kg	6.66	20.0	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418007**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13962**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:38**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**063f6301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	063b6301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254		5.20	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260		6.10	ug/kg	1.26	3.79	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418014	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13963	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 21:18	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	072f7201.d	**Column:**	1 CLP1	**Level:**	LOW
	072b7201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.02	ug/kg	1.34	4.02	1
11104–28–2	Aroclor–1221	U	4.02	ug/kg	1.34	4.02	1
11141–16–5	Aroclor–1232	U	4.02	ug/kg	1.34	4.02	1
53469–21–9	Aroclor–1242	U	4.02	ug/kg	1.34	4.02	1
12672–29–6	Aroclor–1248	U	4.02	ug/kg	1.34	4.02	1
11097–69–1	Aroclor–1254	U	4.02	ug/kg	1.34	4.02	1
11096–82–5	Aroclor–1260	U	4.02	ug/kg	1.34	4.02	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13964	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:45	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	069f6901.d	**Column:**	1 CLP1	**Level:**	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.83	ug/kg	1.27	3.83	1
11104–28–2	Aroclor–1221	U	3.83	ug/kg	1.27	3.83	1
11141–16–5	Aroclor–1232	U	3.83	ug/kg	1.27	3.83	1
53469–21–9	Aroclor–1242	U	3.83	ug/kg	1.27	3.83	1
12672–29–6	Aroclor–1248	U	3.83	ug/kg	1.27	3.83	1
11097–69–1	Aroclor–1254	U	3.83	ug/kg	1.27	3.83	1
11096–82–5	Aroclor–1260	J	2.20	ug/kg	1.27	3.83	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13965	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 19:16	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	061f6101.d	**Column:**	1 CLP1	**Level:**	LOW
	061b6101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.75	ug/kg	1.25	3.75	1
11104-28-2	Aroclor-1221	U	3.75	ug/kg	1.25	3.75	1
11141-16-5	Aroclor-1232	U	3.75	ug/kg	1.25	3.75	1
53469-21-9	Aroclor-1242	U	3.75	ug/kg	1.25	3.75	1
12672-29-6	Aroclor-1248	U	3.75	ug/kg	1.25	3.75	1
11097-69-1	Aroclor-1254	U	3.75	ug/kg	1.25	3.75	1
11096-82-5	Aroclor-1260	J	2.80	ug/kg	1.25	3.75	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418012	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13966	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:56	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	JP	2.90	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	P	3.90	ug/kg	1.20	3.60	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13967**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:07**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**071f7101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	071b7101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.04	ug/kg	1.34	4.04	1
11104-28-2	Aroclor-1221	U	4.04	ug/kg	1.34	4.04	1
11141-16-5	Aroclor-1232	U	4.04	ug/kg	1.34	4.04	1
53469-21-9	Aroclor-1242	U	4.04	ug/kg	1.34	4.04	1
12672-29-6	Aroclor-1248	U	4.04	ug/kg	1.34	4.04	1
11097-69-1	Aroclor-1254	U	4.04	ug/kg	1.34	4.04	1
11096-82-5	Aroclor-1260	U	4.04	ug/kg	1.34	4.04	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:11	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	066f6601.d	**Column:**	1 CLP1	**Level:**	LOW
	066b6601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.62	ug/kg	1.21	3.62	1
11104-28-2	Aroclor-1221	U	3.62	ug/kg	1.21	3.62	1
11141-16-5	Aroclor-1232	U	3.62	ug/kg	1.21	3.62	1
53469-21-9	Aroclor-1242	U	3.62	ug/kg	1.21	3.62	1
12672-29-6	Aroclor-1248	U	3.62	ug/kg	1.21	3.62	1
11097-69-1	Aroclor-1254	U	3.62	ug/kg	1.21	3.62	1
11096-82-5	Aroclor-1260	U	3.62	ug/kg	1.21	3.62	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:00	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.82	ug/kg	1.27	3.82	1
11104-28-2	Aroclor-1221	U	3.82	ug/kg	1.27	3.82	1
11141-16-5	Aroclor-1232	U	3.82	ug/kg	1.27	3.82	1
53469-21-9	Aroclor-1242	U	3.82	ug/kg	1.27	3.82	1
12672-29-6	Aroclor-1248	U	3.82	ug/kg	1.27	3.82	1
11097-69-1	Aroclor-1254	U	3.82	ug/kg	1.27	3.82	1
11096-82-5	Aroclor-1260	U	3.82	ug/kg	1.27	3.82	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13970	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 19:27	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	062f6201.d	**Column:**	1 CLP1	**Level:**	LOW
	062b6201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.72	ug/kg	1.24	3.72	1
11104–28–2	Aroclor–1221	U	3.72	ug/kg	1.24	3.72	1
11141–16–5	Aroclor–1232	U	3.72	ug/kg	1.24	3.72	1
53469–21–9	Aroclor–1242	U	3.72	ug/kg	1.24	3.72	1
12672–29–6	Aroclor–1248	U	3.72	ug/kg	1.24	3.72	1
11097–69–1	Aroclor–1254	JP	2.80	ug/kg	1.24	3.72	1
11096–82–5	Aroclor–1260	J	1.80	ug/kg	1.24	3.72	2

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 19:49	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	064f6401.d	**Column:**	1 CLP1	**Level:**	LOW
	064b6401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.11	ug/kg	1.37	4.11	1
11104-28-2	Aroclor-1221	U	4.11	ug/kg	1.37	4.11	1
11141-16-5	Aroclor-1232	U	4.11	ug/kg	1.37	4.11	1
53469-21-9	Aroclor-1242	U	4.11	ug/kg	1.37	4.11	1
12672-29-6	Aroclor-1248	U	4.11	ug/kg	1.37	4.11	1
11097-69-1	Aroclor-1254	U	4.11	ug/kg	1.37	4.11	1
11096-82-5	Aroclor-1260	U	4.11	ug/kg	1.37	4.11	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418016**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–10–3913**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:40**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**074f7401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	074b7401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.00	ug/kg	1.33	4.00	1
11104–28–2	Aroclor–1221	U	4.00	ug/kg	1.33	4.00	1
11141–16–5	Aroclor–1232	U	4.00	ug/kg	1.33	4.00	1
53469–21–9	Aroclor–1242	U	4.00	ug/kg	1.33	4.00	1
12672–29–6	Aroclor–1248	U	4.00	ug/kg	1.33	4.00	1
11097–69–1	Aroclor–1254	U	4.00	ug/kg	1.33	4.00	1
11096–82–5	Aroclor–1260	U	4.00	ug/kg	1.33	4.00	1

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 21:29	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	073f7301.d	**Column:**	1 CLP1	**Level:**	LOW
	073b7301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.80	ug/kg	1.27	3.80	1
11104-28-2	Aroclor-1221	U	3.80	ug/kg	1.27	3.80	1
11141-16-5	Aroclor-1232	U	3.80	ug/kg	1.27	3.80	1
53469-21-9	Aroclor-1242	U	3.80	ug/kg	1.27	3.80	1
12672-29-6	Aroclor-1248	U	3.80	ug/kg	1.27	3.80	1
11097-69-1	Aroclor-1254	J	3.70	ug/kg	1.27	3.80	1
11096-82-5	Aroclor-1260		4.80	ug/kg	1.27	3.80	1

ETM
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Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-576

REQUEST NUMBER: 10-576

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241418%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13961	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13961	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13960	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13960	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13959	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13959	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13958	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13958	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13965	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13965	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13970	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13970	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13962	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13962	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13971	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13971	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13969	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13969	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13968	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13968	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13964	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13964	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13966	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13966	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13967	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13967	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13963	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13963	1	AMBER GLASS	8270C+8082	Ice	S
RE03-10-3914	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-3914	1	AMBER GLASS	8270C+8082	Ice	S
RE03-10-3913	1	SEPTUM AMBER GLASS	8260B	Ice	S

10-576

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/18/09	1400	Patricia Dover-Dept P.H. Client		11-19-09	08:45
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

R E03-09-14032 1 sept Amber 8260B Ice S

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-576
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009
TURNAROUND/REPORT DUE: 12/18/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	
		1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	SW-846:8260B	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	
		1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	
		1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	SW-846:8270C	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	[illegible]	S	[illegible]	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	
		1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	8260 B	1	RE03-09-38032 S		11/17/09	

Final Page of REQUEST NUMBER 10-576

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 24, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241418
SDG: 10-576

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 19, 2009, and analyzed for GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-576
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241418
SDG: 10-576

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Sample Data Summary.....336
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Quality Control Data.....953
Miscellaneous Data.....986

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241418
SDG # : 10-576

November 24, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 19, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241418001	RE03-09-13961
241418002	RE03-09-13960
241418003	RE03-09-13959
241418004	RE03-09-13958
241418005	RE03-09-13965
241418006	RE03-09-13970
241418007	RE03-09-13962
241418008	RE03-09-13971
241418009	RE03-09-13969
241418010	RE03-09-13968
241418011	RE03-09-13964
241418012	RE03-09-13966
241418013	RE03-09-13967
241418014	RE03-09-13963
241418015	RE03-10-3914
241418016	RE03-10-3913
241418017	RE03-09-14032

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for Valerie Davis

Project Manager

GEL Laboratories PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843.556.8171 F 843.766.1178 www.gel.com

List of current GEL Certifications as of 24 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-576

REQUEST NUMBER: 10-576

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 241418%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13961	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13961	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13960	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13960	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13959	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13959	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13958	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13958	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13965	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13965	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13970	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13970	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13962	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13962	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13971	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13971	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13969	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13969	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13968	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13968	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13964	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13964	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13966	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13966	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13967	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13967	1	AMBER GLASS	8270C+8082	Ice	S
RE03-09-13963	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13963	1	AMBER GLASS	8270C+8082	Ice	S
RE03-10-3914	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-3914	1	AMBER GLASS	8270C+8082	Ice	S
RE03-10-3913	1	SEPTUM AMBER GLASS	8260B	Ice	S

10-576

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/18/09	1400	Patricia Doyer-Dent	P.D. Dent	11-19-09	0845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

RE03-09-14032 1 sept Amber 8260B Ice S

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-576
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009
TURNAROUND/REPORT DUE: 12/18/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	ONTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	
		1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	SW-846:8260B	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	
		1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	
		1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	SW-846:8270C	1	RE03-09-13958	S	11/17/2009	
		1	RE03-09-13959	S	11/17/2009	
		1	RE03-09-13960	S	11/17/2009	
		1	RE03-09-13961	S	11/17/2009	
		1	RE03-09-13962	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-576

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-13963	S	11/17/2009	
		1	RE03-09-13964	S	11/17/2009	
		1	RE03-09-13965	S	11/17/2009	
		1	RE03-09-13966	S	11/17/2009	
		1	RE03-09-13967	S	11/17/2009	
		1	RE03-09-13968	S	11/17/2009	
		1	RE03-09-13969	S	11/17/2009	
		1	RE03-09-13970	S	11/17/2009	
		1	RE03-09-13971	S	11/17/2009	
		1	RE03-10-3913	S	11/17/2009	
		1	RE03-10-3914	S	11/17/2009	
	8260 B	1	RE03-09-38032	S	11/17/09	

Final Page of REQUEST NUMBER 10-576

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-576**
Received By:Patricia Dover-Dent	**Date Received:November 19, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **2-4,15,16**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S
7209 7848 9524 2C
7209 7848 9476 3C
7209 7848 9465 4C
7209 7848 9487 4C
7209 7848 9498 4C
7209 7848 9502 4C
7209 7848 9513 4C
7209 7848 9546 15C
7209 7848 9535 16C

PM review: Initials _____ Date 11/20/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 37.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

2C

FedEx Express

1 of 3
TRK# 0201 7209 7848 9524
THU - 19NOV A1
PRIORITY OVERNIGHT

MM MASTER MM

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

3C

FedEx Express

3 of 3
MPS# 0263 7209 7848 9476
THU - 19NOV A1
PRIORITY OVERNIGHT

Mstr# 7209 7848 9454 0201

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4C

FedEx Express

2 of 3
MPS# 0263 7209 7848 9465
THU - 19NOV A1
PRIORITY OVERNIGHT

Mstr# 7209 7848 9454 0201

CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4C

FedEx Express

1 of 2
TRK# 0201 7209 7848 9487
THU - 19NOV A1
PRIORITY OVERNIGHT

MM MASTER MM

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9498
Mstr# 7209 7848 9487 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9502
MM MASTER MM

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NMT V3.1-03

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

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FedEx Express

2 of 2
MPS# 0263 7209 7848 9513
Mstr# 7209 7848 9502 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

CHSA

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CHS

IN ID: SAFA (505)665-9968
ENE VALDEZ
ALAMOS NATL LAB.
BLDG 1237 DPU 03

ALAMOS, NM 87545
ED STATES US

SHIP DATE: 18NOV09
ACTWGT: 36.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

ALERIE DAVIS
ENERAL ENGINEERING LAB
040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9546
Mstr# 7209 7848 9524 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

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SC-US
CHS

SHIPPING

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

16C

FedEx Express

2 of 3

MPS# 0263 7209 7848 9535

Mstr# 7209 7848 9524 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRJT V3 09/09

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-576

Method/Analysis Information

Procedure:	**Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer**
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	926499
Prep Batch Number:	926498

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241418001	RE03-09-13961
241418002	RE03-09-13960
241418003	RE03-09-13959
241418004	RE03-09-13958
241418005	RE03-09-13965
241418006	RE03-09-13970
241418007	RE03-09-13962
241418008	RE03-09-13971
241418009	RE03-09-13969
241418010	RE03-09-13968
241418011	RE03-09-13964
241418012	RE03-09-13966
241418013	RE03-09-13967
241418014	RE03-09-13963
241418015	RE03-10-3914

241418016	RE03-10-3913
241418017	RE03-09-14032
1201980899	Method Blank (MB)
1201980902	Laboratory Control Sample (LCS)
1201980903	Laboratory Control Sample (LCS)
1201989887	Method Blank (MB)
1201989888	Laboratory Control Sample (LCS)
1201989889	Laboratory Control Sample (LCS)
1201980900	241418001(RE03-09-13961) Post Spike (PS)
1201980901	241418001(RE03-09-13961) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 241418 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015 and 016 in this SDG were analyzed on an "dry weight" basis. Samples 241418 017 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241418001 (RE03-09-13961) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Sample 241418015 (RE03-10-3914) was re-analyzed due to unacceptable recoveries in the initial analysis.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-576 GEL Work Order: 241418

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 14 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-576 VOA

This roadmap was analyzed by acj on 12-07-2009, 23:50.
This roadmap was reviewed by kel00587 on 12-14-2009, 11:25.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/112409v4/4m208.d	241418017	RE03-09-14032	24-NOV-2009	23:28	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m209.d	241418001	RE03-09-13961	24-NOV-2009	23:55	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m210.d	241418002	RE03-09-13960	25-NOV-2009	00:22	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m211.d	241418003	RE03-09-13959	25-NOV-2009	00:50	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m212.d	241418004	RE03-09-13958	25-NOV-2009	01:18	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m213.d	241418005	RE03-09-13965	25-NOV-2009	01:45	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m214.d	241418006	RE03-09-13970	25-NOV-2009	02:12	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m215.d	241418007	RE03-09-13962	25-NOV-2009	02:39	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m216.d	241418008	RE03-09-13971	25-NOV-2009	03:07	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m217.d	241418009	RE03-09-13969	25-NOV-2009	03:34	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m218.d	241418010	RE03-09-13968	25-NOV-2009	04:01	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m219.d	241418011	RE03-09-13964	25-NOV-2009	04:28	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m220.d	241418012	RE03-09-13966	25-NOV-2009	04:55	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m221.d	241418013	RE03-09-13967	25-NOV-2009	05:22	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m222.d	241418014	RE03-09-13963	25-NOV-2009	05:50	10-576.sub	1	926499	
■	N	/chem/VOA4.i/112409v4/4m223.d	241418015	RE03-10-3914	25-NOV-2009	06:17	10-576.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m224.d	241418016	RE03-10-3913	25-NOV-2009	06:45	10-576.sub	1	926499	

☐	N	/chem/VOA4.i/112709v4/4m508.d	241418015	RE03-10-3914	27-NOV-2009	19:21	10-576.sub	1	926499	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/112409v4/4m203l.d	1201980902	LCS	lcs	24-NOV-2009	21:12	all.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m205s.d	1201980903	LCS	lcs	24-NOV-2009	22:06	all.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m206b.d	1201980899	BLANK	mb	24-NOV-2009	22:34	all.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m225.d	1201980900	RE03-09-13961MS	ms	25-NOV-2009	07:12	CALsubL+.sub	1	926499	
☐	N	/chem/VOA4.i/112409v4/4m226.d	1201980901	RE03-09-13961MSD	msd	25-NOV-2009	07:39	CALsubL+.sub	1	926499	
☐	N	/chem/VOA4.i/112709v4/4m503la.d	1201989888	LCS	lcs	27-NOV-2009	17:05	all.sub	1	926499	
☐	N	/chem/VOA4.i/112709v4/4m505sa.d	1201989889	LCS	lcs	27-NOV-2009	18:00	all.sub	1	926499	
☐	N	/chem/VOA4.i/112709v4/4m506ba.d	1201989887	BLANK	mb	27-NOV-2009	18:27	all.sub	1	926499	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418004	**Date Received:**	11/19/2009 08:45	**%Moisture:**	27.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13958	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 01:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:35	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m212.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.467	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.412	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.412	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.412	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.412	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.412	1.37
67-64-1	Acetone		17.5	ug/kg	2.28	6.87
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
74-88-4	Iodomethane	U	6.87	ug/kg	2.20	6.87
75-09-2	Methylene chloride	U	6.87	ug/kg	2.75	6.87
75-15-0	Carbon disulfide	U	6.87	ug/kg	1.72	6.87
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.412	1.37
78-93-3	2-Butanone	U	6.87	ug/kg	2.06	6.87
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.412	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.454	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.412	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.412	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.412	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.412	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.412	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.454	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.412	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.412	1.37
108-10-1	4-Methyl-2-pentanone	U	6.87	ug/kg	1.72	6.87
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.412	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.412	1.37
591-78-6	2-Hexanone	U	6.87	ug/kg	2.06	6.87
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.412	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.412	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.412	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.412	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.412	1.37

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13958**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 01:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:35**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m212.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.412	1.37
179601-23-1	m,p-Xylenes	U	2.75	ug/kg	0.412	2.75
95-47-6	o-Xylene	U	1.37	ug/kg	0.412	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.412	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.412	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.412	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.412	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.412	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.412	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.412	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.412	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.412	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.412	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.412	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.87	ug/kg	2.20	6.87
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:34	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m211.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.413	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.364	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.364	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.364	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.364	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.364	1.21
67-64-1	Acetone		11.6	ug/kg	2.02	6.07
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.364	1.21
74-88-4	Iodomethane	U	6.07	ug/kg	1.94	6.07
75-09-2	Methylene chloride	U	6.07	ug/kg	2.43	6.07
75-15-0	Carbon disulfide	U	6.07	ug/kg	1.52	6.07
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.364	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.364	1.21
78-93-3	2-Butanone	U	6.07	ug/kg	1.82	6.07
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.364	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.364	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.364	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.401	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.364	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.364	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.364	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.364	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.364	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.401	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.364	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.364	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.364	1.21
108-10-1	4-Methyl-2-pentanone	U	6.07	ug/kg	1.52	6.07
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.364	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.364	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.364	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.364	1.21
591-78-6	2-Hexanone	U	6.07	ug/kg	1.82	6.07
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.364	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.364	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.364	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.364	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.364	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:34	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m211.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.364	1.21
179601-23-1	m,p-Xylenes	U	2.43	ug/kg	0.364	2.43
95-47-6	o-Xylene	U	1.21	ug/kg	0.364	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.364	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.364	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.364	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.364	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.364	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.364	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.364	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.364	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.364	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.364	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.364	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.364	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.364	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.364	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.364	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.364	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.07	ug/kg	1.94	6.07
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.364	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	15.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	14.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13960	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:33	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m210.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone		6.77	ug/kg	1.94	5.84
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.84	ug/kg	1.87	5.84
75-09-2	Methylene chloride	U	5.84	ug/kg	2.34	5.84
75-15-0	Carbon disulfide	U	5.84	ug/kg	1.46	5.84
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.84	ug/kg	1.75	5.84
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.84	ug/kg	1.46	5.84
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.84	ug/kg	1.75	5.84
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 00:22**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:33**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m210.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.350	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.84	ug/kg	1.87	5.84
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
87-44-5	Caryophyllene	14.17	34.9	ug/kg	99	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 23:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.410	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.51	6.02
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.51	6.02
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 23:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	12.3	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418007	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13962	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 02:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:38	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m215.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.343	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.343	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.343	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.343	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.343	1.14
67-64-1	Acetone	U	5.71	ug/kg	1.90	5.71
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
74-88-4	Iodomethane	U	5.71	ug/kg	1.83	5.71
75-09-2	Methylene chloride	U	5.71	ug/kg	2.28	5.71
75-15-0	Carbon disulfide	U	5.71	ug/kg	1.43	5.71
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.343	1.14
78-93-3	2-Butanone	U	5.71	ug/kg	1.71	5.71
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.343	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.377	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.343	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.343	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.343	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.343	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.343	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.377	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.343	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.343	1.14
108-10-1	4-Methyl-2-pentanone	U	5.71	ug/kg	1.43	5.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.343	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.343	1.14
591-78-6	2-Hexanone	U	5.71	ug/kg	1.71	5.71
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.343	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.343	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.343	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.343	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.343	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418007	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13962	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 02:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:38	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m215.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.343	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.343	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.343	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.343	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.343	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.343	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.343	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.343	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.343	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.343	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.343	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.343	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.343	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.343	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.71	ug/kg	1.83	5.71
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418014**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13963**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m222.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.410	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21
67-64-1	Acetone	J	2.30	ug/kg	2.00	6.04
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
74-88-4	Iodomethane	U	6.04	ug/kg	1.93	6.04
75-09-2	Methylene chloride	U	6.04	ug/kg	2.41	6.04
75-15-0	Carbon disulfide	U	6.04	ug/kg	1.51	6.04
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21
78-93-3	2-Butanone	U	6.04	ug/kg	1.81	6.04
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.398	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.398	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21
108-10-1	4-Methyl-2-pentanone	U	6.04	ug/kg	1.51	6.04
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21
591-78-6	2-Hexanone	U	6.04	ug/kg	1.81	6.04
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.362	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418014**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13963**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m222.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.362	2.41
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.04	ug/kg	1.93	6.04
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:42	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m219.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.91	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.30	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.44	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.44	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m219.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.74	ug/kg	1.84	5.74
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5989-27-5	D-Limonene	16.03	7.36	ug/kg	96	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 01:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:36**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m213.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.339	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.339	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.339	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.339	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.339	1.13
67-64-1	Acetone	J	2.54	ug/kg	1.87	5.65
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
74-88-4	Iodomethane	U	5.65	ug/kg	1.81	5.65
75-09-2	Methylene chloride	U	5.65	ug/kg	2.26	5.65
75-15-0	Carbon disulfide	U	5.65	ug/kg	1.41	5.65
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.339	1.13
78-93-3	2-Butanone	U	5.65	ug/kg	1.69	5.65
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.339	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.373	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.339	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.339	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.339	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.339	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.339	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.373	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.339	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.339	1.13
108-10-1	4-Methyl-2-pentanone	U	5.65	ug/kg	1.41	5.65
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.339	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.339	1.13
591-78-6	2-Hexanone	U	5.65	ug/kg	1.69	5.65
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.339	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.339	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.339	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.339	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.339	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 01:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:36**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m213.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.339	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.339	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.339	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.339	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.339	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.339	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.339	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.339	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.339	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.339	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.339	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.339	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.339	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.339	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.65	ug/kg	1.81	5.65
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	8.48	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418012	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13966	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:55	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:43	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m220.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.368	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.325	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.325	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.325	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.325	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.325	1.08
67-64-1	Acetone	U	5.41	ug/kg	1.80	5.41
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
74-88-4	Iodomethane	U	5.41	ug/kg	1.73	5.41
75-09-2	Methylene chloride	U	5.41	ug/kg	2.16	5.41
75-15-0	Carbon disulfide	U	5.41	ug/kg	1.35	5.41
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.325	1.08
78-93-3	2-Butanone	U	5.41	ug/kg	1.62	5.41
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.325	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.357	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.325	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.325	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.325	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.325	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.325	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.357	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.325	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.325	1.08
108-10-1	4-Methyl-2-pentanone	U	5.41	ug/kg	1.35	5.41
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.325	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.325	1.08
591-78-6	2-Hexanone	U	5.41	ug/kg	1.62	5.41
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.325	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.325	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.325	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.325	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.325	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418012**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13966**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:43**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m220.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.325	1.08
179601-23-1	m,p-Xylenes	U	2.16	ug/kg	0.325	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.325	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.325	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.325	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.325	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.325	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.325	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.325	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.325	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.325	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.325	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.325	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.325	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.41	ug/kg	1.73	5.41
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418013	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13967	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 05:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:44	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m221.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.414	1.22
74-87-3	Chloromethane	U	1.22	ug/kg	0.365	1.22
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.365	1.22
74-83-9	Bromomethane	U	1.22	ug/kg	0.365	1.22
75-00-3	Chloroethane	U	1.22	ug/kg	0.365	1.22
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.365	1.22
67-64-1	Acetone	J	2.06	ug/kg	2.02	6.09
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
74-88-4	Iodomethane	U	6.09	ug/kg	1.95	6.09
75-09-2	Methylene chloride	U	6.09	ug/kg	2.44	6.09
75-15-0	Carbon disulfide	U	6.09	ug/kg	1.52	6.09
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.365	1.22
78-93-3	2-Butanone	U	6.09	ug/kg	1.83	6.09
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
67-66-3	Chloroform	U	1.22	ug/kg	0.365	1.22
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.402	1.22
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.365	1.22
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.365	1.22
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.365	1.22
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.365	1.22
71-43-2	Benzene	U	1.22	ug/kg	0.365	1.22
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.402	1.22
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.365	1.22
74-95-3	Dibromomethane	U	1.22	ug/kg	0.365	1.22
108-10-1	4-Methyl-2-pentanone	U	6.09	ug/kg	1.52	6.09
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
108-88-3	Toluene	U	1.22	ug/kg	0.365	1.22
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.365	1.22
591-78-6	2-Hexanone	U	6.09	ug/kg	1.83	6.09
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.365	1.22
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.365	1.22
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.365	1.22
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.365	1.22
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.365	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13967**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 05:22**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m221.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes	U	2.44	ug/kg	0.365	2.44
95-47-6	o-Xylene	U	1.22	ug/kg	0.365	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.365	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.365	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:41	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m218.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:41	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m218.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT	Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418009**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**13.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13969**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 03:34**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m217.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.392	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.346	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.346	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.346	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.346	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.346	1.15
67-64-1	Acetone		9.43	ug/kg	1.91	5.76
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.346	1.15
74-88-4	Iodomethane	U	5.76	ug/kg	1.84	5.76
75-09-2	Methylene chloride	U	5.76	ug/kg	2.30	5.76
75-15-0	Carbon disulfide	U	5.76	ug/kg	1.44	5.76
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.346	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.346	1.15
78-93-3	2-Butanone	U	5.76	ug/kg	1.73	5.76
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.346	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.346	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.346	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.380	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.346	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.346	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.346	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.346	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.346	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.380	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.346	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.346	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.346	1.15
108-10-1	4-Methyl-2-pentanone	U	5.76	ug/kg	1.44	5.76
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.346	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.346	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.346	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.346	1.15
591-78-6	2-Hexanone	U	5.76	ug/kg	1.73	5.76
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.346	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.346	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.346	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.346	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.346	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m217.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.346	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.346	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.346	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.346	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.346	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.346	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.346	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.346	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.346	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.346	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.346	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.346	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.346	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.346	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.346	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.346	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.346	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.346	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.346	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.76	ug/kg	1.84	5.76
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.346	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 02:12	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:37	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m214.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12
67-64-1	Acetone	J	4.00	ug/kg	1.86	5.59
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
74-88-4	Iodomethane	U	5.59	ug/kg	1.79	5.59
75-09-2	Methylene chloride	U	5.59	ug/kg	2.24	5.59
75-15-0	Carbon disulfide	U	5.59	ug/kg	1.40	5.59
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12
78-93-3	2-Butanone	U	5.59	ug/kg	1.68	5.59
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12
108-10-1	4-Methyl-2-pentanone	U	5.59	ug/kg	1.40	5.59
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12
591-78-6	2-Hexanone	U	5.59	ug/kg	1.68	5.59
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13970**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 02:12**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:37**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m214.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.59	ug/kg	1.79	5.59
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Alcohol	6.77	8.52	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:39	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m216.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.420	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	J	3.61	ug/kg	2.05	6.17
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.17	ug/kg	1.98	6.17
75-09-2	Methylene chloride	U	6.17	ug/kg	2.47	6.17
75-15-0	Carbon disulfide	U	6.17	ug/kg	1.54	6.17
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.17	ug/kg	1.85	6.17
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.407	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.407	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.17	ug/kg	1.54	6.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.17	ug/kg	1.85	6.17
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:39	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m216.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	U	2.47	ug/kg	0.370	2.47
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.17	ug/kg	1.98	6.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418017	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14032	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/24/2009 23:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:48	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m208.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.37	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418017**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14032**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 23:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m208.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418016	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3913	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 06:45	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:47	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m224.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.410	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21
67-64-1	Acetone	U	6.03	ug/kg	2.00	6.03
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
74-88-4	Iodomethane	U	6.03	ug/kg	1.93	6.03
75-09-2	Methylene chloride	U	6.03	ug/kg	2.41	6.03
75-15-0	Carbon disulfide	U	6.03	ug/kg	1.51	6.03
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21
78-93-3	2-Butanone	U	6.03	ug/kg	1.81	6.03
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.398	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.398	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21
108-10-1	4-Methyl-2-pentanone	U	6.03	ug/kg	1.51	6.03
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21
591-78-6	2-Hexanone	U	6.03	ug/kg	1.81	6.03
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.362	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418016**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3913**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 06:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:47**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m224.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.362	2.41
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.03	ug/kg	1.93	6.03
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	13.4	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418015**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3914**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 19:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 19:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m508.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/27/2009 19:21	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 19:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m508.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-576

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201980902	LCS for batch 926498	106	94	97
1201980903	LCS for batch 926498	97	94	95
1201980899	MB for batch 926498	88	89	92
241418017	RE03-09-14032	99	101	102
241418001	RE03-09-13961	95	99	109
241418002	RE03-09-13960	95	98	101
241418003	RE03-09-13959	94	96	101
241418004	RE03-09-13958	99	95	99
241418005	RE03-09-13965	95	97	102
241418006	RE03-09-13970	99	102	112
241418007	RE03-09-13962	89	94	98
241418008	RE03-09-13971	88	90	95
241418009	RE03-09-13969	89	92	99
241418010	RE03-09-13968	104	103	115
241418011	RE03-09-13964	110	113	130
241418012	RE03-09-13966	105	109	125
241418013	RE03-09-13967	101	96	103
241418014	RE03-09-13963	96	95	102
241418016	RE03-10-3913	92	91	98
1201980900	RE03-09-13961PS	103	95	107
1201980901	RE03-09-13961PSD	96	97	104
1201989888	LCS for batch 926498	119	106	109
1201989889	LCS for batch 926498	106	105	106
1201989887	MB for batch 926498	119	124	131

DCED4 = 1,2-Dichloroethane-d4 (68%-131%)
TOL = Toluene-d8 (75%-129%)
BFB = Bromofluorobenzene (68%-133%)

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

Volatile

Surrogate Recovery Report

SDG Number: 10-576

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
241418015	RE03-10-3914	109	113	126

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13961PS
Lab Sample ID: 1201980900
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 17
Analysis Date: 11/25/2009 07:12
Prep Batch ID: 926498
Batch ID: 926499

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	40.5	81	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	40.2	80	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	43.5	87	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	42.0	84	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	44.1	88	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	45.5	91	51-151
67-64-1	PS	Acetone	250	0.00	U	146	59	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	45.4	91	61-125
74-88-4	PS	Iodomethane	250	0.00	U	198	79	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	44.2	88	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	227	91	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	46.4	93	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	48.1	96	62-125
78-93-3	PS	2-Butanone	250	0.00	U	154	62	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	46.2	92	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	44.9	90	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	46.2	92	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	43.4	87	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	48.4	97	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	47.2	94	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	48.3	97	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	45.2	90	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-576**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-13961PS**	**Matrix:**	**S**
Lab Sample ID:	**1201980900**	**%Moisture:**	**17**
Instrument:	**VOA4.I**	**Analysis Date:**	**11/25/2009 07:12**
Analyst:	**ACJ**	**Prep Batch ID**	**926498**
Purge Vol:	**5 mL**	**Batch ID:**	**926499**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	44.3	89	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	46.3	93	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	45.3	91	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	45.6	91	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	43.7	87	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	184	73	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	41.1	82	54-133
108-88-3	PS	Toluene	50.0	0.00	U	43.6	87	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	42.0	84	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	43.3	87	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	136	54	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	43.4	87	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	41.6	83	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	44.4	89	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	42.9	86	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	43.9	88	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	43.0	86	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	85.0	85	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	42.9	86	52-127
100-42-5	PS	Styrene	50.0	0.00	U	41.3	83	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	46.3	93	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	46.2	92	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-576**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-13961PS**	**Matrix:**	**S**
Lab Sample ID:	**1201980900**	**%Moisture:**	**17**
Instrument:	**VOA4.I**	**Analysis Date:**	**11/25/2009 07:12**
Analyst:	**ACJ**	**Prep Batch ID:**	**926498**
Purge Vol:	**5 mL**	**Batch ID:**	**926499**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	48.1	96	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	45.5	91	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	46.4	93	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	46.2	92	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	47.7	95	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	45.3	91	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	46.9	94	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	45.5	91	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	44.5	89	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	44.0	88	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	41.6	83	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	42.4	85	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	41.9	84	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	40.2	80	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	41.8	84	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	43.9	88	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	40.8	82	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13961PSD
Lab Sample ID: 1201980901
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17
Analysis Date: 11/25/2009 07:39
Dilution: 1
Prep Batch ID 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	39.5	79	25-149	2	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	39.1	78	39-140	3	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	42.8	86	47-129	2	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	41.7	83	31-135	1	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	43.3	87	53-128	2	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	43.9	88	51-151	3	0-25
67-64-1	PSD	Acetone	250	0.00	U	153	61	21-153	5	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	44.6	89	61-125	2	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	204	82	53-142	3	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	42.6	85	59-136	4	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	224	90	46-129	1	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	46.1	92	56-126	1	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	47.4	95	62-125	1	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	164	65	26-152	6	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	45.3	91	60-130	2	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	43.7	87	55-135	3	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	45.6	91	60-127	1	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	43.5	87	61-131	0	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	48.7	97	59-131	1	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	46.7	93	57-128	1	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	48.3	97	58-136	0	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	45.1	90	58-126	0	0-25

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13961PSD
Lab Sample ID: 1201980901
Instrument: VOA4.1
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17
Analysis Date: 11/25/2009 07:39 **Dilution:** 1
Prep Batch ID 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	44.0	88	56-123	1	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	46.7	93	51-137	1	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	44.9	90	60-126	1	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	45.5	91	55-138	0	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	43.3	87	60-132	1	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	197	79	58-136	7	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	42.1	84	54-133	2	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	44.0	88	52-128	1	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	42.8	86	53-137	2	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	43.8	88	59-130	1	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	151	60	31-148	10	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	43.1	86	57-127	0	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	42.2	84	51-128	1	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	44.9	90	59-139	1	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	43.9	88	57-133	2	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	44.3	89	53-122	1	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	43.1	86	51-125	0	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	86.0	86	50-126	1	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	43.5	87	52-127	1	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	42.0	84	49-135	2	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	46.2	92	57-149	0	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	44.9	90	63-127	3	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13961PSD
Lab Sample ID: 1201980901
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 17
Analysis Date: 11/25/2009 07:39
Dilution: 1
Prep Batch ID: 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	45.7	91	57-149	5	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	44.6	89	49-131	2	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	44.8	90	40-136	4	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	44.5	89	44-135	4	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	46.2	92	44-140	3	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	44.5	89	42-140	2	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	44.9	90	44-132	4	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	44.5	89	42-142	2	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	43.2	86	43-137	3	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	43.3	87	39-139	2	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	41.1	82	38-145	1	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	42.5	85	43-129	0	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	42.0	84	44-125	0	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	39.8	80	36-141	1	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	43.7	87	47-151	4	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	44.1	88	59-131	0	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	41.7	83	43-129	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 926498
Lab Sample ID: 1201980902
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/24/2009 21:12
Dilution: 1
Prep Batch ID 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	48.2	96	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	46.3	93	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	51.0	102	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	48.5	97	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	49.9	100	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	53.3	107	67-151
67-64-1	LCS	Acetone	250	0.0	206	82	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	52.6	105	70-125
74-88-4	LCS	Iodomethane	250	0.0	252	101	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	49.0	98	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	269	107	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	53.8	108	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	53.0	106	75-120
78-93-3	LCS	2-Butanone	250	0.0	216	86	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	51.3	103	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	56.3	113	74-135
67-66-3	LCS	Chloroform	50.0	0.0	51.5	103	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	49.5	99	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	57.3	115	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	57.0	114	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	58.9	118	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	49.1	98	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 926498
Lab Sample ID: 1201980902
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/24/2009 21:12
Dilution: 1
Prep Batch ID: 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	50.7	101	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	54.2	108	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	50.7	101	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	51.4	103	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	49.2	98	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	237	95	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	51.1	102	80-125
108-88-3	LCS	Toluene	50.0	0.0	49.8	100	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	49.5	99	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	47.3	95	76-120
591-78-6	LCS	2-Hexanone	250	0.0	209	84	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	46.7	93	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	53.4	107	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	50.8	102	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	48.9	98	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	50.7	101	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	50.4	101	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	103	103	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	50.4	101	74-120
100-42-5	LCS	Styrene	50.0	0.0	50.4	101	76-125
75-25-2	LCS	Bromoform	50.0	0.0	51.1	102	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	47.8	96	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926498 **Matrix:** SOIL

Lab Sample ID: 1201980902

Instrument: VOA4.I **Analysis Date:** 11/24/2009 21:12 **Dilution:** 1

Analyst: ACJ **Prep Batch ID** 926498

Purge Vol: 5 mL **Batch ID:** 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	48.1	96	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	49.1	98	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	50.3	101	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	47.7	95	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	50.4	101	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	49.4	99	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	49.4	99	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	50.5	101	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	49.0	98	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	50.9	102	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	50.5	101	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	49.6	99	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	49.0	98	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	50.7	101	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	49.7	99	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	49.7	99	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	47.8	96	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **10-576**
Client ID: **LCS for batch 926498**
Lab Sample ID: **1201980903**
Instrument: **VOA4.I**
Analyst: **ACJ**
Purge Vol: **5 mL**

Sample Type: **Laboratory Control Sample**
Matrix: **SOIL**
Analysis Date: **11/24/2009 22:06**
Dilution: 1
Prep Batch ID **926498**
Batch ID: **926499**

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	261	104	52-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 926498
Lab Sample ID: 1201989888
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/27/2009 17:05
Dilution: 1
Prep Batch ID: 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	45.5	91	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	45.8	92	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	50.8	102	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	48.8	98	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	51.8	104	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	56.1	112	67-151
67-64-1	LCS	Acetone	250	0.0	228	91	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	54.4	109	70-125
74-88-4	LCS	Iodomethane	250	0.0	268	107	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	54.9	110	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	276	110	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	56.3	113	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	55.7	111	75-120
78-93-3	LCS	2-Butanone	250	0.0	242	97	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	54.3	109	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	59.8	120	74-135
67-66-3	LCS	Chloroform	50.0	0.0	53.9	108	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	53.6	107	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	59.6	119	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	60.3	121	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	61.2	122	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	51.8	104	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 926498
Lab Sample ID: 1201989888
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/27/2009 17:05
Dilution: 1
Prep Batch ID: 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	53.4	107	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	56.4	113	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	53.5	107	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	54.0	108	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	53.3	107	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	264	106	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	54.3	109	80-125
108-88-3	LCS	Toluene	50.0	0.0	52.2	104	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.0	106	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	50.9	102	76-120
591-78-6	LCS	2-Hexanone	250	0.0	229	92	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	49.9	100	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	56.4	113	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	54.4	109	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	52.5	105	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	53.1	106	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	52.0	104	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	107	107	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	52.7	105	74-120
100-42-5	LCS	Styrene	50.0	0.0	52.4	105	76-125
75-25-2	LCS	Bromoform	50.0	0.0	56.3	113	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	52.6	105	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 926498
Lab Sample ID: 1201989888
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/27/2009 17:05
Dilution: 1
Prep Batch ID: 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	51.5	103	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	52.2	104	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	51.8	104	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	50.0	100	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	52.5	105	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	51.4	103	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	51.6	103	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	53.0	106	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	51.3	103	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	52.9	106	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	53.1	106	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	52.1	104	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	51.8	104	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	52.6	105	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	56.8	114	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	52.6	105	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	51.2	102	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 926498
Lab Sample ID: 1201989889
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/27/2009 18:00
Dilution: 1
Prep Batch ID: 926498
Batch ID: 926499

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	298	119	52-139

Method Blank Summary

SDG Number:	10-576	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926498	Instrument ID:	VOA4.I	Data File:	4m206b.d
Lab Sample ID:	1201980899	Prep Date:	11/24/2009 20:30	Analyzed:	11/24/09 22:34
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926498	1201980902	4m203l.d	11/24/09	2112
02	LCS for batch 926498	1201980903	4m205s.d	11/24/09	2206
03	RE03-09-14032	241418017	4m208.d	11/24/09	2328
04	RE03-09-13961	241418001	4m209.d	11/24/09	2355
05	RE03-09-13960	241418002	4m210.d	11/25/09	0022
06	RE03-09-13959	241418003	4m211.d	11/25/09	0050
07	RE03-09-13958	241418004	4m212.d	11/25/09	0118
08	RE03-09-13965	241418005	4m213.d	11/25/09	0145
09	RE03-09-13970	241418006	4m214.d	11/25/09	0212
10	RE03-09-13962	241418007	4m215.d	11/25/09	0239
11	RE03-09-13971	241418008	4m216.d	11/25/09	0307
12	RE03-09-13969	241418009	4m217.d	11/25/09	0334
13	RE03-09-13968	241418010	4m218.d	11/25/09	0401
14	RE03-09-13964	241418011	4m219.d	11/25/09	0428
15	RE03-09-13966	241418012	4m220.d	11/25/09	0455
16	RE03-09-13967	241418013	4m221.d	11/25/09	0522
17	RE03-09-13963	241418014	4m222.d	11/25/09	0550
18	RE03-10-3913	241418016	4m224.d	11/25/09	0645
19	RE03-09-13961PS	1201980900	4m225.d	11/25/09	0712
20	RE03-09-13961PSD	1201980901	4m226.d	11/25/09	0739

Method Blank Summary

SDG Number:	10-576	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926498	Instrument ID:	VOA4.I	Data File:	4m506ba.d
Lab Sample ID:	1201989887	Prep Date:	11/27/2009 16:30	Analyzed:	11/27/09 18:27
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926498	1201989888	4m503la.d	11/27/09	1705
02 LCS for batch 926498	1201989889	4m505sa.d	11/27/09	1800
03 RE03-10-3914	241418015	4m508.d	11/27/09	1921

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: VOA4.I **Injection Date/Time:** 22-NOV-09 09:20

Column Description: DB-624 **Lab File ID** /112209v4/4I701.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	99.3
175	5.0 -9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W4VM091122-01	/112209v4/4I703.d	22-NOV-09 10:14
VSTD001	W4VM091122-02	/112209v4/4I704.d	22-NOV-09 10:41
VSTD002	W4VM091122-04	/112209v4/4I706.d	22-NOV-09 11:36
VSTD005	W4VM091122-05	/112209v4/4I707.d	22-NOV-09 12:04
VSTD010	W4VM091122-06	/112209v4/4I708.d	22-NOV-09 12:31
VSTD020	W4VM091122-07	/112209v4/4I709.d	22-NOV-09 12:59
VSTD050	W4VM091122-08	/112209v4/4I710.d	22-NOV-09 13:27
VSTD100	W4VM091122-09	/112209v4/4I711.d	22-NOV-09 13:54
VSTD005S	W4VM091122-10	/112209v4/4I713.d	22-NOV-09 14:48
VSTD010S	W4VM091122-11	/112209v4/4I714.d	22-NOV-09 15:16
VSTD025S	W4VM091122-12	/112209v4/4I715.d	22-NOV-09 15:43
VSTD050S	W4VM091122-13	/112209v4/4I716.d	22-NOV-09 16:10
VSTD250S	W4VM091122-15	/112209v4/4I718.d	22-NOV-09 17:04
VSTD500S	W4VM091122-16	/112209v4/4I719.d	22-NOV-09 17:32
SECOND SOURCE	W4VM091122-18	/112209v4/4I722.d	22-NOV-09 18:53
SHORT SECOND SOURCE	W4VM091122-19	/112209v4/4I723.d	22-NOV-09 19:21

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: VOA4.I **Injection Date/Time:** 24-NOV-09 20:16

Column Description: DB-624 **Lab File ID** /112409v4/4m201.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	17
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	93
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	97
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091124-01	/112409v4/4m202.d	24-NOV-09 20:44
LCS	1201980902	/112409v4/4m203l.d	24-NOV-09 21:12
VSTD250S	W4VM091124-03	/112409v4/4m204.d	24-NOV-09 21:39
LCS	1201980903	/112409v4/4m205s.d	24-NOV-09 22:06
BLANK	1201980899	/112409v4/4m206b.d	24-NOV-09 22:34
RE03-09-14032	241418017	/112409v4/4m208.d	24-NOV-09 23:28
RE03-09-13961	241418001	/112409v4/4m209.d	24-NOV-09 23:55
RE03-09-13960	241418002	/112409v4/4m210.d	25-NOV-09 00:22
RE03-09-13959	241418003	/112409v4/4m211.d	25-NOV-09 00:50
RE03-09-13958	241418004	/112409v4/4m212.d	25-NOV-09 01:18
RE03-09-13965	241418005	/112409v4/4m213.d	25-NOV-09 01:45
RE03-09-13970	241418006	/112409v4/4m214.d	25-NOV-09 02:12
RE03-09-13962	241418007	/112409v4/4m215.d	25-NOV-09 02:39
RE03-09-13971	241418008	/112409v4/4m216.d	25-NOV-09 03:07
RE03-09-13969	241418009	/112409v4/4m217.d	25-NOV-09 03:34
RE03-09-13968	241418010	/112409v4/4m218.d	25-NOV-09 04:01
RE03-09-13964	241418011	/112409v4/4m219.d	25-NOV-09 04:28
RE03-09-13966	241418012	/112409v4/4m220.d	25-NOV-09 04:55
RE03-09-13967	241418013	/112409v4/4m221.d	25-NOV-09 05:22

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: VOA4.I **Injection Date/Time:** 24-NOV-09 20:16

Column Description: DB-624 **Lab File ID** /112409v4/4m201.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	17
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	93
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	97
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE03-09-13963	241418014	/112409v4/4m222.d	25-NOV-09 05:50
RE03-10-3913	241418016	/112409v4/4m224.d	25-NOV-09 06:45
RE03-09-13961MS	1201980900	/112409v4/4m225.d	25-NOV-09 07:12
RE03-09-13961MSD	1201980901	/112409v4/4m226.d	25-NOV-09 07:39

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: VOA4.I **Injection Date/Time:** 27-NOV-09 16:10

Column Description: DB-624 **Lab File ID** /112709v4/4m501.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	17.5
75	30.0 - 60.0% of mass 95	48.9
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	94.3
175	5.0 -9.0% of mass 174	7
176	95.0 - 101.0% of mass 174	97.3
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091127-01	/112709v4/4m502.d	27-NOV-09 16:38
LCS	1201989888	/112709v4/4m503la.d	27-NOV-09 17:05
VSTD250S	W4VM091127-03	/112709v4/4m504.d	27-NOV-09 17:32
LCS	1201989889	/112709v4/4m505sa.d	27-NOV-09 18:00
BLANK	1201989887	/112709v4/4m506ba.d	27-NOV-09 18:27
RE03-10-3914	241418015	/112709v4/4m508.d	27-NOV-09 19:21

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-576

Instrument: VOA4.I

STD Analysis Time: 24-NOV-09 20:44

GC Column: RTX-VOLATILES

Data File: 4m202.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1545055		10.6	1202618		13.8	830251		16.2
Upper Limit	3090110		11.1	2405236		14.3	1660502		16.7
Lower Limit	772528		10.1	601309		13.3	415126		15.7
Sample ID									
BLK01LCS	1723953		10.6	1352703		13.8	951346		16.2
BLK01SLCS	1753041		10.6	1335055		13.8	902444		16.2
BLK01	1879309		10.6	1411389		13.8	913255		16.2
RE03-09-14032	1610374		10.6	1179825		13.8	750725		16.2
RE03-09-13961	1624077		10.6	1169292		13.8	647373		16.2
RE03-09-13960	1681155		10.6	1233892		13.8	778002		16.2
RE03-09-13959	1636373		10.6	1208258		13.8	743657		16.2
RE03-09-13958	1665107		10.6	1253260		13.8	785544		16.2
RE03-09-13965	1666846		10.6	1207615		13.8	749714		16.2
RE03-09-13970	1557904		10.6	1131184		13.8	631184		16.2
RE03-09-13962	1685646		10.6	1221234		13.8	733651		16.2
RE03-09-13971	1686466		10.6	1243649		13.8	783169		16.2
RE03-09-13969	1691980		10.6	1229320		13.8	747047		16.2
RE03-09-13968	1358971		10.6	973160		13.8	538188		16.2
RE03-09-13964	1278586		10.6	917304		13.8	495343		16.2
RE03-09-13966	1472422		10.6	1006274		13.8	494068		16.2
RE03-09-13967	1588473		10.6	1188309		13.8	719664		16.2
RE03-09-13963	1638832		10.6	1199117		13.8	728320		16.2
RE03-10-3913	1671464		10.6	1232309		13.8	741467		16.2
RE03-09-13961MS	1605613		10.6	1196644		13.8	717000		16.2
RE03-09-13961MSD	1678794		10.6	1256867		13.8	797585		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-576

STD Analysis Time: 27-NOV-09 16:38

Data File: 4m502.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1567711		10.6		1264178		13.8		908965		16.2	
Upper Limit	3135422		11.1		2528356		14.3		1817930		16.7	
Lower Limit	783856		10.1		632089		13.3		454483		15.7	
Sample ID												
BLK02LCS	1659504		10.6		1293764		13.8		905876		16.2	
BLK02SLCS	1592038		10.6		1243392		13.8		849019		16.2	
BLK02	1463582		10.6		1056807		13.8		676915		16.2	
RE03-10-3914	1530350		10.6		1144584		13.8		660103		16.2	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13958**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 01:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:35**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m212.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.467	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.412	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.412	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.412	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.412	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.412	1.37
67-64-1	Acetone		17.5	ug/kg	2.28	6.87
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
74-88-4	Iodomethane	U	6.87	ug/kg	2.20	6.87
75-09-2	Methylene chloride	U	6.87	ug/kg	2.75	6.87
75-15-0	Carbon disulfide	U	6.87	ug/kg	1.72	6.87
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.412	1.37
78-93-3	2-Butanone	U	6.87	ug/kg	2.06	6.87
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.412	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.454	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.412	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.412	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.412	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.412	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.412	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.454	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.412	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.412	1.37
108-10-1	4-Methyl-2-pentanone	U	6.87	ug/kg	1.72	6.87
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.412	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.412	1.37
591-78-6	2-Hexanone	U	6.87	ug/kg	2.06	6.87
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.412	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.412	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.412	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.412	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.412	1.37

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13958**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 01:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:35**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m212.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.412	1.37
179601-23-1	m,p-Xylenes	U	2.75	ug/kg	0.412	2.75
95-47-6	o-Xylene	U	1.37	ug/kg	0.412	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.412	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.412	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.412	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.412	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.412	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.412	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.412	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.412	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.412	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.412	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.412	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.87	ug/kg	2.20	6.87
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m212.d
Lab Smp Id: 241418004 Client Smp ID: RE03-09-13958
Inj Date : 25-NOV-2009 01:18
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418004|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	27.25150	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1665107	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1253260	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	785544	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	323484	49.4620	68.0
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1033856	47.3628	65.1
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	450827	49.5609	68.1
10 Acetone	43	7.363	7.358	(0.693)	86330	12.7603	17.5

ION RATIO REPORT

VOA REPORT

Data file: 4m212.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418004 SampleType: SAMPLE
Injection Date: 25-NOV-2009 01:18
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418004|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	86330	7.36	7.36	80-120	100	( )
58	26232	7.36	7.36	1- 61	30	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21470	10.62	10.34	80-120	100	(T)
64	3926	10.61	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8108	12.25	12.02	80-120	100	(T)
43	5077	12.25	12.02	228-288	63	(QT)
100	719320	12.25	12.02	9- 69	8872	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m212.d
Lab Smp Id: 241418004 Client Smp ID: RE03-09-13958
Inj Date : 25-NOV-2009 01:18
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418004|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m212.d
Date : 25-NOV-2009 01:18
Client ID: RE03-09-13958
Sample Info: |241418004|926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

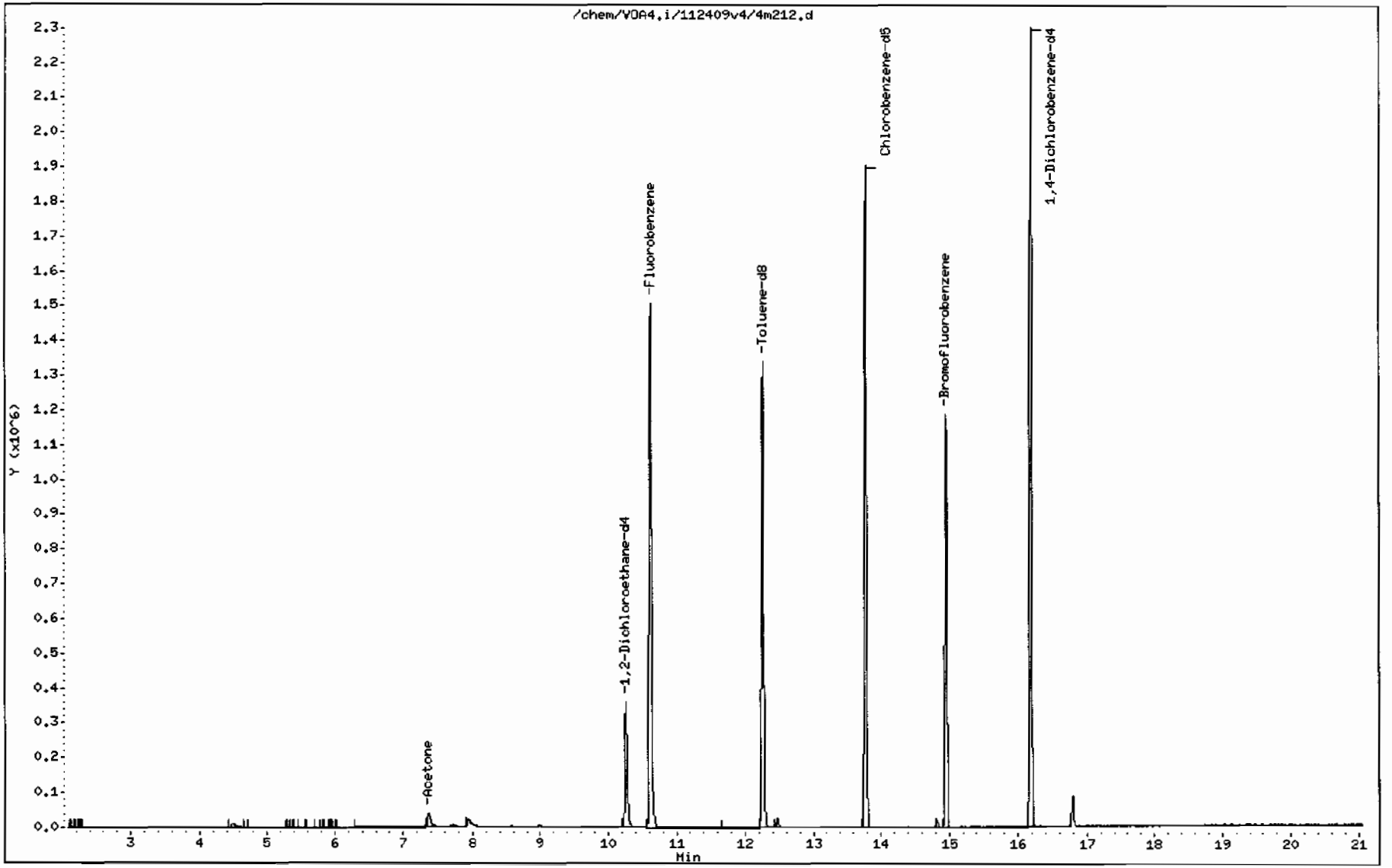

Data File: /chem/VOA4.i/112409v4/4m212.d

Date : 25-NOV-2009 01:18

Client ID: RE03-09-13958

Instrument: VOA4.i

Sample Info: |24141800419264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 17.5 ug/Kg

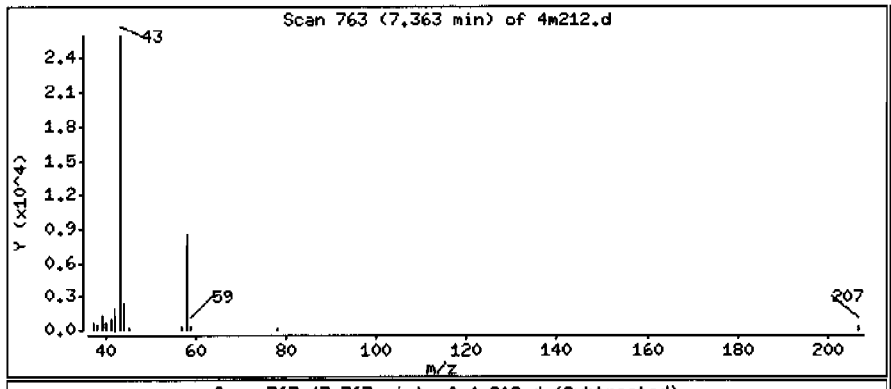

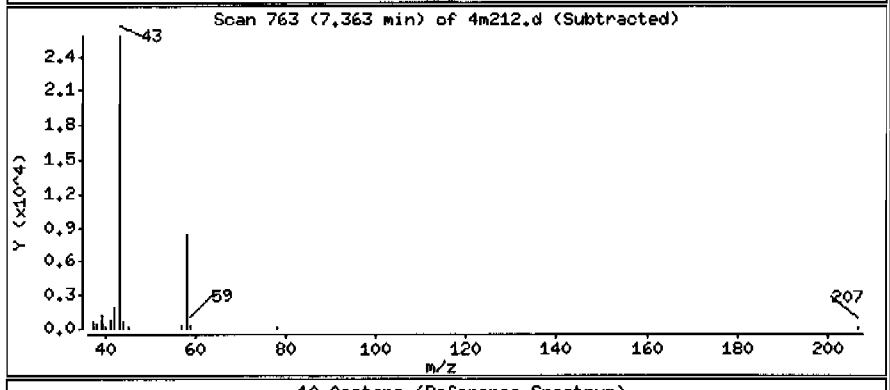

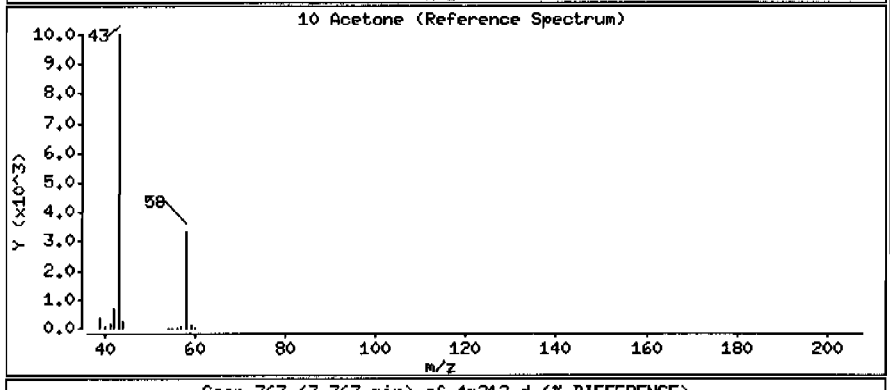

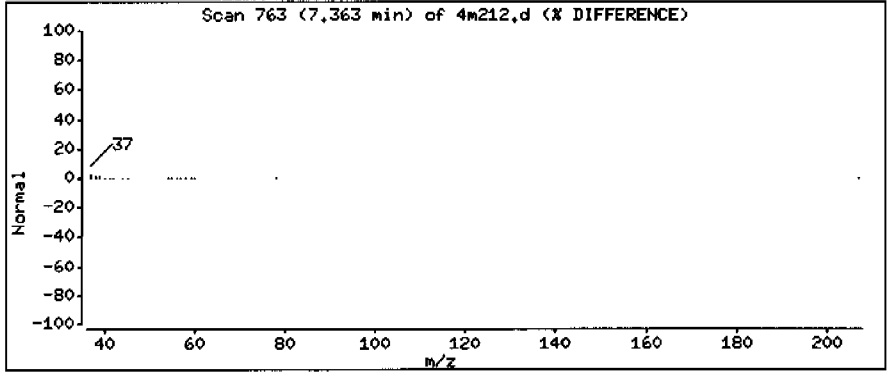

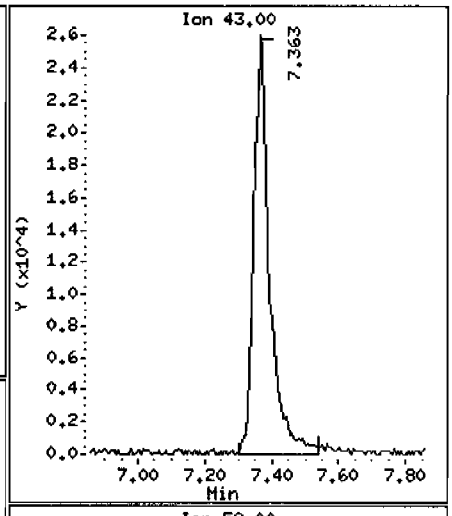

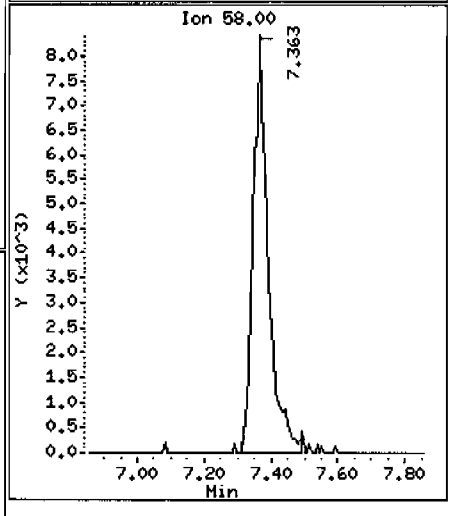

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:34	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m211.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.413	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.364	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.364	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.364	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.364	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.364	1.21
67-64-1	Acetone		11.6	ug/kg	2.02	6.07
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.364	1.21
74-88-4	Iodomethane	U	6.07	ug/kg	1.94	6.07
75-09-2	Methylene chloride	U	6.07	ug/kg	2.43	6.07
75-15-0	Carbon disulfide	U	6.07	ug/kg	1.52	6.07
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.364	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.364	1.21
78-93-3	2-Butanone	U	6.07	ug/kg	1.82	6.07
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.364	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.364	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.364	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.401	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.364	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.364	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.364	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.364	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.364	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.401	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.364	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.364	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.364	1.21
108-10-1	4-Methyl-2-pentanone	U	6.07	ug/kg	1.52	6.07
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.364	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.364	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.364	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.364	1.21
591-78-6	2-Hexanone	U	6.07	ug/kg	1.82	6.07
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.364	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.364	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.364	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.364	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.364	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:34	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m211.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.364	1.21
179601-23-1	m,p-Xylenes	U	2.43	ug/kg	0.364	2.43
95-47-6	o-Xylene	U	1.21	ug/kg	0.364	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.364	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.364	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.364	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.364	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.364	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.364	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.364	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.364	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.364	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.364	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.364	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.364	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.364	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.364	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.364	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.364	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.07	ug/kg	1.94	6.07
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.364	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.364	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	15.8	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m211.d
Lab Smp Id: 241418003 Client Smp ID: RE03-09-13959
Inj Date : 25-NOV-2009 00:50
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418Q03|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.68060	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1636373	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1208258	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	743657	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	302888	47.1260	57.2
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1007236	47.8619	58.1
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	433499	50.3402	61.2
10 Acetone	43	7.363	7.358	(0.693)	63709	9.58209	11.6

ION RATIO REPORT

VOA REPORT

Data file: 4m211.d
Report Date: 11/25/2009 15:38
Lab. ID: 241418003 SampleType: SAMPLE
Injection Date: 25-NOV-2009 00:50
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418003|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone		CAS#: 67-64-1				
43	63709	7.36	7.36	80-120	100	( )
58	18494	7.36	7.36	1- 61	29	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21116	10.62	10.34	80-120	100	(T)
64	3715	10.62	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7970	12.25	12.02	80-120	100	(T)
43	4621	12.25	12.02	228-288	58	(QT)
100	697999	12.25	12.02	9- 69	8758	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m211.d
Lab Smp Id: 241418003 Client Smp ID: RE03-09-13959
Inj Date : 25-NOV-2009 00:50
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418003|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.68060	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 86 1,4-Dichlorobenzene-d4	16.179	4050848	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
16.788	1054167	13.0116812	15.8	0		0	86

Data File: /chem/VOA4.i/112409v4/4m211.d
Date : 25-NOV-2009 00:50
Client ID: RE03-09-13959
Sample Info: |2414180031926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

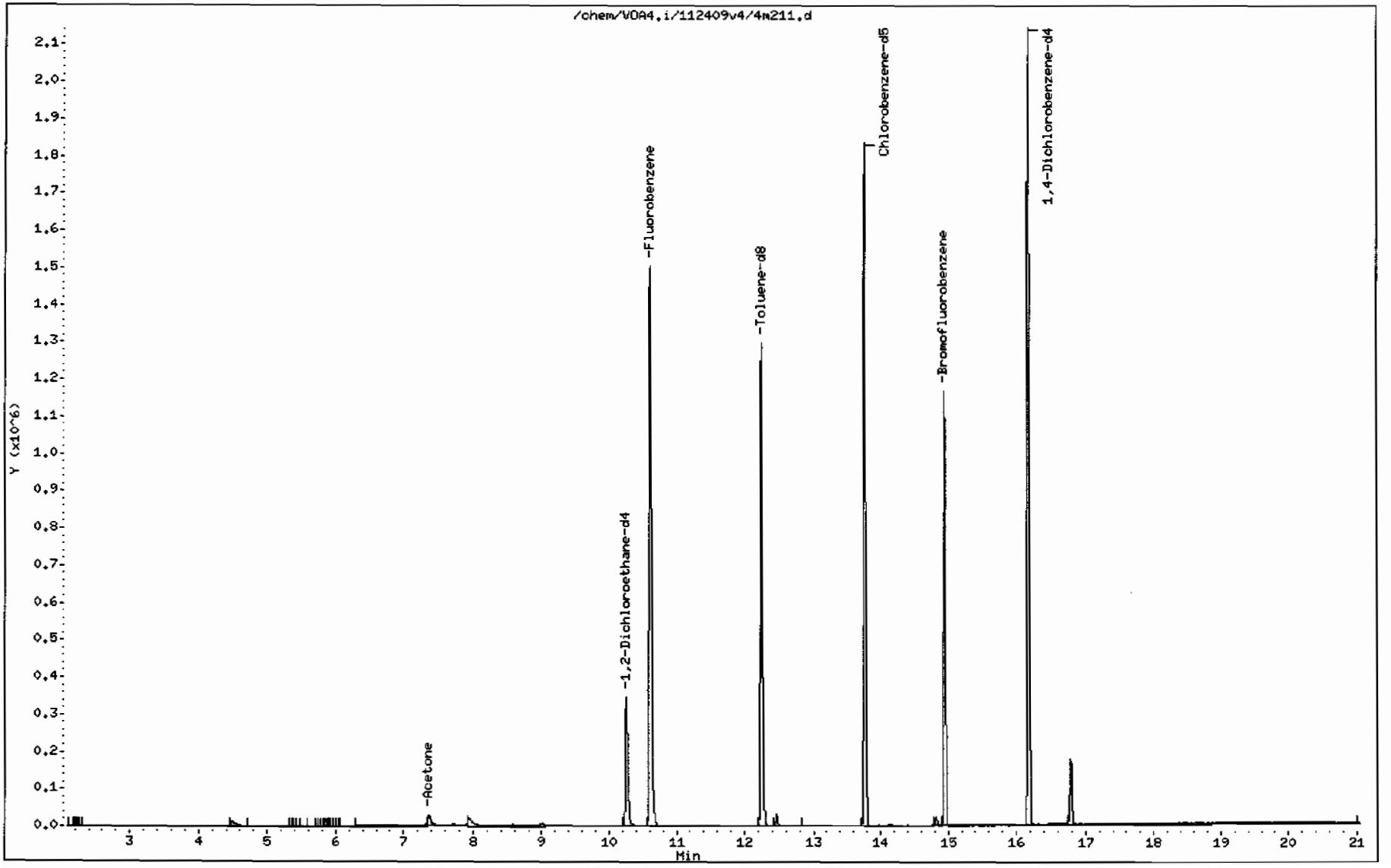

Data File: /chem/VOA4.i/112409v4/4m211.d

Date : 25-NOV-2009 00:50

Client ID: RE03-09-13959

Instrument: VOA4.i

Sample Info: |24141800319264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 11.6 ug/Kg

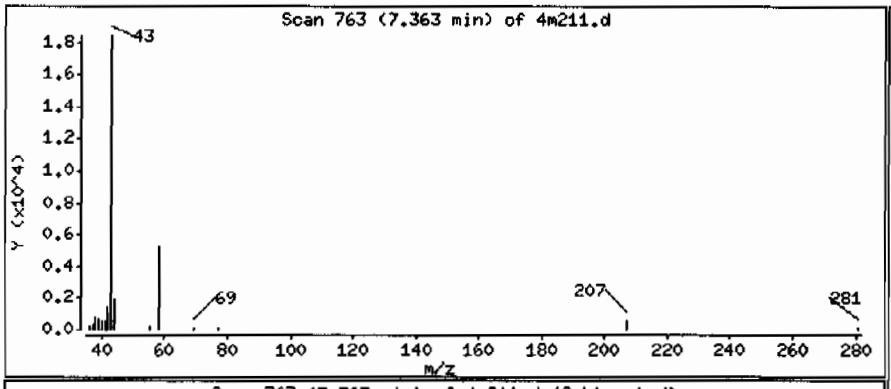

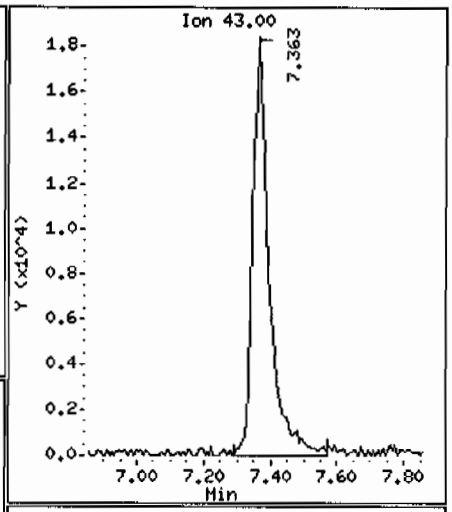

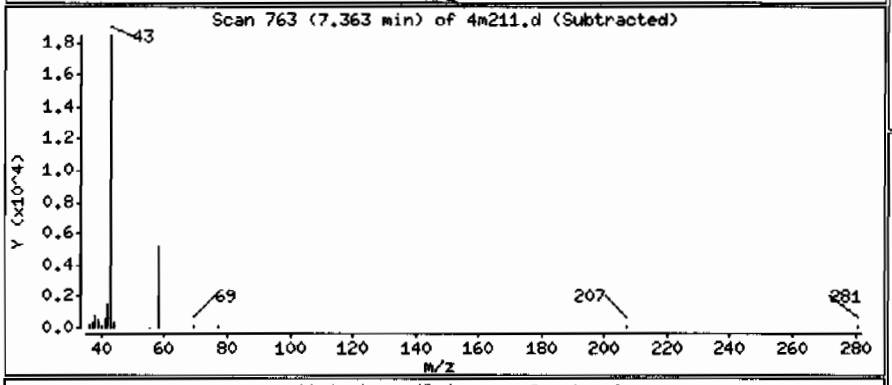

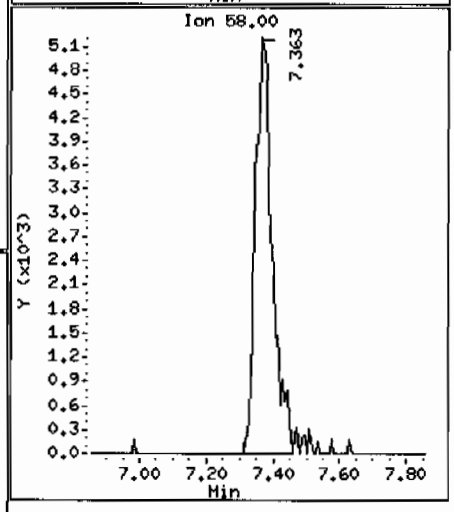

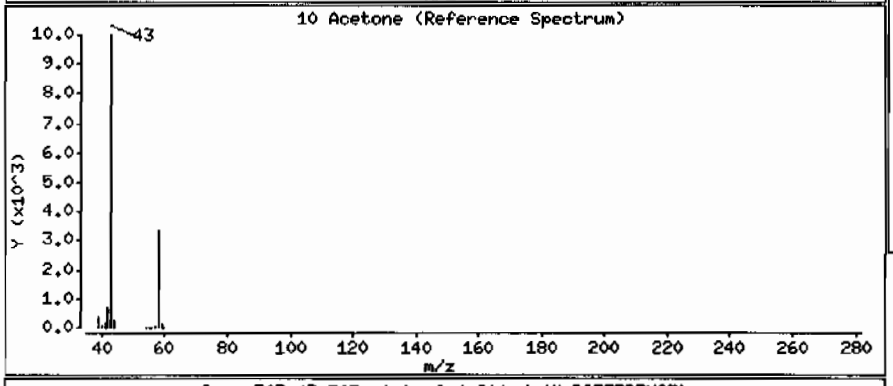

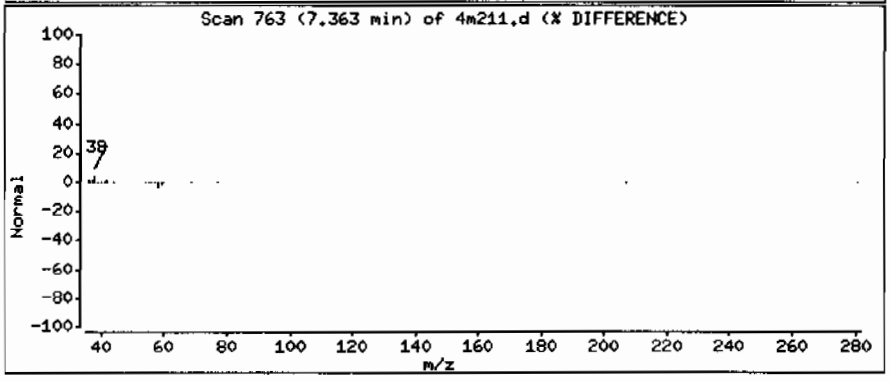

Data File: /chem/VOA4.i/112409v4/4m211.d

Date : 25-NOV-2009 00:50

Client ID: RE03-09-13959

Instrument: VOA4.i

Sample Info: |2414180031926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	56	C21H26F5NO2Si	475
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	56	C16H28O4Si2	340
Phthalimide, N-(4-methoxybezyl)-	1000314-94-0	NIST05.L	103323	47	C16H13NO3	267

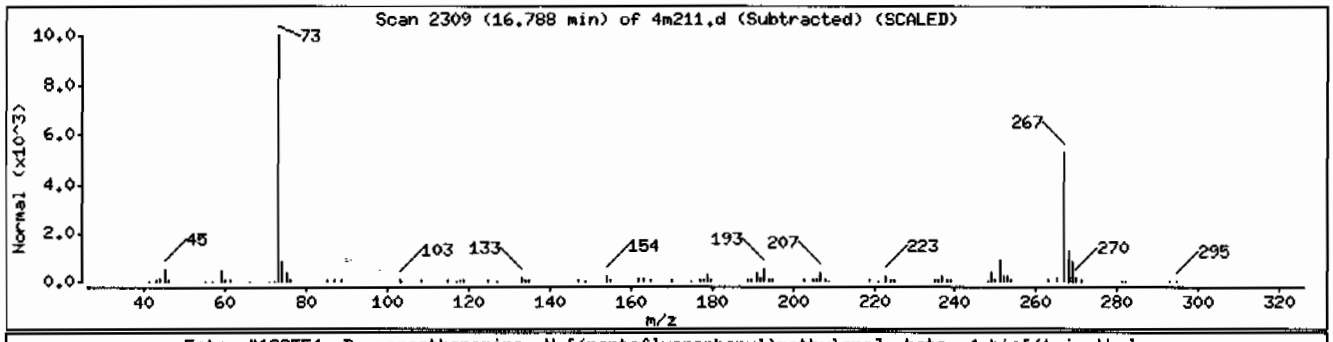

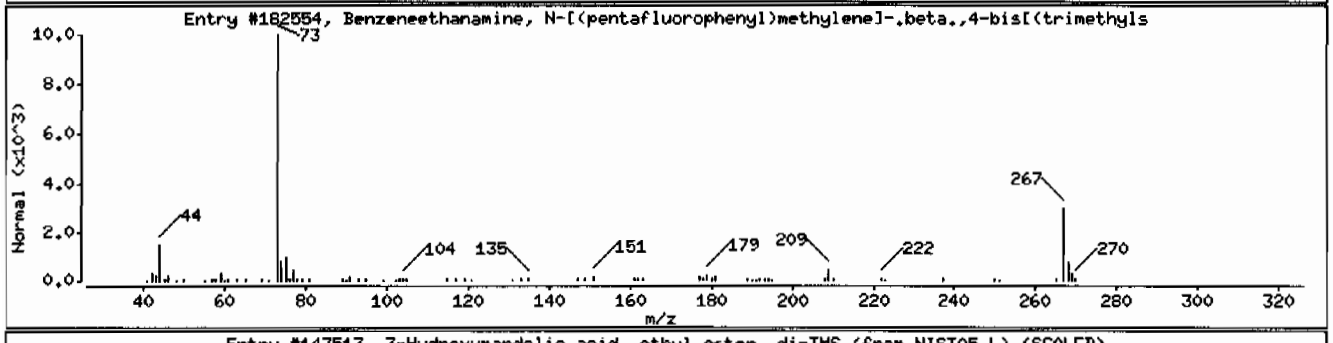

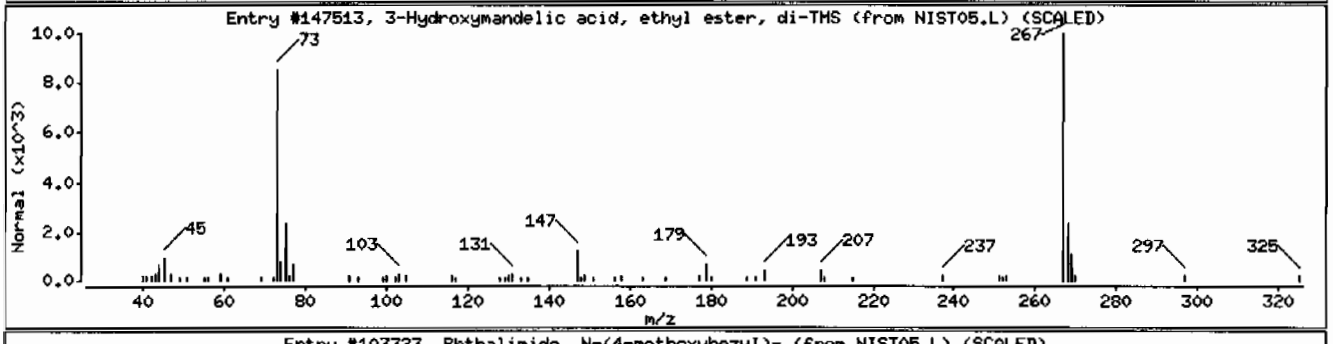

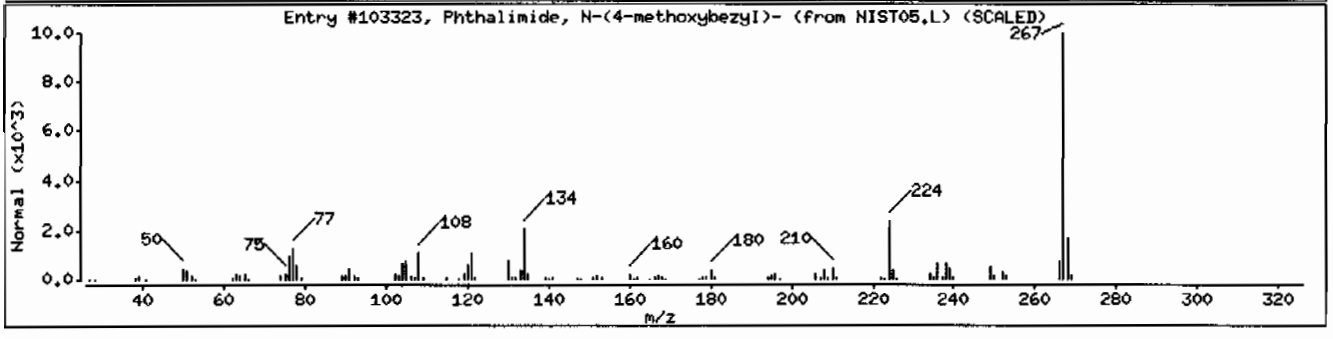

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	14.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13960	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 00:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:33	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m210.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.350	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.350	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.350	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.350	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.350	1.17
67-64-1	Acetone		6.77	ug/kg	1.94	5.84
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
74-88-4	Iodomethane	U	5.84	ug/kg	1.87	5.84
75-09-2	Methylene chloride	U	5.84	ug/kg	2.34	5.84
75-15-0	Carbon disulfide	U	5.84	ug/kg	1.46	5.84
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.350	1.17
78-93-3	2-Butanone	U	5.84	ug/kg	1.75	5.84
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.350	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.350	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.350	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.350	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.350	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.350	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.350	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.350	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.350	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.350	1.17
108-10-1	4-Methyl-2-pentanone	U	5.84	ug/kg	1.46	5.84
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.350	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.350	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.350	1.17
591-78-6	2-Hexanone	U	5.84	ug/kg	1.75	5.84
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.350	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.350	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.350	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.350	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.350	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 00:22**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:33**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m210.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.350	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.350	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.350	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.350	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.350	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.350	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.350	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.350	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.350	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.350	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.350	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.350	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.350	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.350	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.350	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.350	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.84	ug/kg	1.87	5.84
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.350	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.350	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
87-44-5	Caryophyllene	14.17	34.9	ug/kg	99	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m210.d
Lab Smp Id: 241418002 Client Smp ID: RE03-09-13960
Inj Date : 25-NOV-2009 00:22
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418002|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.39710	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1681155	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.771	(1.000)	1233892	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	778002	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	312060	47.2598	55.2
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	1056136	49.1430	57.4
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	456240	50.6422	59.2
10 Acetone	43	7.364	7.358	(0.693)	39560	5.79149	6.8

ION RATIO REPORT

VOA REPORT

Data file: 4m210.d
Report Date: 11/25/2009 15:38
Lab. ID: 241418002 SampleType: SAMPLE
Injection Date: 25-NOV-2009 00:22
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418002|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	39560	7.36	7.36	80-120	100	( )
58	11525	7.36	7.36	1- 61	29	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21835	10.62	10.34	80-120	100	(T)
64	3869	10.61	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7937	12.25	12.02	80-120	100	(T)
43	5021	12.25	12.02	228-288	63	(QT)
100	727594	12.25	12.02	9- 69	9166	(QT)
60 1,1,1,2-Tetrachloroethane			CAS#: 630-20-6			
131	5155	14.17	13.85	80-120	100	(T)
133	122916	14.17	13.85	67-127	2384	(QT)
119	53097	14.15	13.85	34- 94	1030	(QT)
58 Ethylbenzene			CAS#: 100-41-4			
91	131183	14.17	13.86	80-120	100	(T)
106	45046	14.16	13.86	3- 63	34	(T)
64 o-Xylene			CAS#: 95-47-6			
106	45046	14.16	14.41	80-120	100	(T)
91	131183	14.17	14.40	172-232	291	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 m,p-Xylenes			CAS#: 179601-23-1			
106	45046	14.16	13.97	80-120	100	(T)
91	131183	14.17	13.97	162-222	291	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m210.d
Lab Smp Id: 241418002 Client Smp ID: RE03-09-13960
Inj Date : 25-NOV-2009 00:22
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418002|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.39710	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.772	3675998	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Caryophyllene				CAS #: 87-44-5			
14.168	2196819	29.8805836	34.9	99	NIST05.L	59797	61

Data File: /chem/VOA4.i/112409v4/4m210.d

Date : 25-NOV-2009 00:22

Client ID: RE03-09-13960

Sample Info: |24141800219264991|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

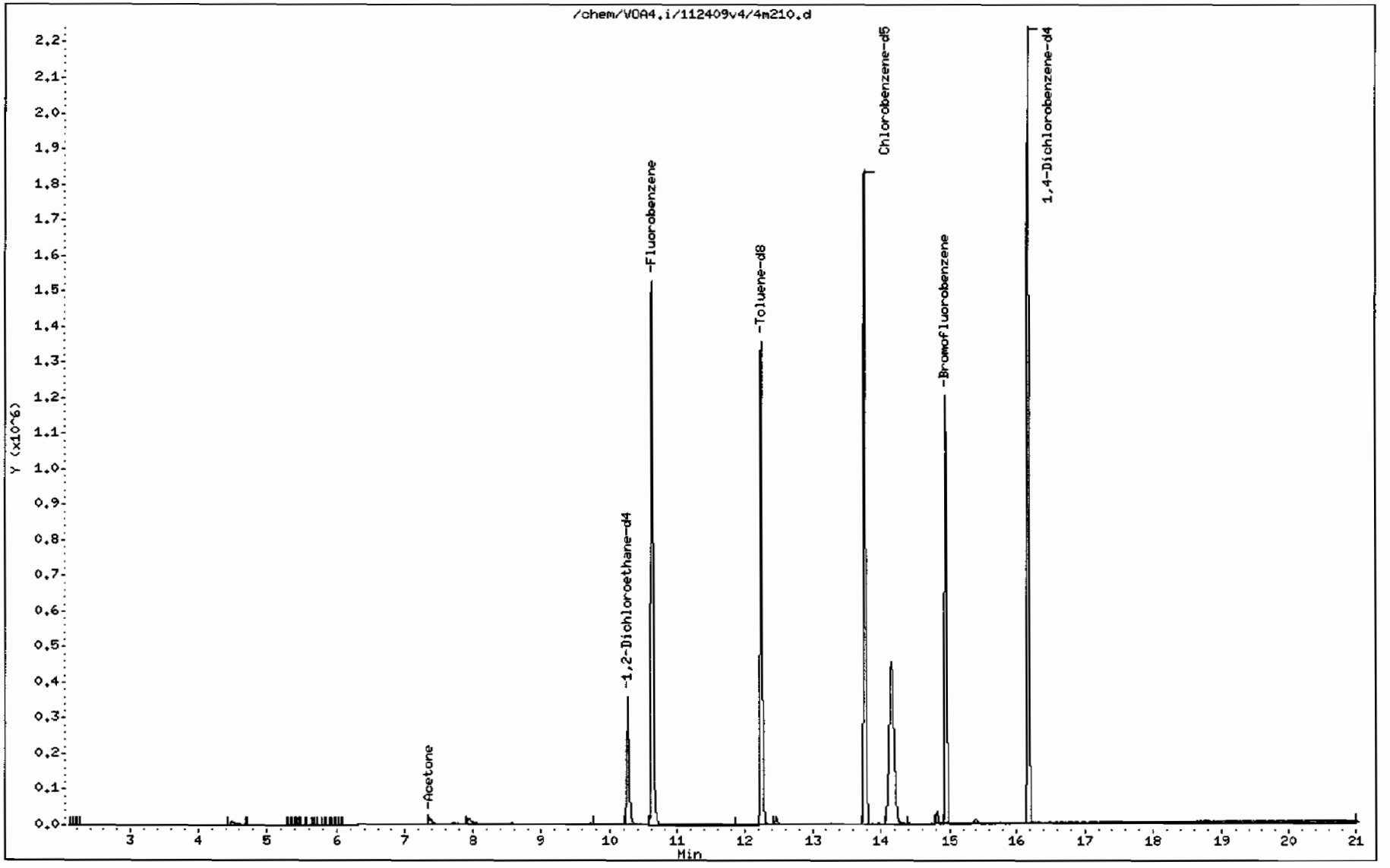

Data File: /chem/VOA4.i/112409v4/4m210.d

Page 2

Date : 25-NOV-2009 00:22

Client ID: RE03-09-13960

Instrument: VOA4.i

Sample Info: |2414180021926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 6.8 ug/Kg

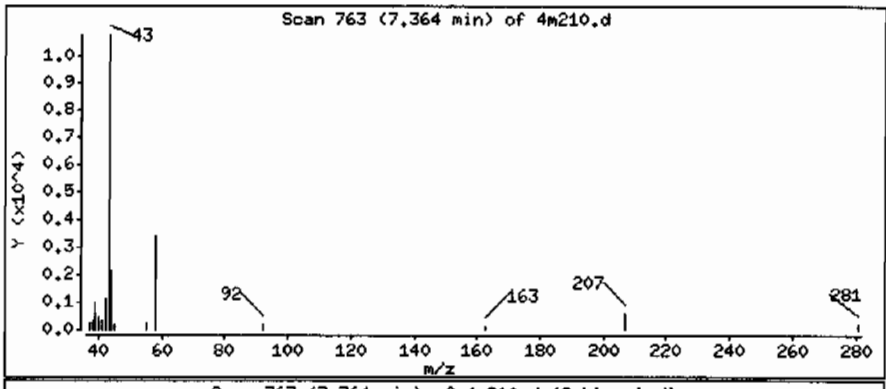

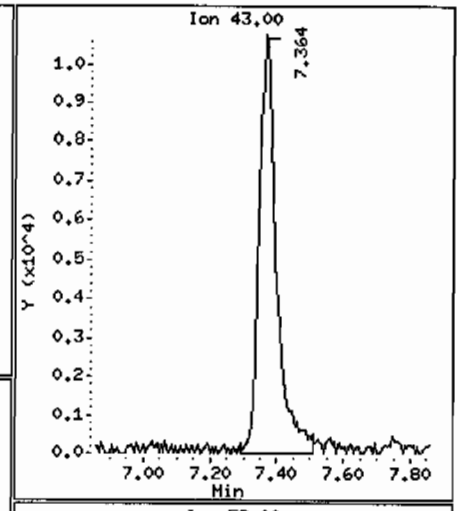

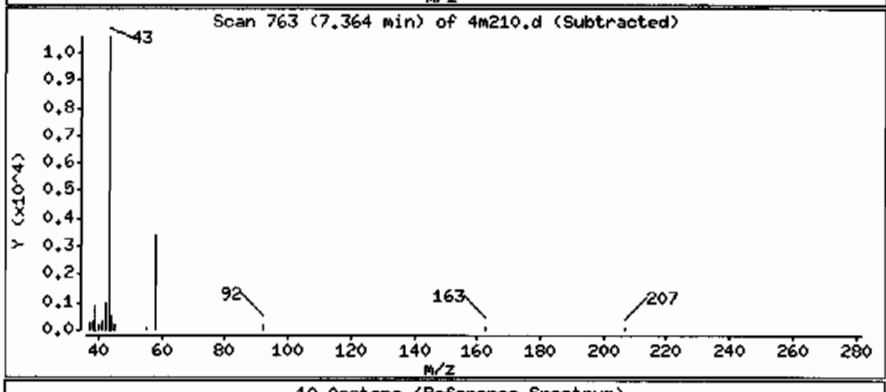

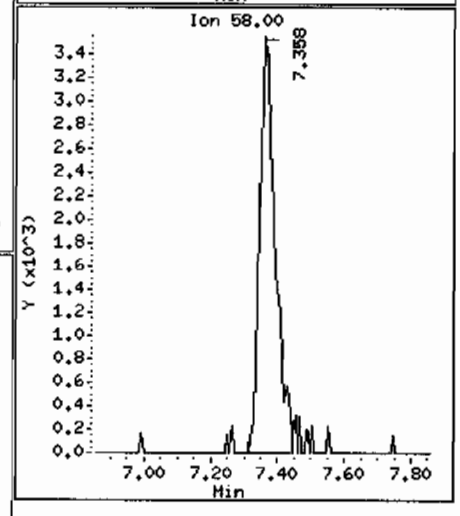

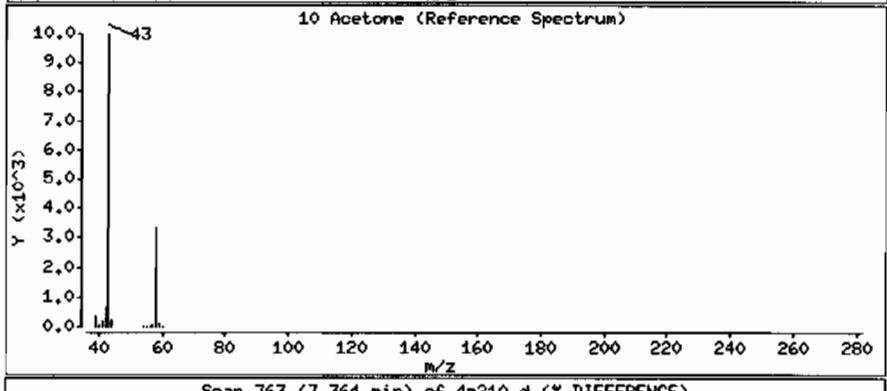

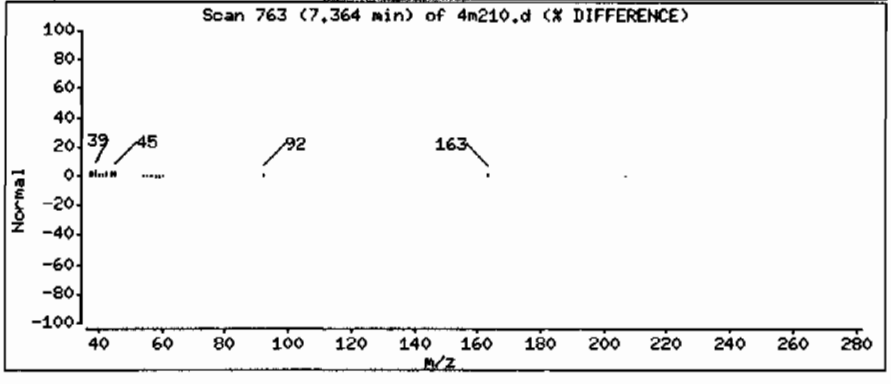

Data File: /chem/VOA4.i/112409v4/4m210.d

Date : 25-NOV-2009 00:22

Client ID: RE03-09-13960

Instrument: VOA4.i

Sample Info: |24141800219264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Caryophyllene	87-44-5	NIST05.L	59797	99	C15H24	204
Caryophyllene	87-44-5	NIST05.L	59800	98	C15H24	204
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	13877-93-5	NIST05.L	59912	94	C15H24	204

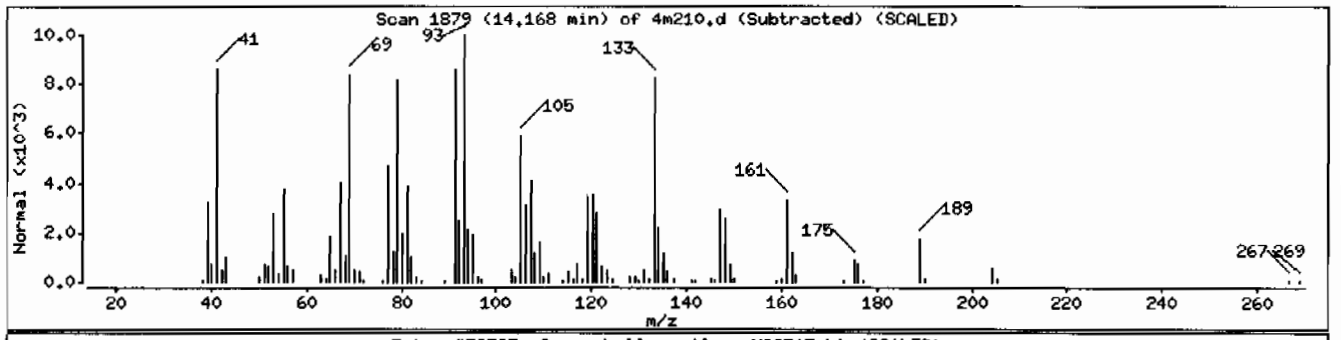

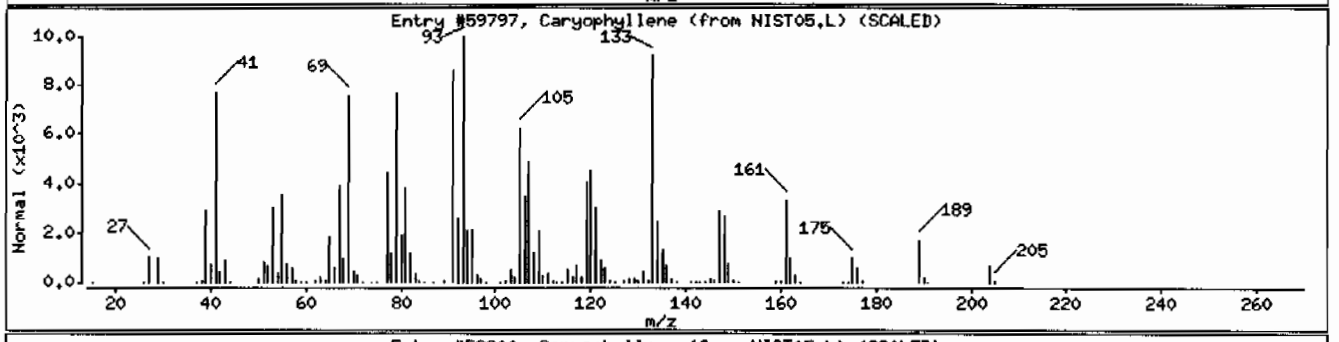

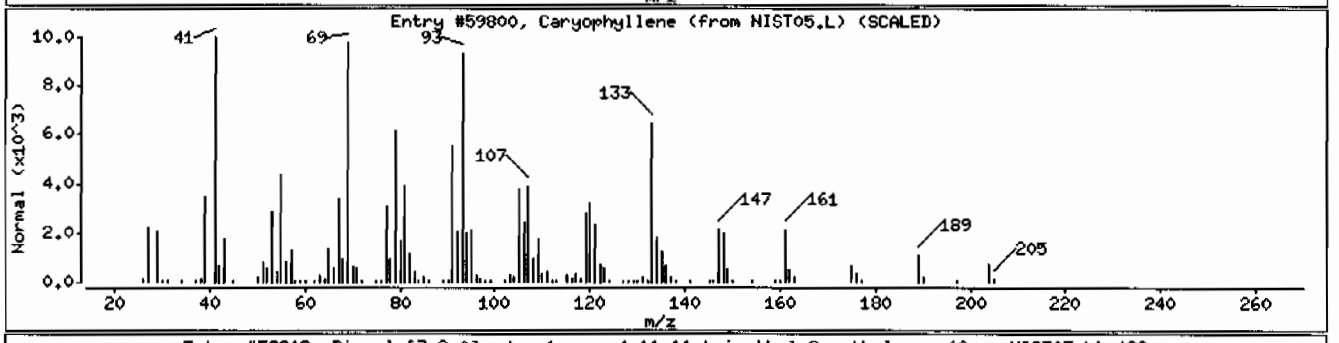

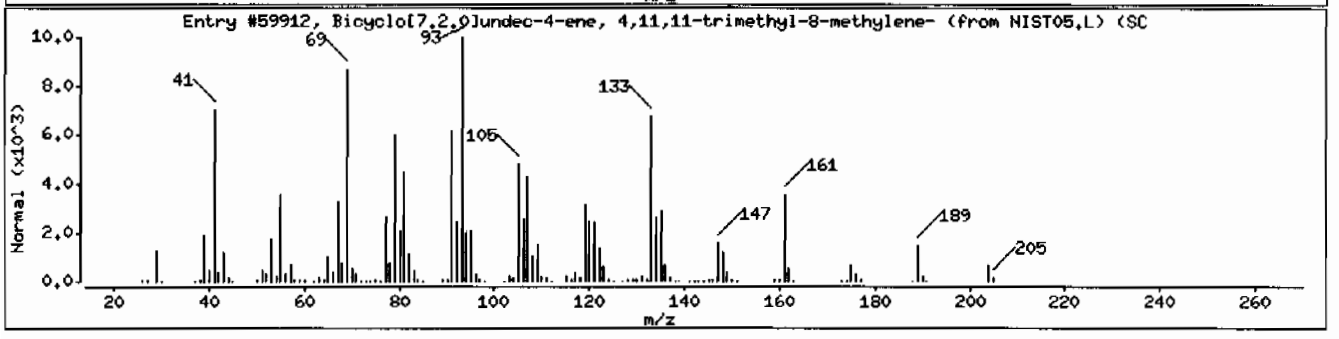

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13961	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/24/2009 23:55	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m209.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.410	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.51	6.02
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.51	6.02
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 23:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	12.3	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m209.d
Lab Smp Id: 241418001 Client Smp ID: RE03-09-13961
Inj Date : 24-NOV-2009 23:55
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418001|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.97420	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1624077	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1169292	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	647373	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	303037	47.5062	57.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1009213	49.5540	59.7
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	409971	54.6888	65.9

ION RATIO REPORT

VOA REPORT

Data file: 4m209.d
Report Date: 11/25/2009 15:38
Lab. ID: 241418001 SampleType: SAMPLE
Injection Date: 24-NOV-2009 23:55
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418001|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	21348	10.62	10.34	80-120	100	(T)
64	3450	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8024	12.25	12.02	80-120	100	(T)
43	5102	12.25	12.02	228-288	64	(QT)
100	700827	12.25	12.02	9- 69	8734	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m209.d
Lab Smp Id: 241418001 Client Smp ID: RE03-09-13961
Inj Date : 24-NOV-2009 23:55
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418001|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.97420	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 86 1,4-Dichlorobenzene-d4	16.179	3542977	50.000

	CONCENTRATIONS			QUANT			
	RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane						CAS #:		
	16.794	725633	10.2404339	12.3	0		0	86

Data File: /chem/VOA4.i/112409v4/4m209.d
Date : 24-NOV-2009 23:55
Client ID: RE03-09-13961
Sample Info: |2414180011926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

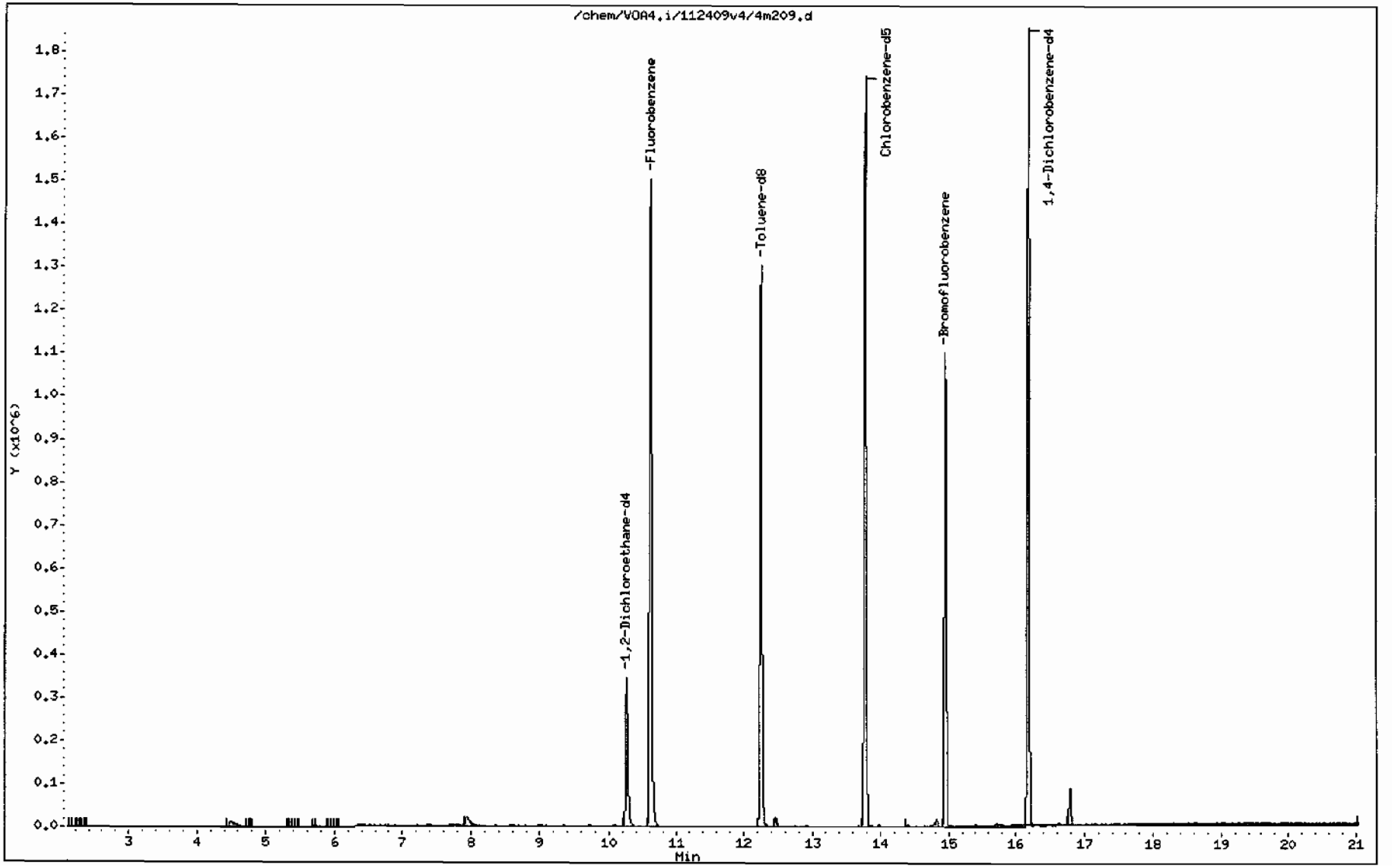

Data File: /chem/VOA4.i/112409v4/4m209.d

Date : 24-NOV-2009 23:55

Client ID: RE03-09-13961

Instrument: VOA4.i

Sample Info: |2414180011926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	64	C13H22O3Si2	282
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	56	C16H28O4Si2	340
Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-	55471-01-7	NIST05.L	184036	56	C18H26F7NO3Si2	493

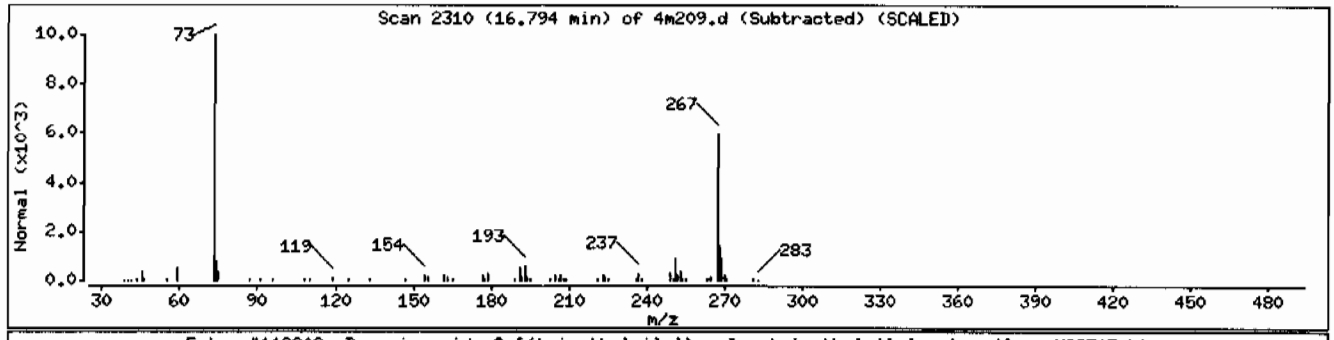

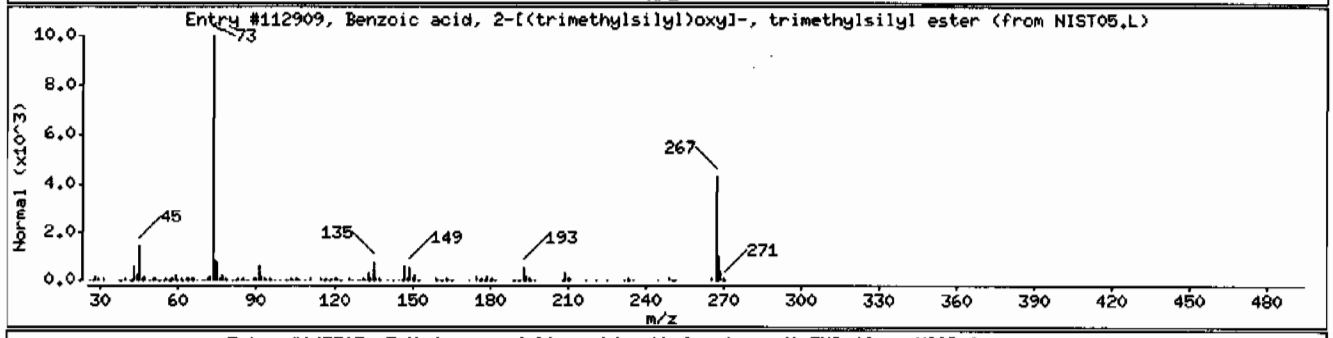

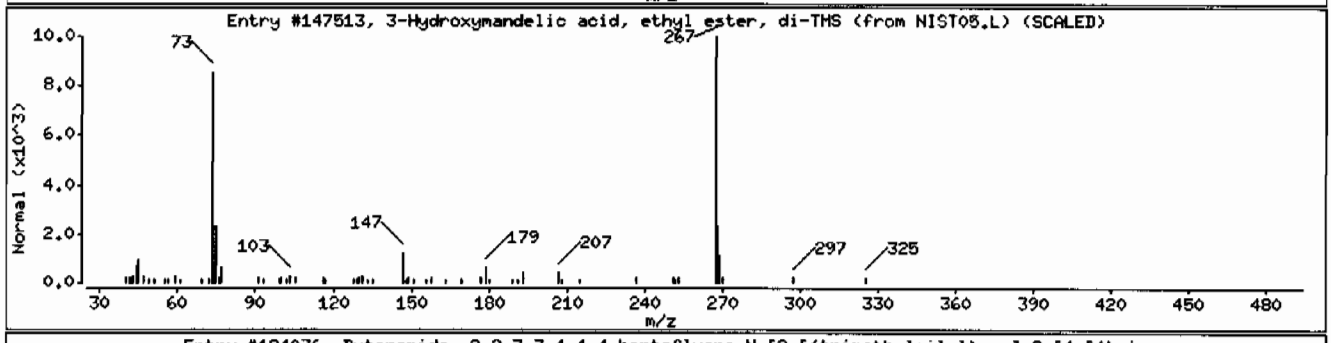

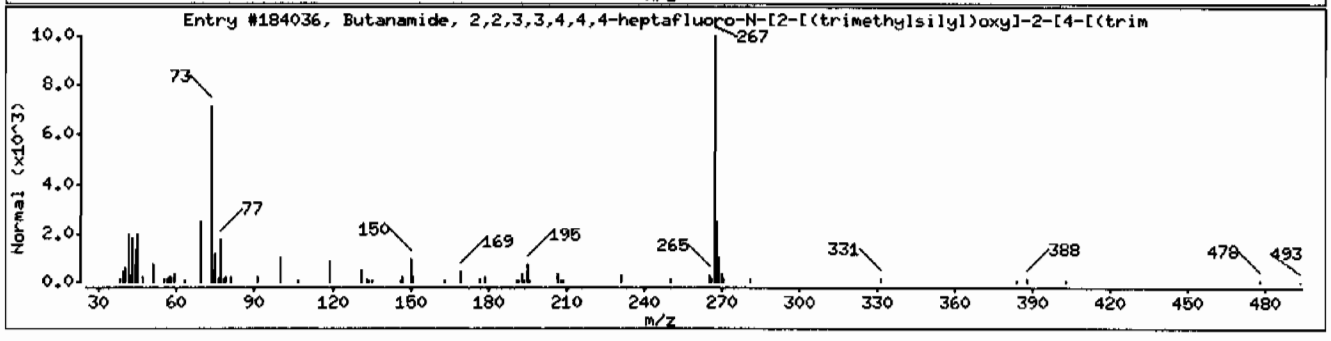

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418007	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13962	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 02:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:38	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m215.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.343	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.343	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.343	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.343	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.343	1.14
67-64-1	Acetone	U	5.71	ug/kg	1.90	5.71
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
74-88-4	Iodomethane	U	5.71	ug/kg	1.83	5.71
75-09-2	Methylene chloride	U	5.71	ug/kg	2.28	5.71
75-15-0	Carbon disulfide	U	5.71	ug/kg	1.43	5.71
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.343	1.14
78-93-3	2-Butanone	U	5.71	ug/kg	1.71	5.71
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.343	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.377	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.343	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.343	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.343	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.343	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.343	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.377	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.343	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.343	1.14
108-10-1	4-Methyl-2-pentanone	U	5.71	ug/kg	1.43	5.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.343	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.343	1.14
591-78-6	2-Hexanone	U	5.71	ug/kg	1.71	5.71
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.343	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.343	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.343	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.343	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.343	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418007**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13962**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 02:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:38**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m215.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.343	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.343	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.343	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.343	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.343	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.343	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.343	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.343	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.343	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.343	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.343	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.343	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.343	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.343	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.71	ug/kg	1.83	5.71
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m215.d
Lab Smp Id: 241418007 Client Smp ID: RE03-09-13962
Inj Date : 25-NOV-2009 02:39
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418007|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.46770	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1685646	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1221234	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	733651	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	295833	44.6829	51.0
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	999989	47.0127	53.7
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	416596	49.0371	56.0

ION RATIO REPORT

VOA REPORT

Data file: 4m215.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418007 SampleType: SAMPLE
Injection Date: 25-NOV-2009 02:39
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418007|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21759	10.62	10.34	80-120	100	(T)
64	3986	10.63	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8300	12.25	12.02	80-120	100	(T)
43	5043	12.25	12.02	228-288	61	(QT)
100	690795	12.25	12.02	9- 69	8322	(QT)
58 Ethylbenzene			CAS#: 100-41-4			
91	23367	13.86	13.86	80-120	100	( )
106	4646	13.88	13.86	3- 63	20	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m215.d
Lab Smp Id: 241418007 Client Smp ID: RE03-09-13962
Inj Date : 25-NOV-2009 02:39
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418007|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m215.d
Date : 25-NOV-2009 02:39
Client ID: RE03-09-13962
Sample Info: |24141800719264991|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

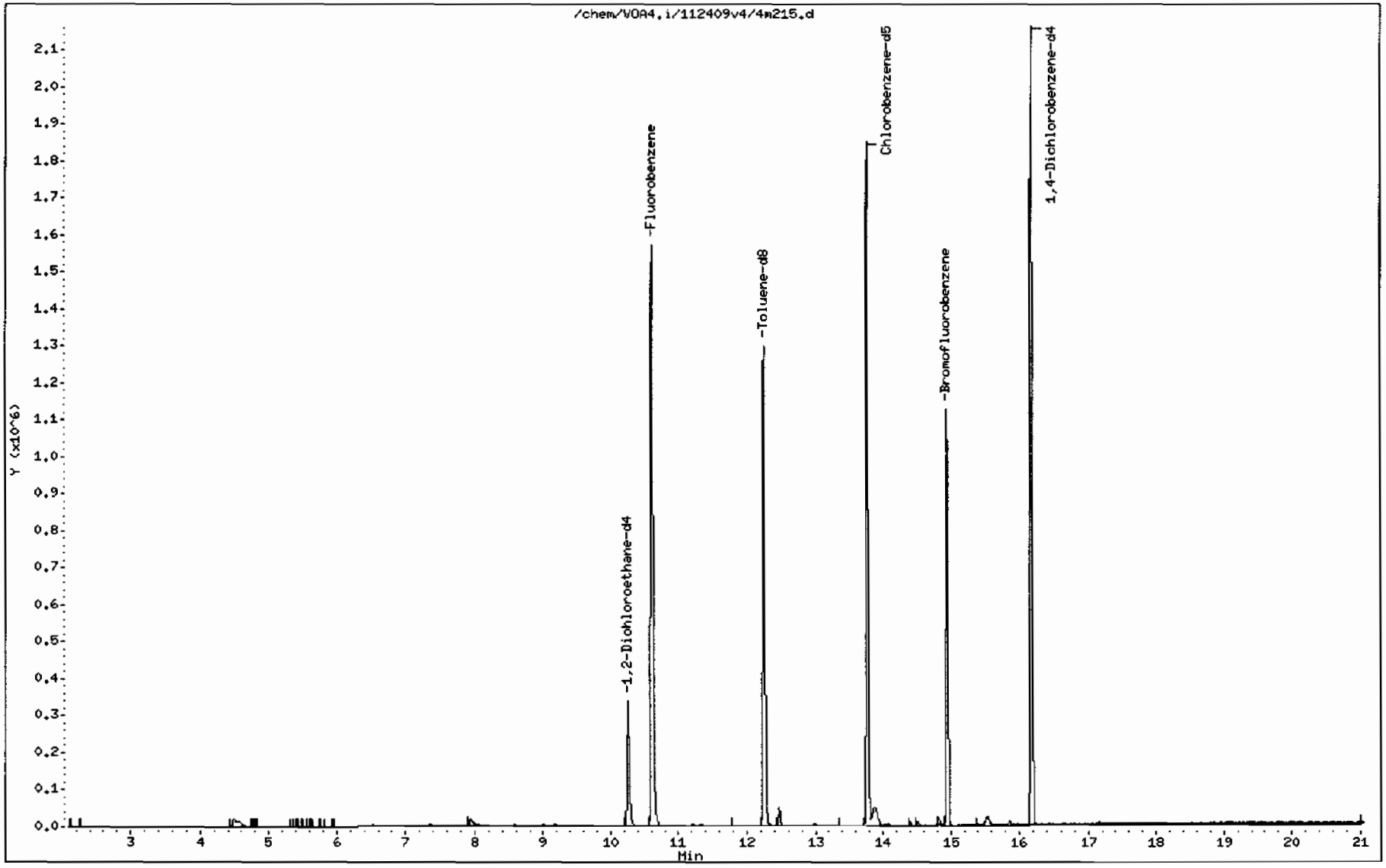

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418014	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13963	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 05:50	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:45	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m222.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.410	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21
67-64-1	Acetone	J	2.30	ug/kg	2.00	6.04
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
74-88-4	Iodomethane	U	6.04	ug/kg	1.93	6.04
75-09-2	Methylene chloride	U	6.04	ug/kg	2.41	6.04
75-15-0	Carbon disulfide	U	6.04	ug/kg	1.51	6.04
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21
78-93-3	2-Butanone	U	6.04	ug/kg	1.81	6.04
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.398	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.398	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21
108-10-1	4-Methyl-2-pentanone	U	6.04	ug/kg	1.51	6.04
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21
591-78-6	2-Hexanone	U	6.04	ug/kg	1.81	6.04
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.362	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418014**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13963**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m222.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.362	2.41
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.04	ug/kg	1.93	6.04
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m222.d
Lab Smp Id: 241418014 Client Smp ID: RE03-09-13963
Inj Date : 25-NOV-2009 05:50
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418014|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.16080	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1638832	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1199117	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	728320	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	309035	48.0103	58.0
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	996293	47.7028	57.6
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	430819	51.0825	61.7
10 Acetone	43	7.364	7.358	(0.693)	12665	1.90201	2.3(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4m222.d
Report Date: 11/25/2009 15:40
Lab. ID: 241418014 SampleType: SAMPLE
Injection Date: 25-NOV-2009 05:50
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418014|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone		CAS#: 67-64-1				
43	12665	7.36	7.36	80-120	100	( )
58	4045	7.38	7.36	1- 61	32	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21083	10.62	10.34	80-120	100	(T)
64	3955	10.61	10.34	2- 62	19	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8037	12.25	12.02	80-120	100	(T)
43	4946	12.25	12.02	228-288	62	(QT)
100	695526	12.25	12.02	9- 69	8654	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m222.d
Lab Smp Id: 241418014 Client Smp ID: RE03-09-13963
Inj Date : 25-NOV-2009 05:50
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418014|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m222.d

Date : 25-NOV-2009 05:50

Client ID: RE03-09-13963

Sample Info: |2414180141926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

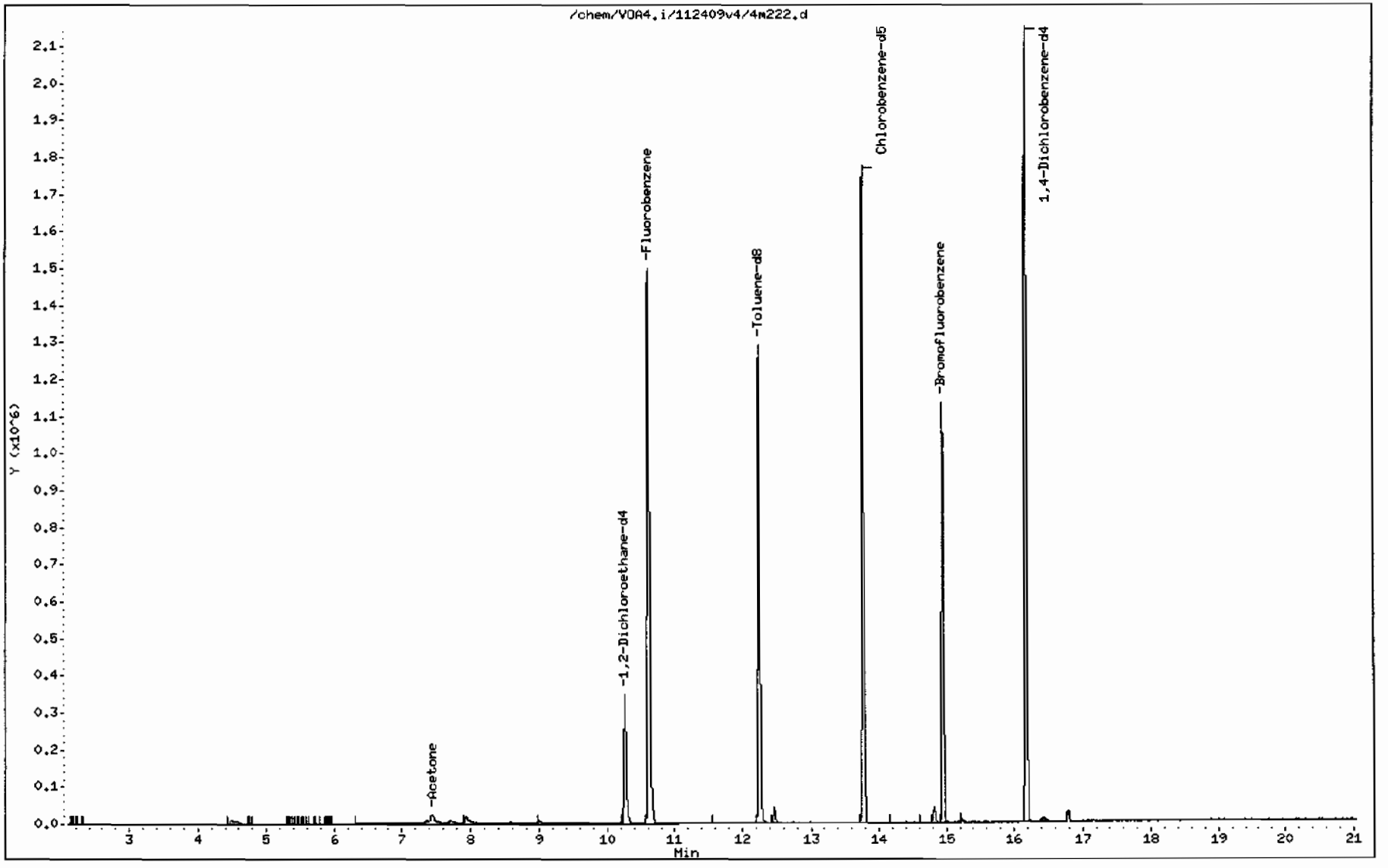

Data File: /chem/VOA4.i/112409v4/4m222.d

Date : 25-NOV-2009 05:50

Client ID: RE03-09-13963

Instrument: VOA4.i

Sample Info: |24141801419264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.3 ug/Kg

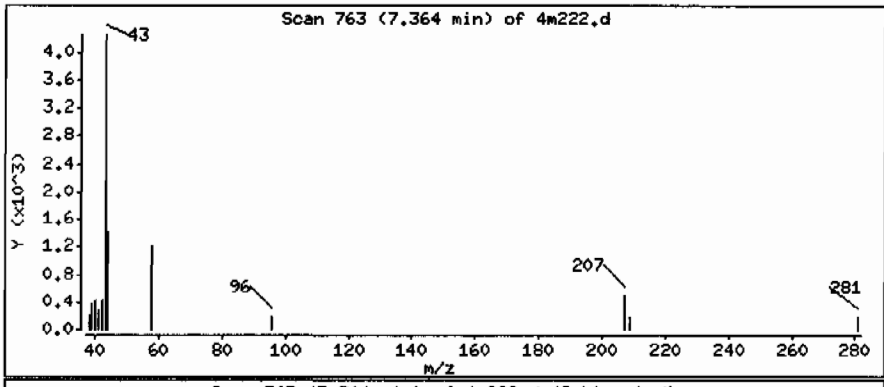

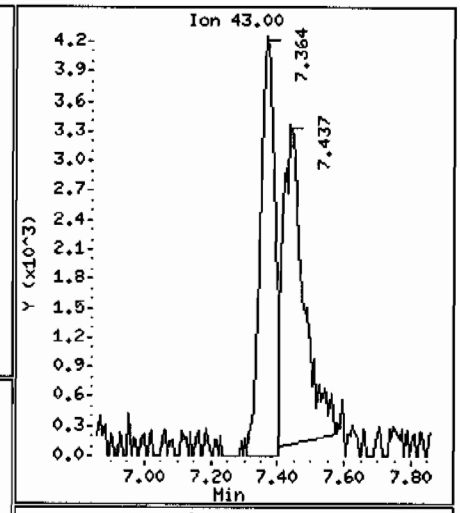

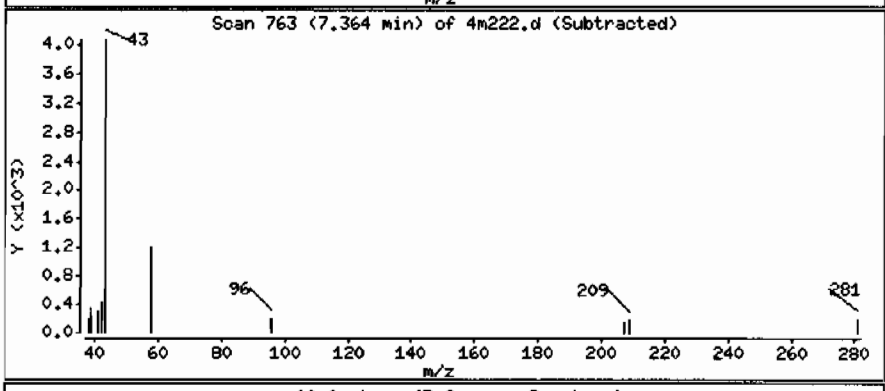

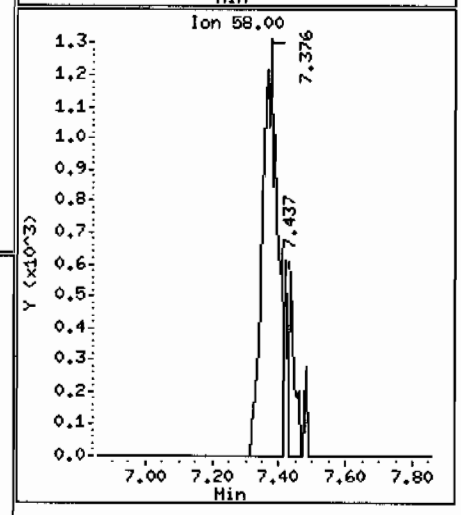

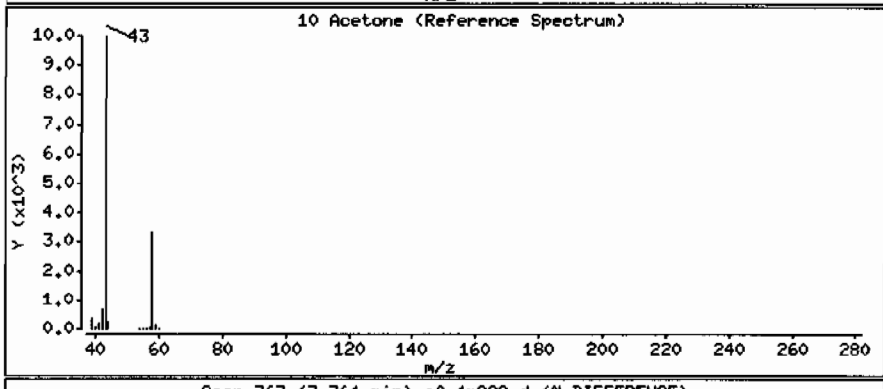

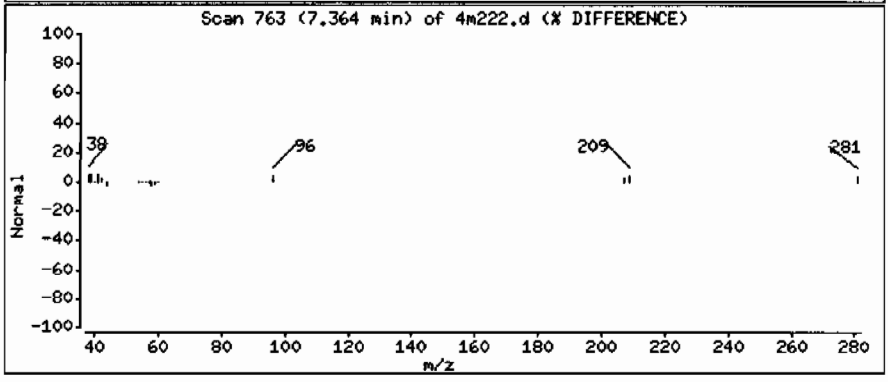

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m219.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15
67-64-1	Acetone	U	5.74	ug/kg	1.91	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.30	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.44	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.44	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.1**	**Dilution:**	**1**
Run Date:	**11/25/2009 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m219.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.74	ug/kg	1.84	5.74
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5989-27-5	D-Limonene	16.03	7.36	ug/kg	96	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m219.d
Lab Smp Id: 241418011 Client Smp ID: RE03-09-13964
Inj Date : 25-NOV-2009 04:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418011|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.92600	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1278586	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	917304	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	495343	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	275486	54.8568	63.0
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	906619	56.7453	65.2
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	373052	65.0374	74.7

ION RATIO REPORT

VOA REPORT

Data file: 4m219.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418011 SampleType: SAMPLE
Injection Date: 25-NOV-2009 04:28
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418011|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	15931	10.61	10.34	80-120	100	(T)
64	2698	10.61	10.34	2- 62	17	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7364	12.25	12.02	80-120	100	(T)
43	4821	12.25	12.02	228-288	65	(QT)
100	625408	12.25	12.02	9- 69	8492	(QT)
89 n-Butylbenzene				CAS#: 104-51-8		
91	16730	16.03	16.50	80-120	100	(T)
92	15061	16.03	16.50	27- 87	90	(QT)
134	281	16.02	16.50	0- 59	2	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m219.d
Lab Smp Id: 241418011 Client Smp ID: RE03-09-13964
Inj Date : 25-NOV-2009 04:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418011|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.92600	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 86 1,4-Dichlorobenzene-d4	16.179	3659671	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
D-Limonene				CAS #: 5989-27-5			
16.026	468949	6.40697593	7.4	96	NIST05.L	15165	86

Data File: /chem/VOA4.i/112409v4/4m219.d
Date : 25-NOV-2009 04:28
Client ID: RE03-09-13964
Sample Info: |24141801|926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

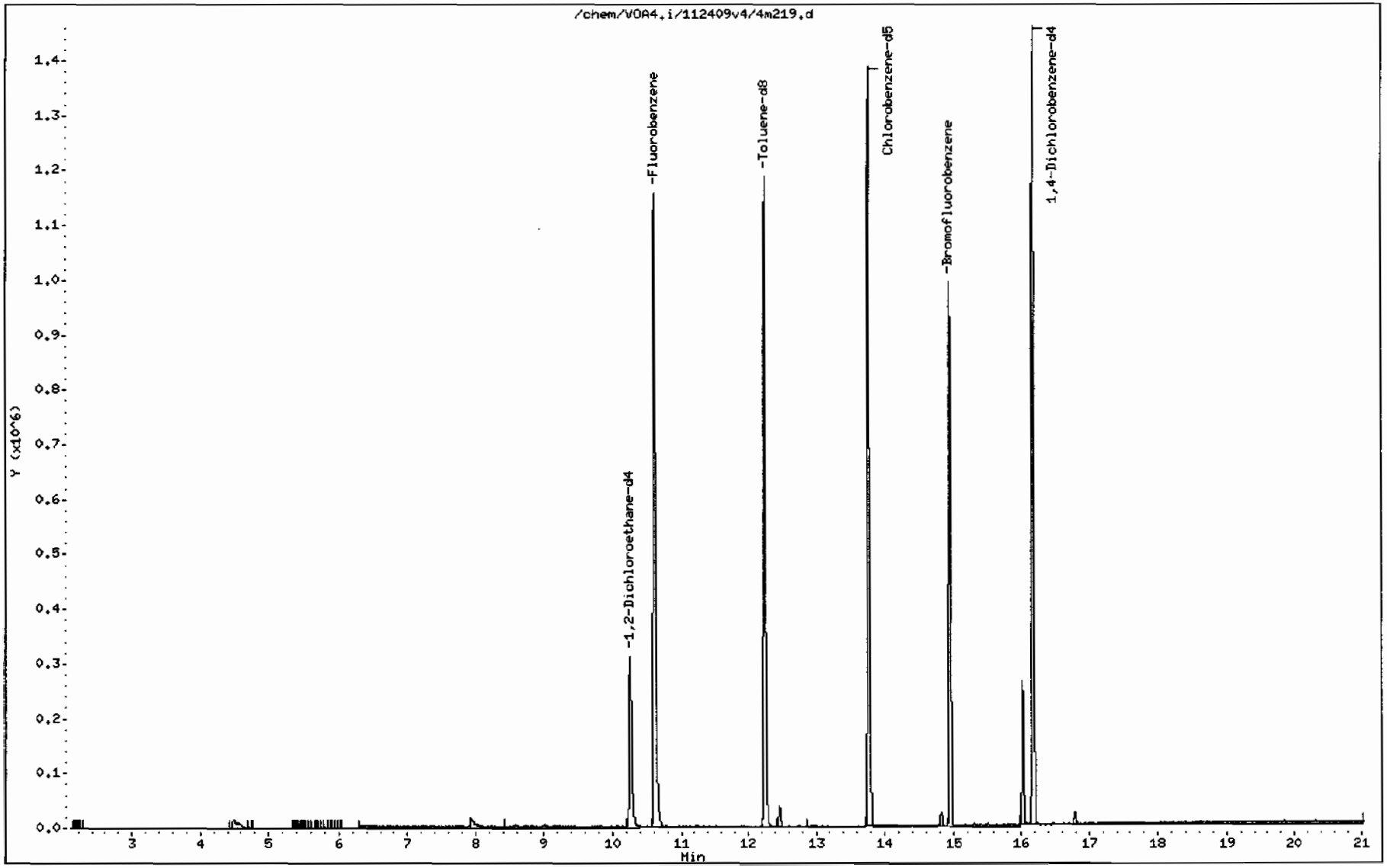

Data File: /chem/VOA4.i/112409v4/4m219.d

Date : 25-NOV-2009 04:28

Client ID: RE03-09-13964

Instrument: VOA4.i

Sample Info: |2414180111926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
D-Limonene	5989-27-5	NIST05.L	15165	96	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15162	95	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15164	94	C10H16	136

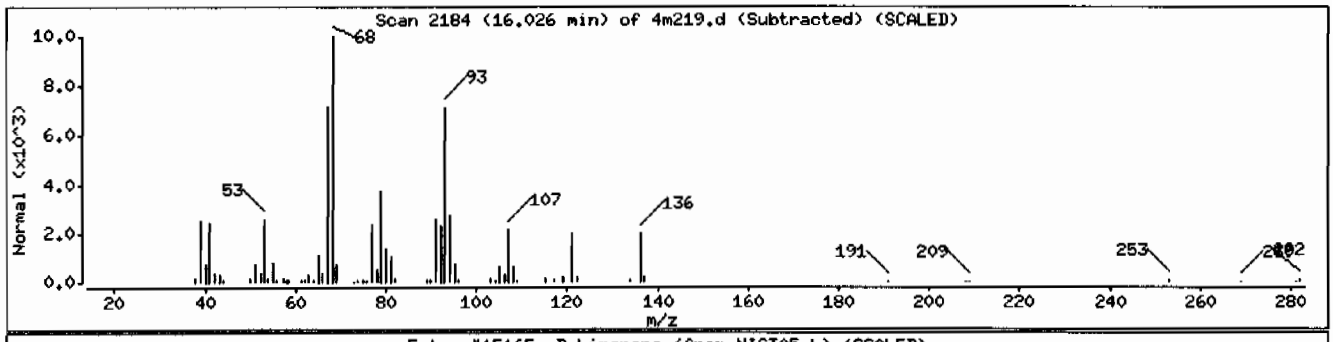

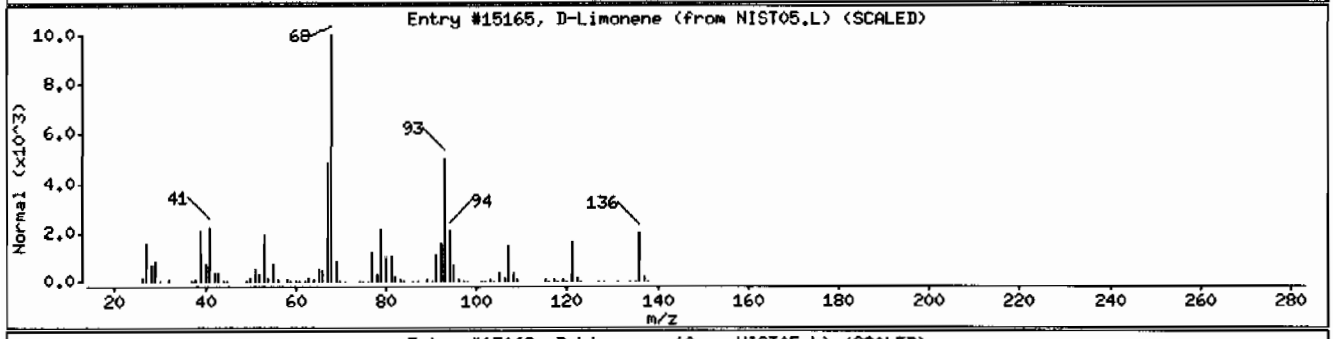

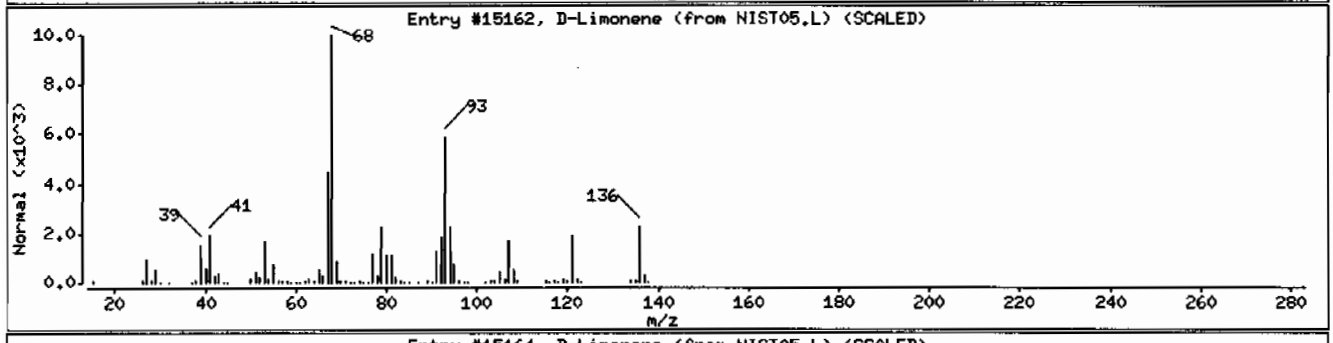

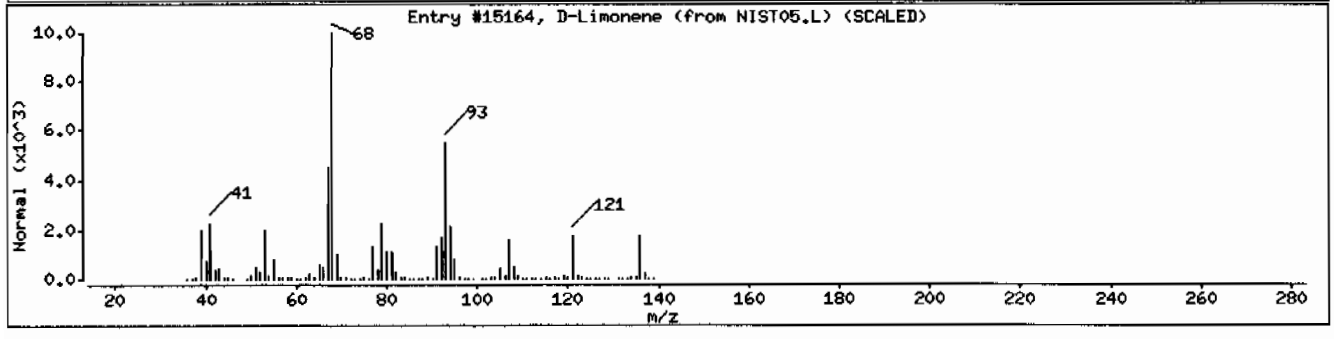

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13965	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 01:45	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:36	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m213.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.339	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.339	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.339	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.339	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.339	1.13
67-64-1	Acetone	J	2.54	ug/kg	1.87	5.65
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
74-88-4	Iodomethane	U	5.65	ug/kg	1.81	5.65
75-09-2	Methylene chloride	U	5.65	ug/kg	2.26	5.65
75-15-0	Carbon disulfide	U	5.65	ug/kg	1.41	5.65
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.339	1.13
78-93-3	2-Butanone	U	5.65	ug/kg	1.69	5.65
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.339	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.373	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.339	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.339	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.339	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.339	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.339	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.373	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.339	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.339	1.13
108-10-1	4-Methyl-2-pentanone	U	5.65	ug/kg	1.41	5.65
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.339	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.339	1.13
591-78-6	2-Hexanone	U	5.65	ug/kg	1.69	5.65
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.339	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.339	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.339	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.339	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.339	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.1**	**Dilution:**	**1**
Run Date:	**11/25/2009 01:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:36**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m213.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.339	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.339	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.339	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.339	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.339	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.339	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.339	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.339	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.339	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.339	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.339	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.339	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.339	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.339	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.65	ug/kg	1.81	5.65
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	8.48	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m213.d
Lab Smp Id: 241418005 Client Smp ID: RE03-09-13965
Inj Date : 25-NOV-2009 01:45
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418005|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	11.42830	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1666846	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1207615	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.180	(1.000)	749714	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	310105	47.3669	53.5
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1023187	48.6458	54.9
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	443608	51.0979	57.7
10 Acetone	43	7.369	7.358	(0.694)	15250	2.25173	2.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4m213.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418005 SampleType: SAMPLE
Injection Date: 25-NOV-2009 01:45
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418005|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	15250	7.37	7.36	80-120	100	( )
58	3886	7.38	7.36	1- 61	25	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21742	10.62	10.34	80-120	100	(T)
64	3922	10.61	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8061	12.25	12.02	80-120	100	(T)
43	5140	12.25	12.02	228-288	64	(QT)
100	709339	12.25	12.02	9- 69	8799	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m213.d
Lab Smp Id: 241418005 Client Smp ID: RE03-09-13965
Inj Date : 25-NOV-2009 01:45
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418005|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	11.42830	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 86 1,4-Dichlorobenzene-d4	16.178	4132415	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
16.794	621055	7.51443121	8.5	0		0	86

Data File: /chem/VOA4.i/112409v4/4m213.d
Date : 25-NOV-2009 01:45
Client ID: RE03-09-13965
Sample Info: |2414180051926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

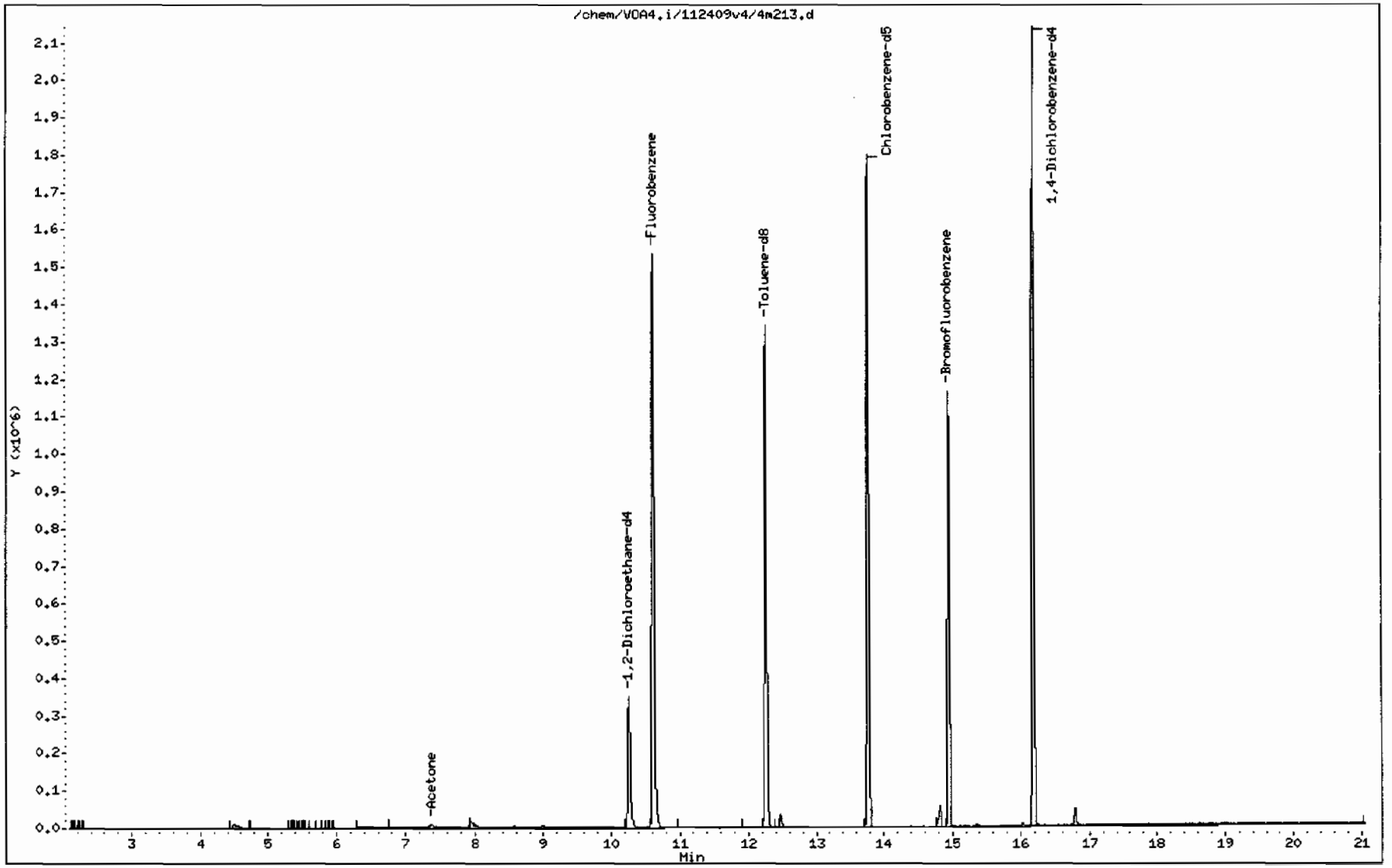

Data File: /chem/VOA4.i/112409v4/4m213.d

Date : 25-NOV-2009 01:45

Client ID: RE03-09-13965

Instrument: VOA4.i

Sample Info: |2414180051926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.5 ug/Kg

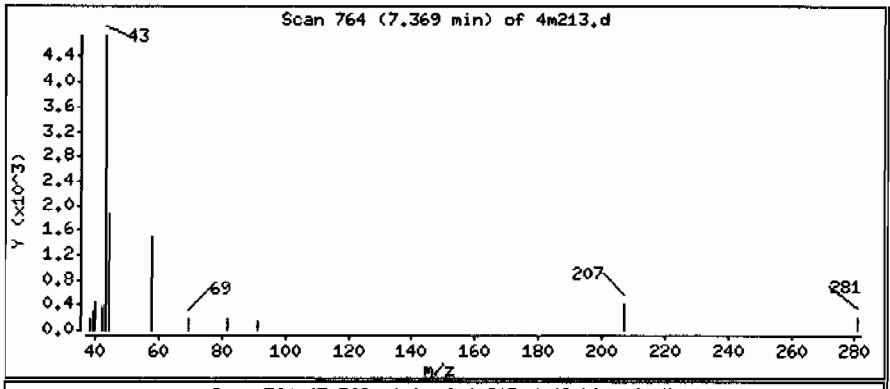

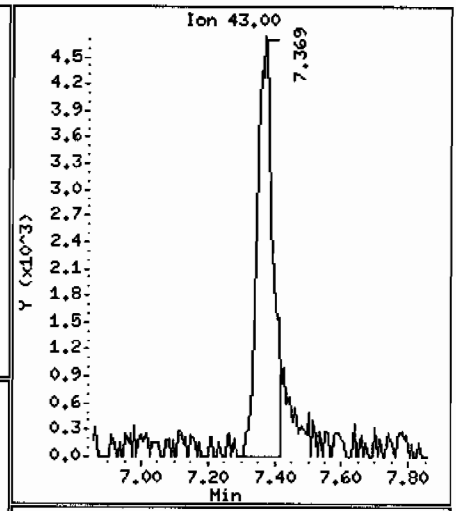

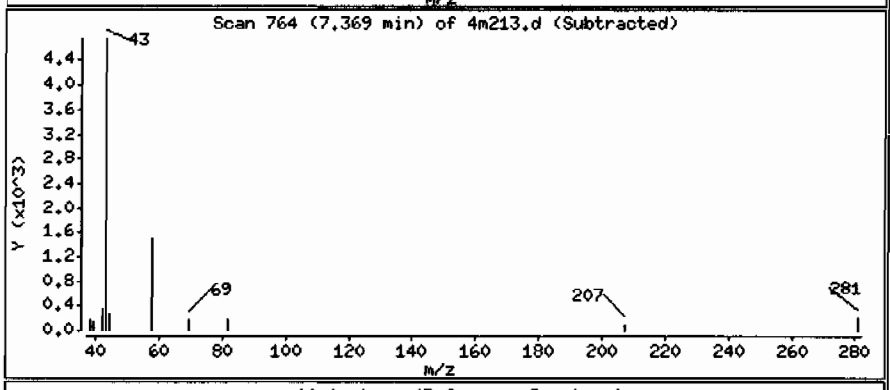

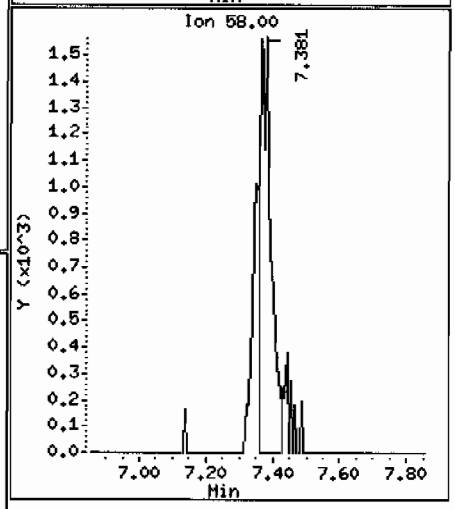

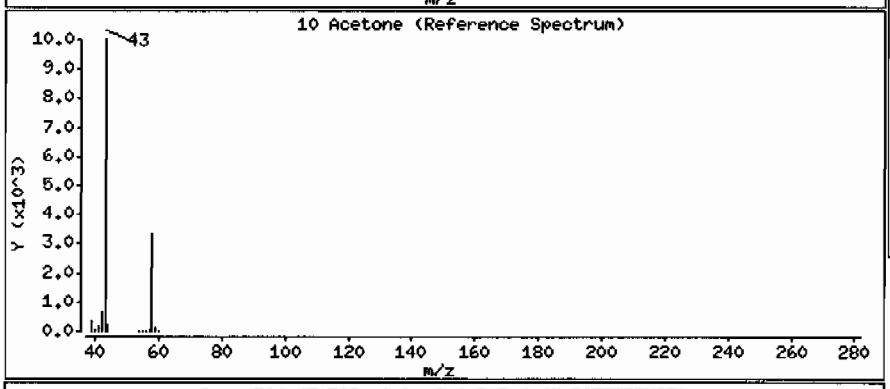

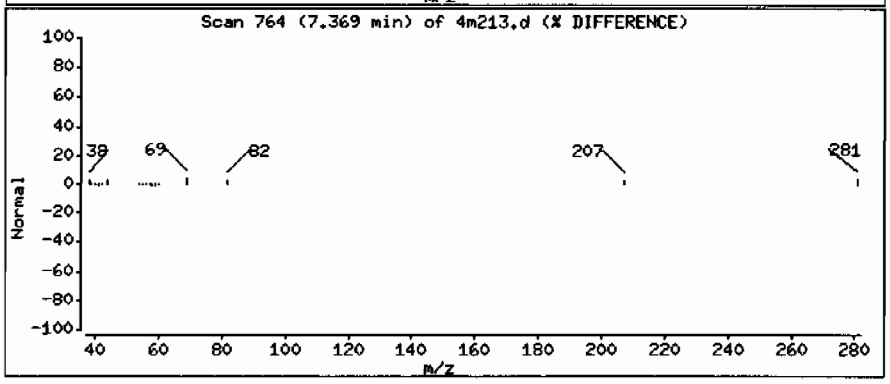

Data File: /chem/VOA4.i/112409v4/4m213.d

Date : 25-NOV-2009 01:45

Client ID: RE03-09-13965

Instrument: VOA4.i

Sample Info: |24141800519264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	64	C16H28O4Si2	340
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	50	C21H26F5NO2Si4	475
p-Trimethylsilyloxyphenyl-(trimethylsily	1000079-05-1	NIST05.L	170606	45	C18H34O4Si3	398

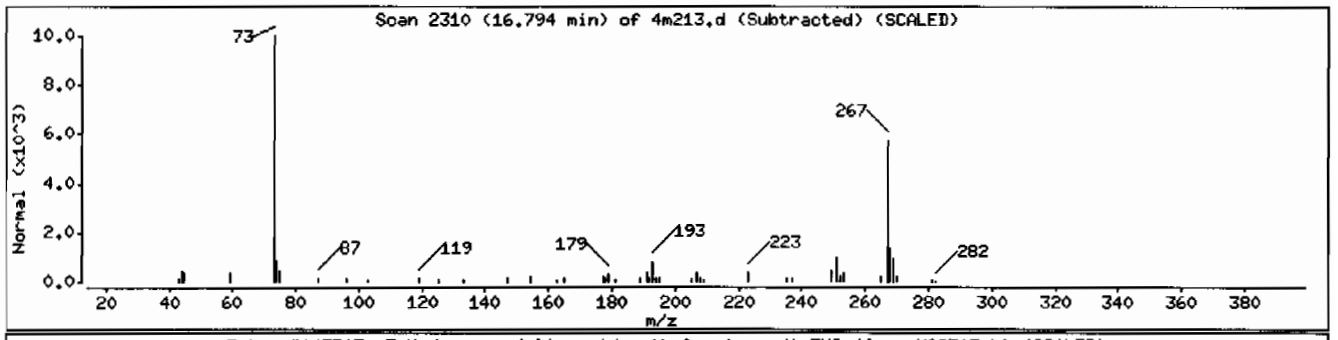

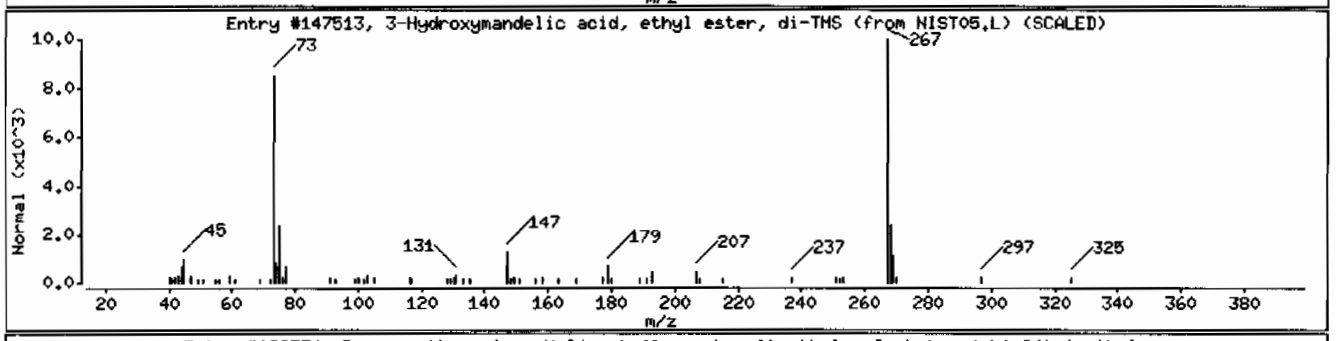

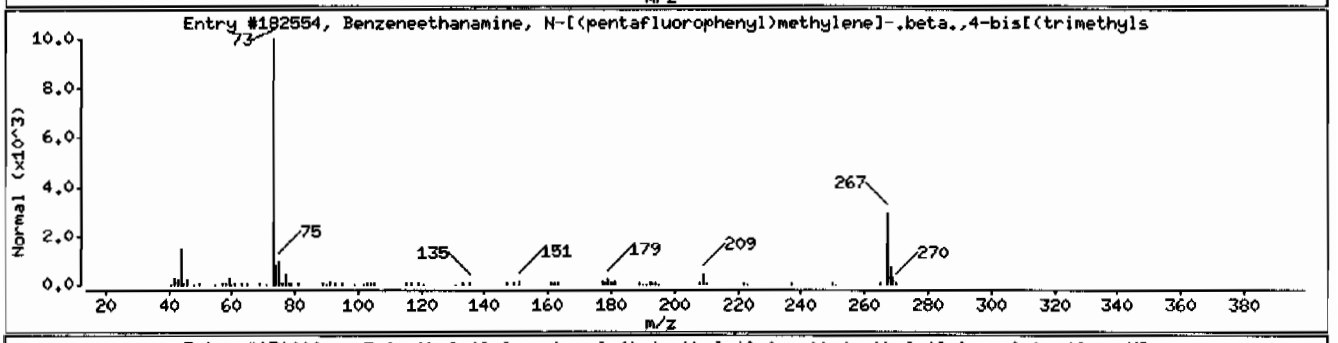

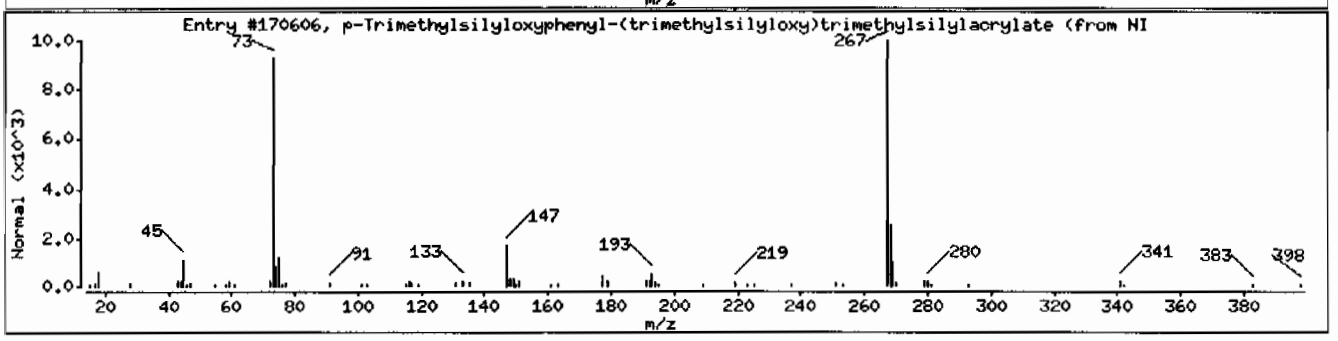

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418012	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13966	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:55	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:43	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m220.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.368	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.325	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.325	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.325	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.325	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.325	1.08
67-64-1	Acetone	U	5.41	ug/kg	1.80	5.41
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
74-88-4	Iodomethane	U	5.41	ug/kg	1.73	5.41
75-09-2	Methylene chloride	U	5.41	ug/kg	2.16	5.41
75-15-0	Carbon disulfide	U	5.41	ug/kg	1.35	5.41
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.325	1.08
78-93-3	2-Butanone	U	5.41	ug/kg	1.62	5.41
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.325	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.357	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.325	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.325	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.325	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.325	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.325	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.357	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.325	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.325	1.08
108-10-1	4-Methyl-2-pentanone	U	5.41	ug/kg	1.35	5.41
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.325	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.325	1.08
591-78-6	2-Hexanone	U	5.41	ug/kg	1.62	5.41
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.325	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.325	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.325	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.325	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.325	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418012	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13966	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:55	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:43	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m220.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.325	1.08
179601-23-1	m,p-Xylenes	U	2.16	ug/kg	0.325	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.325	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.325	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.325	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.325	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.325	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.325	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.325	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.325	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.325	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.325	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.325	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.325	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.41	ug/kg	1.73	5.41
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m220.d
Lab Smp Id: 241418012 Client Smp ID: RE03-09-13966
Inj Date : 25-NOV-2009 04:55
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418012|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.61400	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1472422	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1006274	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.180	(1.000)	494068	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	302437	52.2954	56.6
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	955804	54.5345	59.0
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	358381	62.6409	67.8

ION RATIO REPORT

VOA REPORT

Data file: 4m220.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418012 SampleType: SAMPLE
Injection Date: 25-NOV-2009 04:55
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418012|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	19096	10.62	10.34	80-120	100	(T)
64	3380	10.62	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7741	12.25	12.02	80-120	100	(T)
43	4366	12.25	12.02	228-288	56	(QT)
100	664734	12.25	12.02	9- 69	8587	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m220.d
Lab Smp Id: 241418012 Client Smp ID: RE03-09-13966
Inj Date : 25-NOV-2009 04:55
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418012|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m220.d
Date : 25-NOV-2009 04:55
Client ID: RE03-09-13966
Sample Info: |2414180121926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

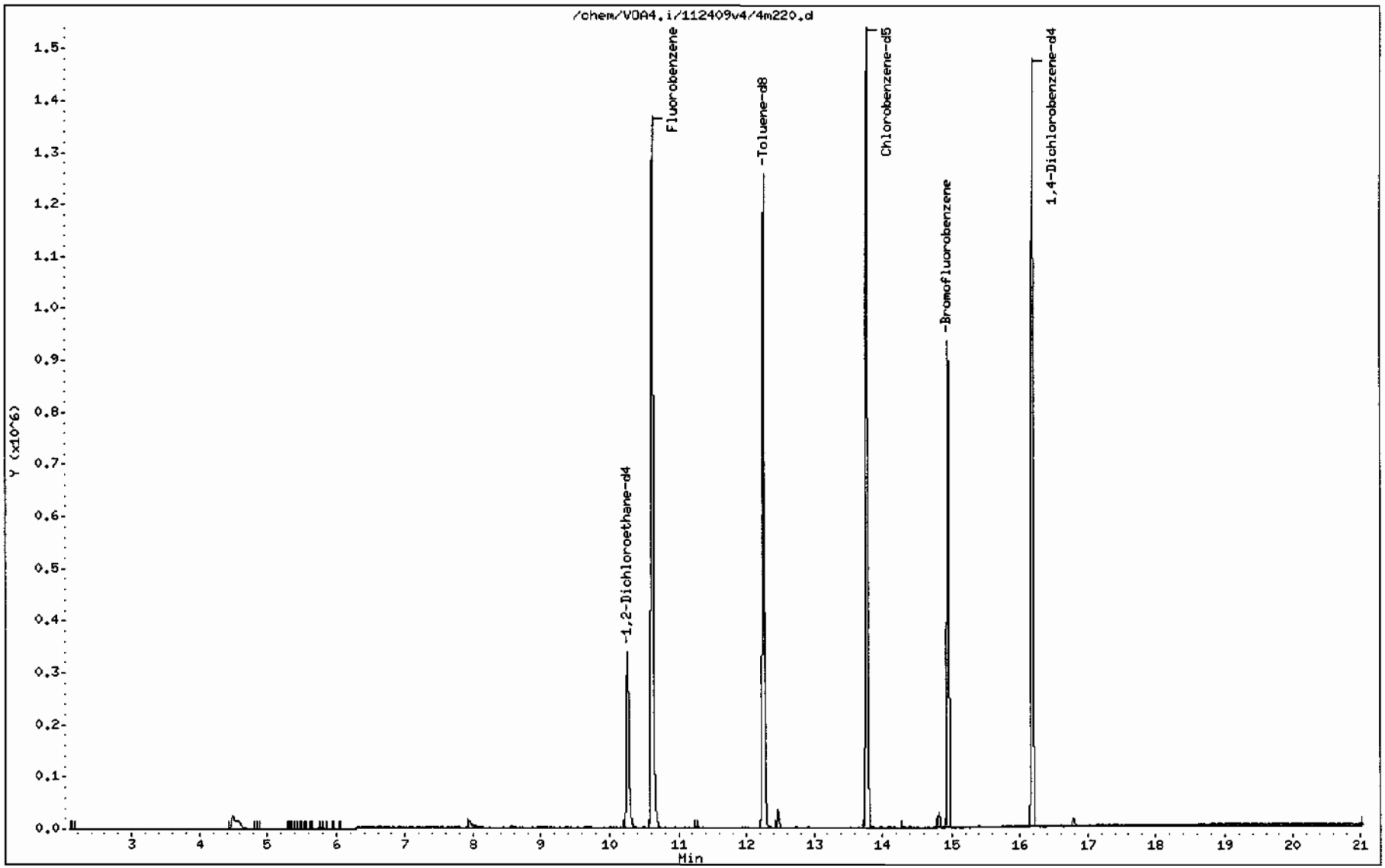

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418013	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13967	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 05:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:44	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m221.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.414	1.22
74-87-3	Chloromethane	U	1.22	ug/kg	0.365	1.22
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.365	1.22
74-83-9	Bromomethane	U	1.22	ug/kg	0.365	1.22
75-00-3	Chloroethane	U	1.22	ug/kg	0.365	1.22
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.365	1.22
67-64-1	Acetone	J	2.06	ug/kg	2.02	6.09
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
74-88-4	Iodomethane	U	6.09	ug/kg	1.95	6.09
75-09-2	Methylene chloride	U	6.09	ug/kg	2.44	6.09
75-15-0	Carbon disulfide	U	6.09	ug/kg	1.52	6.09
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.365	1.22
78-93-3	2-Butanone	U	6.09	ug/kg	1.83	6.09
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.365	1.22
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
67-66-3	Chloroform	U	1.22	ug/kg	0.365	1.22
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.402	1.22
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.365	1.22
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.365	1.22
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.365	1.22
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.365	1.22
71-43-2	Benzene	U	1.22	ug/kg	0.365	1.22
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.402	1.22
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.365	1.22
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.365	1.22
74-95-3	Dibromomethane	U	1.22	ug/kg	0.365	1.22
108-10-1	4-Methyl-2-pentanone	U	6.09	ug/kg	1.52	6.09
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
108-88-3	Toluene	U	1.22	ug/kg	0.365	1.22
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.365	1.22
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.365	1.22
591-78-6	2-Hexanone	U	6.09	ug/kg	1.83	6.09
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.365	1.22
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.365	1.22
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.365	1.22
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.365	1.22
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.365	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13967**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 05:22**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m221.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.365	1.22
179601-23-1	m,p-Xylenes	U	2.44	ug/kg	0.365	2.44
95-47-6	o-Xylene	U	1.22	ug/kg	0.365	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.365	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.365	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.365	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.365	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.365	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.365	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.365	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.365	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.365	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.365	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.365	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.365	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.365	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.09	ug/kg	1.95	6.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.365	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.365	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m221.d
Lab Smp Id: 241418013 Client Smp ID: RE03-09-13967
Inj Date : 25-NOV-2009 05:22
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418013|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.89790	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1588473	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1188309	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	719664	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	315605	50.5854	61.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	996509	48.1471	58.6
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	430143	51.6158	62.9
10 Acetone	43	7.363	7.358	(0.693)	10916	1.69132	2.1(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4m221.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418013 SampleType: SAMPLE
Injection Date: 25-NOV-2009 05:22
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418013|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	10916	7.36	7.36	80-120	100	( )
58	3538	7.36	7.36	1- 61	32	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21280	10.62	10.34	80-120	100	(T)
64	3888	10.62	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8370	12.25	12.02	80-120	100	(T)
43	5630	12.25	12.02	228-288	67	(QT)
100	691352	12.25	12.02	9- 69	8260	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m221.d
Lab Smp Id: 241418013 Client Smp ID: RE03-09-13967
Inj Date : 25-NOV-2009 05:22
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418013|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m221.d
Date : 25-NOV-2009 05:22
Client ID: RE03-09-13967
Sample Info: |2414180131926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

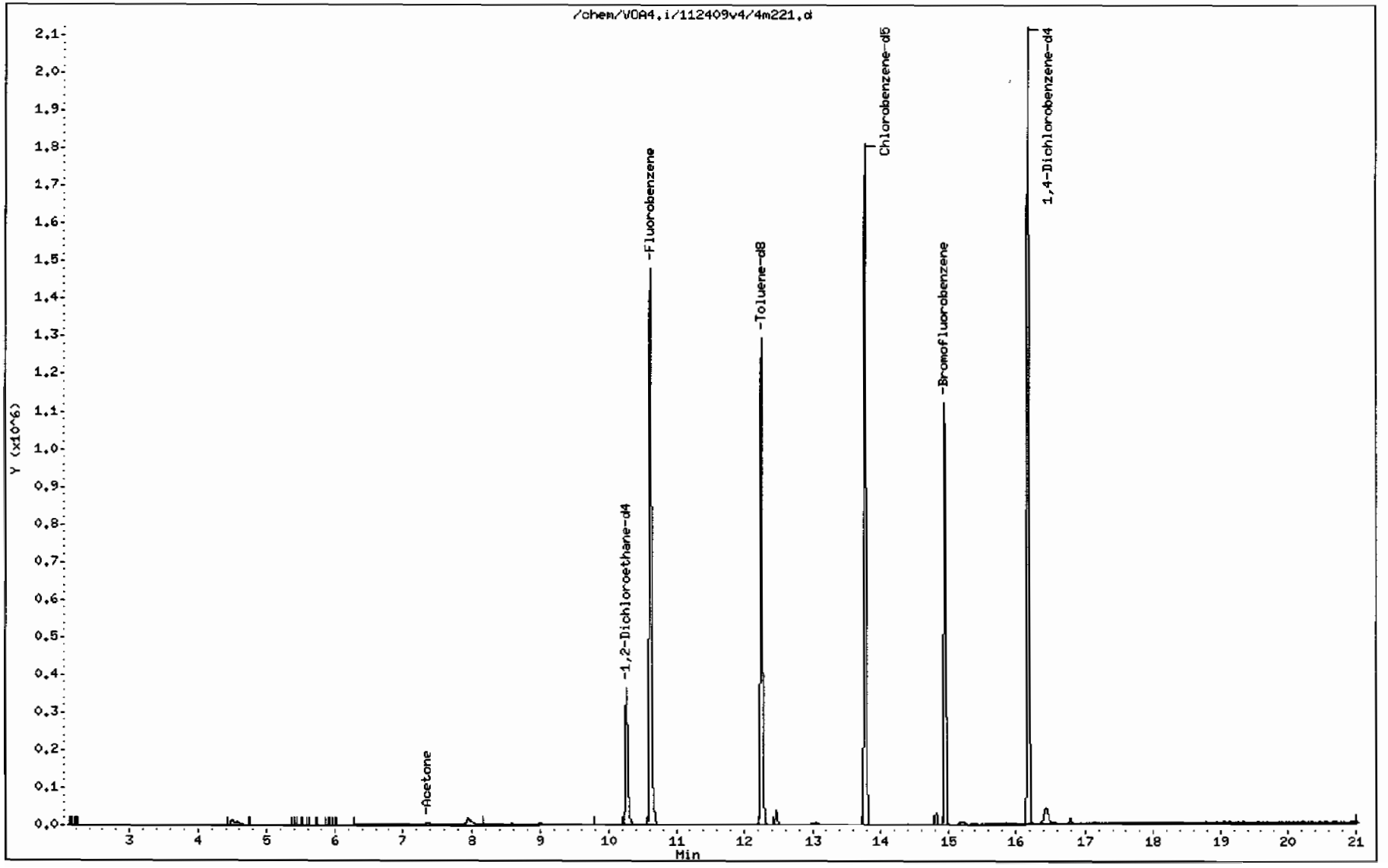

Data File: /chem/VOA4.i/112409v4/4m221.d

Page 2

Date : 25-NOV-2009 05:22

Client ID: RE03-09-13967

Instrument: VOA4.i

Sample Info: |2414180131926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.1 ug/Kg

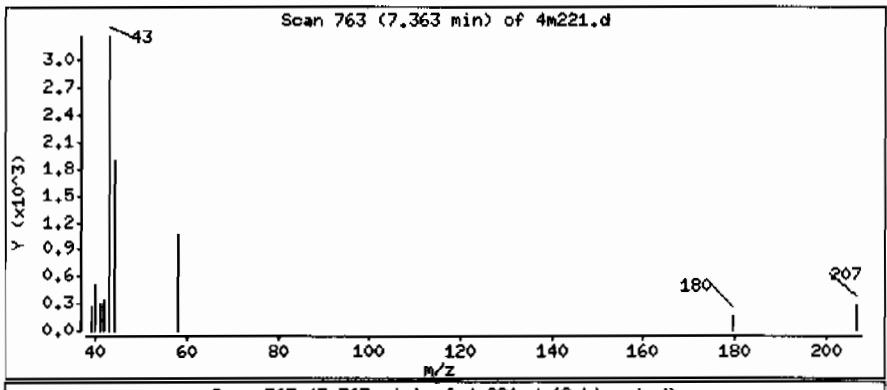

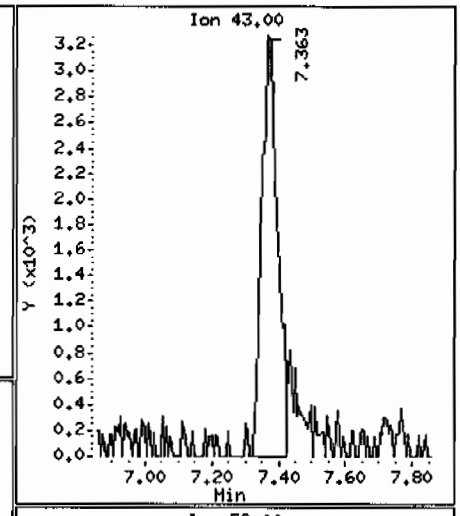

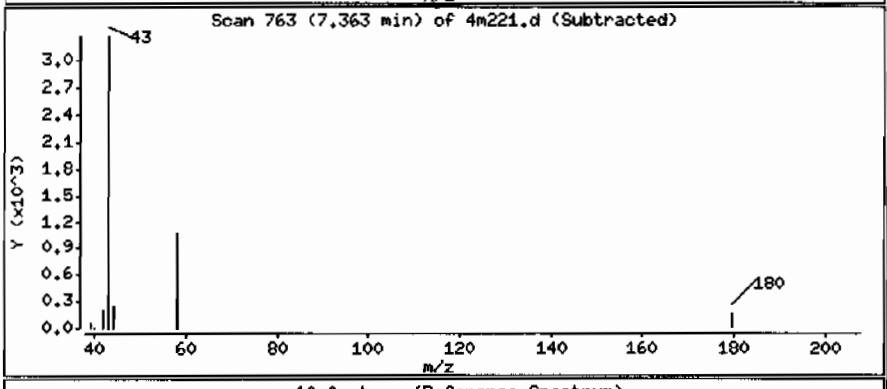

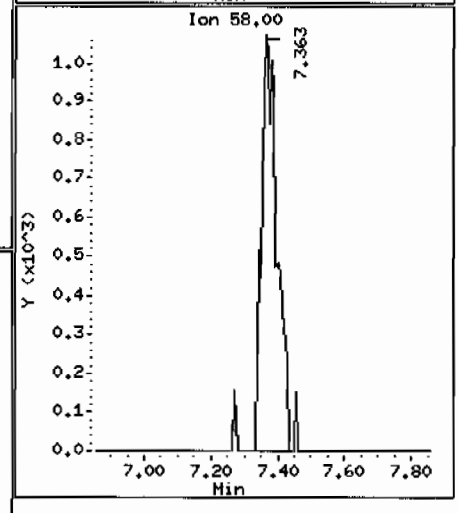

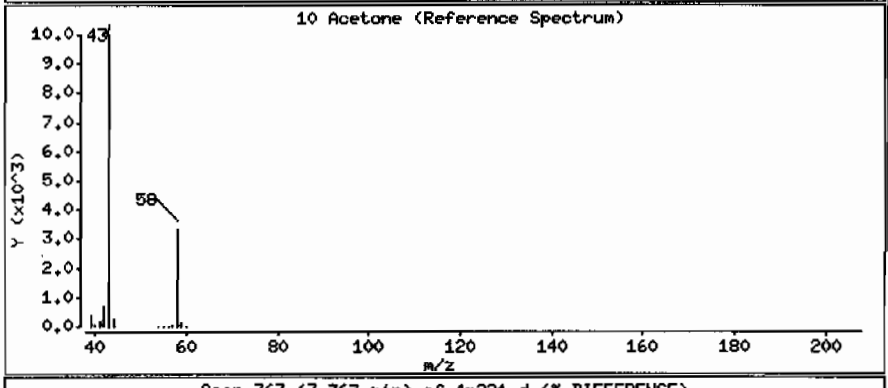

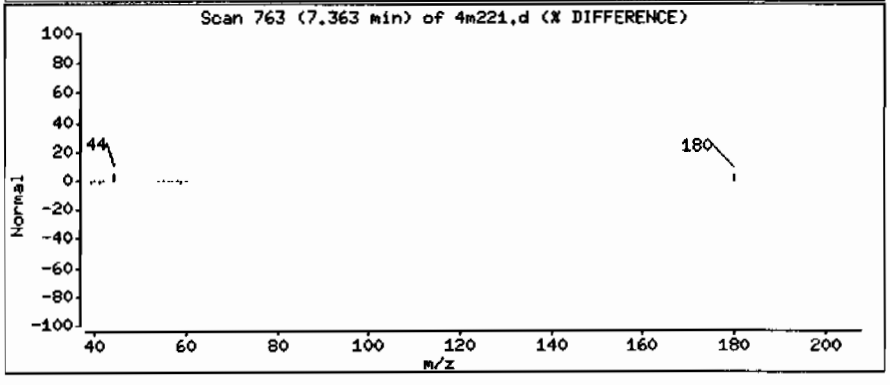

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:41	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m218.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 04:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:41	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m218.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m218.d
Lab Smp Id: 241418010 Client Smp ID: RE03-09-13968
Inj Date : 25-NOV-2009 04:01
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418010|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.55190	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1358971	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	973160	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	538188	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	276431	51.7890	56.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	874485	51.5925	56.4
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	357264	57.3264	62.7

ION RATIO REPORT

VOA REPORT

Data file: 4m218.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418010 SampleType: SAMPLE
Injection Date: 25-NOV-2009 04:01
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418010|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	17621	10.62	10.34	80-120	100	(T)
64	3473	10.62	10.34	2- 62	20	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	6826	12.25	12.02	80-120	100	(T)
43	4694	12.25	12.02	228-288	69	(QT)
100	604676	12.25	12.02	9- 69	8857	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m218.d
Lab Smp Id: 241418010 Client Smp ID: RE03-09-13968
Inj Date : 25-NOV-2009 04:01
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418010|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m218.d
Date : 25-NOV-2009 04:01
Client ID: RE03-09-13968
Sample Info: |24141801019264991|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

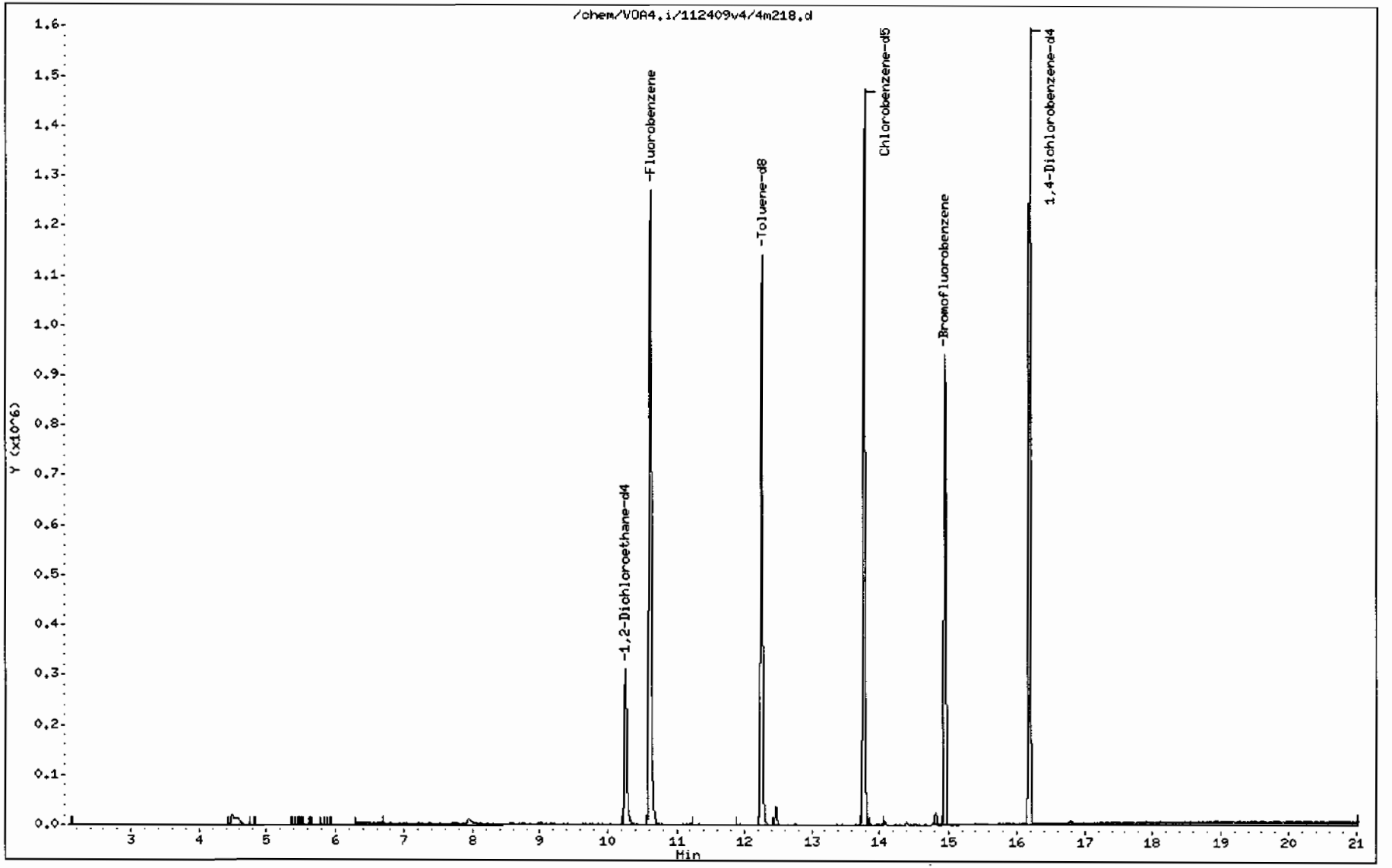

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m217.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.392	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.346	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.346	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.346	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.346	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.346	1.15
67-64-1	Acetone		9.43	ug/kg	1.91	5.76
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.346	1.15
74-88-4	Iodomethane	U	5.76	ug/kg	1.84	5.76
75-09-2	Methylene chloride	U	5.76	ug/kg	2.30	5.76
75-15-0	Carbon disulfide	U	5.76	ug/kg	1.44	5.76
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.346	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.346	1.15
78-93-3	2-Butanone	U	5.76	ug/kg	1.73	5.76
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.346	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.346	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.346	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.380	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.346	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.346	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.346	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.346	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.346	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.380	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.346	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.346	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.346	1.15
108-10-1	4-Methyl-2-pentanone	U	5.76	ug/kg	1.44	5.76
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.346	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.346	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.346	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.346	1.15
591-78-6	2-Hexanone	U	5.76	ug/kg	1.73	5.76
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.346	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.346	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.346	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.346	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.346	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m217.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.346	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.346	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.346	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.346	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.346	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.346	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.346	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.346	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.346	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.346	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.346	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.346	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.346	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.346	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.346	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.346	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.346	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.346	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.346	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.76	ug/kg	1.84	5.76
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.346	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.346	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m217.d
Lab Smp Id: 241418009 Client Smp ID: RE03-09-13969
Inj Date : 25-NOV-2009 03:34
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418009|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	13.21470	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1691980	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1229320	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	747047	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	297261	44.7305	51.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	983911	45.9525	52.9
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	428906	49.5808	57.1
10 Acetone	43	7.364	7.358	(0.693)	56254	8.18276	9.4

ION RATIO REPORT

VOA REPORT

Data file: 4m217.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418009 SampleType: SAMPLE
Injection Date: 25-NOV-2009 03:34
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418009|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone		CAS#: 67-64-1				
43	56254	7.36	7.36	80-120	100	( )
58	17180	7.36	7.36	1- 61	31	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	22074	10.62	10.34	80-120	100	(T)
64	3563	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7814	12.25	12.02	80-120	100	(T)
43	5474	12.25	12.02	228-288	70	(QT)
100	684427	12.25	12.02	9- 69	8759	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m217.d
Lab Smp Id: 241418009 Client Smp ID: RE03-09-13969
Inj Date : 25-NOV-2009 03:34
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418009|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m217.d
Date : 25-NOV-2009 03:34
Client ID: RE03-09-13969
Sample Info: |2414180091926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

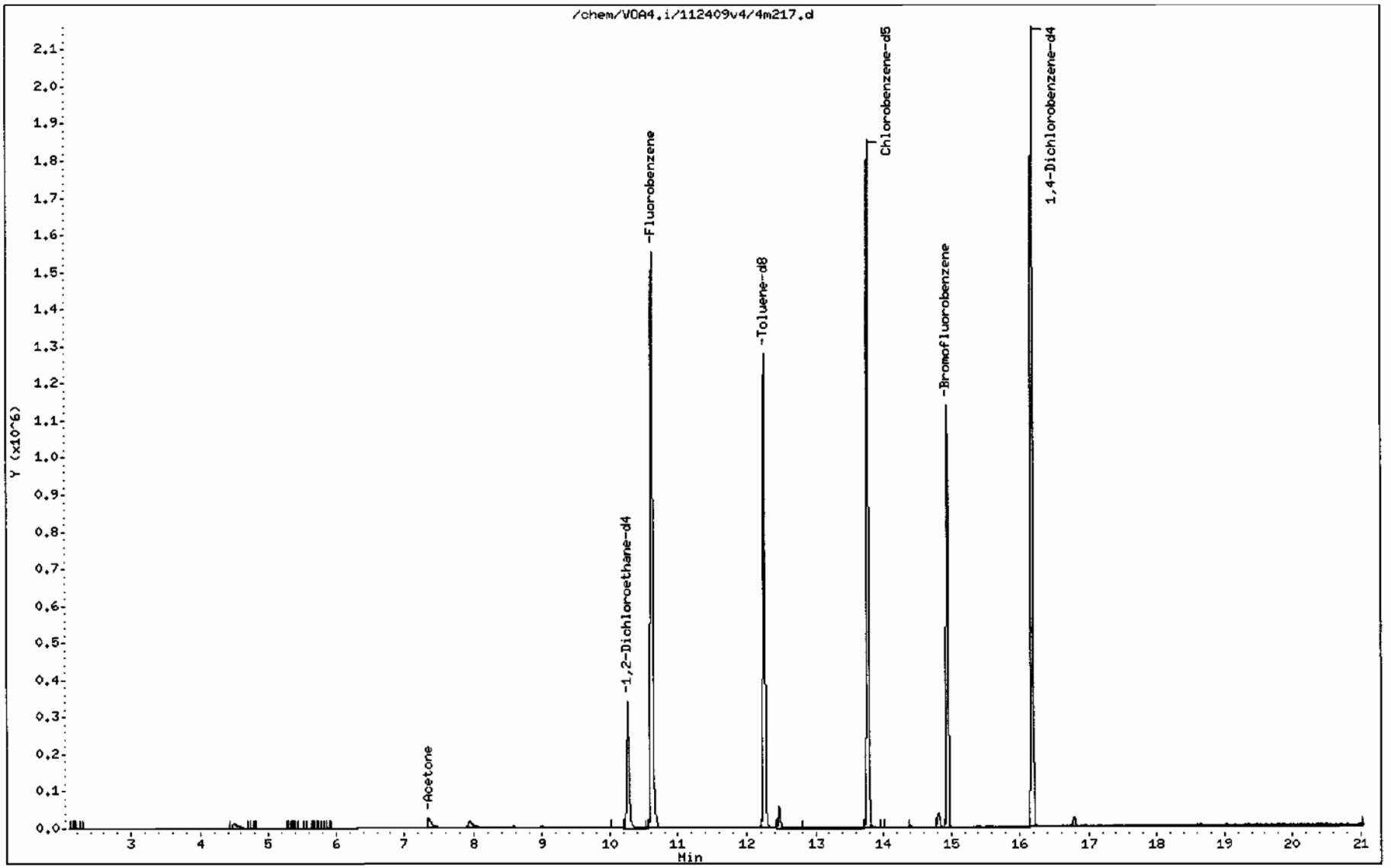

Data File: /chem/VOA4.i/112409v4/4m217.d

Date : 25-NOV-2009 03:34

Client ID: RE03-09-13969

Instrument: VOA4.i

Sample Info: |24141800919264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 9.4 ug/Kg

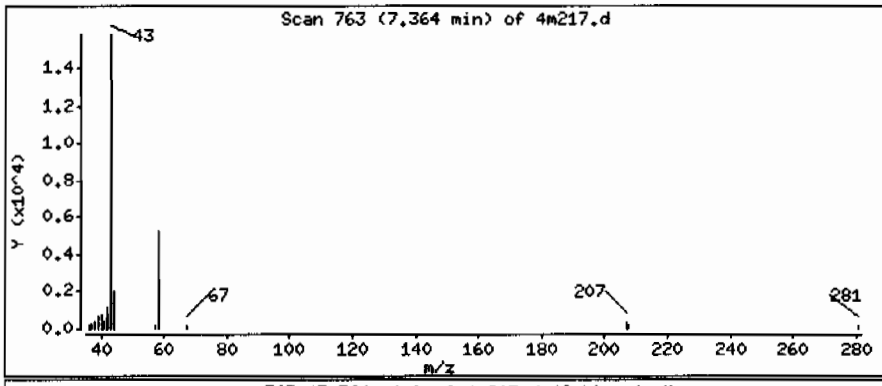

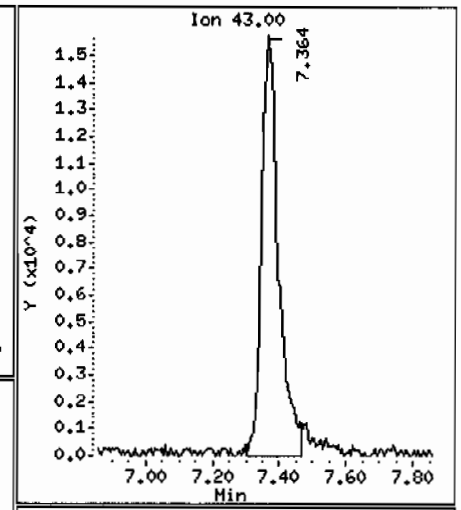

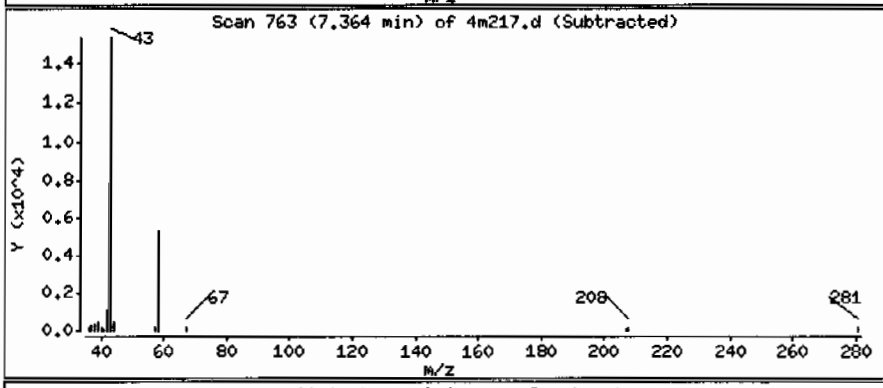

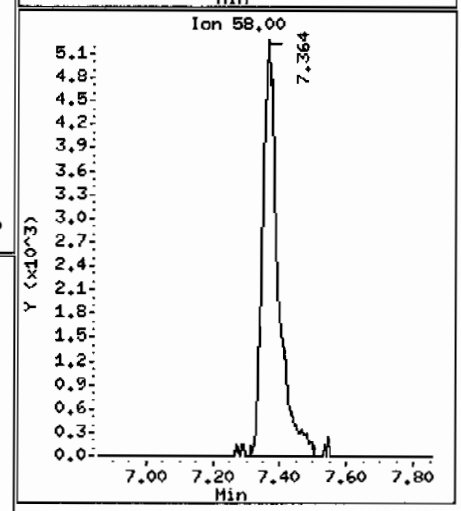

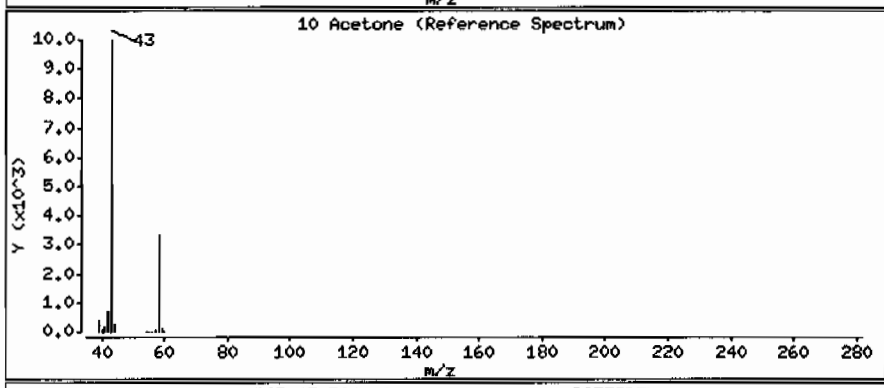

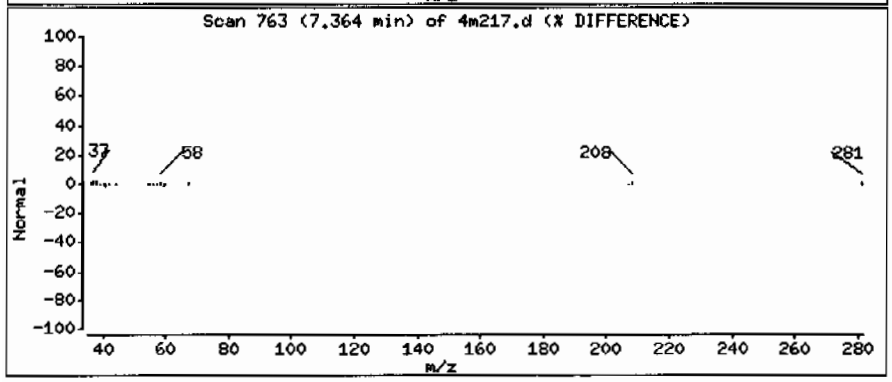

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 02:12	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:37	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m214.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12
67-64-1	Acetone	J	4.00	ug/kg	1.86	5.59
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
74-88-4	Iodomethane	U	5.59	ug/kg	1.79	5.59
75-09-2	Methylene chloride	U	5.59	ug/kg	2.24	5.59
75-15-0	Carbon disulfide	U	5.59	ug/kg	1.40	5.59
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12
78-93-3	2-Butanone	U	5.59	ug/kg	1.68	5.59
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12
108-10-1	4-Methyl-2-pentanone	U	5.59	ug/kg	1.40	5.59
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12
591-78-6	2-Hexanone	U	5.59	ug/kg	1.68	5.59
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13970**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 02:12**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:37**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m214.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.59	ug/kg	1.79	5.59
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Alcohol	6.77	8.52	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m214.d
Lab Smp Id: 241418006 Client Smp ID: RE03-09-13970
Inj Date : 25-NOV-2009 02:12
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418006|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.60320	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1557904	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1131184	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	631184	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	302251	49.3956	55.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1004089	50.9633	57.0
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	410927	56.2223	62.9
10 Acetone	43	7.370	7.358	(0.694)	22637	3.57619	4.0(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4m214.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418006 SampleType: SAMPLE
Injection Date: 25-NOV-2009 02:12
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418006|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	22637	7.37	7.36	80-120	100	( )
58	6538	7.36	7.36	1- 61	29	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	19837	10.61	10.34	80-120	100	(T)
64	3643	10.61	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7868	12.25	12.02	80-120	100	(T)
43	6125	12.25	12.02	228-288	78	(QT)
100	691808	12.25	12.02	9- 69	8792	(QT)
76 n-Propylbenzene			CAS#: 103-65-1			
91	14946	14.79	15.18	80-120	100	(T)
120	262	15.32	15.18	0- 55	2	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m214.d
Lab Smp Id: 241418006 Client Smp ID: RE03-09-13970
Inj Date : 25-NOV-2009 02:12
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418006|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.60320	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	10.620	3310917	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Alcohol					CAS #:		
6.767	504512	7.61891146	8.5	0		0	40

Data File: /chem/VOA4.i/112409v4/4m214.d
Date : 25-NOV-2009 02:12
Client ID: RE03-09-13970
Sample Info: |2414180061926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

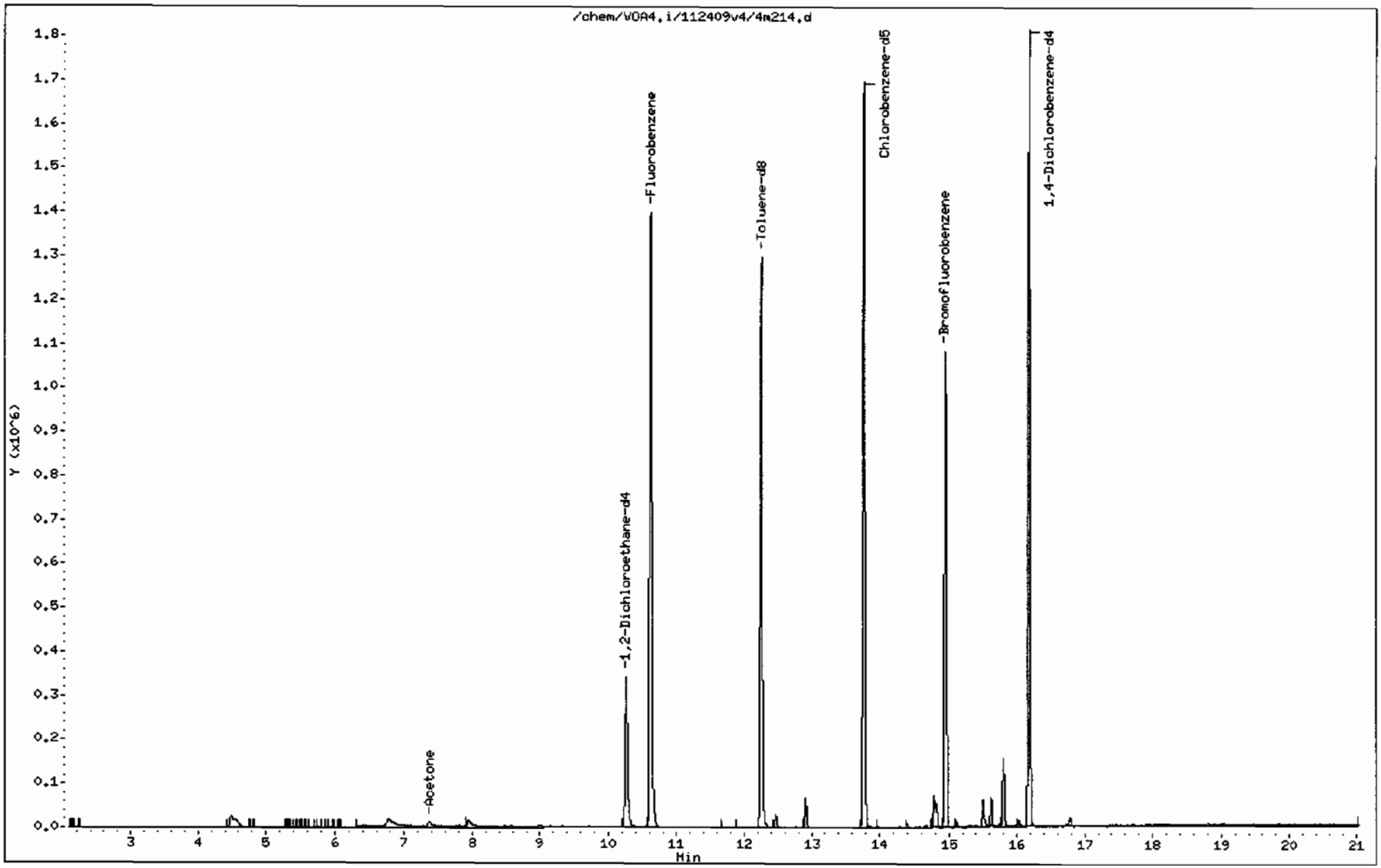

Data File: /chem/VOA4.i/112409v4/4m214.d

Date : 25-NOV-2009 02:12

Client ID: RE03-09-13970

Instrument: VOA4.i

Sample Info: |24141800619264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 4.0 ug/Kg

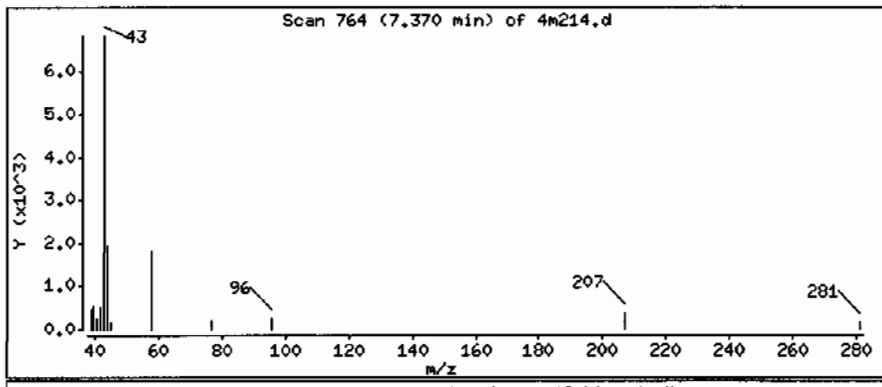

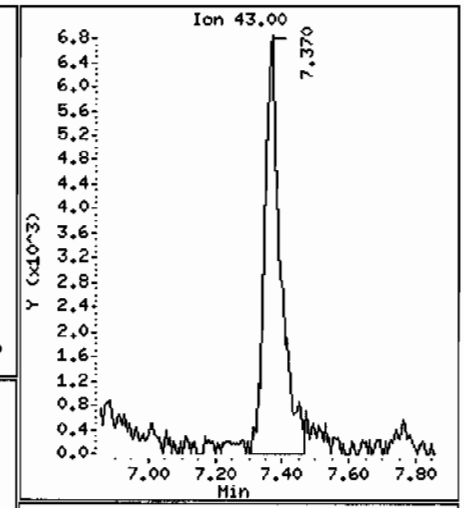

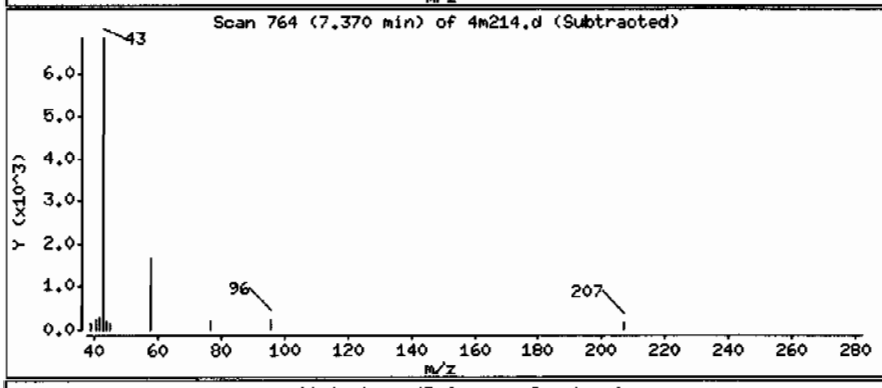

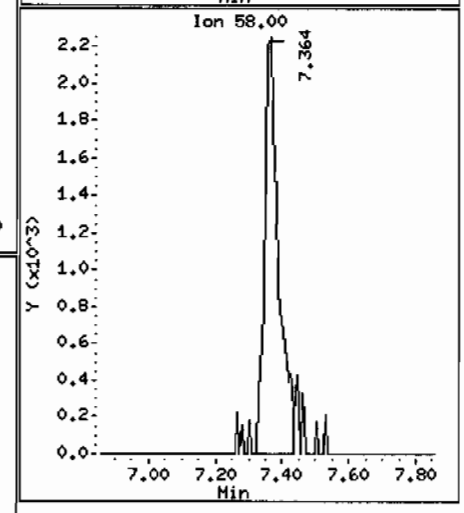

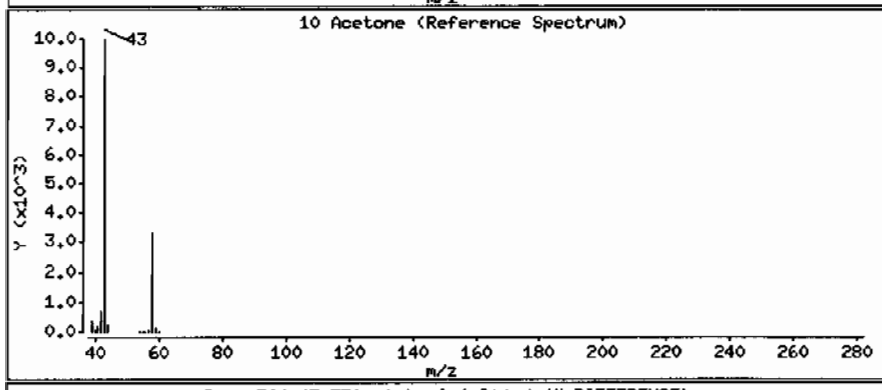

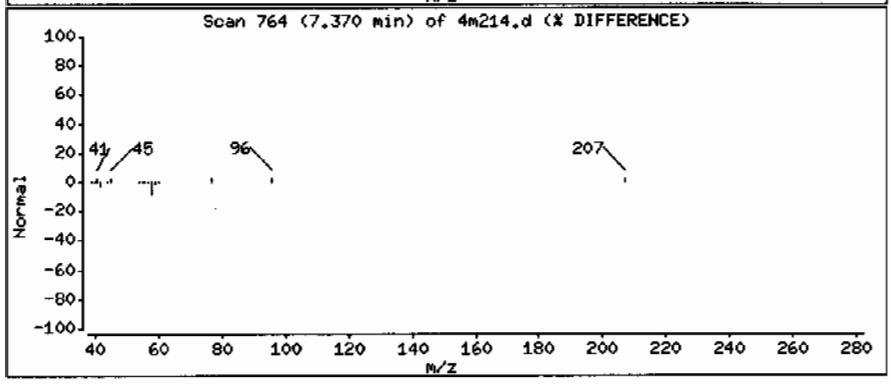

Data File: /chem/VOA4.i/112409v4/4m214.d

Date : 25-NOV-2009 02:12

Client ID: RE03-09-13970

Instrument: VOA4.i

Sample Info: |24141800619264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alcohol						
Ethyl alcohol	64-17-5	NIST05.L	95	50	C2H6O	46
Ethyl alcohol	64-17-5	NIST05.L	93	50	C2H6O	46
Ethyl alcohol	64-17-5	NIST05.L	94	50	C2H6O	46

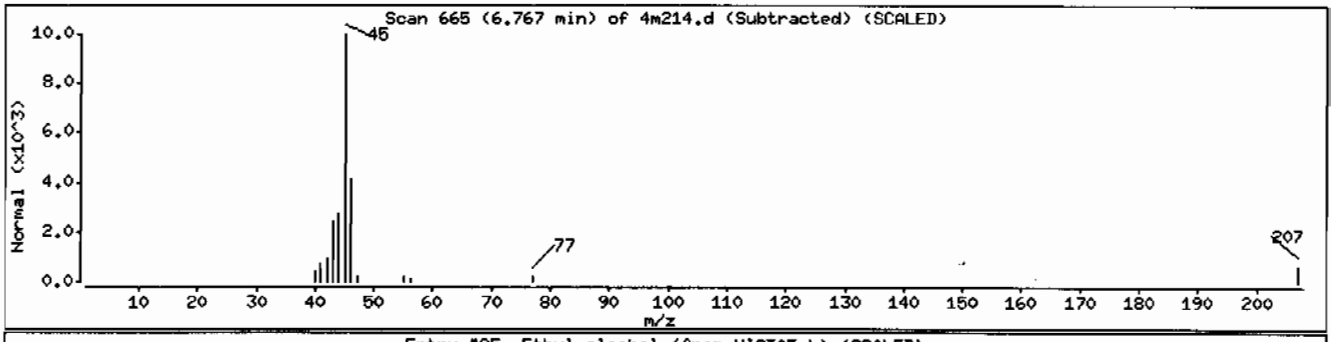

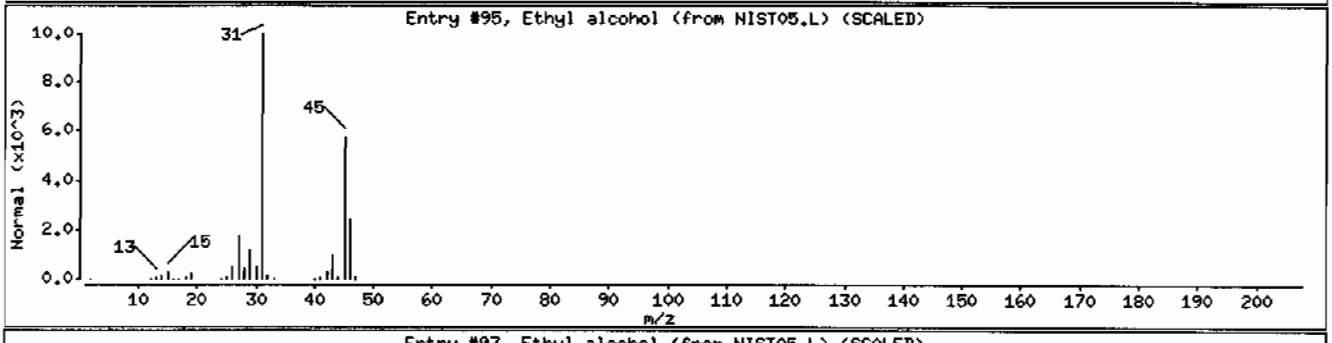

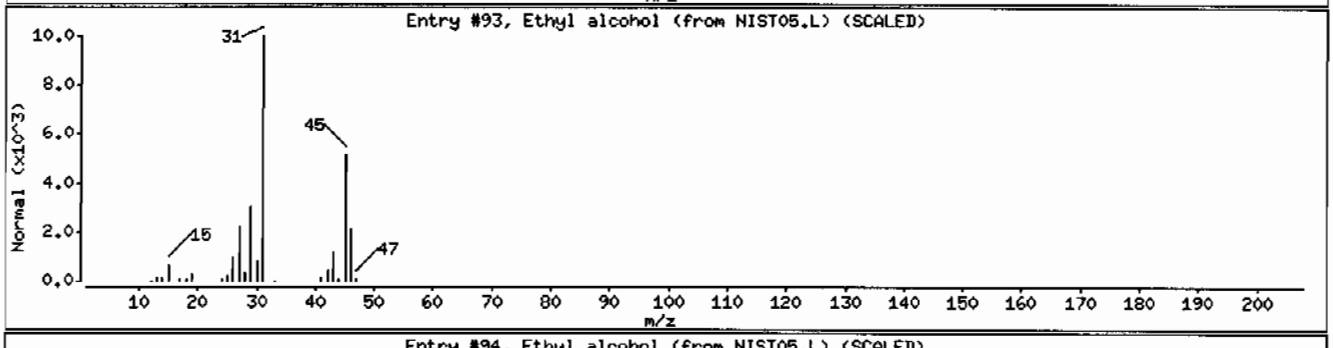

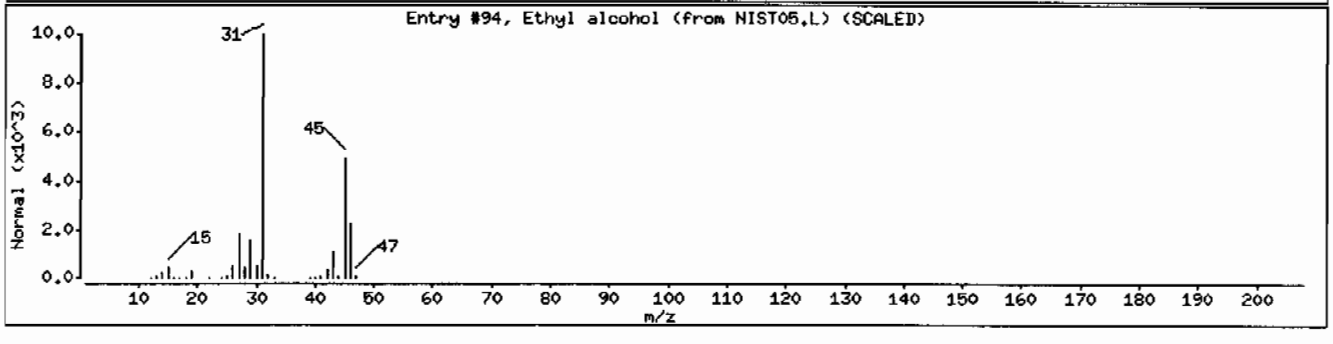

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418008**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**19**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13971**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 03:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:39**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m216.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.420	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	J	3.61	ug/kg	2.05	6.17
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.17	ug/kg	1.98	6.17
75-09-2	Methylene chloride	U	6.17	ug/kg	2.47	6.17
75-15-0	Carbon disulfide	U	6.17	ug/kg	1.54	6.17
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.17	ug/kg	1.85	6.17
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.407	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.407	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.17	ug/kg	1.54	6.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.17	ug/kg	1.85	6.17
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 03:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:39	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m216.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	U	2.47	ug/kg	0.370	2.47
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.17	ug/kg	1.98	6.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m216.d
Lab Smp Id: 241418008 Client Smp ID: RE03-09-13971
Inj Date : 25-NOV-2009 03:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418008|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	19.01720	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1686466	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1243649	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	783169	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	292957	44.2270	54.6
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	977549	45.1294	55.7
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	430438	47.4630	58.6
10 Acetone	43	7.375	7.358	(0.695)	20033	2.92355	3.6(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4m216.d
Report Date: 11/25/2009 15:39
Lab. ID: 241418008 SampleType: SAMPLE
Injection Date: 25-NOV-2009 03:07
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418008|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	20033	7.38	7.36	80-120	100	( )
58	4422	7.36	7.36	1- 61	22	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	22111	10.62	10.34	80-120	100	(T)
64	3447	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7598	12.25	12.02	80-120	100	(T)
43	5058	12.25	12.02	228-288	67	(QT)
100	681972	12.25	12.02	9- 69	8975	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m216.d
Lab Smp Id: 241418008 Client Smp ID: RE03-09-13971
Inj Date : 25-NOV-2009 03:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418008|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m216.d
Date : 25-NOV-2009 03:07
Client ID: RE03-09-13971
Sample Info: |24141800819264991|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

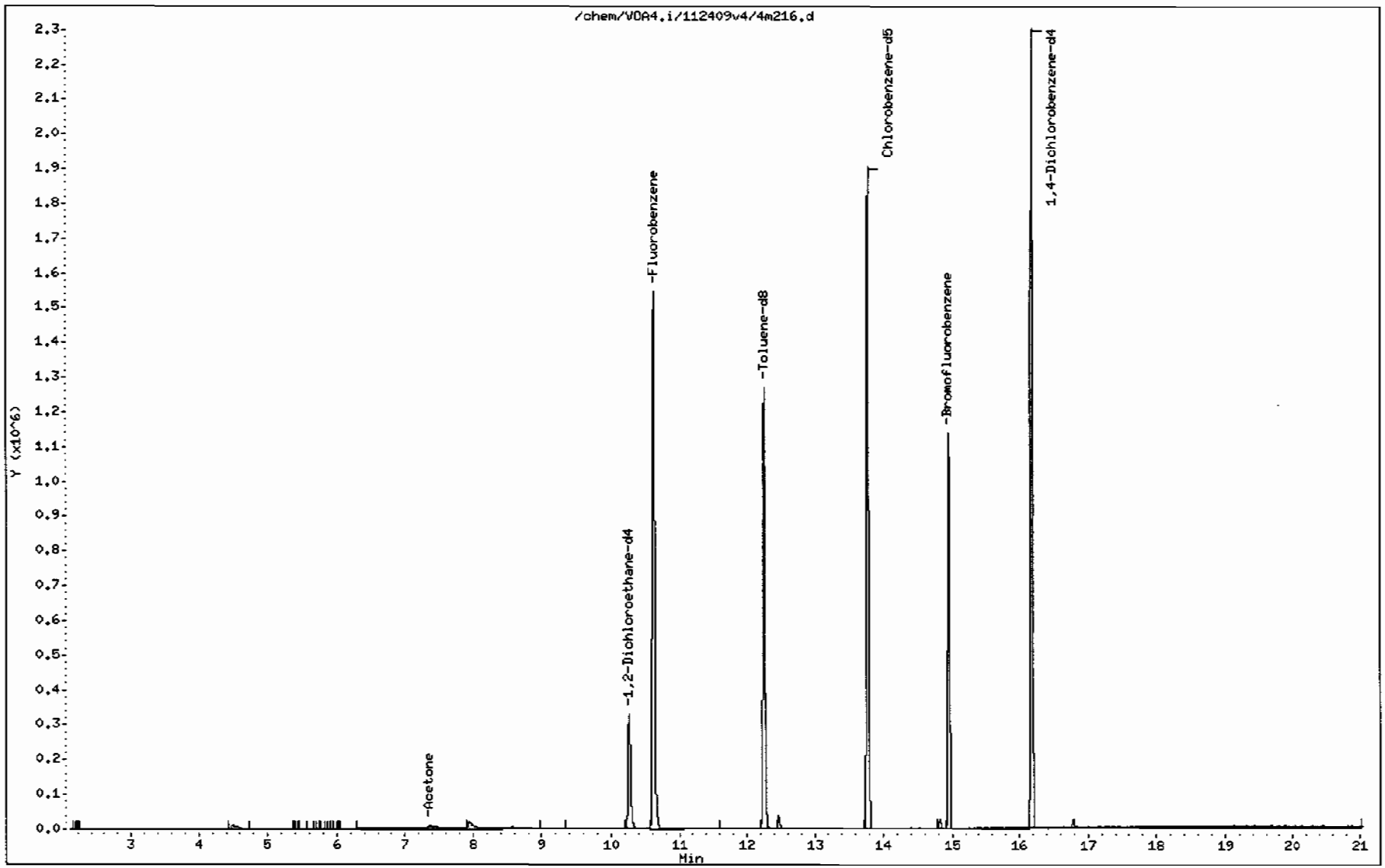

Data File: /chem/VOA4.i/112409v4/4m216.d

Date : 25-NOV-2009 03:07

Client ID: RE03-09-13971

Instrument: VOA4.i

Sample Info: |2414180081926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 3.6 ug/Kg

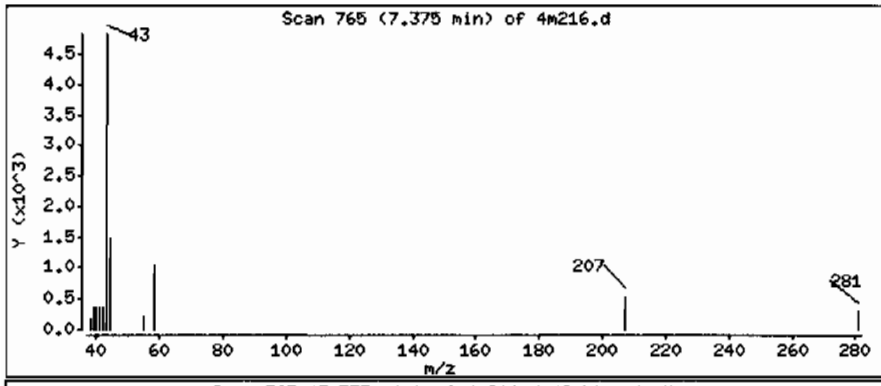

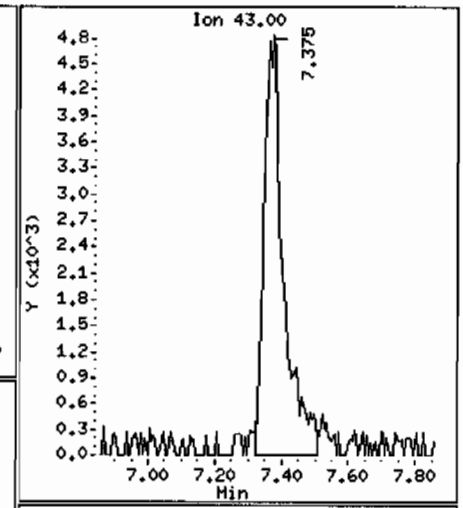

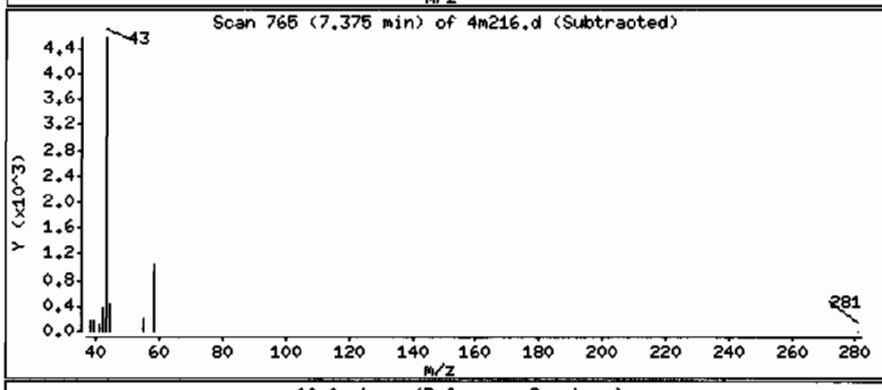

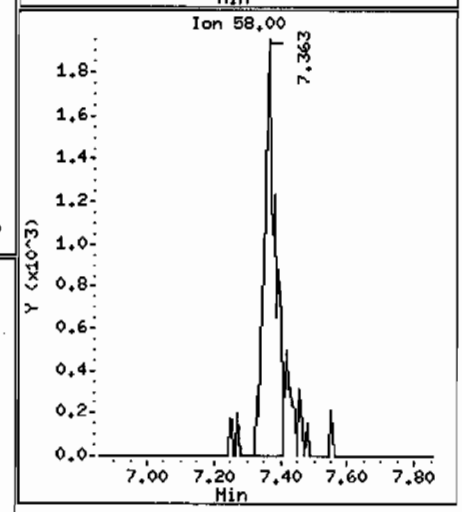

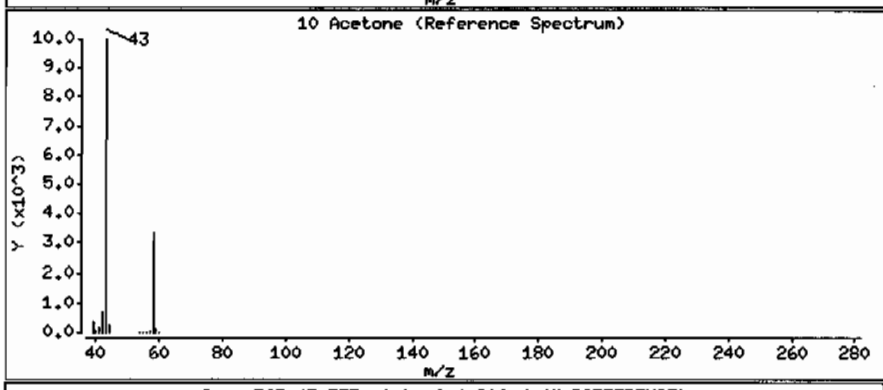

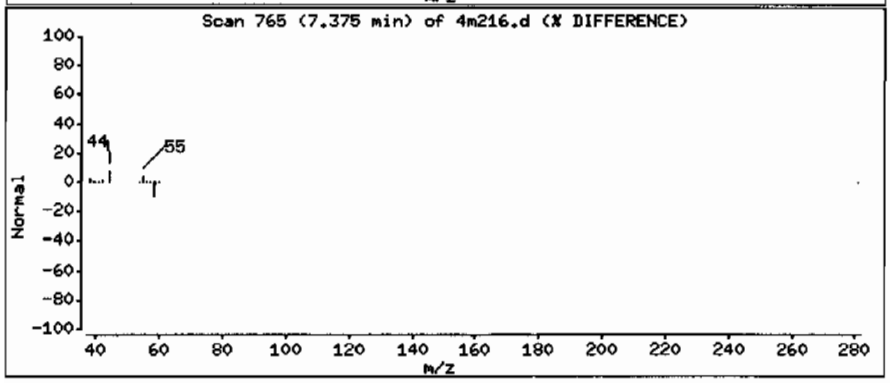

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418017	**Date Received:**	11/19/2009 08:45		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14032	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/24/2009 23:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:48	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m208.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.37	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418017**	**Date Received:**	**11/19/2009 08:45**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14032**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 23:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m208.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m208.d
Lab Smp Id: 241418017 Client Smp ID: RE03-09-14032
Inj Date : 24-NOV-2009 23:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418017|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	888800.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1610374	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1179825	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.180	(1.000)	750725	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	312946	49.4771	49.5
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1038384	50.5311	50.5
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	442465	50.8976	50.9
38 Benzene	78	10.375	10.370	(0.977)	47362	1.37211	1.4

ION RATIO REPORT

VOA REPORT

Data file: 4m208.d
Report Date: 11/25/2009 15:38
Lab. ID: 241418017 SampleType: SAMPLE
Injection Date: 24-NOV-2009 23:28
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418017|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20507	10.62	10.34	80-120	100	(T)
64	3470	10.62	10.34	2- 62	17	(T)
38 Benzene			CAS#: 71-43-2			
78	47362	10.37	10.37	80-120	100	( )
77	10331	10.37	10.37	0- 53	22	( )
51	8305	10.37	10.37	0- 49	18	( )
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7362	12.25	12.02	80-120	100	(T)
43	4964	12.25	12.02	228-288	67	(QT)
100	719743	12.25	12.02	9- 69	9776	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m208.d
Lab Smp Id: 241418017 Client Smp ID: RE03-09-14032
Inj Date : 24-NOV-2009 23:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418017|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m208.d
Date : 24-NOV-2009 23:28
Client ID: RE03-09-14032
Sample Info: |2414180171926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

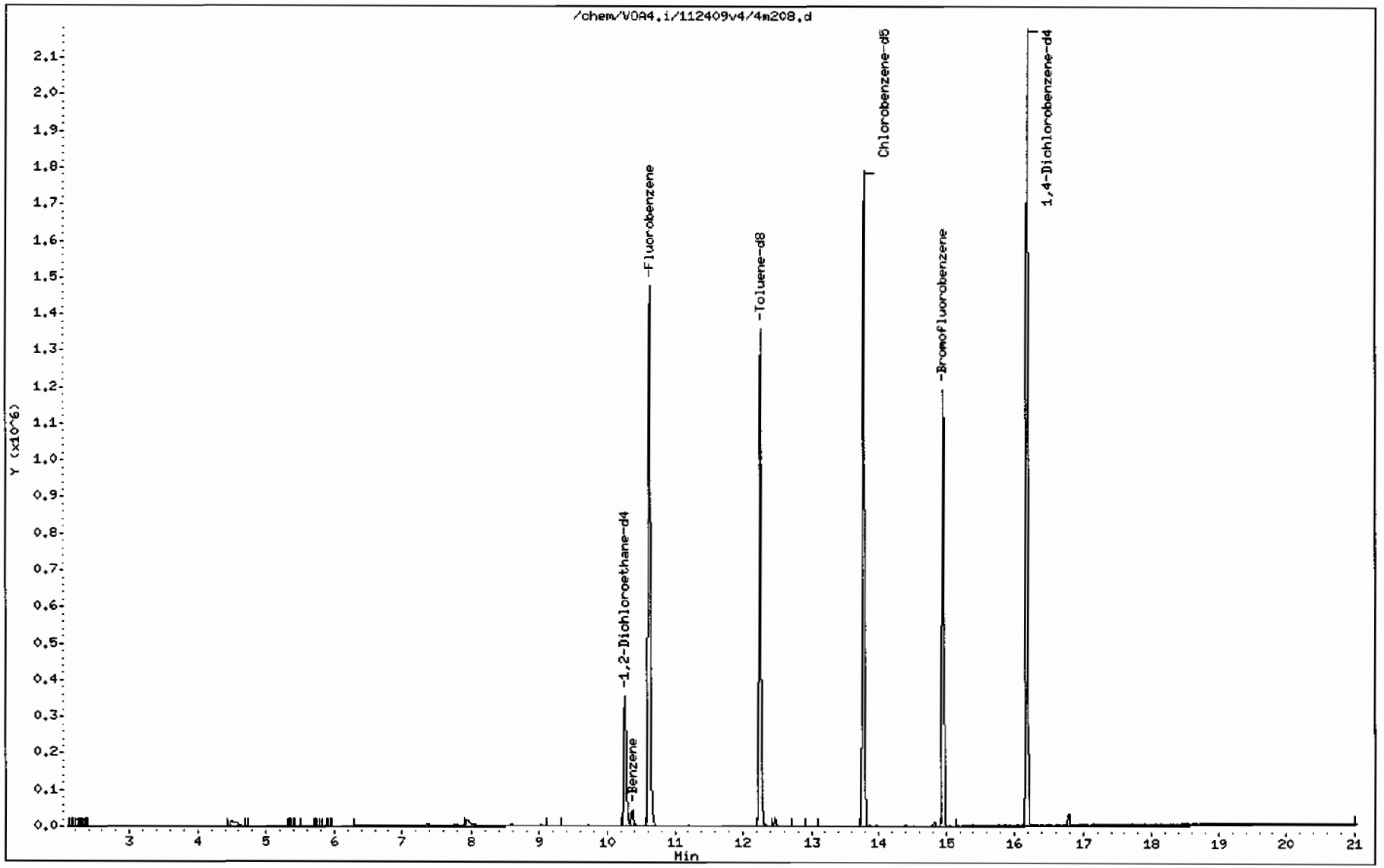

Data File: /chem/VOA4.i/112409v4/4m208.d

Date : 24-NOV-2009 23:28

Client ID: RE03-09-14032

Instrument: VOA4.i

Sample Info: |24141801|926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

38 Benzene

Concentration: 1.4 ug/Kg

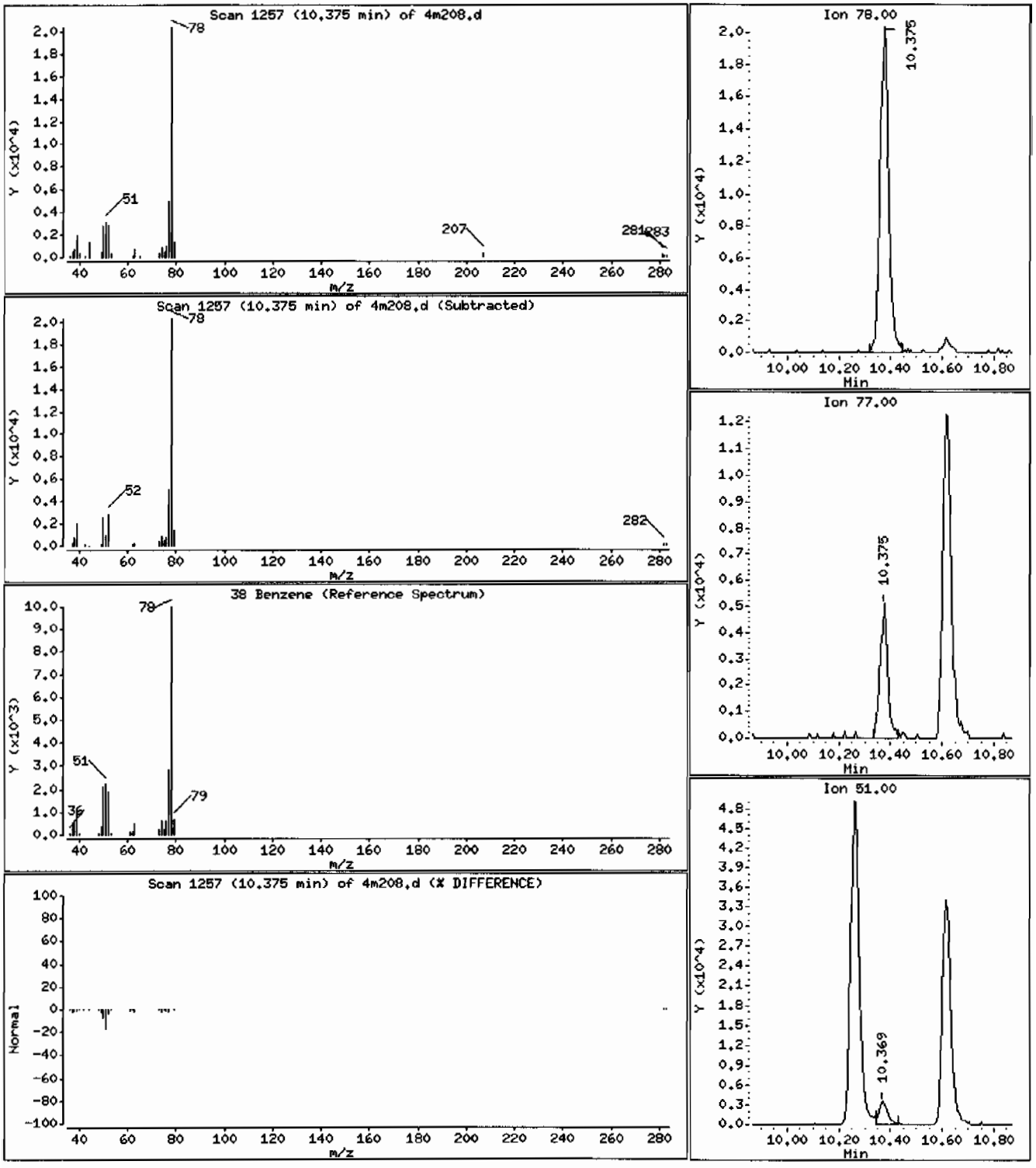

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418016	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3913	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 06:45	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:47	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m224.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.410	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21
67-64-1	Acetone	U	6.03	ug/kg	2.00	6.03
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
74-88-4	Iodomethane	U	6.03	ug/kg	1.93	6.03
75-09-2	Methylene chloride	U	6.03	ug/kg	2.41	6.03
75-15-0	Carbon disulfide	U	6.03	ug/kg	1.51	6.03
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21
78-93-3	2-Butanone	U	6.03	ug/kg	1.81	6.03
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.398	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.398	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21
108-10-1	4-Methyl-2-pentanone	U	6.03	ug/kg	1.51	6.03
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21
591-78-6	2-Hexanone	U	6.03	ug/kg	1.81	6.03
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.362	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418016**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3913**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 06:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:47**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m224.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.362	2.41
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.03	ug/kg	1.93	6.03
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.79	13.4	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m224.d
Lab Smp Id: 241418016 Client Smp ID: RE03-10-3913
Inj Date : 25-NOV-2009 06:45
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418016|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.09990	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1671464	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1232309	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	741467	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	300580	45.7851	55.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	972393	45.3045	54.6
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	420034	48.9207	59.0

ION RATIO REPORT

VOA REPORT

Data file: 4m224.d
Report Date: 11/25/2009 15:40
Lab. ID: 241418016 SampleType: SAMPLE
Injection Date: 25-NOV-2009 06:45
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418016|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	22186	10.62	10.34	80-120	100	(T)
64	4053	10.62	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8276	12.25	12.02	80-120	100	(T)
43	4588	12.25	12.02	228-288	55	(QT)
100	672170	12.25	12.02	9- 69	8122	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m224.d
Lab Smp Id: 241418016 Client Smp ID: RE03-10-3913
Inj Date : 25-NOV-2009 06:45
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418016|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.09990	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 86 1,4-Dichlorobenzene-d4	16.179	4152151	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
16.794	923057	11.1154012	13.4	0		0	86

Data File: /chem/VOA4.i/112409v4/4m224.d

Date : 25-NOV-2009 06:45

Client ID: RE03-10-3913

Sample Info: |2414180161926499|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

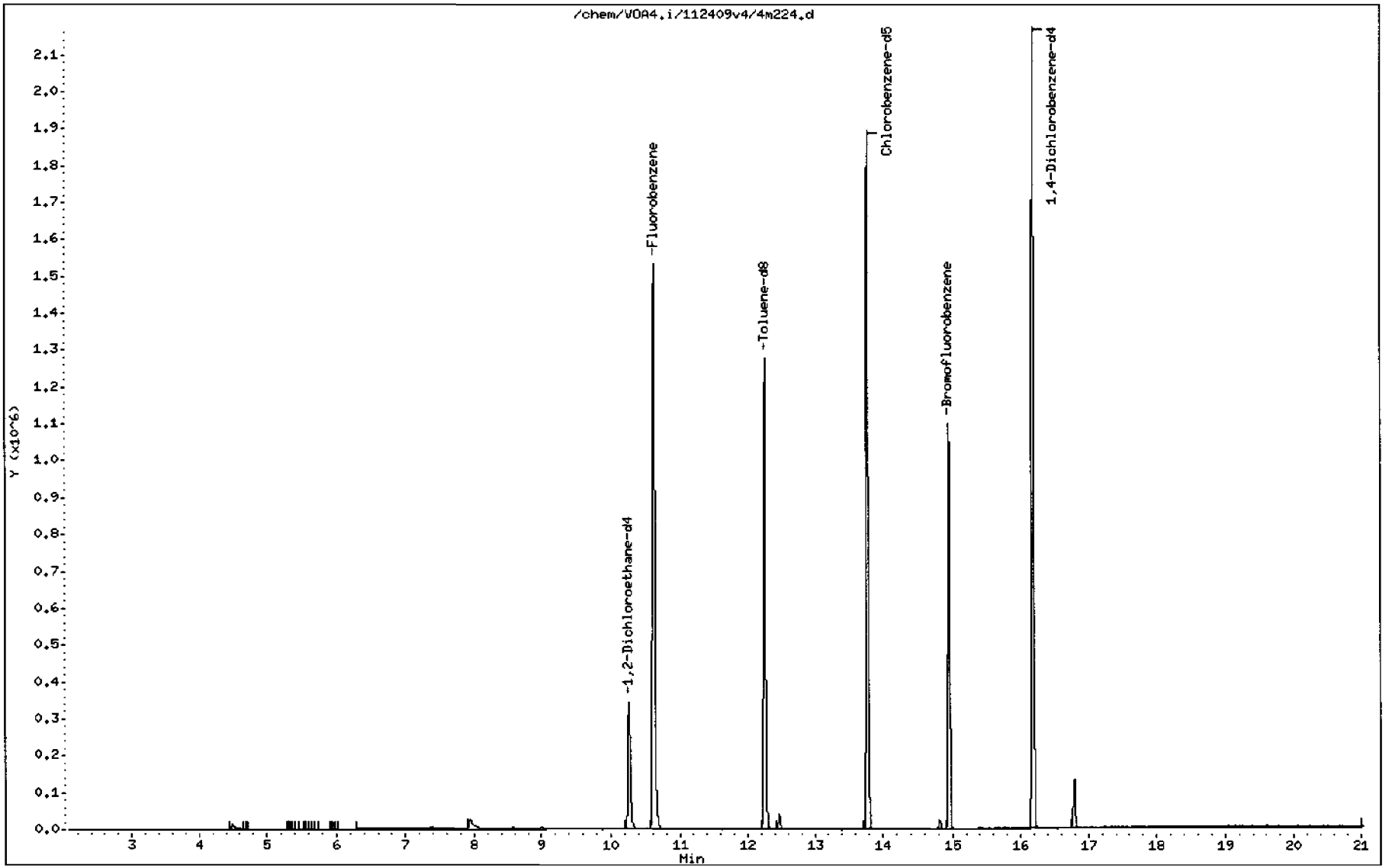

Data File: /chem/VOA4.i/112409v4/4m224.d

Date : 25-NOV-2009 06:45

Client ID: RE03-10-3913

Instrument: VOA4.i

Sample Info: |24141801619264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	56	C16H28O4Si2	340
Benzaldehyde, 2,4-bis(trimethylsiloxy)-	33617-38-8	NIST05.L	112902	50	C13H22O3Si2	282
4-Hydroxymandelic acid, ethyl ester, di-	1000071-53-3	NIST05.L	147514	50	C16H28O4Si2	340

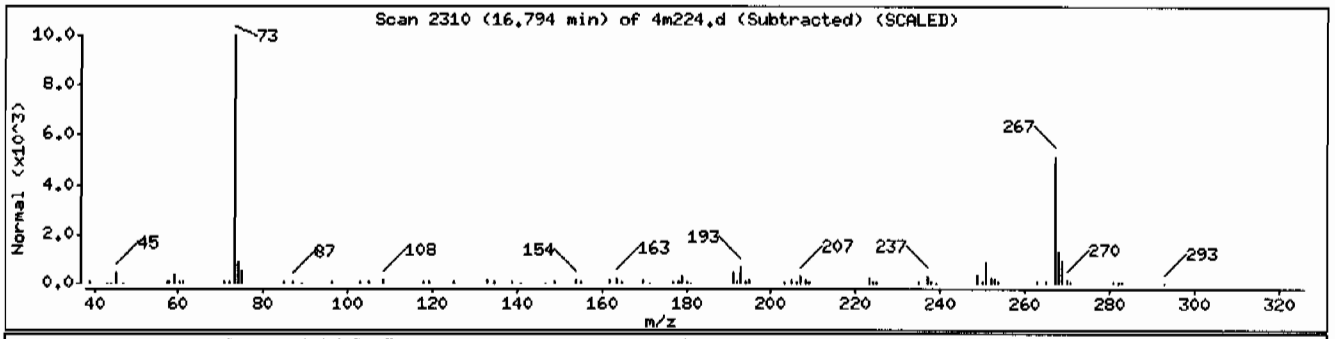

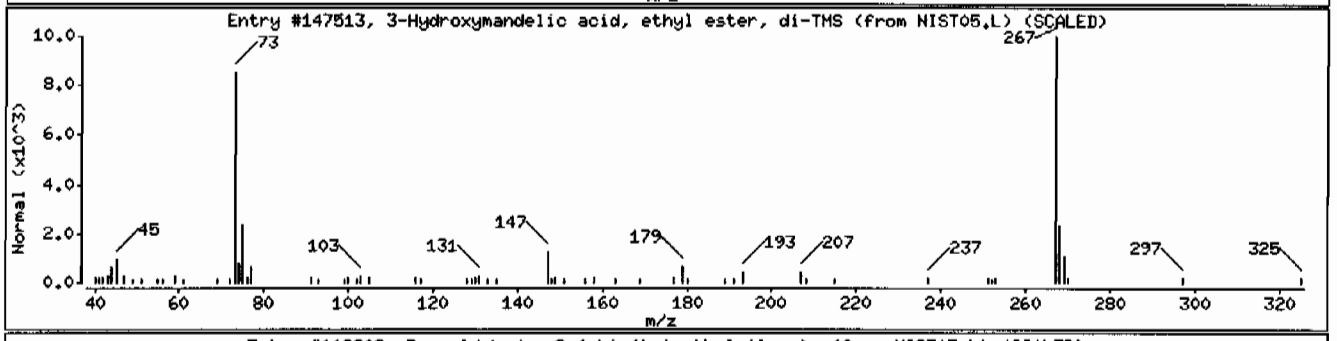

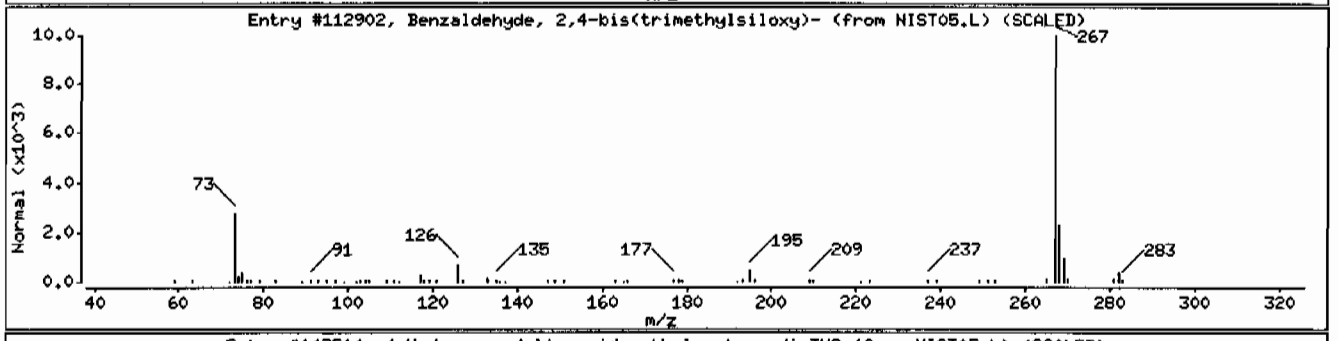

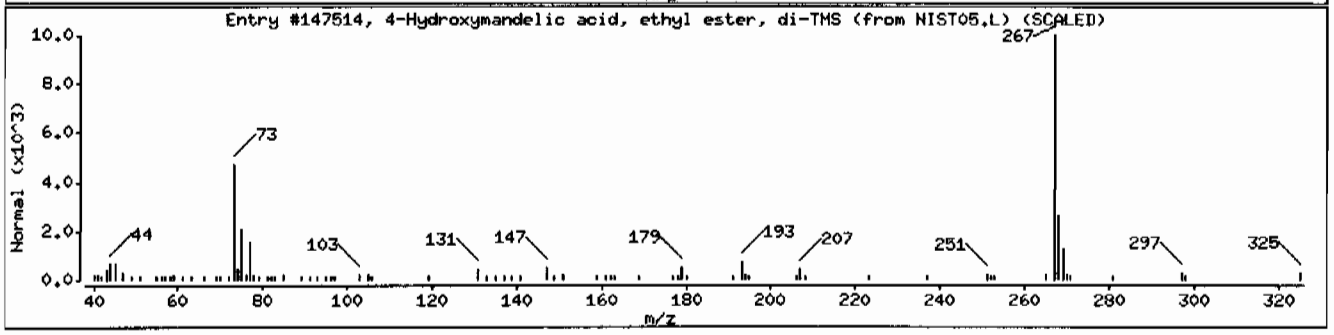

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/27/2009 19:21	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 19:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m508.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418015**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3914**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 19:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 19:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m508.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m508.d
Lab Smp Id: 241418015 Client Smp ID: RE03-10-3914
Inj Date : 27-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418015|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.76330	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1530350	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1144584	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	660103	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.259	(0.967)	326929	54.3906	62.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1128072	56.5859	64.9
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	481732	63.0222	72.2

ION RATIO REPORT

VOA REPORT

Data file: 4m508.d
Report Date: 11/27/2009 19:36
Lab. ID: 241418015 SampleType: SAMPLE
Injection Date: 27-NOV-2009 19:21
Operator: ACJ Instrument: VOA4.i
Sample Info: |241418015|926499|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	18537	10.62	10.34	80-120	100	(T)
64	3722	10.62	10.34	3- 63	20	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	9150	12.25	12.02	80-120	100	(T)
43	5290	12.25	12.02	225-285	58	(QT)
100	786680	12.25	12.02	9- 69	8598	(QT)
66 Bromoform			CAS#: 75-25-2			
173	2249	14.95	14.66	80-120	100	(T)
175	33124	14.95	14.66	19- 79	1472	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m508.d
Lab Smp Id: 241418015 Client Smp ID: RE03-10-3914
Inj Date : 27-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241418015|926499|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112709v4/4m508.d
Date : 27-NOV-2009 19:21
Client ID: RE03-10-3914
Sample Info: |2414180151926499111VOAF111

Column phase: RTX-VOLATILES

Page 1

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

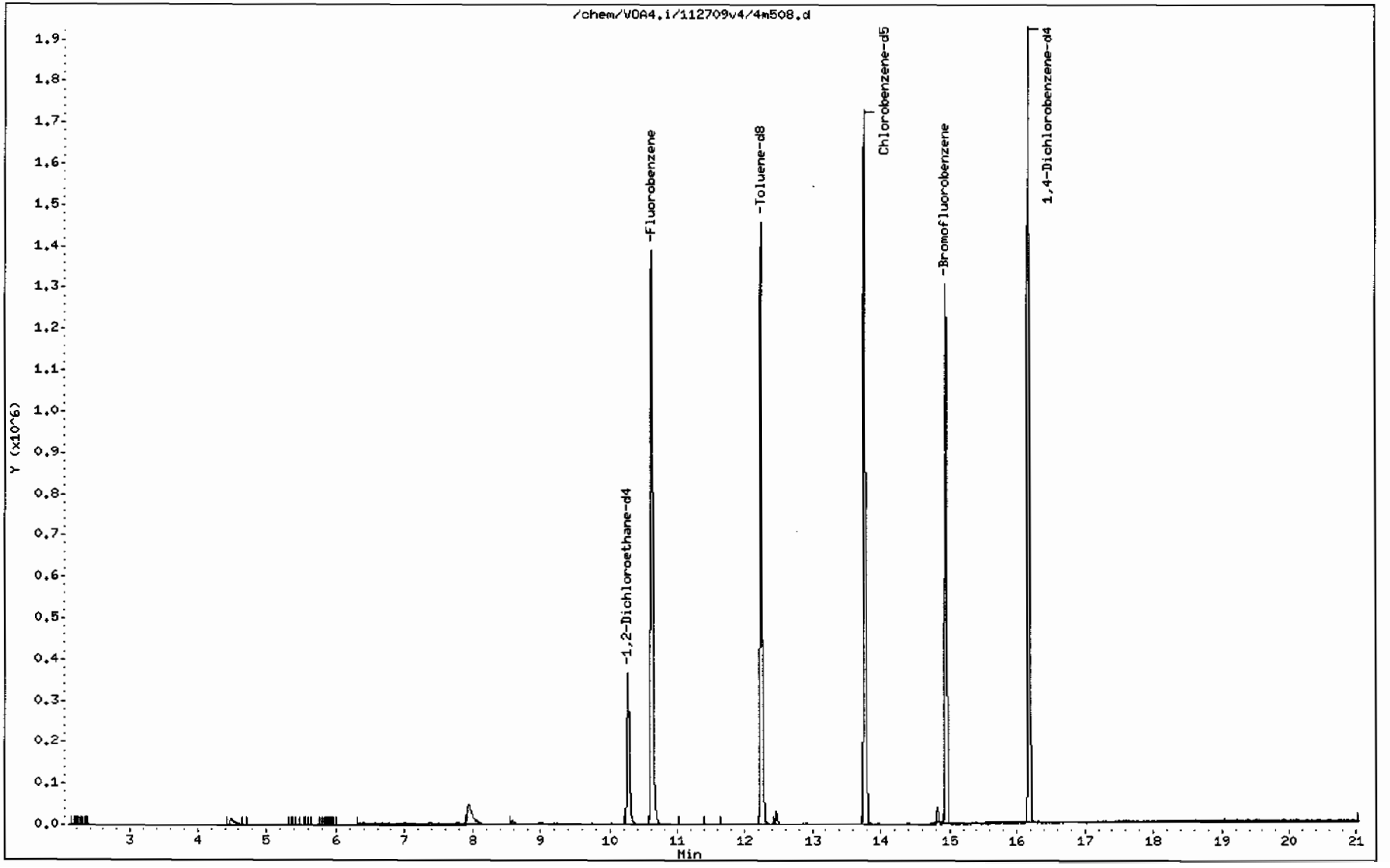

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 30-Nov-2009 16:27

Calibration History

Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Start Cal Date: 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
22-NOV-2009 14:48	ICALsubS	/chem/VOA4.i/112209v4/41713.d
22-NOV-2009 10:41	CALsubL+	/chem/VOA4.i/112209v4/41704.d
Cal Level: 2 , Cal Amount: 2.00000		
22-NOV-2009 15:16	ICALsubS	/chem/VOA4.i/112209v4/41714.d
22-NOV-2009 11:36	CALsubL+	/chem/VOA4.i/112209v4/41706.d
Cal Level: 3 , Cal Amount: 5.00000		
22-NOV-2009 15:43	ICALsubS	/chem/VOA4.i/112209v4/41715.d
22-NOV-2009 12:04	CALsubL+	/chem/VOA4.i/112209v4/41707.d
Cal Level: 4 , Cal Amount: 10.00000		
22-NOV-2009 16:10	ICALsubS	/chem/VOA4.i/112209v4/41716.d
22-NOV-2009 12:31	CALsubL+	/chem/VOA4.i/112209v4/41708.d
Cal Level: 5 , Cal Amount: 20.00000		
22-NOV-2009 16:37	ICALsubS	/chem/VOA4.i/112209v4/41717.d
22-NOV-2009 12:59	CALsubL+	/chem/VOA4.i/112209v4/41709.d
Cal Level: 6 , Cal Amount: 50.00000		
22-NOV-2009 17:04	ICALsubS	/chem/VOA4.i/112209v4/41718.d
22-NOV-2009 13:27	CALsubL+	/chem/VOA4.i/112209v4/41710.d
Cal Level: 7 , Cal Amount: 100.00000		
22-NOV-2009 17:32	ICALsubS	/chem/VOA4.i/112209v4/41719.d
22-NOV-2009 13:54	CALsubL+	/chem/VOA4.i/112209v4/41711.d
Cal Level: 8 , Cal Amount: 200.00000		
22-NOV-2009 10:14	BENZENE+	/chem/VOA4.i/112209v4/41703.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

| Ccal Level: 6 , Ccal Amount: 50.0 |

24-NOV-2009 20:44	CALsubL+	/chem/VOA4.i/112409v4/4m202.d

| Ccal Level: 6 , Ccal Amount: 50.0 |

24-NOV-2009 21:39	CALsubS+SS	/chem/VOA4.i/112409v4/4m204.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Calibration File Names:
Level 1: /chem/VOA4.i/112209v4/41713.d
Level 2: /chem/VOA4.i/112209v4/41714.d
Level 3: /chem/VOA4.i/112209v4/41715.d
Level 4: /chem/VOA4.i/112209v4/41716.d
Level 5: /chem/VOA4.i/112209v4/41717.d
Level 6: /chem/VOA4.i/112209v4/41718.d
Level 7: /chem/VOA4.i/112209v4/41719.d
Level 8: /chem/VOA4.i/112209v4/41703.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.70135	0.67482	0.71847	0.71001	0.64315	0.71607					
	0.60192	+++++					AVRG		0.68083		6.46217
M 2 1,2-Dichloroethylene (total)	0.39740	0.38742	0.40356	0.41339	0.36979	0.42144					
	0.36963	+++++					AVRG		0.39466		5.12263
M 135 1,3-Dichloropropylene	0.41350	0.40551	0.44628	0.45853	0.42258	0.48108					
	0.42557	+++++					AVRG		0.43615		6.18797
153 Chlorotrifluoroethylene	0.13143	0.18372	0.17447	0.18248	+++++	0.19006					
	+++++	+++++					AVRG		0.17243		13.67715
154 2-Chloro-1,1,1-trifluoroethan	0.26186	0.25912	0.25634	0.25645	+++++	0.26647					
	0.25722	+++++					AVRG		0.25958		1.52910

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
3 Dichlorodifluoromethane	0.21952	0.20478	0.24778	0.23830	0.25344	0.24626					
	0.22084	+++++					AVRG		0.23299		7.76928
4 Chloromethane	0.36252	0.34713	0.37649	0.35126	0.36111	0.38641					
	0.33300	+++++					AVRG		0.35970		5.00875
5 Vinyl chloride	0.33360	0.31585	0.35122	0.33159	0.33730	0.35659					
	0.30468	+++++					AVRG		0.33298		5.49023
6 Bromomethane	0.26744	0.25913	0.27384	0.26317	0.25533	0.28190					
	0.23741	+++++					AVRG		0.26260		5.43369
7 Chloroethane	0.24641	0.22492	0.25216	0.24499	0.24862	0.26778					
	0.22546	+++++					AVRG		0.24433		6.17830
8 Trichlorofluoromethane	0.39788	0.40451	0.41714	0.40395	0.41072	0.45146					
	0.39022	+++++					AVRG		0.41084		4.83812
134 Ethyl Ether	0.20013	0.22799	0.22695	0.23007	0.22323	0.24848					
	0.21817	+++++					AVRG		0.22500		6.43554
9 Acrolein	0.05592	0.05545	0.05313	0.05620	+++++	0.05350					
	0.05200	+++++					AVRG		0.05437		3.16611
12 Trichlorotrifluoroethane	0.10763	0.09987	0.09425	0.09433	+++++	0.08318					
	0.08283	+++++					AVRG		0.09368		10.25666

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
10 Acetone	0.21715	0.21091	0.19514	0.20925	0.18498	0.22820					
	0.17644	+++++					AVRG		0.20316		9.05187
11 1,1-Dichloroethylene	0.43010	0.40719	0.43561	0.43488	0.39281	0.46160					
	0.40074	+++++					AVRG		0.42328		5.70354
147 Isopropyl Alcohol	0.02541	0.02962	0.02587	0.02812	+++++	0.02700					
	0.02584	+++++					AVRG		0.02698		6.03712
13 Iodomethane	0.49411	0.49115	0.52557	0.53262	0.47737	0.55006					
	0.47344	+++++					AVRG		0.50633		5.85556
15 Acetonitrile	0.04684	0.04644	0.04649	0.04892	0.04391	0.04889					
	0.03979	+++++					AVRG		0.04590		6.94320
128 Methyl acetate	0.25731	0.23806	0.23684	0.24780	0.21890	0.24259					
	0.19845	+++++					AVRG		0.23428		8.40002
14 Carbon disulfide	0.91167	0.87511	0.91689	0.92639	0.82243	0.92593					
	0.76534	+++++					AVRG		0.87768		7.06555
16 Allyl chloride	0.47481	0.44851	0.43469	0.44980	+++++	0.41236					
	0.38471	+++++					AVRG		0.43415		7.30172
148 tert-Butyl Alcohol	0.03756	0.04508	0.03881	0.04200	+++++	0.04059					
	0.03810	+++++					AVRG		0.04036		7.04178

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
17 Methylene chloride	+++++	89613	104945	156326	244699	561681					
	1084465	+++++					LINR	-0.13197	0.29325		0.99269
18 Acrylonitrile	0.10599	0.11761	0.10731	0.11347	+++++	0.10855					
	0.10484	+++++					AVRG		0.10963		4.48945
20 tert-Butyl methyl ether	0.79558	0.87853	0.81726	0.87060	0.77996	0.85442					
	0.74022	+++++					AVRG		0.81951		6.25004
21 trans-1,2-Dichloroethylene	0.35735	0.37592	0.38478	0.39437	0.35468	0.40358					
	0.35165	+++++					AVRG		0.37462		5.51097
23 Vinyl acetate	0.49838	0.54680	0.57711	0.57802	0.55244	0.60012					
	0.46080	+++++					AVRG		0.54481		9.01724
149 Isopropyl ether	0.95978	0.92001	0.90178	0.92165	+++++	0.89996					
	0.89878	+++++					AVRG		0.91700		2.54124
22 1,1-Dichloroethane	0.46140	0.44295	0.49088	0.48216	0.44328	0.50152					
	0.43956	+++++					AVRG		0.46596		5.47805
24 2-Chloro-1,3-butadiene	0.42752	0.41435	0.41736	0.41116	+++++	0.40092					
	0.40151	+++++					AVRG		0.41214		2.44686
150 Ethyl tert-butyl ether	0.84482	0.84737	0.83195	0.85512	+++++	0.82219					
	0.83043	+++++					AVRG		0.83865		1.47845

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
30 2-Butanone	0.23385	0.23579	0.22472	0.23959	0.21992	0.26519					
	0.21714	+++++					AVRG		0.23374		6.93171
26 Ethyl acetate	0.32623	0.34240	0.30347	0.31352	+++++	0.29024					
	0.26820	+++++					AVRG		0.30734		8.56310
31 cis-1,2-Dichloroethylene	0.43746	0.39893	0.42234	0.43240	0.38490	0.43930					
	0.38761	+++++					AVRG		0.41470		5.71138
25 2,2-Dichloropropane	0.29466	0.25782	0.28219	0.27714	0.24901	0.27503					
	0.24787	+++++					AVRG		0.26910		6.62310
28 Propionitrile	0.04376	0.05227	0.04399	0.04681	+++++	0.04559					
	0.04383	+++++					AVRG		0.04604		7.13467
27 Methacrylonitrile	0.17978	0.19710	0.18112	0.18893	+++++	0.17963					
	0.16721	+++++					AVRG		0.18229		5.51523
29 Bromochloromethane	0.14402	0.13910	0.15114	0.15508	0.13476	0.15841					
	0.14035	+++++					AVRG		0.14612		6.07266
32 Chloroform	0.50037	0.46709	0.47945	0.48569	0.43681	0.49308					
	0.43321	+++++					AVRG		0.47081		5.65257
72 Tetrahydrofuran	28285	49603	91261	180946	+++++	811740					
	1542403	+++++					LINR	-0.21156	0.17273		0.99744

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
36 1,1,1-Trichloroethane	0.34177	0.33797	0.36697	0.35793	0.32888	0.37723					
	0.33495	+++++					AVRG		0.34939		5.19290
19 Isobutyl alcohol	0.01333	0.01535	0.01335	0.01471	+++++	0.01411					
	0.01295	+++++					AVRG		0.01397		6.66101
129 Cyclohexane	0.43240	0.40010	0.41453	0.40591	0.37242	0.42674					
	0.37265	+++++					AVRG		0.40354		5.92718
34 1,1-Dichloropropene	0.34396	0.33259	0.36640	0.35168	0.33247	0.37748					
	0.32857	+++++					AVRG		0.34759		5.37228
33 Carbon tetrachloride	0.33357	0.32239	0.34241	0.34257	0.31834	0.36936					
	0.33037	+++++					AVRG		0.33700		5.03062
37 1,2-Dichloroethane	0.36646	0.37339	0.38216	0.38288	0.34836	0.39447					
	0.34689	+++++					AVRG		0.37066		4.84641
38 Benzene	1.08632	1.03953	1.11726	1.09466	0.97346	1.10695					
	0.94618	1.20943					AVRG		1.07172		7.84406
151 Methyl tert-amyl ether	0.84827	0.86006	0.82129	0.84576	+++++	0.81709					
	0.82104	+++++					AVRG		0.83559		2.15534
139 Cyclohexene	0.52887	0.49537	0.52023	0.51530	0.47626	0.53834					
	0.47205	+++++					AVRG		0.50663		5.09965

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
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Quant Method : ISTD
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Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01024	0.01084	0.01043	0.01203	0.00875	0.01249					
	0.01024	0.01084					AVRG		0.01073		10.73836
39 Trichloroethylene	0.27049	0.26768	0.27901	0.28025	0.25066	0.28409					
	0.25133	+++++					AVRG		0.26907		5.04764
42 Methyl methacrylate	0.20522	0.21958	0.20097	0.21212	+++++	0.19781					
	0.18497	+++++					AVRG		0.20344		5.89043
130 Methylcyclohexane	0.45782	0.40944	0.44364	0.43070	0.40942	0.45487					
	0.39748	+++++					AVRG		0.42905		5.61039
41 1,2-Dichloropropane	0.28007	0.27751	0.28731	0.29540	0.26480	0.30111					
	0.26062	+++++					AVRG		0.28098		5.32401
97 1,4-Dioxane	0.00367	0.00391	0.00331	0.00381	+++++	0.00364					
	0.00350	+++++					AVRG		0.00364		5.86751
43 Dibromomethane	0.17297	0.16928	0.17293	0.18369	0.16407	0.18681					
	0.16513	+++++					AVRG		0.17355		5.03688
45 Bromodichloromethane	0.35810	0.34545	0.37438	0.36950	0.34403	0.39092					
	0.34862	+++++					AVRG		0.36157		4.83779
48 2-Nitropropane	0.09325	0.09886	0.08717	0.09749	+++++	0.09739					
	0.09420	+++++					AVRG		0.09473		4.51184

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
44 2-Chloroethylvinyl ether	0.15167	0.15840	0.16203	0.16999	0.15822	0.17712					
	0.14523	+++++					AVRG		0.16038		6.68189
46 cis-1,3-Dichloropropylene	0.42560	0.42436	0.46605	0.47362	0.43654	0.49344					
	0.43654	+++++					AVRG		0.45088		5.94621
49 4-Methyl-2-pentanone	0.16704	0.16573	0.16058	0.16558	0.15177	0.17455					
	0.14456	+++++					AVRG		0.16140		6.28749
50 Toluene	0.95599	0.89242	0.92210	0.90343	0.80436	0.89036					
	0.76529	+++++					AVRG		0.87628		7.67500
51 Ethyl methacrylate	0.52301	0.54250	0.51464	0.52715	+++++	0.46530					
	0.41126	+++++					AVRG		0.49731		9.98259
53 trans-1,3-Dichloropropylene	0.55667	0.52412	0.57667	0.58556	0.53379	0.60809					
	0.53039	+++++					AVRG		0.55933		5.70215
54 1,1,2-Trichloroethane	0.28664	0.26669	0.29062	0.29122	0.26059	0.29539					
	0.25448	+++++					AVRG		0.27795		6.04778
55 2-Hexanone	0.44966	0.43839	0.43114	0.45156	0.41544	0.47289					
	0.38534	+++++					AVRG		0.43492		6.50323
52 1,3-Dichloropropane	0.58992	0.56247	0.59158	0.58963	0.53126	0.58281					
	0.48934	+++++					AVRG		0.56243		6.91458

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
56 Tetrachloroethylene	0.36707	0.34242	0.34742	0.34437	0.31600	0.35293					
	0.31257	+++++					AVRG		0.34040		5.76135
57 Dibromochloromethane	0.36430	0.36503	0.37424	0.40158	0.37199	0.42902					
	0.38635	+++++					AVRG		0.38465		6.12123
59 1,2-Dibromoethane	0.34061	0.33398	0.36106	0.36598	0.34272	0.38240					
	0.33925	+++++					AVRG		0.35228		5.05692
152 1-Chlorohexane	0.27943	0.25644	0.23756	0.24653	+++++	0.25264					
	0.25465	+++++					AVRG		0.25454		5.49819
62 Chlorobenzene	1.00079	1.01568	1.05757	1.06100	0.94511	1.07380					
	0.92098	+++++					AVRG		1.01070		5.87902
60 1,1,1,2-Tetrachloroethane	0.39361	0.35697	0.40153	0.39299	0.36161	0.40793					
	0.35713	+++++					AVRG		0.38168		5.82855
58 Ethylbenzene	1.84025	1.71034	1.78402	1.76603	1.58732	1.73971					
	1.41449	+++++					AVRG		1.69174		8.58326
63 m,p-Xylenes	0.70030	0.66453	0.70747	0.70329	0.63579	0.70407					
	0.59219	+++++					AVRG		0.67252		6.59440
64 o-Xylene	0.70344	0.69541	0.74047	0.72343	0.65786	0.74007					
	0.62137	+++++					AVRG		0.69744		6.34185

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	1.21077	1.15199	1.23797	1.24119	1.13289	1.27542					
	1.05111	+++++					AVRG		1.18591		6.57939
66 Bromoform	0.49404	0.47895	0.51340	0.55884	0.52075	0.63851					
	0.57125	+++++					AVRG		0.53939		10.14098
67 Isopropylbenzene	2.81546	2.75017	2.84421	2.84280	2.56688	2.84161					
	2.30776	+++++					AVRG		2.70984		7.50228
68 cis-1,4-Dichloro-2-butene	0.20831	0.23800	0.22368	0.22817	+++++	0.22092					
	0.20566	+++++					AVRG		0.22079		5.52375
70 Cyclohexanone	0.03515	0.04094	0.03660	0.04054	+++++	0.03802					
	0.03639	+++++					AVRG		0.03794		6.20501
73 1,1,2,2-Tetrachloroethane	0.75747	0.79219	0.83626	0.84224	0.76143	0.85606					
	0.71570	+++++					AVRG		0.79448		6.59872
69 trans-1,4-Dichloro-2-butene	0.21501	0.23443	0.20845	0.21973	+++++	0.20938					
	0.19312	+++++					AVRG		0.21335		6.41608
74 1,2,3-Trichloropropane	0.20845	0.20706	0.21761	0.22120	0.20235	0.23283					
	0.19379	+++++					AVRG		0.21190		6.12869
75 Bromobenzene	0.86711	0.84553	0.88263	0.88735	0.79663	0.92286					
	0.79096	+++++					AVRG		0.85615		5.67234

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
76 n-Propylbenzene	3.39349	3.26326	3.49629	3.38979	3.04662	3.32860					
	2.61397	+++++					AVRG		3.21886		9.37389
78 1,3,5-Trimethylbenzene	2.48326	2.44997	2.58869	2.55937	2.29300	2.53053					
	2.01793	+++++					AVRG		2.41754		8.32003
77 2-Chlorotoluene	2.50052	2.28701	2.46919	2.41383	2.13859	2.33326					
	1.85746	+++++					AVRG		2.28570		9.84026
80 4-Chlorotoluene	2.21104	2.08272	2.22413	2.19063	1.96458	2.21541					
	1.81428	+++++					AVRG		2.10040		7.51638
81 tert-Butylbenzene	2.56778	2.48368	2.56772	2.56479	2.28412	2.57734					
	2.10600	+++++					AVRG		2.45020		7.52754
79 1,2,4-Trimethylbenzene	2.72525	2.55215	2.74018	2.72725	2.37980	2.63816					
	2.14623	+++++					AVRG		2.55843		8.70457
82 Pentachloroethane	0.50501	0.48269	0.48049	0.45126	+++++	0.35124					
	0.40108	+++++					AVRG		0.44529		13.11002
83 sec-Butylbenzene	3.45534	3.21255	3.53229	3.46947	3.10653	3.41341					
	2.68756	+++++					AVRG		3.26817		9.11754
84 4-Isopropyltoluene	2.82093	2.66835	2.87406	2.82119	2.51181	2.79014					
	2.27080	+++++					AVRG		2.67961		8.13997

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	1.63923	1.59498	1.69316	1.70724	1.50639	1.69998					
	1.43192	+++++					AVRG		1.61041		6.61020
87 1,4-Dichlorobenzene	1.71875	1.59053	1.69010	1.67669	1.50062	1.69539					
	1.44149	+++++					AVRG		1.61622		6.70439
88 Benzyl chloride	1.30649	1.38444	1.30279	1.33389	+++++	1.17735					
	0.96630	+++++					AVRG		1.24521		12.26968
89 n-Butylbenzene	2.60812	2.52813	2.66438	2.61551	2.36712	2.57681					
	2.08133	+++++					AVRG		2.49163		8.21192
90 1,2-Dichlorobenzene	1.64359	1.51915	1.65273	1.62268	1.47619	1.63698					
	1.39061	+++++					AVRG		1.56313		6.54277
91 bis(2-Chloroisopropyl)ether	0.37069	0.42630	0.35573	0.38220	+++++	0.37313					
	0.32169	+++++					AVRG		0.37162		9.20525
92 1,2-Dibromo-3-chloropropane	0.16090	0.17023	0.16881	0.18391	0.17674	0.19572					
	0.17820	+++++					AVRG		0.17636		6.41964
93 1,2,4-Trichlorobenzene	0.86804	0.82729	0.90400	0.95532	0.88491	0.92567					
	0.83336	+++++					AVRG		0.88551		5.30559
94 Hexachlorobutadiene	0.65645	0.61705	0.64747	0.65029	0.59424	0.63287					
	0.57806	+++++					AVRG		0.62520		4.80208

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	1.52349	1.43037	1.51173	1.63279	1.54736	1.60261					
	1.40026	+++++					AVRG		1.52123		5.54782
96 1,2,3-Trichlorobenzene	0.70644	0.66598	0.72623	0.74703	0.68968	0.70642					
	0.65102	+++++					AVRG		0.69897		4.75877
$ 13B 1,2-Dichloroethane-d4	0.17578	0.18570	0.19564	0.20439	0.18848	0.20826					
	0.21644	+++++					AVRG		0.19639		7.22804
$ 47 Toluene-d8	0.83900	0.85325	0.89204	0.90684	0.83870	0.92761					
	0.83861	+++++					AVRG		0.87087		4.28714
$ 71 Bromofluorobenzene	0.52483	0.55505	0.58369	0.61009	0.55725	0.63913					
	0.58288	+++++					AVRG		0.57899		6.53887

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Cal Date : 24-Nov-2009 21:55 amj

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.68083	0.69132	0.69132	0.050	1.54202	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.39466	0.40630	0.40630	0.050	2.95007	30.00000	Averaged	
M	135 1,3-Dichloropropylene	0.43615	0.43846	0.43846	0.050	0.52968	30.00000	Averaged	
	3 Dichlorodifluoromethane	0.23299	0.21510	0.21510	0.050	-7.67900	30.00000	Averaged	
	4 Chloromethane	0.35970	0.31949	0.31949	0.100	-11.17813	30.00000	Averaged	spcc
	5 Vinyl chloride	0.33298	0.32061	0.32061	0.050	-3.71515	20.00000	Averaged	ccc
	6 Bromomethane	0.26260	0.24826	0.24826	0.050	-5.45987	30.00000	Averaged	
	7 Chloroethane	0.24433	0.23602	0.23602	0.050	-3.40156	30.00000	Averaged	
	8 Trichlorofluoromethane	0.41084	0.40966	0.40966	0.050	-0.28572	30.00000	Averaged	
	134 Ethyl Ether	0.22500	0.21166	0.21166	0.001	-5.93017	30.00000	Averaged	
	10 Acetone	0.20316	0.14150	0.14150	0.050	-30.34976	40.00000	Averaged	
	15 Acetonitrile	0.04590	0.04069	0.04069	0.010	-11.34196	30.00000	Averaged	
	11 1,1-Dichloroethylene	0.42328	0.42893	0.42893	0.050	1.33577	20.00000	Averaged	ccc
	128 Methyl acetate	0.23428	0.19676	0.19676	0.010	-16.01466	40.00000	Averaged	
	13 Iodomethane	0.50633	0.51727	0.51727	0.050	2.16046	30.00000	Averaged	
	17 Methylene chloride	51.31291	50.00000	0.33965	0.050	2.62581	30.00000	Linear	
	14 Carbon disulfide	0.87768	0.91718	0.91718	0.050	4.50062	30.00000	Averaged	
	20 tert-Butyl methyl ether	0.81951	0.75110	0.75110	0.050	-8.34781	30.00000	Averaged	
	21 trans-1,2-Dichloroethylene	0.37462	0.38832	0.38832	0.050	3.65819	30.00000	Averaged	
	23 Vinyl acetate	0.54481	0.49355	0.49355	0.010	-9.40872	40.00000	Averaged	
	22 1,1-Dichloroethane	0.46596	0.48122	0.48122	0.100	3.27446	30.00000	Averaged	spcc
	30 2-Butanone	0.23374	0.17581	0.17581	0.030	-24.78714	40.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.41470	0.42429	0.42429	0.050	2.31050	30.00000	Averaged	
	25 2,2-Dichloropropane	0.26910	0.27404	0.27404	0.050	1.83530	30.00000	Averaged	
	32 Chloroform	0.47081	0.47569	0.47569	0.010	1.03561	20.00000	Averaged	ccc
	29 Bromochloromethane	0.14612	0.14549	0.14549	0.010	-0.43079	30.00000	Averaged	
	36 1,1,1-Trichloroethane	0.34939	0.36751	0.36751	0.010	5.18800	30.00000	Averaged	
	129 Cyclohexane	0.40354	0.42421	0.42421	0.010	5.12308	30.00000	Averaged	
	34 1,1-Dichloropropene	0.34759	0.36893	0.36893	0.010	6.13735	30.00000	Averaged	
	131 n-Butyl alcohol	0.01073	0.01040	0.01040	0.001	-3.06093	40.00000	Averaged	
	33 Carbon tetrachloride	0.33700	0.35930	0.35930	0.010	6.61503	30.00000	Averaged	
$	138 1,2-Dichloroethane-d4	0.19639	0.20547	0.20547	0.001	4.62716	30.00000	Averaged	
	37 1,2-Dichloroethane	0.37066	0.35941	0.35941	0.010	-3.03368	30.00000	Averaged	
	38 Benzene	1.07172	1.07229	1.07229	0.010	0.05259	30.00000	Averaged	
	139 Cyclohexene	0.50663	0.51278	0.51278	0.001	1.21436	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.28019	0.28019	0.010	4.13279	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.28134	0.28134	0.010	0.13000	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.44411	0.44411	0.010	3.50875	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.36895	0.36895	0.010	2.04004	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.16757	0.16757	0.010	-3.44731	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14096	0.14096	0.005	-12.11088	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.13941	0.13941	0.010	-13.62299	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.45323	0.45323	0.010	0.52137	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.86829	0.86829	0.010	-0.29589	30.00000	Averaged	
	50 Toluene	0.87628	0.86307	0.86307	0.010	-1.50792	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.54837	0.54837	0.010	-1.95885	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26103	0.26103	0.010	-6.08674	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.29367	0.29367	0.010	-32.47630	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.53703	0.53703	0.010	-4.51590	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.34775	0.34775	0.010	2.16113	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38777	0.38777	0.010	0.81133	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.34520	0.34520	0.010	-2.00984	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.03137	1.03137	0.300	2.04472	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.38883	0.38883	0.010	1.87227	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.67584	1.67584	0.010	-0.93937	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.68291	0.68291	0.010	1.54543	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70815	0.70815	0.010	1.53566	30.00000	Averaged	
	65 Styrene	1.18591	1.21191	1.21191	0.010	2.19258	30.00000	Averaged	
	66 Bromoform	0.53939	0.54722	0.54722	0.100	1.45063	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.67215	2.67215	0.010	-1.39091	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.72562	0.72562	0.300	-8.66743	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.58218	0.58218	0.010	0.55182	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.19674	0.19674	0.010	-7.15485	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.86007	0.86007	0.010	0.45779	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.16972	3.16972	0.010	-1.52666	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.21699	2.21699	0.010	-3.00590	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.39741	2.39741	0.010	-0.83248	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.09083	2.09083	0.010	-0.45555	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.46685	2.46685	0.010	0.67956	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.51478	2.51478	0.010	-1.70627	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.26146	3.26146	0.010	-0.20528	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.67217	2.67217	0.010	-0.27751	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.61689	1.61689	0.010	0.40229	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.59751	1.59751	0.010	-1.15795	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.47231	2.47231	0.010	-0.77540	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.53519	1.53519	0.010	-1.78760	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17202	0.17202	0.010	-2.46241	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.94077	0.94077	0.010	6.24058	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66766	0.66766	0.010	6.79105	30.00000	Averaged
95 Naphthalene	1.52123	1.56791	1.56791	0.010	3.06878	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.76536	0.76536	0.010	9.49837	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41722.d
Lab Smp Id: W4VM091122-18 Client Smp ID: SECOND SOURCE
Inj Date : 22-NOV-2009 18:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-18|ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01C/IVM091122-01
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2583514	150.000	152
M 2 1,2-Dichloroethylene (total)	96				1310123	100.000	103
M 135 1,3-Dichloropropylene	75				1413814	100.000	100
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	346786	50.0000	46.2
4 Chloromethane	50	5.299	5.299	(0.499)	515104	50.0000	44.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	516895	50.0000	48.1
6 Bromomethane	94	6.138	6.138	(0.578)	400262	50.0000	47.3
7 Chloroethane	64	6.288	6.288	(0.592)	380525	50.0000	48.3
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	660479	50.0000	49.8
134 Ethyl Ether	59	7.003	7.003	(0.660)	341247	50.0000	47.0
10 Acetone	43	7.357	7.357	(0.693)	1140649	250.000	174
15 Acetonitrile	41	7.705	7.705	(0.726)	1640110	1250.00	1110
11 1,1-Dichloroethylene	61	7.394	7.394	(0.696)	691539	50.0000	50.7
128 Methyl acetate	43	7.753	7.753	(0.730)	1586132	250.000	210
13 Iodomethane	142	7.631	7.631	(0.719)	4169845	250.000	255
17 Methylene chloride	84	7.942	7.942	(0.748)	547607	50.0000	51.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7393616	250.000	261
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1210958	50.0000	45.8
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	626069	50.0000	51.8
23 Vinyl acetate	43	8.710	8.710	(0.820)	3978626	250.000	226
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	775846	50.0000	51.6
30 2-Butanone	43	9.326	9.326	(0.878)	1417213	250.000	188
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	684054	50.0000	51.2
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	441819	50.0000	50.9
32 Chloroform	83	9.692	9.692	(0.913)	766928	50.0000	50.5
29 Bromochloromethane	128	9.662	9.662	(0.910)	234568	50.0000	49.8
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	592518	50.0000	52.6
129 Cyclohexane	56	10.082	10.082	(0.949)	683928	50.0000	52.6
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	594801	50.0000	53.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1677330	5000.00	4850
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	579271	50.0000	53.3
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	331271	50.0000	52.3
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	579461	50.0000	48.5
38 Benzene	78	10.375	10.375	(0.977)	1728792	50.0000	50.0
139 Cyclohexene	67	10.497	10.497	(0.989)	826734	50.0000	50.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1612245	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	451741	50.0000	52.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	453589	50.0000	50.1
130 Methylcyclohexane	83	11.265	11.265	(1.061)	716009	50.0000	51.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	594832	50.0000	51.0
43 Dibromomethane	93	11.375	11.375	(1.071)	270167	50.0000	48.3
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1136285	250.000	220
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	868329	250.000	216
46 cis-1,3-Dichloropropylene	75	11.935	11.935	(1.124)	730715	50.0000	50.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1081613	50.0000	49.8
50 Toluene	92	12.326	12.326	(0.895)	1075108	50.0000	49.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	683099	50.0000	49.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	325158	50.0000	47.0
55 2-Hexanone	43	12.856	12.856	(0.934)	1829103	250.000	169
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	668969	50.0000	47.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	433189	50.0000	51.1
57 Dibromochloromethane	129	13.149	13.149	(0.955)	483033	50.0000	50.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	430015	50.0000	49.0
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1245683	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1284761	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	484356	50.0000	50.9
58 Ethylbenzene	91	13.862	13.862	(1.007)	2087570	50.0000	49.5
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1701387	100.000	102
64 o-Xylene	106	14.404	14.404	(1.046)	882126	50.0000	50.8
65 Styrene	104	14.404	14.404	(1.046)	1509654	50.0000	51.1
66 Bromoform	173	14.661	14.661	(0.906)	479720	50.0000	50.7
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2342561	50.0000	49.3
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	636119	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	510376	50.0000	50.3
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	172470	50.0000	46.4
75 Bromobenzene	156	15.167	15.167	(0.937)	753987	50.0000	50.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2778758	50.0000	49.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1943541	50.0000	48.5
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2101707	50.0000	49.6
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1832943	50.0000	49.8
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2162586	50.0000	50.3
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2204597	50.0000	49.1
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	2859180	50.0000	49.9
84 4-Isopropyltoluene	119	16.050	16.050	(0.992)	2342581	50.0000	49.9
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1417460	50.0000	50.2
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	876657	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1400467	50.0000	49.4
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2167366	50.0000	49.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1345835	50.0000	49.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	150799	50.0000	48.8
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	824735	50.0000	53.1
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	585310	50.0000	53.4
95 Naphthalene	128	19.032	19.032	(1.176)	1374522	50.0000	51.5
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	670958	50.0000	54.7

Data File: /chem/VOA4.i/112209v4/41722.d
Date : 22-NOV-2009 18:53
Client ID: SECOND SOURCE
Sample Info: IW4VH091122-18|ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

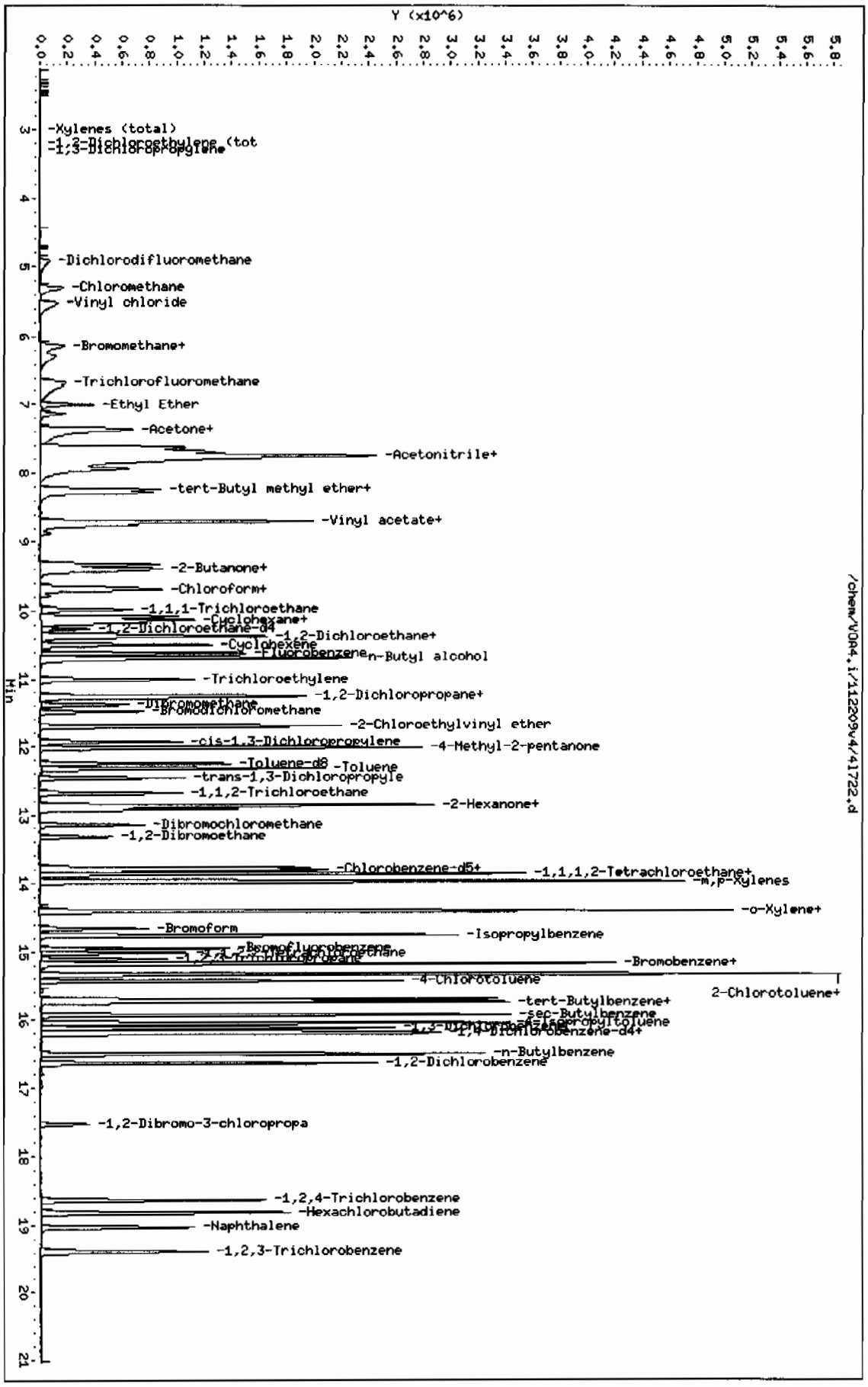

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	0.17243	0.13061	0.13061	0.010	-24.25152	30.00000	Averaged
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.25736	0.25736	0.010	-0.85465	30.00000	Averaged
9 Acrolein	0.05437	0.04991	0.04991	0.001	-8.19106	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.10008	0.10008	0.050	6.83147	30.00000	Averaged
147 Isopropyl Alcohol	0.02698	0.02517	0.02517	0.010	-6.71050	40.00000	Averaged
16 Allyl chloride	0.43415	0.41792	0.41792	0.010	-3.73840	30.00000	Averaged
148 tert-Butyl Alcohol	0.04036	0.03739	0.03739	0.010	-7.33967	40.00000	Averaged
18 Acrylonitrile	0.10963	0.10530	0.10530	0.010	-3.94603	30.00000	Averaged
149 Isopropyl ether	0.91700	0.84326	0.84326	0.010	-8.04141	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.40649	0.40649	0.010	-1.36927	30.00000	Averaged
150 Ethyl tert-butyl ether	0.83865	0.77645	0.77645	0.010	-7.41578	30.00000	Averaged
28 Propionitrile	0.04604	0.04193	0.04193	0.010	-8.93871	30.00000	Averaged
26 Ethyl acetate	0.30734	0.26429	0.26429	0.010	-14.00741	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.17171	0.17171	0.010	-5.80832	30.00000	Averaged
72 Tetrahydrofuran	255	250	0.18327	0.010	1.87504	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01249	0.01249	0.005	-10.58475	40.00000	Averaged
151 Methyl tert-amyl ether	0.83559	0.76954	0.76954	0.010	-7.90398	30.00000	Averaged
42 Methyl methacrylate	0.20344	0.18796	0.18796	0.010	-7.61187	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.45252	0.45252	0.010	-9.00773	30.00000	Averaged
152 1-Chlorohexane	0.25454	0.23444	0.23444	0.010	-7.89735	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00345	0.00345	0.001	-5.31429	40.00000	Averaged
48 2-Nitropropane	0.09473	0.09142	0.09142	0.010	-3.49078	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.21768	0.21768	0.010	-1.40961	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02005	0.02005	0.005	-47.14610	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20712	0.20712	0.010	-2.91969	30.00000	Averaged
82 Pentachloroethane	0.44529	0.35466	0.35466	0.010	-20.35311	30.00000	Averaged
88 Benzyl chloride	1.24521	1.01385	1.01385	0.010	-18.57992	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.34611	0.34611	0.010	-6.86391	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.19105	0.19105	0.001	-2.71473	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.87045	0.87045	0.010	-0.04734	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.57621	0.57621	0.010	-0.48047	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Average %D / Drift Results.
Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41723.d
Lab Smp Id: W4VM091122-19 Client Smp ID: SHORT SECOND SOURCE
Inj Date : 22-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02B/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	635460	150.000	114
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1252089	150.000	149
9 Acrolein	56	7.186	7.186	(0.677)	404736	250.000	230
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	811524	250.000	267
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2040774	2500.00	2330
16 Allyl chloride	41	7.802	7.802	(0.735)	3388727	250.000	241
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3032185	2500.00	2320
18 Acrylonitrile	53	8.180	8.180	(0.770)	853858	250.000	240
149 Isopropyl ether	45	8.747	8.747	(0.824)	1367530	50.0000	46.0
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	659221	50.0000	49.3
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1259195	50.0000	46.3
28 Propionitrile	54	9.393	9.393	(0.885)	339970	250.000	228
26 Ethyl acetate	43	9.345	9.345	(0.880)	2143053	250.000	215
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1392303	250.000	235
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	777504	250.000	255
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1012586	2500.00	2240

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1247986	50.0000	46.0
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1524080	250.000	231
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2794372	250.000	227
152 1-Chlorohexane	55	13.667	13.667	(1.287)	380193	50.0000	46.0
97 1,4-Dioxane	88	11.332	11.332	(1.067)	279362	2500.00	2370
48 2-Nitropropane	43	11.673	11.673	(1.099)	741303	250.000	241
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	923462	250.000	246
70 Cyclohexanone	42	14.904	14.904	(1.082)	619165	1250.00	661
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	878692	250.000	243
82 Pentachloroethane	167	15.776	15.776	(0.975)	1504604	250.000	199
88 Benzyl chloride	91	16.319	16.319	(1.009)	4301119	250.000	204
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1468339	250.000	233
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1621726	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1235040	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	848470	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	309837	50.0000	48.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1075045	50.0000	50.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	488894	50.0000	49.8

Data File: /chem/VOA4.i/112209v4/41723.d
Date : 22-NOV-2009 19:21
Client ID: SHORT SECOND SOURCE
Sample Info: IW4VM091122-191|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

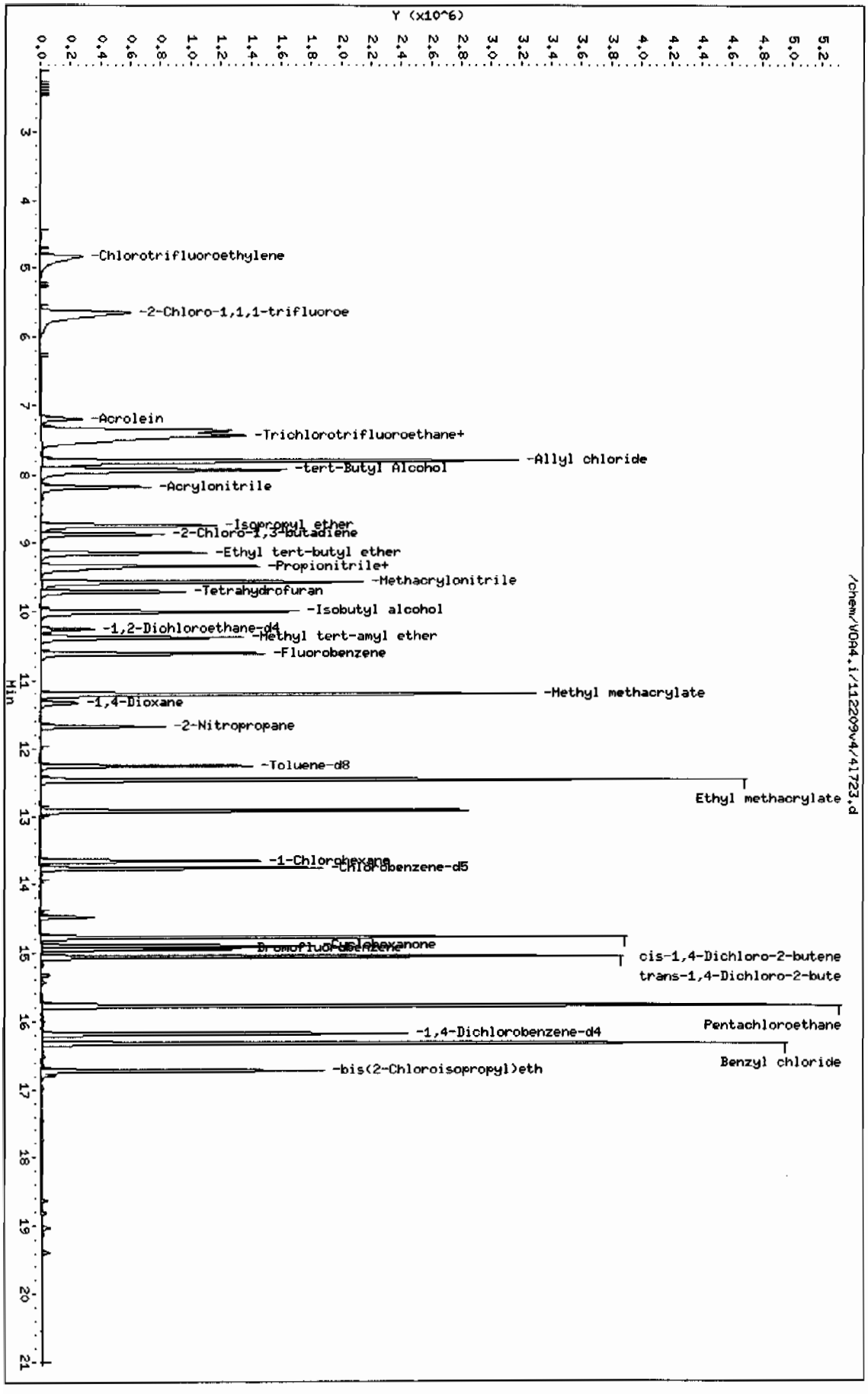

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 24-NOV-2009 20:44
Lab File ID: 4m202.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091124-01 Quant Type: ISTD
Method: /chem/VOA4.i/112409v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.74818	0.74818	0.050	9.89302	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.44124	0.44124	0.050	11.80113	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.46974	0.46974	0.050	7.70152	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.24238	0.24238	0.050	4.03267	30.00000	Averaged	
4 Chloromethane	0.35970	0.35679	0.35679	0.100	-0.81059	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.36824	0.36824	0.050	10.59129	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.27231	0.27231	0.050	3.69625	30.00000	Averaged	
7 Chloroethane	0.24433	0.26513	0.26513	0.050	8.51368	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.48050	0.48050	0.050	16.95627	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.22081	0.22081	0.001	-1.86178	30.00000	Averaged	
10 Acetone	0.20316	0.16933	0.16933	0.050	-16.65099	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04464	0.04464	0.010	-2.73501	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.48996	0.48996	0.050	15.75380	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.21303	0.21303	0.010	-9.07236	40.00000	Averaged	
13 Iodomethane	0.50633	0.54683	0.54683	0.050	7.99893	30.00000	Averaged	
17 Methylene chloride	52.91990	50.00000	0.34908	0.050	5.83981	30.00000	Linear	
14 Carbon disulfide	0.87768	1.03428	1.03428	0.050	17.84189	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.79017	0.79017	0.050	-3.58053	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.42941	0.42941	0.050	14.62530	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.59876	0.59876	0.010	9.90159	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.52750	0.52750	0.100	13.20670	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.20221	0.20221	0.030	-13.49238	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.45307	0.45307	0.050	9.25008	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.32149	0.32149	0.050	19.46951	30.00000	Averaged	
32 Chloroform	0.47081	0.50744	0.50744	0.010	7.78037	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.15029	0.15029	0.010	2.85548	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.41905	0.41905	0.010	19.93848	30.00000	Averaged	
129 Cyclohexane	0.40354	0.49404	0.49404	0.010	22.42748	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.42259	0.42259	0.010	21.57708	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01143	0.01143	0.001	6.52962	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.41402	0.41402	0.010	22.85385	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.21539	0.21539	0.001	9.67585	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.37837	0.37837	0.010	2.08011	30.00000	Averaged	
38 Benzene	1.07172	1.15374	1.15374	0.010	7.65309	30.00000	Averaged	
139 Cyclohexene	0.50663	0.58866	0.58866	0.001	16.19061	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4m202.d
Analysis Type: WATER
Lab Sample ID: W4VM091124-01 Quant Type: ISTD
Method: /chem/VOA4.i/112409v4/VOA4-8260-112209.m

Injection Date: 24-NOV-2009 20:44
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.30619	0.30619	0.010	13.79379	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.30083	0.30083	0.010	7.06740	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.52313	0.52313	0.010	21.92694	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.38762	0.38762	0.010	7.20379	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.17347	0.17347	0.010	-0.05143	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.13674	0.13674	0.005	-14.73768	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.15450	0.15450	0.010	-4.27452	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.48442	0.48442	0.010	7.43846	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.87772	0.87772	0.010	0.78696	30.00000	Averaged	
	50 Toluene	0.87628	0.93701	0.93701	0.010	6.93059	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.58464	0.58464	0.010	4.52583	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.27534	0.27534	0.010	-0.93911	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.36823	0.36823	0.010	-15.33365	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.55368	0.55368	0.010	-1.55563	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.38778	0.38778	0.010	13.91960	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.40880	0.40880	0.010	6.28084	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.35682	0.35682	0.010	1.28780	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.09857	1.09857	0.300	8.69391	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.40513	0.40513	0.010	6.14451	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.84026	1.84026	0.010	8.77957	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.74195	0.74195	0.010	10.32435	30.00000	Averaged	
	64 o-Xylene	0.69744	0.76063	0.76063	0.010	9.06139	30.00000	Averaged	
	65 Styrene	1.18591	1.27790	1.27790	0.010	7.75751	30.00000	Averaged	
	66 Bromoform	0.53939	0.57667	0.57667	0.100	6.91186	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	3.00838	3.00838	0.010	11.01689	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.79821	0.79821	0.300	0.46897	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.62177	0.62177	0.010	7.38845	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.21062	0.21062	0.010	-0.60387	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.90012	0.90012	0.010	5.13579	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.55341	3.55341	0.010	10.39355	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.42536	2.42536	0.010	6.11048	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.61908	2.61908	0.010	8.33682	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.31088	2.31088	0.010	10.02115	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.72698	2.72698	0.010	11.29586	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.73975	2.73975	0.010	7.08705	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.66786	3.66786	0.010	12.22997	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 24-NOV-2009 20:44
Lab File ID: 4m202.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091124-01 Quant Type: ISTD
Method: /chem/VOA4.i/112409v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.97154	2.97154	0.010	10.89459	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.74070	1.74070	0.010	8.09060	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.71396	1.71396	0.010	6.04737	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.75840	2.75840	0.010	10.70696	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.61593	1.61593	0.010	3.37799	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17360	0.17360	0.010	-1.56539	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.92343	0.92343	0.010	4.28253	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66891	0.66891	0.010	6.99012	30.00000	Averaged
95 Naphthalene	1.52123	1.48051	1.48051	0.010	-2.67674	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.71075	0.71075	0.010	1.68604	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.72807
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m202.d
Lab Smp Id: W4VM091124-01 Client Smp ID: VSTD050
Inj Date : 24-NOV-2009 20:44
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091124-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2699325	150.000	165
M 2 1,2-Dichloroethylene (total)	96				1363467	100.000	112
M 135 1,3-Dichloropropylene	75				1451552	100.000	108
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	374493	50.0000	52.0
4 Chloromethane	50	5.299	5.299	(0.499)	551256	50.0000	49.6
5 Vinyl chloride	62	5.521	5.521	(0.520)	568956	50.0000	55.3
6 Bromomethane	94	6.130	6.130	(0.577)	420731	50.0000	51.8
7 Chloroethane	64	6.288	6.288	(0.592)	409648	50.0000	54.2
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	742400	50.0000	58.5
134 Ethyl Ether	59	6.998	6.998	(0.659)	341169	50.0000	49.1
10 Acetone	43	7.358	7.358	(0.693)	1308105	250.000	208
15 Acetonitrile	41	7.699	7.699	(0.725)	1724346	1250.00	1220
11 1,1-Dichloroethylene	61	7.389	7.389	(0.696)	757011	50.0000	57.9
128 Methyl acetate	43	7.748	7.748	(0.730)	1645677	250.000	227
13 Iodomethane	142	7.632	7.632	(0.719)	4224442	250.000	270
17 Methylene chloride	84	7.943	7.943	(0.748)	539348	50.0000	52.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.773	7.773	(0.732)	7990068	250.000	295
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1220854	50.0000	48.2
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	663456	50.0000	57.3
23 Vinyl acetate	43	8.711	8.711	(0.820)	4625551	250.000	275
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	815019	50.0000	56.6
30 2-Butanone	43	9.327	9.327	(0.878)	1562105	250.000	216
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	700011	50.0000	54.6
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	496725	50.0000	59.7
32 Chloroform	83	9.693	9.693	(0.913)	784030	50.0000	53.9
29 Bromochloromethane	128	9.656	9.656	(0.909)	232212	50.0000	51.4
36 1,1,1-Trichloroethane	97	9.980	9.980	(0.940)	647451	50.0000	60.0
129 Cyclohexane	56	10.083	10.083	(0.949)	763316	50.0000	61.2
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	652932	50.0000	60.8
131 n-Butyl alcohol	56	10.687	10.687	(1.006)	1766456	5000.00	5330
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	639684	50.0000	61.4
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	332785	50.0000	54.8
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	584598	50.0000	51.0
38 Benzene	78	10.370	10.370	(0.976)	1782599	50.0000	53.8
139 Cyclohexene	67	10.492	10.492	(0.988)	909511	50.0000	58.1
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1545055	50.0000	
39 Trichloroethylene	95	11.004	11.004	(1.036)	473079	50.0000	56.9
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	464803	50.0000	53.5
130 Methylcyclohexane	83	11.266	11.266	(1.061)	808266	50.0000	61.0
45 Bromodichloromethane	83	11.485	11.485	(1.082)	598890	50.0000	53.6
43 Dibromomethane	93	11.376	11.376	(1.071)	268014	50.0000	50.0
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1056385	250.000	213
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	929039	250.000	239
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	748449	50.0000	53.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1055561	50.0000	50.4
50 Toluene	92	12.327	12.327	(0.895)	1126868	50.0000	53.5
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	703103	50.0000	52.3
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	331124	50.0000	49.5
55 2-Hexanone	43	12.857	12.857	(0.934)	2214180	250.000	212
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	665865	50.0000	49.2
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	466349	50.0000	57.0
57 Dibromochloromethane	129	13.144	13.144	(0.954)	491635	50.0000	53.1
59 1,2-Dibromoethane	107	13.314	13.314	(0.967)	429120	50.0000	50.6
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1202618	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1321165	50.0000	54.3
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	487222	50.0000	53.1
58 Ethylbenzene	91	13.863	13.863	(1.007)	2213133	50.0000	54.4
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1784573	100.000	110
64 o-Xylene	106	14.405	14.405	(1.046)	914752	50.0000	54.5
65 Styrene	104	14.399	14.399	(1.046)	1536830	50.0000	53.9
66 Bromoform	173	14.655	14.655	(0.906)	478783	50.0000	53.4
67 Isopropylbenzene	105	14.759	14.759	(0.912)	2497713	50.0000	55.5
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	662711	50.0000	50.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	516223	50.0000	53.7
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	174866	50.0000	49.7
75 Bromobenzene	156	15.168	15.168	(0.937)	747327	50.0000	52.6
76 n-Propylbenzene	91	15.180	15.180	(0.938)	2950226	50.0000	55.2
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	2013660	50.0000	53.0
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	2174495	50.0000	54.2
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1918614	50.0000	55.0
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2264074	50.0000	55.6
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	2274678	50.0000	53.5
83 sec-Butylbenzene	105	15.930	15.930	(0.985)	3045245	50.0000	56.1
84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	2467126	50.0000	55.4
85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	1445222	50.0000	54.0
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	830251	50.0000	
87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	1423019	50.0000	53.0
89 n-Butylbenzene	91	16.503	16.503	(1.020)	2290168	50.0000	55.4
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1341631	50.0000	51.7
92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	144130	50.0000	49.2
93 1,2,4-Trichlorobenzene	180	18.630	18.630	(1.151)	766682	50.0000	52.1
94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	555360	50.0000	53.5
95 Naphthalene	128	19.027	19.027	(1.176)	1229195	50.0000	48.7
96 1,2,3-Trichlorobenzene	180	19.386	19.386	(1.198)	590104	50.0000	50.8

Data File: /chem/VOA4.i/112409v4/4m202.d
Date : 24-NOV-2009 20:44
Client ID: VSTD050
Sample Info: IW4VM091124-01|CCV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

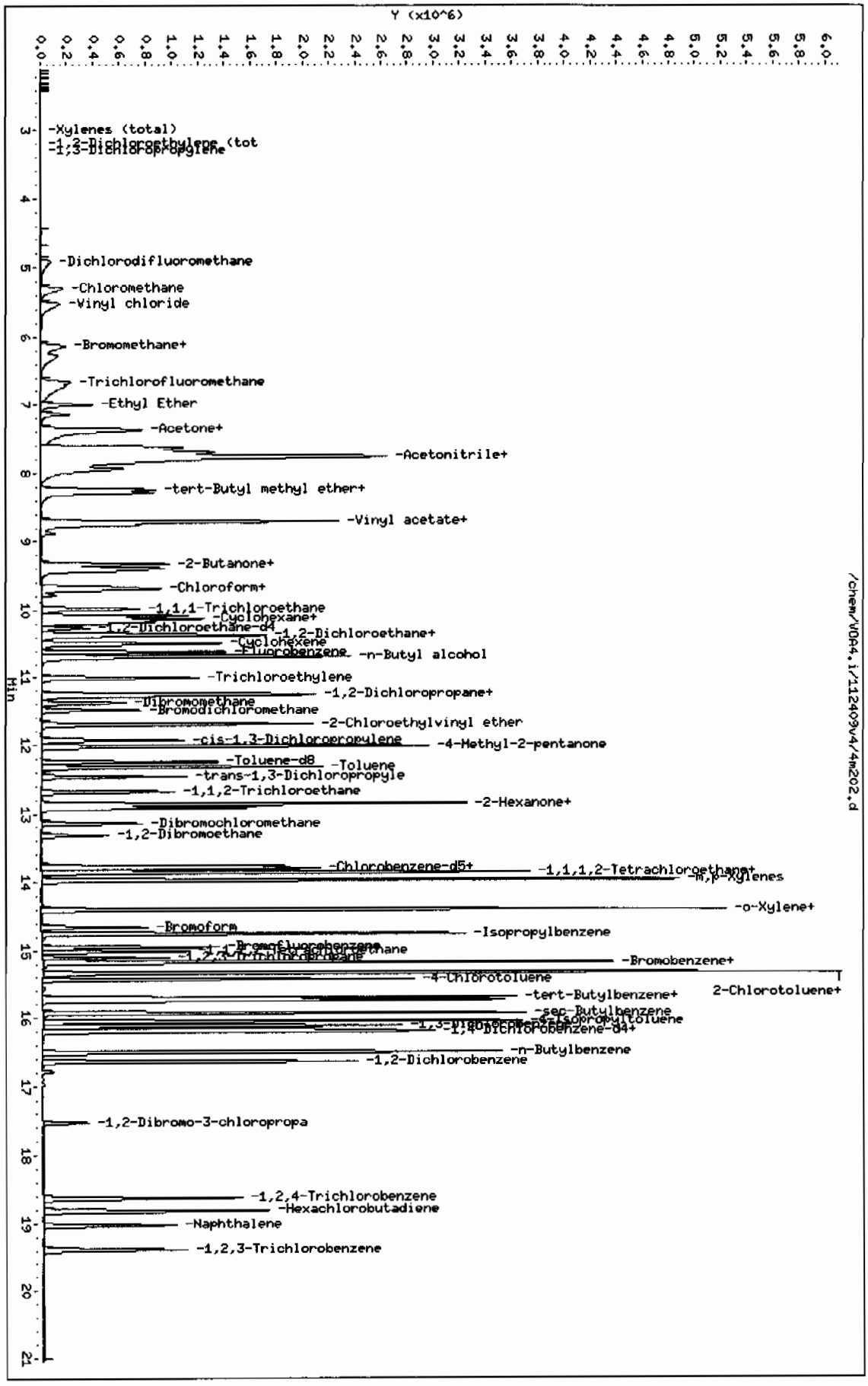

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 24-NOV-2009 21:39
Lab File ID: 4m204.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091124-03 Quant Type: ISTD
Method: /chem/VOA4.i/112409v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	0.17243	0.17505	0.17505	0.010	1.51808	30.00000	Averaged
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.27703	0.27703	0.010	6.72323	30.00000	Averaged
9 Acrolein	0.05437	0.04723	0.04723	0.001	-13.13102	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.08820	0.08820	0.050	-5.85617	30.00000	Averaged
147 Isopropyl Alcohol	0.02698	0.02438	0.02438	0.010	-9.61939	40.00000	Averaged
16 Allyl chloride	0.43415	0.36644	0.36644	0.010	-15.59605	30.00000	Averaged
148 tert-Butyl Alcohol	0.04036	0.03598	0.03598	0.010	-10.83375	40.00000	Averaged
18 Acrylonitrile	0.10963	0.09077	0.09077	0.010	-17.20067	30.00000	Averaged
149 Isopropyl ether	0.91700	0.83927	0.83927	0.010	-8.47601	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.36192	0.36192	0.010	-12.18429	30.00000	Averaged
150 Ethyl tert-butyl ether	0.83865	0.75552	0.75552	0.010	-9.91194	30.00000	Averaged
28 Propionitrile	0.04604	0.03674	0.03674	0.010	-20.20329	30.00000	Averaged
26 Ethyl acetate	0.30734	0.22910	0.22910	0.010	-25.45962	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.14691	0.14691	0.010	-19.41172	30.00000	Averaged
72 Tetrahydrofuran	228	250	0.16451	0.010	-8.98789	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01117	0.01117	0.005	-20.01043	40.00000	Averaged
151 Methyl tert-amyl ether	0.83559	0.74724	0.74724	0.010	-10.57267	30.00000	Averaged
42 Methyl methacrylate	0.20344	0.16115	0.16115	0.010	-20.78754	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.38947	0.38947	0.010	-21.68420	30.00000	Averaged
152 1-Chlorohexane	0.25454	0.25138	0.25138	0.010	-1.24073	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00311	0.00311	0.001	-14.39988	40.00000	Averaged
48 2-Nitropropane	0.09473	0.07933	0.07933	0.010	-16.25116	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.20088	0.20088	0.010	-9.01564	30.00000	Averaged
70 Cyclohexanone	0.03794	0.01810	0.01810	0.005	-52.30168	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.19026	0.19026	0.010	-10.82329	30.00000	Averaged
82 Pentachloroethane	0.44529	0.41837	0.41837	0.010	-6.04611	30.00000	Averaged
88 Benzyl chloride	1.24521	1.11806	1.11806	0.010	-10.21160	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.30896	0.30896	0.010	-16.86314	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.16861	0.16861	0.001	-14.14079	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.77632	0.77632	0.010	-10.85606	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.52229	0.52229	0.010	-9.79350	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 24-NOV-2009 21:39
Lab File ID: 4m204.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091124-03 Quant Type: ISTD
Method: /chem/VOA4.i/112409v4/VOA4-8260-112209.m

Average %D / Drift Results.
Calculated Average %D/Drift = 8.72807
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m204.d
Lab Smp Id: W4VM091124-03 Client Smp ID: VSTD250S
Inj Date : 24-NOV-2009 21:39
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091124-03|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.826	4.826	(0.454)	939304	150.000	152
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1486519	150.000	160
9 Acrolein	56	7.187	7.187	(0.677)	422377	250.000	217
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	788755	250.000	235
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2180649	2500.00	2260
16 Allyl chloride	41	7.802	7.802	(0.735)	3277137	250.000	211
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3218183	2500.00	2230
18 Acrylonitrile	53	8.180	8.180	(0.770)	811794	250.000	207
149 Isopropyl ether	45	8.741	8.741	(0.823)	1501163	50.0000	45.8
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	647350	50.0000	43.9
150 Ethyl tert-butyl ether	59	9.143	9.143	(0.861)	1351362	50.0000	45.0
28 Propionitrile	54	9.393	9.393	(0.885)	328580	250.000	199
26 Ethyl acetate	43	9.339	9.339	(0.879)	2048858	250.000	186
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1313837	250.000	201
72 Tetrahydrofuran	42	9.717	9.717	(0.601)	738412	250.000	228
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	999084	2500.00	2000

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1336557	50.0000	44.7
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1441230	250.000	198
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2610178	250.000	196
152 1-Chlorohexane	55	13.661	13.661	(1.286)	449633	50.0000	49.4
97 1,4-Dioxane	88	11.332	11.332	(1.067)	278552	2500.00	2140
48 2-Nitropropane	43	11.673	11.673	(1.099)	709503	250.000	209
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	901682	250.000	227
70 Cyclohexanone	42	14.905	14.905	(1.082)	606420	1250.00	596
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	854003	250.000	223
82 Pentachloroethane	167	15.770	15.770	(0.975)	1877891	250.000	235
88 Benzyl chloride	91	16.319	16.319	(1.009)	5018483	250.000	224
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1386769	250.000	208
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1788652	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1340362	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	897715	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	301593	50.0000	42.9
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1040555	50.0000	44.6
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	468864	50.0000	45.1

Data File: /chem/VOA4.i/112409v4/4m204.d
Date : 24-NOV-2009 21:39
Client ID: VSTD250S
Sample Info: IW4VH091124-031SHORTI1IVOAFI1I
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

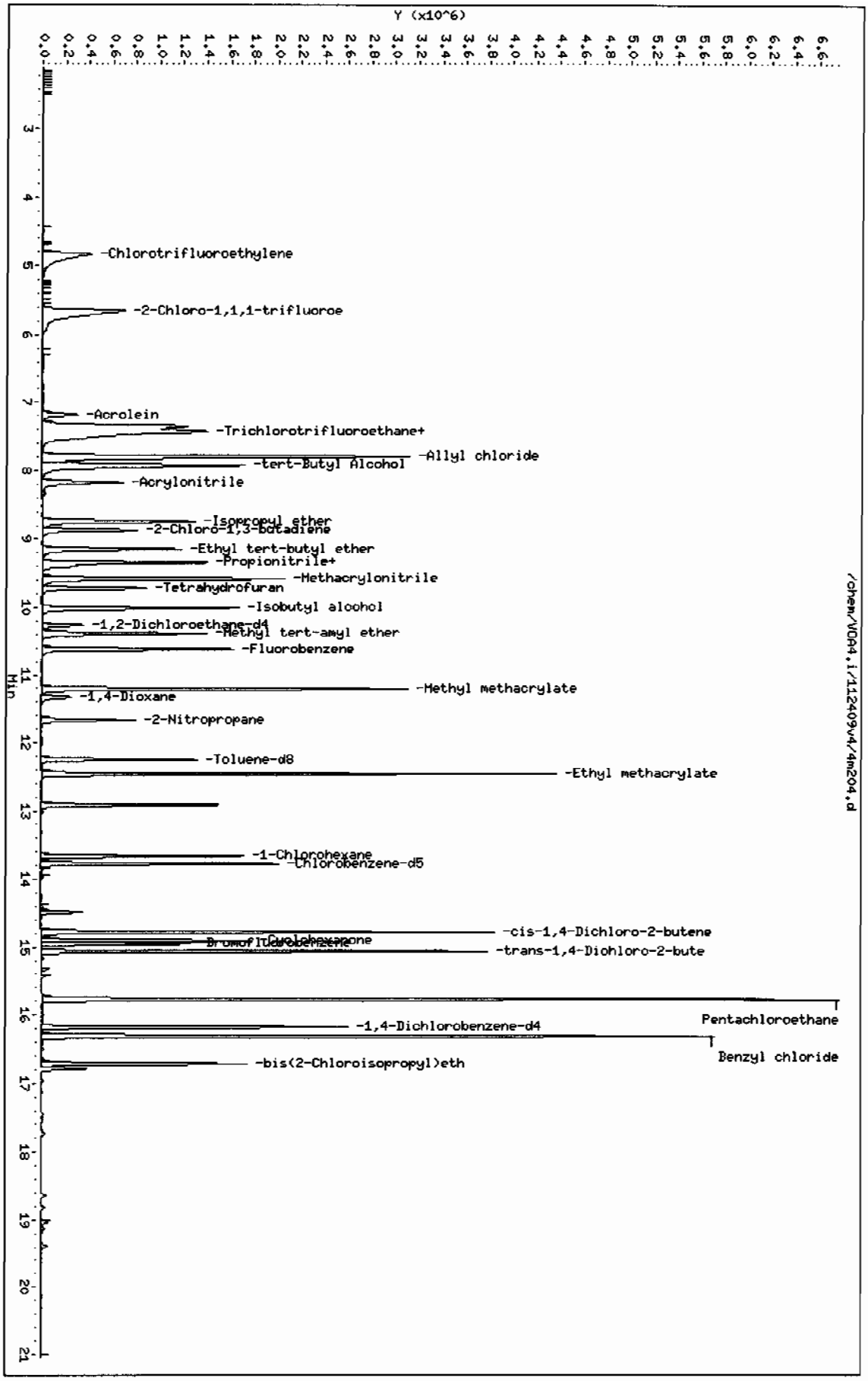

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 27-NOV-2009 16:38
Lab File ID: 4m502.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091127-01 Quant Type: ISTD
Method: /chem/VOA4.i/112709v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.68083	0.68406	0.68406	0.050	0.47428	30.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.39466	0.41944	0.41944	0.050	6.27958	30.00000	Averaged
M 135 1,3-Dichloropropylene	0.43615	0.46591	0.46591	0.050	6.82235	30.00000	Averaged
3 Dichlorodifluoromethane	0.23299	0.20399	0.20399	0.050	-12.44361	30.00000	Averaged
4 Chloromethane	0.35970	0.32215	0.32215	0.100	-10.43949	30.00000	Averaged spcc
5 Vinyl chloride	0.33298	0.32469	0.32469	0.050	-2.48887	20.00000	Averaged ccc
6 Bromomethane	0.26260	0.25747	0.25747	0.050	-1.95407	30.00000	Averaged
7 Chloroethane	0.24433	0.24819	0.24819	0.050	1.57925	30.00000	Averaged
8 Trichlorofluoromethane	0.41084	0.42905	0.42905	0.050	4.43378	30.00000	Averaged
134 Ethyl Ether	0.22500	0.22415	0.22415	0.001	-0.37818	30.00000	Averaged
10 Acetone	0.20316	0.17402	0.17402	0.050	-14.34092	40.00000	Averaged
15 Acetonitrile	0.04590	0.04433	0.04433	0.010	-3.42451	30.00000	Averaged
11 1,1-Dichloroethylene	0.42328	0.44163	0.44163	0.050	4.33586	20.00000	Averaged ccc
128 Methyl acetate	0.23428	0.21579	0.21579	0.010	-7.89384	40.00000	Averaged
13 Iodomethane	0.50633	0.52690	0.52690	0.050	4.06243	30.00000	Averaged
17 Methylene chloride	54.59937	50.00000	0.35893	0.050	9.19874	30.00000	Linear
14 Carbon disulfide	0.87768	0.93989	0.93989	0.050	7.08779	30.00000	Averaged
20 tert-Butyl methyl ether	0.81951	0.80384	0.80384	0.050	-1.91205	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.37462	0.40219	0.40219	0.050	7.35895	30.00000	Averaged
23 Vinyl acetate	0.54481	0.60222	0.60222	0.010	10.53832	40.00000	Averaged
22 1,1-Dichloroethane	0.46596	0.50085	0.50085	0.100	7.48729	30.00000	Averaged spcc
30 2-Butanone	0.23374	0.20909	0.20909	0.030	-10.54808	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.41470	0.43670	0.43670	0.050	5.30466	30.00000	Averaged
25 2,2-Dichloropropane	0.26910	0.30912	0.30912	0.050	14.87007	30.00000	Averaged
32 Chloroform	0.47081	0.48683	0.48683	0.010	3.40161	20.00000	Averaged ccc
29 Bromochloromethane	0.14612	0.15177	0.15177	0.010	3.86298	30.00000	Averaged
36 1,1,1-Trichloroethane	0.34939	0.39433	0.39433	0.010	12.86409	30.00000	Averaged
129 Cyclohexane	0.40354	0.45826	0.45826	0.010	13.56255	30.00000	Averaged
34 1,1-Dichloropropene	0.34759	0.39720	0.39720	0.010	14.27256	30.00000	Averaged
131 n-Butyl alcohol	0.01073	0.01180	0.01180	0.001	9.97649	40.00000	Averaged
33 Carbon tetrachloride	0.33700	0.39018	0.39018	0.010	15.77843	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.22820	0.22820	0.001	16.19868	30.00000	Averaged
37 1,2-Dichloroethane	0.37066	0.37492	0.37492	0.010	1.14955	30.00000	Averaged
38 Benzene	1.07172	1.11794	1.11794	0.010	4.31190	30.00000	Averaged
139 Cyclohexene	0.50663	0.55206	0.55206	0.001	8.96588	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4m502.d
Analysis Type: WATER
Lab Sample ID: W4VM091127-01
Method: /chem/VOA4.i/112709v4/VOA4-8260-112209.m

Injection Date: 27-NOV-2009 16:38
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.29133	0.29133	0.010	8.27023	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.29335	0.29335	0.010	4.40497	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.49549	0.49549	0.010	15.48387	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.38017	0.38017	0.010	5.14344	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.17370	0.17370	0.010	0.08344	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14924	0.14924	0.005	-6.94660	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.15175	0.15175	0.010	-5.98035	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.48046	0.48046	0.010	6.56105	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.90244	0.90244	0.010	3.62543	30.00000	Averaged	
	50 Toluene	0.87628	0.85885	0.85885	0.010	-1.98868	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.55972	0.55972	0.010	0.07073	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26624	0.26624	0.010	-4.21332	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.35989	0.35989	0.010	-17.25003	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.53000	0.53000	0.010	-5.76520	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.35625	0.35625	0.010	4.65801	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38611	0.38611	0.010	0.38009	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.34599	0.34599	0.010	-1.78639	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.02233	1.02233	0.300	1.15009	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.38056	0.38056	0.010	-0.29408	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.66925	1.66925	0.010	-1.32905	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.67524	0.67524	0.010	0.40443	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70169	0.70169	0.010	0.60920	30.00000	Averaged	
	65 Styrene	1.18591	1.18737	1.18737	0.010	0.12304	30.00000	Averaged	
	66 Bromoform	0.53939	0.54152	0.54152	0.100	0.39482	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.62143	2.62143	0.010	-3.26278	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.74738	0.74738	0.300	-5.92827	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.60307	0.60307	0.010	4.15865	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.19807	0.19807	0.010	-6.52347	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.82866	0.82866	0.010	-3.21055	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.10401	3.10401	0.010	-3.56817	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.13876	2.13876	0.010	-6.42855	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.33290	2.33290	0.010	-3.50093	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.04120	2.04120	0.010	-2.81848	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.40907	2.40907	0.010	-1.67898	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.45374	2.45374	0.010	-4.09209	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.21303	3.21303	0.010	-1.68716	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 27-NOV-2009 16:38
Lab File ID: 4m502.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091127-01 Quant Type: ISTD
Method: /chem/VOA4.i/112709v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.67508	2.67508	0.010	-0.16914	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.59606	1.59606	0.010	-0.89103	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.57611	1.57611	0.010	-2.48218	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.49679	2.49679	0.010	0.20705	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.50566	1.50566	0.010	-3.67658	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17276	0.17276	0.010	-2.04111	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.93901	0.93901	0.010	6.04099	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66666	0.66666	0.010	6.63128	30.00000	Averaged
95 Naphthalene	1.52123	1.49367	1.49367	0.010	-1.81171	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.72530	0.72530	0.010	3.76741	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.32710
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m502.d
Lab Smp Id: W4VM091127-01 Client Smp ID: VSTD050
Inj Date : 27-NOV-2009 16:38
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091127-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2594302	150.000	151
M 2 1,2-Dichloroethylene (total)	96				1315135	100.000	106
M 135 1,3-Dichloropropylene	75				1460814	100.000	107
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	319804	50.0000	43.8
4 Chloromethane	50	5.299	5.299	(0.499)	505041	50.0000	44.8
5 Vinyl chloride	62	5.521	5.521	(0.520)	509019	50.0000	48.8
6 Bromomethane	94	6.130	6.130	(0.577)	403639	50.0000	49.0
7 Chloroethane	64	6.288	6.288	(0.592)	389093	50.0000	50.8
8 Trichlorofluoromethane	101	6.674	6.674	(0.629)	672632	50.0000	52.2
134 Ethyl Ether	59	7.004	7.004	(0.660)	351405	50.0000	49.8
10 Acetone	43	7.357	7.357	(0.693)	1364073	250.000	214
15 Acetonitrile	41	7.705	7.705	(0.726)	1737228	1250.00	1210
11 1,1-Dichloroethylene	61	7.382	7.382	(0.695)	692345	50.0000	52.2
128 Methyl acetate	43	7.753	7.753	(0.730)	1691451	250.000	230
13 Iodomethane	142	7.625	7.625	(0.718)	4130151	250.000	260
17 Methylene chloride	84	7.936	7.936	(0.747)	562699	50.0000	54.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7367375	250.000	268
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1260192	50.0000	49.0
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	630510	50.0000	53.7
23 Vinyl acetate	43	8.711	8.711	(0.820)	4720570	250.000	276
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	785190	50.0000	53.7
30 2-Butanone	43	9.326	9.326	(0.878)	1638957	250.000	224
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	684625	50.0000	52.6
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	484605	50.0000	57.4
32 Chloroform	83	9.692	9.692	(0.913)	763207	50.0000	51.7
29 Bromochloromethane	128	9.656	9.656	(0.909)	237925	50.0000	51.9
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	618196	50.0000	56.4
129 Cyclohexane	56	10.082	10.082	(0.949)	718427	50.0000	56.8
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	622702	50.0000	57.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1850352	5000.00	5500
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	611683	50.0000	57.9
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	357747	50.0000	58.1
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	587763	50.0000	50.6
38 Benzene	78	10.375	10.375	(0.977)	1752601	50.0000	52.2
139 Cyclohexene	67	10.497	10.497	(0.989)	865465	50.0000	54.5
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1567711	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	456716	50.0000	54.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	459891	50.0000	52.2
130 Methylcyclohexane	83	11.265	11.265	(1.061)	776780	50.0000	57.7
45 Bromodichloromethane	83	11.484	11.484	(1.082)	595993	50.0000	52.6
43 Dibromomethane	93	11.375	11.375	(1.071)	272311	50.0000	50.0
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1169821	250.000	233
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	959192	250.000	235
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	753222	50.0000	53.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1140843	50.0000	51.8
50 Toluene	92	12.326	12.326	(0.895)	1085745	50.0000	49.0
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	707592	50.0000	50.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	336569	50.0000	47.9
55 2-Hexanone	43	12.862	12.862	(0.934)	2274838	250.000	207
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	670019	50.0000	47.1
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	450366	50.0000	52.3
57 Dibromochloromethane	129	13.149	13.149	(0.955)	488108	50.0000	50.2
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	437395	50.0000	49.1
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1264178	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1292405	50.0000	50.6
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	481095	50.0000	49.8
58 Ethylbenzene	91	13.862	13.862	(1.007)	2110231	50.0000	49.3
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1707247	100.000	100
64 o-Xylene	106	14.405	14.405	(1.046)	887055	50.0000	50.3
65 Styrene	104	14.405	14.405	(1.046)	1501042	50.0000	50.1
66 Bromoform	173	14.661	14.661	(0.906)	492223	50.0000	50.2
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2382785	50.0000	48.4
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	679343	50.0000	47.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	548167	50.0000	52.1
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	180043	50.0000	46.7
75 Bromobenzene	156	15.167	15.167	(0.937)	753227	50.0000	48.4
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2821433	50.0000	48.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1944057	50.0000	46.8
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2120524	50.0000	48.2
80 4-Chlorotoluene	91	15.435	15.435	(0.954)	1855380	50.0000	48.6
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2189756	50.0000	49.2
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2230361	50.0000	48.0
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	2920528	50.0000	49.2
84 4-Isopropyltoluene	119	16.057	16.057	(0.992)	2431552	50.0000	49.9
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1450766	50.0000	49.6
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	908965	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1432625	50.0000	48.8
89 n-Butylbenzene	91	16.508	16.508	(1.020)	2269491	50.0000	50.1
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1368594	50.0000	48.2
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	157032	50.0000	49.0
93 1,2,4-Trichlorobenzene	180	18.635	18.635	(1.152)	853523	50.0000	53.0
94 Hexachlorobutadiene	225	18.824	18.824	(1.164)	605973	50.0000	53.3
95 Naphthalene	128	19.032	19.032	(1.176)	1357693	50.0000	49.1
96 1,2,3-Trichlorobenzene	180	19.391	19.391	(1.199)	659274	50.0000	51.9

Data File: /chem/VOA4.i/112709v4/4m502.d
Date : 27-NOV-2009 16:38
Client ID: VSTD050
Sample Info: IW4WH091127-01|CCV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

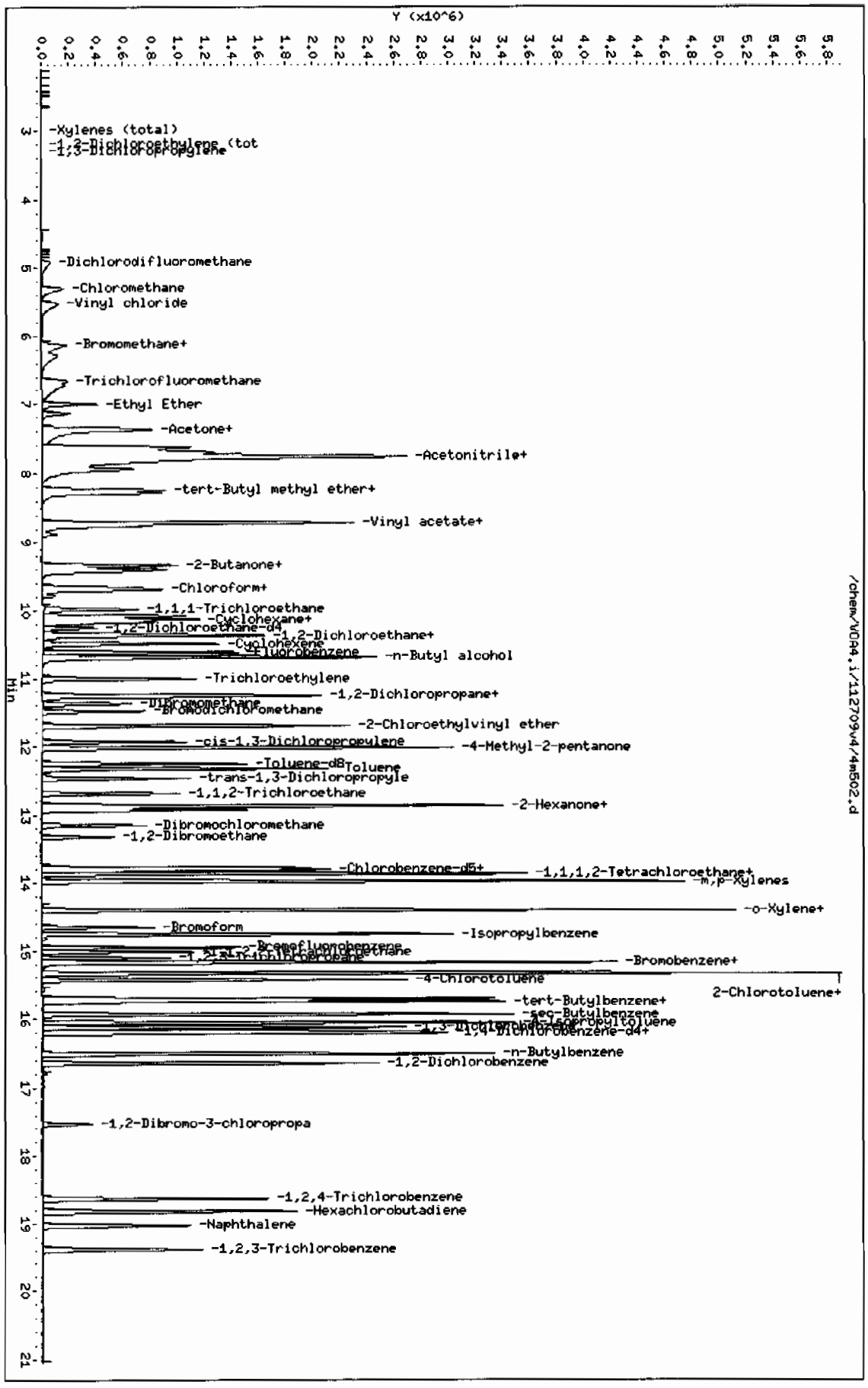

Page 1

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 27-NOV-2009 17:32
Lab File ID: 4m504.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091127-03 Quant Type: ISTD
Method: /chem/VOA4.i/112709v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
153 Chlorotrifluoroethylene	0.17243	0.18889	0.18889	0.010	9.54360	30.00000	Averaged	
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.31931	0.31931	0.010	23.01128	30.00000	Averaged	
9 Acrolein	0.05437	0.05524	0.05524	0.001	1.60499	30.00000	Averaged	
12 Trichlorotrifluoroethane	0.09368	0.10361	0.10361	0.050	10.59938	30.00000	Averaged	
147 Isopropyl Alcohol	0.02698	0.02743	0.02743	0.010	1.66551	40.00000	Averaged	
16 Allyl chloride	0.43415	0.41886	0.41886	0.010	-3.52201	30.00000	Averaged	
148 tert-Butyl Alcohol	0.04036	0.04152	0.04152	0.010	2.87602	40.00000	Averaged	
18 Acrylonitrile	0.10963	0.10833	0.10833	0.010	-1.18151	30.00000	Averaged	
149 Isopropyl ether	0.91700	0.92631	0.92631	0.010	1.01600	30.00000	Averaged	
24 2-Chloro-1,3-butadiene	0.41214	0.41853	0.41853	0.010	1.55008	30.00000	Averaged	
150 Ethyl tert-butyl ether	0.83865	0.84559	0.84559	0.010	0.82791	30.00000	Averaged	
28 Propionitrile	0.04604	0.04401	0.04401	0.010	-4.42331	30.00000	Averaged	
26 Ethyl acetate	0.30734	0.27202	0.27202	0.010	-11.49201	40.00000	Averaged	
27 Methacrylonitrile	0.18229	0.17518	0.17518	0.010	-3.90231	30.00000	Averaged	
72 Tetrahydrofuran	252	250	0.18158	0.010	0.89651	30.00000	Linear	
19 Isobutyl alcohol	0.01397	0.01377	0.01377	0.005	-1.42700	40.00000	Averaged	
151 Methyl tert-amyl ether	0.83559	0.83934	0.83934	0.010	0.44913	30.00000	Averaged	
42 Methyl methacrylate	0.20344	0.19378	0.19378	0.010	-4.74932	30.00000	Averaged	
51 Ethyl methacrylate	0.49731	0.45933	0.45933	0.010	-7.63740	30.00000	Averaged	
152 1-Chlorohexane	0.25454	0.29057	0.29057	0.010	14.15600	30.00000	Averaged	
97 1,4-Dioxane	0.00364	0.00366	0.00366	0.001	0.52847	40.00000	Averaged	
48 2-Nitropropane	0.09473	0.09494	0.09494	0.010	0.21915	30.00000	Averaged	
68 cis-1,4-Dichloro-2-butene	0.22079	0.23206	0.23206	0.010	5.10364	30.00000	Averaged	
70 Cyclohexanone	0.03794	0.02262	0.02262	0.005	-40.37674	40.00000	Averaged	<-
69 trans-1,4-Dichloro-2-butene	0.21335	0.22194	0.22194	0.010	4.02508	30.00000	Averaged	
82 Pentachloroethane	0.44529	0.49687	0.49687	0.010	11.58177	30.00000	Averaged	
88 Benzyl chloride	1.24521	1.27794	1.27794	0.010	2.62831	30.00000	Averaged	
91 bis(2-Chloroisopropyl)ether	0.37162	0.36338	0.36338	0.010	-2.21689	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.19667	0.19667	0.001	0.14353	30.00000	Averaged	
$ 47 Toluene-d8	0.87087	0.89435	0.89435	0.010	2.69633	30.00000	Averaged	
$ 71 Bromofluorobenzene	0.57899	0.58959	0.58959	0.010	1.83014	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 27-NOV-2009 17:32
Lab File ID: 4m504.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091127-03 Quant Type: ISTD
Method: /chem/VOA4.i/112709v4/VOA4-8260-112209.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	5.32710
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m504.d
Lab Smp Id: W4VM091127-03 Client Smp ID: VSTD250S
Inj Date : 27-NOV-2009 17:32
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091127-03|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	940779	150.000	164
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1590356	150.000	184
9 Acrolein	56	7.181	7.181	(0.676)	458551	250.000	254
12 Trichlorotrifluoroethane	85	7.364	7.364	(0.693)	860084	250.000	276
147 Isopropyl Alcohol	45	7.437	7.437	(0.700)	2276785	2500.00	2540
16 Allyl chloride	41	7.803	7.803	(0.735)	3476947	250.000	241
148 tert-Butyl Alcohol	59	7.931	7.931	(0.747)	3446373	2500.00	2570
18 Acrylonitrile	53	8.181	8.181	(0.770)	899280	250.000	247
149 Isopropyl ether	45	8.742	8.742	(0.823)	1537875	50.0000	50.5
24 2-Chloro-1,3-butadiene	53	8.870	8.870	(0.835)	694841	50.0000	50.8
150 Ethyl tert-butyl ether	59	9.150	9.150	(0.862)	1403858	50.0000	50.4
28 Propionitrile	54	9.394	9.394	(0.885)	365297	250.000	239
26 Ethyl acetate	43	9.339	9.339	(0.879)	2258087	250.000	221
27 Methacrylonitrile	41	9.577	9.577	(0.902)	1454188	250.000	240
72 Tetrahydrofuran	42	9.717	9.717	(0.601)	815346	250.000	252
19 Isobutyl alcohol	41	10.010	10.010	(0.943)	1142785	2500.00	2460

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.388	10.388	(0.978)	1393482	50.0000	50.2
42 Methyl methacrylate	69	11.211	11.211	(1.056)	1608592	250.000	238
51 Ethyl methacrylate	69	12.467	12.467	(0.905)	2921854	250.000	231
152 1-Chlorohexane	55	13.662	13.662	(1.286)	482411	50.0000	57.1
97 1,4-Dioxane	88	11.333	11.333	(1.067)	303640	2500.00	2510
48 2-Nitropropane	43	11.674	11.674	(1.099)	788068	250.000	250
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	1041993	250.000	263
70 Cyclohexanone	42	14.905	14.905	(1.082)	719495	1250.00	745
69 trans-1,4-Dichloro-2-butene	53	15.064	15.064	(0.931)	996567	250.000	260
82 Pentachloroethane	167	15.777	15.777	(0.975)	2231051	250.000	279(A)
88 Benzyl chloride	91	16.320	16.320	(1.009)	5738259	250.000	256
91 bis(2-Chloroisopropyl)ether	45	16.722	16.722	(1.034)	1631680	250.000	244
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1660213	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1272224	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	898048	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.259	(0.966)	326509	50.0000	50.1
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1137810	50.0000	51.3
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	529476	50.0000	50.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/112709v4/4m504.d
Date : 27-NOV-2009 17:32
Client ID: VSTD250S
Sample Info: IW4VH091127-03|SHORT|1|VOAFI1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

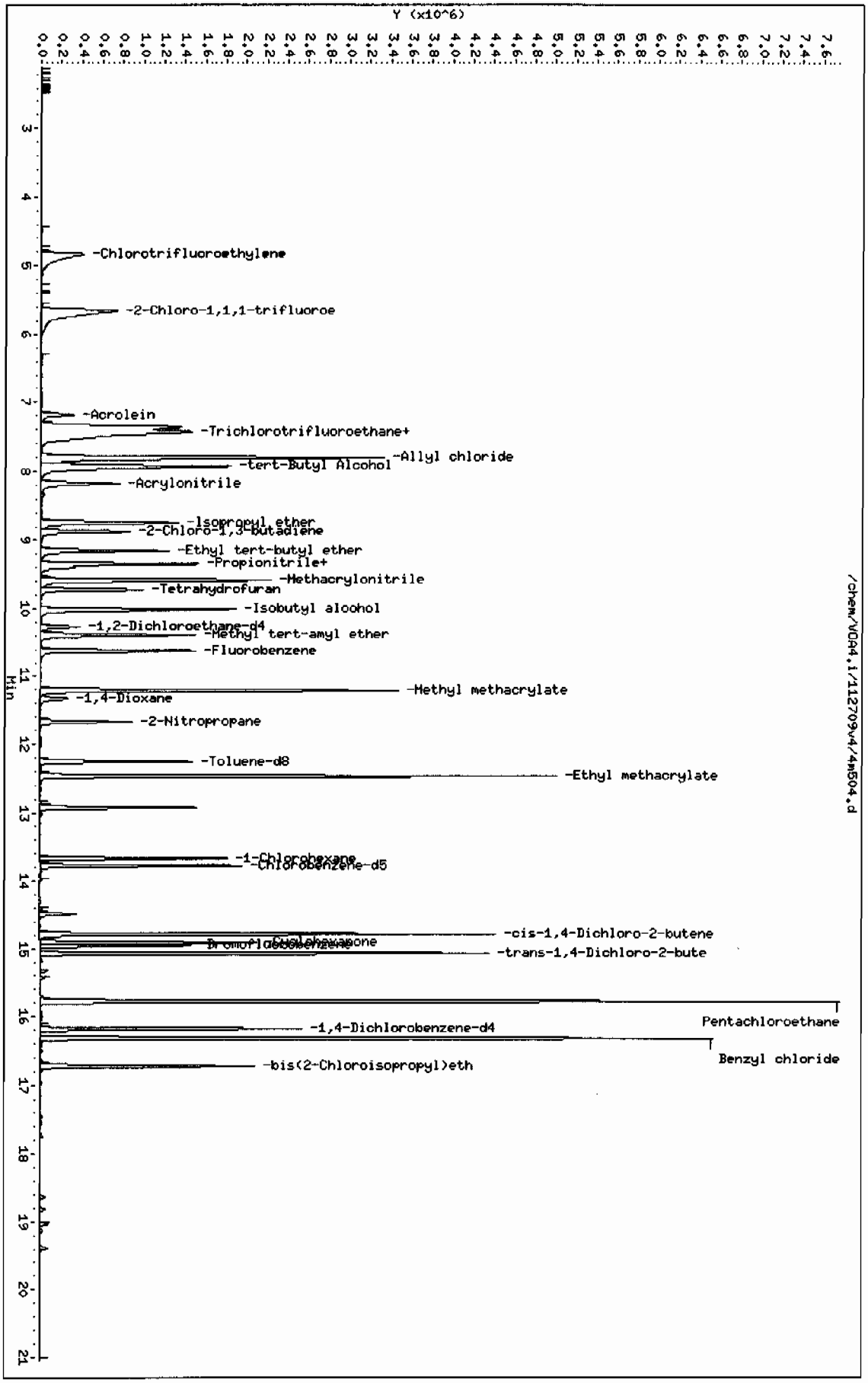

Page 1

QC Data

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: IUVM091020-021BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

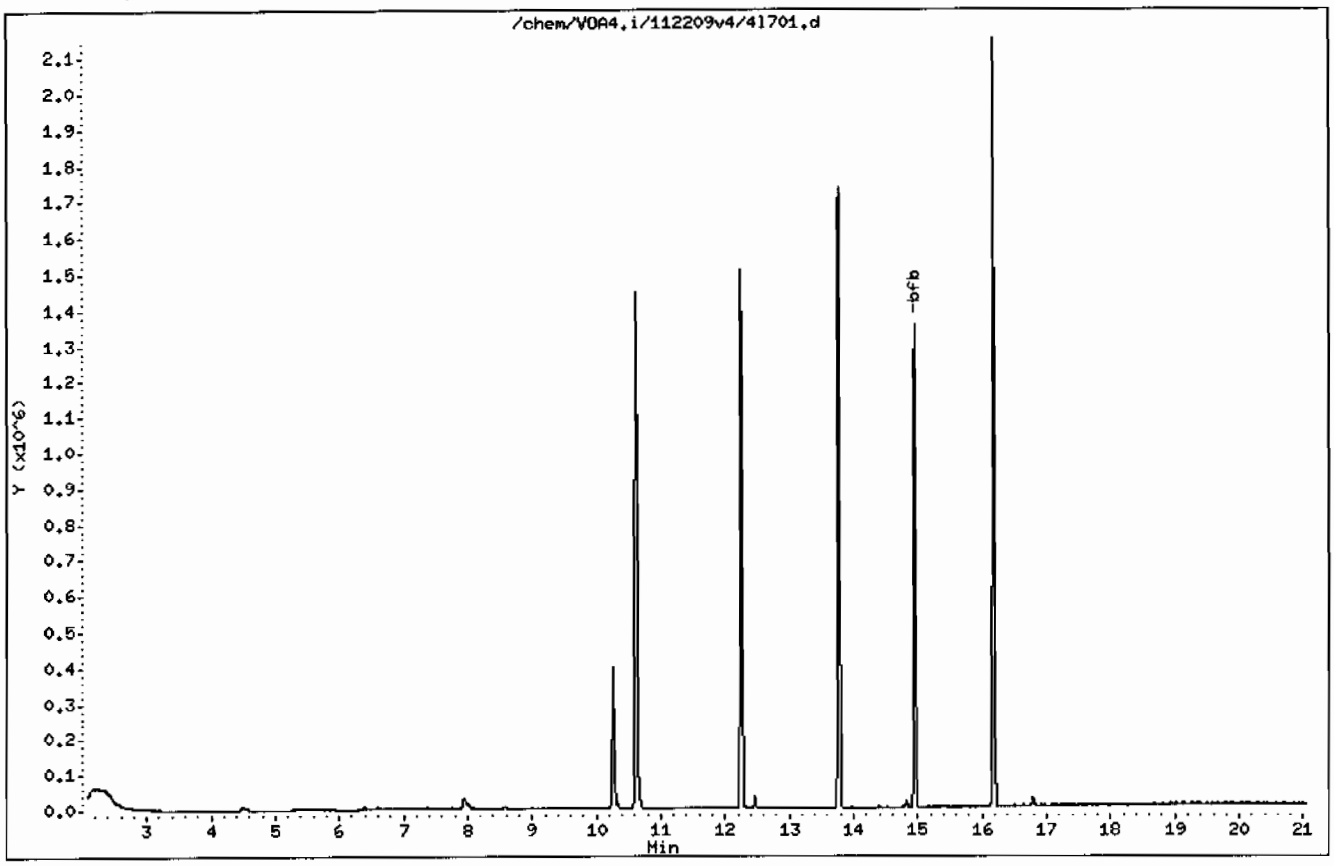

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

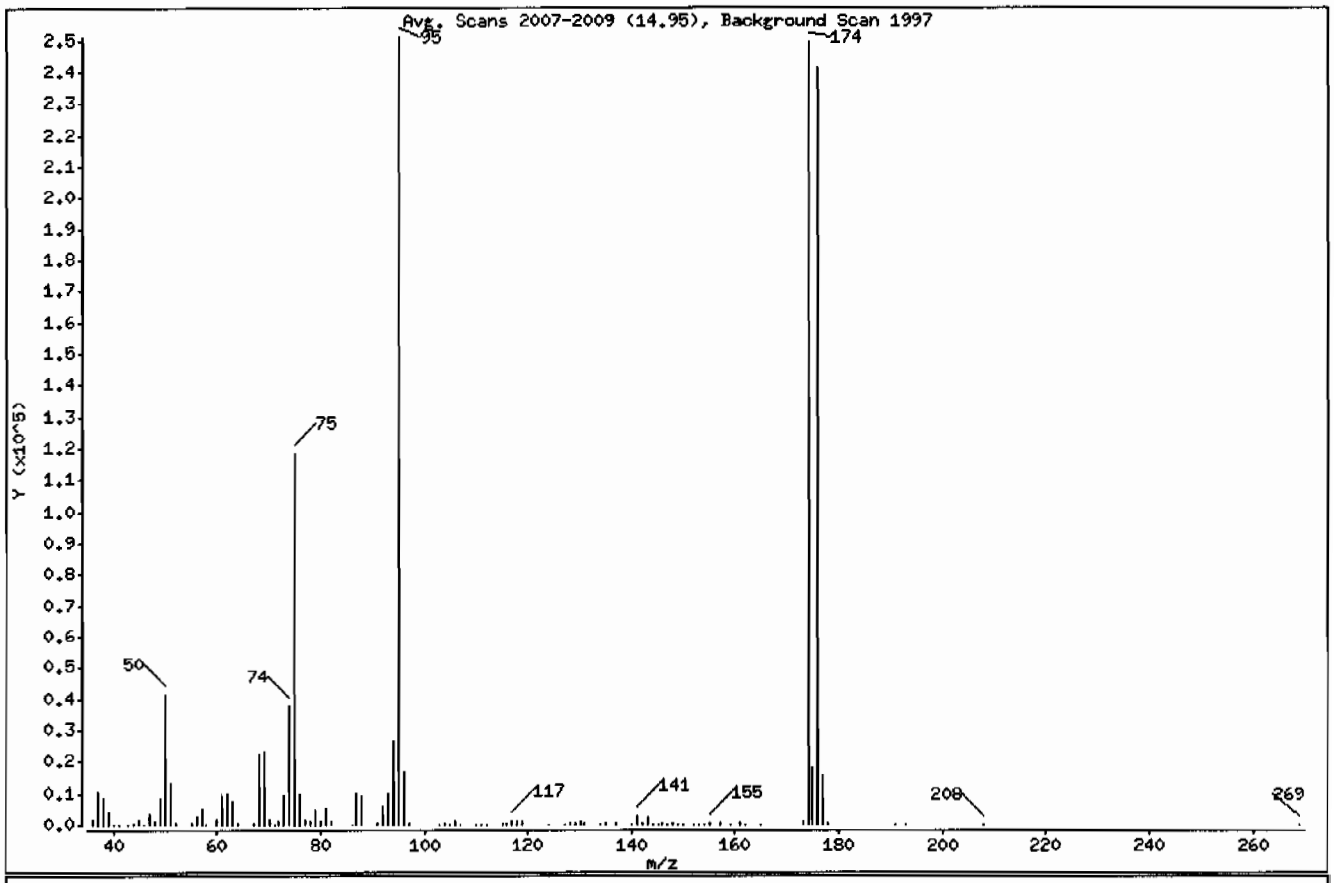

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.48
75	30.00 - 60.00% of mass 95	47.01
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.43 (0.43)
174	50.00 - 100.00% of mass 95	99.29
175	5.00 - 9.00% of mass 174	7.09 (7.14)
176	95.00 - 101.00% of mass 174	96.07 (96.76)
177	5.00 - 9.00% of mass 176	6.11 (6.36)

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Data File: 41701.d

Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1997

Location of Maximum: 95.00

Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1852	68.00	22712	104.00	786	145.00	227
37.00	10469	69.00	23288	105.00	216	146.00	338
38.00	8405	70.00	1742	106.00	913	147.00	212
39.00	4011	71.00	281	107.00	271	148.00	588
40.00	10	72.00	1018	110.00	50	149.00	261
41.00	174	73.00	9172	111.00	93	150.00	273
43.00	32	74.00	37232	112.00	54	152.00	51
44.00	673	75.00	118008	115.00	294	153.00	133
45.00	1913	76.00	10049	116.00	814	154.00	263
46.00	181	77.00	1447	117.00	1364	155.00	862
47.00	3182	78.00	1010	118.00	999	157.00	488
48.00	1157	79.00	4497	119.00	1228	159.00	282
49.00	8549	80.00	1297	124.00	61	161.00	368
50.00	41280	81.00	4964	127.00	56	162.00	58
51.00	13197	82.00	981	128.00	697	165.00	52
52.00	604	86.00	130	129.00	382	173.00	1069
55.00	416	87.00	9653	130.00	872	174.00	249216
56.00	2604	88.00	9450	131.00	389	175.00	17792
57.00	5395	91.00	777	134.00	55	176.00	241152
58.00	216	92.00	6052	135.00	375	177.00	15329
60.00	1746	93.00	9586	137.00	534	178.00	346
61.00	9083	94.00	26584	140.00	119	191.00	57
62.00	9883	95.00	251008	141.00	2645	193.00	50
63.00	7531	96.00	16696	142.00	321	208.00	106
64.00	738	97.00	497	143.00	2485	269.00	58
67.00	656	103.00	132	144.00	135		

Data File: /chem/VOA4.i/112409v4/4m201.d

Date : 24-NOV-2009 20:16

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

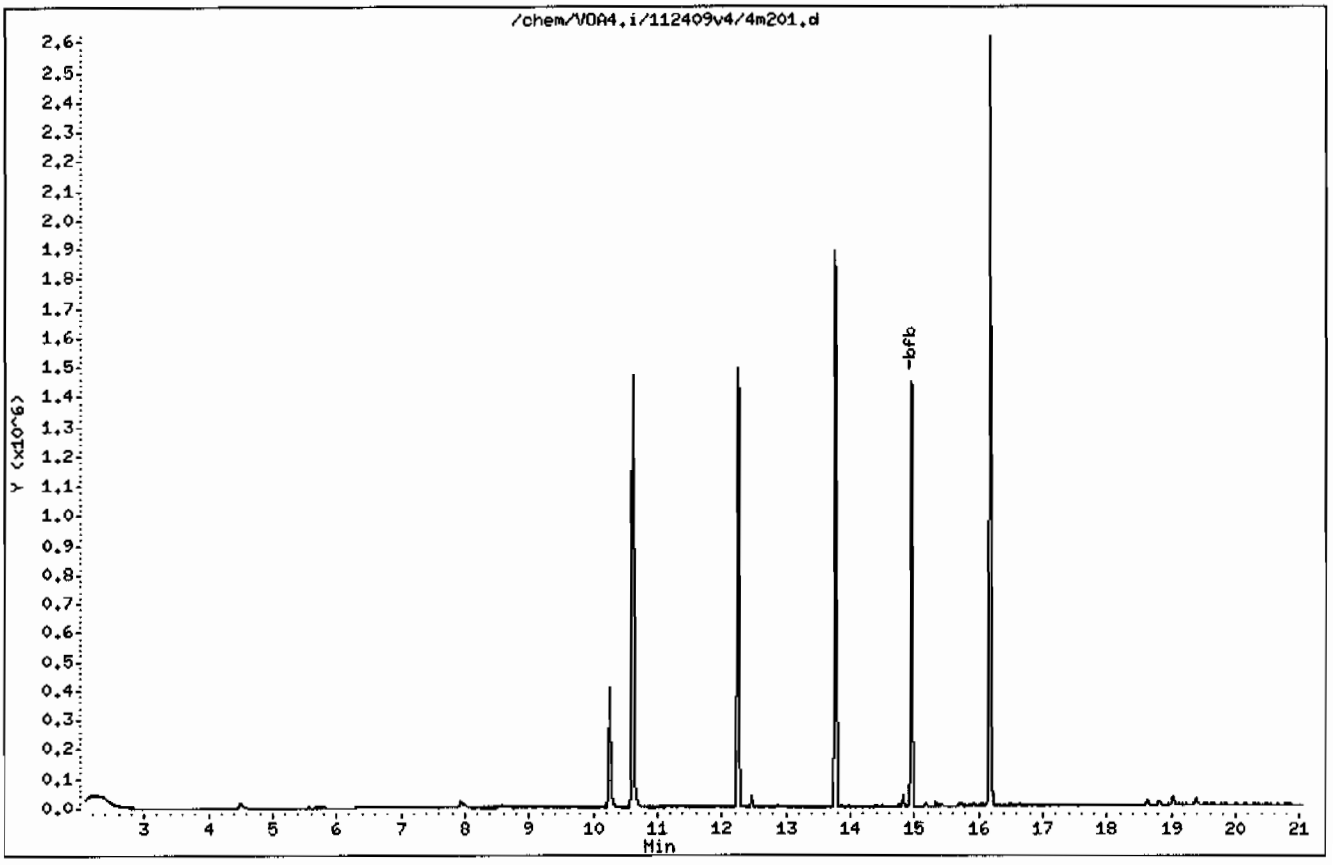

Data File: /chem/VOA4.i/112409v4/4m201.d

Date : 24-NOV-2009 20:16

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

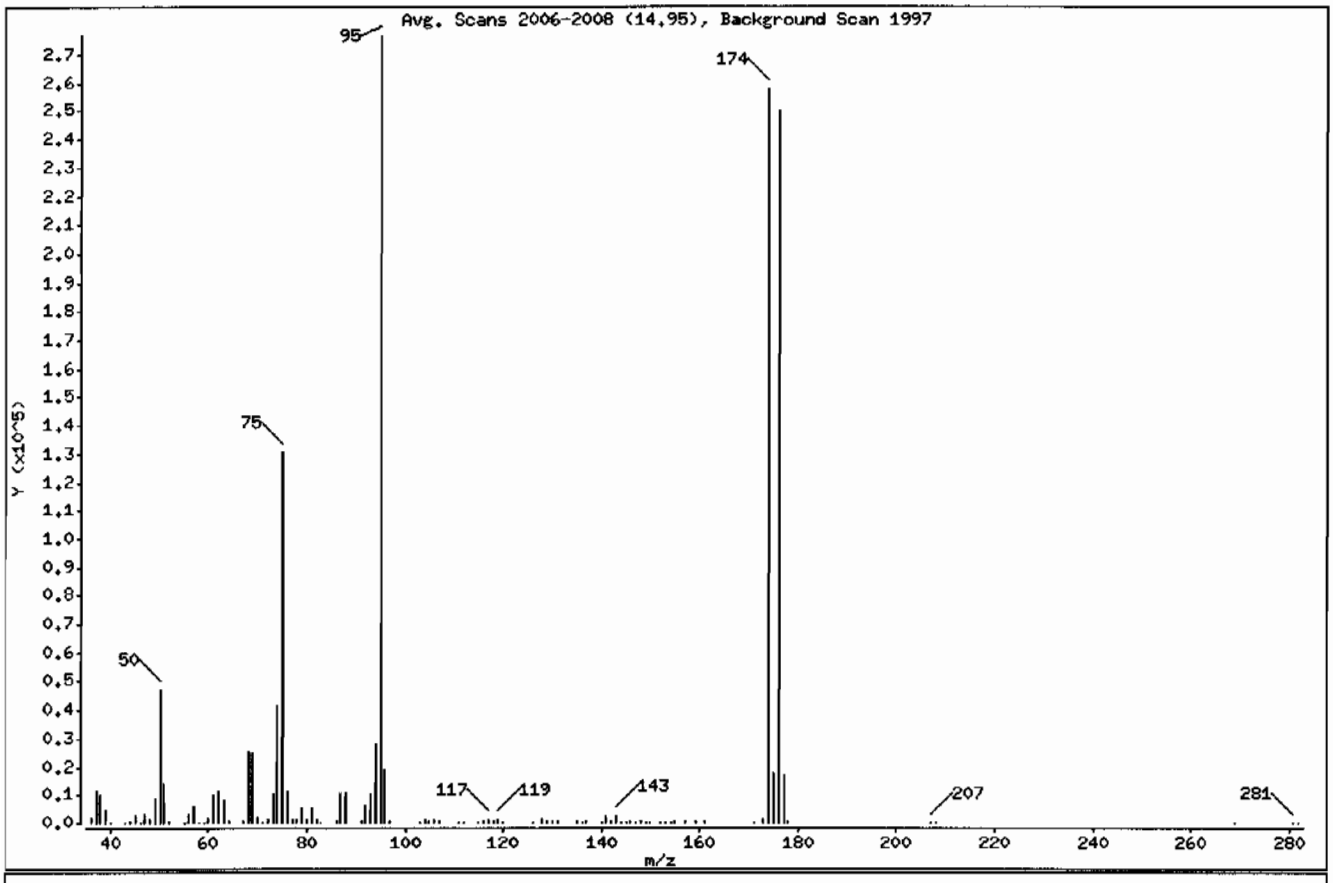

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.03
75	30.00 - 60.00% of mass 95	47.05
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.46 (0.49)
174	50.00 - 100.00% of mass 95	93.05
175	5.00 - 9.00% of mass 174	6.43 (6.91)
176	95.00 - 101.00% of mass 174	90.25 (97.00)
177	5.00 - 9.00% of mass 176	6.16 (6.82)

Data File: /chem/VOA4.i/112409v4/4m201.d

Date : 24-NOV-2009 20:16

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4m201.d
Spectrum: Avg. Scans 2006-2008 (14.95), Background Scan 1997
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1916	68.00	25448	103.00	141	145.00	224
37.00	11202	69.00	24664	104.00	1001	146.00	529
38.00	10196	70.00	1888	105.00	425	147.00	241
39.00	4182	71.00	85	106.00	1131	148.00	740
40.00	35	72.00	1383	107.00	341	149.00	193
43.00	190	73.00	10225	111.00	210	150.00	259
44.00	863	74.00	41104	112.00	83	152.00	55
45.00	2306	75.00	130352	115.00	156	153.00	253
46.00	57	76.00	11424	116.00	799	154.00	200
47.00	3252	77.00	1371	117.00	1436	155.00	718
48.00	1180	78.00	1187	118.00	803	157.00	431
49.00	9199	79.00	4921	119.00	1223	159.00	325
50.00	47184	80.00	1432	120.00	53	161.00	423
51.00	14324	81.00	5239	126.00	56	171.00	67
52.00	711	82.00	1017	128.00	997	173.00	1271
55.00	259	83.00	134	129.00	483	174.00	257792
56.00	3136	86.00	320	130.00	844	175.00	17816
57.00	5888	87.00	10174	131.00	386	176.00	250048
58.00	226	88.00	10544	135.00	420	177.00	17064
59.00	96	91.00	566	136.00	102	178.00	461
60.00	1730	92.00	6589	137.00	445	207.00	177
61.00	10360	93.00	9949	140.00	149	208.00	78
62.00	11279	94.00	28216	141.00	2402	269.00	53
63.00	8001	95.00	277056	142.00	345	281.00	66
64.00	556	96.00	18888	143.00	2857	282.00	57
67.00	757	97.00	554	144.00	56		

Data File: /chem/VOA4.i/112709v4/4m501.d

Date : 27-NOV-2009 16:10

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

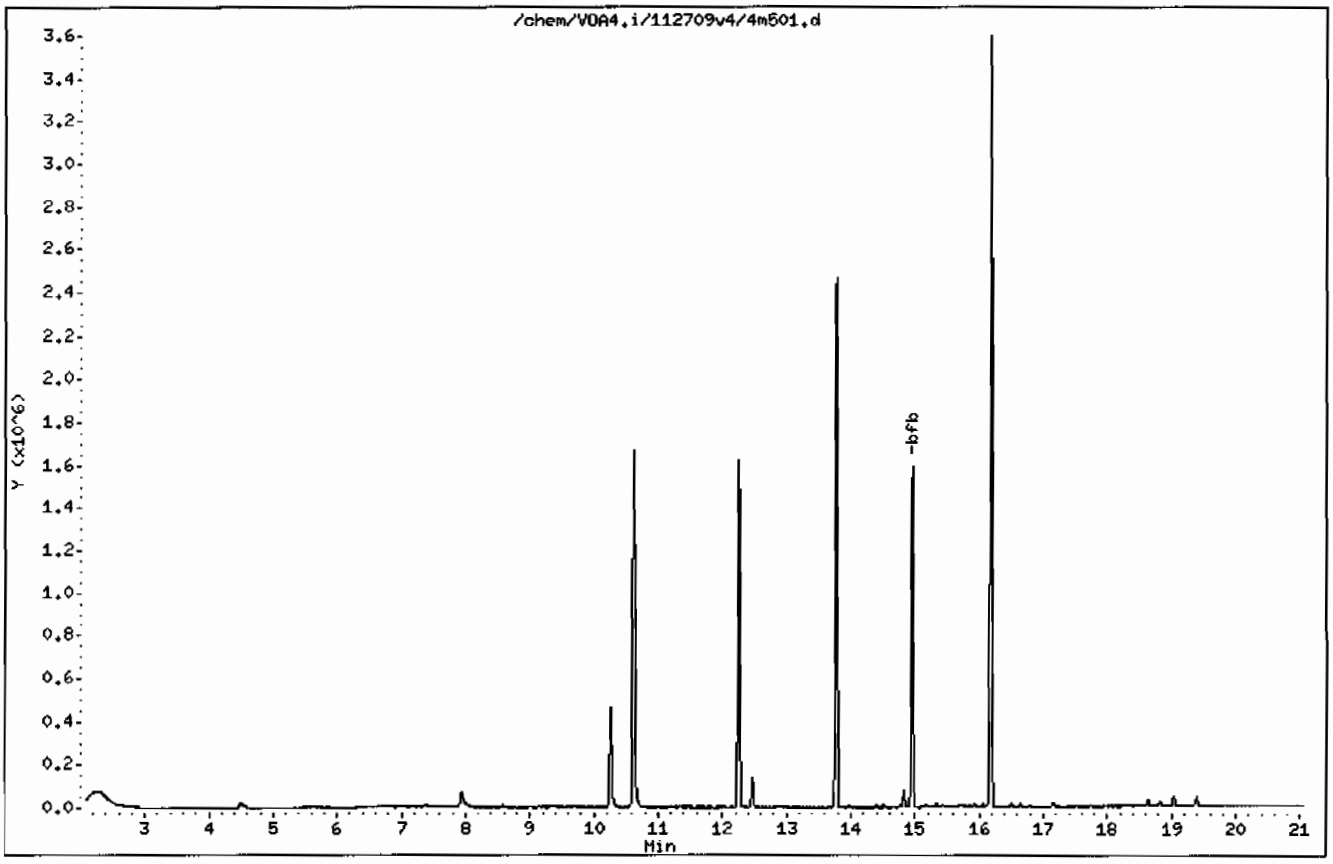

Data File: /chem/VOA4.i/112709v4/4m501.d

Date : 27-NOV-2009 16:10

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

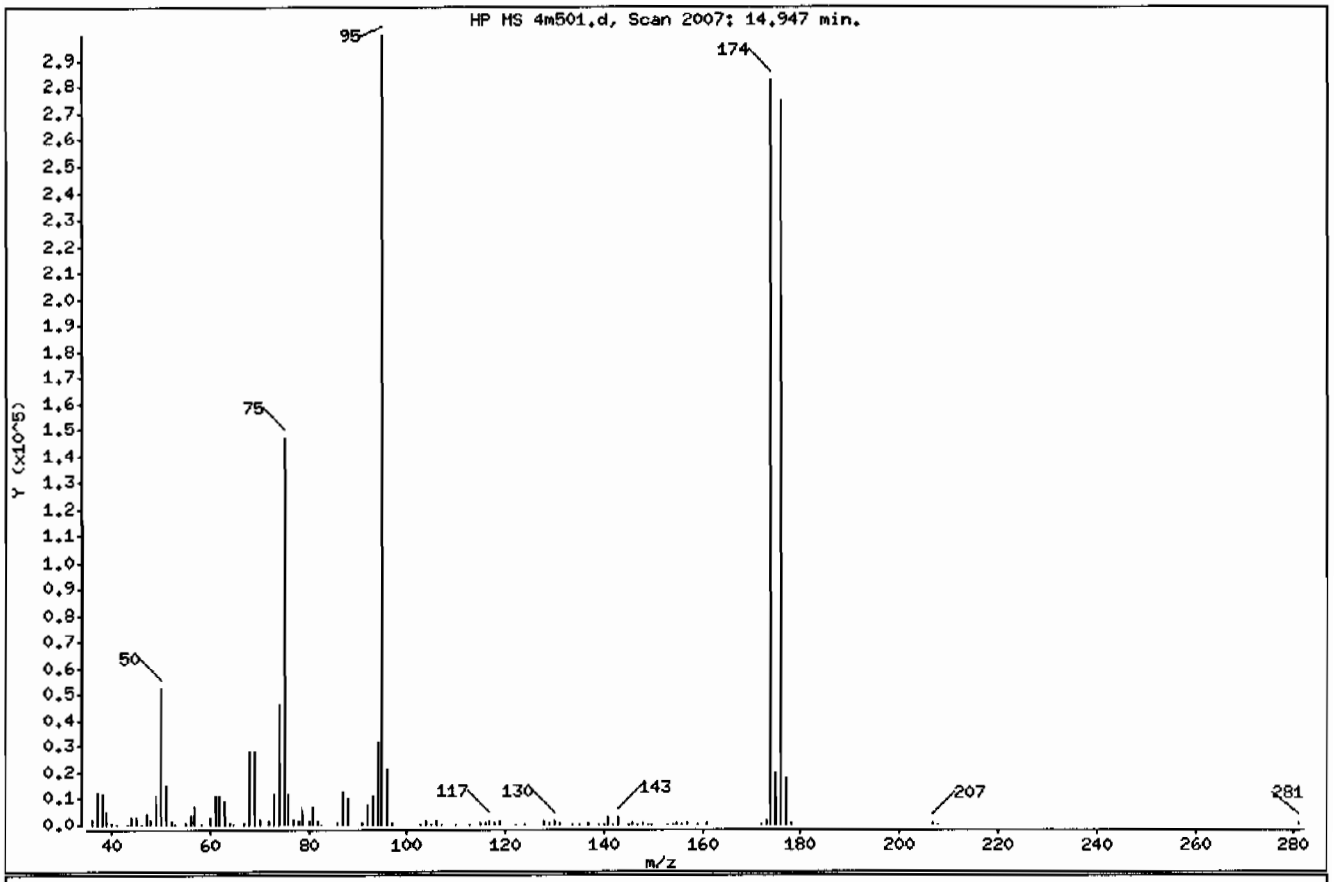

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.54
75	30.00 - 60.00% of mass 95	48.90
96	5.00 - 9.00% of mass 95	7.24
173	Less than 2.00% of mass 174	0.48 (0.51)
174	50.00 - 100.00% of mass 95	94.27
175	5.00 - 9.00% of mass 174	6.63 (7.03)
176	95.00 - 101.00% of mass 174	91.73 (97.30)
177	5.00 - 9.00% of mass 176	6.00 (6.54)

Data File: /chem/VOA4.i/112709v4/4m501.d

Date : 27-NOV-2009 16:10

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4m501.d
Spectrum: HP MS 4m501.d, Scan 2007: 14.947 min.
Location of Maximum: 95.00
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2147	64.90	155	97.00	515	143.00	2753
37.10	12465	67.00	859	102.80	215	145.00	253
38.10	11431	68.00	28080	103.90	1112	145.90	601
39.10	4594	69.00	28304	104.80	311	146.80	279
40.00	820	70.00	2287	105.90	1094	147.90	694
41.10	242	72.00	1413	106.90	261	148.90	223
43.10	191	73.00	11381	109.80	248	149.70	213
44.00	2711	74.00	46016	112.80	150	152.90	298
45.00	2665	75.00	146496	114.80	400	153.90	225
46.20	197	76.00	11974	115.90	752	154.90	819
47.10	4160	76.90	1919	116.90	1276	155.80	169
48.00	1813	78.00	1317	117.90	985	156.90	650
49.00	10701	78.90	5500	118.90	1104	158.90	326
50.00	52544	80.00	1607	122.00	215	160.80	439
51.00	15099	81.00	6889	124.00	161	171.80	154
52.10	1132	82.00	1189	127.90	1070	172.90	1447
53.00	160	82.80	209	128.90	571	173.90	282432
54.90	868	86.00	500	129.90	1146	174.90	19864
56.00	3163	87.00	12438	130.90	460	175.90	274816
57.00	6683	87.90	10514	133.50	168	176.90	17976
58.20	177	91.00	939	134.90	307	177.90	827
60.00	2495	92.00	7766	136.90	408	206.80	505
61.10	10893	93.00	11157	139.10	176	207.90	231
62.00	11280	94.00	31656	140.00	286	281.00	349
63.00	8785	95.00	299584	140.90	2491		
64.00	788	96.00	21680	141.90	342		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980899**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 22:34**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 20:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m206b.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980899**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 22:34**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 20:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m206b.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m206b.d
Lab Smp Id: 1201980899 Client Smp ID: BLANK
Inj Date : 24-NOV-2009 22:34
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201980899|926499|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	326438	44.2246	44.2
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1879309	50.0000	
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1099277	44.7177	44.7
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1411389	50.0000	
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	485908	45.9475	45.9
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	913255	50.0000	
88 Benzyl chloride	91	16.320	16.319	(1.009)	23781	1.04560	1.0(a)
91 bis(2-Chloroisopropyl)ether	45	16.722	16.721	(1.034)	11811	1.74005	1.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m206b.d
Lab Smp Id: 1201980899 Client Smp ID: BLANK
Inj Date : 24-NOV-2009 22:34
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201980899|926499|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112409v4/4m206b.d

Date : 24-NOV-2009 22:34

Client ID: BLANK

Sample Info: |1201980899192649911|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

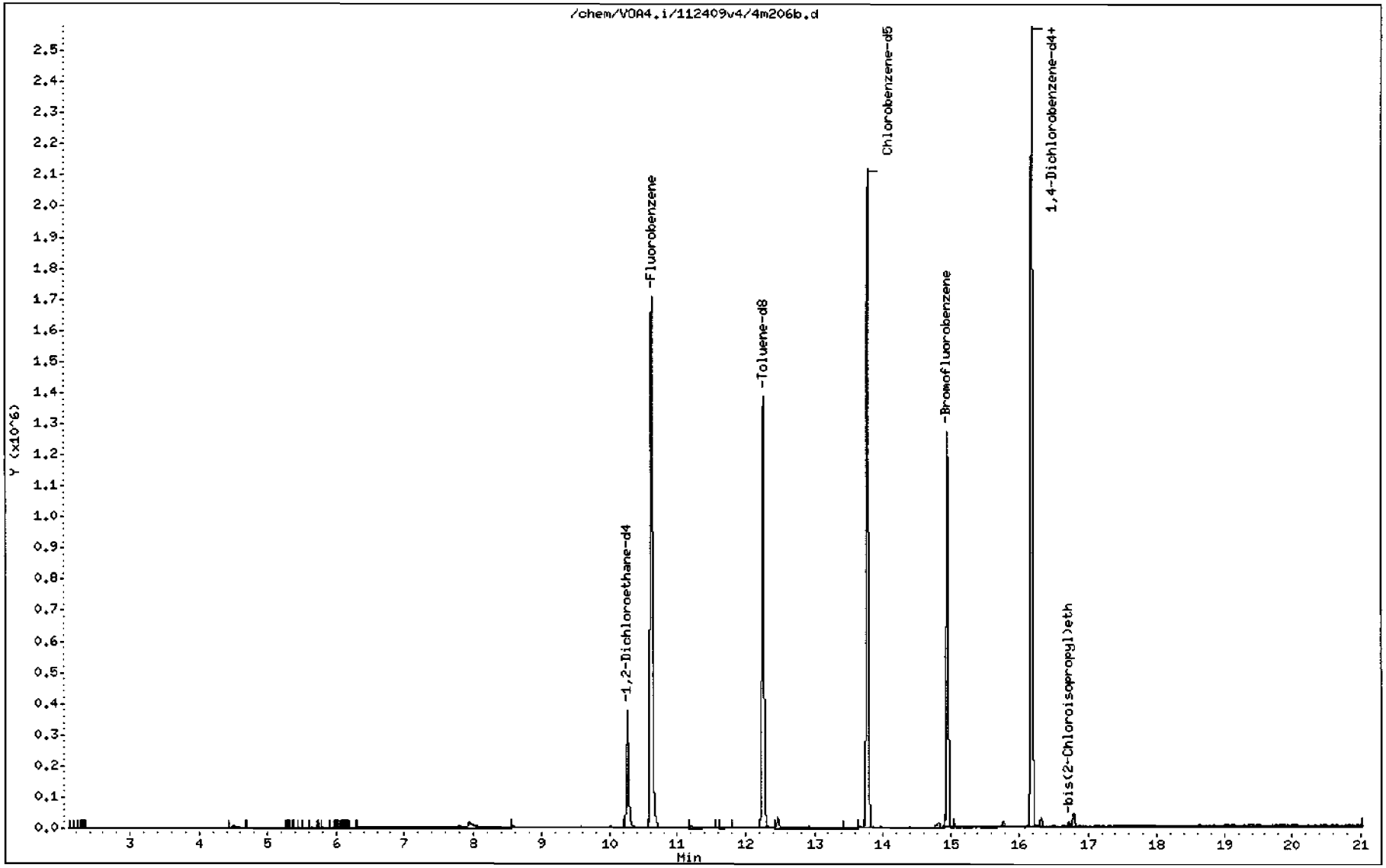

Data File: /chem/VOA4.i/112409v4/4m206b.d

Date : 24-NOV-2009 22:34

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201980899|926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

88 Benzyl chloride

Concentration: 1.0 ug/Kg

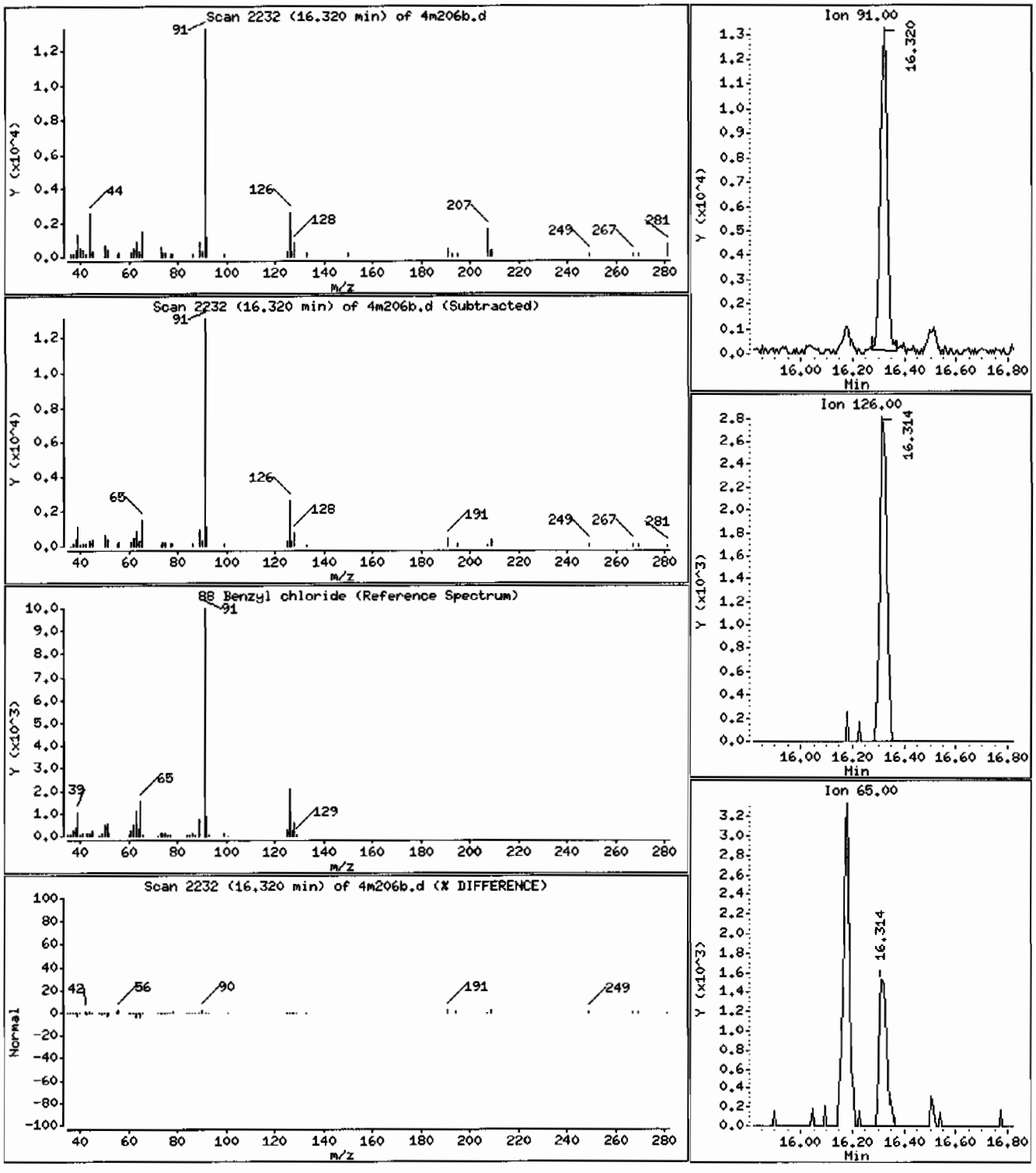

Data File: /chem/VOA4.i/112409v4/4m206b.d

Date : 24-NOV-2009 22:34

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201980899|926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 1.7 ug/Kg

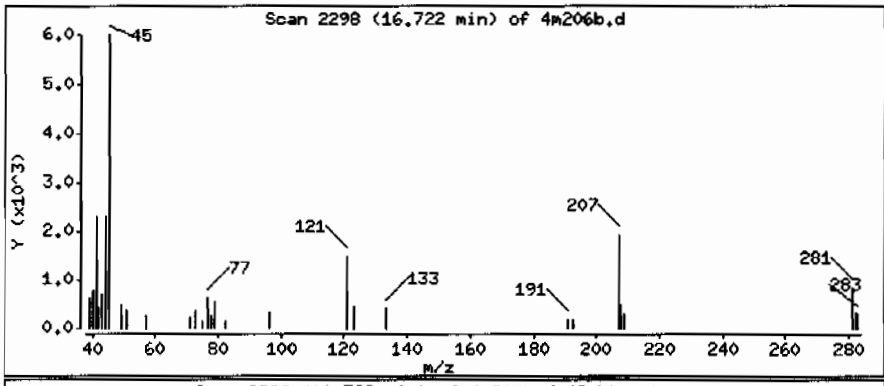

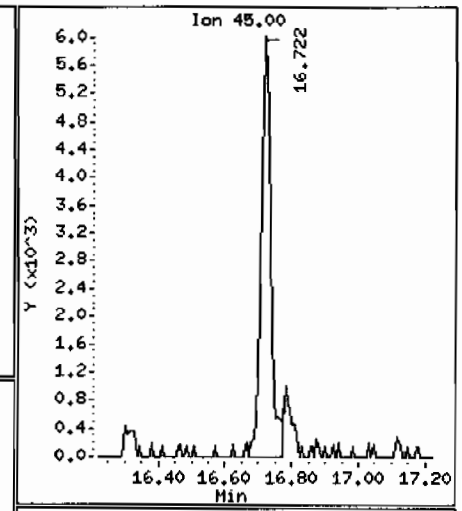

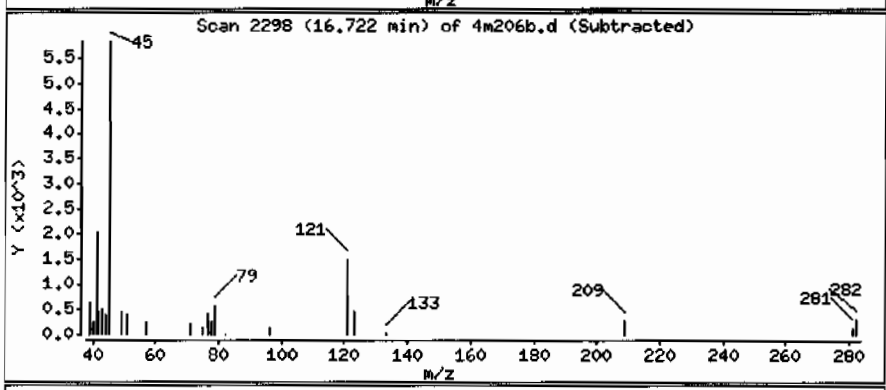

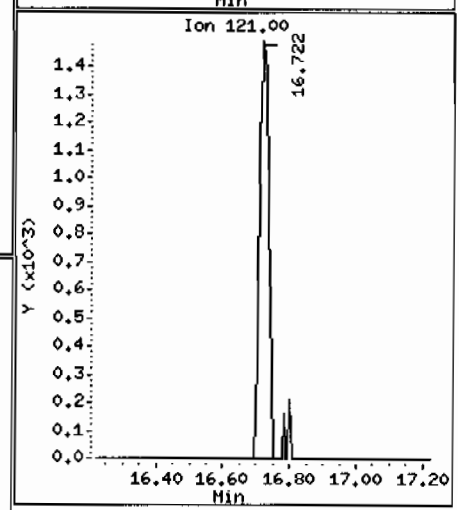

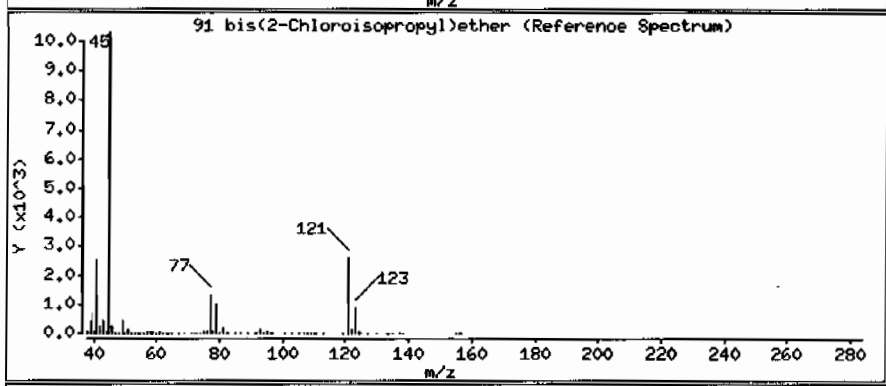

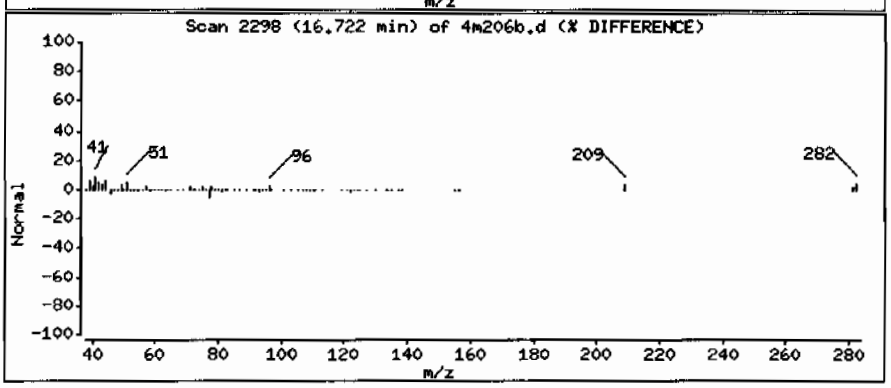

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989887**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 18:27**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m506ba.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576			**Matrix:**	SOIL
Lab Sample ID:	1201989887				
Client Sample:	QC for batch 926498	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926498	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/27/2009 18:27	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/27/2009 16:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m506ba.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m506ba.d
Lab Smp Id: 1201989887 Client Smp ID: BLANK
Inj Date : 27-NOV-2009 18:27
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989887|926499|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	341282	59.3687	59.4
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1463582	50.0000	
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1144615	62.1845	62.2
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1056807	50.0000	
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	513257	65.4787	65.5
69 trans-1,4-Dichloro-2-butene	53	15.063	15.064	(0.931)	2805	0.97111	0.97(a)
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	676915	50.0000	
88 Benzyl chloride	91	16.319	16.320	(1.009)	26678	1.58251	1.6(a)
91 bis(2-Chloroisopropyl)ether	45	16.721	16.722	(1.034)	11311	2.24820	2.2(a)
95 Naphthalene	128	19.038	19.032	(1.177)	7162	0.34776	0.35(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m506ba.d
Lab Smp Id: 1201989887 Client Smp ID: BLANK
Inj Date : 27-NOV-2009 18:27
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989887|926499|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112709v4/4m506ba.d

Date : 27-NOV-2009 18:27

Client ID: BLANK

Sample Info: |120198988719264991|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

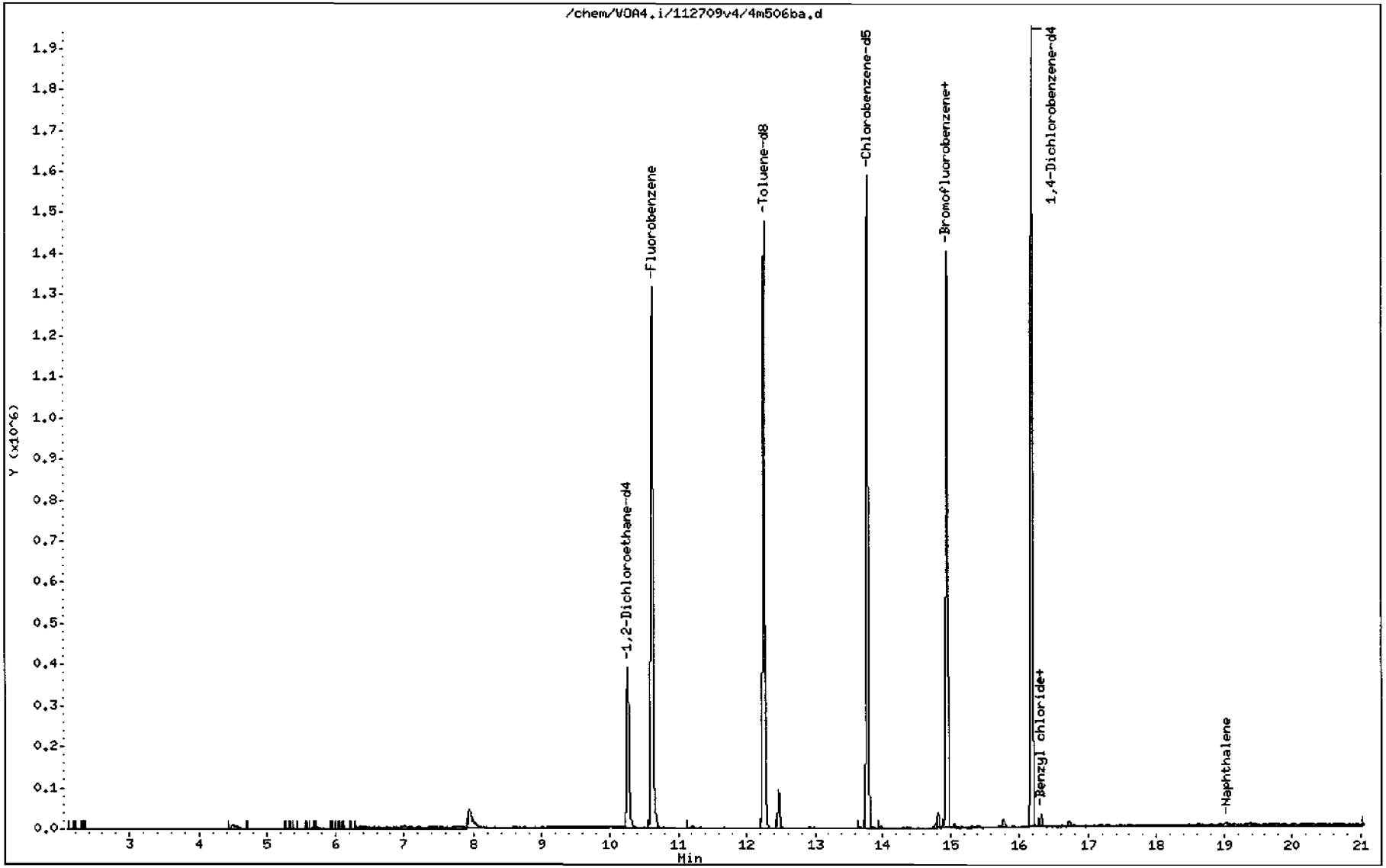

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Date : 27-NOV-2009 18:27

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201989887|926499|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

69 trans-1,4-Dichloro-2-butene

Concentration: 0.97 ug/Kg

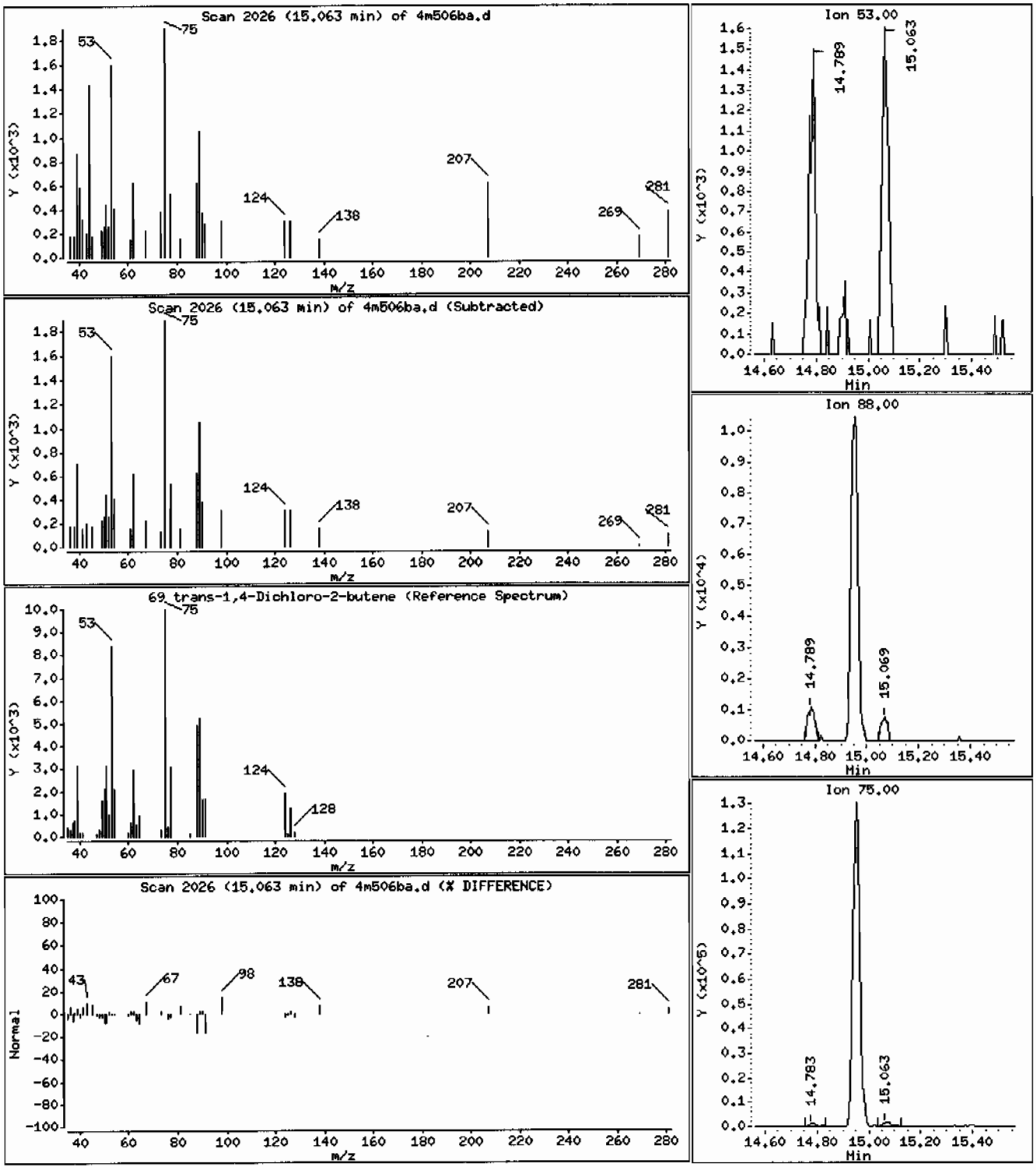

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Date : 27-NOV-2009 18:27

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120198988719264991|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

88 Benzyl chloride

Concentration: 1.6 ug/Kg

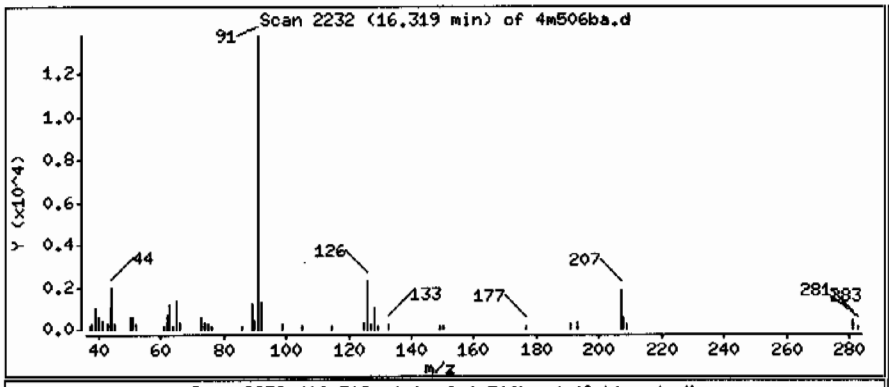

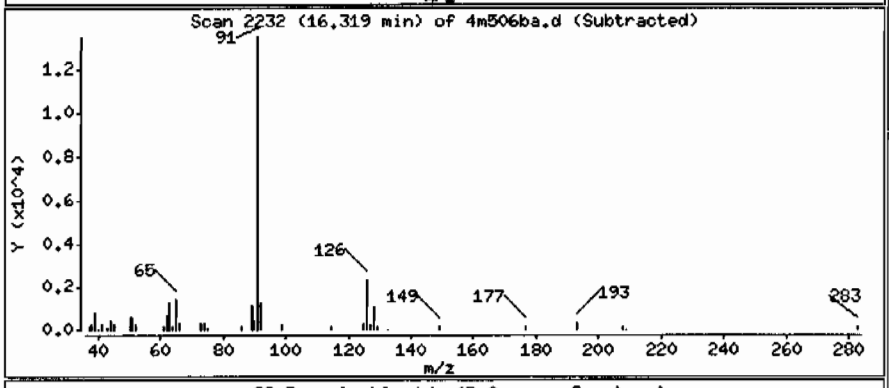

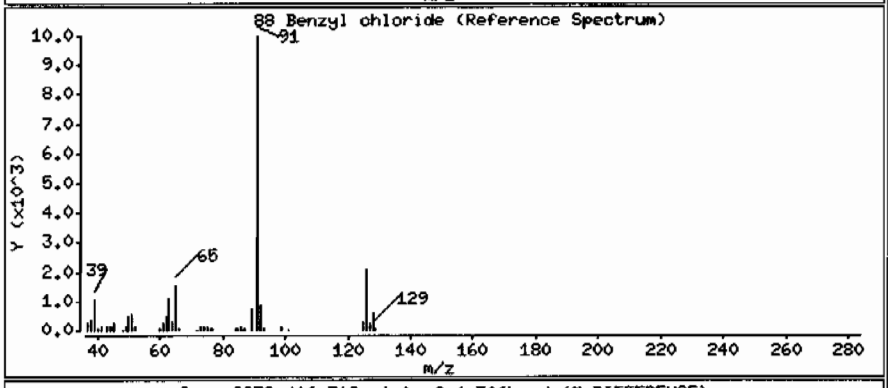

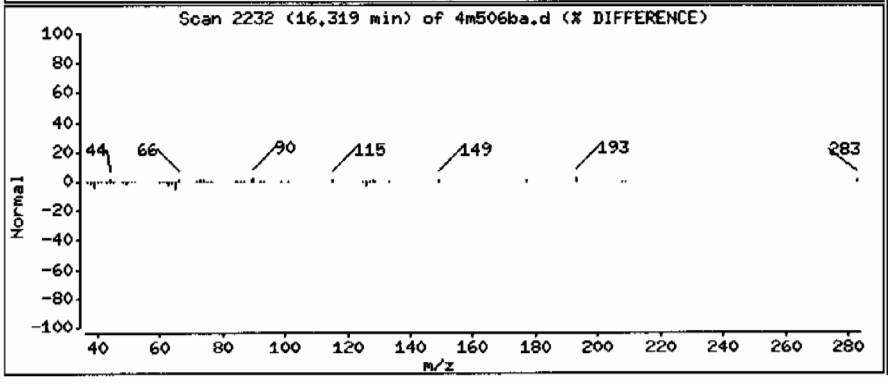

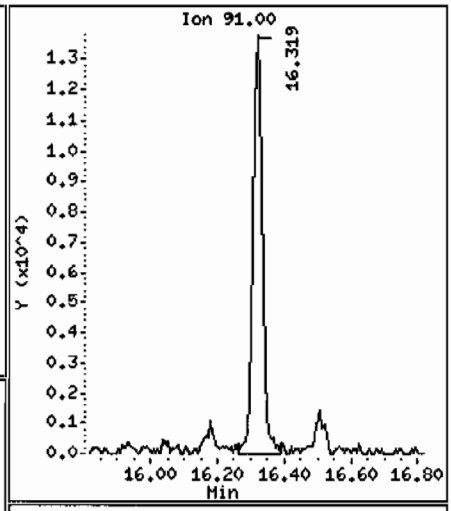

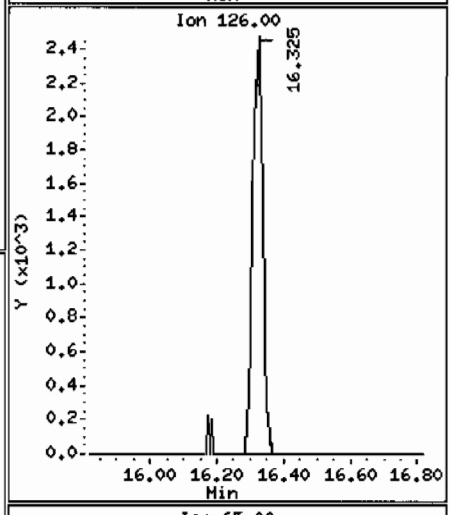

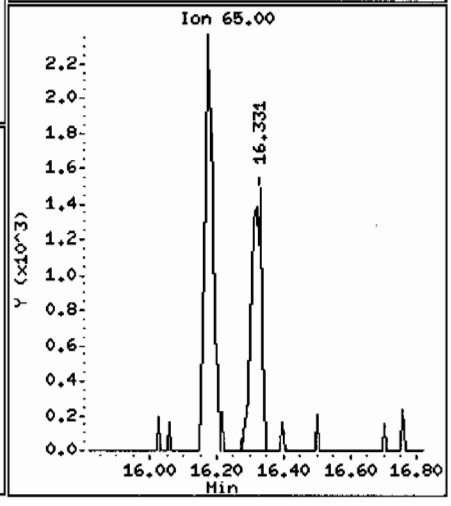

Data File: /chem/VOA4.i/112709v4/4m506ba.d

Date : 27-NOV-2009 18:27

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120198988719264991|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 2.2 ug/Kg

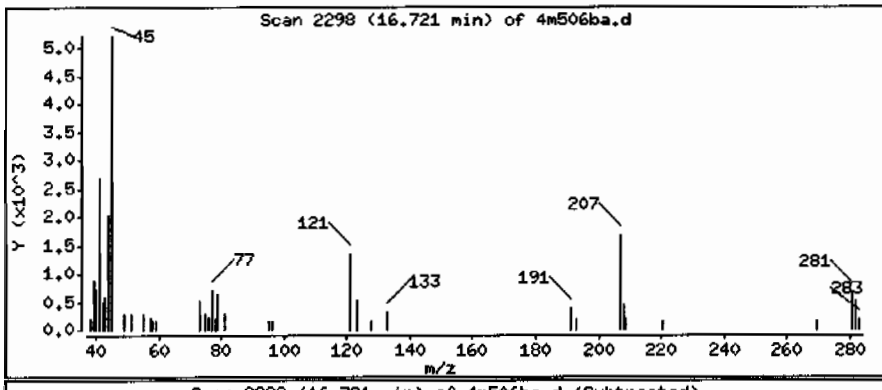

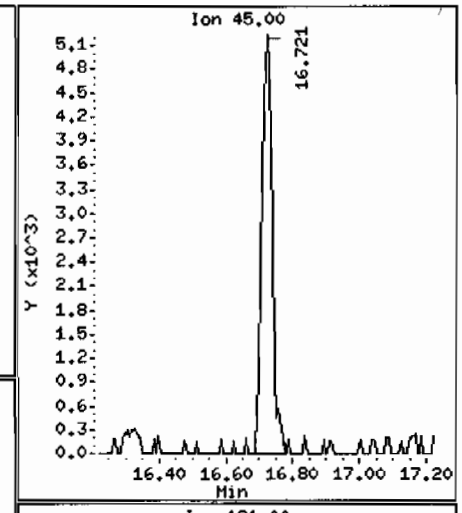

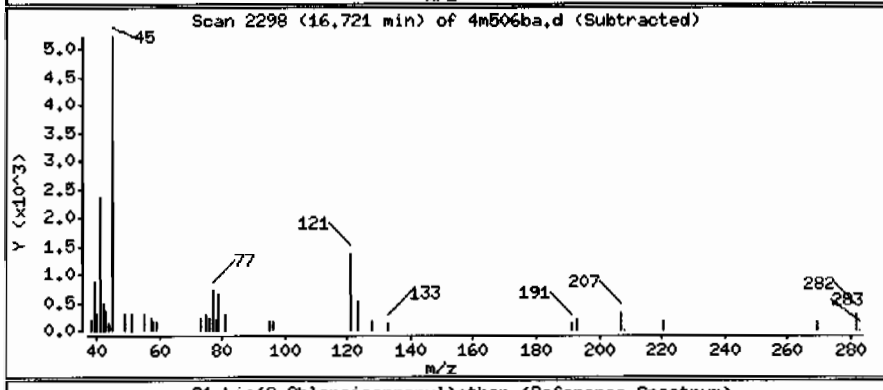

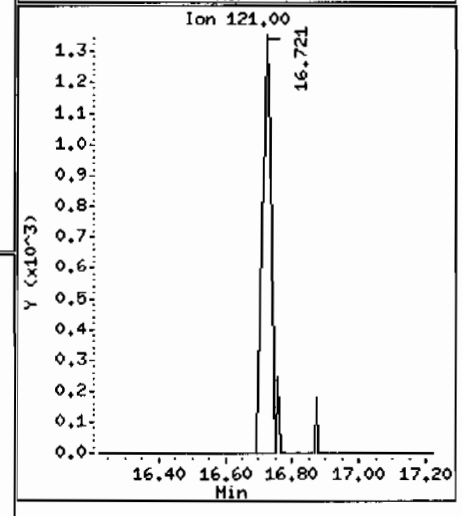

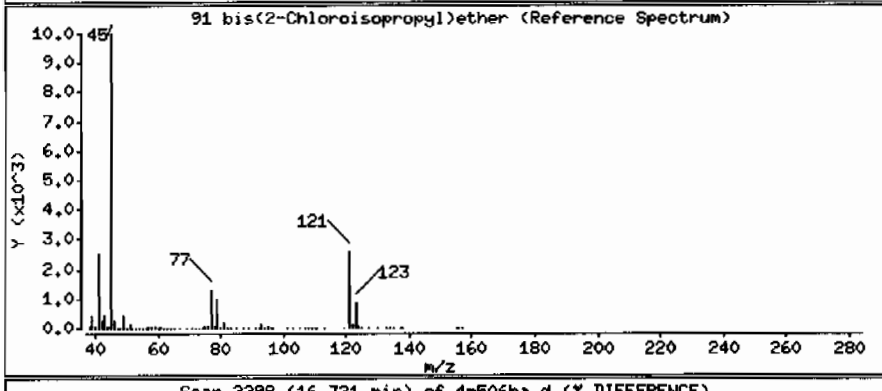

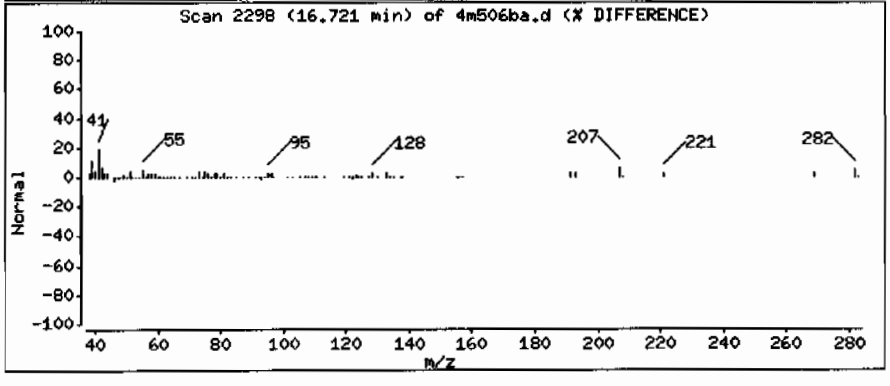

Data File: /chem/VOA4.i/112709v4/4m506ba.d

Date : 27-NOV-2009 18:27

Client ID: BLANK

Instrument: VOA4.i

Sample Info: 1120198988719264991 1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

95 Naphthalene

Concentration: 0.35 ug/Kg

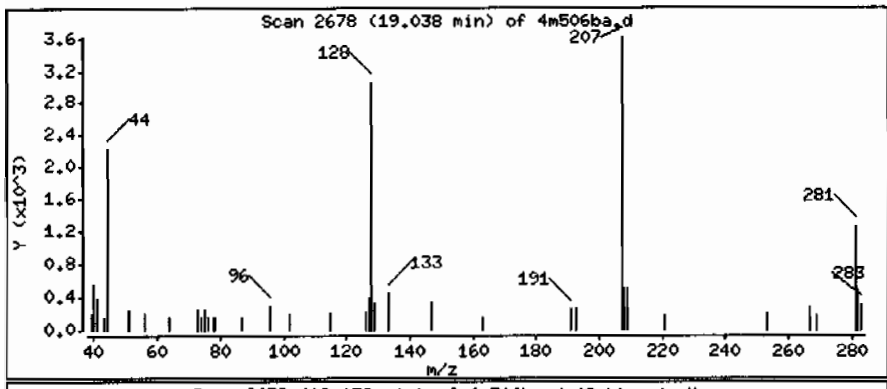

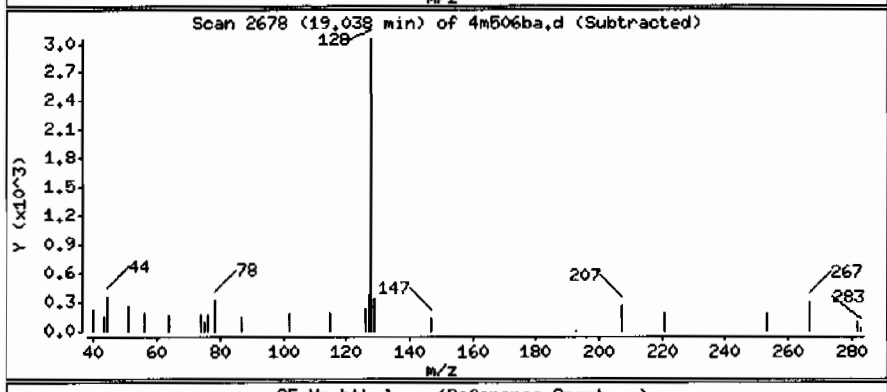

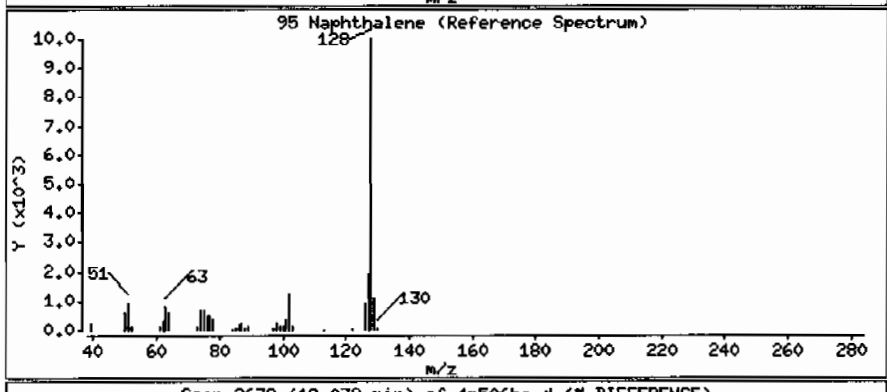

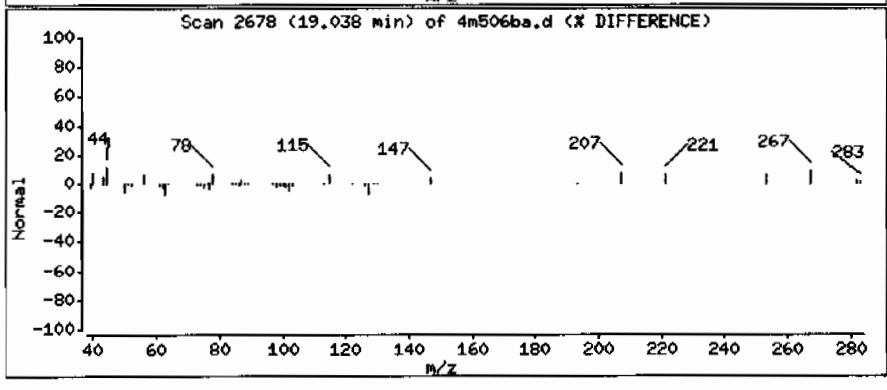

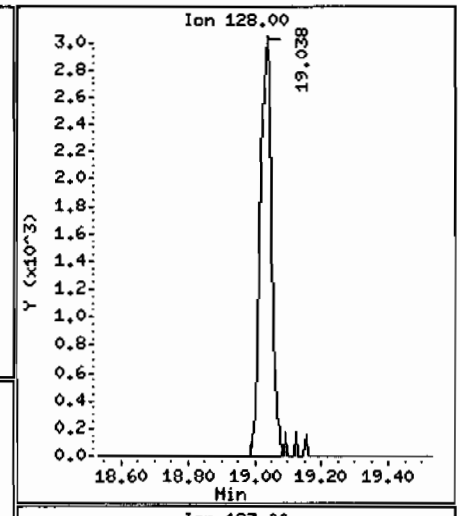

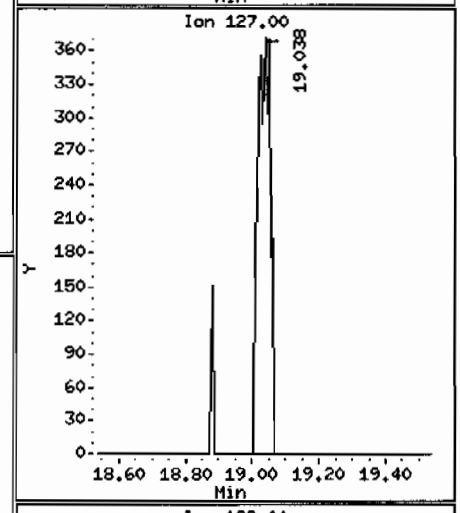

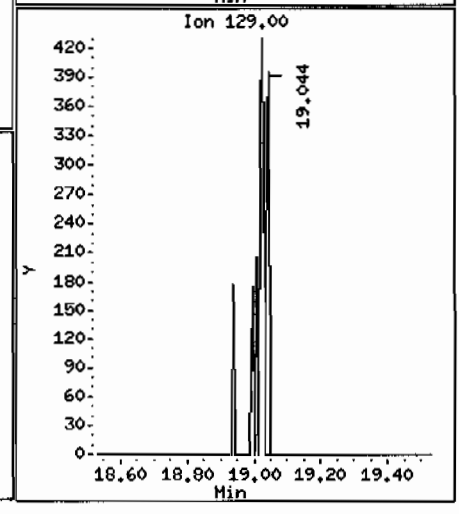

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980902**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 21:12**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 20:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m2031.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		48.2	ug/kg	0.340	1.00
74-87-3	Chloromethane		46.3	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		51.0	ug/kg	0.300	1.00
74-83-9	Bromomethane		48.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		49.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		53.3	ug/kg	0.300	1.00
67-64-1	Acetone		206	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		52.6	ug/kg	0.300	1.00
74-88-4	Iodomethane		252	ug/kg	1.60	5.00
75-09-2	Methylene chloride		49.0	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		269	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		53.8	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		53.0	ug/kg	0.300	1.00
78-93-3	2-Butanone		216	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		51.3	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		56.3	ug/kg	0.300	1.00
67-66-3	Chloroform		51.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		49.5	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		57.3	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		57.0	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		58.9	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		49.1	ug/kg	0.300	1.00
71-43-2	Benzene		50.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		54.2	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		50.7	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.4	ug/kg	0.300	1.00
74-95-3	Dibromomethane		49.2	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		237	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		51.1	ug/kg	0.300	1.00
108-88-3	Toluene		49.8	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		49.5	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		47.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		209	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		46.7	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		53.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		50.8	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		48.9	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		50.7	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980902**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 21:12**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 20:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m203I.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		50.4	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		103	ug/kg	0.300	2.00
95-47-6	o-Xylene		50.4	ug/kg	0.300	1.00
100-42-5	Styrene		50.4	ug/kg	0.300	1.00
75-25-2	Bromoform		51.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.8	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		48.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		49.1	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		50.3	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		47.7	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		50.4	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		49.4	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		49.4	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		50.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		49.0	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		50.9	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		50.5	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		49.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		49.0	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		50.7	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		49.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		49.7	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		47.8	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m2031.d
Lab Smp Id: 1201980902 Client Smp ID: LCS
Inj Date : 24-NOV-2009 21:12
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201980902|926499|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2818314	153.031	153
M 2 1,2-Dichloroethylene (total)	96				1428782	105.126	105
M 135 1,3-Dichloropropylene	75				1543949	102.669	103
3 Dichlorodifluoromethane	85	4.912	4.911	(0.463)	386939	48.1678	48.2
4 Chloromethane	50	5.299	5.299	(0.499)	574760	46.3433	46.3
5 Vinyl chloride	62	5.521	5.521	(0.520)	585456	50.9947	51.0
6 Bromomethane	94	6.130	6.130	(0.577)	439082	48.4945	48.5
7 Chloroethane	64	6.288	6.288	(0.592)	419968	49.8515	49.8
8 Trichlorofluoromethane	101	6.662	6.663	(0.627)	754844	53.2882	53.3
134 Ethyl Ether	59	6.998	6.998	(0.659)	375954	48.4609	48.5
10 Acetone	43	7.363	7.358	(0.693)	1441064	205.731	206
11 1,1-Dichloroethylene	61	7.388	7.389	(0.696)	767599	52.5964	52.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.625	7.632	(0.718)	4405585	252.355	252
15 Acetonitrile	41	7.699	7.699	(0.725)	1872764	1183.43	1180
128 Methyl acetate	43	7.747	7.748	(0.730)	1812747	224.413	224
14 Carbon disulfide	76	7.772	7.773	(0.732)	8126390	268.538	268
17 Methylene chloride	84	7.942	7.943	(0.748)	562606	49.0438	49.0
20 tert-Butyl methyl ether	73	8.241	8.242	(0.776)	1344306	47.5760	47.6
21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.780)	694997	53.8071	53.8
23 Vinyl acetate	43	8.711	8.711	(0.820)	4974675	264.828	265
22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	850835	52.9588	53.0
30 2-Butanone	43	9.326	9.327	(0.878)	1739481	215.835	216
31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.884)	733785	51.3185	51.3
25 2,2-Dichloropropane	77	9.424	9.419	(0.887)	521935	56.2530	56.2
29 Bromochloromethane	128	9.656	9.656	(0.909)	249145	49.4520	49.4
32 Chloroform	83	9.692	9.693	(0.913)	835701	51.4809	51.5
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	690537	57.3228	57.3
129 Cyclohexane	56	10.082	10.083	(0.949)	799637	57.4720	57.5
34 1,1-Dichloropropene	75	10.131	10.132	(0.954)	682584	56.9545	57.0
33 Carbon tetrachloride	117	10.174	10.175	(0.958)	684731	58.9294	58.9
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	357413	52.7845	52.8
37 1,2-Dichloroethane	62	10.344	10.339	(0.974)	627225	49.0790	49.1
38 Benzene	78	10.375	10.370	(0.977)	1872494	50.6736	50.7
139 Cyclohexene	67	10.497	10.492	(0.989)	961825	55.0615	55.1
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1723953	50.0000	
131 n-Butyl alcohol	56	10.692	10.687	(1.007)	2032224	5491.96	5490
39 Trichloroethylene	95	11.003	11.004	(1.036)	503226	54.2421	54.2
130 Methylcyclohexane	83	11.265	11.266	(1.061)	857868	57.9902	58.0
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	491036	50.6863	50.7
43 Dibromomethane	93	11.375	11.376	(1.071)	294502	49.2148	49.2
45 Bromodichloromethane	83	11.484	11.485	(1.082)	641230	51.4358	51.4
44 2-Chloroethylvinyl ether	63	11.698	11.699	(1.102)	1140967	206.332	206
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	794921	51.1340	51.1
49 4-Methyl-2-pentanone	58	12.021	12.016	(0.873)	1034564	236.928	237
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1102453	46.7925	46.8
50 Toluene	92	12.326	12.327	(0.895)	1180800	49.8082	49.8
53 trans-1,3-Dichloropropylene	75	12.466	12.461	(0.905)	749028	49.4992	49.5
54 1,1,2-Trichloroethane	83	12.685	12.686	(0.921)	355530	47.2806	47.3
55 2-Hexanone	43	12.856	12.857	(0.934)	2461367	209.189	209
52 1,3-Dichloropropane	76	12.874	12.875	(0.935)	710484	46.6933	46.7
56 Tetrachloroethylene	164	12.917	12.918	(0.938)	491353	53.3551	53.4
57 Dibromochloromethane	129	13.149	13.144	(0.955)	528817	50.8174	50.8
59 1,2-Dibromoethane	107	13.319	13.314	(0.967)	466402	48.9366	48.9
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1352703	50.0000	
62 Chlorobenzene	112	13.801	13.802	(1.002)	1385878	50.6837	50.7
60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	513222	49.7017	49.7
58 Ethylbenzene	91	13.862	13.863	(1.007)	2307424	50.4153	50.4
63 m,p-Xylenes	106	13.972	13.973	(1.015)	1866549	102.589	102
64 o-Xylene	106	14.405	14.405	(1.046)	951765	50.4420	50.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	65 Styrene	104	14.405	14.399	(1.046)	1617944	50.4290	50.4
	66 Bromoform	173	14.661	14.655	(0.906)	524456	51.1019	51.1
	67 Isopropylbenzene	105	14.758	14.759	(0.912)	2597256	50.3735	50.4
$	71 Bromofluorobenzene	95	14.953	14.954	(0.924)	534617	48.5293	48.5
	73 1,1,2,2-Tetrachloroethane	83	15.014	15.015	(0.928)	721856	47.7528	47.8
	74 1,2,3-Trichloropropane	110	15.106	15.107	(0.934)	193752	48.0564	48.0
	75 Bromobenzene	156	15.167	15.168	(0.937)	799308	49.0676	49.1
	76 n-Propylbenzene	91	15.185	15.180	(0.939)	3078357	50.2630	50.3
	78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	2271225	49.3763	49.4
	77 2-Chlorotoluene	91	15.331	15.332	(0.948)	2074062	47.6908	47.7
	80 4-Chlorotoluene	91	15.429	15.430	(0.954)	1973440	49.3803	49.4
	81 tert-Butylbenzene	119	15.703	15.704	(0.971)	2355154	50.5183	50.5
	79 1,2,4-Trimethylbenzene	105	15.740	15.741	(0.973)	2384874	48.9918	49.0
	83 sec-Butylbenzene	105	15.935	15.930	(0.985)	3162640	50.8601	50.9
	84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	2572866	50.4635	50.5
	85 1,3-Dichlorobenzene	146	16.124	16.119	(0.997)	1518666	49.5629	49.6
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	951346	50.0000	
	87 1,4-Dichlorobenzene	146	16.209	16.204	(1.002)	1506104	48.9762	49.0
	89 n-Butylbenzene	91	16.502	16.503	(1.020)	2402331	50.6736	50.7
	90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	1422361	47.8240	47.8
	92 1,2-Dibromo-3-chloropropane	157	17.526	17.527	(1.083)	166669	49.6694	49.7
	93 1,2,4-Trichlorobenzene	180	18.629	18.630	(1.151)	837793	49.7249	49.7
	94 Hexachlorobutadiene	225	18.818	18.819	(1.163)	592809	49.8339	49.8
	95 Naphthalene	128	19.032	19.027	(1.176)	1394117	48.1655	48.2
	96 1,2,3-Trichlorobenzene	180	19.385	19.386	(1.198)	670957	50.4508	50.4

Data File: /chem/VOA4.i/112409v4/4m2031.d
Date : 24-NOV-2009 21:12
Client ID: LCS
Sample Info: 1120198090219264991|1|VOAF|1|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

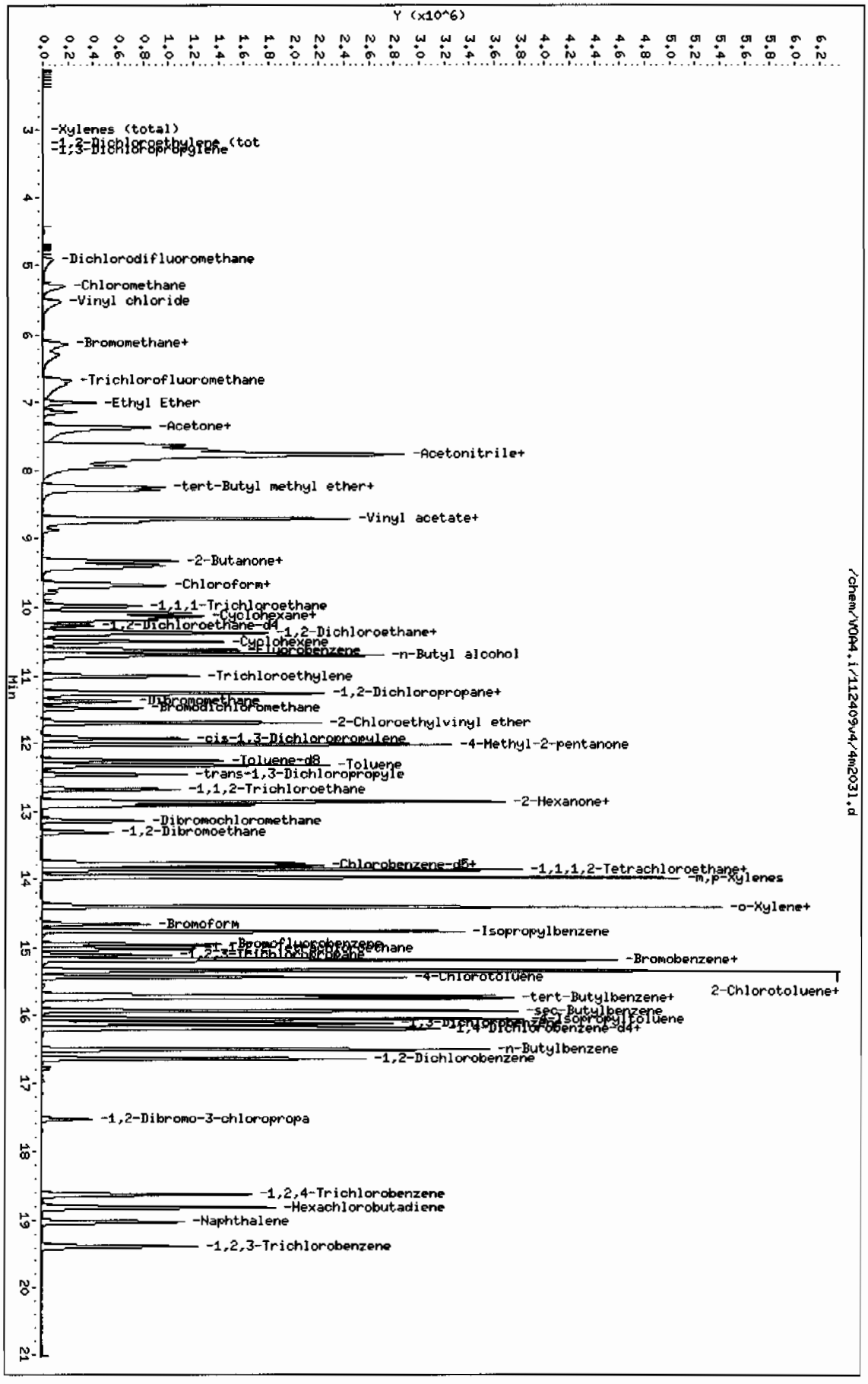

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980903**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 22:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 20:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m205s.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201980903**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/24/2009 22:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 20:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m205s.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		261	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m205s.d
Lab Smp Id: 1201980903 Client Smp ID: LCS
Inj Date : 24-NOV-2009 22:06
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201980903|926499|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.826	(0.455)	954490	157.882	158(A)
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1486684	163.355	163
9 Acrolein	56	7.187	7.187	(0.677)	455263	238.836	239
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	857728	261.140	261
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2160222	2283.82	2280
16 Allyl chloride	41	7.802	7.802	(0.735)	3576987	234.995	235
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3248160	2295.63	2300
18 Acrylonitrile	53	8.180	8.180	(0.770)	867148	225.605	226
149 Isopropyl ether	45	8.741	8.741	(0.823)	1577166	49.0556	49.0
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	726214	50.2575	50.2
150 Ethyl tert-butyl ether	59	9.150	9.143	(0.862)	1436017	48.8381	48.8
26 Ethyl acetate	43	9.339	9.339	(0.879)	2196052	203.796	204

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
28 Propionitrile	54	9.393	9.393	(0.885)	346208	214.464	214
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1403972	219.666	220
72 Tetrahydrofuran	42	9.717	9.717	(0.601)	786484	241.703	242
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1023927	2091.10	2090
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	335049	48.6606	48.7
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1432610	48.9006	48.9
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1753041	50.0000	
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1559352	218.614	219
97 1,4-Dioxane	88	11.332	11.332	(1.067)	282704	2216.02	2220
48 2-Nitropropane	43	11.673	11.673	(1.099)	765564	230.505	230
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1095395	47.1075	47.1
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2851023	214.705	215
152 1-Chlorohexane	55	13.661	13.661	(1.286)	465502	52.1608	52.2
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1335055	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	959757	240.843	241
70 Cyclohexanone	42	14.905	14.905	(1.082)	636910	628.696	629
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	496270	47.4895	47.5
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	905314	235.099	235
82 Pentachloroethane	167	15.770	15.770	(0.975)	1987660	247.312	247
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	902444	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	5280283	234.944	235
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1467071	218.725	219

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/112409v4/4m205s.d
Date : 24-NOV-2009 22:06
Client ID: LCS
Sample Info: 1120198090319264991|VOAF11
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

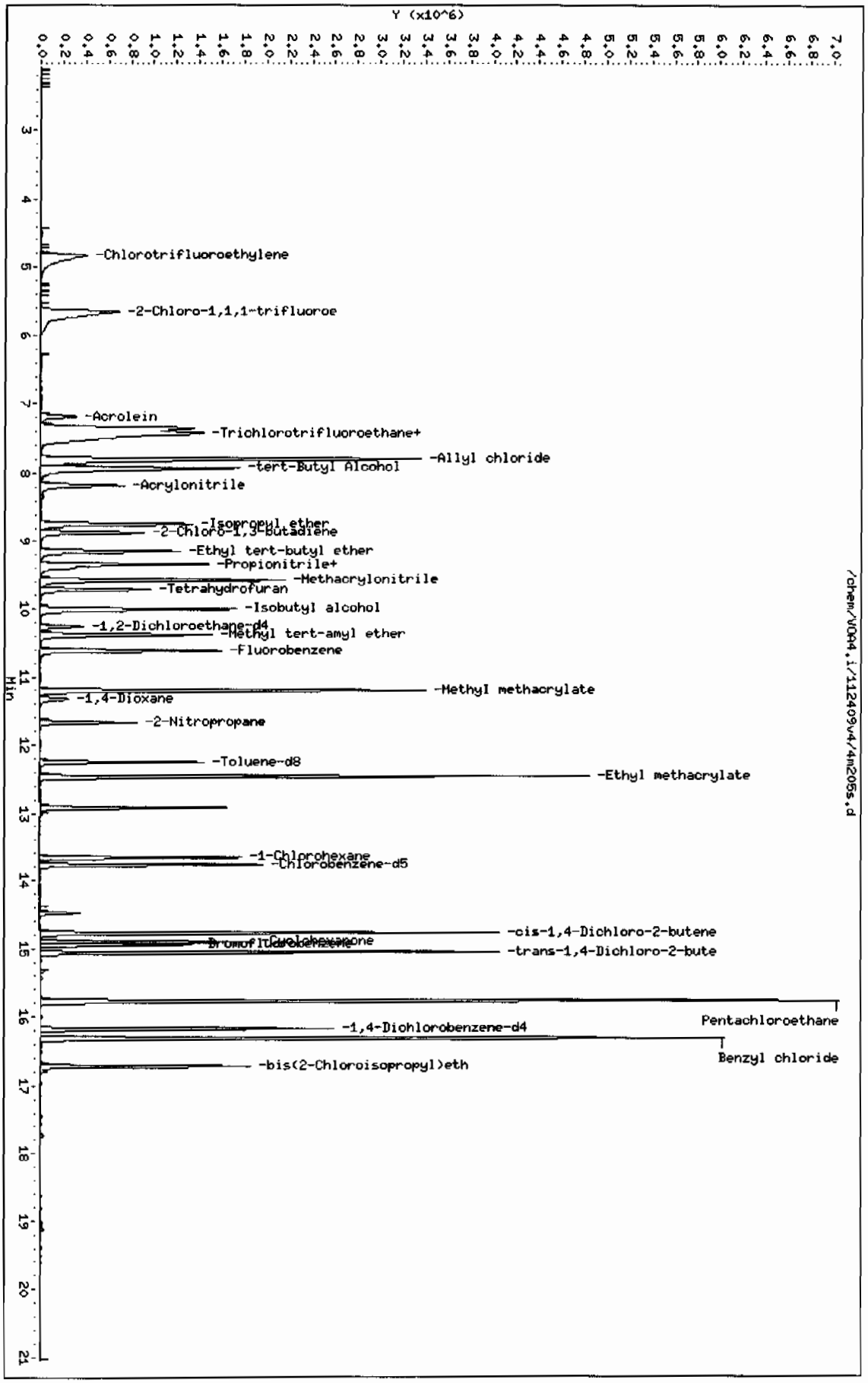

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989888**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 17:05**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m503la.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		45.5	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.8	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		50.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		48.8	ug/kg	0.300	1.00
75-00-3	Chloroethane		51.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		56.1	ug/kg	0.300	1.00
67-64-1	Acetone		228	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		54.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		268	ug/kg	1.60	5.00
75-09-2	Methylene chloride		54.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		276	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		56.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		55.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		242	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		54.3	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		59.8	ug/kg	0.300	1.00
67-66-3	Chloroform		53.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		53.6	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		59.6	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		60.3	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		61.2	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		51.8	ug/kg	0.300	1.00
71-43-2	Benzene		53.4	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		56.4	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		53.5	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		54.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		53.3	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		264	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		54.3	ug/kg	0.300	1.00
108-88-3	Toluene		52.2	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.9	ug/kg	0.300	1.00
591-78-6	2-Hexanone		229	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.9	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		56.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		54.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		52.5	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		53.1	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989888**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 17:05**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m503la.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.0	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		107	ug/kg	0.300	2.00
95-47-6	o-Xylene		52.7	ug/kg	0.300	1.00
100-42-5	Styrene		52.4	ug/kg	0.300	1.00
75-25-2	Bromoform		56.3	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		52.6	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		51.5	ug/kg	0.300	1.00
108-86-1	Bromobenzene		52.2	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		51.8	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		50.0	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		52.5	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		51.4	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		51.6	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		53.0	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		51.3	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		52.9	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		53.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		52.1	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		51.8	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		52.6	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		56.8	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		52.6	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		51.2	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m5031a.d
Lab Smp Id: 1201989888 Client Smp ID: LCS
Inj Date : 27-NOV-2009 17:05
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989888|926499|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2817880	159.979	160
M 2 1,2-Dichloroethylene (total)	96				1446573	110.536	110
M 135 1,3-Dichloropropylene	75				1580853	109.206	109
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	351644	45.4742	45.5
4 Chloromethane	50	5.299	5.299	(0.499)	546671	45.7903	45.8
5 Vinyl chloride	62	5.528	5.521	(0.521)	561471	50.8049	50.8
6 Bromomethane	94	6.130	6.130	(0.577)	425494	48.8189	48.8
7 Chloroethane	64	6.288	6.288	(0.592)	420074	51.8006	51.8
8 Trichlorofluoromethane	101	6.662	6.674	(0.627)	765612	56.1474	56.1
134 Ethyl Ether	59	7.004	7.004	(0.660)	392262	52.5267	52.5
10 Acetone	43	7.357	7.357	(0.693)	1537549	228.030	228
11 1,1-Dichloroethylene	61	7.388	7.382	(0.696)	764531	54.4207	54.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.625	7.625	(0.718)	4495694	267.518	268
15 Acetonitrile	41	7.705	7.705	(0.726)	1952178	1281.53	1280
128 Methyl acetate	43	7.753	7.753	(0.730)	1915389	246.328	246
14 Carbon disulfide	76	7.772	7.772	(0.732)	8038105	275.936	276
17 Methylene chloride	84	7.936	7.936	(0.747)	598544	54.8971	54.9
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1405373	51.6688	51.7
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	699468	56.2564	56.2
23 Vinyl acetate	43	8.711	8.711	(0.820)	5180361	286.488	286
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	861473	55.7034	55.7
30 2-Butanone	43	9.326	9.326	(0.878)	1874152	241.576	242
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	747105	54.2793	54.3
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	534087	59.7983	59.8
29 Bromochloromethane	128	9.662	9.656	(0.910)	259878	53.5856	53.6
32 Chloroform	83	9.692	9.692	(0.913)	842110	53.8904	53.9
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	690814	59.5729	59.6
129 Cyclohexane	56	10.082	10.082	(0.949)	809573	60.4458	60.4
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	695164	60.2569	60.2
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	684665	61.2121	61.2
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	389158	59.7047	59.7
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	637374	51.8100	51.8
38 Benzene	78	10.375	10.375	(0.977)	1898959	53.3856	53.4
139 Cyclohexene	67	10.497	10.497	(0.989)	965661	57.4280	57.4
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1659504	50.0000	
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	2203819	6186.99	6190
39 Trichloroethylene	95	11.009	11.009	(1.037)	503697	56.4014	56.4
130 Methylcyclohexane	83	11.265	11.265	(1.061)	870152	61.1049	61.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	499204	53.5306	53.5
43 Dibromomethane	93	11.375	11.375	(1.071)	306933	53.2842	53.3
45 Bromodichloromethane	83	11.484	11.484	(1.082)	647491	53.9551	54.0
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1148055	215.677	216
46 cis-1,3-Dichloropropylene	75	11.935	11.929	(1.124)	813210	54.3420	54.3
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	1103935	264.332	264
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1189628	52.7928	52.8
50 Toluene	92	12.326	12.326	(0.895)	1183354	52.1899	52.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	767643	53.0404	53.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	366163	50.9130	50.9
55 2-Hexanone	43	12.862	12.862	(0.934)	2580887	229.340	229
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	725870	49.8777	49.9
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	496951	56.4214	56.4
57 Dibromochloromethane	129	13.149	13.149	(0.955)	541773	54.4342	54.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	478839	52.5304	52.5
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1293764	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1388154	53.0797	53.1
60 1,1,1,2-Tetrachloroethane	131	13.856	13.850	(1.006)	519970	52.6492	52.6
58 Ethylbenzene	91	13.868	13.862	(1.007)	2277141	52.0202	52.0
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1866445	107.257	107
64 o-Xylene	106	14.405	14.405	(1.046)	951435	52.7217	52.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
65 Styrene	104	14.405	14.405	(1.046)	1608422	52.4161	52.4
66 Bromoform	173	14.661	14.661	(0.906)	550521	56.3341	56.3
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2578245	52.5148	52.5
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	571911	54.5204	54.5
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	757553	52.6298	52.6
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	197759	51.5123	51.5
75 Bromobenzene	156	15.167	15.167	(0.937)	809520	52.1889	52.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	3021832	51.8167	51.8
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2251190	51.3973	51.4
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	2072145	50.0383	50.0
80 4-Chlorotoluene	91	15.435	15.435	(0.954)	1963554	51.5991	51.6
81 tert-Butylbenzene	119	15.709	15.703	(0.971)	2352275	52.9892	53.0
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2377073	51.2826	51.3
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	3132956	52.9117	52.9
84 4-Isopropyltoluene	119	16.057	16.057	(0.992)	2576853	53.0786	53.1
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1521318	52.1416	52.1
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	905876	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1518171	51.8466	51.8
89 n-Butylbenzene	91	16.508	16.508	(1.020)	2372232	52.5503	52.6
90 1,2-Dichlorobenzene	146	16.648	16.642	(1.029)	1449905	51.1971	51.2
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	181446	56.7873	56.8
93 1,2,4-Trichlorobenzene	180	18.635	18.635	(1.152)	896271	55.8658	55.9
94 Hexachlorobutadiene	225	18.818	18.824	(1.163)	625881	55.2550	55.2
95 Naphthalene	128	19.032	19.032	(1.176)	1513325	54.9084	54.9
96 1,2,3-Trichlorobenzene	180	19.391	19.391	(1.199)	715357	56.4893	56.5

Data File: /chem/VOA4.i/112709v4/4m5031a.d
Date : 27-NOV-2009 17:05
Client ID: LCS
Sample Info: 1120198988819264991111VOAF111
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

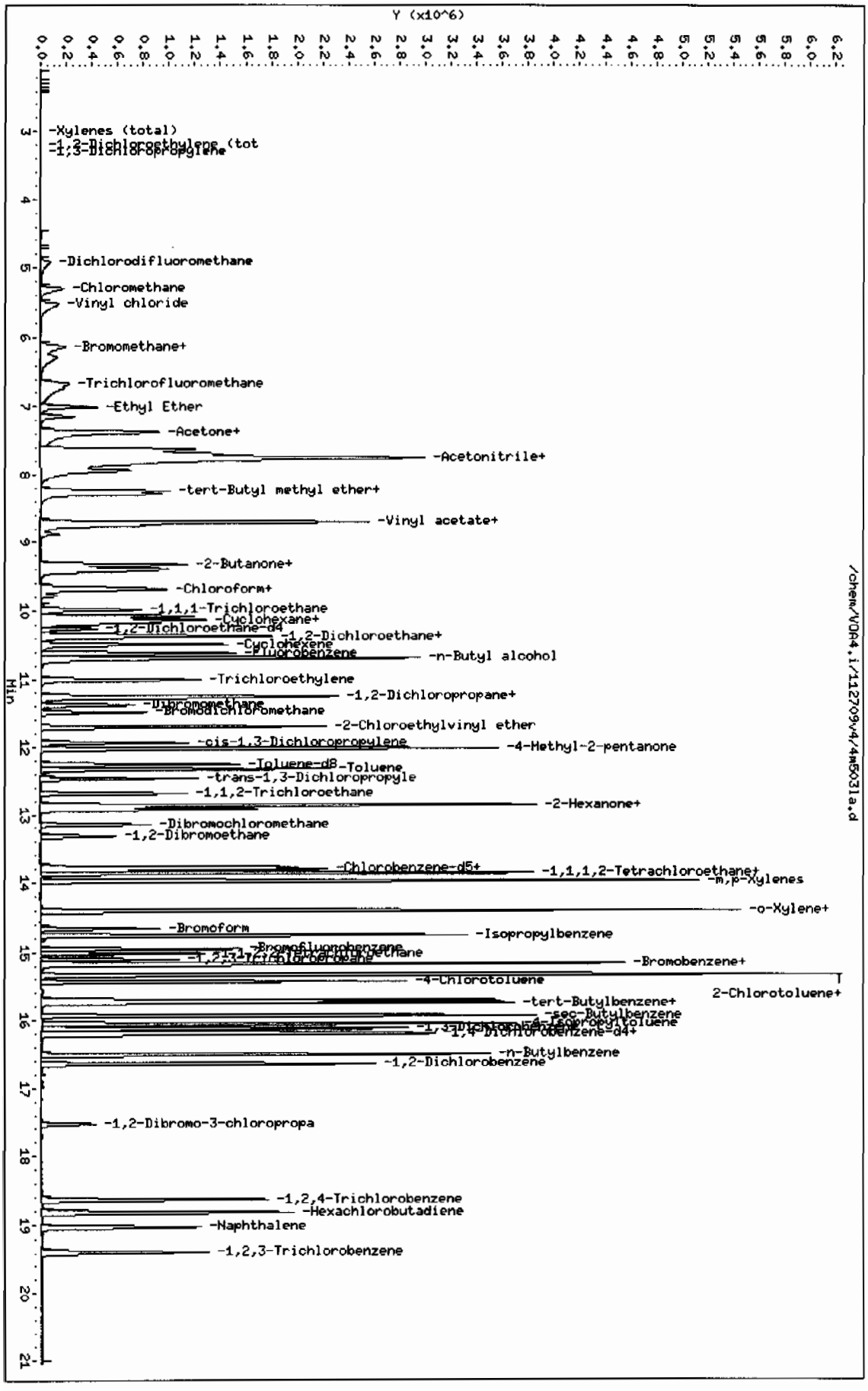

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989889**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 18:00**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 16:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m505sa.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989889**				
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926498**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 18:00**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 16:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m505sa.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		298	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112709v4/4m505sa.d
Lab Smp Id: 1201989889 Client Smp ID: LCS
Inj Date : 27-NOV-2009 18:00
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989889|926499|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112709v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 17:54 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	870252	158.506	158(A)
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1486283	179.827	180
9 Acrolein	56	7.187	7.181	(0.677)	456542	263.729	264
12 Trichlorotrifluoroethane	85	7.363	7.364	(0.693)	887836	297.642	298
147 Isopropyl Alcohol	45	7.436	7.437	(0.700)	2260467	2631.48	2630
16 Allyl chloride	41	7.802	7.803	(0.735)	3451118	249.655	250
148 tert-Butyl Alcohol	59	7.930	7.931	(0.747)	3438792	2676.14	2680
18 Acrylonitrile	53	8.180	8.181	(0.770)	903146	258.733	259
149 Isopropyl ether	45	8.747	8.742	(0.824)	1510016	51.7167	51.7
24 2-Chloro-1,3-butadiene	53	8.869	8.870	(0.835)	695460	52.9965	53.0
150 Ethyl tert-butyl ether	59	9.150	9.150	(0.862)	1393473	52.1839	52.2
26 Ethyl acetate	43	9.345	9.339	(0.880)	2291571	234.167	234

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
28 Propionitrile	54	9.393	9.394	(0.885)	369125	251.785	252
27 Methacrylonitrile	41	9.576	9.577	(0.902)	1452022	250.159	250
72 Tetrahydrofuran	42	9.717	9.717	(0.601)	829327	272.185	272
19 Isobutyl alcohol	41	10.009	10.010	(0.943)	1124780	2529.36	2530
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	332876	53.2341	53.2
151 Methyl tert-amyl ether	73	10.387	10.388	(0.978)	1409937	52.9938	53.0
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1592038	50.0000	
42 Methyl methacrylate	69	11.210	11.211	(1.056)	1636854	252.687	253
97 1,4-Dioxane	88	11.332	11.333	(1.067)	302450	2610.56	2610
48 2-Nitropropane	43	11.673	11.674	(1.099)	798308	264.672	265
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1136111	52.4604	52.5
51 Ethyl methacrylate	69	12.466	12.467	(0.905)	2980181	240.977	241
152 1-Chlorohexane	55	13.667	13.662	(1.287)	440761	54.3832	54.4
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1243392	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	1020850	272.293	272
70 Cyclohexanone	42	14.911	14.905	(1.083)	707683	750.053	750
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	521512	53.0453	53.0
69 trans-1,4-Dichloro-2-butene	53	15.069	15.064	(0.931)	972979	268.570	268
82 Pentachloroethane	167	15.776	15.777	(0.975)	1906097	252.087	252
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	849019	50.0000	
88 Benzyl chloride	91	16.319	16.320	(1.009)	5563651	263.129	263
91 bis(2-Chloroisopropyl)ether	45	16.721	16.722	(1.034)	1632409	258.690	259

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/112709v4/4m505sa.d
Date : 27-NOV-2009 18:00
Client ID: LCS
Sample Info: 1120198988919264991111VOAF111
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

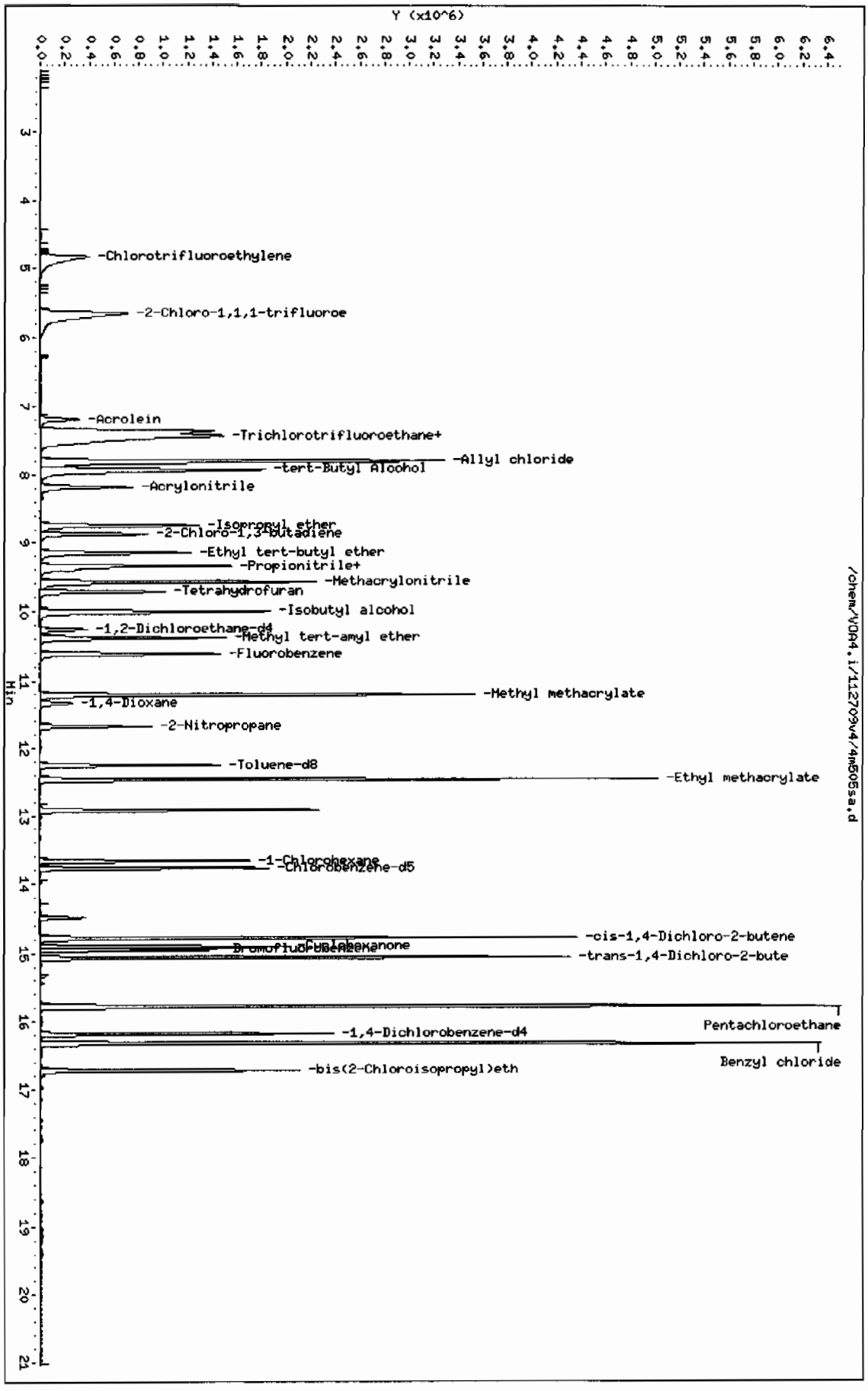

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201980900	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
Client Sample:	QC for batch 926498	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13961PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 07:12	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:31	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m225.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		48.8	ug/kg	0.410	1.20
74-87-3	Chloromethane		48.4	ug/kg	0.361	1.20
75-01-4	Vinyl chloride		52.4	ug/kg	0.361	1.20
74-83-9	Bromomethane		50.6	ug/kg	0.361	1.20
75-00-3	Chloroethane		53.1	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane		54.8	ug/kg	0.361	1.20
67-64-1	Acetone		176	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene		54.6	ug/kg	0.361	1.20
74-88-4	Iodomethane		239	ug/kg	1.93	6.02
75-09-2	Methylene chloride		53.2	ug/kg	2.41	6.02
75-15-0	Carbon disulfide		273	ug/kg	1.51	6.02
156-60-5	trans-1,2-Dichloroethylene		55.9	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane		57.9	ug/kg	0.361	1.20
78-93-3	2-Butanone		186	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene		55.7	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane		54.1	ug/kg	0.361	1.20
67-66-3	Chloroform		55.6	ug/kg	0.361	1.20
74-97-5	Bromochloromethane		52.3	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane		58.3	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene		56.9	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride		58.1	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane		54.4	ug/kg	0.361	1.20
71-43-2	Benzene		53.3	ug/kg	0.361	1.20
79-01-6	Trichloroethylene		55.7	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane		54.6	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane		55.0	ug/kg	0.361	1.20
74-95-3	Dibromomethane		52.6	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone		221	ug/kg	1.51	6.02
10061-01-5	cis-1,3-Dichloropropylene		49.5	ug/kg	0.361	1.20
108-88-3	Toluene		52.5	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene		50.6	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane		52.1	ug/kg	0.361	1.20
591-78-6	2-Hexanone		164	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane		52.2	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene		50.1	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane		53.5	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane		51.6	ug/kg	0.361	1.20
108-90-7	Chlorobenzene		52.9	ug/kg	0.361	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201980900**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13961PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 07:12**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m225.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.8	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes		102	ug/kg	0.361	2.41
95-47-6	o-Xylene		51.7	ug/kg	0.361	1.20
100-42-5	Styrene		49.8	ug/kg	0.361	1.20
75-25-2	Bromoform		55.8	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane		55.6	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane		57.9	ug/kg	0.361	1.20
108-86-1	Bromobenzene		54.8	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene		55.9	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene		55.7	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene		57.5	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene		54.5	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene		56.5	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene		54.9	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene		53.6	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene		53.0	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene		50.1	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene		51.1	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene		50.4	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene		48.4	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane		50.3	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane		52.9	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene		49.1	ug/kg	0.361	1.20

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m225.d
Lab Smp Id: 1201980900 Client Smp ID: RE03-09-13961MS
Inj Date : 25-NOV-2009 07:12
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201980900|926499|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241418001
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 25 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.97420	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1605613	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1196644	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	717000	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	323412	51.2834	61.8
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	985713	47.2938	57.0
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	444410	53.5259	64.5
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	303040	40.5041	48.8
4 Chloromethane	50	5.299	5.299	(0.499)	464203	40.1877	48.4
5 Vinyl chloride	62	5.528	5.521	(0.521)	464940	43.4823	52.4
6 Bromomethane	94	6.137	6.130	(0.578)	354417	42.0287	50.6
7 Chloroethane	64	6.288	6.288	(0.592)	345641	44.0526	53.0
8 Trichlorofluoromethane	101	6.669	6.663	(0.628)	599757	45.4605	54.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.358	7.358	(0.693)	954546	146.318	176
11 1,1-Dichloroethylene	61	7.389	7.389	(0.696)	616700	45.3712	54.6
87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	970150	41.8590	50.4
13 Iodomethane	142	7.626	7.632	(0.718)	3227180	198.480	239
17 Methylene chloride	84	7.943	7.943	(0.748)	478131	44.1744	53.2
14 Carbon disulfide	76	7.773	7.773	(0.732)	6388613	226.673	273
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	557933	46.3792	55.9
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	719281	48.0702	57.9
30 2-Butanone	43	9.327	9.327	(0.878)	1157079	154.152	186
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	615776	46.2395	55.7
85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	979635	42.4207	51.1
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	388389	44.9450	54.1
32 Chloroform	83	9.693	9.693	(0.913)	697895	46.1605	55.6
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	913818	40.7676	49.1
29 Bromochloromethane	128	9.656	9.656	(0.909)	203784	43.4296	52.3
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	543179	48.4136	58.3
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	527376	47.2473	56.9
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	522260	48.2595	58.1
37 1,2-Dichloroethane	62	10.345	10.339	(0.974)	537994	45.1996	54.4
38 Benzene	78	10.376	10.370	(0.977)	1523035	44.2543	53.3
39 Trichloroethylene	95	11.004	11.004	(1.036)	399726	46.2616	55.7
41 1,2-Dichloropropane	63	11.248	11.241	(1.059)	408976	45.3272	54.6
45 Bromodichloromethane	83	11.485	11.485	(1.082)	529880	45.6366	55.0
43 Dibromomethane	93	11.376	11.376	(1.071)	243332	43.6608	52.6
49 4-Methyl-2-pentanone	58	12.022	12.016	(0.873)	709111	183.574	221
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	594498	41.0602	49.4
50 Toluene	92	12.327	12.327	(0.895)	914721	43.6164	52.5
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	562099	41.9904	50.6
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	287756	43.2582	52.1
55 2-Hexanone	43	12.857	12.857	(0.934)	1416375	136.075	164
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	583571	43.3542	52.2
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	339093	41.6235	50.1
57 Dibromochloromethane	129	13.144	13.144	(0.954)	408592	44.3849	53.4
59 1,2-Dibromoethane	107	13.320	13.314	(0.967)	361544	42.8817	51.6
62 Chlorobenzene	112	13.802	13.802	(1.002)	1062435	43.9221	52.9
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	401264	43.9272	52.9
58 Ethylbenzene	91	13.863	13.863	(1.007)	1741228	43.0059	51.8
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1368359	85.0158	102
64 o-Xylene	106	14.405	14.405	(1.046)	716377	42.9183	51.7
65 Styrene	104	14.399	14.399	(1.046)	1172955	41.3272	49.8
66 Bromoform	173	14.655	14.655	(0.906)	358277	46.3198	55.8
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	525944	46.1644	55.6
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	146070	48.0712	57.9
75 Bromobenzene	156	15.168	15.168	(0.937)	558743	45.5106	54.8
76 n-Propylbenzene	91	15.180	15.180	(0.938)	2142177	46.4092	55.9
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	1515148	46.2261	55.7
67 Isopropylbenzene	105	14.759	14.759	(0.912)	1854742	47.7299	57.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	1569731	45.2797	54.5
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1412024	46.8804	56.5
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	1600269	45.5451	54.8
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	1633190	44.5158	53.6
83 sec-Butylbenzene	105	15.930	15.930	(0.985)	2064016	44.0413	53.0
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	1598941	41.6113	50.1
89 n-Butylbenzene	91	16.503	16.503	(1.020)	1435714	40.1824	48.4
92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	105679	41.7871	50.3

Data File: /chem/VOA4.i/112409v4/4m225.d
Date : 25-NOV-2009 07:12
Client ID: RE03-09-13961MS
Sample Info: 1120198090019264991|1|VOAF|1|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

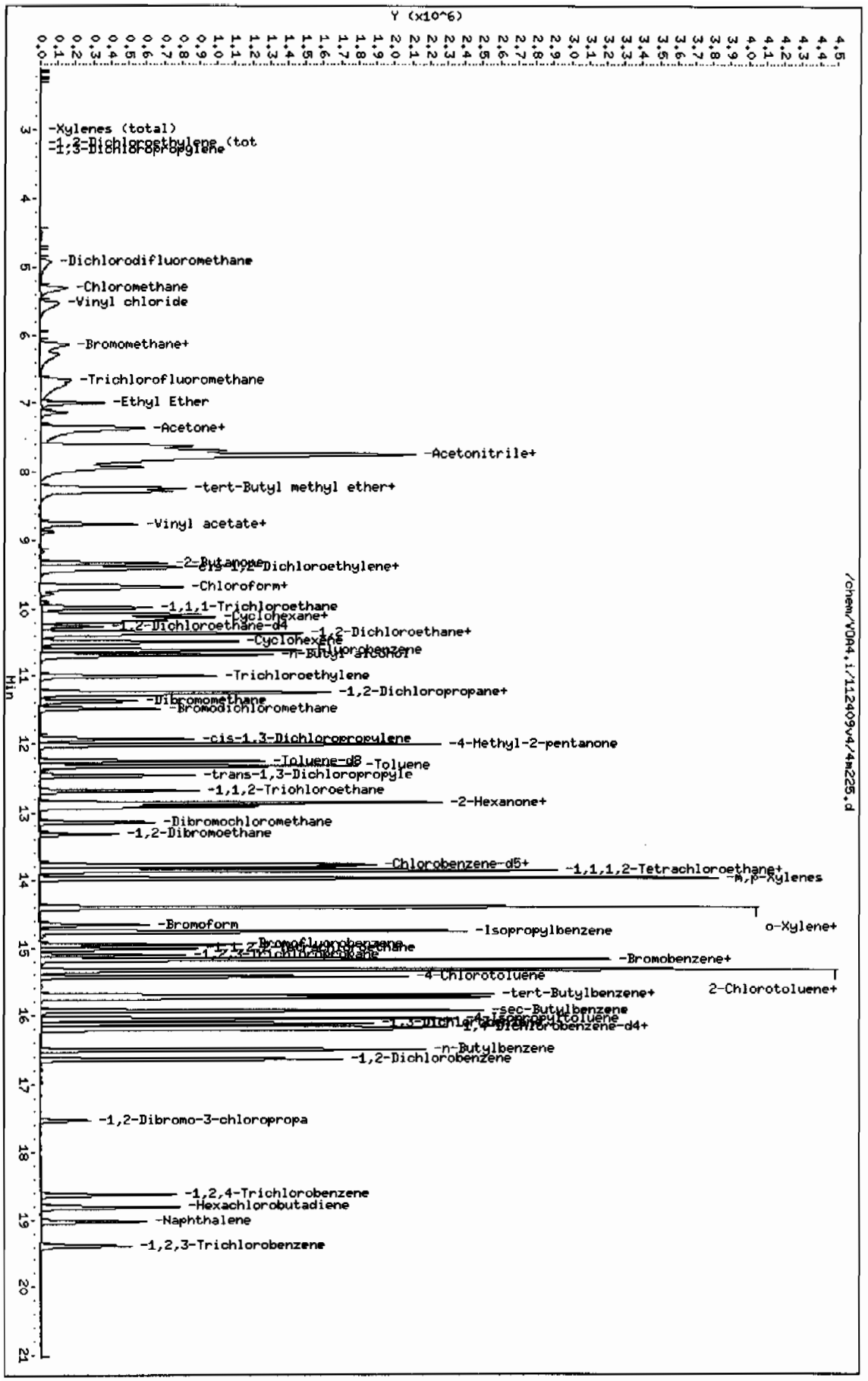

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201980901	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
Client Sample:	QC for batch 926498	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13961PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926499	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 07:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/24/2009 21:32	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m226.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		47.6	ug/kg	0.410	1.20
74-87-3	Chloromethane		47.1	ug/kg	0.361	1.20
75-01-4	Vinyl chloride		51.5	ug/kg	0.361	1.20
74-83-9	Bromomethane		50.2	ug/kg	0.361	1.20
75-00-3	Chloroethane		52.1	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane		52.9	ug/kg	0.361	1.20
67-64-1	Acetone		185	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene		53.7	ug/kg	0.361	1.20
74-88-4	Iodomethane		246	ug/kg	1.93	6.02
75-09-2	Methylene chloride		51.3	ug/kg	2.41	6.02
75-15-0	Carbon disulfide		270	ug/kg	1.51	6.02
156-60-5	trans-1,2-Dichloroethylene		55.5	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane		57.1	ug/kg	0.361	1.20
78-93-3	2-Butanone		197	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene		54.6	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane		52.6	ug/kg	0.361	1.20
67-66-3	Chloroform		55.0	ug/kg	0.361	1.20
74-97-5	Bromochloromethane		52.4	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane		58.6	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene		56.3	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride		58.2	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane		54.3	ug/kg	0.361	1.20
71-43-2	Benzene		53.0	ug/kg	0.361	1.20
79-01-6	Trichloroethylene		56.2	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane		54.1	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane		54.8	ug/kg	0.361	1.20
74-95-3	Dibromomethane		52.2	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone		237	ug/kg	1.51	6.02
10061-01-5	cis-1,3-Dichloropropylene		50.7	ug/kg	0.361	1.20
108-88-3	Toluene		53.0	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene		51.5	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane		52.7	ug/kg	0.361	1.20
591-78-6	2-Hexanone		182	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane		52.0	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene		50.8	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane		54.1	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane		52.8	ug/kg	0.361	1.20
108-90-7	Chlorobenzene		53.4	ug/kg	0.361	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201980901**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
Client Sample:	**QC for batch 926498**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13961PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926499**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 07:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/24/2009 21:32**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m226.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.9	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes		104	ug/kg	0.361	2.41
95-47-6	o-Xylene		52.3	ug/kg	0.361	1.20
100-42-5	Styrene		50.6	ug/kg	0.361	1.20
75-25-2	Bromoform		55.7	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane		54.1	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane		55.0	ug/kg	0.361	1.20
108-86-1	Bromobenzene		53.7	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene		53.9	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene		53.6	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene		55.6	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene		53.6	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene		54.1	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene		53.6	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene		52.0	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene		52.1	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene		49.5	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene		51.2	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene		50.6	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene		47.9	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane		52.6	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane		53.1	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene		50.2	ug/kg	0.361	1.20

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112409v4/4m226.d
Lab Smp Id: 1201980901 Client Smp ID: RE03-09-13961MSD
Inj Date : 25-NOV-2009 07:39
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201980901|926499|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241418001
Comment :
Method : /chem/VOA4.i/112409v4/VOA4-8260-112209.m
Meth Date : 24-Nov-2009 21:55 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 26 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.97420	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1678794	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1256867	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	797585	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	315999	47.9236	57.7
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1057267	48.2963	58.2
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	480986	52.0781	62.7
3 Dichlorodifluoromethane	85	4.912	4.911	(0.463)	309179	39.5232	47.6
4 Chloromethane	50	5.299	5.299	(0.499)	472704	39.1397	47.1
5 Vinyl chloride	62	5.521	5.521	(0.520)	477993	42.7544	51.5
6 Bromomethane	94	6.138	6.130	(0.578)	367313	41.6592	50.2
7 Chloroethane	64	6.288	6.288	(0.592)	355105	43.2860	52.1
8 Trichlorofluoromethane	101	6.668	6.663	(0.628)	605971	43.9293	52.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.357	7.358	(0.693)	1045241	153.236	184
11 1,1-Dichloroethylene	61	7.388	7.389	(0.696)	633864	44.6011	53.7
87 1,4-Dichlorobenzene	146	16.209	16.204	(1.002)	1082984	42.0062	50.6
13 Iodomethane	142	7.631	7.632	(0.719)	3466075	203.880	246
17 Methylene chloride	84	7.942	7.943	(0.748)	484602	42.6183	51.3
14 Carbon disulfide	76	7.778	7.773	(0.732)	6607238	224.210	270
21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.780)	580105	46.1202	55.5
22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	741639	47.4038	57.1
30 2-Butanone	43	9.332	9.327	(0.879)	1284561	163.676	197
31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.884)	630984	45.3160	54.6
85 1,3-Dichlorobenzene	146	16.124	16.119	(0.997)	1091340	42.4831	51.2
25 2,2-Dichloropropane	77	9.424	9.419	(0.887)	394890	43.7053	52.6
32 Chloroform	83	9.692	9.693	(0.913)	721262	45.6264	55.0
90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	1039803	41.7012	50.2
29 Bromochloromethane	128	9.655	9.656	(0.909)	213296	43.4752	52.4
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	571009	48.6756	58.6
34 1,1-Dichloropropene	75	10.137	10.132	(0.955)	545204	46.7153	56.3
33 Carbon tetrachloride	117	10.174	10.175	(0.958)	546549	48.3024	58.2
37 1,2-Dichloroethane	62	10.344	10.339	(0.974)	560812	45.0627	54.3
38 Benzene	78	10.375	10.370	(0.977)	1584457	44.0321	53.0
39 Trichloroethylene	95	11.009	11.004	(1.037)	421886	46.6978	56.2
41 1,2-Dichloropropane	63	11.247	11.241	(1.059)	424037	44.9478	54.1
45 Bromodichloromethane	83	11.484	11.485	(1.082)	551895	45.4607	54.8
43 Dibromomethane	93	11.375	11.376	(1.071)	252445	43.3214	52.2
49 4-Methyl-2-pentanone	58	12.021	12.016	(0.873)	797834	196.646	237
46 cis-1,3-Dichloropropylene	75	11.935	11.930	(1.124)	636754	42.0616	50.7
50 Toluene	92	12.326	12.327	(0.895)	969739	44.0243	53.0
53 trans-1,3-Dichloropropylene	75	12.466	12.461	(0.905)	601577	42.7863	51.5
54 1,1,2-Trichloroethane	83	12.685	12.686	(0.921)	305894	43.7815	52.7
55 2-Hexanone	43	12.856	12.857	(0.934)	1648005	150.742	182
52 1,3-Dichloropropane	76	12.874	12.875	(0.935)	610018	43.1475	52.0
56 Tetrachloroethylene	164	12.923	12.918	(0.938)	361002	42.1896	50.8
57 Dibromochloromethane	129	13.149	13.144	(0.955)	434079	44.8941	54.1
59 1,2-Dibromoethane	107	13.319	13.314	(0.967)	388397	43.8594	52.8
62 Chlorobenzene	112	13.801	13.802	(1.002)	1126772	44.3499	53.4
60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	422818	44.0689	53.1
58 Ethylbenzene	91	13.862	13.863	(1.007)	1832351	43.0881	51.9
63 m,p-Xylenes	106	13.972	13.973	(1.015)	1453854	85.9996	104
64 o-Xylene	106	14.405	14.405	(1.046)	761775	43.4513	52.3
65 Styrene	104	14.405	14.399	(1.046)	1252622	42.0194	50.6
66 Bromoform	173	14.661	14.655	(0.906)	397887	46.2434	55.7
73 1,1,2,2-Tetrachloroethane	83	15.020	15.015	(0.928)	569634	44.9476	54.1
74 1,2,3-Trichloropropane	110	15.112	15.107	(0.934)	154385	45.6743	55.0
75 Bromobenzene	156	15.167	15.168	(0.937)	609167	44.6045	53.7
76 n-Propylbenzene	91	15.185	15.180	(0.939)	2298936	44.7732	53.9
77 2-Chlorotoluene	91	15.331	15.332	(0.948)	1623287	44.5215	53.6
67 Isopropylbenzene	105	14.758	14.759	(0.912)	1995942	46.1739	55.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	1714902	44.4692	53.6
80 4-Chlorotoluene	91	15.429	15.430	(0.954)	1505203	44.9248	54.1
81 tert-Butylbenzene	119	15.703	15.704	(0.971)	1738189	44.4721	53.6
79 1,2,4-Trimethylbenzene	105	15.746	15.741	(0.973)	1762405	43.1842	52.0
83 sec-Butylbenzene	105	15.935	15.930	(0.985)	2256840	43.2902	52.1
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	1755909	41.0793	49.5
89 n-Butylbenzene	91	16.502	16.503	(1.020)	1580166	39.7569	47.9
92 1,2-Dibromo-3-chloropropane	157	17.532	17.527	(1.084)	122901	43.6869	52.6

Data File: /chem/VOA4.i/112409v4/4m226.d
Date : 25-NOV-2009 07:39
Client ID: RE03-09-13961MSD
Sample Info: |120198090119264991|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

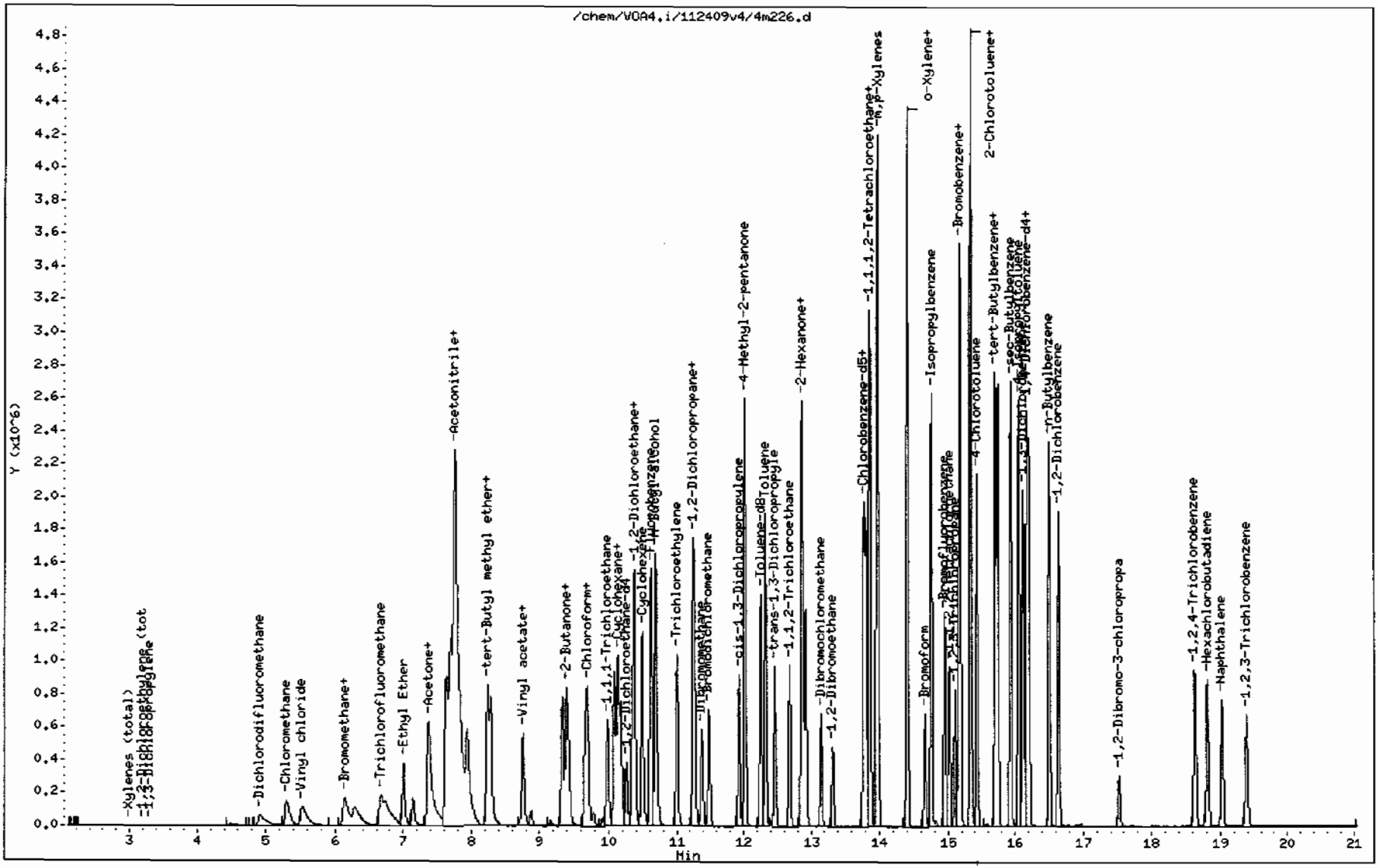

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926498** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201980902 LCS	24-NOV-2009 20:00:00	Soil	5	5	1	
1201980903 LCS	24-NOV-2009 20:15:00	Soil	5	5	1	
1201980899 MB	24-NOV-2009 20:30:00	Soil	5	5	1	
241418001	24-NOV-2009 21:30:00	Soil	5	5	1	
1201980900 PS (241418001)	24-NOV-2009 21:31:00	Soil	5	5	1	
1201980901 PSD (241418001)	24-NOV-2009 21:32:00	Soil	5	5	1	
241418002	24-NOV-2009 21:33:00	Soil	5	5	1	
241418003	24-NOV-2009 21:34:00	Soil	5	5	1	
241418004	24-NOV-2009 21:35:00	Soil	5	5	1	
241418005	24-NOV-2009 21:36:00	Soil	5	5	1	
241418006	24-NOV-2009 21:37:00	Soil	5	5	1	
241418007	24-NOV-2009 21:38:00	Soil	5	5	1	
241418008	24-NOV-2009 21:39:00	Soil	5	5	1	
241418009	24-NOV-2009 21:40:00	Soil	5	5	1	
241418010	24-NOV-2009 21:41:00	Soil	5	5	1	
241418011	24-NOV-2009 21:42:00	Soil	5	5	1	
241418012	24-NOV-2009 21:43:00	Soil	5	5	1	
241418013	24-NOV-2009 21:44:00	Soil	5	5	1	
241418014	24-NOV-2009 21:45:00	Soil	5	5	1	
241418016	24-NOV-2009 21:47:00	Soil	5	5	1	
241418017	24-NOV-2009 21:48:00	Soil	5	5	1	
241418015	25-NOV-2009 19:00:00	Soil	5	5	1	
1201989888 LCS	27-NOV-2009 16:00:00	Soil	5	5	1	
1201989889 LCS	27-NOV-2009 16:10:00	Soil	5	5	1	
1201989887 MB	27-NOV-2009 16:30:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/22/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 112209V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS					
BFB	UVM091020-02				1
SHORT					
DHEC					

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/22/2009 9:20	4L701.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/22/2009 9:47	4L702.D	12019----	GEL	BLANK	5ML	1	N/A	2	w	ACJ	N/A	X	
11/22/2009 10:14	4L703.D	W4VM091122-01	GEL	VSTD0005	5ML	1	N/A	3	w	ACJ	N/A	O	UVM090911-01C/UVM091116-01A
11/22/2009 10:41	4L704.D	W4VM091122-02	GEL	VSTD001	5ML	1	N/A	4	w	ACJ	N/A	X	UVM090911-02C/UVM091116-02A;NOT NEEDED
11/22/2009 11:09	4L705.D	W4VM091122-03	GEL	VSTD001	5ML	1	N/A	5	w	ACJ	N/A	O	UVM090911-02C/UVM091116-02A
11/22/2009 11:36	4L706.D	W4VM091122-04	GEL	VSTD002	5ML	1	N/A	6	w	ACJ	N/A	O	UVM090911-03C/UVM091116-03A
11/22/2009 12:04	4L707.D	W4VM091122-05	GEL	VSTD005	5ML	1	N/A	7	w	ACJ	N/A	O	UVM090911-04C/UVM091116-04A
11/22/2009 12:31	4L708.D	W4VM091122-06	GEL	VSTD010	5ML	1	N/A	8	w	ACJ	N/A	O	UVM090911-05C/UVM091116-05A
11/22/2009 12:59	4L709.D	W4VM091122-07	GEL	VSTD020	5ML	1	N/A	9	w	ACJ	N/A	O	UVM090911-06C/UVM091116-06A
11/22/2009 13:27	4L710.D	W4VM091122-08	GEL	VSTD050	5ML	1	N/A	10	w	ACJ	N/A	O	UVM090911-07C/UVM091116-07A
11/22/2009 13:54	4L711.D	W4VM091122-09	GEL	VSTD100	5ML	1	N/A	11	w	ACJ	N/A	O	UVM090911-08C/UVM091116-08A
11/22/2009 14:21	4L712.D	12019----	GEL	BLANK	5ML	1	N/A	12	w	ACJ	N/A	X	
11/22/2009 14:48	4L713.D	W4VM091122-10	GEL	VSTD005S	5ML	1	N/A	13	w	ACJ	N/A	O	UVM091110-01A/UVM091118-01
11/22/2009 15:16	4L714.D	W4VM091122-11	GEL	VSTD010S	5ML	1	N/A	14	w	ACJ	N/A	O	UVM091110-02A/UVM091118-02
11/22/2009 15:43	4L715.D	W4VM091122-12	GEL	VSTD025S	5ML	1	N/A	15	w	ACJ	N/A	O	UVM091110-03A/UVM091118-03
11/22/2009 16:10	4L716.D	W4VM091122-13	GEL	VSTD050S	5ML	1	N/A	16	w	ACJ	N/A	O	UVM091110-04A/UVM091118-04
11/22/2009 16:37	4L717.D	W4VM091122-14	GEL	VSTD100S	5ML	1	N/A	17	w	ACJ	N/A	X	UVM091110-05A/UVM091118-05; chlorotrifluoroethylene high
11/22/2009 17:04	4L718.D	W4VM091122-15	GEL	VSTD250S	5ML	1	N/A	18	w	ACJ	N/A	O	UVM091110-06A/UVM091118-06
11/22/2009 17:32	4L719.D	W4VM091122-16	GEL	VSTD500S	5ML	1	N/A	19	w	ACJ	N/A	O	UVM091110-07A/UVM091118-07
11/22/2009 17:59	4L720.D	12019----	GEL	BLANK	5ML	1	N/A	20	w	ACJ	N/A	X	
11/22/2009 18:26	4L721.D	W4VM091122-17	GEL	ICV	5ML	1	N/A	21	w	ACJ	N/A	X	UVM091105-01A/IVM091122-01
11/22/2009 18:53	4L722.D	W4VM091122-18	GEL	ICV	5ML	1	N/A	22	w	ACJ	N/A	O	UVM091111-01C/IVM091122-01
11/22/2009 19:21	4L723.D	W4VM091122-19	GEL	SHORTICV	5ML	1	N/A	23	w	ACJ	N/A	O	UVM091105-02B/UVM091118-08A

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/24/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 112409V4

Daily Standard — Volume Added for Purge (ul)

Solution	ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091125-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS	W4VM091125-02			5+5	
BFB	UVM091020-02				1
SHORT	W4VM091124-03/04		5+5	5+5	
DHEC	N/A			5	

Purge Amount

5	Water Purge Vol:
5G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/24/2009	20:16	4M201.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/24/2009	20:44	4M202.D	W4VM091124-01	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091111-01D/IVM091122-01
11/24/2009	21:12	4M203.D	W4VM091125-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091111-01D/IVM091122-01
11/24/2009	21:39	4M204.D	W4VM091124-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/24/2009	22:06	4M205.D	W4VM091124-04	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/24/2009	22:34	4M206.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
11/24/2009	23:01	4M207.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	X	NOT NEEDED
11/24/2009	23:28	4M208.D	241418017	LANL	926499	5G	1	N/A	8	S	ACJ	N/A	O	
11/24/2009	23:55	4M209.D	241418001	LANL	926499	5G	1	N/A	9	S	ACJ	N/A	O	
11/25/2009	0:22	4M210.D	241418002	LANL	926499	5G	1	N/A	10	S	ACJ	N/A	O	
11/25/2009	0:50	4M211.D	241418003	LANL	926499	5G	1	N/A	11	S	ACJ	N/A	O	
11/25/2009	1:18	4M212.D	241418004	LANL	926499	5G	1	N/A	12	S	ACJ	N/A	O	
11/25/2009	1:45	4M213.D	241418005	LANL	926499	5G	1	N/A	13	S	ACJ	N/A	O	
11/25/2009	2:12	4M214.D	241418006	LANL	926499	5G	1	N/A	14	S	ACJ	N/A	O	
11/25/2009	2:39	4M215.D	241418007	LANL	926499	5G	1	N/A	15	S	ACJ	N/A	O	
11/25/2009	3:07	4M216.D	241418008	LANL	926499	5G	1	N/A	16	S	ACJ	N/A	O	
11/25/2009	3:34	4M217.D	241418009	LANL	926499	5G	1	N/A	17	S	ACJ	N/A	O	
11/25/2009	4:01	4M218.D	241418010	LANL	926499	5G	1	N/A	18	S	ACJ	N/A	O	
11/25/2009	4:28	4M219.D	241418011	LANL	926499	5G	1	N/A	19	S	ACJ	N/A	O	
11/25/2009	4:55	4M220.D	241418012	LANL	926499	5G	1	N/A	20	S	ACJ	N/A	O	
11/25/2009	5:22	4M221.D	241418013	LANL	926499	5G	1	N/A	21	S	ACJ	N/A	O	
11/25/2009	5:50	4M222.D	241418014	LANL	926499	5G	1	N/A	22	S	ACJ	N/A	O	
11/25/2009	6:17	4M223.D	241418015	LANL	926499	5G	1	N/A	23	S	ACJ	N/A	X	IS LOW; SEE 4M508
11/25/2009	6:45	4M224.D	241418016	LANL	926499	5G	1	N/A	24	S	ACJ	N/A	O	
11/25/2009	7:12	4M225.D	1201980900	LANL	926499	5G	1	N/A	25	S	ACJ	N/A	O	MS 241418001
11/25/2009	7:39	4M226.D	1201980901	LANL	926499	5G	1	N/A	26	S	ACJ	N/A	O	MSD 241418001

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/27/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 112709V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091127-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS	W4VM091127-01/02			5+5	
BFB	UVM091020-02				1
SHORT	W4VM091127-03/04		5+5	5+5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/27/2009 16:10	4M501.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/27/2009 16:38	4M502.D	W4VM091127-01	GEL	CCV/LCS	5ML	1		2	W	ACJ	N/A	O	UVM091111-01D/IVM091122-01
11/27/2009 17:05	4M503.D	W4VM091127-02	GEL	LCS	5G	1		3	S	ACJ	N/A	O	UVM091111-01D/IVM091122-01
11/27/2009 17:32	4M504.D	W4VM091127-03	GEL	SHORT	5ML	1		4	W	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/27/2009 18:00	4M505.D	W4VM091127-04	GEL	SHORT	5G	1		5	S	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/27/2009 18:27	4M506.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
11/27/2009 18:54	4M507.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	O	
11/27/2009 19:21	4M508.D	241418015	LANL	926499	5G	1	N/A	8	S	ACJ	N/A	O	
11/27/2009 19:49	4M509.D	241604001	LANL	927001	5G	1	N/A	9	S	ACJ	N/A	X	CONFIRMS 4M311
11/27/2009 20:16	4M510.D	241604002	LANL	927001	5G	1	N/A	10	S	ACJ	N/A	X	CONFIRMS 4M312
11/27/2009 20:43	4M511.D	241608001	LANL	927001	5G	1	N/A	11	S	ACJ	N/A	X	CONFIRMS 4M313
11/27/2009 21:10	4M512.D	241608002	LANL	927001	5G	1	N/A	12	S	ACJ	N/A	O	
11/27/2009 21:37	4M513.D	12019----	GEL	BLANK	5ML	1	N/A	13	W	ACJ	N/A	X	
11/27/2009 22:05	4M514.D	241599003	LANL	927208	5ML	1	PH2	14	W	ACJ	N	O	
11/27/2009 22:32	4M515.D	241599005	LANL	927208	5ML	1	PH2	15	W	ACJ	N	O	
11/27/2009 22:59	4M516.D	241599006	LANL	927208	5ML	1	PH2	16	W	ACJ	N	O	
11/27/2009 23:27	4M517.D	241599007	LANL	927208	5ML	1	PH2	17	W	ACJ	N	O	
11/27/2009 23:54	4M518.D	241603001	LANL	927208	5ML	1	PH2	18	W	ACJ	N	O	
11/28/2009 0:21	4M519.D	241603004	LANL	927208	5ML	1	PH2	19	W	ACJ	N	O	
11/28/2009 0:48	4M520.D	241603005	LANL	927208	5ML	1	PH2	20	W	ACJ	N	O	
11/28/2009 1:16	4M521.D	241603008	LANL	927208	5ML	1	PH2	21	W	ACJ	N	O	
11/28/2009 1:43	4M522.D	241813003	LANL	927208	5ML	1	PH2	22	W	ACJ	N	O	
11/28/2009 2:10	4M523.D	241813008	LANL	927208	5ML	1	PH2	23	W	ACJ	N	O	
11/28/2009 2:37	4M524.D	241813009	LANL	927208	5ML	1	PH2	24	W	ACJ	N	O	
11/28/2009 3:05	4M525.D	1201982332	LANL	927208	5ML	1	PH2	25	W	ACJ	N	O	MS 241599003
11/28/2009 3:32	4M526.D	1201982333	LANL	927208	5ML	1	PH2	26	W	ACJ	N	O	MSD 241599003

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-576

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	925661
Prep Batch Number:	925648

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241418001	RE03-09-13961
241418002	RE03-09-13960
241418003	RE03-09-13959
241418004	RE03-09-13958
241418005	RE03-09-13965
241418006	RE03-09-13970
241418007	RE03-09-13962
241418008	RE03-09-13971
241418009	RE03-09-13969
241418010	RE03-09-13968
241418011	RE03-09-13964
241418012	RE03-09-13966
241418013	RE03-09-13967
241418014	RE03-09-13963
241418015	RE03-10-3914
241418016	RE03-10-3913
1201979040	Method Blank (MB)
1201979041	241417001(RE03-09-13812) Matrix Spike (MS)
1201979042	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)
1201979043	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

The non-SDG sample 241417001 (RE03-09-13812) was selected for analysis as the matrix spike and

matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The MS/MSD RPD value for Benzyl alcohol was 39% (limit: 30%). Because the individual MS and MSD recoveries for that analyte were acceptable, the data were reported un-qualified for the RPD value failure.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
A non-conformance report was not required for the samples reported in this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the

analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beuchum **Date:** 12-15-09

Roadmap for LANL 10-576 SVOA

This roadmap was analyzed by nat00999 on 12-05-2009, 17:14.
This roadmap was reviewed by nat00999 on 12-09-2009, 09:27.
This roadmap was reviewed by bar00895 on 12-09-2009, 09:58.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD6.i/s120409.b/s610412.d	241418001	04-DEC-2009	14:45	10-576.sub	RE03-09-13961	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610413.d	241418002	04-DEC-2009	15:13	10-576.sub	RE03-09-13960	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610414.d	241418003	04-DEC-2009	15:41	10-576.sub	RE03-09-13959	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610415.d	241418004	04-DEC-2009	16:10	10-576.sub	RE03-09-13958	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610416.d	241418005	04-DEC-2009	16:38	10-576.sub	RE03-09-13965	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610417.d	241418006	04-DEC-2009	17:06	10-576.sub	RE03-09-13970	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610418.d	241418007	04-DEC-2009	17:34	10-576.sub	RE03-09-13962	1	925661	
■	N	/chem/MSD6.i/s120409.b/s610419.d	241418008	04-DEC-2009	18:01	10-576.sub	RE03-09-13971	1	925661	DUSE - see s610508
☐	N	/chem/MSD6.i/s120409.b/s610420.d	241418009	04-DEC-2009	18:29	10-576.sub	RE03-09-13969	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610421.d	241418010	04-DEC-2009	18:56	10-576.sub	RE03-09-13968	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610422.d	241418011	04-DEC-2009	19:23	10-576.sub	RE03-09-13964	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610423.d	241418012	04-DEC-2009	19:51	10-576.sub	RE03-09-13966	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610424.d	241418013	04-DEC-2009	20:17	10-576.sub	RE03-09-13967	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610425.d	241418014	04-DEC-2009	20:45	10-576.sub	RE03-09-13963	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610426.d	241418015	04-DEC-2009	21:13	10-576.sub	RE03-10-3914	1	925661	
■	N	/chem/MSD6.i/s120409.b/s610427.d	241418016	04-DEC-2009	21:40	10-576.sub	RE03-10-3913	1	925661	DUSE - see s610509
☐	N	/chem/MSD6.i/s120509.b/s610508.d	241418008	05-DEC-2009	13:41	10-576.sub	RE03-09-13971	1	925661	USE - rr of s610419
☐	N	/chem/MSD6.i/s120509.b/s610509.d	241418016	05-DEC-2009	14:08	10-576.sub	RE03-10-3913	1	925661	USE - rr of s610427

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment

☐	N	/chem/MSD6.i/s120409.b/s6l0404-2.d	1201979040	mb	04-DEC-2009	11:05	10-576.sub	SBLK01	1	925661	
■	N	/chem/MSD6.i/s120409.b/s6l0405-2.d	1201979043	lcs	04-DEC-2009	11:32	10-576.sub	SBLK01LCS	1	925661	
☐	N	/chem/MSD6.i/s120509.b/s6l0505-2.d	1201979043	lcs	05-DEC-2009	12:18	10-576.sub	SBLK01LCS	1	925661	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13958**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:10**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0415.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	457	ug/kg	91.5	457
108-95-2	Phenol	U	457	ug/kg	91.5	457
95-57-8	2-Chlorophenol	U	457	ug/kg	91.5	457
106-46-7	1,4-Dichlorobenzene	U	457	ug/kg	91.5	457
621-64-7	N-Nitrosodipropylamine	U	457	ug/kg	91.5	457
59-50-7	4-Chloro-3-methylphenol	U	457	ug/kg	91.5	457
83-32-9	Acenaphthene	U	45.7	ug/kg	15.1	45.7
121-14-2	2,4-Dinitrotoluene	U	457	ug/kg	45.7	457
100-02-7	4-Nitrophenol	U	457	ug/kg	151	457
87-86-5	Pentachlorophenol	U	457	ug/kg	114	457
129-00-0	Pyrene	U	45.7	ug/kg	13.7	45.7
110-86-1	Pyridine	U	457	ug/kg	91.5	457
62-53-3	Aniline	U	457	ug/kg	137	457
111-44-4	bis(2-Chloroethyl) ether	U	457	ug/kg	91.5	457
541-73-1	1,3-Dichlorobenzene	U	457	ug/kg	91.5	457
100-51-6	Benzyl alcohol	U	457	ug/kg	137	457
95-50-1	1,2-Dichlorobenzene	U	457	ug/kg	91.5	457
108-60-1	bis(2-Chloroisopropyl)ether	U	457	ug/kg	91.5	457
95-48-7	o-Cresol	U	457	ug/kg	91.5	457
65794-96-9	m,p-Cresols	U	457	ug/kg	137	457
67-72-1	Hexachloroethane	U	457	ug/kg	91.5	457
98-95-3	Nitrobenzene	U	457	ug/kg	91.5	457
78-59-1	Isophorone	U	457	ug/kg	91.5	457
88-75-5	2-Nitrophenol	U	457	ug/kg	91.5	457
105-67-9	2,4-Dimethylphenol	U	457	ug/kg	160	457
111-91-1	bis(2-Chloroethoxy)methane	U	457	ug/kg	91.5	457
120-83-2	2,4-Dichlorophenol	U	457	ug/kg	91.5	457
65-85-0	Benzoic acid	U	915	ug/kg	229	915
91-20-3	Naphthalene	U	45.7	ug/kg	13.7	45.7
106-47-8	4-Chloroaniline	U	457	ug/kg	91.5	457
87-68-3	Hexachlorobutadiene	U	457	ug/kg	91.5	457
91-57-6	2-Methylnaphthalene	U	45.7	ug/kg	9.15	45.7
77-47-4	Hexachlorocyclopentadiene	U	457	ug/kg	91.5	457
88-06-2	2,4,6-Trichlorophenol	U	457	ug/kg	91.5	457
95-95-4	2,4,5-Trichlorophenol	U	457	ug/kg	91.5	457
91-58-7	2-Chloronaphthalene	U	45.7	ug/kg	15.1	45.7
88-74-4	2-Nitroaniline	U	457	ug/kg	91.5	457
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	457	ug/kg	91.5	457

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13958**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.1**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:10**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0415.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	457	ug/kg	91.5	457
606-20-2	2,6-Dinitrotoluene	U	457	ug/kg	45.7	457
208-96-8	Acenaphthylene	U	45.7	ug/kg	13.7	45.7
51-28-5	2,4-Dinitrophenol	U	915	ug/kg	174	915
132-64-9	Dibenzofuran	U	457	ug/kg	91.5	457
84-66-2	Diethylphthalate	U	457	ug/kg	91.5	457
86-73-7	Fluorene	U	45.7	ug/kg	13.7	45.7
7005-72-3	4-Chlorophenylphenylether	U	457	ug/kg	91.5	457
534-52-1	2-Methyl-4,6-dinitrophenol	U	457	ug/kg	91.5	457
100-01-6	4-Nitroaniline	U	457	ug/kg	137	457
	p-Nitroaniline					
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457
122-66-7	Azobenzene	U	457	ug/kg	91.5	457
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	457	ug/kg	91.5	457
118-74-1	Hexachlorobenzene	U	457	ug/kg	91.5	457
85-01-8	Phenanthrene	U	45.7	ug/kg	13.7	45.7
120-12-7	Anthracene	U	45.7	ug/kg	9.15	45.7
84-74-2	Di-n-butylphthalate	U	457	ug/kg	91.5	457
206-44-0	Fluoranthene	U	45.7	ug/kg	13.7	45.7
85-68-7	Butylbenzylphthalate	U	457	ug/kg	91.5	457
56-55-3	Benzo(a)anthracene	U	45.7	ug/kg	13.7	45.7
91-94-1	3,3'-Dichlorobenzidine	U	457	ug/kg	137	457
218-01-9	Chrysene	U	45.7	ug/kg	13.7	45.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	457	ug/kg	91.5	457
117-84-0	Di-n-octylphthalate	U	457	ug/kg	91.5	457
205-99-2	Benzo(b)fluoranthene	U	45.7	ug/kg	13.7	45.7
207-08-9	Benzo(k)fluoranthene	U	45.7	ug/kg	13.7	45.7
50-32-8	Benzo(a)pyrene	U	45.7	ug/kg	13.7	45.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.7	ug/kg	13.7	45.7
53-70-3	Dibenzo(a,h)anthracene	U	45.7	ug/kg	13.7	45.7
191-24-2	Benzo(ghi)perylene	U	45.7	ug/kg	13.7	45.7
120-82-1	1,2,4-Trichlorobenzene	U	457	ug/kg	91.5	457

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	456	ug/kg		J
	Unknown Aldol Condensate	3.38	445	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418003**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13959**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:41**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0414.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.8	404
108-95-2	Phenol	U	404	ug/kg	80.8	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.8	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.8	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.8	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.8	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene		135	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.8	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.8	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.8	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.8	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.8	404
95-48-7	o-Cresol	U	404	ug/kg	80.8	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.8	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.8	404
78-59-1	Isophorone	U	404	ug/kg	80.8	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.8	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.8	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.8	404
65-85-0	Benzoic acid	U	808	ug/kg	202	808
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.8	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.8	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.08	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.8	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.8	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.8	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.8	404
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	404	ug/kg	80.8	404

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418003**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13959**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:41**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0414.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	404	ug/kg	80.8	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	808	ug/kg	154	808
132-64-9	Dibenzofuran	U	404	ug/kg	80.8	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.8	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.8	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.8	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	p-Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.8	404
122-66-7	Azobenzene	U	404	ug/kg	80.8	404
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.8	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.8	404
85-01-8	Phenanthrene		71.5	ug/kg	12.1	40.4
120-12-7	Anthracene	J	10.6	ug/kg	8.08	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.8	404
206-44-0	Fluoranthene		184	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.8	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene		69.0	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.8	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.8	404
205-99-2	Benzo(b)fluoranthene		90.3	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene		41.0	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene		65.1	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene		150	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	J	34.1	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.8	404

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.24	615	ug/kg		J
	Unknown Aldol Condensate	3.38	422	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0413.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.5	388
108-95-2	Phenol	U	388	ug/kg	77.5	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.5	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.5	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.5	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.5	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	96.9	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.5	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.5	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.5	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.5	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.5	388
95-48-7	o-Cresol	U	388	ug/kg	77.5	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.5	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.5	388
78-59-1	Isophorone	U	388	ug/kg	77.5	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.5	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.5	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.5	388
65-85-0	Benzoic acid	U	775	ug/kg	194	775
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.5	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.5	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.75	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.5	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.5	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.5	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.5	388
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	388	ug/kg	77.5	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	14.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13960	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 15:13	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s6l0413.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.5	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	775	ug/kg	147	775
132-64-9	Dibenzofuran	U	388	ug/kg	77.5	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.5	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.5	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.5	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.5	388
122-66-7	Azobenzene	U	388	ug/kg	77.5	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.5	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.5	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.75	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.5	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.5	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.5	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.5	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.5	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	347	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0412.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401
108-95-2	Phenol	U	401	ug/kg	80.2	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	J	39.3	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.2	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401
95-48-7	o-Cresol	U	401	ug/kg	80.2	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401
78-59-1	Isophorone	U	401	ug/kg	80.2	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401
65-85-0	Benzoic acid	U	802	ug/kg	201	802
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.2	401
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	401	ug/kg	80.2	401

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13961	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 14:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s610412.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	p-Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401
122-66-7	Azobenzene	U	401	ug/kg	80.2	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401
85-01-8	Phenanthrene	J	17.1	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401
206-44-0	Fluoranthene		55.4	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401
56-55-3	Benzo(a)anthracene	J	17.8	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	J	32.8	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401
205-99-2	Benzo(b)fluoranthene		46.2	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	J	13.3	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	J	27.7	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene		140	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	J	21.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	342	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418007**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13962**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:34**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s610418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	381	ug/kg	76.1	381
108-95-2	Phenol	U	381	ug/kg	76.1	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.1	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.1	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.1	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.1	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.2	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.1	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.1	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.1	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.1	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.1	381
95-48-7	o-Cresol	U	381	ug/kg	76.1	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.1	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.1	381
78-59-1	Isophorone	U	381	ug/kg	76.1	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.1	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.1	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.1	381
65-85-0	Benzoic acid	U	761	ug/kg	190	761
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.1	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.1	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.61	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.1	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.1	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.1	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.1	381
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	381	ug/kg	76.1	381

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418007**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13962**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:34**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	381	ug/kg	76.1	381
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
51-28-5	2,4-Dinitrophenol	U	761	ug/kg	145	761
132-64-9	Dibenzofuran	U	381	ug/kg	76.1	381
84-66-2	Diethylphthalate	U	381	ug/kg	76.1	381
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.1	381
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.1	381
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381
	p-Nitroaniline					
122-39-4	Diphenylamine	U	381	ug/kg	76.1	381
122-66-7	Azobenzene	U	381	ug/kg	76.1	381
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.1	381
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.1	381
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1
120-12-7	Anthracene	U	38.1	ug/kg	7.61	38.1
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.1	381
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.1	381
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.1	381
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.1	381
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.1	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	226	ug/kg		J
	Unknown Aldol Condensate	3.37	333	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418014	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13963	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 20:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s6l0425.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.0	400
108-95-2	Phenol	U	400	ug/kg	80.0	400
95-57-8	2-Chlorophenol	U	400	ug/kg	80.0	400
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.0	400
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.0	400
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.0	400
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0
110-86-1	Pyridine	U	400	ug/kg	80.0	400
62-53-3	Aniline	U	400	ug/kg	120	400
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.0	400
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.0	400
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.0	400
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.0	400
95-48-7	o-Cresol	U	400	ug/kg	80.0	400
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400
67-72-1	Hexachloroethane	U	400	ug/kg	80.0	400
98-95-3	Nitrobenzene	U	400	ug/kg	80.0	400
78-59-1	Isophorone	U	400	ug/kg	80.0	400
88-75-5	2-Nitrophenol	U	400	ug/kg	80.0	400
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.0	400
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.0	400
65-85-0	Benzoic acid	U	800	ug/kg	200	800
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0
106-47-8	4-Chloroaniline	U	400	ug/kg	80.0	400
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.0	400
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.00	40.0
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.0	400
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.0	400
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.0	400
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0
88-74-4	2-Nitroaniline	U	400	ug/kg	80.0	400
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	400	ug/kg	80.0	400

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418014	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13963	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 20:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s6l0425.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	400	ug/kg	80.0	400
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0
51-28-5	2,4-Dinitrophenol	U	800	ug/kg	152	800
132-64-9	Dibenzofuran	U	400	ug/kg	80.0	400
84-66-2	Diethylphthalate	U	400	ug/kg	80.0	400
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.0	400
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.0	400
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400
	p-Nitroaniline					
122-39-4	Diphenylamine	U	400	ug/kg	80.0	400
122-66-7	Azobenzene	U	400	ug/kg	80.0	400
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.0	400
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.0	400
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0
120-12-7	Anthracene	U	40.0	ug/kg	8.00	40.0
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.0	400
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.0	400
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.0	400
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.0	400
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.0	400

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	331	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 19:23**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0422.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	383	ug/kg	76.5	383
108-95-2	Phenol	U	383	ug/kg	76.5	383
95-57-8	2-Chlorophenol	U	383	ug/kg	76.5	383
106-46-7	1,4-Dichlorobenzene	U	383	ug/kg	76.5	383
621-64-7	N-Nitrosodipropylamine	U	383	ug/kg	76.5	383
59-50-7	4-Chloro-3-methylphenol	U	383	ug/kg	76.5	383
83-32-9	Acenaphthene	U	38.3	ug/kg	12.6	38.3
121-14-2	2,4-Dinitrotoluene	U	383	ug/kg	38.3	383
100-02-7	4-Nitrophenol	U	383	ug/kg	126	383
87-86-5	Pentachlorophenol	U	383	ug/kg	95.6	383
129-00-0	Pyrene	U	38.3	ug/kg	11.5	38.3
110-86-1	Pyridine	U	383	ug/kg	76.5	383
62-53-3	Aniline	U	383	ug/kg	115	383
111-44-4	bis(2-Chloroethyl) ether	U	383	ug/kg	76.5	383
541-73-1	1,3-Dichlorobenzene	U	383	ug/kg	76.5	383
100-51-6	Benzyl alcohol	U	383	ug/kg	115	383
95-50-1	1,2-Dichlorobenzene	U	383	ug/kg	76.5	383
108-60-1	bis(2-Chloroisopropyl)ether	U	383	ug/kg	76.5	383
95-48-7	o-Cresol	U	383	ug/kg	76.5	383
65794-96-9	m,p-Cresols	U	383	ug/kg	115	383
67-72-1	Hexachloroethane	U	383	ug/kg	76.5	383
98-95-3	Nitrobenzene	U	383	ug/kg	76.5	383
78-59-1	Isophorone	U	383	ug/kg	76.5	383
88-75-5	2-Nitrophenol	U	383	ug/kg	76.5	383
105-67-9	2,4-Dimethylphenol	U	383	ug/kg	134	383
111-91-1	bis(2-Chloroethoxy)methane	U	383	ug/kg	76.5	383
120-83-2	2,4-Dichlorophenol	U	383	ug/kg	76.5	383
65-85-0	Benzoic acid	U	765	ug/kg	191	765
91-20-3	Naphthalene	U	38.3	ug/kg	11.5	38.3
106-47-8	4-Chloroaniline	U	383	ug/kg	76.5	383
87-68-3	Hexachlorobutadiene	U	383	ug/kg	76.5	383
91-57-6	2-Methylnaphthalene	U	38.3	ug/kg	7.65	38.3
77-47-4	Hexachlorocyclopentadiene	U	383	ug/kg	76.5	383
88-06-2	2,4,6-Trichlorophenol	U	383	ug/kg	76.5	383
95-95-4	2,4,5-Trichlorophenol	U	383	ug/kg	76.5	383
91-58-7	2-Chloronaphthalene	U	38.3	ug/kg	12.6	38.3
88-74-4	2-Nitroaniline	U	383	ug/kg	76.5	383
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	383	ug/kg	76.5	383

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s6l0422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	383	ug/kg	76.5	383
606-20-2	2,6-Dinitrotoluene	U	383	ug/kg	38.3	383
208-96-8	Acenaphthylene	U	38.3	ug/kg	11.5	38.3
51-28-5	2,4-Dinitrophenol	U	765	ug/kg	145	765
132-64-9	Dibenzofuran	U	383	ug/kg	76.5	383
84-66-2	Diethylphthalate	U	383	ug/kg	76.5	383
86-73-7	Fluorene	U	38.3	ug/kg	11.5	38.3
7005-72-3	4-Chlorophenylphenylether	U	383	ug/kg	76.5	383
534-52-1	2-Methyl-4,6-dinitrophenol	U	383	ug/kg	76.5	383
100-01-6	4-Nitroaniline	U	383	ug/kg	115	383
	p-Nitroaniline					
122-39-4	Diphenylamine	U	383	ug/kg	76.5	383
122-66-7	Azobenzene	U	383	ug/kg	76.5	383
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	383	ug/kg	76.5	383
118-74-1	Hexachlorobenzene	U	383	ug/kg	76.5	383
85-01-8	Phenanthrene	U	38.3	ug/kg	11.5	38.3
120-12-7	Anthracene	U	38.3	ug/kg	7.65	38.3
84-74-2	Di-n-butylphthalate	U	383	ug/kg	76.5	383
206-44-0	Fluoranthene	U	38.3	ug/kg	11.5	38.3
85-68-7	Butylbenzylphthalate	U	383	ug/kg	76.5	383
56-55-3	Benzo(a)anthracene	U	38.3	ug/kg	11.5	38.3
91-94-1	3,3'-Dichlorobenzidine	U	383	ug/kg	115	383
218-01-9	Chrysene	U	38.3	ug/kg	11.5	38.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	383	ug/kg	76.5	383
117-84-0	Di-n-octylphthalate	U	383	ug/kg	76.5	383
205-99-2	Benzo(b)fluoranthene	U	38.3	ug/kg	11.5	38.3
207-08-9	Benzo(k)fluoranthene	U	38.3	ug/kg	11.5	38.3
50-32-8	Benzo(a)pyrene	U	38.3	ug/kg	11.5	38.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.3	ug/kg	11.5	38.3
53-70-3	Dibenzo(a,h)anthracene	U	38.3	ug/kg	11.5	38.3
191-24-2	Benzo(ghi)perylene	U	38.3	ug/kg	11.5	38.3
120-82-1	1,2,4-Trichlorobenzene	U	383	ug/kg	76.5	383

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.24	160	ug/kg		J
	Unknown Aldol Condensate	3.38	344	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s6l0422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	712	ug/kg		J
	Unknown	17.12	259	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:38**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0416.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.0	375
108-95-2	Phenol	U	375	ug/kg	75.0	375
95-57-8	2-Chlorophenol	U	375	ug/kg	75.0	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.0	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.0	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.0	375
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375
129-00-0	Pyrene	U	37.5	ug/kg	11.2	37.5
110-86-1	Pyridine	U	375	ug/kg	75.0	375
62-53-3	Aniline	U	375	ug/kg	112	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.0	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.0	375
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.0	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.0	375
95-48-7	o-Cresol	U	375	ug/kg	75.0	375
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375
67-72-1	Hexachloroethane	U	375	ug/kg	75.0	375
98-95-3	Nitrobenzene	U	375	ug/kg	75.0	375
78-59-1	Isophorone	U	375	ug/kg	75.0	375
88-75-5	2-Nitrophenol	U	375	ug/kg	75.0	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.0	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.0	375
65-85-0	Benzoic acid	U	750	ug/kg	187	750
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	75.0	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.0	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.50	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.0	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.0	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.0	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	75.0	375
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	375	ug/kg	75.0	375

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:38**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**s610416.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	375	ug/kg	75.0	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5
51-28-5	2,4-Dinitrophenol	U	750	ug/kg	142	750
132-64-9	Dibenzofuran	U	375	ug/kg	75.0	375
84-66-2	Diethylphthalate	U	375	ug/kg	75.0	375
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.0	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.0	375
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375
	p-Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	75.0	375
122-66-7	Azobenzene	U	375	ug/kg	75.0	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.0	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.0	375
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5
120-12-7	Anthracene	U	37.5	ug/kg	7.50	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.0	375
206-44-0	Fluoranthene	U	37.5	ug/kg	11.2	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.0	375
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.0	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.0	375
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.0	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	345	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418012	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13966	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:51	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s610423.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.0	360
108-95-2	Phenol	U	360	ug/kg	72.0	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.0	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.0	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.0	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.0	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.0	360
129-00-0	Pyrene	J	17.4	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.0	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.0	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.0	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.0	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.0	360
95-48-7	o-Cresol	U	360	ug/kg	72.0	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.0	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.0	360
78-59-1	Isophorone	U	360	ug/kg	72.0	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.0	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.0	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.0	360
65-85-0	Benzoic acid	U	720	ug/kg	180	720
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.0	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.0	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.20	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.0	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.0	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.0	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.0	360
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	360	ug/kg	72.0	360

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418012**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13966**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 19:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0423.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	360	ug/kg	72.0	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	720	ug/kg	137	720
132-64-9	Dibenzofuran	U	360	ug/kg	72.0	360
84-66-2	Diethylphthalate	U	360	ug/kg	72.0	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.0	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.0	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	p-Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	72.0	360
122-66-7	Azobenzene	U	360	ug/kg	72.0	360
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.0	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.0	360
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.20	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.0	360
206-44-0	Fluoranthene	J	24.2	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.0	360
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	J	13.0	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.0	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.0	360
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.0	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	324	ug/kg		JA
16327-22-3	1,4-Cyclooctadiene, (Z,Z)-	8.68	186	ug/kg	87	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13967**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:17**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0424.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.7	404
108-95-2	Phenol	U	404	ug/kg	80.7	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.7	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.7	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.7	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.7	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene	J	13.6	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.7	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.7	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.7	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.7	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.7	404
95-48-7	o-Cresol	U	404	ug/kg	80.7	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.7	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.7	404
78-59-1	Isophorone	U	404	ug/kg	80.7	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.7	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.7	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.7	404
65-85-0	Benzoic acid	U	807	ug/kg	202	807
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.7	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.7	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.07	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.7	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.7	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.7	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.7	404
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	404	ug/kg	80.7	404

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13967**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:17**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0424.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	404	ug/kg	80.7	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807
132-64-9	Dibenzofuran	U	404	ug/kg	80.7	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.7	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.7	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.7	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	p-Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.7	404
122-66-7	Azobenzene	U	404	ug/kg	80.7	404
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.7	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.7	404
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4
120-12-7	Anthracene	U	40.4	ug/kg	8.07	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.7	404
206-44-0	Fluoranthene	J	18.3	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.7	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.7	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.7	404
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.7	404

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	280	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 18:56	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s610421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.5	363
108-95-2	Phenol	U	363	ug/kg	72.5	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.5	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.5	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.5	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.5	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.7	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.5	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.5	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.5	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.5	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.5	363
95-48-7	o-Cresol	U	363	ug/kg	72.5	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.5	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.5	363
78-59-1	Isophorone	U	363	ug/kg	72.5	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.5	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.5	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.5	363
65-85-0	Benzoic acid	U	725	ug/kg	181	725
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.5	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.5	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.25	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.5	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.5	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.5	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline	U	363	ug/kg	72.5	363
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	363	ug/kg	72.5	363

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418010**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13968**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:56**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0421.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.5	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	725	ug/kg	138	725
132-64-9	Dibenzofuran	U	363	ug/kg	72.5	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.5	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.5	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.5	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	p-Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.5	363
122-66-7	Azobenzene	U	363	ug/kg	72.5	363
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.5	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.5	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.25	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.5	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.5	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.5	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.5	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.5	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	435	ug/kg		J
	Unknown Aldol Condensate	3.37	325	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 18:56	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s6l0421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	741	ug/kg		J
	Unknown	17.12	269	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418009	Date Received:	11/19/2009 08:45	%Moisture:	13.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13969	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 18:29	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s6l0420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.5	382
108-95-2	Phenol	U	382	ug/kg	76.5	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.5	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.5	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.5	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.5	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.6	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.5	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.5	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.5	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.5	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.5	382
95-48-7	o-Cresol	U	382	ug/kg	76.5	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.5	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.5	382
78-59-1	Isophorone	U	382	ug/kg	76.5	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.5	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.5	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.5	382
65-85-0	Benzoic acid	U	765	ug/kg	191	765
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.5	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.5	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.65	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.5	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.5	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.5	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	382	ug/kg	76.5	382
99-09-2	3-Nitroaniline	U	382	ug/kg	76.5	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418009**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**13.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13969**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:29**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0420.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.5	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	765	ug/kg	145	765
132-64-9	Dibenzofuran	U	382	ug/kg	76.5	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.5	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.5	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.5	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.5	382
122-66-7	Azobenzene	U	382	ug/kg	76.5	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.5	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.5	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.65	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.5	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.5	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.5	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.5	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.5	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	316	ug/kg		JA
	Unknown	16.92	431	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 18:29	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s6l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	17.12	374	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13970**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:06**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.5	372
108-95-2	Phenol	U	372	ug/kg	74.5	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.5	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.5	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.5	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.5	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	93.1	372
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2
110-86-1	Pyridine	U	372	ug/kg	74.5	372
62-53-3	Aniline	U	372	ug/kg	112	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.5	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.5	372
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.5	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.5	372
95-48-7	o-Cresol	U	372	ug/kg	74.5	372
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.5	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.5	372
78-59-1	Isophorone	U	372	ug/kg	74.5	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.5	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.5	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.5	372
65-85-0	Benzoic acid	U	745	ug/kg	186	745
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.5	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.5	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.45	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.5	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.5	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.5	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	372	ug/kg	74.5	372
99-09-2	3-Nitroaniline	U	372	ug/kg	74.5	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 17:06	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s6l0417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.5	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2
51-28-5	2,4-Dinitrophenol	U	745	ug/kg	142	745
132-64-9	Dibenzofuran	U	372	ug/kg	74.5	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.5	372
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.5	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.5	372
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.5	372
122-66-7	Azobenzene	U	372	ug/kg	74.5	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.5	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.5	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.45	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.5	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.5	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.5	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.5	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.5	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.22	942	ug/kg		J
	Unknown Aldol Condensate	3.37	353	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13970**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:06**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.93	1010	ug/kg		J
	Unknown	17.12	535	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418008**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**19**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13971**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 13:41**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s610508.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	411	ug/kg	82.2	411
108-95-2	Phenol	U	411	ug/kg	82.2	411
95-57-8	2-Chlorophenol	U	411	ug/kg	82.2	411
106-46-7	1,4-Dichlorobenzene	U	411	ug/kg	82.2	411
621-64-7	N-Nitrosodipropylamine	U	411	ug/kg	82.2	411
59-50-7	4-Chloro-3-methylphenol	U	411	ug/kg	82.2	411
83-32-9	Acenaphthene	U	41.1	ug/kg	13.6	41.1
121-14-2	2,4-Dinitrotoluene	U	411	ug/kg	41.1	411
100-02-7	4-Nitrophenol	U	411	ug/kg	136	411
87-86-5	Pentachlorophenol	U	411	ug/kg	103	411
129-00-0	Pyrene	U	41.1	ug/kg	12.3	41.1
110-86-1	Pyridine	U	411	ug/kg	82.2	411
62-53-3	Aniline	U	411	ug/kg	123	411
111-44-4	bis(2-Chloroethyl) ether	U	411	ug/kg	82.2	411
541-73-1	1,3-Dichlorobenzene	U	411	ug/kg	82.2	411
100-51-6	Benzyl alcohol	U	411	ug/kg	123	411
95-50-1	1,2-Dichlorobenzene	U	411	ug/kg	82.2	411
108-60-1	bis(2-Chloroisopropyl)ether	U	411	ug/kg	82.2	411
95-48-7	o-Cresol	U	411	ug/kg	82.2	411
65794-96-9	m,p-Cresols	U	411	ug/kg	123	411
67-72-1	Hexachloroethane	U	411	ug/kg	82.2	411
98-95-3	Nitrobenzene	U	411	ug/kg	82.2	411
78-59-1	Isophorone	U	411	ug/kg	82.2	411
88-75-5	2-Nitrophenol	U	411	ug/kg	82.2	411
105-67-9	2,4-Dimethylphenol	U	411	ug/kg	144	411
111-91-1	bis(2-Chloroethoxy)methane	U	411	ug/kg	82.2	411
120-83-2	2,4-Dichlorophenol	U	411	ug/kg	82.2	411
65-85-0	Benzoic acid	U	822	ug/kg	205	822
91-20-3	Naphthalene	U	41.1	ug/kg	12.3	41.1
106-47-8	4-Chloroaniline	U	411	ug/kg	82.2	411
87-68-3	Hexachlorobutadiene	U	411	ug/kg	82.2	411
91-57-6	2-Methylnaphthalene	U	41.1	ug/kg	8.22	41.1
77-47-4	Hexachlorocyclopentadiene	U	411	ug/kg	82.2	411
88-06-2	2,4,6-Trichlorophenol	U	411	ug/kg	82.2	411
95-95-4	2,4,5-Trichlorophenol	U	411	ug/kg	82.2	411
91-58-7	2-Chloronaphthalene	U	41.1	ug/kg	13.6	41.1
88-74-4	2-Nitroaniline	U	411	ug/kg	82.2	411
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	411	ug/kg	82.2	411

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/05/2009 13:41	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s6l0508.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	411	ug/kg	82.2	411
606-20-2	2,6-Dinitrotoluene	U	411	ug/kg	41.1	411
208-96-8	Acenaphthylene	U	41.1	ug/kg	12.3	41.1
51-28-5	2,4-Dinitrophenol	U	822	ug/kg	156	822
132-64-9	Dibenzofuran	U	411	ug/kg	82.2	411
84-66-2	Diethylphthalate	U	411	ug/kg	82.2	411
86-73-7	Fluorene	U	41.1	ug/kg	12.3	41.1
7005-72-3	4-Chlorophenylphenylether	U	411	ug/kg	82.2	411
534-52-1	2-Methyl-4,6-dinitrophenol	U	411	ug/kg	82.2	411
100-01-6	4-Nitroaniline	U	411	ug/kg	123	411
	p-Nitroaniline					
122-39-4	Diphenylamine	U	411	ug/kg	82.2	411
122-66-7	Azobenzene	U	411	ug/kg	82.2	411
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	411	ug/kg	82.2	411
118-74-1	Hexachlorobenzene	U	411	ug/kg	82.2	411
85-01-8	Phenanthrene	U	41.1	ug/kg	12.3	41.1
120-12-7	Anthracene	U	41.1	ug/kg	8.22	41.1
84-74-2	Di-n-butylphthalate	U	411	ug/kg	82.2	411
206-44-0	Fluoranthene	U	41.1	ug/kg	12.3	41.1
85-68-7	Butylbenzylphthalate	U	411	ug/kg	82.2	411
56-55-3	Benzo(a)anthracene	U	41.1	ug/kg	12.3	41.1
91-94-1	3,3'-Dichlorobenzidine	U	411	ug/kg	123	411
218-01-9	Chrysene	U	41.1	ug/kg	12.3	41.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	411	ug/kg	82.2	411
117-84-0	Di-n-octylphthalate	U	411	ug/kg	82.2	411
205-99-2	Benzo(b)fluoranthene	U	41.1	ug/kg	12.3	41.1
207-08-9	Benzo(k)fluoranthene	U	41.1	ug/kg	12.3	41.1
50-32-8	Benzo(a)pyrene	U	41.1	ug/kg	12.3	41.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.1	ug/kg	12.3	41.1
53-70-3	Dibenzo(a,h)anthracene	U	41.1	ug/kg	12.3	41.1
191-24-2	Benzo(ghi)perylene	U	41.1	ug/kg	12.3	41.1
120-82-1	1,2,4-Trichlorobenzene	U	411	ug/kg	82.2	411

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.36	201	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418016**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3913**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 14:08**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0509.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401
108-95-2	Phenol	U	401	ug/kg	80.2	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene		56.6	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.2	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401
95-48-7	o-Cresol	U	401	ug/kg	80.2	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401
78-59-1	Isophorone	U	401	ug/kg	80.2	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401
65-85-0	Benzoic acid	U	802	ug/kg	201	802
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.2	401
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	401	ug/kg	80.2	401

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418016**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3913**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 14:08**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s6I0509.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	p-Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401
122-66-7	Azobenzene	U	401	ug/kg	80.2	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401
85-01-8	Phenanthrene	J	24.3	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401
206-44-0	Fluoranthene		79.7	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene		47.7	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401
205-99-2	Benzo(b)fluoranthene		43.7	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	J	20.9	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene		140	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	J	21.4	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	221	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418015**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3914**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s610426.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	J	13.3	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	382	ug/kg	76.4	382
99-09-2	3-Nitroaniline	U	382	ug/kg	76.4	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418015**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3914**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0426.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.4	382
206-44-0	Fluoranthene	J	15.3	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.22	198	ug/kg		J
	Unknown Aldol Condensate	3.37	275	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.1	**Dilution:**	1
Run Date:	12/04/2009 21:13	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s6l0426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	643	ug/kg		J
	Unknown	17.12	202	ug/kg		J

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-576

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201979040	MB for batch 925648	76	77	84	82	86	93
241418001	RE03-09-13961	64	66	70	70	74	84
241418002	RE03-09-13960	69	70	76	74	74	80
241418003	RE03-09-13959	70	70	77	78	80	95
241418004	RE03-09-13958	69	68	77	78	82	84
241418005	RE03-09-13965	65	62	72	73	75	88
241418006	RE03-09-13970	67	62	76	76	69	88
241418007	RE03-09-13962	65	66	76	76	75	86
241418009	RE03-09-13969	70	68	80	80	76	88
241418010	RE03-09-13968	65	65	79	79	75	86
241418011	RE03-09-13964	65	61	78	77	79	85
241418012	RE03-09-13966	64	64	78	77	69	86
241418013	RE03-09-13967	62	59	76	74	73	84
241418014	RE03-09-13963	60	57	72	71	66	82
241418015	RE03-10-3914	61	58	73	74	66	82
1201979043	LCS for batch 925648	60	69	72	78	97	93
241418008	RE03-09-13971	38	42	46	49	49	55
241418016	RE03-10-3913	37	42	45	49	58	61

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-576**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979041**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 12:44**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1790	0.00	U	677	38	32-90
108-95-2	MS	Phenol	1790	0.00	U	1100	61	32-105
95-57-8	MS	2-Chlorophenol	1790	0.00	U	1120	63	33-106
106-46-7	MS	1,4-Dichlorobenzene	1790	0.00	U	1110	62	33-95
621-64-7	MS	N-Nitrosodipropylamine	1790	0.00	U	1240	70	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1790	0.00	U	1430	80	38-119
83-32-9	MS	Acenaphthene	1790	0.00	U	1230	69	39-100
121-14-2	MS	2,4-Dinitrotoluene	1790	0.00	U	1480	83	42-107
100-02-7	MS	4-Nitrophenol	1790	0.00	U	1130	64	24-120
87-86-5	MS	Pentachlorophenol	1790	0.00	U	1430	80	26-121
129-00-0	MS	Pyrene	1790	0.00	U	1430	80	34-120
110-86-1	MS	Pyridine	1790	0.00	U	681	38	30-95
62-53-3	MS	Aniline	1790	0.00	U	1150	64	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1790	0.00	U	1030	58	34-101
541-73-1	MS	1,3-Dichlorobenzene	1790	0.00	U	1090	61	31-97
100-51-6	MS	Benzyl alcohol	1790	0.00	U	548	31	17-120
95-50-1	MS	1,2-Dichlorobenzene	1790	0.00	U	1160	65	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1790	0.00	U	1160	65	32-113
95-48-7	MS	o-Cresol	1790	0.00	U	1220	68	31-119
65794-96-9	MS	m,p-Cresols	1790	0.00	U	1480	83	35-125
67-72-1	MS	Hexachloroethane	1790	0.00	U	1100	62	30-100
98-95-3	MS	Nitrobenzene	1790	0.00	U	1220	68	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13812MS
Lab Sample ID: 1201979041
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 12:44
Prep Batch ID: 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1790	0.00	U	1310	73	34-110
88-75-5	MS	2-Nitrophenol	1790	0.00	U	1320	74	32-108
105-67-9	MS	2,4-Dimethylphenol	1790	0.00	U	1080	61	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1790	0.00	U	1230	69	35-108
120-83-2	MS	2,4-Dichlorophenol	1790	0.00	U	1350	75	38-110
65-85-0	MS	Benzoic acid	3570	0.00	U	2470	69	18-134
91-20-3	MS	Naphthalene	1790	0.00	U	1200	67	31-105
106-47-8	MS	4-Chloroaniline	1790	0.00	U	1120	63	29-123
87-68-3	MS	Hexachlorobutadiene	1790	0.00	U	1220	68	31-109
91-57-6	MS	2-Methylnaphthalene	1790	0.00	U	1450	81	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1790	0.00	U	1340	75	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1790	0.00	U	1290	72	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1790	0.00	U	1420	80	37-116
91-58-7	MS	2-Chloronaphthalene	1790	0.00	U	1260	70	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1790	0.00	U	1130	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1790	0.00	U	1240	70	39-117
131-11-3	MS	Dimethylphthalate	1790	0.00	U	1360	76	41-105
606-20-2	MS	2,6-Dinitrotoluene	1790	0.00	U	1410	79	41-103
208-96-8	MS	Acenaphthylene	1790	0.00	U	1360	76	41-103
51-28-5	MS	2,4-Dinitrophenol	1790	0.00	U	1490	83	25-104
132-64-9	MS	Dibenzofuran	1790	0.00	U	1610	90	40-114
84-66-2	MS	Diethylphthalate	1790	0.00	U	1410	79	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13812MS
Lab Sample ID: 1201979041
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 12:44
Prep Batch ID 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1790	0.00	U	1380	77	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1790	0.00	U	1410	79	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1790	0.00	U	1370	76	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1790	0.00	U	1450	81	35-139
122-39-4	MS	Diphenylamine	1790	0.00	U	1390	78	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1790	0.00	U	1370	77	37-118
101-55-3	MS	4-Bromophenylphenylether	1790	0.00	U	1500	84	39-112
118-74-1	MS	Hexachlorobenzene	1790	0.00	U	1510	85	38-113
85-01-8	MS	Phenanthrene	1790	0.00	U	1430	80	38-110
120-12-7	MS	Anthracene	1790	0.00	U	1460	82	38-112
84-74-2	MS	Di-n-butylphthalate	1790	0.00	U	1630	91	42-119
206-44-0	MS	Fluoranthene	1790	0.00	U	1590	89	38-119
85-68-7	MS	Butylbenzylphthalate	1790	0.00	U	1640	92	39-126
56-55-3	MS	Benzo(a)anthracene	1790	0.00	U	1490	83	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1790	0.00	U	1290	72	35-106
218-01-9	MS	Chrysene	1790	0.00	U	1540	86	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1790	0.00	U	1720	96	40-125
117-84-0	MS	Di-n-octylphthalate	1790	0.00	U	1760	98	30-147
205-99-2	MS	Benzo(b)fluoranthene	1790	0.00	U	1590	89	38-117
207-08-9	MS	Benzo(k)fluoranthene	1790	0.00	U	1600	89	39-120
50-32-8	MS	Benzo(a)pyrene	1790	0.00	U	1660	93	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1790	0.00	U	1570	88	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-576**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979041**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 12:44**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1790	0.00	U	1600	90	32-124
191-24-2	MS	Benzo(ghi)perylene	1790	0.00	U	1650	92	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1790	0.00	U	1230	69	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13 **Dilution:** 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1790	0.00	U	692	39	32-90	2	0-30
108-95-2	MSD Phenol	1790	0.00	U	1120	63	32-105	2	0-30
95-57-8	MSD 2-Chlorophenol	1790	0.00	U	1150	65	33-106	3	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1790	0.00	U	1120	63	33-95	1	0-30
621-64-7	MSD N-Nitrosodipropylamine	1790	0.00	U	1260	71	31-109	2	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1790	0.00	U	1110	62	38-119	25	0-30
83-32-9	MSD Acenaphthene	1790	0.00	U	1210	68	39-100	2	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1790	0.00	U	1410	79	42-107	5	0-30
100-02-7	MSD 4-Nitrophenol	1790	0.00	U	1150	64	24-120	1	0-30
87-86-5	MSD Pentachlorophenol	1790	0.00	U	1330	74	26-121	7	0-30
129-00-0	MSD Pyrene	1790	0.00	U	1280	72	34-120	11	0-30
110-86-1	MSD Pyridine	1790	0.00	U	701	39	30-95	3	0-30
62-53-3	MSD Aniline	1790	0.00	U	1170	66	34-111	2	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1790	0.00	U	1060	59	34-101	3	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1790	0.00	U	1130	63	31-97	4	0-30
100-51-6	MSD Benzyl alcohol	1790	0.00	U	368	21	17-120	39 *	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1790	0.00	U	1200	67	32-102	3	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1790	0.00	U	1200	67	32-113	3	0-30
95-48-7	MSD o-Cresol	1790	0.00	U	1080	61	31-119	12	0-30
65794-96-9	MSD m,p-Cresols	1790	0.00	U	1300	73	35-125	13	0-30
67-72-1	MSD Hexachloroethane	1790	0.00	U	1130	63	30-100	3	0-30
98-95-3	MSD Nitrobenzene	1790	0.00	U	1210	68	33-108	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13
Dilution: 1
Prep Batch ID 925648
Batch ID: 925661

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1790	0.00	U	1320	74	34-110	1	0-30
88-75-5	MSD 2-Nitrophenol	1790	0.00	U	1330	74	32-108	1	0-30
105-67-9	MSD 2,4-Dimethylphenol	1790	0.00	U	1070	60	32-115	1	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1790	0.00	U	1250	70	35-108	1	0-30
120-83-2	MSD 2,4-Dichlorophenol	1790	0.00	U	1330	74	38-110	2	0-30
65-85-0	MSD Benzoic acid	3570	0.00	U	2380	67	18-134	4	0-30
91-20-3	MSD Naphthalene	1790	0.00	U	1200	67	31-105	0	0-30
106-47-8	MSD 4-Chloroaniline	1790	0.00	U	1120	63	29-123	0	0-30
87-68-3	MSD Hexachlorobutadiene	1790	0.00	U	1230	69	31-109	1	0-30
91-57-6	MSD 2-Methylnaphthalene	1790	0.00	U	1440	81	32-110	0	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1790	0.00	U	1400	78	21-122	4	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1790	0.00	U	1230	69	37-108	4	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1790	0.00	U	1370	77	37-116	4	0-30
91-58-7	MSD 2-Chloronaphthalene	1790	0.00	U	1240	69	37-103	2	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1790	0.00	U	1120	63	36-115	1	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1790	0.00	U	1230	69	39-117	1	0-30
131-11-3	MSD Dimethylphthalate	1790	0.00	U	1320	74	41-105	4	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1790	0.00	U	1360	76	41-103	4	0-30
208-96-8	MSD Acenaphthylene	1790	0.00	U	1310	73	41-103	4	0-30
51-28-5	MSD 2,4-Dinitrophenol	1790	0.00	U	1380	77	25-104	7	0-30
132-64-9	MSD Dibenzofuran	1790	0.00	U	1550	87	40-114	4	0-30
84-66-2	MSD Diethylphthalate	1790	0.00	U	1320	74	43-110	7	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13
Prep Batch ID 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1790	0.00	U	1340	75	48-99	3	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1790	0.00	U	1350	76	42-111	5	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1790	0.00	U	1260	70	19-118	8	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1790	0.00	U	1380	77	35-139	5	0-30
122-39-4	MSD	Diphenylamine	1790	0.00	U	1300	73	41-112	7	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1790	0.00	U	1300	73	37-118	5	0-30
101-55-3	MSD	4-Bromophenylphenylether	1790	0.00	U	1360	76	39-112	10	0-30
118-74-1	MSD	Hexachlorobenzene	1790	0.00	U	1370	76	38-113	10	0-30
85-01-8	MSD	Phenanthrene	1790	0.00	U	1300	73	38-110	9	0-30
120-12-7	MSD	Anthracene	1790	0.00	U	1360	76	38-112	8	0-30
84-74-2	MSD	Di-n-butylphthalate	1790	0.00	U	1450	81	42-119	12	0-30
206-44-0	MSD	Fluoranthene	1790	0.00	U	1450	81	38-119	9	0-30
85-68-7	MSD	Butylbenzylphthalate	1790	0.00	U	1450	81	39-126	12	0-30
56-55-3	MSD	Benzo(a)anthracene	1790	0.00	U	1350	75	39-110	10	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1790	0.00	U	1180	66	35-106	9	0-30
218-01-9	MSD	Chrysene	1790	0.00	U	1370	77	39-109	11	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1790	0.00	U	1480	83	40-125	15	0-30
117-84-0	MSD	Di-n-octylphthalate	1790	0.00	U	1600	89	30-147	9	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1790	0.00	U	1410	79	38-117	12	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1790	0.00	U	1450	81	39-120	10	0-30
50-32-8	MSD	Benzo(a)pyrene	1790	0.00	U	1490	83	40-115	11	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1790	0.00	U	1340	75	32-120	16	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-576**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13812MSD**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979042**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 13:13**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1790	0.00	U	1330	74	32-124	19	0-30
191-24-2	MSD Benzo(ghi)perylene	1790	0.00	U	1330	75	28-119	21	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1790	0.00	U	1230	69	31-105	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	726	44	31-95
108-95-2	LCS	Phenol	1670	0.0	1140	68	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1160	70	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1170	70	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1280	77	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1350	81	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1250	75	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1510	90	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1140	68	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1540	92	38-116
129-00-0	LCS	Pyrene	1670	0.0	1320	79	43-108
110-86-1	LCS	Pyridine	1670	0.0	721	43	13-129
62-53-3	LCS	Aniline	1670	0.0	1020	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1080	65	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1170	70	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	796	48	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1230	74	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1210	73	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1190	72	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1440	87	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1180	71	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1250	75	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1340	80	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1360	81	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1100	66	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1260	75	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1350	81	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	3350	101	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1230	74	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	988	59	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1270	76	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1460	88	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1480	89	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1290	77	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1410	85	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1260	76	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1150	69	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1210	73	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1400	84	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1430	86	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1350	81	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1570	94	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1590	95	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1400	84	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 925648
Lab Sample ID: J201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1380	83	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1400	84	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1390	83	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1390	84	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1340	80	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1340	81	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1430	86	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1440	87	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1370	82	45-107
120-12-7	LCS	Anthracene	1670	0.0	1400	84	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1560	94	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1530	92	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1480	89	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1430	86	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1250	75	45-98
218-01-9	LCS	Chrysene	1670	0.0	1450	87	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1530	92	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1490	89	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1450	87	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1490	89	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1550	93	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1630	98	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1680	101	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1740	105	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1280	77	36-109

Method Blank Summary

SDG Number:	10-576	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925648	Instrument ID:	MSD6.I	Data File:	s610404-1.d
Lab Sample ID:	1201979040	Prep Date:	11/24/2009 21:57	Analyzed:	12/04/09 11:05
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	RE03-09-13961	241418001	s610412.d	12/04/09	1445
02	RE03-09-13960	241418002	s610413.d	12/04/09	1513
03	RE03-09-13959	241418003	s610414.d	12/04/09	1541
04	RE03-09-13958	241418004	s610415.d	12/04/09	1610
05	RE03-09-13965	241418005	s610416.d	12/04/09	1638
06	RE03-09-13970	241418006	s610417.d	12/04/09	1706
07	RE03-09-13962	241418007	s610418.d	12/04/09	1734
08	RE03-09-13969	241418009	s610420.d	12/04/09	1829
09	RE03-09-13968	241418010	s610421.d	12/04/09	1856
10	RE03-09-13964	241418011	s610422.d	12/04/09	1923
11	RE03-09-13966	241418012	s610423.d	12/04/09	1951
12	RE03-09-13967	241418013	s610424.d	12/04/09	2017
13	RE03-09-13963	241418014	s610425.d	12/04/09	2045
14	RE03-10-3914	241418015	s610426.d	12/04/09	2113
15	LCS for batch 925648	1201979043	s610505.d	12/05/09	1218
18	RE03-09-13971	241418008	s610508.d	12/05/09	1341
19	RE03-10-3913	241418016	s610509.d	12/05/09	1408

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: MSD6.I **Injection Date/Time:** 04-DEC-09 09:48

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120409.b/s6l0401.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.9
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	40.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.1
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	22.9
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	75.1
442	Greater than 40% of mass 198	74.9
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.2	/chem/MSD6.i/s120409.b/s6l0402	04-DEC-09 10:02
APCVS	WBN091201-03.2	/chem/MSD6.i/s120409.b/s6l0403	04-DEC-09 10:30
SBLK01	1201979040	/chem/MSD6.i/s120409.b/s6l0404	04-DEC-09 11:05
RE03-09-13961	241418001	/chem/MSD6.i/s120409.b/s6l0412	04-DEC-09 14:45
RE03-09-13960	241418002	/chem/MSD6.i/s120409.b/s6l0413	04-DEC-09 15:13
RE03-09-13959	241418003	/chem/MSD6.i/s120409.b/s6l0414	04-DEC-09 15:41
RE03-09-13958	241418004	/chem/MSD6.i/s120409.b/s6l0415	04-DEC-09 16:10
RE03-09-13965	241418005	/chem/MSD6.i/s120409.b/s6l0416	04-DEC-09 16:38
RE03-09-13970	241418006	/chem/MSD6.i/s120409.b/s6l0417	04-DEC-09 17:06
RE03-09-13962	241418007	/chem/MSD6.i/s120409.b/s6l0418	04-DEC-09 17:34
RE03-09-13969	241418009	/chem/MSD6.i/s120409.b/s6l0420	04-DEC-09 18:29
RE03-09-13968	241418010	/chem/MSD6.i/s120409.b/s6l0421	04-DEC-09 18:56
RE03-09-13964	241418011	/chem/MSD6.i/s120409.b/s6l0422	04-DEC-09 19:23
RE03-09-13966	241418012	/chem/MSD6.i/s120409.b/s6l0423	04-DEC-09 19:51
RE03-09-13967	241418013	/chem/MSD6.i/s120409.b/s6l0424	04-DEC-09 20:17
RE03-09-13963	241418014	/chem/MSD6.i/s120409.b/s6l0425	04-DEC-09 20:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: MSD6.I **Injection Date/Time:** 04-DEC-09 09:48

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120409.b/s6l0401.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.9
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	40.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.1
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	22.9
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	75.1
442	Greater than 40% of mass 198	74.9
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE03-10-3914	241418015	/chem/MSD6.i/s120409.b/s6l0426	04-DEC-09 21:13

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: MSD6.I **Injection Date/Time:** 05-DEC-09 10:31

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120509.b/s6l0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.4
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	38.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	74.8
442	Greater than 40% of mass 198	84.1
443	17 - 23% of mass 442	19.1

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.4	/chem/MSD6.i/s120509.b/s6l0502	05-DEC-09 10:46
APCVS	WBN091201-03.2	/chem/MSD6.i/s120509.b/s6l0503	05-DEC-09 11:14
SBLK01LCS	1201979043	/chem/MSD6.i/s120509.b/s6l0505	05-DEC-09 12:18
RE03-09-13971	241418008	/chem/MSD6.i/s120509.b/s6l0508	05-DEC-09 13:41
RE03-10-3913	241418016	/chem/MSD6.i/s120509.b/s6l0509	05-DEC-09 14:08

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: MSD6.I **Injection Date/Time:** 09-NOV-09 18:00

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0911.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.7
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.9
442	Greater than 40% of mass 198	77.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL	WBN091106-08	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 18:53
MEGAICAL	WBN091106-07	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 19:31
MEGAICAL	WBN091106-06	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:09
MEGAICAL	WBN091106-05.1	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:46
MEGAICAL	WBN091106-04	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 21:25
MEGAICAL	WBN091106-03	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:01
MEGAICAL	WBN091106-02	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:39
MEGAICAL	WBN091106-01	/chem/MSD6.i/s110909.b/s6k092	09-NOV-09 23:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-576

Instrument ID: MSD6.I **Injection Date/Time:** 10-NOV-09 11:07

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0921.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	72.6
442	Greater than 40% of mass 198	76
443	17 - 23% of mass 442	19.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICAL	WBN091016-01	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 11:59
AP12ICAL	WBN091016-02	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 12:36
AP12ICAL	WBN091016-03	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:13
AP12ICAL	WBN091016-04	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:51
AP12ICAL	WBN091016-05	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 14:30
AP12ICAL	WBN091016-06	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:06
AP12ICAL	WBN091016-07	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:43
MEGAICV	WBN091106-09.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 20:29
AP12ICV	WBN091016-08.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 21:07

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-576

Instrument: MSD6.I

STD Analysis Time: 04-DEC-09 10:02

GC Column: J&W DB-5MS

Data File: s6l0402.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	225677		4.73	911417		5.99	476654		7.86	854008		9.47	749694		12.5	697713		14.7
Upper Limit	451354		5.23	1822834		6.49	953308		8.36	1708016		9.97	1499388		13.0	1395426		15.2
Lower Limit	112839		4.23	455709		5.49	238327		7.36	427004		8.97	374847		12.0	348857		14.2
Sample ID																		
BLK01	216526		4.73	816435		5.99	446630		7.85	758251		9.46	627358		12.5	547730		14.7
RE03-09-13961	212773		4.73	811667		5.99	447163		7.85	771992		9.47	630787		12.5	493626		14.7
RE03-09-13960	218656		4.73	832222		5.99	455494		7.85	796932		9.47	682765		12.5	549886		14.7
RE03-09-13959	228160		4.73	856302		5.99	460820		7.85	780029		9.47	588611		12.5	415307		14.7
RE03-09-13958	220886		4.73	834012		5.99	457406		7.86	826917		9.47	720034		12.5	564292		14.7
RE03-09-13965	224964		4.73	867579		5.99	474628		7.85	813716		9.47	651046		12.5	492469		14.7
RE03-09-13970	219122		4.73	822587		5.99	454812		7.86	779753		9.46	596385		12.5	431021		14.7
RE03-09-13962	232695		4.73	882273		5.99	481803		7.86	841294		9.47	724329		12.5	563835		14.7
RE03-09-13969	235542		4.73	900679		5.99	496673		7.86	870514		9.47	765500		12.5	606667		14.7
RE03-09-13968	234054		4.73	888120		5.99	489597		7.86	858109		9.47	708369		12.5	523399		14.7
RE03-09-13964	240837		4.73	914009		5.99	498717		7.86	877903		9.47	746948		12.5	540932		14.7
RE03-09-13966	239311		4.73	909722		5.99	497625		7.86	874575		9.47	734529		12.5	531534		14.7
RE03-09-13967	240643		4.73	908013		5.99	499200		7.85	883044		9.47	771279		12.5	598134		14.7
RE03-09-13963	235782		4.73	892541		5.99	484563		7.86	855511		9.47	724748		12.5	510359		14.7
RE03-10-3914	235281		4.73	881865		5.99	483177		7.85	810378		9.47	657911		12.5	492317		14.7

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-576

Instrument: MSD6.I

STD Analysis Time: 05-DEC-09 10:46

GC Column: J&W DB-5MS

Data File: s6l0502.d

	1,4-Dichlorobenzene-d4				Naphthalene-d8				Acenaphthene-d10				Phenanthrene-d10				Chrysene-d12				Perylene-d12			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	232623		4.72		1017627		5.99		527825		7.86		924477		9.47		791288		12.5		729958		14.7	
Upper Limit	465246		5.22		2035254		6.49		1055650		8.36		1848954		9.97		1582576		13.0		1459916		15.2	
Lower Limit	116312		4.22		508814		5.49		263913		7.36		462239		8.97		395644		12.0		364979		14.2	
Sample ID																								
BLK01LCS	202793		4.72		868816		5.99		487733		7.85		862246		9.46		740083		12.5		677291		14.7	
RE03-09-13971	218748		4.72		940156		5.98		520482		7.85		891397		9.46		737423		12.5		630388		14.7	
RE03-10-3913	206714		4.72		875935		5.98		496951		7.85		853092		9.46		712930		12.5		600844		14.7	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418004	Date Received:	11/19/2009 08:45	%Moisture:	27.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13958	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 16:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s6l0415.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	457	ug/kg	91.5	457
108-95-2	Phenol	U	457	ug/kg	91.5	457
95-57-8	2-Chlorophenol	U	457	ug/kg	91.5	457
106-46-7	1,4-Dichlorobenzene	U	457	ug/kg	91.5	457
621-64-7	N-Nitrosodipropylamine	U	457	ug/kg	91.5	457
59-50-7	4-Chloro-3-methylphenol	U	457	ug/kg	91.5	457
83-32-9	Acenaphthene	U	45.7	ug/kg	15.1	45.7
121-14-2	2,4-Dinitrotoluene	U	457	ug/kg	45.7	457
100-02-7	4-Nitrophenol	U	457	ug/kg	151	457
87-86-5	Pentachlorophenol	U	457	ug/kg	114	457
129-00-0	Pyrene	U	45.7	ug/kg	13.7	45.7
110-86-1	Pyridine	U	457	ug/kg	91.5	457
62-53-3	Aniline	U	457	ug/kg	137	457
111-44-4	bis(2-Chloroethyl) ether	U	457	ug/kg	91.5	457
541-73-1	1,3-Dichlorobenzene	U	457	ug/kg	91.5	457
100-51-6	Benzyl alcohol	U	457	ug/kg	137	457
95-50-1	1,2-Dichlorobenzene	U	457	ug/kg	91.5	457
108-60-1	bis(2-Chloroisopropyl)ether	U	457	ug/kg	91.5	457
95-48-7	o-Cresol	U	457	ug/kg	91.5	457
65794-96-9	m,p-Cresols	U	457	ug/kg	137	457
67-72-1	Hexachloroethane	U	457	ug/kg	91.5	457
98-95-3	Nitrobenzene	U	457	ug/kg	91.5	457
78-59-1	Isophorone	U	457	ug/kg	91.5	457
88-75-5	2-Nitrophenol	U	457	ug/kg	91.5	457
105-67-9	2,4-Dimethylphenol	U	457	ug/kg	160	457
111-91-1	bis(2-Chloroethoxy)methane	U	457	ug/kg	91.5	457
120-83-2	2,4-Dichlorophenol	U	457	ug/kg	91.5	457
65-85-0	Benzoic acid	U	915	ug/kg	229	915
91-20-3	Naphthalene	U	45.7	ug/kg	13.7	45.7
106-47-8	4-Chloroaniline	U	457	ug/kg	91.5	457
87-68-3	Hexachlorobutadiene	U	457	ug/kg	91.5	457
91-57-6	2-Methylnaphthalene	U	45.7	ug/kg	9.15	45.7
77-47-4	Hexachlorocyclopentadiene	U	457	ug/kg	91.5	457
88-06-2	2,4,6-Trichlorophenol	U	457	ug/kg	91.5	457
95-95-4	2,4,5-Trichlorophenol	U	457	ug/kg	91.5	457
91-58-7	2-Chloronaphthalene	U	45.7	ug/kg	15.1	45.7
88-74-4	2-Nitroaniline	U	457	ug/kg	91.5	457
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	457	ug/kg	91.5	457

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13958**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:10**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0415.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	457	ug/kg	91.5	457
606-20-2	2,6-Dinitrotoluene	U	457	ug/kg	45.7	457
208-96-8	Acenaphthylene	U	45.7	ug/kg	13.7	45.7
51-28-5	2,4-Dinitrophenol	U	915	ug/kg	174	915
132-64-9	Dibenzofuran	U	457	ug/kg	91.5	457
84-66-2	Diethylphthalate	U	457	ug/kg	91.5	457
86-73-7	Fluorene	U	45.7	ug/kg	13.7	45.7
7005-72-3	4-Chlorophenylphenylether	U	457	ug/kg	91.5	457
534-52-1	2-Methyl-4,6-dinitrophenol	U	457	ug/kg	91.5	457
100-01-6	4-Nitroaniline	U	457	ug/kg	137	457
	p-Nitroaniline					
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457
122-66-7	Azobenzene	U	457	ug/kg	91.5	457
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	457	ug/kg	91.5	457
118-74-1	Hexachlorobenzene	U	457	ug/kg	91.5	457
85-01-8	Phenanthrene	U	45.7	ug/kg	13.7	45.7
120-12-7	Anthracene	U	45.7	ug/kg	9.15	45.7
84-74-2	Di-n-butylphthalate	U	457	ug/kg	91.5	457
206-44-0	Fluoranthene	U	45.7	ug/kg	13.7	45.7
85-68-7	Butylbenzylphthalate	U	457	ug/kg	91.5	457
56-55-3	Benzo(a)anthracene	U	45.7	ug/kg	13.7	45.7
91-94-1	3,3'-Dichlorobenzidine	U	457	ug/kg	137	457
218-01-9	Chrysene	U	45.7	ug/kg	13.7	45.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	457	ug/kg	91.5	457
117-84-0	Di-n-octylphthalate	U	457	ug/kg	91.5	457
205-99-2	Benzo(b)fluoranthene	U	45.7	ug/kg	13.7	45.7
207-08-9	Benzo(k)fluoranthene	U	45.7	ug/kg	13.7	45.7
50-32-8	Benzo(a)pyrene	U	45.7	ug/kg	13.7	45.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.7	ug/kg	13.7	45.7
53-70-3	Dibenzo(a,h)anthracene	U	45.7	ug/kg	13.7	45.7
191-24-2	Benzo(ghi)perylene	U	45.7	ug/kg	13.7	45.7
120-82-1	1,2,4-Trichlorobenzene	U	457	ug/kg	91.5	457

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	456	ug/kg		J
	Unknown Aldol Condensate	3.38	445	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610415.d
Lab Smp Id: 241418004 Client Smp ID: RE03-09-13958
Inj Date : 04-DEC-2009 16:10
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418004|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	27.25150	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	220886	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	834012	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	457406	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	826917	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	720034	40.0000	
* 98 Perylene-d12	264	14.736	14.741	(1.000)	564292	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	384068	69.4331	3180
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	473153	67.7725	3100
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	226250	38.3490	1750
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	457118	38.7792	1770
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	109647	82.1299	3760
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	488765	42.0923	1920

ION RATIO REPORT

SV REPORT

Data file: s610415.d
Report Date: 12/05/2009 08:15
Lab. ID: 241418004 SampleType: SAMPLE
Injection Date: 04-DEC-2009 16:10
Operator: nagl Instrument: MSD6.i
Sample Info: |241418004|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	20574	4.35	4.42	80-120	100	(T)
93	644	4.12	4.42	223-283	3	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	32111	5.25	5.10	80-120	100	(T)
42	18395	5.25	5.10	40-100	57	(T)
22 Isophorone		CAS#: 78-59-1				
82	226250	5.25	5.52	80-120	100	(T)
138	4435	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	81524	7.86	7.55	80-120	100	(T)
164	457406	7.86	7.55	0- 40	561	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	60623	7.86	8.06	80-120	100	(T)
89	666	7.86	8.06	41-101	1	(QT)
63	583	7.86	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	6805	8.70	8.45	80-120	100	(T)
165	7032	8.70	8.45	62-122	103	(T)
167	2142	8.70	8.45	0- 44	31	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610415.d
Lab Smp Id: 241418004 Client Smp ID: RE03-09-13958
Inj Date : 04-DEC-2009 16:10
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418004|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	27.25150	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1273154	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.230	317437	9.97323049	456	0		0	10
Unknown Aldol Condensate				CAS #:			
3.379	309506	9.72406989	445	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610415.d
Date : 04-DEC-2009 16:10
Client ID: RE03-09-13958
Sample Info: |2414180041925661|1|SVMFI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

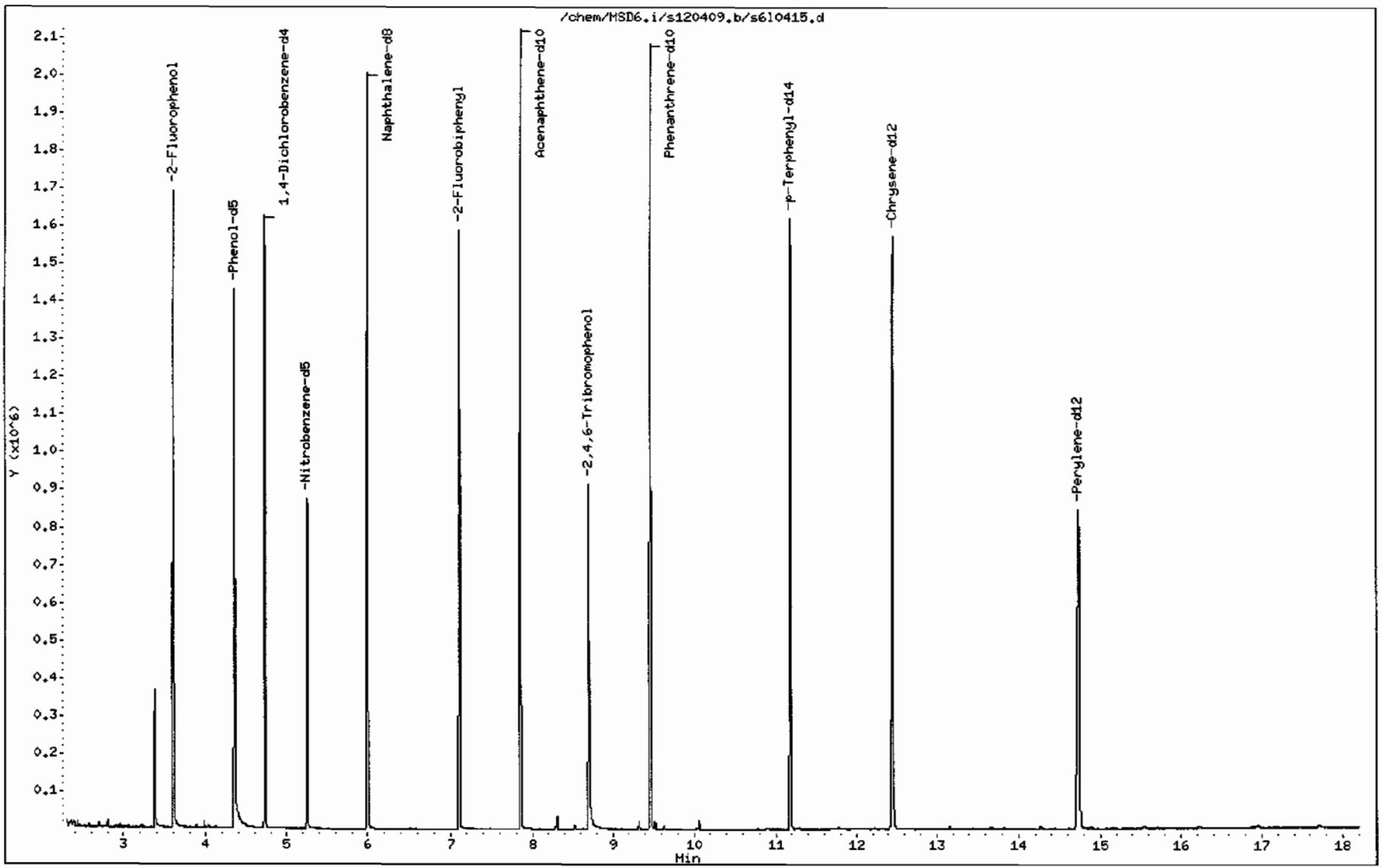

Data File: /chem/MSD6.i/s120409.b/s610415.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13958

Instrument: MSD6.i

Sample Info: |2414180041925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	40	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	12	C7H14O2	130
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	9	CH7N5	89

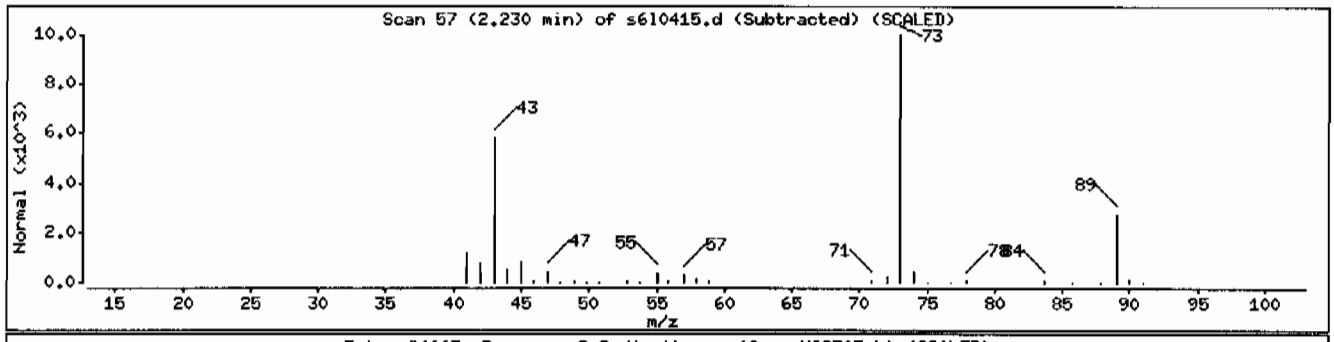

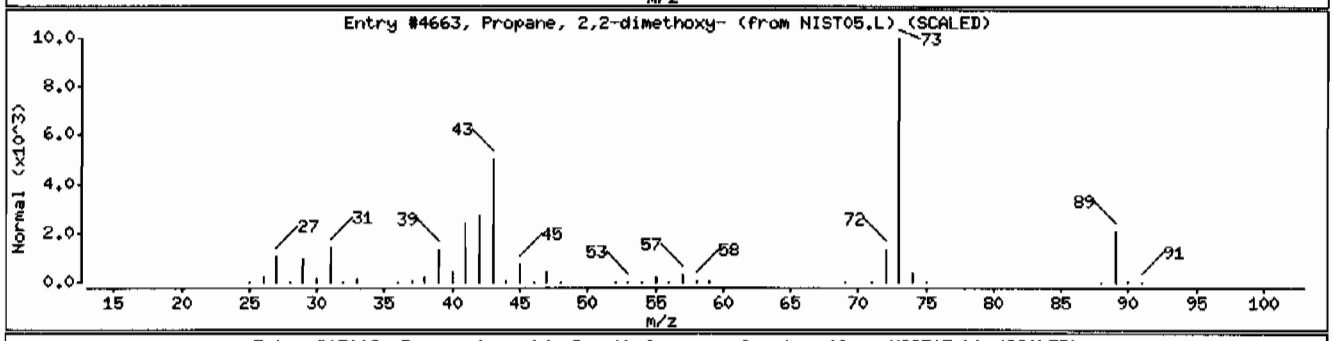

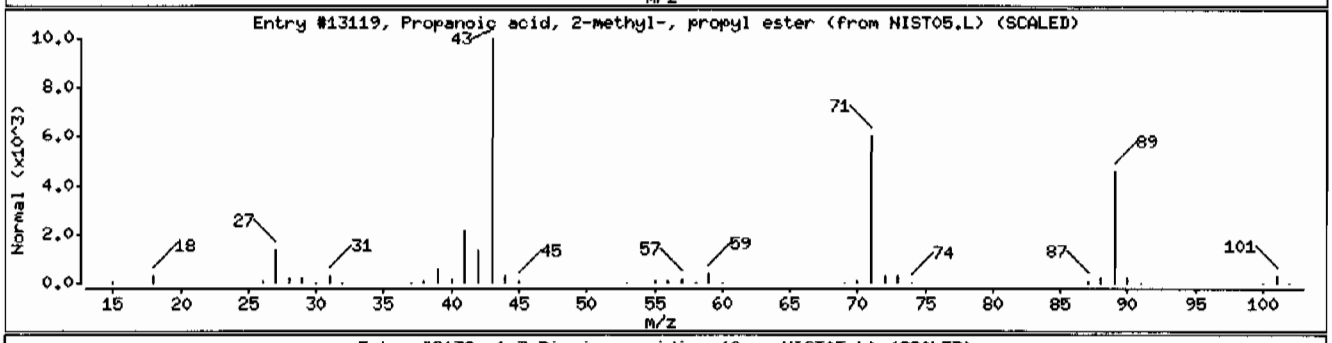

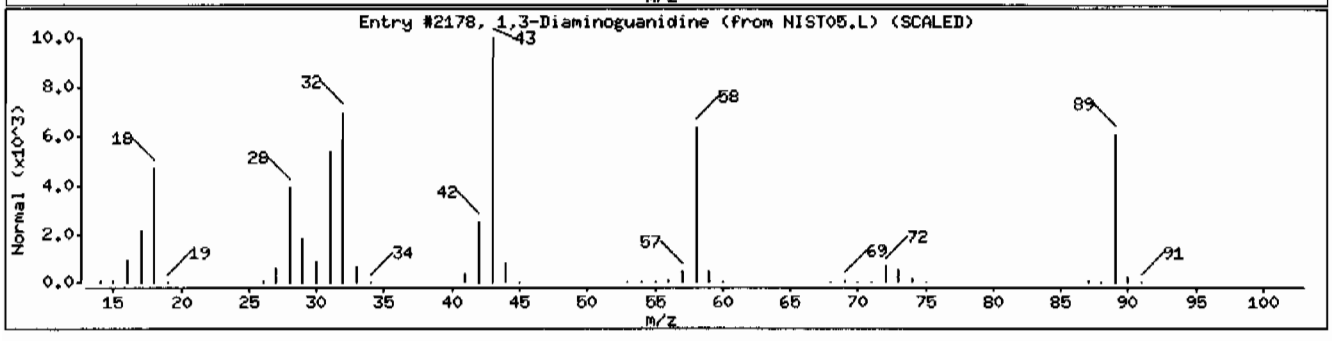

Data File: /chem/MSD6.i/s120409.b/s610415.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13958 Instrument: MSD6.i

Sample Info: |2414180041925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	42	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116

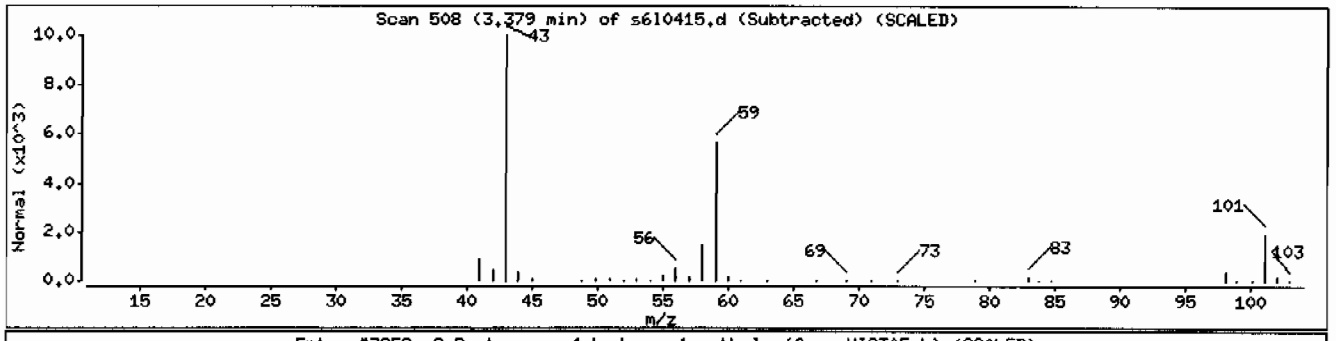

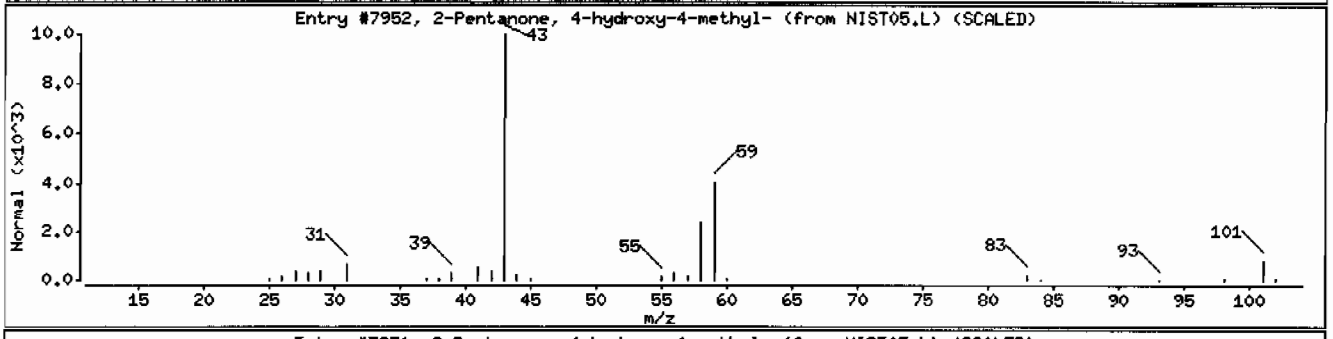

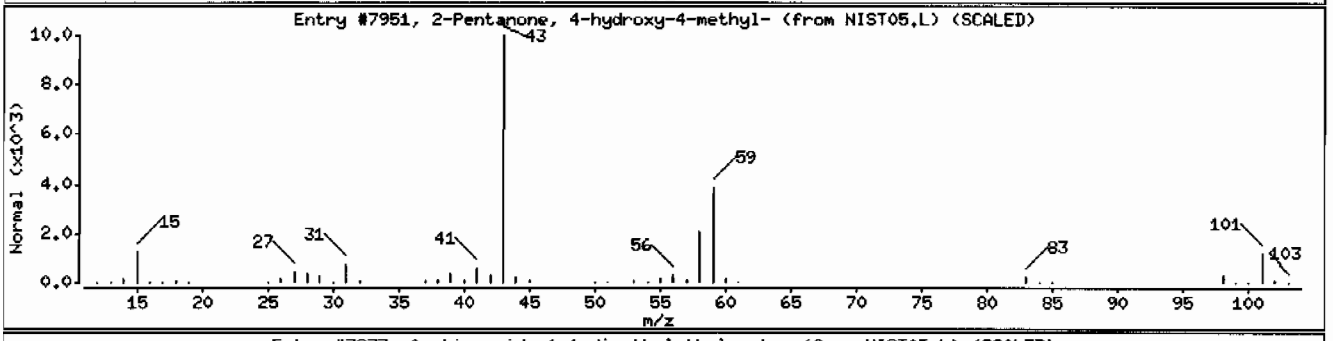

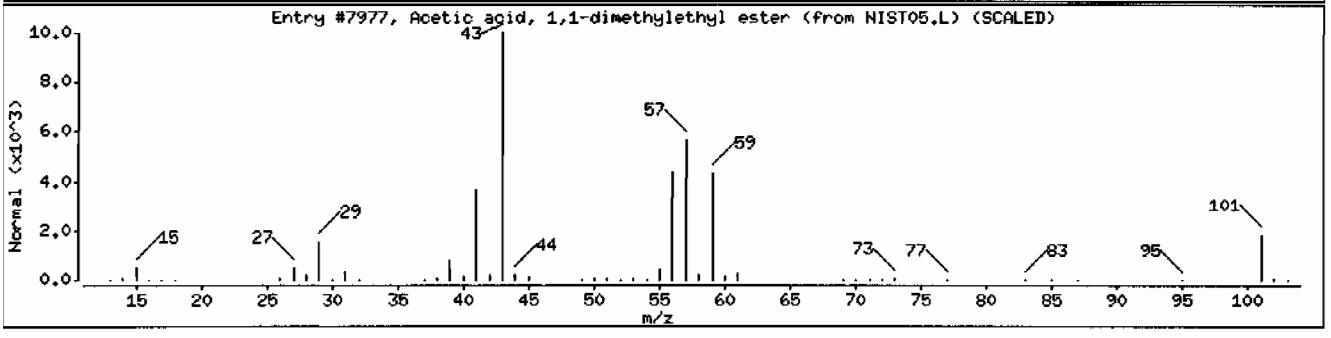

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 15:41	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s6l0414.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.8	404
108-95-2	Phenol	U	404	ug/kg	80.8	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.8	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.8	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.8	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.8	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene		135	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.8	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.8	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.8	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.8	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.8	404
95-48-7	o-Cresol	U	404	ug/kg	80.8	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.8	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.8	404
78-59-1	Isophorone	U	404	ug/kg	80.8	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.8	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.8	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.8	404
65-85-0	Benzoic acid	U	808	ug/kg	202	808
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.8	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.8	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.08	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.8	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.8	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.8	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.8	404
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	404	ug/kg	80.8	404

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418003**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13959**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:41**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0414.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	404	ug/kg	80.8	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	808	ug/kg	154	808
132-64-9	Dibenzofuran	U	404	ug/kg	80.8	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.8	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.8	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.8	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	p-Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.8	404
122-66-7	Azobenzene	U	404	ug/kg	80.8	404
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.8	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.8	404
85-01-8	Phenanthrene		71.5	ug/kg	12.1	40.4
120-12-7	Anthracene	J	10.6	ug/kg	8.08	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.8	404
206-44-0	Fluoranthene		184	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.8	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene		69.0	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.8	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.8	404
205-99-2	Benzo(b)fluoranthene		90.3	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene		41.0	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene		65.1	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene		150	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	J	34.1	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.8	404

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.24	615	ug/kg		J
	Unknown Aldol Condensate	3.38	422	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610414.d
Lab Smp Id: 241418003 Client Smp ID: RE03-09-13959
Inj Date : 04-DEC-2009 15:41
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418003|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	17.68060	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.732	4.729	(1.000)	228160	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	856302	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	460820	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	780029	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	588611	40.0000	
* 98 Perylene-d12	264	14.728	14.741	(1.000)	415307	40.0000	
$ 3 2-Fluorophenol	112	3.605	3.590	(0.762)	397881	69.6370	2810
$ 5 Phenol-d5	99	4.355	4.352	(0.920)	504742	69.9923	2830
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	231778	38.2634	1550
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	460695	38.7931	1570
$ 60 2,4,6-Tribromophenol	329	8.707	8.709	(1.109)	107339	79.8054	3220
$ 81 p-Terphenyl-d14	244	11.178	11.181	(0.898)	450224	47.4303	1920

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	11.028	11.036	(0.886)	53886	3.32838	134
68 Phenanthrene	178	9.486	9.497	(1.002)	28543	1.76942	71.5
69 Anthracene	178	9.543	9.550	(1.008)	4234	0.26260	10.6(a)
76 Fluoranthene	202	10.778	10.783	(1.139)	70223	4.54437	184
92 Chrysene	228	12.481	12.496	(1.002)	20775	1.70734	69.0
95 Benzo(b)fluoranthene	252	14.063	14.076	(0.955)	20524	2.23343	90.2
96 Benzo(k)fluoranthene	252	14.104	14.124	(0.958)	9276	1.01512	41.0
97 Benzo(a)pyrene	252	14.623	14.639	(0.993)	12783	1.61052	65.1
99 Indeno(1,2,3-cd)pyrene	276	16.667	16.695	(1.132)	5483	3.70715	150
101 Benzo(ghi)perylene	276	17.177	17.200	(1.166)	5119	0.84419	34.1(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s610414.d
Report Date: 12/05/2009 08:15
Lab. ID: 241418003 SampleType: SAMPLE
Injection Date: 04-DEC-2009 15:41
Operator: nagl Instrument: MSD6.i
Sample Info: |241418003|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	22755	4.35	4.42	80-120	100	(T)
93	101	4.27	4.42	223-283	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	32353	5.25	5.10	80-120	100	(T)
42	19575	5.26	5.10	40-100	61	(T)
22 Isophorone		CAS#: 78-59-1				
82	231778	5.25	5.52	80-120	100	(T)
138	4766	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	80591	7.86	7.55	80-120	100	(T)
164	460820	7.85	7.55	0- 40	572	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	60175	7.85	8.06	80-120	100	(T)
89	654	7.86	8.06	41-101	1	(QT)
63	662	7.85	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	6713	8.71	8.45	80-120	100	(T)
165	7138	8.70	8.45	62-122	106	(T)
167	2137	8.70	8.45	0- 44	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	164	8.70	8.50	80-120	100	(T)
105	545	8.70	8.50	11- 71	332	(QT)
51	633	8.70	8.50	22- 82	386	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	6967	8.70	8.97	80-120	100	(T)
141	44758	8.70	8.97	45-105	642	(QT)
250	13402	8.70	8.97	67-127	192	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	28543	9.49	9.50	80-120	100	( )
179	4443	9.49	9.50	0- 46	16	( )
176	5206	9.49	9.50	0- 49	18	( )
69 Anthracene				CAS#: 120-12-7		
178	4234	9.54	9.55	80-120	100	( )
179	705	9.54	9.55	0- 46	17	( )
176	469	9.55	9.55	0- 49	11	( )
76 Fluoranthene				CAS#: 206-44-0		
202	70223	10.78	10.78	80-120	100	( )
203	12275	10.78	10.78	0- 48	17	( )
101	9716	10.78	10.78	0- 43	14	( )
79 Pyrene				CAS#: 129-00-0		
202	53886	11.03	11.04	80-120	100	( )
200	10997	11.03	11.04	0- 51	20	( )
101	9357	11.03	11.04	0- 45	17	( )
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	9337	12.43	12.44	80-120	100	( )
226	5312	12.43	12.44	0- 56	57	(Q)
229	2727	12.43	12.44	0- 50	29	( )
92 Chrysene				CAS#: 218-01-9		
228	20775	12.48	12.50	80-120	100	( )
229	4374	12.48	12.50	0- 50	21	( )
226	5413	12.48	12.50	0- 59	26	( )
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	20524	14.06	14.08	80-120	100	( )
253	3990	14.06	14.08	0- 52	19	( )
125	955	14.06	14.07	0- 43	5	( )
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	9276	14.10	14.12	80-120	100	( )
253	590	14.10	14.12	0- 52	6	( )
125	212	14.10	14.12	0- 43	2	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	12783	14.62	14.64	80-120	100	( )
253	933	14.63	14.64	0- 52	7	( )
125	374	14.63	14.64	0- 30	3	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	5483	16.67	16.70	80-120	100	( )
138	1276	16.68	16.70	0- 54	23	( )
100 Dibenzo(a,h)anthracene			CAS#: 53-70-3			
278	318	16.72	16.73	80-120	100	( )
139	0	0.00	16.73	0- 30	0	(T)
101 Benzo(ghi)perylene			CAS#: 191-24-2			
276	5119	17.18	17.20	80-120	100	( )
138	1433	17.17	17.20	0- 30	28	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610414.d
Lab Smp Id: 241418003 Client Smp ID: RE03-09-13959
Inj Date : 04-DEC-2009 15:41
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418003|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	17.68060	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.732	1318119	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.242	501299	15.2125532	615	0		0	10
Unknown Aldol Condensate				CAS #:			
3.381	343767	10.4320328	422	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610414.d
Date : 04-DEC-2009 15:41
Client ID: RE03-09-13959
Sample Info: |24141800319256611|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

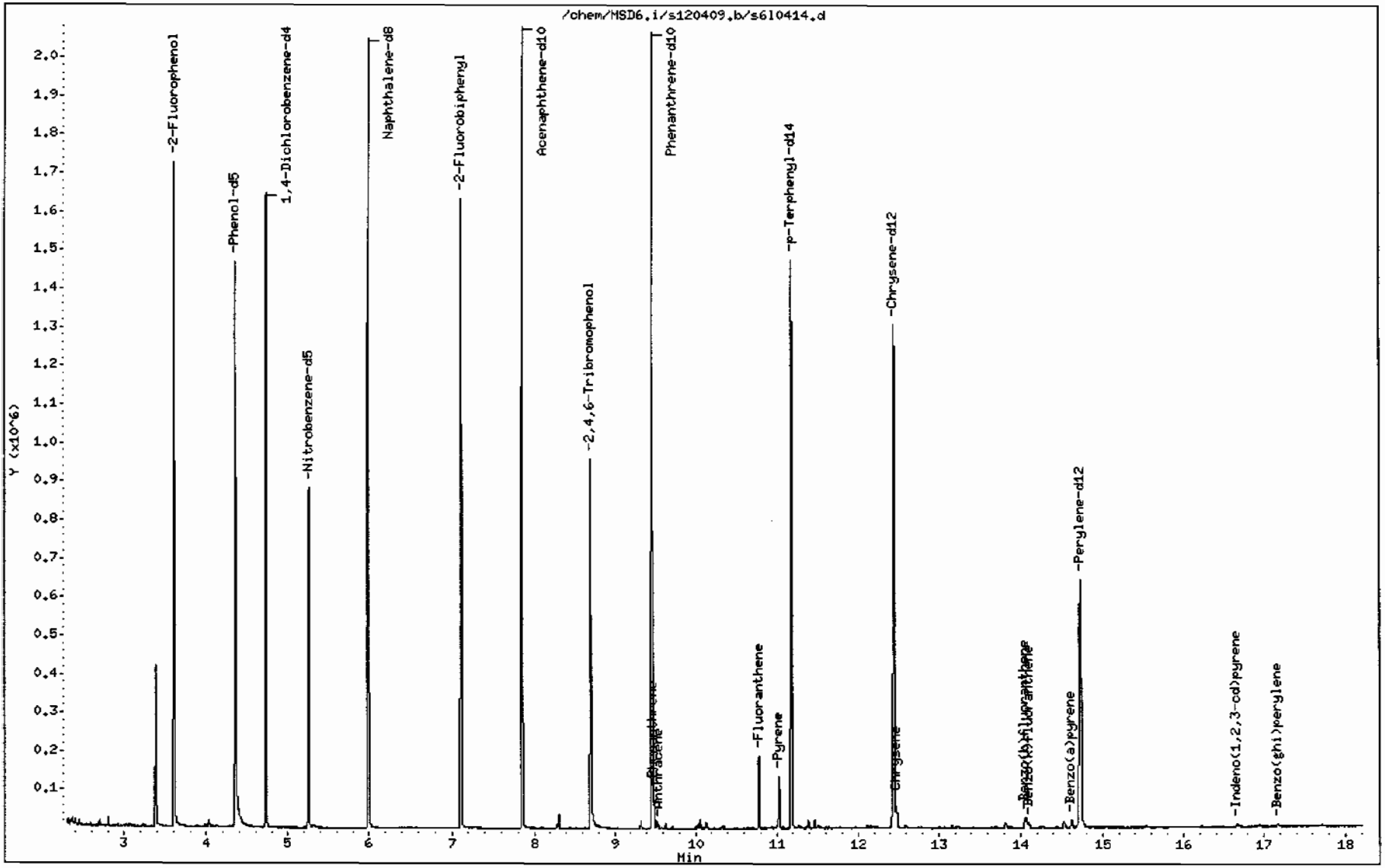

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 134 ug/Kg

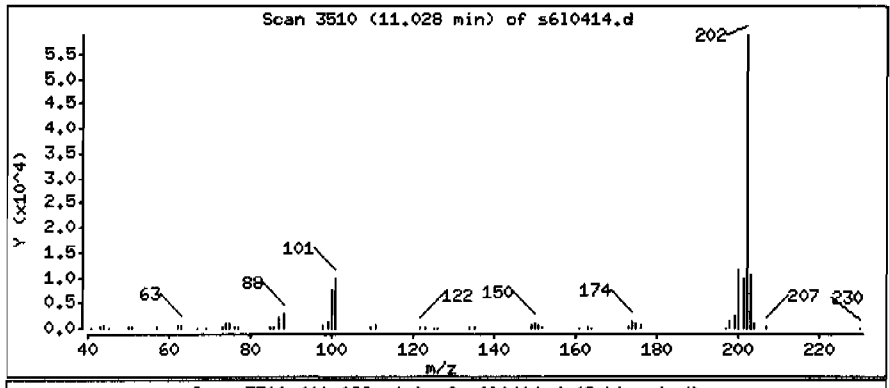

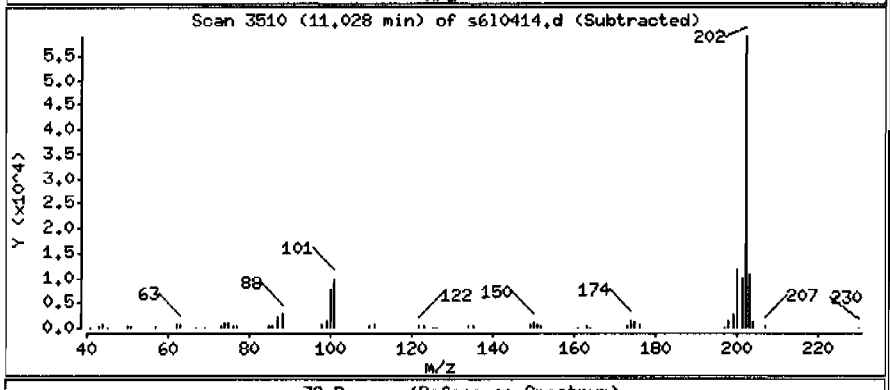

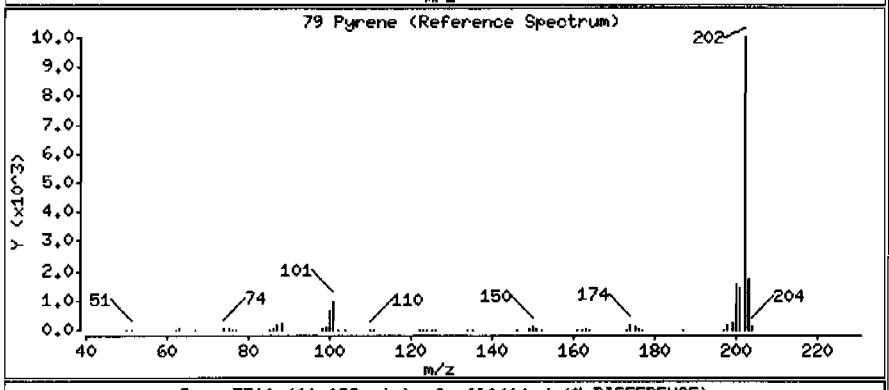

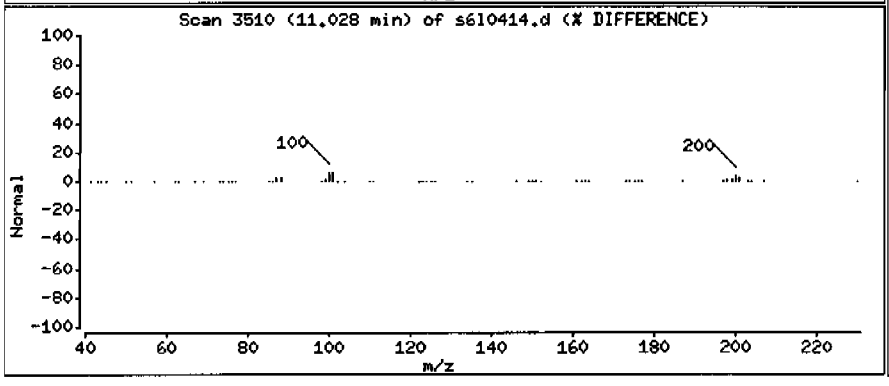

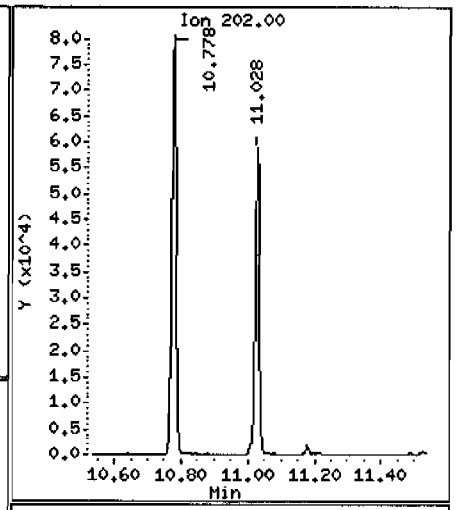

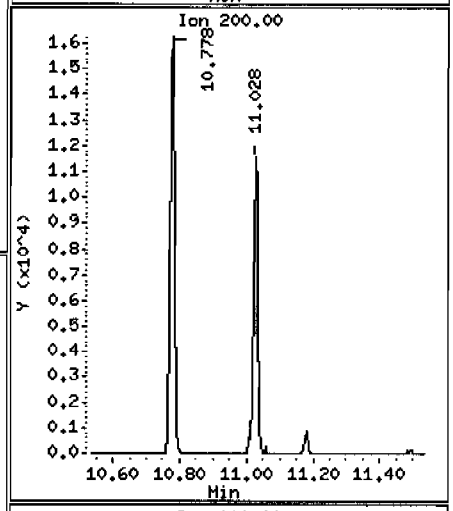

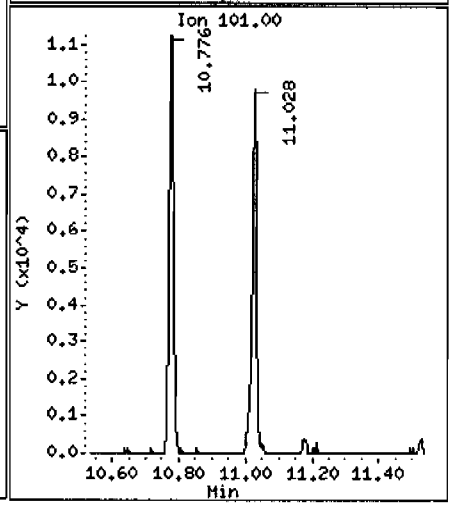

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 71.5 ug/Kg

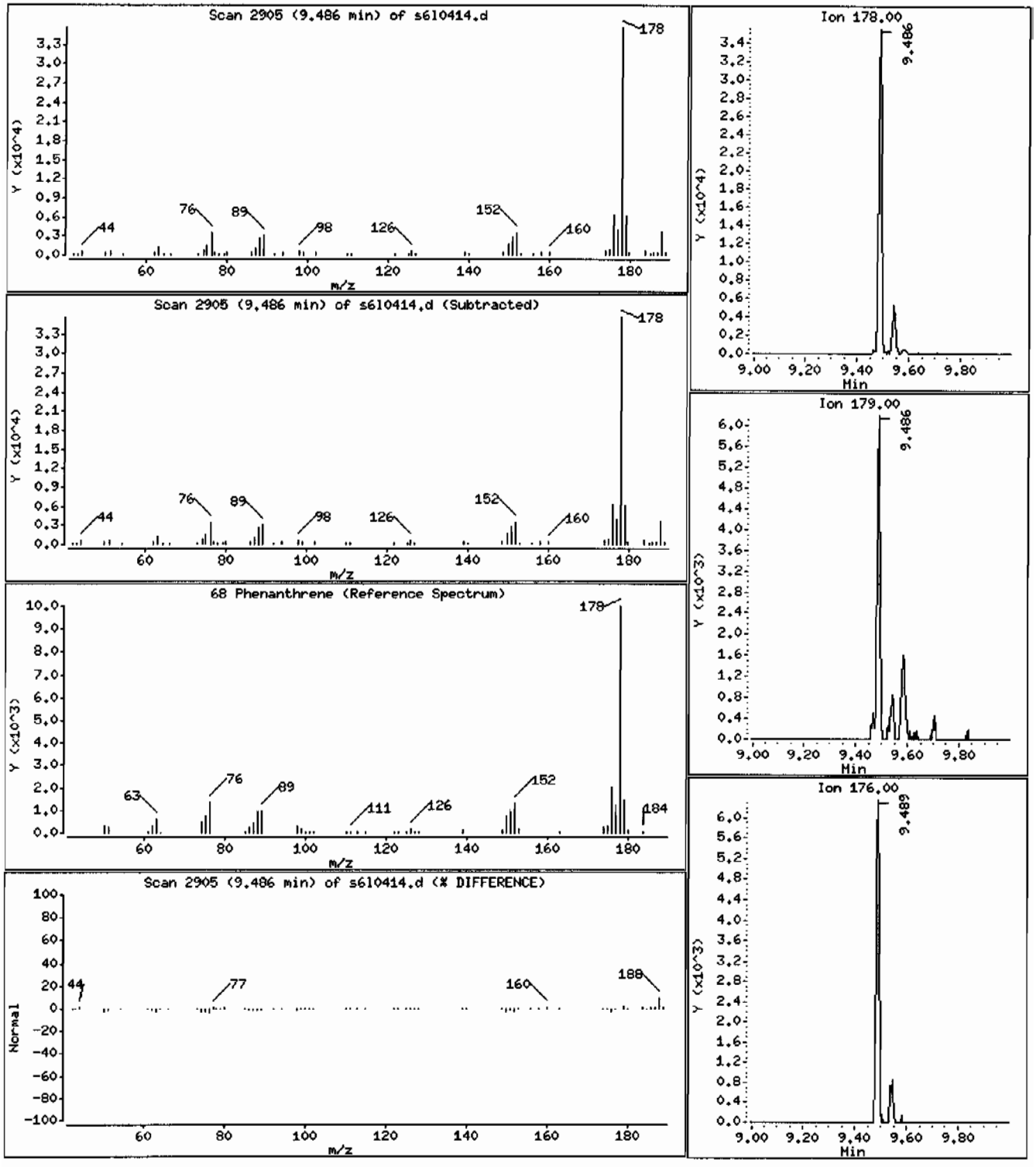

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: 1241418003|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 10.6 ug/Kg

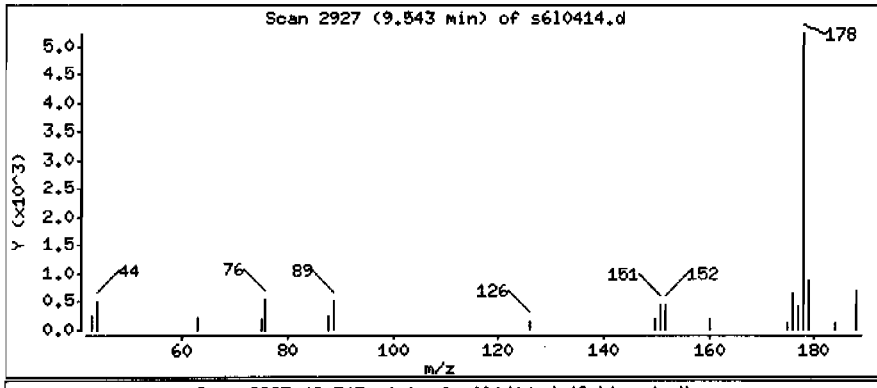

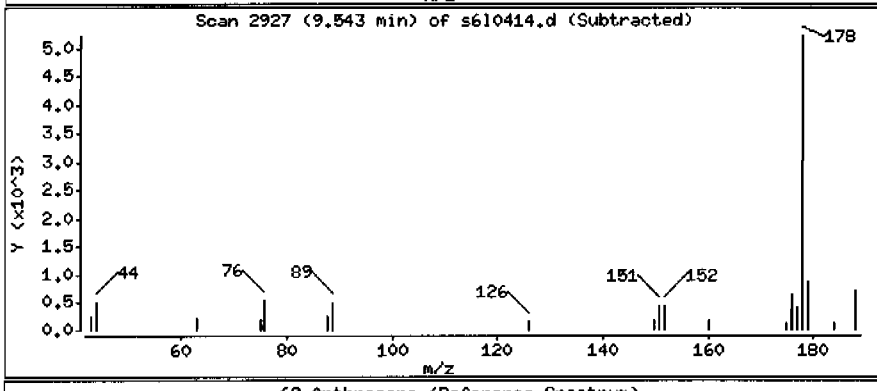

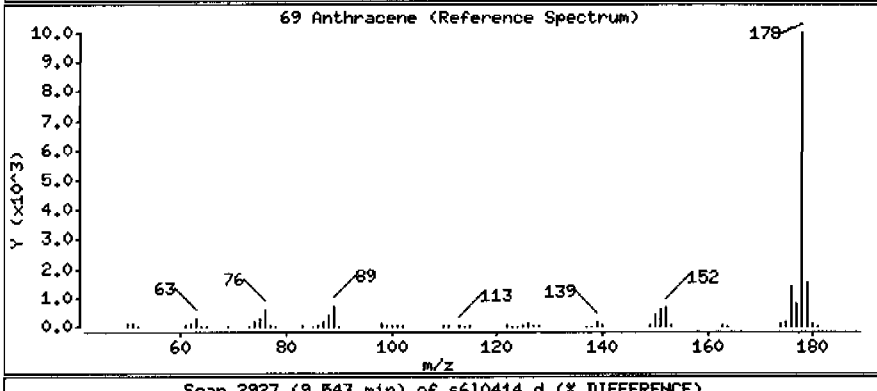

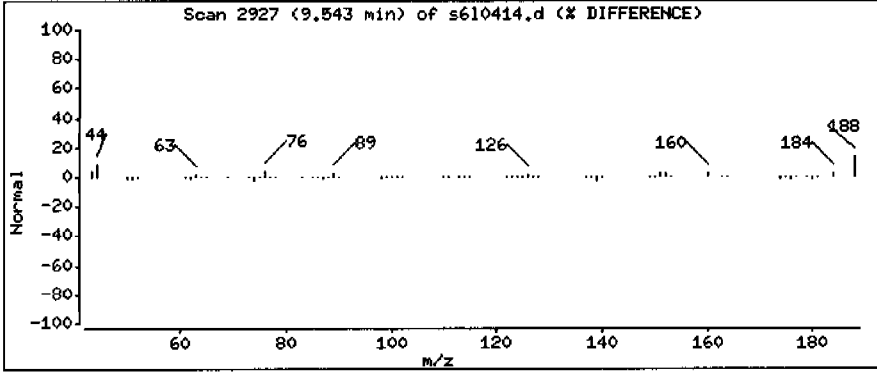

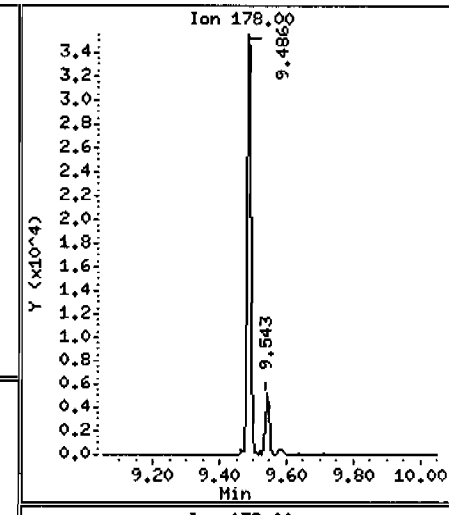

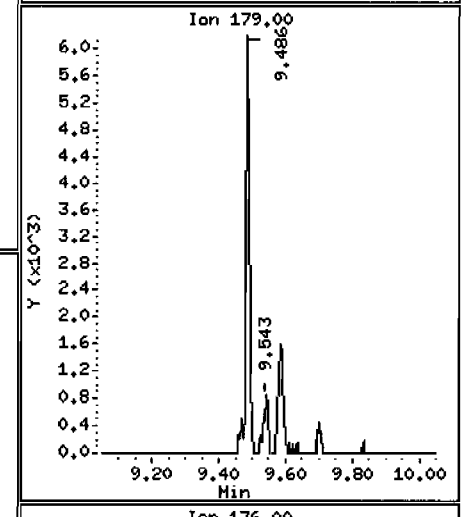

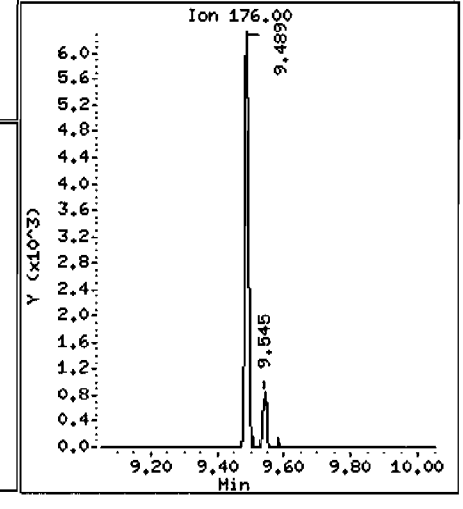

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: I24141B003I925661I1ISVMFI1ILANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 184 ug/Kg

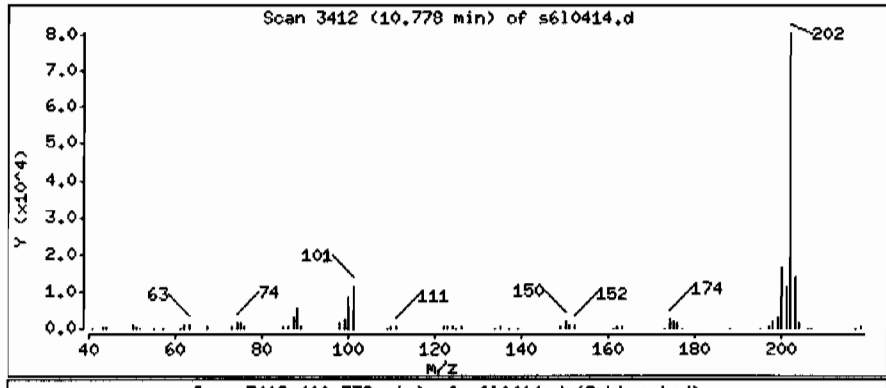

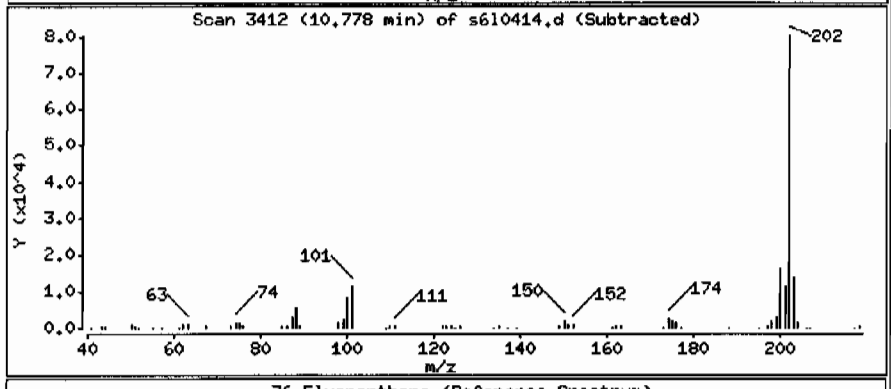

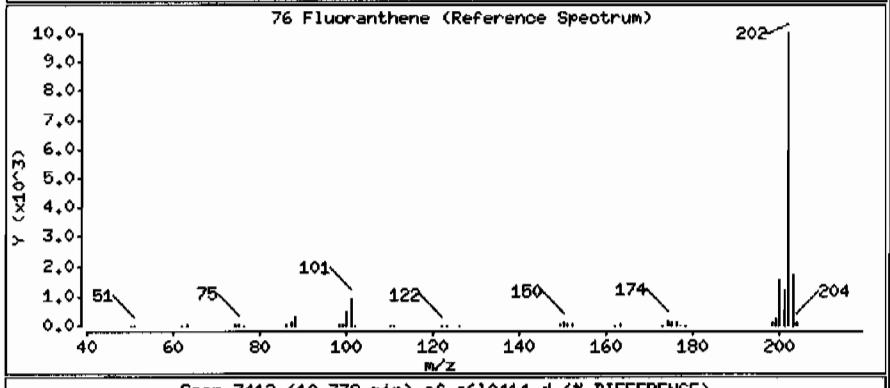

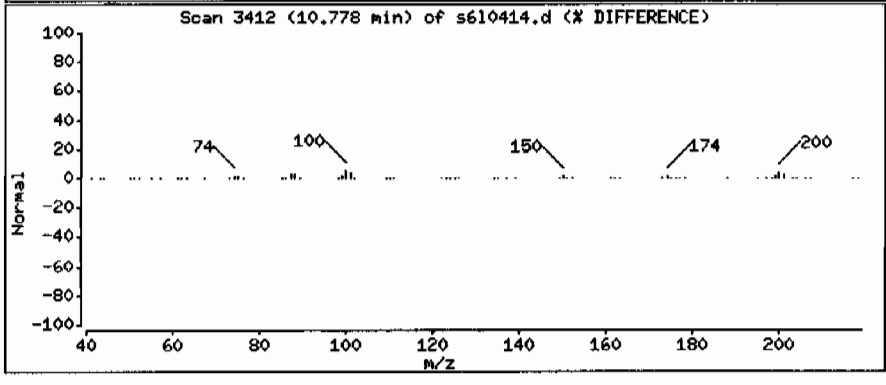

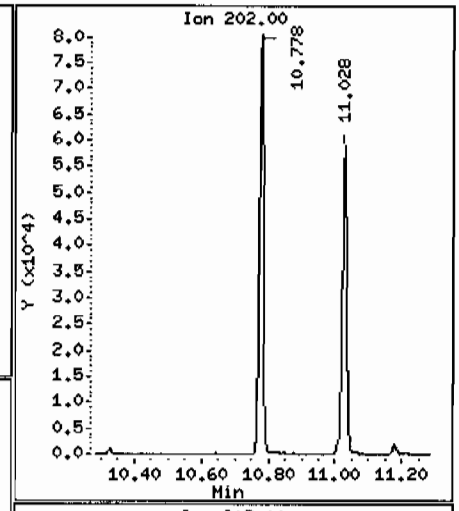

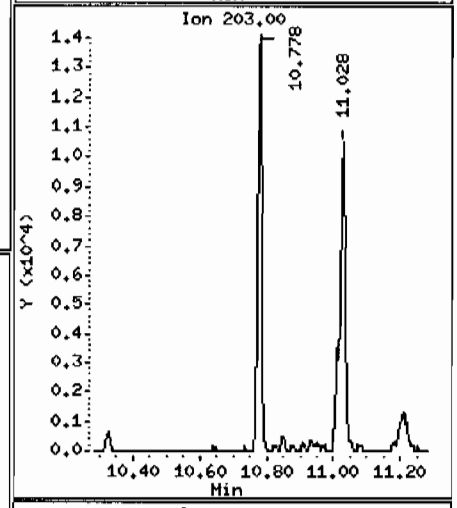

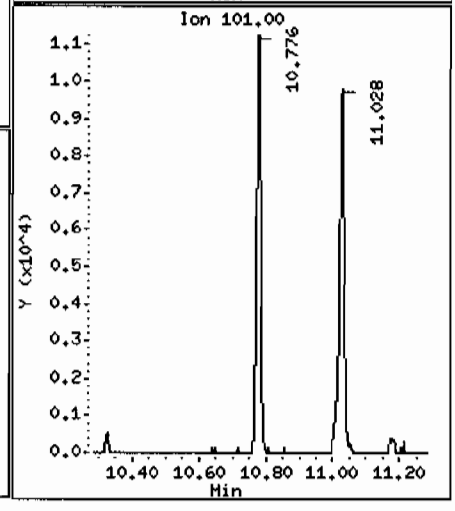

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 69.0 ug/Kg

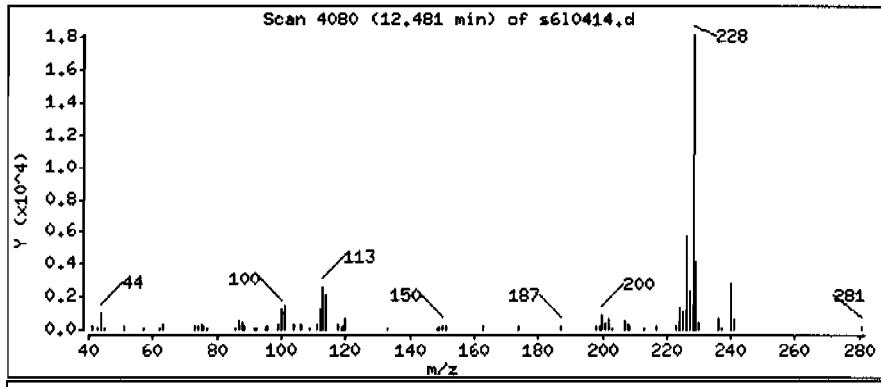

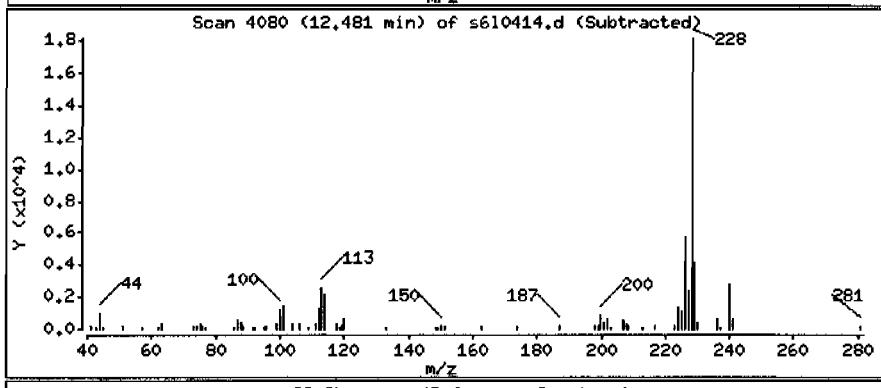

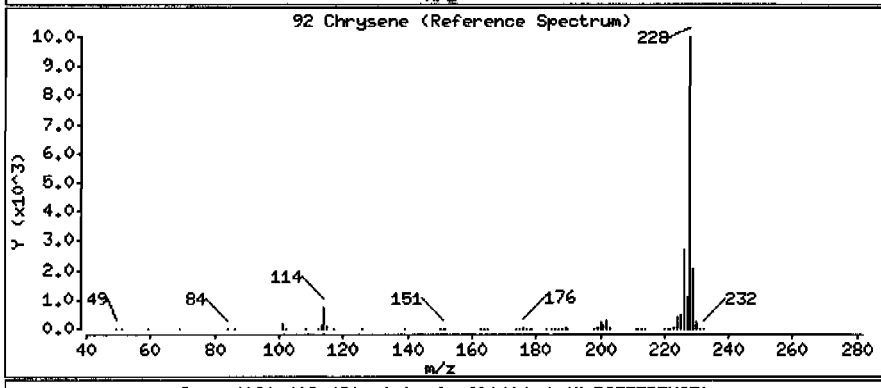

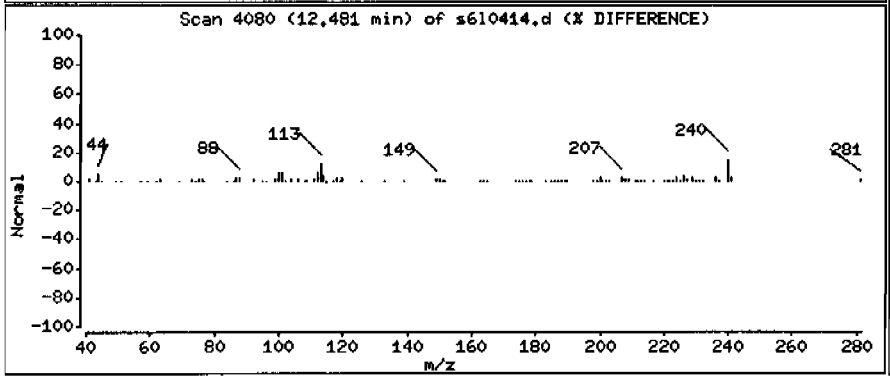

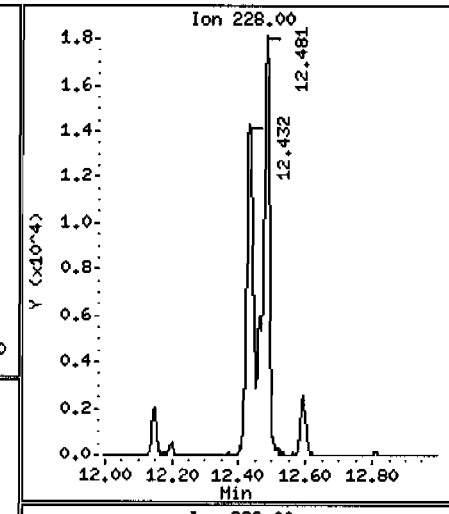

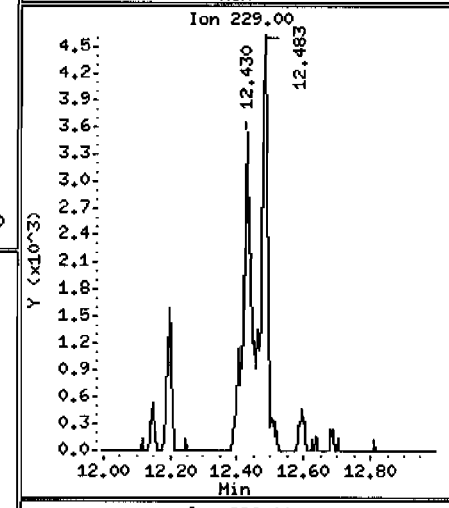

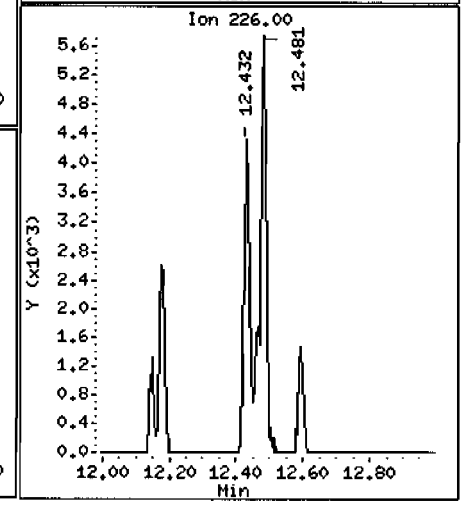

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 90.2 ug/Kg

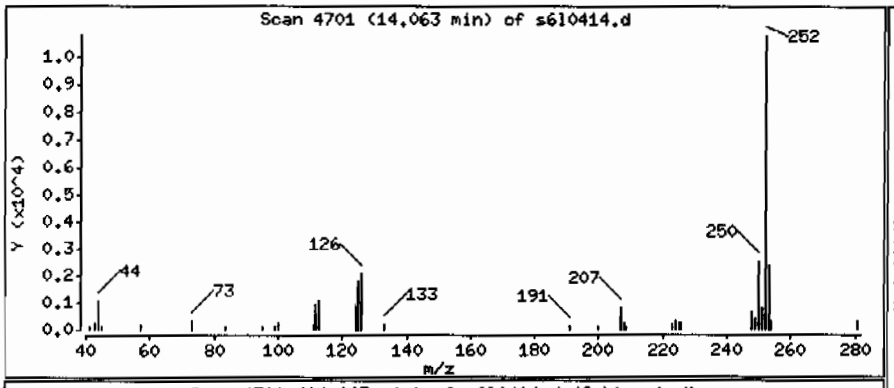

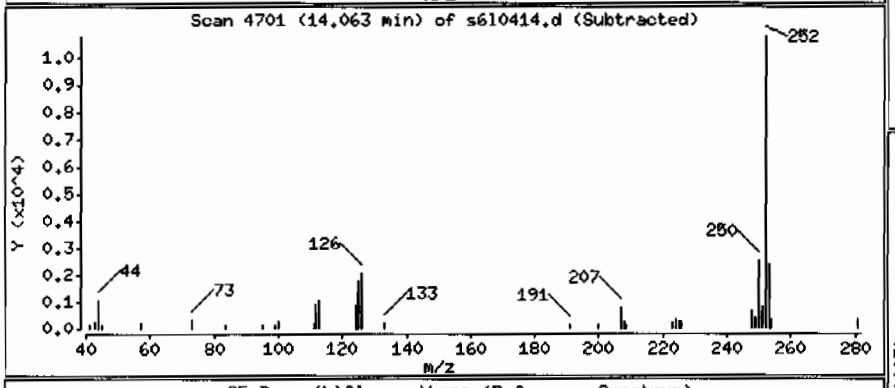

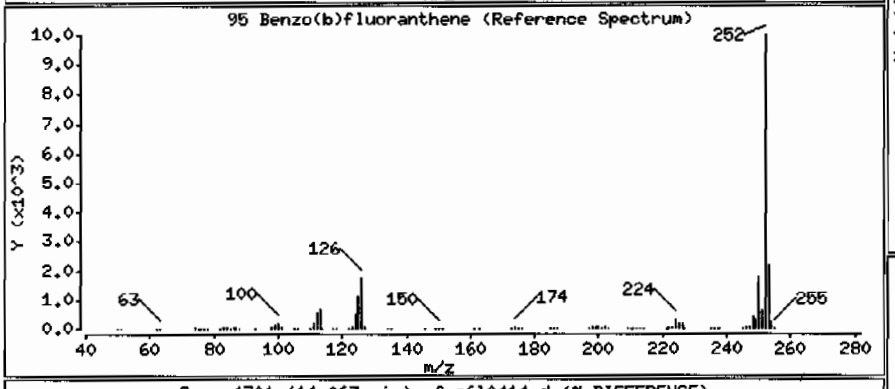

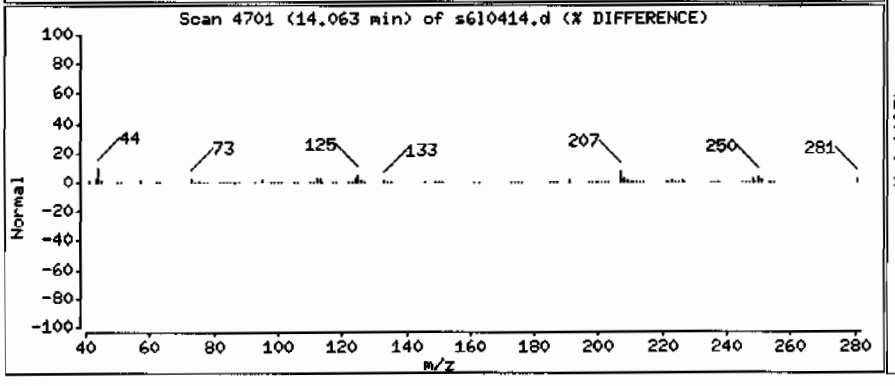

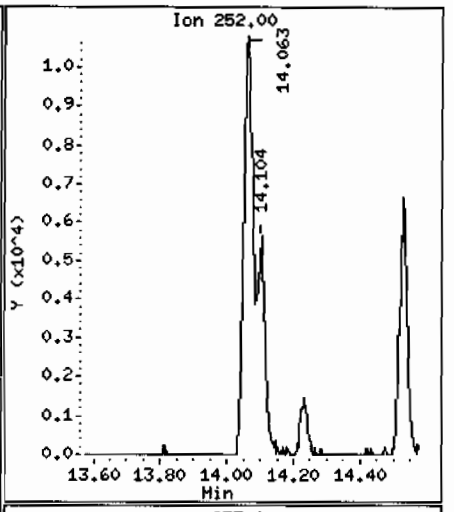

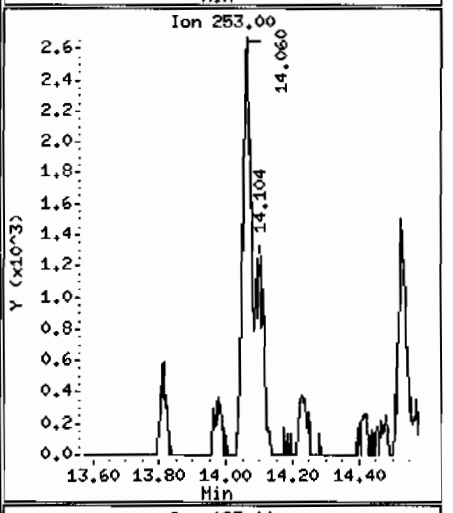

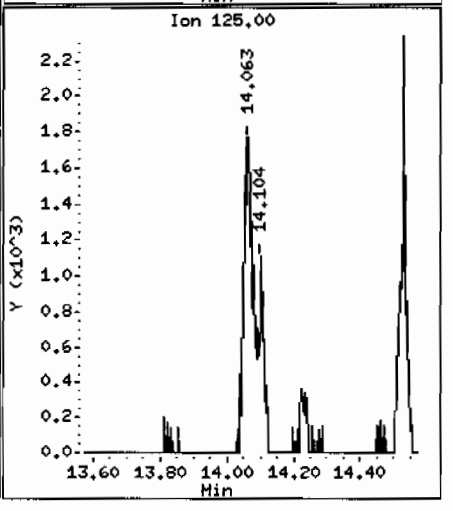

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

96 Benzo(k)fluoranthene

Concentration: 41.0 ug/Kg

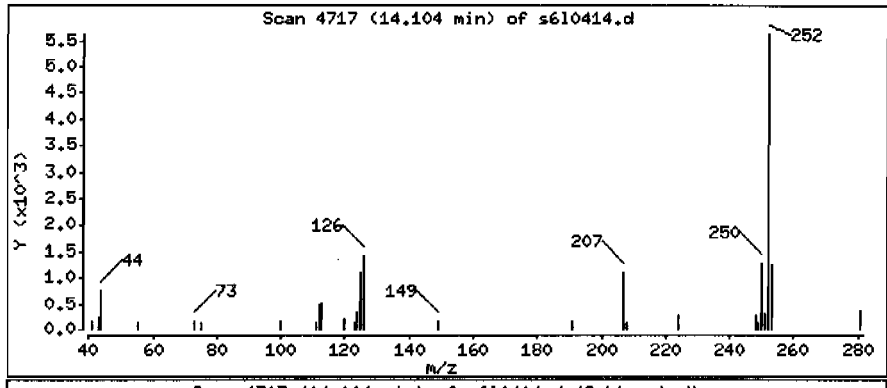

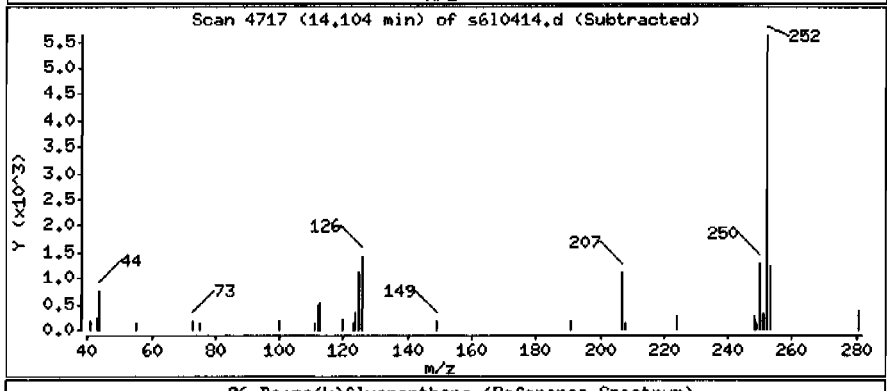

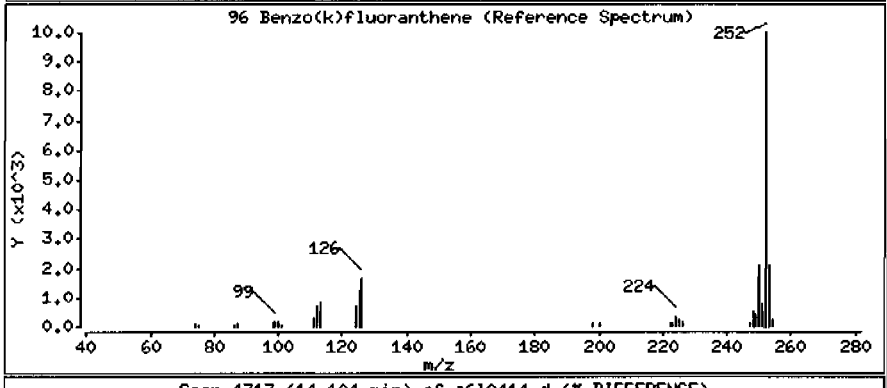

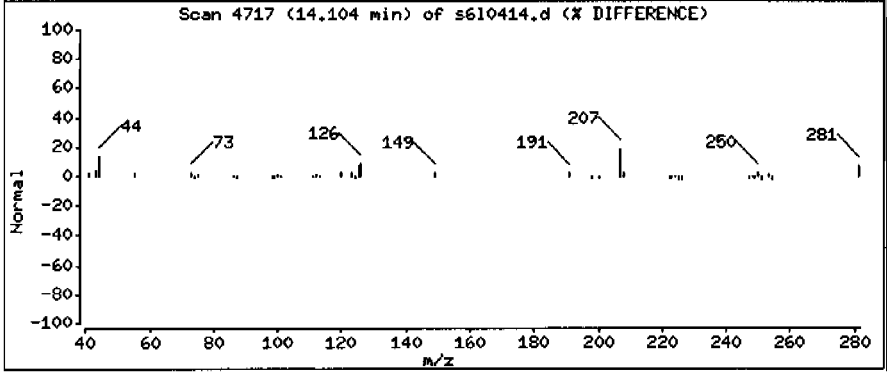

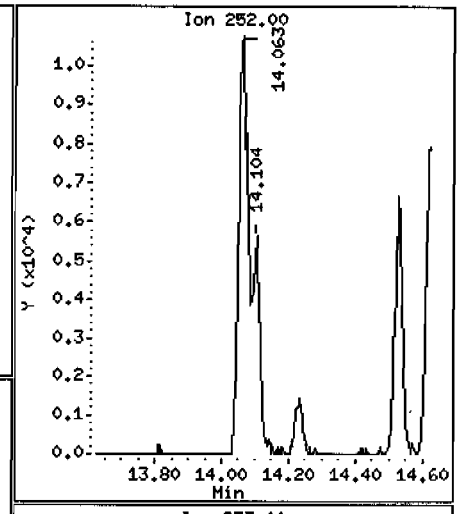

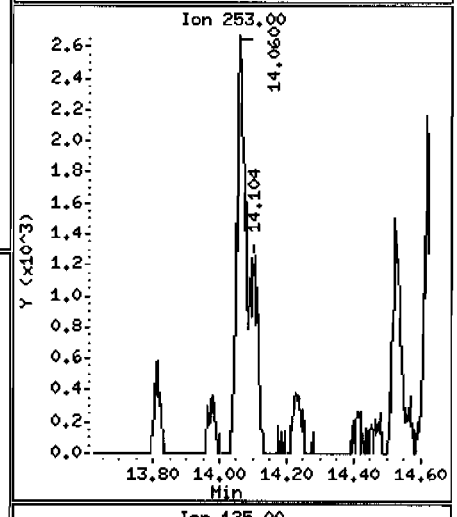

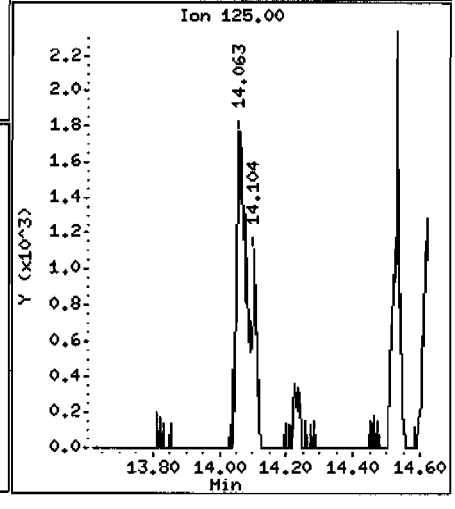

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 65.1 ug/Kg

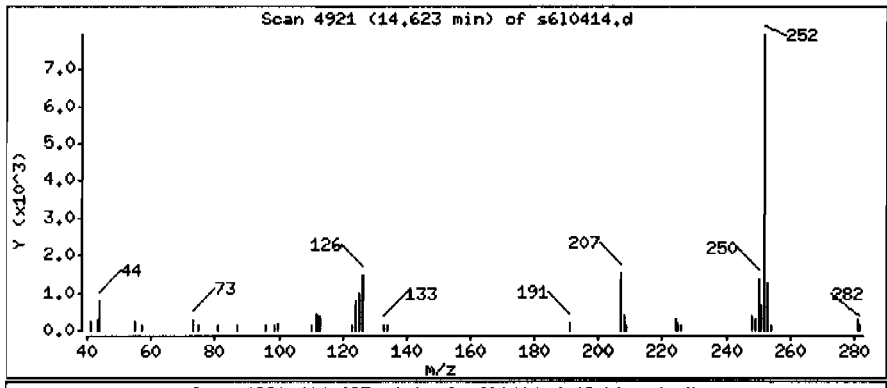

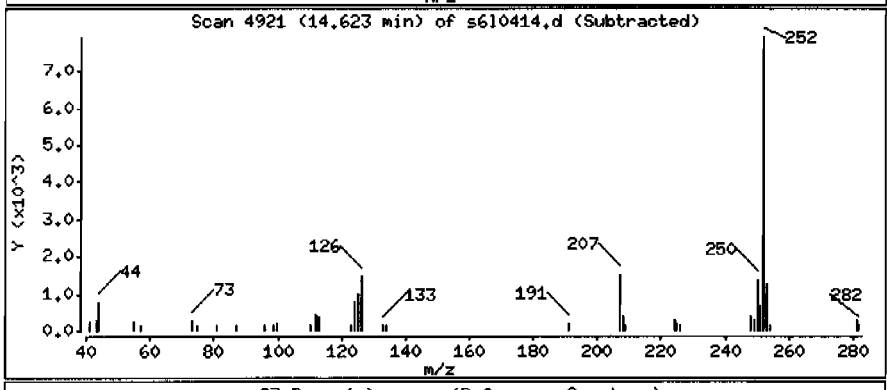

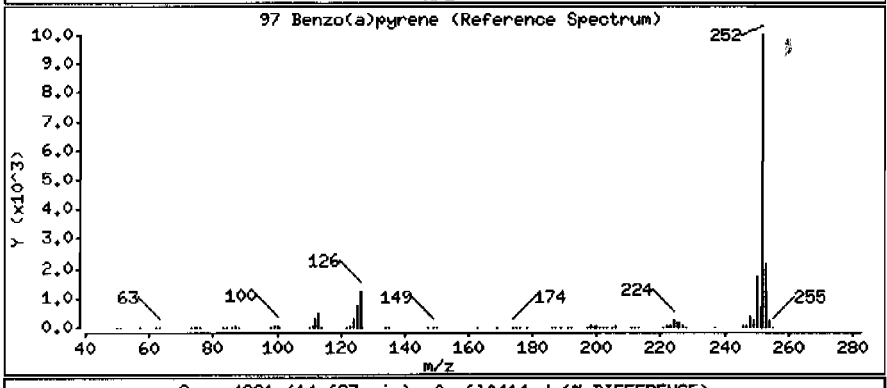

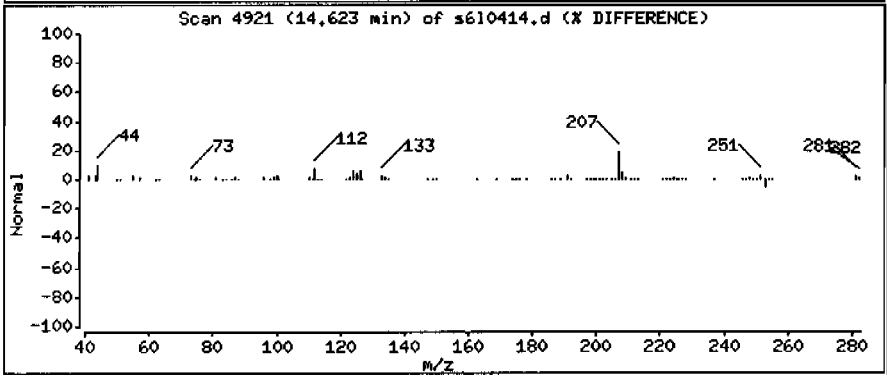

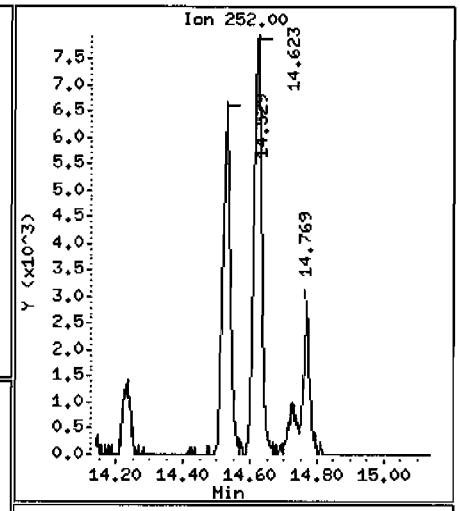

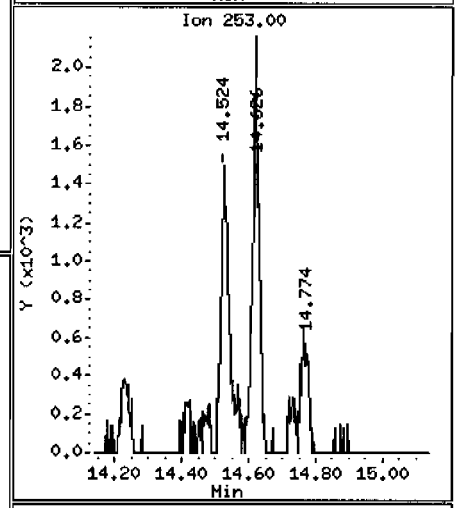

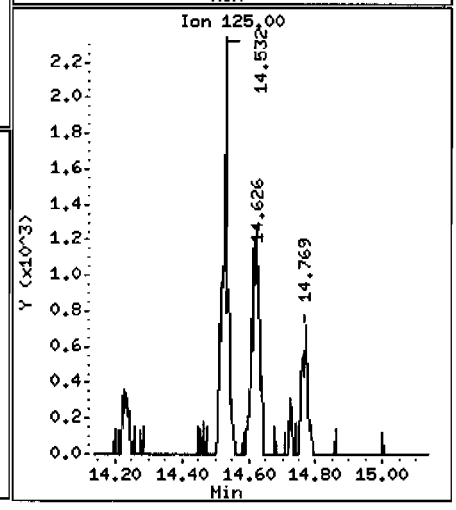

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |24141800319256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 150 ug/Kg

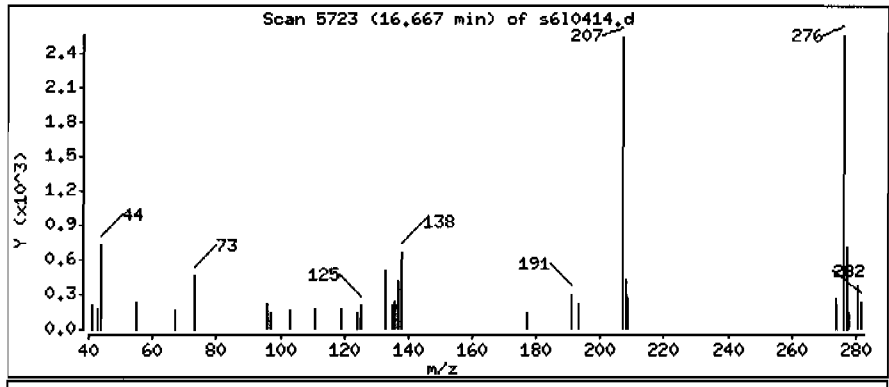

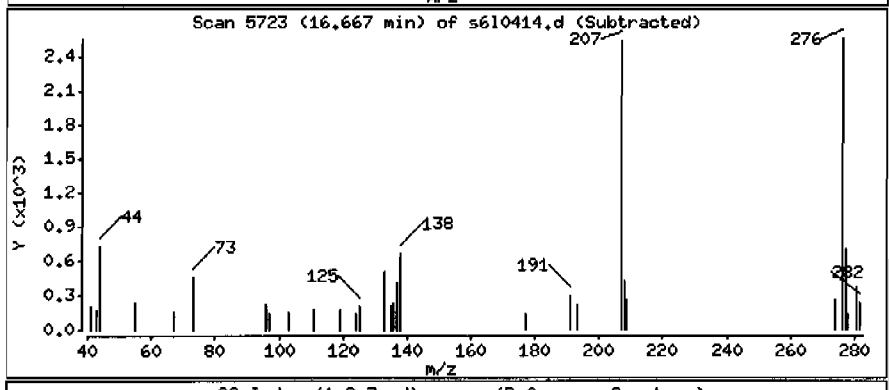

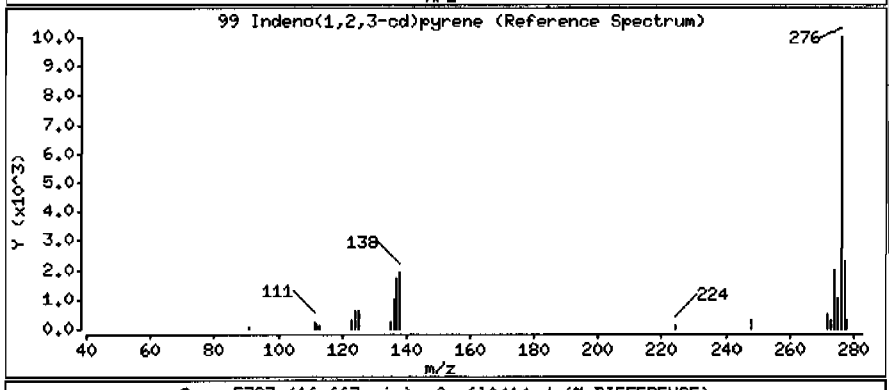

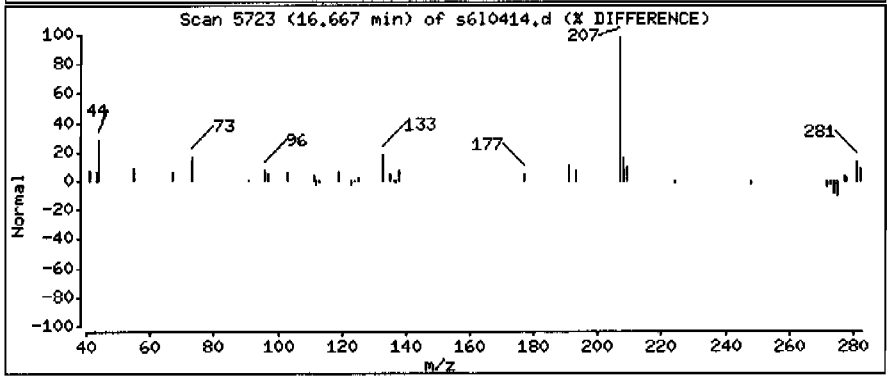

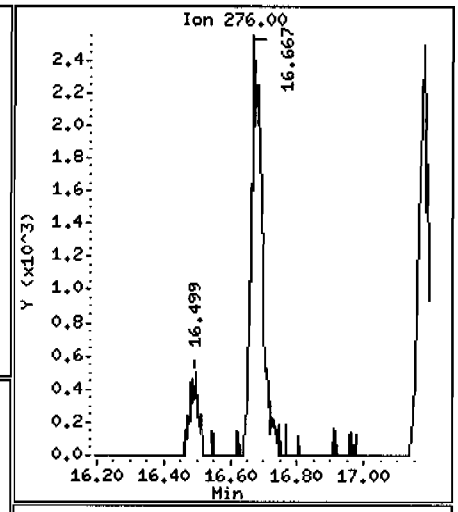

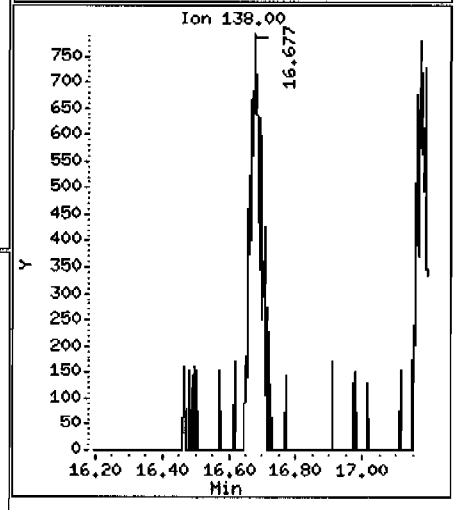

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959 Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

101 Benzo(ghi)perylene Concentration: 34.1 ug/Kg

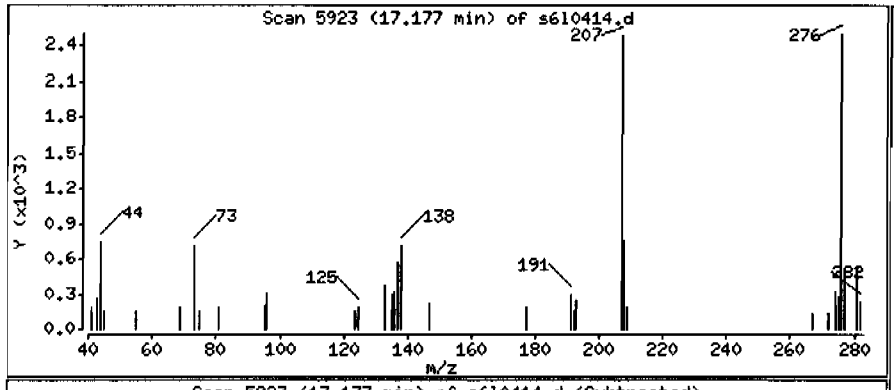

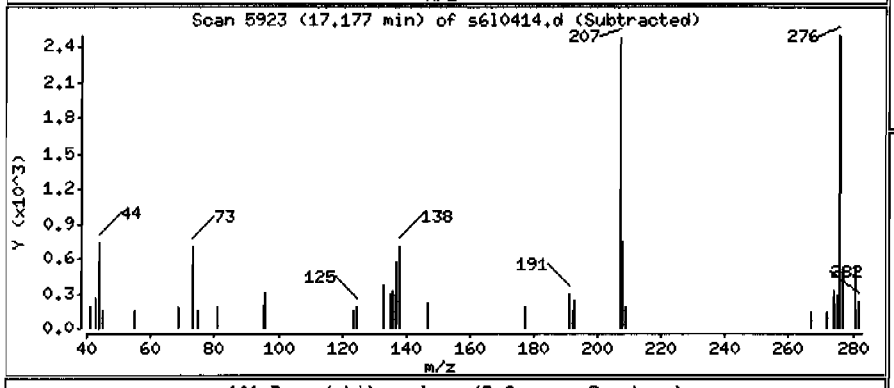

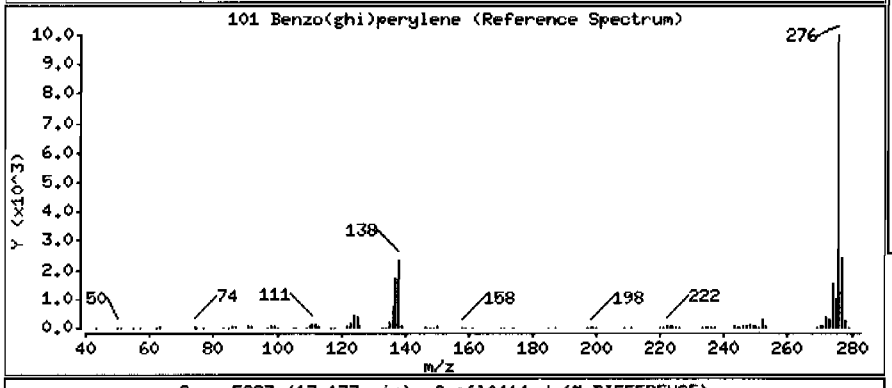

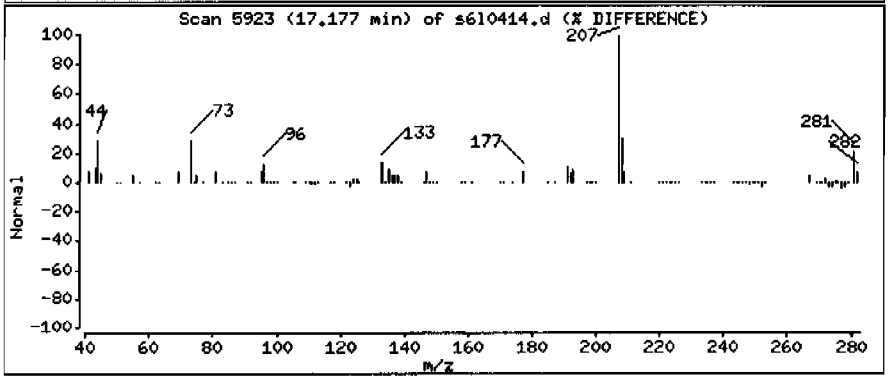

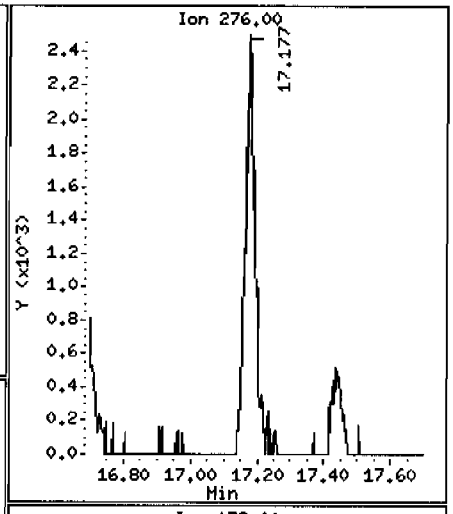

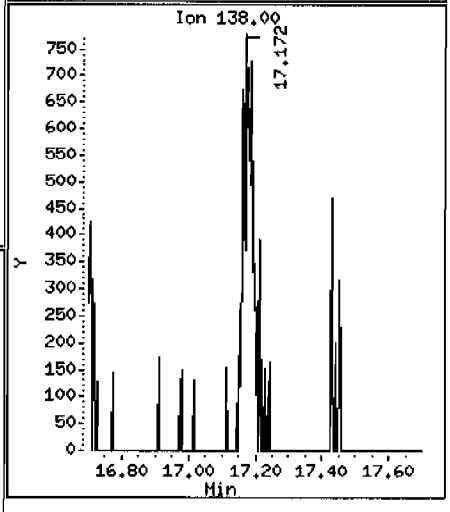

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |2414180031925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	64	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	17	C7H14O2	130
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	16	CH7N5	89

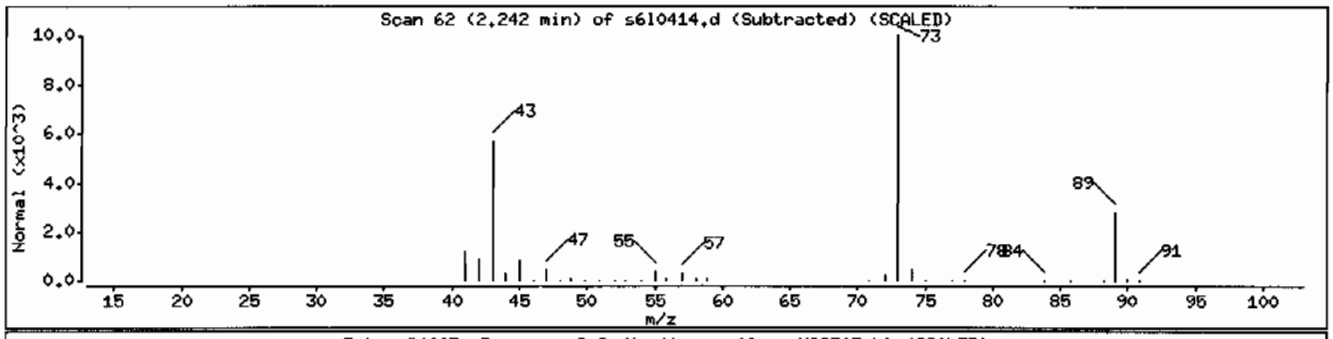

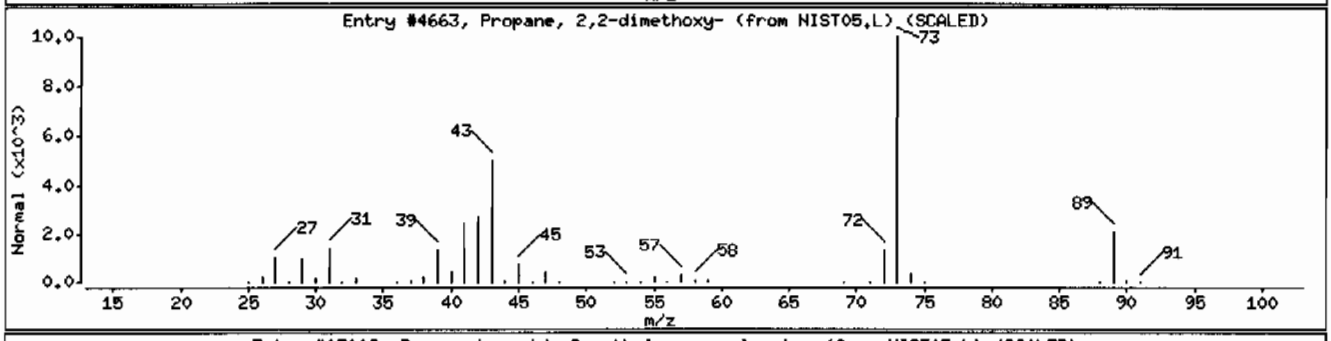

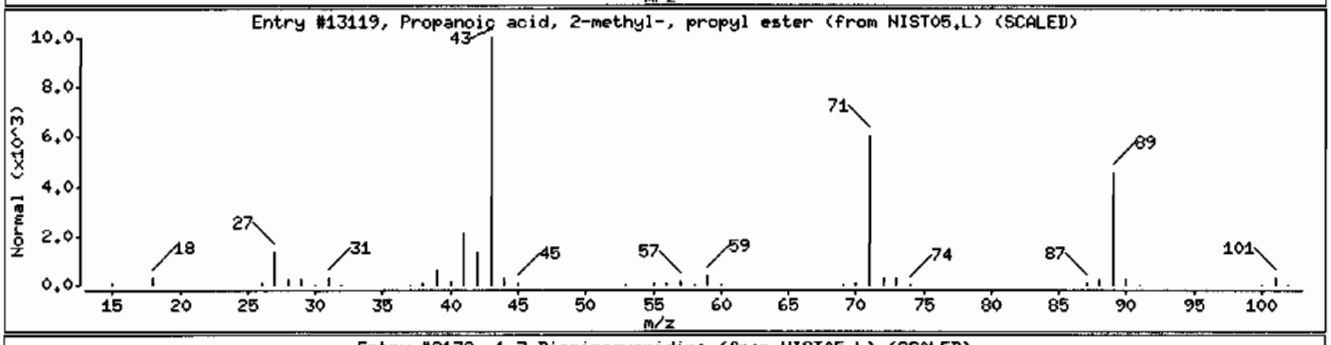

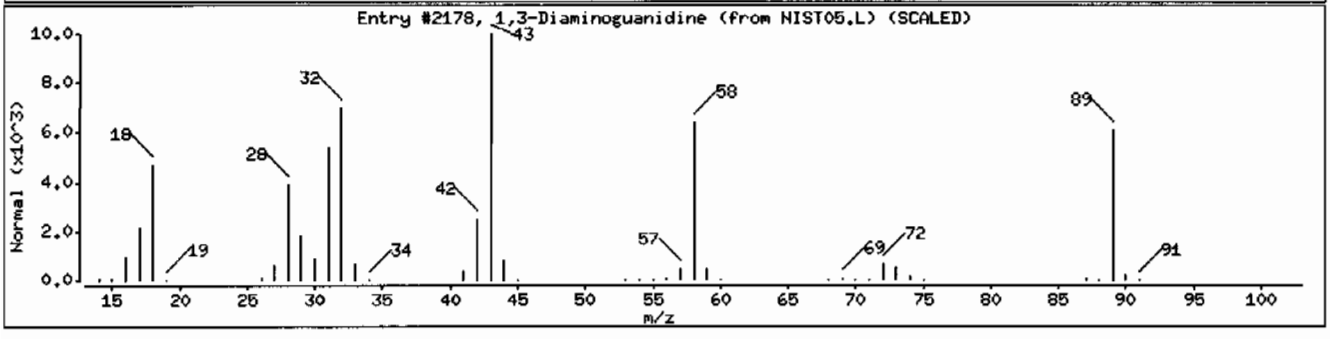

Data File: /chem/MSD6.i/s120409.b/s610414.d

Date : 04-DEC-2009 15:41

Client ID: RE03-09-13959

Instrument: MSD6.i

Sample Info: |24141800319256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	25	C4H7NO2	101

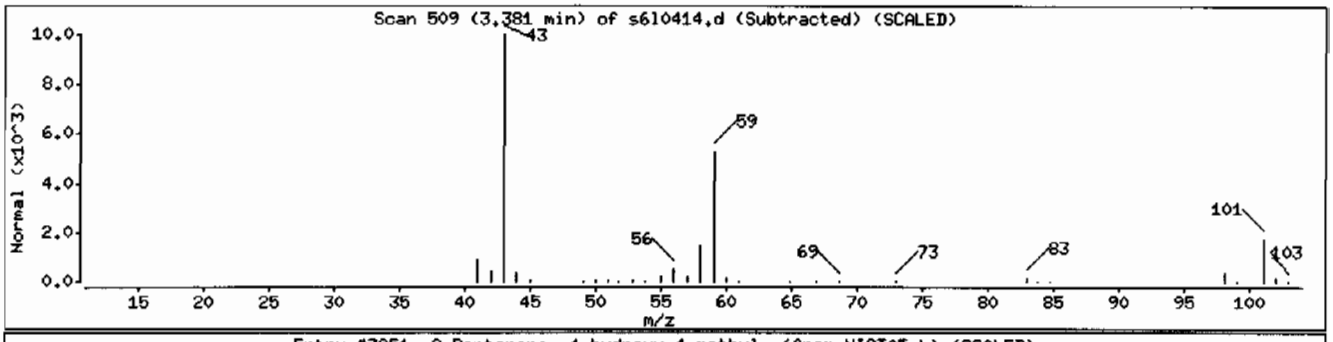

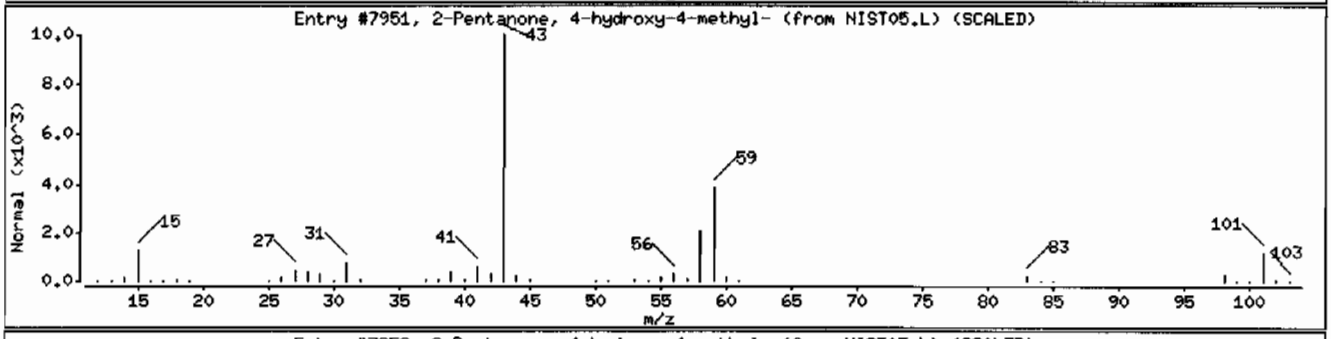

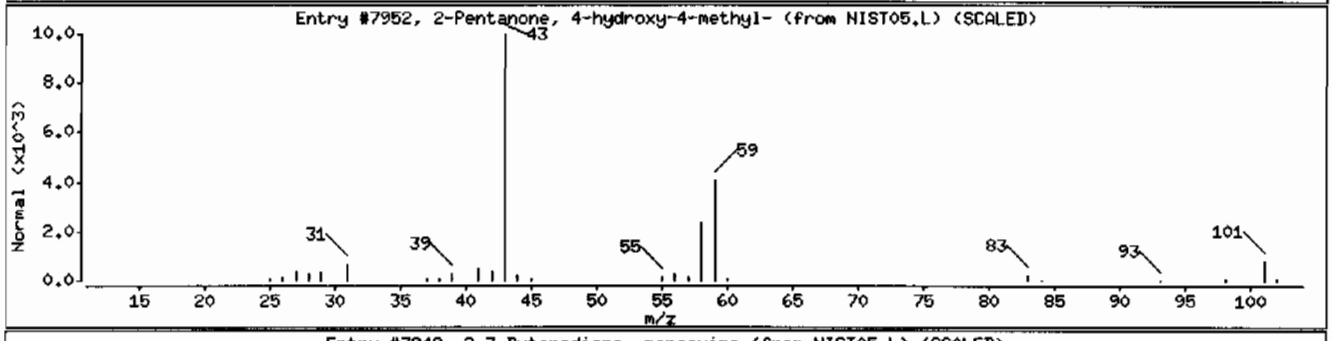

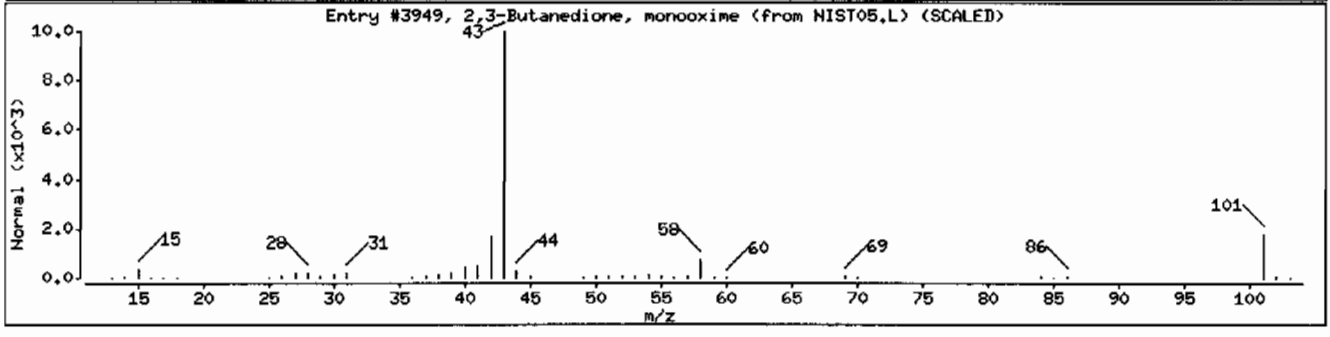

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0413.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.5	388
108-95-2	Phenol	U	388	ug/kg	77.5	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.5	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.5	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.5	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.5	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	96.9	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.5	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.5	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.5	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.5	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.5	388
95-48-7	o-Cresol	U	388	ug/kg	77.5	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.5	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.5	388
78-59-1	Isophorone	U	388	ug/kg	77.5	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.5	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.5	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.5	388
65-85-0	Benzoic acid	U	775	ug/kg	194	775
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.5	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.5	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.75	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.5	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.5	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.5	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.5	388
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	388	ug/kg	77.5	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0413.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.5	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	775	ug/kg	147	775
132-64-9	Dibenzofuran	U	388	ug/kg	77.5	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.5	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.5	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.5	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.5	388
122-66-7	Azobenzene	U	388	ug/kg	77.5	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.5	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.5	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.75	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.5	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.5	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.5	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.5	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.5	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	347	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610413.d
Lab Smp Id: 241418002 Client Smp ID: RE03-09-13960
Inj Date : 04-DEC-2009 15:13
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418002|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	14.39710	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	218656	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	832222	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	455494	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	796932	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	682765	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	549886	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	375722	68.6170	2660
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	482536	69.8214	2710
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	222327	37.7651	1460
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	436229	37.1624	1440
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	98546	74.1246	2870
$ 81 p-Terphenyl-d14	244	11.179	11.181	(0.898)	438338	39.8101	1540

ION RATIO REPORT

SV REPORT

Data file: s610413.d
Report Date: 12/04/2009 15:31
Lab. ID: 241418002 SampleType: SAMPLE
Injection Date: 04-DEC-2009 15:13
Operator: nagl Instrument: MSD6.i
Sample Info: |241418002|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	20976	4.35	4.42	80-120	100	(T)
93	130	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	30298	5.25	5.10	80-120	100	(T)
42	19262	5.25	5.10	40-100	64	(T)
22 Isophorone		CAS#: 78-59-1				
82	222327	5.25	5.52	80-120	100	(T)
138	4560	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	80294	7.85	7.55	80-120	100	(T)
164	455494	7.85	7.55	0- 40	567	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	59911	7.85	8.06	80-120	100	(T)
89	706	7.85	8.06	41-101	1	(QT)
63	706	7.85	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	6331	8.70	8.45	80-120	100	(T)
165	6131	8.70	8.45	62-122	97	(T)
167	1836	8.70	8.45	0- 44	29	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610413.d
Lab Smp Id: 241418002 Client Smp ID: RE03-09-13960
Inj Date : 04-DEC-2009 15:13
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418002|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	14.39710	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1263215	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.374	282655	8.95033297	347	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610413.d
Date : 04-DEC-2009 15:13
Client ID: RE03-09-13960
Sample Info: |2414180021925661|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

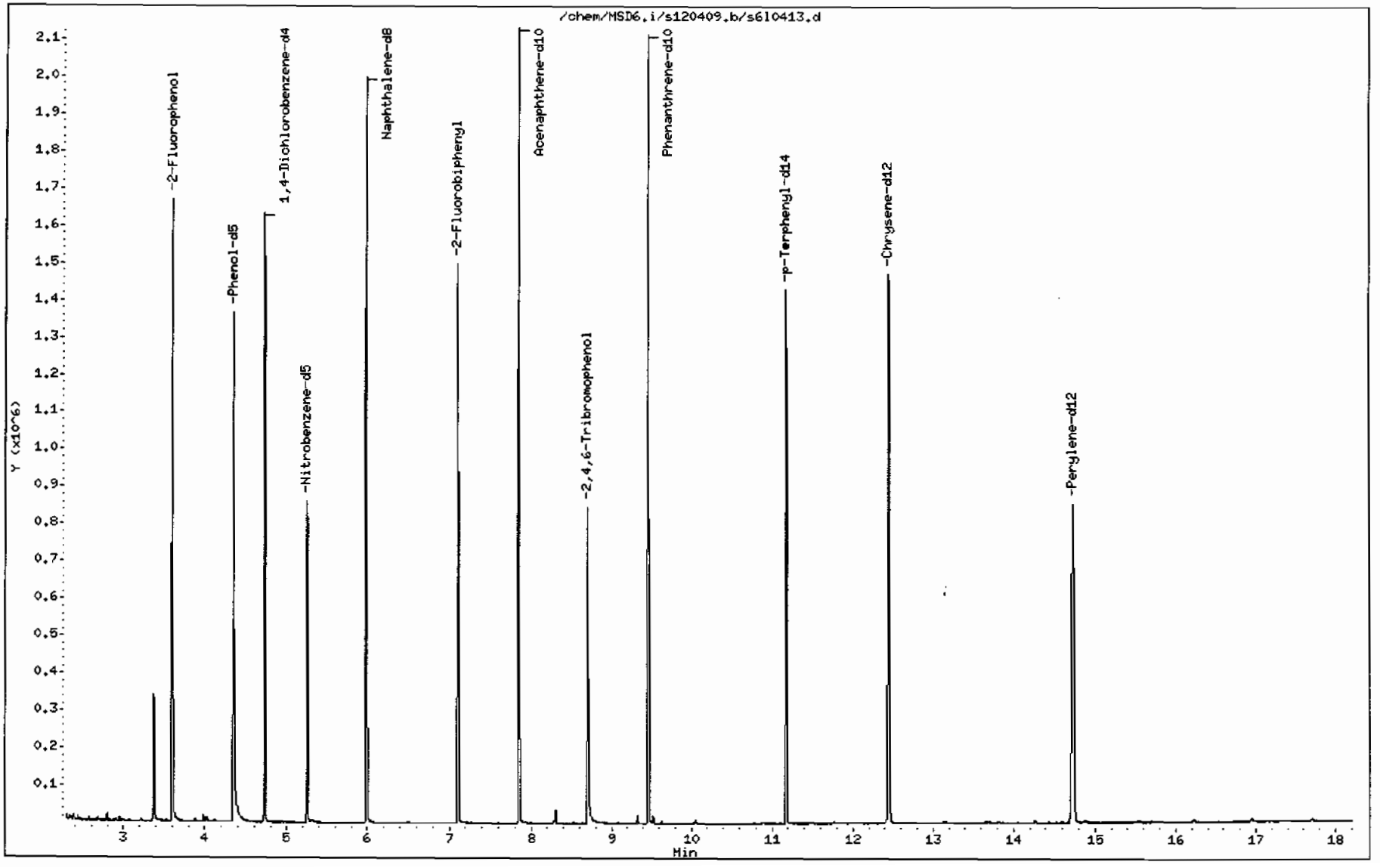

Data File: /chem/MSD6.i/s120409.b/s610413.d

Date : 04-DEC-2009 15:13

Client ID: RE03-09-13960

Instrument: MSD6.i

Sample Info: |2414180021925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

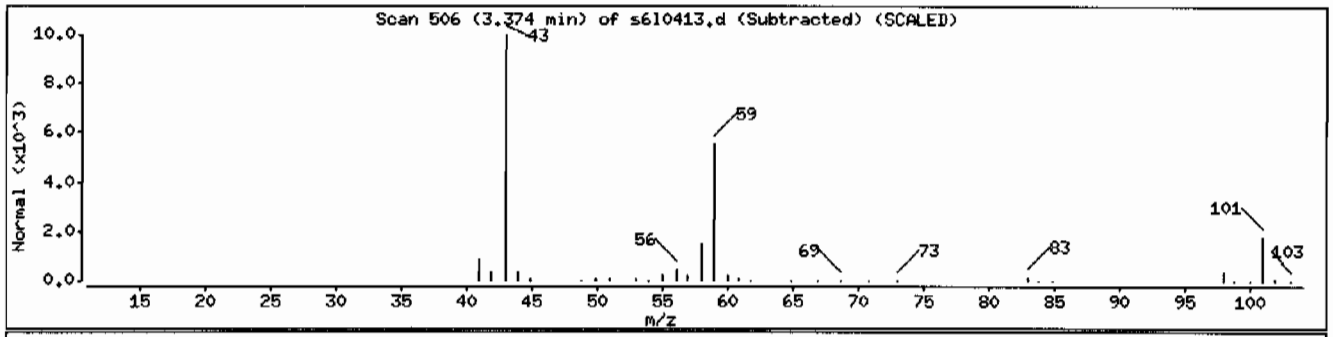

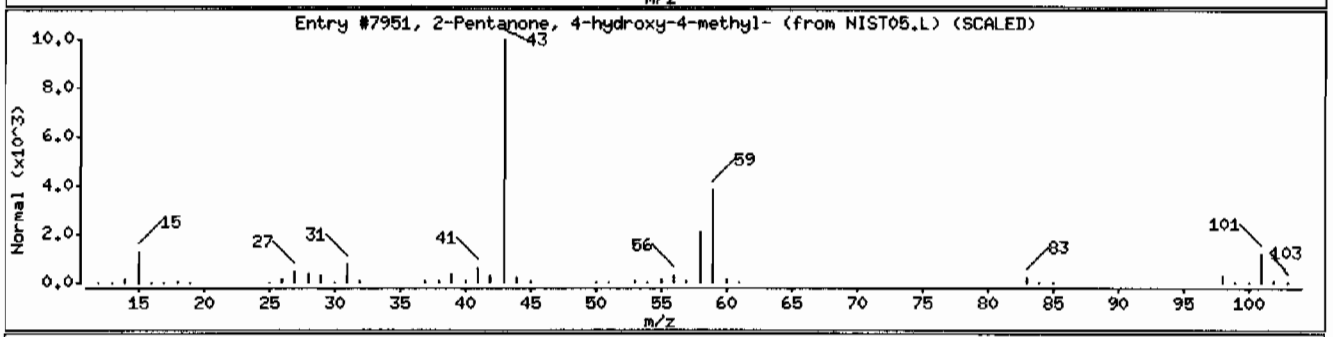

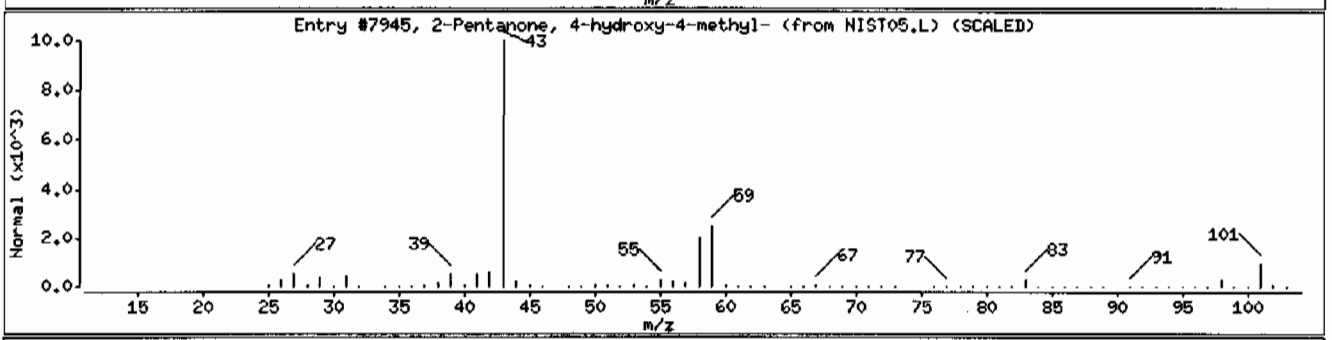

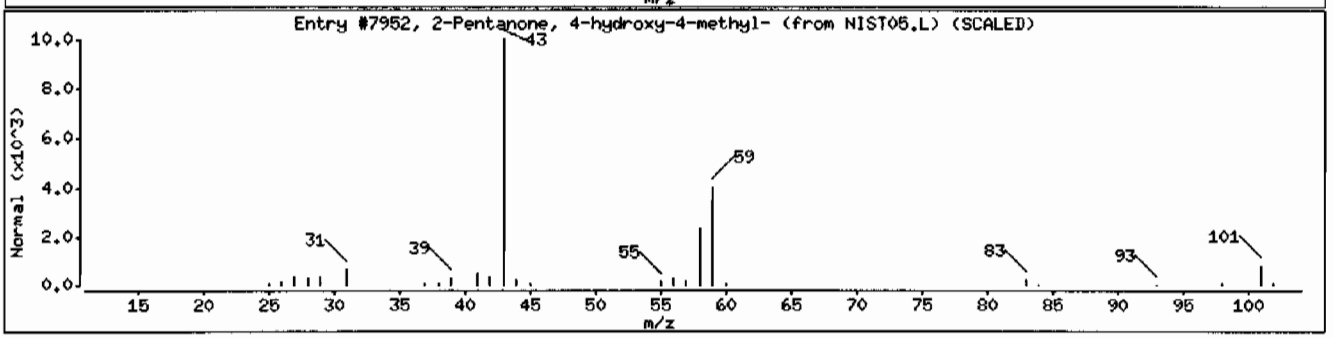

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0412.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401
108-95-2	Phenol	U	401	ug/kg	80.2	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	J	39.3	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.2	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401
95-48-7	o-Cresol	U	401	ug/kg	80.2	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401
78-59-1	Isophorone	U	401	ug/kg	80.2	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401
65-85-0	Benzoic acid	U	802	ug/kg	201	802
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.2	401
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	401	ug/kg	80.2	401

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13961	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 14:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s6l0412.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	p-Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401
122-66-7	Azobenzene	U	401	ug/kg	80.2	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401
85-01-8	Phenanthrene	J	17.1	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401
206-44-0	Fluoranthene		55.4	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401
56-55-3	Benzo(a)anthracene	J	17.8	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	J	32.8	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401
205-99-2	Benzo(b)fluoranthene		46.2	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	J	13.3	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	J	27.7	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene		140	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	J	21.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	342	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610412.d
Lab Smp Id: 241418001 Client Smp ID: RE03-09-13961
Inj Date : 04-DEC-2009 14:45
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418001|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	16.97420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	212773	40.0000	
* 29 Naphthalene-d8	136	5.990	5.993	(1.000)	811667	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	447163	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	771992	40.0000	
* 91 Chrysene-d12	240	12.452	12.463	(1.000)	630787	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	493626	40.0000	
$ 3 2-Fluorophenol	112	3.600	3.590	(0.761)	341171	64.0298	2570
$ 5 Phenol-d5	99	4.350	4.352	(0.920)	440956	65.5691	2630
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	201383	35.0738	1410
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	401178	34.8132	1400
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	96369	73.8376	2960
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	428686	42.1417	1690

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	11.028	11.036	(0.886)	16976	0.97845	39.2(a)
68 Phenanthrene	178	9.486	9.497	(1.002)	6799	0.42587	17.1(a)
76 Fluoranthene	202	10.778	10.783	(1.139)	21106	1.38006	55.4
89 Benzo(a)anthracene	228	12.432	12.440	(0.998)	6040	0.44381	17.8(a)
92 Chrysene	228	12.481	12.496	(1.002)	10663	0.81772	32.8(a)
95 Benzo(b)fluoranthene	252	14.055	14.076	(0.954)	12574	1.15121	46.2
96 Benzo(k)fluoranthene	252	14.101	14.124	(0.957)	3608	0.33220	13.3(a)
97 Benzo(a)pyrene	252	14.623	14.639	(0.993)	6507	0.68974	27.7(a)
99 Indeno(1,2,3-cd)pyrene	276	16.672	16.695	(1.132)	4374	3.48668	140
101 Benzo(ghi)perylene	276	17.172	17.200	(1.165)	3799	0.52711	21.1(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s610412.d
Report Date: 12/04/2009 15:31
Lab. ID: 241418001 SampleType: SAMPLE
Injection Date: 04-DEC-2009 14:45
Operator: nagl Instrument: MSD6.i
Sample Info: |241418001|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	19868	4.35	4.42	80-120	100	(T)
93	155	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	27685	5.25	5.10	80-120	100	(T)
42	17240	5.25	5.10	40-100	62	(T)
22 Isophorone		CAS#: 78-59-1				
82	201383	5.25	5.52	80-120	100	(T)
138	4541	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	80252	7.86	7.55	80-120	100	(T)
164	447163	7.85	7.55	0- 40	557	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	58985	7.85	8.06	80-120	100	(T)
89	642	7.86	8.06	41-101	1	(QT)
63	376	7.86	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	6400	8.70	8.45	80-120	100	(T)
165	6235	8.70	8.45	62-122	97	(T)
167	2333	8.70	8.45	0- 44	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
68 Phenanthrene			CAS#: 85-01-8			
178	6799	9.49	9.50	80-120	100	( )
179	1036	9.49	9.50	0- 46	15	( )
176	1164	9.49	9.50	0- 49	17	( )
69 Anthracene			CAS#: 120-12-7			
178	6799	9.49	9.55	80-120	100	(T)
179	1036	9.49	9.55	0- 46	15	(T)
176	1164	9.49	9.55	0- 49	17	(T)
76 Fluoranthene			CAS#: 206-44-0			
202	21106	10.78	10.78	80-120	100	( )
203	3699	10.78	10.78	0- 48	18	( )
101	2845	10.78	10.78	0- 43	13	( )
79 Pyrene			CAS#: 129-00-0			
202	16976	11.03	11.04	80-120	100	( )
200	3373	11.03	11.04	0- 51	20	( )
101	2814	11.03	11.04	0- 45	17	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	6040	12.43	12.44	80-120	100	( )
226	484	12.44	12.44	0- 56	8	( )
229	709	12.43	12.44	0- 50	12	( )
92 Chrysene			CAS#: 218-01-9			
228	10663	12.48	12.50	80-120	100	( )
229	2192	12.49	12.50	0- 50	21	( )
226	2783	12.48	12.50	0- 59	26	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	12574	14.06	14.08	80-120	100	( )
253	1589	14.05	14.08	0- 52	13	( )
125	489	14.05	14.07	0- 43	4	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	3608	14.10	14.12	80-120	100	( )
253	805	14.10	14.12	0- 52	22	( )
125	897	14.10	14.12	0- 43	25	( )
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	6507	14.62	14.64	80-120	100	( )
253	836	14.62	14.64	0- 52	13	( )
125	742	14.62	14.64	0- 30	11	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	4374	16.67	16.70	80-120	100	( )
138	1361	16.68	16.70	0- 54	31	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	188	16.72	16.73	80-120	100	( )
139	0	0.00	16.73	0- 30	0	(T)
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	3799	17.17	17.20	80-120	100	( )
138	1308	17.18	17.20	0- 30	34	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610412.d
Lab Smp Id: 241418001 Client Smp ID: RE03-09-13961
Inj Date : 04-DEC-2009 14:45
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418001|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	16.97420	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1238921	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.366	263790	8.51676401	342	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610412.d
Date : 04-DEC-2009 14:45
Client ID: RE03-09-13961
Sample Info: !24141800!19256611!SWMF!1!LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

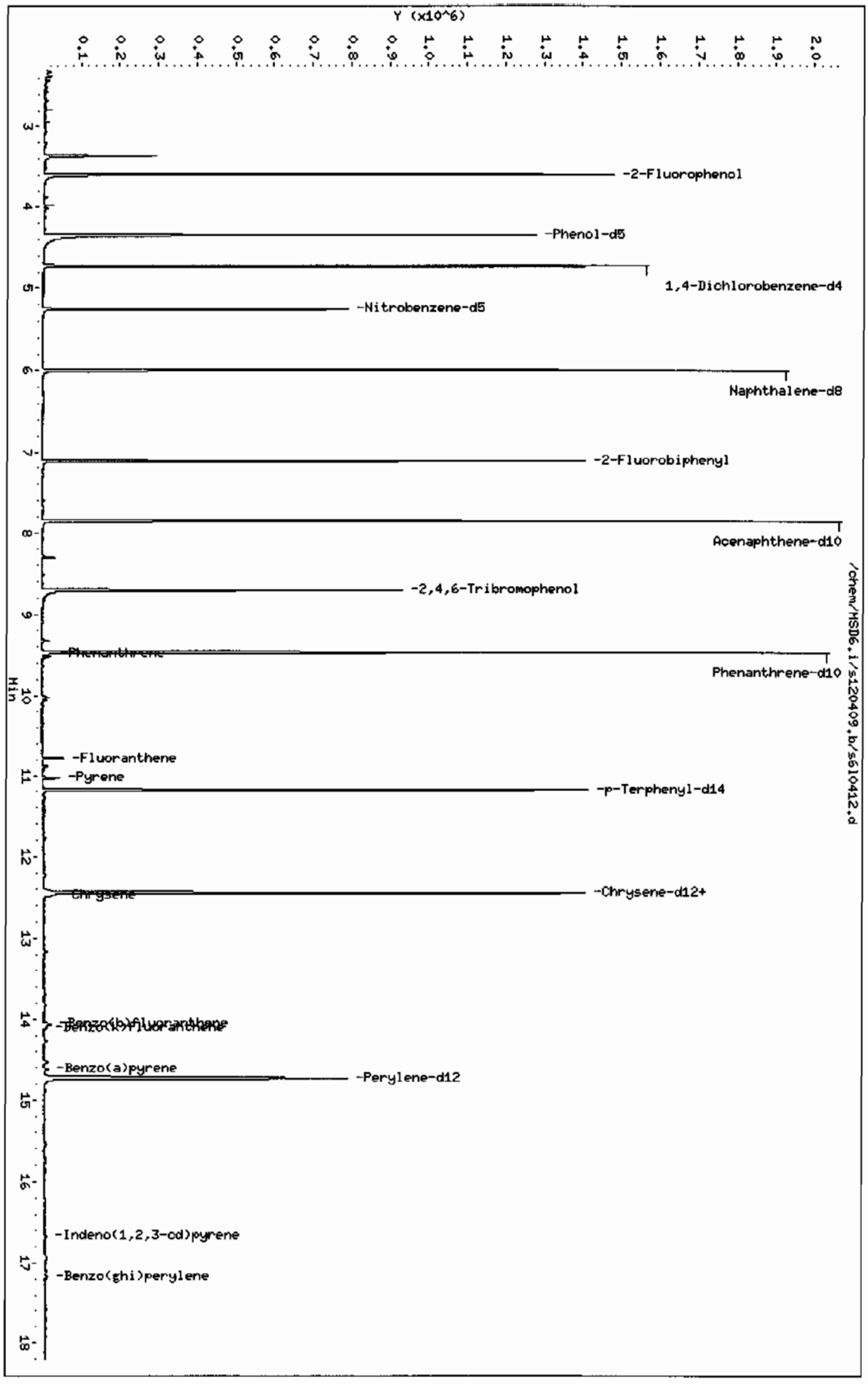

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |241418001|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 39.2 ug/Kg

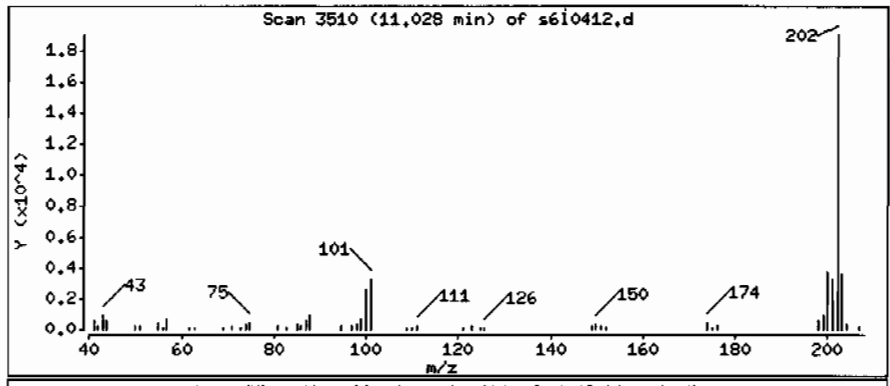

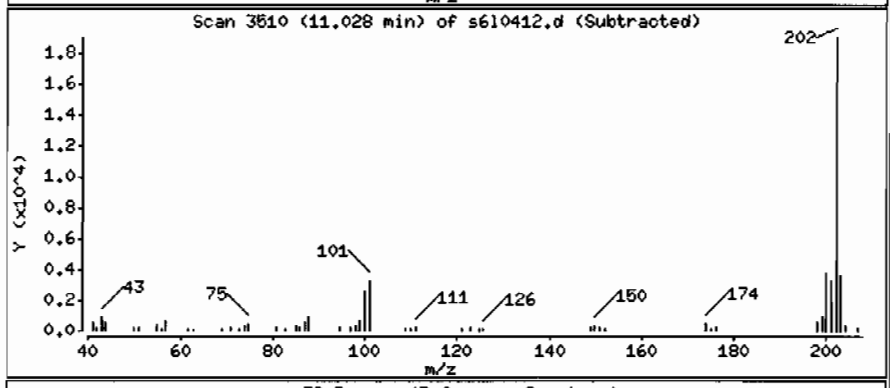

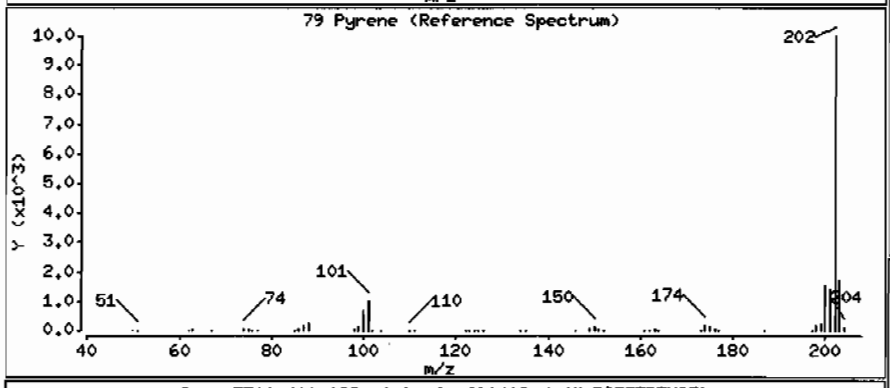

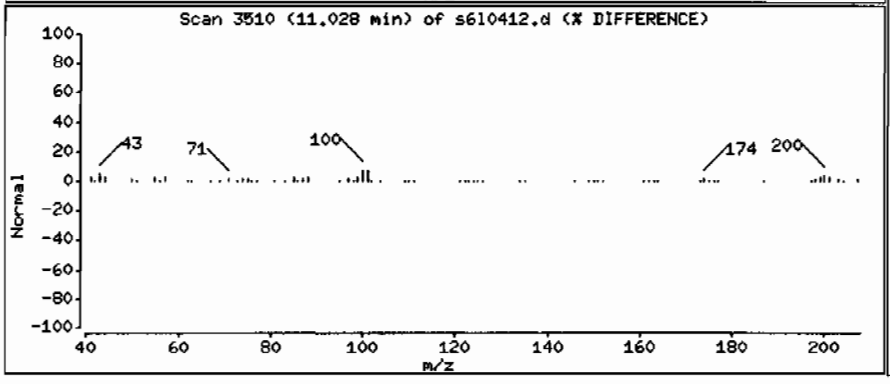

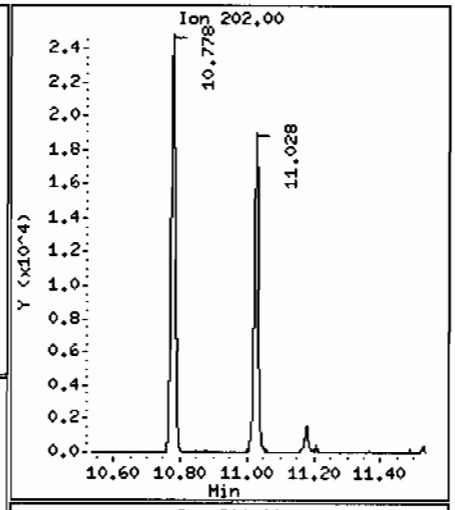

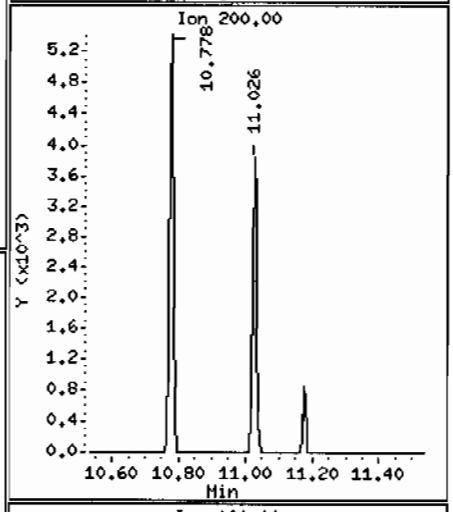

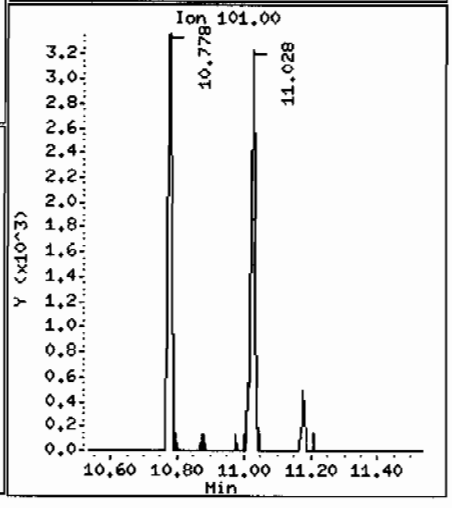

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |24141800|1925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 17.1 ug/Kg

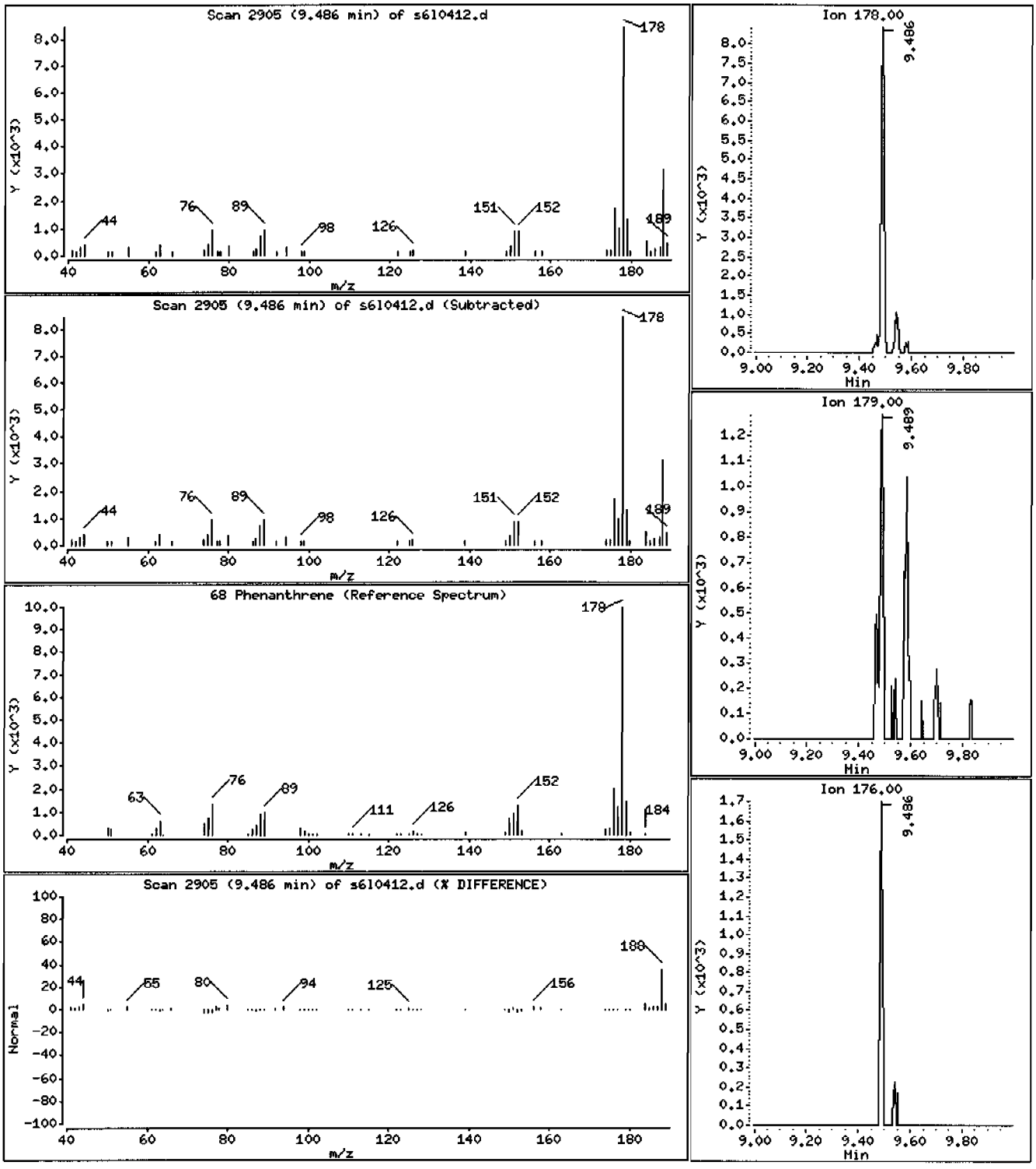

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |2414180001|925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 55.4 ug/Kg

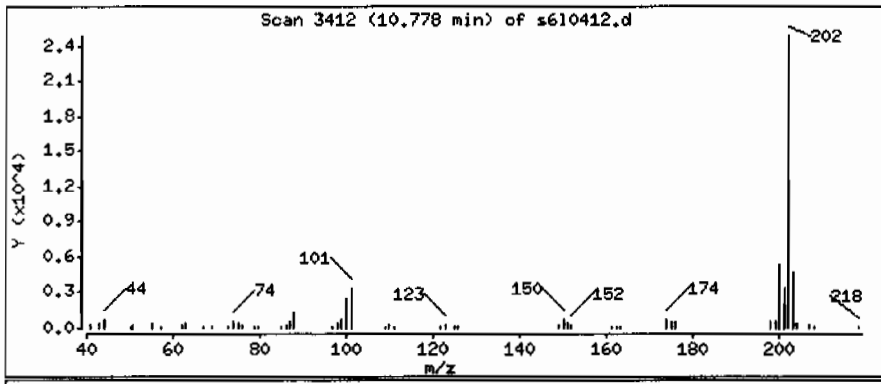

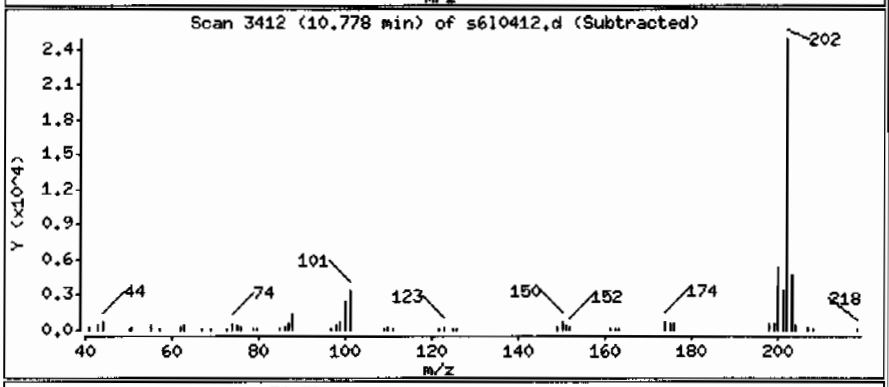

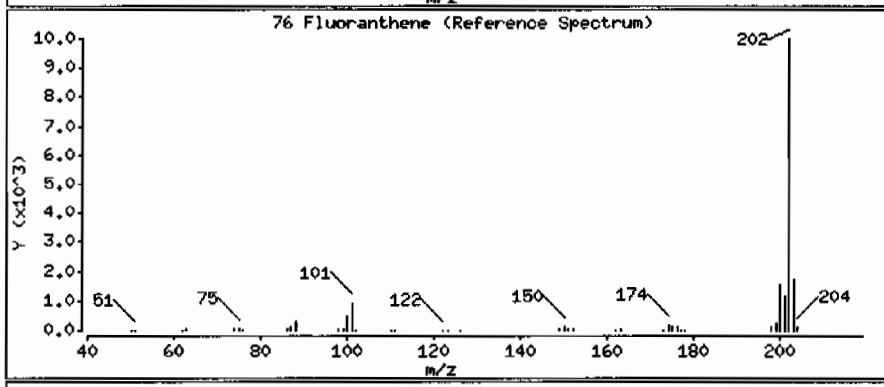

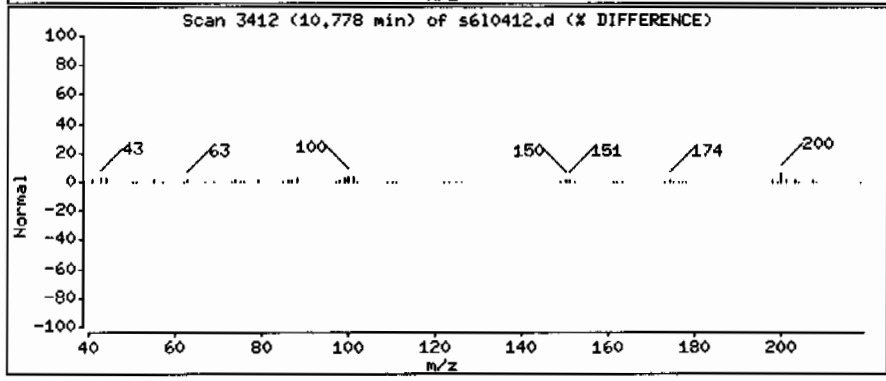

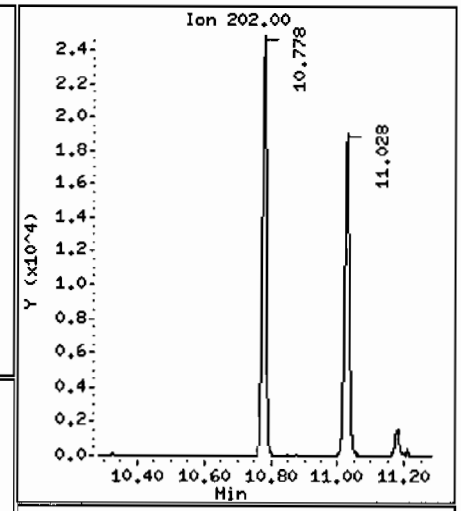

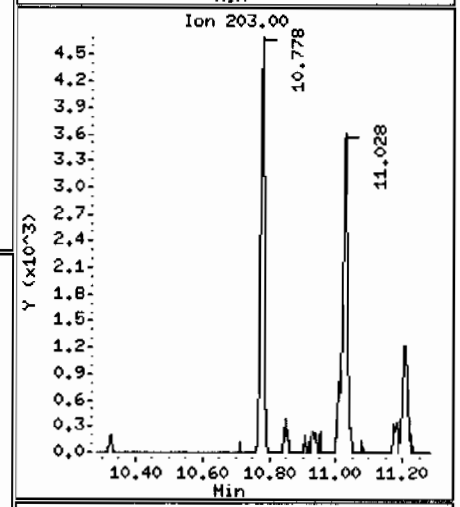

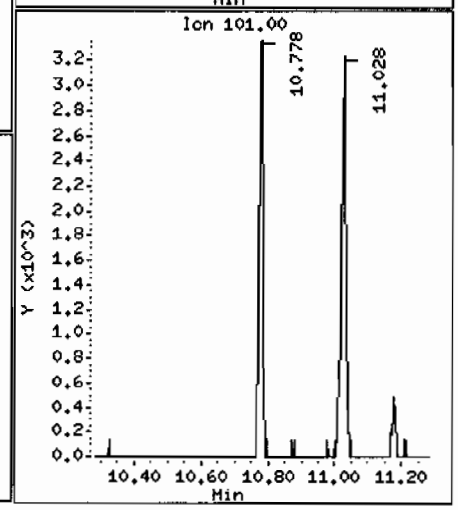

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961 Instrument: MSD6.i

Sample Info: |2414180011925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

89 Benzo(a)anthracene Concentration: 17.8 ug/Kg

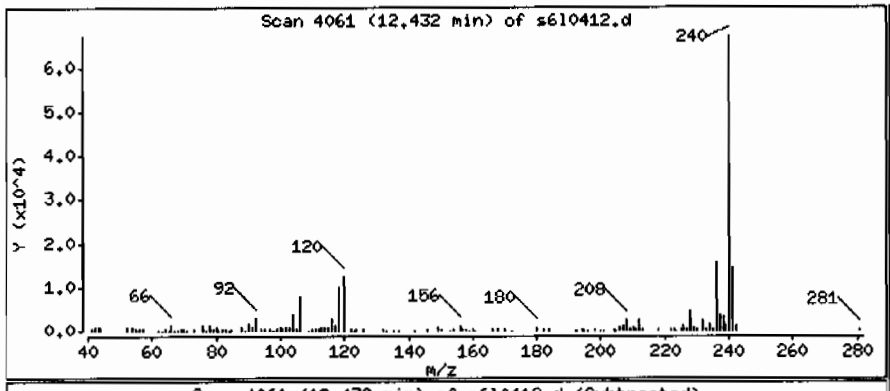

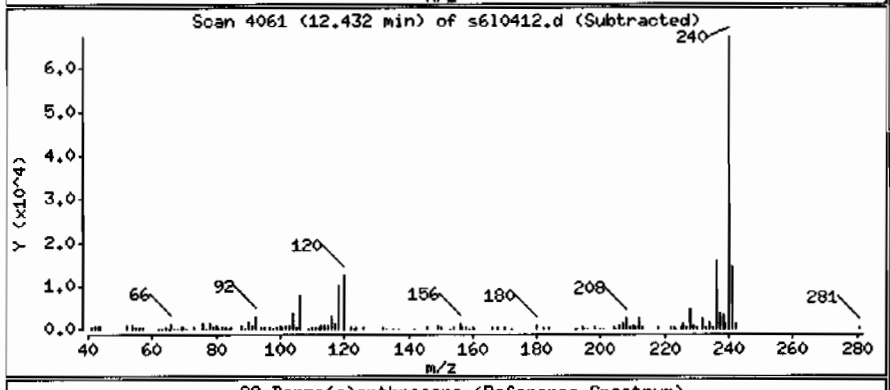

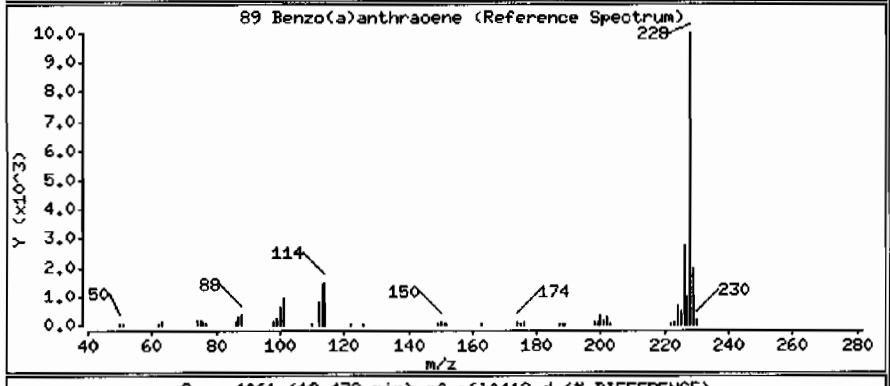

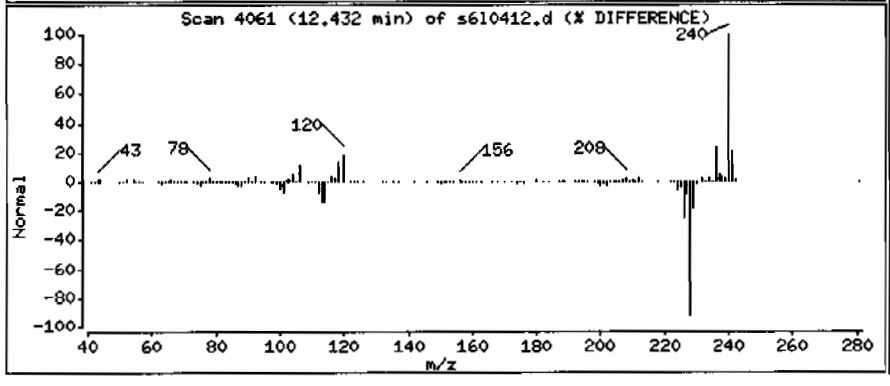

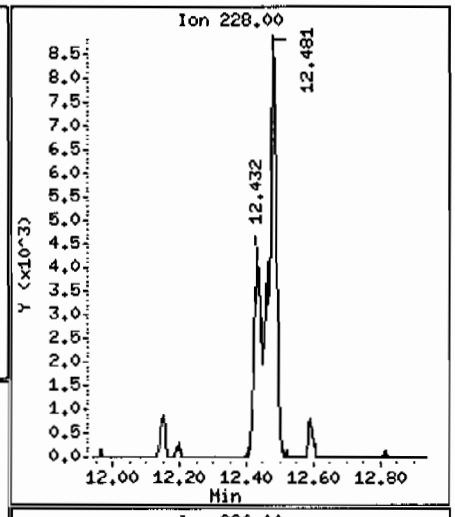

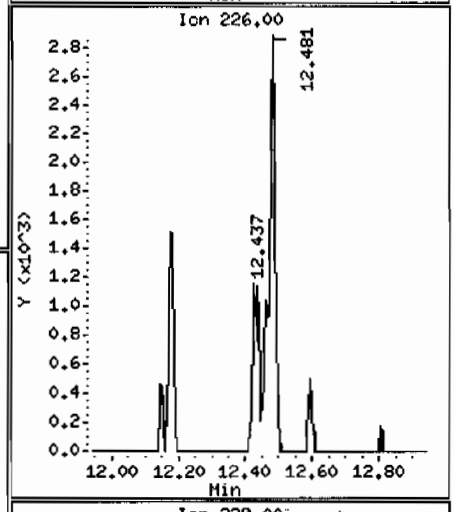

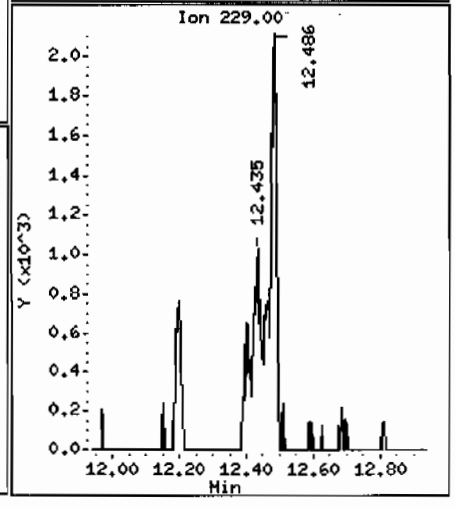

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |2414180001|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 32.8 ug/Kg

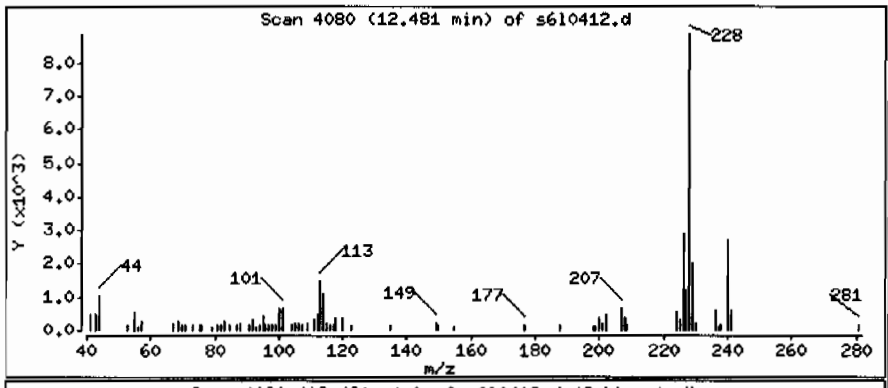

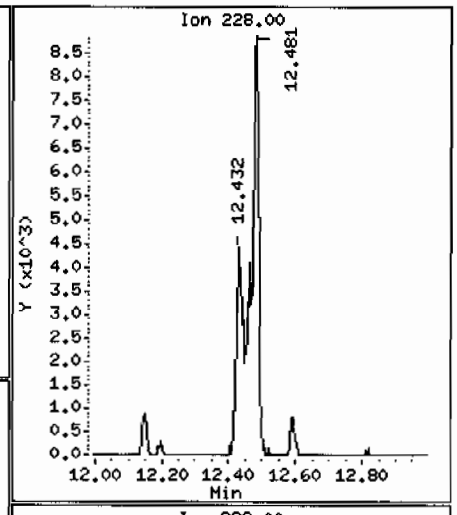

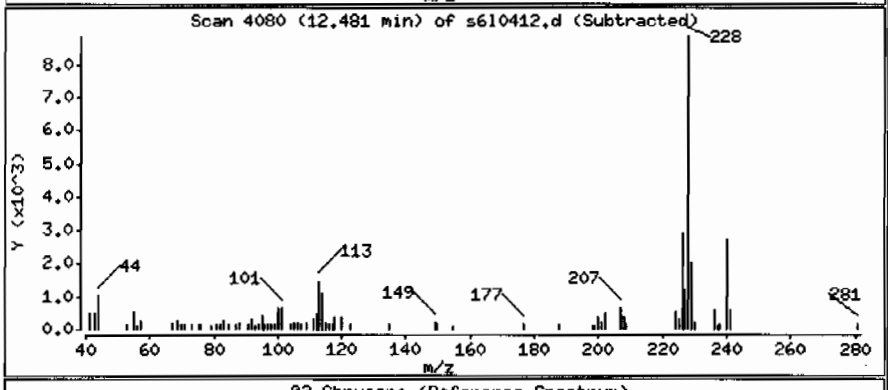

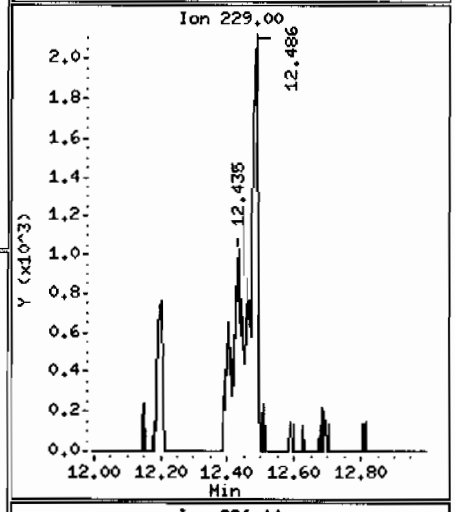

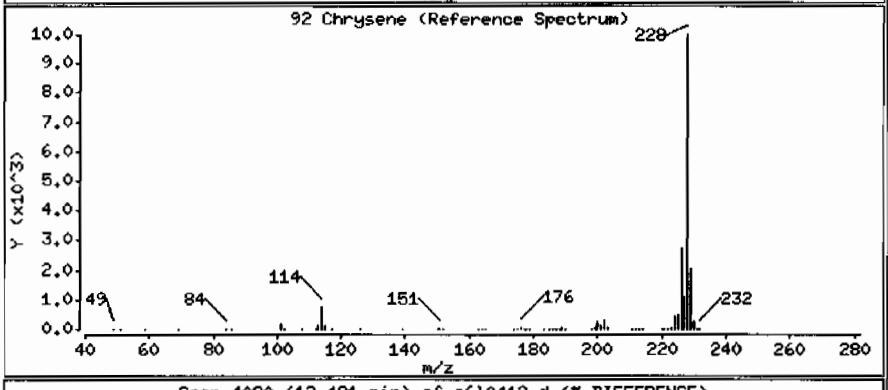

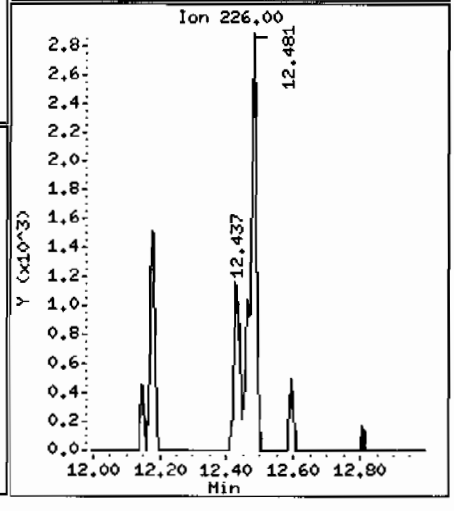

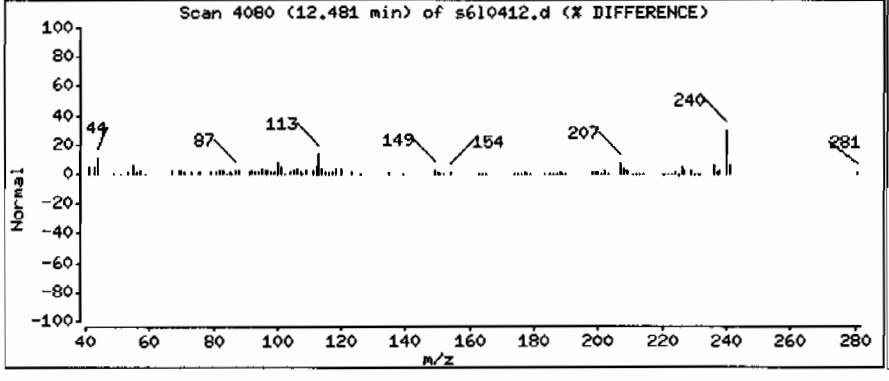

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |241418001|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 46.2 ug/Kg

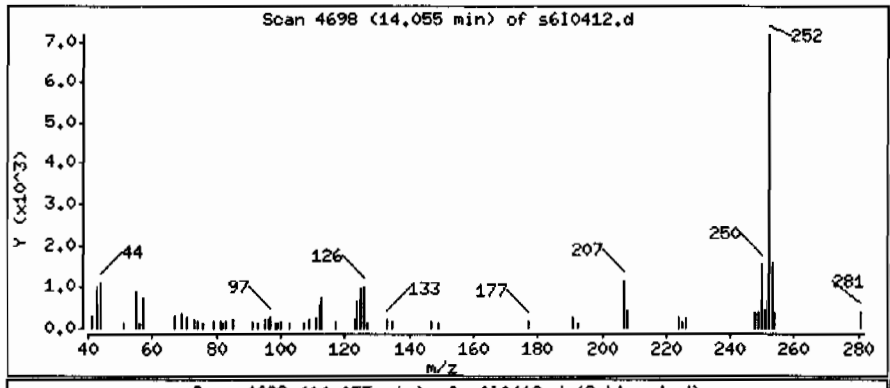

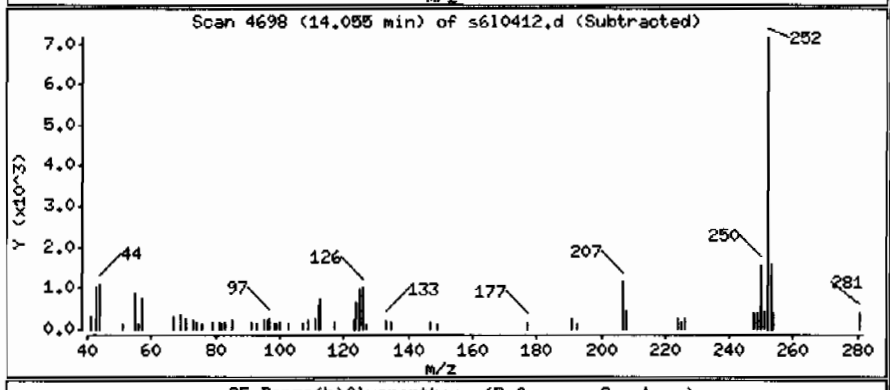

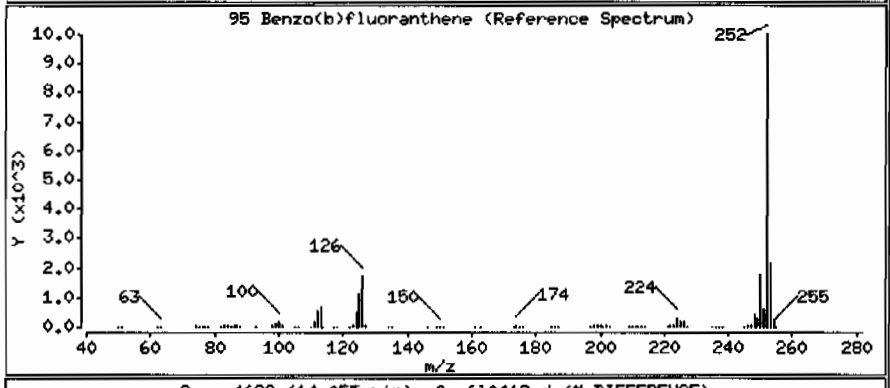

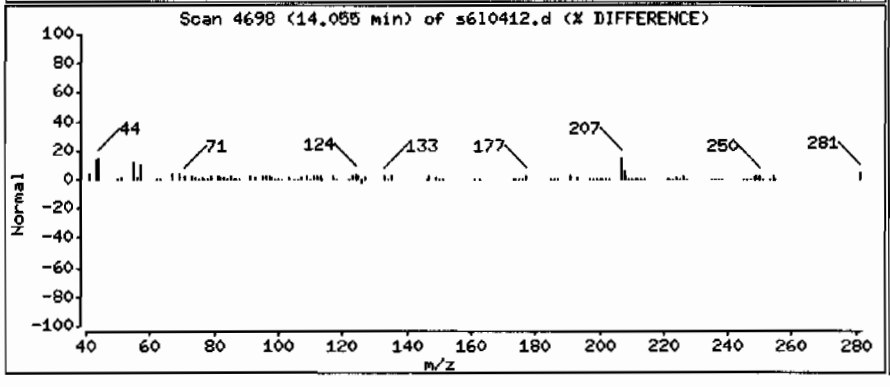

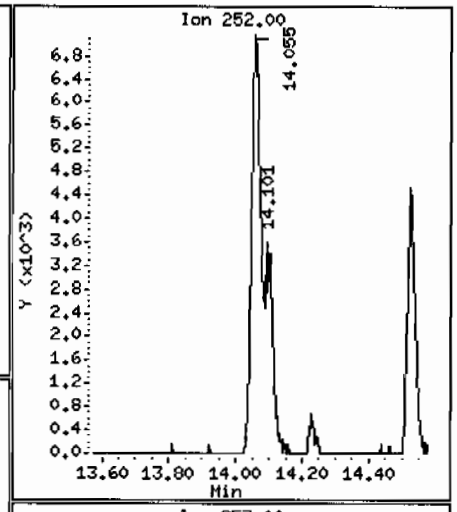

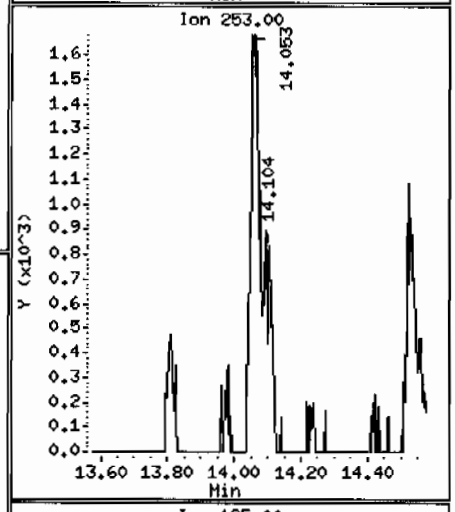

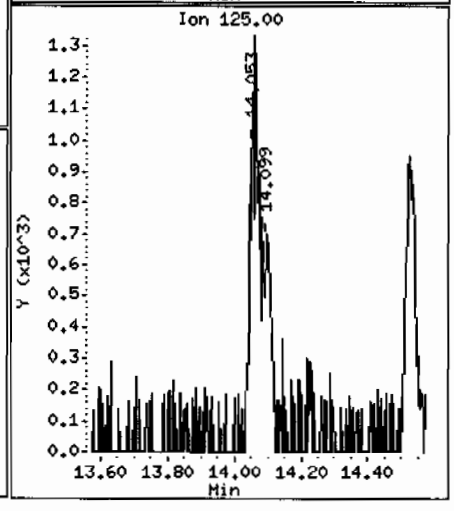

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961 Instrument: MSD6.i

Sample Info: |2414180011925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

96 Benzo(k)fluoranthene Concentration: 13.3 ug/Kg

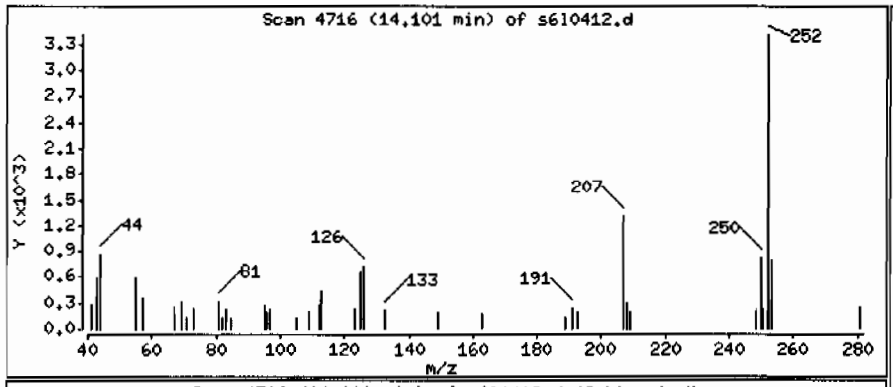

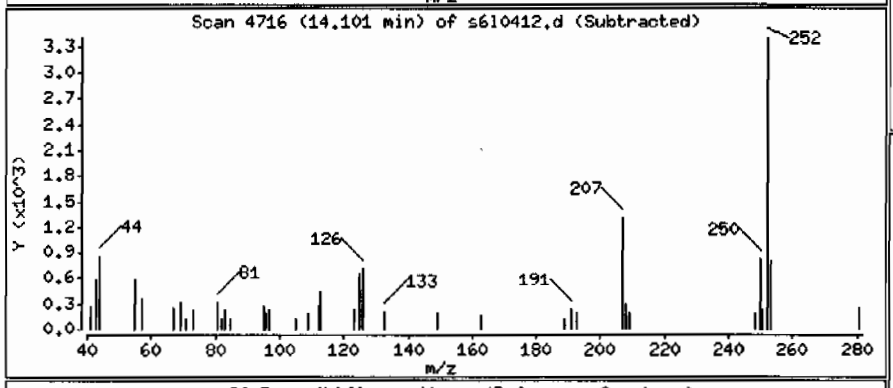

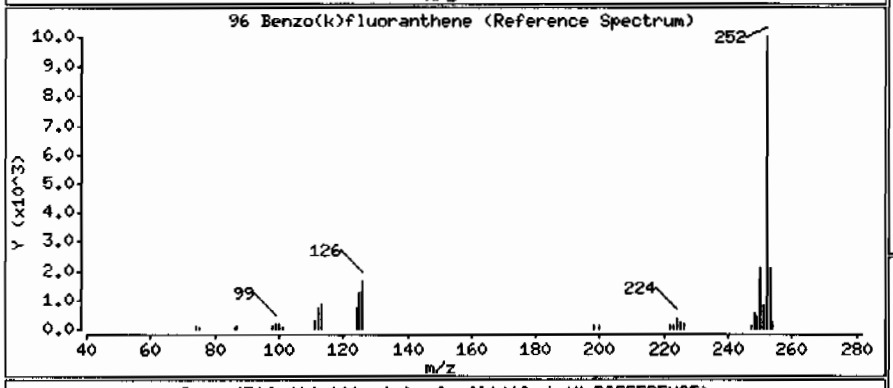

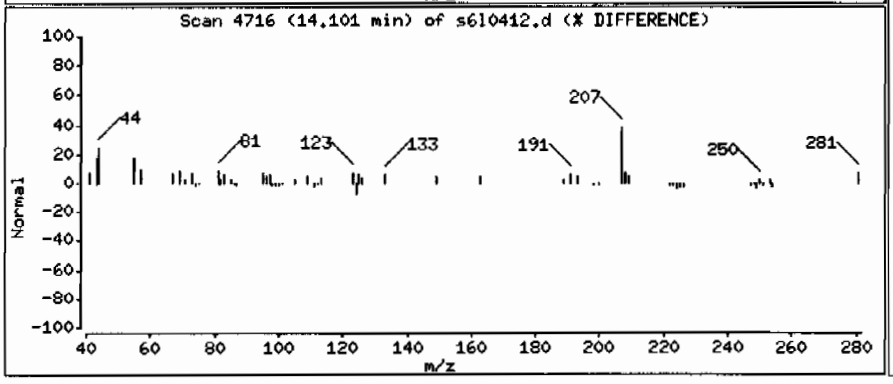

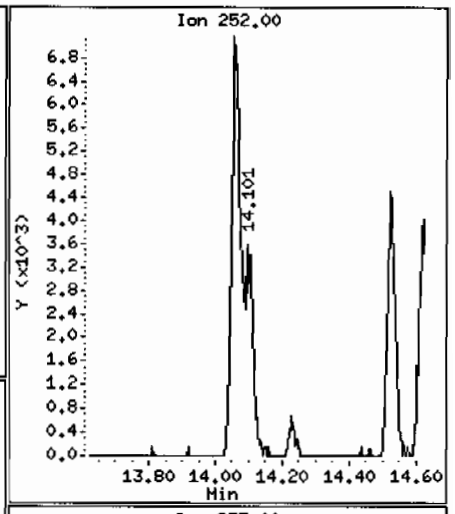

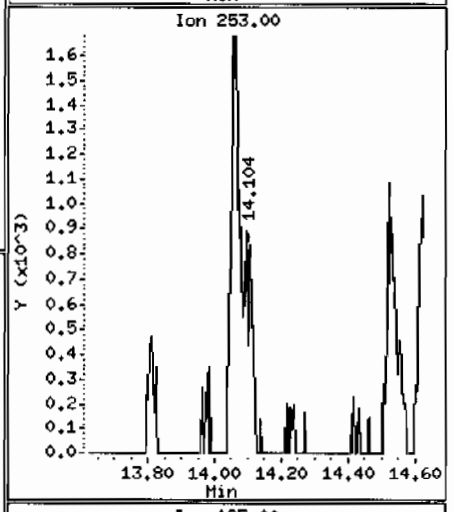

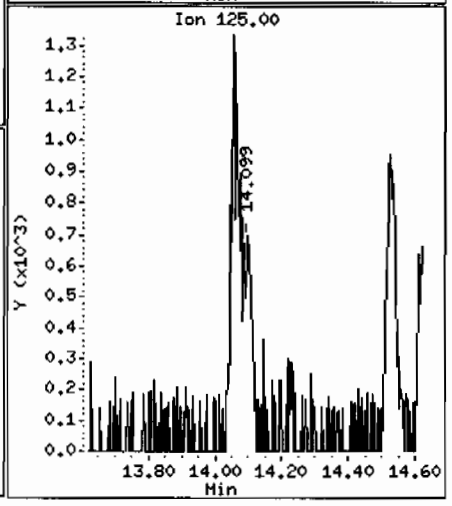

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |2414180011925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 27.7 ug/Kg

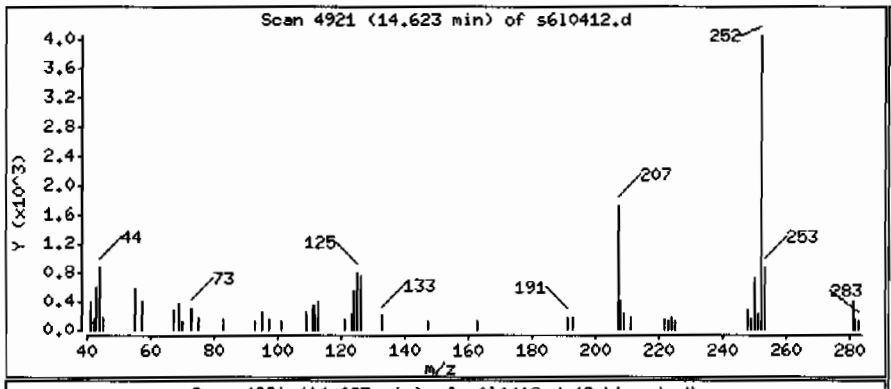

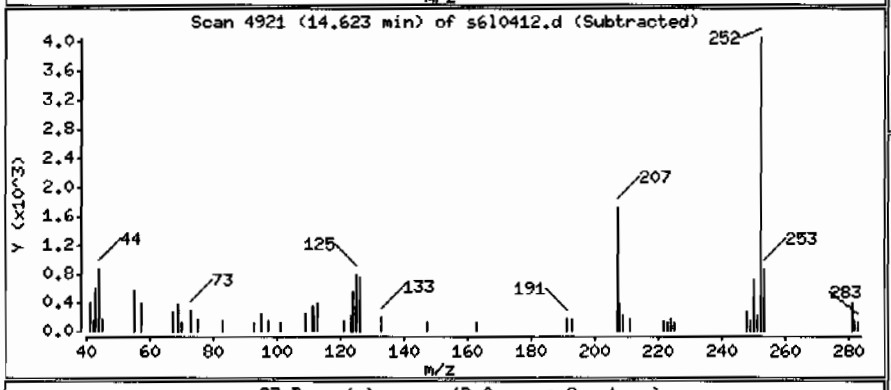

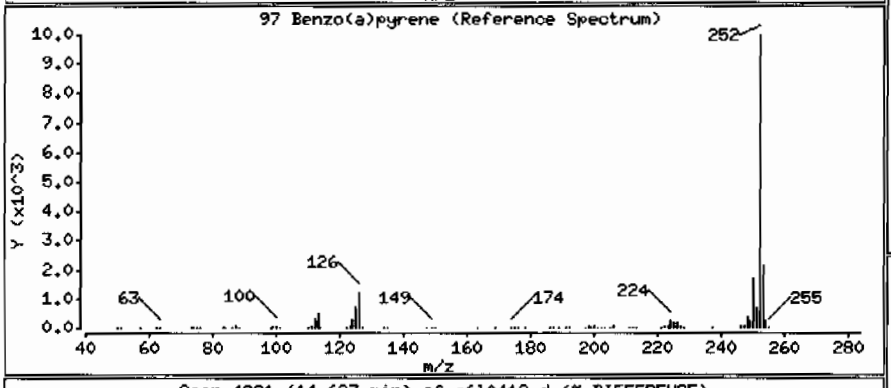

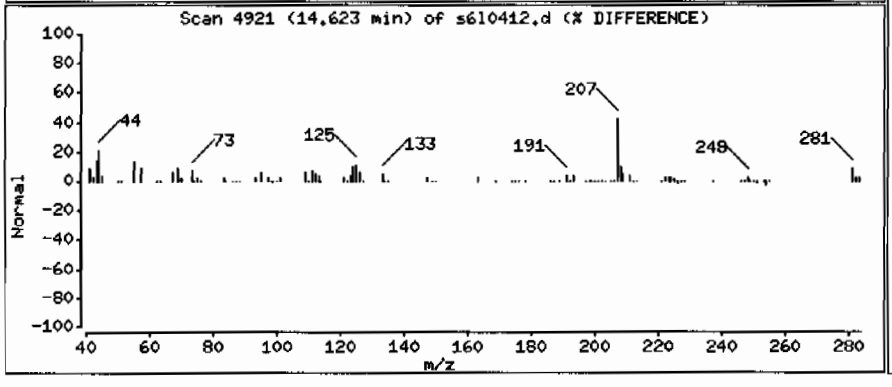

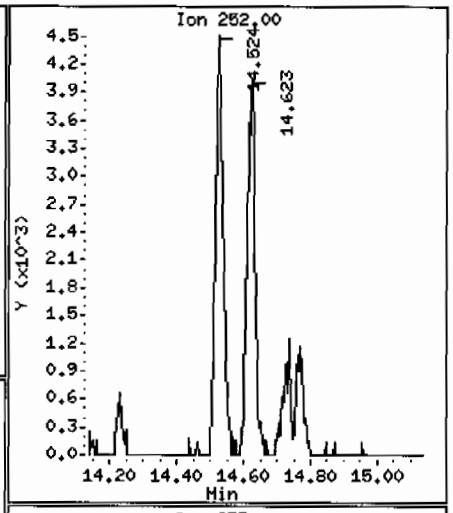

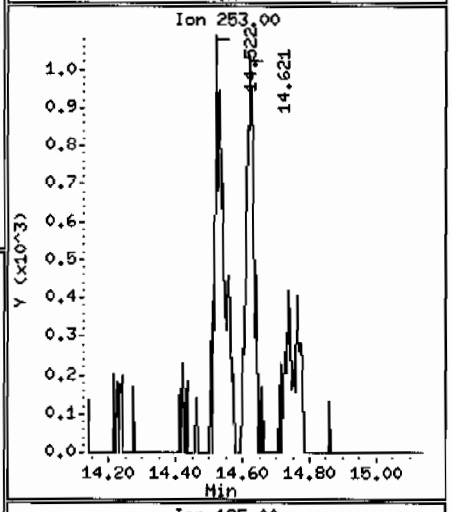

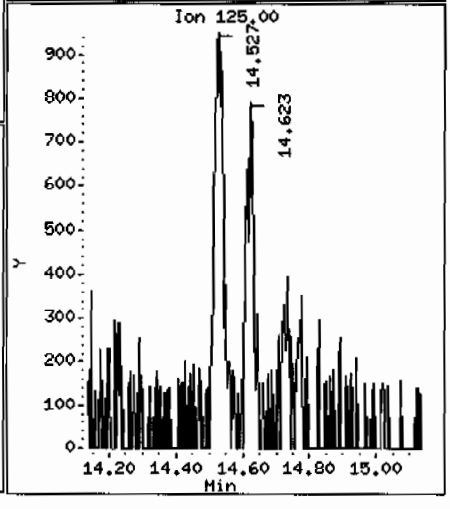

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |2414180001|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 140 ug/Kg

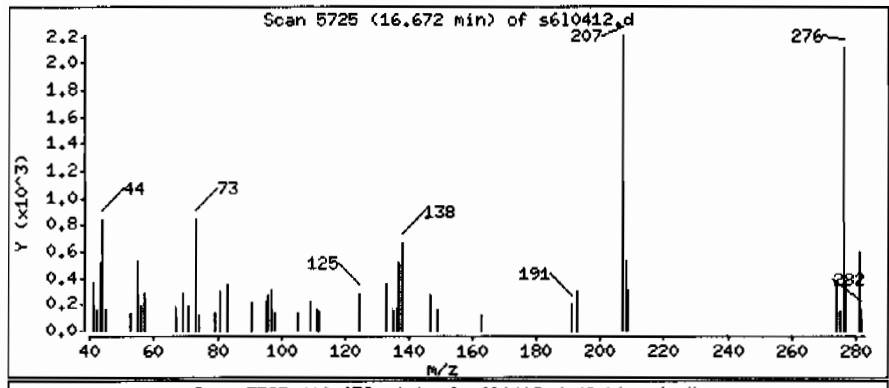

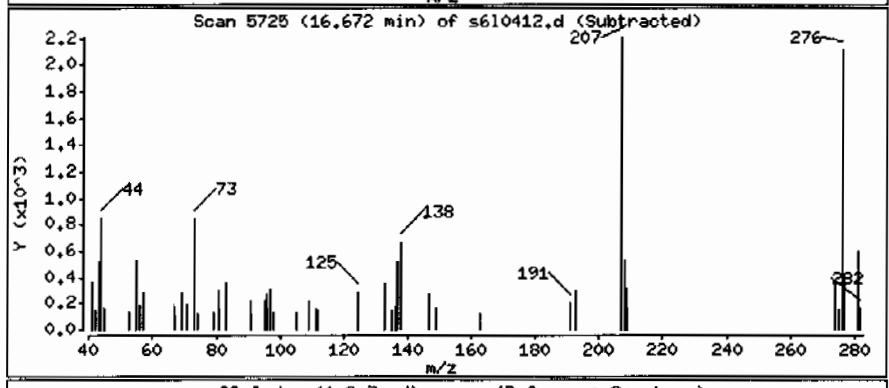

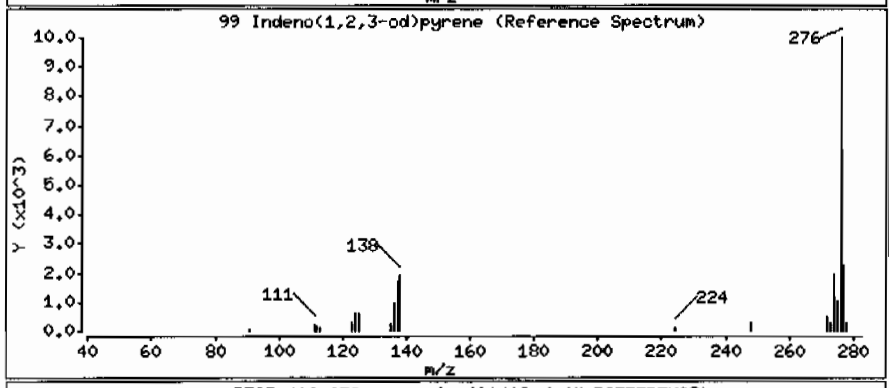

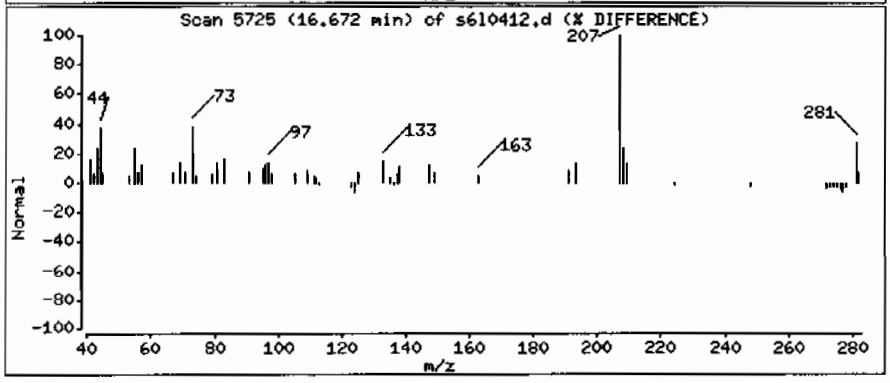

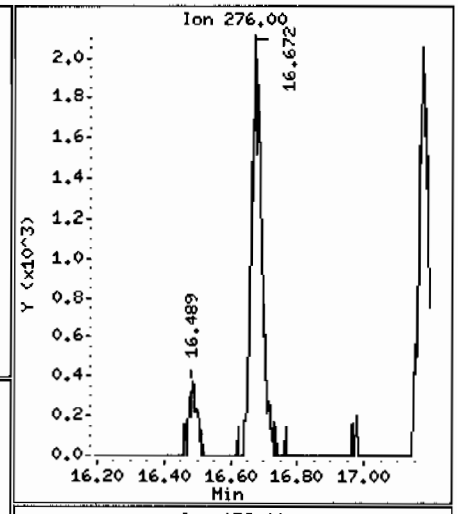

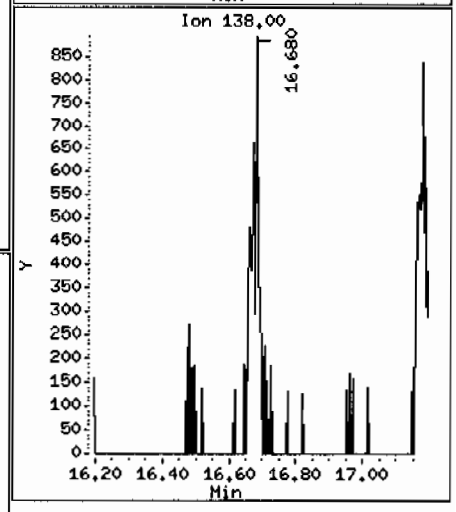

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961 Instrument: MSD6.i

Sample Info: |24141B001|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

101 Benzo(ghi)perylene Concentration: 21.1 ug/Kg

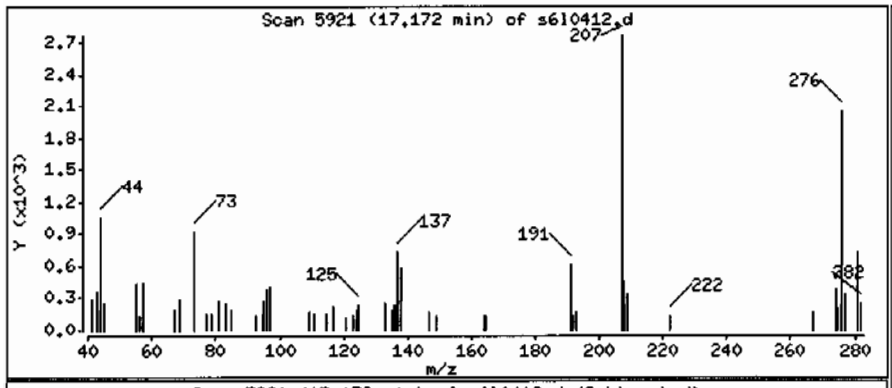

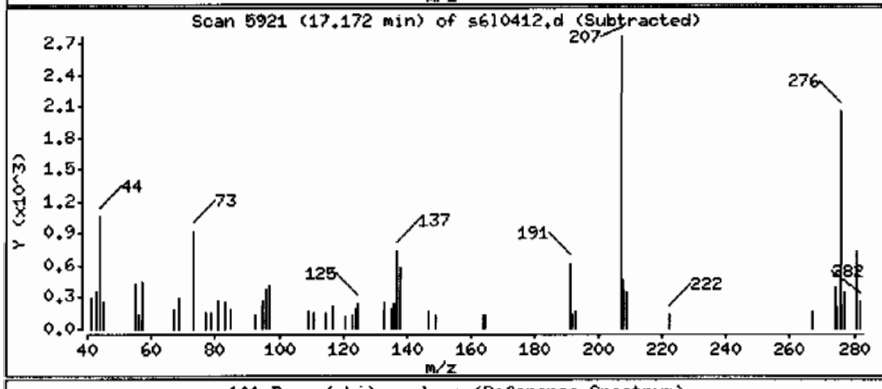

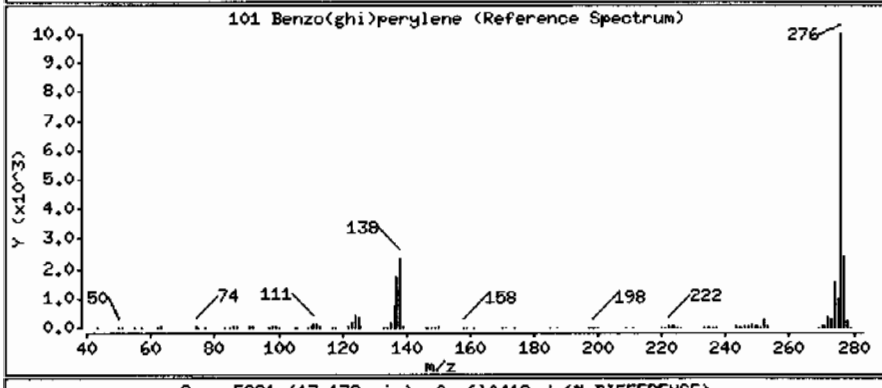

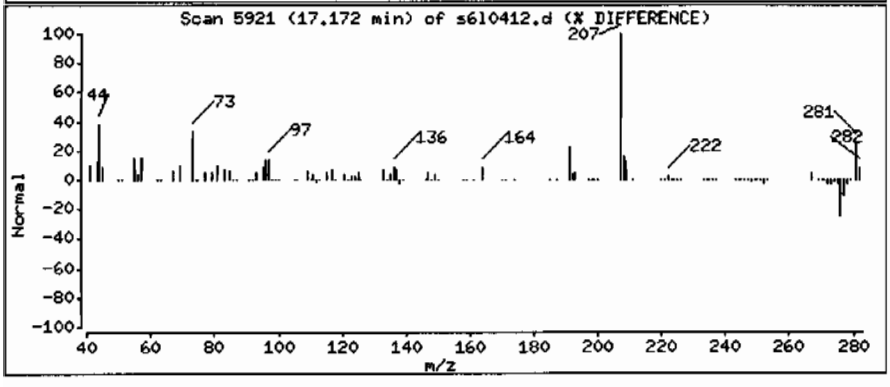

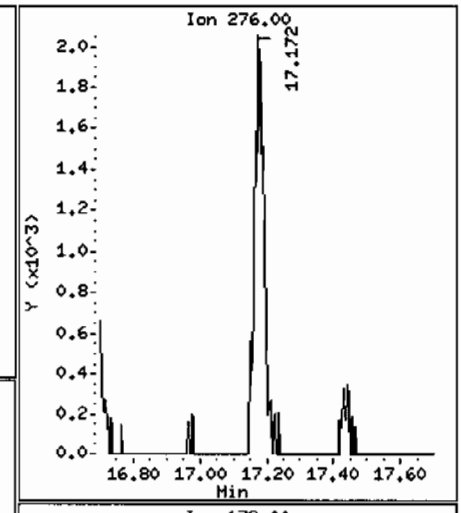

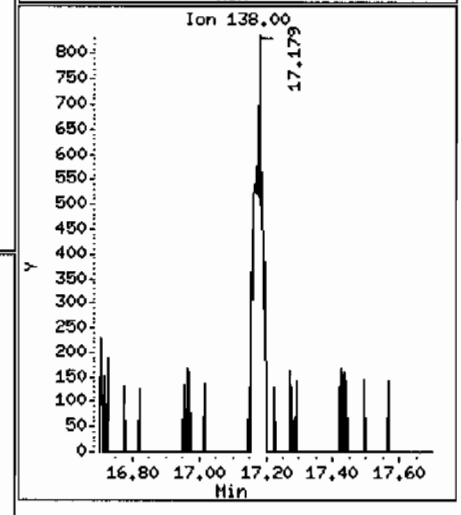

Data File: /chem/MSD6.i/s120409.b/s610412.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13961

Instrument: MSD6.i

Sample Info: |2414180001|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	39	C6H12O2	116

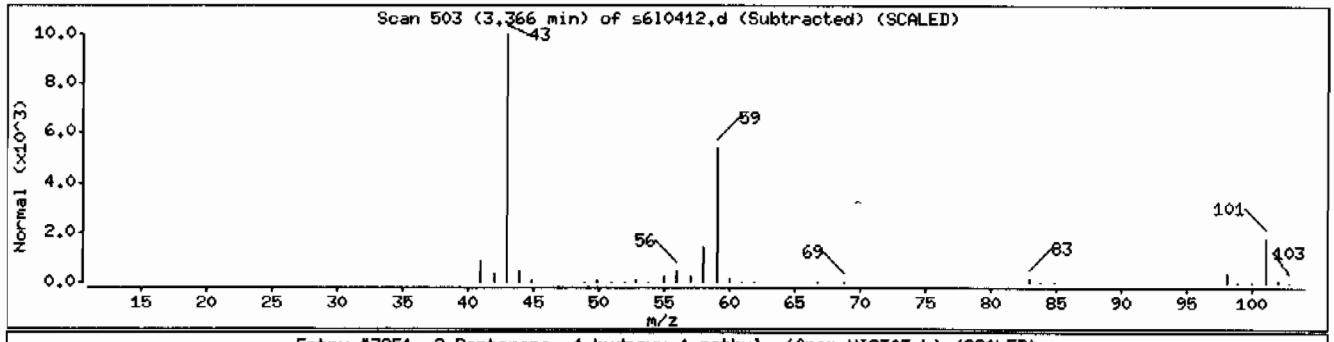

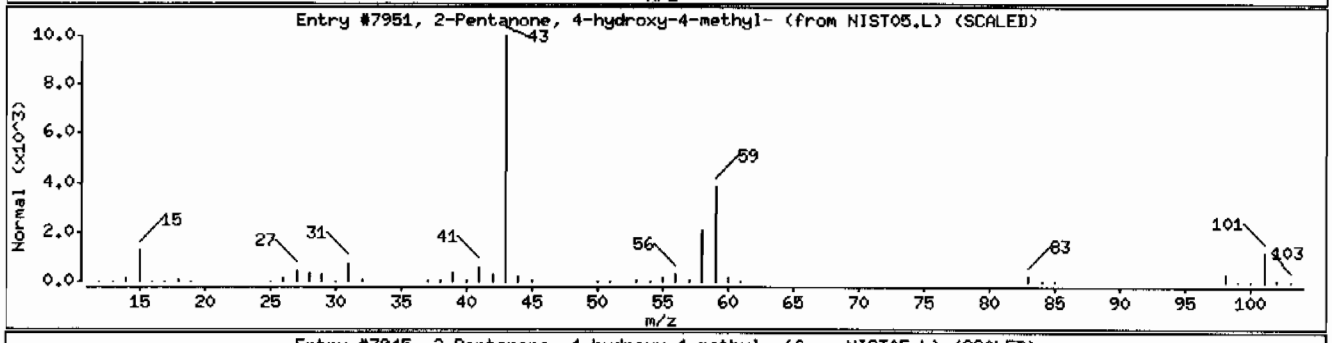

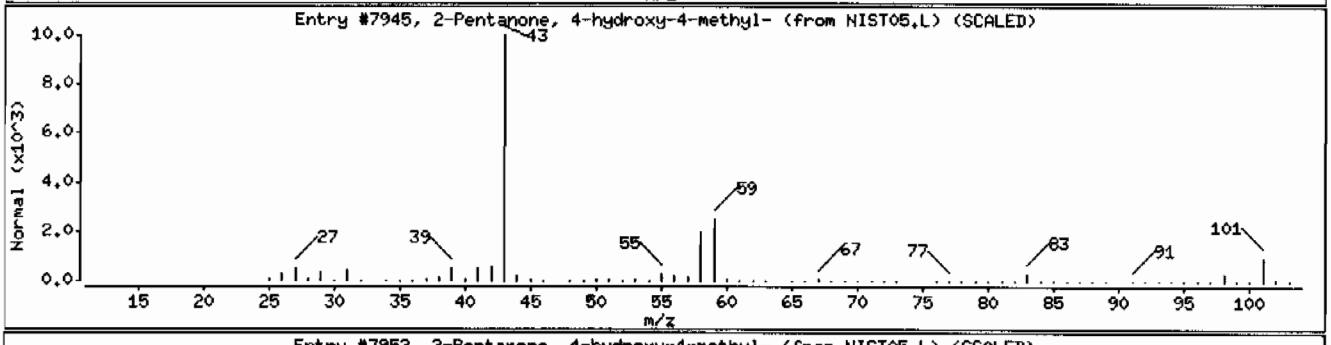

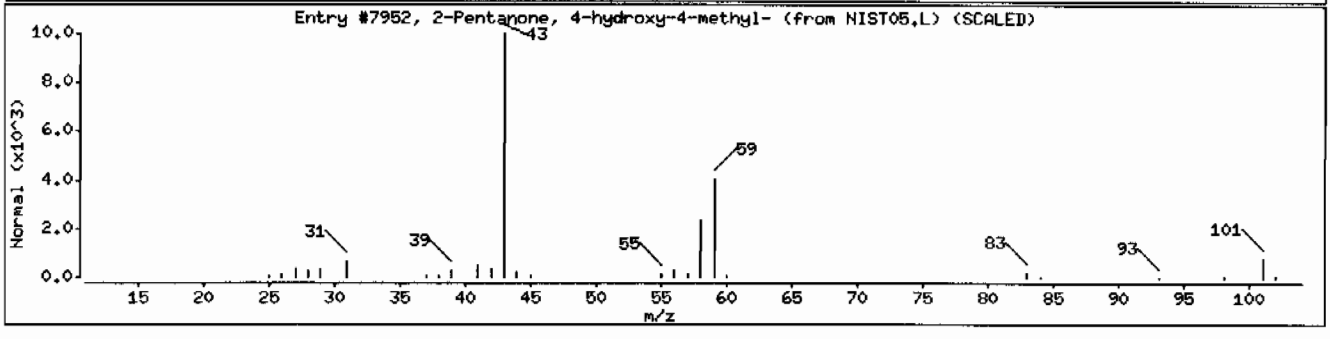

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418007	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13962	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 17:34	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s6l0418.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	381	ug/kg	76.1	381
108-95-2	Phenol	U	381	ug/kg	76.1	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.1	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.1	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.1	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.1	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.2	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.1	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.1	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.1	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.1	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.1	381
95-48-7	o-Cresol	U	381	ug/kg	76.1	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.1	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.1	381
78-59-1	Isophorone	U	381	ug/kg	76.1	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.1	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.1	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.1	381
65-85-0	Benzoic acid	U	761	ug/kg	190	761
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.1	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.1	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.61	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.1	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.1	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.1	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline	U	381	ug/kg	76.1	381
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	381	ug/kg	76.1	381

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418007	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13962	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 17:34	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s6l0418.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	381	ug/kg	76.1	381
606-20-2	2,6-Dinitrotoluene	U	381	ug/kg	38.1	381
208-96-8	Acenaphthylene	U	38.1	ug/kg	11.4	38.1
51-28-5	2,4-Dinitrophenol	U	761	ug/kg	145	761
132-64-9	Dibenzofuran	U	381	ug/kg	76.1	381
84-66-2	Diethylphthalate	U	381	ug/kg	76.1	381
86-73-7	Fluorene	U	38.1	ug/kg	11.4	38.1
7005-72-3	4-Chlorophenylphenylether	U	381	ug/kg	76.1	381
534-52-1	2-Methyl-4,6-dinitrophenol	U	381	ug/kg	76.1	381
100-01-6	4-Nitroaniline	U	381	ug/kg	114	381
	p-Nitroaniline					
122-39-4	Diphenylamine	U	381	ug/kg	76.1	381
122-66-7	Azobenzene	U	381	ug/kg	76.1	381
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	381	ug/kg	76.1	381
118-74-1	Hexachlorobenzene	U	381	ug/kg	76.1	381
85-01-8	Phenanthrene	U	38.1	ug/kg	11.4	38.1
120-12-7	Anthracene	U	38.1	ug/kg	7.61	38.1
84-74-2	Di-n-butylphthalate	U	381	ug/kg	76.1	381
206-44-0	Fluoranthene	U	38.1	ug/kg	11.4	38.1
85-68-7	Butylbenzylphthalate	U	381	ug/kg	76.1	381
56-55-3	Benzo(a)anthracene	U	38.1	ug/kg	11.4	38.1
91-94-1	3,3'-Dichlorobenzidine	U	381	ug/kg	114	381
218-01-9	Chrysene	U	38.1	ug/kg	11.4	38.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	381	ug/kg	76.1	381
117-84-0	Di-n-octylphthalate	U	381	ug/kg	76.1	381
205-99-2	Benzo(b)fluoranthene	U	38.1	ug/kg	11.4	38.1
207-08-9	Benzo(k)fluoranthene	U	38.1	ug/kg	11.4	38.1
50-32-8	Benzo(a)pyrene	U	38.1	ug/kg	11.4	38.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.1	ug/kg	11.4	38.1
53-70-3	Dibenzo(a,h)anthracene	U	38.1	ug/kg	11.4	38.1
191-24-2	Benzo(ghi)perylene	U	38.1	ug/kg	11.4	38.1
120-82-1	1,2,4-Trichlorobenzene	U	381	ug/kg	76.1	381

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	226	ug/kg		J
	Unknown Aldol Condensate	3.37	333	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610418.d
Lab Smp Id: 241418007 Client Smp ID: RE03-09-13962
Inj Date : 04-DEC-2009 17:34
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418007|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	12.46770	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	232695	40.0000	
* 29 Naphthalene-d8	136	5.990	5.993	(1.000)	882273	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	481803	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	841294	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	724329	40.0000	
* 98 Perylene-d12	264	14.736	14.741	(1.000)	563835	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	381276	65.4303	2490
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	486801	66.1888	2520
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	236557	37.9027	1440
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	471075	37.9396	1440
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	104890	74.5883	2840
$ 81 p-Terphenyl-d14	244	11.178	11.181	(0.898)	499805	42.7878	1630

ION RATIO REPORT

SV REPORT

Data file: s610418.d
Report Date: 12/05/2009 08:16
Lab. ID: 241418007 SampleType: SAMPLE
Injection Date: 04-DEC-2009 17:34
Operator: nagl Instrument: MSD6.i
Sample Info: |241418007|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	20401	4.35	4.42	80-120	100	(T)
93	188	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	32629	5.25	5.10	80-120	100	(T)
42	19261	5.25	5.10	40-100	59	(T)
22 Isophorone		CAS#: 78-59-1				
82	236557	5.25	5.52	80-120	100	(T)
138	4849	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	85964	7.86	7.55	80-120	100	(T)
164	481803	7.86	7.55	0- 40	560	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	62174	7.86	8.06	80-120	100	(T)
89	736	7.86	8.06	41-101	1	(QT)
63	567	7.86	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	5982	8.70	8.45	80-120	100	(T)
165	6252	8.70	8.45	62-122	105	(T)
167	1890	8.70	8.45	0- 44	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	138	8.70	8.50	80-120	100	(T)
105	440	8.70	8.50	11- 71	319	(QT)
51	544	8.70	8.50	22- 82	394	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610418.d
Lab Smp Id: 241418007 Client Smp ID: RE03-09-13962
Inj Date : 04-DEC-2009 17:34
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418007|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	12.46770	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1336013	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.227	198199	5.93405135	226	0		0	10
Unknown Aldol Condensate				CAS #:			
3.374	292066	8.74438912	333	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610418.d

Date : 04-DEC-2009 17:34

Client ID: RE03-09-13962

Sample Info: |2414180071925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

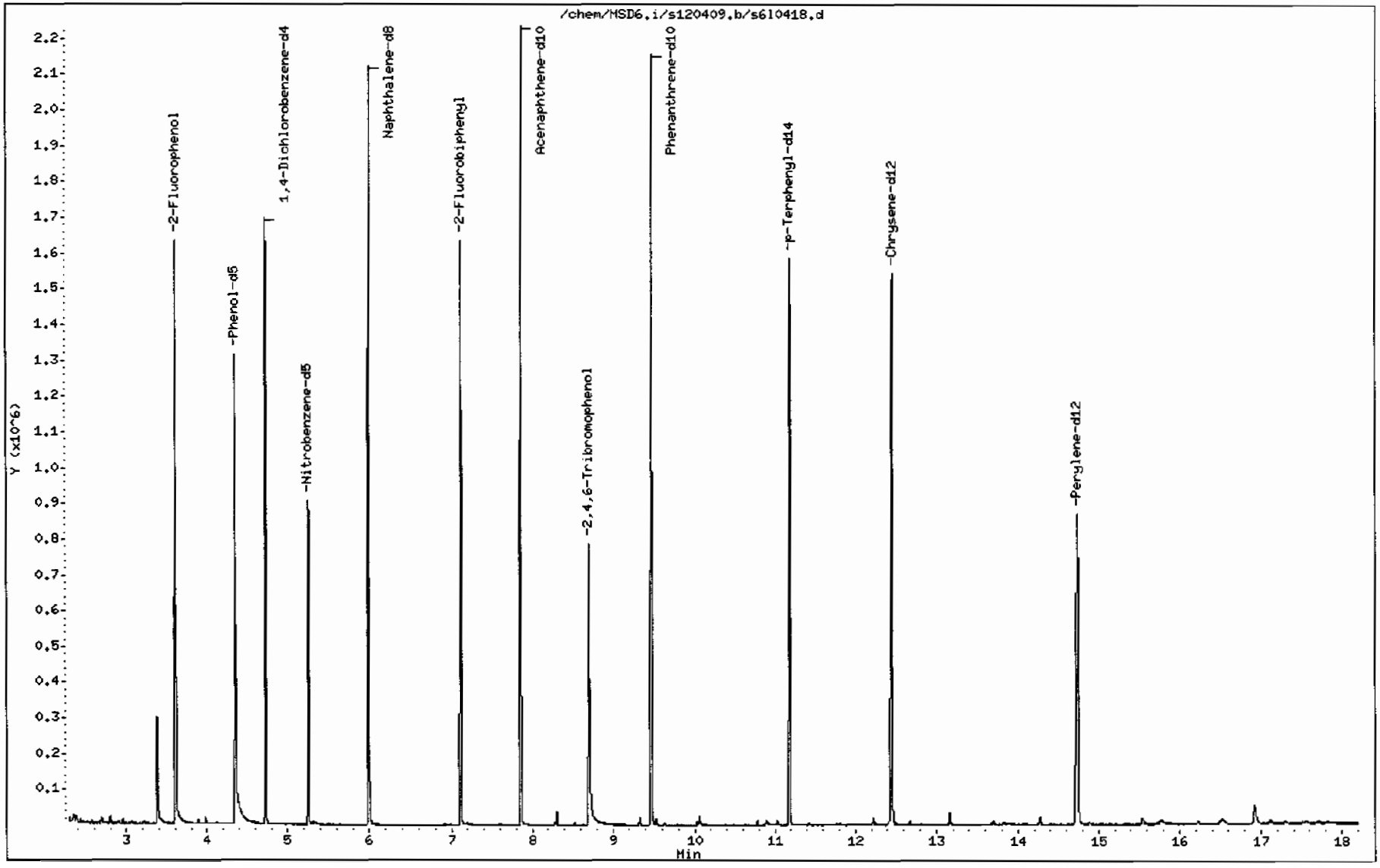

Data File: /chem/MSD6.i/s120409.b/s610418.d

Page 1

Date : 04-DEC-2009 17:34

Client ID: RE03-09-13962

Instrument: MSD6.i

Sample Info: |24141800719256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	39	C5H12O2	104

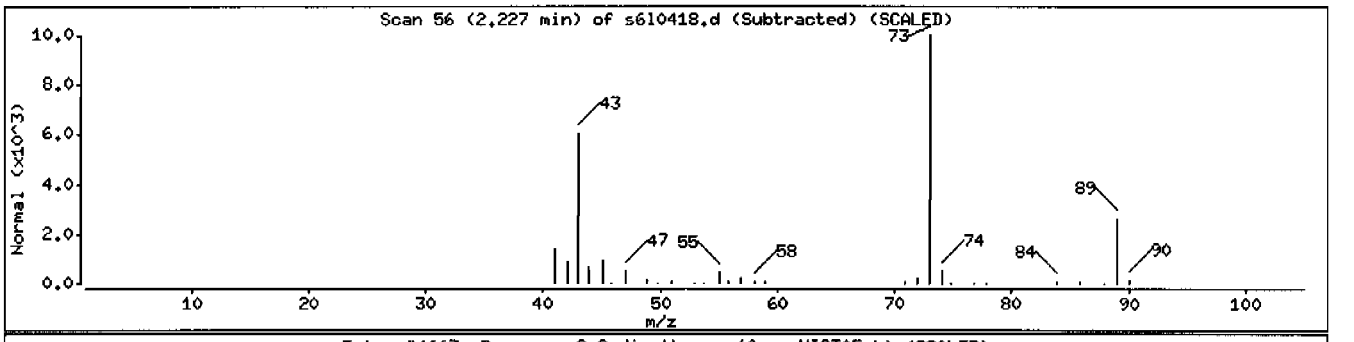

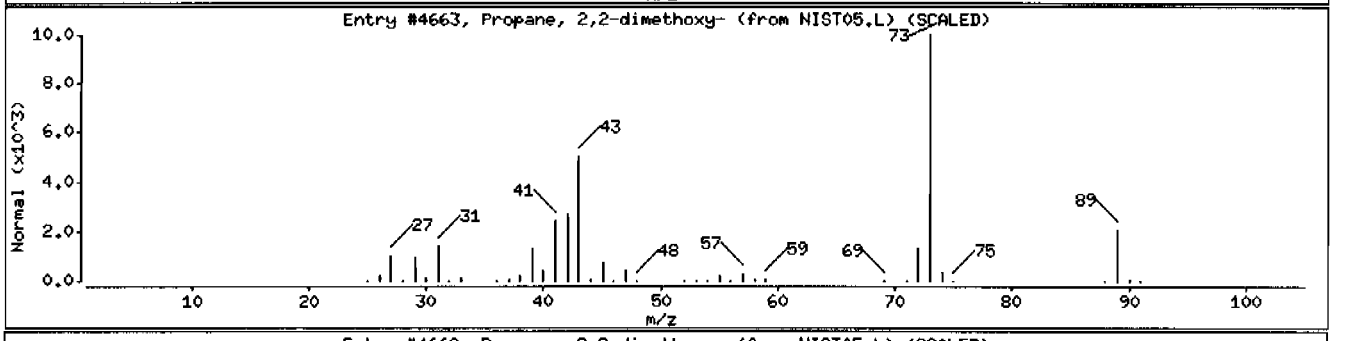

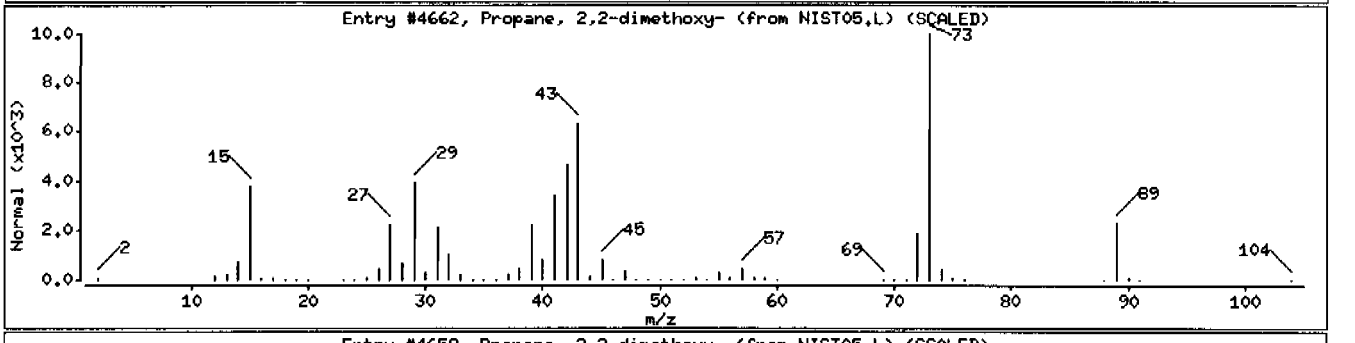

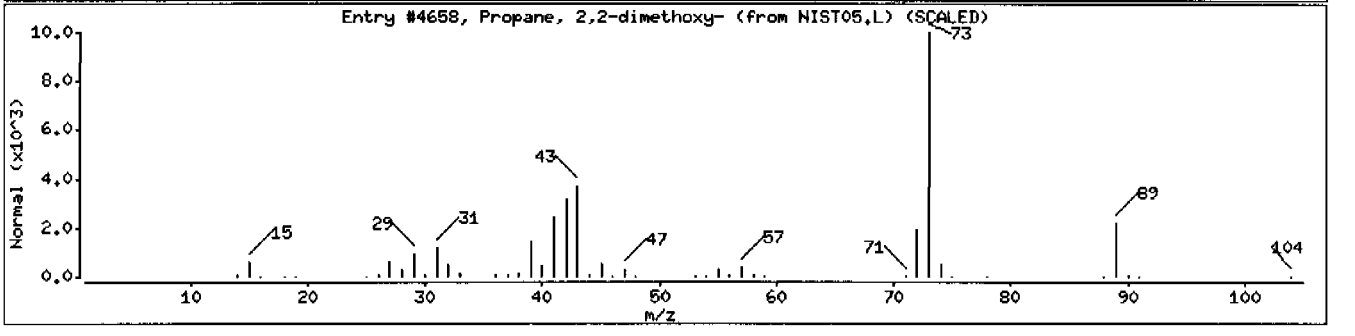

Data File: /chem/MSD6.i/s120409.b/s610418.d

Date : 04-DEC-2009 17:34

Client ID: RE03-09-13962

Instrument: MSD6.i

Sample Info: I2414180071925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
3-Hexanol	623-37-0	NIST05.L	4318	36	C6H14O	102

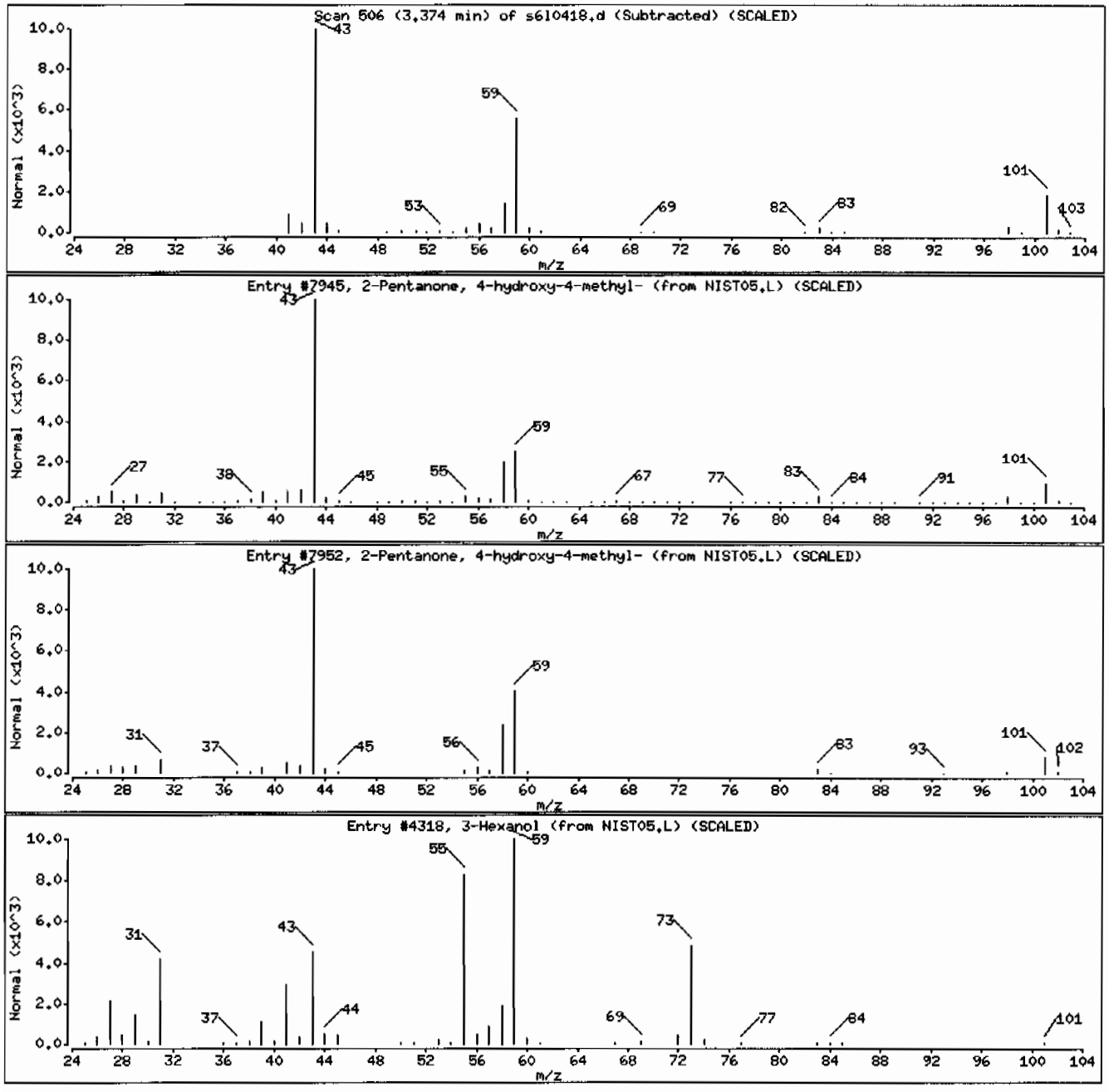

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418014	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13963	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 20:45	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s610425.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.0	400
108-95-2	Phenol	U	400	ug/kg	80.0	400
95-57-8	2-Chlorophenol	U	400	ug/kg	80.0	400
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.0	400
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.0	400
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.0	400
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0
110-86-1	Pyridine	U	400	ug/kg	80.0	400
62-53-3	Aniline	U	400	ug/kg	120	400
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.0	400
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.0	400
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.0	400
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.0	400
95-48-7	o-Cresol	U	400	ug/kg	80.0	400
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400
67-72-1	Hexachloroethane	U	400	ug/kg	80.0	400
98-95-3	Nitrobenzene	U	400	ug/kg	80.0	400
78-59-1	Isophorone	U	400	ug/kg	80.0	400
88-75-5	2-Nitrophenol	U	400	ug/kg	80.0	400
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.0	400
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.0	400
65-85-0	Benzoic acid	U	800	ug/kg	200	800
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0
106-47-8	4-Chloroaniline	U	400	ug/kg	80.0	400
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.0	400
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.00	40.0
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.0	400
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.0	400
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.0	400
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0
88-74-4	2-Nitroaniline	U	400	ug/kg	80.0	400
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	400	ug/kg	80.0	400

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418014**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13963**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:45**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**s610425.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	400	ug/kg	80.0	400
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0
51-28-5	2,4-Dinitrophenol	U	800	ug/kg	152	800
132-64-9	Dibenzofuran	U	400	ug/kg	80.0	400
84-66-2	Diethylphthalate	U	400	ug/kg	80.0	400
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.0	400
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.0	400
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400
	p-Nitroaniline					
122-39-4	Diphenylamine	U	400	ug/kg	80.0	400
122-66-7	Azobenzene	U	400	ug/kg	80.0	400
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.0	400
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.0	400
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0
120-12-7	Anthracene	U	40.0	ug/kg	8.00	40.0
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.0	400
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.0	400
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.0	400
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.0	400
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.0	400

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	331	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610425.d
Lab Smp Id: 241418014 Client Smp ID: RE03-09-13963
Inj Date : 04-DEC-2009 20:45
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418014|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	17.16080	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	235782	40.0000	
* 29 Naphthalene-d8	136	5.990	5.993	(1.000)	892541	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	484563	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	855511	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	724748	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	510359	40.0000	
$ 3 2-Fluorophenol	112	3.605	3.590	(0.762)	355513	60.2104	2410
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	423441	56.8202	2270
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	226892	35.9359	1440
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	445081	35.6419	1420
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	92861	65.6583	2630
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	477910	40.8897	1640

ION RATIO REPORT

SV REPORT

Data file: s610425.d
Report Date: 12/05/2009 08:17
Lab. ID: 241418014 SampleType: SAMPLE
Injection Date: 04-DEC-2009 20:45
Operator: nagl Instrument: MSD6.i
Sample Info: |241418014|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	19193	4.35	4.42	80-120	100	(T)
93	162	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	31373	5.25	5.10	80-120	100	(T)
42	18497	5.26	5.10	40-100	59	(T)
22 Isophorone			CAS#: 78-59-1			
82	226892	5.25	5.52	80-120	100	(T)
138	4778	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	85895	7.86	7.55	80-120	100	(T)
164	484563	7.86	7.55	0- 40	564	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	63155	7.86	8.06	80-120	100	(T)
89	506	7.86	8.06	41-101	1	(QT)
63	638	7.85	8.06	18- 78	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	5921	8.70	8.45	80-120	100	(T)
165	5422	8.70	8.45	62-122	92	(T)
167	1691	8.70	8.45	0- 44	29	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610425.d
Lab Smp Id: 241418014 Client Smp ID: RE03-09-13963
Inj Date : 04-DEC-2009 20:45
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418014|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	17.16080	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1353743	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.381	279894	8.27020608	331	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610425.d
Date : 04-DEC-2009 20:45
Client ID: RE03-09-13963
Sample Info: |2414180141925661|1|SVMFI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

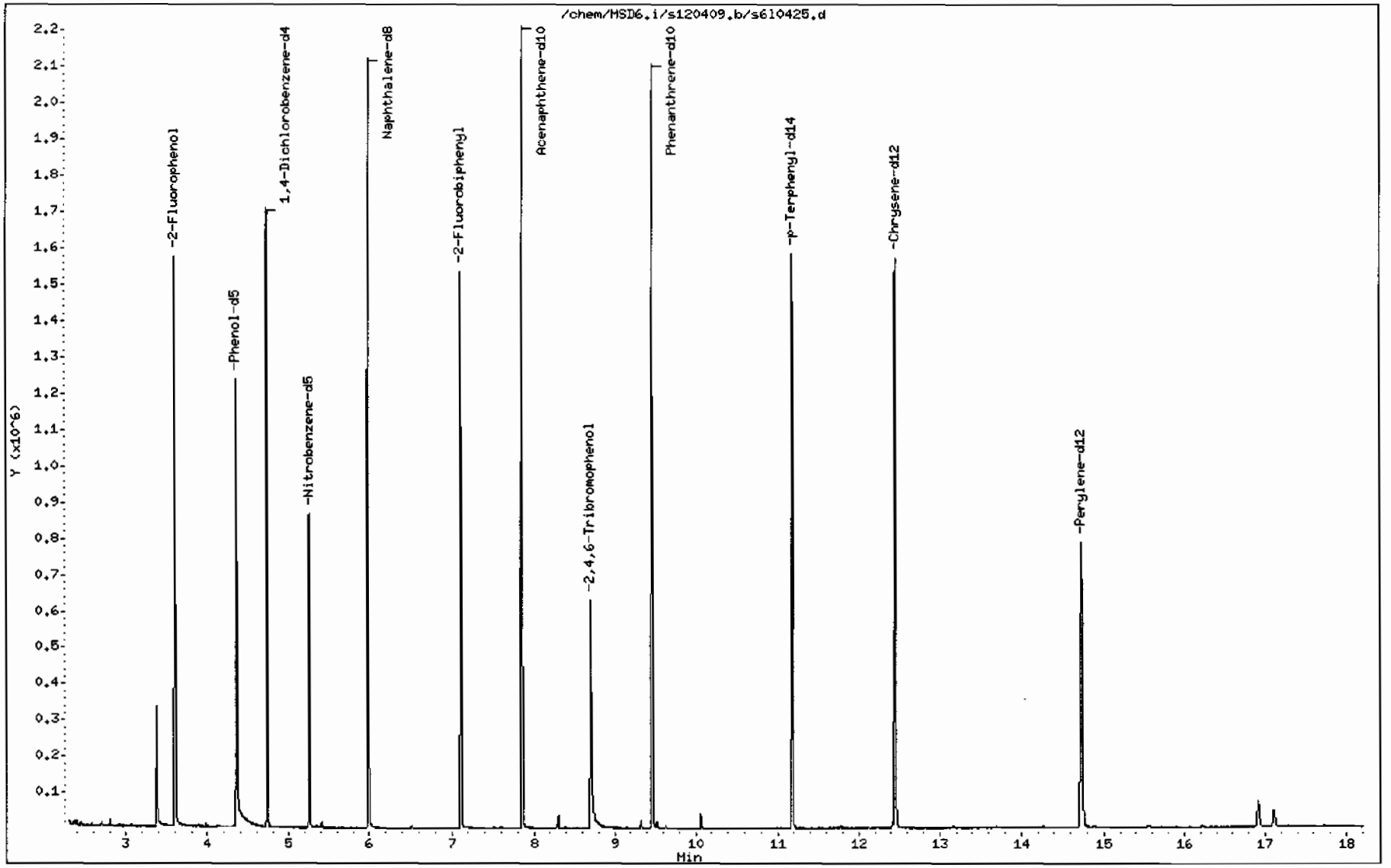

Data File: /chem/MSD6.i/s120409.b/s610425.d

Date : 04-DEC-2009 20:45

Client ID: RE03-09-13963

Instrument: MSD6.i

Sample Info: |2414180141925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	39	C6H12O2	116

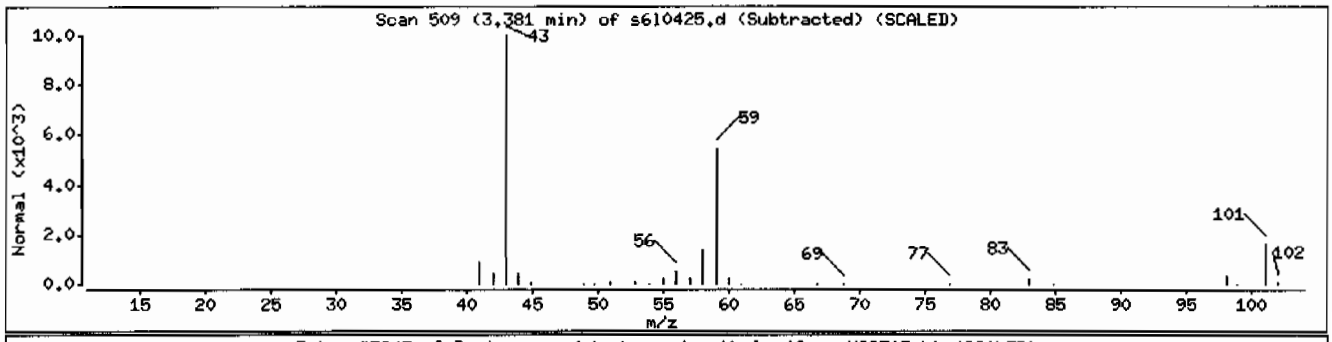

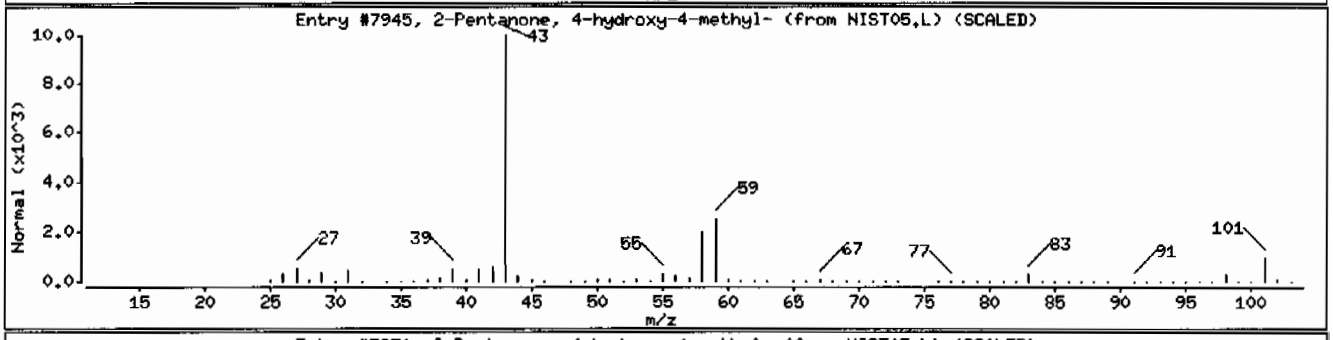

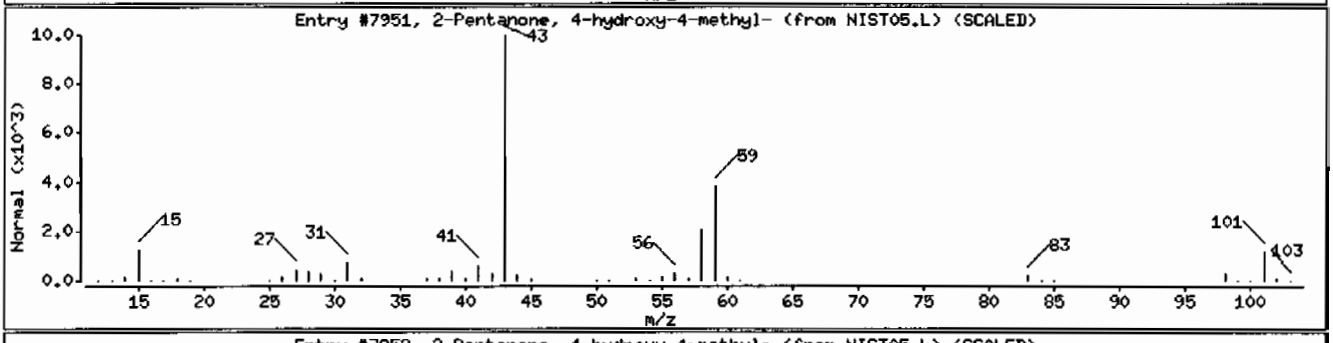

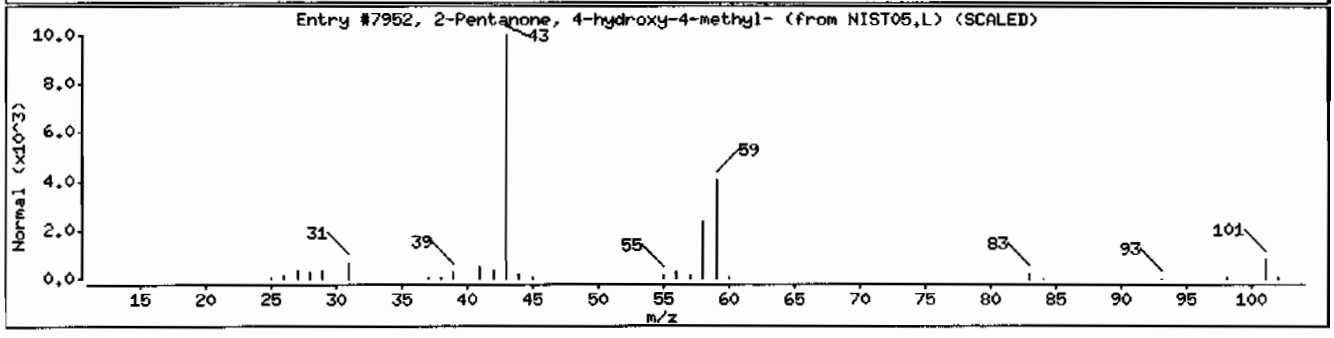

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 19:23**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s610422.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	383	ug/kg	76.5	383
108-95-2	Phenol	U	383	ug/kg	76.5	383
95-57-8	2-Chlorophenol	U	383	ug/kg	76.5	383
106-46-7	1,4-Dichlorobenzene	U	383	ug/kg	76.5	383
621-64-7	N-Nitrosodipropylamine	U	383	ug/kg	76.5	383
59-50-7	4-Chloro-3-methylphenol	U	383	ug/kg	76.5	383
83-32-9	Acenaphthene	U	38.3	ug/kg	12.6	38.3
121-14-2	2,4-Dinitrotoluene	U	383	ug/kg	38.3	383
100-02-7	4-Nitrophenol	U	383	ug/kg	126	383
87-86-5	Pentachlorophenol	U	383	ug/kg	95.6	383
129-00-0	Pyrene	U	38.3	ug/kg	11.5	38.3
110-86-1	Pyridine	U	383	ug/kg	76.5	383
62-53-3	Aniline	U	383	ug/kg	115	383
111-44-4	bis(2-Chloroethyl) ether	U	383	ug/kg	76.5	383
541-73-1	1,3-Dichlorobenzene	U	383	ug/kg	76.5	383
100-51-6	Benzyl alcohol	U	383	ug/kg	115	383
95-50-1	1,2-Dichlorobenzene	U	383	ug/kg	76.5	383
108-60-1	bis(2-Chloroisopropyl)ether	U	383	ug/kg	76.5	383
95-48-7	o-Cresol	U	383	ug/kg	76.5	383
65794-96-9	m,p-Cresols	U	383	ug/kg	115	383
67-72-1	Hexachloroethane	U	383	ug/kg	76.5	383
98-95-3	Nitrobenzene	U	383	ug/kg	76.5	383
78-59-1	Isophorone	U	383	ug/kg	76.5	383
88-75-5	2-Nitrophenol	U	383	ug/kg	76.5	383
105-67-9	2,4-Dimethylphenol	U	383	ug/kg	134	383
111-91-1	bis(2-Chloroethoxy)methane	U	383	ug/kg	76.5	383
120-83-2	2,4-Dichlorophenol	U	383	ug/kg	76.5	383
65-85-0	Benzoic acid	U	765	ug/kg	191	765
91-20-3	Naphthalene	U	38.3	ug/kg	11.5	38.3
106-47-8	4-Chloroaniline	U	383	ug/kg	76.5	383
87-68-3	Hexachlorobutadiene	U	383	ug/kg	76.5	383
91-57-6	2-Methylnaphthalene	U	38.3	ug/kg	7.65	38.3
77-47-4	Hexachlorocyclopentadiene	U	383	ug/kg	76.5	383
88-06-2	2,4,6-Trichlorophenol	U	383	ug/kg	76.5	383
95-95-4	2,4,5-Trichlorophenol	U	383	ug/kg	76.5	383
91-58-7	2-Chloronaphthalene	U	38.3	ug/kg	12.6	38.3
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	383	ug/kg	76.5	383
99-09-2	3-Nitroaniline	U	383	ug/kg	76.5	383

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s610422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	383	ug/kg	76.5	383
606-20-2	2,6-Dinitrotoluene	U	383	ug/kg	38.3	383
208-96-8	Acenaphthylene	U	38.3	ug/kg	11.5	38.3
51-28-5	2,4-Dinitrophenol	U	765	ug/kg	145	765
132-64-9	Dibenzofuran	U	383	ug/kg	76.5	383
84-66-2	Diethylphthalate	U	383	ug/kg	76.5	383
86-73-7	Fluorene	U	38.3	ug/kg	11.5	38.3
7005-72-3	4-Chlorophenylphenylether	U	383	ug/kg	76.5	383
534-52-1	2-Methyl-4,6-dinitrophenol	U	383	ug/kg	76.5	383
100-01-6	4-Nitroaniline	U	383	ug/kg	115	383
	p-Nitroaniline					
122-39-4	Diphenylamine	U	383	ug/kg	76.5	383
122-66-7	Azobenzene	U	383	ug/kg	76.5	383
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	383	ug/kg	76.5	383
118-74-1	Hexachlorobenzene	U	383	ug/kg	76.5	383
85-01-8	Phenanthrene	U	38.3	ug/kg	11.5	38.3
120-12-7	Anthracene	U	38.3	ug/kg	7.65	38.3
84-74-2	Di-n-butylphthalate	U	383	ug/kg	76.5	383
206-44-0	Fluoranthene	U	38.3	ug/kg	11.5	38.3
85-68-7	Butylbenzylphthalate	U	383	ug/kg	76.5	383
56-55-3	Benzo(a)anthracene	U	38.3	ug/kg	11.5	38.3
91-94-1	3,3'-Dichlorobenzidine	U	383	ug/kg	115	383
218-01-9	Chrysene	U	38.3	ug/kg	11.5	38.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	383	ug/kg	76.5	383
117-84-0	Di-n-octylphthalate	U	383	ug/kg	76.5	383
205-99-2	Benzo(b)fluoranthene	U	38.3	ug/kg	11.5	38.3
207-08-9	Benzo(k)fluoranthene	U	38.3	ug/kg	11.5	38.3
50-32-8	Benzo(a)pyrene	U	38.3	ug/kg	11.5	38.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.3	ug/kg	11.5	38.3
53-70-3	Dibenzo(a,h)anthracene	U	38.3	ug/kg	11.5	38.3
191-24-2	Benzo(ghi)perylene	U	38.3	ug/kg	11.5	38.3
120-82-1	1,2,4-Trichlorobenzene	U	383	ug/kg	76.5	383

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.24	160	ug/kg		J
	Unknown Aldol Condensate	3.38	344	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s610422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	712	ug/kg		J
	Unknown	17.12	259	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610422.d
Lab Smp Id: 241418011 Client Smp ID: RE03-09-13964
Inj Date : 04-DEC-2009 19:23
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418011|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	12.92600	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	240837	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	914009	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	498717	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	877903	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	746948	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	540932	40.0000	
$ 3 2-Fluorophenol	112	3.606	3.590	(0.762)	393770	65.2899	2500
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	467514	61.4174	2350
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	251047	38.8278	1480
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	495300	38.5378	1470
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	115100	79.0729	3020
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	512719	42.5642	1630

ION RATIO REPORT

SV REPORT

Data file: s610422.d
Report Date: 12/05/2009 08:17
Lab. ID: 241418011 SampleType: SAMPLE
Injection Date: 04-DEC-2009 19:23
Operator: nagl Instrument: MSD6.i
Sample Info: |241418011|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	21123	4.35	4.42	80-120	100	(T)
93	194	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	35270	5.25	5.10	80-120	100	(T)
42	20993	5.25	5.10	40-100	60	(T)
22 Isophorone			CAS#: 78-59-1			
82	251047	5.25	5.52	80-120	100	(T)
138	5064	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	88266	7.86	7.55	80-120	100	(T)
164	498717	7.86	7.55	0- 40	565	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	65415	7.86	8.06	80-120	100	(T)
89	671	7.86	8.06	41-101	1	(QT)
63	721	7.86	8.06	18- 78	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	6702	8.70	8.45	80-120	100	(T)
165	6333	8.71	8.45	62-122	94	(T)
167	1357	8.70	8.45	0- 44	20	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	303	16.67	16.70	80-120	100	( )
138	573	16.91	16.70	0- 54	189	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610422.d
Lab Smp Id: 241418011 Client Smp ID: RE03-09-13964
Inj Date : 04-DEC-2009 19:23
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418011|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	12.92600	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1380533	40.000
* 98 Perylene-d12	14.733	1486312	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.240	144157	4.17685615	160	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.379	310630	9.00028826	344	0		0	10
Unknown					CAS #:		
16.925	691483	18.6093489	712	0		0	98
Unknown					CAS #:		
17.116	251876	6.77853408	259	0		0	98

Data File: /chem/MSD6.i/s120409.b/s610422.d

Date : 04-DEC-2009 19:23

Client ID: RE03-09-13964

Sample Info: |2414180111925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

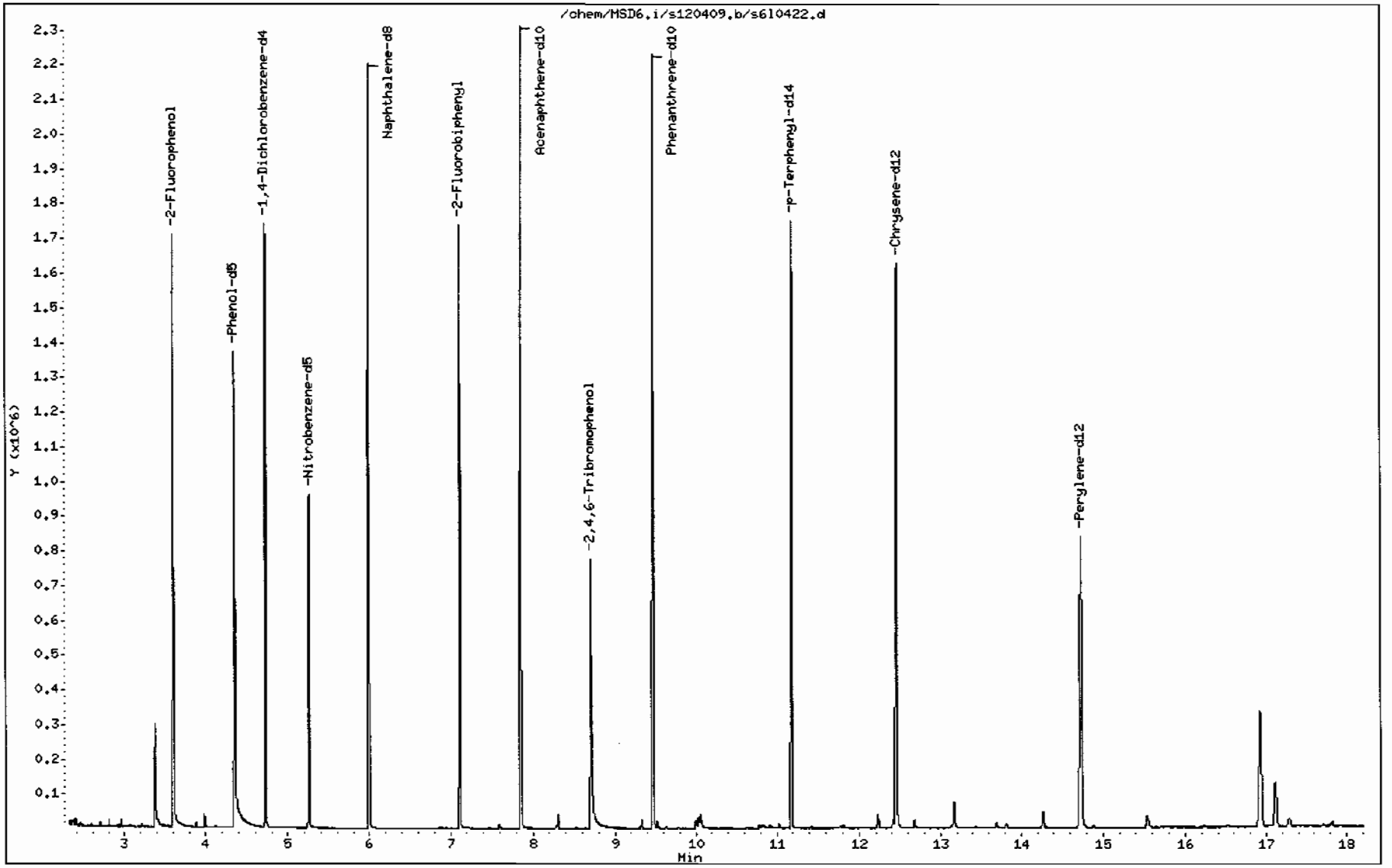

Data File: /chem/MSD6.i/s120409.b/s610422.d

Date : 04-DEC-2009 19:23

Client ID: RE03-09-13964

Instrument: MSD6.i

Sample Info: |2414180111925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	40	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	724	38	C3H7NO	73

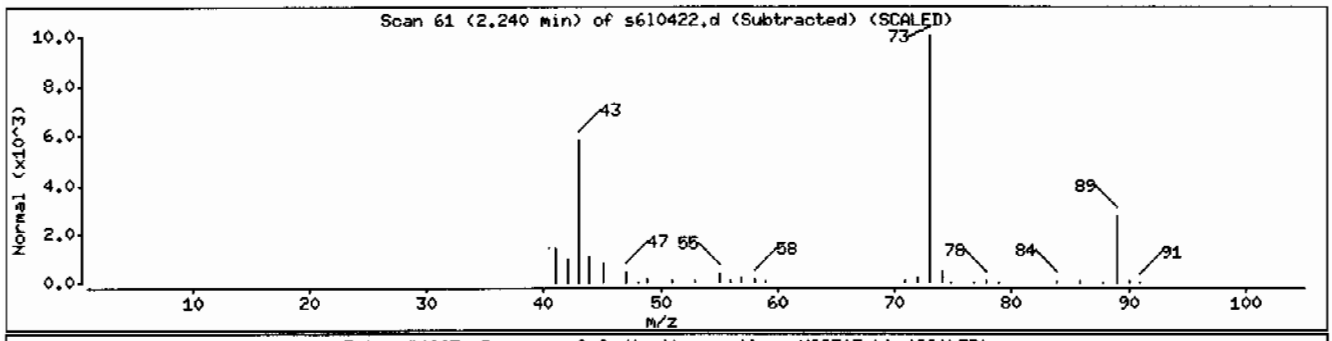

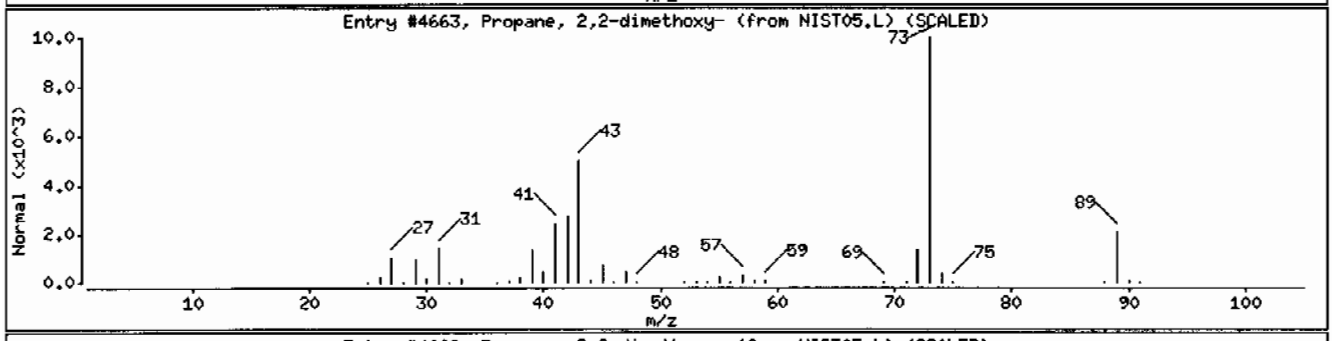

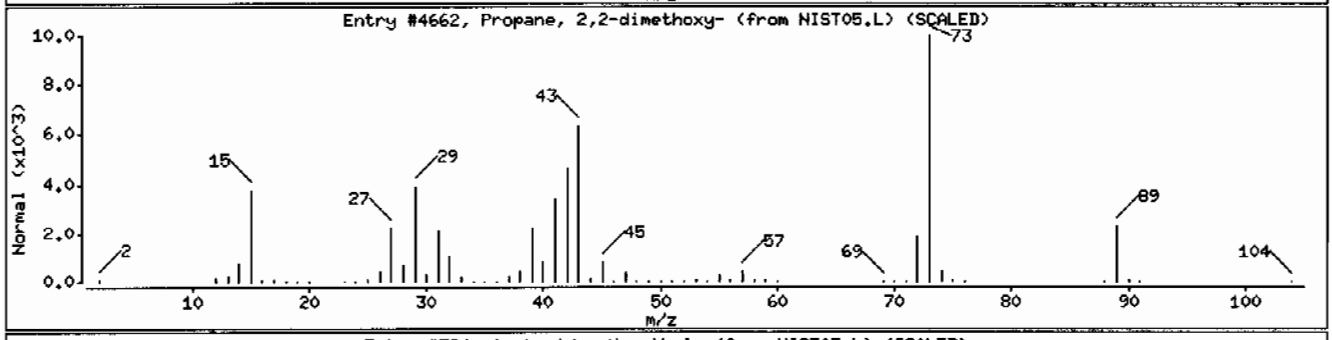

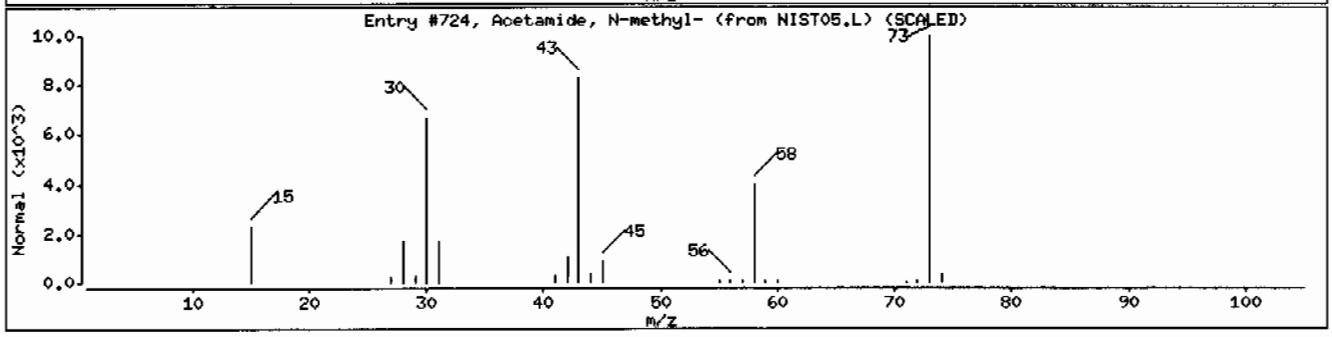

Data File: /chem/MSD6.i/s120409.b/s610422.d

Date : 04-DEC-2009 19:23

Client ID: RE03-09-13964 Instrument: MSD6.i

Sample Info: |2414180111925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

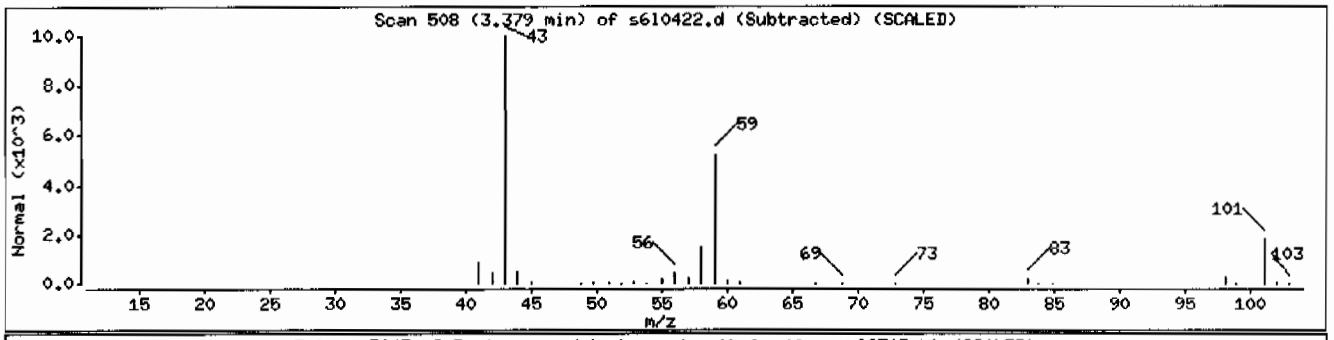

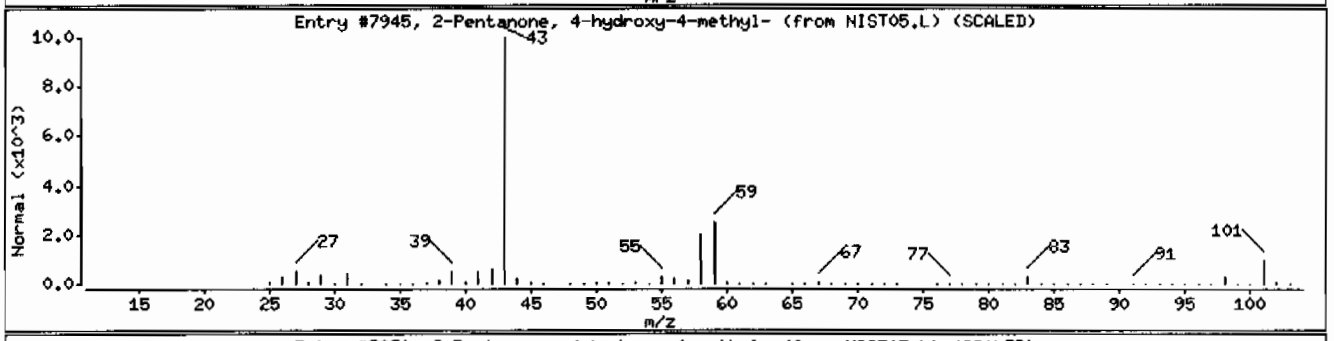

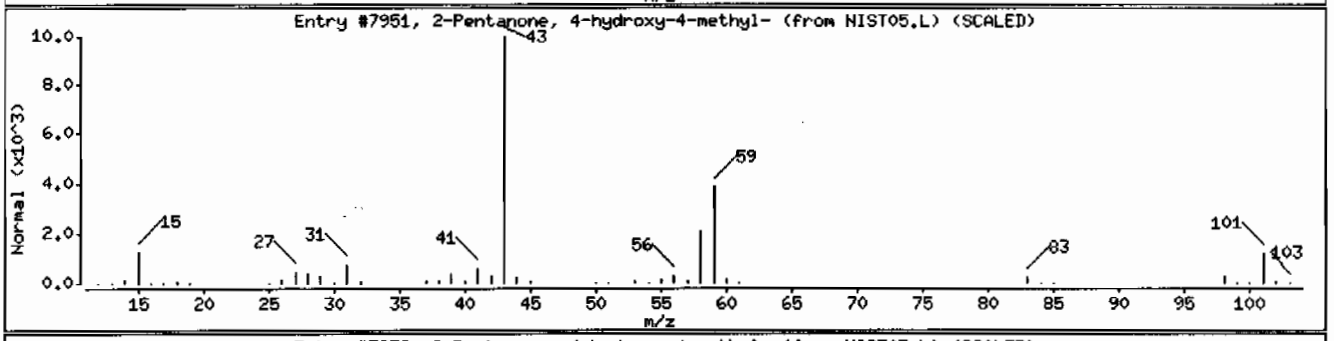

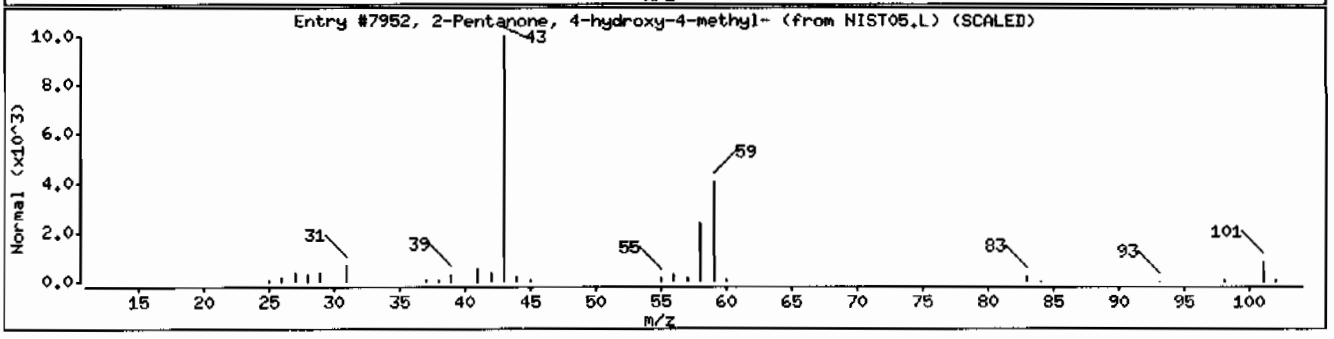

Data File: /chem/MSD6.i/s120409.b/s610422.d

Date : 04-DEC-2009 19:23

Client ID: RE03-09-13964

Instrument: MSD6.i

Sample Info: |24141801|925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cyclopropl[e]azulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60089	55	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	47	C15H24	204
1,1,4a-Trimethyl-5,6-dimethylenedecahydr	1000193-60-8	NIST05.L	59893	45	C15H24	204

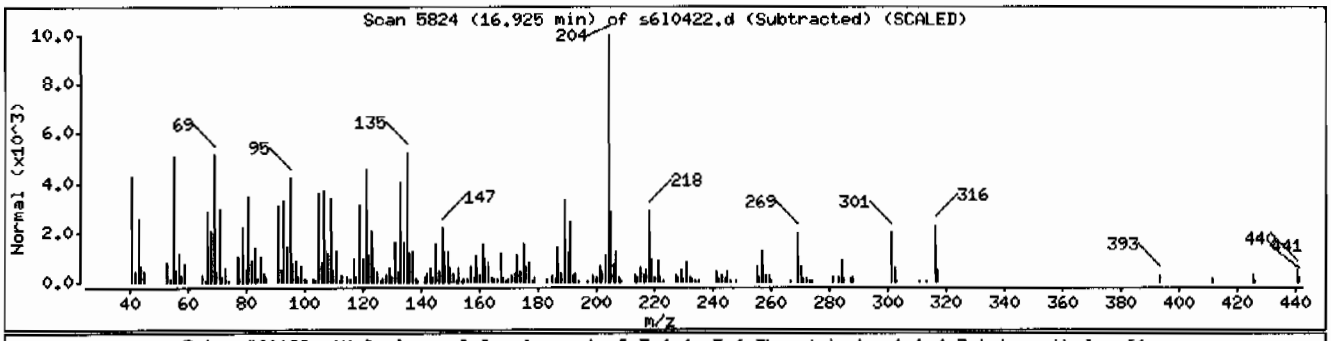

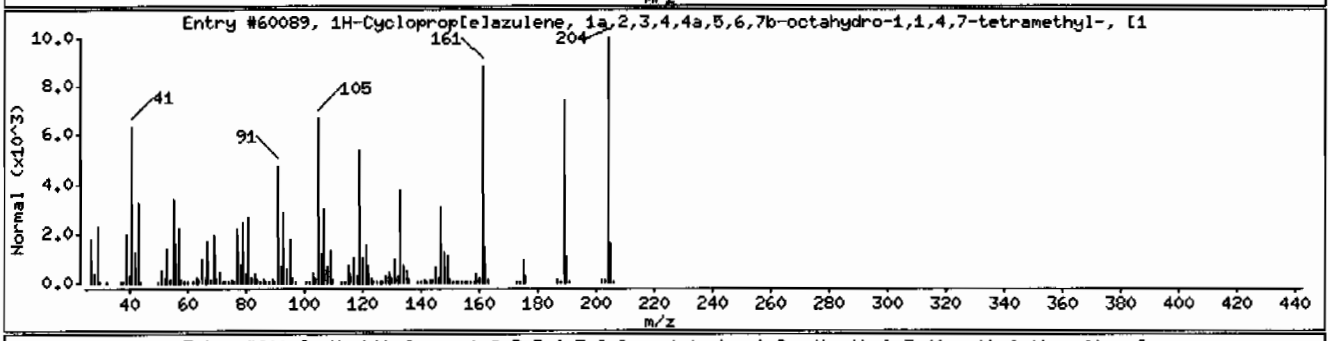

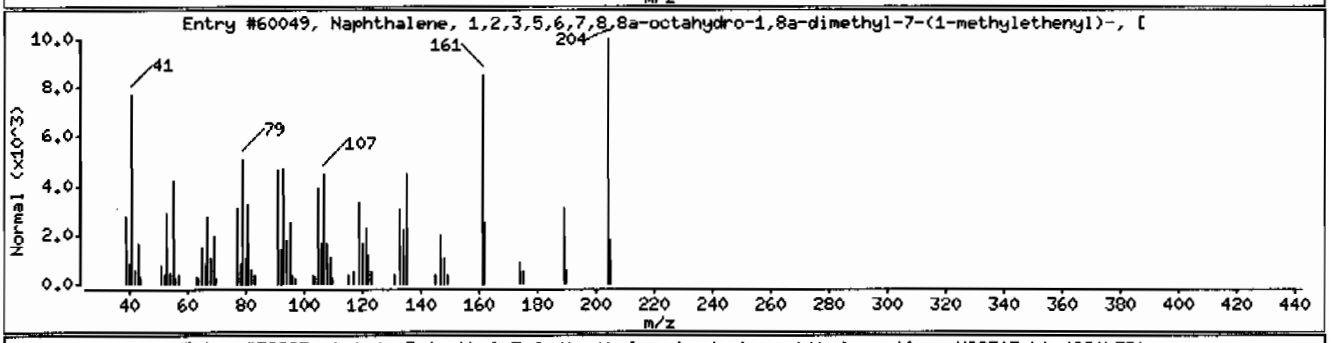

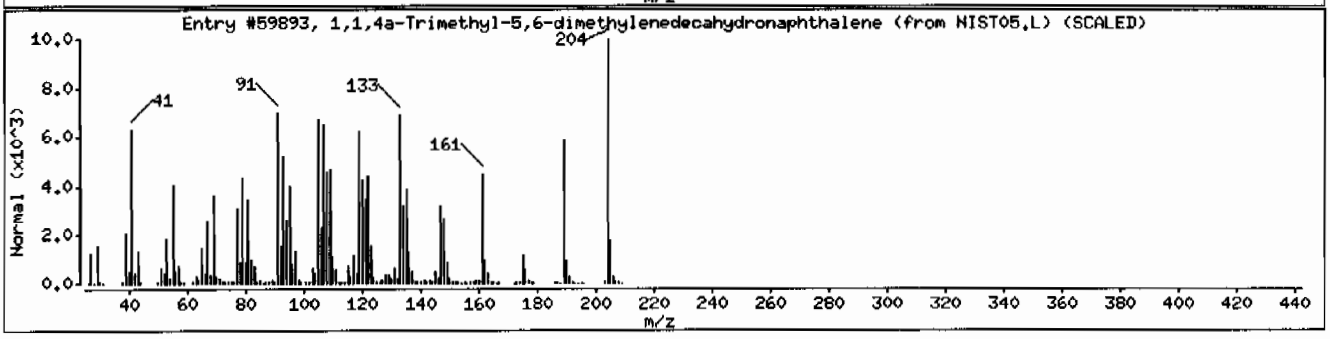

Data File: /chem/MSD6.i/s120409.b/s610422.d

Date : 04-DEC-2009 19:23

Client ID: RE03-09-13964 Instrument: MSD6.i

Sample Info: |24141801|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cyclopropa[a]naphthalene, 1a,2,3,3a,4	489-29-2	NIST05.L	60074	55	C15H24	204
.delta.-Selinene	28624-23-9	NIST05.L	59826	43	C15H24	204
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	41	C15H24	204

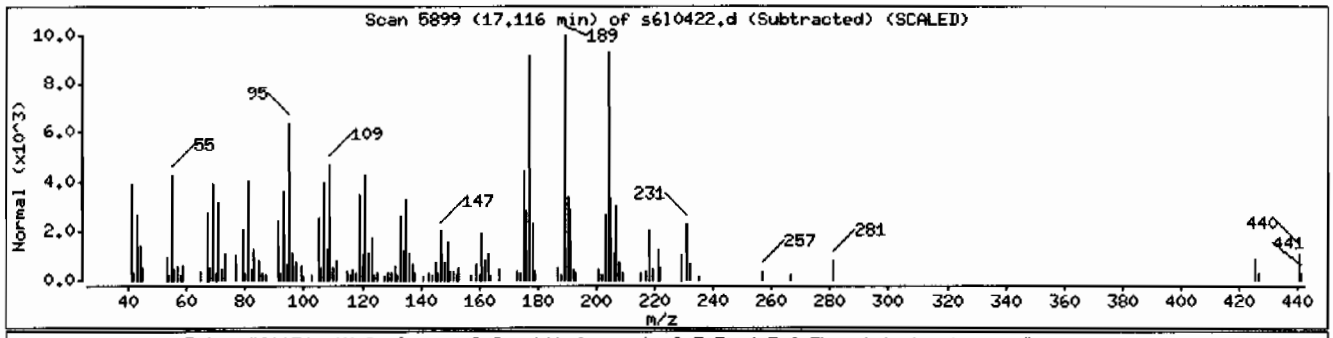

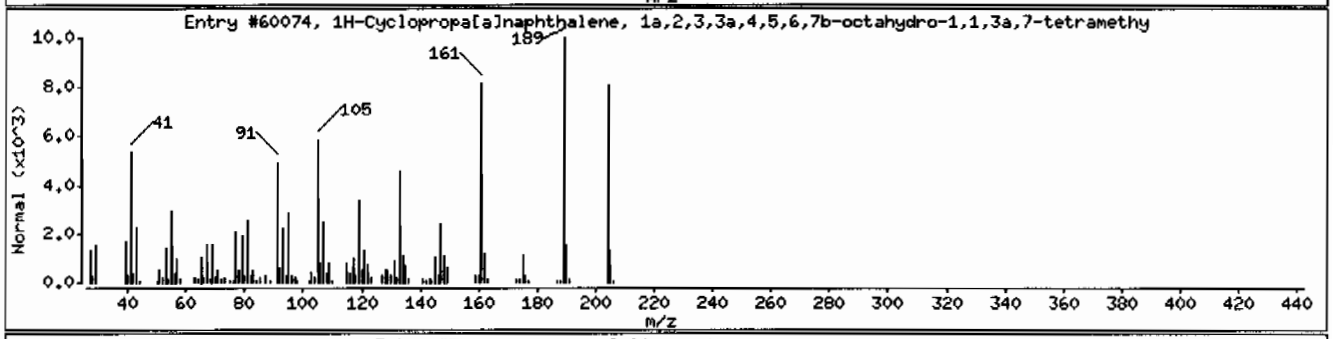

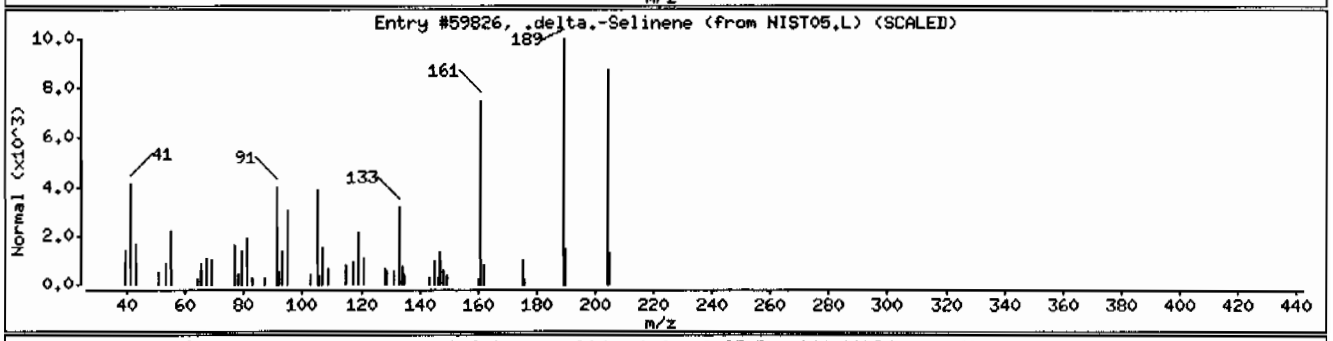

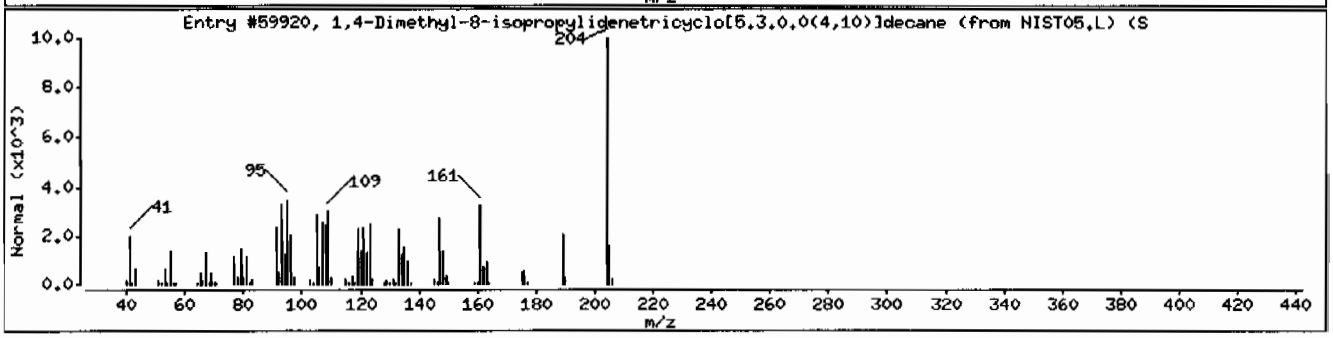

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13965	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 16:38	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s6l0416.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.0	375
108-95-2	Phenol	U	375	ug/kg	75.0	375
95-57-8	2-Chlorophenol	U	375	ug/kg	75.0	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.0	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.0	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.0	375
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375
129-00-0	Pyrene	U	37.5	ug/kg	11.2	37.5
110-86-1	Pyridine	U	375	ug/kg	75.0	375
62-53-3	Aniline	U	375	ug/kg	112	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.0	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.0	375
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.0	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.0	375
95-48-7	o-Cresol	U	375	ug/kg	75.0	375
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375
67-72-1	Hexachloroethane	U	375	ug/kg	75.0	375
98-95-3	Nitrobenzene	U	375	ug/kg	75.0	375
78-59-1	Isophorone	U	375	ug/kg	75.0	375
88-75-5	2-Nitrophenol	U	375	ug/kg	75.0	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.0	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.0	375
65-85-0	Benzoic acid	U	750	ug/kg	187	750
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	75.0	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.0	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.50	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.0	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.0	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.0	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	75.0	375
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	375	ug/kg	75.0	375

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418005	**Date Received:**	11/19/2009 08:45	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13965	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 16:38	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s6l0416.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	375	ug/kg	75.0	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5
51-28-5	2,4-Dinitrophenol	U	750	ug/kg	142	750
132-64-9	Dibenzofuran	U	375	ug/kg	75.0	375
84-66-2	Diethylphthalate	U	375	ug/kg	75.0	375
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.0	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.0	375
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375
	p-Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	75.0	375
122-66-7	Azobenzene	U	375	ug/kg	75.0	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.0	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.0	375
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5
120-12-7	Anthracene	U	37.5	ug/kg	7.50	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.0	375
206-44-0	Fluoranthene	U	37.5	ug/kg	11.2	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.0	375
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.0	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.0	375
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.0	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	345	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610416.d
Lab Smp Id: 241418005 Client Smp ID: RE03-09-13965
Inj Date : 04-DEC-2009 16:38
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418005|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	11.42830	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	224964	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	867579	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	474628	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	813716	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	651046	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	492469	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	366451	65.0473	2440
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	438094	61.6133	2310
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	220385	35.9096	1350
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	445715	36.4398	1360
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	104242	75.2481	2820
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	461970	44.0005	1650

ION RATIO REPORT

SV REPORT

Data file: s610416.d
Report Date: 12/05/2009 08:15
Lab. ID: 241418005 SampleType: SAMPLE
Injection Date: 04-DEC-2009 16:38
Operator: nagl Instrument: MSD6.i
Sample Info: |241418005|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	20008	4.35	4.42	80-120	100	(T)
93	205	4.41	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	30423	5.25	5.10	80-120	100	(T)
42	18031	5.25	5.10	40-100	59	(T)
22 Isophorone			CAS#: 78-59-1			
82	220385	5.25	5.52	80-120	100	(T)
138	4836	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	84180	7.86	7.55	80-120	100	(T)
164	474628	7.85	7.55	0- 40	564	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	61953	7.85	8.06	80-120	100	(T)
89	618	7.86	8.06	41-101	1	(QT)
63	551	7.85	8.06	18- 78	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	5998	8.70	8.45	80-120	100	(T)
165	6122	8.70	8.45	62-122	102	(T)
167	2106	8.70	8.45	0- 44	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	115	8.70	8.50	80-120	100	(T)
105	456	8.71	8.50	11- 71	396	(QT)
51	236	8.70	8.50	22- 82	205	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610416.d
Lab Smp Id: 241418005 Client Smp ID: RE03-09-13965
Inj Date : 04-DEC-2009 16:38
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418005|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	11.42830	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1300244	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.374	298985	9.19779622	345	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610416.d

Date : 04-DEC-2009 16:38

Client ID: RE03-09-13965

Sample Info: |2414180051925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

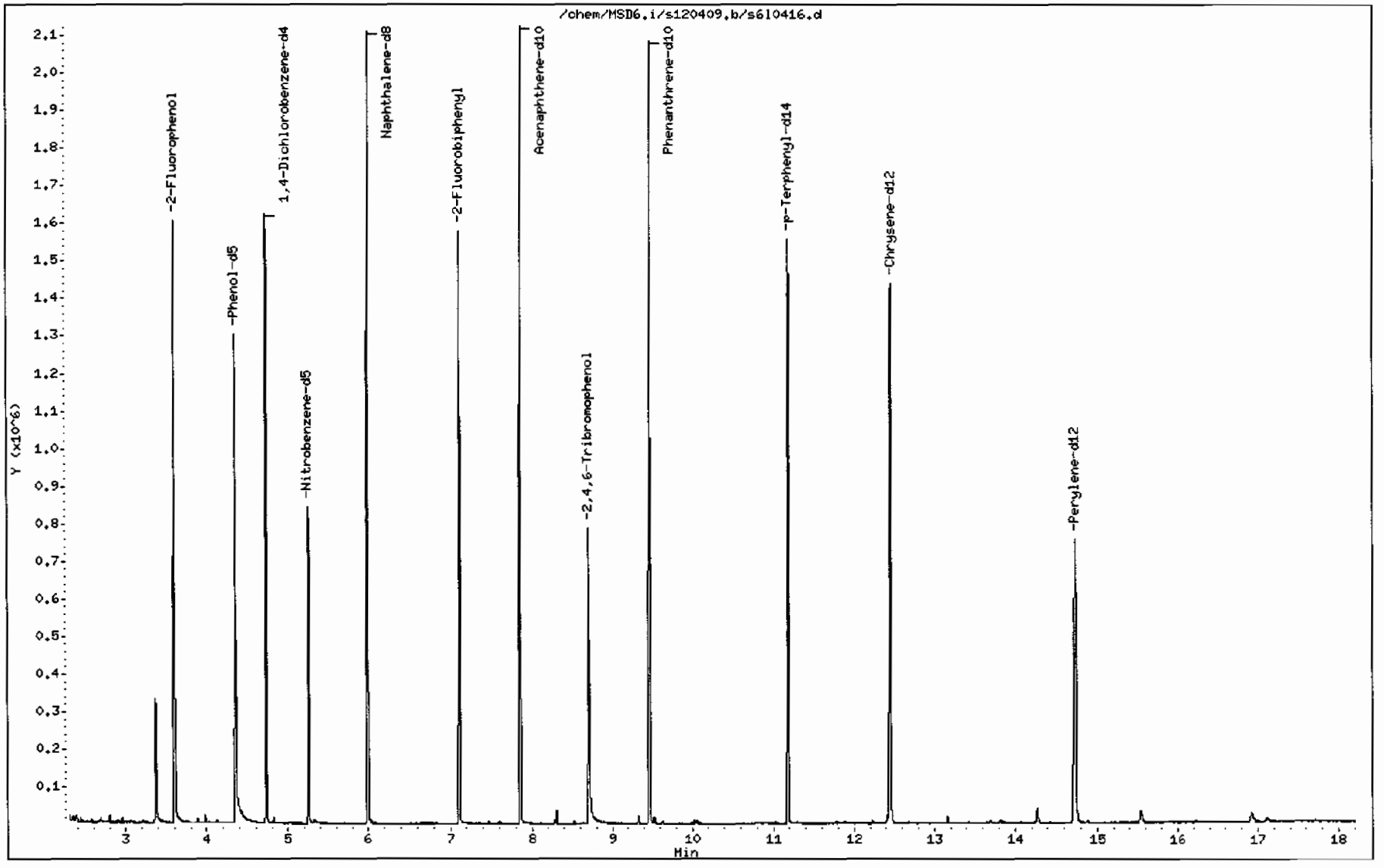

Data File: /chem/MSD6.i/s120409.b/s610416.d

Date : 04-DEC-2009 16:38

Client ID: RE03-09-13965

Instrument: MSD6.i

Sample Info: |2414180051925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

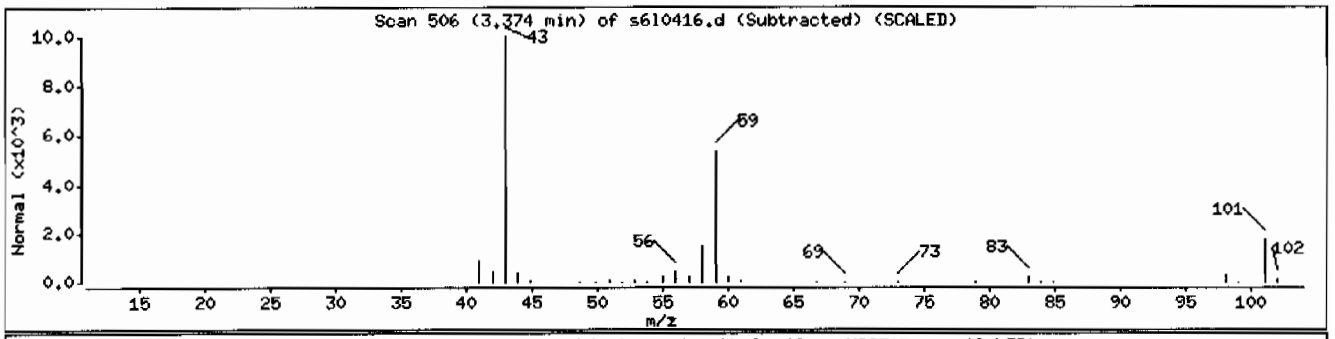

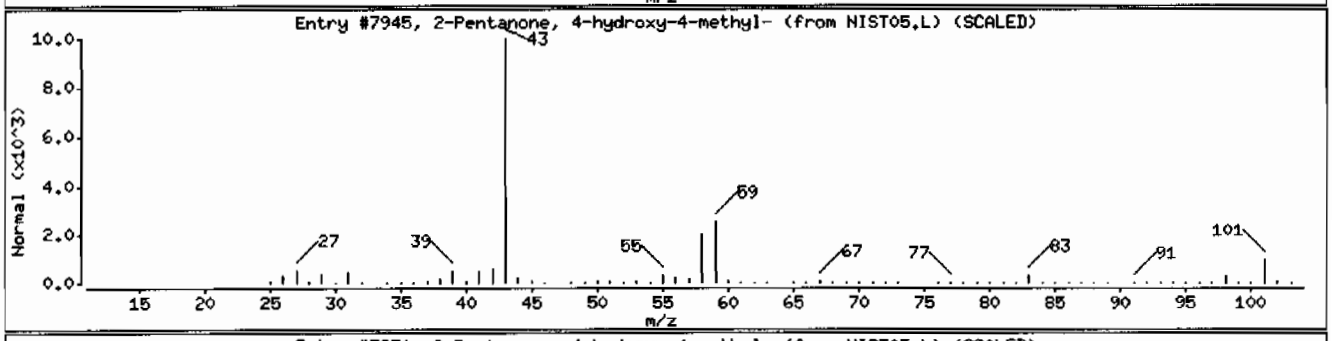

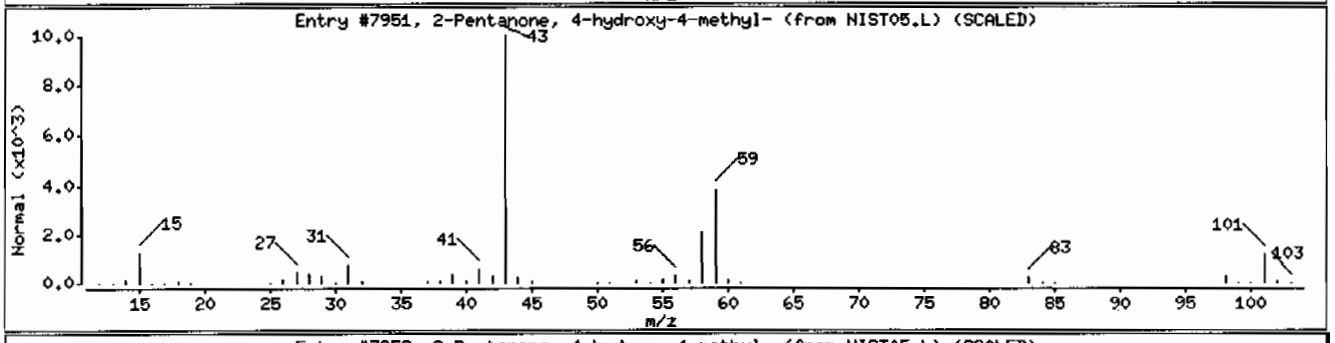

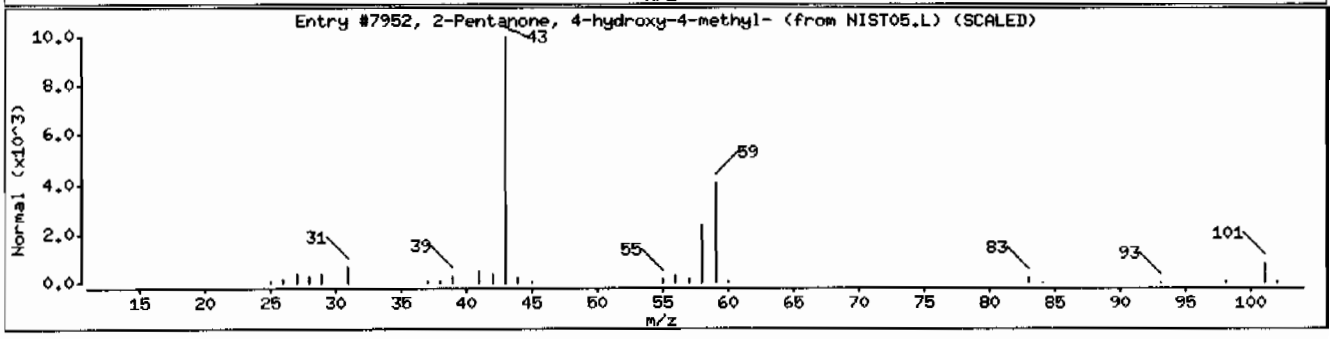

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418012**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13966**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.1**	**Dilution:**	**1**
Run Date:	**12/04/2009 19:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0423.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.0	360
108-95-2	Phenol	U	360	ug/kg	72.0	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.0	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.0	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.0	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.0	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.0	360
129-00-0	Pyrene	J	17.4	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.0	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.0	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.0	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.0	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.0	360
95-48-7	o-Cresol	U	360	ug/kg	72.0	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.0	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.0	360
78-59-1	Isophorone	U	360	ug/kg	72.0	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.0	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.0	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.0	360
65-85-0	Benzoic acid	U	720	ug/kg	180	720
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.0	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.0	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.20	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.0	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.0	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.0	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.0	360
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	360	ug/kg	72.0	360

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418012	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13966	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 19:51	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s610423.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	360	ug/kg	72.0	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	720	ug/kg	137	720
132-64-9	Dibenzofuran	U	360	ug/kg	72.0	360
84-66-2	Diethylphthalate	U	360	ug/kg	72.0	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	72.0	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	72.0	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	p-Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	72.0	360
122-66-7	Azobenzene	U	360	ug/kg	72.0	360
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	72.0	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	72.0	360
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.20	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	72.0	360
206-44-0	Fluoranthene	J	24.2	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	72.0	360
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	J	13.0	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	72.0	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	72.0	360
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	72.0	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	324	ug/kg		JA
16327-22-3	1,4-Cyclooctadiene, (Z,Z)-	8.68	186	ug/kg	87	NJ

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610423.d
Lab Smp Id: 241418012 Client Smp ID: RE03-09-13966
Inj Date : 04-DEC-2009 19:51
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418012|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	7.61400	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	239311	40.0000	
* 29 Naphthalene-d8	136	5.990	5.993	(1.000)	909722	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	497625	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	874575	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	734529	40.0000	
* 98 Perylene-d12	264	14.736	14.741	(1.000)	531534	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	385792	64.3750	2320
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	486615	64.3344	2320
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	252192	39.1887	1410
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	491175	38.3007	1380
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	100376	69.1089	2490
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	508791	42.9522	1550

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	11.028	11.036	(0.885)	9762	0.48319	17.4(a)
76 Fluoranthene	202	10.778	10.783	(1.139)	11624	0.67091	24.2(a)
92 Chrysene	228	12.483	12.496	(1.002)	5502	0.36234	13.0(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s610423.d
Report Date: 12/05/2009 08:17
Lab. ID: 241418012 SampleType: SAMPLE
Injection Date: 04-DEC-2009 19:51
Operator: nag1 Instrument: MSD6.i
Sample Info: |241418012|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	16736	2.23	2.67	80-120	100	(T)
42	32037	2.23	2.67	61-121	191	(QT)
43	231869	2.23	2.67	10- 70	1385	(QT)
4 Aniline				CAS#: 62-53-3		
66	19779	4.35	4.42	80-120	100	(T)
93	100	4.40	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	34904	5.25	5.10	80-120	100	(T)
42	20974	5.25	5.10	40-100	60	(T)
22 Isophorone				CAS#: 78-59-1		
82	252192	5.25	5.52	80-120	100	(T)
138	5009	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	88695	7.86	7.55	80-120	100	(T)
164	497625	7.86	7.55	0- 40	561	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	65490	7.86	8.06	80-120	100	(T)
89	429	7.85	8.06	41-101	1	(QT)
63	784	7.85	8.06	18- 78	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	5594	8.70	8.45	80-120	100	(T)
165	5782	8.70	8.45	62-122	103	(T)
167	1730	8.70	8.45	0- 44	31	(T)
69 Anthracene			CAS#: 120-12-7			
178	4450	9.49	9.55	80-120	100	(T)
179	659	9.49	9.55	0- 46	15	(T)
176	791	9.49	9.55	0- 49	18	(T)
76 Fluoranthene			CAS#: 206-44-0			
202	11624	10.78	10.78	80-120	100	( )
203	2082	10.78	10.78	0- 48	18	( )
101	1764	10.78	10.78	0- 43	15	( )
79 Pyrene			CAS#: 129-00-0			
202	9762	11.03	11.04	80-120	100	( )
200	1965	11.03	11.04	0- 51	20	( )
101	1796	11.03	11.04	0- 45	18	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	5502	12.48	12.44	80-120	100	( )
226	1541	12.48	12.44	0- 56	28	( )
229	643	12.49	12.44	0- 50	12	( )
92 Chrysene			CAS#: 218-01-9			
228	5502	12.48	12.50	80-120	100	( )
229	643	12.49	12.50	0- 50	12	( )
226	1541	12.48	12.50	0- 59	28	( )
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	3385	14.53	14.64	80-120	100	(T)
253	312	14.52	14.64	0- 52	9	(T)
125	273	14.52	14.64	0- 30	8	(T)
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	1852	16.68	16.70	80-120	100	( )
138	473	16.67	16.70	0- 54	26	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610423.d
Lab Smp Id: 241418012 Client Smp ID: RE03-09-13966
Inj Date : 04-DEC-2009 19:51
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418012|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	7.61400	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1360807	40.000
* 67 Phenanthrene-d10	9.466	2164979	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.376	306337	9.00455289	324	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
1,4-Cyclooctadiene, (Z,Z)-				CAS #: 16327-22-3			
8.679	279677	5.16729818	186	87	NIST05.L	5311	67

Data File: /chem/MSD6.i/s120409.b/s610423.d

Date : 04-DEC-2009 19:51

Client ID: RE03-09-13966

Sample Info: |2414180|2|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

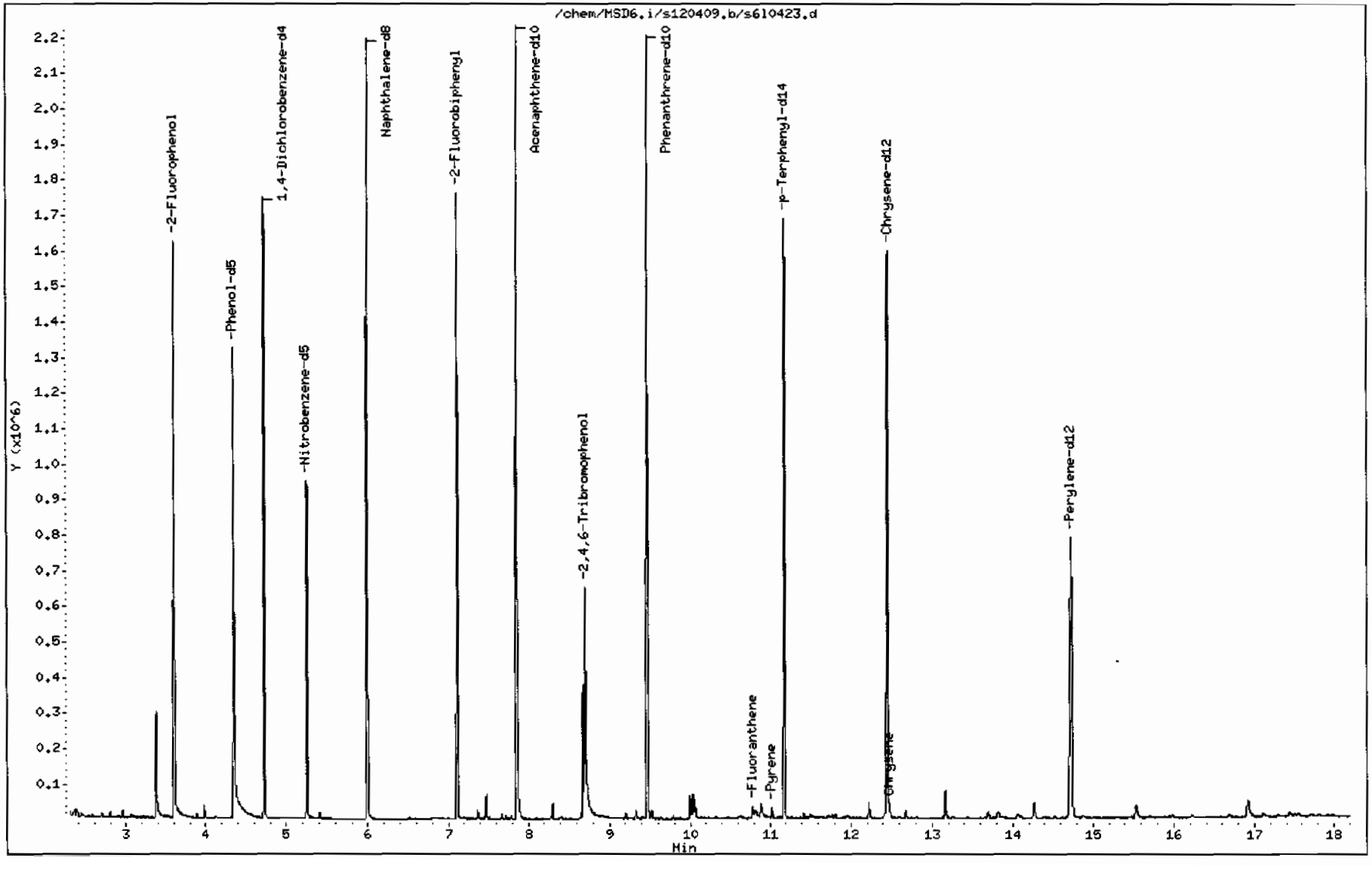

Data File: /chem/HSD6.i/s120409.b/s610423.d

Date : 04-DEC-2009 19:51

Client ID: RE03-09-13966

Instrument: HSD6.i

Sample Info: |2414180121925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 17.4 ug/Kg

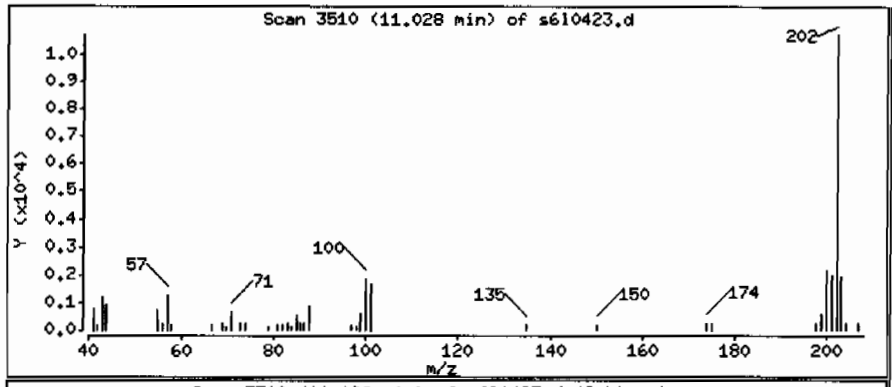

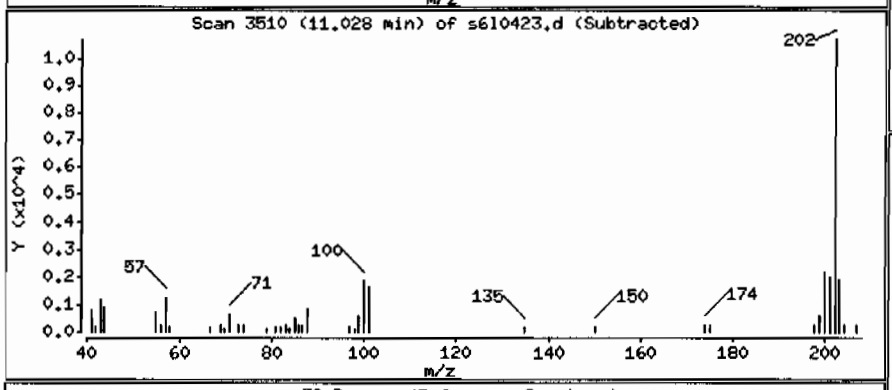

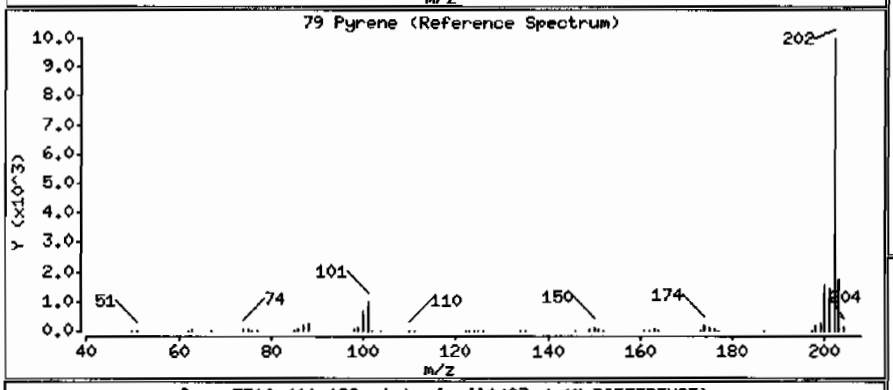

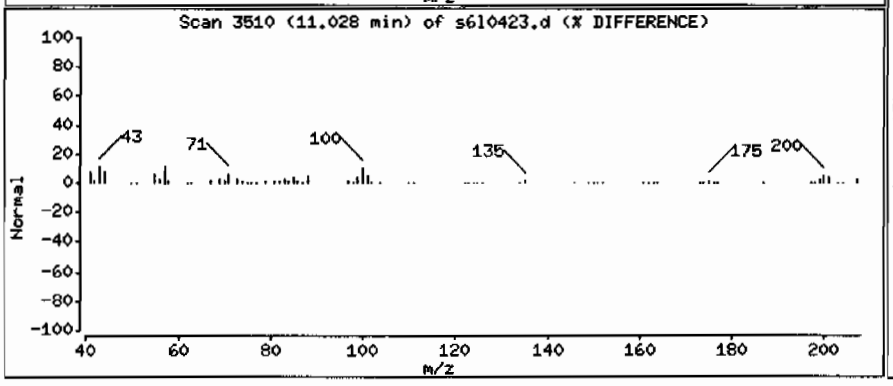

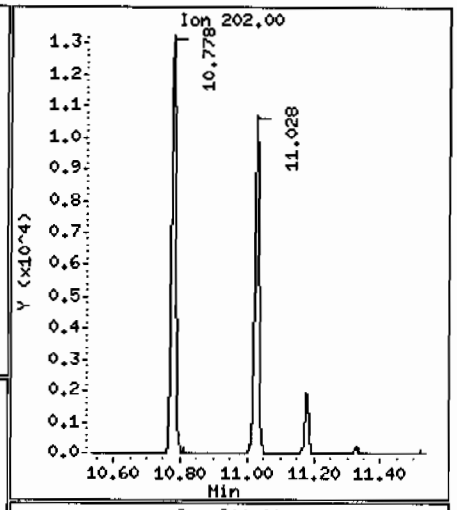

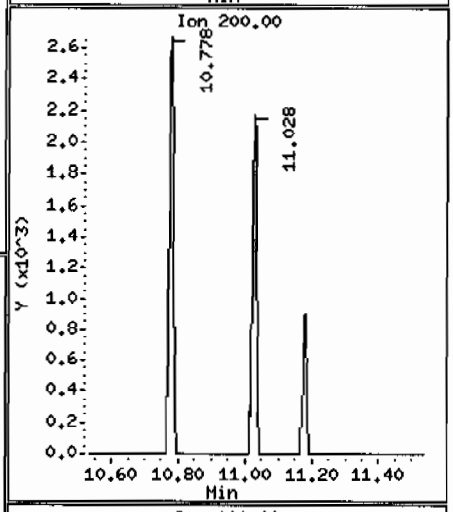

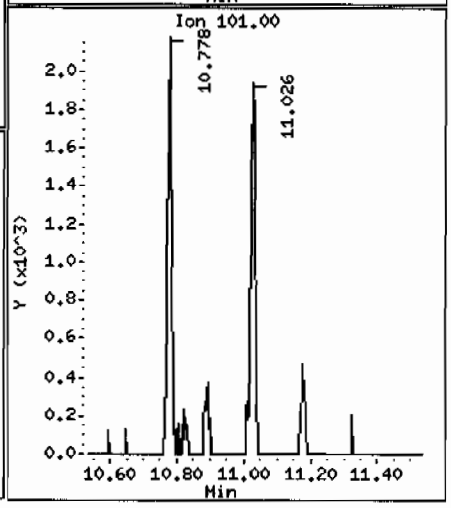

Data File: /chem/MSD6.i/s120409.b/s610423.d

Date : 04-DEC-2009 19:51

Client ID: RE03-09-13966

Instrument: MSD6.i

Sample Info: |2414180121925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 24.2 ug/Kg

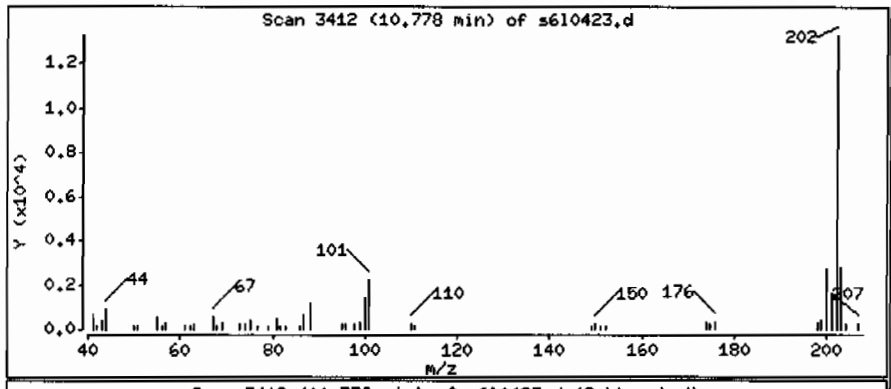

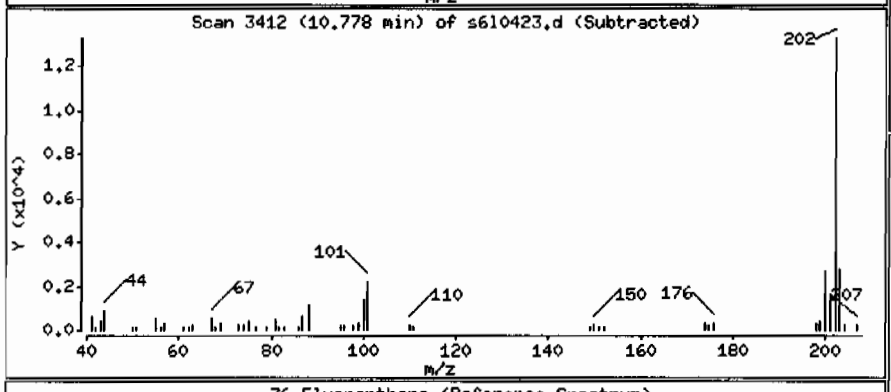

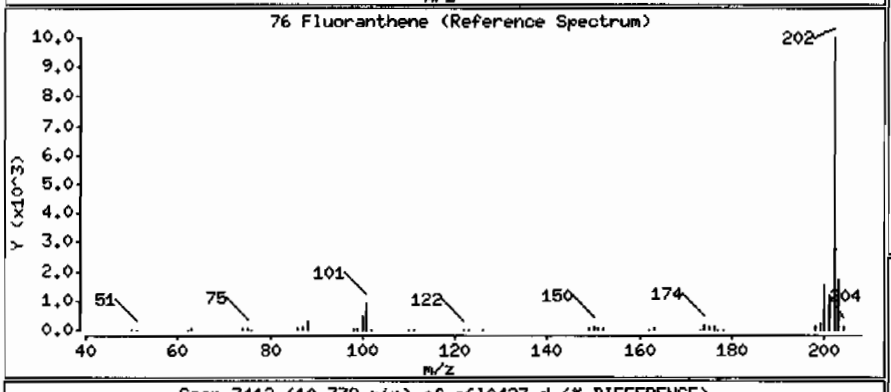

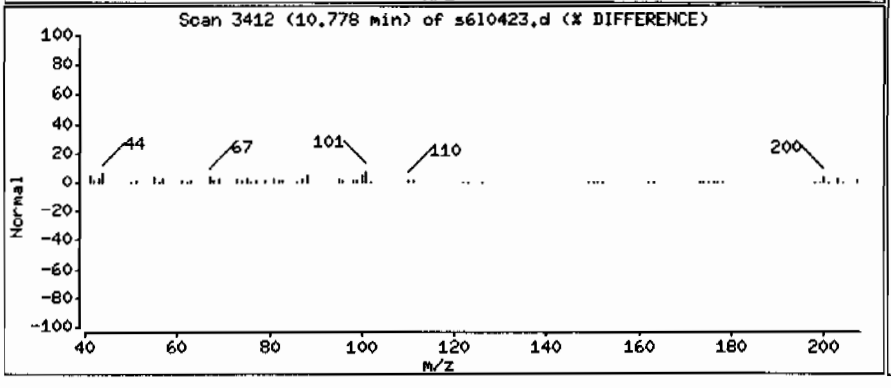

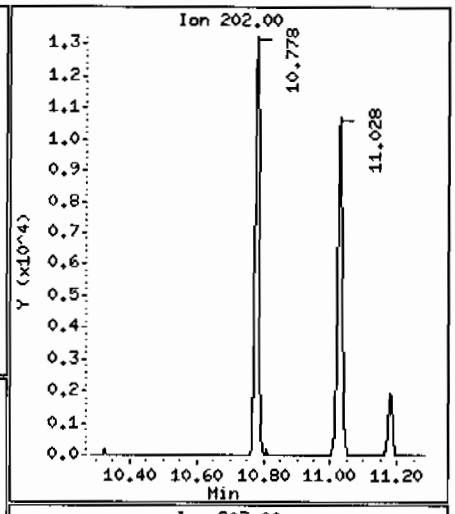

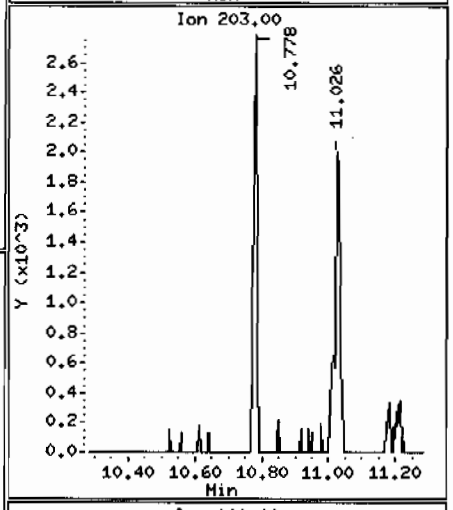

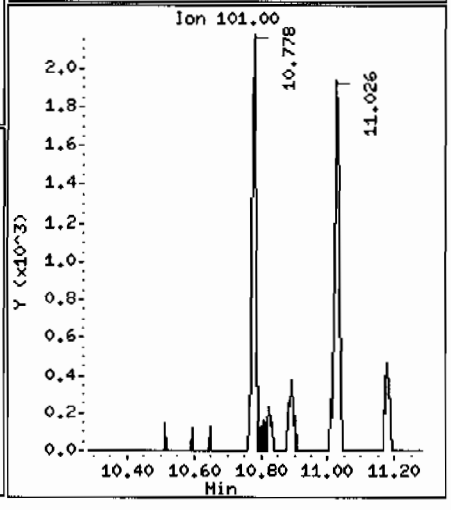

Data File: /chem/MSD6.i/s120409.b/s610423.d

Date : 04-DEC-2009 19:51

Client ID: RE03-09-13966

Instrument: MSD6.i

Sample Info: |2414180121925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 13.0 ug/Kg

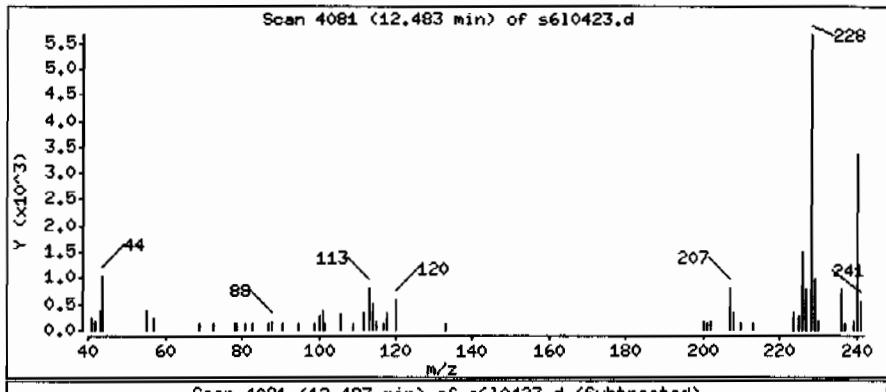

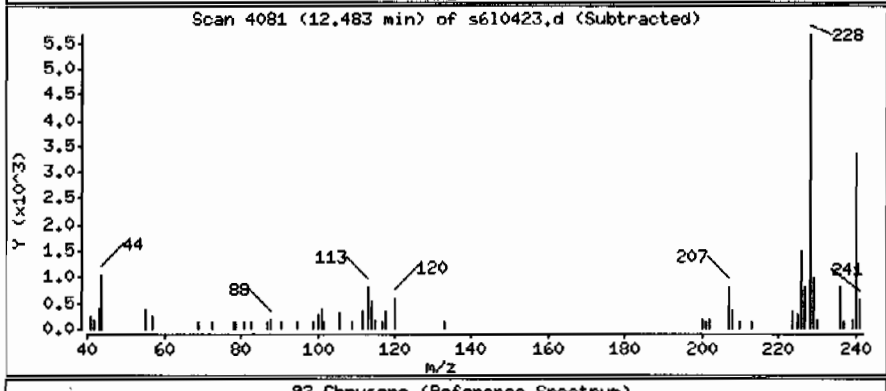

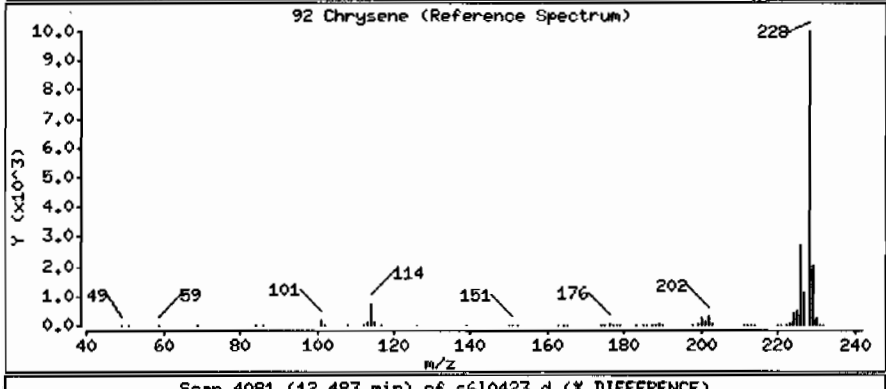

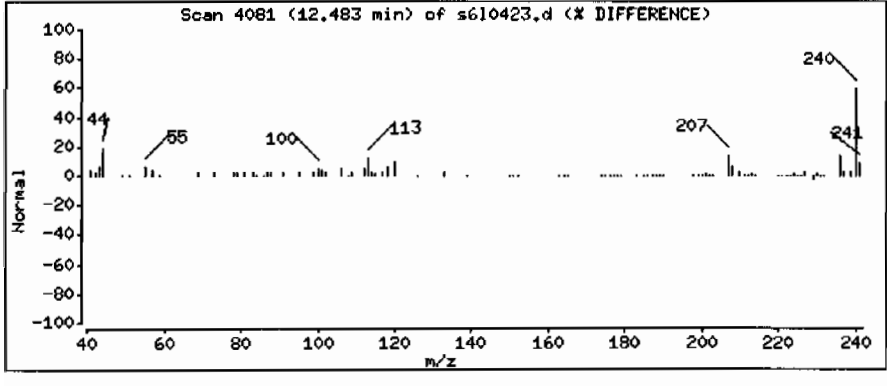

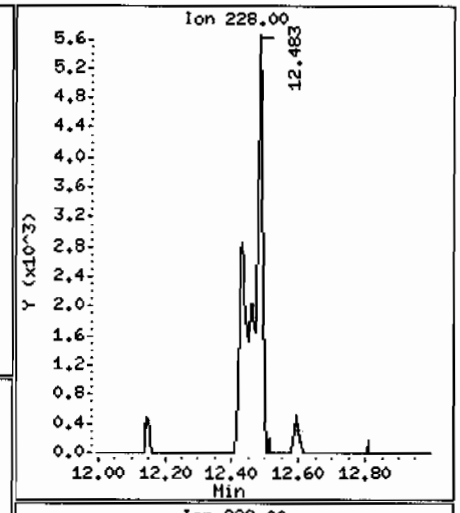

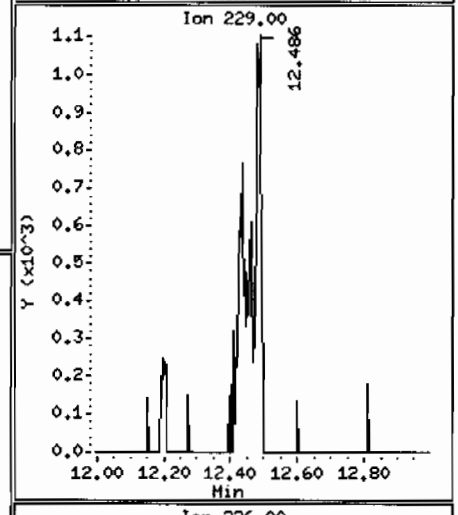

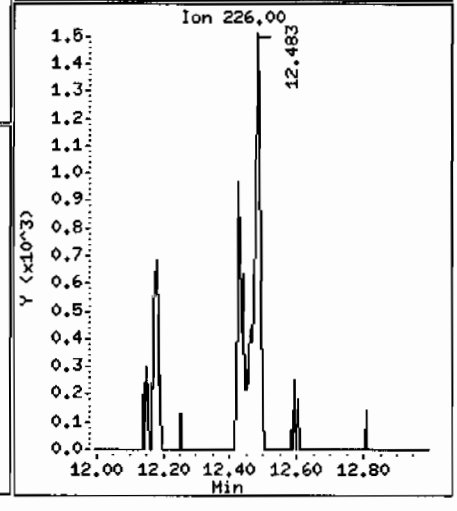

Data File: /chem/MSD6.i/s120409.b/s610423.d

Date : 04-DEC-2009 19:51

Client ID: RE03-09-13966

Instrument: MSD6.i

Sample Info: |24141801219256611|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

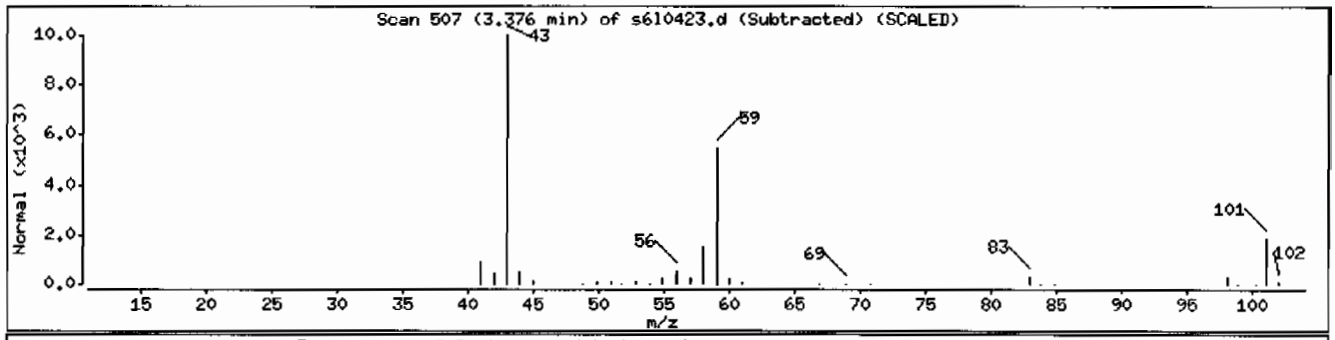

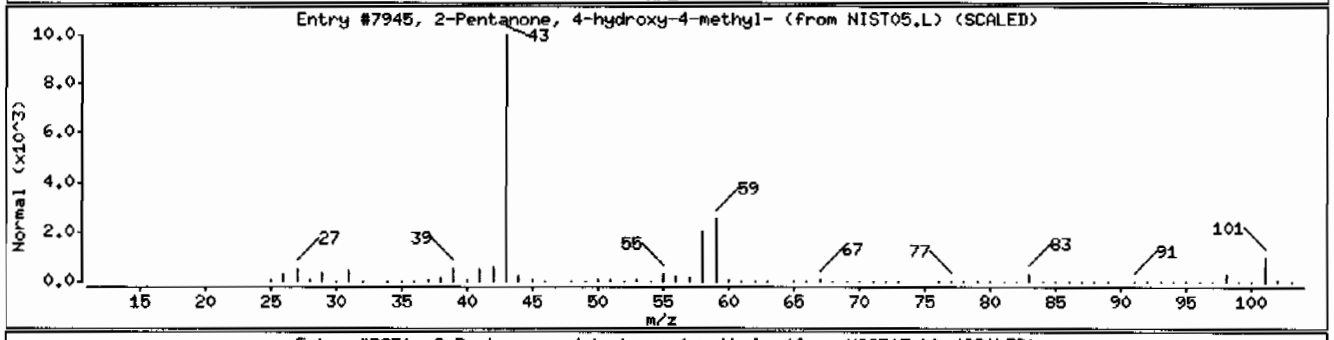

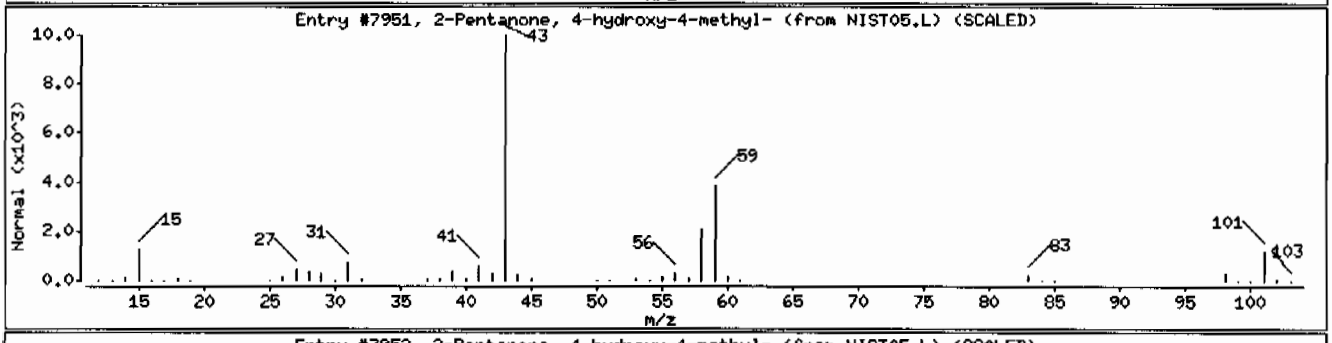

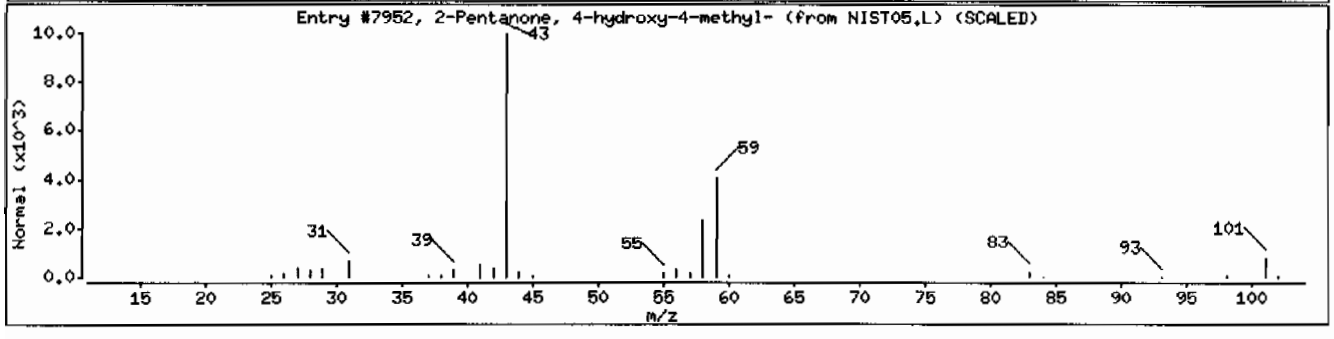

Data File: /chem/MSD6.i/s120409.b/s610423.d

Date : 04-DEC-2009 19:51

Client ID: RE03-09-13966 Instrument: MSD6.i

Sample Info: |2414180121925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Cyclooctadiene, (Z,Z)-	16327-22-3	NIST05.L	5311	87	C8H12	108
9,12,15-Octadecatrienoic acid, methyl es	301-00-8	NIST05.L	119876	58	C19H32O2	292
1,3-Cyclooctadiene	1700-10-3	NIST05.L	5275	58	C8H12	108

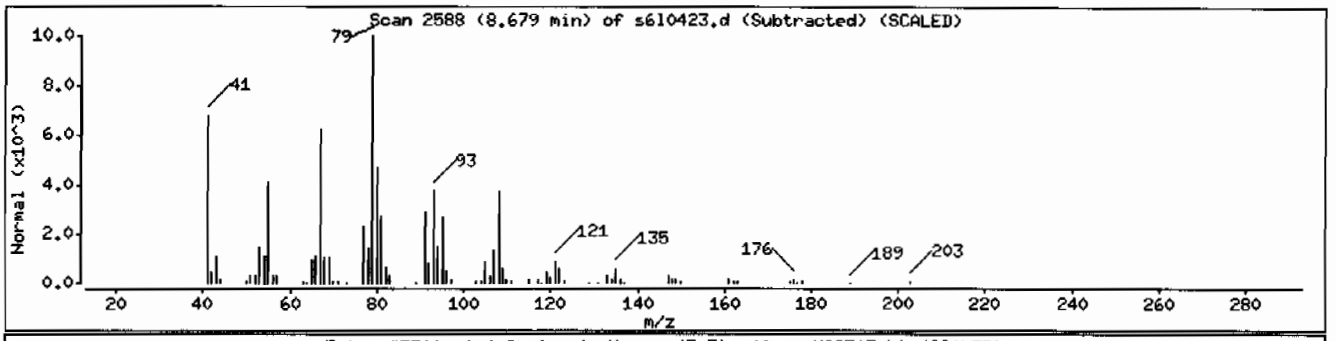

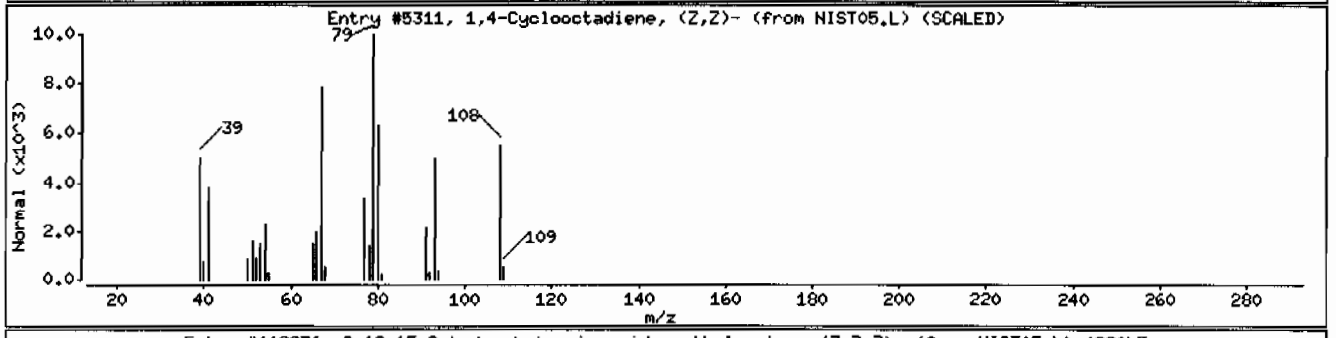

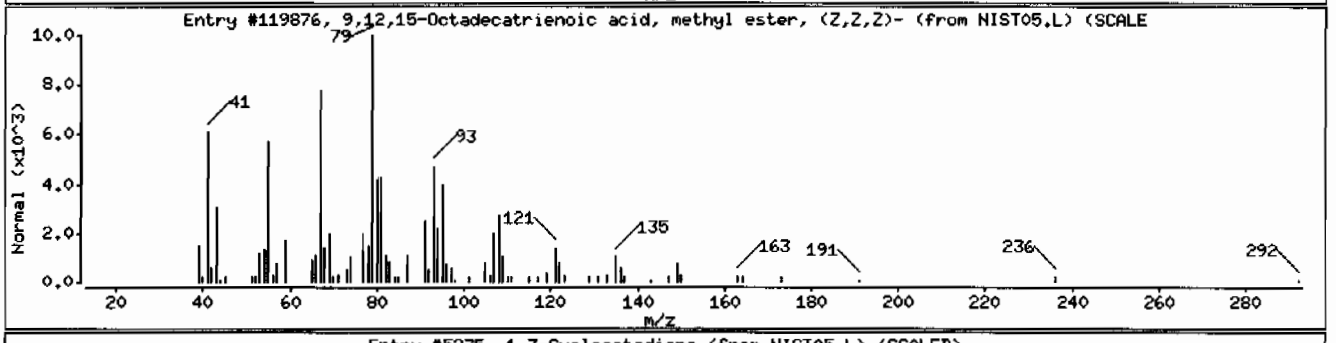

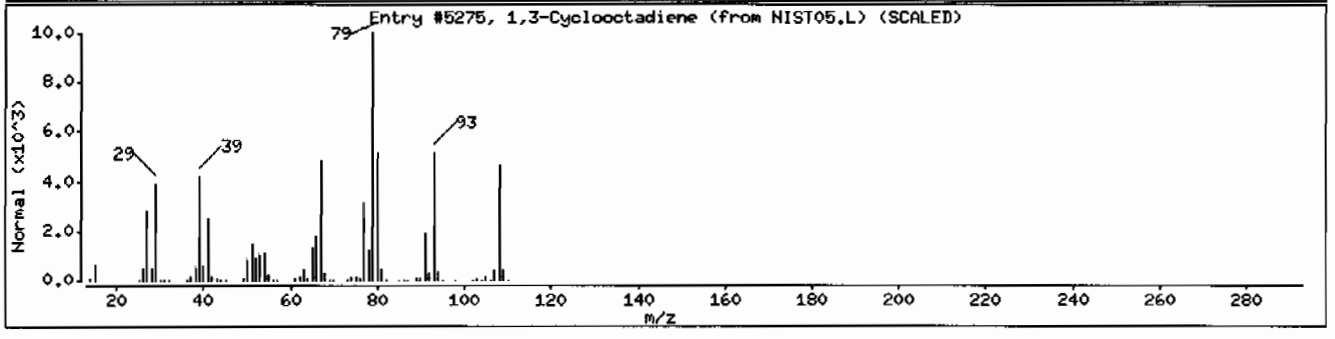

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418013	Date Received:	11/19/2009 08:45	%Moisture:	17.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13967	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 20:17	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s6l0424.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.7	404
108-95-2	Phenol	U	404	ug/kg	80.7	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.7	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.7	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.7	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.7	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene	J	13.6	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.7	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.7	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.7	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.7	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.7	404
95-48-7	o-Cresol	U	404	ug/kg	80.7	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.7	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.7	404
78-59-1	Isophorone	U	404	ug/kg	80.7	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.7	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.7	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.7	404
65-85-0	Benzoic acid	U	807	ug/kg	202	807
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.7	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.7	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.07	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.7	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.7	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.7	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.7	404
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	404	ug/kg	80.7	404

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13967**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.1**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:17**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s610424.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	404	ug/kg	80.7	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807
132-64-9	Dibenzofuran	U	404	ug/kg	80.7	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.7	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.7	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.7	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	p-Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.7	404
122-66-7	Azobenzene	U	404	ug/kg	80.7	404
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.7	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.7	404
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4
120-12-7	Anthracene	U	40.4	ug/kg	8.07	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.7	404
206-44-0	Fluoranthene	J	18.3	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.7	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.7	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.7	404
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.7	404

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	280	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610424.d
Lab Smp Id: 241418013 Client Smp ID: RE03-09-13967
Inj Date : 04-DEC-2009 20:17
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418013|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	17.89790	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	240643	40.0000	
* 29 Naphthalene-d8	136	5.990	5.993	(1.000)	908013	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	499200	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	883044	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	771279	40.0000	
* 98 Perylene-d12	264	14.736	14.741	(1.000)	598134	40.0000	
$ 3 2-Fluorophenol	112	3.600	3.590	(0.761)	376224	62.4309	2520
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	451616	59.3767	2400
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	243552	37.9173	1530
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	479042	37.2367	1500
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	106663	73.2058	2960
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	520978	41.8854	1690

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	11.028	11.036	(0.885)	7144	0.33676	13.6(a)
76 Fluoranthene	202	10.781	10.783	(1.139)	7944	0.45411	18.3(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s610424.d
Report Date: 12/05/2009 08:17
Lab. ID: 241418013 SampleType: SAMPLE
Injection Date: 04-DEC-2009 20:17
Operator: nagl Instrument: MSD6.i
Sample Info: |241418013|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	20755	4.35	4.42	80-120	100	(T)
93	142	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	33216	5.25	5.10	80-120	100	(T)
42	19592	5.25	5.10	40-100	59	(T)
22 Isophorone		CAS#: 78-59-1				
82	243552	5.25	5.52	80-120	100	(T)
138	4828	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	88531	7.86	7.55	80-120	100	(T)
164	499200	7.85	7.55	0- 40	564	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	65194	7.85	8.06	80-120	100	(T)
89	650	7.85	8.06	41-101	1	(QT)
63	708	7.85	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	5518	8.70	8.45	80-120	100	(T)
165	5998	8.70	8.45	62-122	109	(T)
167	1757	8.70	8.45	0- 44	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
76 Fluoranthene			CAS#: 206-44-0			
202	7944	10.78	10.78	80-120	100	( )
203	1419	10.78	10.78	0- 48	18	( )
101	1278	10.78	10.78	0- 43	16	( )
79 Pyrene			CAS#: 129-00-0			
202	7144	11.03	11.04	80-120	100	( )
200	1383	11.03	11.04	0- 51	19	( )
101	1116	11.03	11.04	0- 45	16	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	896	16.68	16.70	80-120	100	( )
138	149	16.68	16.70	0- 54	17	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610424.d
Lab Smp Id: 241418013 Client Smp ID: RE03-09-13967
Inj Date : 04-DEC-2009 20:17
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418013|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	17.89790	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1366328	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.371	236686	6.92909841	280	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610424.d
Date : 04-DEC-2009 20:17
Client ID: RE03-09-13967
Sample Info: 1241418013192566111SVMFI11LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

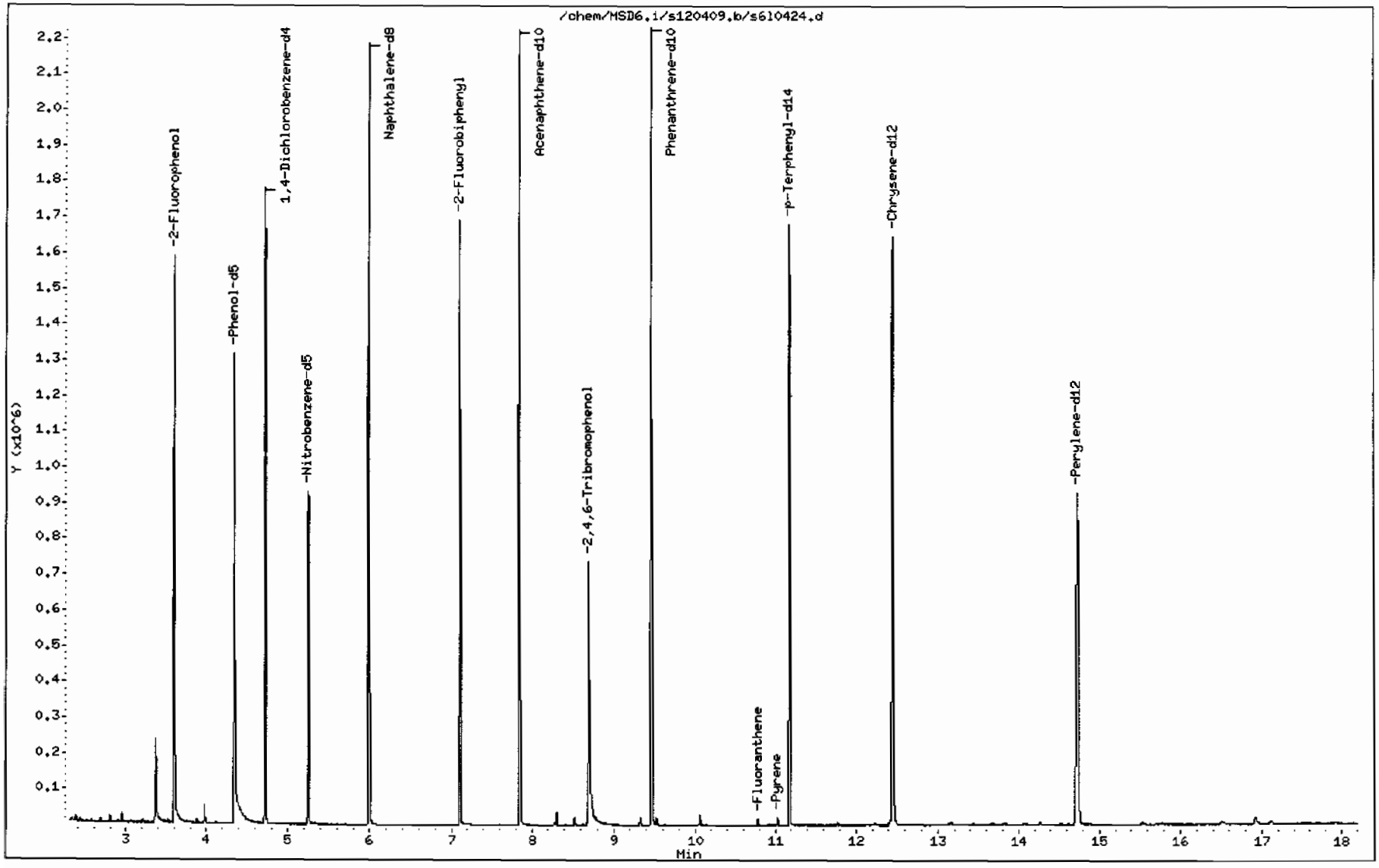

Data File: /chem/MSD6.i/s120409.b/s610424.d

Date : 04-DEC-2009 20:17

Client ID: RE03-09-13967

Instrument: MSD6.i

Sample Info: |24141801319256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 13.6 ug/Kg

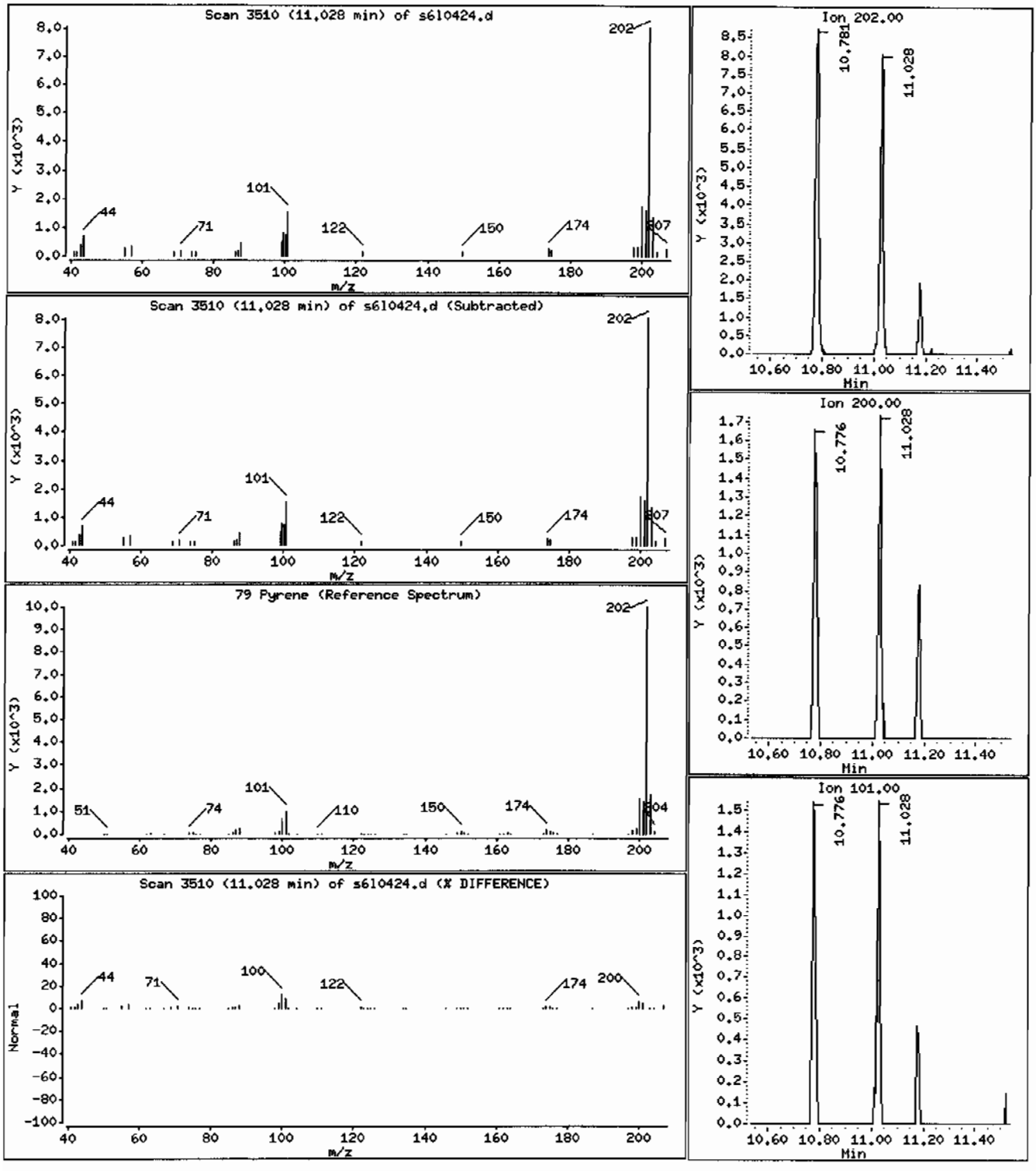

Data File: /chem/MSD6.i/s120409.b/s610424.d

Date : 04-DEC-2009 20:17

Client ID: RE03-09-13967

Instrument: MSD6.i

Sample Info: |24141801319256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 18.3 ug/Kg

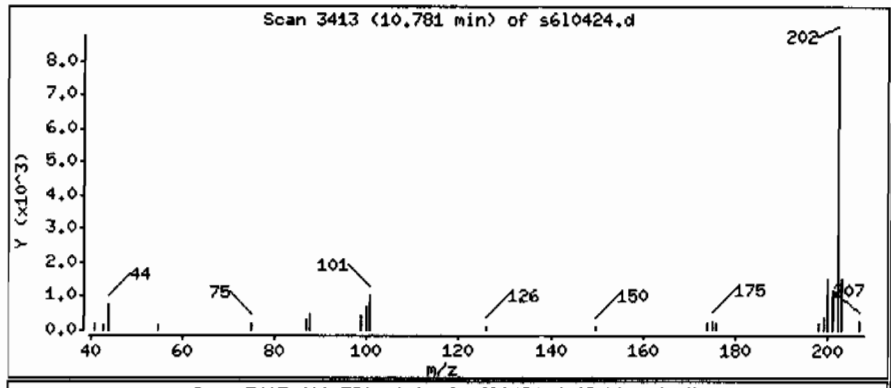

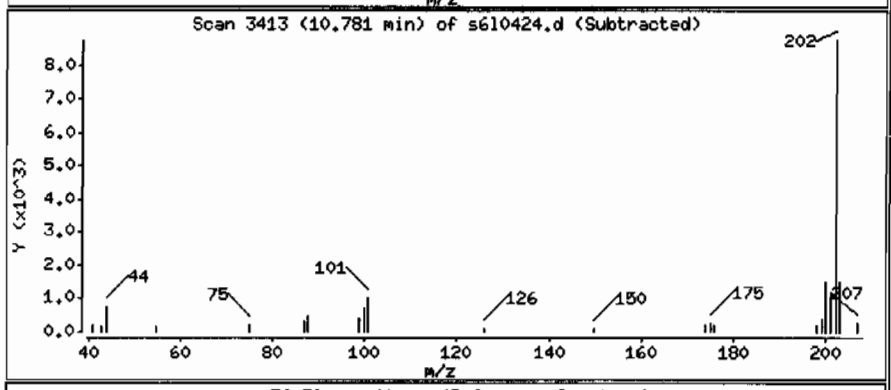

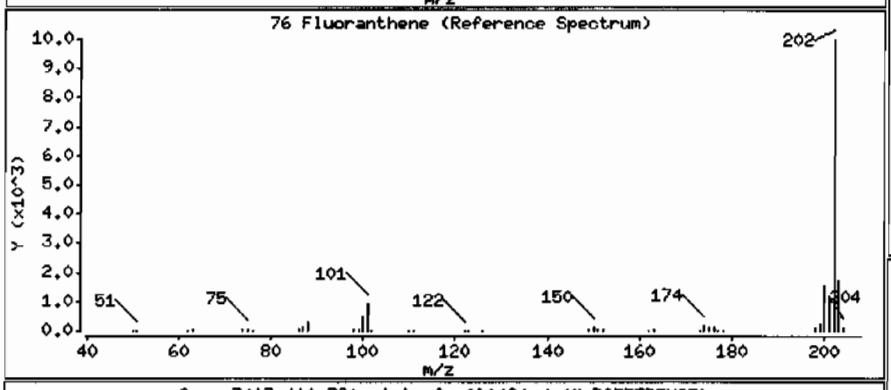

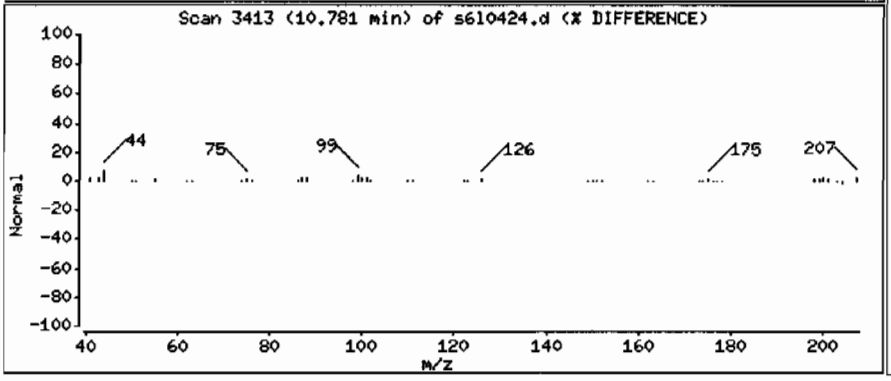

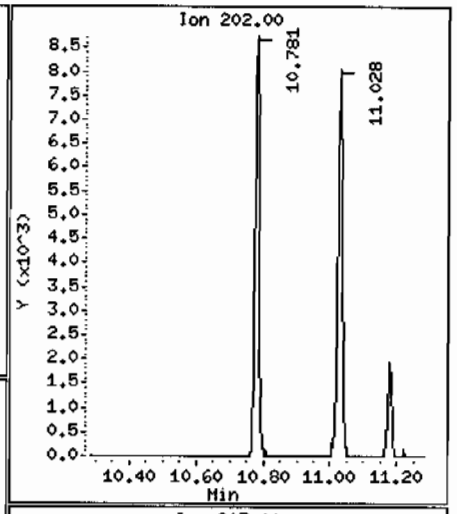

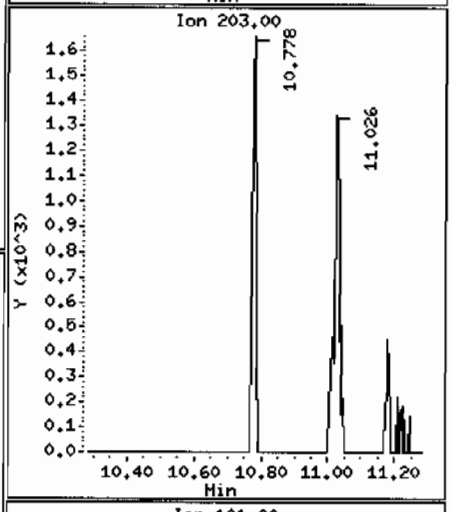

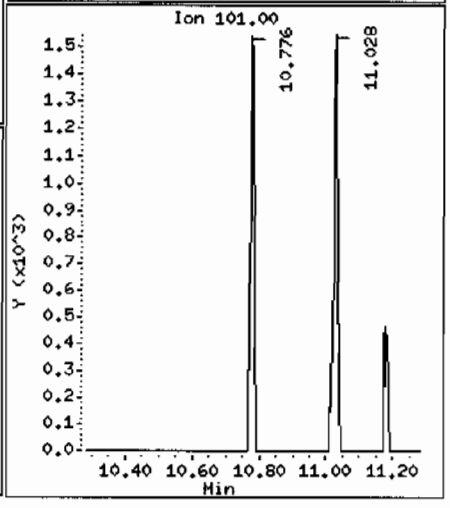

Data File: /chem/MSD6.i/s120409.b/s610424.d

Date : 04-DEC-2009 20:17

Client ID: RE03-09-13967

Instrument: MSD6.i

Sample Info: 1241418013192566111SVMF111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116

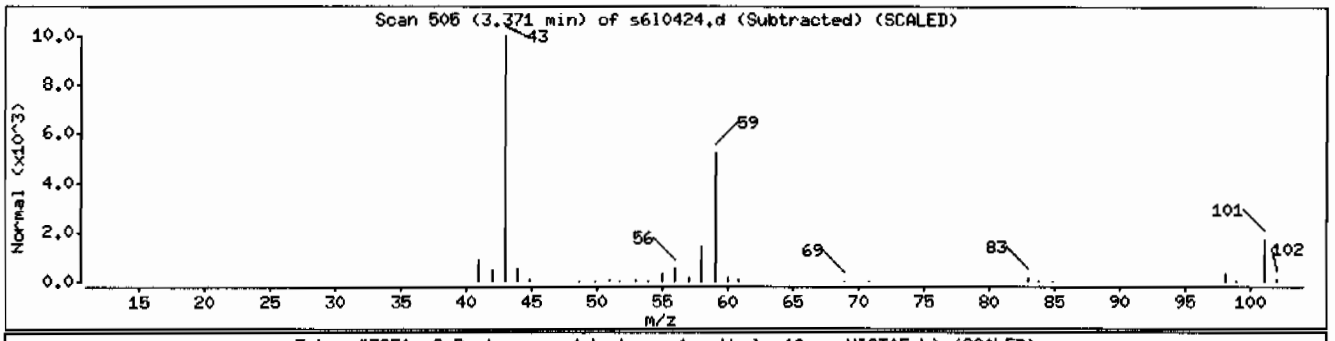

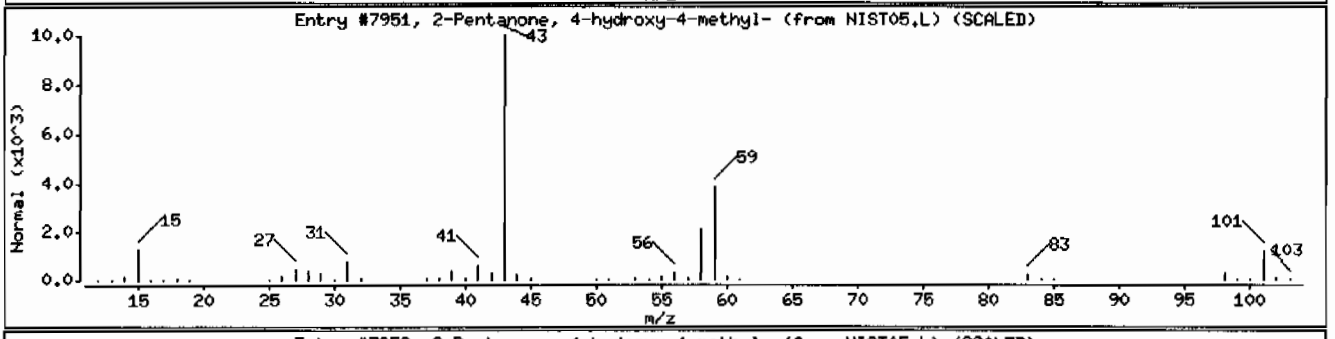

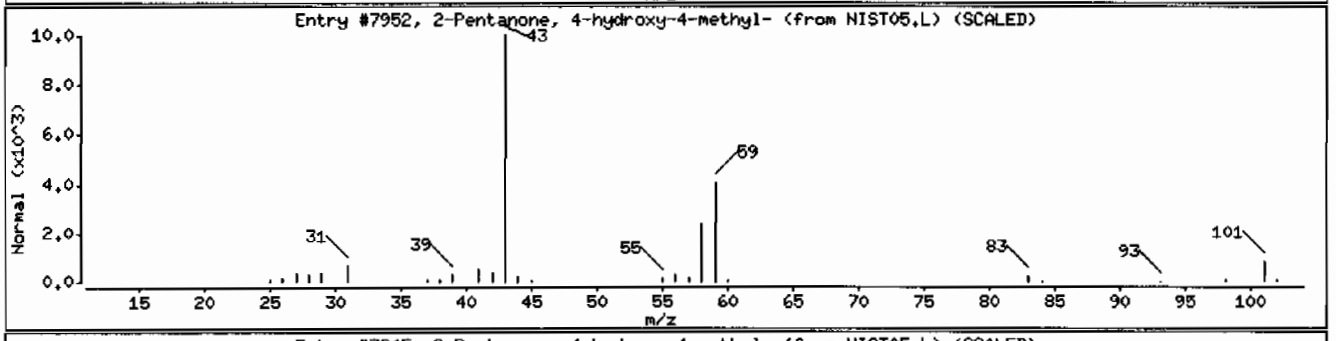

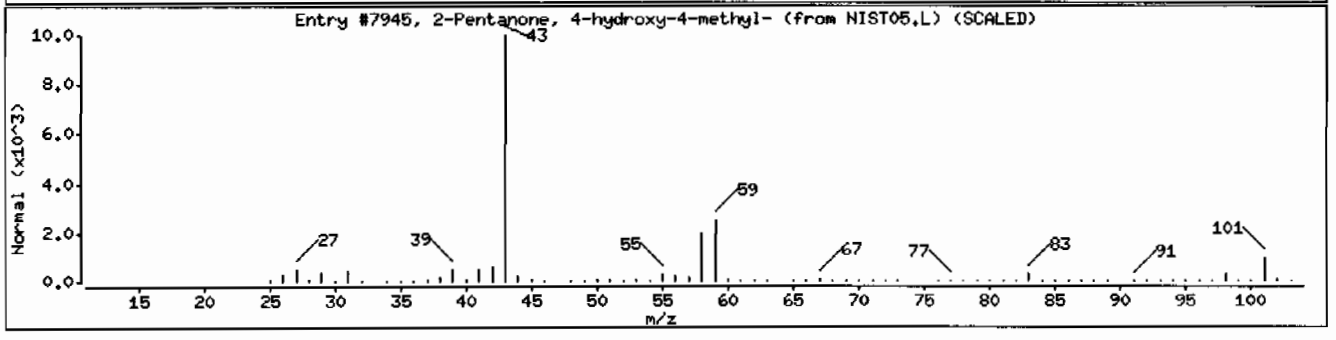

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418010**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13968**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:56**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0421.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.5	363
108-95-2	Phenol	U	363	ug/kg	72.5	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.5	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.5	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.5	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.5	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.7	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.5	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.5	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.5	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.5	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.5	363
95-48-7	o-Cresol	U	363	ug/kg	72.5	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.5	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.5	363
78-59-1	Isophorone	U	363	ug/kg	72.5	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.5	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.5	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.5	363
65-85-0	Benzoic acid	U	725	ug/kg	181	725
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.5	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.5	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.25	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.5	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.5	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.5	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	363	ug/kg	72.5	363
99-09-2	3-Nitroaniline	U	363	ug/kg	72.5	363

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418010**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13968**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:56**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0421.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.5	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	725	ug/kg	138	725
132-64-9	Dibenzofuran	U	363	ug/kg	72.5	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.5	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.5	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.5	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	p-Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.5	363
122-66-7	Azobenzene	U	363	ug/kg	72.5	363
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.5	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.5	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.25	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.5	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.5	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.5	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.5	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.5	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	435	ug/kg		J
	Unknown Aldol Condensate	3.37	325	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 18:56	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s6l0421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	741	ug/kg		J
	Unknown	17.12	269	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610421.d
Lab Smp Id: 241418010 Client Smp ID: RE03-09-13968
Inj Date : 04-DEC-2009 18:56
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418010|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	8.55190	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	234054	40.0000	
* 29 Naphthalene-d8	136	5.990	5.993	(1.000)	888120	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	489597	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	858109	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	708369	40.0000	
* 98 Perylene-d12	264	14.736	14.741	(1.000)	523399	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	382224	65.2122	2360
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	477258	64.5145	2340
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	249372	39.6930	1440
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	497099	39.3982	1430
$ 60 2,4,6-Tribromophenol	329	8.707	8.709	(1.108)	106533	74.5507	2700
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	491680	43.0406	1560

ION RATIO REPORT

SV REPORT

Data file: s610421.d
Report Date: 12/05/2009 08:16
Lab. ID: 241418010 SampleType: SAMPLE
Injection Date: 04-DEC-2009 18:56
Operator: nagl Instrument: MSD6.i
Sample Info: |241418010|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	20258	4.35	4.42	80-120	100	(T)
93	723	4.40	4.42	223-283	4	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	34411	5.25	5.10	80-120	100	(T)
42	20691	5.25	5.10	40-100	60	(T)
22 Isophorone			CAS#: 78-59-1			
82	249372	5.25	5.52	80-120	100	(T)
138	5006	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	86283	7.86	7.55	80-120	100	(T)
164	489597	7.86	7.55	0- 40	567	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	63704	7.85	8.06	80-120	100	(T)
89	646	7.85	8.06	41-101	1	(QT)
63	615	7.86	8.06	18- 78	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	6685	8.70	8.45	80-120	100	(T)
165	6112	8.70	8.45	62-122	91	(T)
167	1877	8.71	8.45	0- 44	28	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610421.d
Lab Smp Id: 241418010 Client Smp ID: RE03-09-13968
Inj Date : 04-DEC-2009 18:56
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418010|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	8.55190	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1342608	40.000
* 98 Perylene-d12	14.736	1431811	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.227	402329	11.9864839	435	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.374	301167	8.97259843	325	0		0	10
Unknown					CAS #:		
16.924	730898	20.4188359	740	0		0	98
Unknown					CAS #:		
17.118	265258	7.41042622	269	0		0	98

Data File: /chem/MSD6.i/s120409.b/s610421.d
Date : 04-DEC-2009 18:56
Client ID: RE03-09-13968
Sample Info: |24141801019256611|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

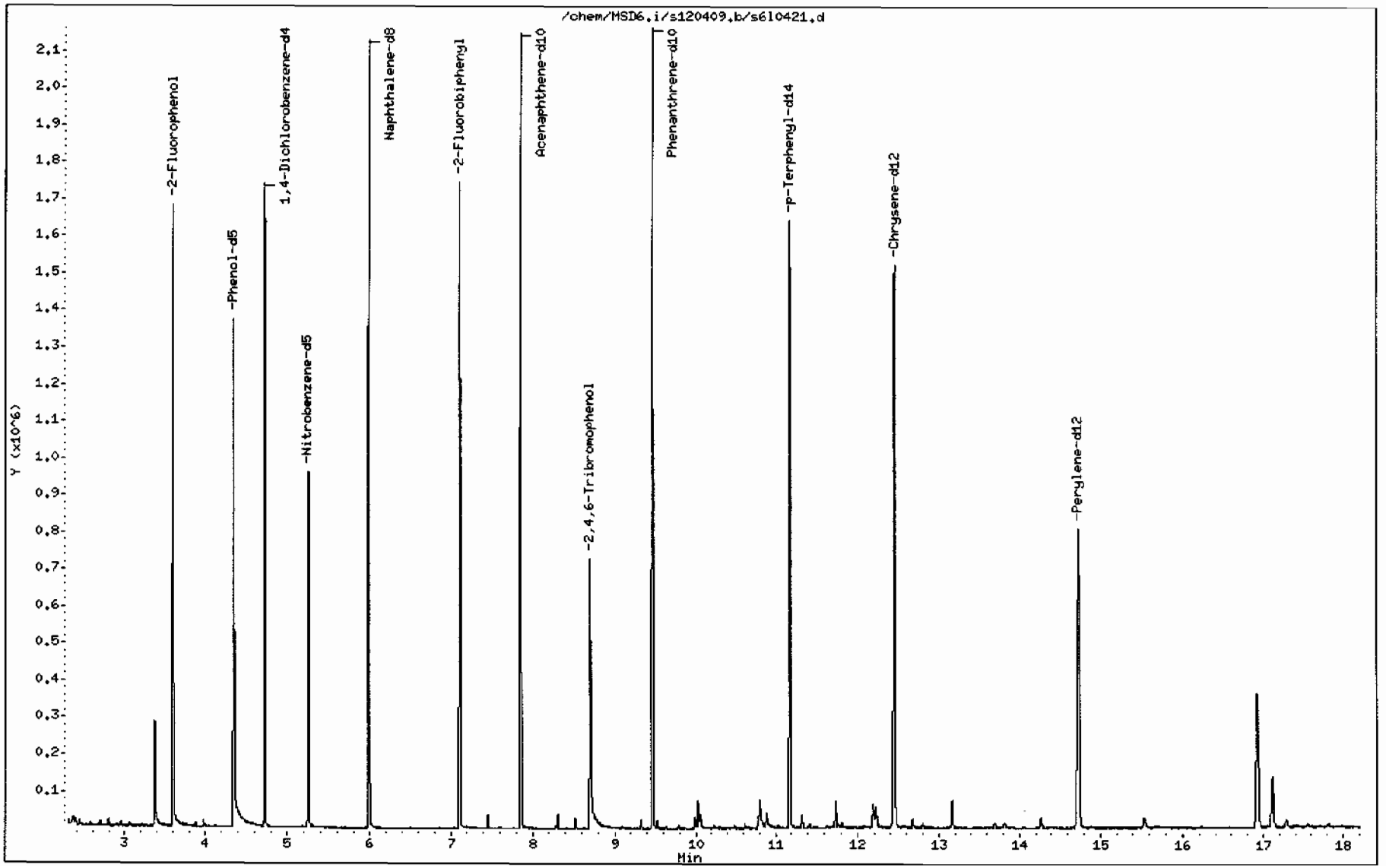

Data File: /chem/MSD6.i/s120409.b/s610421.d

Date : 04-DEC-2009 18:56

Client ID: RE03-09-13968

Instrument: MSD6.i

Sample Info: |2414180101925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104

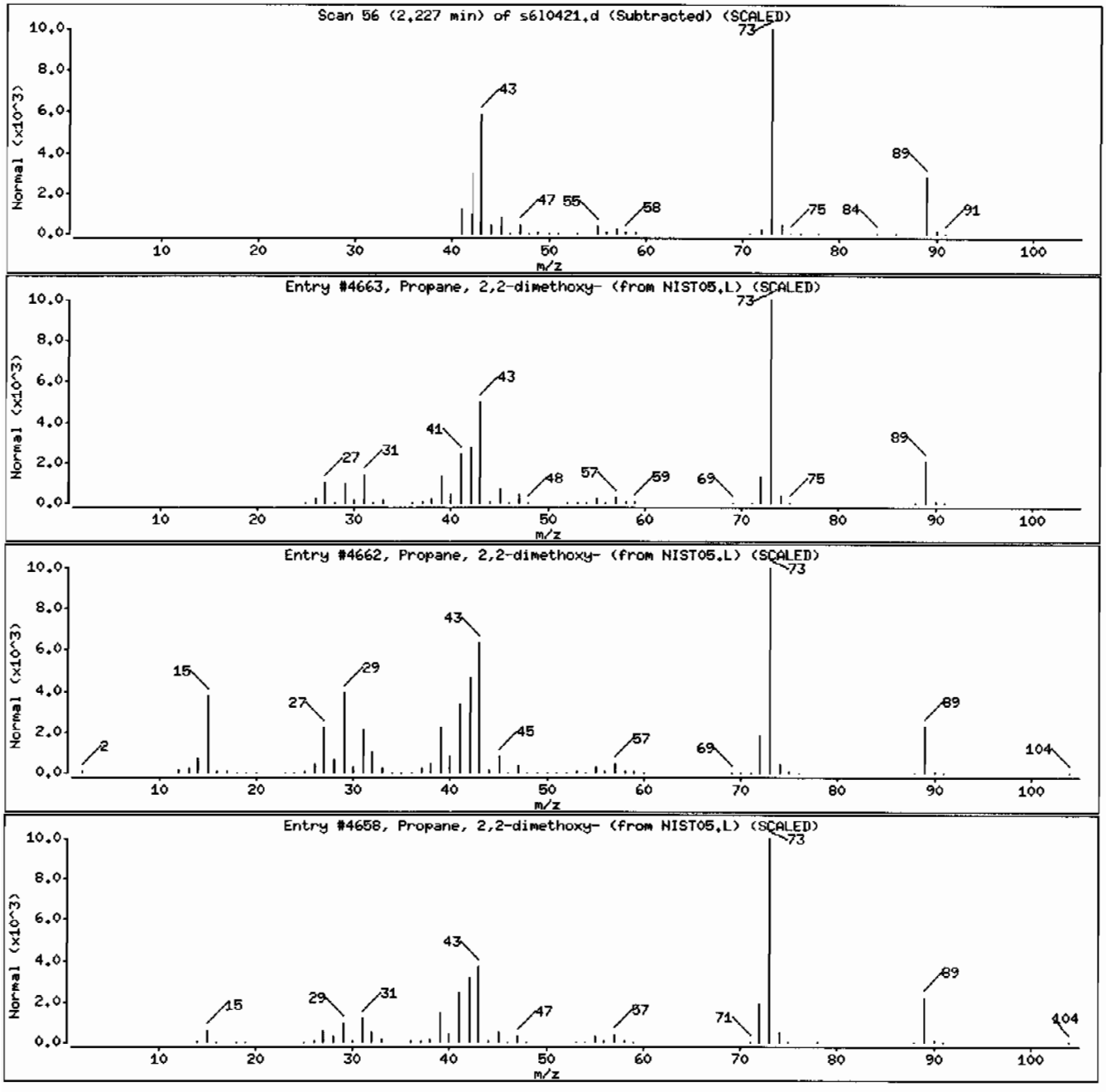

Data File: /chem/MSD6.i/s120409.b/s610421.d

Date : 04-DEC-2009 18:56

Client ID: RE03-09-13968

Instrument: MSD6.i

Sample Info: |2414180101925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	25	C4H7NO2	101

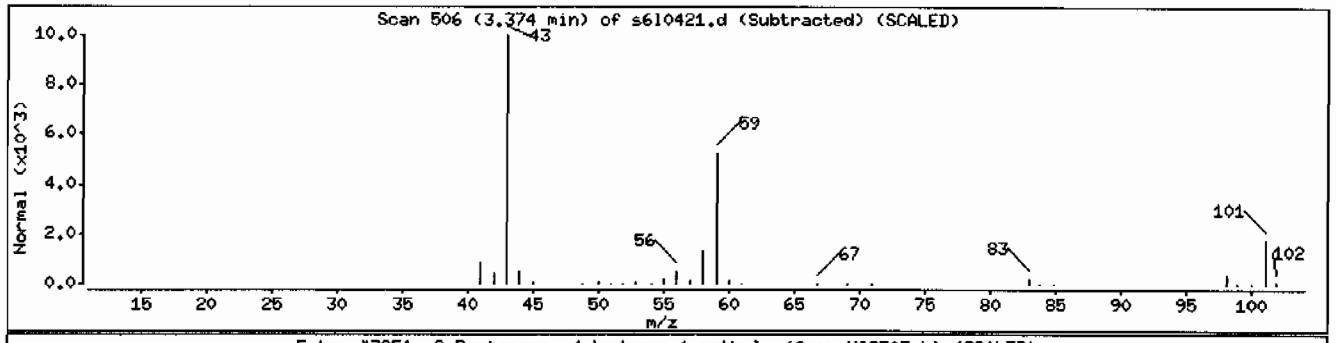

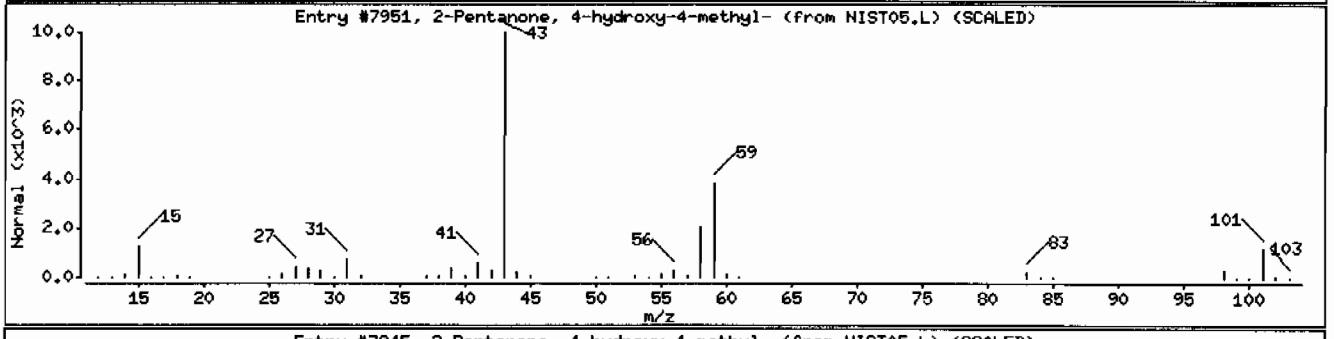

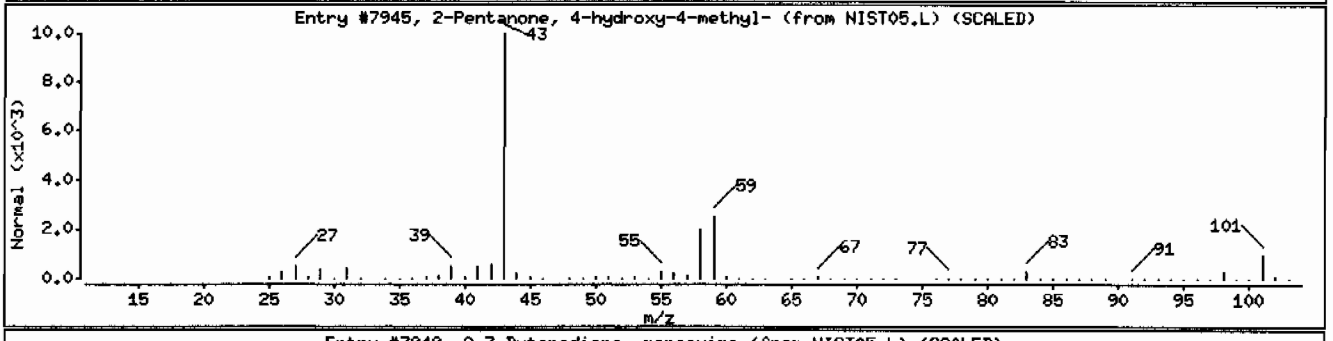

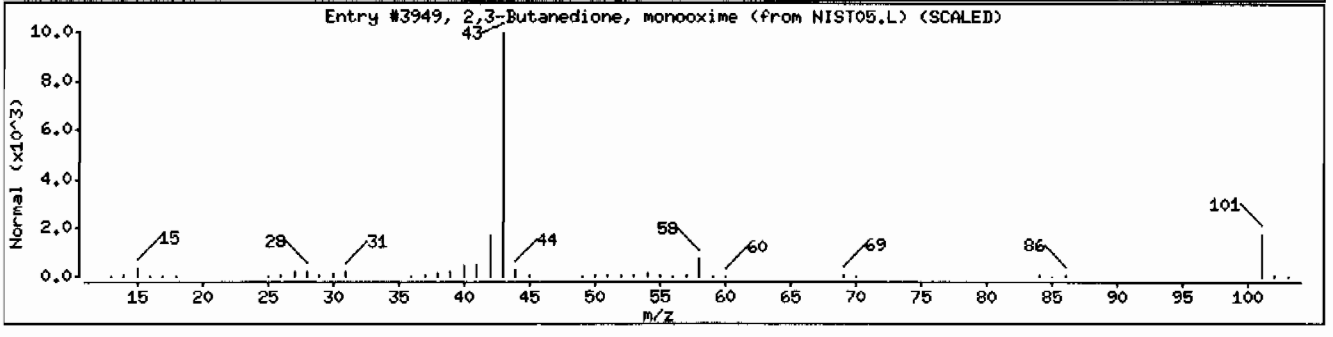

Data File: /chem/MSD6.i/s120409.b/s610421.d

Date : 04-DEC-2009 18:56

Client ID: RE03-09-13968 Instrument: MSD6.i

Sample Info: |2414180101925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,5,5,8a-Tetramethyl-6,7,8,8a-tetrahydro	124957-09-1	NIST05.L	59756	45	C14H20O	204
1,4-Dimethyl-8-isopropylidenetricyclo[5,	1000140-07-7	NIST05.L	59920	42	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	41	C15H24	204

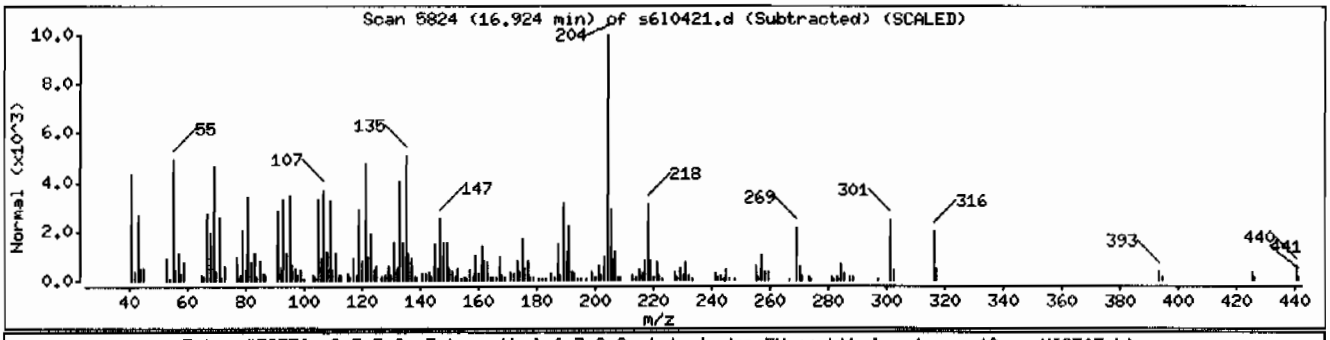

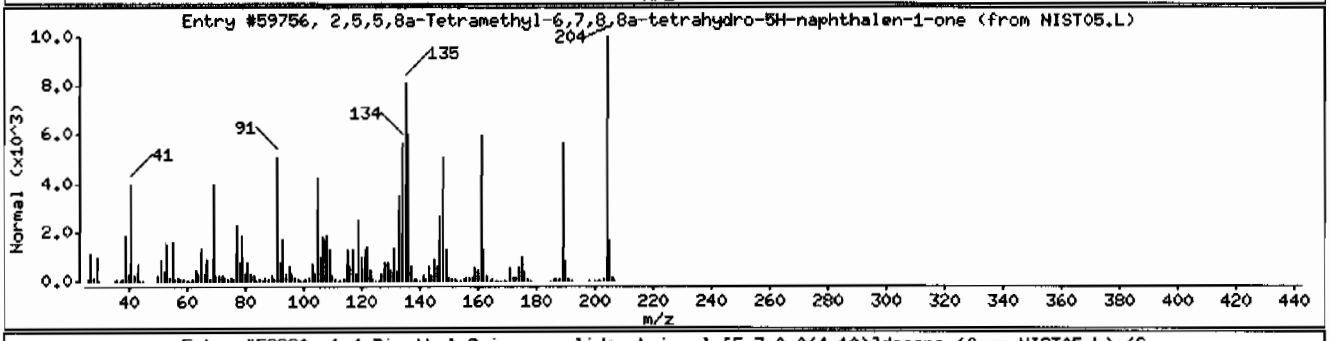

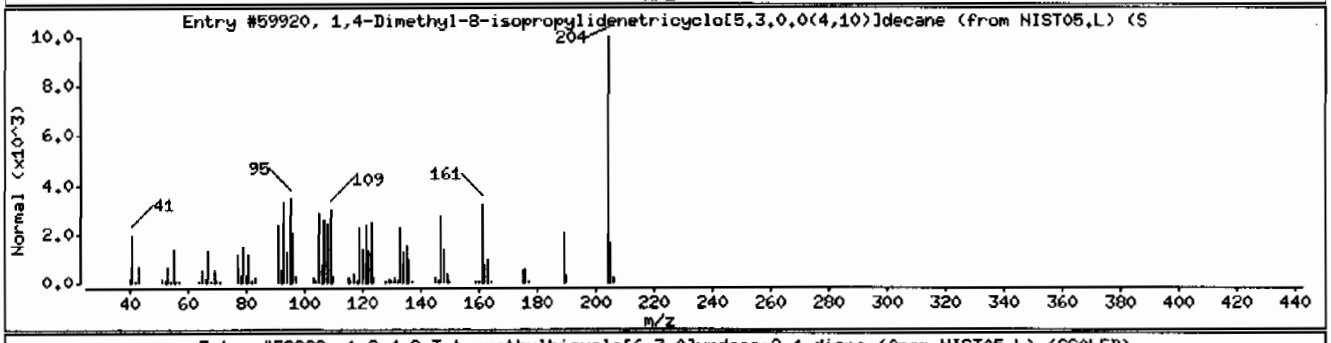

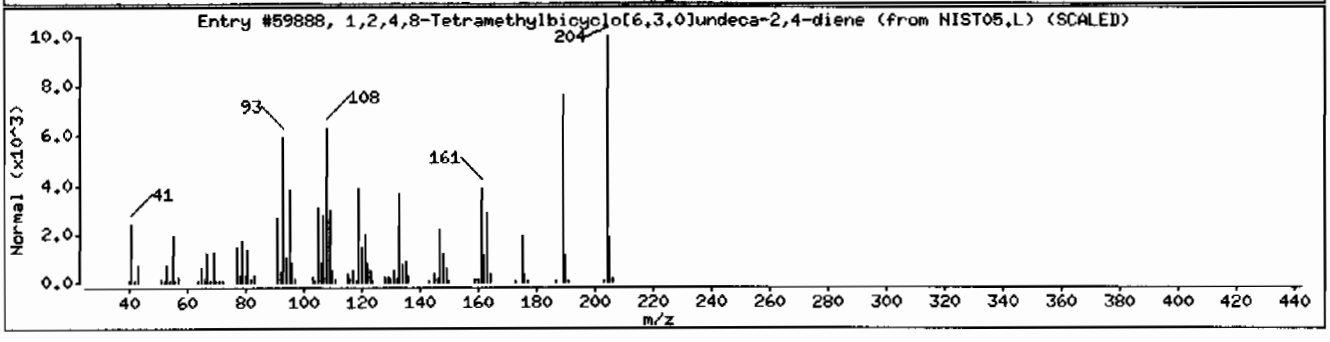

Data File: /chem/MSD6.i/s120409.b/s610421.d

Date : 04-DEC-2009 18:56

Client ID: RE03-09-13968 Instrument: MSD6.i

Sample Info: |2414180101925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60039	60	C15H24	204
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60037	60	C15H24	204
1H-Cyclopropa[a]naphthalene, 1a,2,3,3a,4	489-29-2	NIST05.L	60074	53	C15H24	204

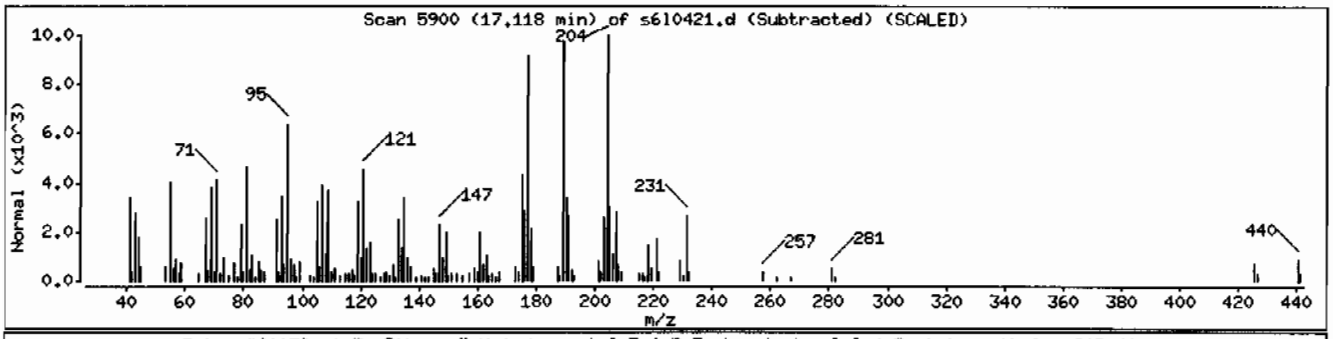

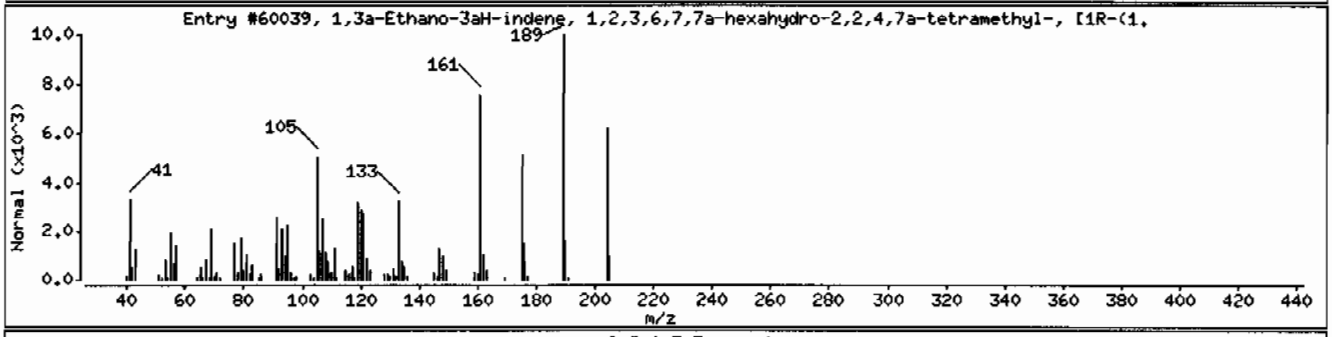

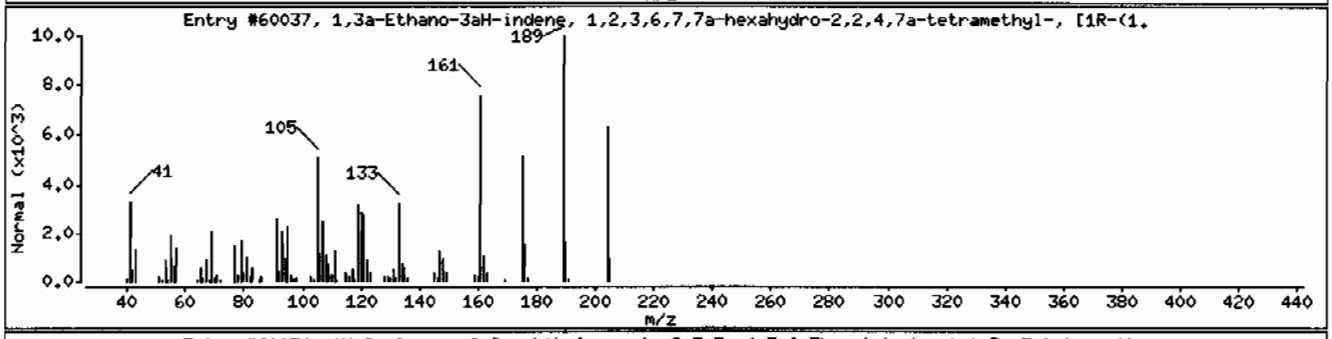

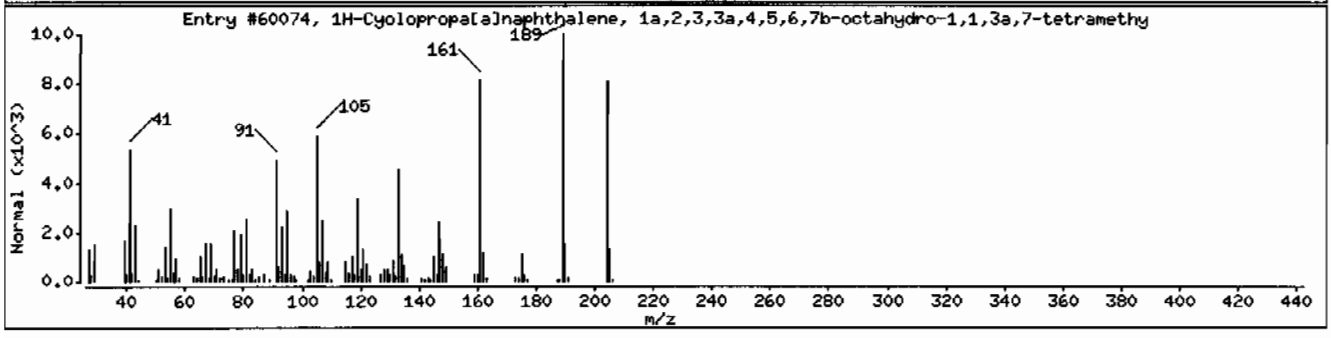

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418009	Date Received:	11/19/2009 08:45	%Moisture:	13.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13969	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.1	Dilution:	1
Run Date:	12/04/2009 18:29	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s6l0420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.5	382
108-95-2	Phenol	U	382	ug/kg	76.5	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.5	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.5	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.5	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.5	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.6	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.5	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.5	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.5	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.5	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.5	382
95-48-7	o-Cresol	U	382	ug/kg	76.5	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.5	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.5	382
78-59-1	Isophorone	U	382	ug/kg	76.5	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.5	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.5	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.5	382
65-85-0	Benzoic acid	U	765	ug/kg	191	765
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.5	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.5	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.65	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.5	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.5	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.5	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.5	382
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	382	ug/kg	76.5	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418009**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**13.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13969**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:29**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0420.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.5	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	765	ug/kg	145	765
132-64-9	Dibenzofuran	U	382	ug/kg	76.5	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.5	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.5	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.5	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.5	382
122-66-7	Azobenzene	U	382	ug/kg	76.5	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.5	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.5	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.65	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.5	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.5	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.5	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.5	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.5	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.38	316	ug/kg		JA
	Unknown	16.92	431	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13969	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.1	**Dilution:**	1
Run Date:	12/04/2009 18:29	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s6l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	17.12	374	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610420.d
Lab Smp Id: 241418009 Client Smp ID: RE03-09-13969
Inj Date : 04-DEC-2009 18:29
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418009|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	13.21470	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	235542	40.0000	
* 29 Naphthalene-d8	136	5.990	5.993	(1.000)	900679	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	496673	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	870514	40.0000	
* 91 Chrysene-d12	240	12.455	12.463	(1.000)	765500	40.0000	
* 98 Perylene-d12	264	14.738	14.741	(1.000)	606667	40.0000	
$ 3 2-Fluorophenol	112	3.605	3.590	(0.762)	413975	70.1831	2680
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	507641	68.1881	2610
$ 20 Nitrobenzene-d5	82	5.257	5.259	(0.877)	255917	40.1668	1540
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	513605	40.1265	1530
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	110144	75.9795	2900
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	544480	44.1054	1690

ION RATIO REPORT

SV REPORT

Data file: s610420.d
Report Date: 12/05/2009 08:16
Lab. ID: 241418009 SampleType: SAMPLE
Injection Date: 04-DEC-2009 18:29
Operator: nagl Instrument: MSD6.i
Sample Info: |241418009|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	22866	4.35	4.42	80-120	100	(T)
93	173	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	35257	5.25	5.10	80-120	100	(T)
42	21444	5.25	5.10	40-100	61	(T)
22 Isophorone		CAS#: 78-59-1				
82	255917	5.26	5.52	80-120	100	(T)
138	4908	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	88256	7.86	7.55	80-120	100	(T)
164	496673	7.86	7.55	0- 40	563	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	65298	7.86	8.06	80-120	100	(T)
89	677	7.86	8.06	41-101	1	(QT)
63	682	7.85	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	6394	8.70	8.45	80-120	100	(T)
165	6772	8.70	8.45	62-122	106	(T)
167	2133	8.70	8.45	0- 44	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	167	8.70	8.50	80-120	100	(T)
105	443	8.70	8.50	11- 71	265	(QT)
51	303	8.70	8.50	22- 82	181	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610420.d
Lab Smp Id: 241418009 Client Smp ID: RE03-09-13969
Inj Date : 04-DEC-2009 18:29
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418009|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	13.21470	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1353279	40.000
* 98 Perylene-d12	14.738	1656773	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.379	279849	8.27172531	316	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown				CAS #:			
16.922	466978	11.2743877	431	0		0	98
Unknown				CAS #:			
17.115	404927	9.77627197	374	0		0	98

Data File: /chem/MSD6.i/s120409.b/s610420.d
Date : 04-DEC-2009 18:29
Client ID: RE03-09-13969
Sample Info: 1241418009|925661|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

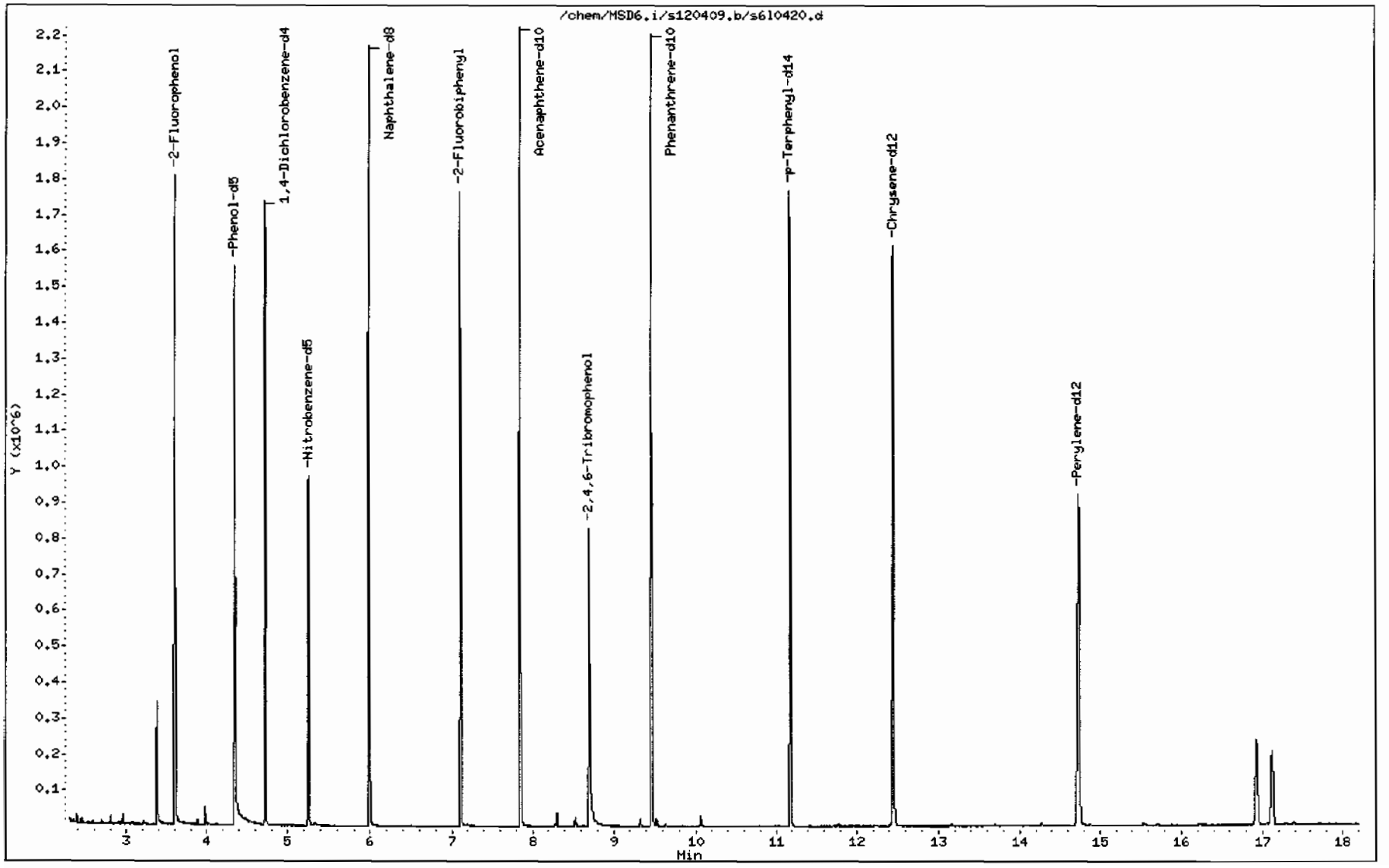

Data File: /chem/MSD6.i/s120409.b/s610420.d

Date : 04-DEC-2009 18:29

Client ID: RE03-09-13969

Instrument: MSD6.i

Sample Info: |2414180091925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
3-Hexanol	623-37-0	NIST05.L	4318	36	C6H14O	102

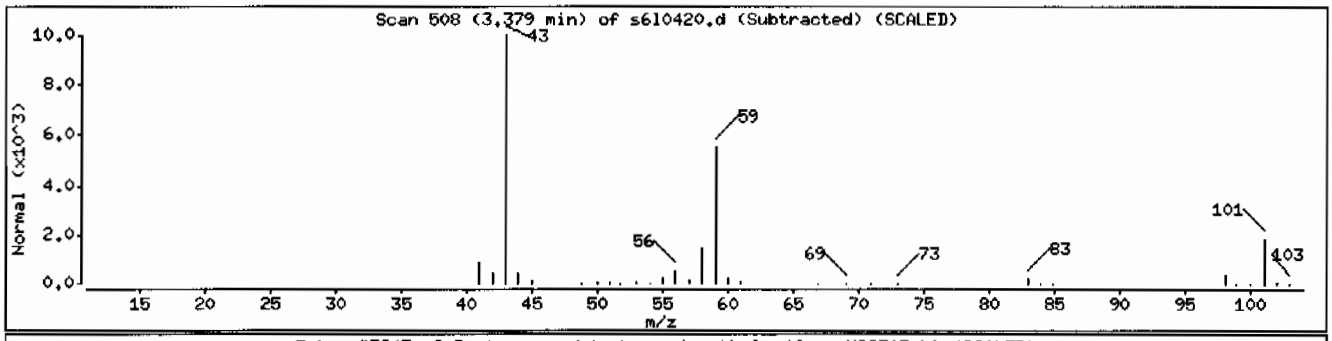

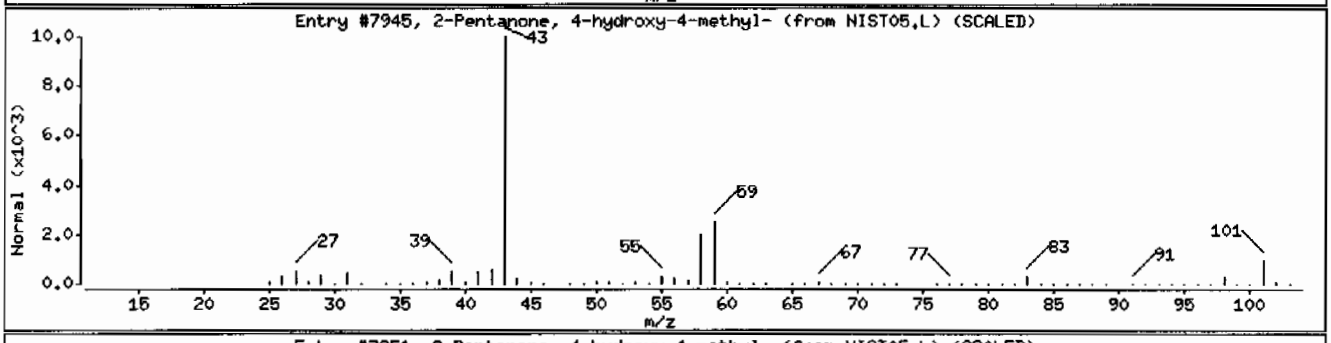

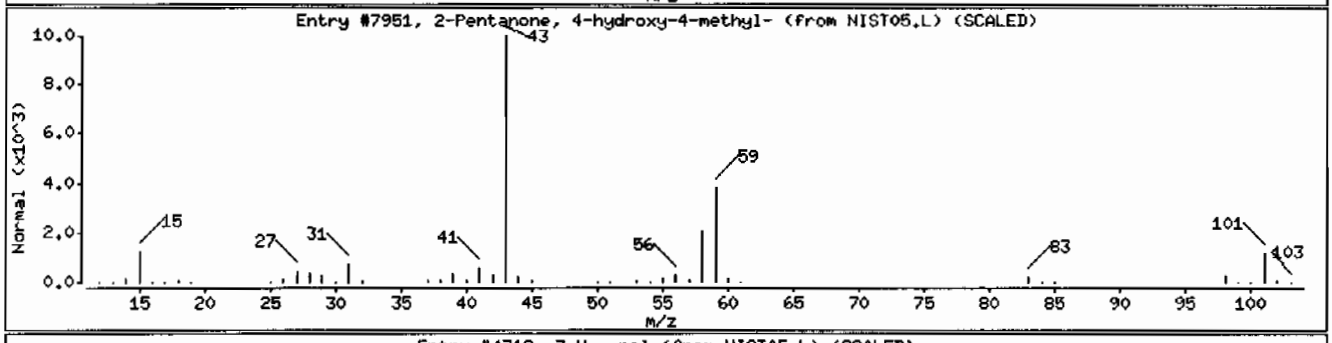

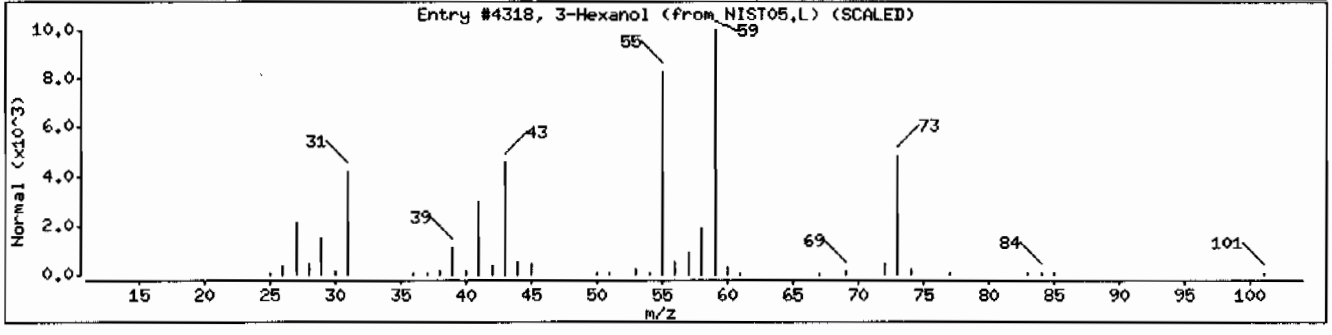

Data File: /chem/MSD6.i/s120409.b/s610420.d

Date : 04-DEC-2009 18:29

Client ID: RE03-09-13969 Instrument: MSD6.i

Sample Info: |2414180091925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	60	C15H24	204
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	43	C15H24	204
3H-Quinazolin-5-one, 2-isopropylimino-7,	1000303-22-6	NIST05.L	80445	38	C13H19N3O	233

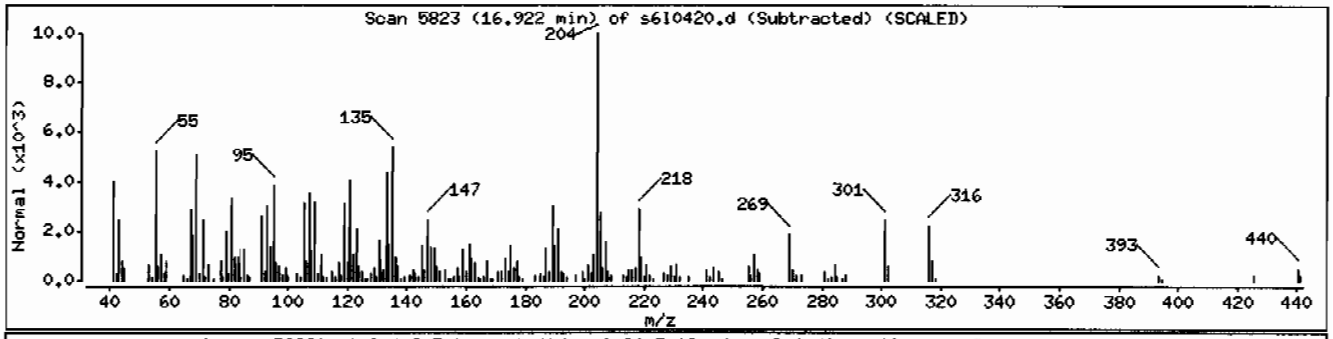

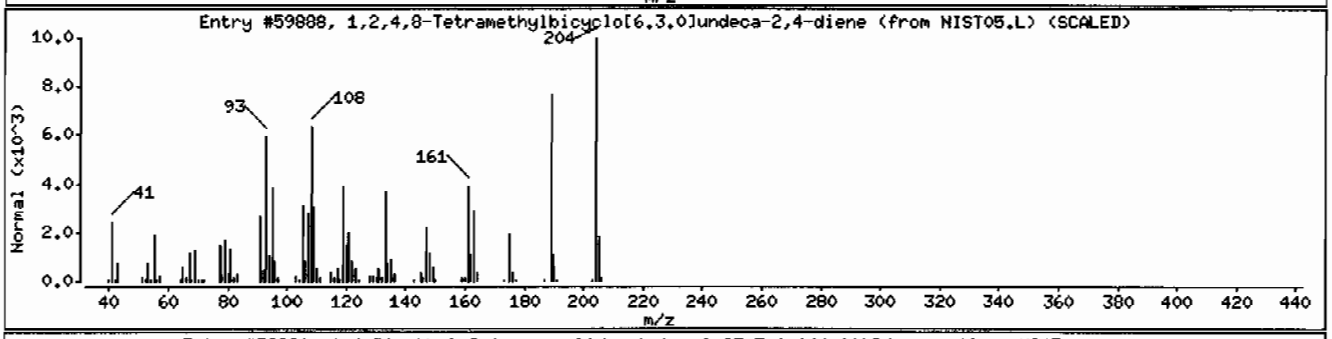

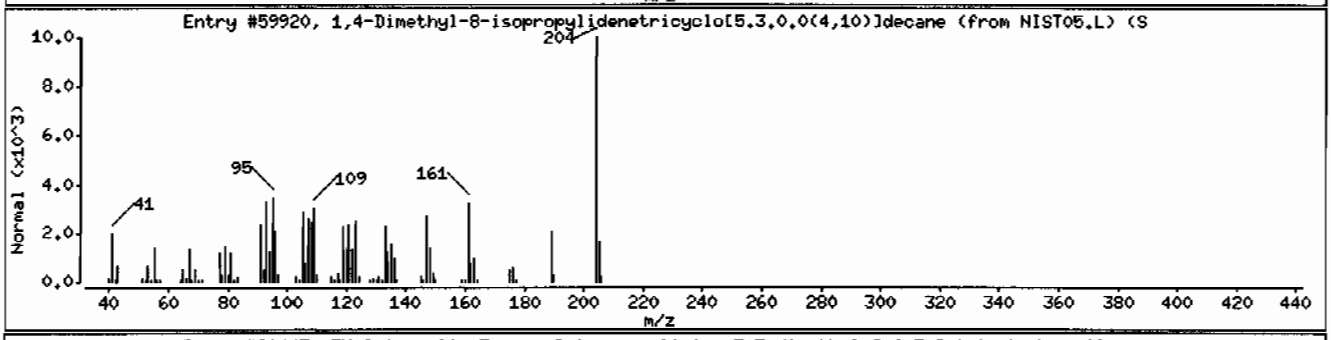

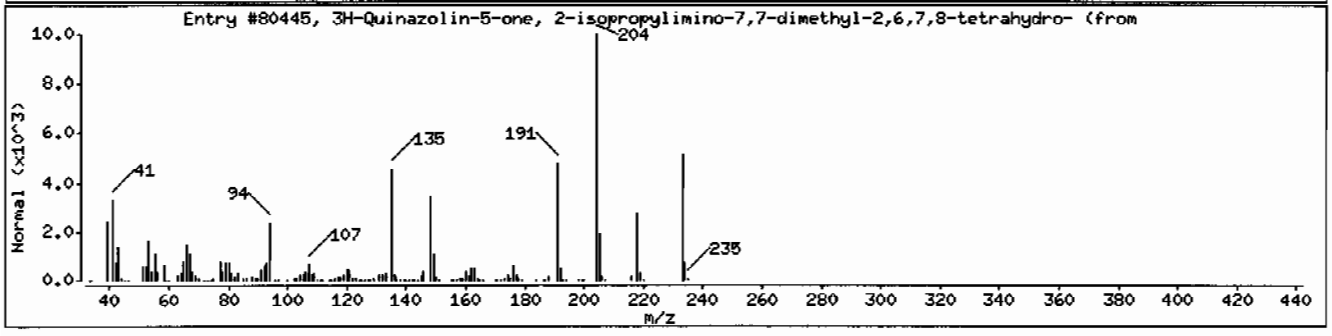

Data File: /chem/MSD6.i/s120409.b/s610420.d

Date : 04-DEC-2009 18:29

Client ID: RE03-09-13969

Instrument: MSD6.i

Sample Info: |24141800919256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60039	47	C15H24	204
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60037	47	C15H24	204
1H-Cyclopropa[a]naphthalene, 1a,2,3,3a,4	489-29-2	NIST05.L	60074	43	C15H24	204

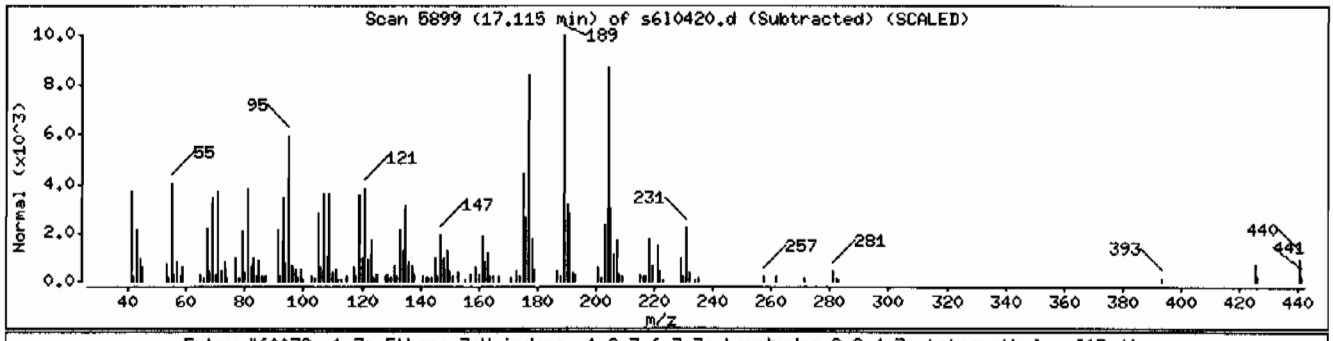

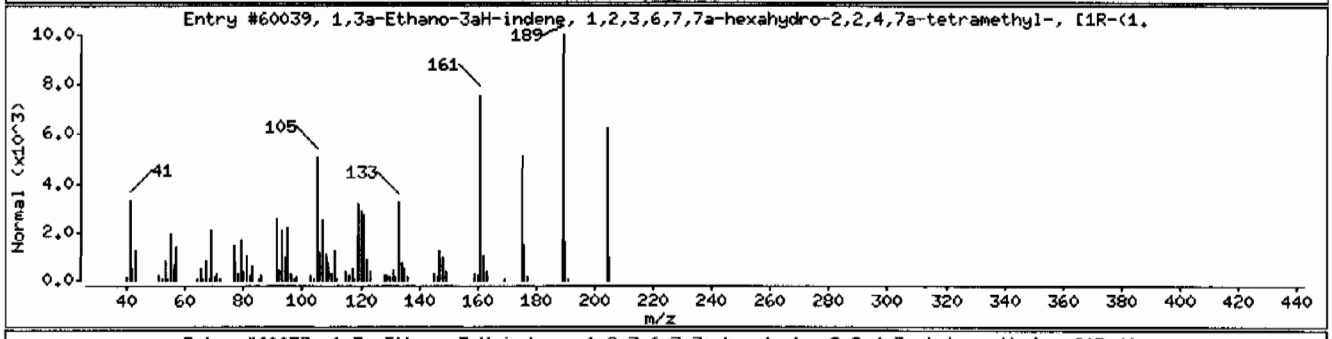

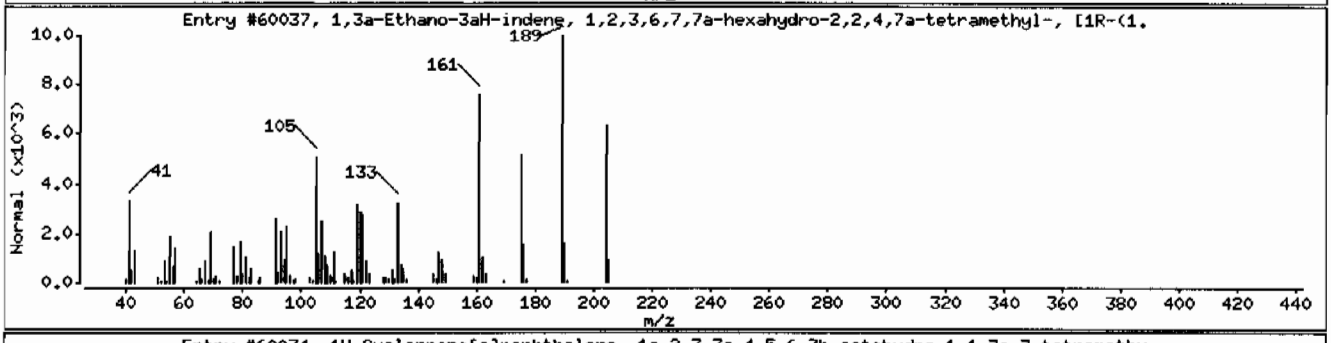

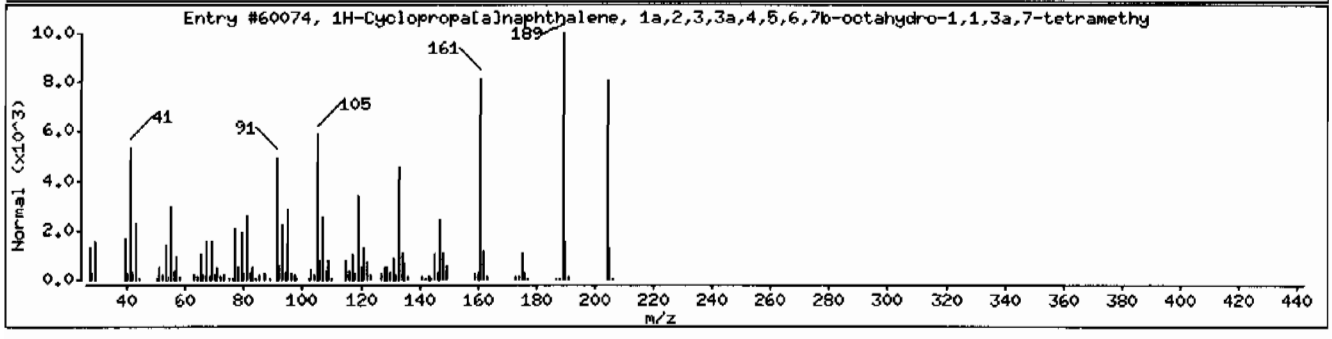

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13970**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:06**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.5	372
108-95-2	Phenol	U	372	ug/kg	74.5	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.5	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.5	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.5	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.5	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	93.1	372
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2
110-86-1	Pyridine	U	372	ug/kg	74.5	372
62-53-3	Aniline	U	372	ug/kg	112	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.5	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.5	372
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.5	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.5	372
95-48-7	o-Cresol	U	372	ug/kg	74.5	372
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.5	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.5	372
78-59-1	Isophorone	U	372	ug/kg	74.5	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.5	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.5	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.5	372
65-85-0	Benzoic acid	U	745	ug/kg	186	745
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.5	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.5	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.45	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.5	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.5	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.5	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline	U	372	ug/kg	74.5	372
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	372	ug/kg	74.5	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 17:06	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s610417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.5	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2
51-28-5	2,4-Dinitrophenol	U	745	ug/kg	142	745
132-64-9	Dibenzofuran	U	372	ug/kg	74.5	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.5	372
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.5	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.5	372
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.5	372
122-66-7	Azobenzene	U	372	ug/kg	74.5	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.5	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.5	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.45	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.5	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.5	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.5	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.5	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.5	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.22	942	ug/kg		J
	Unknown Aldol Condensate	3.37	353	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 17:06	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s6l0417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.93	1010	ug/kg		J
	Unknown	17.12	535	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610417.d
Lab Smp Id: 241418006 Client Smp ID: RE03-09-13970
Inj Date : 04-DEC-2009 17:06
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418006|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	10.60320	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	219122	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	822587	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.858	(1.000)	454812	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.469	(1.000)	779753	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	596385	40.0000	
* 98 Perylene-d12	264	14.728	14.741	(1.000)	431021	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	366345	66.7622	2490
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	428199	61.8272	2300
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	221427	38.0528	1420
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	447498	38.1796	1420
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	91114	68.6372	2560
$ 81 p-Terphenyl-d14	244	11.178	11.181	(0.898)	424083	44.0940	1640

ION RATIO REPORT

SV REPORT

Data file: s610417.d
Report Date: 12/05/2009 08:16
Lab. ID: 241418006 SampleType: SAMPLE
Injection Date: 04-DEC-2009 17:06
Operator: nag1 Instrument: MSD6.i
Sample Info: |241418006|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	9557	2.36	2.67	80-120	100	(T)
42	974	2.38	2.67	61-121	10	(QT)
43	7009	2.38	2.67	10- 70	73	(QT)
4 Aniline			CAS#: 62-53-3			
66	19269	4.35	4.42	80-120	100	(T)
93	103	4.40	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	30544	5.25	5.10	80-120	100	(T)
42	19059	5.25	5.10	40-100	62	(T)
22 Isophorone			CAS#: 78-59-1			
82	221427	5.25	5.52	80-120	100	(T)
138	4569	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	80829	7.86	7.55	80-120	100	(T)
164	454812	7.86	7.55	0- 40	563	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	59670	7.85	8.06	80-120	100	(T)
89	653	7.86	8.06	41-101	1	(QT)
63	642	7.86	8.06	18- 78	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	5121	8.71	8.45	80-120	100	(T)
165	5217	8.70	8.45	62-122	102	(T)
167	1433	8.70	8.45	0- 44	28	(T)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	149	8.70	8.50	80-120	100	(T)
105	407	8.70	8.50	11- 71	272	(QT)
51	472	8.70	8.50	22- 82	316	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610417.d
Lab Smp Id: 241418006 Client Smp ID: RE03-09-13970
Inj Date : 04-DEC-2009 17:06
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418006|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	10.60320	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1241639	40.000
* 98 Perylene-d12	14.728	1170137	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.224	785625	25.3092793	942	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.374	293960	9.47006729	353	0		0	10
Unknown				CAS #:			
16.927	797094	27.2478759	1010	0		0	98
Unknown				CAS #:			
17.118	420051	14.3590326	535	0		0	98

Data File: /chem/MSD6.i/s120409.b/s610417.d
Date : 04-DEC-2009 17:06
Client ID: RE03-09-13970
Sample Info: |241418006|925661|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

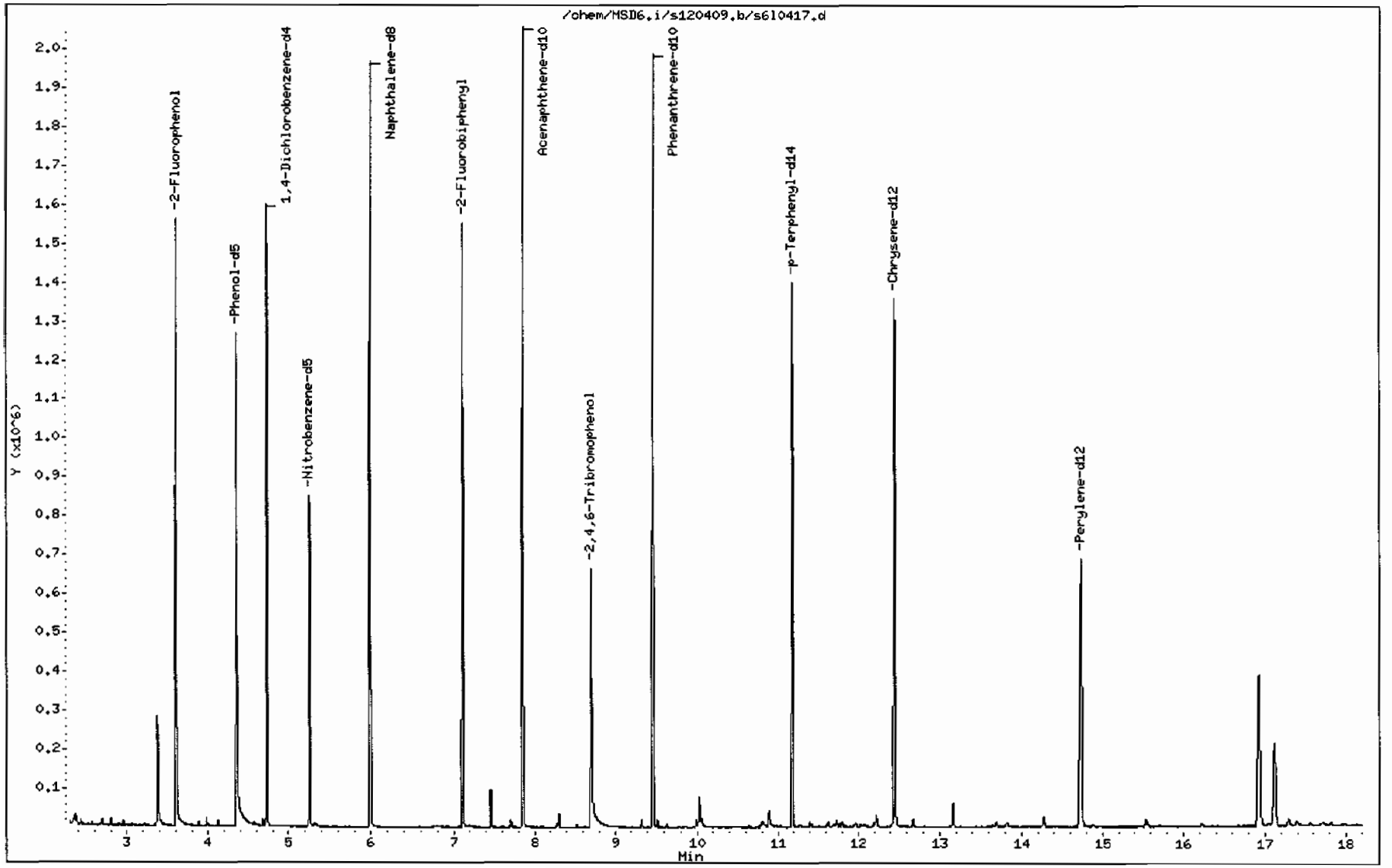

Data File: /chem/MSD6.i/s120409.b/s610417.d

Date : 04-DEC-2009 17:06

Client ID: RE03-09-13970

Instrument: MSD6.i

Sample Info: 1241418006|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	56	C5H12O2	104
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	25	CH7N5	89
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	23	C7H14O2	130

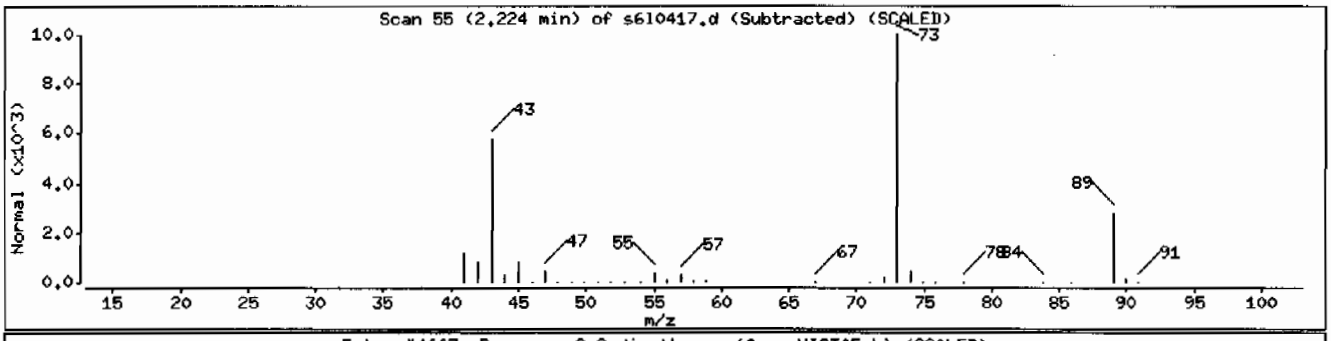

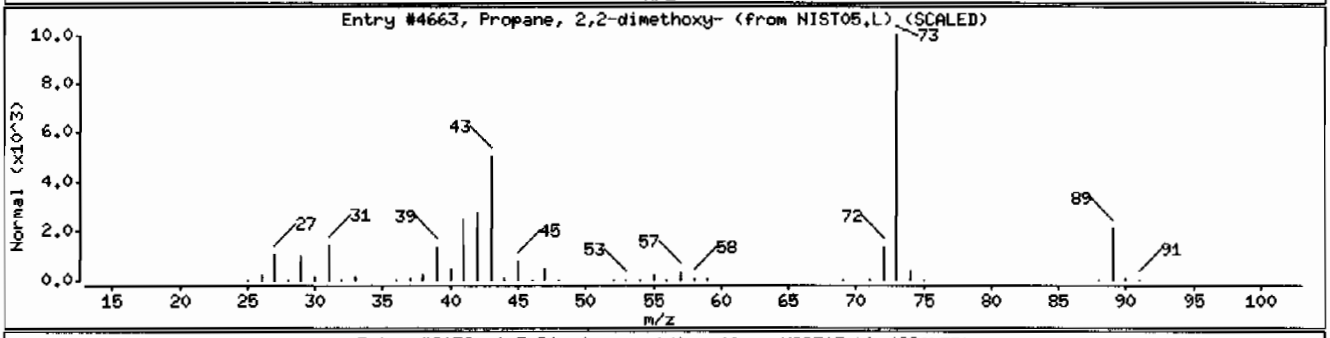

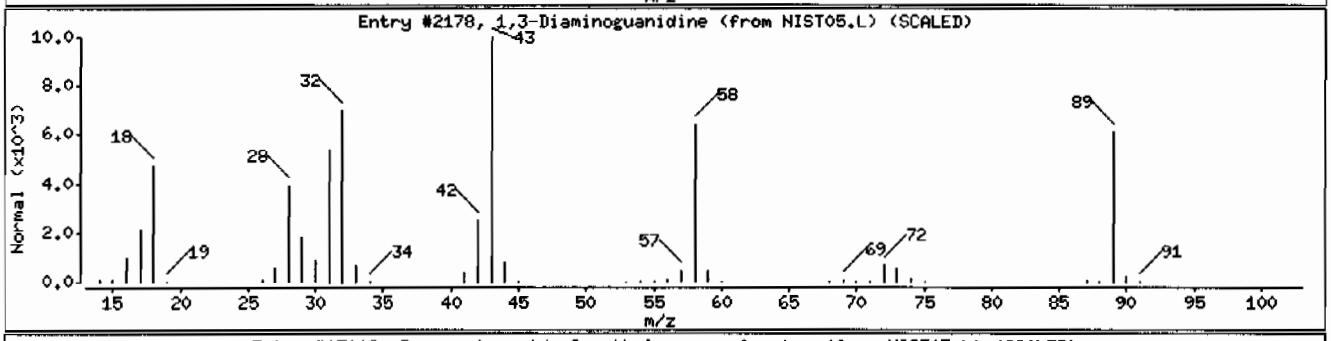

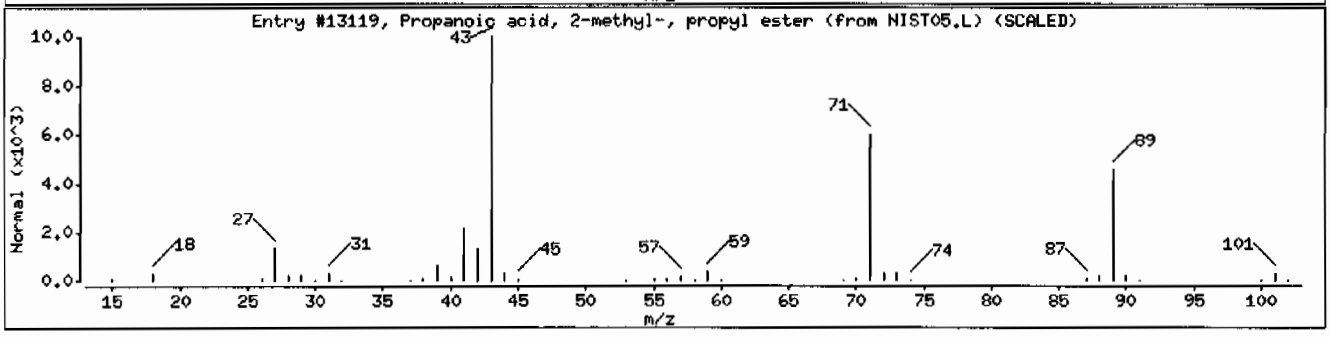

Data File: /chem/MSD6.i/s120409.b/s610417.d

Date : 04-DEC-2009 17:06

Client ID: RE03-09-13970

Instrument: MSD6.i

Sample Info: |241418006|925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	39	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	28	C6H12O2	116

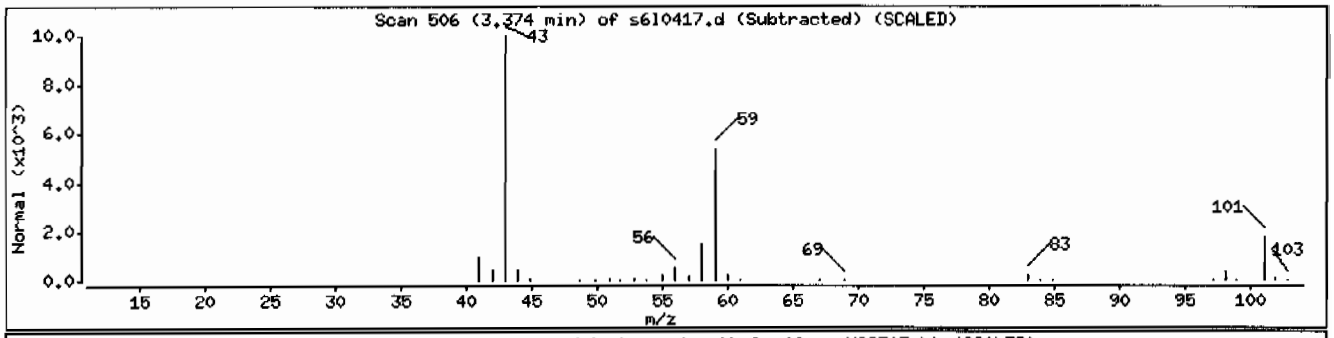

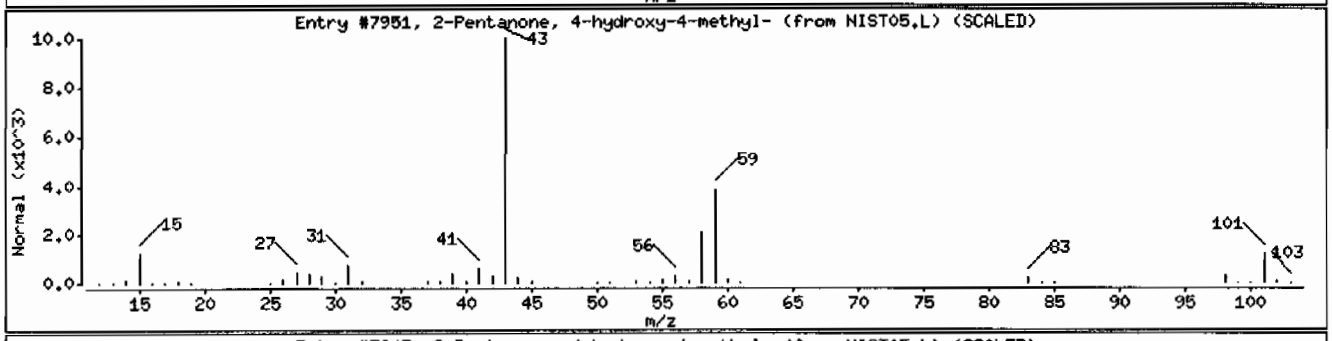

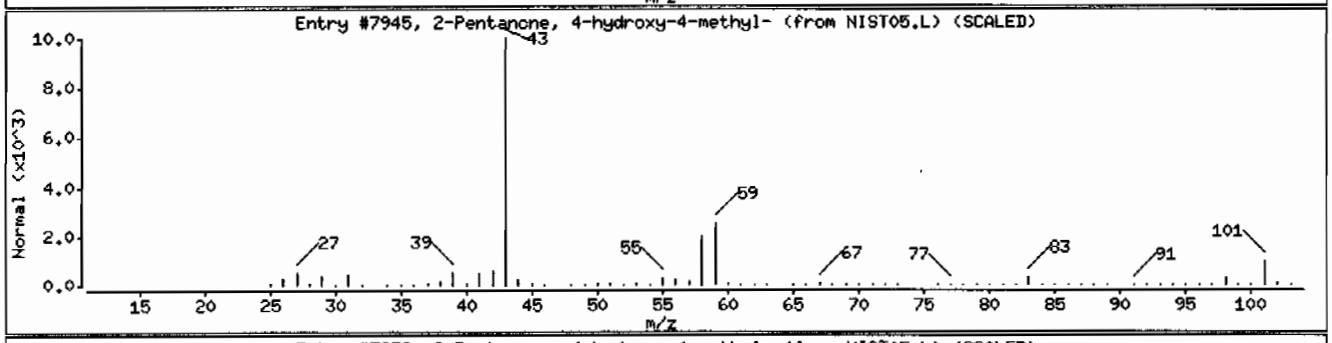

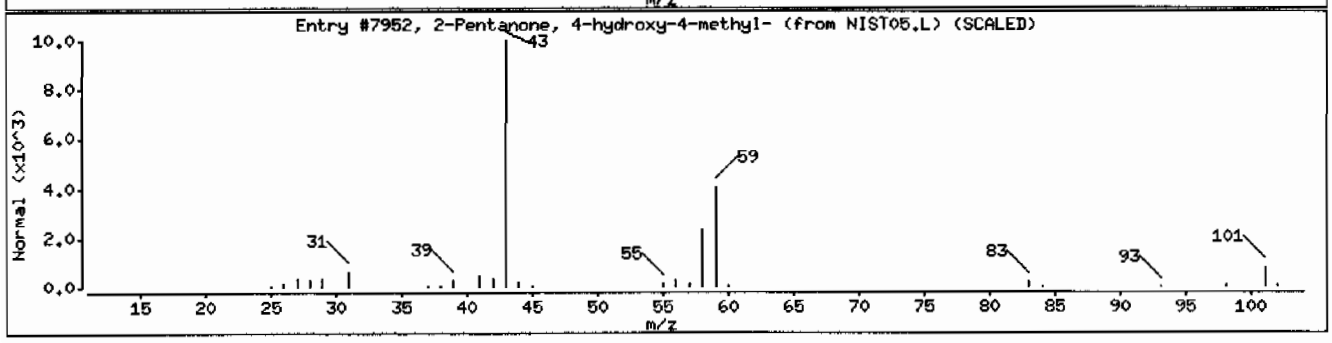

Data File: /chem/MSD6.i/s120409.b/s610417.d

Date : 04-DEC-2009 17:06

Client ID: RE03-09-13970 Instrument: MSD6.i

Sample Info: 1241418006192566111SVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	50	C15H24	204
2H-Cyclopentacyclooctene, 4,5,6,7,8,9-he	1000221-85-8	NIST05.L	59950	49	C15H24	204
2,5,5,8a-Tetramethyl-6,7,8,8a-tetrahydro	124957-09-1	NIST05.L	59756	49	C14H20O	204

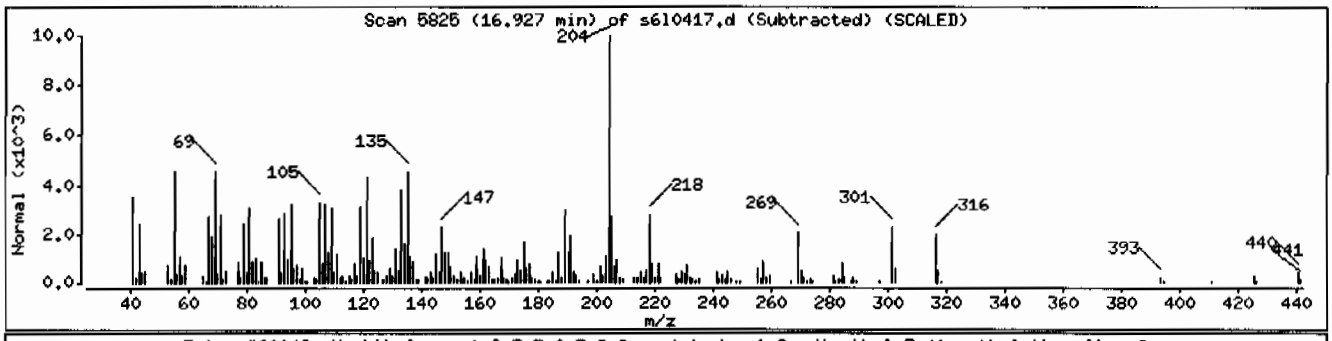

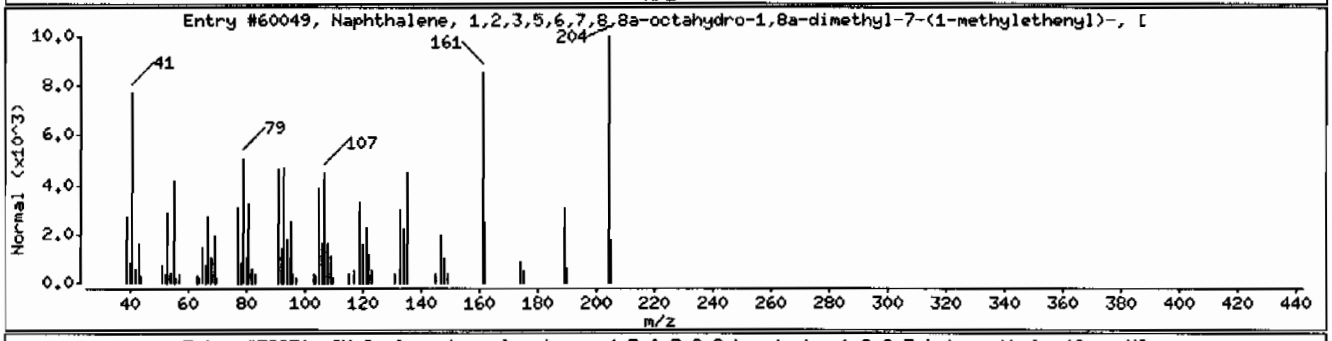

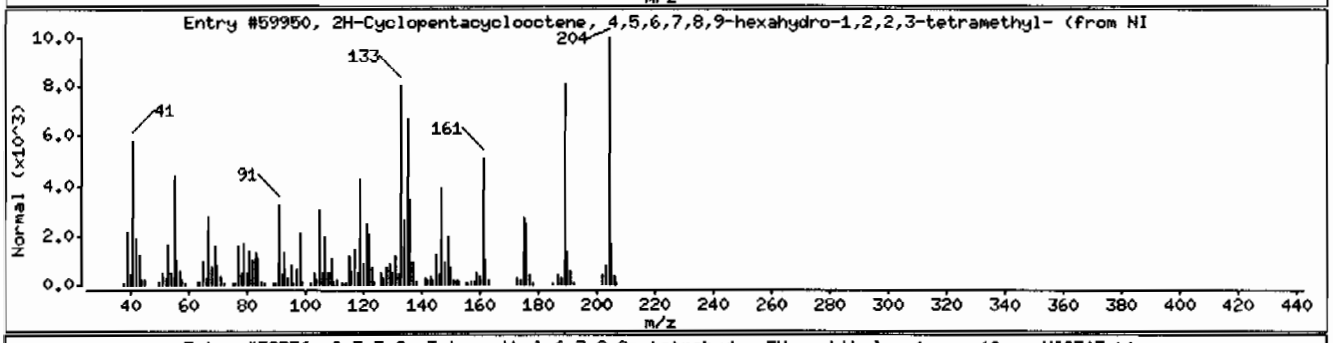

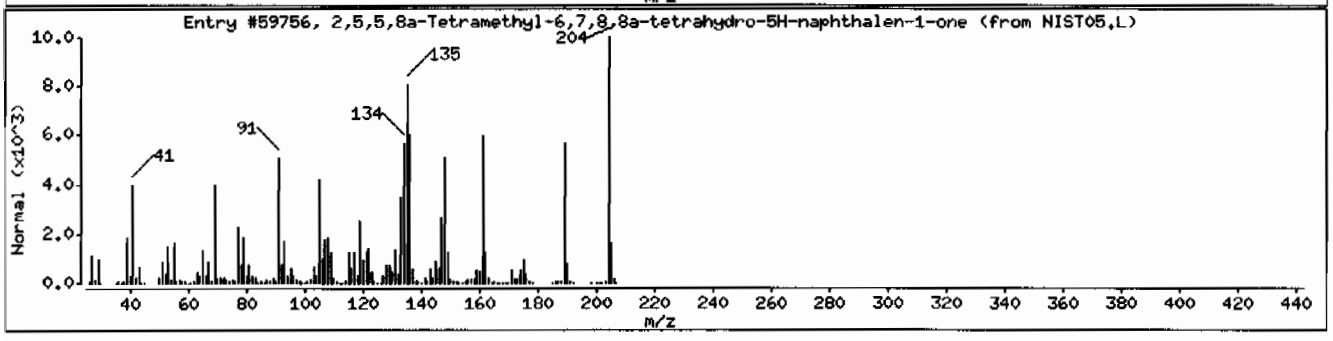

Data File: /chem/MSD6.i/s120409.b/s610417.d

Date : 04-DEC-2009 17:06

Client ID: RE03-09-13970 Instrument: MSD6.i

Sample Info: |2414180061925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Naphthalene, 1,2,4a,5,8,8a-hexahydro-4,7	5951-61-1	NIST05.L	60045	46	C15H24	204
Naphthalene, 2,3,4,4a,5,6-hexahydro-1,4a	473-14-3	NIST05.L	59949	45	C15H24	204
.delta.-Selinene	28624-23-9	NIST05.L	59825	43	C15H24	204

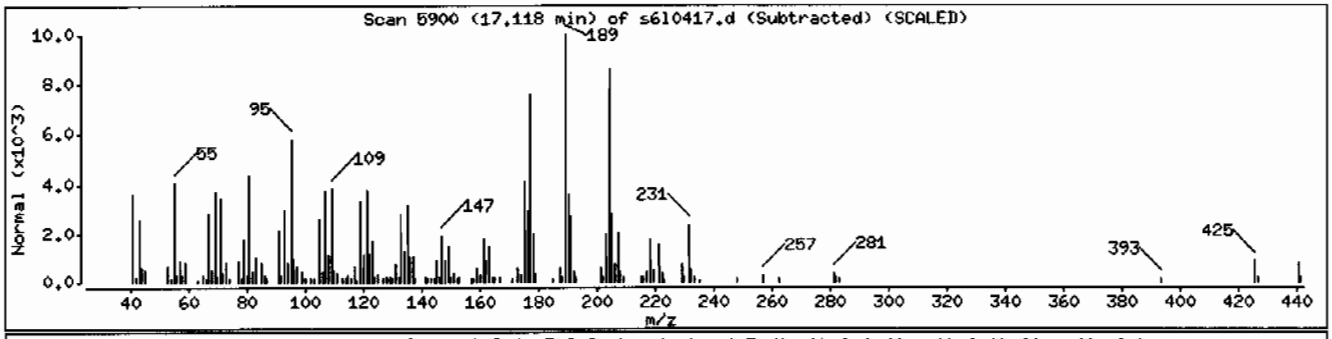

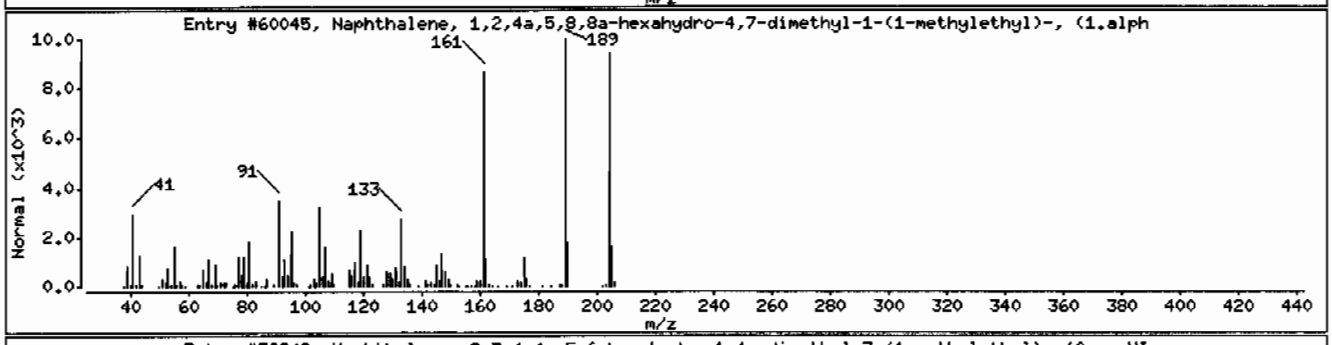

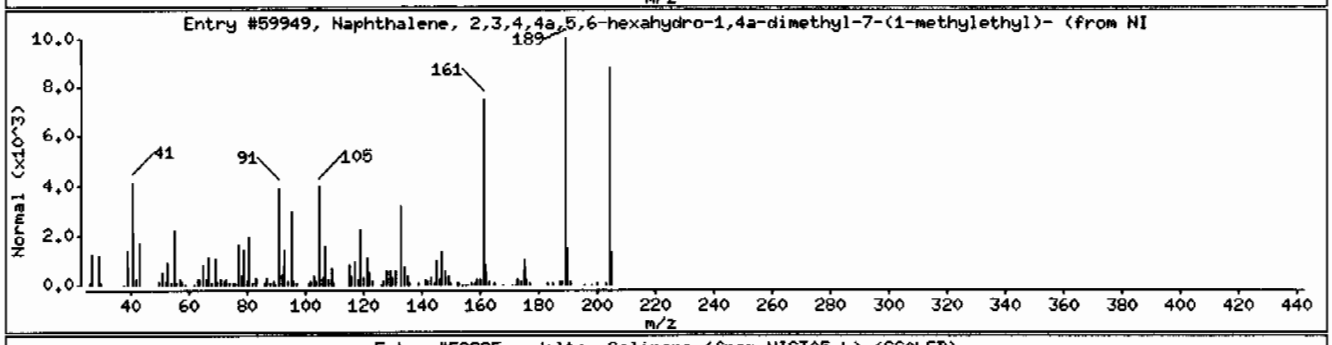

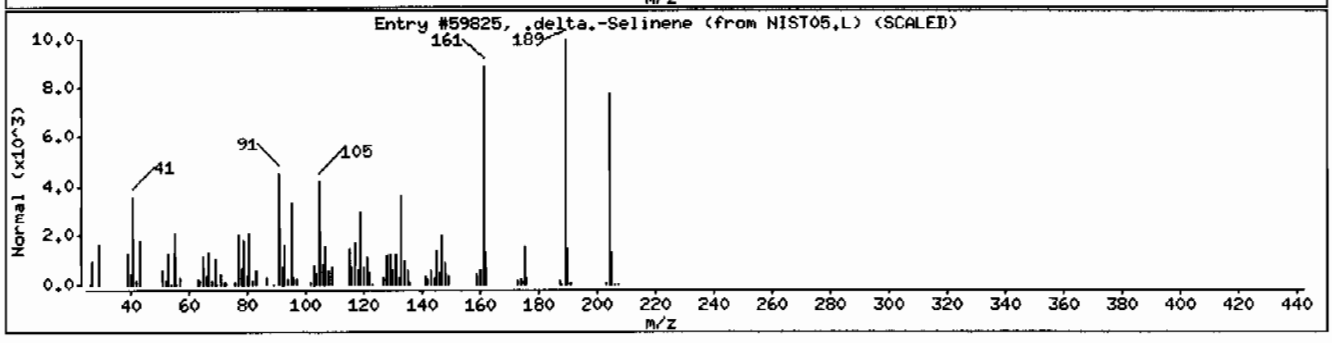

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/05/2009 13:41	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s610508.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	411	ug/kg	82.2	411
108-95-2	Phenol	U	411	ug/kg	82.2	411
95-57-8	2-Chlorophenol	U	411	ug/kg	82.2	411
106-46-7	1,4-Dichlorobenzene	U	411	ug/kg	82.2	411
621-64-7	N-Nitrosodipropylamine	U	411	ug/kg	82.2	411
59-50-7	4-Chloro-3-methylphenol	U	411	ug/kg	82.2	411
83-32-9	Acenaphthene	U	41.1	ug/kg	13.6	41.1
121-14-2	2,4-Dinitrotoluene	U	411	ug/kg	41.1	411
100-02-7	4-Nitrophenol	U	411	ug/kg	136	411
87-86-5	Pentachlorophenol	U	411	ug/kg	103	411
129-00-0	Pyrene	U	41.1	ug/kg	12.3	41.1
110-86-1	Pyridine	U	411	ug/kg	82.2	411
62-53-3	Aniline	U	411	ug/kg	123	411
111-44-4	bis(2-Chloroethyl) ether	U	411	ug/kg	82.2	411
541-73-1	1,3-Dichlorobenzene	U	411	ug/kg	82.2	411
100-51-6	Benzyl alcohol	U	411	ug/kg	123	411
95-50-1	1,2-Dichlorobenzene	U	411	ug/kg	82.2	411
108-60-1	bis(2-Chloroisopropyl)ether	U	411	ug/kg	82.2	411
95-48-7	o-Cresol	U	411	ug/kg	82.2	411
65794-96-9	m,p-Cresols	U	411	ug/kg	123	411
67-72-1	Hexachloroethane	U	411	ug/kg	82.2	411
98-95-3	Nitrobenzene	U	411	ug/kg	82.2	411
78-59-1	Isophorone	U	411	ug/kg	82.2	411
88-75-5	2-Nitrophenol	U	411	ug/kg	82.2	411
105-67-9	2,4-Dimethylphenol	U	411	ug/kg	144	411
111-91-1	bis(2-Chloroethoxy)methane	U	411	ug/kg	82.2	411
120-83-2	2,4-Dichlorophenol	U	411	ug/kg	82.2	411
65-85-0	Benzoic acid	U	822	ug/kg	205	822
91-20-3	Naphthalene	U	41.1	ug/kg	12.3	41.1
106-47-8	4-Chloroaniline	U	411	ug/kg	82.2	411
87-68-3	Hexachlorobutadiene	U	411	ug/kg	82.2	411
91-57-6	2-Methylnaphthalene	U	41.1	ug/kg	8.22	41.1
77-47-4	Hexachlorocyclopentadiene	U	411	ug/kg	82.2	411
88-06-2	2,4,6-Trichlorophenol	U	411	ug/kg	82.2	411
95-95-4	2,4,5-Trichlorophenol	U	411	ug/kg	82.2	411
91-58-7	2-Chloronaphthalene	U	41.1	ug/kg	13.6	41.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	411	ug/kg	82.2	411
99-09-2	3-Nitroaniline	U	411	ug/kg	82.2	411

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418008**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**19**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13971**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 13:41**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s610508.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	411	ug/kg	82.2	411
606-20-2	2,6-Dinitrotoluene	U	411	ug/kg	41.1	411
208-96-8	Acenaphthylene	U	41.1	ug/kg	12.3	41.1
51-28-5	2,4-Dinitrophenol	U	822	ug/kg	156	822
132-64-9	Dibenzofuran	U	411	ug/kg	82.2	411
84-66-2	Diethylphthalate	U	411	ug/kg	82.2	411
86-73-7	Fluorene	U	41.1	ug/kg	12.3	41.1
7005-72-3	4-Chlorophenylphenylether	U	411	ug/kg	82.2	411
534-52-1	2-Methyl-4,6-dinitrophenol	U	411	ug/kg	82.2	411
100-01-6	4-Nitroaniline	U	411	ug/kg	123	411
	p-Nitroaniline					
122-39-4	Diphenylamine	U	411	ug/kg	82.2	411
122-66-7	Azobenzene	U	411	ug/kg	82.2	411
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	411	ug/kg	82.2	411
118-74-1	Hexachlorobenzene	U	411	ug/kg	82.2	411
85-01-8	Phenanthrene	U	41.1	ug/kg	12.3	41.1
120-12-7	Anthracene	U	41.1	ug/kg	8.22	41.1
84-74-2	Di-n-butylphthalate	U	411	ug/kg	82.2	411
206-44-0	Fluoranthene	U	41.1	ug/kg	12.3	41.1
85-68-7	Butylbenzylphthalate	U	411	ug/kg	82.2	411
56-55-3	Benzo(a)anthracene	U	41.1	ug/kg	12.3	41.1
91-94-1	3,3'-Dichlorobenzidine	U	411	ug/kg	123	411
218-01-9	Chrysene	U	41.1	ug/kg	12.3	41.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	411	ug/kg	82.2	411
117-84-0	Di-n-octylphthalate	U	411	ug/kg	82.2	411
205-99-2	Benzo(b)fluoranthene	U	41.1	ug/kg	12.3	41.1
207-08-9	Benzo(k)fluoranthene	U	41.1	ug/kg	12.3	41.1
50-32-8	Benzo(a)pyrene	U	41.1	ug/kg	12.3	41.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.1	ug/kg	12.3	41.1
53-70-3	Dibenzo(a,h)anthracene	U	41.1	ug/kg	12.3	41.1
191-24-2	Benzo(ghi)perylene	U	41.1	ug/kg	12.3	41.1
120-82-1	1,2,4-Trichlorobenzene	U	411	ug/kg	82.2	411

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.36	201	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610508.d
Lab Smp Id: 241418008 Client Smp ID: RE03-09-13971
Inj Date : 05-DEC-2009 13:41
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418008|925661|1|SVMF|1|LANL
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	19.01720	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.722	4.719	(1.000)	218748	40.0000	
* 29 Naphthalene-d8	136	5.983	5.988	(1.000)	940156	40.0000	
* 46 Acenaphthene-d10	164	7.848	7.856	(1.000)	520482	40.0000	
* 67 Phenanthrene-d10	188	9.461	9.466	(1.000)	891397	40.0000	
* 91 Chrysene-d12	240	12.447	12.460	(1.000)	737423	40.0000	
* 98 Perylene-d12	264	14.728	14.736	(1.000)	630388	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	209030	38.1585	1570
$ 5 Phenol-d5	99	4.339	4.342	(0.919)	289321	41.8462	1720
$ 20 Nitrobenzene-d5	82	5.246	5.251	(0.877)	153244	23.0421	946
$ 39 2-Fluorobiphenyl	172	7.107	7.112	(0.906)	326909	24.3721	1000
$ 60 2,4,6-Tribromophenol	329	8.697	8.704	(1.108)	74327	48.9268	2010
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.898)	328251	27.6023	1130

ION RATIO REPORT

SV REPORT

Data file: s610508.d
Report Date: 12/05/2009 14:27
Lab. ID: 241418008 SampleType: SAMPLE
Injection Date: 05-DEC-2009 13:41
Operator: nagl Instrument: MSD6.i
Sample Info: |241418008|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270-SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	13271	4.34	4.41	80-120	100	(T)
93	141	4.46	4.41	220-280	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	20998	5.25	5.09	80-120	100	(T)
42	13176	5.25	5.09	40-100	63	(T)
22 Isophorone			CAS#: 78-59-1			
82	153244	5.25	5.51	80-120	100	(T)
138	5166	5.98	5.51	0- 49	3	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	92313	7.85	7.55	80-120	100	(T)
164	520482	7.85	7.55	0- 40	564	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	67707	7.85	8.05	80-120	100	(T)
89	770	7.85	8.05	38- 98	1	(QT)
63	690	7.85	8.05	16- 76	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	4635	8.70	8.44	80-120	100	(T)
165	4877	8.69	8.44	61-121	105	(T)
167	1745	8.69	8.45	0- 44	38	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610508.d
Lab Smp Id: 241418008 Client Smp ID: RE03-09-13971
Inj Date : 05-DEC-2009 13:41
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418008|925661|1|SVMF|1|LANL
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	19.01720	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.722	1247309	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.358	152949	4.90491364	201	0		0	10

Data File: /chem/MSD6.i/s120509.b/s610508.d

Date : 05-DEC-2009 13:41

Client ID: RE03-09-13971

Sample Info: |2414180081925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

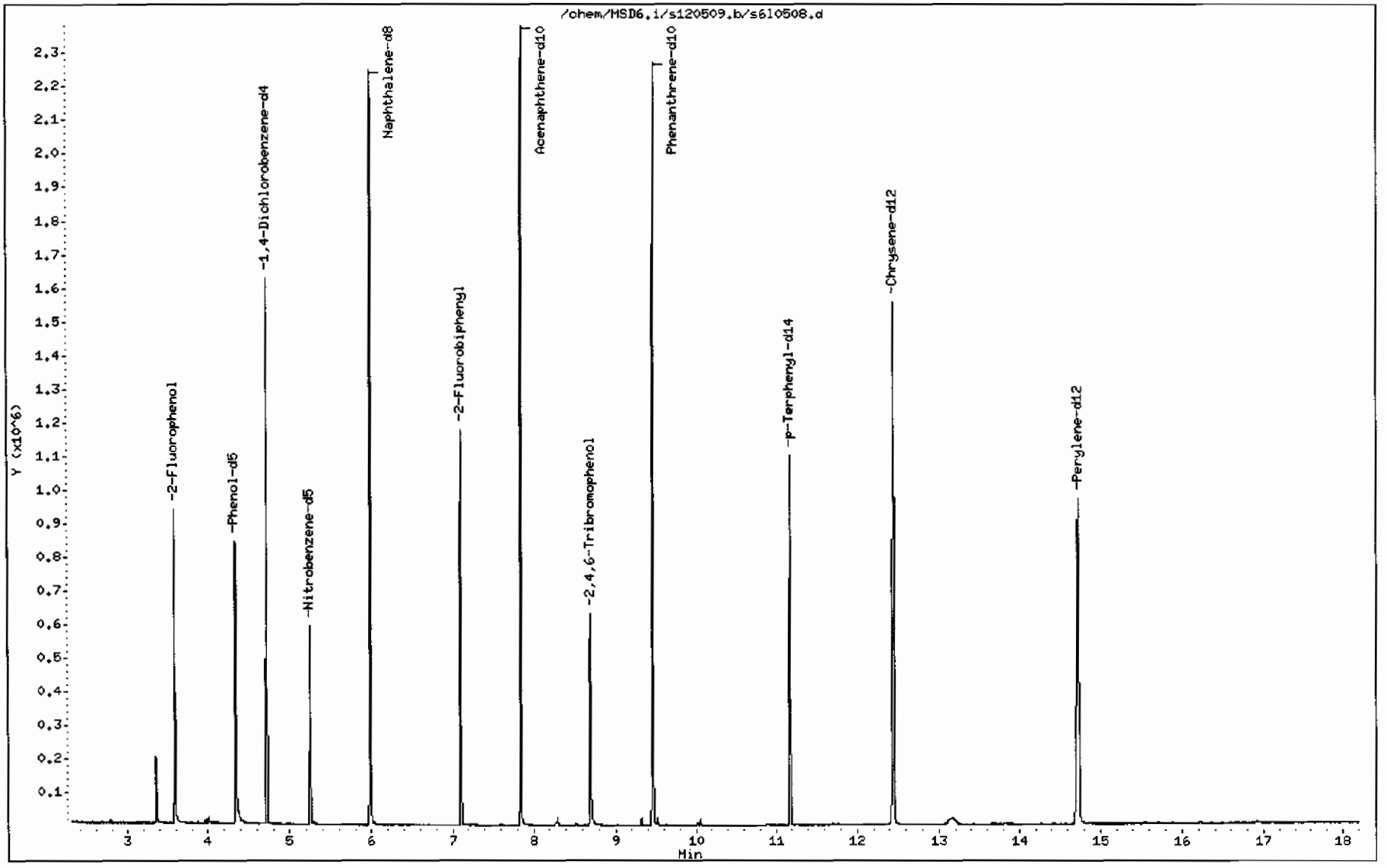

Data File: /chem/MSD6.i/s120509.b/s610508.d

Date : 05-DEC-2009 13:41

Client ID: RE03-09-13971

Instrument: MSD6.i

Sample Info: |24141800819256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	42	C6H12O2	116
Diacetamide	625-77-4	NIST05.L	3936	38	C4H7NO2	101

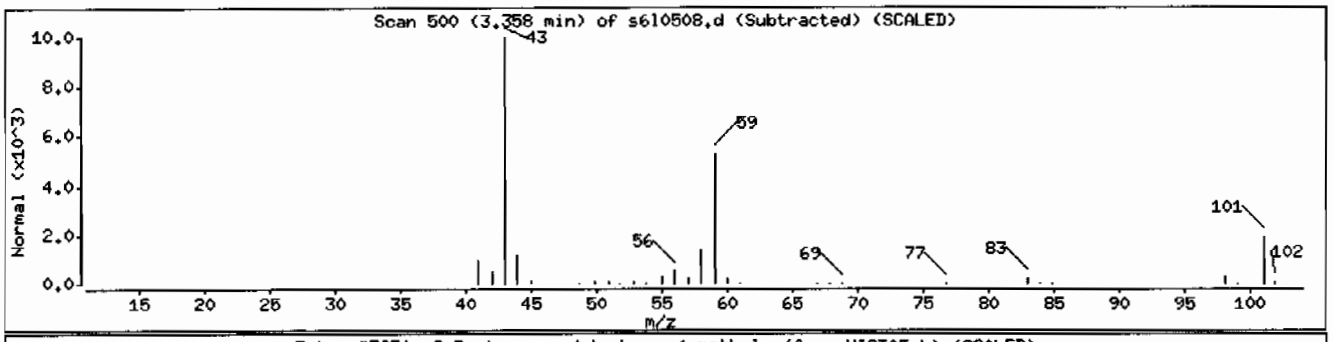

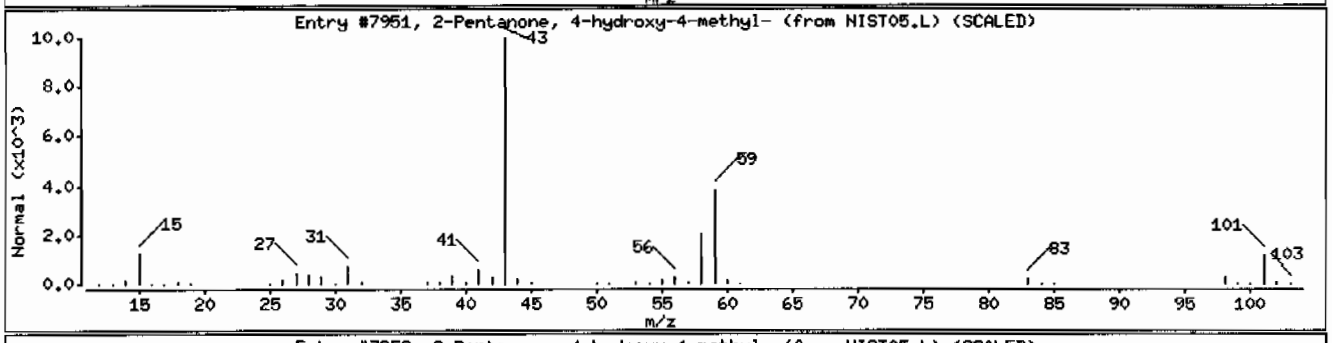

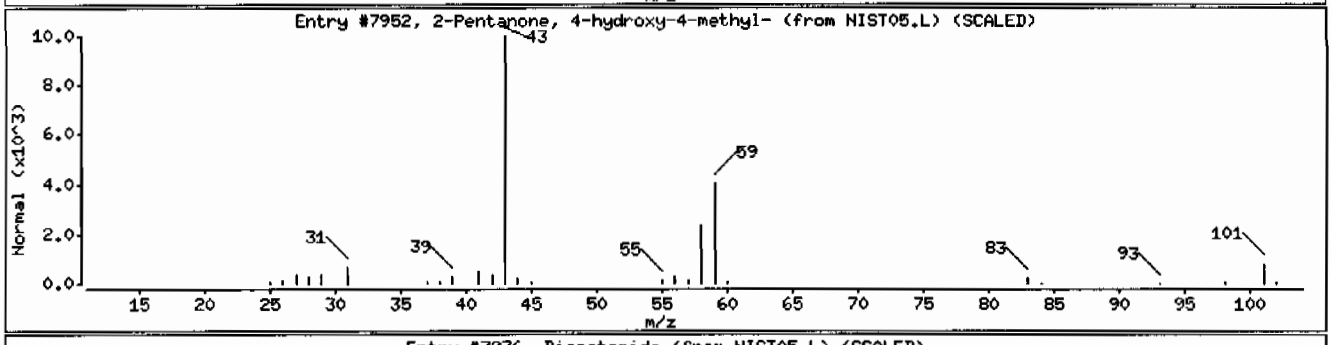

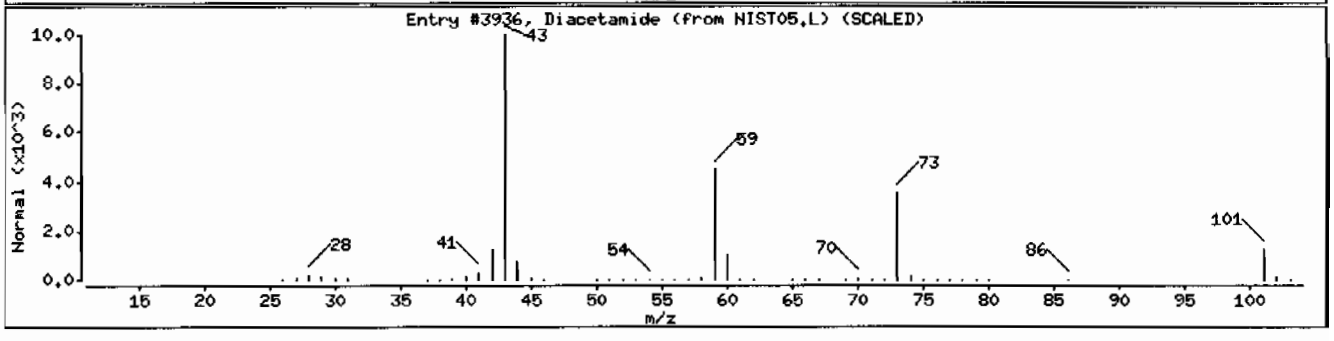

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	Date Collected:	11/17/2009 12:00	Matrix:	S
Lab Sample ID:	241418016	Date Received:	11/19/2009 08:45	%Moisture:	17.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-3913	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/05/2009 14:08	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s6l0509.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.2	401
108-95-2	Phenol	U	401	ug/kg	80.2	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.2	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.2	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.2	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.2	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene		56.6	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.2	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.2	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.2	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.2	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.2	401
95-48-7	o-Cresol	U	401	ug/kg	80.2	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.2	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.2	401
78-59-1	Isophorone	U	401	ug/kg	80.2	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.2	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.2	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.2	401
65-85-0	Benzoic acid	U	802	ug/kg	201	802
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.2	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.2	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.02	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.2	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.2	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.2	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.2	401
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	401	ug/kg	80.2	401

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418016	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3913	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/05/2009 14:08	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s610509.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	401	ug/kg	80.2	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	802	ug/kg	152	802
132-64-9	Dibenzofuran	U	401	ug/kg	80.2	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.2	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.2	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.2	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	p-Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.2	401
122-66-7	Azobenzene	U	401	ug/kg	80.2	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.2	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.2	401
85-01-8	Phenanthrene	J	24.3	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.02	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.2	401
206-44-0	Fluoranthene		79.7	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.2	401
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene		47.7	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.2	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.2	401
205-99-2	Benzo(b)fluoranthene		43.7	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	J	20.9	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene		140	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	J	21.4	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.2	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	221	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610509.d
Lab Smp Id: 241418016 Client Smp ID: RE03-10-3913
Inj Date : 05-DEC-2009 14:08
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418016|925661|1|SVMF|1|LANL
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	17.09990	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.721	4.719	(1.000)	206714	40.0000	
* 29 Naphthalene-d8	136	5.983	5.988	(1.000)	875935	40.0000	
* 46 Acenaphthene-d10	164	7.848	7.856	(1.000)	496951	40.0000	
* 67 Phenanthrene-d10	188	9.461	9.466	(1.000)	853092	40.0000	
* 91 Chrysene-d12	240	12.447	12.460	(1.000)	712930	40.0000	
* 98 Perylene-d12	264	14.728	14.736	(1.000)	600844	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	193103	37.3032	1500
$ 5 Phenol-d5	99	4.342	4.342	(0.920)	275351	42.1441	1690
$ 20 Nitrobenzene-d5	82	5.246	5.251	(0.877)	140655	22.6998	911
$ 39 2-Fluorobiphenyl	172	7.107	7.112	(0.906)	316698	24.7289	992
$ 60 2,4,6-Tribromophenol	329	8.697	8.704	(1.108)	84248	58.0834	2330
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.898)	348130	30.2796	1210

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	11.020	11.031	(0.885)	27688	1.41199	56.6
68 Phenanthrene	178	9.481	9.492	(1.002)	10701	0.60656	24.3(a)
76 Fluoranthene	202	10.771	10.781	(1.138)	33588	1.98744	79.7
92 Chrysene	228	12.475	12.493	(1.002)	17512	1.18822	47.7
95 Benzo(b)fluoranthene	252	14.053	14.073	(0.954)	14498	1.09050	43.7
97 Benzo(a)pyrene	252	14.616	14.636	(0.992)	5977	0.52050	20.9(a)
99 Indeno(1,2,3-cd)pyrene	276	16.659	16.692	(1.131)	5222	3.47806	140(H)
101 Benzo(ghi)perylene	276	17.174	17.197	(1.166)	4680	0.53347	21.4(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s610509.d
Report Date: 12/05/2009 15:01
Lab. ID: 241418016 SampleType: SAMPLE
Injection Date: 05-DEC-2009 14:08
Operator: nag1 Instrument: MSD6.i
Sample Info: |241418016|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270-SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	12607	4.34	4.41	80-120	100	(T)
93	233	4.11	4.41	220-280	2	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	18997	5.25	5.09	80-120	100	(T)
42	11949	5.24	5.09	40-100	63	(T)
22 Isophorone		CAS#: 78-59-1				
82	140655	5.25	5.51	80-120	100	(T)
138	4595	5.98	5.51	0- 49	3	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	88008	7.85	7.55	80-120	100	(T)
164	496951	7.85	7.55	0- 40	565	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	64983	7.85	8.05	80-120	100	(T)
89	409	7.85	8.05	38- 98	1	(QT)
63	398	7.85	8.05	16- 76	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	5305	8.69	8.44	80-120	100	(T)
165	5429	8.70	8.44	61-121	102	(T)
167	1643	8.70	8.45	0- 44	31	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
68 Phenanthrene			CAS#: 85-01-8			
178	10701	9.48	9.49	80-120	100	( )
179	1722	9.48	9.49	0- 46	16	( )
176	1934	9.48	9.49	0- 49	18	( )
69 Anthracene			CAS#: 120-12-7			
178	10701	9.48	9.55	80-120	100	(T)
179	1722	9.48	9.55	0- 46	16	(T)
176	1934	9.48	9.55	0- 48	18	(T)
76 Fluoranthene			CAS#: 206-44-0			
202	33588	10.77	10.78	80-120	100	( )
203	6029	10.77	10.78	0- 48	18	( )
101	5043	10.77	10.78	0- 44	15	( )
79 Pyrene			CAS#: 129-00-0			
202	27688	11.02	11.03	80-120	100	( )
200	5669	11.02	11.03	0- 51	20	( )
101	5078	11.02	11.03	0- 47	18	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	12885	12.43	12.44	80-120	100	( )
226	3187	12.42	12.44	0- 56	25	( )
229	412	12.42	12.44	0- 50	3	( )
92 Chrysene			CAS#: 218-01-9			
228	17512	12.48	12.49	80-120	100	( )
229	3295	12.48	12.49	0- 50	19	( )
226	3789	12.48	12.49	0- 58	22	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	14498	14.05	14.07	80-120	100	( )
253	2501	14.05	14.07	0- 52	17	( )
125	511	14.06	14.07	0- 44	4	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	14498	14.05	14.12	80-120	100	(T)
253	2501	14.05	14.12	0- 52	17	(T)
125	511	14.06	14.12	0- 44	4	(T)
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	5977	14.62	14.64	80-120	100	( )
253	2248	14.61	14.63	0- 52	38	( )
125	982	14.62	14.63	0- 30	16	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	301	16.72	16.69	80-120	100	( )
138	146	16.70	16.70	0- 55	48	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	151	16.67	16.73	80-120	100	( )
139	0	0.00	16.73	0- 30	0	(T)
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	4680	17.17	17.20	80-120	100	( )
138	527	17.18	17.20	0- 30	11	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610509.d
Lab Smp Id: 241418016 Client Smp ID: RE03-10-3913
Inj Date : 05-DEC-2009 14:08
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418016|925661|1|SVMF|1|LANL
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	17.09990	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.721	1190625	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.366	163893	5.50611875	221	0		0	10

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Sample Info: |2414180161925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

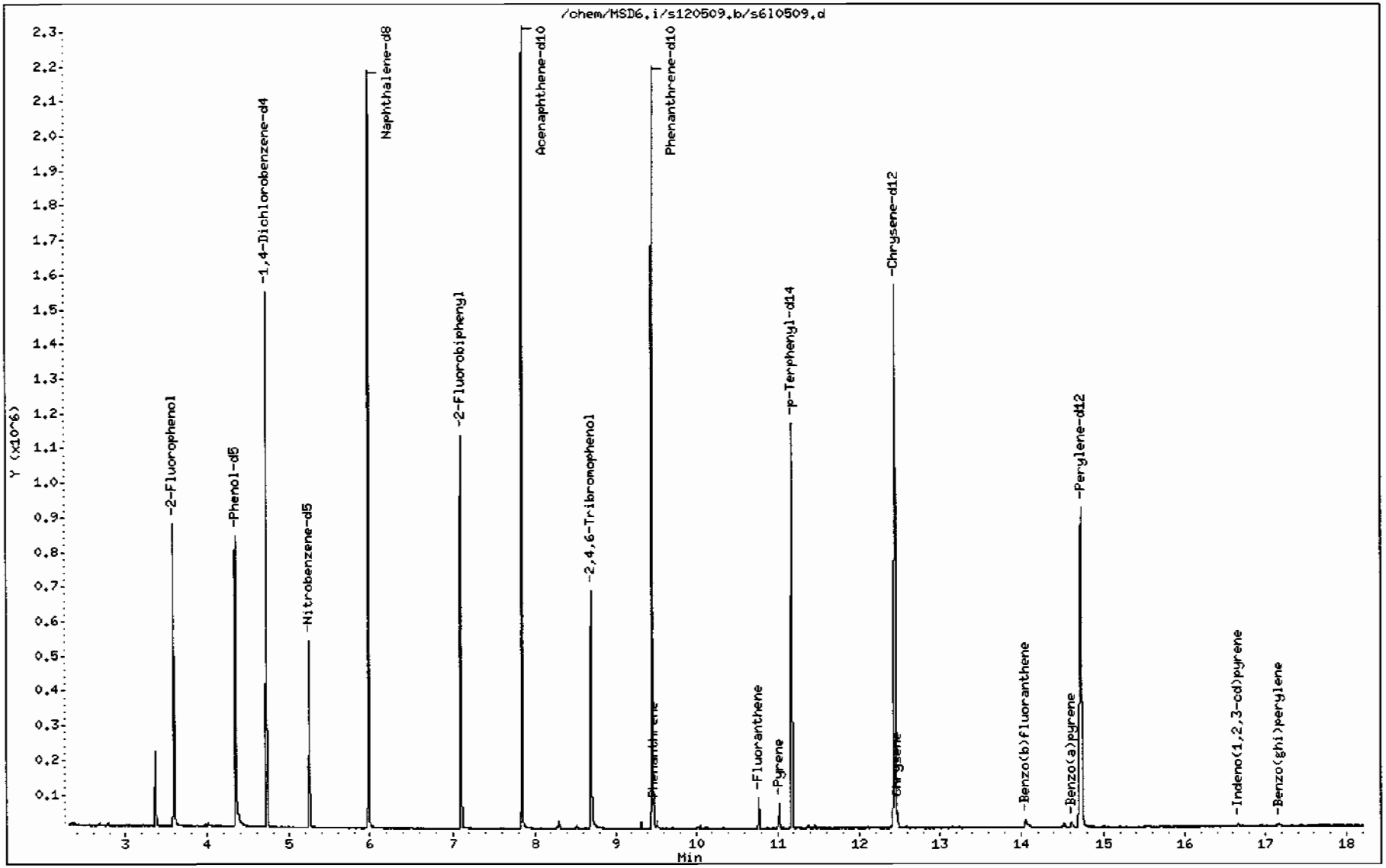

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: MSD6.i

Sample Info: |24141801619256611|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 56.6 ug/Kg

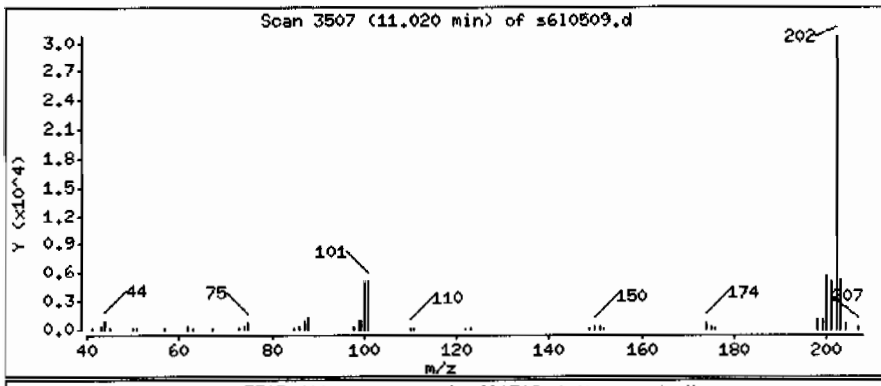

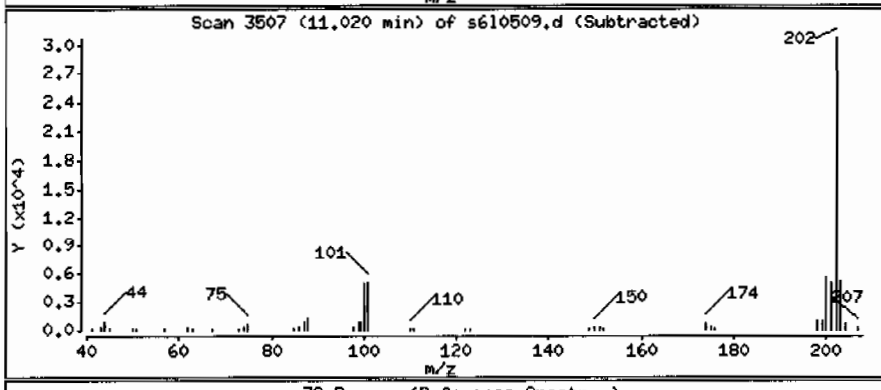

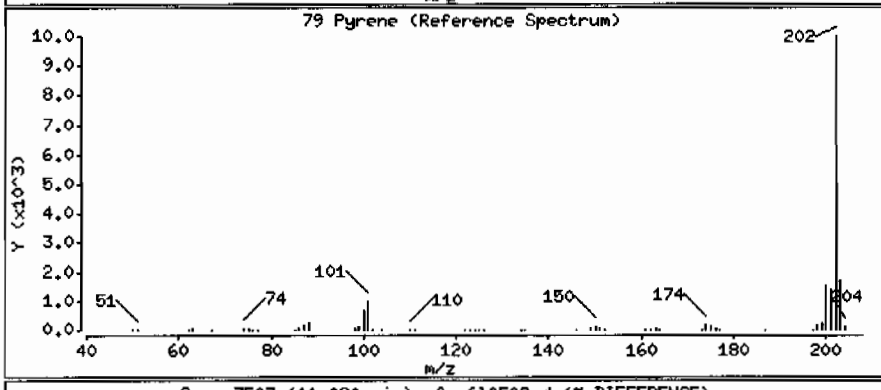

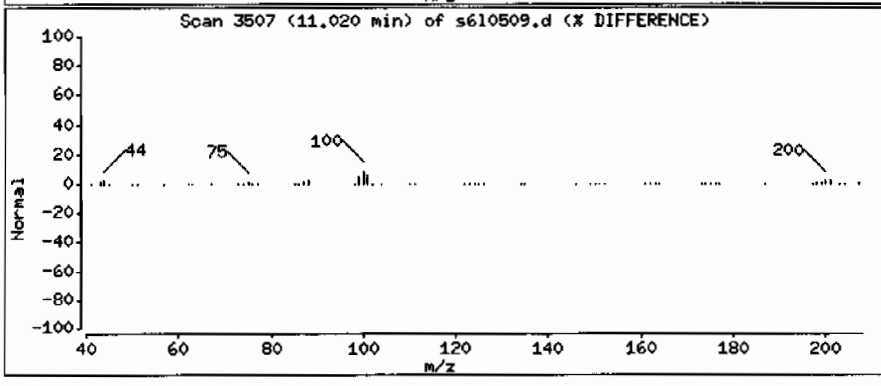

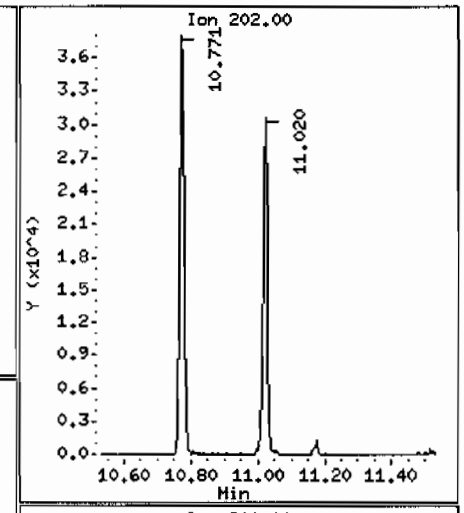

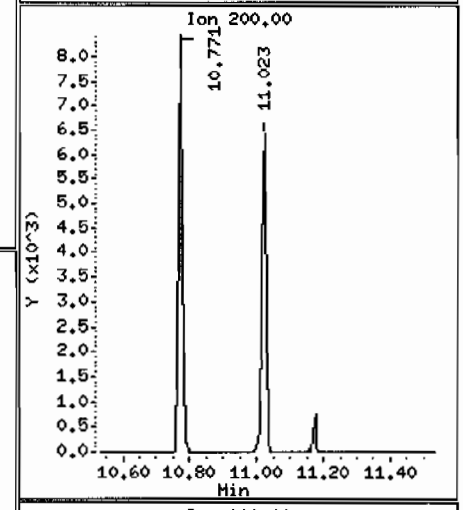

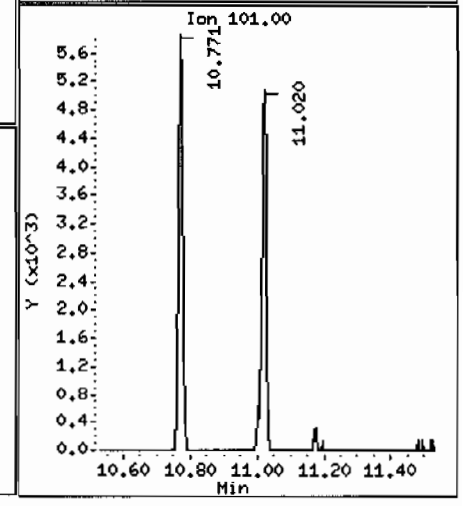

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: MSD6.i

Sample Info: |2414180161925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 24.3 ug/Kg

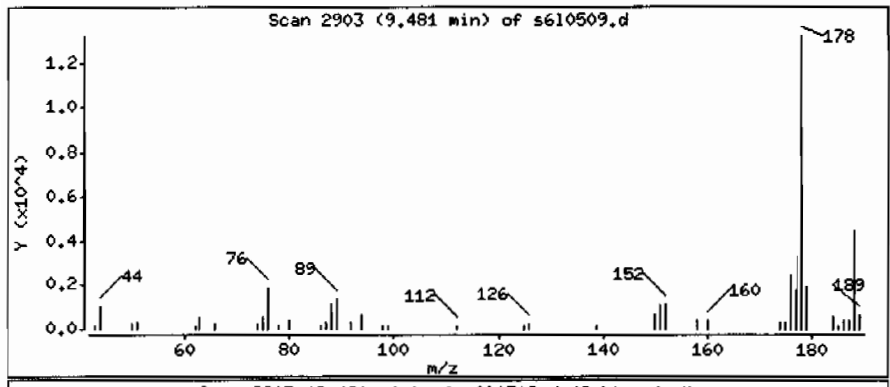

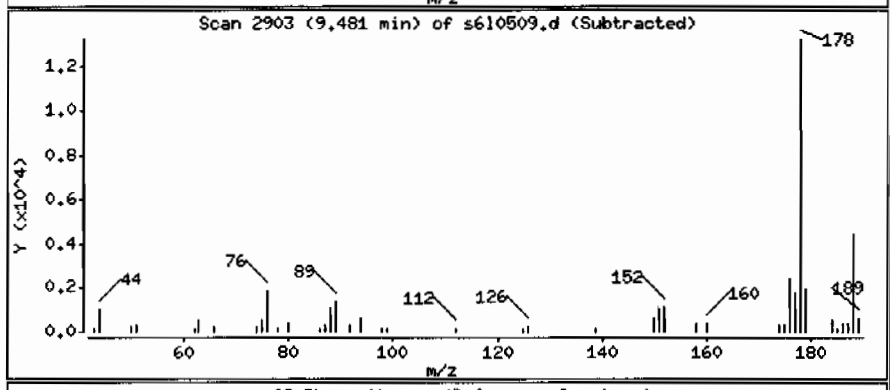

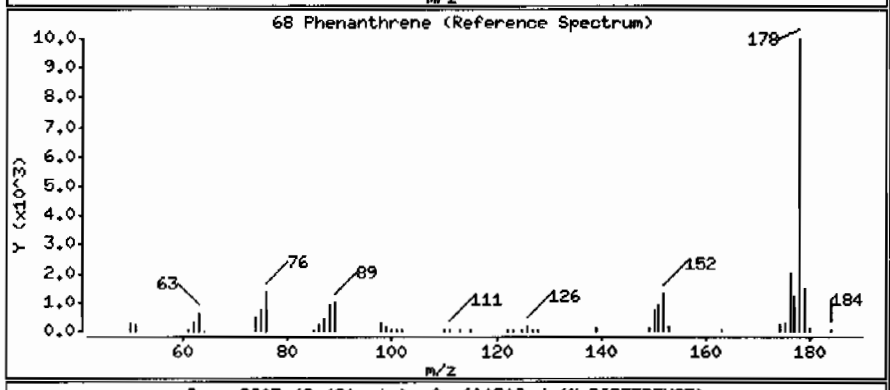

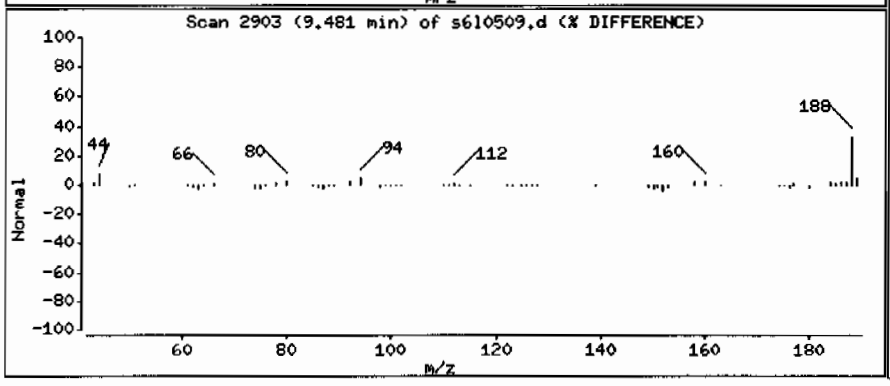

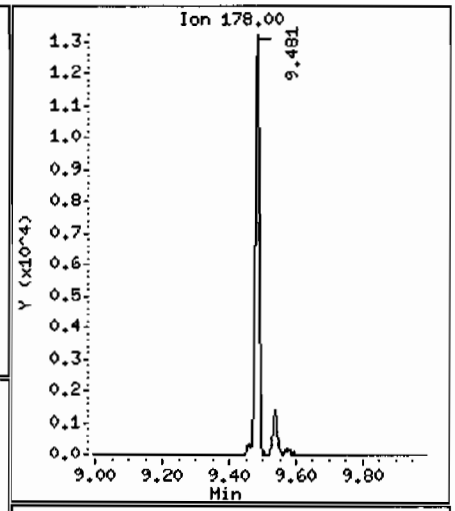

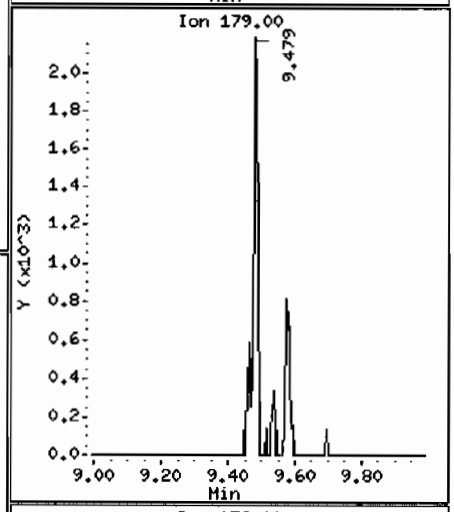

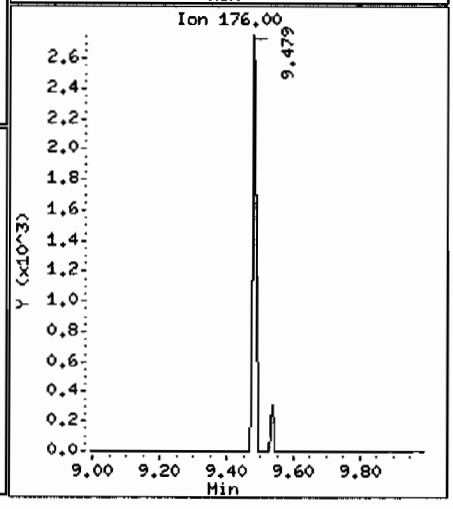

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: MSD6.i

Sample Info: |24141B016|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 79.7 ug/Kg

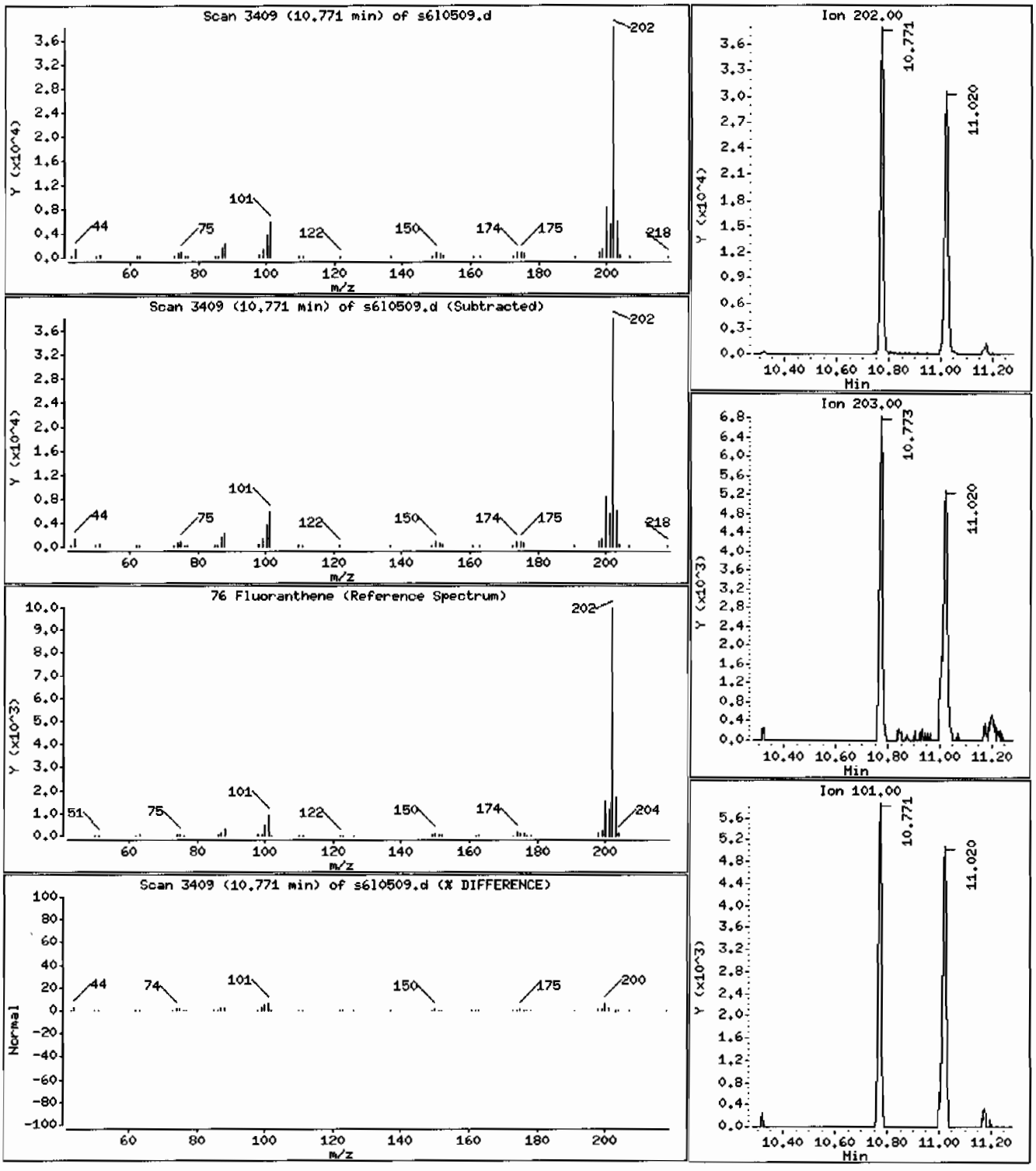

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: MSD6.i

Sample Info: 1241418016|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 47.7 ug/Kg

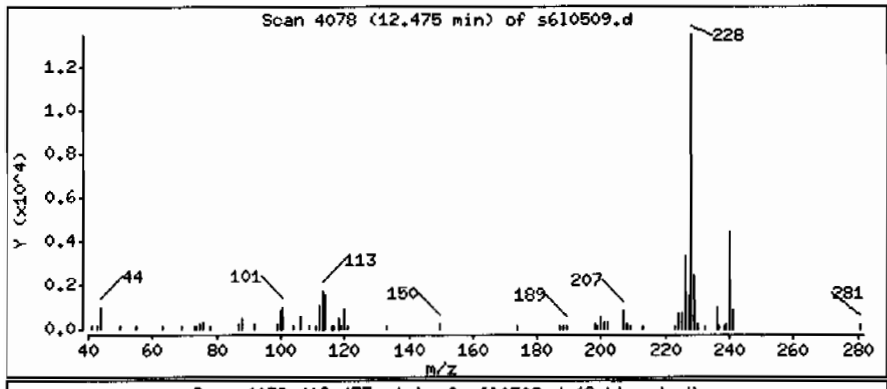

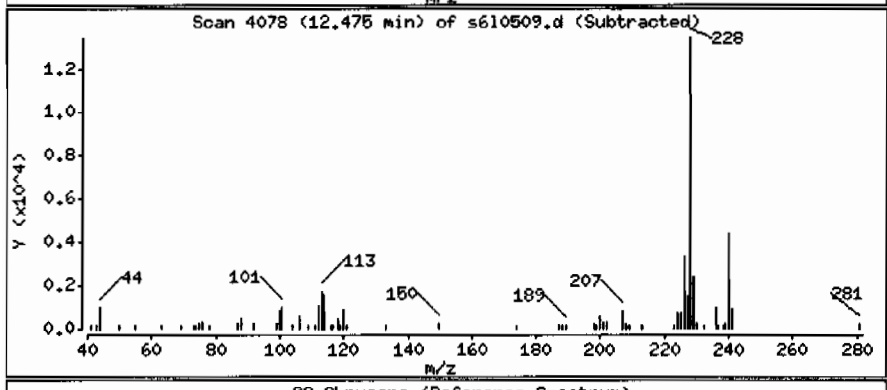

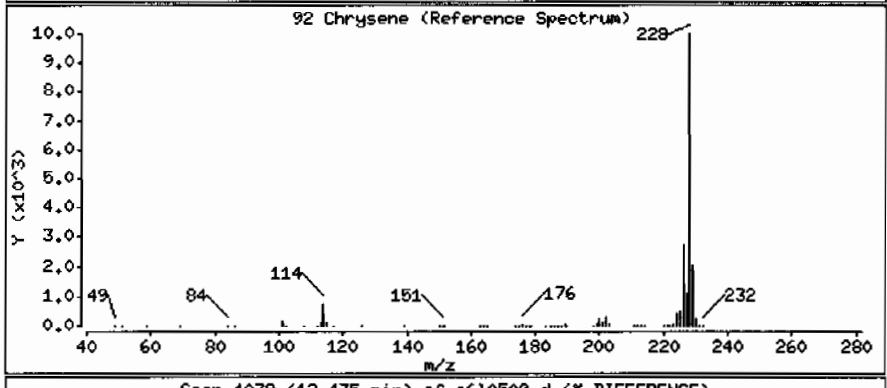

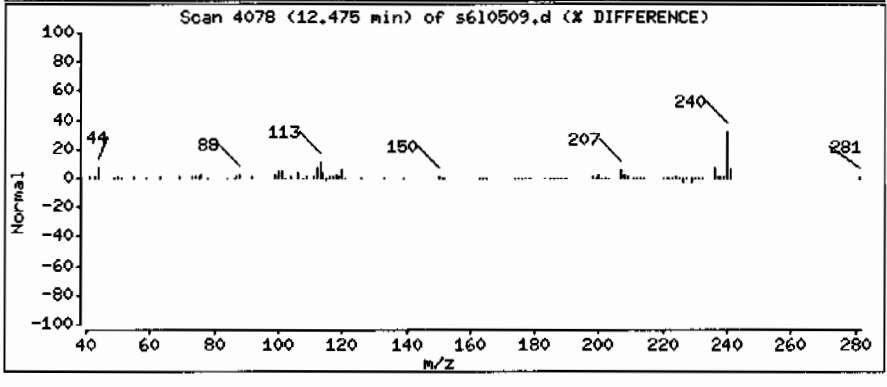

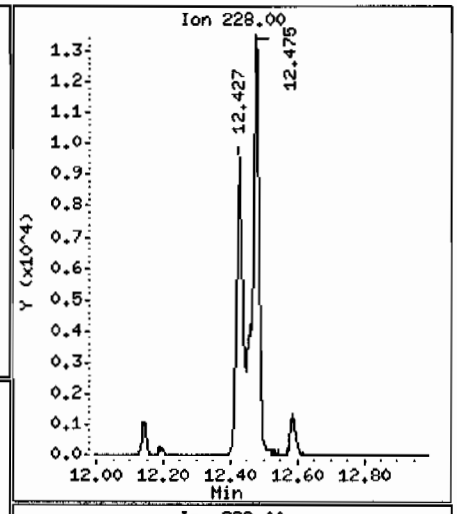

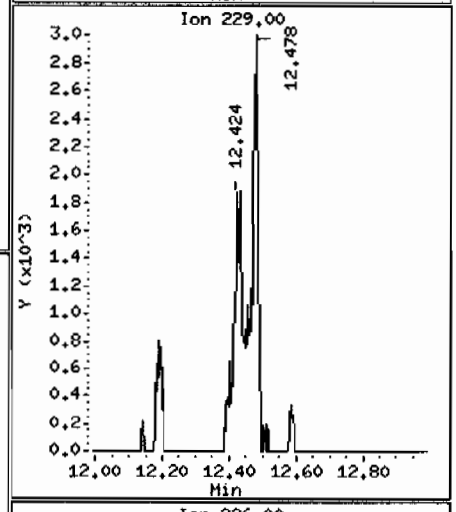

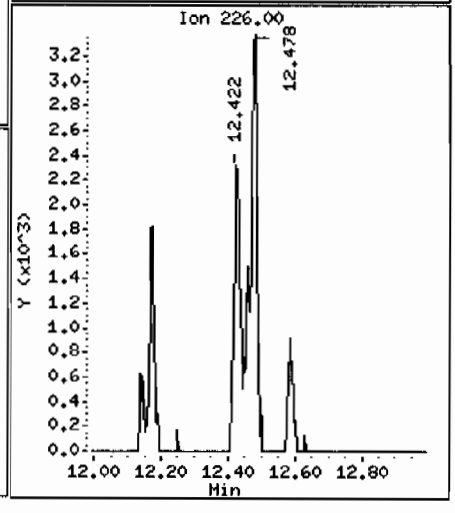

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: MSD6.i

Sample Info: |2414180161925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 43.7 ug/Kg

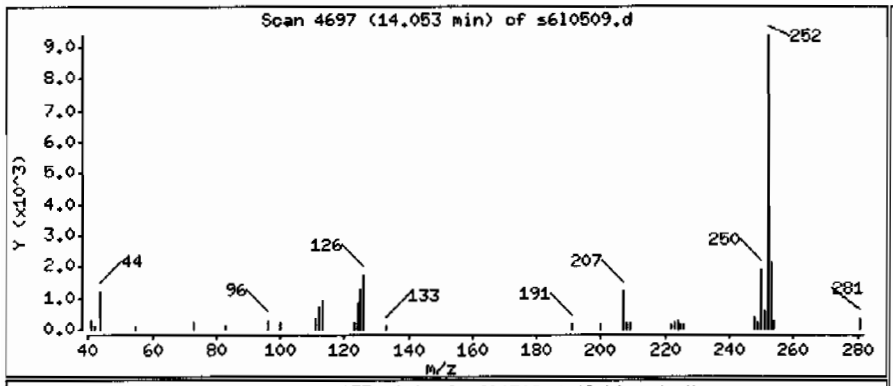

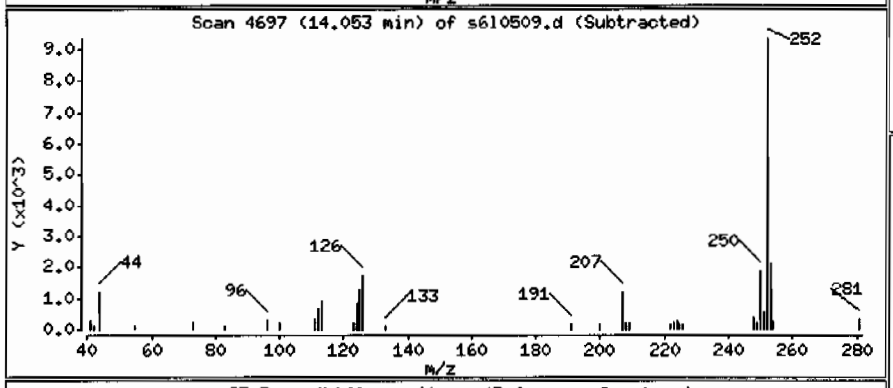

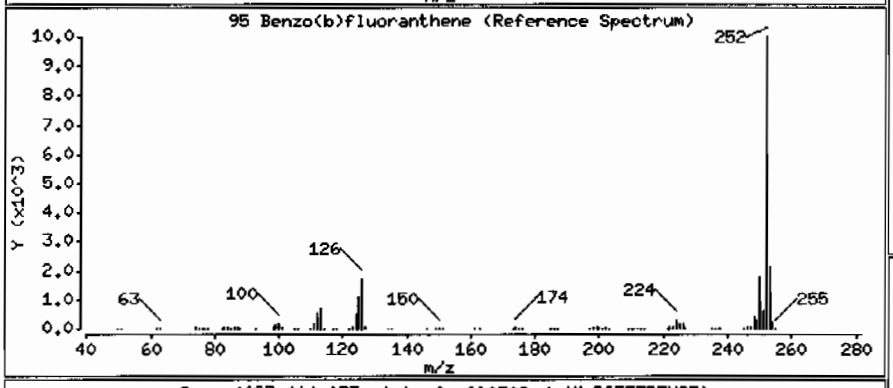

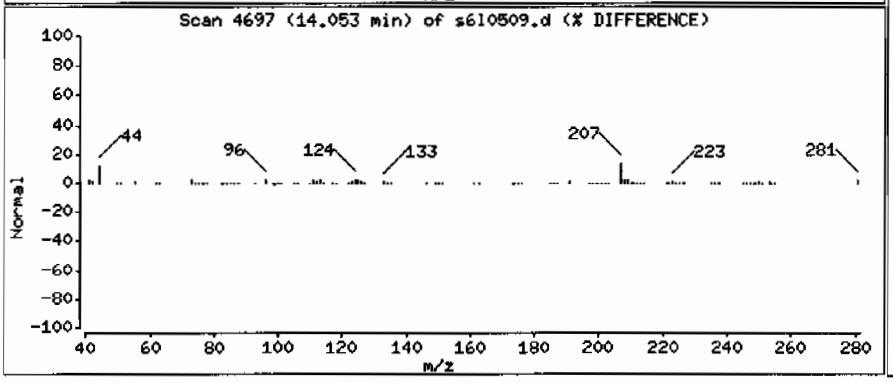

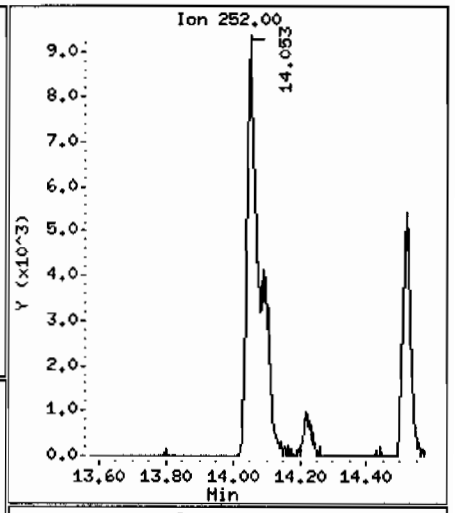

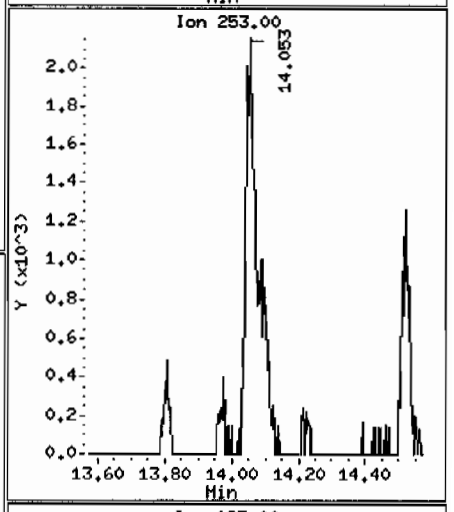

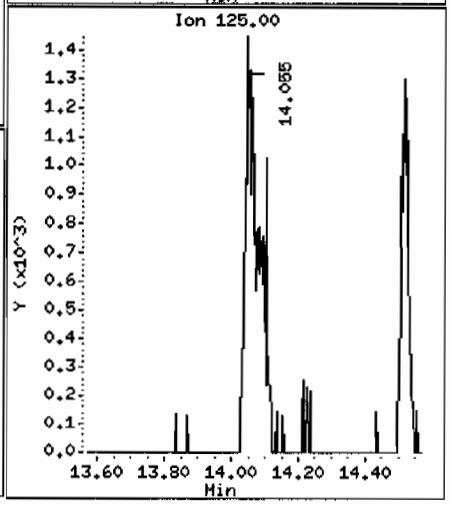

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: MSD6.i

Sample Info: |24141801619256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 20.9 ug/Kg

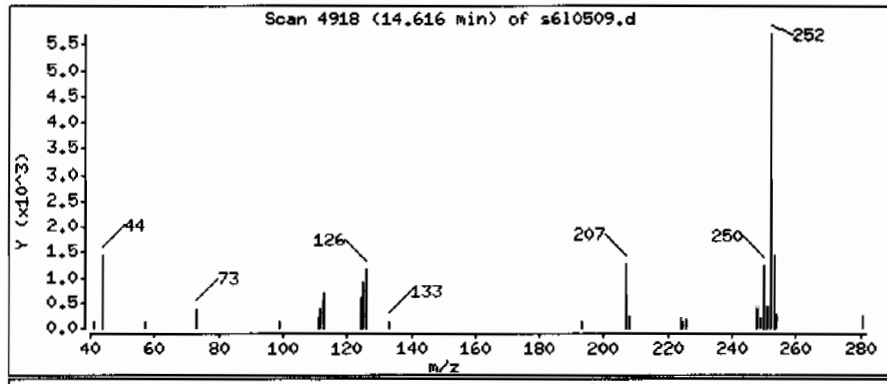

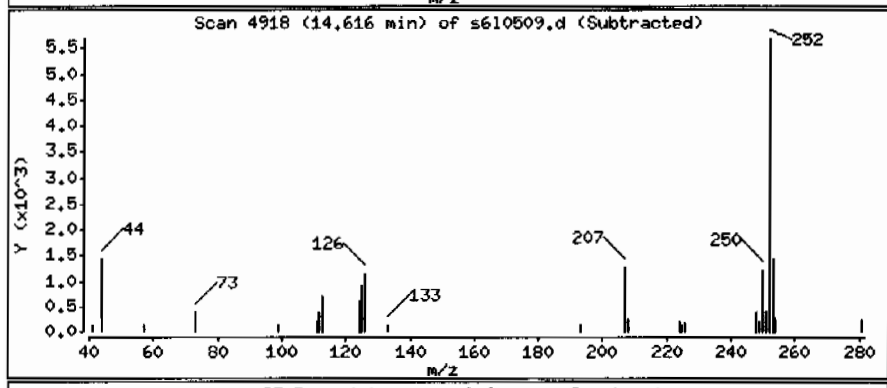

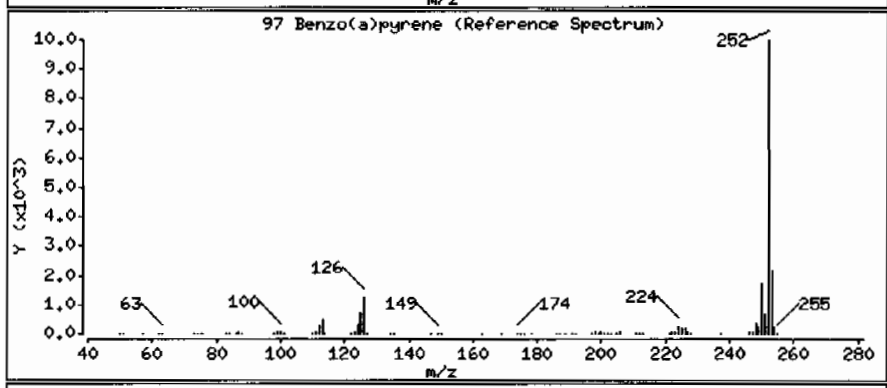

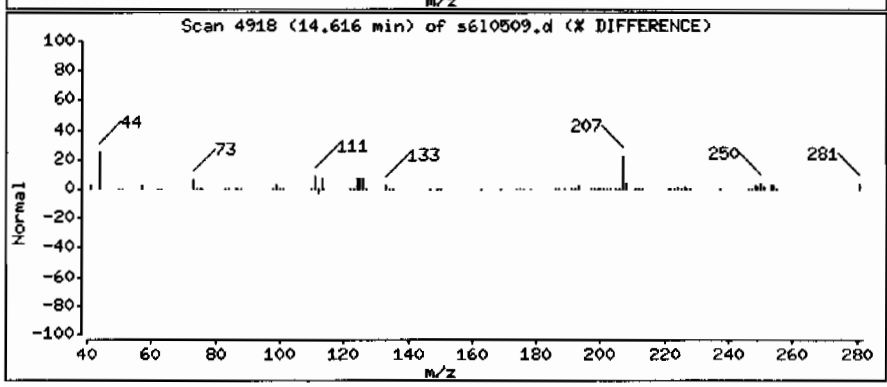

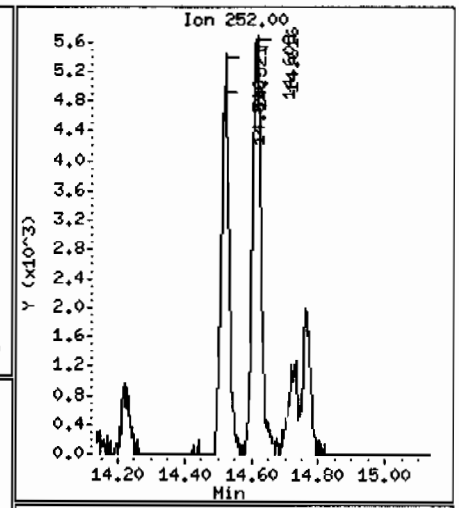

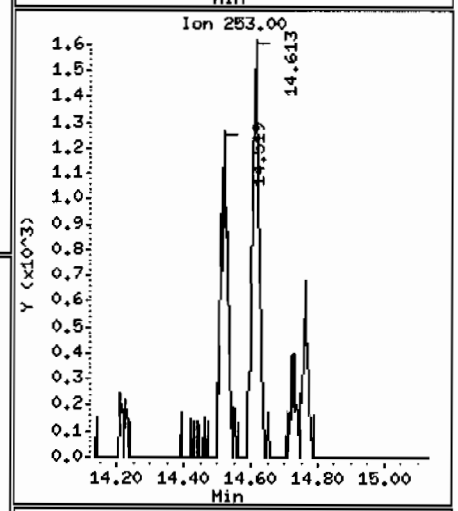

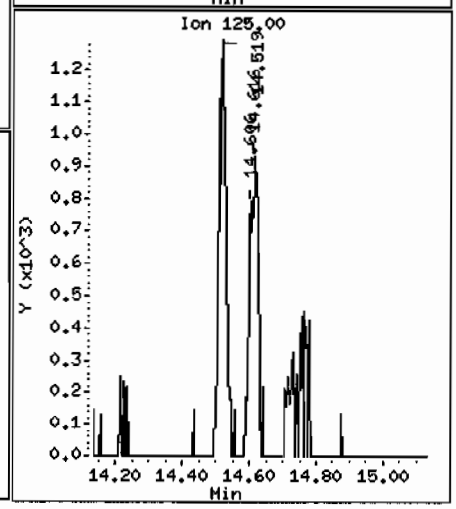

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913 Instrument: MSD6.i

Sample Info: 1241418016192566111SVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene Concentration: 140 ug/Kg

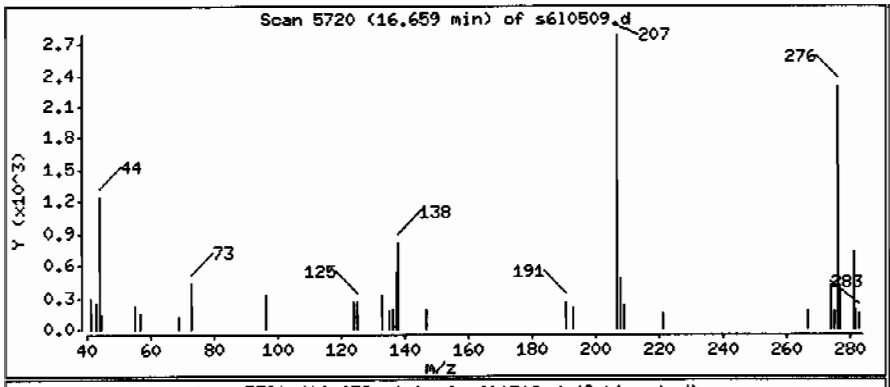

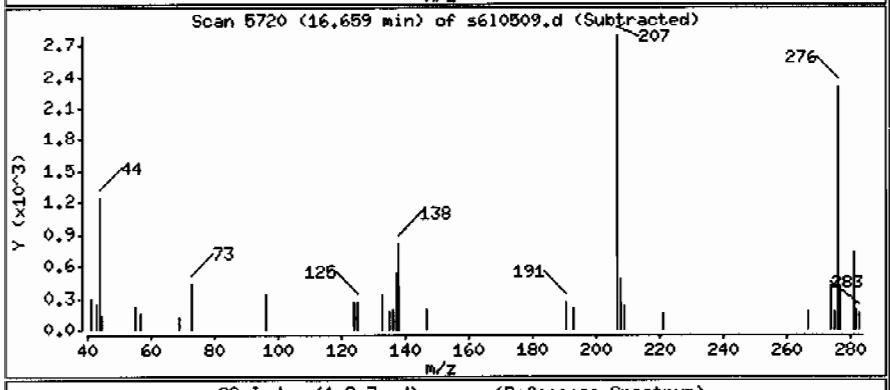

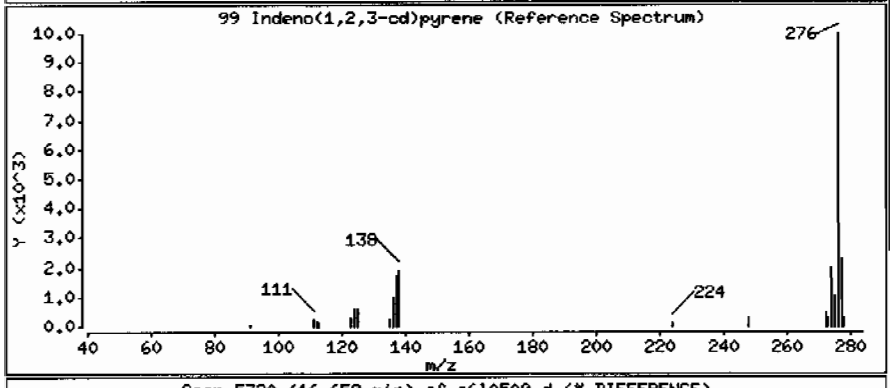

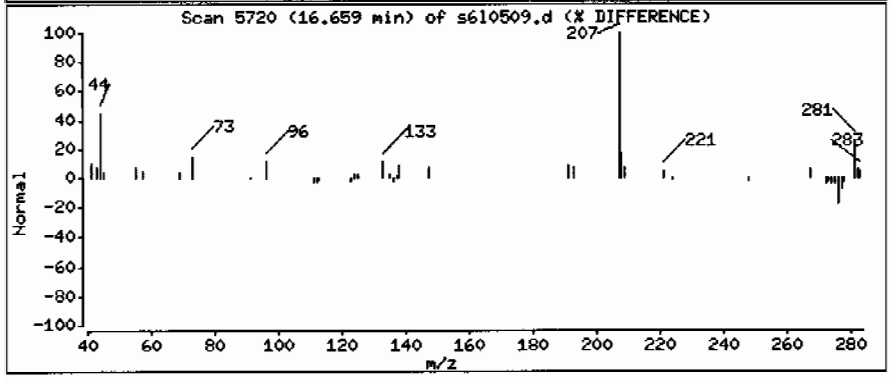

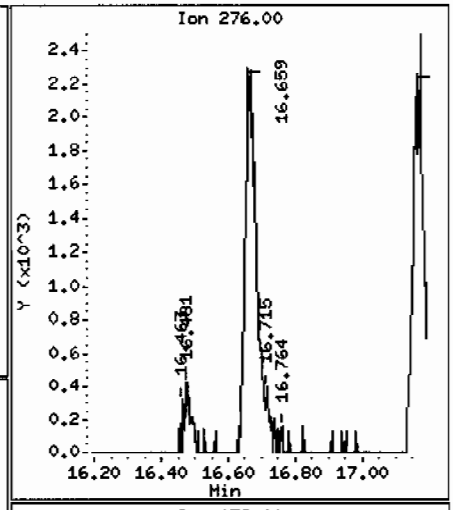

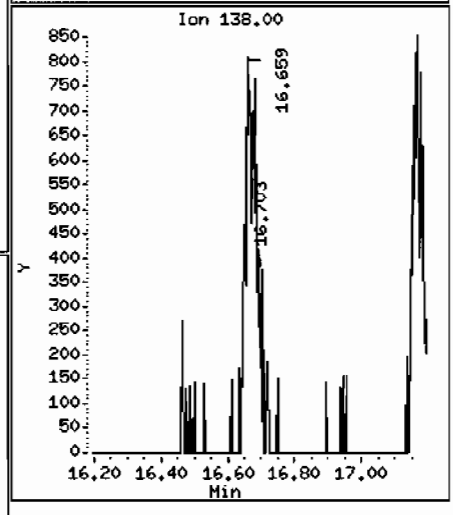

Data File: /chem/HSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: HSD6.i

Sample Info: |24141801619256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 21.4 ug/Kg

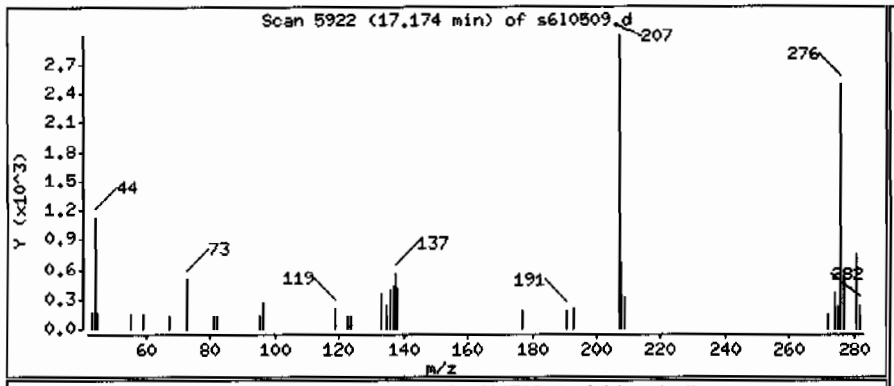

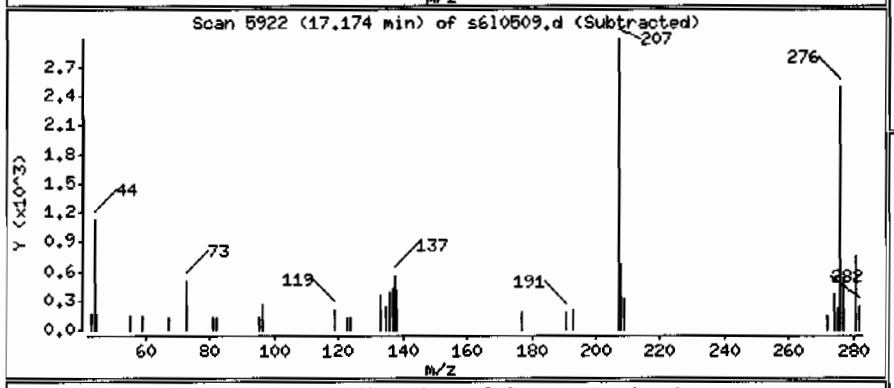

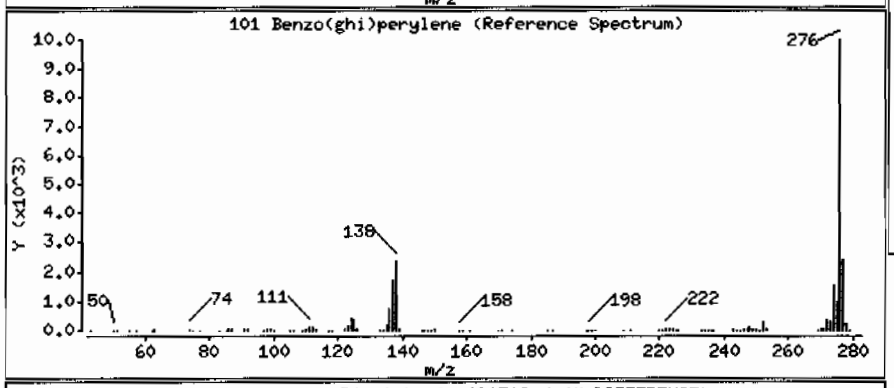

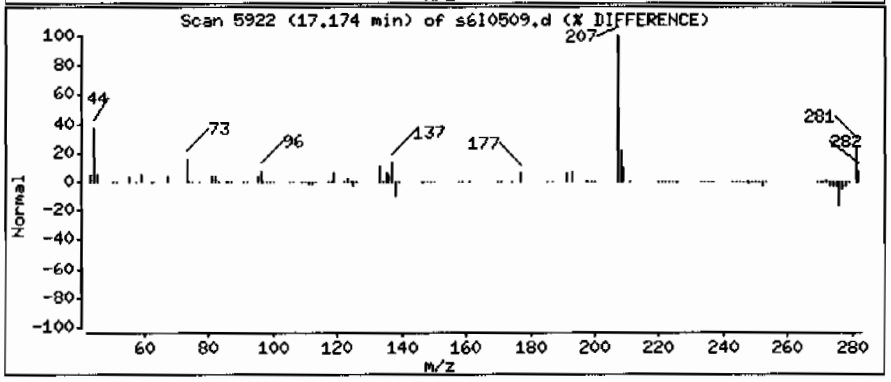

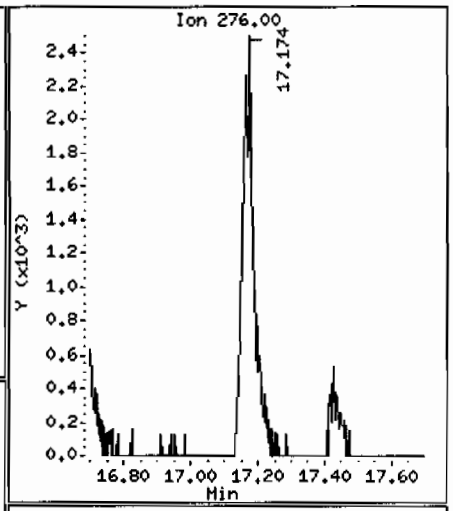

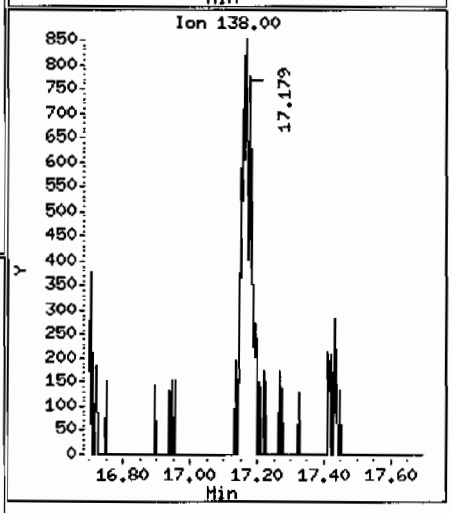

Data File: /chem/MSD6.i/s120509.b/s610509.d

Date : 05-DEC-2009 14:08

Client ID: RE03-10-3913

Instrument: MSD6.i

Sample Info: |24141801619256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	36	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	23	C7H11NO2	141

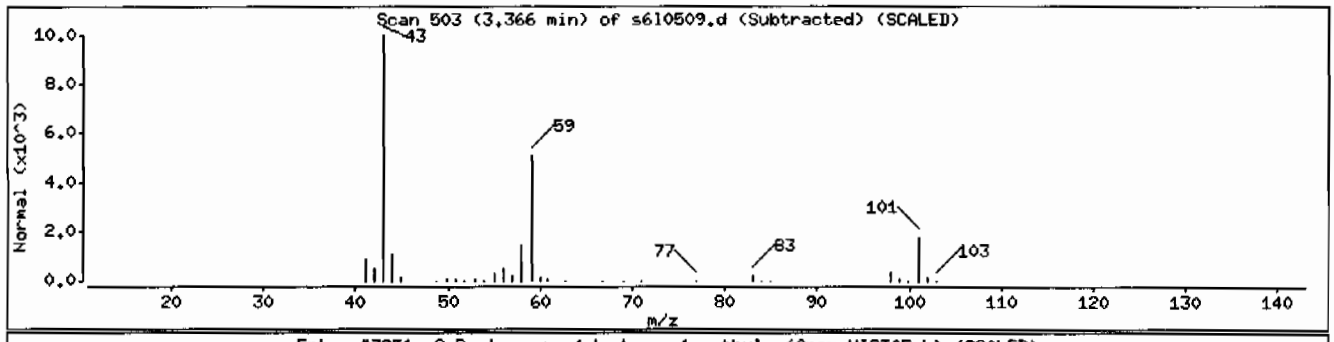

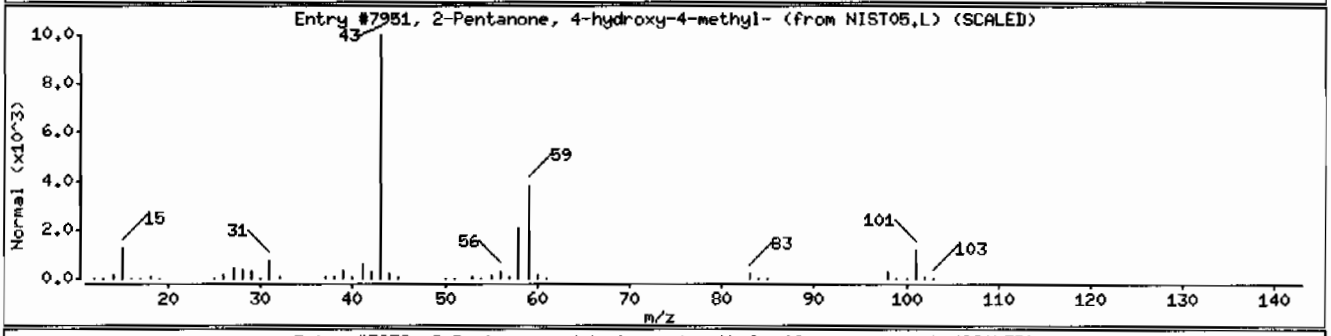

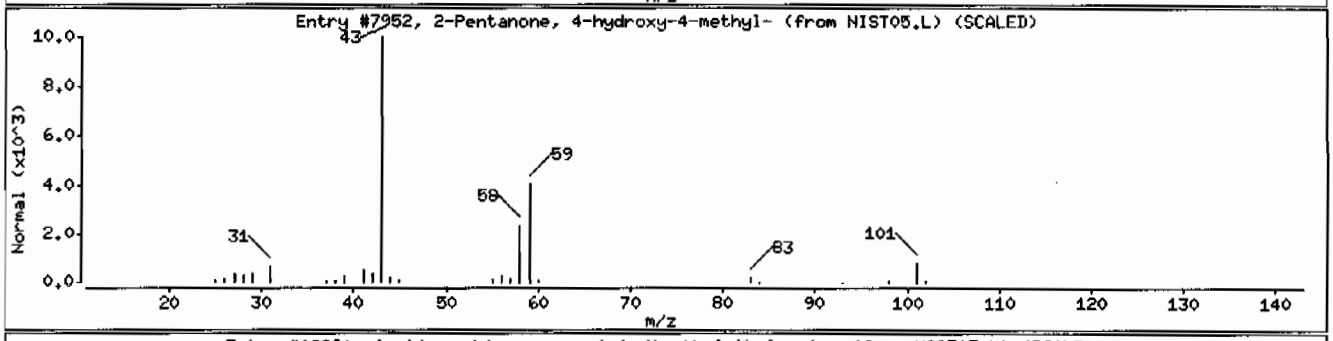

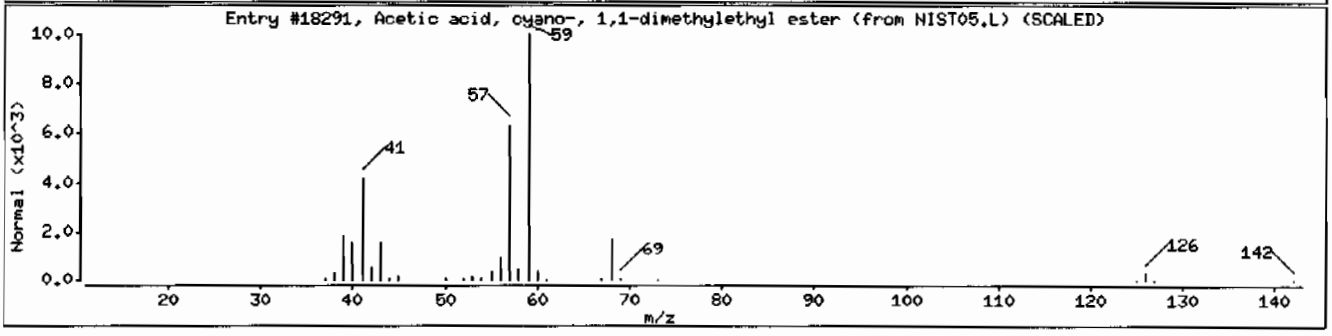

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 21:13	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s610426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	J	13.3	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	382	ug/kg	76.4	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418015**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3914**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:13**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0426.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.4	382
206-44-0	Fluoranthene	J	15.3	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.22	198	ug/kg		J
	Unknown Aldol Condensate	3.37	275	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418015	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-3914	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 21:13	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s6l0426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	16.92	643	ug/kg		J
	Unknown	17.12	202	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610426.d
Lab Smp Id: 241418015 Client Smp ID: RE03-10-3914
Inj Date : 04-DEC-2009 21:13
Operator : nagl Inst ID: MSD6.i
Smp Info : |241418015|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	12.76330	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	235281	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	881865	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	483177	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	810378	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	657911	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	492317	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	356507	60.5073	2310
$ 5 Phenol-d5	99	4.350	4.352	(0.920)	434149	58.3811	2230
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	228588	36.6428	1400
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	458047	36.7855	1400
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	93261	66.1302	2530
$ 81 p-Terphenyl-d14	244	11.179	11.181	(0.898)	437148	41.2018	1570

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	11.028	11.036	(0.886)	6302	0.34825	13.3(a)
76 Fluoranthene	202	10.779	10.783	(1.139)	6424	0.40015	15.3(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s610426.d
Report Date: 12/05/2009 08:17
Lab. ID: 241418015 SampleType: SAMPLE
Injection Date: 04-DEC-2009 21:13
Operator: nagl Instrument: MSD6.i
Sample Info: |241418015|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-576
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	19281	4.35	4.42	80-120	100	(T)
93	158	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	32155	5.25	5.10	80-120	100	(T)
42	19250	5.25	5.10	40-100	60	(T)
22 Isophorone			CAS#: 78-59-1			
82	228588	5.25	5.52	80-120	100	(T)
138	5021	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	84316	7.86	7.55	80-120	100	(T)
164	483177	7.85	7.55	0- 40	573	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	62465	7.85	8.06	80-120	100	(T)
89	270	7.85	8.06	41-101	0	(QT)
63	328	7.85	8.06	18- 78	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	5262	8.70	8.45	80-120	100	(T)
165	5427	8.70	8.45	62-122	103	(T)
167	1837	8.70	8.45	0- 44	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	182	8.71	8.50	80-120	100	(T)
105	490	8.70	8.50	11- 71	269	(QT)
51	439	8.70	8.50	22- 82	241	(QT)
69 Anthracene			CAS#: 120-12-7			
178	3772	9.49	9.55	80-120	100	(T)
179	509	9.49	9.55	0- 46	13	(T)
176	566	9.49	9.55	0- 49	15	(T)
76 Fluoranthene			CAS#: 206-44-0			
202	6424	10.78	10.78	80-120	100	( )
203	1064	10.78	10.78	0- 48	17	( )
101	963	10.78	10.78	0- 43	15	( )
79 Pyrene			CAS#: 129-00-0			
202	6302	11.03	11.04	80-120	100	( )
200	1109	11.03	11.04	0- 51	18	( )
101	770	11.03	11.04	0- 45	12	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	476	16.68	16.70	80-120	100	( )
138	130	16.68	16.70	0- 54	27	( )
100 Dibenzo(a,h)anthracene			CAS#: 53-70-3			
278	148	16.97	16.73	80-120	100	(T)
139	0	0.00	16.73	0- 30	0	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610426.d
Lab Smp Id: 241418015 Client Smp ID: RE03-10-3914
Inj Date : 04-DEC-2009 21:13
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241418015|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	12.76330	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1350005	40.000
* 98 Perylene-d12	14.733	1348974	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.222	175045	5.18650161	198	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.374	242833	7.19501741	275	0		0	10
Unknown					CAS #:		
16.925	567523	16.8282839	643	0		0	98
Unknown					CAS #:		
17.116	178735	5.29986870	202	0		0	98

Data File: /chem/MSD6.i/s120409.b/s610426.d
Date : 04-DEC-2009 21:13
Client ID: RE03-10-3914
Sample Info: |24141801519256641|1|SVMF1|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

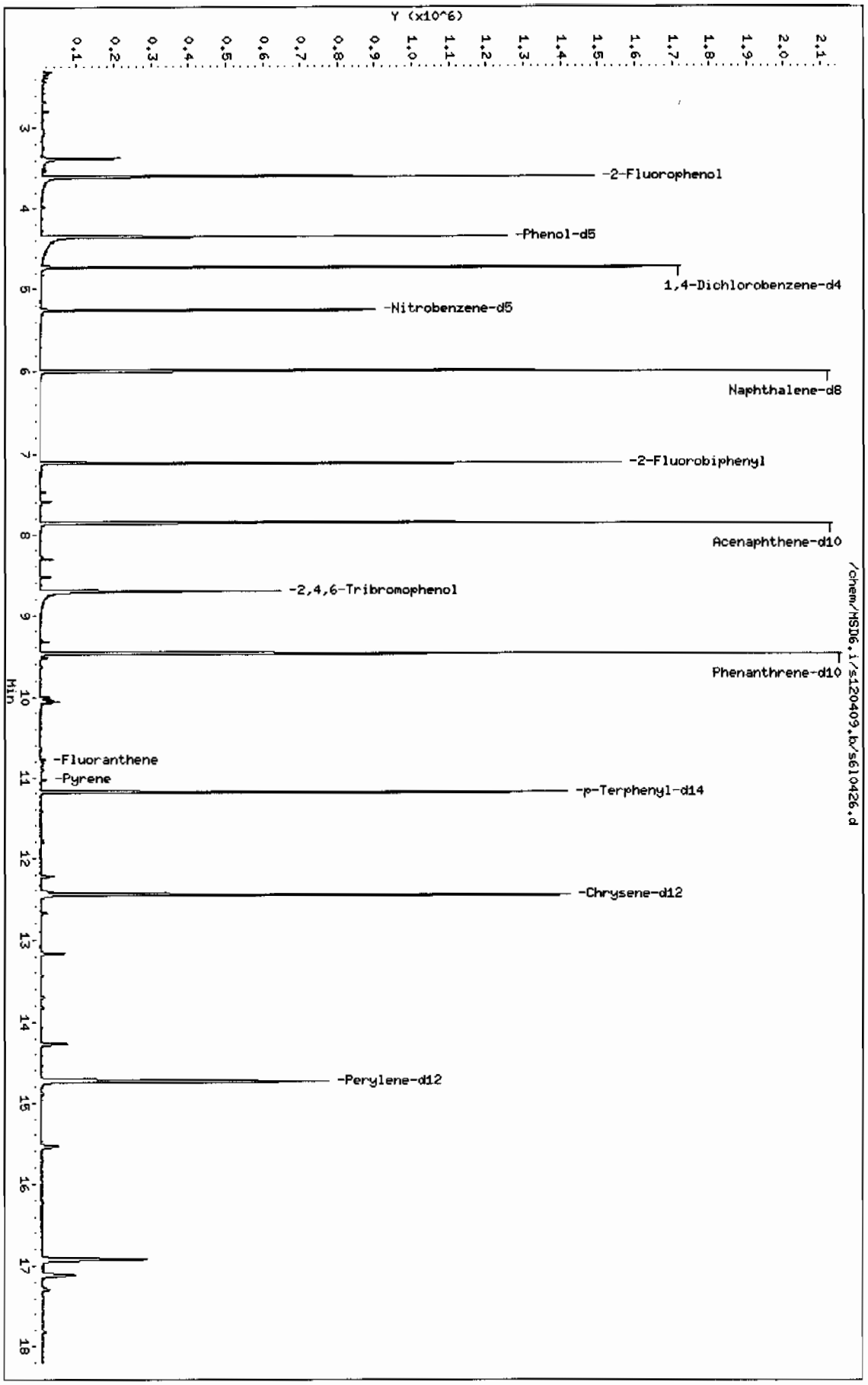

Page 1

Data File: /chem/MSD6.i/s120409.b/s610426.d

Date : 04-DEC-2009 21:13

Client ID: RE03-10-3914

Instrument: MSD6.i

Sample Info: |2414180151925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 13.3 ug/Kg

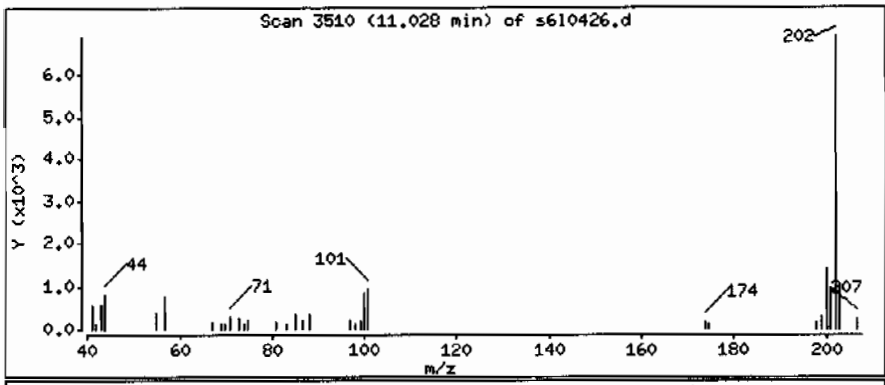

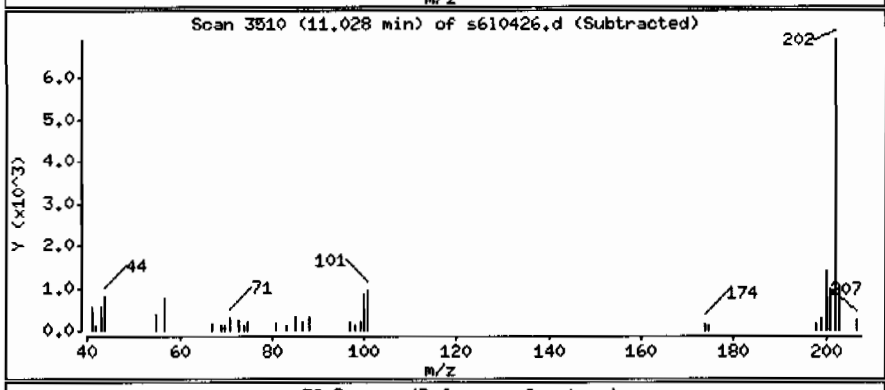

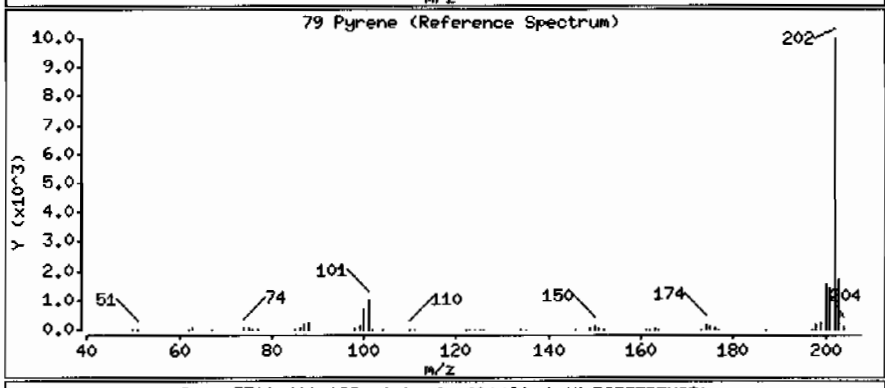

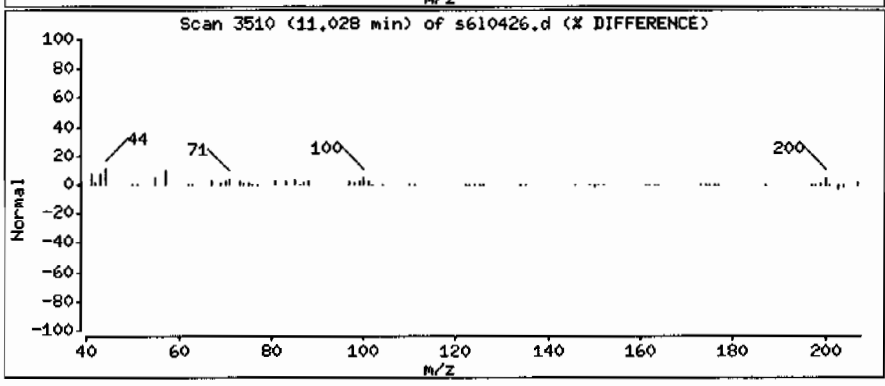

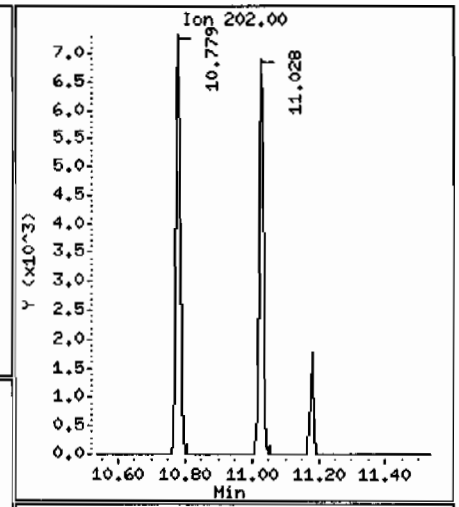

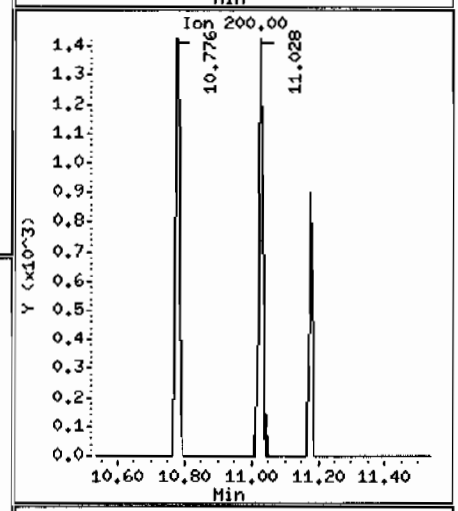

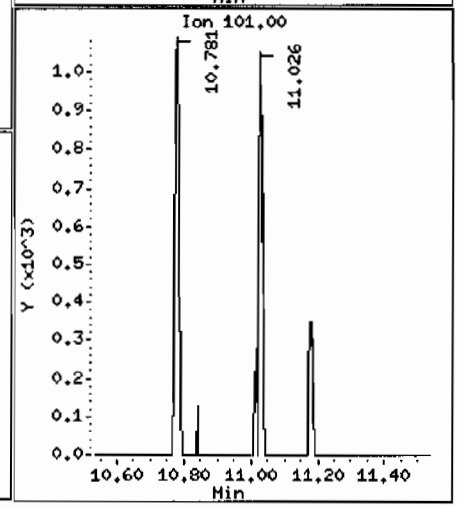

Data File: /chem/MSD6.i/s120409.b/s610426.d

Date : 04-DEC-2009 21:13

Client ID: RE03-10-3914

Instrument: MSD6.i

Sample Info: 1241418015|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 15.3 ug/Kg

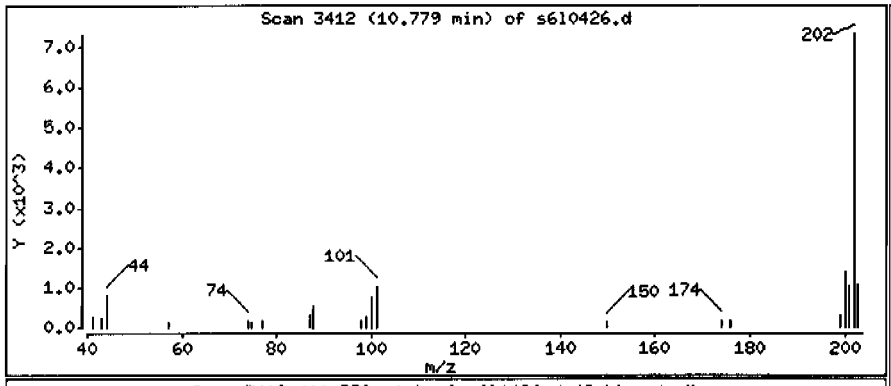

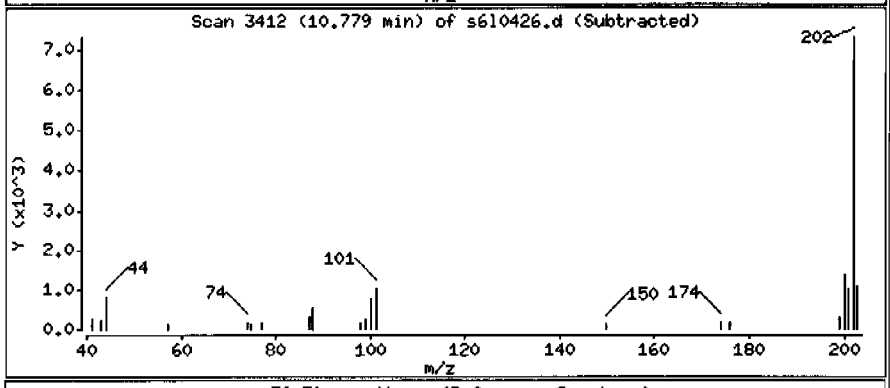

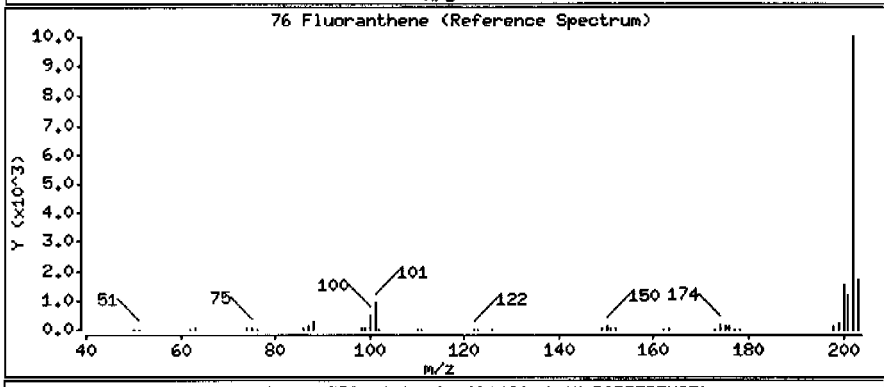

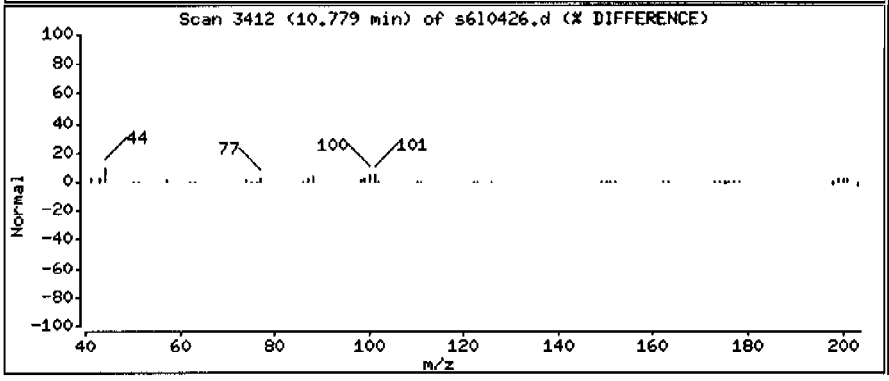

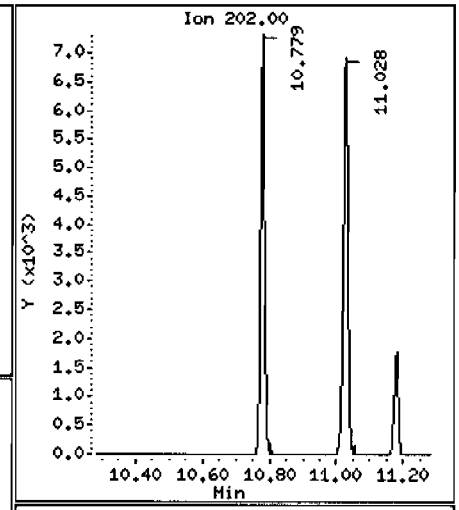

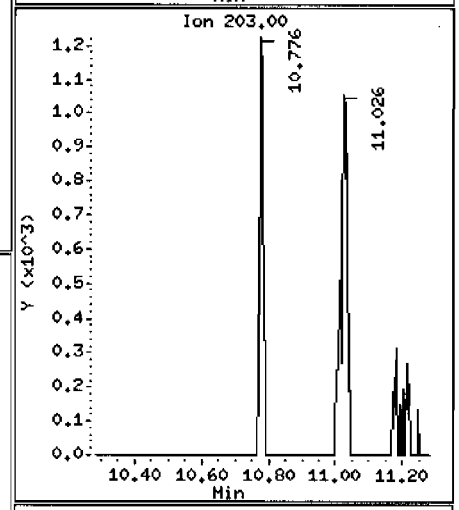

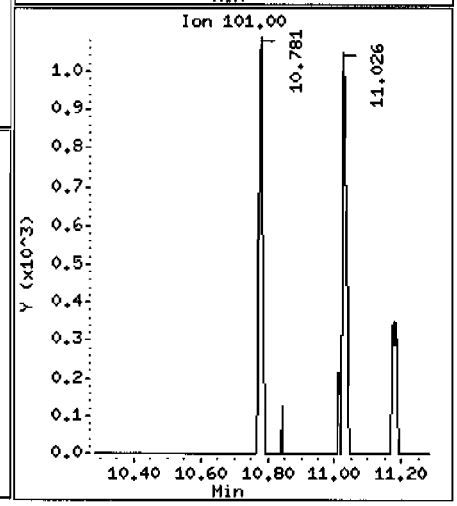

Data File: /chem/MSD6.i/s120409.b/s610426.d

Date : 04-DEC-2009 21:13

Client ID: RE03-10-3914

Instrument: MSD6.i

Sample Info: |24141801519256611|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	724	37	C3H7NO	73

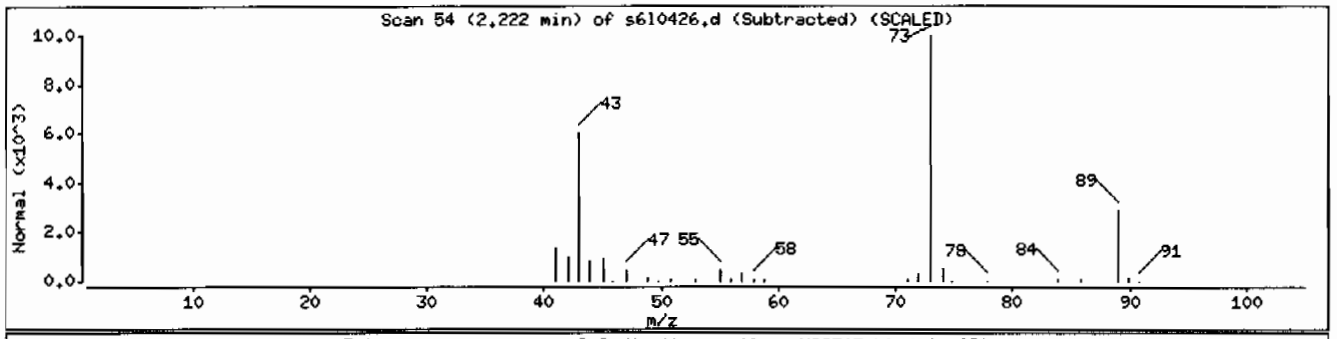

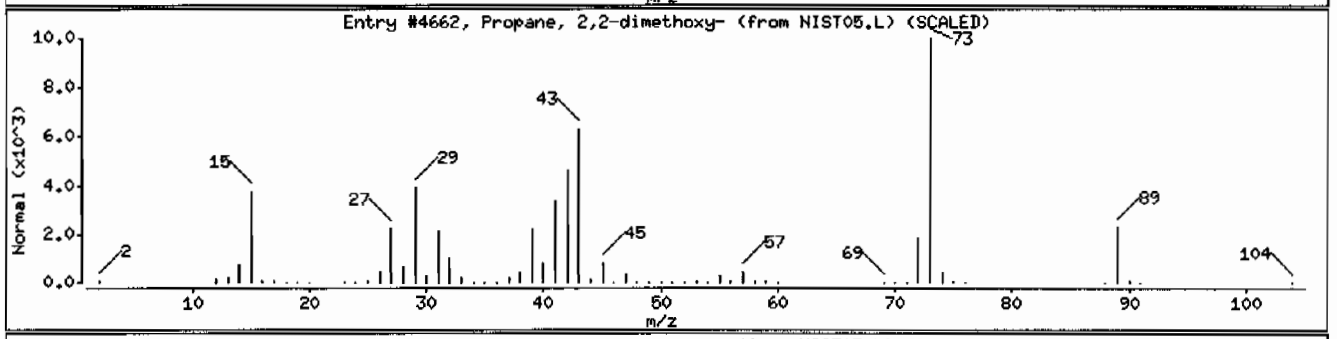

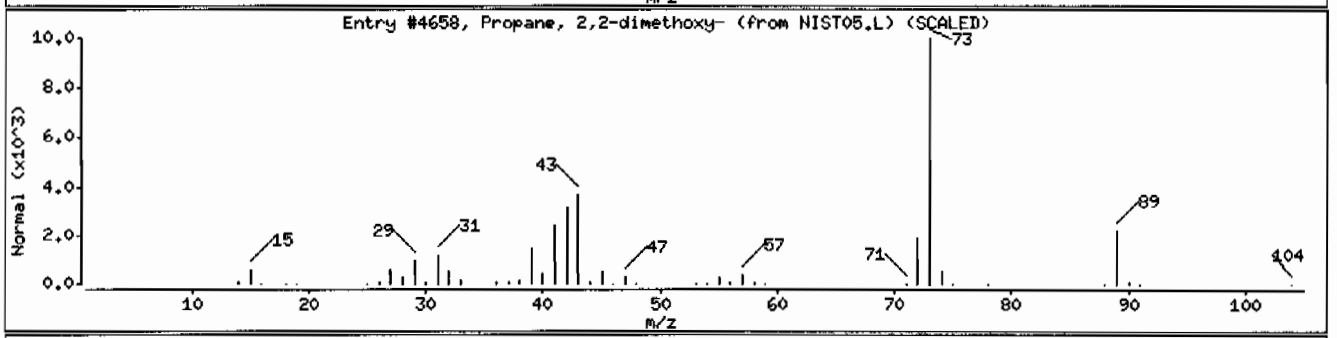

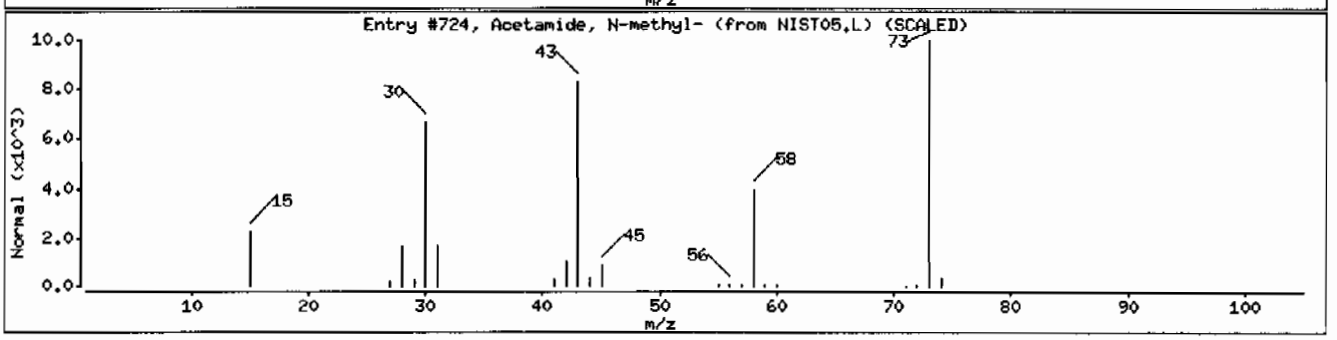

Data File: /chem/MSD6.i/s120409.b/s610426.d

Date : 04-DEC-2009 21:13

Client ID: RE03-10-3914 Instrument: MSD6.i

Sample Info: |24141801519256611|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	36	C6H12O2	116

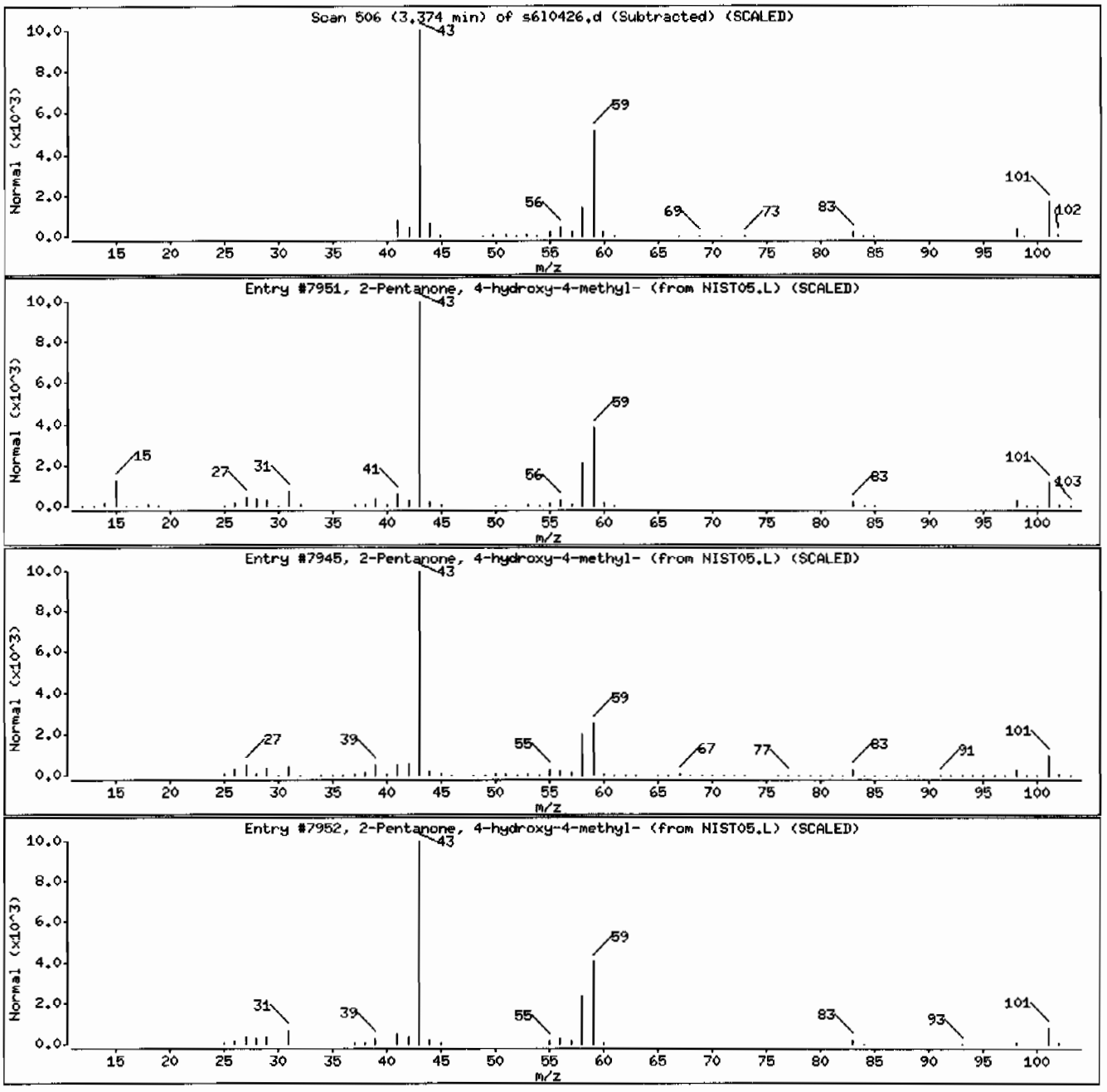

Data File: /chem/HSD6.i/s120409.b/s610426.d

Date : 04-DEC-2009 21:13

Client ID: RE03-10-3914 Instrument: HSD6.i

Sample Info: |2414180151925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	52	C15H24	204
1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60083	50	C15H24	204
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	45	C15H24	204

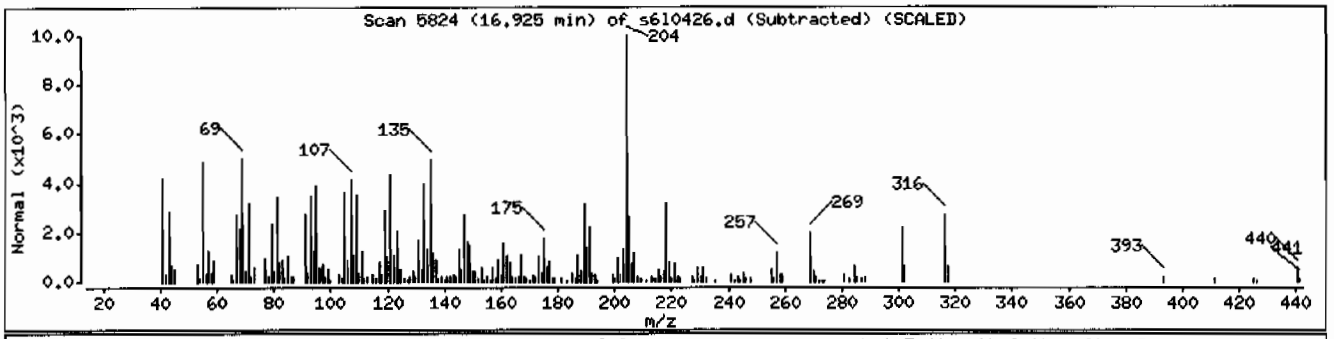

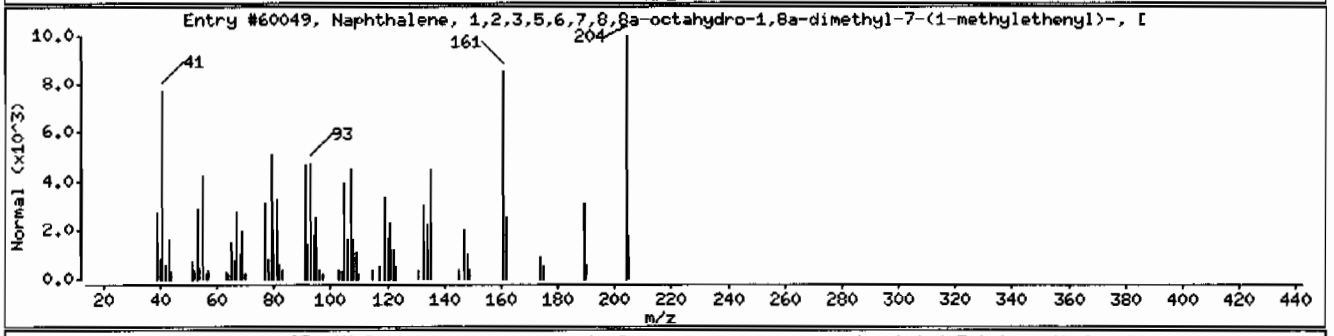

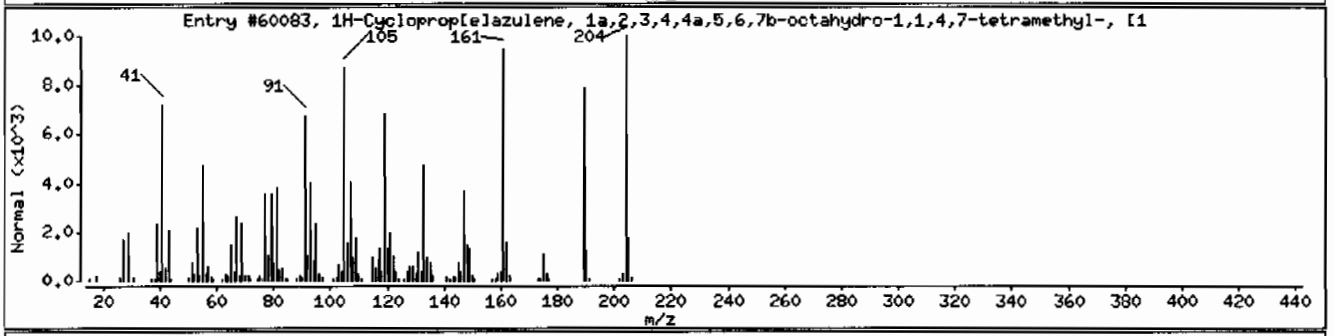

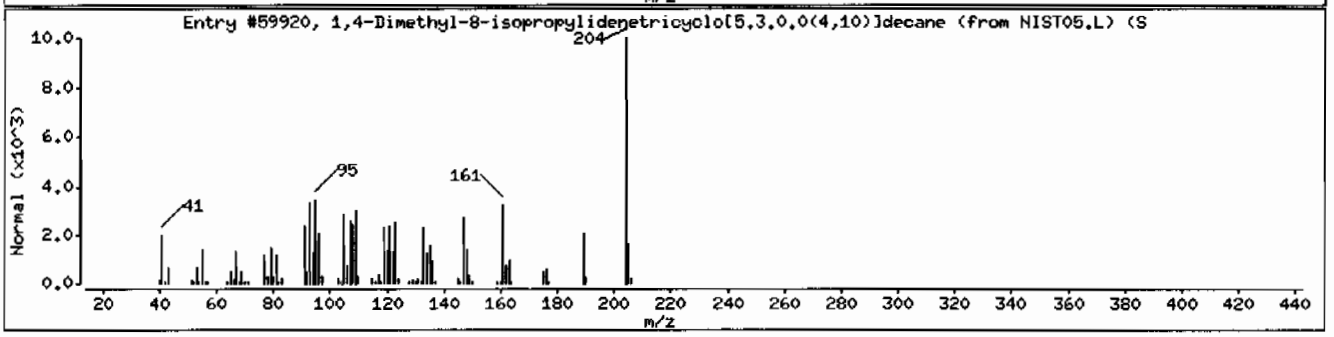

Data File: /chem/MSD6.i/s120409.b/s610426.d

Date : 04-DEC-2009 21:13

Client ID: RE03-10-3914 Instrument: MSD6.i

Sample Info: 1241418015|925661|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60039	43	C15H24	204
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60037	43	C15H24	204
.delta.-Selinene	28624-23-9	NIST05.L	59825	41	C15H24	204

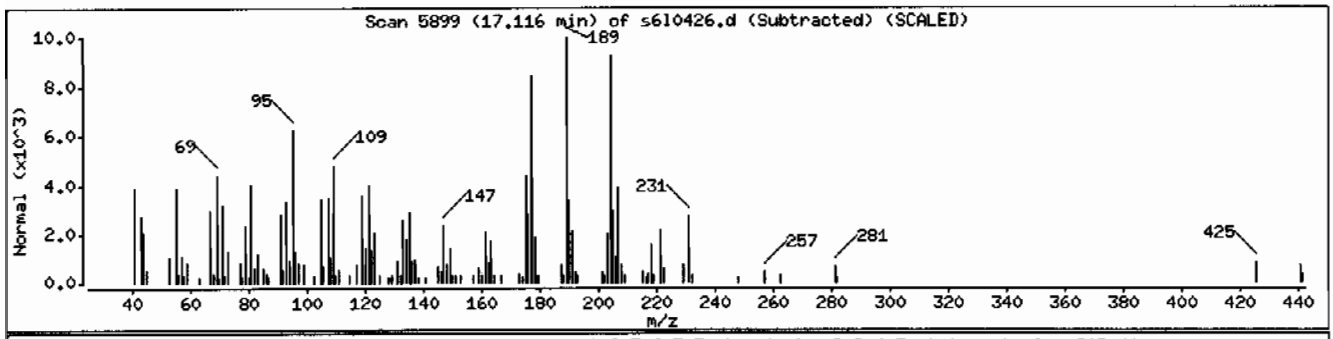

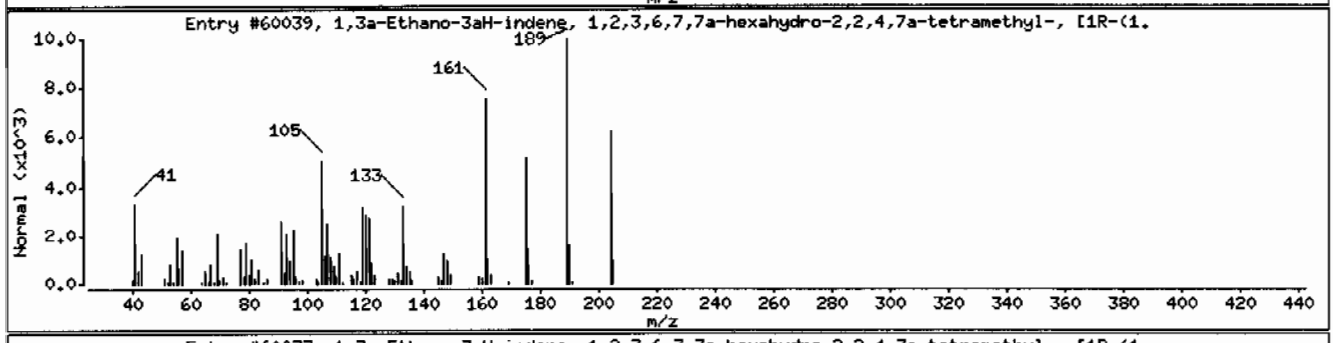

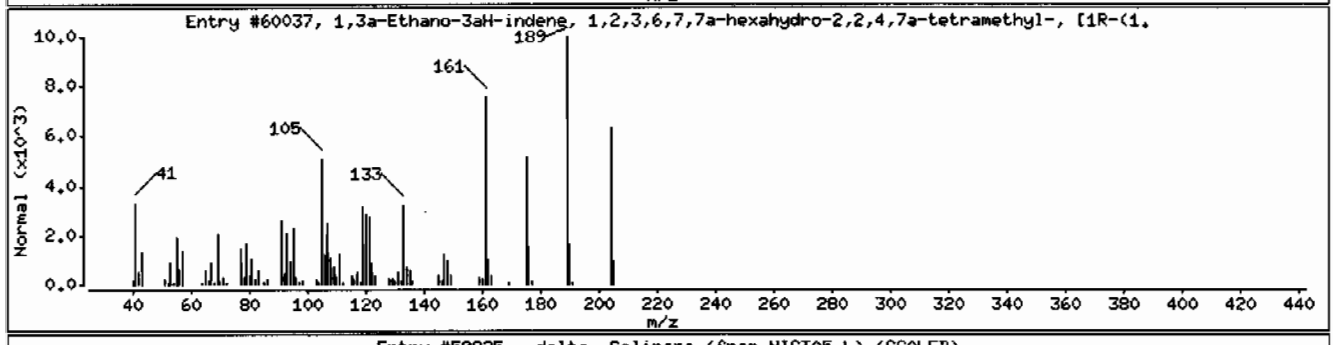

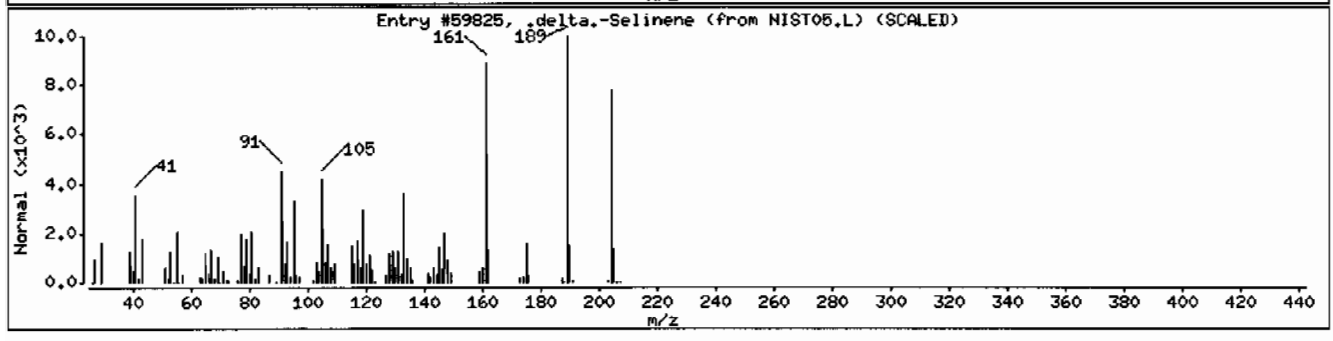

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 04-Dec-2009 15:01

Calibration History

Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Start Cal Date: 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
09-NOV-2009 18:53	MEGA	/chem/MSD6.i/s110909.b/s6k0913.d

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 10.00000		
11-NOV-2009 01:47	NEV	/chem/MSD6.i/s110909.b/s6k0948.d
10-NOV-2009 22:55	HEX	/chem/MSD6.i/s110909.b/s6k0942.d
10-NOV-2009 16:20	PEST	/chem/MSD6.i/s110909.b/s6k0930.d
10-NOV-2009 11:59	AP12	/chem/MSD6.i/s110909.b/s6k0923.d
09-NOV-2009 19:31	MEGA	/chem/MSD6.i/s110909.b/s6k0914.d

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 20.00000		
11-NOV-2009 02:16	NEV	/chem/MSD6.i/s110909.b/s6k0949.d
10-NOV-2009 23:24	HEX	/chem/MSD6.i/s110909.b/s6k0943.d
10-NOV-2009 16:56	PEST	/chem/MSD6.i/s110909.b/s6k0931.d
10-NOV-2009 12:36	AP12	/chem/MSD6.i/s110909.b/s6k0924.d
09-NOV-2009 20:09	MEGA	/chem/MSD6.i/s110909.b/s6k0915.d

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 40.00000		
11-NOV-2009 02:44	NEV	/chem/MSD6.i/s110909.b/s6k0950.d
10-NOV-2009 23:53	HEX	/chem/MSD6.i/s110909.b/s6k0944.d
10-NOV-2009 17:33	PEST	/chem/MSD6.i/s110909.b/s6k0932.d
10-NOV-2009 13:13	AP12	/chem/MSD6.i/s110909.b/s6k0925.d
09-NOV-2009 20:46	MEGA	/chem/MSD6.i/s110909.b/s6k0916.d

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 50.00000		
11-NOV-2009 03:12	NEV	/chem/MSD6.i/s110909.b/s6k0951.d
11-NOV-2009 00:21	HEX	/chem/MSD6.i/s110909.b/s6k0945.d
10-NOV-2009 18:09	PEST	/chem/MSD6.i/s110909.b/s6k0933.d
10-NOV-2009 13:51	AP12	/chem/MSD6.i/s110909.b/s6k0926.d
09-NOV-2009 21:25	MEGA	/chem/MSD6.i/s110909.b/s6k0917.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 80.00000		
11-NOV-2009 03:41	NEV	/chem/MSD6.i/s110909.b/s6k0952.d
11-NOV-2009 00:50	HEX	/chem/MSD6.i/s110909.b/s6k0946.d
10-NOV-2009 18:45	PEST	/chem/MSD6.i/s110909.b/s6k0934.d
10-NOV-2009 14:30	AP12	/chem/MSD6.i/s110909.b/s6k0927.d
09-NOV-2009 22:01	MEGA	/chem/MSD6.i/s110909.b/s6k0918.d

Cal Level: 7 , Cal Amount: 100.00000

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|11-NOV-2009 04:10 |NEV              |/chem/MSD6.i/s110909.b/s6k0953.d        |
|11-NOV-2009 01:18 |HEX              |/chem/MSD6.i/s110909.b/s6k0947.d        |
|10-NOV-2009 19:21 |PEST             |/chem/MSD6.i/s110909.b/s6k0935.d        |
|10-NOV-2009 15:06 |AP12             |/chem/MSD6.i/s110909.b/s6k0928.d        |
|09-NOV-2009 22:39 |MEGA             |/chem/MSD6.i/s110909.b/s6k0919.d        |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 8 , Cal Amount: 120.00000                                        |
+==============================================================================+
|11-NOV-2009 04:38 |NEV              |/chem/MSD6.i/s110909.b/s6k0954.d        |
|10-NOV-2009 19:58 |PEST             |/chem/MSD6.i/s110909.b/s6k0936.d        |
|10-NOV-2009 15:43 |AP12             |/chem/MSD6.i/s110909.b/s6k0929.d        |
|09-NOV-2009 23:16 |MEGA             |/chem/MSD6.i/s110909.b/s6k0920.d        |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4
+------------------+-----------------+----------------------------------------+
| Ccal Level: 4 , Ccal Amount: 40.0                                           |
+==============================================================================+
|04-DEC-2009 10:02 |MEGA             |/chem/MSD6.i/s120409.b/s610402.d        |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 4 , Ccal Amount: 40.0                                           |
+==============================================================================+
|04-DEC-2009 10:30 |AP12             |/chem/MSD6.i/s120409.b/s610403.d        |
+------------------+-----------------+----------------------------------------+
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GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Calibration File Names:
Level 1: /chem/MSD6.i/s110909.b/s6k0913.d
Level 2: /chem/MSD6.i/s110909.b/s6k0948.d
Level 3: /chem/MSD6.i/s110909.b/s6k0949.d
Level 4: /chem/MSD6.i/s110909.b/s6k0950.d
Level 5: /chem/MSD6.i/s110909.b/s6k0951.d
Level 6: /chem/MSD6.i/s110909.b/s6k0952.d
Level 7: /chem/MSD6.i/s110909.b/s6k0953.d
Level 8: /chem/MSD6.i/s110909.b/s6k0954.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.62711	0.72014	0.69994	0.71294	0.67761					
	0.66245	0.66663					AVRG		0.68098		4.78734
2 Pyridine	+++++	0.78506	0.84345	0.94451	0.94132	0.77430					
	0.82190	0.82246					AVRG		0.84757		8.16958
4 Aniline	+++++	0.51792	0.56281	0.52949	0.53182	0.51964					
	0.51849	0.51247					AVRG		0.52752		3.21865
209 Benzaldehyde	+++++	0.94297	0.91161	0.92064	0.86617	0.84259					
	0.79828	0.74667					AVRG		0.86127		8.23824
6 Phenol	+++++	1.29580	1.38609	1.27955	1.27629	1.24279					
	1.20107	1.21677					AVRG		1.27120		4.82676

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.93365	0.90056	0.92748	0.85273	0.86174	0.82247					
	0.79075	0.79709					AVRG		0.86081		6.48811
8 2-Chlorophenol	+++++	1.05270	1.10343	1.04994	1.05384	0.99340					
	0.95375	0.94058					AVRG		1.02109		5.85808
203 n-Decane	+++++	1.57696	1.59018	1.40648	1.36249	1.17658					
	+++++	+++++					AVRG		1.42254		11.98709
9 1,3-Dichlorobenzene	+++++	1.22415	1.27608	1.20806	1.21136	1.14335					
	1.08668	1.07881					AVRG		1.17550		6.31837
11 1,4-Dichlorobenzene	+++++	1.27202	1.32037	1.21925	1.20743	1.15141					
	1.09639	1.07447					AVRG		1.19162		7.54222
12 Benzyl alcohol	+++++	0.60900	0.65716	0.63043	0.62465	0.64143					
	0.63021	0.64767					AVRG		0.63436		2.50657
13 1,2-Dichlorobenzene	+++++	1.16666	1.21707	1.13327	1.12016	1.08966					
	1.03460	1.02472					AVRG		1.11231		6.21300
14 bis(2-Chloroisopropyl)ether	+++++	2.07635	2.13325	1.99088	1.97675	1.86028					
	1.72252	1.69272					AVRG		1.92182		8.81925
15 o-Cresol	+++++	0.82992	0.88629	0.84024	0.85639	0.80893					
	0.80386	0.79407					AVRG		0.83139		3.92027

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.20921	1.17591	1.21168	1.15285	1.16925					
	1.13524	1.12939					AVRG		1.16908		2.80572
17 N-Nitrosodipropylamine	0.65638	0.74117	0.78851	0.72893	0.73002	0.72328					
	0.70725	0.59369					AVRG		0.70865		8.34285
18 m,p-Cresols	+++++	1.03591	1.12590	1.04958	1.05532	1.04720					
	1.02399	1.03632					AVRG		1.05346		3.18987
19 Hexachloroethane	+++++	0.45806	0.49524	0.47390	0.46960	0.45628					
	0.43995	0.43396					AVRG		0.46100		4.53111
21 Nitrobenzene	+++++	0.31691	0.32516	0.29885	0.29715	0.27038					
	0.24823	0.23966					AVRG		0.28519		11.62250
22 Isophorone	+++++	0.55891	0.57824	0.53268	0.53266	0.49425					
	0.45829	0.38358					AVRG		0.50552		13.23015
23 2-Nitrophenol	+++++	0.13453	0.14214	0.13601	0.13806	0.12888					
	0.12072	0.12047					AVRG		0.13154		6.43934
24 2,4-Dimethylphenol	+++++	0.23987	0.22536	0.21067	0.20421	0.21065					
	0.21868	0.21622					AVRG		0.21795		5.40955
25 bis(2-Chloroethoxy)methane	+++++	0.33208	0.34147	0.30906	0.30442	0.28195					
	0.26036	0.25310					AVRG		0.29749		11.40063

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19875	0.21444	0.20921	0.20622	0.19391					
	0.18142	0.17985					AVRG		0.19769		6.80078
27 Benzoic acid	+++++	+++++	0.10585	0.12338	0.14032	0.14157					
	0.15049	0.14556					AVRG		0.13453		12.46641
28 1,2,4-Trichlorobenzene	+++++	0.27809	0.27557	0.25214	0.25046	0.22876					
	0.21050	0.20278					AVRG		0.24261		12.25857
30 Naphthalene	0.93577	0.85146	0.85267	0.76017	0.74029	0.64713					
	+++++	+++++					AVRG		0.79792		12.82401
204 alpha-Terpineol	+++++	0.23577	0.25490	0.22003	0.21987	0.20427					
	0.17723	+++++					AVRG		0.21868		12.15593
31 4-Chloroaniline	+++++	0.26389	0.28196	0.26991	0.26064	0.24995					
	0.23771	0.23114					AVRG		0.25646		7.00922
189 Caprolactam	+++++	0.06766	0.07272	0.08214	0.08102	0.07115					
	0.07075	0.07172					AVRG		0.07388		7.43636
32 Hexachlorobutadiene	+++++	0.14265	0.14557	0.13182	0.13097	0.11864					
	0.10931	0.10542					AVRG		0.12634		12.40746
33 4-Chloro-3-methylphenol	+++++	0.20824	0.22585	0.20971	0.20633	0.19424					
	0.17957	0.17303					AVRG		0.19957		9.25582

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INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.56779	0.53746	0.54769	0.49857	0.47476	0.43707					
	0.39981	0.38884					AVRG		0.48150		14.15789
35 1-Methylnaphthalene	0.55872	0.52838	0.53208	0.48366	0.46920	0.42612					
	0.38935	0.38051					AVRG		0.47100		14.29869
36 Hexachlorocyclopentadiene	+++++	0.13520	0.17775	0.15114	0.16219	0.15378					
	0.18308	0.16783					AVRG		0.16157		10.19735
208 1,1'-Biphenyl	+++++	1.32152	1.23439	1.25731	1.19710	1.16580					
	1.12776	1.10528					AVRG		1.20131		6.32036
205 2,3-Dichloroaniline	+++++	0.51880	0.53286	0.48272	0.49159	0.46096					
	0.42997	0.43664					AVRG		0.47908		8.16477
37 2,4,6-Trichlorophenol	+++++	0.27570	0.29634	0.28058	0.28008	0.26989					
	0.25242	0.25556					AVRG		0.27294		5.58990
38 2,4,5-Trichlorophenol	+++++	0.28031	0.30282	0.29443	0.29832	0.29160					
	0.28523	0.28197					AVRG		0.29067		2.92500
40 2-Chloronaphthalene	0.91208	0.94921	0.97975	0.90835	0.91949	0.87198					
	0.81926	0.82647					AVRG		0.89832		6.24992
42 o-Nitroaniline	+++++	0.28653	0.32807	0.30812	0.31848	0.31056					
	0.29539	0.30412					AVRG		0.30732		4.50651

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.19029	0.23187	0.23025	0.23197	0.23511					
	0.22216	0.23314					AVRG		0.22497		7.03906
43 Dimethylphthalate	+++++	1.10253	1.11895	1.05121	1.05401	1.01311					
	0.95493	0.88796					AVRG		1.02610		7.97599
44 2,6-Dinitrotoluene	+++++	0.24859	0.25869	0.24751	0.24771	0.24514					
	0.22903	0.23656					AVRG		0.24475		3.87474
45 Acenaphthylene	1.45077	1.53234	1.59736	1.47314	1.47686	1.41153					
	1.30118	1.31187					AVRG		1.44438		7.03164
47 Acenaphthene	0.97754	0.93463	0.97051	0.90906	0.90733	0.85875					
	0.82122	0.83304					AVRG		0.90151		6.58830
48 2,4-Dinitrophenol	+++++	+++++	15920	45695	60199	121040					
	185455	+++++					LINR	0.36255	0.13077		0.99262
49 Dibenzofuran	+++++	1.31036	1.35172	1.24091	1.23630	1.17505					
	1.09035	1.11352					AVRG		1.21689		7.96140
50 2,4-Dinitrotoluene	+++++	0.28688	0.32526	0.31392	0.31582	0.31468					
	0.30077	0.30301					AVRG		0.30862		4.09740
51 Diethylphthalate	+++++	1.08427	1.13193	1.06273	1.05585	1.00787					
	0.93441	0.95637					AVRG		1.03335		6.84784

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
52 4-Nitrophenol	+++++	12277	40572	90802	114423	208122					
	294363	379687					LINR	0.18209	0.20146		0.99664
53 Fluorene	1.06940	1.05468	1.10259	1.00777	1.00699	0.94775					
	0.89677	0.90440					AVRG		0.99879		7.65829
54 4-Chlorophenylphenylether	+++++	0.49941	0.52344	0.48539	0.48490	0.45443					
	0.43029	0.42560					AVRG		0.47192		7.71070
55 2-Methyl-4,6-dinitrophenol	+++++	9251	34357	85168	107219	199515					
	279188	346834					LINR	0.17722	0.10780		0.99957
56 p-Nitroaniline	+++++	18297	49968	114446	144020	267165					
	377942	477974					LINR	0.17663	0.25514		0.99741
133 Diphenylamine	+++++	0.51235	0.51279	0.48995	0.49110	0.46341					
	0.45142	0.45392					AVRG		0.48213		5.41113
58 1,2-Diphenylhydrazine	+++++	0.65288	0.67935	0.62730	0.62752	0.58724					
	0.56393	0.55466					AVRG		0.61327		7.55575
59 Tributylphosphate	+++++	1.19922	1.25332	1.24022	1.27997	1.24188					
	1.19433	1.14050					AVRG		1.22135		3.81011
61 4-Bromophenylphenylether	+++++	0.16321	0.16758	0.15949	0.16092	0.15366					
	0.14977	0.15022					AVRG		0.15784		4.30183

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.17072	0.17525	0.16702	0.16690	0.16190					
	0.15730	0.15822					AVRG		0.16533		3.97990
207 Atrazine	+++++	0.04466	0.04316	0.04336	0.04050	0.04104					
	0.03746	0.03425					AVRG		0.04063		9.04410
65 Pentachlorophenol	+++++	12427	38945	80211	100581	192628					
	259470	326879					LINR	0.13427	0.09964		0.99838
206 n-Octadecane	+++++	0.51627	0.51598	0.45832	0.46068	0.40718					
	0.37377	0.35992					AVRG		0.44173		14.37986
68 Phenanthrene	0.95060	0.88603	0.89746	0.83221	0.81673	0.77346					
	0.73349	0.72773					AVRG		0.82721		9.72714
69 Anthracene	0.87683	0.86194	0.90534	0.83970	0.83829	0.78921					
	0.75133	0.75196					AVRG		0.82682		6.91971
72 Di-n-butylphthalate	++++	1.00113	1.04654	0.99105	0.98676	0.92173					
	0.85606	0.84350					AVRG		0.94954		8.15043
76 Fluoranthene	0.78392	0.79487	0.87026	0.82674	0.81613	0.77420					
	0.73596	0.73727					AVRG		0.79242		5.73137
77 Benzidine	+++++	0.35813	0.40641	0.39242	0.37729	0.37701					
	0.39765	0.44234					AVRG		0.39304		6.85454

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	1.12114	1.31021	1.22539	1.10007	1.11660	1.02083					
	0.96007	0.94734					AVRG		1.10021		11.38295
85 Butylbenzylphthalate	+++++	0.52543	0.54028	0.51608	0.52406	0.49119					
	0.46906	0.45845					AVRG		0.50351		6.16544
89 Benzo(a)anthracene	0.94221	0.85505	0.89830	0.85692	0.85716	0.83423					
	0.82127	0.83891					AVRG		0.86301		4.55256
90 3,3'-Dichlorobenzidine	+++++	0.23529	0.28074	0.29290	0.29384	0.28532					
	0.28779	0.30173					AVRG		0.28252		7.74710
92 Chrysene	0.87195	0.83557	0.87346	0.82487	0.82639	0.80729					
	0.78155	0.79409					AVRG		0.82690		4.03552
93 bis(2-Ethylhexyl)phthalate	7340	107837	270739	551016	645048	1078889					
	1389660	1700943					WLINR	0.01019	0.70092		0.99014
94 Di-n-octylphthalate	+++++	1.19610	1.35485	1.31605	1.35770	1.25055					
	1.27306	1.15060					AVRG		1.27127		6.18607
95 Benzo(b)fluoranthene	0.74161	0.85750	0.94279	0.90432	0.93361	0.89239					
	0.89332	0.91506					AVRG		0.88507		7.19928
96 Benzo(k)fluoranthene	0.73172	0.86857	0.95518	0.92430	0.92244	0.89945					
	0.88010	0.85909					AVRG		0.88011		7.72381

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.54179	0.70605	0.81133	0.81358	0.82559	0.80913					
	0.80179	0.80647					AVRG		0.76447		12.74919
99 Indeno(1,2,3-cd)pyrene	5888	60939	200863	402882	510813	1012558					
	1348903	1889688					LINR	0.07592	0.78768		0.99752
100 Dibenzo(a,h)anthracene	3385	46770	157194	361792	411532	815285					
	1094612	1529825					LINR	0.06768	0.63666		0.99908
101 Benzo(ghi)perylene	0.41694	0.53228	0.60870	0.60962	0.60436	0.63133					
	0.62968	0.63931					AVRG		0.58403		12.88683
102 1,4-Dioxane	+++++	0.37671	0.37043	0.39061	0.37803	0.36375					
	0.35237	0.33052					AVRG		0.36606		5.38827
103 Methyl methacrylate	+++++	0.19626	0.19646	0.20436	0.20625	0.18540					
	0.18964	0.17876					AVRG		0.19388		5.13081
104 Ethyl methacrylate	+++++	0.79650	0.81191	0.84398	0.82898	0.80568					
	0.79571	0.75648					AVRG		0.80561		3.45659
105 2-Picoline	+++++	1.39124	1.31746	1.36987	1.31904	1.28927					
	1.27506	1.19912					AVRG		1.30872		4.85814
106 N-Nitrosomethylethylamine	+++++	0.50512	0.48970	0.52453	0.49928	0.51969					
	0.51463	0.52429					AVRG		0.51104		2.61826

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.56429	0.53321	0.56316	0.50377	0.53102					
	0.50923	0.49498					AVRG		0.52852		5.24900
108 N-Nitrosodiethylamine	+++++	0.50310	0.47987	0.51154	0.48534	0.49862					
	0.49304	0.49722					AVRG		0.49553		2.15019
109 Ethyl Methanesulfonate	+++++	0.65808	0.64977	0.67344	0.62747	0.66045					
	0.64399	0.64860					AVRG		0.65169		2.21442
110 Pentachloroethane	+++++	0.32209	0.31386	0.33094	0.32010	0.31614					
	0.31148	0.30303					AVRG		0.31681		2.78134
111 N-Nitrosopyrrolidine	+++++	0.44182	0.46376	0.50830	0.47779	0.50143					
	0.49385	0.44600					AVRG		0.47614		5.57640
113 N-Nitrosomorpholine	+++++	0.71032	0.67134	0.71256	0.65887	0.68726					
	0.65974	0.65547					AVRG		0.67936		3.58698
114 o-Toluidine	+++++	1.74797	1.65530	1.71709	1.64005	1.64679					
	1.58070	1.58178					AVRG		1.65281		3.79762
115 N-Nitrosopiperidine	+++++	0.13834	0.13623	0.14736	0.13885	0.14290					
	0.13997	0.14373					AVRG		0.14105		2.69891
116 a,a-Dimethylphenethylamine	+++++	0.78770	0.81587	0.88476	0.87463	0.88336					
	0.86623	0.87565					AVRG		0.85546		4.44785

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.14741	0.14492	0.13783	0.14116	0.13439					
	0.12857	0.12370					AVRG		0.13685		6.28357
118 2,6-Dichlorophenol	+++++	0.19682	0.19992	0.21240	0.20960	0.21251					
	0.20568	0.21118					AVRG		0.20687		3.05257
119 Hexachloropropene	+++++	0.08644	0.09499	0.10791	0.10350	0.10830					
	0.10654	0.11112					AVRG		0.10269		8.60612
120 p-Phenylenediamine	+++++	0.19714	0.24091	0.25567	0.24421	0.23168					
	0.22043	0.21678					AVRG		0.22955		8.57933
121 N-Nitrosodi-n-butylamine	+++++	0.22447	0.22501	0.22216	0.21154	0.19839					
	0.19348	0.19524					AVRG		0.21004		6.76180
122 Safrole	+++++	0.18675	0.18585	0.19677	0.19040	0.18675					
	0.17956	0.17958					AVRG		0.18653		3.22597
123 1,2,4,5-Tetrachlorobenzene	+++++	0.45393	0.42422	0.44255	0.41650	0.41676					
	0.40609	0.40229					AVRG		0.42319		4.45863
124 Isosafrole	+++++	0.34011	0.33198	0.35164	0.33779	0.34233					
	0.33627	0.33702					AVRG		0.33959		1.83025
125 1,4-Naphthoquinone	+++++	0.30018	0.32824	0.34894	0.32634	0.29745					
	0.28366	0.26235					AVRG		0.30674		9.65282

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.15441	0.17500	0.17160	0.17355	0.17392					
	0.16754	0.16904					AVRG		0.16929		4.19006
127 Pentachlorobenzene	+++++	0.38426	0.36575	0.37736	0.36552	0.35674					
	0.35182	0.35035					AVRG		0.36454		3.50537
128 1-Naphthylamine	+++++	0.90674	0.92102	0.95184	0.91692	0.90718					
	0.86367	0.88454					AVRG		0.90742		3.07978
129 2-Naphthylamine	+++++	0.96578	1.00999	1.02440	0.99125	0.97953					
	0.93471	0.95520					AVRG		0.98012		3.19024
130 2,3,4,6-Tetrachlorophenol	+++++	0.20640	0.23481	0.21862	0.21374	0.22201					
	0.21460	0.22254					AVRG		0.21896		4.07356
131 5-Nitro-o-toluidine	+++++	0.22084	0.26615	0.28994	0.29013	0.29251					
	0.28841	0.30508					AVRG		0.27901		10.07623
132 Thionazin	+++++	0.16760	0.17396	0.17237	0.17849	0.17822					
	0.16987	0.16398					AVRG		0.17207		3.11896
134 Sulfotepp	+++++	0.08934	0.08802	0.08507	0.08886	0.08655					
	0.08265	0.08005					AVRG		0.08579		4.00843
135 Phorate	+++++	0.38230	0.38968	0.37391	0.38904	0.37359					
	0.35020	0.32660					AVRG		0.36933		6.25438

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	14861	45341	104071	130665	222134					
	265730	408609					LINR	0.09141	0.12978		0.99734
137 Phenacetin	+++++	0.21732	0.25812	0.27209	0.26902	0.27044					
	0.26738	0.28241					AVRG		0.26240		8.05167
138 Diallate	+++++	0.26191	0.24374	0.25182	0.23998	0.23522					
	0.22716	0.22410					AVRG		0.24056		5.55643
139 Dimethoate	+++++	0.18955	0.19806	0.21061	0.22946	0.23158					
	0.22398	0.21950					AVRG		0.21468		7.45885
140 4-Aminobiphenyl	+++++	0.50489	0.50584	0.54599	0.56556	0.56494					
	0.53276	0.52934					AVRG		0.53562		4.66298
141 Pentachloronitrobenzene	+++++	0.06195	0.06081	0.06546	0.06329	0.06151					
	0.06084	0.05959					AVRG		0.06192		3.12402
142 Pronamide	+++++	0.26962	0.26582	0.27431	0.26759	0.26151					
	0.25173	0.25174					AVRG		0.26319		3.31411
143 Dinoseb	+++++	11996	47856	123552	154632	280906					
	375481	479562					LINR	0.15482	0.14736		0.99949
144 Disulfoton	+++++	0.31933	0.32969	0.31920	0.32975	0.31125					
	0.29624	0.27823					AVRG		0.31196		6.02930

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
145 Methyl parathion	+++++	0.14493	0.15978	0.17270	0.18140	0.18775						
	0.18141	0.17864					AVRG		0.17237		8.70434	
146 4-Nitroquinoline-1-oxide	+++++	0.02012	0.03296	0.02700	0.02533	0.02224						
	0.01930	0.01750					AVRG		0.02349		22.76469	<-
147 Methapyrilene	+++++	0.40623	0.42209	0.41103	0.39768	0.37937						
	0.35132	0.33430					AVRG		0.38600		8.45747	
148 Isodrin	+++++	0.10136	0.09753	0.10130	0.09757	0.09481						
	0.09122	0.09037					AVRG		0.09631		4.58453	
149 Aramite	+++++	0.03841	0.04251	0.04600	0.04566	0.04690						
	0.04564	0.04428					AVRG		0.04420		6.60357	
150 Kepone	+++++	0.05674	0.06191	0.06311	0.06098	0.06085						
	0.06194	0.06656					AVRG		0.06173		4.75009	
151 p-(Dimethylamino)azobenzene	+++++	0.31224	0.31378	0.33288	0.32474	0.31931						
	0.31446	0.30396					AVRG		0.31734		2.95033	
152 Chlorobenzilate	+++++	0.30009	0.27506	0.30295	0.29512	0.29377						
	0.29203	0.28006					AVRG		0.29130		3.50189	
153 3,3'-Dimethylbenzidine	+++++	0.49489	0.52397	0.53487	0.52482	0.53397						
	0.53619	0.54473					AVRG		0.52763		3.04743	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
154 Famphur	+++++	0.28850	0.33742	0.33640	0.36516	0.37704					
	0.35655	0.33317					AVRG		0.34203		8.41381
155 2-Acetylaminofluorene	+++++	23996	98558	217618	290992	478700					
	598627	953419					LINR	0.12414	0.37309		0.99874
157 7,12Dimethylbenz(a)anthracene	+++++	0.45745	0.44941	0.48919	0.48420	0.49542					
	0.49422	0.48353					AVRG		0.47906		3.80416
158 3-Methylcholanthrene	+++++	0.29343	0.35502	0.37871	0.37695	0.38953					
	0.38995	0.40328					AVRG		0.36955		9.94080
26 Phthalic anhydride	+++++	10939	40864	83487	108159	203846					
	306459	+++++					LINR	0.14938	0.09004		0.99590
173 Carbazole	0.68572	0.63216	0.65059	0.65023	0.64669	0.65901					
	0.65208	0.65947					AVRG		0.65449		2.32370
174 Hexachlorophene	+++++	0.04700	0.06194	0.06687	0.06701	0.06606					
	+++++	+++++					AVRG		0.06178		13.78238
179 Dibenzo(a,e)pyrene	+++++	21397	67635	183254	214017	467062					
	+++++	+++++					LINR	0.16800	0.36891		0.99459
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	0.09983	0.11502	0.14598	0.13665	0.14571					
	0.12211	0.12583					AVRG		0.12730		13.25929
191 Parathion	+++++	0.05089	0.05709	0.06102	0.06360	0.06315					
	0.06253	0.06173					AVRG		0.06000		7.60183
192 Methoxychlor	+++++	0.54663	0.59527	0.57022	0.57190	0.55995					
	0.49223	0.53082					AVRG		0.55243		6.05482
210 m-Toluidine	+++++	1.07152	1.09862	1.08267	1.09477	1.19760					
	1.39731	0.92523					AVRG		1.12396		12.87193
211 p-Toluidine	+++++	0.98878	1.01175	0.93629	0.93823	0.84629					
	0.67790	+++++					AVRG		0.89987		13.64283
212 Cis Diallate	+++++	0.25680	0.24216	0.25774	0.25015	0.25647					
	0.24871	0.25860					AVRG		0.25295		2.41779
213 Trans Diallate	+++++	0.30813	0.28675	0.29626	0.28232	0.27673					
	0.26725	0.26364					AVRG		0.28301		5.55643
214 1,4-Dinitrobenzene	+++++	0.15465	0.18602	0.18671	0.19154	0.19074					
	0.18381	0.19324					AVRG		0.18382		7.23195
215 2-Ethoxyethanol	+++++	0.69474	0.75708	0.72314	0.72734	0.69576					
	0.68979	0.68463					AVRG		0.71035		3.71426

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
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Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	11622	37526	94270	117296	226774					
	306702	394688					LINR	0.14094	0.14618		0.99920
229 2,2'-Dichlorobenzil	+++++	0.65548	0.70788	0.67278	+++++	0.85557					
	0.79635	+++++					AVRG		0.73761		11.58274
230 4-Chlorothioanisole	+++++	65505	120100	275307	+++++	727615					
	828249	+++++					LINR	0.13623	0.30665		0.99347
231 4-Chlorothiophenol	+++++	14955	49890	195788	+++++	593706					
	683100	+++++					LINR	0.29380	0.27176		0.99219
232 bis(p-Chlorophenyl)sulfone	+++++	0.41911	0.42098	0.38909	+++++	0.48605					
	0.44832	+++++					AVRG		0.43271		8.42306
233 bis(p-Chlorophenyl)disulfide	+++++	0.19644	0.20913	0.18244	+++++	0.22594					
	0.20806	+++++					AVRG		0.20440		7.90920
234 Diphenyl disulfide	+++++	0.20078	0.21401	0.19911	+++++	0.24759					
	0.23595	+++++					AVRG		0.21949		9.81334
235 Diphenyl sulfide	+++++	0.77537	0.76082	0.73538	+++++	0.86393					
	0.82035	+++++					AVRG		0.79117		6.45415
236 Phenyl sulfone	+++++	0.43220	0.43102	0.40994	+++++	0.50304					
	0.47114	+++++					AVRG		0.44947		8.28032

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
237 Hydroxymethyl phthalimide	+++++	0.14671	0.15531	0.12673	+++++	0.19818					
	0.17963	+++++					AVRG		0.16131		17.36813 <-
238 Phthalic acid	+++++	13646	40994	115933	+++++	343308					
	402020	+++++					LINR	0.25337	0.15547		0.99358
239 Thiophenol	+++++	41092	104698	327879	+++++	922601					
	1046955	+++++					LINR	0.23456	1.46946		0.99364
240 bis(Chloromethyl)ether	+++++	1.01755	1.00429	0.94829	+++++	1.10480					
	1.05711	+++++					AVRG		1.02641		5.71407
241 Octachlorostyrene	+++++	0.06097	0.06109	0.05953	+++++	0.07399					
	0.07072	+++++					AVRG		0.06526		10.12747
M 225 Trichlorophenols	+++++	0.27800	0.29958	0.28751	0.28920	0.28074					
	0.26883	0.26877					AVRG		0.28180		3.98593
M 226 Tetrachlorophenols	+++++	0.20640	0.23481	0.21862	0.21374	0.22201					
	0.21460	0.22254					AVRG		0.21896		4.07356
M 227 Benzo(b,k)fluoranthene	0.73667	0.86303	0.94898	0.91431	0.92802	0.89592					
	0.88671	0.88707					AVRG		0.88259		7.33906
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.98202	1.07204	1.02934	1.03017	0.98830						
	0.95348	0.95648					AVRG		1.00169		4.36295	
$ 5 Phenol-d5	+++++	1.23734	1.34586	1.27212	1.28456	1.26316						
	1.22407	1.22277					AVRG		1.26427		3.41674	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.30745	0.31426	0.29453	0.29315	0.27101						
	0.25359	0.24671					AVRG		0.28296		9.27927	
$ 39 2-Fluorobiphenyl	+++++	1.11512	1.14628	1.04977	1.05601	0.99136						
	0.92488	0.93239					AVRG		1.03083		8.29816	
$ 60 2,4,6-Tribromophenol	+++++	0.10485	0.11685	0.11180	0.11267	0.12310						
	0.12190	0.12607					AVRG		0.11675		6.41378	
$ 81 p-Terphenyl-d14	+++++	0.71309	0.69797	0.64349	0.66522	0.61764						
	0.59401	0.58404					AVRG		0.64507		7.73004	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.00169	1.03466	1.03466	0.000	3.29147	60.00000	Averaged
$ 5 Phenol-d5	1.26427	1.24245	1.24245	0.000	-1.72556	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28296	0.29902	0.29902	0.000	5.67523	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.03083	1.08174	1.08174	0.000	4.93820	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11675	0.12945	0.12945	0.000	10.88297	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.64507	0.72359	0.72359	0.000	12.17316	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.64081	0.64081	0.000	-5.89855	60.00000	Averaged
2 Pyridine	0.84757	0.77144	0.77144	0.000	-8.98267	60.00000	Averaged
4 Aniline	0.52752	0.51930	0.51930	0.000	-1.55765	60.00000	Averaged
6 Phenol	1.27120	1.23489	1.23489	0.001	-2.85632	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.80936	0.80936	0.000	-5.97614	60.00000	Averaged
8 2-Chlorophenol	1.02109	1.01772	1.01772	0.000	-0.32996	60.00000	Averaged
203 n-Decane	1.42254	1.44155	1.44155	0.000	1.33631	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.19665	1.19665	0.000	1.79939	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.18877	1.18877	0.001	-0.23932	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.12583	1.12583	0.000	1.21558	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.94108	1.94108	0.000	1.00230	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.65075	0.65075	0.000	2.58272	60.00000	Averaged
15 o-Cresol	0.83139	0.83798	0.83798	0.000	0.79318	60.00000	Averaged
18 m,p-Cresols	1.05346	1.05662	1.05662	0.000	0.29972	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.69204	0.69204	0.050	-2.34415	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.44650	0.44650	0.000	-3.14409	60.00000	Averaged
21 Nitrobenzene	0.28519	0.29957	0.29957	0.000	5.04113	60.00000	Averaged
22 Isophorone	0.50552	0.52435	0.52435	0.000	3.72478	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13639	0.13639	0.001	3.68222	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.23088	0.23088	0.000	5.93159	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.30276	0.30276	0.000	1.77222	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.20590	0.20590	0.001	4.15386	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.14567	0.14567	0.000	8.28081	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.24953	0.24953	0.000	2.85087	60.00000	Averaged
30 Naphthalene	0.79792	0.83170	0.83170	0.000	4.23406	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.21801	0.21801	0.000	-0.30655	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51176	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.13489	0.13489	0.001	6.77038	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.20148	0.20148	0.001	0.96147	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.55976	0.55976	0.000	16.25394	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.47100	0.53047	0.53047	0.000	12.62514	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.16157	0.12441	0.12441	0.050	-22.99690	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.47908	0.48878	0.48878	0.000	2.02564	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.27294	0.27425	0.27425	0.001	0.48093	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.29067	0.30912	0.30912	0.000	6.34737	60.00000	Averaged	
40	2-Chloronaphthalene	0.89832	0.89821	0.89821	0.000	-0.01212	60.00000	Averaged	
42	o-Nitroaniline	0.30732	0.29883	0.29883	0.000	-2.76487	60.00000	Averaged	
41	m-Nitroaniline	0.22497	0.22544	0.22544	0.000	0.20968	60.00000	Averaged	
43	Dimethylphthalate	1.02610	1.07233	1.07233	0.000	4.50566	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.24475	0.24571	0.24571	0.000	0.39287	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.30862	0.32387	0.32387	0.000	4.94261	60.00000	Averaged	
45	Acenaphthylene	1.44438	1.60997	1.60997	0.000	11.46448	60.00000	Averaged	
47	Acenaphthene	0.90151	0.96315	0.96315	0.001	6.83729	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	35.88405	40.00000	0.06990	0.050	-10.28987	60.00000	Linear	spcc
49	Dibenzofuran	1.21689	1.24464	1.24464	0.000	2.28092	60.00000	Averaged	
51	Diethylphthalate	1.03335	1.08103	1.08103	0.000	4.61479	60.00000	Averaged	
52	4-Nitrophenol	37.16907	40.00000	0.15052	0.050	-7.07733	60.00000	Linear	spcc
53	Fluorene	0.99879	1.09503	1.09503	0.000	9.63571	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.47192	0.49481	0.49481	0.000	4.84948	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	44.79678	40.00000	0.10162	0.000	11.99194	60.00000	Linear	
56	p-Nitroaniline	37.18126	40.00000	0.19210	0.000	-7.04684	60.00000	Linear	
133	Diphenylamine	0.48213	0.48382	0.48382	0.001	0.34977	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.61327	0.61966	0.61966	0.000	1.04277	60.00000	Averaged	
61	4-Bromophenylphenylether	0.15784	0.15705	0.15705	0.000	-0.50023	60.00000	Averaged	
63	Hexachlorobenzene	0.16533	0.16268	0.16268	0.000	-1.60406	60.00000	Averaged	
65	Pentachlorophenol	41.23337	40.00000	0.08933	0.001	3.08343	20.00000	Linear	ccc
206	n-Octadecane	0.44173	0.45929	0.45929	0.000	3.97491	60.00000	Averaged	
68	Phenanthrene	0.82721	0.88585	0.88585	0.000	7.08867	60.00000	Averaged	
69	Anthracene	0.82682	0.90991	0.90991	0.000	10.04830	60.00000	Averaged	
72	Di-n-butylphthalate	0.94954	1.02135	1.02135	0.000	7.56331	60.00000	Averaged	
76	Fluoranthene	0.79242	0.90654	0.90654	0.001	14.40110	20.00000	Averaged	ccc
79	Pyrene	1.10021	1.20816	1.20816	0.000	9.81213	60.00000	Averaged	
85	Butylbenzylphthalate	0.50351	0.54090	0.54090	0.000	7.42706	60.00000	Averaged	
89	Benzo(a)anthracene	0.86301	0.92157	0.92157	0.000	6.78546	60.00000	Averaged	
92	Chrysene	0.82690	0.90169	0.90169	0.000	9.04505	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	41.60196	40.00000	0.72185	0.000	4.00491	60.00000	Wt Linear	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.35676	1.35676	0.001	6.72426	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.99154	0.99154	0.000	12.02912	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	1.01364	1.01364	0.000	15.17242	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.88080	0.88080	0.001	15.21790	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	40.05227	40.00000	0.72891	0.000	0.13069	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	37.95723	40.00000	0.56106	0.000	-5.10692	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.61594	0.61594	0.000	5.46367	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17081	0.17081	0.000	0.89311	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
	143 Dinoseb	37.88463	40.00000	0.11675	0.000	-5.28842	60.00000	Linear	
	173 Carbazole	0.65449	0.70032	0.70032	0.000	7.00193	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.14364	0.14364	0.000	12.83157	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.57593	0.57593	0.000	4.25434	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.90823	0.90823	0.000	0.92871	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.11262	1.11262	0.000	-1.00903	60.00000	Averaged	
	26 Phthalic anhydride	71.32284	40.00000	0.14710	0.000	78.30709	60.00000	Linear	<-
	179 Dibenzo(a,e)pyrene	23.04060	40.00000	0.15052	0.000	-42.39851	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17485	0.17485	0.000	-4.87689	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.75383	0.75383	0.000	6.12038	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.25405	40.00000	0.11920	0.000	-4.36487	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.29168	0.29168	0.000	3.50642	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	1.00259	1.00259	0.000	13.59635	60.00000	Averaged	

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Data file : /chem/MSD6.i/s110909.b/s6k0937.d
Lab Smp Id: WBN091106-09.1 Client Smp ID: MEGAICV
Inj Date : 10-NOV-2009 20:29
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091106-09.1|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 10:50 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	267857	40.0000	
* 29 Naphthalene-d8	136	6.116	6.116	(1.000)	1007489	40.0000	
* 46 Acenaphthene-d10	164	7.986	7.986	(1.000)	511035	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	891521	40.0000	
* 91 Chrysene-d12	240	12.618	12.618	(1.000)	688764	40.0000	
* 98 Perylene-d12	264	14.955	14.955	(1.000)	524055	40.0000	
$ 3 2-Fluorophenol	112	3.646	3.646	(0.754)	277141	40.0000	41.3
$ 5 Phenol-d5	99	4.431	4.431	(0.917)	332800	40.0000	39.3
$ 20 Nitrobenzene-d5	82	5.371	5.371	(0.878)	301256	40.0000	42.3
$ 39 2-Fluorobiphenyl	172	7.242	7.242	(0.907)	552805	40.0000	42.0
$ 60 2,4,6-Tribromophenol	329	8.834	8.834	(1.106)	66156	40.0000	44.4
$ 81 p-Terphenyl-d14	244	11.306	11.306	(0.896)	498384	40.0000	44.9
1 N-Methyl-N-nitrosomethylamine	74	2.663	2.663	(0.551)	171645	40.0000	37.6
2 Pyridine	79	2.701	2.701	(0.559)	206635	40.0000	36.4
4 Aniline	66	4.518	4.518	(0.935)	139099	40.0000	39.4
6 Phenol	94	4.444	4.444	(0.919)	330773	40.0000	38.8
7 bis(2-Chloroethyl) ether	63	4.559	4.559	(0.943)	216794	40.0000	37.6
8 2-Chlorophenol	128	4.633	4.633	(0.958)	272604	40.0000	39.9
203 n-Decane	43	4.643	4.643	(0.960)	386128	40.0000	40.5
9 1,3-Dichlorobenzene	146	4.783	4.783	(0.989)	320531	40.0000	40.7
11 1,4-Dichlorobenzene	146	4.852	4.852	(1.004)	318420	40.0000	39.9
13 1,2-Dichlorobenzene	146	5.002	5.002	(1.035)	301561	40.0000	40.5
14 bis(2-Chloroisopropyl)ether	45	5.068	5.068	(1.048)	519933	40.0000	40.4
12 Benzyl alcohol	108	4.941	4.941	(1.022)	174307	40.0000	41.0
15 o-Cresol	107	5.025	5.025	(1.040)	224459	40.0000	40.3
18 m,p-Cresols	107	5.180	5.180	(1.072)	283022	40.0000	40.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.206	5.206	(1.077)	185368	40.0000	39.1
19 Hexachloroethane	117	5.338	5.338	(1.104)	119599	40.0000	38.7
21 Nitrobenzene	77	5.392	5.392	(0.882)	301811	40.0000	42.0
22 Isophorone	82	5.626	5.626	(0.920)	528272	40.0000	41.5
23 2-Nitrophenol	139	5.708	5.708	(0.933)	137410	40.0000	41.5
24 2,4-Dimethylphenol	122	5.718	5.718	(0.935)	232609	40.0000	42.4
25 bis(2-Chloroethoxy)methane	93	5.825	5.825	(0.952)	305032	40.0000	40.7
26 2,4-Dichlorophenol	162	5.950	5.950	(0.973)	207439	40.0000	41.7
27 Benzoic acid	105	5.812	5.812	(0.950)	146760	40.0000	43.3(H)
28 1,2,4-Trichlorobenzene	180	6.047	6.047	(0.989)	251400	40.0000	41.1
30 Naphthalene	128	6.138	6.138	(1.004)	837929	40.0000	41.7
204 alpha-Terpineol	59	6.123	6.123	(1.001)	219641	40.0000	39.9
31 4-Chloroaniline	127	6.172	6.172	(1.009)	267452	40.0000	41.4
32 Hexachlorobutadiene	225	6.251	6.251	(1.022)	135904	40.0000	42.7
33 4-Chloro-3-methylphenol	107	6.653	6.653	(1.088)	202993	40.0000	40.4
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	563953	40.0000	46.5
35 1-Methylnaphthalene	142	6.969	6.969	(1.140)	534441	40.0000	45.0
36 Hexachlorocyclopentadiene	237	7.020	7.020	(0.879)	63579	40.0000	30.8
205 2,3-Dichloroaniline	161	7.155	7.155	(0.896)	249785	40.0000	40.8
37 2,4,6-Trichlorophenol	196	7.147	7.147	(0.895)	140152	40.0000	40.2
38 2,4,5-Trichlorophenol	196	7.183	7.183	(0.899)	157970	40.0000	42.5
40 2-Chloronaphthalene	162	7.384	7.384	(0.925)	459019	40.0000	40.0
42 o-Nitroaniline	65	7.479	7.479	(0.936)	152711	40.0000	38.9
41 m-Nitroaniline	138	7.922	7.922	(0.992)	115209	40.0000	40.1
43 Dimethylphthalate	163	7.670	7.670	(0.960)	548000	40.0000	41.8
44 2,6-Dinitrotoluene	165	7.739	7.739	(0.969)	125566	40.0000	40.2
50 2,4-Dinitrotoluene	165	8.172	8.172	(1.023)	165511	40.0000	42.0
45 Acenaphthylene	152	7.835	7.835	(0.981)	822752	40.0000	44.6
47 Acenaphthene	154	8.024	8.024	(1.005)	492203	40.0000	42.7
48 2,4-Dinitrophenol	184	8.029	8.029	(1.005)	35722	40.0000	35.9
49 Dibenzofuran	168	8.205	8.205	(1.027)	636057	40.0000	40.9
51 Diethylphthalate	149	8.424	8.424	(1.055)	552446	40.0000	41.8
52 4-Nitrophenol	139	8.070	8.070	(1.011)	76920	40.0000	37.2
53 Fluorene	166	8.577	8.577	(1.074)	559601	40.0000	43.8
54 4-Chlorophenylphenylether	204	8.564	8.564	(1.072)	252864	40.0000	41.9
55 2-Methyl-4,6-dinitrophenol	198	8.613	8.613	(0.897)	90597	40.0000	44.8
56 p-Nitroaniline	138	8.582	8.582	(1.075)	98168	40.0000	37.2
133 Diphenylamine	169	8.689	8.689	(0.905)	431336	40.0000	40.1
58 1,2-Diphenylhydrazine	77	8.738	8.738	(0.910)	552443	40.0000	40.4
61 4-Bromophenylphenylether	248	9.094	9.094	(0.947)	140012	40.0000	39.8
63 Hexachlorobenzene	284	9.173	9.173	(0.956)	145031	40.0000	39.4
65 Pentachlorophenol	266	9.375	9.375	(0.977)	79644	40.0000	41.2
206 n-Octadecane	57	9.431	9.431	(0.982)	409467	40.0000	41.6
68 Phenanthrene	178	9.624	9.624	(1.003)	789756	40.0000	42.8
69 Anthracene	178	9.680	9.680	(1.008)	811200	40.0000	44.0
72 Di-n-butylphthalate	149	10.190	10.190	(1.062)	910557	40.0000	43.0
76 Fluoranthene	202	10.914	10.914	(1.137)	808196	40.0000	45.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	11.166	11.166	(0.885)	832137	40.0000	43.9
85 Butylbenzylphthalate	149	11.841	11.841	(0.938)	372553	40.0000	43.0
89 Benzo(a)anthracene	228	12.598	12.598	(0.998)	634741	40.0000	42.7
92 Chrysene	228	12.654	12.654	(1.003)	621053	40.0000	43.6
93 bis(2-Ethylhexyl)phthalate	149	12.570	12.570	(0.996)	497186	40.0000	41.6
94 Di-n-octylphthalate	149	13.561	13.561	(0.907)	711015	40.0000	42.7
95 Benzo(b)fluoranthene	252	14.275	14.275	(0.954)	519622	40.0000	44.8
96 Benzo(k)fluoranthene	252	14.326	14.326	(0.958)	531203	40.0000	46.1
97 Benzo(a)pyrene	252	14.853	14.853	(0.993)	461589	40.0000	46.1
99 Indeno(1,2,3-cd)pyrene	276	16.945	16.945	(1.133)	381990	40.0000	40.0
100 Dibenzo(a,h)anthracene	278	16.978	16.978	(1.135)	294025	40.0000	38.0
101 Benzo(ghi)perylene	276	17.460	17.460	(1.167)	322785	40.0000	42.2
126 m-Dinitrobenzene	168	7.708	7.708	(0.965)	87288	40.0000	40.4
130 2,3,4,6-Tetrachlorophenol	232	8.325	8.325	(1.042)	119161	40.0000	42.6
143 Dinoseb	211	9.561	9.561	(0.996)	104085	40.0000	37.9
173 Carbazole	167	9.841	9.841	(1.025)	624352	40.0000	42.8
184 p-Benzoquinone	54	4.085	4.085	(0.845)	38475	40.0000	45.1
192 Methoxychlor	227	12.468	12.468	(0.988)	396683	40.0000	41.7
211 p-Toluidine	106	5.252	5.252	(1.086)	243276	40.0000	40.4
210 m-Toluidine	106	5.285	5.285	(1.093)	298023	40.0000	39.6
26 Phthalic anhydride	104	6.911	6.911	(1.130)	148201	40.0000	71.3
179 Dibenzo(a,e)pyrene	302	21.182	21.182	(1.416)	78881	40.0000	23.0
214 1,4-Dinitrobenzene	75	7.624	7.624	(0.955)	89355	40.0000	38.0
215 2-Ethoxyethanol	59	2.454	2.454	(0.508)	201919	40.0000	42.4
216 Methylenebis(2-chloroaniline)	231	12.539	12.539	(0.994)	82098	40.0000	38.2
M 225 Trichlorophenols	196				298122	80.0000	82.8
M 226 Tetrachlorophenols	232				119161	40.0000	42.6
M 227 Benzo(b,k)fluoranthene	252				1050825	80.0000	90.9

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Date : 10-NOV-2009 20:29
Client ID: MECAICV
Sample Info: IWBN091106-09.1|40 PPM|1|SVMF1|1|MECAICV
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: JMB3
Column diameter: 0.20

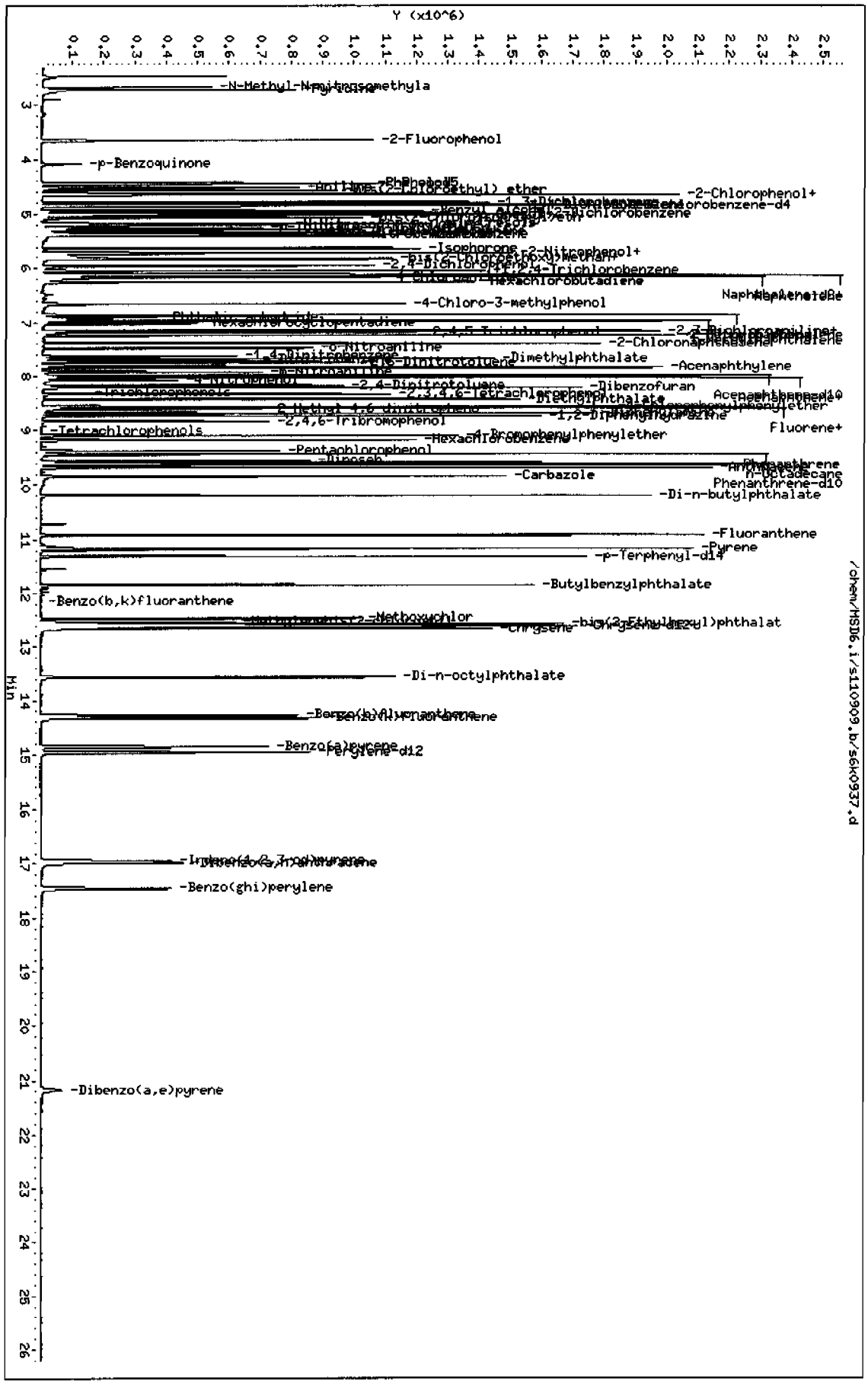

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 21:07
Lab File ID: s6k0938.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091016-08.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.67526	0.67526	0.000	-21.59733	60.00000	Averaged
16 Acetophenone	1.16908	1.08481	1.08481	0.000	-7.20809	60.00000	Averaged
189 Caprolactam	0.07388	0.08118	0.08118	0.000	9.87786	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.15865	1.15865	0.000	-3.55099	60.00000	Averaged
207 Atrazine	0.04063	0.03738	0.03738	0.000	-8.01727	60.00000	Averaged
77 Benzidine	0.39304	0.35886	0.35886	0.000	-8.69608	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.30132	0.30132	0.000	6.65684	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.45837	0.45837	0.000	25.21672	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.26059	0.26059	0.000	34.40927	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.97594	0.97594	0.000	21.14390	60.00000	Averaged
105 2-Picoline	1.30872	1.36092	1.36092	0.000	3.98846	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.53755	0.53755	0.000	5.18772	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.52223	0.52223	0.000	-1.19058	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.51026	0.51026	0.000	2.97098	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.73760	0.73760	0.000	13.18337	60.00000	Averaged
110 Pentachloroethane	0.31681	0.42390	0.42390	0.000	33.80401	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.46325	0.46325	0.000	-2.70540	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.65676	0.65676	0.000	-3.32751	60.00000	Averaged
114 o-Toluidine	1.65281	1.64899	1.64899	0.000	-0.23102	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.14180	0.14180	0.000	0.52679	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.87204	0.87204	0.000	1.93819	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20008	0.20008	0.000	-3.28259	60.00000	Averaged
119 Hexachloropropene	0.10269	0.14537	0.14537	0.000	41.57055	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.23182	0.23182	0.000	0.99155	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.21749	0.21749	0.000	3.54470	60.00000	Averaged
122 Safrole	0.18653	0.20933	0.20933	0.000	12.22661	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.42512	0.42512	0.000	0.45545	60.00000	Averaged
124 Isosafrole	0.33959	0.43257	0.43257	0.000	27.38086	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.30375	0.30375	0.000	-0.97466	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36394	0.36394	0.000	-0.16566	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.91190	0.91190	0.000	0.49410	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.91865	0.91865	0.000	-6.27177	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.28996	0.28996	0.000	3.92480	60.00000	Averaged
136 1,3,5-Trinitrobenzene	46.05690	40.00000	0.13757	0.000	15.14226	60.00000	Linear
137 Phenacetin	0.26240	0.25991	0.25991	0.000	-0.94903	60.00000	Averaged
138 Diallate	0.24056	0.23148	0.23148	0.000	-3.77545	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 21:07
Lab File ID: s6k0938.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091016-08.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.58994	0.58994	0.000	10.14239	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.06213	0.06213	0.000	0.34079	60.00000	Averaged
142 Pronamide	0.26319	0.26234	0.26234	0.000	-0.32101	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02580	0.02580	0.000	9.82299	60.00000	Averaged
147 Methapyrilene	0.38600	0.39422	0.39422	0.000	2.12820	60.00000	Averaged
148 Isodrin	0.09631	0.08838	0.08838	0.000	-8.22821	60.00000	Averaged
149 Aramite	0.04420	0.04155	0.04155	0.000	-5.99495	60.00000	Averaged
150 Kepone	0.06173	0.05889	0.05889	0.000	-4.59530	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.33079	0.33079	0.000	4.23929	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.29321	0.29321	0.000	0.65640	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.57778	0.57778	0.000	9.50435	60.00000	Averaged
155 2-Acetylaminofluorene	41.44131	40.00000	0.34022	0.000	3.60328	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.41447	0.41447	0.000	-13.48259	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.35869	0.35869	0.000	-2.93887	60.00000	Averaged
212 Cis Diallate	0.25295	0.25705	0.25705	0.000	1.62146	60.00000	Averaged
213 Trans Diallate	0.28301	0.27233	0.27233	0.000	-3.77545	60.00000	Averaged

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Data file : /chem/MSD6.i/s110909.b/s6k0938.d
Lab Smp Id: WBN091016-08.1 Client Smp ID: AP12ICV
Inj Date : 10-NOV-2009 21:07
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091016-08.1|40 PPM|1|SVMF|1|AP12ICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 09:25 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	282437	40.0000	
* 29 Naphthalene-d8	136	6.113	6.113	(1.000)	974498	40.0000	
* 46 Acenaphthene-d10	164	7.983	7.983	(1.000)	519475	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	914999	40.0000	
* 91 Chrysene-d12	240	12.613	12.613	(1.000)	718441	40.0000	
* 98 Perylene-d12	264	14.950	14.950	(1.000)	524113	40.0000	
209 Benzaldehyde	77	4.428	4.428	(0.916)	190719	40.0000	31.4
16 Acetophenone	105	5.211	5.211	(1.078)	306390	40.0000	37.1
189 Caprolactam	113	6.531	6.531	(1.068)	79108	40.0000	44.0
208 1,1'-Biphenyl	154	7.354	7.354	(0.921)	601890	40.0000	38.6
207 Atrazine	173	9.249	9.249	(0.964)	34200	40.0000	36.8
77 Benzidine	184	11.038	11.038	(0.875)	257818	40.0000	36.5
90 3,3'-Dichlorobenzidine	252	12.539	12.539	(0.994)	216482	40.0000	42.7
102 1,4-Dioxane	88	2.456	2.456	(0.508)	129460	40.0000	50.1
103 Methyl methacrylate	100	2.454	2.454	(0.508)	73600	40.0000	53.8
104 Ethyl methacrylate	69	2.971	2.971	(0.615)	275642	40.0000	48.4
105 2-Picoline	93	3.228	3.228	(0.668)	384374	40.0000	41.6
106 N-Nitrosomethylethylamine	88	3.297	3.297	(0.682)	151823	40.0000	42.1
107 Methyl methanesulfonate	80	3.521	3.521	(0.728)	147497	40.0000	39.5
108 N-Nitrosodiethylamine	102	3.858	3.858	(0.798)	144115	40.0000	41.2
109 Ethyl Methanesulfonate	79	4.097	4.097	(0.848)	208326	40.0000	45.3
110 Pentachloroethane	167	4.574	4.574	(0.946)	119725	40.0000	53.5
111 N-Nitrosopyrrolidine	100	5.190	5.190	(1.074)	130840	40.0000	38.9(Q)
113 N-Nitrosomorpholine	56	5.223	5.223	(1.081)	185493	40.0000	38.7
114 o-Toluidine	106	5.249	5.249	(1.086)	465737	40.0000	39.9
115 N-Nitrosopiperidine	114	5.539	5.539	(0.906)	138180	40.0000	40.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.962	5.962	(0.975)	849798	40.0000	40.8
118 2,6-Dichlorophenol	162	6.184	6.184	(1.012)	194979	40.0000	38.7
119 Hexachloropropene	213	6.222	6.222	(1.018)	141665	40.0000	56.6
120 p-Phenylenediamine	108	6.541	6.541	(1.070)	225910	40.0000	40.4
121 N-Nitrosodi-n-butylamine	84	6.515	6.515	(1.066)	211942	40.0000	41.4(T)
122 Safrole	162	6.750	6.750	(1.104)	203993	40.0000	44.9
123 1,2,4,5-Tetrachlorobenzene	216	7.035	7.035	(0.881)	220840	40.0000	40.2
124 Isosafrole	162	7.305	7.305	(0.915)	224711	40.0000	51.0
125 1,4-Naphthoquinone	158	7.565	7.565	(0.948)	157789	40.0000	39.6
127 Pentachlorobenzene	250	8.156	8.156	(1.022)	189057	40.0000	39.9
128 1-Naphthylamine	143	8.284	8.284	(1.038)	473709	40.0000	40.2
129 2-Naphthylamine	143	8.368	8.368	(1.048)	477216	40.0000	37.5
131 5-Nitro-o-toluidine	152	8.574	8.574	(1.074)	150626	40.0000	41.6
136 1,3,5-Trinitrobenzene	75	8.946	8.946	(0.932)	125876	40.0000	46.0
137 Phenacetin	108	9.010	9.010	(0.939)	237813	40.0000	39.6(Q)
138 Diallate	86	8.990	8.990	(0.937)	211803	40.0000	38.5
140 4-Aminobiphenyl	169	9.374	9.374	(0.977)	539794	40.0000	44.0
141 Pentachloronitrobenzene	237	9.392	9.392	(0.978)	56852	40.0000	40.1(Q)
142 Pronamide	173	9.423	9.423	(0.982)	240044	40.0000	39.9
146 4-Nitroquinoline-1-oxide	101	10.445	10.445	(1.088)	23608	40.0000	43.9
147 Methapyrilene	58	10.518	10.518	(1.096)	360709	40.0000	40.8
148 Isodrin	193	10.750	10.750	(1.120)	80870	40.0000	36.7
149 Aramite	185	11.265	11.265	(1.174)	38019	40.0000	37.6
150 Kepone	272	11.933	11.933	(1.243)	53886	40.0000	38.2
151 p-(Dimethylamino)azobenzene	120	11.456	11.456	(0.908)	237654	40.0000	41.7
152 Chlorobenzilate	251	11.499	11.499	(0.912)	210653	40.0000	40.3
153 3,3'-Dimethylbenzidine	212	11.838	11.838	(0.939)	415103	40.0000	43.8
155 2-Acetylaminofluorene	181	12.154	12.154	(0.964)	244425	40.0000	41.4
157 7,12Dimethylbenz(a)anthracene	256	14.251	14.251	(0.953)	217229	40.0000	34.6
158 3-Methylcholanthrene	268	15.477	15.477	(1.035)	187994	40.0000	38.8(Q)
212 Cis Diallate	86	9.092	9.092	(0.947)	35280	6.00000	6.1
213 Trans Diallate	86	8.990	8.990	(0.937)	211803	34.0000	32.7

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s110909.b/s6k0938.d
Date : 10-NOV-2009 21:07
Client ID: AP12ICV
Sample Info: IWBN091016-08.1140 PPM11ISVMF11AP12ICV
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: JHB3
Column diameter: 0.20

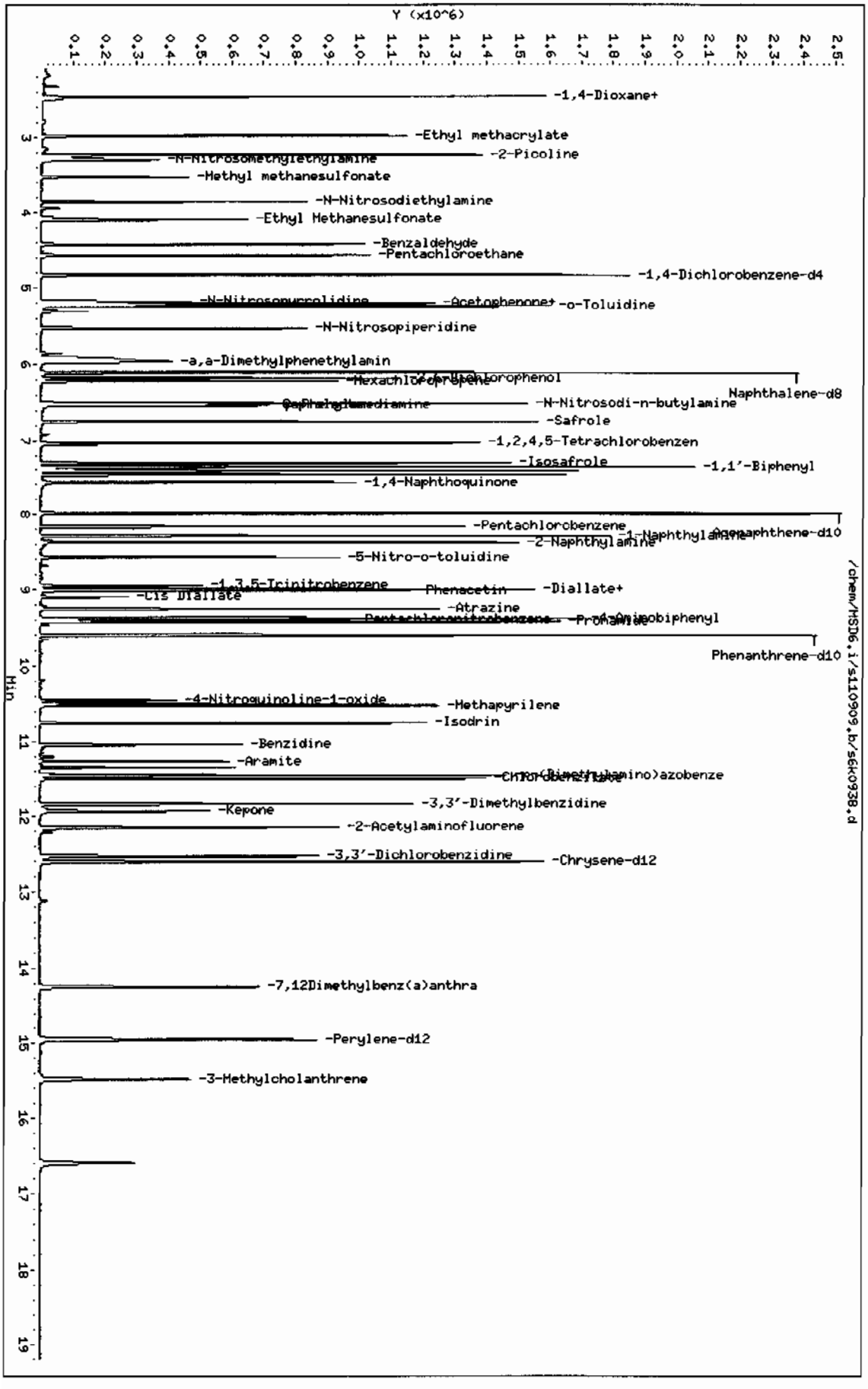

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.00169	0.97640	0.97640	0.000	-2.52518	60.00000	Averaged	
$ 5 Phenol-d5	1.26427	1.29785	1.29785	0.000	2.65649	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.28296	0.27597	0.27597	0.000	-2.46803	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	1.03083	1.03275	1.03275	0.000	0.18643	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.11675	0.13838	0.13838	0.000	18.52335	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.64507	0.61648	0.61648	0.000	-4.43189	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.68098	0.62406	0.62406	0.000	-8.35865	60.00000	Averaged	
2 Pyridine	0.84757	0.78760	0.78760	0.000	-7.07537	60.00000	Averaged	
4 Aniline	0.52752	0.49969	0.49969	0.000	-5.27527	60.00000	Averaged	
6 Phenol	1.27120	1.30773	1.30773	0.001	2.87379	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	0.86081	0.80899	0.80899	0.000	-6.01938	60.00000	Averaged	
8 2-Chlorophenol	1.02109	1.03419	1.03419	0.000	1.28243	60.00000	Averaged	
203 n-Decane	1.42254	1.23857	1.23857	0.000	-12.93249	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.17550	1.22643	1.22643	0.000	4.33317	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.19162	1.23193	1.23193	0.001	3.38265	20.00000	Averaged	ccc
13 1,2-Dichlorobenzene	1.11231	1.16356	1.16356	0.000	4.60749	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	1.92182	1.85138	1.85138	0.000	-3.66534	60.00000	Averaged	
12 Benzyl alcohol	0.63436	0.52905	0.52905	0.000	-16.60093	60.00000	Averaged	
15 o-Cresol	0.83139	0.84537	0.84537	0.000	1.68220	60.00000	Averaged	
18 m,p-Cresols	1.05346	1.06021	1.06021	0.000	0.64045	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.70865	0.74903	0.74903	0.050	5.69721	60.00000	Averaged	spcc
19 Hexachloroethane	0.46100	0.46476	0.46476	0.000	0.81558	60.00000	Averaged	
21 Nitrobenzene	0.28519	0.27599	0.27599	0.000	-3.22500	60.00000	Averaged	
22 Isophorone	0.50552	0.51153	0.51153	0.000	1.18903	60.00000	Averaged	
23 2-Nitrophenol	0.13154	0.14495	0.14495	0.001	10.19234	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	0.21795	0.23235	0.23235	0.000	6.60570	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.29749	0.29970	0.29970	0.000	0.74330	60.00000	Averaged	
26 2,4-Dichlorophenol	0.19769	0.21016	0.21016	0.001	6.31063	20.00000	Averaged	ccc
27 Benzoic acid	0.13453	0.15969	0.15969	0.000	18.70616	60.00000	Averaged	
28 1,2,4-Trichlorobenzene	0.24261	0.25766	0.25766	0.000	6.20012	60.00000	Averaged	
30 Naphthalene	0.79792	0.73723	0.73723	0.000	-7.60612	60.00000	Averaged	
204 alpha-Terpineol	0.21868	0.22273	0.22273	0.000	1.85067	60.00000	Averaged	
31 4-Chloroaniline	0.25646	0.25818	0.25818	0.000	0.67042	60.00000	Averaged	
32 Hexachlorobutadiene	0.12634	0.13413	0.13413	0.001	6.16552	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.19957	0.21492	0.21492	0.001	7.69256	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.48150	0.49831	0.49831	0.000	3.49055	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.47100	0.49228	0.49228	0.000	4.51626	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16157	0.18559	0.18559	0.050	14.86920	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.47908	0.47169	0.47169	0.000	-1.54125	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.27294	0.27929	0.27929	0.001	2.32726	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.29067	0.30745	0.30745	0.000	5.77340	60.00000	Averaged	
40 2-Chloronaphthalene	0.89832	0.90392	0.90392	0.000	0.62253	60.00000	Averaged	
42 o-Nitroaniline	0.30732	0.28764	0.28764	0.000	-6.40548	60.00000	Averaged	
41 m-Nitroaniline	0.22497	0.22802	0.22802	0.000	1.35665	60.00000	Averaged	
43 Dimethylphthalate	1.02610	1.02791	1.02791	0.000	0.17622	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.24475	0.24841	0.24841	0.000	1.49670	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.30862	0.31932	0.31932	0.000	3.46620	60.00000	Averaged	
45 Acenaphthylene	1.44438	1.46306	1.46306	0.000	1.29315	60.00000	Averaged	
47 Acenaphthene	0.90151	0.87235	0.87235	0.001	-3.23488	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	52.77220	40.00000	0.12511	0.050	31.93051	60.00000	Linear	spcc
49 Dibenzofuran	1.21689	1.25516	1.25516	0.000	3.14537	60.00000	Averaged	
51 Diethylphthalate	1.03335	1.03182	1.03182	0.000	-0.14758	60.00000	Averaged	
52 4-Nitrophenol	43.77804	40.00000	0.18380	0.050	9.44511	60.00000	Linear	spcc
53 Fluorene	0.99879	1.02927	1.02927	0.000	3.05138	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.47192	0.49607	0.49607	0.000	5.11798	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	43.39990	40.00000	0.09786	0.000	8.49974	60.00000	Linear	
56 p-Nitroaniline	42.19462	40.00000	0.22407	0.000	5.48655	60.00000	Linear	
133 Diphenylamine	0.48213	0.48587	0.48587	0.001	0.77589	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.61327	0.57988	0.57988	0.000	-5.44400	60.00000	Averaged	
61 4-Bromophenylphenylether	0.15784	0.16183	0.16183	0.000	2.53130	60.00000	Averaged	
63 Hexachlorobenzene	0.16533	0.16948	0.16948	0.000	2.51126	60.00000	Averaged	
65 Pentachlorophenol	44.52110	40.00000	0.09752	0.001	11.30274	20.00000	Linear	ccc
206 n-Octadecane	0.44173	0.43893	0.43893	0.000	-0.63476	60.00000	Averaged	
68 Phenanthrene	0.82721	0.82830	0.82830	0.000	0.13104	60.00000	Averaged	
69 Anthracene	0.82682	0.83156	0.83156	0.000	0.57339	60.00000	Averaged	
72 Di-n-butylphthalate	0.94954	0.98125	0.98125	0.000	3.33991	60.00000	Averaged	
76 Fluoranthene	0.79242	0.83105	0.83105	0.001	4.87486	20.00000	Averaged	ccc
79 Pyrene	1.10021	1.00753	1.00753	0.000	-8.42356	60.00000	Averaged	
85 Butylbenzylphthalate	0.50351	0.48002	0.48002	0.000	-4.66383	60.00000	Averaged	
89 Benzo(a)anthracene	0.86301	0.85166	0.85166	0.000	-1.31465	60.00000	Averaged	
92 Chrysene	0.82690	0.83255	0.83255	0.000	0.68349	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	39.45585	40.00000	0.68425	0.000	-1.36038	60.00000	Wt Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	1.27127	1.21644	1.21644	0.001	-4.31356	20.00000	Averaged	ccc
95 Benzo(b)fluoranthene	0.88507	0.86707	0.86707	0.000	-2.03373	60.00000	Averaged	
96 Benzo(k)fluoranthene	0.88011	0.86925	0.86925	0.000	-1.23353	60.00000	Averaged	
97 Benzo(a)pyrene	0.76447	0.81522	0.81522	0.001	6.63855	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	45.94450	40.00000	0.84494	0.000	14.86125	60.00000	Linear	
100 Dibenzo(a,h)anthracene	46.34947	40.00000	0.69463	0.000	15.87367	60.00000	Linear	
101 Benzo(ghi)perylene	0.58403	0.70848	0.70848	0.000	21.30910	60.00000	Averaged	
126 m-Dinitrobenzene	0.16929	0.17634	0.17634	0.000	4.16283	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.21896	0.24655	0.24655	0.000	12.60018	60.00000	Averaged	
143 Dinoseb	41.98772	40.00000	0.13187	0.000	4.96931	60.00000	Linear	
173 Carbazole	0.65449	0.65896	0.65896	0.000	0.68183	60.00000	Averaged	
184 p-Benzoquinone	0.12730	0.04944	0.04944	0.000	-61.16573	60.00000	Averaged	<-
192 Methoxychlor	0.55243	0.52649	0.52649	0.000	-4.69610	60.00000	Averaged	
211 p-Toluidine	0.89987	0.91477	0.91477	0.000	1.65560	60.00000	Averaged	
210 m-Toluidine	1.12396	1.05029	1.05029	0.000	-6.55469	60.00000	Averaged	
26 Phthalic anhydride	19.49077	40.00000	0.03042	0.000	-51.27308	60.00000	Linear	
214 1,4-Dinitrobenzene	0.18382	0.18139	0.18139	0.000	-1.31871	60.00000	Averaged	
215 2-Ethoxyethanol	0.71035	0.58527	0.58527	0.000	-17.60940	60.00000	Averaged	
216 Methylenebis(2-chloroanilin	41.87935	40.00000	0.13244	0.000	4.69836	60.00000	Linear	
M 225 Trichlorophenols	0.28180	0.29337	0.29337	0.000	4.10453	60.00000	Averaged	
M 226 Tetrachlorophenols	0.21896	0.24655	0.24655	0.000	12.60018	60.00000	Averaged	
M 227 Benzo(b,k)fluoranthene	0.88259	0.86816	0.86816	0.000	-1.63475	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610402.d
Lab Smp Id: WBN091106-05.2 Client Smp ID: MEGACVS
Inj Date : 04-DEC-2009 10:02
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091106-05.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	225677	40.0000	
* 29 Naphthalene-d8	136	5.993	5.993	(1.000)	911417	40.0000	
* 46 Acenaphthene-d10	164	7.858	7.858	(1.000)	476654	40.0000	
* 67 Phenanthrene-d10	188	9.469	9.469	(1.000)	854008	40.0000	
* 91 Chrysene-d12	240	12.463	12.463	(1.000)	749694	40.0000	
* 98 Perylene-d12	264	14.741	14.741	(1.000)	697713	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.590	(0.759)	220350	40.0000	39.0
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	292896	40.0000	41.1
$ 20 Nitrobenzene-d5	82	5.259	5.259	(0.878)	251528	40.0000	39.0
$ 39 2-Fluorobiphenyl	172	7.117	7.117	(0.906)	492266	40.0000	40.1
$ 60 2,4,6-Tribromophenol	329	8.709	8.709	(1.108)	65957	40.0000	47.4
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.897)	462170	40.0000	38.2
1 N-Methyl-N-nitrosomethylamine	74	2.665	2.665	(0.564)	140835	40.0000	36.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.706	2.706	(0.572)	177744	40.0000	37.2
4 Aniline	66	4.421	4.421	(0.935)	112769	40.0000	37.9
6 Phenol	94	4.365	4.365	(0.923)	295124	40.0000	41.1(Q)
7 bis(2-Chloroethyl) ether	63	4.459	4.459	(0.943)	182571	40.0000	37.6
8 2-Chlorophenol	128	4.535	4.535	(0.959)	233392	40.0000	40.5
203 n-Decane	43	4.541	4.541	(0.960)	279516	40.0000	34.8
9 1,3-Dichlorobenzene	146	4.678	4.678	(0.989)	276778	40.0000	41.7
11 1,4-Dichlorobenzene	146	4.744	4.744	(1.003)	278018	40.0000	41.4
13 1,2-Dichlorobenzene	146	4.890	4.890	(1.034)	262588	40.0000	41.8
14 bis(2-Chloroisopropyl)ether	45	4.958	4.958	(1.048)	417814	40.0000	38.5
12 Benzyl alcohol	108	4.841	4.841	(1.024)	119395	40.0000	33.4
15 o-Cresol	107	4.928	4.928	(1.042)	190781	40.0000	40.7
18 m,p-Cresols	107	5.083	5.083	(1.075)	239264	40.0000	40.2
17 N-Nitrosodipropylamine	70	5.096	5.096	(1.078)	169038	40.0000	42.3
19 Hexachloroethane	117	5.221	5.221	(1.104)	104885	40.0000	40.3
21 Nitrobenzene	77	5.279	5.279	(0.881)	251545	40.0000	38.7
22 Isophorone	82	5.519	5.519	(0.921)	466214	40.0000	40.5
23 2-Nitrophenol	139	5.593	5.593	(0.933)	132112	40.0000	44.1
24 2,4-Dimethylphenol	122	5.613	5.613	(0.937)	211767	40.0000	42.6
25 bis(2-Chloroethoxy)methane	93	5.710	5.710	(0.953)	273155	40.0000	40.3
26 2,4-Dichlorophenol	162	5.840	5.840	(0.974)	191544	40.0000	42.5
27 Benzoic acid	105	5.725	5.725	(0.955)	145548	40.0000	47.5
28 1,2,4-Trichlorobenzene	180	5.924	5.924	(0.989)	234833	40.0000	42.5
30 Naphthalene	128	6.016	6.016	(1.004)	671920	40.0000	37.0
204 alpha-Terpineol	59	6.006	6.006	(1.002)	202996	40.0000	40.7
31 4-Chloroaniline	127	6.057	6.057	(1.011)	235307	40.0000	40.3
32 Hexachlorobutadiene	225	6.125	6.125	(1.022)	122248	40.0000	42.5
33 4-Chloro-3-methylphenol	107	6.551	6.551	(1.093)	195879	40.0000	43.1
34 2-Methylnaphthalene	142	6.737	6.737	(1.124)	454164	40.0000	41.4
35 1-Methylnaphthalene	142	6.844	6.844	(1.142)	448668	40.0000	41.8
36 Hexachlorocyclopentadiene	237	6.895	6.895	(0.877)	88463	40.0000	45.9
205 2,3-Dichloroaniline	161	7.033	7.033	(0.895)	224835	40.0000	39.4
37 2,4,6-Trichlorophenol	196	7.030	7.030	(0.895)	133125	40.0000	40.9
38 2,4,5-Trichlorophenol	196	7.073	7.073	(0.900)	146547	40.0000	42.3
40 2-Chloronaphthalene	162	7.257	7.257	(0.923)	430855	40.0000	40.2
42 o-Nitroaniline	65	7.361	7.361	(0.937)	137104	40.0000	37.4
41 m-Nitroaniline	138	7.807	7.807	(0.994)	108688	40.0000	40.5
43 Dimethylphthalate	163	7.555	7.555	(0.961)	489957	40.0000	40.1
44 2,6-Dinitrotoluene	165	7.621	7.621	(0.970)	118406	40.0000	40.6
50 2,4-Dinitrotoluene	165	8.057	8.057	(1.025)	152204	40.0000	41.4
45 Acenaphthylene	152	7.708	7.708	(0.981)	697373	40.0000	40.5
47 Acenaphthene	154	7.894	7.894	(1.005)	415808	40.0000	38.7
48 2,4-Dinitrophenol	184	7.919	7.919	(1.008)	59635	40.0000	52.8
49 Dibenzofuran	168	8.077	8.077	(1.028)	598279	40.0000	41.2
51 Diethylphthalate	149	8.304	8.304	(1.057)	491822	40.0000	39.9
52 4-Nitrophenol	139	7.988	7.988	(1.017)	87611	40.0000	43.8
53 Fluorene	166	8.449	8.449	(1.075)	490606	40.0000	41.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.437	8.437	(1.074)	236456	40.0000	42.0
55 2-Methyl-4,6-dinitrophenol	198	8.498	8.498	(0.897)	83570	40.0000	43.4
56 p-Nitroaniline	138	8.470	8.470	(1.078)	106806	40.0000	42.2
133 Diphenylamine	169	8.564	8.564	(0.904)	414941	40.0000	40.3
58 1,2-Diphenylhydrazine	77	8.610	8.610	(0.909)	495224	40.0000	37.8
61 4-Bromophenylphenylether	248	8.967	8.967	(0.947)	138207	40.0000	41.0
63 Hexachlorobenzene	284	9.043	9.043	(0.955)	144739	40.0000	41.0
65 Pentachlorophenol	266	9.252	9.252	(0.977)	83287	40.0000	44.5
206 n-Octadecane	57	9.308	9.308	(0.983)	374848	40.0000	39.7
68 Phenanthrene	178	9.497	9.497	(1.003)	707373	40.0000	40.0
69 Anthracene	178	9.550	9.550	(1.009)	710163	40.0000	40.2
72 Di-n-butylphthalate	149	10.065	10.065	(1.063)	837995	40.0000	41.3
76 Fluoranthene	202	10.783	10.783	(1.139)	709722	40.0000	41.9
79 Pyrene	202	11.036	11.036	(0.886)	755339	40.0000	36.6
85 Butylbenzylphthalate	149	11.708	11.708	(0.939)	359870	40.0000	38.1
89 Benzo(a)anthracene	228	12.440	12.440	(0.998)	638485	40.0000	39.5
92 Chrysene	228	12.496	12.496	(1.003)	624158	40.0000	40.3
93 bis(2-Ethylhexyl)phthalate	149	12.419	12.419	(0.997)	512975	40.0000	39.4
94 Di-n-octylphthalate	149	13.380	13.380	(0.908)	848723	40.0000	38.3
95 Benzo(b)fluoranthene	252	14.076	14.076	(0.955)	604969	40.0000	39.2
96 Benzo(k)fluoranthene	252	14.124	14.124	(0.958)	606487	40.0000	39.5
97 Benzo(a)pyrene	252	14.639	14.639	(0.993)	568787	40.0000	42.6
99 Indeno(1,2,3-cd)pyrene	276	16.695	16.695	(1.133)	589527	40.0000	45.9
100 Dibenzo(a,h)anthracene	278	16.728	16.728	(1.135)	484654	40.0000	46.3
101 Benzo(ghi)perylene	276	17.200	17.200	(1.167)	494315	40.0000	48.5
126 m-Dinitrobenzene	168	7.596	7.596	(0.967)	84054	40.0000	41.7
130 2,3,4,6-Tetrachlorophenol	232	8.205	8.205	(1.044)	117518	40.0000	45.0
143 Dinoseb	211	9.438	9.438	(0.997)	112614	40.0000	42.0
173 Carbazole	167	9.716	9.716	(1.026)	562755	40.0000	40.3
184 p-Benzoquinone	54	3.998	3.998	(0.845)	11157	40.0000	15.5
192 Methoxychlor	227	12.320	12.320	(0.989)	394706	40.0000	38.1
211 p-Toluidine	106	5.142	5.142	(1.087)	206443	40.0000	40.7
210 m-Toluidine	106	5.175	5.175	(1.094)	237026	40.0000	37.4
26 Phthalic anhydride	104	6.796	6.796	(1.134)	27729	40.0000	19.5
214 1,4-Dinitrobenzene	75	7.512	7.512	(0.956)	86461	40.0000	39.5
215 2-Ethoxyethanol	59	2.474	2.474	(0.523)	132081	40.0000	33.0
216 Methylenebis(2-chloroaniline)	231	12.389	12.389	(0.994)	99293	40.0000	41.9(Q)
M 225 Trichlorophenols	196				279672	80.0000	83.3
M 226 Tetrachlorophenols	232				117518	40.0000	45.0
M 227 Benzo(b,k)fluoranthene	252				1211456	80.0000	78.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120409.b/s610402.d
Date : 04-DEC-2009 10:02
Client ID: MEGACVS
Sample Info: IWBN091106-05,2|40 PPM|1|SVMF|1|MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

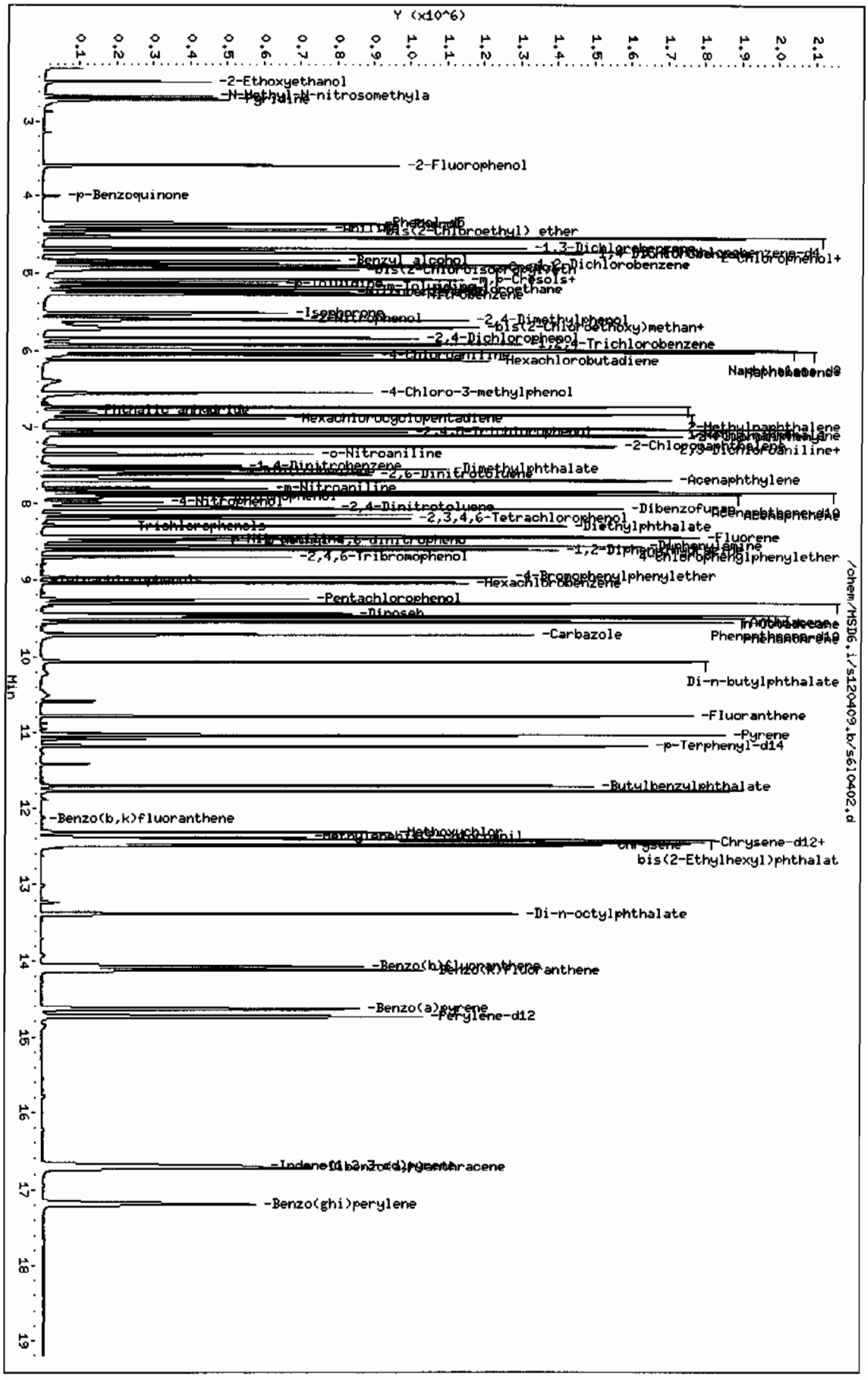

Page 1

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:30
Lab File ID: s610403.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.86384	0.86384	0.000	0.29732	60.00000	Averaged
16 Acetophenone	1.16908	1.14719	1.14719	0.000	-1.87213	60.00000	Averaged
189 Caprolactam	0.07388	0.08380	0.08380	0.000	13.42166	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.13540	1.13540	0.000	-5.48628	60.00000	Averaged
207 Atrazine	0.04063	0.03853	0.03853	0.000	-5.18077	60.00000	Averaged
77 Benzidine	0.39304	0.39359	0.39359	0.000	0.14164	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.29238	0.29238	0.000	3.49156	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.33379	0.33379	0.000	-8.81449	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.18464	0.18464	0.000	-4.76584	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.71781	0.71781	0.000	-10.89815	60.00000	Averaged
105 2-Picoline	1.30872	1.19166	1.19166	0.000	-8.94509	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.47088	0.47088	0.000	-7.85776	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.47460	0.47460	0.000	-10.20162	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.48508	0.48508	0.000	-2.10895	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.60114	0.60114	0.000	-7.75679	60.00000	Averaged
110 Pentachloroethane	0.31681	0.31032	0.31032	0.000	-2.04621	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.52389	0.52389	0.000	10.02928	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.66181	0.66181	0.000	-2.58439	60.00000	Averaged
114 o-Toluidine	1.65281	1.61706	1.61706	0.000	-2.16342	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.14180	0.14180	0.000	0.52663	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.80876	0.80876	0.000	-5.45843	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.21325	0.21325	0.000	3.08158	60.00000	Averaged
119 Hexachloropropene	0.10269	0.10480	0.10480	0.000	2.05585	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.22937	0.22937	0.000	-0.07586	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.20121	0.20121	0.000	-4.20314	60.00000	Averaged
122 Safrole	0.18653	0.19023	0.19023	0.000	1.98745	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.40304	0.40304	0.000	-4.76235	60.00000	Averaged
124 Isosafrole	0.33959	0.32781	0.32781	0.000	-3.46892	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.26662	0.26662	0.000	-13.07706	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36587	0.36587	0.000	0.36364	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.90808	0.90808	0.000	0.07313	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.98608	0.98608	0.000	0.60813	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.28585	0.28585	0.000	2.45340	60.00000	Averaged
136 1,3,5-Trinitrobenzene	36.62659	40.00000	0.10697	0.000	-8.43353	60.00000	Linear
137 Phenacetin	0.26240	0.25209	0.25209	0.000	-3.92721	60.00000	Averaged
138 Diallate	0.24056	0.22939	0.22939	0.000	-4.64205	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:30
Lab File ID: s610403.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.56434	0.56434	0.000	5.36241	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.05938	0.05938	0.000	-4.10423	60.00000	Averaged
142 Pronamide	0.26319	0.24970	0.24970	0.000	-5.12637	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02138	0.02138	0.000	-8.98875	60.00000	Averaged
147 Methapyrilene	0.38600	0.37363	0.37363	0.000	-3.20660	60.00000	Averaged
148 Isodrin	0.09631	0.09869	0.09869	0.000	2.47720	60.00000	Averaged
149 Aramite	0.04420	0.04722	0.04722	0.000	6.83133	60.00000	Averaged
150 Kepone	0.06173	0.07035	0.07035	0.000	13.96758	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.27305	0.27305	0.000	-13.95626	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.26334	0.26334	0.000	-9.59810	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.51809	0.51809	0.000	-1.80860	60.00000	Averaged
155 2-Acetylaminofluorene	41.91862	40.00000	0.34467	0.000	4.79655	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.42632	0.42632	0.000	-11.00999	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.39925	0.39925	0.000	8.03534	60.00000	Averaged
212 Cis Diallate	0.25295	0.23080	0.23080	0.000	-8.75707	60.00000	Averaged
213 Trans Diallate	0.28301	0.26988	0.26988	0.000	-4.64205	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610403.d
Lab Smp Id: WBN091201-03.2 Client Smp ID: APCVS
Inj Date : 04-DEC-2009 10:30
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091201-03.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.727	4.727	(1.000)	226850	40.0000	
* 29 Naphthalene-d8	136	5.990	5.990	(1.000)	838473	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.853	(1.000)	476434	40.0000	
* 67 Phenanthrene-d10	188	9.469	9.469	(1.000)	850357	40.0000	
* 91 Chrysene-d12	240	12.452	12.452	(1.000)	769541	40.0000	
* 98 Perylene-d12	264	14.733	14.733	(1.000)	694904	40.0000	
209 Benzaldehyde	77	4.332	4.332	(0.916)	195961	40.0000	40.1
16 Acetophenone	105	5.099	5.099	(1.079)	260240	40.0000	39.2
189 Caprolactam	113	6.424	6.424	(1.072)	70261	40.0000	45.4
208 1,1'-Biphenyl	154	7.226	7.226	(0.920)	540944	40.0000	37.8
207 Atrazine	173	9.132	9.132	(0.964)	32764	40.0000	37.9
77 Benzidine	184	10.913	10.913	(0.876)	302886	40.0000	40.0
90 3,3'-Dichlorobenzidine	252	12.384	12.384	(0.994)	224998	40.0000	41.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.477	2.477	(0.524)	75721	40.0000	36.5
103 Methyl methacrylate	100	2.472	2.472	(0.523)	41885	40.0000	38.1
104 Ethyl methacrylate	69	2.940	2.940	(0.622)	162835	40.0000	35.6
105 2-Picoline	93	3.185	3.185	(0.674)	270327	40.0000	36.4
106 N-Nitrosomethylethylamine	88	3.246	3.246	(0.687)	106819	40.0000	36.8
107 Methyl methanesulfonate	80	3.463	3.463	(0.733)	107664	40.0000	35.9
108 N-Nitrosodiethylamine	102	3.781	3.781	(0.800)	110041	40.0000	39.2
109 Ethyl Methanesulfonate	79	4.011	4.011	(0.848)	136368	40.0000	36.9
110 Pentachloroethane	167	4.472	4.472	(0.946)	70397	40.0000	39.2
111 N-Nitrosopyrrolidine	100	5.083	5.083	(1.075)	118844	40.0000	44.0(Q)
113 N-Nitrosomorpholine	56	5.116	5.116	(1.082)	150131	40.0000	39.0
114 o-Toluidine	106	5.137	5.137	(1.087)	366829	40.0000	39.1
115 N-Nitrosopiperidine	114	5.425	5.425	(0.906)	118892	40.0000	40.2
116 a,a-Dimethylphenethylamine	58	5.799	5.799	(0.968)	678125	40.0000	37.8
118 2,6-Dichlorophenol	162	6.067	6.067	(1.013)	178802	40.0000	41.2
119 Hexachloropropene	213	6.097	6.097	(1.018)	87869	40.0000	40.8
120 p-Phenylenediamine	108	6.431	6.431	(1.074)	192322	40.0000	40.0
121 N-Nitrosodi-n-butylamine	84	6.396	6.396	(1.068)	168713	40.0000	38.3(T)
122 Safrole	162	6.627	6.627	(1.106)	159505	40.0000	40.8
123 1,2,4,5-Tetrachlorobenzene	216	6.908	6.908	(0.880)	192022	40.0000	38.1
124 Isosafrole	162	7.180	7.180	(0.914)	156180	40.0000	38.6
125 1,4-Naphthoquinone	158	7.440	7.440	(0.947)	127029	40.0000	34.8
127 Pentachlorobenzene	250	8.029	8.029	(1.022)	174312	40.0000	40.1
128 1-Naphthylamine	143	8.159	8.159	(1.039)	432640	40.0000	40.0
129 2-Naphthylamine	143	8.243	8.243	(1.050)	469803	40.0000	40.2
131 5-Nitro-o-toluidine	152	8.452	8.452	(1.076)	136190	40.0000	41.0
136 1,3,5-Trinitrobenzene	75	8.842	8.842	(0.934)	90965	40.0000	36.6
137 Phenacetin	108	8.895	8.895	(0.939)	214367	40.0000	38.4(Q)
138 Diallate	86	8.862	8.862	(0.936)	195067	40.0000	38.1
140 4-Aminobiphenyl	169	9.249	9.249	(0.977)	479888	40.0000	42.1
141 Pentachloronitrobenzene	237	9.265	9.265	(0.978)	50495	40.0000	38.4(Q)
142 Pronamide	173	9.300	9.300	(0.982)	212331	40.0000	37.9
146 4-Nitroquinoline-1-oxide	101	10.322	10.322	(1.090)	18182	40.0000	36.4
147 Methapyrilene	58	10.391	10.391	(1.097)	317715	40.0000	38.7
148 Isodrin	193	10.615	10.615	(1.121)	83924	40.0000	41.0
149 Aramite	185	11.140	11.140	(1.177)	40154	40.0000	42.7
150 Kepone	272	11.787	11.787	(1.245)	59823	40.0000	45.6
151 p-(Dimethylamino)azobenzene	120	11.329	11.329	(0.910)	210123	40.0000	34.4
152 Chlorobenzilate	251	11.372	11.372	(0.913)	202649	40.0000	36.2
153 3,3'-Dimethylbenzidine	212	11.703	11.703	(0.940)	398693	40.0000	39.3
155 2-Acetylaminofluorene	181	12.017	12.017	(0.965)	265236	40.0000	41.9
157 7,12Dimethylbenz(a)anthracene	256	14.048	14.048	(0.953)	296248	40.0000	35.6
158 3-Methylcholanthrene	268	15.253	15.253	(1.035)	277437	40.0000	43.2(Q)
212 Cis Diallate	86	8.962	8.962	(0.946)	29439	6.00000	5.5
213 Trans Diallate	86	8.862	8.862	(0.936)	195067	34.0000	32.4

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120409.b/s610403.d
Date : 04-DEC-2009 10:30
Client ID: APCVS
Sample Info: IWBN091201-03,2140 PPM|1|SVHF|1|APCVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

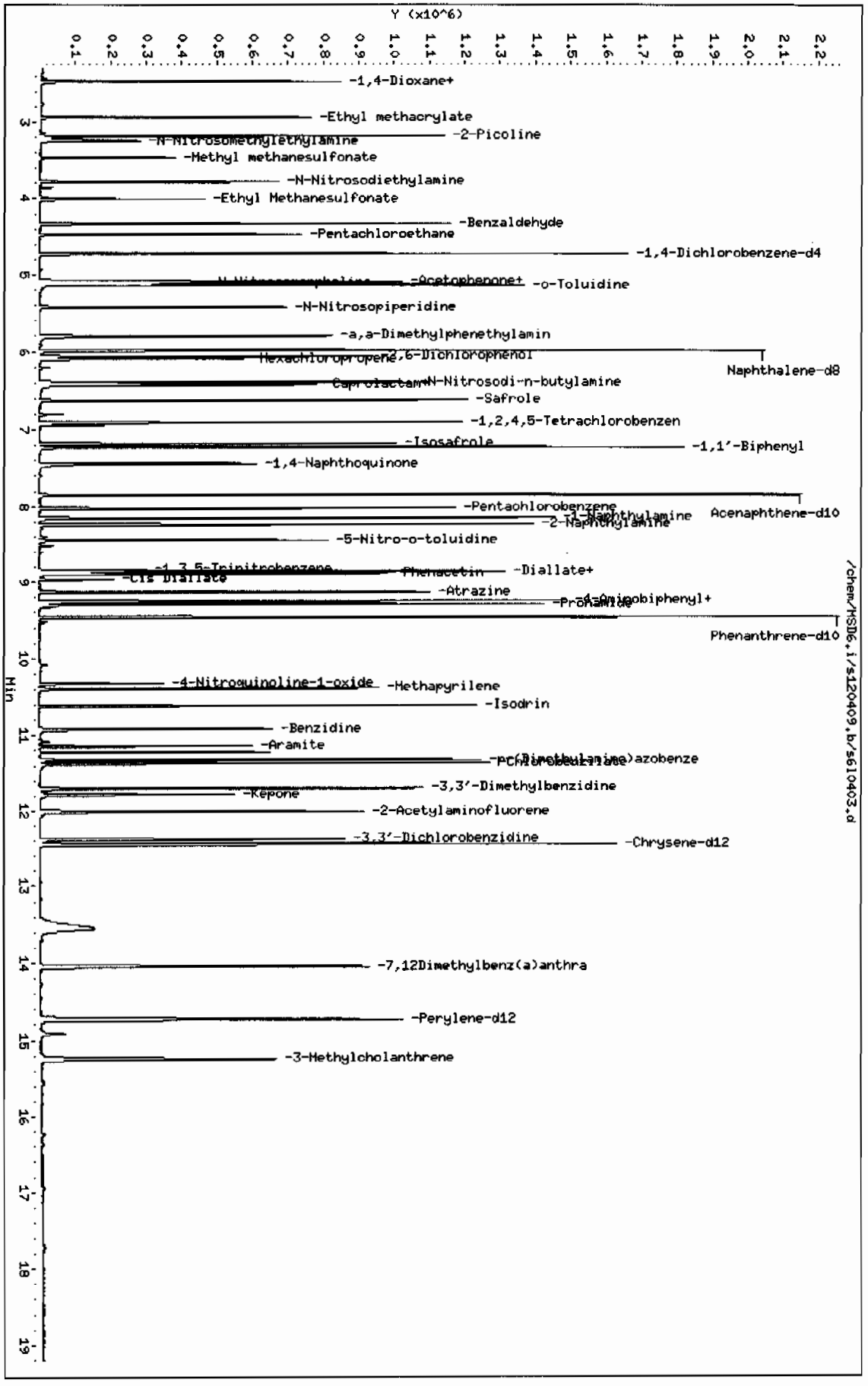

Data File: /chem/MSD6.i/s120509.b/s610502.d
Report Date: 05-Dec-2009 15:04

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 10:46
Lab File ID: s610502.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.4 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.00169	0.80670	0.80670	0.000	-19.46566	60.00000	Averaged
$ 5 Phenol-d5	1.26427	1.17175	1.17175	0.000	-7.31838	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28296	0.24736	0.24736	0.000	-12.58217	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.03083	0.99499	0.99499	0.000	-3.47725	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11675	0.13041	0.13041	0.000	11.70482	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.64507	0.60201	0.60201	0.000	-6.67406	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.45940	0.45940	0.000	-32.53738	60.00000	Averaged
2 Pyridine	0.84757	0.53734	0.53734	0.000	-36.60279	60.00000	Averaged
4 Aniline	0.52752	0.45729	0.45729	0.000	-13.31259	60.00000	Averaged
6 Phenol	1.27120	1.17240	1.17240	0.001	-7.77196	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.74407	0.74407	0.000	-13.56132	60.00000	Averaged
8 2-Chlorophenol	1.02109	0.96674	0.96674	0.000	-5.32285	60.00000	Averaged
203 n-Decane	1.42254	1.16523	1.16523	0.000	-18.08762	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.14778	1.14778	0.000	-2.35762	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.16978	1.16978	0.001	-1.83310	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.12061	1.12061	0.000	0.74618	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.77994	1.77994	0.000	-7.38267	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.37599	0.37599	0.000	-40.73011	60.00000	Averaged
15 o-Cresol	0.83139	0.78339	0.78339	0.000	-5.77281	60.00000	Averaged
18 m,p-Cresols	1.05346	1.00421	1.00421	0.000	-4.67468	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.74628	0.74628	0.050	5.30914	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.45060	0.45060	0.000	-2.25440	60.00000	Averaged
21 Nitrobenzene	0.28519	0.25637	0.25637	0.000	-10.10681	60.00000	Averaged
22 Isophorone	0.50552	0.48509	0.48509	0.000	-4.04014	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13461	0.13461	0.001	2.32882	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.18735	0.18735	0.000	-14.04177	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.27923	0.27923	0.000	-6.14009	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.19642	0.19642	0.001	-0.64128	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.13799	0.13799	0.000	2.57316	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.23692	0.23692	0.000	-2.34565	60.00000	Averaged
30 Naphthalene	0.79792	0.70047	0.70047	0.000	-12.21297	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.21088	0.21088	0.000	-3.56502	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.24532	0.24532	0.000	-4.34264	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.12169	0.12169	0.001	-3.68374	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.20460	0.20460	0.001	2.52111	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.47801	0.47801	0.000	-0.72529	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610502.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.4
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

Injection Date: 05-DEC-2009 10:46
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.47100	0.47002	0.47002	0.000	-0.20965	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.18968	0.18968	0.050	17.40098	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.47908	0.45744	0.45744	0.000	-4.51712	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.26748	0.26748	0.001	-2.00108	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.29067	0.27733	0.27733	0.000	-4.58985	60.00000	Averaged
40 2-Chloronaphthalene	0.89832	0.87190	0.87190	0.000	-2.94195	60.00000	Averaged
42 o-Nitroaniline	0.30732	0.26977	0.26977	0.000	-12.22112	60.00000	Averaged
41 m-Nitroaniline	0.22497	0.20886	0.20886	0.000	-7.16256	60.00000	Averaged
43 Dimethylphthalate	1.02610	1.00433	1.00433	0.000	-2.12162	60.00000	Averaged
44 2,6-Dinitrotoluene	0.24475	0.24005	0.24005	0.000	-1.92047	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30862	0.30491	0.30491	0.000	-1.20165	60.00000	Averaged
45 Acenaphthylene	1.44438	1.41727	1.41727	0.000	-1.87682	60.00000	Averaged
47 Acenaphthene	0.90151	0.84184	0.84184	0.001	-6.61898	20.00000	Averaged ccc
48 2,4-Dinitrophenol	48.48831	40.00000	0.11111	0.050	21.22078	60.00000	Linear spcc
49 Dibenzofuran	1.21689	1.19777	1.19777	0.000	-1.57077	60.00000	Averaged
51 Diethylphthalate	1.03335	1.00202	1.00202	0.000	-3.03199	60.00000	Averaged
52 4-Nitrophenol	39.29622	40.00000	0.16123	0.050	-1.75945	60.00000	Linear spcc
53 Fluorene	0.99879	0.98682	0.98682	0.000	-1.19906	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47192	0.47369	0.47369	0.000	0.37530	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	42.33229	40.00000	0.09498	0.000	5.83073	60.00000	Linear
56 p-Nitroaniline	37.52631	40.00000	0.19430	0.000	-6.18422	60.00000	Linear
133 Diphenylamine	0.48213	0.47114	0.47114	0.001	-2.27985	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.61327	0.56973	0.56973	0.000	-7.09982	60.00000	Averaged
61 4-Bromophenylphenylether	0.15784	0.15797	0.15797	0.000	0.08661	60.00000	Averaged
63 Hexachlorobenzene	0.16533	0.16565	0.16565	0.000	0.19175	60.00000	Averaged
65 Pentachlorophenol	41.09697	40.00000	0.08900	0.001	2.74243	20.00000	Linear ccc
206 n-Octadecane	0.44173	0.42475	0.42475	0.000	-3.84528	60.00000	Averaged
68 Phenanthrene	0.82721	0.79982	0.79982	0.000	-3.31214	60.00000	Averaged
69 Anthracene	0.82682	0.81069	0.81069	0.000	-1.95109	60.00000	Averaged
72 Di-n-butylphthalate	0.94954	0.95959	0.95959	0.000	1.05851	60.00000	Averaged
76 Fluoranthene	0.79242	0.79502	0.79502	0.001	0.32799	20.00000	Averaged ccc
79 Pyrene	1.10021	0.97786	0.97786	0.000	-11.12063	60.00000	Averaged
85 Butylbenzylphthalate	0.50351	0.47745	0.47745	0.000	-5.17512	60.00000	Averaged
89 Benzo(a)anthracene	0.86301	0.81555	0.81555	0.000	-5.49953	60.00000	Averaged
92 Chrysene	0.82690	0.80336	0.80336	0.000	-2.84602	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	39.33104	40.00000	0.68206	0.000	-1.67239	60.00000	Wt Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 10:46
Lab File ID: s610502.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.4 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.22300	1.22300	0.001	-3.79727	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.83101	0.83101	0.000	-6.10866	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	0.85201	0.85201	0.000	-3.19277	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.77620	0.77620	0.001	1.53457	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	43.60546	40.00000	0.79888	0.000	9.01366	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	44.22736	40.00000	0.66086	0.000	10.56839	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.67457	0.67457	0.000	15.50263	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17288	0.17288	0.000	2.11758	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.22733	0.22733	0.000	3.82373	60.00000	Averaged	
	143 Dinoseb	41.03302	40.00000	0.12835	0.000	2.58255	60.00000	Linear	
	173 Carbazole	0.65449	0.60296	0.60296	0.000	-7.87362	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.08219	0.08219	0.000	-35.43941	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.53643	0.53643	0.000	-2.89729	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.82200	0.82200	0.000	-8.65437	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.08508	1.08508	0.000	-3.45911	60.00000	Averaged	
	26 Phthalic anhydride	28.75720	40.00000	0.05128	0.000	-28.10700	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17085	0.17085	0.000	-7.05345	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.33704	0.33704	0.000	-52.55345	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.07476	40.00000	0.11854	0.000	-4.81310	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.27240	0.27240	0.000	-3.33619	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.22733	0.22733	0.000	3.82373	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	0.84151	0.84151	0.000	-4.65482	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610502.d
Lab Smp Id: WBN091106-05.4 Client Smp ID: MEGACVS
Inj Date : 05-DEC-2009 10:46
Operator : nag1 Inst ID: MSD6.i
Smp Info : |WBN091106-05.4|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.719	4.719	(1.000)	232623	40.0000	
* 29 Naphthalene-d8	136	5.988	5.988	(1.000)	1017627	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.856	(1.000)	527825	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.466	(1.000)	924477	40.0000	
* 91 Chrysene-d12	240	12.460	12.460	(1.000)	791288	40.0000	
* 98 Perylene-d12	264	14.736	14.736	(1.000)	729958	40.0000	
$ 3 2-Fluorophenol	112	3.577	3.577	(0.758)	187658	40.0000	32.2
$ 5 Phenol-d5	99	4.342	4.342	(0.920)	272575	40.0000	37.1
$ 20 Nitrobenzene-d5	82	5.251	5.251	(0.877)	251716	40.0000	35.0
$ 39 2-Fluorobiphenyl	172	7.112	7.112	(0.905)	525179	40.0000	38.6
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.108)	68836	40.0000	44.7
$ 81 p-Terphenyl-d14	244	11.178	11.178	(0.897)	476367	40.0000	37.3
1 N-Methyl-N-nitrosomethylamine	74	2.642	2.642	(0.560)	106868	40.0000	27.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.686	2.686	(0.569)	124997	40.0000	25.4
4 Aniline	66	4.411	4.411	(0.935)	106377	40.0000	34.7
6 Phenol	94	4.357	4.357	(0.923)	272727	40.0000	36.9
7 bis(2-Chloroethyl) ether	63	4.451	4.451	(0.943)	173088	40.0000	34.6
8 2-Chlorophenol	128	4.525	4.525	(0.959)	224886	40.0000	37.9
203 n-Decane	43	4.533	4.533	(0.961)	271060	40.0000	32.8
9 1,3-Dichlorobenzene	146	4.671	4.671	(0.990)	267001	40.0000	39.0
11 1,4-Dichlorobenzene	146	4.737	4.737	(1.004)	272117	40.0000	39.3
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.035)	260679	40.0000	40.3
14 bis(2-Chloroisopropyl)ether	45	4.953	4.953	(1.050)	414055	40.0000	37.0
12 Benzyl alcohol	108	4.834	4.834	(1.024)	87463	40.0000	23.7
15 o-Cresol	107	4.920	4.920	(1.043)	182235	40.0000	37.7
18 m,p-Cresols	107	5.076	5.076	(1.076)	233603	40.0000	38.1
17 N-Nitrosodipropylamine	70	5.091	5.091	(1.079)	173601	40.0000	42.1
19 Hexachloroethane	117	5.213	5.213	(1.105)	104821	40.0000	39.1
21 Nitrobenzene	77	5.272	5.272	(0.880)	260886	40.0000	36.0
22 Isophorone	82	5.509	5.509	(0.920)	493643	40.0000	38.4
23 2-Nitrophenol	139	5.585	5.585	(0.933)	136981	40.0000	40.9
24 2,4-Dimethylphenol	122	5.606	5.606	(0.936)	190650	40.0000	34.4
25 bis(2-Chloroethoxy)methane	93	5.705	5.705	(0.953)	284148	40.0000	37.5
26 2,4-Dichlorophenol	162	5.835	5.835	(0.974)	199880	40.0000	39.7
27 Benzoic acid	105	5.718	5.718	(0.955)	140423	40.0000	41.0
28 1,2,4-Trichlorobenzene	180	5.919	5.919	(0.988)	241100	40.0000	39.1
30 Naphthalene	128	6.011	6.011	(1.004)	712814	40.0000	35.1
204 alpha-Terpineol	59	6.001	6.001	(1.002)	214600	40.0000	38.6
31 4-Chloroaniline	127	6.049	6.049	(1.010)	249645	40.0000	38.3
32 Hexachlorobutadiene	225	6.120	6.120	(1.022)	123831	40.0000	38.5
33 4-Chloro-3-methylphenol	107	6.546	6.546	(1.093)	208203	40.0000	41.0
34 2-Methylnaphthalene	142	6.729	6.729	(1.124)	486432	40.0000	39.7
35 1-Methylnaphthalene	142	6.836	6.836	(1.142)	478301	40.0000	39.9
36 Hexachlorocyclopentadiene	237	6.890	6.890	(0.877)	100119	40.0000	47.0
205 2,3-Dichloroaniline	161	7.028	7.028	(0.895)	241447	40.0000	38.2
37 2,4,6-Trichlorophenol	196	7.025	7.025	(0.894)	141181	40.0000	39.2
38 2,4,5-Trichlorophenol	196	7.068	7.068	(0.900)	146380	40.0000	38.2
40 2-Chloronaphthalene	162	7.254	7.254	(0.923)	460208	40.0000	38.8
42 o-Nitroaniline	65	7.359	7.359	(0.937)	142389	40.0000	35.1
41 m-Nitroaniline	138	7.802	7.802	(0.993)	110240	40.0000	37.1
43 Dimethylphthalate	163	7.550	7.550	(0.961)	530111	40.0000	39.2
44 2,6-Dinitrotoluene	165	7.616	7.616	(0.970)	126703	40.0000	39.2
50 2,4-Dinitrotoluene	165	8.054	8.054	(1.025)	160940	40.0000	39.5
45 Acenaphthylene	152	7.703	7.703	(0.981)	748072	40.0000	39.2
47 Acenaphthene	154	7.891	7.891	(1.005)	444344	40.0000	37.4
48 2,4-Dinitrophenol	184	7.914	7.914	(1.007)	58645	40.0000	48.5
49 Dibenzofuran	168	8.072	8.072	(1.028)	632215	40.0000	39.4
51 Diethylphthalate	149	8.299	8.299	(1.056)	528889	40.0000	38.8
52 4-Nitrophenol	139	7.983	7.983	(1.016)	85102	40.0000	39.3
53 Fluorene	166	8.444	8.444	(1.075)	520867	40.0000	39.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.432	8.432	(1.073)	250027	40.0000	40.2
55 2-Methyl-4,6-dinitrophenol	198	8.493	8.493	(0.897)	87806	40.0000	42.3
56 p-Nitroaniline	138	8.465	8.465	(1.078)	102555	40.0000	37.5
133 Diphenylamine	169	8.561	8.561	(0.904)	435560	40.0000	39.1
58 1,2-Diphenylhydrazine	77	8.605	8.605	(0.909)	526700	40.0000	37.2
61 4-Bromophenylphenylether	248	8.964	8.964	(0.947)	146044	40.0000	40.0
63 Hexachlorobenzene	284	9.041	9.041	(0.955)	153137	40.0000	40.1
65 Pentachlorophenol	266	9.249	9.249	(0.977)	82274	40.0000	41.1
206 n-Octadecane	57	9.303	9.303	(0.983)	392668	40.0000	38.5
68 Phenanthrene	178	9.492	9.492	(1.003)	739411	40.0000	38.7
69 Anthracene	178	9.548	9.548	(1.009)	749466	40.0000	39.2
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	887116	40.0000	40.4
76 Fluoranthene	202	10.781	10.781	(1.139)	734976	40.0000	40.1
79 Pyrene	202	11.031	11.031	(0.885)	773766	40.0000	35.6
85 Butylbenzylphthalate	149	11.706	11.706	(0.939)	377799	40.0000	37.9
89 Benzo(a)anthracene	228	12.440	12.440	(0.998)	645331	40.0000	37.8
92 Chrysene	228	12.493	12.493	(1.003)	635693	40.0000	38.9
93 bis(2-Ethylhexyl)phthalate	149	12.417	12.417	(0.997)	539705	40.0000	39.3
94 Di-n-octylphthalate	149	13.377	13.377	(0.908)	892738	40.0000	38.5
95 Benzo(b)fluoranthene	252	14.073	14.073	(0.955)	606601	40.0000	37.6
96 Benzo(k)fluoranthene	252	14.119	14.119	(0.958)	621929	40.0000	38.7
97 Benzo(a)pyrene	252	14.636	14.636	(0.993)	566592	40.0000	40.6
99 Indeno(1,2,3-cd)pyrene	276	16.692	16.692	(1.133)	583150	40.0000	43.6
100 Dibenzo(a,h)anthracene	278	16.726	16.726	(1.135)	482397	40.0000	44.2
101 Benzo(ghi)perylene	276	17.197	17.197	(1.167)	492406	40.0000	46.2(Q)
126 m-Dinitrobenzene	168	7.593	7.593	(0.967)	91250	40.0000	40.8
130 2,3,4,6-Tetrachlorophenol	232	8.200	8.200	(1.044)	119991	40.0000	41.5
143 Dinoseb	211	9.433	9.433	(0.996)	118655	40.0000	41.0
173 Carbazole	167	9.711	9.711	(1.026)	557425	40.0000	36.8
184 p-Benzoquinone	54	3.988	3.988	(0.845)	19119	40.0000	25.8
192 Methoxychlor	227	12.317	12.317	(0.989)	424468	40.0000	38.8
211 p-Toluidine	106	5.134	5.134	(1.088)	191215	40.0000	36.5
210 m-Toluidine	106	5.170	5.170	(1.096)	252415	40.0000	38.6
26 Phthalic anhydride	104	6.793	6.793	(1.134)	52187	40.0000	28.8
214 1,4-Dinitrobenzene	75	7.507	7.507	(0.956)	90179	40.0000	37.2
215 2-Ethoxyethanol	59	2.449	2.449	(0.519)	78403	40.0000	19.0
216 Methylenebis(2-chloroaniline)	231	12.386	12.386	(0.994)	93800	40.0000	38.1(Q)
M 225 Trichlorophenols	196				287561	80.0000	77.3
M 226 Tetrachlorophenols	232				119991	40.0000	41.5
M 227 Benzo(b,k)fluoranthene	252				1228530	80.0000	76.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610502.d
Date : 05-DEC-2009 10:46
Client ID: MEGACVS
Sample Info: IWBN091106-05,4140 PPM11ISVMF11MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

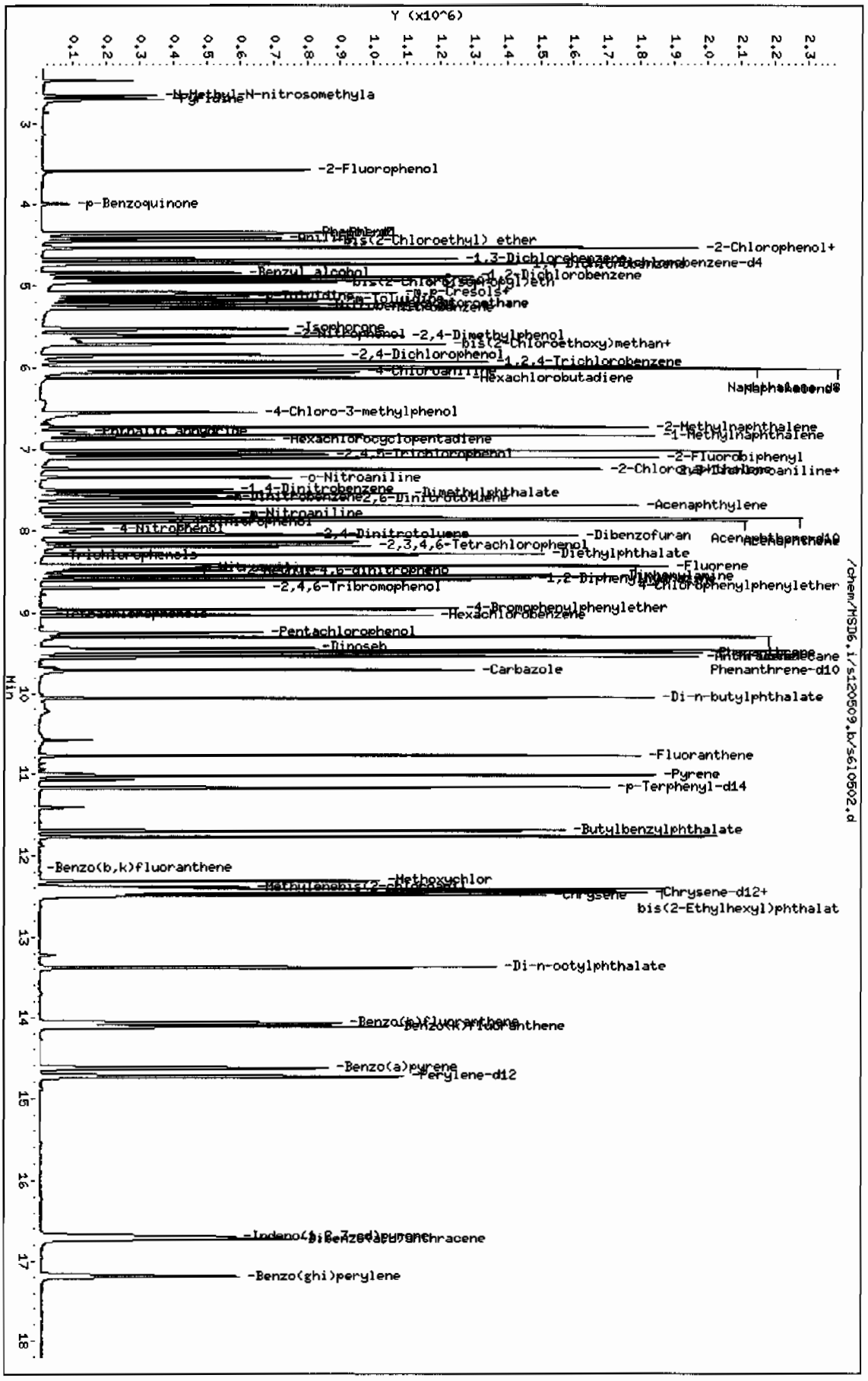

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 11:14
Lab File ID: s610503.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.79237	0.79237	0.000	-8.00023	60.00000	Averaged
16 Acetophenone	1.16908	1.13445	1.13445	0.000	-2.96193	60.00000	Averaged
189 Caprolactam	0.07388	0.08138	0.08138	0.000	10.14494	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.10939	1.10939	0.000	-7.65148	60.00000	Averaged
207 Atrazine	0.04063	0.03811	0.03811	0.000	-6.21191	60.00000	Averaged
77 Benzidine	0.39304	0.34950	0.34950	0.000	-11.07792	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.27841	0.27841	0.000	-1.45488	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.23366	0.23366	0.000	-36.16814	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.12854	0.12854	0.000	-33.70159	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.53934	0.53934	0.000	-33.05202	60.00000	Averaged
105 2-Picoline	1.30872	0.93437	0.93437	0.000	-28.60452	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.36686	0.36686	0.000	-28.21262	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.37774	0.37774	0.000	-28.52940	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.41358	0.41358	0.000	-16.53787	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.52516	0.52516	0.000	-19.41506	60.00000	Averaged
110 Pentachloroethane	0.31681	0.29185	0.29185	0.000	-7.87686	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.51847	0.51847	0.000	8.89214	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.63777	0.63777	0.000	-6.12276	60.00000	Averaged
114 o-Toluidine	1.65281	1.63900	1.63900	0.000	-0.83545	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.13254	0.13254	0.000	-6.03854	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.73038	0.73038	0.000	-14.62137	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20897	0.20897	0.000	1.01481	60.00000	Averaged
119 Hexachloropropene	0.10269	0.09611	0.09611	0.000	-6.40055	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.20409	0.20409	0.000	-11.08869	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.19596	0.19596	0.000	-6.70330	60.00000	Averaged
122 Safrole	0.18653	0.18463	0.18463	0.000	-1.01436	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.39797	0.39797	0.000	-5.96048	60.00000	Averaged
124 Isosafrole	0.33959	0.31895	0.31895	0.000	-6.07854	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.28848	0.28848	0.000	-5.95269	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36337	0.36337	0.000	-0.32040	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.87871	0.87871	0.000	-3.16392	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.94272	0.94272	0.000	-3.81637	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.27318	0.27318	0.000	-2.08763	60.00000	Averaged
136 1,3,5-Trinitrobenzene	37.46063	40.00000	0.10968	0.000	-6.34843	60.00000	Linear
137 Phenacetin	0.26240	0.24221	0.24221	0.000	-7.69463	60.00000	Averaged
138 Diallate	0.24056	0.22772	0.22772	0.000	-5.33793	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 11:14
Lab File ID: s610503.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.54964	0.54964	0.000	2.61777	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.05729	0.05729	0.000	-7.47829	60.00000	Averaged
142 Pronamide	0.26319	0.24237	0.24237	0.000	-7.90894	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02303	0.02303	0.000	-1.95806	60.00000	Averaged
147 Methapyrilene	0.38600	0.34584	0.34584	0.000	-10.40471	60.00000	Averaged
148 Isodrin	0.09631	0.09698	0.09698	0.000	0.70286	60.00000	Averaged
149 Aramite	0.04420	0.04500	0.04500	0.000	1.81854	60.00000	Averaged
150 Kepone	0.06173	0.07109	0.07109	0.000	15.16824	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.27374	0.27374	0.000	-13.73966	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.25861	0.25861	0.000	-11.22143	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.47756	0.47756	0.000	-9.49117	60.00000	Averaged
155 2-Acetylaminofluorene	39.44427	40.00000	0.32159	0.000	-1.38933	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.42852	0.42852	0.000	-10.55060	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.39080	0.39080	0.000	5.75086	60.00000	Averaged
212 Cis Diallate	0.25295	0.23132	0.23132	0.000	-8.54848	60.00000	Averaged
213 Trans Diallate	0.28301	0.26791	0.26791	0.000	-5.33793	60.00000	Averaged

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Data file : /chem/MSD6.i/s120509.b/s610503.d
Lab Smp Id: WBN091201-03.2 Client Smp ID: APCVS
Inj Date : 05-DEC-2009 11:14
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091201-03.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.719	4.719	(1.000)	226673	40.0000	
* 29 Naphthalene-d8	136	5.983	5.983	(1.000)	916713	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.851	(1.000)	514494	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.464	(1.000)	887756	40.0000	
* 91 Chrysene-d12	240	12.450	12.450	(1.000)	768226	40.0000	
* 98 Perylene-d12	264	14.728	14.728	(1.000)	685228	40.0000	
209 Benzaldehyde	77	4.322	4.322	(0.916)	179609	40.0000	36.8
16 Acetophenone	105	5.091	5.091	(1.079)	257149	40.0000	38.8
189 Caprolactam	113	6.419	6.419	(1.073)	74598	40.0000	44.0
208 1,1'-Biphenyl	154	7.221	7.221	(0.920)	570775	40.0000	36.9
207 Atrazine	173	9.127	9.127	(0.964)	33833	40.0000	37.5
77 Benzidine	184	10.911	10.911	(0.876)	268492	40.0000	35.6
90 3,3'-Dichlorobenzidine	252	12.381	12.381	(0.994)	213878	40.0000	39.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.451	2.451	(0.519)	52965	40.0000	25.5
103 Methyl methacrylate	100	2.446	2.446	(0.518)	29136	40.0000	26.5
104 Ethyl methacrylate	69	2.923	2.923	(0.619)	122253	40.0000	26.8
105 2-Picoline	93	3.170	3.170	(0.672)	211796	40.0000	28.6
106 N-Nitrosomethylethylamine	88	3.231	3.231	(0.685)	83157	40.0000	28.7
107 Methyl methanesulfonate	80	3.450	3.450	(0.731)	85623	40.0000	28.6
108 N-Nitrosodiethylamine	102	3.771	3.771	(0.799)	93748	40.0000	33.4
109 Ethyl Methanesulfonate	79	4.000	4.000	(0.848)	119040	40.0000	32.2
110 Pentachloroethane	167	4.462	4.462	(0.945)	66155	40.0000	36.8
111 N-Nitrosopyrrolidine	100	5.078	5.078	(1.076)	117524	40.0000	43.6(Q)
113 N-Nitrosomorpholine	56	5.111	5.111	(1.083)	144565	40.0000	37.6
114 o-Toluidine	106	5.129	5.129	(1.087)	371518	40.0000	39.7
115 N-Nitrosopiperidine	114	5.417	5.417	(0.905)	121497	40.0000	37.6
116 a,a-Dimethylphenethylamine	58	5.792	5.792	(0.968)	669546	40.0000	34.2
118 2,6-Dichlorophenol	162	6.062	6.062	(1.013)	191567	40.0000	40.4
119 Hexachloropropene	213	6.090	6.090	(1.018)	88108	40.0000	37.4
120 p-Phenylenediamine	108	6.426	6.426	(1.074)	187094	40.0000	35.6
121 N-Nitrosodi-n-butylamine	84	6.391	6.391	(1.068)	179642	40.0000	37.3(T)
122 Safrole	162	6.620	6.620	(1.106)	169256	40.0000	39.6
123 1,2,4,5-Tetrachlorobenzene	216	6.903	6.903	(0.879)	204753	40.0000	37.6
124 Isosafrole	162	7.175	7.175	(0.914)	164097	40.0000	37.6
125 1,4-Naphthoquinone	158	7.435	7.435	(0.947)	148420	40.0000	37.6
127 Pentachlorobenzene	250	8.024	8.024	(1.022)	186954	40.0000	39.9
128 1-Naphthylamine	143	8.154	8.154	(1.039)	452089	40.0000	38.7
129 2-Naphthylamine	143	8.238	8.238	(1.049)	485022	40.0000	38.5
131 5-Nitro-o-toluidine	152	8.447	8.447	(1.076)	140551	40.0000	39.2
136 1,3,5-Trinitrobenzene	75	8.839	8.839	(0.934)	97368	40.0000	37.5
137 Phenacetin	108	8.893	8.893	(0.940)	215019	40.0000	36.9(Q)
138 Diallate	86	8.860	8.860	(0.936)	202160	40.0000	37.9
140 4-Aminobiphenyl	169	9.247	9.247	(0.977)	487943	40.0000	41.0
141 Pentachloronitrobenzene	237	9.260	9.260	(0.978)	50861	40.0000	37.0(Q)
142 Pronamide	173	9.295	9.295	(0.982)	215168	40.0000	36.8
146 4-Nitroquinoline-1-oxide	101	10.317	10.317	(1.090)	20448	40.0000	39.2
147 Methapyrilene	58	10.383	10.383	(1.097)	307022	40.0000	35.8
148 Isodrin	193	10.613	10.613	(1.121)	86098	40.0000	40.3
149 Aramite	185	11.138	11.138	(1.177)	39953	40.0000	40.7
150 Kepone	272	11.782	11.782	(1.245)	63112	40.0000	46.1
151 p-(Dimethylamino)azobenzene	120	11.326	11.326	(0.910)	210292	40.0000	34.5
152 Chlorobenzilate	251	11.370	11.370	(0.913)	198670	40.0000	35.5
153 3,3'-Dimethylbenzidine	212	11.701	11.701	(0.940)	366871	40.0000	36.2
155 2-Acetylaminofluorene	181	12.012	12.012	(0.965)	247053	40.0000	39.4
157 7,12Dimethylbenz(a)anthracene	256	14.045	14.045	(0.954)	293631	40.0000	35.8
158 3-Methylcholanthrene	268	15.243	15.243	(1.035)	267789	40.0000	42.3(Q)
212 Cis Diallate	86	8.959	8.959	(0.947)	30804	6.00000	5.5
213 Trans Diallate	86	8.860	8.860	(0.936)	202160	34.0000	32.2

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610503.d
Date : 05-DEC-2009 11:14
Client ID: APCVS
Sample Info: IWBN091201-03,2|40 PPM|1|SVNF|1|APCVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

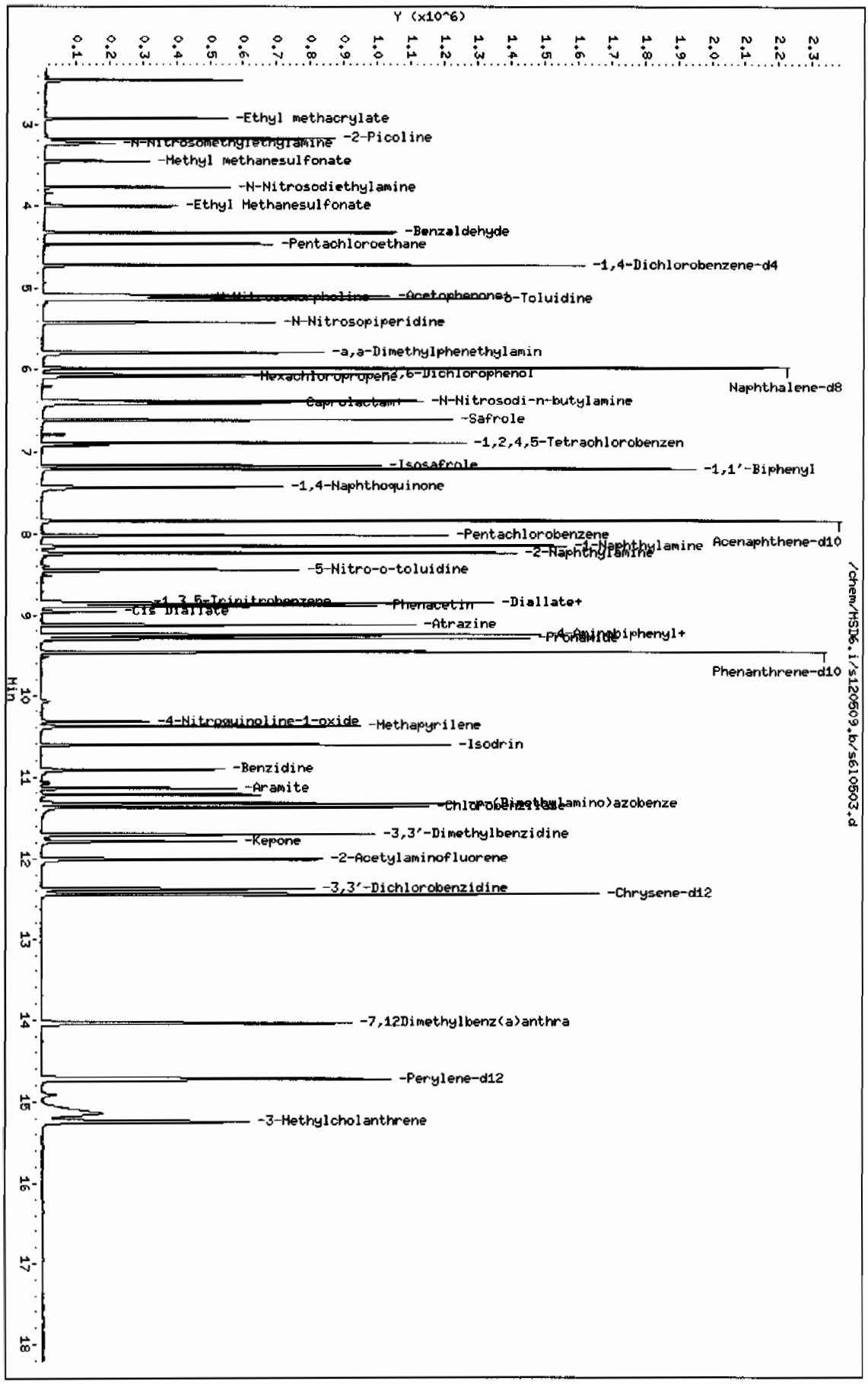

QC Data

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

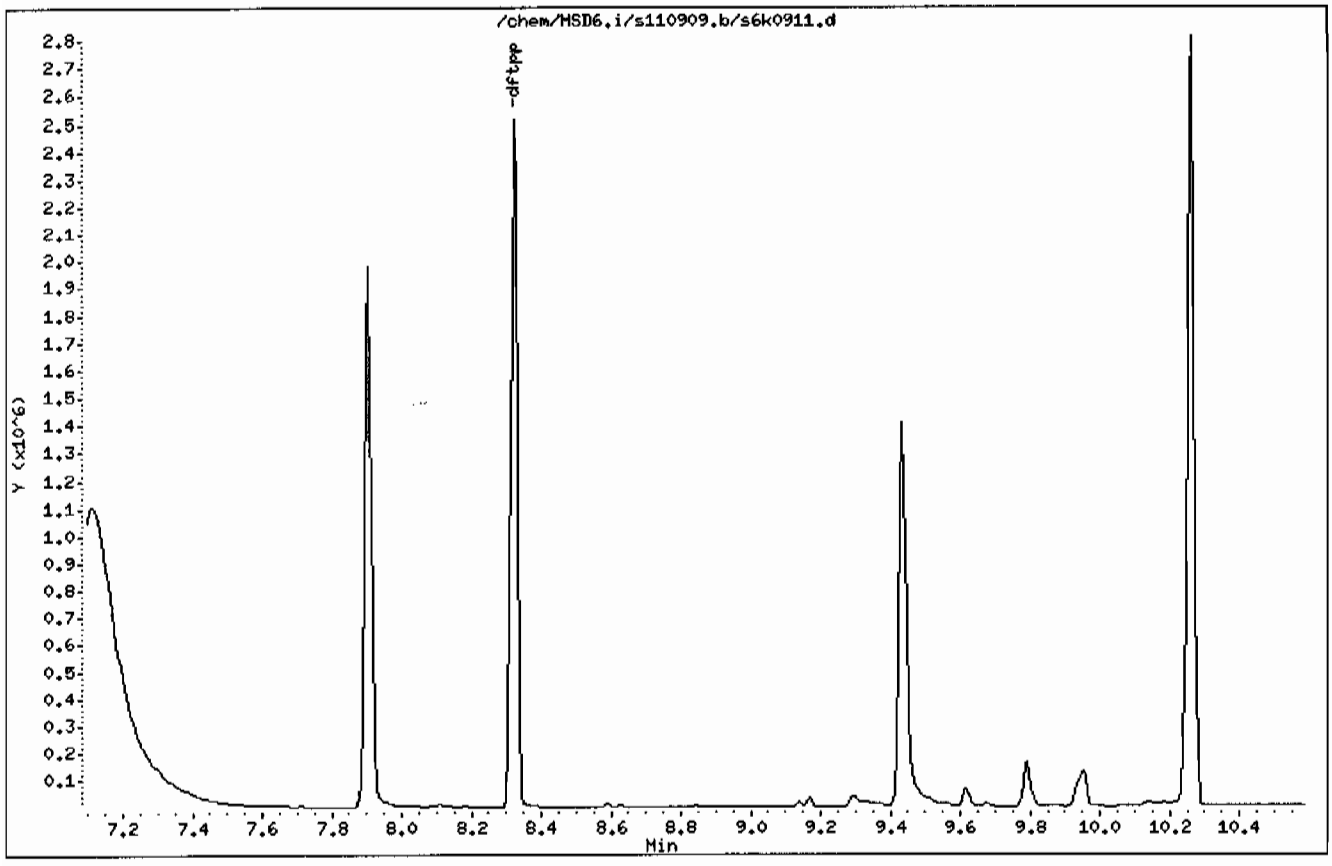

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

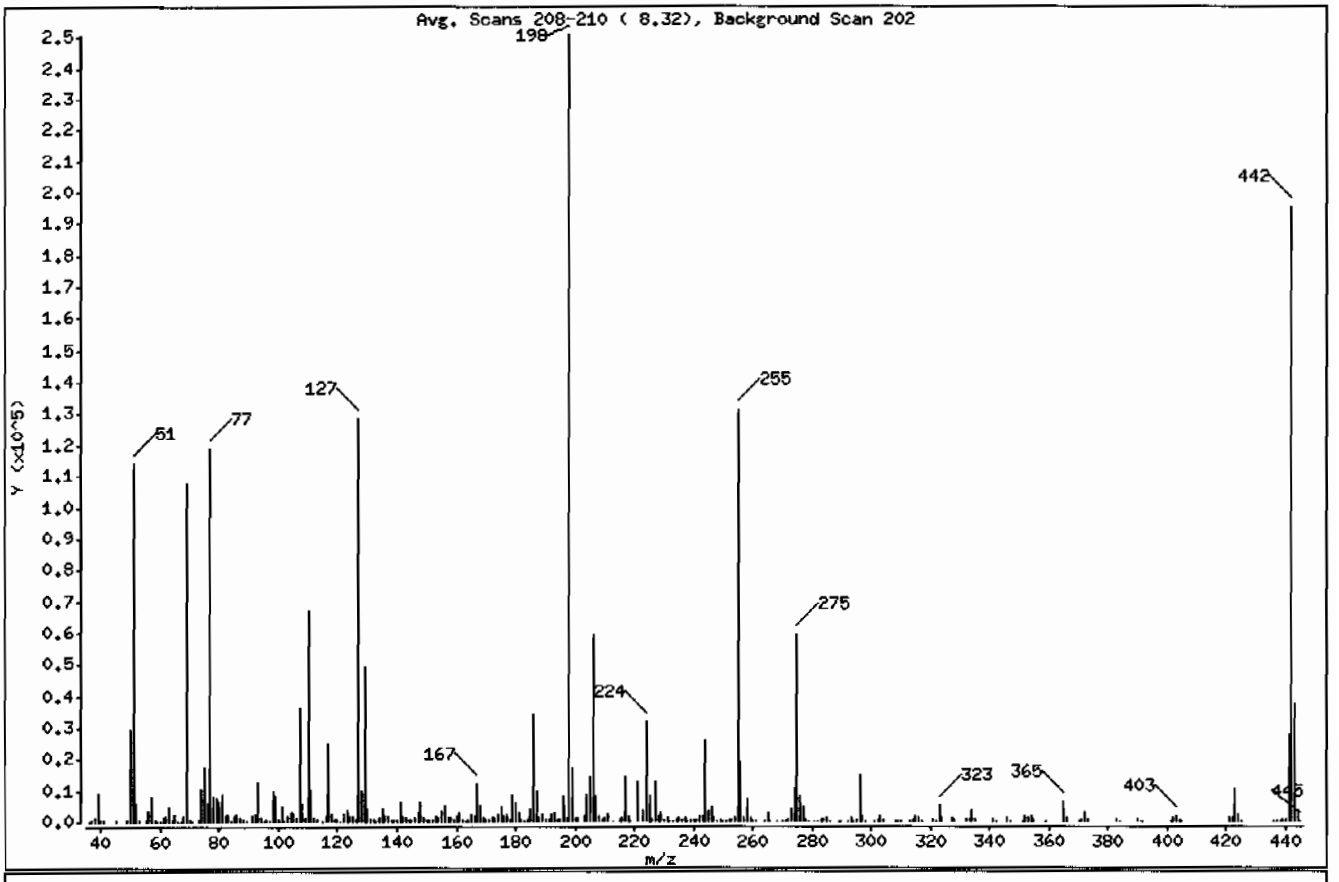

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.40
68	Less than 2.00% of mass 69	0.67 (1.56)
69	Mass 69 relative abundance	42.98
70	Less than 2.00% of mass 69	0.23 (0.53)
127	40.00 - 60.00% of mass 198	51.37
197	Less than 1.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 30.00% of mass 198	23.67
365	Greater than 1.00% of mass 198	2.45
441	Present, but less than mass 443	11.05
442	Greater than 40.00% of mass 198	77.94
443	17.00 - 23.00% of mass 442	14.94 (19.17)

Date : 09-NOV-2009 18:00

Client ID: DFTPP Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8	122.00	2302	198.00	250752	284.00	336
37.00	393	123.00	3695	199.00	17344	285.00	937
38.00	1200	124.00	1621	200.00	1195	286.00	170
39.00	9016	125.00	1448	201.00	1207	289.00	255
40.00	406	126.00	632	203.00	1659	290.00	159
41.00	292	127.00	128832	204.00	8363	292.00	259
45.00	305	128.00	9787	205.00	14289	293.00	1083
49.00	640	129.00	49280	206.00	59576	294.00	255
50.00	29544	130.00	4085	207.00	7878	295.00	324
51.00	113864	131.00	795	208.00	1898	296.00	14712
52.00	5719	132.00	464	209.00	609	297.00	1998
53.00	291	133.00	153	210.00	1016	298.00	48
55.00	556	134.00	1412	211.00	2089	301.00	220
56.00	3212	135.00	3908	213.00	96	302.00	374
57.00	7977	136.00	1509	215.00	674	303.00	1716
58.00	306	137.00	2002	216.00	1188	304.00	518
59.00	43	138.00	459	217.00	14324	308.00	142
60.00	144	139.00	392	218.00	1841	309.00	104
61.00	1384	140.00	751	219.00	194	310.00	127
62.00	1579	141.00	6116	221.00	12869	313.00	98
63.00	4522	142.00	1931	223.00	3368	314.00	758
64.00	592	143.00	1380	224.00	31752	315.00	1571
65.00	2251	144.00	329	225.00	7987	316.00	915
66.00	47	145.00	339	226.00	839	317.00	119
67.00	98	146.00	1032	227.00	12952	321.00	481
68.00	1681	147.00	3100	228.00	1848	322.00	229
69.00	107792	148.00	6347	229.00	2774	323.00	5178
70.00	566	149.00	1410	230.00	478	324.00	998
71.00	154	150.00	411	231.00	1257	327.00	960
73.00	818	151.00	692	232.00	280	328.00	487
74.00	10556	152.00	489	233.00	226	332.00	397
75.00	17208	153.00	1814	234.00	759	333.00	430
76.00	5735	154.00	1411	235.00	1001	334.00	3299
77.00	118792	155.00	3187	236.00	589	335.00	849
78.00	8119	156.00	5061	237.00	1093	341.00	644

Date : 09-NOV-2009 18:00

Client ID: DFTPP Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8,32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	7616	157.00	1047	238.00	176	342.00	184
80.00	6053	158.00	1005	239.00	483	346.00	1112
81.00	8741	159.00	819	240.00	449	347.00	197
82.00	1932	160.00	1690	241.00	776	351.00	99
83.00	2188	161.00	2737	242.00	1684	352.00	1491
84.00	232	162.00	809	243.00	1819	353.00	1169
85.00	1461	163.00	190	244.00	25832	354.00	1725
86.00	2130	164.00	335	245.00	3598	355.00	318
87.00	1162	165.00	2034	246.00	4786	359.00	103
88.00	449	166.00	1979	247.00	980	365.00	6134
89.00	268	167.00	12360	248.00	210	366.00	872
91.00	1835	168.00	5121	249.00	829	370.00	96
92.00	2163	169.00	1038	250.00	174	371.00	434
93.00	12786	170.00	446	251.00	238	372.00	2651
94.00	908	171.00	470	252.00	289	373.00	754
95.00	251	172.00	1064	253.00	569	383.00	711
96.00	626	173.00	1291	254.00	1047	384.00	258
97.00	236	174.00	2515	255.00	131328	390.00	402
98.00	9808	175.00	4789	256.00	18784	391.00	259
99.00	8032	176.00	1446	257.00	1424	392.00	153
100.00	746	177.00	2269	258.00	6873	401.00	116
101.00	4358	178.00	802	259.00	1148	402.00	1140
102.00	258	179.00	8475	260.00	228	403.00	1594
103.00	1616	180.00	5994	261.00	261	404.00	514
104.00	3096	181.00	2983	264.00	141	405.00	98
105.00	2795	182.00	429	265.00	2620	421.00	1430
106.00	910	183.00	259	266.00	251	422.00	1234
107.00	36184	184.00	679	268.00	180	423.00	10131
108.00	5604	185.00	3929	270.00	163	424.00	2144
109.00	997	186.00	34256	271.00	257	425.00	193
110.00	66656	187.00	9747	272.00	290	436.00	45
111.00	10177	188.00	1146	273.00	3906	437.00	191
112.00	1133	189.00	2105	274.00	10561	438.00	232
113.00	472	190.00	292	275.00	59368	439.00	301
115.00	217	191.00	815	276.00	7957	440.00	309

Date : 09-NOV-2009 18:00

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1841	192.00	2423	277.00	4641	441.00	27712
117.00	25072	193.00	3008	278.00	676	442.00	195456
118.00	2060	194.00	699	279.00	175	443.00	37472
119.00	345	195.00	448	281.00	87	444.00	3400
120.00	476	196.00	7876	282.00	46	445.00	197
121.00	165	197.00	1433	283.00	505		

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01150 PPMI1ISVMFI1IDFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

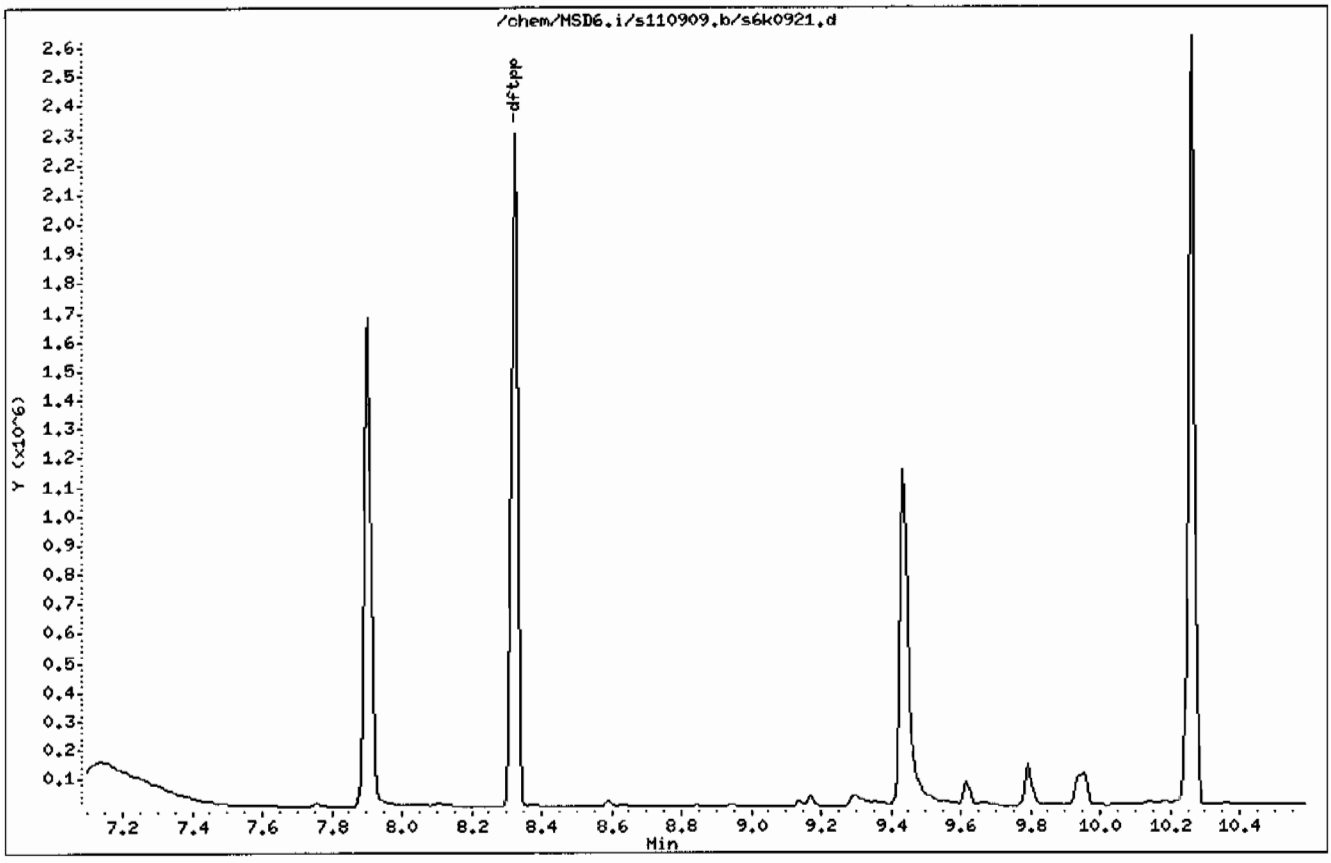

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

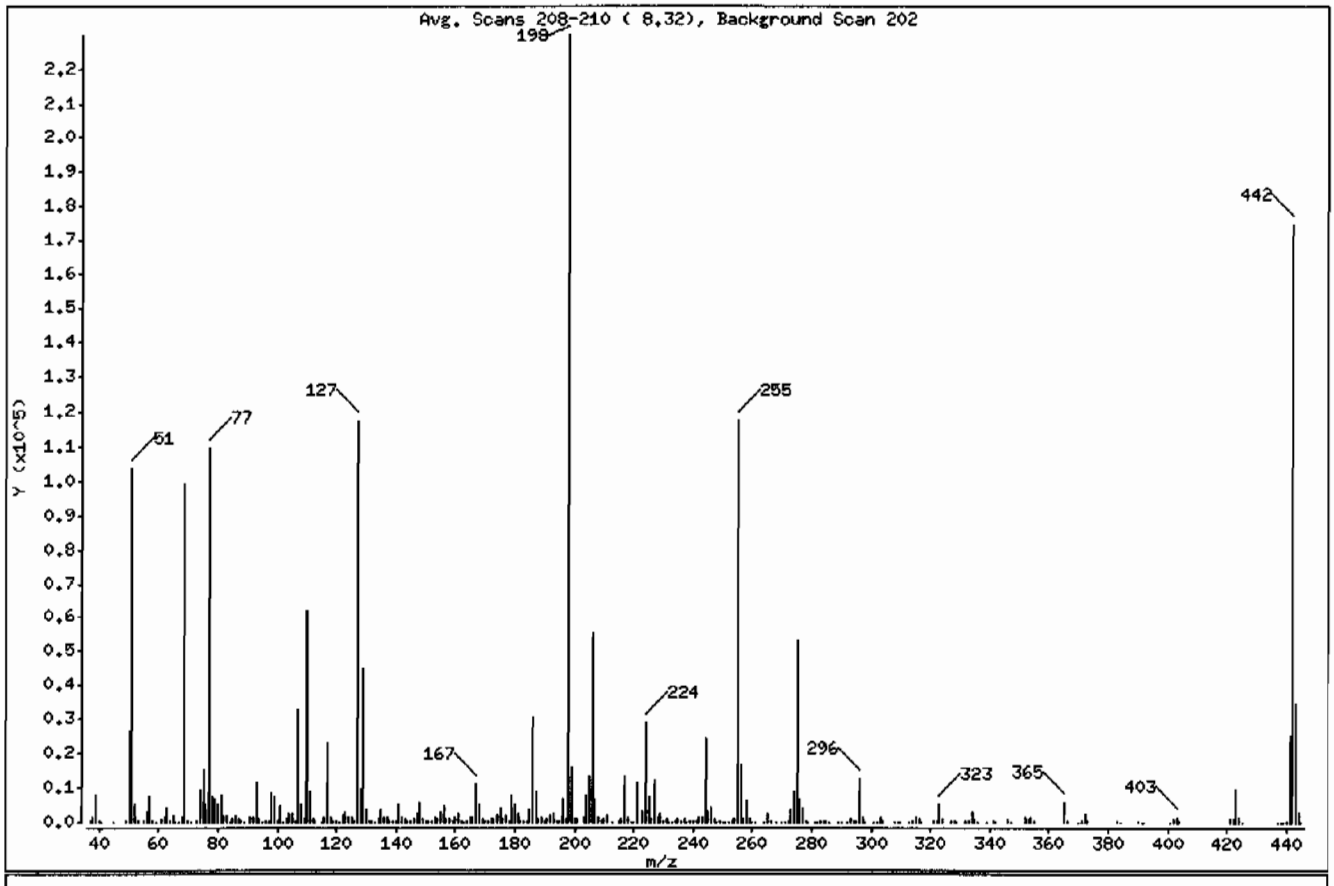

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.09
68	Less than 2.00% of mass 69	0.69 (1.59)
69	Mass 69 relative abundance	43.13
70	Less than 2.00% of mass 69	0.21 (0.50)
127	40.00 - 60.00% of mass 198	50.95
197	Less than 1.00% of mass 198	0.38
199	5.00 - 9.00% of mass 198	7.01
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.61
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	76.04
443	17.00 - 23.00% of mass 442	15.14 (19.92)

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	446	124.00	1597	200.00	1296	285.00	727
38.00	1364	125.00	1527	201.00	1130	286.00	93
39.00	8081	126.00	500	203.00	1398	289.00	109
40.00	429	127.00	117112	204.00	7870	290.00	48
41.00	123	128.00	9305	205.00	12990	292.00	179
45.00	232	129.00	44864	206.00	55704	293.00	996
49.00	676	130.00	3877	207.00	6919	294.00	284
50.00	26328	131.00	762	208.00	1589	295.00	295
51.00	103656	132.00	413	209.00	492	296.00	12743
52.00	5217	133.00	83	210.00	869	297.00	1758
53.00	281	134.00	1179	211.00	2059	298.00	106
55.00	508	135.00	3584	213.00	155	301.00	200
56.00	3141	136.00	1380	215.00	501	302.00	236
57.00	7300	137.00	1770	216.00	1098	303.00	1828
58.00	351	138.00	422	217.00	13179	304.00	578
59.00	89	139.00	313	218.00	1725	308.00	164
61.00	1282	140.00	577	219.00	178	309.00	120
62.00	1522	141.00	5319	220.00	48	310.00	179
63.00	4035	142.00	1826	221.00	11795	313.00	116
64.00	709	143.00	1268	223.00	3181	314.00	633
65.00	2010	144.00	322	224.00	29056	315.00	1462
66.00	201	145.00	315	225.00	7532	316.00	903
67.00	136	146.00	853	226.00	796	317.00	97
68.00	1576	147.00	2856	227.00	12169	321.00	535
69.00	99128	148.00	5895	228.00	1834	322.00	301
70.00	492	149.00	1137	229.00	2389	323.00	5031
71.00	87	150.00	371	230.00	448	324.00	932
73.00	640	151.00	713	231.00	1077	327.00	782
74.00	9704	152.00	430	232.00	217	328.00	460
75.00	15458	153.00	1634	233.00	234	329.00	92
76.00	5031	154.00	1294	234.00	764	332.00	329
77.00	109208	155.00	2977	235.00	895	333.00	541
78.00	7381	156.00	4520	236.00	588	334.00	3026
79.00	6803	157.00	931	237.00	934	335.00	912
80.00	5387	158.00	937	238.00	52	336.00	92

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	7979	159.00	792	239.00	457	339.00	88
82.00	2000	160.00	1501	240.00	364	341.00	550
83.00	1851	161.00	2637	241.00	638	342.00	176
84.00	203	162.00	756	242.00	1412	346.00	1020
85.00	1319	163.00	204	243.00	1572	347.00	119
86.00	1985	164.00	328	244.00	24152	352.00	1335
87.00	1000	165.00	1810	245.00	3200	353.00	950
88.00	412	166.00	1695	246.00	4314	354.00	1475
89.00	260	167.00	10891	247.00	844	355.00	296
91.00	1676	168.00	5136	248.00	166	365.00	5995
92.00	1806	169.00	973	249.00	748	366.00	747
93.00	11677	170.00	306	250.00	170	370.00	103
94.00	892	171.00	442	251.00	190	371.00	323
95.00	199	172.00	897	252.00	210	372.00	2543
96.00	636	173.00	1105	253.00	472	373.00	611
97.00	286	174.00	2178	254.00	899	383.00	675
98.00	8556	175.00	4297	255.00	117320	384.00	156
99.00	7312	176.00	1290	256.00	16728	390.00	314
100.00	595	177.00	2105	257.00	1320	391.00	189
101.00	4548	178.00	636	258.00	6484	392.00	157
102.00	251	179.00	8002	259.00	1064	401.00	199
103.00	1289	180.00	5191	260.00	200	402.00	1090
104.00	2626	181.00	2701	261.00	212	403.00	1396
105.00	2533	182.00	448	264.00	192	404.00	427
106.00	724	183.00	312	265.00	2469	421.00	1265
107.00	33008	184.00	599	266.00	401	422.00	1145
108.00	5264	185.00	3797	268.00	43	423.00	9473
109.00	994	186.00	30448	270.00	167	424.00	1846
110.00	61616	187.00	8914	271.00	186	425.00	183
111.00	9026	188.00	970	272.00	329	437.00	54
112.00	1057	189.00	1726	273.00	3492	438.00	170
113.00	367	190.00	298	274.00	9124	439.00	228
115.00	227	191.00	976	275.00	53576	440.00	294
116.00	1610	192.00	2282	276.00	7126	441.00	25272
117.00	23152	193.00	2535	277.00	3970	442.00	174784

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1681	194.00	518	278.00	653	443.00	34808
119.00	280	195.00	333	279.00	140	444.00	3177
120.00	427	196.00	6863	281.00	140	445.00	129
121.00	176	197.00	878	282.00	42		
122.00	2199	198.00	229824	283.00	507		
123.00	3315	199.00	16104	284.00	294		

Data File: /chem/MSD6.i/s120409.b/s610401.d

Page 1

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

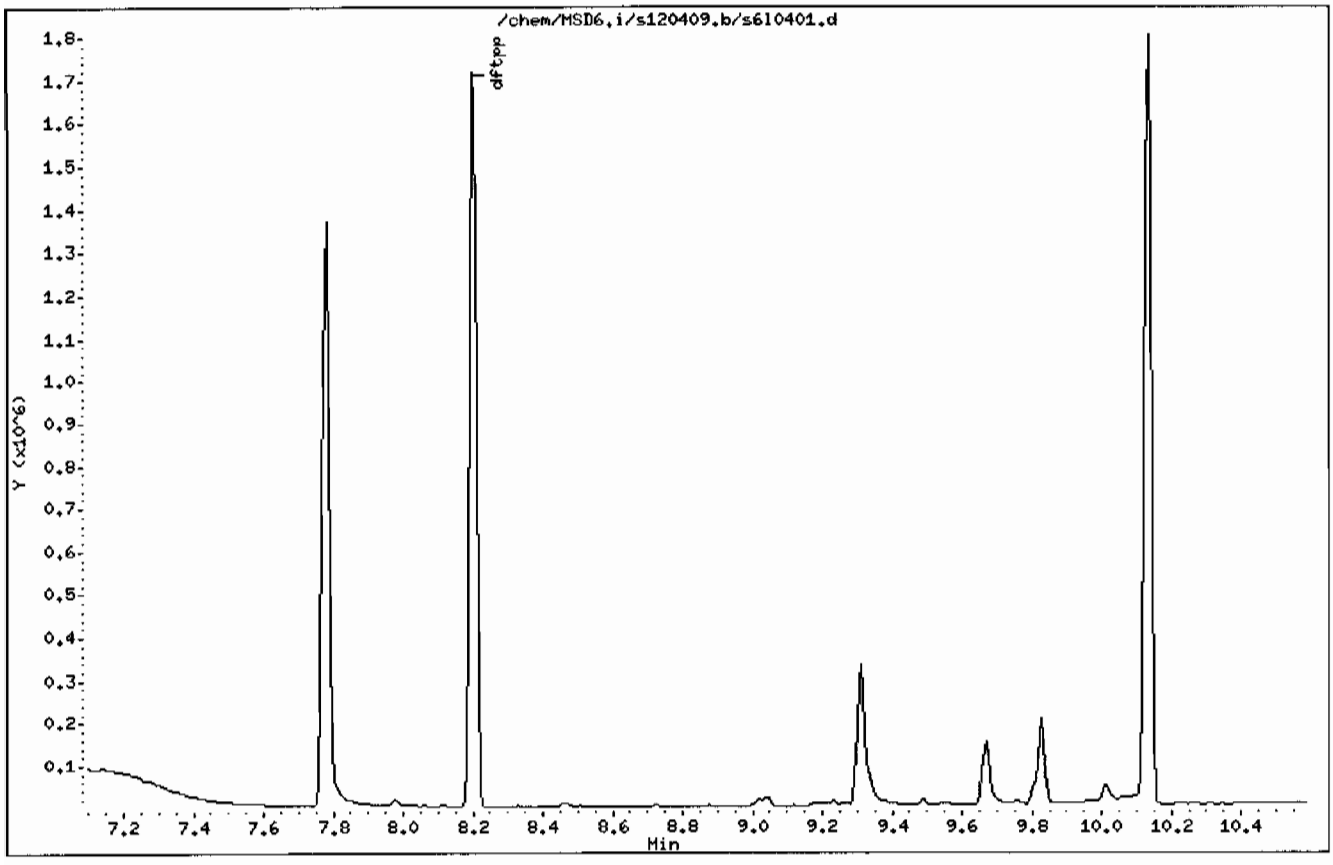

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

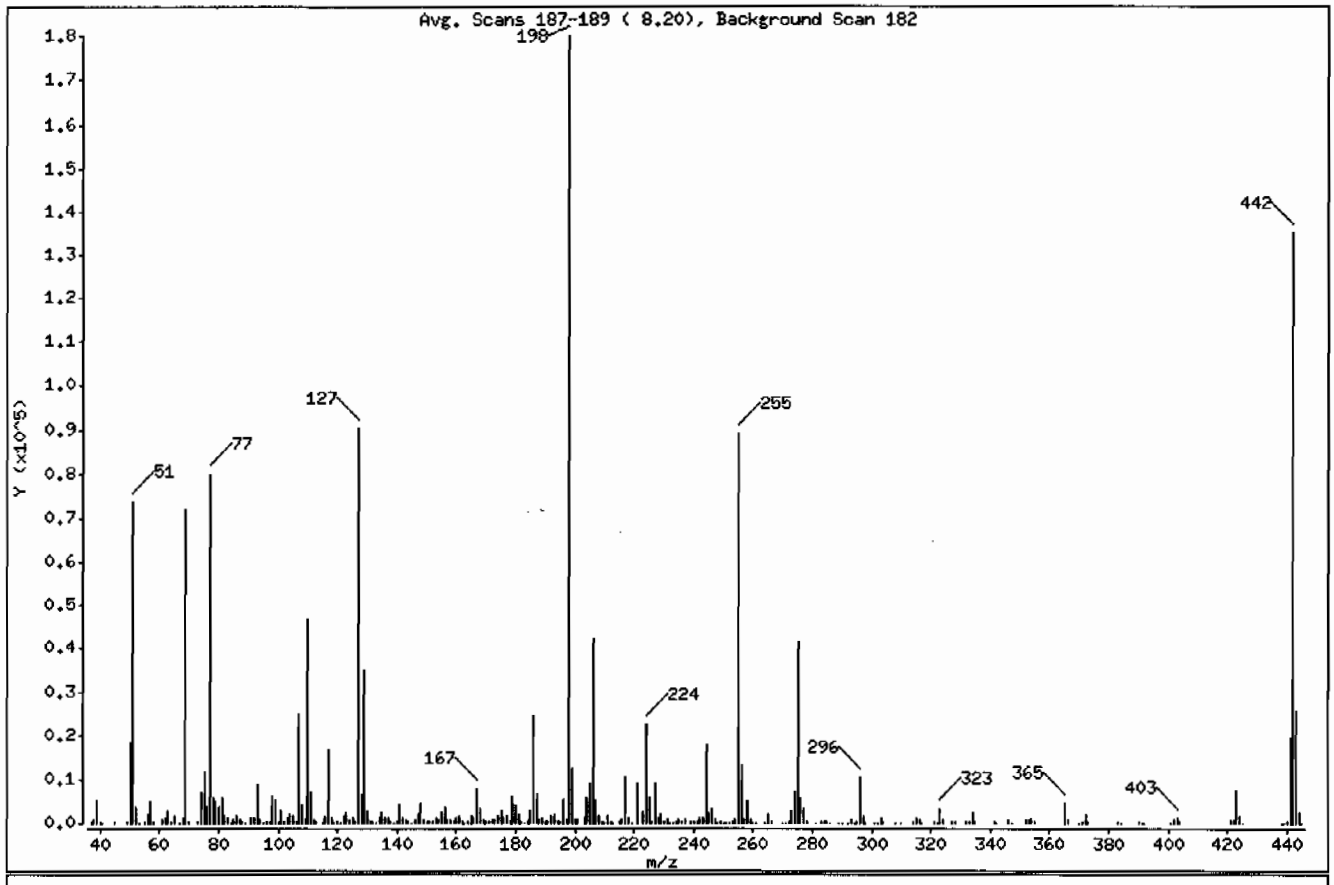

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.88
68	Less than 2.00% of mass 69	0.66 (1.64)
69	Mass 69 relative abundance	40.07
70	Less than 2.00% of mass 69	0.21 (0.53)
127	40.00 - 60.00% of mass 198	50.13
197	Less than 1.00% of mass 198	0.53
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 30.00% of mass 198	22.95
365	Greater than 1.00% of mass 198	2.44
441	Present, but less than mass 443	10.71
442	Greater than 40.00% of mass 198	74.88
443	17.00 - 23.00% of mass 442	14.26 (19.05)

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610401.d

Spectrum: Avg. Scans 187-189 (8,20), Background Scan 182

Location of Maximum: 198.00

Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	295	124.00	1032	197.00	949	283.00	386
38.00	928	125.00	1173	198.00	180096	284.00	244
39.00	5316	126.00	368	199.00	12363	285.00	533
40.00	338	127.00	90280	200.00	953	286.00	102
41.00	42	128.00	6784	201.00	859	289.00	123
45.00	266	129.00	34920	203.00	1069	290.00	93
49.00	507	130.00	2795	204.00	5633	292.00	184
50.00	18088	131.00	554	205.00	9273	293.00	807
51.00	73624	132.00	288	206.00	42232	294.00	136
52.00	3674	133.00	43	207.00	5311	295.00	252
53.00	167	134.00	1086	208.00	1455	296.00	10160
55.00	253	135.00	2621	209.00	422	297.00	1505
56.00	2226	136.00	1211	210.00	198	298.00	44
57.00	5106	137.00	1280	211.00	1509	301.00	124
58.00	267	138.00	273	212.00	222	302.00	191
61.00	945	139.00	159	213.00	115	303.00	1308
62.00	1065	140.00	420	215.00	469	304.00	318
63.00	3075	141.00	4319	216.00	866	308.00	123
64.00	388	142.00	1438	217.00	10307	310.00	105
65.00	1455	143.00	933	218.00	1312	314.00	527
67.00	88	144.00	266	219.00	97	315.00	1099
68.00	1182	145.00	204	221.00	9219	316.00	695
69.00	72152	146.00	714	223.00	2308	317.00	111
70.00	383	147.00	2147	224.00	22208	321.00	311
73.00	492	148.00	4357	225.00	5800	322.00	151
74.00	7192	149.00	973	226.00	544	323.00	3494
75.00	11516	150.00	228	227.00	8923	324.00	688
76.00	3757	151.00	515	228.00	1237	327.00	581
77.00	79768	152.00	374	229.00	2009	328.00	292
78.00	5676	153.00	1346	230.00	277	332.00	273
79.00	5119	154.00	1008	231.00	803	333.00	348
80.00	3910	155.00	2415	232.00	103	334.00	2395
81.00	5813	156.00	3537	233.00	183	335.00	598
82.00	1465	157.00	708	234.00	540	341.00	459
83.00	1371	158.00	775	235.00	690	342.00	92

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5HS

Column diameter: 0.20

Data File: s610401.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	203	159.00	580	236.00	422	346.00	737
85.00	1034	160.00	1193	237.00	777	347.00	126
86.00	1603	161.00	1808	239.00	345	352.00	894
87.00	747	162.00	585	240.00	261	353.00	771
88.00	309	163.00	173	241.00	542	354.00	1155
89.00	171	164.00	249	242.00	1178	355.00	252
91.00	1398	165.00	1527	243.00	1259	365.00	4393
92.00	1368	166.00	1138	244.00	17632	366.00	729
93.00	8569	167.00	8011	245.00	2397	370.00	87
94.00	630	168.00	3496	246.00	3294	371.00	258
95.00	200	169.00	634	247.00	624	372.00	1954
96.00	482	170.00	236	248.00	123	373.00	501
97.00	211	171.00	356	249.00	578	383.00	532
98.00	6139	172.00	753	250.00	109	384.00	121
99.00	5182	173.00	901	251.00	173	390.00	237
100.00	472	174.00	1763	252.00	124	391.00	134
101.00	2979	175.00	3073	253.00	368	392.00	107
102.00	218	176.00	1118	254.00	635	401.00	95
103.00	1071	177.00	1524	255.00	88808	402.00	781
104.00	2018	178.00	475	256.00	13127	403.00	1122
105.00	1852	179.00	6005	257.00	967	404.00	356
106.00	587	180.00	4210	258.00	4963	421.00	889
107.00	24912	181.00	1940	259.00	746	422.00	874
108.00	3935	182.00	290	260.00	94	423.00	7271
109.00	647	183.00	174	261.00	109	424.00	1454
110.00	46944	184.00	490	264.00	194	425.00	121
111.00	7096	185.00	2765	265.00	1873	438.00	48
112.00	825	186.00	24368	266.00	247	439.00	53
113.00	237	187.00	6599	270.00	104	440.00	239
115.00	136	188.00	687	271.00	196	441.00	19288
116.00	1458	189.00	1360	272.00	221	442.00	134848
117.00	16568	190.00	233	273.00	2726	443.00	25688
118.00	1305	191.00	615	274.00	7076	444.00	2368
119.00	167	192.00	1785	275.00	41320	445.00	132
120.00	337	193.00	2239	276.00	5823		

Date : 04-DEC-2009 09:48

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s610401.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
121.00	143	194.00	480	277.00	3274		
122.00	1518	195.00	303	278.00	568		
123.00	2452	196.00	5484	281.00	140		

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

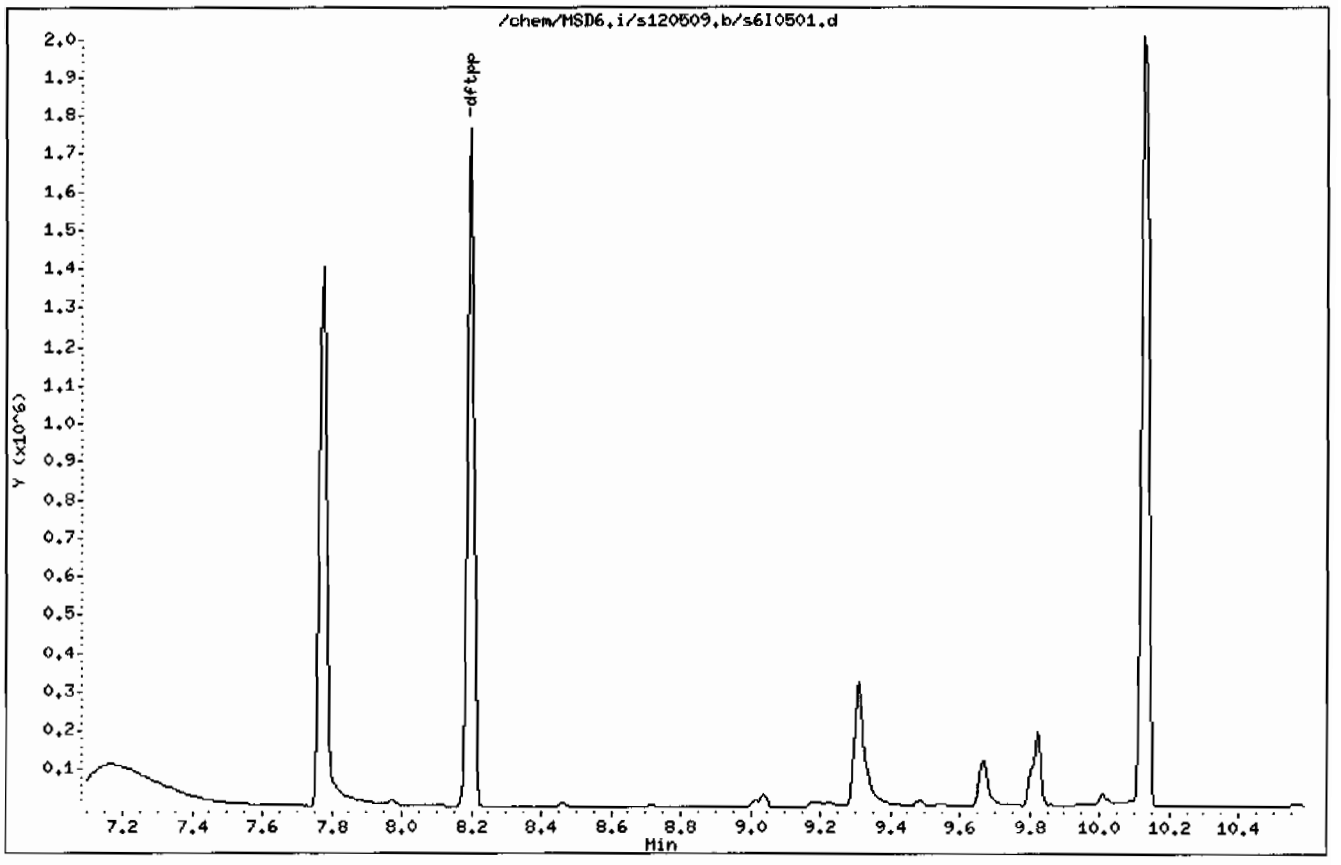

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

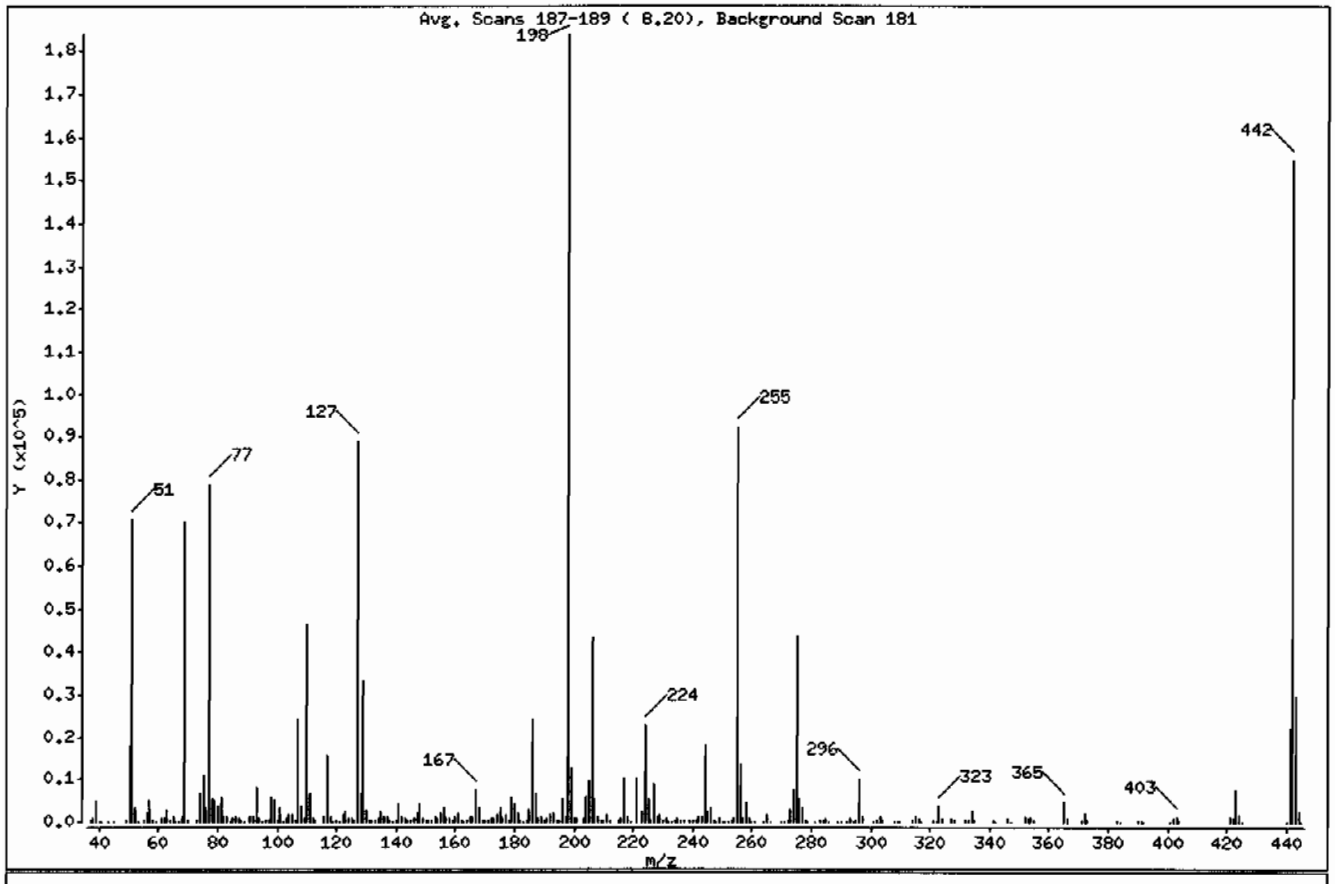

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.42
68	Less than 2.00% of mass 69	0.63 (1.65)
69	Mass 69 relative abundance	38.25
70	Less than 2.00% of mass 69	0.17 (0.46)
127	40.00 - 60.00% of mass 198	48.34
197	Less than 1.00% of mass 198	0.71
199	5.00 - 9.00% of mass 198	6.80
275	10.00 - 30.00% of mass 198	23.81
365	Greater than 1.00% of mass 198	2.59
441	Present, but less than mass 443	12.04
442	Greater than 40.00% of mass 198	84.12
443	17.00 - 23.00% of mass 442	16.09 (19.13)

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 181
Location of Maximum: 198.00
Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	272	121.00	48	193.00	2218	276.00	5684
38.00	868	122.00	1555	194.00	504	277.00	3450
39.00	5172	123.00	2442	195.00	290	278.00	538
40.00	84	124.00	1049	196.00	5662	279.00	96
41.00	80	125.00	1052	197.00	1308	281.00	135
43.00	4	126.00	416	198.00	183936	283.00	351
45.00	188	127.00	88912	199.00	12499	284.00	299
49.00	527	128.00	6698	200.00	846	285.00	653
50.00	17704	129.00	33400	201.00	885	286.00	43
51.00	70672	130.00	3014	203.00	1053	289.00	93
52.00	3529	131.00	622	204.00	5882	290.00	45
53.00	175	132.00	402	205.00	9714	292.00	103
55.00	276	133.00	216	206.00	43416	293.00	744
56.00	2179	134.00	948	207.00	5537	294.00	170
57.00	4950	135.00	2620	208.00	1440	295.00	221
58.00	242	136.00	1126	209.00	442	296.00	10034
59.00	43	137.00	1283	210.00	568	297.00	1453
61.00	893	138.00	289	211.00	1631	301.00	100
62.00	911	139.00	125	212.00	407	302.00	215
63.00	2782	140.00	403	215.00	444	303.00	1343
64.00	411	141.00	4139	216.00	845	304.00	332
65.00	1455	142.00	1299	217.00	10338	308.00	179
66.00	101	143.00	896	218.00	1333	309.00	95
67.00	145	144.00	339	219.00	88	310.00	110
68.00	1161	145.00	260	221.00	10103	314.00	511
69.00	70352	146.00	723	223.00	2347	315.00	1140
70.00	321	147.00	2102	224.00	22888	316.00	745
73.00	458	148.00	4277	225.00	5701	317.00	43
74.00	6810	149.00	984	226.00	568	321.00	359
75.00	11072	150.00	268	227.00	8833	322.00	177
76.00	3542	151.00	528	228.00	1251	323.00	3933
77.00	78576	152.00	373	229.00	1868	324.00	661
78.00	5398	153.00	1230	230.00	291	327.00	638
79.00	5008	154.00	967	231.00	777	328.00	372
80.00	4006	155.00	2304	232.00	104	332.00	237

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d

Spectrum: Avg. Scans 187-189 (8.20), Background Scan 181

Location of Maximum: 198.00

Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5834	156.00	3552	233.00	198	333.00	334
82.00	1368	157.00	767	234.00	620	334.00	2414
83.00	1276	158.00	763	235.00	667	335.00	606
84.00	174	159.00	595	236.00	380	341.00	438
85.00	1011	160.00	1260	237.00	622	342.00	99
86.00	1349	161.00	1928	239.00	289	346.00	757
87.00	704	162.00	552	240.00	273	347.00	153
88.00	271	163.00	208	241.00	478	352.00	1184
89.00	106	164.00	225	242.00	1250	353.00	865
91.00	1277	165.00	1268	243.00	1259	354.00	1311
92.00	1354	166.00	1206	244.00	18096	355.00	250
93.00	8000	167.00	7650	245.00	2374	365.00	4755
94.00	732	168.00	3247	246.00	3230	366.00	684
95.00	87	169.00	609	247.00	623	371.00	267
96.00	501	170.00	251	248.00	95	372.00	2014
97.00	220	171.00	310	249.00	721	373.00	477
98.00	6061	172.00	687	250.00	114	383.00	569
99.00	5010	173.00	990	251.00	185	384.00	177
100.00	517	174.00	1570	252.00	208	390.00	253
101.00	3213	175.00	3375	253.00	365	391.00	239
102.00	195	176.00	1021	254.00	702	392.00	154
103.00	1039	177.00	1606	255.00	92016	401.00	46
104.00	1884	178.00	581	256.00	13468	402.00	855
105.00	1707	179.00	6086	257.00	1016	403.00	1118
106.00	564	180.00	4308	258.00	4709	404.00	424
107.00	24072	181.00	1964	259.00	774	421.00	1109
108.00	3697	182.00	332	260.00	164	422.00	1001
109.00	660	183.00	106	261.00	102	423.00	7781
110.00	46600	184.00	435	264.00	82	424.00	1640
111.00	6953	185.00	2879	265.00	1810	425.00	156
112.00	723	186.00	23944	266.00	109	440.00	157
113.00	253	187.00	6622	270.00	136	441.00	22136
116.00	1183	188.00	656	271.00	193	442.00	154688
117.00	15818	189.00	1444	272.00	259	443.00	29600
118.00	1199	190.00	262	273.00	2758	444.00	2738

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 181
Location of Maximum: 198.00
Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	177	191.00	635	274.00	7792	445.00	153
120.00	318	192.00	1857	275.00	43784		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979040**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:05**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0404-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979040**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:05**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0404-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	2610	ug/kg		J
	Unknown Aldol Condensate	3.38	358	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610404-2.d
Lab Smp Id: 1201979040 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:05
Operator : nag1 Inst ID: MSD6.i
Smp Info : |1201979040|925661|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	216526	40.0000	
* 29 Naphthalene-d8	136	5.988	5.993	(1.000)	816435	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	446630	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.469	(1.000)	758251	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	627358	40.0000	
* 98 Perylene-d12	264	14.730	14.741	(1.000)	547730	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	411971	75.9772	2530
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	525716	76.8177	2560
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	241733	41.8555	1400
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	470795	40.9031	1360
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	111616	85.6219	2850
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	470132	46.4686	1550

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610404-2.d
Lab Smp Id: 1201979040 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:05
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979040|925661|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1249915	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.229	2442929	78.1789987	2600	0		0	10
Unknown Aldol Condensate				CAS #:			
3.376	335144	10.7253168	358	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610404-2.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01

Sample Info: |1201979040|925661|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

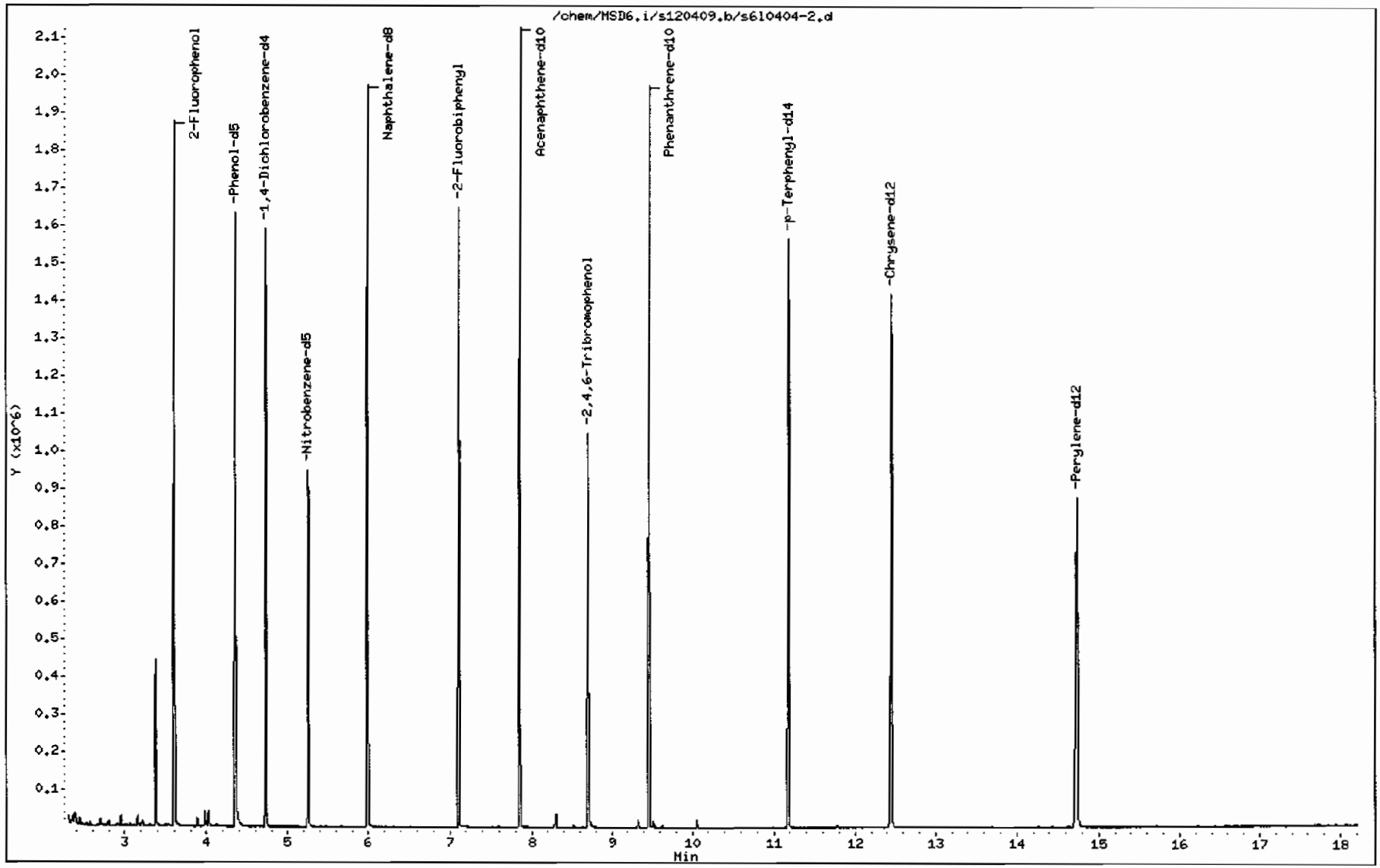

Data File: /chem/MSD6.i/s120409.b/s610404-2.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: |120197904|925661|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	39	C5H12O2	104

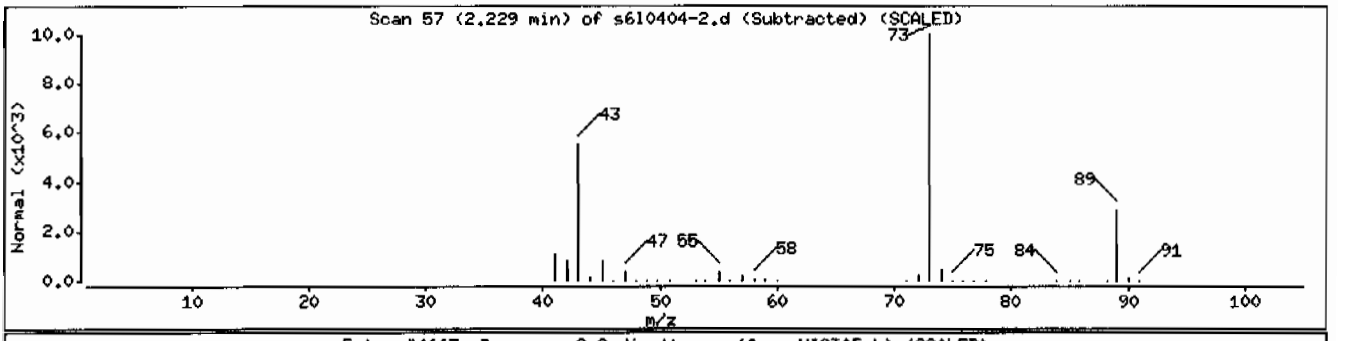

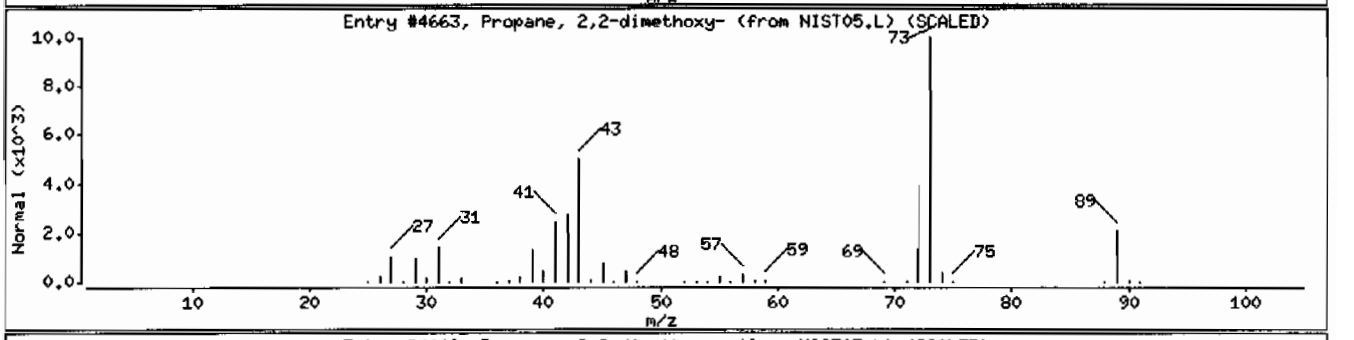

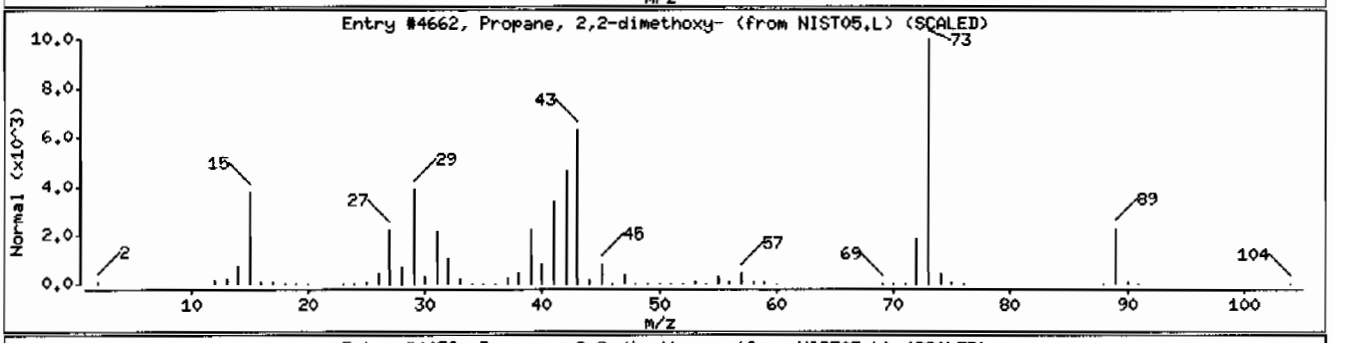

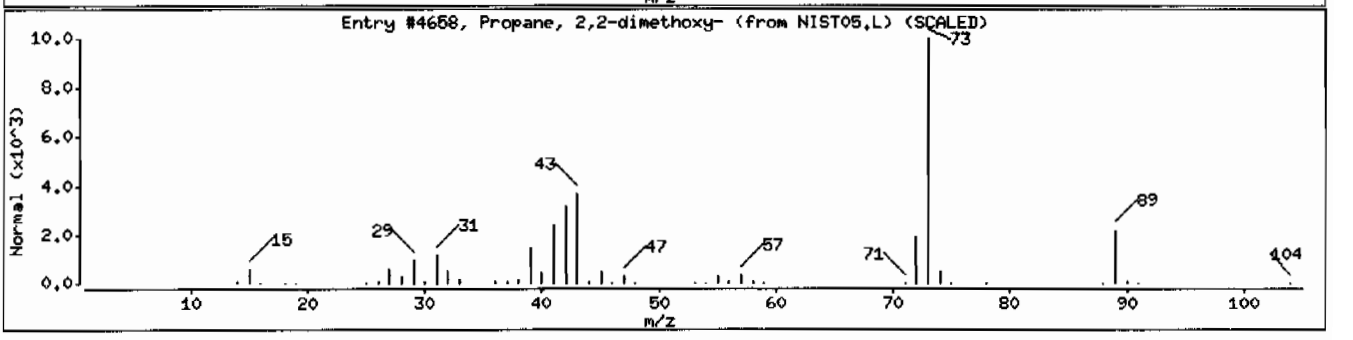

Data File: /chem/MSD6.i/s120409.b/s610404-2.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: |1201979040|925661|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116

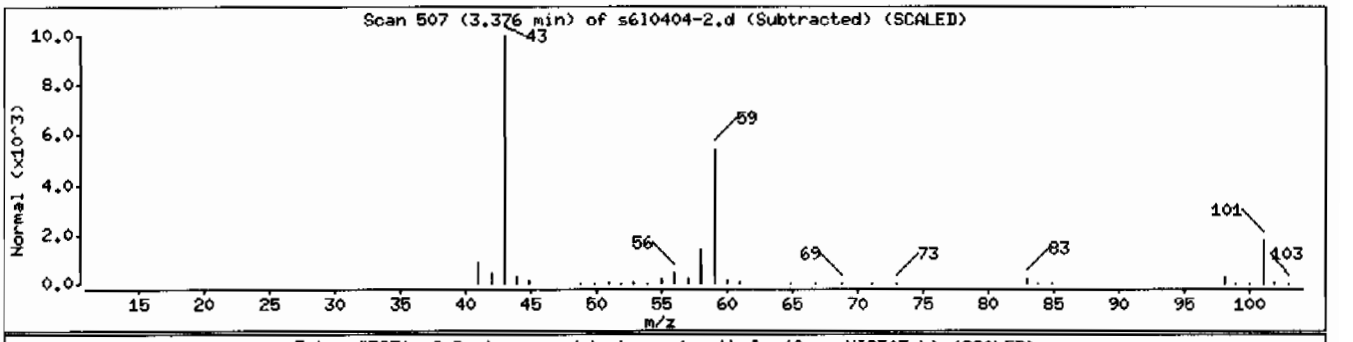

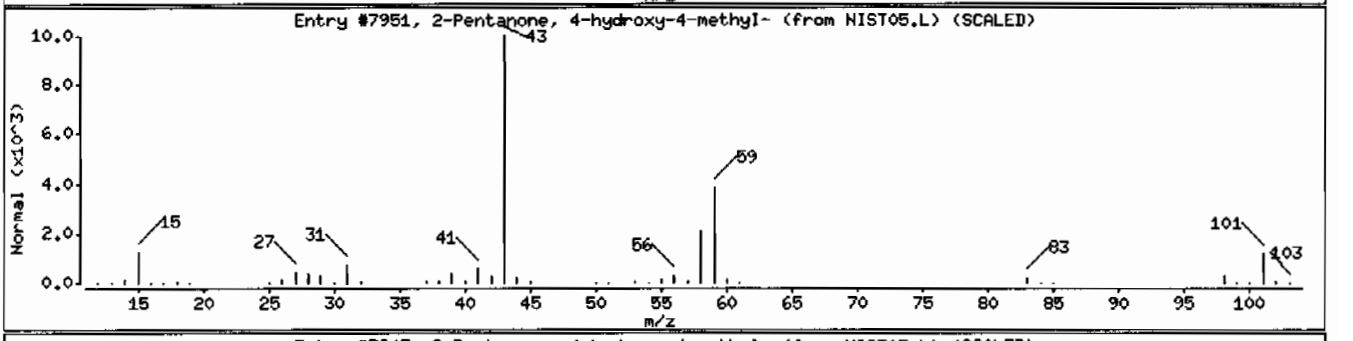

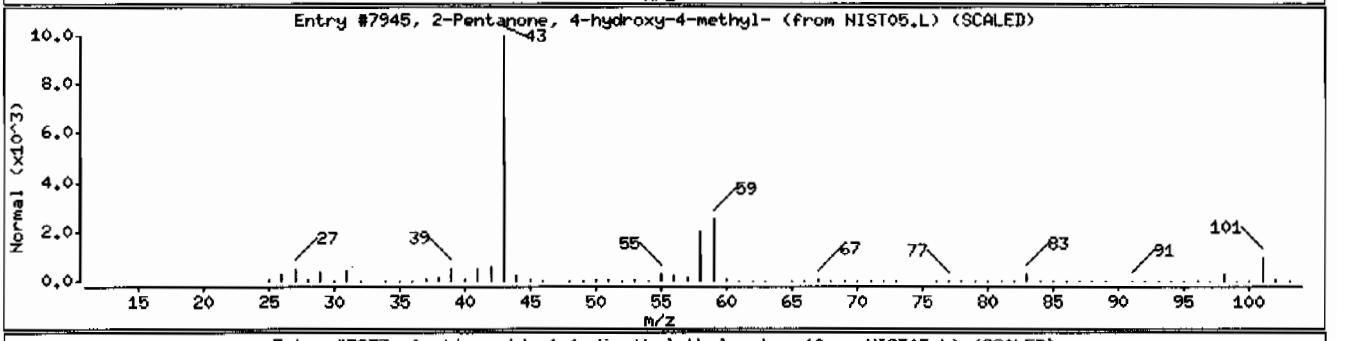

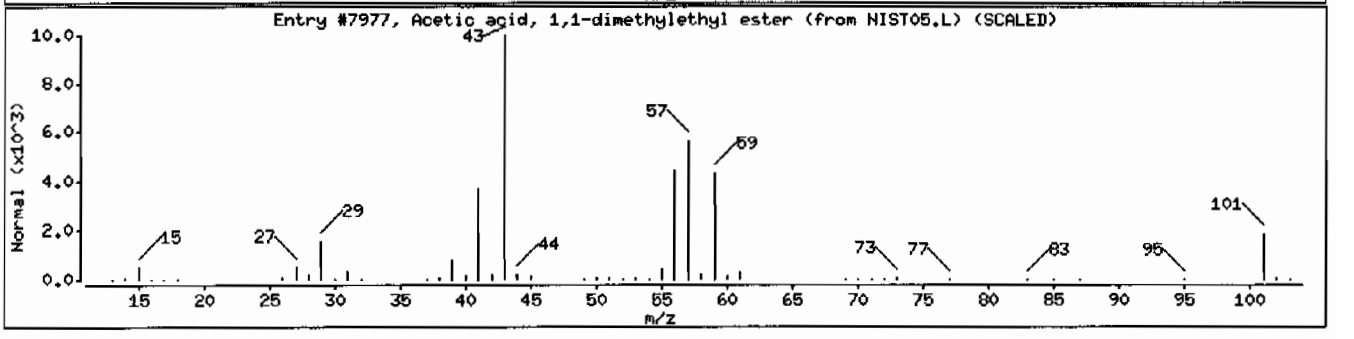

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-576			**Matrix:**	SOIL
Lab Sample ID:	1201979043				
Client Sample:	QC for batch 925648	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 925648	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/05/2009 12:18	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s6l0505.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		726	ug/kg	66.7	333
108-95-2	Phenol		1140	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1160	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1170	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1280	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1350	ug/kg	66.7	333
83-32-9	Acenaphthene		1250	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1510	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1140	ug/kg	110	333
87-86-5	Pentachlorophenol		1540	ug/kg	83.3	333
129-00-0	Pyrene		1320	ug/kg	10.0	33.3
110-86-1	Pyridine		721	ug/kg	66.7	333
62-53-3	Aniline		1020	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1080	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1170	ug/kg	66.7	333
100-51-6	Benzyl alcohol		796	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1230	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1210	ug/kg	66.7	333
95-48-7	o-Cresol		1190	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1440	ug/kg	100	333
67-72-1	Hexachloroethane		1180	ug/kg	66.7	333
98-95-3	Nitrobenzene		1250	ug/kg	66.7	333
78-59-1	Isophorone		1340	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1360	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1100	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1260	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1350	ug/kg	66.7	333
65-85-0	Benzoic acid		3350	ug/kg	167	667
91-20-3	Naphthalene		1230	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		988	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1270	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1460	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1480	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1290	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1410	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1260	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1150	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1210	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979043**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 12:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0505.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1400	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1430	ug/kg	33.3	333
208-96-8	Acenaphthylene		1350	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1570	ug/kg	127	667
132-64-9	Dibenzofuran		1590	ug/kg	66.7	333
84-66-2	Diethylphthalate		1400	ug/kg	66.7	333
86-73-7	Fluorene		1380	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1400	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1390	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1390	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1340	ug/kg	66.7	333
122-66-7	Azobenzene		1340	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1430	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1440	ug/kg	66.7	333
85-01-8	Phenanthrene		1370	ug/kg	10.0	33.3
120-12-7	Anthracene		1400	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1560	ug/kg	66.7	333
206-44-0	Fluoranthene		1530	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1480	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1430	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1250	ug/kg	100	333
218-01-9	Chrysene		1450	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1530	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1490	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1450	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1490	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1550	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1630	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1680	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1740	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1280	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610505-2.d
Lab Smp Id: 1201979043 Client Smp ID: SBLK01LCS
Inj Date : 05-DEC-2009 12:18
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979043|925661|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-576.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.722	4.719	(1.000)	202793	40.0000	
* 29 Naphthalene-d8	136	5.986	5.988	(1.000)	868816	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	487733	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	862246	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	740083	40.0000	
* 98 Perylene-d12	264	14.731	14.736	(1.000)	677291	40.0000	
$ 3 2-Fluorophenol	112	3.593	3.577	(0.761)	306461	60.3461	2010
$ 5 Phenol-d5	99	4.350	4.342	(0.921)	440218	68.6808	2290
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	222353	36.1787	1200
$ 39 2-Fluorobiphenyl	172	7.112	7.112	(0.906)	487539	38.7882	1290
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	138504	97.2941	3240
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.897)	552550	46.2963	1540

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.362	4.357	(0.924)	220528	34.2183	1140
8 2-Chlorophenol	128	4.531	4.525	(0.960)	180591	34.8850	1160
11 1,4-Dichlorobenzene	146	4.739	4.737	(1.004)	211634	35.0312	1170
17 N-Nitrosodipropylamine	70	5.089	5.091	(1.078)	137557	38.2874	1280(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	201607	38.2579	1280
33 4-Chloro-3-methylphenol	107	6.554	6.546	(1.095)	175125	40.4013	1350
47 Acenaphthene	154	7.886	7.891	(1.005)	412715	37.5455	1250
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	170130	45.2100	1510
52 4-Nitrophenol	139	8.009	7.983	(1.020)	65882	34.1034	1140
65 Pentachlorophenol	266	9.250	9.249	(0.977)	87451	46.0857	1540
79 Pyrene	202	11.031	11.031	(0.886)	805176	39.5545	1320
2 Pyridine	79	2.724	2.686	(0.577)	92996	21.6419	721
4 Aniline	66	4.413	4.411	(0.935)	81453	30.4562	1020
7 bis(2-Chloroethyl) ether	63	4.452	4.451	(0.943)	140810	32.2652	1080
9 1,3-Dichlorobenzene	146	4.673	4.671	(0.990)	208615	35.0050	1170
12 Benzyl alcohol	108	4.836	4.834	(1.024)	76757	23.8664	796
13 1,2-Dichlorobenzene	146	4.885	4.882	(1.035)	207275	36.7561	1220
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	354400	36.3737	1210
15 o-Cresol	107	4.926	4.920	(1.043)	150996	35.8236	1190
18 m,p-Cresols	107	5.076	5.076	(1.075)	231102	43.2706	1440
19 Hexachloroethane	117	5.213	5.213	(1.104)	82895	35.4680	1180
21 Nitrobenzene	77	5.272	5.272	(0.881)	232112	37.4709	1250
22 Isophorone	82	5.506	5.509	(0.920)	441195	40.1817	1340
23 2-Nitrophenol	139	5.585	5.585	(0.933)	116224	40.6775	1360
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	155598	32.8682	1100
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	243857	37.7391	1260
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	173458	40.3972	1350
27 Benzoic acid	105	5.754	5.718	(0.961)	294019	100.622	3350
30 Naphthalene	128	6.008	6.011	(1.004)	640574	36.9610	1230
31 4-Chloroaniline	127	6.052	6.049	(1.011)	165094	29.6379	988
32 Hexachlorobutadiene	225	6.118	6.120	(1.022)	104641	38.1323	1270
34 2-Methylnaphthalene	142	6.730	6.729	(1.124)	459065	43.8946	1460
36 Hexachlorocyclopentadiene	237	6.888	6.890	(0.877)	87307	44.3172	1480
37 2,4,6-Trichlorophenol	196	7.023	7.025	(0.894)	128334	38.5616	1280
38 2,4,5-Trichlorophenol	196	7.076	7.068	(0.901)	150418	42.4405	1410
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	414390	37.8316	1260
42 o-Nitroaniline	65	7.356	7.359	(0.937)	128935	34.4074	1150
41 m-Nitroaniline	138	7.800	7.802	(0.994)	99673	36.3353	1210
43 Dimethylphthalate	163	7.537	7.550	(0.960)	524865	41.9503	1400
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	128021	42.8983	1430
45 Acenaphthylene	152	7.698	7.703	(0.981)	712449	40.4529	1350
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	51997	47.1126	1570
49 Dibenzofuran	168	8.070	8.072	(1.028)	705591	47.5532	1580
51 Diethylphthalate	149	8.297	8.299	(1.057)	528635	41.9554	1400
53 Fluorene	166	8.442	8.444	(1.075)	505811	41.5327	1380
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	241998	42.0552	1400
55 2-Methyl-4,6-dinitrophenol	198	8.490	8.493	(0.897)	80510	41.7361	1390

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	108069	41.8026	1390
133 Diphenylamine	169	8.559	8.561	(0.904)	416329	40.0588	1340
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	533102	40.3263	1340
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	145645	42.8068	1430
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	154396	43.3224	1440
68 Phenanthrene	178	9.489	9.492	(1.003)	732079	41.0553	1370
69 Anthracene	178	9.545	9.548	(1.009)	750456	42.1057	1400
72 Di-n-butylphthalate	149	10.060	10.062	(1.063)	960386	46.9206	1560
76 Fluoranthene	202	10.778	10.781	(1.139)	781951	45.7776	1520
85 Butylbenzylphthalate	149	11.701	11.706	(0.939)	414075	44.4482	1480
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	683426	42.8013	1430
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	196060	37.5082	1250
92 Chrysene	228	12.488	12.493	(1.003)	665667	43.5095	1450
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	591116	45.9884	1530
94 Di-n-octylphthalate	149	13.378	13.377	(0.908)	959331	44.5671	1480
95 Benzo(b)fluoranthene	252	14.071	14.073	(0.955)	652652	43.5498	1450
96 Benzo(k)fluoranthene	252	14.117	14.119	(0.958)	666482	44.7237	1490
97 Benzo(a)pyrene	252	14.631	14.636	(0.993)	601626	46.4786	1550
99 Indeno(1,2,3-cd)pyrene	276	16.693	16.692	(1.133)	611358	48.8751	1630
100 Dibenzo(a,h)anthracene	278	16.721	16.726	(1.135)	515064	50.4863	1680
101 Benzo(ghi)perylene	276	17.195	17.197	(1.167)	517312	52.3123	1740(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.676	2.642	(0.567)	75231	21.7907	726

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610505-2.d
Date : 05-DEC-2009 12:18
Client ID: SBLK01LCS
Sample Info: 1120197904319256611111SWMF111SBLK01LCS
Volume Injected (uL): 0.5
Column phase: JW DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

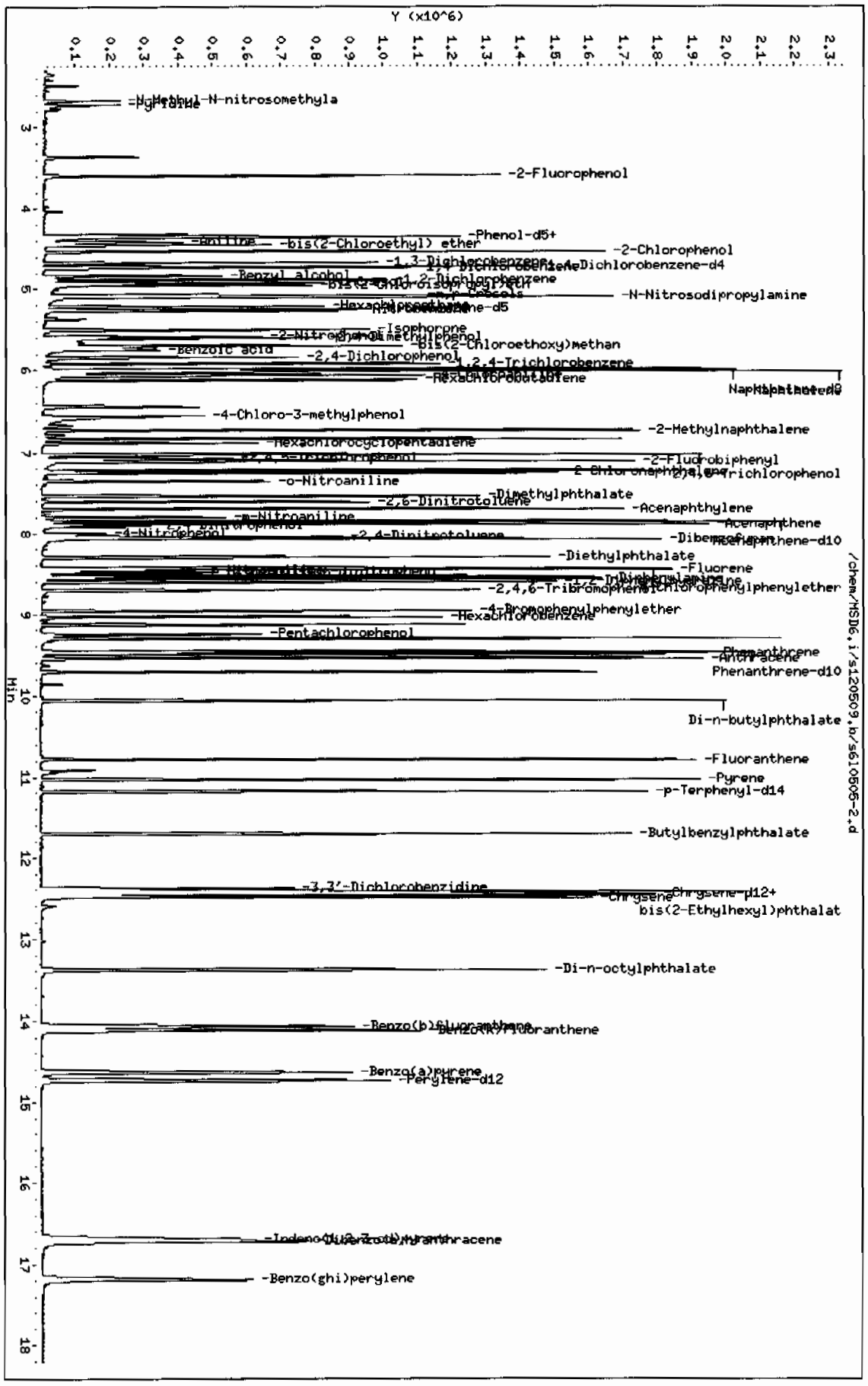

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 925648 **Verified by:** _____
Analyst: Alberto Velasco
Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201979040 MB	24-NOV-2009 21:57:44	30	1	0.03333
1201979043 LCS	24-NOV-2009 21:57:44	30	1	0.03333
241336001	24-NOV-2009 21:57:44	30.03	1	0.0333
241336002	24-NOV-2009 21:57:44	30.02	1	0.03331
241417001	24-NOV-2009 21:57:44	30.03	1	0.0333
1201979041 MS (241417001)	24-NOV-2009 21:57:44	30.12	1	0.0332
1201979042 MSD (241417001)	24-NOV-2009 21:57:44	30.14	1	0.03318
241417002	24-NOV-2009 21:57:44	30.02	1	0.03331
241418001	24-NOV-2009 21:57:44	30.02	1	0.03331
241418002	24-NOV-2009 21:57:44	30.14	1	0.03318
241418003	24-NOV-2009 21:57:44	30.06	1	0.03327
241418004	24-NOV-2009 21:57:44	30.06	1	0.03327
241418005	24-NOV-2009 21:57:44	30.12	1	0.0332
241418006	24-NOV-2009 21:57:44	30.04	1	0.03329
241418007	24-NOV-2009 21:57:44	30.01	1	0.03332
241418008	24-NOV-2009 21:57:44	30.06	1	0.03327
241418009	24-NOV-2009 21:57:44	30.13	1	0.03319
241418010	24-NOV-2009 21:57:44	30.15	1	0.03317
241418011	24-NOV-2009 21:57:44	30.02	1	0.03331
241418012	24-NOV-2009 21:57:44	30.06	1	0.03327
241418013	24-NOV-2009 21:57:44	30.17	1	0.03315
241418014	24-NOV-2009 21:57:44	30.18	1	0.03313
241418015	24-NOV-2009 21:57:44	30.01	1	0.03332
241418016	24-NOV-2009 21:57:44	30.07	1	0.03326

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201979043	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201979043	BENZIDINE LCS	UE091117-20	1	mL
MS	1201979041	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201979041	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201979042	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201979042	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS
Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/04/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610401.d	WBN091128-01	nagl	04-DEC-2009 09:48	50 PPM	s120409	1.0	DFTPP	
s610402.d	WBN091106-05.2	nagl	04-DEC-2009 10:02	40 PPM	s120409	1.0	MEGACVS	225677
s610403.d	WBN091201-03.2	nagl	04-DEC-2009 10:30	40 PPM	s120409	1.0	APCVS	
s610404.d	1201979040	nagl	04-DEC-2009 11:05	925661	10-546	1.0	SBLK01	
s610405.d	1201979043	nagl	04-DEC-2009 11:32	925661	10-546	1.0	SBLK01LCS	DUSE - see s610505
s610406.d	241336001	nagl	04-DEC-2009 12:00	925661	10-546	1.0	LANL	
s610407.d	241336002	nagl	04-DEC-2009 12:28	925661	10-546	1.0	LANL	
s610408.d	241417001	nagl	04-DEC-2009 12:54	925661	10-575	1.0	LANL	
s610409.d	1201979041	nagl	04-DEC-2009 13:21	925661	10-575	1.0	LANL001MS	DUSE - see s610506
s610410.d	1201979042	nagl	04-DEC-2009 13:49	925661	10-575	1.0	LANL001MSD	DUSE - see s610507
s610411.d	241417002	nagl	04-DEC-2009 14:18	925661	10-575	1.0	LANL	
s610412.d	241418001	nagl	04-DEC-2009 14:45	925661	10-576	1.0	LANL	
s610413.d	241418002	nagl	04-DEC-2009 15:13	925661	10-576	1.0	LANL	
s610414.d	241418003	nagl	04-DEC-2009 15:41	925661	10-576	1.0	LANL	
s610415.d	241418004	nagl	04-DEC-2009 16:10	925661	10-576	1.0	LANL	
s610416.d	241418005	nagl	04-DEC-2009 16:38	925661	10-576	1.0	LANL	
s610417.d	241418006	nagl	04-DEC-2009 17:06	925661	10-576	1.0	LANL	
s610418.d	241418007	nagl	04-DEC-2009 17:34	925661	10-576	1.0	LANL	
s610419.d	241418008	nagl	04-DEC-2009 18:01	925661	10-576	1.0	LANL	DUSE - see s610508

s610420.d	241418009	nag1	04-DEC-2009 18:29	925661	10-576		1.0	LANL	
s610421.d	241418010	nag1	04-DEC-2009 18:56	925661	10-576		1.0	LANL	
s610422.d	241418011	nag1	04-DEC-2009 19:23	925661	10-576		1.0	LANL	
s610423.d	241418012	nag1	04-DEC-2009 19:51	925661	10-576		1.0	LANL	
s610424.d	241418013	nag1	04-DEC-2009 20:17	925661	10-576		1.0	LANL	
s610425.d	241418014	nag1	04-DEC-2009 20:45	925661	10-576		1.0	LANL	
s610426.d	241418015	nag1	04-DEC-2009 21:13	925661	10-576		1.0	LANL	
s610427.d	241418016	nag1	04-DEC-2009 21:40	925661	10-576		1.0	LANL	DUSE - see s610509

(s10HInstrument Batch: /chem/MSD6.i/s120409.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/05/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120509.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610501.d	WBN091128-01	nagl	05-DEC-2009 10:31	50 PPM	s120509	1.0	DFTPP	
s610502.d	WBN091106-05.4	nagl	05-DEC-2009 10:46	40 PPM	s120509	1.0	MEGACVS	232623
s610503.d	WBN091201-03.2	nagl	05-DEC-2009 11:14	40 PPM	s120509	1.0	APCVS	
s610504.d	inst blk	nagl	05-DEC-2009 11:50	--------	s120509	1.0	INST BLK	
s610505.d	1201979043	nagl	05-DEC-2009 12:18	925661	10-546	1.0	SBLK01LCS	USE - rr of s610405
s610506.d	1201979041	nagl	05-DEC-2009 12:44	925661	10-575	1.0	LANL001MS	USE - rr of s610409
s610507.d	1201979042	nagl	05-DEC-2009 13:13	925661	s120509	1.0	LANL001MSD	USE - rr of s610410
s610508.d	241418008	nagl	05-DEC-2009 13:41	925661	10-576	1.0	LANL	USE - rr of s610419
s610509.d	241418016	nagl	05-DEC-2009 14:08	925661	10-576	1.0	LANL	USE - rr of s610427

Instrument Batch: /chem/MSD6.i/s120509.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 11/09/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1198658-D
Multiplier Voltage: 1565 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s110909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6k0901.d	WBN091101-01	JMB3	09-NOV-2009 11:20	50 PPM	s110909	1.0	DFTPP	DUSE
s6k0902.d	inst blk	JMB3	09-NOV-2009 11:35	--------	s110909	1.0	INST BLK	DUSE
s6k0903.d	WBN091106-08	JMB3	09-NOV-2009 12:23	1 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0904.d	WBN091106-07	JMB3	09-NOV-2009 13:00	10 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0905.d	WBN091106-06	JMB3	09-NOV-2009 13:36	20 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0906.d	WBN091106-05.1	JMB3	09-NOV-2009 14:14	40 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0907.d	WBN091106-04	JMB3	09-NOV-2009 14:52	50 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0908.d	WBN091106-03	JMB3	09-NOV-2009 15:30	80 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0909.d	WBN091106-02	JMB3	09-NOV-2009 16:06	100 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0910.d	WBN091106-01	JMB3	09-NOV-2009 16:43	120 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0911-D.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0912.d	inst blk	JMB3	09-NOV-2009 18:15	--------	s110909	1.0	INST BLK	
s6k0913.d	WBN091106-08	JMB3	09-NOV-2009 18:53	1 PPM	s110909	1.0	MEGAICAL	
s6k0914.d	WBN091106-07	JMB3	09-NOV-2009 19:31	10 PPM	s110909	1.0	MEGAICAL	
s6k0915.d	WBN091106-06	JMB3	09-NOV-2009 20:09	20 PPM	s110909	1.0	MEGAICAL	
s6k0916.d	WBN091106-05.1	JMB3	09-NOV-2009 20:46	40 PPM	s110909	1.0	MEGAICAL	
s6k0917.d	WBN091106-04	JMB3	09-NOV-2009 21:25	50 PPM	s110909	1.0	MEGAICAL	
s6k0918.d	WBN091106-03	JMB3	09-NOV-2009 22:01	80 PPM	s110909	1.0	MEGAICAL	

s6k0919.d	WBN091106-02	JMB3	09-NOV-2009 22:39	100 PPM	s110909	1.0	MEGAICAL	
s6k0920.d	WBN091106-01	JMB3	09-NOV-2009 23:16	120 PPM	s110909	1.0	MEGAICAL	
s6k0921-D.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0921.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0922.d	inst blk	JMB3	10-NOV-2009 11:21	--------	s110909	1.0	INST BLK	
s6k0923.d	WBN091016-01	JMB3	10-NOV-2009 11:59	10 PPM	s110909	1.0	AP12ICAL	
s6k0924.d	WBN091016-02	JMB3	10-NOV-2009 12:36	20 PPM	s110909	1.0	AP12ICAL	
s6k0925.d	WBN091016-03	JMB3	10-NOV-2009 13:13	40 PPM	s110909	1.0	AP12ICAL	
s6k0926.d	WBN091016-04	JMB3	10-NOV-2009 13:51	50 PPM	s110909	1.0	AP12ICAL	
s6k0927.d	WBN091016-05	JMB3	10-NOV-2009 14:30	80 PPM	s110909	1.0	AP12ICAL	
s6k0928.d	WBN091016-06	JMB3	10-NOV-2009 15:06	100 PPM	s110909	1.0	AP12ICAL	
s6k0929.d	WBN091016-07	JMB3	10-NOV-2009 15:43	120 PPM	s110909	1.0	AP12ICAL	
s6k0930.d	WBN091029-25	JMB3	10-NOV-2009 16:20	10 PPM	s110909	1.0	PESTICAL	
s6k0931.d	WBN091029-24	JMB3	10-NOV-2009 16:56	20 PPM	s110909	1.0	PESTICAL	
s6k0932.d	WBN091029-23.1	JMB3	10-NOV-2009 17:33	40 PPM	s110909	1.0	PESTICAL	
s6k0933.d	WBN091029-22	JMB3	10-NOV-2009 18:09	50 PPM	s110909	1.0	PESTICAL	
s6k0934.d	WBN091029-21	JMB3	10-NOV-2009 18:45	80 PPM	s110909	1.0	PESTICAL	
s6k0935.d	WBN091029-20	JMB3	10-NOV-2009 19:21	100 PPM	s110909	1.0	PESTICAL	
s6k0936.d	WBN091029-19	JMB3	10-NOV-2009 19:58	120 PPM	s110909	1.0	PESTICAL	
s6k0937-D.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	FAILED SC 8270D
s6k0937.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	
s6k0938-D.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0938.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0939-D.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0939.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0940-D.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	
s6k0940.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	

s6k0941.d	inst blk	JMB3	10-NOV-2009 22:26	--------	s110909	1.0	INST BLK	
s6k0942.d	WBN091016-16	JMB3	10-NOV-2009 22:55	500 PPM	s110909	1.0	HEXICAL	
s6k0943.d	WBN091016-15	JMB3	10-NOV-2009 23:24	1000 PPM	s110909	1.0	HEXICAL	
s6k0944.d	WBN091016-14	JMB3	10-NOV-2009 23:53	1250 PPM	s110909	1.0	HEXICAL	
s6k0945.d	WBN091016-13	JMB3	11-NOV-2009 00:21	1500 PPM	s110909	1.0	HEXICAL	
s6k0946.d	WBN091016-12	JMB3	11-NOV-2009 00:50	1750 PPM	s110909	1.0	HEXICAL	
s6k0947.d	UBN090828-02.4-16	JMB3	11-NOV-2009 01:18	500 PPM	s110909	1.0	HEXICAL	
s6k0948.d	UBN090924-01	JMB3	11-NOV-2009 01:47	10 PPM	s110909	1.0	NEVICAL	
s6k0949.d	UBN090924-02	JMB3	11-NOV-2009 02:16	20 PPM	s110909	1.0	NEVICAL	
s6k0950.d	UBN090924-03	JMB3	11-NOV-2009 02:44	40 PPM	s110909	1.0	NEVICAL	
s6k0951.d	UBN090924-04	JMB3	11-NOV-2009 03:12	50 PPM	s110909	1.0	NEVICAL	
s6k0952.d	UBN090924-05	JMB3	11-NOV-2009 03:41	80 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0953.d	UBN090924-06	JMB3	11-NOV-2009 04:10	100 PPM	s110909	1.0	NEVICAL	
s6k0954.d	UBN090924-07	JMB3	11-NOV-2009 04:38	120 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0955-D.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	DUSE - failed >70%-130%
s6k0955.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	

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Data file : /chem/MSD6.i/s120509.b/s610506.d
Lab Smp Id: 1201979041 Client Smp ID: RE03-09-13812MS
Inj Date : 05-DEC-2009 12:44
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979041|925661|1|SVMF|1|LANL001MS
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.721	4.719	(1.000)	200466	40.0000	
* 29 Naphthalene-d8	136	5.985	5.988	(1.000)	857738	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	484280	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	832631	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	675290	40.0000	
* 98 Perylene-d12	264	14.730	14.736	(1.000)	577986	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	269842	53.7521	1920
$ 5 Phenol-d5	99	4.347	4.342	(0.921)	389250	61.4339	2200
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	193823	31.9439	1140
$ 39 2-Fluorobiphenyl	172	7.109	7.112	(0.906)	434987	34.8540	1240
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	127218	90.0033	3220
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.897)	501532	46.0536	1640

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.360	4.357	(0.923)	195248	30.6474	1100
8 2-Chlorophenol	128	4.528	4.525	(0.959)	160733	31.4094	1120
11 1,4-Dichlorobenzene	146	4.737	4.737	(1.003)	185317	31.0311	1110
17 N-Nitrosodipropylamine	70	5.086	5.091	(1.077)	123441	34.7572	1240(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	178627	34.3349	1230
33 4-Chloro-3-methylphenol	107	6.556	6.546	(1.095)	171781	40.1417	1430
47 Acenaphthene	154	7.886	7.891	(1.005)	377045	34.5451	1230
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	154383	41.3179	1480
52 4-Nitrophenol	139	8.003	7.983	(1.019)	59686	31.7544	1130
65 Pentachlorophenol	266	9.252	9.249	(0.978)	71883	40.0280	1430
79 Pyrene	202	11.028	11.031	(0.885)	743420	40.0249	1430
2 Pyridine	79	2.714	2.686	(0.575)	80941	19.0551	681
4 Aniline	66	4.413	4.411	(0.935)	85179	32.2191	1150
7 bis(2-Chloroethyl) ether	63	4.451	4.451	(0.943)	124073	28.7601	1030
9 1,3-Dichlorobenzene	146	4.671	4.671	(0.989)	178959	30.3774	1080
12 Benzyl alcohol	108	4.834	4.834	(1.024)	48712	15.3221	548
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.034)	180290	32.3419	1160
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	313092	32.5071	1160
15 o-Cresol	107	4.923	4.920	(1.043)	142313	34.1555	1220
18 m,p-Cresols	107	5.073	5.076	(1.074)	218854	41.4530	1480
19 Hexachloroethane	117	5.213	5.213	(1.104)	71191	30.8138	1100
21 Nitrobenzene	77	5.272	5.272	(0.881)	209208	34.2096	1220
22 Isophorone	82	5.504	5.509	(0.920)	396946	36.6186	1310
23 2-Nitrophenol	139	5.585	5.585	(0.933)	103930	36.8445	1320
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	141850	30.3511	1080
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	220252	34.5262	1230
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	159761	37.6879	1350
27 Benzoic acid	105	5.736	5.718	(0.958)	199536	69.1689	2470
30 Naphthalene	128	6.008	6.011	(1.004)	576164	33.6740	1200
31 4-Chloroaniline	127	6.052	6.049	(1.011)	171988	31.2743	1120
32 Hexachlorobutadiene	225	6.118	6.120	(1.022)	92343	34.0854	1220
34 2-Methylnaphthalene	142	6.727	6.729	(1.124)	417516	40.4374	1440
36 Hexachlorocyclopentadiene	237	6.887	6.890	(0.877)	73151	37.3963	1340
37 2,4,6-Trichlorophenol	196	7.022	7.025	(0.894)	119209	36.0751	1290
38 2,4,5-Trichlorophenol	196	7.073	7.068	(0.901)	140017	39.7875	1420
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	382271	35.1481	1260
42 o-Nitroaniline	65	7.354	7.359	(0.937)	117654	31.6209	1130
41 m-Nitroaniline	138	7.797	7.802	(0.993)	94712	34.7730	1240
43 Dimethylphthalate	163	7.537	7.550	(0.960)	474177	38.1693	1360
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	117027	39.4940	1410
45 Acenaphthylene	152	7.698	7.703	(0.981)	664045	37.9734	1360
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	42827	41.5531	1480
49 Dibenzofuran	168	8.070	8.072	(1.028)	661917	44.9279	1600
51 Diethylphthalate	149	8.294	8.299	(1.056)	495099	39.5740	1410
53 Fluorene	166	8.442	8.444	(1.075)	467522	38.6625	1380
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	225680	39.4990	1410
55 2-Methyl-4,6-dinitrophenol	198	8.488	8.493	(0.897)	69856	38.2204	1360

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	103915	40.7055	1450
133 Diphenylamine	169	8.559	8.561	(0.904)	390865	38.9463	1390
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	490692	38.4384	1370
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	138051	42.0180	1500
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	145649	42.3217	1510
68 Phenanthrene	178	9.489	9.492	(1.003)	687057	39.9009	1420
69 Anthracene	178	9.545	9.548	(1.009)	704771	40.9489	1460
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	903373	45.7049	1630
76 Fluoranthene	202	10.778	10.781	(1.139)	732201	44.3898	1590
85 Butylbenzylphthalate	149	11.701	11.706	(0.939)	390101	45.8926	1640
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	606144	41.6037	1490
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	172190	36.1024	1290
92 Chrysene	228	12.488	12.493	(1.003)	599787	42.9650	1540
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	563652	48.0408	1720
94 Di-n-octylphthalate	149	13.375	13.377	(0.908)	902314	49.1204	1760
95 Benzo(b)fluoranthene	252	14.068	14.073	(0.955)	567920	44.4069	1590
96 Benzo(k)fluoranthene	252	14.114	14.119	(0.958)	568388	44.6943	1600
97 Benzo(a)pyrene	252	14.629	14.636	(0.993)	512796	46.4225	1660
99 Indeno(1,2,3-cd)pyrene	276	16.687	16.692	(1.133)	465348	43.9223	1570
100 Dibenzo(a,h)anthracene	278	16.721	16.726	(1.135)	387179	44.7941	1600
101 Benzo(ghi)perylene	276	17.189	17.197	(1.167)	389876	46.1993	1650(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.665	2.642	(0.564)	64606	18.9304	676

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610506.d
Date : 05-DEC-2009 12:44
Client ID: RE03-09-13B12MS
Sample Info: 1120197904119256611111SVHF111LANL001MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

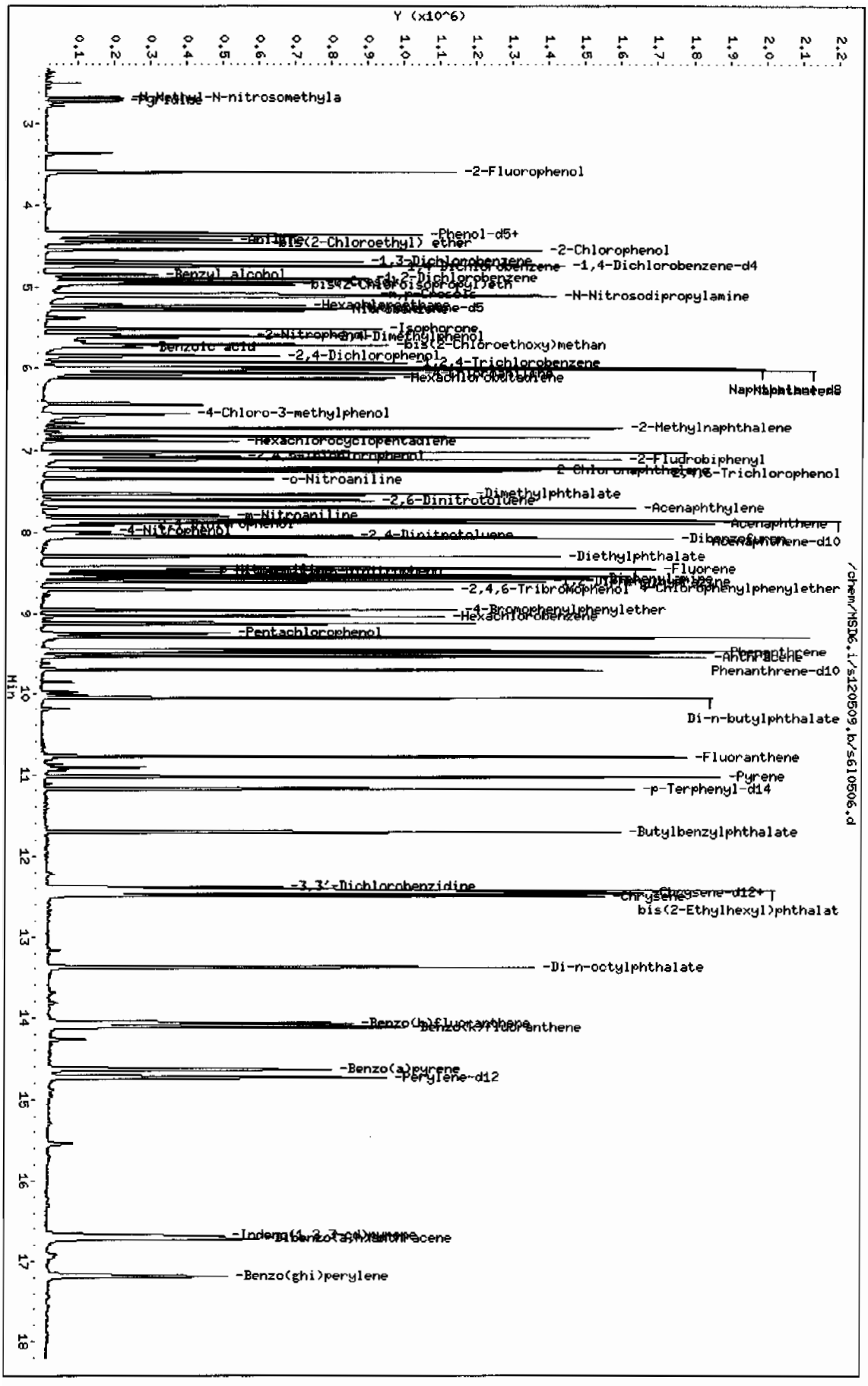

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Data file : /chem/MSD6.i/s120509.b/s610507.d
Lab Smp Id: 1201979042 Client Smp ID: RE03-09-13812MSD
Inj Date : 05-DEC-2009 13:13
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979042|925661|1|SVMF|1|LANL001MSD
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.722	4.719	(1.000)	212844	40.0000	
* 29 Naphthalene-d8	136	5.985	5.988	(1.000)	913923	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	507549	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	884578	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	735909	40.0000	
* 98 Perylene-d12	264	14.733	14.736	(1.000)	596420	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	279036	52.3511	1870
$ 5 Phenol-d5	99	4.350	4.342	(0.921)	404984	60.2000	2150
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	201006	31.0912	1110
$ 39 2-Fluorobiphenyl	172	7.109	7.112	(0.906)	427432	32.6784	1170
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	117056	79.0173	2820
$ 81 p-Terphenyl-d14	244	11.176	11.178	(0.897)	457000	38.5077	1380

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.360	4.357	(0.923)	212334	31.3910	1120
8 2-Chlorophenol	128	4.531	4.525	(0.960)	175421	32.2861	1150
11 1,4-Dichlorobenzene	146	4.739	4.737	(1.004)	199393	31.4464	1120
17 N-Nitrosodipropylamine	70	5.089	5.091	(1.078)	133477	35.3974	1260(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	191411	34.5303	1230
33 4-Chloro-3-methylphenol	107	6.556	6.546	(1.095)	142092	31.1627	1110
47 Acenaphthene	154	7.886	7.891	(1.005)	388765	33.9859	1210
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	154180	39.3718	1410
52 4-Nitrophenol	139	8.011	7.983	(1.020)	63681	32.1953	1150
65 Pentachlorophenol	266	9.252	9.249	(0.978)	70061	37.1659	1330
79 Pyrene	202	11.031	11.031	(0.886)	725063	35.8210	1280
2 Pyridine	79	2.716	2.686	(0.575)	88527	19.6290	701
4 Aniline	66	4.413	4.411	(0.935)	92195	32.8448	1170
7 bis(2-Chloroethyl) ether	63	4.452	4.451	(0.943)	135459	29.5733	1060
9 1,3-Dichlorobenzene	146	4.673	4.671	(0.990)	197670	31.6022	1130
12 Benzyl alcohol	108	4.836	4.834	(1.024)	34768	10.3001	368
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.034)	198308	33.5053	1200
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	342454	33.4879	1200
15 o-Cresol	107	4.925	4.920	(1.043)	134088	30.3100	1080
18 m,p-Cresols	107	5.073	5.076	(1.074)	203865	36.3684	1300
19 Hexachloroethane	117	5.213	5.213	(1.104)	77816	31.7226	1130
21 Nitrobenzene	77	5.272	5.272	(0.881)	220982	33.9134	1210
22 Isophorone	82	5.504	5.509	(0.920)	425636	36.8514	1320
23 2-Nitrophenol	139	5.585	5.585	(0.933)	111799	37.1976	1330
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	149283	29.9778	1070
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	237132	34.8871	1240
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	167764	37.1428	1330
27 Benzoic acid	105	5.731	5.718	(0.957)	205023	66.7017	2380
30 Naphthalene	128	6.008	6.011	(1.004)	614081	33.6836	1200
31 4-Chloroaniline	127	6.052	6.049	(1.011)	183595	31.3325	1120
32 Hexachlorobutadiene	225	6.121	6.120	(1.023)	99253	34.3837	1230
34 2-Methylnaphthalene	142	6.730	6.729	(1.124)	443900	40.3497	1440
36 Hexachlorocyclopentadiene	237	6.888	6.890	(0.877)	80091	39.0671	1400
37 2,4,6-Trichlorophenol	196	7.023	7.025	(0.894)	119735	34.5731	1230
38 2,4,5-Trichlorophenol	196	7.076	7.068	(0.901)	141121	38.2628	1370
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	394927	34.6470	1240
42 o-Nitroaniline	65	7.356	7.359	(0.937)	121958	31.2749	1120
41 m-Nitroaniline	138	7.797	7.802	(0.993)	98509	34.5090	1230
43 Dimethylphthalate	163	7.537	7.550	(0.960)	479666	36.8410	1320
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	118176	38.0533	1360
45 Acenaphthylene	152	7.700	7.703	(0.981)	671677	36.6489	1310
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	39976	38.5947	1380
49 Dibenzofuran	168	8.070	8.072	(1.028)	670138	43.4006	1550
51 Diethylphthalate	149	8.294	8.299	(1.056)	483397	36.8672	1320
53 Fluorene	166	8.442	8.444	(1.075)	476764	37.6192	1340
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	226252	37.7837	1350
55 2-Methyl-4,6-dinitrophenol	198	8.490	8.493	(0.897)	66882	35.1446	1260

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	102477	38.7191	1380
133 Diphenylamine	169	8.559	8.561	(0.904)	387106	36.3066	1300
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	495167	36.5111	1300
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	133063	38.1215	1360
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	139756	38.2245	1360
68 Phenanthrene	178	9.489	9.492	(1.003)	667316	36.4785	1300
69 Anthracene	178	9.545	9.548	(1.009)	694403	37.9772	1360
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	854376	40.6875	1450
76 Fluoranthene	202	10.778	10.781	(1.139)	710989	40.5725	1450
85 Butylbenzylphthalate	149	11.703	11.706	(0.940)	376015	40.5917	1450
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	599007	37.7271	1350
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	171120	32.9226	1180
92 Chrysene	228	12.488	12.493	(1.003)	583352	38.3455	1370
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	529814	41.4931	1480
94 Di-n-octylphthalate	149	13.375	13.377	(0.908)	847355	44.7028	1600
95 Benzo(b)fluoranthene	252	14.068	14.073	(0.955)	521923	39.5489	1410
96 Benzo(k)fluoranthene	252	14.116	14.119	(0.958)	531503	40.5022	1450
97 Benzo(a)pyrene	252	14.631	14.636	(0.993)	474032	41.5869	1480
99 Indeno(1,2,3-cd)pyrene	276	16.682	16.692	(1.132)	405734	37.5828	1340
100 Dibenzo(a,h)anthracene	278	16.716	16.726	(1.135)	326581	37.1098	1320
101 Benzo(ghi)perylene	276	17.187	17.197	(1.167)	325496	37.3783	1330(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.670	2.642	(0.566)	70217	19.3780	692

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610507.d
Date : 05-DEC-2009 13:13
Client ID: RE03-09-13812MSD
Sample Info: 1120197904219256611!!SVMFI1!!ANLO01MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

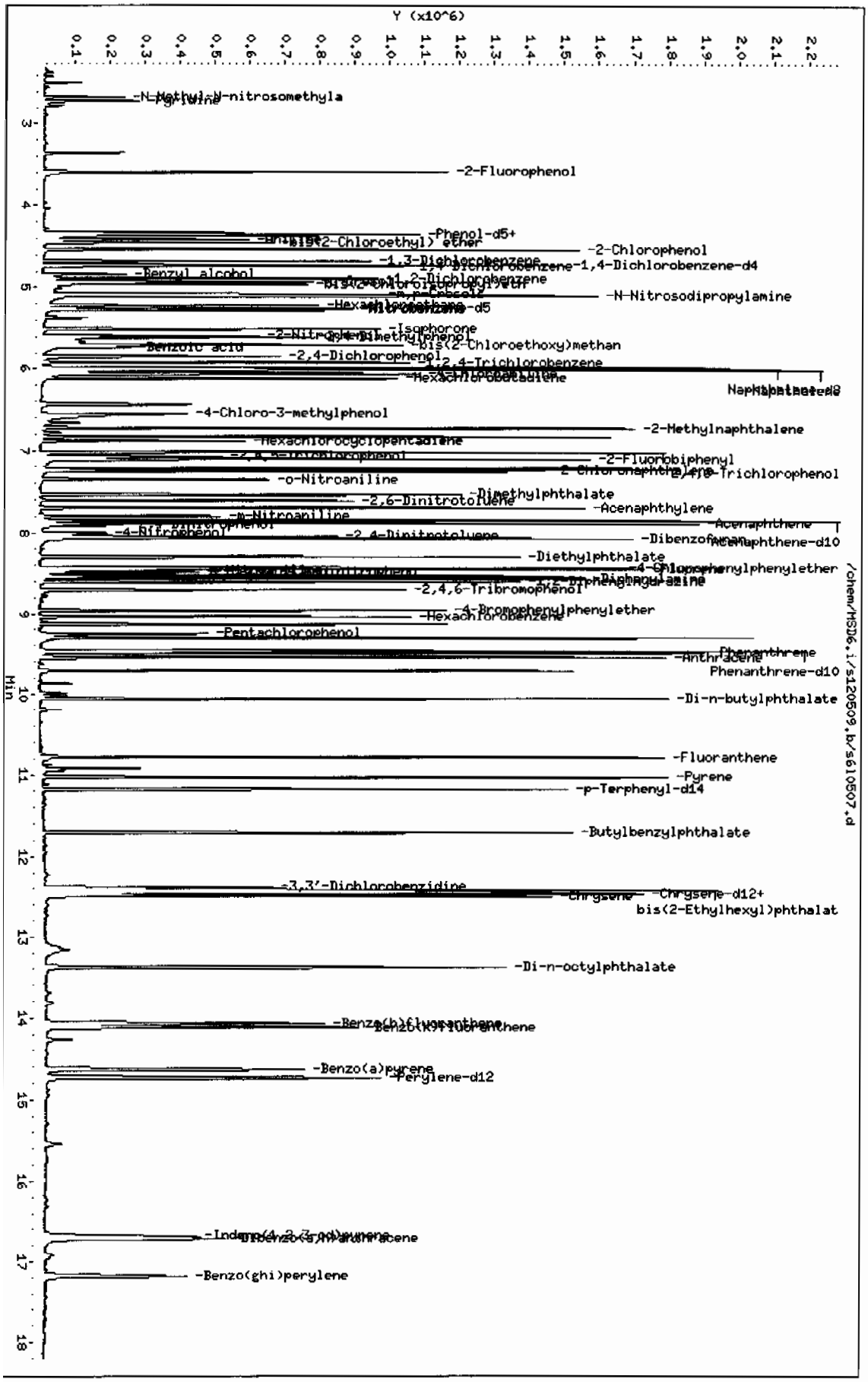

Page 1

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-576

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	926729
Prep Batch Number:	926728

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241418001	RE03-09-13961
241418002	RE03-09-13960
241418003	RE03-09-13959
241418004	RE03-09-13958
241418005	RE03-09-13965
241418006	RE03-09-13970
241418007	RE03-09-13962
241418008	RE03-09-13971
241418009	RE03-09-13969
241418010	RE03-09-13968
241418011	RE03-09-13964
241418012	RE03-09-13966
241418013	RE03-09-13967
241418014	RE03-09-13963
241418015	RE03-10-3914
241418016	RE03-10-3913
1201981410	Method Blank (MB)
1201981411	241418003(RE03-09-13959) Matrix Spike (MS)

1201981412 241418003(RE03-09-13959) Matrix Spike Duplicate (MSD)

1201981413 Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration requirements have been met for this SDG.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this non-compliance has no adverse effects on the data.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241418003 (RE03-09-13959) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241418001 (1:5) was diluted prior to analysis due to the oily matrix of the extract.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whittock Date: 12-15-2009

Roadmap for LANL 10-576 PCB

This roadmap was analyzed by jen01212 on 12-04-2009, 11:59.
This roadmap was reviewed by jim01140 on 12-07-2009, 09:31.
This roadmap was packaged by sha01289 on 12-15-2009, 08:43.
This roadmap was validated by rob01090 on 12-15-2009, 17:17.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/053f5301.d	241418001	sample	03-DEC-2009	17:47	10-576.sub	RE03-09-13961	5.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/054f5401.d	241418002	sample	03-DEC-2009	17:58	10-576.sub	RE03-09-13960	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/057f5701.d	241418003	sample	03-DEC-2009	18:31	10-576.sub	RE03-09-13959	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/060f6001.d	241418004	sample	03-DEC-2009	19:05	10-576.sub	RE03-09-13958	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/061f6101.d	241418005	sample	03-DEC-2009	19:16	10-576.sub	RE03-09-13965	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/062f6201.d	241418006	sample	03-DEC-2009	19:27	10-576.sub	RE03-09-13970	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/063f6301.d	241418007	sample	03-DEC-2009	19:38	10-576.sub	RE03-09-13962	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/064f6401.d	241418008	sample	03-DEC-2009	19:49	10-576.sub	RE03-09-13971	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/065f6501.d	241418009	sample	03-DEC-2009	20:00	10-576.sub	RE03-09-13969	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/066f6601.d	241418010	sample	03-DEC-2009	20:11	10 576.sub	RE03-09-13968	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/069f6901.d	241418011	sample	03-DEC-2009	20:45	10-576.sub	RE03-09-13964	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/070f7001.d	241418012	sample	03-DEC-2009	20:56	10-576.sub	RE03-09-13966	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/071f7101.d	241418013	sample	03-DEC-2009	21:07	10-576.sub	RE03-09-13967	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/072f7201.d	241418014	sample	03-DEC-2009	21:18	10-576.sub	RE03-09-13963	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/073f7301.d	241418015	sample	03-DEC-2009	21:29	10-576.sub	RE03-10-3914	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/074f7401.d	241418016	sample	03-DEC-2009	21:40	10-576.sub	RE03-10-3913	1.00000	926729	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/053b5301.d	241418001	sample	03-DEC-2009	17:47	10-576.sub	RE03-09-13961	5.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/054b5401.d	241418002	sample	03-DEC-2009	17:58	10-576.sub	RE03-09-13960	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/057b5701.d	241418003	sample	03-DEC-2009	18:31	10-576.sub	RE03-09-13959	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/060b6001.d	241418004	sample	03-DEC-2009	19:05	10-576.sub	RE03-09-13958	1.00000	926729	UPLOAD BOTH, USE HIGHER

☐	N	/chem/ecd2a.i/120309.b/061b6101.d	241418005	sample	03-DEC-2009	19:16	10-576.sub	RE03-09-13965	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/062b6201.d	241418006	sample	03-DEC-2009	19:27	10-576.sub	RE03-09-13970	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/063b6301.d	241418007	sample	03-DEC-2009	19:38	10-576.sub	RE03-09-13962	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/064b6401.d	241418008	sample	03-DEC-2009	19:49	10-576.sub	RE03-09-13971	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/065b6501.d	241418009	sample	03-DEC-2009	20:00	10-576.sub	RE03-09-13969	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/066b6601.d	241418010	sample	03-DEC-2009	20:11	10-576.sub	RE03-09-13968	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/069b6901.d	241418011	sample	03-DEC-2009	20:45	10-576.sub	RE03-09-13964	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/070b7001.d	241418012	sample	03-DEC-2009	20:56	10-576.sub	RE03-09-13966	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/071b7101.d	241418013	sample	03-DEC-2009	21:07	10-576.sub	RE03-09-13967	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/072b7201.d	241418014	sample	03-DEC-2009	21:18	10-576.sub	RE03-09-13963	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/073b7301.d	241418015	sample	03-DEC-2009	21:29	10-576.sub	RE03-10-3914	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/074b7401.d	241418016	sample	03-DEC-2009	21:40	10-576.sub	RE03-10-3913	1.00000	926729	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/051f5101.d	1201981410	mb	03-DEC-2009	17:25	10-576.sub	PBLK01	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/052f5201.d	1201981413	lcs	03-DEC-2009	17:36	10-576.sub	PBLK01LCS	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/058f5801.d	1201981411	ms	03-DEC-2009	18:42	10-576.sub	RE03-09-13959MS	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/059f5901.d	1201981412	msd	03-DEC-2009	18:54	10-576.sub	RE03-09-13959MSD	1.00000	926729	UPLOAD BOTH, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120309.b/051b5101.d	1201981410	mb	03-DEC-2009	17:25	10-576.sub	PBLK01	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/052b5201.d	1201981413	lcs	03-DEC-2009	17:36	10-576.sub	PBLK01LCS	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/058b5801.d	1201981411	ms	03-DEC-2009	18:42	10-576.sub	RE03-09-13959MS	1.00000	926729	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120309.b/059b5901.d	1201981412	msd	03-DEC-2009	18:54	10-576.sub	RE03-09-13959MSD	1.00000	926729	UPLOAD BOTH, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13958**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:05**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**060f6001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	060b6001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.57	ug/kg	1.52	4.57	1
11104-28-2	Aroclor-1221	U	4.57	ug/kg	1.52	4.57	1
11141-16-5	Aroclor-1232	U	4.57	ug/kg	1.52	4.57	1
53469-21-9	Aroclor-1242	U	4.57	ug/kg	1.52	4.57	1
12672-29-6	Aroclor-1248	U	4.57	ug/kg	1.52	4.57	1
11097-69-1	Aroclor-1254	J	1.80	ug/kg	1.52	4.57	1
11096-82-5	Aroclor-1260	U	4.57	ug/kg	1.52	4.57	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13959	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 18:31	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	057f5701.d	**Column:**	1 CLP1	**Level:**	LOW
	057b5701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.04	ug/kg	1.35	4.04	1
11104–28–2	Aroclor–1221	U	4.04	ug/kg	1.35	4.04	1
11141–16–5	Aroclor–1232	U	4.04	ug/kg	1.35	4.04	1
53469–21–9	Aroclor–1242	U	4.04	ug/kg	1.35	4.04	1
12672–29–6	Aroclor–1248	U	4.04	ug/kg	1.35	4.04	1
11097–69–1	Aroclor–1254	U	4.04	ug/kg	1.35	4.04	1
11096–82–5	Aroclor–1260	U	4.04	ug/kg	1.35	4.04	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**14.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13960**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:58**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**054f5401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	054b5401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.88	ug/kg	1.29	3.88	1
11104-28-2	Aroclor-1221	U	3.88	ug/kg	1.29	3.88	1
11141-16-5	Aroclor-1232	U	3.88	ug/kg	1.29	3.88	1
53469-21-9	Aroclor-1242	U	3.88	ug/kg	1.29	3.88	1
12672-29-6	Aroclor-1248	U	3.88	ug/kg	1.29	3.88	1
11097-69-1	Aroclor-1254	U	3.88	ug/kg	1.29	3.88	1
11096-82-5	Aroclor-1260	U	3.88	ug/kg	1.29	3.88	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13961**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**12/03/2009 17:47**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**053f5301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	053b5301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	20.0	ug/kg	6.66	20.0	1
11104-28-2	Aroclor-1221	U	20.0	ug/kg	6.66	20.0	1
11141-16-5	Aroclor-1232	U	20.0	ug/kg	6.66	20.0	1
53469-21-9	Aroclor-1242	U	20.0	ug/kg	6.66	20.0	1
12672-29-6	Aroclor-1248	U	20.0	ug/kg	6.66	20.0	1
11097-69-1	Aroclor-1254	U	20.0	ug/kg	6.66	20.0	1
11096-82-5	Aroclor-1260	U	20.0	ug/kg	6.66	20.0	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418007**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13962**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:38**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**063f6301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	063b6301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254		5.20	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260		6.10	ug/kg	1.26	3.79	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418014**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13963**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:18**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**072f7201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	072b7201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.02	ug/kg	1.34	4.02	1
11104-28-2	Aroclor-1221	U	4.02	ug/kg	1.34	4.02	1
11141-16-5	Aroclor-1232	U	4.02	ug/kg	1.34	4.02	1
53469-21-9	Aroclor-1242	U	4.02	ug/kg	1.34	4.02	1
12672-29-6	Aroclor-1248	U	4.02	ug/kg	1.34	4.02	1
11097-69-1	Aroclor-1254	U	4.02	ug/kg	1.34	4.02	1
11096-82-5	Aroclor-1260	U	4.02	ug/kg	1.34	4.02	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418011	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13964	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:45	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	069f6901.d	**Column:**	1 CLP1	**Level:**	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.83	ug/kg	1.27	3.83	1
11104-28-2	Aroclor-1221	U	3.83	ug/kg	1.27	3.83	1
11141-16-5	Aroclor-1232	U	3.83	ug/kg	1.27	3.83	1
53469-21-9	Aroclor-1242	U	3.83	ug/kg	1.27	3.83	1
12672-29-6	Aroclor-1248	U	3.83	ug/kg	1.27	3.83	1
11097-69-1	Aroclor-1254	U	3.83	ug/kg	1.27	3.83	1
11096-82-5	Aroclor-1260	J	2.20	ug/kg	1.27	3.83	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:16**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**061f6101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	061b6101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.75	ug/kg	1.25	3.75	1
11104-28-2	Aroclor-1221	U	3.75	ug/kg	1.25	3.75	1
11141-16-5	Aroclor-1232	U	3.75	ug/kg	1.25	3.75	1
53469-21-9	Aroclor-1242	U	3.75	ug/kg	1.25	3.75	1
12672-29-6	Aroclor-1248	U	3.75	ug/kg	1.25	3.75	1
11097-69-1	Aroclor-1254	U	3.75	ug/kg	1.25	3.75	1
11096-82-5	Aroclor-1260	J	2.80	ug/kg	1.25	3.75	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418012	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13966	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:56	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	JP	2.90	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	P	3.90	ug/kg	1.20	3.60	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13967**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:07**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**071f7101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	071b7101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.04	ug/kg	1.34	4.04	1
11104-28-2	Aroclor-1221	U	4.04	ug/kg	1.34	4.04	1
11141-16-5	Aroclor-1232	U	4.04	ug/kg	1.34	4.04	1
53469-21-9	Aroclor-1242	U	4.04	ug/kg	1.34	4.04	1
12672-29-6	Aroclor-1248	U	4.04	ug/kg	1.34	4.04	1
11097-69-1	Aroclor-1254	U	4.04	ug/kg	1.34	4.04	1
11096-82-5	Aroclor-1260	U	4.04	ug/kg	1.34	4.04	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418010**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13968**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 20:11**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**066f6601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	066b6601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.62	ug/kg	1.21	3.62	1
11104–28–2	Aroclor–1221	U	3.62	ug/kg	1.21	3.62	1
11141–16–5	Aroclor–1232	U	3.62	ug/kg	1.21	3.62	1
53469–21–9	Aroclor–1242	U	3.62	ug/kg	1.21	3.62	1
12672–29–6	Aroclor–1248	U	3.62	ug/kg	1.21	3.62	1
11097–69–1	Aroclor–1254	U	3.62	ug/kg	1.21	3.62	1
11096–82–5	Aroclor–1260	U	3.62	ug/kg	1.21	3.62	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13969	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:00	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.82	ug/kg	1.27	3.82	1
11104–28–2	Aroclor–1221	U	3.82	ug/kg	1.27	3.82	1
11141–16–5	Aroclor–1232	U	3.82	ug/kg	1.27	3.82	1
53469–21–9	Aroclor–1242	U	3.82	ug/kg	1.27	3.82	1
12672–29–6	Aroclor–1248	U	3.82	ug/kg	1.27	3.82	1
11097–69–1	Aroclor–1254	U	3.82	ug/kg	1.27	3.82	1
11096–82–5	Aroclor–1260	U	3.82	ug/kg	1.27	3.82	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418006**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13970**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:27**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**062f6201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	062b6201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.72	ug/kg	1.24	3.72	1
11104–28–2	Aroclor–1221	U	3.72	ug/kg	1.24	3.72	1
11141–16–5	Aroclor–1232	U	3.72	ug/kg	1.24	3.72	1
53469–21–9	Aroclor–1242	U	3.72	ug/kg	1.24	3.72	1
12672–29–6	Aroclor–1248	U	3.72	ug/kg	1.24	3.72	1
11097–69–1	Aroclor–1254	JP	2.80	ug/kg	1.24	3.72	1
11096–82–5	Aroclor–1260	J	1.80	ug/kg	1.24	3.72	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418008**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**19**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13971**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:49**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**064f6401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	064b6401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.11	ug/kg	1.37	4.11	1
11104-28-2	Aroclor-1221	U	4.11	ug/kg	1.37	4.11	1
11141-16-5	Aroclor-1232	U	4.11	ug/kg	1.37	4.11	1
53469-21-9	Aroclor-1242	U	4.11	ug/kg	1.37	4.11	1
12672-29-6	Aroclor-1248	U	4.11	ug/kg	1.37	4.11	1
11097-69-1	Aroclor-1254	U	4.11	ug/kg	1.37	4.11	1
11096-82-5	Aroclor-1260	U	4.11	ug/kg	1.37	4.11	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418016**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3913**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:40**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**074f7401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	074b7401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.00	ug/kg	1.33	4.00	1
11104-28-2	Aroclor-1221	U	4.00	ug/kg	1.33	4.00	1
11141-16-5	Aroclor-1232	U	4.00	ug/kg	1.33	4.00	1
53469-21-9	Aroclor-1242	U	4.00	ug/kg	1.33	4.00	1
12672-29-6	Aroclor-1248	U	4.00	ug/kg	1.33	4.00	1
11097-69-1	Aroclor-1254	U	4.00	ug/kg	1.33	4.00	1
11096-82-5	Aroclor-1260	U	4.00	ug/kg	1.33	4.00	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418015**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3914**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:29**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**073f7301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	073b7301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.80	ug/kg	1.27	3.80	1
11104-28-2	Aroclor-1221	U	3.80	ug/kg	1.27	3.80	1
11141-16-5	Aroclor-1232	U	3.80	ug/kg	1.27	3.80	1
53469-21-9	Aroclor-1242	U	3.80	ug/kg	1.27	3.80	1
12672-29-6	Aroclor-1248	U	3.80	ug/kg	1.27	3.80	1
11097-69-1	Aroclor-1254	J	3.70	ug/kg	1.27	3.80	1
11096-82-5	Aroclor-1260		4.80	ug/kg	1.27	3.80	1

QUALITY CONTROL SUMMARY

Surrogate Recovery Report

SDG Number: 10-576

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201981410	MB for batch 926728	94		100		74		77	
1201981413	LCS for batch 926728	96		103		80		82	
241418001	RE03-09-13961	92	D	93	D	74	D	76	D
241418002	RE03-09-13960	87		93		67		74	
241418003	RE03-09-13959	85		91		59		70	
1201981411	RE03-09-13959MS	90		96		71		82	
1201981412	RE03-09-13959MSD	85		90		62		74	
241418004	RE03-09-13958	85		91		68		74	
241418005	RE03-09-13965	86		91		65		73	
241418006	RE03-09-13970	84		91		70		73	
241418007	RE03-09-13962	89		95		69		80	
241418008	RE03-09-13971	97		104		83		88	
241418009	RE03-09-13969	90		96		77		82	
241418010	RE03-09-13968	88		95		70		75	
241418011	RE03-09-13964	84		91		70		79	
241418012	RE03-09-13966	69		91		64		76	
241418013	RE03-09-13967	84		95		72		81	
241418014	RE03-09-13963	92		99		75		81	
241418015	RE03-10-3914	82		87		61		69	
241418016	RE03-10-3913	86		92		58		69	

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: LCS for batch 926728
Lab Sample ID: 1201981413
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 17:36
Prep Batch ID: 926728
Batch ID: 926729
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	31.6	95	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	33.7	101	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-576**	**Sample Type:**	**Matrix Spike**	
Client ID:	**RE03-09-13959MS**	**Matrix:**	**S**	
Lab Sample ID:	**1201981411**	**%Moisture:**	**17.7**	
Instrument:	**ECD2A.I**	**Analysis Date:**	**12/03/2009 18:42**	**Dilution: 1**
Analyst:	**JAOC**	**Prep Batch ID:**	**926728**	
Inj. Vol:	**1 uL**	**Batch ID:**	**926729**	

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	40.3	0.00	U	37.1	92	23-117
11096-82-5	MS	Aroclor-1260	40.3	0.00	U	39.3	98	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-576
Client ID: RE03-09-13959MSD
Lab Sample ID: 1201981412
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 17.7
Analysis Date: 12/03/2009 18:54
Prep Batch ID: 926728
Batch ID: 926729
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	40.4	0.00	U	33.6	83	23-117	10	0-30
11096-82-5	MSD Aroclor-1260	40.4	0.00	U	36.2	90	27-116	8	0-30

Method Blank Summary

SDG Number:	10-576	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926728	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	051b5101-1.d 051f5101-1.d
Lab Sample ID:	1201981410				
Column:	CLP2 CLP1	Prep Date:	11/27/2009 21:14	Analyzed:	12/03/09 17:25
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926728	1201981413	052f5201-1.d 052b5201-1.d	12/03/09	1736
02	RE03-09-13961	241418001	053f5301.d 053b5301.d	12/03/09	1747
03	RE03-09-13960	241418002	054f5401.d 054b5401.d	12/03/09	1758
04	RE03-09-13959	241418003	057f5701.d 057b5701.d	12/03/09	1831
05	RE03-09-13959MS	1201981411	058f5801.d 058b5801.d	12/03/09	1842
06	RE03-09-13959MSD	1201981412	059f5901.d 059b5901.d	12/03/09	1854
07	RE03-09-13958	241418004	060f6001.d 060b6001.d	12/03/09	1905
08	RE03-09-13965	241418005	061f6101.d 061b6101.d	12/03/09	1916
09	RE03-09-13970	241418006	062f6201.d 062b6201.d	12/03/09	1927
10	RE03-09-13962	241418007	063f6301.d 063b6301.d	12/03/09	1938
11	RE03-09-13971	241418008	064f6401.d 064b6401.d	12/03/09	1949
12	RE03-09-13969	241418009	065f6501.d 065b6501.d	12/03/09	2000
13	RE03-09-13968	241418010	066f6601.d 066b6601.d	12/03/09	2011
14	RE03-09-13964	241418011	069f6901.d 069b6901.d	12/03/09	2045
15	RE03-09-13966	241418012	070f7001.d 070b7001.d	12/03/09	2056
16	RE03-09-13967	241418013	071f7101.d 071b7101.d	12/03/09	2107
17	RE03-09-13963	241418014	072f7201.d 072b7201.d	12/03/09	2118

Method Blank Summary

SDG Number:	10-576	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926728	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	051b5101-1.d 051f5101-1.d
Lab Sample ID:	1201981410				
Column:	CLP2 CLP1	Prep Date:	11/27/2009 21:14	Analyzed:	12/03/09 17:25
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
18 RE03-10-3914	241418015	073f7301.d 073b7301.d	12/03/09	2129
19 RE03-10-3913	241418016	074f7401.d 074b7401.d	12/03/09	2140

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418004**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**27.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13958**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:05**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**060f6001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	060b6001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.57	ug/kg	1.52	4.57	1
11104–28–2	Aroclor–1221	U	4.57	ug/kg	1.52	4.57	1
11141–16–5	Aroclor–1232	U	4.57	ug/kg	1.52	4.57	1
53469–21–9	Aroclor–1242	U	4.57	ug/kg	1.52	4.57	1
12672–29–6	Aroclor–1248	U	4.57	ug/kg	1.52	4.57	1
11097–69–1	Aroclor–1254	J	1.80	ug/kg	1.52	4.57	1
11096–82–5	Aroclor–1260	U	4.57	ug/kg	1.52	4.57	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/060f6001.d
Lab Smp Id: 241418004 Client Smp ID: RE03-09-13958
Inj Date : 03-DEC-2009 19:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418004|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13958|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 60
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	27.25150	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	9784198	169.537	7.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7414376	135.227	6.2	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	112147	53.9155	2.5	80.00- 120.00	100.00(a)
3.429	3.428	0.001	87480	31.5569	1.4	113.78- 153.78	78.01
3.698	3.697	0.001	136275	36.4138	1.7	164.17- 204.17	121.51
3.889	3.888	0.001	92680	33.3057	1.5	117.36- 157.36	82.64
4.019	4.018	0.001	106099	38.4411	1.8	110.08- 150.08	94.61
Average of Peak Concentrations =					1.8		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/060f6001.d

Date : 03-DEC-2009 19:05

Client ID: RE03-09-13958

Sample Info: |241418004|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

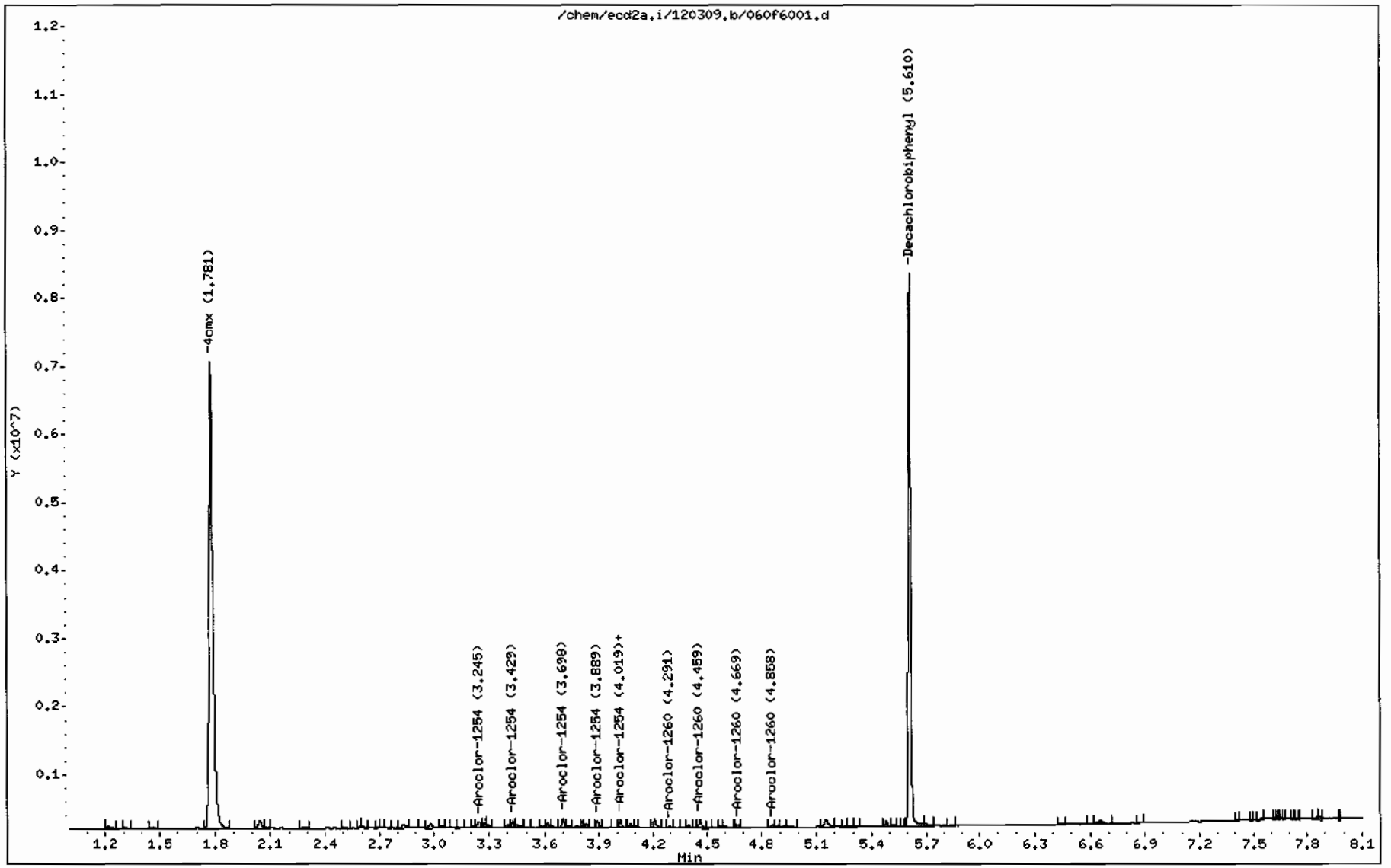

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/060b6001.d
Lab Smp Id: 241418004 Client Smp ID: RE03-09-13958
Inj Date : 03-DEC-2009 19:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418004|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13958|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 60
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	27.25150	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.075	0.003	21428122	181.287	8.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	16137309	148.537	6.8	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.824	3.822	0.002	202483	40.6160	1.8	80.00- 120.00	100.00(a)
3.964	3.963	0.001	283051	48.8108	2.2	96.19- 136.19	139.79
4.200	4.200	0.000	138631	34.4597	1.6	61.63- 101.63	68.47
4.281	4.280	0.001	237729	30.7486	1.4	137.40- 177.40	117.41
4.445	4.443	0.002	179250	31.9615	1.5	90.70- 130.70	88.53
Average of Peak Concentrations =					1.7		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/060b6001.d

Date : 03-DEC-2009 19:05

Client ID: RE03-09-13958

Sample Info: |24141800411|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

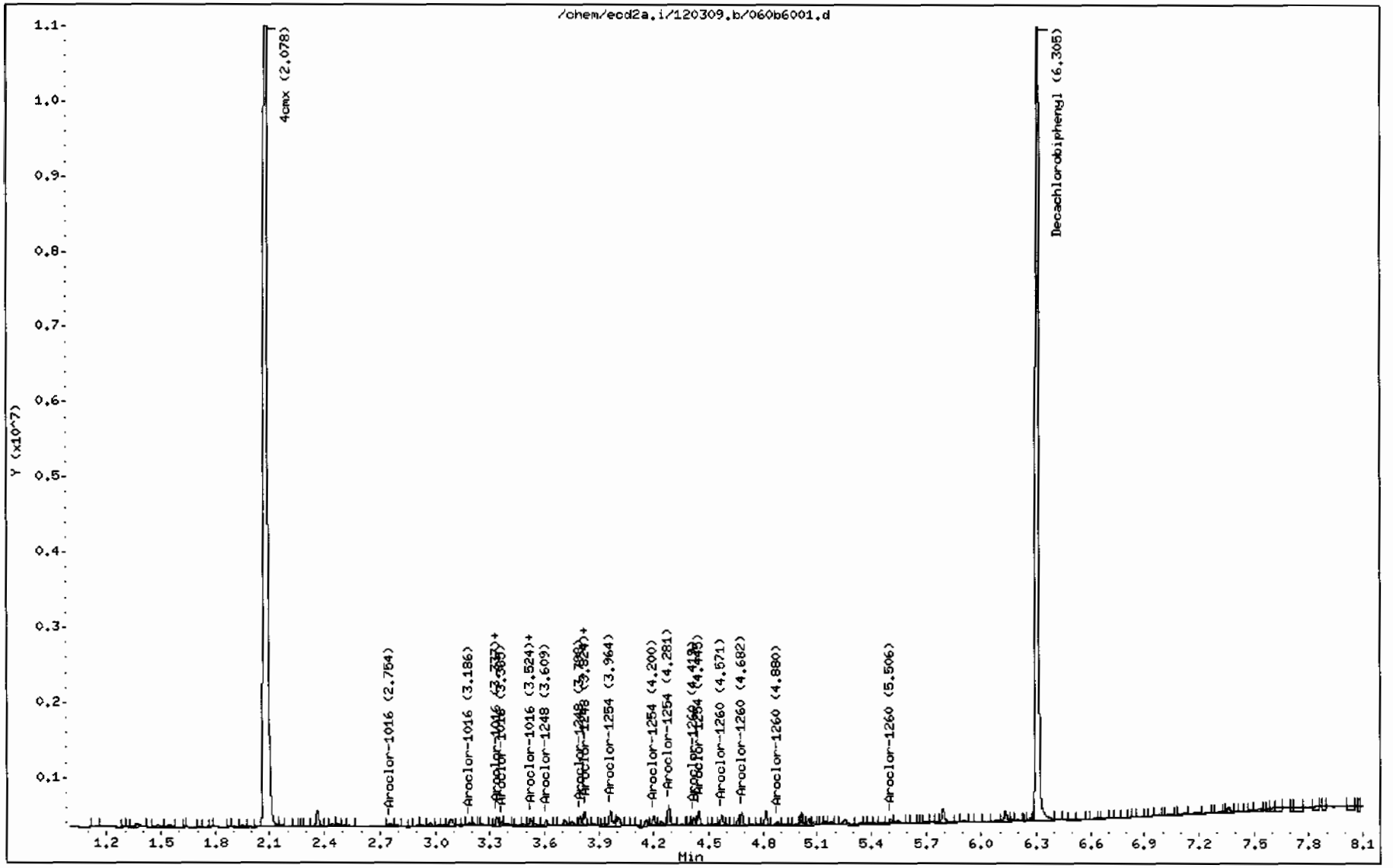

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418003	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13959	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 18:31	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	057f5701.d	**Column:**	1 CLP1	**Level:**	LOW
	057b5701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.04	ug/kg	1.35	4.04	1
11104-28-2	Aroclor-1221	U	4.04	ug/kg	1.35	4.04	1
11141-16-5	Aroclor-1232	U	4.04	ug/kg	1.35	4.04	1
53469-21-9	Aroclor-1242	U	4.04	ug/kg	1.35	4.04	1
12672-29-6	Aroclor-1248	U	4.04	ug/kg	1.35	4.04	1
11097-69-1	Aroclor-1254	U	4.04	ug/kg	1.35	4.04	1
11096-82-5	Aroclor-1260	U	4.04	ug/kg	1.35	4.04	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/057f5701.d
Lab Smp Id: 241418003 Client Smp ID: RE03-09-13959
Inj Date : 03-DEC-2009 18:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418003|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13959|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9862884	170.901	6.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	6424995	117.182	4.7	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/057f5701.d

Date : 03-DEC-2009 18:31

Client ID: RE03-09-13959

Sample Info: |241418003|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

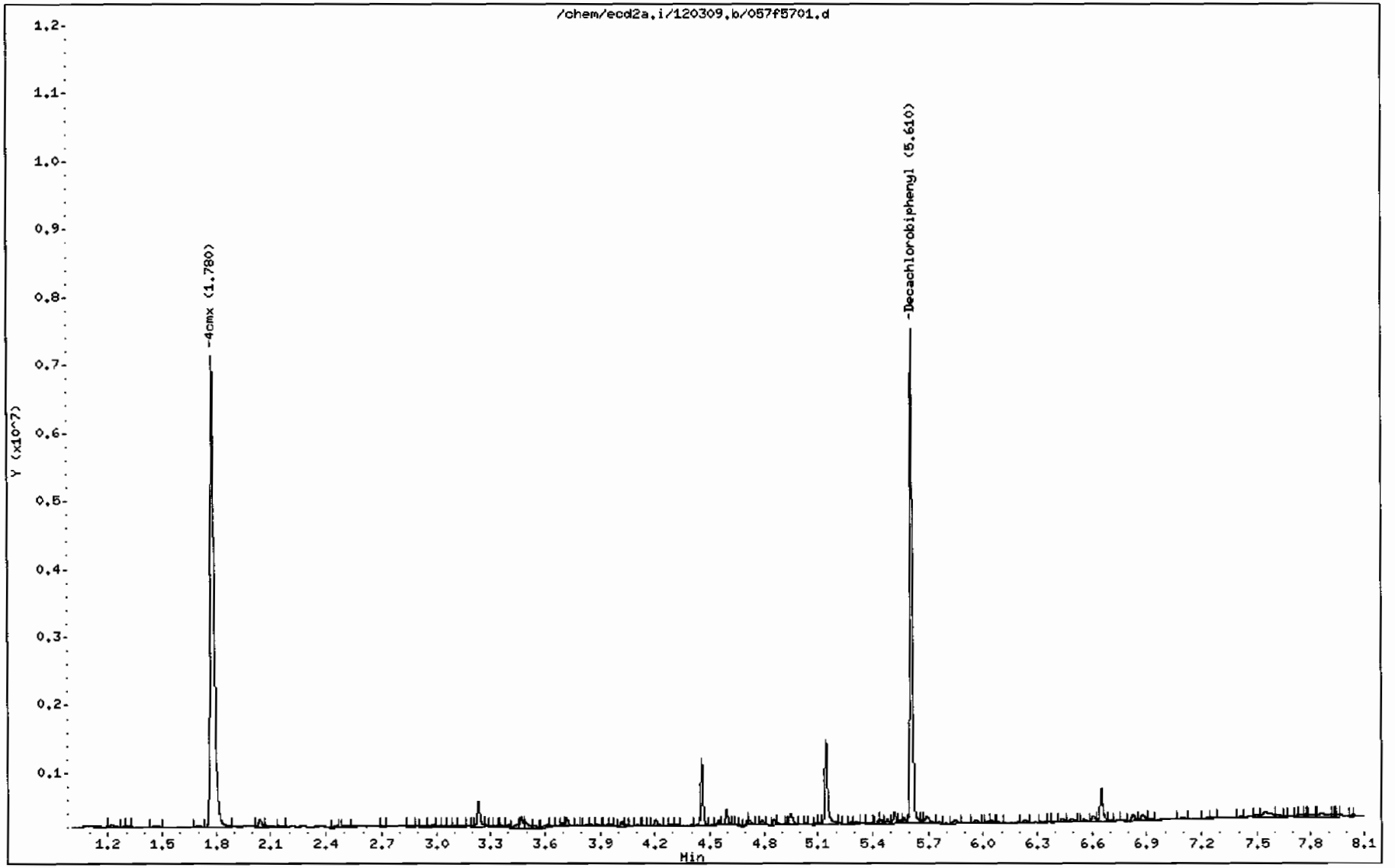

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/057b5701.d
Lab Smp Id: 241418003 Client Smp ID: RE03-09-13959
Inj Date : 03-DEC-2009 18:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418003|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13959|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21526234	182.117	7.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15243712	140.312	5.7	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/057b5701.d
Date : 03-DEC-2009 18:31
Client ID: RE03-09-13959
Sample Info: |241418003|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

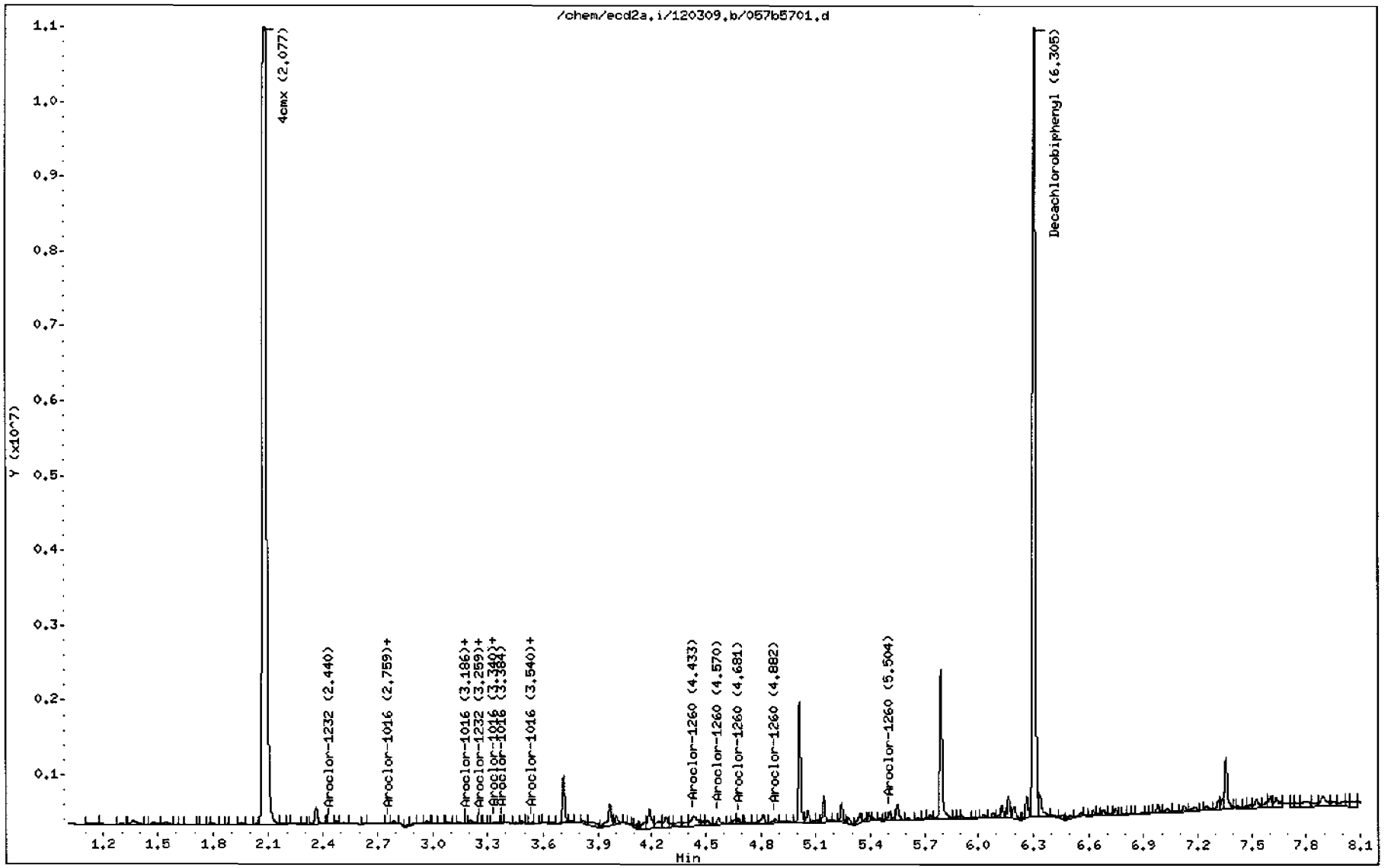

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	14.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13960	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 17:58	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	054f5401.d	**Column:**	1 CLP1	**Level:**	LOW
	054b5401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.88	ug/kg	1.29	3.88	1
11104–28–2	Aroclor–1221	U	3.88	ug/kg	1.29	3.88	1
11141–16–5	Aroclor–1232	U	3.88	ug/kg	1.29	3.88	1
53469–21–9	Aroclor–1242	U	3.88	ug/kg	1.29	3.88	1
12672–29–6	Aroclor–1248	U	3.88	ug/kg	1.29	3.88	1
11097–69–1	Aroclor–1254	U	3.88	ug/kg	1.29	3.88	1
11096–82–5	Aroclor–1260	U	3.88	ug/kg	1.29	3.88	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/054f5401.d
Lab Smp Id: 241418002 Client Smp ID: RE03-09-13960
Inj Date : 03-DEC-2009 17:58
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418002|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13960|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	14.39710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	10078144	174.631	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7340976	133.888	5.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/054f5401.d
Date : 03-DEC-2009 17:58
Client ID: RE03-09-13960
Sample Info: 1241418002|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

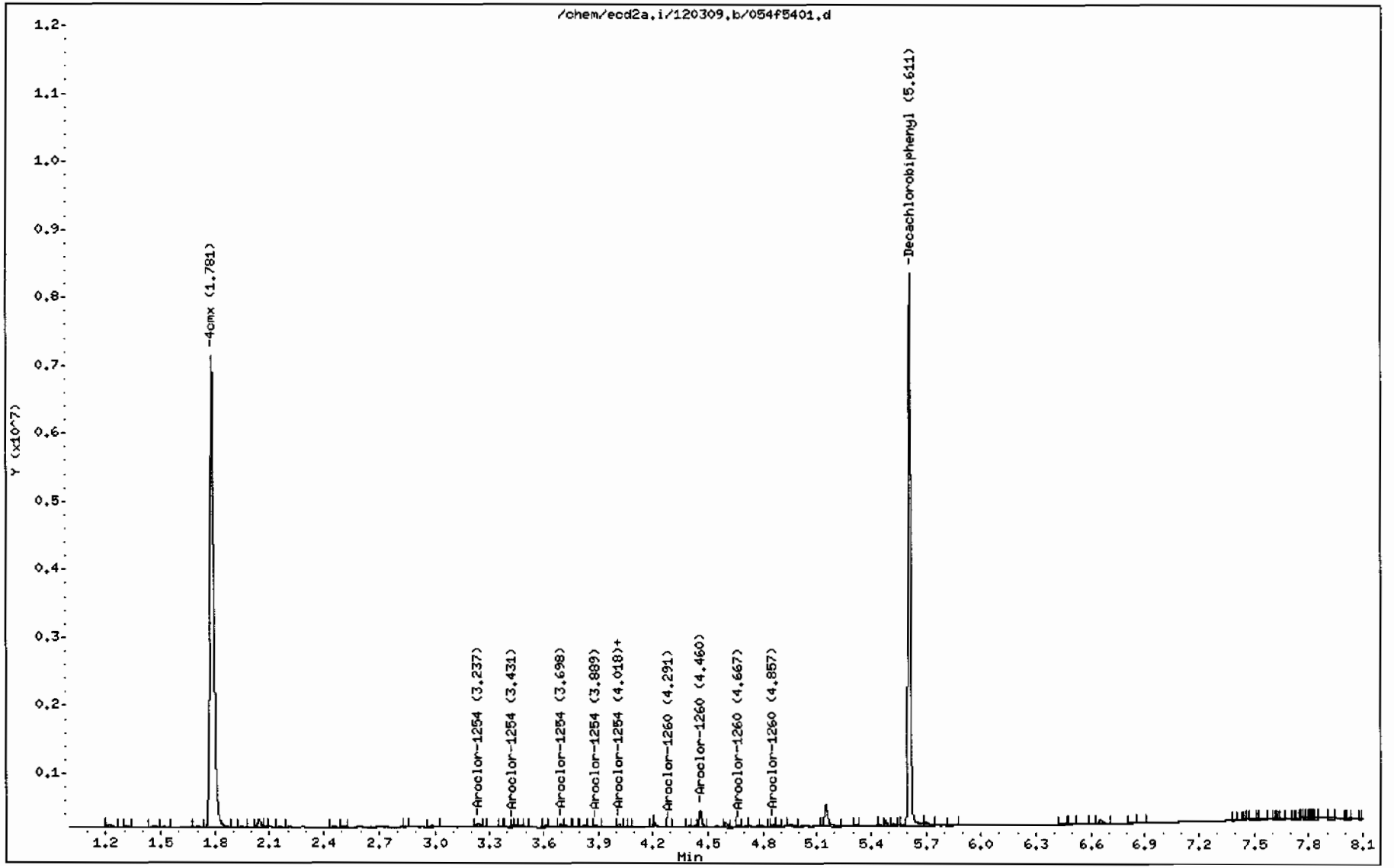

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/054b5401.d
Lab Smp Id: 241418002 Client Smp ID: RE03-09-13960
Inj Date : 03-DEC-2009 17:58
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418002|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13960|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	14.39710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21921542	185.462	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	16089100	148.093	5.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/054b5401.d
Date : 03-DEC-2009 17:58
Client ID: RE03-09-13960
Sample Info: 1241418002111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

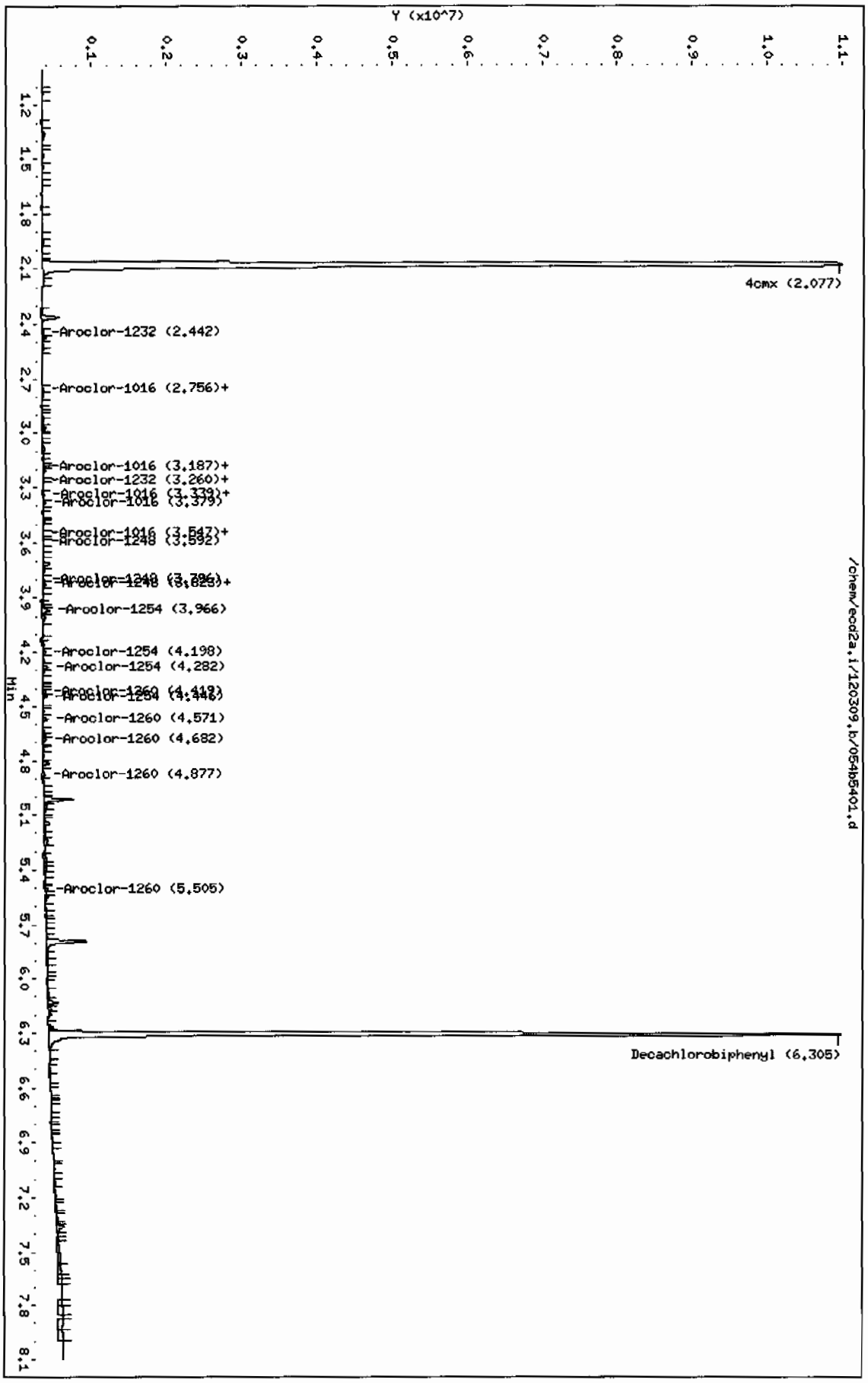

Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13961	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	12/03/2009 17:47	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	053f5301.d	**Column:**	1 CLP1	**Level:**	LOW
	053b5301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	20.0	ug/kg	6.66	20.0	1
11104-28-2	Aroclor-1221	U	20.0	ug/kg	6.66	20.0	1
11141-16-5	Aroclor-1232	U	20.0	ug/kg	6.66	20.0	1
53469-21-9	Aroclor-1242	U	20.0	ug/kg	6.66	20.0	1
12672-29-6	Aroclor-1248	U	20.0	ug/kg	6.66	20.0	1
11097-69-1	Aroclor-1254	U	20.0	ug/kg	6.66	20.0	1
11096-82-5	Aroclor-1260	U	20.0	ug/kg	6.66	20.0	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/053f5301.d
Lab Smp Id: 241418001 Client Smp ID: RE03-09-13961
Inj Date : 03-DEC-2009 17:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418001|5|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13961|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 53
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	16.97420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	2127567	36.8657	7.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	1612751	29.4141	5.9	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/053f5301.d

Date : 03-DEC-2009 17:47

Client ID: RE03-09-13961

Sample Info: |241418001151

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

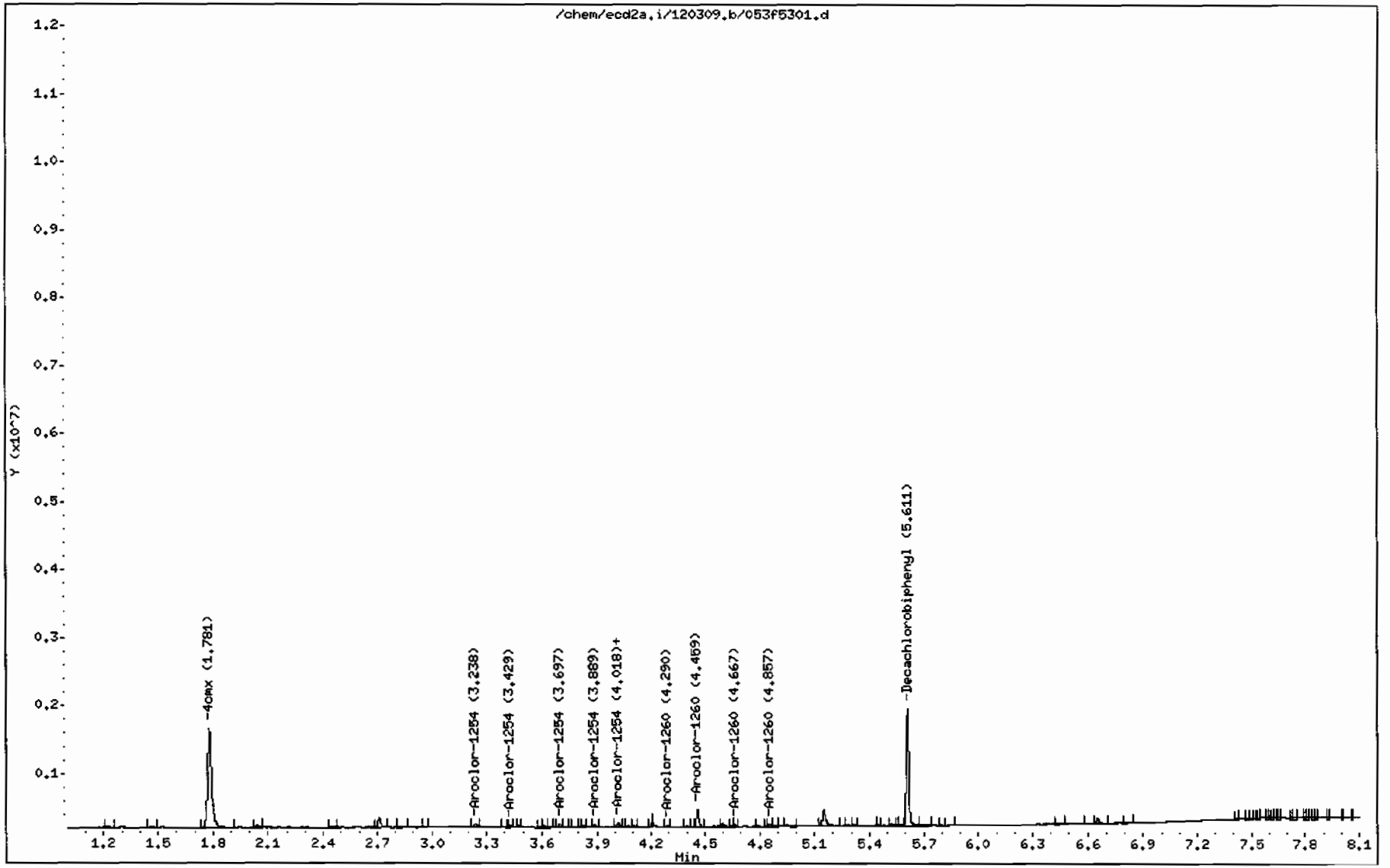

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/053b5301.d
Lab Smp Id: 241418001 Client Smp ID: RE03-09-13961
Inj Date : 03-DEC-2009 17:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418001|5|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13961|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 53
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	16.97420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	4373747	37.0030	7.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	3283028	30.2189	6.0	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/053b5301.d
Date : 03-DEC-2009 17:47
Client ID: RE03-09-13961
Sample Info: 1241418001151
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

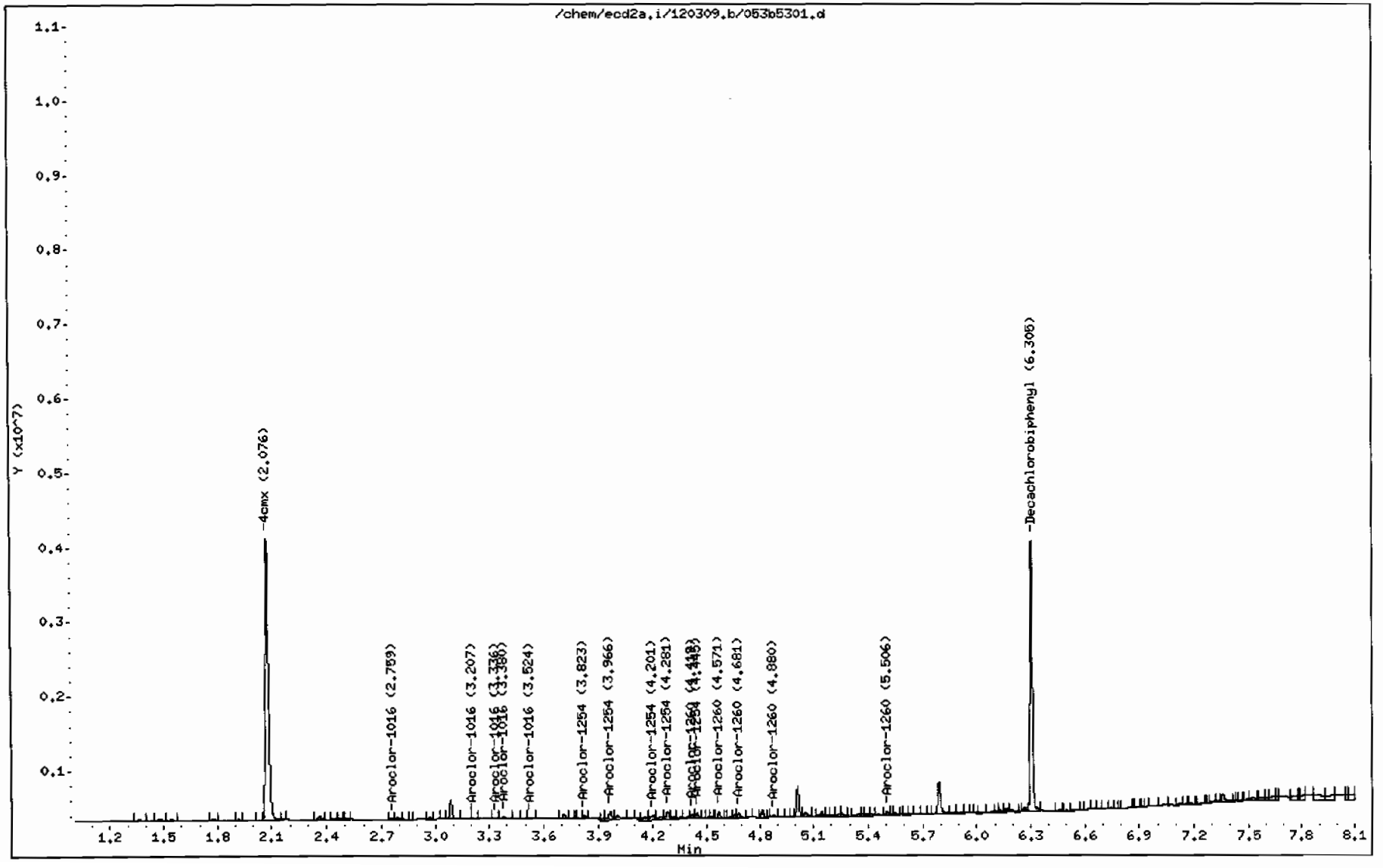

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418007	**Date Received:**	11/19/2009 08:45	**%Moisture:**	12.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13962	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 19:38	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	063f6301.d	**Column:**	1 CLP1	**Level:**	LOW
	063b6301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254		5.20	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260		6.10	ug/kg	1.26	3.79	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/063f6301.d
Lab Smp Id: 241418007 Client Smp ID: RE03-09-13962
Inj Date : 03-DEC-2009 19:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418007|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13962|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 63
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	12.46770	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	10295962	178.405	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7581778	138.280	5.2	80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1		
3.234	3.245	-0.011	371319	178.514	6.8	80.00- 120.00	100.00(M)
3.429	3.428	0.001	154291	55.6580	2.1	113.78- 153.78	41.55
3.697	3.697	0.000	313182	83.6849	3.2	164.17- 204.17	84.34
3.888	3.888	0.000	342763	123.176	4.7	117.36- 157.36	92.31
4.018	4.018	0.000	667181	241.729	9.2	110.08- 150.08	179.68

Average of Peak Concentrations = 5.2

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	667181	164.056	6.2	80.00- 120.00	100.00(M)
4.289	4.288	0.001	167212	66.1358	2.5	40.91- 80.91	25.06
4.456	4.454	0.002	1115497	431.827	16.4	42.71- 82.71	167.20
4.668	4.665	0.003	243692	40.3725	1.5	125.86- 165.86	36.53
4.856	4.855	0.001	305612	104.951	4.0	49.52- 89.52	45.81
Average of Peak Concentrations =					6.1		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/063f6301.d
Date : 03-DEC-2009 19:38
Client ID: RE03-09-13962
Sample Info: |241418007|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

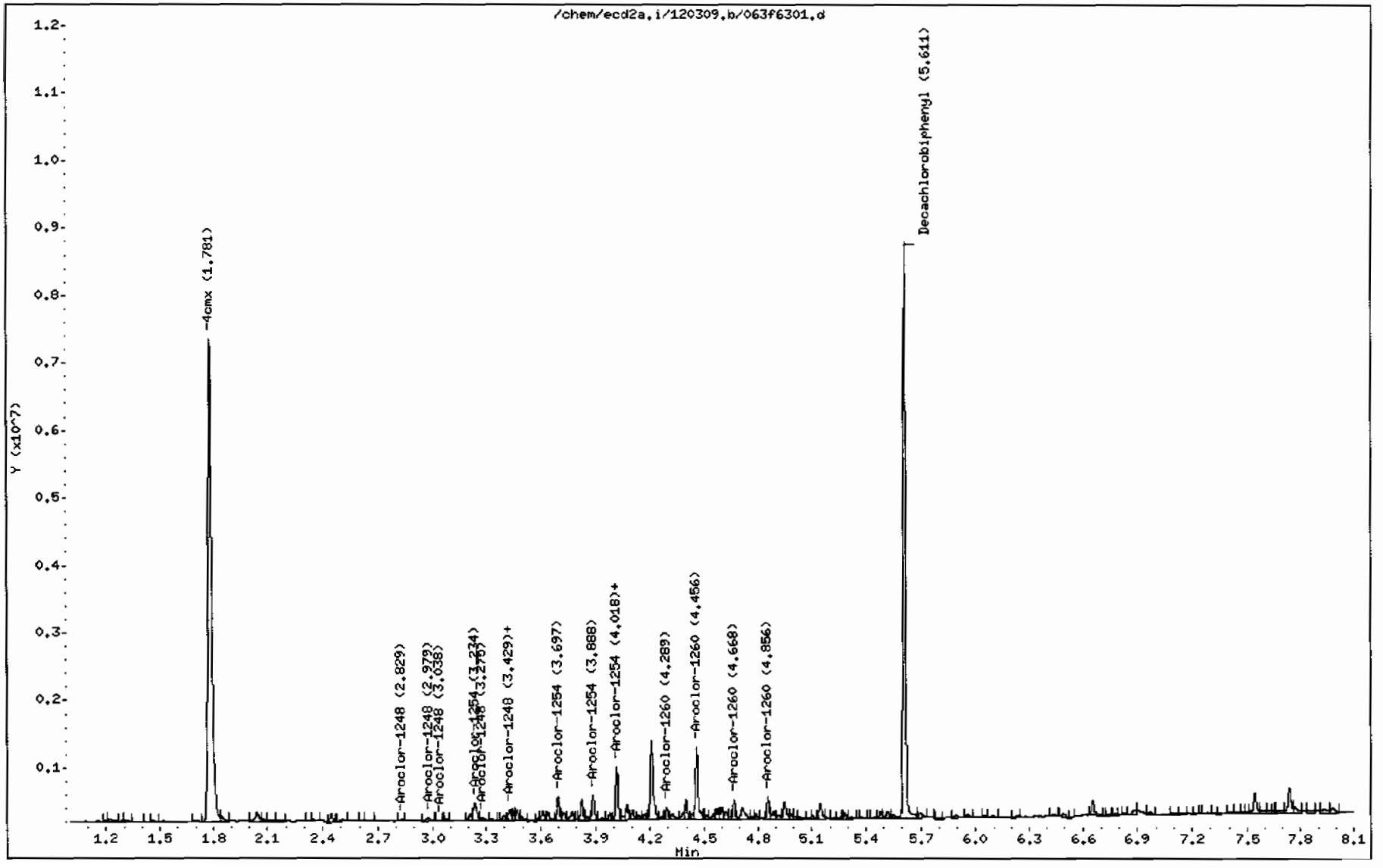

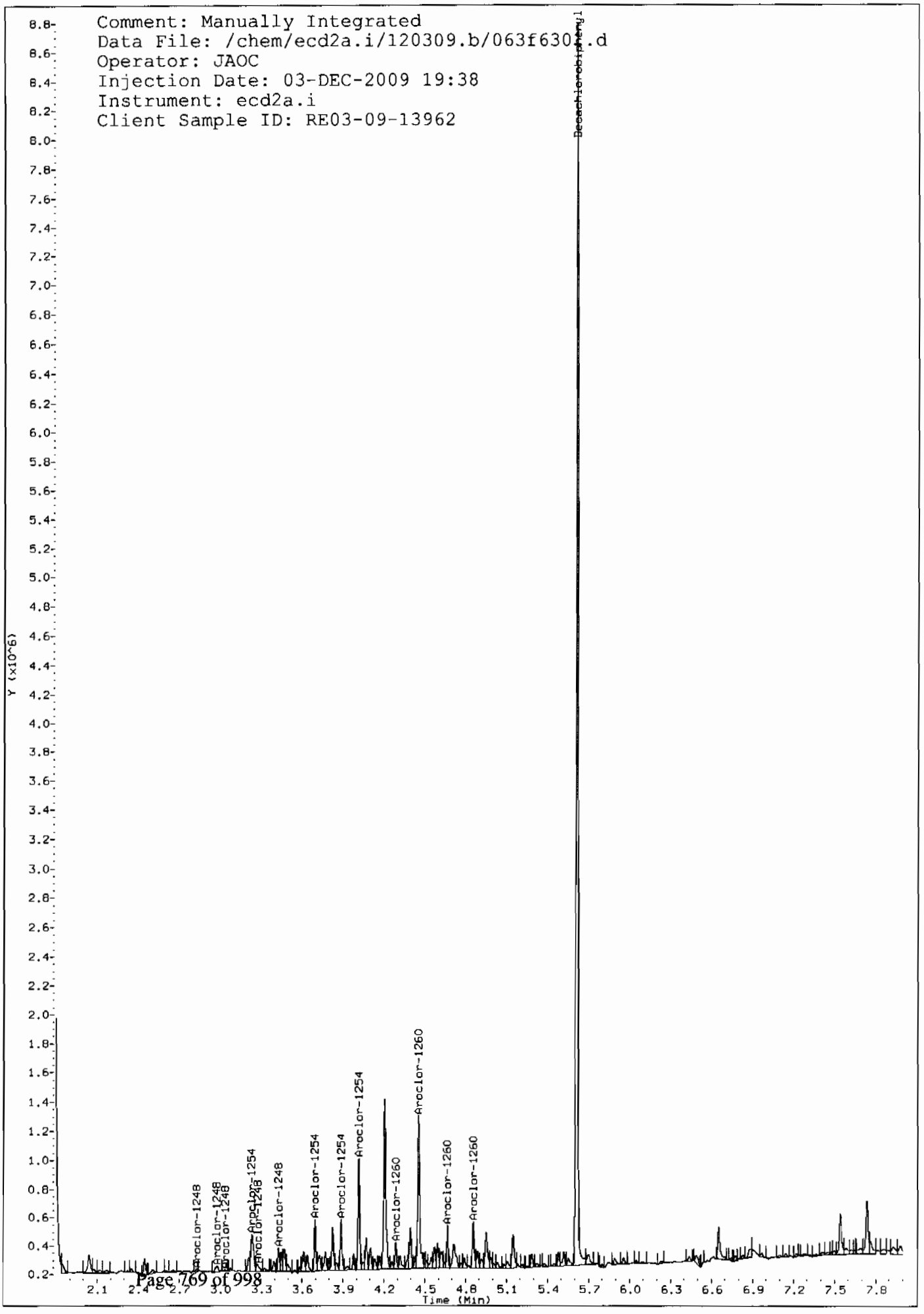
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/063f6301.d
Operator: JAOC
Injection Date: 03-DEC-2009 19:38
Instrument: ecd2a.i
Client Sample ID: RE03-09-13962
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^6)
Time (Min)

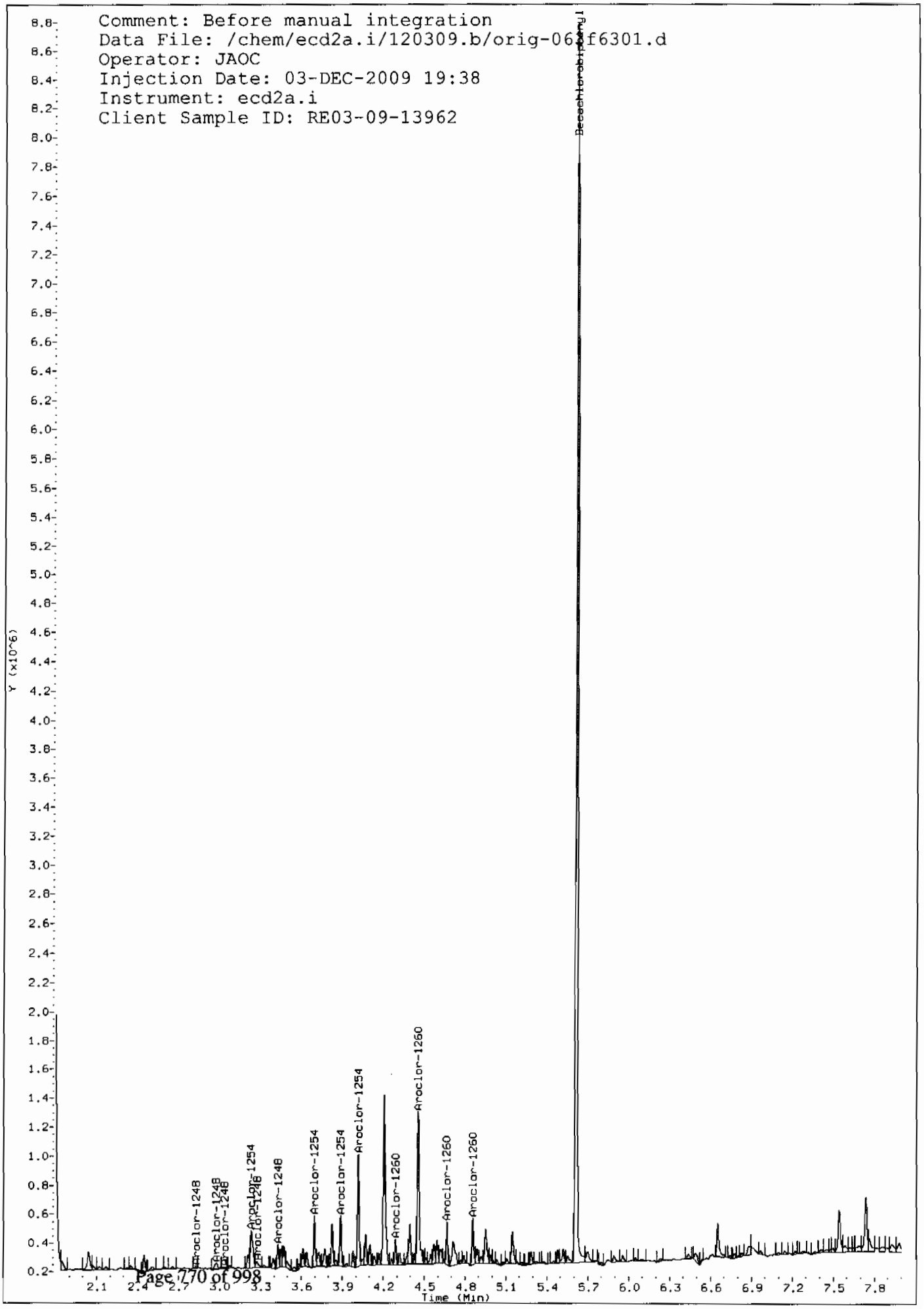
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-06f6301.d
Operator: JAOC
Injection Date: 03-DEC-2009 19:38
Instrument: ecd2a.i
Client Sample ID: RE03-09-13962
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/063b6301.d
Lab Smp Id: 241418007 Client Smp ID: RE03-09-13962
Inj Date : 03-DEC-2009 19:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418007|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13962|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 63
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	12.46770	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22392006	189.442	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	17466458	160.771	6.1	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.822	0.001	187420	37.5946	1.4	80.00- 120.00	100.00
3.965	3.963	0.002	599362	103.357	3.9	96.19- 136.19	319.80
4.199	4.200	-0.001	531881	132.211	5.0	61.63- 101.63	283.79
4.281	4.280	0.001	754161	97.5456	3.7	137.40- 177.40	402.39
4.445	4.443	0.002	824654	147.042	5.6	90.70- 130.70	440.00
Average of Peak Concentrations =					3.9		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	694403	125.966	4.8	80.00- 120.00	100.00
4.571	4.569	0.002	1284858	180.155	6.8	107.13- 147.13	185.03
4.682	4.680	0.002	825285	174.429	6.6	64.21- 104.21	118.85
4.879	4.878	0.001	570618	98.3714	3.7	80.11- 120.11	82.17
5.506	5.504	0.002	646832	71.5469	2.7	135.13- 175.13	93.15
Average of Peak Concentrations =					4.9		

Data File: /chem/ecd2a.i/120309.b/063b6301.d

Date : 03-DEC-2009 19:38

Client ID: RE03-09-13962

Sample Info: 1241418007|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

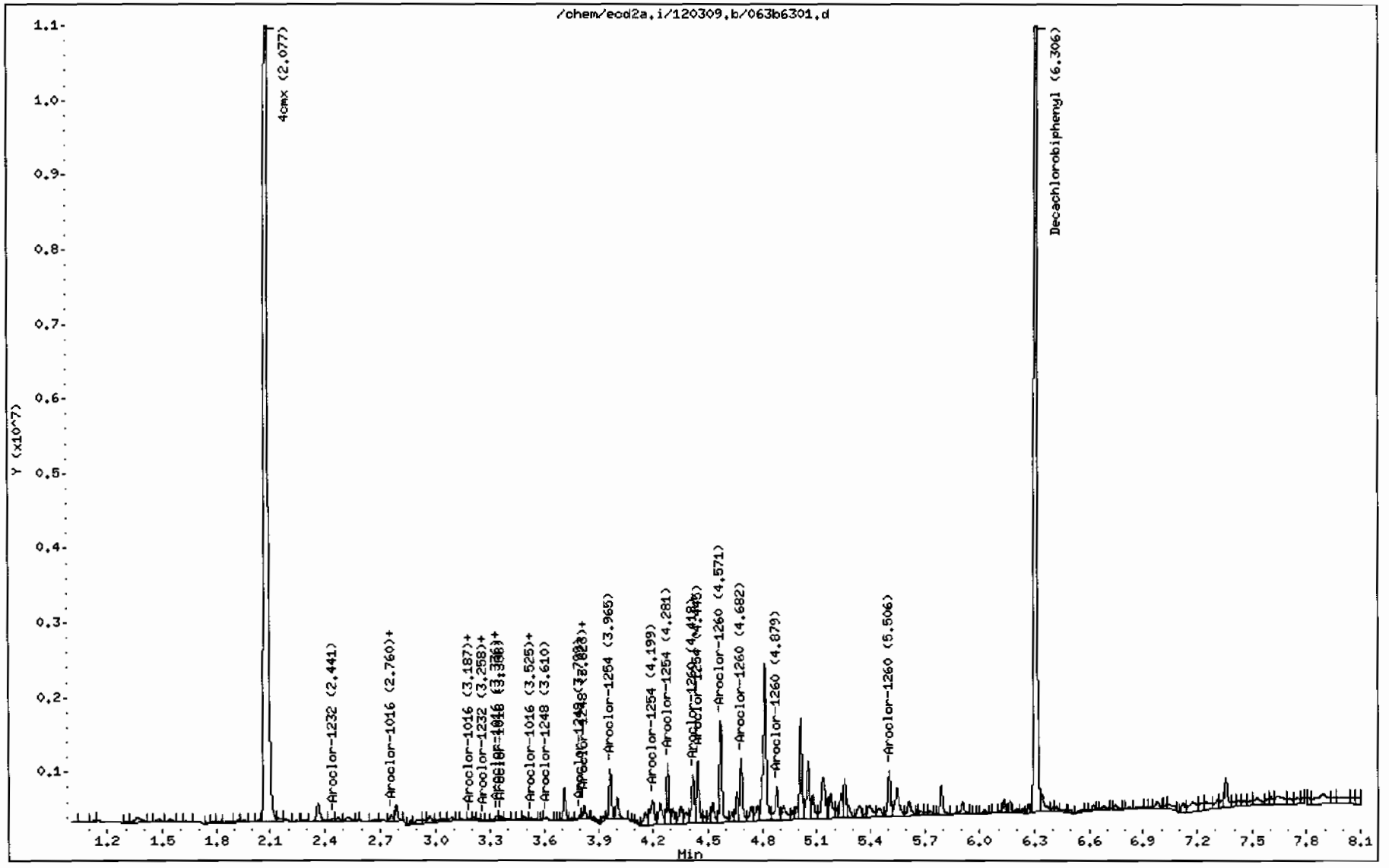

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418014**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13963**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:18**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**072f7201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	072b7201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.02	ug/kg	1.34	4.02	1
11104–28–2	Aroclor–1221	U	4.02	ug/kg	1.34	4.02	1
11141–16–5	Aroclor–1232	U	4.02	ug/kg	1.34	4.02	1
53469–21–9	Aroclor–1242	U	4.02	ug/kg	1.34	4.02	1
12672–29–6	Aroclor–1248	U	4.02	ug/kg	1.34	4.02	1
11097–69–1	Aroclor–1254	U	4.02	ug/kg	1.34	4.02	1
11096–82–5	Aroclor–1260	U	4.02	ug/kg	1.34	4.02	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/072f7201.d
Lab Smp Id: 241418014 Client Smp ID: RE03-09-13963
Inj Date : 03-DEC-2009 21:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418014|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13963|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	17.16080	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.782	1.779	0.003	10576126	183.259	7.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8277104	150.961	6.1	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/072f7201.d

Date : 03-DEC-2009 21:18

Client ID: RE03-09-13963

Sample Info: |241418014|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

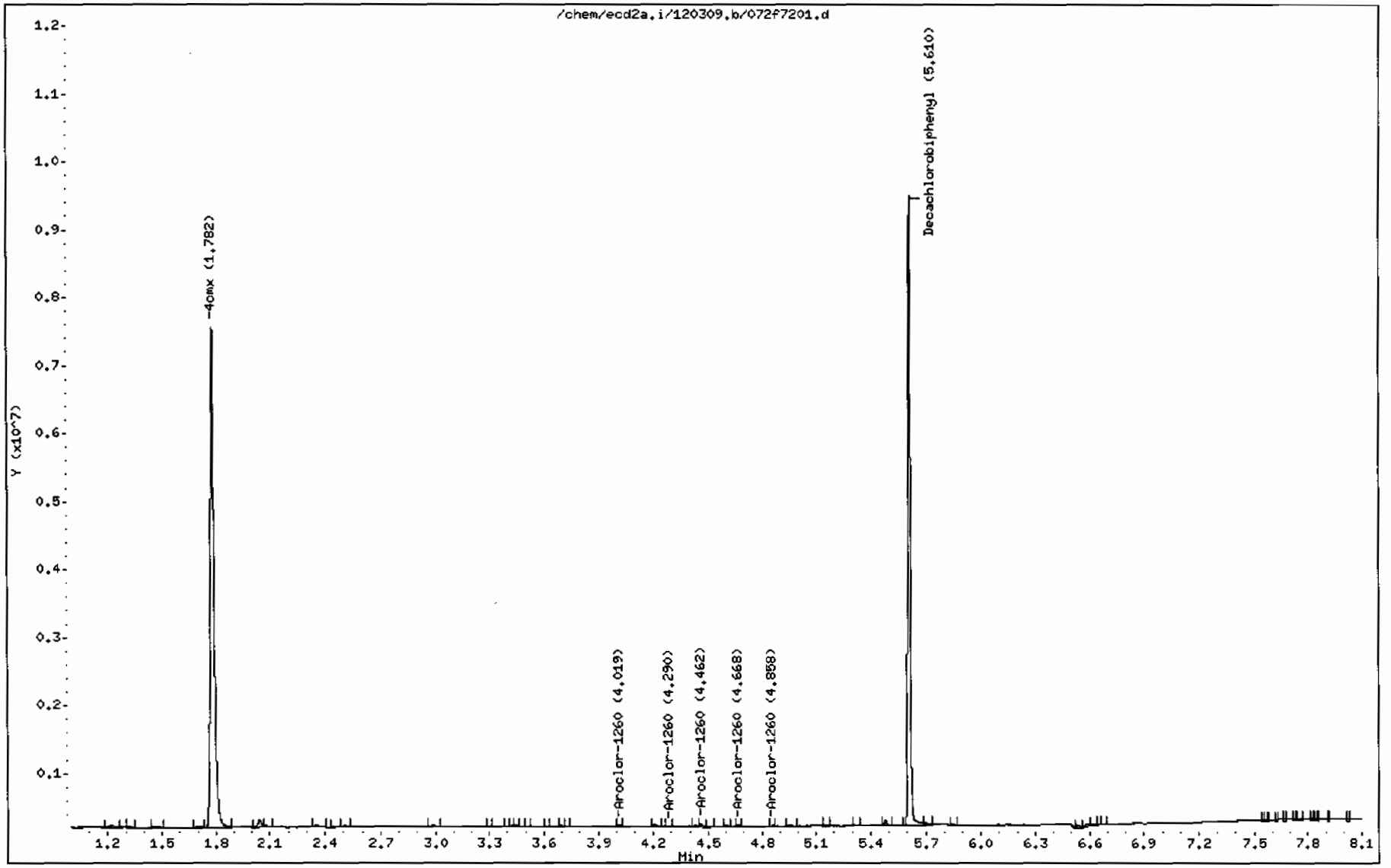

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/072b7201.d
Lab Smp Id: 241418014 Client Smp ID: RE03-09-13963
Inj Date : 03-DEC-2009 21:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418014|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13963|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	17.16080	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.075	0.003	23313338	197.237	7.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17615778	162.146	6.5	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/072b7201.d

Date : 03-DEC-2009 21:18

Client ID: RE03-09-13963

Sample Info: |241418014|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

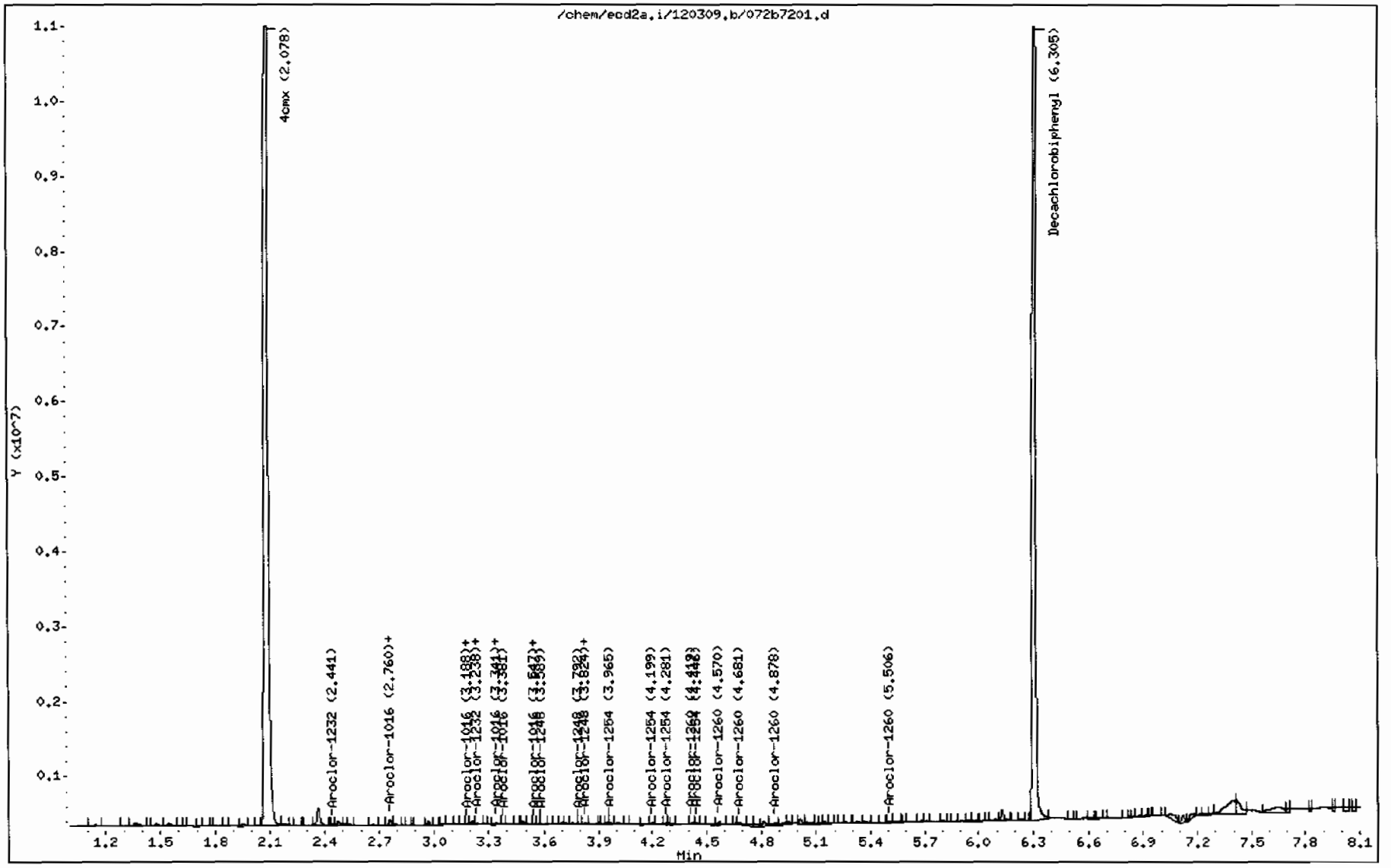

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418011**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13964**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 20:45**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**069f6901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	069b6901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.83	ug/kg	1.27	3.83	1
11104-28-2	Aroclor-1221	U	3.83	ug/kg	1.27	3.83	1
11141-16-5	Aroclor-1232	U	3.83	ug/kg	1.27	3.83	1
53469-21-9	Aroclor-1242	U	3.83	ug/kg	1.27	3.83	1
12672-29-6	Aroclor-1248	U	3.83	ug/kg	1.27	3.83	1
11097-69-1	Aroclor-1254	U	3.83	ug/kg	1.27	3.83	1
11096-82-5	Aroclor-1260	J	2.20	ug/kg	1.27	3.83	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/069f6901.d
Lab Smp Id: 241418011 Client Smp ID: RE03-09-13964
Inj Date : 03-DEC-2009 20:45
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418011|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13964|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	12.92600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9733779	168.663	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7691190	140.275	5.4	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	219143	53.8860	2.1	80.00- 120.00	100.00(a)
4.290	4.288	0.002	134639	53.2525	2.0	40.91- 80.91	61.44
4.458	4.454	0.004	212210	82.1503	3.1	42.71- 82.71	96.84
4.668	4.665	0.003	192877	31.9540	1.2	125.86- 165.86	88.01
4.857	4.855	0.002	177484	60.9505	2.3	49.52- 89.52	80.99
			Average of Peak Concentrations =		2.2		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/069f6901.d
Date : 03-DEC-2009 20:45
Client ID: RE03-09-13964
Sample Info: |241418011|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

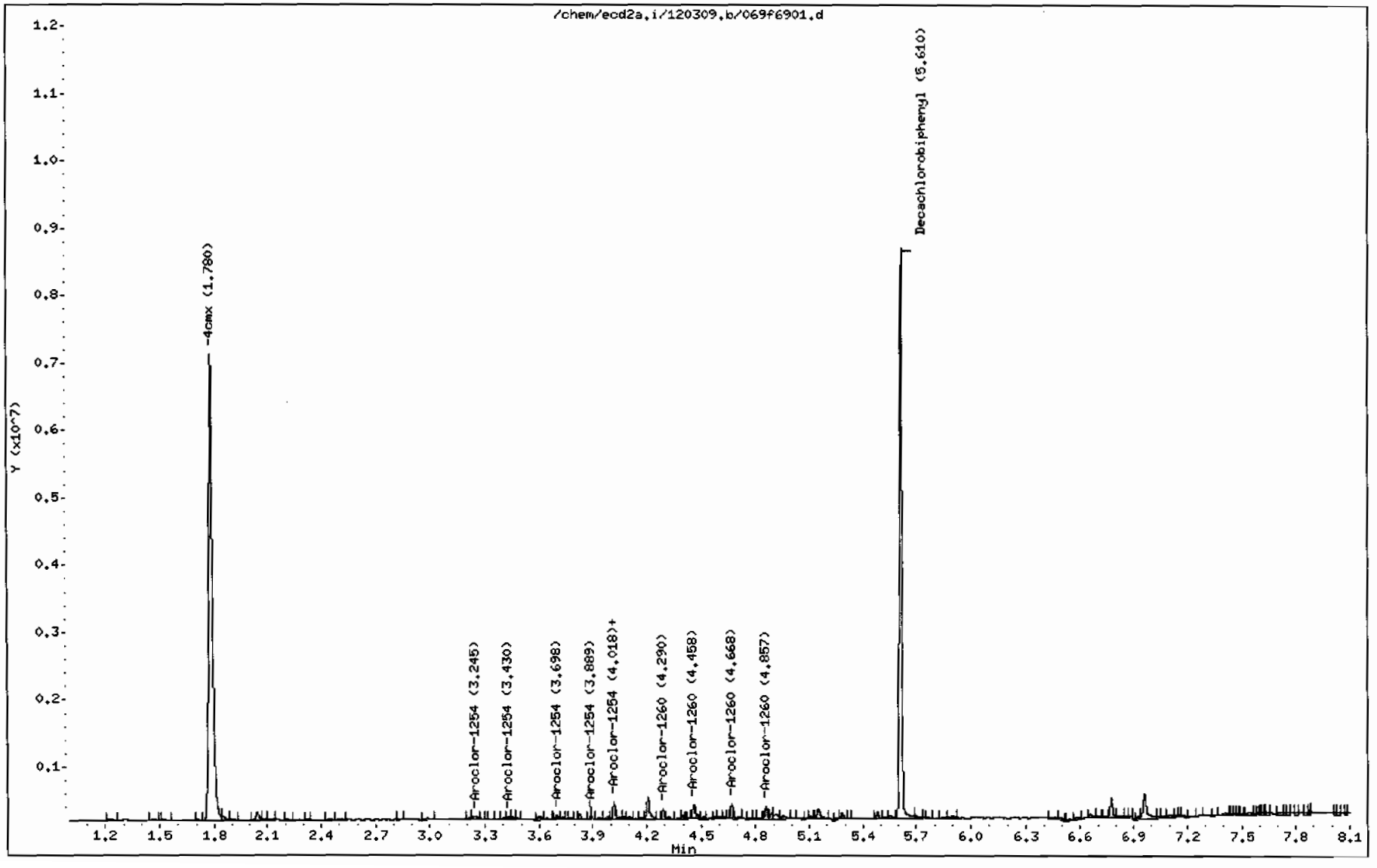

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/069b6901.d
Lab Smp Id: 241418011 Client Smp ID: RE03-09-13964
Inj Date : 03-DEC-2009 20:45
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418011|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13964|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	12.92600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21424576	181.257	6.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17244314	158.727	6.1	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	140276	25.4463	0.97	80.00- 120.00	100.00(a)
4.570	4.569	0.001	404447	56.7091	2.2	107.13- 147.13	288.32
4.681	4.680	0.001	162020	34.2439	1.3	64.21- 104.21	115.50
4.880	4.878	0.002	265153	45.7110	1.7	80.11- 120.11	189.02
5.505	5.504	0.001	400495	44.2993	1.7	135.13- 175.13	285.50

Average of Peak Concentrations = 1.6

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/eod2a.i/120309.b/069b6901.d

Date : 03-DEC-2009 20:45

Client ID: RE03-09-13964

Sample Info: 1241418011|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: eod2a.i

Operator: JAOC

Column diameter: 0.25

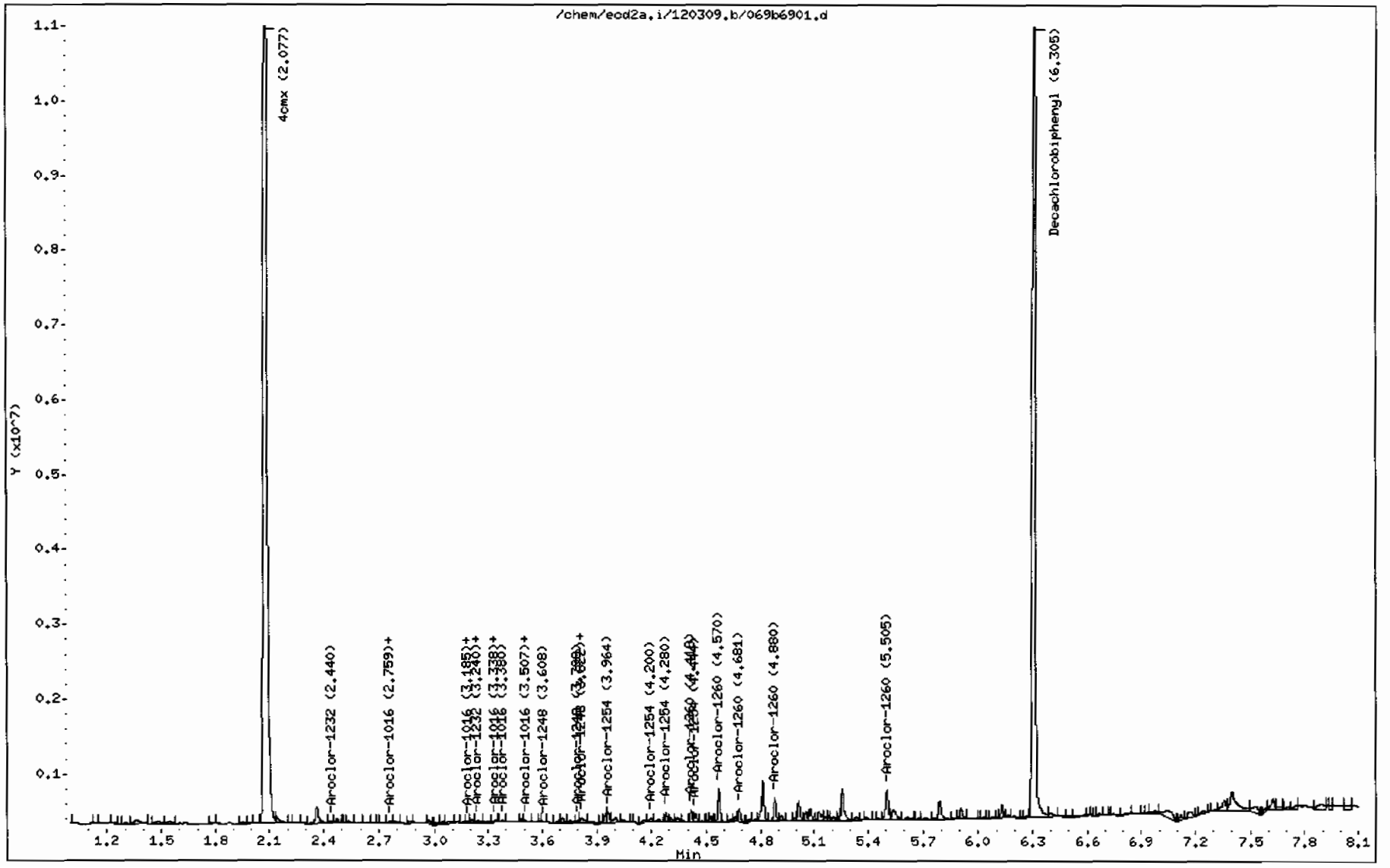

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418005**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13965**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:16**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**061f6101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	061b6101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.75	ug/kg	1.25	3.75	1
11104-28-2	Aroclor-1221	U	3.75	ug/kg	1.25	3.75	1
11141-16-5	Aroclor-1232	U	3.75	ug/kg	1.25	3.75	1
53469-21-9	Aroclor-1242	U	3.75	ug/kg	1.25	3.75	1
12672-29-6	Aroclor-1248	U	3.75	ug/kg	1.25	3.75	1
11097-69-1	Aroclor-1254	U	3.75	ug/kg	1.25	3.75	1
11096-82-5	Aroclor-1260	J	2.80	ug/kg	1.25	3.75	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/061f6101.d
Lab Smp Id: 241418005 Client Smp ID: RE03-09-13965
Inj Date : 03-DEC-2009 19:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418005|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13965|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 61
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	11.42830	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	9932468	172.106	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.610	0.002	7136360	130.156	4.9	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	306264	75.3085	2.8	80.00- 120.00	100.00(a)
4.290	4.288	0.002	147972	58.5259	2.2	40.91- 80.91	48.32
4.458	4.454	0.004	330331	127.877	4.8	42.71- 82.71	107.86
4.668	4.665	0.003	216633	35.8895	1.3	125.86- 165.86	70.73
4.857	4.855	0.002	210286	72.2149	2.7	49.52- 89.52	68.66

Average of Peak Concentrations = 2.8

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/061f6101.d
Date : 03-DEC-2009 19:16
Client ID: RE03-09-13965
Sample Info: 1241418005111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

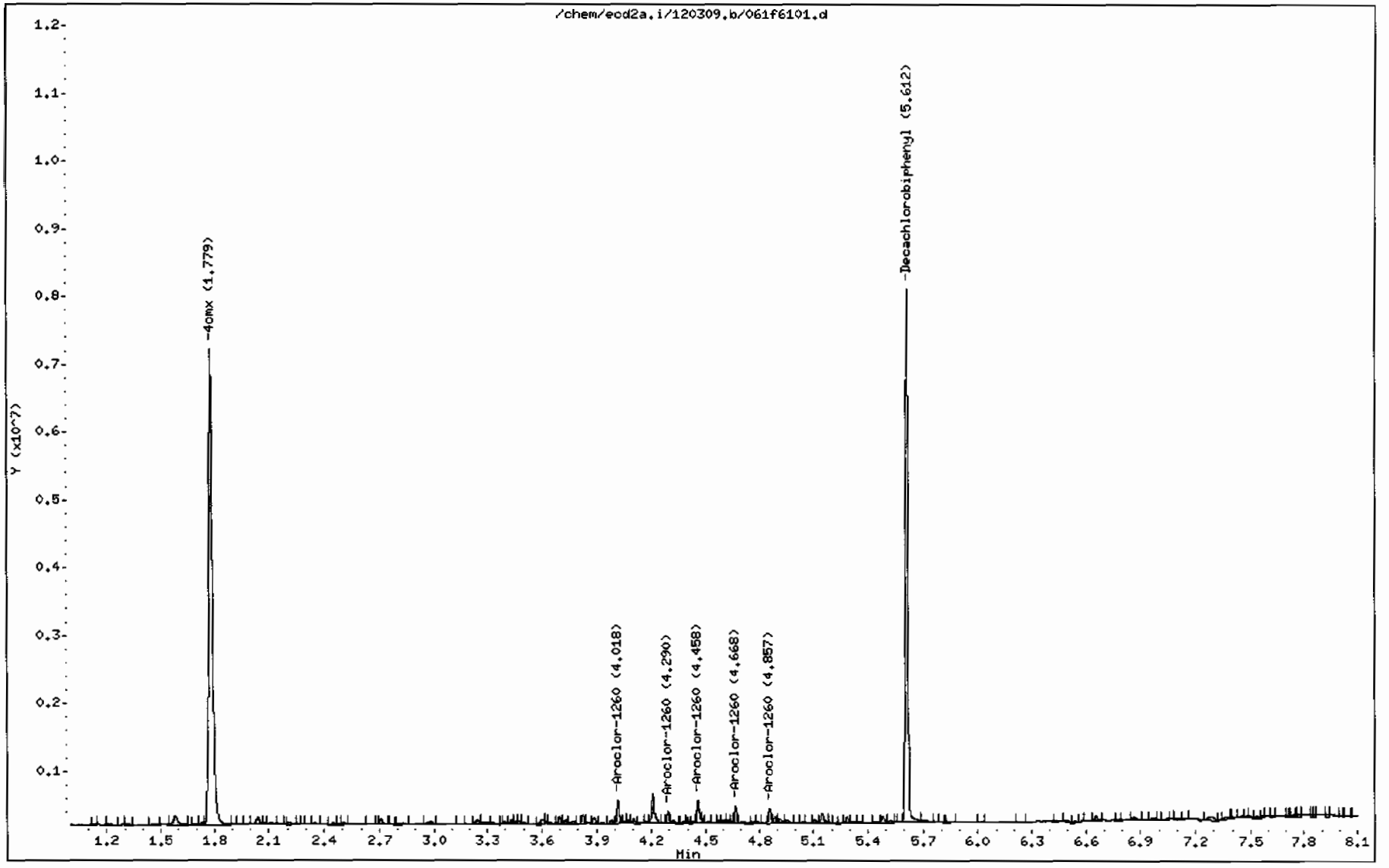

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/061b6101.d
Lab Smp Id: 241418005 Client Smp ID: RE03-09-13965
Inj Date : 03-DEC-2009 19:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418005|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13965|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 61
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	11.42830	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	21477885	181.708	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	15796665	145.402	5.4	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	236260	42.8580	1.6	80.00- 120.00	100.00(a)
4.571	4.569	0.002	529360	74.2236	2.8	107.13- 147.13	224.06
4.682	4.680	0.002	251114	53.0745	2.0	64.21- 104.21	106.29
4.880	4.878	0.002	321284	55.3877	2.1	80.11- 120.11	135.99
5.507	5.504	0.003	478355	52.9115	2.0	135.13- 175.13	202.47

Average of Peak Concentrations = 2.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/061b6101.d
Date : 03-DEC-2009 19:16
Client ID: RE03-09-13965
Sample Info: 1241418005|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

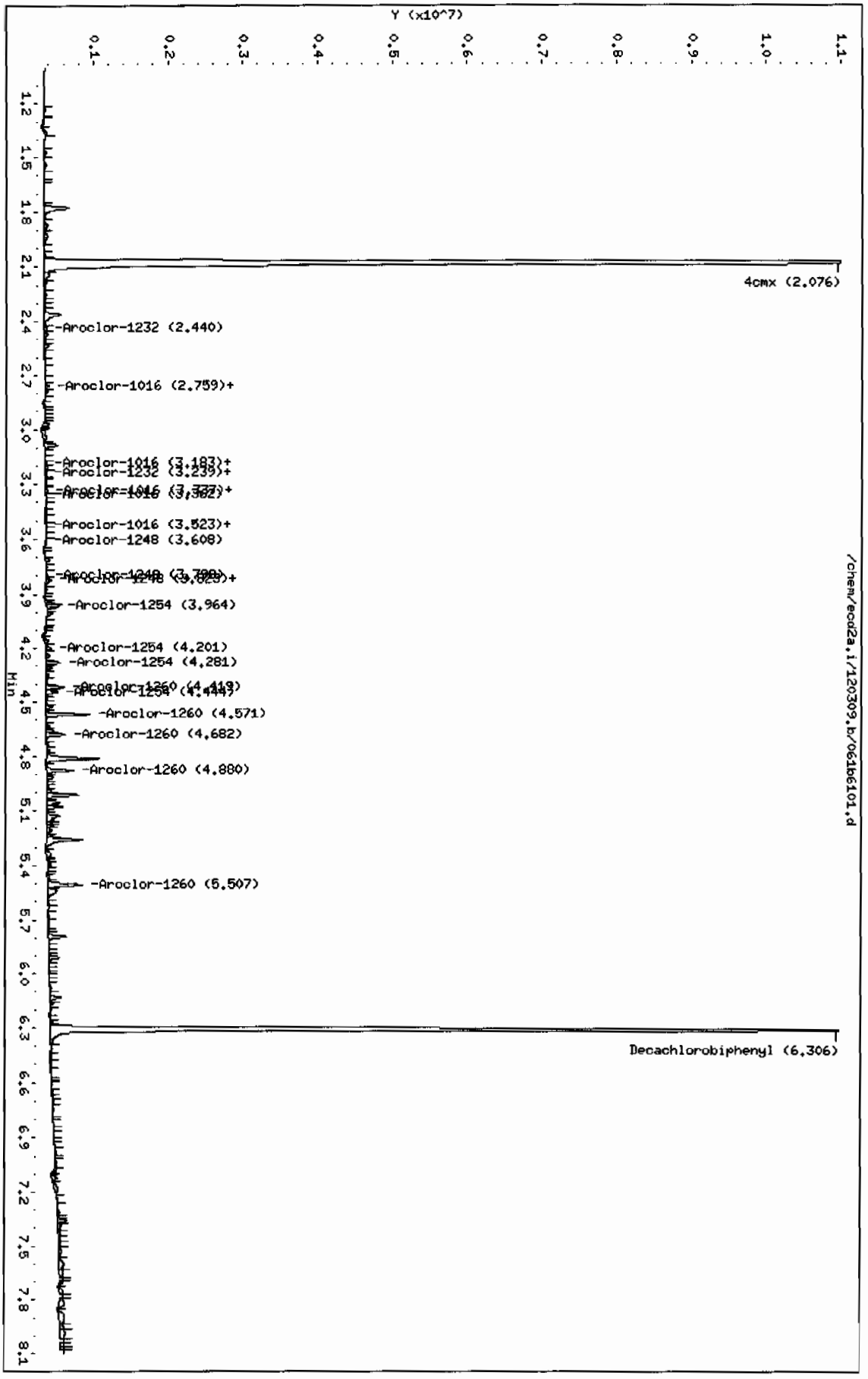

Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418012**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13966**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 20:56**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**070f7001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	070b7001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	JP	2.90	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	P	3.90	ug/kg	1.20	3.60	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/070f7001.d
Lab Smp Id: 241418012 Client Smp ID: RE03-09-13966
Inj Date : 03-DEC-2009 20:56
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418012|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13966|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	7.61400	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	7944881	137.666	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	6992834	127.538	4.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.235	3.245	-0.010	272190	130.857	4.7	80.00- 120.00	100.00(a)
3.431	3.428	0.003	142356	51.3524	1.8	113.78- 153.78	52.30
3.697	3.697	0.000	141499	37.8097	1.4	164.17- 204.17	51.99
3.888	3.888	0.000	146962	52.8126	1.9	117.36- 157.36	53.99
4.018	4.018	0.000	362656	131.395	4.7	110.08- 150.08	133.24

Average of Peak Concentrations = 2.9

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	362656	89.1749	3.2	80.00- 120.00	100.00
4.289	4.288	0.001	112059	44.3216	1.6	40.91- 80.91	30.90
4.457	4.454	0.003	814960	315.484	11.4	42.71- 82.71	224.72
4.667	4.665	0.002	153948	25.5045	0.92	125.86- 165.86	42.45
4.857	4.855	0.002	203733	69.9645	2.5	49.52- 89.52	56.18
Average of Peak Concentrations =					3.9		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/070f7001.d

Page 1

Date : 03-DEC-2009 20:56

Client ID: RE03-09-13966

Instrument: ecd2a.i

Sample Info: |2414180121|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

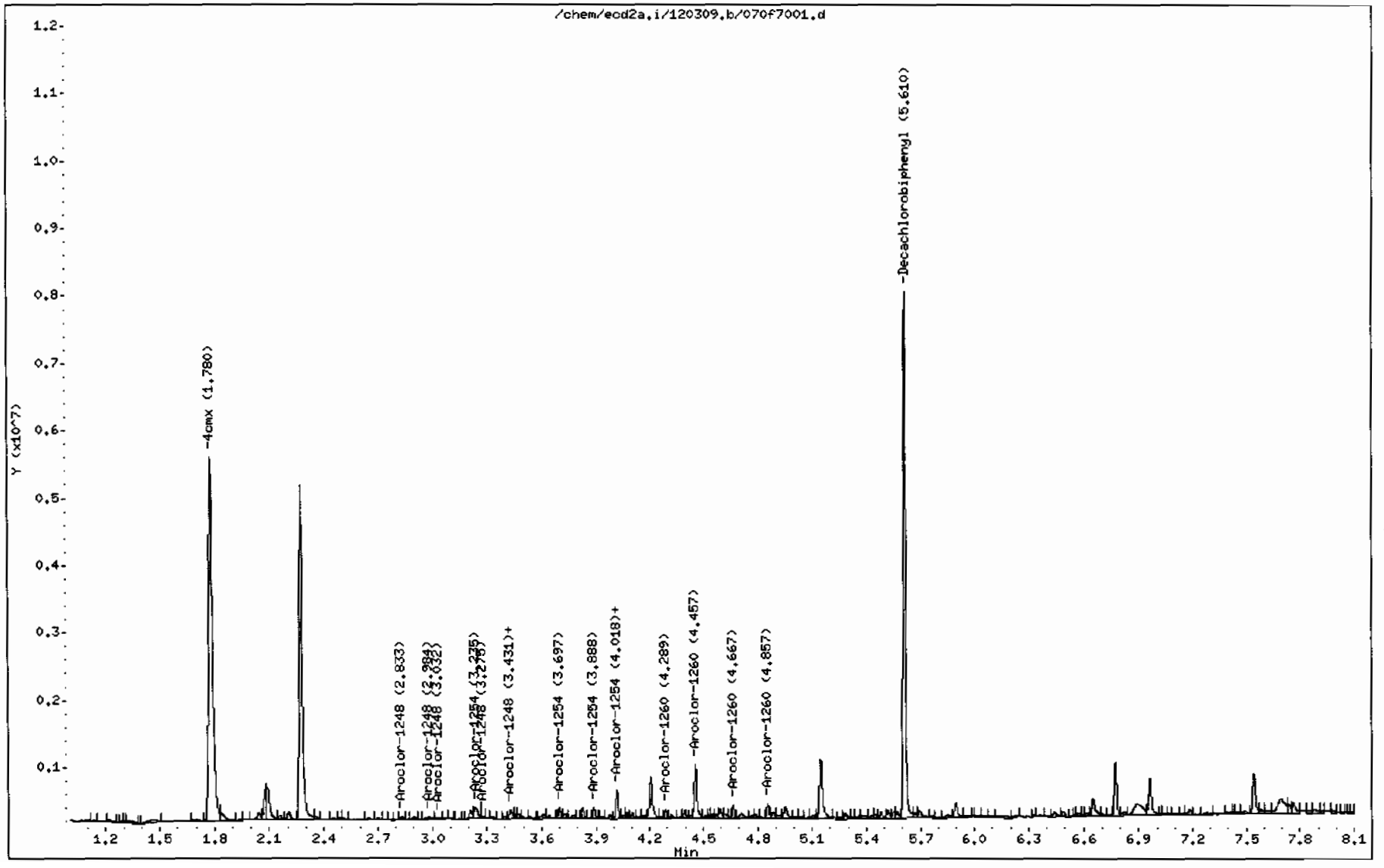

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/070b7001.d
Lab Smp Id: 241418012 Client Smp ID: RE03-09-13966
Inj Date : 03-DEC-2009 20:56
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418012|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13966|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	7.61400	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21509859	181.979	6.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	16414680	151.090	5.4	80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	227568	45.6478	1.6	80.00- 120.00	100.00(aM)
3.965	3.963	0.002	395940	68.2779	2.4	96.19- 136.19	173.99
4.199	4.200	-0.001	216846	53.9017	1.9	61.63- 101.63	95.29
4.281	4.280	0.001	300846	38.9124	1.4	137.40- 177.40	132.20
4.444	4.443	0.001	328003	58.4852	2.1	90.70- 130.70	144.13
Average of Peak Concentrations =					1.9		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	338999	61.4948	2.2	80.00- 120.00	100.00(aM)
4.571	4.569	0.002	625084	87.6454	3.2	107.13- 147.13	184.39
4.681	4.680	0.001	342994	72.4937	2.6	64.21- 104.21	101.18
4.879	4.878	0.001	327502	56.4595	2.0	80.11- 120.11	96.61
5.505	5.504	0.001	405296	44.8303	1.6	135.13- 175.13	119.56
Average of Peak Concentrations =					2.3		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/070b7001.d
Date : 03-DEC-2009 20:56
Client ID: RE03-09-13966
Sample Info: |241418012|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

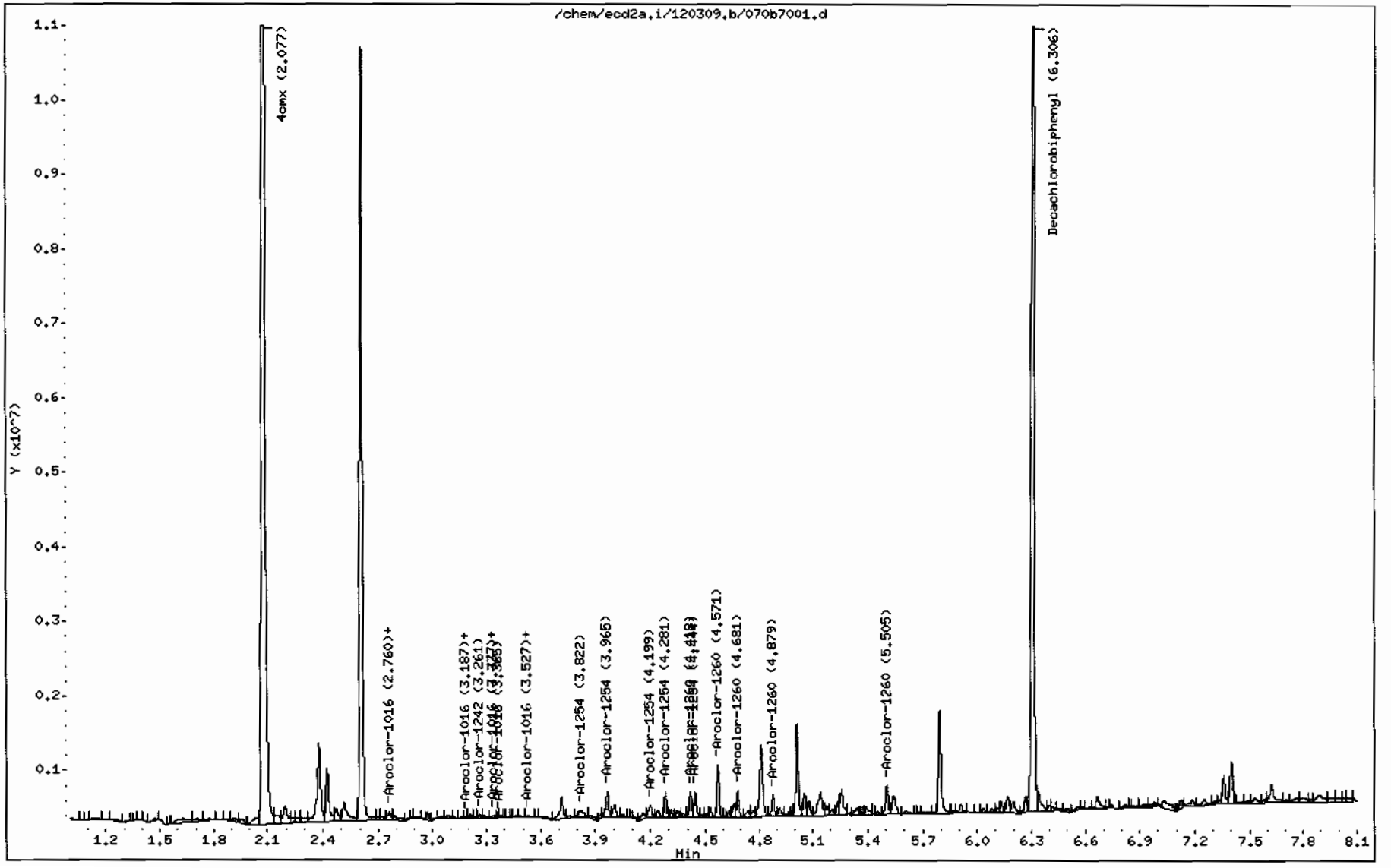

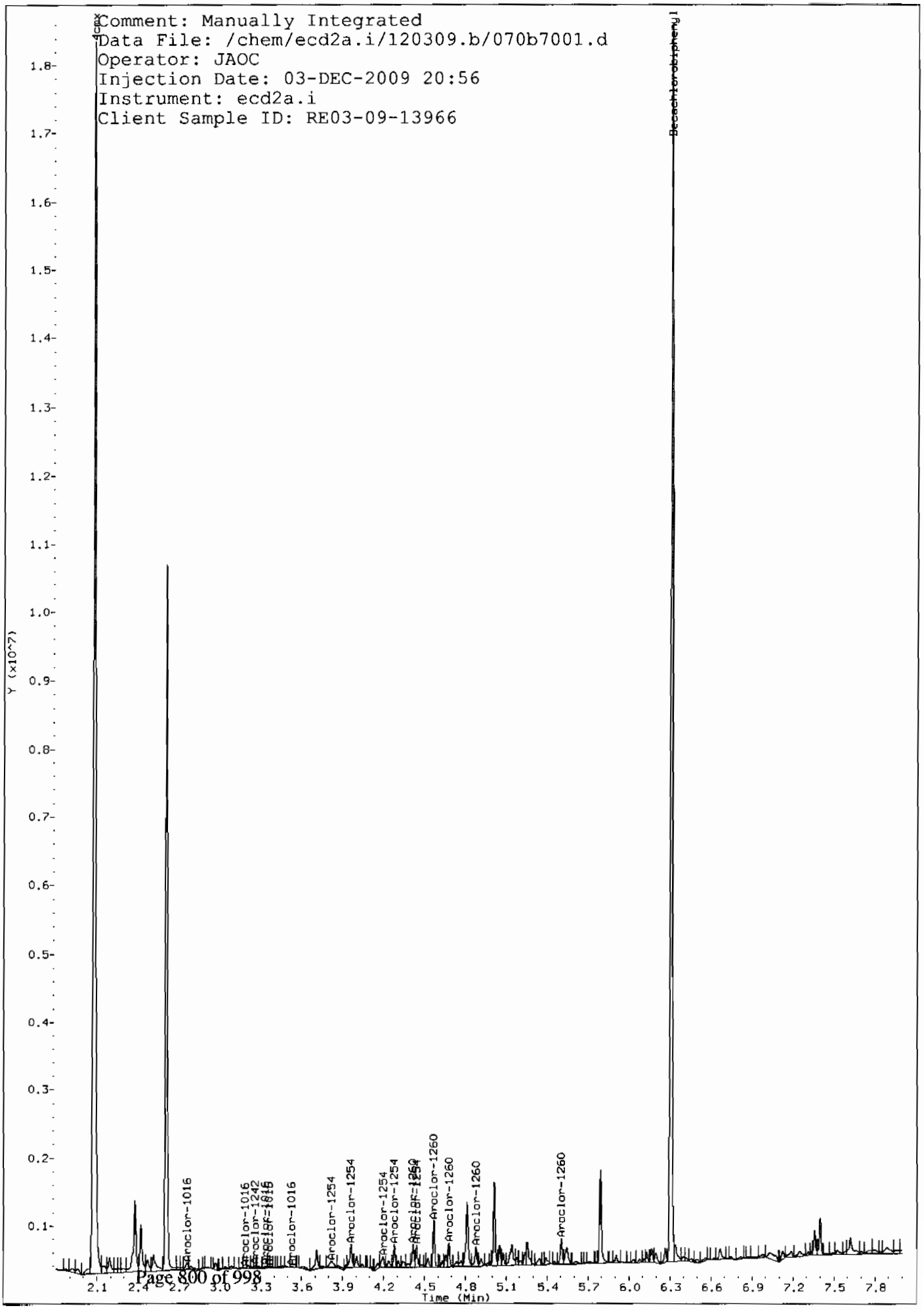
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/070b7001.d
Operator: JAOC
Injection Date: 03-DEC-2009 20:56
Instrument: ecd2a.i
Client Sample ID: RE03-09-13966
Decachlorobiphenyl
Aroclor-1016
Aroclor-1254
Aroclor-1260
Y (x10^7)
Time (Min)

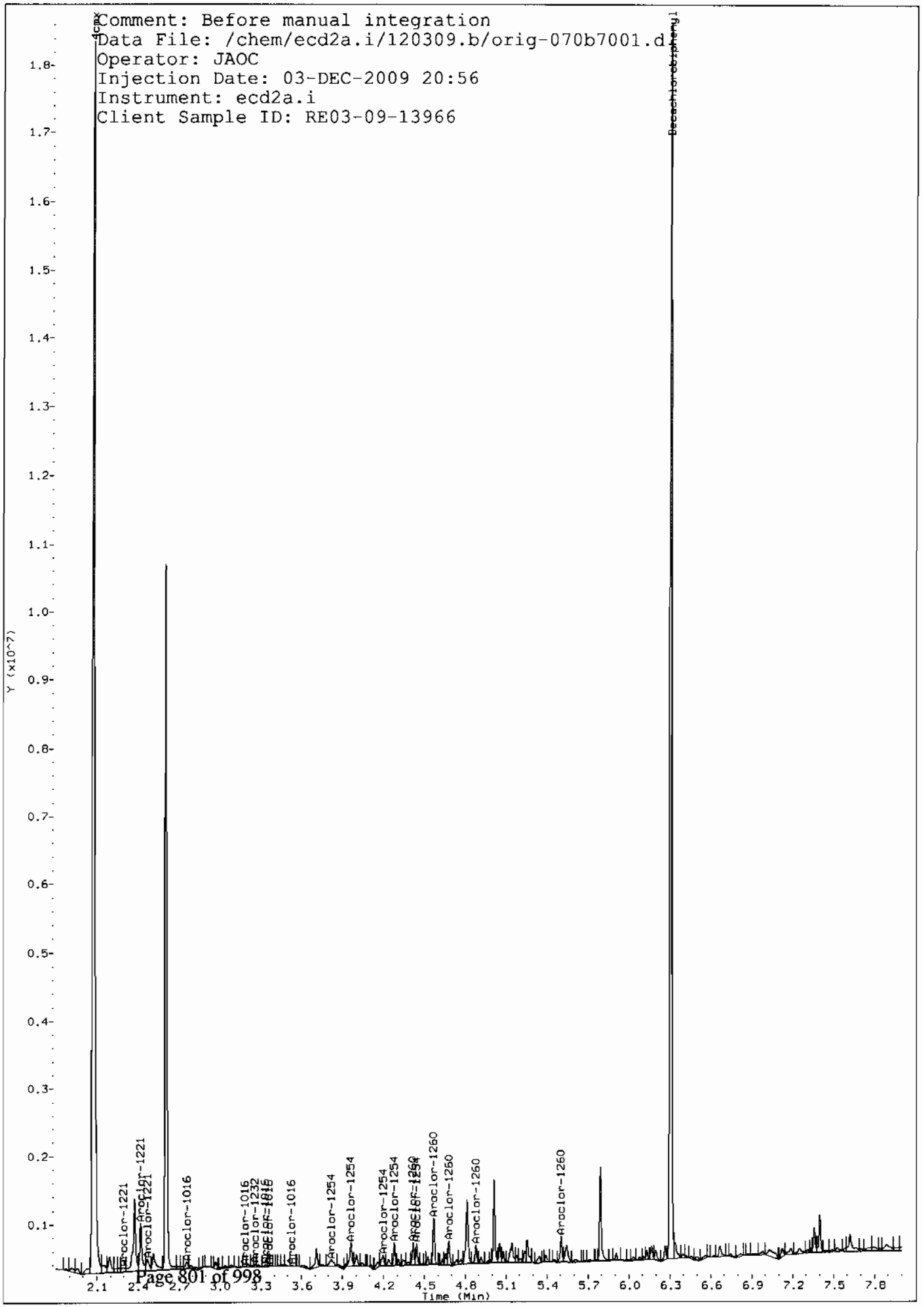
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-070b7001.d
Operator: JAOC
Injection Date: 03-DEC-2009 20:56
Instrument: ecd2a.i
Client Sample ID: RE03-09-13966
Decachlorobiphenyl
Aroclor-1221
Aroclor-1016
Aroclor-1232
Aroclor-1254
Aroclor-1260
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418013**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**17.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13967**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:07**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**071f7101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	071b7101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.04	ug/kg	1.34	4.04	1
11104–28–2	Aroclor–1221	U	4.04	ug/kg	1.34	4.04	1
11141–16–5	Aroclor–1232	U	4.04	ug/kg	1.34	4.04	1
53469–21–9	Aroclor–1242	U	4.04	ug/kg	1.34	4.04	1
12672–29–6	Aroclor–1248	U	4.04	ug/kg	1.34	4.04	1
11097–69–1	Aroclor–1254	U	4.04	ug/kg	1.34	4.04	1
11096–82–5	Aroclor–1260	U	4.04	ug/kg	1.34	4.04	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/071f7101.d
Lab Smp Id: 241418013 Client Smp ID: RE03-09-13967
Inj Date : 03-DEC-2009 21:07
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418013|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13967|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	17.89790	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9752273	168.984	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7923171	144.506	5.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/071f7101.d

Date : 03-DEC-2009 21:07

Client ID: RE03-09-13967

Sample Info: |241418013|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

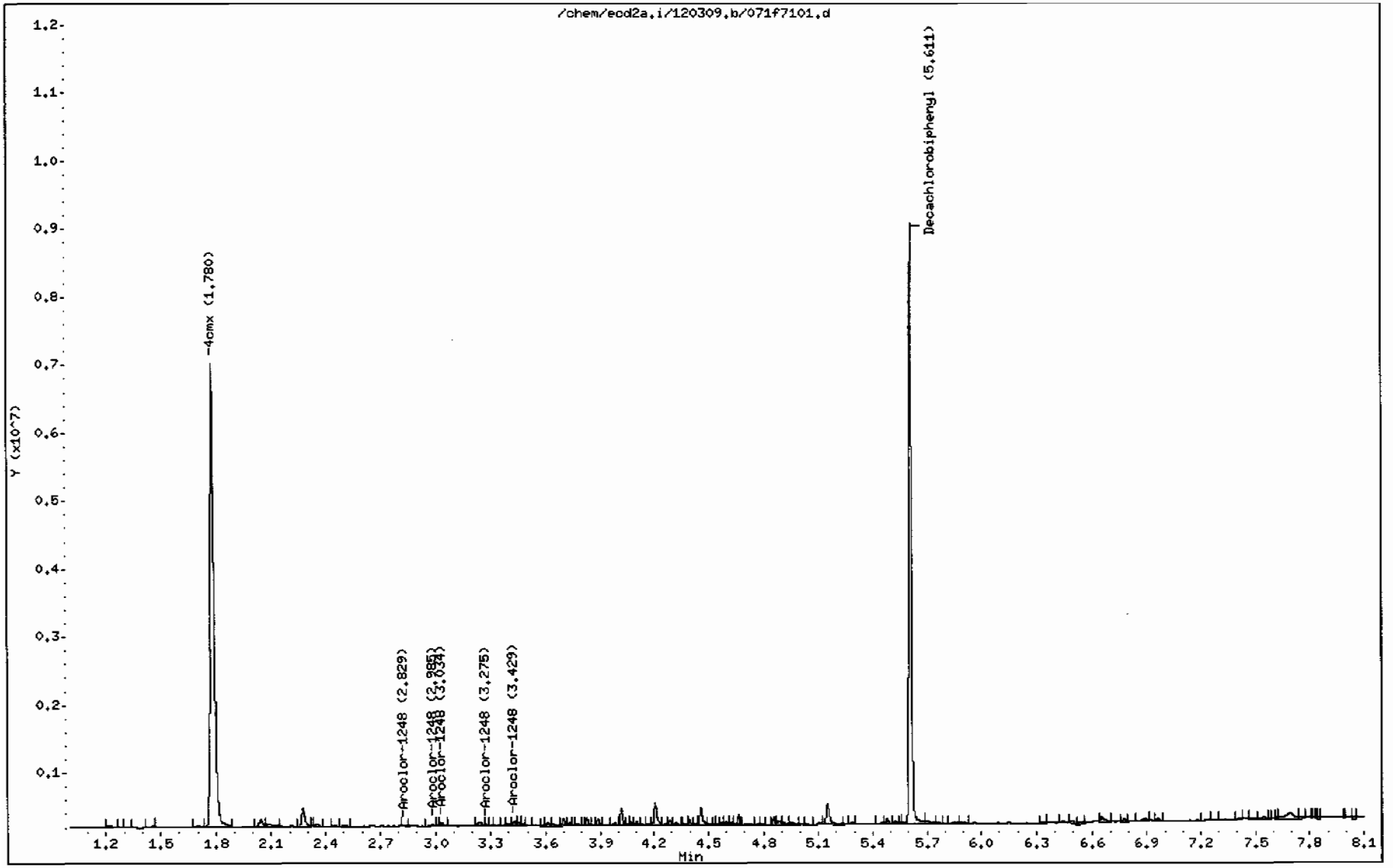

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/071b7101.d
Lab Smp Id: 241418013 Client Smp ID: RE03-09-13967
Inj Date : 03-DEC-2009 21:07
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418013|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13967|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	17.89790	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22446426	189.902	7.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17640624	162.375	6.6	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod2a.i/120309.b/071b7101.d

Date : 03-DEC-2009 21:07

Client ID: RE03-09-13967

Sample Info: |24141801311|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: eod2a.i

Operator: JAOC

Column diameter: 0.25

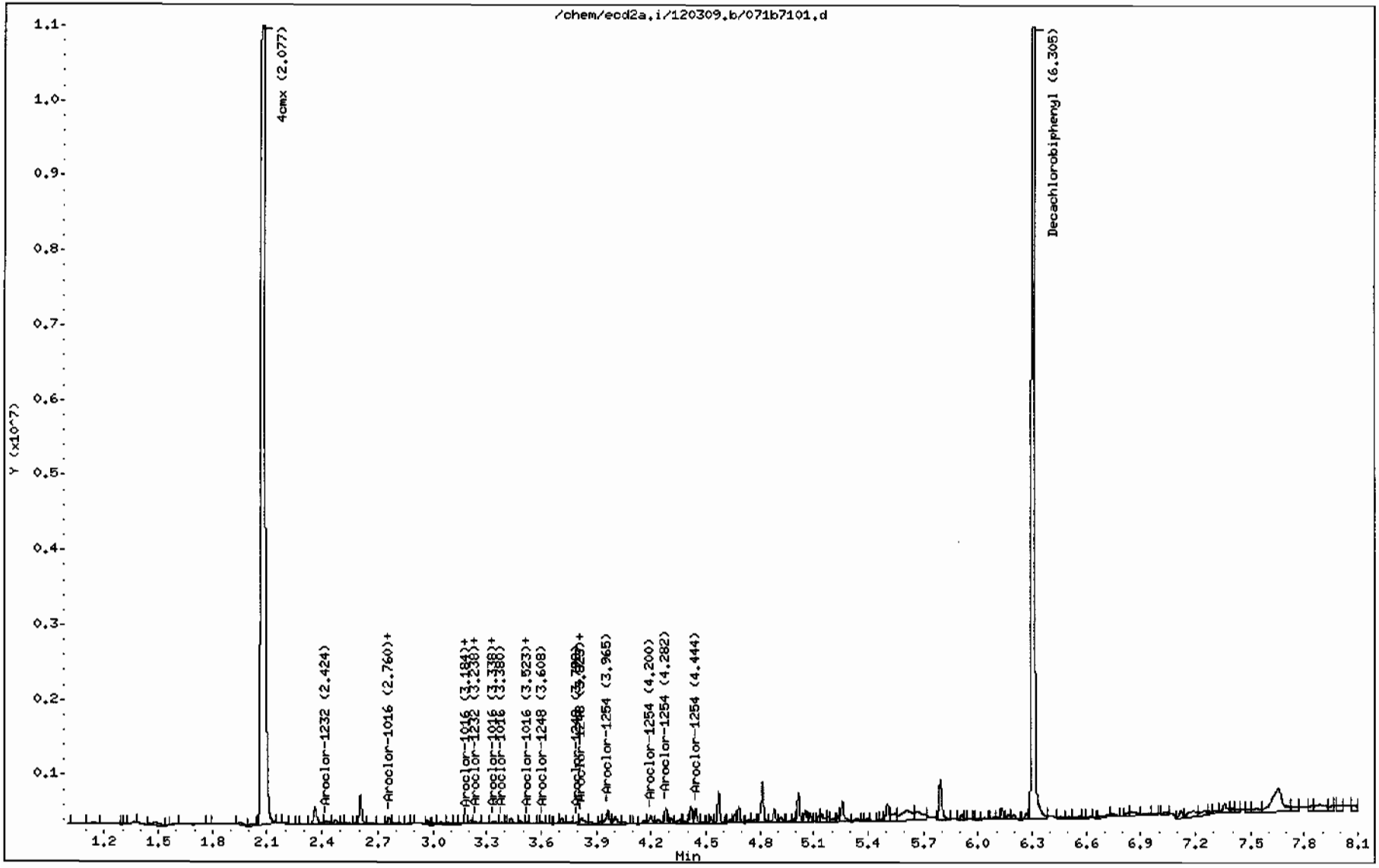

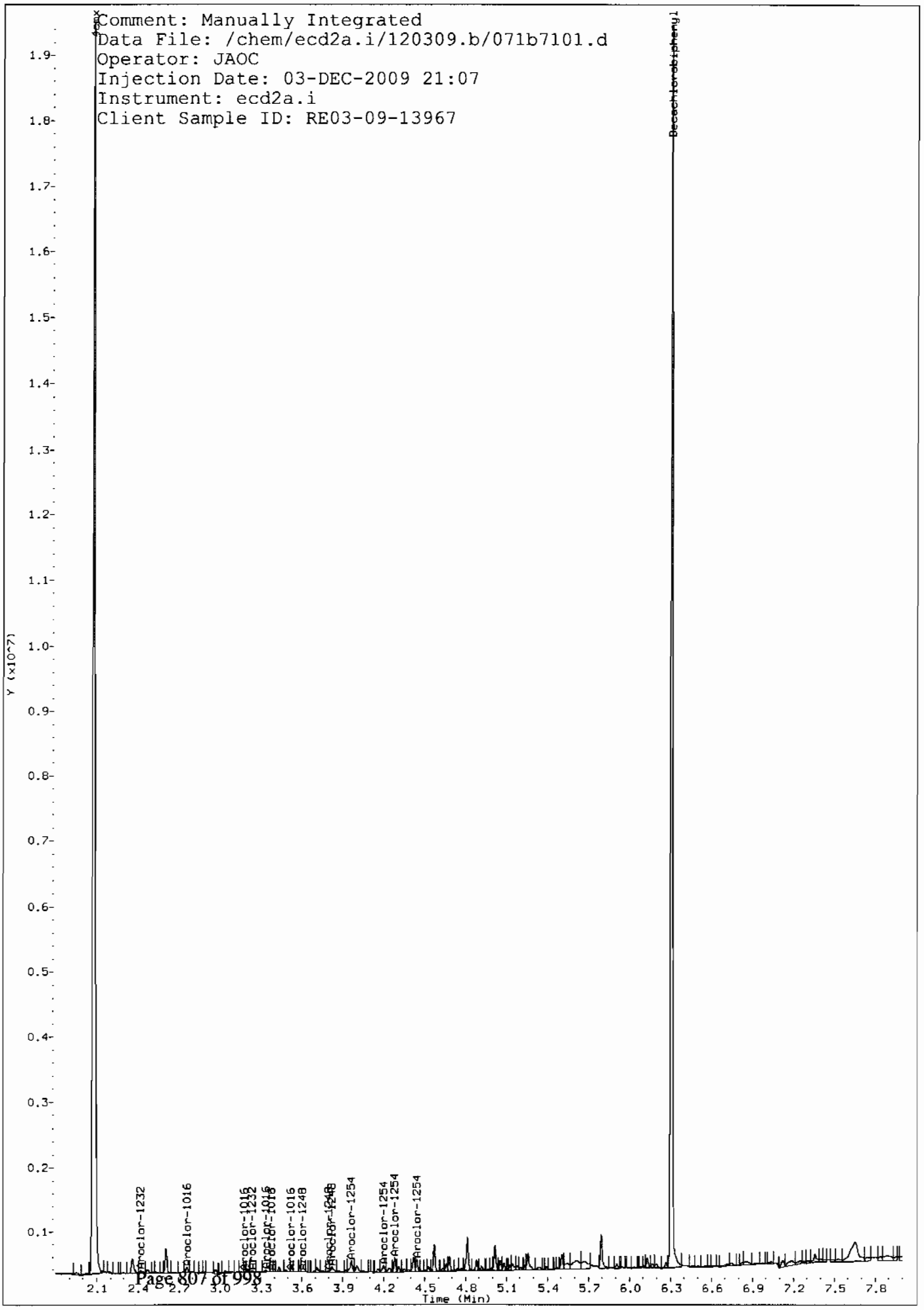
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/071b7101.d
Operator: JAOC
Injection Date: 03-DEC-2009 21:07
Instrument: ecd2a.i
Client Sample ID: RE03-09-13967
Decachlorobiphenyl
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Y (x10^7)
Time (Min)

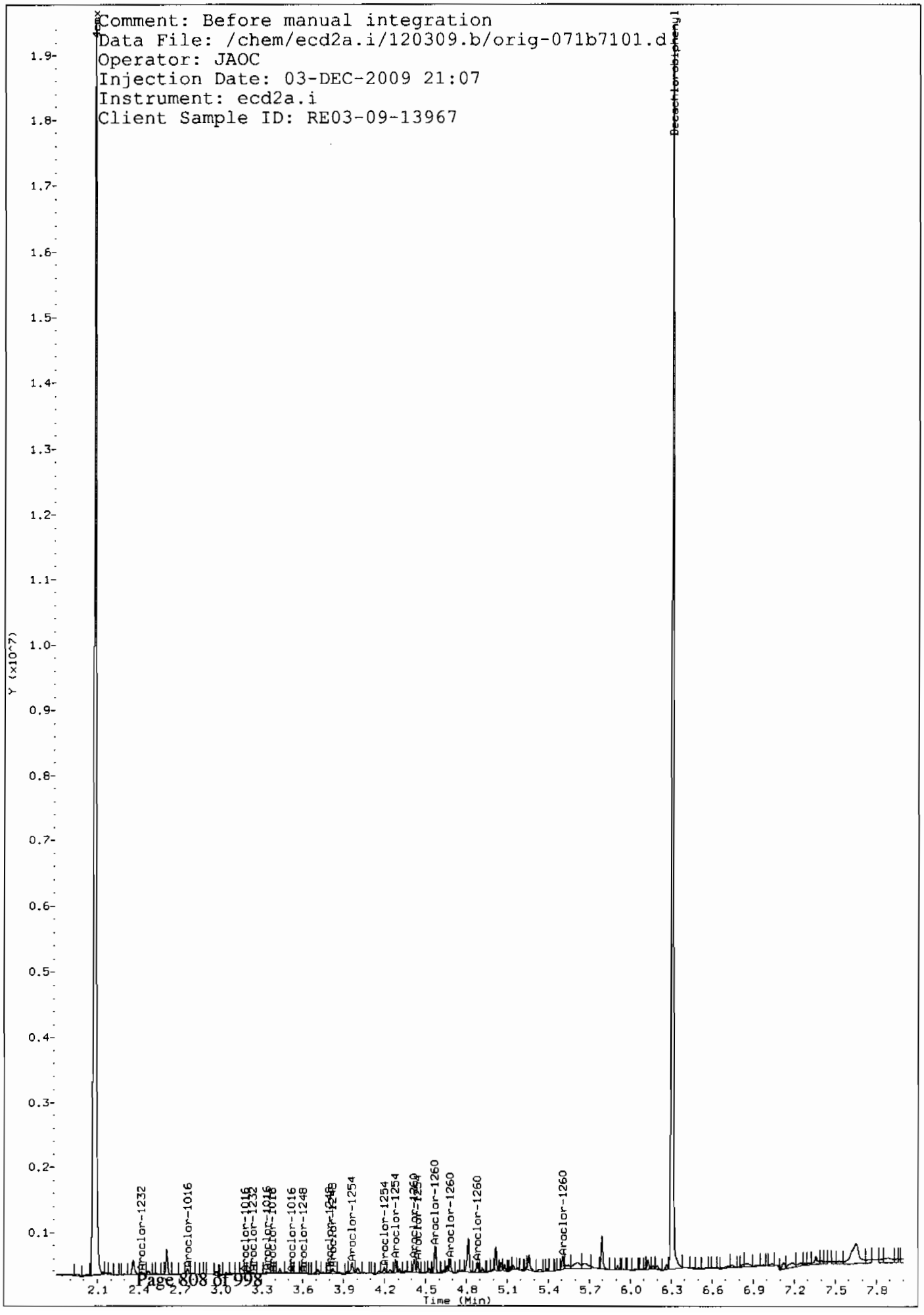
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-071b7101.d
Operator: JAOC
Injection Date: 03-DEC-2009 21:07
Instrument: ecd2a.i
Client Sample ID: RE03-09-13967
Decachlorobiphenyl
Aroclor-1232
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1260
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418010	**Date Received:**	11/19/2009 08:45	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13968	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:11	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	066f6601.d	**Column:**	1 CLP1	**Level:**	LOW
	066b6601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.62	ug/kg	1.21	3.62	1
11104-28-2	Aroclor-1221	U	3.62	ug/kg	1.21	3.62	1
11141-16-5	Aroclor-1232	U	3.62	ug/kg	1.21	3.62	1
53469-21-9	Aroclor-1242	U	3.62	ug/kg	1.21	3.62	1
12672-29-6	Aroclor-1248	U	3.62	ug/kg	1.21	3.62	1
11097-69-1	Aroclor-1254	U	3.62	ug/kg	1.21	3.62	1
11096-82-5	Aroclor-1260	U	3.62	ug/kg	1.21	3.62	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/066f6601.d
Lab Smp Id: 241418010 Client Smp ID: RE03-09-13968
Inj Date : 03-DEC-2009 20:11
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418010|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13968|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	8.55190	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	10167594	176.180	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7646628	139.463	5.0	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/066f6601.d

Date : 03-DEC-2009 20:11

Client ID: RE03-09-13968

Sample Info: |2414180101|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

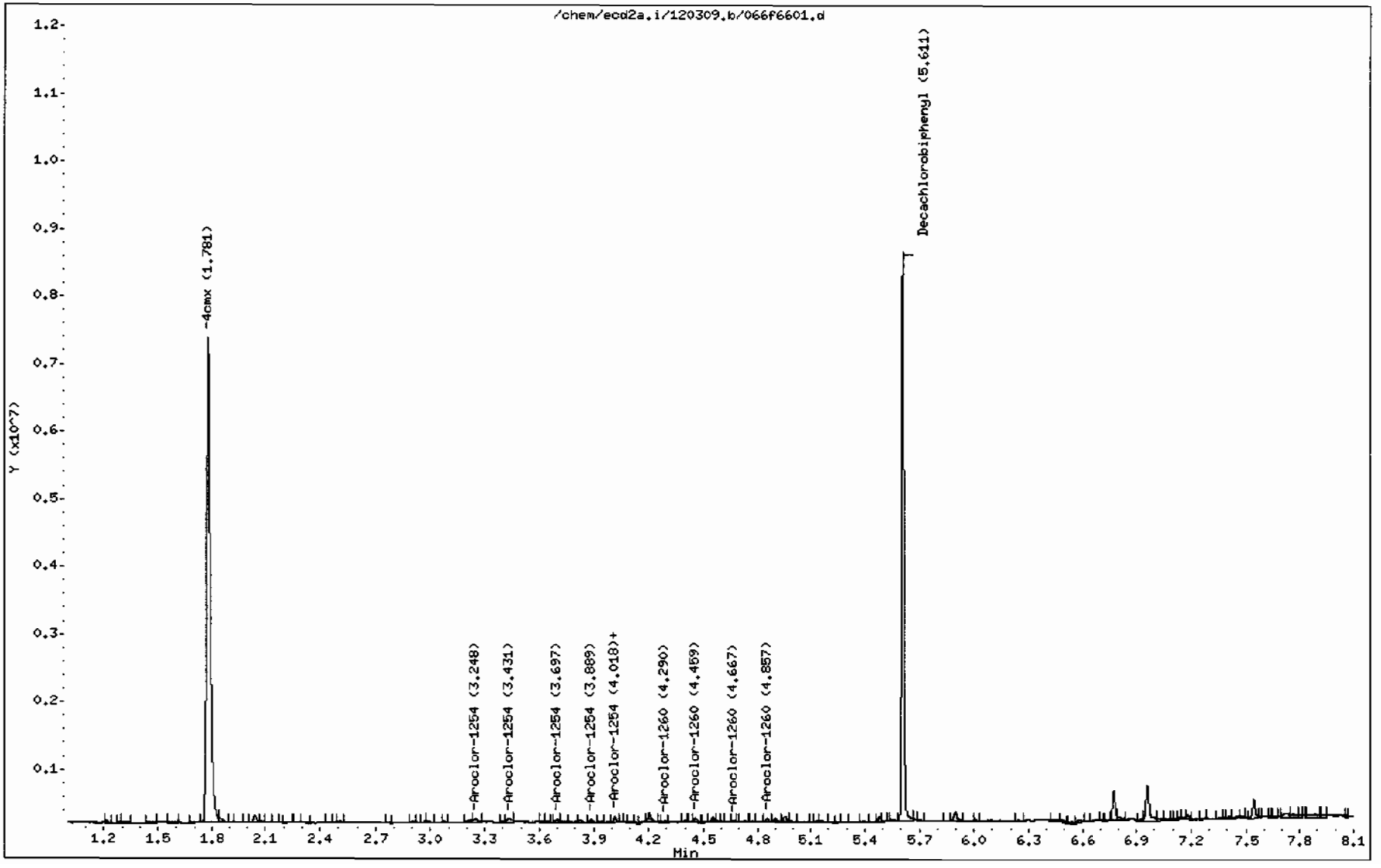

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/066b6601.d
Lab Smp Id: 241418010 Client Smp ID: RE03-09-13968
Inj Date : 03-DEC-2009 20:11
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418010|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13968|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	8.55190	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22374619	189.295	6.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	16390881	150.871	5.5	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/066b6601.d

Date : 03-DEC-2009 20:11

Client ID: RE03-09-13968

Sample Info: |241418010|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

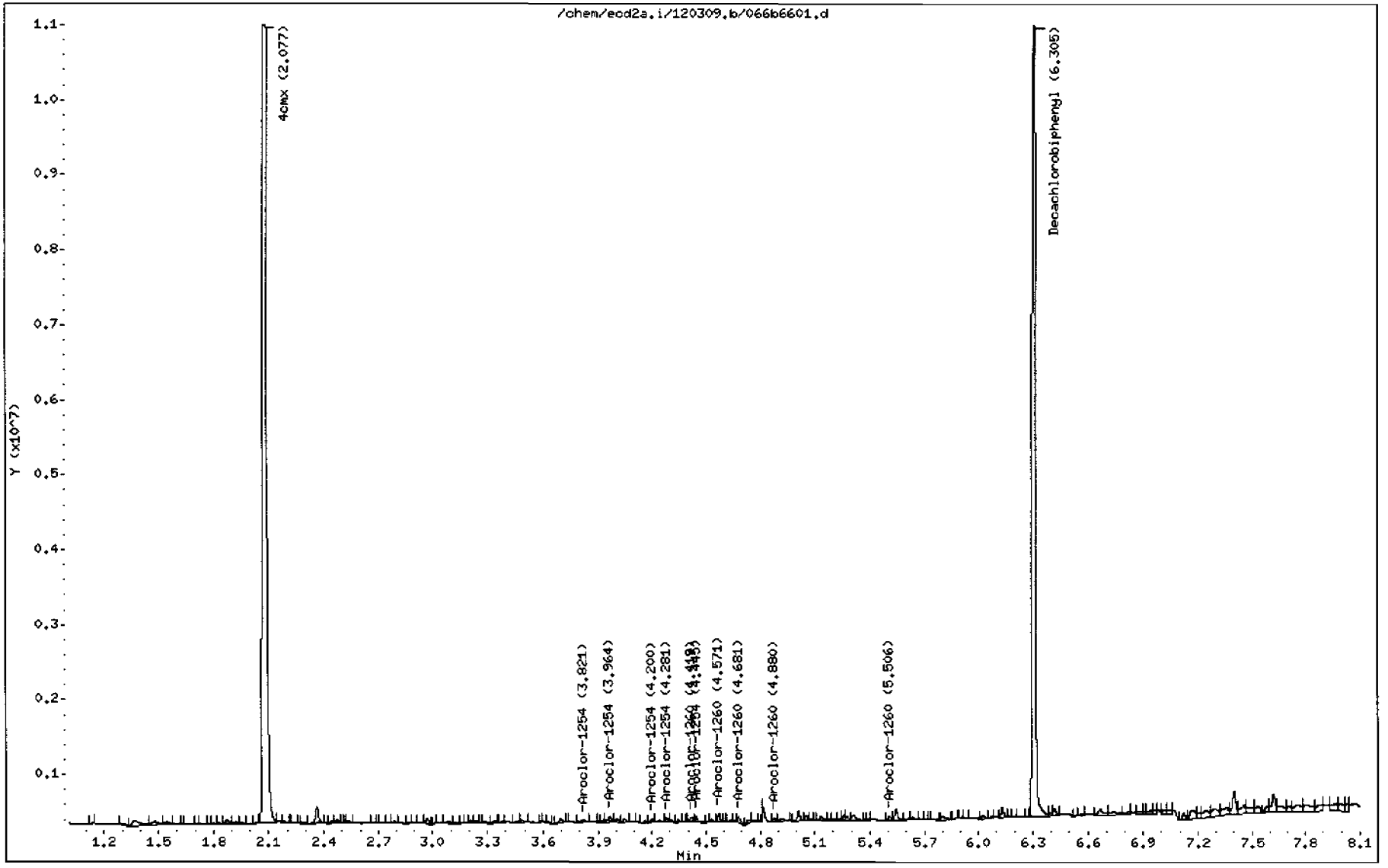

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418009	**Date Received:**	11/19/2009 08:45	**%Moisture:**	13.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13969	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 20:00	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.82	ug/kg	1.27	3.82	1
11104–28–2	Aroclor–1221	U	3.82	ug/kg	1.27	3.82	1
11141–16–5	Aroclor–1232	U	3.82	ug/kg	1.27	3.82	1
53469–21–9	Aroclor–1242	U	3.82	ug/kg	1.27	3.82	1
12672–29–6	Aroclor–1248	U	3.82	ug/kg	1.27	3.82	1
11097–69–1	Aroclor–1254	U	3.82	ug/kg	1.27	3.82	1
11096–82–5	Aroclor–1260	U	3.82	ug/kg	1.27	3.82	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/065f6501.d
Lab Smp Id: 241418009 Client Smp ID: RE03-09-13969
Inj Date : 03-DEC-2009 20:00
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418009|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13969|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.21470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	10373378	179.746	6.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	8488397	154.815	5.9	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/065f6501.d

Page 1

Date : 03-DEC-2009 20:00

Client ID: RE03-09-13969

Instrument: ecd2a.i

Sample Info: |241418009|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

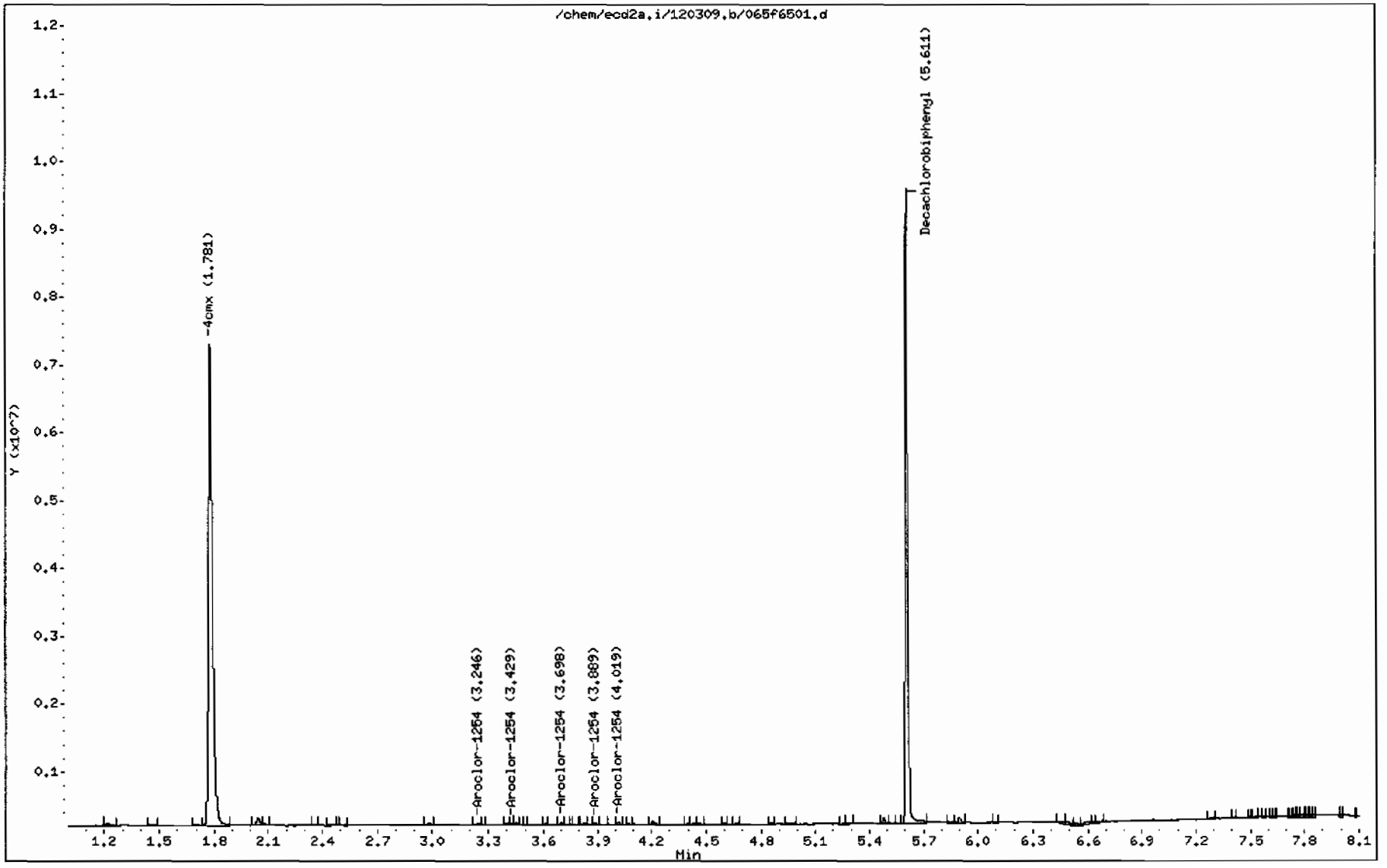

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/065b6501.d
Lab Smp Id: 241418009 Client Smp ID: RE03-09-13969
Inj Date : 03-DEC-2009 20:00
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418009|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13969|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.21470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22715793	192.181	7.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17768634	163.553	6.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/065b6501.d

Date : 03-DEC-2009 20:00

Client ID: RE03-09-13969

Sample Info: |241418009|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

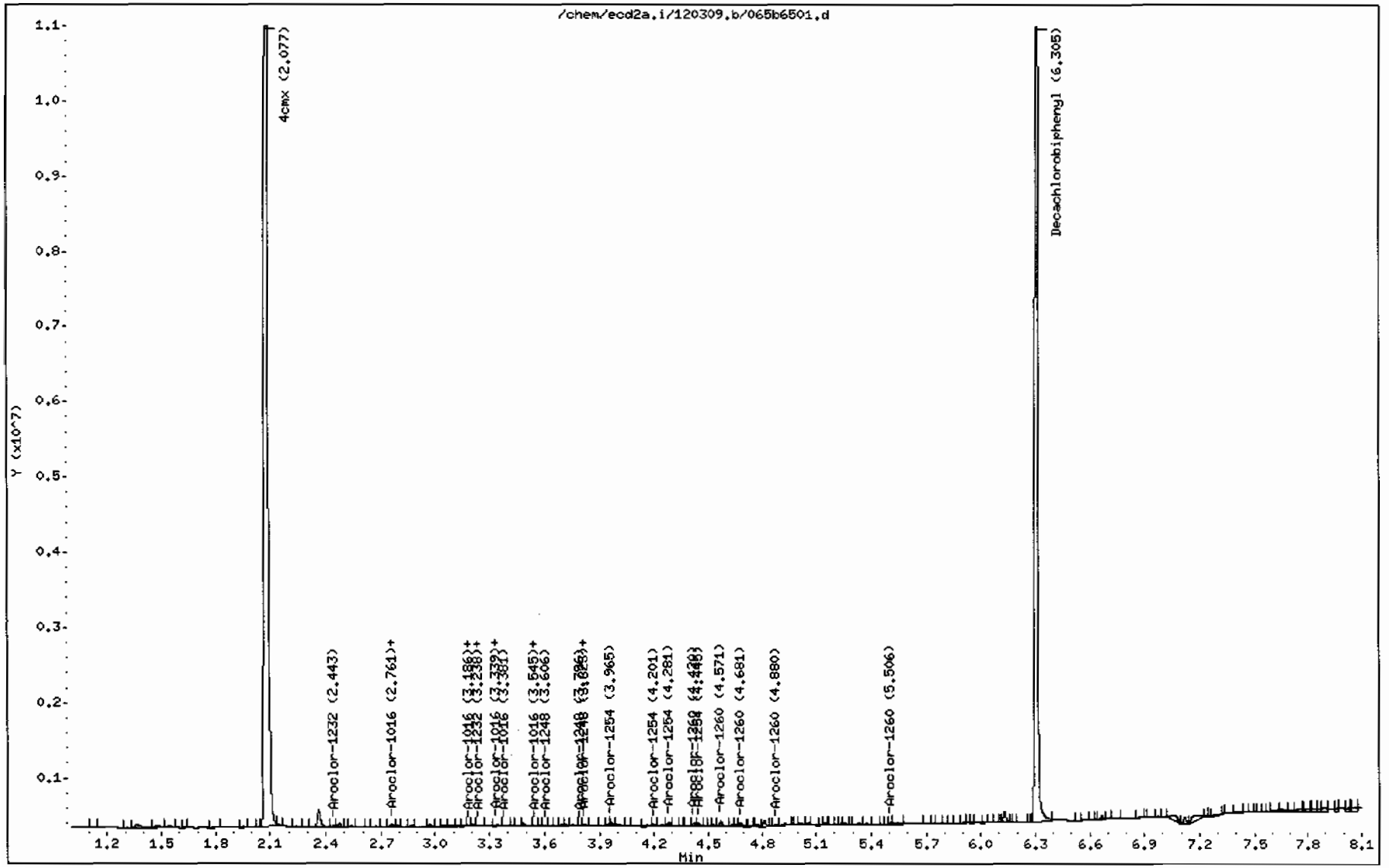

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418006	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13970	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 19:27	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	062f6201.d	**Column:**	1 CLP1	**Level:**	LOW
	062b6201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.72	ug/kg	1.24	3.72	1
11104-28-2	Aroclor-1221	U	3.72	ug/kg	1.24	3.72	1
11141-16-5	Aroclor-1232	U	3.72	ug/kg	1.24	3.72	1
53469-21-9	Aroclor-1242	U	3.72	ug/kg	1.24	3.72	1
12672-29-6	Aroclor-1248	U	3.72	ug/kg	1.24	3.72	1
11097-69-1	Aroclor-1254	JP	2.80	ug/kg	1.24	3.72	1
11096-82-5	Aroclor-1260	J	1.80	ug/kg	1.24	3.72	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/062f6201.d
Lab Smp Id: 241418006 Client Smp ID: RE03-09-13970
Inj Date : 03-DEC-2009 19:27
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418006|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13970|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 62
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	10.60320	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9729425	168.588	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7647532	139.479	5.2	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.246	3.245	0.001	120348	57.8584	2.2	80.00- 120.00	100.00(aM)
3.430	3.428	0.002	210719	76.0133	2.8	113.78- 153.78	175.09
3.698	3.697	0.001	173826	46.4478	1.7	164.17- 204.17	144.44
3.889	3.888	0.001	210419	75.6168	2.8	117.36- 157.36	174.84
4.017	4.018	-0.001	322116	116.707	4.3	110.08- 150.08	267.65

Average of Peak Concentrations = 2.8

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	322116	79.2065	2.9	80.00- 120.00	100.00(aM)
4.289	4.288	0.001	62925	24.8883	0.93	40.91- 80.91	19.54
4.456	4.454	0.002	77142	29.8630	1.1	42.71- 82.71	23.95
4.667	4.665	0.002	131308	21.7539	0.81	125.86- 165.86	40.76
4.856	4.855	0.001	106228	36.4804	1.4	49.52- 89.52	32.98
			Average of Peak Concentrations =		1.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/062f6201.d

Date : 03-DEC-2009 19:27

Client ID: RE03-09-13970

Sample Info: |2414180061|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

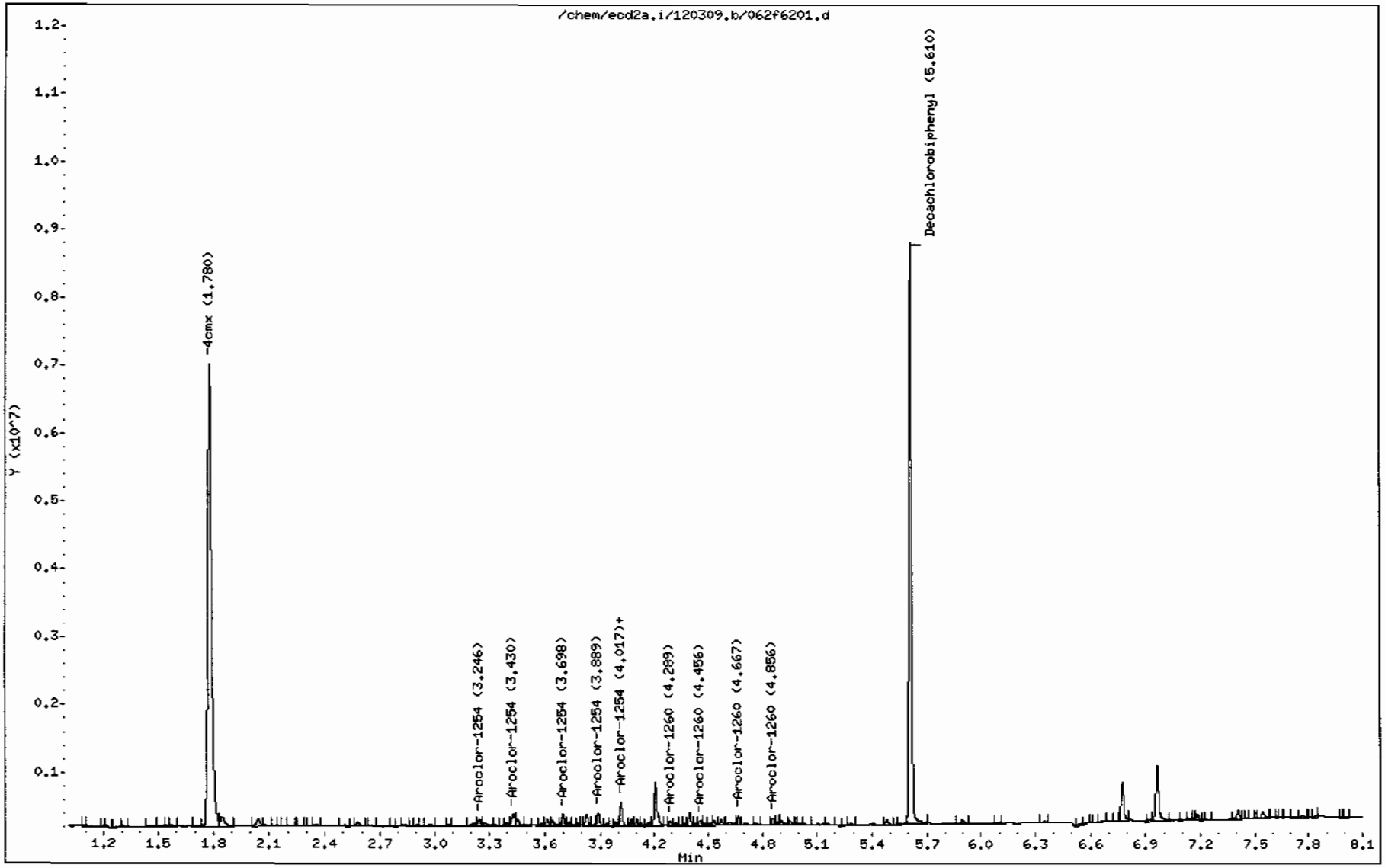

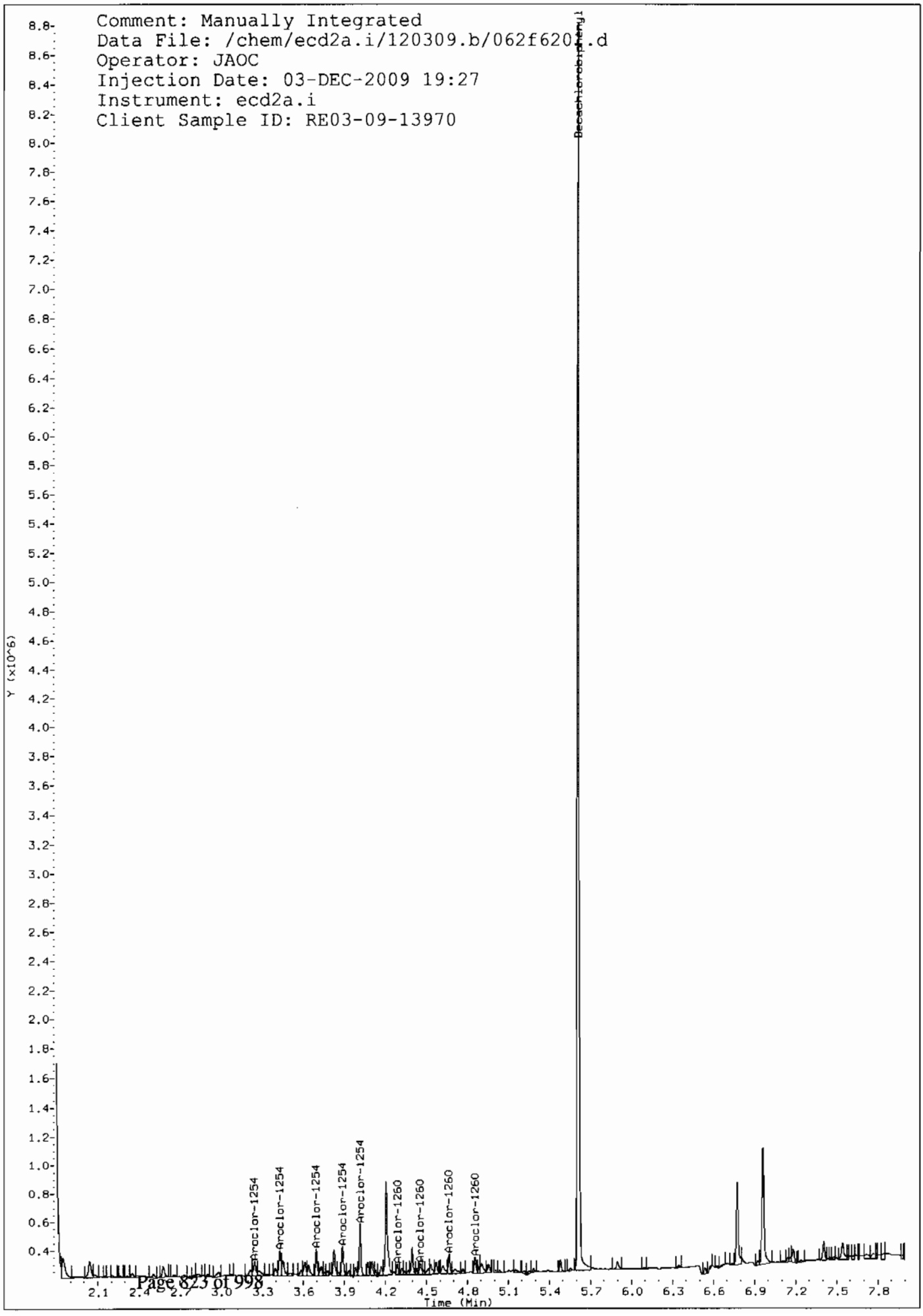
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/062f6201.d
Operator: JAOC
Injection Date: 03-DEC-2009 19:27
Instrument: ecd2a.i
Client Sample ID: RE03-09-13970
Decachlorobiphenyl
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^6)
Time (Min)

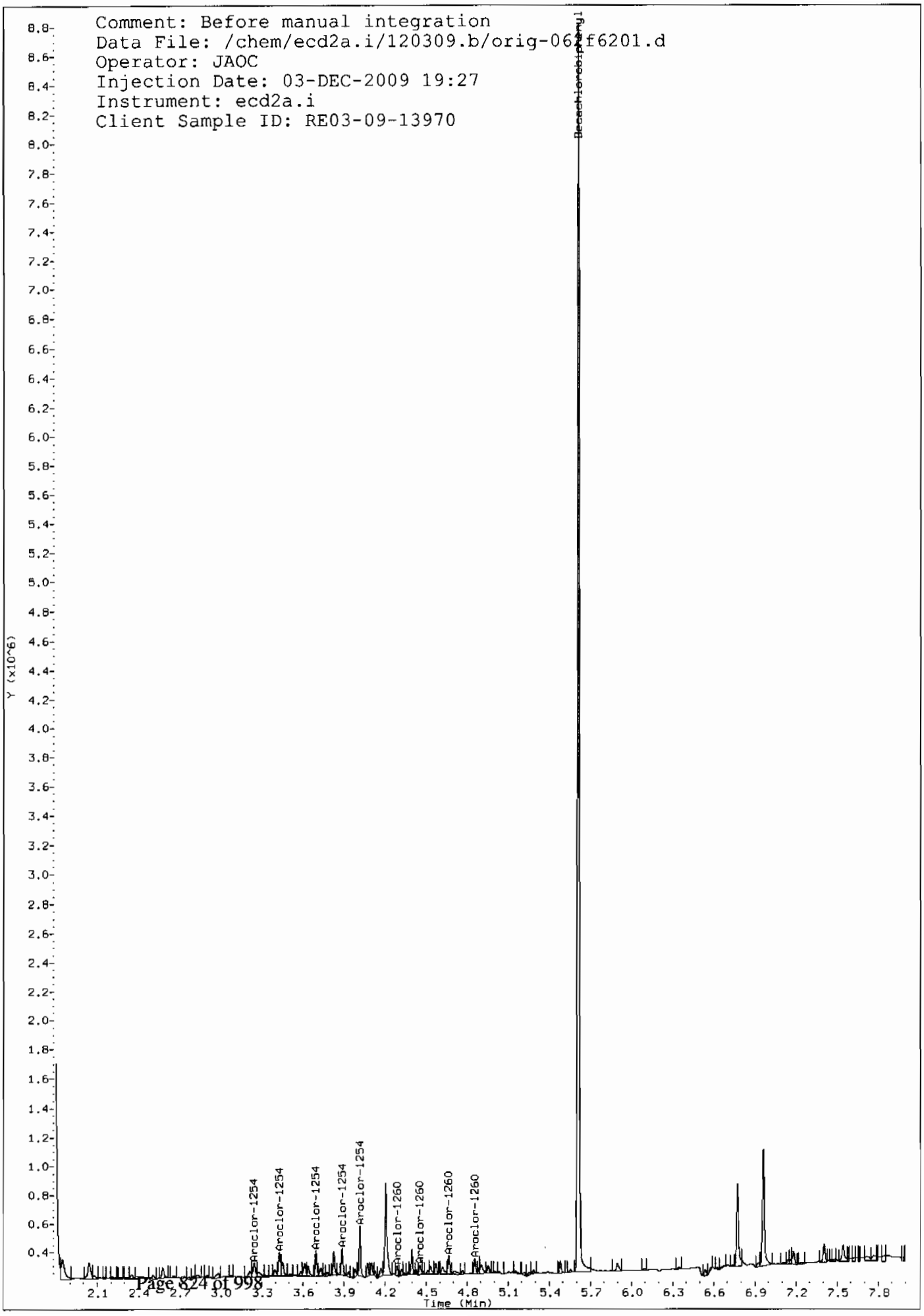
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-06ff6201.d
Operator: JAOC
Injection Date: 03-DEC-2009 19:27
Instrument: ecd2a.i
Client Sample ID: RE03-09-13970
Decachlorobiphenyl
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/062b6201.d
Lab Smp Id: 241418006 Client Smp ID: RE03-09-13970
Inj Date : 03-DEC-2009 19:27
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418006|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13970|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 62
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	10.60320	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	21569783	182.486	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15790371	145.344	5.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	177037	35.5120	1.3	80.00- 120.00	100.00(a)
3.964	3.963	0.001	312292	53.8533	2.0	96.19- 136.19	176.40
4.200	4.200	0.000	129202	32.1161	1.2	61.63- 101.63	72.98
4.280	4.280	0.000	247933	32.0685	1.2	137.40- 177.40	140.05
4.445	4.443	0.002	293993	52.4210	2.0	90.70- 130.70	166.06
			Average of Peak Concentrations =		1.5		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	268342	48.6777	1.8	80.00- 120.00	100.00(a)
4.570	4.569	0.001	497203	69.7148	2.6	107.13- 147.13	185.29
4.681	4.680	0.001	400326	84.6112	3.2	64.21- 104.21	149.18
4.878	4.878	0.000	111902	19.2913	0.72	80.11- 120.11	41.70
5.505	5.504	0.001	185160	20.4808	0.76	135.13- 175.13	69.00
		Average of Peak Concentrations =			1.8		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/062b6201.d

Date : 03-DEC-2009 19:27

Client ID: RE03-09-13970

Sample Info: 1241418006111

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

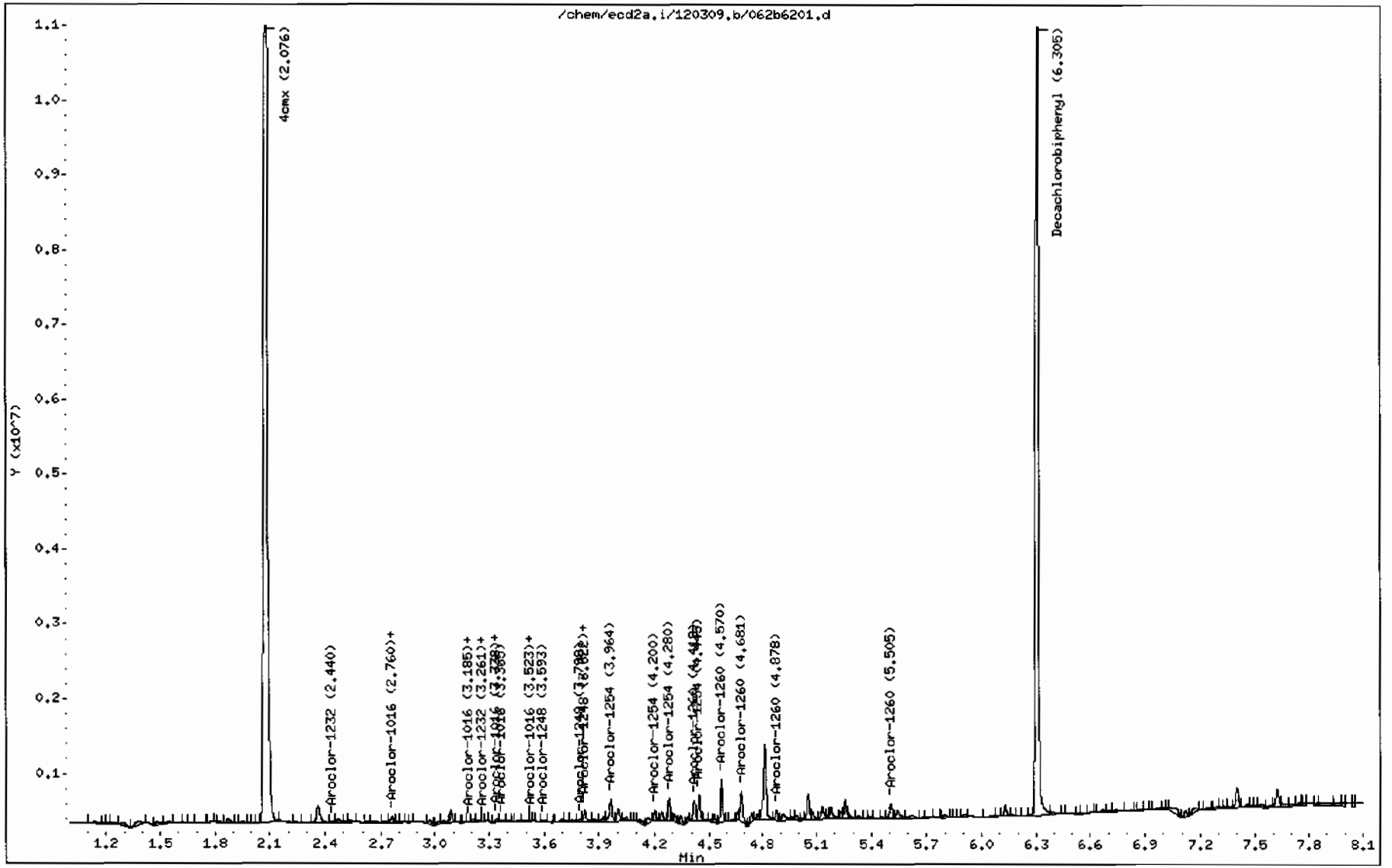

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418008	**Date Received:**	11/19/2009 08:45	**%Moisture:**	19
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13971	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 19:49	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	064f6401.d	**Column:**	1 CLP1	**Level:**	LOW
	064b6401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.11	ug/kg	1.37	4.11	1
11104-28-2	Aroclor-1221	U	4.11	ug/kg	1.37	4.11	1
11141-16-5	Aroclor-1232	U	4.11	ug/kg	1.37	4.11	1
53469-21-9	Aroclor-1242	U	4.11	ug/kg	1.37	4.11	1
12672-29-6	Aroclor-1248	U	4.11	ug/kg	1.37	4.11	1
11097-69-1	Aroclor-1254	U	4.11	ug/kg	1.37	4.11	1
11096-82-5	Aroclor-1260	U	4.11	ug/kg	1.37	4.11	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/064f6401.d
Lab Smp Id: 241418008 Client Smp ID: RE03-09-13971
Inj Date : 03-DEC-2009 19:49
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418008|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13971|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 64
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	19.01720	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	11204023	194.139	8.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	9120028	166.335	6.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/064f6401.d

Date : 03-DEC-2009 19:49

Client ID: RE03-09-13971

Sample Info: |241418008|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

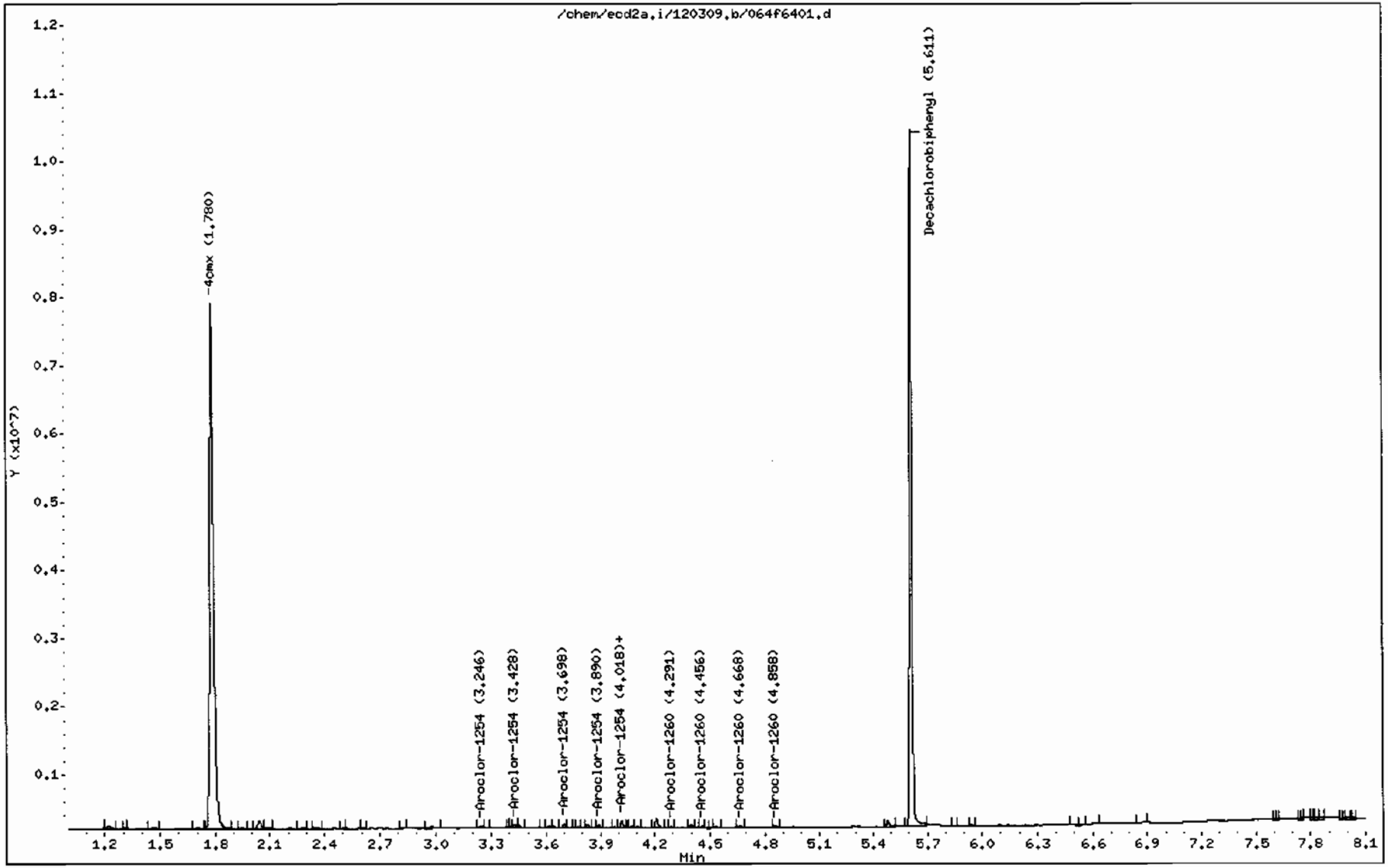

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/064b6401.d
Lab Smp Id: 241418008 Client Smp ID: RE03-09-13971
Inj Date : 03-DEC-2009 19:49
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418008|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-09-13971|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 64
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	19.01720	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	24688847	208.874	8.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	19027775	175.143	7.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/064b6401.d
Date : 03-DEC-2009 19:49
Client ID: RE03-09-13971
Sample Info: 1241418008111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

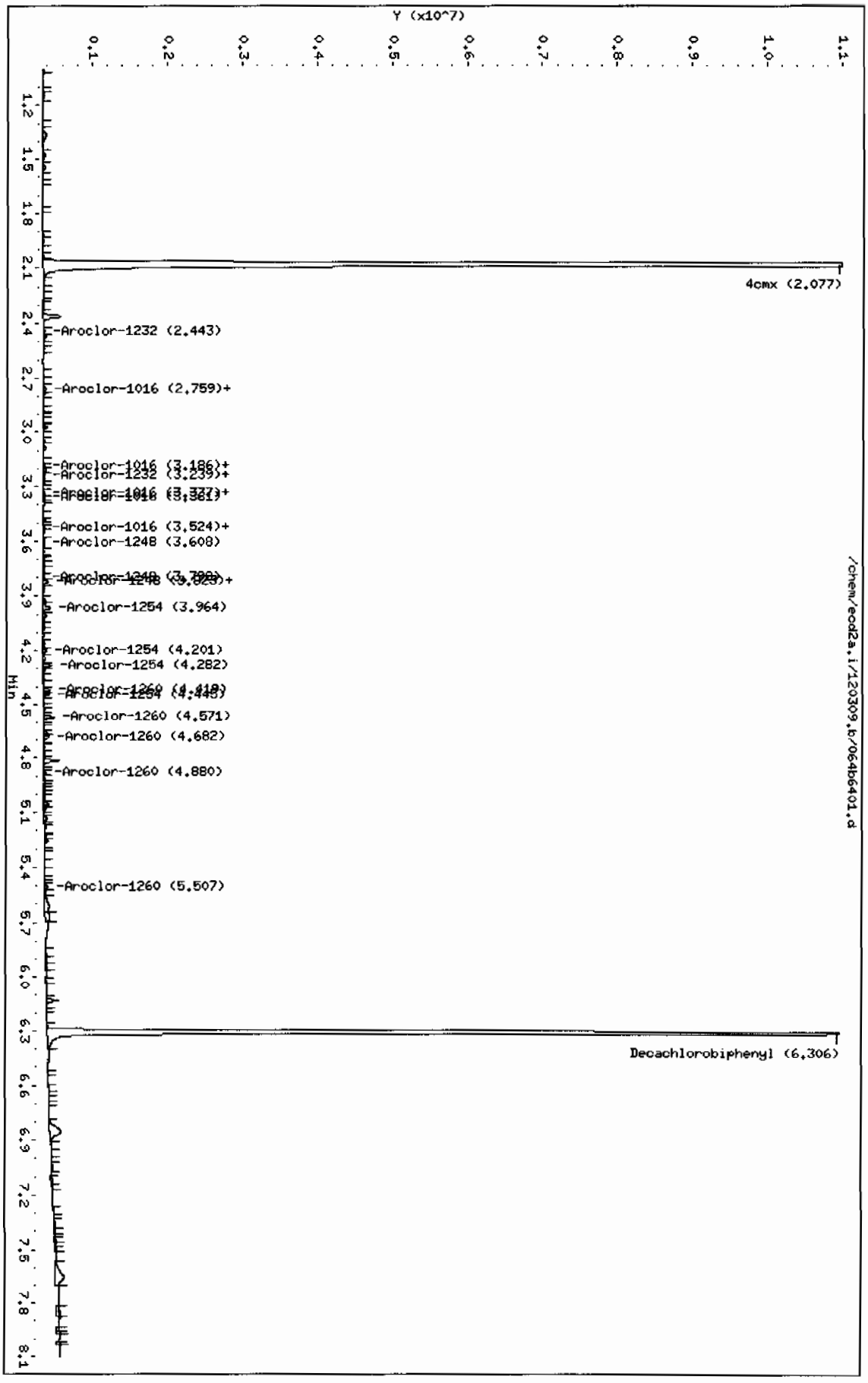

Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	241418016	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–3913	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 21:40	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	074f7401.d	**Column:**	1 CLP1	**Level:**	LOW
	074b7401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.00	ug/kg	1.33	4.00	1
11104–28–2	Aroclor–1221	U	4.00	ug/kg	1.33	4.00	1
11141–16–5	Aroclor–1232	U	4.00	ug/kg	1.33	4.00	1
53469–21–9	Aroclor–1242	U	4.00	ug/kg	1.33	4.00	1
12672–29–6	Aroclor–1248	U	4.00	ug/kg	1.33	4.00	1
11097–69–1	Aroclor–1254	U	4.00	ug/kg	1.33	4.00	1
11096–82–5	Aroclor–1260	U	4.00	ug/kg	1.33	4.00	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/074f7401.d
Lab Smp Id: 241418016 Client Smp ID: RE03-10-3913
Inj Date : 03-DEC-2009 21:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418016|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-10-3913|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 74
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	17.09990	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	9894775	171.453	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	6392896	116.596	4.7	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/074f7401.d

Page 1

Date : 03-DEC-2009 21:40

Client ID: RE03-10-3913

Instrument: ecd2a.i

Sample Info: |241418016|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

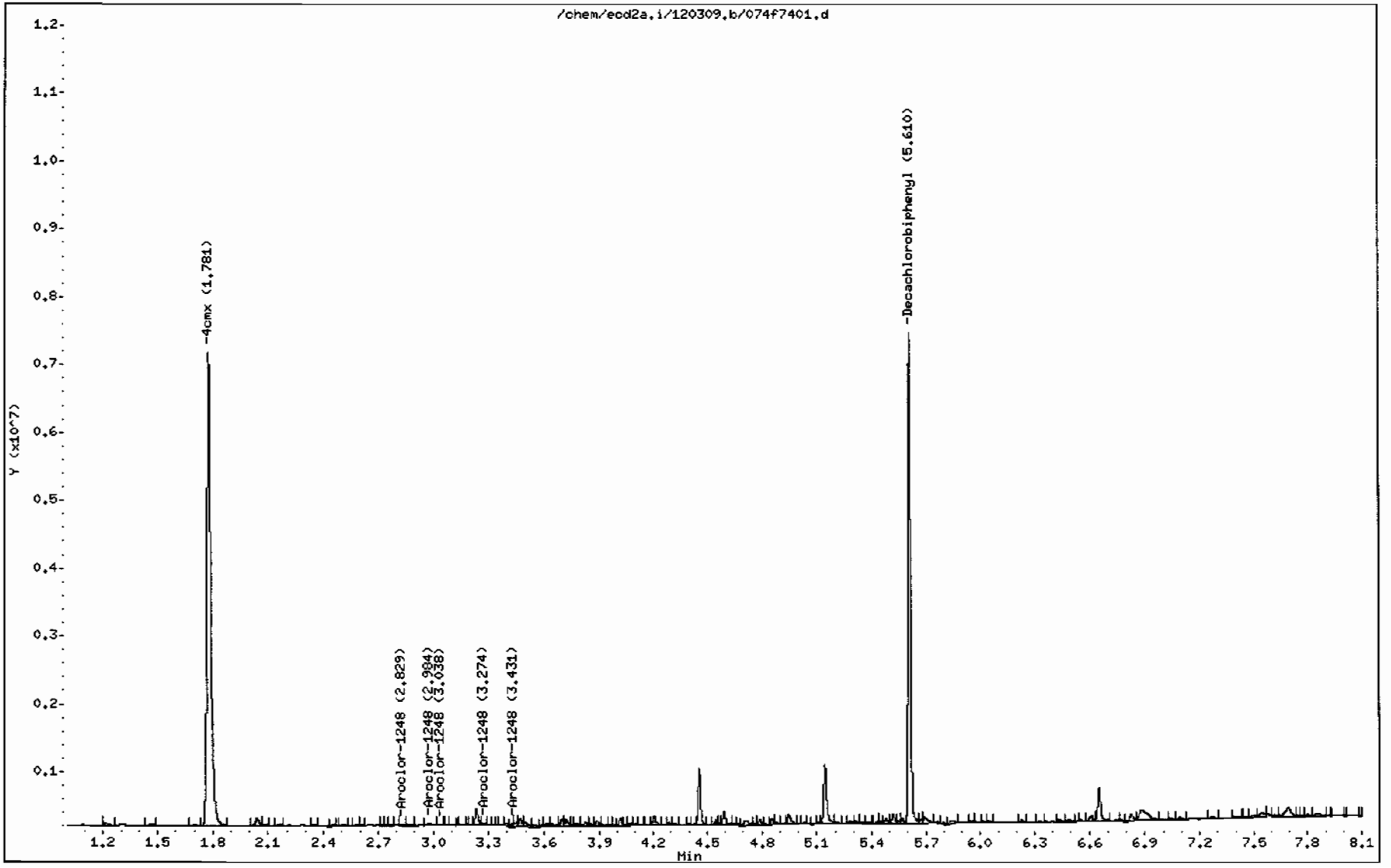

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/074b7401.d
Lab Smp Id: 241418016 Client Smp ID: RE03-10-3913
Inj Date : 03-DEC-2009 21:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418016|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-10-3913|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 74
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	17.09990	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21727658	183.821	7.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15071893	138.731	5.5	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/074b7401.d

Date : 03-DEC-2009 21:40

Client ID: RE03-10-3913

Sample Info: |241418016|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

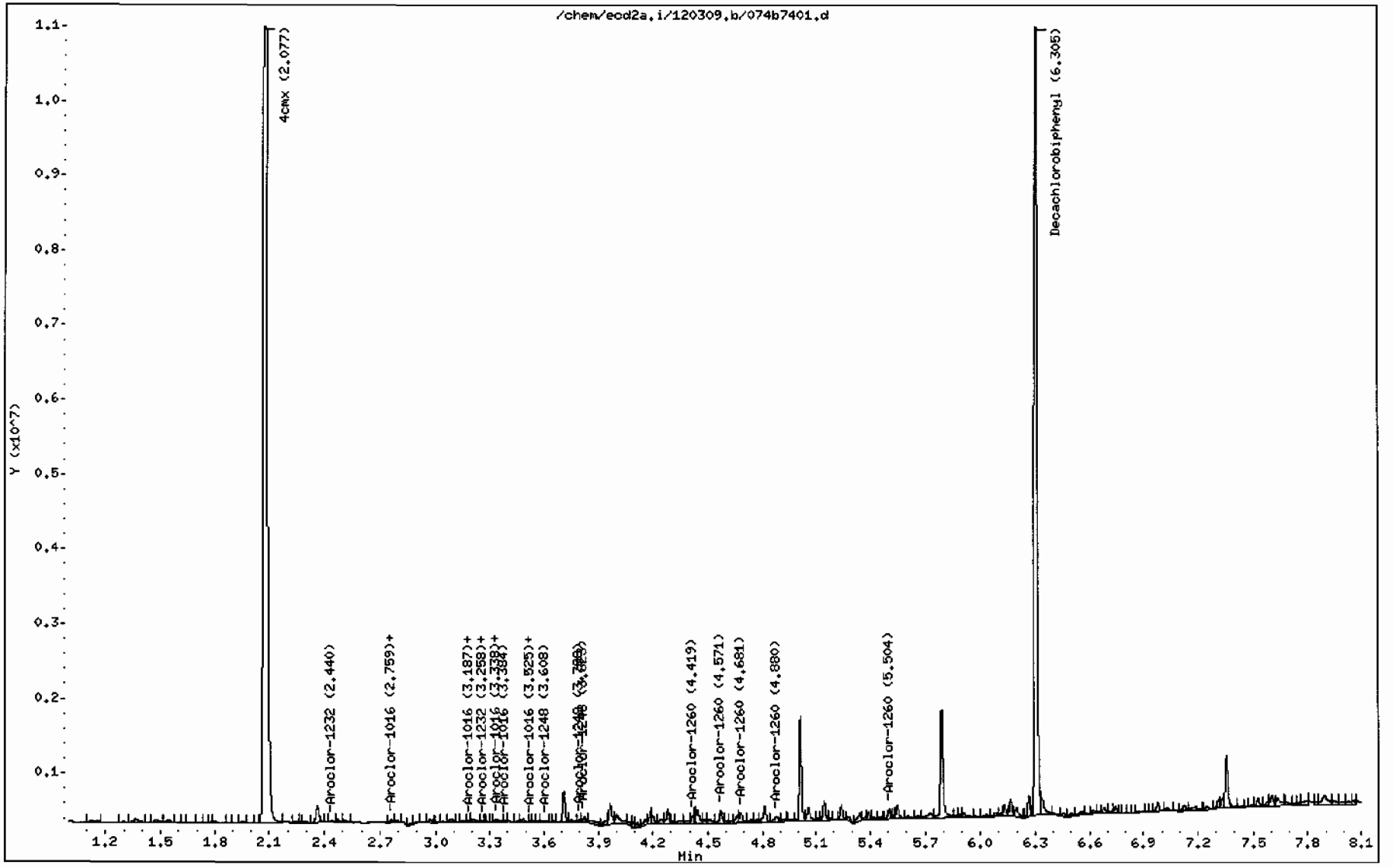

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241418015**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-3914**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:29**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**073f7301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	073b7301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.80	ug/kg	1.27	3.80	1
11104-28-2	Aroclor-1221	U	3.80	ug/kg	1.27	3.80	1
11141-16-5	Aroclor-1232	U	3.80	ug/kg	1.27	3.80	1
53469-21-9	Aroclor-1242	U	3.80	ug/kg	1.27	3.80	1
12672-29-6	Aroclor-1248	U	3.80	ug/kg	1.27	3.80	1
11097-69-1	Aroclor-1254	J	3.70	ug/kg	1.27	3.80	1
11096-82-5	Aroclor-1260		4.80	ug/kg	1.27	3.80	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/073f7301.d
Lab Smp Id: 241418015 Client Smp ID: RE03-10-3914
Inj Date : 03-DEC-2009 21:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418015|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-10-3914|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	12.76330	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9425209	163.317	6.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6640046	121.104	4.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.246	3.245	0.001	213571	102.676	3.9	80.00- 120.00	100.00(aM)
3.429	3.428	0.001	150196	54.1806	2.0	113.78- 153.78	70.33
3.698	3.697	0.001	224531	59.9965	2.3	164.17- 204.17	105.13
3.889	3.888	0.001	195893	70.3966	2.7	117.36- 157.36	91.72
4.018	4.018	0.000	550519	199.460	7.6	110.08- 150.08	257.77

Average of Peak Concentrations = 3.7

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	550519	135.369	5.1	80.00- 120.00	100.00(M)
4.290	4.288	0.002	289900	114.661	4.4	40.91- 80.91	52.66
4.458	4.454	0.004	470813	182.259	6.9	42.71- 82.71	85.52
4.668	4.665	0.003	439146	72.7532	2.8	125.86- 165.86	79.77
4.856	4.855	0.001	372481	127.915	4.9	49.52- 89.52	67.66
			Average of Peak Concentrations =		4.8		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/073f7301.d

Page 1

Date : 03-DEC-2009 21:29

Client ID: RE03-10-3914

Instrument: ecd2a.i

Sample Info: |241418015|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

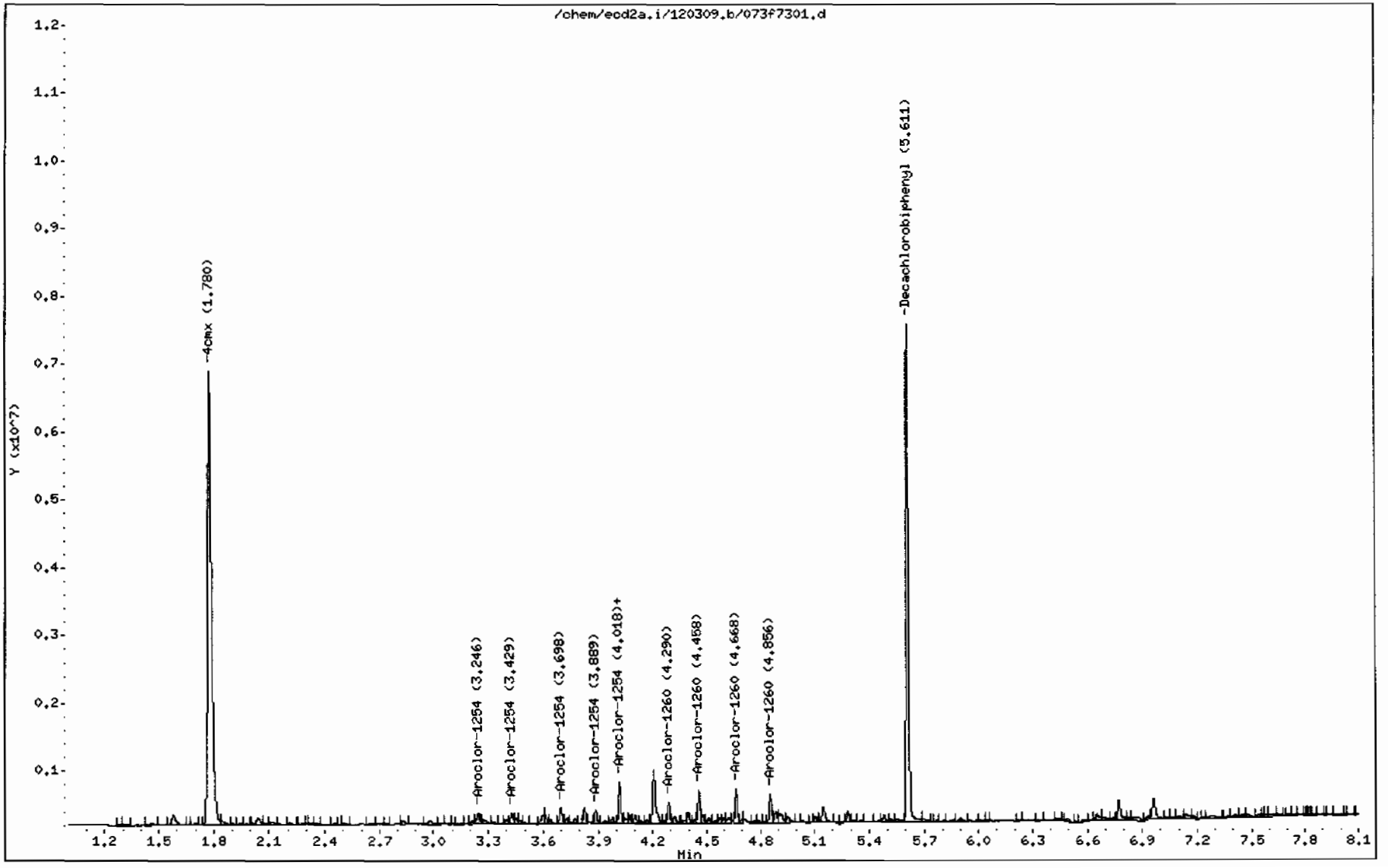

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/073f730[illegible].d
Operator: JAOC
Injection Date: 03-DEC-2009 21:29
Instrument: ecd2a.i
Client Sample ID: RE03-10-3914

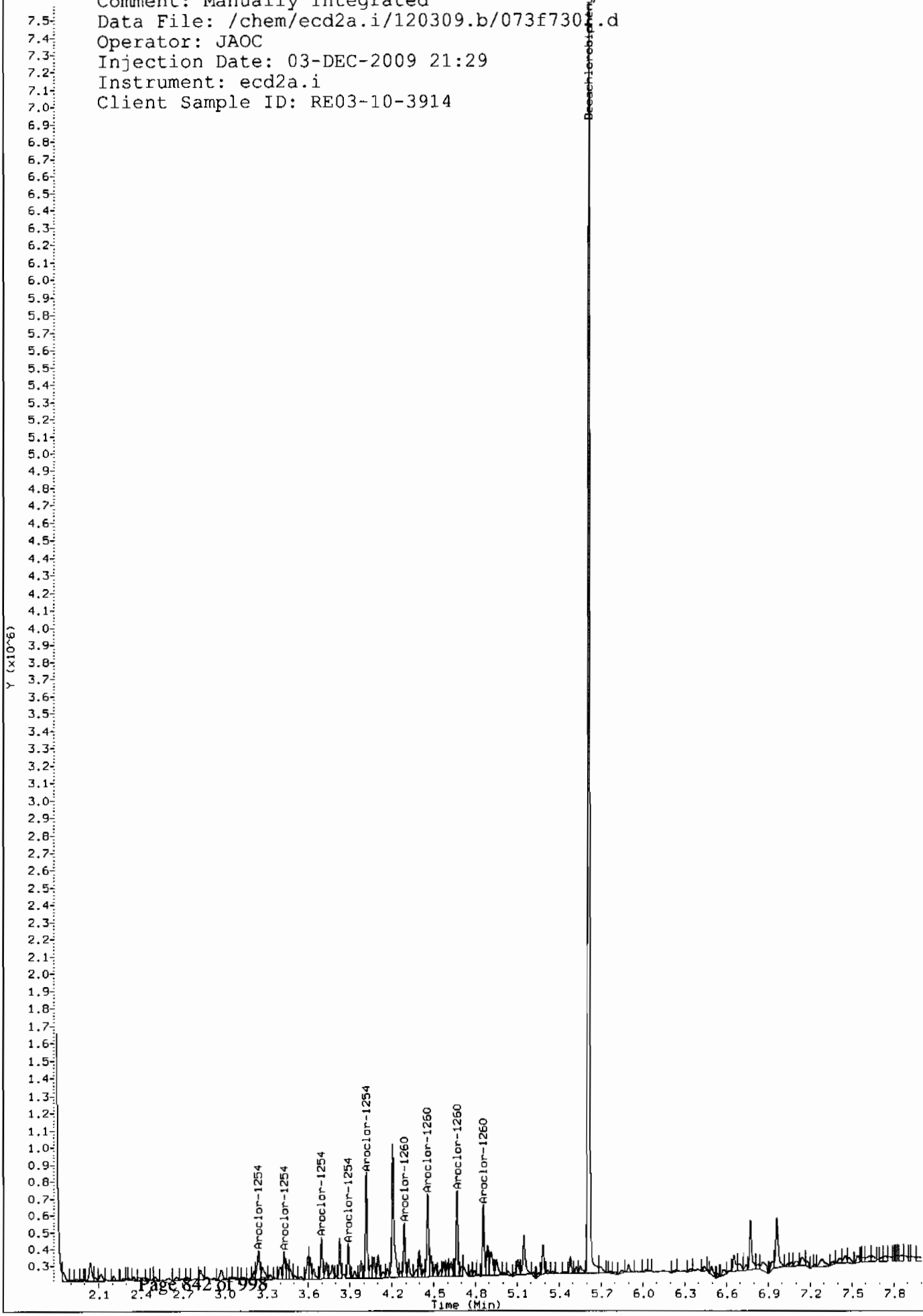

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-07f7301.d
Operator: JAOC
Injection Date: 03-DEC-2009 21:29
Instrument: ecd2a.i
Client Sample ID: RE03-10-3914

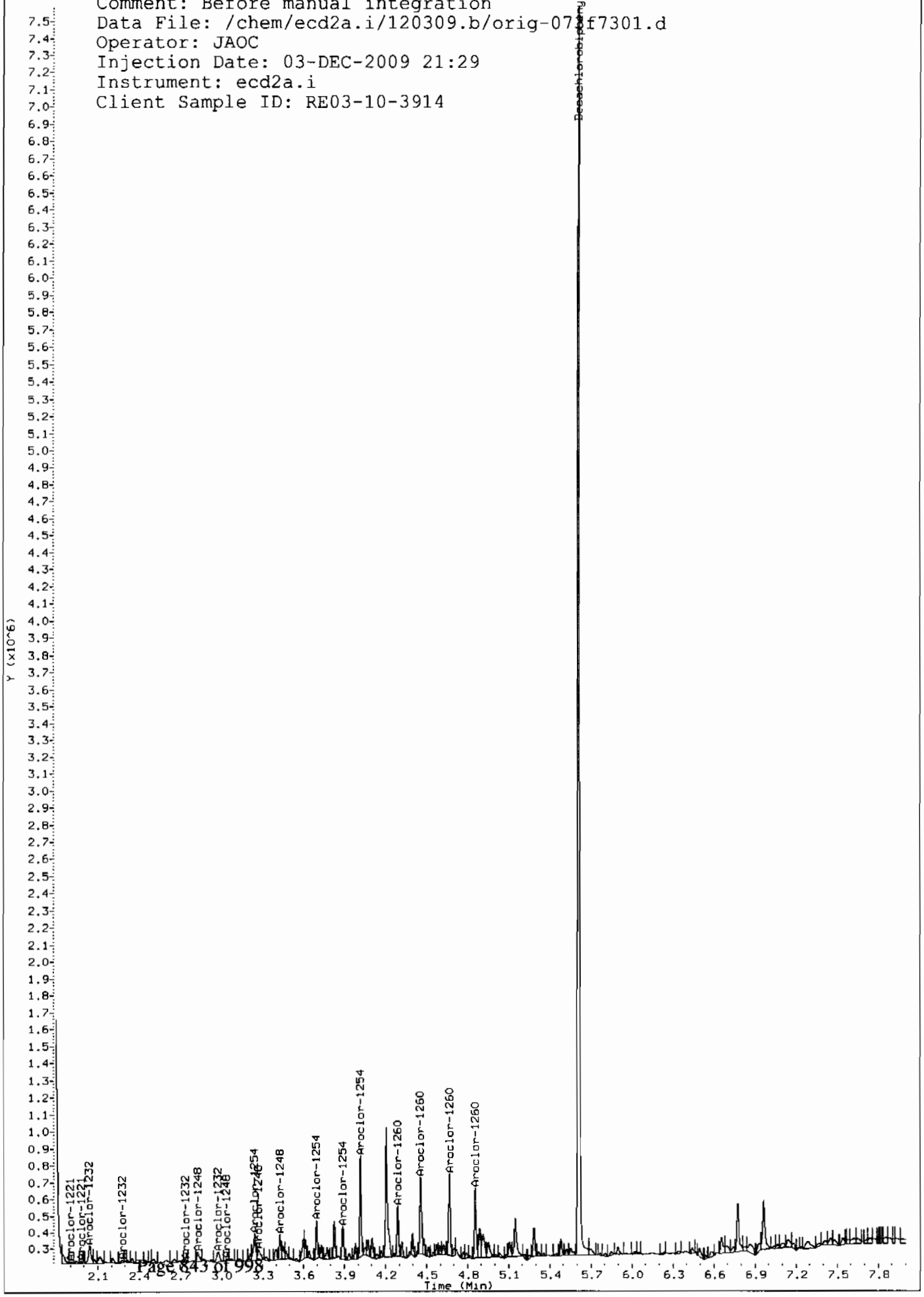

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/073b7301.d
Lab Smp Id: 241418015 Client Smp ID: RE03-10-3914
Inj Date : 03-DEC-2009 21:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241418015|1|
Misc Info : |ECD82P_1SF|926729|SVAF|LANL|SOIL|RE03-10-3914|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	12.76330	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	20521995	173.621	6.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15052280	138.550	5.3	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.822	0.001	300854	60.3483	2.3	80.00- 120.00	100.00(a)
3.964	3.963	0.001	450954	77.7648	3.0	96.19- 136.19	149.89
4.201	4.200	0.001	262718	65.3042	2.5	61.63- 101.63	87.32
4.281	4.280	0.001	430397	55.6689	2.1	137.40- 177.40	143.06
4.445	4.443	0.002	351699	62.7104	2.4	90.70- 130.70	116.90

Average of Peak Concentrations = 2.5

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	442493	80.2687	3.0	80.00- 120.00	100.00
4.571	4.569	0.002	918329	128.762	4.9	107.13- 147.13	207.54
4.682	4.680	0.002	492611	104.116	4.0	64.21- 104.21	111.33
4.880	4.878	0.002	608945	104.979	4.0	80.11- 120.11	137.62
5.505	5.504	0.001	901207	99.6835	3.8	135.13- 175.13	203.67
Average of Peak Concentrations =					3.9		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/120309.b/073b7301.d

Date : 03-DEC-2009 21:29

Client ID: RE03-10-3914

Sample Info: |241418015|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

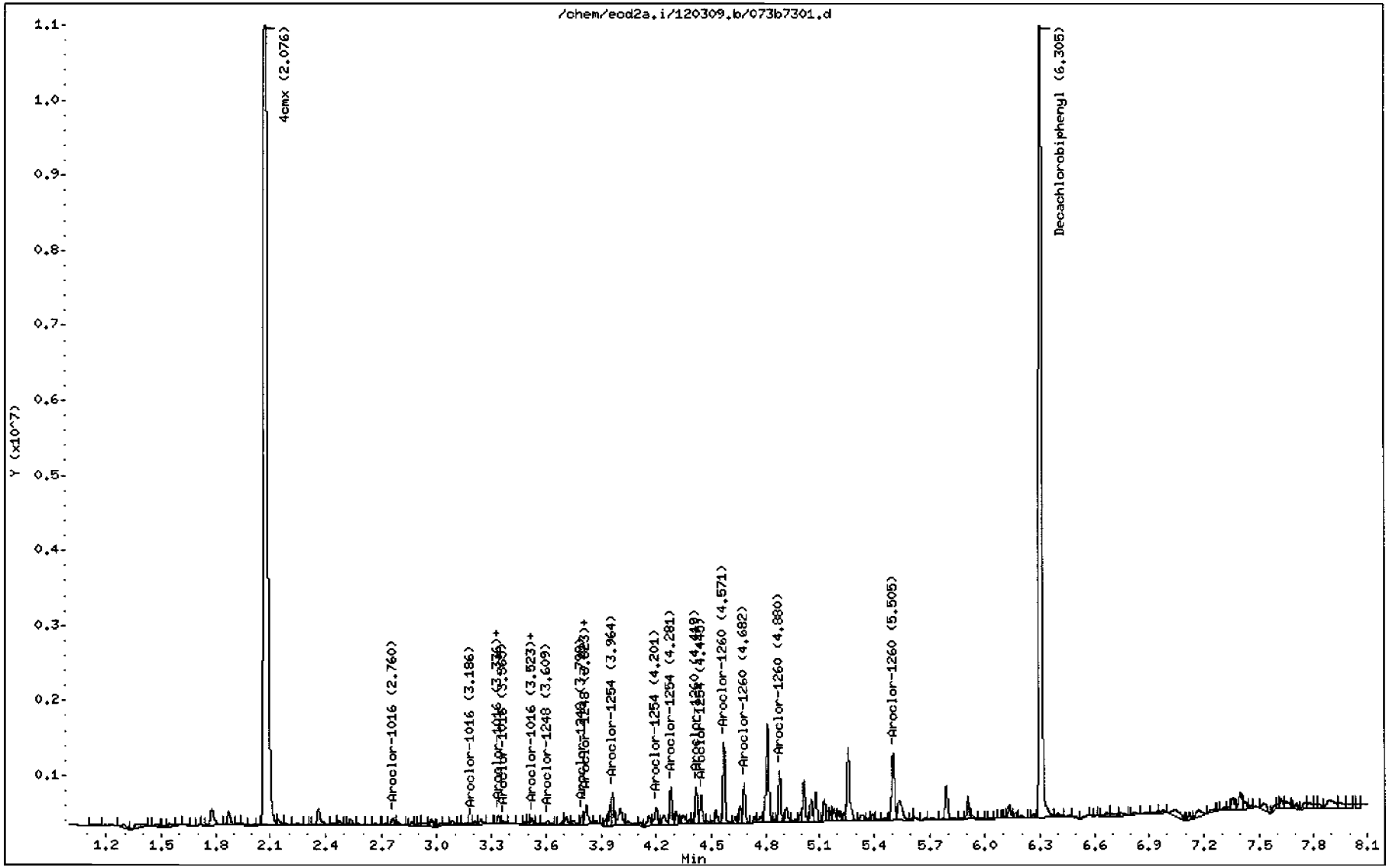

STANDARDS DATA

Report Date: 09-Dec-2009 07:15

Calibration History

Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d

12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 14:05	AR1660	/chem/ecd2a.i/120309.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 00:16	AR1660	/chem/ecd2a.i/120309.b/088f8801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 22:36	AR1660	/chem/ecd2a.i/120309.b/079f7901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 20:23	AR1660	/chem/ecd2a.i/120309.b/067f6701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 18:09	AR1660	/chem/ecd2a.i/120309.b/055f5501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 16:18	AR1660	/chem/ecd2a.i/120309.b/045f4501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:17	AR1221	/chem/ecd2a.i/120309.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 11:52	AR1660	/chem/ecd2a.i/120309.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:39	AR1268	/chem/ecd2a.i/120309.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:28	AR1262	/chem/ecd2a.i/120309.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:54	AR1248	/chem/ecd2a.i/120309.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:05	AR1232	/chem/ecd2a.i/120309.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:43	AR1242	/chem/ecd2a.i/120309.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:32	AR1254	/chem/ecd2a.i/120309.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:21	AR1660	/chem/ecd2a.i/120309.b/002f0201.d

Report Date: 03-Dec-2009 12:34

Calibration History

Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 11:52	AR1660	/chem/ecd2a.i/120309.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:39	AR1268	/chem/ecd2a.i/120309.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:28	AR1262	/chem/ecd2a.i/120309.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:17	AR1221	/chem/ecd2a.i/120309.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 09:05	AR1232	/chem/ecd2a.i/120309.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:54	AR1248	/chem/ecd2a.i/120309.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:43	AR1242	/chem/ecd2a.i/120309.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:32	AR1254	/chem/ecd2a.i/120309.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:21	AR1660	/chem/ecd2a.i/120309.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 12:17 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.280	2.250-2.310	2.100e+03
	2.601	2.571-2.631	4.505e+03
	2.692	2.662-2.722	1.820e+03
	2.827	2.797-2.857	9.329e+02
	2.978	2.948-3.008	1.378e+03
2 Aroclor-1221	1.446	1.416-1.476	4.641e+02
	1.905	1.875-1.935	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.033	2.003-2.063	1.165e+03
	2.280	2.250-2.310	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.736	2.706-2.766	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.979	2.949-3.009	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
	3.428	3.398-3.458	2.772e+03
	3.697	3.667-3.727	3.742e+03
	3.888	3.858-3.918	2.783e+03
	4.018	3.988-4.048	2.760e+03
7 Aroclor-1260	4.016	3.986-4.046	4.067e+03
	4.288	4.258-4.318	2.528e+03
	4.454	4.424-4.484	2.583e+03
	4.665	4.635-4.695	6.036e+03
	4.855	4.825-4.885	2.912e+03
8 Aroclor-1262	3.827	3.797-3.857	2.273e+03
	4.018	3.988-4.048	3.072e+03
	4.289	4.259-4.319	4.004e+03
	4.455	4.425-4.485	3.573e+03
	4.857	4.827-4.887	2.501e+03
9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
	4.912	4.882-4.942	9.361e+03
	5.045	5.015-5.075	7.073e+03
	5.283	5.253-5.313	3.056e+03
	5.480	5.450-5.510	2.201e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.779	1.749-1.809	5.771e+04
$ 12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 12:15 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.750	2.720-2.780	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.335	3.305-3.365	1.979e+03
	3.364	3.334-3.394	2.061e+03
	3.521	3.491-3.551	2.754e+03
2 Aroclor-1221	2.299	2.269-2.329	1.263e+03
	2.404	2.374-2.434	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.448	2.418-2.478	2.061e+03
	2.751	2.721-2.781	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.257	3.227-3.287	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.751	2.721-2.781	3.445e+03
	3.185	3.155-3.215	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.335	3.305-3.365	1.508e+03
	3.522	3.492-3.552	2.145e+03
5 Aroclor-1248	3.336	3.306-3.366	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.797	3.767-3.827	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.822	3.792-3.852	4.985e+03
	3.963	3.933-3.993	5.799e+03
	4.200	4.170-4.230	4.023e+03
	4.280	4.250-4.310	7.731e+03
	4.443	4.413-4.473	5.608e+03
7 Aroclor-1260	4.418	4.388-4.448	5.513e+03
	4.569	4.539-4.599	7.132e+03
	4.680	4.650-4.710	4.731e+03
	4.878	4.848-4.908	5.801e+03
	5.504	5.474-5.534	9.041e+03
8 Aroclor-1262	4.418	4.388-4.448	4.703e+03
	4.570	4.540-4.600	5.853e+03
	4.879	4.849-4.909	8.946e+03
	5.079	5.049-5.109	7.772e+03
	5.258	5.228-5.288	1.672e+04
9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
	5.535	5.505-5.565	2.018e+04
	5.707	5.677-5.737	1.496e+04
	5.907	5.877-5.937	6.438e+03
	6.131	6.101-6.161	4.409e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.075	2.045-2.105	1.182e+05
$ 12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Cal Date : 03-Dec-2009 12:17 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008f0801.d
Level 2: /chem/ecd2a.i/120209.b/009f0901.d
Level 3: /chem/ecd2a.i/120209.b/010f1001.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/120209.b/012f1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Cal Date : 03-Dec-2009 12:17 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
	(2)	2598	2539	2501	2535	2469	2528	1.903
	(3)	2625	2577	2548	2609	2557	2583	1.287
	(4)	5914	5894	5999	6196	6179	6036	2.381
	(5)	2944	2846	2851	2940	2978	2912	2.044
	8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
	(2)	3295	3066	3031	3051	2917	3072	4.482
	(3)	4237	3997	3977	3997	3815	4004	3.763
	(4)	3754	3532	3556	3594	3430	3573	3.295
	(5)	2578	2453	2481	2538	2454	2501	2.217
	9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
	(2)	9332	9272	9238	9197	9765	9361	2.470
	(3)	6985	6923	6953	6984	7523	7073	3.568
	(4)	3112	3015	2984	2964	3207	3056	3.331
	(5)	21397	21592	21760	21851	23464	22013	3.767
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
	14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
	15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$	11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$	12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Cal Date : 03-Dec-2009 12:15 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008b0801.d
Level 2: /chem/ecd2a.i/120209.b/009b0901.d
Level 3: /chem/ecd2a.i/120209.b/010b1001.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/120209.b/012b1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Cal Date : 03-Dec-2009 12:15 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0821

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2085.253	0.01	-0.7	15.0
(2)	4504.513	4285.927	0.01	-4.8	15.0
(3)	1820.211	1728.701	0.01	-5.0	15.0
(4)	932.883	835.835	0.01	-10.4	15.0
(5)	1378.125	1268.162	0.01	-8.0	15.0
Aroclor-1260	4066.794	4077.459	0.01	0.3	15.0
(2)	2528.317	2528.986	0.01	0.0	15.0
(3)	2583.202	2589.227	0.01	0.2	15.0
(4)	6036.106	6066.223	0.01	0.5	15.0
(5)	2911.947	2891.295	0.01	-0.7	15.0
4cmx	57711.247	61240.300	0.01	6.1	15.0
Decachlorobiphenyl	54829.246	49462.440	0.01	-9.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0821

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4174.215	0.01	-2.0	15.0
(2)	3444.681	3357.939	0.01	-2.5	15.0
(3)	1979.487	1949.046	0.01	-1.5	15.0
(4)	2061.253	2027.884	0.01	-1.6	15.0
(5)	2754.170	2756.943	0.01	0.1	15.0
Aroclor-1260	5512.644	5813.745	0.01	5.5	15.0
(2)	7131.968	7474.901	0.01	4.8	15.0
(3)	4731.365	5007.399	0.01	5.8	15.0
(4)	5800.657	5946.667	0.01	2.5	15.0
(5)	9040.681	9360.400	0.01	3.5	15.0
4cmx	118199.83	131354.53	0.01	11.1	15.0
Decachlorobiphenyl	108641.52	103854.55	0.01	-4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0832

Lab File ID: 003F0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1969.624	0.01	-5.3	15.0
(2)	2772.138	2634.906	0.01	-5.0	15.0
(3)	3742.400	3627.492	0.01	-3.1	15.0
(4)	2782.705	2705.422	0.01	-2.8	15.0
(5)	2760.043	2562.087	0.01	-7.2	15.0
4cmx	57711.247	64723.850	0.01	12.2	15.0
Decachlorobiphenyl	54829.246	53425.320	0.01	-2.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 0832

Lab File ID: 003B0301 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4956.809	0.01	-0.6	15.0	
(2)	5798.946	5759.379	0.01	-0.7	15.0	
(3)	4022.990	4046.006	0.01	0.6	15.0	
(4)	7731.372	7802.109	0.01	0.9	15.0	
(5)	5608.308	5487.038	0.01	-2.2	15.0	
4cmx	118199.83	139202.25	0.01	17.8	15.0	<-
Decachlorobiphenyl	108641.52	112202.84	0.01	3.3	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1618

Lab File ID: 045F4501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2030.518	0.01	-3.3	15.0	
(2)	4504.513	4356.685	0.01	-3.3	15.0	
(3)	1820.211	1743.924	0.01	-4.2	15.0	
(4)	932.883	854.233	0.01	-8.4	15.0	
(5)	1378.125	1309.544	0.01	-5.0	15.0	
Aroclor-1260	4066.794	4096.006	0.01	0.7	15.0	
(2)	2528.317	2491.202	0.01	-1.5	15.0	
(3)	2583.202	2554.375	0.01	-1.1	15.0	
(4)	6036.106	5937.904	0.01	-1.6	15.0	
(5)	2911.947	2831.785	0.01	-2.8	15.0	
4cmx	57711.247	62043.470	0.01	7.5	15.0	
Decachlorobiphenyl	54829.246	44093.980	0.01	-19.6	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1618

Lab File ID: 045B4501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4216.212	0.01	-1.0	15.0	
(2)	3444.681	3405.549	0.01	-1.1	15.0	
(3)	1979.487	1963.953	0.01	-0.8	15.0	
(4)	2061.253	2065.526	0.01	0.2	15.0	
(5)	2754.170	2798.242	0.01	1.6	15.0	
Aroclor-1260	5512.644	5729.480	0.01	3.9	15.0	
(2)	7131.968	7299.919	0.01	2.4	15.0	
(3)	4731.365	4829.058	0.01	2.1	15.0	
(4)	5800.657	5716.115	0.01	-1.4	15.0	
(5)	9040.681	8826.543	0.01	-2.4	15.0	
4cmx	118199.83	132813.10	0.01	12.4	15.0	
Decachlorobiphenyl	108641.52	86887.570	0.01	-20.0	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1809

Lab File ID: 055F5501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2047.399	0.01	-2.5	15.0
(2)	4504.513	4384.029	0.01	-2.7	15.0
(3)	1820.211	1759.330	0.01	-3.3	15.0
(4)	932.883	883.630	0.01	-5.3	15.0
(5)	1378.125	1281.466	0.01	-7.0	15.0
Aroclor-1260	4066.794	4145.972	0.01	1.9	15.0
(2)	2528.317	2544.535	0.01	0.6	15.0
(3)	2583.202	2603.734	0.01	0.8	15.0
(4)	6036.106	6101.061	0.01	1.1	15.0
(5)	2911.947	2916.980	0.01	0.2	15.0
4cmx	57711.247	62578.520	0.01	8.4	15.0
Decachlorobiphenyl	54829.246	47400.040	0.01	-13.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 1809

Lab File ID: 055B5501 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4268.280	0.01	0.2	15.0
(2)	3444.681	3465.346	0.01	0.6	15.0
(3)	1979.487	2011.970	0.01	1.6	15.0
(4)	2061.253	2064.024	0.01	0.1	15.0
(5)	2754.170	2847.951	0.01	3.4	15.0
Aroclor-1260	5512.644	5893.238	0.01	6.9	15.0
(2)	7131.968	7495.996	0.01	5.1	15.0
(3)	4731.365	4978.184	0.01	5.2	15.0
(4)	5800.657	5877.103	0.01	1.3	15.0
(5)	9040.681	9056.734	0.01	0.2	15.0
4cmx	118199.83	134094.29	0.01	13.4	15.0
Decachlorobiphenyl	108641.52	94981.590	0.01	-12.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2023

Lab File ID: 067F6701 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2088.114	0.01	-0.6	15.0
(2)	4504.513	4342.596	0.01	-3.6	15.0
(3)	1820.211	1732.922	0.01	-4.8	15.0
(4)	932.883	872.123	0.01	-6.5	15.0
(5)	1378.125	1313.386	0.01	-4.7	15.0
Aroclor-1260	4066.794	4128.392	0.01	1.5	15.0
(2)	2528.317	2539.399	0.01	0.4	15.0
(3)	2583.202	2583.337	0.01	0.0	15.0
(4)	6036.106	6075.361	0.01	0.6	15.0
(5)	2911.947	2892.782	0.01	-0.6	15.0
4cmx	57711.247	61636.100	0.01	6.8	15.0
Decachlorobiphenyl	54829.246	46671.790	0.01	-14.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2023

Lab File ID: 067B6701 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4241.952	0.01	-0.4	15.0
(2)	3444.681	3445.004	0.01	0.0	15.0
(3)	1979.487	1997.782	0.01	0.9	15.0
(4)	2061.253	2077.037	0.01	0.8	15.0
(5)	2754.170	2827.729	0.01	2.7	15.0
Aroclor-1260	5512.644	5876.310	0.01	6.6	15.0
(2)	7131.968	7499.077	0.01	5.1	15.0
(3)	4731.365	4987.524	0.01	5.4	15.0
(4)	5800.657	5914.224	0.01	2.0	15.0
(5)	9040.681	9320.682	0.01	3.1	15.0
4cmx	118199.83	133280.74	0.01	12.8	15.0
Decachlorobiphenyl	108641.52	95441.990	0.01	-12.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2236

Lab File ID: 079F7901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	1978.981	0.01	-5.8	15.0	
(2)	4504.513	4303.790	0.01	-4.4	15.0	
(3)	1820.211	1712.863	0.01	-5.9	15.0	
(4)	932.883	871.419	0.01	-6.6	15.0	
(5)	1378.125	1292.053	0.01	-6.2	15.0	
Aroclor-1260	4066.794	4099.995	0.01	0.8	15.0	
(2)	2528.317	2500.052	0.01	-1.1	15.0	
(3)	2583.202	2561.308	0.01	-0.8	15.0	
(4)	6036.106	6022.736	0.01	-0.2	15.0	
(5)	2911.947	2873.424	0.01	-1.3	15.0	
4cmx	57711.247	61586.860	0.01	6.7	15.0	
Decachlorobiphenyl	54829.246	45808.580	0.01	-16.4	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

Instrument ID: ECD2A Calibration Date: 12/03/09 Time: 2236

Lab File ID: 079B7901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4227.852	0.01	-0.7	15.0
(2)	3444.681	3405.204	0.01	-1.1	15.0
(3)	1979.487	1957.926	0.01	-1.1	15.0
(4)	2061.253	2034.358	0.01	-1.3	15.0
(5)	2754.170	2793.974	0.01	1.4	15.0
Aroclor-1260	5512.644	5796.324	0.01	5.1	15.0
(2)	7131.968	7372.925	0.01	3.4	15.0
(3)	4731.365	4864.948	0.01	2.8	15.0
(4)	5800.657	5761.960	0.01	-0.7	15.0
(5)	9040.681	9007.180	0.01	-0.4	15.0
4cmx	118199.83	133357.02	0.01	12.8	15.0
Decachlorobiphenyl	108641.52	92491.590	0.01	-14.9	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 08:21
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6124030	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	4946244	100.000	90.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2085253	1000.00	993	80.00- 120.00	100.00(M)
2.601	2.601	0.000	4285927	1000.00	951	185.54- 225.54	205.54
2.692	2.692	0.000	1728701	1000.00	950	62.90- 102.90	82.90
2.827	2.827	0.000	835835	1000.00	896	20.08- 60.08	40.08
2.978	2.978	0.000	1268162	1000.00	920	40.82- 80.82	60.82
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.016	4.016	0.000	4077459	1000.00	1000	80.00- 120.00	100.00
4.288	4.288	0.000	2528986	1000.00	1000	42.02- 82.02	62.02
4.454	4.454	0.000	2589227	1000.00	1000	43.50- 83.50	63.50
4.665	4.665	0.000	6066223	1000.00	1000	128.77- 168.77	148.77
4.855	4.855	0.000	2891295	1000.00	993	50.91- 90.91	70.91
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/002f0201.d

Date : 03-DEC-2009 08:21

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

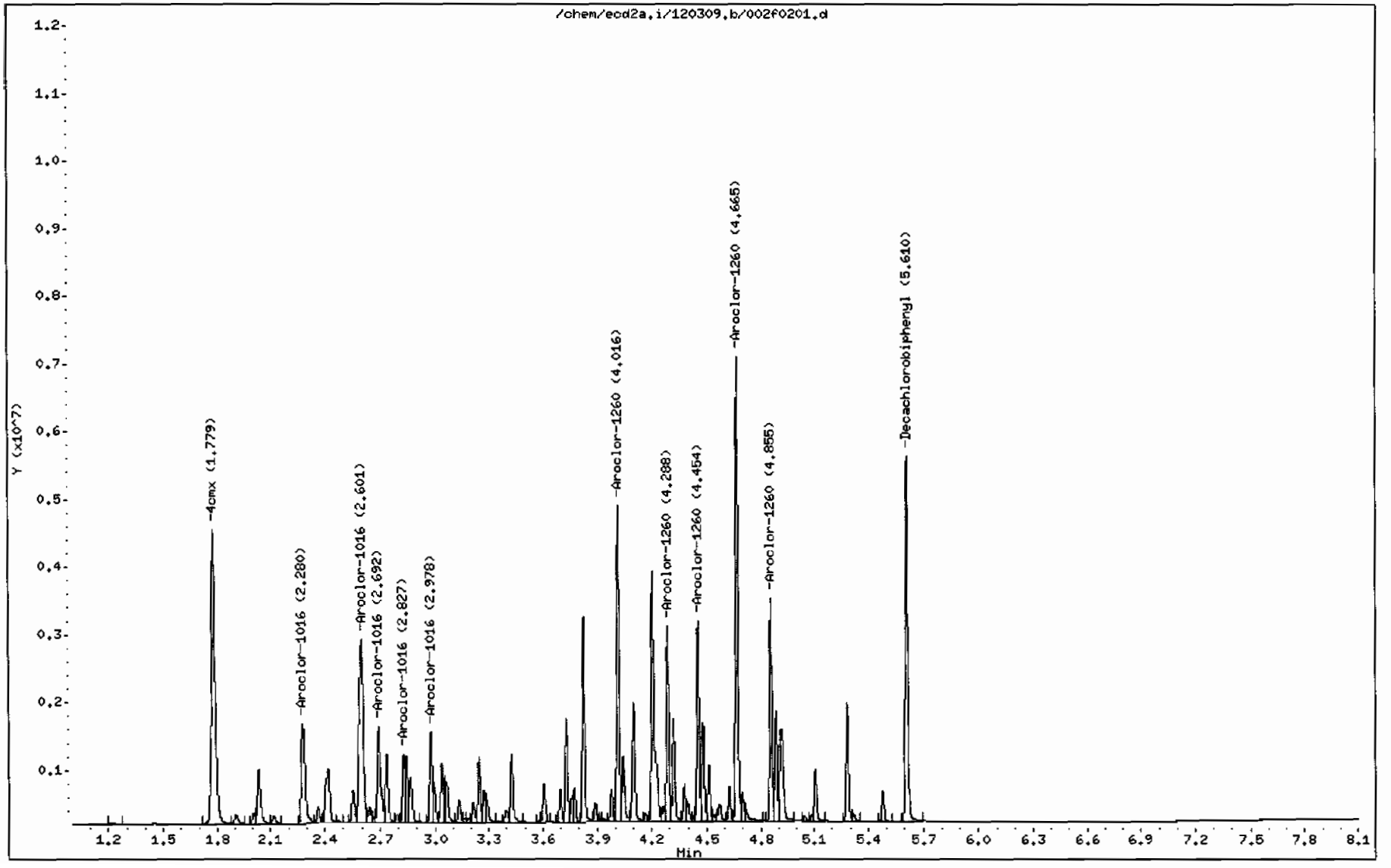

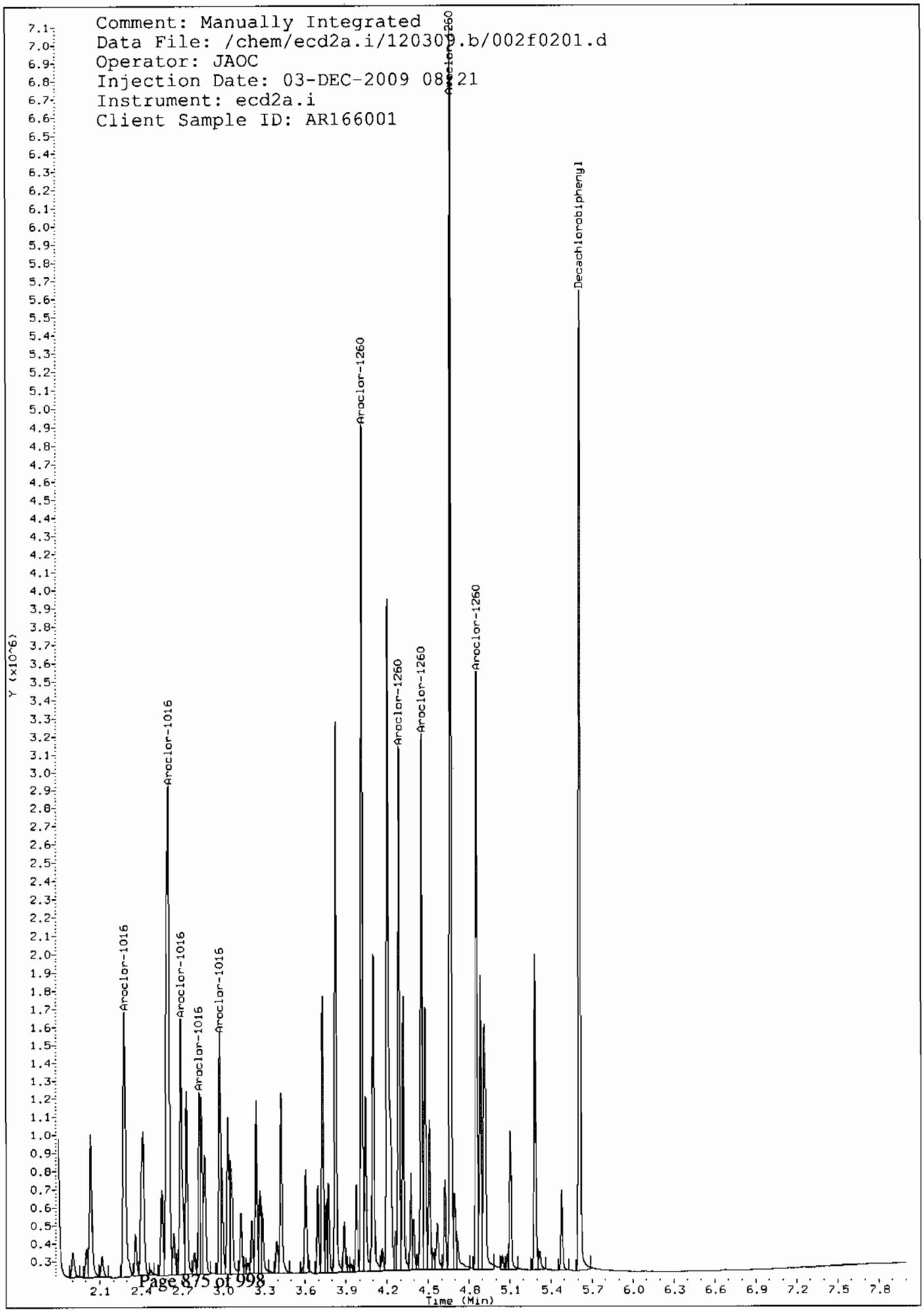
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Data File: /chem/ecd2a.i/120309.b/002f0201.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:21
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

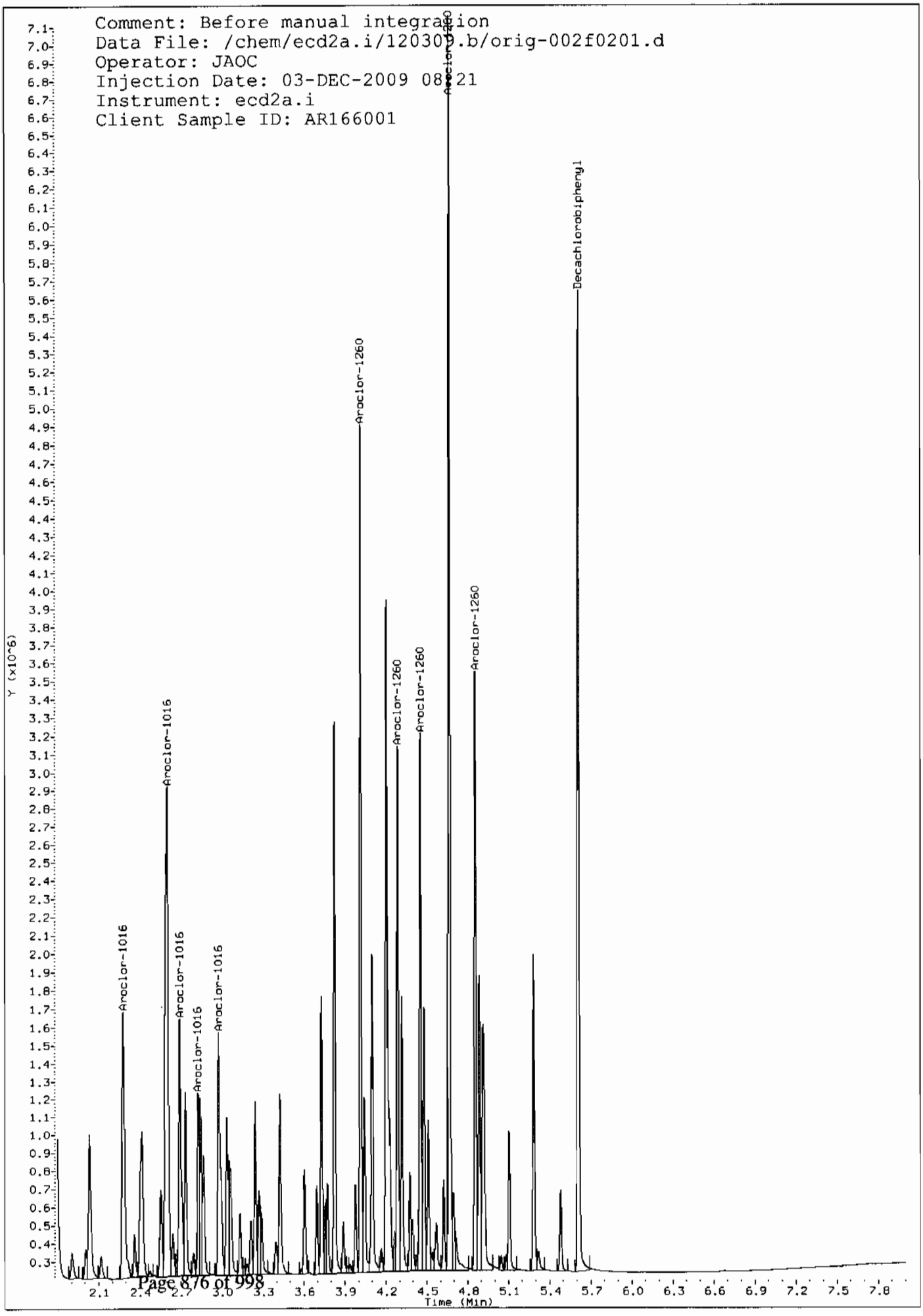
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Data File: /chem/ecd2a.i/120309.b/orig-002f0201.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:21
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 08:21
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13135453	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10385455	100.000	95.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.750	0.000	4174215	1000.00	980	80.00- 120.00	100.00
3.185	3.185	0.000	3357939	1000.00	975	60.44- 100.44	80.44
3.335	3.335	0.000	1949045	1000.00	985	26.69- 66.69	46.69
3.364	3.364	0.000	2027883	1000.00	984	28.58- 68.58	48.58
3.521	3.521	0.000	2756942	1000.00	1000	46.05- 86.05	66.05
Average of Peak Amounts =					985		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5813745	1000.00	1050	80.00- 120.00	100.00
4.569	4.569	0.000	7474901	1000.00	1050	108.57- 148.57	128.57
4.680	4.680	0.000	5007398	1000.00	1060	66.13- 106.13	86.13
4.878	4.878	0.000	5946667	1000.00	1020	82.29- 122.29	102.29
5.504	5.504	0.000	9360400	1000.00	1040	141.00- 181.00	161.00
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/002b0201.d

Date : 03-DEC-2009 08:21

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

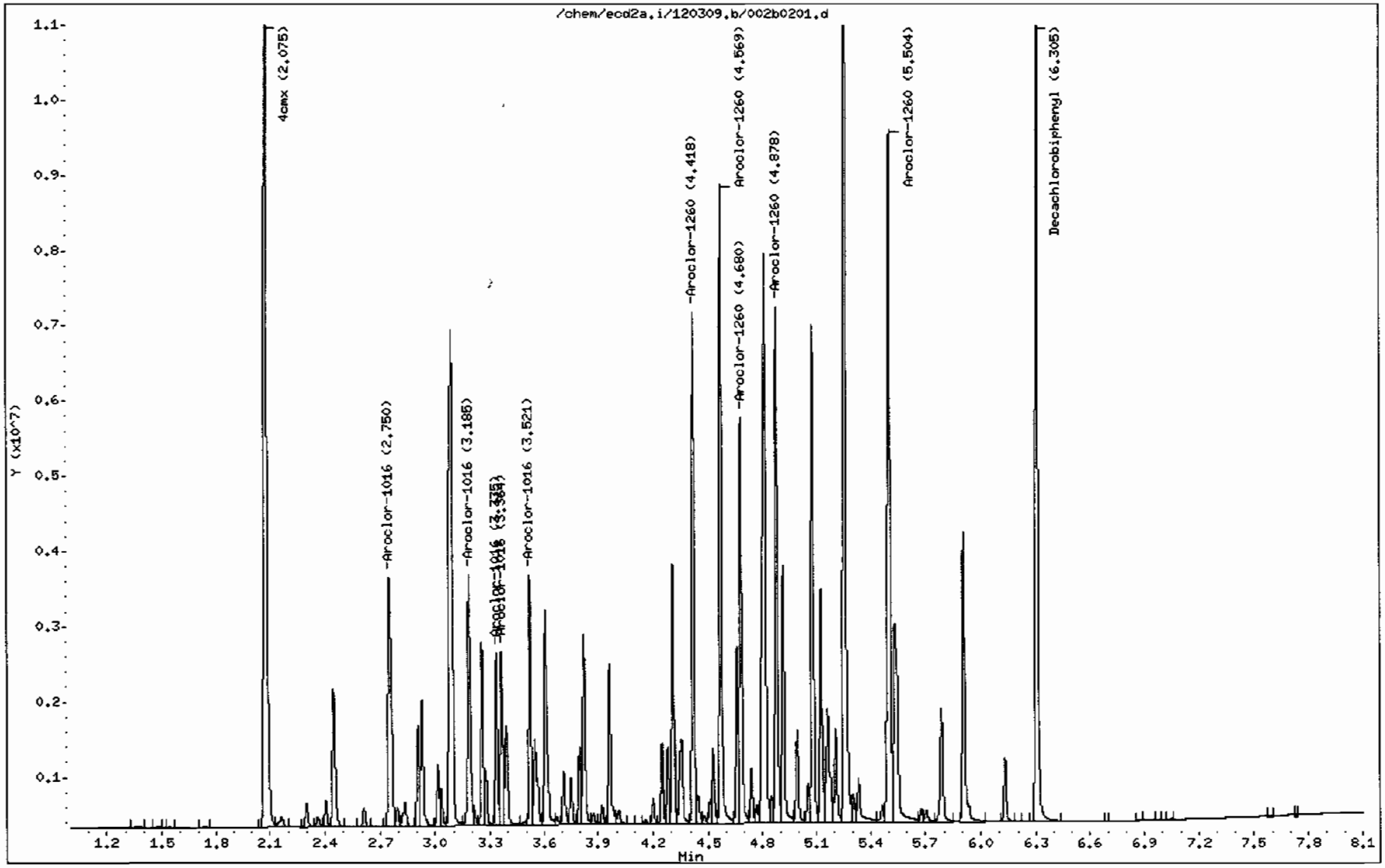

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 08:32
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	6472385	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5342532	100.000	97.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1969623	1000.00	947	80.00- 120.00	100.00
3.428	3.428	0.000	2634906	1000.00	950	113.78- 153.78	133.78
3.697	3.697	0.000	3627492	1000.00	969	164.17- 204.17	184.17
3.888	3.888	0.000	2705421	1000.00	972	117.36- 157.36	137.36
4.018	4.018	0.000	2562087	1000.00	928	110.08- 150.08	130.08
Average of Peak Amounts =					953		

Data File: /chem/ecd2a.i/120309.b/003f0301.d

Date : 03-DEC-2009 08:32

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

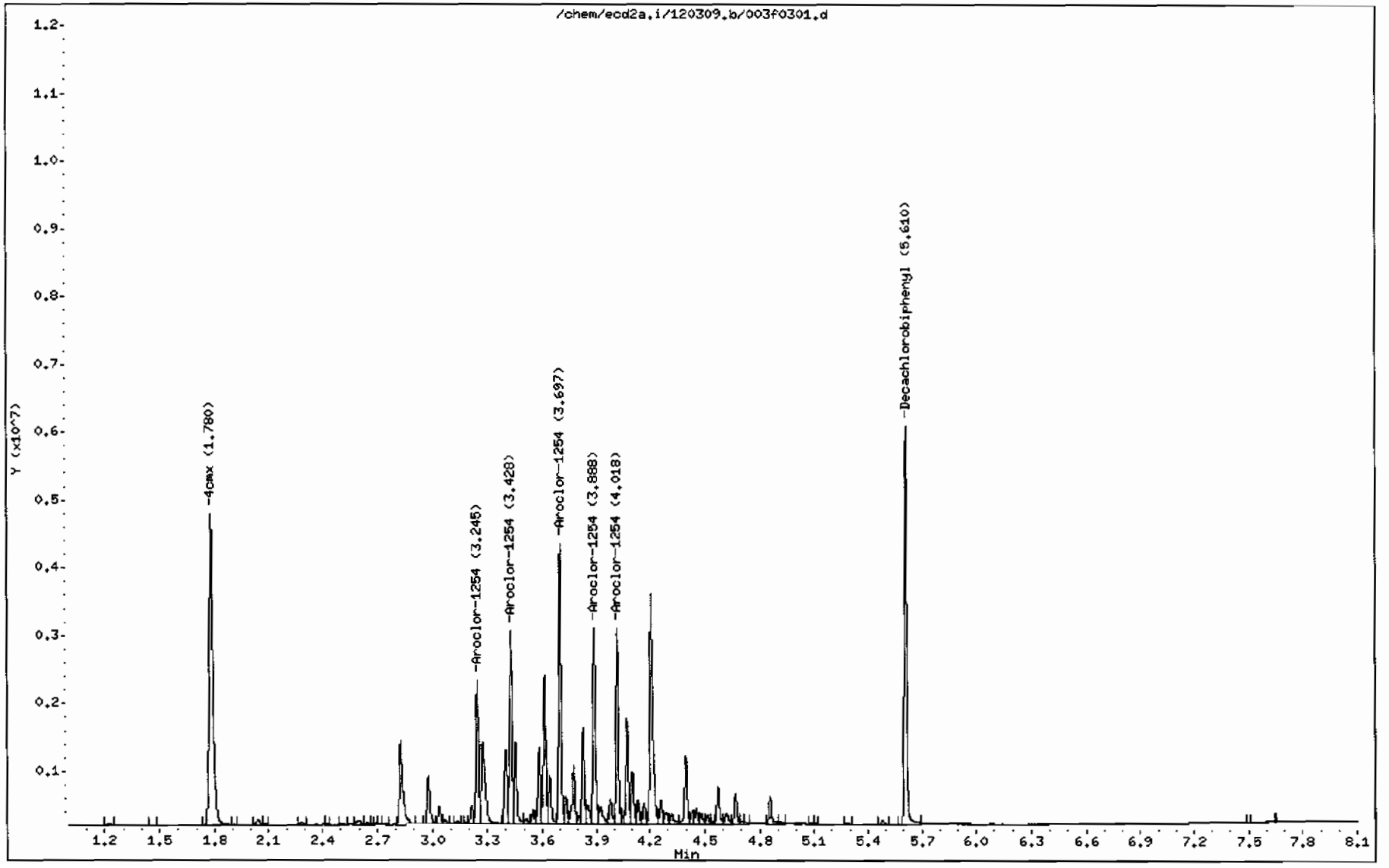

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 08:32
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13920225	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	11220284	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.822	0.000	4956808	1000.00	994	80.00- 120.00	100.00
3.963	3.963	0.000	5759378	1000.00	993	96.19- 136.19	116.19
4.200	4.200	0.000	4046006	1000.00	1000	61.63- 101.63	81.63
4.280	4.280	0.000	7802109	1000.00	1010	137.40- 177.40	157.40
4.443	4.443	0.000	5487038	1000.00	978	90.70- 130.70	110.70
Average of Peak Amounts =					996		

Data File: /chem/ecd2a.i/120309.b/003b0301.d

Date : 03-DEC-2009 08:32

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

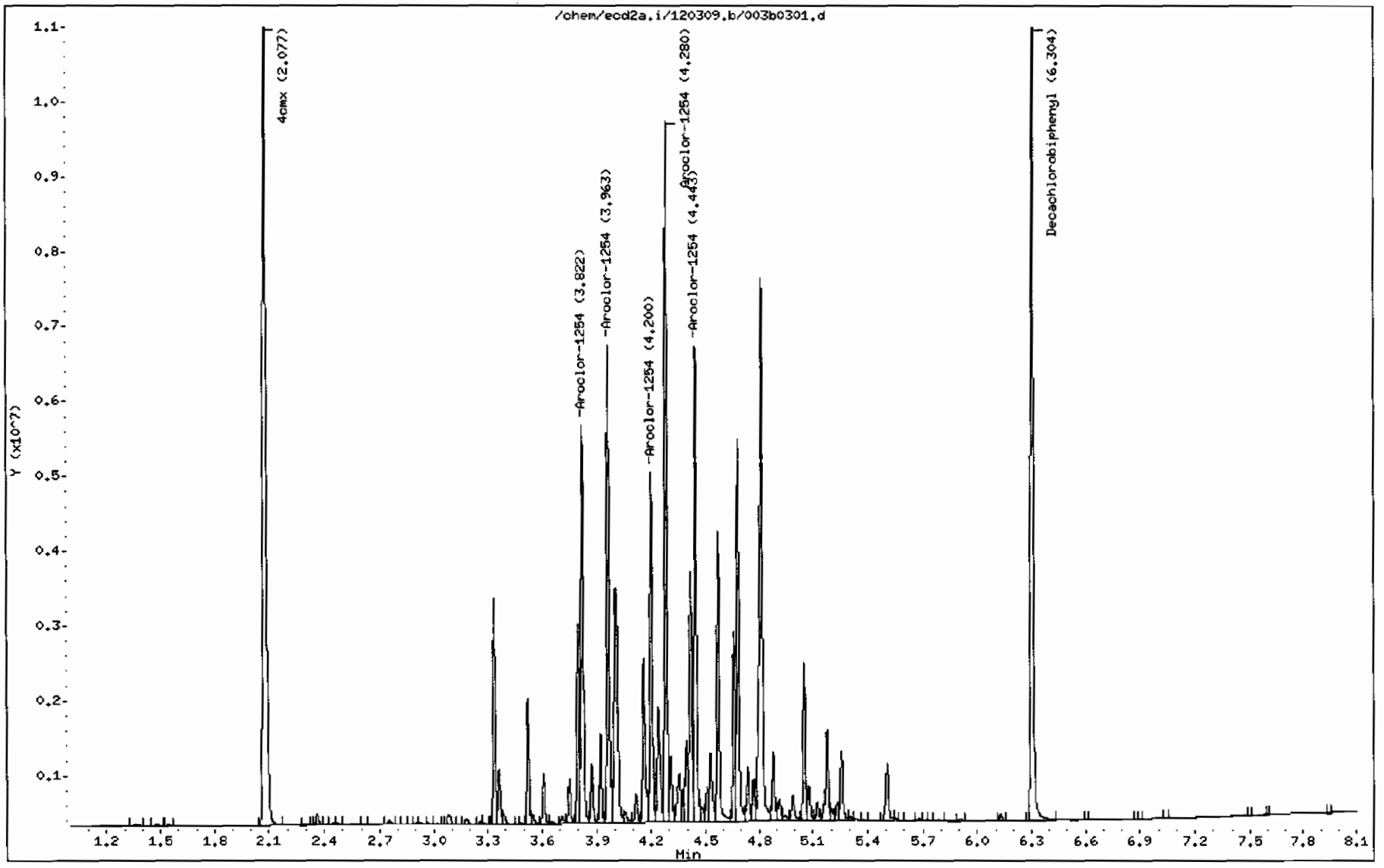

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 08:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6537650	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5242004	100.000	95.6	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1864718	1000.00	1080	80.00- 120.00	100.00(M)
2.693	2.693	0.000	1512911	1000.00	1020	61.13- 101.13	81.13
2.736	2.736	0.000	946427	1000.00	1040	30.75- 70.75	50.75
2.828	2.828	0.000	758891	1000.00	1040	20.70- 60.70	40.70
2.979	2.979	0.000	1214381	1000.00	1080	45.12- 85.12	65.12

Average of Peak Amounts = 1.05e+03

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/004f0401.d

Date : 03-DEC-2009 08:43

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

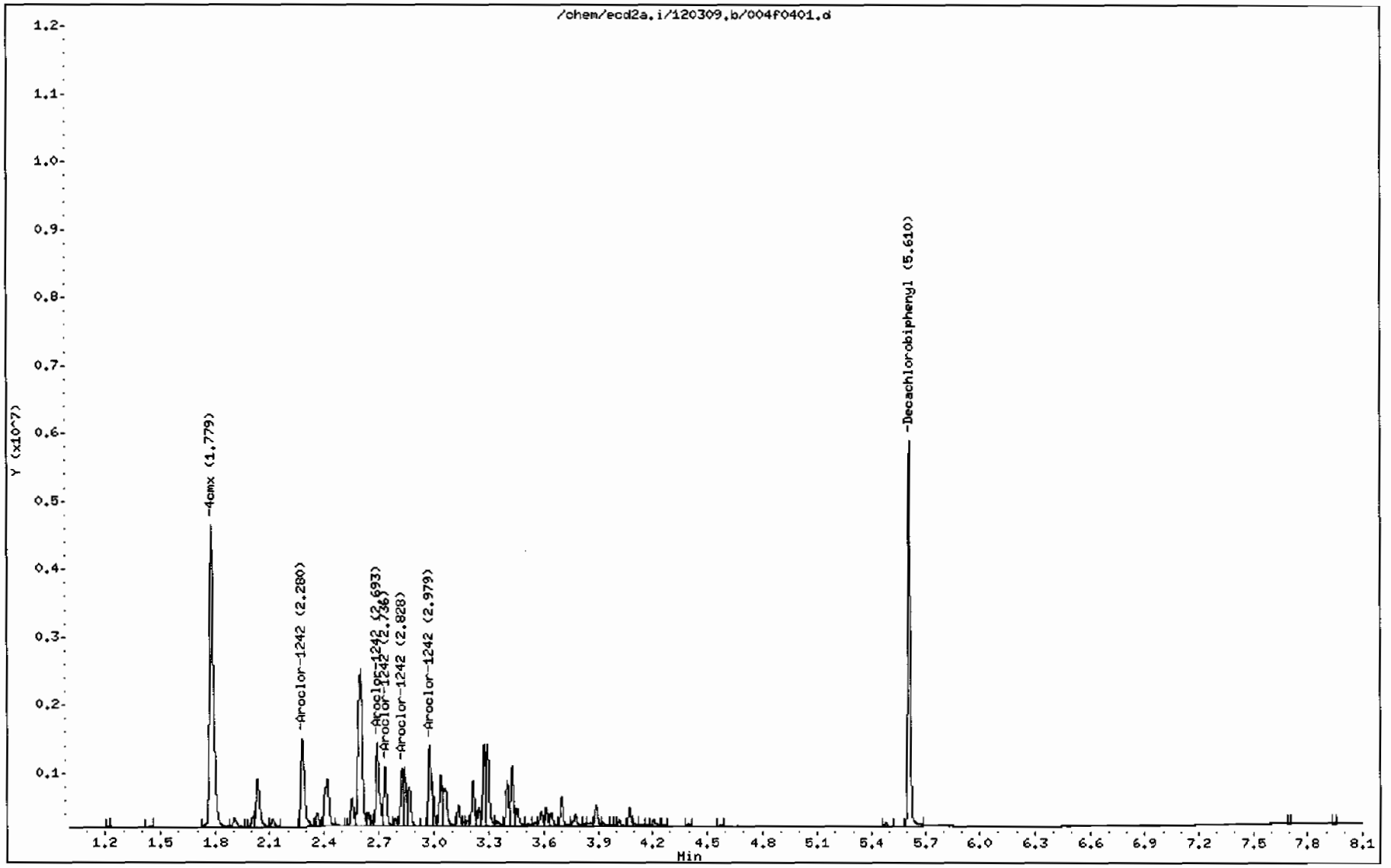

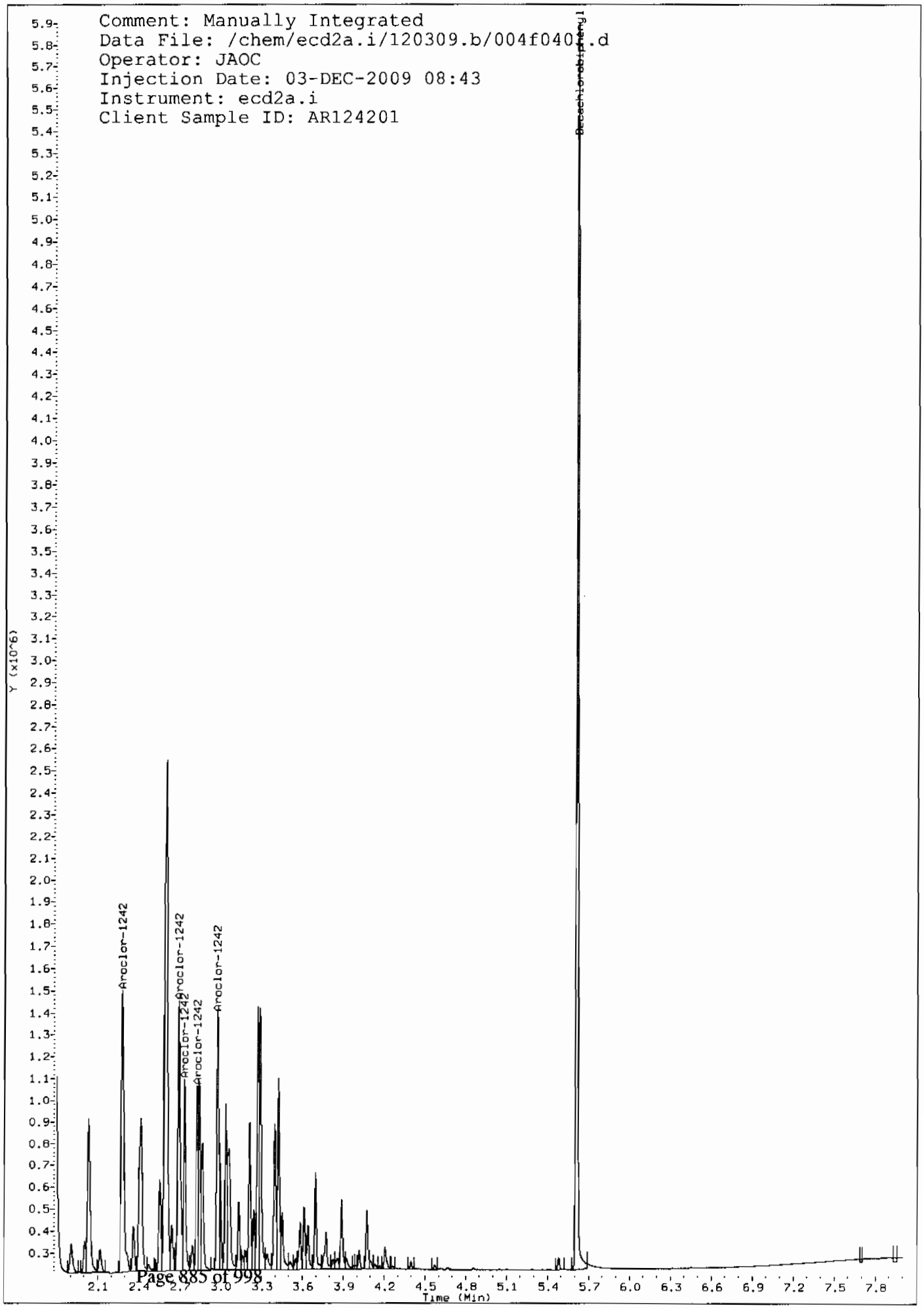
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/004f040.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:43
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

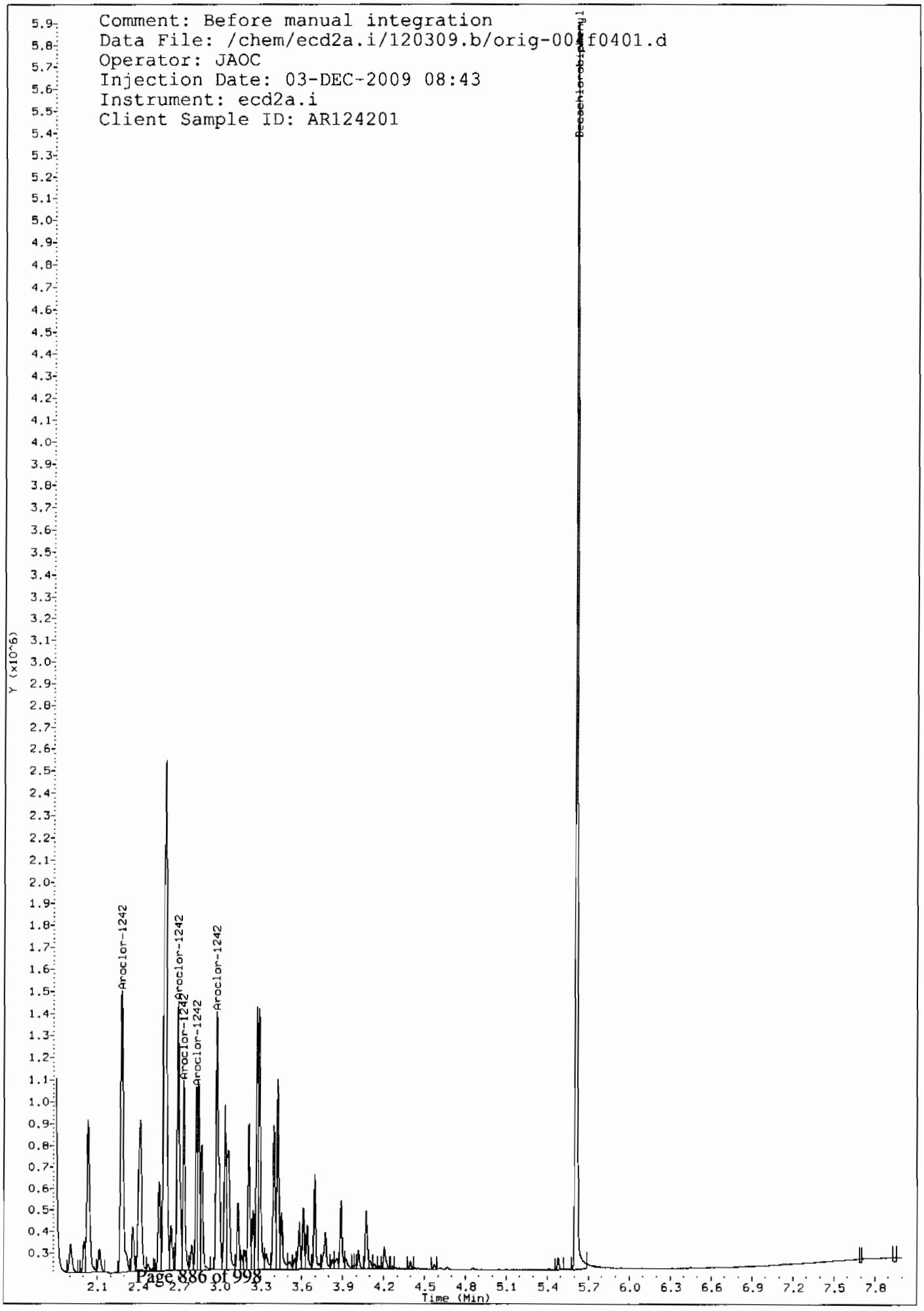
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-00[illegible]f0401.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:43
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 08:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	14014463	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobipheny1					CAS #: 2051-24-3		
6.305	6.305	0.000	11008738	100.000	101	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.751	2.751	0.000	3664129	1000.00	1060	80.00- 120.00	100.00
3.185	3.185	0.000	2696371	1000.00	1000	53.59- 93.59	73.59
3.257	3.257	0.000	1635174	1000.00	999	24.63- 64.63	44.63
3.335	3.335	0.000	1531191	1000.00	1020	21.79- 61.79	41.79
3.522	3.522	0.000	2292877	1000.00	1070	42.58- 82.58	62.58

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecd2a.i/120309.b/004b0401.d
Date : 03-DEC-2009 08:43
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

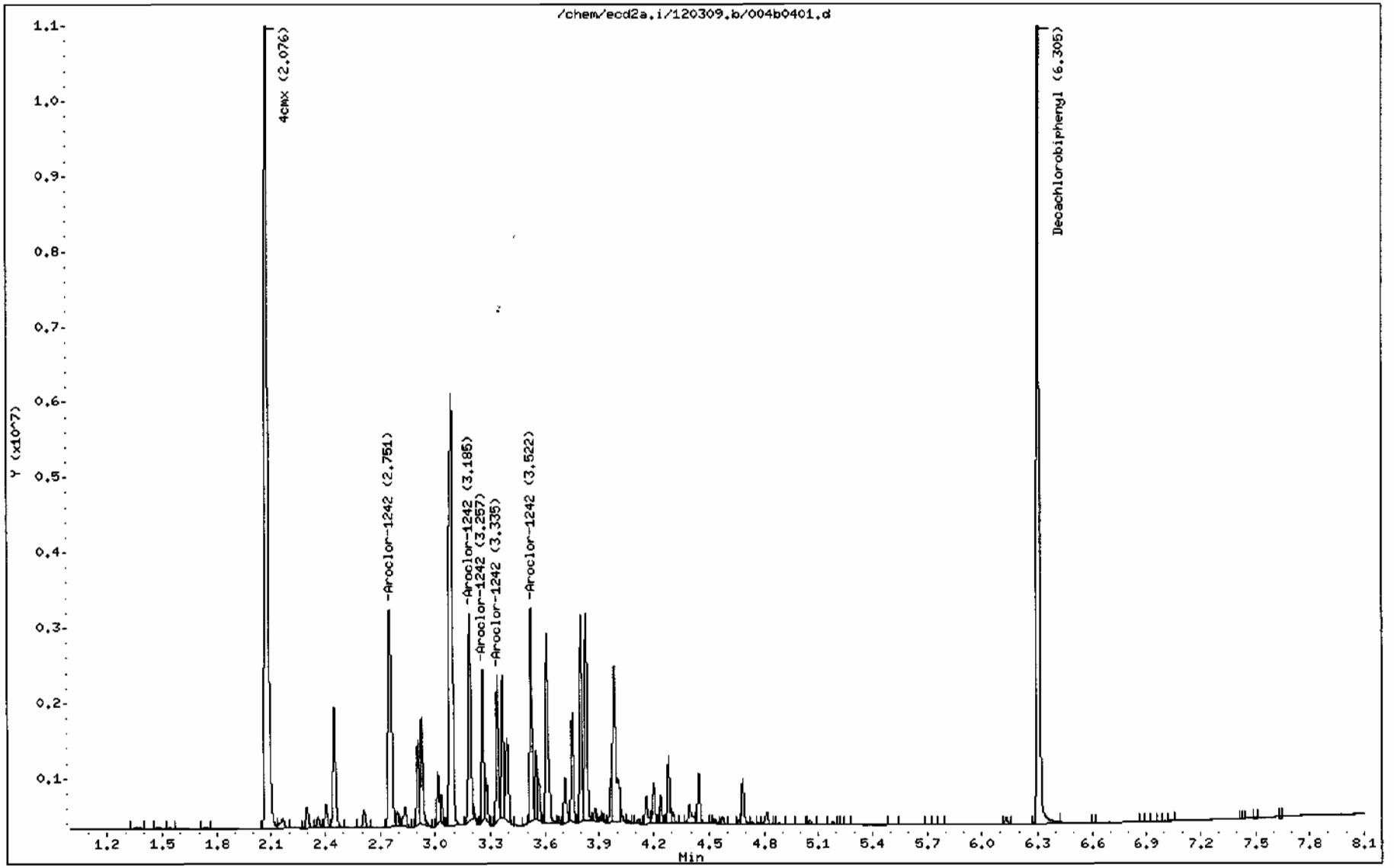

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 08:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	7176948	100.000	124	80.00- 120.00	100.00
$ 12 Decachlorobipheny1					CAS #: 2051-24-3		
5.611	5.610	0.001	5927719	100.000	108	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.827	2.827	0.000	1474555	1000.00	966	80.00- 120.00	100.00(M)
2.979	2.979	0.000	2023657	1000.00	998	117.24- 157.24	181.85
3.038	3.038	0.000	1560950	1000.00	994	85.86- 125.86	105.86
3.272	3.272	0.000	2192176	1000.00	988	128.67- 168.67	148.67
3.425	3.425	0.000	1904865	1000.00	996	109.18- 149.18	129.18
Average of Peak Amounts =					988		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/005f0501.d

Date : 03-DEC-2009 08:54

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

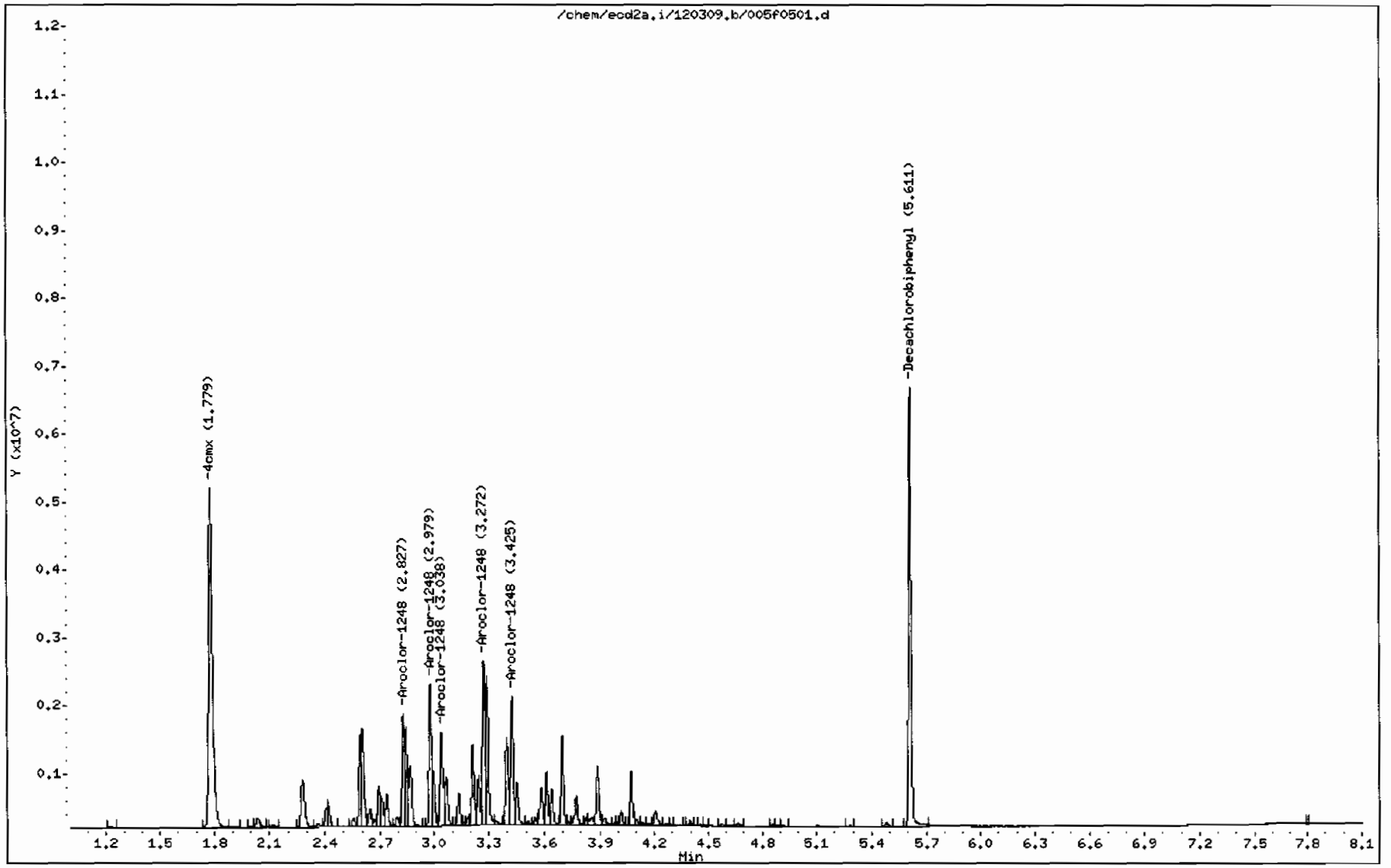

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/005f0501.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:54
Instrument: ecd2a.i
Client Sample ID: AR124801

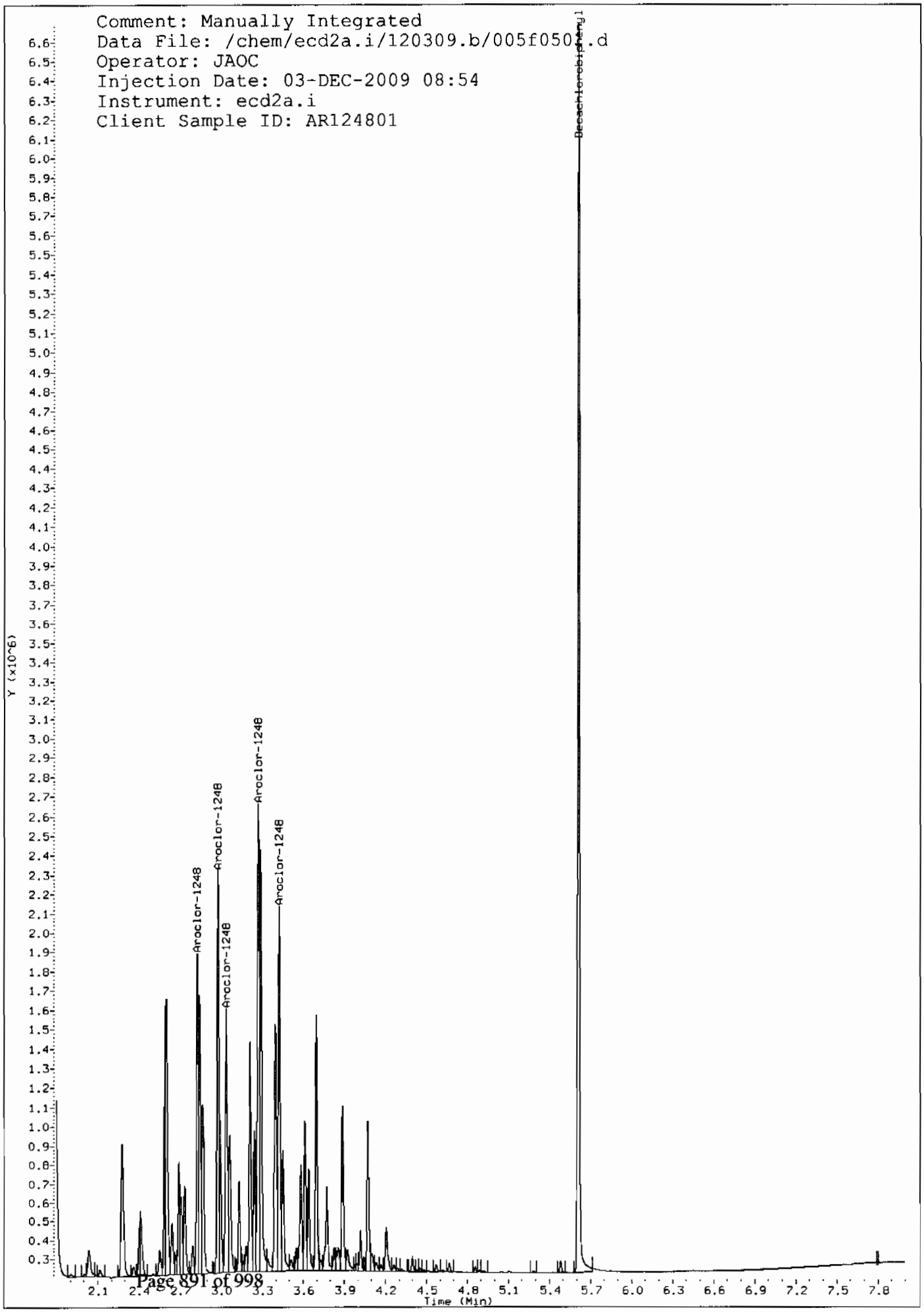

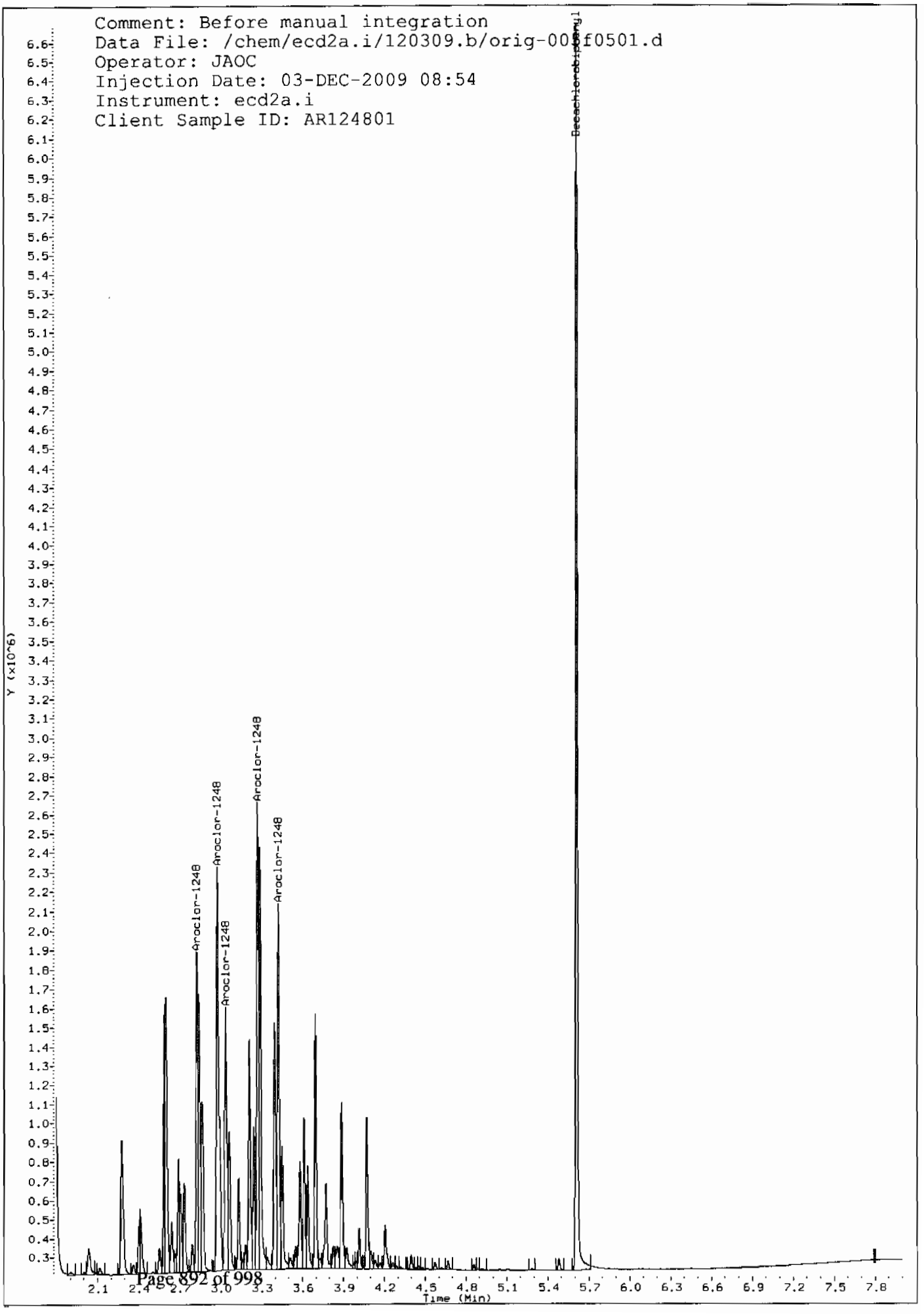
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-00f0501.d
Operator: JAOC
Injection Date: 03-DEC-2009 08:54
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 08:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	15468032	100.000	131	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	12416332	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	3372417	1000.00	1030	80.00- 120.00	100.00
3.522	3.522	0.000	4325187	1000.00	1030	108.25- 148.25	128.25
3.609	3.609	0.000	4583011	1000.00	1030	115.90- 155.90	135.90
3.797	3.797	0.000	4814880	1000.00	1020	122.77- 162.77	142.77
3.827	3.827	0.000	5549978	1000.00	1030	144.57- 184.57	164.57

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecd2a.i/120309.b/005b0501.d

Date : 03-DEC-2009 08:54

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

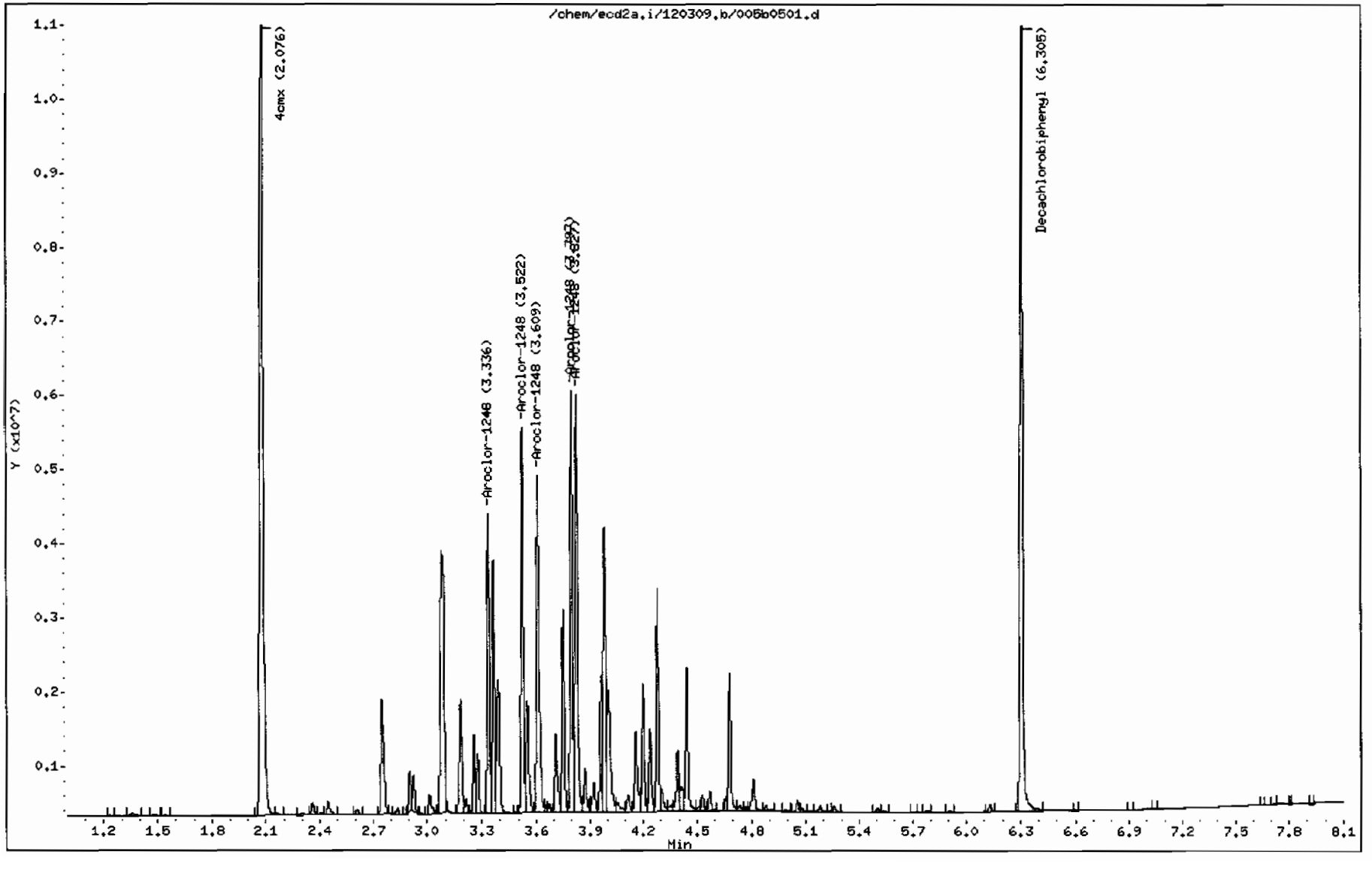

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 09:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	8484289	100.000	147	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6989603	100.000	127	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.033	2.033	0.000	1401667	1000.00	1200	80.00- 120.00	100.00(M)
2.280	2.280	0.000	1108261	1000.00	1190	59.07- 99.07	79.07
2.694	2.694	0.000	963768	1000.00	1200	48.76- 88.76	68.76
2.736	2.736	0.000	622142	1000.00	1220	24.39- 64.39	44.39
2.979	2.979	0.000	680049	1000.00	1160	28.52- 68.52	48.52

Average of Peak Amounts = 1.2e+03

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/006f0601.d

Date : 03-DEC-2009 09:05

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

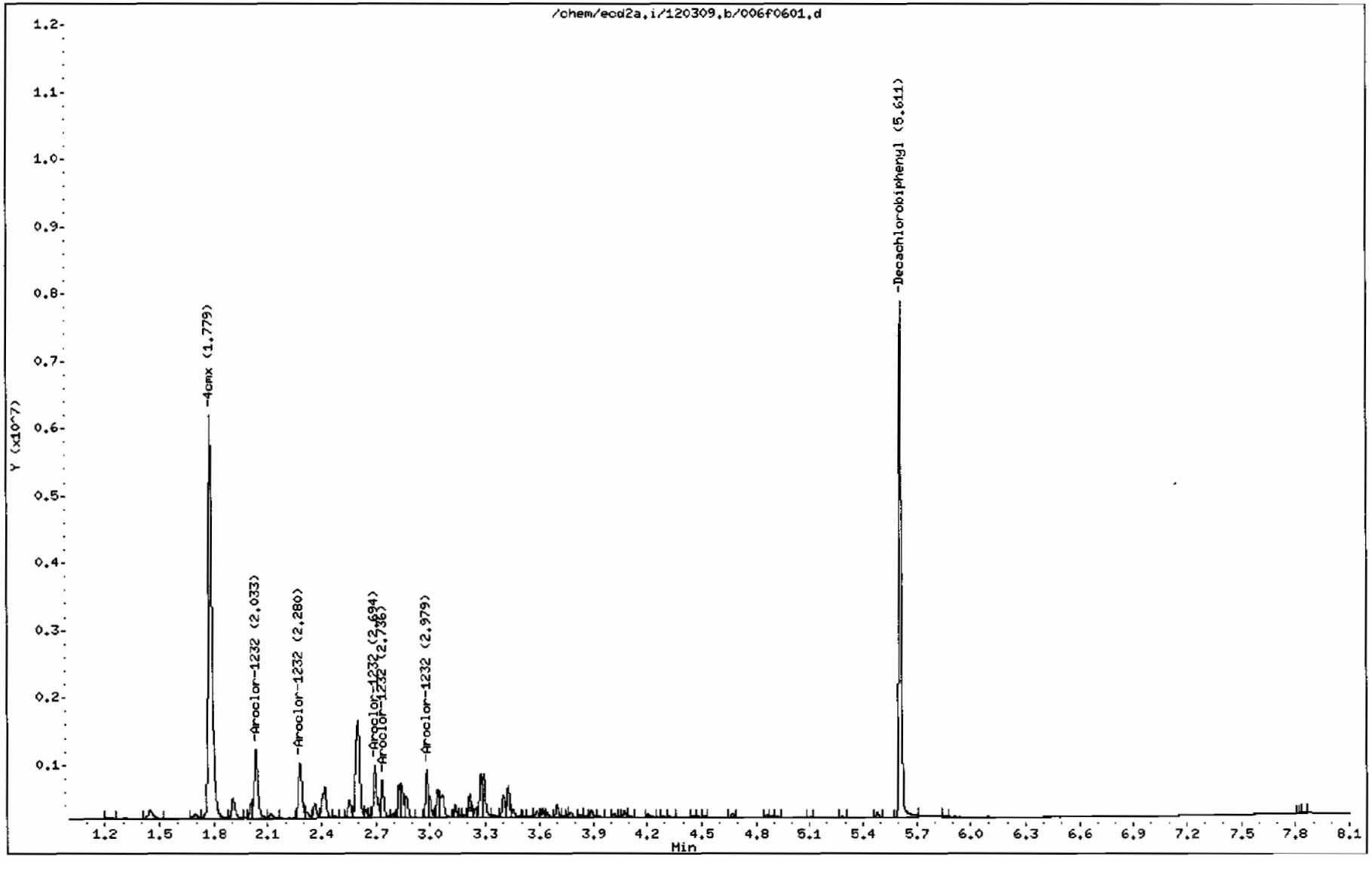

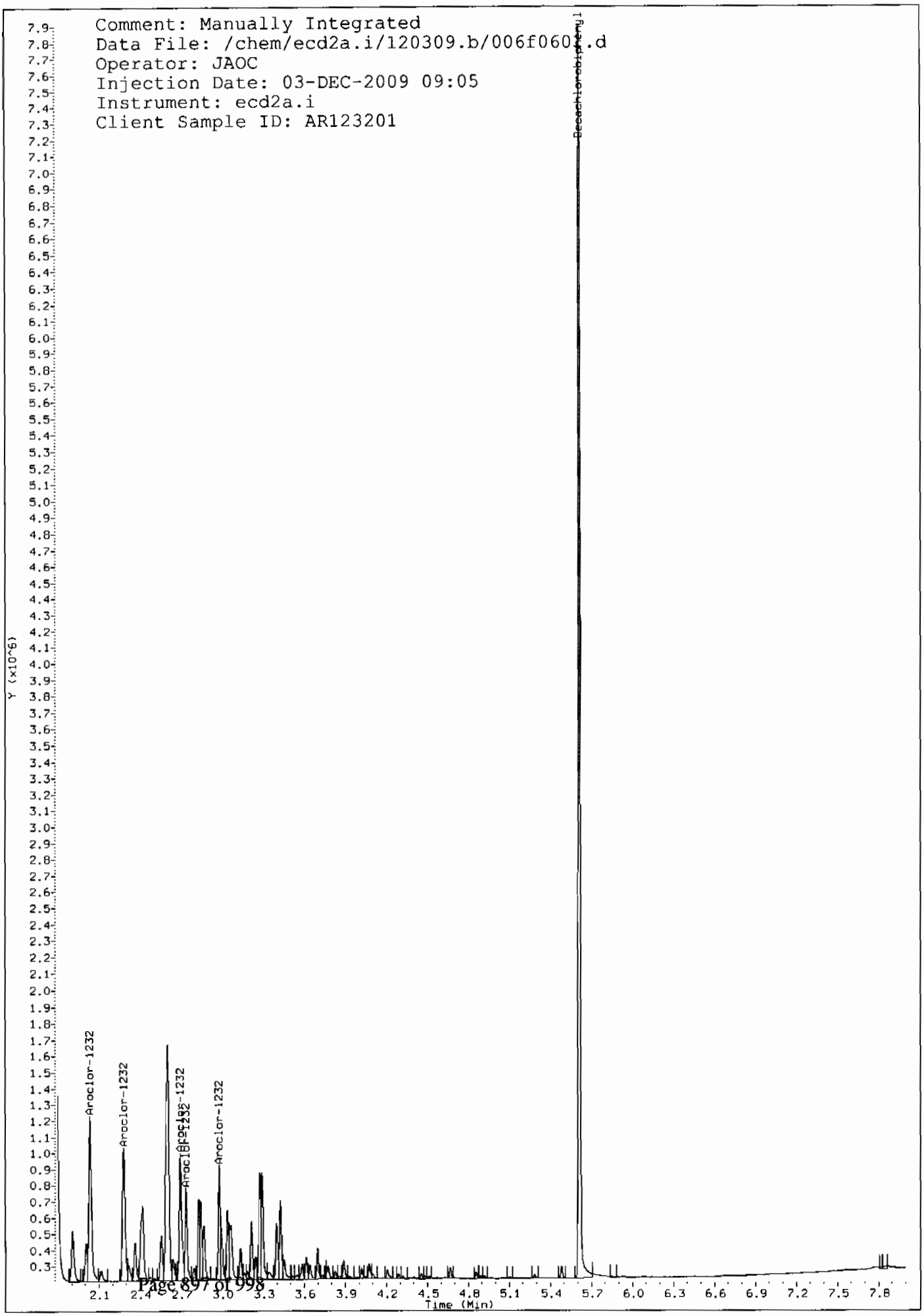
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/006f0601.d
Operator: JAOC
Injection Date: 03-DEC-2009 09:05
Instrument: ecd2a.i
Client Sample ID: AR123201
Decachlorobiphenyl
Aroclor-1232
Aroclor-1232
Aroclor-1232
Aroclor-1232
Aroclor-1232
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-00[illegible]f0601.d
Operator: JAOC
Injection Date: 03-DEC-2009 09:05
Instrument: ecd2a.i
Client Sample ID: AR123201

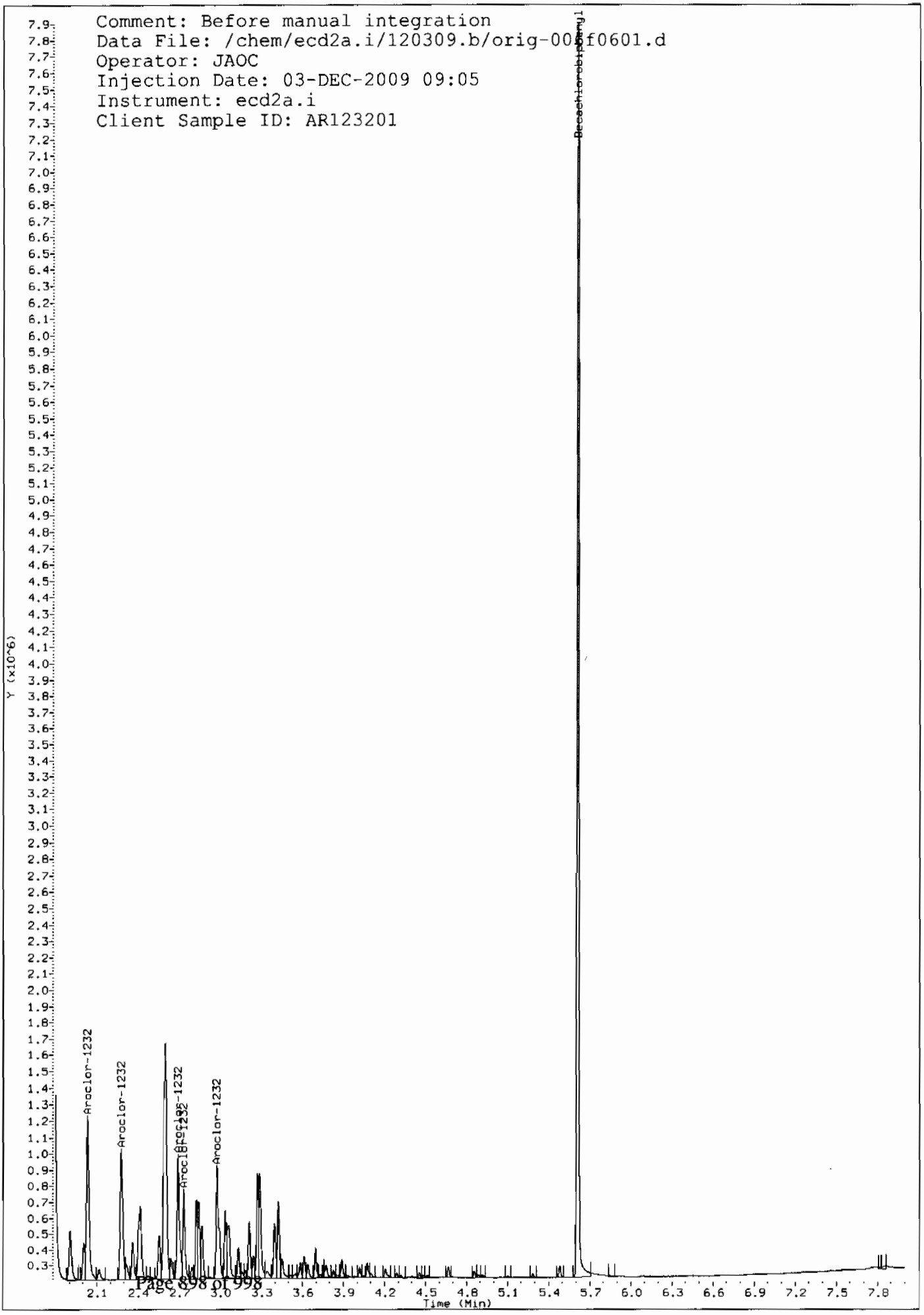

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 09:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	18213495	100.000	154	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	14777154	100.000	136	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.448	2.448	0.000	2404157	1000.00	1170	80.00- 120.00	100.00
2.751	2.751	0.000	2312538	1000.00	1180	76.19- 116.19	96.19
3.185	3.185	0.000	1872182	1000.00	1250	57.87- 97.87	77.87
3.257	3.257	0.000	1095454	1000.00	1180	25.57- 65.57	45.57
3.523	3.523	0.000	1342494	1000.00	1210	35.84- 75.84	55.84

Average of Peak Amounts = 1.2e+03

Data File: /chem/ecd2a.i/120309.b/006b0601.d

Date : 03-DEC-2009 09:05

Client ID: AR123201

Sample Info: !WAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

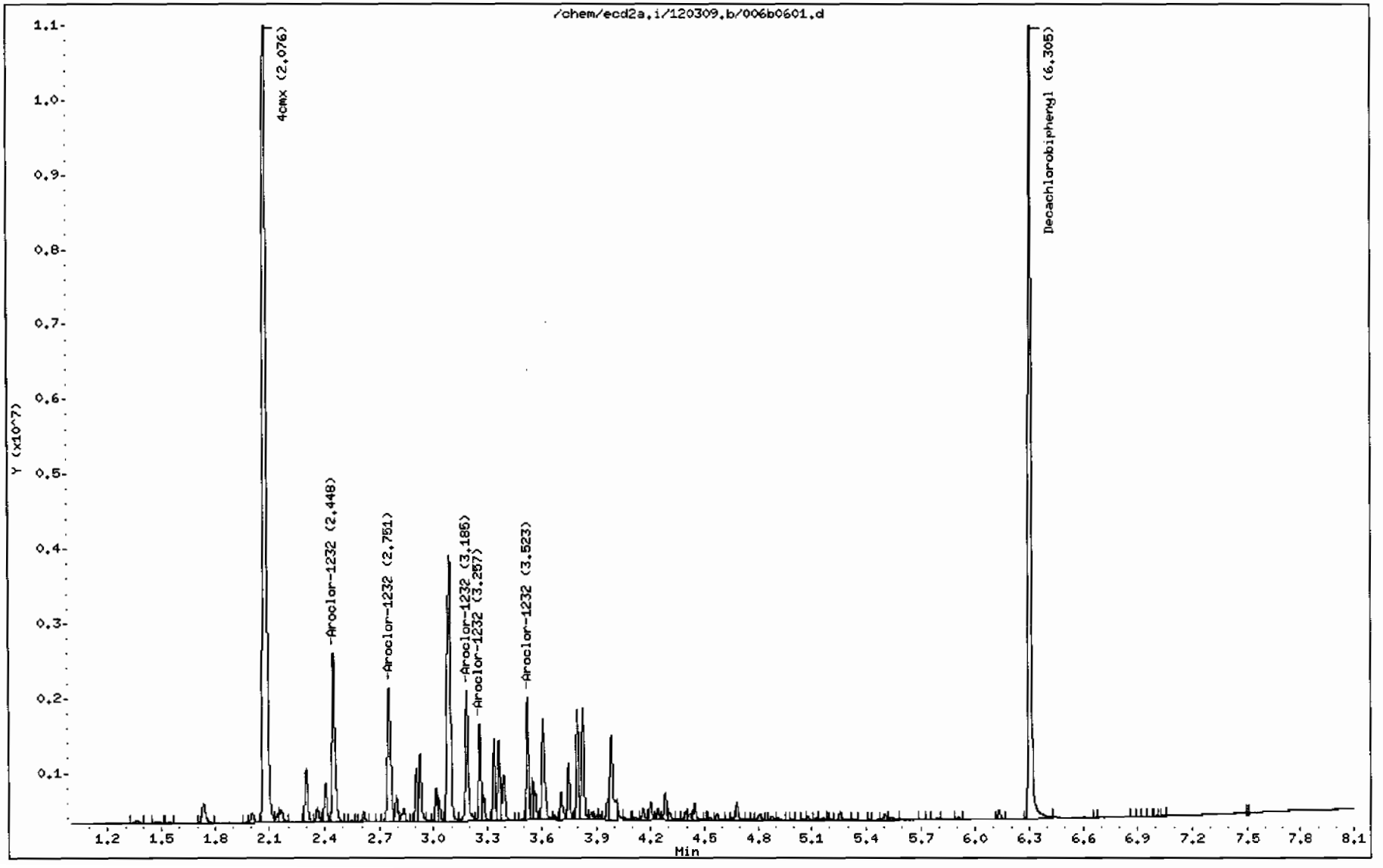

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 09:17
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 03-Dec-2009 13:23 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6537929	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5224914	100.000	95.3	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	545550	1000.00	1180	80.00- 120.00	100.00
1.904	1.904	0.000	770872	1000.00	1170	121.30- 161.30	141.30
2.004	2.004	0.000	388905	1000.00	1120	51.29- 91.29	71.29

Average of Peak Amounts = 1.16e+03

Data File: /chem/ecd2a.i/120309.b/007f0701.d

Date : 03-DEC-2009 09:17

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

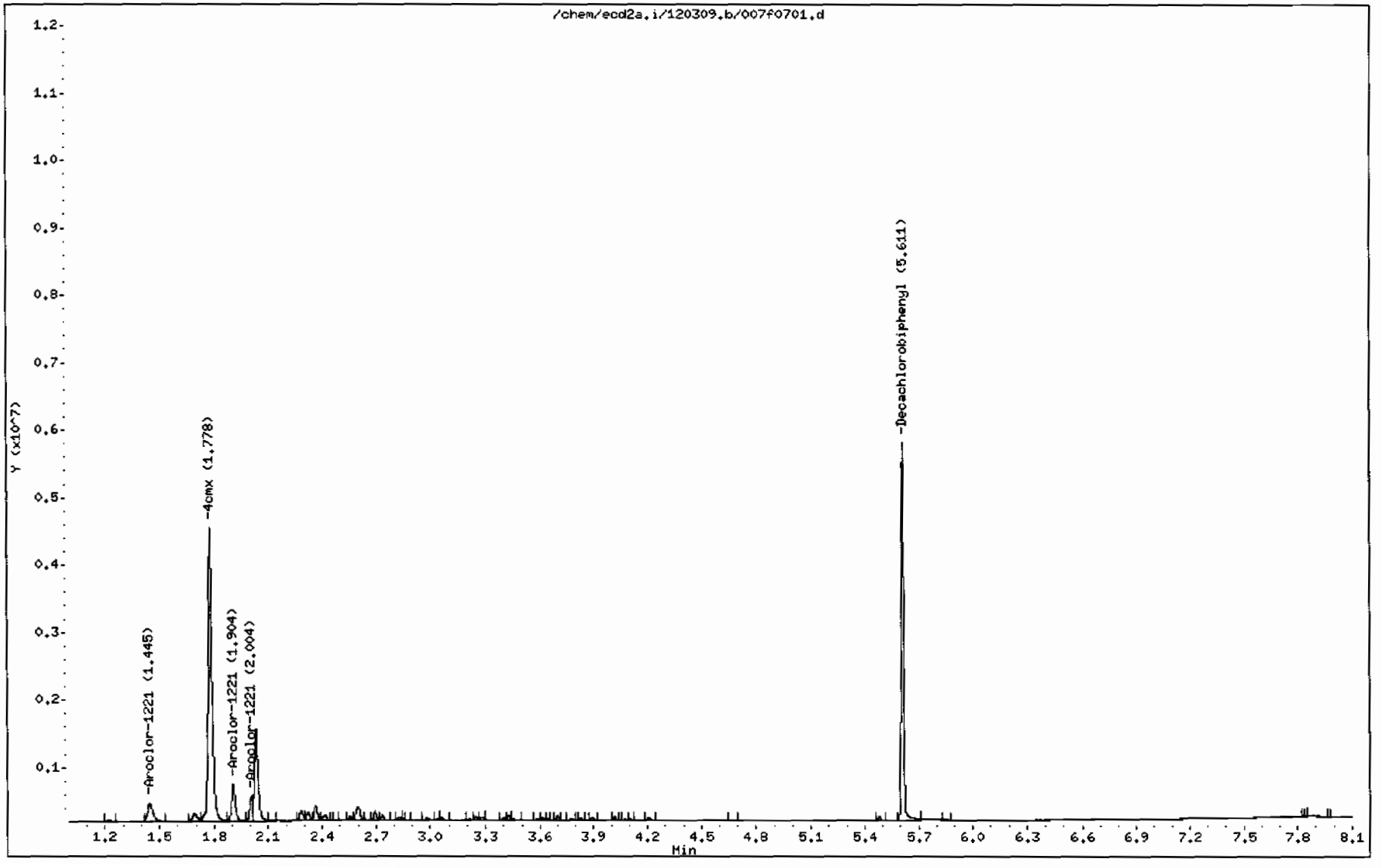

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 09:17
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 03-Dec-2009 11:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.075	0.000	13792010	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10908463	100.000	100	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.299	2.299	0.000	1396907	1000.00	1100	80.00- 120.00	100.00
2.404	2.404	0.000	852382	1000.00	1100	41.02- 81.02	61.02
2.448	2.448	0.000	3384246	1000.00	1110	222.27- 262.27	242.27

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd2a.i/120309.b/007b0701.d

Date : 03-DEC-2009 09:17

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

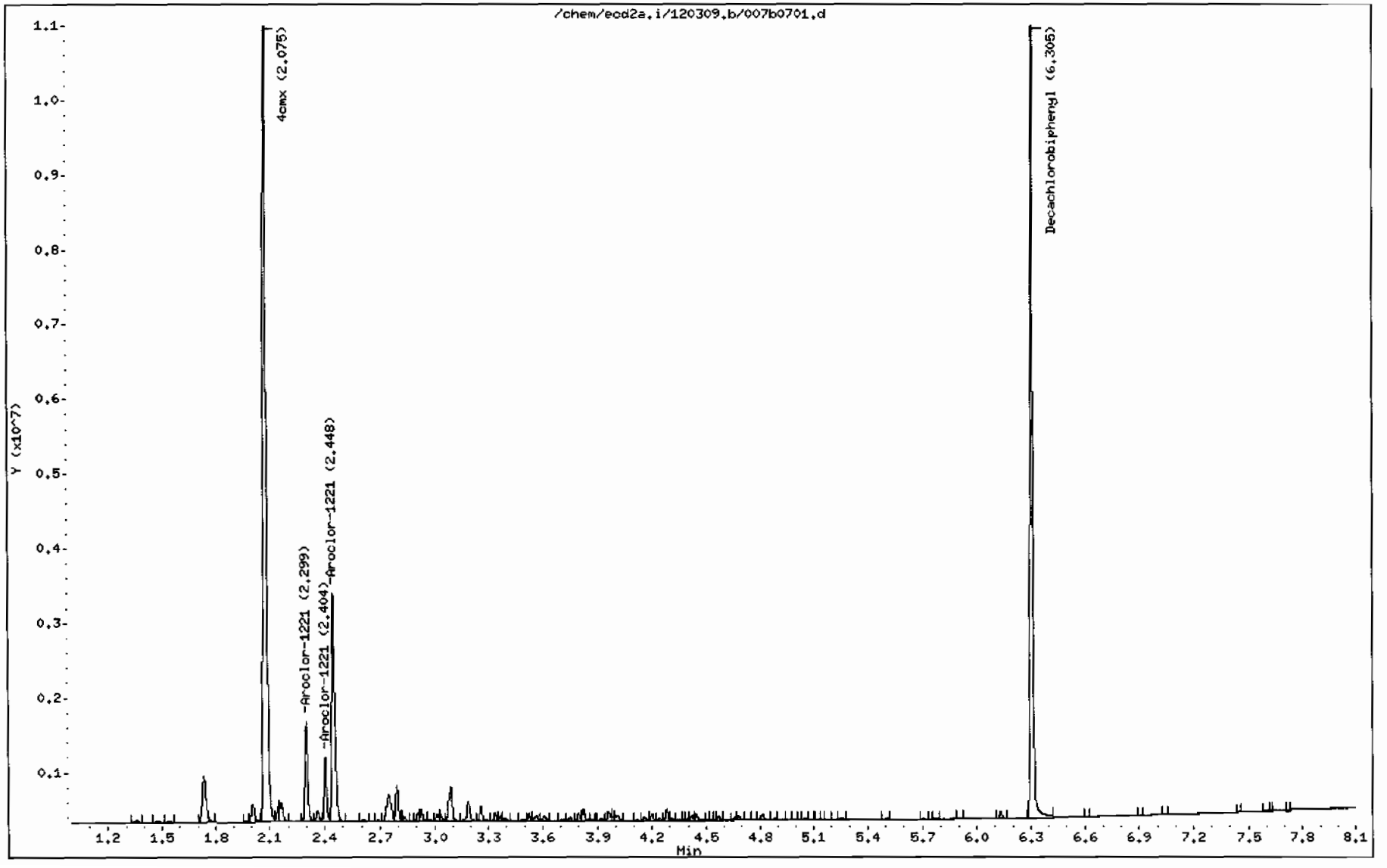

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/045f4501.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 03-DEC-2009 16:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 04
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	6204347	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4409398	100.000	80.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.280	0.002	2030518	1000.00	967	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4356685	1000.00	967	191.91- 231.91	214.56
2.694	2.692	0.002	1743924	1000.00	958	65.28- 105.28	85.89
2.829	2.827	0.002	854233	1000.00	916	23.06- 63.06	42.07
2.980	2.978	0.002	1309544	1000.00	950	41.11- 81.11	64.49
Average of Peak Amounts =					952		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4096006	1000.00	1010	80.00- 120.00	100.00
4.290	4.288	0.002	2491202	1000.00	985	40.91- 80.91	60.82
4.455	4.454	0.001	2554375	1000.00	989	42.71- 82.71	62.36
4.668	4.665	0.003	5937904	1000.00	984	125.86- 165.86	144.97
4.856	4.855	0.001	2831785	1000.00	972	49.52- 89.52	69.14
Average of Peak Amounts =					988		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/045f4501.d

Date : 03-DEC-2009 16:18

Client ID: AR166004

Sample Info: IWAR091119-60 04

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

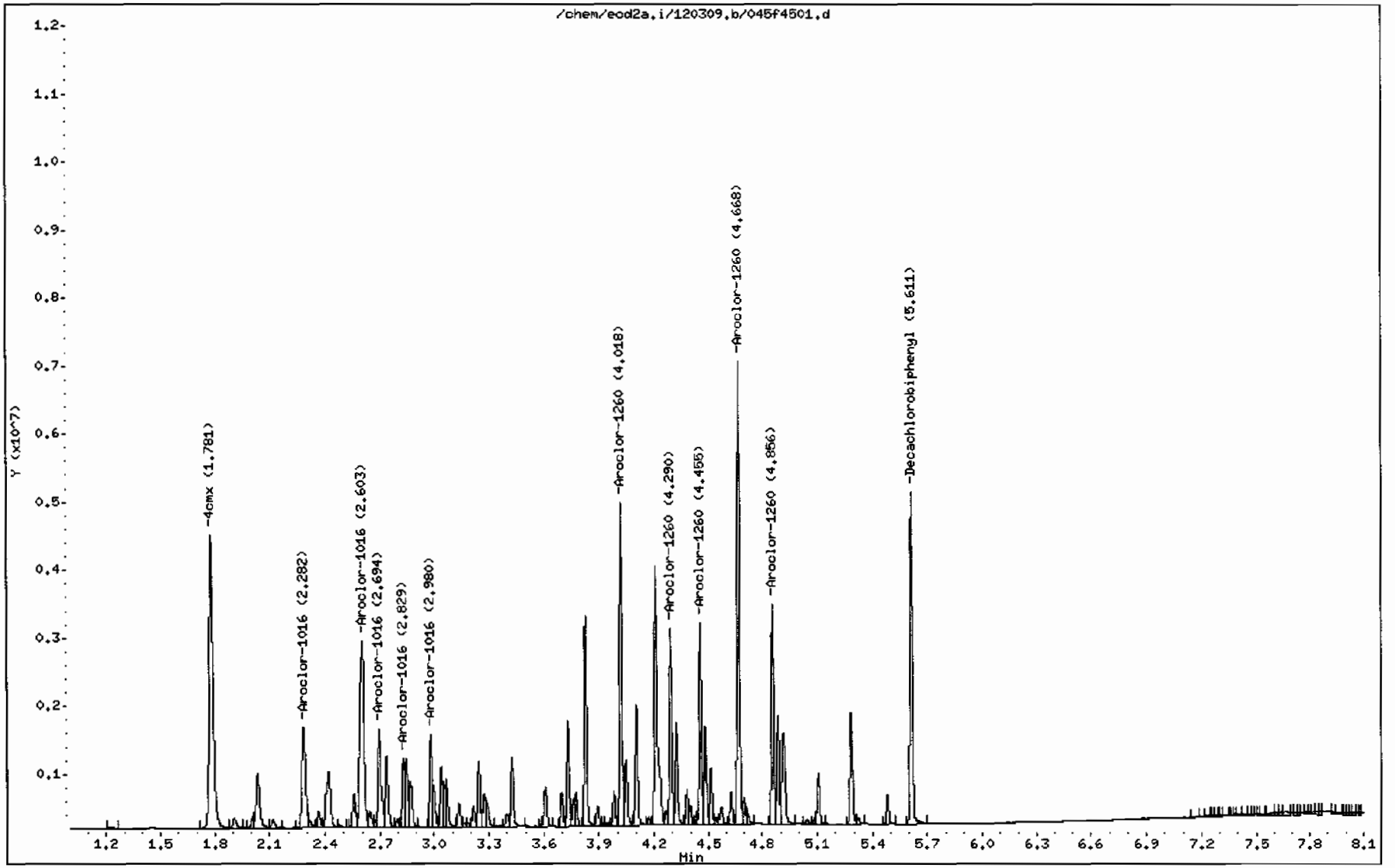

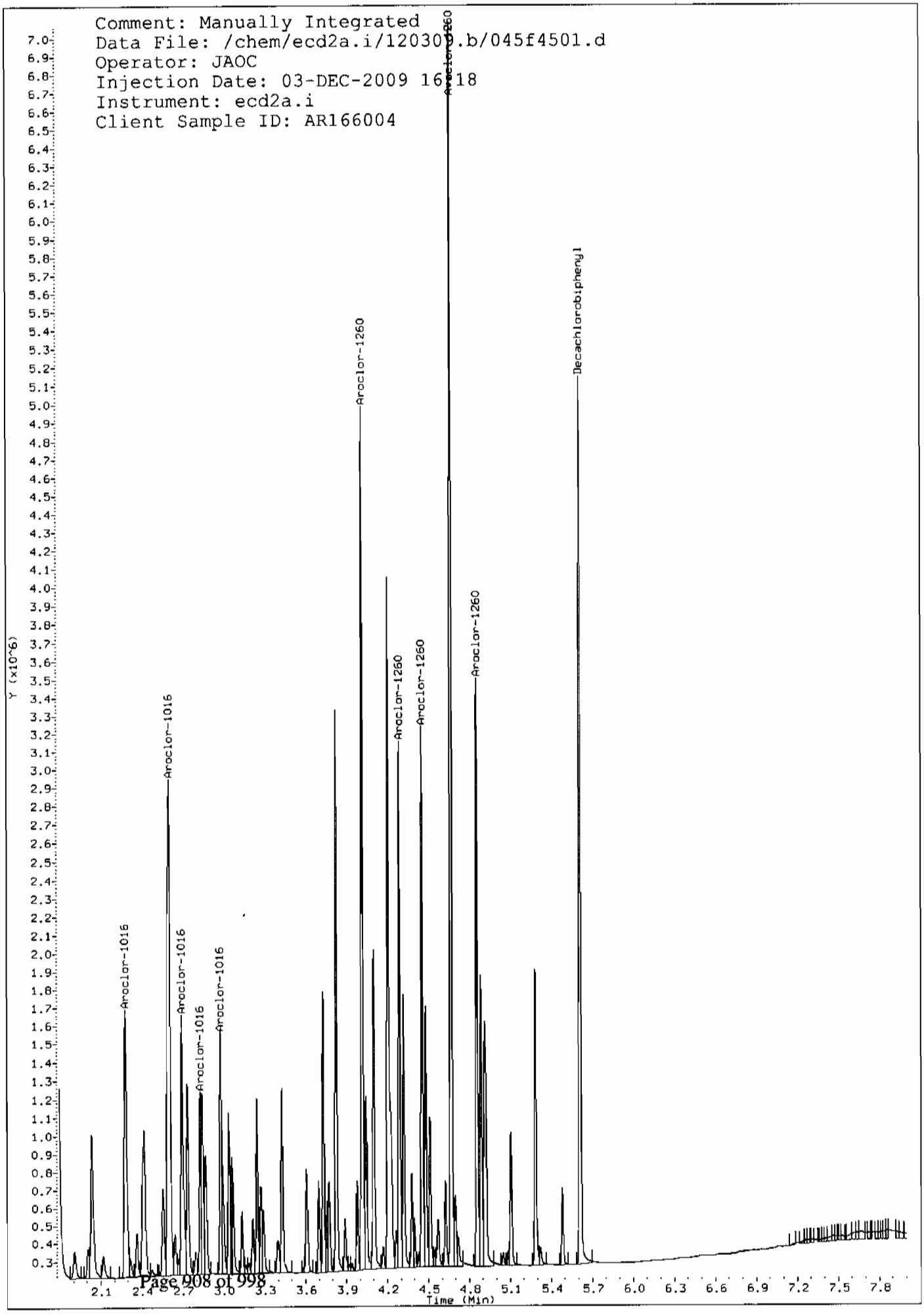
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/045f4501.d
Operator: JAOC
Injection Date: 03-DEC-2009 16:18
Instrument: ecd2a.i
Client Sample ID: AR166004
Y (x10^6)
Time (Min)
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-045f4501.d
Operator: JAOC
Injection Date: 03-DEC-2009 16:18
Instrument: ecd2a.i
Client Sample ID: AR166004

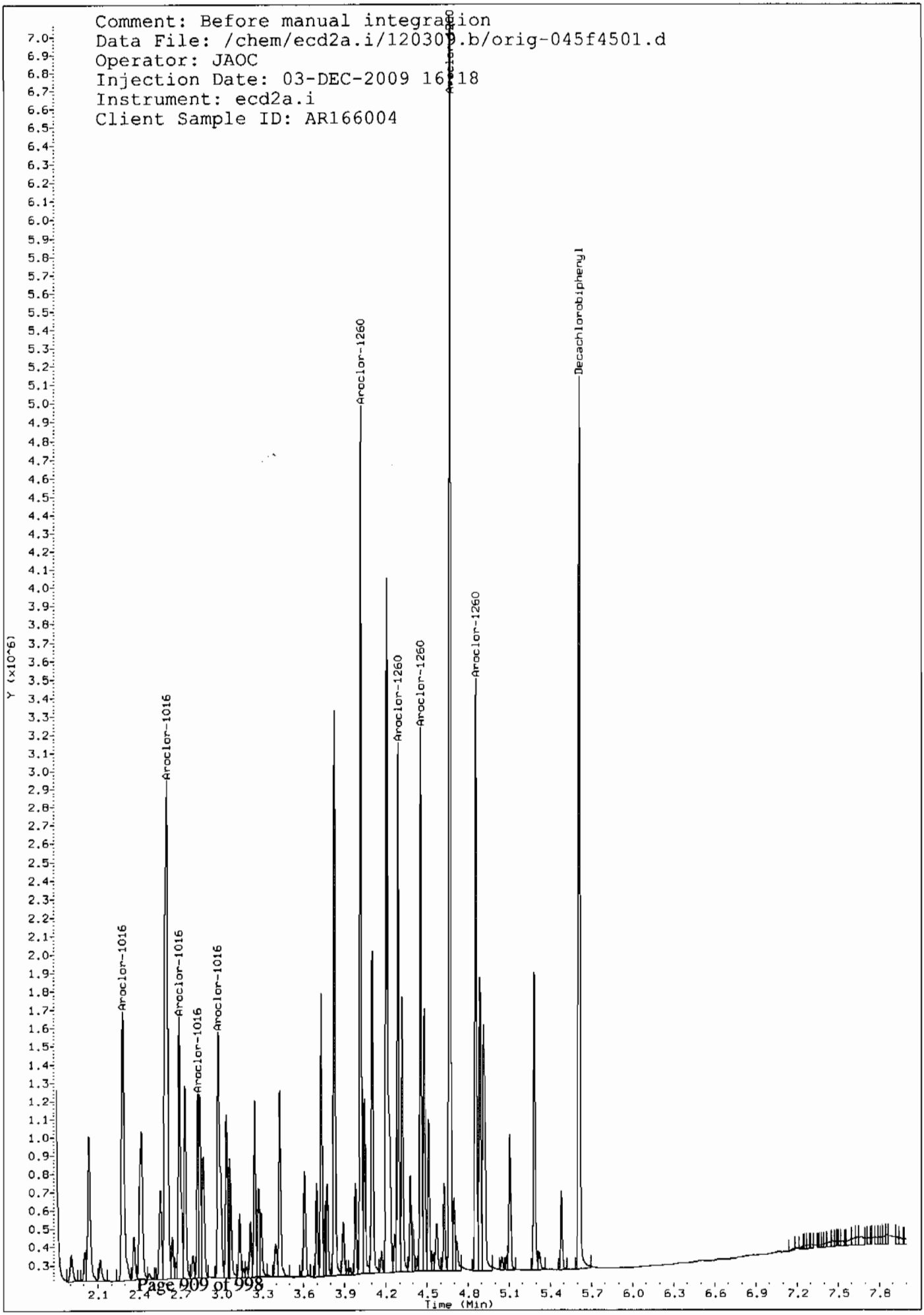

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/045b4501.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 03-DEC-2009 16:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 04
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	13281310	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	8688757	100.000	80.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4216212	1000.00	990	80.00- 120.00	100.00
3.185	3.185	0.000	3405548	1000.00	989	61.21- 101.21	80.77
3.336	3.335	0.001	1963953	1000.00	992	26.96- 66.96	46.58
3.365	3.364	0.001	2065526	1000.00	1000	28.74- 68.74	48.99
3.523	3.521	0.002	2798242	1000.00	1020	46.95- 86.95	66.37
Average of Peak Amounts =					998		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5729480	1000.00	1040	80.00- 120.00	100.00
4.570	4.569	0.001	7299919	1000.00	1020	107.13- 147.13	127.41
4.682	4.680	0.002	4829057	1000.00	1020	64.21- 104.21	84.28
4.880	4.878	0.002	5716115	1000.00	985	80.11- 120.11	99.77
5.505	5.504	0.001	8826542	1000.00	976	135.13- 175.13	154.05
Average of Peak Amounts =					1.01e+03		

Data File: /chem/ecd2a.i/120309.b/045b4501.d

Date : 03-DEC-2009 16:18

Client ID: AR166004

Sample Info: IWAR091119-60 04

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

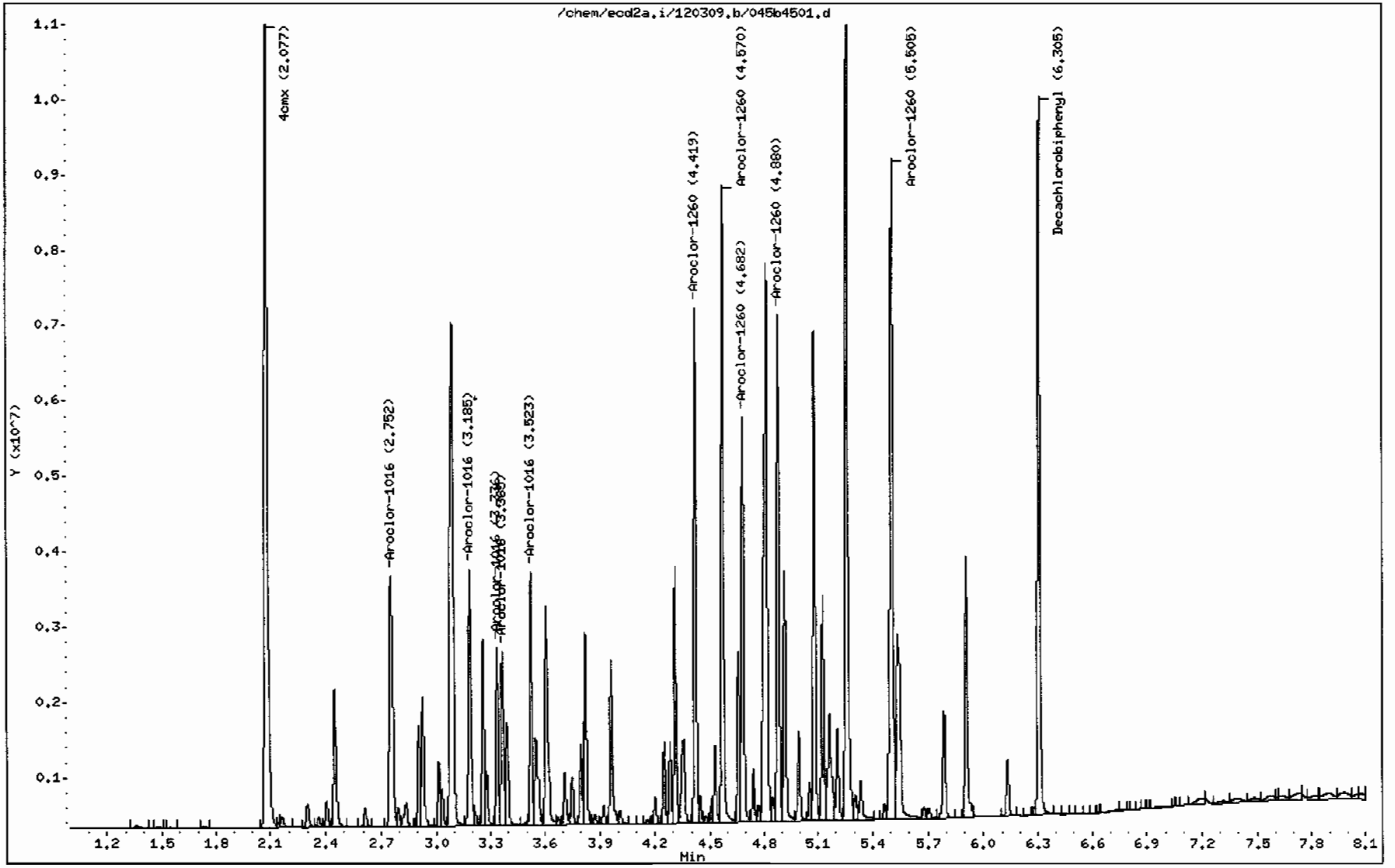

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/055f5501.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 18:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 05
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 55 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.779	-0.001	6257852	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4740004	100.000	86.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2047399	1000.00	975	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4384029	1000.00	973	191.91- 231.91	214.13
2.693	2.692	0.001	1759330	1000.00	966	65.28- 105.28	85.93
2.828	2.827	0.001	883630	1000.00	947	23.06- 63.06	43.16
2.979	2.978	0.001	1281466	1000.00	930	41.11- 81.11	62.59
Average of Peak Amounts =					958		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4145972	1000.00	1020	80.00- 120.00	100.00
4.289	4.288	0.001	2544535	1000.00	1010	40.91- 80.91	61.37
4.455	4.454	0.001	2603734	1000.00	1010	42.71- 82.71	62.80
4.668	4.665	0.003	6101061	1000.00	1010	125.86- 165.86	147.16
4.857	4.855	0.002	2916980	1000.00	1000	49.52- 89.52	70.36
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/055f5501.d

Date : 03-DEC-2009 18:09

Client ID: AR166005

Sample Info: IWAR091119-60 05

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

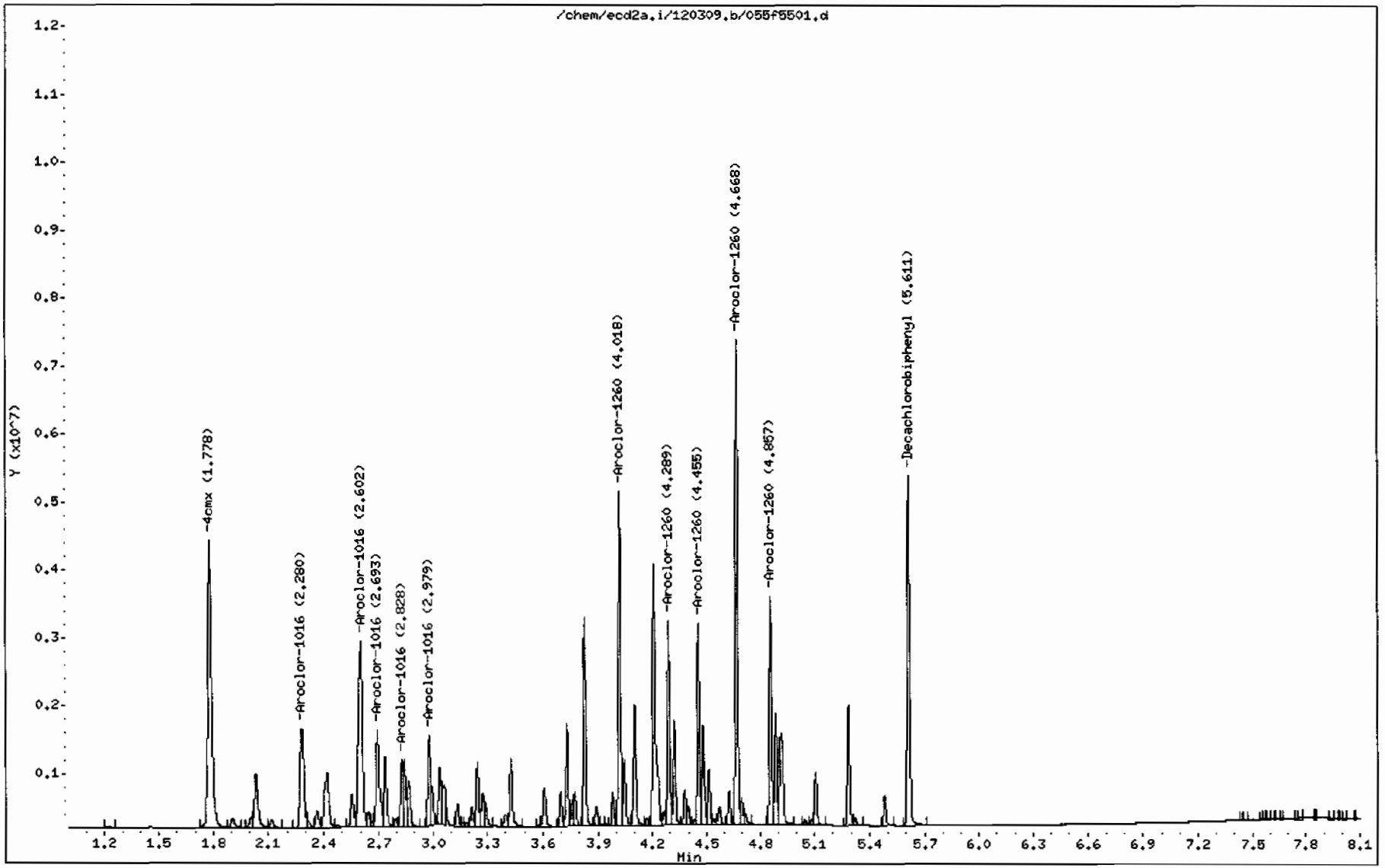

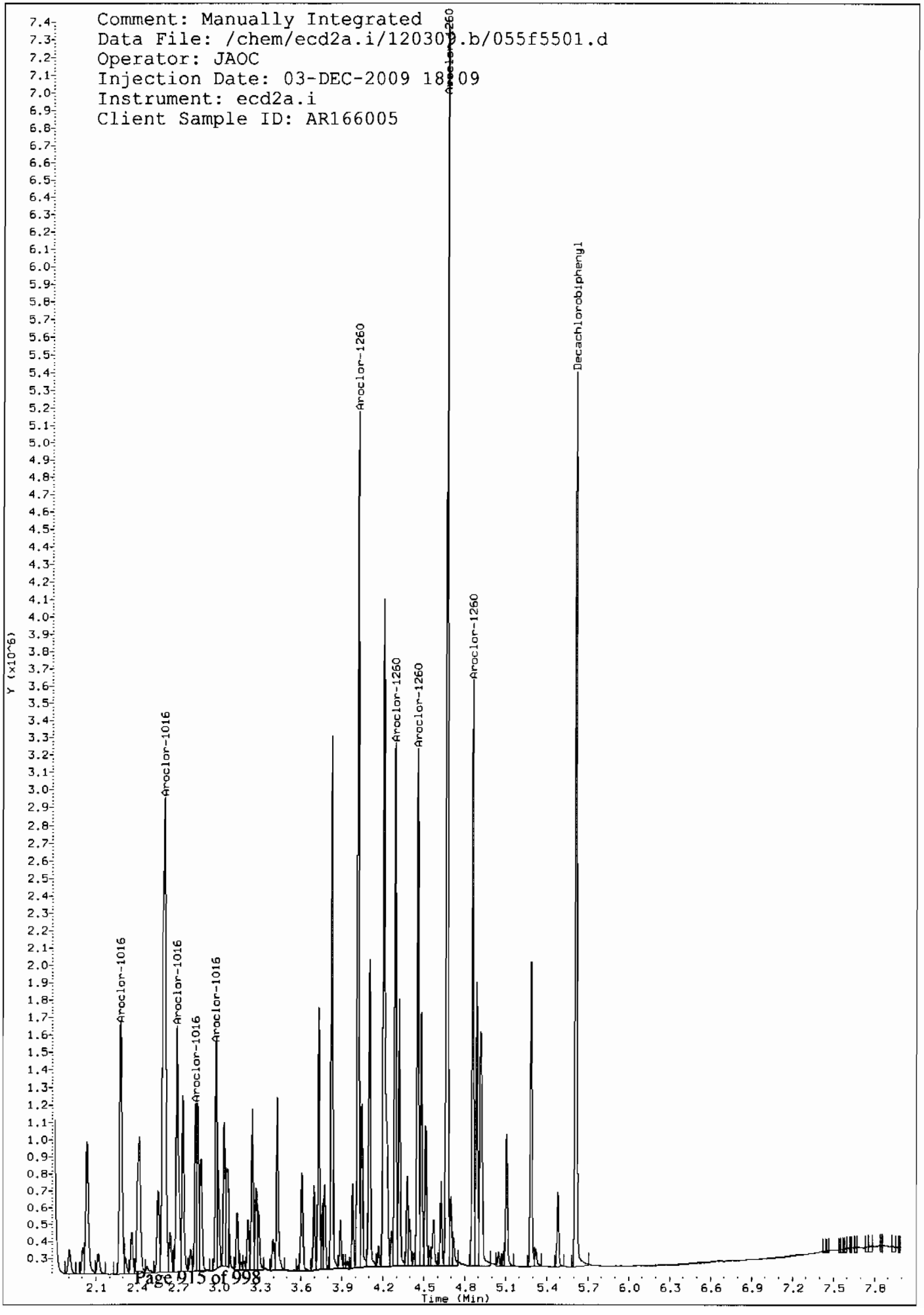
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/055f5501.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:09
Instrument: ecd2a.i
Client Sample ID: AR166005
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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Decachlorobiphenyl
Y (x10^6)
Time (Min)

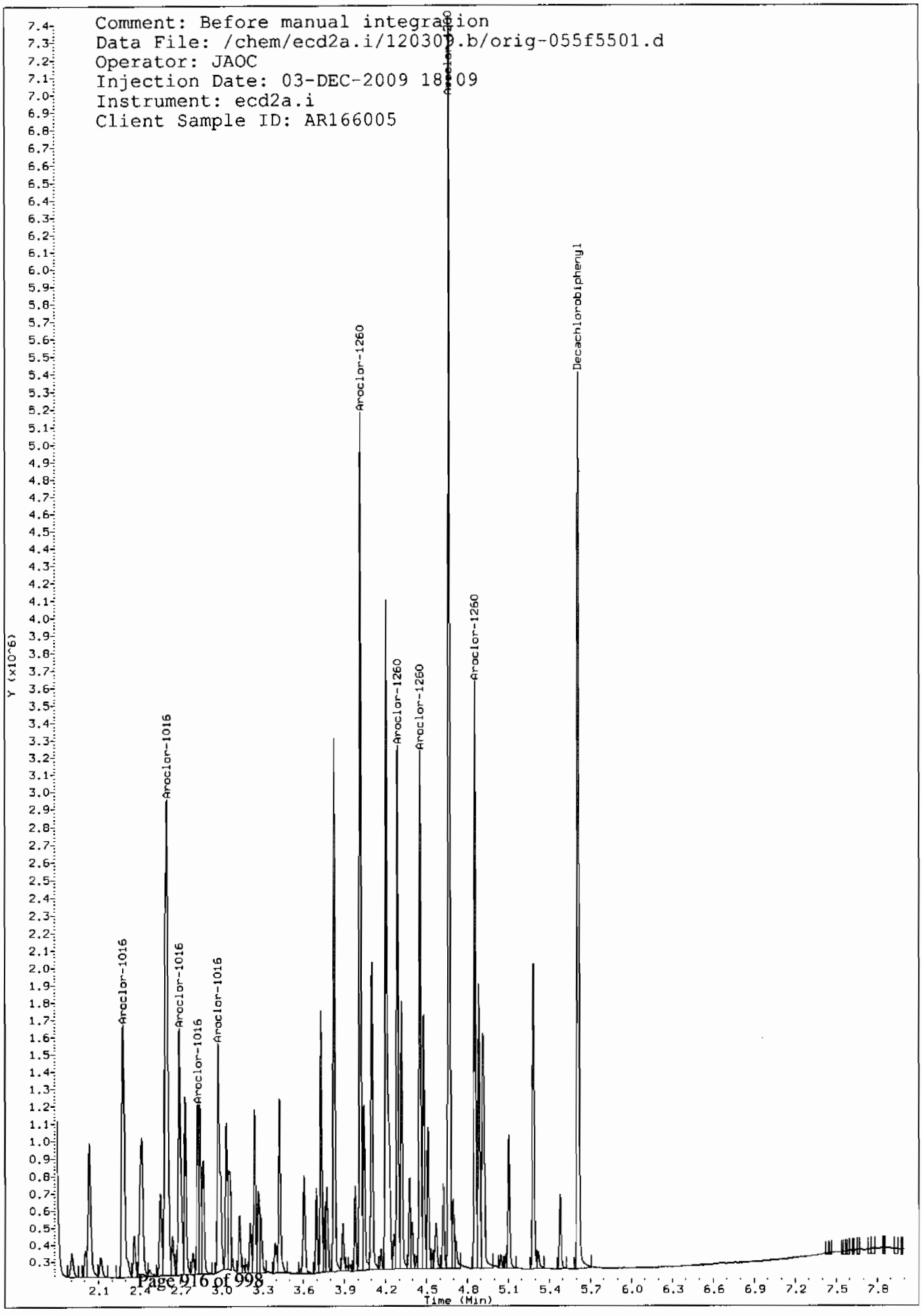
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-055f5501.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:09
Instrument: ecd2a.i
Client Sample ID: AR166005
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/055b5501.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 18:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 05
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 55 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13409429	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9498159	100.000	87.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4268280	1000.00	1000	80.00- 120.00	100.00
3.185	3.185	0.000	3465345	1000.00	1000	61.21- 101.21	81.19
3.336	3.335	0.001	2011969	1000.00	1020	26.96- 66.96	47.14
3.364	3.364	0.000	2064024	1000.00	1000	28.74- 68.74	48.36
3.523	3.521	0.002	2847950	1000.00	1030	46.95- 86.95	66.72
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5893238	1000.00	1070	80.00- 120.00	100.00
4.570	4.569	0.001	7495996	1000.00	1050	107.13- 147.13	127.20
4.682	4.680	0.002	4978183	1000.00	1050	64.21- 104.21	84.47
4.879	4.878	0.001	5877103	1000.00	1010	80.11- 120.11	99.73
5.505	5.504	0.001	9056734	1000.00	1000	135.13- 175.13	153.68
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/055b5501.d

Date : 03-DEC-2009 18:09

Client ID: AR166005

Sample Info: IWAR091119-60 05

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

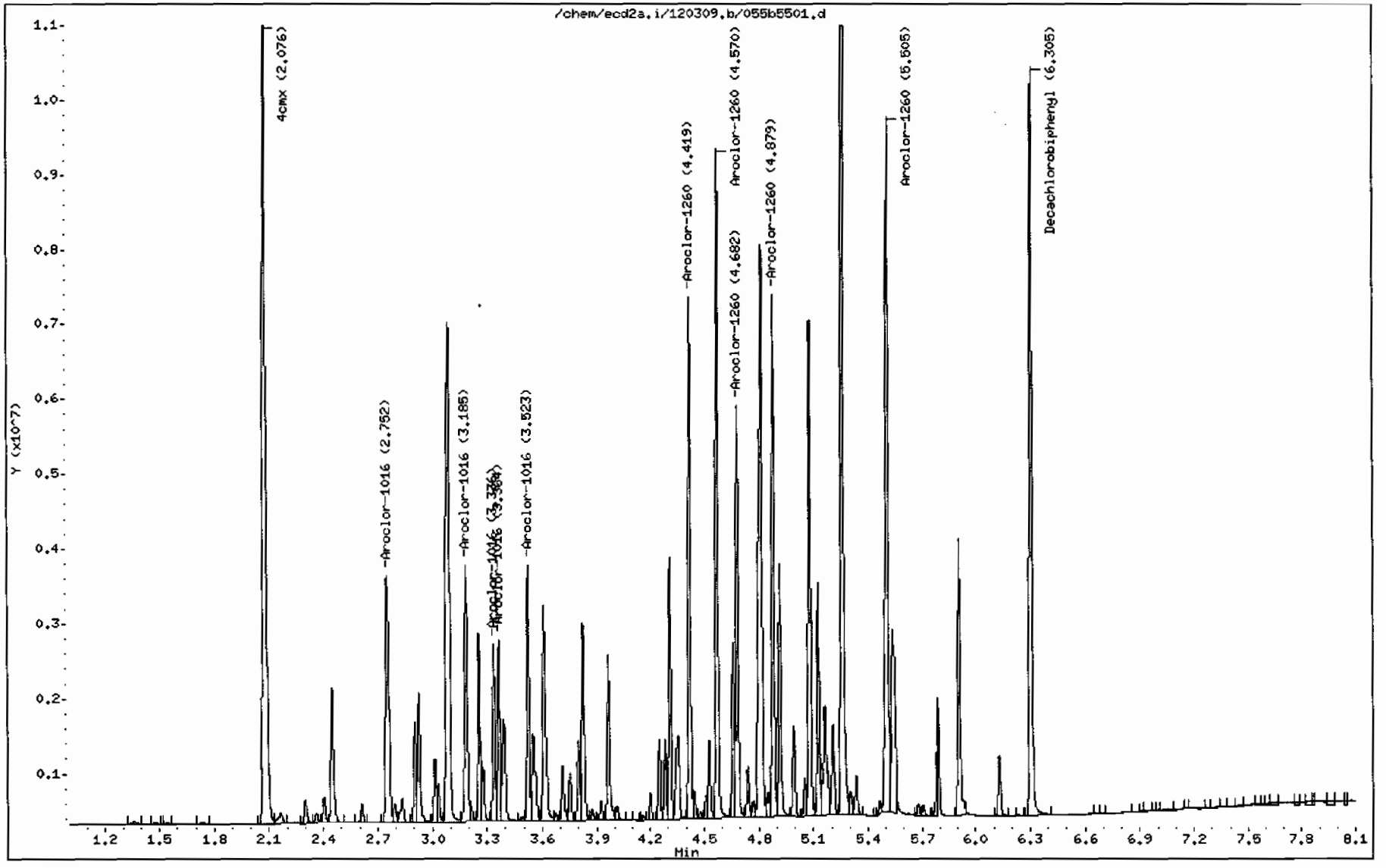

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/067f6701.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 03-DEC-2009 20:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 67 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6163610	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4667179	100.000	85.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.280	0.000	2088114	1000.00	994	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4342596	1000.00	964	191.91- 231.91	207.97
2.693	2.692	0.001	1732922	1000.00	952	65.28- 105.28	82.99
2.828	2.827	0.001	872123	1000.00	935	23.06- 63.06	41.77
2.979	2.978	0.001	1313386	1000.00	953	41.11- 81.11	62.90
Average of Peak Amounts =					960		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4128392	1000.00	1020	80.00- 120.00	100.00
4.289	4.288	0.001	2539399	1000.00	1000	40.91- 80.91	61.51
4.455	4.454	0.001	2583337	1000.00	1000	42.71- 82.71	62.57
4.668	4.665	0.003	6075361	1000.00	1010	125.86- 165.86	147.16
4.857	4.855	0.002	2892782	1000.00	993	49.52- 89.52	70.07
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/067f6701.d

Date : 03-DEC-2009 20:23

Client ID: AR166006

Sample Info: !WAR091119-60 06

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

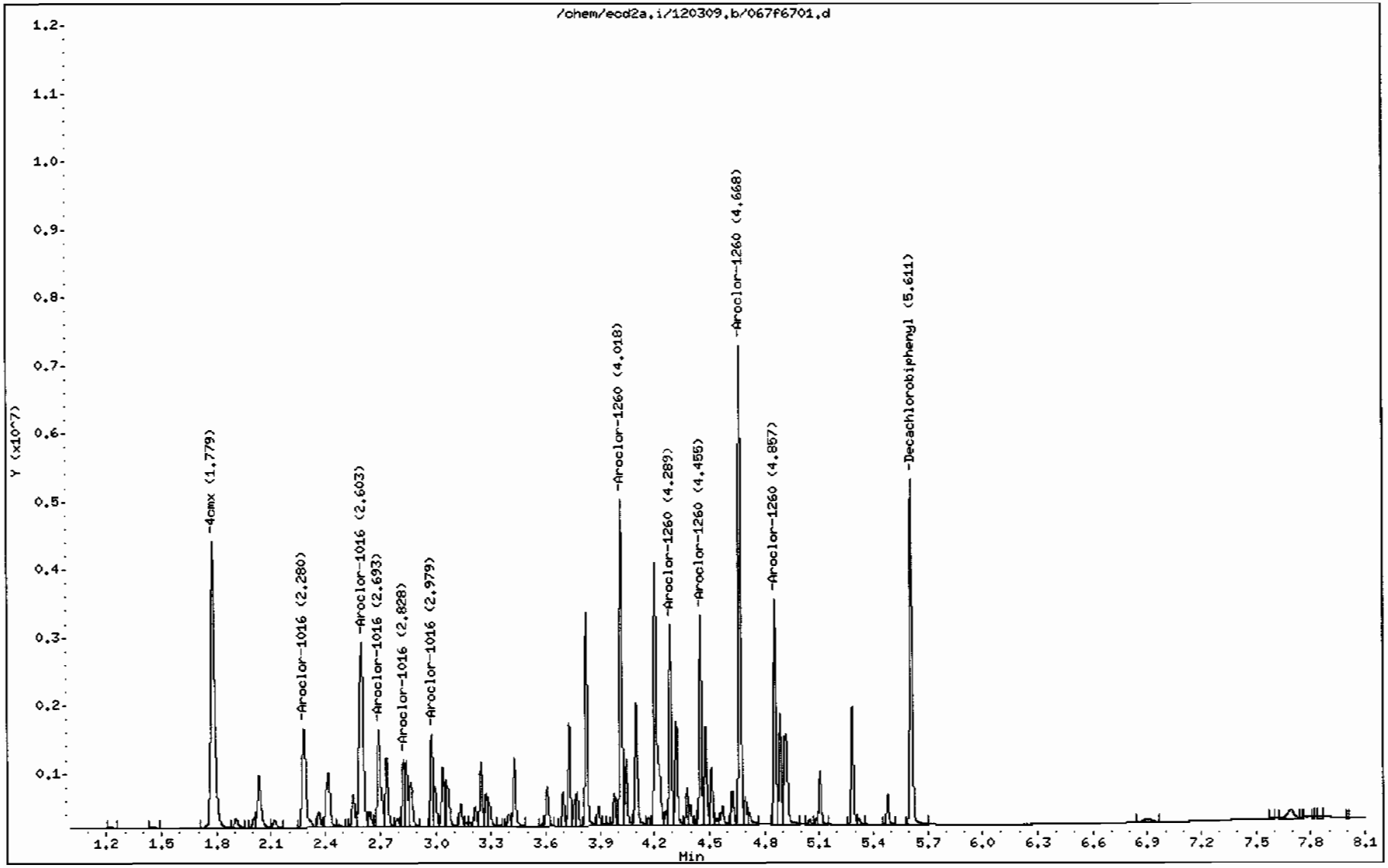

Comment: Manually Integrated
Data File: /chem/ecd2a.i/1203009.b/067f6701.d
Operator: JAOC
Injection Date: 03-DEC-2009 20:23
Instrument: ecd2a.i
Client Sample ID: AR166006

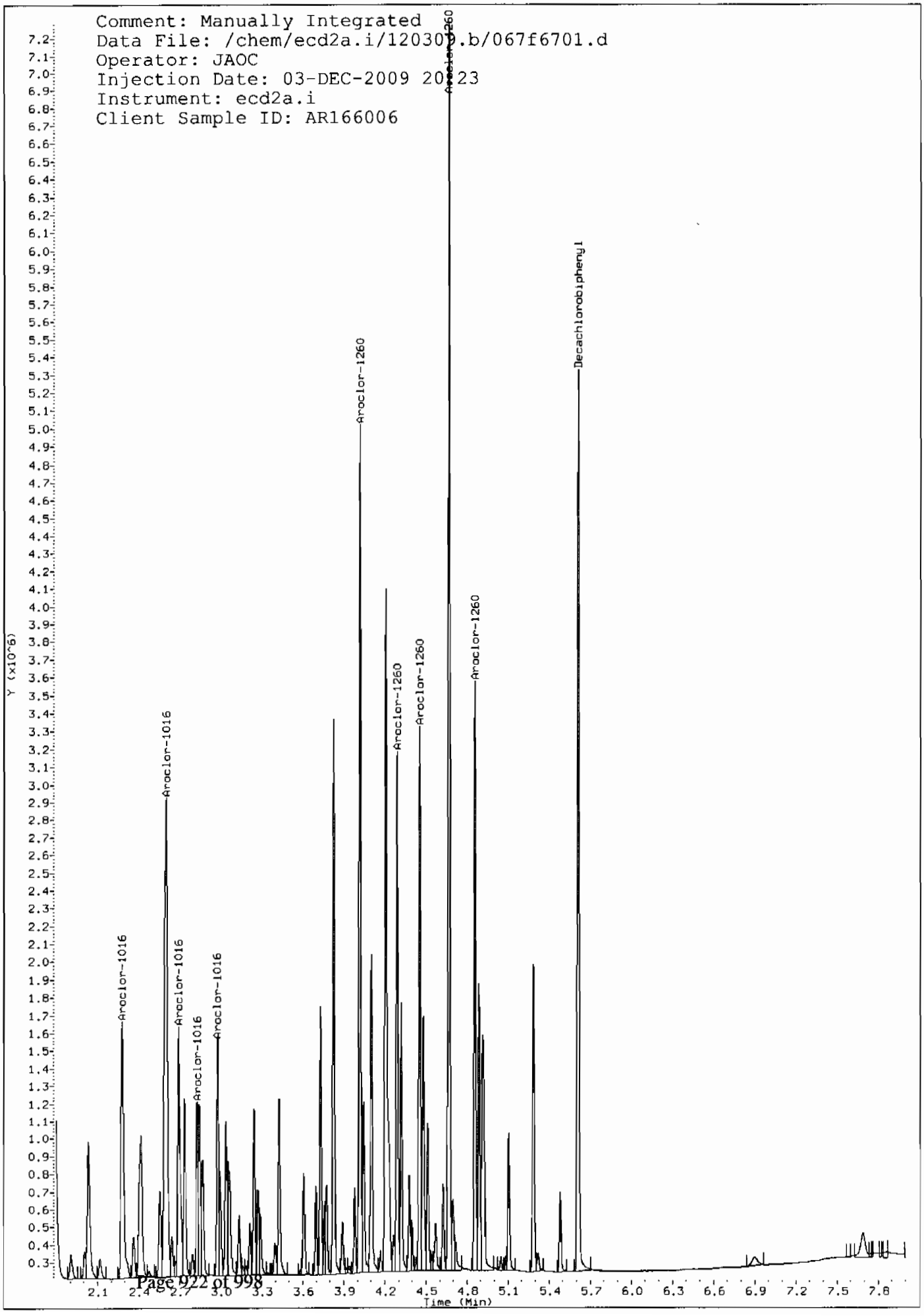

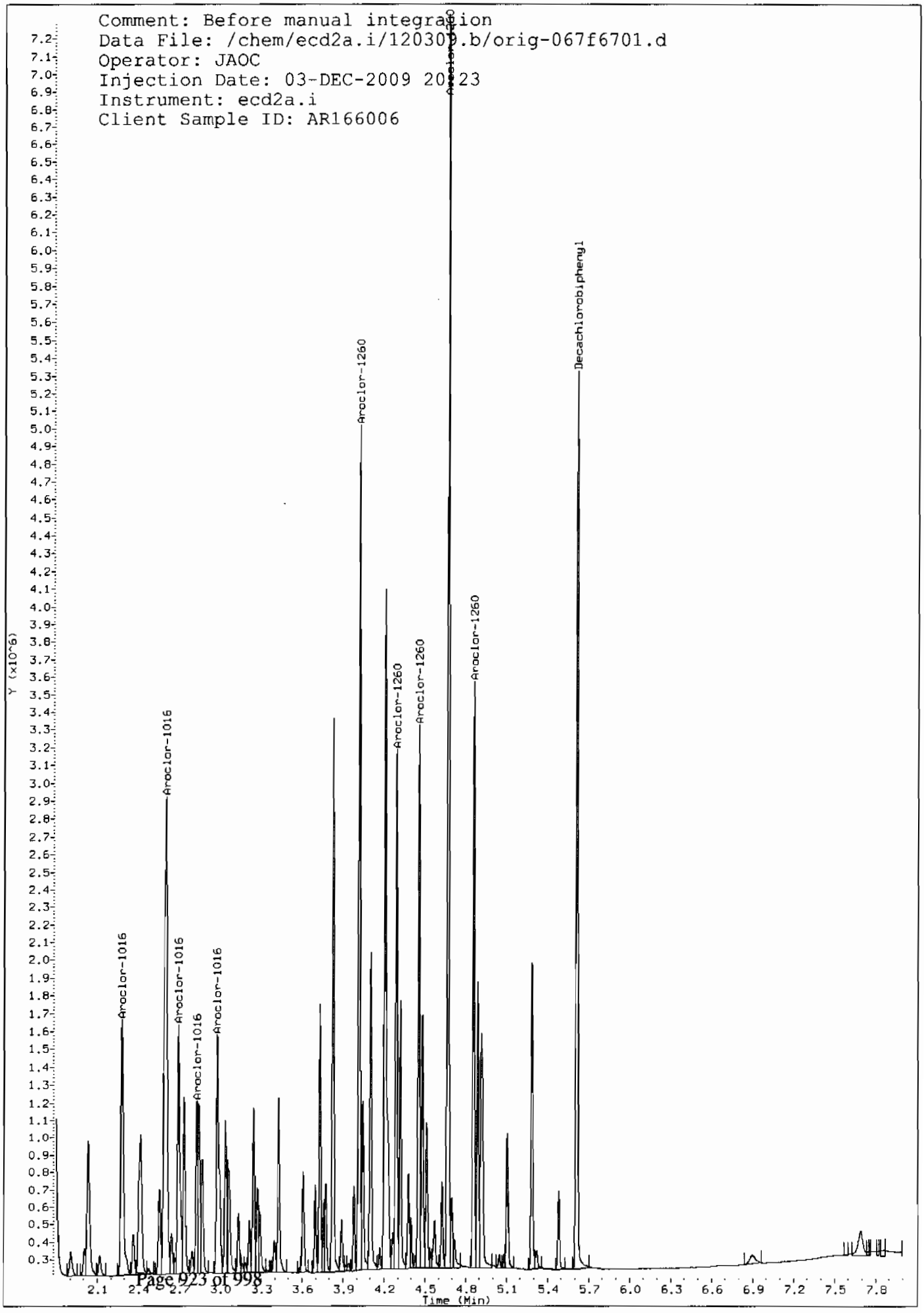
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-067f6701.d
Operator: JAOC
Injection Date: 03-DEC-2009 20:23
Instrument: ecd2a.i
Client Sample ID: AR166006
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/067b6701.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 03-DEC-2009 20:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 67 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13328074	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	9544199	100.000	87.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.750	0.001	4241951	1000.00	996	80.00- 120.00	100.00
3.185	3.185	0.000	3445004	1000.00	1000	61.21- 101.21	81.21
3.336	3.335	0.001	1997782	1000.00	1010	26.96- 66.96	47.10
3.364	3.364	0.000	2077036	1000.00	1010	28.74- 68.74	48.96
3.523	3.521	0.002	2827729	1000.00	1030	46.95- 86.95	66.66
Average of Peak Amounts =					1.01e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5876309	1000.00	1060	80.00- 120.00	100.00
4.570	4.569	0.001	7499076	1000.00	1050	107.13- 147.13	127.62
4.683	4.680	0.003	4987524	1000.00	1050	64.21- 104.21	84.88
4.880	4.878	0.002	5914224	1000.00	1020	80.11- 120.11	100.65
5.505	5.504	0.001	9320682	1000.00	1030	135.13- 175.13	158.61
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120309.b/067b6701.d
Date : 03-DEC-2009 20:23
Client ID: AR166006
Sample Info: IWAR091119-60 06

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

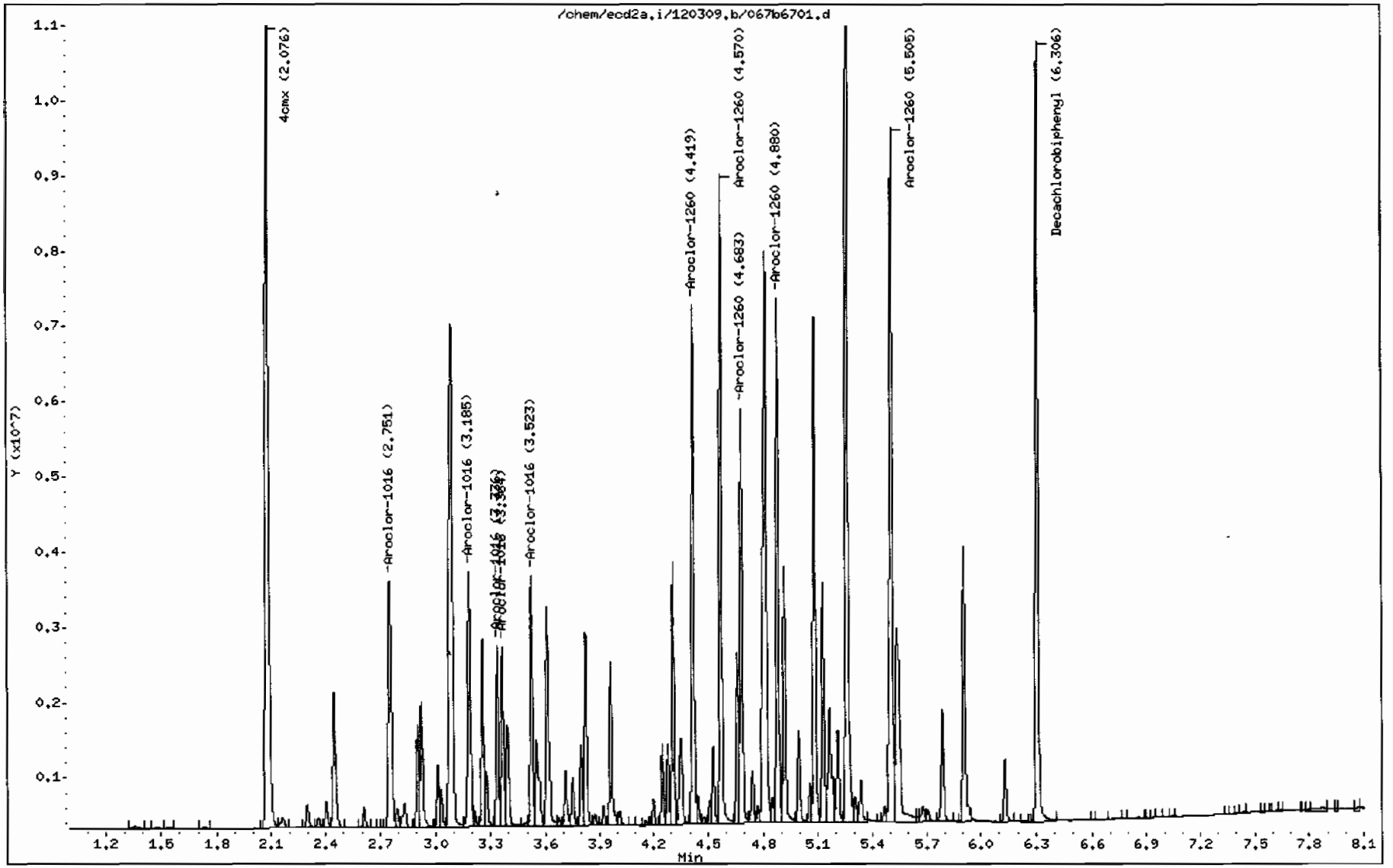

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/079f7901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 03-DEC-2009 22:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 79 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.779	0.000	6158686	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	4580858	100.000	83.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	1978981	1000.00	942	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4303790	1000.00	955	191.91- 231.91	217.48
2.694	2.692	0.002	1712863	1000.00	941	65.28- 105.28	86.55
2.828	2.827	0.001	871419	1000.00	934	23.06- 63.06	44.03
2.980	2.978	0.002	1292053	1000.00	938	41.11- 81.11	65.29
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.016	0.002	4099995	1000.00	1010	80.00- 120.00	100.00
4.290	4.288	0.002	2500052	1000.00	989	40.91- 80.91	60.98
4.456	4.454	0.002	2561308	1000.00	992	42.71- 82.71	62.47
4.668	4.665	0.003	6022736	1000.00	998	125.86- 165.86	146.90
4.857	4.855	0.002	2873424	1000.00	987	49.52- 89.52	70.08
Average of Peak Amounts =					995		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/079f7901.d

Date : 03-DEC-2009 22:36

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

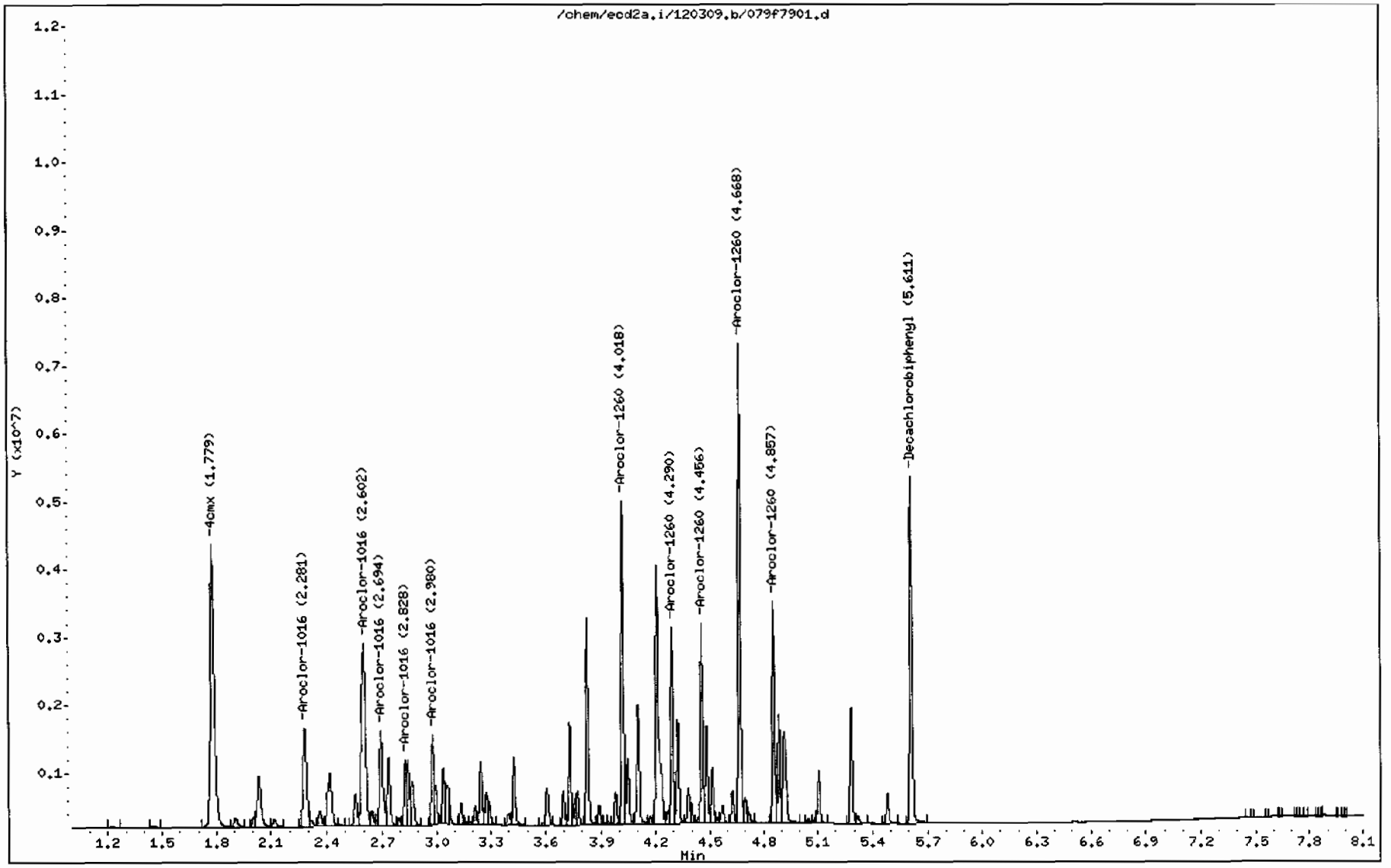

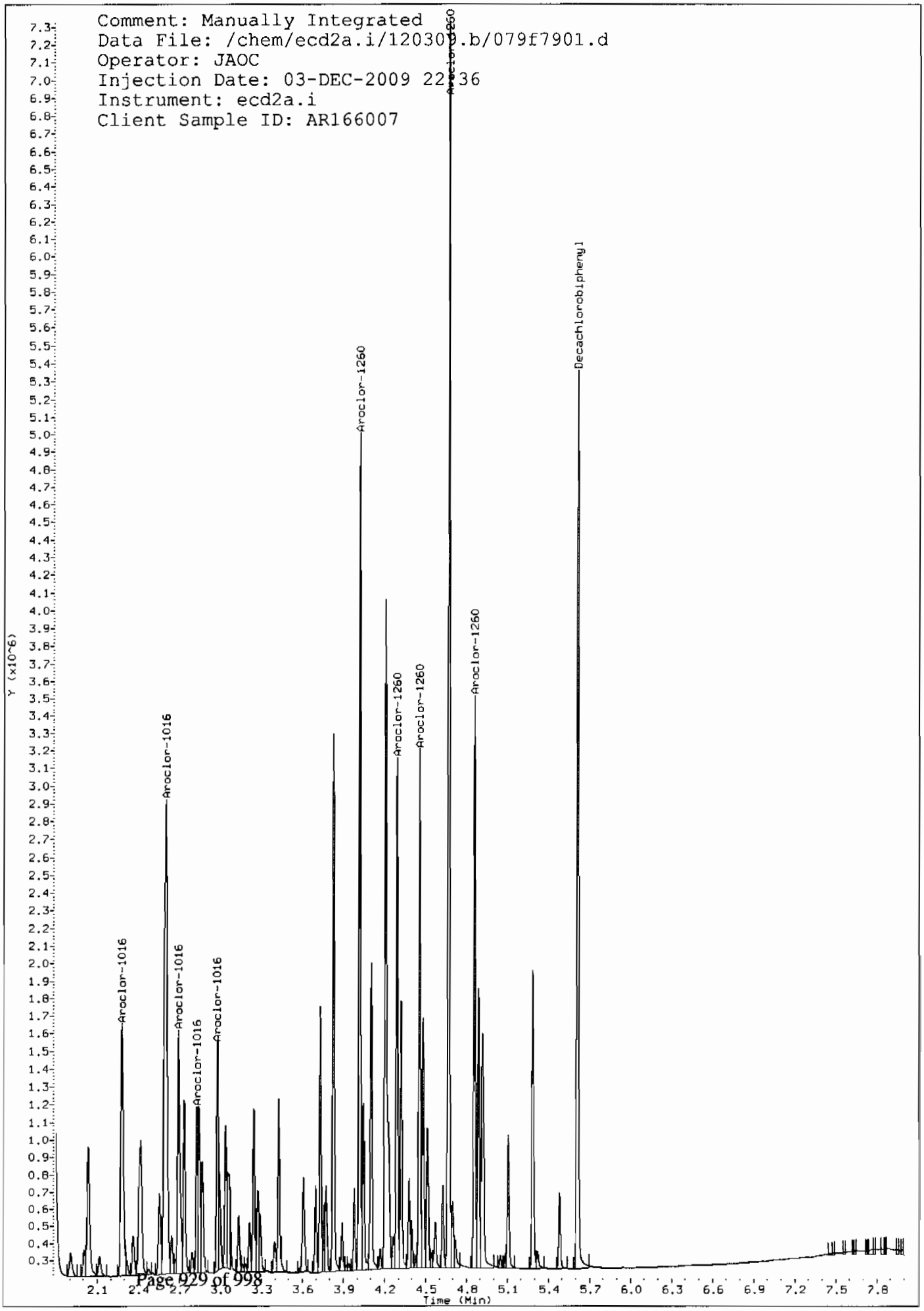
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/079f7901.d
Operator: JAOC
Injection Date: 03-DEC-2009 22:36
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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Decachlorobiphenyl
Y (x10^6)
Time (Min)

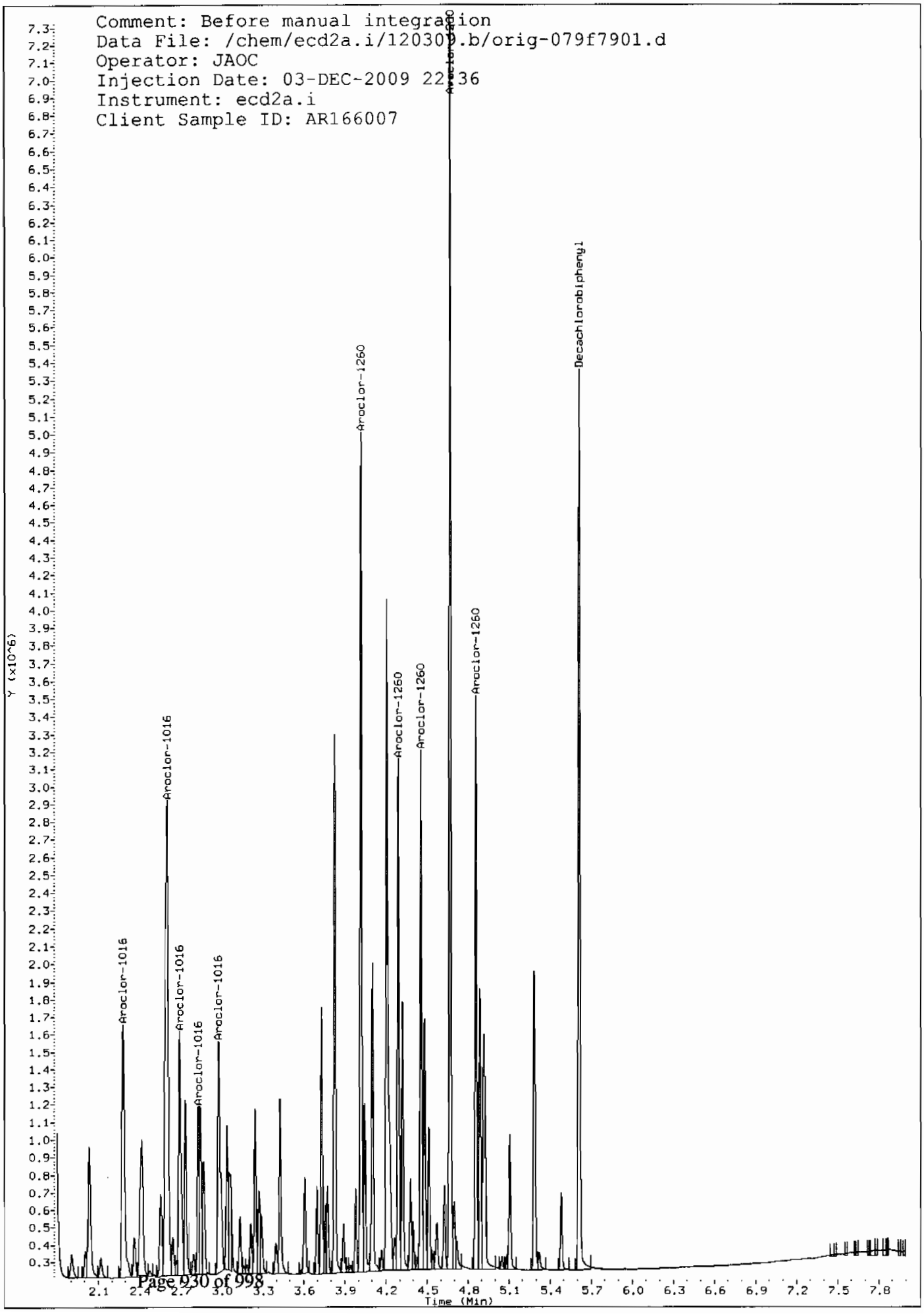
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-079f7901.d
Operator: JAOC
Injection Date: 03-DEC-2009 22:36
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/079b7901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 03-DEC-2009 22:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 79 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	13335702	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	9249159	100.000	85.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	4227851	1000.00	993	80.00- 120.00	100.00
3.186	3.185	0.001	3405204	1000.00	988	61.21- 101.21	80.54
3.337	3.335	0.002	1957925	1000.00	989	26.96- 66.96	46.31
3.365	3.364	0.001	2034357	1000.00	987	28.74- 68.74	48.12
3.523	3.521	0.002	2793974	1000.00	1010	46.95- 86.95	66.08
Average of Peak Amounts =					994		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5796323	1000.00	1050	80.00- 120.00	100.00
4.571	4.569	0.002	7372924	1000.00	1030	107.13- 147.13	127.20
4.683	4.680	0.003	4864947	1000.00	1030	64.21- 104.21	83.93
4.880	4.878	0.002	5761959	1000.00	993	80.11- 120.11	99.41
5.505	5.504	0.001	9007179	1000.00	996	135.13- 175.13	155.39
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd2a.i/120309.b/079b7901.d

Date : 03-DEC-2009 22:36

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

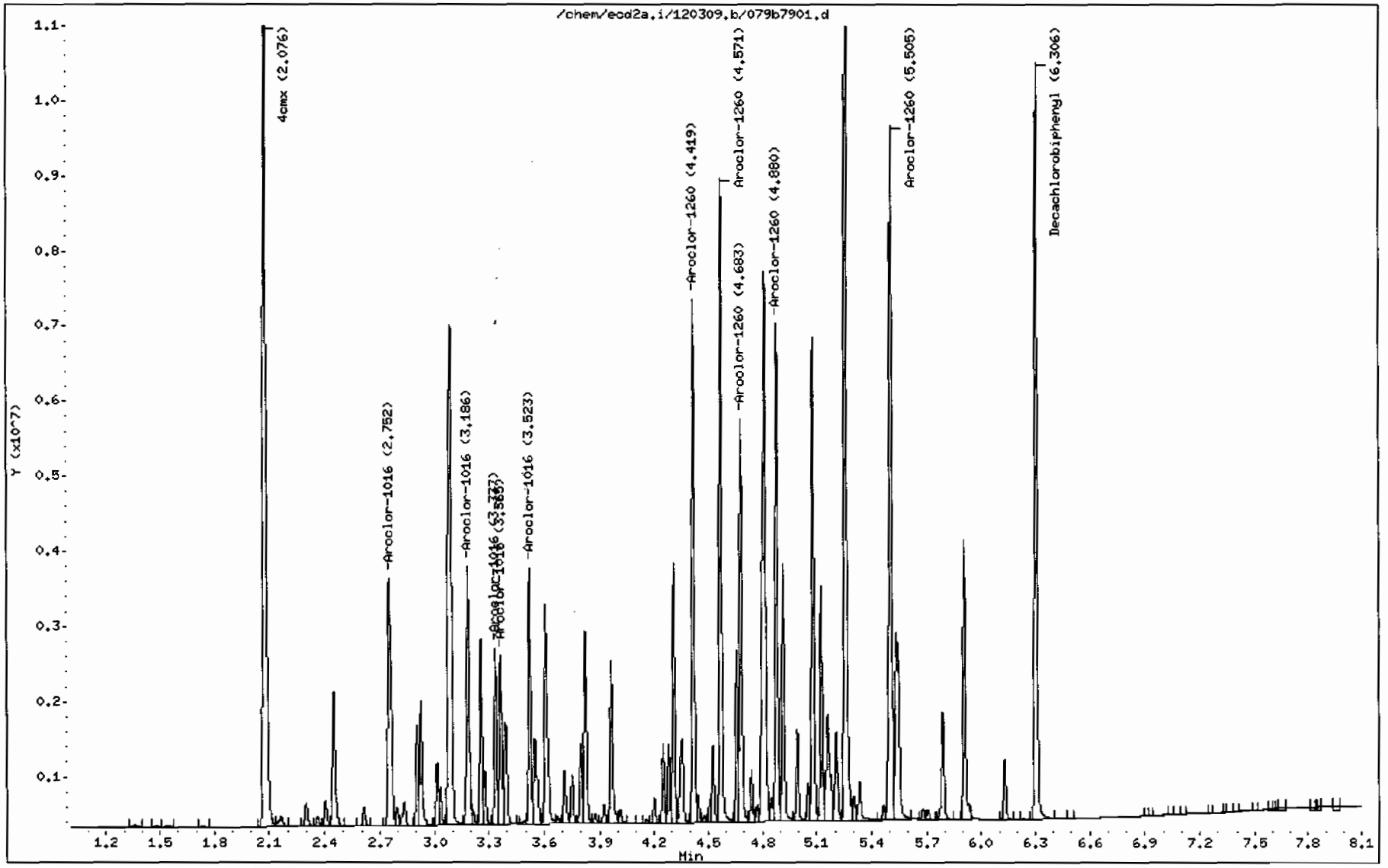

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	AR166001	WAR091119-60	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	AR124801	WAR091027-48	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	AR166001	WAR091119-60	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	AR124801	WAR091027-48	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0810	1.77	5.61
02	AR166001	WAR091119-60	12/03/09	0821	1.78	5.61
03	AR125401	WAR091102-54	12/03/09	0832	1.78	5.61
04	AR124201	WAR091102-42	12/03/09	0843	1.78	5.61
05	AR124801	WAR091027-48	12/03/09	0854	1.78	5.61
06	AR123201	WAR090930-32	12/03/09	0905	1.78	5.61
07	AR122101	WAR091111-21	12/03/09	0917	1.78	5.61
08	AR126201	WAR091111-62	12/03/09	0928	1.78	5.61
09	AR126801	WAR091106-68	12/03/09	0939	1.78	5.61
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0950		
11	PIBLK02	WAR090916-99	12/03/09	1001	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	1012	1.78	5.61
13	ZZZZZ	ZZZZZ	12/03/09	1023	1.78	5.61
14	ZZZZZ	ZZZZZ	12/03/09	1034	1.78	5.61
15	ZZZZZ	ZZZZZ	12/03/09	1045	1.78	5.61
16	ZZZZZ	ZZZZZ	12/03/09	1057	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	1108	1.78	5.61
18	ZZZZZ	ZZZZZ	12/03/09	1119	1.78	5.61
19	ZZZZZ	ZZZZZ	12/03/09	1130	1.78	5.61
20	ZZZZZ	ZZZZZ	12/03/09	1141	1.78	5.61
21	AR166002	WAR091119-60	12/03/09	1152	1.78	5.61
22	PIBLK03	WAR090916-99	12/03/09	1203	1.78	5.61
23	ZZZZZ	ZZZZZ	12/03/09	1214	1.78	5.61
24	ZZZZZ	ZZZZZ	12/03/09	1225	1.78	5.61
25	ZZZZZ	ZZZZZ	12/03/09	1236	1.78	5.61
26	ZZZZZ	ZZZZZ	12/03/09	1247	1.78	5.61
27	ZZZZZ	ZZZZZ	12/03/09	1258	1.78	5.61
28	ZZZZZ	ZZZZZ	12/03/09	1309	1.78	5.61
29	ZZZZZ	ZZZZZ	12/03/09	1321	1.78	5.61
30	ZZZZZ	ZZZZZ	12/03/09	1332	1.78	5.61
31	ZZZZZ	ZZZZZ	12/03/09	1343	1.78	5.61
32	ZZZZZ	ZZZZZ	12/03/09	1354	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166003	WAR091119-60	12/03/09	1405	1.78	5.61
02	PIBLK04	WAR090916-99	12/03/09	1416	1.78	5.61
03	ZZZZZ	ZZZZZ	12/03/09	1427	1.78	5.61
04	ZZZZZ	ZZZZZ	12/03/09	1438	1.78	5.61
05	ZZZZZ	ZZZZZ	12/03/09	1449	1.78	5.61
06	ZZZZZ	ZZZZZ	12/03/09	1500	1.78	5.61
07	ZZZZZ	ZZZZZ	12/03/09	1512	1.78	5.62
08	ZZZZZ	ZZZZZ	12/03/09	1523	1.78	5.61
09	ZZZZZ	ZZZZZ	12/03/09	1534	1.78	5.61
10	ZZZZZ	ZZZZZ	12/03/09	1545	1.78	5.61
11	ZZZZZ	ZZZZZ	12/03/09	1556	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	1607	1.78	5.61
13	AR166004	WAR091119-60	12/03/09	1618	1.78	5.61
14	PIBLK05	WAR090916-99	12/03/09	1629	1.78	5.61
15	ZZZZZ	ZZZZZ	12/03/09	1640	1.78	5.61
16	ZZZZZ	ZZZZZ	12/03/09	1651	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	1703	1.78	5.62
18	ZZZZZ	ZZZZZ	12/03/09	1714	1.78	5.61
19	PBLK01	1201981410	12/03/09	1725	1.78	5.61
20	PBLK01LCS	1201981413	12/03/09	1736	1.78	5.61
21	RE03-09-1396	241418001	12/03/09	1747	1.78	5.61
22	RE03-09-1396	241418002	12/03/09	1758	1.78	5.61
23	AR166005	WAR091119-60	12/03/09	1809	1.78	5.61
24	PIBLK06	WAR090916-99	12/03/09	1820	1.78	5.61
25	RE03-09-1395	241418003	12/03/09	1831	1.78	5.61
26	RE03-09-1395MS	1201981411	12/03/09	1842	1.78	5.61
27	RE03-09-1395MSD	1201981412	12/03/09	1854	1.78	5.61
28	RE03-09-1395	241418004	12/03/09	1905	1.78	5.61
29	RE03-09-1396	241418005	12/03/09	1916	1.78	5.61
30	RE03-09-1397	241418006	12/03/09	1927	1.78	5.61
31	RE03-09-1396	241418007	12/03/09	1938	1.78	5.61
32	RE03-09-1397	241418008	12/03/09	1949	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	RE03-09-1396	241418009	12/03/09	2000	1.78	5.61
02	RE03-09-1396	241418010	12/03/09	2011	1.78	5.61
03	AR166006	WAR091119-60	12/03/09	2023	1.78	5.61
04	PIBLK07	WAR090916-99	12/03/09	2034	1.78	5.61
05	RE03-09-1396	241418011	12/03/09	2045	1.78	5.61
06	RE03-09-1396	241418012	12/03/09	2056	1.78	5.61
07	RE03-09-1396	241418013	12/03/09	2107	1.78	5.61
08	RE03-09-1396	241418014	12/03/09	2118	1.78	5.61
09	RE03-10-3914	241418015	12/03/09	2129	1.78	5.61
10	RE03-10-3913	241418016	12/03/09	2140	1.78	5.61
11	ZZZZZ	ZZZZZ	12/03/09	2151	1.78	5.61
12	ZZZZZ	ZZZZZ	12/03/09	2202	1.78	5.61
13	ZZZZZ	ZZZZZ	12/03/09	2214	1.78	5.61
14	ZZZZZ	ZZZZZ	12/03/09	2225	1.78	5.61
15	AR166007	WAR091119-60	12/03/09	2236	1.78	5.61
16	PIBLK08	WAR090916-99	12/03/09	2247	1.78	5.61
17	ZZZZZ	ZZZZZ	12/03/09	2258	1.78	5.61
18	ZZZZZ	ZZZZZ	12/03/09	2309	1.78	5.61
19	ZZZZZ	ZZZZZ	12/03/09	2320	1.78	5.61
20	ZZZZZ	ZZZZZ	12/03/09	2331	1.78	5.61
21	ZZZZZ	ZZZZZ	12/03/09	2343	1.78	5.61
22	ZZZZZ	ZZZZZ	12/03/09	2354	1.78	5.61
23	ZZZZZ	ZZZZZ	12/04/09	0005	1.78	5.61
24	AR166008	WAR091119-60	12/04/09	0016	1.78	5.61
25	PIBLK09	WAR090916-99	12/04/09	0027	1.78	5.61
26						
27						
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0810	2.07	6.30
02	AR166001	WAR091119-60	12/03/09	0821	2.08	6.30
03	AR125401	WAR091102-54	12/03/09	0832	2.08	6.30
04	AR124201	WAR091102-42	12/03/09	0843	2.08	6.30
05	AR124801	WAR091027-48	12/03/09	0854	2.08	6.30
06	AR123201	WAR090930-32	12/03/09	0905	2.08	6.31
07	AR122101	WAR091111-21	12/03/09	0917	2.08	6.31
08	AR126201	WAR091111-62	12/03/09	0928	2.08	6.31
09	AR126801	WAR091106-68	12/03/09	0939	2.08	6.30
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0950		
11	PIBLK02	WAR090916-99	12/03/09	1001	2.08	6.30
12	ZZZZZ	ZZZZZ	12/03/09	1012	2.08	6.31
13	ZZZZZ	ZZZZZ	12/03/09	1023	2.08	6.30
14	ZZZZZ	ZZZZZ	12/03/09	1034	2.08	6.31
15	ZZZZZ	ZZZZZ	12/03/09	1045	2.08	6.31
16	ZZZZZ	ZZZZZ	12/03/09	1057	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	1108	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	1119	2.08	6.30
19	ZZZZZ	ZZZZZ	12/03/09	1130	2.08	6.30
20	ZZZZZ	ZZZZZ	12/03/09	1141	2.08	6.30
21	AR166002	WAR091119-60	12/03/09	1152	2.08	6.30
22	PIBLK03	WAR090916-99	12/03/09	1203	2.08	6.30
23	ZZZZZ	ZZZZZ	12/03/09	1214	2.08	6.31
24	ZZZZZ	ZZZZZ	12/03/09	1225	2.08	6.30
25	ZZZZZ	ZZZZZ	12/03/09	1236	2.08	6.30
26	ZZZZZ	ZZZZZ	12/03/09	1247	2.08	6.31
27	ZZZZZ	ZZZZZ	12/03/09	1258	2.08	6.30
28	ZZZZZ	ZZZZZ	12/03/09	1309	2.08	6.30
29	ZZZZZ	ZZZZZ	12/03/09	1321	2.08	6.30
30	ZZZZZ	ZZZZZ	12/03/09	1332	2.08	6.30
31	ZZZZZ	ZZZZZ	12/03/09	1343	2.08	6.30
32	ZZZZZ	ZZZZZ	12/03/09	1354	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166003	WAR091119-60	12/03/09	1405	2.08	6.30
02	PIBLK04	WAR090916-99	12/03/09	1416	2.08	6.30
03	ZZZZZ	ZZZZZ	12/03/09	1427	2.08	6.31
04	ZZZZZ	ZZZZZ	12/03/09	1438	2.08	6.31
05	ZZZZZ	ZZZZZ	12/03/09	1449	2.08	6.31
06	ZZZZZ	ZZZZZ	12/03/09	1500	2.08	6.31
07	ZZZZZ	ZZZZZ	12/03/09	1512	2.08	6.31
08	ZZZZZ	ZZZZZ	12/03/09	1523	2.08	6.30
09	ZZZZZ	ZZZZZ	12/03/09	1534	2.08	6.31
10	ZZZZZ	ZZZZZ	12/03/09	1545	2.08	6.31
11	ZZZZZ	ZZZZZ	12/03/09	1556	2.08	6.30
12	ZZZZZ	ZZZZZ	12/03/09	1607	2.08	6.31
13	AR166004	WAR091119-60	12/03/09	1618	2.08	6.31
14	PIBLK05	WAR090916-99	12/03/09	1629	2.08	6.31
15	ZZZZZ	ZZZZZ	12/03/09	1640	2.08	6.31
16	ZZZZZ	ZZZZZ	12/03/09	1651	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	1703	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	1714	2.08	6.31
19	PBLK01	1201981410	12/03/09	1725	2.08	6.31
20	PBLK01LCS	1201981413	12/03/09	1736	2.08	6.31
21	RE03-09-1396	241418001	12/03/09	1747	2.08	6.30
22	RE03-09-1396	241418002	12/03/09	1758	2.08	6.30
23	AR166005	WAR091119-60	12/03/09	1809	2.08	6.31
24	PIBLK06	WAR090916-99	12/03/09	1820	2.08	6.31
25	RE03-09-1395	241418003	12/03/09	1831	2.08	6.31
26	RE03-09-1395MS	1201981411	12/03/09	1842	2.08	6.30
27	RE03-09-1395MSD	1201981412	12/03/09	1854	2.08	6.31
28	RE03-09-1395	241418004	12/03/09	1905	2.08	6.31
29	RE03-09-1396	241418005	12/03/09	1916	2.08	6.31
30	RE03-09-1397	241418006	12/03/09	1927	2.08	6.31
31	RE03-09-1396	241418007	12/03/09	1938	2.08	6.31
32	RE03-09-1397	241418008	12/03/09	1949	2.08	6.31

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-576

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	RE03-09-1396	241418009	12/03/09	2000	2.08	6.30
02	RE03-09-1396	241418010	12/03/09	2011	2.08	6.30
03	AR166006	WAR091119-60	12/03/09	2023	2.08	6.31
04	PIBLK07	WAR090916-99	12/03/09	2034	2.08	6.30
05	RE03-09-1396	241418011	12/03/09	2045	2.08	6.30
06	RE03-09-1396	241418012	12/03/09	2056	2.08	6.31
07	RE03-09-1396	241418013	12/03/09	2107	2.08	6.31
08	RE03-09-1396	241418014	12/03/09	2118	2.08	6.31
09	RE03-10-3914	241418015	12/03/09	2129	2.08	6.30
10	RE03-10-3913	241418016	12/03/09	2140	2.08	6.31
11	ZZZZZ	ZZZZZ	12/03/09	2151	2.08	6.31
12	ZZZZZ	ZZZZZ	12/03/09	2202	2.08	6.31
13	ZZZZZ	ZZZZZ	12/03/09	2214	2.08	6.30
14	ZZZZZ	ZZZZZ	12/03/09	2225	2.08	6.31
15	AR166007	WAR091119-60	12/03/09	2236	2.08	6.31
16	PIBLK08	WAR090916-99	12/03/09	2247	2.08	6.31
17	ZZZZZ	ZZZZZ	12/03/09	2258	2.08	6.31
18	ZZZZZ	ZZZZZ	12/03/09	2309	2.08	6.31
19	ZZZZZ	ZZZZZ	12/03/09	2320	2.08	6.31
20	ZZZZZ	ZZZZZ	12/03/09	2331	2.08	6.31
21	ZZZZZ	ZZZZZ	12/03/09	2343	2.08	6.31
22	ZZZZZ	ZZZZZ	12/03/09	2354	2.08	6.31
23	ZZZZZ	ZZZZZ	12/04/09	0005	2.08	6.31
24	AR166008	WAR091119-60	12/04/09	0016	2.08	6.30
25	PIBLK09	WAR090916-99	12/04/09	0027	2.08	6.31
26						
27						
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10-576 **Client ID:** LCS for batch 926728

Lab Sample ID: 1201981413

Data File: 052f5201.d **Data File:** 052b5201.d

Inst: ECD2A.I_1 **Inst:** ECD2A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 03-DEC-09 17:36 **Analyzed:** 03-DEC-09 17:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							2.37
Column 1	1	2.28	2.25 – 2.31	32.1		ug/kg	
	2	2.6	2.57 – 2.63	30.6		ug/kg	
	3	2.69	2.66 – 2.72	30.4		ug/kg	
	4	2.83	2.8 – 2.86	30.4		ug/kg	
	5	2.98	2.95 – 3.01	30.8		ug/kg	
					30.9		
Column 2	1	2.75	2.72 – 2.78	31.3		ug/kg	
	2	3.19	3.15 – 3.21	31.5		ug/kg	
	3	3.34	3.3 – 3.36	31.7		ug/kg	
	4	3.37	3.33 – 3.39	31		ug/kg	
	5	3.52	3.49 – 3.55	32.4		ug/kg	
					31.6		
Aroclor-1260							1.56
Column 1	1	4.02	3.99 – 4.05	33.3		ug/kg	
	2	4.29	4.26 – 4.32	32.9		ug/kg	
	3	4.46	4.42 – 4.48	33.1		ug/kg	
	4	4.67	4.64 – 4.7	33.4		ug/kg	
	5	4.86	4.83 – 4.89	33.1		ug/kg	
					33.2		
Column 2	1	4.42	4.39 – 4.45	34.3		ug/kg	
	2	4.57	4.54 – 4.6	34.1		ug/kg	
	3	4.68	4.65 – 4.71	33.8		ug/kg	
	4	4.88	4.85 – 4.91	32.7		ug/kg	
	5	5.51	5.47 – 5.53	33.4		ug/kg	
					33.7		

Identification Summary

SDG Number: 10–576 **Client ID:** RE03–09–13958

Lab Sample ID: 241418004

Data File:	060f6001.d	**Data File:**	060b6001.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 19:05	**Analyzed:**	03–DEC–09 19:05

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							3.7
Column 1	1	3.25	3.22 – 3.28	2.46		ug/kg	
	2	3.43	3.4 – 3.46	1.44		ug/kg	
	3	3.7	3.67 – 3.73	1.66		ug/kg	
	4	3.89	3.86 – 3.92	1.52		ug/kg	
	5	4.02	3.99 – 4.05	1.76		ug/kg	
					1.77		
Column 2	1	3.82	3.79 – 3.85	1.86		ug/kg	
	2	3.96	3.93 – 3.99	2.23		ug/kg	
	3	4.2	4.17 – 4.23	1.58		ug/kg	
	4	4.28	4.25 – 4.31	1.41		ug/kg	
	5	4.45	4.41 – 4.47	1.46		ug/kg	
					1.71		

Identification Summary

SDG Number: 10–576 **Client ID:** RE03–09–13959MS

Lab Sample ID: 1201981411

Data File: 058f5801.d **Data File:** 058b5801.d

Inst: ECD2A.I_1 **Inst:** ECD2A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 03–DEC–09 18:42 **Analyzed:** 03–DEC–09 18:42

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							.456
Column 1	1	2.28	2.25 – 2.31	35.5		ug/kg	
	2	2.6	2.57 – 2.63	36.7		ug/kg	
	3	2.69	2.66 – 2.72	36.8		ug/kg	
	4	2.83	2.8 – 2.86	36.4		ug/kg	
	5	2.98	2.95 – 3.01	40		ug/kg	
					37.1		
Column 2	1	2.75	2.72 – 2.78	36.4		ug/kg	
	2	3.18	3.15 – 3.21	37.4		ug/kg	
	3	3.34	3.3 – 3.36	38		ug/kg	
	4	3.36	3.33 – 3.39	35.8		ug/kg	
	5	3.52	3.49 – 3.55	38.6		ug/kg	
					37.3		
Aroclor–1260							3.44
Column 1	1	4.02	3.99 – 4.05	40.5		ug/kg	
	2	4.29	4.26 – 4.32	39.3		ug/kg	
	3	4.45	4.42 – 4.48	40.8		ug/kg	
	4	4.67	4.64 – 4.7	36		ug/kg	
	5	4.86	4.83 – 4.89	39.7		ug/kg	
					39.3		
Column 2	1	4.42	4.39 – 4.45	41.2		ug/kg	
	2	4.57	4.54 – 4.6	41.9		ug/kg	
	3	4.68	4.65 – 4.71	41.4		ug/kg	
	4	4.88	4.85 – 4.91	39.2		ug/kg	
	5	5.5	5.47 – 5.53	39.5		ug/kg	
					40.6		

Identification Summary

SDG Number: 10–576 **Client ID:** RE03–09–13959MSD

Lab Sample ID: 1201981412

Data File:	059f5901.d	**Data File:**	059b5901.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 18:54	**Analyzed:**	03–DEC–09 18:54

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							6.58
Column 1	1	2.28	2.25 – 2.31	32.8		ug/kg	
	2	2.6	2.57 – 2.63	34.1		ug/kg	
	3	2.69	2.66 – 2.72	33.7		ug/kg	
	4	2.83	2.8 – 2.86	32.9		ug/kg	
	5	2.98	2.95 – 3.01	34.6		ug/kg	
					33.6		
Column 2	1	2.75	2.72 – 2.78	34.1		ug/kg	
	2	3.19	3.15 – 3.21	36.6		ug/kg	
	3	3.34	3.3 – 3.36	37.1		ug/kg	
	4	3.36	3.33 – 3.39	34.2		ug/kg	
	5	3.52	3.49 – 3.55	37.3		ug/kg	
					35.9		
Aroclor–1260							2.7
Column 1	1	4.02	3.99 – 4.05	37.5		ug/kg	
	2	4.29	4.26 – 4.32	36.3		ug/kg	
	3	4.46	4.42 – 4.48	39.9		ug/kg	
	4	4.67	4.64 – 4.7	30.9		ug/kg	
	5	4.86	4.83 – 4.89	36.6		ug/kg	
					36.2		
Column 2	1	4.42	4.39 – 4.45	37.7		ug/kg	
	2	4.57	4.54 – 4.6	38.8		ug/kg	
	3	4.68	4.65 – 4.71	38.3		ug/kg	
	4	4.88	4.85 – 4.91	35.6		ug/kg	
	5	5.51	5.47 – 5.53	35.7		ug/kg	
					37.2		

Identification Summary

SDG Number: 10-576 **Client ID:** RE03-09-13962

Lab Sample ID: 241418007

Data File:	063f6301.d	**Data File:**	063b6301.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03-DEC-09 19:38	**Analyzed:**	03-DEC-09 19:38

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							27.5
Column 1	1	3.23	3.22 – 3.28	6.77		ug/kg	
	2	3.43	3.4 – 3.46	2.11		ug/kg	
	3	3.7	3.67 – 3.73	3.17		ug/kg	
	4	3.89	3.86 – 3.92	4.67		ug/kg	
	5	4.02	3.99 – 4.05	9.17		ug/kg	
					5.18		
Column 2	1	3.82	3.79 – 3.85	1.43		ug/kg	
	2	3.97	3.93 – 3.99	3.92		ug/kg	
	3	4.2	4.17 – 4.23	5.01		ug/kg	
	4	4.28	4.25 – 4.31	3.7		ug/kg	
	5	4.45	4.41 – 4.47	5.58		ug/kg	
					3.93		
Aroclor-1260							21.5
Column 1	1	4.02	3.99 – 4.05	6.22		ug/kg	
	2	4.29	4.26 – 4.32	2.51		ug/kg	
	3	4.46	4.42 – 4.48	16.4		ug/kg	
	4	4.67	4.64 – 4.7	1.53		ug/kg	
	5	4.86	4.83 – 4.89	3.98		ug/kg	
					6.12		
Column 2	1	4.42	4.39 – 4.45	4.78		ug/kg	
	2	4.57	4.54 – 4.6	6.83		ug/kg	
	3	4.68	4.65 – 4.71	6.62		ug/kg	
	4	4.88	4.85 – 4.91	3.73		ug/kg	
	5	5.51	5.47 – 5.53	2.71		ug/kg	
					4.93		

Identification Summary

SDG Number: 10–576 **Client ID:** RE03–09–13964

Lab Sample ID: 241418011

Data File:	069f6901.d	**Data File:**	069b6901.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 20:45	**Analyzed:**	03–DEC–09 20:45

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							31
Column 1	1	4.02	3.99 – 4.05	2.06		ug/kg	
	2	4.29	4.26 – 4.32	2.04		ug/kg	
	3	4.46	4.42 – 4.48	3.14		ug/kg	
	4	4.67	4.64 – 4.7	1.22		ug/kg	
	5	4.86	4.83 – 4.89	2.33		ug/kg	
					2.16		
Column 2	1	4.42	4.39 – 4.45	.973		ug/kg	
	2	4.57	4.54 – 4.6	2.17		ug/kg	
	3	4.68	4.65 – 4.71	1.31		ug/kg	
	4	4.88	4.85 – 4.91	1.75		ug/kg	
	5	5.5	5.47 – 5.53	1.69		ug/kg	
					1.58		

Identification Summary

SDG Number: 10–576 **Client ID:** RE03–09–13965

Lab Sample ID: 241418005

Data File:	061f6101.d	**Data File:**	061b6101.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 19:16	**Analyzed:**	03–DEC–09 19:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							28.2
Column 1	1	4.02	3.99 – 4.05	2.83		ug/kg	
	2	4.29	4.26 – 4.32	2.2		ug/kg	
	3	4.46	4.42 – 4.48	4.8		ug/kg	
	4	4.67	4.64 – 4.7	1.35		ug/kg	
	5	4.86	4.83 – 4.89	2.71		ug/kg	
					2.78		
Column 2	1	4.42	4.39 – 4.45	1.61		ug/kg	
	2	4.57	4.54 – 4.6	2.79		ug/kg	
	3	4.68	4.65 – 4.71	1.99		ug/kg	
	4	4.88	4.85 – 4.91	2.08		ug/kg	
	5	5.51	5.47 – 5.53	1.99		ug/kg	
					2.09		

Identification Summary

SDG Number: 10–576 **Client ID:** RE03–09–13966

Lab Sample ID: 241418012

Data File:	070f7001.d	**Data File:**	070b7001.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 20:56	**Analyzed:**	03–DEC–09 20:56

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							41.5
Column 1	1	3.23	3.22 – 3.28	4.71		ug/kg	
	2	3.43	3.4 – 3.46	1.85		ug/kg	
	3	3.7	3.67 – 3.73	1.36		ug/kg	
	4	3.89	3.86 – 3.92	1.9		ug/kg	
	5	4.02	3.99 – 4.05	4.73		ug/kg	
					2.91		
Column 2	1	3.82	3.79 – 3.85	1.64		ug/kg	
	2	3.96	3.93 – 3.99	2.46		ug/kg	
	3	4.2	4.17 – 4.23	1.94		ug/kg	
	4	4.28	4.25 – 4.31	1.4		ug/kg	
	5	4.44	4.41 – 4.47	2.1		ug/kg	
					1.91		
Aroclor–1260							51.1
Column 1	1	4.02	3.99 – 4.05	3.21		ug/kg	
	2	4.29	4.26 – 4.32	1.59		ug/kg	
	3	4.46	4.42 – 4.48	11.4		ug/kg	
	4	4.67	4.64 – 4.7	.918		ug/kg	
	5	4.86	4.83 – 4.89	2.52		ug/kg	
					3.92		
Column 2	1	4.42	4.39 – 4.45	2.21		ug/kg	
	2	4.57	4.54 – 4.6	3.15		ug/kg	
	3	4.68	4.65 – 4.71	2.61		ug/kg	
	4	4.88	4.85 – 4.91	2.03		ug/kg	
	5	5.5	5.47 – 5.53	1.61		ug/kg	
					2.32		

Identification Summary

SDG Number: 10–576

Client ID: RE03–09–13970

Lab Sample ID: 241418006

Data File:	062f6201.d	Data File:	062b6201.d
Inst:	ECD2A.I_1	Inst:	ECD2A.I_2
Column:	CLP1	Column:	CLP2
Analyzed:	03–DEC–09 19:27	Analyzed:	03–DEC–09 19:27

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							57.6
Column 1	1	3.25	3.22 – 3.28	2.15		ug/kg	
	2	3.43	3.4 – 3.46	2.83		ug/kg	
	3	3.7	3.67 – 3.73	1.73		ug/kg	
	4	3.89	3.86 – 3.92	2.82		ug/kg	
	5	4.02	3.99 – 4.05	4.35		ug/kg	
					2.78		
Column 2	1	3.82	3.79 – 3.85	1.32		ug/kg	
	2	3.96	3.93 – 3.99	2.01		ug/kg	
	3	4.2	4.17 – 4.23	1.2		ug/kg	
	4	4.28	4.25 – 4.31	1.19		ug/kg	
	5	4.44	4.41 – 4.47	1.95		ug/kg	
					1.53		
Aroclor–1260							23.3
Column 1	1	4.02	3.99 – 4.05	2.95		ug/kg	
	2	4.29	4.26 – 4.32	.927		ug/kg	
	3	4.46	4.42 – 4.48	1.11		ug/kg	
	4	4.67	4.64 – 4.7	.81		ug/kg	
	5	4.86	4.83 – 4.89	1.36		ug/kg	
					1.43		
Column 2	1	4.42	4.39 – 4.45	1.81		ug/kg	
	2	4.57	4.54 – 4.6	2.6		ug/kg	
	3	4.68	4.65 – 4.71	3.15		ug/kg	
	4	4.88	4.85 – 4.91	.718		ug/kg	
	5	5.51	5.47 – 5.53	.763		ug/kg	
					1.81		

Identification Summary

SDG Number: 10–576 **Client ID:** RE03–10–3914

Lab Sample ID: 241418015

Data File:	073f7301.d	**Data File:**	073b7301.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 21:29	**Analyzed:**	03–DEC–09 21:29

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							40.8
Column 1	1	3.25	3.22 – 3.28	3.9		ug/kg	
	2	3.43	3.4 – 3.46	2.06		ug/kg	
	3	3.7	3.67 – 3.73	2.28		ug/kg	
	4	3.89	3.86 – 3.92	2.68		ug/kg	
	5	4.02	3.99 – 4.05	7.58		ug/kg	
					3.7		
Column 2	1	3.82	3.79 – 3.85	2.29		ug/kg	
	2	3.96	3.93 – 3.99	2.96		ug/kg	
	3	4.2	4.17 – 4.23	2.48		ug/kg	
	4	4.28	4.25 – 4.31	2.12		ug/kg	
	5	4.44	4.41 – 4.47	2.38		ug/kg	
					2.45		
Aroclor–1260							20
Column 1	1	4.02	3.99 – 4.05	5.15		ug/kg	
	2	4.29	4.26 – 4.32	4.36		ug/kg	
	3	4.46	4.42 – 4.48	6.93		ug/kg	
	4	4.67	4.64 – 4.7	2.77		ug/kg	
	5	4.86	4.83 – 4.89	4.86		ug/kg	
					4.81		
Column 2	1	4.42	4.39 – 4.45	3.05		ug/kg	
	2	4.57	4.54 – 4.6	4.9		ug/kg	
	3	4.68	4.65 – 4.71	3.96		ug/kg	
	4	4.88	4.85 – 4.91	3.99		ug/kg	
	5	5.5	5.47 – 5.53	3.79		ug/kg	
					3.94		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981410**				
Client Sample:	**QC for batch 926728**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926728**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:25**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**051f5101-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	051b5101-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/051f5101.d
Lab Smp Id: 1201981410 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 17:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981410|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 51 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10836896	187.778	6.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	8102321	147.774	4.9	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/051f5101.d

Date : 03-DEC-2009 17:25

Client ID: PBLK01

Sample Info: |120198141011|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

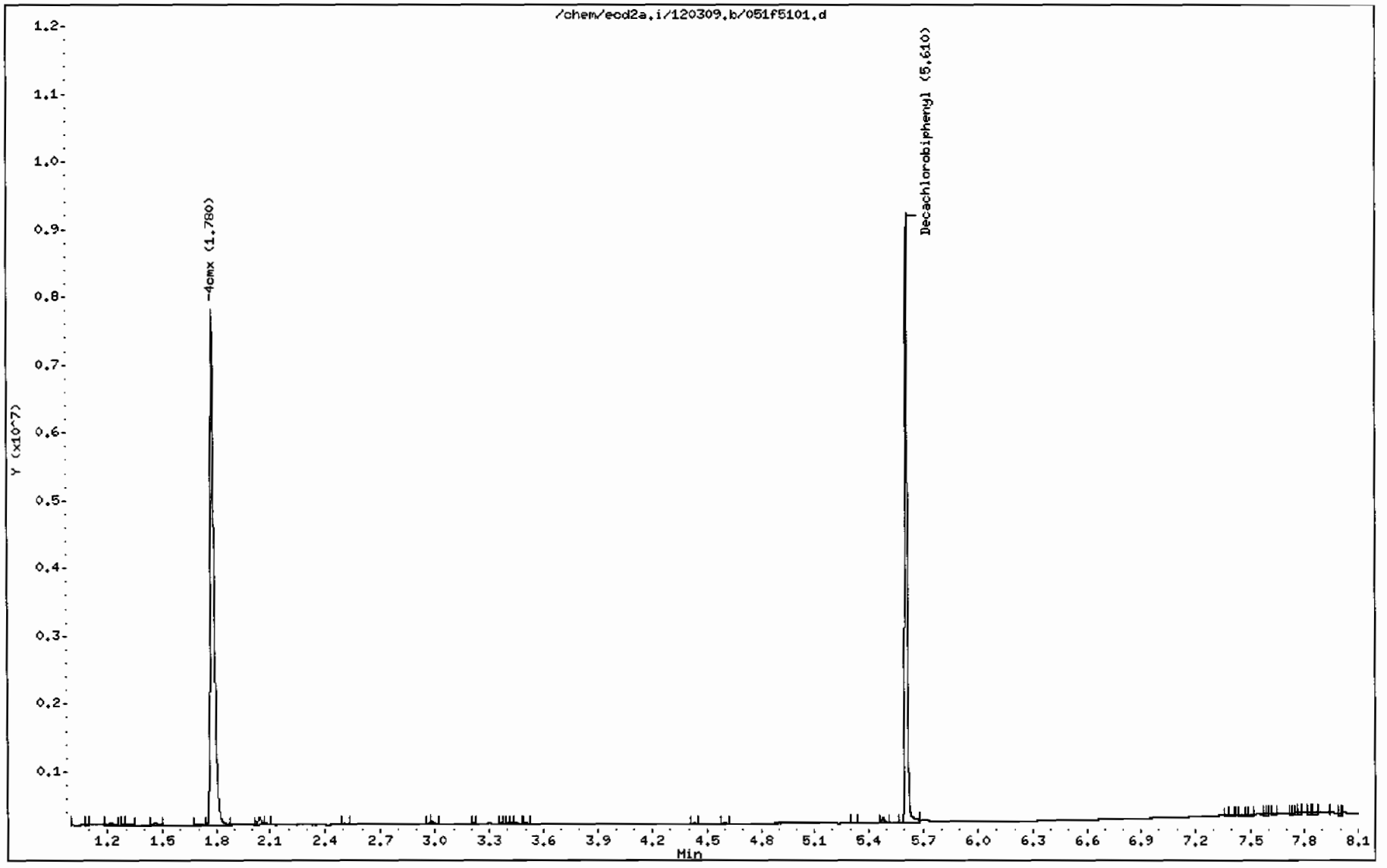

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/051b5101.d
Lab Smp Id: 1201981410 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 17:25
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981410|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 51 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.075	0.001	23746407	200.901	6.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	16767718	154.340	5.1	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120309.b/051b5101.d

Date : 03-DEC-2009 17:25

Client ID: PBLK01

Sample Info: |1201981410|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

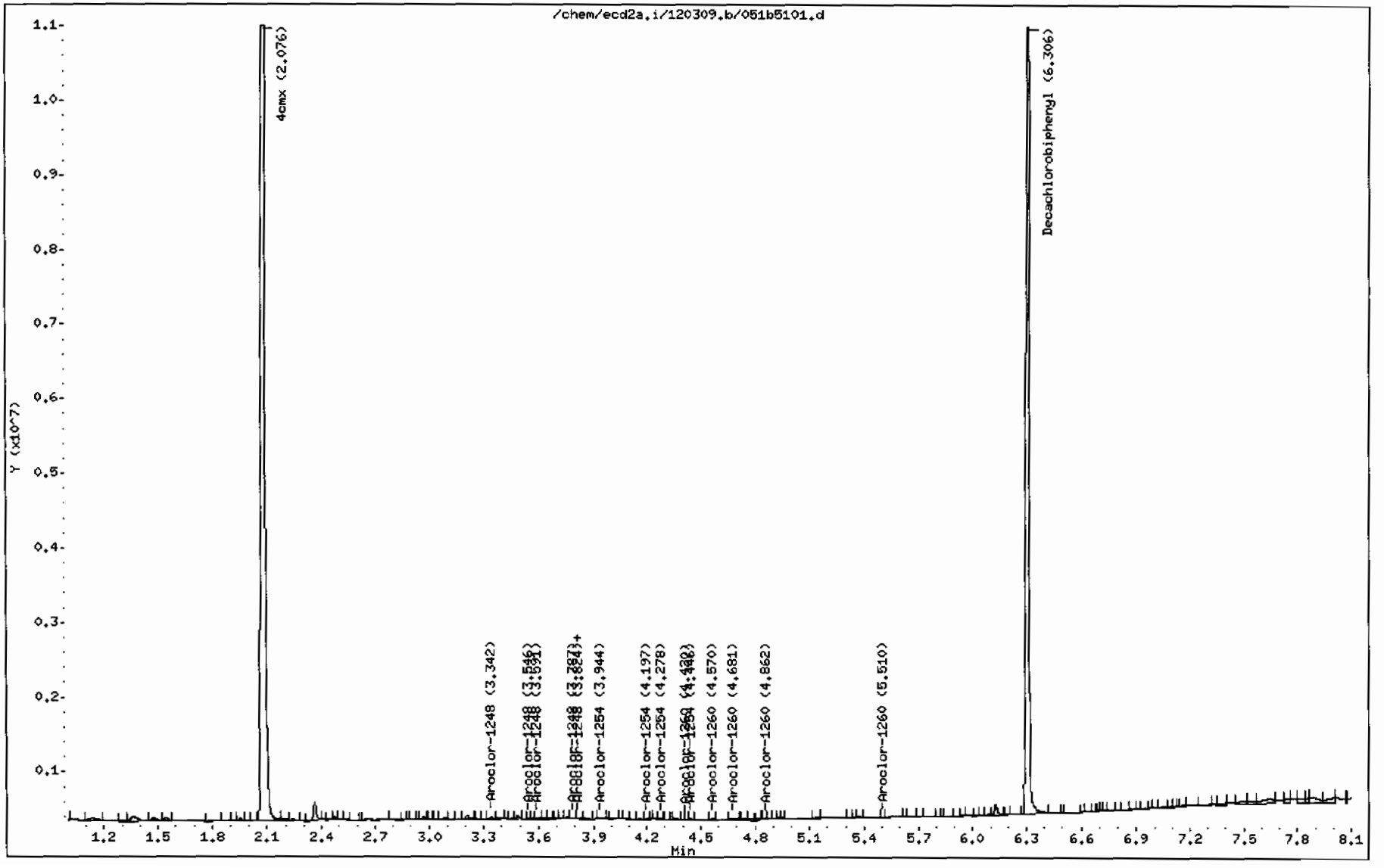

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–576**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981413**				
Client Sample:	**QC for batch 926728**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926728**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**926729**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:36**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 21:14**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**052f5201–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	052b5201–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		31.6	ug/kg	1.11	3.33	2
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		33.7	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/052f5201.d
Lab Smp Id: 1201981413 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 17:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981413|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.779	0.002	11046764	191.414	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	8822798	160.914	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	2020219	962.099	32.1	80.00- 120.00	100.00(M)
2.603	2.601	0.002	4137433	918.508	30.6	191.91- 231.91	204.80
2.694	2.692	0.002	1661377	912.739	30.4	65.28- 105.28	82.24
2.829	2.827	0.002	849541	910.662	30.4	23.06- 63.06	42.05
2.980	2.978	0.002	1274883	925.085	30.8	41.11- 81.11	81.15

Average of Peak Concentrations = 30.9

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.016	0.003	4068365	1000.39	33.3	80.00- 120.00	100.00
4.289	4.288	0.001	2494673	986.693	32.9	40.91- 80.91	61.32
4.455	4.454	0.001	2563289	992.291	33.1	42.71- 82.71	63.01
4.668	4.665	0.003	6048225	1002.01	33.4	125.86- 165.86	148.66
4.857	4.855	0.002	2892043	993.165	33.1	49.52- 89.52	71.09
Average of Peak Concentrations =					33.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/052f5201.d

Date : 03-DEC-2009 17:36

Client ID: PBLK01LCS

Sample Info: |1201981413|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

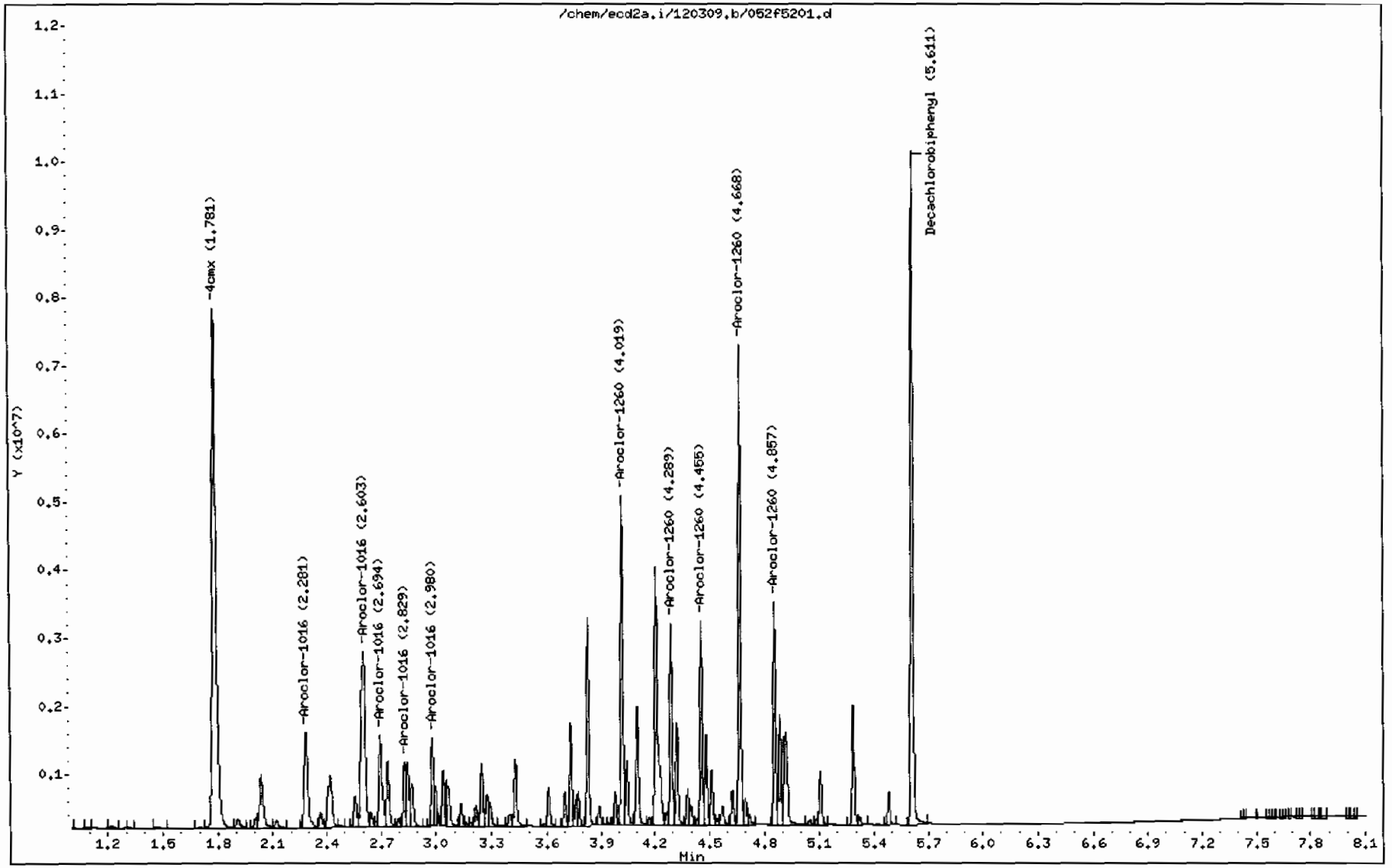

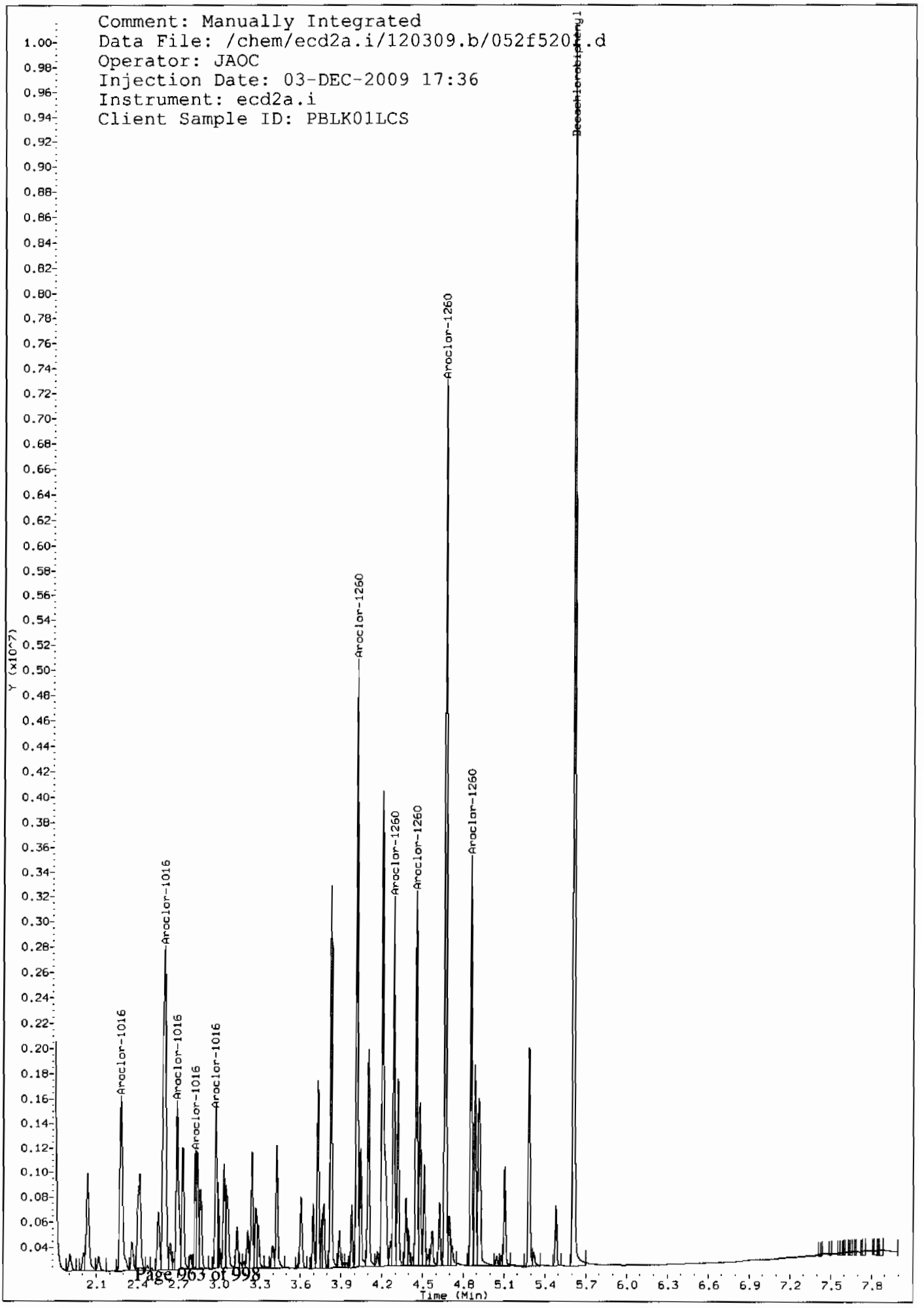
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/052f5204.d
Operator: JAOC
Injection Date: 03-DEC-2009 17:36
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
Time (Min)

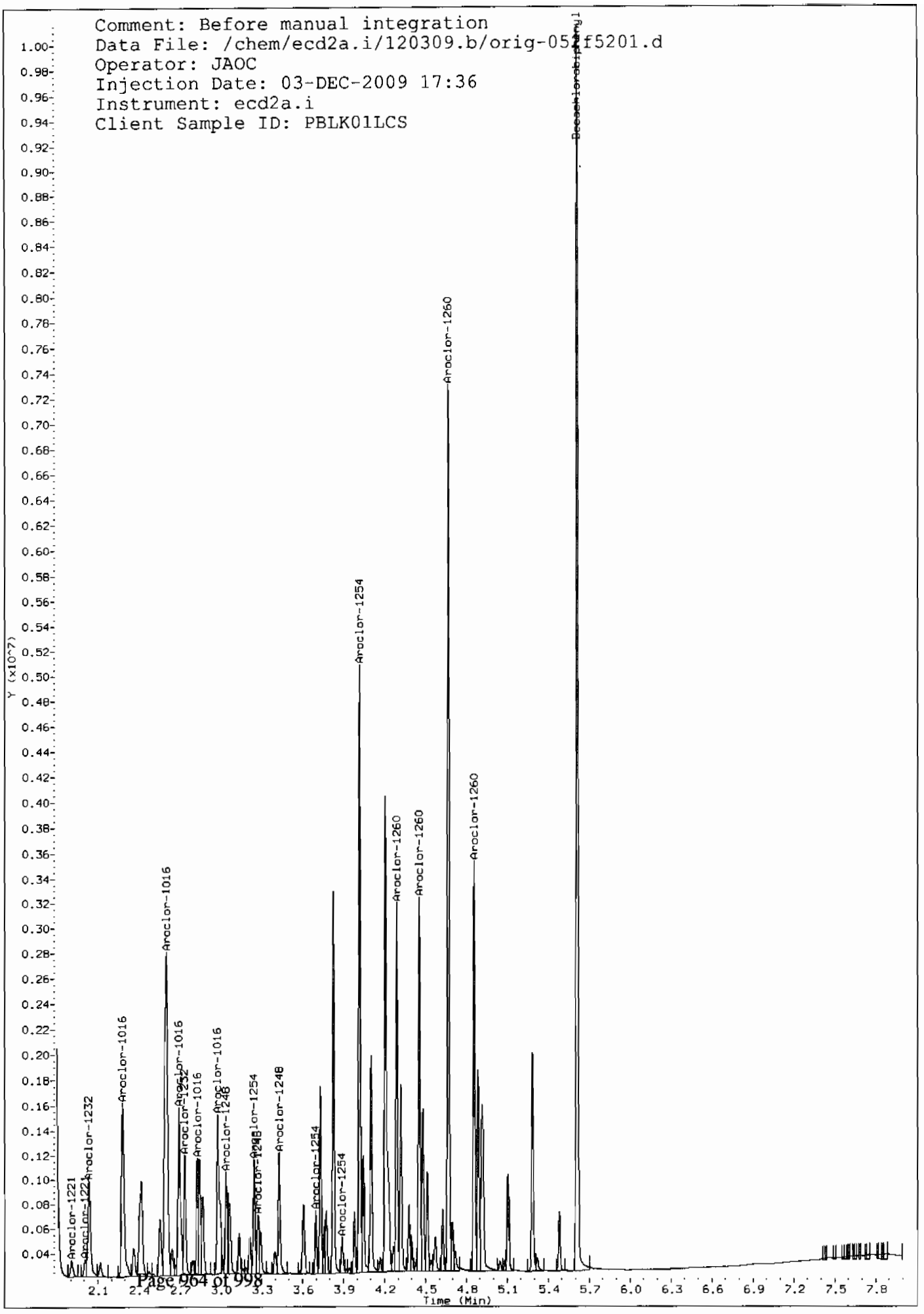
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-05f5201.d
Operator: JAOC
Injection Date: 03-DEC-2009 17:36
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1248
Aroclor-1232
Aroclor-1221
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/052b5201.d
Lab Smp Id: 1201981413 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 17:36
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981413|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	24233942	205.025	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17883484	164.610	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.753	2.750	0.003	4003522	940.224	31.3	80.00- 120.00	100.00
3.186	3.185	0.001	3259724	946.306	31.5	61.21- 101.21	81.42
3.337	3.335	0.002	1882499	951.004	31.7	26.96- 66.96	47.02
3.365	3.364	0.001	1920231	931.584	31.0	28.74- 68.74	47.96
3.524	3.521	0.003	2673806	970.821	32.4	46.95- 86.95	66.79
Average of Peak Concentrations =					31.6		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5678453	1030.08	34.3	80.00- 120.00	100.00
4.570	4.569	0.001	7303724	1024.08	34.1	107.13- 147.13	128.62
4.682	4.680	0.002	4796067	1013.68	33.8	64.21- 104.21	84.46
4.879	4.878	0.001	5693991	981.611	32.7	80.11- 120.11	100.27
5.505	5.504	0.001	9072806	1003.55	33.4	135.13- 175.13	159.78
Average of Peak Concentrations =					33.7		

Data File: /chem/ecd2a.i/120309.b/052b5201.d
Date : 03-DEC-2009 17:36
Client ID: PBLK01LCS
Sample Info: |1201981413|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Page 1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

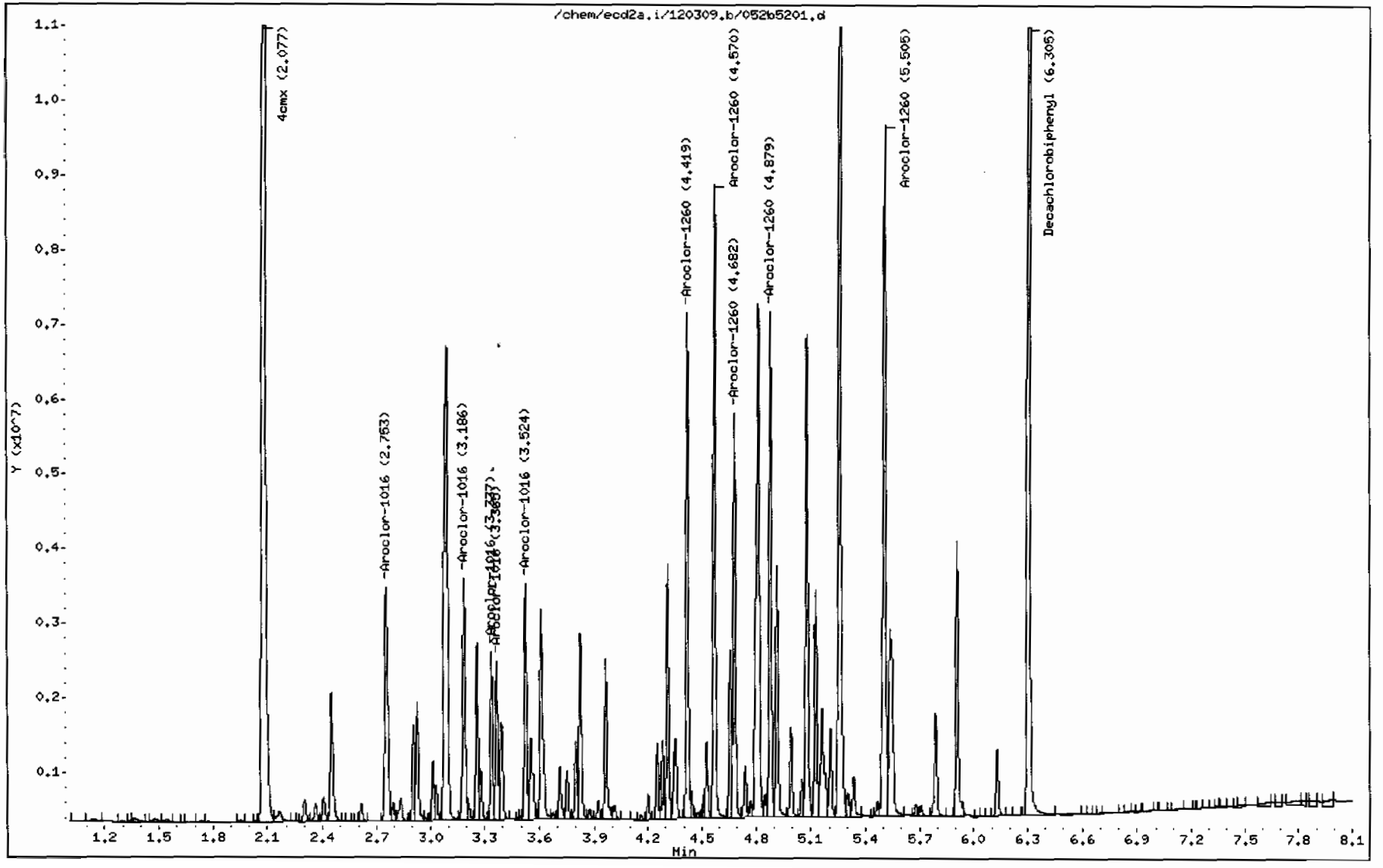

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981411	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
Client Sample:	QC for batch 926728	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–13959MS	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 18:42	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	058f5801.d	**Column:**	1 CLP1	**Level:**	LOW
	058b5801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		37.1	ug/kg	1.34	4.03	1
11104–28–2	Aroclor–1221	U	4.03	ug/kg	1.34	4.03	1
11141–16–5	Aroclor–1232	U	4.03	ug/kg	1.34	4.03	1
53469–21–9	Aroclor–1242	U	4.03	ug/kg	1.34	4.03	1
12672–29–6	Aroclor–1248	U	4.03	ug/kg	1.34	4.03	1
11097–69–1	Aroclor–1254	U	4.03	ug/kg	1.34	4.03	1
11096–82–5	Aroclor–1260		39.3	ug/kg	1.34	4.03	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/058f5801.d
Lab Smp Id: 1201981411 Client Smp ID: RE03-09-13959MS
Inj Date : 03-DEC-2009 18:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981411|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 58 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	10377798	179.823	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	7838476	142.962	5.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.280	0.001	1851046	881.533	35.5	80.00- 120.00	100.00(M)
2.602	2.601	0.001	4107570	911.879	36.7	191.91- 231.91	211.49
2.693	2.692	0.001	1661339	912.718	36.8	65.28- 105.28	85.54
2.828	2.827	0.001	842546	903.164	36.4	23.06- 63.06	43.38
2.980	2.978	0.002	1367720	992.450	40.0	41.11- 81.11	92.19
Average of Peak Concentrations =					37.1		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.016	0.001	4090607	1005.86	40.5	80.00- 120.00	100.00
4.289	4.288	0.001	2464320	974.688	39.3	40.91- 80.91	60.24
4.454	4.454	0.000	2615893	1012.66	40.8	42.71- 82.71	63.95
4.667	4.665	0.002	5388781	892.758	36.0	125.86- 165.86	131.74
4.856	4.855	0.001	2869499	985.423	39.7	49.52- 89.52	70.15
			Average of Peak Concentrations =		39.3		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/058f5801.d

Date : 03-DEC-2009 18:42

Client ID: RE03-09-13959MS

Sample Info: |120198141111|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

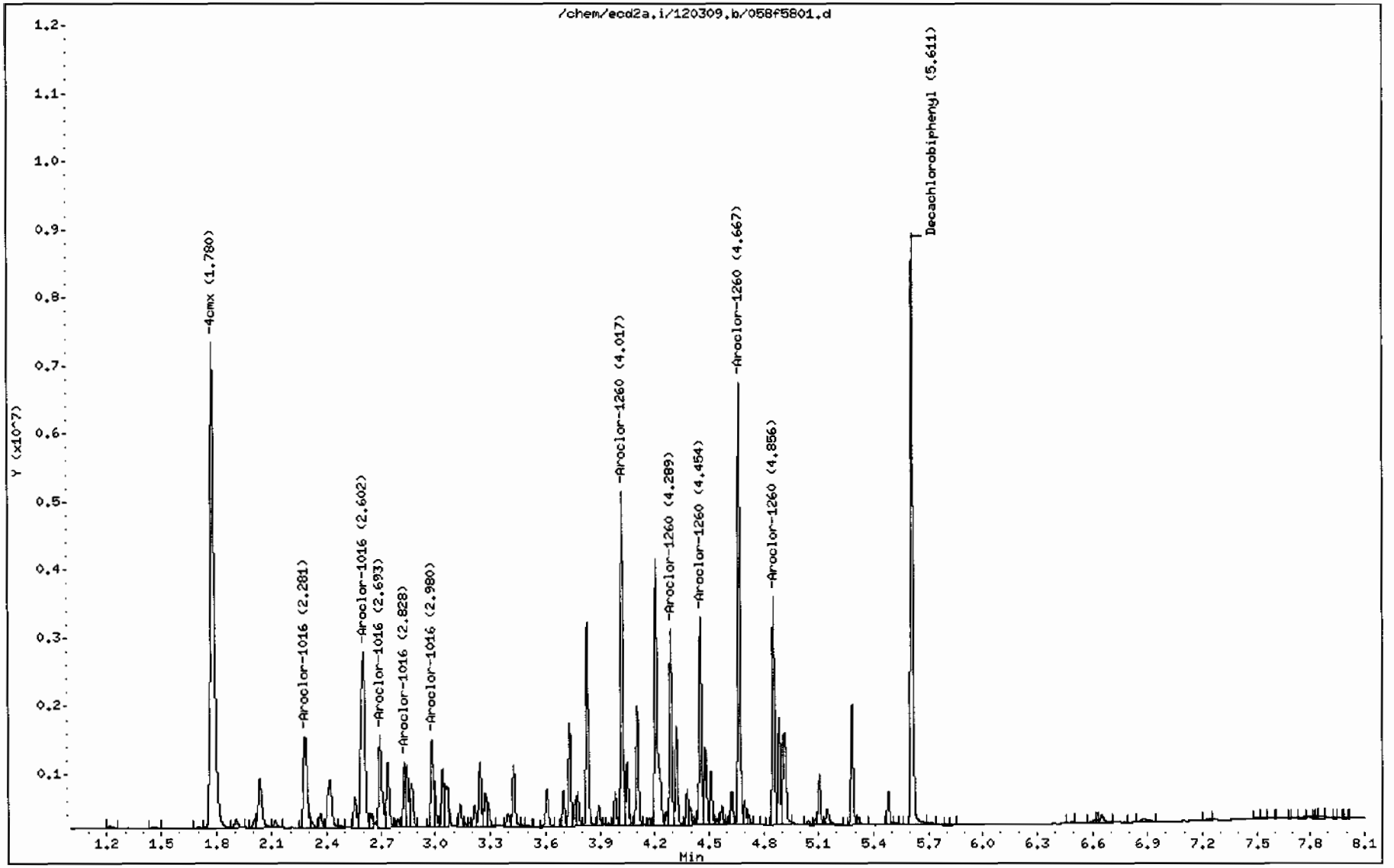

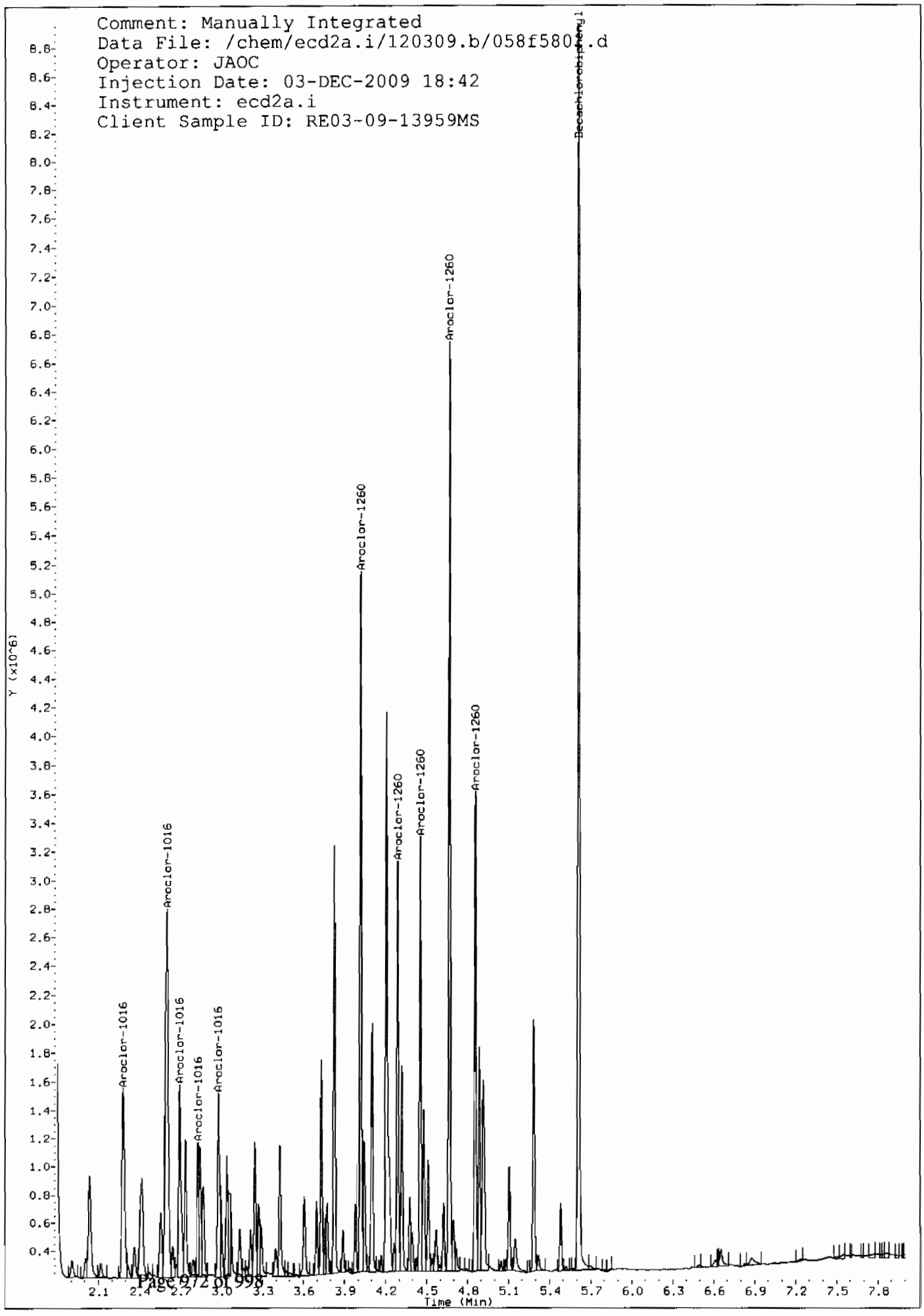
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/058f5807.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:42
Instrument: ecd2a.i
Client Sample ID: RE03-09-13959MS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

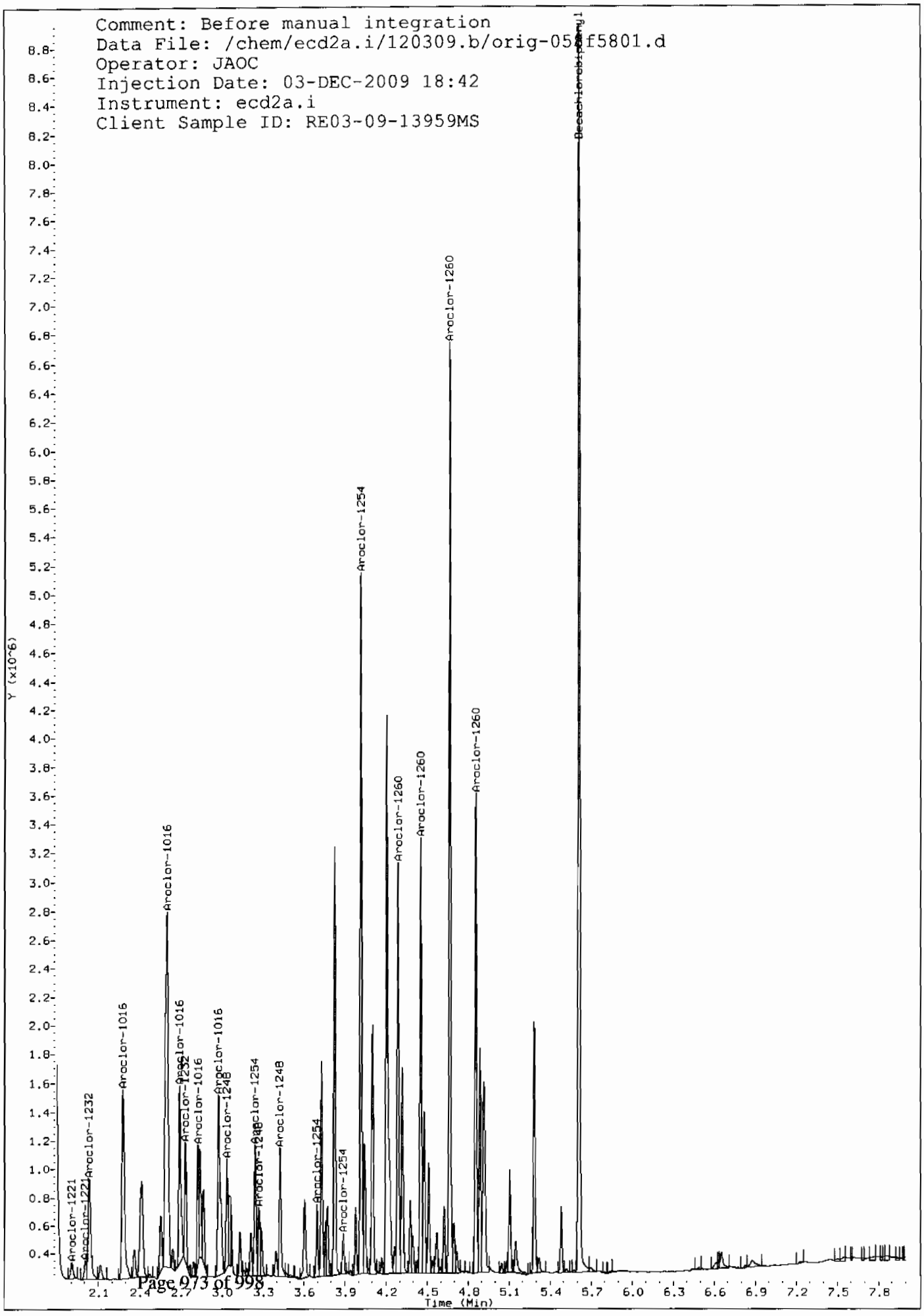
Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-05f5801.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:42
Instrument: ecd2a.i
Client Sample ID: RE03-09-13959MS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1221
Aroclor-1221
Aroclor-1232
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/058b5801.d
Lab Smp Id: 1201981411 Client Smp ID: RE03-09-13959MS
Inj Date : 03-DEC-2009 18:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981411|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 58 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	22668773	191.783	7.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	17899895	164.761	6.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3846513	903.351	36.4	80.00- 120.00	100.00
3.185	3.185	0.000	3201334	929.356	37.4	61.21- 101.21	83.23
3.336	3.335	0.001	1865837	942.586	38.0	26.96- 66.96	48.51
3.364	3.364	0.000	1833001	889.266	35.8	28.74- 68.74	47.65
3.522	3.521	0.001	2639029	958.194	38.6	46.95- 86.95	68.61

Average of Peak Concentrations = 37.2

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.418	0.000	5631456	1021.55	41.2	80.00- 120.00	100.00
4.570	4.569	0.001	7415776	1039.79	41.9	107.13- 147.13	131.68
4.682	4.680	0.002	4859421	1027.07	41.4	64.21- 104.21	86.29
4.879	4.878	0.001	5641638	972.586	39.2	80.11- 120.11	100.18
5.505	5.504	0.001	8865808	980.657	39.5	135.13- 175.13	157.43

Average of Peak Concentrations = 40.6

Data File: /chem/ecd2a.i/120309.b/058b5801.d

Date : 03-DEC-2009 18:42

Client ID: RE03-09-13959MS

Sample Info: |120198141111|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

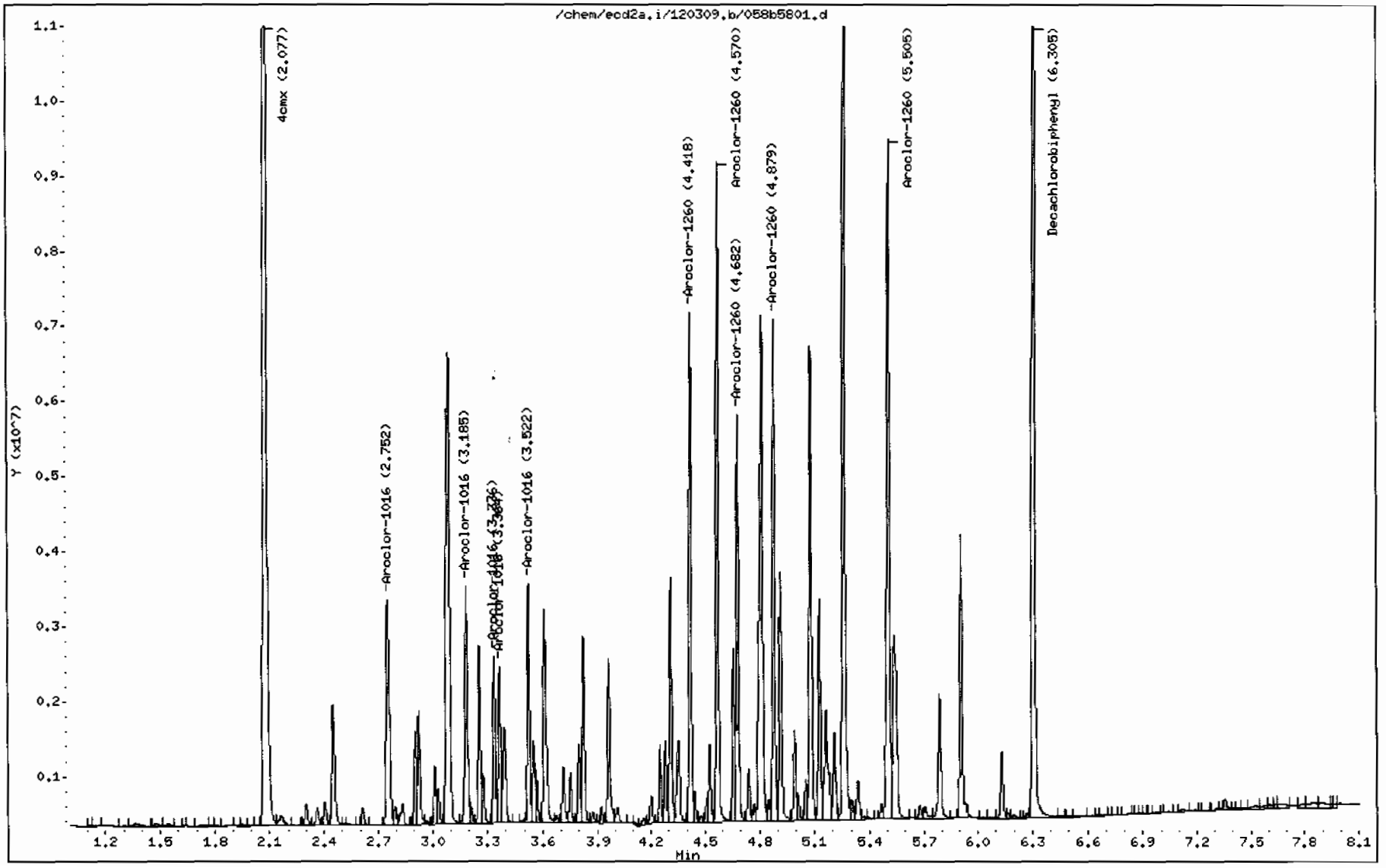

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-576	**Date Collected:**	11/17/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981412	**Date Received:**	11/19/2009 08:45	**%Moisture:**	17.7
Client Sample:	QC for batch 926728	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13959MSD	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926729	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/03/2009 18:54	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 21:14	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	059f5901.d	**Column:**	1 CLP1	**Level:**	LOW
	059b5901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		33.6	ug/kg	1.35	4.04	1
11104-28-2	Aroclor-1221	U	4.04	ug/kg	1.35	4.04	1
11141-16-5	Aroclor-1232	U	4.04	ug/kg	1.35	4.04	1
53469-21-9	Aroclor-1242	U	4.04	ug/kg	1.35	4.04	1
12672-29-6	Aroclor-1248	U	4.04	ug/kg	1.35	4.04	1
11097-69-1	Aroclor-1254	U	4.04	ug/kg	1.35	4.04	1
11096-82-5	Aroclor-1260		36.2	ug/kg	1.35	4.04	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/059f5901.d
Lab Smp Id: 1201981412 Client Smp ID: RE03-09-13959MSD
Inj Date : 03-DEC-2009 18:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981412|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 09:19 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 59 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.779	0.001	9780999	169.482	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6799121	124.005	5.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.280	0.002	1700945	810.049	32.8	80.00- 120.00	100.00(M)
2.604	2.601	0.003	3792957	842.035	34.0	191.91- 231.91	216.09
2.695	2.692	0.003	1515325	832.500	33.7	65.28- 105.28	86.33
2.830	2.827	0.003	758013	812.549	32.8	23.06- 63.06	43.19
2.980	2.978	0.002	1180025	856.254	34.6	41.11- 81.11	92.67
Average of Peak Concentrations =					33.6		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.016	0.003	3774236	928.062	37.5	80.00- 120.00	100.00
4.290	4.288	0.002	2266393	896.404	36.2	40.91- 80.91	60.05
4.455	4.454	0.001	2549369	986.903	39.9	42.71- 82.71	67.55
4.668	4.665	0.003	4606247	763.116	30.8	125.86- 165.86	122.04
4.857	4.855	0.002	2633534	904.389	36.6	49.52- 89.52	69.78
Average of Peak Concentrations =					36.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120309.b/059f5901.d
Date : 03-DEC-2009 18:54
Client ID: RE03-09-13959MSD
Sample Info: |1201981412|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

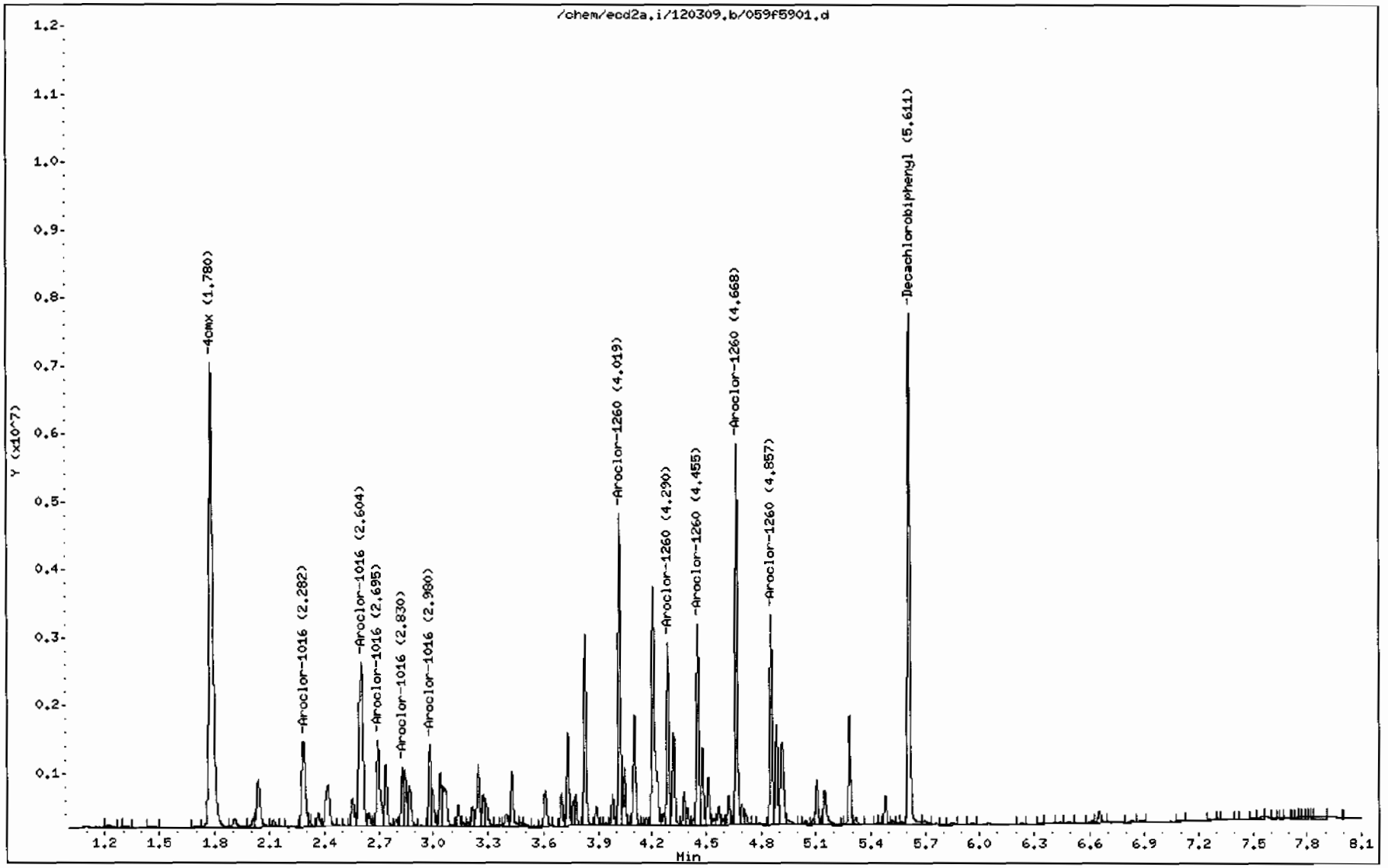

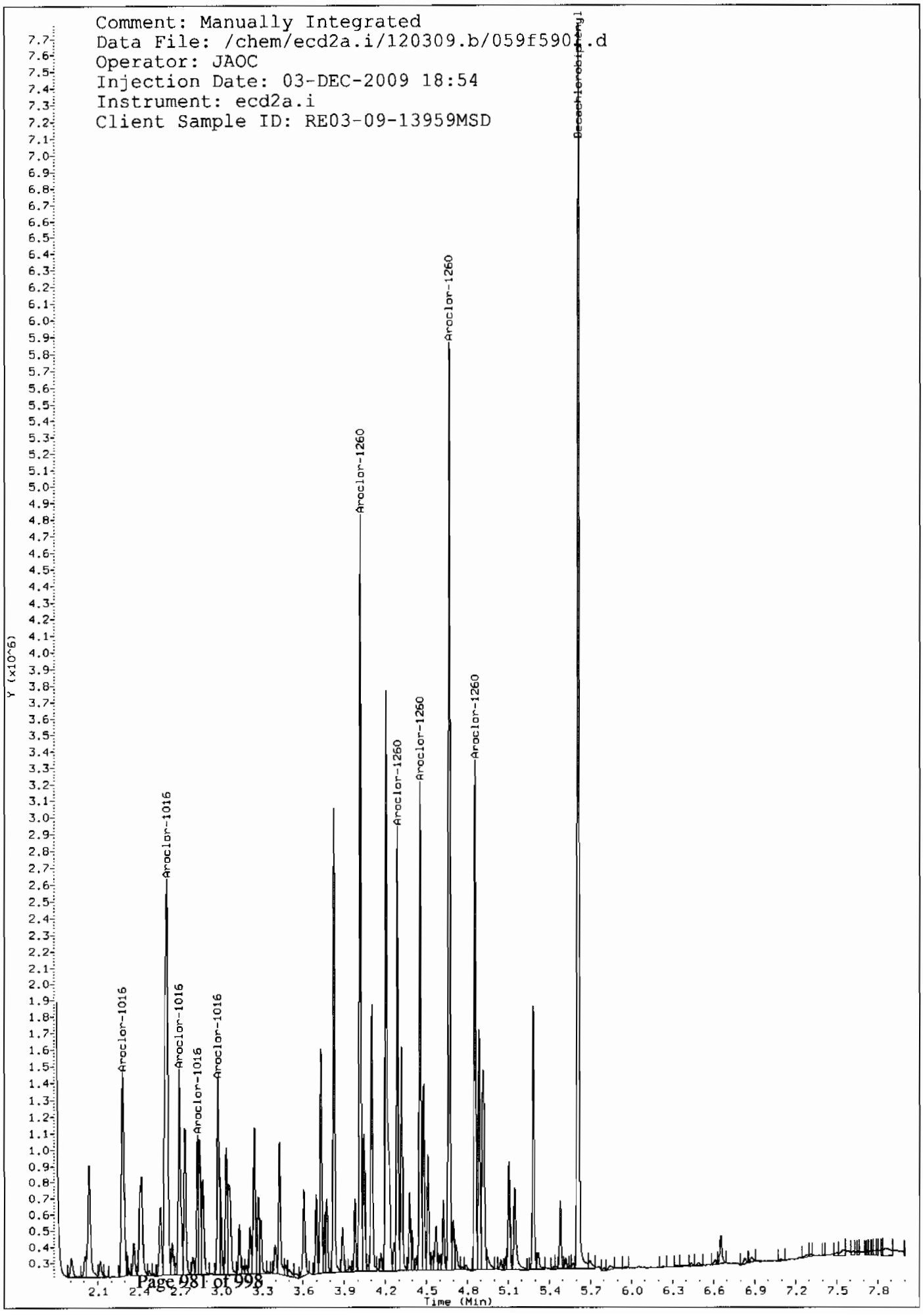
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120309.b/059f5904.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:54
Instrument: ecd2a.i
Client Sample ID: RE03-09-13959MSD
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120309.b/orig-05f5901.d
Operator: JAOC
Injection Date: 03-DEC-2009 18:54
Instrument: ecd2a.i
Client Sample ID: RE03-09-13959MSD

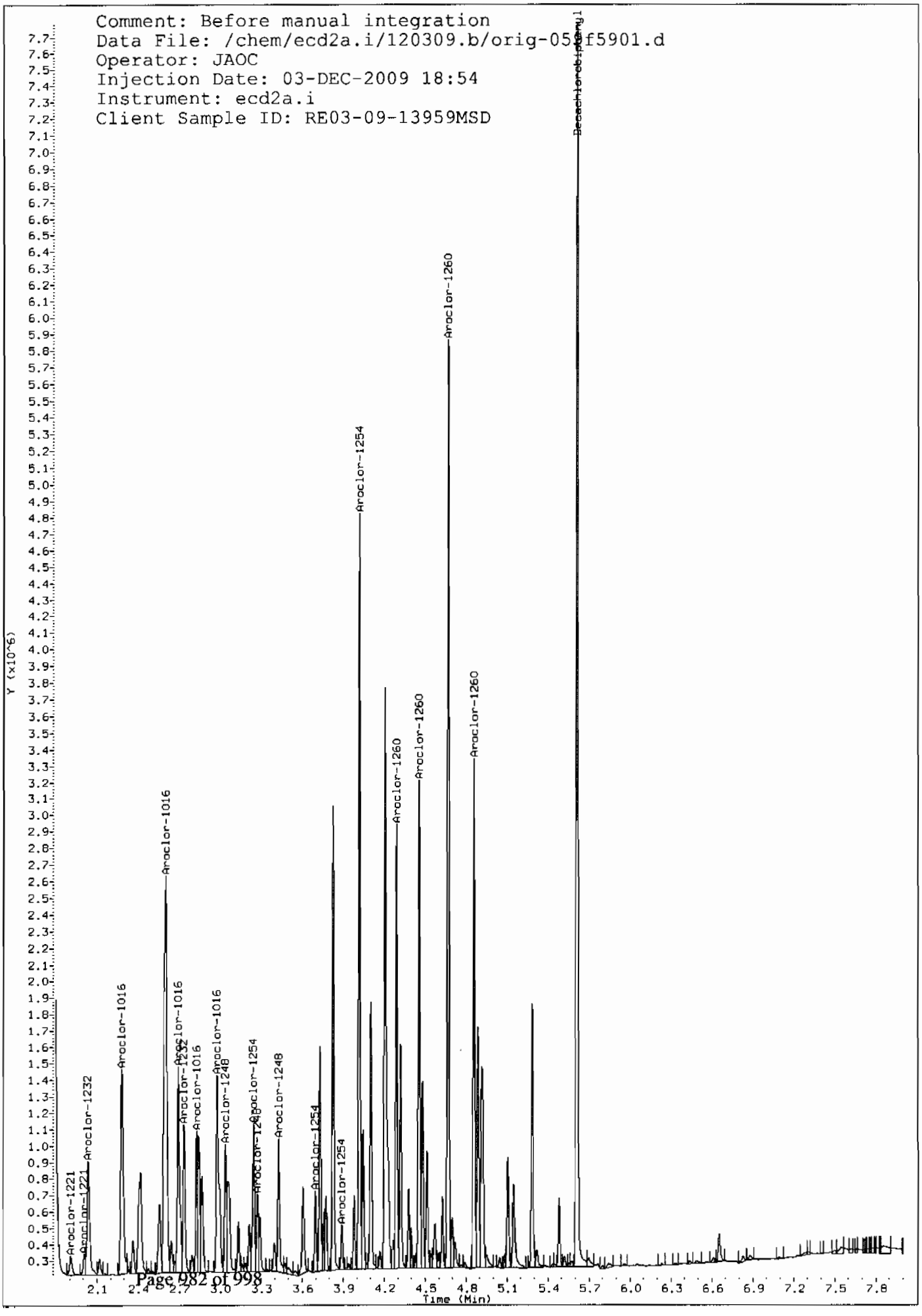

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120309.b/059b5901.d
Lab Smp Id: 1201981412 Client Smp ID: RE03-09-13959MSD
Inj Date : 03-DEC-2009 18:54
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981412|1|
Misc Info : |ECD82P_1SF|926729|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120309.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 07:56 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 59 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-576.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	17.68060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.075	0.002	21314209	180.324	7.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	16061504	147.839	6.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.750	0.002	3594121	844.076	34.1	80.00- 120.00	100.00
3.185	3.185	0.000	3116444	904.712	36.6	61.21- 101.21	86.71
3.336	3.335	0.001	1815558	917.186	37.1	26.96- 66.96	50.51
3.365	3.364	0.001	1744732	846.443	34.2	28.74- 68.74	48.54
3.523	3.521	0.002	2543042	923.342	37.3	46.95- 86.95	70.76
Average of Peak Concentrations -					35.9		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.418	0.001	5133233	931.174	37.6	80.00- 120.00	100.00
4.570	4.569	0.001	6838854	958.901	38.8	107.13- 147.13	133.23
4.682	4.680	0.002	4482339	947.367	38.3	64.21- 104.21	87.32
4.880	4.878	0.002	5107909	880.574	35.6	80.11- 120.11	99.51
5.505	5.504	0.001	7986869	883.437	35.7	135.13- 175.13	155.59
Average of Peak Concentrations =					37.2		

Data File: /chem/ecd2a.i/120309.b/059b5901.d
Date : 03-DEC-2009 18:54
Client ID: RE03-09-13959MSD
Sample Info: |120198141211|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

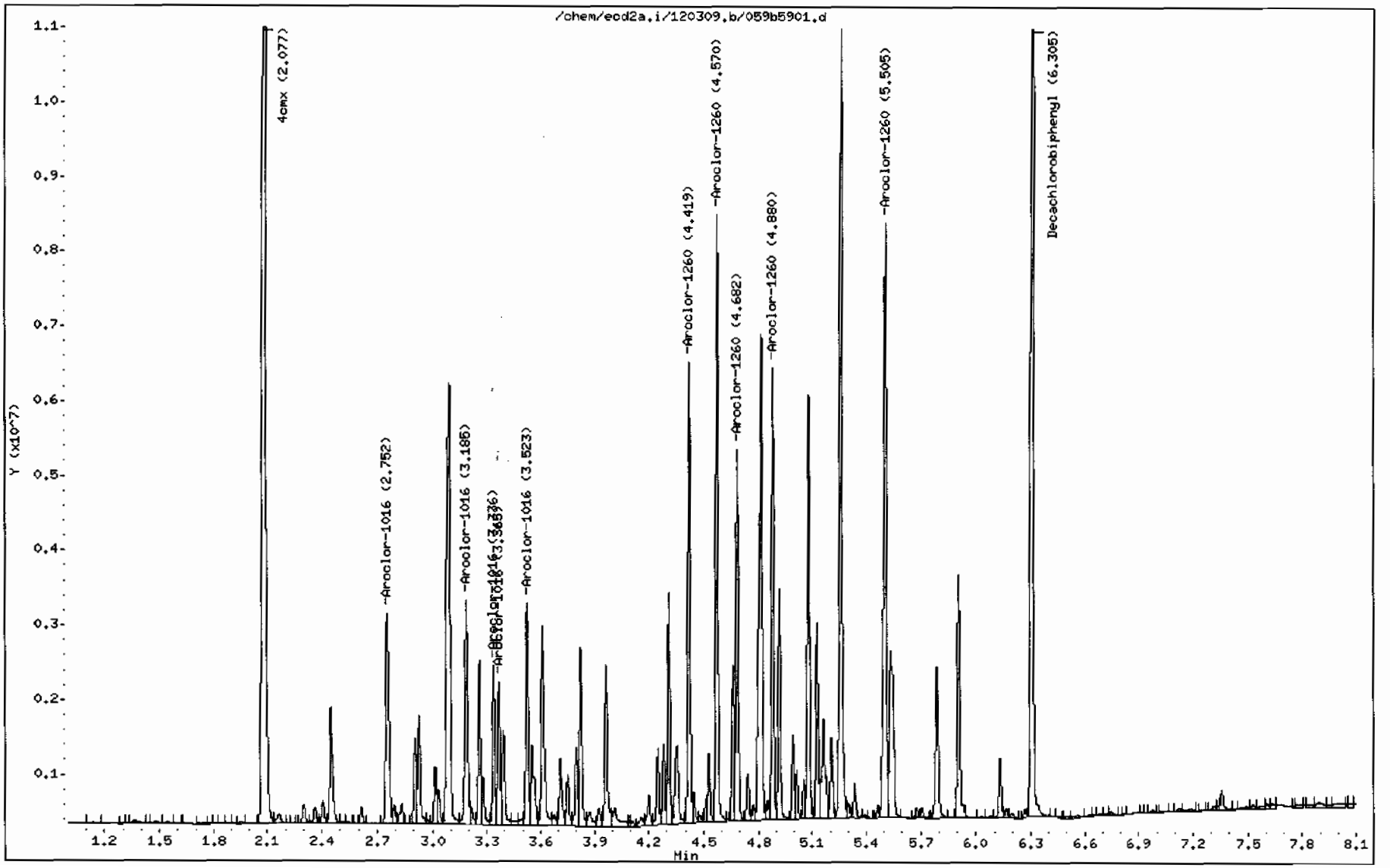

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0	CLEAN	
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0	DUSE	
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0	PASSES BOTH COLUMNS	
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0	PASSES BOTH COLUMNS	
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0	DUSE	
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0	PATTERN ONLY	
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0	PASSES BOTH COLUMNS	
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0	PATTERN ONLY	
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0	1660 LEVEL 1	
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0	1660 LEVEL 2	
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0	1660 LEVEL 3	
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0	1660 LEVEL 4	
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0	1660 LEVEL 5	
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0	PASSES BOTH COLUMNS	
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0	PATTERN ONLY	

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0	PATTERN ONLY	

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0		DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0		CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A	UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0		CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL	UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL	UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809	1.0		PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0		DUSE
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0		1254 LEVEL 1
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0		1254 LEVEL 2
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0		1254 LEVEL 3
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0		1254 LEVEL 4
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0		1254 LEVEL 5
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0		1248 LEVEL 1
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0		1248 LEVEL 2
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0		1248 LEVEL 3
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0		1248 LEVEL 4
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0		1248 LEVEL 5

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0		DUSE

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18			113009a	1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29			113009a	1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40			113009a	1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51			113009a	1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02			113009a	1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13			113009a	1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25			113009a	1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399		200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36			113009a	1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47			113009a	1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12			113009a	1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23			113009a	1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463		1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463		5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463		20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462	10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a	1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a	1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390	1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407	1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407	5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a	1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a	1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a	1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/04/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number: Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	03-DEC-2009 08:10		120309	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	03-DEC-2009 08:21		120309	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	03-DEC-2009 08:32		120309	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	03-DEC-2009 08:43		120309	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	03-DEC-2009 08:54		120309	1.0		PASSES BOTH COLUMNS
006f0601.d	WAR090930-32	JAOC	03-DEC-2009 09:05		120309	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	03-DEC-2009 09:17		120309	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	03-DEC-2009 09:28		120309	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	03-DEC-2009 09:39		120309	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	JAOC	03-DEC-2009 09:50		120309	1.0		DDT
011f1101.d	WAR090916-99 02	JAOC	03-DEC-2009 10:01		120309	1.0		CLEAN
012f1201.d	241175006	JAOC	03-DEC-2009 10:12	926702	10-516	10.0	LANL	UPLOAD BOTH, USE HIGHER
013f1301.d	241175007	JAOC	03-DEC-2009 10:23	926702	10-516	1.0	LANL	DUSE, RE-VIAL
014f1401.d	1201984412	JAOC	03-DEC-2009 10:34	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER
015f1501.d	1201984413	JAOC	03-DEC-2009 10:45	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120309.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1201984416	JAOC	03-DEC-2009 10:57	928081	EUI-7398P	1.0	QC A	UPLOAD BOTH, USE HIGHER

017f1701.d	241626001	JAOC	03-DEC-2009 11:08	928081	EUI-7398P	50.0	CARE	UPLOAD BOTH, USE HIGHER
018f1801.d	1201984414	JAOC	03-DEC-2009 11:19	928081	EUI-7398P	50.0	QC A	UPLOAD BOTH, USE HIGHER
019f1901.d	1201984415	JAOC	03-DEC-2009 11:30	928081	EUI-7398P	50.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	241175007	JAOC	03-DEC-2009 11:41	926702	10-516	1.0	LANL	UPLOAD BOTH, USE HIGHER
021f2101.d	WAR091119-60 02	JAOC	03-DEC-2009 11:52	1660	120309	1.0	CVS	PASSES BOTH COLUMNS
022f2201.d	WAR090916-99 03	JAOC	03-DEC-2009 12:03	SOLV	120309	1.0	IB	CLEAN
023f2301.d	1201978766	JAOC	03-DEC-2009 12:14	925544	10-457	1.0	QC A	UPLOAD BOTH, USE HIGHER
024f2401.d	1201978769	JAOC	03-DEC-2009 12:25	925544	10-457	1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	241027001	JAOC	03-DEC-2009 12:36	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	241027002	JAOC	03-DEC-2009 12:47	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	241027003	JAOC	03-DEC-2009 12:58	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	241027004	JAOC	03-DEC-2009 13:09	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	241027005	JAOC	03-DEC-2009 13:21	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
030f3001.d	241027006	JAOC	03-DEC-2009 13:32	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
031f3101.d	241027007	JAOC	03-DEC-2009 13:43	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	241027008	JAOC	03-DEC-2009 13:54	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
033f3301.d	WAR091119-60 03	JAOC	03-DEC-2009 14:05		120309	1.0		PASSES BOTH COLUMNS
034f3401.d	WAR090916-99 04	JAOC	03-DEC-2009 14:16	SOLV	120309	1.0	IB	CLEAN
035f3501.d	241027009	JAOC	03-DEC-2009 14:27	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241027010	JAOC	03-DEC-2009 14:38	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
037f3701.d	241027011	JAOC	03-DEC-2009 14:49	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
038f3801.d	241027012	JAOC	03-DEC-2009 15:00	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241027013	JAOC	03-DEC-2009 15:12	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241027015	JAOC	03-DEC-2009 15:23	925544	10-457	1.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241033001	JAOC	03-DEC-2009 15:34	925544	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	1201978767	JAOC	03-DEC-2009 15:45	925544	10-460	1.0	QC A	UPLOAD BOTH, USE HIGHER
043f4301.d	1201978768	JAOC	03-DEC-2009 15:56	925544	10-460	1.0	QC A	UPLOAD BOTH, USE HIGHER
044f4401.d	241033002	JAOC	03-DEC-2009 16:07	925544	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	03-DEC-2009 16:18		120309	1.0		PASSES BOTH COLUMNS, DCB LOW
046f4601.d	WAR090916-99 05	JAOC	03-DEC-2009 16:29		120309	1.0		CLEAN
047f4701.d	241033003	JAOC	03-DEC-2009 16:40	925544	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER
048f4801.d	241033004	JAOC	03-DEC-2009 16:51	925544	10-460	1.0	LANL	DUSE, LOOKS LIKE NO SURROGATE WAS ADDED
049f4901.d	241033005	JAOC	03-DEC-2009 17:03	925544	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	241033006	JAOC	03-DEC-2009 17:14	925544	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER
051f5101.d	1201981410	JAOC	03-DEC-2009 17:25	926729	10-576	1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	1201981413	JAOC	03-DEC-2009 17:36	926729	10-576	1.0	QC A	UPLOAD BOTH, USE HIGHER
053f5301.d	241418001	JAOC	03-DEC-2009 17:47	926729	10-576	5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	241418002	JAOC	03-DEC-2009 17:58	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
055f5501.d	WAR091119-60 05	JAOC	03-DEC-2009 18:09		120309	1.0		PASSES BOTH COLUMNS

Instrument Batch: /chem/ecd2a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 06	JAOC	03-DEC-2009 18:20		120309	1.0		CLEAN
057f5701.d	241418003	JAOC	03-DEC-2009 18:31	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
058f5801.d	1201981411	JAOC	03-DEC-2009 18:42	926729	10-576	1.0	QC A	UPLOAD BOTH, USE HIGHER
059f5901.d	1201981412	JAOC	03-DEC-2009 18:54	926729	10-576	1.0	QC A	UPLOAD BOTH, USE HIGHER
060f6001.d	241418004	JAOC	03-DEC-2009 19:05	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
061f6101.d	241418005	JAOC	03-DEC-2009 19:16	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
062f6201.d	241418006	JAOC	03-DEC-2009 19:27	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
063f6301.d	241418007	JAOC	03-DEC-2009 19:38	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
064f6401.d	241418008	JAOC	03-DEC-2009 19:49	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241418009	JAOC	03-DEC-2009 20:00	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241418010	JAOC	03-DEC-2009 20:11	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	WAR091119-60 06	JAOC	03-DEC-2009 20:23		120309	1.0		PASSES BOTH COLUMNS
068f6801.d	WAR090916-99 07	JAOC	03-DEC-2009 20:34		120309	1.0		CLEAN
069f6901.d	241418011	JAOC	03-DEC-2009 20:45	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241418012	JAOC	03-DEC-2009 20:56	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241418013	JAOC	03-DEC-2009 21:07	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	241418014	JAOC	03-DEC-2009 21:18	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
073f7301.d	241418015	JAOC	03-DEC-2009 21:29	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
074f7401.d	241418016	JAOC	03-DEC-2009 21:40	926729	10-576	1.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241423004	JAOC	03-DEC-2009 21:51	926729	10-578	5.0	LANL	DUSE OVERRANGE, RE-RUN AT 10X

Instrument Batch: /chem/ecd2a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241423005	JAOC	03-DEC-2009 22:02	926729	10-578	1.0	LANL	DUSE, AFTER OVERRANGE
077f7701.d	241512001	JAOC	03-DEC-2009 22:14	926729	10-598	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241524002	JAOC	03-DEC-2009 22:25	926729	10-600	5.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	WAR091119-60 07	JAOC	03-DEC-2009 22:36		120309	1.0		PASSES BOTH COLUMNS, DCB LOW
080f8001.d	WAR090916-99 08	JAOC	03-DEC-2009 22:47		120309	1.0		CLEAN
081f8101.d	1201984424	JAOC	03-DEC-2009 22:58	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
082f8201.d	1201984423	JAOC	03-DEC-2009 23:09	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
083f8301.d	241994001	JAOC	03-DEC-2009 23:20	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
084f8401.d	1201984425	JAOC	03-DEC-2009 23:31	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
085f8501.d	1201984426	JAOC	03-DEC-2009 23:43	928087	241994	1.0	QC A	UPLOAD BOTH, USE HIGHER
086f8601.d	241994002	JAOC	03-DEC-2009 23:54	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
087f8701.d	241994003	JAOC	04-DEC-2009 00:05	928087	241994	1.0	WSRB	UPLOAD BOTH, USE HIGHER
088f8801.d	WAR091119-60 08	JAOC	04-DEC-2009 00:16		120309	1.0		PASSES BOTH COLUMNS
089f8901.d	WAR090916-99 09	JAOC	04-DEC-2009 00:27		120309	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926728 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981410 MB	27-NOV-2009 21:14:34	30	H2SO4/KMn2		2	9	1	0.03333
1201981413 LCS	27-NOV-2009 21:14:34	30	H2SO4/KMn2		2	9	1	0.03333
241418001	27-NOV-2009 21:14:34	30.09	H2SO4/KMn2		2	9	1	0.03323
241418002	27-NOV-2009 21:14:34	30.07	H2SO4/KMn2		2	9	1	0.03326
241418003	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
1201981411 MS (241418003)	27-NOV-2009 21:14:34	30.15	H2SO4/KMn2		2	9	1	0.03317
1201981412 MSD (241418003)	27-NOV-2009 21:14:34	30.04	H2SO4/KMn2		2	9	1	0.03329
241418004	27-NOV-2009 21:14:34	30.07	H2SO4/KMn2		2	9	1	0.03326
241418005	27-NOV-2009 21:14:34	30.08	H2SO4/KMn2		2	9	1	0.03324
241418006	27-NOV-2009 21:14:34	30.04	H2SO4/KMn2		2	9	1	0.03329
241418007	27-NOV-2009 21:14:34	30.12	H2SO4/KMn2		2	9	1	0.0332
241418008	27-NOV-2009 21:14:34	30.01	H2SO4/KMn2		2	9	1	0.03332
241418009	27-NOV-2009 21:14:34	30.14	H2SO4/KMn2		2	9	1	0.03318
241418010	27-NOV-2009 21:14:34	30.17	H2SO4/KMn2		2	9	1	0.03315
241418011	27-NOV-2009 21:14:34	30.02	H2SO4/KMn2		2	9	1	0.03331
241418012	27-NOV-2009 21:14:34	30.08	H2SO4/KMn2		2	9	1	0.03324
241418013	27-NOV-2009 21:14:34	30.17	H2SO4/KMn2		2	9	1	0.03315
241418014	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
241418015	27-NOV-2009 21:14:34	30.15	H2SO4/KMn2		2	9	1	0.03317
241418016	27-NOV-2009 21:14:34	30.18	H2SO4/KMn2		2	9	1	0.03313
241423004	27-NOV-2009 21:14:34	30.06	H2SO4/KMn2		2	9	1	0.03327
241423005	27-NOV-2009 21:14:34	30.01	H2SO4/KMn2		2	9	1	0.03332
241512001	27-NOV-2009 21:14:34	30.13	H2SO4/KMn2		2	9	1	0.03319
241524002	27-NOV-2009 21:14:34	30.13	H2SO4/KMn2		2	9	1	0.03319

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981413	PCB Laboratory Control	WE091113-07	1	mL
MS	1201981411	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201981412	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

Wednesday, November 18, 2009

REQUEST NUMBER: 10-575

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-575

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13811	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13812	S	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:8082	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:8260B	1	RE03-09-13811	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-575

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13812	S	11/17/2009	
	SW-846:8270C	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:9012A	1	RE03-09-13811	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13812	S	11/17/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-575

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-575

REQUEST NUMBER: 10-575

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13812	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13812	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13811	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13811	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13812	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13811	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
Jary W/G		11/18/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2272 **EVENT NAME:** Soil Sampling at CU 03-014(a)-99, Part 2

SAMPLE ID: RE03-09-13811 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		0819	SUB-MEDIA:	OTHER	NA
PRS ID:	03-056(d)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608288		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: ____ COMPOSITE TIME INTERVAL: ____ WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: ____ BOREHOLE DIRECTION: ____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand w/ gravel (5%) Strong Brown 7.5 YR 4/6
Plant roots present

SAMPLE COMMENTS:
NA

LOCATION DESC:
56d-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Background
α: 60
β: 1273
Samples: MDA >

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2272 **EVENT NAME:** Soil Sampling at CU 03-014(a)-99, Part 2

SAMPLE ID: RE03-09-13812 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		0830	SUB-MEDIA:	OTHER	NA
PRS ID:	03-056(d)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608288	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	3'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	4'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Light reddish brown tuff (5 YR 6/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-056(d)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND α: 60 β: 1273 SAMPLES MDA >

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M Rains (Signature)	11/17/09 1630	(Printed Name) (Signature)	11/17/09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-575 VALIDATION DATE: 01/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV and CCV %Ds for acetone, 2-hexanone and 2-butanone were >20%. The associated sample results were NDs and, thus, were qualified UJ,V7c.
2. The LCS %R for n-butylbenzene was < the laboratory's LAL but ≥10%. The associated sample results were NDs and, thus, were qualified UJ,V12a.
3. It should be noted that the MS/MSD was not spiked with trichlorotrifluoroethane. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/19/10

VALIDATOR'S SIGNATURE: L. Thal DATE: 01/18/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☒	☐	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

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Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☐	☒	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☐	☒	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 15:26**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:57**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n314.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

LT 01/18/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 15:26**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:57**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n314.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11	
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22	
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11	
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11	
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11	
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11	
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11	
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11	
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11	
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11	UJ,V12a
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Flt	Qual
	No Tentatively Identified Compounds Found		ug/kg		

LT 01/18/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:56**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n313.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.35	5.38
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.35	5.38
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

LT 01/18/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:56**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n313.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08	
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15	
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08	
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08	
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08	
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08	
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08	
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08	
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08	
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08	
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08	
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08	
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08	
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08	
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08	
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08	
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08	
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08	
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08	UJ,V12a
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08	
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

LT 01/18/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-575 VALIDATION DATE: 01/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV or CCV %Ds for hexachlorocyclopentadiene; 2,4-dinitrophenol and benzo(g,h,i)perylene were >20%. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The MS/MSD RPD for benzyl alcohol did not meet laboratory acceptance criteria. Since the analysis of an MS or an MSD was not a client requirement, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: 1 Date: 01/19/10

VALIDATOR'S SIGNATURE: L Thal DATE: 01/18/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☐	☒	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☐	☒	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s610411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370	
108-95-2	Phenol	U	370	ug/kg	74.0	370	
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370	
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370	
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370	
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370	
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0	
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370	
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370	
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370	
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0	
110-86-1	Pyridine	U	370	ug/kg	74.0	370	
62-53-3	Aniline	U	370	ug/kg	111	370	
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370	
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370	
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370	
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370	
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370	
95-48-7	o-Cresol	U	370	ug/kg	74.0	370	
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370	
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370	
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370	
78-59-1	Isophorone	U	370	ug/kg	74.0	370	
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370	
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370	
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370	
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370	
65-85-0	Benzoic acid	U	740	ug/kg	185	740	
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0	
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370	
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370	
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0	
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370	
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370	
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0	
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	370	ug/kg	74.0	370	

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s610411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370	
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370	
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0	
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740	UJ,SV7c
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370	
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370	
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0	
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370	
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370	
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370	
122-66-7	Azobenzene	U	370	ug/kg	74.0	370	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370	
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370	
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0	
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0	
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370	
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0	
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370	
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0	
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370	
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370	
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370	
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0	
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0	
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0	
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0	
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	325	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:54**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s610408.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.7	358	
108-95-2	Phenol	U	358	ug/kg	71.7	358	
95-57-8	2-Chlorophenol	U	358	ug/kg	71.7	358	
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.7	358	
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.7	358	
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.7	358	
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8	
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358	
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358	
87-86-5	Pentachlorophenol	U	358	ug/kg	89.6	358	
129-00-0	Pyrene	U	35.8	ug/kg	10.8	35.8	
110-86-1	Pyridine	U	358	ug/kg	71.7	358	
62-53-3	Aniline	U	358	ug/kg	108	358	
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.7	358	
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.7	358	
100-51-6	Benzyl alcohol	U	358	ug/kg	108	358	
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.7	358	
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.7	358	
95-48-7	o-Cresol	U	358	ug/kg	71.7	358	
65794-96-9	m,p-Cresols	U	358	ug/kg	108	358	
67-72-1	Hexachloroethane	U	358	ug/kg	71.7	358	
98-95-3	Nitrobenzene	U	358	ug/kg	71.7	358	
78-59-1	Isophorone	U	358	ug/kg	71.7	358	
88-75-5	2-Nitrophenol	U	358	ug/kg	71.7	358	
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358	
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.7	358	
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.7	358	
65-85-0	Benzoic acid	U	717	ug/kg	179	717	
91-20-3	Naphthalene	U	35.8	ug/kg	10.8	35.8	
106-47-8	4-Chloroaniline	U	358	ug/kg	71.7	358	
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.7	358	
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.17	35.8	
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.7	358	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.7	358	
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.7	358	
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	358	ug/kg	71.7	358	
99-09-2	3-Nitroaniline	U	358	ug/kg	71.7	358	

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:54**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0408.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	358	ug/kg	71.7	358	
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358	
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.8	35.8	
51-28-5	2,4-Dinitrophenol	U	717	ug/kg	136	717	UJ,SV7c
132-64-9	Dibenzofuran	U	358	ug/kg	71.7	358	
84-66-2	Diethylphthalate	U	358	ug/kg	71.7	358	
86-73-7	Fluorene	U	35.8	ug/kg	10.8	35.8	
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.7	358	
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.7	358	
100-01-6	4-Nitroaniline	U	358	ug/kg	108	358	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	358	ug/kg	71.7	358	
122-66-7	Azobenzene	U	358	ug/kg	71.7	358	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.7	358	
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.7	358	
85-01-8	Phenanthrene	U	35.8	ug/kg	10.8	35.8	
120-12-7	Anthracene	U	35.8	ug/kg	7.17	35.8	
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.7	358	
206-44-0	Fluoranthene	U	35.8	ug/kg	10.8	35.8	
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.7	358	
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.8	35.8	
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	108	358	
218-01-9	Chrysene	U	35.8	ug/kg	10.8	35.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	358	ug/kg	71.7	358	
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.7	358	
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.8	35.8	
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.8	35.8	
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.8	35.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.8	35.8	
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.8	35.8	
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.8	35.8	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.7	358	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	302	ug/kg		JA

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-575 VALIDATION DATE: 01/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/19/10

VALIDATOR'S SIGNATURE: L Thal DATE: 01/18/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	Date Collected:	11/17/2009 12:00	Matrix:	SOIL
Lab Sample ID:	241417001	Date Received:	11/19/2009 08:45	%Moisture:	7.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13812	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 20:00	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	007f0701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.19	mg/kg	2.32	7.14

LT 01/18/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	Date Collected:	11/17/2009 12:00	Matrix:	SOIL
Lab Sample ID:	241417002	Date Received:	11/19/2009 08:45	%Moisture:	10
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13811	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 21:55	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.36	mg/kg	2.39	7.36

LT 01/18/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-575 VALIDATION DATE: 01/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Polychlorinated Biphenyls

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The MS/MSD %Rs for aroclor-1016 and -1260 and the RPD for aroclor -1260 did not meet laboratory acceptance criteria. Since the analysis of an MS or an MSD was not a client requirement, no sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/19/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/18/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13811	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 01:05	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	089f8901.d	**Column:**	1 CLP1	**Level:**	LOW
	089b8901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.70	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254	U	3.70	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260	J	1.40	ug/kg	1.23	3.70	1

LT 01/18/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13812	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	10
Run Date:	12/01/2009 00:31	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	086f8601.d	**Column:**	1 CLP1	**Level:**	LOW
	086b8601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	35.8	ug/kg	11.9	35.8	1
11104-28-2	Aroclor-1221	U	35.8	ug/kg	11.9	35.8	1
11141-16-5	Aroclor-1232	U	35.8	ug/kg	11.9	35.8	1
53469-21-9	Aroclor-1242	U	35.8	ug/kg	11.9	35.8	1
12672-29-6	Aroclor-1248	U	35.8	ug/kg	11.9	35.8	1
11097-69-1	Aroclor-1254	P	53.9	ug/kg	11.9	35.8	1
11096-82-5	Aroclor-1260		76.9	ug/kg	11.9	35.8	2

LT 01/18/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-575 VALIDATION DATE: 01/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the MB, Ca and Na were detected. The Na sample results were detects >5X but ≤50X the MB concentration and, thus, were qualified J,I4a. The Ca sample results were detects >50X the MB concentration and, thus, were not qualified based on professional judgment.
2. In the CCBs, Si and K were detected. The associated sample results were detects >5X the CCB concentrations and, thus, were not qualified.
3. The MS %Rs for Hg, Cr, K, Al and Ba were > the laboratory's UALs. The MS %Rs for B, Mg, Mn and Ti were < the laboratory's LAL but ≥10%. The MS %Rs for Ca, Cu, Fe and Si were <10%. The Hg Cr and K sample results were detects and, thus, were qualified J+,I6b. The B and Mn sample results were detects and, thus, were qualified J-,I6a. The associated parent sample results for Al, Ba, Mg, Ti, Ca, Cu, Fe and Si were detects >4X the spike amounts and, thus, no sample results were qualified based on professional judgment.
4. The duplicate RPD for Al, Cr, Co, Cu, Fe, Mn, Si, Na and Ti were >35% and both the parent and duplicate sample results were >5X the PQL. The associated sample results were detects and, thus, were qualified J,I10a.
5. It should be noted that the matrix QC for all target analytes were performed on samples from other LANL RNs. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/19/10

DATA VALIDATION COVER SHEET

5118-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

VALIDATOR'S SIGNATURE: K Neal DATE: 01/18/10

Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☐	☒	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-575 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241417001 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13812 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J,I10a	4570000	ug/Kg		7320	21500	21500	1	P	HSC	12/10/09 08:26	121009-1	930799
7440-36-0	Antimony	1070	ug/Kg	U	352	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-38-2	Arsenic	1.78	mg/kg		0.212	1.06	1.06	2	MS	BAJ	12/07/09 21:54	091207-4	925189
7440-39-3	Barium	67400	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-41-7	Beryllium	0.465	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 09:44	091207-8	925189
7440-42-8	Boron J-,I6a	1770	ug/Kg	J	1070	5340	5340	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-43-9	Cadmium	163	ug/Kg	J	107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-70-2	Calcium	2710000	ug/Kg		8540	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-47-3	Chromium J+,I6b	22600	ug/Kg		160	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-48-4	Cobalt J,I10a	2370	ug/Kg		160	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-50-8	Copper J,I10a	21800	ug/Kg		320	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-89-6	Iron J,I10a	14500000	ug/Kg		8540	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-92-1	Lead	17900	ug/Kg		267	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-93-2	Lithium	11.5	mg/kg		0.425	2.12	2.12	2	MS	BAJ	12/08/09 09:44	091207-8	925189
7439-95-4	Magnesium	1580000	ug/Kg		9080	32000	32000	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-96-5	Manganese J-,I6a	253000	ug/Kg		214	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-97-6	Mercury J+,I6b	161	ug/kg		3.79	11.1	11.1	1	AV	JXL1	12/07/09 10:45	120709S1-10	924862
7440-02-0	Nickel	4.12	mg/kg		0.106	0.425	0.425	2	MS	BAJ	12/08/09 09:44	091207-8	925189
7440-09-7	Potassium J+,I6b	953000	ug/Kg		6830	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7782-49-2	Selenium	1.06	mg/kg	U	0.531	1.06	1.06	2	MS	BAJ	12/07/09 21:54	091207-4	925189
7440-21-3	Silicon J,I10a	892000	ug/Kg		1610	10800	10800	1	P	HSC	12/10/09 08:26	121009-1	930799
7440-22-4	Silver	12000	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-23-5	Sodium J,I4a	99200	ug/Kg		7480	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-28-0	Thallium	0.090	mg/kg	J	0.0637	0.212	0.212	2	MS	BAJ	12/09/09 10:06	091208-9	925189
7440-32-6	Titanium J,I10a	537000	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-61-1	Uranium	0.687	mg/kg		0.014	0.0425	0.0425	2	MS	BAJ	12/07/09 21:54	091207-4	925189
7440-62-2	Vanadium	18300	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-66-6	Zinc	52300	ug/Kg		352	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.58	g	30	mL	12/04/09	TXB3
925187	925186	SW846 3050B	0.504	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.507	g	50	mL	12/05/09	BCD1

LT 01/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-575 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241417002 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13811 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	5330000	ug/Kg		7460	21900	21900	1	P	HSC	12/10/09 08:30	121009-1	930799
7440-36-0	Antimony		1070	ug/Kg	U	352	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-38-2	Arsenic		1.04	mg/kg	J	0.217	1.09	1.09	2	MS	BAJ	12/07/09 22:00	091207-4	925189
7440-39-3	Barium		45700	ug/Kg		107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-41-7	Beryllium		0.535	mg/kg		0.0217	0.109	0.109	2	MS	BAJ	12/08/09 09:46	091207-8	925189
7440-42-8	Boron	J-,I6a	1100	ug/Kg	J	1070	5330	5330	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-43-9	Cadmium		533	ug/Kg	U	107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-70-2	Calcium		1080000	ug/Kg		8530	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-47-3	Chromium	J+,I6b	5840	ug/Kg		160	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-48-4	Cobalt	J,I10a	1010	ug/Kg		160	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-50-8	Copper	J,I10a	2380	ug/Kg		320	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-89-6	Iron	J,I10a	12900000	ug/Kg		8530	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-92-1	Lead		8880	ug/Kg		266	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-93-2	Lithium		15.6	mg/kg		0.435	2.17	2.17	2	MS	BAJ	12/08/09 09:46	091207-8	925189
7439-95-4	Magnesium		1170000	ug/Kg		9060	32000	32000	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-96-5	Manganese	J-,I6a	232000	ug/Kg		213	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-97-6	Mercury	J+,I6b	7.21	ug/kg	J	4.36	12.8	12.8	1	AV	JXL1	12/07/09 10:47	120709S1-10	924862
7440-02-0	Nickel		3.02	mg/kg		0.109	0.435	0.435	2	MS	BAJ	12/08/09 09:46	091207-8	925189
7440-09-7	Potassium	J+,I6b	692000	ug/Kg		6820	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7782-49-2	Selenium		1.09	mg/kg	U	0.543	1.09	1.09	2	MS	BAJ	12/07/09 22:00	091207-4	925189
7440-21-3	Silicon	J,I10a	940000	ug/Kg		1650	11000	11000	1	P	HSC	12/10/09 08:30	121009-1	930799
7440-22-4	Silver		454	ug/Kg	J	107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-23-5	Sodium	J,I4a	146000	ug/Kg		7460	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-28-0	Thallium		0.144	mg/kg	J	0.0652	0.217	0.217	2	MS	BAJ	12/09/09 10:08	091208-9	925189
7440-32-6	Titanium	J,I10a	533000	ug/Kg		107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-61-1	Uranium		0.378	mg/kg		0.0143	0.0435	0.0435	2	MS	BAJ	12/07/09 22:00	091207-4	925189
7440-62-2	Vanadium		9410	ug/Kg		107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-66-6	Zinc		46300	ug/Kg		352	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.52	g	30	mL	12/04/09	TXB3
925187	925186	SW846 3050B	0.521	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.511	g	50	mL	12/05/09	BCD1

LT 01/18/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-575 VALIDATION DATE: 01/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the matrix QC analyses were performed on a sample from another LANL RN. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/19/10

VALIDATOR'S SIGNATURE: L. Thal DATE: 01/18/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☐	☒	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 **General Chemistry Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-575

Client Sample ID:	RE03-09-13812	Project:	LANL01004
Sample ID:	241417001	Client ID:	LANL010
Matrix:	Soil		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	7.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		554	70.4	259	ug/kg	1	AXC2 11/23/09	1537	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 01/18/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-575

Client Sample ID:	RE03-09-13811	Project:	LANL01004
Sample ID:	241417002	Client ID:	LANL010
Matrix:	Soil		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	9.96%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.9	257	ug/kg	1	AXC2 11/23/09	1538	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 01/18/10

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-575

REQUEST NUMBER: 10-575

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241419 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13812	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13812	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13811	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13811	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13812	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13811	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
Jay Wy		11/18/09	1400	Patricia Dover-Dist	P. Dover-Dist	11-19-09	08:45
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Wednesday, November 18, 2009

REQUEST NUMBER: 10-575

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-575

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13811	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13812	S	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:8082	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:8260B	1	RE03-09-13811	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-575

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13812	S	11/17/2009	
	SW-846:8270C	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:9012A	1	RE03-09-13811	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13812	S	11/17/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-575

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 24, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241417
SDG: 10-575

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 19, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-575
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241417
SDG: 10-575

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Miscellaneous.....1294

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241417
SDG # : 10-575

November 24, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 19, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241417001	RE03-09-13812
241417002	RE03-09-13811

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for
Valerie Davis

Project Manager

List of current GEL Certifications as of 24 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Wednesday, November 18, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-575

REQUEST NUMBER: 10-575

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/18/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241417 /.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13812	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13812	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13811	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13811	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13812	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13811	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
Jerry Wy		11/18/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-19-09	08:45
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

Wednesday, November 18, 2009

REQUEST NUMBER: 10-575

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-575
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/18/2009
TURNAROUND/REPORT DUE: 12/18/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13811	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13812	S	11/17/2009	Plus, B, Li, Si, Ti, U
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:8082	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:8260B	1	RE03-09-13811	S	11/17/2009	

Wednesday, November 18, 2009

REQUEST NUMBER: 10-575

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13812	S	11/17/2009	
	SW-846:8270C	1	RE03-09-13811	S	11/17/2009	
		1	RE03-09-13812	S	11/17/2009	
	SW-846:9012A	1	RE03-09-13811	S	11/17/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13812	S	11/17/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-575

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-575**
Received By:Patricia Dover-Dent	**Date Received:November 19, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **2-4,15,16**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S
7209 7848 9524 2C
7209 7848 9476 3C
7209 7848 9465 4C
7209 7848 9487 4C
7209 7848 9498 4C
7209 7848 9502 4C
7209 7848 9513 4C
7209 7848 9546 15C
7209 7848 9535 16C

PM (or PM's) review: Initials PD Date 11/20/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 37.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

2C

FedEx Express

1 of 3
TRK# 0201 7209 7848 9524
MASTER

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

3C

FedEx Express

3 of 3
MPS# 0263 7209 7848 9476
Matr# 7209 7848 9454 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156146-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 37.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4C

FedEx Express

2 of 3
7209 7848 9465
7209 7848 9454 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4C

FedEx Express

1 of 2
TRK# 0201 7209 7848 9487
MASTER

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9498
Mstr# 7209 7848 9487 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9513
Mstr# 7209 7848 9502 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWG0

4c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9502
MM MASTER MM

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156146-434 NRTT 03/13-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 36.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9546
Mstr# 7209 7848 9524 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

SHIPPING

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

16C

FedEx Express

2 of 3

MPS# 0263 7209 7848 9535

Matr# 7209 7848 9524 0201

THU - 19NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 09-09

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-575

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	926739
Prep Batch Number:	926738

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241417001	RE03-09-13812
241417002	RE03-09-13811
1201981429	Method Blank (MB)
1201981432	Laboratory Control Sample (LCS)
1201981433	Laboratory Control Sample (LCS)
1201981430	241417001(RE03-09-13812) Post Spike (PS)
1201981431	241417001(RE03-09-13812) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS recoveries were not all within the acceptance limits. See NCR# 763414.

QC Sample Designation
Sample 241417001 (RE03-09-13812) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from

sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 763414

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/11/09

Roadmap for LANL 10-575 VOA

This roadmap was analyzed by ron01469 on 11-30-2009, 13:40.
This roadmap was reviewed by sar00518 on 11-30-2009, 20:08.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112509v1/1n313.d	241417001	RE03-09-13812	25-NOV-2009	14:56	10-575.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n314.d	241417002	RE03-09-13811	25-NOV-2009	15:26	10-575.sub	1	926739	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112509v1/1n303LA.d	1201981432	LCS	lcs	25-NOV-2009	09:50	all.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n305sLA.d	1201981433	LCS	lcs	25-NOV-2009	10:51	all.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n306BA.d	1201981429	BLANK	mb	25-NOV-2009	11:22	all.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n323.d	1201981430	RE03-09-13812MS	ms	25-NOV-2009	19:58	10-575.sub	1	926739	
☐	N	/chem/VOA1.i/112509v1/1n324.d	1201981431	RE03-09-13812MSD	msd	25-NOV-2009	20:29	10-575.sub	1	926739	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 15:26**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:57**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n314.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 15:26**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:57**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n314.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:56**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n313.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.35	5.38
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.35	5.38
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:56**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n313.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-575

Matrix Type: SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201981432	LCS for batch 926738	109	104	90
1201981433	LCS for batch 926738	98	104	94
1201981429	MB for batch 926738	102	106	96
241417001	RE03-09-13812	107	108	98
241417002	RE03-09-13811	112	107	95
1201981430	RE03-09-13812PS	118	104	92
1201981431	RE03-09-13812PSD	113	106	95

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-13812PS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981430**	**%Moisture:**	**7.1**
Instrument:	**VOA1.I**	**Analysis Date:**	**11/25/2009 19:58**
Analyst:	**RXM4**	**Prep Batch ID:**	**926738**
Purge Vol:	**5 mL**	**Batch ID:**	**926739**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	42.4	85	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	48.1	96	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	47.5	95	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	50.7	101	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	56.2	112	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	55.6	111	51-151
67-64-1	PS	Acetone	250	0.00	U	167	67	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	48.3	97	61-125
74-88-4	PS	Iodomethane	250	0.00	U	225	90	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	51.7	103	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	265	106	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	50.7	101	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	50.9	102	62-125
78-93-3	PS	2-Butanone	250	0.00	U	178	71	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	52.6	105	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	49.4	99	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	49.9	100	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	56.1	112	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	50.5	101	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	49.2	98	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	51.3	103	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	48.8	98	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-13812PS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981430**	**%Moisture:**	**7.1**
Instrument:	**VOA1.I**	**Analysis Date:**	**11/25/2009 19:58**
Analyst:	**RXM4**	**Prep Batch ID**	**926738**
Purge Vol:	**5 mL**	**Batch ID:**	**926739**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	50.2	100	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	50.1	100	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	51.2	102	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	52.1	104	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	52.1	104	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	165	66	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	45.6	91	54-133
108-88-3	PS	Toluene	50.0	0.00	U	46.1	92	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	42.6	85	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	47.8	96	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	105	42	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	46.9	94	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	47.1	94	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	49.6	99	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	47.0	94	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	46.3	93	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	42.9	86	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	89.4	89	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	45.9	92	52-127
100-42-5	PS	Styrene	50.0	0.00	U	45.0	90	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	50.3	101	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	47.1	94	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-13812PS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981430**	**%Moisture:**	**7.1**
Instrument:	**VOA1.I**	**Analysis Date:**	**11/25/2009 19:58**
Analyst:	**RXM4**	**Prep Batch ID**	**926738**
Purge Vol:	**5 mL**	**Batch ID:**	**926739**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	43.8	88	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	46.5	93	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	40.6	81	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	41.4	83	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	42.0	84	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	41.6	83	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	41.0	82	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	41.7	83	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	40.8	82	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	39.3	79	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	35.7	71	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	43.3	87	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	42.8	86	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	46.4	93	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	47.1	94	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	43.2	86	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	38.6	77	25-149	9	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	45.0	90	39-140	7	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	43.5	87	47-129	9	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	48.3	97	31-135	5	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	54.6	109	53-128	3	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	51.0	102	51-151	9	0-25
67-64-1	PSD	Acetone	250	0.00	U	163	65	21-153	3	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	45.3	91	61-125	6	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	216	87	53-142	4	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	51.1	102	59-136	1	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	257	103	46-129	3	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	49.3	99	56-126	3	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	47.9	96	62-125	6	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	175	70	26-152	2	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	50.5	101	60-130	4	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	47.0	94	55-135	5	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	47.4	95	60-127	5	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	54.4	109	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	47.3	95	59-131	7	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	46.9	94	57-128	5	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	47.5	95	58-136	8	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	45.3	91	58-126	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	48.7	97	56-123	3	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	47.7	95	51-137	5	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	49.8	100	60-126	3	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	48.5	97	55-138	7	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	49.6	99	60-132	5	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	170	68	58-136	3	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	44.1	88	54-133	3	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	45.8	92	52-128	1	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	42.2	84	53-137	1	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	48.4	97	59-130	1	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	111	45	31-148	6	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	47.7	95	57-127	2	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	47.2	94	51-128	0	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	50.1	100	59-139	1	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	47.7	95	57-133	2	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	46.4	93	53-122	0	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	42.9	86	51-125	0	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	87.8	88	50-126	2	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	45.7	91	52-127	0	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	43.8	88	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	51.1	102	57-149	2	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	48.1	96	63-127	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812PSD
Lab Sample ID: 1201981431
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/25/2009 20:29
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	45.1	90	57-149	3	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	47.7	95	49-131	3	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	41.4	83	40-136	2	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	42.0	84	44-135	1	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	42.3	85	44-140	1	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	42.3	85	42-140	2	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	41.6	83	44-132	2	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	42.8	86	42-142	3	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	41.6	83	43-137	2	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	39.8	80	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	36.6	73	38-145	2	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	43.2	86	43-129	0	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	43.5	87	44-125	2	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	36.7	73	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	47.7	95	47-151	3	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	46.2	92	59-131	2	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	41.5	83	43-129	4	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: LCS for batch 926738
Lab Sample ID: 1201981432
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:50
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	41.0	82	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	45.5	91	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	48.8	98	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	53.5	107	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	53.8	108	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	53.0	106	67-151
67-64-1	LCS	Acetone	250	0.0	165	66	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	45.1	90	70-125
74-88-4	LCS	Iodomethane	250	0.0	260	104	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	47.3	95	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	277	111	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	49.9	100	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	45.7	91	75-120
78-93-3	LCS	2-Butanone	250	0.0	185	74	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	49.5	99	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	49.2	98	74-135
67-66-3	LCS	Chloroform	50.0	0.0	44.7	89	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	52.9	106	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	47.7	95	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	48.8	98	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	48.1	96	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	39.6	79	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: LCS for batch 926738
Lab Sample ID: 1201981432
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:50
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	48.8	98	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	48.6	97	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	47.5	95	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	44.3	89	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	45.1	90	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	220	88	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	46.5	93	80-125
108-88-3	LCS	Toluene	50.0	0.0	49.2	98	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	46.6	93	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	47.0	94	76-120
591-78-6	LCS	2-Hexanone	250	0.0	182	73	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	45.4	91	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	51.4	103	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	49.4	99	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	49.0	98	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	49.1	98	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	45.9	92	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	97.6	98	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	47.7	95	74-120
100-42-5	LCS	Styrene	50.0	0.0	48.8	98	76-125
75-25-2	LCS	Bromoform	50.0	0.0	50.5	101	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	47.8	96	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: LCS for batch 926738
Lab Sample ID: 1201981432
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 09:50
Dilution: 1
Prep Batch ID: 926738
Batch ID: 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	43.4	87	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	49.1	98	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	42.0	84	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	42.3	85	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	43.3	87	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	42.1	84	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	43.7	87	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	40.5	81	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	41.3	83	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	37.5	75	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	39.1	78	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	46.7	93	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	45.3	91	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	35.2	70 *	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	49.5	99	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	46.2	92	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	44.9	90	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926738 **Matrix:** SOIL

Lab Sample ID: 1201981433

Instrument: VOA1.I **Analysis Date:** 11/25/2009 10:51 **Dilution:** 1

Analyst: RXM4 **Prep Batch ID** 926738

Purge Vol: 5 mL **Batch ID:** 926739

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	265	106	52-139

Method Blank Summary

SDG Number:	10-575	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926738	Instrument ID:	VOA1.I	Data File:	1n306BA.d
Lab Sample ID:	1201981429	Prep Date:	11/25/2009 07:00	Analyzed:	11/25/09 11:22
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926738	1201981432	1n303LA.d	11/25/09	0950
02 LCS for batch 926738	1201981433	1n305sLA.d	11/25/09	1051
03 RE03-09-13812	241417001	1n313.d	11/25/09	1456
04 RE03-09-13811	241417002	1n314.d	11/25/09	1526
05 RE03-09-13812PS	1201981430	1n323.d	11/25/09	1958
06 RE03-09-13812PSD	1201981431	1n324.d	11/25/09	2029

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-575

Instrument ID: VOA1.I **Injection Date/Time:** 13-NOV-09 22:17

Column Description: RTX-Volatiles **Lab File ID** /111309v1/11507.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	59
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.1
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W1VM091113-05	/111309v1/11509.d	13-NOV-09 23:18
VSTD001	W1VM091113-07	/111309v1/11511.d	14-NOV-09 00:18
VSTD002	W1VM091113-08	/111309v1/11512.d	14-NOV-09 00:48
VSTD005	W1VM091113-09	/111309v1/11513.d	14-NOV-09 01:19
VSTD010	W1VM091113-10	/111309v1/11514.d	14-NOV-09 01:49
VSTD020	W1VM091113-11	/111309v1/11515.d	14-NOV-09 02:19
VSTD050	W1VM091113-12	/111309v1/11516.d	14-NOV-09 02:49
VSTD100	W1VM091113-13	/111309v1/11517.d	14-NOV-09 03:19
VSTD005S	W1VM091113-14	/111309v1/11519.d	14-NOV-09 04:20
VSTD010S	W1VM091113-15	/111309v1/11520.d	14-NOV-09 04:50
VSTD025S	W1VM091113-16	/111309v1/11521.d	14-NOV-09 05:20
VSTD050S	W1VM091113-17	/111309v1/11522.d	14-NOV-09 05:50
VSTD100S	W1VM091113-18	/111309v1/11523.d	14-NOV-09 06:20
VSTD250S	W1VM091113-19	/111309v1/11524.d	14-NOV-09 06:51
VSTD500S	W1VM091113-20	/111309v1/11525.d	14-NOV-09 07:21
SHORTICV	W1VM091113-19	/111309v1/11528.d	14-NOV-09 08:52

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-575

Instrument ID: VOA1.I **Injection Date/Time:** 16-NOV-09 14:01

Column Description: RTX-Volatiles **Lab File ID** /111609v1/1m108BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	55
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050/LICV	W1VM091116-05	/111609v1/1m108.d	16-NOV-09 14:01

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-575

Instrument ID: VOA1.I **Injection Date/Time:** 25-NOV-09 08:50

Column Description: RTX-Volatiles **Lab File ID** /112509v1/1n301.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	53.6
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	74
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	95.7
177	5.0 - 9.0% of mass 176	6.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091125-01	/112509v1/1n302.d	25-NOV-09 09:20
LCS	1201981432	/112509v1/1n303LA.d	25-NOV-09 09:50
VSTD250S	UVM091118-08A	/112509v1/1n304.d	25-NOV-09 10:21
SLCS	1201981433	/112509v1/1n305sLA.d	25-NOV-09 10:51
MB	1201981429	/112509v1/1n306BA.d	25-NOV-09 11:22
RE03-09-13812	241417001	/112509v1/1n313.d	25-NOV-09 14:56
RE03-09-13811	241417002	/112509v1/1n314.d	25-NOV-09 15:26
RE03-09-13812MS	1201981430	/112509v1/1n323.d	25-NOV-09 19:58
RE03-09-13812MSD	1201981431	/112509v1/1n324.d	25-NOV-09 20:29

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-575

STD Analysis Time: 25-NOV-09 09:20

Data File: 1n302.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1036496		13.7		853527		17.2		483618		19.6	
Upper Limit	2072992		14.2		1707054		17.7		967236		20.1	
Lower Limit	518248		13.2		426764		16.7		241809		19.1	
Sample ID												
BLK01LCS	1045218		13.7		841936		17.2		474928		19.6	
BLK01SLCS	1085808		13.7		884474		17.2		482095		19.6	
BLK01	1032717		13.7		836157		17.2		444725		19.6	
RE03-09-13812	897693		13.7		715437		17.2		379941		19.6	
RE03-09-13811	856621		13.7		702569		17.2		390872		19.6	
RE03-09-13812MS	796819		13.7		694339		17.2		395865		19.6	
RE03-09-13812MSD	883949		13.7		731041		17.2		400251		19.6	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13811	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 15:26	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 13:57	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n314.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 15:26**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:57**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n314.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n314.d
Lab Smp Id: 241417002 Client Smp ID: RE03-09-13811
Inj Date : 25-NOV-2009 15:26
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417002|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.95660	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	856621	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	702569	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	390872	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	595990	55.9347	62.1
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1535206	53.6890	59.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	626519	47.7385	53.0

ION RATIO REPORT

VOA REPORT

Data file: 1n314.d
Report Date: 11/27/2009 04:54
Lab. ID: 241417002 SampleType: SAMPLE
Injection Date: 25-NOV-2009 15:26
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241417002|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-575
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	15488	13.69	13.44	80-120	100	(T)
64	2666	13.69	13.44	3- 63	17	(T)
47 Benzene			CAS#: 71-43-2			
78	321	13.33	13.33	80-120	100	( )
77	17916	13.69	13.34	0- 53	5569	(QT)
51	185530	13.34	13.34	6- 66	57666	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	15331	15.52	15.36	80-120	100	(T)
43	7785	15.52	15.36	214-274	51	(QT)
100	966487	15.52	15.36	1- 61	6304	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n314.d
Lab Smp Id: 241417002 Client Smp ID: RE03-09-13811
Inj Date : 25-NOV-2009 15:26
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417002|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n314.d

Date : 25-NOV-2009 15:26

Client ID: RE03-09-13811

Sample Info: |24141700219267391|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

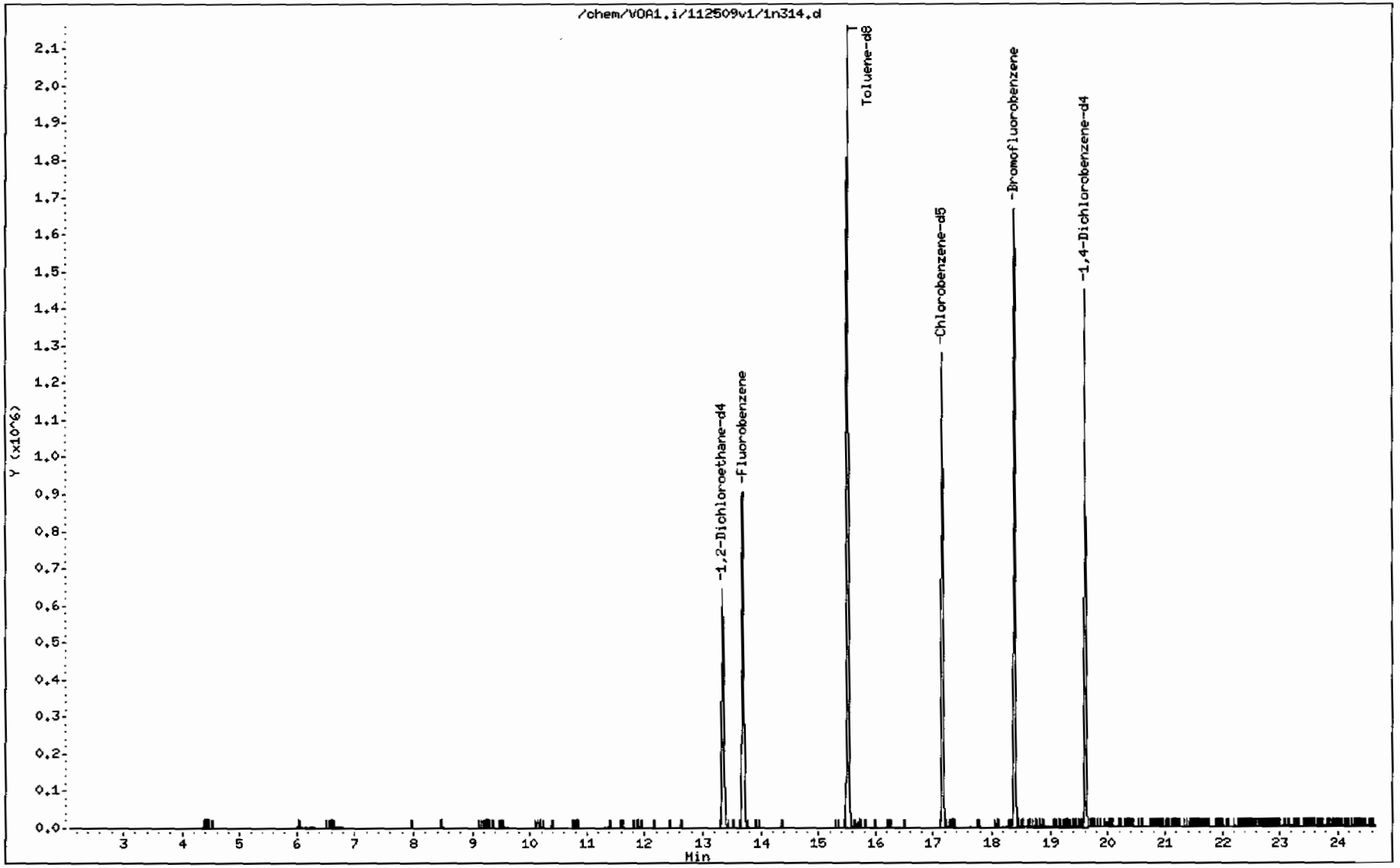

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:56**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n313.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.35	5.38
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.35	5.38
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 14:56**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 13:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n313.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n313.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 25-NOV-2009 14:56
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	897693	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	715437	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	379941	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	597356	53.4978	57.6
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1571628	53.9742	58.1
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	623950	48.9105	52.6

ION RATIO REPORT

VOA REPORT

Data file: 1n313.d
Report Date: 11/27/2009 04:54
Lab. ID: 241417001 SampleType: SAMPLE
Injection Date: 25-NOV-2009 14:56
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241417001|926739|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-575
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	15863	13.68	13.44	80-120	100	(T)
64	2693	13.69	13.44	3- 63	17	(T)
47 Benzene			CAS#: 71-43-2			
78	467	13.33	13.33	80-120	100	( )
77	18073	13.68	13.34	0- 53	3870	(QT)
51	185997	13.34	13.34	6- 66	39828	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	15674	15.51	15.36	80-120	100	(T)
43	8470	15.51	15.36	214-274	54	(QT)
100	985612	15.52	15.36	1- 61	6288	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n313.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 25-NOV-2009 14:56
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241417001|926739|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n313.d

Date : 25-NOV-2009 14:56

Client ID: RE03-09-13812

Sample Info: |2414170011926739|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

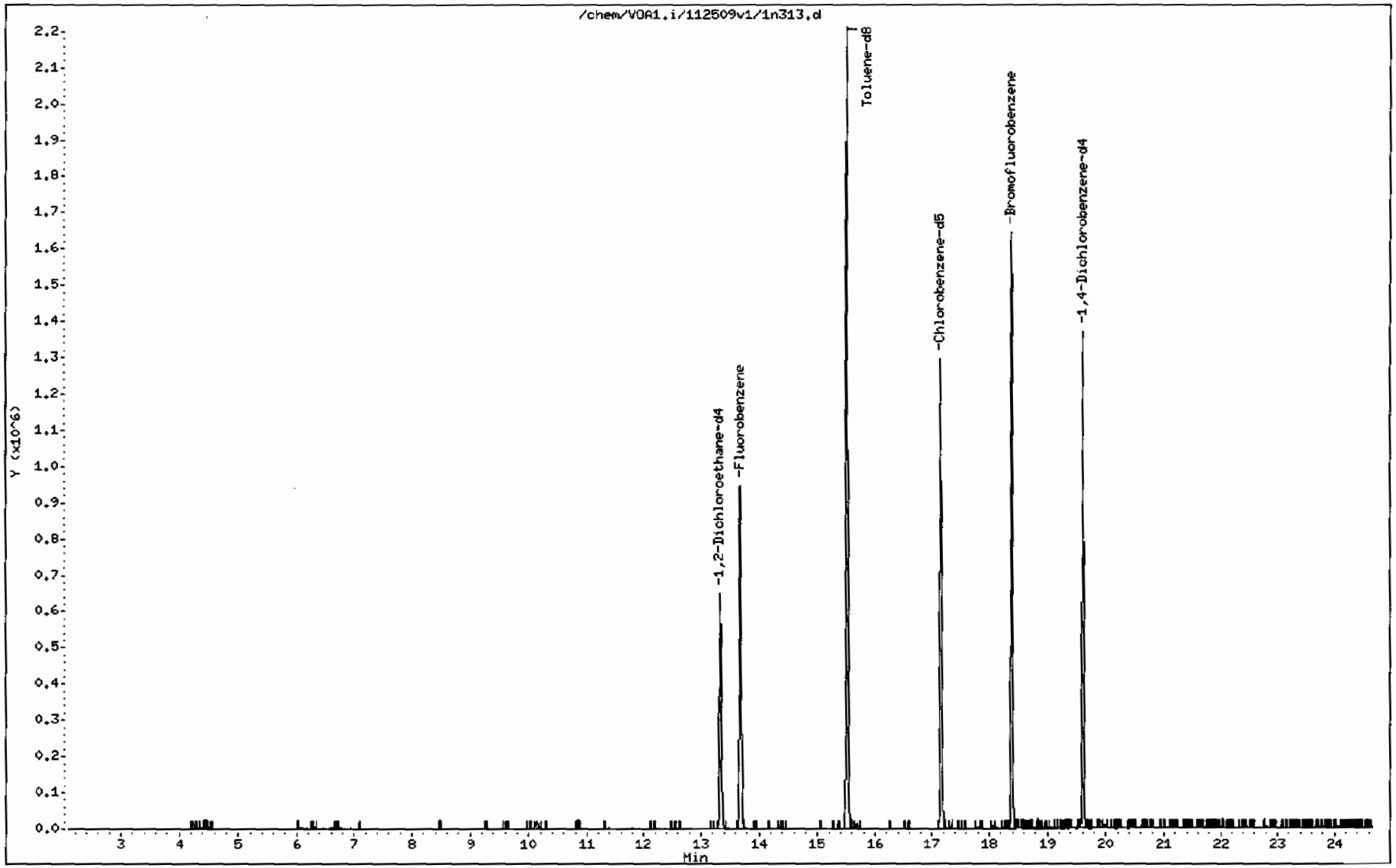

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 25-Nov-2009 08:26

Calibration History

Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Start Cal Date: 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 04:20	ICALsubS	/chem/VOA1.i/111309v1/11519.d
14-NOV-2009 00:18	CALsubL+	/chem/VOA1.i/111309v1/11511.d
Cal Level: 2 , Cal Amount: 2.00000		
14-NOV-2009 04:50	ICALsubS	/chem/VOA1.i/111309v1/11520.d
14-NOV-2009 00:48	CALsubL+	/chem/VOA1.i/111309v1/11512.d
Cal Level: 3 , Cal Amount: 5.00000		
14-NOV-2009 05:20	ICALsubS	/chem/VOA1.i/111309v1/11521.d
14-NOV-2009 01:19	CALsubL+	/chem/VOA1.i/111309v1/11513.d
Cal Level: 4 , Cal Amount: 10.00000		
14-NOV-2009 05:50	ICALsubS	/chem/VOA1.i/111309v1/11522.d
14-NOV-2009 01:49	CALsubL+	/chem/VOA1.i/111309v1/11514.d
Cal Level: 5 , Cal Amount: 20.00000		
14-NOV-2009 06:20	ICALsubS	/chem/VOA1.i/111309v1/11523.d
14-NOV-2009 02:19	CALsubL+	/chem/VOA1.i/111309v1/11515.d
Cal Level: 6 , Cal Amount: 50.00000		
14-NOV-2009 06:51	ICALsubS	/chem/VOA1.i/111309v1/11524.d
14-NOV-2009 02:49	CALsubL+	/chem/VOA1.i/111309v1/11516.d
Cal Level: 7 , Cal Amount: 100.00000		
14-NOV-2009 07:21	ICALsubS	/chem/VOA1.i/111309v1/11525.d
14-NOV-2009 03:19	CALsubL+	/chem/VOA1.i/111309v1/11517.d
Cal Level: 8 , Cal Amount: 200.00000		
13-NOV-2009 23:18	BENZENE+	/chem/VOA1.i/111309v1/11509.d

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Start Cal Date : 13-NOV-2009 23:18
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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Calibration File Names:
Level 1: /chem/VOA1.i/111309v1/11519.d
Level 2: /chem/VOA1.i/111309v1/11520.d
Level 3: /chem/VOA1.i/111309v1/11521.d
Level 4: /chem/VOA1.i/111309v1/11522.d
Level 5: /chem/VOA1.i/111309v1/11523.d
Level 6: /chem/VOA1.i/111309v1/11524.d
Level 7: /chem/VOA1.i/111309v1/11525.d
Level 8: /chem/VOA1.i/111309v1/11509.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.81227	0.73137	0.78894	0.72498	0.74753	0.76443					
	0.83207	+++++					AVRG		0.77166		5.29958
M 2 1,2-Dichloroethylene (total)	0.34833	0.34223	0.35784	0.33479	0.33448	0.33077					
	0.34829	+++++					AVRG		0.34239		2.83215
M 3 1,3-Dichloropropylene	0.70586	0.72835	0.78706	0.78242	0.78994	0.81396					
	0.86766	+++++					AVRG		0.78218		6.82978
4 Chlorotrifluoroethylene	0.13485	0.14655	0.15206	0.14935	0.17832	0.16711					
	0.16995	+++++					AVRG		0.15688		9.76231
5 Dichlorodifluoromethane	0.38136	0.29154	0.34309	0.34840	0.34284	0.32399					
	0.30590	+++++					AVRG		0.33388		8.90427

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
6 Chloromethane	0.36352	0.41180	0.43566	0.42653	0.42921	0.41976					
	0.40514	+++++					AVRG		0.41309		5.86079
7 Vinyl chloride	0.37166	0.41882	0.39367	0.36887	0.36084	0.34024					
	0.32820	+++++					AVRG		0.36890		8.32266
8 2-Chloro-1,1,1-trifluoroethan	+++++	0.33998	0.31048	0.30901	0.32578	0.34040					
	0.34703	+++++					AVRG		0.32878		4.95745
9 Bromomethane	0.21690	0.22761	0.23531	0.22897	0.22468	0.21559					
	0.20365	+++++					AVRG		0.22182		4.75715
10 Chloroethane	0.19204	0.24536	0.23794	0.23300	0.23259	0.23061					
	0.22732	+++++					AVRG		0.22841		7.46771
11 Trichlorofluoromethane	0.43608	0.52008	0.53827	0.53954	0.53870	0.53853					
	0.52430	+++++					AVRG		0.51936		7.23277
12 Ethyl Ether	13883	16946	33985	58858	108474	271086					
	556612	+++++					WLINR	-0.01699	0.31004		0.99399
13 Acrolein	0.05333	0.04888	0.04523	0.05392	0.05442	+++++					
	+++++	+++++					AVRG		0.05116		7.77888
14 Trichlorotrifluoroethane	0.38443	0.29919	0.26333	0.27368	0.28733	0.26637					
	0.27318	+++++					AVRG		0.29250		14.49372

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Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 1,1-Dichloroethylene	0.66544	0.72486	0.72849	0.75349	0.72602	0.70860					
	0.70169	+++++					AVRG		0.71551		3.85053
16 Acetone	0.27960	0.29041	0.29028	0.29519	0.28855	0.29877					
	0.28827	+++++					AVRG		0.29015		2.07413
17 Isopropyl Alcohol	+++++	0.01880	0.01931	0.02045	0.01791	0.02228					
	0.02251	+++++					AVRG		0.02021		9.32492
18 Iodomethane	0.47134	0.45473	0.46938	0.46784	0.46221	0.46114					
	0.45366	+++++					AVRG		0.46290		1.51011
19 Carbon disulfide	0.96269	0.92797	0.89305	0.94299	0.92514	0.93790					
	0.86070	+++++					AVRG		0.92149		3.70371
20 Allyl chloride	0.09501	0.09361	0.09290	0.10507	0.12042	0.13013					
	+++++	+++++					AVRG		0.10619		14.81176
21 Methyl acetate	0.26593	0.25494	0.25595	0.25694	0.24207	0.22786					
	0.23511	+++++					AVRG		0.24840		5.49716
22 Acetonitrile	0.03907	0.03505	0.03613	0.03588	0.03452	0.03371					
	0.03550	+++++					AVRG		0.03569		4.76986
23 Methylene chloride	+++++	24051	41818	70969	131447	316200					
	681164	+++++					LINR	-0.03083	0.35083		0.99980

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
24 tert-Butyl Alcohol	0.03736	0.03924	0.03623	0.04125	0.03045	0.04033					
	0.04086	+++++					AVRG		0.03796		9.99389
25 tert-Butyl methyl ether	1.02944	1.16134	1.14779	1.21755	1.11739	1.12980					
	1.16499	+++++					AVRG		1.13833		5.06877
26 trans-1,2-Dichloroethylene	0.34072	0.33605	0.34935	0.32977	0.32190	0.31967					
	0.32891	+++++					AVRG		0.33234		3.15938
27 Acrylonitrile	0.11445	0.10516	0.09582	0.09726	0.11027	0.10992					
	0.11442	+++++					AVRG		0.10676		7.18031
28 Isopropyl ether	+++++	1.14017	1.11343	1.15572	1.20439	1.22887					
	1.32967	+++++					AVRG		1.19537		6.54156
29 Vinyl acetate	0.47200	0.53409	0.59574	0.55445	0.52377	0.60780					
	0.57002	+++++					AVRG		0.55113		8.40353
30 1,1-Dichloroethane	0.71917	0.72889	0.80378	0.74289	0.72120	0.71174					
	0.74337	+++++					AVRG		0.73872		4.20348
31 2-Chloro-1,3-butadiene	0.65721	0.59215	0.56354	0.55911	0.62777	0.61361					
	0.65818	+++++					AVRG		0.61022		6.67178
32 Ethyl tert-butyl ether	+++++	1.12815	1.09366	1.08936	1.06318	1.18087					
	1.29073	+++++					AVRG		1.14099		7.34719

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
33 2,2-Dichloropropane	0.48989	0.52491	0.58120	0.54053	0.55119	0.53778					
	0.55150	+++++					AVRG		0.53957		5.18583
34 Ethyl acetate	0.33965	0.28932	0.26285	0.29260	0.27580	0.29649					
	0.28868	+++++					AVRG		0.29220		8.17282
35 2-Butanone	0.25793	0.27740	0.26965	0.27914	0.28942	0.30924					
	0.30740	+++++					AVRG		0.28431		6.68266
36 cis-1,2-Dichloroethylene	0.35593	0.34838	0.36631	0.33981	0.34705	0.34186					
	0.36768	+++++					AVRG		0.35243		3.18020
37 Propionitrile	0.04783	0.04230	0.03731	0.04306	0.04379	0.04424					
	0.04431	+++++					AVRG		0.04326		7.28248
38 Tetrahydrofuran	0.23152	0.20954	0.20440	0.19096	0.19197	0.21633					
	0.18821	+++++					AVRG		0.20471		7.72518
39 Bromochloromethane	0.13887	0.13222	0.13837	0.14209	0.13930	0.14049					
	0.14893	+++++					AVRG		0.14004		3.56145
40 Methacrylonitrile	0.24963	0.22678	0.21065	0.22890	0.23535	0.24087					
	0.23039	+++++					AVRG		0.23180		5.27167
41 Chloroform	0.74775	0.77887	0.82572	0.78772	0.78034	0.77383					
	0.81096	+++++					AVRG		0.78646		3.24006

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
42 Cyclohexane	0.66345	0.64389	0.63890	0.66407	0.64404	0.63011					
	0.64678	+++++					AVRG		0.64732		1.92383
43 1,1,1-Trichloroethane	0.54517	0.62302	0.63779	0.62522	0.62893	0.61320					
	0.63805	+++++					AVRG		0.61591		5.25541
44 Carbon tetrachloride	0.56294	0.58644	0.63641	0.63628	0.63185	0.62091					
	0.64429	+++++					AVRG		0.61702		4.94513
45 1,1-Dichloropropene	0.55100	0.55607	0.56975	0.55980	0.55465	0.55195					
	0.58405	+++++					AVRG		0.56104		2.12886
46 Isobutyl alcohol	0.01033	0.01111	0.01036	0.01037	0.00985	0.01223					
	0.01175	+++++					AVRG		0.01086		7.98726
47 Benzene	36755	49089	122794	236505	464924	1202457					
	2698240	23667					LINR	0.00708	1.40915		0.99937
49 Methyl tert-amyl ether	+++++	0.88273	0.85934	0.84815	0.87620	0.96177					
	1.02973	+++++					AVRG		0.90966		7.81866
50 Cyclohexene	0.53615	0.51960	0.53427	0.54352	0.53716	0.52183					
	0.54823	+++++					AVRG		0.53439		1.96596
51 1,2-Dichloroethane	0.63028	0.70033	0.72243	0.70806	0.70200	0.69617					
	0.69894	+++++					AVRG		0.69403		4.24176

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
53 n-Butyl alcohol	0.00840	0.00793	0.00871	0.00963	0.00810	0.00978					
	0.01083	+++++					AVRG		0.00905		11.70077
54 Trichloroethylene	0.38407	0.37942	0.39497	0.37726	0.38205	0.37012					
	0.39468	+++++					AVRG		0.38323		2.36496
55 Methylcyclohexane	0.61415	0.59438	0.58177	0.58292	0.58847	0.57365					
	0.60973	+++++					AVRG		0.59215		2.53002
56 Methyl methacrylate	0.21424	0.18730	0.18064	0.19254	0.19905	0.20650					
	0.20620	+++++					AVRG		0.19807		6.00920
57 1,2-Dichloropropane	0.39078	0.35768	0.35900	0.35500	0.35022	0.35218					
	0.37196	+++++					AVRG		0.36240		3.96416
58 1,4-Dioxane	0.00305	0.00245	0.00266	0.00286	0.00318	0.00288					
	0.00289	+++++					AVRG		0.00285		8.49652
59 Dibromomethane	0.20277	0.23410	0.23268	0.22085	0.21845	0.22248					
	0.23307	+++++					AVRG		0.22349		5.00706
60 Bromodichloromethane	0.51667	0.56051	0.62592	0.60782	0.59837	0.61544					
	0.63717	+++++					AVRG		0.59456		7.08633
61 2-Chloroethylvinyl ether	2224	2878	11313	21547	54379	210498					
	505362	+++++					LINR	0.39134	0.05430		0.99355

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
62 2-Nitropropane	0.10211	0.09608	0.09548	0.10761	0.11835	0.11732					
	0.11890	+++++					AVRG		0.10798		9.61347
63 cis-1,3-Dichloropropylene	0.56705	0.57716	0.62105	0.61985	0.62451	0.64527					
	0.67992	+++++					AVRG		0.61926		6.21449
64 4-Methyl-2-pentanone	0.15705	0.17262	0.17271	0.18512	0.18978	0.21108					
	0.20813	+++++					AVRG		0.18521		10.62392
66 Toluene	1.14017	1.06414	1.10843	1.06181	1.07135	1.08649					
	1.15420	+++++					AVRG		1.09808		3.39614
67 Ethyl methacrylate	0.52322	0.48434	0.48427	0.53223	0.51154	0.52546					
	0.51582	+++++					AVRG		0.51098		3.79655
68 trans-1,3-Dichloropropylene	0.69838	0.72713	0.78298	0.78308	0.78831	0.81706					
	0.87099	+++++					AVRG		0.78113		7.23969
69 1,1,2-Trichloroethane	0.31590	0.30169	0.29945	0.29278	0.30402	0.30261					
	0.32301	+++++					AVRG		0.30563		3.37459
70 Tetrachloroethylene	0.34151	0.33330	0.33889	0.32547	0.32471	0.32346					
	0.34458	+++++					AVRG		0.33313		2.62174
71 2-Hexanone	0.42866	0.44990	0.45866	0.46921	0.50138	0.56178					
	0.55722	+++++					AVRG		0.48954		10.73922

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
72 1,3-Dichloropropane	0.67890	0.68207	0.69734	0.65590	0.66618	0.66440					
	0.71069	+++++					AVRG		0.67935		2.85695
73 Dibromochloromethane	0.38469	0.38394	0.44512	0.43782	0.44944	0.47113					
	0.49706	+++++					AVRG		0.43846		9.55461
74 1,2-Dibromoethane	0.34045	0.34527	0.36316	0.35106	0.36203	0.36864					
	0.38538	+++++					AVRG		0.35943		4.26461
75 1-Chlorohexane	+++++	0.39312	0.39282	0.32524	0.40104	0.42060					
	0.43305	+++++					AVRG		0.39431		9.49685
77 Chlorobenzene	1.21373	1.15844	1.14111	1.07587	1.08040	1.10429					
	1.17692	+++++					AVRG		1.13582		4.54042
78 Ethylbenzene	2.40687	2.33669	2.47268	2.23463	2.29813	2.32214					
	2.46303	+++++					AVRG		2.36203		3.74714
79 1,1,1,2-Tetrachloroethane	0.42049	0.43141	0.45326	0.42496	0.43613	0.44494					
	0.47082	+++++					AVRG		0.44029		3.98244
80 m,p-Xylenes	0.80780	0.74989	0.79953	0.72779	0.75646	0.76931					
	0.84008	+++++					AVRG		0.77870		4.98818
81 o-Xylene	0.82120	0.69429	0.76774	0.71936	0.72965	0.75467					
	0.81606	+++++					AVRG		0.75757		6.33656

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
82 Styrene	1.30914	1.18192	1.31601	1.23212	1.27501	1.34034					
	1.43319	+++++					AVRG		1.29825		6.19894
83 Bromoform	0.42221	0.45244	0.46276	0.49988	0.51775	0.53547					
	0.59142	+++++					AVRG		0.49742		11.48564
84 Isopropylbenzene	3.92962	3.81106	4.36021	3.96245	4.03248	4.02489					
	4.35218	+++++					AVRG		4.06756		5.17225
85 cis-1,4-Dichloro-2-butene	0.30225	0.29462	0.29877	0.29084	0.32781	0.32850					
	0.31209	+++++					AVRG		0.30784		4.99910
86 Cyclohexanone	12846	23538	58910	150579	381845	+++++					
	+++++	+++++					LINR	0.49988	0.04909		0.99135
88 1,1,2,2-Tetrachloroethane	0.75610	0.74369	0.81649	0.79419	0.78783	0.79158					
	0.86202	+++++					AVRG		0.79313		4.92083
89 n-Propylbenzene	4.79404	4.78851	5.23968	4.82134	4.89570	4.92964					
	5.21295	+++++					AVRG		4.95455		3.89310
90 trans-1,4-Dichloro-2-butene	0.29812	0.31352	0.28782	0.26998	0.31695	0.31835					
	0.29727	+++++					AVRG		0.30029		5.87400
91 Bromobenzene	0.85156	0.84147	0.85882	0.81020	0.81428	0.82700					
	0.88455	+++++					AVRG		0.84112		3.13963

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
92 1,2,3-Trichloropropane	0.28022	0.26897	0.25372	0.25204	0.25423	0.25360					
	0.26290	+++++					AVRG		0.26081		4.05216
93 1,3,5-Trimethylbenzene	3.43446	3.49218	3.68233	3.44662	3.56449	3.59826					
	3.86366	+++++					AVRG		3.58314		4.23441
94 2-Chlorotoluene	3.47821	3.57761	3.79930	3.46640	3.52829	3.52154					
	3.75641	+++++					AVRG		3.58968		3.73610
95 4-Chlorotoluene	3.35203	3.17426	3.34752	3.10435	3.16879	3.17490					
	3.33681	+++++					AVRG		3.23695		3.22667
96 tert-Butylbenzene	2.87089	2.74977	2.84522	2.66297	2.72776	2.70387					
	2.96377	+++++					AVRG		2.78918		3.84011
97 1,2,4-Trimethylbenzene	3.70191	3.60410	3.79540	3.52090	3.56225	3.61987					
	3.87066	+++++					AVRG		3.66787		3.47855
98 Pentachloroethane	0.32060	0.31703	0.32398	0.24876	0.30297	0.37777					
	0.29193	+++++					AVRG		0.31186		12.45420
99 sec-Butylbenzene	4.44800	4.34644	4.60966	4.23567	4.42485	4.37976					
	4.71803	+++++					AVRG		4.45177		3.66292
100 4-Isopropyltoluene	3.36328	3.22054	3.51684	3.17589	3.32966	3.36325					
	3.58839	+++++					AVRG		3.36541		4.38795

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
101 1,3-Dichlorobenzene	1.67374	1.55428	1.66831	1.53164	1.55944	1.58328					
	1.67251	+++++					AVRG		1.60617		3.91972
103 1,4-Dichlorobenzene	1.76616	1.66887	1.68200	1.51979	1.57239	1.60865					
	1.70636	+++++					AVRG		1.64632		5.12085
104 Benzyl chloride	1.62969	1.55776	1.60390	1.34298	1.74375	1.69429					
	1.59116	+++++					AVRG		1.59479		8.02116
105 n-Butylbenzene	3.64538	3.69207	3.98159	3.55254	3.74217	3.76878					
	3.99375	+++++					AVRG		3.76804		4.39399
106 1,2-Dichlorobenzene	1.66043	1.49940	1.55636	1.46965	1.48387	1.49852					
	1.59506	+++++					AVRG		1.53761		4.53952
107 bis(2-Chloroisopropyl)ether	0.37106	0.36662	0.32099	0.32780	0.38946	0.39192					
	0.35359	+++++					AVRG		0.36021		7.73065
108 1,2-Dibromo-3-chloropropane	0.14172	0.13191	0.14045	0.15188	0.15917	0.15194					
	0.18132	+++++					AVRG		0.15120		10.62760
109 1,2,4-Trichlorobenzene	1.16045	1.14150	1.16560	1.09295	1.12242	1.11980					
	1.19388	+++++					AVRG		1.14237		2.96216
110 Hexachlorobutadiene	0.84192	0.81403	0.87311	0.75366	0.80851	0.77001					
	0.79946	+++++					AVRG		0.80867		5.02102

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
111 Naphthalene	2.12943	2.03059	1.99480	2.09592	2.16328	2.08234					
	2.33666	+++++					AVRG		2.11900		5.26088
112 1,2,3-Trichlorobenzene	0.93318	0.98133	0.98253	0.97572	0.96237	0.91436					
	0.97897	+++++					AVRG		0.96121		2.80673
$ 48 1,2-Dichloroethane-d4	0.52359	0.62803	0.63025	0.66045	0.64311	0.66027					
	0.60778	+++++					AVRG		0.62193		7.59277
$ 65 Toluene-d8	1.93610	2.03435	2.05225	2.06640	2.00752	2.08350					
	2.06482	+++++					AVRG		2.03499		2.46206
$ 87 Bromofluorobenzene	1.60564	1.67611	1.67667	1.73493	1.66503	1.69222					
	1.70106	+++++					AVRG		1.67881		2.35520

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Cal Date : 02-Dec-2009 13:55 ron01469

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/VOA1.i/111309v1/11528.d
Report Date: 18-Nov-2009 11:01

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 14-NOV-2009 08:52
Lab File ID: 11528.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091113-19 Quant Type: ISTD
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.14763	0.14763	0.010	-5.90175	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.36322	0.36322	0.010	10.47439	30.00000	Averaged
13 Acrolein	0.05116	0.04667	0.04667	0.001	-8.77636	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.27186	0.27186	0.030	-7.05527	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02305	0.02305	0.000	14.05893	40.00000	Averaged
20 Allyl chloride	0.10619	0.13404	0.13404	0.010	26.22620	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.04061	0.04061	0.010	6.98257	40.00000	Averaged
27 Acrylonitrile	0.10676	0.10533	0.10533	0.010	-1.33680	30.00000	Averaged
28 Isopropyl ether	1.19537	1.28737	1.28737	0.010	7.69603	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.60811	0.60811	0.010	-0.34717	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.22940	1.22940	0.010	7.74850	30.00000	Averaged
37 Propionitrile	0.04326	0.04095	0.04095	0.010	-5.34093	30.00000	Averaged
34 Ethyl acetate	0.29220	0.26253	0.26253	0.010	-10.15296	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.22054	0.22054	0.010	-4.85685	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.19333	0.19333	0.010	-5.55867	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01041	0.01041	0.001	-4.14907	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	0.98494	0.98494	0.010	8.27576	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.19115	0.19115	0.010	-3.48960	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.48311	0.48311	0.010	-5.45482	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.40080	0.40080	0.000	1.64453	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00267	0.00267	0.001	-6.48301	40.00000	Averaged
62 2-Nitropropane	0.10798	0.10490	0.10490	0.000	-2.85062	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.29808	0.29808	0.010	-3.17173	30.00000	Averaged
86 Cyclohexanone	555	1250	0.02080	0.010	-55.62459	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.28505	0.28505	0.010	-5.07396	30.00000	Averaged
98 Pentachloroethane	0.31186	0.25219	0.25219	0.010	-19.13515	30.00000	Averaged
104 Benzyl chloride	1.59479	1.35725	1.35725	0.010	-14.89504	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.35032	0.35032	0.010	-2.74499	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.54180	0.54180	0.010	-12.88362	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.03543	2.03543	0.010	0.02147	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.62823	1.62823	0.010	-3.01305	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 11528.d
Analysis Type: WATER
Lab Sample ID: W1VM091113-19
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

Injection Date: 14-NOV-2009 08:52
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

Average %D / Drift Results.	
Calculated Average %D/Drift =	8.75563
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111309v1/11528.d
Lab Smp Id: W1VM091113-19 Client Smp ID: SHORTICV
Inj Date : 14-NOV-2009 08:52
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091113-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091023-08A/UVM091105-02A
Comment :
Method : /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m
Meth Date : 18-Nov-2009 11:01 eh1 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	493699	150.000	141
8 2-Chloro-1,1,1-trifluoroethane	118	6.298	6.298	(0.460)	1214708	150.000	166
13 Acrolein	56	8.959	8.959	(0.655)	260116	250.000	228
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1515317	250.000	232
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1284719	2500.00	2850
20 Allyl chloride	76	9.856	9.856	(0.720)	747101	250.000	316
24 tert-Butyl Alcohol	59	10.202	10.202	(0.745)	2263586	2500.00	2670
27 Acrylonitrile	53	10.671	10.671	(0.780)	587086	250.000	247
28 Isopropyl ether	45	11.201	11.201	(0.818)	1435106	50.0000	53.8
31 2-Chloro-1,3-butadiene	53	11.399	11.399	(0.833)	677890	50.0000	49.8
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1370484	50.0000	53.9
37 Propionitrile	54	12.407	12.407	(0.906)	228260	250.000	237
34 Ethyl acetate	43	12.167	12.167	(0.889)	1463298	250.000	225
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1229233	250.000	238
38 Tetrahydrofuran	42	12.545	12.545	(0.640)	489608	250.000	236

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
46 Isobutyl alcohol	41	13.111	13.111	(0.958)	580033	2500.00	2400
49 Methyl tert-amyl ether	73	13.350	13.350	(0.975)	1097966	50.0000	54.1
56 Methyl methacrylate	69	14.441	14.441	(1.055)	1065456	250.000	241
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2164928	250.000	236
75 1-Chlorohexane	55	17.033	17.033	(1.244)	446791	50.0000	50.8
58 1,4-Dioxane	88	14.547	14.547	(1.063)	148599	2500.00	2340
62 2-Nitropropane	43	15.081	15.081	(1.102)	584679	250.000	243
85 cis-1,4-Dichloro-2-butene	53	18.275	18.275	(0.932)	754892	250.000	242
86 Cyclohexanone	55	18.386	18.386	(1.071)	466077	1250.00	555
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	721901	250.000	237
98 Pentachloroethane	167	19.201	19.201	(0.979)	638677	250.000	202
104 Benzyl chloride	91	19.776	19.776	(1.008)	3437283	250.000	213
107 bis(2-Chloroisopropyl)ether	45	20.167	20.167	(1.028)	887198	250.000	243
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1114758	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	896248	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	506508	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	603976	50.0000	43.6
$ 65 Toluene-d8	98	15.523	15.523	(0.904)	1824247	50.0000	50.0
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	824709	50.0000	48.5

Data File: /chem/VOA1.i/111309v1/11528.d
Date : 14-NOV-2009 08:52
Client ID: SHORTICV
Sample Info: IW1VH091113-19|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

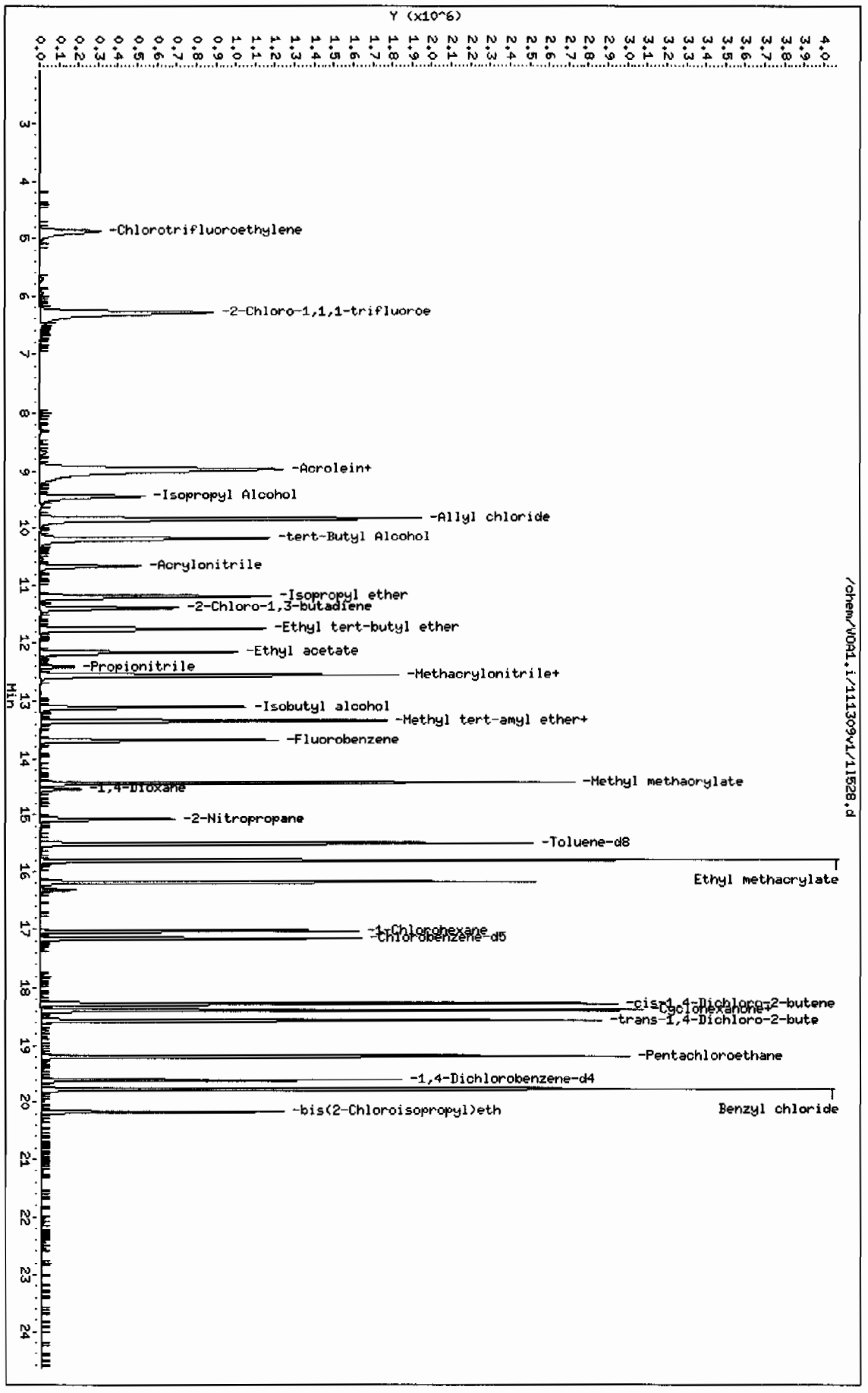

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M	1 Xylenes (total)	0.77166	0.78659	0.78659	0.050	1.93501	30.00000	Averaged
M	2 1,2-Dichloroethylene (total	0.34239	0.34829	0.34829	0.050	1.72438	30.00000	Averaged
M	3 1,3-Dichloropropylene	0.78218	0.76082	0.76082	0.050	-2.73046	30.00000	Averaged
	5 Dichlorodifluoromethane	0.33388	0.28961	0.28961	0.050	-13.25713	30.00000	Averaged
	6 Chloromethane	0.41309	0.34567	0.34567	0.100	-16.32056	30.00000	Averaged spcc
	7 Vinyl chloride	0.36890	0.30586	0.30586	0.050	-17.08914	20.00000	Averaged ccc
	9 Bromomethane	0.22174	0.21949	0.21949	0.050	-1.01260	30.00000	Averaged
	10 Chloroethane	0.22841	0.24501	0.24501	0.050	7.27015	30.00000	Averaged
	11 Trichlorofluoromethane	0.51936	0.53920	0.53920	0.050	3.81924	30.00000	Averaged
	12 Ethyl Ether	45.83993	50.00000	0.28952	0.010	-8.32014	30.00000	Wt Linear
	16 Acetone	0.29015	0.19861	0.19861	0.000	-31.55015	40.00000	Averaged
	22 Acetonitrile	0.03569	0.03488	0.03488	0.010	-2.28372	30.00000	Averaged
	15 1,1-Dichloroethylene	0.71551	0.66262	0.66262	0.050	-7.39264	20.00000	Averaged ccc
	21 Methyl acetate	0.24838	0.21471	0.21471	0.010	-13.55590	40.00000	Averaged
	18 Iodomethane	0.46290	0.47705	0.47705	0.050	3.05775	30.00000	Averaged
	23 Methylene chloride	49.69453	50.00000	0.35951	0.000	-0.61094	30.00000	Linear
	19 Carbon disulfide	0.92149	1.06038	1.06038	0.050	15.07243	30.00000	Averaged
	25 tert-Butyl methyl ether	1.13833	1.01424	1.01424	0.050	-10.90101	30.00000	Averaged
	26 trans-1,2-Dichloroethylene	0.33234	0.34226	0.34226	0.050	2.98628	30.00000	Averaged
	29 Vinyl acetate	0.55113	0.66089	0.66089	0.010	19.91591	40.00000	Averaged
	30 1,1-Dichloroethane	0.73872	0.68036	0.68036	0.100	-7.89939	30.00000	Averaged spcc
	35 2-Butanone	0.28431	0.21356	0.21356	0.030	-24.88572	40.00000	Averaged
	36 cis-1,2-Dichloroethylene	0.35243	0.35432	0.35432	0.050	0.53641	30.00000	Averaged
	33 2,2-Dichloropropane	0.53957	0.52117	0.52117	0.050	-3.41129	30.00000	Averaged
	41 Chloroform	0.78646	0.70224	0.70224	0.010	-10.70855	20.00000	Averaged ccc
	39 Bromochloromethane	0.14004	0.14700	0.14700	0.010	4.97038	30.00000	Averaged
	43 1,1,1-Trichloroethane	0.61591	0.56828	0.56828	0.010	-7.73277	30.00000	Averaged
	42 Cyclohexane	0.64732	0.70592	0.70592	0.010	9.05253	30.00000	Averaged
	45 1,1-Dichloropropene	0.56104	0.55571	0.55571	0.010	-0.95042	30.00000	Averaged
	53 n-Butyl alcohol	0.00905	0.00962	0.00962	0.001	6.25892	40.00000	Averaged
	44 Carbon tetrachloride	0.61702	0.57859	0.57859	0.010	-6.22742	30.00000	Averaged
$	48 1,2-Dichloroethane-d4	0.62106	0.48336	0.48336	0.010	-22.17142	30.00000	Averaged
	51 1,2-Dichloroethane	0.69403	0.55944	0.55944	0.010	-19.39207	30.00000	Averaged
	47 Benzene	50.28606	50.00000	1.40724	0.010	0.57211	30.00000	Linear
	50 Cyclohexene	0.53439	0.52276	0.52276	0.010	-2.17678	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.37928	0.37928	0.010	-1.03062	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.35751	0.35751	0.010	-1.35037	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.64311	0.64311	0.010	8.60482	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.53560	0.53560	0.010	-9.91614	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20094	0.20094	0.010	-10.08947	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	197	250	0.03848	0.000	-21.31056	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.16731	0.16731	0.010	-9.66493	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.60977	0.60977	0.010	-1.53290	30.00000	Averaged	
$	65 Toluene-d8	2.03499	1.97166	1.97166	0.010	-3.11196	30.00000	Averaged	
	66 Toluene	1.09808	1.09311	1.09311	0.010	-0.45345	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.75103	0.75103	0.010	-3.85367	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.29722	0.29722	0.010	-2.75287	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.37565	0.37565	0.010	-23.26575	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.63720	0.63720	0.010	-6.20551	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34435	0.34435	0.010	3.36940	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.42649	0.42649	0.010	-2.73068	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.35320	0.35320	0.010	-1.73152	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.16153	1.16153	0.300	2.26365	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.42501	0.42501	0.010	-3.47076	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.28751	2.28751	0.010	-3.15483	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.80163	0.80163	0.010	2.94558	30.00000	Averaged	
	81 o-Xylene	0.75757	0.75650	0.75650	0.010	-0.14143	30.00000	Averaged	
	82 Styrene	1.29825	1.33826	1.33826	0.010	3.08236	30.00000	Averaged	
	83 Bromoform	0.49742	0.51659	0.51659	0.100	3.85450	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	4.09104	4.09104	0.010	0.57739	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.80201	0.80201	0.300	1.11984	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.59852	1.59852	0.010	-4.78243	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.22267	0.22267	0.010	-14.62239	30.00000	Averaged	
	91 Bromobenzene	0.84113	0.86234	0.86234	0.010	2.52236	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.95567	4.95567	0.010	0.02259	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.47589	3.47589	0.010	-3.16985	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.53161	3.53161	0.010	-1.43822	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.13706	3.13706	0.010	-3.08595	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.83816	2.83816	0.010	1.75609	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.59991	3.59991	0.010	-1.85290	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.49320	4.49320	0.010	0.93061	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.51635	3.51635	0.010	4.48521	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.71300	1.71300	0.010	6.65131	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.70171	1.70171	0.010	3.36466	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.75570	3.75570	0.010	-0.32761	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.59378	1.59378	0.010	3.65299	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.16033	0.16033	0.010	6.03864	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20851	1.20851	0.010	5.78950	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.82340	0.82340	0.010	1.82157	30.00000	Averaged
111 Naphthalene	2.11900	2.27355	2.27355	0.010	7.29312	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.98434	0.98434	0.010	2.40643	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.36236
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111609v1/1m108ICV.d
Lab Smp Id: W1VM091116-05 Client Smp ID: ICV
Inj Date : 16-NOV-2009 14:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091116-05|CCV/LCS/ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m
Meth Date : 01-Dec-2009 16:53 slg Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2088100	150.000	153
M 2 1,2-Dichloroethylene (total)	96				778988	100.000	102
M 3 1,3-Dichloropropylene	75				1346471	100.000	97.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	323873	50.0000	43.4
6 Chloromethane	50	5.550	5.550	(0.405)	386561	50.0000	41.8
7 Vinyl chloride	62	5.923	5.923	(0.433)	342039	50.0000	41.4
9 Bromomethane	96	6.948	6.948	(0.508)	245458	50.0000	49.5
10 Chloroethane	64	7.215	7.215	(0.527)	273997	50.0000	53.6
11 Trichlorofluoromethane	101	7.836	7.836	(0.573)	602979	50.0000	51.9
12 Ethyl Ether	59	8.476	8.476	(0.619)	323763	50.0000	45.8
16 Acetone	43	9.254	9.254	(0.676)	1110521	250.000	171
22 Acetonitrile	41	9.976	9.976	(0.729)	975078	1250.00	1220
15 1,1-Dichloroethylene	61	9.093	9.093	(0.664)	741002	50.0000	46.3
21 Methyl acetate	43	9.838	9.838	(0.719)	1200537	250.000	216
18 Iodomethane	142	9.470	9.470	(0.692)	2667438	250.000	258

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	23 Methylene chloride	84	10.137	10.137	(0.741)	402034	50.0000	49.7
	19 Carbon disulfide	76	9.571	9.571	(0.699)	5929090	250.000	288
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1134219	50.0000	44.5
	26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	382752	50.0000	51.5
	29 Vinyl acetate	43	11.297	11.297	(0.825)	3695328	250.000	300
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	760846	50.0000	46.0
	35 2-Butanone	43	12.186	12.186	(0.890)	1194107	250.000	188
	36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	396236	50.0000	50.3
	33 2,2-Dichloropropane	77	12.158	12.158	(0.888)	582817	50.0000	48.3
	41 Chloroform	83	12.614	12.614	(0.922)	785308	50.0000	44.6
	39 Bromochloromethane	128	12.559	12.559	(0.918)	164387	50.0000	52.5
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	635509	50.0000	46.1
	42 Cyclohexane	56	12.839	12.839	(0.938)	789422	50.0000	54.5
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	621443	50.0000	49.5
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1075626	5000.00	5310
	44 Carbon tetrachloride	117	13.024	13.024	(0.952)	647037	50.0000	46.9
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	540540	50.0000	38.9
	51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	625621	50.0000	40.3
	47 Benzene	78	13.337	13.337	(0.974)	1573713	50.0000	50.3
	50 Cyclohexene	54	13.396	13.396	(0.979)	584602	50.0000	48.9
*	52 Fluorobenzene	96	13.686	13.686	(1.000)	1118294	50.0000	
	54 Trichloroethylene	95	14.119	14.119	(1.032)	424142	50.0000	49.5
	57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	399800	50.0000	49.3
	55 Methylcyclohexane	83	14.285	14.285	(1.044)	719182	50.0000	54.3
	60 Bromodichloromethane	83	14.754	14.754	(1.078)	598959	50.0000	45.0
	59 Dibromomethane	93	14.621	14.621	(1.068)	224707	50.0000	45.0
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	215138	250.000	197
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	740258	250.000	226
	63 cis-1,3-Dichloropropylene	75	15.261	15.261	(1.115)	681900	50.0000	49.2
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1744680	50.0000	48.4
	66 Toluene	92	15.597	15.597	(0.909)	967265	50.0000	49.8
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	664571	50.0000	48.1
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	263004	50.0000	48.6
	71 2-Hexanone	43	16.269	16.269	(0.948)	1662015	250.000	192
	72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	563840	50.0000	46.9
	70 Tetrachloroethylene	164	16.195	16.195	(0.944)	304712	50.0000	51.7
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	377389	50.0000	48.6
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	312543	50.0000	49.1
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	884878	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	1027816	50.0000	51.1
	79 1,1,1,2-Tetrachloroethane	131	17.263	17.263	(1.006)	376079	50.0000	48.3
	78 Ethylbenzene	91	17.222	17.222	(1.003)	2024165	50.0000	48.4
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1418694	100.000	103
	81 o-Xylene	106	17.783	17.783	(1.036)	669406	50.0000	49.9
	82 Styrene	104	17.806	17.806	(1.038)	1184200	50.0000	51.5
	83 Bromoform	173	18.105	18.105	(0.923)	253734	50.0000	51.9
	84 Isopropylbenzene	105	18.133	18.133	(0.924)	2009401	50.0000	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.510	18.510	(0.944)	393924	50.0000	50.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	785147	50.0000	47.6
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	109371	50.0000	42.7
91 Bromobenzene	156	18.593	18.593	(0.948)	423557	50.0000	51.3
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2434081	50.0000	50.0
94 2-Chlorotoluene	91	18.745	18.745	(0.956)	1707258	50.0000	48.4
93 1,3,5-Trimethylbenzene	105	18.722	18.722	(0.954)	1734624	50.0000	49.3
95 4-Chlorotoluene	91	18.856	18.856	(0.961)	1540833	50.0000	48.4
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1394021	50.0000	50.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1768170	50.0000	49.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2206931	50.0000	50.5
100 4-Isopropyltoluene	119	19.426	19.426	(0.990)	1727131	50.0000	52.2
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.996)	841377	50.0000	53.3
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.615	(1.000)	491171	50.0000	
103 1,4-Dichlorobenzene	146	19.643	19.643	(1.001)	835831	50.0000	51.7
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1844689	50.0000	49.8
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	782819	50.0000	51.8
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78748	50.0000	53.0
109 1,2,4-Trichlorobenzene	180	22.027	22.027	(1.123)	593584	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	404431	50.0000	50.9
111 Naphthalene	128	22.441	22.441	(1.144)	1116700	50.0000	53.6
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	483479	50.0000	51.2

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Date : 16-NOV-2009 14:01
Client ID: ICV
Sample Info: IW1VH091116-05ICCV/LCS/ICV1I1VOAF11I
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

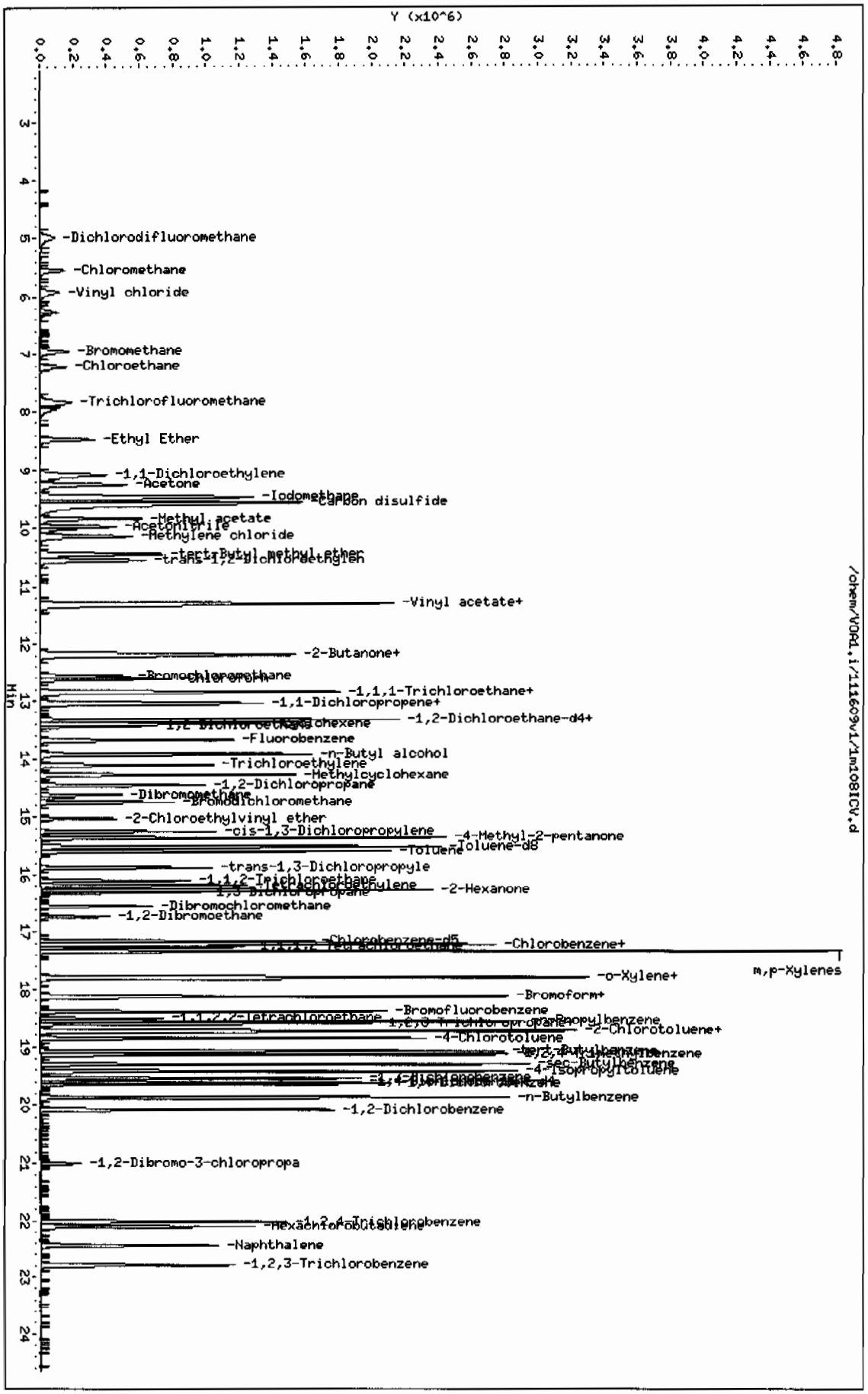

Page 1

Data File: /chem/VOA1.i/112509v1/1n302.d
Report Date: 02-Dec-2009 13:55

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n302.d
Analysis Type: WATER
Lab Sample ID: W1VM091125-01
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

Injection Date: 25-NOV-2009 09:20
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.77239	0.77239	0.050	0.09517	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34202	0.34202	0.050	-0.10902	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.73432	0.73432	0.050	-6.11940	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.27253	0.27253	0.050	-18.37439	30.00000	Averaged	
	6 Chloromethane	0.41309	0.37098	0.37098	0.100	-10.19401	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.33633	0.33633	0.050	-8.82979	20.00000	Averaged	ccc
	9 Bromomethane	0.22182	0.23258	0.23258	0.050	4.85423	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24289	0.24289	0.050	6.33847	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.55795	0.55795	0.050	7.43114	30.00000	Averaged	
	12 Ethyl Ether	44.53694	50.00000	0.28144	0.010	-10.92612	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19462	0.19462	0.000	-32.92517	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03407	0.03407	0.010	-4.54038	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.65585	0.65585	0.050	-8.33887	20.00000	Averaged	ccc
	21 Methyl acetate	0.24840	0.20849	0.20849	0.010	-16.06623	40.00000	Averaged	
	18 Iodomethane	0.46290	0.47822	0.47822	0.050	3.30927	30.00000	Averaged	
	23 Methylene chloride	49.36468	50.00000	0.35719	0.000	-1.27065	30.00000	Linear	
	25 tert-Butyl methyl ether	1.13833	1.00500	1.00500	0.050	-11.71288	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.33149	0.33149	0.050	-0.25555	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.67539	0.67539	0.010	22.54812	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.69086	0.69086	0.100	-6.47891	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.20641	0.20641	0.030	-27.40060	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.35254	0.35254	0.050	0.03109	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52263	0.52263	0.050	-3.14046	30.00000	Averaged	
	41 Chloroform	0.78646	0.72111	0.72111	0.010	-8.30928	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.15114	0.15114	0.010	7.93046	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.58505	0.58505	0.010	-5.01144	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.67026	0.67026	0.010	3.54368	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55035	0.55035	0.010	-1.90568	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00873	0.00873	0.001	-3.51230	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.60672	0.60672	0.010	-1.66901	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62193	0.66017	0.66017	0.010	6.14881	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.57208	0.57208	0.010	-17.57103	30.00000	Averaged	
	47 Benzene	48.88554	50.00000	1.36777	0.010	-2.22891	30.00000	Linear	
	50 Cyclohexene	0.53439	0.50549	0.50549	0.010	-5.40824	30.00000	Averaged	
	54 Trichloroethylene	0.38323	0.37670	0.37670	0.010	-1.70295	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.35428	0.35428	0.010	-2.24177	20.00000	Averaged	ccc

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n302.d
Analysis Type: WATER
Lab Sample ID: W1VM091125-01
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

Injection Date: 25-NOV-2009 09:20
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	55 Methylcyclohexane	0.59215	0.62223	0.62223	0.010	5.08002	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.55191	0.55191	0.010	-7.17327	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20656	0.20656	0.010	-7.57154	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	225	250	0.04461	0.000	-10.02193	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.15733	0.15733	0.010	-15.05573	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.60523	0.60523	0.010	-2.26623	30.00000	Averaged	
$	65 Toluene-d8	2.03499	2.10905	2.10905	0.010	3.63920	30.00000	Averaged	
	66 Toluene	1.09808	1.07198	1.07198	0.010	-2.37772	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.73366	0.73366	0.010	-6.07722	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.29107	0.29107	0.010	-4.76557	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.34738	0.34738	0.010	-29.03989	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.62783	0.62783	0.010	-7.58447	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34822	0.34822	0.010	4.53035	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.43529	0.43529	0.010	-0.72373	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.34373	0.34373	0.010	-4.36664	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.14363	1.14363	0.300	0.68764	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.42908	0.42908	0.010	-2.54566	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.23266	2.23266	0.010	-5.47676	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.78410	0.78410	0.010	0.69399	30.00000	Averaged	
	81 o-Xylene	0.75757	0.74897	0.74897	0.010	-1.13487	30.00000	Averaged	
	82 Styrene	1.29825	1.32357	1.32357	0.010	1.95032	30.00000	Averaged	
	83 Bromoform	0.49742	0.48325	0.48325	0.100	-2.84740	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	3.81558	3.81558	0.010	-6.19476	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.76352	0.76352	0.300	-3.73275	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.53620	1.53620	0.010	-8.49444	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.21228	0.21228	0.010	-18.60691	30.00000	Averaged	
	91 Bromobenzene	0.84112	0.86810	0.86810	0.010	3.20756	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.75407	4.75407	0.010	-4.04640	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.35990	3.35990	0.010	-6.40109	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.44199	3.44199	0.010	-3.93941	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.06717	3.06717	0.010	-5.24492	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.72849	2.72849	0.010	-2.17593	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.34659	3.34659	0.010	-8.75928	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.35652	4.35652	0.010	-2.13961	30.00000	Averaged	
	100 4-Isopropyltoluene	3.36541	3.39122	3.39122	0.010	0.76695	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 09:20
Lab File ID: 1n302.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091125-01 Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
101 1,3-Dichlorobenzene	1.60617	1.66341	1.66341	0.010	3.56391	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.67899	1.67899	0.010	1.98475	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.68310	3.68310	0.010	-2.25419	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.55205	1.55205	0.010	0.93890	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.14624	0.14624	0.010	-3.28087	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.17130	1.17130	0.010	2.53251	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.79219	0.79219	0.010	-2.03752	30.00000	Averaged
111 Naphthalene	2.11900	2.04179	2.04179	0.010	-3.64370	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.96409	0.96409	0.010	0.29978	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.29619
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n302.d
Lab Smp Id: W1VM091125-01 Client Smp ID: VSTD050
Inj Date : 25-NOV-2009 09:20
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091125-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1977766	150.000	150
M 2 1,2-Dichloroethylene (total)	96				708995	100.000	99.9
M 3 1,3-Dichloropropylene	75				1253516	100.000	95.8
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	282474	50.0000	40.8
6 Chloromethane	50	5.542	5.542	(0.405)	384517	50.0000	44.9
7 Vinyl chloride	62	5.922	5.922	(0.433)	348601	50.0000	45.6
9 Bromomethane	96	6.947	6.947	(0.508)	241073	50.0000	52.4
10 Chloroethane	64	7.214	7.214	(0.527)	251749	50.0000	53.2
11 Trichlorofluoromethane	101	7.850	7.850	(0.574)	578315	50.0000	53.7
12 Ethyl Ether	59	8.476	8.476	(0.619)	291706	50.0000	44.5
16 Acetone	43	9.249	9.249	(0.676)	1008615	250.000	168
22 Acetonitrile	41	9.972	9.972	(0.729)	882884	1250.00	1190
15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	679783	50.0000	45.8
21 Methyl acetate	43	9.834	9.834	(0.719)	1080499	250.000	210
18 Iodomethane	142	9.470	9.470	(0.692)	2478361	250.000	258

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	23 Methylene chloride	84	10.137	10.137	(0.741)	370228	50.0000	49.4
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1041677	50.0000	44.1
	26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	343588	50.0000	49.9
	29 Vinyl acetate	43	11.297	11.297	(0.826)	3500213	250.000	306
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	716070	50.0000	46.8
	35 2-Butanone	43	12.186	12.186	(0.891)	1069708	250.000	181
	36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	365407	50.0000	50.0
	33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	541701	50.0000	48.4
	41 Chloroform	83	12.609	12.609	(0.922)	747424	50.0000	45.8
	39 Bromochloromethane	128	12.559	12.559	(0.918)	156659	50.0000	54.0
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.939)	606397	50.0000	47.5
	42 Cyclohexane	56	12.839	12.839	(0.938)	694718	50.0000	51.8
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	570432	50.0000	49.0
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	905273	5000.00	4820
	44 Carbon tetrachloride	117	13.023	13.023	(0.952)	628862	50.0000	49.2
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	684261	50.0000	53.1
	51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	592959	50.0000	41.2
	47 Benzene	78	13.332	13.332	(0.974)	1417692	50.0000	48.9
	50 Cyclohexene	54	13.396	13.396	(0.979)	523942	50.0000	47.3
*	52 Fluorobenzene	96	13.682	13.682	(1.000)	1036496	50.0000	
	54 Trichloroethylene	95	14.114	14.114	(1.032)	390447	50.0000	49.1
	57 1,2-Dichloropropane	63	14.460	14.460	(1.057)	367208	50.0000	48.9
	55 Methylcyclohexane	83	14.280	14.280	(1.044)	644943	50.0000	52.5
	60 Bromodichloromethane	83	14.750	14.750	(1.078)	572051	50.0000	46.4
	59 Dibromomethane	93	14.625	14.625	(1.069)	214103	50.0000	46.2
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.099)	231171	250.000	225
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	671420	250.000	212
	63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	627315	50.0000	48.9
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1800129	50.0000	51.8
	66 Toluene	92	15.597	15.597	(0.909)	914960	50.0000	48.8
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	626200	50.0000	47.0
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.939)	248435	50.0000	47.6
	71 2-Hexanone	43	16.269	16.269	(0.948)	1482497	250.000	177
	72 1,3-Dichloropropane	76	16.310	16.310	(0.951)	535867	50.0000	46.2
	70 Tetrachloroethylene	164	16.190	16.190	(0.944)	297217	50.0000	52.3
	73 Dibromochloromethane	129	16.549	16.549	(0.965)	371529	50.0000	49.6
	74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	293385	50.0000	47.8
*	76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	853527	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	976122	50.0000	50.3
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	366231	50.0000	48.7
	78 Ethylbenzene	91	17.221	17.221	(1.004)	1905638	50.0000	47.3
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1338500	100.000	101
	81 o-Xylene	106	17.788	17.788	(1.037)	639265	50.0000	49.4
	82 Styrene	104	17.801	17.801	(1.038)	1129700	50.0000	51.0
	83 Bromoform	173	18.110	18.110	(0.923)	233710	50.0000	48.6
	84 Isopropylbenzene	105	18.128	18.128	(0.924)	1845286	50.0000	46.9
	88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	369253	50.0000	48.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	742936	50.0000	45.8
92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	102663	50.0000	40.7
91 Bromobenzene	156	18.593	18.593	(0.948)	419831	50.0000	51.6
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2299156	50.0000	48.0
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1624911	50.0000	46.8
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1664609	50.0000	48.0
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1483343	50.0000	47.4
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	1319547	50.0000	48.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1618473	50.0000	45.6
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2106896	50.0000	48.9
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1640056	50.0000	50.4
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	804457	50.0000	51.8
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	483618	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	811992	50.0000	51.0
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1781216	50.0000	48.9
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	750599	50.0000	50.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	70722	50.0000	48.4
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	566462	50.0000	51.3
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	383120	50.0000	49.0
111 Naphthalene	128	22.437	22.437	(1.144)	987449	50.0000	48.2
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	466252	50.0000	50.1

Data File: /chem/VOA1.i/112509v1/1n302.d
Date : 25-NOV-2009 09:20
Client ID: VSTD050
Sample Info: M1VM091125-01|CCV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

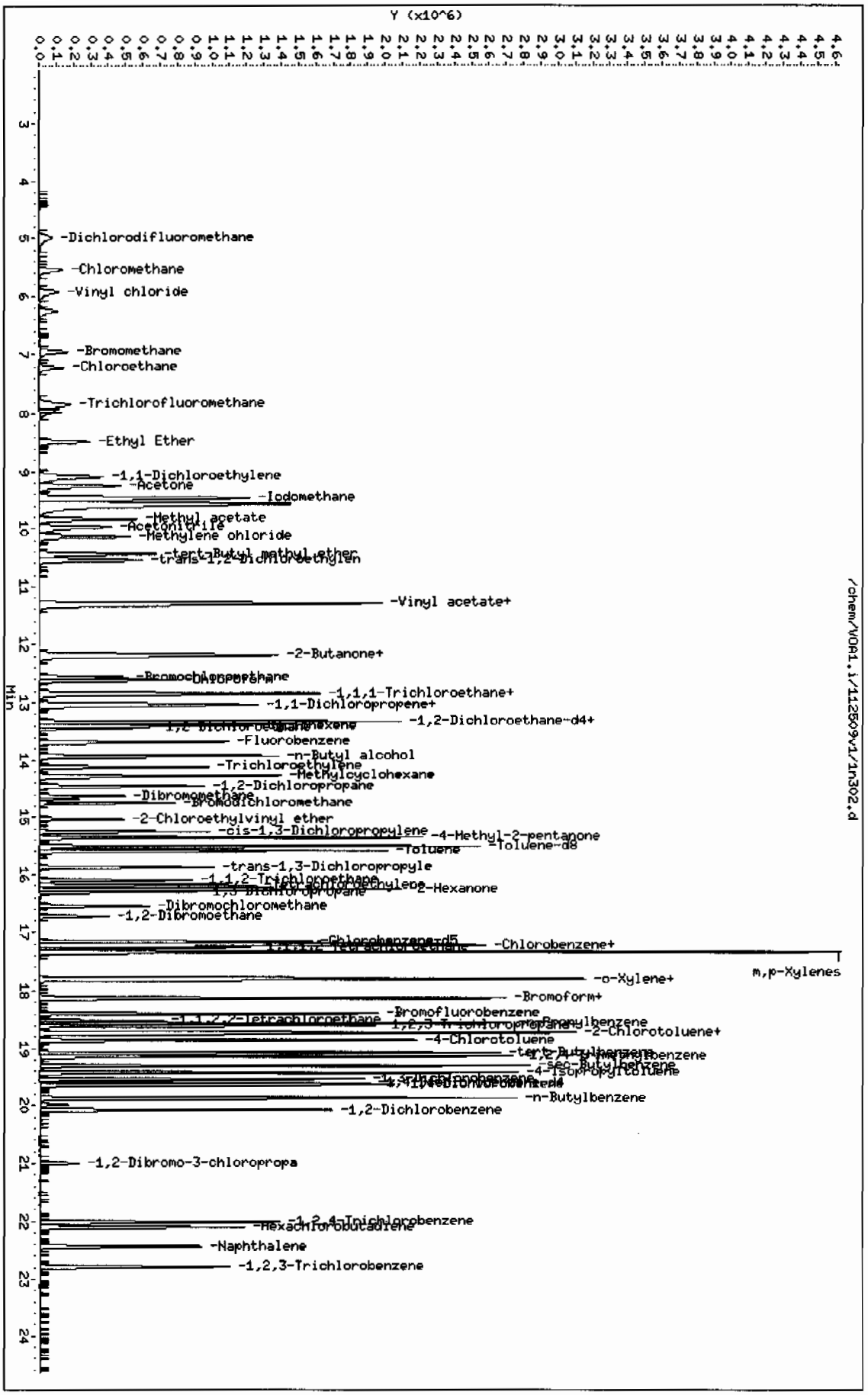

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 10:21
Lab File ID: 1n304.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
13 Acrolein	0.05116	0.05786	0.05786	0.001	13.11027	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.31104	0.31104	0.030	6.33620	30.00000	Averaged
20 Allyl chloride	0.10619	0.14577	0.14577	0.010	37.27413	30.00000	Averaged <-
27 Acrylonitrile	0.10676	0.10158	0.10158	0.010	-4.84809	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.62369	0.62369	0.010	2.20736	30.00000	Averaged
37 Propionitrile	0.04326	0.03975	0.03975	0.010	-8.12405	30.00000	Averaged
34 Ethyl acetate	0.29220	0.24698	0.24698	0.010	-15.47523	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.21691	0.21691	0.010	-6.42181	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.19629	0.19629	0.010	-4.11020	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01023	0.01023	0.001	-5.77222	40.00000	Averaged
56 Methyl methacrylate	0.19807	0.19694	0.19694	0.010	-0.56736	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.49886	0.49886	0.010	-2.37331	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00256	0.00256	0.001	-10.23687	40.00000	Averaged
62 2-Nitropropane	0.10798	0.09933	0.09933	0.000	-8.00455	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.31380	0.31380	0.010	1.93420	30.00000	Averaged
86 Cyclohexanone	694	1250	0.02628	0.010	-44.45934	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.29390	0.29390	0.010	-2.12566	30.00000	Averaged
98 Pentachloroethane	0.31186	0.49786	0.49786	0.010	59.64072	30.00000	Averaged <-
104 Benzyl chloride	1.59479	1.74589	1.74589	0.010	9.47467	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.34828	0.34828	0.010	-3.31105	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.60544	0.60544	0.010	-2.65062	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.16082	2.16082	0.010	6.18312	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.59191	1.59191	0.010	-5.17636	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 27.08676
Maximun Average %D/Drift = 20.00000
* Failed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n304.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 25-NOV-2009 10:21
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 25-Nov-2009 10:44 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
13 Acrolein	56	8.950	8.950	(0.654)	313836	250.000	283
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1686945	250.000	266
20 Allyl chloride	76	9.852	9.852	(0.720)	790605	250.000	343
27 Acrylonitrile	53	10.671	10.671	(0.780)	550941	250.000	238
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	676539	50.0000	51.1
37 Propionitrile	54	12.402	12.402	(0.906)	215581	250.000	230
34 Ethyl acetate	43	12.163	12.163	(0.889)	1339535	250.000	211
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1176447	250.000	234
38 Tetrahydrofuran	42	12.545	12.545	(0.640)	466691	250.000	240
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	554851	2500.00	2360
56 Methyl methacrylate	69	14.441	14.441	(1.056)	1068148	250.000	248
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2191695	250.000	244
58 1,4-Dioxane	88	14.543	14.543	(1.063)	138792	2500.00	2240
62 2-Nitropropane	43	15.081	15.081	(1.102)	538747	250.000	230
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	746059	250.000	255

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
86 Cyclohexanone	55	18.386	18.386	(1.071)	577343	1250.00	694
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	698766	250.000	245
98 Pentachloroethane	167	19.196	19.196	(0.979)	1183684	250.000	399(A)
104 Benzyl chloride	91	19.772	19.772	(1.008)	4150923	250.000	274
107 bis(2-Chloroisopropyl)ether	45	20.168	20.168	(1.029)	828049	250.000	242
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1084730	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	878690	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.606	(1.000)	475507	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.975)	656741	50.0000	48.7
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1898687	50.0000	53.1
$ 87 Bromofluorobenzene	95	18.386	18.386	(0.938)	756963	50.0000	47.4

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA1.i/112509v1/1n304.d
Date : 25-NOV-2009 10:21
Client ID: VSTD250S
Sample Info: IUVH091118-08A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

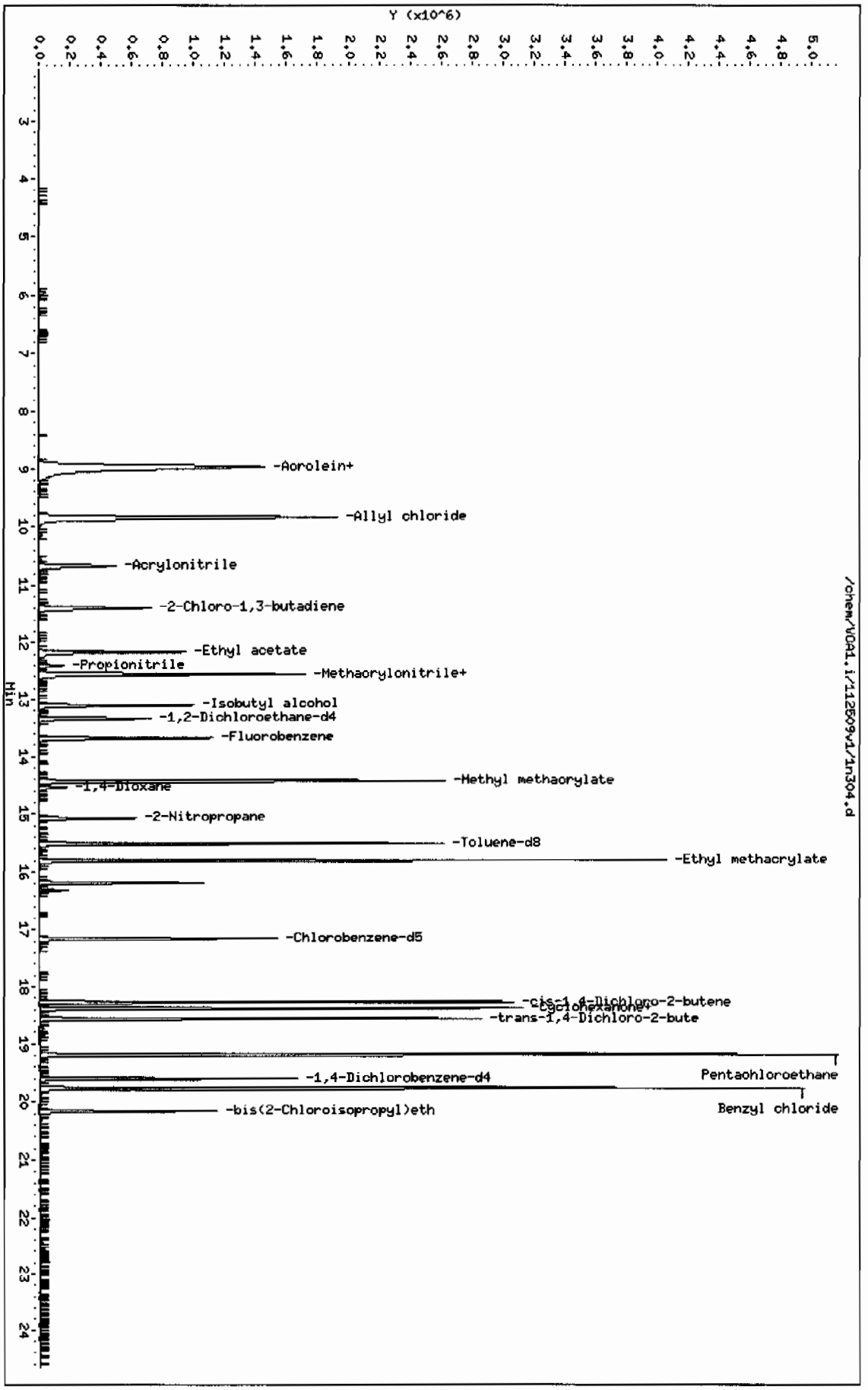

Page 1

QC Data

Data File: /chem/VOA1.i/111309v1/11507.d

Page 1

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

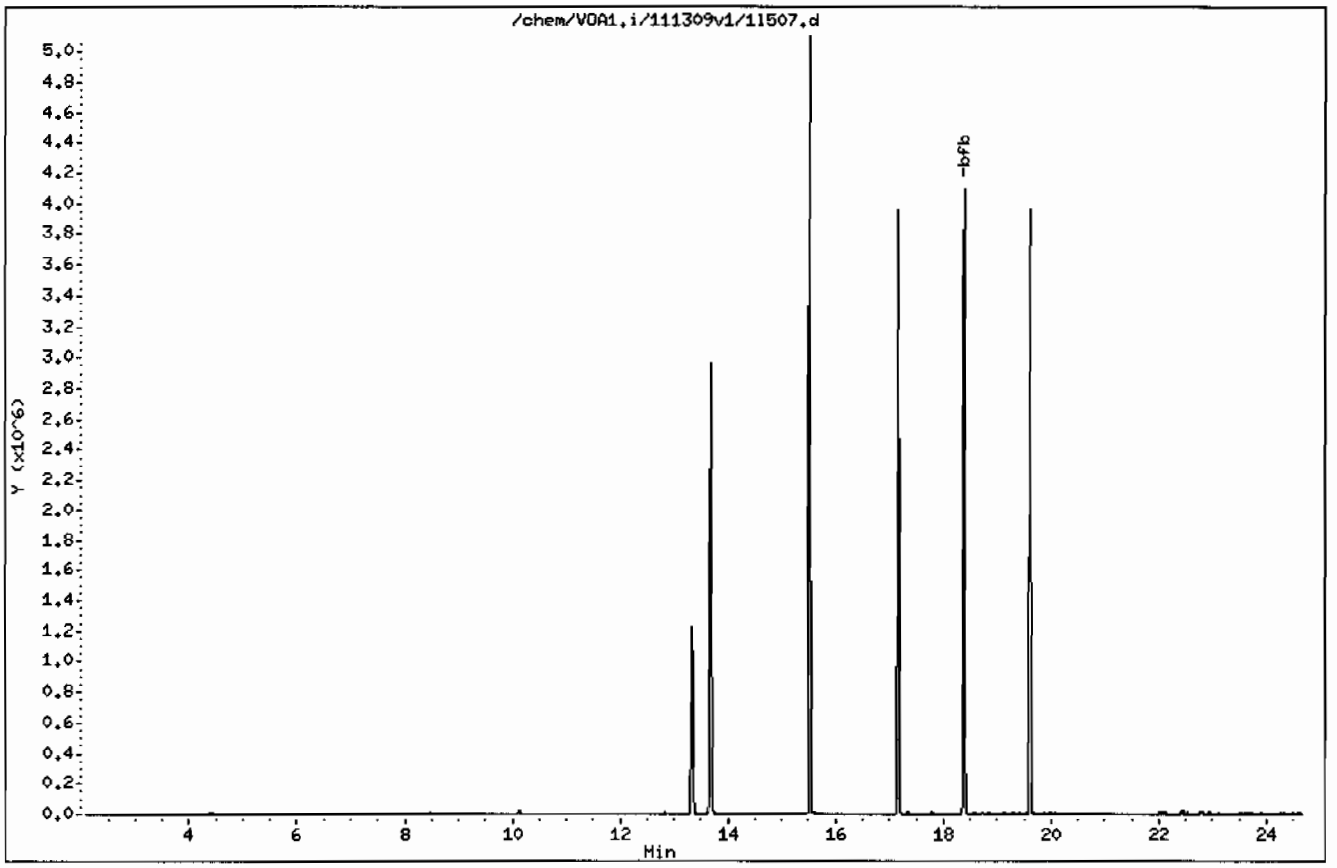

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

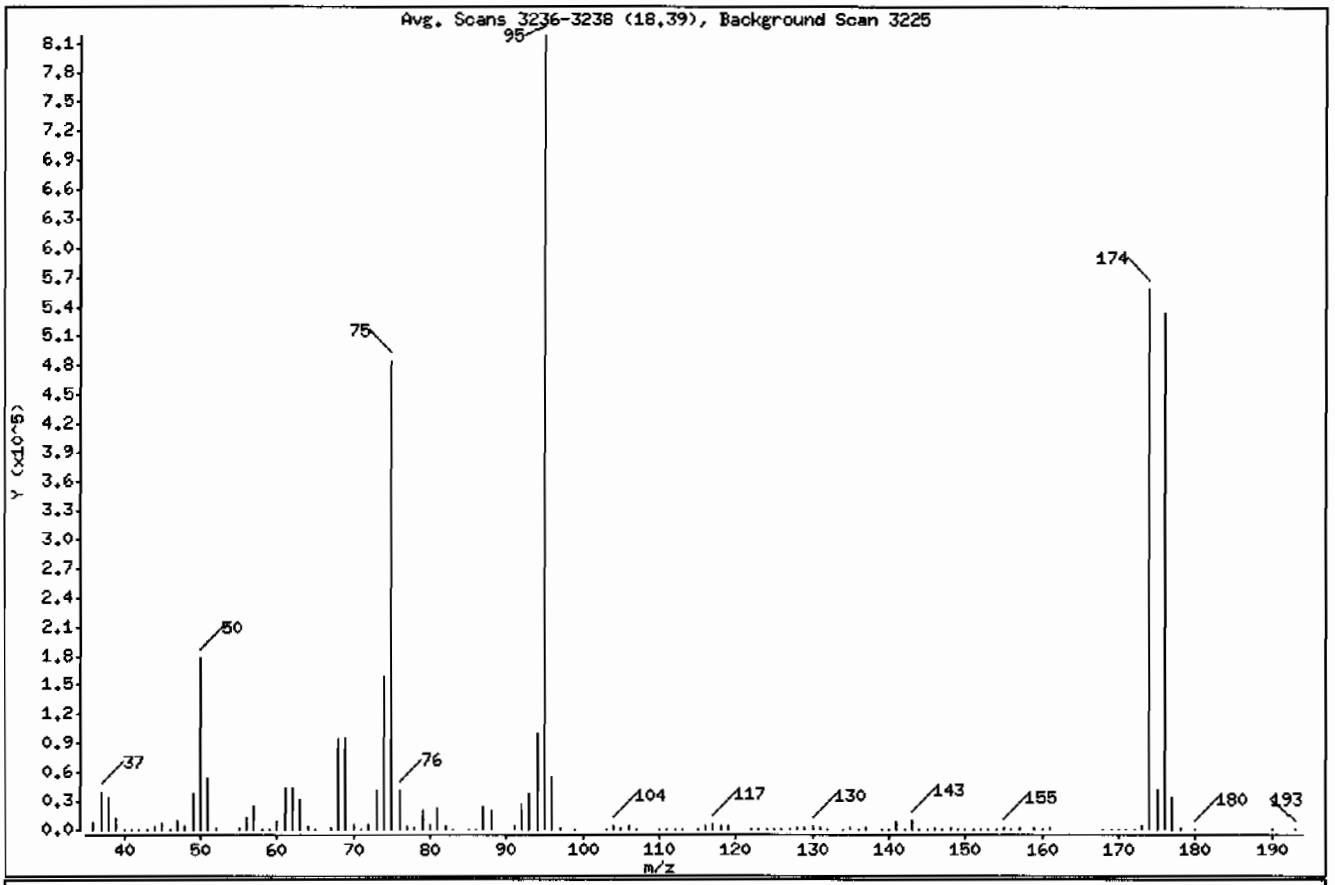

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.72
75	30.00 - 60.00% of mass 95	59.02
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.49 (0.72)
174	50.00 - 100.00% of mass 95	68.14
175	5.00 - 9.00% of mass 174	4.99 (7.33)
176	95.00 - 101.00% of mass 174	65.07 (95.50)
177	5.00 - 9.00% of mass 176	4.22 (6.48)

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 11507.d

Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7225	70.00	6120	110.00	479	146.00	1188
37.00	39360	71.00	217	111.00	606	147.00	494
38.00	33392	72.00	5094	112.00	379	148.00	1977
39.00	13646	73.00	41472	113.00	584	149.00	463
40.00	251	74.00	158400	115.00	797	150.00	811
41.00	60	75.00	483904	116.00	2966	151.00	74
42.00	138	76.00	42152	117.00	5025	152.00	425
43.00	423	77.00	4070	118.00	2850	153.00	568
44.00	4049	78.00	2614	119.00	3829	154.00	504
45.00	7085	79.00	20536	122.00	323	155.00	1883
46.00	389	80.00	5933	123.00	301	156.00	430
47.00	8871	81.00	21704	124.00	508	157.00	1202
48.00	4657	82.00	3708	125.00	172	159.00	1015
49.00	37544	83.00	554	126.00	282	160.00	117
50.00	178048	85.00	50	127.00	21	161.00	1118
51.00	55256	86.00	546	128.00	2650	168.00	58
52.00	2192	87.00	24184	129.00	1544	169.00	60
55.00	2170	88.00	20208	130.00	3040	170.00	440
56.00	12658	91.00	3132	131.00	1311	171.00	182
57.00	24424	92.00	25640	132.00	121	172.00	596
58.00	905	93.00	38600	134.00	219	173.00	4037
59.00	131	94.00	99912	135.00	1394	174.00	558656
60.00	8890	95.00	819904	136.00	360	175.00	40952
61.00	42584	96.00	54800	137.00	1272	176.00	533504
62.00	42856	97.00	1967	139.00	373	177.00	34584
63.00	32200	99.00	52	140.00	657	178.00	987
64.00	3117	103.00	491	141.00	8405	180.00	56
65.00	197	104.00	3451	142.00	877	190.00	52
67.00	2068	105.00	1217	143.00	9022	193.00	80
68.00	94512	106.00	3389	144.00	613		
69.00	96344	107.00	757	145.00	540		

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Page 1

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

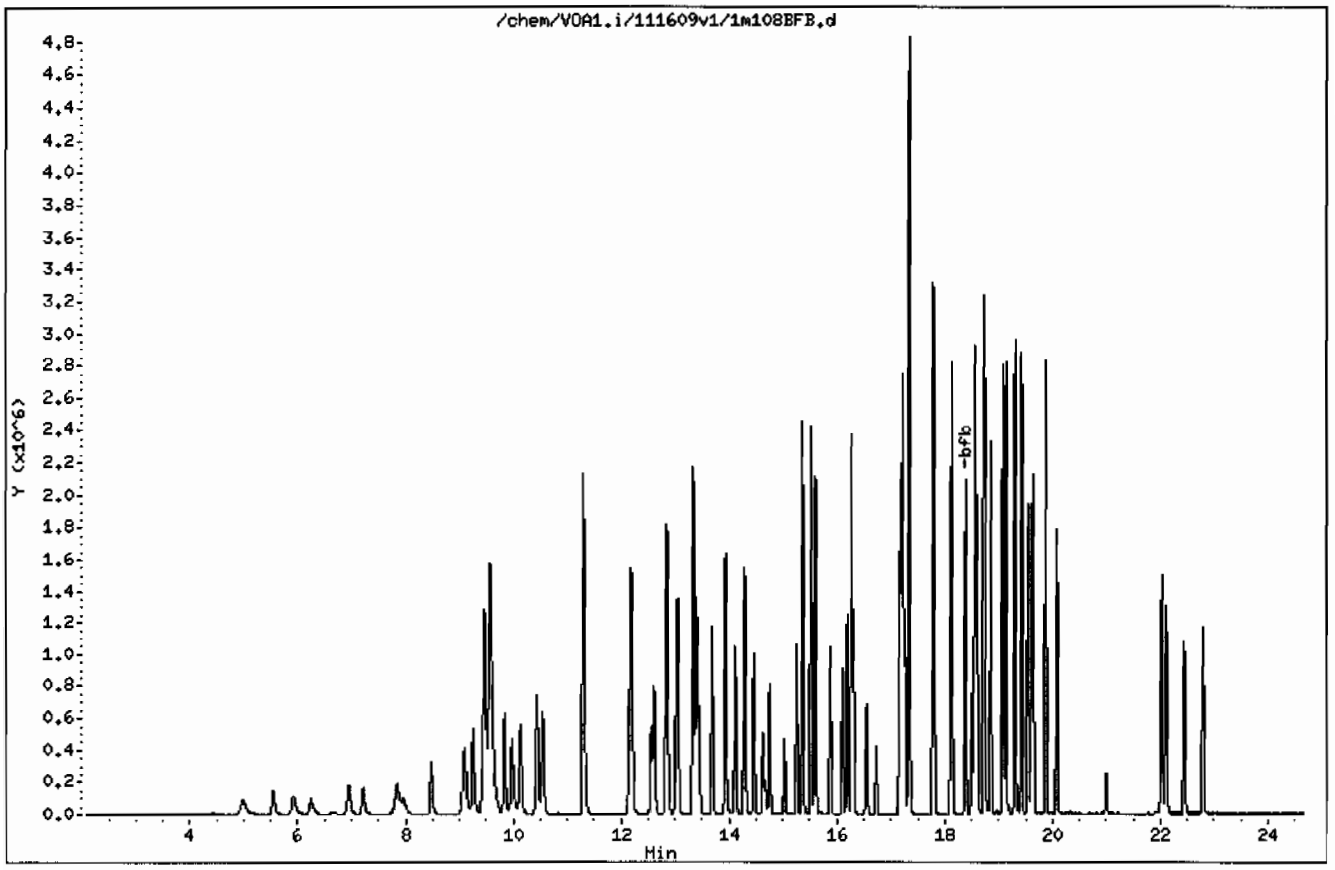

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

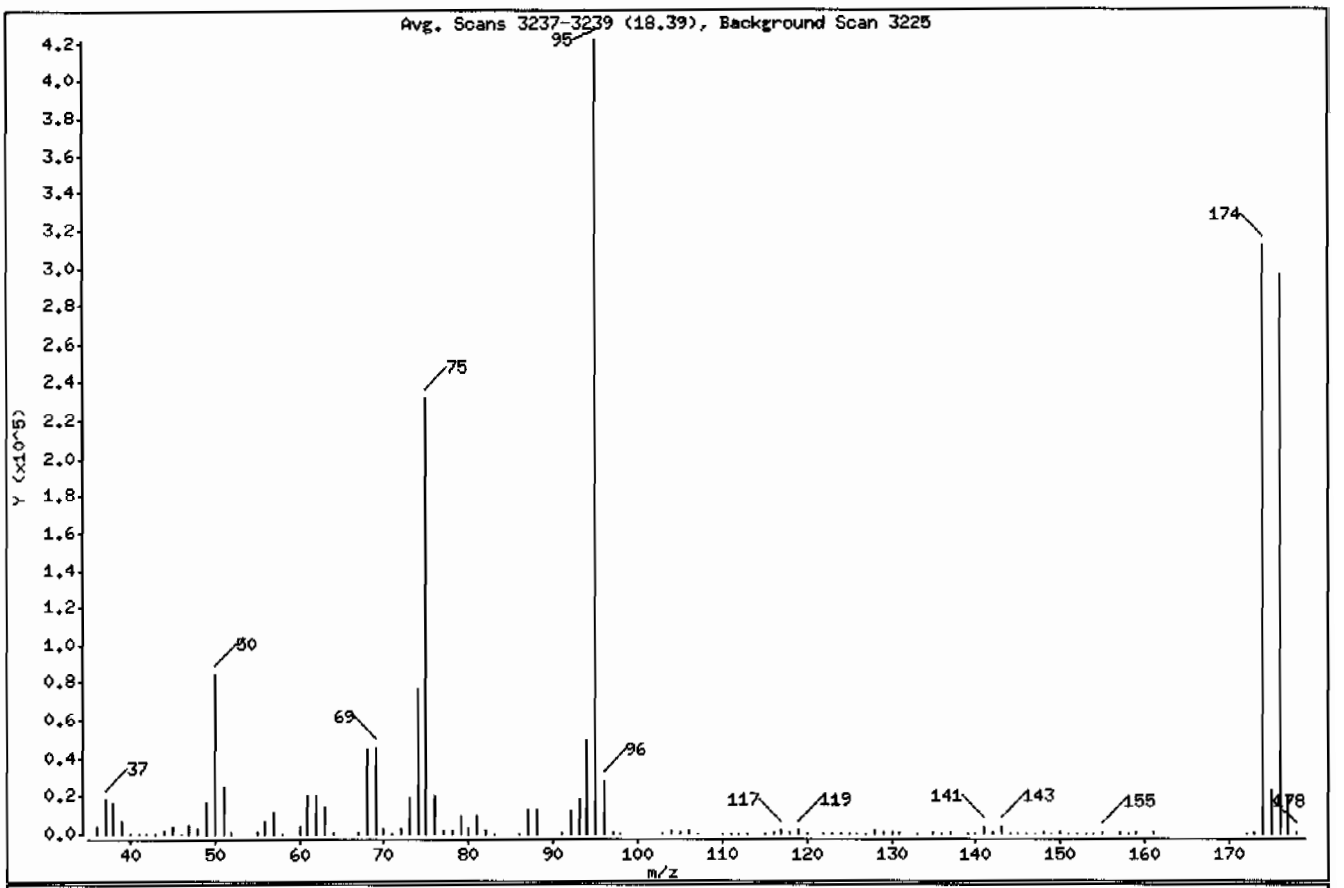

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.05
75	30.00 - 60.00% of mass 95	55.05
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.24 (0.33)
174	50.00 - 100.00% of mass 95	73.77
175	5.00 - 9.00% of mass 174	5.55 (7.52)
176	95.00 - 101.00% of mass 174	70.16 (95.10)
177	5.00 - 9.00% of mass 176	4.80 (6.85)

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1m108BFB.d

Spectrum: Avg. Scans 3237-3239 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3659	69.00	45424	105.00	693	140.00	369
37.00	18736	70.00	3367	106.00	1646	141.00	4255
38.00	16169	71.00	52	107.00	372	142.00	516
39.00	6393	72.00	2726	110.00	174	143.00	4228
40.00	197	73.00	19232	111.00	270	144.00	219
41.00	211	74.00	76640	112.00	131	145.00	352
42.00	88	75.00	232128	113.00	343	146.00	482
43.00	101	76.00	20048	115.00	393	147.00	319
44.00	1967	77.00	2016	116.00	1253	148.00	958
45.00	3625	78.00	1571	117.00	2412	149.00	257
46.00	225	79.00	9321	118.00	1200	150.00	553
47.00	4876	80.00	2593	119.00	2051	151.00	69
48.00	2650	81.00	10141	120.00	65	152.00	268
49.00	16864	82.00	1900	122.00	51	153.00	303
50.00	84536	83.00	304	123.00	52	154.00	398
51.00	25456	86.00	357	124.00	134	155.00	1157
52.00	1092	87.00	13023	125.00	172	157.00	819
55.00	1440	88.00	12376	126.00	137	158.00	66
56.00	6484	91.00	1301	127.00	134	159.00	539
57.00	11568	92.00	12794	128.00	1472	161.00	538
58.00	395	93.00	18184	129.00	873	172.00	156
60.00	4192	94.00	49672	130.00	1342	173.00	1032
61.00	20288	95.00	421696	131.00	645	174.00	311104
62.00	19928	96.00	28576	133.00	54	175.00	23400
63.00	14761	97.00	689	135.00	775	176.00	295872
64.00	1430	98.00	65	136.00	53	177.00	20256
67.00	1159	103.00	156	137.00	650	178.00	602
68.00	44552	104.00	1551	139.00	58		

Data File: /chem/VOA1.i/112509v1/1n301.d

Page 1

Date : 25-NOV-2009 08:50

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

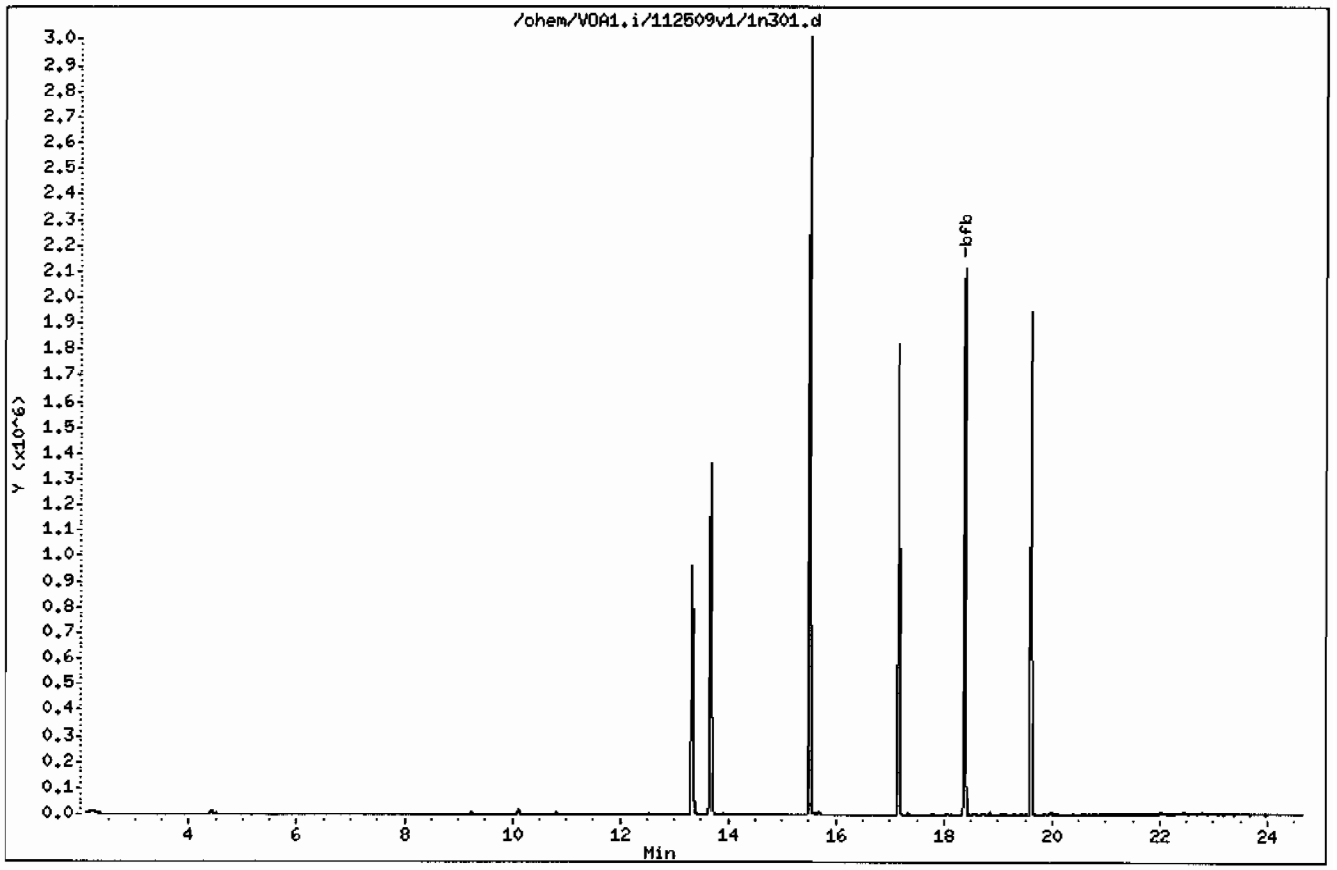

Data File: /chem/VOA1.i/112509v1/1n301.d

Date : 25-NOV-2009 08:50

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

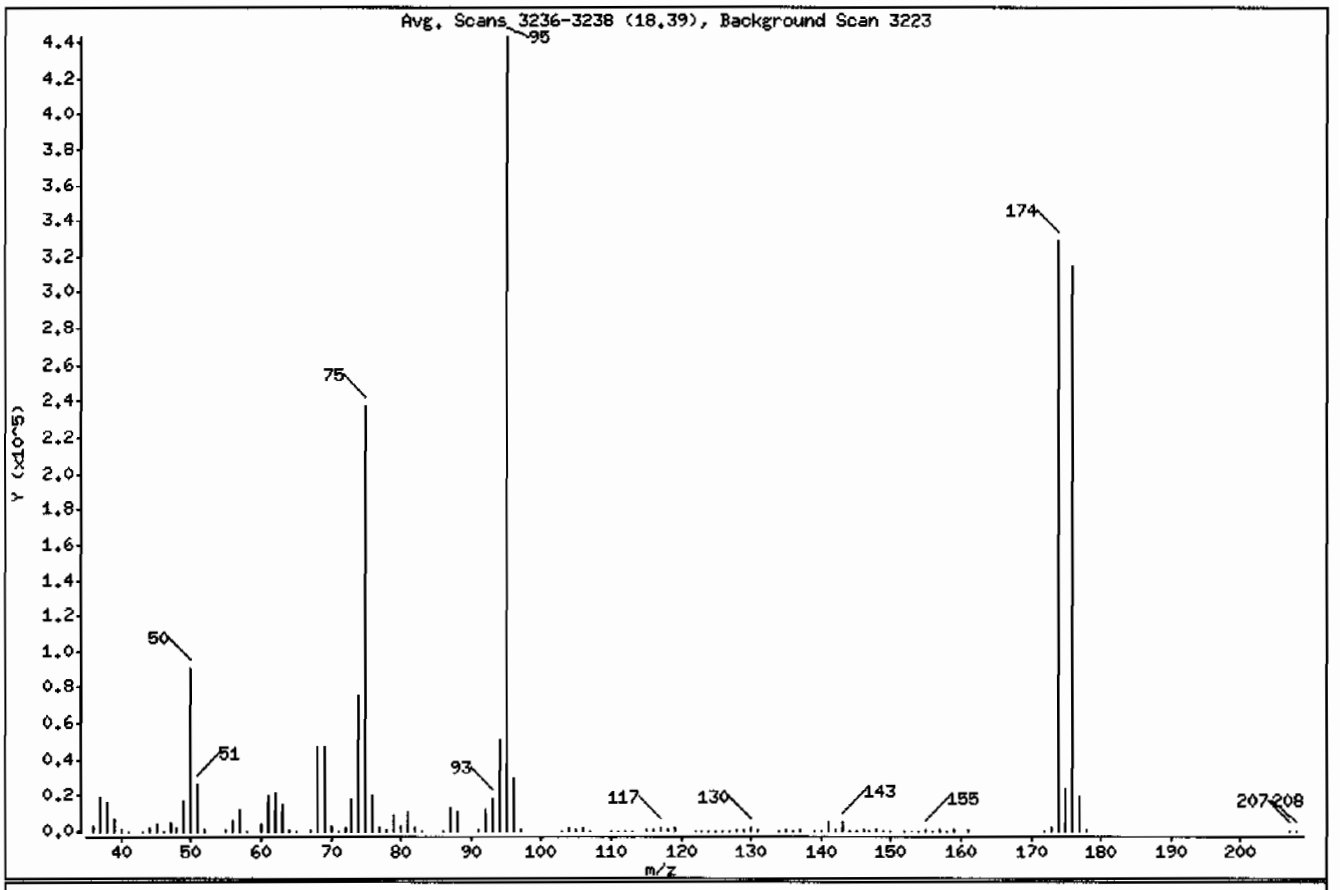

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.40
75	30.00 - 60.00% of mass 95	53.56
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.49 (0.66)
174	50.00 - 100.00% of mass 95	73.99
175	5.00 - 9.00% of mass 174	5.29 (7.16)
176	95.00 - 101.00% of mass 174	70.79 (95.69)
177	5.00 - 9.00% of mass 176	4.48 (6.32)

Data File: /chem/VOA1.i/112509v1/1n301.d

Date : 25-NOV-2009 08:50

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1n301.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3223
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3152	69.00	46912	106.00	1794	142.00	544
37.00	19680	70.00	3504	107.00	485	143.00	4955
38.00	16648	71.00	70	110.00	238	144.00	298
39.00	7213	72.00	2419	111.00	316	145.00	340
40.00	527	73.00	18464	112.00	318	146.00	584
41.00	53	74.00	74896	113.00	317	147.00	294
43.00	201	75.00	237312	115.00	513	148.00	1188
44.00	1649	76.00	20240	116.00	1413	149.00	320
45.00	3651	77.00	2370	117.00	2354	150.00	466
46.00	376	78.00	1350	118.00	1514	152.00	265
47.00	4811	79.00	9614	119.00	1937	153.00	277
48.00	2537	80.00	2673	122.00	53	154.00	249
49.00	17080	81.00	11095	123.00	53	155.00	1201
50.00	90392	82.00	1711	124.00	287	156.00	185
51.00	26568	83.00	362	125.00	117	157.00	719
52.00	1142	86.00	400	126.00	64	158.00	57
55.00	1264	87.00	13526	127.00	156	159.00	622
56.00	6228	88.00	11662	128.00	1519	161.00	514
57.00	11775	91.00	1500	129.00	781	172.00	336
58.00	410	92.00	12378	130.00	1665	173.00	2177
60.00	4000	93.00	18816	131.00	578	174.00	327808
61.00	20680	94.00	50528	134.00	58	175.00	23456
62.00	21392	95.00	443072	135.00	676	176.00	313664
63.00	15421	96.00	29552	136.00	51	177.00	19832
64.00	1305	97.00	854	137.00	674	178.00	622
65.00	75	103.00	52	139.00	162	207.00	102
67.00	1186	104.00	1633	140.00	294	208.00	51
68.00	46880	105.00	615	141.00	4668		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981429**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 11:22**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n306BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981429**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 11:22**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n306BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n306BA.d
Lab Smp Id: 1201981429 Client Smp ID: MB_for_batch_926738
Inj Date : 25-NOV-2009 11:22
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981429|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	656148	51.0800	51.1
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1032717	50.0000	
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1805428	53.0518	53.0
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	836157	50.0000	
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	718799	48.1376	48.1
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	444725	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n306BA.d
Lab Smp Id: 1201981429 Client Smp ID: MB_for_batch_926738
Inj Date : 25-NOV-2009 11:22
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981429|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n306BA.d
Date : 25-NOV-2009 11:22
Client ID: MB_for_batch_926738
Sample Info: |120198142919267391|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

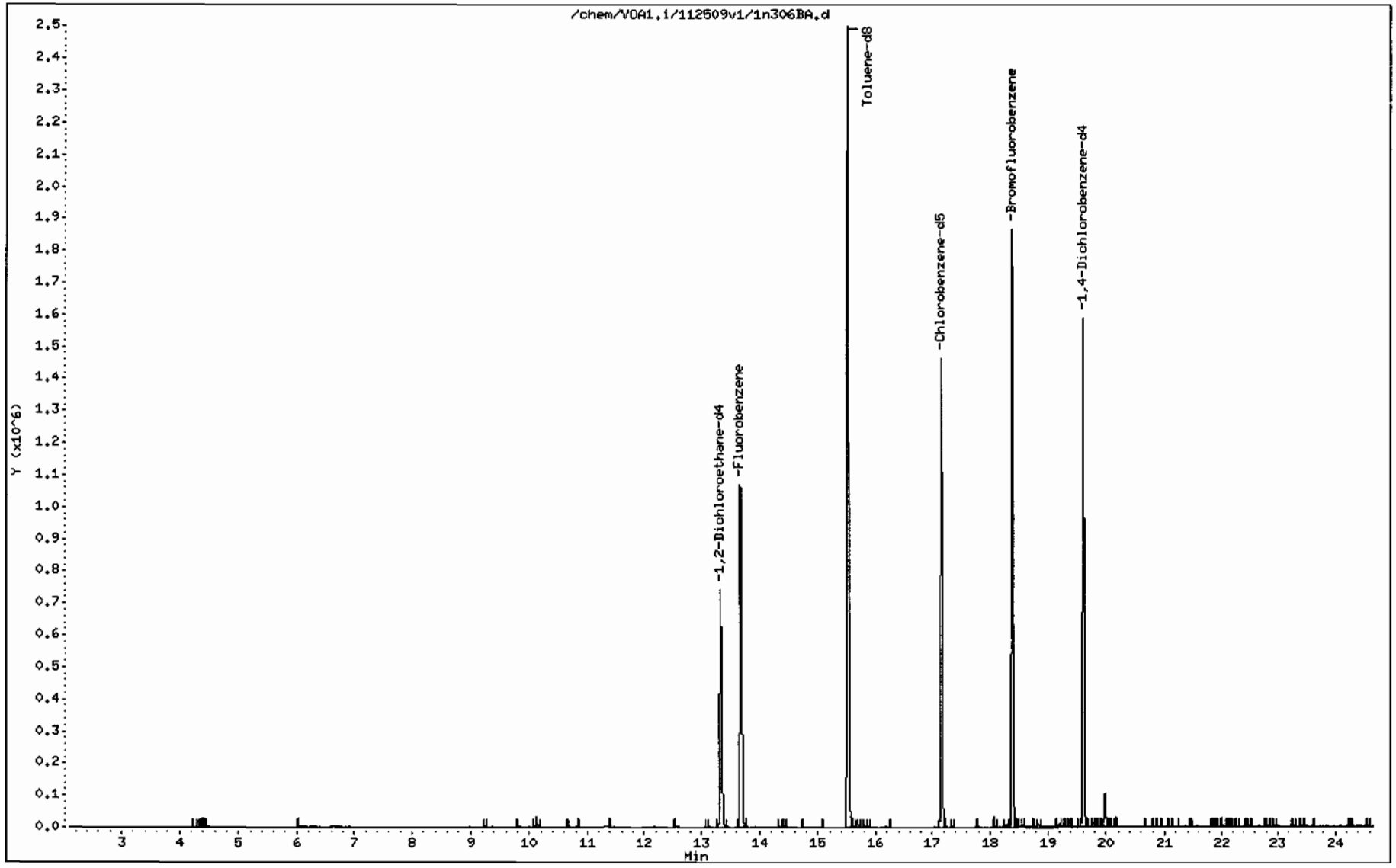

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981432**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 09:50**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n303LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.0	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		48.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		53.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		53.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		53.0	ug/kg	0.300	1.00
67-64-1	Acetone		165	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		45.1	ug/kg	0.300	1.00
74-88-4	Iodomethane		260	ug/kg	1.60	5.00
75-09-2	Methylene chloride		47.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		277	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		49.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		45.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		185	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		49.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		49.2	ug/kg	0.300	1.00
67-66-3	Chloroform		44.7	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		52.9	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		47.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		48.8	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		48.1	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		39.6	ug/kg	0.300	1.00
71-43-2	Benzene		48.8	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		48.6	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		47.5	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		44.3	ug/kg	0.300	1.00
74-95-3	Dibromomethane		45.1	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		220	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		46.5	ug/kg	0.300	1.00
108-88-3	Toluene		49.2	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.6	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		47.0	ug/kg	0.300	1.00
591-78-6	2-Hexanone		182	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		45.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		51.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		49.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		49.1	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981432**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 09:50**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n303LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		45.9	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		97.6	ug/kg	0.300	2.00
95-47-6	o-Xylene		47.7	ug/kg	0.300	1.00
100-42-5	Styrene		48.8	ug/kg	0.300	1.00
75-25-2	Bromoform		50.5	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.8	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		43.4	ug/kg	0.300	1.00
108-86-1	Bromobenzene		49.1	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		42.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		42.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		43.3	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		42.1	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		43.7	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		40.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		41.3	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		37.5	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		39.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		46.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		45.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		35.2	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		49.5	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		46.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		44.9	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n303LA.d
Lab Smp Id: 1201981432 Client Smp ID: LCS_for_batch_92673
Inj Date : 25-NOV-2009 09:50
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981432|926739|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				1887818	145.268	145
M 2 1,2-Dichloroethylene (total)	96				711508	99.4215	99.4
M 3 1,3-Dichloropropylene	75				1215067	93.1133	93.1
5 Dichlorodifluoromethane	85	4.983	4.990	(0.364)	285913	40.9650	41.0
6 Chloromethane	50	5.543	5.542	(0.405)	392629	45.4677	45.5
7 Vinyl chloride	62	5.922	5.922	(0.433)	376708	48.8495	48.8
9 Bromomethane	96	6.948	6.947	(0.508)	247924	53.4672	53.5
10 Chloroethane	64	7.215	7.214	(0.527)	256801	53.7836	53.8
11 Trichlorofluoromethane	101	7.836	7.850	(0.573)	575740	53.0301	53.0
12 Ethyl Ether	59	8.476	8.476	(0.619)	288257	43.6259	43.6
16 Acetone	43	9.249	9.249	(0.676)	998499	164.620	165
22 Acetonitrile	41	9.972	9.972	(0.729)	838263	1123.48	1120

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	15 1,1-Dichloroethylene	61	9.083	9.088	(0.664)	674374	45.0865	45.1
	21 Methyl acetate	43	9.834	9.834	(0.719)	1075251	207.073	207
	18 Iodomethane	142	9.465	9.470	(0.692)	2514384	259.841	260
	23 Methylene chloride	84	10.142	10.137	(0.741)	357897	47.2585	47.2
	19 Carbon disulfide	76	9.576	9.571	(0.700)	5331286	276.761	277
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1023440	43.0088	43.0
	26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	346772	49.9144	49.9
	29 Vinyl acetate	43	11.297	11.297	(0.826)	3456715	300.038	300
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	705924	45.7133	45.7
	35 2-Butanone	43	12.186	12.186	(0.891)	1099451	184.988	185
	36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	364736	49.5071	49.5
	33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	554900	49.1958	49.2
	41 Chloroform	83	12.609	12.609	(0.922)	735177	44.7179	44.7
	39 Bromochloromethane	128	12.554	12.559	(0.918)	154839	52.8934	52.9
	43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	614788	47.7497	47.7
	42 Cyclohexane	56	12.844	12.839	(0.939)	658753	48.6820	48.7
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	571868	48.7603	48.8
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	871595	4606.15	4610
	44 Carbon tetrachloride	117	13.024	13.023	(0.952)	620871	48.1357	48.1
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	711702	54.7422	54.7
	51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	574654	39.6089	39.6
	47 Benzene	78	13.332	13.332	(0.974)	1426577	48.7822	48.8
	50 Cyclohexene	54	13.396	13.396	(0.979)	522960	46.8133	46.8
*	52 Fluorobenzene	96	13.682	13.682	(1.000)	1045218	50.0000	
	54 Trichloroethylene	95	14.114	14.114	(1.032)	388958	48.5525	48.6
	57 1,2-Dichloropropane	63	14.460	14.460	(1.057)	360033	47.5242	47.5
	55 Methylcyclohexane	83	14.280	14.280	(1.044)	523855	42.3196	42.3
	60 Bromodichloromethane	83	14.750	14.750	(1.078)	550765	44.3134	44.3
	59 Dibromomethane	93	14.621	14.625	(1.069)	210734	45.1075	45.1
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.099)	250273	240.061	240
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	687205	220.345	220
	63 cis-1,3-Dichloropropylene	75	15.251	15.256	(1.115)	602272	46.5246	46.5
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1786652	52.1397	52.1
	66 Toluene	92	15.597	15.597	(0.909)	909894	49.2091	49.2
	68 trans-1,3-Dichloropropylene	75	15.882	15.877	(0.925)	612794	46.5887	46.6
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	242023	47.0268	47.0
	71 2-Hexanone	43	16.269	16.269	(0.948)	1498454	181.778	182
	72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	519044	45.3733	45.4
	70 Tetrachloroethylene	164	16.190	16.190	(0.943)	288340	51.4022	51.4
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	364369	49.3518	49.4
	74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	296742	49.0295	49.0
*	76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	841936	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	938281	49.0583	49.0
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	342200	46.1566	46.2
	78 Ethylbenzene	91	17.222	17.221	(1.003)	1826019	45.9104	45.9
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1279262	97.5624	97.6
	81 o-Xylene	106	17.783	17.788	(1.036)	608556	47.7057	47.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
82 Styrene	104	17.806	17.801	(1.038)	1066217	48.7729	48.8
83 Bromoform	173	18.105	18.110	(0.923)	238679	50.5167	50.5
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1673000	43.3016	43.3
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	360249	47.8191	47.8
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	721060	45.2181	45.2
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	107460	43.3774	43.4(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	392021	49.0672	49.1
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1974913	41.9648	42.0
94 2-Chlorotoluene	91	18.741	18.740	(0.956)	1443150	42.3251	42.3
93 1,3,5-Trimethylbenzene	105	18.718	18.717	(0.954)	1432078	42.0770	42.1
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1344854	43.7402	43.7
96 tert-Butylbenzene	119	19.077	19.076	(0.973)	1073521	40.5206	40.5
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1438699	41.2950	41.3
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1586748	37.5247	37.5
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1251053	39.1363	39.1
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	712036	46.6716	46.7
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	474928	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	708109	45.2823	45.3
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1260794	35.2266	35.2(R)
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	655454	44.8784	44.9
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	71144	49.5379	49.5
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	416191	38.3555	38.4
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	215725	28.0848	28.1(R)
111 Naphthalene	128	22.441	22.437	(1.144)	863719	42.9124	42.9
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	354746	38.8545	38.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112509v1/1n303LA.d
Date : 25-NOV-2009 09:50
Client ID: LCS_for_batch_92673
Sample Info: i120198143219267391|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

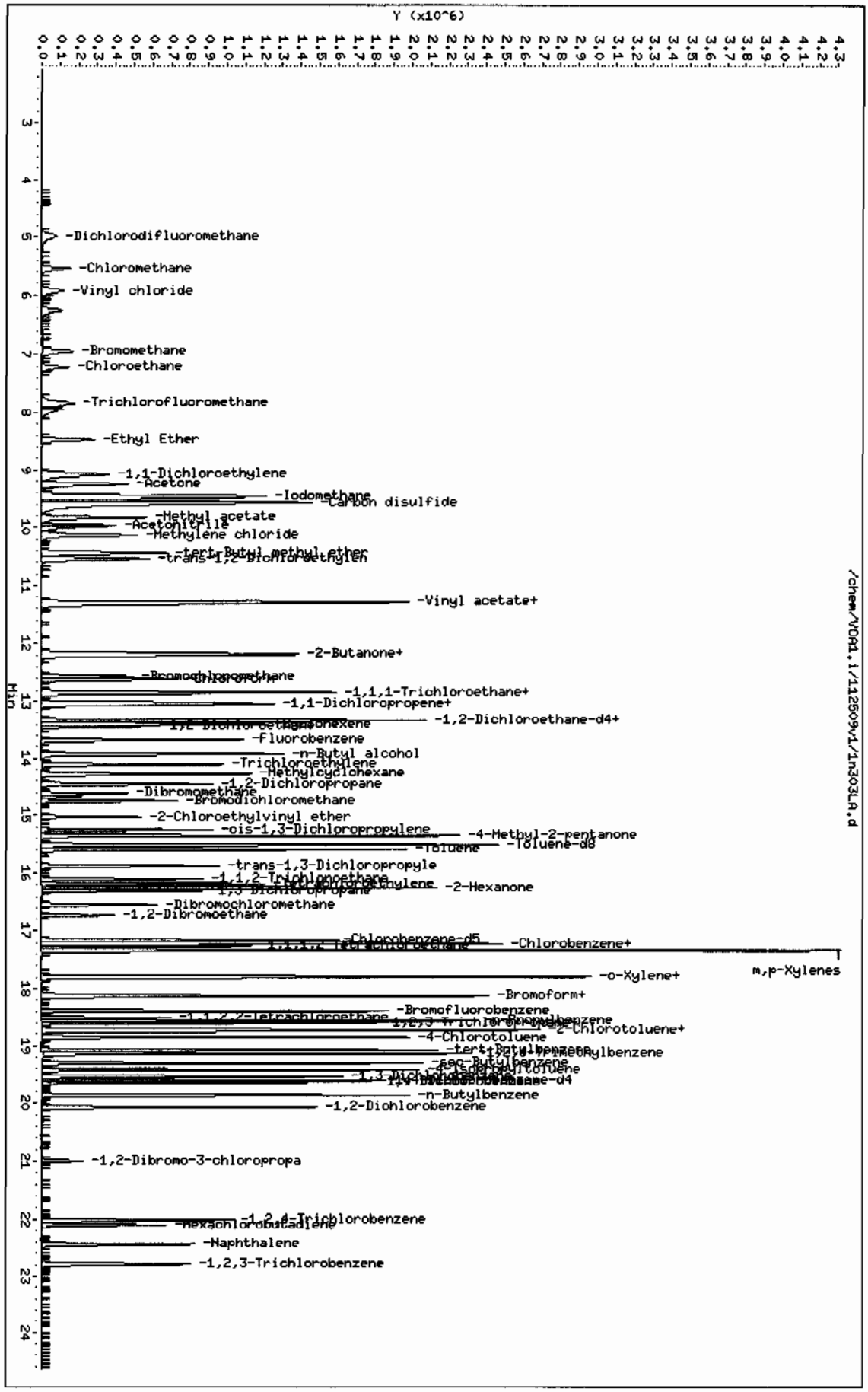

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981433**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 10:51**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n305sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981433**				
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926738**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 10:51**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n305sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		265	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n305sLA.d
Lab Smp Id: 1201981433 Client Smp ID: LCS
Inj Date : 25-NOV-2009 10:51
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981433|926739|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 30-Nov-2009 13:43 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Acrolein	56	8.950	8.954	(0.654)	314105	282.737	283(A)
14 Trichlorotrifluoroethane	101	8.982	8.978	(0.656)	1680976	264.637	265
20 Allyl chloride	76	9.848	9.848	(0.720)	795414	344.930	345(AR)
27 Acrylonitrile	53	10.667	10.671	(0.780)	561273	242.100	242
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	684722	51.6705	51.7
34 Ethyl acetate	43	12.163	12.167	(0.889)	1416416	223.218	223
37 Propionitrile	54	12.402	12.402	(0.906)	220333	234.520	234
38 Tetrahydrofuran	42	12.536	12.540	(0.639)	475004	240.660	241
40 Methacrylonitrile	41	12.559	12.563	(0.918)	1184554	235.324	235
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	526690	2233.91	2230
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	665010	49.2386	49.2
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	1085808	50.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
56 Methyl methacrylate	69	14.437	14.437	(1.055)	1065804	247.790	248
58 1,4-Dioxane	88	14.547	14.543	(1.063)	132740	2144.09	2140
62 2-Nitropropane	43	15.081	15.081	(1.102)	539165	229.939	230
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1867447	51.8765	51.9
67 Ethyl methacrylate	69	15.813	15.813	(0.922)	2145903	237.405	237
* 76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	884474	50.0000	
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	743272	250.414	250
86 Cyclohexanone	55	18.386	18.386	(1.072)	572214	683.975	684
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	763494	47.1674	47.2
90 trans-1,4-Dichloro-2-butene	53	18.570	18.566	(0.947)	695666	240.271	240
98 Pentachloroethane	167	19.196	19.196	(0.979)	1019015	338.885	339(A)
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	482095	50.0000	
104 Benzyl chloride	91	19.772	19.772	(1.008)	4141273	269.319	269
107 bis(2-Chloroisopropyl)ether	45	20.168	20.163	(1.028)	842748	242.651	243

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112509v1/1n305sLA.d
Date : 25-NOV-2009 10:51
Client ID: LCS
Sample Info: |120198143319267391|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

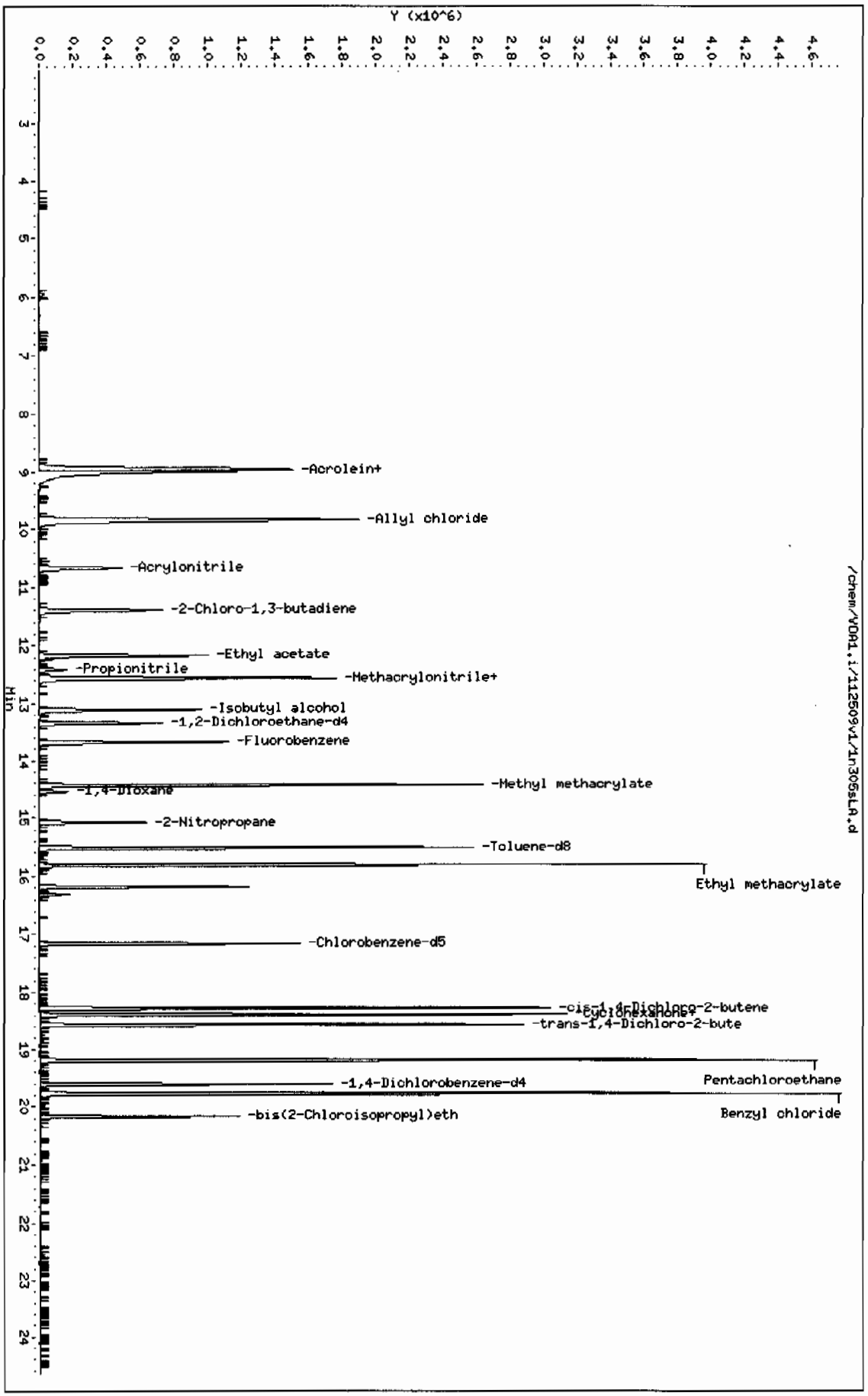

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201981430	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 926738	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 19:58	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n323.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		45.6	ug/kg	0.366	1.08
74-87-3	Chloromethane		51.8	ug/kg	0.323	1.08
75-01-4	Vinyl chloride		51.1	ug/kg	0.323	1.08
74-83-9	Bromomethane		54.6	ug/kg	0.323	1.08
75-00-3	Chloroethane		60.5	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane		59.8	ug/kg	0.323	1.08
67-64-1	Acetone		180	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene		52.0	ug/kg	0.323	1.08
74-88-4	Iodomethane		242	ug/kg	1.72	5.38
75-09-2	Methylene chloride		55.7	ug/kg	2.15	5.38
75-15-0	Carbon disulfide		286	ug/kg	1.35	5.38
156-60-5	trans-1,2-Dichloroethylene		54.6	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane		54.8	ug/kg	0.323	1.08
78-93-3	2-Butanone		192	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene		56.6	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane		53.2	ug/kg	0.323	1.08
67-66-3	Chloroform		53.7	ug/kg	0.323	1.08
74-97-5	Bromochloromethane		60.4	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane		54.4	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene		53.0	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride		55.2	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane		52.5	ug/kg	0.323	1.08
71-43-2	Benzene		54.0	ug/kg	0.323	1.08
79-01-6	Trichloroethylene		53.9	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane		55.1	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane		56.1	ug/kg	0.323	1.08
74-95-3	Dibromomethane		56.1	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone		177	ug/kg	1.35	5.38
10061-01-5	cis-1,3-Dichloropropylene		49.1	ug/kg	0.323	1.08
108-88-3	Toluene		49.6	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene		45.9	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane		51.4	ug/kg	0.323	1.08
591-78-6	2-Hexanone		113	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane		50.5	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene		50.7	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane		53.4	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane		50.6	ug/kg	0.323	1.08
108-90-7	Chlorobenzene		49.8	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981430**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13812PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 19:58**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:08**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n323.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		46.2	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes		96.2	ug/kg	0.323	2.15
95-47-6	o-Xylene		49.4	ug/kg	0.323	1.08
100-42-5	Styrene		48.4	ug/kg	0.323	1.08
75-25-2	Bromoform		54.2	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane		50.7	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane		47.1	ug/kg	0.323	1.08
108-86-1	Bromobenzene		50.1	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene		43.7	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene		44.6	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene		45.2	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene		44.8	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene		44.1	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene		44.9	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene		44.0	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene		42.3	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene		38.5	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene		46.6	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene		46.1	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene		39.5	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane		50.0	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane		50.7	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene		46.5	ug/kg	0.323	1.08

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n323.d
Lab Smp Id: 1201981430 Client Smp ID: RE03-09-13812MS
Inj Date : 25-NOV-2009 19:58
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981430|926739|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241417001
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	796819	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	694339	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	395865	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	582393	58.7607	63.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1465311	51.8521	55.8
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	608664	45.7930	49.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	225650	42.4092	45.6
6 Chloromethane	50	5.550	5.542	(0.405)	316917	48.1407	51.8
7 Vinyl chloride	62	5.922	5.922	(0.433)	278970	47.4525	51.1
9 Bromomethane	96	6.943	6.947	(0.507)	179262	50.7111	54.6
10 Chloroethane	64	7.219	7.214	(0.527)	204517	56.1861	60.5
11 Trichlorofluoromethane	101	7.845	7.850	(0.573)	459945	55.5711	59.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.254	9.249	(0.676)	771650	166.879	180
15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	551194	48.3389	52.0
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	557652	42.7831	46.0
18 Iodomethane	142	9.465	9.470	(0.692)	1660218	225.055	242
23 Methylene chloride	84	10.137	10.137	(0.741)	297934	51.7465	55.7
19 Carbon disulfide	76	9.576	9.571	(0.700)	3898567	265.476	286
26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	268636	50.7215	54.6
30 1,1-Dichloroethane	63	11.325	11.320	(0.827)	599262	50.9036	54.8
35 2-Butanone	43	12.190	12.186	(0.891)	806964	178.102	192
36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	295362	52.5884	56.6
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	550405	43.2826	46.6
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	425131	49.4405	53.2
41 Chloroform	83	12.614	12.609	(0.922)	624845	49.8550	53.7
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	526339	43.2356	46.5
39 Bromochloromethane	128	12.563	12.559	(0.918)	125301	56.1461	60.4
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	496144	50.5475	54.4
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	440252	49.2401	53.0
44 Carbon tetrachloride	117	13.024	13.023	(0.952)	504581	51.3149	55.2
51 1,2-Dichloroethane	62	13.442	13.438	(0.982)	539636	48.7903	52.5
47 Benzene	78	13.336	13.332	(0.974)	1118506	50.1608	54.0
54 Trichloroethylene	95	14.119	14.114	(1.032)	305821	50.0753	53.9
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	295843	51.2248	55.1
60 Bromodichloromethane	83	14.754	14.750	(1.078)	493567	52.0909	56.1
59 Dibromomethane	93	14.625	14.625	(1.069)	185725	52.1471	56.1
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	423248	164.558	177
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	450482	45.6472	49.1
66 Toluene	92	15.597	15.597	(0.909)	703335	46.1238	49.6
68 trans-1,3-Dichloropropylene	75	15.882	15.877	(0.925)	462433	42.6306	45.9
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	202866	47.7975	51.4
71 2-Hexanone	43	16.269	16.269	(0.948)	712740	104.842	113
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	442403	46.8944	50.5
70 Tetrachloroethylene	164	16.190	16.190	(0.943)	217864	47.0944	50.7
73 Dibromochloromethane	129	16.549	16.549	(0.964)	301804	49.5671	53.4
74 1,2-Dibromoethane	107	16.729	16.724	(0.975)	234574	46.9966	50.6
77 Chlorobenzene	112	17.194	17.194	(1.002)	729551	46.2534	49.8
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	288225	47.1404	50.7
78 Ethylbenzene	91	17.217	17.221	(1.003)	1407256	42.9029	46.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	966903	89.4157	96.2
81 o-Xylene	106	17.783	17.788	(1.036)	482800	45.8928	49.4
82 Styrene	104	17.806	17.801	(1.038)	810950	44.9816	48.4
83 Bromoform	173	18.105	18.110	(0.923)	198202	50.3281	54.2
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	295510	47.0600	50.6
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	90405	43.7814	47.1(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	309977	46.5470	50.1
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1593664	40.6271	43.7
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1177582	41.4341	44.6
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1351226	41.9583	45.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1180536	41.6139	44.8
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1050035	40.9723	44.1
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	921473	41.7282	44.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1185810	40.8342	44.0
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1385994	39.3234	42.3
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	951885	35.7248	38.4
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1093810	36.6648	39.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	55577	46.4274	50.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112509v1/1n323.d
Date : 25-NOV-2009 19:58
Client ID: RE03-09-13812NS
Sample Info: 1120198143019267391|1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

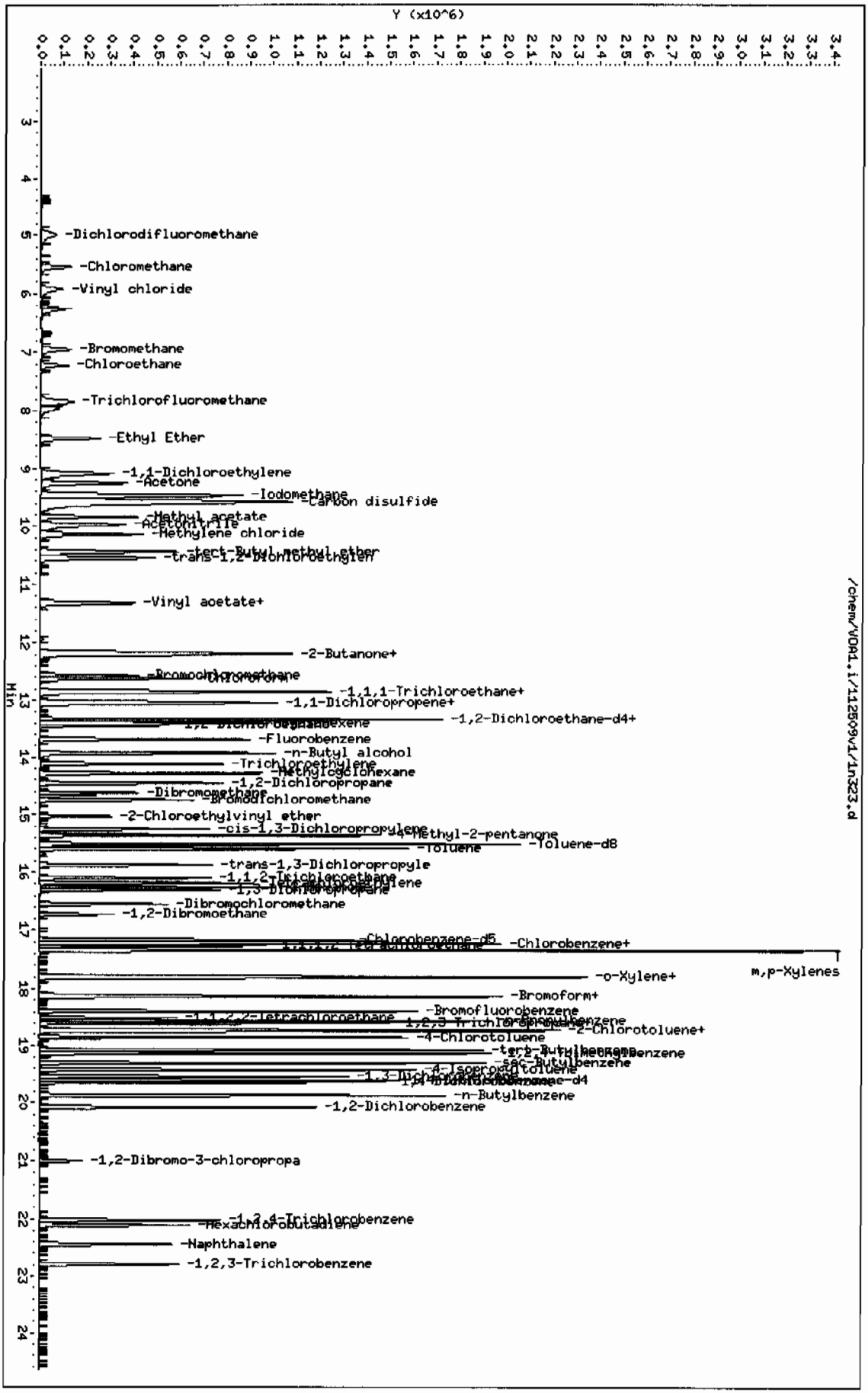

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201981431	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 926738	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926739	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/25/2009 20:29	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n324.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.6	ug/kg	0.366	1.08
74-87-3	Chloromethane		48.5	ug/kg	0.323	1.08
75-01-4	Vinyl chloride		46.9	ug/kg	0.323	1.08
74-83-9	Bromomethane		52.0	ug/kg	0.323	1.08
75-00-3	Chloroethane		58.8	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane		54.9	ug/kg	0.323	1.08
67-64-1	Acetone		175	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene		48.8	ug/kg	0.323	1.08
74-88-4	Iodomethane		233	ug/kg	1.72	5.38
75-09-2	Methylene chloride		55.0	ug/kg	2.15	5.38
75-15-0	Carbon disulfide		277	ug/kg	1.35	5.38
156-60-5	trans-1,2-Dichloroethylene		53.0	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane		51.6	ug/kg	0.323	1.08
78-93-3	2-Butanone		188	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene		54.3	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane		50.5	ug/kg	0.323	1.08
67-66-3	Chloroform		51.1	ug/kg	0.323	1.08
74-97-5	Bromochloromethane		58.5	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane		50.9	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene		50.5	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride		51.1	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane		48.7	ug/kg	0.323	1.08
71-43-2	Benzene		52.4	ug/kg	0.323	1.08
79-01-6	Trichloroethylene		51.3	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane		53.6	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane		52.2	ug/kg	0.323	1.08
74-95-3	Dibromomethane		53.4	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone		183	ug/kg	1.35	5.38
10061-01-5	cis-1,3-Dichloropropylene		47.5	ug/kg	0.323	1.08
108-88-3	Toluene		49.3	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene		45.5	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane		52.1	ug/kg	0.323	1.08
591-78-6	2-Hexanone		120	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane		51.3	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene		50.8	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane		53.9	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane		51.4	ug/kg	0.323	1.08
108-90-7	Chlorobenzene		49.9	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981431**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
Client Sample:	**QC for batch 926738**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13812PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926739**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 20:29**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:09**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n324.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		46.2	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes		94.5	ug/kg	0.323	2.15
95-47-6	o-Xylene		49.2	ug/kg	0.323	1.08
100-42-5	Styrene		47.2	ug/kg	0.323	1.08
75-25-2	Bromoform		55.0	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane		51.8	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane		48.5	ug/kg	0.323	1.08
108-86-1	Bromobenzene		51.4	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene		44.6	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene		45.2	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene		45.6	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene		45.6	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene		44.8	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene		46.1	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene		44.8	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene		42.9	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene		39.4	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene		46.5	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene		46.8	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene		39.5	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane		51.3	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane		49.8	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene		44.6	ug/kg	0.323	1.08

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n324.d
Lab Smp Id: 1201981431 Client Smp ID: RE03-09-13812MSD
Inj Date : 25-NOV-2009 20:29
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981431|926739|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241417001
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309.m
Meth Date : 02-Dec-2009 13:55 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.09880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	883949	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	731041	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	400251	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	621155	56.4942	60.8
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1580652	53.1254	57.2
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	641032	47.6998	51.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	228108	38.6454	41.6
6 Chloromethane	50	5.550	5.542	(0.405)	328977	45.0469	48.5
7 Vinyl chloride	62	5.922	5.922	(0.433)	283964	43.5409	46.9
9 Bromomethane	96	6.947	6.947	(0.508)	189335	48.2813	52.0
10 Chloroethane	64	7.219	7.214	(0.527)	220402	54.5817	58.8
11 Trichlorofluoromethane	101	7.854	7.850	(0.574)	467915	50.9616	54.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.254	9.249	(0.676)	834590	162.700	175
15 1,1-Dichloroethylene	61	9.083	9.088	(0.664)	573262	45.3188	48.8
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	572697	43.4559	46.8
18 Iodomethane	142	9.470	9.470	(0.692)	1770014	216.288	233
23 Methylene chloride	84	10.142	10.137	(0.741)	326393	51.0823	55.0
19 Carbon disulfide	76	9.576	9.571	(0.700)	4194096	257.449	277
26 trans-1,2-Dichloroethylene	96	10.552	10.547	(0.771)	289433	49.2616	53.0
30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	625975	47.9315	51.6
35 2-Butanone	43	12.186	12.186	(0.890)	877174	174.515	188
36 cis-1,2-Dichloroethylene	96	12.200	12.204	(0.891)	314559	50.4859	54.3
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	555729	43.2224	46.5
33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	447948	46.9592	50.5
41 Chloroform	83	12.614	12.609	(0.922)	659599	47.4404	51.1
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	510475	41.4730	44.6
39 Bromochloromethane	128	12.563	12.559	(0.918)	134612	54.3728	58.5
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	515171	47.3125	50.9
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	465171	46.8989	50.5
44 Carbon tetrachloride	117	13.028	13.023	(0.952)	517864	47.4746	51.1
51 1,2-Dichloroethane	62	13.442	13.438	(0.982)	555482	45.2726	48.7
47 Benzene	78	13.336	13.332	(0.974)	1204370	48.6980	52.4
54 Trichloroethylene	95	14.114	14.114	(1.031)	322891	47.6589	51.3
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	318782	49.7560	53.6
60 Bromodichloromethane	83	14.754	14.750	(1.078)	510161	48.5351	52.2
59 Dibromomethane	93	14.625	14.625	(1.069)	195930	49.5899	53.4
64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	461238	170.326	183
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	482829	44.1024	47.5
66 Toluene	92	15.597	15.597	(0.909)	734986	45.7795	49.3
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	482379	42.2368	45.5
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.939)	216219	48.3860	52.1
71 2-Hexanone	43	16.269	16.269	(0.948)	796706	111.310	120
72 1,3-Dichloropropane	76	16.310	16.310	(0.951)	473670	47.6880	51.3
70 Tetrachloroethylene	164	16.190	16.190	(0.944)	230013	47.2244	50.8
73 Dibromochloromethane	129	16.545	16.549	(0.964)	320927	50.0616	53.9
74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	250720	47.7095	51.4
77 Chlorobenzene	112	17.194	17.194	(1.002)	770102	46.3731	49.9
79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	297713	46.2476	49.8
78 Ethylbenzene	91	17.221	17.221	(1.004)	1482021	42.9139	46.2
80 m,p-Xylenes	106	17.337	17.337	(1.010)	999274	87.7698	94.5
81 o-Xylene	106	17.783	17.788	(1.036)	506521	45.7304	49.2
82 Styrene	104	17.806	17.801	(1.038)	832185	43.8420	47.2
83 Bromoform	173	18.105	18.110	(0.923)	203441	51.0923	55.0
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	305520	48.1209	51.8
92 1,2,3-Trichloropropane	110	18.607	18.602	(0.949)	94154	45.0973	48.5(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	321477	47.7449	51.4
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1642875	41.4227	44.6
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1206813	41.9973	45.2
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1378153	42.3254	45.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1213997	42.3244	45.6
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1078344	41.6159	44.8
96 tert-Butylbenzene	119	19.076	19.076	(0.973)	956541	42.8415	46.1
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1221687	41.6087	44.8
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1418697	39.8102	42.8
100 4-Isopropyltoluene	119	19.426	19.422	(0.991)	985658	36.5869	39.4
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1107311	36.7106	39.5
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	57733	47.7000	51.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112509v1/1n324.d
Date : 25-NOV-2009 20:29
Client ID: REO3-09-13812HSD
Sample Info: 1120198143119267391 1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

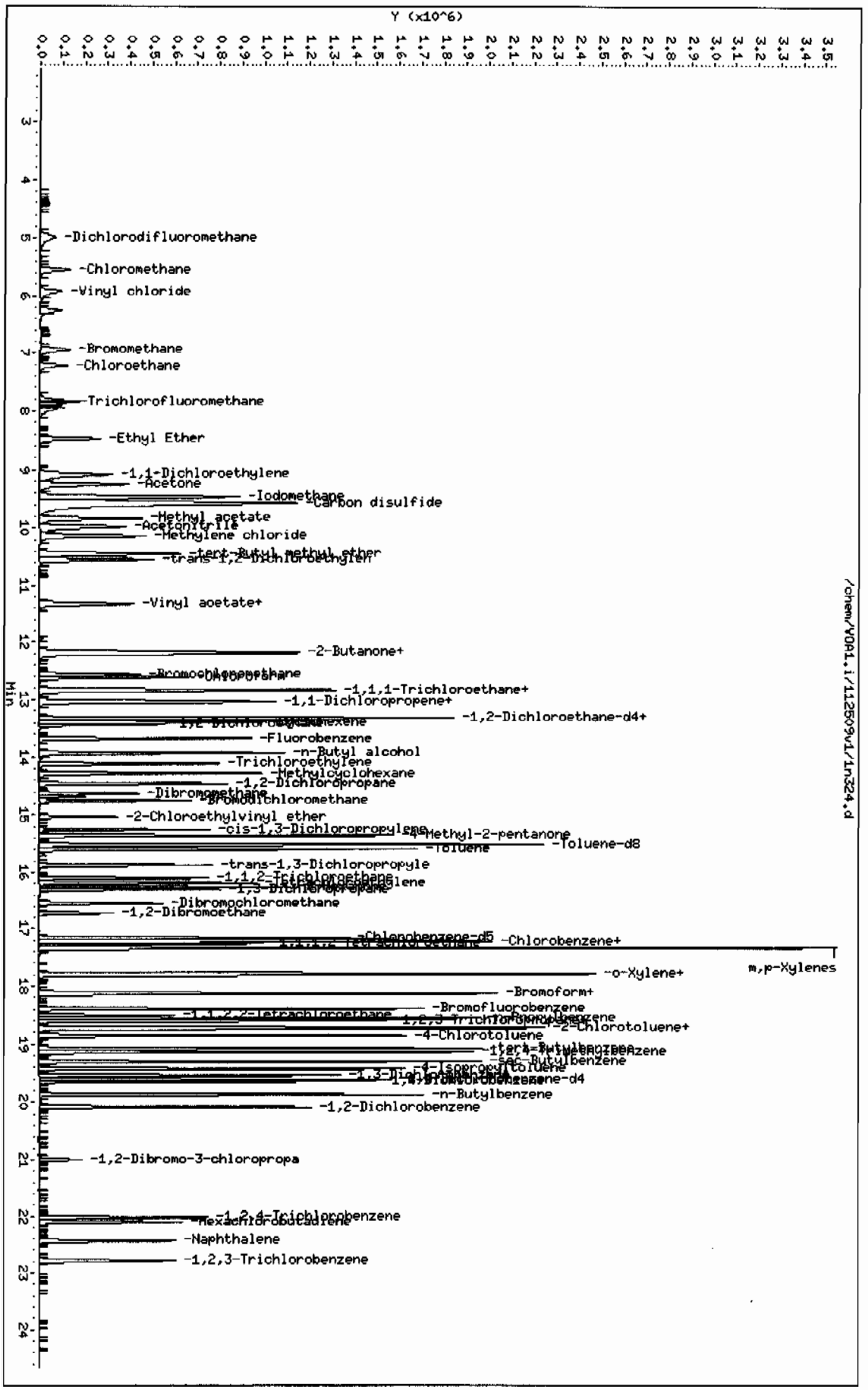

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926738** Verified by: _____

Analyst: Ronda Eagle
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201981429 MB	25-NOV-2009 07:00:00	Soil	5	5	1	
1201981432 LCS	25-NOV-2009 07:01:00	Soil	5	5	1	
1201981433 LCS	25-NOV-2009 07:02:00	Soil	5	5	1	
1201983208 MB	25-NOV-2009 12:30:00	Soil	5	5	1	
1201983209 LCS	25-NOV-2009 12:31:00	Soil	5	5	1	
1201983210 LCS	25-NOV-2009 12:32:00	Soil	5	5	1	
241714001	25-NOV-2009 13:54:00	Soil	5	5	1	
241714002	25-NOV-2009 13:55:00	Soil	5	5	1	
241417001	25-NOV-2009 13:56:00	Soil	5	5	1	
241417002	25-NOV-2009 13:57:00	Soil	5	5	1	
241423001	25-NOV-2009 13:58:00	Soil	5	5	1	
241423003	25-NOV-2009 13:59:00	Soil	5	5	1	
241423004	25-NOV-2009 14:00:00	Soil	5	5	1	
241423005	25-NOV-2009 14:01:00	Soil	5	5	1	
241503001	25-NOV-2009 14:02:00	Soil	5	5	1	
241503002	25-NOV-2009 14:03:00	Soil	5	5	1	
241503003	25-NOV-2009 14:04:00	Soil	5	5	1	
241503004	25-NOV-2009 14:05:00	Soil	5	5	1	
241524001	25-NOV-2009 14:06:00	Soil	5	5	1	
241524002	25-NOV-2009 14:07:00	Soil	5	5	1	
1201981430 PS (241417001)	25-NOV-2009 14:08:00	Soil	5	5	1	
1201981431 PSD (241417001)	25-NOV-2009 14:09:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/13/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111309v1

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
ICV	W1VM091113-18		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
BFB	UVM090821-02				1
SHORT ICV	W1VM091113-19		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/13/2009 22:17	1L507.D	UVM090821-02	GEL	BFB2	5ML	1	N/A	1	W	ACJ	N/A	O	Passed.
11/13/2009 22:47	1L508.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
11/13/2009 23:18	1L509.D	W1VM091113-05	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM090911-01B/UVM091012-01D
11/13/2009 23:48	1L510.D	W1VM091113-06	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	N/A	X	UVM090911-02B/UVM091012-02D: See 1L511
11/14/2009 0:18	1L511.D	W1VM091113-07	GEL	VSTD001	5ML	1	N/A	5	W	ACJ	N/A	O	UVM090911-02B/UVM091012-02D
11/14/2009 0:48	1L512.D	W1VM091113-08	GEL	VSTD002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM090911-03B/UVM091012-03D
11/14/2009 1:19	1L513.D	W1VM091113-09	GEL	VSTD005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM090911-04B/UVM091012-04D
11/14/2009 1:49	1L514.D	W1VM091113-10	GEL	VSTD010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM090911-05B/UVM091012-05D
11/14/2009 2:19	1L515.D	W1VM091113-11	GEL	VSTD020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM090911-06B/UVM091012-06D
11/14/2009 2:49	1L516.D	W1VM091113-12	GEL	VSTD050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM090911-07B/UVM091012-07D
11/14/2009 3:19	1L517.D	W1VM091113-13	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM090911-08B/UVM091012-08D
11/14/2009 3:50	1L518.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	Rinse
11/14/2009 4:20	1L519.D	W1VM091113-14	GEL	VSTD005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091023-01/UVM091110-01E
11/14/2009 4:50	1L520.D	W1VM091113-15	GEL	VSTD010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091023-02/UVM091110-02E
11/14/2009 5:20	1L521.D	W1VM091113-16	GEL	VSTD025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091023-03/UVM091110-03E
11/14/2009 5:50	1L522.D	W1VM091113-17	GEL	VSTD050S	5ML	1	N/A	16	W	ACJ	N/A	O	UVM091023-04/UVM091110-04E
11/14/2009 6:20	1L523.D	W1VM091113-18	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091023-05/UVM091110-05E
11/14/2009 6:51	1L524.D	W1VM091113-19	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091023-06/UVM091110-06E
11/14/2009 7:21	1L525.D	W1VM091113-20	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091023-07/UVM091110-07E
11/14/2009 7:51	1L526.D	12019---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	Rinse
11/14/2009 8:21	1L527.D	W1VM091113-18	GEL	ICV	5ML	1	N/A	21	W	ACJ	N/A	X	UVM091111-01A/IVM091111-01; Vinyl Chloride low. See 11/16/09
11/14/2009 8:52	1L528.D	W1VM091113-19	GEL	SHORT ICV	5ML	1	N/A	22	W	ACJ	N/A	O	UVM091023-08A/UVM091105-02B

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Scl. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard

	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount

5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/16/2009 9:04	1M101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	Passed. See 1M108
11/16/2009 9:35	1M102.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	RXM4	N/A	X	
11/16/2009 10:14	1M103.D	W1VM091116-01	GEL	CCV/LCS/ICV	5ML	1	N/A	3	W	RXM4	N/A	X	
11/16/2009 10:45	1M104.D	W1VM091116-02	GEL	LCSD	5ML	1	N/A	4	W	RXM4	N/A	X	
11/16/2009 12:25	1M105.D	W1VM091116-03	GEL	SHORTICV	5ML	1	N/A	5	W	RXM4	N/A	X	Decreased multiplier
11/16/2009 13:00	1M106.D	UVM090821-02	GEL	BFB	5ML	1	N/A	6	W	RXM4	N/A	X	See 1M108
11/16/2009 13:30	1M107.D	W1VM091116-04	GEL	CCV/LCS/ICV	5ML	1	N/A	7	W	RXM4	N/A	X	UVM091111-01A/IVM0901111-01
11/16/2009 14:01	**1M108.D**	**W1VM091116-05**	**GEL**	**BFB/CCV/LCS/ICV**	**5ML**	**1**	**N/A**	**8**	**W**	**RXM4**	**N/A**	**O**	UVM091111-01B/IVM0901111-01
11/16/2009 14:48	1M109.D	W1VM091116-06	GEL	SHORT	5ML	1	N/A	9	W	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 15:20	1M110.D	W1VM091116-07	GEL	LCS	5G	1	N/A	10	S	RXM4	N/A	O	UVM091111-01B/IVM0901111-01
11/16/2009 15:51	1M111.D	W1VM091116-08	GEL	SHORT	5G	1	N/A	11	S	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:21	1M112.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	RXM4	N/A	X	waters were not analyzed. Not needed.
11/16/2009 16:51	1M113.D	12019---	GEL	BLANK	5G	1	N/A	13	S	RXM4	N/A	O	
11/16/2009 17:22	1M114.D	240630001	LANL	923274	5G	1	N/A	14	S	RXM4	N/A	O	
11/16/2009 17:52	1M115.D	240630002	LANL	923274	5G	1	N/A	15	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 18:22	1M116.D	240630003	LANL	923274	5G	1	N/A	16	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 18:52	1M117.D	240630004	LANL	923274	5G	1	N/A	17	S	RXM4	N/A	O	
11/16/2009 19:23	1M118.D	240630005	LANL	923274	5G	1	N/A	18	S	RXM4	N/A	O	
11/16/2009 19:53	1M119.D	240630006	LANL	923274	5G	1	N/A	19	S	RXM4	N/A	O	
11/16/2009 20:23	1M120.D	240630007	LANL	923274	5G	1	N/A	20	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 20:53	1M121.D	240630008	LANL	923274	5G	1	N/A	21	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:23	1M122.D	240630009	LANL	923274	5G	1	N/A	22	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:54	1M123.D	240630010	LANL	923274	5G	1	N/A	23	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 22:24	1M124.D	240630011	LANL	923274	5G	1	N/A	24	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 22:55	1M125.D	240634001	LANL	923274	5G	1	N/A	25	S	RXM4	N/A	O	
11/16/2009 23:25	1M126.D	240634002	LANL	923274	5G	1	N/A	26	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 23:55	1M127.D	240634003	LANL	923274	5G	1	N/A	27	S	RXM4	N/A	O	
11/17/2009 0:25	1M128.D	240634004	LANL	923274	5G	1	N/A	28	S	RXM4	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Scl. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/17/2009 0:55	1M129.D	240634005	LANL	923274	5G	1	N/A	29	S	RXM4	N/A	O	
11/17/2009 1:25	1M130.D	240634006	LANL	923274	5G	1	N/A	30	S	RXM4	N/A	O	
11/17/2009 1:56	1M131.D	1201973574	LANL	923274	5G	1	N/A	31	S	RXM4	N/A	X	MS 240630001; See 11/17/09
11/17/2009 2:26	1M132.D	1201973575	LANL	923274	5G	1	N/A	32	S	RXM4	N/A	X	MSD 240630001; out of tune. See 11/17/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/25/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

CI test lot # 84515

Sequence Number: 112509v1 AM

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091125-01		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091125-01/02			5+5	
BFB	UVM090821-02				1
SHORT	UVM091118-08A		5	5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable O/X	Comments
11/25/2009 8:50	1N301.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	O	
11/25/2009 9:20	1N302.D	W1VM091125-01	GEL	CCV/LCS	5ML	1	N/A	2	W	RXM4	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 9:50	1N303.D	W1VM091125-02	GEL	LCS	5G	1	N/A	3	S	RXM4	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 10:21	1N304.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	4	W	RXM4	N/A	O	UVM091118-08A
11/25/2009 10:51	1N305.D	UVM091118-08A	GEL	SHORT	5G	1	N/A	5	S	RXM4	N/A	O	
11/25/2009 11:22	1N306.D	12019---	GEL	BLANK	5G	1	N/A	6	S	RXM4	N/A	O	
11/25/2009 11:52	1N307.D	12019---	GEL	BLANK	5ML	1	N/A	7	W	RXM4	N/A	O	
11/25/2009 12:23	1N308.D	12019802193	PNTX	926146	5ML	1	PH2	8	W	RXM4	N	O	MS 240427002
11/25/2009 12:53	1N309.D	12019802194	PNTX	926146	5ML	1	PH2	9	W	RXM4	N	O	MSD 240427002
11/25/2009 13:23	1N310.D	12019--	GEL	BLANK	5ML	1	N/A	10	W	RXM4	N/A	X	
11/25/2009 13:56	1N311.D	241714001	LANL	926739	5G	1	N/A	11	S	RXM4	N/A	O	
11/25/2009 14:26	1N312.D	241714002	LANL	926739	5G	1	N/A	12	S	RXM4	N/A	O	
11/25/2009 14:56	1N313.D	241417001	LANL	926739	5G	1	N/A	13	S	RXM4	N/A	O	
11/25/2009 15:26	1N314.D	241417002	LANL	926739	5G	1	N/A	14	S	RXM4	N/A	O	
11/25/2009 15:57	1N315.D	241423001	LANL	926739	5G	1	N/A	15	S	RXM4	N/A	O	
11/25/2009 16:27	1N316.D	241423003	LANL	926739	5G	1	N/A	16	S	RXM4	N/A	O	
11/25/2009 16:57	1N317.D	241423004	LANL	926739	5G	1	N/A	17	S	RXM4	N/A	O	
11/25/2009 17:27	1N318.D	241423005	LANL	926739	5G	1	N/A	18	S	RXM4	N/A	O	
11/25/2009 17:57	1N319.D	241503001	LANL	926739	5G	1	N/A	19	S	RXM4	N/A	O	
11/25/2009 18:28	1N320.D	241503002	LANL	926739	5G	1	N/A	20	S	RXM4	N/A	O	
11/25/2009 18:58	1N321.D	241503003	LANL	926739	5G	1	N/A	21	S	RXM4	N/A	O	
11/25/2009 19:28	1N322.D	241503004	LANL	926739	5G	1	N/A	22	S	RXM4	N/A	O	
11/25/2009 19:58	1N323.D	1201981430	LANL	926739	5G	1	N/A	23	S	RXM4	N/A	O	MS 241417001
11/25/2009 20:29	1N324.D	1201981431	LANL	926739	5G	1	N/A	24	S	RXM4	N/A	O	MSD 241417001

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
926739	See Below		

Potentially affected work order(s)(SDG): 241417(10-575),241423(10-578),241503(10-589),241524(10-600),241714(10-650)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. LCS 1201981432 did not meet the spike recovery acceptance criteria for the following compound: n-Butylbenzene 70.45% (71.50%-128.40%). 2. LCS 1201983209 did not meet the spike recovery acceptance criteria for the following compound: Bromochloromethane 122.5% (76.00%-121.60%).	1/2. The total number of unnaceptable spike recoveries is within the client required 5% of the total requested analytes. The results are reported.

Originator's Name:

Ronda Eagle 30-NOV-09

Data Validator/Group Leader:

Sarah Kozlik 30-NOV-09

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-575

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	925661
Prep Batch Number:	925648

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241417001	RE03-09-13812
241417002	RE03-09-13811
1201979040	Method Blank (MB)
1201979041	241417001(RE03-09-13812) Matrix Spike (MS)
1201979042	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)
1201979043	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241417001 (RE03-09-13812) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The MS/MSD RPD value for Benzyl alcohol was 39% (limit: 30%). Because the individual MS and MSD recoveries for that analyte were acceptable, the data were reported un-qualified for the RPD value failure.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days

expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 766334. It is located in the Miscellaneous Section of the data report.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration
The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beveham **Date:** 12-15-09

Roadmap for LANL 10-575 SVOA

This roadmap was analyzed by nat00999 on 12-05-2009, 17:14.
This roadmap was reviewed by nat00999 on 12-09-2009, 09:27.
This roadmap was reviewed by bar00895 on 12-09-2009, 09:56.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD6.i/s120409.b/s6l0408.d	241417001	04-DEC-2009	12:54	10-575.sub	RE03-09-13812	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s6l0411.d	241417002	04-DEC-2009	14:18	10-575.sub	RE03-09-13811	1	925661	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD6.i/s120409.b/s6l0404-1.d	1201979040	mb	04-DEC-2009	11:05	10-575.sub	SBLK01	1	925661	
■	N	/chem/MSD6.i/s120409.b/s6l0405-1.d	1201979043	lcs	04-DEC-2009	11:32	10-575.sub	SBLK01LCS	1	925661	
■	N	/chem/MSD6.i/s120409.b/s6l0410.d	1201979042	msd	04-DEC-2009	13:49	10-575.sub	RE03-09-13812MSD	1	925661	DUSE - see s610507
☐	N	/chem/MSD6.i/s120509.b/s6l0505-1.d	1201979043	lcs	05-DEC-2009	12:18	10-575.sub	SBLK01LCS	1	925661	
☐	N	/chem/MSD6.i/s120509.b/s6l0506.d	1201979041	ms	05-DEC-2009	12:44	10-575.sub	RE03-09-13812MS	1	925661	USE - rr of s610409
☐	Y	/chem/MSD6.i/s120509.b/s6l0507.d	1201979042	msd	05-DEC-2009	13:13	10-575.sub	RE03-09-13812MSD	1.00000	925661	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.1**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	370	ug/kg	74.0	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13811	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 14:18	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s6l0411.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	325	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:54**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0408.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.7	358
108-95-2	Phenol	U	358	ug/kg	71.7	358
95-57-8	2-Chlorophenol	U	358	ug/kg	71.7	358
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.7	358
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.7	358
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.7	358
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358
87-86-5	Pentachlorophenol	U	358	ug/kg	89.6	358
129-00-0	Pyrene	U	35.8	ug/kg	10.8	35.8
110-86-1	Pyridine	U	358	ug/kg	71.7	358
62-53-3	Aniline	U	358	ug/kg	108	358
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.7	358
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.7	358
100-51-6	Benzyl alcohol	U	358	ug/kg	108	358
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.7	358
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.7	358
95-48-7	o-Cresol	U	358	ug/kg	71.7	358
65794-96-9	m,p-Cresols	U	358	ug/kg	108	358
67-72-1	Hexachloroethane	U	358	ug/kg	71.7	358
98-95-3	Nitrobenzene	U	358	ug/kg	71.7	358
78-59-1	Isophorone	U	358	ug/kg	71.7	358
88-75-5	2-Nitrophenol	U	358	ug/kg	71.7	358
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.7	358
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.7	358
65-85-0	Benzoic acid	U	717	ug/kg	179	717
91-20-3	Naphthalene	U	35.8	ug/kg	10.8	35.8
106-47-8	4-Chloroaniline	U	358	ug/kg	71.7	358
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.7	358
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.17	35.8
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.7	358
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.7	358
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.7	358
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8
88-74-4	2-Nitroaniline	U	358	ug/kg	71.7	358
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	358	ug/kg	71.7	358

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575	Date Collected:	11/17/2009 12:00	Matrix:	SOIL
Lab Sample ID:	241417001	Date Received:	11/19/2009 08:45	%Moisture:	7.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13812	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 12:54	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s6l0408.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	358	ug/kg	71.7	358
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.8	35.8
51-28-5	2,4-Dinitrophenol	U	717	ug/kg	136	717
132-64-9	Dibenzofuran	U	358	ug/kg	71.7	358
84-66-2	Diethylphthalate	U	358	ug/kg	71.7	358
86-73-7	Fluorene	U	35.8	ug/kg	10.8	35.8
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.7	358
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.7	358
100-01-6	4-Nitroaniline	U	358	ug/kg	108	358
	p-Nitroaniline					
122-39-4	Diphenylamine	U	358	ug/kg	71.7	358
122-66-7	Azobenzene	U	358	ug/kg	71.7	358
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.7	358
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.7	358
85-01-8	Phenanthrene	U	35.8	ug/kg	10.8	35.8
120-12-7	Anthracene	U	35.8	ug/kg	7.17	35.8
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.7	358
206-44-0	Fluoranthene	U	35.8	ug/kg	10.8	35.8
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.7	358
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.8	35.8
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	108	358
218-01-9	Chrysene	U	35.8	ug/kg	10.8	35.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	358	ug/kg	71.7	358
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.7	358
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.8	35.8
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.8	35.8
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.8	35.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.8	35.8
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.8	35.8
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.8	35.8
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.7	358

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	302	ug/kg		JA

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-575

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201979040	MB for batch 925648	76	77	84	82	86	93
241417001	RE03-09-13812	58	62	66	71	79	86
241417002	RE03-09-13811	65	67	74	72	72	82
1201979043	LCS for batch 925648	60	69	72	78	97	93
1201979041	RE03-09-13812MS	54	61	64	70	90	92
1201979042	RE03-09-13812MSD	52	60	62	65	79	77

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812MS
Lab Sample ID: 1201979041
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 12:44
Prep Batch ID: 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1790	0.00	U	677	38	32-90
108-95-2	MS	Phenol	1790	0.00	U	1100	61	32-105
95-57-8	MS	2-Chlorophenol	1790	0.00	U	1120	63	33-106
106-46-7	MS	1,4-Dichlorobenzene	1790	0.00	U	1110	62	33-95
621-64-7	MS	N-Nitrosodipropylamine	1790	0.00	U	1240	70	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1790	0.00	U	1430	80	38-119
83-32-9	MS	Acenaphthene	1790	0.00	U	1230	69	39-100
121-14-2	MS	2,4-Dinitrotoluene	1790	0.00	U	1480	83	42-107
100-02-7	MS	4-Nitrophenol	1790	0.00	U	1130	64	24-120
87-86-5	MS	Pentachlorophenol	1790	0.00	U	1430	80	26-121
129-00-0	MS	Pyrene	1790	0.00	U	1430	80	34-120
110-86-1	MS	Pyridine	1790	0.00	U	681	38	30-95
62-53-3	MS	Aniline	1790	0.00	U	1150	64	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1790	0.00	U	1030	58	34-101
541-73-1	MS	1,3-Dichlorobenzene	1790	0.00	U	1090	61	31-97
100-51-6	MS	Benzyl alcohol	1790	0.00	U	548	31	17-120
95-50-1	MS	1,2-Dichlorobenzene	1790	0.00	U	1160	65	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1790	0.00	U	1160	65	32-113
95-48-7	MS	o-Cresol	1790	0.00	U	1220	68	31-119
65794-96-9	MS	m,p-Cresols	1790	0.00	U	1480	83	35-125
67-72-1	MS	Hexachloroethane	1790	0.00	U	1100	62	30-100
98-95-3	MS	Nitrobenzene	1790	0.00	U	1220	68	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812MS
Lab Sample ID: 1201979041
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 12:44
Prep Batch ID: 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1790	0.00	U	1310	73	34-110
88-75-5	MS	2-Nitrophenol	1790	0.00	U	1320	74	32-108
105-67-9	MS	2,4-Dimethylphenol	1790	0.00	U	1080	61	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1790	0.00	U	1230	69	35-108
120-83-2	MS	2,4-Dichlorophenol	1790	0.00	U	1350	75	38-110
65-85-0	MS	Benzoic acid	3570	0.00	U	2470	69	18-134
91-20-3	MS	Naphthalene	1790	0.00	U	1200	67	31-105
106-47-8	MS	4-Chloroaniline	1790	0.00	U	1120	63	29-123
87-68-3	MS	Hexachlorobutadiene	1790	0.00	U	1220	68	31-109
91-57-6	MS	2-Methylnaphthalene	1790	0.00	U	1450	81	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1790	0.00	U	1340	75	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1790	0.00	U	1290	72	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1790	0.00	U	1420	80	37-116
91-58-7	MS	2-Chloronaphthalene	1790	0.00	U	1260	70	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1790	0.00	U	1130	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1790	0.00	U	1240	70	39-117
131-11-3	MS	Dimethylphthalate	1790	0.00	U	1360	76	41-105
606-20-2	MS	2,6-Dinitrotoluene	1790	0.00	U	1410	79	41-103
208-96-8	MS	Acenaphthylene	1790	0.00	U	1360	76	41-103
51-28-5	MS	2,4-Dinitrophenol	1790	0.00	U	1490	83	25-104
132-64-9	MS	Dibenzofuran	1790	0.00	U	1610	90	40-114
84-66-2	MS	Diethylphthalate	1790	0.00	U	1410	79	43-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979041**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 12:44**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1790	0.00	U	1380	77	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1790	0.00	U	1410	79	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1790	0.00	U	1370	76	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1790	0.00	U	1450	81	35-139
122-39-4	MS	Diphenylamine	1790	0.00	U	1390	78	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1790	0.00	U	1370	77	37-118
101-55-3	MS	4-Bromophenylphenylether	1790	0.00	U	1500	84	39-112
118-74-1	MS	Hexachlorobenzene	1790	0.00	U	1510	85	38-113
85-01-8	MS	Phenanthrene	1790	0.00	U	1430	80	38-110
120-12-7	MS	Anthracene	1790	0.00	U	1460	82	38-112
84-74-2	MS	Di-n-butylphthalate	1790	0.00	U	1630	91	42-119
206-44-0	MS	Fluoranthene	1790	0.00	U	1590	89	38-119
85-68-7	MS	Butylbenzylphthalate	1790	0.00	U	1640	92	39-126
56-55-3	MS	Benzo(a)anthracene	1790	0.00	U	1490	83	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1790	0.00	U	1290	72	35-106
218-01-9	MS	Chrysene	1790	0.00	U	1540	86	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1790	0.00	U	1720	96	40-125
117-84-0	MS	Di-n-octylphthalate	1790	0.00	U	1760	98	30-147
205-99-2	MS	Benzo(b)fluoranthene	1790	0.00	U	1590	89	38-117
207-08-9	MS	Benzo(k)fluoranthene	1790	0.00	U	1600	89	39-120
50-32-8	MS	Benzo(a)pyrene	1790	0.00	U	1660	93	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1790	0.00	U	1570	88	32-120

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979041**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 12:44**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1790	0.00	U	1600	90	32-124
191-24-2	MS	Benzo(ghi)perylene	1790	0.00	U	1650	92	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1790	0.00	U	1230	69	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13812MSD**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979042**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 13:13**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1790	0.00	U	692	39	32-90	2	0-30
108-95-2	MSD Phenol	1790	0.00	U	1120	63	32-105	2	0-30
95-57-8	MSD 2-Chlorophenol	1790	0.00	U	1150	65	33-106	3	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1790	0.00	U	1120	63	33-95	1	0-30
621-64-7	MSD N-Nitrosodipropylamine	1790	0.00	U	1260	71	31-109	2	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1790	0.00	U	1110	62	38-119	25	0-30
83-32-9	MSD Acenaphthene	1790	0.00	U	1210	68	39-100	2	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1790	0.00	U	1410	79	42-107	5	0-30
100-02-7	MSD 4-Nitrophenol	1790	0.00	U	1150	64	24-120	1	0-30
87-86-5	MSD Pentachlorophenol	1790	0.00	U	1330	74	26-121	7	0-30
129-00-0	MSD Pyrene	1790	0.00	U	1280	72	34-120	11	0-30
110-86-1	MSD Pyridine	1790	0.00	U	701	39	30-95	3	0-30
62-53-3	MSD Aniline	1790	0.00	U	1170	66	34-111	2	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1790	0.00	U	1060	59	34-101	3	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1790	0.00	U	1130	63	31-97	4	0-30
100-51-6	MSD Benzyl alcohol	1790	0.00	U	368	21	17-120	39 *	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1790	0.00	U	1200	67	32-102	3	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1790	0.00	U	1200	67	32-113	3	0-30
95-48-7	MSD o-Cresol	1790	0.00	U	1080	61	31-119	12	0-30
65794-96-9	MSD m,p-Cresols	1790	0.00	U	1300	73	35-125	13	0-30
67-72-1	MSD Hexachloroethane	1790	0.00	U	1130	63	30-100	3	0-30
98-95-3	MSD Nitrobenzene	1790	0.00	U	1210	68	33-108	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD	Isophorone	1790	0.00	U	1320	74	34-110	1	0-30
88-75-5	MSD	2-Nitrophenol	1790	0.00	U	1330	74	32-108	1	0-30
105-67-9	MSD	2,4-Dimethylphenol	1790	0.00	U	1070	60	32-115	1	0-30
111-91-1	MSD	bis(2-Chloroethoxy)methane	1790	0.00	U	1250	70	35-108	1	0-30
120-83-2	MSD	2,4-Dichlorophenol	1790	0.00	U	1330	74	38-110	2	0-30
65-85-0	MSD	Benzoic acid	3570	0.00	U	2380	67	18-134	4	0-30
91-20-3	MSD	Naphthalene	1790	0.00	U	1200	67	31-105	0	0-30
106-47-8	MSD	4-Chloroaniline	1790	0.00	U	1120	63	29-123	0	0-30
87-68-3	MSD	Hexachlorobutadiene	1790	0.00	U	1230	69	31-109	1	0-30
91-57-6	MSD	2-Methylnaphthalene	1790	0.00	U	1440	81	32-110	0	0-30
77-47-4	MSD	Hexachlorocyclopentadiene	1790	0.00	U	1400	78	21-122	4	0-30
88-06-2	MSD	2,4,6-Trichlorophenol	1790	0.00	U	1230	69	37-108	4	0-30
95-95-4	MSD	2,4,5-Trichlorophenol	1790	0.00	U	1370	77	37-116	4	0-30
91-58-7	MSD	2-Chloronaphthalene	1790	0.00	U	1240	69	37-103	2	0-30
88-74-4	MSD	2-Nitroaniline *o-Nitroaniline*	1790	0.00	U	1120	63	36-115	1	0-30
99-09-2	MSD	3-Nitroaniline *m-Nitroaniline*	1790	0.00	U	1230	69	39-117	1	0-30
131-11-3	MSD	Dimethylphthalate	1790	0.00	U	1320	74	41-105	4	0-30
606-20-2	MSD	2,6-Dinitrotoluene	1790	0.00	U	1360	76	41-103	4	0-30
208-96-8	MSD	Acenaphthylene	1790	0.00	U	1310	73	41-103	4	0-30
51-28-5	MSD	2,4-Dinitrophenol	1790	0.00	U	1380	77	25-104	7	0-30
132-64-9	MSD	Dibenzofuran	1790	0.00	U	1550	87	40-114	4	0-30
84-66-2	MSD	Diethylphthalate	1790	0.00	U	1320	74	43-110	7	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13
Prep Batch ID: 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1790	0.00	U	1340	75	48-99	3	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1790	0.00	U	1350	76	42-111	5	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1790	0.00	U	1260	70	19-118	8	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1790	0.00	U	1380	77	35-139	5	0-30
122-39-4	MSD	Diphenylamine	1790	0.00	U	1300	73	41-112	7	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1790	0.00	U	1300	73	37-118	5	0-30
101-55-3	MSD	4-Bromophenylphenylether	1790	0.00	U	1360	76	39-112	10	0-30
118-74-1	MSD	Hexachlorobenzene	1790	0.00	U	1370	76	38-113	10	0-30
85-01-8	MSD	Phenanthrene	1790	0.00	U	1300	73	38-110	9	0-30
120-12-7	MSD	Anthracene	1790	0.00	U	1360	76	38-112	8	0-30
84-74-2	MSD	Di-n-butylphthalate	1790	0.00	U	1450	81	42-119	12	0-30
206-44-0	MSD	Fluoranthene	1790	0.00	U	1450	81	38-119	9	0-30
85-68-7	MSD	Butylbenzylphthalate	1790	0.00	U	1450	81	39-126	12	0-30
56-55-3	MSD	Benzo(a)anthracene	1790	0.00	U	1350	75	39-110	10	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1790	0.00	U	1180	66	35-106	9	0-30
218-01-9	MSD	Chrysene	1790	0.00	U	1370	77	39-109	11	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1790	0.00	U	1480	83	40-125	15	0-30
117-84-0	MSD	Di-n-octylphthalate	1790	0.00	U	1600	89	30-147	9	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1790	0.00	U	1410	79	38-117	12	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1790	0.00	U	1450	81	39-120	10	0-30
50-32-8	MSD	Benzo(a)pyrene	1790	0.00	U	1490	83	40-115	11	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1790	0.00	U	1340	75	32-120	16	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13812MSD**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979042**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 13:13**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1790	0.00	U	1330	74	32-124	19	0-30
191-24-2	MSD Benzo(ghi)perylene	1790	0.00	U	1330	75	28-119	21	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1790	0.00	U	1230	69	31-105	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	726	44	31-95
108-95-2	LCS	Phenol	1670	0.0	1140	68	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1160	70	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1170	70	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1280	77	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1350	81	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1250	75	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1510	90	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1140	68	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1540	92	38-116
129-00-0	LCS	Pyrene	1670	0.0	1320	79	43-108
110-86-1	LCS	Pyridine	1670	0.0	721	43	13-129
62-53-3	LCS	Aniline	1670	0.0	1020	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1080	65	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1170	70	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	796	48	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1230	74	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1210	73	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1190	72	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1440	87	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1180	71	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1250	75	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 925648 **Matrix:** SOIL

Lab Sample ID: 1201979043

Instrument: MSD6.I **Analysis Date:** 12/05/2009 12:18 **Dilution:** 1

Analyst: NAG1 **Prep Batch ID:** 925648

Inj. Vol: .5 uL **Batch ID:** 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1340	80	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1360	81	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1100	66	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1260	75	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1350	81	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	3350	101	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1230	74	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	988	59	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1270	76	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1460	88	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1480	89	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1290	77	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1410	85	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1260	76	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1150	69	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1210	73	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1400	84	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1430	86	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1350	81	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1570	94	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1590	95	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1400	84	50-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1380	83	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1400	84	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1390	83	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1390	84	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1340	80	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1340	81	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1430	86	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1440	87	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1370	82	45-107
120-12-7	LCS	Anthracene	1670	0.0	1400	84	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1560	94	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1530	92	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1480	89	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1430	86	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1250	75	45-98
218-01-9	LCS	Chrysene	1670	0.0	1450	87	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1530	92	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1490	89	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1450	87	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1490	89	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1550	93	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1630	98	45-128

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-575 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 925648 **Matrix:** SOIL

Lab Sample ID: 1201979043

Instrument: MSD6.I **Analysis Date:** 12/05/2009 12:18 **Dilution:** 1

Analyst: NAG1 **Prep Batch ID:** 925648

Inj. Vol: .5 uL **Batch ID:** 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1680	101	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1740	105	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1280	77	36-109

Method Blank Summary

SDG Number:	10-575	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925648	Instrument ID:	MSD6.I	Data File:	s6l0404-1.d
Lab Sample ID:	1201979040	Prep Date:	11/24/2009 21:57	Analyzed:	12/04/09 11:05
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 RE03-09-13812	241417001	s6l0408.d	12/04/09	1254
02 RE03-09-13811	241417002	s6l0411.d	12/04/09	1418
03 LCS for batch 925648	1201979043	s6l0505.d	12/05/09	1218
04 RE03-09-13812MS	1201979041	s6l0506.d	12/05/09	1244
05 RE03-09-13812MSD	1201979042	s6l0507.d	12/05/09	1313

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-575

Instrument ID: MSD6.I **Injection Date/Time:** 04-DEC-09 09:48

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120409.b/s6l0401.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.9
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	40.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.1
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	22.9
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	75.1
442	Greater than 40% of mass 198	74.9
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.2	/chem/MSD6.i/s120409.b/s6l0402	04-DEC-09 10:02
APCVS	WBN091201-03.2	/chem/MSD6.i/s120409.b/s6l0403	04-DEC-09 10:30
SBLK01	1201979040	/chem/MSD6.i/s120409.b/s6l0404	04-DEC-09 11:05
RE03-09-13812	241417001	/chem/MSD6.i/s120409.b/s6l0408	04-DEC-09 12:54
RE03-09-13811	241417002	/chem/MSD6.i/s120409.b/s6l0411	04-DEC-09 14:18

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-575

Instrument ID: MSD6.I **Injection Date/Time:** 05-DEC-09 10:31

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120509.b/s6l0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.4
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	38.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	74.8
442	Greater than 40% of mass 198	84.1
443	17 - 23% of mass 442	19.1

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.4	/chem/MSD6.i/s120509.b/s6l0502	05-DEC-09 10:46
APCVS	WBN091201-03.2	/chem/MSD6.i/s120509.b/s6l0503	05-DEC-09 11:14
SBLK01LCS	1201979043	/chem/MSD6.i/s120509.b/s6l0505	05-DEC-09 12:18
RE03-09-13812MS	1201979041	/chem/MSD6.i/s120509.b/s6l0506	05-DEC-09 12:44
RE03-09-13812MSD	1201979042	/chem/MSD6.i/s120509.b/s6l0507	05-DEC-09 13:13

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-575

Instrument ID: MSD6.I **Injection Date/Time:** 09-NOV-09 18:00

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0911.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.7
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.9
442	Greater than 40% of mass 198	77.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL	WBN091106-08	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 18:53
MEGAICAL	WBN091106-07	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 19:31
MEGAICAL	WBN091106-06	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:09
MEGAICAL	WBN091106-05.1	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:46
MEGAICAL	WBN091106-04	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 21:25
MEGAICAL	WBN091106-03	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:01
MEGAICAL	WBN091106-02	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:39
MEGAICAL	WBN091106-01	/chem/MSD6.i/s110909.b/s6k092	09-NOV-09 23:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-575

Instrument ID: MSD6.I **Injection Date/Time:** 10-NOV-09 11:07

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0921.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	72.6
442	Greater than 40% of mass 198	76
443	17 - 23% of mass 442	19.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICAL	WBN091016-01	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 11:59
AP12ICAL	WBN091016-02	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 12:36
AP12ICAL	WBN091016-03	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:13
AP12ICAL	WBN091016-04	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:51
AP12ICAL	WBN091016-05	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 14:30
AP12ICAL	WBN091016-06	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:06
AP12ICAL	WBN091016-07	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:43
MEGAICV	WBN091106-09.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 20:29
AP12ICV	WBN091016-08.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 21:07

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD6.I

GC Column: J&W DB-5MS

Client SDG: 10-575

STD Analysis Time: 04-DEC-09 10:02

Data File: s6l0402.d

	1,4-Dichlorobenzene-d4				Naphthalene-d8				Acenaphthene-d10				Phenanthrene-d10				Chrysene-d12				Perylene-d12			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	225677		4.73		911417		5.99		476654		7.86		854008		9.47		749694		12.5		697713		14.7	
Upper Limit	451354		5.23		1822834		6.49		953308		8.36		1708016		9.97		1499388		13.0		1395426		15.2	
Lower Limit	112839		4.23		455709		5.49		238327		7.36		427004		8.97		374847		12.0		348857		14.2	
Sample ID																								
BLK01	216526		4.73		816435		5.99		446630		7.85		758251		9.46		627358		12.5		547730		14.7	
RE03-09-13812	210131		4.73		786944		5.99		436406		7.85		760806		9.46		651580		12.5		569401		14.7	
RE03-09-13811	223517		4.73		846375		5.99		457117		7.85		793175		9.47		648815		12.5		556852		14.7	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-575

Instrument: MSD6.I

STD Analysis Time: 05-DEC-09 10:46

GC Column: J&W DB-5MS

Data File: s6l0502.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	232623		4.72		1017627		5.99		527825		7.86		924477		9.47		791288		12.5		729958		14.7	
Upper Limit	465246		5.22		2035254		6.49		1055650		8.36		1848954		9.97		1582576		13.0		1459916		15.2	
Lower Limit	116312		4.22		508814		5.49		263913		7.36		462239		8.97		395644		12.0		364979		14.2	
Sample ID																								
BLK01LCS	202793		4.72		868816		5.99		487733		7.85		862246		9.46		740083		12.5		677291		14.7	
RE03-09-13812MS	200466		4.72		857738		5.99		484280		7.85		832631		9.46		675290		12.5		577986		14.7	
RE03-09-13812MSD	212844		4.72		913923		5.99		507549		7.85		884578		9.46		735909		12.5		596420		14.7	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	370	ug/kg	74.0	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	325	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610411.d
Lab Smp Id: 241417002 Client Smp ID: RE03-09-13811
Inj Date : 04-DEC-2009 14:18
Operator : nagl Inst ID: MSD6.i
Smp Info : |241417002|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.95660	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	223517	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	846375	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	457117	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	793175	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	648815	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	556852	40.0000	
$ 3 2-Fluorophenol	112	3.600	3.590	(0.761)	362987	64.8496	2400
$ 5 Phenol-d5	99	4.350	4.352	(0.920)	473914	67.0825	2480
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	220040	36.7516	1360
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	421859	35.8107	1320
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	96121	72.0439	2660
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	426566	40.7681	1510

ION RATIO REPORT

SV REPORT

Data file: s610411.d
Report Date: 12/04/2009 15:31
Lab. ID: 241417002 SampleType: SAMPLE
Injection Date: 04-DEC-2009 14:18
Operator: nagl Instrument: MSD6.i
Sample Info: |241417002|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-575
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	22437	4.35	4.42	80-120	100	(T)
93	103	4.47	4.42	223-283	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	31175	5.25	5.10	80-120	100	(T)
42	19202	5.25	5.10	40-100	62	(T)
22 Isophorone		CAS#: 78-59-1				
82	220040	5.25	5.52	80-120	100	(T)
138	4639	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	81338	7.86	7.55	80-120	100	(T)
164	457117	7.85	7.55	0- 40	562	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	60733	7.85	8.06	80-120	100	(T)
89	715	7.85	8.06	41-101	1	(QT)
63	581	7.86	8.06	18- 78	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	6035	8.70	8.45	80-120	100	(T)
165	6088	8.70	8.45	62-122	101	(T)
167	1876	8.70	8.45	0- 44	31	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610411.d
Lab Smp Id: 241417002 Client Smp ID: RE03-09-13811
Inj Date : 04-DEC-2009 14:18
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241417002|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.95660	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1299313	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.369	285432	8.78716896	325	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610411.d
Date : 04-DEC-2009 14:18
Client ID: RE03-09-13811
Sample Info: |24141700219256611|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

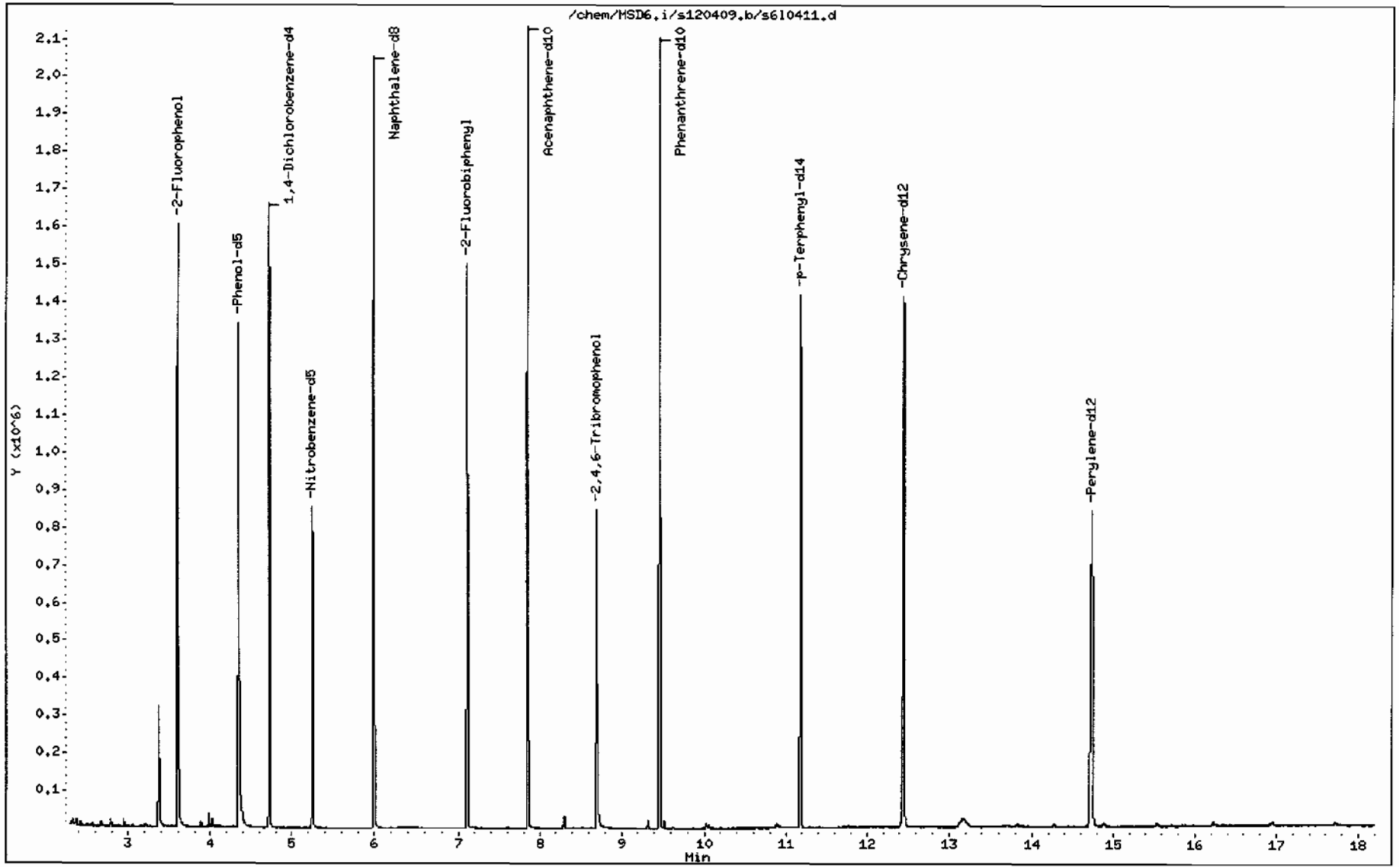

Data File: /chem/MSD6.i/s120409.b/s610411.d

Date : 04-DEC-2009 14:18

Client ID: RE03-09-13811

Instrument: MSD6.i

Sample Info: |2414170021925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

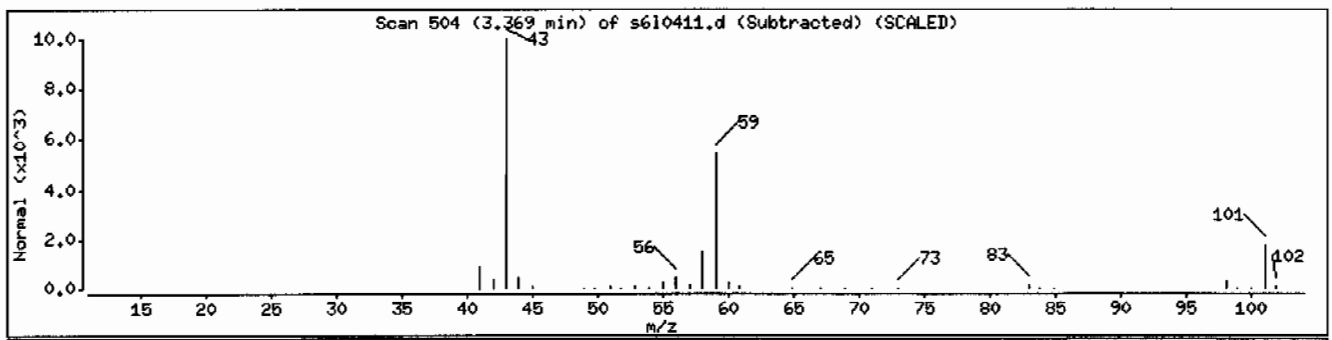

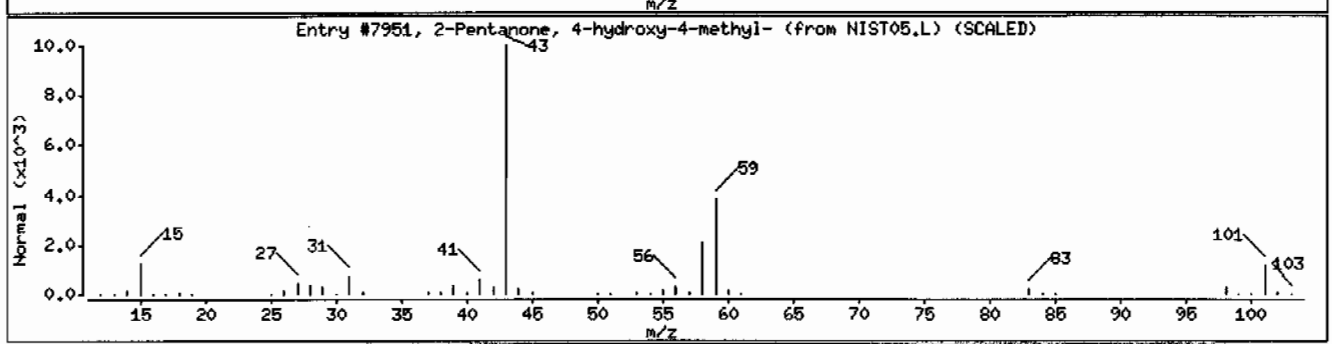

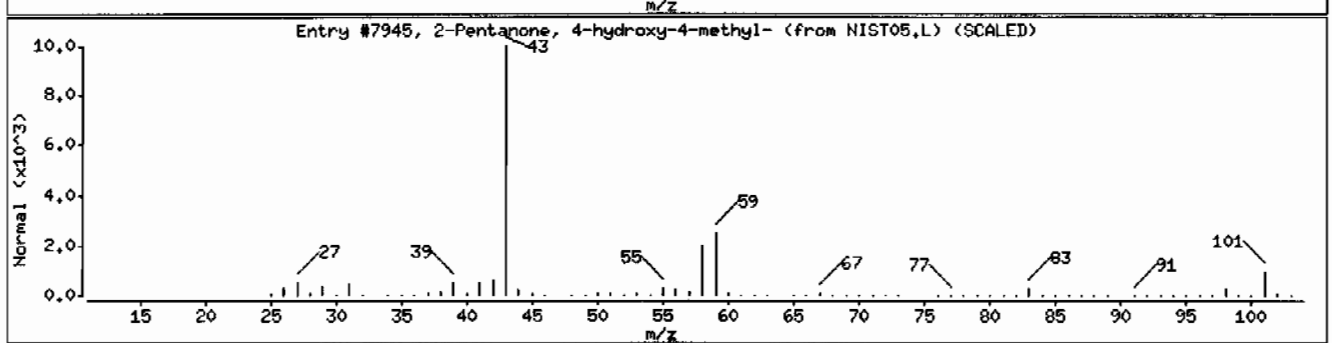

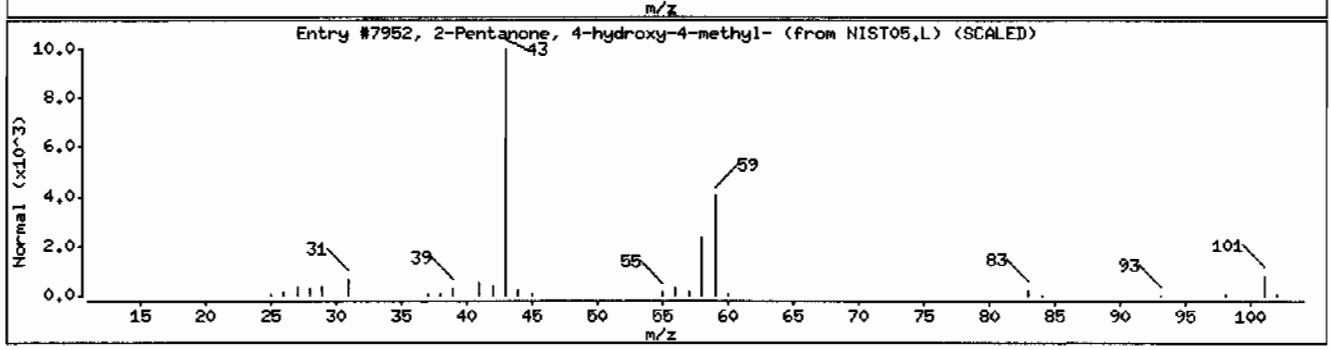

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:54**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0408.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.7	358
108-95-2	Phenol	U	358	ug/kg	71.7	358
95-57-8	2-Chlorophenol	U	358	ug/kg	71.7	358
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.7	358
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.7	358
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.7	358
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358
87-86-5	Pentachlorophenol	U	358	ug/kg	89.6	358
129-00-0	Pyrene	U	35.8	ug/kg	10.8	35.8
110-86-1	Pyridine	U	358	ug/kg	71.7	358
62-53-3	Aniline	U	358	ug/kg	108	358
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.7	358
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.7	358
100-51-6	Benzyl alcohol	U	358	ug/kg	108	358
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.7	358
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.7	358
95-48-7	o-Cresol	U	358	ug/kg	71.7	358
65794-96-9	m,p-Cresols	U	358	ug/kg	108	358
67-72-1	Hexachloroethane	U	358	ug/kg	71.7	358
98-95-3	Nitrobenzene	U	358	ug/kg	71.7	358
78-59-1	Isophorone	U	358	ug/kg	71.7	358
88-75-5	2-Nitrophenol	U	358	ug/kg	71.7	358
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.7	358
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.7	358
65-85-0	Benzoic acid	U	717	ug/kg	179	717
91-20-3	Naphthalene	U	35.8	ug/kg	10.8	35.8
106-47-8	4-Chloroaniline	U	358	ug/kg	71.7	358
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.7	358
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.17	35.8
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.7	358
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.7	358
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.7	358
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	358	ug/kg	71.7	358
99-09-2	3-Nitroaniline	U	358	ug/kg	71.7	358

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:54**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s610408.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	358	ug/kg	71.7	358
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.8	35.8
51-28-5	2,4-Dinitrophenol	U	717	ug/kg	136	717
132-64-9	Dibenzofuran	U	358	ug/kg	71.7	358
84-66-2	Diethylphthalate	U	358	ug/kg	71.7	358
86-73-7	Fluorene	U	35.8	ug/kg	10.8	35.8
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.7	358
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.7	358
100-01-6	4-Nitroaniline	U	358	ug/kg	108	358
	p-Nitroaniline					
122-39-4	Diphenylamine	U	358	ug/kg	71.7	358
122-66-7	Azobenzene	U	358	ug/kg	71.7	358
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.7	358
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.7	358
85-01-8	Phenanthrene	U	35.8	ug/kg	10.8	35.8
120-12-7	Anthracene	U	35.8	ug/kg	7.17	35.8
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.7	358
206-44-0	Fluoranthene	U	35.8	ug/kg	10.8	35.8
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.7	358
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.8	35.8
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	108	358
218-01-9	Chrysene	U	35.8	ug/kg	10.8	35.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	358	ug/kg	71.7	358
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.7	358
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.8	35.8
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.8	35.8
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.8	35.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.8	35.8
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.8	35.8
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.8	35.8
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.7	358

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	302	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610408.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 04-DEC-2009 12:54
Operator : nagl Inst ID: MSD6.i
Smp Info : |241417001|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	210131	40.0000	
* 29 Naphthalene-d8	136	5.988	5.993	(1.000)	786944	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	436406	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.469	(1.000)	760806	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	651580	40.0000	
* 98 Perylene-d12	264	14.733	14.741	(1.000)	569401	40.0000	
$ 3 2-Fluorophenol	112	3.600	3.590	(0.761)	307767	58.4869	2100
$ 5 Phenol-d5	99	4.350	4.352	(0.920)	411304	61.9289	2220
$ 20 Nitrobenzene-d5	82	5.252	5.259	(0.877)	184801	33.1970	1190
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	396739	35.2766	1260
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	100820	79.1521	2840
$ 81 p-Terphenyl-d14	244	11.178	11.181	(0.898)	449298	42.7585	1530

ION RATIO REPORT

SV REPORT

Data file: s610408.d
Report Date: 12/04/2009 14:22
Lab. ID: 241417001 SampleType: SAMPLE
Injection Date: 04-DEC-2009 12:54
Operator: nagl Instrument: MSD6.i
Sample Info: |241417001|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-575
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	19288	4.35	4.42	80-120	100	(T)
93	108	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	26666	5.25	5.10	80-120	100	(T)
42	16398	5.25	5.10	40-100	61	(T)
22 Isophorone			CAS#: 78-59-1			
82	184801	5.25	5.52	80-120	100	(T)
138	4535	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	78350	7.86	7.55	80-120	100	(T)
164	436406	7.85	7.55	0- 40	557	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	57330	7.85	8.06	80-120	100	(T)
89	625	7.86	8.06	41-101	1	(QT)
63	664	7.86	8.06	18- 78	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	6227	8.70	8.45	80-120	100	(T)
165	6510	8.70	8.45	62-122	105	(T)
167	2130	8.70	8.45	0- 44	34	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	195	8.71	8.50	80-120	100	(T)
105	569	8.70	8.50	11- 71	291	(QT)
51	523	8.70	8.50	22- 82	267	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	6201	8.70	8.97	80-120	100	(T)
141	41544	8.70	8.97	45-105	670	(QT)
250	12254	8.70	8.97	67-127	198	(QT)
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	810	16.67	16.70	80-120	100	( )
138	305	16.67	16.70	0- 54	38	( )
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	107	16.95	16.73	80-120	100	(T)
139	210	16.91	16.73	0- 30	195	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610408.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 04-DEC-2009 12:54
Operator : nag1 Inst ID: MSD6.i
Smp Info : |241417001|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1215964	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.369	255830	8.41569109	302	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610408.d
Date : 04-DEC-2009 12:54
Client ID: RE03-09-13812
Sample Info: |241417001|925661|1|SVMF:1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

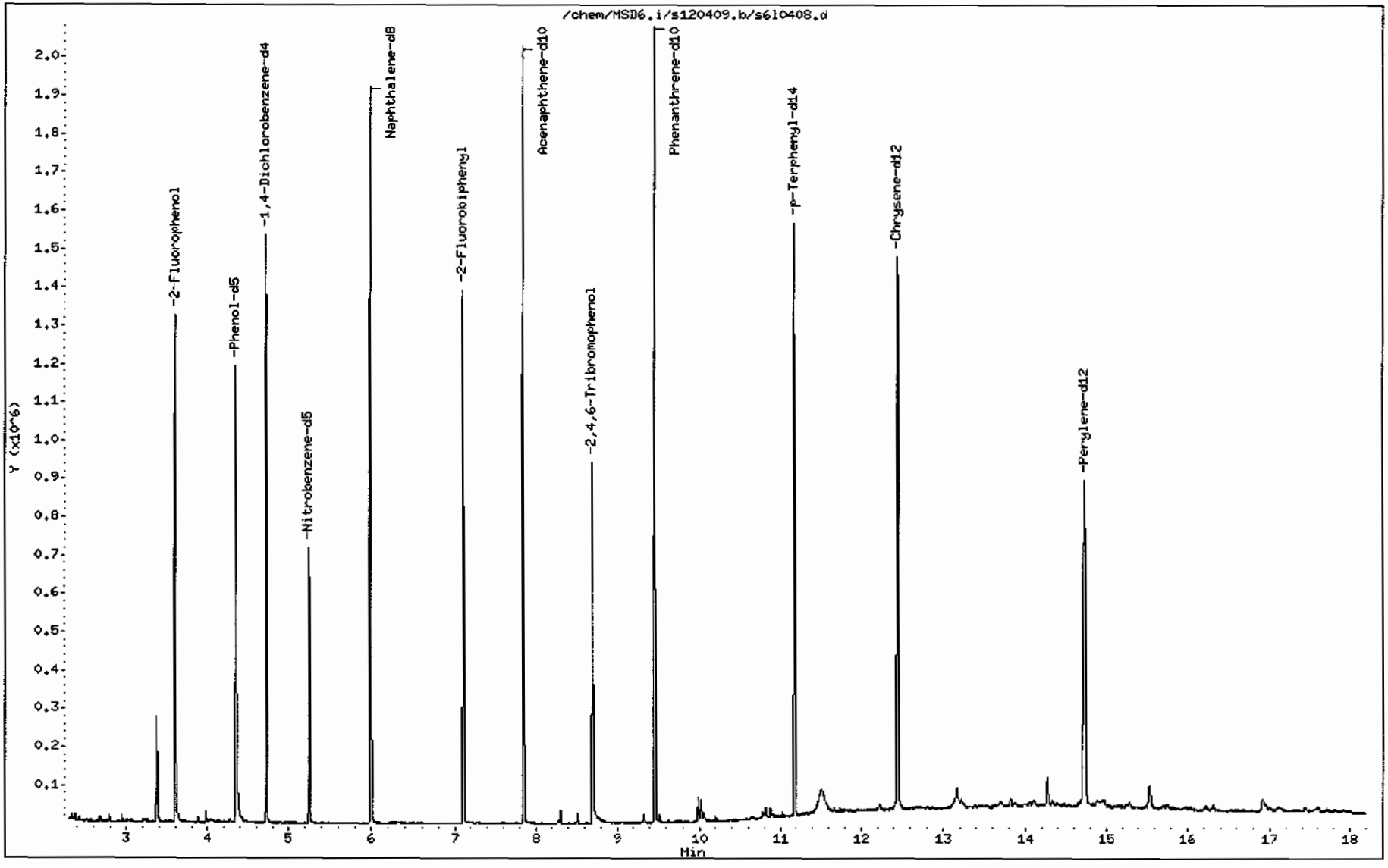

Data File: /chem/MSD6.i/s120409.b/s610408.d

Date : 04-DEC-2009 12:54

Client ID: RE03-09-13812

Instrument: MSD6.i

Sample Info: |24141700|1925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	42	C6H12O2	116

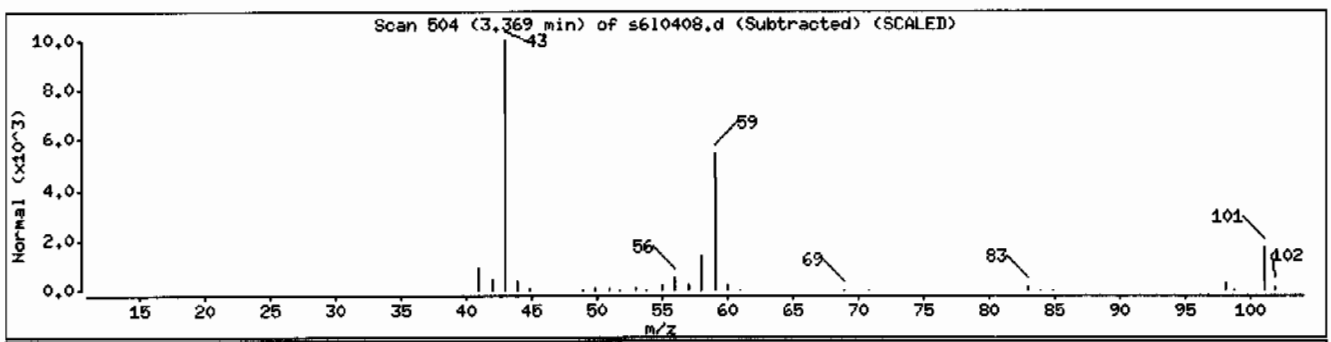

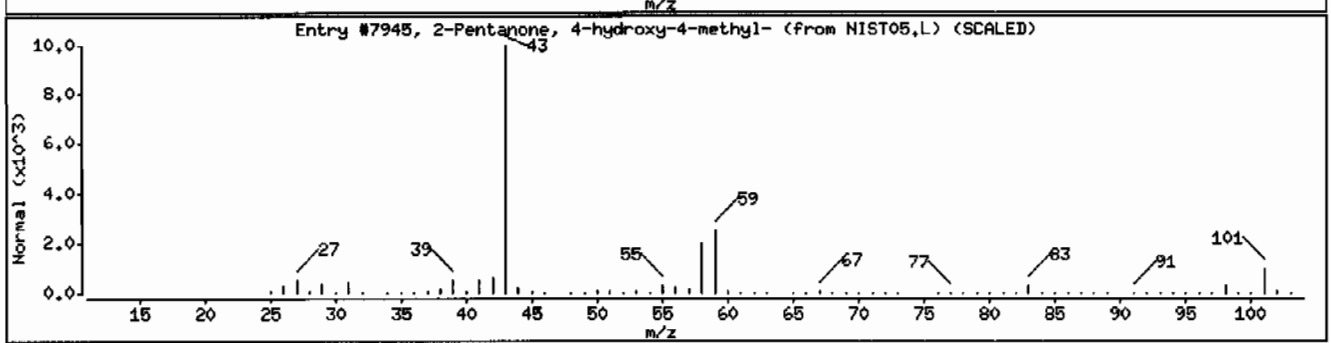

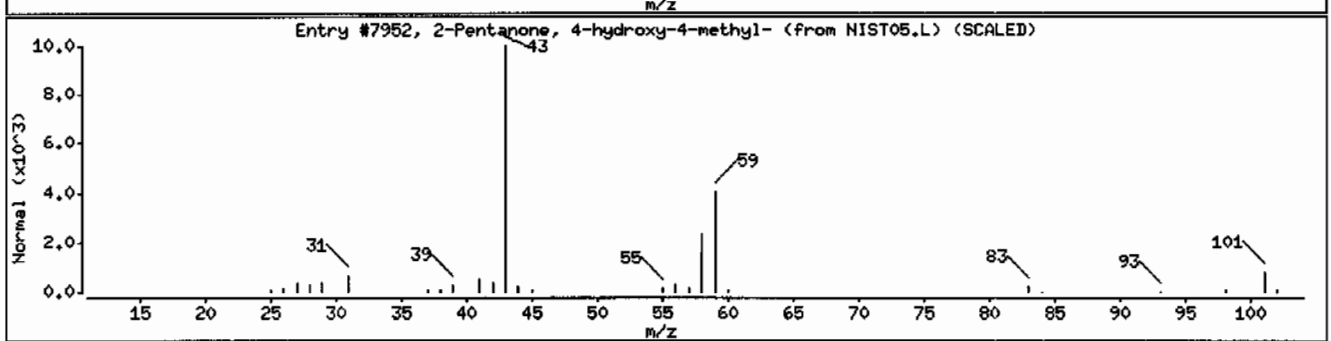

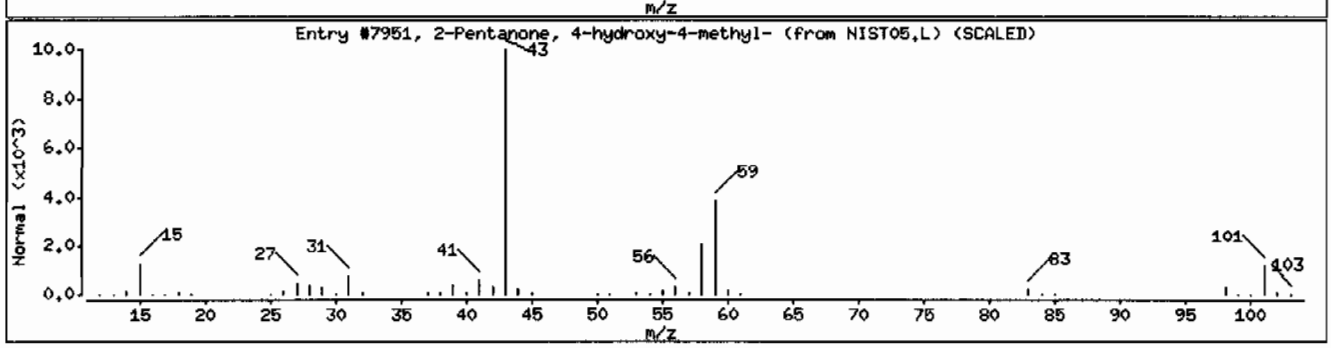

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 04-Dec-2009 15:01

Calibration History

Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Start Cal Date: 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
09-NOV-2009 18:53	MEGA	/chem/MSD6.i/s110909.b/s6k0913.d
Cal Level: 2 , Cal Amount: 10.00000		
11-NOV-2009 01:47	NEV	/chem/MSD6.i/s110909.b/s6k0948.d
10-NOV-2009 22:55	HEX	/chem/MSD6.i/s110909.b/s6k0942.d
10-NOV-2009 16:20	PEST	/chem/MSD6.i/s110909.b/s6k0930.d
10-NOV-2009 11:59	AP12	/chem/MSD6.i/s110909.b/s6k0923.d
09-NOV-2009 19:31	MEGA	/chem/MSD6.i/s110909.b/s6k0914.d
Cal Level: 3 , Cal Amount: 20.00000		
11-NOV-2009 02:16	NEV	/chem/MSD6.i/s110909.b/s6k0949.d
10-NOV-2009 23:24	HEX	/chem/MSD6.i/s110909.b/s6k0943.d
10-NOV-2009 16:56	PEST	/chem/MSD6.i/s110909.b/s6k0931.d
10-NOV-2009 12:36	AP12	/chem/MSD6.i/s110909.b/s6k0924.d
09-NOV-2009 20:09	MEGA	/chem/MSD6.i/s110909.b/s6k0915.d
Cal Level: 4 , Cal Amount: 40.00000		
11-NOV-2009 02:44	NEV	/chem/MSD6.i/s110909.b/s6k0950.d
10-NOV-2009 23:53	HEX	/chem/MSD6.i/s110909.b/s6k0944.d
10-NOV-2009 17:33	PEST	/chem/MSD6.i/s110909.b/s6k0932.d
10-NOV-2009 13:13	AP12	/chem/MSD6.i/s110909.b/s6k0925.d
09-NOV-2009 20:46	MEGA	/chem/MSD6.i/s110909.b/s6k0916.d
Cal Level: 5 , Cal Amount: 50.00000		
11-NOV-2009 03:12	NEV	/chem/MSD6.i/s110909.b/s6k0951.d
11-NOV-2009 00:21	HEX	/chem/MSD6.i/s110909.b/s6k0945.d
10-NOV-2009 18:09	PEST	/chem/MSD6.i/s110909.b/s6k0933.d
10-NOV-2009 13:51	AP12	/chem/MSD6.i/s110909.b/s6k0926.d
09-NOV-2009 21:25	MEGA	/chem/MSD6.i/s110909.b/s6k0917.d
Cal Level: 6 , Cal Amount: 80.00000		
11-NOV-2009 03:41	NEV	/chem/MSD6.i/s110909.b/s6k0952.d
11-NOV-2009 00:50	HEX	/chem/MSD6.i/s110909.b/s6k0946.d
10-NOV-2009 18:45	PEST	/chem/MSD6.i/s110909.b/s6k0934.d
10-NOV-2009 14:30	AP12	/chem/MSD6.i/s110909.b/s6k0927.d
09-NOV-2009 22:01	MEGA	/chem/MSD6.i/s110909.b/s6k0918.d
Cal Level: 7 , Cal Amount: 100.00000		

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|11-NOV-2009 04:10 |NEV              |/chem/MSD6.i/s110909.b/s6k0953.d        |
|11-NOV-2009 01:18 |HEX              |/chem/MSD6.i/s110909.b/s6k0947.d        |
|10-NOV-2009 19:21 |PEST             |/chem/MSD6.i/s110909.b/s6k0935.d        |
|10-NOV-2009 15:06 |AP12             |/chem/MSD6.i/s110909.b/s6k0928.d        |
|09-NOV-2009 22:39 |MEGA             |/chem/MSD6.i/s110909.b/s6k0919.d        |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 8 , Cal Amount: 120.00000                                        |
+=============================================================================+
|11-NOV-2009 04:38 |NEV              |/chem/MSD6.i/s110909.b/s6k0954.d        |
|10-NOV-2009 19:58 |PEST             |/chem/MSD6.i/s110909.b/s6k0936.d        |
|10-NOV-2009 15:43 |AP12             |/chem/MSD6.i/s110909.b/s6k0929.d        |
|09-NOV-2009 23:16 |MEGA             |/chem/MSD6.i/s110909.b/s6k0920.d        |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4
+------------------+-----------------+----------------------------------------+
| Ccal Level: 4 , Ccal Amount: 40.0                                           |
+=============================================================================+
|04-DEC-2009 10:02 |MEGA             |/chem/MSD6.i/s120409.b/s610402.d        |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 4 , Ccal Amount: 40.0                                           |
+=============================================================================+
|04-DEC-2009 10:30 |AP12             |/chem/MSD6.i/s120409.b/s610403.d        |
+------------------+-----------------+----------------------------------------+
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INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Calibration File Names:
Level 1: /chem/MSD6.i/s110909.b/s6k0913.d
Level 2: /chem/MSD6.i/s110909.b/s6k0948.d
Level 3: /chem/MSD6.i/s110909.b/s6k0949.d
Level 4: /chem/MSD6.i/s110909.b/s6k0950.d
Level 5: /chem/MSD6.i/s110909.b/s6k0951.d
Level 6: /chem/MSD6.i/s110909.b/s6k0952.d
Level 7: /chem/MSD6.i/s110909.b/s6k0953.d
Level 8: /chem/MSD6.i/s110909.b/s6k0954.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.62711	0.72014	0.69994	0.71294	0.67761					
	0.66245	0.66663					AVRG		0.68098		4.78734
2 Pyridine	+++++	0.78506	0.84345	0.94451	0.94132	0.77430					
	0.82190	0.82246					AVRG		0.84757		8.16958
4 Aniline	+++++	0.51792	0.56281	0.52949	0.53182	0.51964					
	0.51849	0.51247					AVRG		0.52752		3.21865
209 Benzaldehyde	+++++	0.94297	0.91161	0.92064	0.86617	0.84259					
	0.79828	0.74667					AVRG		0.86127		8.23824
6 Phenol	+++++	1.29580	1.38609	1.27955	1.27629	1.24279					
	1.20107	1.21677					AVRG		1.27120		4.82676

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.93365	0.90056	0.92748	0.85273	0.86174	0.82247					
	0.79075	0.79709					AVRG		0.86081		6.48811
8 2-Chlorophenol	+++++	1.05270	1.10343	1.04994	1.05384	0.99340					
	0.95375	0.94058					AVRG		1.02109		5.85808
203 n-Decane	+++++	1.57696	1.59018	1.40648	1.36249	1.17658					
	+++++	+++++					AVRG		1.42254		11.98709
9 1,3-Dichlorobenzene	+++++	1.22415	1.27608	1.20806	1.21136	1.14335					
	1.08668	1.07881					AVRG		1.17550		6.31837
11 1,4-Dichlorobenzene	+++++	1.27202	1.32037	1.21925	1.20743	1.15141					
	1.09639	1.07447					AVRG		1.19162		7.54222
12 Benzyl alcohol	+++++	0.60900	0.65716	0.63043	0.62465	0.64143					
	0.63021	0.64767					AVRG		0.63436		2.50657
13 1,2-Dichlorobenzene	+++++	1.16666	1.21707	1.13327	1.12016	1.08966					
	1.03460	1.02472					AVRG		1.11231		6.21300
14 bis(2-Chloroisopropyl)ether	+++++	2.07635	2.13325	1.99088	1.97675	1.86028					
	1.72252	1.69272					AVRG		1.92182		8.81925
15 o-Cresol	+++++	0.82992	0.88629	0.84024	0.85639	0.80893					
	0.80386	0.79407					AVRG		0.83139		3.92027

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.20921	1.17591	1.21168	1.15285	1.16925					
	1.13524	1.12939					AVRG		1.16908		2.80572
17 N-Nitrosodipropylamine	0.65638	0.74117	0.78851	0.72893	0.73002	0.72328					
	0.70725	0.59369					AVRG		0.70865		8.34285
18 m,p-Cresols	+++++	1.03591	1.12590	1.04958	1.05532	1.04720					
	1.02399	1.03632					AVRG		1.05346		3.18987
19 Hexachloroethane	+++++	0.45806	0.49524	0.47390	0.46960	0.45628					
	0.43995	0.43396					AVRG		0.46100		4.53111
21 Nitrobenzene	+++++	0.31691	0.32516	0.29885	0.29715	0.27038					
	0.24823	0.23966					AVRG		0.28519		11.62250
22 Isophorone	+++++	0.55891	0.57824	0.53268	0.53266	0.49425					
	0.45829	0.38358					AVRG		0.50552		13.23015
23 2-Nitrophenol	+++++	0.13453	0.14214	0.13601	0.13806	0.12888					
	0.12072	0.12047					AVRG		0.13154		6.43934
24 2,4-Dimethylphenol	+++++	0.23987	0.22536	0.21067	0.20421	0.21065					
	0.21868	0.21622					AVRG		0.21795		5.40955
25 bis(2-Chloroethoxy)methane	+++++	0.33208	0.34147	0.30906	0.30442	0.28195					
	0.26036	0.25310					AVRG		0.29749		11.40063

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19875	0.21444	0.20921	0.20622	0.19391					
	0.18142	0.17985					AVRG		0.19769		6.80078
27 Benzoic acid	+++++	+++++	0.10585	0.12338	0.14032	0.14157					
	0.15049	0.14556					AVRG		0.13453		12.46641
28 1,2,4-Trichlorobenzene	+++++	0.27809	0.27557	0.25214	0.25046	0.22876					
	0.21050	0.20278					AVRG		0.24261		12.25857
30 Naphthalene	0.93577	0.85146	0.85267	0.76017	0.74029	0.64713					
	+++++	+++++					AVRG		0.79792		12.82401
204 alpha-Terpineol	+++++	0.23577	0.25490	0.22003	0.21987	0.20427					
	0.17723	+++++					AVRG		0.21868		12.15593
31 4-Chloroaniline	+++++	0.26389	0.28196	0.26991	0.26064	0.24995					
	0.23771	0.23114					AVRG		0.25646		7.00922
189 Caprolactam	+++++	0.06766	0.07272	0.08214	0.08102	0.07115					
	0.07075	0.07172					AVRG		0.07388		7.43636
32 Hexachlorobutadiene	+++++	0.14265	0.14557	0.13182	0.13097	0.11864					
	0.10931	0.10542					AVRG		0.12634		12.40746
33 4-Chloro-3-methylphenol	+++++	0.20824	0.22585	0.20971	0.20633	0.19424					
	0.17957	0.17303					AVRG		0.19957		9.25582

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
34 2-Methylnaphthalene	0.56779	0.53746	0.54769	0.49857	0.47476	0.43707					
	0.39981	0.38884					AVRG		0.48150		14.15789
35 1-Methylnaphthalene	0.55872	0.52838	0.53208	0.48366	0.46920	0.42612					
	0.38935	0.38051					AVRG		0.47100		14.29869
36 Hexachlorocyclopentadiene	+++++	0.13520	0.17775	0.15114	0.16219	0.15378					
	0.18308	0.16783					AVRG		0.16157		10.19735
208 1,1'-Biphenyl	+++++	1.32152	1.23439	1.25731	1.19710	1.16580					
	1.12776	1.10528					AVRG		1.20131		6.32036
205 2,3-Dichloroaniline	+++++	0.51880	0.53286	0.48272	0.49159	0.46096					
	0.42997	0.43664					AVRG		0.47908		8.16477
37 2,4,6-Trichlorophenol	+++++	0.27570	0.29634	0.28058	0.28008	0.26989					
	0.25242	0.25556					AVRG		0.27294		5.58990
38 2,4,5-Trichlorophenol	+++++	0.28031	0.30282	0.29443	0.29832	0.29160					
	0.28523	0.28197					AVRG		0.29067		2.92500
40 2-Chloronaphthalene	0.91208	0.94921	0.97975	0.90835	0.91949	0.87198					
	0.81926	0.82647					AVRG		0.89832		6.24992
42 o-Nitroaniline	+++++	0.28653	0.32807	0.30812	0.31848	0.31056					
	0.29539	0.30412					AVRG		0.30732		4.50651

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.19029	0.23187	0.23025	0.23197	0.23511					
	0.22216	0.23314					AVRG		0.22497		7.03906
43 Dimethylphthalate	+++++	1.10253	1.11895	1.05121	1.05401	1.01311					
	0.95493	0.88796					AVRG		1.02610		7.97599
44 2,6-Dinitrotoluene	+++++	0.24859	0.25869	0.24751	0.24771	0.24514					
	0.22903	0.23656					AVRG		0.24475		3.87474
45 Acenaphthylene	1.45077	1.53234	1.59736	1.47314	1.47686	1.41153					
	1.30118	1.31187					AVRG		1.44438		7.03164
47 Acenaphthene	0.97754	0.93463	0.97051	0.90906	0.90733	0.85875					
	0.82122	0.83304					AVRG		0.90151		6.58830
48 2,4-Dinitrophenol	+++++	+++++	15920	45695	60199	121040					
	185455	+++++					LINR	0.36255	0.13077		0.99262
49 Dibenzofuran	+++++	1.31036	1.35172	1.24091	1.23630	1.17505					
	1.09035	1.11352					AVRG		1.21689		7.96140
50 2,4-Dinitrotoluene	+++++	0.28688	0.32526	0.31392	0.31582	0.31468					
	0.30077	0.30301					AVRG		0.30862		4.09740
51 Diethylphthalate	+++++	1.08427	1.13193	1.06273	1.05585	1.00787					
	0.93441	0.95637					AVRG		1.03335		6.84784

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	12277	40572	90802	114423	208122					
	294363	379687					LINR	0.18209	0.20146		0.99664
53 Fluorene	1.06940	1.05468	1.10259	1.00777	1.00699	0.94775					
	0.89677	0.90440					AVRG		0.99879		7.65829
54 4-Chlorophenylphenylether	+++++	0.49941	0.52344	0.48539	0.48490	0.45443					
	0.43029	0.42560					AVRG		0.47192		7.71070
55 2-Methyl-4,6-dinitrophenol	+++++	9251	34357	85168	107219	199515					
	279188	346834					LINR	0.17722	0.10780		0.99957
56 p-Nitroaniline	+++++	18297	49968	114446	144020	267165					
	377942	477974					LINR	0.17663	0.25514		0.99741
133 Diphenylamine	+++++	0.51235	0.51279	0.48995	0.49110	0.46341					
	0.45142	0.45392					AVRG		0.48213		5.41113
58 1,2-Diphenylhydrazine	+++++	0.65288	0.67935	0.62730	0.62752	0.58724					
	0.56393	0.55466					AVRG		0.61327		7.55575
59 Tributylphosphate	+++++	1.19922	1.25332	1.24022	1.27997	1.24188					
	1.19433	1.14050					AVRG		1.22135		3.81011
61 4-Bromophenylphenylether	+++++	0.16321	0.16758	0.15949	0.16092	0.15366					
	0.14977	0.15022					AVRG		0.15784		4.30183

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.17072	0.17525	0.16702	0.16690	0.16190					
	0.15730	0.15822					AVRG		0.16533		3.97990
207 Atrazine	+++++	0.04466	0.04316	0.04336	0.04050	0.04104					
	0.03746	0.03425					AVRG		0.04063		9.04410
65 Pentachlorophenol	+++++	12427	38945	80211	100581	192628					
	259470	326879					LINR	0.13427	0.09964		0.99838
206 n-Octadecane	+++++	0.51627	0.51598	0.45832	0.46068	0.40718					
	0.37377	0.35992					AVRG		0.44173		14.37986
68 Phenanthrene	0.95060	0.88603	0.89746	0.83221	0.81673	0.77346					
	0.73349	0.72773					AVRG		0.82721		9.72714
69 Anthracene	0.87683	0.86194	0.90534	0.83970	0.83829	0.78921					
	0.75133	0.75196					AVRG		0.82682		6.91971
72 Di-n-butylphthalate	+++++	1.00113	1.04654	0.99105	0.98676	0.92173					
	0.85606	0.84350					AVRG		0.94954		8.15043
76 Fluoranthene	0.78392	0.79487	0.87026	0.82674	0.81613	0.77420					
	0.73596	0.73727					AVRG		0.79242		5.73137
77 Benzidine	+++++	0.35813	0.40641	0.39242	0.37729	0.37701					
	0.39765	0.44234					AVRG		0.39304		6.85454

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
79 Pyrene	1.12114	1.31021	1.22539	1.10007	1.11660	1.02083					
	0.96007	0.94734					AVRG		1.10021		11.38295
85 Butylbenzylphthalate	+++++	0.52543	0.54028	0.51608	0.52406	0.49119					
	0.46906	0.45845					AVRG		0.50351		6.16544
89 Benzo(a)anthracene	0.94221	0.85505	0.89830	0.85692	0.85716	0.83423					
	0.82127	0.83891					AVRG		0.86301		4.55256
90 3,3'-Dichlorobenzidine	+++++	0.23529	0.28074	0.29290	0.29384	0.28532					
	0.28779	0.30173					AVRG		0.28252		7.74710
92 Chrysene	0.87195	0.83557	0.87346	0.82487	0.82639	0.80729					
	0.78155	0.79409					AVRG		0.82690		4.03552
93 bis(2-Ethylhexyl)phthalate	7340	107837	270739	551016	645048	1078889					
	1389660	1700943					WLINR	0.01019	0.70092		0.99014
94 Di-n-octylphthalate	+++++	1.19610	1.35485	1.31605	1.35770	1.25055					
	1.27306	1.15060					AVRG		1.27127		6.18607
95 Benzo(b)fluoranthene	0.74161	0.85750	0.94279	0.90432	0.93361	0.89239					
	0.89332	0.91506					AVRG		0.88507		7.19928
96 Benzo(k)fluoranthene	0.73172	0.86857	0.95518	0.92430	0.92244	0.89945					
	0.88010	0.85909					AVRG		0.88011		7.72381

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End Cal Date : 11-NOV-2009 04:38
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Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.54179	0.70605	0.81133	0.81358	0.82559	0.80913					
	0.80179	0.80647					AVRG		0.76447		12.74919
99 Indeno(1,2,3-cd)pyrene	5888	60939	200863	402882	510813	1012558					
	1348903	1889688					LINR	0.07592	0.78768		0.99752
100 Dibenzo(a,h)anthracene	3385	46770	157194	361792	411532	815285					
	1094612	1529825					LINR	0.06768	0.63666		0.99908
101 Benzo(ghi)perylene	0.41694	0.53228	0.60870	0.60962	0.60436	0.63133					
	0.62968	0.63931					AVRG		0.58403		12.88683
102 1,4-Dioxane	+++++	0.37671	0.37043	0.39061	0.37803	0.36375					
	0.35237	0.33052					AVRG		0.36606		5.38827
103 Methyl methacrylate	+++++	0.19626	0.19646	0.20436	0.20625	0.18540					
	0.18964	0.17876					AVRG		0.19388		5.13081
104 Ethyl methacrylate	+++++	0.79650	0.81191	0.84398	0.82898	0.80568					
	0.79571	0.75648					AVRG		0.80561		3.45659
105 2-Picoline	+++++	1.39124	1.31746	1.36987	1.31904	1.28927					
	1.27506	1.19912					AVRG		1.30872		4.85814
106 N-Nitrosomethylethylamine	+++++	0.50512	0.48970	0.52453	0.49928	0.51969					
	0.51463	0.52429					AVRG		0.51104		2.61826

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.56429	0.53321	0.56316	0.50377	0.53102					
	0.50923	0.49498					AVRG		0.52852		5.24900
108 N-Nitrosodiethylamine	+++++	0.50310	0.47987	0.51154	0.48534	0.49862					
	0.49304	0.49722					AVRG		0.49553		2.15019
109 Ethyl Methanesulfonate	+++++	0.65808	0.64977	0.67344	0.62747	0.66045					
	0.64399	0.64860					AVRG		0.65169		2.21442
110 Pentachloroethane	+++++	0.32209	0.31386	0.33094	0.32010	0.31614					
	0.31148	0.30303					AVRG		0.31681		2.78134
111 N-Nitrosopyrrolidine	+++++	0.44182	0.46376	0.50830	0.47779	0.50143					
	0.49385	0.44600					AVRG		0.47614		5.57640
113 N-Nitrosomorpholine	+++++	0.71032	0.67134	0.71256	0.65887	0.68726					
	0.65974	0.65547					AVRG		0.67936		3.58698
114 o-Toluidine	+++++	1.74797	1.65530	1.71709	1.64005	1.64679					
	1.58070	1.58178					AVRG		1.65281		3.79762
115 N-Nitrosopiperidine	+++++	0.13834	0.13623	0.14736	0.13885	0.14290					
	0.13997	0.14373					AVRG		0.14105		2.69891
116 a,a-Dimethylphenethylamine	+++++	0.78770	0.81587	0.88476	0.87463	0.88336					
	0.86623	0.87565					AVRG		0.85546		4.44785

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.14741	0.14492	0.13783	0.14116	0.13439					
	0.12857	0.12370					AVRG		0.13685		6.28357
118 2,6-Dichlorophenol	+++++	0.19682	0.19992	0.21240	0.20960	0.21251					
	0.20568	0.21118					AVRG		0.20687		3.05257
119 Hexachloropropene	+++++	0.08644	0.09499	0.10791	0.10350	0.10830					
	0.10654	0.11112					AVRG		0.10269		8.60612
120 p-Phenylenediamine	+++++	0.19714	0.24091	0.25567	0.24421	0.23168					
	0.22043	0.21678					AVRG		0.22955		8.57933
121 N-Nitrosodi-n-butylamine	+++++	0.22447	0.22501	0.22216	0.21154	0.19839					
	0.19348	0.19524					AVRG		0.21004		6.76180
122 Safrole	+++++	0.18675	0.18585	0.19677	0.19040	0.18675					
	0.17956	0.17958					AVRG		0.18653		3.22597
123 1,2,4,5-Tetrachlorobenzene	+++++	0.45393	0.42422	0.44255	0.41650	0.41676					
	0.40609	0.40229					AVRG		0.42319		4.45863
124 Isosafrole	+++++	0.34011	0.33198	0.35164	0.33779	0.34233					
	0.33627	0.33702					AVRG		0.33959		1.83025
125 1,4-Naphthoquinone	+++++	0.30018	0.32824	0.34894	0.32634	0.29745					
	0.28366	0.26235					AVRG		0.30674		9.65282

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.15441	0.17500	0.17160	0.17355	0.17392					
	0.16754	0.16904					AVRG		0.16929		4.19006
127 Pentachlorobenzene	+++++	0.38426	0.36575	0.37736	0.36552	0.35674					
	0.35182	0.35035					AVRG		0.36454		3.50537
128 1-Naphthylamine	+++++	0.90674	0.92102	0.95184	0.91692	0.90718					
	0.86367	0.88454					AVRG		0.90742		3.07978
129 2-Naphthylamine	+++++	0.96578	1.00999	1.02440	0.99125	0.97953					
	0.93471	0.95520					AVRG		0.98012		3.19024
130 2,3,4,6-Tetrachlorophenol	+++++	0.20640	0.23481	0.21862	0.21374	0.22201					
	0.21460	0.22254					AVRG		0.21896		4.07356
131 5-Nitro-o-toluidine	+++++	0.22084	0.26615	0.28994	0.29013	0.29251					
	0.28841	0.30508					AVRG		0.27901		10.07623
132 Thionazin	+++++	0.16760	0.17396	0.17237	0.17849	0.17822					
	0.16987	0.16398					AVRG		0.17207		3.11896
134 Sulfotepp	+++++	0.08934	0.08802	0.08507	0.08886	0.08655					
	0.08265	0.08005					AVRG		0.08579		4.00843
135 Phorate	+++++	0.38230	0.38968	0.37391	0.38904	0.37359					
	0.35020	0.32660					AVRG		0.36933		6.25438

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136 1,3,5-Trinitrobenzene	+++++	14861	45341	104071	130665	222134					
	265730	408609					LINR	0.09141	0.12978		0.99734
137 Phenacetin	+++++	0.21732	0.25812	0.27209	0.26902	0.27044					
	0.26738	0.28241					AVRG		0.26240		8.05167
138 Diallate	+++++	0.26191	0.24374	0.25182	0.23998	0.23522					
	0.22716	0.22410					AVRG		0.24056		5.55643
139 Dimethoate	+++++	0.18955	0.19806	0.21061	0.22946	0.23158					
	0.22398	0.21950					AVRG		0.21468		7.45885
140 4-Aminobiphenyl	+++++	0.50489	0.50584	0.54599	0.56556	0.56494					
	0.53276	0.52934					AVRG		0.53562		4.66298
141 Pentachloronitrobenzene	+++++	0.06195	0.06081	0.06546	0.06329	0.06151					
	0.06084	0.05959					AVRG		0.06192		3.12402
142 Pronamide	+++++	0.26962	0.26582	0.27431	0.26759	0.26151					
	0.25173	0.25174					AVRG		0.26319		3.31411
143 Dinoseb	+++++	11996	47856	123552	154632	280906					
	375481	479562					LINR	0.15482	0.14736		0.99949
144 Disulfoton	+++++	0.31933	0.32969	0.31920	0.32975	0.31125					
	0.29624	0.27823					AVRG		0.31196		6.02930

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145 Methyl parathion	+++++	0.14493	0.15978	0.17270	0.18140	0.18775						
	0.18141	0.17864					AVRG		0.17237		8.70434	
146 4-Nitroquinoline-1-oxide	+++++	0.02012	0.03296	0.02700	0.02533	0.02224						
	0.01930	0.01750					AVRG		0.02349		22.76469	<-
147 Methapyrilene	+++++	0.40623	0.42209	0.41103	0.39768	0.37937						
	0.35132	0.33430					AVRG		0.38600		8.45747	
148 Isodrin	+++++	0.10136	0.09753	0.10130	0.09757	0.09481						
	0.09122	0.09037					AVRG		0.09631		4.58453	
149 Aramite	+++++	0.03841	0.04251	0.04600	0.04566	0.04690						
	0.04564	0.04428					AVRG		0.04420		6.60357	
150 Kepone	+++++	0.05674	0.06191	0.06311	0.06098	0.06085						
	0.06194	0.06656					AVRG		0.06173		4.75009	
151 p-(Dimethylamino)azobenzene	+++++	0.31224	0.31378	0.33288	0.32474	0.31931						
	0.31446	0.30396					AVRG		0.31734		2.95033	
152 Chlorobenzilate	+++++	0.30009	0.27506	0.30295	0.29512	0.29377						
	0.29203	0.28006					AVRG		0.29130		3.50189	
153 3,3'-Dimethylbenzidine	+++++	0.49489	0.52397	0.53487	0.52482	0.53397						
	0.53619	0.54473					AVRG		0.52763		3.04743	

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154 Famphur	+++++	0.28850	0.33742	0.33640	0.36516	0.37704					
	0.35655	0.33317					AVRG		0.34203		8.41381
155 2-Acetylaminofluorene	+++++	23996	98558	217618	290992	478700					
	598627	953419					LINR	0.12414	0.37309		0.99874
157 7,12Dimethylbenz(a)anthracene	+++++	0.45745	0.44941	0.48919	0.48420	0.49542					
	0.49422	0.48353					AVRG		0.47906		3.80416
158 3-Methylcholanthrene	+++++	0.29343	0.35502	0.37871	0.37695	0.38953					
	0.38995	0.40328					AVRG		0.36955		9.94080
26 Phthalic anhydride	+++++	10939	40864	83487	108159	203846					
	306459	+++++					LINR	0.14938	0.09004		0.99590
173 Carbazole	0.68572	0.63216	0.65059	0.65023	0.64669	0.65901					
	0.65208	0.65947					AVRG		0.65449		2.32370
174 Hexachlorophene	+++++	0.04700	0.06194	0.06687	0.06701	0.06606					
	+++++	+++++					AVRG		0.06178		13.78238
179 Dibenzo(a,e)pyrene	+++++	21397	67635	183254	214017	467062					
	+++++	+++++					LINR	0.16800	0.36891		0.99459
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

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184 p-Benzoquinone	+++++	0.09983	0.11502	0.14598	0.13665	0.14571					
	0.12211	0.12583					AVRG		0.12730		13.25929
191 Parathion	+++++	0.05089	0.05709	0.06102	0.06360	0.06315					
	0.06253	0.06173					AVRG		0.06000		7.60183
192 Methoxychlor	+++++	0.54663	0.59527	0.57022	0.57190	0.55995					
	0.49223	0.53082					AVRG		0.55243		6.05482
210 m-Toluidine	+++++	1.07152	1.09862	1.08267	1.09477	1.19760					
	1.39731	0.92523					AVRG		1.12396		12.87193
211 p-Toluidine	+++++	0.98878	1.01175	0.93629	0.93823	0.84629					
	0.67790	+++++					AVRG		0.89987		13.64283
212 Cis Diallate	+++++	0.25680	0.24216	0.25774	0.25015	0.25647					
	0.24871	0.25860					AVRG		0.25295		2.41779
213 Trans Diallate	+++++	0.30813	0.28675	0.29626	0.28232	0.27673					
	0.26725	0.26364					AVRG		0.28301		5.55643
214 1,4-Dinitrobenzene	+++++	0.15465	0.18602	0.18671	0.19154	0.19074					
	0.18381	0.19324					AVRG		0.18382		7.23195
215 2-Ethoxyethanol	+++++	0.69474	0.75708	0.72314	0.72734	0.69576					
	0.68979	0.68463					AVRG		0.71035		3.71426

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	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	11622	37526	94270	117296	226774					
	306702	394688					LINR	0.14094	0.14618		0.99920
229 2,2'-Dichlorobenzil	+++++	0.65548	0.70788	0.67278	+++++	0.85557					
	0.79635	+++++					AVRG		0.73761		11.58274
230 4-Chlorothioanisole	+++++	65505	120100	275307	+++++	727615					
	828249	+++++					LINR	0.13623	0.30665		0.99347
231 4-Chlorothiophenol	+++++	14955	49890	195788	+++++	593706					
	683100	+++++					LINR	0.29380	0.27176		0.99219
232 bis(p-Chlorophenyl)sulfone	+++++	0.41911	0.42098	0.38909	+++++	0.48605					
	0.44832	+++++					AVRG		0.43271		8.42306
233 bis(p-Chlorophenyl)disulfide	+++++	0.19644	0.20913	0.18244	+++++	0.22594					
	0.20806	+++++					AVRG		0.20440		7.90920
234 Diphenyl disulfide	+++++	0.20078	0.21401	0.19911	+++++	0.24759					
	0.23595	+++++					AVRG		0.21949		9.81334
235 Diphenyl sulfide	+++++	0.77537	0.76082	0.73538	+++++	0.86393					
	0.82035	+++++					AVRG		0.79117		6.45415
236 Phenyl sulfone	+++++	0.43220	0.43102	0.40994	+++++	0.50304					
	0.47114	+++++					AVRG		0.44947		8.28032

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	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.14671	0.15531	0.12673	+++++	0.19818						
	0.17963	+++++					AVRG		0.16131		17.36813	<-
238 Phthalic acid	+++++	13646	40994	115933	+++++	343308						
	402020	+++++					LINR	0.25337	0.15547		0.99358	
239 Thiophenol	+++++	41092	104698	327879	+++++	922601						
	1046955	+++++					LINR	0.23456	1.46946		0.99364	
240 bis(Chloromethyl)ether	+++++	1.01755	1.00429	0.94829	+++++	1.10480						
	1.05711	+++++					AVRG		1.02641		5.71407	
241 Octachlorostyrene	+++++	0.06097	0.06109	0.05953	+++++	0.07399						
	0.07072	+++++					AVRG		0.06526		10.12747	
M 225 Trichlorophenols	+++++	0.27800	0.29958	0.28751	0.28920	0.28074						
	0.26883	0.26877					AVRG		0.28180		3.98593	
M 226 Tetrachlorophenols	+++++	0.20640	0.23481	0.21862	0.21374	0.22201						
	0.21460	0.22254					AVRG		0.21896		4.07356	
M 227 Benzo(b,k)fluoranthene	0.73667	0.86303	0.94898	0.91431	0.92802	0.89592						
	0.88671	0.88707					AVRG		0.88259		7.33906	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.98202	1.07204	1.02934	1.03017	0.98830						
	0.95348	0.95648					AVRG		1.00169		4.36295	
$ 5 Phenol-d5	+++++	1.23734	1.34586	1.27212	1.28456	1.26316						
	1.22407	1.22277					AVRG		1.26427		3.41674	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.30745	0.31426	0.29453	0.29315	0.27101						
	0.25359	0.24671					AVRG		0.28296		9.27927	
$ 39 2-Fluorobiphenyl	+++++	1.11512	1.14628	1.04977	1.05601	0.99136						
	0.92488	0.93239					AVRG		1.03083		8.29816	
$ 60 2,4,6-Tribromophenol	+++++	0.10485	0.11685	0.11180	0.11267	0.12310						
	0.12190	0.12607					AVRG		0.11675		6.41378	
$ 81 p-Terphenyl-d14	+++++	0.71309	0.69797	0.64349	0.66522	0.61764						
	0.59401	0.58404					AVRG		0.64507		7.73004	

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INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Report Date: 11-Nov-2009 10:50

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	3 2-Fluorophenol	1.00169	1.03466	1.03466	0.000	3.29147	60.00000	Averaged
$	5 Phenol-d5	1.26427	1.24245	1.24245	0.000	-1.72556	60.00000	Averaged
$	20 Nitrobenzene-d5	0.28296	0.29902	0.29902	0.000	5.67523	60.00000	Averaged
$	39 2-Fluorobiphenyl	1.03083	1.08174	1.08174	0.000	4.93820	60.00000	Averaged
$	60 2,4,6-Tribromophenol	0.11675	0.12945	0.12945	0.000	10.88297	60.00000	Averaged
$	81 p-Terphenyl-d14	0.64507	0.72359	0.72359	0.000	12.17316	60.00000	Averaged
	1 N-Methyl-N-nitrosomethylami	0.68098	0.64081	0.64081	0.000	-5.89855	60.00000	Averaged
	2 Pyridine	0.84757	0.77144	0.77144	0.000	-8.98267	60.00000	Averaged
	4 Aniline	0.52752	0.51930	0.51930	0.000	-1.55765	60.00000	Averaged
	6 Phenol	1.27120	1.23489	1.23489	0.001	-2.85632	20.00000	Averaged ccc
	7 bis(2-Chloroethyl) ether	0.86081	0.80936	0.80936	0.000	-5.97614	60.00000	Averaged
	8 2-Chlorophenol	1.02109	1.01772	1.01772	0.000	-0.32996	60.00000	Averaged
	203 n-Decane	1.42254	1.44155	1.44155	0.000	1.33631	60.00000	Averaged
	9 1,3-Dichlorobenzene	1.17550	1.19665	1.19665	0.000	1.79939	60.00000	Averaged
	11 1,4-Dichlorobenzene	1.19162	1.18877	1.18877	0.001	-0.23932	20.00000	Averaged ccc
	13 1,2-Dichlorobenzene	1.11231	1.12583	1.12583	0.000	1.21558	60.00000	Averaged
	14 bis(2-Chloroisopropyl)ether	1.92182	1.94108	1.94108	0.000	1.00230	60.00000	Averaged
	12 Benzyl alcohol	0.63436	0.65075	0.65075	0.000	2.58272	60.00000	Averaged
	15 o-Cresol	0.83139	0.83798	0.83798	0.000	0.79318	60.00000	Averaged
	18 m,p-Cresols	1.05346	1.05662	1.05662	0.000	0.29972	60.00000	Averaged
	17 N-Nitrosodipropylamine	0.70865	0.69204	0.69204	0.050	-2.34415	60.00000	Averaged spcc
	19 Hexachloroethane	0.46100	0.44650	0.44650	0.000	-3.14409	60.00000	Averaged
	21 Nitrobenzene	0.28519	0.29957	0.29957	0.000	5.04113	60.00000	Averaged
	22 Isophorone	0.50552	0.52435	0.52435	0.000	3.72478	60.00000	Averaged
	23 2-Nitrophenol	0.13154	0.13639	0.13639	0.001	3.68222	20.00000	Averaged ccc
	24 2,4-Dimethylphenol	0.21795	0.23088	0.23088	0.000	5.93159	60.00000	Averaged
	25 bis(2-Chloroethoxy)methane	0.29749	0.30276	0.30276	0.000	1.77222	60.00000	Averaged
	26 2,4-Dichlorophenol	0.19769	0.20590	0.20590	0.001	4.15386	20.00000	Averaged ccc
	27 Benzoic acid	0.13453	0.14567	0.14567	0.000	8.28081	60.00000	Averaged
	28 1,2,4-Trichlorobenzene	0.24261	0.24953	0.24953	0.000	2.85087	60.00000	Averaged
	30 Naphthalene	0.79792	0.83170	0.83170	0.000	4.23406	60.00000	Averaged
	204 alpha-Terpineol	0.21868	0.21801	0.21801	0.000	-0.30655	60.00000	Averaged
	31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51176	60.00000	Averaged
	32 Hexachlorobutadiene	0.12634	0.13489	0.13489	0.001	6.77038	20.00000	Averaged ccc
	33 4-Chloro-3-methylphenol	0.19957	0.20148	0.20148	0.001	0.96147	20.00000	Averaged ccc
	34 2-Methylnaphthalene	0.48150	0.55976	0.55976	0.000	16.25394	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.47100	0.53047	0.53047	0.000	12.62514	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.12441	0.12441	0.050	-22.99690	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.47908	0.48878	0.48878	0.000	2.02564	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.27425	0.27425	0.001	0.48093	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.29067	0.30912	0.30912	0.000	6.34737	60.00000	Averaged
40 2-Chloronaphthalene	0.89832	0.89821	0.89821	0.000	-0.01212	60.00000	Averaged
42 o-Nitroaniline	0.30732	0.29883	0.29883	0.000	-2.76487	60.00000	Averaged
41 m-Nitroaniline	0.22497	0.22544	0.22544	0.000	0.20968	60.00000	Averaged
43 Dimethylphthalate	1.02610	1.07233	1.07233	0.000	4.50566	60.00000	Averaged
44 2,6-Dinitrotoluene	0.24475	0.24571	0.24571	0.000	0.39287	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30862	0.32387	0.32387	0.000	4.94261	60.00000	Averaged
45 Acenaphthylene	1.44438	1.60997	1.60997	0.000	11.46448	60.00000	Averaged
47 Acenaphthene	0.90151	0.96315	0.96315	0.001	6.83729	20.00000	Averaged ccc
48 2,4-Dinitrophenol	35.88405	40.00000	0.06990	0.050	-10.28987	60.00000	Linear spcc
49 Dibenzofuran	1.21689	1.24464	1.24464	0.000	2.28092	60.00000	Averaged
51 Diethylphthalate	1.03335	1.08103	1.08103	0.000	4.61479	60.00000	Averaged
52 4-Nitrophenol	37.16907	40.00000	0.15052	0.050	-7.07733	60.00000	Linear spcc
53 Fluorene	0.99879	1.09503	1.09503	0.000	9.63571	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47192	0.49481	0.49481	0.000	4.84948	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	44.79678	40.00000	0.10162	0.000	11.99194	60.00000	Linear
56 p-Nitroaniline	37.18126	40.00000	0.19210	0.000	-7.04684	60.00000	Linear
133 Diphenylamine	0.48213	0.48382	0.48382	0.001	0.34977	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.61327	0.61966	0.61966	0.000	1.04277	60.00000	Averaged
61 4-Bromophenylphenylether	0.15784	0.15705	0.15705	0.000	-0.50023	60.00000	Averaged
63 Hexachlorobenzene	0.16533	0.16268	0.16268	0.000	-1.60406	60.00000	Averaged
65 Pentachlorophenol	41.23337	40.00000	0.08933	0.001	3.08343	20.00000	Linear ccc
206 n-Octadecane	0.44173	0.45929	0.45929	0.000	3.97491	60.00000	Averaged
68 Phenanthrene	0.82721	0.88585	0.88585	0.000	7.08867	60.00000	Averaged
69 Anthracene	0.82682	0.90991	0.90991	0.000	10.04830	60.00000	Averaged
72 Di-n-butylphthalate	0.94954	1.02135	1.02135	0.000	7.56331	60.00000	Averaged
76 Fluoranthene	0.79242	0.90654	0.90654	0.001	14.40110	20.00000	Averaged ccc
79 Pyrene	1.10021	1.20816	1.20816	0.000	9.81213	60.00000	Averaged
85 Butylbenzylphthalate	0.50351	0.54090	0.54090	0.000	7.42706	60.00000	Averaged
89 Benzo(a)anthracene	0.86301	0.92157	0.92157	0.000	6.78546	60.00000	Averaged
92 Chrysene	0.82690	0.90169	0.90169	0.000	9.04505	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	41.60196	40.00000	0.72185	0.000	4.00491	60.00000	Wt Linear

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.35676	1.35676	0.001	6.72426	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.99154	0.99154	0.000	12.02912	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	1.01364	1.01364	0.000	15.17242	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.88080	0.88080	0.001	15.21790	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	40.05227	40.00000	0.72891	0.000	0.13069	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	37.95723	40.00000	0.56106	0.000	-5.10692	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.61594	0.61594	0.000	5.46367	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17081	0.17081	0.000	0.89311	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
	143 Dinoseb	37.88463	40.00000	0.11675	0.000	-5.28842	60.00000	Linear	
	173 Carbazole	0.65449	0.70032	0.70032	0.000	7.00193	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.14364	0.14364	0.000	12.83157	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.57593	0.57593	0.000	4.25434	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.90823	0.90823	0.000	0.92871	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.11262	1.11262	0.000	-1.00903	60.00000	Averaged	
	26 Phthalic anhydride	71.32284	40.00000	0.14710	0.000	78.30709	60.00000	Linear	<-
	179 Dibenzo(a,e)pyrene	23.04060	40.00000	0.15052	0.000	-42.39851	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17485	0.17485	0.000	-4.87689	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.75383	0.75383	0.000	6.12038	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.25405	40.00000	0.11920	0.000	-4.36487	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.29168	0.29168	0.000	3.50642	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	1.00259	1.00259	0.000	13.59635	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s110909.b/s6k0937.d
Lab Smp Id: WBN091106-09.1 Client Smp ID: MEGAICV
Inj Date : 10-NOV-2009 20:29
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091106-09.1|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 10:50 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	267857	40.0000	
* 29 Naphthalene-d8	136	6.116	6.116	(1.000)	1007489	40.0000	
* 46 Acenaphthene-d10	164	7.986	7.986	(1.000)	511035	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	891521	40.0000	
* 91 Chrysene-d12	240	12.618	12.618	(1.000)	688764	40.0000	
* 98 Perylene-d12	264	14.955	14.955	(1.000)	524055	40.0000	
$ 3 2-Fluorophenol	112	3.646	3.646	(0.754)	277141	40.0000	41.3
$ 5 Phenol-d5	99	4.431	4.431	(0.917)	332800	40.0000	39.3
$ 20 Nitrobenzene-d5	82	5.371	5.371	(0.878)	301256	40.0000	42.3
$ 39 2-Fluorobiphenyl	172	7.242	7.242	(0.907)	552805	40.0000	42.0
$ 60 2,4,6-Tribromophenol	329	8.834	8.834	(1.106)	66156	40.0000	44.4
$ 81 p-Terphenyl-d14	244	11.306	11.306	(0.896)	498384	40.0000	44.9
1 N-Methyl-N-nitrosomethylamine	74	2.663	2.663	(0.551)	171645	40.0000	37.6
2 Pyridine	79	2.701	2.701	(0.559)	206635	40.0000	36.4
4 Aniline	66	4.518	4.518	(0.935)	139099	40.0000	39.4
6 Phenol	94	4.444	4.444	(0.919)	330773	40.0000	38.8
7 bis(2-Chloroethyl) ether	63	4.559	4.559	(0.943)	216794	40.0000	37.6
8 2-Chlorophenol	128	4.633	4.633	(0.958)	272604	40.0000	39.9
203 n-Decane	43	4.643	4.643	(0.960)	386128	40.0000	40.5
9 1,3-Dichlorobenzene	146	4.783	4.783	(0.989)	320531	40.0000	40.7
11 1,4-Dichlorobenzene	146	4.852	4.852	(1.004)	318420	40.0000	39.9
13 1,2-Dichlorobenzene	146	5.002	5.002	(1.035)	301561	40.0000	40.5
14 bis(2-Chloroisopropyl)ether	45	5.068	5.068	(1.048)	519933	40.0000	40.4
12 Benzyl alcohol	108	4.941	4.941	(1.022)	174307	40.0000	41.0
15 o-Cresol	107	5.025	5.025	(1.040)	224459	40.0000	40.3
18 m,p-Cresols	107	5.180	5.180	(1.072)	283022	40.0000	40.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.206	5.206	(1.077)	185368	40.0000	39.1
19 Hexachloroethane	117	5.338	5.338	(1.104)	119599	40.0000	38.7
21 Nitrobenzene	77	5.392	5.392	(0.882)	301811	40.0000	42.0
22 Isophorone	82	5.626	5.626	(0.920)	528272	40.0000	41.5
23 2-Nitrophenol	139	5.708	5.708	(0.933)	137410	40.0000	41.5
24 2,4-Dimethylphenol	122	5.718	5.718	(0.935)	232609	40.0000	42.4
25 bis(2-Chloroethoxy)methane	93	5.825	5.825	(0.952)	305032	40.0000	40.7
26 2,4-Dichlorophenol	162	5.950	5.950	(0.973)	207439	40.0000	41.7
27 Benzoic acid	105	5.812	5.812	(0.950)	146760	40.0000	43.3(H)
28 1,2,4-Trichlorobenzene	180	6.047	6.047	(0.989)	251400	40.0000	41.1
30 Naphthalene	128	6.138	6.138	(1.004)	837929	40.0000	41.7
204 alpha-Terpineol	59	6.123	6.123	(1.001)	219641	40.0000	39.9
31 4-Chloroaniline	127	6.172	6.172	(1.009)	267452	40.0000	41.4
32 Hexachlorobutadiene	225	6.251	6.251	(1.022)	135904	40.0000	42.7
33 4-Chloro-3-methylphenol	107	6.653	6.653	(1.088)	202993	40.0000	40.4
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	563953	40.0000	46.5
35 1-Methylnaphthalene	142	6.969	6.969	(1.140)	534441	40.0000	45.0
36 Hexachlorocyclopentadiene	237	7.020	7.020	(0.879)	63579	40.0000	30.8
205 2,3-Dichloroaniline	161	7.155	7.155	(0.896)	249785	40.0000	40.8
37 2,4,6-Trichlorophenol	196	7.147	7.147	(0.895)	140152	40.0000	40.2
38 2,4,5-Trichlorophenol	196	7.183	7.183	(0.899)	157970	40.0000	42.5
40 2-Chloronaphthalene	162	7.384	7.384	(0.925)	459019	40.0000	40.0
42 o-Nitroaniline	65	7.479	7.479	(0.936)	152711	40.0000	38.9
41 m-Nitroaniline	138	7.922	7.922	(0.992)	115209	40.0000	40.1
43 Dimethylphthalate	163	7.670	7.670	(0.960)	548000	40.0000	41.8
44 2,6-Dinitrotoluene	165	7.739	7.739	(0.969)	125566	40.0000	40.2
50 2,4-Dinitrotoluene	165	8.172	8.172	(1.023)	165511	40.0000	42.0
45 Acenaphthylene	152	7.835	7.835	(0.981)	822752	40.0000	44.6
47 Acenaphthene	154	8.024	8.024	(1.005)	492203	40.0000	42.7
48 2,4-Dinitrophenol	184	8.029	8.029	(1.005)	35722	40.0000	35.9
49 Dibenzofuran	168	8.205	8.205	(1.027)	636057	40.0000	40.9
51 Diethylphthalate	149	8.424	8.424	(1.055)	552446	40.0000	41.8
52 4-Nitrophenol	139	8.070	8.070	(1.011)	76920	40.0000	37.2
53 Fluorene	166	8.577	8.577	(1.074)	559601	40.0000	43.8
54 4-Chlorophenylphenylether	204	8.564	8.564	(1.072)	252864	40.0000	41.9
55 2-Methyl-4,6-dinitrophenol	198	8.613	8.613	(0.897)	90597	40.0000	44.8
56 p-Nitroaniline	138	8.582	8.582	(1.075)	98168	40.0000	37.2
133 Diphenylamine	169	8.689	8.689	(0.905)	431336	40.0000	40.1
58 1,2-Diphenylhydrazine	77	8.738	8.738	(0.910)	552443	40.0000	40.4
61 4-Bromophenylphenylether	248	9.094	9.094	(0.947)	140012	40.0000	39.8
63 Hexachlorobenzene	284	9.173	9.173	(0.956)	145031	40.0000	39.4
65 Pentachlorophenol	266	9.375	9.375	(0.977)	79644	40.0000	41.2
206 n-Octadecane	57	9.431	9.431	(0.982)	409467	40.0000	41.6
68 Phenanthrene	178	9.624	9.624	(1.003)	789756	40.0000	42.8
69 Anthracene	178	9.680	9.680	(1.008)	811200	40.0000	44.0
72 Di-n-butylphthalate	149	10.190	10.190	(1.062)	910557	40.0000	43.0
76 Fluoranthene	202	10.914	10.914	(1.137)	808196	40.0000	45.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	11.166	11.166	(0.885)	832137	40.0000	43.9
85 Butylbenzylphthalate	149	11.841	11.841	(0.938)	372553	40.0000	43.0
89 Benzo(a)anthracene	228	12.598	12.598	(0.998)	634741	40.0000	42.7
92 Chrysene	228	12.654	12.654	(1.003)	621053	40.0000	43.6
93 bis(2-Ethylhexyl)phthalate	149	12.570	12.570	(0.996)	497186	40.0000	41.6
94 Di-n-octylphthalate	149	13.561	13.561	(0.907)	711015	40.0000	42.7
95 Benzo(b)fluoranthene	252	14.275	14.275	(0.954)	519622	40.0000	44.8
96 Benzo(k)fluoranthene	252	14.326	14.326	(0.958)	531203	40.0000	46.1
97 Benzo(a)pyrene	252	14.853	14.853	(0.993)	461589	40.0000	46.1
99 Indeno(1,2,3-cd)pyrene	276	16.945	16.945	(1.133)	381990	40.0000	40.0
100 Dibenzo(a,h)anthracene	278	16.978	16.978	(1.135)	294025	40.0000	38.0
101 Benzo(ghi)perylene	276	17.460	17.460	(1.167)	322785	40.0000	42.2
126 m-Dinitrobenzene	168	7.708	7.708	(0.965)	87288	40.0000	40.4
130 2,3,4,6-Tetrachlorophenol	232	8.325	8.325	(1.042)	119161	40.0000	42.6
143 Dinoseb	211	9.561	9.561	(0.996)	104085	40.0000	37.9
173 Carbazole	167	9.841	9.841	(1.025)	624352	40.0000	42.8
184 p-Benzoquinone	54	4.085	4.085	(0.845)	38475	40.0000	45.1
192 Methoxychlor	227	12.468	12.468	(0.988)	396683	40.0000	41.7
211 p-Toluidine	106	5.252	5.252	(1.086)	243276	40.0000	40.4
210 m-Toluidine	106	5.285	5.285	(1.093)	298023	40.0000	39.6
26 Phthalic anhydride	104	6.911	6.911	(1.130)	148201	40.0000	71.3
179 Dibenzo(a,e)pyrene	302	21.182	21.182	(1.416)	78881	40.0000	23.0
214 1,4-Dinitrobenzene	75	7.624	7.624	(0.955)	89355	40.0000	38.0
215 2-Ethoxyethanol	59	2.454	2.454	(0.508)	201919	40.0000	42.4
216 Methylenebis(2-chloroaniline)	231	12.539	12.539	(0.994)	82098	40.0000	38.2
M 225 Trichlorophenols	196				298122	80.0000	82.8
M 226 Tetrachlorophenols	232				119161	40.0000	42.6
M 227 Benzo(b,k)fluoranthene	252				1050825	80.0000	90.9

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Date : 10-NOV-2009 20:29
Client ID: MEGAICV
Sample Info: IWBN091106-09,1140 PPM11ISVMF11IMEGAICV

Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: JMB3
Column diameter: 0.20

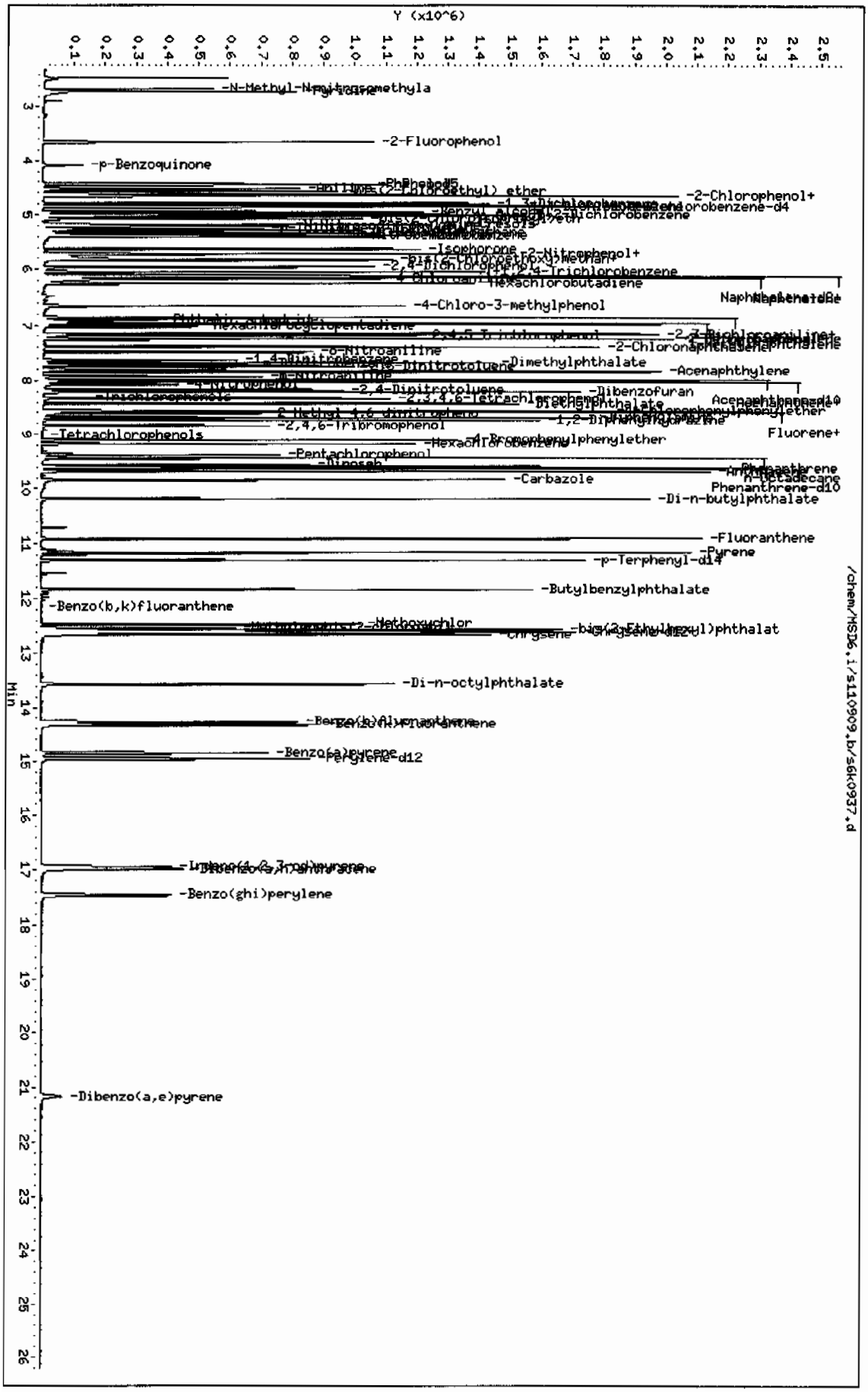

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 21:07
Lab File ID: s6k0938.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091016-08.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.67526	0.67526	0.000	-21.59733	60.00000	Averaged
16 Acetophenone	1.16908	1.08481	1.08481	0.000	-7.20809	60.00000	Averaged
189 Caprolactam	0.07388	0.08118	0.08118	0.000	9.87786	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.15865	1.15865	0.000	-3.55099	60.00000	Averaged
207 Atrazine	0.04063	0.03738	0.03738	0.000	-8.01727	60.00000	Averaged
77 Benzidine	0.39304	0.35886	0.35886	0.000	-8.69608	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.30132	0.30132	0.000	6.65684	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.45837	0.45837	0.000	25.21672	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.26059	0.26059	0.000	34.40927	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.97594	0.97594	0.000	21.14390	60.00000	Averaged
105 2-Picoline	1.30872	1.36092	1.36092	0.000	3.98846	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.53755	0.53755	0.000	5.18772	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.52223	0.52223	0.000	-1.19058	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.51026	0.51026	0.000	2.97098	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.73760	0.73760	0.000	13.18337	60.00000	Averaged
110 Pentachloroethane	0.31681	0.42390	0.42390	0.000	33.80401	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.46325	0.46325	0.000	-2.70540	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.65676	0.65676	0.000	-3.32751	60.00000	Averaged
114 o-Toluidine	1.65281	1.64899	1.64899	0.000	-0.23102	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.14180	0.14180	0.000	0.52679	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.87204	0.87204	0.000	1.93819	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20008	0.20008	0.000	-3.28259	60.00000	Averaged
119 Hexachloropropene	0.10269	0.14537	0.14537	0.000	41.57055	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.23182	0.23182	0.000	0.99155	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.21749	0.21749	0.000	3.54470	60.00000	Averaged
122 Safrole	0.18653	0.20933	0.20933	0.000	12.22661	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.42512	0.42512	0.000	0.45545	60.00000	Averaged
124 Isosafrole	0.33959	0.43257	0.43257	0.000	27.38086	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.30375	0.30375	0.000	-0.97466	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36394	0.36394	0.000	-0.16566	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.91190	0.91190	0.000	0.49410	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.91865	0.91865	0.000	-6.27177	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.28996	0.28996	0.000	3.92480	60.00000	Averaged
136 1,3,5-Trinitrobenzene	46.05690	40.00000	0.13757	0.000	15.14226	60.00000	Linear
137 Phenacetin	0.26240	0.25991	0.25991	0.000	-0.94903	60.00000	Averaged
138 Diallate	0.24056	0.23148	0.23148	0.000	-3.77545	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0938.d
Analysis Type:
Lab Sample ID: WBN091016-08.1
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 21:07
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.58994	0.58994	0.000	10.14239	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.06213	0.06213	0.000	0.34079	60.00000	Averaged
142 Pronamide	0.26319	0.26234	0.26234	0.000	-0.32101	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02580	0.02580	0.000	9.82299	60.00000	Averaged
147 Methapyrilene	0.38600	0.39422	0.39422	0.000	2.12820	60.00000	Averaged
148 Isodrin	0.09631	0.08838	0.08838	0.000	-8.22821	60.00000	Averaged
149 Aramite	0.04420	0.04155	0.04155	0.000	-5.99495	60.00000	Averaged
150 Kepone	0.06173	0.05889	0.05889	0.000	-4.59530	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.33079	0.33079	0.000	4.23929	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.29321	0.29321	0.000	0.65640	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.57778	0.57778	0.000	9.50435	60.00000	Averaged
155 2-Acetylaminofluorene	41.44131	40.00000	0.34022	0.000	3.60328	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.41447	0.41447	0.000	-13.48259	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.35869	0.35869	0.000	-2.93887	60.00000	Averaged
212 Cis Diallate	0.25295	0.25705	0.25705	0.000	1.62146	60.00000	Averaged
213 Trans Diallate	0.28301	0.27233	0.27233	0.000	-3.77545	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s110909.b/s6k0938.d
Lab Smp Id: WBN091016-08.1 Client Smp ID: AP12ICV
Inj Date : 10-NOV-2009 21:07
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091016-08.1|40 PPM|1|SVMF|1|AP12ICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 09:25 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	282437	40.0000	
* 29 Naphthalene-d8	136	6.113	6.113	(1.000)	974498	40.0000	
* 46 Acenaphthene-d10	164	7.983	7.983	(1.000)	519475	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	914999	40.0000	
* 91 Chrysene-d12	240	12.613	12.613	(1.000)	718441	40.0000	
* 98 Perylene-d12	264	14.950	14.950	(1.000)	524113	40.0000	
209 Benzaldehyde	77	4.428	4.428	(0.916)	190719	40.0000	31.4
16 Acetophenone	105	5.211	5.211	(1.078)	306390	40.0000	37.1
189 Caprolactam	113	6.531	6.531	(1.068)	79108	40.0000	44.0
208 1,1'-Biphenyl	154	7.354	7.354	(0.921)	601890	40.0000	38.6
207 Atrazine	173	9.249	9.249	(0.964)	34200	40.0000	36.8
77 Benzidine	184	11.038	11.038	(0.875)	257818	40.0000	36.5
90 3,3'-Dichlorobenzidine	252	12.539	12.539	(0.994)	216482	40.0000	42.7
102 1,4-Dioxane	88	2.456	2.456	(0.508)	129460	40.0000	50.1
103 Methyl methacrylate	100	2.454	2.454	(0.508)	73600	40.0000	53.8
104 Ethyl methacrylate	69	2.971	2.971	(0.615)	275642	40.0000	48.4
105 2-Picoline	93	3.228	3.228	(0.668)	384374	40.0000	41.6
106 N-Nitrosomethylethylamine	88	3.297	3.297	(0.682)	151823	40.0000	42.1
107 Methyl methanesulfonate	80	3.521	3.521	(0.728)	147497	40.0000	39.5
108 N-Nitrosodiethylamine	102	3.858	3.858	(0.798)	144115	40.0000	41.2
109 Ethyl Methanesulfonate	79	4.097	4.097	(0.848)	208326	40.0000	45.3
110 Pentachloroethane	167	4.574	4.574	(0.946)	119725	40.0000	53.5
111 N-Nitrosopyrrolidine	100	5.190	5.190	(1.074)	130840	40.0000	38.9(Q)
113 N-Nitrosomorpholine	56	5.223	5.223	(1.081)	185493	40.0000	38.7
114 o-Toluidine	106	5.249	5.249	(1.086)	465737	40.0000	39.9
115 N-Nitrosopiperidine	114	5.539	5.539	(0.906)	138180	40.0000	40.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.962	5.962	(0.975)	849798	40.0000	40.8
118 2,6-Dichlorophenol	162	6.184	6.184	(1.012)	194979	40.0000	38.7
119 Hexachloropropene	213	6.222	6.222	(1.018)	141665	40.0000	56.6
120 p-Phenylenediamine	108	6.541	6.541	(1.070)	225910	40.0000	40.4
121 N-Nitrosodi-n-butylamine	84	6.515	6.515	(1.066)	211942	40.0000	41.4(T)
122 Safrole	162	6.750	6.750	(1.104)	203993	40.0000	44.9
123 1,2,4,5-Tetrachlorobenzene	216	7.035	7.035	(0.881)	220840	40.0000	40.2
124 Isosafrole	162	7.305	7.305	(0.915)	224711	40.0000	51.0
125 1,4-Naphthoquinone	158	7.565	7.565	(0.948)	157789	40.0000	39.6
127 Pentachlorobenzene	250	8.156	8.156	(1.022)	189057	40.0000	39.9
128 1-Naphthylamine	143	8.284	8.284	(1.038)	473709	40.0000	40.2
129 2-Naphthylamine	143	8.368	8.368	(1.048)	477216	40.0000	37.5
131 5-Nitro-o-toluidine	152	8.574	8.574	(1.074)	150626	40.0000	41.6
136 1,3,5-Trinitrobenzene	75	8.946	8.946	(0.932)	125876	40.0000	46.0
137 Phenacetin	108	9.010	9.010	(0.939)	237813	40.0000	39.6(Q)
138 Diallate	86	8.990	8.990	(0.937)	211803	40.0000	38.5
140 4-Aminobiphenyl	169	9.374	9.374	(0.977)	539794	40.0000	44.0
141 Pentachloronitrobenzene	237	9.392	9.392	(0.978)	56852	40.0000	40.1(Q)
142 Pronamide	173	9.423	9.423	(0.982)	240044	40.0000	39.9
146 4-Nitroquinoline-1-oxide	101	10.445	10.445	(1.088)	23608	40.0000	43.9
147 Methapyrilene	58	10.518	10.518	(1.096)	360709	40.0000	40.8
148 Isodrin	193	10.750	10.750	(1.120)	80870	40.0000	36.7
149 Aramite	185	11.265	11.265	(1.174)	38019	40.0000	37.6
150 Kepone	272	11.933	11.933	(1.243)	53886	40.0000	38.2
151 p-(Dimethylamino)azobenzene	120	11.456	11.456	(0.908)	237654	40.0000	41.7
152 Chlorobenzilate	251	11.499	11.499	(0.912)	210653	40.0000	40.3
153 3,3'-Dimethylbenzidine	212	11.838	11.838	(0.939)	415103	40.0000	43.8
155 2-Acetylaminofluorene	181	12.154	12.154	(0.964)	244425	40.0000	41.4
157 7,12Dimethylbenz(a)anthracene	256	14.251	14.251	(0.953)	217229	40.0000	34.6
158 3-Methylcholanthrene	268	15.477	15.477	(1.035)	187994	40.0000	38.8(Q)
212 Cis Diallate	86	9.092	9.092	(0.947)	35280	6.00000	6.1
213 Trans Diallate	86	8.990	8.990	(0.937)	211803	34.0000	32.7

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s110909.b/s6k0938.d
Date : 10-NOV-2009 21:07
Client ID: AP12ICV
Sample Info: !WBN091016-08,1!40 PPM!1!SVMF!1!AP12ICV
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: JMB3
Column diameter: 0.20

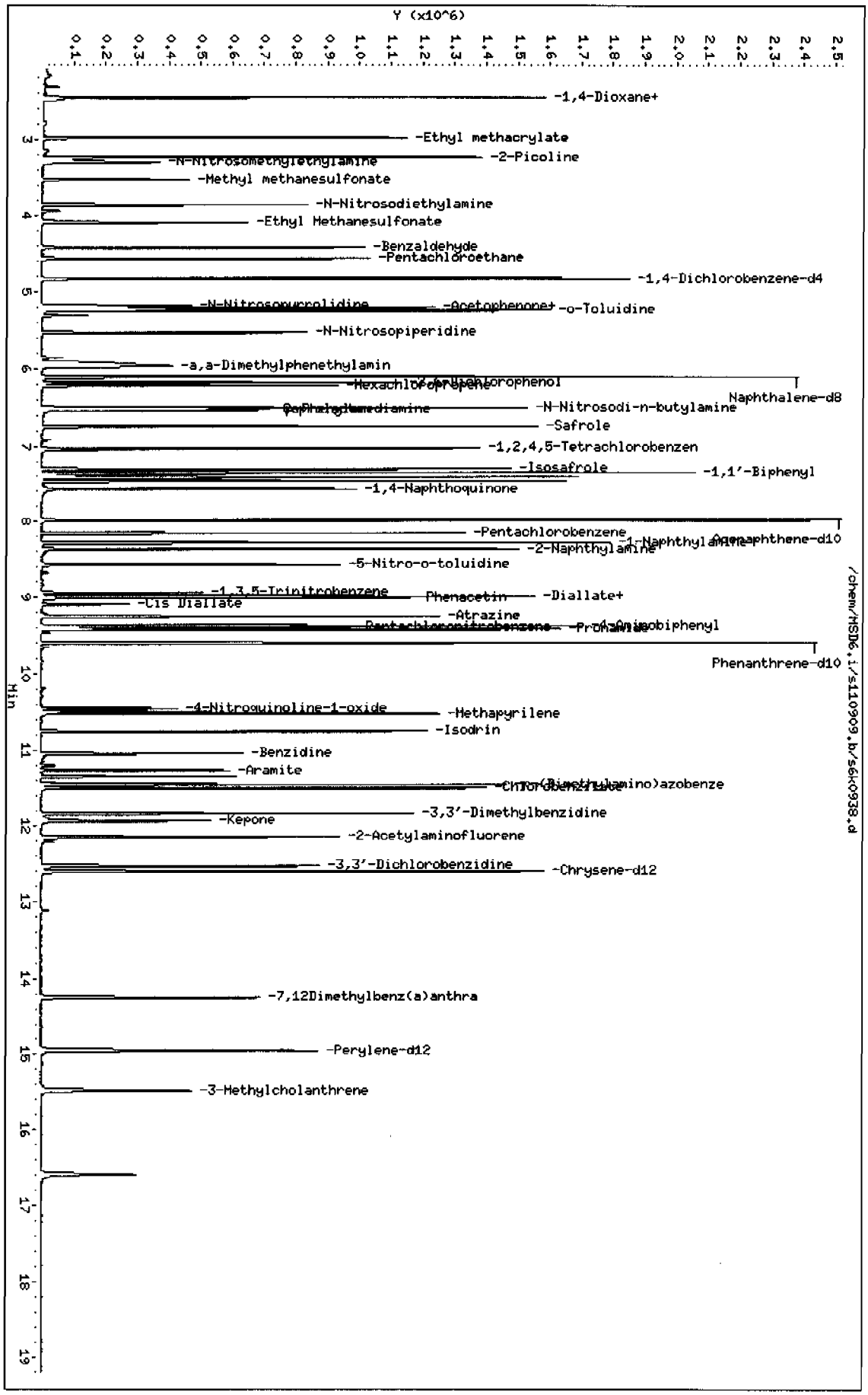

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.00169	0.97640	0.97640	0.000	-2.52518	60.00000	Averaged
$ 5 Phenol-d5	1.26427	1.29785	1.29785	0.000	2.65649	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28296	0.27597	0.27597	0.000	-2.46803	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.03083	1.03275	1.03275	0.000	0.18643	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11675	0.13838	0.13838	0.000	18.52335	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.64507	0.61648	0.61648	0.000	-4.43189	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.62406	0.62406	0.000	-8.35865	60.00000	Averaged
2 Pyridine	0.84757	0.78760	0.78760	0.000	-7.07537	60.00000	Averaged
4 Aniline	0.52752	0.49969	0.49969	0.000	-5.27527	60.00000	Averaged
6 Phenol	1.27120	1.30773	1.30773	0.001	2.87379	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.80899	0.80899	0.000	-6.01938	60.00000	Averaged
8 2-Chlorophenol	1.02109	1.03419	1.03419	0.000	1.28243	60.00000	Averaged
203 n-Decane	1.42254	1.23857	1.23857	0.000	-12.93249	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.22643	1.22643	0.000	4.33317	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.23193	1.23193	0.001	3.38265	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.16356	1.16356	0.000	4.60749	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.85138	1.85138	0.000	-3.66534	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.52905	0.52905	0.000	-16.60093	60.00000	Averaged
15 o-Cresol	0.83139	0.84537	0.84537	0.000	1.68220	60.00000	Averaged
18 m,p-Cresols	1.05346	1.06021	1.06021	0.000	0.64045	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.74903	0.74903	0.050	5.69721	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.46476	0.46476	0.000	0.81558	60.00000	Averaged
21 Nitrobenzene	0.28519	0.27599	0.27599	0.000	-3.22500	60.00000	Averaged
22 Isophorone	0.50552	0.51153	0.51153	0.000	1.18903	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.14495	0.14495	0.001	10.19234	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.23235	0.23235	0.000	6.60570	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.29970	0.29970	0.000	0.74330	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.21016	0.21016	0.001	6.31063	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.15969	0.15969	0.000	18.70616	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.25766	0.25766	0.000	6.20012	60.00000	Averaged
30 Naphthalene	0.79792	0.73723	0.73723	0.000	-7.60612	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.22273	0.22273	0.000	1.85067	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.25818	0.25818	0.000	0.67042	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.13413	0.13413	0.001	6.16552	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.21492	0.21492	0.001	7.69256	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.49831	0.49831	0.000	3.49055	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.47100	0.49228	0.49228	0.000	4.51626	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16157	0.18559	0.18559	0.050	14.86920	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.47908	0.47169	0.47169	0.000	-1.54125	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.27294	0.27929	0.27929	0.001	2.32726	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.29067	0.30745	0.30745	0.000	5.77340	60.00000	Averaged	
40 2-Chloronaphthalene	0.89832	0.90392	0.90392	0.000	0.62253	60.00000	Averaged	
42 o-Nitroaniline	0.30732	0.28764	0.28764	0.000	-6.40548	60.00000	Averaged	
41 m-Nitroaniline	0.22497	0.22802	0.22802	0.000	1.35665	60.00000	Averaged	
43 Dimethylphthalate	1.02610	1.02791	1.02791	0.000	0.17622	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.24475	0.24841	0.24841	0.000	1.49670	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.30862	0.31932	0.31932	0.000	3.46620	60.00000	Averaged	
45 Acenaphthylene	1.44438	1.46306	1.46306	0.000	1.29315	60.00000	Averaged	
47 Acenaphthene	0.90151	0.87235	0.87235	0.001	-3.23488	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	52.77220	40.00000	0.12511	0.050	31.93051	60.00000	Linear	spcc
49 Dibenzofuran	1.21689	1.25516	1.25516	0.000	3.14537	60.00000	Averaged	
51 Diethylphthalate	1.03335	1.03182	1.03182	0.000	-0.14758	60.00000	Averaged	
52 4-Nitrophenol	43.77804	40.00000	0.18380	0.050	9.44511	60.00000	Linear	spcc
53 Fluorene	0.99879	1.02927	1.02927	0.000	3.05138	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.47192	0.49607	0.49607	0.000	5.11798	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	43.39990	40.00000	0.09786	0.000	8.49974	60.00000	Linear	
56 p-Nitroaniline	42.19462	40.00000	0.22407	0.000	5.48655	60.00000	Linear	
133 Diphenylamine	0.48213	0.48587	0.48587	0.001	0.77589	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.61327	0.57988	0.57988	0.000	-5.44400	60.00000	Averaged	
61 4-Bromophenylphenylether	0.15784	0.16183	0.16183	0.000	2.53130	60.00000	Averaged	
63 Hexachlorobenzene	0.16533	0.16948	0.16948	0.000	2.51126	60.00000	Averaged	
65 Pentachlorophenol	44.52110	40.00000	0.09752	0.001	11.30274	20.00000	Linear	ccc
206 n-Octadecane	0.44173	0.43893	0.43893	0.000	-0.63476	60.00000	Averaged	
68 Phenanthrene	0.82721	0.82830	0.82830	0.000	0.13104	60.00000	Averaged	
69 Anthracene	0.82682	0.83156	0.83156	0.000	0.57339	60.00000	Averaged	
72 Di-n-butylphthalate	0.94954	0.98125	0.98125	0.000	3.33991	60.00000	Averaged	
76 Fluoranthene	0.79242	0.83105	0.83105	0.001	4.87486	20.00000	Averaged	ccc
79 Pyrene	1.10021	1.00753	1.00753	0.000	-8.42356	60.00000	Averaged	
85 Butylbenzylphthalate	0.50351	0.48002	0.48002	0.000	-4.66383	60.00000	Averaged	
89 Benzo(a)anthracene	0.86301	0.85166	0.85166	0.000	-1.31465	60.00000	Averaged	
92 Chrysene	0.82690	0.83255	0.83255	0.000	0.68349	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	39.45585	40.00000	0.68425	0.000	-1.36038	60.00000	Wt Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.21644	1.21644	0.001	-4.31356	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.86707	0.86707	0.000	-2.03373	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	0.86925	0.86925	0.000	-1.23353	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.81522	0.81522	0.001	6.63855	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	45.94450	40.00000	0.84494	0.000	14.86125	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	46.34947	40.00000	0.69463	0.000	15.87367	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.70848	0.70848	0.000	21.30910	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17634	0.17634	0.000	4.16283	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.24655	0.24655	0.000	12.60018	60.00000	Averaged	
	143 Dinoseb	41.98772	40.00000	0.13187	0.000	4.96931	60.00000	Linear	
	173 Carbazole	0.65449	0.65896	0.65896	0.000	0.68183	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.04944	0.04944	0.000	-61.16573	60.00000	Averaged	<-
	192 Methoxychlor	0.55243	0.52649	0.52649	0.000	-4.69610	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.91477	0.91477	0.000	1.65560	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.05029	1.05029	0.000	-6.55469	60.00000	Averaged	
	26 Phthalic anhydride	19.49077	40.00000	0.03042	0.000	-51.27308	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.18139	0.18139	0.000	-1.31871	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.58527	0.58527	0.000	-17.60940	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	41.87935	40.00000	0.13244	0.000	4.69836	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.29337	0.29337	0.000	4.10453	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.24655	0.24655	0.000	12.60018	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	0.86816	0.86816	0.000	-1.63475	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610402.d
Lab Smp Id: WBN091106-05.2 Client Smp ID: MEGACVS
Inj Date : 04-DEC-2009 10:02
Operator : nag1 Inst ID: MSD6.i
Smp Info : |WBN091106-05.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	225677	40.0000	
* 29 Naphthalene-d8	136	5.993	5.993	(1.000)	911417	40.0000	
* 46 Acenaphthene-d10	164	7.858	7.858	(1.000)	476654	40.0000	
* 67 Phenanthrene-d10	188	9.469	9.469	(1.000)	854008	40.0000	
* 91 Chrysene-d12	240	12.463	12.463	(1.000)	749694	40.0000	
* 98 Perylene-d12	264	14.741	14.741	(1.000)	697713	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.590	(0.759)	220350	40.0000	39.0
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	292896	40.0000	41.1
$ 20 Nitrobenzene-d5	82	5.259	5.259	(0.878)	251528	40.0000	39.0
$ 39 2-Fluorobiphenyl	172	7.117	7.117	(0.906)	492266	40.0000	40.1
$ 60 2,4,6-Tribromophenol	329	8.709	8.709	(1.108)	65957	40.0000	47.4
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.897)	462170	40.0000	38.2
1 N-Methyl-N-nitrosomethylamine	74	2.665	2.665	(0.564)	140835	40.0000	36.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.706	2.706	(0.572)	177744	40.0000	37.2
4 Aniline	66	4.421	4.421	(0.935)	112769	40.0000	37.9
6 Phenol	94	4.365	4.365	(0.923)	295124	40.0000	41.1(Q)
7 bis(2-Chloroethyl) ether	63	4.459	4.459	(0.943)	182571	40.0000	37.6
8 2-Chlorophenol	128	4.535	4.535	(0.959)	233392	40.0000	40.5
203 n-Decane	43	4.541	4.541	(0.960)	279516	40.0000	34.8
9 1,3-Dichlorobenzene	146	4.678	4.678	(0.989)	276778	40.0000	41.7
11 1,4-Dichlorobenzene	146	4.744	4.744	(1.003)	278018	40.0000	41.4
13 1,2-Dichlorobenzene	146	4.890	4.890	(1.034)	262588	40.0000	41.8
14 bis(2-Chloroisopropyl)ether	45	4.958	4.958	(1.048)	417814	40.0000	38.5
12 Benzyl alcohol	108	4.841	4.841	(1.024)	119395	40.0000	33.4
15 o-Cresol	107	4.928	4.928	(1.042)	190781	40.0000	40.7
18 m,p-Cresols	107	5.083	5.083	(1.075)	239264	40.0000	40.2
17 N-Nitrosodipropylamine	70	5.096	5.096	(1.078)	169038	40.0000	42.3
19 Hexachloroethane	117	5.221	5.221	(1.104)	104885	40.0000	40.3
21 Nitrobenzene	77	5.279	5.279	(0.881)	251545	40.0000	38.7
22 Isophorone	82	5.519	5.519	(0.921)	466214	40.0000	40.5
23 2-Nitrophenol	139	5.593	5.593	(0.933)	132112	40.0000	44.1
24 2,4-Dimethylphenol	122	5.613	5.613	(0.937)	211767	40.0000	42.6
25 bis(2-Chloroethoxy)methane	93	5.710	5.710	(0.953)	273155	40.0000	40.3
26 2,4-Dichlorophenol	162	5.840	5.840	(0.974)	191544	40.0000	42.5
27 Benzoic acid	105	5.725	5.725	(0.955)	145548	40.0000	47.5
28 1,2,4-Trichlorobenzene	180	5.924	5.924	(0.989)	234833	40.0000	42.5
30 Naphthalene	128	6.016	6.016	(1.004)	671920	40.0000	37.0
204 alpha-Terpineol	59	6.006	6.006	(1.002)	202996	40.0000	40.7
31 4-Chloroaniline	127	6.057	6.057	(1.011)	235307	40.0000	40.3
32 Hexachlorobutadiene	225	6.125	6.125	(1.022)	122248	40.0000	42.5
33 4-Chloro-3-methylphenol	107	6.551	6.551	(1.093)	195879	40.0000	43.1
34 2-Methylnaphthalene	142	6.737	6.737	(1.124)	454164	40.0000	41.4
35 1-Methylnaphthalene	142	6.844	6.844	(1.142)	448668	40.0000	41.8
36 Hexachlorocyclopentadiene	237	6.895	6.895	(0.877)	88463	40.0000	45.9
205 2,3-Dichloroaniline	161	7.033	7.033	(0.895)	224835	40.0000	39.4
37 2,4,6-Trichlorophenol	196	7.030	7.030	(0.895)	133125	40.0000	40.9
38 2,4,5-Trichlorophenol	196	7.073	7.073	(0.900)	146547	40.0000	42.3
40 2-Chloronaphthalene	162	7.257	7.257	(0.923)	430855	40.0000	40.2
42 o-Nitroaniline	65	7.361	7.361	(0.937)	137104	40.0000	37.4
41 m-Nitroaniline	138	7.807	7.807	(0.994)	108688	40.0000	40.5
43 Dimethylphthalate	163	7.555	7.555	(0.961)	489957	40.0000	40.1
44 2,6-Dinitrotoluene	165	7.621	7.621	(0.970)	118406	40.0000	40.6
50 2,4-Dinitrotoluene	165	8.057	8.057	(1.025)	152204	40.0000	41.4
45 Acenaphthylene	152	7.708	7.708	(0.981)	697373	40.0000	40.5
47 Acenaphthene	154	7.894	7.894	(1.005)	415808	40.0000	38.7
48 2,4-Dinitrophenol	184	7.919	7.919	(1.008)	59635	40.0000	52.8
49 Dibenzofuran	168	8.077	8.077	(1.028)	598279	40.0000	41.2
51 Diethylphthalate	149	8.304	8.304	(1.057)	491822	40.0000	39.9
52 4-Nitrophenol	139	7.988	7.988	(1.017)	87611	40.0000	43.8
53 Fluorene	166	8.449	8.449	(1.075)	490606	40.0000	41.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.437	8.437	(1.074)	236456	40.0000	42.0
55 2-Methyl-4,6-dinitrophenol	198	8.498	8.498	(0.897)	83570	40.0000	43.4
56 p-Nitroaniline	138	8.470	8.470	(1.078)	106806	40.0000	42.2
133 Diphenylamine	169	8.564	8.564	(0.904)	414941	40.0000	40.3
58 1,2-Diphenylhydrazine	77	8.610	8.610	(0.909)	495224	40.0000	37.8
61 4-Bromophenylphenylether	248	8.967	8.967	(0.947)	138207	40.0000	41.0
63 Hexachlorobenzene	284	9.043	9.043	(0.955)	144739	40.0000	41.0
65 Pentachlorophenol	266	9.252	9.252	(0.977)	83287	40.0000	44.5
206 n-Octadecane	57	9.308	9.308	(0.983)	374848	40.0000	39.7
68 Phenanthrene	178	9.497	9.497	(1.003)	707373	40.0000	40.0
69 Anthracene	178	9.550	9.550	(1.009)	710163	40.0000	40.2
72 Di-n-butylphthalate	149	10.065	10.065	(1.063)	837995	40.0000	41.3
76 Fluoranthene	202	10.783	10.783	(1.139)	709722	40.0000	41.9
79 Pyrene	202	11.036	11.036	(0.886)	755339	40.0000	36.6
85 Butylbenzylphthalate	149	11.708	11.708	(0.939)	359870	40.0000	38.1
89 Benzo(a)anthracene	228	12.440	12.440	(0.998)	638485	40.0000	39.5
92 Chrysene	228	12.496	12.496	(1.003)	624158	40.0000	40.3
93 bis(2-Ethylhexyl)phthalate	149	12.419	12.419	(0.997)	512975	40.0000	39.4
94 Di-n-octylphthalate	149	13.380	13.380	(0.908)	848723	40.0000	38.3
95 Benzo(b)fluoranthene	252	14.076	14.076	(0.955)	604969	40.0000	39.2
96 Benzo(k)fluoranthene	252	14.124	14.124	(0.958)	606487	40.0000	39.5
97 Benzo(a)pyrene	252	14.639	14.639	(0.993)	568787	40.0000	42.6
99 Indeno(1,2,3-cd)pyrene	276	16.695	16.695	(1.133)	589527	40.0000	45.9
100 Dibenzo(a,h)anthracene	278	16.728	16.728	(1.135)	484654	40.0000	46.3
101 Benzo(ghi)perylene	276	17.200	17.200	(1.167)	494315	40.0000	48.5
126 m-Dinitrobenzene	168	7.596	7.596	(0.967)	84054	40.0000	41.7
130 2,3,4,6-Tetrachlorophenol	232	8.205	8.205	(1.044)	117518	40.0000	45.0
143 Dinoseb	211	9.438	9.438	(0.997)	112614	40.0000	42.0
173 Carbazole	167	9.716	9.716	(1.026)	562755	40.0000	40.3
184 p-Benzoquinone	54	3.998	3.998	(0.845)	11157	40.0000	15.5
192 Methoxychlor	227	12.320	12.320	(0.989)	394706	40.0000	38.1
211 p-Toluidine	106	5.142	5.142	(1.087)	206443	40.0000	40.7
210 m-Toluidine	106	5.175	5.175	(1.094)	237026	40.0000	37.4
26 Phthalic anhydride	104	6.796	6.796	(1.134)	27729	40.0000	19.5
214 1,4-Dinitrobenzene	75	7.512	7.512	(0.956)	86461	40.0000	39.5
215 2-Ethoxyethanol	59	2.474	2.474	(0.523)	132081	40.0000	33.0
216 Methylenebis(2-chloroaniline)	231	12.389	12.389	(0.994)	99293	40.0000	41.9(Q)
M 225 Trichlorophenols	196				279672	80.0000	83.3
M 226 Tetrachlorophenols	232				117518	40.0000	45.0
M 227 Benzo(b,k)fluoranthene	252				1211456	80.0000	78.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120409.b/s610402.d
Date : 04-DEC-2009 10:02
Client ID: MEGACVS
Sample Info: iWBN091106-05,2140 PPM1I1SVHF1I1MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagi
Column diameter: 0.20

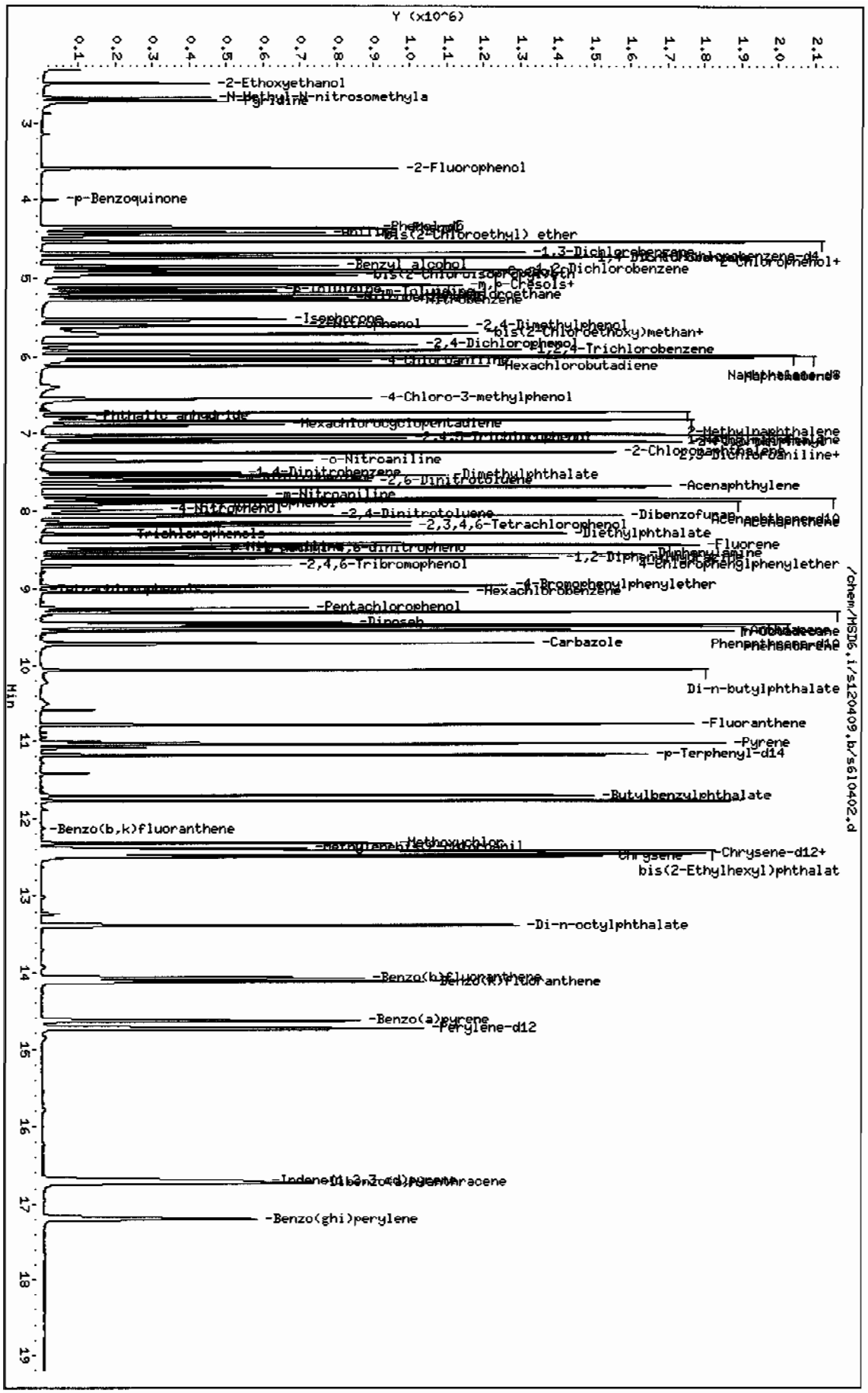

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:30
Lab File ID: s610403.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.86384	0.86384	0.000	0.29732	60.00000	Averaged
16 Acetophenone	1.16908	1.14719	1.14719	0.000	-1.87213	60.00000	Averaged
189 Caprolactam	0.07388	0.08380	0.08380	0.000	13.42166	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.13540	1.13540	0.000	-5.48628	60.00000	Averaged
207 Atrazine	0.04063	0.03853	0.03853	0.000	-5.18077	60.00000	Averaged
77 Benzidine	0.39304	0.39359	0.39359	0.000	0.14164	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.29238	0.29238	0.000	3.49156	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.33379	0.33379	0.000	-8.81449	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.18464	0.18464	0.000	-4.76584	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.71781	0.71781	0.000	-10.89815	60.00000	Averaged
105 2-Picoline	1.30872	1.19166	1.19166	0.000	-8.94509	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.47088	0.47088	0.000	-7.85776	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.47460	0.47460	0.000	-10.20162	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.48508	0.48508	0.000	-2.10895	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.60114	0.60114	0.000	-7.75679	60.00000	Averaged
110 Pentachloroethane	0.31681	0.31032	0.31032	0.000	-2.04621	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.52389	0.52389	0.000	10.02928	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.66181	0.66181	0.000	-2.58439	60.00000	Averaged
114 o-Toluidine	1.65281	1.61706	1.61706	0.000	-2.16342	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.14180	0.14180	0.000	0.52663	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.80876	0.80876	0.000	-5.45843	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.21325	0.21325	0.000	3.08158	60.00000	Averaged
119 Hexachloropropene	0.10269	0.10480	0.10480	0.000	2.05585	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.22937	0.22937	0.000	-0.07586	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.20121	0.20121	0.000	-4.20314	60.00000	Averaged
122 Safrole	0.18653	0.19023	0.19023	0.000	1.98745	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.40304	0.40304	0.000	-4.76235	60.00000	Averaged
124 Isosafrole	0.33959	0.32781	0.32781	0.000	-3.46892	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.26662	0.26662	0.000	-13.07706	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36587	0.36587	0.000	0.36364	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.90808	0.90808	0.000	0.07313	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.98608	0.98608	0.000	0.60813	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.28585	0.28585	0.000	2.45340	60.00000	Averaged
136 1,3,5-Trinitrobenzene	36.62659	40.00000	0.10697	0.000	-8.43353	60.00000	Linear
137 Phenacetin	0.26240	0.25209	0.25209	0.000	-3.92721	60.00000	Averaged
138 Diallate	0.24056	0.22939	0.22939	0.000	-4.64205	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:30
Lab File ID: s610403.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.56434	0.56434	0.000	5.36241	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.05938	0.05938	0.000	-4.10423	60.00000	Averaged
142 Pronamide	0.26319	0.24970	0.24970	0.000	-5.12637	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02138	0.02138	0.000	-8.98875	60.00000	Averaged
147 Methapyrilene	0.38600	0.37363	0.37363	0.000	-3.20660	60.00000	Averaged
148 Isodrin	0.09631	0.09869	0.09869	0.000	2.47720	60.00000	Averaged
149 Aramite	0.04420	0.04722	0.04722	0.000	6.83133	60.00000	Averaged
150 Kepone	0.06173	0.07035	0.07035	0.000	13.96758	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.27305	0.27305	0.000	-13.95626	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.26334	0.26334	0.000	-9.59810	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.51809	0.51809	0.000	-1.80860	60.00000	Averaged
155 2-Acetylaminofluorene	41.91862	40.00000	0.34467	0.000	4.79655	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.42632	0.42632	0.000	-11.00999	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.39925	0.39925	0.000	8.03534	60.00000	Averaged
212 Cis Diallate	0.25295	0.23080	0.23080	0.000	-8.75707	60.00000	Averaged
213 Trans Diallate	0.28301	0.26988	0.26988	0.000	-4.64205	60.00000	Averaged

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Data file : /chem/MSD6.i/s120409.b/s610403.d
Lab Smp Id: WBN091201-03.2 Client Smp ID: APCVS
Inj Date : 04-DEC-2009 10:30
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091201-03.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.727	4.727	(1.000)	226850	40.0000	
* 29 Naphthalene-d8	136	5.990	5.990	(1.000)	838473	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.853	(1.000)	476434	40.0000	
* 67 Phenanthrene-d10	188	9.469	9.469	(1.000)	850357	40.0000	
* 91 Chrysene-d12	240	12.452	12.452	(1.000)	769541	40.0000	
* 98 Perylene-d12	264	14.733	14.733	(1.000)	694904	40.0000	
209 Benzaldehyde	77	4.332	4.332	(0.916)	195961	40.0000	40.1
16 Acetophenone	105	5.099	5.099	(1.079)	260240	40.0000	39.2
189 Caprolactam	113	6.424	6.424	(1.072)	70261	40.0000	45.4
208 1,1'-Biphenyl	154	7.226	7.226	(0.920)	540944	40.0000	37.8
207 Atrazine	173	9.132	9.132	(0.964)	32764	40.0000	37.9
77 Benzidine	184	10.913	10.913	(0.876)	302886	40.0000	40.0
90 3,3'-Dichlorobenzidine	252	12.384	12.384	(0.994)	224998	40.0000	41.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.477	2.477	(0.524)	75721	40.0000	36.5
103 Methyl methacrylate	100	2.472	2.472	(0.523)	41885	40.0000	38.1
104 Ethyl methacrylate	69	2.940	2.940	(0.622)	162835	40.0000	35.6
105 2-Picoline	93	3.185	3.185	(0.674)	270327	40.0000	36.4
106 N-Nitrosomethylethylamine	88	3.246	3.246	(0.687)	106819	40.0000	36.8
107 Methyl methanesulfonate	80	3.463	3.463	(0.733)	107664	40.0000	35.9
108 N-Nitrosodiethylamine	102	3.781	3.781	(0.800)	110041	40.0000	39.2
109 Ethyl Methanesulfonate	79	4.011	4.011	(0.848)	136368	40.0000	36.9
110 Pentachloroethane	167	4.472	4.472	(0.946)	70397	40.0000	39.2
111 N-Nitrosopyrrolidine	100	5.083	5.083	(1.075)	118844	40.0000	44.0(Q)
113 N-Nitrosomorpholine	56	5.116	5.116	(1.082)	150131	40.0000	39.0
114 o-Toluidine	106	5.137	5.137	(1.087)	366829	40.0000	39.1
115 N-Nitrosopiperidine	114	5.425	5.425	(0.906)	118892	40.0000	40.2
116 a,a-Dimethylphenethylamine	58	5.799	5.799	(0.968)	678125	40.0000	37.8
118 2,6-Dichlorophenol	162	6.067	6.067	(1.013)	178802	40.0000	41.2
119 Hexachloropropene	213	6.097	6.097	(1.018)	87869	40.0000	40.8
120 p-Phenylenediamine	108	6.431	6.431	(1.074)	192322	40.0000	40.0
121 N-Nitrosodi-n-butylamine	84	6.396	6.396	(1.068)	168713	40.0000	38.3(T)
122 Safrole	162	6.627	6.627	(1.106)	159505	40.0000	40.8
123 1,2,4,5-Tetrachlorobenzene	216	6.908	6.908	(0.880)	192022	40.0000	38.1
124 Isosafrole	162	7.180	7.180	(0.914)	156180	40.0000	38.6
125 1,4-Naphthoquinone	158	7.440	7.440	(0.947)	127029	40.0000	34.8
127 Pentachlorobenzene	250	8.029	8.029	(1.022)	174312	40.0000	40.1
128 1-Naphthylamine	143	8.159	8.159	(1.039)	432640	40.0000	40.0
129 2-Naphthylamine	143	8.243	8.243	(1.050)	469803	40.0000	40.2
131 5-Nitro-o-toluidine	152	8.452	8.452	(1.076)	136190	40.0000	41.0
136 1,3,5-Trinitrobenzene	75	8.842	8.842	(0.934)	90965	40.0000	36.6
137 Phenacetin	108	8.895	8.895	(0.939)	214367	40.0000	38.4(Q)
138 Diallate	86	8.862	8.862	(0.936)	195067	40.0000	38.1
140 4-Aminobiphenyl	169	9.249	9.249	(0.977)	479888	40.0000	42.1
141 Pentachloronitrobenzene	237	9.265	9.265	(0.978)	50495	40.0000	38.4(Q)
142 Pronamide	173	9.300	9.300	(0.982)	212331	40.0000	37.9
146 4-Nitroquinoline-1-oxide	101	10.322	10.322	(1.090)	18182	40.0000	36.4
147 Methapyrilene	58	10.391	10.391	(1.097)	317715	40.0000	38.7
148 Isodrin	193	10.615	10.615	(1.121)	83924	40.0000	41.0
149 Aramite	185	11.140	11.140	(1.177)	40154	40.0000	42.7
150 Kepone	272	11.787	11.787	(1.245)	59823	40.0000	45.6
151 p-(Dimethylamino)azobenzene	120	11.329	11.329	(0.910)	210123	40.0000	34.4
152 Chlorobenzilate	251	11.372	11.372	(0.913)	202649	40.0000	36.2
153 3,3'-Dimethylbenzidine	212	11.703	11.703	(0.940)	398693	40.0000	39.3
155 2-Acetylaminofluorene	181	12.017	12.017	(0.965)	265236	40.0000	41.9
157 7,12Dimethylbenz(a)anthracene	256	14.048	14.048	(0.953)	296248	40.0000	35.6
158 3-Methylcholanthrene	268	15.253	15.253	(1.035)	277437	40.0000	43.2(Q)
212 Cis Diallate	86	8.962	8.962	(0.946)	29439	6.00000	5.5
213 Trans Diallate	86	8.862	8.862	(0.936)	195067	34.0000	32.4

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120409.b/s10403.d
Date : 04-DEC-2009 10:30
Client ID: APCVS
Sample Info: WBN091201-03,2140 PPM!1!SVMF1!1!APCVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

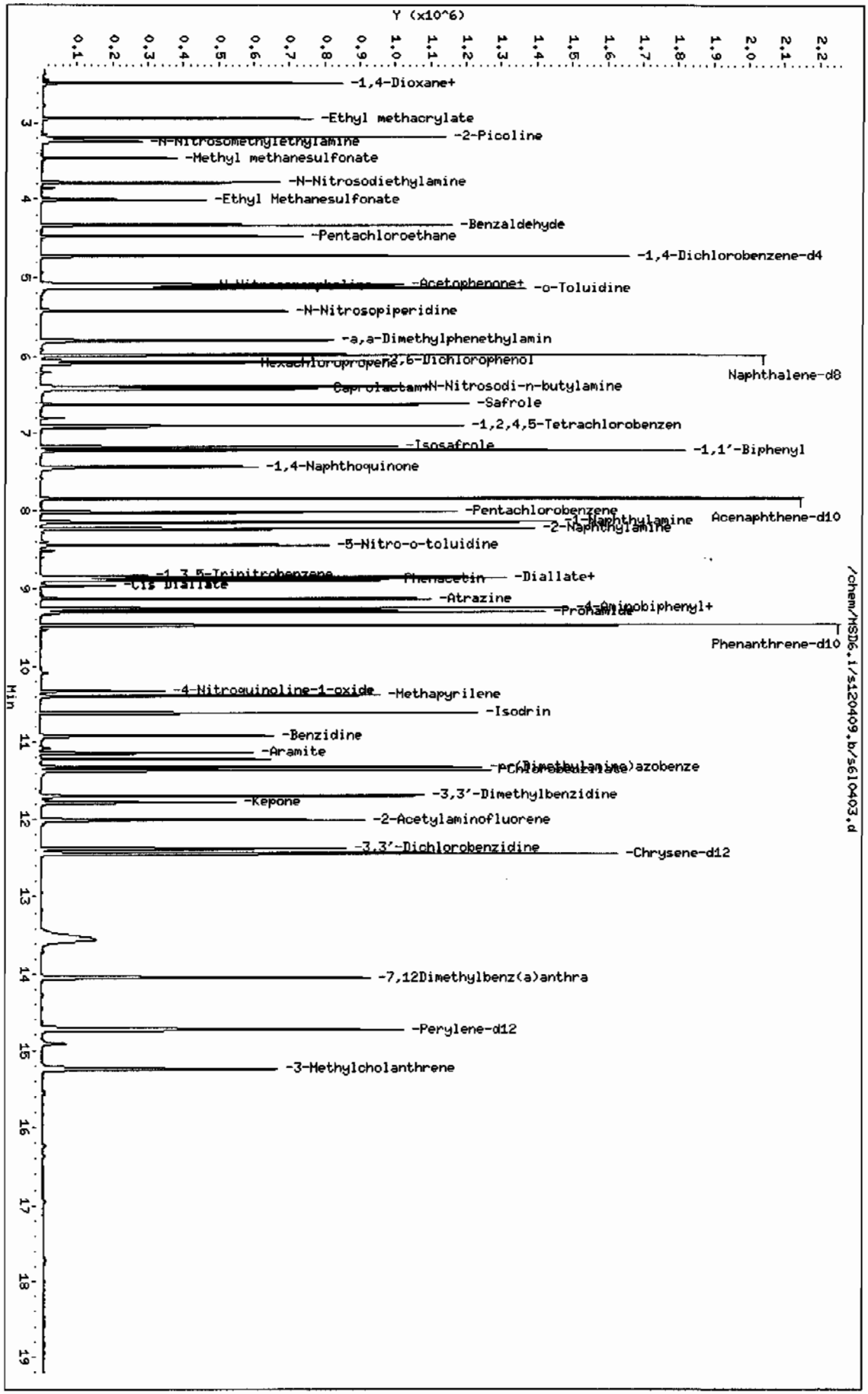

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 10:46
Lab File ID: s610502.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.4 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.00169	0.80670	0.80670	0.000	-19.46566	60.00000	Averaged
$ 5 Phenol-d5	1.26427	1.17175	1.17175	0.000	-7.31838	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28296	0.24736	0.24736	0.000	-12.58217	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.03083	0.99499	0.99499	0.000	-3.47725	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11675	0.13041	0.13041	0.000	11.70482	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.64507	0.60201	0.60201	0.000	-6.67406	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.45940	0.45940	0.000	-32.53738	60.00000	Averaged
2 Pyridine	0.84757	0.53734	0.53734	0.000	-36.60279	60.00000	Averaged
4 Aniline	0.52752	0.45729	0.45729	0.000	-13.31259	60.00000	Averaged
6 Phenol	1.27120	1.17240	1.17240	0.001	-7.77196	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.74407	0.74407	0.000	-13.56132	60.00000	Averaged
8 2-Chlorophenol	1.02109	0.96674	0.96674	0.000	-5.32285	60.00000	Averaged
203 n-Decane	1.42254	1.16523	1.16523	0.000	-18.08762	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.14778	1.14778	0.000	-2.35762	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.16978	1.16978	0.001	-1.83310	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.12061	1.12061	0.000	0.74618	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.77994	1.77994	0.000	-7.38267	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.37599	0.37599	0.000	-40.73011	60.00000	Averaged
15 o-Cresol	0.83139	0.78339	0.78339	0.000	-5.77281	60.00000	Averaged
18 m,p-Cresols	1.05346	1.00421	1.00421	0.000	-4.67468	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.74628	0.74628	0.050	5.30914	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.45060	0.45060	0.000	-2.25440	60.00000	Averaged
21 Nitrobenzene	0.28519	0.25637	0.25637	0.000	-10.10681	60.00000	Averaged
22 Isophorone	0.50552	0.48509	0.48509	0.000	-4.04014	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13461	0.13461	0.001	2.32882	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.18735	0.18735	0.000	-14.04177	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.27923	0.27923	0.000	-6.14009	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.19642	0.19642	0.001	-0.64128	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.13799	0.13799	0.000	2.57316	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.23692	0.23692	0.000	-2.34565	60.00000	Averaged
30 Naphthalene	0.79792	0.70047	0.70047	0.000	-12.21297	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.21088	0.21088	0.000	-3.56502	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.24532	0.24532	0.000	-4.34264	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.12169	0.12169	0.001	-3.68374	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.20460	0.20460	0.001	2.52111	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.47801	0.47801	0.000	-0.72529	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610502.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.4
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

Injection Date: 05-DEC-2009 10:46
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.47100	0.47002	0.47002	0.000	-0.20965	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.18968	0.18968	0.050	17.40098	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.47908	0.45744	0.45744	0.000	-4.51712	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.26748	0.26748	0.001	-2.00108	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.29067	0.27733	0.27733	0.000	-4.58985	60.00000	Averaged
40 2-Chloronaphthalene	0.89832	0.87190	0.87190	0.000	-2.94195	60.00000	Averaged
42 o-Nitroaniline	0.30732	0.26977	0.26977	0.000	-12.22112	60.00000	Averaged
41 m-Nitroaniline	0.22497	0.20886	0.20886	0.000	-7.16256	60.00000	Averaged
43 Dimethylphthalate	1.02610	1.00433	1.00433	0.000	-2.12162	60.00000	Averaged
44 2,6-Dinitrotoluene	0.24475	0.24005	0.24005	0.000	-1.92047	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30862	0.30491	0.30491	0.000	-1.20165	60.00000	Averaged
45 Acenaphthylene	1.44438	1.41727	1.41727	0.000	-1.87682	60.00000	Averaged
47 Acenaphthene	0.90151	0.84184	0.84184	0.001	-6.61898	20.00000	Averaged ccc
48 2,4-Dinitrophenol	48.48831	40.00000	0.11111	0.050	21.22078	60.00000	Linear spcc
49 Dibenzofuran	1.21689	1.19777	1.19777	0.000	-1.57077	60.00000	Averaged
51 Diethylphthalate	1.03335	1.00202	1.00202	0.000	-3.03199	60.00000	Averaged
52 4-Nitrophenol	39.29622	40.00000	0.16123	0.050	-1.75945	60.00000	Linear spcc
53 Fluorene	0.99879	0.98682	0.98682	0.000	-1.19906	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47192	0.47369	0.47369	0.000	0.37530	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	42.33229	40.00000	0.09498	0.000	5.83073	60.00000	Linear
56 p-Nitroaniline	37.52631	40.00000	0.19430	0.000	-6.18422	60.00000	Linear
133 Diphenylamine	0.48213	0.47114	0.47114	0.001	-2.27985	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.61327	0.56973	0.56973	0.000	-7.09982	60.00000	Averaged
61 4-Bromophenylphenylether	0.15784	0.15797	0.15797	0.000	0.08661	60.00000	Averaged
63 Hexachlorobenzene	0.16533	0.16565	0.16565	0.000	0.19175	60.00000	Averaged
65 Pentachlorophenol	41.09697	40.00000	0.08900	0.001	2.74243	20.00000	Linear ccc
206 n-Octadecane	0.44173	0.42475	0.42475	0.000	-3.84528	60.00000	Averaged
68 Phenanthrene	0.82721	0.79982	0.79982	0.000	-3.31214	60.00000	Averaged
69 Anthracene	0.82682	0.81069	0.81069	0.000	-1.95109	60.00000	Averaged
72 Di-n-butylphthalate	0.94954	0.95959	0.95959	0.000	1.05851	60.00000	Averaged
76 Fluoranthene	0.79242	0.79502	0.79502	0.001	0.32799	20.00000	Averaged ccc
79 Pyrene	1.10021	0.97786	0.97786	0.000	-11.12063	60.00000	Averaged
85 Butylbenzylphthalate	0.50351	0.47745	0.47745	0.000	-5.17512	60.00000	Averaged
89 Benzo(a)anthracene	0.86301	0.81555	0.81555	0.000	-5.49953	60.00000	Averaged
92 Chrysene	0.82690	0.80336	0.80336	0.000	-2.84602	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	39.33104	40.00000	0.68206	0.000	-1.67239	60.00000	Wt Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 10:46
Lab File ID: s610502.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.4 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.22300	1.22300	0.001	-3.79727	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.83101	0.83101	0.000	-6.10866	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	0.85201	0.85201	0.000	-3.19277	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.77620	0.77620	0.001	1.53457	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	43.60546	40.00000	0.79888	0.000	9.01366	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	44.22736	40.00000	0.66086	0.000	10.56839	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.67457	0.67457	0.000	15.50263	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17288	0.17288	0.000	2.11758	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.22733	0.22733	0.000	3.82373	60.00000	Averaged	
	143 Dinoseb	41.03302	40.00000	0.12835	0.000	2.58255	60.00000	Linear	
	173 Carbazole	0.65449	0.60296	0.60296	0.000	-7.87362	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.08219	0.08219	0.000	-35.43941	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.53643	0.53643	0.000	-2.89729	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.82200	0.82200	0.000	-8.65437	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.08508	1.08508	0.000	-3.45911	60.00000	Averaged	
	26 Phthalic anhydride	28.75720	40.00000	0.05128	0.000	-28.10700	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17085	0.17085	0.000	-7.05345	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.33704	0.33704	0.000	-52.55345	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.07476	40.00000	0.11854	0.000	-4.81310	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.27240	0.27240	0.000	-3.33619	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.22733	0.22733	0.000	3.82373	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	0.84151	0.84151	0.000	-4.65482	60.00000	Averaged	

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Data file : /chem/MSD6.i/s120509.b/s610502.d
Lab Smp Id: WBN091106-05.4 Client Smp ID: MEGACVS
Inj Date : 05-DEC-2009 10:46
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091106-05.4|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.719	4.719	(1.000)	232623	40.0000	
* 29 Naphthalene-d8	136	5.988	5.988	(1.000)	1017627	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.856	(1.000)	527825	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.466	(1.000)	924477	40.0000	
* 91 Chrysene-d12	240	12.460	12.460	(1.000)	791288	40.0000	
* 98 Perylene-d12	264	14.736	14.736	(1.000)	729958	40.0000	
$ 3 2-Fluorophenol	112	3.577	3.577	(0.758)	187658	40.0000	32.2
$ 5 Phenol-d5	99	4.342	4.342	(0.920)	272575	40.0000	37.1
$ 20 Nitrobenzene-d5	82	5.251	5.251	(0.877)	251716	40.0000	35.0
$ 39 2-Fluorobiphenyl	172	7.112	7.112	(0.905)	525179	40.0000	38.6
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.108)	68836	40.0000	44.7
$ 81 p-Terphenyl-d14	244	11.178	11.178	(0.897)	476367	40.0000	37.3
1 N-Methyl-N-nitrosomethylamine	74	2.642	2.642	(0.560)	106868	40.0000	27.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
2 Pyridine	79	2.686	2.686	(0.569)	124997	40.0000	25.4
4 Aniline	66	4.411	4.411	(0.935)	106377	40.0000	34.7
6 Phenol	94	4.357	4.357	(0.923)	272727	40.0000	36.9
7 bis(2-Chloroethyl) ether	63	4.451	4.451	(0.943)	173088	40.0000	34.6
8 2-Chlorophenol	128	4.525	4.525	(0.959)	224886	40.0000	37.9
203 n-Decane	43	4.533	4.533	(0.961)	271060	40.0000	32.8
9 1,3-Dichlorobenzene	146	4.671	4.671	(0.990)	267001	40.0000	39.0
11 1,4-Dichlorobenzene	146	4.737	4.737	(1.004)	272117	40.0000	39.3
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.035)	260679	40.0000	40.3
14 bis(2-Chloroisopropyl)ether	45	4.953	4.953	(1.050)	414055	40.0000	37.0
12 Benzyl alcohol	108	4.834	4.834	(1.024)	87463	40.0000	23.7
15 o-Cresol	107	4.920	4.920	(1.043)	182235	40.0000	37.7
18 m,p-Cresols	107	5.076	5.076	(1.076)	233603	40.0000	38.1
17 N-Nitrosodipropylamine	70	5.091	5.091	(1.079)	173601	40.0000	42.1
19 Hexachloroethane	117	5.213	5.213	(1.105)	104821	40.0000	39.1
21 Nitrobenzene	77	5.272	5.272	(0.880)	260886	40.0000	36.0
22 Isophorone	82	5.509	5.509	(0.920)	493643	40.0000	38.4
23 2-Nitrophenol	139	5.585	5.585	(0.933)	136981	40.0000	40.9
24 2,4-Dimethylphenol	122	5.606	5.606	(0.936)	190650	40.0000	34.4
25 bis(2-Chloroethoxy)methane	93	5.705	5.705	(0.953)	284148	40.0000	37.5
26 2,4-Dichlorophenol	162	5.835	5.835	(0.974)	199880	40.0000	39.7
27 Benzoic acid	105	5.718	5.718	(0.955)	140423	40.0000	41.0
28 1,2,4-Trichlorobenzene	180	5.919	5.919	(0.988)	241100	40.0000	39.1
30 Naphthalene	128	6.011	6.011	(1.004)	712814	40.0000	35.1
204 alpha-Terpineol	59	6.001	6.001	(1.002)	214600	40.0000	38.6
31 4-Chloroaniline	127	6.049	6.049	(1.010)	249645	40.0000	38.3
32 Hexachlorobutadiene	225	6.120	6.120	(1.022)	123831	40.0000	38.5
33 4-Chloro-3-methylphenol	107	6.546	6.546	(1.093)	208203	40.0000	41.0
34 2-Methylnaphthalene	142	6.729	6.729	(1.124)	486432	40.0000	39.7
35 1-Methylnaphthalene	142	6.836	6.836	(1.142)	478301	40.0000	39.9
36 Hexachlorocyclopentadiene	237	6.890	6.890	(0.877)	100119	40.0000	47.0
205 2,3-Dichloroaniline	161	7.028	7.028	(0.895)	241447	40.0000	38.2
37 2,4,6-Trichlorophenol	196	7.025	7.025	(0.894)	141181	40.0000	39.2
38 2,4,5-Trichlorophenol	196	7.068	7.068	(0.900)	146380	40.0000	38.2
40 2-Chloronaphthalene	162	7.254	7.254	(0.923)	460208	40.0000	38.8
42 o-Nitroaniline	65	7.359	7.359	(0.937)	142389	40.0000	35.1
41 m-Nitroaniline	138	7.802	7.802	(0.993)	110240	40.0000	37.1
43 Dimethylphthalate	163	7.550	7.550	(0.961)	530111	40.0000	39.2
44 2,6-Dinitrotoluene	165	7.616	7.616	(0.970)	126703	40.0000	39.2
50 2,4-Dinitrotoluene	165	8.054	8.054	(1.025)	160940	40.0000	39.5
45 Acenaphthylene	152	7.703	7.703	(0.981)	748072	40.0000	39.2
47 Acenaphthene	154	7.891	7.891	(1.005)	444344	40.0000	37.4
48 2,4-Dinitrophenol	184	7.914	7.914	(1.007)	58645	40.0000	48.5
49 Dibenzofuran	168	8.072	8.072	(1.028)	632215	40.0000	39.4
51 Diethylphthalate	149	8.299	8.299	(1.056)	528889	40.0000	38.8
52 4-Nitrophenol	139	7.983	7.983	(1.016)	85102	40.0000	39.3
53 Fluorene	166	8.444	8.444	(1.075)	520867	40.0000	39.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.432	8.432	(1.073)	250027	40.0000	40.2
55 2-Methyl-4,6-dinitrophenol	198	8.493	8.493	(0.897)	87806	40.0000	42.3
56 p-Nitroaniline	138	8.465	8.465	(1.078)	102555	40.0000	37.5
133 Diphenylamine	169	8.561	8.561	(0.904)	435560	40.0000	39.1
58 1,2-Diphenylhydrazine	77	8.605	8.605	(0.909)	526700	40.0000	37.2
61 4-Bromophenylphenylether	248	8.964	8.964	(0.947)	146044	40.0000	40.0
63 Hexachlorobenzene	284	9.041	9.041	(0.955)	153137	40.0000	40.1
65 Pentachlorophenol	266	9.249	9.249	(0.977)	82274	40.0000	41.1
206 n-Octadecane	57	9.303	9.303	(0.983)	392668	40.0000	38.5
68 Phenanthrene	178	9.492	9.492	(1.003)	739411	40.0000	38.7
69 Anthracene	178	9.548	9.548	(1.009)	749466	40.0000	39.2
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	887116	40.0000	40.4
76 Fluoranthene	202	10.781	10.781	(1.139)	734976	40.0000	40.1
79 Pyrene	202	11.031	11.031	(0.885)	773766	40.0000	35.6
85 Butylbenzylphthalate	149	11.706	11.706	(0.939)	377799	40.0000	37.9
89 Benzo(a)anthracene	228	12.440	12.440	(0.998)	645331	40.0000	37.8
92 Chrysene	228	12.493	12.493	(1.003)	635693	40.0000	38.9
93 bis(2-Ethylhexyl)phthalate	149	12.417	12.417	(0.997)	539705	40.0000	39.3
94 Di-n-octylphthalate	149	13.377	13.377	(0.908)	892738	40.0000	38.5
95 Benzo(b)fluoranthene	252	14.073	14.073	(0.955)	606601	40.0000	37.6
96 Benzo(k)fluoranthene	252	14.119	14.119	(0.958)	621929	40.0000	38.7
97 Benzo(a)pyrene	252	14.636	14.636	(0.993)	566592	40.0000	40.6
99 Indeno(1,2,3-cd)pyrene	276	16.692	16.692	(1.133)	583150	40.0000	43.6
100 Dibenzo(a,h)anthracene	278	16.726	16.726	(1.135)	482397	40.0000	44.2
101 Benzo(ghi)perylene	276	17.197	17.197	(1.167)	492406	40.0000	46.2(Q)
126 m-Dinitrobenzene	168	7.593	7.593	(0.967)	91250	40.0000	40.8
130 2,3,4,6-Tetrachlorophenol	232	8.200	8.200	(1.044)	119991	40.0000	41.5
143 Dinoseb	211	9.433	9.433	(0.996)	118655	40.0000	41.0
173 Carbazole	167	9.711	9.711	(1.026)	557425	40.0000	36.8
184 p-Benzoquinone	54	3.988	3.988	(0.845)	19119	40.0000	25.8
192 Methoxychlor	227	12.317	12.317	(0.989)	424468	40.0000	38.8
211 p-Toluidine	106	5.134	5.134	(1.088)	191215	40.0000	36.5
210 m-Toluidine	106	5.170	5.170	(1.096)	252415	40.0000	38.6
26 Phthalic anhydride	104	6.793	6.793	(1.134)	52187	40.0000	28.8
214 1,4-Dinitrobenzene	75	7.507	7.507	(0.956)	90179	40.0000	37.2
215 2-Ethoxyethanol	59	2.449	2.449	(0.519)	78403	40.0000	19.0
216 Methylenebis(2-chloroaniline)	231	12.386	12.386	(0.994)	93800	40.0000	38.1(Q)
M 225 Trichlorophenols	196				287561	80.0000	77.3
M 226 Tetrachlorophenols	232				119991	40.0000	41.5
M 227 Benzo(b,k)fluoranthene	252				1228530	80.0000	76.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610502.d
Date : 05-DEC-2009 10:46
Client ID: MEGACVS
Sample Info: IWBN091106-05,4|40 PPM|1|SVMF|1|MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

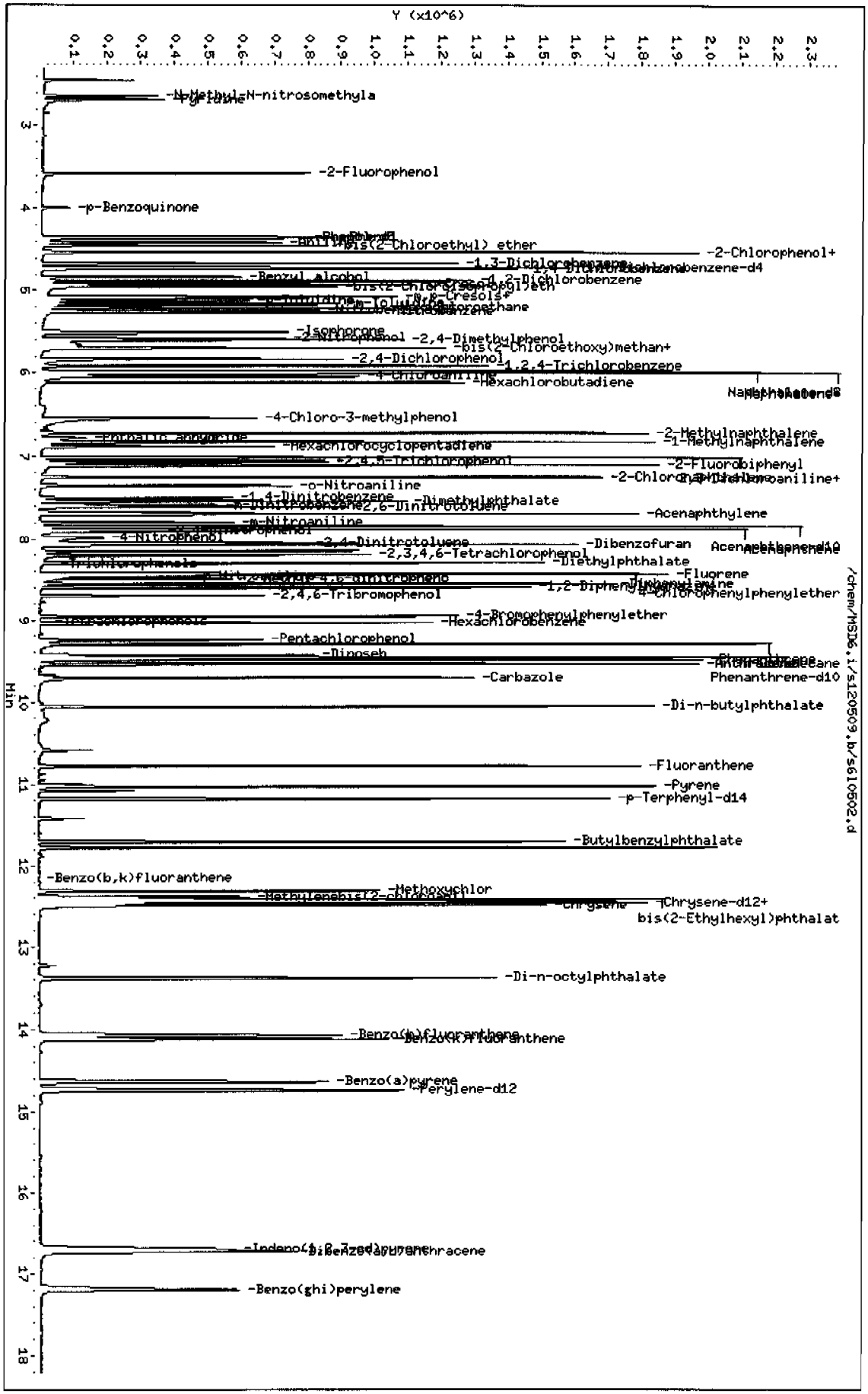

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 11:14
Lab File ID: s610503.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.79237	0.79237	0.000	-8.00023	60.00000	Averaged
16 Acetophenone	1.16908	1.13445	1.13445	0.000	-2.96193	60.00000	Averaged
189 Caprolactam	0.07388	0.08138	0.08138	0.000	10.14494	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.10939	1.10939	0.000	-7.65148	60.00000	Averaged
207 Atrazine	0.04063	0.03811	0.03811	0.000	-6.21191	60.00000	Averaged
77 Benzidine	0.39304	0.34950	0.34950	0.000	-11.07792	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.27841	0.27841	0.000	-1.45488	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.23366	0.23366	0.000	-36.16814	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.12854	0.12854	0.000	-33.70159	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.53934	0.53934	0.000	-33.05202	60.00000	Averaged
105 2-Picoline	1.30872	0.93437	0.93437	0.000	-28.60452	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.36686	0.36686	0.000	-28.21262	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.37774	0.37774	0.000	-28.52940	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.41358	0.41358	0.000	-16.53787	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.52516	0.52516	0.000	-19.41506	60.00000	Averaged
110 Pentachloroethane	0.31681	0.29185	0.29185	0.000	-7.87686	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.51847	0.51847	0.000	8.89214	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.63777	0.63777	0.000	-6.12276	60.00000	Averaged
114 o-Toluidine	1.65281	1.63900	1.63900	0.000	-0.83545	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.13254	0.13254	0.000	-6.03854	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.73038	0.73038	0.000	-14.62137	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20897	0.20897	0.000	1.01481	60.00000	Averaged
119 Hexachloropropene	0.10269	0.09611	0.09611	0.000	-6.40055	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.20409	0.20409	0.000	-11.08869	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.19596	0.19596	0.000	-6.70330	60.00000	Averaged
122 Safrole	0.18653	0.18463	0.18463	0.000	-1.01436	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.39797	0.39797	0.000	-5.96048	60.00000	Averaged
124 Isosafrole	0.33959	0.31895	0.31895	0.000	-6.07854	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.28848	0.28848	0.000	-5.95269	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36337	0.36337	0.000	-0.32040	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.87871	0.87871	0.000	-3.16392	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.94272	0.94272	0.000	-3.81637	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.27318	0.27318	0.000	-2.08763	60.00000	Averaged
136 1,3,5-Trinitrobenzene	37.46063	40.00000	0.10968	0.000	-6.34843	60.00000	Linear
137 Phenacetin	0.26240	0.24221	0.24221	0.000	-7.69463	60.00000	Averaged
138 Diallate	0.24056	0.22772	0.22772	0.000	-5.33793	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610503.d
Analysis Type: WATER
Lab Sample ID: WBN091201-03.2
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

Injection Date: 05-DEC-2009 11:14
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.54964	0.54964	0.000	2.61777	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.05729	0.05729	0.000	-7.47829	60.00000	Averaged
142 Pronamide	0.26319	0.24237	0.24237	0.000	-7.90894	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02303	0.02303	0.000	-1.95806	60.00000	Averaged
147 Methapyrilene	0.38600	0.34584	0.34584	0.000	-10.40471	60.00000	Averaged
148 Isodrin	0.09631	0.09698	0.09698	0.000	0.70286	60.00000	Averaged
149 Aramite	0.04420	0.04500	0.04500	0.000	1.81854	60.00000	Averaged
150 Kepone	0.06173	0.07109	0.07109	0.000	15.16824	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.27374	0.27374	0.000	-13.73966	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.25861	0.25861	0.000	-11.22143	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.47756	0.47756	0.000	-9.49117	60.00000	Averaged
155 2-Acetylaminofluorene	39.44427	40.00000	0.32159	0.000	-1.38933	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.42852	0.42852	0.000	-10.55060	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.39080	0.39080	0.000	5.75086	60.00000	Averaged
212 Cis Diallate	0.25295	0.23132	0.23132	0.000	-8.54848	60.00000	Averaged
213 Trans Diallate	0.28301	0.26791	0.26791	0.000	-5.33793	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610503.d
Lab Smp Id: WBN091201-03.2 Client Smp ID: APCVS
Inj Date : 05-DEC-2009 11:14
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091201-03.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.719	4.719	(1.000)	226673	40.0000	
* 29 Naphthalene-d8	136	5.983	5.983	(1.000)	916713	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.851	(1.000)	514494	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.464	(1.000)	887756	40.0000	
* 91 Chrysene-d12	240	12.450	12.450	(1.000)	768226	40.0000	
* 98 Perylene-d12	264	14.728	14.728	(1.000)	685228	40.0000	
209 Benzaldehyde	77	4.322	4.322	(0.916)	179609	40.0000	36.8
16 Acetophenone	105	5.091	5.091	(1.079)	257149	40.0000	38.8
189 Caprolactam	113	6.419	6.419	(1.073)	74598	40.0000	44.0
208 1,1'-Biphenyl	154	7.221	7.221	(0.920)	570775	40.0000	36.9
207 Atrazine	173	9.127	9.127	(0.964)	33833	40.0000	37.5
77 Benzidine	184	10.911	10.911	(0.876)	268492	40.0000	35.6
90 3,3'-Dichlorobenzidine	252	12.381	12.381	(0.994)	213878	40.0000	39.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.451	2.451	(0.519)	52965	40.0000	25.5
103 Methyl methacrylate	100	2.446	2.446	(0.518)	29136	40.0000	26.5
104 Ethyl methacrylate	69	2.923	2.923	(0.619)	122253	40.0000	26.8
105 2-Picoline	93	3.170	3.170	(0.672)	211796	40.0000	28.6
106 N-Nitrosomethylethylamine	88	3.231	3.231	(0.685)	83157	40.0000	28.7
107 Methyl methanesulfonate	80	3.450	3.450	(0.731)	85623	40.0000	28.6
108 N-Nitrosodiethylamine	102	3.771	3.771	(0.799)	93748	40.0000	33.4
109 Ethyl Methanesulfonate	79	4.000	4.000	(0.848)	119040	40.0000	32.2
110 Pentachloroethane	167	4.462	4.462	(0.945)	66155	40.0000	36.8
111 N-Nitrosopyrrolidine	100	5.078	5.078	(1.076)	117524	40.0000	43.6(Q)
113 N-Nitrosomorpholine	56	5.111	5.111	(1.083)	144565	40.0000	37.6
114 o-Toluidine	106	5.129	5.129	(1.087)	371518	40.0000	39.7
115 N-Nitrosopiperidine	114	5.417	5.417	(0.905)	121497	40.0000	37.6
116 a,a-Dimethylphenethylamine	58	5.792	5.792	(0.968)	669546	40.0000	34.2
118 2,6-Dichlorophenol	162	6.062	6.062	(1.013)	191567	40.0000	40.4
119 Hexachloropropene	213	6.090	6.090	(1.018)	88108	40.0000	37.4
120 p-Phenylenediamine	108	6.426	6.426	(1.074)	187094	40.0000	35.6
121 N-Nitrosodi-n-butylamine	84	6.391	6.391	(1.068)	179642	40.0000	37.3(T)
122 Safrole	162	6.620	6.620	(1.106)	169256	40.0000	39.6
123 1,2,4,5-Tetrachlorobenzene	216	6.903	6.903	(0.879)	204753	40.0000	37.6
124 Isosafrole	162	7.175	7.175	(0.914)	164097	40.0000	37.6
125 1,4-Naphthoquinone	158	7.435	7.435	(0.947)	148420	40.0000	37.6
127 Pentachlorobenzene	250	8.024	8.024	(1.022)	186954	40.0000	39.9
128 1-Naphthylamine	143	8.154	8.154	(1.039)	452089	40.0000	38.7
129 2-Naphthylamine	143	8.238	8.238	(1.049)	485022	40.0000	38.5
131 5-Nitro-o-toluidine	152	8.447	8.447	(1.076)	140551	40.0000	39.2
136 1,3,5-Trinitrobenzene	75	8.839	8.839	(0.934)	97368	40.0000	37.5
137 Phenacetin	108	8.893	8.893	(0.940)	215019	40.0000	36.9(Q)
138 Diallate	86	8.860	8.860	(0.936)	202160	40.0000	37.9
140 4-Aminobiphenyl	169	9.247	9.247	(0.977)	487943	40.0000	41.0
141 Pentachloronitrobenzene	237	9.260	9.260	(0.978)	50861	40.0000	37.0(Q)
142 Pronamide	173	9.295	9.295	(0.982)	215168	40.0000	36.8
146 4-Nitroquinoline-1-oxide	101	10.317	10.317	(1.090)	20448	40.0000	39.2
147 Methapyrilene	58	10.383	10.383	(1.097)	307022	40.0000	35.8
148 Isodrin	193	10.613	10.613	(1.121)	86098	40.0000	40.3
149 Aramite	185	11.138	11.138	(1.177)	39953	40.0000	40.7
150 Kepone	272	11.782	11.782	(1.245)	63112	40.0000	46.1
151 p-(Dimethylamino)azobenzene	120	11.326	11.326	(0.910)	210292	40.0000	34.5
152 Chlorobenzilate	251	11.370	11.370	(0.913)	198670	40.0000	35.5
153 3,3'-Dimethylbenzidine	212	11.701	11.701	(0.940)	366871	40.0000	36.2
155 2-Acetylaminofluorene	181	12.012	12.012	(0.965)	247053	40.0000	39.4
157 7,12Dimethylbenz(a)anthracene	256	14.045	14.045	(0.954)	293631	40.0000	35.8
158 3-Methylcholanthrene	268	15.243	15.243	(1.035)	267789	40.0000	42.3(Q)
212 Cis Diallate	86	8.959	8.959	(0.947)	30804	6.00000	5.5
213 Trans Diallate	86	8.860	8.860	(0.936)	202160	34.0000	32.2

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610503.d
Date : 05-DEC-2009 11:14
Client ID: APCVS
Sample Info: IWBN091201-03,2140 PPM!1!SVMF11!APCVS
Volume Injected (uL): 0.5
Column phase: JW DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

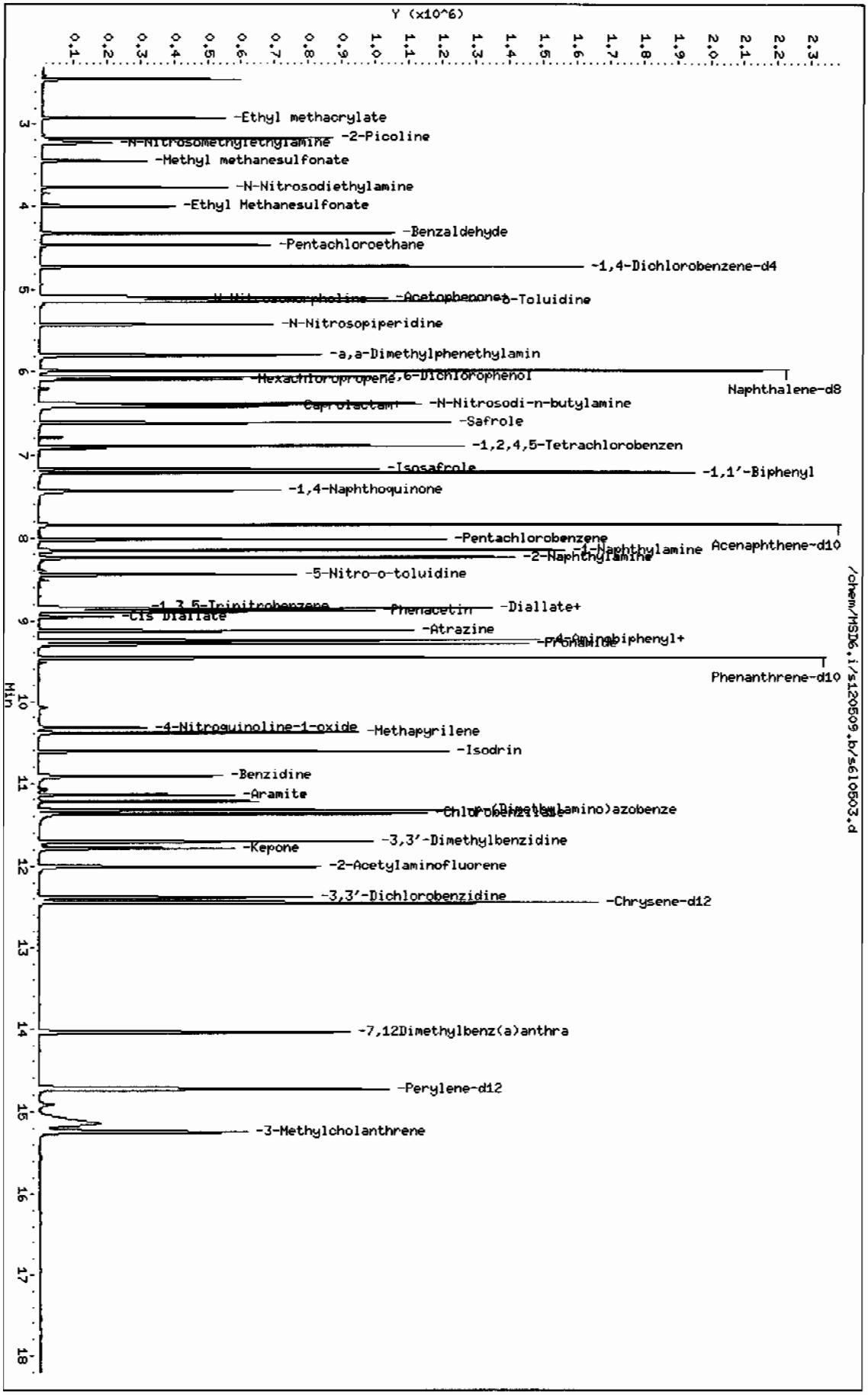

Page 1

QC Data

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

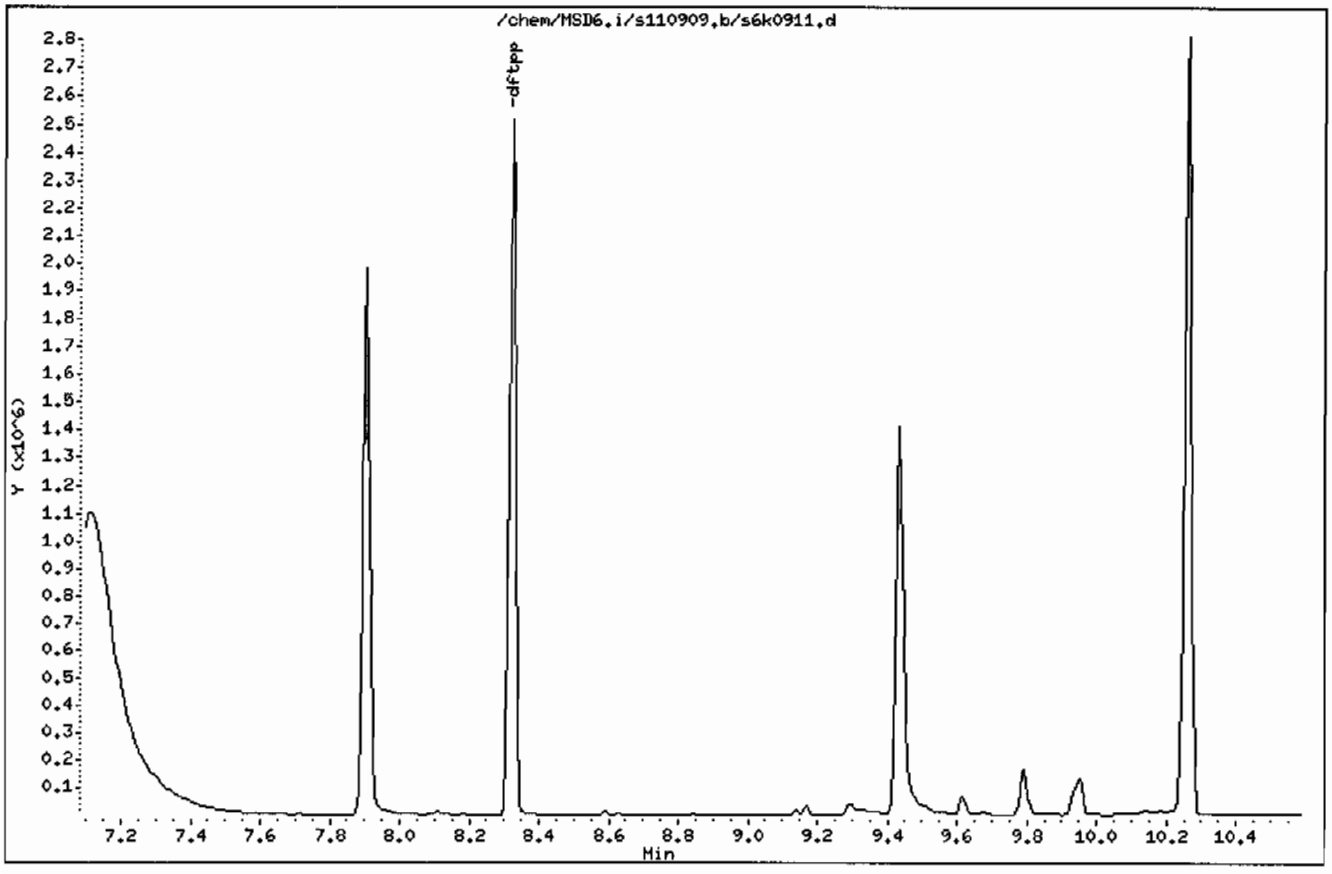

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

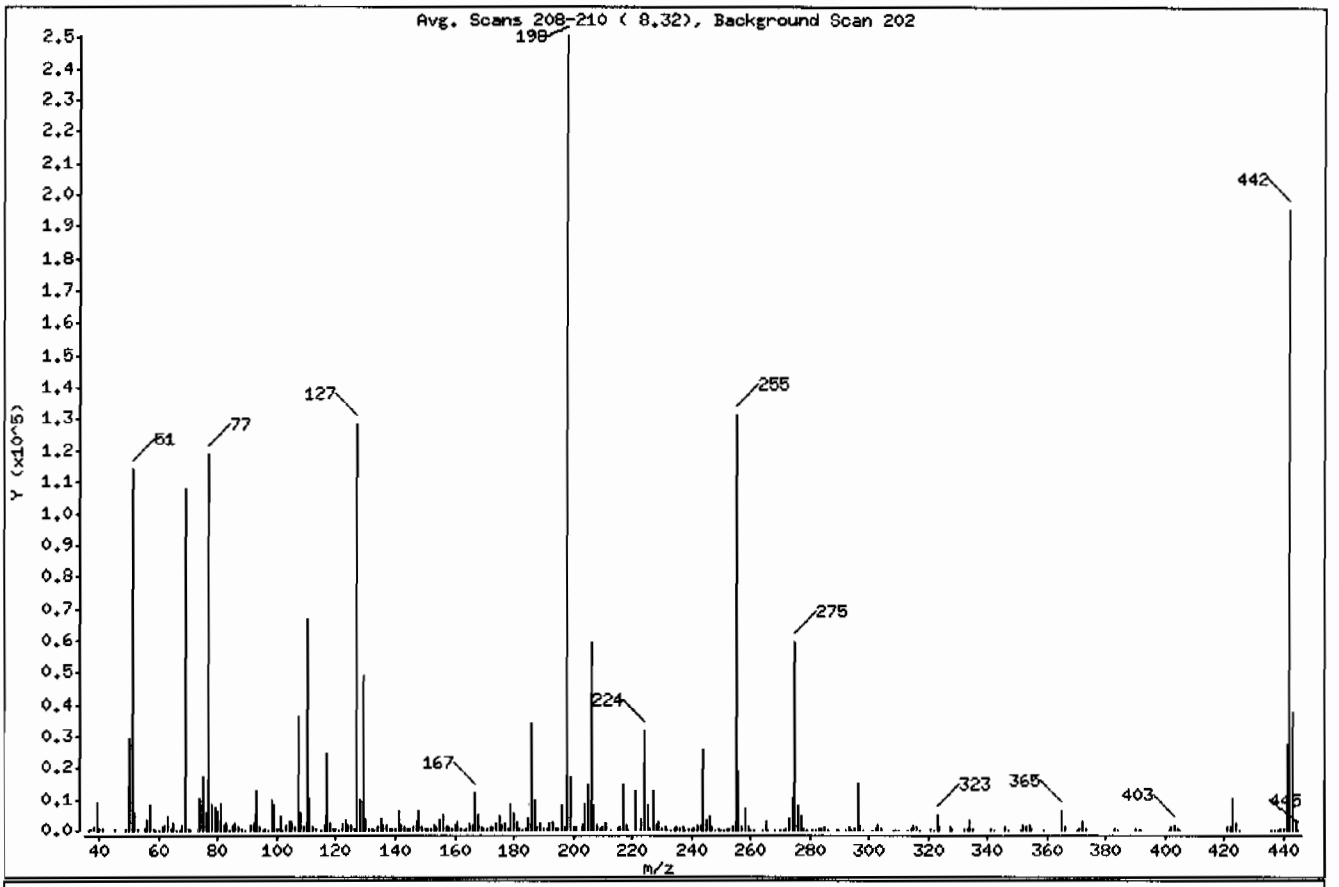

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.40
68	Less than 2.00% of mass 69	0.67 (1.56)
69	Mass 69 relative abundance	42.98
70	Less than 2.00% of mass 69	0.23 (0.53)
127	40.00 - 60.00% of mass 198	51.37
197	Less than 1.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 30.00% of mass 198	23.67
365	Greater than 1.00% of mass 198	2.45
441	Present, but less than mass 443	11.05
442	Greater than 40.00% of mass 198	77.94
443	17.00 - 23.00% of mass 442	14.94 (19.17)

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8	122.00	2302	198.00	250752	284.00	336
37.00	393	123.00	3695	199.00	17344	285.00	937
38.00	1200	124.00	1621	200.00	1195	286.00	170
39.00	9016	125.00	1448	201.00	1207	289.00	255
40.00	406	126.00	632	203.00	1659	290.00	159
41.00	292	127.00	128832	204.00	8363	292.00	259
45.00	305	128.00	9787	205.00	14289	293.00	1083
49.00	640	129.00	49280	206.00	59576	294.00	255
50.00	29544	130.00	4085	207.00	7878	295.00	324
51.00	113864	131.00	795	208.00	1898	296.00	14712
52.00	5719	132.00	464	209.00	609	297.00	1998
53.00	291	133.00	153	210.00	1016	298.00	48
55.00	556	134.00	1412	211.00	2089	301.00	220
56.00	3212	135.00	3908	213.00	96	302.00	374
57.00	7977	136.00	1509	215.00	674	303.00	1716
58.00	306	137.00	2002	216.00	1188	304.00	518
59.00	43	138.00	459	217.00	14324	308.00	142
60.00	144	139.00	392	218.00	1841	309.00	104
61.00	1384	140.00	751	219.00	194	310.00	127
62.00	1579	141.00	6116	221.00	12869	313.00	98
63.00	4522	142.00	1931	223.00	3368	314.00	758
64.00	592	143.00	1380	224.00	31752	315.00	1571
65.00	2251	144.00	329	225.00	7987	316.00	915
66.00	47	145.00	339	226.00	839	317.00	119
67.00	98	146.00	1032	227.00	12952	321.00	481
68.00	1681	147.00	3100	228.00	1848	322.00	229
69.00	107792	148.00	6347	229.00	2774	323.00	5178
70.00	566	149.00	1410	230.00	478	324.00	998
71.00	154	150.00	411	231.00	1257	327.00	960
73.00	818	151.00	692	232.00	280	328.00	487
74.00	10556	152.00	489	233.00	226	332.00	397
75.00	17208	153.00	1814	234.00	759	333.00	430
76.00	5735	154.00	1411	235.00	1001	334.00	3299
77.00	118792	155.00	3187	236.00	589	335.00	849
78.00	8119	156.00	5061	237.00	1093	341.00	644

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	7616	157.00	1047	238.00	176	342.00	184
80.00	6053	158.00	1005	239.00	483	346.00	1112
81.00	8741	159.00	819	240.00	449	347.00	197
82.00	1932	160.00	1690	241.00	776	351.00	99
83.00	2188	161.00	2737	242.00	1684	352.00	1491
84.00	232	162.00	809	243.00	1819	353.00	1169
85.00	1461	163.00	190	244.00	25832	354.00	1725
86.00	2130	164.00	335	245.00	3698	355.00	318
87.00	1162	165.00	2034	246.00	4786	359.00	103
88.00	449	166.00	1979	247.00	980	365.00	6134
89.00	268	167.00	12360	248.00	210	366.00	872
91.00	1835	168.00	5121	249.00	829	370.00	96
92.00	2163	169.00	1038	250.00	174	371.00	434
93.00	12786	170.00	446	251.00	238	372.00	2651
94.00	908	171.00	470	252.00	289	373.00	754
95.00	251	172.00	1064	253.00	569	383.00	711
96.00	626	173.00	1291	254.00	1047	384.00	258
97.00	236	174.00	2515	255.00	131328	390.00	402
98.00	9808	175.00	4789	256.00	18784	391.00	259
99.00	8032	176.00	1446	257.00	1424	392.00	153
100.00	745	177.00	2269	258.00	6873	401.00	116
101.00	4358	178.00	802	259.00	1148	402.00	1140
102.00	258	179.00	8475	260.00	228	403.00	1594
103.00	1616	180.00	5994	261.00	261	404.00	514
104.00	3096	181.00	2983	264.00	141	405.00	98
105.00	2795	182.00	429	265.00	2620	421.00	1430
106.00	910	183.00	259	266.00	251	422.00	1234
107.00	36184	184.00	679	268.00	180	423.00	10131
108.00	5604	185.00	3929	270.00	163	424.00	2144
109.00	997	186.00	34256	271.00	257	425.00	193
110.00	66656	187.00	9747	272.00	290	436.00	45
111.00	10177	188.00	1146	273.00	3906	437.00	191
112.00	1133	189.00	2105	274.00	10561	438.00	232
113.00	472	190.00	292	275.00	59368	439.00	301
115.00	217	191.00	815	276.00	7957	440.00	309

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1841	192.00	2423	277.00	4641	441.00	27712
117.00	25072	193.00	3008	278.00	676	442.00	195456
118.00	2060	194.00	699	279.00	175	443.00	37472
119.00	345	195.00	448	281.00	87	444.00	3400
120.00	476	196.00	7876	282.00	46	445.00	197
121.00	165	197.00	1433	283.00	505		

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Page 1

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

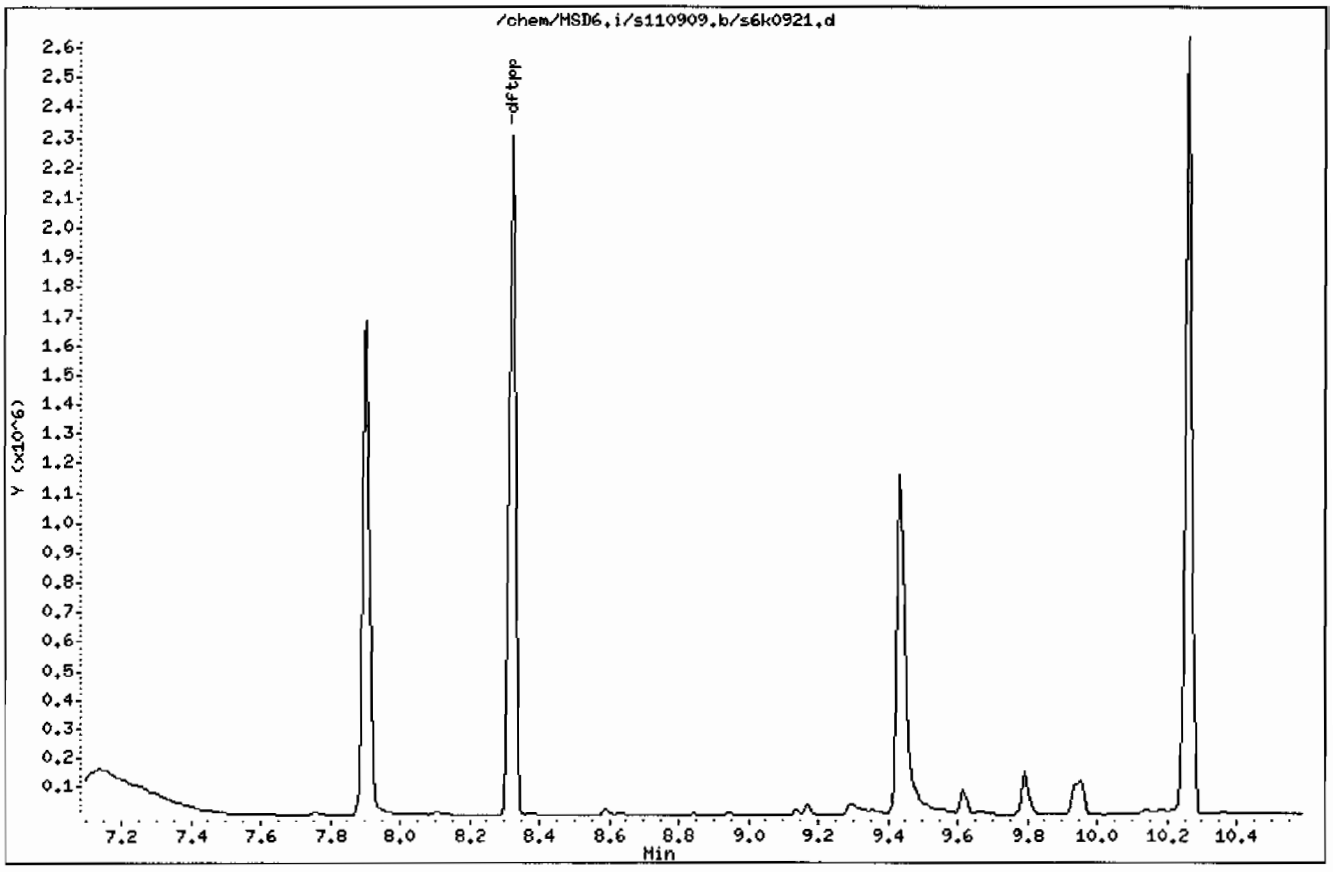

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

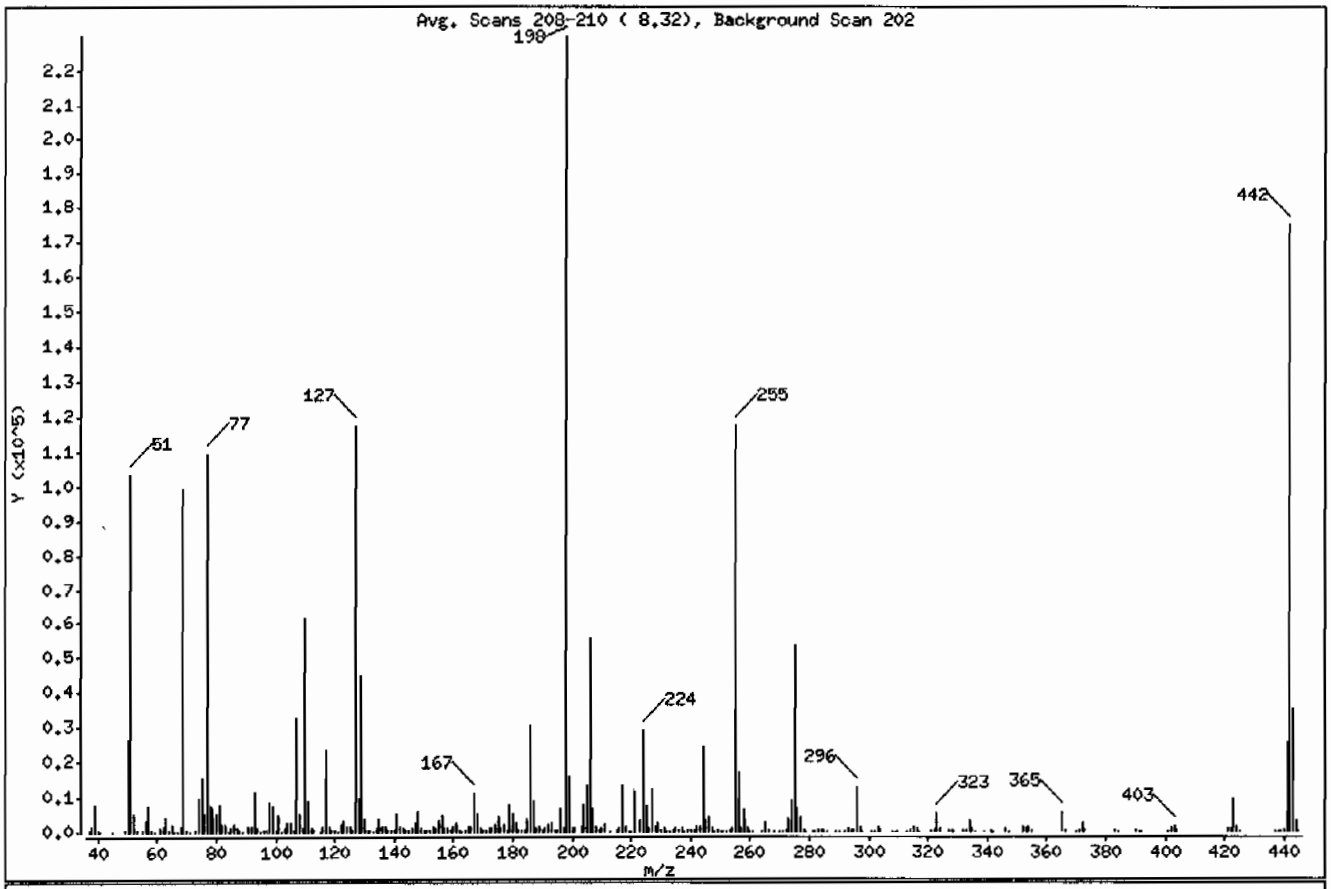

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.09
68	Less than 2.00% of mass 69	0.69 (1.59)
69	Mass 69 relative abundance	43.13
70	Less than 2.00% of mass 69	0.21 (0.50)
127	40.00 - 60.00% of mass 198	50.95
197	Less than 1.00% of mass 198	0.38
199	5.00 - 9.00% of mass 198	7.01
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.61
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	76.04
443	17.00 - 23.00% of mass 442	15.14 (19.92)

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d

Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	446	124.00	1597	200.00	1296	285.00	727
38.00	1364	125.00	1527	201.00	1130	286.00	93
39.00	8081	126.00	500	203.00	1398	289.00	109
40.00	429	127.00	117112	204.00	7870	290.00	48
41.00	123	128.00	9305	205.00	12990	292.00	179
45.00	232	129.00	44864	206.00	55704	293.00	996
49.00	676	130.00	3877	207.00	6919	294.00	284
50.00	26328	131.00	762	208.00	1589	295.00	295
51.00	103656	132.00	413	209.00	492	296.00	12743
52.00	5217	133.00	83	210.00	869	297.00	1758
53.00	281	134.00	1179	211.00	2059	298.00	106
55.00	508	135.00	3584	213.00	155	301.00	200
56.00	3141	136.00	1380	215.00	501	302.00	236
57.00	7300	137.00	1770	216.00	1098	303.00	1828
58.00	351	138.00	422	217.00	13179	304.00	578
59.00	89	139.00	313	218.00	1725	308.00	164
61.00	1282	140.00	577	219.00	178	309.00	120
62.00	1522	141.00	5319	220.00	48	310.00	179
63.00	4035	142.00	1826	221.00	11795	313.00	116
64.00	709	143.00	1268	223.00	3181	314.00	633
65.00	2010	144.00	322	224.00	29056	315.00	1462
66.00	201	145.00	315	225.00	7532	316.00	903
67.00	136	146.00	853	226.00	796	317.00	97
68.00	1576	147.00	2856	227.00	12169	321.00	535
69.00	99128	148.00	5895	228.00	1834	322.00	301
70.00	492	149.00	1137	229.00	2389	323.00	5031
71.00	87	150.00	371	230.00	448	324.00	932
73.00	640	151.00	713	231.00	1077	327.00	782
74.00	9704	152.00	430	232.00	217	328.00	460
75.00	15458	153.00	1634	233.00	234	329.00	92
76.00	5031	154.00	1294	234.00	764	332.00	329
77.00	109208	155.00	2977	235.00	895	333.00	541
78.00	7381	156.00	4520	236.00	588	334.00	3026
79.00	6803	157.00	931	237.00	934	335.00	912
80.00	5387	158.00	937	238.00	52	336.00	92

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	7979	159.00	792	239.00	457	339.00	88
82.00	2000	160.00	1501	240.00	364	341.00	550
83.00	1851	161.00	2637	241.00	638	342.00	176
84.00	203	162.00	756	242.00	1412	346.00	1020
85.00	1319	163.00	204	243.00	1572	347.00	119
86.00	1985	164.00	328	244.00	24152	352.00	1335
87.00	1000	165.00	1810	245.00	3200	353.00	950
88.00	412	166.00	1695	246.00	4314	354.00	1475
89.00	260	167.00	10891	247.00	844	355.00	296
91.00	1676	168.00	5136	248.00	166	365.00	5995
92.00	1806	169.00	973	249.00	748	366.00	747
93.00	11677	170.00	306	250.00	170	370.00	103
94.00	892	171.00	442	251.00	190	371.00	323
95.00	199	172.00	897	252.00	210	372.00	2543
96.00	636	173.00	1105	253.00	472	373.00	611
97.00	286	174.00	2178	254.00	899	383.00	675
98.00	8556	175.00	4297	255.00	117320	384.00	156
99.00	7312	176.00	1290	256.00	16728	390.00	314
100.00	595	177.00	2105	257.00	1320	391.00	189
101.00	4548	178.00	636	258.00	6484	392.00	157
102.00	251	179.00	8002	259.00	1064	401.00	199
103.00	1289	180.00	5191	260.00	200	402.00	1090
104.00	2626	181.00	2701	261.00	212	403.00	1396
105.00	2533	182.00	448	264.00	192	404.00	427
106.00	724	183.00	312	265.00	2469	421.00	1265
107.00	33008	184.00	599	266.00	401	422.00	1145
108.00	5264	185.00	3797	268.00	43	423.00	9473
109.00	994	186.00	30448	270.00	167	424.00	1846
110.00	61616	187.00	8914	271.00	186	425.00	183
111.00	9026	188.00	970	272.00	329	437.00	54
112.00	1057	189.00	1726	273.00	3492	438.00	170
113.00	367	190.00	298	274.00	9124	439.00	228
115.00	227	191.00	976	275.00	53576	440.00	294
116.00	1610	192.00	2282	276.00	7126	441.00	25272
117.00	23152	193.00	2535	277.00	3970	442.00	174784

Date : 10-NOV-2009 11:07

Client ID: DFTPP Instrument: HSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1681	194.00	518	278.00	653	443.00	34808
119.00	280	195.00	333	279.00	140	444.00	3177
120.00	427	196.00	6863	281.00	140	445.00	129
121.00	176	197.00	878	282.00	42		
122.00	2199	198.00	229824	283.00	507		
123.00	3315	199.00	16104	284.00	294		

Data File: /chem/MSD6.i/s120409.b/s610401.d

Page 1

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

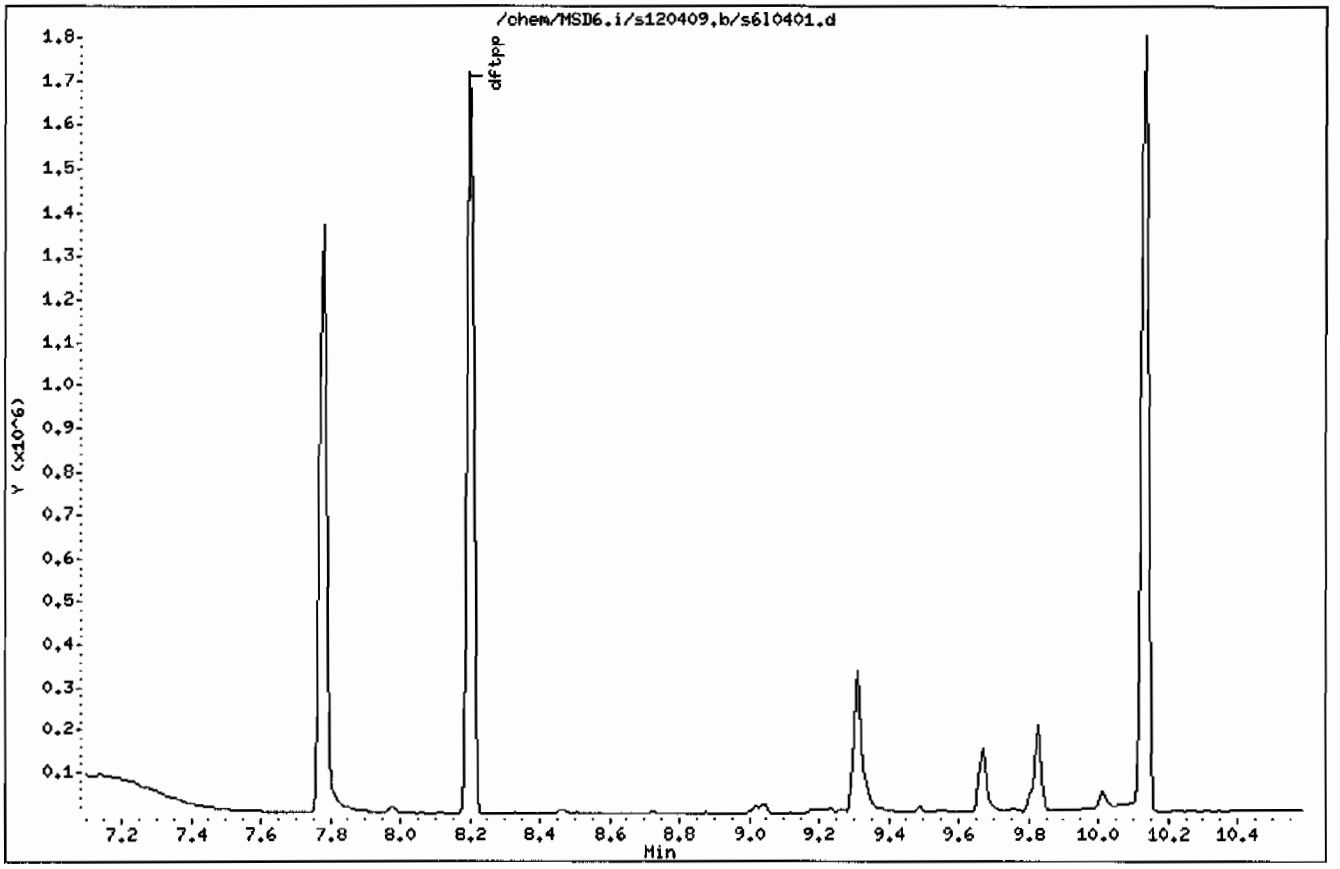

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

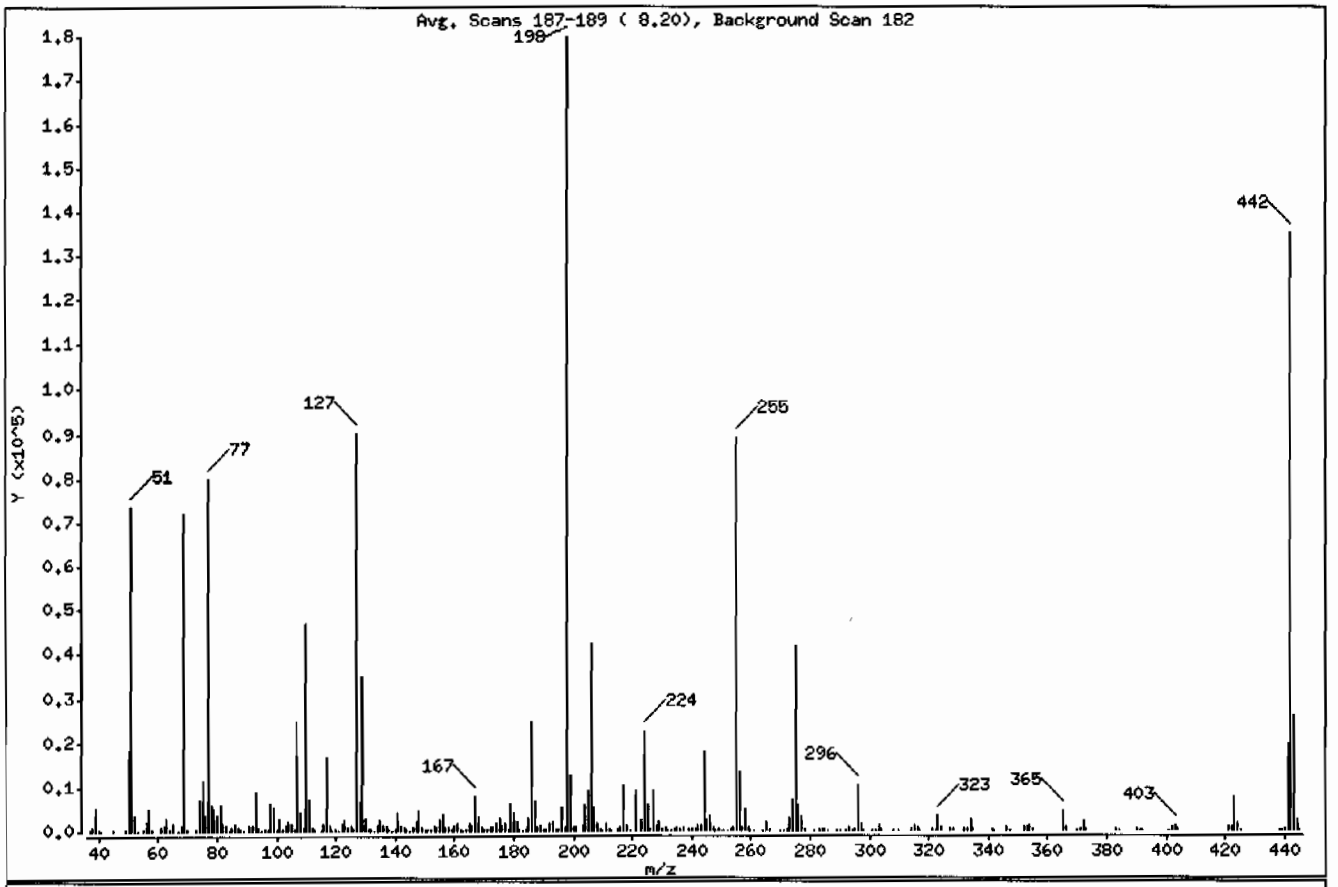

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.88
68	Less than 2.00% of mass 69	0.66 (1.64)
69	Mass 69 relative abundance	40.07
70	Less than 2.00% of mass 69	0.21 (0.53)
127	40.00 - 60.00% of mass 198	50.13
197	Less than 1.00% of mass 198	0.53
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 30.00% of mass 198	22.95
365	Greater than 1.00% of mass 198	2.44
441	Present, but less than mass 443	10.71
442	Greater than 40.00% of mass 198	74.88
443	17.00 - 23.00% of mass 442	14.26 (19.05)

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610401.d

Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182

Location of Maximum: 198.00

Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	295	124.00	1032	197.00	949	283.00	386
38.00	928	125.00	1173	198.00	180096	284.00	244
39.00	5316	126.00	368	199.00	12363	285.00	533
40.00	338	127.00	90280	200.00	953	286.00	102
41.00	42	128.00	6784	201.00	859	289.00	123
45.00	266	129.00	34920	203.00	1069	290.00	93
49.00	507	130.00	2795	204.00	5633	292.00	184
50.00	18088	131.00	554	205.00	9273	293.00	807
51.00	73624	132.00	288	206.00	42232	294.00	136
52.00	3674	133.00	43	207.00	5311	295.00	252
53.00	167	134.00	1086	208.00	1455	296.00	10160
55.00	253	135.00	2621	209.00	422	297.00	1505
56.00	2226	136.00	1211	210.00	198	298.00	44
57.00	5106	137.00	1280	211.00	1509	301.00	124
58.00	267	138.00	273	212.00	222	302.00	191
61.00	945	139.00	159	213.00	115	303.00	1308
62.00	1065	140.00	420	215.00	469	304.00	318
63.00	3075	141.00	4319	216.00	866	308.00	123
64.00	388	142.00	1438	217.00	10307	310.00	105
65.00	1455	143.00	933	218.00	1312	314.00	527
67.00	88	144.00	266	219.00	97	315.00	1099
68.00	1182	145.00	204	221.00	9219	316.00	695
69.00	72152	146.00	714	223.00	2308	317.00	111
70.00	383	147.00	2147	224.00	22208	321.00	311
73.00	492	148.00	4357	225.00	5800	322.00	151
74.00	7192	149.00	973	226.00	544	323.00	3494
75.00	11516	150.00	228	227.00	8923	324.00	688
76.00	3757	151.00	515	228.00	1237	327.00	581
77.00	79768	152.00	374	229.00	2009	328.00	292
78.00	5676	153.00	1346	230.00	277	332.00	273
79.00	5119	154.00	1008	231.00	803	333.00	348
80.00	3910	155.00	2415	232.00	103	334.00	2395
81.00	5813	156.00	3537	233.00	183	335.00	598
82.00	1465	157.00	708	234.00	540	341.00	459
83.00	1371	158.00	775	235.00	690	342.00	92

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610401.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	203	159.00	580	236.00	422	346.00	737
85.00	1034	160.00	1193	237.00	777	347.00	126
86.00	1603	161.00	1808	239.00	345	352.00	894
87.00	747	162.00	585	240.00	261	353.00	771
88.00	309	163.00	173	241.00	542	354.00	1155
89.00	171	164.00	249	242.00	1178	355.00	252
91.00	1398	165.00	1527	243.00	1259	365.00	4393
92.00	1368	166.00	1138	244.00	17632	366.00	729
93.00	8569	167.00	8011	245.00	2397	370.00	87
94.00	630	168.00	3496	246.00	3294	371.00	258
95.00	200	169.00	634	247.00	624	372.00	1954
96.00	482	170.00	236	248.00	123	373.00	501
97.00	211	171.00	356	249.00	578	383.00	532
98.00	6139	172.00	753	250.00	109	384.00	121
99.00	5182	173.00	901	251.00	173	390.00	237
100.00	472	174.00	1763	252.00	124	391.00	134
101.00	2979	175.00	3073	253.00	368	392.00	107
102.00	218	176.00	1118	254.00	635	401.00	95
103.00	1071	177.00	1524	255.00	88808	402.00	781
104.00	2018	178.00	475	256.00	13127	403.00	1122
105.00	1852	179.00	6005	257.00	967	404.00	356
106.00	587	180.00	4210	258.00	4963	421.00	889
107.00	24912	181.00	1940	259.00	746	422.00	874
108.00	3935	182.00	290	260.00	94	423.00	7271
109.00	647	183.00	174	261.00	109	424.00	1454
110.00	46944	184.00	490	264.00	194	425.00	121
111.00	7096	185.00	2765	265.00	1873	438.00	48
112.00	825	186.00	24368	266.00	247	439.00	53
113.00	237	187.00	6599	270.00	104	440.00	239
115.00	136	188.00	687	271.00	196	441.00	19288
116.00	1458	189.00	1360	272.00	221	442.00	134848
117.00	16568	190.00	233	273.00	2726	443.00	25688
118.00	1305	191.00	615	274.00	7076	444.00	2368
119.00	167	192.00	1785	275.00	41320	445.00	132
120.00	337	193.00	2239	276.00	5823		

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagi

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610401.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
121.00	143	194.00	480	277.00	3274		
122.00	1518	195.00	303	278.00	568		
123.00	2452	196.00	5484	281.00	140		

Data File: /chem/MSD6.i/s120509.b/s610501.d

Page 1

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

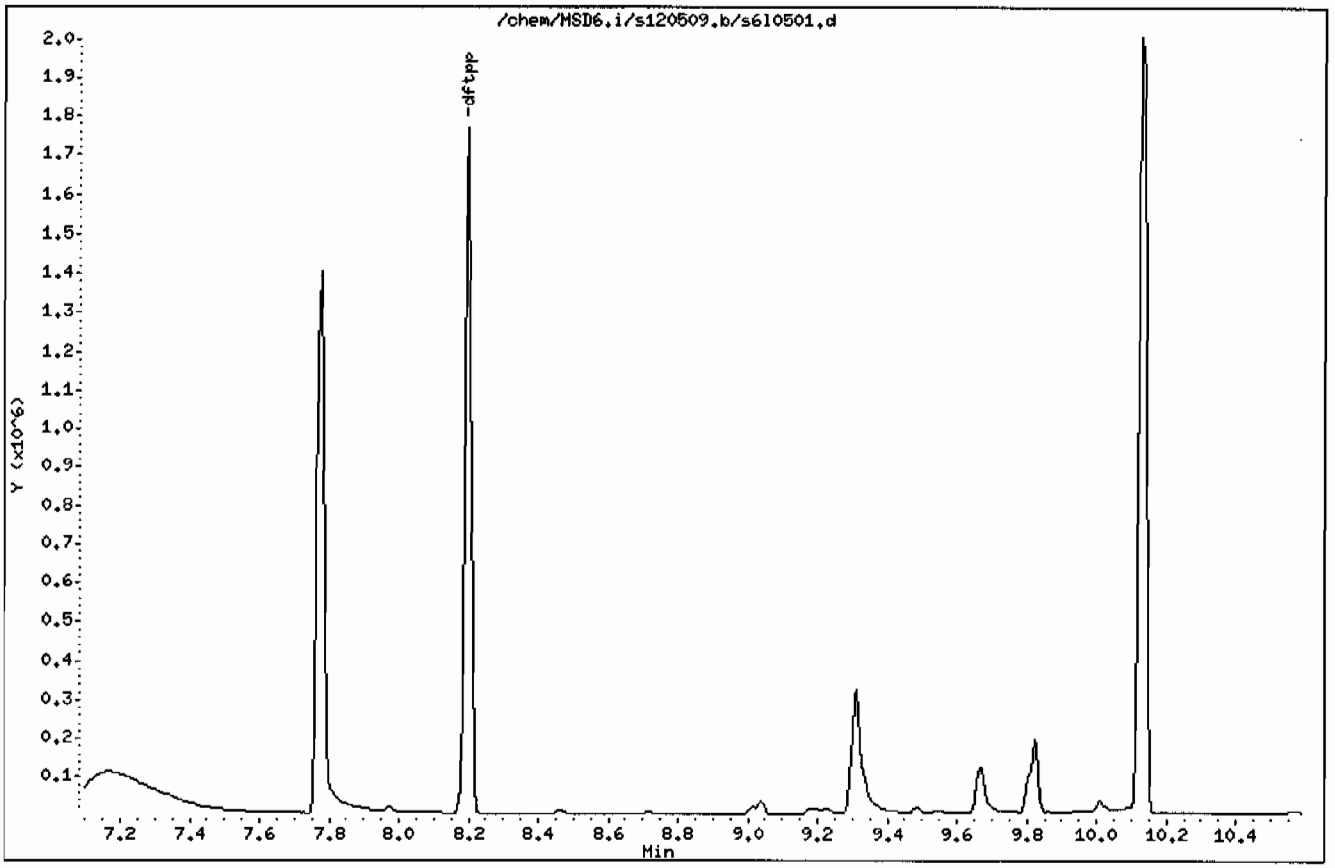

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

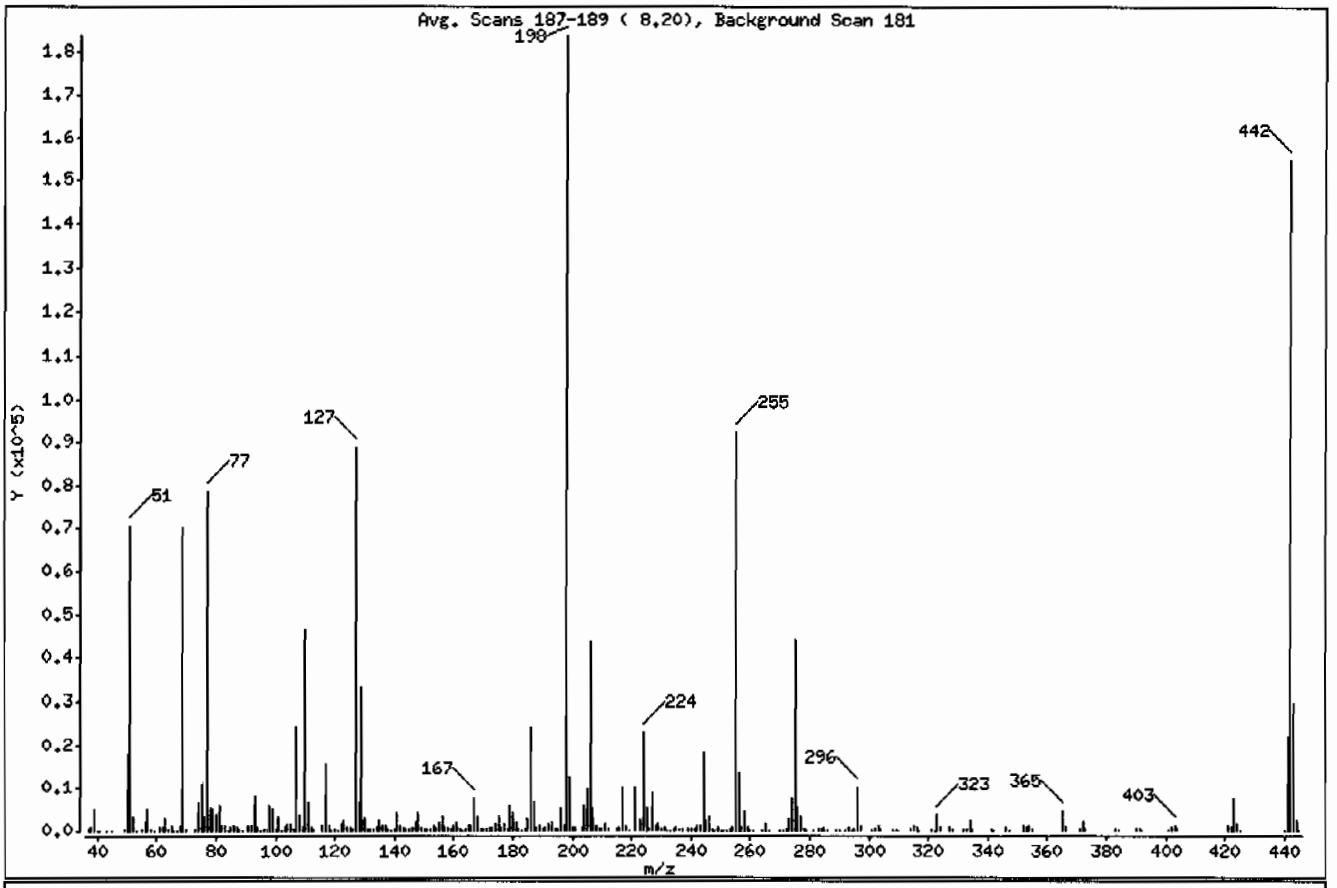

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.42
68	Less than 2.00% of mass 69	0.63 (1.65)
69	Mass 69 relative abundance	38.25
70	Less than 2.00% of mass 69	0.17 (0.46)
127	40.00 - 60.00% of mass 198	48.34
197	Less than 1.00% of mass 198	0.71
199	5.00 - 9.00% of mass 198	6.80
275	10.00 - 30.00% of mass 198	23.81
365	Greater than 1.00% of mass 198	2.59
441	Present, but less than mass 443	12.04
442	Greater than 40.00% of mass 198	84.12
443	17.00 - 23.00% of mass 442	16.09 (19.13)

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d

Spectrum: Avg. Scans 187-189 (8,20), Background Scan 181

Location of Maximum: 198.00

Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	272	121.00	48	193.00	2218	276.00	5684
38.00	868	122.00	1555	194.00	504	277.00	3450
39.00	5172	123.00	2442	195.00	290	278.00	538
40.00	84	124.00	1049	196.00	5662	279.00	96
41.00	80	125.00	1052	197.00	1308	281.00	135
43.00	4	126.00	416	198.00	183936	283.00	351
45.00	188	127.00	88912	199.00	12499	284.00	299
49.00	527	128.00	6698	200.00	846	285.00	653
50.00	17704	129.00	33400	201.00	885	286.00	43
51.00	70672	130.00	3014	203.00	1053	289.00	93
52.00	3529	131.00	622	204.00	5882	290.00	45
53.00	175	132.00	402	205.00	9714	292.00	103
55.00	276	133.00	216	206.00	43416	293.00	744
56.00	2179	134.00	948	207.00	5537	294.00	170
57.00	4950	135.00	2620	208.00	1440	295.00	221
58.00	242	136.00	1126	209.00	442	296.00	10034
59.00	43	137.00	1283	210.00	568	297.00	1453
61.00	893	138.00	289	211.00	1631	301.00	100
62.00	911	139.00	125	212.00	407	302.00	215
63.00	2782	140.00	403	215.00	444	303.00	1343
64.00	411	141.00	4139	216.00	845	304.00	332
65.00	1455	142.00	1299	217.00	10338	308.00	179
66.00	101	143.00	896	218.00	1333	309.00	95
67.00	145	144.00	339	219.00	88	310.00	110
68.00	1161	145.00	260	221.00	10103	314.00	511
69.00	70352	146.00	723	223.00	2347	315.00	1140
70.00	321	147.00	2102	224.00	22888	316.00	745
73.00	458	148.00	4277	225.00	5701	317.00	43
74.00	6810	149.00	984	226.00	568	321.00	359
75.00	11072	150.00	268	227.00	8833	322.00	177
76.00	3542	151.00	528	228.00	1251	323.00	3933
77.00	78576	152.00	373	229.00	1868	324.00	661
78.00	5398	153.00	1230	230.00	291	327.00	638
79.00	5008	154.00	967	231.00	777	328.00	372
80.00	4006	155.00	2304	232.00	104	332.00	237

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d

Spectrum: Avg, Scans 187-189 (8.20), Background Scan 181

Location of Maximum: 198.00

Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5834	156.00	3552	233.00	198	333.00	334
82.00	1368	157.00	767	234.00	620	334.00	2414
83.00	1276	158.00	763	235.00	667	335.00	606
84.00	174	159.00	595	236.00	380	341.00	438
85.00	1011	160.00	1260	237.00	622	342.00	99
86.00	1349	161.00	1928	239.00	289	346.00	757
87.00	704	162.00	552	240.00	273	347.00	153
88.00	271	163.00	208	241.00	478	352.00	1184
89.00	106	164.00	225	242.00	1250	353.00	865
91.00	1277	165.00	1268	243.00	1259	354.00	1311
92.00	1354	166.00	1206	244.00	18096	355.00	250
93.00	8000	167.00	7650	245.00	2374	365.00	4755
94.00	732	168.00	3247	246.00	3230	366.00	684
95.00	87	169.00	609	247.00	623	371.00	267
96.00	501	170.00	251	248.00	95	372.00	2014
97.00	220	171.00	310	249.00	721	373.00	477
98.00	6061	172.00	687	250.00	114	383.00	569
99.00	5010	173.00	990	251.00	185	384.00	177
100.00	517	174.00	1570	252.00	208	390.00	253
101.00	3213	175.00	3375	253.00	365	391.00	239
102.00	195	176.00	1021	254.00	702	392.00	154
103.00	1039	177.00	1606	255.00	92016	401.00	46
104.00	1884	178.00	581	256.00	13468	402.00	855
105.00	1707	179.00	6086	257.00	1016	403.00	1118
106.00	564	180.00	4308	258.00	4709	404.00	424
107.00	24072	181.00	1964	259.00	774	421.00	1109
108.00	3697	182.00	332	260.00	164	422.00	1001
109.00	660	183.00	106	261.00	102	423.00	7781
110.00	46600	184.00	435	264.00	82	424.00	1640
111.00	6953	185.00	2879	265.00	1810	425.00	156
112.00	723	186.00	23944	266.00	109	440.00	157
113.00	253	187.00	6622	270.00	136	441.00	22136
116.00	1183	188.00	656	271.00	193	442.00	154688
117.00	15818	189.00	1444	272.00	259	443.00	29600
118.00	1199	190.00	262	273.00	2758	444.00	2738

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 181
Location of Maximum: 198.00
Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	177	191.00	635	274.00	7792	445.00	153
120.00	318	192.00	1857	275.00	43784		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979040**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:05**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0404-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979040**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:05**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0404-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	2610	ug/kg		J
	Unknown Aldol Condensate	3.38	358	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610404-1.d
Lab Smp Id: 1201979040 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:05
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979040|925661|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	216526	40.0000	
* 29 Naphthalene-d8	136	5.988	5.993	(1.000)	816435	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	446630	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.469	(1.000)	758251	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	627358	40.0000	
* 98 Perylene-d12	264	14.730	14.741	(1.000)	547730	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	411971	75.9772	2530
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	525716	76.8177	2560
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	241733	41.8555	1400
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	470795	40.9031	1360
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	111616	85.6219	2850
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	470132	46.4686	1550

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610404-1.d
Lab Smp Id: 1201979040 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:05
Operator : nag1 Inst ID: MSD6.i
Smp Info : |1201979040|925661|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1249915	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.229	2442929	78.1789987	2600	0		0	10
Unknown Aldol Condensate				CAS #:			
3.376	335144	10.7253168	358	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610404-1.d
Date : 04-DEC-2009 11:05
Client ID: SBLK01
Sample Info: !120197904019256611!SVMF!1!SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

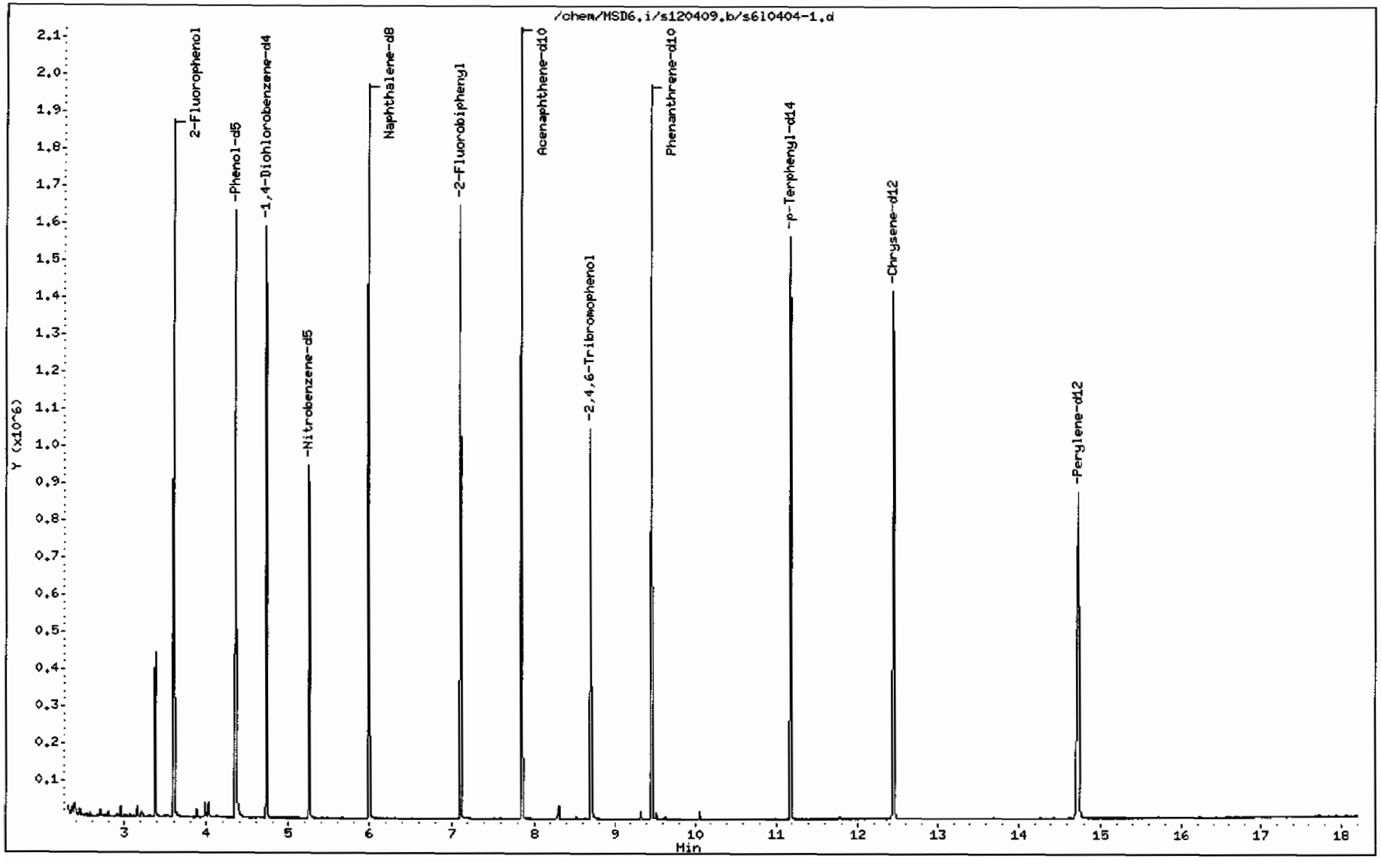

Data File: /chem/MSD6.i/s120409.b/s610404-1.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: |1201979040|925661|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	39	C5H12O2	104

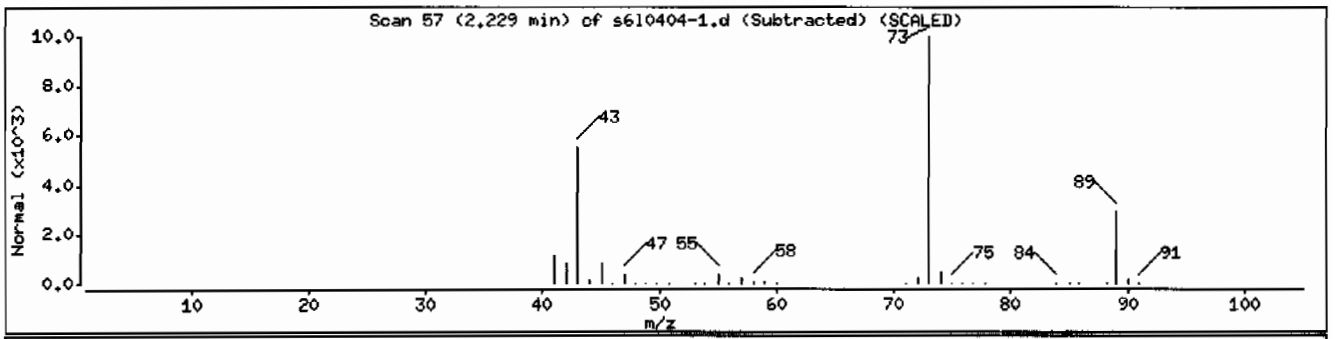

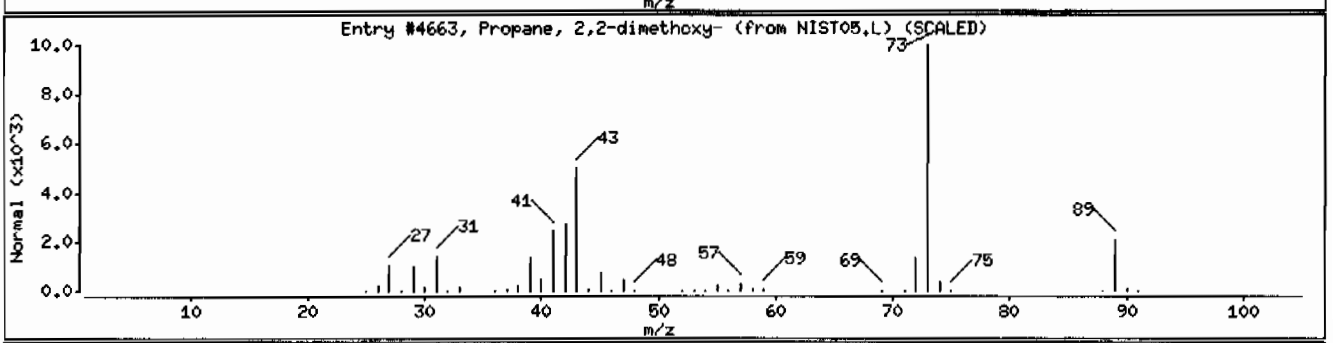

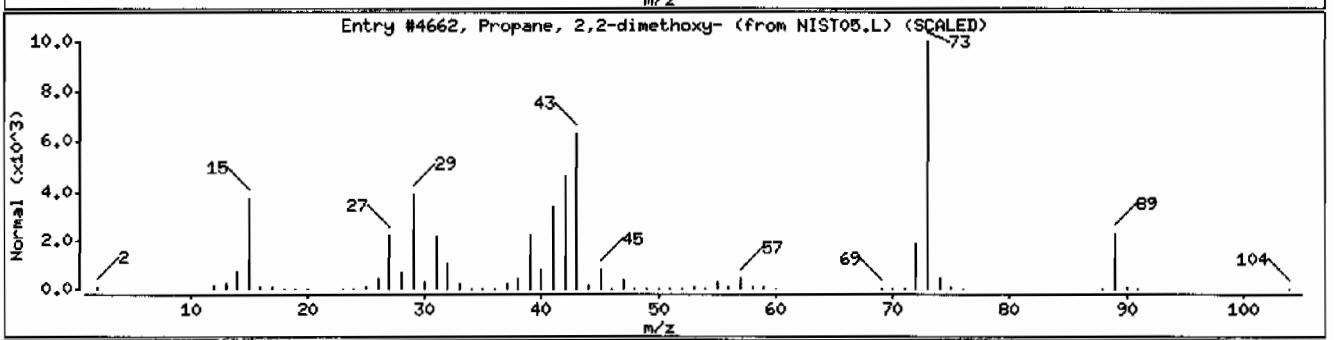

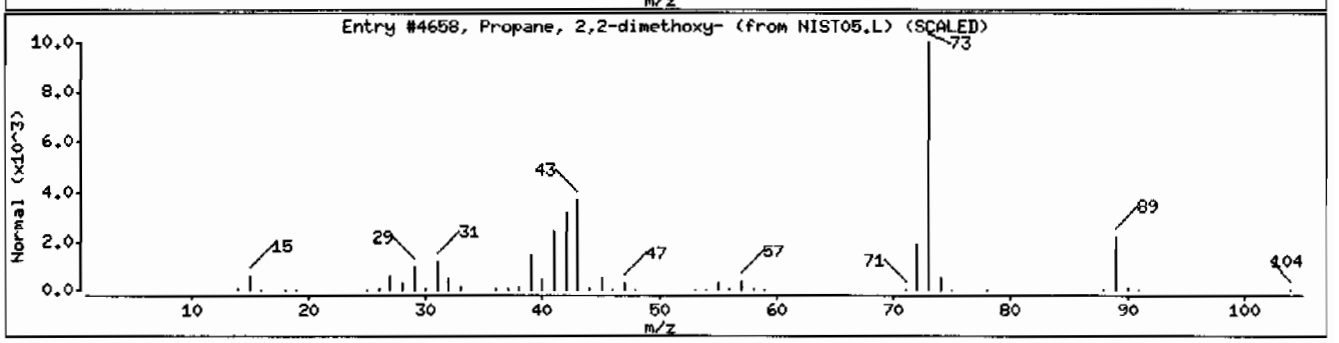

Data File: /chem/MSD6.i/s120409.b/s610404-1.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: |1201979040|925661|1|SVHF|1|SBLK01

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116

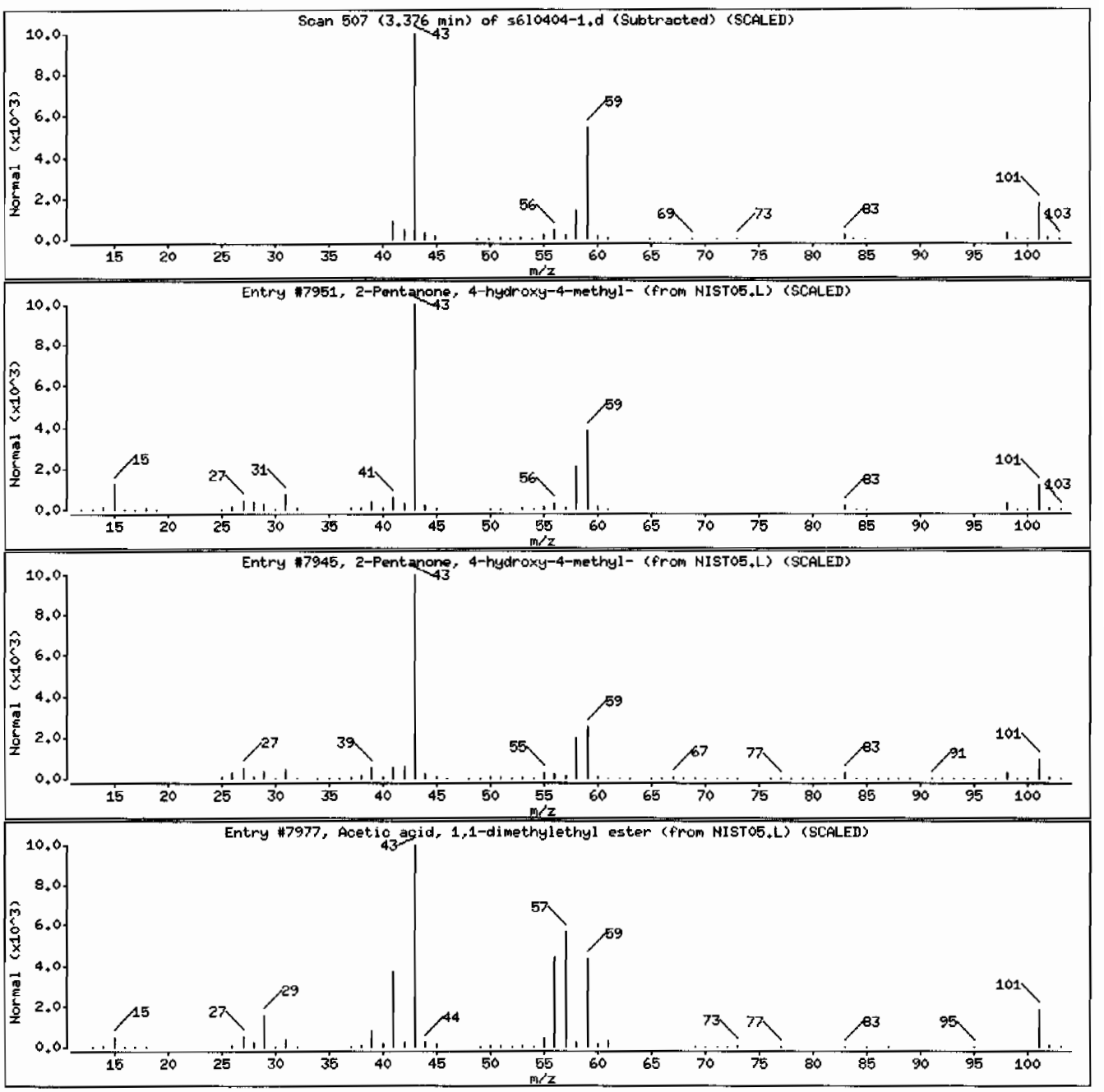

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979043**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.1**	**Dilution:**	**1**
Run Date:	**12/05/2009 12:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0505.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		726	ug/kg	66.7	333
108-95-2	Phenol		1140	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1160	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1170	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1280	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1350	ug/kg	66.7	333
83-32-9	Acenaphthene		1250	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1510	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1140	ug/kg	110	333
87-86-5	Pentachlorophenol		1540	ug/kg	83.3	333
129-00-0	Pyrene		1320	ug/kg	10.0	33.3
110-86-1	Pyridine		721	ug/kg	66.7	333
62-53-3	Aniline		1020	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1080	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1170	ug/kg	66.7	333
100-51-6	Benzyl alcohol		796	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1230	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1210	ug/kg	66.7	333
95-48-7	o-Cresol		1190	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1440	ug/kg	100	333
67-72-1	Hexachloroethane		1180	ug/kg	66.7	333
98-95-3	Nitrobenzene		1250	ug/kg	66.7	333
78-59-1	Isophorone		1340	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1360	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1100	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1260	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1350	ug/kg	66.7	333
65-85-0	Benzoic acid		3350	ug/kg	167	667
91-20-3	Naphthalene		1230	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		988	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1270	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1460	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1480	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1290	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1410	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1260	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1150	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1210	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575			Matrix:	SOIL
Lab Sample ID:	1201979043				
Client Sample:	QC for batch 925648	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 925648	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/05/2009 12:18	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s6l0505.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1400	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1430	ug/kg	33.3	333
208-96-8	Acenaphthylene		1350	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1570	ug/kg	127	667
132-64-9	Dibenzofuran		1590	ug/kg	66.7	333
84-66-2	Diethylphthalate		1400	ug/kg	66.7	333
86-73-7	Fluorene		1380	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1400	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1390	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1390	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1340	ug/kg	66.7	333
122-66-7	Azobenzene		1340	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1430	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1440	ug/kg	66.7	333
85-01-8	Phenanthrene		1370	ug/kg	10.0	33.3
120-12-7	Anthracene		1400	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1560	ug/kg	66.7	333
206-44-0	Fluoranthene		1530	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1480	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1430	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1250	ug/kg	100	333
218-01-9	Chrysene		1450	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1530	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1490	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1450	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1490	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1550	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1630	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1680	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1740	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1280	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610505-1.d
Lab Smp Id: 1201979043 Client Smp ID: SBLK01LCS
Inj Date : 05-DEC-2009 12:18
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979043|925661|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.722	4.719	(1.000)	202793	40.0000	
* 29 Naphthalene-d8	136	5.986	5.988	(1.000)	868816	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	487733	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	862246	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	740083	40.0000	
* 98 Perylene-d12	264	14.731	14.736	(1.000)	677291	40.0000	
$ 3 2-Fluorophenol	112	3.593	3.577	(0.761)	306461	60.3461	2010
$ 5 Phenol-d5	99	4.350	4.342	(0.921)	440218	68.6808	2290
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	222353	36.1787	1200
$ 39 2-Fluorobiphenyl	172	7.112	7.112	(0.906)	487539	38.7882	1290
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	138504	97.2941	3240
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.897)	552550	46.2963	1540

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.362	4.357	(0.924)	220528	34.2183	1140
8 2-Chlorophenol	128	4.531	4.525	(0.960)	180591	34.8850	1160
11 1,4-Dichlorobenzene	146	4.739	4.737	(1.004)	211634	35.0312	1170
17 N-Nitrosodipropylamine	70	5.089	5.091	(1.078)	137557	38.2874	1280(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	201607	38.2579	1280
33 4-Chloro-3-methylphenol	107	6.554	6.546	(1.095)	175125	40.4013	1350
47 Acenaphthene	154	7.886	7.891	(1.005)	412715	37.5455	1250
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	170130	45.2100	1510
52 4-Nitrophenol	139	8.009	7.983	(1.020)	65882	34.1034	1140
65 Pentachlorophenol	266	9.250	9.249	(0.977)	87451	46.0857	1540
79 Pyrene	202	11.031	11.031	(0.886)	805176	39.5545	1320
2 Pyridine	79	2.724	2.686	(0.577)	92996	21.6419	721
4 Aniline	66	4.413	4.411	(0.935)	81453	30.4562	1020
7 bis(2-Chloroethyl) ether	63	4.452	4.451	(0.943)	140810	32.2652	1080
9 1,3-Dichlorobenzene	146	4.673	4.671	(0.990)	208615	35.0050	1170
12 Benzyl alcohol	108	4.836	4.834	(1.024)	76757	23.8664	796
13 1,2-Dichlorobenzene	146	4.885	4.882	(1.035)	207275	36.7561	1220
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	354400	36.3737	1210
15 o-Cresol	107	4.926	4.920	(1.043)	150996	35.8236	1190
18 m,p-Cresols	107	5.076	5.076	(1.075)	231102	43.2706	1440
19 Hexachloroethane	117	5.213	5.213	(1.104)	82895	35.4680	1180
21 Nitrobenzene	77	5.272	5.272	(0.881)	232112	37.4709	1250
22 Isophorone	82	5.506	5.509	(0.920)	441195	40.1817	1340
23 2-Nitrophenol	139	5.585	5.585	(0.933)	116224	40.6775	1360
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	155598	32.8682	1100
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	243857	37.7391	1260
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	173458	40.3972	1350
27 Benzoic acid	105	5.754	5.718	(0.961)	294019	100.622	3350
30 Naphthalene	128	6.008	6.011	(1.004)	640574	36.9610	1230
31 4-Chloroaniline	127	6.052	6.049	(1.011)	165094	29.6379	988
32 Hexachlorobutadiene	225	6.118	6.120	(1.022)	104641	38.1323	1270
34 2-Methylnaphthalene	142	6.730	6.729	(1.124)	459065	43.8946	1460
36 Hexachlorocyclopentadiene	237	6.888	6.890	(0.877)	87307	44.3172	1480
37 2,4,6-Trichlorophenol	196	7.023	7.025	(0.894)	128334	38.5616	1280
38 2,4,5-Trichlorophenol	196	7.076	7.068	(0.901)	150418	42.4405	1410
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	414390	37.8316	1260
42 o-Nitroaniline	65	7.356	7.359	(0.937)	128935	34.4074	1150
41 m-Nitroaniline	138	7.800	7.802	(0.994)	99673	36.3353	1210
43 Dimethylphthalate	163	7.537	7.550	(0.960)	524865	41.9503	1400
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	128021	42.8983	1430
45 Acenaphthylene	152	7.698	7.703	(0.981)	712449	40.4529	1350
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	51997	47.1126	1570
49 Dibenzofuran	168	8.070	8.072	(1.028)	705591	47.5532	1580
51 Diethylphthalate	149	8.297	8.299	(1.057)	528635	41.9554	1400
53 Fluorene	166	8.442	8.444	(1.075)	505811	41.5327	1380
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	241998	42.0552	1400
55 2-Methyl-4,6-dinitrophenol	198	8.490	8.493	(0.897)	80510	41.7361	1390

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	108069	41.8026	1390
133 Diphenylamine	169	8.559	8.561	(0.904)	416329	40.0588	1340
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	533102	40.3263	1340
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	145645	42.8068	1430
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	154396	43.3224	1440
68 Phenanthrene	178	9.489	9.492	(1.003)	732079	41.0553	1370
69 Anthracene	178	9.545	9.548	(1.009)	750456	42.1057	1400
72 Di-n-butylphthalate	149	10.060	10.062	(1.063)	960386	46.9206	1560
76 Fluoranthene	202	10.778	10.781	(1.139)	781951	45.7776	1520
85 Butylbenzylphthalate	149	11.701	11.706	(0.939)	414075	44.4482	1480
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	683426	42.8013	1430
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	196060	37.5082	1250
92 Chrysene	228	12.488	12.493	(1.003)	665667	43.5095	1450
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	591116	45.9884	1530
94 Di-n-octylphthalate	149	13.378	13.377	(0.908)	959331	44.5671	1480
95 Benzo(b)fluoranthene	252	14.071	14.073	(0.955)	652652	43.5498	1450
96 Benzo(k)fluoranthene	252	14.117	14.119	(0.958)	666482	44.7237	1490
97 Benzo(a)pyrene	252	14.631	14.636	(0.993)	601626	46.4786	1550
99 Indeno(1,2,3-cd)pyrene	276	16.693	16.692	(1.133)	611358	48.8751	1630
100 Dibenzo(a,h)anthracene	278	16.721	16.726	(1.135)	515064	50.4863	1680
101 Benzo(ghi)perylene	276	17.195	17.197	(1.167)	517312	52.3123	1740(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.676	2.642	(0.567)	75231	21.7907	726

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610505-1.d
Date : 05-DEC-2009 12:18
Client ID: SBLK01LCS
Sample Info: 1120197904319256611|SVMF|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

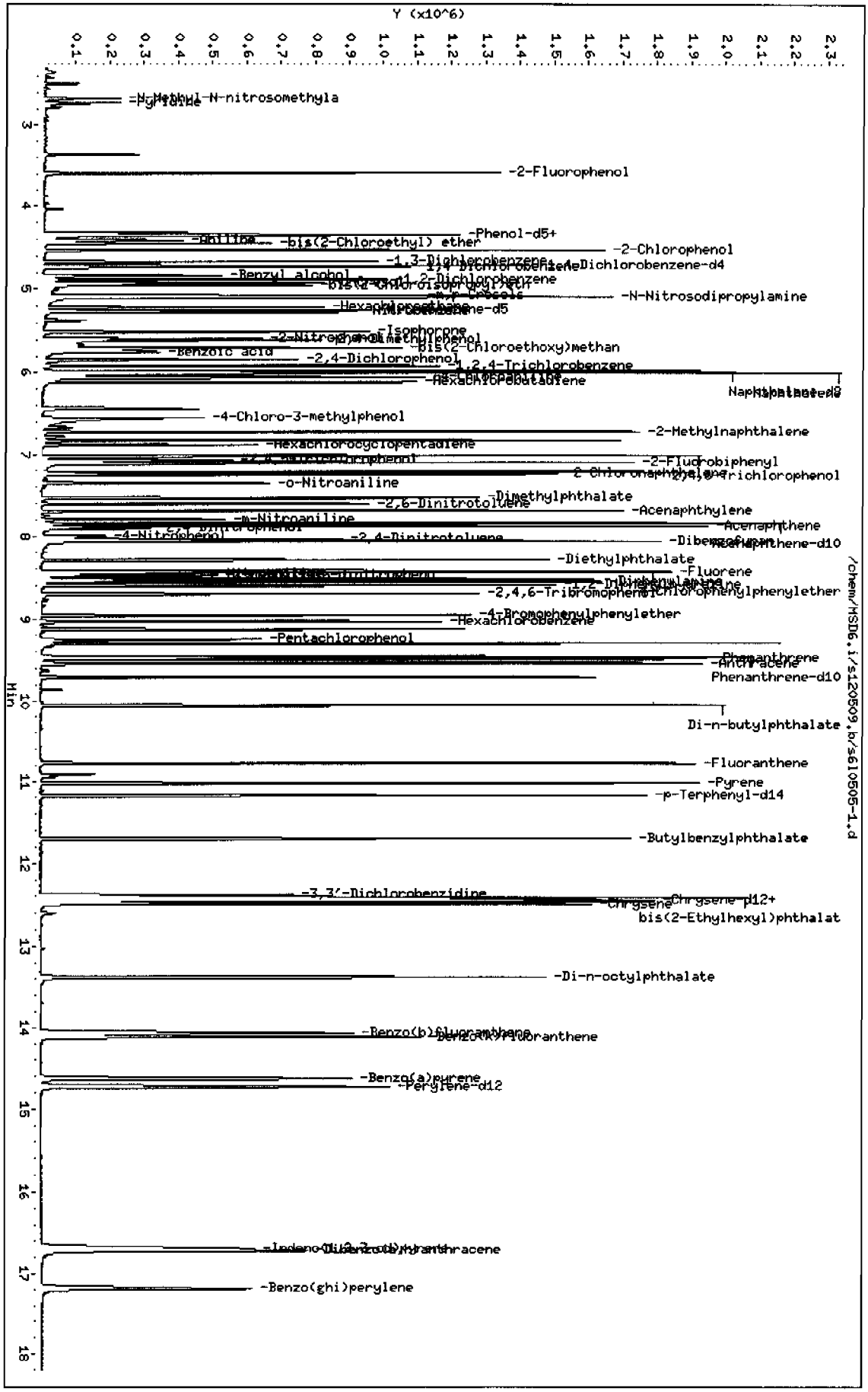

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979041**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13812MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 12:44**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**s610506.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		677	ug/kg	71.5	357
108-95-2	Phenol		1100	ug/kg	71.5	357
95-57-8	2-Chlorophenol		1120	ug/kg	71.5	357
106-46-7	1,4-Dichlorobenzene		1110	ug/kg	71.5	357
621-64-7	N-Nitrosodipropylamine		1240	ug/kg	71.5	357
59-50-7	4-Chloro-3-methylphenol		1430	ug/kg	71.5	357
83-32-9	Acenaphthene		1230	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene		1480	ug/kg	35.7	357
100-02-7	4-Nitrophenol		1130	ug/kg	118	357
87-86-5	Pentachlorophenol		1430	ug/kg	89.3	357
129-00-0	Pyrene		1430	ug/kg	10.7	35.7
110-86-1	Pyridine		681	ug/kg	71.5	357
62-53-3	Aniline		1150	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether		1030	ug/kg	71.5	357
541-73-1	1,3-Dichlorobenzene		1090	ug/kg	71.5	357
100-51-6	Benzyl alcohol		548	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene		1160	ug/kg	71.5	357
108-60-1	bis(2-Chloroisopropyl)ether		1160	ug/kg	71.5	357
95-48-7	o-Cresol		1220	ug/kg	71.5	357
65794-96-9	m,p-Cresols		1480	ug/kg	107	357
67-72-1	Hexachloroethane		1100	ug/kg	71.5	357
98-95-3	Nitrobenzene		1220	ug/kg	71.5	357
78-59-1	Isophorone		1310	ug/kg	71.5	357
88-75-5	2-Nitrophenol		1320	ug/kg	71.5	357
105-67-9	2,4-Dimethylphenol		1080	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane		1230	ug/kg	71.5	357
120-83-2	2,4-Dichlorophenol		1350	ug/kg	71.5	357
65-85-0	Benzoic acid		2470	ug/kg	179	715
91-20-3	Naphthalene		1200	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline		1120	ug/kg	71.5	357
87-68-3	Hexachlorobutadiene		1220	ug/kg	71.5	357
91-57-6	2-Methylnaphthalene		1450	ug/kg	7.15	35.7
77-47-4	Hexachlorocyclopentadiene		1340	ug/kg	71.5	357
88-06-2	2,4,6-Trichlorophenol		1290	ug/kg	71.5	357
95-95-4	2,4,5-Trichlorophenol		1420	ug/kg	71.5	357
91-58-7	2-Chloronaphthalene		1260	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline		1130	ug/kg	71.5	357
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1240	ug/kg	71.5	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979041**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13812MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 12:44**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0506.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1360	ug/kg	71.5	357
606-20-2	2,6-Dinitrotoluene		1410	ug/kg	35.7	357
208-96-8	Acenaphthylene		1360	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol		1490	ug/kg	136	715
132-64-9	Dibenzofuran		1610	ug/kg	71.5	357
84-66-2	Diethylphthalate		1410	ug/kg	71.5	357
86-73-7	Fluorene		1380	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether		1410	ug/kg	71.5	357
534-52-1	2-Methyl-4,6-dinitrophenol		1370	ug/kg	71.5	357
100-01-6	4-Nitroaniline		1450	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine		1390	ug/kg	71.5	357
122-66-7	Azobenzene		1370	ug/kg	71.5	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1500	ug/kg	71.5	357
118-74-1	Hexachlorobenzene		1510	ug/kg	71.5	357
85-01-8	Phenanthrene		1430	ug/kg	10.7	35.7
120-12-7	Anthracene		1460	ug/kg	7.15	35.7
84-74-2	Di-n-butylphthalate		1630	ug/kg	71.5	357
206-44-0	Fluoranthene		1590	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate		1640	ug/kg	71.5	357
56-55-3	Benzo(a)anthracene		1490	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine		1290	ug/kg	107	357
218-01-9	Chrysene		1540	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate		1720	ug/kg	71.5	357
117-84-0	Di-n-octylphthalate		1760	ug/kg	71.5	357
205-99-2	Benzo(b)fluoranthene		1590	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene		1600	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene		1660	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene		1570	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene		1600	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene		1650	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene		1230	ug/kg	71.5	357

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610506.d
Lab Smp Id: 1201979041 Client Smp ID: RE03-09-13812MS
Inj Date : 05-DEC-2009 12:44
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979041|925661|1|SVMF|1|LANL001MS
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.721	4.719	(1.000)	200466	40.0000	
* 29 Naphthalene-d8	136	5.985	5.988	(1.000)	857738	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	484280	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	832631	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	675290	40.0000	
* 98 Perylene-d12	264	14.730	14.736	(1.000)	577986	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	269842	53.7521	1920
$ 5 Phenol-d5	99	4.347	4.342	(0.921)	389250	61.4339	2200
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	193823	31.9439	1140
$ 39 2-Fluorobiphenyl	172	7.109	7.112	(0.906)	434987	34.8540	1240
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	127218	90.0033	3220
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.897)	501532	46.0536	1640

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.360	4.357	(0.923)	195248	30.6474	1100
8 2-Chlorophenol	128	4.528	4.525	(0.959)	160733	31.4094	1120
11 1,4-Dichlorobenzene	146	4.737	4.737	(1.003)	185317	31.0311	1110
17 N-Nitrosodipropylamine	70	5.086	5.091	(1.077)	123441	34.7572	1240(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	178627	34.3349	1230
33 4-Chloro-3-methylphenol	107	6.556	6.546	(1.095)	171781	40.1417	1430
47 Acenaphthene	154	7.886	7.891	(1.005)	377045	34.5451	1230
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	154383	41.3179	1480
52 4-Nitrophenol	139	8.003	7.983	(1.019)	59686	31.7544	1130
65 Pentachlorophenol	266	9.252	9.249	(0.978)	71883	40.0280	1430
79 Pyrene	202	11.028	11.031	(0.885)	743420	40.0249	1430
2 Pyridine	79	2.714	2.686	(0.575)	80941	19.0551	681
4 Aniline	66	4.413	4.411	(0.935)	85179	32.2191	1150
7 bis(2-Chloroethyl) ether	63	4.451	4.451	(0.943)	124073	28.7601	1030
9 1,3-Dichlorobenzene	146	4.671	4.671	(0.989)	178959	30.3774	1080
12 Benzyl alcohol	108	4.834	4.834	(1.024)	48712	15.3221	548
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.034)	180290	32.3419	1160
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	313092	32.5071	1160
15 o-Cresol	107	4.923	4.920	(1.043)	142313	34.1555	1220
18 m,p-Cresols	107	5.073	5.076	(1.074)	218854	41.4530	1480
19 Hexachloroethane	117	5.213	5.213	(1.104)	71191	30.8138	1100
21 Nitrobenzene	77	5.272	5.272	(0.881)	209208	34.2096	1220
22 Isophorone	82	5.504	5.509	(0.920)	396946	36.6186	1310
23 2-Nitrophenol	139	5.585	5.585	(0.933)	103930	36.8445	1320
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	141850	30.3511	1080
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	220252	34.5262	1230
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	159761	37.6879	1350
27 Benzoic acid	105	5.736	5.718	(0.958)	199536	69.1689	2470
30 Naphthalene	128	6.008	6.011	(1.004)	576164	33.6740	1200
31 4-Chloroaniline	127	6.052	6.049	(1.011)	171988	31.2743	1120
32 Hexachlorobutadiene	225	6.118	6.120	(1.022)	92343	34.0854	1220
34 2-Methylnaphthalene	142	6.727	6.729	(1.124)	417516	40.4374	1440
36 Hexachlorocyclopentadiene	237	6.887	6.890	(0.877)	73151	37.3963	1340
37 2,4,6-Trichlorophenol	196	7.022	7.025	(0.894)	119209	36.0751	1290
38 2,4,5-Trichlorophenol	196	7.073	7.068	(0.901)	140017	39.7875	1420
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	382271	35.1481	1260
42 o-Nitroaniline	65	7.354	7.359	(0.937)	117654	31.6209	1130
41 m-Nitroaniline	138	7.797	7.802	(0.993)	94712	34.7730	1240
43 Dimethylphthalate	163	7.537	7.550	(0.960)	474177	38.1693	1360
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	117027	39.4940	1410
45 Acenaphthylene	152	7.698	7.703	(0.981)	664045	37.9734	1360
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	42827	41.5531	1480
49 Dibenzofuran	168	8.070	8.072	(1.028)	661917	44.9279	1600
51 Diethylphthalate	149	8.294	8.299	(1.056)	495099	39.5740	1410
53 Fluorene	166	8.442	8.444	(1.075)	467522	38.6625	1380
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	225680	39.4990	1410
55 2-Methyl-4,6-dinitrophenol	198	8.488	8.493	(0.897)	69856	38.2204	1360

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	103915	40.7055	1450
133 Diphenylamine	169	8.559	8.561	(0.904)	390865	38.9463	1390
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	490692	38.4384	1370
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	138051	42.0180	1500
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	145649	42.3217	1510
68 Phenanthrene	178	9.489	9.492	(1.003)	687057	39.9009	1420
69 Anthracene	178	9.545	9.548	(1.009)	704771	40.9489	1460
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	903373	45.7049	1630
76 Fluoranthene	202	10.778	10.781	(1.139)	732201	44.3898	1590
85 Butylbenzylphthalate	149	11.701	11.706	(0.939)	390101	45.8926	1640
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	606144	41.6037	1490
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	172190	36.1024	1290
92 Chrysene	228	12.488	12.493	(1.003)	599787	42.9650	1540
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	563652	48.0408	1720
94 Di-n-octylphthalate	149	13.375	13.377	(0.908)	902314	49.1204	1760
95 Benzo(b)fluoranthene	252	14.068	14.073	(0.955)	567920	44.4069	1590
96 Benzo(k)fluoranthene	252	14.114	14.119	(0.958)	568388	44.6943	1600
97 Benzo(a)pyrene	252	14.629	14.636	(0.993)	512796	46.4225	1660
99 Indeno(1,2,3-cd)pyrene	276	16.687	16.692	(1.133)	465348	43.9223	1570
100 Dibenzo(a,h)anthracene	278	16.721	16.726	(1.135)	387179	44.7941	1600
101 Benzo(ghi)perylene	276	17.189	17.197	(1.167)	389876	46.1993	1650(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.665	2.642	(0.564)	64606	18.9304	676

QC Flag Legend

Q - Qualifier signal failed the ratio test.

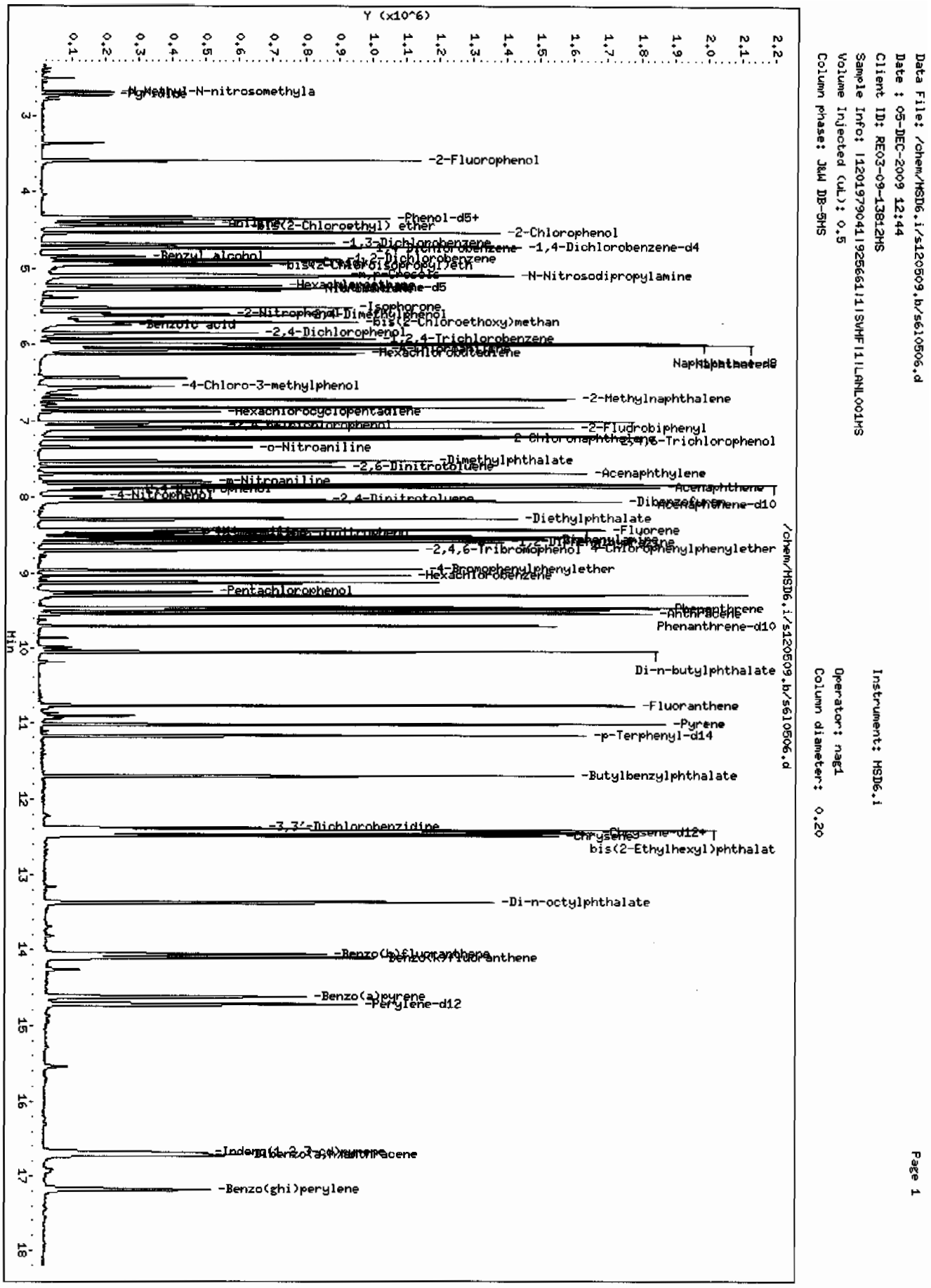
Data File: /chem/MSD6.i/s120509.b/s610506.d
Date : 05-DEC-2009 12:44
Client ID: RE03-09-13812HS
Sample Info: 1201979041192566111SVHF11LANL001HS
Volume Injected (uL): 0.5
Column phase: J&W DB-5HS
Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20
Page 1
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-d5+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4
-Benzyl alcohol
-N-Nitrosodipropylamine
-Isophorone
-Benzoic acid
-2,4-Dichlorophenol
-4-Chloro-3-methylphenol
-2-Methylnaphthalene
-2-Fluorobiphenyl
-o-Nitroaniline
-Dimethylphthalate
-2,6-Dinitrotoluene
-Acenaphthylene
-m-Nitroaniline
-4-Nitrophenol
-2,4-Dinitrotoluene
-Diethylphthalate
-Fluorene
-2,4,6-Tribromophenol
-4-Chlorophenylphenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene
-Anthracene
Phenanthrene-d10
Di-n-butylphthalate
-Fluoranthene
-Pyrene
-p-Terphenyl-d14
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine
-Chrysene
bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-d12
-Benzo(ghi)perylene
/chem/MSD6.i/s120509.b/s610506.d

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201979042	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 925648	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812MSD	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/05/2009 13:13	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s6l0507.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		692	ug/kg	71.4	357
108-95-2	Phenol		1120	ug/kg	71.4	357
95-57-8	2-Chlorophenol		1150	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene		1120	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine		1260	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol		1110	ug/kg	71.4	357
83-32-9	Acenaphthene		1210	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene		1410	ug/kg	35.7	357
100-02-7	4-Nitrophenol		1150	ug/kg	118	357
87-86-5	Pentachlorophenol		1330	ug/kg	89.3	357
129-00-0	Pyrene		1280	ug/kg	10.7	35.7
110-86-1	Pyridine		701	ug/kg	71.4	357
62-53-3	Aniline		1170	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether		1060	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene		1130	ug/kg	71.4	357
100-51-6	Benzyl alcohol		368	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene		1200	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether		1200	ug/kg	71.4	357
95-48-7	o-Cresol		1080	ug/kg	71.4	357
65794-96-9	m,p-Cresols		1300	ug/kg	107	357
67-72-1	Hexachloroethane		1130	ug/kg	71.4	357
98-95-3	Nitrobenzene		1210	ug/kg	71.4	357
78-59-1	Isophorone		1320	ug/kg	71.4	357
88-75-5	2-Nitrophenol		1330	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol		1070	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane		1250	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol		1330	ug/kg	71.4	357
65-85-0	Benzoic acid		2380	ug/kg	179	714
91-20-3	Naphthalene		1200	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline		1120	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene		1230	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene		1440	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene		1400	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol		1230	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol		1370	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene		1240	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline		1120	ug/kg	71.4	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1230	ug/kg	71.4	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201979042	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 925648	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812MSD	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/05/2009 13:13	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s6l0507.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1320	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene		1360	ug/kg	35.7	357
208-96-8	Acenaphthylene		1310	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol		1380	ug/kg	136	714
132-64-9	Dibenzofuran		1550	ug/kg	71.4	357
84-66-2	Diethylphthalate		1320	ug/kg	71.4	357
86-73-7	Fluorene		1340	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether		1350	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol		1260	ug/kg	71.4	357
100-01-6	4-Nitroaniline		1380	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine		1300	ug/kg	71.4	357
122-66-7	Azobenzene		1300	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1360	ug/kg	71.4	357
118-74-1	Hexachlorobenzene		1370	ug/kg	71.4	357
85-01-8	Phenanthrene		1300	ug/kg	10.7	35.7
120-12-7	Anthracene		1360	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate		1450	ug/kg	71.4	357
206-44-0	Fluoranthene		1450	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate		1450	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene		1350	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine		1180	ug/kg	107	357
218-01-9	Chrysene		1370	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate		1480	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate		1600	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene		1410	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene		1450	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene		1490	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene		1340	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene		1330	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene		1330	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene		1230	ug/kg	71.4	357

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610507.d
Lab Smp Id: 1201979042 Client Smp ID: RE03-09-13812MSD
Inj Date : 05-DEC-2009 13:13
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979042|925661|1|SVMF|1|LANL001MSD
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.722	4.719	(1.000)	212844	40.0000	
* 29 Naphthalene-d8	136	5.985	5.988	(1.000)	913923	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	507549	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	884578	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	735909	40.0000	
* 98 Perylene-d12	264	14.733	14.736	(1.000)	596420	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	279036	52.3511	1870
$ 5 Phenol-d5	99	4.350	4.342	(0.921)	404984	60.2000	2150
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	201006	31.0912	1110
$ 39 2-Fluorobiphenyl	172	7.109	7.112	(0.906)	427432	32.6784	1170
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	117056	79.0173	2820
$ 81 p-Terphenyl-d14	244	11.176	11.178	(0.897)	457000	38.5077	1380

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.360	4.357	(0.923)	212334	31.3910	1120
8 2-Chlorophenol	128	4.531	4.525	(0.960)	175421	32.2861	1150
11 1,4-Dichlorobenzene	146	4.739	4.737	(1.004)	199393	31.4464	1120
17 N-Nitrosodipropylamine	70	5.089	5.091	(1.078)	133477	35.3974	1260(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	191411	34.5303	1230
33 4-Chloro-3-methylphenol	107	6.556	6.546	(1.095)	142092	31.1627	1110
47 Acenaphthene	154	7.886	7.891	(1.005)	388765	33.9859	1210
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	154180	39.3718	1410
52 4-Nitrophenol	139	8.011	7.983	(1.020)	63681	32.1953	1150
65 Pentachlorophenol	266	9.252	9.249	(0.978)	70061	37.1659	1330
79 Pyrene	202	11.031	11.031	(0.886)	725063	35.8210	1280
2 Pyridine	79	2.716	2.686	(0.575)	88527	19.6290	701
4 Aniline	66	4.413	4.411	(0.935)	92195	32.8448	1170
7 bis(2-Chloroethyl) ether	63	4.452	4.451	(0.943)	135459	29.5733	1060
9 1,3-Dichlorobenzene	146	4.673	4.671	(0.990)	197670	31.6022	1130
12 Benzyl alcohol	108	4.836	4.834	(1.024)	34768	10.3001	368
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.034)	198308	33.5053	1200
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	342454	33.4879	1200
15 o-Cresol	107	4.925	4.920	(1.043)	134088	30.3100	1080
18 m,p-Cresols	107	5.073	5.076	(1.074)	203865	36.3684	1300
19 Hexachloroethane	117	5.213	5.213	(1.104)	77816	31.7226	1130
21 Nitrobenzene	77	5.272	5.272	(0.881)	220982	33.9134	1210
22 Isophorone	82	5.504	5.509	(0.920)	425636	36.8514	1320
23 2-Nitrophenol	139	5.585	5.585	(0.933)	111799	37.1976	1330
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	149283	29.9778	1070
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	237132	34.8871	1240
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	167764	37.1428	1330
27 Benzoic acid	105	5.731	5.718	(0.957)	205023	66.7017	2380
30 Naphthalene	128	6.008	6.011	(1.004)	614081	33.6836	1200
31 4-Chloroaniline	127	6.052	6.049	(1.011)	183595	31.3325	1120
32 Hexachlorobutadiene	225	6.121	6.120	(1.023)	99253	34.3837	1230
34 2-Methylnaphthalene	142	6.730	6.729	(1.124)	443900	40.3497	1440
36 Hexachlorocyclopentadiene	237	6.888	6.890	(0.877)	80091	39.0671	1400
37 2,4,6-Trichlorophenol	196	7.023	7.025	(0.894)	119735	34.5731	1230
38 2,4,5-Trichlorophenol	196	7.076	7.068	(0.901)	141121	38.2628	1370
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	394927	34.6470	1240
42 o-Nitroaniline	65	7.356	7.359	(0.937)	121958	31.2749	1120
41 m-Nitroaniline	138	7.797	7.802	(0.993)	98509	34.5090	1230
43 Dimethylphthalate	163	7.537	7.550	(0.960)	479666	36.8410	1320
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	118176	38.0533	1360
45 Acenaphthylene	152	7.700	7.703	(0.981)	671677	36.6489	1310
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	39976	38.5947	1380
49 Dibenzofuran	168	8.070	8.072	(1.028)	670138	43.4006	1550
51 Diethylphthalate	149	8.294	8.299	(1.056)	483397	36.8672	1320
53 Fluorene	166	8.442	8.444	(1.075)	476764	37.6192	1340
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	226252	37.7837	1350
55 2-Methyl-4,6-dinitrophenol	198	8.490	8.493	(0.897)	66882	35.1446	1260

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	102477	38.7191	1380
133 Diphenylamine	169	8.559	8.561	(0.904)	387106	36.3066	1300
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	495167	36.5111	1300
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	133063	38.1215	1360
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	139756	38.2245	1360
68 Phenanthrene	178	9.489	9.492	(1.003)	667316	36.4785	1300
69 Anthracene	178	9.545	9.548	(1.009)	694403	37.9772	1360
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	854376	40.6875	1450
76 Fluoranthene	202	10.778	10.781	(1.139)	710989	40.5725	1450
85 Butylbenzylphthalate	149	11.703	11.706	(0.940)	376015	40.5917	1450
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	599007	37.7271	1350
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	171120	32.9226	1180
92 Chrysene	228	12.488	12.493	(1.003)	583352	38.3455	1370
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	529814	41.4931	1480
94 Di-n-octylphthalate	149	13.375	13.377	(0.908)	847355	44.7028	1600
95 Benzo(b)fluoranthene	252	14.068	14.073	(0.955)	521923	39.5489	1410
96 Benzo(k)fluoranthene	252	14.116	14.119	(0.958)	531503	40.5022	1450
97 Benzo(a)pyrene	252	14.631	14.636	(0.993)	474032	41.5869	1480
99 Indeno(1,2,3-cd)pyrene	276	16.682	16.692	(1.132)	405734	37.5828	1340
100 Dibenzo(a,h)anthracene	278	16.716	16.726	(1.135)	326581	37.1098	1320
101 Benzo(ghi)perylene	276	17.187	17.197	(1.167)	325496	37.3783	1330(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.670	2.642	(0.566)	70217	19.3780	692

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610507.d
Date : 05-DEC-2009 13:13
Client ID: RE03-09-13812MSD
Sample Info: 1120197904219256641|1|SVHF|1||LAN_001MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

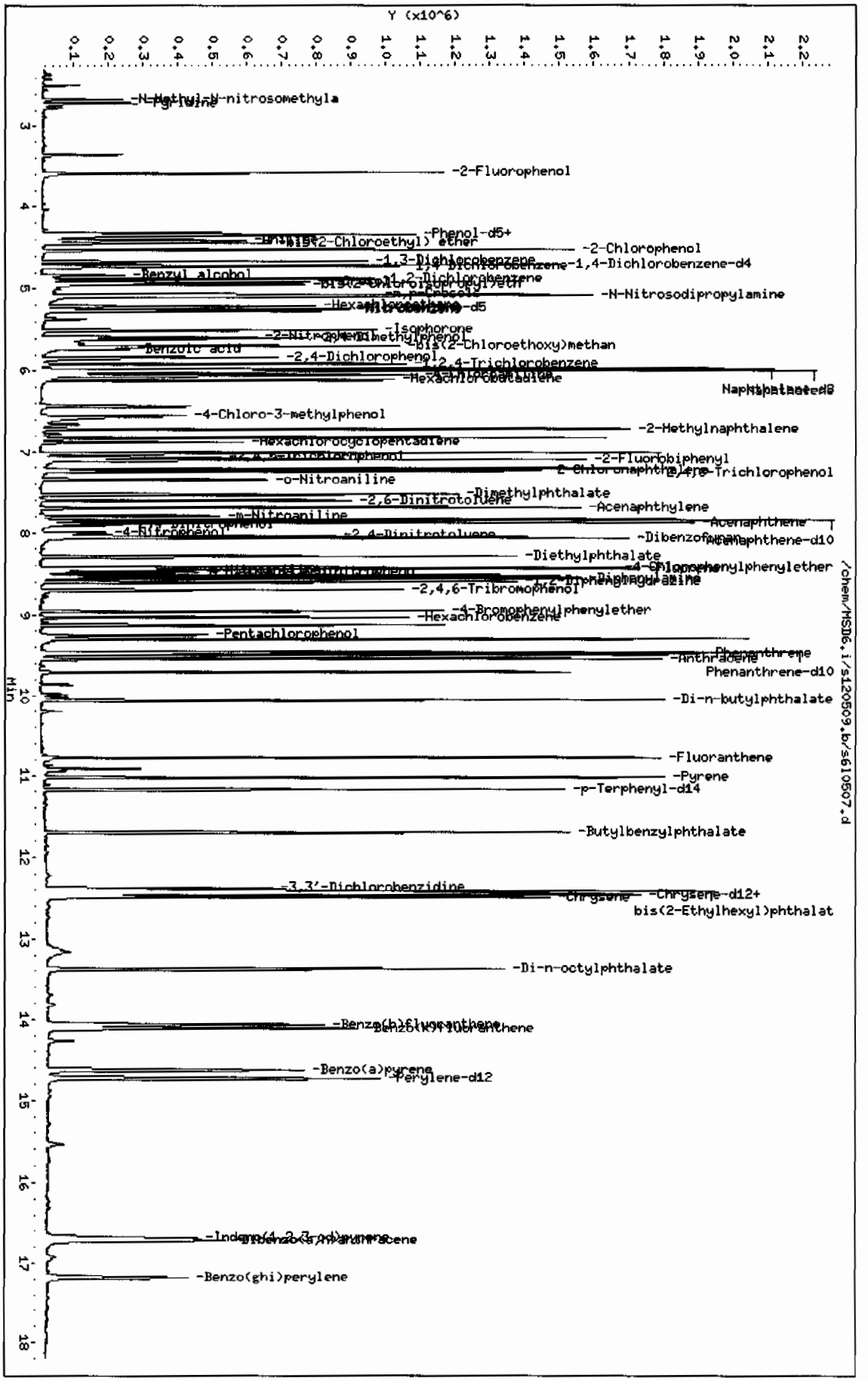

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 925648 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201979040 MB	24-NOV-2009 21:57:44	30	1	0.03333
1201979043 LCS	24-NOV-2009 21:57:44	30	1	0.03333
241336001	24-NOV-2009 21:57:44	30.03	1	0.0333
241336002	24-NOV-2009 21:57:44	30.02	1	0.03331
241417001	24-NOV-2009 21:57:44	30.03	1	0.0333
1201979041 MS (241417001)	24-NOV-2009 21:57:44	30.12	1	0.0332
1201979042 MSD (241417001)	24-NOV-2009 21:57:44	30.14	1	0.03318
241417002	24-NOV-2009 21:57:44	30.02	1	0.03331
241418001	24-NOV-2009 21:57:44	30.02	1	0.03331
241418002	24-NOV-2009 21:57:44	30.14	1	0.03318
241418003	24-NOV-2009 21:57:44	30.06	1	0.03327
241418004	24-NOV-2009 21:57:44	30.06	1	0.03327
241418005	24-NOV-2009 21:57:44	30.12	1	0.0332
241418006	24-NOV-2009 21:57:44	30.04	1	0.03329
241418007	24-NOV-2009 21:57:44	30.01	1	0.03332
241418008	24-NOV-2009 21:57:44	30.06	1	0.03327
241418009	24-NOV-2009 21:57:44	30.13	1	0.03319
241418010	24-NOV-2009 21:57:44	30.15	1	0.03317
241418011	24-NOV-2009 21:57:44	30.02	1	0.03331
241418012	24-NOV-2009 21:57:44	30.06	1	0.03327
241418013	24-NOV-2009 21:57:44	30.17	1	0.03315
241418014	24-NOV-2009 21:57:44	30.18	1	0.03313
241418015	24-NOV-2009 21:57:44	30.01	1	0.03332
241418016	24-NOV-2009 21:57:44	30.07	1	0.03326

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201979043	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201979043	BENZIDINE LCS	UE091117-20	1	mL
MS	1201979041	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201979041	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201979042	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201979042	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/04/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610401.d	WBN091128-01	nagl	04-DEC-2009 09:48	50 PPM	s120409	1.0	DFTPP	
s610402.d	WBN091106-05.2	nagl	04-DEC-2009 10:02	40 PPM	s120409	1.0	MEGACVS	225677
s610403.d	WBN091201-03.2	nagl	04-DEC-2009 10:30	40 PPM	s120409	1.0	APCVS	
s610404.d	1201979040	nagl	04-DEC-2009 11:05	925661	10-546	1.0	SBLK01	
s610405.d	1201979043	nagl	04-DEC-2009 11:32	925661	10-546	1.0	SBLK01LCS	DUSE - see s610505
s610406.d	241336001	nagl	04-DEC-2009 12:00	925661	10-546	1.0	LANL	
s610407.d	241336002	nagl	04-DEC-2009 12:28	925661	10-546	1.0	LANL	
s610408.d	241417001	nagl	04-DEC-2009 12:54	925661	10-575	1.0	LANL	
s610409.d	1201979041	nagl	04-DEC-2009 13:21	925661	10-575	1.0	LANL001MS	DUSE - see s610506
s610410.d	1201979042	nagl	04-DEC-2009 13:49	925661	10-575	1.0	LANL001MSD	DUSE - see s610507
s610411.d	241417002	nagl	04-DEC-2009 14:18	925661	10-575	1.0	LANL	
s610412.d	241418001	nagl	04-DEC-2009 14:45	925661	10-576	1.0	LANL	
s610413.d	241418002	nagl	04-DEC-2009 15:13	925661	10-576	1.0	LANL	
s610414.d	241418003	nagl	04-DEC-2009 15:41	925661	10-576	1.0	LANL	
s610415.d	241418004	nagl	04-DEC-2009 16:10	925661	10-576	1.0	LANL	
s610416.d	241418005	nagl	04-DEC-2009 16:38	925661	10-576	1.0	LANL	
s610417.d	241418006	nagl	04-DEC-2009 17:06	925661	10-576	1.0	LANL	
s610418.d	241418007	nagl	04-DEC-2009 17:34	925661	10-576	1.0	LANL	
s610419.d	241418008	nagl	04-DEC-2009 18:01	925661	10-576	1.0	LANL	DUSE - see s610508

s610420.d	241418009	nagl	04-DEC-2009 18:29	925661	10-576	1.0	LANL	
s610421.d	241418010	nagl	04-DEC-2009 18:56	925661	10-576	1.0	LANL	
s610422.d	241418011	nagl	04-DEC-2009 19:23	925661	10-576	1.0	LANL	
s610423.d	241418012	nagl	04-DEC-2009 19:51	925661	10-576	1.0	LANL	
s610424.d	241418013	nagl	04-DEC-2009 20:17	925661	10-576	1.0	LANL	
s610425.d	241418014	nagl	04-DEC-2009 20:45	925661	10-576	1.0	LANL	
s610426.d	241418015	nagl	04-DEC-2009 21:13	925661	10-576	1.0	LANL	
s610427.d	241418016	nagl	04-DEC-2009 21:40	925661	10-576	1.0	LANL	DUSE - see s610509

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/05/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120509.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610501.d	WBN091128-01	nagl	05-DEC-2009 10:31	50 PPM	s120509	1.0	DFTPP	
s610502.d	WBN091106-05.4	nagl	05-DEC-2009 10:46	40 PPM	s120509	1.0	MEGACVS	232623
s610503.d	WBN091201-03.2	nagl	05-DEC-2009 11:14	40 PPM	s120509	1.0	APCVS	
s610504.d	inst blk	nagl	05-DEC-2009 11:50	--------	s120509	1.0	INST BLK	
s610505.d	1201979043	nagl	05-DEC-2009 12:18	925661	10-546	1.0	SBLK01LCS	USE - rr of s610405
s610506.d	1201979041	nagl	05-DEC-2009 12:44	925661	10-575	1.0	LANLC01MS	USE - rr of s610409
s610507.d	1201979042	nagl	05-DEC-2009 13:13	925661	s120509	1.0	LANL001MSD	USE - rr of s610410
s610508.d	241418008	nagl	05-DEC-2009 13:41	925661	10-576	1.0	LANL	USE - rr of s610419
s610509.d	241418016	nagl	05-DEC-2009 14:08	925661	10-576	1.0	LANL	USE - rr of s610427

Instrument Batch: /chem/MSD6.i/s120509.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 11/09/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1198658-D
Multiplier Voltage: 1565 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s110909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6k0901.d	WBN091101-01	JMB3	09-NOV-2009 11:20	50 PPM	s110909	1.0	DFTPP	DUSE
s6k0902.d	inst blk	JMB3	09-NOV-2009 11:35	--------	s110909	1.0	INST BLK	DUSE
s6k0903.d	WBN091106-08	JMB3	09-NOV-2009 12:23	1 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0904.d	WBN091106-07	JMB3	09-NOV-2009 13:00	10 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0905.d	WBN091106-06	JMB3	09-NOV-2009 13:36	20 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0906.d	WBN091106-05.1	JMB3	09-NOV-2009 14:14	40 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0907.d	WBN091106-04	JMB3	09-NOV-2009 14:52	50 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0908.d	WBN091106-03	JMB3	09-NOV-2009 15:30	80 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0909.d	WBN091106-02	JMB3	09-NOV-2009 16:06	100 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0910.d	WBN091106-01	JMB3	09-NOV-2009 16:43	120 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0911-D.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0912.d	inst blk	JMB3	09-NOV-2009 18:15	--------	s110909	1.0	INST BLK	
s6k0913.d	WBN091106-08	JMB3	09-NOV-2009 18:53	1 PPM	s110909	1.0	MEGAICAL	
s6k0914.d	WBN091106-07	JMB3	09-NOV-2009 19:31	10 PPM	s110909	1.0	MEGAICAL	
s6k0915.d	WBN091106-06	JMB3	09-NOV-2009 20:09	20 PPM	s110909	1.0	MEGAICAL	
s6k0916.d	WBN091106-05.1	JMB3	09-NOV-2009 20:46	40 PPM	s110909	1.0	MEGAICAL	
s6k0917.d	WBN091106-04	JMB3	09-NOV-2009 21:25	50 PPM	s110909	1.0	MEGAICAL	
s6k0918.d	WBN091106-03	JMB3	09-NOV-2009 22:01	80 PPM	s110909	1.0	MEGAICAL	

s6k0919.d	WBN091106-02	JMB3	09-NOV-2009 22:39	100 PPM	s110909	1.0	MEGAICAL	
s6k0920.d	WBN091106-01	JMB3	09-NOV-2009 23:16	120 PPM	s110909	1.0	MEGAICAL	
s6k0921-D.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0921.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0922.d	inst blk	JMB3	10-NOV-2009 11:21	--------	s110909	1.0	INST BLK	
s6k0923.d	WBN091016-01	JMB3	10-NOV-2009 11:59	10 PPM	s110909	1.0	AP12ICAL	
s6k0924.d	WBN091016-02	JMB3	10-NOV-2009 12:36	20 PPM	s110909	1.0	AP12ICAL	
s6k0925.d	WBN091016-03	JMB3	10-NOV-2009 13:13	40 PPM	s110909	1.0	AP12ICAL	
s6k0926.d	WBN091016-04	JMB3	10-NOV-2009 13:51	50 PPM	s110909	1.0	AP12ICAL	
s6k0927.d	WBN091016-05	JMB3	10-NOV-2009 14:30	80 PPM	s110909	1.0	AP12ICAL	
s6k0928.d	WBN091016-06	JMB3	10-NOV-2009 15:06	100 PPM	s110909	1.0	AP12ICAL	
s6k0929.d	WBN091016-07	JMB3	10-NOV-2009 15:43	120 PPM	s110909	1.0	AP12ICAL	
s6k0930.d	WBN091029-25	JMB3	10-NOV-2009 16:20	10 PPM	s110909	1.0	PESTICAL	
s6k0931.d	WBN091029-24	JMB3	10-NOV-2009 16:56	20 PPM	s110909	1.0	PESTICAL	
s6k0932.d	WBN091029-23.1	JMB3	10-NOV-2009 17:33	40 PPM	s110909	1.0	PESTICAL	
s6k0933.d	WBN091029-22	JMB3	10-NOV-2009 18:09	50 PPM	s110909	1.0	PESTICAL	
s6k0934.d	WBN091029-21	JMB3	10-NOV-2009 18:45	80 PPM	s110909	1.0	PESTICAL	
s6k0935.d	WBN091029-20	JMB3	10-NOV-2009 19:21	100 PPM	s110909	1.0	PESTICAL	
s6k0936.d	WBN091029-19	JMB3	10-NOV-2009 19:58	120 PPM	s110909	1.0	PESTICAL	
s6k0937-D.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	FAILED SC 8270D
s6k0937.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	
s6k0938-D.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0938.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0939-D.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0939.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0940-D.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	
s6k0940.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	

s6k0941.d	inst blk	JMB3	10-NOV-2009 22:26	--------	s110909	1.0	INST BLK	
s6k0942.d	WBN091016-16	JMB3	10-NOV-2009 22:55	500 PPM	s110909	1.0	HEXICAL	
s6k0943.d	WBN091016-15	JMB3	10-NOV-2009 23:24	1000 PPM	s110909	1.0	HEXICAL	
s6k0944.d	WBN091016-14	JMB3	10-NOV-2009 23:53	1250 PPM	s110909	1.0	HEXICAL	
s6k0945.d	WBN091016-13	JMB3	11-NOV-2009 00:21	1500 PPM	s110909	1.0	HEXICAL	
s6k0946.d	WBN091016-12	JMB3	11-NOV-2009 00:50	1750 PPM	s110909	1.0	HEXICAL	
s6k0947.d	UBN090828-02.4-16	JMB3	11-NOV-2009 01:18	500 PPM	s110909	1.0	HEXICAL	
s6k0948.d	UBN090924-01	JMB3	11-NOV-2009 01:47	10 PPM	s110909	1.0	NEVICAL	
s6k0949.d	UBN090924-02	JMB3	11-NOV-2009 02:16	20 PPM	s110909	1.0	NEVICAL	
s6k0950.d	UBN090924-03	JMB3	11-NOV-2009 02:44	40 PPM	s110909	1.0	NEVICAL	
s6k0951.d	UBN090924-04	JMB3	11-NOV-2009 03:12	50 PPM	s110909	1.0	NEVICAL	
s6k0952.d	UBN090924-05	JMB3	11-NOV-2009 03:41	80 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0953.d	UBN090924-06	JMB3	11-NOV-2009 04:10	100 PPM	s110909	1.0	NEVICAL	
s6k0954.d	UBN090924-07	JMB3	11-NOV-2009 04:38	120 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0955-D.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	DUSE - failed >70%-130%
s6k0955.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	

NCR Report No.: 766334
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
05-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
925661	See Below		

Potentially affected work order(s)(SDG): 241336(10-546),241417(10-575),241418(10-576)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The MS(1201979041)/MSD(1201979042) RPD for Benzyl alcohol was 39%. The limit is 30%.	1. Since Benzyl alcohol was individually within the acceptance limits for the MS and MSD, the data results have been reported.

Originator's Name:

Nathan Greene 05-DEC-09

Data Validator/Group Leader:

Barbara Bailey 08-DEC-09

GC SEMIVOLATILE DRO ANALYSIS

DRO Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-575

Method/Analysis Information

Procedure:	**Analysis of Diesel Range Organics by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	926871
Prep Batch Number:	926870

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241417001	RE03-09-13812
241417002	RE03-09-13811
1201981721	Method Blank (MB)
1201981724	Laboratory Control Sample (LCS)
1201981722	241417001(RE03-09-13812) Matrix Spike (MS)
1201981723	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241417001 (RE03-09-13812) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cero **Date:** 12/14/09

Roadmap for LANL 10-575 DRO

This roadmap was analyzed by kev01577 on 12-02-2009, 01:52.
This roadmap was reviewed by jim01140 on 12-02-2009, 08:48.
This roadmap was packaged by yml on 12-12-2009, 07:34.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/113009dr/007f0701.d	241417001	30-NOV-2009	20:00	10-575.sub	RE03-09-13812	1.00000	926871	USE
☐	N	/chem/fid5.i/113009dr/010f1001.d	241417002	30-NOV-2009	21:55	10-575.sub	RE03-09-13811	1.00000	926871	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/113009dr/005f0501.d	1201981721	mb	30-NOV-2009	18:43	all.sub	DBLK01	1.00000	926871	USE
☐	N	/chem/fid5.i/113009dr/006f0601.d	1201981724	lcs	30-NOV-2009	19:21	all.sub	DBLK01LCS	1.00000	926871	USE
☐	N	/chem/fid5.i/113009dr/008f0801.d	1201981722	ms	30-NOV-2009	20:38	10-575.sub	RE03-09-13812MS	1.00000	926871	USE
☐	N	/chem/fid5.i/113009dr/009f0901.d	1201981723	msd	30-NOV-2009	21:17	10-575.sub	RE03-09-13812MSD	1.00000	926871	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13812	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.1	**Dilution:**	1
Run Date:	11/30/2009 20:00	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	007f0701.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.19	mg/kg	2.32	7.14

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13811	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 21:55	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	010f1001.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.36	mg/kg	2.39	7.36

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10-575

Matrix Type: SOLID

CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC
1201981721	MB for batch 926870	59
1201981724	LCS for batch 926870	83
241417001	RE03-09-13812	54
1201981722	RE03-09-13812MS	68
1201981723	RE03-09-13812MSD	67
241417002	RE03-09-13811	46

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10–575
Client ID: LCS for batch 926870
Lab Sample ID: 1201981724
Instrument: FID5.I
Analyst: KXR2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 19:21
Dilution: 1
Prep Batch ID: 926870
Batch ID: 926871

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	27.7	83	53–114

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812MS
Lab Sample ID: 1201981722
Instrument: FID5.I
Analyst: KXR2
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 11/30/2009 20:38
Prep Batch ID: 926870
Batch ID: 926871

Dilution: 1

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	35.7	3.19	J	28.1	70	21-122

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10–575**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03–09–13812MSD**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981723**	**%Moisture:**	**7.1**
Instrument:	**FID5.I**	**Analysis Date:**	**11/30/2009 21:17**
Analyst:	**KXR2**	**Prep Batch ID:**	**926870**
Inj. Vol:	**1 uL**	**Batch ID:**	**926871**

Dilution: 1

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	35.7	3.19	J	28.0	70	21–122	0	0–30

Method Blank Summary

SDG Number:	10–575	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926870	Instrument ID:	FID5.I	Data File:	005f0501.d
Lab Sample ID:	1201981721	Prep Date:	11/29/2009 20:04	Analyzed:	11/30/09 18:43
Column:	DB–5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926870	1201981724	006f0601.d	11/30/09	1921
02 RE03–09–13812	241417001	007f0701.d	11/30/09	2000
03 RE03–09–13812MS	1201981722	008f0801.d	11/30/09	2038
04 RE03–09–13812MSD	1201981723	009f0901.d	11/30/09	2117
05 RE03–09–13811	241417002	010f1001.d	11/30/09	2155

SAMPLE DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	Date Collected:	11/17/2009 12:00	Matrix:	SOIL
Lab Sample ID:	241417001	Date Received:	11/19/2009 08:45	%Moisture:	7.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13812	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926871	Inst:	FID5.I	Dilution:	1
Run Date:	11/30/2009 20:00	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:04	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	007f0701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.19	mg/kg	2.32	7.14

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/007f0701.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 30-NOV-2009 20:00
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241417001|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	CONCENTRATIONS FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			12038828	89.4189	3.2	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.139	14.145	-0.006	2299964	10.8195	0.39	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/007f0701.d
Date : 30-NOV-2009 20:00
Client ID: RE03-09-13812
Sample Info: |241417001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

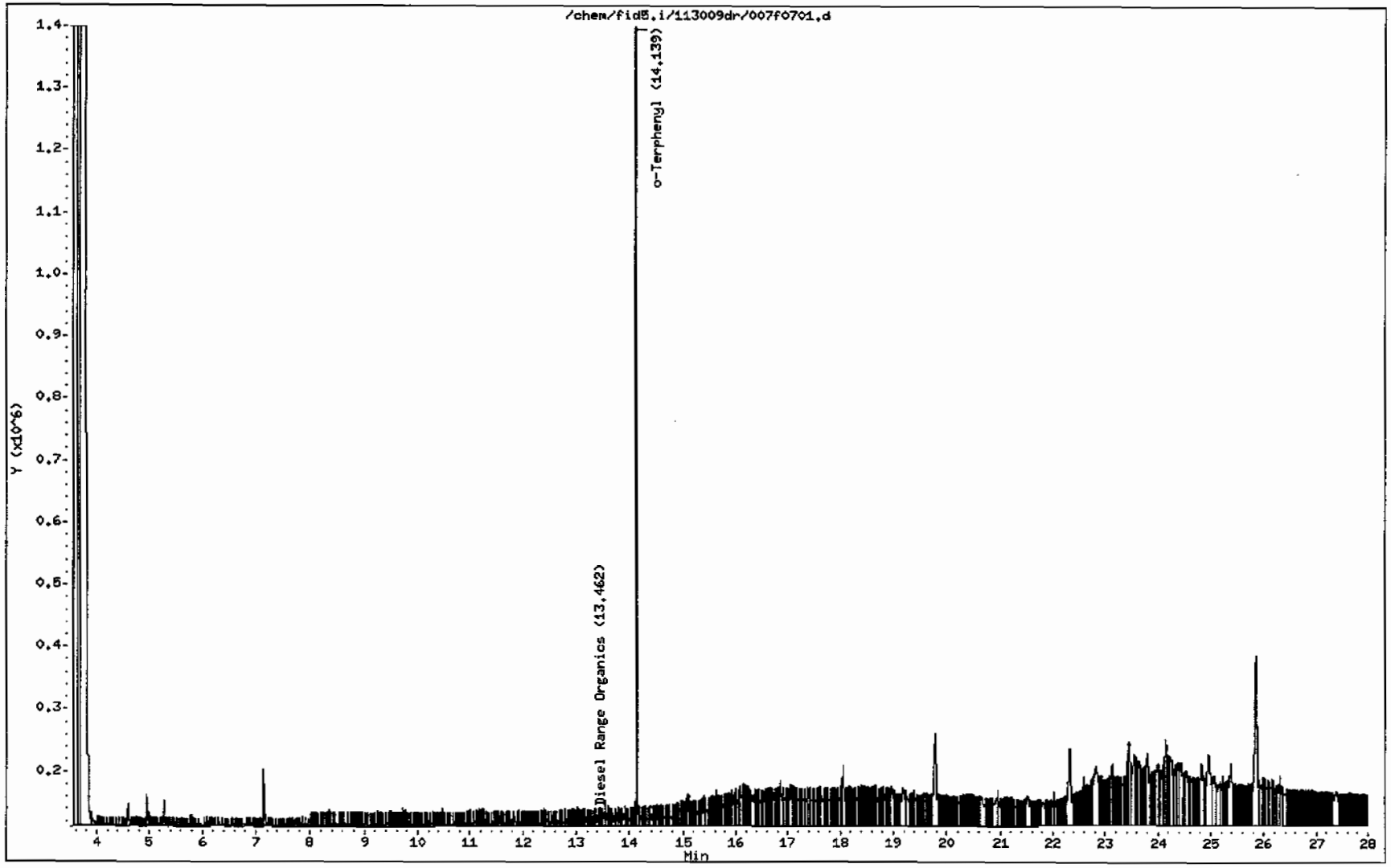

Data File: /chem/fid5.i/113009dir/00070701.d
Injection Date: 30-NOV-2009 20:00
Instrument: fid5.i
Client Sample ID: RE03-09-13812

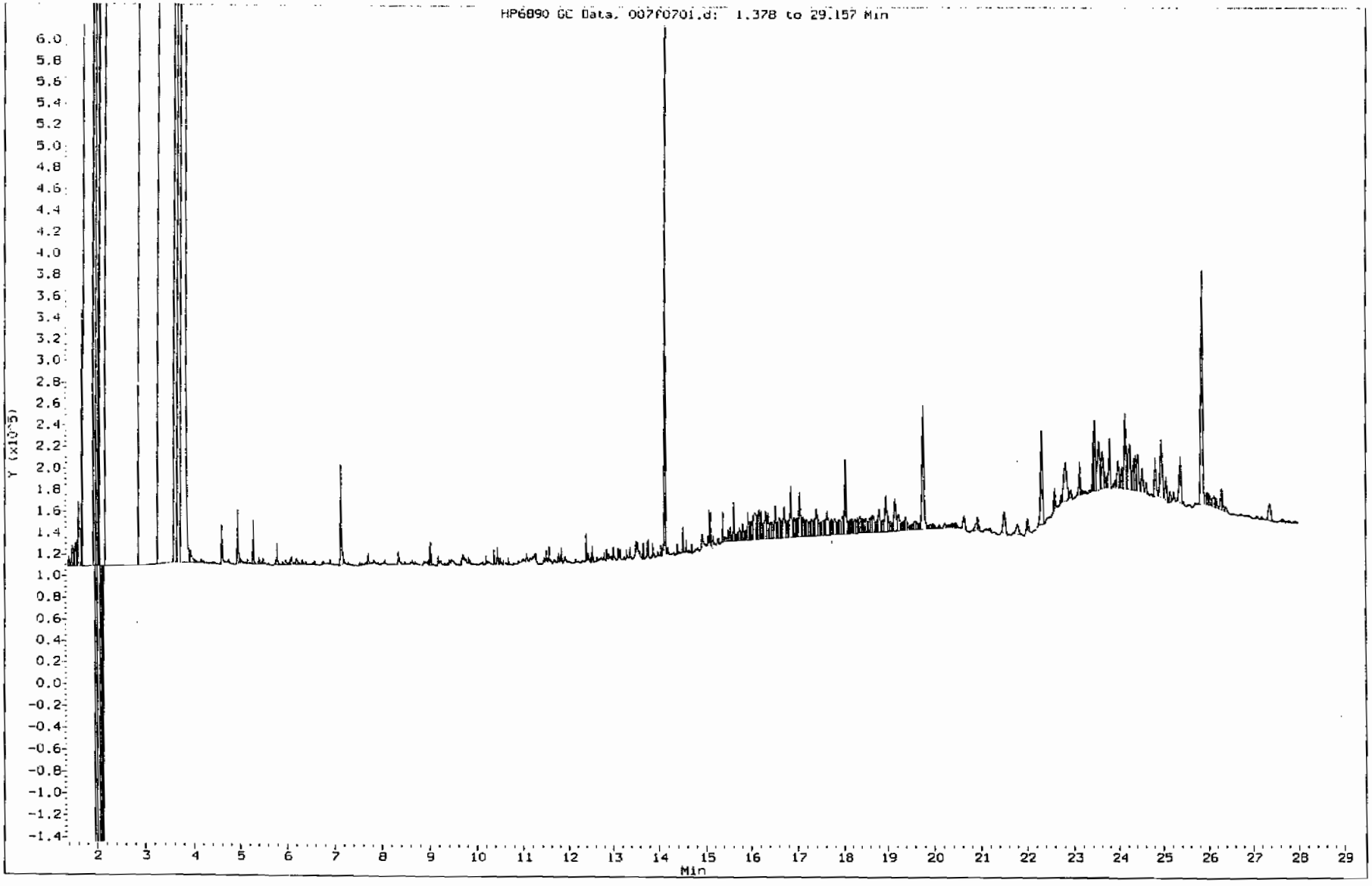

Data File: /chem/fid5.i/113009dr/007f0701.d
Injection Date: 30-NOV-2009 20:00
Instrument: fid5.i
Client Sample ID: RE03-09-13812

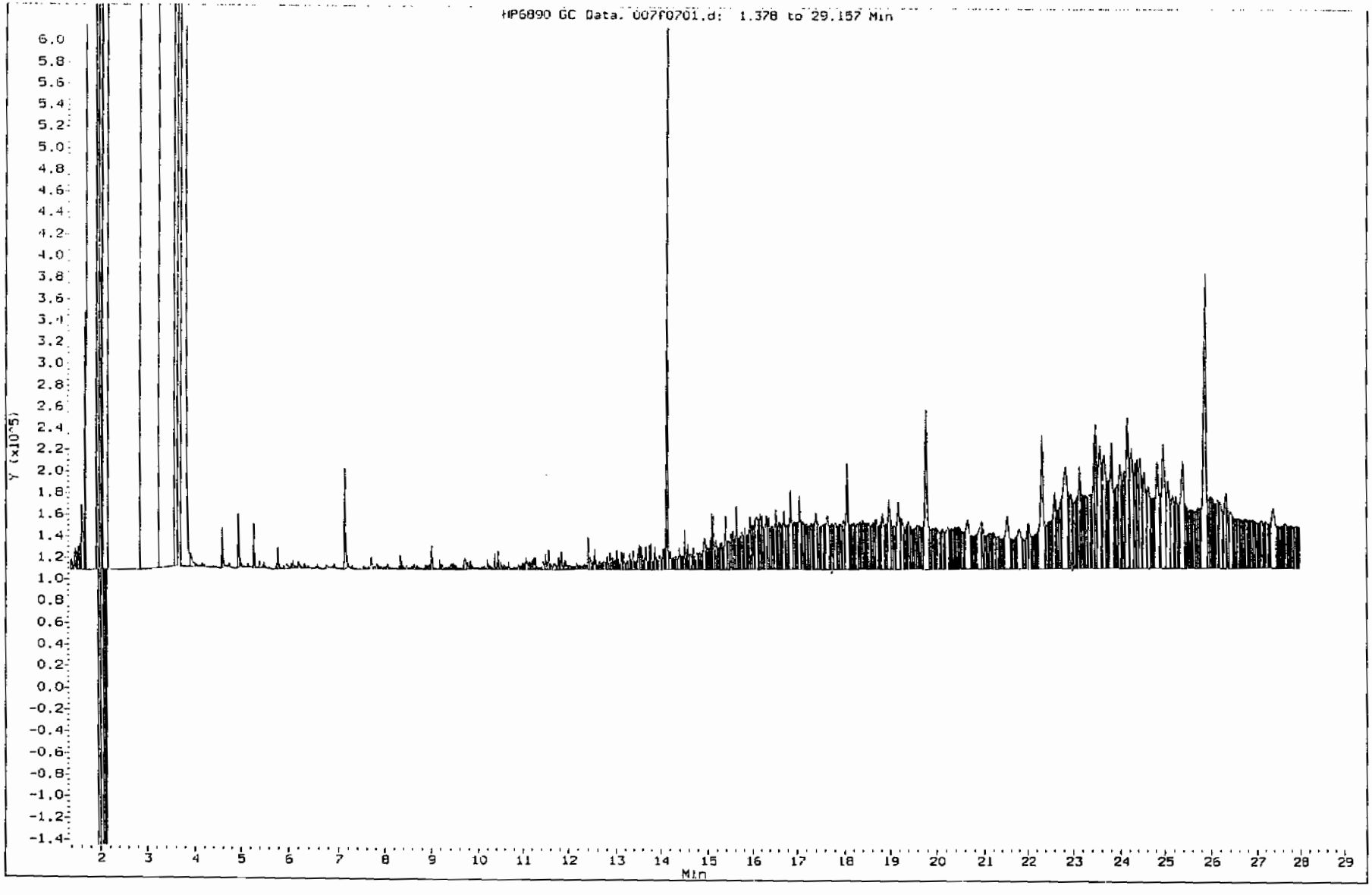

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13811	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 21:55	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	010f1001.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.36	mg/kg	2.39	7.36

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/010f1001.d
Lab Smp Id: 241417002 Client Smp ID: RE03-09-13811
Inj Date : 30-NOV-2009 21:55
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241417002|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weigth of sample extracted (g)
M	9.95660	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.138	14.145	-0.007	1952716	9.18595	0.34

Data File: /chem/fid5.i/113009dr/010f1001.d
Date : 30-NOV-2009 21:55
Client ID: RE03-09-13811
Sample Info: 1241417002|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

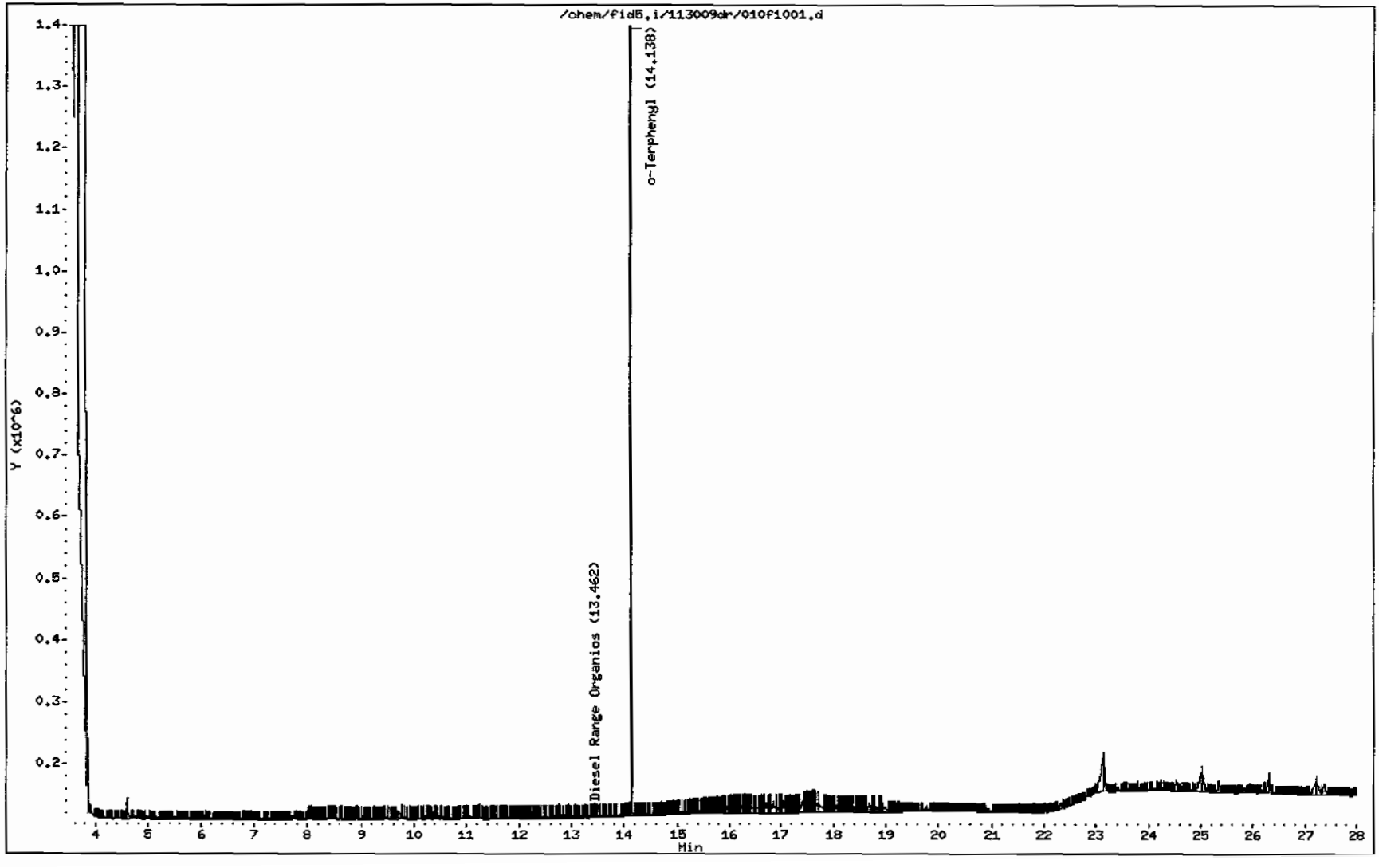

STANDARDS DATA

Report Date: 02-Dec-2009 01:12

Calibration History

Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 23:51	dro	/chem/fid5.i/113009dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 17:28	dro	/chem/fid5.i/113009dr/003f0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 01-Dec-2009 09:57 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

		Compound	RT	RT Window	RF
	3	Decane (C10)	8.032	8.002-8.062	
S	1	Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2	o-Terphenyl	14.145	14.115-14.175	2.126e+05
	4	Octacosane (C28)	18.867	18.837-18.897	
S	75	JP-4	6.750	3.500-10.000	
S	76	Motor oil	17.000	14.000-20.000	

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INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Cal Date : 01-Dec-2009 09:57 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 1728

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	141780.20	0.01	5.3	15.0
o-Terphenyl	212576.33	208247.31	0.01	-2.0	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: FID5 Calibration Date: 11/30/09 Time: 2351

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	152520.07	0.01	13.3	15.0
o-Terphenyl	212576.33	223357.08	0.01	5.1	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 30-NOV-2009 17:28
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
$ 1 Diesel Range Organics					CAS #:
8.008- 18.916			141780197	1000.00	1050
$ 2 o-Terphenyl					CAS #: 84-15-1
14.145	14.145	0.000	5206182	25.0000	24.5

Data File: /chem/fid5.i/113009dr/003f0301.d
Date : 30-NOV-2009 17:28
Client ID: DSTD01
Sample Info: !UFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

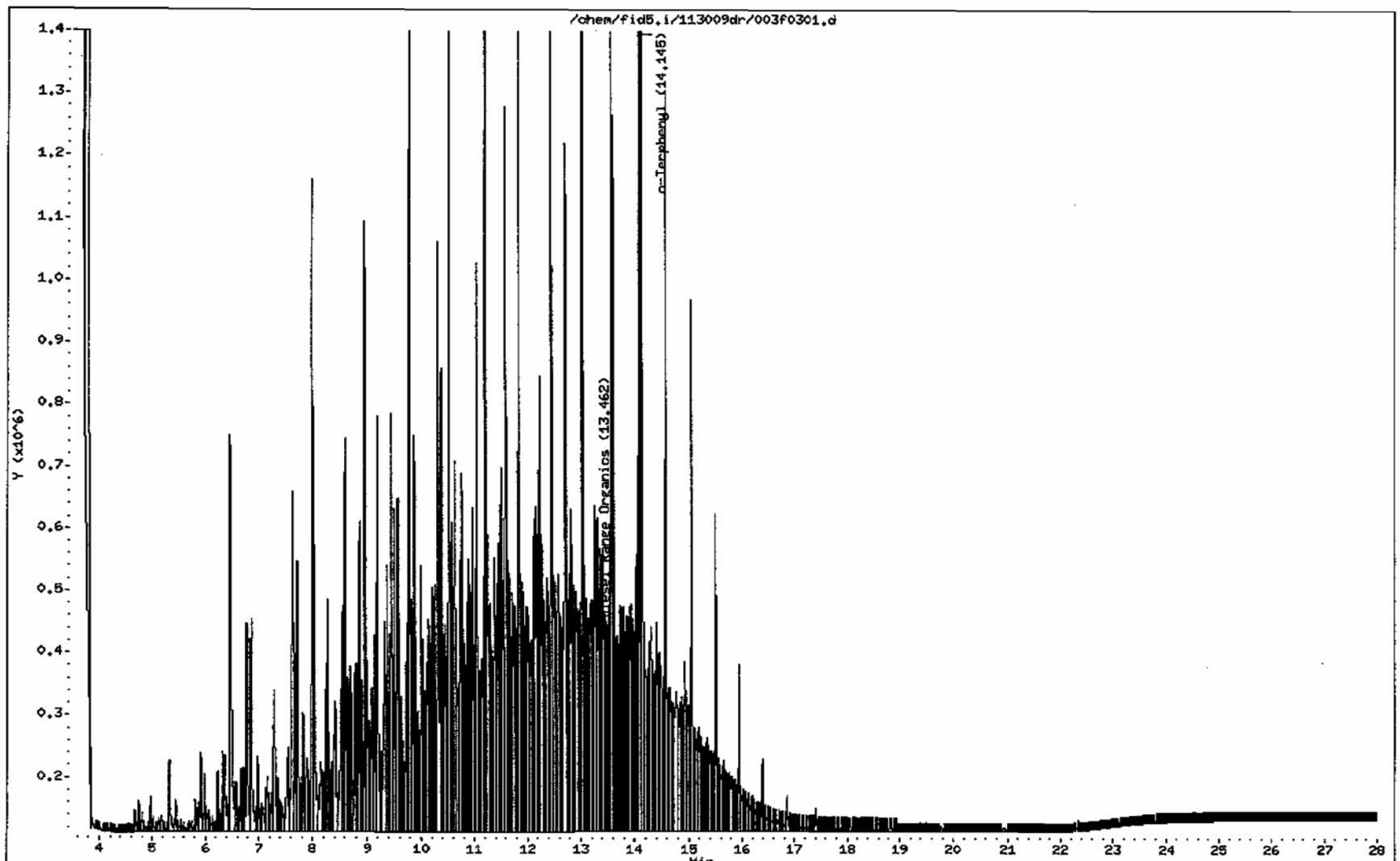

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 30-NOV-2009 23:51
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			152520070	1000.00	1130
$	2 o-Terphenyl					CAS #: 84-15-1
	14.146	14.145	0.001	5583926	25.0000	26.3

Data File: /chem/fid5.i/113009dr/013f1301.d
Date : 30-NOV-2009 23:51
Client ID: DSTD02
Sample Info: !UFI091118-01 D2

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

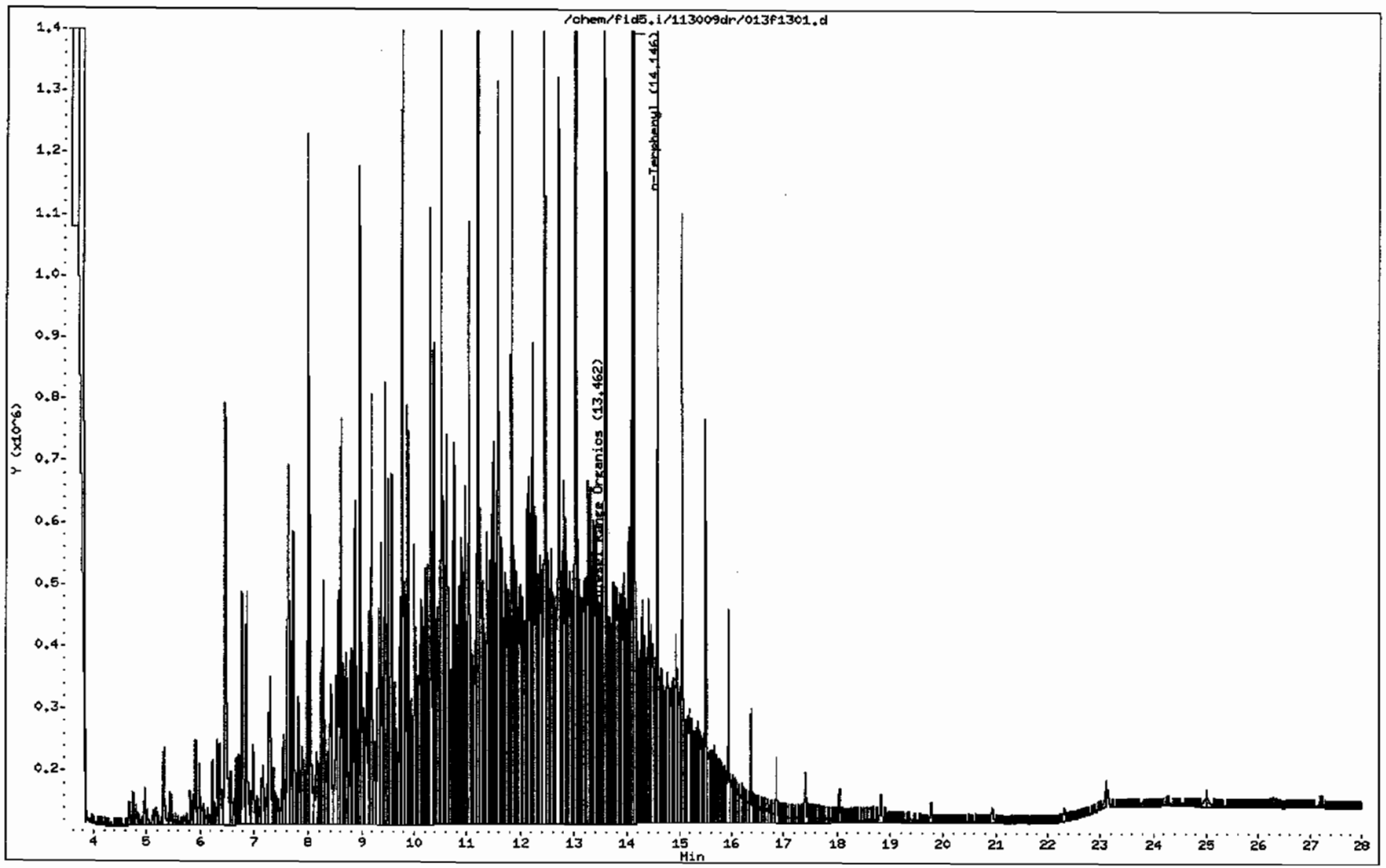

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	11/30/09	1612	14.14	
02	RTMARKER	UFI091013-03	11/30/09	1649		
03	DSTD01	UFI091118-01	11/30/09	1728	14.15	
04	DIBLK02	WFI091130-06	11/30/09	1805	14.14	
05	DBLK01	1201981721	11/30/09	1843	14.14	
06	DBLK01LCS	1201981724	11/30/09	1921	14.14	
07	RE03-09-13812	241417001	11/30/09	2000	14.14	
08	RE03-09-13812MS	1201981722	11/30/09	2038	14.14	
09	RE03-09-13812MSD	1201981723	11/30/09	2117	14.14	
10	RE03-09-13811	241417002	11/30/09	2155	14.14	
11	ZZZZZ	ZZZZZ	11/30/09	2234	14.14	
12	ZZZZZ	ZZZZZ	11/30/09	2313	14.14	
13	DSTD02	UFI091118-01	11/30/09	2351	14.15	
14	DIBLK03	WFI091130-06	12/01/09	0029	14.14	
15	ZZZZZ	ZZZZZ	12/01/09	0107	14.14	
16	ZZZZZ	ZZZZZ	12/01/09	0145	14.14	
17	ZZZZZ	ZZZZZ	12/01/09	0224	14.14	
18	ZZZZZ	ZZZZZ	12/01/09	0303	14.13	
19	ZZZZZ	ZZZZZ	12/01/09	0341		
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–575			**Matrix:**	SOIL
Lab Sample ID:	1201981721				
Client Sample:	QC for batch 926870	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926870	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 18:43	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/005f0501.d
Lab Smp Id: 1201981721 Client Smp ID: DBLK01
Inj Date : 30-NOV-2009 18:43
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981721|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2500731	11.7639	0.39

Data File: /chem/fid5.i/113009dr/005f0501.d
Date : 30-NOV-2009 18:43
Client ID: DBLK01
Sample Info: |120198172111|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

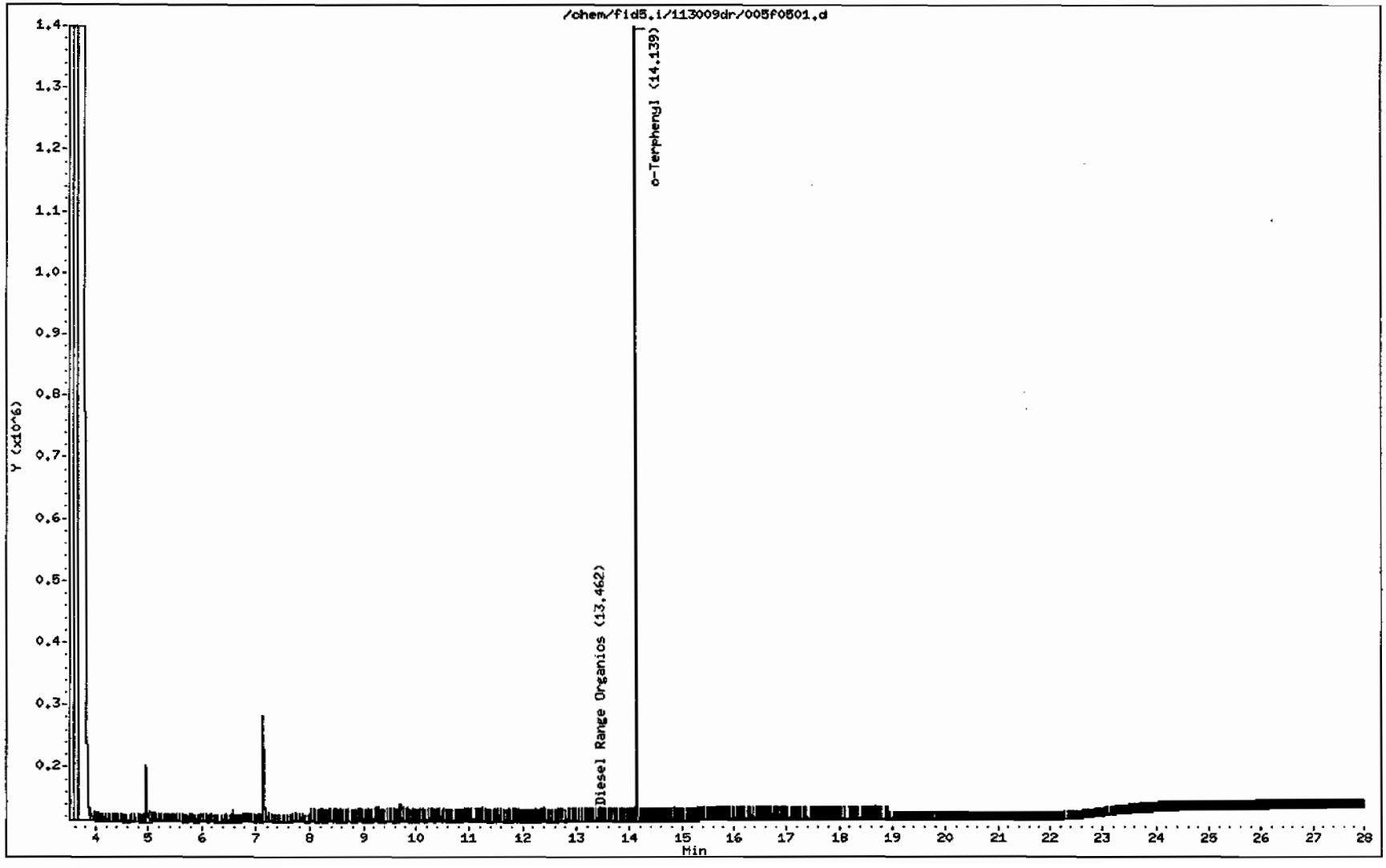

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575			**Matrix:**	SOIL
Lab Sample ID:	1201981724				
Client Sample:	QC for batch 926870	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926870	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 19:21	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	006f0601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		27.7	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/006f0601.d
Lab Smp Id: 1201981724 Client Smp ID: DBLK01LCS
Inj Date : 30-NOV-2009 19:21
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981724|1|
Misc Info : |FIDDRO_SF|926871|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			112073366	832.429	27.7
$ 2 o-Terphenyl					CAS #: 84-15-1
14.143	14.145	-0.002	3523785	16.5766	0.55

Data File: /chem/fid5.i/113009dr/006f0601.d
Date : 30-NOV-2009 19:21
Client ID: DBLK01LCS
Sample Info: |1201981724|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

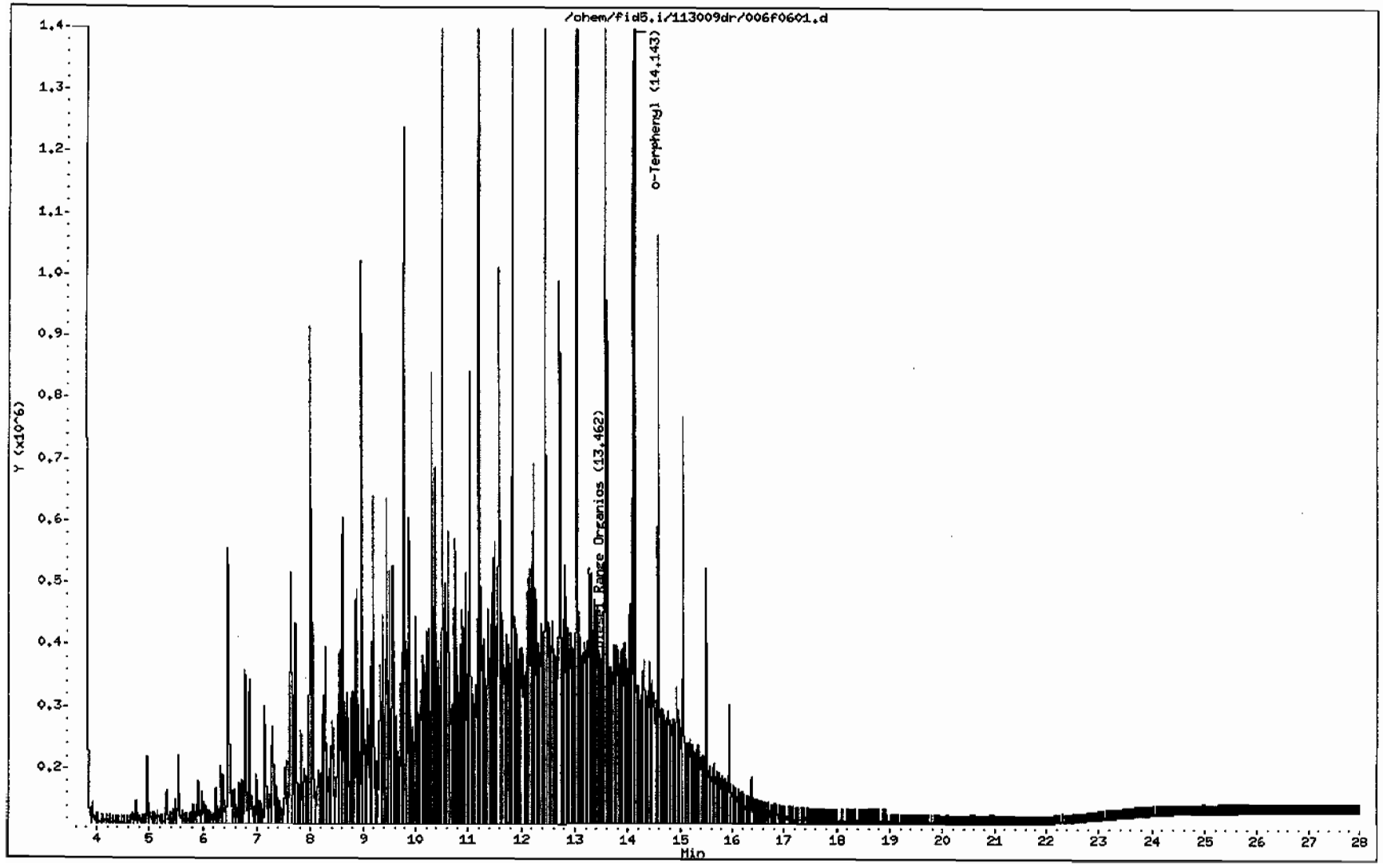

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201981722	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 926870	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812MS	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 20:38	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	008f0801.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		28.1	mg/kg	2.32	7.15

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/008f0801.d
Lab Smp Id: 1201981722 Client Smp ID: RE03-09-13812MS
Inj Date : 30-NOV-2009 20:38
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981722|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			105879710	786.426	28.1	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.142	14.145	-0.003	2871765	13.5093	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/008f0801.d

Date : 30-NOV-2009 20:38

Client ID: RE03-09-13812MS

Sample Info: |120198172211|

Volume Injected (uL): 1.0

Column phase: DB-5HS

Instrument: fid5.i

Operator: KXR2

Column diameter: 0.25

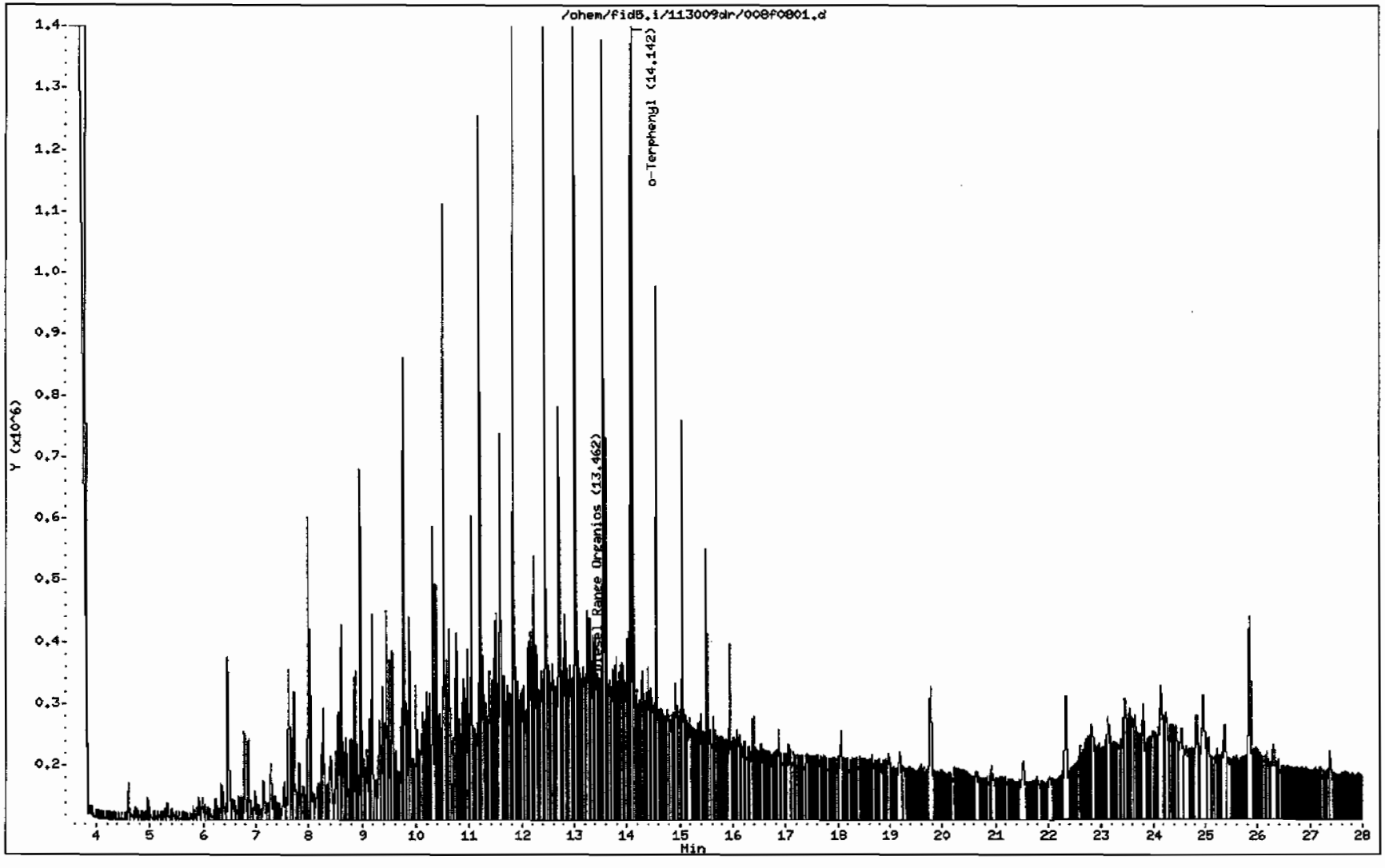

Data File: /chem/fid5.i/113009dh/008f0801.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

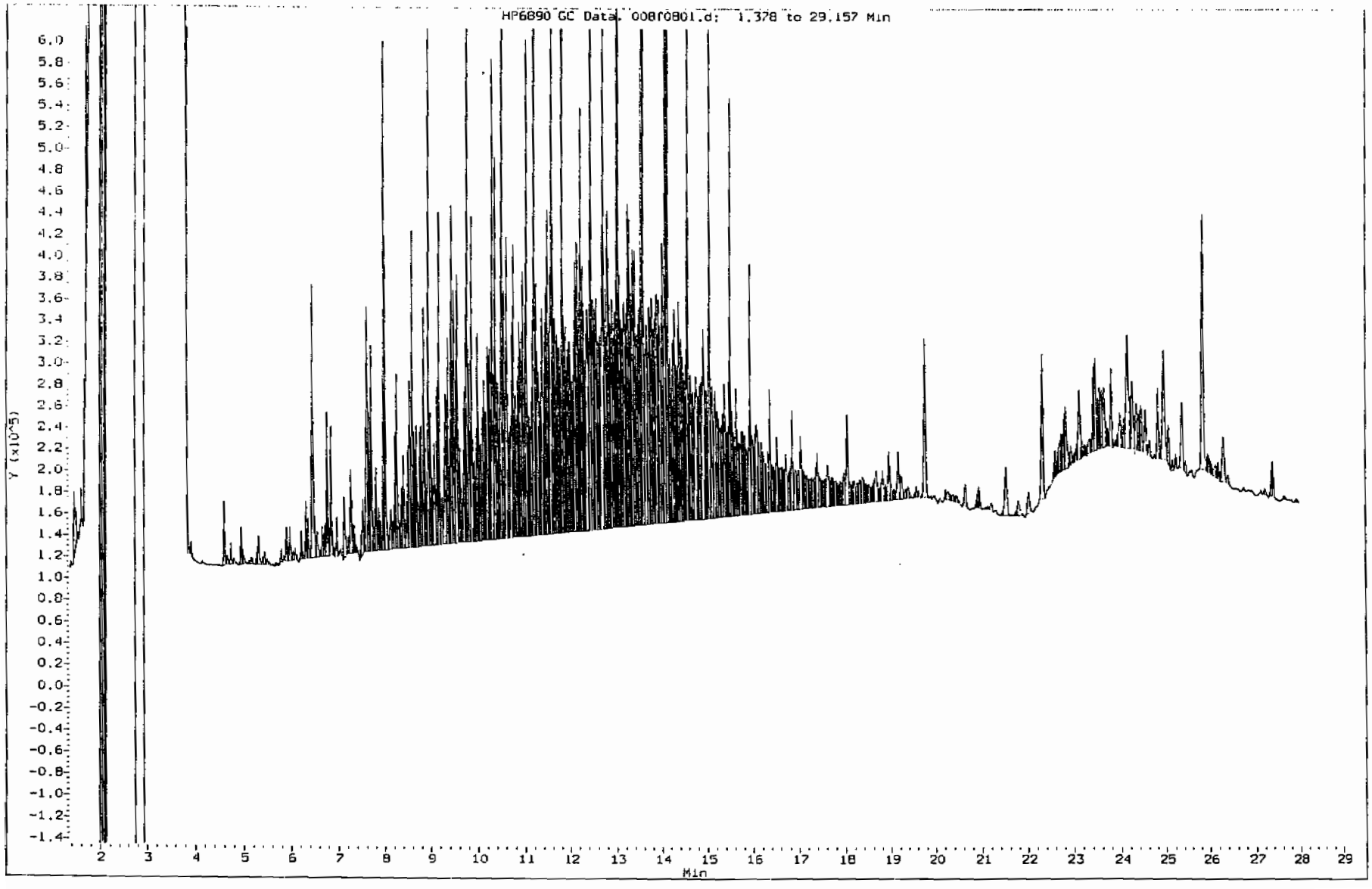

Data File: /chem/fid5.i/113009dr/0081080l.d
Injection Date: 30-NOV-2009 20:38
Instrument: fid5.i
Client Sample ID: RE03-09-13812MS

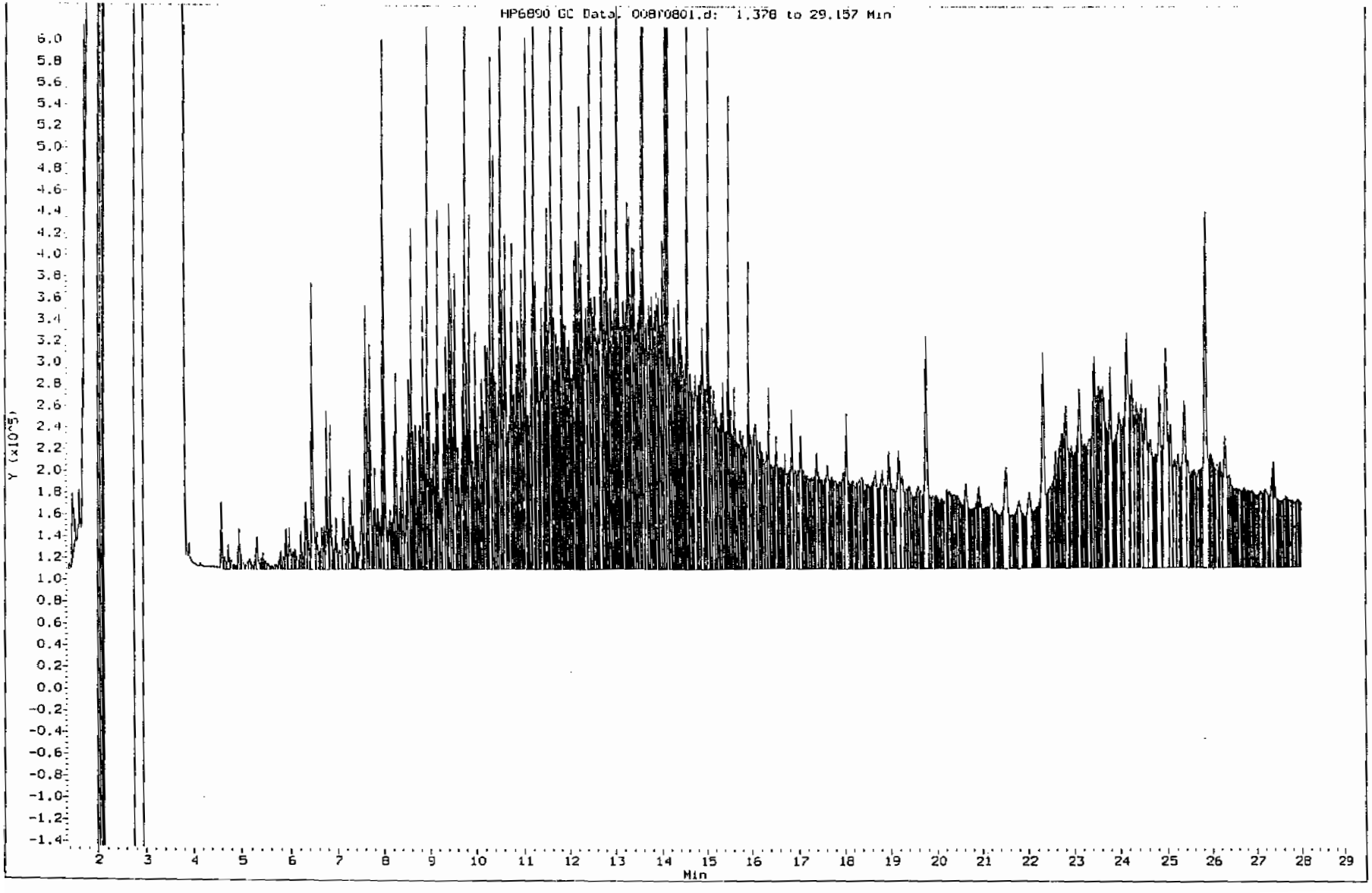

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201981723	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 926870	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812MSD	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926871	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	11/30/2009 21:17	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:04	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	009f0901.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		28.0	mg/kg	2.32	7.14

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/113009dr/009f0901.d
Lab Smp Id: 1201981723 Client Smp ID: RE03-09-13812MSD
Inj Date : 30-NOV-2009 21:17
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201981723|1|
Misc Info : |FIDDRO_SF|926871|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/113009dr/FID5a.i_b_DRO_111709.m
Meth Date : 01-Dec-2009 09:57 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			105621807	784.510	28.0	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.141	14.145	-0.004	2830842	13.3168	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/113009dr/009f0901.d
Date : 30-NOV-2009 21:17
Client ID: RE03-09-13812MSD
Sample Info: |120198172311|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

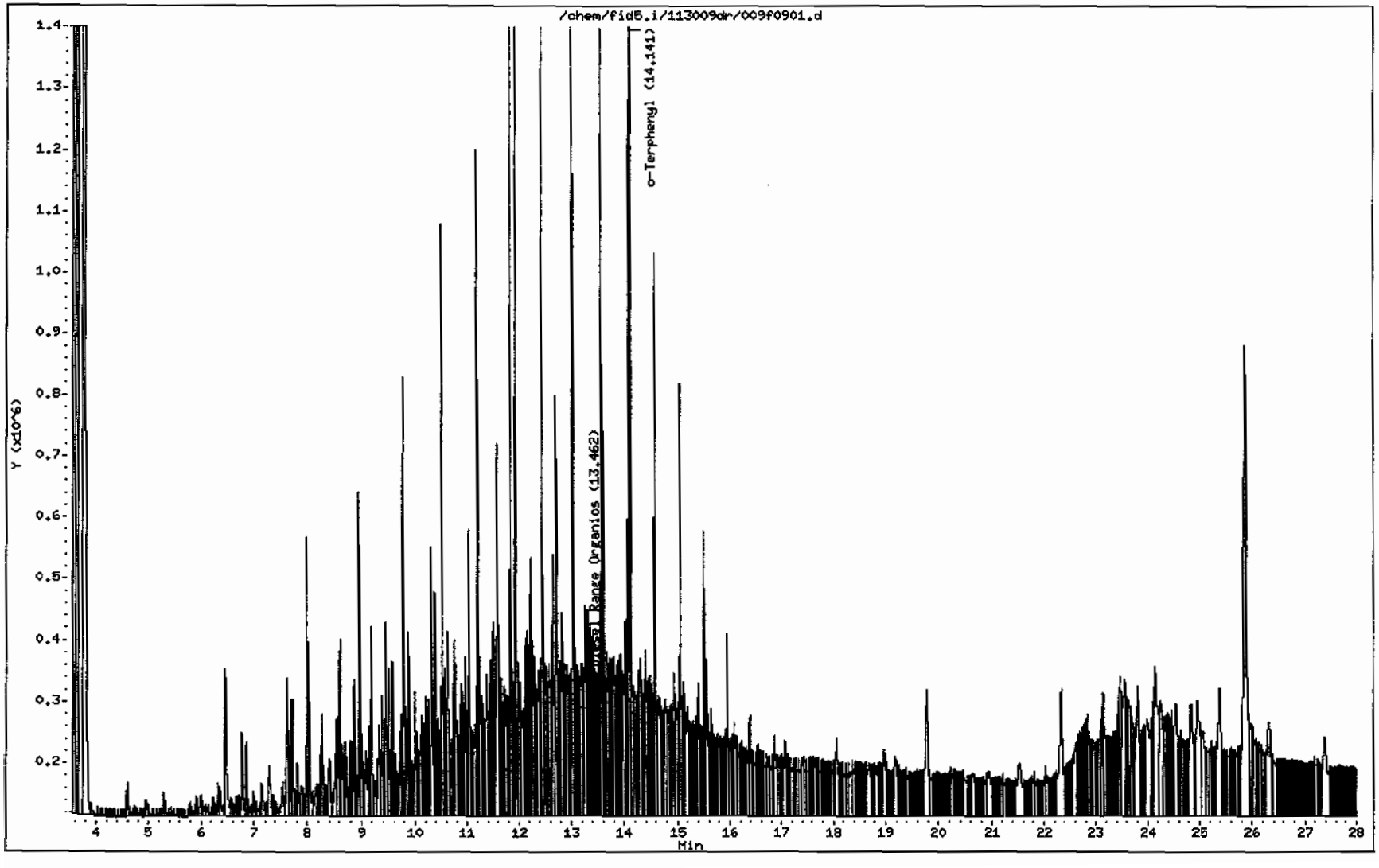

Data File: /chem/fid5.i/113009dr/0090f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

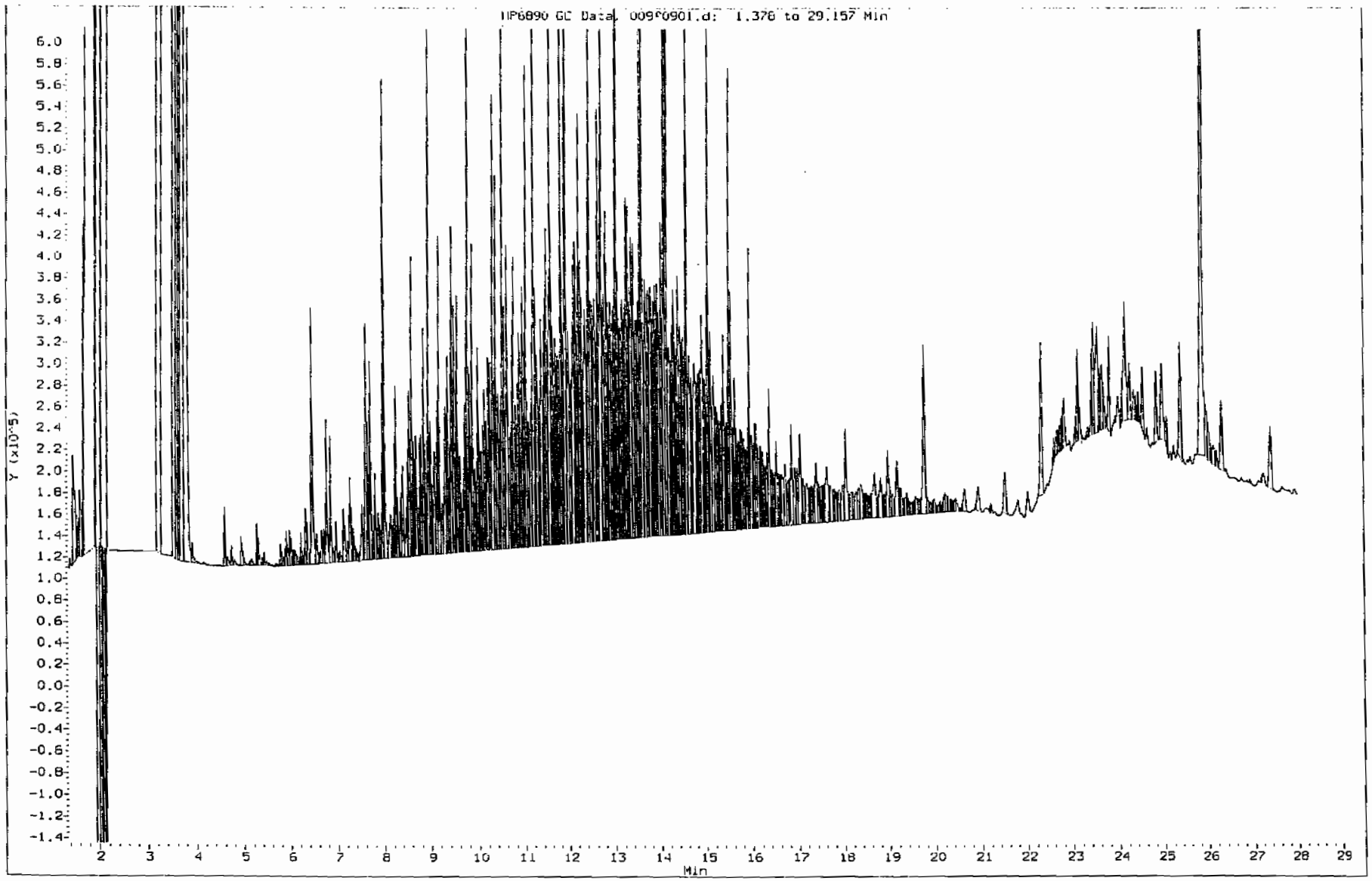

Data File: /chem/fid5.i/113009dr/009f0901.d
Injection Date: 30-NOV-2009 21:17
Instrument: fid5.i
Client Sample ID: RE03-09-13812MSD

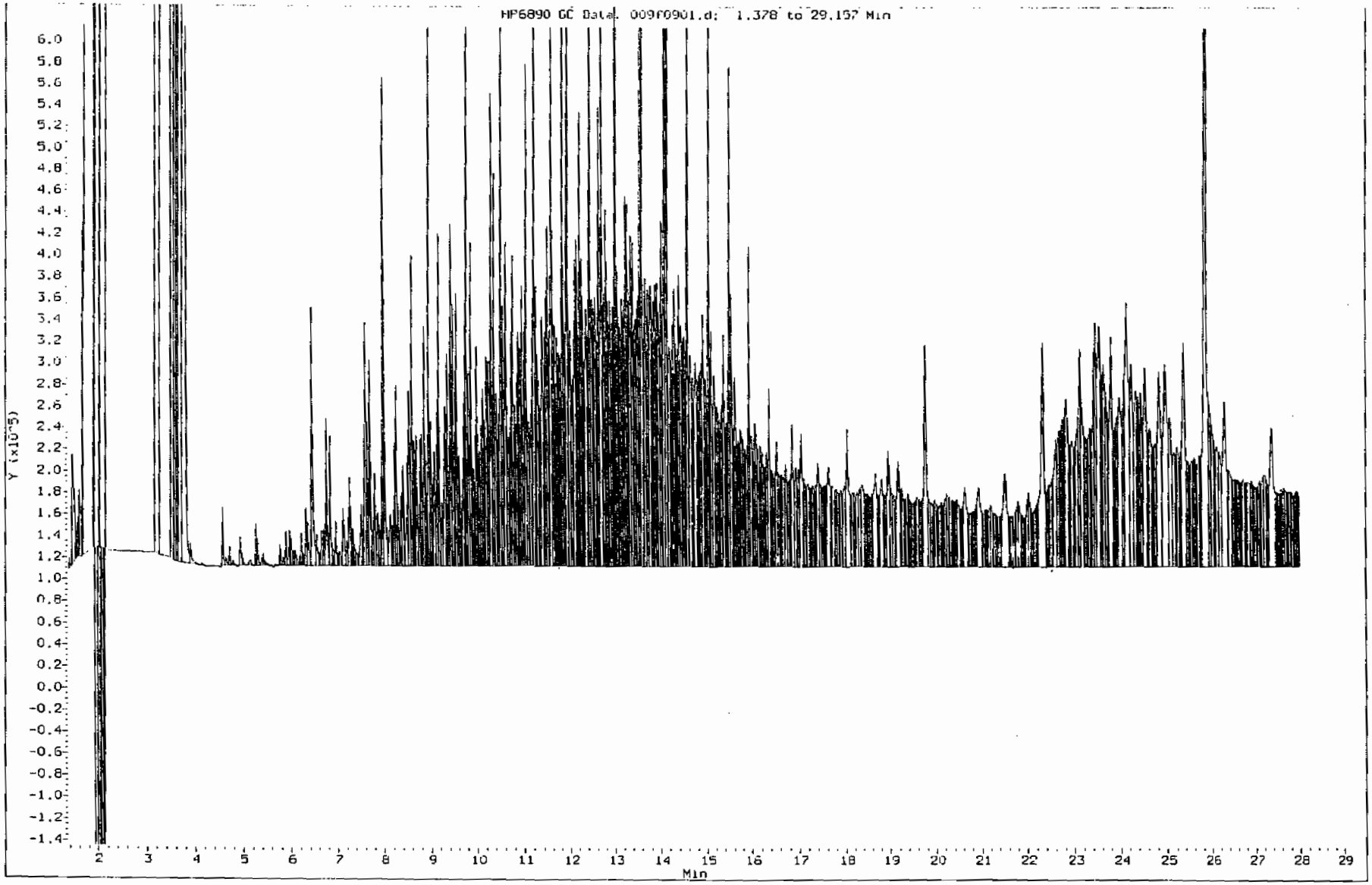

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORH	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MBSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359		1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359		1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359		1.0	LANL	USE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359		1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359		1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359		1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359		1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359		1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08		SDGa26875		1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46		SDGa26875		1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359		1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359		1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359		1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359		1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359		1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359		1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875	1.0		CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359	1.0	LANL	USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359	1.0	LANL	USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359	1.0	LANL	USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359	1.0	LANL	USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406	1.0	LANL	USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406		1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406		1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875		1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875		1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875		1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385		1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385		1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385		1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385		1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385		1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385		1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385		1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385		1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385		1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42			SDGa26875	1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20			SDGa26875	1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58			SDGa26875	1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35			SDGa26875	1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50			SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 12/01/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:113009DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	30-NOV-2009 16:12		SDGa01714	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	30-NOV-2009 16:49		SDGa01714	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	30-NOV-2009 17:28		SDGa01714	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	30-NOV-2009 18:05		SDGa01714	1.0		CLEAN
005f0501.d	1201981721	KXR2	30-NOV-2009 18:43	926871	SDGa01714	1.0	MB	USE
006f0601.d	1201981724	KXR2	30-NOV-2009 19:21	926871		1.0	LCS	USE
007f0701.d	241417001	KXR2	30-NOV-2009 20:00	926871	10-575	1.0	LANL	USE
008f0801.d	1201981722	KXR2	30-NOV-2009 20:38	926871	10-575	1.0	MS	USE
009f0901.d	1201981723	KXR2	30-NOV-2009 21:17	926871	10-575	1.0	MSD	USE
010f1001.d	241417002	KXR2	30-NOV-2009 21:55	926871	10-575	1.0	LANL	USE
011f1101.d	241423004	KXR2	30-NOV-2009 22:34	926871	10-578	1.0	LANL	USE
012f1201.d	241423005	KXR2	30-NOV-2009 23:13	926871	10-578	1.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	30-NOV-2009 23:51		SDGa01714	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	01-DEC-2009 00:29		SDGa01714	1.0		CLEAN
015f1501.d	241503002	KXR2	01-DEC-2009 01:07	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

Instrument Batch: /chem/fid5.i/113009dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241503003	KXR2	01-DEC-2009 01:45	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

017f1701.d	241503004	KXR2	01-DEC-2009 02:24	926871	10-589	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN
018f1801.d	241524002	KXR2	01-DEC-2009 03:03	926871	10-600	10.0	LANL	DUSE,INSTRUMENT SHUTDOWN
019f1901.d	241539001	KXR2	01-DEC-2009 03:41	926871	10-603	1.0	LANL	DUSE,INSTRUMENT SHUTDOWN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926870 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981721 MB	29-NOV-2009 20:04:50	30	1	0.03333
1201981724 LCS	29-NOV-2009 20:04:50	30	1	0.03333
241417001	29-NOV-2009 20:04:50	30.17	1	0.03315
1201981722 MS (241417001)	29-NOV-2009 20:04:50	30.13	1	0.03319
1201981723 MSD (241417001)	29-NOV-2009 20:04:50	30.17	1	0.03315
241417002	29-NOV-2009 20:04:50	30.18	1	0.03313
241423004	29-NOV-2009 20:04:50	30.18	1	0.03313
241423005	29-NOV-2009 20:04:50	30.04	1	0.03329
241503002	29-NOV-2009 20:04:50	30.11	1	0.03321
241503003	29-NOV-2009 20:04:50	30.1	1	0.03322
241503004	29-NOV-2009 20:04:50	30.19	1	0.03312
241524002	29-NOV-2009 20:04:50	30.09	1	0.03323
241539001	29-NOV-2009 20:04:50	30.02	1	0.03331
241539002	29-NOV-2009 20:04:50	30.05	1	0.03328
241539003	29-NOV-2009 20:04:50	30.03	1	0.0333
241539004	29-NOV-2009 20:04:50	30.03	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981724	TPH DRO LCS	UE091030-08	1	mL
MS	1201981722	TPH DRO LCS	UE091030-08	1	mL
MSD	1201981723	TPH DRO LCS	UE091030-08	1	mL
SURR	All	20 ppm surrogate	WE091121-04	1	mL
REGNT	All	Methylene Chloride	1234878-D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-575

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	926712
Prep Batch Number:	926709

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241417001	RE03-09-13812
241417002	RE03-09-13811
1201981383	Method Blank (MB)
1201981384	241417001(RE03-09-13812) Matrix Spike (MS)
1201981385	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)
1201981386	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the

Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241417001 (RE03-09-13812) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were not within the established acceptance limits. The MS recoveries were outside the accepted recovery limits due to dilution and matrix interference. See NCR #764566 in the Miscellaneous Data section of this package.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were not within the established acceptance limits. The MSD recoveries were outside the accepted recovery limits due to dilution and matrix interference. See NCR #764566 in the Miscellaneous Data section of this package.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD did not meet the acceptance limits due to dilution and matrix interference. See NCR #764566 in the Miscellaneous Data section of this package.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 1201981384 (1:10), 1201981385 MS (1:10) and 241417001 MSD (1:10) were diluted prior to analysis due to the oily matrix of the extracts.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR # 764566 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whattock Date: 12-15-2009

Roadmap for LANL 10-575 PCB

This roadmap was analyzed by jen01212 on 12-02-2009, 14:22.
This roadmap was reviewed by jcb on 12-03-2009, 09:27.
This roadmap was packaged by sha01289 on 12-14-2009, 16:21.
This roadmap was validated by rob01090 on 12-15-2009, 19:54.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/086f8601.d	241417001	sample	01-DEC-2009	00:31	10-575.sub	RE03-09-13812	10.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/089f8901.d	241417002	sample	01-DEC-2009	01:05	10-575.sub	RE03-09-13811	1.00000	926712	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/086b8601.d	241417001	sample	01-DEC-2009	00:31	10-575.sub	RE03-09-13812	10.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/089b8901.d	241417002	sample	01-DEC-2009	01:05	10-575.sub	RE03-09-13811	1.00000	926712	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/062f6201-4.d	1201981383	mb	30-NOV-2009	20:05	10-575.sub	PBLK01	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/063f6301-4.d	1201981386	lcs	30-NOV-2009	20:16	10-575.sub	PBLK01LCS	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/087f8701.d	1201981384	ms	01-DEC-2009	00:42	10-575.sub	RE03-09-13812MS	10.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/088f8801.d	1201981385	msd	01-DEC-2009	00:53	10-575.sub	RE03-09-13812MSD	10.00000	926712	UPLOAD BOTH, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/062b6201-4.d	1201981383	mb	30-NOV-2009	20:05	10-575.sub	PBLK01	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/063b6301-4.d	1201981386	lcs	30-NOV-2009	20:16	10-575.sub	PBLK01LCS	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/087b8701.d	1201981384	ms	01-DEC-2009	00:42	10-575.sub	RE03-09-13812MS	10.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/088b8801.d	1201981385	msd	01-DEC-2009	00:53	10-575.sub	RE03-09-13812MSD	10.00000	926712	UPLOAD BOTH, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417002	**Date Received:**	11/19/2009 08:45	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13811	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/01/2009 01:05	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	089f8901.d	**Column:**	1 CLP1	**Level:**	LOW
	089b8901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.70	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254	U	3.70	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260	J	1.40	ug/kg	1.23	3.70	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	241417001	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13812	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	10
Run Date:	12/01/2009 00:31	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	086f8601.d	**Column:**	1 CLP1	**Level:**	LOW
	086b8601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	35.8	ug/kg	11.9	35.8	1
11104–28–2	Aroclor–1221	U	35.8	ug/kg	11.9	35.8	1
11141–16–5	Aroclor–1232	U	35.8	ug/kg	11.9	35.8	1
53469–21–9	Aroclor–1242	U	35.8	ug/kg	11.9	35.8	1
12672–29–6	Aroclor–1248	U	35.8	ug/kg	11.9	35.8	1
11097–69–1	Aroclor–1254	P	53.9	ug/kg	11.9	35.8	1
11096–82–5	Aroclor–1260		76.9	ug/kg	11.9	35.8	2

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-575

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201981383	MB for batch 926709	94		99		88		99	
1201981386	LCS for batch 926709	88		92		83		93	
241417001	RE03-09-13812	85	D	83	D	82	D	82	D
1201981384	RE03-09-13812MS	82	D	80	D	79	D	79	D
1201981385	RE03-09-13812MSD	101	D	100	D	95	D	97	D
241417002	RE03-09-13811	77		81		73		81	

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: LCS for batch 926709
Lab Sample ID: 1201981386
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 20:16
Dilution: 1
Prep Batch ID: 926709
Batch ID: 926712

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	26.5	80	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	30.8	92	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981384**	**%Moisture:**	**7.1**
Instrument:	**ECD2A.I**	**Analysis Date:**	**12/01/2009 00:42**
Analyst:	**JAOC**	**Prep Batch ID:**	**926709**
Inj. Vol:	**1 uL**	**Batch ID:**	**926712**

Dilution: 10

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	35.7	0.00	U	35.3	99	23-117
11096-82-5	MS	Aroclor-1260	35.7	76.9		76.4	-1 *	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–575
Client ID: RE03–09–13812MSD
Lab Sample ID: 1201981385
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/01/2009 00:53
Prep Batch ID: 926709
Batch ID: 926712
Dilution: 10

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	35.7	0.00	U	44.3	124 *	23–117	23	0–30
11096–82–5	MSD Aroclor–1260	35.7	76.9		109	90	27–116	35 *	0–30

Method Blank Summary

SDG Number:	10-575	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926709	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	062b6201-1.d 062f6201-1.d
Lab Sample ID:	1201981383				
Column:	CLP2 CLP1	Prep Date:	11/27/2009 22:34	Analyzed:	11/30/09 20:05
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926709	1201981386	063f6301-1.d 063b6301-1.d	11/30/09	2016
02 RE03-09-13812	241417001	086f8601.d 086b8601.d	12/01/09	0031
03 RE03-09-13812MS	1201981384	087f8701.d 087b8701.d	12/01/09	0042
04 RE03-09-13812MSD	1201981385	088f8801.d 088b8801.d	12/01/09	0053
05 RE03-09-13811	241417002	089f8901.d 089b8901.d	12/01/09	0105

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417002**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13811**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 01:05**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**089f8901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	089b8901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.70	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254	U	3.70	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260	J	1.40	ug/kg	1.23	3.70	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/089f8901.d
Lab Smp Id: 241417002 Client Smp ID: RE03-09-13811
Inj Date : 01-DEC-2009 01:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241417002|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13811|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 89
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	9.95660	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	8899401	154.206	5.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	7974350	145.440	5.4	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	195942	48.1811	1.8	80.00- 120.00	100.00(a)
4.289	4.290	-0.001	89194	35.2782	1.3	41.58- 81.58	45.52
4.454	4.455	-0.001	84117	32.5634	1.2	43.08- 83.08	42.93
4.667	4.667	0.000	202669	33.5762	1.2	129.99- 169.99	103.43
4.857	4.856	0.001	122177	41.9573	1.6	51.44- 91.44	62.35
			Average of Peak Concentrations =		1.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/089f8901.d

Page 1

Date : 01-DEC-2009 01:05

Client ID: RE03-09-13811

Instrument: ecd2a.i

Sample Info: |24141700211|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

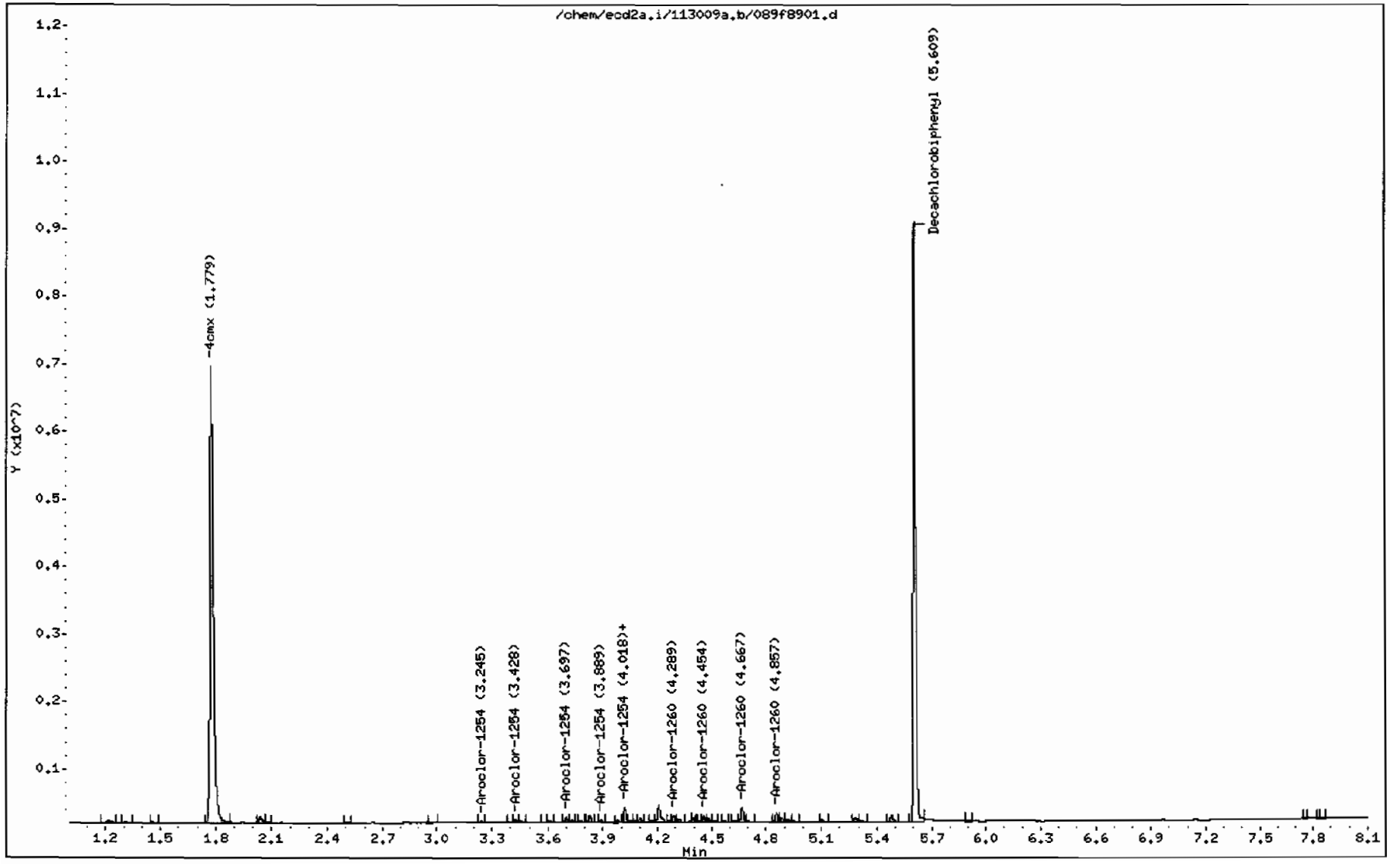

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/089b8901.d
Lab Smp Id: 241417002 Client Smp ID: RE03-09-13811
Inj Date : 01-DEC-2009 01:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241417002|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13811|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 89
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	9.95660	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	19095236	161.550	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	17556095	161.597	6.0	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	170418	30.9141	1.1	80.00- 120.00	100.00(a)
4.570	4.570	0.000	307094	43.0589	1.6	108.85- 148.85	180.20
4.682	4.682	0.000	177536	37.5233	1.4	65.38- 105.38	104.18
4.879	4.880	-0.001	184009	31.7222	1.2	82.89- 122.89	107.98
5.504	5.505	-0.001	290144	32.0933	1.2	145.10- 185.10	170.25
Average of Peak Concentrations =					1.3		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/089b8901.d

Date : 01-DEC-2009 01:05

Client ID: RE03-09-13811

Sample Info: !241417002!1!

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

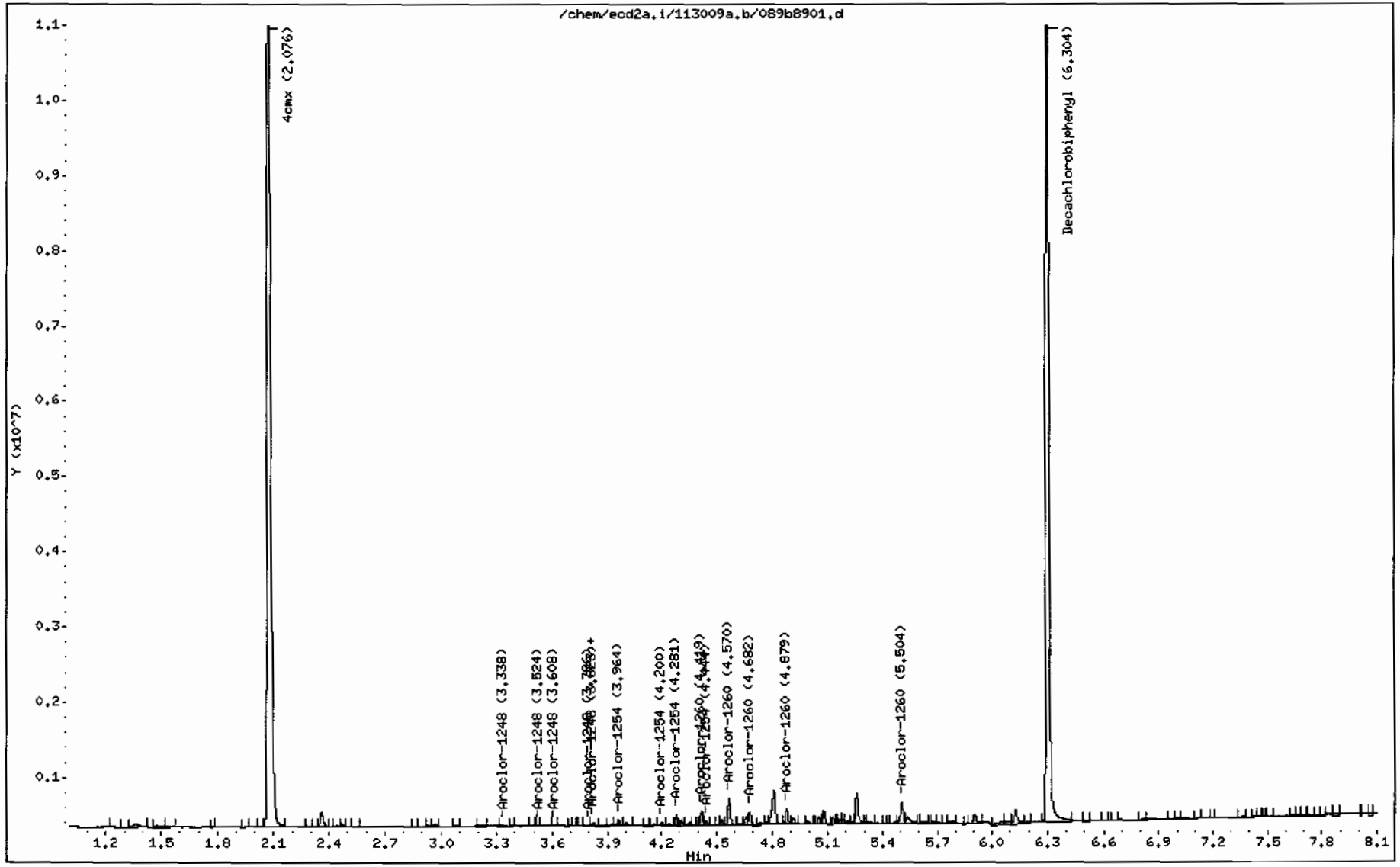

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**	**Date Collected:**	**11/17/2009 12:00**	**Matrix:**	**SOIL**
Lab Sample ID:	**241417001**	**Date Received:**	**11/19/2009 08:45**	**%Moisture:**	**7.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13812**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**10**
Run Date:	**12/01/2009 00:31**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**086f8601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	086b8601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	35.8	ug/kg	11.9	35.8	1
11104-28-2	Aroclor-1221	U	35.8	ug/kg	11.9	35.8	1
11141-16-5	Aroclor-1232	U	35.8	ug/kg	11.9	35.8	1
53469-21-9	Aroclor-1242	U	35.8	ug/kg	11.9	35.8	1
12672-29-6	Aroclor-1248	U	35.8	ug/kg	11.9	35.8	1
11097-69-1	Aroclor-1254	P	53.9	ug/kg	11.9	35.8	1
11096-82-5	Aroclor-1260		76.9	ug/kg	11.9	35.8	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/086f8601.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 01-DEC-2009 00:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241417001|10|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13812|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 86
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.780	-0.002	980432	16.9886	6.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	893981	16.3048	5.8	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	126746	60.9342	21.8	80.00- 120.00	100.00
3.427	3.427	0.000	258285	93.1721	33.4	115.68- 155.68	203.78
3.696	3.697	-0.001	425127	113.597	40.7	166.12- 206.12	335.42
3.889	3.889	0.000	231851	83.3188	29.8	117.34- 157.34	182.93
4.017	4.018	-0.001	1108321	401.560	144	114.59- 154.59	874.44

Average of Peak Concentrations = 53.9

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1108321	272.530	97.6	80.00- 120.00	100.00
4.289	4.290	-0.001	467730	184.997	66.3	41.58- 81.58	42.20
4.455	4.455	0.000	407422	157.720	56.5	43.08- 83.08	36.76
4.666	4.667	-0.001	932493	154.486	55.4	129.99- 169.99	84.14
4.856	4.856	0.000	566712	194.616	69.7	51.44- 91.44	51.13
Average of Peak Concentrations =					69.1		

Data File: /chem/ecd2a.i/113009a.b/086f8601.d

Page 1

Date : 01-DEC-2009 00:31

Client ID: RE03-09-13812

Instrument: ecd2a.i

Sample Info: |241417001|10|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

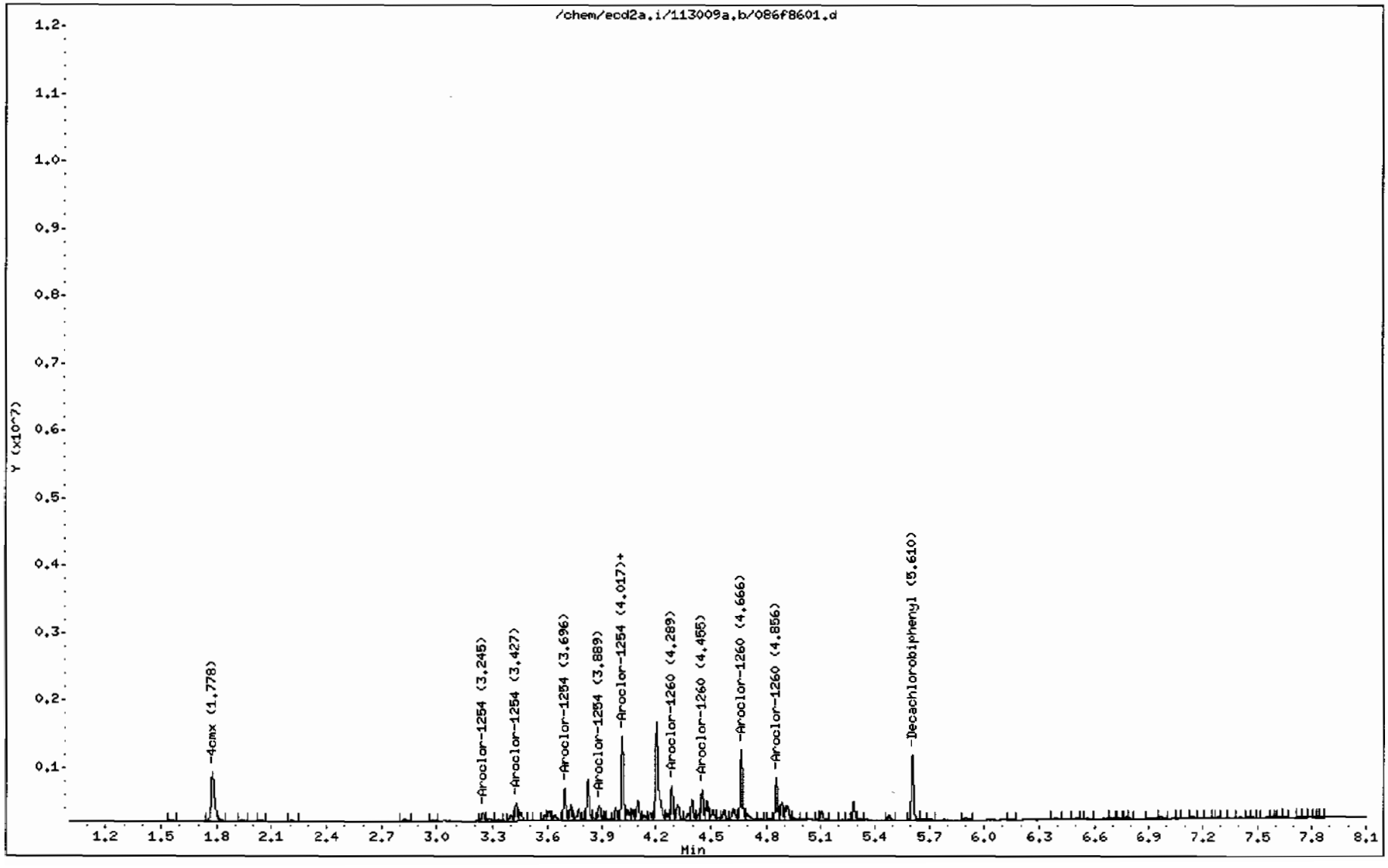

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/086b8601.d
Lab Smp Id: 241417001 Client Smp ID: RE03-09-13812
Inj Date : 01-DEC-2009 00:31
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241417001|10|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13812|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 86
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	1969989	16.6666	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	1776020	16.3475	5.8	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	273107	54.7827	19.6	80.00- 120.00	100.00(a)
3.964	3.964	0.000	546834	94.2989	33.8	97.16- 137.16	200.23
4.201	4.201	0.000	243141	60.4379	21.6	61.89- 101.89	89.03
4.281	4.282	-0.001	838665	108.476	38.9	138.47- 178.47	307.08
4.444	4.445	-0.001	387023	69.0089	24.7	96.59- 136.59	141.71

Average of Peak Concentrations = 27.7

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	1210243	219.539	78.7	80.00- 120.00	100.00
4.571	4.570	0.001	1942665	272.388	97.6	108.85- 148.85	160.52
4.681	4.682	-0.001	1019129	215.399	77.2	65.38- 105.38	84.21
4.879	4.880	-0.001	1124781	193.906	69.5	82.89- 122.89	92.94
5.505	5.505	0.000	1551346	171.596	61.5	145.10- 185.10	128.18
Average of Peak Concentrations =					76.9		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/086b8601.d

Date : 01-DEC-2009 00:31

Client ID: RE03-09-13812

Sample Info: |241417001|10|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

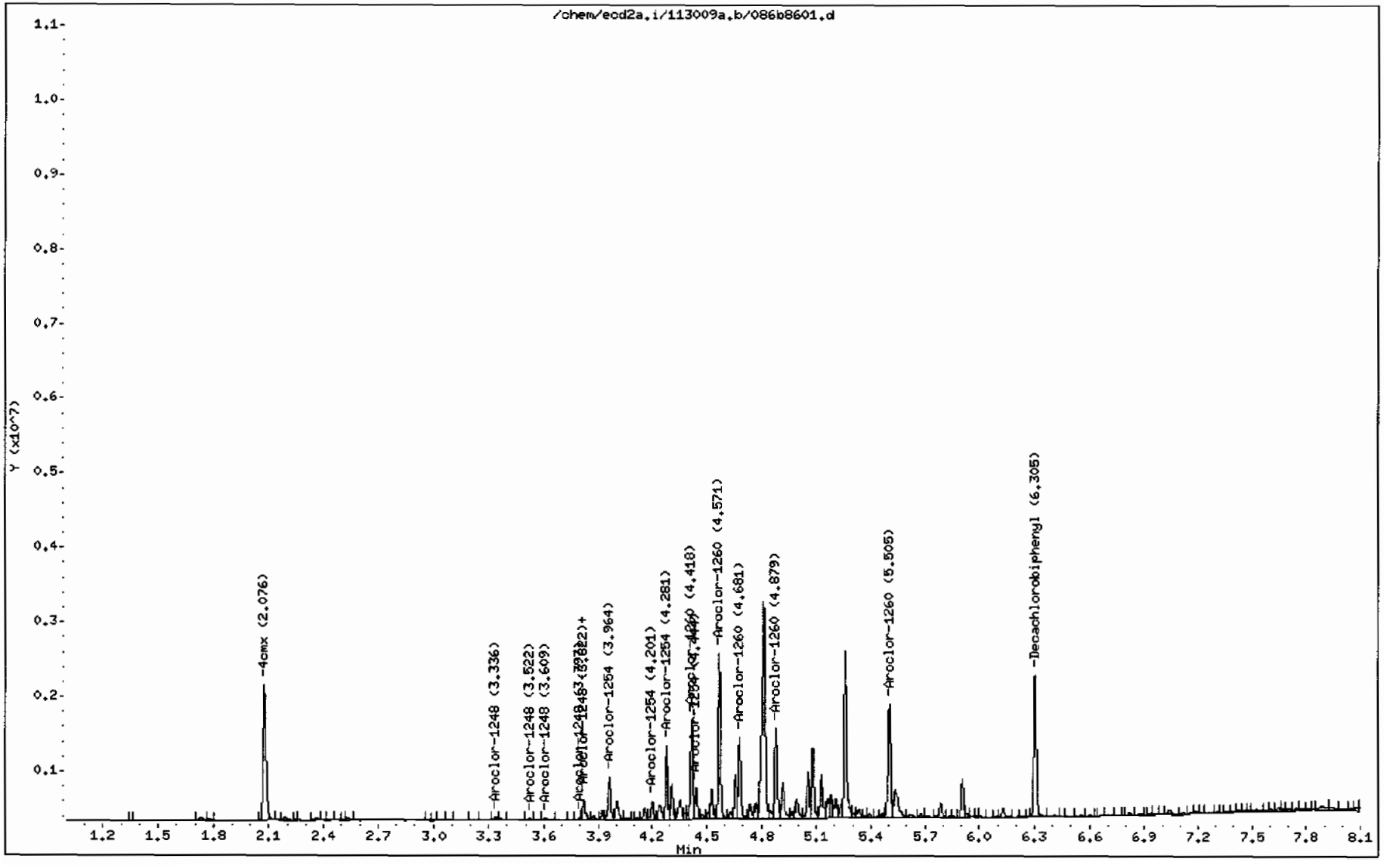

STANDARDS DATA

Report Date: 30-Nov-2009 14:29

Calibration History

Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008f0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 13:36	AR1660	/chem/ecd2a.i/113009a.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 12:02	AR1268	/chem/ecd2a.i/113009a.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:51	AR1262	/chem/ecd2a.i/113009a.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:40	AR1221	/chem/ecd2a.i/113009a.b/019f1901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:29	AR1248	/chem/ecd2a.i/113009a.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:18	AR1232	/chem/ecd2a.i/113009a.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:07	AR1248	/chem/ecd2a.i/113009a.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:01	AR1660	/chem/ecd2a.i/113009a.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:50	AR1242	/chem/ecd2a.i/113009a.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:38	AR1254	/chem/ecd2a.i/113009a.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 08:32	AR1660	/chem/ecd2a.i/113009a.b/002f0201.d

Report Date: 03-Dec-2009 08:04

Calibration History

Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008b0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000 |

01-DEC-2009 01:16	AR1660	/chem/ecd2a.i/113009a.b/090b9001.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 00:09	AR1660	/chem/ecd2a.i/113009a.b/084b8401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 21:55	AR1660	/chem/ecd2a.i/113009a.b/072b7201.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 19:42	AR1660	/chem/ecd2a.i/113009a.b/060b6001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 18:31	AR1660	/chem/ecd2a.i/113009a.b/054b5401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 16:51	AR1660	/chem/ecd2a.i/113009a.b/045b4501.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 15:12	AR1660	/chem/ecd2a.i/113009a.b/036b3601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 13:36	AR1660	/chem/ecd2a.i/113009a.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:38	AR1254	/chem/ecd2a.i/113009a.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 12:02	AR1268	/chem/ecd2a.i/113009a.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:51	AR1262	/chem/ecd2a.i/113009a.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:40	AR1221	/chem/ecd2a.i/113009a.b/019b1901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:29	AR1248	/chem/ecd2a.i/113009a.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:18	AR1232	/chem/ecd2a.i/113009a.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:07	AR1248	/chem/ecd2a.i/113009a.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:01	AR1660	/chem/ecd2a.i/113009a.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:50	AR1242	/chem/ecd2a.i/113009a.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		

```
|30-NOV-2009 09:27 |AR1254           |/chem/ecd2a.i/113009a.b/007b0701.d      |
+------------------+-----------------+---------------------------------------+
| Ccal Level: 4 , Ccal Amount: 1000                                          |
+==========================================================================+
|30-NOV-2009 08:32 |AR1660           |/chem/ecd2a.i/113009a.b/002b0201.d      |
+------------------+-----------------+---------------------------------------+
```

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 13:52 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.281	2.251-2.311	2.100e+03
	2.603	2.573-2.633	4.505e+03
	2.694	2.664-2.724	1.820e+03
	2.829	2.799-2.859	9.329e+02
	2.980	2.950-3.010	1.378e+03
2 Aroclor-1221	1.445	1.415-1.475	4.641e+02
	1.905	1.875-1.935	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.033	2.003-2.063	1.165e+03
	2.281	2.251-2.311	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.736	2.706-2.766	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.979	2.949-3.009	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
		3.427	3.397-3.457	2.772e+03
		3.697	3.667-3.727	3.742e+03
		3.889	3.859-3.919	2.783e+03
		4.018	3.988-4.048	2.760e+03
	7 Aroclor-1260	4.018	3.988-4.048	4.067e+03
		4.290	4.260-4.320	2.528e+03
		4.455	4.425-4.485	2.583e+03
		4.667	4.637-4.697	6.036e+03
		4.856	4.826-4.886	2.912e+03
	8 Aroclor-1262	3.826	3.796-3.856	1.983e+03
		4.018	3.988-4.048	2.689e+03
		4.290	4.260-4.320	3.536e+03
		4.455	4.425-4.485	3.145e+03
		4.856	4.825-4.886	2.254e+03
	9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
		4.912	4.882-4.942	9.361e+03
		5.045	5.015-5.075	7.073e+03
		5.284	5.254-5.314	3.056e+03
		5.479	5.449-5.509	2.201e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.780	1.750-1.810	5.771e+04
$	12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
	13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
	14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
	15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 13:47 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.752	2.722-2.782	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.336	3.306-3.366	1.979e+03
	3.365	3.335-3.395	2.061e+03
	3.523	3.493-3.553	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.403	2.373-2.433	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.449	2.419-2.479	2.061e+03
	2.752	2.722-2.782	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.257	3.227-3.287	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.751	2.721-2.781	3.445e+03
	3.185	3.155-3.215	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.336	3.306-3.366	1.508e+03
	3.523	3.493-3.553	2.145e+03
5 Aroclor-1248	3.336	3.306-3.366	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.798	3.768-3.828	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.823	3.793-3.853	4.863e+03
		3.964	3.934-3.994	5.652e+03
		4.201	4.171-4.231	3.906e+03
		4.282	4.252-4.312	7.490e+03
		4.445	4.415-4.475	5.479e+03
	7 Aroclor-1260	4.419	4.389-4.449	5.513e+03
		4.570	4.540-4.600	7.132e+03
		4.682	4.652-4.712	4.731e+03
		4.880	4.850-4.910	5.801e+03
		5.505	5.475-5.535	9.041e+03
	8 Aroclor-1262	4.418	4.388-4.448	3.827e+03
		4.570	4.540-4.600	5.052e+03
		4.879	4.849-4.909	7.695e+03
		5.079	5.049-5.109	6.486e+03
		5.257	5.227-5.287	1.455e+04
	9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
		5.535	5.505-5.565	2.018e+04
		5.707	5.677-5.737	1.496e+04
		5.906	5.876-5.936	6.438e+03
		6.130	6.100-6.160	4.409e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.076	2.046-2.106	1.182e+05
$	12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
	13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
	14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
	15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Cal Date : 30-Nov-2009 13:52 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035f3501.d
Level 2: /chem/ecd2a.i/111209a.b/036f3601.d
Level 3: /chem/ecd2a.i/111209a.b/037f3701.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/111209a.b/039f3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Cal Date : 30-Nov-2009 13:52 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
(2)	2598	2539	2501	2535	2469	2528	1.903
(3)	2625	2577	2548	2609	2557	2583	1.287
(4)	5914	5894	5999	6196	6179	6036	2.381
(5)	2944	2846	2851	2940	2978	2912	2.044
8 Aroclor-1262(1)	+++++	+++++	+++++	1983	+++++	1983	0.000
(2)	+++++	+++++	+++++	2689	+++++	2689	0.000
(3)	+++++	+++++	+++++	3536	+++++	3536	0.000
(4)	+++++	+++++	+++++	3145	+++++	3145	0.000
(5)	+++++	+++++	+++++	2254	+++++	2254	0.000
9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
(2)	9332	9272	9238	9197	9765	9361	2.470
(3)	6985	6923	6953	6984	7523	7073	3.568
(4)	3112	3015	2984	2964	3207	3056	3.331
(5)	21397	21592	21760	21851	23464	22013	3.767
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$ 11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$ 12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Cal Date : 30-Nov-2009 16:02 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035b3501.d
Level 2: /chem/ecd2a.i/111209a.b/036b3601.d
Level 3: /chem/ecd2a.i/111209a.b/037b3701.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/111209a.b/039b3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Cal Date : 30-Nov-2009 16:02 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	___ RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	+++++	+++++	+++++	3827	+++++	3827	0.000
(2)	+++++	+++++	+++++	5052	+++++	5052	0.000
(3)	+++++	+++++	+++++	7695	+++++	7695	0.000
(4)	+++++	+++++	+++++	6486	+++++	6486	0.000
(5)	+++++	+++++	+++++	14548	+++++	14548	0.000
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 0938

Lab File ID: 008F0801 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1989.434	0.01	-4.4	15.0
(2)	2772.138	2699.271	0.01	-2.6	15.0
(3)	3742.400	3702.763	0.01	-1.0	15.0
(4)	2782.705	2732.349	0.01	-1.8	15.0
(5)	2760.043	2677.493	0.01	-3.0	15.0
4cmx	57711.247	66194.820	0.01	14.7	15.0
Decachlorobiphenyl	54829.246	56393.900	0.01	2.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 0938

Lab File ID: 008B0801 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4974.047	0.01	-0.2	15.0	
(2)	5798.946	5827.527	0.01	0.5	15.0	
(3)	4022.990	4073.257	0.01	1.2	15.0	
(4)	7731.372	7882.366	0.01	2.0	15.0	
(5)	5608.308	5799.096	0.01	3.4	15.0	
4cmx	118199.83	140299.55	0.01	18.7	15.0	<-
Decachlorobiphenyl	108641.52	117729.78	0.01	8.4	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1001

Lab File ID: 010F1001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1978.468	0.01	-5.8	15.0
(2)	4504.513	4261.729	0.01	-5.4	15.0
(3)	1820.211	1682.401	0.01	-7.6	15.0
(4)	932.883	838.621	0.01	-10.1	15.0
(5)	1378.125	1291.604	0.01	-6.3	15.0
Aroclor-1260	4066.794	4068.904	0.01	0.0	15.0
(2)	2528.317	2483.392	0.01	-1.8	15.0
(3)	2583.202	2543.166	0.01	-1.5	15.0
(4)	6036.106	6041.869	0.01	0.1	15.0
(5)	2911.947	2868.024	0.01	-1.5	15.0
4cmx	57711.247	61965.910	0.01	7.4	15.0
Decachlorobiphenyl	54829.246	50777.650	0.01	-7.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1001

Lab File ID: 010B1001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4173.489	0.01	-2.0	15.0
(2)	3444.681	3357.058	0.01	-2.5	15.0
(3)	1979.487	1945.702	0.01	-1.7	15.0
(4)	2061.253	2043.240	0.01	-0.9	15.0
(5)	2754.170	2757.838	0.01	0.1	15.0
Aroclor-1260	5512.644	5766.118	0.01	4.6	15.0
(2)	7131.968	7438.440	0.01	4.3	15.0
(3)	4731.365	4933.515	0.01	4.3	15.0
(4)	5800.657	5948.704	0.01	2.6	15.0
(5)	9040.681	9441.654	0.01	4.4	15.0
4cmx	118199.83	131769.63	0.01	11.5	15.0
Decachlorobiphenyl	108641.52	106858.72	0.01	-1.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1942

Lab File ID: 060F6001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1933.010	0.01	-7.9	15.0
(2)	4504.513	4217.365	0.01	-6.4	15.0
(3)	1820.211	1668.882	0.01	-8.3	15.0
(4)	932.883	842.674	0.01	-9.7	15.0
(5)	1378.125	1280.903	0.01	-7.0	15.0
Aroclor-1260	4066.794	4041.106	0.01	-0.6	15.0
(2)	2528.317	2494.289	0.01	-1.3	15.0
(3)	2583.202	2559.863	0.01	-0.9	15.0
(4)	6036.106	6076.875	0.01	0.7	15.0
(5)	2911.947	2890.332	0.01	-0.7	15.0
4cmx	57711.247	60978.950	0.01	5.7	15.0
Decachlorobiphenyl	54829.246	53638.350	0.01	-2.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1942

Lab File ID: 060B6001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4147.516	0.01	-2.6	15.0
(2)	3444.681	3338.194	0.01	-3.1	15.0
(3)	1979.487	1931.223	0.01	-2.4	15.0
(4)	2061.253	2026.640	0.01	-1.7	15.0
(5)	2754.170	2736.734	0.01	-0.6	15.0
Aroclor-1260	5512.644	5707.094	0.01	3.5	15.0
(2)	7131.968	7325.451	0.01	2.7	15.0
(3)	4731.365	4866.123	0.01	2.8	15.0
(4)	5800.657	5882.184	0.01	1.4	15.0
(5)	9040.681	9343.503	0.01	3.3	15.0
4cmx	118199.83	130229.09	0.01	10.2	15.0
Decachlorobiphenyl	108641.52	109824.65	0.01	1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 2155

Lab File ID: 072F7201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1930.672	0.01	-8.0	15.0
(2)	4504.513	4222.979	0.01	-6.2	15.0
(3)	1820.211	1665.504	0.01	-8.5	15.0
(4)	932.883	831.367	0.01	-10.9	15.0
(5)	1378.125	1279.233	0.01	-7.2	15.0
Aroclor-1260	4066.794	4070.896	0.01	0.1	15.0
(2)	2528.317	2513.820	0.01	-0.6	15.0
(3)	2583.202	2576.179	0.01	-0.3	15.0
(4)	6036.106	6093.310	0.01	0.9	15.0
(5)	2911.947	2912.572	0.01	0.0	15.0
4cmx	57711.247	60799.280	0.01	5.4	15.0
Decachlorobiphenyl	54829.246	52497.030	0.01	-4.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 2155

Lab File ID: 072B7201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4110.584	0.01	-3.5	15.0
(2)	3444.681	3321.649	0.01	-3.6	15.0
(3)	1979.487	1920.571	0.01	-3.0	15.0
(4)	2061.253	1996.450	0.01	-3.1	15.0
(5)	2754.170	2724.972	0.01	-1.1	15.0
Aroclor-1260	5512.644	5674.547	0.01	2.9	15.0
(2)	7131.968	7298.534	0.01	2.3	15.0
(3)	4731.365	4828.748	0.01	2.0	15.0
(4)	5800.657	5817.967	0.01	0.3	15.0
(5)	9040.681	9235.477	0.01	2.2	15.0
4cmx	118199.83	129374.12	0.01	9.4	15.0
Decachlorobiphenyl	108641.52	108070.87	0.01	-0.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0009

Lab File ID: 084F8401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1952.367	0.01	-7.0	15.0
(2)	4504.513	4266.269	0.01	-5.3	15.0
(3)	1820.211	1683.812	0.01	-7.5	15.0
(4)	932.883	836.486	0.01	-10.3	15.0
(5)	1378.125	1291.869	0.01	-6.2	15.0
Aroclor-1260	4066.794	4074.980	0.01	0.2	15.0
(2)	2528.317	2503.389	0.01	-1.0	15.0
(3)	2583.202	2559.185	0.01	-0.9	15.0
(4)	6036.106	6100.779	0.01	1.1	15.0
(5)	2911.947	2920.454	0.01	0.3	15.0
4cmx	57711.247	61356.690	0.01	6.3	15.0
Decachlorobiphenyl	54829.246	52557.370	0.01	-4.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0009

Lab File ID: 084B8401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4158.775	0.01	-2.3	15.0
(2)	3444.681	3350.373	0.01	-2.7	15.0
(3)	1979.487	1931.547	0.01	-2.4	15.0
(4)	2061.253	2010.024	0.01	-2.5	15.0
(5)	2754.170	2746.844	0.01	-0.3	15.0
Aroclor-1260	5512.644	5760.526	0.01	4.5	15.0
(2)	7131.968	7410.662	0.01	3.9	15.0
(3)	4731.365	4897.495	0.01	3.5	15.0
(4)	5800.657	5899.028	0.01	1.7	15.0
(5)	9040.681	9366.909	0.01	3.6	15.0
4cmx	118199.83	130933.89	0.01	10.8	15.0
Decachlorobiphenyl	108641.52	108655.55	0.01	0.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0116

Lab File ID: 090F9001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1941.261	0.01	-7.6	15.0
(2)	4504.513	4235.651	0.01	-6.0	15.0
(3)	1820.211	1675.229	0.01	-8.0	15.0
(4)	932.883	841.408	0.01	-9.8	15.0
(5)	1378.125	1260.382	0.01	-8.5	15.0
Aroclor-1260	4066.794	4040.756	0.01	-0.6	15.0
(2)	2528.317	2488.405	0.01	-1.6	15.0
(3)	2583.202	2549.026	0.01	-1.3	15.0
(4)	6036.106	6060.922	0.01	0.4	15.0
(5)	2911.947	2886.760	0.01	-0.9	15.0
4cmx	57711.247	61009.570	0.01	5.7	15.0
Decachlorobiphenyl	54829.246	52615.040	0.01	-4.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0116

Lab File ID: 090B9001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4126.336	0.01	-3.1	15.0
(2)	3444.681	3338.474	0.01	-3.1	15.0
(3)	1979.487	1926.661	0.01	-2.7	15.0
(4)	2061.253	2027.709	0.01	-1.6	15.0
(5)	2754.170	2736.128	0.01	-0.6	15.0
Aroclor-1260	5512.644	5702.944	0.01	3.4	15.0
(2)	7131.968	7348.410	0.01	3.0	15.0
(3)	4731.365	4868.894	0.01	2.9	15.0
(4)	5800.657	5867.481	0.01	1.2	15.0
(5)	9040.681	9415.753	0.01	4.1	15.0
4cmx	118199.83	129677.16	0.01	9.7	15.0
Decachlorobiphenyl	108641.52	108993.98	0.01	0.3	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/008f0801.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 30-NOV-2009 09:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	6619482	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5639390	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1989434	1000.00	956	80.00- 120.00	100.00
3.427	3.427	0.000	2699270	1000.00	974	115.68- 155.68	135.68
3.697	3.697	0.000	3702762	1000.00	989	166.12- 206.12	186.12
3.889	3.889	0.000	2732348	1000.00	982	117.34- 157.34	137.34
4.018	4.018	0.000	2677492	1000.00	970	114.59- 154.59	134.59
Average of Peak Amounts =					974		

Data File: /chem/ecd2a.i/113009a.b/008f0801.d
Date : 30-NOV-2009 09:38
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

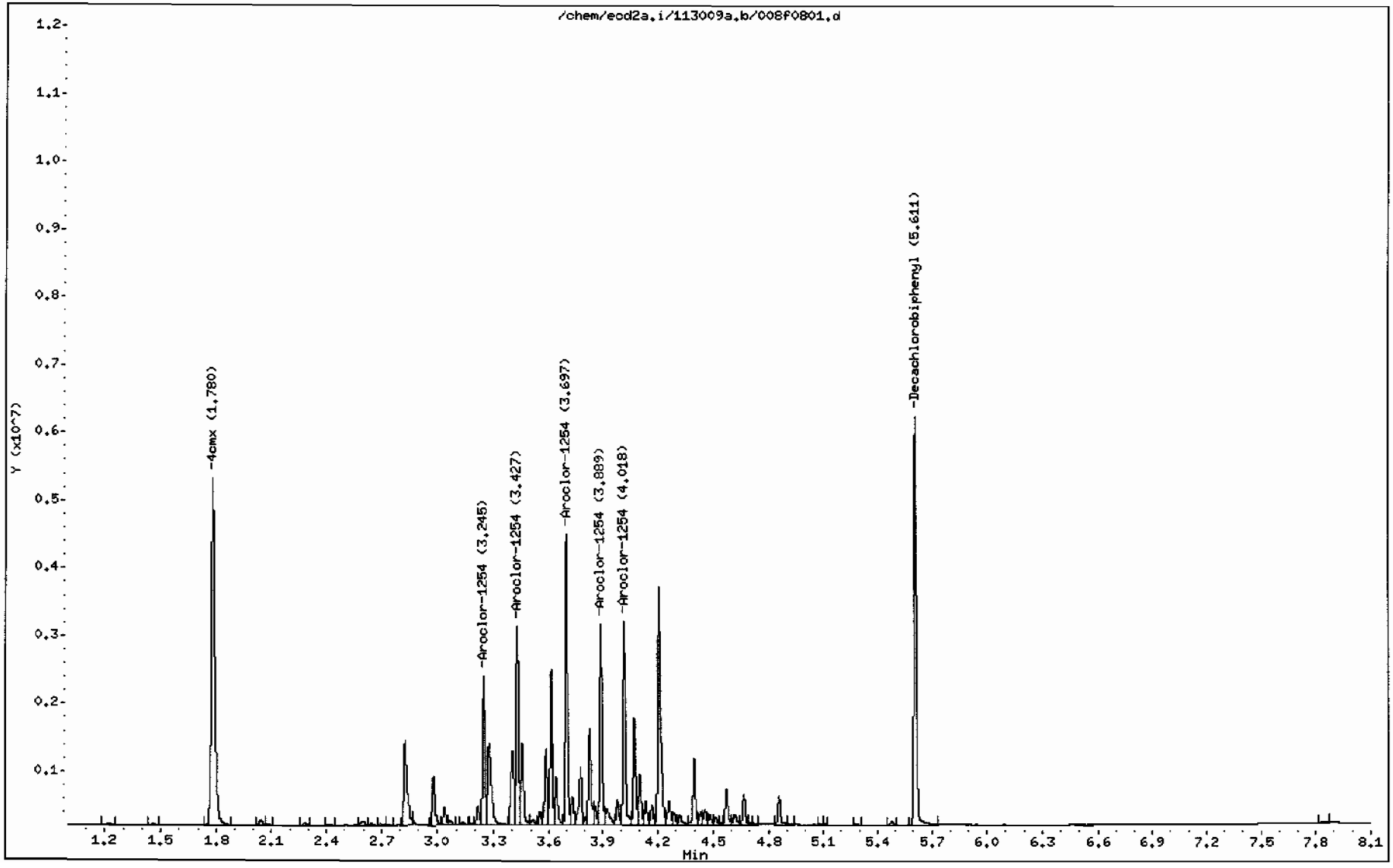

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/008b0801.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 30-NOV-2009 09:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 16:02 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	14029955	100.000	119	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11772978	100.000	108	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	4974047	1000.00	998	80.00- 120.00	100.00
3.964	3.964	0.000	5827527	1000.00	1000	97.16- 137.16	117.16
4.201	4.201	0.000	4073257	1000.00	1010	61.89- 101.89	81.89
4.282	4.282	0.000	7882366	1000.00	1020	138.47- 178.47	158.47
4.445	4.445	0.000	5799096	1000.00	1030	96.59- 136.59	116.59

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/113009a.b/008b0801.d
Date : 30-NOV-2009 09:38
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

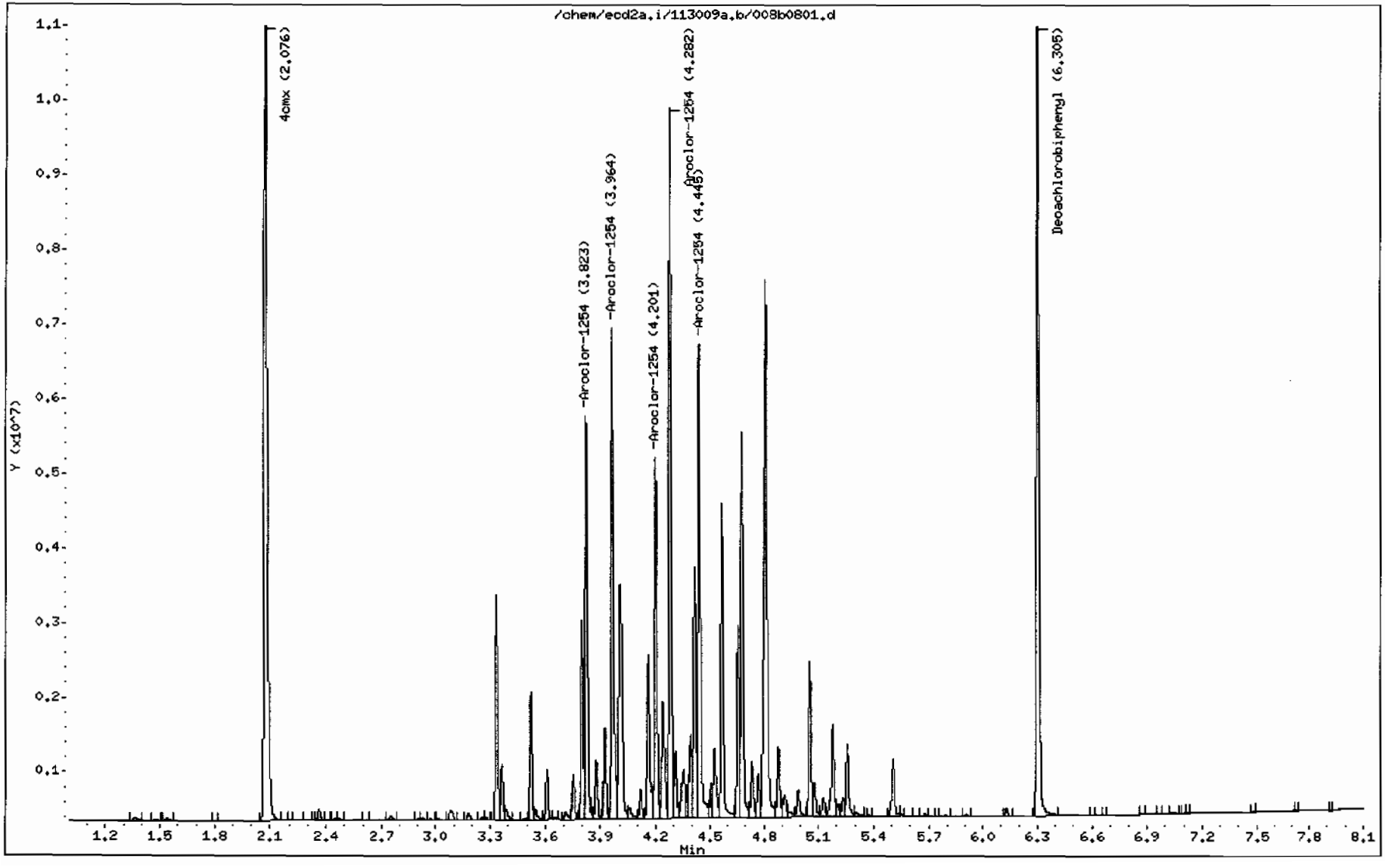

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/009f0901.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 30-NOV-2009 09:50
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6570476	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5634570	100.000	103	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1755483	1000.00	1010	80.00- 120.00	100.00(M)
2.693	2.693	0.000	1468918	1000.00	990	63.68- 103.68	83.68
2.736	2.736	0.000	908042	1000.00	1000	31.73- 71.73	51.73
2.828	2.828	0.000	700038	1000.00	963	19.88- 59.88	39.88
2.979	2.979	0.000	1112656	1000.00	994	43.38- 83.38	63.38
		Average of Peak Amounts =			992		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/009f0901.d

Page 1

Date : 30-NOV-2009 09:50

Client ID: AR124201

Instrument: ecd2a.i

Sample Info: IWAR091102-42

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

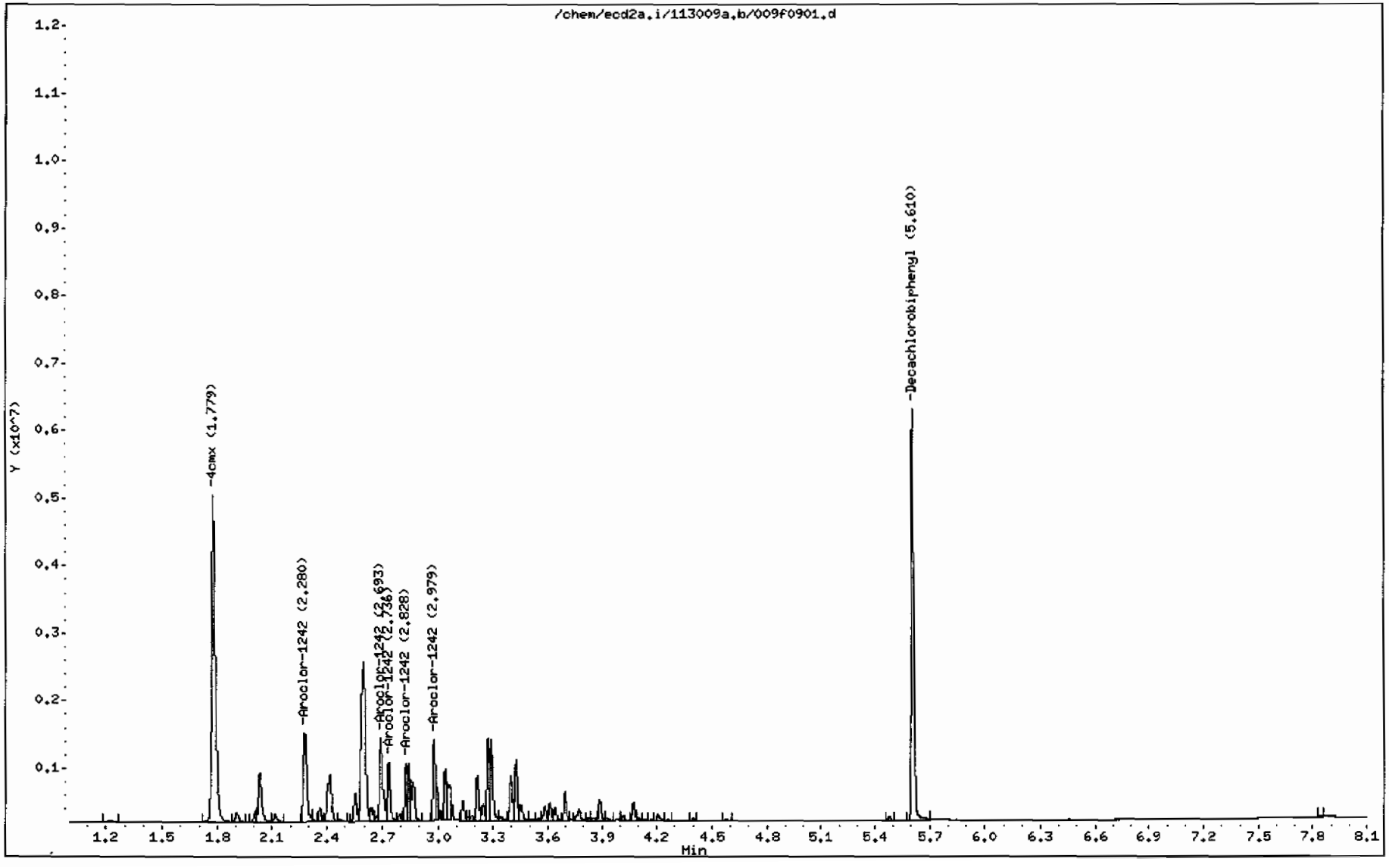

Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/009f0901.d
Operator: JAOC
Injection Date: 30-NOV-2009 09:50
Instrument: ecd2a.i
Client Sample ID: AR124201

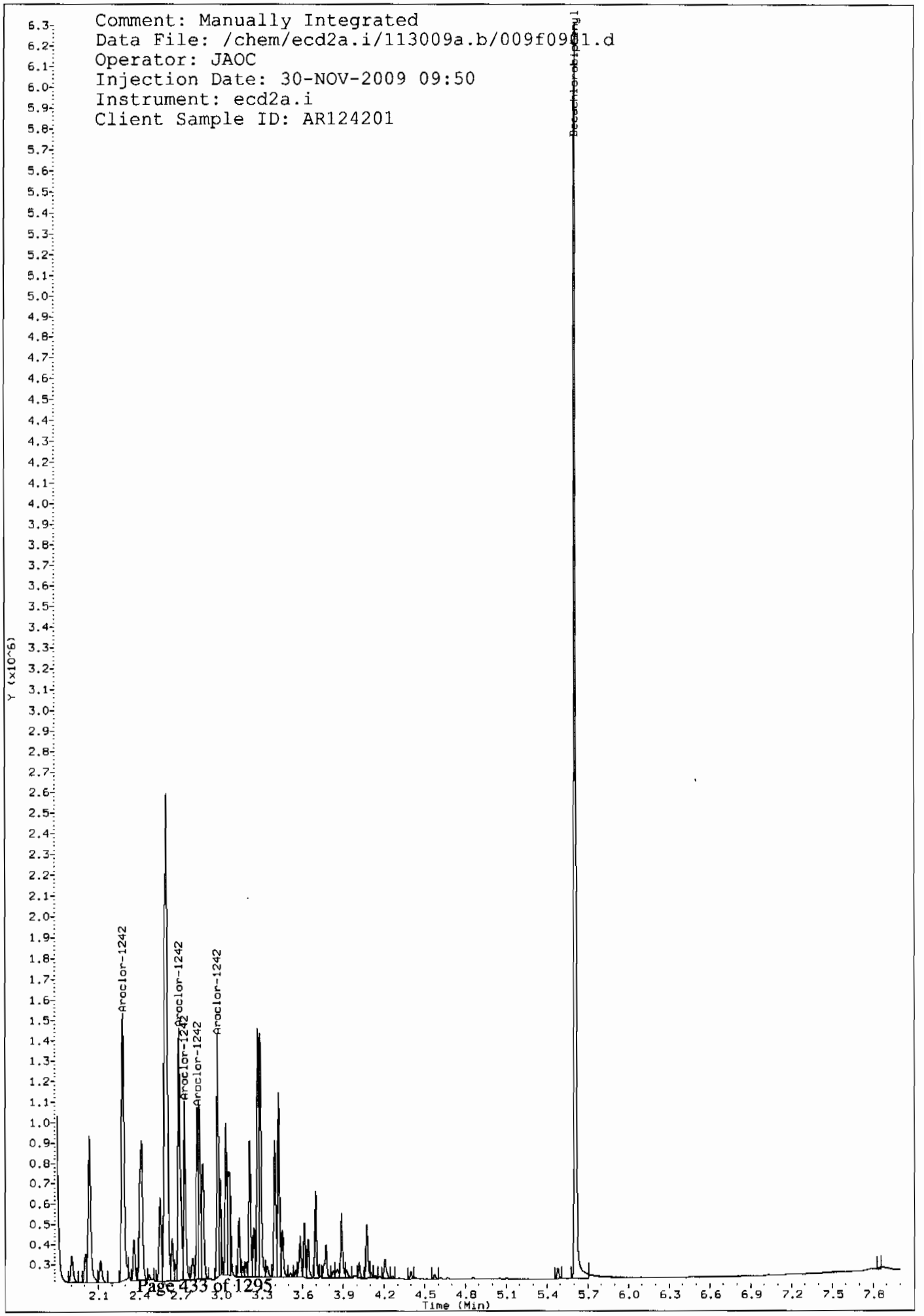

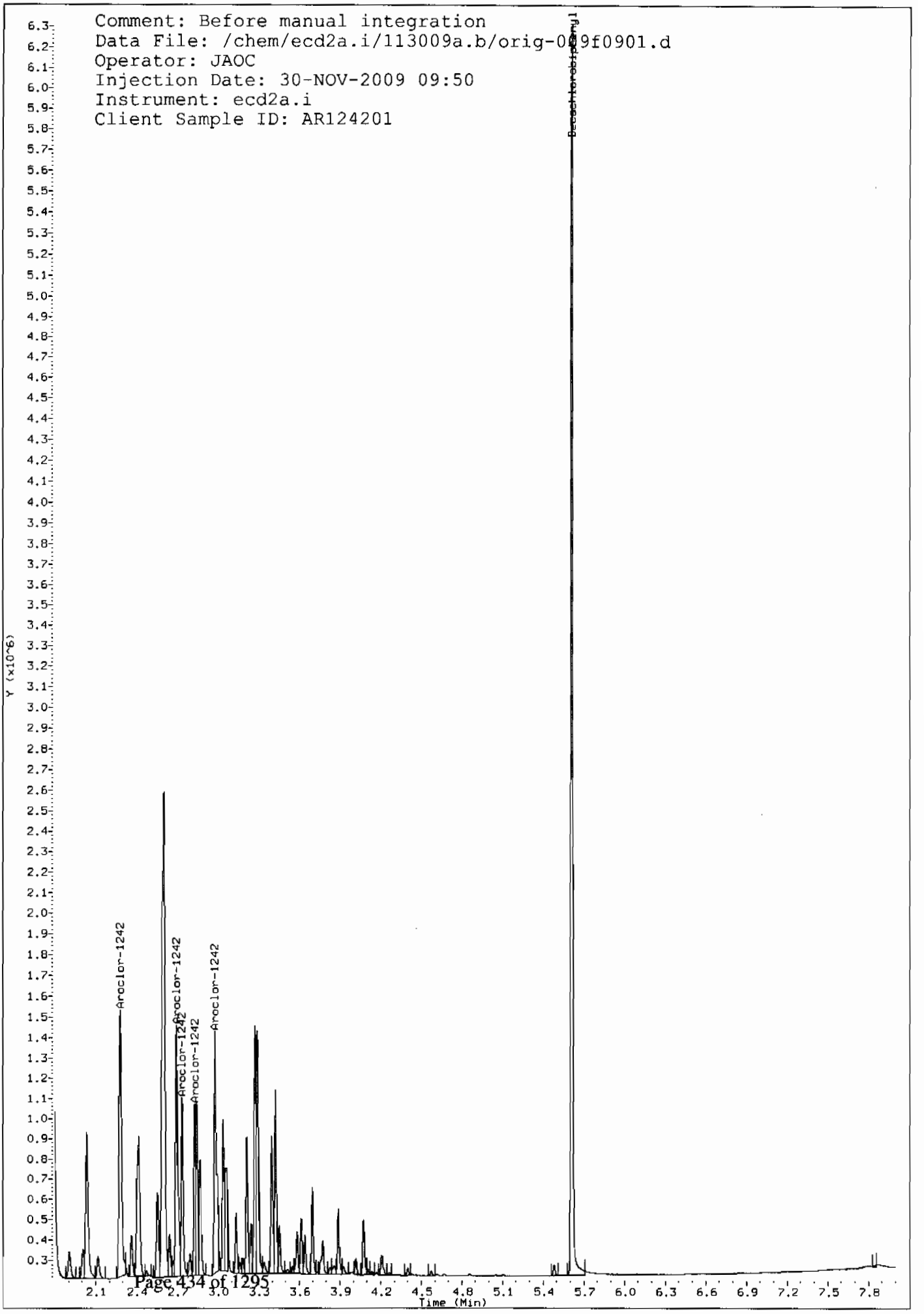
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-0[illegible]9f0901.d
Operator: JAOC
Injection Date: 30-NOV-2009 09:50
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/009b0901.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 30-NOV-2009 09:50
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 15:49 Cal File: 032b3201.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	13959492	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11817209	100.000	109	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.751	2.751	0.000	3684803	1000.00	1070	80.00- 120.00	100.00
3.185	3.185	0.000	2896136	1000.00	1080	58.60- 98.60	78.60
3.257	3.257	0.000	1750227	1000.00	1070	27.50- 67.50	47.50
3.336	3.336	0.000	1638839	1000.00	1090	24.48- 64.48	44.48
3.523	3.523	0.000	2366567	1000.00	1100	44.23- 84.23	64.23

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd2a.i/113009a.b/009b0901.d

Date : 30-NOV-2009 09:50

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

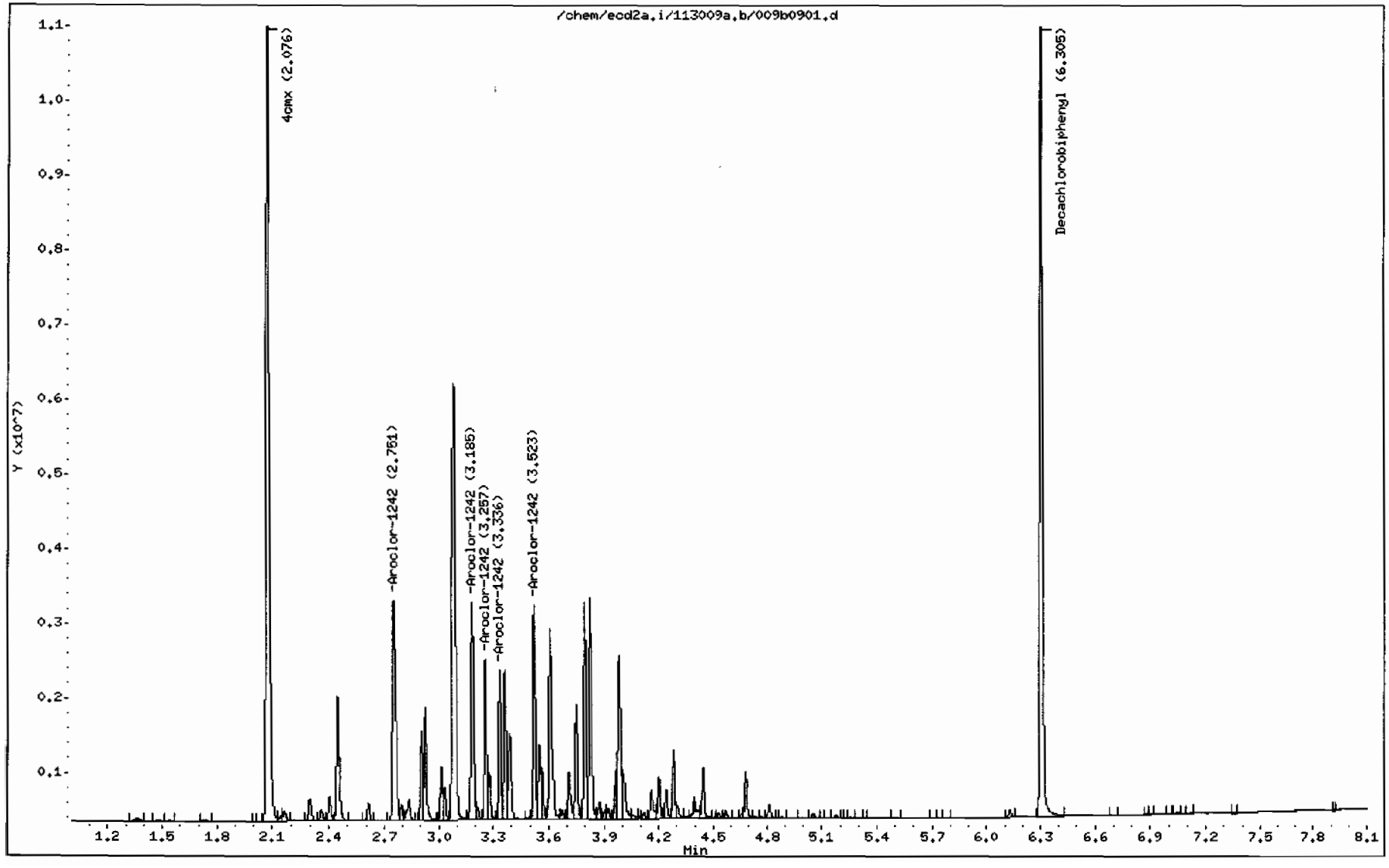

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/010f1001.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 30-NOV-2009 10:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	6196591	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5077765	100.000	92.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.281	0.000	1978468	1000.00	942	80.00- 120.00	100.00(M)
2.603	2.603	0.000	4261729	1000.00	946	200.70- 240.70	215.41
2.694	2.694	0.000	1682401	1000.00	924	66.33- 106.33	85.04
2.829	2.829	0.000	838621	1000.00	899	23.94- 63.94	42.39
2.980	2.980	0.000	1291604	1000.00	937	46.48- 86.48	65.28
Average of Peak Amounts =					930		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4068904	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2483392	1000.00	982	41.40- 81.40	61.03
4.455	4.455	0.000	2543166	1000.00	984	42.98- 82.98	62.50
4.667	4.667	0.000	6041869	1000.00	1000	129.48- 169.48	148.49
4.856	4.856	0.000	2868024	1000.00	985	51.53- 91.53	70.49
Average of Peak Amounts =					991		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/010f1001.d
Date : 30-NOV-2009 10:01
Client ID: AR166001
Sample Info: IWAR091119-60 01
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

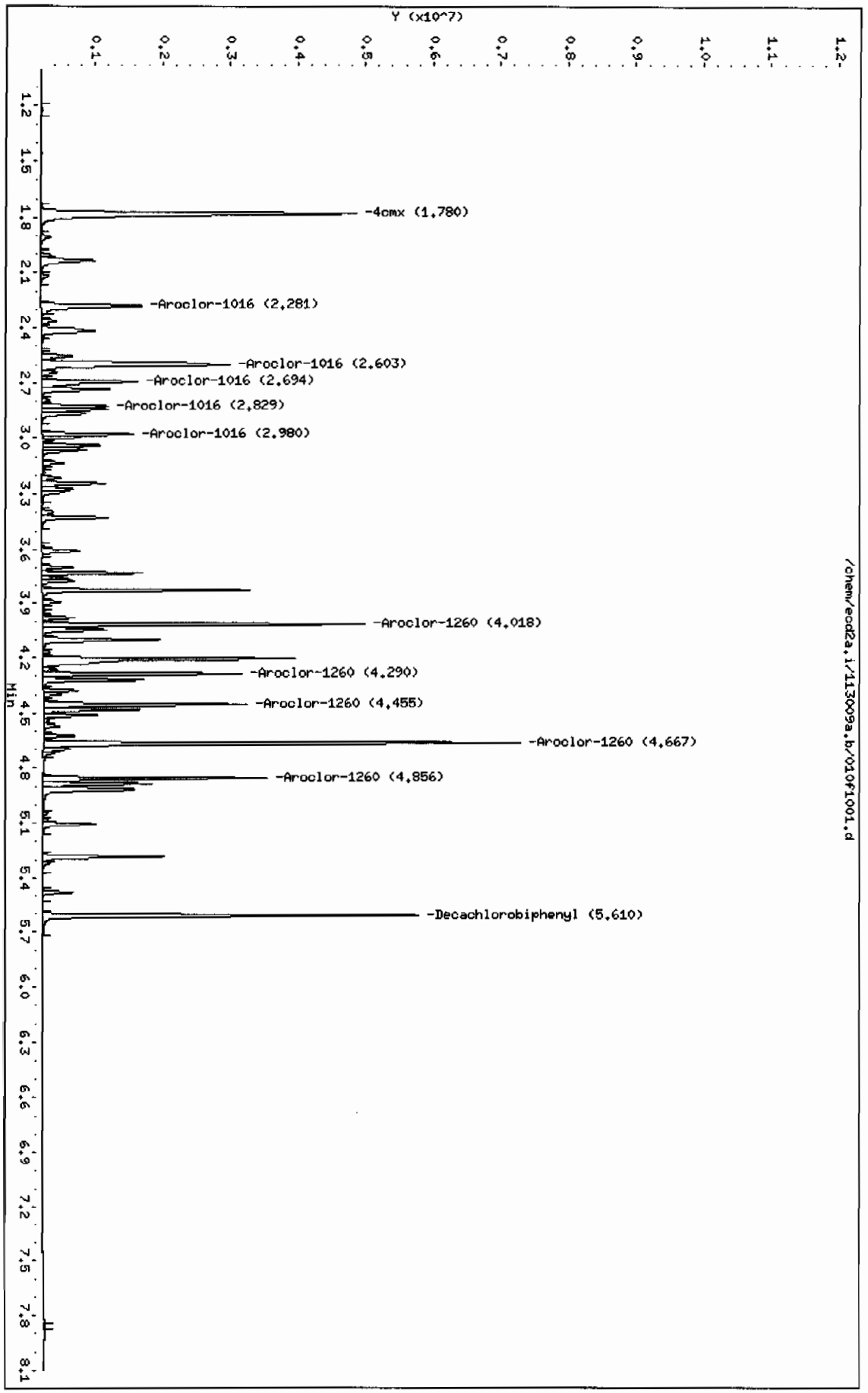

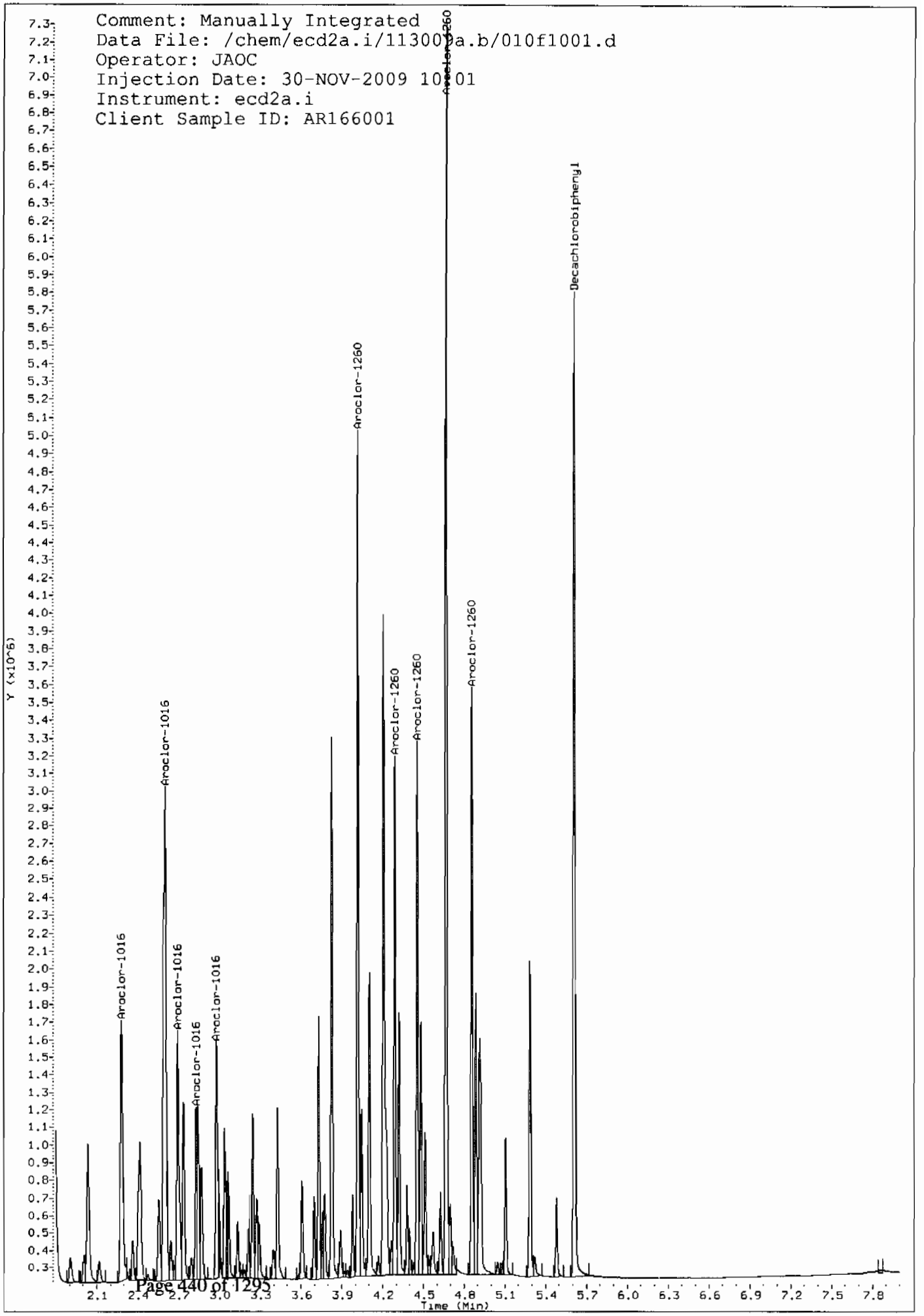
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/010f1001.d
Operator: JAOC
Injection Date: 30-NOV-2009 10:01
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-010f1001.d
Operator: JAOC
Injection Date: 30-NOV-2009 10:01
Instrument: ecd2a.i
Client Sample ID: AR166001

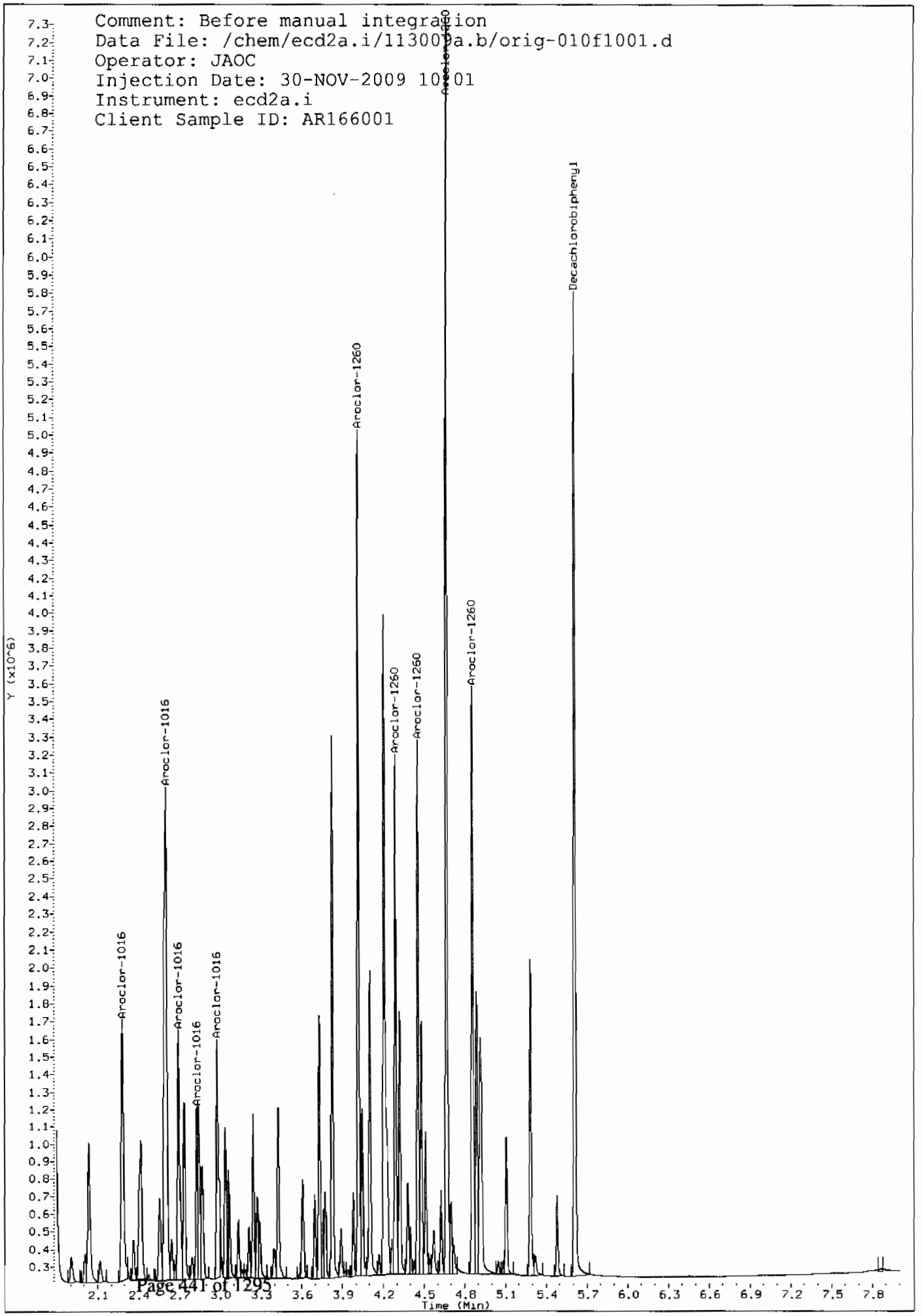

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/010b1001.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 30-NOV-2009 10:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 15:49 Cal File: 032b3201.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	13176963	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10685872	100.000	98.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	4173488	1000.00	980	80.00- 120.00	100.00
3.185	3.185	0.000	3357057	1000.00	974	60.34- 100.34	80.44
3.336	3.336	0.000	1945702	1000.00	983	26.76- 66.76	46.62
3.365	3.365	0.000	2043240	1000.00	991	28.59- 68.59	48.96
3.523	3.523	0.000	2757838	1000.00	1000	45.90- 85.90	66.08
Average of Peak Amounts =					986		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5766117	1000.00	1040	80.00- 120.00	100.00
4.570	4.570	0.000	7438440	1000.00	1040	109.55- 149.55	129.00
4.682	4.682	0.000	4933514	1000.00	1040	66.53- 106.53	85.56
4.880	4.880	0.000	5948703	1000.00	1020	83.52- 123.52	103.17
5.505	5.505	0.000	9441654	1000.00	1040	145.03- 185.03	163.74
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/113009a.b/010b1001.d

Date : 30-NOV-2009 10:01

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

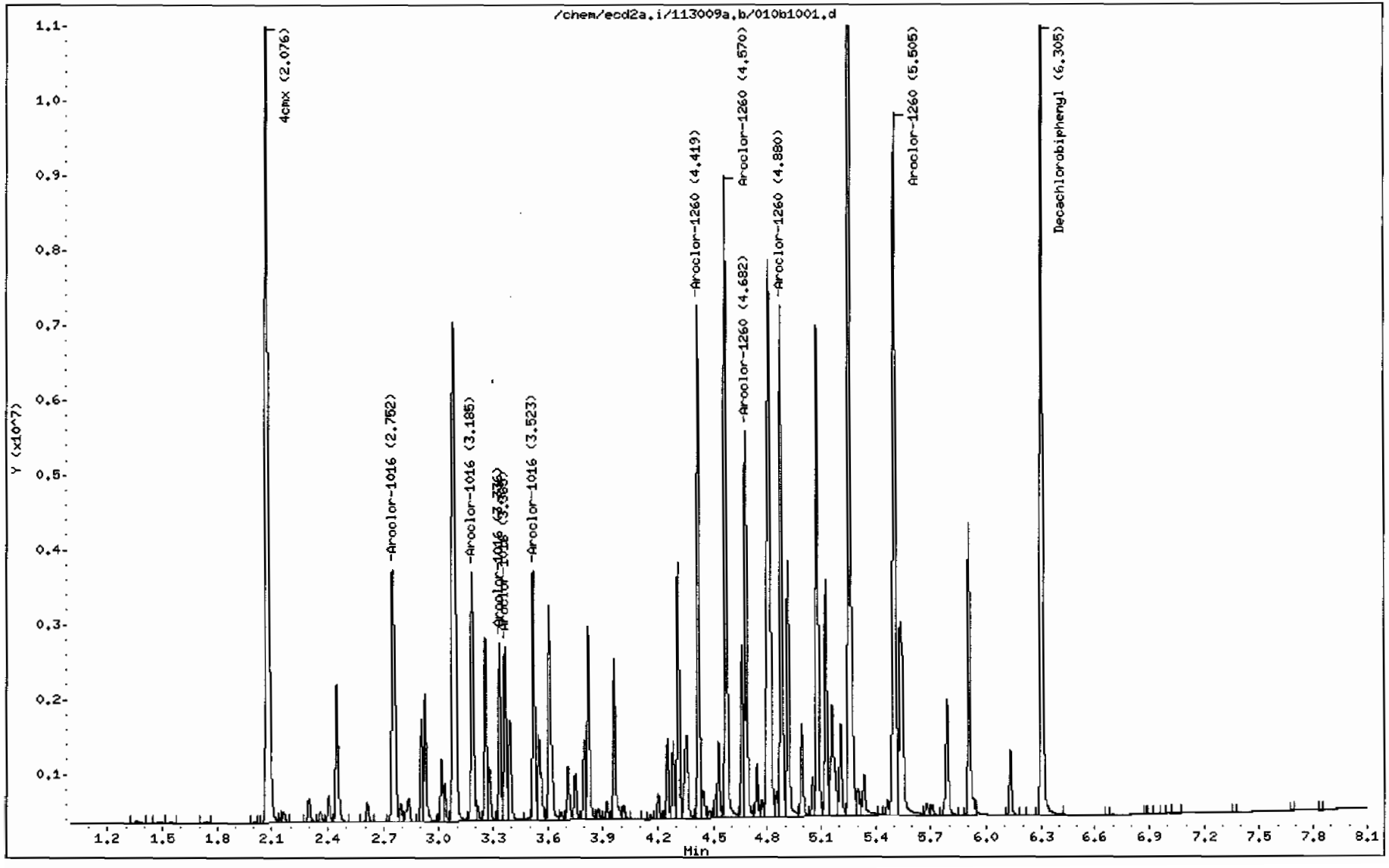

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/017f1701.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 30-NOV-2009 11:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	8531635	100.000	148	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7379390	100.000	134	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.033	2.033	0.000	1313610	1000.00	1130	80.00- 120.00	100.00
2.281	2.281	0.000	1065304	1000.00	1140	61.10- 101.10	81.10
2.694	2.694	0.000	914957	1000.00	1140	49.65- 89.65	69.65
2.736	2.736	0.000	586250	1000.00	1150	24.63- 64.63	44.63
2.979	2.979	0.000	850224	1000.00	1460	44.72- 84.72	64.72

Average of Peak Amounts = 1.2e+03

Data File: /chem/ecd2a.i/113009a.b/017f1701.d

Date : 30-NOV-2009 11:18

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

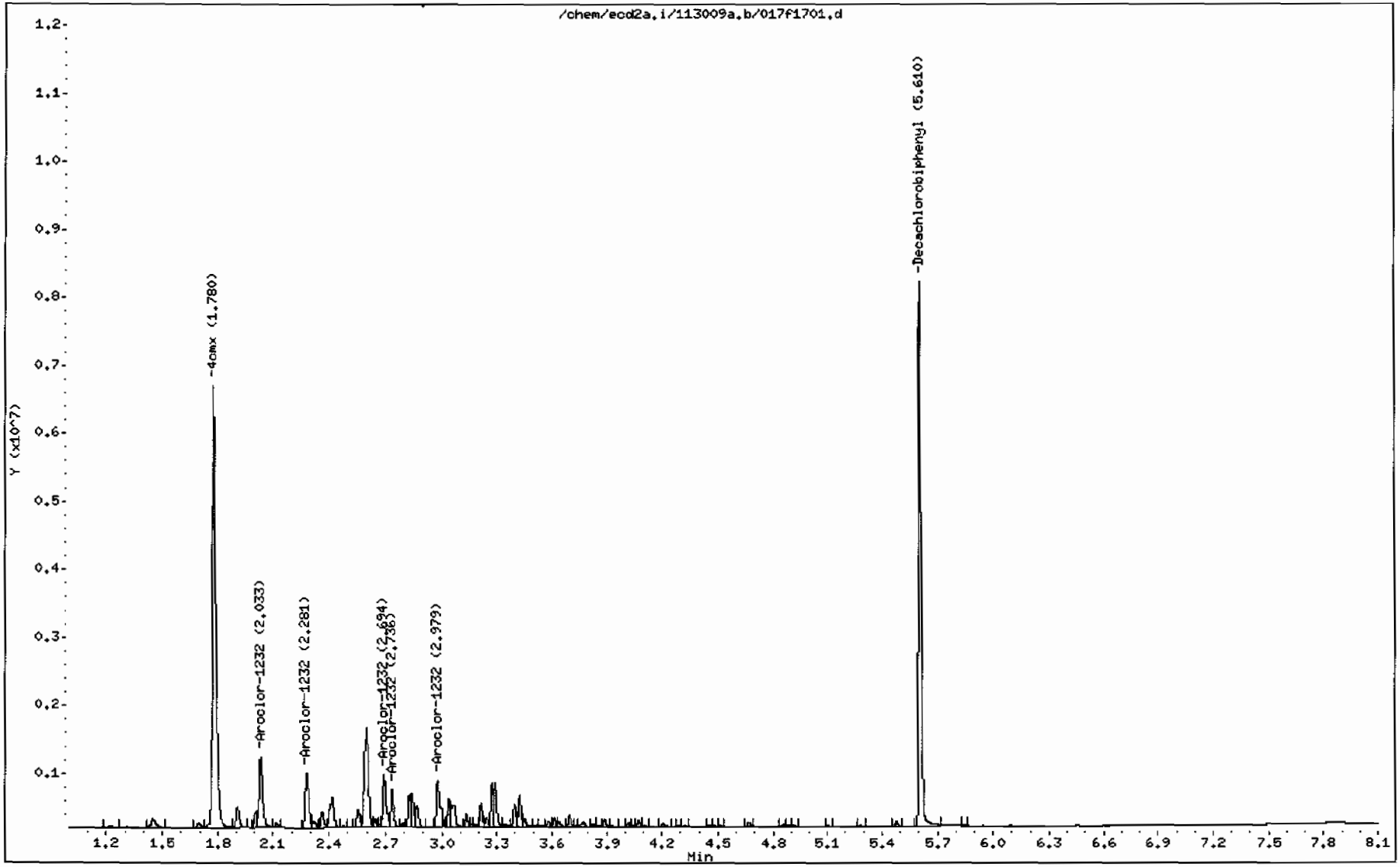

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/017b1701.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 30-NOV-2009 11:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	18108908	100.000	153	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15551881	100.000	143	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.449	2.449	0.000	2396862	1000.00	1160	80.00- 120.00	100.00
2.752	2.752	0.000	2305145	1000.00	1180	76.17- 116.17	96.17
3.185	3.185	0.000	1903054	1000.00	1270	59.40- 99.40	79.40
3.257	3.257	0.000	1112987	1000.00	1200	26.44- 66.44	46.44
3.523	3.523	0.000	1384932	1000.00	1250	37.78- 77.78	57.78

Average of Peak Amounts = 1.21e+03

Data File: /chem/ecd2a.i/113009a.b/017b1701.d

Date : 30-NOV-2009 11:18

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

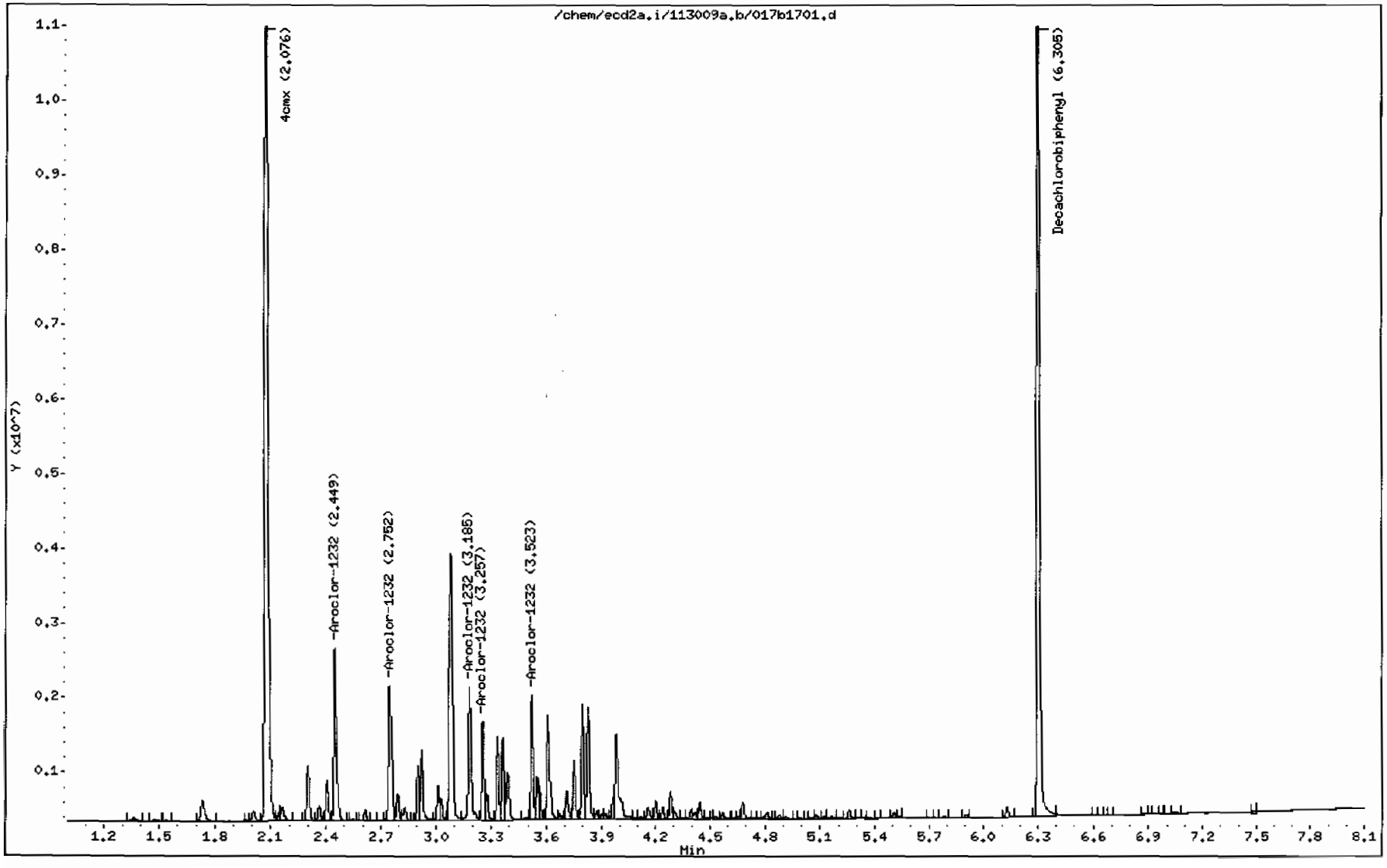

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/018f1801.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 30-NOV-2009 11:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.778	1.780	-0.002	7109031	100.000	123	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	6272632	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.827	2.827	0.000	1446897	1000.00	948	80.00- 120.00	100.00(M)
2.979	2.979	0.000	1934737	1000.00	954	113.72- 153.72	133.72
3.038	3.038	0.000	1530041	1000.00	974	85.75- 125.75	105.75
3.272	3.272	0.000	2181149	1000.00	983	130.75- 170.75	150.75
3.425	3.425	0.000	1839367	1000.00	962	107.12- 147.12	127.12
Average of Peak Amounts =					964		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/018f1801.d

Date : 30-NOV-2009 11:29

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

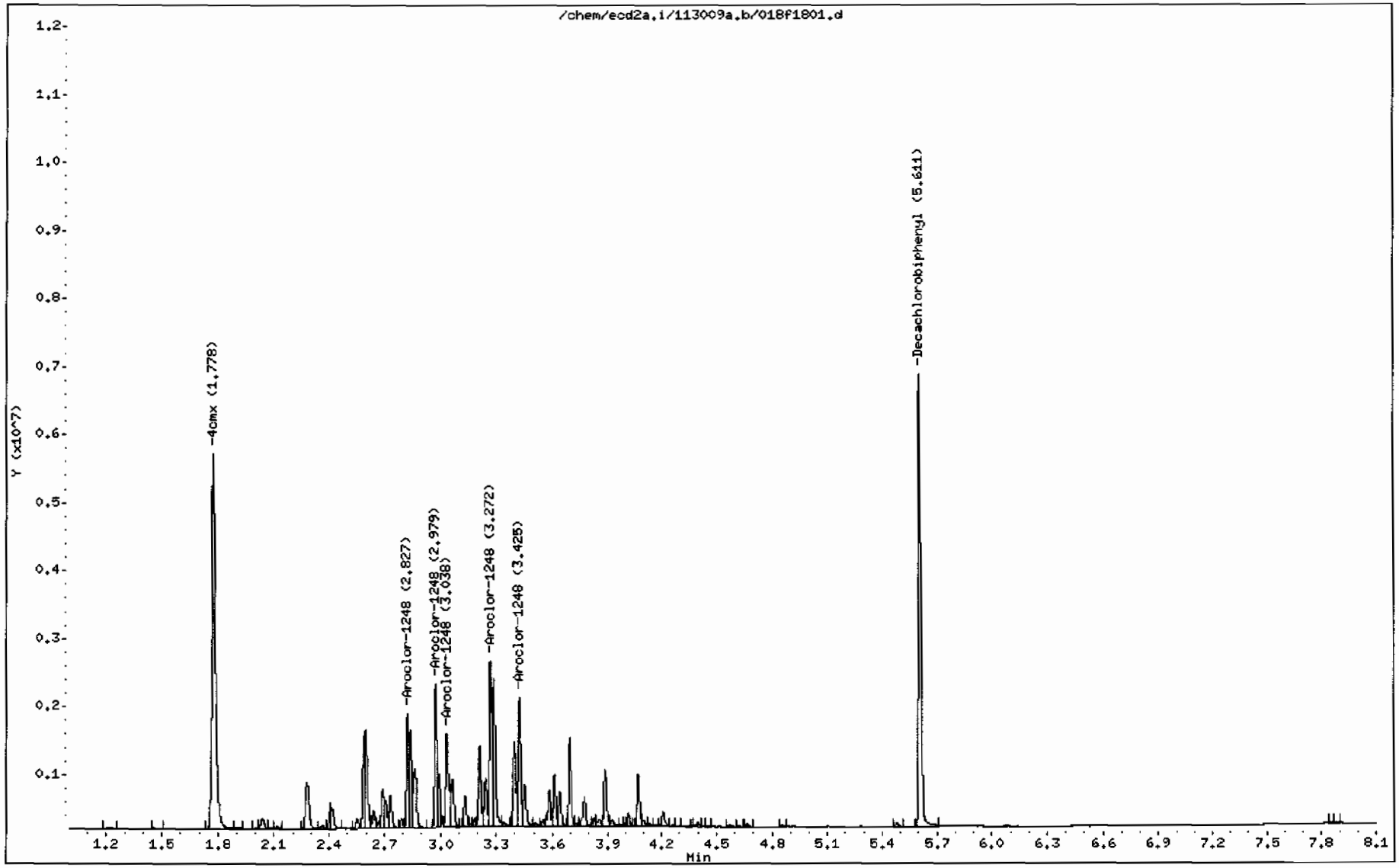

Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/018f1801.d
Operator: JAOC
Injection Date: 30-NOV-2009 11:29
Instrument: ecd2a.i
Client Sample ID: AR124801

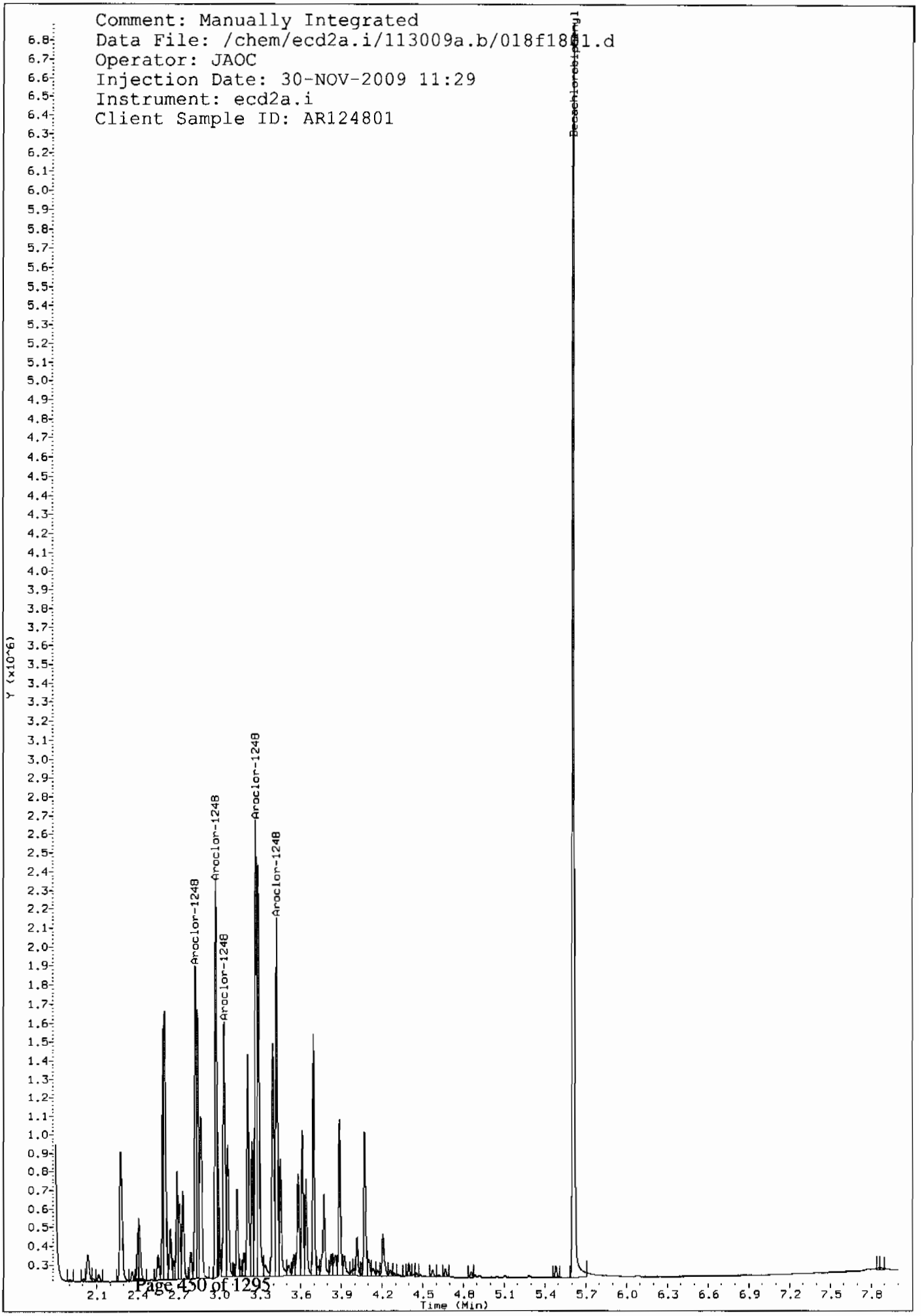

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-018f1801.d
Operator: JAOC
Injection Date: 30-NOV-2009 11:29
Instrument: ecd2a.i
Client Sample ID: AR124801

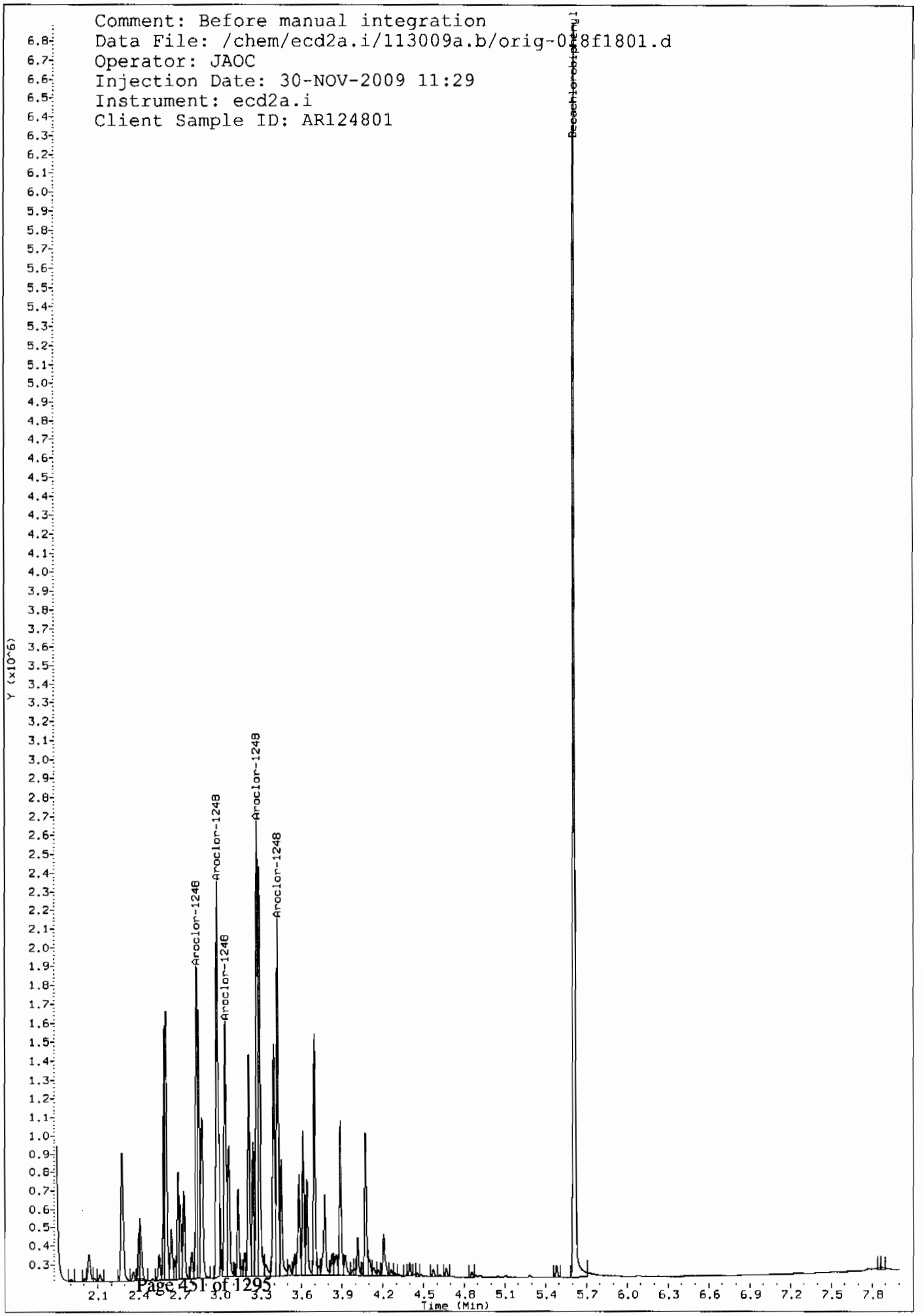

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/018b1801.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 30-NOV-2009 11:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	15148730	100.000	128	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	13300825	100.000	122	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	3317920	1000.00	1010	80.00- 120.00	100.00
3.522	3.522	0.000	4246080	1000.00	1010	107.97- 147.97	127.97
3.609	3.609	0.000	4509127	1000.00	1010	115.90- 155.90	135.90
3.798	3.798	0.000	4787444	1000.00	1020	124.29- 164.29	144.29
3.827	3.827	0.000	5425831	1000.00	1010	143.53- 183.53	163.53

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/113009a.b/018b1801.d

Date : 30-NOV-2009 11:29

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

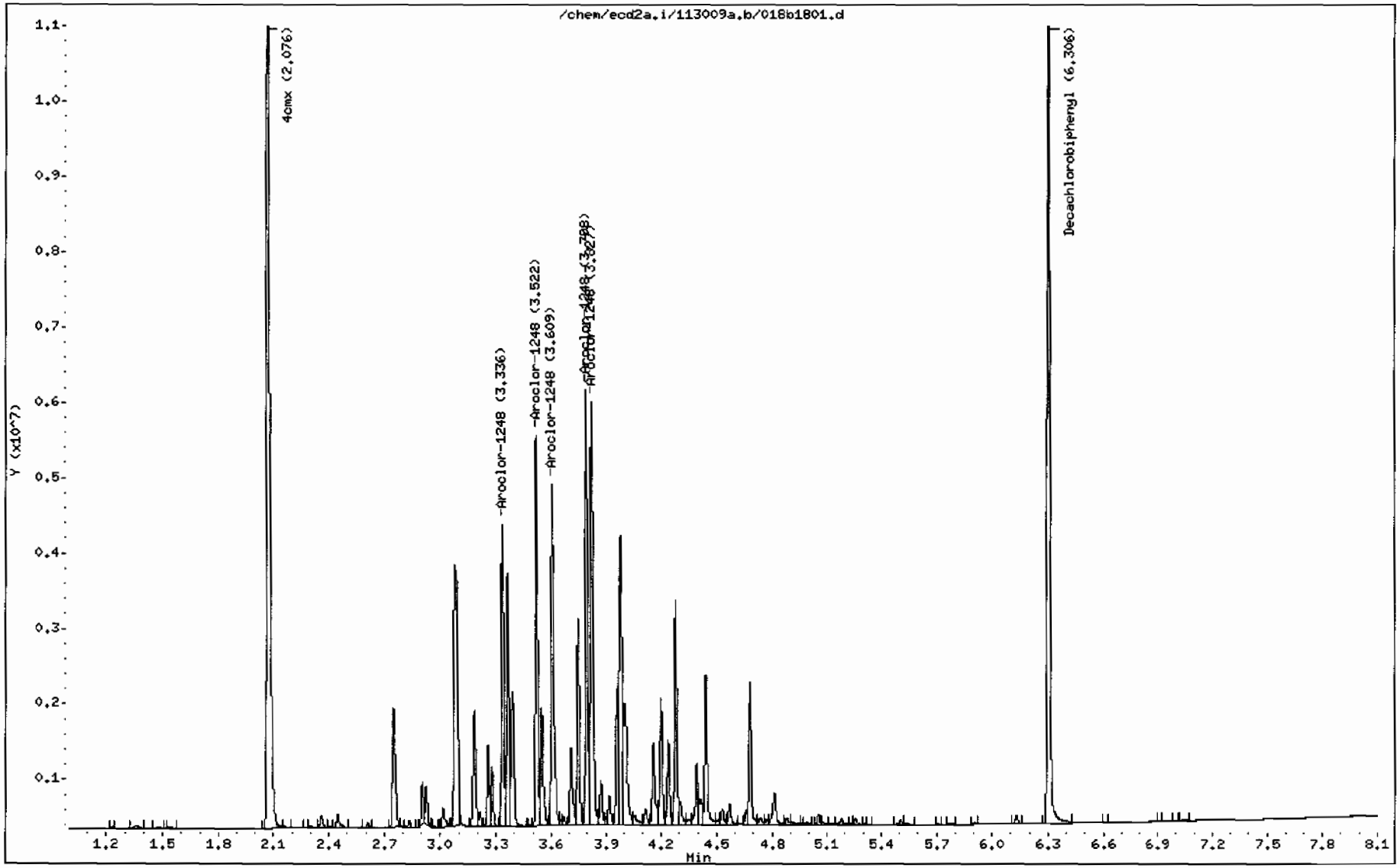

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/019f1901.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 30-NOV-2009 11:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6593393	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	5710697	100.000	104	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	503780	1000.00	1080	80.00- 120.00	100.00
1.905	1.905	0.000	730976	1000.00	1110	125.10- 165.10	145.10
2.005	2.005	0.000	393878	1000.00	1140	58.18- 98.18	78.18

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd2a.i/113009a.b/019f1901.d
Date : 30-NOV-2009 11:40
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

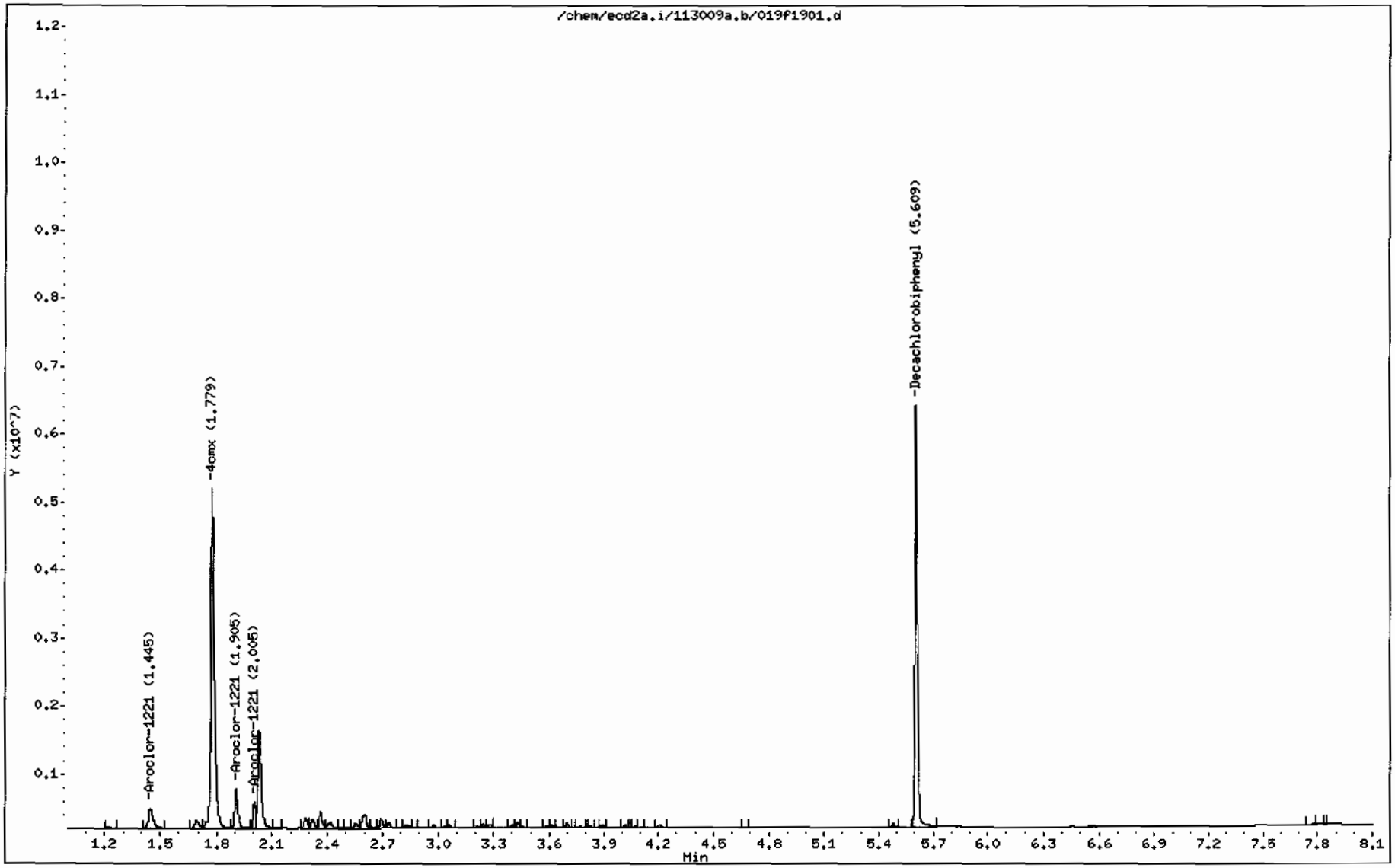

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/019b1901.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 30-NOV-2009 11:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13835551	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.303	6.305	-0.002	11993777	100.000	110	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1394076	1000.00	1100	80.00- 120.00	100.00
2.403	2.403	0.000	852399	1000.00	1100	41.14- 81.14	61.14
2.448	2.448	0.000	3385211	1000.00	1110	222.83- 262.83	242.83

Average of Peak Amounts = 1.1e+03

Data File: /chem/ecd2a.i/113009a.b/019b1901.d

Date : 30-NOV-2009 11:40

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

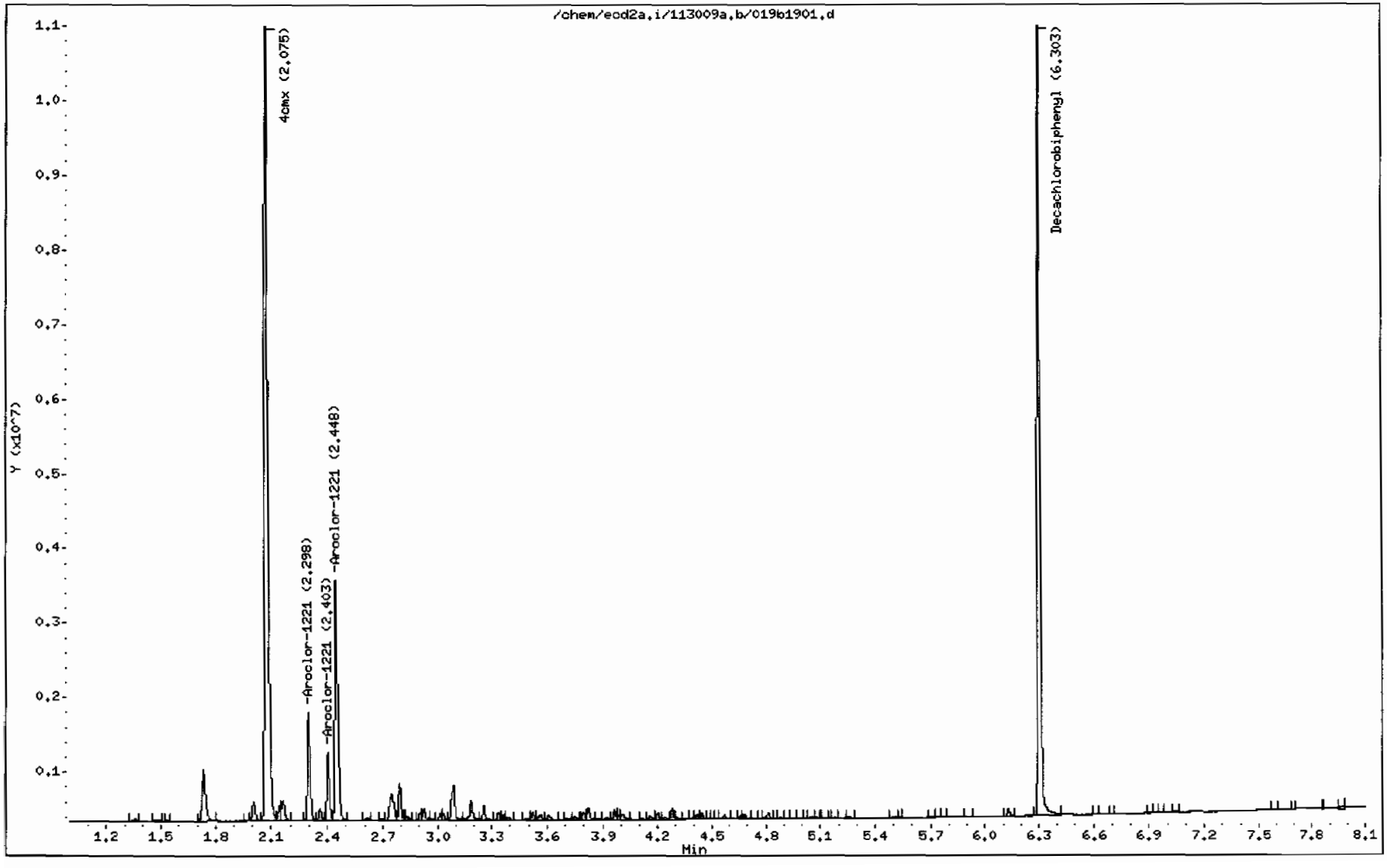

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/060f6001.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 30-NOV-2009 19:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	6097895	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.607	5.610	-0.003	5363835	100.000	97.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.278	2.281	-0.003	1933010	1000.00	920	80.00- 120.00	100.00(M)
2.600	2.603	-0.003	4217365	1000.00	936	198.19- 238.19	218.18
2.691	2.694	-0.003	1668882	1000.00	917	66.30- 106.30	86.34
2.825	2.829	-0.004	842674	1000.00	903	23.34- 63.34	43.59
2.976	2.980	-0.004	1280903	1000.00	929	44.93- 84.93	66.26
Average of Peak Amounts =					921		
7 Aroclor-1260					CAS #: 11096-82-5		
4.015	4.018	-0.003	4041106	1000.00	994	80.00- 120.00	100.00
4.285	4.290	-0.005	2494289	1000.00	986	41.58- 81.58	61.72
4.451	4.455	-0.004	2559863	1000.00	991	43.08- 83.08	63.35
4.664	4.667	-0.003	6076875	1000.00	1010	129.99- 169.99	150.38
4.853	4.856	-0.003	2890332	1000.00	992	51.44- 91.44	71.52
Average of Peak Amounts =					994		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/060f6001.d
Date : 30-NOV-2009 19:42
Client ID: AR166006
Sample Info: IWAR091119-60 06

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

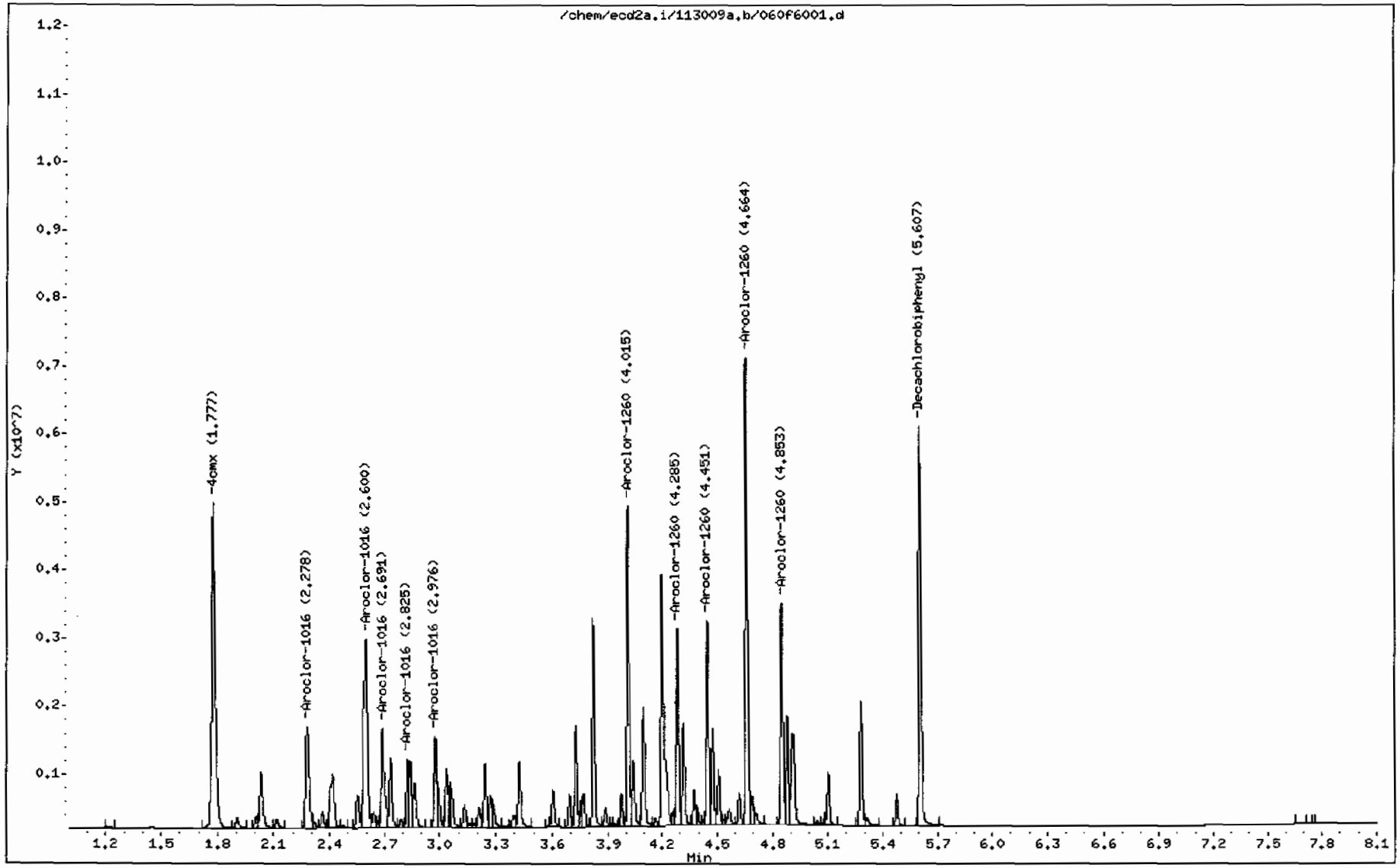

Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/060f6001.d
Operator: JAOC
Injection Date: 30-NOV-2009 19:42
Instrument: ecd2a.i
Client Sample ID: AR166006

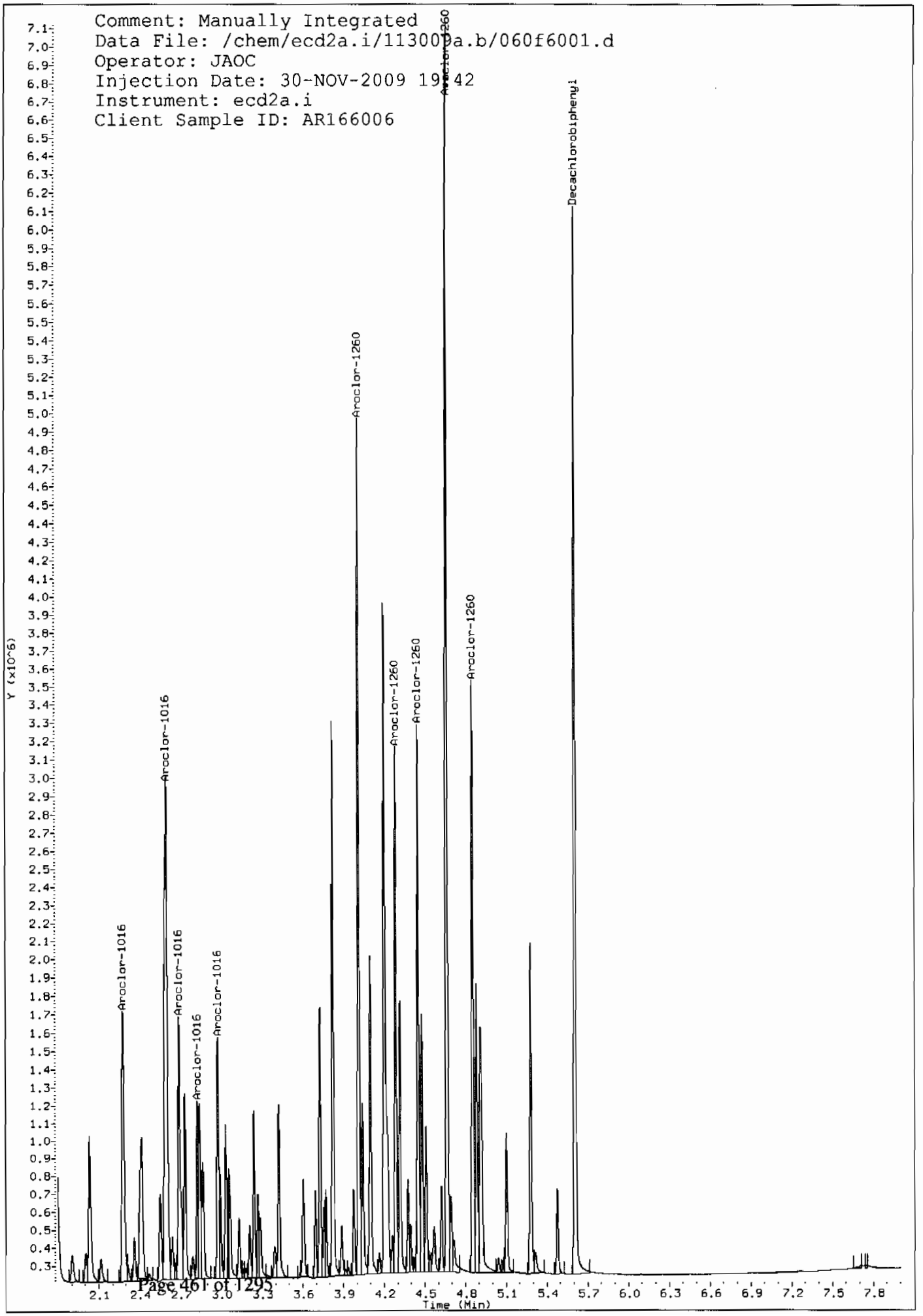

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-060f6001.d
Operator: JAOC
Injection Date: 30-NOV-2009 19:42
Instrument: ecd2a.i
Client Sample ID: AR166006

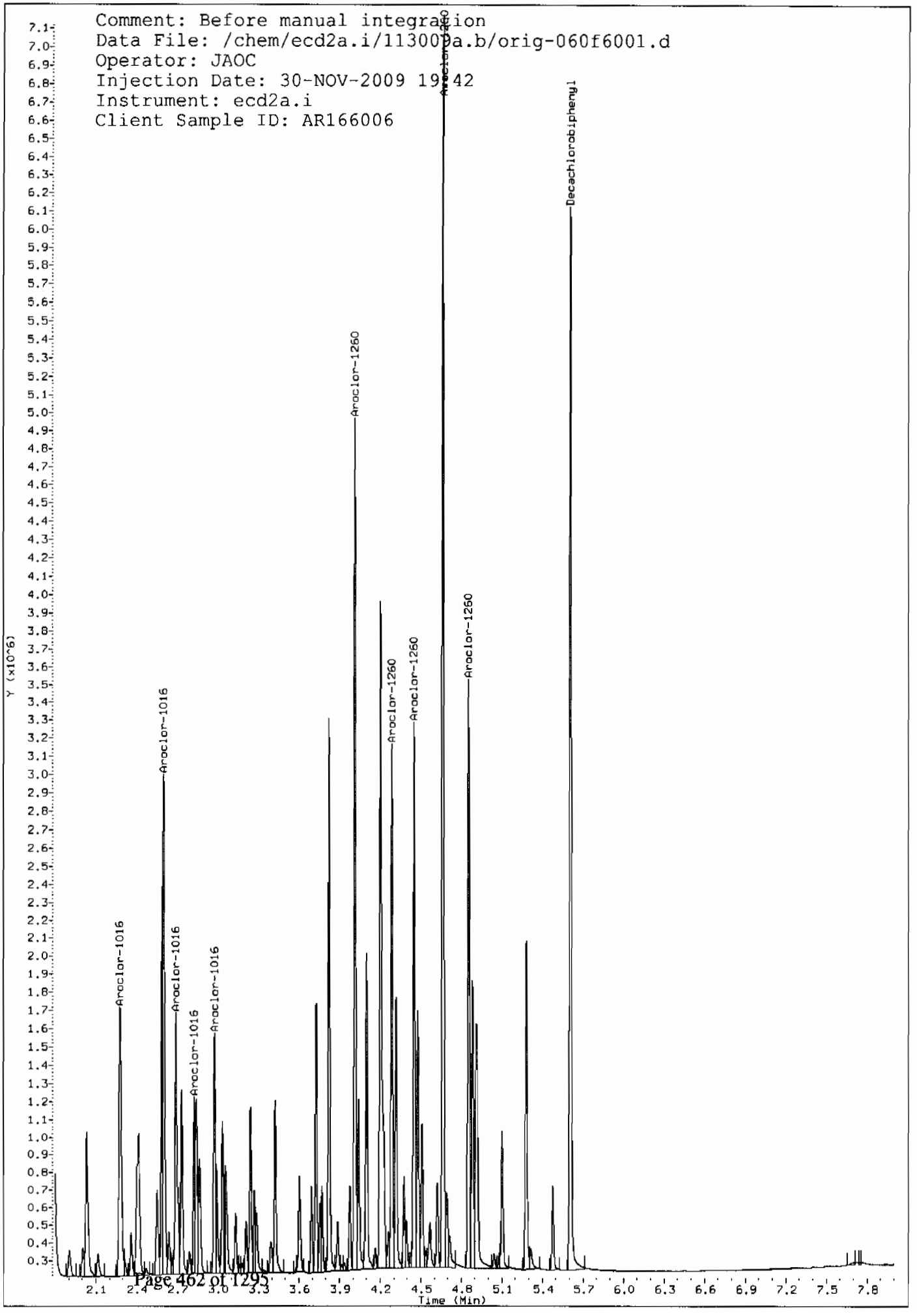

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/060b6001.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 30-NOV-2009 19:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13022909	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.303	6.305	-0.002	10982465	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.752	-0.002	4147515	1000.00	974	80.00- 120.00	100.00
3.183	3.185	-0.002	3338194	1000.00	969	60.91- 100.91	80.49
3.334	3.336	-0.002	1931223	1000.00	976	26.69- 66.69	46.56
3.362	3.365	-0.003	2026640	1000.00	983	29.14- 69.14	48.86
3.521	3.523	-0.002	2736733	1000.00	994	46.31- 86.31	65.98
Average of Peak Amounts =					979		
7 Aroclor-1260					CAS #: 11096-82-5		
4.416	4.419	-0.003	5707093	1000.00	1040	80.00- 120.00	100.00
4.568	4.570	-0.002	7325450	1000.00	1030	108.85- 148.85	128.36
4.680	4.682	-0.002	4866123	1000.00	1030	65.38- 105.38	85.26
4.876	4.880	-0.004	5882183	1000.00	1010	82.89- 122.89	103.07
5.502	5.505	-0.003	9343503	1000.00	1030	145.10- 185.10	163.72
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/113009a.b/060b6001.d
Date : 30-NOV-2009 19:42
Client ID: AR166006
Sample Info: IWAR091119-60 06
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

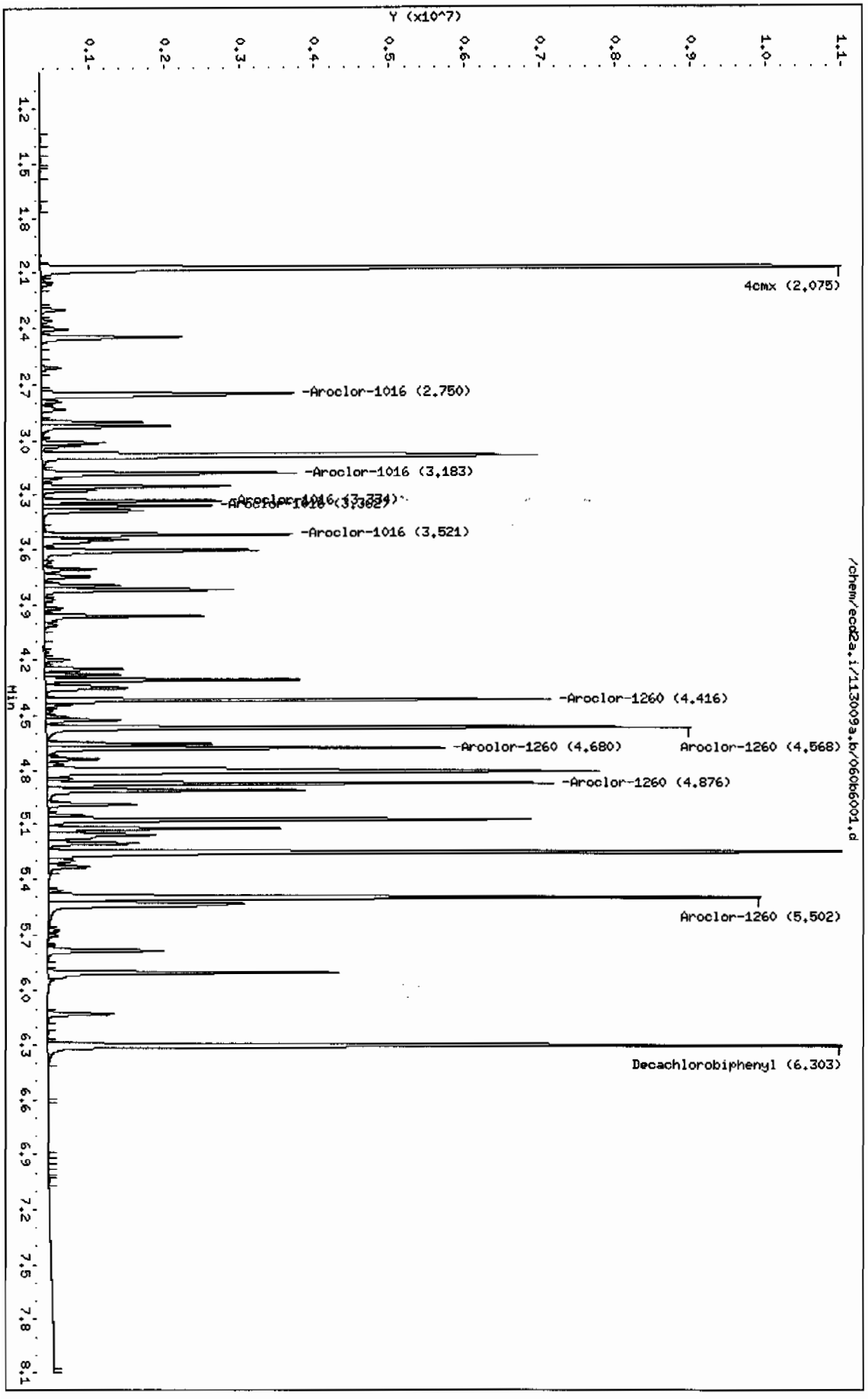

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/072f7201.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 30-NOV-2009 21:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6079928	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5249703	100.000	95.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1930672	1000.00	919	80.00- 120.00	100.00(M)
2.602	2.603	-0.001	4222979	1000.00	937	198.19- 238.19	218.73
2.693	2.694	-0.001	1665504	1000.00	915	66.30- 106.30	86.27
2.828	2.829	-0.001	831367	1000.00	891	23.34- 63.34	43.06
2.979	2.980	-0.001	1279233	1000.00	928	44.93- 84.93	66.26
Average of Peak Amounts =					918		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4070896	1000.00	1000	80.00- 120.00	100.00
4.289	4.290	-0.001	2513820	1000.00	994	41.58- 81.58	61.75
4.455	4.455	0.000	2576179	1000.00	997	43.08- 83.08	63.28
4.667	4.667	0.000	6093310	1000.00	1010	129.99- 169.99	149.68
4.856	4.856	0.000	2912572	1000.00	1000	51.44- 91.44	71.55
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/072f7201.d

Date : 30-NOV-2009 21:55

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

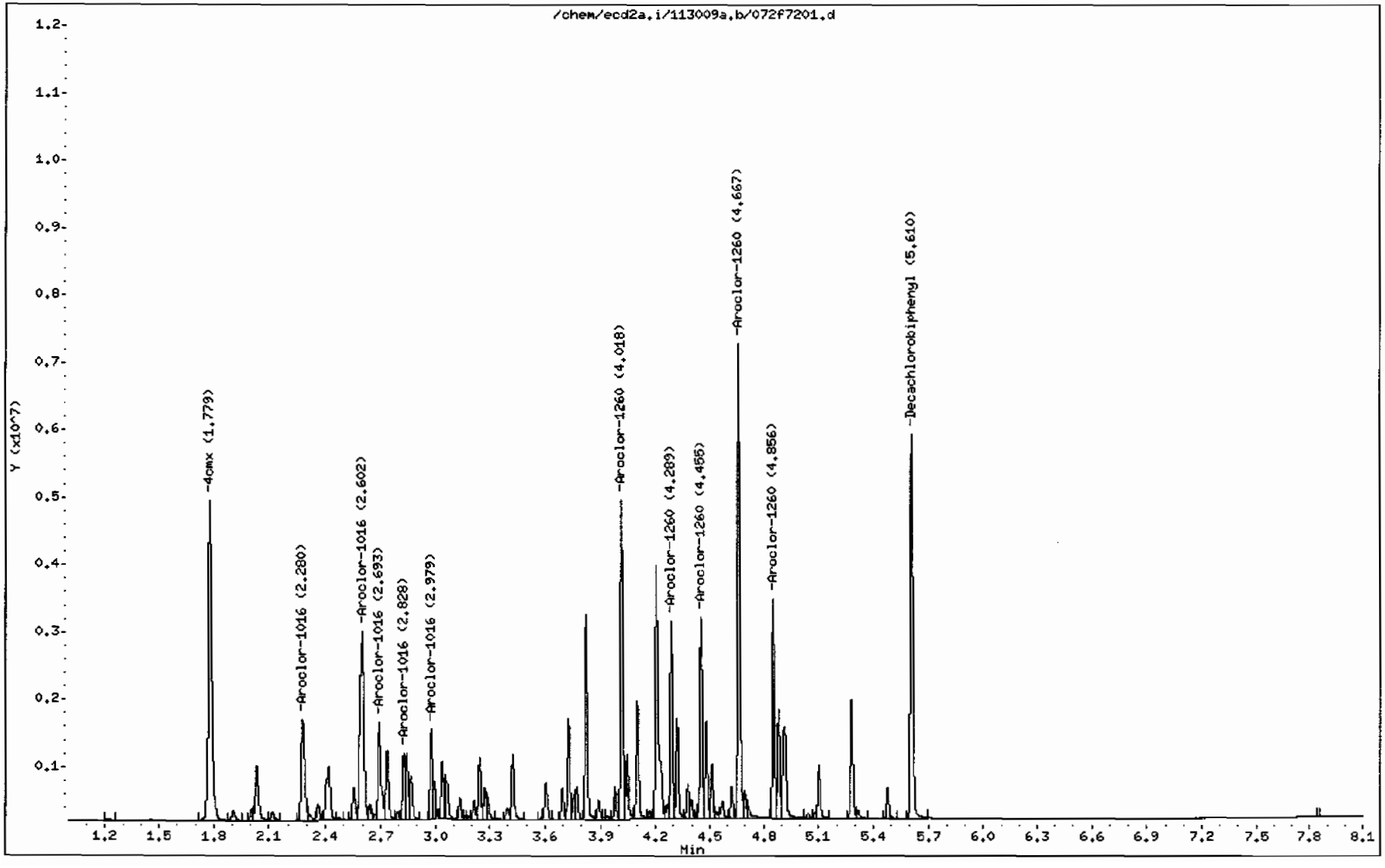

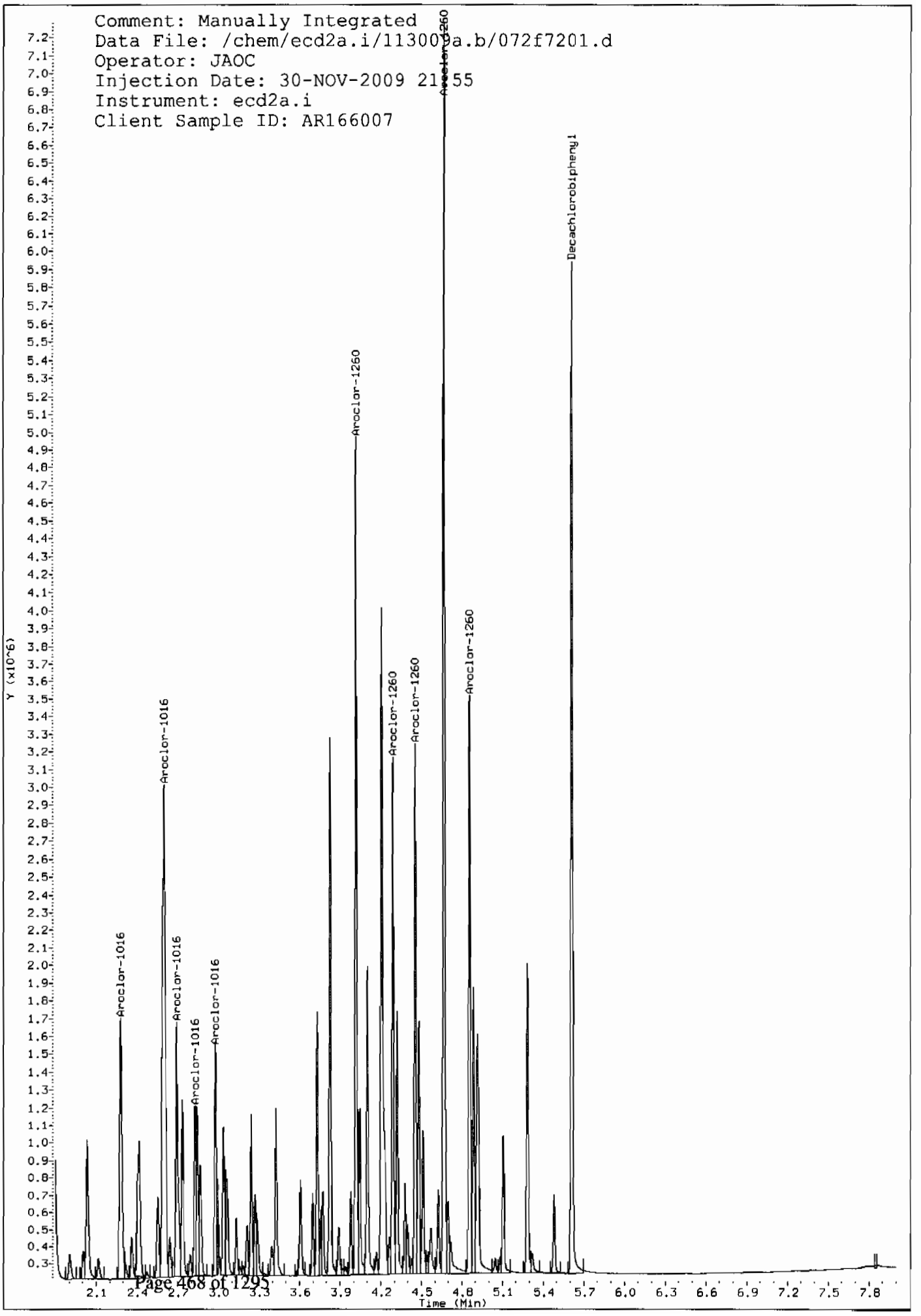
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Data File: /chem/ecd2a.i/113009a.b/072f7201.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:55
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

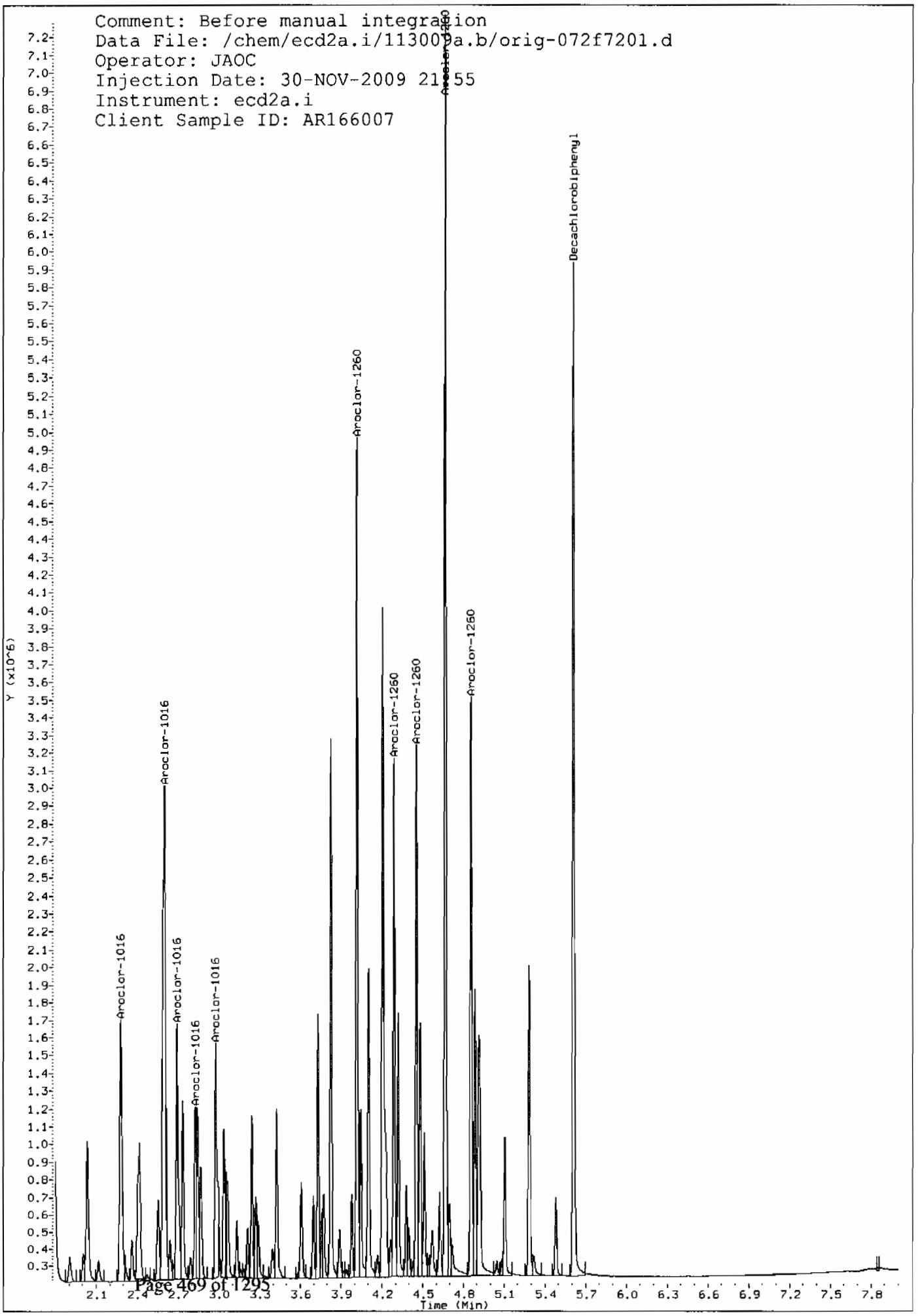
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-072f7201.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:55
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
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Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/072b7201.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 30-NOV-2009 21:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	12937412	100.000	109	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	10807087	100.000	99.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	4110584	1000.00	965	80.00- 120.00	100.00
3.184	3.185	-0.001	3321649	1000.00	964	60.91- 100.91	80.81
3.335	3.336	-0.001	1920571	1000.00	970	26.69- 66.69	46.72
3.364	3.365	-0.001	1996449	1000.00	968	29.14- 69.14	48.57
3.522	3.523	-0.001	2724972	1000.00	989	46.31- 86.31	66.29
Average of Peak Amounts =					972		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5674547	1000.00	1030	80.00- 120.00	100.00
4.570	4.570	0.000	7298534	1000.00	1020	108.85- 148.85	128.62
4.681	4.682	-0.001	4828747	1000.00	1020	65.38- 105.38	85.09
4.879	4.880	-0.001	5817967	1000.00	1000	82.89- 122.89	102.53
5.505	5.505	0.000	9235476	1000.00	1020	145.10- 185.10	162.75
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd2a.i/113009a.b/072b7201.d

Date : 30-NOV-2009 21:55

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

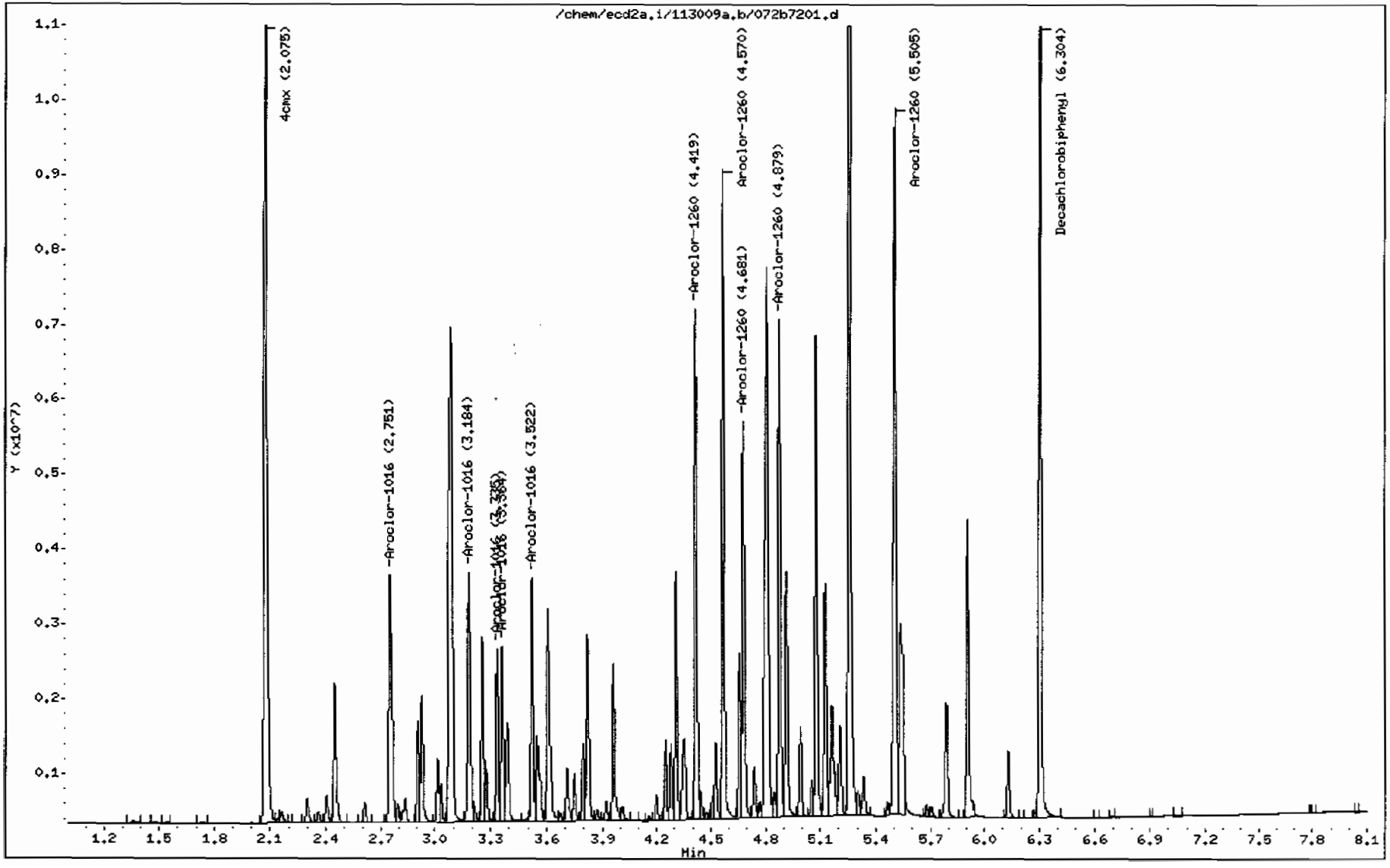

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/084f8401.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 01-DEC-2009 00:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 84 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6135669	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5255737	100.000	95.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1952367	1000.00	930	80.00- 120.00	100.00(M)
2.602	2.603	-0.001	4266269	1000.00	947	198.19- 238.19	218.52
2.693	2.694	-0.001	1683812	1000.00	925	66.30- 106.30	86.24
2.827	2.829	-0.002	836486	1000.00	897	23.34- 63.34	42.84
2.979	2.980	-0.001	1291869	1000.00	937	44.93- 84.93	66.17
Average of Peak Amounts =					927		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4074980	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2503389	1000.00	990	41.58- 81.58	61.43
4.455	4.455	0.000	2559185	1000.00	991	43.08- 83.08	62.80
4.667	4.667	0.000	6100779	1000.00	1010	129.99- 169.99	149.71
4.856	4.856	0.000	2920454	1000.00	1000	51.44- 91.44	71.67
Average of Peak Amounts =					999		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/084f8401.d

Page 1

Date : 01-DEC-2009 00:09

Client ID: AR166008

Instrument: ecd2a.i

Sample Info: IWAR091119-60 08

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

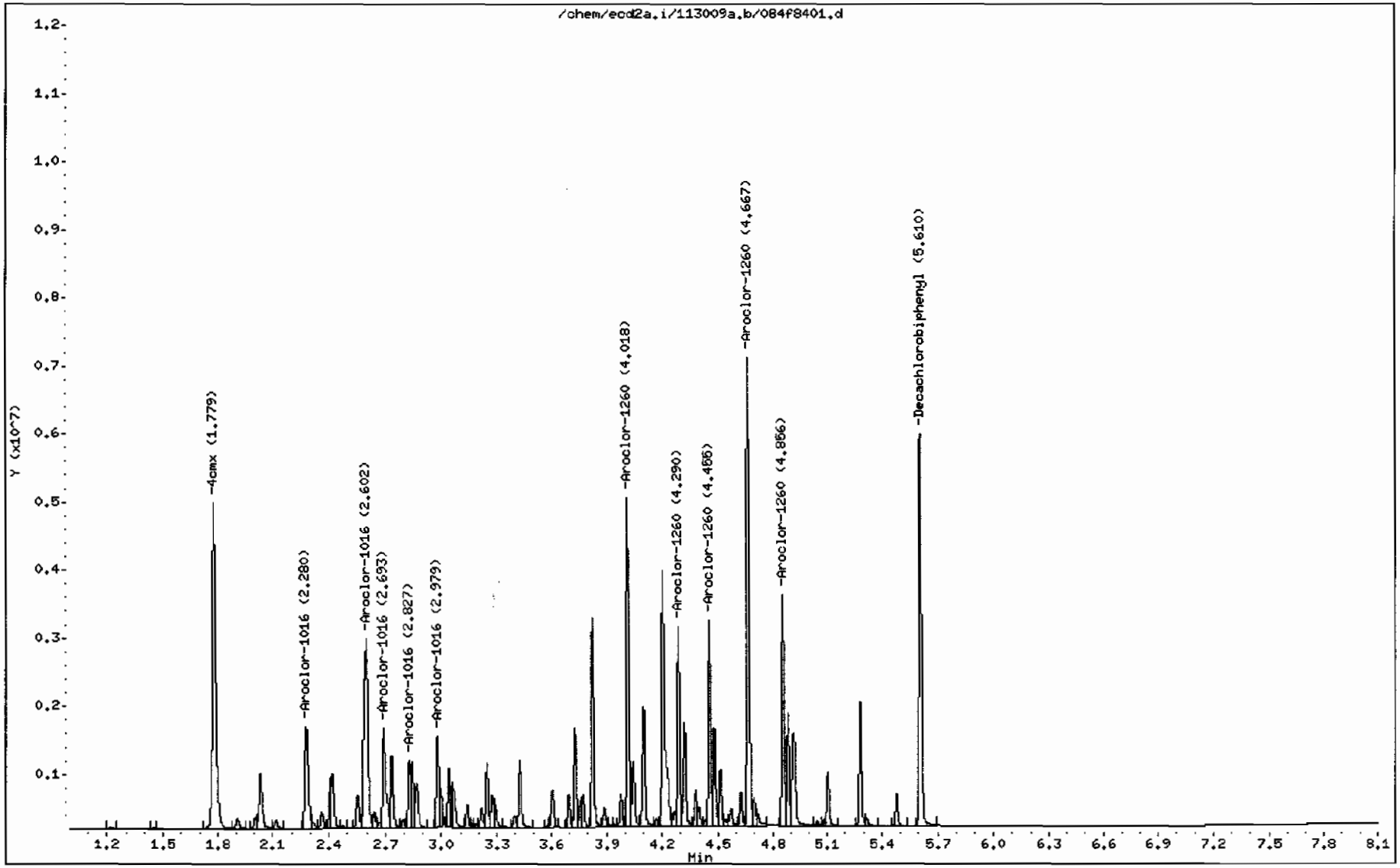

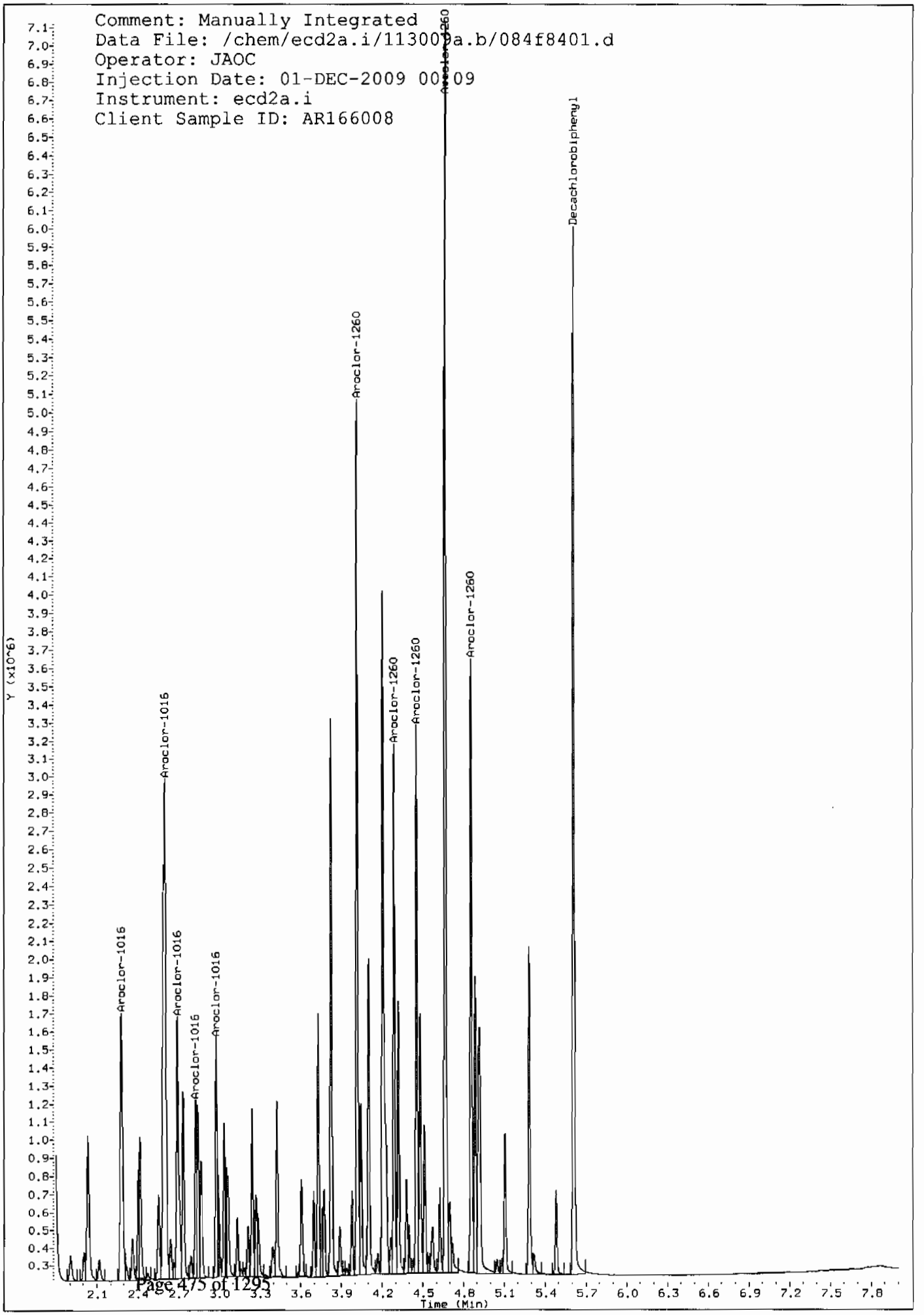
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/084f8401.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:09
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

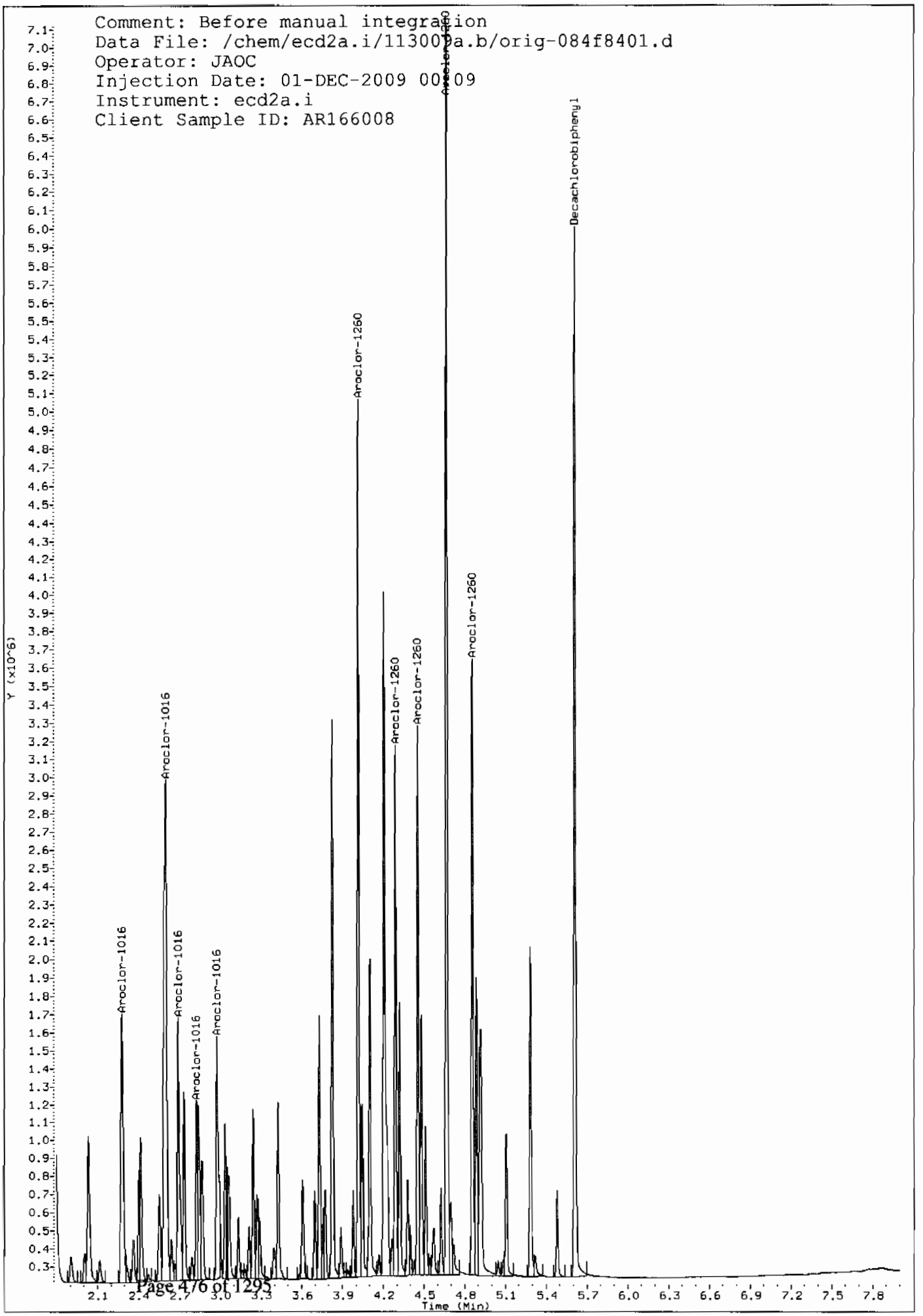
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-084f8401.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:09
Instrument: ecd2a.i
Client Sample ID: AR166008
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/084b8401.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 01-DEC-2009 00:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 84 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13093389	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10865555	100.000	100	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	4158774	1000.00	977	80.00- 120.00	100.00
3.185	3.185	0.000	3350372	1000.00	973	60.91- 100.91	80.56
3.335	3.336	-0.001	1931546	1000.00	976	26.69- 66.69	46.45
3.365	3.365	0.000	2010024	1000.00	975	29.14- 69.14	48.33
3.523	3.523	0.000	2746843	1000.00	997	46.31- 86.31	66.05
Average of Peak Amounts =					980		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5760526	1000.00	1040	80.00- 120.00	100.00
4.570	4.570	0.000	7410661	1000.00	1040	108.85- 148.85	128.65
4.682	4.682	0.000	4897495	1000.00	1040	65.38- 105.38	85.02
4.879	4.880	-0.001	5899028	1000.00	1020	82.89- 122.89	102.40
5.505	5.505	0.000	9366908	1000.00	1040	145.10- 185.10	162.61
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/113009a.b/084b8401.d

Date : 01-DEC-2009 00:09

Client ID: AR166008

Sample Info: IWAR091119-60 08

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

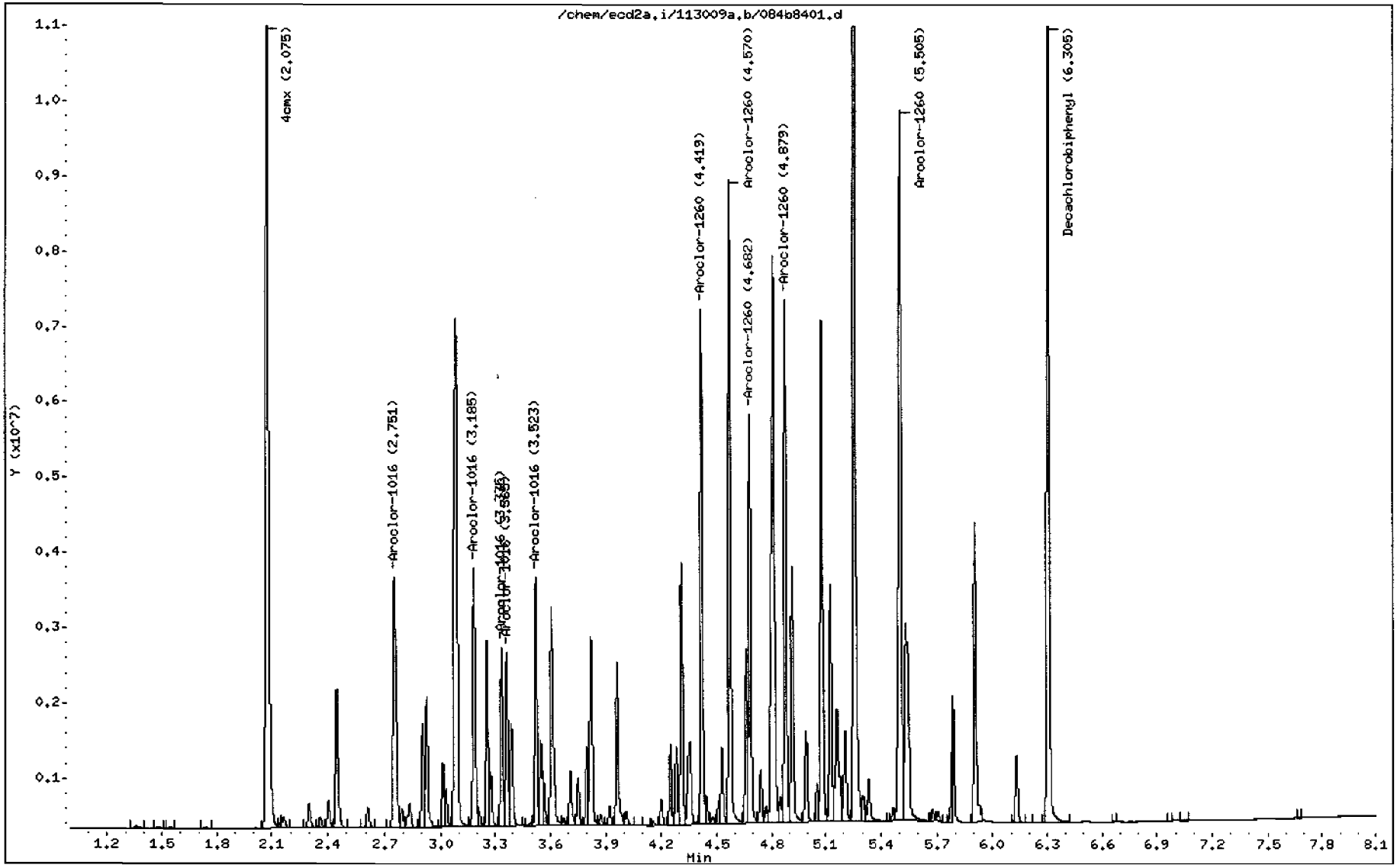

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/090f9001.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 01-DEC-2009 01:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 09
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 90 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6100957	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5261504	100.000	96.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.281	0.000	1941261	1000.00	924	80.00- 120.00	100.00(M)
2.602	2.603	-0.001	4235651	1000.00	940	198.19- 238.19	218.19
2.693	2.694	-0.001	1675229	1000.00	920	66.30- 106.30	86.30
2.828	2.829	-0.001	841408	1000.00	902	23.34- 63.34	43.34
2.979	2.980	-0.001	1260382	1000.00	914	44.93- 84.93	64.93
Average of Peak Amounts =					920		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	4040756	1000.00	994	80.00- 120.00	100.00
4.289	4.290	-0.001	2488405	1000.00	984	41.58- 81.58	61.58
4.455	4.455	0.000	2549026	1000.00	987	43.08- 83.08	63.08
4.666	4.667	-0.001	6060922	1000.00	1000	129.99- 169.99	149.99
4.856	4.856	0.000	2886760	1000.00	991	51.44- 91.44	71.44
Average of Peak Amounts =					992		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/090f9001.d

Date : 01-DEC-2009 01:16

Client ID: AR166009

Sample Info: IWAR091119-60 09

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

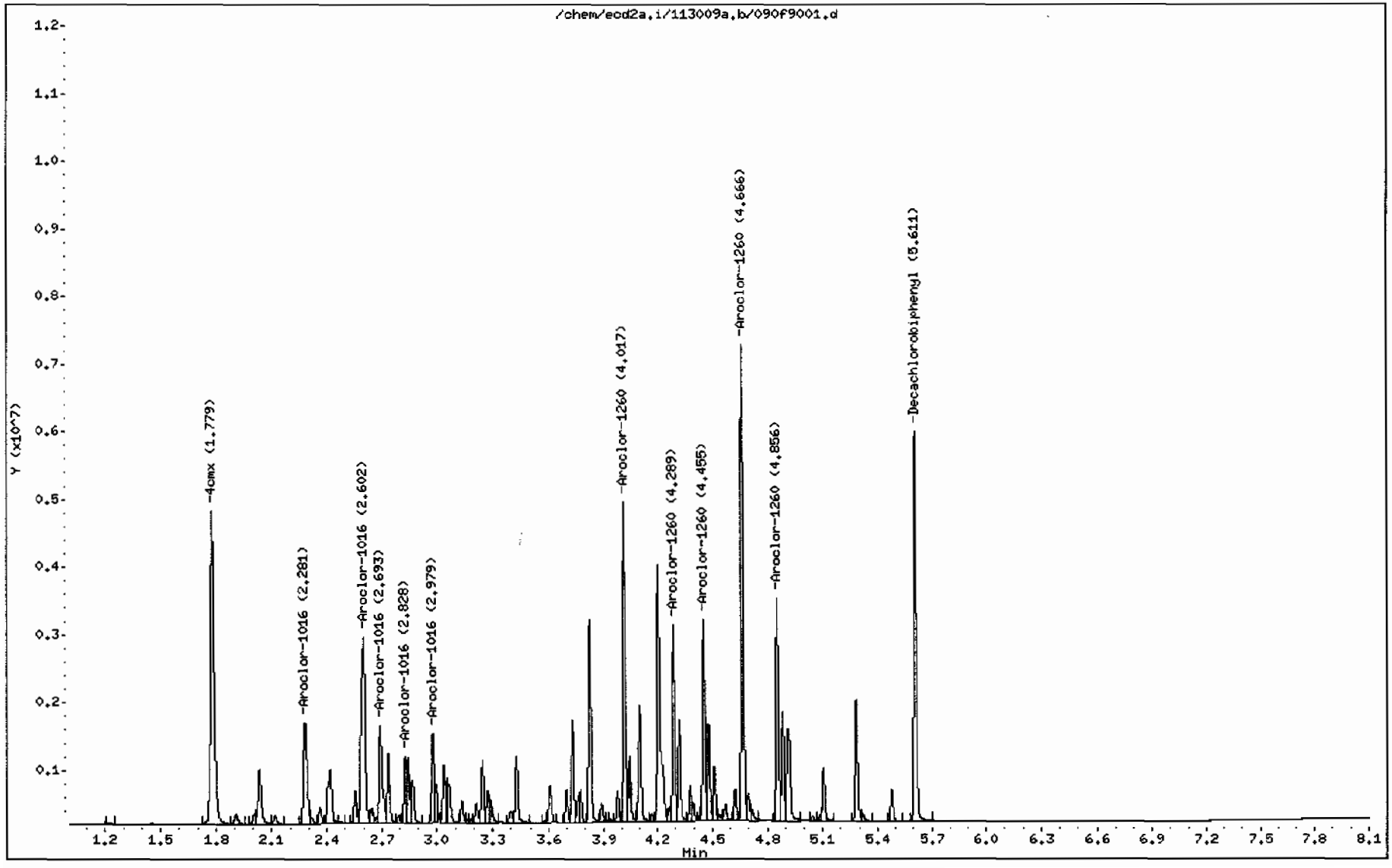

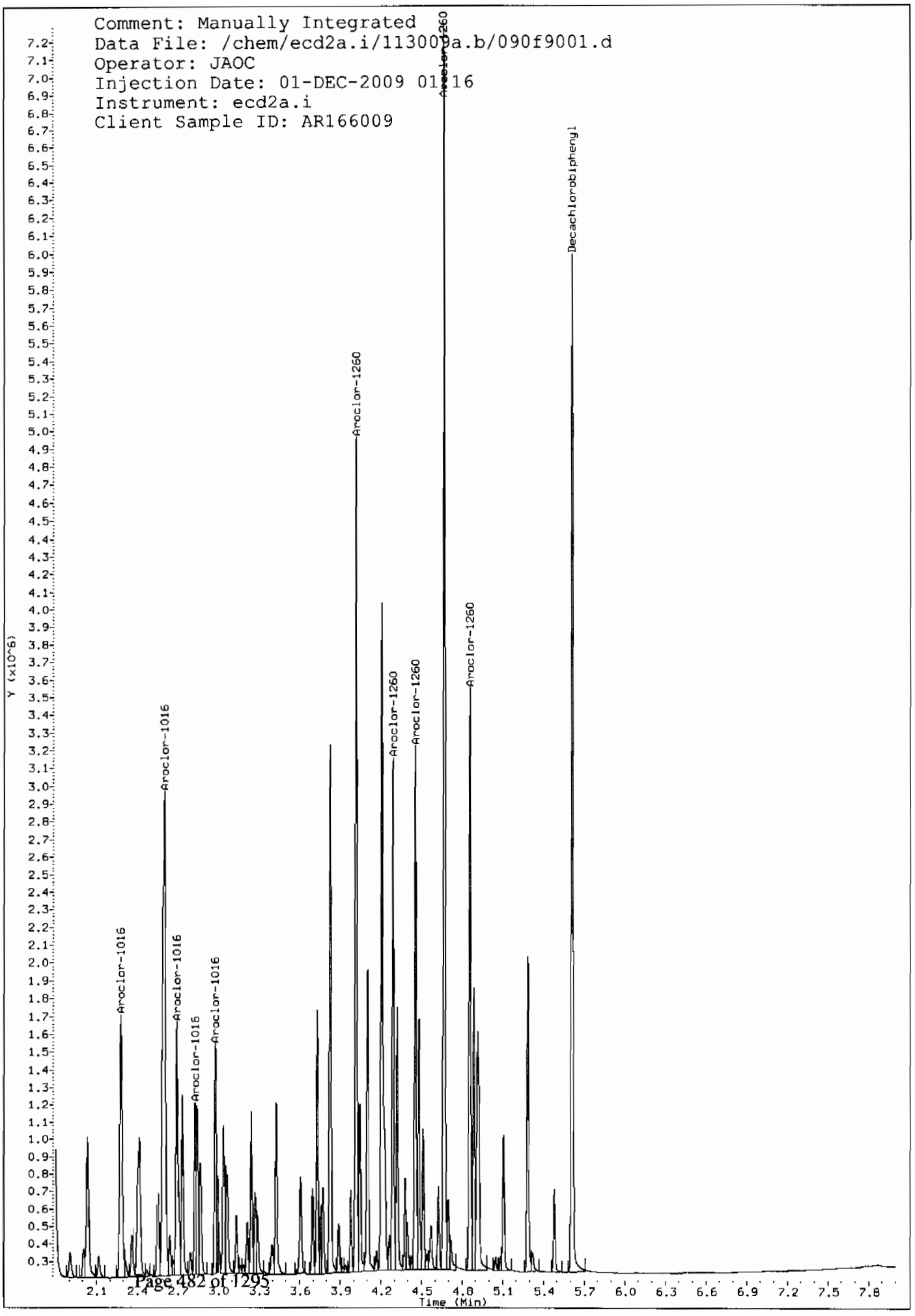
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/090f9001.d
Operator: JAOC
Injection Date: 01-DEC-2009 01:16
Instrument: ecd2a.i
Client Sample ID: AR166009
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-090f9001.d
Operator: JAOC
Injection Date: 01-DEC-2009 01:16
Instrument: ecd2a.i
Client Sample ID: AR166009

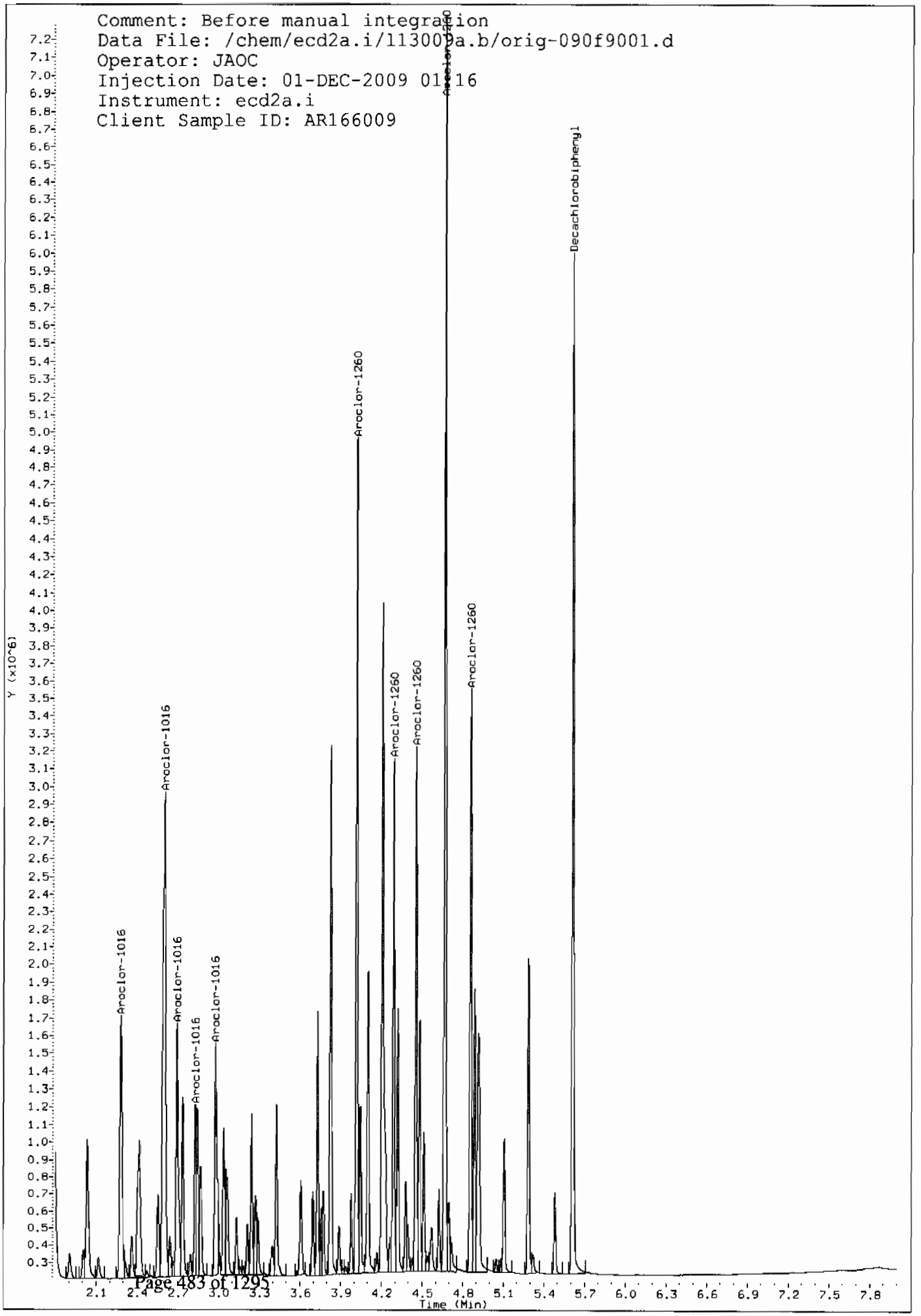

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/090b9001.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 01-DEC-2009 01:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 09
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 90 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	12967716	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10899398	100.000	100	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	4126336	1000.00	969	80.00- 120.00	100.00
3.185	3.185	0.000	3338474	1000.00	969	60.91- 100.91	80.91
3.336	3.336	0.000	1926660	1000.00	973	26.69- 66.69	46.69
3.364	3.365	-0.001	2027708	1000.00	984	29.14- 69.14	49.14
3.522	3.523	-0.001	2736127	1000.00	993	46.31- 86.31	66.31
Average of Peak Amounts =					978		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	5702944	1000.00	1030	80.00- 120.00	100.00
4.570	4.570	0.000	7348409	1000.00	1030	108.85- 148.85	128.85
4.681	4.682	-0.001	4868893	1000.00	1030	65.38- 105.38	85.38
4.879	4.880	-0.001	5867481	1000.00	1010	82.89- 122.89	102.89
5.505	5.505	0.000	9415753	1000.00	1040	145.10- 185.10	165.10
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/113009a.b/090b9001.d

Date : 01-DEC-2009 01:16

Client ID: AR166009

Sample Info: IWAR091119-60 09

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

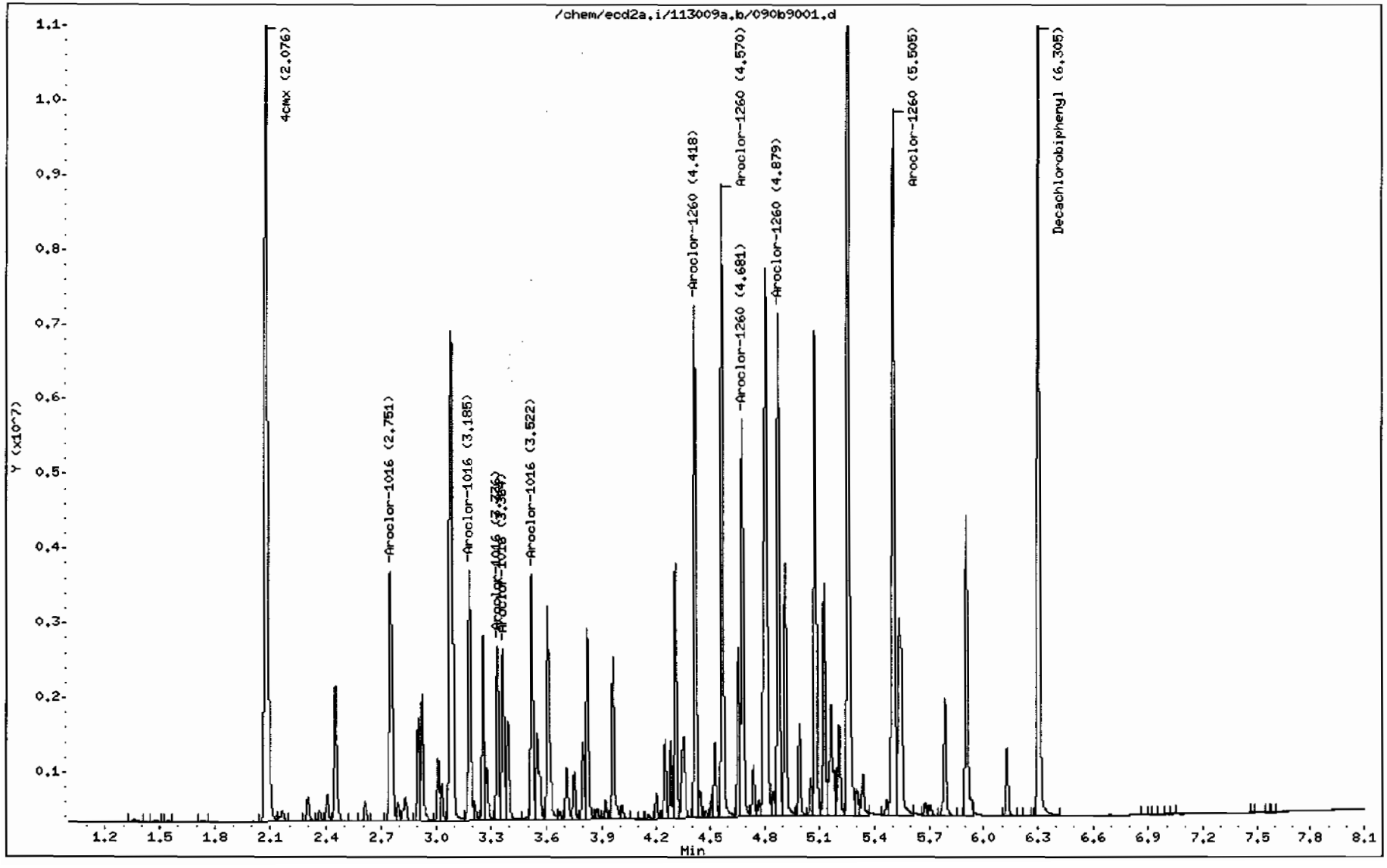

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	AR166001	WAR091119-60	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	AR124801	WAR091027-48	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	1434	1.78	5.62
02	ZZZZZ	ZZZZZ	11/30/09	1445		
03	ZZZZZ	ZZZZZ	11/30/09	1456		
04	AR166003	WAR091119-60	11/30/09	1512	1.78	5.61
05	PIBLK04	WAR090916-99	11/30/09	1523	1.78	5.61
06	ZZZZZ	ZZZZZ	11/30/09	1534	1.78	5.61
07	ZZZZZ	ZZZZZ	11/30/09	1545	1.78	5.61
08	ZZZZZ	ZZZZZ	11/30/09	1556	1.78	5.61
09	ZZZZZ	ZZZZZ	11/30/09	1607	1.78	5.61
10	ZZZZZ	ZZZZZ	11/30/09	1618	1.78	5.61
11	ZZZZZ	ZZZZZ	11/30/09	1629	1.78	5.61
12	ZZZZZ	ZZZZZ	11/30/09	1640	1.78	5.61
13	AR166004	WAR091119-60	11/30/09	1651	1.78	5.61
14	PIBLK05	WAR090916-99	11/30/09	1702	1.78	5.61
15	ZZZZZ	ZZZZZ	11/30/09	1713	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	1724	1.78	5.61
17	ZZZZZ	ZZZZZ	11/30/09	1736	1.78	5.61
18	ZZZZZ	ZZZZZ	11/30/09	1747	1.78	5.61
19	ZZZZZ	ZZZZZ	11/30/09	1758	1.78	5.61
20	ZZZZZ	ZZZZZ	11/30/09	1809	1.78	5.61
21	ZZZZZ	ZZZZZ	11/30/09	1820	1.78	5.61
22	AR166005	WAR091119-60	11/30/09	1831	1.78	5.61
23	PIBLK06	WAR090916-99	11/30/09	1842	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1853	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1904	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1915	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1926		5.61
28	AR166006	WAR091119-60	11/30/09	1942	1.78	5.61
29	PIBLK07	WAR090916-99	11/30/09	1953	1.78	5.61
30	PBLK01	1201981383	11/30/09	2005	1.78	5.61
31	PBLK01LCS	1201981386	11/30/09	2016	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	2027	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	2038	1.78	5.61
02	ZZZZZ	ZZZZZ	11/30/09	2049	1.78	5.61
03	ZZZZZ	ZZZZZ	11/30/09	2100	1.78	5.61
04	ZZZZZ	ZZZZZ	11/30/09	2111	1.78	5.61
05	ZZZZZ	ZZZZZ	11/30/09	2122	1.78	5.61
06	ZZZZZ	ZZZZZ	11/30/09	2133	1.78	5.61
07	ZZZZZ	ZZZZZ	11/30/09	2144	1.78	5.61
08	AR166007	WAR091119-60	11/30/09	2155	1.78	5.61
09	PIBLK08	WAR090916-99	11/30/09	2207	1.78	5.61
10	ZZZZZ	ZZZZZ	11/30/09	2218	1.78	5.61
11	ZZZZZ	ZZZZZ	11/30/09	2229	1.78	5.61
12	ZZZZZ	ZZZZZ	11/30/09	2240	1.78	5.61
13	ZZZZZ	ZZZZZ	11/30/09	2251	1.78	5.61
14	ZZZZZ	ZZZZZ	11/30/09	2302	1.78	5.61
15	ZZZZZ	ZZZZZ	11/30/09	2313	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	2324	1.78	5.61
17	ZZZZZ	ZZZZZ	11/30/09	2336	1.78	5.61
18	ZZZZZ	ZZZZZ	11/30/09	2347	1.78	5.61
19	ZZZZZ	ZZZZZ	11/30/09	2358	1.78	5.61
20	AR166008	WAR091119-60	12/01/09	0009	1.78	5.61
21	PIBLK09	WAR090916-99	12/01/09	0020	1.78	5.61
22	RE03-09-1381	241417001	12/01/09	0031	1.78	5.61
23	RE03-09-1381	1201981384	12/01/09	0042	1.78	5.61
24	RE03-09-1381	1201981385	12/01/09	0053	1.78	5.61
25	RE03-09-1381	241417002	12/01/09	0105	1.78	5.61
26	AR166009	WAR091119-60	12/01/09	0116	1.78	5.61
27	PIBLK10	WAR090916-99	12/01/09	0127	1.78	5.61
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	AR166001	WAR091119-60	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	AR124801	WAR091027-48	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	1434	2.08	6.31
02	ZZZZZ	ZZZZZ	11/30/09	1445		
03	ZZZZZ	ZZZZZ	11/30/09	1456		
04	AR166003	WAR091119-60	11/30/09	1512	2.07	6.30
05	PIBLK04	WAR090916-99	11/30/09	1523	2.08	6.31
06	ZZZZZ	ZZZZZ	11/30/09	1534	2.07	6.30
07	ZZZZZ	ZZZZZ	11/30/09	1545	2.08	6.30
08	ZZZZZ	ZZZZZ	11/30/09	1556	2.08	6.30
09	ZZZZZ	ZZZZZ	11/30/09	1607	2.07	6.30
10	ZZZZZ	ZZZZZ	11/30/09	1618	2.08	6.30
11	ZZZZZ	ZZZZZ	11/30/09	1629	2.08	6.30
12	ZZZZZ	ZZZZZ	11/30/09	1640	2.07	6.30
13	AR166004	WAR091119-60	11/30/09	1651	2.07	6.31
14	PIBLK05	WAR090916-99	11/30/09	1702	2.08	6.30
15	ZZZZZ	ZZZZZ	11/30/09	1713	2.08	6.30
16	ZZZZZ	ZZZZZ	11/30/09	1724	2.08	6.30
17	ZZZZZ	ZZZZZ	11/30/09	1736	2.08	6.30
18	ZZZZZ	ZZZZZ	11/30/09	1747	2.08	6.31
19	ZZZZZ	ZZZZZ	11/30/09	1758	2.07	6.31
20	ZZZZZ	ZZZZZ	11/30/09	1809	2.08	6.31
21	ZZZZZ	ZZZZZ	11/30/09	1820	2.08	6.31
22	AR166005	WAR091119-60	11/30/09	1831	2.08	6.30
23	PIBLK06	WAR090916-99	11/30/09	1842	2.08	6.30
24	ZZZZZ	ZZZZZ	11/30/09	1853	2.08	6.31
25	ZZZZZ	ZZZZZ	11/30/09	1904	2.07	6.31
26	ZZZZZ	ZZZZZ	11/30/09	1915	2.08	6.31
27	ZZZZZ	ZZZZZ	11/30/09	1926	2.08	6.31
28	AR166006	WAR091119-60	11/30/09	1942	2.07	6.30
29	PIBLK07	WAR090916-99	11/30/09	1953	2.08	6.30
30	PBLK01	1201981383	11/30/09	2005	2.07	6.31
31	PBLK01LCS	1201981386	11/30/09	2016	2.08	6.31
32	ZZZZZ	ZZZZZ	11/30/09	2027	2.08	6.31

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-575

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	2038	2.08	6.30
02	ZZZZZ	ZZZZZ	11/30/09	2049	2.08	6.30
03	ZZZZZ	ZZZZZ	11/30/09	2100	2.08	6.30
04	ZZZZZ	ZZZZZ	11/30/09	2111	2.07	6.31
05	ZZZZZ	ZZZZZ	11/30/09	2122	2.08	6.30
06	ZZZZZ	ZZZZZ	11/30/09	2133	2.08	6.30
07	ZZZZZ	ZZZZZ	11/30/09	2144	2.08	6.30
08	AR166007	WAR091119-60	11/30/09	2155	2.08	6.30
09	PIBLK08	WAR090916-99	11/30/09	2207	2.08	6.30
10	ZZZZZ	ZZZZZ	11/30/09	2218	2.08	6.30
11	ZZZZZ	ZZZZZ	11/30/09	2229	2.08	6.30
12	ZZZZZ	ZZZZZ	11/30/09	2240	2.08	6.30
13	ZZZZZ	ZZZZZ	11/30/09	2251	2.08	6.30
14	ZZZZZ	ZZZZZ	11/30/09	2302	2.08	6.30
15	ZZZZZ	ZZZZZ	11/30/09	2313	2.08	6.31
16	ZZZZZ	ZZZZZ	11/30/09	2324	2.07	6.30
17	ZZZZZ	ZZZZZ	11/30/09	2336	2.08	6.30
18	ZZZZZ	ZZZZZ	11/30/09	2347	2.08	6.30
19	ZZZZZ	ZZZZZ	11/30/09	2358	2.08	6.30
20	AR166008	WAR091119-60	12/01/09	0009	2.08	6.30
21	PIBLK09	WAR090916-99	12/01/09	0020	2.08	6.30
22	RE03-09-1381	241417001	12/01/09	0031	2.08	6.30
23	RE03-09-1381	1201981384	12/01/09	0042	2.08	6.30
24	RE03-09-1381	1201981385	12/01/09	0053	2.08	6.30
25	RE03-09-1381	241417002	12/01/09	0105	2.08	6.30
26	AR166009	WAR091119-60	12/01/09	0116	2.08	6.30
27	PIBLK10	WAR090916-99	12/01/09	0127	2.08	6.30
28						
29						
30						
31						
32						

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10–575 **Client ID:** LCS for batch 926709

Lab Sample ID: 1201981386

Data File:	063f6301.d	**Data File:**	063b6301.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30–NOV–09 20:16	**Analyzed:**	30–NOV–09 20:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							3.53
Column 1	1	2.28	2.25 – 2.31	25.7		ug/kg	
	2	2.6	2.57 – 2.63	26		ug/kg	
	3	2.69	2.66 – 2.72	24.9		ug/kg	
	4	2.83	2.8 – 2.86	24.8		ug/kg	
	5	2.98	2.95 – 3.01	26.3		ug/kg	
					25.5		
Column 2	1	2.75	2.72 – 2.78	26.3		ug/kg	
	2	3.19	3.16 – 3.22	26.3		ug/kg	
	3	3.34	3.31 – 3.37	27.4		ug/kg	
	4	3.36	3.33 – 3.39	25.1		ug/kg	
	5	3.52	3.49 – 3.55	27.2		ug/kg	
					26.5		
Aroclor–1260							1.08
Column 1	1	4.02	3.99 – 4.05	30.3		ug/kg	
	2	4.29	4.26 – 4.32	30.2		ug/kg	
	3	4.45	4.42 – 4.48	29.9		ug/kg	
	4	4.67	4.64 – 4.7	31.6		ug/kg	
	5	4.86	4.83 – 4.89	30.1		ug/kg	
					30.4		
Column 2	1	4.42	4.39 – 4.45	30.5		ug/kg	
	2	4.57	4.54 – 4.6	31.7		ug/kg	
	3	4.68	4.65 – 4.71	30.9		ug/kg	
	4	4.88	4.85 – 4.91	31.1		ug/kg	
	5	5.5	5.48 – 5.54	29.6		ug/kg	
					30.8		

Identification Summary

SDG Number: 10–575 **Client ID:** RE03–09–13811

Lab Sample ID: 241417002

Data File:	089f8901.d	**Data File:**	089b8901.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 01:05	**Analyzed:**	01–DEC–09 01:05

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							8.86
Column 1	1	4.02	3.99 – 4.05	1.78		ug/kg	
	2	4.29	4.26 – 4.32	1.31		ug/kg	
	3	4.45	4.42 – 4.48	1.2		ug/kg	
	4	4.67	4.64 – 4.7	1.24		ug/kg	
	5	4.86	4.83 – 4.89	1.55		ug/kg	
					1.42		
Column 2	1	4.42	4.39 – 4.45	1.14		ug/kg	
	2	4.57	4.54 – 4.6	1.59		ug/kg	
	3	4.68	4.65 – 4.71	1.39		ug/kg	
	4	4.88	4.85 – 4.91	1.17		ug/kg	
	5	5.5	5.48 – 5.54	1.19		ug/kg	
					1.3		

Identification Summary

SDG Number: 10–575 **Client ID:** RE03–09–13812

Lab Sample ID: 241417001

Data File:	086f8601.d	**Data File:**	086b8601.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 00:31	**Analyzed:**	01–DEC–09 00:31

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							64.2
Column 1	1	3.24	3.21 – 3.27	21.8		ug/kg	
	2	3.43	3.4 – 3.46	33.4		ug/kg	
	3	3.7	3.67 – 3.73	40.7		ug/kg	
	4	3.89	3.86 – 3.92	29.9		ug/kg	
	5	4.02	3.99 – 4.05	144		ug/kg	
					53.9		
Column 2	1	3.82	3.79 – 3.85	19.6		ug/kg	
	2	3.96	3.93 – 3.99	33.8		ug/kg	
	3	4.2	4.17 – 4.23	21.7		ug/kg	
	4	4.28	4.25 – 4.31	38.9		ug/kg	
	5	4.44	4.41 – 4.47	24.7		ug/kg	
					27.7		
Aroclor–1260							10.7
Column 1	1	4.02	3.99 – 4.05	97.7		ug/kg	
	2	4.29	4.26 – 4.32	66.3		ug/kg	
	3	4.45	4.42 – 4.48	56.5		ug/kg	
	4	4.67	4.64 – 4.7	55.4		ug/kg	
	5	4.86	4.83 – 4.89	69.7		ug/kg	
					69.1		
Column 2	1	4.42	4.39 – 4.45	78.7		ug/kg	
	2	4.57	4.54 – 4.6	97.6		ug/kg	
	3	4.68	4.65 – 4.71	77.2		ug/kg	
	4	4.88	4.85 – 4.91	69.5		ug/kg	
	5	5.5	5.48 – 5.54	61.5		ug/kg	
					76.9		

Identification Summary

SDG Number: 10–575 **Client ID:** RE03–09–13812MS

Lab Sample ID: 1201981384

Data File:	087f8701.d	**Data File:**	087b8701.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 00:42	**Analyzed:**	01–DEC–09 00:42

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							7.51
Column 1	1	2.28	2.25 – 2.31	35.9		ug/kg	
	2	2.6	2.57 – 2.63	32		ug/kg	
	3	2.69	2.66 – 2.72	33.4		ug/kg	
	4	2.83	2.8 – 2.86	39.7		ug/kg	
	5	2.98	2.95 – 3.01	35.8		ug/kg	
					35.4		
Column 2	1	2.75	2.72 – 2.78	30.8		ug/kg	
	2	3.19	3.16 – 3.22	34.2		ug/kg	
	3	3.34	3.31 – 3.37	35.7		ug/kg	
	4	3.36	3.33 – 3.39	31.8		ug/kg	
	5	3.52	3.49 – 3.55	31.5		ug/kg	
					32.8		
Aroclor–1254							76.1
Column 1	1	3.24	3.21 – 3.27	27.1		ug/kg	
	2	3.43	3.4 – 3.46	29.3		ug/kg	
	3	3.7	3.67 – 3.73	27.8		ug/kg	
	4	3.89	3.86 – 3.92	21.2		ug/kg	
	5	4.02	3.99 – 4.05	133		ug/kg	
					47.7		
Column 2	1	3.82	3.79 – 3.85	25		ug/kg	
	2	3.96	3.93 – 3.99	29.4		ug/kg	
	3	4.2	4.17 – 4.23	12.9		ug/kg	
	4	4.28	4.25 – 4.31	24.6		ug/kg	
	5	4.44	4.41 – 4.47	15.1		ug/kg	
					21.4		

Identification Summary

SDG Number: 10–575 **Client ID:** RE03–09–13812MS

Lab Sample ID: 1201981384

Data File:	087f8701.d	**Data File:**	087b8701.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 00:42	**Analyzed:**	01–DEC–09 00:42

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							.142
Column 1	1	4.02	3.99 – 4.05	90.5		ug/kg	
	2	4.29	4.26 – 4.32	73.7		ug/kg	
	3	4.45	4.42 – 4.48	69.3		ug/kg	
	4	4.67	4.64 – 4.7	69		ug/kg	
	5	4.86	4.83 – 4.89	80.3		ug/kg	
					76.6		
Column 2	1	4.42	4.39 – 4.45	74.9		ug/kg	
	2	4.57	4.54 – 4.6	87.5		ug/kg	
	3	4.68	4.65 – 4.71	75.4		ug/kg	
	4	4.88	4.85 – 4.91	72.5		ug/kg	
	5	5.5	5.48 – 5.54	71.9		ug/kg	
					76.5		

Identification Summary

SDG Number: 10–575 **Client ID:** RE03–09–13812MSD

Lab Sample ID: 1201981385

Data File: 088f8801.d **Data File:** 088b8801.d

Inst: ECD2A.I_1 **Inst:** ECD2A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 01–DEC–09 00:53 **Analyzed:** 01–DEC–09 00:53

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							2.26
Column 1	1	2.28	2.25 – 2.31	43.1		ug/kg	
	2	2.6	2.57 – 2.63	39.4		ug/kg	
	3	2.69	2.66 – 2.72	41		ug/kg	
	4	2.83	2.8 – 2.86	54.5		ug/kg	
	5	2.98	2.95 – 3.01	43.7		ug/kg	
					44.3		
Column 2	1	2.75	2.72 – 2.78	38.6		ug/kg	
	2	3.19	3.16 – 3.22	40.7		ug/kg	
	3	3.34	3.31 – 3.37	50.9		ug/kg	
	4	3.36	3.33 – 3.39	43.7		ug/kg	
	5	3.52	3.49 – 3.55	42.9		ug/kg	
					43.3		
Aroclor–1254							62.1
Column 1	1	3.25	3.21 – 3.27	38.4		ug/kg	
	2	3.43	3.4 – 3.46	42.1		ug/kg	
	3	3.7	3.67 – 3.73	42.4		ug/kg	
	4	3.89	3.86 – 3.92	32.8		ug/kg	
	5	4.02	3.99 – 4.05	186		ug/kg	
					68.4		
Column 2	1	3.82	3.79 – 3.85	39.4		ug/kg	
	2	3.96	3.93 – 3.99	46.2		ug/kg	
	3	4.2	4.17 – 4.23	24.7		ug/kg	
	4	4.28	4.25 – 4.31	42.1		ug/kg	
	5	4.44	4.41 – 4.47	27.4		ug/kg	
					36		

Identification Summary

SDG Number: 10–575

Client ID: RE03–09–13812MSD

Lab Sample ID: 1201981385

Data File:	088f8801.d	**Data File:**	088b8801.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	01–DEC–09 00:53	**Analyzed:**	01–DEC–09 00:53

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							6.43
Column 1	1	4.02	3.99 – 4.05	126		ug/kg	
	2	4.29	4.26 – 4.32	96.6		ug/kg	
	3	4.45	4.42 – 4.48	90.3		ug/kg	
	4	4.67	4.64 – 4.7	91		ug/kg	
	5	4.86	4.83 – 4.89	108		ug/kg	
					102		
Column 2	1	4.42	4.39 – 4.45	108		ug/kg	
	2	4.57	4.54 – 4.6	127		ug/kg	
	3	4.68	4.65 – 4.71	111		ug/kg	
	4	4.88	4.85 – 4.91	100		ug/kg	
	5	5.51	5.48 – 5.54	99.8		ug/kg	
					109		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981383**				
Client Sample:	**QC for batch 926709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926709**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 20:05**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**062f6201-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	062b6201-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/062f6201-4.d
Lab Smp Id: 1201981383 Client Smp ID: PBLK01
Inj Date : 30-NOV-2009 20:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981383|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 62 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	10895979	188.802	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	9597879	175.050	5.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/062f6201-4.d

Date : 30-NOV-2009 20:05

Client ID: PBLK01

Sample Info: |120198138311|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

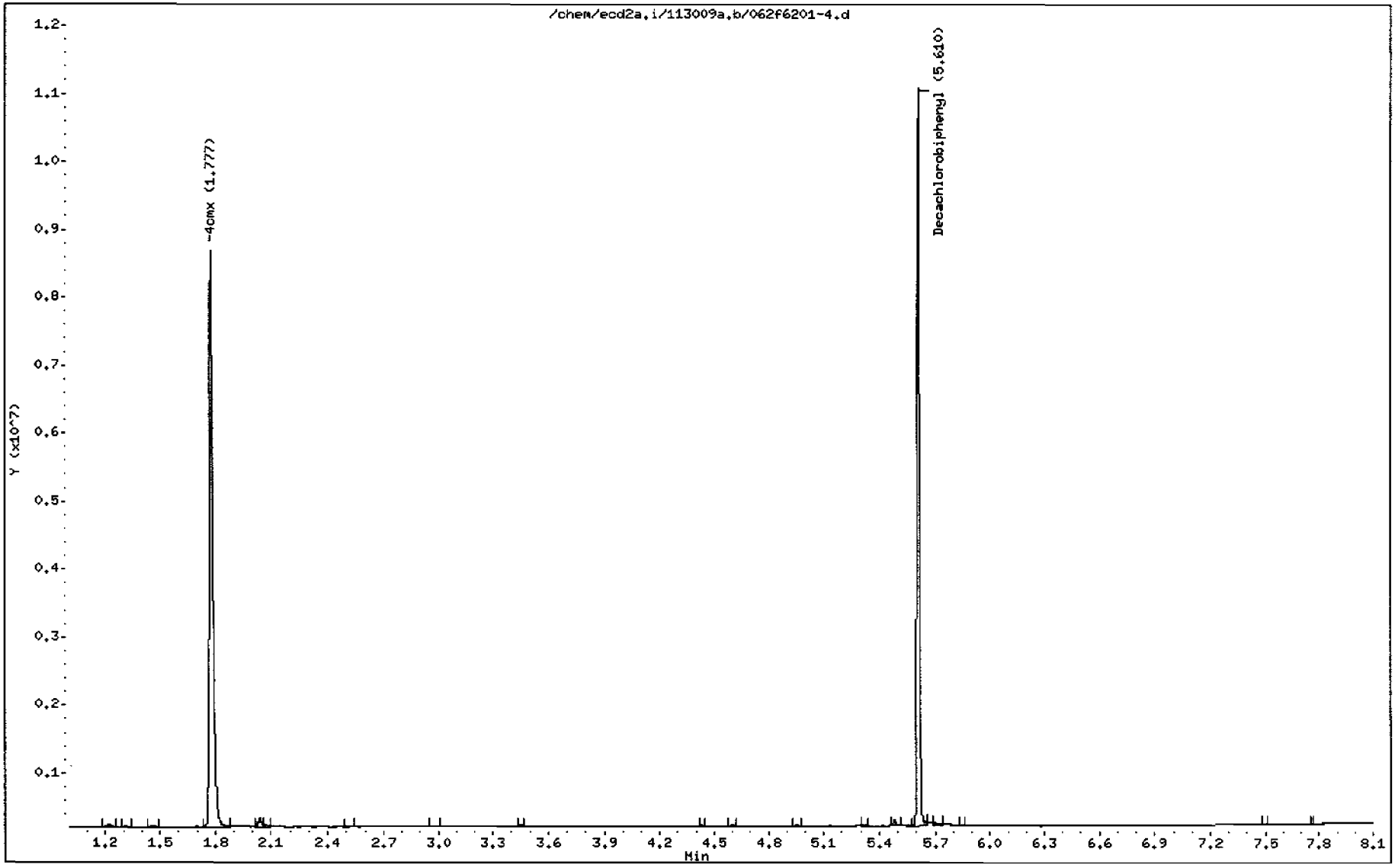

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/062b6201-4.d
Lab Smp Id: 1201981383 Client Smp ID: PBLK01
Inj Date : 30-NOV-2009 20:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981383|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 62 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	23422973	198.164	6.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	21469886	197.621	6.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/062b6201-4.d

Page 1

Date : 30-NOV-2009 20:05

Client ID: PBLK01

Instrument: ecd2a.i

Sample Info: |120198138311|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP2

Column diameter: 0.25

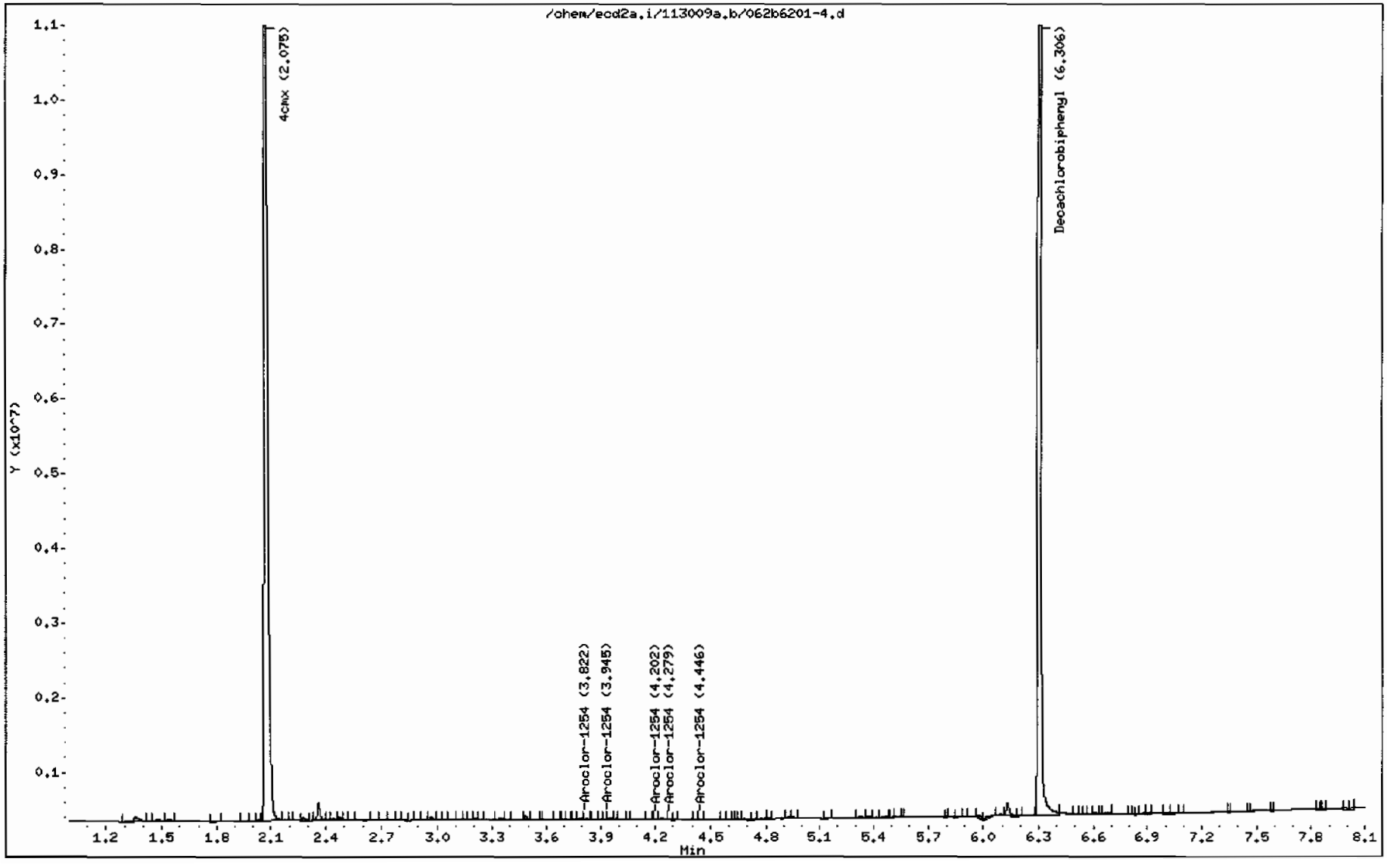

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-575**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981386**				
Client Sample:	**QC for batch 926709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926709**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 20:16**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**063f6301-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	063b6301-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		26.5	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		30.8	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/063f6301-4.d
Lab Smp Id: 1201981386 Client Smp ID: PBLK01LCS
Inj Date : 30-NOV-2009 20:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981386|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 63 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	10115527	175.278	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	9156412	166.999	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1621507	772.218	25.7	80.00- 120.00	100.00(M)
2.603	2.603	0.000	3512511	779.776	26.0	198.19- 238.19	216.62
2.693	2.694	-0.001	1360284	747.322	24.9	66.30- 106.30	83.89
2.828	2.829	-0.001	694592	744.565	24.8	23.34- 63.34	42.84

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.979	2.980	-0.001	1087022	788.769	26.3	44.93- 84.93	67.04
Average of Peak Concentrations =					25.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	3702340	910.383	30.3	80.00- 120.00	100.00
4.289	4.290	-0.001	2289506	905.545	30.2	41.58- 81.58	61.84
4.454	4.455	-0.001	2321235	898.588	30.0	43.08- 83.08	62.70
4.666	4.667	-0.001	5727314	948.843	31.6	129.99- 169.99	154.69
4.855	4.856	-0.001	2629528	903.014	30.1	51.44- 91.44	71.02
Average of Peak Concentrations =					30.4		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/063f6301-4.d

Date : 30-NOV-2009 20:16

Client ID: PBLK01LCS

Sample Info: |120198138611|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

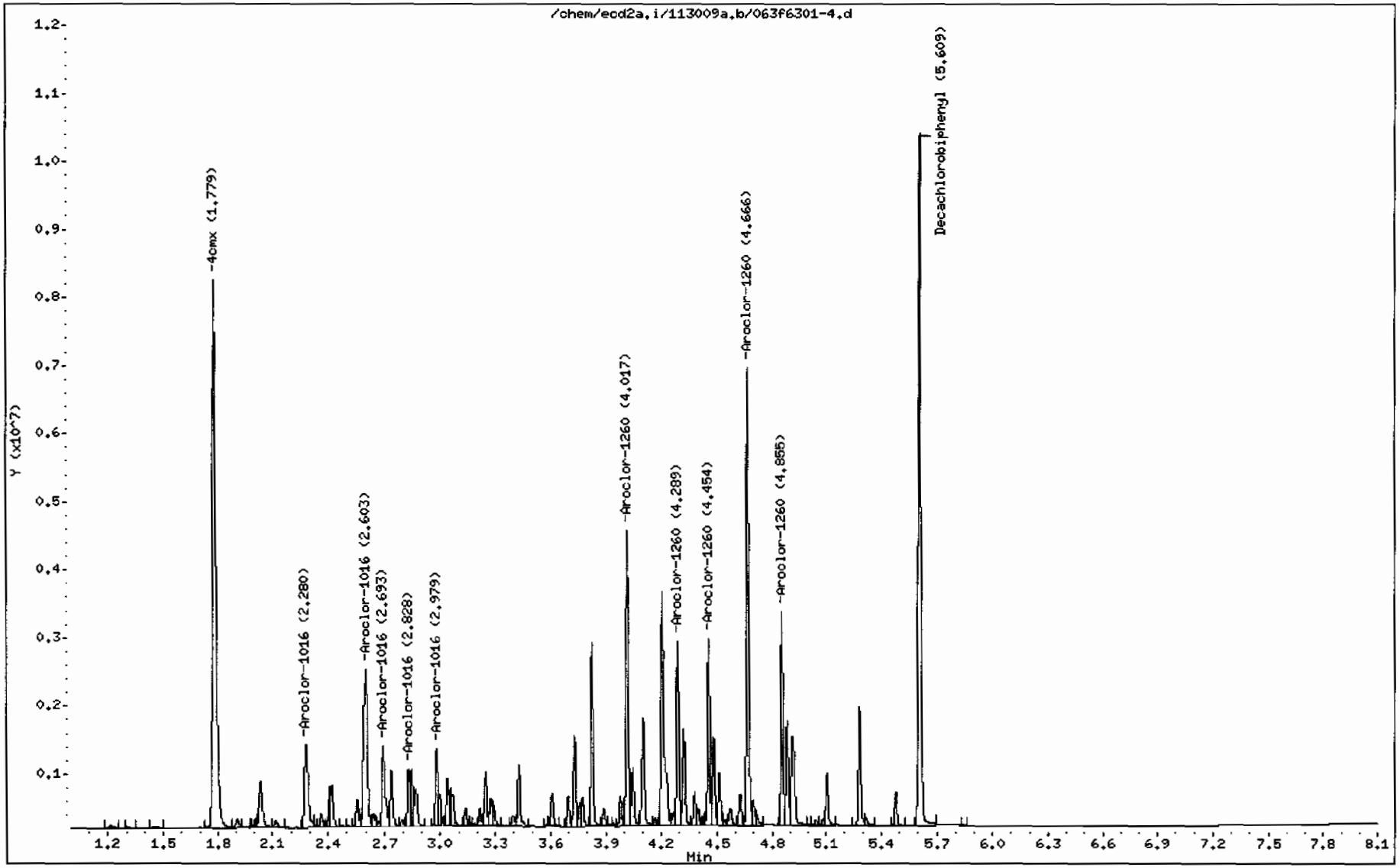

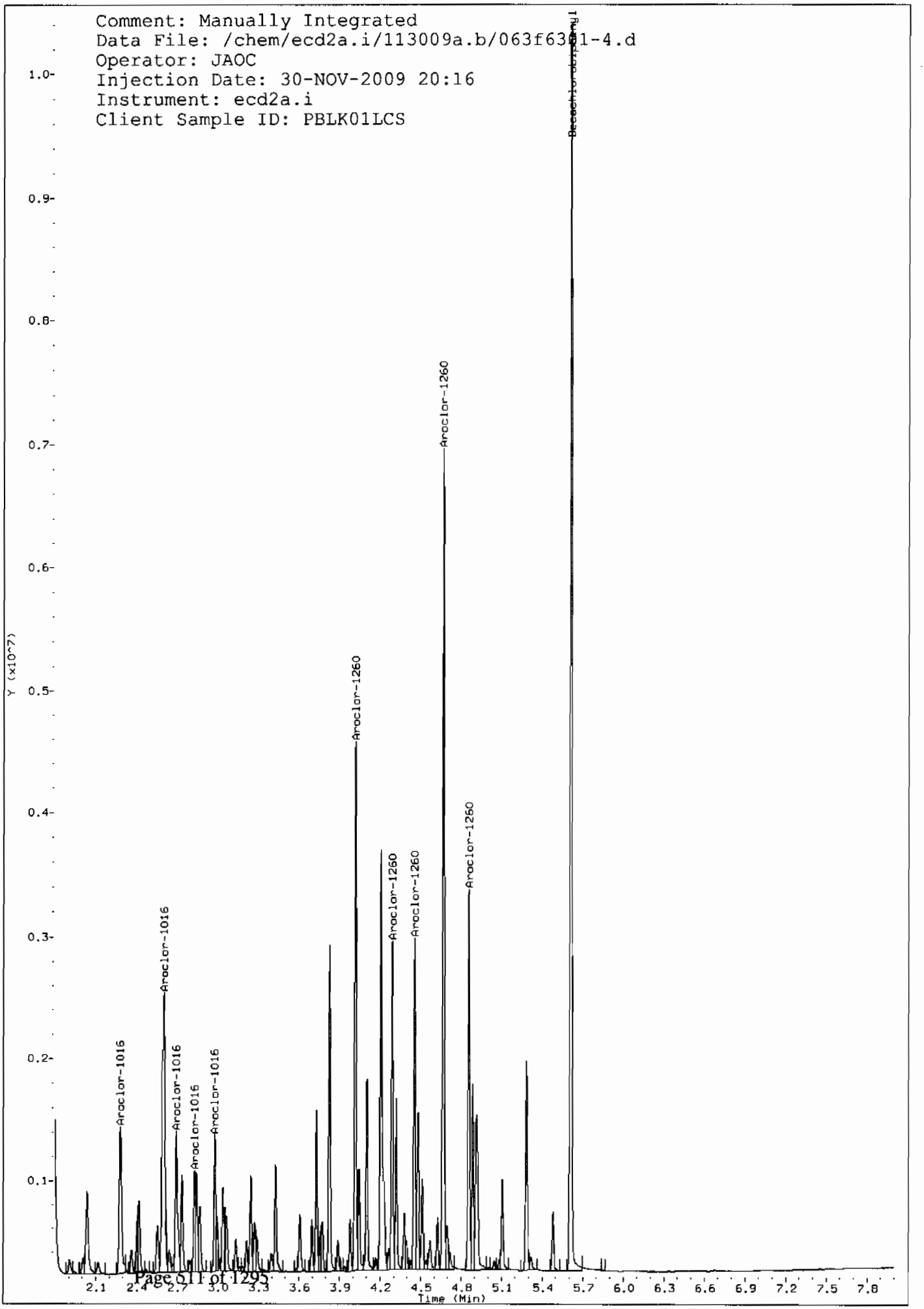
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/063f6301-4.d
Operator: JAOC
Injection Date: 30-NOV-2009 20:16
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1
5.4
5.7
6.0
6.3
6.6
6.9
7.2
7.5
7.8
Time (Min)

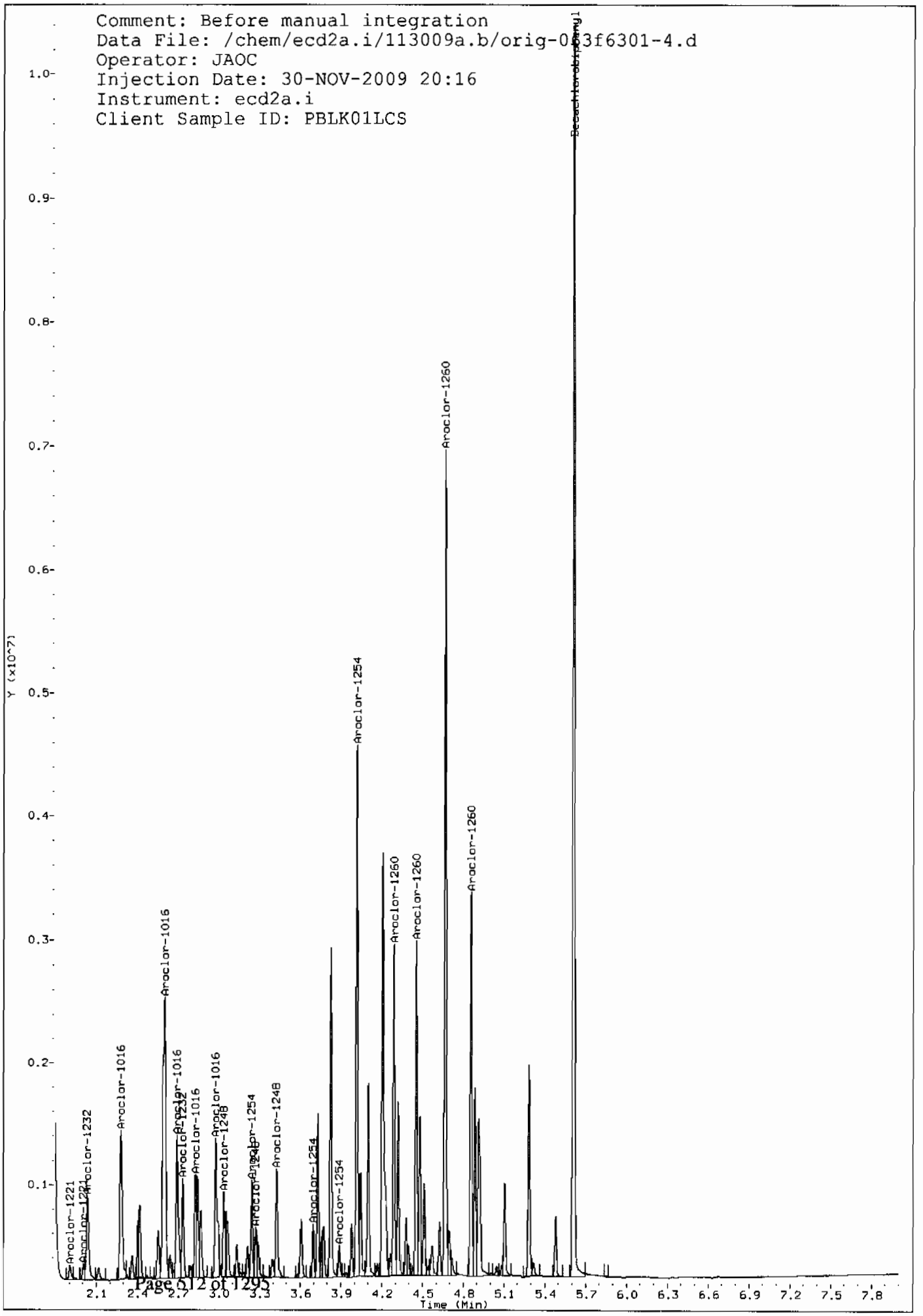
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Operator: JAOC
Injection Date: 30-NOV-2009 20:16
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1016
Aroclor-1248
Aroclor-1232
Aroclor-1221
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/063b6301-4.d
Lab Smp Id: 1201981386 Client Smp ID: PBLK01LCS
Inj Date : 30-NOV-2009 20:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981386|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 63 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	21700397	183.591	6.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	20147515	185.449	6.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	3361403	789.423	26.3	80.00- 120.00	100.00
3.185	3.185	0.000	2715289	788.255	26.3	60.91- 100.91	80.78
3.336	3.336	0.000	1625894	821.371	27.4	26.69- 66.69	48.37
3.364	3.365	-0.001	1554186	754.001	25.1	29.14- 69.14	46.24

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.523	0.000	2251036	817.319	27.2	46.31- 86.31	66.97
Average of Peak Concentrations =					26.5		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5047570	915.635	30.5	80.00- 120.00	100.00
4.569	4.570	-0.001	6783885	951.194	31.7	108.85- 148.85	134.40
4.681	4.682	-0.001	4392993	928.483	30.9	65.38- 105.38	87.03
4.879	4.880	-0.001	5416528	933.778	31.1	82.89- 122.89	107.31
5.504	5.505	-0.001	8016416	886.705	29.6	145.10- 185.10	158.82
Average of Peak Concentrations =					30.8		

Data File: /chem/ecd2a.i/113009a.b/063b6301-4.d

Date : 30-NOV-2009 20:16

Client ID: PBLK01LCS

Sample Info: |120198138611|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

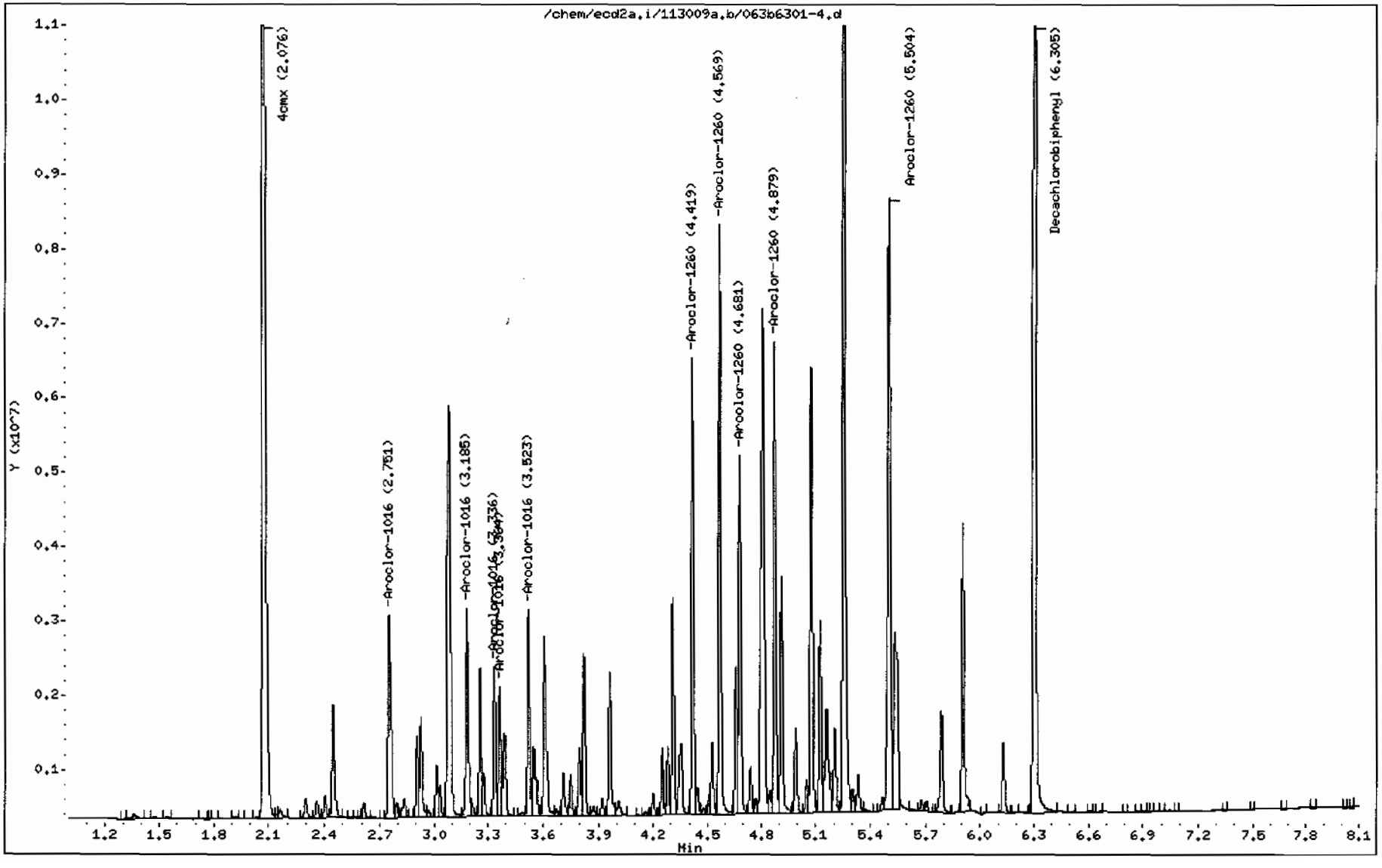

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201981384	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 926709	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812MS	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	10
Run Date:	12/01/2009 00:42	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	087f8701.d	**Column:**	1 CLP1	**Level:**	LOW
	087b8701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	J	35.3	ug/kg	11.9	35.7	1
11104-28-2	Aroclor-1221	U	35.7	ug/kg	11.9	35.7	1
11141-16-5	Aroclor-1232	U	35.7	ug/kg	11.9	35.7	1
53469-21-9	Aroclor-1242	U	35.7	ug/kg	11.9	35.7	1
12672-29-6	Aroclor-1248	U	35.7	ug/kg	11.9	35.7	1
11097-69-1	Aroclor-1254	P	47.7	ug/kg	11.9	35.7	1
11096-82-5	Aroclor-1260		76.4	ug/kg	11.9	35.7	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/087f8701.d
Lab Smp Id: 1201981384 Client Smp ID: RE03-09-13812MS
Inj Date : 01-DEC-2009 00:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981384|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 87 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	945449	16.3824	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	865486	15.7851	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	210831	100.405	35.8	80.00- 120.00	100.00(aM)
2.603	2.603	0.000	403736	89.6292	32.0	198.19- 238.19	191.50
2.694	2.694	0.000	170449	93.6424	33.4	66.30- 106.30	80.85
2.828	2.829	-0.001	103638	111.094	39.7	23.34- 63.34	49.16
2.980	2.980	0.000	138292	100.348	35.8	44.93- 84.93	89.35
Average of Peak Concentrations =					35.3		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	157543	75.7399	27.0	80.00- 120.00	100.00
3.427	3.427	0.000	227743	82.1543	29.3	115.68- 155.68	144.56
3.697	3.697	0.000	290842	77.7154	27.8	166.12- 206.12	184.61
3.890	3.889	0.001	165190	59.3631	21.2	117.34- 157.34	104.85
4.017	4.018	-0.001	1030103	373.220	133	114.59- 154.59	653.85
Average of Peak Concentrations =					47.7		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1030103	253.296	90.5	80.00- 120.00	100.00(R)
4.289	4.290	-0.001	521982	206.454	73.7	41.58- 81.58	50.67
4.455	4.455	0.000	500949	193.926	69.2	43.08- 83.08	48.63
4.667	4.667	0.000	1166980	193.333	69.0	129.99- 169.99	113.29
4.856	4.856	0.000	654902	224.902	80.3	51.44- 91.44	63.58
Average of Peak Concentrations =					76.5		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/087f8701.d

Page 1

Date : 01-DEC-2009 00:42

Client ID: RE03-09-13812MS

Instrument: ecd2a.i

Sample Info: |120198138411 01|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

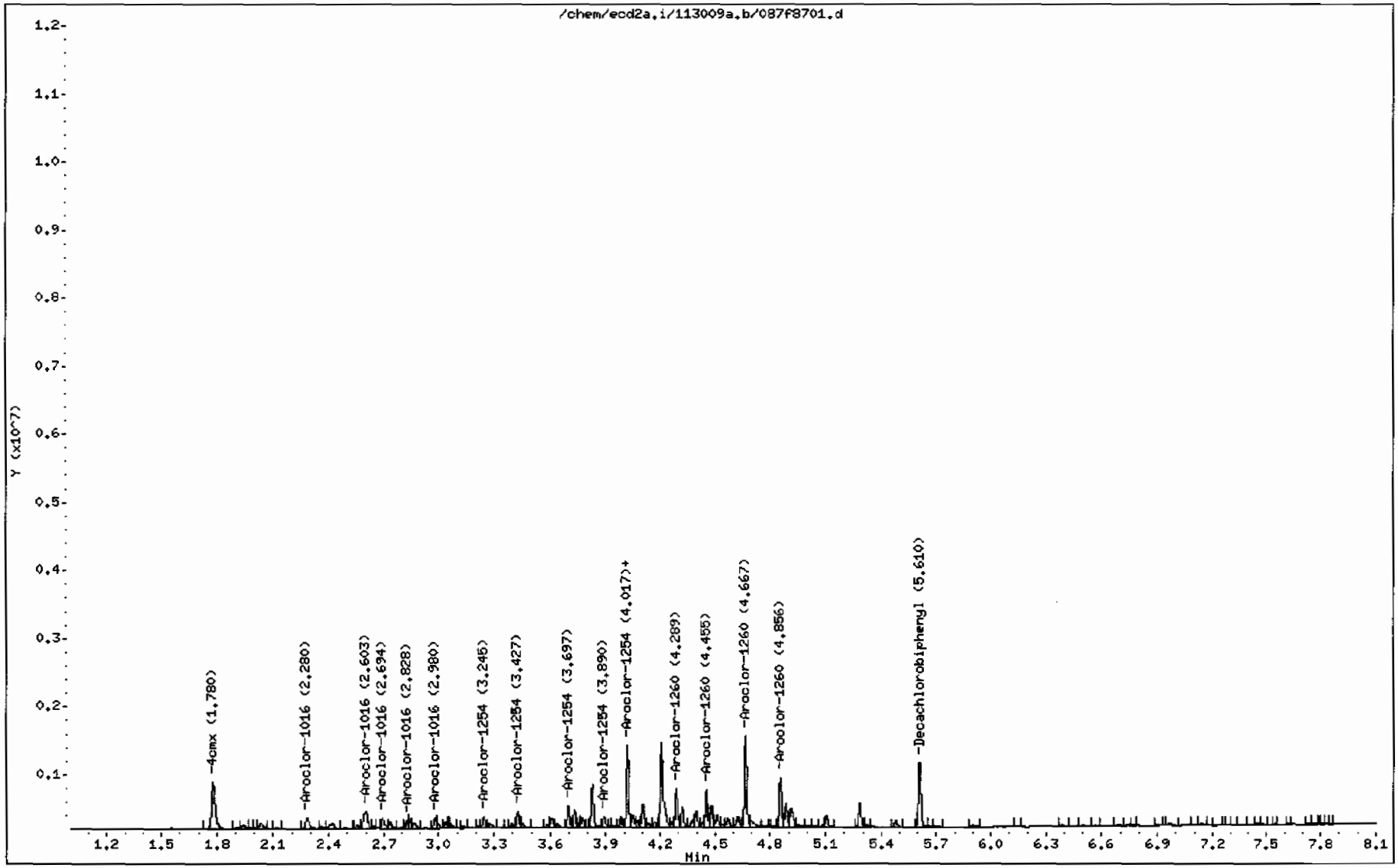

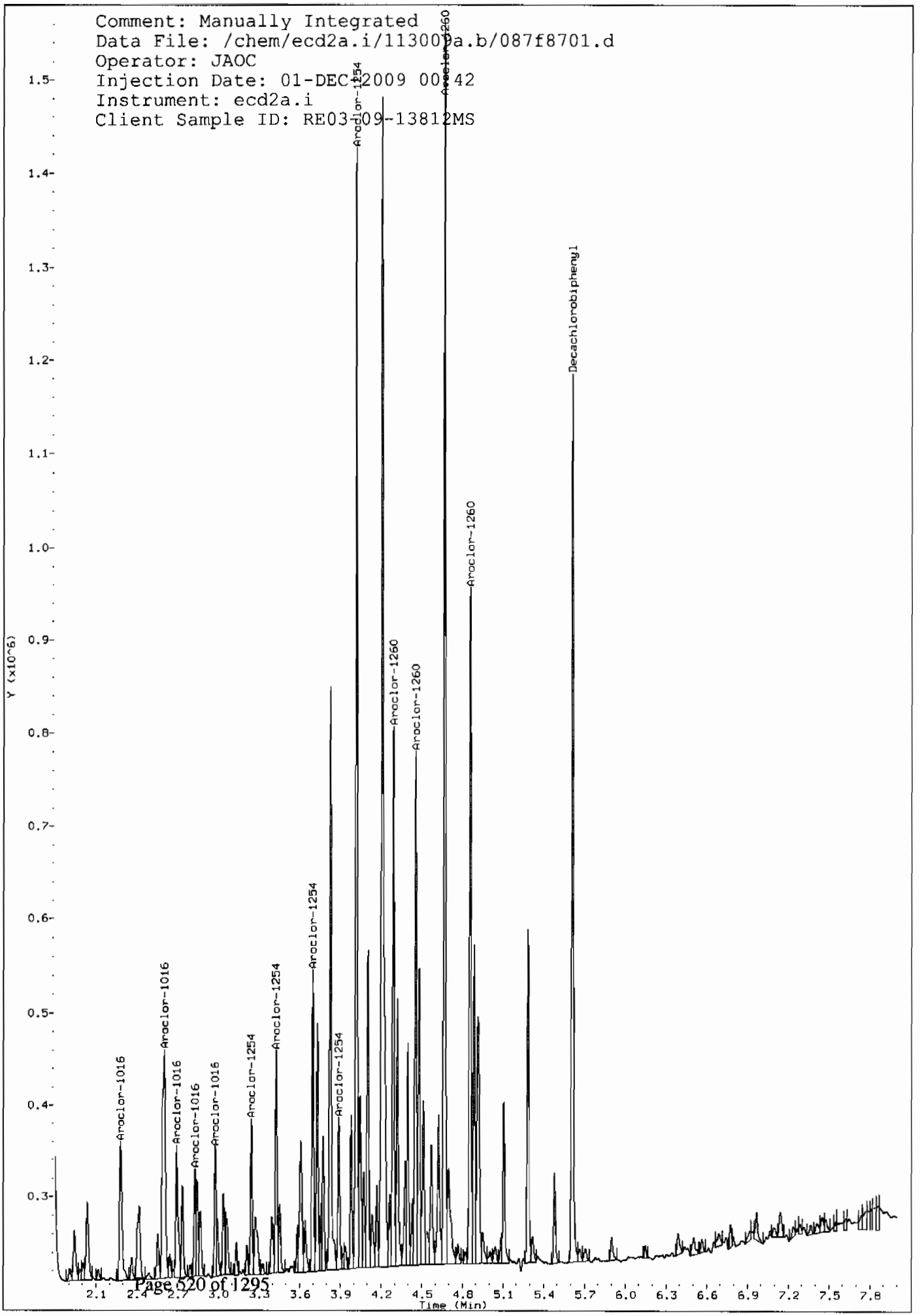
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Data File: /chem/ecd2a.i/113009a.b/087f8701.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:42
Instrument: ecd2a.i
Client Sample ID: RE03-09-13812MS
Y (x10^6)
Time (Min)
Aroclor-1016
Aroclor-1254
Aroclor-1260
Decachlorobiphenyl

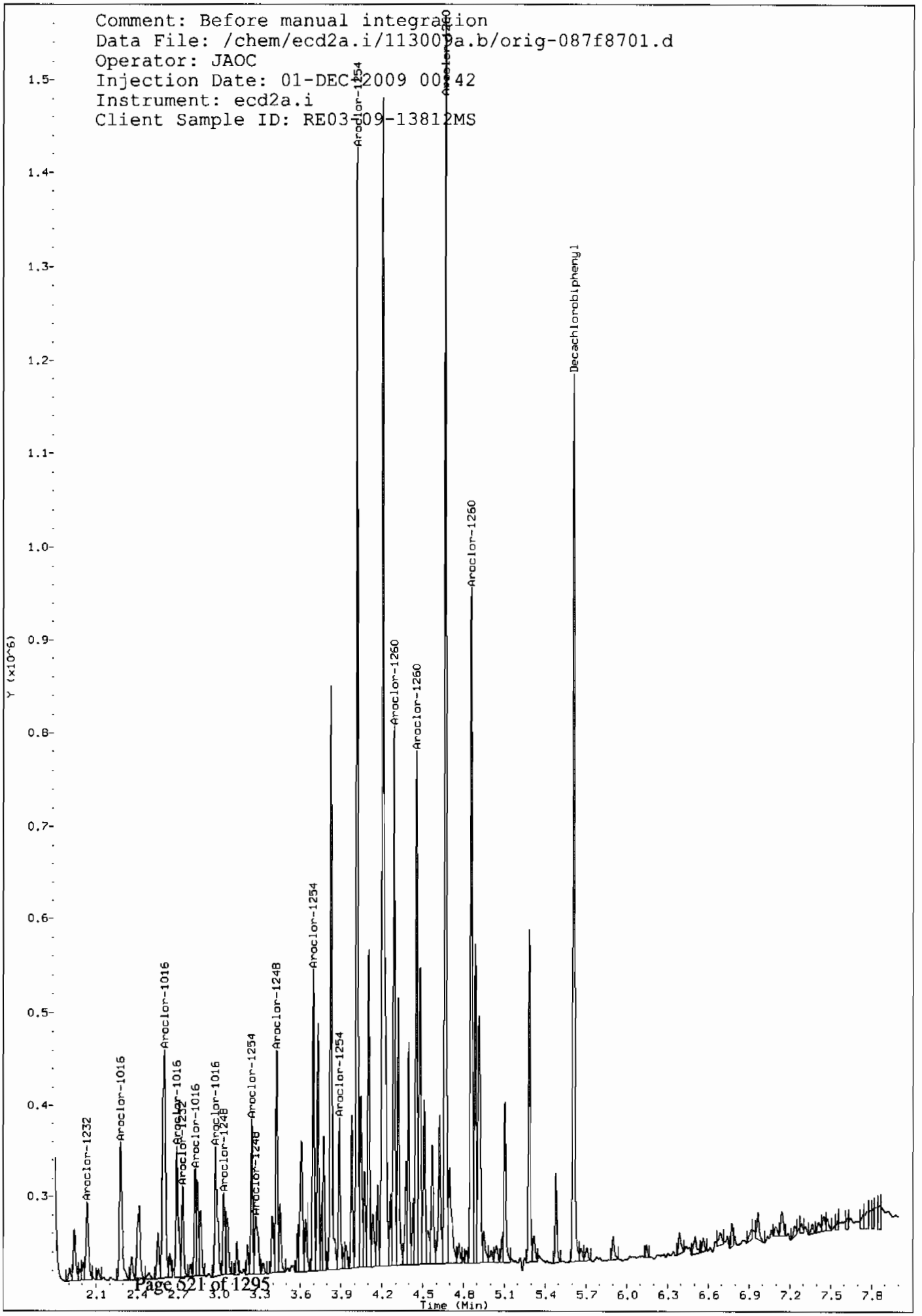
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-087f8701.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:42
Instrument: ecd2a.i
Client Sample ID: RE0309-13812MS
Y (x10^6)
Time (Min)
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/087b8701.d
Lab Smp Id: 1201981384 Client Smp ID: RE03-09-13812MS
Inj Date : 01-DEC-2009 00:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981384|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 87 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	1884697	15.9450	5.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	1713211	15.7694	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	366924	86.1718	30.8	80.00- 120.00	100.00(a)
3.185	3.185	0.000	329596	95.6826	34.2	60.91- 100.91	89.83
3.336	3.336	0.000	197962	100.007	35.7	26.69- 66.69	53.95
3.365	3.365	0.000	183712	89.1264	31.8	29.14- 69.14	50.07
3.523	3.523	0.000	243175	88.2934	31.5	46.31- 86.31	66.27

Average of Peak Concentrations = 32.8

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	349250	70.0560	25.0	80.00- 120.00	100.00(a)
3.964	3.964	0.000	478068	82.4405	29.4	97.16- 137.16	136.88
4.200	4.201	-0.001	144817	35.9974	12.8	61.89- 101.89	41.47
4.280	4.282	-0.002	533417	68.9938	24.6	138.47- 178.47	152.73
4.444	4.445	-0.001	237464	42.3415	15.1	96.59- 136.59	67.99
Average of Peak Concentrations =					21.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	1156007	209.701	74.9	80.00- 120.00	100.00(R)
4.570	4.570	0.000	1748193	245.121	87.5	108.85- 148.85	151.23
4.681	4.682	-0.001	998920	211.127	75.4	65.38- 105.38	86.41
4.879	4.880	-0.001	1178256	203.125	72.5	82.89- 122.89	101.92
5.505	5.505	0.000	1820006	201.313	71.9	145.10- 185.10	157.44
Average of Peak Concentrations =					76.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd2a.i/113009a.b/087b8701.d

Date : 01-DEC-2009 00:42

Client ID: RE03-09-13812MS

Sample Info: |1201981384|10|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

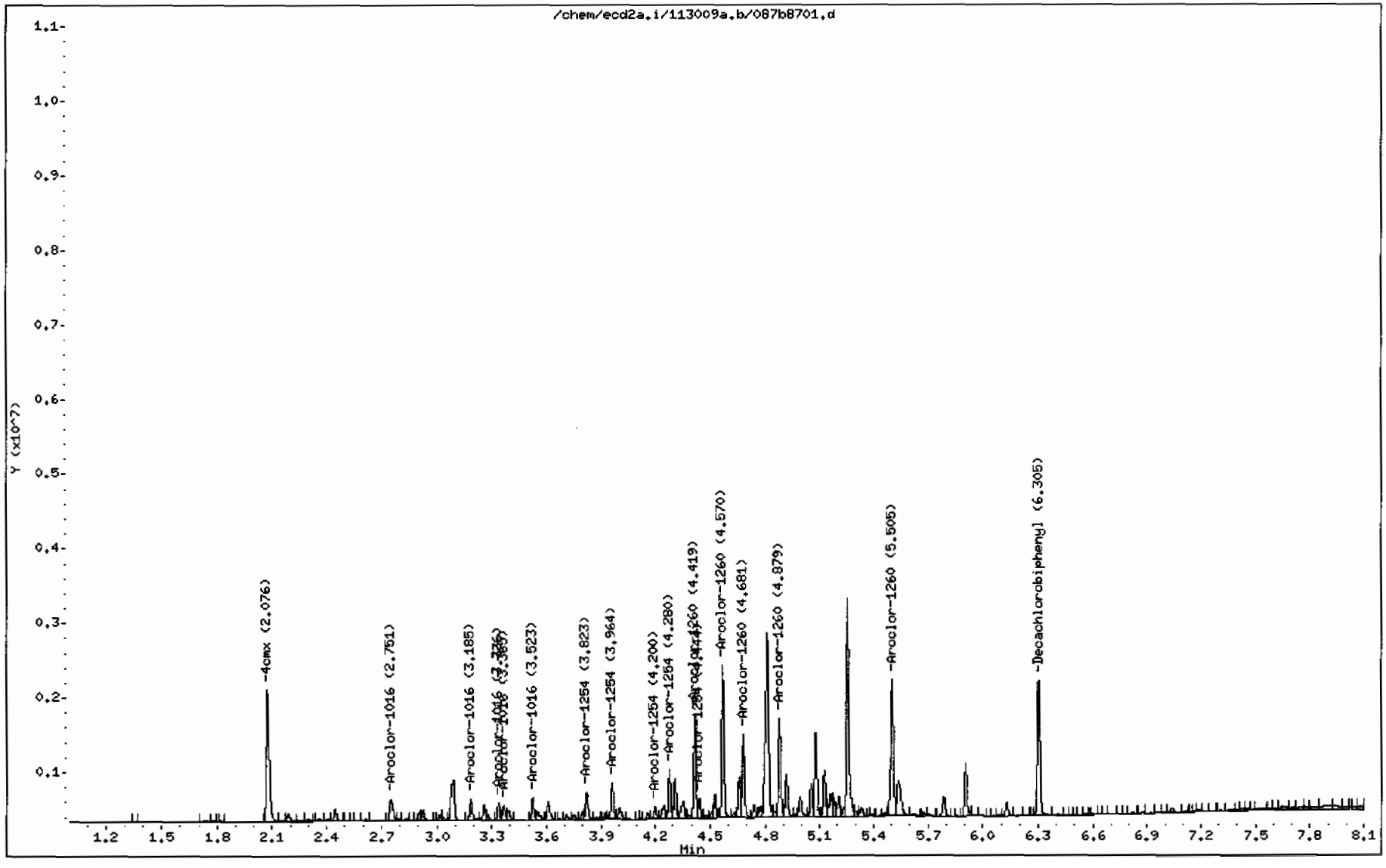

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-575	**Date Collected:**	11/17/2009 12:00	**Matrix:**	SOIL
Lab Sample ID:	1201981385	**Date Received:**	11/19/2009 08:45	**%Moisture:**	7.1
Client Sample:	QC for batch 926709	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13812MSD	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	10
Run Date:	12/01/2009 00:53	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	088f8801.d	**Column:**	1 CLP1	**Level:**	LOW
	088b8801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		44.3	ug/kg	11.9	35.7	1
11104-28-2	Aroclor-1221	U	35.7	ug/kg	11.9	35.7	1
11141-16-5	Aroclor-1232	U	35.7	ug/kg	11.9	35.7	1
53469-21-9	Aroclor-1242	U	35.7	ug/kg	11.9	35.7	1
12672-29-6	Aroclor-1248	U	35.7	ug/kg	11.9	35.7	1
11097-69-1	Aroclor-1254	P	68.3	ug/kg	11.9	35.7	1
11096-82-5	Aroclor-1260		109	ug/kg	11.9	35.7	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/088f8801.d
Lab Smp Id: 1201981385 Client Smp ID: RE03-09-13812MSD
Inj Date : 01-DEC-2009 00:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981385|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 88 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	1165201	20.1902	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1046084	19.0789	6.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	253152	120.560	43.0	80.00- 120.00	100.00(RM)
2.602	2.603	-0.001	496456	110.213	39.4	198.19- 238.19	196.11
2.694	2.694	0.000	209188	114.925	41.0	66.30- 106.30	82.63
2.828	2.829	-0.001	142339	152.580	54.5	23.34- 63.34	56.23
2.979	2.980	-0.001	168563	122.313	43.7	44.93- 84.93	91.96
Average of Peak Concentrations =					44.3		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	223667	107.530	38.4	80.00- 120.00	100.00
3.427	3.427	0.000	326718	117.858	42.1	115.68- 155.68	146.07
3.697	3.697	0.000	444356	118.736	42.4	166.12- 206.12	198.67
3.889	3.889	0.000	255422	91.7891	32.8	117.34- 157.34	114.20
4.017	4.018	-0.001	1438348	521.132	186	114.59- 154.59	643.07
Average of Peak Concentrations =					68.3		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1438348	353.681	126	80.00- 120.00	100.00(R)
4.289	4.290	-0.001	683561	270.362	96.6	41.58- 81.58	47.52
4.454	4.455	-0.001	653446	252.960	90.3	43.08- 83.08	45.43
4.666	4.667	-0.001	1538492	254.882	91.0	129.99- 169.99	106.96
4.855	4.856	-0.001	878884	301.820	108	51.44- 91.44	61.10
Average of Peak Concentrations =					102		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/088f8801.d

Page 1

Date : 01-DEC-2009 00:53

Client ID: RE03-09-13812MSD

Instrument: ecd2a.i

Sample Info: |120198138510|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

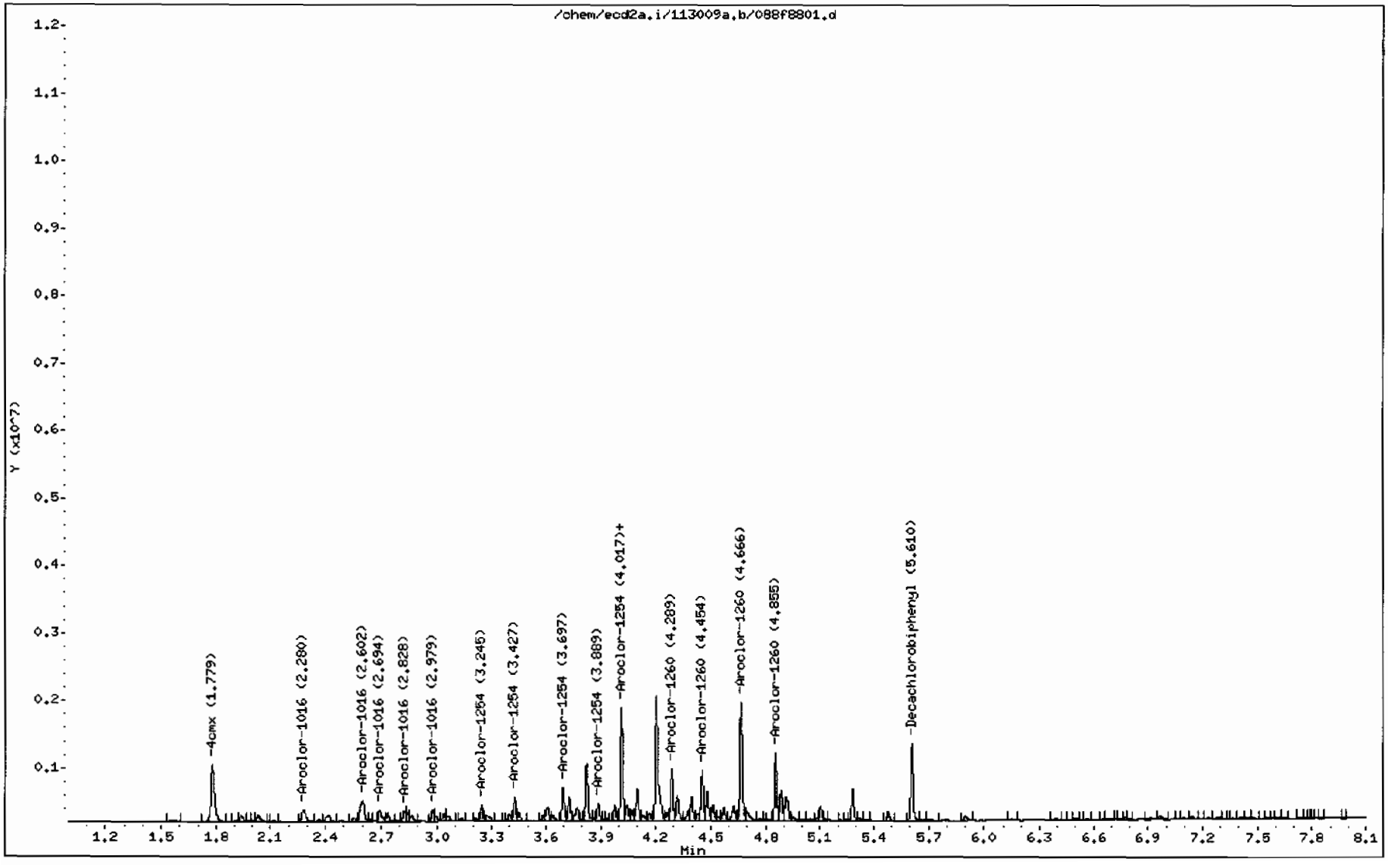

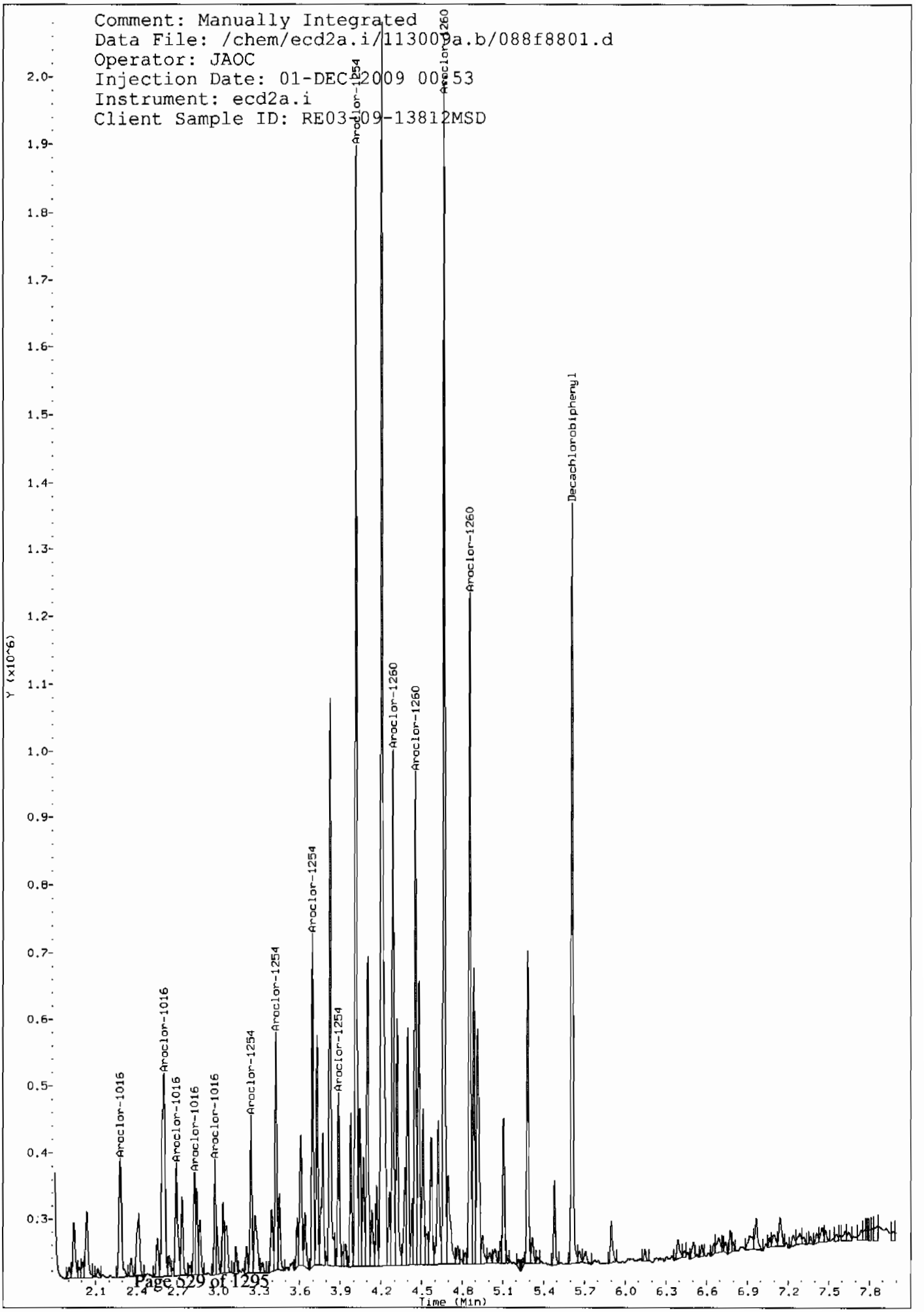
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Operator: JAOC
Injection Date: 01-DEC-2009 00:53
Instrument: ecd2a.i
Client Sample ID: RE03-09-13812MSD
Y (x10^6)
Time (Min)
Aroclor-1016
Aroclor-1016
Aroclor-1016
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Aroclor-1016
Aroclor-1254
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Aroclor-1260
Decachlorobiphenyl

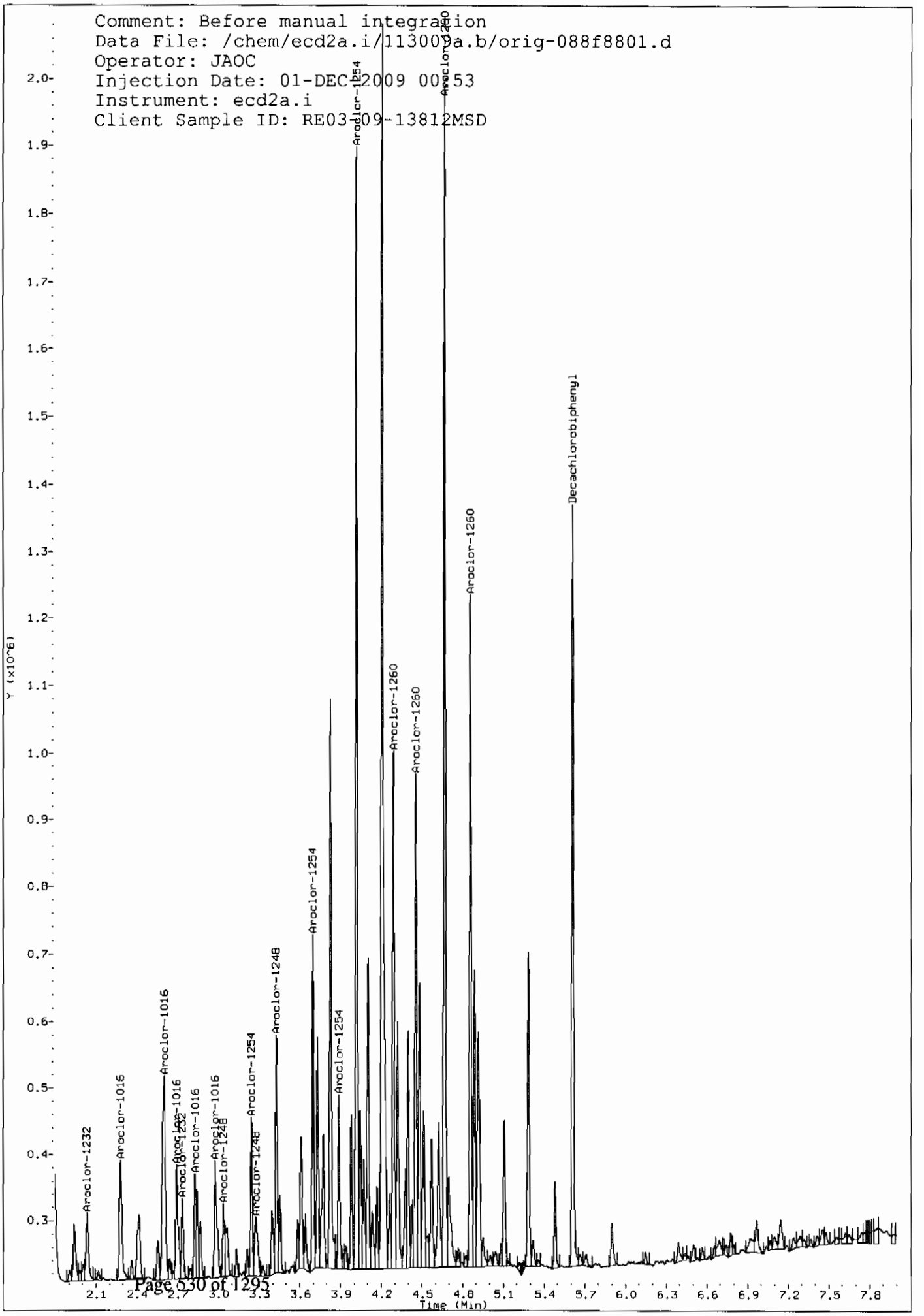
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-088f8801.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:53
Instrument: ecd2a.i
Client Sample ID: RE03-09-13812MSD
Y (x10^6)
Time (Min)
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
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Aroclor-1248
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Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/088b8801.d
Lab Smp Id: 1201981385 Client Smp ID: RE03-09-13812MSD
Inj Date : 01-DEC-2009 00:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981385|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 88 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	2365836	20.0156	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	2102573	19.3533	6.9	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	459752	107.972	38.6	80.00- 120.00	100.00(RM)
3.185	3.185	0.000	392218	113.862	40.7	60.91- 100.91	85.31
3.336	3.336	0.000	282077	142.500	50.9	26.69- 66.69	61.35
3.364	3.365	-0.001	252001	122.256	43.7	29.14- 69.14	54.81
3.523	3.523	0.000	330798	120.108	42.9	46.31- 86.31	71.95

Average of Peak Concentrations = 43.4

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	549454	110.215	39.4	80.00- 120.00	100.00(M)
3.964	3.964	0.000	750432	129.408	46.2	97.16- 137.16	136.58
4.200	4.201	-0.001	278012	69.1058	24.7	61.89- 101.89	50.60
4.280	4.282	-0.002	911879	117.945	42.1	138.47- 178.47	165.96
4.444	4.445	-0.001	430951	76.8415	27.4	96.59- 136.59	78.43
Average of Peak Concentrations =					36.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	1673278	303.535	108	80.00- 120.00	100.00(R)
4.569	4.570	-0.001	2530905	354.868	127	108.85- 148.85	151.25
4.681	4.682	-0.001	1467844	310.237	111	65.38- 105.38	87.72
4.879	4.880	-0.001	1629259	280.875	100	82.89- 122.89	97.37
5.505	5.505	0.000	2526002	279.404	99.8	145.10- 185.10	150.96
Average of Peak Concentrations =					109		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/088b8801.d

Date : 01-DEC-2009 00:53

Client ID: RE03-09-13812MSD

Sample Info: |1201981385|10|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

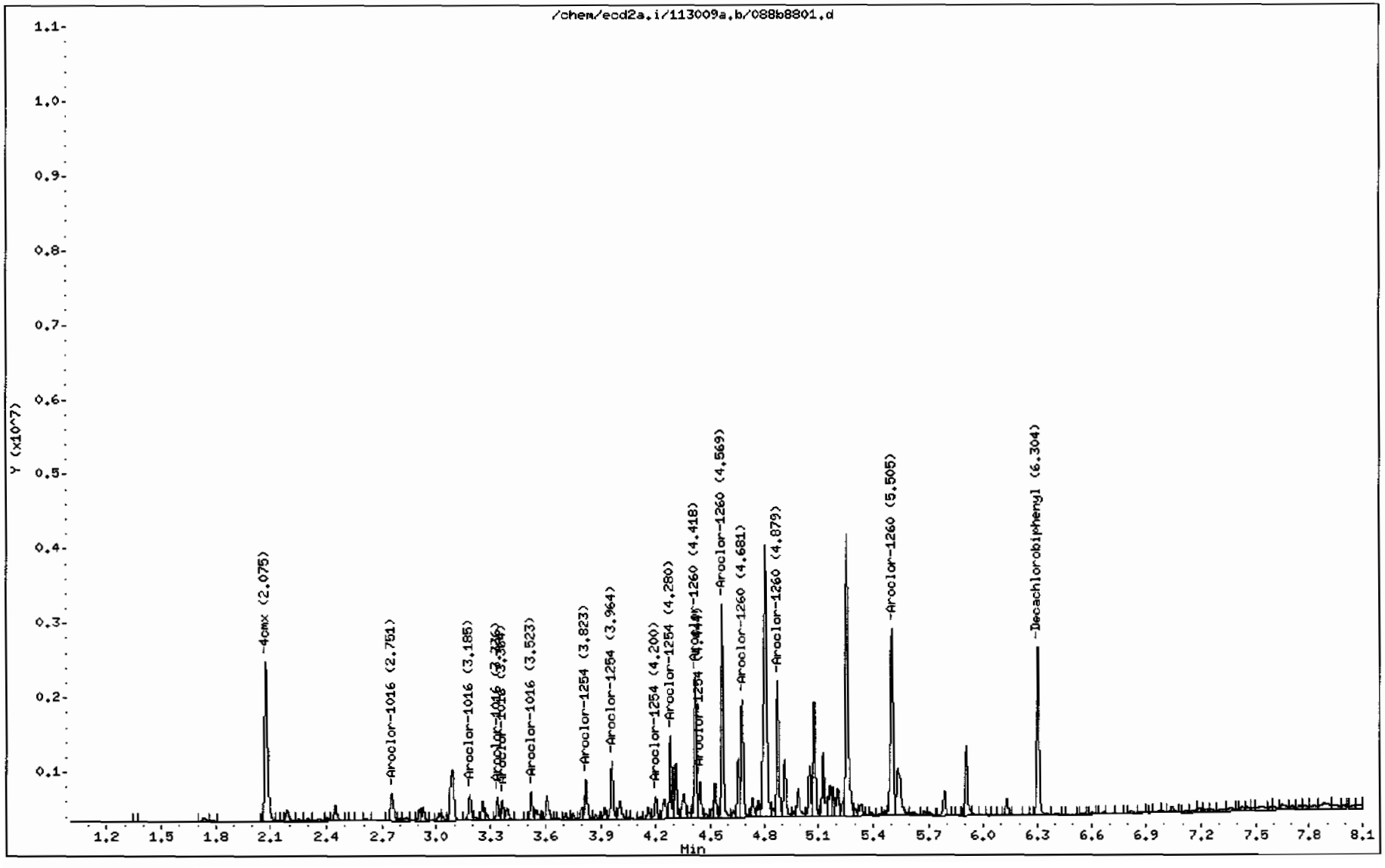

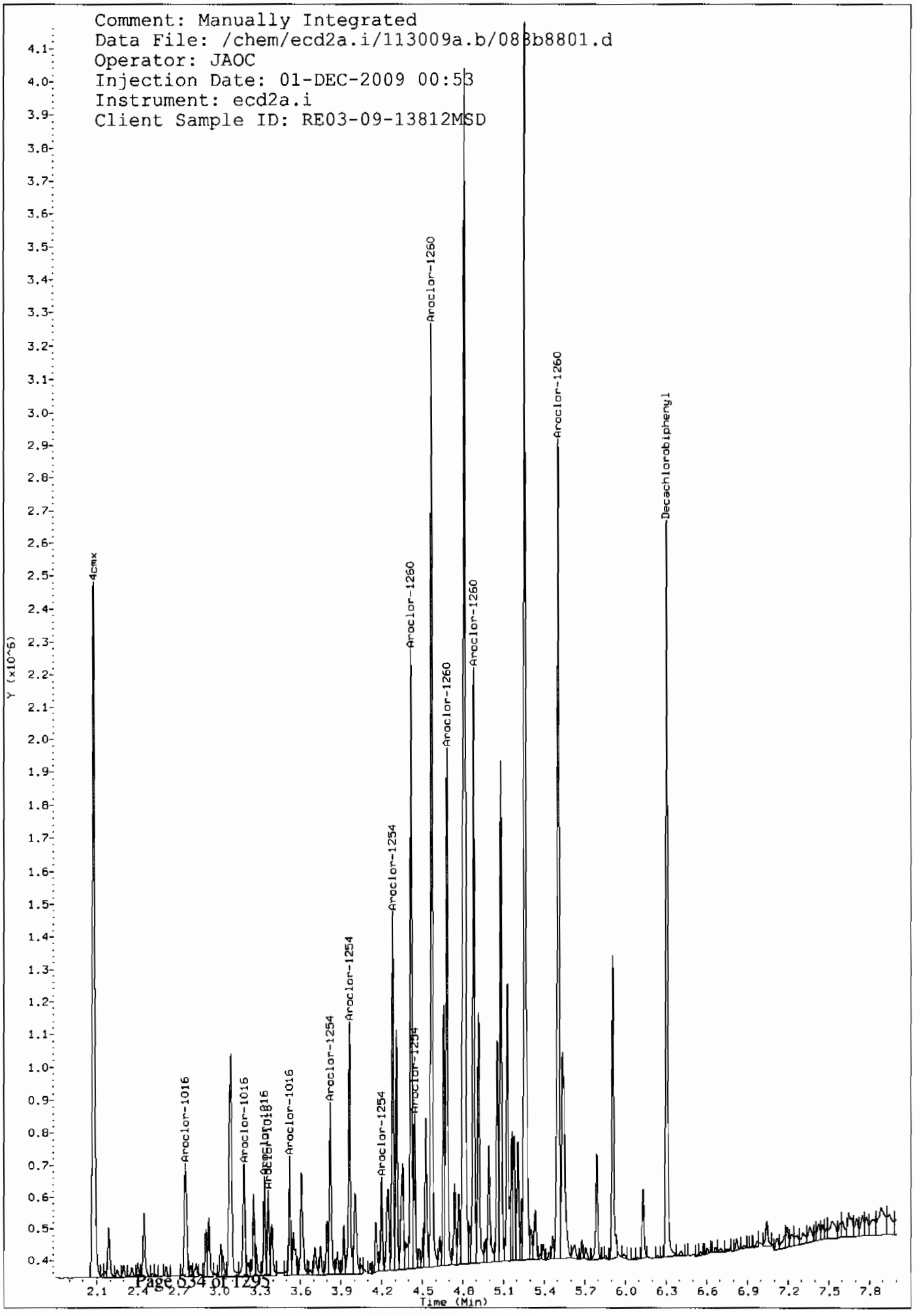
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/083b8801.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:53
Instrument: ecd2a.i
Client Sample ID: RE03-09-13812MSD
Y (x10^6)
Time (Min)
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
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Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

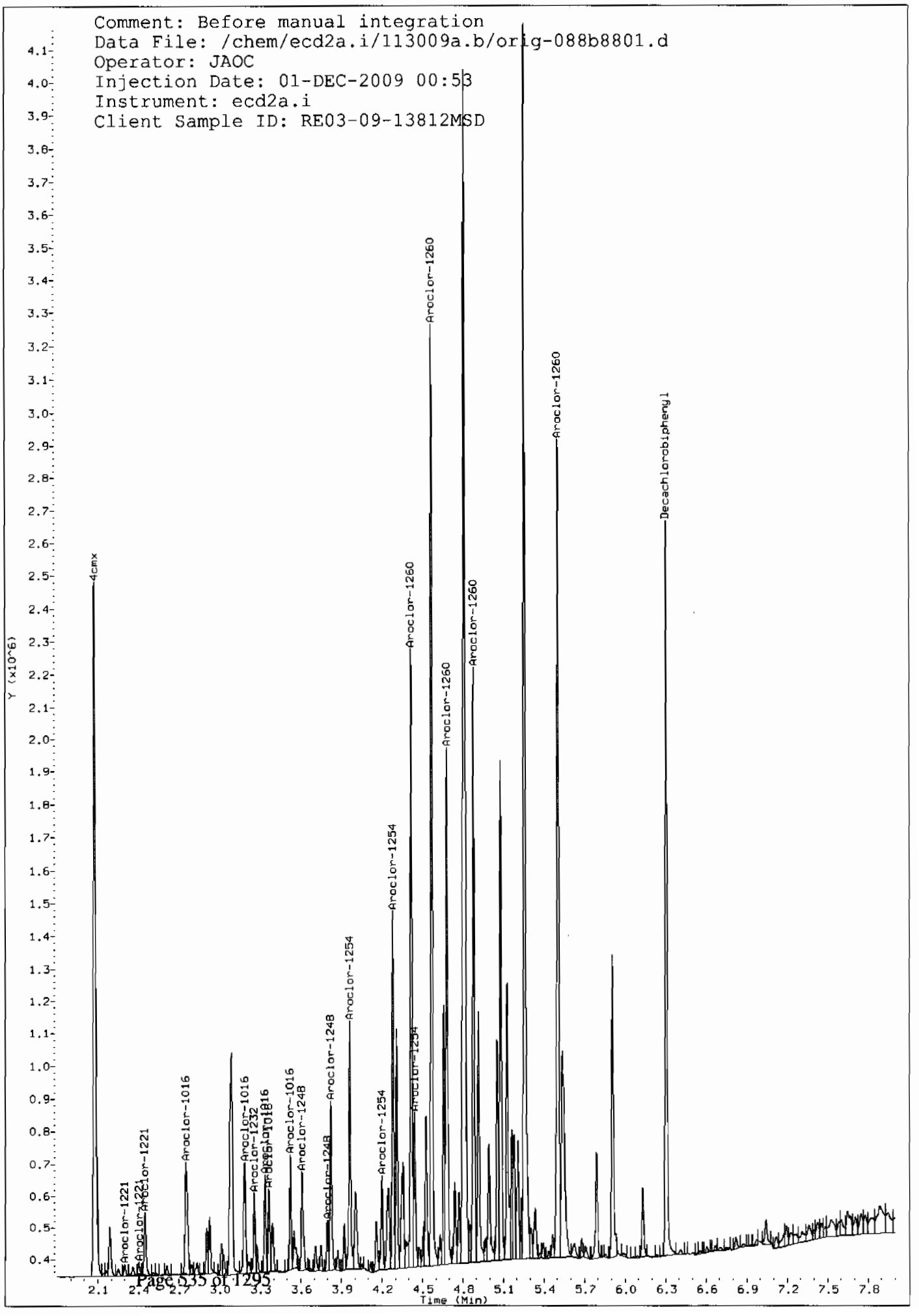
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-088b8801.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:53
Instrument: ecd2a.i
Client Sample ID: RE03-09-13812MSD
Y (x10^6)
Time (Min)
4cmx
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1248
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Aroclor-1248
Aroclor-1254
Aroclor-1254
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Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0	DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0	CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0	PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0	CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362		1.0	QC A UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362		1.0	QC A UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362		1.0	LANL UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809		1.0	PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809		1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0		DUSE
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0		1254 LEVEL 1
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0		1254 LEVEL 2
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0		1254 LEVEL 3
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0		1254 LEVEL 4
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0		1254 LEVEL 5
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0		1248 LEVEL 1
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0		1248 LEVEL 2
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0		1248 LEVEL 3
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0		1248 LEVEL 4
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0		1248 LEVEL 5

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0		DUSE

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18		113009a		1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29		113009a		1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40		113009a		1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51		113009a		1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02		113009a		1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13		113009a		1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25		113009a		1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399		1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399		200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399		200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36		113009a		1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47		113009a		1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688		1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688		1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12		113009a	1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23		113009a	1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463	1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463	5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463	20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463		100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462		10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a		1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a		1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390		1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390		1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407		1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407		5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a		1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a		1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		i13009a	1.0	CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926709 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981383 MB	27-NOV-2009 22:34:22	30	H2SO4/KMn2		2	9	1	0.03333
1201981386 LCS	27-NOV-2009 22:34:22	30	H2SO4/KMn2		2	9	1	0.03333
241033012 - 2	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241183002	27-NOV-2009 22:34:22	30.13	H2SO4/KMn2		2	9	1	0.03319
241183003	27-NOV-2009 22:34:22	30.07	H2SO4/KMn2		2	9	1	0.03326
241183004	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
241318001	27-NOV-2009 22:34:22	30.08	H2SO4/KMn2		2	9	1	0.03324
241318002	27-NOV-2009 22:34:22	30.12	H2SO4/KMn2		2	9	1	0.0332
241318003	27-NOV-2009 22:34:22	30.13	H2SO4/KMn2		2	9	1	0.03319
241318004	27-NOV-2009 22:34:22	30.16	H2SO4/KMn2		2	9	1	0.03316
241318005	27-NOV-2009 22:34:22	30.17	H2SO4/KMn2		2	9	1	0.03315
241318006	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241318007	27-NOV-2009 22:34:22	30.16	H2SO4/KMn2		2	9	1	0.03316
241318008	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241318009	27-NOV-2009 22:34:22	30.17	H2SO4/KMn2		2	9	1	0.03315
241318010	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
241318013	27-NOV-2009 22:34:22	30.01	H2SO4/KMn2		2	9	1	0.03332
241318014	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241336001	27-NOV-2009 22:34:22	30.15	H2SO4/KMn2		2	9	1	0.03317
241336002	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241417001	27-NOV-2009 22:34:22	30.04	H2SO4/KMn2		2	9	1	0.03329
1201981384 MS (241417001)	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
1201981385 MSD (241417001)	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
241417002	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981386	PCB Laboratory Control	WE091113-07	1	mL
MS	1201981384	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201981385	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

NCR Report No.: 764566
Revision No.: 1

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8082	Solid	LANL
Batch ID:	**Sample Numbers:**		
926712	See Below		

Potentially affected work order(s)(SDG): 241033(10-460),241183(10-519),241318(10-543),241336(10-546),241417(10-575)

Application Issues:

Failed Recovery for MSD/PSD

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The MS(1201981384) and MSD(1201981385) did not meet spike recovery acceptance limits or RPD acceptance limits.	1. The sample and MS/MSD were analyzed at a dilution. As a result, the spikes were diluted outside of the acceptance limits. In addition, target analytes were detected in the sample. The failures are attributed to dilution and co-eluting interference.

Originator's Name:

Jennifer Criscione 02-DEC-09

Data Validator/Group Leader:

Cameron Bearden 02-DEC-09

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-575

Sample Analysis

Sample ID	Client ID
241417001	RE03-09-13812
241417002	RE03-09-13811
1201977915	Method Blank (MB) **ICP**
1201990787	Method Blank (MB) **ICP**
1201977920	Laboratory Control Sample (LCS)
1201990788	Laboratory Control Sample (LCS)
1201977917	241190001(WST16-10-4667L) Serial Dilution (SD)
1201977916	241190001(WST16-10-4667D) Sample Duplicate (DUP)
1201977918	241190001(WST16-10-4667S) Matrix Spike (MS)
1201977919	241190001(WST16-10-4667SD) Matrix Spike Duplicate (MSD)
1201977921	Method Blank (MB) **ICP-MS**
1201977926	Laboratory Control Sample (LCS)
1201977923	241190001(WST16-10-4667L) Serial Dilution (SD)
1201977922	241190001(WST16-10-4667D) Sample Duplicate (DUP)
1201977924	241190001(WST16-10-4667S) Matrix Spike (MS)
1201977925	241190001(WST16-10-4667SD) Matrix Spike Duplicate (MSD)
1201977155	Method Blank (MB) **CVAA**
1201977156	Laboratory Control Sample (LCS)
1201977159	241425001(WST03-10-2131L) Serial Dilution (SD)
1201977157	241425001(WST03-10-2131D) Sample Duplicate (DUP)

1201977158	241425001(WST03-10-2131S) Matrix Spike (MS)
1201977160	241425001(WST03-10-2131SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925187, 930799, 925189 and 924862
Prep Batch :	925186, 930798, 925188 and 924861
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens

voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria for all applicable analytes with the exception of silicon. CCB10 analyzed 10-DEC-09 08:08 failed high for silicon; however, all bracketed samples contained silicon at levels greater than 10x the PQL/RDL.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241190001 and 241425001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of mercury, boron, chromium, manganese and potassium, as indicatd by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of mercury, boron, manganese, potassium, sodium and lithium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of mercury, barium and copper, as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of aluminum, antimony, boron, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, potassium, silicon, sodium, titanium, zinc and arsenic, as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D) with the exception of mercury, as indicated by the "E" qualifier.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 766704, 768079, 769018 and 769304. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen [illegible] **Date:** 12/15/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-575 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241417001 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13812 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4570000	ug/Kg		7320	21500	21500	1	P	HSC	12/10/09 08:26	121009-1	930799
7440-36-0	Antimony	1070	ug/Kg	U	352	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-38-2	Arsenic	1.78	mg/kg		0.212	1.06	1.06	2	MS	BAJ	12/07/09 21:54	091207-4	925189
7440-39-3	Barium	67400	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-41-7	Beryllium	0.465	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 09:44	091207-8	925189
7440-42-8	Boron	1770	ug/Kg	J	1070	5340	5340	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-43-9	Cadmium	163	ug/Kg	J	107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-70-2	Calcium	2710000	ug/Kg		8540	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-47-3	Chromium	22600	ug/Kg		160	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-48-4	Cobalt	2370	ug/Kg		160	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-50-8	Copper	21800	ug/Kg		320	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-89-6	Iron	14500000	ug/Kg		8540	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-92-1	Lead	17900	ug/Kg		267	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-93-2	Lithium	11.5	mg/kg		0.425	2.12	2.12	2	MS	BAJ	12/08/09 09:44	091207-8	925189
7439-95-4	Magnesium	1580000	ug/Kg		9080	32000	32000	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-96-5	Manganese	253000	ug/Kg		214	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187
7439-97-6	Mercury	161	ug/kg		3.79	11.1	11.1	1	AV	JXL1	12/07/09 10:45	120709S1-10	924862
7440-02-0	Nickel	4.12	mg/kg		0.106	0.425	0.425	2	MS	BAJ	12/08/09 09:44	091207-8	925189
7440-09-7	Potassium	953000	ug/Kg		6830	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7782-49-2	Selenium	1.06	mg/kg	U	0.531	1.06	1.06	2	MS	BAJ	12/07/09 21:54	091207-4	925189
7440-21-3	Silicon	892000	ug/Kg		1610	10800	10800	1	P	HSC	12/10/09 08:26	121009-1	930799
7440-22-4	Silver	12000	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-23-5	Sodium	99200	ug/Kg		7480	26700	26700	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-28-0	Thallium	0.090	mg/kg	J	0.0637	0.212	0.212	2	MS	BAJ	12/09/09 10:06	091208-9	925189
7440-32-6	Titanium	537000	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-61-1	Uranium	0.687	mg/kg		0.014	0.0425	0.0425	2	MS	BAJ	12/07/09 21:54	091207-4	925189
7440-62-2	Vanadium	18300	ug/Kg		107	534	534	1	P	HSC	12/05/09 01:18	120409A-2	925187
7440-66-6	Zinc	52300	ug/Kg		352	1070	1070	1	P	HSC	12/05/09 01:18	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.58	g	30	mL	12/04/09	TXB3
925187	925186	SW846 3050B	0.504	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.507	g	50	mL	12/05/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930799	930798	SW846 3050B	0.5	g	50	mL	12/09/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-575 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241417002 **BASIS:** Dry Weight **DATE COLLECTED** 17-NOV-09

CLIENT ID: RE03-09-13811 **LEVEL:** Low **DATE RECEIVED** 19-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5330000	ug/Kg		7460	21900	21900	1	P	HSC	12/10/09 08:30	121009-1	930799
7440-36-0	Antimony	1070	ug/Kg	U	352	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-38-2	Arsenic	1.04	mg/kg	J	0.217	1.09	1.09	2	MS	BAJ	12/07/09 22:00	091207-4	925189
7440-39-3	Barium	45700	ug/Kg		107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-41-7	Beryllium	0.535	mg/kg		0.0217	0.109	0.109	2	MS	BAJ	12/08/09 09:46	091207-8	925189
7440-42-8	Boron	1100	ug/Kg	J	1070	5330	5330	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-43-9	Cadmium	533	ug/Kg	U	107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-70-2	Calcium	1080000	ug/Kg		8530	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-47-3	Chromium	5840	ug/Kg		160	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-48-4	Cobalt	1010	ug/Kg		160	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-50-8	Copper	2380	ug/Kg		320	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-89-6	Iron	12900000	ug/Kg		8530	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-92-1	Lead	8880	ug/Kg		266	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-93-2	Lithium	15.6	mg/kg		0.435	2.17	2.17	2	MS	BAJ	12/08/09 09:46	091207-8	925189
7439-95-4	Magnesium	1170000	ug/Kg		9060	32000	32000	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-96-5	Manganese	232000	ug/Kg		213	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187
7439-97-6	Mercury	7.21	ug/kg	J	4.36	12.8	12.8	1	AV	JXL1	12/07/09 10:47	120709S1-10	924862
7440-02-0	Nickel	3.02	mg/kg		0.109	0.435	0.435	2	MS	BAJ	12/08/09 09:46	091207-8	925189
7440-09-7	Potassium	692000	ug/Kg		6820	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7782-49-2	Selenium	1.09	mg/kg	U	0.543	1.09	1.09	2	MS	BAJ	12/07/09 22:00	091207-4	925189
7440-21-3	Silicon	940000	ug/Kg		1650	11000	11000	1	P	HSC	12/10/09 08:30	121009-1	930799
7440-22-4	Silver	454	ug/Kg	J	107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-23-5	Sodium	146000	ug/Kg		7460	26600	26600	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-28-0	Thallium	0.144	mg/kg	J	0.0652	0.217	0.217	2	MS	BAJ	12/09/09 10:08	091208-9	925189
7440-32-6	Titanium	533000	ug/Kg		107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-61-1	Uranium	0.378	mg/kg		0.0143	0.0435	0.0435	2	MS	BAJ	12/07/09 22:00	091207-4	925189
7440-62-2	Vanadium	9410	ug/Kg		107	533	533	1	P	HSC	12/05/09 01:25	120409A-2	925187
7440-66-6	Zinc	46300	ug/Kg		352	1070	1070	1	P	HSC	12/05/09 01:25	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924862	924861	SW846 7471A Prep	0.52	g	30	mL	12/04/09	TXB3
925187	925186	SW846 3050B	0.521	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.511	g	50	mL	12/05/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930799	930798	SW846 3050B	0.506	g	50	mL	12/09/09	BXA1

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Antimony	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Barium	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Boron	527	ug/L	500	ug/L	105.5	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Chromium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Copper	521	ug/L	500	ug/L	104.1	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Lead	518	ug/L	500	ug/L	103.7	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Manganese	526	ug/L	500	ug/L	105.2	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Potassium	2500	ug/L	2500	ug/L	100	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Silver	265	ug/L	250	ug/L	106.2	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Titanium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	04-DEC-09 09:34	120409A-2
	Mercury	5.19	ug/L	5	ug/L	103.8	90.0 - 110.0	AV	07-DEC-09 10:07	120709S1-10
	Arsenic	47.9	ug/L	50	ug/L	95.7	90.0 - 110.0	MS	07-DEC-09 19:02	091207-4
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 - 110.0	MS	07-DEC-09 19:02	091207-4
	Uranium	50.3	ug/L	50	ug/L	100.6	90.0 - 110.0	MS	07-DEC-09 19:02	091207-4
	Beryllium	51.8	ug/L	50	ug/L	103.6	90.0 - 110.0	MS	08-DEC-09 08:44	091207-8
	Lithium	50.4	ug/L	50	ug/L	100.7	90.0 - 110.0	MS	08-DEC-09 08:44	091207-8
	Nickel	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	08-DEC-09 08:44	091207-8
	Calcium	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	09-DEC-09 08:43	120909A-3
	Potassium	2530	ug/L	2500	ug/L	101.4	90.0 - 110.0	P	09-DEC-09 08:43	120909A-3
	Thallium	50.1	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	09-DEC-09 09:01	091208-9
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	10-DEC-09 02:42	121009-1
	Silicon	4900	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	10-DEC-09 02:42	121009-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Antimony	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Boron	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Cadmium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Lead	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Manganese	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Titanium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	07–DEC–09 10:13	120709S1–10
	Arsenic	47.3	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	07–DEC–09 19:33	091207–4
	Selenium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	07–DEC–09 19:33	091207–4
	Uranium	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	07–DEC–09 19:33	091207–4
	Beryllium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	08–DEC–09 08:56	091207–8
	Lithium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	08–DEC–09 08:56	091207–8
	Nickel	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	08–DEC–09 08:56	091207–8
	Thallium	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	09–DEC–09 09:14	091208–9
	Calcium	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 09:43	120909A–3
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	09–DEC–09 09:43	120909A–3
	Aluminum	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	10–DEC–09 03:05	121009–1
	Silicon	2480	ug/L	2500	ug/L	99.2	90.0 – 110.0	P	10–DEC–09 03:05	121009–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Boron	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Cadmium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Lead	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–2
	Mercury	5.38	ug/L	5	ug/L	107.7	80.0 – 120.0	AV	07–DEC–09 10:37	120709S1–10
	Arsenic	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	07–DEC–09 19:51	091207–4
	Selenium	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	07–DEC–09 19:51	091207–4
	Uranium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	07–DEC–09 19:51	091207–4
	Beryllium	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	08–DEC–09 09:15	091207–8
	Lithium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	08–DEC–09 09:15	091207–8
	Nickel	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	08–DEC–09 09:15	091207–8
	Thallium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	09–DEC–09 09:33	091208–9
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 10:11	120909A–3
	Potassium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 10:11	120909A–3
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	10–DEC–09 03:39	121009–1
	Silicon	2440	ug/L	2500	ug/L	97.5	90.0 – 110.0	P	10–DEC–09 03:39	121009–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Cadmium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Lead	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Manganese	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	07–DEC–09 11:01	120709S1–10
	Arsenic	47.9	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	07–DEC–09 20:40	091207–4
	Selenium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	07–DEC–09 20:40	091207–4
	Uranium	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	07–DEC–09 20:40	091207–4
	Beryllium	52.6	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	08–DEC–09 09:36	091207–8
	Lithium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	08–DEC–09 09:36	091207–8
	Nickel	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	08–DEC–09 09:36	091207–8
	Thallium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	09–DEC–09 09:52	091208–9
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	09–DEC–09 11:31	120909A–3
	Potassium	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	09–DEC–09 11:31	120909A–3
	Aluminum	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	10–DEC–09 04:06	121009–1
	Silicon	2420	ug/L	2500	ug/L	96.7	90.0 – 110.0	P	10–DEC–09 04:06	121009–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Lead	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Mercury	5.79	ug/L	5	ug/L	115.9	80.0 – 120.0	AV	07–DEC–09 11:24	120709S1–10
	Arsenic	47.4	ug/L	50	ug/L	94.8	90.0 – 110.0	MS	07–DEC–09 21:29	091207–4
	Selenium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	07–DEC–09 21:29	091207–4
	Uranium	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	07–DEC–09 21:29	091207–4
	Beryllium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	08–DEC–09 09:53	091207–8
	Lithium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	08–DEC–09 09:53	091207–8
	Nickel	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	08–DEC–09 09:53	091207–8
	Thallium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	09–DEC–09 10:17	091208–9
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 12:40	120909A–3
	Potassium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	09–DEC–09 12:40	120909A–3
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	10–DEC–09 04:40	121009–1
	Silicon	2420	ug/L	2500	ug/L	97	90.0 – 110.0	P	10–DEC–09 04:40	121009–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Mercury	5.49	ug/L	5	ug/L	109.7	80.0 – 120.0	AV	07–DEC–09 11:48	120709S1–10
	Arsenic	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	07–DEC–09 22:18	091207–4
	Selenium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	07–DEC–09 22:18	091207–4
	Uranium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	07–DEC–09 22:18	091207–4
	Aluminum	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	10–DEC–09 05:19	121009–1
	Silicon	2420	ug/L	2500	ug/L	96.8	90.0 – 110.0	P	10–DEC–09 05:19	121009–1
CCV06										
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Boron	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Cadmium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Copper	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Lead	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Manganese	510	ug/L	500	ug/L	102	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Silver	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Titanium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Zinc	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 14:52	120409A-2
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	10-DEC-09 05:48	121009-1
	Silicon	2420	ug/L	2500	ug/L	96.9	90.0 - 110.0	P	10-DEC-09 05:48	121009-1
CCV07										
	Antimony	516	ug/L	500	ug/L	103.1	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Barium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Boron	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Chromium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Copper	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Lead	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Manganese	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Silver	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Aluminum	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	10-DEC-09 06:21	121009-1
	Silicon	2420	ug/L	2500	ug/L	96.8	90.0 – 110.0	P	10-DEC-09 06:21	121009-1
CCV08										
	Antimony	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Chromium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Lead	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	10-DEC-09 06:47	121009-1
	Silicon	2450	ug/L	2500	ug/L	98.1	90.0 – 110.0	P	10-DEC-09 06:47	121009-1
CCV09										
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Cadmium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Manganese	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Aluminum	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	10–DEC–09 07:14	121009–1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	10–DEC–09 07:14	121009–1
CCV10										
	Antimony	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Calcium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Chromium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Cobalt	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Copper	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Sodium	9790	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	10–DEC–09 08:04	121009–1
	Silicon	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	10–DEC–09 08:04	121009–1
CCV11										
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Calcium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Iron	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Lead	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Manganese	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Titanium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Vanadium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Zinc	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	10–DEC–09 08:41	121009–1
	Silicon	2490	ug/L	2500	ug/L	99.7	90.0 – 110.0	P	10–DEC–09 08:41	121009–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV12										
	Antimony	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Boron	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Copper	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Lead	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Magnesium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Silver	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Vanadium	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
CCV13										
	Antimony	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Barium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Boron	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Chromium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Copper	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Lead	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Titanium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Vanadium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Zinc	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
CCV14										
	Antimony	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Boron	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Copper	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Iron	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Lead	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Silver	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Sodium	10500	ug/L	10000	ug/L	104.7	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Titanium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Zinc	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
CCV15										
	Antimony	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Chromium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Iron	5350	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Lead	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Magnesium	5430	ug/L	5000	ug/L	108.5	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Silver	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Sodium	10600	ug/L	10000	ug/L	106.1	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Zinc	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.155	ug/L	.2	ug/L	77.4	70.0 – 130.0	AV	07–DEC–09 10:11	120709S1–10
	Arsenic	5.4	ug/L	5	ug/L	108	70.0 – 130.0	MS	07–DEC–09 19:14	091207–4
	Uranium	.218	ug/L	.2	ug/L	109	70.0 – 130.0	MS	07–DEC–09 19:14	091207–4
	Selenium	5.59	ug/L	5	ug/L	111.8	70.0 – 130.0	MS	07–DEC–09 19:14	091207–4
	Nickel	2.12	ug/L	2	ug/L	105.9	70.0 – 130.0	MS	08–DEC–09 08:49	091207–8
	Lithium	10.6	ug/L	10	ug/L	105.9	70.0 – 130.0	MS	08–DEC–09 08:49	091207–8
	Beryllium	.517	ug/L	.5	ug/L	103.4	70.0 – 130.0	MS	08–DEC–09 08:49	091207–8
	Thallium	1.2	ug/L	1	ug/L	120.3	70.0 – 130.0	MS	09–DEC–09 09:06	091208–9
PQL01										
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Cadmium	5.09	ug/L	5	ug/L	101.8	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Barium	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Antimony	11.8	ug/L	10	ug/L	118.1	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Potassium	162	ug/L	150	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Manganese	10.5	ug/L	10	ug/L	105.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Lead	9.1	ug/L	10	ug/L	91	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Calcium	203	ug/L	200	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Chromium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Potassium	157	ug/L	150	ug/L	104.4	70.0 – 130.0	P	09–DEC–09 08:57	120909A–3
	Calcium	202	ug/L	200	ug/L	100.9	70.0 – 130.0	P	09–DEC–09 08:57	120909A–3
	Aluminum	217	ug/L	200	ug/L	108.4	70.0 – 130.0	P	10–DEC–09 02:49	121009–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Silicon	97.9	ug/L	100	ug/L	97.9	70.0 – 130.0	P	10–DEC–09 02:49	121009–1
PQL02										
	Antimony	14.9	ug/L	10	ug/L	149	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Barium	5.08	ug/L	5	ug/L	101.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Cadmium	5.08	ug/L	5	ug/L	101.5	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Chromium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Sodium	343	ug/L	300	ug/L	114.4	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Silver	4.88	ug/L	5	ug/L	97.7	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Potassium	168	ug/L	150	ug/L	112.3	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Manganese	10.7	ug/L	10	ug/L	106.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Magnesium	232	ug/L	300	ug/L	77.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Lead	10	ug/L	10	ug/L	100.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Iron	107	ug/L	100	ug/L	106.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Cobalt	4.93	ug/L	5	ug/L	98.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Copper	10.8	ug/L	10	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Vanadium	4.98	ug/L	5	ug/L	99.5	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Zinc	10.2	ug/L	10	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Calcium	207	ug/L	200	ug/L	103.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Boron	49.9	ug/L	50	ug/L	99.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Titanium	5.01	ug/L	5	ug/L	100.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 09:41	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 09:41	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Mercury	–0.096	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:09	120709S1–10
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 19:08	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 19:08	091207–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 19:08	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 08:46	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 08:46	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 08:46	091207–8
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 08:50	120909A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 08:50	120909A–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 09:04	091208–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 02:45	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 02:45	121009–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB01										
	Antimony	3.77	+/–10	J	3.3	10.0	SOL	P	04–DEC–09 10:42	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 10:42	120409A–2
	Boron	10.73	+/–50	J	10.0	50.0	SOL	P	04–DEC–09 10:42	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 10:42	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 10:42	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 10:42	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 10:42	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 10:42	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 10:42	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 10:42	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 10:42	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 10:42	120409A–2
	Potassium	101.63	+/–250	J	64.0	250	SOL	P	04–DEC–09 10:42	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 10:42	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 10:42	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 10:42	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 10:42	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 10:42	120409A–2
	Mercury	–0.098	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:15	120709S1–10
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 19:39	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 19:39	091207–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 19:39	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 08:58	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 08:58	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 08:58	091207–8
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 09:17	091208–9
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 09:50	120909A–3
	Potassium	67.0	+/–250	J	64.0	250	SOL	P	09–DEC–09 09:50	120909A–3
	Aluminum	76.18	+/–200	J	68.0	200	SOL	P	10–DEC–09 03:08	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 03:08	121009–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB02										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 11:03	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 11:03	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Mercury	-0.091	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:39	120709S1-10
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	07-DEC-09 19:57	091207-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 19:57	091207-4
	Uranium	0.093	+/-.2	J	0.066	0.2	SOL	MS	07-DEC-09 19:57	091207-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	08-DEC-09 09:17	091207-8
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	08-DEC-09 09:17	091207-8
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-DEC-09 09:17	091207-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	09-DEC-09 09:36	091208-9
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 10:18	120909A-3
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	09-DEC-09 10:18	120909A-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 03:43	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 03:43	121009-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB03										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 12:20	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 12:20	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Mercury	–0.117	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:03	120709S1–10
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 20:46	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 20:46	091207–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 20:46	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 09:39	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 09:39	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 09:39	091207–8
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 09:55	091208–9
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 11:38	120909A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 11:38	120909A–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 04:10	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 04:10	121009–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB04										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 12:55	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 12:55	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Mercury	–0.136	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:26	120709S1–10
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 21:35	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 21:35	091207–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 21:35	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 09:56	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 09:56	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 09:56	091207–8
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 10:19	091208–9
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 12:47	120909A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 12:47	120909A–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 04:43	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 04:43	121009–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 14:03	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 14:03	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 11:50	120709S1-10
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	07-DEC-09 22:24	091207-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 22:24	091207-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	07-DEC-09 22:24	091207-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 05:22	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 05:22	121009-1
CCB06										
	Antimony	3.35	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 14:59	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 14:59	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:59	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:59	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 14:59	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 05:51	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 05:51	121009–1
CCB07										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 15:55	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 15:55	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 15:55	120409A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 06:25	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 06:25	121009-1
CCB08										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 17:05	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 17:05	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 06:51	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 06:51	121009-1
CCB09										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 18:08	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 18:08	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 18:08	120409A-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 18:08	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 18:08	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 18:08	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 18:08	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 18:08	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 18:08	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 18:08	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 18:08	120409A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 07:17	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 07:17	121009-1
CCB10										
	Antimony	3.31	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 19:26	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 19:26	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 19:26	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 19:26	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 19:26	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 19:26	120409A-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 08:08	121009-1
	Silicon	142.34	+/-100		15.0	100	SOL	P	10-DEC-09 08:08	121009-1
CCB11										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 20:36	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 20:36	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 20:36	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 20:36	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 20:36	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 20:36	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 08:44	121009-1
	Silicon	18.21	+/-100	J	15.0	100	SOL	P	10-DEC-09 08:44	121009-1
CCB12										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 21:47	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 21:47	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 21:47	120409A–2
CCB13										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 23:27	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 23:27	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 23:27	120409A–2
CCB14										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 00:43	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Potassium	137.31	+/–250	J	64.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 00:43	120409A–2
CCB15										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 01:54	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 01:54	120409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–575

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 01:54	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 01:54	120409A–2

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–575

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201977155								
	Mercury	–4.34	ug/kg	+/–10.417	J	AV	3.54	10.4
1201977915								
	Antimony	327	ug/Kg	+/–990.099	U	P	327	990
	Barium	99	ug/Kg	+/–495.05	U	P	99	495
	Boron	990	ug/Kg	+/–4950.495	U	P	990	4950
	Cadmium	99	ug/Kg	+/–495.05	U	P	99	495
	Calcium	8440	ug/Kg	+/–24752.475	J	P	7920	24800
	Chromium	149	ug/Kg	+/–495.05	U	P	149	495
	Cobalt	149	ug/Kg	+/–495.05	U	P	149	495
	Copper	297	ug/Kg	+/–990.099	U	P	297	990
	Iron	7920	ug/Kg	+/–24752.475	U	P	7920	24800
	Lead	248	ug/Kg	+/–990.099	U	P	248	990
	Magnesium	8420	ug/Kg	+/–29702.97	U	P	8420	29700
	Manganese	198	ug/Kg	+/–990.099	U	P	198	990
	Potassium	6340	ug/Kg	+/–24752.475	U	P	6340	24800
	Sodium	7720	ug/Kg	+/–24752.475	J	P	6930	24800
	Titanium	99	ug/Kg	+/–495.05	U	P	99	495
	Vanadium	99	ug/Kg	+/–495.05	U	P	99	495
	Silver	99	ug/Kg	+/–495.05	U	P	99	495
	Zinc	327	ug/Kg	+/–990.099	U	P	327	990
1201977921								
	Arsenic	0.199	mg/kg	+/–0.994	U	MS	0.199	0.994
	Beryllium	0.0199	mg/kg	+/–0.099	U	MS	0.0199	0.0994
	Lithium	0.398	mg/kg	+/–1.988	U	MS	0.398	1.99
	Nickel	0.0994	mg/kg	+/–0.398	U	MS	0.0994	0.398
	Selenium	0.497	mg/kg	+/–0.994	U	MS	0.497	0.994
	Thallium	0.0596	mg/kg	+/–0.199	U	MS	0.0596	0.199
	Uranium	0.0131	mg/kg	+/–0.04	U	MS	0.0131	0.0398
1201990787								
	Aluminum	6750	ug/Kg	+/–19841.27	U	P	6750	19800
	Silicon	1490	ug/Kg	+/–9920.635	U	P	1490	9920

METALS
-4-
Interference Check Sample

SDG No: 10-575

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 - 120.0	10-DEC-09 02:52	121009-1
	Silicon	22.1	ug/L					10-DEC-09 02:52	121009-1
ICSAB01									
	Aluminum	512000	ug/L	500000	ug/L	102	80.0 - 120.0	10-DEC-09 02:55	121009-1
	Silicon	5120	ug/L	5000	ug/L	102	80.0 - 120.0	10-DEC-09 02:55	121009-1

METALS
–4–
Interference Check Sample

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	4.98	ug/L					04–DEC–09 09:55	120409A–2
	Barium	1.92	ug/L					04–DEC–09 09:55	120409A–2
	Boron	–5.89	ug/L					04–DEC–09 09:55	120409A–2
	Cadmium	–0.11	ug/L					04–DEC–09 09:55	120409A–2
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	04–DEC–09 09:55	120409A–2
	Chromium	1.28	ug/L					04–DEC–09 09:55	120409A–2
	Cobalt	–1.39	ug/L					04–DEC–09 09:55	120409A–2
	Copper	1.06	ug/L					04–DEC–09 09:55	120409A–2
	Iron	184000	ug/L	200000	ug/L	92	80.0 – 120.0	04–DEC–09 09:55	120409A–2
	Lead	–2.66	ug/L					04–DEC–09 09:55	120409A–2
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	04–DEC–09 09:55	120409A–2
	Manganese	7.66	ug/L					04–DEC–09 09:55	120409A–2
	Potassium	–19.7	ug/L					04–DEC–09 09:55	120409A–2
	Silver	–1.58	ug/L					04–DEC–09 09:55	120409A–2
	Sodium	24.7	ug/L					04–DEC–09 09:55	120409A–2
	Titanium	–0.536	ug/L					04–DEC–09 09:55	120409A–2
	Vanadium	–1.65	ug/L					04–DEC–09 09:55	120409A–2
	Zinc	–7.1	ug/L					04–DEC–09 09:55	120409A–2
ICSAB01									
	Antimony	551	ug/L	500	ug/L	110	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Barium	505	ug/L	500	ug/L	101	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Boron	519	ug/L	500	ug/L	104	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Cadmium	473	ug/L	500	ug/L	94.6	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Chromium	482	ug/L	500	ug/L	96.3	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Copper	574	ug/L	500	ug/L	115	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Lead	473	ug/L	500	ug/L	94.7	80.0 – 120.0	04–DEC–09 10:01	120409A–2

METALS
-4-
Interference Check Sample

SDG No: 10-575

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Manganese	501	ug/L	500	ug/L	100	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Potassium	5530	ug/L	5000	ug/L	111	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Silver	274	ug/L	250	ug/L	110	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Sodium	5210	ug/L	5000	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Titanium	514	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Vanadium	513	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Zinc	488	ug/L	500	ug/L	97.7	80.0 – 120.0	04-DEC-09 10:01	120409A-2

METALS
–4–
Interference Check Sample

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Calcium	472000	ug/L	500000	ug/L	94.4	80.0 – 120.0	09–DEC–09 09:04	120909A–3
	Potassium	57.5	ug/L					09–DEC–09 09:04	120909A–3
ICSAB01									
	Calcium	478000	ug/L	500000	ug/L	95.7	80.0 – 120.0	09–DEC–09 09:10	120909A–3
	Potassium	5590	ug/L	5000	ug/L	112	80.0 – 120.0	09–DEC–09 09:10	120909A–3

METALS
–4–
Interference Check Sample

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.495	ug/L					07–DEC–09 19:21	091207–4
	Selenium	–1.21	ug/L					07–DEC–09 19:21	091207–4
	Uranium	–0.036	ug/L					07–DEC–09 19:21	091207–4
ICSAB01									
	Arsenic	20.5	ug/L	20	ug/L	102	80.0 – 120.0	07–DEC–09 19:27	091207–4
	Selenium	19.4	ug/L	20	ug/L	97	80.0 – 120.0	07–DEC–09 19:27	091207–4
	Uranium	24.0	ug/L	20	ug/L	120	80.0 – 120.0	07–DEC–09 19:27	091207–4

METALS
-4-
Interference Check Sample

SDG No: 10-575

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.048	ug/L					08-DEC-09 08:51	091207-8
	Lithium	0.064	ug/L					08-DEC-09 08:51	091207-8
	Nickel	3.12	ug/L					08-DEC-09 08:51	091207-8
ICSAB01									
	Beryllium	19.2	ug/L	20	ug/L	95.9	80.0 - 120.0	08-DEC-09 08:54	091207-8
	Lithium	20.4	ug/L	20	ug/L	102	80.0 - 120.0	08-DEC-09 08:54	091207-8
	Nickel	22.9	ug/L	22.7	ug/L	101	80.0 - 120.0	08-DEC-09 08:54	091207-8

METALS
–4–
Interference Check Sample

SDG No: 10–575

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	–0.048	ug/L					09–DEC–09 09:09	091208–9
ICSAB01									
	Thallium	21.1	ug/L	20	ug/L	105	80.0 – 120.0	09–DEC–09 09:12	091208–9

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–575 **Client ID** WST03–10–2131S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.1

Sample ID: 241425001 **Spike ID:** 1201977158

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	366		181		122	152	N	AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–575 **Client ID** WST03–10–2131SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.1

Sample ID: 241425001 **Spike ID:** 1201977160

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	619		181		129	341	N	AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–575 **Client ID** WST16–10–4667S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977918

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		9330000		8480000		522000	162	N/A	P
Antimony	ug/Kg	75–125	54700		5430		52200	94.3		P
Barium	ug/Kg		1130000		925000		52200	400	N/A	P
Boron	ug/Kg	75–125	88900		52500		52200	69.8	N	P
Cadmium	ug/Kg	75–125	49700		318	J	52200	94.5		P
Calcium	ug/Kg		85100000		100000000		522000	–2940	N/A	P
Chromium	ug/Kg	75–125	78900		11500		52200	129	N	P
Cobalt	ug/Kg	75–125	52900		5630		52200	90.6		P
Copper	ug/Kg		638000		910000		52200	–522	N/A	P
Iron	ug/Kg		10800000		10900000		522000	–25.4	N/A	P
Lead	ug/Kg	75–125	98800		53400		52200	87		P
Magnesium	ug/Kg		4700000		4570000		522000	25.4	N/A	P
Manganese	ug/Kg	75–125	223000		198000		52200	47.5	N	P
Potassium	ug/Kg	75–125	1400000		634000		522000	147	N	P
Silicon	ug/Kg		12100000		14400000		522000	–428	N/A	P
Silver	ug/Kg	75–125	56900		104	U	52200	109		P
Sodium	ug/Kg	75–125	861000		252000		522000	117		P
Titanium	ug/Kg		482000		456000		52200	50.2	N/A	P
Vanadium	ug/Kg	75–125	74700		22900		52200	99.2		P
Zinc	ug/Kg		269000		223000		52200	87.4	N/A	P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–575 **Client ID** WST16–10–4667SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977919

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		7730000		8480000		506000	–148	N/A	P
Antimony	ug/Kg	75–125	50300		5430		50000	89.7		P
Barium	ug/Kg		786000		925000		50000	–280	N/A	P
Boron	ug/Kg	75–125	73400		52500		50000	41.9	N	P
Cadmium	ug/Kg	75–125	47800		318	J	50000	94.9		P
Calcium	ug/Kg		98300000		100000000		500000	–416	N/A	P
Chromium	ug/Kg	75–125	67700		11500		50000	112		P
Cobalt	ug/Kg	75–125	51500		5630		50000	91.8		P
Copper	ug/Kg		115000		910000		50000	–1590	N/A	P
Iron	ug/Kg		10400000		10900000		500000	–108	N/A	P
Lead	ug/Kg	75–125	95400		53400		50000	84		P
Magnesium	ug/Kg		5330000		4570000		500000	152	N/A	P
Manganese	ug/Kg	75–125	222000		198000		50000	47.9	N	P
Potassium	ug/Kg	75–125	1330000		634000		500000	139	N	P
Silicon	ug/Kg		12100000		14400000		506000	–457	N/A	P
Silver	ug/Kg	75–125	55100		104	U	50000	110		P
Sodium	ug/Kg	75–125	880000		252000		500000	126	N	P
Titanium	ug/Kg		448000		456000		50000	–15.3	N/A	P
Vanadium	ug/Kg	75–125	70800		22900		50000	95.7		P
Zinc	ug/Kg		257000		223000		50000	67.4	N/A	P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–575 **Client ID** WST16–10–4667S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977924

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	15.5		6.78		8.06	109		MS
Beryllium	mg/kg	75–125	4.58		0.427		5.04	82.3		MS
Lithium	mg/kg	75–125	10.9		6.27		5.04	91.5		MS
Nickel	mg/kg	75–125	9.54		5.45		5.04	81.1		MS
Selenium	mg/kg	75–125	1.58		0.523	U	2.02	78.6		MS
Thallium	mg/kg	75–125	11.9		0.0697	J	10.1	118		MS
Uranium	mg/kg	75–125	7.18		1.66		5.04	110		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–575 **Client ID** WST16–10–4667SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977925

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	15.9		6.78		7.61	119		MS
Beryllium	mg/kg	75–125	4.26		0.427		4.76	80.6		MS
Lithium	mg/kg	75–125	9.78		6.27		4.76	73.8	N	MS
Nickel	mg/kg	75–125	9.44		5.45		4.76	83.8		MS
Selenium	mg/kg	75–125	1.45		0.523	U	1.9	76.2		MS
Thallium	mg/kg	75–125	11.7		0.0697	J	9.51	122		MS
Uranium	mg/kg	75–125	6.82		1.66		4.76	109		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–575

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2131D

Sample ID: 241425001 **Duplicate ID:** 1201977157 **Percent Solids for Dup:** 92.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20%	181		167		8.09		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-575

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03-10-2131SD

Sample ID: 1201977158 **Duplicate ID:** 1201977160 **Percent Solids for Dup:** 92.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	366		619		51.4	*	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–575

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16–10–4667D

Sample ID: 241190001 **Duplicate ID:** 1201977916 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	8480000		2990000		95.7	*	P
Antimony	ug/Kg	+/–1010	5430		3560		41.5	*	P
Barium	ug/Kg	+/–20%	925000		1040000		11.6		P
Boron	ug/Kg	+/–5040	52500		20400		87.9	*	P
Cadmium	ug/Kg	+/–504	318	J	435	J	30.9		P
Calcium	ug/Kg	+/–20%	100000000		73100000		31.4	*	P
Chromium	ug/Kg	+/–20%	11500		217000		180	*	P
Cobalt	ug/Kg	+/–20%	5630		10400		59.5	*	P
Copper	ug/Kg	+/–20%	910000		1720000		61.5	*	P
Iron	ug/Kg	+/–20%	10900000		16200000		38.4	*	P
Lead	ug/Kg	+/–20%	53400		38900		31.4	*	P
Magnesium	ug/Kg	+/–20%	4570000		6400000		33.4	*	P
Manganese	ug/Kg	+/–20%	198000		408000		69.1	*	P
Potassium	ug/Kg	+/–20%	634000		809000		24.3	*	P
Silicon	ug/Kg	+/–20%	14400000		4440000		106	*	P
Silver	ug/Kg		104	U	101	U			P
Sodium	ug/Kg	+/–20%	252000		398000		45.1	*	P
Titanium	ug/Kg	+/–20%	456000		702000		42.5	*	P
Vanadium	ug/Kg	+/–20%	22900		25600		10.9		P
Zinc	ug/Kg	+/–20%	223000		166000		29.6	*	P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–575

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16–10–4667SD

Sample ID: 1201977918 **Duplicate ID:** 1201977919 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	9330000		7730000		18.7		P
Antimony	ug/Kg	+/–20	54700		50300		8.36		P
Barium	ug/Kg	+/–20	1130000		786000		36.3	*	P
Boron	ug/Kg	+/–20	88900		73400		19.1		P
Cadmium	ug/Kg	+/–20	49700		47800		3.88		P
Calcium	ug/Kg	+/–20	85100000		98300000		14.5		P
Chromium	ug/Kg	+/–20	78900		67700		15.2		P
Cobalt	ug/Kg	+/–20	52900		51500		2.68		P
Copper	ug/Kg	+/–20	638000		115000		139	*	P
Iron	ug/Kg	+/–20	10800000		10400000		3.84		P
Lead	ug/Kg	+/–20	98800		95400		3.49		P
Magnesium	ug/Kg	+/–20	4700000		5330000		12.5		P
Manganese	ug/Kg	+/–20	223000		222000		.376		P
Potassium	ug/Kg	+/–20	1400000		1330000		5.14		P
Silicon	ug/Kg	+/–20	12100000		12100000		.643		P
Silver	ug/Kg	+/–20	56900		55100		3.23		P
Sodium	ug/Kg	+/–20	861000		880000		2.18		P
Titanium	ug/Kg	+/–20	482000		448000		7.27		P
Vanadium	ug/Kg	+/–20	74700		70800		5.38		P
Zinc	ug/Kg	+/–20	269000		257000		4.53		P

Metals
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Duplicate Sample Summary

SDG No.: 10–575

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16–10–4667D

Sample ID: 241190001 **Duplicate ID:** 1201977922 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20%	6.78		8.44		21.8	*	MS
Beryllium	mg/kg	+/–.103	0.427		0.38		11.4		MS
Lithium	mg/kg	+/–2.06	6.27		5.85		6.97		MS
Nickel	mg/kg	+/–20%	5.45		5.51		1.16		MS
Selenium	mg/kg		0.523	U	0.514	U			MS
Thallium	mg/kg		0.0697	J	0.0617	U	200		MS
Uranium	mg/kg	+/–20%	1.66		1.65		.786		MS

Metals
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Duplicate Sample Summary

SDG No.: 10-575

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16-10-4667SD

Sample ID: 1201977924 **Duplicate ID:** 1201977925 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	15.5		15.9		2.02		MS
Beryllium	mg/kg	+/-20	4.58		4.26		7.14		MS
Lithium	mg/kg	+/-20	10.9		9.78		10.6		MS
Nickel	mg/kg	+/-20	9.54		9.44		1.06		MS
Selenium	mg/kg	+/-20	1.58		1.45		8.85		MS
Thallium	mg/kg	+/-20	11.9		11.7		1.86		MS
Uranium	mg/kg	+/-20	7.18		6.82		5.12		MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10-575

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977156								
	Mercury	ug/kg	5150	5650		110	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-575

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977920								
	Antimony	ug/Kg	121000	93400		77.2	39.1-132.1	P
	Barium	ug/Kg	475000	470000		99	82-110.6	P
	Boron	ug/Kg	139000	137000		98.6	74.9-113.6	P
	Cadmium	ug/Kg	116000	115000		99.1	77.9-115.2	P
	Calcium	ug/Kg	3720000	3730000		100	77.4-111.7	P
	Chromium	ug/Kg	84000	83300		99.1	66.6-116.5	P
	Cobalt	ug/Kg	83000	82800		99.7	79-113.9	P
	Copper	ug/Kg	105000	105000		100	77.6-112	P
	Iron	ug/Kg	20000000	22300000		112	51.5-145.5	P
	Lead	ug/Kg	161000	166000		103	83.1-114.7	P
	Magnesium	ug/Kg	2980000	3090000		104	81-114.3	P
	Manganese	ug/Kg	398000	384000		96.4	76.6-106.6	P
	Potassium	ug/Kg	2390000	2400000		100	72.2-111.1	P
	Silver	ug/Kg	133000	132000		99.4	81.7-115.7	P
	Sodium	ug/Kg	614000	566000		92.2	71.5-109.3	P
	Titanium	ug/Kg	382000	429000		112	41.7-148.3	P
	Vanadium	ug/Kg	166000	159000		95.9	65-118.6	P
	Zinc	ug/Kg	195000	202000		103	82.8-111.9	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-575

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977926								
	Arsenic	mg/kg	255	266		104	83-120	MS
	Beryllium	mg/kg	86.4	96.4		112	81.2-126.8	MS
	Lithium	mg/kg	8.01	7.79	J	97.3	66.7-133.7	MS
	Nickel	mg/kg	101	114		112	83.3-121.4	MS
	Selenium	mg/kg	171	187		109	80.2-125.9	MS
	Thallium	mg/kg	203	222		109	78-123.2	MS
	Uranium	mg/kg	2.12	1.68		79	61.9-130.7	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–575

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201990788								
	Aluminum	ug/Kg	10500000	8730000		83.1	56–144	P
	Silicon	ug/Kg	1210000	1130000		93.3	10–190	P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–575 **Client ID** WST03–10–2131L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241425001 **Serial Dilution ID:** 1201977159

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	2.86		1.96		31.5	E	10	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-575 **Client ID** WST16-10-4667L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241190001 **Serial Dilution ID:** 1201977917

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	81400		83000		1.97		10	P
Antimony	52		55.5		6.73			P
Barium	8860		9250		4.4		10	P
Boron	502		487		3.09		10	P
Cadmium	3.05	J	5	U	100			P
Calcium	192000		194000		1.04		10	P
Chromium	110		115		4.55		10	P
Cobalt	53.9		56		3.9			P
Copper	8720		8300		4.82		10	P
Iron	105000		107000		1.9		10	P
Lead	511		535		4.7		10	P
Magnesium	43800		44800		2.17		10	P
Manganese	1900		1970		3.68		10	P
Potassium	1210		1190	J	2.07			P
Silicon	138000		142000		2.9		10	P
Silver	1	U	5	U				P
Sodium	2410		2620		8.51			P
Titanium	4370		4450		1.83		10	P
Vanadium	220		221		.227		10	P
Zinc	2140		2170		1.4		10	P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–575 **Client ID** WST16–10–4667L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241190001 **Serial Dilution ID:** 1201977923

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	32.4		33.8		4.17			MS
Beryllium	2.04		2.41	J	18.1			MS
Lithium	30		34.1	J	13.7			MS
Nickel	26.1		29.6		13.2			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.333	J	1.85	J	456			MS
Uranium	7.93		8		.883		10	MS

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–575 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925186							
1201977915	MB for batch 925186	MB	S	24–NOV–09	.505g	50mL	
1201977920	LCS for batch 925186	LCS	S	24–NOV–09	.51g	50mL	
1201977918	WST16–10–4667S	MS	S	24–NOV–09	.503g	50mL	
1201977919	WST16–10–4667SD	MSD	S	24–NOV–09	.525g	50mL	
1201977916	WST16–10–4667D	DUP	S	24–NOV–09	.521g	50mL	
241417001	RE03–09–13812	SAMPLE	S	24–NOV–09	.504g	50mL	
241417002	RE03–09–13811	SAMPLE	S	24–NOV–09	.521g	50mL	
Batch Number 930798							
1201990787	MB for batch 930798	MB	S	09–DEC–09	.504g	50mL	
1201990788	LCS for batch 930798	LCS	S	09–DEC–09	.505g	50mL	
1201977918	WST16–10–4667S	MS	S	09–DEC–09	.503g	50mL	
1201977919	WST16–10–4667SD	MSD	S	09–DEC–09	.519g	50mL	
1201977916	WST16–10–4667D	DUP	S	09–DEC–09	.5g	50mL	
241417001	RE03–09–13812	SAMPLE	S	09–DEC–09	.5g	50mL	
241417002	RE03–09–13811	SAMPLE	S	09–DEC–09	.506g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–575 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925188						
1201977921	MB for batch 925188	MB	S	05–DEC–09	.503g	50mL	
1201977926	LCS for batch 925188	LCS	S	05–DEC–09	.511g	50mL	
1201977924	WST16–10–4667S	MS	S	05–DEC–09	.521g	50mL	
1201977925	WST16–10–4667SD	MSD	S	05–DEC–09	.552g	50mL	
1201977922	WST16–10–4667D	DUP	S	05–DEC–09	.511g	50mL	
241417001	RE03–09–13812	SAMPLE	S	05–DEC–09	.507g	50mL	
241417002	RE03–09–13811	SAMPLE	S	05–DEC–09	.511g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-575 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	924861						
1201977155	MB for batch 924861	MB	S	04-DEC-09	.576g	30mL	
1201977156	LCS for batch 924861	LCS	S	04-DEC-09	.203g	30mL	
1201977158	WST03-10-2131S	MS	S	04-DEC-09	.536g	30mL	
1201977160	WST03-10-2131SD	MSD	S	04-DEC-09	.506g	30mL	
1201977157	WST03-10-2131D	DUP	S	04-DEC-09	.514g	30mL	
241417001	RE03-09-13812	SAMPLE	S	04-DEC-09	.58g	30mL	
241417002	RE03-09-13811	SAMPLE	S	04-DEC-09	.52g	30mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 07–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–575
Method MS
Data File: 091207–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	18:44			X																	X						X		
S10	1	18:50			X																	X						X		
S100	1	18:56			X																	X						X		
ICV01	1	19:02			X																	X						X		
ICB01	1	19:08			X																	X						X		
CRDL01	1	19:14			X																	X						X		
ICSA01	1	19:21			X																	X						X		
ICSAB01	1	19:27			X																	X						X		
CCV01	1	19:33			X																	X						X		
CCB01	1	19:39			X																	X						X		
LR01	1	19:45			X																	X						X		
CCV02	1	19:51			X																	X						X		
CCB02	1	19:57			X																	X						X		
1201977921	2	20:03			X																	X						X		
ZZZZZZ	20	20:09																												
1201977926	40	20:16			X																	X						X		
ZZZZZZ	2	20:22																												
ZZZZZZ	2	20:28																												
ZZZZZZ	2	20:34																												
CCV03	1	20:40			X																	X						X		
CCB03	1	20:46			X																	X						X		
ZZZZZZ	2	20:52																												
1201977922	2	20:58			X																	X						X		
1201977924	2	21:05			X																	X						X		
1201977925	2	21:11			X																	X						X		
1201977923	10	21:17			X																	X						X		
ZZZZZZ	2	21:23																												
CCV04	1	21:29			X																	X						X		
CCB04	1	21:35			X																	X						X		
ZZZZZZ	2	21:41																												
ZZZZZZ	2	21:48																												
241417001	2	21:54			X																	X						X		
241417002	2	22:00			X																	X						X		
ZZZZZZ	2	22:06																												
ZZZZZZ	2	22:12																												
CCV05	1	22:18			X																	X						X		
CCB05	1	22:24			X																	X						X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 07–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–575
Method MS
Data File: 091207–8

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:37					X									X				X										
S10	1	08:39					X									X				X										
S100	1	08:42					X									X				X										
ICV01	1	08:44					X									X				X										
ICB01	1	08:46					X									X				X										
CRDL01	1	08:49					X									X				X										
ICSA01	1	08:51					X									X				X										
ICSAB01	1	08:54					X									X				X										
CCV01	1	08:56					X									X				X										
CCB01	1	08:58					X									X				X										
1201977921	2	09:01					X									X				X										
1201977926	20	09:03														X														
1201977926	40	09:05					X													X										
ZZZZZZ	2	09:08																												
ZZZZZZ	2	09:10																												
ZZZZZZ	2	09:13																												
CCV02	1	09:15					X									X				X										
CCB02	1	09:17					X									X				X										
ZZZZZZ	2	09:20																												
1201977922	2	09:22					X									X				X										
1201977924	2	09:24					X									X				X										
1201977925	2	09:27					X									X				X										
1201977923	10	09:29					X									X				X										
ZZZZZZ	2	09:32																												
ZZZZZZ	2	09:34																												
CCV03	1	09:36					X									X				X										
CCB03	1	09:39					X									X				X										
ZZZZZZ	2	09:41																												
241417001	2	09:44					X									X				X										
241417002	2	09:46					X									X				X										
ZZZZZZ	2	09:48																												
ZZZZZZ	2	09:51																												
CCV04	1	09:53					X									X				X										
CCB04	1	09:56					X									X				X										

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 09-DEC-09 **End Date:** 09-DEC-09

Client Sdg: 10-575
Method MS
Data File: 091208-9

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:53																								X				
S10	1	08:56																								X				
S100	1	08:59																								X				
ICV01	1	09:01																								X				
ICB01	1	09:04																								X				
CRDL01	1	09:06																								X				
ICSA01	1	09:09																								X				
ICSAB01	1	09:12																								X				
CCV01	1	09:14																								X				
CCB01	1	09:17																								X				
1201977921	2	09:20																								X				
1201977926	40	09:23																								X				
ZZZZZZ	2	09:25																												
ZZZZZZ	2	09:28																												
ZZZZZZ	2	09:31																												
CCV02	1	09:33																								X				
CCB02	1	09:36																								X				
ZZZZZZ	2	09:39																												
1201977922	2	09:41																								X				
1201977924	2	09:44																								X				
1201977925	2	09:47																								X				
1201977923	10	09:50																								X				
CCV03	1	09:52																								X				
CCB03	1	09:55																								X				
ZZZZZZ	2	09:58																												
ZZZZZZ	2	10:00																												
ZZZZZZ	2	10:03																												
241417001	2	10:06																								X				
241417002	2	10:08																								X				
ZZZZZZ	2	10:11																												
ZZZZZZ	2	10:14																												
CCV04	1	10:17																								X				
CCB04	1	10:19																								X				

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–575
Method P
Data File: 120409A–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	09:08		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	09:14		X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	09:21		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	09:28								X				X			X								X					
ICV01	1	09:34		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	09:41		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	09:48		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	09:55		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	10:01		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	10:06		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	10:12		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	10:42		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	10:49		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	10:56		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	11:03		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	12:20		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV04	1	12:48		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	12:55		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
CCB05	1	14:03		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
ZZZZZZ	1	14:45																												
CCV06	1	14:52		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	14:59		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	15:06																												
ZZZZZZ	1	15:13																												
ZZZZZZ	5	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	15:55		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	16:02																												
ZZZZZZ	1	16:09																												
ZZZZZZ	1	16:16																												
ZZZZZZ	1	16:23																												
ZZZZZZ	1	16:30																												
ZZZZZZ	5	16:37																												
ZZZZZZ	1	16:44																												
ZZZZZZ	1	16:51																												
CCV08	1	16:58		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	17:05		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	17:12																												
ZZZZZZ	1	17:19																												
ZZZZZZ	1	17:26																												
ZZZZZZ	1	17:33																												
ZZZZZZ	1	17:40																												
ZZZZZZ	1	17:47																												
ZZZZZZ	1	17:54																												
CCV09	1	18:01		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	18:08		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	18:15																												
ZZZZZZ	2	18:22																												
ZZZZZZ	1	18:29																												
ZZZZZZ	1	18:36																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	18:43																												
ZZZZZZ	1	18:50																												
ZZZZZZ	5	18:58																												
ZZZZZZ	1	19:05																												
ZZZZZZ	1	19:12																												
CCV10	1	19:19		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB10	1	19:26		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	19:33																												
ZZZZZZ	1	19:40																												
ZZZZZZ	1	19:47																												
ZZZZZZ	1	19:54																												
ZZZZZZ	1	20:01																												
ZZZZZZ	1	20:08																												
ZZZZZZ	1	20:15																												
ZZZZZZ	1	20:22																												
CCV11	1	20:30		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB11	1	20:36		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	20:43																												
ZZZZZZ	1	20:50																												
ZZZZZZ	1	20:58																												
ZZZZZZ	1	21:05																												
ZZZZZZ	1	21:12																												
ZZZZZZ	1	21:19																												
ZZZZZZ	1	21:26																												
ZZZZZZ	1	21:33																												
CCV12	1	21:40		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB12	1	21:47		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	22:03																												
ZZZZZZ	1	22:10																												
ZZZZZZ	1	22:17																												
ZZZZZZ	1	22:24																												
ZZZZZZ	1	22:31																												
ZZZZZZ	1	22:38																												
ZZZZZZ	1	22:45																												
ZZZZZZ	1	22:53																												
ZZZZZZ	5	23:00																												
ZZZZZZ	1	23:07																												
CCV13	1	23:14		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL02	1	23:20		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB13	1	23:27		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
1201977915	1	23:34		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977920	2	23:41		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	23:48																												
ZZZZZZ	1	23:55																												
ZZZZZZ	1	00:02																												
ZZZZZZ	1	00:10																												
1201977916	1	00:16		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
1201977918	1	00:24		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
1201977919	1	00:30		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
CCV14	1	00:36		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB14	1	00:43		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977917	5	00:50		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
ZZZZZZ	1	00:57																												
ZZZZZZ	1	01:04																												
ZZZZZZ	1	01:11																												
241417001	1	01:18		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241417002	1	01:25		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	01:33																												
ZZZZZZ	1	01:40																												
CCV15	1	01:47		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB15	1	01:54		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 09–DEC–09 **End Date:** 09–DEC–09

Client Sdg: 10–575
Method P
Data File: 120909A–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:10								X											X									
S0.1	1	08:17																			X									
S0.5	1	08:23								X											X									
SCAL	1	08:31								X											X									
S10	1	08:38								X																				
ICV01	1	08:43								X											X									
ICB01	1	08:50								X											X									
PQL01	1	08:57								X											X									
ICSA01	1	09:04								X											X									
ICSAB01	1	09:10								X											X									
LR01	1	09:16								X											X									
LR02	1	09:22								X											X									
ZZZZZZ	1	09:29																												
ZZZZZZ	1	09:36																												
CCV01	1	09:43								X											X									
CCB01	1	09:50								X											X									
LR03	1	09:57								X											X									
LR04	1	10:03								X											X									
CCV02	1	10:11								X											X									
CCB02	1	10:18								X											X									
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:43																												
ZZZZZZ	1	10:50																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:11																												
ZZZZZZ	1	11:17																												
ZZZZZZ	5	11:24																												
CCV03	1	11:31								X											X									
CCB03	1	11:38								X											X									
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:53																												
ZZZZZZ	1	11:59																												
ZZZZZZ	5	12:06																												
1201977916	5	12:13								X											X									
1201977918	5	12:20								X											X									
1201977919	5	12:27								X											X									
1201977917	25	12:33								X											X									
CCV04	1	12:40								X											X									
CCB04	1	12:47								X											X									

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–575
Method AV
Data File: 120709S1–10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:55																	X											
S0.2	1	09:57																	X											
S0.5	1	09:59																	X											
S2.0	1	10:01																	X											
S5.0	1	10:03																	X											
S10	1	10:05																	X											
ICV01	1	10:07																	X											
ICB01	1	10:09																	X											
CRDL01	1	10:11																	X											
CCV01	1	10:13																	X											
CCB01	1	10:15																	X											
ZZZZZZ	1	10:17																												
ZZZZZZ	10	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
ZZZZZZ	1	10:35																												
CCV02	1	10:37																	X											
CCB02	1	10:39																	X											
1201977155	1	10:41																	X											
1201977156	10	10:43																	X											
241417001	1	10:45																	X											
241417002	1	10:47																	X											
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	1	10:55																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	10:59																												
CCV03	1	11:01																	X											
CCB03	1	11:03																	X											
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:10																												
ZZZZZZ	1	11:12																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:14																											
ZZZZZZ	1	11:16																											
ZZZZZZ	1	11:18																											
ZZZZZZ	1	11:20																											
ZZZZZZ	1	11:22																											
CCV04	1	11:24															X												
CCB04	1	11:26															X												
ZZZZZZ	1	11:28																											
1201977157	1	11:30															X												
1201977158	1	11:32															X												
1201977160	1	11:34															X												
1201977159	5	11:36															X												
ZZZZZZ	1	11:38																											
ZZZZZZ	1	11:40																											
ZZZZZZ	10	11:42																											
ZZZZZZ	1	11:44																											
ZZZZZZ	1	11:46																											
CCV05	1	11:48															X												
CCB05	1	11:50															X												

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 10-DEC-09 **End Date:** 10-DEC-09

Client Sdg: 10-575
Method P
Data File: 121009-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:26	X																				X							
S0.1	1	02:29																					X							
S0.5	1	02:32	X																				X							
SCAL	1	02:36	X																				X							
S10	1	02:39	X																											
ICV01	1	02:42	X																				X							
ICB01	1	02:45	X																				X							
PQL01	1	02:49	X																				X							
ICSA01	1	02:52	X																				X							
ICSAB01	1	02:55	X																				X							
LR01	1	02:58	X																				X							
LR02	1	03:01	X																				X							
CCV01	1	03:05	X																				X							
CCB01	1	03:08	X																				X							
ZZZZZZ	1	03:20																												
ZZZZZZ	1	03:24																												
ZZZZZZ	1	03:28																												
ZZZZZZ	1	03:31																												
ZZZZZZ	1	03:35																												
CCV02	1	03:39	X																				X							
CCB02	1	03:43	X																				X							
ZZZZZZ	1	03:47																												
ZZZZZZ	1	03:51																												
ZZZZZZ	5	03:55																												
ZZZZZZ	1	03:59																												
ZZZZZZ	1	04:02																												
CCV03	1	04:06	X																				X							
CCB03	1	04:10	X																				X							
ZZZZZZ	1	04:14																												
ZZZZZZ	1	04:17																												
ZZZZZZ	1	04:21																												
ZZZZZZ	1	04:25																												
ZZZZZZ	1	04:28																												
ZZZZZZ	5	04:32																												
ZZZZZZ	1	04:36																												
CCV04	1	04:40	X																				X							
CCB04	1	04:43	X																				X							
ZZZZZZ	1	04:47																												
ZZZZZZ	1	04:51																												
ZZZZZZ	1	04:55																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	04:59																											
ZZZZZZ	1	05:03																											
ZZZZZZ	1	05:07																											
ZZZZZZ	1	05:11																											
ZZZZZZ	1	05:15																											
CCV05	1	05:19	X																			X							
CCB05	1	05:22	X																			X							
ZZZZZZ	1	05:26																											
ZZZZZZ	1	05:29																											
ZZZZZZ	1	05:33																											
ZZZZZZ	1	05:37																											
ZZZZZZ	1	05:40																											
ZZZZZZ	5	05:44																											
CCV06	1	05:48	X																			X							
CCB06	1	05:51	X																			X							
ZZZZZZ	1	05:55																											
ZZZZZZ	1	05:59																											
ZZZZZZ	1	06:02																											
ZZZZZZ	1	06:06																											
ZZZZZZ	1	06:10																											
ZZZZZZ	1	06:14																											
ZZZZZZ	1	06:18																											
CCV07	1	06:21	X																			X							
CCB07	1	06:25	X																			X							
ZZZZZZ	1	06:28																											
ZZZZZZ	1	06:32																											
ZZZZZZ	1	06:36																											
ZZZZZZ	1	06:39																											
ZZZZZZ	1	06:41																											
ZZZZZZ	1	06:44																											
CCV08	1	06:47	X																			X							
CCB08	1	06:51	X																			X							
ZZZZZZ	5	06:55																											
ZZZZZZ	1	06:58																											
ZZZZZZ	1	07:02																											
ZZZZZZ	1	07:05																											
ZZZZZZ	1	07:08																											
ZZZZZZ	1	07:11																											
CCV09	1	07:14	X																			X							
CCB09	1	07:17	X																			X							

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
1201990787	1	07:33	X																				X							
1201990788	2	07:37	X																				X							
ZZZZZZ	1	07:40																												
1201977916	1	07:43	X																				X							
1201977918	1	07:47	X																				X							
1201977919	1	07:50	X																				X							
1201977917	5	07:53	X																				X							
ZZZZZZ	1	07:57																												
ZZZZZZ	1	08:00																												
CCV10	1	08:04	X																				X							
CCB10	1	08:08	X																				X							
ZZZZZZ	1	08:11																												
ZZZZZZ	1	08:15																												
ZZZZZZ	1	08:19																												
ZZZZZZ	1	08:22																												
241417001	1	08:26	X																				X							
241417002	1	08:30	X																				X							
ZZZZZZ	1	08:33																												
ZZZZZZ	1	08:37																												
CCV11	1	08:41	X																				X							
CCB11	1	08:44	X																				X							

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-575

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-575

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-575

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-575
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–575
Effective Dates: 01–NOV–09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	–0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10–575
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	–17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	–13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-575
Contract: LANL01004
Instrument: OPTIMA1 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-575
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–575

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–575

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10-575

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

Raw Data

Method: Hg_ReAlign
Result: 121409A

Sample ID: Hg_ReAlign

Hg 253.652 **Rep: 1**

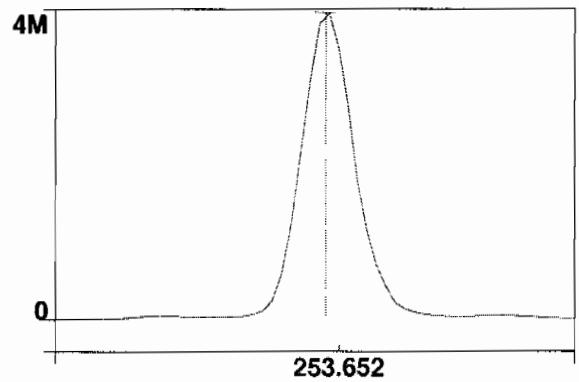

Intensity: 4054442.2 cps
Conc:

1

12/10/2009 02:24:56 Hg ReAlign... Actual peak offset (nm): 0.005
Drift (nm): -0.000 Slit adjustment: -3

Analysis Begun

Start Time: 12/10/2009 02:26:08 **Plasma On Time: 12/6/2009 23:29:48**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\120909.sif
Batch ID:
Results Data Set: 121009
Results Library: c:\pe\optima1\Results\Results.mdb

Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/9/2009 10:29:07**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/10/2009 02:26:11**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time

1	Sc RADIAL	116394.7	116394.7	99.8	%	02:26:45
1	Al 396.153Radial†	122.6	122.8	[0.00]	µg/L	02:26:45
1	Ca 317.933Radial†	415.6	416.5	[0.00]	µg/L	02:27:05
1	Fe 238.204 Radial†	15.8	15.8	[0.00]	µg/L	02:27:05
1	K 766.490 Radial†	724.9	726.3	[0.00]	µg/L	02:26:45
1	Mg 279.077 IEC†	15.3	15.3	[0.00]	µg/L	02:27:05
1	Na 589.592 Radial†	-603.5	-604.8	[0.00]	µg/L	02:26:45
1	Sr 421.552†	-57.0	-57.1	[0.00]	µg/L	02:26:45
1	Sc 361.383	2011794.4	2011794.4	99.484	%	02:28:07
1	Y 371.029	1256223.9	1256223.9	99.799	%	02:28:07
1	Ag 328.068†	21.7	21.8	[0.00]	µg/L	02:28:13
1	As 188.979†	1.5	1.5	[0.00]	µg/L	02:28:33
1	B 249.677†	137.7	138.4	[0.00]	µg/L	02:28:33
1	Ba 233.527†	-72.3	-72.7	[0.00]	µg/L	02:28:33
1	Be 313.107†	3486.9	3505.0	[0.00]	µg/L	02:28:13
1	Cd 226.502†	-96.5	-97.0	[0.00]	µg/L	02:28:33
1	Co 228.616†	-68.3	-68.6	[0.00]	µg/L	02:28:33
1	Cr 267.716†	-90.5	-90.9	[0.00]	µg/L	02:28:13
1	Cu 324.752†	4270.4	4292.6	[0.00]	µg/L	02:28:13
1	Mn 257.610†	-207.5	-208.6	[0.00]	µg/L	02:28:33
1	Mo 202.031†	-4.2	-4.2	[0.00]	µg/L	02:28:33
1	Ni 231.604†	271.5	272.9	[0.00]	µg/L	02:28:33
1	P 214.914†	201.2	202.3	[0.00]	µg/L	02:28:33
1	Pb 220.353†	49.5	49.8	[0.00]	µg/L	02:28:33
1	S 181.975 Axial†	23.8	23.9	[0.00]	µg/L	02:28:33
1	Sb 206.836†	26.1	26.3	[0.00]	µg/L	02:28:33
1	Se 196.026†	4.7	4.7	[0.00]	µg/L	02:28:33
1	SiO2†	2754.9	2769.2	[0.00]	µg/L	02:28:13
1	Si 251.611†	322.6	324.3	[0.00]	µg/L	02:28:33
1	Sn 189.927†	22.1	22.2	[0.00]	µg/L	02:28:33
1	Ti 334.940†	750.7	754.6	[0.00]	µg/L	02:28:13
1	Tl 190.801†	-25.8	-25.9	[0.00]	µg/L	02:28:33
1	U 409.014†	687.2	690.8	[0.00]	µg/L	02:28:13
1	V 292.402†	-154.1	-154.9	[0.00]	µg/L	02:28:13
1	Zn 213.857†	529.4	532.1	[0.00]	µg/L	02:28:33
2	Sc RADIAL	117444.7	117444.7	101	%	02:27:11
2	Al 396.153Radial†	118.9	118.1	[0.00]	µg/L	02:27:11
2	Ca 317.933Radial†	402.2	399.4	[0.00]	µg/L	02:27:31
2	Fe 238.204 Radial†	13.6	13.5	[0.00]	µg/L	02:27:31
2	K 766.490 Radial†	678.0	673.3	[0.00]	µg/L	02:27:11
2	Mg 279.077 IEC†	15.2	15.1	[0.00]	µg/L	02:27:31
2	Na 589.592 Radial†	-639.2	-634.8	[0.00]	µg/L	02:27:11
2	Sr 421.552†	-81.6	-81.0	[0.00]	µg/L	02:27:11
2	Sc 361.383	2015611.3	2015611.3	99.673	%	02:28:39
2	Y 371.029	1254118.8	1254118.8	99.632	%	02:28:39
2	Ag 328.068†	-13.2	-13.3	[0.00]	µg/L	02:28:45
2	As 188.979†	0.5	0.5	[0.00]	µg/L	02:29:06
2	B 249.677†	142.0	142.4	[0.00]	µg/L	02:29:06
2	Ba 233.527†	-79.5	-79.8	[0.00]	µg/L	02:29:06
2	Be 313.107†	3562.3	3573.9	[0.00]	µg/L	02:28:45
2	Cd 226.502†	-99.7	-100.1	[0.00]	µg/L	02:29:06
2	Co 228.616†	-71.2	-71.4	[0.00]	µg/L	02:29:06
2	Cr 267.716†	-107.4	-107.7	[0.00]	µg/L	02:28:45
2	Cu 324.752†	4279.3	4293.3	[0.00]	µg/L	02:28:45
2	Mn 257.610†	-190.8	-191.5	[0.00]	µg/L	02:29:06
2	Mo 202.031†	-2.0	-2.0	[0.00]	µg/L	02:29:06
2	Ni 231.604†	272.7	273.6	[0.00]	µg/L	02:29:06
2	P 214.914†	196.6	197.3	[0.00]	µg/L	02:29:06
2	Pb 220.353†	59.7	59.9	[0.00]	µg/L	02:29:06
2	S 181.975 Axial†	21.8	21.8	[0.00]	µg/L	02:29:06
2	Sb 206.836†	18.6	18.6	[0.00]	µg/L	02:29:06
2	Se 196.026†	11.5	11.5	[0.00]	µg/L	02:29:06
2	SiO2†	2765.7	2774.8	[0.00]	µg/L	02:28:45
2	Si 251.611†	319.5	320.5	[0.00]	µg/L	02:29:06
2	Sn 189.927†	20.9	21.0	[0.00]	µg/L	02:29:06
2	Ti 334.940†	799.3	801.9	[0.00]	µg/L	02:28:45
2	Tl 190.801†	-21.0	-21.1	[0.00]	µg/L	02:29:06
2	U 409.014†	716.4	718.8	[0.00]	µg/L	02:28:45
2	V 292.402†	-129.9	-130.4	[0.00]	µg/L	02:28:45
2	Zn 213.857†	516.6	518.3	[0.00]	µg/L	02:29:06
3	Sc RADIAL	116046.5	116046.5	99.5	%	02:27:37

3	Al 396.153Radial†	128.3	129.0	[0.00]	µg/L	02:27:37
3	Ca 317.933Radial†	420.3	422.5	[0.00]	µg/L	02:27:57
3	Fe 238.204 Radial†	16.0	16.1	[0.00]	µg/L	02:27:57
3	K 766.490 Radial†	644.5	647.8	[0.00]	µg/L	02:27:37
3	Mg 279.077 IEC†	15.8	15.9	[0.00]	µg/L	02:27:57
3	Na 589.592 Radial†	-659.5	-662.8	[0.00]	µg/L	02:27:37
3	Sr 421.552†	-48.6	-48.8	[0.00]	µg/L	02:27:37
3	Sc 361.383	2039265.3	2039265.3	100.84	%	02:29:12
3	Y 371.029	1265900.8	1265900.8	100.57	%	02:29:12
3	Ag 328.068†	22.9	22.7	[0.00]	µg/L	02:29:17
3	As 188.979†	4.6	4.6	[0.00]	µg/L	02:29:38
3	B 249.677†	133.8	132.7	[0.00]	µg/L	02:29:38
3	Ba 233.527†	-82.4	-81.7	[0.00]	µg/L	02:29:38
3	Be 313.107†	3497.9	3468.7	[0.00]	µg/L	02:29:17
3	Cd 226.502†	-100.6	-99.8	[0.00]	µg/L	02:29:38
3	Co 228.616†	-60.4	-59.9	[0.00]	µg/L	02:29:38
3	Cr 267.716†	-101.6	-100.7	[0.00]	µg/L	02:29:17
3	Cu 324.752†	4259.0	4223.4	[0.00]	µg/L	02:29:17
3	Mn 257.610†	-205.7	-204.0	[0.00]	µg/L	02:29:38
3	Mo 202.031†	-4.9	-4.9	[0.00]	µg/L	02:29:38
3	Ni 231.604†	282.6	280.2	[0.00]	µg/L	02:29:38
3	P 214.914†	204.9	203.2	[0.00]	µg/L	02:29:38
3	Pb 220.353†	59.6	59.1	[0.00]	µg/L	02:29:38
3	S 181.975 Axial†	20.9	20.7	[0.00]	µg/L	02:29:38
3	Sb 206.836†	18.6	18.4	[0.00]	µg/L	02:29:38
3	Se 196.026†	13.5	13.4	[0.00]	µg/L	02:29:38
3	SiO2†	2733.0	2710.1	[0.00]	µg/L	02:29:17
3	Si 251.611†	333.6	330.8	[0.00]	µg/L	02:29:38
3	Sn 189.927†	24.2	24.0	[0.00]	µg/L	02:29:38
3	Ti 334.940†	773.2	766.7	[0.00]	µg/L	02:29:17
3	Tl 190.801†	-14.2	-14.1	[0.00]	µg/L	02:29:38
3	U 409.014†	788.4	781.8	[0.00]	µg/L	02:29:17
3	V 292.402†	-95.8	-95.0	[0.00]	µg/L	02:29:17
3	Zn 213.857†	534.0	529.5	[0.00]	µg/L	02:29:38

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2022223.7	14881.34	0.74%	100.000	%
Sc RADIAL	116628.7	727.82	0.62%	100	%
Y 371.029	1258747.8	6283.42	0.50%	100.00	%
Ag 328.068†	10.4	20.53	197.25%	[0.00]	µg/L
Al 396.153Radial†	123.3	5.46	4.43%	[0.00]	µg/L
As 188.979†	2.2	2.12	95.86%	[0.00]	µg/L
B 249.677†	137.9	4.88	3.54%	[0.00]	µg/L
Ba 233.527†	-78.0	4.76	6.10%	[0.00]	µg/L
Be 313.107†	3515.9	53.46	1.52%	[0.00]	µg/L
Ca 317.933Radial†	412.8	11.97	2.90%	[0.00]	µg/L
Cd 226.502†	-99.0	1.66	1.68%	[0.00]	µg/L
Co 228.616†	-66.7	6.02	9.04%	[0.00]	µg/L
Cr 267.716†	-99.8	8.43	8.45%	[0.00]	µg/L
Cu 324.752†	4269.8	40.16	0.94%	[0.00]	µg/L
Fe 238.204 Radial†	15.2	1.41	9.29%	[0.00]	µg/L
K 766.490 Radial†	682.5	40.08	5.87%	[0.00]	µg/L
Mg 279.077 IEC†	15.4	0.42	2.70%	[0.00]	µg/L
Mn 257.610†	-201.3	8.86	4.40%	[0.00]	µg/L
Mo 202.031†	-3.7	1.51	41.20%	[0.00]	µg/L
Na 589.592 Radial†	-634.1	29.02	4.58%	[0.00]	µg/L
Ni 231.604†	275.6	4.06	1.47%	[0.00]	µg/L
P 214.914†	200.9	3.19	1.59%	[0.00]	µg/L
Pb 220.353†	56.3	5.64	10.03%	[0.00]	µg/L
S 181.975 Axial†	22.2	1.65	7.47%	[0.00]	µg/L
Sb 206.836†	21.1	4.46	21.15%	[0.00]	µg/L
Se 196.026†	9.9	4.58	46.43%	[0.00]	µg/L
SiO2†	2751.4	35.82	1.30%	[0.00]	µg/L
Si 251.611†	325.2	5.22	1.61%	[0.00]	µg/L
Sn 189.927†	22.4	1.52	6.78%	[0.00]	µg/L
Sr 421.552†	-62.3	16.72	26.84%	[0.00]	µg/L
Ti 334.940†	774.4	24.57	3.17%	[0.00]	µg/L
Tl 190.801†	-20.4	5.94	29.15%	[0.00]	µg/L

U 409.014†	730.5	46.63	6.38%	[0.00] µg/L
V 292.402†	-126.7	30.12	23.77%	[0.00] µg/L
Zn 213.857†	526.6	7.34	1.39%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/10/2009 02:29:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	117559.6	117559.6	101	%	02:30:22
1	K 766.490 Radial†	2726.3	2022.2	[1000]	µg/L	02:30:22
1	Sr 421.552†	20442.1	20342.5	[100]	µg/L	02:30:22
1	Sc 361.383	2023025.9	2023025.9	100.04	%	02:30:44
1	Y 371.029	1260425.7	1260425.7	100.13	%	02:30:44
1	Ag 328.068†	11176.8	11162.0	[100]	µg/L	02:30:50
1	As 188.979†	59.6	57.4	[100]	µg/L	02:31:10
1	B 249.677†	2449.1	2310.3	[100]	µg/L	02:30:50
1	Ba 233.527†	3928.2	4004.7	[100]	µg/L	02:30:50
1	Be 313.107†	165785.9	162204.3	[100]	µg/L	02:30:44
1	Cd 226.502†	3792.3	3889.8	[100]	µg/L	02:30:50
1	Co 228.616†	2047.7	2113.5	[100]	µg/L	02:31:10
1	Cr 267.716†	4750.5	4848.4	[100]	µg/L	02:30:50
1	Cu 324.752†	19139.5	14862.2	[100]	µg/L	02:30:50
1	Mn 257.610†	32038.9	32227.5	[100]	µg/L	02:30:50
1	Mo 202.031†	865.1	868.4	[100]	µg/L	02:31:10
1	Ni 231.604†	2188.1	1911.7	[100]	µg/L	02:30:50
1	P 214.914†	452.6	251.6	[500]	µg/L	02:31:10
1	Pb 220.353†	461.9	405.4	[100]	µg/L	02:31:10
1	S 181.975 Axial†	65.3	43.1	[200]	µg/L	02:31:10
1	Sb 206.836†	129.3	108.2	[100]	µg/L	02:31:10
1	Se 196.026†	93.4	83.4	[100]	µg/L	02:31:10
1	SiO2†	8649.5	5894.7	[1069.5]	µg/L	02:30:50
1	Si 251.611†	7136.5	6808.4	[500]	µg/L	02:30:50
1	Sn 189.927†	217.7	195.2	[100]	µg/L	02:31:10
1	Ti 334.940†	44240.9	43449.0	[100]	µg/L	02:30:50
1	Tl 190.801†	49.9	70.2	[100]	µg/L	02:31:10
1	U 409.014†	1782.6	1051.5	[100]	µg/L	02:30:50
1	V 292.402†	8907.2	9030.4	[100]	µg/L	02:30:50
1	Zn 213.857†	4441.6	3913.2	[100]	µg/L	02:30:50
2	Sc RADIAL	117486.7	117486.7	101	%	02:30:28
2	K 766.490 Radial†	2767.7	2065.0	[1000]	µg/L	02:30:28
2	Sr 421.552†	20343.1	20256.8	[100]	µg/L	02:30:28
2	Sc 361.383	2037610.9	2037610.9	100.76	%	02:31:17
2	Y 371.029	1270288.6	1270288.6	100.92	%	02:31:17
2	Ag 328.068†	11067.9	10973.9	[100]	µg/L	02:31:22
2	As 188.979†	56.8	54.2	[100]	µg/L	02:31:43
2	B 249.677†	2395.1	2239.1	[100]	µg/L	02:31:22
2	Ba 233.527†	3899.6	3948.2	[100]	µg/L	02:31:22
2	Be 313.107†	165931.2	161162.3	[100]	µg/L	02:31:17
2	Cd 226.502†	3799.6	3869.8	[100]	µg/L	02:31:22
2	Co 228.616†	1969.8	2021.6	[100]	µg/L	02:31:43
2	Cr 267.716†	4740.5	4804.5	[100]	µg/L	02:31:22
2	Cu 324.752†	19057.2	14643.5	[100]	µg/L	02:31:22
2	Mn 257.610†	32022.8	31982.3	[100]	µg/L	02:31:22
2	Mo 202.031†	833.7	831.1	[100]	µg/L	02:31:43
2	Ni 231.604†	2180.8	1888.8	[100]	µg/L	02:31:22
2	P 214.914†	448.4	244.1	[500]	µg/L	02:31:43
2	Pb 220.353†	448.4	388.8	[100]	µg/L	02:31:43
2	S 181.975 Axial†	65.6	43.0	[200]	µg/L	02:31:43
2	Sb 206.836†	117.6	95.6	[100]	µg/L	02:31:43
2	Se 196.026†	94.0	83.4	[100]	µg/L	02:31:43
2	SiO2†	8636.2	5819.6	[1069.5]	µg/L	02:31:22
2	Si 251.611†	7108.1	6729.3	[500]	µg/L	02:31:22
2	Sn 189.927†	212.6	188.6	[100]	µg/L	02:31:43
2	Ti 334.940†	44293.6	43184.7	[100]	µg/L	02:31:22
2	Tl 190.801†	42.5	62.5	[100]	µg/L	02:31:43
2	U 409.014†	1871.4	1126.8	[100]	µg/L	02:31:22
2	V 292.402†	8925.8	8985.1	[100]	µg/L	02:31:22

2	Zn 213.857†	4419.3	3859.3	[100]	µg/L	02:31:22
3	Sc RADIAL	118235.9	118235.9	101	%	02:30:34
3	K 766.490 Radial†	2767.8	2047.7	[1000]	µg/L	02:30:34
3	Sr 421.552†	20472.9	20256.9	[100]	µg/L	02:30:34
3	Sc 361.383	2034992.9	2034992.9	100.63	%	02:31:49
3	Y 371.029	1270927.6	1270927.6	100.97	%	02:31:49
3	Ag 328.068†	11140.1	11059.8	[100]	µg/L	02:31:55
3	As 188.979†	61.6	59.0	[100]	µg/L	02:32:15
3	B 249.677†	2378.5	2225.7	[100]	µg/L	02:31:55
3	Ba 233.527†	3905.2	3958.7	[100]	µg/L	02:31:55
3	Be 313.107†	166370.3	161810.5	[100]	µg/L	02:31:49
3	Cd 226.502†	3801.0	3876.2	[100]	µg/L	02:31:55
3	Co 228.616†	2030.4	2084.3	[100]	µg/L	02:32:15
3	Cr 267.716†	4755.4	4825.3	[100]	µg/L	02:31:55
3	Cu 324.752†	19183.5	14793.3	[100]	µg/L	02:31:55
3	Mn 257.610†	31952.0	31952.8	[100]	µg/L	02:31:55
3	Mo 202.031†	860.8	859.1	[100]	µg/L	02:32:15
3	Ni 231.604†	2184.5	1895.2	[100]	µg/L	02:31:55
3	P 214.914†	447.2	243.4	[500]	µg/L	02:32:15
3	Pb 220.353†	456.1	397.0	[100]	µg/L	02:32:15
3	S 181.975 Axial†	66.6	44.0	[200]	µg/L	02:32:15
3	Sb 206.836†	126.4	104.5	[100]	µg/L	02:32:15
3	Se 196.026†	92.0	81.6	[100]	µg/L	02:32:15
3	SiO2†	8640.5	5834.9	[1069.5]	µg/L	02:31:55
3	Si 251.611†	7151.3	6781.2	[500]	µg/L	02:31:55
3	Sn 189.927†	226.0	202.2	[100]	µg/L	02:32:15
3	Ti 334.940†	44226.1	43174.2	[100]	µg/L	02:31:55
3	Tl 190.801†	45.6	65.7	[100]	µg/L	02:32:15
3	U 409.014†	1892.5	1150.2	[100]	µg/L	02:31:55
3	V 292.402†	8866.6	8937.7	[100]	µg/L	02:31:55
3	Zn 213.857†	4411.5	3857.2	[100]	µg/L	02:31:55

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2031876.5	7775.87	0.38%	100.48	%
Sc RADIAL	117760.7	413.13	0.35%	101	%
Y 371.029	1267213.9	5887.44	0.46%	100.67	%
Ag 328.068†	11065.2	94.16	0.85%	[100]	µg/L
As 188.979†	56.9	2.47	4.34%	[100]	µg/L
B 249.677†	2258.4	45.43	2.01%	[100]	µg/L
Ba 233.527†	3970.6	30.07	0.76%	[100]	µg/L
Be 313.107†	161725.7	526.16	0.33%	[100]	µg/L
Cd 226.502†	3878.6	10.19	0.26%	[100]	µg/L
Co 228.616†	2073.2	46.96	2.27%	[100]	µg/L
Cr 267.716†	4826.1	21.98	0.46%	[100]	µg/L
Cu 324.752†	14766.3	111.80	0.76%	[100]	µg/L
K 766.490 Radial†	2045.0	21.54	1.05%	[1000]	µg/L
Mn 257.610†	32054.2	150.82	0.47%	[100]	µg/L
Mo 202.031†	852.9	19.43	2.28%	[100]	µg/L
Ni 231.604†	1898.6	11.81	0.62%	[100]	µg/L
P 214.914†	246.4	4.51	1.83%	[500]	µg/L
Pb 220.353†	397.0	8.34	2.10%	[100]	µg/L
S 181.975 Axial†	43.4	0.57	1.32%	[200]	µg/L
Sb 206.836†	102.8	6.47	6.30%	[100]	µg/L
Se 196.026†	82.8	1.05	1.27%	[100]	µg/L
SiO2†	5849.7	39.68	0.68%	[1069.5]	µg/L
Si 251.611†	6773.0	40.22	0.59%	[500]	µg/L
Sn 189.927†	195.3	6.79	3.48%	[100]	µg/L
Sr 421.552†	20285.4	49.47	0.24%	[100]	µg/L
Ti 334.940†	43269.3	155.71	0.36%	[100]	µg/L
Tl 190.801†	66.2	3.88	5.86%	[100]	µg/L
U 409.014†	1109.5	51.61	4.65%	[100]	µg/L
V 292.402†	8984.4	46.33	0.52%	[100]	µg/L
Zn 213.857†	3876.5	31.73	0.82%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/10/2009 02:32:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	118394.2	118394.2	102	%	02:32:57
1	Al 396.153Radial†	10512.5	10232.5	[5000]	µg/L	02:32:57
1	Ca 317.933Radial†	13569.3	12954.2	[5000]	µg/L	02:33:18
1	K 766.490 Radial†	10544.3	9704.6	[5000]	µg/L	02:32:57
1	Mg 279.077 IEC†	850.4	822.3	[5000]	µg/L	02:33:18
1	Sr 421.552†	100733.3	99293.4	[500]	µg/L	02:32:57
1	Sc 361.383	2040216.3	2040216.3	100.89	%	02:34:21
1	Y 371.029	1264250.0	1264250.0	100.44	%	02:34:21
1	Ag 328.068†	56207.3	55701.2	[500]	µg/L	02:34:27
1	As 188.979†	278.3	273.6	[500]	µg/L	02:34:48
1	B 249.677†	11560.8	11321.0	[500]	µg/L	02:34:27
1	Ba 233.527†	19454.6	19361.1	[500]	µg/L	02:34:27
1	Be 313.107†	801779.7	791192.9	[500]	µg/L	02:34:21
1	Cd 226.502†	18808.6	18741.7	[500]	µg/L	02:34:27
1	Co 228.616†	10358.1	10333.4	[500]	µg/L	02:34:27
1	Cr 267.716†	23700.0	23590.8	[500]	µg/L	02:34:27
1	Cu 324.752†	76431.4	71487.6	[500]	µg/L	02:34:27
1	Mn 257.610†	156312.6	155135.4	[500]	µg/L	02:34:21
1	Mo 202.031†	4354.2	4319.5	[500]	µg/L	02:34:48
1	Ni 231.604†	9444.1	9085.3	[500]	µg/L	02:34:27
1	P 214.914†	1457.6	1243.8	[2500]	µg/L	02:34:48
1	Pb 220.353†	2000.2	1926.3	[500]	µg/L	02:34:48
1	S 181.975 Axial†	230.0	205.9	[1000]	µg/L	02:34:48
1	Sb 206.836†	539.9	514.1	[500]	µg/L	02:34:48
1	Se 196.026†	404.0	390.6	[500]	µg/L	02:34:48
1	SiO2†	32284.4	29248.3	[5347.5]	µg/L	02:34:27
1	Si 251.611†	34556.5	33926.5	[2500]	µg/L	02:34:27
1	Sn 189.927†	1031.7	1000.1	[500]	µg/L	02:34:48
1	Ti 334.940†	224213.3	221461.6	[500]	µg/L	02:34:21
1	Tl 190.801†	308.7	326.4	[500]	µg/L	02:34:48
1	U 409.014†	6308.9	5522.8	[500]	µg/L	02:34:27
1	V 292.402†	44245.2	43981.7	[500]	µg/L	02:34:27
1	Zn 213.857†	19570.7	18871.5	[500]	µg/L	02:34:27
2	Sc RADIAL	117609.6	117609.6	101	%	02:33:23
2	Al 396.153Radial†	10471.7	10261.1	[5000]	µg/L	02:33:23
2	Ca 317.933Radial†	13607.4	13081.2	[5000]	µg/L	02:33:44
2	K 766.490 Radial†	10455.1	9685.5	[5000]	µg/L	02:33:23
2	Mg 279.077 IEC†	851.4	828.9	[5000]	µg/L	02:33:44
2	Sr 421.552†	99948.5	99177.1	[500]	µg/L	02:33:23
2	Sc 361.383	2030613.9	2030613.9	100.41	%	02:34:55
2	Y 371.029	1259458.6	1259458.6	100.06	%	02:34:55
2	Ag 328.068†	56316.8	56073.7	[500]	µg/L	02:35:00
2	As 188.979†	277.3	273.9	[500]	µg/L	02:35:21
2	B 249.677†	11641.0	11455.1	[500]	µg/L	02:35:00
2	Ba 233.527†	19417.1	19414.9	[500]	µg/L	02:35:00
2	Be 313.107†	804946.4	798104.6	[500]	µg/L	02:34:55
2	Cd 226.502†	18766.4	18787.8	[500]	µg/L	02:35:00
2	Co 228.616†	10321.4	10345.4	[500]	µg/L	02:35:00
2	Cr 267.716†	23744.9	23746.6	[500]	µg/L	02:35:00
2	Cu 324.752†	76426.4	71840.8	[500]	µg/L	02:35:00
2	Mn 257.610†	156983.3	156536.0	[500]	µg/L	02:34:55
2	Mo 202.031†	4320.6	4306.4	[500]	µg/L	02:35:21
2	Ni 231.604†	9503.7	9188.8	[500]	µg/L	02:35:00
2	P 214.914†	1432.8	1226.0	[2500]	µg/L	02:35:21
2	Pb 220.353†	1995.9	1931.4	[500]	µg/L	02:35:21
2	S 181.975 Axial†	227.7	204.6	[1000]	µg/L	02:35:21
2	Sb 206.836†	535.9	512.5	[500]	µg/L	02:35:21
2	Se 196.026†	408.3	396.7	[500]	µg/L	02:35:21
2	SiO2†	32247.8	29363.2	[5347.5]	µg/L	02:35:00

2	Si 251.611†	34579.2	34111.1	[2500]	µg/L	02:35:00
2	Sn 189.927†	1018.4	991.8	[500]	µg/L	02:35:21
2	Ti 334.940†	225492.0	223785.9	[500]	µg/L	02:34:55
2	Tl 190.801†	299.7	318.8	[500]	µg/L	02:35:21
2	U 409.014†	6151.3	5395.5	[500]	µg/L	02:35:00
2	V 292.402†	44349.8	44293.3	[500]	µg/L	02:35:00
2	Zn 213.857†	19564.7	18957.2	[500]	µg/L	02:35:00
3	Sc RADIAL	117511.1	117511.1	101	%	02:33:49
3	Al 396.153Radial†	10422.2	10220.7	[5000]	µg/L	02:33:49
3	Ca 317.933Radial†	13536.7	13022.2	[5000]	µg/L	02:34:10
3	K 766.490 Radial†	10415.1	9654.4	[5000]	µg/L	02:33:49
3	Mg 279.077 IEC†	854.9	833.1	[5000]	µg/L	02:34:10
3	Sr 421.552†	99843.4	99156.0	[500]	µg/L	02:33:49
3	Sc 361.383	2035673.7	2035673.7	100.67	%	02:35:28
3	Y 371.029	1262009.6	1262009.6	100.26	%	02:35:28
3	Ag 328.068†	56490.3	56106.7	[500]	µg/L	02:35:34
3	As 188.979†	272.4	268.4	[500]	µg/L	02:35:54
3	B 249.677†	11695.9	11480.8	[500]	µg/L	02:35:34
3	Ba 233.527†	19519.1	19468.2	[500]	µg/L	02:35:34
3	Be 313.107†	804893.5	796059.5	[500]	µg/L	02:35:28
3	Cd 226.502†	18841.0	18815.4	[500]	µg/L	02:35:34
3	Co 228.616†	10390.5	10388.5	[500]	µg/L	02:35:34
3	Cr 267.716†	23786.3	23728.9	[500]	µg/L	02:35:34
3	Cu 324.752†	76720.2	71943.6	[500]	µg/L	02:35:34
3	Mn 257.610†	156901.6	156066.3	[500]	µg/L	02:35:28
3	Mo 202.031†	4250.9	4226.4	[500]	µg/L	02:35:54
3	Ni 231.604†	9551.4	9212.8	[500]	µg/L	02:35:34
3	P 214.914†	1420.4	1210.1	[2500]	µg/L	02:35:54
3	Pb 220.353†	1971.3	1902.0	[500]	µg/L	02:35:54
3	S 181.975 Axial†	230.1	206.4	[1000]	µg/L	02:35:54
3	Sb 206.836†	524.0	499.4	[500]	µg/L	02:35:54
3	Se 196.026†	402.6	390.1	[500]	µg/L	02:35:54
3	SiO2†	32438.5	29472.8	[5347.5]	µg/L	02:35:34
3	Si 251.611†	34758.0	34203.2	[2500]	µg/L	02:35:34
3	Sn 189.927†	1003.3	974.3	[500]	µg/L	02:35:54
3	Ti 334.940†	225143.6	222881.6	[500]	µg/L	02:35:28
3	Tl 190.801†	304.7	323.1	[500]	µg/L	02:35:54
3	U 409.014†	6242.2	5470.5	[500]	µg/L	02:35:34
3	V 292.402†	44464.6	44297.5	[500]	µg/L	02:35:34
3	Zn 213.857†	19586.3	18930.3	[500]	µg/L	02:35:34

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2035501.3	4803.51	0.24%	100.66	%
Sc RADIAL	117838.3	483.97	0.41%	101	%
Y 371.029	1261906.1	2397.38	0.19%	100.25	%
Ag 328.068†	55960.5	225.20	0.40%	[500]	µg/L
Al 396.153Radial†	10238.1	20.79	0.20%	[5000]	µg/L
As 188.979†	272.0	3.09	1.14%	[500]	µg/L
B 249.677†	11418.9	85.82	0.75%	[500]	µg/L
Ba 233.527†	19414.7	53.55	0.28%	[500]	µg/L
Be 313.107†	795119.0	3550.50	0.45%	[500]	µg/L
Ca 317.933Radial†	13019.2	63.54	0.49%	[5000]	µg/L
Cd 226.502†	18781.6	37.27	0.20%	[500]	µg/L
Co 228.616†	10355.8	28.95	0.28%	[500]	µg/L
Cr 267.716†	23688.8	85.32	0.36%	[500]	µg/L
Cu 324.752†	71757.3	239.19	0.33%	[500]	µg/L
K 766.490 Radial†	9681.5	25.32	0.26%	[5000]	µg/L
Mg 279.077 IEC†	828.1	5.45	0.66%	[5000]	µg/L
Mn 257.610†	155912.6	712.85	0.46%	[500]	µg/L
Mo 202.031†	4284.1	50.37	1.18%	[500]	µg/L
Ni 231.604†	9162.3	67.76	0.74%	[500]	µg/L
P 214.914†	1226.6	16.85	1.37%	[2500]	µg/L
Pb 220.353†	1919.9	15.70	0.82%	[500]	µg/L
S 181.975 Axial†	205.6	0.90	0.44%	[1000]	µg/L
Sb 206.836†	508.7	8.07	1.59%	[500]	µg/L
Se 196.026†	392.5	3.71	0.94%	[500]	µg/L
SiO2†	29361.4	112.27	0.38%	[5347.5]	µg/L
Si 251.611†	34080.3	140.90	0.41%	[2500]	µg/L

Sn 189.927†	988.7	13.21	1.34%	[500] µg/L
Sr 421.552†	99208.8	73.97	0.07%	[500] µg/L
Ti 334.940†	222709.7	1171.66	0.53%	[500] µg/L
Tl 190.801†	322.8	3.79	1.17%	[500] µg/L
U 409.014†	5462.9	63.99	1.17%	[500] µg/L
V 292.402†	44190.8	181.11	0.41%	[500] µg/L
Zn 213.857†	18919.7	43.82	0.23%	[500] µg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: SCAL **Date Collected: 12/10/2009 02:36:03**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	119743.9	119743.9	103	%	02:36:36
1	Al 396.153Radial†	20616.9	19957.2	[10000]	µg/L	02:36:36
1	Ca 317.933Radial†	27133.5	26014.8	[10000]	µg/L	02:36:56
1	Fe 238.204 Radial†	1640.9	1583.1	[10000]	µg/L	02:36:56
1	K 766.490 Radial†	20307.4	19096.6	[10000]	µg/L	02:36:36
1	Mg 279.077 IEC†	1713.2	1653.2	[10000]	µg/L	02:36:56
1	Na 589.592 Radial†	40142.2	39731.9	[10000]	µg/L	02:36:36
1	Sr 421.552†	199391.3	194266.2	[1000]	µg/L	02:36:36
1	Sc 361.383	2048864.6	2048864.6	101.32	%	02:38:01
1	Y 371.029	1264226.7	1264226.7	100.44	%	02:38:01
1	Ag 328.068†	109177.1	107747.1	[1000]	µg/L	02:38:06
1	As 188.979†	560.4	550.9	[1000]	µg/L	02:38:27
1	B 249.677†	23259.8	22819.5	[1000]	µg/L	02:38:06
1	Ba 233.527†	39002.6	38573.5	[1000]	µg/L	02:38:06
1	Be 313.107†	1621159.0	1596563.6	[1000]	µg/L	02:38:01
1	Cd 226.502†	37482.2	37093.8	[1000]	µg/L	02:38:06
1	Co 228.616†	20629.7	20428.1	[1000]	µg/L	02:38:06
1	Cr 267.716†	47676.6	47156.5	[1000]	µg/L	02:38:06
1	Cu 324.752†	148795.1	142590.6	[1000]	µg/L	02:38:06
1	Mn 257.610†	316772.8	312855.3	[1000]	µg/L	02:38:01
1	Mo 202.031†	8535.8	8428.5	[1000]	µg/L	02:38:06
1	Ni 231.604†	18577.4	18060.3	[1000]	µg/L	02:38:06
1	P 214.914†	2694.5	2458.5	[5000]	µg/L	02:38:27
1	Pb 220.353†	3944.3	3836.8	[1000]	µg/L	02:38:27
1	S 181.975 Axial†	435.0	407.2	[2000]	µg/L	02:38:27
1	Sb 206.836†	1049.1	1014.4	[1000]	µg/L	02:38:27
1	Se 196.026†	795.5	775.2	[1000]	µg/L	02:38:27
1	SiO2†	60968.5	57424.4	[10695]	µg/L	02:38:06
1	Si 251.611†	67766.2	66559.8	[5000]	µg/L	02:38:06
1	Sn 189.927†	1987.5	1939.2	[1000]	µg/L	02:38:27
1	Ti 334.940†	442941.1	436407.2	[1000]	µg/L	02:38:01
1	Tl 190.801†	633.8	646.0	[1000]	µg/L	02:38:27
1	U 409.014†	11805.2	10921.2	[1000]	µg/L	02:38:06
1	V 292.402†	88964.1	87934.1	[1000]	µg/L	02:38:06
1	Zn 213.857†	38215.5	37191.9	[1000]	µg/L	02:38:06
2	Sc RADIAL	119056.1	119056.1	102	%	02:37:02
2	Al 396.153Radial†	21203.3	20647.7	[10000]	µg/L	02:37:02
2	Ca 317.933Radial†	27106.2	26140.8	[10000]	µg/L	02:37:22
2	Fe 238.204 Radial†	1634.3	1585.8	[10000]	µg/L	02:37:22
2	K 766.490 Radial†	20803.8	19697.2	[10000]	µg/L	02:37:02
2	Mg 279.077 IEC†	1706.7	1656.4	[10000]	µg/L	02:37:22
2	Na 589.592 Radial†	41070.8	40867.5	[10000]	µg/L	02:37:02
2	Sr 421.552†	204769.9	200657.1	[1000]	µg/L	02:37:02
2	Sc 361.383	2013723.8	2013723.8	99.580	%	02:38:34
2	Y 371.029	1244074.5	1244074.5	98.834	%	02:38:34
2	Ag 328.068†	109694.1	110146.7	[1000]	µg/L	02:38:39
2	As 188.979†	558.3	558.4	[1000]	µg/L	02:39:00
2	B 249.677†	23401.1	23362.0	[1000]	µg/L	02:38:39
2	Ba 233.527†	39199.2	39442.7	[1000]	µg/L	02:38:39
2	Be 313.107†	1595181.2	1598398.6	[1000]	µg/L	02:38:34
2	Cd 226.502†	37768.9	38027.3	[1000]	µg/L	02:38:39
2	Co 228.616†	20736.6	20890.8	[1000]	µg/L	02:38:39
2	Cr 267.716†	48017.7	48320.1	[1000]	µg/L	02:38:39
2	Cu 324.752†	149257.8	145618.1	[1000]	µg/L	02:38:39
2	Mn 257.610†	311708.4	313225.4	[1000]	µg/L	02:38:34
2	Mo 202.031†	8623.4	8663.5	[1000]	µg/L	02:38:39
2	Ni 231.604†	18636.3	18439.4	[1000]	µg/L	02:38:39
2	P 214.914†	2711.0	2521.5	[5000]	µg/L	02:39:00
2	Pb 220.353†	3976.4	3937.0	[1000]	µg/L	02:39:00

2	S 181.975 Axial†	431.7	411.3	[2000]	µg/L	02:39:00
2	Sb 206.836†	1059.2	1042.6	[1000]	µg/L	02:39:00
2	Se 196.026†	796.4	789.8	[1000]	µg/L	02:39:00
2	SiO2†	61237.4	58744.6	[10695]	µg/L	02:38:39
2	Si 251.611†	68123.7	68086.0	[5000]	µg/L	02:38:39
2	Sn 189.927†	1994.6	1980.6	[1000]	µg/L	02:39:00
2	Ti 334.940†	436107.6	437174.0	[1000]	µg/L	02:38:34
2	Tl 190.801†	639.8	662.9	[1000]	µg/L	02:39:00
2	U 409.014†	11787.5	11106.8	[1000]	µg/L	02:38:39
2	V 292.402†	89426.4	89930.6	[1000]	µg/L	02:38:39
2	Zn 213.857†	38502.4	38138.2	[1000]	µg/L	02:38:39
3	Sc RADIAL	117907.6	117907.6	101	%	02:37:28
3	Al 396.153Radial†	21174.5	20821.5	[10000]	µg/L	02:37:28
3	Ca 317.933Radial†	26926.1	26221.3	[10000]	µg/L	02:37:49
3	Fe 238.204 Radial†	1619.4	1586.6	[10000]	µg/L	02:37:49
3	K 766.490 Radial†	20837.9	19929.4	[10000]	µg/L	02:37:28
3	Mg 279.077 IEC†	1696.3	1662.5	[10000]	µg/L	02:37:49
3	Na 589.592 Radial†	41077.3	41265.9	[10000]	µg/L	02:37:28
3	Sr 421.552†	204426.3	202271.2	[1000]	µg/L	02:37:28
3	Sc 361.383	2012021.1	2012021.1	99.495	%	02:39:07
3	Y 371.029	1244191.8	1244191.8	98.844	%	02:39:07
3	Ag 328.068†	108949.8	109491.9	[1000]	µg/L	02:39:13
3	As 188.979†	547.1	547.6	[1000]	µg/L	02:39:33
3	B 249.677†	23225.9	23205.8	[1000]	µg/L	02:39:13
3	Ba 233.527†	38770.5	39045.2	[1000]	µg/L	02:39:13
3	Be 313.107†	1599961.6	1604558.8	[1000]	µg/L	02:39:07
3	Cd 226.502†	37279.1	37567.1	[1000]	µg/L	02:39:13
3	Co 228.616†	20580.2	20751.2	[1000]	µg/L	02:39:13
3	Cr 267.716†	47443.6	47783.9	[1000]	µg/L	02:39:13
3	Cu 324.752†	148191.1	144672.7	[1000]	µg/L	02:39:13
3	Mn 257.610†	312485.6	314271.5	[1000]	µg/L	02:39:07
3	Mo 202.031†	8541.0	8587.9	[1000]	µg/L	02:39:13
3	Ni 231.604†	18456.8	18274.8	[1000]	µg/L	02:39:13
3	P 214.914†	2650.2	2462.7	[5000]	µg/L	02:39:33
3	Pb 220.353†	3890.7	3854.1	[1000]	µg/L	02:39:33
3	S 181.975 Axial†	424.0	404.0	[2000]	µg/L	02:39:33
3	Sb 206.836†	1027.6	1011.7	[1000]	µg/L	02:39:33
3	Se 196.026†	785.1	779.2	[1000]	µg/L	02:39:33
3	SiO2†	60631.2	58187.2	[10695]	µg/L	02:39:13
3	Si 251.611†	67579.4	67596.8	[5000]	µg/L	02:39:13
3	Sn 189.927†	1933.0	1920.4	[1000]	µg/L	02:39:33
3	Ti 334.940†	437339.8	438783.0	[1000]	µg/L	02:39:07
3	Tl 190.801†	625.3	648.8	[1000]	µg/L	02:39:33
3	U 409.014†	11805.2	11134.6	[1000]	µg/L	02:39:13
3	V 292.402†	88610.0	89186.0	[1000]	µg/L	02:39:13
3	Zn 213.857†	38077.2	37743.7	[1000]	µg/L	02:39:13

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2024869.8	20797.47	1.03%	100.13	%
Sc RADIAL	118902.6	927.75	0.78%	102	%
Y 371.029	1250831.0	11601.19	0.93%	99.371	%
Ag 328.068†	109128.6	1240.37	1.14%	[1000]	µg/L
Al 396.153Radial†	20475.5	457.18	2.23%	[10000]	µg/L
As 188.979†	552.3	5.54	1.00%	[1000]	µg/L
B 249.677†	23129.1	279.25	1.21%	[1000]	µg/L
Ba 233.527†	39020.5	435.13	1.12%	[1000]	µg/L
Be 313.107†	1599840.3	4188.04	0.26%	[1000]	µg/L
Ca 317.933Radial†	26125.6	104.07	0.40%	[10000]	µg/L
Cd 226.502†	37562.7	466.80	1.24%	[1000]	µg/L
Co 228.616†	20690.0	237.32	1.15%	[1000]	µg/L
Cr 267.716†	47753.5	582.40	1.22%	[1000]	µg/L
Cu 324.752†	144293.8	1548.92	1.07%	[1000]	µg/L
Fe 238.204 Radial†	1585.2	1.87	0.12%	[10000]	µg/L
K 766.490 Radial†	19574.4	429.77	2.20%	[10000]	µg/L
Mg 279.077 IEC†	1657.4	4.73	0.29%	[10000]	µg/L
Mn 257.610†	313450.7	734.49	0.23%	[1000]	µg/L
Mo 202.031†	8560.0	119.98	1.40%	[1000]	µg/L
Na 589.592 Radial†	40621.7	795.95	1.96%	[10000]	µg/L

Ni 231.604†	18258.1	190.09	1.04%	[1000]	µg/L
P 214.914†	2480.9	35.24	1.42%	[5000]	µg/L
Pb 220.353†	3876.0	53.53	1.38%	[1000]	µg/L
S 181.975 Axial†	407.5	3.67	0.90%	[2000]	µg/L
Sb 206.836†	1022.9	17.12	1.67%	[1000]	µg/L
Se 196.026†	781.4	7.55	0.97%	[1000]	µg/L
SiO2†	58118.7	662.73	1.14%	[10695]	µg/L
Si 251.611†	67414.2	779.31	1.16%	[5000]	µg/L
Sn 189.927†	1946.7	30.78	1.58%	[1000]	µg/L
Sr 421.552†	199064.8	4233.36	2.13%	[1000]	µg/L
Ti 334.940†	437454.7	1212.55	0.28%	[1000]	µg/L
Tl 190.801†	652.6	9.08	1.39%	[1000]	µg/L
U 409.014†	11054.2	116.01	1.05%	[1000]	µg/L
V 292.402†	89016.9	1008.96	1.13%	[1000]	µg/L
Zn 213.857†	37691.3	475.32	1.26%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/10/2009 02:39:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	117579.4	117579.4	101	%	02:40:15
1	Al 396.153Radial†	102713.5	101759.7	[50000]	µg/L	02:40:15
1	Ca 317.933Radial†	132449.9	130966.2	[50000]	µg/L	02:40:15
1	Fe 238.204 Radial†	3188.2	3147.2	[20000]	µg/L	02:40:35
1	Mg 279.077 IEC†	8192.1	8110.4	[50000]	µg/L	02:40:35
1	Na 589.592 Radial†	80464.3	80447.7	[20000]	µg/L	02:40:15
1	Sc 361.383	2020400.8	2020400.8	99.910	%	02:41:39
1	Y 371.029	1238955.1	1238955.1	98.428	%	02:41:39
2	Sc RADIAL	117418.3	117418.3	101	%	02:40:41
2	Al 396.153Radial†	102440.1	101627.9	[50000]	µg/L	02:40:41
2	Ca 317.933Radial†	131997.2	130696.7	[50000]	µg/L	02:40:41
2	Fe 238.204 Radial†	3177.0	3140.5	[20000]	µg/L	02:41:01
2	Mg 279.077 IEC†	8154.2	8083.9	[50000]	µg/L	02:41:01
2	Na 589.592 Radial†	80330.3	80424.1	[20000]	µg/L	02:40:41
2	Sc 361.383	2020059.9	2020059.9	99.893	%	02:41:47
2	Y 371.029	1238410.6	1238410.6	98.384	%	02:41:47
3	Sc RADIAL	118489.3	118489.3	102	%	02:41:07
3	Al 396.153Radial†	99940.4	98247.7	[50000]	µg/L	02:41:07
3	Ca 317.933Radial†	128243.8	125817.1	[50000]	µg/L	02:41:07
3	Fe 238.204 Radial†	3193.2	3127.9	[20000]	µg/L	02:41:27
3	Mg 279.077 IEC†	8217.1	8072.7	[50000]	µg/L	02:41:27
3	Na 589.592 Radial†	78282.4	77687.2	[20000]	µg/L	02:41:07
3	Sc 361.383	2010279.6	2010279.6	99.409	%	02:41:55
3	Y 371.029	1234084.4	1234084.4	98.041	%	02:41:55

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2016913.5	5747.58	0.28%	99.737	%
Sc RADIAL	117829.0	577.49	0.49%	101	%
Y 371.029	1237150.0	2668.87	0.22%	98.284	%
Al 396.153Radial†	100545.1	1990.69	1.98%	[50000]	µg/L
Ca 317.933Radial†	129160.0	2898.14	2.24%	[50000]	µg/L
Fe 238.204 Radial†	3138.5	9.79	0.31%	[20000]	µg/L
Mg 279.077 IEC†	8089.0	19.38	0.24%	[50000]	µg/L
Na 589.592 Radial†	79519.7	1587.00	2.00%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	109.7	0.00000	0.999948	
Al 396.153Radial	3	Lin Thru 0	0.0	2.013	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	0.5508	0.00000	0.999977	
B 249.677	3	Lin Thru 0	0.0	23.07	0.00000	0.999986	
Ba 233.527	3	Lin Thru 0	0.0	38.99	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	1598	0.00000	0.999997	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.585	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	37.57	0.00000	0.999996	
Co 228.616	3	Lin Thru 0	0.0	20.69	0.00000	1.000000	
Cr 267.716	3	Lin Thru 0	0.0	47.68	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	144.2	0.00000	0.999995	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1572	0.00000	0.999992	
K 766.490 Radial	3	Lin Thru 0	0.0	1.954	0.00000	0.999982	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1620	0.00000	0.999987	
Mn 257.610	3	Lin Thru 0	0.0	313.2	0.00000	0.999996	
Mo 202.031	3	Lin Thru 0	0.0	8.561	0.00000	1.000000	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.993	0.00000	0.999963	

Ni 231.604	3	Lin Thru 0	0.0	18.28	0.00000	0.999993
P 214.914	3	Lin Thru 0	0.0	0.4951	0.00000	0.999990
Pb 220.353	3	Lin Thru 0	0.0	3.870	0.00000	0.999990
S 181.975 Axial	3	Lin Thru 0	0.0	0.2042	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	1.022	0.00000	0.999998
Se 196.026	3	Lin Thru 0	0.0	0.7825	0.00000	0.999985
SiO2	3	Lin Thru 0	0.0	5.446	0.00000	0.999991
Si 251.611	3	Lin Thru 0	0.0	13.51	0.00000	0.999990
Sn 189.927	3	Lin Thru 0	0.0	1.953	0.00000	0.999980
Sr 421.552	3	Lin Thru 0	0.0	199.0	0.00000	0.999998
Ti 334.940	3	Lin Thru 0	0.0	439.0	0.00000	0.999973
Tl 190.801	3	Lin Thru 0	0.0	0.6512	0.00000	0.999990
U 409.014	3	Lin Thru 0	0.0	11.03	0.00000	0.999989
V 292.402	3	Lin Thru 0	0.0	88.90	0.00000	0.999995
Zn 213.857	3	Lin Thru 0	0.0	37.73	0.00000	0.999996

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/10/2009 02:42:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	118253.7	118253.7	101	%			02:42:37
1	Al 396.153Radial†	10571.7	10303.1	5099.2	µg/L	5099.2	ppb	02:42:37
1	Ca 317.933Radial†	13538.4	12939.6	5006.6	µg/L	5006.6	ppb	02:42:57
1	Fe 238.204 Radial†	824.2	797.7	5089.8	µg/L	5089.8	ppb	02:42:57
1	K 766.490 Radial†	5468.8	4711.2	2411.1	µg/L	2411.1	ppb	02:42:37
1	Mg 279.077 IEC†	851.6	824.5	5096.1	µg/L	5096.1	ppb	02:42:57
1	Na 589.592 Radial†	9534.0	10037.1	2513.5	µg/L	2513.5	ppb	02:42:37
1	Sr 421.552†	105600.3	104211.4	523.76	µg/L	523.76	ppb	02:42:37
1	Sc 361.383	2030054.5	2030054.5	100.39	%			02:44:01
1	Y 371.029	1258208.0	1258208.0	99.957	%			02:44:01
1	Ag 328.068†	27988.3	27869.9	257.85	µg/L	257.85	ppb	02:44:06
1	As 188.979†	266.8	263.5	477.30	µg/L	477.30	ppb	02:44:27
1	B 249.677†	12099.7	11915.2	514.95	µg/L	514.95	ppb	02:44:06
1	Ba 233.527†	19765.6	19767.4	508.05	µg/L	508.05	ppb	02:44:06
1	Be 313.107†	411393.3	406290.5	254.06	µg/L	254.06	ppb	02:44:01
1	Cd 226.502†	18701.6	18728.4	498.93	µg/L	498.93	ppb	02:44:06
1	Co 228.616†	10482.5	10508.8	508.00	µg/L	508.00	ppb	02:44:06
1	Cr 267.716†	23365.3	23374.9	491.37	µg/L	491.37	ppb	02:44:06
1	Cu 324.752†	77406.1	72837.8	506.33	µg/L	506.33	ppb	02:44:06
1	Mn 257.610†	155319.3	154921.5	495.30	µg/L	495.30	ppb	02:44:01
1	Mo 202.031†	4509.2	4495.5	525.29	µg/L	525.29	ppb	02:44:27
1	Ni 231.604†	9218.5	8907.4	487.33	µg/L	487.33	ppb	02:44:06
1	P 214.914†	1447.1	1240.6	2451.4	µg/L	2451.4	ppb	02:44:27
1	Pb 220.353†	1990.9	1926.9	498.82	µg/L	498.82	ppb	02:44:27
1	S 181.975 Axial†	524.8	500.6	2449.7	µg/L	2449.7	ppb	02:44:27
1	Sb 206.836†	518.7	495.6	483.55	µg/L	483.55	ppb	02:44:27
1	Se 196.026†	1990.8	1973.2	2523.8	µg/L	2523.8	ppb	02:44:27
1	SiO2†	60530.6	57545.7	10567	µg/L	10567	ppb	02:44:06
1	Si 251.611†	67349.6	66764.6	4892.6	µg/L	4892.6	ppb	02:44:06
1	Sn 189.927†	1071.1	1044.6	537.60	µg/L	537.60	ppb	02:44:27
1	Ti 334.940†	216180.0	214571.7	488.50	µg/L	488.50	ppb	02:44:01
1	Tl 190.801†	316.0	335.2	516.96	µg/L	516.96	ppb	02:44:27
1	U 409.014†	5896.1	5142.9	465.48	µg/L	465.48	ppb	02:44:06
1	V 292.402†	43934.5	43891.8	498.56	µg/L	498.56	ppb	02:44:06
1	Zn 213.857†	19285.1	18684.0	491.27	µg/L	491.27	ppb	02:44:06
2	Sc RADIAL	117252.8	117252.8	101	%			02:43:03
2	Al 396.153Radial†	10561.5	10382.0	5138.3	µg/L	5138.3	ppb	02:43:03
2	Ca 317.933Radial†	13539.5	13054.6	5051.1	µg/L	5051.1	ppb	02:43:23
2	Fe 238.204 Radial†	825.9	806.4	5145.1	µg/L	5145.1	ppb	02:43:23
2	K 766.490 Radial†	5526.1	4814.2	2463.8	µg/L	2463.8	ppb	02:43:03
2	Mg 279.077 IEC†	850.1	830.2	5131.2	µg/L	5131.2	ppb	02:43:23
2	Na 589.592 Radial†	9450.3	10034.1	2512.8	µg/L	2512.8	ppb	02:43:03
2	Sr 421.552†	105207.8	104710.1	526.27	µg/L	526.27	ppb	02:43:03
2	Sc 361.383	2026539.7	2026539.7	100.21	%			02:44:34
2	Y 371.029	1256791.4	1256791.4	99.845	%			02:44:34
2	Ag 328.068†	28161.9	28091.5	259.89	µg/L	259.89	ppb	02:44:40
2	As 188.979†	270.5	267.7	484.93	µg/L	484.93	ppb	02:45:00
2	B 249.677†	12175.5	12011.7	519.12	µg/L	519.12	ppb	02:44:40
2	Ba 233.527†	19803.6	19839.4	509.90	µg/L	509.90	ppb	02:44:40
2	Be 313.107†	413927.5	409530.1	256.08	µg/L	256.08	ppb	02:44:34
2	Cd 226.502†	18775.7	18834.7	501.77	µg/L	501.77	ppb	02:44:40
2	Co 228.616†	10502.0	10546.3	509.81	µg/L	509.81	ppb	02:44:40
2	Cr 267.716†	23395.5	23445.4	492.86	µg/L	492.86	ppb	02:44:40
2	Cu 324.752†	77788.3	73352.9	509.91	µg/L	509.91	ppb	02:44:40
2	Mn 257.610†	156423.0	156291.2	499.68	µg/L	499.68	ppb	02:44:34
2	Mo 202.031†	4519.8	4513.9	527.44	µg/L	527.44	ppb	02:45:00
2	Ni 231.604†	9239.8	8944.6	489.37	µg/L	489.37	ppb	02:44:40
2	P 214.914†	1469.2	1265.2	2500.7	µg/L	2500.7	ppb	02:45:00
2	Pb 220.353†	2001.8	1941.3	502.53	µg/L	502.53	ppb	02:45:00

2	S 181.975 Axial†	526.7	503.4	2463.3 µg/L	2463.3 ppb	02:45:00
2	Sb 206.836†	523.6	501.4	489.20 µg/L	489.20 ppb	02:45:00
2	Se 196.026†	1989.7	1975.6	2527.0 µg/L	2527.0 ppb	02:45:00
2	SiO2†	60808.8	57927.9	10637 µg/L	10637 ppb	02:44:40
2	Si 251.611†	67522.3	67053.3	4913.8 µg/L	4913.8 ppb	02:44:40
2	Sn 189.927†	1072.4	1047.7	539.25 µg/L	539.25 ppb	02:45:00
2	Ti 334.940†	217522.1	216284.4	492.39 µg/L	492.39 ppb	02:44:34
2	Tl 190.801†	312.1	331.8	511.81 µg/L	511.81 ppb	02:45:00
2	U 409.014†	6002.1	5258.9	475.98 µg/L	475.98 ppb	02:44:40
2	V 292.402†	44068.7	44101.6	500.96 µg/L	500.96 ppb	02:44:40
2	Zn 213.857†	19329.9	18762.1	493.32 µg/L	493.32 ppb	02:44:40
3	Sc RADIAL	117095.1	117095.1	100 %		02:43:29
3	Al 396.153Radial†	10617.1	10451.6	5173.6 µg/L	5173.6 ppb	02:43:29
3	Ca 317.933Radial†	13602.6	13135.7	5082.5 µg/L	5082.5 ppb	02:43:49
3	Fe 238.204 Radial†	830.4	811.9	5180.2 µg/L	5180.2 ppb	02:43:49
3	K 766.490 Radial†	5536.0	4831.4	2472.7 µg/L	2472.7 ppb	02:43:29
3	Mg 279.077 IEC†	853.6	834.7	5158.8 µg/L	5158.8 ppb	02:43:49
3	Na 589.592 Radial†	9494.4	10090.6	2526.9 µg/L	2526.9 ppb	02:43:29
3	Sr 421.552†	105501.1	105143.2	528.45 µg/L	528.45 ppb	02:43:29
3	Sc 361.383	2023199.8	2023199.8	100.05 %		02:45:07
3	Y 371.029	1256679.8	1256679.8	99.836 %		02:45:07
3	Ag 328.068†	27856.5	27832.6	257.51 µg/L	257.51 ppb	02:45:13
3	As 188.979†	257.6	255.2	462.27 µg/L	462.27 ppb	02:45:34
3	B 249.677†	12047.9	11904.3	514.45 µg/L	514.45 ppb	02:45:13
3	Ba 233.527†	19648.7	19717.3	506.76 µg/L	506.76 ppb	02:45:13
3	Be 313.107†	413871.5	410156.0	256.47 µg/L	256.47 ppb	02:45:07
3	Cd 226.502†	18596.3	18686.3	497.81 µg/L	497.81 ppb	02:45:13
3	Co 228.616†	10405.9	10467.6	505.97 µg/L	505.97 ppb	02:45:13
3	Cr 267.716†	23138.4	23227.0	488.27 µg/L	488.27 ppb	02:45:13
3	Cu 324.752†	77072.0	72765.1	505.84 µg/L	505.84 ppb	02:45:13
3	Mn 257.610†	156264.3	156390.2	500.00 µg/L	500.00 ppb	02:45:07
3	Mo 202.031†	4359.0	4360.6	509.53 µg/L	509.53 ppb	02:45:34
3	Ni 231.604†	9107.2	8827.2	482.95 µg/L	482.95 ppb	02:45:13
3	P 214.914†	1424.4	1222.8	2415.0 µg/L	2415.0 ppb	02:45:34
3	Pb 220.353†	1946.7	1889.5	489.11 µg/L	489.11 ppb	02:45:34
3	S 181.975 Axial†	508.8	486.4	2380.0 µg/L	2380.0 ppb	02:45:34
3	Sb 206.836†	506.0	484.6	472.83 µg/L	472.83 ppb	02:45:34
3	Se 196.026†	1938.2	1927.4	2465.3 µg/L	2465.3 ppb	02:45:34
3	SiO2†	60311.5	57531.0	10565 µg/L	10565 ppb	02:45:13
3	Si 251.611†	66947.1	66589.6	4880.5 µg/L	4880.5 ppb	02:45:13
3	Sn 189.927†	1028.2	1005.3	517.52 µg/L	517.52 ppb	02:45:34
3	Ti 334.940†	217570.8	216691.5	493.32 µg/L	493.32 ppb	02:45:07
3	Tl 190.801†	311.0	331.2	510.87 µg/L	510.87 ppb	02:45:34
3	U 409.014†	5973.8	5240.5	474.31 µg/L	474.31 ppb	02:45:13
3	V 292.402†	43700.4	43806.0	497.51 µg/L	497.51 ppb	02:45:13
3	Zn 213.857†	19164.5	18628.6	489.81 µg/L	489.81 ppb	02:45:13

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026598.0	100.22	%	0.170				0.17%
Sc RADIAL	117533.9	101	%	0.5				0.53%
Y 371.029	1257226.4	99.879	%	0.0677				0.07%
Ag 328.068†	27931.3	258.42	µg/L	1.287	258.42	ppb	1.287	0.50%
QC value within limits for Ag 328.068 Recovery = 103.37%								
Al 396.153Radial†	10378.9	5137.0	µg/L	37.20	5137.0	ppb	37.20	0.72%
QC value within limits for Al 396.153Radial Recovery = 102.74%								
As 188.979†	262.2	474.83	µg/L	11.528	474.83	ppb	11.528	2.43%
QC value within limits for As 188.979 Recovery = 94.97%								
B 249.677†	11943.7	516.17	µg/L	2.563	516.17	ppb	2.563	0.50%
QC value within limits for B 249.677 Recovery = 103.23%								
Ba 233.527†	19774.7	508.24	µg/L	1.578	508.24	ppb	1.578	0.31%
QC value within limits for Ba 233.527 Recovery = 101.65%								
Be 313.107†	408658.9	255.54	µg/L	1.297	255.54	ppb	1.297	0.51%
QC value within limits for Be 313.107 Recovery = 102.22%								
Ca 317.933Radial†	13043.3	5046.7	µg/L	38.13	5046.7	ppb	38.13	0.76%
QC value within limits for Ca 317.933Radial Recovery = 100.93%								
Cd 226.502†	18749.8	499.50	µg/L	2.041	499.50	ppb	2.041	0.41%
QC value within limits for Cd 226.502 Recovery = 99.90%								
Co 228.616†	10507.5	507.93	µg/L	1.925	507.93	ppb	1.925	0.38%

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   QC value within limits for Co 228.616  Recovery = 101.59%
Cr 267.716†            23349.1      490.83 µg/L        2.342      490.83 ppb          2.342   0.48%
   QC value within limits for Cr 267.716  Recovery = 98.17%
Cu 324.752†            72985.2      507.36 µg/L        2.223      507.36 ppb          2.223   0.44%
   QC value within limits for Cu 324.752  Recovery = 101.47%
Fe 238.204 Radial†       805.3      5138.4 µg/L       45.56      5138.4 ppb         45.56   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.77%
K 766.490 Radial†       4785.6      2449.2 µg/L       33.27      2449.2 ppb         33.27   1.36%
   QC value within limits for K 766.490 Radial  Recovery = 97.97%
Mg 279.077 IEC†          829.8      5128.7 µg/L       31.41      5128.7 ppb         31.41   0.61%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.57%
Mn 257.610†           155867.7      498.33 µg/L        2.626      498.33 ppb          2.626   0.53%
   QC value within limits for Mn 257.610  Recovery = 99.67%
Mo 202.031†             4456.6      520.75 µg/L        9.777      520.75 ppb          9.777   1.88%
   QC value within limits for Mo 202.031  Recovery = 104.15%
Na 589.592 Radial†     10054.0      2517.8 µg/L        7.96      2517.8 ppb           7.96   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 100.71%
Ni 231.604†             8893.1      486.55 µg/L        3.281      486.55 ppb          3.281   0.67%
   QC value within limits for Ni 231.604  Recovery = 97.31%
P 214.914†              1242.9      2455.7 µg/L       42.99      2455.7 ppb         42.99   1.75%
   QC value within limits for P 214.914  Recovery = 98.23%
Pb 220.353†             1919.2      496.82 µg/L        6.931      496.82 ppb          6.931   1.40%
   QC value within limits for Pb 220.353  Recovery = 99.36%
S 181.975 Axial†         496.8      2431.0 µg/L       44.69      2431.0 ppb         44.69   1.84%
   QC value within limits for S 181.975 Axial  Recovery = 97.24%
Sb 206.836†              493.9      481.86 µg/L        8.316      481.86 ppb          8.316   1.73%
   QC value within limits for Sb 206.836  Recovery = 96.37%
Se 196.026†             1958.7      2505.4 µg/L       34.74      2505.4 ppb         34.74   1.39%
   QC value within limits for Se 196.026  Recovery = 100.21%
SiO2†                  57668.2       10590 µg/L        41.3       10590 ppb          41.3   0.39%
   QC value within limits for SiO2  Recovery = 99.02%
Si 251.611†            66802.5      4895.6 µg/L       16.81      4895.6 ppb         16.81   0.34%
   QC value within limits for Si 251.611  Recovery = 97.91%
Sn 189.927†             1032.5      531.46 µg/L       12.100      531.46 ppb        12.100   2.28%
   QC value within limits for Sn 189.927  Recovery = 106.29%
Sr 421.552†           104688.2      526.16 µg/L        2.343      526.16 ppb          2.343   0.45%
   QC value within limits for Sr 421.552  Recovery = 105.23%
Ti 334.940†           215849.2      491.40 µg/L        2.560      491.40 ppb          2.560   0.52%
   QC value within limits for Ti 334.940  Recovery = 98.28%
Tl 190.801†              332.7      513.21 µg/L        3.283      513.21 ppb          3.283   0.64%
   QC value within limits for Tl 190.801  Recovery = 102.64%
U 409.014†              5214.1      471.92 µg/L        5.646      471.92 ppb          5.646   1.20%
   QC value within limits for U 409.014  Recovery = 94.38%
V 292.402†             43933.1      499.01 µg/L        1.768      499.01 ppb          1.768   0.35%
   QC value within limits for V 292.402  Recovery = 99.80%
Zn 213.857†            18691.6      491.47 µg/L        1.761      491.47 ppb          1.761   0.36%
   QC value within limits for Zn 213.857  Recovery = 98.29%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/10/2009 02:45:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114557.6	114557.6	98.2	%			02:46:16
1	Al 396.153Radial†	162.5	42.2	20.921	µg/L	20.921	ppb	02:46:16
1	Ca 317.933Radial†	416.5	11.3	4.3776	µg/L	4.3776	ppb	02:46:37
1	Fe 238.204 Radial†	17.3	2.4	15.286	µg/L	15.286	ppb	02:46:37
1	K 766.490 Radial†	624.9	-46.2	-23.667	µg/L	-23.667	ppb	02:46:16
1	Mg 279.077 IEC†	9.0	-6.3	-38.899	µg/L	-38.899	ppb	02:46:37
1	Na 589.592 Radial†	-637.4	-14.8	-3.7070	µg/L	-3.7070	ppb	02:46:16
1	Sr 421.552†	-52.2	9.2	0.0463	µg/L	0.0463	ppb	02:46:16
1	Sc 361.383	1993683.0	1993683.0	98.589	%			02:47:39
1	Y 371.029	1242102.5	1242102.5	98.678	%			02:47:39
1	Ag 328.068†	84.8	75.6	0.6939	µg/L	0.6939	ppb	02:47:44
1	As 188.979†	6.0	3.8	6.9356	µg/L	6.9356	ppb	02:48:05
1	B 249.677†	201.0	66.0	2.8557	µg/L	2.8557	ppb	02:48:05
1	Ba 233.527†	-56.3	20.9	0.5373	µg/L	0.5373	ppb	02:48:05
1	Be 313.107†	4077.6	620.1	0.3877	µg/L	0.3877	ppb	02:47:44
1	Cd 226.502†	-66.5	31.6	0.8372	µg/L	0.8372	ppb	02:48:05
1	Co 228.616†	-59.2	6.6	0.3167	µg/L	0.3167	ppb	02:48:05
1	Cr 267.716†	-81.3	17.3	0.3647	µg/L	0.3647	ppb	02:47:44
1	Cu 324.752†	4264.0	55.2	0.3863	µg/L	0.3863	ppb	02:47:44
1	Mn 257.610†	-57.8	142.7	0.4575	µg/L	0.4575	ppb	02:48:05
1	Mo 202.031†	1.5	5.2	0.6065	µg/L	0.6065	ppb	02:48:05
1	Ni 231.604†	285.7	14.2	0.7768	µg/L	0.7768	ppb	02:48:05
1	P 214.914†	203.7	5.7	11.442	µg/L	11.442	ppb	02:48:05
1	Pb 220.353†	52.4	-3.1	-0.8008	µg/L	-0.8008	ppb	02:48:05
1	S 181.975 Axial†	26.6	4.8	23.664	µg/L	23.664	ppb	02:48:05
1	Sb 206.836†	17.9	-3.0	-2.9003	µg/L	-2.9003	ppb	02:48:05
1	Se 196.026†	17.1	7.5	9.6292	µg/L	9.6292	ppb	02:48:05
1	SiO2†	2802.0	90.7	16.661	µg/L	16.661	ppb	02:47:44
1	Si 251.611†	380.1	60.4	4.3182	µg/L	4.3182	ppb	02:48:05
1	Sn 189.927†	27.8	5.7	2.9337	µg/L	2.9337	ppb	02:48:05
1	Ti 334.940†	1166.6	408.9	0.9311	µg/L	0.9311	ppb	02:47:44
1	Tl 190.801†	-24.7	-4.7	-7.1707	µg/L	-7.1707	ppb	02:48:05
1	U 409.014†	684.6	-36.0	-3.2694	µg/L	-3.2694	ppb	02:47:44
1	V 292.402†	-83.2	42.4	0.4767	µg/L	0.4767	ppb	02:47:44
1	Zn 213.857†	547.1	28.3	0.7460	µg/L	0.7460	ppb	02:48:05
2	Sc RADIAL	114325.9	114325.9	98.0	%			02:46:42
2	Al 396.153Radial†	150.9	30.6	15.182	µg/L	15.182	ppb	02:46:42
2	Ca 317.933Radial†	417.0	12.6	4.8884	µg/L	4.8884	ppb	02:47:03
2	Fe 238.204 Radial†	15.5	0.7	4.4025	µg/L	4.4025	ppb	02:47:03
2	K 766.490 Radial†	639.6	-30.0	-15.364	µg/L	-15.364	ppb	02:46:42
2	Mg 279.077 IEC†	14.7	-0.4	-2.7607	µg/L	-2.7607	ppb	02:47:03
2	Na 589.592 Radial†	-610.4	11.4	2.8562	µg/L	2.8562	ppb	02:46:42
2	Sr 421.552†	-7.6	54.6	0.2743	µg/L	0.2743	ppb	02:46:42
2	Sc 361.383	1993045.4	1993045.4	98.557	%			02:48:11
2	Y 371.029	1242168.7	1242168.7	98.683	%			02:48:11
2	Ag 328.068†	98.8	89.9	0.8206	µg/L	0.8206	ppb	02:48:16
2	As 188.979†	3.5	1.3	2.3811	µg/L	2.3811	ppb	02:48:37
2	B 249.677†	183.9	48.8	2.1121	µg/L	2.1121	ppb	02:48:37
2	Ba 233.527†	-51.5	25.8	0.6624	µg/L	0.6624	ppb	02:48:37
2	Be 313.107†	3759.4	298.6	0.1866	µg/L	0.1866	ppb	02:48:16
2	Cd 226.502†	-76.1	21.8	0.5833	µg/L	0.5833	ppb	02:48:37
2	Co 228.616†	-66.0	-0.3	-0.0145	µg/L	-0.0145	ppb	02:48:37
2	Cr 267.716†	-112.4	-14.3	-0.2990	µg/L	-0.2990	ppb	02:48:16
2	Cu 324.752†	4194.0	-14.3	-0.0985	µg/L	-0.0985	ppb	02:48:16
2	Mn 257.610†	-104.3	95.5	0.3055	µg/L	0.3055	ppb	02:48:37
2	Mo 202.031†	3.3	7.1	0.8237	µg/L	0.8237	ppb	02:48:37
2	Ni 231.604†	295.4	24.2	1.3214	µg/L	1.3214	ppb	02:48:37
2	P 214.914†	194.4	-3.7	-7.4496	µg/L	-7.4496	ppb	02:48:37
2	Pb 220.353†	59.9	4.5	1.1651	µg/L	1.1651	ppb	02:48:37

2	S 181.975 Axial†	28.2	6.4	31.387 µg/L	31.387 ppb	02:48:37
2	Sb 206.836†	21.2	0.4	0.3885 µg/L	0.3885 ppb	02:48:37
2	Se 196.026†	16.4	6.8	8.6516 µg/L	8.6516 ppb	02:48:37
2	SiO2†	2740.3	29.1	5.3415 µg/L	5.3415 ppb	02:48:16
2	Si 251.611†	385.3	65.7	4.8142 µg/L	4.8142 ppb	02:48:37
2	Sn 189.927†	22.8	0.7	0.3848 µg/L	0.3848 ppb	02:48:37
2	Ti 334.940†	1084.0	325.5	0.7411 µg/L	0.7411 ppb	02:48:16
2	Tl 190.801†	-21.4	-1.3	-1.9814 µg/L	-1.9814 ppb	02:48:37
2	U 409.014†	762.9	43.6	3.9560 µg/L	3.9560 ppb	02:48:16
2	V 292.402†	-112.5	12.6	0.1542 µg/L	0.1542 ppb	02:48:16
2	Zn 213.857†	539.5	20.8	0.5439 µg/L	0.5439 ppb	02:48:37
3	Sc RADIAL	112118.0	112118.0	96.1 %		02:47:08
3	Al 396.153Radial†	121.3	2.9	1.4154 µg/L	1.4154 ppb	02:47:08
3	Ca 317.933Radial†	468.8	74.9	28.964 µg/L	28.964 ppb	02:47:28
3	Fe 238.204 Radial†	22.6	8.4	53.142 µg/L	53.142 ppb	02:47:28
3	K 766.490 Radial†	725.0	71.7	36.676 µg/L	36.676 ppb	02:47:08
3	Mg 279.077 IEC†	23.0	8.5	52.405 µg/L	52.405 ppb	02:47:28
3	Na 589.592 Radial†	-600.1	9.9	2.4705 µg/L	2.4705 ppb	02:47:08
3	Sr 421.552†	-61.2	-1.3	-0.0066 µg/L	-0.0066 ppb	02:47:08
3	Sc 361.383	2021689.1	2021689.1	99.974 %		02:48:43
3	Y 371.029	1256954.7	1256954.7	99.858 %		02:48:43
3	Ag 328.068†	119.2	108.8	0.9973 µg/L	0.9973 ppb	02:48:48
3	As 188.979†	6.4	4.2	7.6108 µg/L	7.6108 ppb	02:49:09
3	B 249.677†	155.3	17.5	0.7400 µg/L	0.7400 ppb	02:49:09
3	Ba 233.527†	-67.3	10.7	0.2753 µg/L	0.2753 ppb	02:49:09
3	Be 313.107†	3756.1	241.2	0.1508 µg/L	0.1508 ppb	02:48:48
3	Cd 226.502†	-77.8	21.2	0.5589 µg/L	0.5589 ppb	02:49:09
3	Co 228.616†	-60.7	5.9	0.2849 µg/L	0.2849 ppb	02:49:09
3	Cr 267.716†	-138.1	-38.3	-0.8029 µg/L	-0.8029 ppb	02:48:48
3	Cu 324.752†	4223.1	-45.6	-0.3047 µg/L	-0.3047 ppb	02:48:48
3	Mn 257.610†	-133.7	67.6	0.2226 µg/L	0.2226 ppb	02:49:09
3	Mo 202.031†	-0.6	3.0	0.3556 µg/L	0.3556 ppb	02:49:09
3	Ni 231.604†	280.2	4.7	0.2581 µg/L	0.2581 ppb	02:49:09
3	P 214.914†	192.6	-8.3	-16.786 µg/L	-16.786 ppb	02:49:09
3	Pb 220.353†	48.5	-7.7	-2.0002 µg/L	-2.0002 ppb	02:49:09
3	S 181.975 Axial†	25.9	3.7	18.204 µg/L	18.204 ppb	02:49:09
3	Sb 206.836†	26.2	5.1	4.9871 µg/L	4.9871 ppb	02:49:09
3	Se 196.026†	11.2	1.3	1.6891 µg/L	1.6891 ppb	02:49:09
3	SiO2†	2773.5	22.9	4.2038 µg/L	4.2038 ppb	02:48:48
3	Si 251.611†	360.3	35.2	2.6466 µg/L	2.6466 ppb	02:49:09
3	Sn 189.927†	18.5	-3.9	-1.9748 µg/L	-1.9748 ppb	02:49:09
3	Ti 334.940†	991.3	217.1	0.4930 µg/L	0.4930 ppb	02:48:48
3	Tl 190.801†	-20.4	-0.0	-0.0160 µg/L	-0.0160 ppb	02:49:09
3	U 409.014†	712.4	-17.8	-1.6275 µg/L	-1.6275 ppb	02:48:48
3	V 292.402†	-114.0	12.8	0.1476 µg/L	0.1476 ppb	02:48:48
3	Zn 213.857†	537.1	10.6	0.2722 µg/L	0.2722 ppb	02:49:09

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2002805.8	99.040	%	0.8088				0.82%
Sc RADIAL	113667.2	97.5	%	1.15				1.18%
Y 371.029	1247075.3	99.073	%	0.6797				0.69%
Ag 328.068†	91.4	0.8372	µg/L	0.15243	0.8372	ppb	0.15243	18.21%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	25.2	12.506	µg/L	10.0242	12.506	ppb	10.0242	80.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.1	5.6425	µg/L	2.84456	5.6425	ppb	2.84456	50.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	44.1	1.9026	µg/L	1.07329	1.9026	ppb	1.07329	56.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.1	0.4917	µg/L	0.19752	0.4917	ppb	0.19752	40.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	386.7	0.2417	µg/L	0.12773	0.2417	ppb	0.12773	52.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	32.9	12.743	µg/L	14.0501	12.743	ppb	14.0501	110.25%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	24.8	0.6598	µg/L	0.15407	0.6598	ppb	0.15407	23.35%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.1	0.1957	µg/L	0.18270	0.1957	ppb	0.18270	93.35%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -11.7     -0.2457 µg/L       0.58563     -0.2457 ppb        0.58563 238.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -1.6     -0.0056 µg/L       0.35474     -0.0056 ppb        0.35474 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.8      24.277 µg/L       25.5834      24.277 ppb        25.5834 105.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -1.5     -0.7850 µg/L      32.70716     -0.7850 ppb       32.70716 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.6      3.5817 µg/L      45.98133      3.5817 ppb       45.98133 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              101.9      0.3286 µg/L       0.11914      0.3286 ppb        0.11914  36.26%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.1      0.5953 µg/L       0.23422      0.5953 ppb        0.23422  39.35%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         2.2      0.5399 µg/L       3.68297      0.5399 ppb        3.68297 682.17%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.4      0.7855 µg/L       0.53171      0.7855 ppb        0.53171  67.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.1     -4.2643 µg/L      14.38110     -4.2643 ppb       14.38110 337.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.1     -0.5453 µg/L       1.59802     -0.5453 ppb        1.59802 293.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           5.0      24.419 µg/L        6.6239      24.419 ppb         6.6239  27.13%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.8      0.8251 µg/L       3.96177      0.8251 ppb        3.96177 480.16%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.2      6.6566 µg/L       4.32972      6.6566 ppb        4.32972  65.04%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     47.6      8.7356 µg/L       6.88753      8.7356 ppb        6.88753  78.84%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               53.8      3.9263 µg/L       1.13572      3.9263 ppb        1.13572  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.9      0.4479 µg/L       2.45488      0.4479 ppb        2.45488 548.12%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               20.8      0.1047 µg/L       0.14928      0.1047 ppb        0.14928 142.64%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              317.2      0.7217 µg/L       0.21972      0.7217 ppb        0.21972  30.44%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.0     -3.0560 µg/L       3.69642     -3.0560 ppb        3.69642 120.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -3.4     -0.3137 µg/L       3.78768     -0.3137 ppb        3.78768 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                22.6      0.2595 µg/L       0.18810      0.2595 ppb        0.18810  72.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               19.9      0.5207 µg/L       0.23773      0.5207 ppb        0.23773  45.65%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/10/2009 02:49:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115322.0	115322.0	98.9	%			02:49:51
1	Al 396.153Radial†	556.3	439.3	217.89	µg/L	217.89	ppb	02:49:51
1	Ca 317.933Radial†	947.0	544.9	210.85	µg/L	210.85	ppb	02:50:11
1	Fe 238.204 Radial†	36.7	21.9	139.59	µg/L	139.59	ppb	02:50:11
1	K 766.490 Radial†	1010.1	339.0	173.51	µg/L	173.51	ppb	02:49:51
1	Mg 279.077 IEC†	63.4	48.7	300.59	µg/L	300.59	ppb	02:50:11
1	Na 589.592 Radial†	641.8	1283.2	321.34	µg/L	321.34	ppb	02:49:51
1	Sr 421.552†	966.2	1039.5	5.2245	µg/L	5.2245	ppb	02:49:51
1	Sc 361.383	2008463.3	2008463.3	99.320	%			02:51:13
1	Y 371.029	1249809.3	1249809.3	99.290	%			02:51:13
1	Ag 328.068†	651.9	646.0	5.9341	µg/L	5.9341	ppb	02:51:19
1	As 188.979†	16.8	14.7	26.661	µg/L	26.661	ppb	02:51:39
1	B 249.677†	1270.9	1141.7	49.451	µg/L	49.451	ppb	02:51:19
1	Ba 233.527†	127.0	205.9	5.2929	µg/L	5.2929	ppb	02:51:39
1	Be 313.107†	11369.7	7931.7	4.9613	µg/L	4.9613	ppb	02:51:19
1	Cd 226.502†	90.6	190.2	5.0993	µg/L	5.0993	ppb	02:51:39
1	Co 228.616†	26.6	93.5	4.5307	µg/L	4.5307	ppb	02:51:39
1	Cr 267.716†	123.6	224.2	4.7140	µg/L	4.7140	ppb	02:51:19
1	Cu 324.752†	5710.7	1480.1	10.296	µg/L	10.296	ppb	02:51:19
1	Mn 257.610†	2970.2	3191.9	10.209	µg/L	10.209	ppb	02:51:19
1	Mo 202.031†	85.4	89.7	10.478	µg/L	10.478	ppb	02:51:39
1	Ni 231.604†	369.3	96.2	5.2646	µg/L	5.2646	ppb	02:51:39
1	P 214.914†	266.6	67.5	135.21	µg/L	135.21	ppb	02:51:39
1	Pb 220.353†	91.0	35.4	9.1262	µg/L	9.1262	ppb	02:51:39
1	S 181.975 Axial†	43.3	21.4	104.70	µg/L	104.70	ppb	02:51:39
1	Sb 206.836†	25.8	4.9	4.7700	µg/L	4.7700	ppb	02:51:39
1	Se 196.026†	42.4	32.8	41.910	µg/L	41.910	ppb	02:51:39
1	SiO2†	3925.0	1200.5	220.45	µg/L	220.45	ppb	02:51:19
1	Si 251.611†	1656.6	1342.8	98.556	µg/L	98.556	ppb	02:51:39
1	Sn 189.927†	41.3	19.2	9.9508	µg/L	9.9508	ppb	02:51:39
1	Ti 334.940†	3070.5	2317.1	5.2664	µg/L	5.2664	ppb	02:51:19
1	Tl 190.801†	-6.4	14.0	21.477	µg/L	21.477	ppb	02:51:39
1	U 409.014†	1368.6	647.5	58.689	µg/L	58.689	ppb	02:51:19
1	V 292.402†	316.9	445.8	5.1946	µg/L	5.1946	ppb	02:51:19
1	Zn 213.857†	906.4	386.0	10.165	µg/L	10.165	ppb	02:51:39
2	Sc RADIAL	115523.7	115523.7	99.1	%			02:50:17
2	Al 396.153Radial†	532.9	414.7	205.65	µg/L	205.65	ppb	02:50:17
2	Ca 317.933Radial†	939.0	535.2	207.09	µg/L	207.09	ppb	02:50:37
2	Fe 238.204 Radial†	33.8	19.0	120.97	µg/L	120.97	ppb	02:50:37
2	K 766.490 Radial†	1028.8	356.2	182.30	µg/L	182.30	ppb	02:50:17
2	Mg 279.077 IEC†	68.4	53.6	331.29	µg/L	331.29	ppb	02:50:37
2	Na 589.592 Radial†	652.2	1292.5	323.68	µg/L	323.68	ppb	02:50:17
2	Sr 421.552†	954.5	1025.9	5.1564	µg/L	5.1564	ppb	02:50:17
2	Sc 361.383	2015459.0	2015459.0	99.665	%			02:51:46
2	Y 371.029	1256823.8	1256823.8	99.847	%			02:51:46
2	Ag 328.068†	556.5	548.0	5.0389	µg/L	5.0389	ppb	02:51:51
2	As 188.979†	18.6	16.4	29.742	µg/L	29.742	ppb	02:52:12
2	B 249.677†	1272.3	1138.7	49.327	µg/L	49.327	ppb	02:51:51
2	Ba 233.527†	119.4	197.9	5.0854	µg/L	5.0854	ppb	02:52:12
2	Be 313.107†	11424.6	7947.1	4.9709	µg/L	4.9709	ppb	02:51:51
2	Cd 226.502†	91.2	190.4	5.0976	µg/L	5.0976	ppb	02:52:12
2	Co 228.616†	31.1	97.9	4.7428	µg/L	4.7428	ppb	02:52:12
2	Cr 267.716†	138.5	238.7	5.0182	µg/L	5.0182	ppb	02:51:51
2	Cu 324.752†	5720.5	1469.9	10.222	µg/L	10.222	ppb	02:51:51
2	Mn 257.610†	3029.4	3240.9	10.364	µg/L	10.364	ppb	02:51:51
2	Mo 202.031†	86.0	90.0	10.513	µg/L	10.513	ppb	02:52:12
2	Ni 231.604†	385.2	110.9	6.0691	µg/L	6.0691	ppb	02:52:12
2	P 214.914†	274.4	74.4	149.23	µg/L	149.23	ppb	02:52:12
2	Pb 220.353†	96.1	40.2	10.374	µg/L	10.374	ppb	02:52:12

2	S 181.975 Axial†	44.2	22.2	108.55 µg/L	108.55 ppb	02:52:12
2	Sb 206.836†	34.3	13.3	12.965 µg/L	12.965 ppb	02:52:12
2	Se 196.026†	46.4	36.7	46.905 µg/L	46.905 ppb	02:52:12
2	SiO2†	3881.9	1143.6	210.00 µg/L	210.00 ppb	02:51:51
2	Si 251.611†	1658.5	1338.9	98.166 µg/L	98.166 ppb	02:52:12
2	Sn 189.927†	46.1	23.8	12.323 µg/L	12.323 ppb	02:52:12
2	Ti 334.940†	3148.5	2384.7	5.4205 µg/L	5.4205 ppb	02:51:51
2	Tl 190.801†	-10.9	9.5	14.556 µg/L	14.556 ppb	02:52:12
2	U 409.014†	1217.7	491.4	44.533 µg/L	44.533 ppb	02:51:51
2	V 292.402†	311.2	438.9	5.0928 µg/L	5.0928 ppb	02:51:51
2	Zn 213.857†	900.6	376.9	9.9224 µg/L	9.9224 ppb	02:52:12
3	Sc RADIAL	114605.5	114605.5	98.3 %		02:50:43
3	Al 396.153Radial†	570.2	456.9	226.64 µg/L	226.64 ppb	02:50:43
3	Ca 317.933Radial†	920.6	524.1	202.77 µg/L	202.77 ppb	02:51:03
3	Fe 238.204 Radial†	35.0	20.4	129.93 µg/L	129.93 ppb	02:51:03
3	K 766.490 Radial†	1005.7	341.0	174.50 µg/L	174.50 ppb	02:50:43
3	Mg 279.077 IEC†	62.3	48.0	296.25 µg/L	296.25 ppb	02:51:03
3	Na 589.592 Radial†	596.4	1241.1	310.80 µg/L	310.80 ppb	02:50:43
3	Sr 421.552†	965.6	1044.9	5.2517 µg/L	5.2517 ppb	02:50:43
3	Sc 361.383	2024345.6	2024345.6	100.10 %		02:52:18
3	Y 371.029	1263256.8	1263256.8	100.36 %		02:52:18
3	Ag 328.068†	582.5	571.5	5.2543 µg/L	5.2543 ppb	02:52:23
3	As 188.979†	18.2	16.0	28.974 µg/L	28.974 ppb	02:52:44
3	B 249.677†	1244.1	1104.9	47.859 µg/L	47.859 ppb	02:52:23
3	Ba 233.527†	117.2	195.1	5.0147 µg/L	5.0147 ppb	02:52:44
3	Be 313.107†	11278.2	7750.5	4.8480 µg/L	4.8480 ppb	02:52:23
3	Cd 226.502†	81.0	179.9	4.8190 µg/L	4.8190 ppb	02:52:44
3	Co 228.616†	33.9	100.6	4.8719 µg/L	4.8719 ppb	02:52:44
3	Cr 267.716†	131.8	231.5	4.8657 µg/L	4.8657 ppb	02:52:23
3	Cu 324.752†	5701.2	1425.5	9.9155 µg/L	9.9155 ppb	02:52:23
3	Mn 257.610†	2953.5	3151.8	10.080 µg/L	10.080 ppb	02:52:23
3	Mo 202.031†	84.0	87.6	10.239 µg/L	10.239 ppb	02:52:44
3	Ni 231.604†	373.8	97.8	5.3508 µg/L	5.3508 ppb	02:52:44
3	P 214.914†	267.3	66.1	132.42 µg/L	132.42 ppb	02:52:44
3	Pb 220.353†	91.6	35.3	9.1064 µg/L	9.1064 ppb	02:52:44
3	S 181.975 Axial†	40.4	18.2	89.053 µg/L	89.053 ppb	02:52:44
3	Sb 206.836†	23.9	2.8	2.6916 µg/L	2.6916 ppb	02:52:44
3	Se 196.026†	34.7	24.8	31.669 µg/L	31.669 ppb	02:52:44
3	SiO2†	3909.0	1153.5	211.82 µg/L	211.82 ppb	02:52:23
3	Si 251.611†	1646.8	1319.8	96.955 µg/L	96.955 ppb	02:52:44
3	Sn 189.927†	36.9	14.4	7.5091 µg/L	7.5091 ppb	02:52:44
3	Ti 334.940†	3105.4	2327.7	5.2909 µg/L	5.2909 ppb	02:52:23
3	Tl 190.801†	-5.1	15.2	23.422 µg/L	23.422 ppb	02:52:44
3	U 409.014†	1281.7	549.9	49.844 µg/L	49.844 ppb	02:52:23
3	V 292.402†	313.2	439.6	5.1073 µg/L	5.1073 ppb	02:52:23
3	Zn 213.857†	898.7	371.1	9.7717 µg/L	9.7717 ppb	02:52:44

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2016089.3	99.697	%	0.3936				0.39%
Sc RADIAL	115150.4	98.7	%	0.41				0.42%
Y 371.029	1256630.0	99.832	%	0.5343				0.54%
Ag 328.068†	588.5	5.4091	µg/L	0.46727	5.4091	ppb	0.46727	8.64%
QC value within limits for Ag 328.068 Recovery = 108.18%								
Al 396.153Radial†	437.0	216.73	µg/L	10.544	216.73	ppb	10.544	4.87%
QC value within limits for Al 396.153Radial Recovery = 108.36%								
As 188.979†	15.7	28.459	µg/L	1.6037	28.459	ppb	1.6037	5.64%
QC value within limits for As 188.979 Recovery = 94.86%								
B 249.677†	1128.4	48.879	µg/L	0.8857	48.879	ppb	0.8857	1.81%
QC value within limits for B 249.677 Recovery = 97.76%								
Ba 233.527†	199.6	5.1310	µg/L	0.14457	5.1310	ppb	0.14457	2.82%
QC value within limits for Ba 233.527 Recovery = 102.62%								
Be 313.107†	7876.4	4.9267	µg/L	0.06839	4.9267	ppb	0.06839	1.39%
QC value within limits for Be 313.107 Recovery = 98.53%								
Ca 317.933Radial†	534.7	206.90	µg/L	4.042	206.90	ppb	4.042	1.95%
QC value within limits for Ca 317.933Radial Recovery = 103.45%								
Cd 226.502†	186.8	5.0053	µg/L	0.16132	5.0053	ppb	0.16132	3.22%
QC value within limits for Cd 226.502 Recovery = 100.11%								
Co 228.616†	97.3	4.7151	µg/L	0.17226	4.7151	ppb	0.17226	3.65%

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   QC value within limits for Co 228.616  Recovery = 94.30%
Cr 267.716†              231.5      4.8660 µg/L       0.15212      4.8660 ppb        0.15212   3.13%
   QC value within limits for Cr 267.716  Recovery = 97.32%
Cu 324.752†             1458.5      10.145 µg/L        0.2018      10.145 ppb         0.2018   1.99%
   QC value within limits for Cu 324.752  Recovery = 101.45%
Fe 238.204 Radial†        20.4      130.17 µg/L         9.310      130.17 ppb          9.310   7.15%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 130.17%
K 766.490 Radial†        345.4      176.77 µg/L         4.815      176.77 ppb          4.815   2.72%
   QC value within limits for K 766.490 Radial  Recovery = 117.84%
Mg 279.077 IEC†           50.1      309.38 µg/L        19.098      309.38 ppb         19.098   6.17%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.13%
Mn 257.610†             3194.9      10.218 µg/L        0.1420      10.218 ppb         0.1420   1.39%
   QC value within limits for Mn 257.610  Recovery = 102.18%
Mo 202.031†               89.1      10.410 µg/L        0.1491      10.410 ppb         0.1491   1.43%
   QC value within limits for Mo 202.031  Recovery = 104.10%
Na 589.592 Radial†      1272.3      318.61 µg/L         6.866      318.61 ppb          6.866   2.15%
   QC value within limits for Na 589.592 Radial  Recovery = 106.20%
Ni 231.604†              101.7      5.5615 µg/L       0.44174      5.5615 ppb        0.44174   7.94%
   QC value within limits for Ni 231.604  Recovery = 111.23%
P 214.914†                69.3      138.95 µg/L         9.013      138.95 ppb          9.013   6.49%
   QC value within limits for P 214.914  Recovery = 92.64%
Pb 220.353†               36.9      9.5355 µg/L       0.72606      9.5355 ppb        0.72606   7.61%
   QC value within limits for Pb 220.353  Recovery = 95.35%
S 181.975 Axial†          20.6      100.77 µg/L        10.325      100.77 ppb         10.325  10.25%
   QC value within limits for S 181.975 Axial  Recovery = 100.77%
Sb 206.836†                7.0      6.8090 µg/L       5.43193      6.8090 ppb        5.43193  79.78%
   QC value less than the lower limit for Sb 206.836  Recovery = 68.09%
Se 196.026†               31.4      40.161 µg/L        7.7671      40.161 ppb         7.7671  19.34%
   QC value greater than the upper limit for Se 196.026  Recovery = 133.87%
SiO2†                   1165.9      214.09 µg/L         5.585      214.09 ppb          5.585   2.61%
   QC value within limits for SiO2  Recovery = 100.51%
Si 251.611†             1333.8      97.893 µg/L        0.8347      97.893 ppb         0.8347   0.85%
   QC value within limits for Si 251.611  Recovery = 97.89%
Sn 189.927†               19.1      9.9277 µg/L       2.40711      9.9277 ppb        2.40711  24.25%
   QC value within limits for Sn 189.927  Recovery = 99.28%
Sr 421.552†             1036.8      5.2109 µg/L       0.04911      5.2109 ppb        0.04911   0.94%
   QC value within limits for Sr 421.552  Recovery = 104.22%
Ti 334.940†             2343.2      5.3259 µg/L       0.08282      5.3259 ppb        0.08282   1.56%
   QC value within limits for Ti 334.940  Recovery = 106.52%
Tl 190.801†               12.9      19.818 µg/L        4.6603      19.818 ppb         4.6603  23.52%
   QC value within limits for Tl 190.801  Recovery = 99.09%
U 409.014†               562.9      51.022 µg/L        7.1510      51.022 ppb         7.1510  14.02%
   QC value within limits for U 409.014  Recovery = 102.04%
V 292.402†               441.5      5.1315 µg/L       0.05505      5.1315 ppb        0.05505   1.07%
   QC value within limits for V 292.402  Recovery = 102.63%
Zn 213.857†              378.0      9.9531 µg/L       0.19848      9.9531 ppb        0.19848   1.99%
   QC value within limits for Zn 213.857  Recovery = 99.53%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/10/2009 02:52:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112284.4	112284.4	96.3	%			02:53:34
1	Al 396.153Radial†	1015707.8	1054881.9	524130	µg/L	524130	ppb	02:53:28
1	Ca 317.933Radial†	1243220.2	1290907.3	499480	µg/L	499480	ppb	02:53:28
1	Fe 238.204 Radial†	28495.3	29582.6	188130	µg/L	188130	ppb	02:53:34
1	K 766.490 Radial†	709.1	54.0	27.649	µg/L	27.649	ppb	02:53:34
1	Mg 279.077 IEC†	76114.9	79044.3	487750	µg/L	487750	ppb	02:53:34
1	Na 589.592 Radial†	-514.9	99.3	24.864	µg/L	24.864	ppb	02:53:34
1	Sr 421.552†	642.9	730.1	3.6695	µg/L	3.6695	ppb	02:53:34
1	Sc 361.383	1866598.6	1866598.6	92.304	%			02:54:08
1	Y 371.029	1133613.3	1133613.3	90.059	%			02:54:08
1	Ag 328.068†	-1920.8	-2091.4	-4.3283	µg/L	-4.3283	ppb	02:54:08
1	As 188.979†	38.4	39.3	-31.699	µg/L	-31.699	ppb	02:54:28
1	B 249.677†	1997.6	2026.3	28.683	µg/L	28.683	ppb	02:54:08
1	Ba 233.527†	160.1	251.5	6.4179	µg/L	6.4179	ppb	02:54:28
1	Be 313.107†	2543.5	-760.3	-0.4856	µg/L	-0.4856	ppb	02:54:08
1	Cd 226.502†	534.1	677.6	3.4787	µg/L	3.4787	ppb	02:54:28
1	Co 228.616†	-89.8	-30.6	-1.5652	µg/L	-1.5652	ppb	02:54:28
1	Cr 267.716†	-238.3	-158.4	-3.3577	µg/L	-3.3577	ppb	02:54:28
1	Cu 324.752†	-399.3	-4702.3	7.7929	µg/L	7.7929	ppb	02:54:08
1	Mn 257.610†	-2429.5	-2430.7	15.887	µg/L	15.887	ppb	02:54:08
1	Mo 202.031†	-107.2	-112.4	-5.7399	µg/L	-5.7399	ppb	02:54:28
1	Ni 231.604†	248.6	-6.2	-0.3418	µg/L	-0.3418	ppb	02:54:28
1	P 214.914†	200.1	15.9	3.2456	µg/L	3.2456	ppb	02:54:28
1	Pb 220.353†	-65.1	-126.8	10.533	µg/L	10.533	ppb	02:54:28
1	S 181.975 Axial†	59.1	41.8	107.26	µg/L	107.26	ppb	02:54:28
1	Sb 206.836†	65.0	49.3	1.5449	µg/L	1.5449	ppb	02:54:28
1	Se 196.026†	21.8	13.7	18.143	µg/L	18.143	ppb	02:54:28
1	SiO2†	2554.5	16.1	2.9532	µg/L	2.9532	ppb	02:54:28
1	Si 251.611†	556.6	277.8	28.684	µg/L	28.684	ppb	02:54:28
1	Sn 189.927†	-393.6	-448.8	0.6631	µg/L	0.6631	ppb	02:54:28
1	Ti 334.940†	11442.8	11622.4	-1.6106	µg/L	-1.6106	ppb	02:54:08
1	Tl 190.801†	31.2	54.2	16.520	µg/L	16.520	ppb	02:54:28
1	U 409.014†	992.8	345.1	8.0003	µg/L	8.0003	ppb	02:54:08
1	V 292.402†	-1390.2	-1379.4	-0.2096	µg/L	-0.2096	ppb	02:54:08
1	Zn 213.857†	1761.8	1382.0	3.3392	µg/L	3.3392	ppb	02:54:28
2	Sc RADIAL	112711.7	112711.7	96.6	%			02:53:45
2	Al 396.153Radial†	1005475.3	1040294.3	516880	µg/L	516880	ppb	02:53:40
2	Ca 317.933Radial†	1227908.3	1270167.9	491450	µg/L	491450	ppb	02:53:40
2	Fe 238.204 Radial†	28859.6	29847.4	189810	µg/L	189810	ppb	02:53:45
2	K 766.490 Radial†	684.3	25.6	13.098	µg/L	13.098	ppb	02:53:45
2	Mg 279.077 IEC†	76926.0	79583.9	491080	µg/L	491080	ppb	02:53:45
2	Na 589.592 Radial†	-506.3	110.2	27.589	µg/L	27.589	ppb	02:53:45
2	Sr 421.552†	661.6	746.9	3.7537	µg/L	3.7537	ppb	02:53:45
2	Sc 361.383	1873254.9	1873254.9	92.633	%			02:54:35
2	Y 371.029	1142871.7	1142871.7	90.794	%			02:54:35
2	Ag 328.068†	-1934.3	-2098.5	-4.2628	µg/L	-4.2628	ppb	02:54:35
2	As 188.979†	38.5	39.4	-30.675	µg/L	-30.675	ppb	02:54:56
2	B 249.677†	2043.5	2068.2	29.971	µg/L	29.971	ppb	02:54:35
2	Ba 233.527†	151.7	241.8	6.1692	µg/L	6.1692	ppb	02:54:56
2	Be 313.107†	2471.1	-848.3	-0.5407	µg/L	-0.5407	ppb	02:54:35
2	Cd 226.502†	545.1	687.4	3.6100	µg/L	3.6100	ppb	02:54:56
2	Co 228.616†	-87.2	-27.4	-1.4096	µg/L	-1.4096	ppb	02:54:56
2	Cr 267.716†	-227.7	-146.0	-3.0984	µg/L	-3.0984	ppb	02:54:56
2	Cu 324.752†	-452.2	-4757.9	7.7691	µg/L	7.7691	ppb	02:54:35
2	Mn 257.610†	-2446.7	-2439.9	16.069	µg/L	16.069	ppb	02:54:35
2	Mo 202.031†	-97.6	-101.7	-4.4138	µg/L	-4.4138	ppb	02:54:56
2	Ni 231.604†	242.3	-14.0	-0.7661	µg/L	-0.7661	ppb	02:54:56
2	P 214.914†	201.6	16.7	0.2447	µg/L	0.2447	ppb	02:54:56
2	Pb 220.353†	-63.1	-124.4	10.514	µg/L	10.514	ppb	02:54:56

2	S 181.975 Axial†	61.1	43.8	116.04 µg/L	116.04 ppb	02:54:56
2	Sb 206.836†	52.4	35.5	-11.281 µg/L	-11.281 ppb	02:54:56
2	Se 196.026†	23.3	15.3	18.845 µg/L	18.845 ppb	02:54:56
2	SiO2†	2468.5	-86.6	-15.897 µg/L	-15.897 ppb	02:54:56
2	Si 251.611†	443.7	153.8	19.663 µg/L	19.663 ppb	02:54:56
2	Sn 189.927†	-403.5	-458.0	-4.9572 µg/L	-4.9572 ppb	02:54:56
2	Ti 334.940†	11563.8	11709.0	-0.9623 µg/L	-0.9623 ppb	02:54:35
2	Tl 190.801†	23.3	45.5	4.2671 µg/L	4.2671 ppb	02:54:56
2	U 409.014†	1037.9	390.0	11.562 µg/L	11.562 ppb	02:54:35
2	V 292.402†	-1425.8	-1412.5	-0.4293 µg/L	-0.4293 ppb	02:54:35
2	Zn 213.857†	1769.1	1383.1	3.0996 µg/L	3.0996 ppb	02:54:56
3	Sc RADIAL	112495.2	112495.2	96.5 %		02:53:57
3	Al 396.153Radial†	1006819.3	1043689.7	518570 µg/L	518570 ppb	02:53:51
3	Ca 317.933Radial†	1229286.9	1274041.9	492950 µg/L	492950 ppb	02:53:51
3	Fe 238.204 Radial†	29027.8	30079.2	191290 µg/L	191290 ppb	02:53:57
3	K 766.490 Radial†	730.1	74.5	38.107 µg/L	38.107 ppb	02:53:57
3	Mg 279.077 IEC†	77486.5	80318.2	495610 µg/L	495610 ppb	02:53:57
3	Na 589.592 Radial†	-526.4	88.4	22.139 µg/L	22.139 ppb	02:53:57
3	Sr 421.552†	607.3	691.9	3.4774 µg/L	3.4774 ppb	02:53:57
3	Sc 361.383	1863246.7	1863246.7	92.139 %		02:55:03
3	Y 371.029	1138140.3	1138140.3	90.418 %		02:55:03
3	Ag 328.068†	-1947.6	-2124.1	-4.3788 µg/L	-4.3788 ppb	02:55:03
3	As 188.979†	38.4	39.5	-30.950 µg/L	-30.950 ppb	02:55:23
3	B 249.677†	2007.8	2041.3	28.340 µg/L	28.340 ppb	02:55:03
3	Ba 233.527†	158.2	249.8	6.3738 µg/L	6.3738 ppb	02:55:23
3	Be 313.107†	2432.0	-876.3	-0.5583 µg/L	-0.5583 ppb	02:55:03
3	Cd 226.502†	557.8	704.4	3.9605 µg/L	3.9605 ppb	02:55:23
3	Co 228.616†	-87.8	-28.7	-1.4688 µg/L	-1.4688 ppb	02:55:23
3	Cr 267.716†	-213.8	-132.2	-2.8101 µg/L	-2.8101 ppb	02:55:23
3	Cu 324.752†	-452.9	-4761.4	8.0619 µg/L	8.0619 ppb	02:55:03
3	Mn 257.610†	-2442.6	-2449.7	16.223 µg/L	16.223 ppb	02:55:03
3	Mo 202.031†	-99.4	-104.2	-4.6498 µg/L	-4.6498 ppb	02:55:23
3	Ni 231.604†	233.8	-21.8	-1.1926 µg/L	-1.1926 ppb	02:55:23
3	P 214.914†	210.0	27.0	19.822 µg/L	19.822 ppb	02:55:23
3	Pb 220.353†	-69.8	-132.0	8.6465 µg/L	8.6465 ppb	02:55:23
3	S 181.975 Axial†	43.5	25.1	23.779 µg/L	23.779 ppb	02:55:23
3	Sb 206.836†	60.3	44.3	-2.7487 µg/L	-2.7487 ppb	02:55:23
3	Se 196.026†	20.9	12.8	15.013 µg/L	15.013 ppb	02:55:23
3	SiO2†	2453.2	-88.9	-16.320 µg/L	-16.320 ppb	02:55:23
3	Si 251.611†	419.1	129.6	17.968 µg/L	17.968 ppb	02:55:23
3	Sn 189.927†	-405.9	-463.0	-6.0982 µg/L	-6.0982 ppb	02:55:23
3	Ti 334.940†	11534.2	11744.0	-0.9669 µg/L	-0.9669 ppb	02:55:03
3	Tl 190.801†	19.9	41.9	-1.3947 µg/L	-1.3947 ppb	02:55:23
3	U 409.014†	1202.3	574.5	28.050 µg/L	28.050 ppb	02:55:03
3	V 292.402†	-1399.5	-1392.2	-0.0560 µg/L	-0.0560 ppb	02:55:03
3	Zn 213.857†	1767.2	1391.4	3.0406 µg/L	3.0406 ppb	02:55:23

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1867700.1	92.359	%	0.2519				0.27%
Sc RADIAL	112497.1	96.5	%	0.18				0.19%
Y 371.029	1138208.4	90.424	%	0.3678				0.41%
Ag 328.068†	-2104.7	-4.3233	µg/L	0.05814	-4.3233	ppb	0.05814	1.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1046288.6	519860	µg/L	3792.6	519860	ppb	3792.6	0.73%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	39.4	-31.108	µg/L	0.5301	-31.108	ppb	0.5301	1.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2045.2	28.998	µg/L	0.8600	28.998	ppb	0.8600	2.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	247.7	6.3203	µg/L	0.13273	6.3203	ppb	0.13273	2.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-828.3	-0.5282	µg/L	0.03794	-0.5282	ppb	0.03794	7.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1278372.3	494630	µg/L	4266.6	494630	ppb	4266.6	0.86%
QC value within limits for Ca 317.933Radial Recovery = 98.93%								
Cd 226.502†	689.8	3.6831	µg/L	0.24907	3.6831	ppb	0.24907	6.76%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-28.9	-1.4812	µg/L	0.07852	-1.4812	ppb	0.07852	5.30%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -145.5     -3.0888 µg/L      0.27393     -3.0888 ppb       0.27393   8.87%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4740.5      7.8746 µg/L      0.16259      7.8746 ppb       0.16259   2.06%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    29836.4      189740 µg/L       1580.1      189740 ppb        1580.1   0.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.87%
K 766.490 Radial†         51.4      26.285 µg/L      12.5603      26.285 ppb       12.5603  47.79%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       79648.8      491480 µg/L       3945.4      491480 ppb        3945.4   0.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.30%
Mn 257.610†           -2440.1      16.060 µg/L       0.1684      16.060 ppb        0.1684   1.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -106.1     -4.9345 µg/L      0.70739     -4.9345 ppb       0.70739  14.34%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        99.3      24.864 µg/L       2.7250      24.864 ppb        2.7250  10.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -14.0     -0.7669 µg/L      0.42541     -0.7669 ppb       0.42541  55.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                19.9      7.7708 µg/L     10.54396      7.7708 ppb      10.54396 135.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -127.7      9.8980 µg/L      1.08392      9.8980 ppb       1.08392  10.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          36.9      82.359 µg/L      50.9214      82.359 ppb       50.9214  61.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               43.0     -4.1615 µg/L      6.52845     -4.1615 ppb       6.52845 156.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               13.9      17.334 µg/L       2.0398      17.334 ppb        2.0398  11.77%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -53.1     -9.7546 µg/L     11.00728     -9.7546 ppb      11.00728 112.84%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              187.0      22.105 µg/L       5.7601      22.105 ppb        5.7601  26.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -456.6     -3.4641 µg/L      3.61953     -3.4641 ppb       3.61953 104.49%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              723.0      3.6336 µg/L      0.14167      3.6336 ppb       0.14167   3.90%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11691.8     -1.1800 µg/L      0.37299     -1.1800 ppb       0.37299  31.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               47.2      6.4642 µg/L      9.15726      6.4642 ppb       9.15726 141.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               436.5      15.871 µg/L      10.6968      15.871 ppb       10.6968  67.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1394.7     -0.2316 µg/L      0.18758     -0.2316 ppb       0.18758  80.98%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             1385.5      3.1598 µg/L      0.15811      3.1598 ppb       0.15811   5.00%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/10/2009 02:55:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112601.6	112601.6	96.5	%			02:56:12
1	Al 396.153Radial†	1002078.1	1037792.7	515620	µg/L	515620	ppb	02:56:06
1	Ca 317.933Radial†	1224021.9	1267384.6	490380	µg/L	490380	ppb	02:56:06
1	Fe 238.204 Radial†	29078.7	30103.5	191460	µg/L	191460	ppb	02:56:12
1	K 766.490 Radial†	10580.2	10276.1	5259.2	µg/L	5259.2	ppb	02:56:12
1	Mg 279.077 IEC†	78014.1	80788.7	498530	µg/L	498530	ppb	02:56:12
1	Na 589.592 Radial†	19777.2	21118.6	5288.6	µg/L	5288.6	ppb	02:56:12
1	Sr 421.552†	98444.3	102027.3	512.79	µg/L	512.79	ppb	02:56:12
1	Sc 361.383	1861040.3	1861040.3	92.029	%			02:56:46
1	Y 371.029	1136362.9	1136362.9	90.277	%			02:56:46
1	Ag 328.068†	25163.6	27332.5	267.64	µg/L	267.64	ppb	02:56:52
1	As 188.979†	302.0	325.9	489.95	µg/L	489.95	ppb	02:57:13
1	B 249.677†	12970.8	13956.4	544.83	µg/L	544.83	ppb	02:56:52
1	Ba 233.527†	17722.2	19335.2	496.96	µg/L	496.96	ppb	02:56:52
1	Be 313.107†	359334.4	386940.2	241.93	µg/L	241.93	ppb	02:56:46
1	Cd 226.502†	16681.3	18225.0	471.04	µg/L	471.04	ppb	02:56:52
1	Co 228.616†	8163.5	8937.2	431.87	µg/L	431.87	ppb	02:57:13
1	Cr 267.716†	20819.9	22722.9	477.69	µg/L	477.69	ppb	02:56:52
1	Cu 324.752†	73247.1	75321.2	563.58	µg/L	563.58	ppb	02:56:52
1	Mn 257.610†	133074.9	144801.8	486.42	µg/L	486.42	ppb	02:56:52
1	Mo 202.031†	3789.8	4121.7	488.96	µg/L	488.96	ppb	02:57:13
1	Ni 231.604†	7555.0	7933.8	434.07	µg/L	434.07	ppb	02:57:13
1	P 214.914†	1349.7	1265.7	2463.6	µg/L	2463.6	ppb	02:57:13
1	Pb 220.353†	1627.4	1712.1	485.31	µg/L	485.31	ppb	02:57:13
1	S 181.975 Axial†	550.8	576.4	2722.6	µg/L	2722.6	ppb	02:57:13
1	Sb 206.836†	532.1	557.1	498.43	µg/L	498.43	ppb	02:57:13
1	Se 196.026†	1681.3	1817.1	2319.4	µg/L	2319.4	ppb	02:57:13
1	SiO2†	57741.9	59991.5	11016	µg/L	11016	ppb	02:56:52
1	Si 251.611†	64526.9	69790.4	5124.5	µg/L	5124.5	ppb	02:56:52
1	Sn 189.927†	520.8	543.5	509.35	µg/L	509.35	ppb	02:57:13
1	Ti 334.940†	216652.8	234642.5	506.92	µg/L	506.92	ppb	02:56:52
1	Tl 190.801†	289.6	335.0	452.28	µg/L	452.28	ppb	02:57:13
1	U 409.014†	5516.3	5263.6	453.12	µg/L	453.12	ppb	02:56:52
1	V 292.402†	40099.2	43698.9	511.31	µg/L	511.31	ppb	02:56:52
1	Zn 213.857†	18245.0	19298.6	474.50	µg/L	474.50	ppb	02:56:52
2	Sc RADIAL	114472.9	114472.9	98.2	%			02:56:24
2	Al 396.153Radial†	1001900.0	1020644.4	507100	µg/L	507100	ppb	02:56:18
2	Ca 317.933Radial†	1224144.8	1246784.9	482410	µg/L	482410	ppb	02:56:18
2	Fe 238.204 Radial†	29309.9	29846.7	189820	µg/L	189820	ppb	02:56:24
2	K 766.490 Radial†	10657.2	10175.4	5207.6	µg/L	5207.6	ppb	02:56:24
2	Mg 279.077 IEC†	78509.6	79972.7	493490	µg/L	493490	ppb	02:56:24
2	Na 589.592 Radial†	19883.7	20892.3	5231.9	µg/L	5231.9	ppb	02:56:24
2	Sr 421.552†	99154.4	101084.0	508.05	µg/L	508.05	ppb	02:56:24
2	Sc 361.383	1864640.5	1864640.5	92.207	%			02:57:19
2	Y 371.029	1139661.9	1139661.9	90.539	%			02:57:19
2	Ag 328.068†	25128.0	27241.2	266.68	µg/L	266.68	ppb	02:57:25
2	As 188.979†	304.2	327.7	494.68	µg/L	494.68	ppb	02:57:46
2	B 249.677†	12999.5	13960.2	545.52	µg/L	545.52	ppb	02:57:25
2	Ba 233.527†	17730.6	19307.0	496.24	µg/L	496.24	ppb	02:57:25
2	Be 313.107†	357681.5	384393.8	240.34	µg/L	240.34	ppb	02:57:19
2	Cd 226.502†	16651.6	18157.8	469.38	µg/L	469.38	ppb	02:57:25
2	Co 228.616†	8165.5	8922.2	431.14	µg/L	431.14	ppb	02:57:46
2	Cr 267.716†	20852.4	22714.5	477.52	µg/L	477.52	ppb	02:57:25
2	Cu 324.752†	73328.3	75255.6	562.78	µg/L	562.78	ppb	02:57:25
2	Mn 257.610†	133083.4	144531.8	485.35	µg/L	485.35	ppb	02:57:25
2	Mo 202.031†	3796.7	4121.2	488.83	µg/L	488.83	ppb	02:57:46
2	Ni 231.604†	7539.1	7900.6	432.25	µg/L	432.25	ppb	02:57:46
2	P 214.914†	1354.9	1268.5	2468.3	µg/L	2468.3	ppb	02:57:46
2	Pb 220.353†	1626.5	1707.7	483.44	µg/L	483.44	ppb	02:57:46

2	S 181.975 Axial†	547.4	571.5	2699.4 µg/L	2699.4 ppb	02:57:46
2	Sb 206.836†	530.4	554.1	496.31 µg/L	496.31 ppb	02:57:46
2	Se 196.026†	1676.1	1807.9	2307.4 µg/L	2307.4 ppb	02:57:46
2	SiO2†	57868.5	60007.7	11019 µg/L	11019 ppb	02:57:25
2	Si 251.611†	64657.3	69796.4	5124.9 µg/L	5124.9 ppb	02:57:25
2	Sn 189.927†	526.3	548.4	508.89 µg/L	508.89 ppb	02:57:46
2	Ti 334.940†	217071.3	234641.8	507.37 µg/L	507.37 ppb	02:57:25
2	Tl 190.801†	297.3	342.8	465.33 µg/L	465.33 ppb	02:57:46
2	U 409.014†	5585.4	5327.0	458.99 µg/L	458.99 ppb	02:57:25
2	V 292.402†	40196.6	43720.5	511.43 µg/L	511.43 ppb	02:57:25
2	Zn 213.857†	18311.6	19332.6	475.73 µg/L	475.73 ppb	02:57:25
3	Sc RADIAL	113610.9	113610.9	97.4 %		02:56:35
3	Al 396.153Radial†	1006505.3	1033117.4	513290 µg/L	513290 ppb	02:56:30
3	Ca 317.933Radial†	1229991.4	1262250.5	488390 µg/L	488390 ppb	02:56:30
3	Fe 238.204 Radial†	29103.6	29861.5	189920 µg/L	189920 ppb	02:56:35
3	K 766.490 Radial†	10600.3	10199.4	5219.9 µg/L	5219.9 ppb	02:56:35
3	Mg 279.077 IEC†	77880.0	79933.2	493250 µg/L	493250 ppb	02:56:35
3	Na 589.592 Radial†	19810.0	20970.3	5251.5 µg/L	5251.5 ppb	02:56:35
3	Sr 421.552†	98489.3	101167.7	508.47 µg/L	508.47 ppb	02:56:35
3	Sc 361.383	1859128.7	1859128.7	91.935 %		02:57:52
3	Y 371.029	1136430.4	1136430.4	90.283 %		02:57:52
3	Ag 328.068†	25048.2	27235.2	266.63 µg/L	266.63 ppb	02:57:58
3	As 188.979†	293.0	316.5	473.37 µg/L	473.37 ppb	02:58:18
3	B 249.677†	12959.2	13958.2	545.40 µg/L	545.40 ppb	02:57:58
3	Ba 233.527†	17691.9	19322.0	496.62 µg/L	496.62 ppb	02:57:58
3	Be 313.107†	360826.7	388964.9	243.20 µg/L	243.20 ppb	02:57:52
3	Cd 226.502†	16630.6	18188.5	470.19 µg/L	470.19 ppb	02:57:58
3	Co 228.616†	8193.0	8978.4	433.86 µg/L	433.86 ppb	02:58:18
3	Cr 267.716†	20730.3	22648.7	476.14 µg/L	476.14 ppb	02:57:58
3	Cu 324.752†	72972.3	75104.2	561.75 µg/L	561.75 ppb	02:57:58
3	Mn 257.610†	132691.7	144533.6	485.37 µg/L	485.37 ppb	02:57:58
3	Mo 202.031†	3800.7	4137.8	490.77 µg/L	490.77 ppb	02:58:18
3	Ni 231.604†	7565.5	7953.6	435.15 µg/L	435.15 ppb	02:58:18
3	P 214.914†	1354.3	1272.2	2477.8 µg/L	2477.8 ppb	02:58:18
3	Pb 220.353†	1632.4	1719.4	487.02 µg/L	487.02 ppb	02:58:18
3	S 181.975 Axial†	554.6	581.1	2746.5 µg/L	2746.5 ppb	02:58:18
3	Sb 206.836†	540.8	567.2	508.51 µg/L	508.51 ppb	02:58:18
3	Se 196.026†	1696.3	1835.2	2343.4 µg/L	2343.4 ppb	02:58:18
3	SiO2†	57529.3	59824.8	10986 µg/L	10986 ppb	02:57:58
3	Si 251.611†	64428.3	69755.1	5122.0 µg/L	5122.0 ppb	02:57:58
3	Sn 189.927†	516.3	539.2	505.45 µg/L	505.45 ppb	02:58:18
3	Ti 334.940†	216419.5	234630.8	507.01 µg/L	507.01 ppb	02:57:58
3	Tl 190.801†	296.3	342.7	464.36 µg/L	464.36 ppb	02:58:18
3	U 409.014†	5460.9	5209.5	448.46 µg/L	448.46 ppb	02:57:58
3	V 292.402†	40032.8	43671.5	510.88 µg/L	510.88 ppb	02:57:58
3	Zn 213.857†	18258.5	19333.6	475.74 µg/L	475.74 ppb	02:57:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1861603.2	92.057	%	0.1384				0.15%
Sc RADIAL	113561.8	97.4	%	0.80				0.82%
Y 371.029	1137485.1	90.366	%	0.1498				0.17%
Ag 328.068†	27269.6	266.99	µg/L	0.570	266.99	ppb	0.570	0.21%
QC value within limits for Ag 328.068 Recovery = 106.79%								
Al 396.153Radial†	1030518.2	512000	µg/L	4404.5	512000	ppb	4404.5	0.86%
QC value within limits for Al 396.153Radial Recovery = 102.40%								
As 188.979†	323.4	486.00	µg/L	11.193	486.00	ppb	11.193	2.30%
QC value within limits for As 188.979 Recovery = 97.20%								
B 249.677†	13958.3	545.25	µg/L	0.364	545.25	ppb	0.364	0.07%
QC value within limits for B 249.677 Recovery = 109.05%								
Ba 233.527†	19321.4	496.61	µg/L	0.361	496.61	ppb	0.361	0.07%
QC value within limits for Ba 233.527 Recovery = 99.32%								
Be 313.107†	386766.3	241.82	µg/L	1.433	241.82	ppb	1.433	0.59%
QC value within limits for Be 313.107 Recovery = 96.73%								
Ca 317.933Radial†	1258806.7	487060	µg/L	4148.9	487060	ppb	4148.9	0.85%
QC value within limits for Ca 317.933Radial Recovery = 97.41%								
Cd 226.502†	18190.4	470.20	µg/L	0.831	470.20	ppb	0.831	0.18%
QC value within limits for Cd 226.502 Recovery = 94.04%								
Co 228.616†	8945.9	432.29	µg/L	1.410	432.29	ppb	1.410	0.33%

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   QC value within limits for Co 228.616  Recovery = 86.46%
Cr 267.716†            22695.4      477.12 µg/L        0.852      477.12 ppb         0.852   0.18%
   QC value within limits for Cr 267.716  Recovery = 95.42%
Cu 324.752†            75227.0      562.70 µg/L        0.920      562.70 ppb         0.920   0.16%
   QC value within limits for Cu 324.752  Recovery = 112.54%
Fe 238.204 Radial†     29937.2      190400 µg/L        916.9      190400 ppb         916.9   0.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.20%
K 766.490 Radial†      10217.0      5228.9 µg/L        26.91      5228.9 ppb         26.91   0.51%
   QC value within limits for K 766.490 Radial  Recovery = 104.58%
Mg 279.077 IEC†        80231.5      495090 µg/L       2980.3      495090 ppb        2980.3   0.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.02%
Mn 257.610†           144622.4      485.71 µg/L        0.611      485.71 ppb         0.611   0.13%
   QC value within limits for Mn 257.610  Recovery = 97.14%
Mo 202.031†             4126.9      489.52 µg/L        1.085      489.52 ppb         1.085   0.22%
   QC value within limits for Mo 202.031  Recovery = 97.90%
Na 589.592 Radial†     20993.7      5257.3 µg/L        28.79      5257.3 ppb         28.79   0.55%
   QC value within limits for Na 589.592 Radial  Recovery = 105.15%
Ni 231.604†             7929.3      433.82 µg/L        1.465      433.82 ppb         1.465   0.34%
   QC value within limits for Ni 231.604  Recovery = 86.76%
P 214.914†              1268.8      2469.9 µg/L         7.25      2469.9 ppb          7.25   0.29%
   QC value within limits for P 214.914  Recovery = 98.79%
Pb 220.353†             1713.1      485.26 µg/L        1.790      485.26 ppb         1.790   0.37%
   QC value within limits for Pb 220.353  Recovery = 97.05%
S 181.975 Axial†         576.3      2722.8 µg/L        23.52      2722.8 ppb         23.52   0.86%
   QC value within limits for S 181.975 Axial  Recovery = 108.91%
Sb 206.836†              559.5      501.09 µg/L        6.517      501.09 ppb         6.517   1.30%
   QC value within limits for Sb 206.836  Recovery = 100.22%
Se 196.026†             1820.1      2323.4 µg/L        18.33      2323.4 ppb         18.33   0.79%
   QC value within limits for Se 196.026  Recovery = 92.94%
SiO2†                  59941.3       11007 µg/L         18.6       11007 ppb          18.6   0.17%
   QC value within limits for SiO2  Recovery = 102.92%
Si 251.611†            69780.6      5123.8 µg/L         1.58      5123.8 ppb         1.58   0.03%
   QC value within limits for Si 251.611  Recovery = 102.48%
Sn 189.927†              543.7      507.89 µg/L        2.132      507.89 ppb         2.132   0.42%
   QC value within limits for Sn 189.927  Recovery = 101.58%
Sr 421.552†           101426.3      509.77 µg/L        2.624      509.77 ppb         2.624   0.51%
   QC value within limits for Sr 421.552  Recovery = 101.95%
Ti 334.940†           234638.4      507.10 µg/L        0.237      507.10 ppb         0.237   0.05%
   QC value within limits for Ti 334.940  Recovery = 101.42%
Tl 190.801†              340.2      460.66 µg/L        7.271      460.66 ppb         7.271   1.58%
   QC value within limits for Tl 190.801  Recovery = 92.13%
U 409.014†              5266.7      453.52 µg/L        5.276      453.52 ppb         5.276   1.16%
   QC value within limits for U 409.014  Recovery = 90.70%
V 292.402†             43697.0      511.21 µg/L        0.288      511.21 ppb         0.288   0.06%
   QC value within limits for V 292.402  Recovery = 102.24%
Zn 213.857†            19321.6      475.32 µg/L        0.709      475.32 ppb         0.709   0.15%
   QC value within limits for Zn 213.857  Recovery = 95.06%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/10/2009 02:58:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111504.9	111504.9	95.6	%			02:59:09
1	Al 396.153Radial†	983487.9	1028557.3	511050	µg/L	511050	ppb	02:59:03
1	Ca 317.933Radial†	1212074.4	1267358.2	490370	µg/L	490370	ppb	02:59:03
1	Fe 238.204 Radial†	68115.9	71230.8	452990	µg/L	452990	ppb	02:59:09
1	K 766.490 Radial†	702.0	51.8	26.504	µg/L	26.504	ppb	02:59:09
1	Mg 279.077 IEC†	74475.0	77881.8	480180	µg/L	480180	ppb	02:59:09
1	Na 589.592 Radial†	1879972.5	1966994.0	492580	µg/L	492580	ppb	02:59:03
1	Sr 421.552†	866.1	968.2	4.8660	µg/L	4.8660	ppb	02:59:09
1	Sc 361.383	1864230.3	1864230.3	92.187	%			02:59:44
1	Y 371.029	1127608.4	1127608.4	89.582	%			02:59:44
1	Ag 328.068†	-3721.5	-4047.3	-1.5222	µg/L	-1.5222	ppb	02:59:50
1	As 188.979†	33.6	34.2	-78.094	µg/L	-78.094	ppb	03:00:11
1	B 249.677†	4583.2	4833.8	67.107	µg/L	67.107	ppb	02:59:50
1	Ba 233.527†	256.0	355.8	9.0131	µg/L	9.0131	ppb	03:00:11
1	Be 313.107†	-2140.2	-5837.4	-3.6679	µg/L	-3.6679	ppb	02:59:50
1	Cd 226.502†	1348.6	1561.8	16.279	µg/L	16.279	ppb	02:59:50
1	Co 228.616†	47.4	118.1	5.5657	µg/L	5.5657	ppb	03:00:11
1	Cr 267.716†	-277.5	-201.2	-4.3449	µg/L	-4.3449	ppb	03:00:11
1	Cu 324.752†	-7537.0	-12445.5	10.975	µg/L	10.975	ppb	02:59:50
1	Mn 257.610†	-13415.1	-14350.7	11.119	µg/L	11.119	ppb	02:59:50
1	Mo 202.031†	-195.8	-208.7	-6.5794	µg/L	-6.5794	ppb	03:00:11
1	Ni 231.604†	229.4	-26.7	-1.4620	µg/L	-1.4620	ppb	03:00:11
1	P 214.914†	350.9	179.8	23.404	µg/L	23.404	ppb	03:00:11
1	Pb 220.353†	16.5	-38.4	17.421	µg/L	17.421	ppb	03:00:11
1	S 181.975 Axial†	63.9	47.2	95.333	µg/L	95.333	ppb	03:00:11
1	Sb 206.836†	49.3	32.3	-6.4970	µg/L	-6.4970	ppb	03:00:11
1	Se 196.026†	-106.7	-125.7	27.298	µg/L	27.298	ppb	03:00:11
1	SiO2†	2280.7	-277.4	-50.944	µg/L	-50.944	ppb	03:00:11
1	Si 251.611†	-223.0	-567.1	-33.078	µg/L	-33.078	ppb	03:00:11
1	Sn 189.927†	-443.4	-503.4	0.2752	µg/L	0.2752	ppb	03:00:11
1	Ti 334.940†	17175.9	17857.1	13.104	µg/L	13.104	ppb	02:59:50
1	Tl 190.801†	2.7	23.3	-29.751	µg/L	-29.751	ppb	03:00:11
1	U 409.014†	140637.9	151826.5	13693	µg/L	13693	ppb	02:59:50
1	V 292.402†	-4505.9	-4761.1	5.4978	µg/L	5.4978	ppb	02:59:50
1	Zn 213.857†	2977.7	2703.4	10.438	µg/L	10.438	ppb	03:00:11
2	Sc RADIAL	111318.2	111318.2	95.4	%			02:59:21
2	Al 396.153Radial†	980837.3	1027504.9	510530	µg/L	510530	ppb	02:59:16
2	Ca 317.933Radial†	1207186.3	1264362.3	489210	µg/L	489210	ppb	02:59:16
2	Fe 238.204 Radial†	68784.0	72050.2	458200	µg/L	458200	ppb	02:59:21
2	K 766.490 Radial†	737.0	89.6	45.880	µg/L	45.880	ppb	02:59:21
2	Mg 279.077 IEC†	75131.5	78700.2	485230	µg/L	485230	ppb	02:59:21
2	Na 589.592 Radial†	1874931.3	1965009.0	492090	µg/L	492090	ppb	02:59:16
2	Sr 421.552†	900.5	1005.7	5.0548	µg/L	5.0548	ppb	02:59:21
2	Sc 361.383	1835548.6	1835548.6	90.769	%			03:00:17
2	Y 371.029	1110309.3	1110309.3	88.207	%			03:00:17
2	Ag 328.068†	-3708.4	-4096.0	-1.5597	µg/L	-1.5597	ppb	03:00:22
2	As 188.979†	34.5	35.8	-75.844	µg/L	-75.844	ppb	03:00:43
2	B 249.677†	4565.6	4892.1	67.996	µg/L	67.996	ppb	03:00:22
2	Ba 233.527†	254.6	358.5	9.0810	µg/L	9.0810	ppb	03:00:43
2	Be 313.107†	-2271.6	-6018.4	-3.7814	µg/L	-3.7814	ppb	03:00:22
2	Cd 226.502†	1409.5	1651.9	18.454	µg/L	18.454	ppb	03:00:22
2	Co 228.616†	37.3	107.8	5.0638	µg/L	5.0638	ppb	03:00:43
2	Cr 267.716†	-252.9	-178.8	-3.8771	µg/L	-3.8771	ppb	03:00:43
2	Cu 324.752†	-7653.6	-12701.8	10.317	µg/L	10.317	ppb	03:00:22
2	Mn 257.610†	-13452.0	-14618.7	10.919	µg/L	10.919	ppb	03:00:22
2	Mo 202.031†	-197.2	-213.6	-6.9402	µg/L	-6.9402	ppb	03:00:43
2	Ni 231.604†	213.6	-40.3	-2.2029	µg/L	-2.2029	ppb	03:00:43
2	P 214.914†	374.8	212.1	82.338	µg/L	82.338	ppb	03:00:43
2	Pb 220.353†	21.4	-32.6	18.586	µg/L	18.586	ppb	03:00:43

2	S 181.975 Axial†	67.3	52.0	117.47	µg/L	117.47 ppb	03:00:43
2	Sb 206.836†	55.9	40.5	1.7280	µg/L	1.7280 ppb	03:00:43
2	Se 196.026†	-119.1	-141.1	8.9989	µg/L	8.9989 ppb	03:00:43
2	SiO2†	2257.4	-264.4	-48.549	µg/L	-48.549 ppb	03:00:43
2	Si 251.611†	-251.6	-602.4	-35.393	µg/L	-35.393 ppb	03:00:43
2	Sn 189.927†	-451.5	-519.9	-6.7782	µg/L	-6.7782 ppb	03:00:43
2	Ti 334.940†	17219.0	18195.8	13.940	µg/L	13.940 ppb	03:00:22
2	Tl 190.801†	8.0	29.2	-20.528	µg/L	-20.528 ppb	03:00:43
2	U 409.014†	141065.2	154681.1	13951	µg/L	13951 ppb	03:00:22
2	V 292.402†	-4498.4	-4829.1	5.5721	µg/L	5.5721 ppb	03:00:22
2	Zn 213.857†	2959.4	2733.7	10.555	µg/L	10.555 ppb	03:00:43
3	Sc RADIAL	111262.9	111262.9	95.4	%		02:59:34
3	Al 396.153Radial†	980927.6	1028110.1	510830	µg/L	510830 ppb	02:59:29
3	Ca 317.933Radial†	1208004.7	1265848.6	489780	µg/L	489780 ppb	02:59:29
3	Fe 238.204 Radial†	68676.3	71973.1	457710	µg/L	457710 ppb	02:59:34
3	K 766.490 Radial†	787.5	143.0	73.186	µg/L	73.186 ppb	02:59:34
3	Mg 279.077 IEC†	74943.4	78542.2	484250	µg/L	484250 ppb	02:59:34
3	Na 589.592 Radial†	1873584.8	1964573.5	491980	µg/L	491980 ppb	02:59:29
3	Sr 421.552†	861.2	965.1	4.8505	µg/L	4.8505 ppb	02:59:34
3	Sc 361.383	1848335.3	1848335.3	91.401	%		03:00:49
3	Y 371.029	1117737.4	1117737.4	88.798	%		03:00:49
3	Ag 328.068†	-3682.7	-4039.5	-1.0889	µg/L	-1.0889 ppb	03:00:55
3	As 188.979†	35.3	36.4	-74.787	µg/L	-74.787 ppb	03:01:15
3	B 249.677†	4721.4	5027.7	74.029	µg/L	74.029 ppb	03:00:55
3	Ba 233.527†	273.3	377.1	9.5554	µg/L	9.5554 ppb	03:01:15
3	Be 313.107†	-2251.1	-5978.7	-3.7564	µg/L	-3.7564 ppb	03:00:55
3	Cd 226.502†	1402.6	1633.6	17.970	µg/L	17.970 ppb	03:00:55
3	Co 228.616†	26.6	95.8	4.4828	µg/L	4.4828 ppb	03:01:15
3	Cr 267.716†	-259.7	-184.4	-3.9959	µg/L	-3.9959 ppb	03:01:15
3	Cu 324.752†	-7695.7	-12689.4	10.297	µg/L	10.297 ppb	03:00:55
3	Mn 257.610†	-13482.6	-14549.7	11.077	µg/L	11.077 ppb	03:00:55
3	Mo 202.031†	-206.5	-222.3	-7.9773	µg/L	-7.9773 ppb	03:01:15
3	Ni 231.604†	237.2	-16.0	-0.8774	µg/L	-0.8774 ppb	03:01:15
3	P 214.914†	382.2	217.2	93.525	µg/L	93.525 ppb	03:01:15
3	Pb 220.353†	11.9	-43.3	15.909	µg/L	15.909 ppb	03:01:15
3	S 181.975 Axial†	58.0	41.3	65.172	µg/L	65.172 ppb	03:01:15
3	Sb 206.836†	58.5	42.9	4.0189	µg/L	4.0189 ppb	03:01:15
3	Se 196.026†	-102.5	-122.0	33.507	µg/L	33.507 ppb	03:01:15
3	SiO2†	2287.5	-248.6	-45.657	µg/L	-45.657 ppb	03:01:15
3	Si 251.611†	-256.1	-605.4	-35.747	µg/L	-35.747 ppb	03:01:15
3	Sn 189.927†	-447.4	-511.9	-2.8484	µg/L	-2.8484 ppb	03:01:15
3	Ti 334.940†	17124.3	17960.9	13.373	µg/L	13.373 ppb	03:00:55
3	Tl 190.801†	17.5	39.5	-4.8719	µg/L	-4.8719 ppb	03:01:15
3	U 409.014†	141529.7	154114.1	13900	µg/L	13900 ppb	03:00:55
3	V 292.402†	-4590.5	-4895.7	4.6932	µg/L	4.6932 ppb	03:00:55
3	Zn 213.857†	2967.3	2719.8	10.260	µg/L	10.260 ppb	03:01:15

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1849371.4	91.452	%	0.7105				0.78%
Sc RADIAL	111362.0	95.5	%	0.11				0.11%
Y 371.029	1118551.7	88.862	%	0.6894				0.78%
Ag 328.068†	-4060.9	-1.3903	µg/L	0.26162	-1.3903	ppb	0.26162	18.82%
Al 396.153Radial†	1028057.4	510800	µg/L	262.4	510800	ppb	262.4	0.05%
QC value within limits for Al 396.153Radial Recovery = 102.16%								
As 188.979†	35.5	-76.242	µg/L	1.6891	-76.242	ppb	1.6891	2.22%
B 249.677†	4917.9	69.711	µg/L	3.7661	69.711	ppb	3.7661	5.40%
Ba 233.527†	363.8	9.2165	µg/L	0.29546	9.2165	ppb	0.29546	3.21%
Be 313.107†	-5944.9	-3.7352	µg/L	0.05966	-3.7352	ppb	0.05966	1.60%
Ca 317.933Radial†	1265856.4	489780	µg/L	579.6	489780	ppb	579.6	0.12%
QC value within limits for Ca 317.933Radial Recovery = 97.96%								
Cd 226.502†	1615.8	17.568	µg/L	1.1422	17.568	ppb	1.1422	6.50%
Co 228.616†	107.2	5.0374	µg/L	0.54194	5.0374	ppb	0.54194	10.76%
Cr 267.716†	-188.1	-4.0726	µg/L	0.24311	-4.0726	ppb	0.24311	5.97%
Cu 324.752†	-12612.2	10.530	µg/L	0.3858	10.530	ppb	0.3858	3.66%
Fe 238.204 Radial†	71751.4	456300	µg/L	2877.6	456300	ppb	2877.6	0.63%
QC value within limits for Fe 238.204 Radial Recovery = 91.26%								
K 766.490 Radial†	94.8	48.523	µg/L	23.4529	48.523	ppb	23.4529	48.33%
Mg 279.077 IEC†	78374.7	483220	µg/L	2676.3	483220	ppb	2676.3	0.55%

QC value within limits for Mg 279.077 IEC Recovery = 96.64%

Mn 257.610†	-14506.4	11.038 µg/L	0.1059	11.038 ppb	0.1059	0.96%
Mo 202.031†	-214.9	-7.1656 µg/L	0.72568	-7.1656 ppb	0.72568	10.13%
Na 589.592 Radial†	1965525.5	492220 µg/L	323.1	492220 ppb	323.1	0.07%

QC value within limits for Na 589.592 Radial Recovery = 98.44%

Ni 231.604†	-27.7	-1.5141 µg/L	0.66432	-1.5141 ppb	0.66432	43.87%
P 214.914†	203.0	66.422 µg/L	37.6725	66.422 ppb	37.6725	56.72%
Pb 220.353†	-38.1	17.305 µg/L	1.3422	17.305 ppb	1.3422	7.76%
S 181.975 Axial†	46.8	92.658 µg/L	26.2517	92.658 ppb	26.2517	28.33%
Sb 206.836†	38.6	-0.2501 µg/L	5.52995	-0.2501 ppb	5.52995	>999.9%
Se 196.026†	-129.6	23.268 µg/L	12.7414	23.268 ppb	12.7414	54.76%
SiO2†	-263.5	-48.384 µg/L	2.6475	-48.384 ppb	2.6475	5.47%
Si 251.611†	-591.6	-34.739 µg/L	1.4493	-34.739 ppb	1.4493	4.17%
Sn 189.927†	-511.7	-3.1171 µg/L	3.53438	-3.1171 ppb	3.53438	113.39%
Sr 421.552†	979.7	4.9238 µg/L	0.11371	4.9238 ppb	0.11371	2.31%
Ti 334.940†	18004.6	13.472 µg/L	0.4271	13.472 ppb	0.4271	3.17%
Tl 190.801†	30.7	-18.383 µg/L	12.5772	-18.383 ppb	12.5772	68.42%
U 409.014†	153540.6	13848 µg/L	136.5	13848 ppb	136.5	0.99%

QC value within limits for U 409.014 Recovery = 92.32%

V 292.402†	-4828.6	5.2543 µg/L	0.48738	5.2543 ppb	0.48738	9.28%
Zn 213.857†	2719.0	10.417 µg/L	0.1485	10.417 ppb	0.1485	1.43%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/10/2009 03:01:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	123511.7	123511.7	106	%			03:02:07
1	Al 396.153Radial†	967.4	790.2	22.239	µg/L	22.239	ppb	03:02:07
1	Ca 317.933Radial†	660.8	211.2	81.710	µg/L	81.710	ppb	03:02:27
1	Fe 238.204 Radial†	17.2	1.1	320.45	µg/L	320.45	ppb	03:02:27
1	K 766.490 Radial†	575490.0	542736.5	277770	µg/L	277770	ppb	03:02:01
1	Mg 279.077 IEC†	-34.0	-47.5	-50.348	µg/L	-50.348	ppb	03:02:27
1	Na 589.592 Radial†	-137.0	504.8	126.40	µg/L	126.40	ppb	03:02:07
1	Sr 421.552†	1923685.9	1816544.9	9129.9	µg/L	9129.9	ppb	03:02:01
1	Sc 361.383	1995017.0	1995017.0	98.655	%			03:03:59
1	Y 371.029	1209781.9	1209781.9	96.110	%			03:03:59
1	Ag 328.068†	-7099.5	-7206.7	2.0971	µg/L	2.0971	ppb	03:03:59
1	As 188.979†	5263.9	5333.5	9692.2	µg/L	9692.2	ppb	03:04:04
1	B 249.677†	110947.4	112322.6	4869.4	µg/L	4869.4	ppb	03:03:59
1	Ba 233.527†	548878.1	556441.3	14293	µg/L	14293	ppb	03:03:59
1	Be 313.107†	4560535.9	4619213.4	2886.8	µg/L	2886.8	ppb	03:03:48
1	Cd 226.502†	356212.9	361169.6	9623.2	µg/L	9623.2	ppb	03:03:59
1	Co 228.616†	193481.2	196186.4	9482.0	µg/L	9482.0	ppb	03:03:59
1	Cr 267.716†	1124902.6	1140343.0	23938	µg/L	23938	ppb	03:03:59
1	Cu 324.752†	2905093.7	2940441.6	20396	µg/L	20396	ppb	03:03:59
1	Mn 257.610†	2884294.6	2923829.9	9335.8	µg/L	9335.8	ppb	03:03:59
1	Mo 202.031†	82256.8	83382.3	9739.4	µg/L	9739.4	ppb	03:03:59
1	Ni 231.604†	173740.5	175834.3	9620.1	µg/L	9620.1	ppb	03:03:59
1	P 214.914†	8758.1	8676.6	15253	µg/L	15253	ppb	03:04:04
1	Pb 220.353†	94834.6	96071.6	24829	µg/L	24829	ppb	03:03:59
1	S 181.975 Axial†	10279.0	10397.0	50906	µg/L	50906	ppb	03:04:04
1	Sb 206.836†	10261.2	10380.1	10068	µg/L	10068	ppb	03:04:04
1	Se 196.026†	7423.8	7515.2	9604.2	µg/L	9604.2	ppb	03:04:04
1	SiO2†	530846.7	535334.7	98304	µg/L	98304	ppb	03:03:59
1	Si 251.611†	610758.6	618762.5	44747	µg/L	44747	ppb	03:03:59
1	Sn 189.927†	20718.1	20978.2	10742	µg/L	10742	ppb	03:04:04
1	Ti 334.940†	4305220.4	4363157.6	9938.9	µg/L	9938.9	ppb	03:03:48
1	Tl 190.801†	6189.8	6294.6	9726.4	µg/L	9726.4	ppb	03:04:04
1	U 409.014†	1864.0	1159.0	105.09	µg/L	105.09	ppb	03:03:59
1	V 292.402†	867605.6	879564.1	9962.2	µg/L	9962.2	ppb	03:03:59
1	Zn 213.857†	544709.1	551610.8	14541	µg/L	14541	ppb	03:03:59
2	Sc RADIAL	119662.2	119662.2	103	%			03:02:39
2	Al 396.153Radial†	1213.5	1059.5	151.82	µg/L	151.82	ppb	03:02:39
2	Ca 317.933Radial†	904.9	469.2	181.53	µg/L	181.53	ppb	03:02:59
2	Fe 238.204 Radial†	20.9	5.2	349.97	µg/L	349.97	ppb	03:02:59
2	K 766.490 Radial†	582179.6	566738.1	290050	µg/L	290050	ppb	03:02:33
2	Mg 279.077 IEC†	-19.1	-34.1	35.389	µg/L	35.389	ppb	03:02:59
2	Na 589.592 Radial†	25.1	658.5	164.91	µg/L	164.91	ppb	03:02:39
2	Sr 421.552†	1947743.9	1898428.4	9541.4	µg/L	9541.4	ppb	03:02:33
2	Sc 361.383	1991028.4	1991028.4	98.457	%			03:04:24
2	Y 371.029	1210880.7	1210880.7	96.197	%			03:04:24
2	Ag 328.068†	-7192.8	-7315.9	1.8070	µg/L	1.8070	ppb	03:04:24
2	As 188.979†	5296.2	5376.9	9770.7	µg/L	9770.7	ppb	03:04:29
2	B 249.677†	111834.2	113448.5	4918.2	µg/L	4918.2	ppb	03:04:24
2	Ba 233.527†	553631.3	562383.6	14446	µg/L	14446	ppb	03:04:24
2	Be 313.107†	4535937.6	4603490.4	2877.0	µg/L	2877.0	ppb	03:04:13
2	Cd 226.502†	359304.8	365033.4	9726.1	µg/L	9726.1	ppb	03:04:24
2	Co 228.616†	195093.1	198216.5	9580.4	µg/L	9580.4	ppb	03:04:24
2	Cr 267.716†	1133922.9	1151788.9	24179	µg/L	24179	ppb	03:04:24
2	Cu 324.752†	2927972.4	2969577.8	20598	µg/L	20598	ppb	03:04:24
2	Mn 257.610†	2906208.6	2951944.2	9425.6	µg/L	9425.6	ppb	03:04:24
2	Mo 202.031†	83022.9	84327.3	9849.8	µg/L	9849.8	ppb	03:04:24
2	Ni 231.604†	175062.5	177529.8	9712.9	µg/L	9712.9	ppb	03:04:24
2	P 214.914†	8799.7	8736.7	15350	µg/L	15350	ppb	03:04:29
2	Pb 220.353†	95569.2	97010.3	25071	µg/L	25071	ppb	03:04:24

2	S 181.975 Axial†	10268.8	10407.5	50958	µg/L	50958	ppb	03:04:29
2	Sb 206.836†	10297.5	10437.7	10123	µg/L	10123	ppb	03:04:29
2	Se 196.026†	7392.2	7498.1	9582.4	µg/L	9582.4	ppb	03:04:29
2	SiO2†	535028.9	540660.3	99282	µg/L	99282	ppb	03:04:24
2	Si 251.611†	615643.4	624964.0	45200	µg/L	45200	ppb	03:04:24
2	Sn 189.927†	20734.6	21037.1	10772	µg/L	10772	ppb	03:04:29
2	Ti 334.940†	4282611.0	4348936.2	9906.5	µg/L	9906.5	ppb	03:04:13
2	Tl 190.801†	6192.0	6309.4	9748.8	µg/L	9748.8	ppb	03:04:29
2	U 409.014†	1808.8	1106.7	100.34	µg/L	100.34	ppb	03:04:24
2	V 292.402†	874856.6	888690.5	10066	µg/L	10066	ppb	03:04:24
2	Zn 213.857†	548147.9	556209.6	14662	µg/L	14662	ppb	03:04:24
3	Sc RADIAL	115737.2	115737.2	99.2	%			03:03:11
3	Al 396.153Radial†	806.5	689.5	-29.272	µg/L	-29.272	ppb	03:03:11
3	Ca 317.933Radial†	709.2	301.9	116.81	µg/L	116.81	ppb	03:03:31
3	Fe 238.204 Radial†	10.7	-4.4	286.77	µg/L	286.77	ppb	03:03:31
3	K 766.490 Radial†	580258.2	584045.4	298910	µg/L	298910	ppb	03:03:05
3	Mg 279.077 IEC†	-33.0	-48.7	-56.262	µg/L	-56.262	ppb	03:03:31
3	Na 589.592 Radial†	-312.6	319.1	79.917	µg/L	79.917	ppb	03:03:11
3	Sr 421.552†	1941195.7	1956210.8	9831.9	µg/L	9831.9	ppb	03:03:05
3	Sc 361.383	1987125.1	1987125.1	98.264	%			03:04:49
3	Y 371.029	1209146.7	1209146.7	96.059	%			03:04:49
3	Ag 328.068†	-7118.4	-7254.5	1.8505	µg/L	1.8505	ppb	03:04:49
3	As 188.979†	5201.9	5291.5	9616.1	µg/L	9616.1	ppb	03:04:54
3	B 249.677†	111423.3	113253.5	4909.8	µg/L	4909.8	ppb	03:04:49
3	Ba 233.527†	548637.9	558406.5	14343	µg/L	14343	ppb	03:04:49
3	Be 313.107†	4563466.4	4640554.9	2900.1	µg/L	2900.1	ppb	03:04:38
3	Cd 226.502†	356039.5	362427.2	9656.7	µg/L	9656.7	ppb	03:04:49
3	Co 228.616†	193139.6	196617.6	9502.8	µg/L	9502.8	ppb	03:04:49
3	Cr 267.716†	1121485.7	1141394.3	23960	µg/L	23960	ppb	03:04:49
3	Cu 324.752†	2905622.0	2952674.1	20481	µg/L	20481	ppb	03:04:49
3	Mn 257.610†	2880301.2	2931377.2	9359.9	µg/L	9359.9	ppb	03:04:49
3	Mo 202.031†	82252.0	83708.5	9777.5	µg/L	9777.5	ppb	03:04:49
3	Ni 231.604†	173402.0	176189.2	9639.5	µg/L	9639.5	ppb	03:04:49
3	P 214.914†	8605.0	8556.1	14994	µg/L	14994	ppb	03:04:54
3	Pb 220.353†	94780.1	96397.9	24913	µg/L	24913	ppb	03:04:49
3	S 181.975 Axial†	10066.0	10221.6	50047	µg/L	50047	ppb	03:04:54
3	Sb 206.836†	10058.0	10214.5	9905.7	µg/L	9905.7	ppb	03:04:54
3	Se 196.026†	7247.3	7365.5	9412.9	µg/L	9412.9	ppb	03:04:54
3	SiO2†	532030.5	538676.3	98918	µg/L	98918	ppb	03:04:49
3	Si 251.611†	611781.1	622261.8	45005	µg/L	45005	ppb	03:04:49
3	Sn 189.927†	20156.3	20489.9	10492	µg/L	10492	ppb	03:04:54
3	Ti 334.940†	4312010.6	4387399.1	9994.1	µg/L	9994.1	ppb	03:04:38
3	Tl 190.801†	6124.3	6252.9	9662.8	µg/L	9662.8	ppb	03:04:54
3	U 409.014†	1776.0	1076.9	97.649	µg/L	97.649	ppb	03:04:49
3	V 292.402†	866616.3	882050.1	9990.4	µg/L	9990.4	ppb	03:04:49
3	Zn 213.857†	543533.1	552606.8	14567	µg/L	14567	ppb	03:04:49

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1991056.9	98.459	%	0.1951				0.20%
Sc RADIAL	119637.0	103	%	3.3				3.25%
Y 371.029	1209936.4	96.122	%	0.0697				0.07%
Ag 328.068†	-7259.1	1.9182	µg/L	0.15643	1.9182	ppb	0.15643	8.16%
Al 396.153Radial†	846.4	48.261	µg/L	93.3060	48.261	ppb	93.3060	193.34%
As 188.979†	5334.0	9693.0	µg/L	77.34	9693.0	ppb	77.34	0.80%
QC value within limits for As 188.979 Recovery = 96.93%								
B 249.677†	113008.2	4899.1	µg/L	26.08	4899.1	ppb	26.08	0.53%
QC value within limits for B 249.677 Recovery = 97.98%								
Ba 233.527†	559077.1	14361	µg/L	77.8	14361	ppb	77.8	0.54%
QC value within limits for Ba 233.527 Recovery = 95.74%								
Be 313.107†	4621086.2	2888.0	µg/L	11.62	2888.0	ppb	11.62	0.40%
QC value within limits for Be 313.107 Recovery = 96.27%								
Ca 317.933Radial†	327.4	126.68	µg/L	50.636	126.68	ppb	50.636	39.97%
Cd 226.502†	362876.7	9668.7	µg/L	52.50	9668.7	ppb	52.50	0.54%
QC value within limits for Cd 226.502 Recovery = 96.69%								
Co 228.616†	197006.8	9521.7	µg/L	51.87	9521.7	ppb	51.87	0.54%
QC value within limits for Co 228.616 Recovery = 95.22%								
Cr 267.716†	1144508.7	24026	µg/L	132.8	24026	ppb	132.8	0.55%
QC value within limits for Cr 267.716 Recovery = 96.10%								

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Cu 324.752†          2954231.2       20492 µg/L        101.5       20492 ppb        101.5   0.50%
   QC value within limits for Cu 324.752  Recovery = 102.46%
Fe 238.204 Radial†         0.6      319.06 µg/L       31.624      319.06 ppb       31.624   9.91%
K 766.490 Radial†     564506.7      288910 µg/L      10616.8      288910 ppb      10616.8   3.67%
   QC value within limits for K 766.490 Radial  Recovery = 96.30%
Mg 279.077 IEC†          -43.4     -23.740 µg/L      51.2929     -23.740 ppb      51.2929 216.06%
Mn 257.610†          2935717.1      9373.8 µg/L        46.46      9373.8 ppb        46.46   0.50%
   QC value within limits for Mn 257.610  Recovery = 93.74%
Mo 202.031†            83806.0      9788.9 µg/L        56.07      9788.9 ppb        56.07   0.57%
   QC value within limits for Mo 202.031  Recovery = 97.89%
Na 589.592 Radial†       494.1      123.75 µg/L       42.560      123.75 ppb       42.560  34.39%
Ni 231.604†           176517.8      9657.5 µg/L        48.92      9657.5 ppb        48.92   0.51%
   QC value within limits for Ni 231.604  Recovery = 96.57%
P 214.914†              8656.5       15199 µg/L        184.3       15199 ppb        184.3   1.21%
   QC value within limits for P 214.914  Recovery = 101.33%
Pb 220.353†            96493.3       24938 µg/L        123.2       24938 ppb        123.2   0.49%
   QC value within limits for Pb 220.353  Recovery = 99.75%
S 181.975 Axial†       10342.1       50637 µg/L        511.3       50637 ppb        511.3   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 101.27%
Sb 206.836†            10344.1       10032 µg/L        112.8       10032 ppb        112.8   1.12%
   QC value within limits for Sb 206.836  Recovery = 100.32%
Se 196.026†             7459.6      9533.2 µg/L       104.74      9533.2 ppb       104.74   1.10%
   QC value within limits for Se 196.026  Recovery = 95.33%
SiO2†                 538223.8       98835 µg/L        494.2       98835 ppb        494.2   0.50%
   QC value within limits for SiO2  Recovery = 92.37%
Si 251.611†           621996.1       44984 µg/L        227.0       44984 ppb        227.0   0.50%
   QC value less than the lower limit for Si 251.611  Recovery = 89.97%
Sn 189.927†            20835.1       10669 µg/L        153.8       10669 ppb        153.8   1.44%
   QC value within limits for Sn 189.927  Recovery = 106.69%
Sr 421.552†          1890394.7      9501.1 µg/L       352.72      9501.1 ppb       352.72   3.71%
   QC value within limits for Sr 421.552  Recovery = 95.01%
Ti 334.940†          4366497.6      9946.5 µg/L        44.30      9946.5 ppb        44.30   0.45%
   QC value within limits for Ti 334.940  Recovery = 99.47%
Tl 190.801†             6285.6      9712.7 µg/L        44.63      9712.7 ppb        44.63   0.46%
   QC value within limits for Tl 190.801  Recovery = 97.13%
U 409.014†              1114.2      101.02 µg/L        3.766      101.02 ppb        3.766   3.73%
V 292.402†            883434.9       10006 µg/L         53.5       10006 ppb         53.5   0.53%
   QC value within limits for V 292.402  Recovery = 100.06%
Zn 213.857†           553475.7       14590 µg/L         63.7       14590 ppb         63.7   0.44%
   QC value within limits for Zn 213.857  Recovery = 97.27%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:05:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114144.5	114144.5	97.9	%			03:05:41
1	Al 396.153Radial†	10436.6	10540.5	5217.6	µg/L	5217.6	ppb	03:05:41
1	Ca 317.933Radial†	13444.9	13324.8	5155.6	µg/L	5155.6	ppb	03:06:01
1	Fe 238.204 Radial†	805.8	808.2	5156.2	µg/L	5156.2	ppb	03:06:01
1	K 766.490 Radial†	10527.8	10074.4	5156.0	µg/L	5156.0	ppb	03:05:41
1	Mg 279.077 IEC†	848.6	851.6	5263.2	µg/L	5263.2	ppb	03:06:01
1	Na 589.592 Radial†	39836.4	41337.4	10352	µg/L	10352	ppb	03:05:41
1	Sr 421.552†	98847.3	101060.8	507.93	µg/L	507.93	ppb	03:05:41
1	Sc 361.383	1981668.3	1981668.3	97.995	%			03:07:05
1	Y 371.029	1243227.2	1243227.2	98.767	%			03:07:05
1	Ag 328.068†	55086.8	56203.8	516.19	µg/L	516.19	ppb	03:07:11
1	As 188.979†	280.1	283.7	513.94	µg/L	513.94	ppb	03:07:31
1	B 249.677†	11537.3	11635.6	502.81	µg/L	502.81	ppb	03:07:11
1	Ba 233.527†	18979.6	19446.1	499.82	µg/L	499.82	ppb	03:07:11
1	Be 313.107†	791780.9	804469.0	503.20	µg/L	503.20	ppb	03:07:05
1	Cd 226.502†	18405.4	18881.0	503.03	µg/L	503.03	ppb	03:07:11
1	Co 228.616†	10118.1	10391.8	502.24	µg/L	502.24	ppb	03:07:11
1	Cr 267.716†	23267.9	23843.9	501.22	µg/L	501.22	ppb	03:07:11
1	Cu 324.752†	75053.4	72319.6	502.75	µg/L	502.75	ppb	03:07:11
1	Mn 257.610†	154624.5	157990.3	505.11	µg/L	505.11	ppb	03:07:05
1	Mo 202.031†	4306.2	4398.0	513.91	µg/L	513.91	ppb	03:07:31
1	Ni 231.604†	9286.9	9201.4	503.42	µg/L	503.42	ppb	03:07:11
1	P 214.914†	1416.1	1244.1	2458.7	µg/L	2458.7	ppb	03:07:31
1	Pb 220.353†	1988.6	1973.1	510.71	µg/L	510.71	ppb	03:07:31
1	S 181.975 Axial†	231.6	214.2	1047.1	µg/L	1047.1	ppb	03:07:31
1	Sb 206.836†	544.3	534.4	521.61	µg/L	521.61	ppb	03:07:31
1	Se 196.026†	403.0	401.4	515.11	µg/L	515.11	ppb	03:07:31
1	SiO2†	31674.8	29571.7	5430.3	µg/L	5430.3	ppb	03:07:11
1	Si 251.611†	33910.5	34279.3	2486.9	µg/L	2486.9	ppb	03:07:11
1	Sn 189.927†	1018.2	1016.6	523.37	µg/L	523.37	ppb	03:07:31
1	Ti 334.940†	228089.7	231983.2	528.15	µg/L	528.15	ppb	03:07:05
1	Tl 190.801†	308.6	335.3	517.48	µg/L	517.48	ppb	03:07:31
1	U 409.014†	6124.4	5519.3	499.59	µg/L	499.59	ppb	03:07:11
1	V 292.402†	43315.8	44329.0	503.46	µg/L	503.46	ppb	03:07:11
1	Zn 213.857†	19223.4	19090.2	501.95	µg/L	501.95	ppb	03:07:11
2	Sc RADIAL	114667.4	114667.4	98.3	%			03:06:07
2	Al 396.153Radial†	10372.1	10426.2	5161.1	µg/L	5161.1	ppb	03:06:07
2	Ca 317.933Radial†	13402.6	13219.0	5114.7	µg/L	5114.7	ppb	03:06:27
2	Fe 238.204 Radial†	801.6	800.1	5104.9	µg/L	5104.9	ppb	03:06:27
2	K 766.490 Radial†	10389.3	9884.6	5058.8	µg/L	5058.8	ppb	03:06:07
2	Mg 279.077 IEC†	849.9	849.0	5246.7	µg/L	5246.7	ppb	03:06:27
2	Na 589.592 Radial†	39629.5	40941.5	10253	µg/L	10253	ppb	03:06:07
2	Sr 421.552†	98064.9	99804.5	501.61	µg/L	501.61	ppb	03:06:07
2	Sc 361.383	2005021.9	2005021.9	99.149	%			03:07:38
2	Y 371.029	1253973.1	1253973.1	99.621	%			03:07:38
2	Ag 328.068†	55400.1	55865.0	513.08	µg/L	513.08	ppb	03:07:44
2	As 188.979†	267.3	267.4	484.37	µg/L	484.37	ppb	03:08:05
2	B 249.677†	11616.4	11578.3	500.34	µg/L	500.34	ppb	03:07:44
2	Ba 233.527†	19178.0	19420.5	499.16	µg/L	499.16	ppb	03:07:44
2	Be 313.107†	796648.5	799967.3	500.39	µg/L	500.39	ppb	03:07:38
2	Cd 226.502†	18542.5	18800.5	500.88	µg/L	500.88	ppb	03:07:44
2	Co 228.616†	10194.4	10348.5	500.15	µg/L	500.15	ppb	03:07:44
2	Cr 267.716†	23441.5	23742.4	499.09	µg/L	499.09	ppb	03:07:44
2	Cu 324.752†	75567.0	71945.5	500.14	µg/L	500.14	ppb	03:07:44
2	Mn 257.610†	155451.5	156986.5	501.90	µg/L	501.90	ppb	03:07:38
2	Mo 202.031†	4298.1	4338.6	506.97	µg/L	506.97	ppb	03:08:05
2	Ni 231.604†	9268.7	9072.6	496.37	µg/L	496.37	ppb	03:07:44
2	P 214.914†	1413.0	1224.3	2418.7	µg/L	2418.7	ppb	03:08:05
2	Pb 220.353†	1997.0	1957.9	506.77	µg/L	506.77	ppb	03:08:05

2	S 181.975 Axial†	231.6	211.5	1034.0 µg/L	1034.0 ppb	03:08:05
2	Sb 206.836†	529.1	512.5	500.19 µg/L	500.19 ppb	03:08:05
2	Se 196.026†	391.5	384.9	494.06 µg/L	494.06 ppb	03:08:05
2	SiO2†	31848.7	29370.6	5393.4 µg/L	5393.4 ppb	03:07:44
2	Si 251.611†	34119.2	34086.7	2473.4 µg/L	2473.4 ppb	03:07:44
2	Sn 189.927†	1015.1	1001.4	515.54 µg/L	515.54 ppb	03:08:05
2	Ti 334.940†	228032.7	229214.7	521.84 µg/L	521.84 ppb	03:07:38
2	Tl 190.801†	300.8	323.8	499.73 µg/L	499.73 ppb	03:08:05
2	U 409.014†	6157.9	5480.3	496.06 µg/L	496.06 ppb	03:07:44
2	V 292.402†	43595.4	44096.2	500.79 µg/L	500.79 ppb	03:07:44
2	Zn 213.857†	19377.0	19016.6	500.04 µg/L	500.04 ppb	03:07:44
3	Sc RADIAL	115758.8	115758.8	99.3 %		03:06:33
3	Al 396.153Radial†	10512.7	10468.4	5182.4 µg/L	5182.4 ppb	03:06:33
3	Ca 317.933Radial†	13441.8	13130.0	5080.3 µg/L	5080.3 ppb	03:06:54
3	Fe 238.204 Radial†	803.7	794.6	5069.6 µg/L	5069.6 ppb	03:06:54
3	K 766.490 Radial†	10567.8	9964.7	5099.8 µg/L	5099.8 ppb	03:06:33
3	Mg 279.077 IEC†	848.2	839.1	5185.7 µg/L	5185.7 ppb	03:06:54
3	Na 589.592 Radial†	40049.8	40984.9	10264 µg/L	10264 ppb	03:06:33
3	Sr 421.552†	99216.5	100024.4	502.72 µg/L	502.72 ppb	03:06:33
3	Sc 361.383	1999085.5	1999085.5	98.856 %		03:08:12
3	Y 371.029	1246729.6	1246729.6	99.045 %		03:08:12
3	Ag 328.068†	55248.9	55878.0	513.20 µg/L	513.20 ppb	03:08:17
3	As 188.979†	273.7	274.6	497.60 µg/L	497.60 ppb	03:08:38
3	B 249.677†	11581.1	11577.2	500.31 µg/L	500.31 ppb	03:08:17
3	Ba 233.527†	19153.8	19453.5	500.01 µg/L	500.01 ppb	03:08:17
3	Be 313.107†	790801.9	796439.0	498.18 µg/L	498.18 ppb	03:08:12
3	Cd 226.502†	18500.0	18813.1	501.23 µg/L	501.23 ppb	03:08:17
3	Co 228.616†	10194.3	10379.0	501.61 µg/L	501.61 ppb	03:08:17
3	Cr 267.716†	23445.2	23816.3	500.64 µg/L	500.64 ppb	03:08:17
3	Cu 324.752†	75436.1	72039.5	500.78 µg/L	500.78 ppb	03:08:17
3	Mn 257.610†	154128.5	156113.8	499.11 µg/L	499.11 ppb	03:08:12
3	Mo 202.031†	4217.2	4269.6	498.91 µg/L	498.91 ppb	03:08:38
3	Ni 231.604†	9320.7	9153.0	500.77 µg/L	500.77 ppb	03:08:17
3	P 214.914†	1385.8	1200.9	2371.5 µg/L	2371.5 ppb	03:08:38
3	Pb 220.353†	1945.4	1911.7	494.80 µg/L	494.80 ppb	03:08:38
3	S 181.975 Axial†	227.9	208.4	1018.9 µg/L	1018.9 ppb	03:08:38
3	Sb 206.836†	527.6	512.6	500.32 µg/L	500.32 ppb	03:08:38
3	Se 196.026†	405.1	399.9	513.13 µg/L	513.13 ppb	03:08:38
3	SiO2†	31834.9	29452.0	5408.3 µg/L	5408.3 ppb	03:08:17
3	Si 251.611†	34097.9	34167.4	2479.8 µg/L	2479.8 ppb	03:08:17
3	Sn 189.927†	1001.2	990.4	509.88 µg/L	509.88 ppb	03:08:38
3	Ti 334.940†	225520.7	227356.6	517.61 µg/L	517.61 ppb	03:08:12
3	Tl 190.801†	300.7	324.6	500.89 µg/L	500.89 ppb	03:08:38
3	U 409.014†	6145.2	5485.9	496.58 µg/L	496.58 ppb	03:08:17
3	V 292.402†	43585.7	44216.9	502.09 µg/L	502.09 ppb	03:08:17
3	Zn 213.857†	19355.7	19053.1	500.99 µg/L	500.99 ppb	03:08:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1995258.6	98.667	%	0.6002				0.61%
Sc RADIAL	114856.9	98.5	%	0.71				0.72%
Y 371.029	1247976.6	99.144	%	0.4354				0.44%
Ag 328.068†	55982.3	514.16	µg/L	1.761	514.16	ppb	1.761	0.34%
QC value within limits for Ag 328.068 Recovery = 102.83%								
Al 396.153Radial†	10478.4	5187.0	µg/L	28.55	5187.0	ppb	28.55	0.55%
QC value within limits for Al 396.153Radial Recovery = 103.74%								
As 188.979†	275.2	498.64	µg/L	14.812	498.64	ppb	14.812	2.97%
QC value within limits for As 188.979 Recovery = 99.73%								
B 249.677†	11597.0	501.15	µg/L	1.435	501.15	ppb	1.435	0.29%
QC value within limits for B 249.677 Recovery = 100.23%								
Ba 233.527†	19440.0	499.66	µg/L	0.446	499.66	ppb	0.446	0.09%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	800291.8	500.59	µg/L	2.517	500.59	ppb	2.517	0.50%
QC value within limits for Be 313.107 Recovery = 100.12%								
Ca 317.933Radial†	13224.6	5116.9	µg/L	37.72	5116.9	ppb	37.72	0.74%
QC value within limits for Ca 317.933Radial Recovery = 102.34%								
Cd 226.502†	18831.6	501.71	µg/L	1.154	501.71	ppb	1.154	0.23%
QC value within limits for Cd 226.502 Recovery = 100.34%								
Co 228.616†	10373.1	501.33	µg/L	1.075	501.33	ppb	1.075	0.21%

```
   QC value within limits for Co 228.616  Recovery = 100.27%
Cr 267.716†            23800.9      500.32 µg/L         1.104      500.32 ppb          1.104   0.22%
   QC value within limits for Cr 267.716  Recovery = 100.06%
Cu 324.752†            72101.6      501.22 µg/L         1.357      501.22 ppb          1.357   0.27%
   QC value within limits for Cu 324.752  Recovery = 100.24%
Fe 238.204 Radial†       800.9      5110.2 µg/L        43.57      5110.2 ppb         43.57   0.85%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.20%
K 766.490 Radial†       9974.6      5104.9 µg/L        48.78      5104.9 ppb         48.78   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 102.10%
Mg 279.077 IEC†          846.6      5231.9 µg/L        40.80      5231.9 ppb         40.80   0.78%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.64%
Mn 257.610†           157030.2      502.04 µg/L         3.004      502.04 ppb          3.004   0.60%
   QC value within limits for Mn 257.610  Recovery = 100.41%
Mo 202.031†            4335.4      506.60 µg/L         7.506      506.60 ppb          7.506   1.48%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†    41087.9       10289 µg/L        54.4        10289 ppb          54.4   0.53%
   QC value within limits for Na 589.592 Radial  Recovery = 102.89%
Ni 231.604†            9142.4      500.19 µg/L         3.559      500.19 ppb          3.559   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.04%
P 214.914†             1223.1      2416.3 µg/L        43.65      2416.3 ppb         43.65   1.81%
   QC value within limits for P 214.914  Recovery = 96.65%
Pb 220.353†            1947.6      504.09 µg/L         8.284      504.09 ppb          8.284   1.64%
   QC value within limits for Pb 220.353  Recovery = 100.82%
S 181.975 Axial†        211.4      1033.3 µg/L        14.10      1033.3 ppb         14.10   1.36%
   QC value within limits for S 181.975 Axial  Recovery = 103.33%
Sb 206.836†             519.8      507.37 µg/L        12.333      507.37 ppb         12.333   2.43%
   QC value within limits for Sb 206.836  Recovery = 101.47%
Se 196.026†             395.4      507.43 µg/L        11.620      507.43 ppb         11.620   2.29%
   QC value within limits for Se 196.026  Recovery = 101.49%
SiO2†                  29464.7      5410.7 µg/L        18.58      5410.7 ppb         18.58   0.34%
   QC value within limits for SiO2  Recovery = 101.18%
Si 251.611†            34177.8      2480.0 µg/L         6.79      2480.0 ppb          6.79   0.27%
   QC value within limits for Si 251.611  Recovery = 99.20%
Sn 189.927†            1002.8      516.26 µg/L         6.774      516.26 ppb          6.774   1.31%
   QC value within limits for Sn 189.927  Recovery = 103.25%
Sr 421.552†           100296.6      504.09 µg/L         3.372      504.09 ppb          3.372   0.67%
   QC value within limits for Sr 421.552  Recovery = 100.82%
Ti 334.940†           229518.2      522.54 µg/L         5.301      522.54 ppb          5.301   1.01%
   QC value within limits for Ti 334.940  Recovery = 104.51%
Tl 190.801†             327.9      506.04 µg/L         9.929      506.04 ppb          9.929   1.96%
   QC value within limits for Tl 190.801  Recovery = 101.21%
U 409.014†             5495.1      497.41 µg/L         1.905      497.41 ppb          1.905   0.38%
   QC value within limits for U 409.014  Recovery = 99.48%
V 292.402†            44214.0      502.11 µg/L         1.339      502.11 ppb          1.339   0.27%
   QC value within limits for V 292.402  Recovery = 100.42%
Zn 213.857†           19053.3      500.99 µg/L         0.952      500.99 ppb          0.952   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.20%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 03:08:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114417.2	114417.2	98.1	%			03:09:19
1	Al 396.153Radial†	347.2	230.6	114.52	µg/L	114.52	ppb	03:09:19
1	Ca 317.933Radial†	488.7	85.4	33.037	µg/L	33.037	ppb	03:09:40
1	Fe 238.204 Radial†	22.9	8.1	51.712	µg/L	51.712	ppb	03:09:40
1	K 766.490 Radial†	766.2	98.5	50.423	µg/L	50.423	ppb	03:09:19
1	Mg 279.077 IEC†	12.4	-2.8	-17.126	µg/L	-17.126	ppb	03:09:40
1	Na 589.592 Radial†	-462.2	163.0	40.817	µg/L	40.817	ppb	03:09:19
1	Sr 421.552†	208.4	274.7	1.3807	µg/L	1.3807	ppb	03:09:19
1	Sc 361.383	1995000.1	1995000.1	98.654	%			03:10:42
1	Y 371.029	1245351.6	1245351.6	98.936	%			03:10:42
1	Ag 328.068†	93.2	84.1	0.7790	µg/L	0.7790	ppb	03:10:48
1	As 188.979†	0.7	-1.5	-2.7125	µg/L	-2.7125	ppb	03:11:08
1	B 249.677†	246.8	112.3	4.8518	µg/L	4.8518	ppb	03:10:48
1	Ba 233.527†	-31.5	46.1	1.1852	µg/L	1.1852	ppb	03:11:08
1	Be 313.107†	4185.9	727.1	0.4533	µg/L	0.4533	ppb	03:10:48
1	Cd 226.502†	-49.1	49.2	1.3105	µg/L	1.3105	ppb	03:11:08
1	Co 228.616†	-56.0	9.9	0.4733	µg/L	0.4733	ppb	03:11:08
1	Cr 267.716†	16.7	116.8	2.4519	µg/L	2.4519	ppb	03:10:48
1	Cu 324.752†	4508.1	299.9	2.0912	µg/L	2.0912	ppb	03:10:48
1	Mn 257.610†	17.4	218.9	0.7056	µg/L	0.7056	ppb	03:11:08
1	Mo 202.031†	6.1	9.9	1.1576	µg/L	1.1576	ppb	03:11:08
1	Ni 231.604†	302.8	31.4	1.7169	µg/L	1.7169	ppb	03:11:08
1	P 214.914†	193.1	-5.2	-10.742	µg/L	-10.742	ppb	03:11:08
1	Pb 220.353†	54.9	-0.6	-0.1573	µg/L	-0.1573	ppb	03:11:08
1	S 181.975 Axial†	27.1	5.3	26.179	µg/L	26.179	ppb	03:11:08
1	Sb 206.836†	24.0	3.2	3.1558	µg/L	3.1558	ppb	03:11:08
1	Se 196.026†	17.4	7.7	9.9118	µg/L	9.9118	ppb	03:11:08
1	SiO2†	2767.2	53.6	9.8478	µg/L	9.8478	ppb	03:10:48
1	Si 251.611†	414.4	94.9	6.7462	µg/L	6.7462	ppb	03:11:08
1	Sn 189.927†	25.5	3.4	1.7733	µg/L	1.7733	ppb	03:11:08
1	Ti 334.940†	2766.1	2029.5	4.6211	µg/L	4.6211	ppb	03:10:48
1	Tl 190.801†	-19.7	0.4	0.6021	µg/L	0.6021	ppb	03:11:08
1	U 409.014†	754.9	34.8	3.1444	µg/L	3.1444	ppb	03:10:48
1	V 292.402†	-13.1	113.5	1.2937	µg/L	1.2937	ppb	03:10:48
1	Zn 213.857†	588.1	69.5	1.8259	µg/L	1.8259	ppb	03:11:08
2	Sc RADIAL	117860.7	117860.7	101	%			03:09:45
2	Al 396.153Radial†	214.4	88.9	44.127	µg/L	44.127	ppb	03:09:45
2	Ca 317.933Radial†	486.6	68.7	26.590	µg/L	26.590	ppb	03:10:06
2	Fe 238.204 Radial†	22.8	7.4	46.771	µg/L	46.771	ppb	03:10:06
2	K 766.490 Radial†	795.0	104.2	53.316	µg/L	53.316	ppb	03:09:45
2	Mg 279.077 IEC†	23.1	7.4	45.512	µg/L	45.512	ppb	03:10:06
2	Na 589.592 Radial†	-523.3	116.3	29.127	µg/L	29.127	ppb	03:09:45
2	Sr 421.552†	29.3	91.3	0.4590	µg/L	0.4590	ppb	03:09:45
2	Sc 361.383	1997369.1	1997369.1	98.771	%			03:11:14
2	Y 371.029	1246763.1	1246763.1	99.048	%			03:11:14
2	Ag 328.068†	52.4	42.6	0.3985	µg/L	0.3985	ppb	03:11:20
2	As 188.979†	1.8	-0.4	-0.7433	µg/L	-0.7433	ppb	03:11:41
2	B 249.677†	245.0	110.2	4.7625	µg/L	4.7625	ppb	03:11:20
2	Ba 233.527†	-25.7	52.0	1.3351	µg/L	1.3351	ppb	03:11:41
2	Be 313.107†	3856.7	388.8	0.2418	µg/L	0.2418	ppb	03:11:20
2	Cd 226.502†	-47.5	50.9	1.3473	µg/L	1.3473	ppb	03:11:41
2	Co 228.616†	-53.7	12.3	0.5872	µg/L	0.5872	ppb	03:11:41
2	Cr 267.716†	-29.5	69.9	1.4682	µg/L	1.4682	ppb	03:11:20
2	Cu 324.752†	4431.3	216.6	1.5127	µg/L	1.5127	ppb	03:11:20
2	Mn 257.610†	5.8	207.2	0.6675	µg/L	0.6675	ppb	03:11:41
2	Mo 202.031†	6.0	9.7	1.1376	µg/L	1.1376	ppb	03:11:41
2	Ni 231.604†	295.7	23.8	1.3032	µg/L	1.3032	ppb	03:11:41
2	P 214.914†	185.0	-13.6	-27.633	µg/L	-27.633	ppb	03:11:41
2	Pb 220.353†	66.0	10.6	2.7495	µg/L	2.7495	ppb	03:11:41

2	S 181.975 Axial†	30.3	8.6	41.862 µg/L	41.862 ppb	03:11:41
2	Sb 206.836†	19.9	-1.0	-0.9352 µg/L	-0.9352 ppb	03:11:41
2	Se 196.026†	14.8	5.1	6.5079 µg/L	6.5079 ppb	03:11:41
2	SiO2†	2749.9	32.8	6.0158 µg/L	6.0158 ppb	03:11:20
2	Si 251.611†	402.0	81.8	5.6975 µg/L	5.6975 ppb	03:11:41
2	Sn 189.927†	30.8	8.7	4.4984 µg/L	4.4984 ppb	03:11:41
2	Ti 334.940†	2483.1	1739.6	3.9611 µg/L	3.9611 ppb	03:11:20
2	Tl 190.801†	-19.2	1.0	1.4890 µg/L	1.4890 ppb	03:11:41
2	U 409.014†	643.7	-78.7	-7.1468 µg/L	-7.1468 ppb	03:11:20
2	V 292.402†	-44.6	81.6	0.9182 µg/L	0.9182 ppb	03:11:20
2	Zn 213.857†	590.3	71.0	1.8660 µg/L	1.8660 ppb	03:11:41
3	Sc RADIAL	114149.3	114149.3	97.9 %		03:10:11
3	Al 396.153Radial†	258.4	140.7	69.882 µg/L	69.882 ppb	03:10:11
3	Ca 317.933Radial†	524.0	122.6	47.438 µg/L	47.438 ppb	03:10:32
3	Fe 238.204 Radial†	22.6	7.9	50.241 µg/L	50.241 ppb	03:10:32
3	K 766.490 Radial†	820.7	156.0	79.855 µg/L	79.855 ppb	03:10:11
3	Mg 279.077 IEC†	19.1	4.1	25.232 µg/L	25.232 ppb	03:10:32
3	Na 589.592 Radial†	-445.2	179.3	44.892 µg/L	44.892 ppb	03:10:11
3	Sr 421.552†	148.6	214.1	1.0760 µg/L	1.0760 ppb	03:10:11
3	Sc 361.383	1997534.1	1997534.1	98.779 %		03:11:47
3	Y 371.029	1246478.5	1246478.5	99.025 %		03:11:47
3	Ag 328.068†	30.6	20.6	0.1969 µg/L	0.1969 ppb	03:11:52
3	As 188.979†	5.6	3.4	6.2527 µg/L	6.2527 ppb	03:12:13
3	B 249.677†	205.1	69.8	3.0115 µg/L	3.0115 ppb	03:11:52
3	Ba 233.527†	-24.9	52.9	1.3578 µg/L	1.3578 ppb	03:12:13
3	Be 313.107†	3828.2	359.6	0.2237 µg/L	0.2237 ppb	03:11:52
3	Cd 226.502†	-50.7	47.6	1.2686 µg/L	1.2686 ppb	03:12:13
3	Co 228.616†	-41.8	24.4	1.1731 µg/L	1.1731 ppb	03:12:13
3	Cr 267.716†	-67.0	32.0	0.6721 µg/L	0.6721 ppb	03:11:52
3	Cu 324.752†	4349.8	133.8	0.9387 µg/L	0.9387 ppb	03:11:52
3	Mn 257.610†	-3.7	197.6	0.6372 µg/L	0.6372 ppb	03:12:13
3	Mo 202.031†	7.6	11.3	1.3250 µg/L	1.3250 ppb	03:12:13
3	Ni 231.604†	285.7	13.7	0.7498 µg/L	0.7498 ppb	03:12:13
3	P 214.914†	195.4	-3.1	-6.3589 µg/L	-6.3589 ppb	03:12:13
3	Pb 220.353†	60.1	4.5	1.1735 µg/L	1.1735 ppb	03:12:13
3	S 181.975 Axial†	24.6	2.7	13.314 µg/L	13.314 ppb	03:12:13
3	Sb 206.836†	21.8	1.0	0.9558 µg/L	0.9558 ppb	03:12:13
3	Se 196.026†	14.0	4.3	5.5866 µg/L	5.5866 ppb	03:12:13
3	SiO2†	2715.5	-2.3	-0.4193 µg/L	-0.4193 ppb	03:11:52
3	Si 251.611†	416.1	96.0	6.9174 µg/L	6.9174 ppb	03:12:13
3	Sn 189.927†	22.5	0.4	0.2175 µg/L	0.2175 ppb	03:12:13
3	Ti 334.940†	2314.1	1568.3	3.5698 µg/L	3.5698 ppb	03:11:52
3	Tl 190.801†	-18.9	1.2	1.9016 µg/L	1.9016 ppb	03:12:13
3	U 409.014†	797.9	77.3	6.9967 µg/L	6.9967 ppb	03:11:52
3	V 292.402†	-54.1	72.0	0.8343 µg/L	0.8343 ppb	03:11:52
3	Zn 213.857†	589.1	69.7	1.8361 µg/L	1.8361 ppb	03:12:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1996634.4	98.735	%	0.0701				0.07%
Sc RADIAL	115475.7	99.0	%	1.77				1.79%
Y 371.029	1246197.7	99.003	%	0.0593				0.06%
Ag 328.068†	49.1	0.4581	µg/L	0.29562	0.4581	ppb	0.29562	64.53%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	153.4	76.176	µg/L	35.6155	76.176	ppb	35.6155	46.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.9323	µg/L	4.71163	0.9323	ppb	4.71163	505.38%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	97.4	4.2086	µg/L	1.03768	4.2086	ppb	1.03768	24.66%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	50.3	1.2927	µg/L	0.09375	1.2927	ppb	0.09375	7.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	491.8	0.3063	µg/L	0.12764	0.3063	ppb	0.12764	41.68%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	92.2	35.688	µg/L	10.6736	35.688	ppb	10.6736	29.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	49.2	1.3088	µg/L	0.03934	1.3088	ppb	0.03934	3.01%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	15.5	0.7445	µg/L	0.37548	0.7445	ppb	0.37548	50.43%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              72.9      1.5307 µg/L       0.89151      1.5307 ppb        0.89151  58.24%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             216.8      1.5142 µg/L       0.57628      1.5142 ppb        0.57628  38.06%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        7.8      49.575 µg/L        2.5370      49.575 ppb         2.5370   5.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       119.6      61.198 µg/L       16.2219      61.198 ppb        16.2219  26.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           2.9      17.873 µg/L       31.9613      17.873 ppb        31.9613 178.83%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             207.9      0.6701 µg/L       0.03427      0.6701 ppb        0.03427   5.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              10.3      1.2067 µg/L       0.10290      1.2067 ppb        0.10290   8.53%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      152.9      38.278 µg/L        8.1834      38.278 ppb         8.1834  21.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              23.0      1.2567 µg/L       0.48524      1.2567 ppb        0.48524  38.61%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.3     -14.911 µg/L       11.2330     -14.911 ppb        11.2330  75.33%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.8      1.2552 µg/L       1.45510      1.2552 ppb        1.45510 115.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          5.5      27.118 µg/L       14.2972      27.118 ppb        14.2972  52.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               1.1      1.0588 µg/L       2.04743      1.0588 ppb        2.04743 193.37%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               5.7      7.3354 µg/L       2.27825      7.3354 ppb        2.27825  31.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    28.0      5.1481 µg/L       5.18826      5.1481 ppb        5.18826 100.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              90.9      6.4537 µg/L       0.66048      6.4537 ppb        0.66048  10.23%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.2      2.1631 µg/L       2.16689      2.1631 ppb        2.16689 100.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             193.4      0.9719 µg/L       0.46956      0.9719 ppb        0.46956  48.31%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            1779.1      4.0507 µg/L       0.53134      4.0507 ppb        0.53134  13.12%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.9      1.3309 µg/L       0.66401      1.3309 ppb        0.66401  49.89%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               11.1      0.9981 µg/L       7.31195      0.9981 ppb        7.31195 732.59%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               89.0      1.0154 µg/L       0.24466      1.0154 ppb        0.24466  24.10%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              70.1      1.8427 µg/L       0.02084      1.8427 ppb        0.02084   1.13%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 6
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:39:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	119102.6	119102.6	102	%			03:40:24
1	Al 396.153Radial†	10313.6	9976.0	4937.6	µg/L	4937.6	ppb	03:40:24
1	Ca 317.933Radial†	13526.7	12832.9	4965.3	µg/L	4965.3	ppb	03:40:44
1	Fe 238.204 Radial†	803.0	771.2	4920.6	µg/L	4920.6	ppb	03:40:44
1	K 766.490 Radial†	10448.0	9548.6	4886.8	µg/L	4886.8	ppb	03:40:24
1	Mg 279.077 IEC†	848.2	815.1	5037.8	µg/L	5037.8	ppb	03:40:44
1	Na 589.592 Radial†	41105.5	40885.8	10239	µg/L	10239	ppb	03:40:24
1	Sr 421.552†	98068.7	96094.0	482.97	µg/L	482.97	ppb	03:40:24
1	Sc 361.383	2073293.8	2073293.8	102.53	%			03:41:48
1	Y 371.029	1280044.1	1280044.1	101.69	%			03:41:48
1	Ag 328.068†	56424.5	55024.2	505.36	µg/L	505.36	ppb	03:41:54
1	As 188.979†	284.5	275.3	498.72	µg/L	498.72	ppb	03:42:14
1	B 249.677†	12484.4	12039.0	520.37	µg/L	520.37	ppb	03:41:54
1	Ba 233.527†	19653.9	19247.8	494.72	µg/L	494.72	ppb	03:41:54
1	Be 313.107†	813355.6	789804.8	494.04	µg/L	494.04	ppb	03:41:48
1	Cd 226.502†	19115.7	18743.8	499.38	µg/L	499.38	ppb	03:41:54
1	Co 228.616†	10469.6	10278.4	496.79	µg/L	496.79	ppb	03:41:54
1	Cr 267.716†	23953.2	23463.0	493.21	µg/L	493.21	ppb	03:41:54
1	Cu 324.752†	76369.4	70218.5	488.12	µg/L	488.12	ppb	03:41:54
1	Mn 257.610†	158087.5	154394.8	493.60	µg/L	493.60	ppb	03:41:48
1	Mo 202.031†	4397.7	4293.0	501.64	µg/L	501.64	ppb	03:42:14
1	Ni 231.604†	9601.3	9089.3	497.28	µg/L	497.28	ppb	03:41:54
1	P 214.914†	1461.8	1224.9	2421.5	µg/L	2421.5	ppb	03:42:14
1	Pb 220.353†	2032.0	1925.6	498.43	µg/L	498.43	ppb	03:42:14
1	S 181.975 Axial†	243.3	215.1	1051.9	µg/L	1051.9	ppb	03:42:14
1	Sb 206.836†	546.6	512.0	499.67	µg/L	499.67	ppb	03:42:14
1	Se 196.026†	408.4	388.4	498.45	µg/L	498.45	ppb	03:42:14
1	SiO2†	32390.7	28841.5	5296.2	µg/L	5296.2	ppb	03:41:54
1	Si 251.611†	34828.3	33645.2	2441.6	µg/L	2441.6	ppb	03:41:54
1	Sn 189.927†	1048.6	1000.4	514.93	µg/L	514.93	ppb	03:42:14
1	Ti 334.940†	226183.6	219837.8	500.49	µg/L	500.49	ppb	03:41:48
1	Tl 190.801†	311.5	324.2	500.19	µg/L	500.19	ppb	03:42:14
1	U 409.014†	6157.9	5275.8	477.56	µg/L	477.56	ppb	03:41:54
1	V 292.402†	44572.5	43601.3	495.14	µg/L	495.14	ppb	03:41:54
1	Zn 213.857†	19724.7	18712.2	492.01	µg/L	492.01	ppb	03:41:54
2	Sc RADIAL	119473.2	119473.2	102	%			03:40:50
2	Al 396.153Radial†	10374.6	10004.3	4951.6	µg/L	4951.6	ppb	03:40:50
2	Ca 317.933Radial†	13530.0	12795.1	4950.7	µg/L	4950.7	ppb	03:41:10
2	Fe 238.204 Radial†	811.5	777.0	4958.0	µg/L	4958.0	ppb	03:41:10
2	K 766.490 Radial†	10606.8	9671.8	4949.9	µg/L	4949.9	ppb	03:40:50
2	Mg 279.077 IEC†	851.7	816.0	5043.4	µg/L	5043.4	ppb	03:41:10
2	Na 589.592 Radial†	40679.7	40345.2	10103	µg/L	10103	ppb	03:40:50
2	Sr 421.552†	99361.2	97057.8	487.81	µg/L	487.81	ppb	03:40:50
2	Sc 361.383	2085453.2	2085453.2	103.13	%			03:42:21
2	Y 371.029	1289070.2	1289070.2	102.41	%			03:42:21
2	Ag 328.068†	56316.5	54598.6	501.47	µg/L	501.47	ppb	03:42:27
2	As 188.979†	295.6	284.4	515.33	µg/L	515.33	ppb	03:42:47
2	B 249.677†	12384.7	11871.4	513.09	µg/L	513.09	ppb	03:42:27
2	Ba 233.527†	19723.9	19203.9	493.58	µg/L	493.58	ppb	03:42:27
2	Be 313.107†	827955.1	799336.2	500.00	µg/L	500.00	ppb	03:42:21
2	Cd 226.502†	19172.3	18690.0	497.93	µg/L	497.93	ppb	03:42:27
2	Co 228.616†	10494.1	10242.6	495.05	µg/L	495.05	ppb	03:42:27
2	Cr 267.716†	24040.9	23411.8	492.13	µg/L	492.13	ppb	03:42:27
2	Cu 324.752†	76365.6	69780.5	485.09	µg/L	485.09	ppb	03:42:27
2	Mn 257.610†	160819.2	156144.6	499.19	µg/L	499.19	ppb	03:42:21
2	Mo 202.031†	4436.1	4305.3	503.07	µg/L	503.07	ppb	03:42:47
2	Ni 231.604†	9553.2	8988.0	491.74	µg/L	491.74	ppb	03:42:27
2	P 214.914†	1477.8	1232.1	2436.4	µg/L	2436.4	ppb	03:42:47
2	Pb 220.353†	2058.7	1940.0	502.16	µg/L	502.16	ppb	03:42:47

2	S 181.975 Axial†	237.3	208.0	1016.8 µg/L	1016.8 ppb	03:42:47
2	Sb 206.836†	552.5	514.7	502.32 µg/L	502.32 ppb	03:42:47
2	Se 196.026†	417.1	394.6	506.35 µg/L	506.35 ppb	03:42:47
2	SiO2†	32486.7	28750.4	5279.5 µg/L	5279.5 ppb	03:42:27
2	Si 251.611†	34837.8	33456.4	2427.3 µg/L	2427.3 ppb	03:42:27
2	Sn 189.927†	1058.7	1004.2	516.89 µg/L	516.89 ppb	03:42:47
2	Ti 334.940†	230176.6	222423.4	506.38 µg/L	506.38 ppb	03:42:21
2	Tl 190.801†	314.7	325.5	502.28 µg/L	502.28 ppb	03:42:47
2	U 409.014†	6143.8	5227.0	473.13 µg/L	473.13 ppb	03:42:27
2	V 292.402†	44654.8	43427.7	493.19 µg/L	493.19 ppb	03:42:27
2	Zn 213.857†	19811.8	18684.5	491.31 µg/L	491.31 ppb	03:42:27
3	Sc RADIAL	118270.2	118270.2	101 %		03:41:16
3	Al 396.153Radial†	10386.7	10119.3	5009.1 µg/L	5009.1 ppb	03:41:16
3	Ca 317.933Radial†	13646.3	13044.1	5047.0 µg/L	5047.0 ppb	03:41:36
3	Fe 238.204 Radial†	815.3	788.9	5033.2 µg/L	5033.2 ppb	03:41:36
3	K 766.490 Radial†	10469.3	9641.5	4934.4 µg/L	4934.4 ppb	03:41:16
3	Mg 279.077 IEC†	859.1	831.7	5140.1 µg/L	5140.1 ppb	03:41:36
3	Na 589.592 Radial†	40383.3	40456.9	10131 µg/L	10131 ppb	03:41:16
3	Sr 421.552†	99237.2	97922.2	492.15 µg/L	492.15 ppb	03:41:16
3	Sc 361.383	2075214.7	2075214.7	102.62 %		03:42:54
3	Y 371.029	1283122.2	1283122.2	101.94 %		03:42:54
3	Ag 328.068†	56469.9	55017.5	505.32 µg/L	505.32 ppb	03:43:00
3	As 188.979†	277.8	268.5	486.41 µg/L	486.41 ppb	03:43:21
3	B 249.677†	12345.0	11891.9	513.96 µg/L	513.96 ppb	03:43:00
3	Ba 233.527†	19803.0	19375.4	497.99 µg/L	497.99 ppb	03:43:00
3	Be 313.107†	822121.4	797612.5	498.92 µg/L	498.92 ppb	03:42:54
3	Cd 226.502†	19233.1	18840.9	501.97 µg/L	501.97 ppb	03:43:00
3	Co 228.616†	10520.6	10318.6	498.71 µg/L	498.71 ppb	03:43:00
3	Cr 267.716†	24111.6	23595.7	496.00 µg/L	496.00 ppb	03:43:00
3	Cu 324.752†	76394.4	70173.9	487.84 µg/L	487.84 ppb	03:43:00
3	Mn 257.610†	159748.2	155870.3	498.33 µg/L	498.33 ppb	03:42:54
3	Mo 202.031†	4334.1	4227.1	493.93 µg/L	493.93 ppb	03:43:21
3	Ni 231.604†	9691.8	9168.7	501.63 µg/L	501.63 ppb	03:43:00
3	P 214.914†	1457.6	1219.4	2410.3 µg/L	2410.3 ppb	03:43:21
3	Pb 220.353†	2019.5	1911.7	494.79 µg/L	494.79 ppb	03:43:21
3	S 181.975 Axial†	238.9	210.6	1029.7 µg/L	1029.7 ppb	03:43:21
3	Sb 206.836†	535.8	501.0	488.91 µg/L	488.91 ppb	03:43:21
3	Se 196.026†	402.7	382.6	491.02 µg/L	491.02 ppb	03:43:21
3	SiO2†	32450.3	28870.3	5301.5 µg/L	5301.5 ppb	03:43:00
3	Si 251.611†	34870.5	33654.9	2442.6 µg/L	2442.6 ppb	03:43:00
3	Sn 189.927†	1033.2	984.4	506.82 µg/L	506.82 ppb	03:43:21
3	Ti 334.940†	228381.2	221775.1	504.90 µg/L	504.90 ppb	03:42:54
3	Tl 190.801†	311.9	324.3	500.48 µg/L	500.48 ppb	03:43:21
3	U 409.014†	6337.8	5445.5	492.92 µg/L	492.92 ppb	03:43:00
3	V 292.402†	44744.5	43728.7	496.55 µg/L	496.55 ppb	03:43:00
3	Zn 213.857†	19847.3	18813.9	494.67 µg/L	494.67 ppb	03:43:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2077987.2	102.76	%	0.323				0.31%
Sc RADIAL	118948.7	102	%	0.5				0.52%
Y 371.029	1284078.8	102.01	%	0.365				0.36%
Ag 328.068†	54880.1	504.05	µg/L	2.234	504.05	ppb	2.234	0.44%
QC value within limits for Ag 328.068 Recovery = 100.81%								
Al 396.153Radial†	10033.2	4966.1	µg/L	37.87	4966.1	ppb	37.87	0.76%
QC value within limits for Al 396.153Radial Recovery = 99.32%								
As 188.979†	276.1	500.16	µg/L	14.513	500.16	ppb	14.513	2.90%
QC value within limits for As 188.979 Recovery = 100.03%								
B 249.677†	11934.1	515.81	µg/L	3.976	515.81	ppb	3.976	0.77%
QC value within limits for B 249.677 Recovery = 103.16%								
Ba 233.527†	19275.7	495.43	µg/L	2.288	495.43	ppb	2.288	0.46%
QC value within limits for Ba 233.527 Recovery = 99.09%								
Be 313.107†	795584.5	497.65	µg/L	3.177	497.65	ppb	3.177	0.64%
QC value within limits for Be 313.107 Recovery = 99.53%								
Ca 317.933Radial†	12890.7	4987.7	µg/L	51.91	4987.7	ppb	51.91	1.04%
QC value within limits for Ca 317.933Radial Recovery = 99.75%								
Cd 226.502†	18758.2	499.76	µg/L	2.045	499.76	ppb	2.045	0.41%
QC value within limits for Cd 226.502 Recovery = 99.95%								
Co 228.616†	10279.9	496.85	µg/L	1.827	496.85	ppb	1.827	0.37%

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   QC value within limits for Co 228.616  Recovery = 99.37%
Cr 267.716†            23490.2      493.78 µg/L        1.994      493.78 ppb        1.994   0.40%
   QC value within limits for Cr 267.716  Recovery = 98.76%
Cu 324.752†            70057.6      487.02 µg/L        1.673      487.02 ppb        1.673   0.34%
   QC value within limits for Cu 324.752  Recovery = 97.40%
Fe 238.204 Radial†       779.0      4970.6 µg/L       57.37      4970.6 ppb       57.37   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.41%
K 766.490 Radial†       9620.6      4923.7 µg/L       32.86      4923.7 ppb       32.86   0.67%
   QC value within limits for K 766.490 Radial  Recovery = 98.47%
Mg 279.077 IEC†          820.9      5073.7 µg/L       57.52      5073.7 ppb       57.52   1.13%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.47%
Mn 257.610†           155469.9      497.04 µg/L       3.010      497.04 ppb       3.010   0.61%
   QC value within limits for Mn 257.610  Recovery = 99.41%
Mo 202.031†            4275.1      499.55 µg/L       4.912      499.55 ppb       4.912   0.98%
   QC value within limits for Mo 202.031  Recovery = 99.91%
Na 589.592 Radial†    40562.7       10158 µg/L        71.5       10158 ppb        71.5   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 101.58%
Ni 231.604†            9082.0      496.89 µg/L       4.956      496.89 ppb       4.956   1.00%
   QC value within limits for Ni 231.604  Recovery = 99.38%
P 214.914†             1225.4      2422.7 µg/L       13.11      2422.7 ppb       13.11   0.54%
   QC value within limits for P 214.914  Recovery = 96.91%
Pb 220.353†            1925.8      498.46 µg/L       3.684      498.46 ppb       3.684   0.74%
   QC value within limits for Pb 220.353  Recovery = 99.69%
S 181.975 Axial†        211.2      1032.8 µg/L       17.75      1032.8 ppb       17.75   1.72%
   QC value within limits for S 181.975 Axial  Recovery = 103.28%
Sb 206.836†             509.2      496.97 µg/L       7.099      496.97 ppb       7.099   1.43%
   QC value within limits for Sb 206.836  Recovery = 99.39%
Se 196.026†             388.5      498.61 µg/L       7.670      498.61 ppb       7.670   1.54%
   QC value within limits for Se 196.026  Recovery = 99.72%
SiO2†                  28820.7      5292.4 µg/L       11.49      5292.4 ppb       11.49   0.22%
   QC value within limits for SiO2  Recovery = 98.97%
Si 251.611†            33585.5      2437.2 µg/L        8.56      2437.2 ppb        8.56   0.35%
   QC value within limits for Si 251.611  Recovery = 97.49%
Sn 189.927†             996.3      512.88 µg/L       5.335      512.88 ppb       5.335   1.04%
   QC value within limits for Sn 189.927  Recovery = 102.58%
Sr 421.552†            97024.7      487.64 µg/L       4.597      487.64 ppb       4.597   0.94%
   QC value within limits for Sr 421.552  Recovery = 97.53%
Ti 334.940†           221345.4      503.93 µg/L       3.064      503.93 ppb       3.064   0.61%
   QC value within limits for Ti 334.940  Recovery = 100.79%
Tl 190.801†             324.7      500.98 µg/L       1.133      500.98 ppb       1.133   0.23%
   QC value within limits for Tl 190.801  Recovery = 100.20%
U 409.014†             5316.1      481.20 µg/L      10.388      481.20 ppb      10.388   2.16%
   QC value within limits for U 409.014  Recovery = 96.24%
V 292.402†             43585.9      494.96 µg/L       1.687      494.96 ppb       1.687   0.34%
   QC value within limits for V 292.402  Recovery = 98.99%
Zn 213.857†            18736.9      492.66 µg/L       1.774      492.66 ppb       1.774   0.36%
   QC value within limits for Zn 213.857  Recovery = 98.53%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 03:43:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117089.0	117089.0	100	%			03:44:02
1	Al 396.153Radial†	148.5	24.6	12.236	µg/L	12.236	ppb	03:44:02
1	Ca 317.933Radial†	432.6	18.2	7.0268	µg/L	7.0268	ppb	03:44:23
1	Fe 238.204 Radial†	17.5	2.3	14.641	µg/L	14.641	ppb	03:44:23
1	K 766.490 Radial†	844.7	158.9	81.339	µg/L	81.339	ppb	03:44:02
1	Mg 279.077 IEC†	18.6	3.1	18.947	µg/L	18.947	ppb	03:44:23
1	Na 589.592 Radial†	-199.3	435.6	109.09	µg/L	109.09	ppb	03:44:02
1	Sr 421.552†	-61.2	1.4	0.0069	µg/L	0.0069	ppb	03:44:02
1	Sc 361.383	2025357.8	2025357.8	100.15	%			03:45:25
1	Y 371.029	1260935.3	1260935.3	100.17	%			03:45:25
1	Ag 328.068†	89.0	78.5	0.7186	µg/L	0.7186	ppb	03:45:30
1	As 188.979†	2.9	0.7	1.2387	µg/L	1.2387	ppb	03:45:51
1	B 249.677†	558.1	419.4	18.177	µg/L	18.177	ppb	03:45:30
1	Ba 233.527†	-71.5	6.7	0.1717	µg/L	0.1717	ppb	03:45:51
1	Be 313.107†	3697.0	175.4	0.1094	µg/L	0.1094	ppb	03:45:30
1	Cd 226.502†	-84.9	14.2	0.3796	µg/L	0.3796	ppb	03:45:51
1	Co 228.616†	-76.3	-9.6	-0.4639	µg/L	-0.4639	ppb	03:45:51
1	Cr 267.716†	-146.5	-46.4	-0.9735	µg/L	-0.9735	ppb	03:45:30
1	Cu 324.752†	4172.4	-103.8	-0.7171	µg/L	-0.7171	ppb	03:45:30
1	Mn 257.610†	-212.9	-11.3	-0.0341	µg/L	-0.0341	ppb	03:45:51
1	Mo 202.031†	-4.2	-0.5	-0.0614	µg/L	-0.0614	ppb	03:45:51
1	Ni 231.604†	289.4	13.4	0.7326	µg/L	0.7326	ppb	03:45:51
1	P 214.914†	202.3	1.1	2.2453	µg/L	2.2453	ppb	03:45:51
1	Pb 220.353†	57.5	1.1	0.2932	µg/L	0.2932	ppb	03:45:51
1	S 181.975 Axial†	30.1	7.9	38.651	µg/L	38.651	ppb	03:45:51
1	Sb 206.836†	22.5	1.3	1.3215	µg/L	1.3215	ppb	03:45:51
1	Se 196.026†	10.6	0.8	0.9643	µg/L	0.9643	ppb	03:45:51
1	SiO2†	2690.9	-64.6	-11.862	µg/L	-11.862	ppb	03:45:30
1	Si 251.611†	348.9	23.2	1.6188	µg/L	1.6188	ppb	03:45:51
1	Sn 189.927†	24.0	1.6	0.8183	µg/L	0.8183	ppb	03:45:51
1	Ti 334.940†	1194.3	418.0	0.9519	µg/L	0.9519	ppb	03:45:30
1	Tl 190.801†	-16.2	4.2	6.4273	µg/L	6.4273	ppb	03:45:51
1	U 409.014†	755.0	23.4	2.1186	µg/L	2.1186	ppb	03:45:30
1	V 292.402†	-102.2	24.6	0.2814	µg/L	0.2814	ppb	03:45:30
1	Zn 213.857†	545.0	17.5	0.4586	µg/L	0.4586	ppb	03:45:51
2	Sc RADIAL	113832.5	113832.5	97.6	%			03:44:28
2	Al 396.153Radial†	144.3	24.6	12.204	µg/L	12.204	ppb	03:44:28
2	Ca 317.933Radial†	436.6	34.6	13.388	µg/L	13.388	ppb	03:44:49
2	Fe 238.204 Radial†	19.2	4.5	28.580	µg/L	28.580	ppb	03:44:49
2	K 766.490 Radial†	712.6	47.6	24.383	µg/L	24.383	ppb	03:44:28
2	Mg 279.077 IEC†	17.8	2.8	16.948	µg/L	16.948	ppb	03:44:49
2	Na 589.592 Radial†	39.4	674.5	168.91	µg/L	168.91	ppb	03:44:28
2	Sr 421.552†	-63.2	-2.4	-0.0122	µg/L	-0.0122	ppb	03:44:28
2	Sc 361.383	2028517.3	2028517.3	100.31	%			03:45:57
2	Y 371.029	1263352.3	1263352.3	100.37	%			03:45:57
2	Ag 328.068†	55.1	44.6	0.4097	µg/L	0.4097	ppb	03:46:03
2	As 188.979†	1.3	-0.9	-1.6949	µg/L	-1.6949	ppb	03:46:23
2	B 249.677†	498.4	359.0	15.553	µg/L	15.553	ppb	03:46:03
2	Ba 233.527†	-69.2	9.1	0.2326	µg/L	0.2326	ppb	03:46:23
2	Be 313.107†	3596.3	69.3	0.0430	µg/L	0.0430	ppb	03:46:03
2	Cd 226.502†	-80.9	18.4	0.4916	µg/L	0.4916	ppb	03:46:23
2	Co 228.616†	-67.3	-0.4	-0.0211	µg/L	-0.0211	ppb	03:46:23
2	Cr 267.716†	-93.8	6.2	0.1315	µg/L	0.1315	ppb	03:46:03
2	Cu 324.752†	4156.5	-126.2	-0.8693	µg/L	-0.8693	ppb	03:46:03
2	Mn 257.610†	-207.3	-5.3	-0.0134	µg/L	-0.0134	ppb	03:46:23
2	Mo 202.031†	-4.3	-0.6	-0.0682	µg/L	-0.0682	ppb	03:46:23
2	Ni 231.604†	295.5	19.0	1.0421	µg/L	1.0421	ppb	03:46:23
2	P 214.914†	192.3	-9.2	-18.517	µg/L	-18.517	ppb	03:46:23
2	Pb 220.353†	55.0	-1.5	-0.3822	µg/L	-0.3822	ppb	03:46:23

2	S 181.975 Axial†	31.4	9.1	44.639 µg/L	44.639 ppb		03:46:23
2	Sb 206.836†	18.4	-2.8	-2.7400 µg/L	-2.7400 ppb		03:46:23
2	Se 196.026†	11.2	1.2	1.6029 µg/L	1.6029 ppb		03:46:23
2	SiO2†	2675.2	-84.5	-15.519 µg/L	-15.519 ppb		03:46:03
2	Si 251.611†	344.9	18.6	1.3210 µg/L	1.3210 ppb		03:46:23
2	Sn 189.927†	23.5	1.1	0.5528 µg/L	0.5528 ppb		03:46:23
2	Ti 334.940†	1146.6	368.6	0.8389 µg/L	0.8389 ppb		03:46:03
2	Tl 190.801†	-24.7	-4.3	-6.5271 µg/L	-6.5271 ppb		03:46:23
2	U 409.014†	794.1	61.2	5.5401 µg/L	5.5401 ppb		03:46:03
2	V 292.402†	-110.3	16.8	0.1999 µg/L	0.1999 ppb		03:46:03
2	Zn 213.857†	542.9	14.6	0.3780 µg/L	0.3780 ppb		03:46:23
3	Sc RADIAL	115492.1	115492.1	99.0 %			03:44:54
3	Al 396.153Radial†	145.2	23.3	11.589 µg/L	11.589 ppb		03:44:54
3	Ca 317.933Radial†	436.7	28.3	10.943 µg/L	10.943 ppb		03:45:14
3	Fe 238.204 Radial†	15.2	0.2	1.0069 µg/L	1.0069 ppb		03:45:14
3	K 766.490 Radial†	690.6	14.9	7.6272 µg/L	7.6272 ppb		03:44:54
3	Mg 279.077 IEC†	17.1	1.8	11.341 µg/L	11.341 ppb		03:45:14
3	Na 589.592 Radial†	-186.8	445.4	111.55 µg/L	111.55 ppb		03:44:54
3	Sr 421.552†	-32.6	29.4	0.1476 µg/L	0.1476 ppb		03:44:54
3	Sc 361.383	2021784.9	2021784.9	99.978 %			03:46:29
3	Y 371.029	1258730.2	1258730.2	99.999 %			03:46:29
3	Ag 328.068†	37.5	27.1	0.2464 µg/L	0.2464 ppb		03:46:35
3	As 188.979†	3.0	0.8	1.4497 µg/L	1.4497 ppb		03:46:55
3	B 249.677†	485.2	347.5	15.064 µg/L	15.064 ppb		03:46:35
3	Ba 233.527†	-67.1	10.9	0.2793 µg/L	0.2793 ppb		03:46:55
3	Be 313.107†	3582.7	67.6	0.0420 µg/L	0.0420 ppb		03:46:35
3	Cd 226.502†	-96.5	2.5	0.0583 µg/L	0.0583 ppb		03:46:55
3	Co 228.616†	-67.8	-1.2	-0.0572 µg/L	-0.0572 ppb		03:46:55
3	Cr 267.716†	-157.6	-57.9	-1.2135 µg/L	-1.2135 ppb		03:46:35
3	Cu 324.752†	4159.9	-109.0	-0.7555 µg/L	-0.7555 ppb		03:46:35
3	Mn 257.610†	-224.0	-22.7	-0.0724 µg/L	-0.0724 ppb		03:46:55
3	Mo 202.031†	-2.9	0.8	0.0957 µg/L	0.0957 ppb		03:46:55
3	Ni 231.604†	287.3	11.8	0.6476 µg/L	0.6476 ppb		03:46:55
3	P 214.914†	202.7	1.8	3.8020 µg/L	3.8020 ppb		03:46:55
3	Pb 220.353†	46.2	-10.0	-2.5785 µg/L	-2.5785 ppb		03:46:55
3	S 181.975 Axial†	26.2	4.1	19.890 µg/L	19.890 ppb		03:46:55
3	Sb 206.836†	14.1	-7.0	-6.8593 µg/L	-6.8593 ppb		03:46:55
3	Se 196.026†	10.7	0.8	0.9986 µg/L	0.9986 ppb		03:46:55
3	SiO2†	2736.0	-14.8	-2.7145 µg/L	-2.7145 ppb		03:46:35
3	Si 251.611†	355.7	30.6	2.2227 µg/L	2.2227 ppb		03:46:55
3	Sn 189.927†	22.9	0.5	0.2415 µg/L	0.2415 ppb		03:46:55
3	Ti 334.940†	1119.0	344.9	0.7850 µg/L	0.7850 ppb		03:46:35
3	Tl 190.801†	-20.7	-0.3	-0.5112 µg/L	-0.5112 ppb		03:46:55
3	U 409.014†	605.1	-125.2	-11.352 µg/L	-11.352 ppb		03:46:35
3	V 292.402†	-136.1	-9.4	-0.1228 µg/L	-0.1228 ppb		03:46:35
3	Zn 213.857†	536.9	10.4	0.2717 µg/L	0.2717 ppb		03:46:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025220.0	100.15	%	0.167				0.17%
Sc RADIAL	115471.2	99.0	%	1.40				1.41%
Y 371.029	1261005.9	100.18	%	0.184				0.18%
Ag 328.068†	50.0	0.4582	µg/L	0.23980	0.4582	ppb	0.23980	52.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	24.2	12.010	µg/L	0.3646	12.010	ppb	0.3646	3.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.3312	µg/L	1.75779	0.3312	ppb	1.75779	530.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	375.3	16.265	µg/L	1.6745	16.265	ppb	1.6745	10.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.9	0.2279	µg/L	0.05398	0.2279	ppb	0.05398	23.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	104.1	0.0648	µg/L	0.03861	0.0648	ppb	0.03861	59.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	27.0	10.452	µg/L	3.2087	10.452	ppb	3.2087	30.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.7	0.3098	µg/L	0.22493	0.3098	ppb	0.22493	72.60%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-3.7	-0.1807	µg/L	0.24589	-0.1807	ppb	0.24589	136.07%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -32.7     -0.6851 µg/L       0.71734     -0.6851 ppb        0.71734 104.70%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -113.0     -0.7807 µg/L       0.07913     -0.7807 ppb        0.07913  10.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.3      14.743 µg/L       13.7867      14.743 ppb        13.7867  93.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         73.8      37.783 µg/L       38.6397      37.783 ppb        38.6397 102.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.6      15.746 µg/L        3.9431      15.746 ppb         3.9431  25.04%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -13.1     -0.0400 µg/L       0.02992     -0.0400 ppb        0.02992  74.81%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.1     -0.0113 µg/L       0.09275     -0.0113 ppb        0.09275 821.72%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       518.5      129.85 µg/L        33.849      129.85 ppb         33.849  26.07%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.8      0.8074 µg/L       0.20766      0.8074 ppb        0.20766  25.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.1     -4.1566 µg/L      12.46085     -4.1566 ppb       12.46085 299.79%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -3.5     -0.8892 µg/L       1.50143     -0.8892 ppb        1.50143 168.86%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           7.0      34.393 µg/L       12.9124      34.393 ppb        12.9124  37.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.8     -2.7593 µg/L       4.09048     -2.7593 ppb        4.09048 148.25%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.9      1.1886 µg/L       0.35923      1.1886 ppb        0.35923  30.22%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -54.6     -10.032 µg/L        6.5955     -10.032 ppb         6.5955  65.75%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               24.1      1.7208 µg/L       0.45944      1.7208 ppb        0.45944  26.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.0      0.5375 µg/L       0.28871      0.5375 ppb        0.28871  53.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.4      0.0475 µg/L       0.08728      0.0475 ppb        0.08728 183.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              377.2      0.8586 µg/L       0.08517      0.8586 ppb        0.08517   9.92%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.1     -0.2037 µg/L       6.48268     -0.2037 ppb        6.48268 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -13.6     -1.2311 µg/L       8.93033     -1.2311 ppb        8.93033 725.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                10.7      0.1195 µg/L       0.21379      0.1195 ppb        0.21379 178.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.1      0.3694 µg/L       0.09378      0.3694 ppb        0.09378  25.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 04:06:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	119005.9	119005.9	102	%			04:07:26
1	Al 396.153Radial†	10293.7	9964.8	4932.1	µg/L	4932.1	ppb	04:07:26
1	Ca 317.933Radial†	13436.7	12755.6	4935.4	µg/L	4935.4	ppb	04:07:47
1	Fe 238.204 Radial†	806.0	774.8	4943.3	µg/L	4943.3	ppb	04:07:47
1	K 766.490 Radial†	10443.3	9552.2	4888.7	µg/L	4888.7	ppb	04:07:26
1	Mg 279.077 IEC†	840.9	808.6	4997.7	µg/L	4997.7	ppb	04:07:47
1	Na 589.592 Radial†	39923.3	39759.9	9956.9	µg/L	9956.9	ppb	04:07:26
1	Sr 421.552†	98401.2	96497.9	485.00	µg/L	485.00	ppb	04:07:26
1	Sc 361.383	2042485.1	2042485.1	101.00	%			04:08:51
1	Y 371.029	1260543.1	1260543.1	100.14	%			04:08:51
1	Ag 328.068†	55349.9	54790.4	503.21	µg/L	503.21	ppb	04:08:56
1	As 188.979†	281.9	276.9	501.64	µg/L	501.64	ppb	04:09:17
1	B 249.677†	11646.5	11393.1	492.36	µg/L	492.36	ppb	04:08:56
1	Ba 233.527†	19122.3	19010.6	488.62	µg/L	488.62	ppb	04:08:56
1	Be 313.107†	795411.9	784005.5	490.41	µg/L	490.41	ppb	04:08:51
1	Cd 226.502†	18574.8	18489.5	492.60	µg/L	492.60	ppb	04:08:56
1	Co 228.616†	10195.5	10161.0	491.12	µg/L	491.12	ppb	04:08:56
1	Cr 267.716†	23352.6	23220.7	488.12	µg/L	488.12	ppb	04:08:56
1	Cu 324.752†	75047.3	70033.1	486.84	µg/L	486.84	ppb	04:08:56
1	Mn 257.610†	154776.5	153442.4	490.56	µg/L	490.56	ppb	04:08:51
1	Mo 202.031†	4311.9	4272.8	499.28	µg/L	499.28	ppb	04:09:17
1	Ni 231.604†	9335.0	8966.8	490.59	µg/L	490.59	ppb	04:08:56
1	P 214.914†	1424.8	1209.7	2391.0	µg/L	2391.0	ppb	04:09:17
1	Pb 220.353†	1999.9	1923.8	497.93	µg/L	497.93	ppb	04:09:17
1	S 181.975 Axial†	230.0	205.6	1005.3	µg/L	1005.3	ppb	04:09:17
1	Sb 206.836†	538.3	511.8	499.50	µg/L	499.50	ppb	04:09:17
1	Se 196.026†	412.9	398.9	511.85	µg/L	511.85	ppb	04:09:17
1	SiO2†	31694.8	28629.0	5257.2	µg/L	5257.2	ppb	04:08:56
1	Si 251.611†	33953.1	33291.1	2415.6	µg/L	2415.6	ppb	04:08:56
1	Sn 189.927†	1026.6	994.0	511.67	µg/L	511.67	ppb	04:09:17
1	Ti 334.940†	222234.5	219255.5	499.17	µg/L	499.17	ppb	04:08:51
1	Tl 190.801†	309.7	327.0	504.60	µg/L	504.60	ppb	04:09:17
1	U 409.014†	6123.0	5331.8	482.63	µg/L	482.63	ppb	04:08:56
1	V 292.402†	43592.7	43287.0	491.59	µg/L	491.59	ppb	04:08:56
1	Zn 213.857†	19273.8	18556.0	487.91	µg/L	487.91	ppb	04:08:56
2	Sc RADIAL	117749.8	117749.8	101	%			04:07:52
2	Al 396.153Radial†	10335.9	10114.2	5006.3	µg/L	5006.3	ppb	04:07:52
2	Ca 317.933Radial†	13430.4	12889.7	4987.3	µg/L	4987.3	ppb	04:08:13
2	Fe 238.204 Radial†	808.8	786.0	5014.4	µg/L	5014.4	ppb	04:08:13
2	K 766.490 Radial†	10392.7	9611.3	4918.9	µg/L	4918.9	ppb	04:07:52
2	Mg 279.077 IEC†	839.1	815.6	5041.0	µg/L	5041.0	ppb	04:08:13
2	Na 589.592 Radial†	39891.3	40145.6	10053	µg/L	10053	ppb	04:07:52
2	Sr 421.552†	98127.3	97255.3	488.80	µg/L	488.80	ppb	04:07:52
2	Sc 361.383	2034901.1	2034901.1	100.63	%			04:09:24
2	Y 371.029	1260510.3	1260510.3	100.14	%			04:09:24
2	Ag 328.068†	54042.4	53695.3	493.17	µg/L	493.17	ppb	04:09:29
2	As 188.979†	284.0	280.0	507.30	µg/L	507.30	ppb	04:09:50
2	B 249.677†	11404.7	11195.8	483.79	µg/L	483.79	ppb	04:09:29
2	Ba 233.527†	18782.3	18743.3	481.75	µg/L	481.75	ppb	04:09:29
2	Be 313.107†	783195.9	774800.7	484.65	µg/L	484.65	ppb	04:09:24
2	Cd 226.502†	18132.3	18118.3	482.69	µg/L	482.69	ppb	04:09:29
2	Co 228.616†	9982.2	9986.7	482.71	µg/L	482.71	ppb	04:09:29
2	Cr 267.716†	22854.1	22811.5	479.52	µg/L	479.52	ppb	04:09:29
2	Cu 324.752†	73321.6	68595.0	476.88	µg/L	476.88	ppb	04:09:29
2	Mn 257.610†	152395.7	151647.6	484.84	µg/L	484.84	ppb	04:09:24
2	Mo 202.031†	4314.2	4291.0	501.40	µg/L	501.40	ppb	04:09:50
2	Ni 231.604†	9124.7	8792.3	481.04	µg/L	481.04	ppb	04:09:29
2	P 214.914†	1424.1	1214.3	2401.5	µg/L	2401.5	ppb	04:09:50
2	Pb 220.353†	2001.1	1932.3	500.19	µg/L	500.19	ppb	04:09:50

2	S 181.975 Axial†	232.3	208.7	1020.6 µg/L	1020.6 ppb	04:09:50
2	Sb 206.836†	536.3	511.8	499.54 µg/L	499.54 ppb	04:09:50
2	Se 196.026†	403.2	390.8	501.57 µg/L	501.57 ppb	04:09:50
2	SiO2†	31161.1	28215.6	5181.3 µg/L	5181.3 ppb	04:09:29
2	Si 251.611†	33294.0	32761.3	2376.5 µg/L	2376.5 ppb	04:09:29
2	Sn 189.927†	1025.0	996.2	512.80 µg/L	512.80 ppb	04:09:50
2	Ti 334.940†	219712.3	217569.0	495.32 µg/L	495.32 ppb	04:09:24
2	Tl 190.801†	307.8	326.2	503.31 µg/L	503.31 ppb	04:09:50
2	U 409.014†	5921.8	5154.5	466.54 µg/L	466.54 ppb	04:09:29
2	V 292.402†	42697.9	42558.6	483.40 µg/L	483.40 ppb	04:09:29
2	Zn 213.857†	18825.1	18181.2	478.03 µg/L	478.03 ppb	04:09:29
3	Sc RADIAL	118925.1	118925.1	102 %		04:08:18
3	Al 396.153Radial†	10385.0	10061.1	4980.1 µg/L	4980.1 ppb	04:08:18
3	Ca 317.933Radial†	13472.5	12799.6	4952.4 µg/L	4952.4 ppb	04:08:39
3	Fe 238.204 Radial†	812.8	781.9	4989.1 µg/L	4989.1 ppb	04:08:39
3	K 766.490 Radial†	10466.2	9581.6	4903.7 µg/L	4903.7 ppb	04:08:18
3	Mg 279.077 IEC†	842.2	810.5	5008.9 µg/L	5008.9 ppb	04:08:39
3	Na 589.592 Radial†	40126.6	39985.9	10013 µg/L	10013 ppb	04:08:18
3	Sr 421.552†	99040.4	97190.2	488.48 µg/L	488.48 ppb	04:08:18
3	Sc 361.383	2020476.4	2020476.4	99.914 %		04:09:57
3	Y 371.029	1249610.6	1249610.6	99.274 %		04:09:57
3	Ag 328.068†	55583.9	55621.6	510.84 µg/L	510.84 ppb	04:10:03
3	As 188.979†	266.2	264.2	478.68 µg/L	478.68 ppb	04:10:23
3	B 249.677†	11766.0	11638.3	502.98 µg/L	502.98 ppb	04:10:03
3	Ba 233.527†	19299.0	19393.7	498.47 µg/L	498.47 ppb	04:10:03
3	Be 313.107†	788210.1	785375.8	491.27 µg/L	491.27 ppb	04:09:57
3	Cd 226.502†	18670.4	18785.5	500.49 µg/L	500.49 ppb	04:10:03
3	Co 228.616†	10245.5	10321.0	498.84 µg/L	498.84 ppb	04:10:03
3	Cr 267.716†	23540.9	23661.0	497.38 µg/L	497.38 ppb	04:10:03
3	Cu 324.752†	75321.4	71116.7	494.37 µg/L	494.37 ppb	04:10:03
3	Mn 257.610†	153329.5	153663.4	491.27 µg/L	491.27 ppb	04:09:57
3	Mo 202.031†	4240.5	4247.8	496.36 µg/L	496.36 ppb	04:10:23
3	Ni 231.604†	9423.7	9156.3	500.95 µg/L	500.95 ppb	04:10:03
3	P 214.914†	1410.1	1210.4	2391.4 µg/L	2391.4 ppb	04:10:23
3	Pb 220.353†	1957.9	1903.3	492.63 µg/L	492.63 ppb	04:10:23
3	S 181.975 Axial†	225.7	203.7	995.89 µg/L	995.89 ppb	04:10:23
3	Sb 206.836†	535.2	514.6	502.20 µg/L	502.20 ppb	04:10:23
3	Se 196.026†	391.0	381.5	489.63 µg/L	489.63 ppb	04:10:23
3	SiO2†	31888.4	29164.6	5355.5 µg/L	5355.5 ppb	04:10:03
3	Si 251.611†	34149.9	33854.2	2457.4 µg/L	2457.4 ppb	04:10:03
3	Sn 189.927†	1011.8	990.3	509.76 µg/L	509.76 ppb	04:10:23
3	Ti 334.940†	220246.6	219662.6	500.10 µg/L	500.10 ppb	04:09:57
3	Tl 190.801†	298.9	319.5	493.07 µg/L	493.07 ppb	04:10:23
3	U 409.014†	6145.2	5420.1	490.62 µg/L	490.62 ppb	04:10:03
3	V 292.402†	43772.3	43936.9	498.90 µg/L	498.90 ppb	04:10:03
3	Zn 213.857†	19413.9	18904.0	497.06 µg/L	497.06 ppb	04:10:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032620.9	100.51	%	0.553				0.55%
Sc RADIAL	118560.2	102	%	0.6				0.59%
Y 371.029	1256888.0	99.852	%	0.5007				0.50%
Ag 328.068†	54702.4	502.41	µg/L	8.860	502.41	ppb	8.860	1.76%
QC value within limits for Ag 328.068 Recovery = 100.48%								
Al 396.153Radial†	10046.7	4972.8	µg/L	37.60	4972.8	ppb	37.60	0.76%
QC value within limits for Al 396.153Radial Recovery = 99.46%								
As 188.979†	273.7	495.87	µg/L	15.159	495.87	ppb	15.159	3.06%
QC value within limits for As 188.979 Recovery = 99.17%								
B 249.677†	11409.1	493.04	µg/L	9.613	493.04	ppb	9.613	1.95%
QC value within limits for B 249.677 Recovery = 98.61%								
Ba 233.527†	19049.2	489.61	µg/L	8.401	489.61	ppb	8.401	1.72%
QC value within limits for Ba 233.527 Recovery = 97.92%								
Be 313.107†	781394.0	488.78	µg/L	3.598	488.78	ppb	3.598	0.74%
QC value within limits for Be 313.107 Recovery = 97.76%								
Ca 317.933Radial†	12815.0	4958.4	µg/L	26.46	4958.4	ppb	26.46	0.53%
QC value within limits for Ca 317.933Radial Recovery = 99.17%								
Cd 226.502†	18464.4	491.93	µg/L	8.919	491.93	ppb	8.919	1.81%
QC value within limits for Cd 226.502 Recovery = 98.39%								
Co 228.616†	10156.2	490.89	µg/L	8.069	490.89	ppb	8.069	1.64%

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   QC value within limits for Co 228.616  Recovery = 98.18%
Cr 267.716†            23231.1      488.34 µg/L         8.928      488.34 ppb          8.928   1.83%
   QC value within limits for Cr 267.716  Recovery = 97.67%
Cu 324.752†            69914.9      486.03 µg/L         8.771      486.03 ppb          8.771   1.80%
   QC value within limits for Cu 324.752  Recovery = 97.21%
Fe 238.204 Radial†       780.9      4982.2 µg/L         36.03      4982.2 ppb          36.03   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.64%
K 766.490 Radial†       9581.7      4903.8 µg/L         15.11      4903.8 ppb          15.11   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 98.08%
Mg 279.077 IEC†          811.6      5015.9 µg/L         22.44      5015.9 ppb          22.44   0.45%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.32%
Mn 257.610†           152917.8      488.89 µg/L         3.527      488.89 ppb          3.527   0.72%
   QC value within limits for Mn 257.610  Recovery = 97.78%
Mo 202.031†            4270.5      499.01 µg/L         2.534      499.01 ppb          2.534   0.51%
   QC value within limits for Mo 202.031  Recovery = 99.80%
Na 589.592 Radial†     39963.8       10008 µg/L          48.5       10008 ppb           48.5   0.48%
   QC value within limits for Na 589.592 Radial  Recovery = 100.08%
Ni 231.604†            8971.8      490.86 µg/L         9.959      490.86 ppb          9.959   2.03%
   QC value within limits for Ni 231.604  Recovery = 98.17%
P 214.914†             1211.5      2394.6 µg/L          5.97      2394.6 ppb           5.97   0.25%
   QC value within limits for P 214.914  Recovery = 95.79%
Pb 220.353†            1919.8      496.92 µg/L         3.880      496.92 ppb          3.880   0.78%
   QC value within limits for Pb 220.353  Recovery = 99.38%
S 181.975 Axial†        206.0      1007.2 µg/L         12.46      1007.2 ppb          12.46   1.24%
   QC value within limits for S 181.975 Axial  Recovery = 100.72%
Sb 206.836†             512.7      500.42 µg/L         1.548      500.42 ppb          1.548   0.31%
   QC value within limits for Sb 206.836  Recovery = 100.08%
Se 196.026†             390.4      501.02 µg/L        11.121      501.02 ppb         11.121   2.22%
   QC value within limits for Se 196.026  Recovery = 100.20%
SiO2†                  28669.7      5264.7 µg/L         87.37      5264.7 ppb          87.37   1.66%
   QC value within limits for SiO2  Recovery = 98.45%
Si 251.611†            33302.2      2416.5 µg/L         40.46      2416.5 ppb          40.46   1.67%
   QC value within limits for Si 251.611  Recovery = 96.66%
Sn 189.927†             993.5      511.41 µg/L         1.533      511.41 ppb          1.533   0.30%
   QC value within limits for Sn 189.927  Recovery = 102.28%
Sr 421.552†            96981.2      487.42 µg/L         2.110      487.42 ppb          2.110   0.43%
   QC value within limits for Sr 421.552  Recovery = 97.48%
Ti 334.940†           218829.1      498.20 µg/L         2.530      498.20 ppb          2.530   0.51%
   QC value within limits for Ti 334.940  Recovery = 99.64%
Tl 190.801†             324.3      500.33 µg/L         6.320      500.33 ppb          6.320   1.26%
   QC value within limits for Tl 190.801  Recovery = 100.07%
U 409.014†             5302.1      479.93 µg/L        12.266      479.93 ppb         12.266   2.56%
   QC value within limits for U 409.014  Recovery = 95.99%
V 292.402†            43260.8      491.30 µg/L         7.757      491.30 ppb          7.757   1.58%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†           18547.1      487.67 µg/L         9.519      487.67 ppb          9.519   1.95%
   QC value within limits for Zn 213.857  Recovery = 97.53%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 04:10:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	115639.0	115639.0	99.2	%			04:11:05
1	Al 396.153Radial†	156.9	35.0	17.356	µg/L	17.356	ppb	04:11:05
1	Ca 317.933Radial†	436.6	27.6	10.676	µg/L	10.676	ppb	04:11:25
1	Fe 238.204 Radial†	18.5	3.5	22.446	µg/L	22.446	ppb	04:11:25
1	K 766.490 Radial†	786.8	111.1	56.847	µg/L	56.847	ppb	04:11:05
1	Mg 279.077 IEC†	11.0	-4.3	-26.840	µg/L	-26.840	ppb	04:11:25
1	Na 589.592 Radial†	-267.9	363.9	91.129	µg/L	91.129	ppb	04:11:05
1	Sr 421.552†	-68.1	-6.4	-0.0321	µg/L	-0.0321	ppb	04:11:05
1	Sc 361.383	2046993.6	2046993.6	101.22	%			04:12:27
1	Y 371.029	1273420.2	1273420.2	101.17	%			04:12:27
1	Ag 328.068†	77.0	65.6	0.5997	µg/L	0.5997	ppb	04:12:33
1	As 188.979†	2.3	0.1	0.1715	µg/L	0.1715	ppb	04:12:53
1	B 249.677†	367.3	225.0	9.7477	µg/L	9.7477	ppb	04:12:33
1	Ba 233.527†	-65.5	13.4	0.3427	µg/L	0.3427	ppb	04:12:53
1	Be 313.107†	3542.7	-16.0	-0.0103	µg/L	-0.0103	ppb	04:12:33
1	Cd 226.502†	-91.5	8.5	0.2274	µg/L	0.2274	ppb	04:12:53
1	Co 228.616†	-60.8	6.6	0.3171	µg/L	0.3171	ppb	04:12:53
1	Cr 267.716†	-145.2	-43.6	-0.9148	µg/L	-0.9148	ppb	04:12:33
1	Cu 324.752†	4166.8	-153.4	-1.0593	µg/L	-1.0593	ppb	04:12:33
1	Mn 257.610†	-217.5	-13.6	-0.0405	µg/L	-0.0405	ppb	04:12:53
1	Mo 202.031†	-1.1	2.6	0.3058	µg/L	0.3058	ppb	04:12:53
1	Ni 231.604†	297.2	18.0	0.9874	µg/L	0.9874	ppb	04:12:53
1	P 214.914†	197.4	-5.9	-11.829	µg/L	-11.829	ppb	04:12:53
1	Pb 220.353†	49.6	-7.2	-1.8707	µg/L	-1.8707	ppb	04:12:53
1	S 181.975 Axial†	25.8	3.4	16.470	µg/L	16.470	ppb	04:12:53
1	Sb 206.836†	19.6	-1.8	-1.7395	µg/L	-1.7395	ppb	04:12:53
1	Se 196.026†	9.2	-0.8	-0.9878	µg/L	-0.9878	ppb	04:12:53
1	SiO2†	2736.9	-47.6	-8.7330	µg/L	-8.7330	ppb	04:12:33
1	Si 251.611†	351.8	22.4	1.6130	µg/L	1.6130	ppb	04:12:53
1	Sn 189.927†	22.2	-0.4	-0.2305	µg/L	-0.2305	ppb	04:12:53
1	Ti 334.940†	1084.8	297.3	0.6766	µg/L	0.6766	ppb	04:12:33
1	Tl 190.801†	-19.9	0.8	1.1576	µg/L	1.1576	ppb	04:12:53
1	U 409.014†	756.3	16.7	1.5112	µg/L	1.5112	ppb	04:12:33
1	V 292.402†	-131.0	-2.6	-0.0233	µg/L	-0.0233	ppb	04:12:33
1	Zn 213.857†	539.7	6.5	0.1683	µg/L	0.1683	ppb	04:12:53
2	Sc RADIAL	115483.1	115483.1	99.0	%			04:11:31
2	Al 396.153Radial†	139.0	17.1	8.4812	µg/L	8.4812	ppb	04:11:31
2	Ca 317.933Radial†	416.1	7.5	2.9040	µg/L	2.9040	ppb	04:11:51
2	Fe 238.204 Radial†	13.6	-1.4	-8.9957	µg/L	-8.9957	ppb	04:11:51
2	K 766.490 Radial†	755.8	80.8	41.341	µg/L	41.341	ppb	04:11:31
2	Mg 279.077 IEC†	14.0	-1.3	-7.7965	µg/L	-7.7965	ppb	04:11:51
2	Na 589.592 Radial†	-313.4	317.6	79.527	µg/L	79.527	ppb	04:11:31
2	Sr 421.552†	-77.3	-15.8	-0.0792	µg/L	-0.0792	ppb	04:11:31
2	Sc 361.383	2028601.9	2028601.9	100.32	%			04:12:59
2	Y 371.029	1262475.9	1262475.9	100.30	%			04:12:59
2	Ag 328.068†	25.2	14.7	0.1335	µg/L	0.1335	ppb	04:13:05
2	As 188.979†	2.0	-0.2	-0.3754	µg/L	-0.3754	ppb	04:13:25
2	B 249.677†	363.4	224.4	9.7303	µg/L	9.7303	ppb	04:13:05
2	Ba 233.527†	-67.7	10.5	0.2701	µg/L	0.2701	ppb	04:13:25
2	Be 313.107†	3500.1	-26.8	-0.0170	µg/L	-0.0170	ppb	04:13:05
2	Cd 226.502†	-77.2	22.1	0.5844	µg/L	0.5844	ppb	04:13:25
2	Co 228.616†	-64.0	2.9	0.1382	µg/L	0.1382	ppb	04:13:25
2	Cr 267.716†	-112.7	-12.5	-0.2623	µg/L	-0.2623	ppb	04:13:05
2	Cu 324.752†	4176.8	-106.1	-0.7380	µg/L	-0.7380	ppb	04:13:05
2	Mn 257.610†	-218.5	-16.4	-0.0536	µg/L	-0.0536	ppb	04:13:25
2	Mo 202.031†	-0.4	3.3	0.3795	µg/L	0.3795	ppb	04:13:25
2	Ni 231.604†	286.7	10.3	0.5611	µg/L	0.5611	ppb	04:13:25
2	P 214.914†	203.8	2.2	4.7067	µg/L	4.7067	ppb	04:13:25
2	Pb 220.353†	50.8	-5.6	-1.4386	µg/L	-1.4386	ppb	04:13:25

2	S 181.975 Axial†	30.4	8.1	39.742 µg/L	39.742 ppb		04:13:25
2	Sb 206.836†	12.6	-8.6	-8.3972 µg/L	-8.3972 ppb		04:13:25
2	Se 196.026†	8.7	-1.2	-1.5563 µg/L	-1.5563 ppb		04:13:25
2	SiO2†	2747.0	-13.0	-2.3964 µg/L	-2.3964 ppb		04:13:05
2	Si 251.611†	345.6	19.3	1.2542 µg/L	1.2542 ppb		04:13:25
2	Sn 189.927†	29.0	6.5	3.3311 µg/L	3.3311 ppb		04:13:25
2	Ti 334.940†	1024.5	246.9	0.5622 µg/L	0.5622 ppb		04:13:05
2	Tl 190.801†	-19.2	1.2	1.8761 µg/L	1.8761 ppb		04:13:25
2	U 409.014†	674.2	-58.4	-5.2889 µg/L	-5.2889 ppb		04:13:05
2	V 292.402†	-120.2	6.9	0.0712 µg/L	0.0712 ppb		04:13:05
2	Zn 213.857†	548.9	20.5	0.5438 µg/L	0.5438 ppb		04:13:25
3	Sc RADIAL	116381.2	116381.2	99.8 %			04:11:57
3	Al 396.153Radial†	165.2	42.3	20.986 µg/L	20.986 ppb		04:11:57
3	Ca 317.933Radial†	426.0	14.2	5.4851 µg/L	5.4851 ppb		04:12:17
3	Fe 238.204 Radial†	14.7	-0.5	-2.9914 µg/L	-2.9914 ppb		04:12:17
3	K 766.490 Radial†	719.2	38.3	19.577 µg/L	19.577 ppb		04:11:57
3	Mg 279.077 IEC†	17.8	2.4	14.819 µg/L	14.819 ppb		04:12:17
3	Na 589.592 Radial†	-316.5	317.0	79.379 µg/L	79.379 ppb		04:11:57
3	Sr 421.552†	-108.3	-46.2	-0.2324 µg/L	-0.2324 ppb		04:11:57
3	Sc 361.383	2033268.1	2033268.1	100.55 %			04:13:31
3	Y 371.029	1265609.7	1265609.7	100.55 %			04:13:31
3	Ag 328.068†	54.2	43.5	0.3944 µg/L	0.3944 ppb		04:13:37
3	As 188.979†	11.2	8.9	16.117 µg/L	16.117 ppb		04:13:57
3	B 249.677†	370.9	231.1	10.019 µg/L	10.019 ppb		04:13:37
3	Ba 233.527†	-73.9	4.5	0.1156 µg/L	0.1156 ppb		04:13:57
3	Be 313.107†	3543.9	8.8	0.0052 µg/L	0.0052 ppb		04:13:37
3	Cd 226.502†	-81.8	17.6	0.4688 µg/L	0.4688 ppb		04:13:57
3	Co 228.616†	-69.7	-2.6	-0.1278 µg/L	-0.1278 ppb		04:13:57
3	Cr 267.716†	-121.9	-21.4	-0.4498 µg/L	-0.4498 ppb		04:13:37
3	Cu 324.752†	4190.7	-101.8	-0.7067 µg/L	-0.7067 ppb		04:13:37
3	Mn 257.610†	-208.3	-5.9	-0.0191 µg/L	-0.0191 ppb		04:13:57
3	Mo 202.031†	-1.3	2.4	0.2782 µg/L	0.2782 ppb		04:13:57
3	Ni 231.604†	284.9	7.7	0.4239 µg/L	0.4239 ppb		04:13:57
3	P 214.914†	193.9	-8.1	-16.212 µg/L	-16.212 ppb		04:13:57
3	Pb 220.353†	53.8	-2.7	-0.6997 µg/L	-0.6997 ppb		04:13:57
3	S 181.975 Axial†	24.7	2.4	11.779 µg/L	11.779 ppb		04:13:57
3	Sb 206.836†	17.5	-3.7	-3.5889 µg/L	-3.5889 ppb		04:13:57
3	Se 196.026†	12.4	2.5	3.1776 µg/L	3.1776 ppb		04:13:57
3	SiO2†	2749.8	-16.5	-3.0271 µg/L	-3.0271 ppb		04:13:37
3	Si 251.611†	367.0	39.8	2.9265 µg/L	2.9265 ppb		04:13:57
3	Sn 189.927†	21.4	-1.1	-0.5616 µg/L	-0.5616 ppb		04:13:57
3	Ti 334.940†	1118.9	338.4	0.7705 µg/L	0.7705 ppb		04:13:37
3	Tl 190.801†	-18.9	1.6	2.4301 µg/L	2.4301 ppb		04:13:57
3	U 409.014†	709.9	-24.4	-2.2159 µg/L	-2.2159 ppb		04:13:37
3	V 292.402†	-149.3	-21.7	-0.2465 µg/L	-0.2465 ppb		04:13:37
3	Zn 213.857†	547.0	17.4	0.4600 µg/L	0.4600 ppb		04:13:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2036287.9	100.70	%	0.473				0.47%
Sc RADIAL	115834.4	99.3	%	0.41				0.41%
Y 371.029	1267168.6	100.67	%	0.448				0.44%
Ag 328.068†	41.2	0.3759	µg/L	0.23365	0.3759	ppb	0.23365	62.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	31.4	15.608	µg/L	6.4332	15.608	ppb	6.4332	41.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.9	5.3044	µg/L	9.36814	5.3044	ppb	9.36814	176.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	226.8	9.8322	µg/L	0.16167	9.8322	ppb	0.16167	1.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.5	0.2428	µg/L	0.11602	0.2428	ppb	0.11602	47.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-11.4	-0.0074	µg/L	0.01137	-0.0074	ppb	0.01137	154.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.4	6.3551	µg/L	3.95851	6.3551	ppb	3.95851	62.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	16.1	0.4269	µg/L	0.18219	0.4269	ppb	0.18219	42.68%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.3	0.1092	µg/L	0.22387	0.1092	ppb	0.22387	205.03%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -25.9     -0.5423 µg/L       0.33594     -0.5423 ppb        0.33594  61.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -120.4     -0.8347 µg/L       0.19516     -0.8347 ppb        0.19516  23.38%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      3.4864 µg/L      16.69195      3.4864 ppb       16.69195 478.78%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         76.7     39.255 µg/L       18.7226      39.255 ppb        18.7226  47.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.1     -6.6059 µg/L      20.85538     -6.6059 ppb       20.85538 315.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -12.0     -0.0377 µg/L       0.01741     -0.0377 ppb        0.01741  46.14%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.7      0.3212 µg/L       0.05237      0.3212 ppb        0.05237  16.31%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       332.8     83.345 µg/L        6.7413     83.345 ppb         6.7413   8.09%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               12.0      0.6575 µg/L       0.29387      0.6575 ppb        0.29387  44.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.9     -7.7782 µg/L      11.03213     -7.7782 ppb       11.03213 141.83%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.2     -1.3363 µg/L       0.59213     -1.3363 ppb        0.59213  44.31%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.6      22.664 µg/L       14.9752      22.664 ppb        14.9752  66.08%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -4.7     -4.5752 µg/L       3.43668     -4.5752 ppb        3.43668  75.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.2      0.2112 µg/L       2.58468      0.2112 ppb        2.58468 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -25.7     -4.7188 µg/L       3.49064     -4.7188 ppb        3.49064  73.97%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               27.1      1.9312 µg/L       0.88039      1.9312 ppb        0.88039  45.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.7      0.8463 µg/L       2.15822      0.8463 ppb        2.15822 255.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -22.8     -0.1146 µg/L       0.10474     -0.1146 ppb        0.10474  91.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              294.2      0.6698 µg/L       0.10433      0.6698 ppb        0.10433  15.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.2      1.8213 µg/L       0.63805      1.8213 ppb        0.63805  35.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -22.0     -1.9979 µg/L       3.40527     -1.9979 ppb        3.40527 170.45%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.8     -0.0662 µg/L       0.16313     -0.0662 ppb        0.16313 246.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.8      0.3907 µg/L       0.19708      0.3907 ppb        0.19708  50.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 04:40:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117131.8	117131.8	100	%			04:40:46
1	Al 396.153Radial†	10298.6	10131.1	5014.8	µg/L	5014.8	ppb	04:40:46
1	Ca 317.933Radial†	13241.0	12771.4	4941.5	µg/L	4941.5	ppb	04:41:06
1	Fe 238.204 Radial†	794.4	775.8	4949.8	µg/L	4949.8	ppb	04:41:06
1	K 766.490 Radial†	10374.1	9647.1	4937.2	µg/L	4937.2	ppb	04:40:46
1	Mg 279.077 IEC†	832.7	813.7	5028.7	µg/L	5028.7	ppb	04:41:06
1	Na 589.592 Radial†	39970.9	40433.3	10125	µg/L	10125	ppb	04:40:46
1	Sr 421.552†	97142.2	96787.2	486.45	µg/L	486.45	ppb	04:40:46
1	Sc 361.383	2010513.1	2010513.1	99.421	%			04:42:10
1	Y 371.029	1241971.9	1241971.9	98.667	%			04:42:10
1	Ag 328.068†	54362.3	54668.5	502.07	µg/L	502.07	ppb	04:42:15
1	As 188.979†	264.3	263.7	477.67	µg/L	477.67	ppb	04:42:36
1	B 249.677†	11352.9	11281.1	487.51	µg/L	487.51	ppb	04:42:15
1	Ba 233.527†	18588.5	18774.8	482.57	µg/L	482.57	ppb	04:42:15
1	Be 313.107†	778478.3	779496.8	487.59	µg/L	487.59	ppb	04:42:10
1	Cd 226.502†	17947.5	18151.0	483.58	µg/L	483.58	ppb	04:42:15
1	Co 228.616†	9918.1	10042.5	485.38	µg/L	485.38	ppb	04:42:15
1	Cr 267.716†	22771.1	23003.6	483.56	µg/L	483.56	ppb	04:42:15
1	Cu 324.752†	73941.2	70102.1	487.32	µg/L	487.32	ppb	04:42:15
1	Mn 257.610†	151757.2	152842.5	488.65	µg/L	488.65	ppb	04:42:10
1	Mo 202.031†	4219.2	4247.5	496.32	µg/L	496.32	ppb	04:42:36
1	Ni 231.604†	9071.8	8849.1	484.14	µg/L	484.14	ppb	04:42:15
1	P 214.914†	1394.3	1201.5	2374.2	µg/L	2374.2	ppb	04:42:36
1	Pb 220.353†	1946.4	1901.5	492.18	µg/L	492.18	ppb	04:42:36
1	S 181.975 Axial†	227.2	206.4	1009.1	µg/L	1009.1	ppb	04:42:36
1	Sb 206.836†	528.4	510.4	498.15	µg/L	498.15	ppb	04:42:36
1	Se 196.026†	395.7	388.1	498.09	µg/L	498.09	ppb	04:42:36
1	SiO2†	31122.5	28552.4	5243.1	µg/L	5243.1	ppb	04:42:15
1	Si 251.611†	33348.7	33217.7	2410.5	µg/L	2410.5	ppb	04:42:15
1	Sn 189.927†	997.9	981.4	505.19	µg/L	505.19	ppb	04:42:36
1	Ti 334.940†	218849.0	219349.4	499.38	µg/L	499.38	ppb	04:42:10
1	Tl 190.801†	306.2	328.4	506.69	µg/L	506.69	ppb	04:42:36
1	U 409.014†	6015.1	5319.7	481.53	µg/L	481.53	ppb	04:42:15
1	V 292.402†	42531.4	42905.9	487.29	µg/L	487.29	ppb	04:42:15
1	Zn 213.857†	18805.9	18388.8	483.51	µg/L	483.51	ppb	04:42:15
2	Sc RADIAL	116562.1	116562.1	99.9	%			04:41:12
2	Al 396.153Radial†	10283.1	10165.7	5032.0	µg/L	5032.0	ppb	04:41:12
2	Ca 317.933Radial†	13213.0	12807.8	4955.6	µg/L	4955.6	ppb	04:41:32
2	Fe 238.204 Radial†	792.9	778.2	4965.1	µg/L	4965.1	ppb	04:41:32
2	K 766.490 Radial†	10444.5	9768.0	4999.1	µg/L	4999.1	ppb	04:41:12
2	Mg 279.077 IEC†	829.4	814.4	5033.5	µg/L	5033.5	ppb	04:41:32
2	Na 589.592 Radial†	40229.8	40886.9	10239	µg/L	10239	ppb	04:41:12
2	Sr 421.552†	97706.8	97824.9	491.67	µg/L	491.67	ppb	04:41:12
2	Sc 361.383	2006234.6	2006234.6	99.209	%			04:42:43
2	Y 371.029	1242302.8	1242302.8	98.694	%			04:42:43
2	Ag 328.068†	54951.8	55379.4	508.59	µg/L	508.59	ppb	04:42:49
2	As 188.979†	270.9	270.8	490.61	µg/L	490.61	ppb	04:43:09
2	B 249.677†	11387.5	11340.4	490.07	µg/L	490.07	ppb	04:42:49
2	Ba 233.527†	18829.2	19057.3	489.83	µg/L	489.83	ppb	04:42:49
2	Be 313.107†	779345.1	782040.4	489.18	µg/L	489.18	ppb	04:42:43
2	Cd 226.502†	18159.2	18402.9	490.30	µg/L	490.30	ppb	04:42:49
2	Co 228.616†	10047.4	10194.1	492.71	µg/L	492.71	ppb	04:42:49
2	Cr 267.716†	22990.3	23273.3	489.23	µg/L	489.23	ppb	04:42:49
2	Cu 324.752†	74696.4	71021.9	493.70	µg/L	493.70	ppb	04:42:49
2	Mn 257.610†	151782.0	153193.0	489.77	µg/L	489.77	ppb	04:42:43
2	Mo 202.031†	4223.3	4260.7	497.86	µg/L	497.86	ppb	04:43:09
2	Ni 231.604†	9171.8	8969.3	490.72	µg/L	490.72	ppb	04:42:49
2	P 214.914†	1399.2	1209.4	2389.5	µg/L	2389.5	ppb	04:43:09
2	Pb 220.353†	1940.4	1899.6	491.67	µg/L	491.67	ppb	04:43:09

2	S 181.975 Axial†	232.2	211.9	1036.2 µg/L	1036.2 ppb	04:43:09
2	Sb 206.836†	531.2	514.3	501.96 µg/L	501.96 ppb	04:43:09
2	Se 196.026†	398.0	391.3	502.18 µg/L	502.18 ppb	04:43:09
2	SiO2†	31320.7	28818.9	5292.1 µg/L	5292.1 ppb	04:42:49
2	Si 251.611†	33588.9	33531.4	2433.5 µg/L	2433.5 ppb	04:42:49
2	Sn 189.927†	999.2	984.7	506.93 µg/L	506.93 ppb	04:43:09
2	Ti 334.940†	219290.3	220263.5	501.46 µg/L	501.46 ppb	04:42:43
2	Tl 190.801†	306.6	329.4	508.19 µg/L	508.19 ppb	04:43:09
2	U 409.014†	6100.9	5419.1	490.54 µg/L	490.54 ppb	04:42:49
2	V 292.402†	43026.3	43495.9	493.95 µg/L	493.95 ppb	04:42:49
2	Zn 213.857†	18963.2	18587.7	488.73 µg/L	488.73 ppb	04:42:49
3	Sc RADIAL	116475.4	116475.4	99.9 %		04:41:38
3	Al 396.153Radial†	10372.7	10263.1	5080.7 µg/L	5080.7 ppb	04:41:38
3	Ca 317.933Radial†	13235.6	12840.2	4968.1 µg/L	4968.1 ppb	04:41:58
3	Fe 238.204 Radial†	793.7	779.6	4973.9 µg/L	4973.9 ppb	04:41:58
3	K 766.490 Radial†	10499.6	9831.0	5031.4 µg/L	5031.4 ppb	04:41:38
3	Mg 279.077 IEC†	827.0	812.7	5022.4 µg/L	5022.4 ppb	04:41:58
3	Na 589.592 Radial†	40701.6	41389.3	10365 µg/L	10365 ppb	04:41:38
3	Sr 421.552†	97969.4	98160.7	493.35 µg/L	493.35 ppb	04:41:38
3	Sc 361.383	2012177.2	2012177.2	99.503 %		04:43:16
3	Y 371.029	1244322.9	1244322.9	98.854 %		04:43:16
3	Ag 328.068†	54982.4	55246.5	507.38 µg/L	507.38 ppb	04:43:22
3	As 188.979†	270.5	269.6	488.51 µg/L	488.51 ppb	04:43:42
3	B 249.677†	11410.5	11329.7	489.60 µg/L	489.60 ppb	04:43:22
3	Ba 233.527†	18842.5	19014.6	488.73 µg/L	488.73 ppb	04:43:22
3	Be 313.107†	782780.9	783173.3	489.89 µg/L	489.89 ppb	04:43:16
3	Cd 226.502†	18220.9	18410.9	490.51 µg/L	490.51 ppb	04:43:22
3	Co 228.616†	10075.1	10192.0	492.59 µg/L	492.59 ppb	04:43:22
3	Cr 267.716†	23099.4	23314.6	490.10 µg/L	490.10 ppb	04:43:22
3	Cu 324.752†	74719.3	70822.6	492.32 µg/L	492.32 ppb	04:43:22
3	Mn 257.610†	152397.5	153359.7	490.30 µg/L	490.30 ppb	04:43:16
3	Mo 202.031†	4169.8	4194.3	490.10 µg/L	490.10 ppb	04:43:42
3	Ni 231.604†	9189.9	8960.2	490.22 µg/L	490.22 ppb	04:43:22
3	P 214.914†	1379.8	1185.8	2341.7 µg/L	2341.7 ppb	04:43:42
3	Pb 220.353†	1930.5	1883.9	487.60 µg/L	487.60 ppb	04:43:42
3	S 181.975 Axial†	227.4	206.4	1009.0 µg/L	1009.0 ppb	04:43:42
3	Sb 206.836†	518.4	499.9	487.89 µg/L	487.89 ppb	04:43:42
3	Se 196.026†	390.6	382.6	491.10 µg/L	491.10 ppb	04:43:42
3	SiO2†	31361.1	28766.3	5282.4 µg/L	5282.4 ppb	04:43:22
3	Si 251.611†	33628.0	33470.7	2429.5 µg/L	2429.5 ppb	04:43:22
3	Sn 189.927†	984.4	966.9	497.78 µg/L	497.78 ppb	04:43:42
3	Ti 334.940†	220111.7	220436.3	501.86 µg/L	501.86 ppb	04:43:16
3	Tl 190.801†	290.5	312.4	482.06 µg/L	482.06 ppb	04:43:42
3	U 409.014†	6071.7	5371.6	486.23 µg/L	486.23 ppb	04:43:22
3	V 292.402†	43139.8	43481.9	493.73 µg/L	493.73 ppb	04:43:22
3	Zn 213.857†	19050.2	18618.7	489.56 µg/L	489.56 ppb	04:43:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2009641.7	99.378	%	0.1516				0.15%
Sc RADIAL	116723.1	100	%	0.3				0.31%
Y 371.029	1242865.9	98.738	%	0.1011				0.10%
Ag 328.068†	55098.1	506.01	µg/L	3.472	506.01	ppb	3.472	0.69%
QC value within limits for Ag 328.068 Recovery = 101.20%								
Al 396.153Radial†	10186.6	5042.5	µg/L	34.15	5042.5	ppb	34.15	0.68%
QC value within limits for Al 396.153Radial Recovery = 100.85%								
As 188.979†	268.0	485.60	µg/L	6.941	485.60	ppb	6.941	1.43%
QC value within limits for As 188.979 Recovery = 97.12%								
B 249.677†	11317.1	489.06	µg/L	1.366	489.06	ppb	1.366	0.28%
QC value within limits for B 249.677 Recovery = 97.81%								
Ba 233.527†	18948.9	487.04	µg/L	3.914	487.04	ppb	3.914	0.80%
QC value within limits for Ba 233.527 Recovery = 97.41%								
Be 313.107†	781570.2	488.88	µg/L	1.178	488.88	ppb	1.178	0.24%
QC value within limits for Be 313.107 Recovery = 97.78%								
Ca 317.933Radial†	12806.5	4955.1	µg/L	13.33	4955.1	ppb	13.33	0.27%
QC value within limits for Ca 317.933Radial Recovery = 99.10%								
Cd 226.502†	18321.6	488.13	µg/L	3.940	488.13	ppb	3.940	0.81%
QC value within limits for Cd 226.502 Recovery = 97.63%								
Co 228.616†	10142.9	490.23	µg/L	4.196	490.23	ppb	4.196	0.86%

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   QC value within limits for Co 228.616  Recovery = 98.05%
Cr 267.716†            23197.2      487.63 µg/L         3.551      487.63 ppb          3.551   0.73%
   QC value within limits for Cr 267.716  Recovery = 97.53%
Cu 324.752†            70648.9      491.12 µg/L         3.359      491.12 ppb          3.359   0.68%
   QC value within limits for Cu 324.752  Recovery = 98.22%
Fe 238.204 Radial†       777.8      4962.9 µg/L        12.20      4962.9 ppb         12.20   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.26%
K 766.490 Radial†       9748.7      4989.3 µg/L        47.83      4989.3 ppb         47.83   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 99.79%
Mg 279.077 IEC†          813.6      5028.2 µg/L         5.61      5028.2 ppb          5.61   0.11%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.56%
Mn 257.610†           153131.7      489.57 µg/L         0.844      489.57 ppb         0.844   0.17%
   QC value within limits for Mn 257.610  Recovery = 97.91%
Mo 202.031†            4234.1      494.76 µg/L         4.105      494.76 ppb         4.105   0.83%
   QC value within limits for Mo 202.031  Recovery = 98.95%
Na 589.592 Radial†    40903.2       10243 µg/L       119.7        10243 ppb        119.7   1.17%
   QC value within limits for Na 589.592 Radial  Recovery = 102.43%
Ni 231.604†            8926.2      488.36 µg/L         3.663      488.36 ppb         3.663   0.75%
   QC value within limits for Ni 231.604  Recovery = 97.67%
P 214.914†             1198.9      2368.5 µg/L        24.41      2368.5 ppb        24.41   1.03%
   QC value within limits for P 214.914  Recovery = 94.74%
Pb 220.353†            1895.0      490.48 µg/L         2.512      490.48 ppb         2.512   0.51%
   QC value within limits for Pb 220.353  Recovery = 98.10%
S 181.975 Axial†        208.2      1018.1 µg/L        15.69      1018.1 ppb        15.69   1.54%
   QC value within limits for S 181.975 Axial  Recovery = 101.81%
Sb 206.836†             508.2      496.00 µg/L         7.277      496.00 ppb         7.277   1.47%
   QC value within limits for Sb 206.836  Recovery = 99.20%
Se 196.026†             387.4      497.12 µg/L         5.606      497.12 ppb         5.606   1.13%
   QC value within limits for Se 196.026  Recovery = 99.42%
SiO2†                  28712.5      5272.5 µg/L        25.92      5272.5 ppb        25.92   0.49%
   QC value within limits for SiO2  Recovery = 98.60%
Si 251.611†            33406.6      2424.5 µg/L        12.30      2424.5 ppb        12.30   0.51%
   QC value within limits for Si 251.611  Recovery = 96.98%
Sn 189.927†             977.6      503.30 µg/L         4.858      503.30 ppb         4.858   0.97%
   QC value within limits for Sn 189.927  Recovery = 100.66%
Sr 421.552†            97590.9      490.49 µg/L         3.599      490.49 ppb         3.599   0.73%
   QC value within limits for Sr 421.552  Recovery = 98.10%
Ti 334.940†           220016.4      500.90 µg/L         1.330      500.90 ppb         1.330   0.27%
   QC value within limits for Ti 334.940  Recovery = 100.18%
Tl 190.801†             323.4      498.98 µg/L        14.670      498.98 ppb        14.670   2.94%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†             5370.1      486.10 µg/L         4.504      486.10 ppb         4.504   0.93%
   QC value within limits for U 409.014  Recovery = 97.22%
V 292.402†            43294.6      491.66 µg/L         3.786      491.66 ppb         3.786   0.77%
   QC value within limits for V 292.402  Recovery = 98.33%
Zn 213.857†           18531.7      487.27 µg/L         3.281      487.27 ppb         3.281   0.67%
   QC value within limits for Zn 213.857  Recovery = 97.45%
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 04:43:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113588.2	113588.2	97.4	%			04:44:24
1	Al 396.153Radial†	148.9	29.6	14.679	µg/L	14.679	ppb	04:44:24
1	Ca 317.933Radial†	426.0	24.7	9.5432	µg/L	9.5432	ppb	04:44:44
1	Fe 238.204 Radial†	14.5	-0.3	-1.8215	µg/L	-1.8215	ppb	04:44:44
1	K 766.490 Radial†	784.9	123.4	63.155	µg/L	63.155	ppb	04:44:24
1	Mg 279.077 IEC†	15.5	0.4	2.7231	µg/L	2.7231	ppb	04:44:44
1	Na 589.592 Radial†	-371.7	252.5	63.233	µg/L	63.233	ppb	04:44:24
1	Sr 421.552†	-43.3	17.8	0.0895	µg/L	0.0895	ppb	04:44:24
1	Sc 361.383	2019606.0	2019606.0	99.871	%			04:45:46
1	Y 371.029	1257603.9	1257603.9	99.909	%			04:45:46
1	Ag 328.068†	18.1	7.7	0.0761	µg/L	0.0761	ppb	04:45:52
1	As 188.979†	-0.0	-2.3	-4.1113	µg/L	-4.1113	ppb	04:46:13
1	B 249.677†	256.4	118.9	5.1535	µg/L	5.1535	ppb	04:46:13
1	Ba 233.527†	-64.3	13.6	0.3514	µg/L	0.3514	ppb	04:46:13
1	Be 313.107†	3828.5	317.6	0.1985	µg/L	0.1985	ppb	04:45:52
1	Cd 226.502†	-92.0	6.8	0.1751	µg/L	0.1751	ppb	04:46:13
1	Co 228.616†	-67.5	-1.0	-0.0477	µg/L	-0.0477	ppb	04:46:13
1	Cr 267.716†	-99.6	0.1	0.0042	µg/L	0.0042	ppb	04:45:52
1	Cu 324.752†	4138.4	-126.0	-0.8743	µg/L	-0.8743	ppb	04:45:52
1	Mn 257.610†	-173.7	27.4	0.0872	µg/L	0.0872	ppb	04:46:13
1	Mo 202.031†	-1.3	2.4	0.2806	µg/L	0.2806	ppb	04:46:13
1	Ni 231.604†	269.1	-6.1	-0.3349	µg/L	-0.3349	ppb	04:46:13
1	P 214.914†	186.2	-14.5	-29.126	µg/L	-29.126	ppb	04:46:13
1	Pb 220.353†	49.1	-7.1	-1.8261	µg/L	-1.8261	ppb	04:46:13
1	S 181.975 Axial†	26.7	4.6	22.630	µg/L	22.630	ppb	04:46:13
1	Sb 206.836†	19.8	-1.3	-1.2436	µg/L	-1.2436	ppb	04:46:13
1	Se 196.026†	7.0	-2.9	-3.6953	µg/L	-3.6953	ppb	04:46:13
1	SiO2†	2740.0	-7.8	-1.4274	µg/L	-1.4274	ppb	04:45:52
1	Si 251.611†	361.5	36.7	2.7509	µg/L	2.7509	ppb	04:46:13
1	Sn 189.927†	18.3	-4.1	-2.1159	µg/L	-2.1159	ppb	04:46:13
1	Ti 334.940†	1036.9	263.8	0.6004	µg/L	0.6004	ppb	04:45:52
1	Tl 190.801†	-17.5	2.9	4.3949	µg/L	4.3949	ppb	04:46:13
1	U 409.014†	631.6	-98.1	-8.8903	µg/L	-8.8903	ppb	04:45:52
1	V 292.402†	-54.2	72.5	0.8029	µg/L	0.8029	ppb	04:45:52
1	Zn 213.857†	538.6	12.7	0.3395	µg/L	0.3395	ppb	04:46:13
2	Sc RADIAL	114563.0	114563.0	98.2	%			04:44:50
2	Al 396.153Radial†	127.5	6.5	3.2427	µg/L	3.2427	ppb	04:44:50
2	Ca 317.933Radial†	405.9	0.5	0.1836	µg/L	0.1836	ppb	04:45:10
2	Fe 238.204 Radial†	19.7	4.9	30.923	µg/L	30.923	ppb	04:45:10
2	K 766.490 Radial†	644.2	-26.7	-13.657	µg/L	-13.657	ppb	04:44:50
2	Mg 279.077 IEC†	14.4	-0.8	-4.9726	µg/L	-4.9726	ppb	04:45:10
2	Na 589.592 Radial†	-333.3	294.8	73.824	µg/L	73.824	ppb	04:44:50
2	Sr 421.552†	-70.6	-9.6	-0.0481	µg/L	-0.0481	ppb	04:44:50
2	Sc 361.383	2010407.0	2010407.0	99.416	%			04:46:19
2	Y 371.029	1252503.3	1252503.3	99.504	%			04:46:19
2	Ag 328.068†	109.0	99.3	0.9072	µg/L	0.9072	ppb	04:46:24
2	As 188.979†	-4.3	-6.6	-11.899	µg/L	-11.899	ppb	04:46:45
2	B 249.677†	248.8	112.4	4.8633	µg/L	4.8633	ppb	04:46:45
2	Ba 233.527†	-65.7	11.9	0.3063	µg/L	0.3063	ppb	04:46:45
2	Be 313.107†	3440.8	-54.8	-0.0345	µg/L	-0.0345	ppb	04:46:24
2	Cd 226.502†	-88.1	10.3	0.2741	µg/L	0.2741	ppb	04:46:45
2	Co 228.616†	-62.7	3.6	0.1725	µg/L	0.1725	ppb	04:46:45
2	Cr 267.716†	-134.9	-35.9	-0.7536	µg/L	-0.7536	ppb	04:46:24
2	Cu 324.752†	4133.9	-111.6	-0.7672	µg/L	-0.7672	ppb	04:46:24
2	Mn 257.610†	-180.7	19.6	0.0663	µg/L	0.0663	ppb	04:46:45
2	Mo 202.031†	-9.0	-5.4	-0.6277	µg/L	-0.6277	ppb	04:46:45
2	Ni 231.604†	281.2	7.3	0.3970	µg/L	0.3970	ppb	04:46:45
2	P 214.914†	196.8	-3.0	-5.9870	µg/L	-5.9870	ppb	04:46:45
2	Pb 220.353†	51.7	-4.3	-1.1016	µg/L	-1.1016	ppb	04:46:45

2	S 181.975 Axial†	26.5	4.5	21.922 µg/L	21.922 ppb		04:46:45
2	Sb 206.836†	14.7	-6.4	-6.2096 µg/L	-6.2096 ppb		04:46:45
2	Se 196.026†	9.4	-0.4	-0.5135 µg/L	-0.5135 ppb		04:46:45
2	SiO2†	2691.8	-43.7	-8.0328 µg/L	-8.0328 ppb		04:46:24
2	Si 251.611†	351.0	27.8	2.1528 µg/L	2.1528 ppb		04:46:45
2	Sn 189.927†	17.3	-5.0	-2.5604 µg/L	-2.5604 ppb		04:46:45
2	Ti 334.940†	1040.3	272.0	0.6196 µg/L	0.6196 ppb		04:46:24
2	Tl 190.801†	-15.7	4.6	7.0621 µg/L	7.0621 ppb		04:46:45
2	U 409.014†	736.6	10.4	0.9400 µg/L	0.9400 ppb		04:46:24
2	V 292.402†	-128.7	-2.7	-0.0310 µg/L	-0.0310 ppb		04:46:24
2	Zn 213.857†	550.5	27.1	0.7145 µg/L	0.7145 ppb		04:46:45
3	Sc RADIAL	114473.5	114473.5	98.2 %			04:45:16
3	Al 396.153Radial†	134.5	13.8	6.8406 µg/L	6.8406 ppb		04:45:16
3	Ca 317.933Radial†	430.0	25.3	9.7966 µg/L	9.7966 ppb		04:45:36
3	Fe 238.204 Radial†	18.4	3.6	22.942 µg/L	22.942 ppb		04:45:36
3	K 766.490 Radial†	733.1	64.5	32.991 µg/L	32.991 ppb		04:45:16
3	Mg 279.077 IEC†	12.3	-2.9	-17.757 µg/L	-17.757 ppb		04:45:36
3	Na 589.592 Radial†	-437.7	188.1	47.115 µg/L	47.115 ppb		04:45:16
3	Sr 421.552†	-39.0	22.5	0.1133 µg/L	0.1133 ppb		04:45:16
3	Sc 361.383	2029864.0	2029864.0	100.38 %			04:46:51
3	Y 371.029	1265029.6	1265029.6	100.50 %			04:46:51
3	Ag 328.068†	43.1	32.5	0.2971 µg/L	0.2971 ppb		04:46:56
3	As 188.979†	0.6	-1.6	-2.8570 µg/L	-2.8570 ppb		04:47:17
3	B 249.677†	240.3	101.5	4.3943 µg/L	4.3943 ppb		04:47:17
3	Ba 233.527†	-70.1	8.2	0.2106 µg/L	0.2106 ppb		04:47:17
3	Be 313.107†	3502.1	-27.0	-0.0170 µg/L	-0.0170 ppb		04:46:56
3	Cd 226.502†	-90.3	9.0	0.2387 µg/L	0.2387 ppb		04:47:17
3	Co 228.616†	-61.3	5.6	0.2707 µg/L	0.2707 ppb		04:47:17
3	Cr 267.716†	-119.2	-19.0	-0.3987 µg/L	-0.3987 ppb		04:46:56
3	Cu 324.752†	4134.5	-150.9	-1.0415 µg/L	-1.0415 ppb		04:46:56
3	Mn 257.610†	-193.4	8.7	0.0306 µg/L	0.0306 ppb		04:47:17
3	Mo 202.031†	-3.1	0.6	0.0664 µg/L	0.0664 ppb		04:47:17
3	Ni 231.604†	282.2	5.6	0.3043 µg/L	0.3043 ppb		04:47:17
3	P 214.914†	185.5	-16.1	-32.354 µg/L	-32.354 ppb		04:47:17
3	Pb 220.353†	54.1	-2.4	-0.6163 µg/L	-0.6163 ppb		04:47:17
3	S 181.975 Axial†	27.7	5.4	26.623 µg/L	26.623 ppb		04:47:17
3	Sb 206.836†	19.6	-1.6	-1.5540 µg/L	-1.5540 ppb		04:47:17
3	Se 196.026†	13.6	3.7	4.7718 µg/L	4.7718 ppb		04:47:17
3	SiO2†	2677.3	-84.1	-15.444 µg/L	-15.444 ppb		04:46:56
3	Si 251.611†	350.1	23.6	1.7564 µg/L	1.7564 ppb		04:47:17
3	Sn 189.927†	20.5	-2.0	-0.9976 µg/L	-0.9976 ppb		04:47:17
3	Ti 334.940†	954.5	176.5	0.4015 µg/L	0.4015 ppb		04:46:56
3	Tl 190.801†	-21.4	-1.0	-1.5316 µg/L	-1.5316 ppb		04:47:17
3	U 409.014†	747.3	14.0	1.2688 µg/L	1.2688 ppb		04:46:56
3	V 292.402†	-137.9	-10.7	-0.1156 µg/L	-0.1156 ppb		04:46:56
3	Zn 213.857†	532.3	3.7	0.0958 µg/L	0.0958 ppb		04:47:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2019959.0	99.888	%	0.4813				0.48%
Sc RADIAL	114208.2	97.9	%	0.46				0.47%
Y 371.029	1258378.9	99.971	%	0.5004				0.50%
Ag 328.068†	46.5	0.4268	µg/L	0.43048	0.4268	ppb	0.43048	100.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.6	8.2542	µg/L	5.84794	8.2542	ppb	5.84794	70.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.5	-6.2890	µg/L	4.89846	-6.2890	ppb	4.89846	77.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	110.9	4.8037	µg/L	0.38308	4.8037	ppb	0.38308	7.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.3	0.2894	µg/L	0.07193	0.2894	ppb	0.07193	24.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.6	0.0490	µg/L	0.12979	0.0490	ppb	0.12979	264.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.8	6.5078	µg/L	5.47836	6.5078	ppb	5.47836	84.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	8.7	0.2293	µg/L	0.05015	0.2293	ppb	0.05015	21.87%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.8	0.1319	µg/L	0.16305	0.1319	ppb	0.16305	123.65%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -18.3     -0.3827 µg/L       0.37919     -0.3827 ppb        0.37919  99.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -129.5     -0.8944 µg/L       0.13823     -0.8944 ppb        0.13823  15.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.7      17.348 µg/L       17.0742      17.348 ppb        17.0742  98.42%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         53.7      27.496 µg/L       38.6996      27.496 ppb        38.6996 140.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.1     -6.6688 µg/L      10.34480     -6.6688 ppb       10.34480 155.12%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.5      0.0614 µg/L       0.02862      0.0614 ppb        0.02862  46.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.8     -0.0935 µg/L       0.47479     -0.0935 ppb        0.47479 507.57%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       245.1      61.391 µg/L       13.4493      61.391 ppb        13.4493  21.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.2      0.1221 µg/L       0.39848      0.1221 ppb        0.39848 326.29%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -11.2     -22.489 µg/L       14.3819     -22.489 ppb        14.3819  63.95%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.6     -1.1813 µg/L       0.60882     -1.1813 ppb        0.60882  51.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.8      23.725 µg/L        2.5344      23.725 ppb         2.5344  10.68%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.1     -3.0024 µg/L       2.78185     -3.0024 ppb        2.78185  92.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.1      0.1877 µg/L       4.27688      0.1877 ppb        4.27688 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -45.2     -8.3015 µg/L       7.01231     -8.3015 ppb        7.01231  84.47%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               29.4      2.2200 µg/L       0.50065      2.2200 ppb        0.50065  22.55%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.7     -1.8913 µg/L       0.80527     -1.8913 ppb        0.80527  42.58%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.3      0.0516 µg/L       0.08711      0.0516 ppb        0.08711 168.93%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              237.4      0.5405 µg/L       0.12075      0.5405 ppb        0.12075  22.34%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.2      3.3085 µg/L       4.39867      3.3085 ppb        4.39867 132.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -24.5     -2.2272 µg/L       5.77282     -2.2272 ppb        5.77282 259.20%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.7      0.2188 µg/L       0.50762      0.2188 ppb        0.50762 232.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.5      0.3833 µg/L       0.31163      0.3833 ppb        0.31163  81.31%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 05:19:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117579.6	117579.6	101	%			05:19:38
1	Al 396.153Radial†	10298.8	10092.2	4995.5	µg/L	4995.5	ppb	05:19:38
1	Ca 317.933Radial†	13164.9	12645.7	4892.9	µg/L	4892.9	ppb	05:19:59
1	Fe 238.204 Radial†	789.4	767.9	4899.3	µg/L	4899.3	ppb	05:19:59
1	K 766.490 Radial†	10620.6	9852.2	5042.2	µg/L	5042.2	ppb	05:19:38
1	Mg 279.077 IEC†	824.5	802.4	4959.4	µg/L	4959.4	ppb	05:19:59
1	Na 589.592 Radial†	40861.0	41164.6	10309	µg/L	10309	ppb	05:19:38
1	Sr 421.552†	97952.3	97222.3	488.64	µg/L	488.64	ppb	05:19:38
1	Sc 361.383	2028849.9	2028849.9	100.33	%			05:21:02
1	Y 371.029	1253689.1	1253689.1	99.598	%			05:21:02
1	Ag 328.068†	54836.4	54646.9	501.89	µg/L	501.89	ppb	05:21:07
1	As 188.979†	270.6	267.5	484.67	µg/L	484.67	ppb	05:21:28
1	B 249.677†	12214.9	12037.1	520.30	µg/L	520.30	ppb	05:21:07
1	Ba 233.527†	18864.9	18881.4	485.31	µg/L	485.31	ppb	05:21:07
1	Be 313.107†	784629.4	778550.9	487.00	µg/L	487.00	ppb	05:21:02
1	Cd 226.502†	18220.9	18260.3	486.50	µg/L	486.50	ppb	05:21:07
1	Co 228.616†	10026.5	10060.4	486.25	µg/L	486.25	ppb	05:21:07
1	Cr 267.716†	23122.5	23146.8	486.57	µg/L	486.57	ppb	05:21:07
1	Cu 324.752†	74484.2	69971.2	486.40	µg/L	486.40	ppb	05:21:07
1	Mn 257.610†	150751.3	150460.3	481.03	µg/L	481.03	ppb	05:21:07
1	Mo 202.031†	4268.4	4258.1	497.55	µg/L	497.55	ppb	05:21:28
1	Ni 231.604†	9198.4	8892.8	486.53	µg/L	486.53	ppb	05:21:07
1	P 214.914†	1408.5	1203.0	2377.3	µg/L	2377.3	ppb	05:21:28
1	Pb 220.353†	1962.0	1899.3	491.62	µg/L	491.62	ppb	05:21:28
1	S 181.975 Axial†	278.7	255.7	1250.3	µg/L	1250.3	ppb	05:21:28
1	Sb 206.836†	534.5	511.7	499.38	µg/L	499.38	ppb	05:21:28
1	Se 196.026†	402.6	391.5	502.33	µg/L	502.33	ppb	05:21:28
1	SiO2†	31367.7	28513.9	5236.0	µg/L	5236.0	ppb	05:21:07
1	Si 251.611†	33605.3	33170.4	2407.0	µg/L	2407.0	ppb	05:21:07
1	Sn 189.927†	1003.7	978.0	503.47	µg/L	503.47	ppb	05:21:28
1	Ti 334.940†	220219.3	218725.6	497.96	µg/L	497.96	ppb	05:21:02
1	Tl 190.801†	301.8	321.2	495.59	µg/L	495.59	ppb	05:21:28
1	U 409.014†	6088.0	5337.7	483.17	µg/L	483.17	ppb	05:21:07
1	V 292.402†	43205.2	43190.8	490.50	µg/L	490.50	ppb	05:21:07
1	Zn 213.857†	18968.7	18380.1	483.27	µg/L	483.27	ppb	05:21:07
2	Sc RADIAL	116388.5	116388.5	99.8	%			05:20:04
2	Al 396.153Radial†	10220.0	10117.8	5008.2	µg/L	5008.2	ppb	05:20:04
2	Ca 317.933Radial†	13089.3	12703.5	4915.3	µg/L	4915.3	ppb	05:20:24
2	Fe 238.204 Radial†	788.1	774.6	4942.3	µg/L	4942.3	ppb	05:20:24
2	K 766.490 Radial†	10578.1	9917.4	5075.6	µg/L	5075.6	ppb	05:20:04
2	Mg 279.077 IEC†	829.6	815.9	5042.5	µg/L	5042.5	ppb	05:20:24
2	Na 589.592 Radial†	40630.5	41348.4	10355	µg/L	10355	ppb	05:20:04
2	Sr 421.552†	97143.0	97405.7	489.56	µg/L	489.56	ppb	05:20:04
2	Sc 361.383	2016378.8	2016378.8	99.711	%			05:21:35
2	Y 371.029	1245556.1	1245556.1	98.952	%			05:21:35
2	Ag 328.068†	55026.1	55175.2	506.73	µg/L	506.73	ppb	05:21:40
2	As 188.979†	265.1	263.6	477.63	µg/L	477.63	ppb	05:22:01
2	B 249.677†	12175.6	12073.1	521.84	µg/L	521.84	ppb	05:21:40
2	Ba 233.527†	18939.0	19071.9	490.20	µg/L	490.20	ppb	05:21:40
2	Be 313.107†	783614.2	782369.8	489.38	µg/L	489.38	ppb	05:21:35
2	Cd 226.502†	18268.4	18420.4	490.77	µg/L	490.77	ppb	05:21:40
2	Co 228.616†	10056.1	10151.9	490.67	µg/L	490.67	ppb	05:21:40
2	Cr 267.716†	23100.9	23267.7	489.11	µg/L	489.11	ppb	05:21:40
2	Cu 324.752†	74768.3	70715.3	491.57	µg/L	491.57	ppb	05:21:40
2	Mn 257.610†	151243.8	151883.6	485.58	µg/L	485.58	ppb	05:21:40
2	Mo 202.031†	4251.0	4267.0	498.59	µg/L	498.59	ppb	05:22:01
2	Ni 231.604†	9224.0	8975.1	491.04	µg/L	491.04	ppb	05:21:40
2	P 214.914†	1402.8	1206.0	2382.8	µg/L	2382.8	ppb	05:22:01
2	Pb 220.353†	1975.1	1924.5	498.12	µg/L	498.12	ppb	05:22:01

2	S 181.975 Axial†	267.7	246.3	1204.5 µg/L	1204.5 ppb	05:22:01
2	Sb 206.836†	529.8	510.2	497.93 µg/L	497.93 ppb	05:22:01
2	Se 196.026†	399.7	391.0	501.77 µg/L	501.77 ppb	05:22:01
2	SiO2†	31517.0	28857.0	5299.1 µg/L	5299.1 ppb	05:21:40
2	Si 251.611†	33727.3	33499.8	2431.1 µg/L	2431.1 ppb	05:21:40
2	Sn 189.927†	1008.3	988.8	508.99 µg/L	508.99 ppb	05:22:01
2	Ti 334.940†	220290.3	220154.5	501.22 µg/L	501.22 ppb	05:21:35
2	Tl 190.801†	306.1	327.3	505.02 µg/L	505.02 ppb	05:22:01
2	U 409.014†	6103.6	5390.8	487.98 µg/L	487.98 ppb	05:21:40
2	V 292.402†	43207.6	43459.6	493.54 µg/L	493.54 ppb	05:21:40
2	Zn 213.857†	19029.2	18557.7	487.94 µg/L	487.94 ppb	05:21:40
3	Sc RADIAL	116439.5	116439.5	99.8 %		05:20:30
3	Al 396.153Radial†	10328.6	10222.1	5060.4 µg/L	5060.4 ppb	05:20:30
3	Ca 317.933Radial†	13130.7	12739.2	4929.1 µg/L	4929.1 ppb	05:20:50
3	Fe 238.204 Radial†	790.3	776.5	4954.1 µg/L	4954.1 ppb	05:20:50
3	K 766.490 Radial†	10660.5	9995.3	5115.5 µg/L	5115.5 ppb	05:20:30
3	Mg 279.077 IEC†	836.6	822.6	5083.4 µg/L	5083.4 ppb	05:20:50
3	Na 589.592 Radial†	40938.8	41639.4	10428 µg/L	10428 ppb	05:20:30
3	Sr 421.552†	98058.0	98279.6	493.95 µg/L	493.95 ppb	05:20:30
3	Sc 361.383	2037404.5	2037404.5	100.75 %		05:22:08
3	Y 371.029	1259573.1	1259573.1	100.07 %		05:22:08
3	Ag 328.068†	55391.6	54968.4	504.84 µg/L	504.84 ppb	05:22:13
3	As 188.979†	268.9	264.7	479.58 µg/L	479.58 ppb	05:22:34
3	B 249.677†	12155.9	11927.4	515.52 µg/L	515.52 ppb	05:22:13
3	Ba 233.527†	19088.2	19024.0	488.97 µg/L	488.97 ppb	05:22:13
3	Be 313.107†	790038.1	780635.6	488.30 µg/L	488.30 ppb	05:22:08
3	Cd 226.502†	18453.0	18414.5	490.61 µg/L	490.61 ppb	05:22:13
3	Co 228.616†	10158.2	10149.1	490.52 µg/L	490.52 ppb	05:22:13
3	Cr 267.716†	23336.8	23262.7	489.01 µg/L	489.01 ppb	05:22:13
3	Cu 324.752†	75258.7	70428.1	489.58 µg/L	489.58 ppb	05:22:13
3	Mn 257.610†	152462.4	151527.8	484.45 µg/L	484.45 ppb	05:22:13
3	Mo 202.031†	4202.6	4174.9	487.84 µg/L	487.84 ppb	05:22:34
3	Ni 231.604†	9299.3	8954.4	489.91 µg/L	489.91 ppb	05:22:13
3	P 214.914†	1386.0	1174.7	2319.8 µg/L	2319.8 ppb	05:22:34
3	Pb 220.353†	1948.9	1878.1	486.11 µg/L	486.11 ppb	05:22:34
3	S 181.975 Axial†	267.2	243.0	1188.4 µg/L	1188.4 ppb	05:22:34
3	Sb 206.836†	525.5	500.5	488.41 µg/L	488.41 ppb	05:22:34
3	Se 196.026†	390.2	377.4	484.41 µg/L	484.41 ppb	05:22:34
3	SiO2†	31667.5	28680.1	5266.6 µg/L	5266.6 ppb	05:22:13
3	Si 251.611†	33963.7	33385.4	2423.2 µg/L	2423.2 ppb	05:22:13
3	Sn 189.927†	1001.1	971.3	500.04 µg/L	500.04 ppb	05:22:34
3	Ti 334.940†	221758.4	219331.7	499.34 µg/L	499.34 ppb	05:22:08
3	Tl 190.801†	304.7	322.8	498.05 µg/L	498.05 ppb	05:22:34
3	U 409.014†	6215.8	5439.0	492.35 µg/L	492.35 ppb	05:22:13
3	V 292.402†	43585.1	43387.1	492.66 µg/L	492.66 ppb	05:22:13
3	Zn 213.857†	19211.3	18541.5	487.52 µg/L	487.52 ppb	05:22:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027544.4	100.26	%	0.523				0.52%
Sc RADIAL	116802.6	100	%	0.6				0.58%
Y 371.029	1252939.4	99.539	%	0.5592				0.56%
Ag 328.068†	54930.2	504.48	µg/L	2.439	504.48	ppb	2.439	0.48%
QC value within limits for Ag 328.068 Recovery = 100.90%								
Al 396.153Radial†	10144.0	5021.3	µg/L	34.39	5021.3	ppb	34.39	0.68%
QC value within limits for Al 396.153Radial Recovery = 100.43%								
As 188.979†	265.3	480.63	µg/L	3.636	480.63	ppb	3.636	0.76%
QC value within limits for As 188.979 Recovery = 96.13%								
B 249.677†	12012.5	519.22	µg/L	3.294	519.22	ppb	3.294	0.63%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	18992.4	488.16	µg/L	2.545	488.16	ppb	2.545	0.52%
QC value within limits for Ba 233.527 Recovery = 97.63%								
Be 313.107†	780518.8	488.23	µg/L	1.196	488.23	ppb	1.196	0.24%
QC value within limits for Be 313.107 Recovery = 97.65%								
Ca 317.933Radial†	12696.2	4912.4	µg/L	18.27	4912.4	ppb	18.27	0.37%
QC value within limits for Ca 317.933Radial Recovery = 98.25%								
Cd 226.502†	18365.1	489.29	µg/L	2.419	489.29	ppb	2.419	0.49%
QC value within limits for Cd 226.502 Recovery = 97.86%								
Co 228.616†	10120.5	489.15	µg/L	2.508	489.15	ppb	2.508	0.51%

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   QC value within limits for Co 228.616  Recovery = 97.83%
Cr 267.716†            23225.7      488.23 µg/L        1.438      488.23 ppb          1.438   0.29%
   QC value within limits for Cr 267.716  Recovery = 97.65%
Cu 324.752†            70371.5      489.18 µg/L        2.608      489.18 ppb          2.608   0.53%
   QC value within limits for Cu 324.752  Recovery = 97.84%
Fe 238.204 Radial†       773.0      4931.9 µg/L       28.87      4931.9 ppb         28.87   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.64%
K 766.490 Radial†       9921.6      5077.8 µg/L       36.66      5077.8 ppb         36.66   0.72%
   QC value within limits for K 766.490 Radial  Recovery = 101.56%
Mg 279.077 IEC†          813.6      5028.5 µg/L       63.20      5028.5 ppb         63.20   1.26%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.57%
Mn 257.610†           151290.5      483.69 µg/L        2.368      483.69 ppb          2.368   0.49%
   QC value within limits for Mn 257.610  Recovery = 96.74%
Mo 202.031†             4233.3      494.66 µg/L        5.930      494.66 ppb          5.930   1.20%
   QC value within limits for Mo 202.031  Recovery = 98.93%
Na 589.592 Radial†     41384.2       10364 µg/L         60.0       10364 ppb           60.0   0.58%
   QC value within limits for Na 589.592 Radial  Recovery = 103.64%
Ni 231.604†             8940.8      489.16 µg/L        2.344      489.16 ppb          2.344   0.48%
   QC value within limits for Ni 231.604  Recovery = 97.83%
P 214.914†              1194.6      2360.0 µg/L       34.91      2360.0 ppb         34.91   1.48%
   QC value within limits for P 214.914  Recovery = 94.40%
Pb 220.353†             1900.7      491.95 µg/L        6.015      491.95 ppb          6.015   1.22%
   QC value within limits for Pb 220.353  Recovery = 98.39%
S 181.975 Axial†         248.3      1214.4 µg/L       32.11      1214.4 ppb         32.11   2.64%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 121.44%
Sb 206.836†              507.4      495.24 µg/L        5.955      495.24 ppb          5.955   1.20%
   QC value within limits for Sb 206.836  Recovery = 99.05%
Se 196.026†              386.6      496.17 µg/L       10.189      496.17 ppb         10.189   2.05%
   QC value within limits for Se 196.026  Recovery = 99.23%
SiO2†                  28683.7      5267.2 µg/L       31.51      5267.2 ppb         31.51   0.60%
   QC value within limits for SiO2  Recovery = 98.50%
Si 251.611†            33351.9      2420.4 µg/L       12.25      2420.4 ppb         12.25   0.51%
   QC value within limits for Si 251.611  Recovery = 96.82%
Sn 189.927†              979.4      504.17 µg/L        4.518      504.17 ppb          4.518   0.90%
   QC value within limits for Sn 189.927  Recovery = 100.83%
Sr 421.552†            97635.9      490.72 µg/L        2.839      490.72 ppb          2.839   0.58%
   QC value within limits for Sr 421.552  Recovery = 98.14%
Ti 334.940†           219403.9      499.51 µg/L        1.633      499.51 ppb          1.633   0.33%
   QC value within limits for Ti 334.940  Recovery = 99.90%
Tl 190.801†              323.8      499.55 µg/L        4.892      499.55 ppb          4.892   0.98%
   QC value within limits for Tl 190.801  Recovery = 99.91%
U 409.014†              5389.2      487.83 µg/L        4.591      487.83 ppb          4.591   0.94%
   QC value within limits for U 409.014  Recovery = 97.57%
V 292.402†             43345.8      492.23 µg/L        1.565      492.23 ppb          1.565   0.32%
   QC value within limits for V 292.402  Recovery = 98.45%
Zn 213.857†            18493.1      486.25 µg/L        2.583      486.25 ppb          2.583   0.53%
   QC value within limits for Zn 213.857  Recovery = 97.25%
QC Failed.  Continue with analysis.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 05:22:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115329.1	115329.1	98.9	%			05:23:15
1	Al 396.153Radial†	153.5	31.9	15.843	µg/L	15.843	ppb	05:23:15
1	Ca 317.933Radial†	458.9	51.3	19.844	µg/L	19.844	ppb	05:23:35
1	Fe 238.204 Radial†	13.7	-1.4	-8.5985	µg/L	-8.5985	ppb	05:23:35
1	K 766.490 Radial†	839.2	166.1	85.028	µg/L	85.028	ppb	05:23:15
1	Mg 279.077 IEC†	11.3	-4.0	-24.664	µg/L	-24.664	ppb	05:23:35
1	Na 589.592 Radial†	962.8	1607.7	402.61	µg/L	402.61	ppb	05:23:15
1	Sr 421.552†	16.5	79.0	0.3972	µg/L	0.3972	ppb	05:23:15
1	Sc 361.383	1999901.7	1999901.7	98.896	%			05:24:37
1	Y 371.029	1243400.7	1243400.7	98.781	%			05:24:37
1	Ag 328.068†	79.2	69.7	0.6367	µg/L	0.6367	ppb	05:24:43
1	As 188.979†	2.2	-0.0	-0.0624	µg/L	-0.0624	ppb	05:25:03
1	B 249.677†	611.9	480.9	20.849	µg/L	20.849	ppb	05:24:43
1	Ba 233.527†	-73.2	4.0	0.1033	µg/L	0.1033	ppb	05:25:03
1	Be 313.107†	3550.8	74.6	0.0464	µg/L	0.0464	ppb	05:24:43
1	Cd 226.502†	-89.2	8.8	0.2356	µg/L	0.2356	ppb	05:25:03
1	Co 228.616†	-70.0	-4.1	-0.2016	µg/L	-0.2016	ppb	05:25:03
1	Cr 267.716†	-114.7	-16.2	-0.3385	µg/L	-0.3385	ppb	05:24:43
1	Cu 324.752†	4109.1	-114.8	-0.7979	µg/L	-0.7979	ppb	05:24:43
1	Mn 257.610†	-201.0	-1.9	-0.0073	µg/L	-0.0073	ppb	05:25:03
1	Mo 202.031†	-3.6	0.0	0.0002	µg/L	0.0002	ppb	05:25:03
1	Ni 231.604†	284.6	12.2	0.6678	µg/L	0.6678	ppb	05:25:03
1	P 214.914†	191.6	-7.2	-14.432	µg/L	-14.432	ppb	05:25:03
1	Pb 220.353†	45.8	-9.9	-2.5695	µg/L	-2.5695	ppb	05:25:03
1	S 181.975 Axial†	70.0	48.6	238.11	µg/L	238.11	ppb	05:25:03
1	Sb 206.836†	24.1	3.2	3.1691	µg/L	3.1691	ppb	05:25:03
1	Se 196.026†	11.8	2.1	2.6743	µg/L	2.6743	ppb	05:25:03
1	SiO2†	2653.0	-68.8	-12.634	µg/L	-12.634	ppb	05:24:43
1	Si 251.611†	360.0	38.8	2.8648	µg/L	2.8648	ppb	05:25:03
1	Sn 189.927†	19.8	-2.4	-1.2283	µg/L	-1.2283	ppb	05:25:03
1	Ti 334.940†	1054.2	291.6	0.6631	µg/L	0.6631	ppb	05:24:43
1	Tl 190.801†	-15.3	4.9	7.5755	µg/L	7.5755	ppb	05:25:03
1	U 409.014†	740.0	17.8	1.6205	µg/L	1.6205	ppb	05:24:43
1	V 292.402†	-96.9	28.8	0.3259	µg/L	0.3259	ppb	05:24:43
1	Zn 213.857†	548.0	27.5	0.7280	µg/L	0.7280	ppb	05:25:03
2	Sc RADIAL	114187.4	114187.4	97.9	%			05:23:41
2	Al 396.153Radial†	156.9	37.0	18.391	µg/L	18.391	ppb	05:23:41
2	Ca 317.933Radial†	468.3	65.5	25.351	µg/L	25.351	ppb	05:24:01
2	Fe 238.204 Radial†	16.8	2.0	12.686	µg/L	12.686	ppb	05:24:01
2	K 766.490 Radial†	867.1	203.1	103.96	µg/L	103.96	ppb	05:23:41
2	Mg 279.077 IEC†	13.9	-1.3	-7.8939	µg/L	-7.8939	ppb	05:24:01
2	Na 589.592 Radial†	1827.0	2500.2	626.10	µg/L	626.10	ppb	05:23:41
2	Sr 421.552†	-22.5	39.4	0.1978	µg/L	0.1978	ppb	05:23:41
2	Sc 361.383	2017457.6	2017457.6	99.764	%			05:25:09
2	Y 371.029	1254873.9	1254873.9	99.692	%			05:25:09
2	Ag 328.068†	16.9	6.6	0.0607	µg/L	0.0607	ppb	05:25:15
2	As 188.979†	-0.1	-2.3	-4.2418	µg/L	-4.2418	ppb	05:25:35
2	B 249.677†	572.6	436.1	18.903	µg/L	18.903	ppb	05:25:15
2	Ba 233.527†	-76.0	1.9	0.0480	µg/L	0.0480	ppb	05:25:35
2	Be 313.107†	3599.2	91.9	0.0573	µg/L	0.0573	ppb	05:25:15
2	Cd 226.502†	-93.6	5.1	0.1285	µg/L	0.1285	ppb	05:25:35
2	Co 228.616†	-75.4	-9.0	-0.4346	µg/L	-0.4346	ppb	05:25:35
2	Cr 267.716†	-132.0	-32.5	-0.6823	µg/L	-0.6823	ppb	05:25:15
2	Cu 324.752†	4119.9	-140.1	-0.9693	µg/L	-0.9693	ppb	05:25:15
2	Mn 257.610†	-201.5	-0.7	-0.0006	µg/L	-0.0006	ppb	05:25:35
2	Mo 202.031†	-4.6	-1.0	-0.1144	µg/L	-0.1144	ppb	05:25:35
2	Ni 231.604†	280.1	5.2	0.2835	µg/L	0.2835	ppb	05:25:35
2	P 214.914†	184.4	-16.1	-32.455	µg/L	-32.455	ppb	05:25:35
2	Pb 220.353†	49.4	-6.7	-1.7272	µg/L	-1.7272	ppb	05:25:35

2	S 181.975 Axial†	63.0	41.0	200.78 µg/L	200.78 ppb	05:25:35
2	Sb 206.836†	19.4	-1.6	-1.5925 µg/L	-1.5925 ppb	05:25:35
2	Se 196.026†	13.2	3.4	4.3394 µg/L	4.3394 ppb	05:25:35
2	SiO2†	2686.1	-58.9	-10.812 µg/L	-10.812 ppb	05:25:15
2	Si 251.611†	353.1	28.7	2.1222 µg/L	2.1222 ppb	05:25:35
2	Sn 189.927†	19.5	-2.8	-1.4527 µg/L	-1.4527 ppb	05:25:35
2	Ti 334.940†	1029.9	257.9	0.5861 µg/L	0.5861 ppb	05:25:15
2	Tl 190.801†	-15.8	4.6	6.9990 µg/L	6.9990 ppb	05:25:35
2	U 409.014†	620.6	-108.4	-9.8289 µg/L	-9.8289 ppb	05:25:15
2	V 292.402†	-128.4	-1.9	-0.0374 µg/L	-0.0374 ppb	05:25:15
2	Zn 213.857†	544.8	19.4	0.5138 µg/L	0.5138 ppb	05:25:35
3	Sc RADIAL	114187.2	114187.2	97.9 %		05:24:07
3	Al 396.153Radial†	161.1	41.2	20.500 µg/L	20.500 ppb	05:24:07
3	Ca 317.933Radial†	446.7	43.5	16.817 µg/L	16.817 ppb	05:24:27
3	Fe 238.204 Radial†	16.0	1.2	7.5319 µg/L	7.5319 ppb	05:24:27
3	K 766.490 Radial†	917.1	254.2	130.11 µg/L	130.11 ppb	05:24:07
3	Mg 279.077 IEC†	13.7	-1.4	-8.7847 µg/L	-8.7847 ppb	05:24:27
3	Na 589.592 Radial†	3044.5	3743.7	937.52 µg/L	937.52 ppb	05:24:07
3	Sr 421.552†	-5.4	56.8	0.2854 µg/L	0.2854 ppb	05:24:07
3	Sc 361.383	2009601.7	2009601.7	99.376 %		05:25:41
3	Y 371.029	1250014.9	1250014.9	99.306 %		05:25:41
3	Ag 328.068†	72.8	62.8	0.5750 µg/L	0.5750 ppb	05:25:47
3	As 188.979†	5.2	3.0	5.3929 µg/L	5.3929 ppb	05:26:07
3	B 249.677†	523.9	389.3	16.876 µg/L	16.876 ppb	05:25:47
3	Ba 233.527†	-70.1	7.5	0.1934 µg/L	0.1934 ppb	05:26:07
3	Be 313.107†	3453.1	-41.1	-0.0258 µg/L	-0.0258 ppb	05:25:47
3	Cd 226.502†	-92.9	5.5	0.1427 µg/L	0.1427 ppb	05:26:07
3	Co 228.616†	-79.2	-13.0	-0.6296 µg/L	-0.6296 ppb	05:26:07
3	Cr 267.716†	-112.7	-13.6	-0.2850 µg/L	-0.2850 ppb	05:25:47
3	Cu 324.752†	4167.7	-75.9	-0.5249 µg/L	-0.5249 ppb	05:25:47
3	Mn 257.610†	-206.4	-6.4	-0.0194 µg/L	-0.0194 ppb	05:26:07
3	Mo 202.031†	-6.0	-2.4	-0.2747 µg/L	-0.2747 ppb	05:26:07
3	Ni 231.604†	298.2	24.5	1.3432 µg/L	1.3432 ppb	05:26:07
3	P 214.914†	193.7	-5.9	-11.941 µg/L	-11.941 ppb	05:26:07
3	Pb 220.353†	50.0	-5.9	-1.5268 µg/L	-1.5268 ppb	05:26:07
3	S 181.975 Axial†	55.1	33.2	162.80 µg/L	162.80 ppb	05:26:07
3	Sb 206.836†	24.5	3.6	3.5143 µg/L	3.5143 ppb	05:26:07
3	Se 196.026†	17.1	7.3	9.3555 µg/L	9.3555 ppb	05:26:07
3	SiO2†	2693.8	-40.7	-7.4736 µg/L	-7.4736 ppb	05:25:47
3	Si 251.611†	343.1	20.1	1.4206 µg/L	1.4206 ppb	05:26:07
3	Sn 189.927†	22.7	0.4	0.2189 µg/L	0.2189 ppb	05:26:07
3	Ti 334.940†	917.6	148.9	0.3383 µg/L	0.3383 ppb	05:25:47
3	Tl 190.801†	-23.3	-3.0	-4.6569 µg/L	-4.6569 ppb	05:26:07
3	U 409.014†	657.1	-69.2	-6.2761 µg/L	-6.2761 ppb	05:25:47
3	V 292.402†	-101.9	24.2	0.2610 µg/L	0.2610 ppb	05:25:47
3	Zn 213.857†	539.6	16.4	0.4277 µg/L	0.4277 ppb	05:26:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2008987.0	99.345	%	0.4349				0.44%
Sc RADIAL	114567.9	98.2	%	0.57				0.58%
Y 371.029	1249429.8	99.260	%	0.4575				0.46%
Ag 328.068†	46.3	0.4241	µg/L	0.31625	0.4241	ppb	0.31625	74.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	36.7	18.245	µg/L	2.3323	18.245	ppb	2.3323	12.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.3629	µg/L	4.83143	0.3629	ppb	4.83143	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	435.4	18.876	µg/L	1.9870	18.876	ppb	1.9870	10.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.1149	µg/L	0.07340	0.1149	ppb	0.07340	63.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.8	0.0260	µg/L	0.04518	0.0260	ppb	0.04518	174.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	53.4	20.671	µg/L	4.3269	20.671	ppb	4.3269	20.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.5	0.1689	µg/L	0.05814	0.1689	ppb	0.05814	34.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.7	-0.4219	µg/L	0.21432	-0.4219	ppb	0.21432	50.80%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -20.8     -0.4352 µg/L       0.21558     -0.4352 ppb        0.21558  49.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -110.3     -0.7641 µg/L       0.22412     -0.7641 ppb        0.22412  29.33%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.6      3.8733 µg/L      11.10410      3.8733 ppb       11.10410 286.69%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        207.8      106.37 µg/L        22.638      106.37 ppb         22.638  21.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.2     -13.781 µg/L        9.4354     -13.781 ppb         9.4354  68.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -3.0     -0.0091 µg/L       0.00953     -0.0091 ppb        0.00953 104.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.1     -0.1297 µg/L       0.13808     -0.1297 ppb        0.13808 106.49%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      2617.2      655.41 µg/L       268.656      655.41 ppb        268.656  40.99%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.0      0.7648 µg/L       0.53646      0.7648 ppb        0.53646  70.14%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.7     -19.609 µg/L       11.1941     -19.609 ppb        11.1941  57.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -7.5     -1.9412 µg/L       0.55331     -1.9412 ppb        0.55331  28.50%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          41.0      200.56 µg/L        37.658      200.56 ppb         37.658  18.78%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                1.7      1.6970 µg/L       2.85395      1.6970 ppb        2.85395 168.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                4.3      5.4564 µg/L       3.47784      5.4564 ppb        3.47784  63.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -56.1     -10.307 µg/L        2.6172     -10.307 ppb         2.6172  25.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               29.2      2.1359 µg/L       0.72220      2.1359 ppb        0.72220  33.81%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.6     -0.8207 µg/L       0.90729     -0.8207 ppb        0.90729 110.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               58.4      0.2935 µg/L       0.09994      0.2935 ppb        0.09994  34.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              232.8      0.5292 µg/L       0.16974      0.5292 ppb        0.16974  32.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.2      3.3058 µg/L       6.90199      3.3058 ppb        6.90199 208.78%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -53.2     -4.8282 µg/L       5.86042     -4.8282 ppb        5.86042 121.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                17.0      0.1832 µg/L       0.19377      0.1832 ppb        0.19377 105.78%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               21.1      0.5565 µg/L       0.15462      0.5565 ppb        0.15462  27.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 40
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 05:48:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115837.9	115837.9	99.3	%			05:48:40
1	Al 396.153Radial†	10200.3	10146.6	5022.4	µg/L	5022.4	ppb	05:48:40
1	Ca 317.933Radial†	13122.9	12799.8	4952.5	µg/L	4952.5	ppb	05:49:00
1	Fe 238.204 Radial†	787.7	777.9	4963.5	µg/L	4963.5	ppb	05:49:00
1	K 766.490 Radial†	10323.1	9711.1	4970.0	µg/L	4970.0	ppb	05:48:40
1	Mg 279.077 IEC†	826.4	816.6	5047.0	µg/L	5047.0	ppb	05:49:00
1	Na 589.592 Radial†	39478.0	40381.6	10113	µg/L	10113	ppb	05:48:40
1	Sr 421.552†	96827.5	97550.9	490.29	µg/L	490.29	ppb	05:48:40
1	Sc 361.383	2005122.6	2005122.6	99.154	%			05:50:04
1	Y 371.029	1243470.3	1243470.3	98.786	%			05:50:04
1	Ag 328.068†	55033.0	55491.9	509.64	µg/L	509.64	ppb	05:50:09
1	As 188.979†	273.1	273.2	495.02	µg/L	495.02	ppb	05:50:30
1	B 249.677†	11436.9	11396.6	492.51	µg/L	492.51	ppb	05:50:09
1	Ba 233.527†	18928.1	19167.5	492.66	µg/L	492.66	ppb	05:50:09
1	Be 313.107†	778861.2	781988.0	489.15	µg/L	489.15	ppb	05:50:04
1	Cd 226.502†	18338.7	18594.1	495.39	µg/L	495.39	ppb	05:50:09
1	Co 228.616†	10064.0	10216.5	493.80	µg/L	493.80	ppb	05:50:09
1	Cr 267.716†	23116.4	23413.3	492.18	µg/L	492.18	ppb	05:50:09
1	Cu 324.752†	74736.7	71104.3	494.27	µg/L	494.27	ppb	05:50:09
1	Mn 257.610†	151323.5	152815.4	488.56	µg/L	488.56	ppb	05:50:04
1	Mo 202.031†	4244.6	4284.5	500.64	µg/L	500.64	ppb	05:50:30
1	Ni 231.604†	9206.9	9009.8	492.94	µg/L	492.94	ppb	05:50:09
1	P 214.914†	1400.8	1211.9	2394.3	µg/L	2394.3	ppb	05:50:30
1	Pb 220.353†	1950.3	1910.7	494.54	µg/L	494.54	ppb	05:50:30
1	S 181.975 Axial†	250.0	230.0	1124.5	µg/L	1124.5	ppb	05:50:30
1	Sb 206.836†	527.4	510.7	498.46	µg/L	498.46	ppb	05:50:30
1	Se 196.026†	397.7	391.2	502.02	µg/L	502.02	ppb	05:50:30
1	SiO2†	31463.7	28980.6	5321.8	µg/L	5321.8	ppb	05:50:09
1	Si 251.611†	33738.6	33701.1	2446.0	µg/L	2446.0	ppb	05:50:09
1	Sn 189.927†	1000.0	986.1	507.65	µg/L	507.65	ppb	05:50:30
1	Ti 334.940†	218707.3	219798.2	500.40	µg/L	500.40	ppb	05:50:04
1	Tl 190.801†	297.8	320.7	494.80	µg/L	494.80	ppb	05:50:30
1	U 409.014†	6102.1	5423.7	490.96	µg/L	490.96	ppb	05:50:09
1	V 292.402†	43241.2	43736.8	496.68	µg/L	496.68	ppb	05:50:09
1	Zn 213.857†	19101.5	18737.8	492.70	µg/L	492.70	ppb	05:50:09
2	Sc RADIAL	115966.7	115966.7	99.4	%			05:49:05
2	Al 396.153Radial†	10318.2	10253.8	5075.7	µg/L	5075.7	ppb	05:49:05
2	Ca 317.933Radial†	13127.2	12789.3	4948.4	µg/L	4948.4	ppb	05:49:26
2	Fe 238.204 Radial†	786.3	775.6	4948.5	µg/L	4948.5	ppb	05:49:26
2	K 766.490 Radial†	10413.4	9790.3	5010.6	µg/L	5010.6	ppb	05:49:05
2	Mg 279.077 IEC†	826.3	815.6	5040.6	µg/L	5040.6	ppb	05:49:26
2	Na 589.592 Radial†	39824.1	40685.5	10189	µg/L	10189	ppb	05:49:05
2	Sr 421.552†	97615.0	98234.5	493.72	µg/L	493.72	ppb	05:49:05
2	Sc 361.383	2019908.0	2019908.0	99.885	%			05:50:37
2	Y 371.029	1251573.5	1251573.5	99.430	%			05:50:37
2	Ag 328.068†	54745.4	54797.8	503.26	µg/L	503.26	ppb	05:50:42
2	As 188.979†	277.8	275.9	499.97	µg/L	499.97	ppb	05:51:03
2	B 249.677†	11365.3	11240.4	485.74	µg/L	485.74	ppb	05:50:42
2	Ba 233.527†	18792.2	18891.8	485.57	µg/L	485.57	ppb	05:50:42
2	Be 313.107†	787523.7	784910.7	490.97	µg/L	490.97	ppb	05:50:37
2	Cd 226.502†	18204.3	18324.1	488.20	µg/L	488.20	ppb	05:50:42
2	Co 228.616†	10002.9	10081.0	487.24	µg/L	487.24	ppb	05:50:42
2	Cr 267.716†	22903.8	23029.9	484.12	µg/L	484.12	ppb	05:50:42
2	Cu 324.752†	74357.5	70173.0	487.81	µg/L	487.81	ppb	05:50:42
2	Mn 257.610†	152942.3	153319.0	490.17	µg/L	490.17	ppb	05:50:37
2	Mo 202.031†	4268.3	4276.9	499.75	µg/L	499.75	ppb	05:51:03
2	Ni 231.604†	9166.1	8901.0	486.98	µg/L	486.98	ppb	05:50:42
2	P 214.914†	1407.1	1207.8	2387.0	µg/L	2387.0	ppb	05:51:03
2	Pb 220.353†	1958.8	1904.8	493.05	µg/L	493.05	ppb	05:51:03

2	S 181.975 Axial†	246.3	224.4	1097.4 µg/L	1097.4 ppb	05:51:03
2	Sb 206.836†	541.3	520.8	508.34 µg/L	508.34 ppb	05:51:03
2	Se 196.026†	402.0	392.6	503.80 µg/L	503.80 ppb	05:51:03
2	SiO2†	31335.0	28619.5	5255.4 µg/L	5255.4 ppb	05:50:42
2	Si 251.611†	33587.5	33300.8	2416.3 µg/L	2416.3 ppb	05:50:42
2	Sn 189.927†	1010.8	989.6	509.41 µg/L	509.41 ppb	05:51:03
2	Ti 334.940†	221209.4	220688.6	502.43 µg/L	502.43 ppb	05:50:37
2	Tl 190.801†	301.7	322.5	497.58 µg/L	497.58 ppb	05:51:03
2	U 409.014†	6120.9	5397.4	488.58 µg/L	488.58 ppb	05:50:42
2	V 292.402†	42971.4	43147.4	490.04 µg/L	490.04 ppb	05:50:42
2	Zn 213.857†	18989.9	18485.0	486.04 µg/L	486.04 ppb	05:50:42
3	Sc RADIAL	115915.6	115915.6	99.4 %		05:49:31
3	Al 396.153Radial†	10213.9	10153.4	5026.3 µg/L	5026.3 ppb	05:49:31
3	Ca 317.933Radial†	13108.5	12776.3	4943.4 µg/L	4943.4 ppb	05:49:52
3	Fe 238.204 Radial†	785.6	775.3	4946.5 µg/L	4946.5 ppb	05:49:52
3	K 766.490 Radial†	10354.7	9736.0	4982.7 µg/L	4982.7 ppb	05:49:31
3	Mg 279.077 IEC†	830.7	820.4	5070.1 µg/L	5070.1 ppb	05:49:52
3	Na 589.592 Radial†	39382.4	40258.8	10082 µg/L	10082 ppb	05:49:31
3	Sr 421.552†	96711.2	97368.5	489.37 µg/L	489.37 ppb	05:49:31
3	Sc 361.383	2028648.8	2028648.8	100.32 %		05:51:10
3	Y 371.029	1257270.3	1257270.3	99.883 %		05:51:10
3	Ag 328.068†	54760.2	54576.3	501.23 µg/L	501.23 ppb	05:51:16
3	As 188.979†	270.5	267.4	484.52 µg/L	484.52 ppb	05:51:36
3	B 249.677†	11404.7	11230.7	485.32 µg/L	485.32 ppb	05:51:16
3	Ba 233.527†	18836.3	18854.7	484.62 µg/L	484.62 ppb	05:51:16
3	Be 313.107†	787723.4	781712.7	488.97 µg/L	488.97 ppb	05:51:10
3	Cd 226.502†	18219.1	18260.3	486.49 µg/L	486.49 ppb	05:51:16
3	Co 228.616†	9999.6	10034.6	484.98 µg/L	484.98 ppb	05:51:16
3	Cr 267.716†	23006.5	23033.5	484.19 µg/L	484.19 ppb	05:51:16
3	Cu 324.752†	74386.3	69880.9	485.78 µg/L	485.78 ppb	05:51:16
3	Mn 257.610†	153111.2	152827.6	488.60 µg/L	488.60 ppb	05:51:10
3	Mo 202.031†	4171.3	4161.8	486.31 µg/L	486.31 ppb	05:51:36
3	Ni 231.604†	9177.0	8872.3	485.41 µg/L	485.41 ppb	05:51:16
3	P 214.914†	1383.4	1178.1	2326.8 µg/L	2326.8 ppb	05:51:36
3	Pb 220.353†	1917.4	1855.1	480.17 µg/L	480.17 ppb	05:51:36
3	S 181.975 Axial†	239.8	216.9	1060.3 µg/L	1060.3 ppb	05:51:36
3	Sb 206.836†	523.6	500.8	488.80 µg/L	488.80 ppb	05:51:36
3	Se 196.026†	394.1	383.0	491.50 µg/L	491.50 ppb	05:51:36
3	SiO2†	31366.2	28515.5	5236.3 µg/L	5236.3 ppb	05:51:16
3	Si 251.611†	33573.6	33142.0	2405.6 µg/L	2405.6 ppb	05:51:16
3	Sn 189.927†	979.5	953.9	491.17 µg/L	491.17 ppb	05:51:36
3	Ti 334.940†	221039.2	219564.7	499.87 µg/L	499.87 ppb	05:51:10
3	Tl 190.801†	301.9	321.3	495.87 µg/L	495.87 ppb	05:51:36
3	U 409.014†	5989.2	5239.8	474.28 µg/L	474.28 ppb	05:51:16
3	V 292.402†	42978.3	42968.9	487.91 µg/L	487.91 ppb	05:51:16
3	Zn 213.857†	18996.1	18409.3	484.05 µg/L	484.05 ppb	05:51:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017893.1	99.786	%	0.5881				0.59%
Sc RADIAL	115906.7	99.4	%	0.06				0.06%
Y 371.029	1250771.4	99.366	%	0.5509				0.55%
Ag 328.068†	54955.3	504.71	µg/L	4.387	504.71	ppb	4.387	0.87%
QC value within limits for Ag 328.068 Recovery = 100.94%								
Al 396.153Radial†	10184.6	5041.5	µg/L	29.69	5041.5	ppb	29.69	0.59%
QC value within limits for Al 396.153Radial Recovery = 100.83%								
As 188.979†	272.2	493.17	µg/L	7.891	493.17	ppb	7.891	1.60%
QC value within limits for As 188.979 Recovery = 98.63%								
B 249.677†	11289.3	487.86	µg/L	4.034	487.86	ppb	4.034	0.83%
QC value within limits for B 249.677 Recovery = 97.57%								
Ba 233.527†	18971.4	487.62	µg/L	4.393	487.62	ppb	4.393	0.90%
QC value within limits for Ba 233.527 Recovery = 97.52%								
Be 313.107†	782870.5	489.70	µg/L	1.108	489.70	ppb	1.108	0.23%
QC value within limits for Be 313.107 Recovery = 97.94%								
Ca 317.933Radial†	12788.5	4948.1	µg/L	4.54	4948.1	ppb	4.54	0.09%
QC value within limits for Ca 317.933Radial Recovery = 98.96%								
Cd 226.502†	18392.8	490.03	µg/L	4.724	490.03	ppb	4.724	0.96%
QC value within limits for Cd 226.502 Recovery = 98.01%								
Co 228.616†	10110.7	488.67	µg/L	4.581	488.67	ppb	4.581	0.94%

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   QC value within limits for Co 228.616  Recovery = 97.73%
Cr 267.716†            23158.9      486.83 µg/L         4.632      486.83 ppb          4.632   0.95%
   QC value within limits for Cr 267.716  Recovery = 97.37%
Cu 324.752†            70386.1      489.29 µg/L         4.434      489.29 ppb          4.434   0.91%
   QC value within limits for Cu 324.752  Recovery = 97.86%
Fe 238.204 Radial†       776.3      4952.8 µg/L          9.29      4952.8 ppb           9.29   0.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.06%
K 766.490 Radial†       9745.8      4987.8 µg/L         20.73      4987.8 ppb          20.73   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 99.76%
Mg 279.077 IEC†          817.5      5052.6 µg/L         15.54      5052.6 ppb          15.54   0.31%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.05%
Mn 257.610†           152987.3      489.11 µg/L         0.917      489.11 ppb          0.917   0.19%
   QC value within limits for Mn 257.610  Recovery = 97.82%
Mo 202.031†             4241.1      495.57 µg/L         8.030      495.57 ppb          8.030   1.62%
   QC value within limits for Mo 202.031  Recovery = 99.11%
Na 589.592 Radial†     40442.0       10128 µg/L          55.0       10128 ppb           55.0   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 101.28%
Ni 231.604†             8927.7      488.45 µg/L         3.968      488.45 ppb          3.968   0.81%
   QC value within limits for Ni 231.604  Recovery = 97.69%
P 214.914†              1199.3      2369.4 µg/L         37.06      2369.4 ppb          37.06   1.56%
   QC value within limits for P 214.914  Recovery = 94.78%
Pb 220.353†             1890.2      489.25 µg/L         7.903      489.25 ppb          7.903   1.62%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†         223.7      1094.1 µg/L         32.22      1094.1 ppb          32.22   2.94%
   QC value within limits for S 181.975 Axial  Recovery = 109.41%
Sb 206.836†              510.8      498.53 µg/L         9.768      498.53 ppb          9.768   1.96%
   QC value within limits for Sb 206.836  Recovery = 99.71%
Se 196.026†              388.9      499.11 µg/L         6.648      499.11 ppb          6.648   1.33%
   QC value within limits for Se 196.026  Recovery = 99.82%
SiO2†                   28705.2      5271.2 µg/L         44.83      5271.2 ppb          44.83   0.85%
   QC value within limits for SiO2  Recovery = 98.57%
Si 251.611†             33381.3      2422.6 µg/L         20.97      2422.6 ppb          20.97   0.87%
   QC value within limits for Si 251.611  Recovery = 96.91%
Sn 189.927†              976.6      502.74 µg/L        10.064      502.74 ppb         10.064   2.00%
   QC value within limits for Sn 189.927  Recovery = 100.55%
Sr 421.552†             97718.0      491.13 µg/L         2.295      491.13 ppb          2.295   0.47%
   QC value within limits for Sr 421.552  Recovery = 98.23%
Ti 334.940†            220017.2      500.90 µg/L         1.351      500.90 ppb          1.351   0.27%
   QC value within limits for Ti 334.940  Recovery = 100.18%
Tl 190.801†              321.5      496.09 µg/L         1.403      496.09 ppb          1.403   0.28%
   QC value within limits for Tl 190.801  Recovery = 99.22%
U 409.014†              5353.6      484.61 µg/L         9.018      484.61 ppb          9.018   1.86%
   QC value within limits for U 409.014  Recovery = 96.92%
V 292.402†              43284.4      491.54 µg/L         4.572      491.54 ppb          4.572   0.93%
   QC value within limits for V 292.402  Recovery = 98.31%
Zn 213.857†             18544.0      487.60 µg/L         4.532      487.60 ppb          4.532   0.93%
   QC value within limits for Zn 213.857  Recovery = 97.52%
All analyte(s) passed QC.
```

Sequence No.: 41
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 05:51:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114637.1	114637.1	98.3	%			05:52:20
1	Al 396.153Radial†	135.1	14.2	7.0565	µg/L	7.0565	ppb	05:52:20
1	Ca 317.933Radial†	411.0	5.3	2.0690	µg/L	2.0690	ppb	05:52:40
1	Fe 238.204 Radial†	16.7	1.8	11.709	µg/L	11.709	ppb	05:52:40
1	K 766.490 Radial†	790.9	122.1	62.501	µg/L	62.501	ppb	05:52:20
1	Mg 279.077 IEC†	15.5	0.4	2.1558	µg/L	2.1558	ppb	05:52:40
1	Na 589.592 Radial†	-326.1	302.4	75.716	µg/L	75.716	ppb	05:52:20
1	Sr 421.552†	-99.9	-39.3	-0.1974	µg/L	-0.1974	ppb	05:52:20
1	Sc 361.383	2009804.3	2009804.3	99.386	%			05:53:42
1	Y 371.029	1252128.0	1252128.0	99.474	%			05:53:42
1	Ag 328.068†	32.0	21.8	0.1992	µg/L	0.1992	ppb	05:53:48
1	As 188.979†	4.4	2.2	3.9813	µg/L	3.9813	ppb	05:54:08
1	B 249.677†	255.4	119.1	5.1594	µg/L	5.1594	ppb	05:54:08
1	Ba 233.527†	-75.7	1.9	0.0486	µg/L	0.0486	ppb	05:54:08
1	Be 313.107†	3600.3	106.6	0.0665	µg/L	0.0665	ppb	05:53:48
1	Cd 226.502†	-89.6	8.8	0.2327	µg/L	0.2327	ppb	05:54:08
1	Co 228.616†	-66.2	0.0	-0.0010	µg/L	-0.0010	ppb	05:54:08
1	Cr 267.716†	-100.4	-1.2	-0.0256	µg/L	-0.0256	ppb	05:53:48
1	Cu 324.752†	4098.3	-146.2	-1.0115	µg/L	-1.0115	ppb	05:53:48
1	Mn 257.610†	-203.2	-3.1	-0.0085	µg/L	-0.0085	ppb	05:54:08
1	Mo 202.031†	-3.5	0.2	0.0238	µg/L	0.0238	ppb	05:54:08
1	Ni 231.604†	295.7	21.9	1.2007	µg/L	1.2007	ppb	05:54:08
1	P 214.914†	199.1	-0.6	-1.0127	µg/L	-1.0127	ppb	05:54:08
1	Pb 220.353†	51.6	-4.3	-1.1084	µg/L	-1.1084	ppb	05:54:08
1	S 181.975 Axial†	42.1	20.2	98.774	µg/L	98.774	ppb	05:54:08
1	Sb 206.836†	16.5	-4.5	-4.4186	µg/L	-4.4186	ppb	05:54:08
1	Se 196.026†	15.2	5.5	6.9918	µg/L	6.9918	ppb	05:54:08
1	SiO2†	2657.5	-77.5	-14.229	µg/L	-14.229	ppb	05:53:48
1	Si 251.611†	356.7	33.7	2.4232	µg/L	2.4232	ppb	05:54:08
1	Sn 189.927†	23.7	1.4	0.7176	µg/L	0.7176	ppb	05:54:08
1	Ti 334.940†	1043.5	275.6	0.6276	µg/L	0.6276	ppb	05:53:48
1	Tl 190.801†	-16.3	4.0	6.1069	µg/L	6.1069	ppb	05:54:08
1	U 409.014†	704.6	-21.5	-1.9550	µg/L	-1.9550	ppb	05:53:48
1	V 292.402†	-135.8	-9.9	-0.1133	µg/L	-0.1133	ppb	05:53:48
1	Zn 213.857†	539.3	16.0	0.4179	µg/L	0.4179	ppb	05:54:08
2	Sc RADIAL	115125.2	115125.2	98.7	%			05:52:46
2	Al 396.153Radial†	146.3	24.9	12.364	µg/L	12.364	ppb	05:52:46
2	Ca 317.933Radial†	421.9	14.7	5.6684	µg/L	5.6684	ppb	05:53:06
2	Fe 238.204 Radial†	15.5	0.5	3.4418	µg/L	3.4418	ppb	05:53:06
2	K 766.490 Radial†	839.3	167.7	85.849	µg/L	85.849	ppb	05:52:46
2	Mg 279.077 IEC†	13.7	-1.6	-9.7881	µg/L	-9.7881	ppb	05:53:06
2	Na 589.592 Radial†	-379.9	249.2	62.405	µg/L	62.405	ppb	05:52:46
2	Sr 421.552†	-49.0	12.7	0.0638	µg/L	0.0638	ppb	05:52:46
2	Sc 361.383	2003156.0	2003156.0	99.057	%			05:54:14
2	Y 371.029	1247675.9	1247675.9	99.120	%			05:54:14
2	Ag 328.068†	28.9	18.7	0.1720	µg/L	0.1720	ppb	05:54:20
2	As 188.979†	5.6	3.5	6.2888	µg/L	6.2888	ppb	05:54:41
2	B 249.677†	251.7	116.2	5.0374	µg/L	5.0374	ppb	05:54:41
2	Ba 233.527†	-69.6	7.8	0.2011	µg/L	0.2011	ppb	05:54:41
2	Be 313.107†	3675.4	194.5	0.1215	µg/L	0.1215	ppb	05:54:20
2	Cd 226.502†	-88.3	9.8	0.2614	µg/L	0.2614	ppb	05:54:41
2	Co 228.616†	-62.5	3.6	0.1730	µg/L	0.1730	ppb	05:54:41
2	Cr 267.716†	-138.9	-40.5	-0.8483	µg/L	-0.8483	ppb	05:54:20
2	Cu 324.752†	4137.2	-93.2	-0.6456	µg/L	-0.6456	ppb	05:54:20
2	Mn 257.610†	-199.4	0.1	0.0006	µg/L	0.0006	ppb	05:54:41
2	Mo 202.031†	-1.0	2.7	0.3129	µg/L	0.3129	ppb	05:54:41
2	Ni 231.604†	297.6	24.9	1.3629	µg/L	1.3629	ppb	05:54:41
2	P 214.914†	190.0	-9.1	-18.259	µg/L	-18.259	ppb	05:54:41
2	Pb 220.353†	49.2	-6.6	-1.7084	µg/L	-1.7084	ppb	05:54:41

2	S 181.975 Axial†	35.5	13.6	66.757 µg/L	66.757 ppb		05:54:41
2	Sb 206.836†	19.0	-2.0	-1.9198 µg/L	-1.9198 ppb		05:54:41
2	Se 196.026†	20.0	10.3	13.185 µg/L	13.185 ppb		05:54:41
2	SiO2†	2669.4	-56.6	-10.394 µg/L	-10.394 ppb		05:54:20
2	Si 251.611†	353.9	32.1	2.3977 µg/L	2.3977 ppb		05:54:41
2	Sn 189.927†	18.1	-4.1	-2.0975 µg/L	-2.0975 ppb		05:54:41
2	Ti 334.940†	993.2	228.2	0.5195 µg/L	0.5195 ppb		05:54:20
2	Tl 190.801†	-22.1	-2.0	-3.0439 µg/L	-3.0439 ppb		05:54:41
2	U 409.014†	699.8	-24.0	-2.1789 µg/L	-2.1789 ppb		05:54:20
2	V 292.402†	-113.5	12.1	0.1353 µg/L	0.1353 ppb		05:54:20
2	Zn 213.857†	530.1	8.5	0.2203 µg/L	0.2203 ppb		05:54:41
3	Sc RADIAL	114101.3	114101.3	97.8 %			05:53:12
3	Al 396.153Radial†	104.3	-16.7	-8.3266 µg/L	-8.3266 ppb		05:53:12
3	Ca 317.933Radial†	425.4	22.0	8.5151 µg/L	8.5151 ppb		05:53:32
3	Fe 238.204 Radial†	16.9	2.1	13.269 µg/L	13.269 ppb		05:53:32
3	K 766.490 Radial†	741.9	75.8	38.817 µg/L	38.817 ppb		05:53:12
3	Mg 279.077 IEC†	15.3	0.2	1.3248 µg/L	1.3248 ppb		05:53:32
3	Na 589.592 Radial†	-387.0	238.6	59.745 µg/L	59.745 ppb		05:53:12
3	Sr 421.552†	-63.7	-2.8	-0.0140 µg/L	-0.0140 ppb		05:53:12
3	Sc 361.383	2029979.0	2029979.0	100.38 %			05:54:47
3	Y 371.029	1264771.0	1264771.0	100.48 %			05:54:47
3	Ag 328.068†	113.4	102.5	0.9349 µg/L	0.9349 ppb		05:54:52
3	As 188.979†	0.7	-1.5	-2.6930 µg/L	-2.6930 ppb		05:55:13
3	B 249.677†	248.1	109.3	4.7358 µg/L	4.7358 ppb		05:55:13
3	Ba 233.527†	-68.5	9.8	0.2524 µg/L	0.2524 ppb		05:55:13
3	Be 313.107†	3659.8	130.0	0.0812 µg/L	0.0812 ppb		05:54:52
3	Cd 226.502†	-80.8	18.4	0.4862 µg/L	0.4862 ppb		05:55:13
3	Co 228.616†	-67.4	-0.5	-0.0231 µg/L	-0.0231 ppb		05:55:13
3	Cr 267.716†	-138.5	-38.2	-0.8015 µg/L	-0.8015 ppb		05:54:52
3	Cu 324.752†	4098.9	-186.5	-1.2910 µg/L	-1.2910 ppb		05:54:52
3	Mn 257.610†	-201.9	0.2	0.0022 µg/L	0.0022 ppb		05:55:13
3	Mo 202.031†	6.2	9.8	1.1472 µg/L	1.1472 ppb		05:55:13
3	Ni 231.604†	285.9	9.2	0.5053 µg/L	0.5053 ppb		05:55:13
3	P 214.914†	196.4	-5.3	-10.601 µg/L	-10.601 ppb		05:55:13
3	Pb 220.353†	46.6	-9.8	-2.5263 µg/L	-2.5263 ppb		05:55:13
3	S 181.975 Axial†	34.5	12.2	59.623 µg/L	59.623 ppb		05:55:13
3	Sb 206.836†	17.4	-3.8	-3.6736 µg/L	-3.6736 ppb		05:55:13
3	Se 196.026†	15.5	5.5	7.0909 µg/L	7.0909 ppb		05:55:13
3	SiO2†	2697.7	-64.0	-11.745 µg/L	-11.745 ppb		05:54:52
3	Si 251.611†	367.0	40.4	3.0765 µg/L	3.0765 ppb		05:55:13
3	Sn 189.927†	15.6	-6.9	-3.5046 µg/L	-3.5046 ppb		05:55:13
3	Ti 334.940†	965.4	187.3	0.4262 µg/L	0.4262 ppb		05:54:52
3	Tl 190.801†	-22.4	-1.9	-2.9318 µg/L	-2.9318 ppb		05:55:13
3	U 409.014†	665.9	-67.1	-6.0880 µg/L	-6.0880 ppb		05:54:52
3	V 292.402†	-136.1	-8.9	-0.1006 µg/L	-0.1006 ppb		05:54:52
3	Zn 213.857†	537.6	8.9	0.2328 µg/L	0.2328 ppb		05:55:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2014313.1	99.609	%	0.6907				0.69%
Sc RADIAL	114621.2	98.3	%	0.44				0.45%
Y 371.029	1254858.3	99.691	%	0.7046				0.71%
Ag 328.068†	47.7	0.4354	µg/L	0.43283	0.4354	ppb	0.43283	99.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.5	3.6980	µg/L	10.74639	3.6980	ppb	10.74639	290.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.4	2.5257	µg/L	4.66444	2.5257	ppb	4.66444	184.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	114.9	4.9775	µg/L	0.21805	4.9775	ppb	0.21805	4.38%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.5	0.1674	µg/L	0.10603	0.1674	ppb	0.10603	63.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	143.7	0.0897	µg/L	0.02849	0.0897	ppb	0.02849	31.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	14.0	5.4175	µg/L	3.23041	5.4175	ppb	3.23041	59.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	12.4	0.3268	µg/L	0.13884	0.3268	ppb	0.13884	42.49%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.0	0.0496	µg/L	0.10740	0.0496	ppb	0.10740	216.52%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -26.6     -0.5585 µg/L       0.46210     -0.5585 ppb        0.46210  82.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -142.0     -0.9827 µg/L       0.32366     -0.9827 ppb        0.32366  32.94%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.5      9.4733 µg/L       5.28125      9.4733 ppb        5.28125  55.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        121.9      62.389 µg/L       23.5165      62.389 ppb        23.5165  37.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3     -2.1025 µg/L       6.66887     -2.1025 ppb        6.66887 317.19%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -1.0     -0.0019 µg/L       0.00581     -0.0019 ppb        0.00581 306.80%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.2      0.4946 µg/L       0.58334      0.4946 ppb        0.58334 117.94%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       263.4      65.955 µg/L        8.5573      65.955 ppb         8.5573  12.97%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               18.7      1.0230 µg/L       0.45560      1.0230 ppb        0.45560  44.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -5.0     -9.9577 µg/L       8.64129     -9.9577 ppb        8.64129  86.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -6.9     -1.7810 µg/L       0.71173     -1.7810 ppb        0.71173  39.96%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          15.3      75.051 µg/L       20.8519      75.051 ppb        20.8519  27.78%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.4     -3.3373 µg/L       1.28287     -3.3373 ppb        1.28287  38.44%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                7.1      9.0892 µg/L       3.54730      9.0892 ppb        3.54730  39.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -66.0     -12.123 µg/L        1.9450     -12.123 ppb         1.9450  16.04%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               35.4      2.6324 µg/L       0.38473      2.6324 ppb        0.38473  14.61%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.2     -1.6282 µg/L       2.14989     -1.6282 ppb        2.14989 132.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -9.8     -0.0492 µg/L       0.13413     -0.0492 ppb        0.13413 272.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              230.4      0.5245 µg/L       0.10079      0.5245 ppb        0.10079  19.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.0      0.0437 µg/L       5.25117      0.0437 ppb        5.25117 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -37.6     -3.4073 µg/L       2.32424     -3.4073 ppb        2.32424  68.21%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -2.2     -0.0262 µg/L       0.14000     -0.0262 ppb        0.14000 534.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               11.1      0.2903 µg/L       0.11066      0.2903 ppb        0.11066  38.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 49
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 06:21:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116748.5	116748.5	100	%			06:22:18
1	Al 396.153Radial†	10225.1	10091.3	4995.2	µg/L	4995.2	ppb	06:22:18
1	Ca 317.933Radial†	13075.1	12648.9	4894.1	µg/L	4894.1	ppb	06:22:38
1	Fe 238.204 Radial†	786.1	770.1	4913.6	µg/L	4913.6	ppb	06:22:38
1	K 766.490 Radial†	10518.4	9825.1	5028.4	µg/L	5028.4	ppb	06:22:18
1	Mg 279.077 IEC†	828.6	812.3	5020.3	µg/L	5020.3	ppb	06:22:38
1	Na 589.592 Radial†	39675.6	40269.0	10084	µg/L	10084	ppb	06:22:18
1	Sr 421.552†	96587.8	96550.9	485.26	µg/L	485.26	ppb	06:22:18
1	Sc 361.383	2048636.3	2048636.3	101.31	%			06:23:42
1	Y 371.029	1263771.4	1263771.4	100.40	%			06:23:42
1	Ag 328.068†	54765.9	54049.4	496.40	µg/L	496.40	ppb	06:23:47
1	As 188.979†	270.1	264.4	479.06	µg/L	479.06	ppb	06:24:08
1	B 249.677†	11392.5	11107.7	480.00	µg/L	480.00	ppb	06:23:47
1	Ba 233.527†	18877.7	18712.3	480.96	µg/L	480.96	ppb	06:23:47
1	Be 313.107†	791545.4	777824.4	486.54	µg/L	486.54	ppb	06:23:42
1	Cd 226.502†	18270.9	18134.3	483.13	µg/L	483.13	ppb	06:23:47
1	Co 228.616†	10047.2	9984.4	482.57	µg/L	482.57	ppb	06:23:47
1	Cr 267.716†	23063.2	22865.7	480.66	µg/L	480.66	ppb	06:23:47
1	Cu 324.752†	74446.1	69216.6	481.17	µg/L	481.17	ppb	06:23:47
1	Mn 257.610†	150853.9	149110.3	476.73	µg/L	476.73	ppb	06:23:47
1	Mo 202.031†	4266.2	4214.9	492.51	µg/L	492.51	ppb	06:24:08
1	Ni 231.604†	9223.5	8829.0	483.04	µg/L	483.04	ppb	06:23:47
1	P 214.914†	1414.6	1195.5	2362.8	µg/L	2362.8	ppb	06:24:08
1	Pb 220.353†	1976.3	1894.6	490.39	µg/L	490.39	ppb	06:24:08
1	S 181.975 Axial†	250.3	224.9	1099.8	µg/L	1099.8	ppb	06:24:08
1	Sb 206.836†	540.6	512.5	500.25	µg/L	500.25	ppb	06:24:08
1	Se 196.026†	406.2	391.1	501.82	µg/L	501.82	ppb	06:24:08
1	SiO2†	31330.3	28175.0	5173.8	µg/L	5173.8	ppb	06:23:47
1	Si 251.611†	33650.7	32891.6	2386.5	µg/L	2386.5	ppb	06:23:47
1	Sn 189.927†	1015.3	979.7	504.36	µg/L	504.36	ppb	06:24:08
1	Ti 334.940†	221398.7	217769.8	495.79	µg/L	495.79	ppb	06:23:42
1	Tl 190.801†	303.3	319.8	493.40	µg/L	493.40	ppb	06:24:08
1	U 409.014†	6041.6	5233.3	473.70	µg/L	473.70	ppb	06:23:47
1	V 292.402†	43095.2	42666.3	484.55	µg/L	484.55	ppb	06:23:47
1	Zn 213.857†	19055.2	18282.9	480.72	µg/L	480.72	ppb	06:23:47
2	Sc RADIAL	116740.6	116740.6	100	%			06:22:44
2	Al 396.153Radial†	10289.2	10156.0	5027.2	µg/L	5027.2	ppb	06:22:44
2	Ca 317.933Radial†	13118.1	12692.8	4911.1	µg/L	4911.1	ppb	06:23:04
2	Fe 238.204 Radial†	785.4	769.5	4909.8	µg/L	4909.8	ppb	06:23:04
2	K 766.490 Radial†	10526.7	9834.1	5033.0	µg/L	5033.0	ppb	06:22:44
2	Mg 279.077 IEC†	830.6	814.4	5033.2	µg/L	5033.2	ppb	06:23:04
2	Na 589.592 Radial†	40195.1	40790.6	10215	µg/L	10215	ppb	06:22:44
2	Sr 421.552†	97435.3	97404.1	489.55	µg/L	489.55	ppb	06:22:44
2	Sc 361.383	2019809.7	2019809.7	99.881	%			06:24:15
2	Y 371.029	1247980.0	1247980.0	99.145	%			06:24:15
2	Ag 328.068†	55294.0	55349.7	508.32	µg/L	508.32	ppb	06:24:20
2	As 188.979†	276.3	274.5	497.27	µg/L	497.27	ppb	06:24:41
2	B 249.677†	11511.4	11387.3	492.12	µg/L	492.12	ppb	06:24:20
2	Ba 233.527†	19016.4	19117.2	491.36	µg/L	491.36	ppb	06:24:20
2	Be 313.107†	785120.2	782542.7	489.49	µg/L	489.49	ppb	06:24:15
2	Cd 226.502†	18408.7	18529.7	493.68	µg/L	493.68	ppb	06:24:20
2	Co 228.616†	10158.9	10237.7	494.82	µg/L	494.82	ppb	06:24:20
2	Cr 267.716†	23223.1	23350.7	490.86	µg/L	490.86	ppb	06:24:20
2	Cu 324.752†	75067.0	70886.9	492.75	µg/L	492.75	ppb	06:24:20
2	Mn 257.610†	152114.5	152497.7	487.54	µg/L	487.54	ppb	06:24:20
2	Mo 202.031†	4255.7	4264.4	498.30	µg/L	498.30	ppb	06:24:41
2	Ni 231.604†	9263.8	8999.3	492.36	µg/L	492.36	ppb	06:24:20
2	P 214.914†	1407.5	1208.3	2387.5	µg/L	2387.5	ppb	06:24:41
2	Pb 220.353†	1964.5	1910.6	494.51	µg/L	494.51	ppb	06:24:41

2	S 181.975 Axial†	246.3	224.4	1097.4 µg/L	1097.4 ppb	06:24:41
2	Sb 206.836†	533.0	512.5	500.19 µg/L	500.19 ppb	06:24:41
2	Se 196.026†	399.5	390.1	500.59 µg/L	500.59 ppb	06:24:41
2	SiO2†	31560.0	28846.3	5297.1 µg/L	5297.1 ppb	06:24:20
2	Si 251.611†	33860.1	33575.3	2436.5 µg/L	2436.5 ppb	06:24:20
2	Sn 189.927†	1020.9	999.7	514.58 µg/L	514.58 ppb	06:24:41
2	Ti 334.940†	220067.2	219555.8	499.85 µg/L	499.85 ppb	06:24:15
2	Tl 190.801†	302.8	323.5	499.19 µg/L	499.19 ppb	06:24:41
2	U 409.014†	6070.2	5347.0	484.02 µg/L	484.02 ppb	06:24:20
2	V 292.402†	43393.9	43572.5	494.80 µg/L	494.80 ppb	06:24:20
2	Zn 213.857†	19230.7	18727.0	492.43 µg/L	492.43 ppb	06:24:20
3	Sc RADIAL	116320.4	116320.4	99.7 %		06:23:10
3	Al 396.153Radial†	10194.2	10097.9	4998.5 µg/L	4998.5 ppb	06:23:10
3	Ca 317.933Radial†	13074.0	12695.9	4912.3 µg/L	4912.3 ppb	06:23:30
3	Fe 238.204 Radial†	785.5	772.4	4928.6 µg/L	4928.6 ppb	06:23:30
3	K 766.490 Radial†	10409.0	9754.1	4992.0 µg/L	4992.0 ppb	06:23:10
3	Mg 279.077 IEC†	825.6	812.3	5020.5 µg/L	5020.5 ppb	06:23:30
3	Na 589.592 Radial†	39616.2	40355.3	10106 µg/L	10106 ppb	06:23:10
3	Sr 421.552†	96283.7	96601.2	485.51 µg/L	485.51 ppb	06:23:10
3	Sc 361.383	2019100.1	2019100.1	99.846 %		06:24:48
3	Y 371.029	1248568.4	1248568.4	99.191 %		06:24:48
3	Ag 328.068†	55208.6	55283.6	507.72 µg/L	507.72 ppb	06:24:53
3	As 188.979†	264.4	262.5	475.65 µg/L	475.65 ppb	06:25:14
3	B 249.677†	11509.2	11389.2	492.20 µg/L	492.20 ppb	06:24:53
3	Ba 233.527†	19010.4	19117.8	491.38 µg/L	491.38 ppb	06:24:53
3	Be 313.107†	780104.3	777795.3	486.52 µg/L	486.52 ppb	06:24:48
3	Cd 226.502†	18430.6	18558.1	494.44 µg/L	494.44 ppb	06:24:53
3	Co 228.616†	10140.8	10223.1	494.11 µg/L	494.11 ppb	06:24:53
3	Cr 267.716†	23231.3	23367.0	491.20 µg/L	491.20 ppb	06:24:53
3	Cu 324.752†	74842.1	70688.1	491.38 µg/L	491.38 ppb	06:24:53
3	Mn 257.610†	151889.5	152325.8	486.99 µg/L	486.99 ppb	06:24:53
3	Mo 202.031†	4201.1	4211.2	492.08 µg/L	492.08 ppb	06:25:14
3	Ni 231.604†	9286.5	9025.3	493.78 µg/L	493.78 ppb	06:24:53
3	P 214.914†	1389.3	1190.5	2351.5 µg/L	2351.5 ppb	06:25:14
3	Pb 220.353†	1956.7	1903.5	492.67 µg/L	492.67 ppb	06:25:14
3	S 181.975 Axial†	245.1	223.3	1091.8 µg/L	1091.8 ppb	06:25:14
3	Sb 206.836†	527.7	507.4	495.16 µg/L	495.16 ppb	06:25:14
3	Se 196.026†	391.6	382.3	490.69 µg/L	490.69 ppb	06:25:14
3	SiO2†	31560.9	28858.4	5299.3 µg/L	5299.3 ppb	06:24:53
3	Si 251.611†	33862.8	33590.0	2438.2 µg/L	2438.2 ppb	06:24:53
3	Sn 189.927†	1001.9	981.0	505.01 µg/L	505.01 ppb	06:25:14
3	Ti 334.940†	218659.2	218223.1	496.82 µg/L	496.82 ppb	06:24:48
3	Tl 190.801†	299.6	320.4	494.39 µg/L	494.39 ppb	06:25:14
3	U 409.014†	6154.8	5433.9	491.89 µg/L	491.89 ppb	06:24:53
3	V 292.402†	43358.3	43552.2	494.54 µg/L	494.54 ppb	06:24:53
3	Zn 213.857†	19209.6	18712.6	492.04 µg/L	492.04 ppb	06:24:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2029182.0	100.34	%	0.833				0.83%
Sc RADIAL	116603.2	100.0	%	0.21				0.21%
Y 371.029	1253439.9	99.578	%	0.7112				0.71%
Ag 328.068†	54894.2	504.15	µg/L	6.717	504.15	ppb	6.717	1.33%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	10115.1	5007.0	µg/L	17.56	5007.0	ppb	17.56	0.35%
QC value within limits for Al 396.153Radial Recovery = 100.14%								
As 188.979†	267.1	483.99	µg/L	11.625	483.99	ppb	11.625	2.40%
QC value within limits for As 188.979 Recovery = 96.80%								
B 249.677†	11294.7	488.11	µg/L	7.020	488.11	ppb	7.020	1.44%
QC value within limits for B 249.677 Recovery = 97.62%								
Ba 233.527†	18982.5	487.90	µg/L	6.012	487.90	ppb	6.012	1.23%
QC value within limits for Ba 233.527 Recovery = 97.58%								
Be 313.107†	779387.4	487.52	µg/L	1.709	487.52	ppb	1.709	0.35%
QC value within limits for Be 313.107 Recovery = 97.50%								
Ca 317.933Radial†	12679.2	4905.8	µg/L	10.17	4905.8	ppb	10.17	0.21%
QC value within limits for Ca 317.933Radial Recovery = 98.12%								
Cd 226.502†	18407.4	490.42	µg/L	6.317	490.42	ppb	6.317	1.29%
QC value within limits for Cd 226.502 Recovery = 98.08%								
Co 228.616†	10148.4	490.50	µg/L	6.874	490.50	ppb	6.874	1.40%

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   QC value within limits for Co 228.616  Recovery = 98.10%
Cr 267.716†            23194.5      487.57 µg/L        5.988      487.57 ppb          5.988   1.23%
   QC value within limits for Cr 267.716  Recovery = 97.51%
Cu 324.752†            70263.9      488.43 µg/L        6.329      488.43 ppb          6.329   1.30%
   QC value within limits for Cu 324.752  Recovery = 97.69%
Fe 238.204 Radial†       770.7      4917.3 µg/L         9.97      4917.3 ppb           9.97   0.20%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.35%
K 766.490 Radial†       9804.5      5017.8 µg/L        22.42      5017.8 ppb          22.42   0.45%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†          813.0      5024.6 µg/L         7.37      5024.6 ppb           7.37   0.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.49%
Mn 257.610†           151311.2      483.75 µg/L        6.093      483.75 ppb          6.093   1.26%
   QC value within limits for Mn 257.610  Recovery = 96.75%
Mo 202.031†             4230.2      494.30 µg/L        3.471      494.30 ppb          3.471   0.70%
   QC value within limits for Mo 202.031  Recovery = 98.86%
Na 589.592 Radial†     40471.7       10135 µg/L         70.0       10135 ppb           70.0   0.69%
   QC value within limits for Na 589.592 Radial  Recovery = 101.35%
Ni 231.604†             8951.2      489.73 µg/L        5.834      489.73 ppb          5.834   1.19%
   QC value within limits for Ni 231.604  Recovery = 97.95%
P 214.914†              1198.1      2367.3 µg/L        18.42      2367.3 ppb          18.42   0.78%
   QC value within limits for P 214.914  Recovery = 94.69%
Pb 220.353†             1902.9      492.52 µg/L        2.067      492.52 ppb          2.067   0.42%
   QC value within limits for Pb 220.353  Recovery = 98.50%
S 181.975 Axial†         224.2      1096.3 µg/L         4.14      1096.3 ppb           4.14   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 109.63%
Sb 206.836†              510.8      498.53 µg/L        2.922      498.53 ppb          2.922   0.59%
   QC value within limits for Sb 206.836  Recovery = 99.71%
Se 196.026†              387.8      497.70 µg/L        6.104      497.70 ppb          6.104   1.23%
   QC value within limits for Se 196.026  Recovery = 99.54%
SiO2†                  28626.5      5256.7 µg/L        71.83      5256.7 ppb          71.83   1.37%
   QC value within limits for SiO2  Recovery = 98.30%
Si 251.611†            33352.3      2420.4 µg/L        29.34      2420.4 ppb          29.34   1.21%
   QC value within limits for Si 251.611  Recovery = 96.82%
Sn 189.927†              986.8      507.98 µg/L        5.720      507.98 ppb          5.720   1.13%
   QC value within limits for Sn 189.927  Recovery = 101.60%
Sr 421.552†            96852.1      486.78 µg/L        2.406      486.78 ppb          2.406   0.49%
   QC value within limits for Sr 421.552  Recovery = 97.36%
Ti 334.940†           218516.2      497.49 µg/L        2.114      497.49 ppb          2.114   0.43%
   QC value within limits for Ti 334.940  Recovery = 99.50%
Tl 190.801†              321.2      495.66 µg/L        3.098      495.66 ppb          3.098   0.63%
   QC value within limits for Tl 190.801  Recovery = 99.13%
U 409.014†              5338.1      483.20 µg/L        9.123      483.20 ppb          9.123   1.89%
   QC value within limits for U 409.014  Recovery = 96.64%
V 292.402†             43263.6      491.30 µg/L        5.845      491.30 ppb          5.845   1.19%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†            18574.2      488.39 µg/L        6.649      488.39 ppb          6.649   1.36%
   QC value within limits for Zn 213.857  Recovery = 97.68%
All analyte(s) passed QC.
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Sequence No.: 50
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 06:25:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113892.6	113892.6	97.7	%			06:25:57
1	Al 396.153Radial†	134.1	14.0	6.9338	µg/L	6.9338	ppb	06:25:57
1	Ca 317.933Radial†	425.4	22.8	8.8357	µg/L	8.8357	ppb	06:26:18
1	Fe 238.204 Radial†	16.1	1.4	8.6980	µg/L	8.6980	ppb	06:26:18
1	K 766.490 Radial†	873.7	212.2	108.61	µg/L	108.61	ppb	06:25:57
1	Mg 279.077 IEC†	16.5	1.4	8.7757	µg/L	8.7757	ppb	06:26:18
1	Na 589.592 Radial†	-112.3	519.1	129.99	µg/L	129.99	ppb	06:25:57
1	Sr 421.552†	-25.3	36.4	0.1828	µg/L	0.1828	ppb	06:25:57
1	Sc 361.383	2013279.5	2013279.5	99.558	%			06:27:20
1	Y 371.029	1252788.1	1252788.1	99.527	%			06:27:20
1	Ag 328.068†	43.5	33.3	0.3073	µg/L	0.3073	ppb	06:27:26
1	As 188.979†	3.3	1.1	1.9199	µg/L	1.9199	ppb	06:27:46
1	B 249.677†	227.7	90.9	3.9376	µg/L	3.9376	ppb	06:27:26
1	Ba 233.527†	-69.1	8.6	0.2219	µg/L	0.2219	ppb	06:27:46
1	Be 313.107†	3568.1	68.1	0.0425	µg/L	0.0425	ppb	06:27:26
1	Cd 226.502†	-93.4	5.1	0.1303	µg/L	0.1303	ppb	06:27:46
1	Co 228.616†	-67.2	-0.9	-0.0413	µg/L	-0.0413	ppb	06:27:46
1	Cr 267.716†	-125.9	-26.6	-0.5573	µg/L	-0.5573	ppb	06:27:26
1	Cu 324.752†	4113.4	-138.1	-0.9557	µg/L	-0.9557	ppb	06:27:26
1	Mn 257.610†	-195.2	5.3	0.0179	µg/L	0.0179	ppb	06:27:46
1	Mo 202.031†	0.3	4.0	0.4687	µg/L	0.4687	ppb	06:27:46
1	Ni 231.604†	288.0	13.7	0.7481	µg/L	0.7481	ppb	06:27:46
1	P 214.914†	191.1	-9.0	-18.048	µg/L	-18.048	ppb	06:27:46
1	Pb 220.353†	53.9	-2.2	-0.5464	µg/L	-0.5464	ppb	06:27:46
1	S 181.975 Axial†	40.3	18.3	89.534	µg/L	89.534	ppb	06:27:46
1	Sb 206.836†	20.4	-0.6	-0.6067	µg/L	-0.6067	ppb	06:27:46
1	Se 196.026†	7.6	-2.3	-2.9062	µg/L	-2.9062	ppb	06:27:46
1	SiO2†	2712.7	-26.6	-4.8879	µg/L	-4.8879	ppb	06:27:26
1	Si 251.611†	361.7	38.1	2.8016	µg/L	2.8016	ppb	06:27:46
1	Sn 189.927†	20.1	-2.2	-1.1324	µg/L	-1.1324	ppb	06:27:46
1	Ti 334.940†	925.6	155.3	0.3532	µg/L	0.3532	ppb	06:27:26
1	Tl 190.801†	-24.4	-4.2	-6.4149	µg/L	-6.4149	ppb	06:27:46
1	U 409.014†	632.6	-95.1	-8.6204	µg/L	-8.6204	ppb	06:27:26
1	V 292.402†	-84.6	41.8	0.4598	µg/L	0.4598	ppb	06:27:26
1	Zn 213.857†	531.3	7.0	0.1819	µg/L	0.1819	ppb	06:27:46
2	Sc RADIAL	114170.3	114170.3	97.9	%			06:26:23
2	Al 396.153Radial†	141.2	21.0	10.415	µg/L	10.415	ppb	06:26:23
2	Ca 317.933Radial†	415.1	11.3	4.3666	µg/L	4.3666	ppb	06:26:44
2	Fe 238.204 Radial†	15.8	0.9	5.9649	µg/L	5.9649	ppb	06:26:44
2	K 766.490 Radial†	799.9	134.7	68.923	µg/L	68.923	ppb	06:26:23
2	Mg 279.077 IEC†	14.9	-0.2	-1.1572	µg/L	-1.1572	ppb	06:26:44
2	Na 589.592 Radial†	-138.3	492.8	123.41	µg/L	123.41	ppb	06:26:23
2	Sr 421.552†	-68.7	-7.9	-0.0396	µg/L	-0.0396	ppb	06:26:23
2	Sc 361.383	2006719.9	2006719.9	99.233	%			06:27:52
2	Y 371.029	1249750.1	1249750.1	99.285	%			06:27:52
2	Ag 328.068†	76.7	66.9	0.6098	µg/L	0.6098	ppb	06:27:58
2	As 188.979†	1.3	-0.9	-1.5991	µg/L	-1.5991	ppb	06:28:18
2	B 249.677†	214.3	78.1	3.3836	µg/L	3.3836	ppb	06:27:58
2	Ba 233.527†	-75.8	1.6	0.0416	µg/L	0.0416	ppb	06:28:18
2	Be 313.107†	3567.3	79.0	0.0493	µg/L	0.0493	ppb	06:27:58
2	Cd 226.502†	-79.7	18.7	0.4948	µg/L	0.4948	ppb	06:28:18
2	Co 228.616†	-64.9	1.2	0.0593	µg/L	0.0593	ppb	06:28:18
2	Cr 267.716†	-142.8	-44.2	-0.9261	µg/L	-0.9261	ppb	06:27:58
2	Cu 324.752†	4071.8	-166.5	-1.1539	µg/L	-1.1539	ppb	06:27:58
2	Mn 257.610†	-185.2	14.7	0.0476	µg/L	0.0476	ppb	06:28:18
2	Mo 202.031†	-1.2	2.4	0.2846	µg/L	0.2846	ppb	06:28:18
2	Ni 231.604†	292.8	19.5	1.0680	µg/L	1.0680	ppb	06:28:18
2	P 214.914†	190.2	-9.2	-18.538	µg/L	-18.538	ppb	06:28:18
2	Pb 220.353†	52.0	-3.9	-0.9877	µg/L	-0.9877	ppb	06:28:18

2	S 181.975 Axial†	41.9	20.0	98.036 µg/L	98.036 ppb		06:28:18
2	Sb 206.836†	10.6	-10.4	-10.207 µg/L	-10.207 ppb		06:28:18
2	Se 196.026†	17.0	7.2	9.2538 µg/L	9.2538 ppb		06:28:18
2	SiO2†	2717.4	-12.9	-2.3772 µg/L	-2.3772 ppb		06:27:58
2	Si 251.611†	364.1	41.7	3.0755 µg/L	3.0755 ppb		06:28:18
2	Sn 189.927†	20.6	-1.6	-0.8430 µg/L	-0.8430 ppb		06:28:18
2	Ti 334.940†	899.6	132.2	0.3008 µg/L	0.3008 ppb		06:27:58
2	Tl 190.801†	-18.9	1.3	1.9778 µg/L	1.9778 ppb		06:28:18
2	U 409.014†	672.2	-53.0	-4.8083 µg/L	-4.8083 ppb		06:27:58
2	V 292.402†	-131.2	-5.4	-0.0666 µg/L	-0.0666 ppb		06:27:58
2	Zn 213.857†	539.7	17.3	0.4535 µg/L	0.4535 ppb		06:28:18
3	Sc RADIAL	114292.5	114292.5	98.0 %			06:26:49
3	Al 396.153Radial†	129.8	9.2	4.5635 µg/L	4.5635 ppb		06:26:49
3	Ca 317.933Radial†	412.0	7.7	2.9633 µg/L	2.9633 ppb		06:27:10
3	Fe 238.204 Radial†	15.8	1.0	6.2506 µg/L	6.2506 ppb		06:27:10
3	K 766.490 Radial†	836.8	171.5	87.752 µg/L	87.752 ppb		06:26:49
3	Mg 279.077 IEC†	15.1	-0.0	-0.1313 µg/L	-0.1313 ppb		06:27:10
3	Na 589.592 Radial†	322.5	963.2	241.20 µg/L	241.20 ppb		06:26:49
3	Sr 421.552†	-55.9	5.3	0.0264 µg/L	0.0264 ppb		06:26:49
3	Sc 361.383	2010058.1	2010058.1	99.398 %			06:28:25
3	Y 371.029	1250621.1	1250621.1	99.354 %			06:28:25
3	Ag 328.068†	82.4	72.5	0.6602 µg/L	0.6602 ppb		06:28:30
3	As 188.979†	3.3	1.1	1.9255 µg/L	1.9255 ppb		06:28:51
3	B 249.677†	197.0	60.3	2.6131 µg/L	2.6131 ppb		06:28:30
3	Ba 233.527†	-69.9	7.7	0.1977 µg/L	0.1977 ppb		06:28:51
3	Be 313.107†	3478.7	-16.1	-0.0102 µg/L	-0.0102 ppb		06:28:30
3	Cd 226.502†	-90.4	8.1	0.2141 µg/L	0.2141 ppb		06:28:51
3	Co 228.616†	-59.4	6.9	0.3313 µg/L	0.3313 ppb		06:28:51
3	Cr 267.716†	-120.3	-21.3	-0.4467 µg/L	-0.4467 ppb		06:28:30
3	Cu 324.752†	4082.7	-162.4	-1.1252 µg/L	-1.1252 ppb		06:28:30
3	Mn 257.610†	-187.8	12.4	0.0404 µg/L	0.0404 ppb		06:28:51
3	Mo 202.031†	-4.3	-0.7	-0.0810 µg/L	-0.0810 ppb		06:28:51
3	Ni 231.604†	294.0	20.2	1.1048 µg/L	1.1048 ppb		06:28:51
3	P 214.914†	195.7	-4.0	-7.9568 µg/L	-7.9568 ppb		06:28:51
3	Pb 220.353†	49.0	-6.9	-1.7885 µg/L	-1.7885 ppb		06:28:51
3	S 181.975 Axial†	41.0	19.1	93.502 µg/L	93.502 ppb		06:28:51
3	Sb 206.836†	22.0	1.0	1.0081 µg/L	1.0081 ppb		06:28:51
3	Se 196.026†	14.7	4.9	6.2356 µg/L	6.2356 ppb		06:28:51
3	SiO2†	2646.1	-89.2	-16.387 µg/L	-16.387 ppb		06:28:30
3	Si 251.611†	346.9	23.7	1.7725 µg/L	1.7725 ppb		06:28:51
3	Sn 189.927†	19.4	-2.9	-1.5024 µg/L	-1.5024 ppb		06:28:51
3	Ti 334.940†	903.3	134.3	0.3059 µg/L	0.3059 ppb		06:28:30
3	Tl 190.801†	-21.1	-0.8	-1.2444 µg/L	-1.2444 ppb		06:28:51
3	U 409.014†	706.7	-19.5	-1.7710 µg/L	-1.7710 ppb		06:28:30
3	V 292.402†	-144.9	-19.0	-0.2169 µg/L	-0.2169 ppb		06:28:30
3	Zn 213.857†	541.5	18.1	0.4747 µg/L	0.4747 ppb		06:28:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2010019.1	99.396	%	0.1622				0.16%
Sc RADIAL	114118.4	97.8	%	0.18				0.18%
Y 371.029	1251053.1	99.389	%	0.1243				0.13%
Ag 328.068†	57.6	0.5258	µg/L	0.19082	0.5258	ppb	0.19082	36.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	7.3042	µg/L	2.94352	7.3042	ppb	2.94352	40.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.4	0.7488	µg/L	2.03331	0.7488	ppb	2.03331	271.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	76.4	3.3114	µg/L	0.66522	3.3114	ppb	0.66522	20.09%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.0	0.1537	µg/L	0.09789	0.1537	ppb	0.09789	63.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	43.7	0.0272	µg/L	0.03257	0.0272	ppb	0.03257	119.72%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.9	5.3885	µg/L	3.06669	5.3885	ppb	3.06669	56.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.6	0.2797	µg/L	0.19089	0.2797	ppb	0.19089	68.24%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.4	0.1164	µg/L	0.19277	0.1164	ppb	0.19277	165.58%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -30.7     -0.6433 µg/L       0.25104     -0.6433 ppb        0.25104  39.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -155.7     -1.0783 µg/L       0.10710     -1.0783 ppb        0.10710   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.1      6.9712 µg/L       1.50229      6.9712 ppb        1.50229  21.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        172.8      88.428 µg/L       19.8512      88.428 ppb        19.8512  22.45%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.4      2.4957 µg/L       5.46279      2.4957 ppb        5.46279 218.89%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               10.8      0.0353 µg/L       0.01551      0.0353 ppb        0.01551  43.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.9      0.2241 µg/L       0.27979      0.2241 ppb        0.27979 124.86%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       658.4      164.87 µg/L        66.188      164.87 ppb         66.188  40.15%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               17.8      0.9736 µg/L       0.19621      0.9736 ppb        0.19621  20.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -7.4     -14.847 µg/L        5.9725     -14.847 ppb         5.9725  40.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.3     -1.1076 µg/L       0.62967     -1.1076 ppb        0.62967  56.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          19.1      93.691 µg/L        4.2537      93.691 ppb         4.2537   4.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.3     -3.2687 µg/L       6.06310     -3.2687 ppb        6.06310 185.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.3      4.1944 µg/L       6.33174      4.1944 ppb        6.33174 150.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -42.9     -7.8841 µg/L       7.47025     -7.8841 ppb        7.47025  94.75%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               34.5      2.5499 µg/L       0.68700      2.5499 ppb        0.68700  26.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.3     -1.1593 µg/L       0.33057     -1.1593 ppb        0.33057  28.52%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               11.2      0.0565 µg/L       0.11421      0.0565 ppb        0.11421 202.12%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              140.6      0.3200 µg/L       0.02892      0.3200 ppb        0.02892   9.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.2     -1.8938 µg/L       4.23387     -1.8938 ppb        4.23387 223.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -55.9     -5.0666 µg/L       3.43201     -5.0666 ppb        3.43201  67.74%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 5.8      0.0588 µg/L       0.35534      0.0588 ppb        0.35534 604.77%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.1      0.3700 µg/L       0.16326      0.3700 ppb        0.16326  44.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 06:47:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114319.3	114319.3	98.0	%			06:48:26
1	Al 396.153Radial†	10479.2	10567.6	5231.7	µg/L	5231.7	ppb	06:48:26
1	Ca 317.933Radial†	13073.4	12924.7	5000.8	µg/L	5000.8	ppb	06:48:47
1	Fe 238.204 Radial†	799.1	800.1	5104.6	µg/L	5104.6	ppb	06:48:47
1	K 766.490 Radial†	10338.6	9865.0	5048.8	µg/L	5048.8	ppb	06:48:26
1	Mg 279.077 IEC†	824.6	825.8	5103.3	µg/L	5103.3	ppb	06:48:47
1	Na 589.592 Radial†	39533.0	40965.7	10259	µg/L	10259	ppb	06:48:26
1	Sr 421.552†	96435.2	98445.6	494.78	µg/L	494.78	ppb	06:48:26
1	Sc 361.383	2004032.1	2004032.1	99.100	%			06:49:50
1	Y 371.029	1246917.0	1246917.0	99.060	%			06:49:50
1	Ag 328.068†	54782.5	55269.4	507.60	µg/L	507.60	ppb	06:49:56
1	As 188.979†	272.5	272.8	494.18	µg/L	494.18	ppb	06:50:16
1	B 249.677†	11281.6	11246.1	485.94	µg/L	485.94	ppb	06:49:56
1	Ba 233.527†	18772.5	19021.0	488.89	µg/L	488.89	ppb	06:49:56
1	Be 313.107†	779611.8	783172.8	489.89	µg/L	489.89	ppb	06:49:50
1	Cd 226.502†	18206.2	18470.4	492.08	µg/L	492.08	ppb	06:49:56
1	Co 228.616†	10005.9	10163.4	491.23	µg/L	491.23	ppb	06:49:56
1	Cr 267.716†	22918.8	23226.6	488.25	µg/L	488.25	ppb	06:49:56
1	Cu 324.752†	74267.7	70672.1	491.31	µg/L	491.31	ppb	06:49:56
1	Mn 257.610†	150178.2	151742.8	485.16	µg/L	485.16	ppb	06:49:56
1	Mo 202.031†	4218.0	4260.0	497.79	µg/L	497.79	ppb	06:50:16
1	Ni 231.604†	9167.4	8975.0	491.03	µg/L	491.03	ppb	06:49:56
1	P 214.914†	1398.2	1210.0	2390.9	µg/L	2390.9	ppb	06:50:16
1	Pb 220.353†	1939.2	1900.6	491.95	µg/L	491.95	ppb	06:50:16
1	S 181.975 Axial†	233.0	213.0	1041.4	µg/L	1041.4	ppb	06:50:16
1	Sb 206.836†	531.2	514.9	502.52	µg/L	502.52	ppb	06:50:16
1	Se 196.026†	401.9	395.7	507.85	µg/L	507.85	ppb	06:50:16
1	SiO2†	31520.0	29054.7	5335.4	µg/L	5335.4	ppb	06:49:56
1	Si 251.611†	33791.4	33772.9	2451.3	µg/L	2451.3	ppb	06:49:56
1	Sn 189.927†	1001.8	988.4	508.87	µg/L	508.87	ppb	06:50:16
1	Ti 334.940†	218508.7	219717.8	500.22	µg/L	500.22	ppb	06:49:50
1	Tl 190.801†	296.5	319.6	493.16	µg/L	493.16	ppb	06:50:16
1	U 409.014†	6034.1	5358.5	485.02	µg/L	485.02	ppb	06:49:56
1	V 292.402†	42934.6	43451.1	493.45	µg/L	493.45	ppb	06:49:56
1	Zn 213.857†	19011.9	18657.8	490.58	µg/L	490.58	ppb	06:49:56
2	Sc RADIAL	115890.0	115890.0	99.4	%			06:48:53
2	Al 396.153Radial†	10330.5	10273.1	5085.3	µg/L	5085.3	ppb	06:48:53
2	Ca 317.933Radial†	13016.4	12686.6	4908.7	µg/L	4908.7	ppb	06:49:13
2	Fe 238.204 Radial†	790.2	780.1	4977.3	µg/L	4977.3	ppb	06:49:13
2	K 766.490 Radial†	10399.8	9783.6	5007.1	µg/L	5007.1	ppb	06:48:53
2	Mg 279.077 IEC†	827.1	816.9	5049.0	µg/L	5049.0	ppb	06:49:13
2	Na 589.592 Radial†	39461.3	40346.9	10104	µg/L	10104	ppb	06:48:53
2	Sr 421.552†	96648.3	97326.7	489.16	µg/L	489.16	ppb	06:48:53
2	Sc 361.383	2012293.1	2012293.1	99.509	%			06:50:23
2	Y 371.029	1251324.9	1251324.9	99.410	%			06:50:23
2	Ag 328.068†	54780.7	55040.6	505.49	µg/L	505.49	ppb	06:50:29
2	As 188.979†	274.1	273.2	495.00	µg/L	495.00	ppb	06:50:49
2	B 249.677†	11385.4	11303.7	488.48	µg/L	488.48	ppb	06:50:29
2	Ba 233.527†	18815.3	18986.2	488.00	µg/L	488.00	ppb	06:50:29
2	Be 313.107†	786355.0	786719.8	492.11	µg/L	492.11	ppb	06:50:23
2	Cd 226.502†	18251.6	18440.7	491.30	µg/L	491.30	ppb	06:50:29
2	Co 228.616†	10028.9	10145.0	490.34	µg/L	490.34	ppb	06:50:29
2	Cr 267.716†	23028.8	23242.3	488.58	µg/L	488.58	ppb	06:50:29
2	Cu 324.752†	74217.0	70313.5	488.79	µg/L	488.79	ppb	06:50:29
2	Mn 257.610†	150279.8	151222.7	483.48	µg/L	483.48	ppb	06:50:29
2	Mo 202.031†	4247.5	4272.1	499.20	µg/L	499.20	ppb	06:50:49
2	Ni 231.604†	9169.6	8939.2	489.08	µg/L	489.08	ppb	06:50:29
2	P 214.914†	1402.5	1208.5	2388.3	µg/L	2388.3	ppb	06:50:49
2	Pb 220.353†	1949.9	1903.3	492.66	µg/L	492.66	ppb	06:50:49

2	S 181.975 Axial†	242.6	221.7	1084.0 µg/L	1084.0 ppb	06:50:49
2	Sb 206.836†	528.7	510.2	497.95 µg/L	497.95 ppb	06:50:49
2	Se 196.026†	405.6	397.8	510.42 µg/L	510.42 ppb	06:50:49
2	SiO2†	31594.8	28999.3	5325.2 µg/L	5325.2 ppb	06:50:29
2	Si 251.611†	33849.1	33691.0	2445.2 µg/L	2445.2 ppb	06:50:29
2	Sn 189.927†	1006.8	989.4	509.32 µg/L	509.32 ppb	06:50:49
2	Ti 334.940†	220193.0	220505.2	502.02 µg/L	502.02 ppb	06:50:23
2	Tl 190.801†	303.9	325.8	502.66 µg/L	502.66 ppb	06:50:49
2	U 409.014†	6005.3	5304.4	480.14 µg/L	480.14 ppb	06:50:29
2	V 292.402†	42960.4	43299.1	491.73 µg/L	491.73 ppb	06:50:29
2	Zn 213.857†	19010.9	18578.1	488.49 µg/L	488.49 ppb	06:50:29
3	Sc RADIAL	115171.0	115171.0	98.8 %		06:49:19
3	Al 396.153Radial†	10371.9	10379.8	5138.4 µg/L	5138.4 ppb	06:49:19
3	Ca 317.933Radial†	13068.4	12821.0	4960.7 µg/L	4960.7 ppb	06:49:39
3	Fe 238.204 Radial†	794.5	789.4	5036.6 µg/L	5036.6 ppb	06:49:39
3	K 766.490 Radial†	10371.6	9820.3	5025.9 µg/L	5025.9 ppb	06:49:19
3	Mg 279.077 IEC†	819.0	813.9	5030.1 µg/L	5030.1 ppb	06:49:39
3	Na 589.592 Radial†	39486.5	40620.3	10172 µg/L	10172 ppb	06:49:19
3	Sr 421.552†	96771.1	98058.2	492.84 µg/L	492.84 ppb	06:49:19
3	Sc 361.383	2007332.3	2007332.3	99.264 %		06:50:56
3	Y 371.029	1247335.9	1247335.9	99.093 %		06:50:56
3	Ag 328.068†	54901.0	55297.9	507.86 µg/L	507.86 ppb	06:51:02
3	As 188.979†	269.2	269.0	487.39 µg/L	487.39 ppb	06:51:22
3	B 249.677†	11431.1	11378.0	491.68 µg/L	491.68 ppb	06:51:02
3	Ba 233.527†	18854.1	19072.0	490.21 µg/L	490.21 ppb	06:51:02
3	Be 313.107†	782162.4	784449.0	490.69 µg/L	490.69 ppb	06:50:56
3	Cd 226.502†	18282.2	18516.8	493.32 µg/L	493.32 ppb	06:51:02
3	Co 228.616†	10035.1	10176.2	491.85 µg/L	491.85 ppb	06:51:02
3	Cr 267.716†	23024.4	23295.0	489.69 µg/L	489.69 ppb	06:51:02
3	Cu 324.752†	74504.3	70787.3	492.09 µg/L	492.09 ppb	06:51:02
3	Mn 257.610†	150551.9	151870.1	485.55 µg/L	485.55 ppb	06:51:02
3	Mo 202.031†	4229.2	4264.3	498.28 µg/L	498.28 ppb	06:51:22
3	Ni 231.604†	9205.5	8998.2	492.30 µg/L	492.30 ppb	06:51:02
3	P 214.914†	1395.7	1205.1	2381.0 µg/L	2381.0 ppb	06:51:22
3	Pb 220.353†	1956.5	1914.7	495.62 µg/L	495.62 ppb	06:51:22
3	S 181.975 Axial†	238.5	218.1	1066.5 µg/L	1066.5 ppb	06:51:22
3	Sb 206.836†	533.8	516.7	504.24 µg/L	504.24 ppb	06:51:22
3	Se 196.026†	399.0	392.1	503.25 µg/L	503.25 ppb	06:51:22
3	SiO2†	31583.7	29066.6	5337.5 µg/L	5337.5 ppb	06:51:02
3	Si 251.611†	33926.1	33852.6	2457.3 µg/L	2457.3 ppb	06:51:02
3	Sn 189.927†	1001.6	986.6	507.89 µg/L	507.89 ppb	06:51:22
3	Ti 334.940†	219011.5	219861.8	500.55 µg/L	500.55 ppb	06:50:56
3	Tl 190.801†	306.5	329.1	507.76 µg/L	507.76 ppb	06:51:22
3	U 409.014†	5938.0	5251.6	475.34 µg/L	475.34 ppb	06:51:02
3	V 292.402†	43051.5	43497.6	493.95 µg/L	493.95 ppb	06:51:02
3	Zn 213.857†	19013.7	18628.2	489.79 µg/L	489.79 ppb	06:51:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2007885.8	99.291	%	0.2056				0.21%
Sc RADIAL	115126.7	98.7	%	0.67				0.68%
Y 371.029	1248525.9	99.188	%	0.1933				0.19%
Ag 328.068†	55202.6	506.98	µg/L	1.298	506.98	ppb	1.298	0.26%
QC value within limits for Ag 328.068 Recovery = 101.40%								
Al 396.153Radial†	10406.8	5151.8	µg/L	74.12	5151.8	ppb	74.12	1.44%
QC value within limits for Al 396.153Radial Recovery = 103.04%								
As 188.979†	271.7	492.19	µg/L	4.178	492.19	ppb	4.178	0.85%
QC value within limits for As 188.979 Recovery = 98.44%								
B 249.677†	11309.3	488.70	µg/L	2.877	488.70	ppb	2.877	0.59%
QC value within limits for B 249.677 Recovery = 97.74%								
Ba 233.527†	19026.4	489.03	µg/L	1.109	489.03	ppb	1.109	0.23%
QC value within limits for Ba 233.527 Recovery = 97.81%								
Be 313.107†	784780.5	490.89	µg/L	1.124	490.89	ppb	1.124	0.23%
QC value within limits for Be 313.107 Recovery = 98.18%								
Ca 317.933Radial†	12810.8	4956.8	µg/L	46.19	4956.8	ppb	46.19	0.93%
QC value within limits for Ca 317.933Radial Recovery = 99.14%								
Cd 226.502†	18475.9	492.23	µg/L	1.019	492.23	ppb	1.019	0.21%
QC value within limits for Cd 226.502 Recovery = 98.45%								
Co 228.616†	10161.5	491.14	µg/L	0.757	491.14	ppb	0.757	0.15%

```
   QC value within limits for Co 228.616  Recovery = 98.23%
Cr 267.716†            23254.6      488.84 µg/L         0.753      488.84 ppb          0.753   0.15%
   QC value within limits for Cr 267.716  Recovery = 97.77%
Cu 324.752†            70591.0      490.73 µg/L         1.723      490.73 ppb          1.723   0.35%
   QC value within limits for Cu 324.752  Recovery = 98.15%
Fe 238.204 Radial†       789.9      5039.5 µg/L        63.70      5039.5 ppb         63.70   1.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.79%
K 766.490 Radial†       9823.0      5027.3 µg/L        20.86      5027.3 ppb         20.86   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 100.55%
Mg 279.077 IEC†          818.9      5060.8 µg/L        38.01      5060.8 ppb         38.01   0.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.22%
Mn 257.610†           151611.9      484.73 µg/L         1.101      484.73 ppb          1.101   0.23%
   QC value within limits for Mn 257.610  Recovery = 96.95%
Mo 202.031†            4265.5      498.42 µg/L         0.716      498.42 ppb          0.716   0.14%
   QC value within limits for Mo 202.031  Recovery = 99.68%
Na 589.592 Radial†    40644.3       10178 µg/L          77.7       10178 ppb           77.7   0.76%
   QC value within limits for Na 589.592 Radial  Recovery = 101.78%
Ni 231.604†            8970.8      490.80 µg/L         1.625      490.80 ppb          1.625   0.33%
   QC value within limits for Ni 231.604  Recovery = 98.16%
P 214.914†             1207.9      2386.7 µg/L         5.13      2386.7 ppb           5.13   0.21%
   QC value within limits for P 214.914  Recovery = 95.47%
Pb 220.353†            1906.2      493.41 µg/L         1.946      493.41 ppb          1.946   0.39%
   QC value within limits for Pb 220.353  Recovery = 98.68%
S 181.975 Axial†        217.6      1063.9 µg/L        21.42      1063.9 ppb         21.42   2.01%
   QC value within limits for S 181.975 Axial  Recovery = 106.39%
Sb 206.836†             513.9      501.57 µg/L         3.253      501.57 ppb          3.253   0.65%
   QC value within limits for Sb 206.836  Recovery = 100.31%
Se 196.026†             395.2      507.17 µg/L         3.631      507.17 ppb          3.631   0.72%
   QC value within limits for Se 196.026  Recovery = 101.43%
SiO2†                  29040.2      5332.7 µg/L         6.59      5332.7 ppb           6.59   0.12%
   QC value within limits for SiO2  Recovery = 99.72%
Si 251.611†            33772.1      2451.3 µg/L         6.04      2451.3 ppb           6.04   0.25%
   QC value within limits for Si 251.611  Recovery = 98.05%
Sn 189.927†             988.1      508.69 µg/L         0.732      508.69 ppb          0.732   0.14%
   QC value within limits for Sn 189.927  Recovery = 101.74%
Sr 421.552†            97943.5      492.26 µg/L         2.856      492.26 ppb          2.856   0.58%
   QC value within limits for Sr 421.552  Recovery = 98.45%
Ti 334.940†           220028.3      500.93 µg/L         0.958      500.93 ppb          0.958   0.19%
   QC value within limits for Ti 334.940  Recovery = 100.19%
Tl 190.801†             324.8      501.19 µg/L         7.409      501.19 ppb          7.409   1.48%
   QC value within limits for Tl 190.801  Recovery = 100.24%
U 409.014†             5304.8      480.17 µg/L         4.837      480.17 ppb          4.837   1.01%
   QC value within limits for U 409.014  Recovery = 96.03%
V 292.402†            43415.9      493.04 µg/L         1.165      493.04 ppb          1.165   0.24%
   QC value within limits for V 292.402  Recovery = 98.61%
Zn 213.857†           18621.3      489.62 µg/L         1.053      489.62 ppb          1.053   0.22%
   QC value within limits for Zn 213.857  Recovery = 97.92%
All analyte(s) passed QC.
```

Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 06:51:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113967.3	113967.3	97.7	%			06:52:06
1	Al 396.153Radial†	165.3	45.9	22.738	µg/L	22.738	ppb	06:52:06
1	Ca 317.933Radial†	428.9	26.2	10.133	µg/L	10.133	ppb	06:52:27
1	Fe 238.204 Radial†	23.8	9.2	58.473	µg/L	58.473	ppb	06:52:27
1	K 766.490 Radial†	786.9	122.8	62.847	µg/L	62.847	ppb	06:52:06
1	Mg 279.077 IEC†	17.9	2.9	18.034	µg/L	18.034	ppb	06:52:27
1	Na 589.592 Radial†	-452.1	171.5	42.944	µg/L	42.944	ppb	06:52:06
1	Sr 421.552†	-90.4	-30.2	-0.1518	µg/L	-0.1518	ppb	06:52:06
1	Sc 361.383	2011620.7	2011620.7	99.476	%			06:53:29
1	Y 371.029	1254148.3	1254148.3	99.635	%			06:53:29
1	Ag 328.068†	132.0	122.3	1.1217	µg/L	1.1217	ppb	06:53:34
1	As 188.979†	3.3	1.2	2.0779	µg/L	2.0779	ppb	06:53:55
1	B 249.677†	222.8	86.1	3.7158	µg/L	3.7158	ppb	06:53:55
1	Ba 233.527†	-48.4	29.3	0.7532	µg/L	0.7532	ppb	06:53:55
1	Be 313.107†	3576.9	79.8	0.0497	µg/L	0.0497	ppb	06:53:34
1	Cd 226.502†	-86.0	12.5	0.3341	µg/L	0.3341	ppb	06:53:55
1	Co 228.616†	-62.8	3.5	0.1701	µg/L	0.1701	ppb	06:53:55
1	Cr 267.716†	-138.7	-39.6	-0.8298	µg/L	-0.8298	ppb	06:53:34
1	Cu 324.752†	4100.5	-147.7	-1.0117	µg/L	-1.0117	ppb	06:53:34
1	Mn 257.610†	-36.0	165.2	0.5348	µg/L	0.5348	ppb	06:53:55
1	Mo 202.031†	6.3	10.0	1.1739	µg/L	1.1739	ppb	06:53:55
1	Ni 231.604†	297.6	23.6	1.2927	µg/L	1.2927	ppb	06:53:55
1	P 214.914†	186.7	-13.2	-26.653	µg/L	-26.653	ppb	06:53:55
1	Pb 220.353†	47.7	-8.3	-2.1353	µg/L	-2.1353	ppb	06:53:55
1	S 181.975 Axial†	34.1	12.1	59.147	µg/L	59.147	ppb	06:53:55
1	Sb 206.836†	24.0	3.0	2.9668	µg/L	2.9668	ppb	06:53:55
1	Se 196.026†	11.8	2.0	2.6337	µg/L	2.6337	ppb	06:53:55
1	SiO2†	2771.3	34.5	6.3418	µg/L	6.3418	ppb	06:53:34
1	Si 251.611†	463.2	140.4	10.244	µg/L	10.244	ppb	06:53:55
1	Sn 189.927†	26.1	3.8	1.9826	µg/L	1.9826	ppb	06:53:55
1	Ti 334.940†	1108.4	339.9	0.7736	µg/L	0.7736	ppb	06:53:34
1	Tl 190.801†	-19.2	1.0	1.6062	µg/L	1.6062	ppb	06:53:55
1	U 409.014†	799.1	72.9	6.5957	µg/L	6.5957	ppb	06:53:34
1	V 292.402†	-97.8	28.4	0.3431	µg/L	0.3431	ppb	06:53:34
1	Zn 213.857†	546.7	22.9	0.5959	µg/L	0.5959	ppb	06:53:55
2	Sc RADIAL	114874.9	114874.9	98.5	%			06:52:32
2	Al 396.153Radial†	170.2	49.5	24.571	µg/L	24.571	ppb	06:52:32
2	Ca 317.933Radial†	443.1	37.1	14.373	µg/L	14.373	ppb	06:52:53
2	Fe 238.204 Radial†	21.2	6.4	40.467	µg/L	40.467	ppb	06:52:53
2	K 766.490 Radial†	747.7	76.6	39.206	µg/L	39.206	ppb	06:52:32
2	Mg 279.077 IEC†	16.7	1.5	9.2979	µg/L	9.2979	ppb	06:52:53
2	Na 589.592 Radial†	-406.0	221.9	55.559	µg/L	55.559	ppb	06:52:32
2	Sr 421.552†	-5.6	56.6	0.2843	µg/L	0.2843	ppb	06:52:32
2	Sc 361.383	2002324.3	2002324.3	99.016	%			06:54:01
2	Y 371.029	1249453.9	1249453.9	99.262	%			06:54:01
2	Ag 328.068†	39.8	29.8	0.2767	µg/L	0.2767	ppb	06:54:07
2	As 188.979†	7.2	5.0	9.0855	µg/L	9.0855	ppb	06:54:27
2	B 249.677†	211.8	76.1	3.2861	µg/L	3.2861	ppb	06:54:27
2	Ba 233.527†	-59.3	18.2	0.4667	µg/L	0.4667	ppb	06:54:27
2	Be 313.107†	3716.9	238.0	0.1488	µg/L	0.1488	ppb	06:54:07
2	Cd 226.502†	-82.3	15.8	0.4181	µg/L	0.4181	ppb	06:54:27
2	Co 228.616†	-66.2	-0.2	-0.0126	µg/L	-0.0126	ppb	06:54:27
2	Cr 267.716†	-130.9	-32.4	-0.6783	µg/L	-0.6783	ppb	06:54:07
2	Cu 324.752†	4163.0	-65.4	-0.4446	µg/L	-0.4446	ppb	06:54:07
2	Mn 257.610†	-121.9	78.2	0.2549	µg/L	0.2549	ppb	06:54:27
2	Mo 202.031†	-2.3	1.3	0.1586	µg/L	0.1586	ppb	06:54:27
2	Ni 231.604†	314.3	41.9	2.2898	µg/L	2.2898	ppb	06:54:27
2	P 214.914†	192.4	-6.6	-13.435	µg/L	-13.435	ppb	06:54:27
2	Pb 220.353†	50.7	-5.1	-1.3032	µg/L	-1.3032	ppb	06:54:27

2	S 181.975 Axial†	33.9	12.1	59.256 µg/L	59.256 ppb	06:54:27
2	Sb 206.836†	19.7	-1.2	-1.2058 µg/L	-1.2058 ppb	06:54:27
2	Se 196.026†	12.6	2.9	3.7126 µg/L	3.7126 ppb	06:54:27
2	SiO2†	2768.5	44.6	8.1932 µg/L	8.1932 ppb	06:54:07
2	Si 251.611†	460.9	140.2	10.402 µg/L	10.402 ppb	06:54:27
2	Sn 189.927†	19.3	-2.9	-1.4658 µg/L	-1.4658 ppb	06:54:27
2	Ti 334.940†	952.1	187.2	0.4256 µg/L	0.4256 ppb	06:54:07
2	Tl 190.801†	-21.8	-1.7	-2.5495 µg/L	-2.5495 ppb	06:54:27
2	U 409.014†	678.5	-45.2	-4.1094 µg/L	-4.1094 ppb	06:54:07
2	V 292.402†	-103.6	22.1	0.2466 µg/L	0.2466 ppb	06:54:07
2	Zn 213.857†	539.2	17.9	0.4588 µg/L	0.4588 ppb	06:54:27
3	Sc RADIAL	116525.7	116525.7	99.9 %		06:52:58
3	Al 396.153Radial†	328.7	205.7	102.20 µg/L	102.20 ppb	06:52:58
3	Ca 317.933Radial†	451.8	39.4	15.250 µg/L	15.250 ppb	06:53:19
3	Fe 238.204 Radial†	24.2	9.0	57.310 µg/L	57.310 ppb	06:53:19
3	K 766.490 Radial†	732.7	50.8	26.018 µg/L	26.018 ppb	06:52:58
3	Mg 279.077 IEC†	17.5	2.1	12.684 µg/L	12.684 ppb	06:53:19
3	Na 589.592 Radial†	-324.2	309.6	77.543 µg/L	77.543 ppb	06:52:58
3	Sr 421.552†	8.5	70.9	0.3561 µg/L	0.3561 ppb	06:52:58
3	Sc 361.383	2001635.2	2001635.2	98.982 %		06:54:33
3	Y 371.029	1246863.9	1246863.9	99.056 %		06:54:33
3	Ag 328.068†	72.2	62.6	0.5744 µg/L	0.5744 ppb	06:54:39
3	As 188.979†	1.6	-0.6	-1.0811 µg/L	-1.0811 ppb	06:54:59
3	B 249.677†	196.2	60.4	2.5995 µg/L	2.5995 ppb	06:54:59
3	Ba 233.527†	-66.7	10.7	0.2738 µg/L	0.2738 ppb	06:54:59
3	Be 313.107†	3589.6	110.7	0.0691 µg/L	0.0691 ppb	06:54:39
3	Cd 226.502†	-85.4	12.7	0.3286 µg/L	0.3286 ppb	06:54:59
3	Co 228.616†	-59.2	6.8	0.3277 µg/L	0.3277 ppb	06:54:59
3	Cr 267.716†	-100.0	-1.3	-0.0267 µg/L	-0.0267 ppb	06:54:39
3	Cu 324.752†	4098.0	-129.7	-0.8871 µg/L	-0.8871 ppb	06:54:39
3	Mn 257.610†	-107.0	93.2	0.3048 µg/L	0.3048 ppb	06:54:59
3	Mo 202.031†	-4.4	-0.7	-0.0847 µg/L	-0.0847 ppb	06:54:59
3	Ni 231.604†	292.6	20.1	1.0980 µg/L	1.0980 ppb	06:54:59
3	P 214.914†	195.4	-3.5	-6.9865 µg/L	-6.9865 ppb	06:54:59
3	Pb 220.353†	33.1	-22.9	-5.8942 µg/L	-5.8942 ppb	06:54:59
3	S 181.975 Axial†	31.3	9.5	46.375 µg/L	46.375 ppb	06:54:59
3	Sb 206.836†	17.6	-3.3	-3.2563 µg/L	-3.2563 ppb	06:54:59
3	Se 196.026†	13.6	3.8	4.9319 µg/L	4.9319 ppb	06:54:59
3	SiO2†	2766.6	43.7	8.0174 µg/L	8.0174 ppb	06:54:39
3	Si 251.611†	456.9	136.4	10.094 µg/L	10.094 ppb	06:54:59
3	Sn 189.927†	21.2	-1.0	-0.4991 µg/L	-0.4991 ppb	06:54:59
3	Ti 334.940†	933.1	168.3	0.3825 µg/L	0.3825 ppb	06:54:39
3	Tl 190.801†	-17.0	3.1	4.8360 µg/L	4.8360 ppb	06:54:59
3	U 409.014†	642.5	-81.4	-7.3892 µg/L	-7.3892 ppb	06:54:39
3	V 292.402†	-131.3	-5.9	-0.0740 µg/L	-0.0740 ppb	06:54:39
3	Zn 213.857†	534.2	13.1	0.3351 µg/L	0.3351 ppb	06:54:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005193.4	99.158	%	0.2758				0.28%
Sc RADIAL	115122.6	98.7	%	1.11				1.13%
Y 371.029	1250155.4	99.317	%	0.2933				0.30%
Ag 328.068†	71.6	0.6576	µg/L	0.42860	0.6576	ppb	0.42860	65.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	100.3	49.836	µg/L	45.3568	49.836	ppb	45.3568	91.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	3.3608	µg/L	5.20326	3.3608	ppb	5.20326	154.82%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	74.2	3.2005	µg/L	0.56305	3.2005	ppb	0.56305	17.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.4	0.4979	µg/L	0.24124	0.4979	ppb	0.24124	48.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	142.8	0.0892	µg/L	0.05250	0.0892	ppb	0.05250	58.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	34.2	13.252	µg/L	2.7365	13.252	ppb	2.7365	20.65%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.7	0.3603	µg/L	0.05017	0.3603	ppb	0.05017	13.93%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.4	0.1618	µg/L	0.17029	0.1618	ppb	0.17029	105.27%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -24.4     -0.5116 µg/L       0.42670     -0.5116 ppb        0.42670  83.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -114.2     -0.7812 µg/L       0.29802     -0.7812 ppb        0.29802  38.15%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         8.2      52.083 µg/L      10.0770      52.083 ppb       10.0770  19.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         83.4      42.690 µg/L      18.6603      42.690 ppb       18.6603  43.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      13.338 µg/L       4.4047      13.338 ppb        4.4047  33.02%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              112.2       0.3648 µg/L       0.14931      0.3648 ppb       0.14931  40.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.5       0.4159 µg/L       0.66762      0.4159 ppb       0.66762 160.51%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       234.3      58.682 µg/L      17.5098      58.682 ppb       17.5098  29.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               28.5       1.5602 µg/L       0.63933      1.5602 ppb       0.63933  40.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -7.8     -15.691 µg/L      10.0253     -15.691 ppb       10.0253  63.89%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -12.1      -3.1109 µg/L       2.44606     -3.1109 ppb       2.44606  78.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          11.2      54.926 µg/L       7.4056      54.926 ppb        7.4056  13.48%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.5      -0.4984 µg/L       3.17130     -0.4984 ppb       3.17130 636.27%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.9       3.7594 µg/L       1.14983      3.7594 ppb       1.14983  30.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     40.9       7.5175 µg/L       1.02192      7.5175 ppb       1.02192  13.59%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              139.0      10.247 µg/L       0.1540      10.247 ppb        0.1540   1.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.0       0.0059 µg/L       1.77876      0.0059 ppb       1.77876 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               32.4       0.1629 µg/L       0.27486      0.1629 ppb       0.27486 168.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              231.8       0.5272 µg/L       0.21446      0.5272 ppb       0.21446  40.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.8       1.2975 µg/L       3.70240      1.2975 ppb       3.70240 285.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -17.9      -1.6343 µg/L       7.31360     -1.6343 ppb       7.31360 447.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                14.9       0.1719 µg/L       0.21837      0.1719 ppb       0.21837 127.05%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               18.0       0.4633 µg/L       0.13046      0.4633 ppb       0.13046  28.16%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 65
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 07:14:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112917.3	112917.3	96.8	%			07:14:36
1	Al 396.153Radial†	10322.0	10538.0	5216.9	µg/L	5216.9	ppb	07:14:36
1	Ca 317.933Radial†	13073.0	13089.9	5064.7	µg/L	5064.7	ppb	07:14:56
1	Fe 238.204 Radial†	790.1	800.9	5109.8	µg/L	5109.8	ppb	07:14:56
1	K 766.490 Radial†	10300.5	9956.5	5095.6	µg/L	5095.6	ppb	07:14:36
1	Mg 279.077 IEC†	823.4	835.0	5160.2	µg/L	5160.2	ppb	07:14:56
1	Na 589.592 Radial†	39312.0	41238.3	10327	µg/L	10327	ppb	07:14:36
1	Sr 421.552†	95886.7	99100.6	498.08	µg/L	498.08	ppb	07:14:36
1	Sc 361.383	2006610.4	2006610.4	99.228	%			07:16:00
1	Y 371.029	1248498.0	1248498.0	99.186	%			07:16:00
1	Ag 328.068†	55104.9	55523.2	509.93	µg/L	509.93	ppb	07:16:06
1	As 188.979†	276.1	276.1	500.14	µg/L	500.14	ppb	07:16:26
1	B 249.677†	11464.3	11415.6	493.29	µg/L	493.29	ppb	07:16:06
1	Ba 233.527†	19036.2	19262.4	495.09	µg/L	495.09	ppb	07:16:06
1	Be 313.107†	790200.8	792833.4	495.93	µg/L	495.93	ppb	07:16:00
1	Cd 226.502†	18355.5	18597.3	495.46	µg/L	495.46	ppb	07:16:06
1	Co 228.616†	10092.4	10237.5	494.80	µg/L	494.80	ppb	07:16:06
1	Cr 267.716†	23170.9	23451.0	492.96	µg/L	492.96	ppb	07:16:06
1	Cu 324.752†	74979.9	71293.6	495.62	µg/L	495.62	ppb	07:16:06
1	Mn 257.610†	154312.4	155714.4	497.84	µg/L	497.84	ppb	07:16:00
1	Mo 202.031†	4235.4	4272.0	499.19	µg/L	499.19	ppb	07:16:26
1	Ni 231.604†	9209.8	9005.9	492.72	µg/L	492.72	ppb	07:16:06
1	P 214.914†	1396.0	1206.0	2382.2	µg/L	2382.2	ppb	07:16:26
1	Pb 220.353†	1964.2	1923.3	497.81	µg/L	497.81	ppb	07:16:26
1	S 181.975 Axial†	236.4	216.1	1056.6	µg/L	1056.6	ppb	07:16:26
1	Sb 206.836†	535.0	518.0	505.60	µg/L	505.60	ppb	07:16:26
1	Se 196.026†	406.0	399.3	512.43	µg/L	512.43	ppb	07:16:26
1	SiO2†	31738.0	29233.6	5368.2	µg/L	5368.2	ppb	07:16:06
1	Si 251.611†	34053.2	33992.9	2467.4	µg/L	2467.4	ppb	07:16:06
1	Sn 189.927†	1003.9	989.3	509.31	µg/L	509.31	ppb	07:16:26
1	Ti 334.940†	221121.3	222067.4	505.57	µg/L	505.57	ppb	07:16:00
1	Tl 190.801†	306.6	329.4	508.26	µg/L	508.26	ppb	07:16:26
1	U 409.014†	6018.3	5334.7	482.86	µg/L	482.86	ppb	07:16:06
1	V 292.402†	43224.3	43687.4	496.11	µg/L	496.11	ppb	07:16:06
1	Zn 213.857†	19349.8	18973.7	498.93	µg/L	498.93	ppb	07:16:06
2	Sc RADIAL	114382.4	114382.4	98.1	%			07:15:02
2	Al 396.153Radial†	10230.7	10308.4	5102.7	µg/L	5102.7	ppb	07:15:02
2	Ca 317.933Radial†	13106.5	12951.1	5011.0	µg/L	5011.0	ppb	07:15:22
2	Fe 238.204 Radial†	790.9	791.2	5048.0	µg/L	5048.0	ppb	07:15:22
2	K 766.490 Radial†	10322.5	9842.7	5037.4	µg/L	5037.4	ppb	07:15:02
2	Mg 279.077 IEC†	835.6	836.6	5170.1	µg/L	5170.1	ppb	07:15:22
2	Na 589.592 Radial†	39219.9	40624.3	10173	µg/L	10173	ppb	07:15:02
2	Sr 421.552†	95938.4	97884.8	491.97	µg/L	491.97	ppb	07:15:02
2	Sc 361.383	1998268.6	1998268.6	98.815	%			07:16:33
2	Y 371.029	1243111.0	1243111.0	98.758	%			07:16:33
2	Ag 328.068†	54691.2	55336.5	508.20	µg/L	508.20	ppb	07:16:39
2	As 188.979†	278.2	279.3	506.05	µg/L	506.05	ppb	07:16:59
2	B 249.677†	11310.1	11307.8	488.63	µg/L	488.63	ppb	07:16:39
2	Ba 233.527†	18917.5	19222.3	494.06	µg/L	494.06	ppb	07:16:39
2	Be 313.107†	780792.8	786637.0	492.05	µg/L	492.05	ppb	07:16:33
2	Cd 226.502†	18117.1	18433.2	491.09	µg/L	491.09	ppb	07:16:39
2	Co 228.616†	9969.3	10155.4	490.85	µg/L	490.85	ppb	07:16:39
2	Cr 267.716†	22901.9	23276.2	489.29	µg/L	489.29	ppb	07:16:39
2	Cu 324.752†	74282.0	70902.7	492.89	µg/L	492.89	ppb	07:16:39
2	Mn 257.610†	151907.8	153930.2	492.13	µg/L	492.13	ppb	07:16:33
2	Mo 202.031†	4248.9	4303.5	502.87	µg/L	502.87	ppb	07:16:59
2	Ni 231.604†	9145.5	8979.5	491.28	µg/L	491.28	ppb	07:16:39
2	P 214.914†	1391.1	1206.9	2384.4	µg/L	2384.4	ppb	07:16:59
2	Pb 220.353†	1961.6	1928.8	499.26	µg/L	499.26	ppb	07:16:59

2	S 181.975 Axial†	241.6	222.4	1087.4 µg/L	1087.4 ppb	07:16:59
2	Sb 206.836†	522.6	507.8	495.57 µg/L	495.57 ppb	07:16:59
2	Se 196.026†	406.3	401.3	514.93 µg/L	514.93 ppb	07:16:59
2	SiO2†	31437.4	29062.9	5336.9 µg/L	5336.9 ppb	07:16:39
2	Si 251.611†	33751.1	33830.5	2455.3 µg/L	2455.3 ppb	07:16:39
2	Sn 189.927†	1006.2	995.9	512.68 µg/L	512.68 ppb	07:16:59
2	Ti 334.940†	218679.3	220526.4	502.06 µg/L	502.06 ppb	07:16:33
2	Tl 190.801†	301.3	325.3	501.89 µg/L	501.89 ppb	07:16:59
2	U 409.014†	5943.1	5283.9	478.27 µg/L	478.27 ppb	07:16:39
2	V 292.402†	42795.7	43435.4	493.29 µg/L	493.29 ppb	07:16:39
2	Zn 213.857†	19208.2	18911.8	497.31 µg/L	497.31 ppb	07:16:39
3	Sc RADIAL	113802.2	113802.2	97.6 %		07:15:28
3	Al 396.153Radial†	10180.7	10310.2	5103.9 µg/L	5103.9 ppb	07:15:28
3	Ca 317.933Radial†	13127.4	13040.7	5045.7 µg/L	5045.7 ppb	07:15:48
3	Fe 238.204 Radial†	796.7	801.3	5112.3 µg/L	5112.3 ppb	07:15:48
3	K 766.490 Radial†	10249.9	9822.0	5026.8 µg/L	5026.8 ppb	07:15:28
3	Mg 279.077 IEC†	838.6	844.0	5215.6 µg/L	5215.6 ppb	07:15:48
3	Na 589.592 Radial†	39216.1	40824.1	10223 µg/L	10223 ppb	07:15:28
3	Sr 421.552†	95579.5	98015.7	492.62 µg/L	492.62 ppb	07:15:28
3	Sc 361.383	1995882.6	1995882.6	98.697 %		07:17:07
3	Y 371.029	1240911.4	1240911.4	98.583 %		07:17:07
3	Ag 328.068†	54566.4	55276.2	507.66 µg/L	507.66 ppb	07:17:12
3	As 188.979†	277.6	279.0	505.57 µg/L	505.57 ppb	07:17:33
3	B 249.677†	11307.9	11319.3	489.11 µg/L	489.11 ppb	07:17:12
3	Ba 233.527†	18850.6	19177.4	492.91 µg/L	492.91 ppb	07:17:12
3	Be 313.107†	785406.9	792256.6	495.57 µg/L	495.57 ppb	07:17:07
3	Cd 226.502†	18185.2	18524.2	493.52 µg/L	493.52 ppb	07:17:12
3	Co 228.616†	10001.5	10200.2	492.99 µg/L	492.99 ppb	07:17:12
3	Cr 267.716†	22937.0	23339.5	490.62 µg/L	490.62 ppb	07:17:12
3	Cu 324.752†	74064.1	70771.8	492.00 µg/L	492.00 ppb	07:17:12
3	Mn 257.610†	152539.1	154753.6	494.77 µg/L	494.77 ppb	07:17:07
3	Mo 202.031†	4187.9	4246.8	496.25 µg/L	496.25 ppb	07:17:33
3	Ni 231.604†	9165.0	9010.4	492.97 µg/L	492.97 ppb	07:17:12
3	P 214.914†	1385.4	1202.8	2376.2 µg/L	2376.2 ppb	07:17:33
3	Pb 220.353†	1944.4	1913.8	495.35 µg/L	495.35 ppb	07:17:33
3	S 181.975 Axial†	236.4	217.4	1062.7 µg/L	1062.7 ppb	07:17:33
3	Sb 206.836†	525.5	511.4	499.09 µg/L	499.09 ppb	07:17:33
3	Se 196.026†	398.3	393.7	505.23 µg/L	505.23 ppb	07:17:33
3	SiO2†	31354.4	29016.8	5328.4 µg/L	5328.4 ppb	07:17:12
3	Si 251.611†	33720.3	33840.1	2456.2 µg/L	2456.2 ppb	07:17:12
3	Sn 189.927†	994.6	985.3	507.29 µg/L	507.29 ppb	07:17:33
3	Ti 334.940†	219779.2	221905.4	505.20 µg/L	505.20 ppb	07:17:07
3	Tl 190.801†	305.7	330.1	509.39 µg/L	509.39 ppb	07:17:33
3	U 409.014†	6031.5	5380.7	487.03 µg/L	487.03 ppb	07:17:12
3	V 292.402†	42759.8	43450.9	493.44 µg/L	493.44 ppb	07:17:12
3	Zn 213.857†	19142.8	18868.8	496.15 µg/L	496.15 ppb	07:17:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2000253.9	98.914	%	0.2785				0.28%
Sc RADIAL	113700.6	97.5	%	0.63				0.65%
Y 371.029	1244173.5	98.842	%	0.3101				0.31%
Ag 328.068†	55378.6	508.60	µg/L	1.185	508.60	ppb	1.185	0.23%
QC value within limits for Ag 328.068 Recovery = 101.72%								
Al 396.153Radial†	10385.5	5141.1	µg/L	65.61	5141.1	ppb	65.61	1.28%
QC value within limits for Al 396.153Radial Recovery = 102.82%								
As 188.979†	278.1	503.92	µg/L	3.279	503.92	ppb	3.279	0.65%
QC value within limits for As 188.979 Recovery = 100.78%								
B 249.677†	11347.6	490.34	µg/L	2.561	490.34	ppb	2.561	0.52%
QC value within limits for B 249.677 Recovery = 98.07%								
Ba 233.527†	19220.7	494.02	µg/L	1.093	494.02	ppb	1.093	0.22%
QC value within limits for Ba 233.527 Recovery = 98.80%								
Be 313.107†	790575.7	494.52	µg/L	2.141	494.52	ppb	2.141	0.43%
QC value within limits for Be 313.107 Recovery = 98.90%								
Ca 317.933Radial†	13027.2	5040.5	µg/L	27.23	5040.5	ppb	27.23	0.54%
QC value within limits for Ca 317.933Radial Recovery = 100.81%								
Cd 226.502†	18518.2	493.36	µg/L	2.188	493.36	ppb	2.188	0.44%
QC value within limits for Cd 226.502 Recovery = 98.67%								
Co 228.616†	10197.7	492.88	µg/L	1.978	492.88	ppb	1.978	0.40%

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   QC value within limits for Co 228.616  Recovery = 98.58%
Cr 267.716†            23355.6      490.96 µg/L          1.859      490.96 ppb          1.859   0.38%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†            70989.4      493.50 µg/L          1.885      493.50 ppb          1.885   0.38%
   QC value within limits for Cu 324.752  Recovery = 98.70%
Fe 238.204 Radial†       797.8      5090.1 µg/L         36.43      5090.1 ppb         36.43   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.80%
K 766.490 Radial†       9873.7      5053.3 µg/L         37.09      5053.3 ppb         37.09   0.73%
   QC value within limits for K 766.490 Radial  Recovery = 101.07%
Mg 279.077 IEC†          838.5      5182.0 µg/L         29.55      5182.0 ppb         29.55   0.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.64%
Mn 257.610†           154799.4      494.91 µg/L          2.855      494.91 ppb          2.855   0.58%
   QC value within limits for Mn 257.610  Recovery = 98.98%
Mo 202.031†            4274.1      499.43 µg/L          3.318      499.43 ppb          3.318   0.66%
   QC value within limits for Mo 202.031  Recovery = 99.89%
Na 589.592 Radial†     40895.6       10241 µg/L          78.4       10241 ppb           78.4   0.77%
   QC value within limits for Na 589.592 Radial  Recovery = 102.41%
Ni 231.604†            8998.6      492.32 µg/L          0.913      492.32 ppb          0.913   0.19%
   QC value within limits for Ni 231.604  Recovery = 98.46%
P 214.914†             1205.2      2380.9 µg/L           4.28      2380.9 ppb           4.28   0.18%
   QC value within limits for P 214.914  Recovery = 95.24%
Pb 220.353†            1922.0      497.48 µg/L          1.976      497.48 ppb          1.976   0.40%
   QC value within limits for Pb 220.353  Recovery = 99.50%
S 181.975 Axial†        218.6      1068.9 µg/L         16.29      1068.9 ppb         16.29   1.52%
   QC value within limits for S 181.975 Axial  Recovery = 106.89%
Sb 206.836†             512.4      500.09 µg/L          5.088      500.09 ppb          5.088   1.02%
   QC value within limits for Sb 206.836  Recovery = 100.02%
Se 196.026†             398.1      510.86 µg/L          5.036      510.86 ppb          5.036   0.99%
   QC value within limits for Se 196.026  Recovery = 102.17%
SiO2†                  29104.4      5344.5 µg/L         20.97      5344.5 ppb         20.97   0.39%
   QC value within limits for SiO2  Recovery = 99.94%
Si 251.611†            33887.8      2459.6 µg/L          6.72      2459.6 ppb          6.72   0.27%
   QC value within limits for Si 251.611  Recovery = 98.39%
Sn 189.927†             990.1      509.76 µg/L          2.725      509.76 ppb          2.725   0.53%
   QC value within limits for Sn 189.927  Recovery = 101.95%
Sr 421.552†            98333.7      494.22 µg/L          3.354      494.22 ppb          3.354   0.68%
   QC value within limits for Sr 421.552  Recovery = 98.84%
Ti 334.940†           221499.7      504.27 µg/L          1.927      504.27 ppb          1.927   0.38%
   QC value within limits for Ti 334.940  Recovery = 100.85%
Tl 190.801†             328.3      506.51 µg/L          4.043      506.51 ppb          4.043   0.80%
   QC value within limits for Tl 190.801  Recovery = 101.30%
U 409.014†             5333.1      482.72 µg/L          4.384      482.72 ppb          4.384   0.91%
   QC value within limits for U 409.014  Recovery = 96.54%
V 292.402†             43524.5      494.28 µg/L          1.588      494.28 ppb          1.588   0.32%
   QC value within limits for V 292.402  Recovery = 98.86%
Zn 213.857†            18918.1      497.47 µg/L          1.396      497.47 ppb          1.396   0.28%
   QC value within limits for Zn 213.857  Recovery = 99.49%
All analyte(s) passed QC.
```

Sequence No.: 66
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 07:17:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112989.9	112989.9	96.9	%			07:18:15
1	Al 396.153Radial†	150.2	31.7	15.783	µg/L	15.783	ppb	07:18:15
1	Ca 317.933Radial†	439.0	40.4	15.633	µg/L	15.633	ppb	07:18:36
1	Fe 238.204 Radial†	21.7	7.2	45.695	µg/L	45.695	ppb	07:18:36
1	K 766.490 Radial†	710.7	51.1	26.173	µg/L	26.173	ppb	07:18:15
1	Mg 279.077 IEC†	10.0	-5.1	-31.347	µg/L	-31.347	ppb	07:18:36
1	Na 589.592 Radial†	-480.6	138.1	34.573	µg/L	34.573	ppb	07:18:15
1	Sr 421.552†	-61.7	-1.4	-0.0068	µg/L	-0.0068	ppb	07:18:15
1	Sc 361.383	2003994.4	2003994.4	99.099	%			07:19:38
1	Y 371.029	1249084.7	1249084.7	99.232	%			07:19:38
1	Ag 328.068†	44.7	34.7	0.3198	µg/L	0.3198	ppb	07:19:43
1	As 188.979†	7.8	5.7	10.264	µg/L	10.264	ppb	07:20:04
1	B 249.677†	185.7	49.6	2.1350	µg/L	2.1350	ppb	07:20:04
1	Ba 233.527†	-31.3	46.4	1.1912	µg/L	1.1912	ppb	07:20:04
1	Be 313.107†	3572.5	89.1	0.0555	µg/L	0.0555	ppb	07:19:43
1	Cd 226.502†	-86.7	11.5	0.2991	µg/L	0.2991	ppb	07:20:04
1	Co 228.616†	-71.0	-5.0	-0.2437	µg/L	-0.2437	ppb	07:20:04
1	Cr 267.716†	-146.5	-48.0	-1.0068	µg/L	-1.0068	ppb	07:19:43
1	Cu 324.752†	4073.5	-159.2	-1.0943	µg/L	-1.0943	ppb	07:19:43
1	Mn 257.610†	64.8	266.7	0.8575	µg/L	0.8575	ppb	07:20:04
1	Mo 202.031†	-6.5	-2.9	-0.3324	µg/L	-0.3324	ppb	07:20:04
1	Ni 231.604†	287.6	14.7	0.8024	µg/L	0.8024	ppb	07:20:04
1	P 214.914†	191.3	-7.9	-15.817	µg/L	-15.817	ppb	07:20:04
1	Pb 220.353†	55.3	-0.5	-0.1150	µg/L	-0.1150	ppb	07:20:04
1	S 181.975 Axial†	31.7	9.9	48.384	µg/L	48.384	ppb	07:20:04
1	Sb 206.836†	25.2	4.3	4.2065	µg/L	4.2065	ppb	07:20:04
1	Se 196.026†	3.9	-6.0	-7.5633	µg/L	-7.5633	ppb	07:20:04
1	SiO2†	2752.0	25.7	4.7189	µg/L	4.7189	ppb	07:19:43
1	Si 251.611†	465.0	144.0	10.665	µg/L	10.665	ppb	07:20:04
1	Sn 189.927†	20.5	-1.7	-0.8695	µg/L	-0.8695	ppb	07:20:04
1	Ti 334.940†	1032.8	267.8	0.6090	µg/L	0.6090	ppb	07:19:43
1	Tl 190.801†	-17.8	2.4	3.6555	µg/L	3.6555	ppb	07:20:04
1	U 409.014†	664.2	-60.2	-5.4675	µg/L	-5.4675	ppb	07:19:43
1	V 292.402†	-124.8	0.8	0.0012	µg/L	0.0012	ppb	07:19:43
1	Zn 213.857†	632.7	111.9	2.9580	µg/L	2.9580	ppb	07:20:04
2	Sc RADIAL	114035.1	114035.1	97.8	%			07:18:41
2	Al 396.153Radial†	173.0	53.6	26.627	µg/L	26.627	ppb	07:18:41
2	Ca 317.933Radial†	438.1	35.3	13.674	µg/L	13.674	ppb	07:19:02
2	Fe 238.204 Radial†	20.7	6.0	38.276	µg/L	38.276	ppb	07:19:02
2	K 766.490 Radial†	742.4	76.8	39.328	µg/L	39.328	ppb	07:18:41
2	Mg 279.077 IEC†	14.8	-0.3	-1.6390	µg/L	-1.6390	ppb	07:19:02
2	Na 589.592 Radial†	-518.5	103.8	25.986	µg/L	25.986	ppb	07:18:41
2	Sr 421.552†	-71.6	-10.9	-0.0547	µg/L	-0.0547	ppb	07:18:41
2	Sc 361.383	2012333.3	2012333.3	99.511	%			07:20:10
2	Y 371.029	1255023.0	1255023.0	99.704	%			07:20:10
2	Ag 328.068†	152.2	142.5	1.3006	µg/L	1.3006	ppb	07:20:15
2	As 188.979†	6.3	4.1	7.4023	µg/L	7.4023	ppb	07:20:36
2	B 249.677†	192.9	56.0	2.4159	µg/L	2.4159	ppb	07:20:36
2	Ba 233.527†	-18.7	59.3	1.5195	µg/L	1.5195	ppb	07:20:36
2	Be 313.107†	3508.6	10.0	0.0061	µg/L	0.0061	ppb	07:20:15
2	Cd 226.502†	-92.2	6.4	0.1629	µg/L	0.1629	ppb	07:20:36
2	Co 228.616†	-61.1	5.3	0.2539	µg/L	0.2539	ppb	07:20:36
2	Cr 267.716†	-117.8	-18.6	-0.3897	µg/L	-0.3897	ppb	07:20:15
2	Cu 324.752†	4096.9	-152.7	-1.0513	µg/L	-1.0513	ppb	07:20:15
2	Mn 257.610†	144.0	346.1	1.1099	µg/L	1.1099	ppb	07:20:36
2	Mo 202.031†	-0.5	3.2	0.3725	µg/L	0.3725	ppb	07:20:36
2	Ni 231.604†	296.6	22.5	1.2293	µg/L	1.2293	ppb	07:20:36
2	P 214.914†	179.3	-20.7	-41.699	µg/L	-41.699	ppb	07:20:36
2	Pb 220.353†	47.6	-8.5	-2.1787	µg/L	-2.1787	ppb	07:20:36

2	S 181.975 Axial†	29.6	7.6	37.149	µg/L	37.149 ppb	07:20:36
2	Sb 206.836†	18.5	-2.5	-2.4613	µg/L	-2.4613 ppb	07:20:36
2	Se 196.026†	7.7	-2.2	-2.7247	µg/L	-2.7247 ppb	07:20:36
2	SiO2†	2721.1	-16.9	-3.1123	µg/L	-3.1123 ppb	07:20:15
2	Si 251.611†	435.1	112.0	8.2802	µg/L	8.2802 ppb	07:20:36
2	Sn 189.927†	21.0	-1.3	-0.6590	µg/L	-0.6590 ppb	07:20:36
2	Ti 334.940†	907.2	137.3	0.3119	µg/L	0.3119 ppb	07:20:15
2	Tl 190.801†	-14.0	6.3	9.6422	µg/L	9.6422 ppb	07:20:36
2	U 409.014†	654.7	-72.6	-6.5871	µg/L	-6.5871 ppb	07:20:15
2	V 292.402†	-146.3	-20.3	-0.2328	µg/L	-0.2328 ppb	07:20:15
2	Zn 213.857†	650.8	127.4	3.3678	µg/L	3.3678 ppb	07:20:36
3	Sc RADIAL	112710.7	112710.7	96.6	%		07:19:07
3	Al 396.153Radial†	131.5	12.8	6.3588	µg/L	6.3588 ppb	07:19:07
3	Ca 317.933Radial†	437.8	40.2	15.572	µg/L	15.572 ppb	07:19:27
3	Fe 238.204 Radial†	20.2	5.7	36.215	µg/L	36.215 ppb	07:19:27
3	K 766.490 Radial†	697.2	39.0	19.952	µg/L	19.952 ppb	07:19:07
3	Mg 279.077 IEC†	16.1	1.2	7.6302	µg/L	7.6302 ppb	07:19:27
3	Na 589.592 Radial†	-511.7	104.6	26.202	µg/L	26.202 ppb	07:19:07
3	Sr 421.552†	-39.0	21.9	0.1102	µg/L	0.1102 ppb	07:19:07
3	Sc 361.383	2015562.4	2015562.4	99.671	%		07:20:42
3	Y 371.029	1257218.0	1257218.0	99.878	%		07:20:42
3	Ag 328.068†	95.6	85.5	0.7832	µg/L	0.7832 ppb	07:20:48
3	As 188.979†	-2.3	-4.6	-8.2969	µg/L	-8.2969 ppb	07:21:08
3	B 249.677†	191.0	53.8	2.3215	µg/L	2.3215 ppb	07:21:08
3	Ba 233.527†	-21.3	56.7	1.4549	µg/L	1.4549 ppb	07:21:08
3	Be 313.107†	3610.3	106.3	0.0664	µg/L	0.0664 ppb	07:20:48
3	Cd 226.502†	-88.8	9.9	0.2615	µg/L	0.2615 ppb	07:21:08
3	Co 228.616†	-62.1	4.4	0.2099	µg/L	0.2099 ppb	07:21:08
3	Cr 267.716†	-104.0	-4.6	-0.0954	µg/L	-0.0954 ppb	07:20:48
3	Cu 324.752†	4159.7	-96.3	-0.6604	µg/L	-0.6604 ppb	07:20:48
3	Mn 257.610†	165.6	367.4	1.1778	µg/L	1.1778 ppb	07:21:08
3	Mo 202.031†	-6.4	-2.8	-0.3202	µg/L	-0.3202 ppb	07:21:08
3	Ni 231.604†	292.9	18.3	1.0020	µg/L	1.0020 ppb	07:21:08
3	P 214.914†	183.3	-17.0	-34.259	µg/L	-34.259 ppb	07:21:08
3	Pb 220.353†	52.9	-3.1	-0.8130	µg/L	-0.8130 ppb	07:21:08
3	S 181.975 Axial†	28.9	6.9	33.570	µg/L	33.570 ppb	07:21:08
3	Sb 206.836†	28.0	6.9	6.7908	µg/L	6.7908 ppb	07:21:08
3	Se 196.026†	15.7	5.9	7.5200	µg/L	7.5200 ppb	07:21:08
3	SiO2†	2727.0	-15.3	-2.8137	µg/L	-2.8137 ppb	07:20:48
3	Si 251.611†	437.2	113.4	8.3190	µg/L	8.3190 ppb	07:21:08
3	Sn 189.927†	25.3	3.0	1.5335	µg/L	1.5335 ppb	07:21:08
3	Ti 334.940†	928.2	156.8	0.3564	µg/L	0.3564 ppb	07:20:48
3	Tl 190.801†	-20.8	-0.5	-0.7579	µg/L	-0.7579 ppb	07:21:08
3	U 409.014†	730.9	2.8	0.2514	µg/L	0.2514 ppb	07:20:48
3	V 292.402†	-115.1	11.2	0.1272	µg/L	0.1272 ppb	07:20:48
3	Zn 213.857†	644.6	120.1	3.1750	µg/L	3.1750 ppb	07:21:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2010630.1	99.427	%	0.2952				0.30%
Sc RADIAL	113245.2	97.1	%	0.60				0.62%
Y 371.029	1253775.2	99.605	%	0.3343				0.34%
Ag 328.068†	87.6	0.8012	µg/L	0.49065	0.8012	ppb	0.49065	61.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	32.7	16.256	µg/L	10.1426	16.256	ppb	10.1426	62.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	3.1232	µg/L	9.99310	3.1232	ppb	9.99310	319.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.1	2.2908	µg/L	0.14294	2.2908	ppb	0.14294	6.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	54.1	1.3885	µg/L	0.17389	1.3885	ppb	0.17389	12.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	68.5	0.0427	µg/L	0.03213	0.0427	ppb	0.03213	75.28%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	38.7	14.960	µg/L	1.1137	14.960	ppb	1.1137	7.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.2	0.2412	µg/L	0.07037	0.2412	ppb	0.07037	29.18%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.5	0.0734	µg/L	0.27547	0.0734	ppb	0.27547	375.37%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -23.7     -0.4973 µg/L       0.46510     -0.4973 ppb        0.46510  93.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -136.1     -0.9353 µg/L       0.23906     -0.9353 ppb        0.23906  25.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         6.3      40.062 µg/L        4.9859      40.062 ppb         4.9859  12.45%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         55.7      28.484 µg/L        9.8922      28.484 ppb         9.8922  34.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.4     -8.4519 µg/L      20.36206     -8.4519 ppb       20.36206 240.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              326.8      1.0484 µg/L       0.16879      1.0484 ppb        0.16879  16.10%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.8     -0.0934 µg/L       0.40346     -0.0934 ppb        0.40346 432.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       115.5      28.920 µg/L        4.8963      28.920 ppb         4.8963  16.93%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               18.5      1.0113 µg/L       0.21359      1.0113 ppb        0.21359  21.12%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.2     -30.592 µg/L       13.3252     -30.592 ppb        13.3252  43.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.0     -1.0356 µg/L       1.04972     -1.0356 ppb        1.04972 101.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.1      39.701 µg/L        7.7295      39.701 ppb         7.7295  19.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.9      2.8453 µg/L       4.77391      2.8453 ppb        4.77391 167.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.7     -0.9227 µg/L       7.70142     -0.9227 ppb        7.70142 834.68%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -2.2     -0.4024 µg/L       4.43765     -0.4024 ppb        4.43765 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              123.1      9.0881 µg/L       1.36581      9.0881 ppb        1.36581  15.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.0      0.0017 µg/L       1.33076      0.0017 ppb        1.33076 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.2      0.0162 µg/L       0.08484      0.0162 ppb        0.08484 522.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              187.3      0.4258 µg/L       0.16027      0.4258 ppb        0.16027  37.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.7      4.1799 µg/L       5.21983      4.1799 ppb        5.21983 124.88%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -43.3     -3.9344 µg/L       3.66797     -3.9344 ppb        3.66797  93.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -2.8     -0.0348 µg/L       0.18272     -0.0348 ppb        0.18272 525.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              119.8      3.1669 µg/L       0.20503      3.1669 ppb        0.20503   6.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/10/2009 07:33:30 Plasma On Time: 12/6/2009 23:29:48
Logged In Analyst: optima Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121009A.sif
Batch ID:
Results Data Set: 121009
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 301
Sample ID: 1201990787|930799|1 Date Collected: 12/10/2009 07:33:32
Analyst: HSC Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 1201990787|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115054.4	115054.4	98.7	%			07:34:08
1	Al 396.153Radial†	139.7	18.3	9.1267	µg/L	9.1267	ppb	07:34:08
1	Ca 317.933Radial†	471.9	65.6	25.396	µg/L	25.396	ppb	07:34:29
1	Fe 238.204 Radial†	23.7	8.9	56.387	µg/L	56.387	ppb	07:34:29
1	K 766.490 Radial†	813.1	141.7	72.545	µg/L	72.545	ppb	07:34:08
1	Mg 279.077 IEC†	12.3	-3.0	-18.714	µg/L	-18.714	ppb	07:34:29
1	Na 589.592 Radial†	-504.1	123.1	30.831	µg/L	30.831	ppb	07:34:08
1	Sr 421.552†	-3.3	58.9	0.2962	µg/L	0.2962	ppb	07:34:08
1	Sc 361.383	2006376.9	2006376.9	99.216	%			07:35:31
1	Y 371.029	1242435.5	1242435.5	98.704	%			07:35:31
1	Ag 328.068†	105.5	96.0	0.8809	µg/L	0.8809	ppb	07:35:36
1	As 188.979†	-1.3	-3.5	-6.4533	µg/L	-6.4533	ppb	07:35:57
1	B 249.677†	205.5	69.3	2.9864	µg/L	2.9864	ppb	07:35:57
1	Ba 233.527†	-50.5	27.2	0.6976	µg/L	0.6976	ppb	07:35:57
1	Be 313.107†	3506.5	18.3	0.0113	µg/L	0.0113	ppb	07:35:36
1	Cd 226.502†	-90.8	7.4	0.1937	µg/L	0.1937	ppb	07:35:57
1	Co 228.616†	-73.3	-7.2	-0.3507	µg/L	-0.3507	ppb	07:35:57
1	Cr 267.716†	-103.0	-4.0	-0.0841	µg/L	-0.0841	ppb	07:35:36
1	Cu 324.752†	4125.2	-112.0	-0.7645	µg/L	-0.7645	ppb	07:35:36
1	Mn 257.610†	-45.7	155.2	0.5027	µg/L	0.5027	ppb	07:35:57
1	Mo 202.031†	-5.9	-2.3	-0.2686	µg/L	-0.2686	ppb	07:35:57
1	Ni 231.604†	305.8	32.7	1.7886	µg/L	1.7886	ppb	07:35:57
1	P 214.914†	189.1	-10.3	-20.898	µg/L	-20.898	ppb	07:35:57
1	Pb 220.353†	51.5	-4.4	-1.1259	µg/L	-1.1259	ppb	07:35:57
1	S 181.975 Axial†	36.3	14.5	70.763	µg/L	70.763	ppb	07:35:57
1	Sb 206.836†	22.6	1.7	1.6566	µg/L	1.6566	ppb	07:35:57
1	Se 196.026†	9.8	-0.0	-0.0076	µg/L	-0.0076	ppb	07:35:57
1	SiO2†	2776.6	47.2	8.6624	µg/L	8.6624	ppb	07:35:36
1	Si 251.611†	465.1	143.6	10.676	µg/L	10.676	ppb	07:35:57
1	Sn 189.927†	17.8	-4.5	-2.2709	µg/L	-2.2709	ppb	07:35:57
1	Ti 334.940†	939.6	172.6	0.3917	µg/L	0.3917	ppb	07:35:36
1	Tl 190.801†	-20.7	-0.5	-0.7001	µg/L	-0.7001	ppb	07:35:57
1	U 409.014†	706.1	-18.8	-1.7103	µg/L	-1.7103	ppb	07:35:36
1	V 292.402†	-105.2	20.7	0.2331	µg/L	0.2331	ppb	07:35:36
1	Zn 213.857†	618.6	96.8	2.5524	µg/L	2.5524	ppb	07:35:57
2	Sc RADIAL	114242.5	114242.5	98.0	%			07:34:34
2	Al 396.153Radial†	161.1	41.1	20.429	µg/L	20.429	ppb	07:34:34
2	Ca 317.933Radial†	481.1	78.4	30.323	µg/L	30.323	ppb	07:34:55
2	Fe 238.204 Radial†	26.8	12.2	77.404	µg/L	77.404	ppb	07:34:55
2	K 766.490 Radial†	701.1	33.3	17.025	µg/L	17.025	ppb	07:34:34
2	Mg 279.077 IEC†	14.1	-1.0	-6.4009	µg/L	-6.4009	ppb	07:34:55
2	Na 589.592 Radial†	-483.7	140.3	35.127	µg/L	35.127	ppb	07:34:34
2	Sr 421.552†	-17.9	44.0	0.2214	µg/L	0.2214	ppb	07:34:34
2	Sc 361.383	2006706.8	2006706.8	99.233	%			07:36:03
2	Y 371.029	1245552.3	1245552.3	98.952	%			07:36:03
2	Ag 328.068†	109.0	99.4	0.9086	µg/L	0.9086	ppb	07:36:08
2	As 188.979†	0.8	-1.4	-2.6129	µg/L	-2.6129	ppb	07:36:29

2	B 249.677†	224.2	88.1	3.7950 µg/L	3.7950 ppb		07:36:29
2	Ba 233.527†	-43.4	34.3	0.8796 µg/L	0.8796 ppb		07:36:29
2	Be 313.107†	3444.9	-44.3	-0.0279 µg/L	-0.0279 ppb		07:36:08
2	Cd 226.502†	-92.2	6.1	0.1578 µg/L	0.1578 ppb		07:36:29
2	Co 228.616†	-72.0	-5.9	-0.2864 µg/L	-0.2864 ppb		07:36:29
2	Cr 267.716†	-108.0	-9.1	-0.1915 µg/L	-0.1915 ppb		07:36:08
2	Cu 324.752†	4018.6	-220.1	-1.5099 µg/L	-1.5099 ppb		07:36:08
2	Mn 257.610†	-11.0	190.3	0.6173 µg/L	0.6173 ppb		07:36:29
2	Mo 202.031†	-2.3	1.4	0.1637 µg/L	0.1637 ppb		07:36:29
2	Ni 231.604†	317.9	44.8	2.4512 µg/L	2.4512 ppb		07:36:29
2	P 214.914†	190.4	-9.0	-18.202 µg/L	-18.202 ppb		07:36:29
2	Pb 220.353†	58.6	2.8	0.7345 µg/L	0.7345 ppb		07:36:29
2	S 181.975 Axial†	40.6	18.7	91.591 µg/L	91.591 ppb		07:36:29
2	Sb 206.836†	28.2	7.3	7.1597 µg/L	7.1597 ppb		07:36:29
2	Se 196.026†	14.2	4.4	5.6990 µg/L	5.6990 ppb		07:36:29
2	SiO2†	2713.5	-16.9	-3.1022 µg/L	-3.1022 ppb		07:36:08
2	Si 251.611†	461.3	139.6	10.473 µg/L	10.473 ppb		07:36:29
2	Sn 189.927†	13.7	-8.6	-4.3944 µg/L	-4.3944 ppb		07:36:29
2	Ti 334.940†	1019.8	253.2	0.5752 µg/L	0.5752 ppb		07:36:08
2	Tl 190.801†	-17.1	3.2	4.8960 µg/L	4.8960 ppb		07:36:29
2	U 409.014†	712.2	-12.7	-1.1693 µg/L	-1.1693 ppb		07:36:08
2	V 292.402†	-174.4	-49.0	-0.5460 µg/L	-0.5460 ppb		07:36:08
2	Zn 213.857†	625.9	104.1	2.7397 µg/L	2.7397 ppb		07:36:29
3	Sc RADIAL	114264.7	114264.7	98.0 %			07:35:00
3	Al 396.153Radial†	146.5	26.2	13.018 µg/L	13.018 ppb		07:35:00
3	Ca 317.933Radial†	484.3	81.6	31.565 µg/L	31.565 ppb		07:35:20
3	Fe 238.204 Radial†	21.6	6.9	44.005 µg/L	44.005 ppb		07:35:20
3	K 766.490 Radial†	747.7	80.7	41.285 µg/L	41.285 ppb		07:35:00
3	Mg 279.077 IEC†	11.8	-3.4	-20.998 µg/L	-20.998 ppb		07:35:20
3	Na 589.592 Radial†	-499.9	123.9	31.026 µg/L	31.026 ppb		07:35:00
3	Sr 421.552†	-75.7	-15.0	-0.0753 µg/L	-0.0753 ppb		07:35:00
3	Sc 361.383	2001934.6	2001934.6	98.997 %			07:36:35
3	Y 371.029	1241996.1	1241996.1	98.669 %			07:36:35
3	Ag 328.068†	96.6	87.2	0.7960 µg/L	0.7960 ppb		07:36:40
3	As 188.979†	-0.4	-2.6	-4.7378 µg/L	-4.7378 ppb		07:37:01
3	B 249.677†	205.7	70.0	3.0193 µg/L	3.0193 ppb		07:37:01
3	Ba 233.527†	-44.2	33.4	0.8570 µg/L	0.8570 ppb		07:37:01
3	Be 313.107†	3501.2	20.8	0.0129 µg/L	0.0129 ppb		07:36:40
3	Cd 226.502†	-99.5	-1.5	-0.0443 µg/L	-0.0443 ppb		07:37:01
3	Co 228.616†	-64.4	1.6	0.0758 µg/L	0.0758 ppb		07:37:01
3	Cr 267.716†	-68.6	30.5	0.6390 µg/L	0.6390 ppb		07:36:40
3	Cu 324.752†	4101.9	-126.3	-0.8668 µg/L	-0.8668 ppb		07:36:40
3	Mn 257.610†	6.4	207.8	0.6691 µg/L	0.6691 ppb		07:37:01
3	Mo 202.031†	-3.9	-0.3	-0.0289 µg/L	-0.0289 ppb		07:37:01
3	Ni 231.604†	302.2	29.7	1.6268 µg/L	1.6268 ppb		07:37:01
3	P 214.914†	196.0	-3.0	-5.9556 µg/L	-5.9556 ppb		07:37:01
3	Pb 220.353†	58.7	3.0	0.7874 µg/L	0.7874 ppb		07:37:01
3	S 181.975 Axial†	37.1	15.3	74.798 µg/L	74.798 ppb		07:37:01
3	Sb 206.836†	20.0	-0.9	-0.8440 µg/L	-0.8440 ppb		07:37:01
3	Se 196.026†	17.0	7.3	9.4139 µg/L	9.4139 ppb		07:37:01
3	SiO2†	2752.1	28.6	5.2560 µg/L	5.2560 ppb		07:36:40
3	Si 251.611†	466.5	146.1	10.837 µg/L	10.837 ppb		07:37:01
3	Sn 189.927†	19.3	-2.9	-1.4984 µg/L	-1.4984 ppb		07:37:01
3	Ti 334.940†	951.1	186.3	0.4227 µg/L	0.4227 ppb		07:36:40
3	Tl 190.801†	-24.2	-4.1	-6.2390 µg/L	-6.2390 ppb		07:37:01
3	U 409.014†	683.7	-39.8	-3.6194 µg/L	-3.6194 ppb		07:36:40
3	V 292.402†	-157.6	-32.5	-0.3681 µg/L	-0.3681 ppb		07:36:40
3	Zn 213.857†	630.1	109.8	2.8995 µg/L	2.8995 ppb		07:37:01

Mean Data: 1201990787|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005006.1	99.149	%	0.1318				0.13%
Sc RADIAL	114520.5	98.2	%	0.40				0.40%
Y 371.029	1243328.0	98.775	%	0.1540				0.16%
Ag 328.068†	94.2	0.8618	µg/L	0.05867	0.8618	ppb	0.05867	6.81%
Al 396.153Radial†	28.6	14.191	µg/L	5.7416	14.191	ppb	5.7416	40.46%
As 188.979†	-2.5	-4.6013	µg/L	1.92384	-4.6013	ppb	1.92384	41.81%
B 249.677†	75.8	3.2669	µg/L	0.45768	3.2669	ppb	0.45768	14.01%
Ba 233.527†	31.7	0.8114	µg/L	0.09915	0.8114	ppb	0.09915	12.22%

Be 313.107†	-1.7	-0.0013 µg/L	0.02311	-0.0013 ppb	0.02311	>999.9%
Ca 317.933Radial†	75.2	29.095 µg/L	3.2626	29.095 ppb	3.2626	11.21%
Cd 226.502†	4.0	0.1024 µg/L	0.12830	0.1024 ppb	0.12830	125.26%
Co 228.616†	-3.8	-0.1871 µg/L	0.22995	-0.1871 ppb	0.22995	122.92%
Cr 267.716†	5.8	0.1211 µg/L	0.45172	0.1211 ppb	0.45172	372.88%
Cu 324.752†	-152.8	-1.0471 µg/L	0.40403	-1.0471 ppb	0.40403	38.59%
Fe 238.204 Radial†	9.3	59.265 µg/L	16.8846	59.265 ppb	16.8846	28.49%
K 766.490 Radial†	85.2	43.619 µg/L	27.8335	43.619 ppb	27.8335	63.81%
Mg 279.077 IEC†	-2.5	-15.371 µg/L	7.8519	-15.371 ppb	7.8519	51.08%
Mn 257.610†	184.4	0.5964 µg/L	0.08511	0.5964 ppb	0.08511	14.27%
Mo 202.031†	-0.4	-0.0446 µg/L	0.21657	-0.0446 ppb	0.21657	485.68%
Na 589.592 Radial†	129.1	32.328 µg/L	2.4257	32.328 ppb	2.4257	7.50%
Ni 231.604†	35.7	1.9555 µg/L	0.43681	1.9555 ppb	0.43681	22.34%
P 214.914†	-7.4	-15.018 µg/L	7.9636	-15.018 ppb	7.9636	53.03%
Pb 220.353†	0.5	0.1320 µg/L	1.08970	0.1320 ppb	1.08970	825.47%
S 181.975 Axial†	16.1	79.051 µg/L	11.0462	79.051 ppb	11.0462	13.97%
Sb 206.836†	2.7	2.6574 µg/L	4.09467	2.6574 ppb	4.09467	154.08%
Se 196.026†	3.9	5.0351 µg/L	4.74567	5.0351 ppb	4.74567	94.25%
SiO2†	19.6	3.6054 µg/L	6.05352	3.6054 ppb	6.05352	167.90%
Si 251.611†	143.1	10.662 µg/L	0.1821	10.662 ppb	0.1821	1.71%
Sn 189.927†	-5.3	-2.7213 µg/L	1.49961	-2.7213 ppb	1.49961	55.11%
Sr 421.552†	29.3	0.1474 µg/L	0.19650	0.1474 ppb	0.19650	133.27%
Ti 334.940†	204.1	0.4632 µg/L	0.09821	0.4632 ppb	0.09821	21.20%
Tl 190.801†	-0.4	-0.6811 µg/L	5.56751	-0.6811 ppb	5.56751	817.48%
U 409.014†	-23.8	-2.1664 µg/L	1.28712	-2.1664 ppb	1.28712	59.41%
V 292.402†	-20.3	-0.2270 µg/L	0.40827	-0.2270 ppb	0.40827	179.88%
Zn 213.857†	103.6	2.7306 µg/L	0.17375	2.7306 ppb	0.17375	6.36%

Sequence No.: 2
Sample ID: 1201990788|930799|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 302
Date Collected: 12/10/2009 07:37:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201990788|930799|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	118709.8	118709.8	102	%			07:37:43
1	Al 396.153Radial†	89775.7	88078.5	43753	µg/L	43753	ppb	07:37:43
1	Ca 317.933Radial†	134726.0	131951.3	51055	µg/L	51055	ppb	07:37:43
1	Fe 238.204 Radial†	14961.7	14684.2	93399	µg/L	93399	ppb	07:38:04
1	K 766.490 Radial†	39849.3	38468.2	19688	µg/L	19688	ppb	07:37:43
1	Mg 279.077 IEC†	3131.5	3061.1	18768	µg/L	18768	ppb	07:38:04
1	Na 589.592 Radial†	18782.0	19086.8	4779.8	µg/L	4779.8	ppb	07:37:43
1	Sr 421.552†	215091.5	211383.0	1062.4	µg/L	1062.4	ppb	07:37:43
1	Sc 361.383	2027398.8	2027398.8	100.26	%			07:39:08
1	Y 371.029	1259913.9	1259913.9	100.09	%			07:39:08
1	Ag 328.068†	15510.8	15460.8	152.29	µg/L	152.29	ppb	07:39:14
1	As 188.979†	293.0	290.0	512.69	µg/L	512.69	ppb	07:39:35
1	B 249.677†	17326.2	17144.1	713.86	µg/L	713.86	ppb	07:39:14
1	Ba 233.527†	36371.8	36357.0	933.74	µg/L	933.74	ppb	07:39:14
1	Be 313.107†	616807.2	611716.9	381.70	µg/L	381.70	ppb	07:39:08
1	Cd 226.502†	10886.4	10957.5	285.07	µg/L	285.07	ppb	07:39:35
1	Co 228.616†	9178.0	9221.3	440.05	µg/L	440.05	ppb	07:39:35
1	Cr 267.716†	53193.6	53157.6	1116.2	µg/L	1116.2	ppb	07:39:14
1	Cu 324.752†	131572.1	126966.5	900.76	µg/L	900.76	ppb	07:39:14
1	Mn 257.610†	820366.0	818473.3	2625.1	µg/L	2625.1	ppb	07:39:08
1	Mo 202.031†	2144.3	2142.6	253.93	µg/L	253.93	ppb	07:39:35
1	Ni 231.604†	12115.8	11809.3	646.11	µg/L	646.11	ppb	07:39:35
1	P 214.914†	2141.5	1935.1	3716.8	µg/L	3716.8	ppb	07:39:35
1	Pb 220.353†	1666.5	1606.0	417.27	µg/L	417.27	ppb	07:39:35
1	S 181.975 Axial†	415.2	392.0	1902.7	µg/L	1902.7	ppb	07:39:35
1	Sb 206.836†	954.7	931.2	911.77	µg/L	911.77	ppb	07:39:35
1	Se 196.026†	1064.3	1051.7	1408.8	µg/L	1408.8	ppb	07:39:35
1	SiO2†	71309.4	68376.0	12556	µg/L	12556	ppb	07:39:14
1	Si 251.611†	79466.1	78938.0	5706.5	µg/L	5706.5	ppb	07:39:14
1	Sn 189.927†	927.2	902.4	488.09	µg/L	488.09	ppb	07:39:35
1	Ti 334.940†	1289787.0	1285720.2	2925.9	µg/L	2925.9	ppb	07:39:08
1	Tl 190.801†	375.7	395.1	629.16	µg/L	629.16	ppb	07:39:35
1	U 409.014†	208.0	-523.0	-63.644	µg/L	-63.644	ppb	07:39:14
1	V 292.402†	51672.1	51666.9	590.48	µg/L	590.48	ppb	07:39:14
1	Zn 213.857†	108441.7	107638.2	2837.8	µg/L	2837.8	ppb	07:39:14
2	Sc RADIAL	117866.3	117866.3	101	%			07:38:09
2	Al 396.153Radial†	90269.7	89198.6	44309	µg/L	44309	ppb	07:38:09
2	Ca 317.933Radial†	135491.3	133655.8	51714	µg/L	51714	ppb	07:38:09
2	Fe 238.204 Radial†	14906.6	14734.9	93721	µg/L	93721	ppb	07:38:30
2	K 766.490 Radial†	40221.2	39116.4	20019	µg/L	20019	ppb	07:38:09
2	Mg 279.077 IEC†	3121.9	3073.7	18845	µg/L	18845	ppb	07:38:30
2	Na 589.592 Radial†	18879.7	19315.5	4837.1	µg/L	4837.1	ppb	07:38:09
2	Sr 421.552†	216285.3	214076.4	1075.9	µg/L	1075.9	ppb	07:38:09
2	Sc 361.383	2029309.7	2029309.7	100.35	%			07:39:42
2	Y 371.029	1261658.9	1261658.9	100.23	%			07:39:42
2	Ag 328.068†	15444.8	15380.4	151.58	µg/L	151.58	ppb	07:39:47
2	As 188.979†	292.7	289.5	511.60	µg/L	511.60	ppb	07:40:08
2	B 249.677†	17415.8	17217.1	716.93	µg/L	716.93	ppb	07:39:47
2	Ba 233.527†	36346.4	36297.5	932.21	µg/L	932.21	ppb	07:39:47
2	Be 313.107†	617811.8	612138.7	381.96	µg/L	381.96	ppb	07:39:42
2	Cd 226.502†	10941.9	11002.6	286.25	µg/L	286.25	ppb	07:40:08
2	Co 228.616†	9215.2	9249.7	441.43	µg/L	441.43	ppb	07:40:08
2	Cr 267.716†	53044.2	52958.8	1112.0	µg/L	1112.0	ppb	07:39:47
2	Cu 324.752†	131528.3	126799.2	899.66	µg/L	899.66	ppb	07:39:47
2	Mn 257.610†	821494.0	818826.8	2626.3	µg/L	2626.3	ppb	07:39:42
2	Mo 202.031†	2152.5	2148.7	254.65	µg/L	254.65	ppb	07:40:08
2	Ni 231.604†	12175.0	11856.9	648.71	µg/L	648.71	ppb	07:40:08
2	P 214.914†	2150.3	1941.9	3730.4	µg/L	3730.4	ppb	07:40:08
2	Pb 220.353†	1684.3	1622.1	421.49	µg/L	421.49	ppb	07:40:08

2	S 181.975 Axial†	421.1	397.4	1929.3 µg/L	1929.3 ppb	07:40:08
2	Sb 206.836†	958.8	934.3	914.78 µg/L	914.78 ppb	07:40:08
2	Se 196.026†	1061.1	1047.5	1403.8 µg/L	1403.8 ppb	07:40:08
2	SiO2†	71390.6	68390.0	12559 µg/L	12559 ppb	07:39:47
2	Si 251.611†	79640.9	79037.6	5713.8 µg/L	5713.8 ppb	07:39:47
2	Sn 189.927†	929.9	904.3	489.24 µg/L	489.24 ppb	07:40:08
2	Ti 334.940†	1289793.5	1284515.3	2923.1 µg/L	2923.1 ppb	07:39:42
2	Tl 190.801†	376.6	395.6	629.85 µg/L	629.85 ppb	07:40:08
2	U 409.014†	151.5	-579.5	-68.814 µg/L	-68.814 ppb	07:39:47
2	V 292.402†	51674.8	51621.1	589.99 µg/L	589.99 ppb	07:39:47
2	Zn 213.857†	108344.1	107439.1	2832.5 µg/L	2832.5 ppb	07:39:47
3	Sc RADIAL	117862.7	117862.7	101 %		07:38:35
3	Al 396.153Radial†	89907.8	88843.1	44133 µg/L	44133 ppb	07:38:35
3	Ca 317.933Radial†	134819.4	132995.0	51458 µg/L	51458 ppb	07:38:35
3	Fe 238.204 Radial†	14845.7	14675.1	93341 µg/L	93341 ppb	07:38:56
3	K 766.490 Radial†	40095.6	38993.3	19956 µg/L	19956 ppb	07:38:35
3	Mg 279.077 IEC†	3114.2	3066.2	18799 µg/L	18799 ppb	07:38:56
3	Na 589.592 Radial†	18814.2	19251.3	4821.0 µg/L	4821.0 ppb	07:38:35
3	Sr 421.552†	215434.8	213241.4	1071.7 µg/L	1071.7 ppb	07:38:35
3	Sc 361.383	2026773.6	2026773.6	100.22 %		07:40:15
3	Y 371.029	1260125.6	1260125.6	100.11 %		07:40:15
3	Ag 328.068†	15266.0	15221.4	150.07 µg/L	150.07 ppb	07:40:21
3	As 188.979†	289.1	286.2	505.79 µg/L	505.79 ppb	07:40:41
3	B 249.677†	17225.9	17049.4	709.78 µg/L	709.78 ppb	07:40:21
3	Ba 233.527†	35980.0	35977.3	923.99 µg/L	923.99 ppb	07:40:21
3	Be 313.107†	617481.6	612579.5	382.24 µg/L	382.24 ppb	07:40:15
3	Cd 226.502†	10895.6	10970.1	285.42 µg/L	285.42 ppb	07:40:41
3	Co 228.616†	9171.9	9218.0	439.89 µg/L	439.89 ppb	07:40:41
3	Cr 267.716†	52543.1	52524.9	1102.9 µg/L	1102.9 ppb	07:40:21
3	Cu 324.752†	130199.8	125637.7	891.53 µg/L	891.53 ppb	07:40:21
3	Mn 257.610†	821015.2	819373.4	2628.0 µg/L	2628.0 ppb	07:40:15
3	Mo 202.031†	2128.6	2127.4	252.16 µg/L	252.16 ppb	07:40:41
3	Ni 231.604†	12121.8	11819.0	646.64 µg/L	646.64 ppb	07:40:41
3	P 214.914†	2132.2	1926.5	3700.9 µg/L	3700.9 ppb	07:40:41
3	Pb 220.353†	1666.2	1606.2	417.36 µg/L	417.36 ppb	07:40:41
3	S 181.975 Axial†	414.7	391.6	1901.0 µg/L	1901.0 ppb	07:40:41
3	Sb 206.836†	958.3	935.0	915.56 µg/L	915.56 ppb	07:40:41
3	Se 196.026†	1068.8	1056.5	1414.9 µg/L	1414.9 ppb	07:40:41
3	SiO2†	71131.5	68220.4	12527 µg/L	12527 ppb	07:40:21
3	Si 251.611†	79284.3	78781.1	5694.5 µg/L	5694.5 ppb	07:40:21
3	Sn 189.927†	942.6	918.1	496.20 µg/L	496.20 ppb	07:40:41
3	Ti 334.940†	1289817.6	1286147.6	2926.8 µg/L	2926.8 ppb	07:40:15
3	Tl 190.801†	370.3	389.8	621.02 µg/L	621.02 ppb	07:40:41
3	U 409.014†	281.6	-449.5	-56.963 µg/L	-56.963 ppb	07:40:21
3	V 292.402†	51137.0	51148.9	584.65 µg/L	584.65 ppb	07:40:21
3	Zn 213.857†	107271.2	106503.8	2807.8 µg/L	2807.8 ppb	07:40:21

Mean Data: 1201990788|930799|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027827.4	100.28	%	0.065				0.07%
Sc RADIAL	118146.3	101	%	0.4				0.41%
Y 371.029	1260566.1	100.14	%	0.076				0.08%
Ag 328.068†	15354.2	151.31	µg/L	1.138	151.31	ppb	1.138	0.75%
Al 396.153Radial†	88706.7	44065	µg/L	284.4	44065	ppb	284.4	0.65%
As 188.979†	288.6	510.03	µg/L	3.712	510.03	ppb	3.712	0.73%
B 249.677†	17136.9	713.52	µg/L	3.589	713.52	ppb	3.589	0.50%
Ba 233.527†	36210.6	929.98	µg/L	5.245	929.98	ppb	5.245	0.56%
Be 313.107†	612145.0	381.97	µg/L	0.270	381.97	ppb	0.270	0.07%
Ca 317.933Radial†	132867.4	51409	µg/L	332.5	51409	ppb	332.5	0.65%
Cd 226.502†	10976.7	285.58	µg/L	0.603	285.58	ppb	0.603	0.21%
Co 228.616†	9229.6	440.46	µg/L	0.849	440.46	ppb	0.849	0.19%
Cr 267.716†	52880.4	1110.4	µg/L	6.79	1110.4	ppb	6.79	0.61%
Cu 324.752†	126467.8	897.32	µg/L	5.043	897.32	ppb	5.043	0.56%
Fe 238.204 Radial†	14698.1	93487	µg/L	204.9	93487	ppb	204.9	0.22%
K 766.490 Radial†	38859.3	19888	µg/L	176.2	19888	ppb	176.2	0.89%
Mg 279.077 IEC†	3067.0	18804	µg/L	38.8	18804	ppb	38.8	0.21%
Mn 257.610†	818891.2	2626.5	µg/L	1.44	2626.5	ppb	1.44	0.05%
Mo 202.031†	2139.6	253.58	µg/L	1.282	253.58	ppb	1.282	0.51%
Na 589.592 Radial†	19217.9	4812.6	µg/L	29.54	4812.6	ppb	29.54	0.61%

Ni 231.604†	11828.4	647.15	µg/L	1.375	647.15	ppb	1.375	0.21%
P 214.914†	1934.5	3716.0	µg/L	14.78	3716.0	ppb	14.78	0.40%
Pb 220.353†	1611.5	418.71	µg/L	2.408	418.71	ppb	2.408	0.58%
S 181.975 Axial†	393.7	1911.0	µg/L	15.86	1911.0	ppb	15.86	0.83%
Sb 206.836†	933.5	914.04	µg/L	2.000	914.04	ppb	2.000	0.22%
Se 196.026†	1051.9	1409.2	µg/L	5.59	1409.2	ppb	5.59	0.40%
SiO2†	68328.8	12547	µg/L	17.3	12547	ppb	17.3	0.14%
Si 251.611†	78918.9	5705.0	µg/L	9.76	5705.0	ppb	9.76	0.17%
Sn 189.927†	908.3	491.18	µg/L	4.387	491.18	ppb	4.387	0.89%
Sr 421.552†	212900.3	1070.0	µg/L	6.93	1070.0	ppb	6.93	0.65%
Ti 334.940†	1285461.1	2925.3	µg/L	1.94	2925.3	ppb	1.94	0.07%
Tl 190.801†	393.5	626.68	µg/L	4.909	626.68	ppb	4.909	0.78%
U 409.014†	-517.3	-63.140	µg/L	5.9413	-63.140	ppb	5.9413	9.41%
V 292.402†	51479.0	588.37	µg/L	3.235	588.37	ppb	3.235	0.55%
Zn 213.857†	107193.7	2826.0	µg/L	16.04	2826.0	ppb	16.04	0.57%

Sequence No.: 4
Sample ID: 1201977916|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 304
Date Collected: 12/10/2009 07:43:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977916|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	114763.3	114763.3	98.4	%			07:44:23
1	Al 396.153Radial†	56118.7	56907.6	28274	µg/L	28274	ppb	07:44:23
1	Ca 317.933Radial†	987280.2	1002915.0	388050	µg/L	388050	ppb	07:44:23
1	Fe 238.204 Radial†	4408.3	4464.8	28394	µg/L	28394	ppb	07:44:43
1	K 766.490 Radial†	3579.7	2955.4	1512.5	µg/L	1512.5	ppb	07:44:23
1	Mg 279.077 IEC†	2033.4	2051.0	12622	µg/L	12622	ppb	07:44:43
1	Na 589.592 Radial†	1409.4	2066.4	517.49	µg/L	517.49	ppb	07:44:43
1	Sr 421.552†	108946.7	110779.9	556.78	µg/L	556.78	ppb	07:44:23
1	Sc 361.383	1934012.5	1934012.5	95.638	%			07:45:48
1	Y 371.029	1196115.8	1196115.8	95.024	%			07:45:48
1	Ag 328.068†	-553.6	-589.3	-2.7339	µg/L	-2.7339	ppb	07:45:54
1	As 188.979†	55.9	56.2	42.849	µg/L	42.849	ppb	07:46:15
1	B 249.677†	1086.9	998.6	34.364	µg/L	34.364	ppb	07:46:15
1	Ba 233.527†	13241.1	13923.1	357.23	µg/L	357.23	ppb	07:45:54
1	Be 313.107†	5699.0	2443.1	1.0071	µg/L	1.0071	ppb	07:45:54
1	Cd 226.502†	51.6	152.9	1.8612	µg/L	1.8612	ppb	07:46:15
1	Co 228.616†	167.1	241.4	8.7712	µg/L	8.7712	ppb	07:46:15
1	Cr 267.716†	1839.8	2023.5	42.574	µg/L	42.574	ppb	07:46:15
1	Cu 324.752†	17227.1	13743.1	101.43	µg/L	101.43	ppb	07:45:54
1	Mn 257.610†	193596.3	202627.6	650.56	µg/L	650.56	ppb	07:45:54
1	Mo 202.031†	177.9	189.7	23.271	µg/L	23.271	ppb	07:46:15
1	Ni 231.604†	430.4	174.5	9.5461	µg/L	9.5461	ppb	07:46:15
1	P 214.914†	561.7	386.4	743.51	µg/L	743.51	ppb	07:46:15
1	Pb 220.353†	503.8	470.5	123.65	µg/L	123.65	ppb	07:46:15
1	S 181.975 Axial†	1371.9	1412.3	6908.9	µg/L	6908.9	ppb	07:46:15
1	Sb 206.836†	74.0	56.3	23.688	µg/L	23.688	ppb	07:46:15
1	Se 196.026†	-39.6	-51.3	3.2257	µg/L	3.2257	ppb	07:46:15
1	SiO2†	478672.1	497753.2	91403	µg/L	91403	ppb	07:45:48
1	Si 251.611†	546284.7	570875.7	42199	µg/L	42199	ppb	07:45:48
1	Sn 189.927†	-179.8	-210.4	-16.427	µg/L	-16.427	ppb	07:46:15
1	Ti 334.940†	592343.2	618585.8	1387.3	µg/L	1387.3	ppb	07:45:48
1	Tl 190.801†	20.7	42.0	18.515	µg/L	18.515	ppb	07:46:15
1	U 409.014†	438.3	-272.2	-20.787	µg/L	-20.787	ppb	07:45:54
1	V 292.402†	4814.7	5161.1	60.487	µg/L	60.487	ppb	07:46:15
1	Zn 213.857†	21909.8	22382.5	589.68	µg/L	589.68	ppb	07:45:54
2	Sc RADIAL	113796.8	113796.8	97.6	%			07:44:49
2	Al 396.153Radial†	56284.6	57561.9	28599	µg/L	28599	ppb	07:44:49
2	Ca 317.933Radial†	982816.3	1006860.8	389570	µg/L	389570	ppb	07:44:49
2	Fe 238.204 Radial†	4395.2	4489.4	28551	µg/L	28551	ppb	07:45:10
2	K 766.490 Radial†	3630.6	3038.4	1555.0	µg/L	1555.0	ppb	07:44:49
2	Mg 279.077 IEC†	2027.4	2062.4	12692	µg/L	12692	ppb	07:45:10
2	Na 589.592 Radial†	1434.9	2104.7	527.07	µg/L	527.07	ppb	07:45:10
2	Sr 421.552†	108935.7	111708.9	561.45	µg/L	561.45	ppb	07:44:49
2	Sc 361.383	1940438.3	1940438.3	95.956	%			07:46:21
2	Y 371.029	1200436.9	1200436.9	95.368	%			07:46:21
2	Ag 328.068†	-471.6	-501.8	-1.9283	µg/L	-1.9283	ppb	07:46:27
2	As 188.979†	52.5	52.5	35.809	µg/L	35.809	ppb	07:46:48
2	B 249.677†	1080.0	987.7	33.840	µg/L	33.840	ppb	07:46:48
2	Ba 233.527†	13386.5	14028.7	359.94	µg/L	359.94	ppb	07:46:27
2	Be 313.107†	5906.9	2640.0	1.1306	µg/L	1.1306	ppb	07:46:27
2	Cd 226.502†	54.4	155.7	1.9220	µg/L	1.9220	ppb	07:46:48
2	Co 228.616†	170.2	244.1	8.9026	µg/L	8.9026	ppb	07:46:48
2	Cr 267.716†	1841.3	2018.7	42.470	µg/L	42.470	ppb	07:46:48
2	Cu 324.752†	17506.9	13975.0	103.07	µg/L	103.07	ppb	07:46:27
2	Mn 257.610†	196439.4	204920.3	657.90	µg/L	657.90	ppb	07:46:27
2	Mo 202.031†	176.5	187.6	23.031	µg/L	23.031	ppb	07:46:48
2	Ni 231.604†	446.9	190.2	10.405	µg/L	10.405	ppb	07:46:48
2	P 214.914†	562.2	385.0	740.34	µg/L	740.34	ppb	07:46:48
2	Pb 220.353†	508.6	473.8	124.54	µg/L	124.54	ppb	07:46:48

2	S 181.975 Axial†	1360.7	1395.9	6828.6 µg/L	6828.6 ppb	07:46:48
2	Sb 206.836†	77.3	59.5	26.660 µg/L	26.660 ppb	07:46:48
2	Se 196.026†	-51.3	-63.3	-11.783 µg/L	-11.783 ppb	07:46:48
2	SiO2†	480016.9	497497.2	91356 µg/L	91356 ppb	07:46:21
2	Si 251.611†	548019.6	570792.3	42193 µg/L	42193 ppb	07:46:21
2	Sn 189.927†	-182.5	-212.6	-17.188 µg/L	-17.188 ppb	07:46:48
2	Ti 334.940†	593942.6	618201.6	1386.3 µg/L	1386.3 ppb	07:46:21
2	Tl 190.801†	27.5	49.1	29.202 µg/L	29.202 ppb	07:46:48
2	U 409.014†	400.4	-313.2	-24.501 µg/L	-24.501 ppb	07:46:27
2	V 292.402†	4783.5	5111.8	59.938 µg/L	59.938 ppb	07:46:48
2	Zn 213.857†	22175.2	22583.2	594.98 µg/L	594.98 ppb	07:46:27
3	Sc RADIAL	115227.5	115227.5	98.8 %		07:45:16
3	Al 396.153Radial†	56978.1	57547.7	28592 µg/L	28592 ppb	07:45:16
3	Ca 317.933Radial†	997592.8	1009310.9	390520 µg/L	390520 ppb	07:45:16
3	Fe 238.204 Radial†	4421.6	4460.2	28365 µg/L	28365 ppb	07:45:36
3	K 766.490 Radial†	3699.7	3062.2	1567.2 µg/L	1567.2 ppb	07:45:16
3	Mg 279.077 IEC†	2041.9	2051.2	12623 µg/L	12623 ppb	07:45:36
3	Na 589.592 Radial†	1410.6	2061.9	516.34 µg/L	516.34 ppb	07:45:36
3	Sr 421.552†	110316.3	111720.1	561.50 µg/L	561.50 ppb	07:45:16
3	Sc 361.383	1928611.0	1928611.0	95.371 %		07:46:55
3	Y 371.029	1192519.3	1192519.3	94.739 %		07:46:55
3	Ag 328.068†	-533.8	-570.1	-2.5619 µg/L	-2.5619 ppb	07:47:00
3	As 188.979†	57.4	58.0	45.676 µg/L	45.676 ppb	07:47:21
3	B 249.677†	1067.4	981.3	33.623 µg/L	33.623 ppb	07:47:21
3	Ba 233.527†	13368.2	14095.1	361.65 µg/L	361.65 ppb	07:47:00
3	Be 313.107†	5839.5	2607.1	1.1070 µg/L	1.1070 ppb	07:47:00
3	Cd 226.502†	62.6	164.6	2.1685 µg/L	2.1685 ppb	07:47:21
3	Co 228.616†	164.8	239.5	8.6653 µg/L	8.6653 ppb	07:47:21
3	Cr 267.716†	1821.2	2009.4	42.276 µg/L	42.276 ppb	07:47:21
3	Cu 324.752†	17304.2	13874.3	102.33 µg/L	102.33 ppb	07:47:00
3	Mn 257.610†	195399.9	205085.8	658.41 µg/L	658.41 ppb	07:47:00
3	Mo 202.031†	176.6	188.8	23.171 µg/L	23.171 ppb	07:47:21
3	Ni 231.604†	454.8	201.3	11.013 µg/L	11.013 ppb	07:47:21
3	P 214.914†	565.4	392.0	754.64 µg/L	754.64 ppb	07:47:21
3	Pb 220.353†	504.9	473.2	124.38 µg/L	124.38 ppb	07:47:21
3	S 181.975 Axial†	1378.0	1422.8	6960.2 µg/L	6960.2 ppb	07:47:21
3	Sb 206.836†	84.9	67.9	34.854 µg/L	34.854 ppb	07:47:21
3	Se 196.026†	-48.7	-61.0	-8.8078 µg/L	-8.8078 ppb	07:47:21
3	SiO2†	480953.7	501547.3	92100 µg/L	92100 ppb	07:46:55
3	Si 251.611†	549033.9	575358.2	42530 µg/L	42530 ppb	07:46:55
3	Sn 189.927†	-184.9	-216.3	-18.906 µg/L	-18.906 ppb	07:47:21
3	Ti 334.940†	593691.1	621733.8	1394.3 µg/L	1394.3 ppb	07:46:55
3	Tl 190.801†	29.2	50.9	31.966 µg/L	31.966 ppb	07:47:21
3	U 409.014†	304.3	-411.3	-33.340 µg/L	-33.340 ppb	07:47:00
3	V 292.402†	4795.1	5154.6	60.391 µg/L	60.391 ppb	07:47:21
3	Zn 213.857†	22048.6	22592.2	595.24 µg/L	595.24 ppb	07:47:00

Mean Data: 1201977916|930799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1934353.9	95.655	%	0.2928				0.31%
Sc RADIAL	114595.9	98.3	%	0.63				0.64%
Y 371.029	1196357.3	95.043	%	0.3149				0.33%
Ag 328.068†	-553.7	-2.4080	µg/L	0.42425	-2.4080	ppb	0.42425	17.62%
Al 396.153Radial†	57339.1	28489	µg/L	185.7	28489	ppb	185.7	0.65%
As 188.979†	55.6	41.445	µg/L	5.0811	41.445	ppb	5.0811	12.26%
B 249.677†	989.2	33.942	µg/L	0.3810	33.942	ppb	0.3810	1.12%
Ba 233.527†	14015.6	359.61	µg/L	2.225	359.61	ppb	2.225	0.62%
Be 313.107†	2563.4	1.0816	µg/L	0.06559	1.0816	ppb	0.06559	6.06%
Ca 317.933Radial†	1006362.2	389380	µg/L	1248.6	389380	ppb	1248.6	0.32%
Cd 226.502†	157.7	1.9839	µg/L	0.16271	1.9839	ppb	0.16271	8.20%
Co 228.616†	241.6	8.7797	µg/L	0.11886	8.7797	ppb	0.11886	1.35%
Cr 267.716†	2017.2	42.440	µg/L	0.1509	42.440	ppb	0.1509	0.36%
Cu 324.752†	13864.1	102.28	µg/L	0.823	102.28	ppb	0.823	0.80%
Fe 238.204 Radial†	4471.5	28437	µg/L	99.8	28437	ppb	99.8	0.35%
K 766.490 Radial†	3018.7	1544.9	µg/L	28.70	1544.9	ppb	28.70	1.86%
Mg 279.077 IEC†	2054.9	12645	µg/L	40.0	12645	ppb	40.0	0.32%
Mn 257.610†	204211.2	655.62	µg/L	4.391	655.62	ppb	4.391	0.67%
Mo 202.031†	188.7	23.158	µg/L	0.1204	23.158	ppb	0.1204	0.52%
Na 589.592 Radial†	2077.7	520.30	µg/L	5.889	520.30	ppb	5.889	1.13%

Ni 231.604†	188.7	10.321 µg/L	0.7371	10.321 ppb	0.7371	7.14%
P 214.914†	387.8	746.16 µg/L	7.512	746.16 ppb	7.512	1.01%
Pb 220.353†	472.5	124.19 µg/L	0.474	124.19 ppb	0.474	0.38%
S 181.975 Axial†	1410.3	6899.2 µg/L	66.35	6899.2 ppb	66.35	0.96%
Sb 206.836†	61.2	28.400 µg/L	5.7832	28.400 ppb	5.7832	20.36%
Se 196.026†	-58.5	-5.7885 µg/L	7.94704	-5.7885 ppb	7.94704	137.29%
SiO2†	498932.6	91620 µg/L	416.5	91620 ppb	416.5	0.45%
Si 251.611†	572342.1	42307 µg/L	193.2	42307 ppb	193.2	0.46%
Sn 189.927†	-213.1	-17.507 µg/L	1.2701	-17.507 ppb	1.2701	7.25%
Sr 421.552†	111403.0	559.91 µg/L	2.712	559.91 ppb	2.712	0.48%
Ti 334.940†	619507.1	1389.3 µg/L	4.36	1389.3 ppb	4.36	0.31%
Tl 190.801†	47.3	26.561 µg/L	7.1034	26.561 ppb	7.1034	26.74%
U 409.014†	-332.2	-26.210 µg/L	6.4483	-26.210 ppb	6.4483	24.60%
V 292.402†	5142.5	60.272 µg/L	0.2931	60.272 ppb	0.2931	0.49%
Zn 213.857†	22519.3	593.30 µg/L	3.134	593.30 ppb	3.134	0.53%

Sequence No.: 5
Sample ID: 1201977918|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 305
Date Collected: 12/10/2009 07:47:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977918|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	112593.9	112593.9	96.5	%			07:48:04
1	Al 396.153Radial†	171952.5	177991.1	88415	µg/L	88415	ppb	07:48:04
1	Ca 317.933Radial†	2742557.8	2840424.6	1099000	µg/L	1099000	ppb	07:48:04
1	Fe 238.204 Radial†	13710.4	14186.6	90236	µg/L	90236	ppb	07:48:10
1	K 766.490 Radial†	16752.3	16670.1	8531.6	µg/L	8531.6	ppb	07:48:10
1	Mg 279.077 IEC†	6574.0	6794.2	41828	µg/L	41828	ppb	07:48:10
1	Na 589.592 Radial†	24582.7	26097.8	6535.5	µg/L	6535.5	ppb	07:48:04
1	Sr 421.552†	420077.3	435193.1	2187.3	µg/L	2187.3	ppb	07:48:04
1	Sc 361.383	1875733.3	1875733.3	92.756	%			07:48:48
1	Y 371.029	1160855.3	1160855.3	92.223	%			07:48:48
1	Ag 328.068†	51832.4	55869.9	521.13	µg/L	521.13	ppb	07:48:54
1	As 188.979†	371.6	398.5	554.75	µg/L	554.75	ppb	07:49:14
1	B 249.677†	13859.3	14803.9	613.41	µg/L	613.41	ppb	07:48:54
1	Ba 233.527†	48690.3	52570.9	1349.8	µg/L	1349.8	ppb	07:48:54
1	Be 313.107†	751257.8	806413.4	502.93	µg/L	502.93	ppb	07:48:48
1	Cd 226.502†	16277.3	17647.4	463.58	µg/L	463.58	ppb	07:48:54
1	Co 228.616†	9134.2	9914.3	470.85	µg/L	470.85	ppb	07:49:14
1	Cr 267.716†	25790.7	27904.7	586.82	µg/L	586.82	ppb	07:48:54
1	Cu 324.752†	114644.7	119328.4	847.10	µg/L	847.10	ppb	07:48:54
1	Mn 257.610†	577011.3	622275.8	1998.3	µg/L	1998.3	ppb	07:48:48
1	Mo 202.031†	4354.7	4698.5	552.35	µg/L	552.35	ppb	07:49:14
1	Ni 231.604†	8469.3	8855.2	484.48	µg/L	484.48	ppb	07:49:14
1	P 214.914†	1496.6	1412.6	2685.7	µg/L	2685.7	ppb	07:49:14
1	Pb 220.353†	3055.5	3237.9	843.43	µg/L	843.43	ppb	07:49:14
1	S 181.975 Axial†	4847.9	5204.4	25462	µg/L	25462	ppb	07:49:14
1	Sb 206.836†	599.7	625.4	522.64	µg/L	522.64	ppb	07:49:14
1	Se 196.026†	301.2	314.9	601.60	µg/L	601.60	ppb	07:49:14
1	SiO2†	1260503.8	1356194.8	249040	µg/L	249040	ppb	07:48:48
1	Si 251.611†	1436831.9	1548719.9	114420	µg/L	114420	ppb	07:48:48
1	Sn 189.927†	662.0	691.3	614.92	µg/L	614.92	ppb	07:49:14
1	Ti 334.940†	1853970.9	1997987.2	4489.5	µg/L	4489.5	ppb	07:48:48
1	Tl 190.801†	300.9	344.8	401.79	µg/L	401.79	ppb	07:49:14
1	U 409.014†	5662.3	5374.0	496.45	µg/L	496.45	ppb	07:48:54
1	V 292.402†	56266.5	60787.5	695.77	µg/L	695.77	ppb	07:48:54
1	Zn 213.857†	74424.8	79710.6	2098.2	µg/L	2098.2	ppb	07:48:54
2	Sc RADIAL	112939.1	112939.1	96.8	%			07:48:17
2	Al 396.153Radial†	174720.5	180304.9	89565	µg/L	89565	ppb	07:48:17
2	Ca 317.933Radial†	2782495.0	2872981.1	1111600	µg/L	1111600	ppb	07:48:17
2	Fe 238.204 Radial†	13753.1	14187.3	90240	µg/L	90240	ppb	07:48:22
2	K 766.490 Radial†	16834.4	16701.9	8547.8	µg/L	8547.8	ppb	07:48:22
2	Mg 279.077 IEC†	6617.6	6818.3	41977	µg/L	41977	ppb	07:48:22
2	Na 589.592 Radial†	25012.9	26464.2	6627.3	µg/L	6627.3	ppb	07:48:17
2	Sr 421.552†	426609.6	440608.5	2214.5	µg/L	2214.5	ppb	07:48:17
2	Sc 361.383	1874888.9	1874888.9	92.714	%			07:49:22
2	Y 371.029	1162995.2	1162995.2	92.393	%			07:49:22
2	Ag 328.068†	51924.7	55994.7	522.27	µg/L	522.27	ppb	07:49:28
2	As 188.979†	354.6	380.3	519.81	µg/L	519.81	ppb	07:49:48
2	B 249.677†	13887.1	14840.6	615.00	µg/L	615.00	ppb	07:49:28
2	Ba 233.527†	48702.2	52607.4	1350.8	µg/L	1350.8	ppb	07:49:28
2	Be 313.107†	750406.6	805860.0	502.58	µg/L	502.58	ppb	07:49:22
2	Cd 226.502†	16229.7	17604.0	462.42	µg/L	462.42	ppb	07:49:28
2	Co 228.616†	9032.0	9808.5	465.71	µg/L	465.71	ppb	07:49:48
2	Cr 267.716†	25777.8	27903.3	586.79	µg/L	586.79	ppb	07:49:28
2	Cu 324.752†	114957.4	119721.4	849.82	µg/L	849.82	ppb	07:49:28
2	Mn 257.610†	575883.2	621339.2	1995.3	µg/L	1995.3	ppb	07:49:22
2	Mo 202.031†	4290.3	4631.1	544.47	µg/L	544.47	ppb	07:49:48
2	Ni 231.604†	8333.3	8712.6	476.68	µg/L	476.68	ppb	07:49:48
2	P 214.914†	1481.5	1397.0	2654.3	µg/L	2654.3	ppb	07:49:48
2	Pb 220.353†	3018.3	3199.2	833.50	µg/L	833.50	ppb	07:49:48

2	S 181.975 Axial†	4802.9	5158.2	25236 µg/L	25236 ppb		07:49:48
2	Sb 206.836†	594.5	620.1	516.29 µg/L	516.29 ppb		07:49:48
2	Se 196.026†	292.0	305.1	590.78 µg/L	590.78 ppb		07:49:48
2	SiO2†	1269239.3	1366228.8	250880 µg/L	250880 ppb		07:49:22
2	Si 251.611†	1446509.3	1559855.4	115240 µg/L	115240 ppb		07:49:22
2	Sn 189.927†	648.4	676.9	610.36 µg/L	610.36 ppb		07:49:48
2	Ti 334.940†	1853130.7	1997981.2	4488.7 µg/L	4488.7 ppb		07:49:22
2	Tl 190.801†	290.2	333.4	382.37 µg/L	382.37 ppb		07:49:48
2	U 409.014†	5766.3	5489.0	507.17 µg/L	507.17 ppb		07:49:28
2	V 292.402†	56279.2	60828.6	696.19 µg/L	696.19 ppb		07:49:28
2	Zn 213.857†	74406.3	79726.7	2098.7 µg/L	2098.7 ppb		07:49:28
3	Sc RADIAL	112538.0	112538.0	96.5 %			07:48:29
3	Al 396.153Radial†	174992.4	181229.9	90025 µg/L	90025 ppb		07:48:29
3	Ca 317.933Radial†	2783631.6	2884400.2	1116000 µg/L	1116000 ppb		07:48:29
3	Fe 238.204 Radial†	13677.1	14159.1	90061 µg/L	90061 ppb		07:48:34
3	K 766.490 Radial†	16853.2	16783.3	8589.5 µg/L	8589.5 ppb		07:48:34
3	Mg 279.077 IEC†	6623.0	6848.3	42163 µg/L	42163 ppb		07:48:34
3	Na 589.592 Radial†	24995.8	26538.4	6645.9 µg/L	6645.9 ppb		07:48:29
3	Sr 421.552†	426913.2	442493.3	2224.0 µg/L	2224.0 ppb		07:48:29
3	Sc 361.383	1868511.2	1868511.2	92.399 %			07:49:56
3	Y 371.029	1157092.7	1157092.7	91.924 %			07:49:56
3	Ag 328.068†	51711.8	55955.4	521.89 µg/L	521.89 ppb		07:50:02
3	As 188.979†	356.6	383.7	525.49 µg/L	525.49 ppb		07:50:22
3	B 249.677†	13833.8	14834.0	614.77 µg/L	614.77 ppb		07:50:02
3	Ba 233.527†	48436.9	52499.6	1348.0 µg/L	1348.0 ppb		07:50:02
3	Be 313.107†	751046.2	809314.9	504.74 µg/L	504.74 ppb		07:49:56
3	Cd 226.502†	16114.0	17538.6	460.69 µg/L	460.69 ppb		07:50:02
3	Co 228.616†	9038.6	9848.8	467.61 µg/L	467.61 ppb		07:50:22
3	Cr 267.716†	25733.8	27950.6	587.78 µg/L	587.78 ppb		07:50:02
3	Cu 324.752†	114450.9	119596.4	848.92 µg/L	848.92 ppb		07:50:02
3	Mn 257.610†	576719.7	624364.8	2004.9 µg/L	2004.9 ppb		07:49:56
3	Mo 202.031†	4299.3	4656.7	547.46 µg/L	547.46 ppb		07:50:22
3	Ni 231.604†	8353.6	8765.2	479.55 µg/L	479.55 ppb		07:50:22
3	P 214.914†	1481.9	1402.9	2666.5 µg/L	2666.5 ppb		07:50:22
3	Pb 220.353†	3007.4	3198.5	833.37 µg/L	833.37 ppb		07:50:22
3	S 181.975 Axial†	4799.3	5172.0	25304 µg/L	25304 ppb		07:50:22
3	Sb 206.836†	593.9	621.6	517.38 µg/L	517.38 ppb		07:50:22
3	Se 196.026†	293.3	307.5	594.35 µg/L	594.35 ppb		07:50:22
3	SiO2†	1309895.2	1414902.0	259820 µg/L	259820 ppb		07:49:56
3	Si 251.611†	1491879.8	1614283.6	119270 µg/L	119270 ppb		07:49:56
3	Sn 189.927†	640.4	670.6	608.13 µg/L	608.13 ppb		07:50:22
3	Ti 334.940†	1857813.2	2009871.2	4515.6 µg/L	4515.6 ppb		07:49:56
3	Tl 190.801†	293.3	337.8	388.73 µg/L	388.73 ppb		07:50:22
3	U 409.014†	5743.4	5485.4	506.99 µg/L	506.99 ppb		07:50:02
3	V 292.402†	56014.0	60748.7	695.30 µg/L	695.30 ppb		07:50:02
3	Zn 213.857†	74176.1	79751.5	2099.4 µg/L	2099.4 ppb		07:50:02

Mean Data: 1201977918|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1873044.5	92.623	%	0.1953				0.21%
Sc RADIAL	112690.3	96.6	%	0.19				0.19%
Y 371.029	1160314.4	92.180	%	0.2374				0.26%
Ag 328.068†	55940.0	521.76	µg/L	0.581	521.76	ppb	0.581	0.11%
Al 396.153Radial†	179842.0	89335	µg/L	829.0	89335	ppb	829.0	0.93%
As 188.979†	387.5	533.35	µg/L	18.750	533.35	ppb	18.750	3.52%
B 249.677†	14826.1	614.39	µg/L	0.859	614.39	ppb	0.859	0.14%
Ba 233.527†	52559.3	1349.5	µg/L	1.41	1349.5	ppb	1.41	0.10%
Be 313.107†	807196.1	503.42	µg/L	1.155	503.42	ppb	1.155	0.23%
Ca 317.933Radial†	2865935.3	1108900	µg/L	8829.0	1108900	ppb	8829.0	0.80%
Cd 226.502†	17596.7	462.23	µg/L	1.451	462.23	ppb	1.451	0.31%
Co 228.616†	9857.2	468.06	µg/L	2.594	468.06	ppb	2.594	0.55%
Cr 267.716†	27919.5	587.13	µg/L	0.564	587.13	ppb	0.564	0.10%
Cu 324.752†	119548.7	848.61	µg/L	1.389	848.61	ppb	1.389	0.16%
Fe 238.204 Radial†	14177.7	90179	µg/L	102.1	90179	ppb	102.1	0.11%
K 766.490 Radial†	16718.5	8556.3	µg/L	29.88	8556.3	ppb	29.88	0.35%
Mg 279.077 IEC†	6820.3	41989	µg/L	167.4	41989	ppb	167.4	0.40%
Mn 257.610†	622659.9	1999.5	µg/L	4.93	1999.5	ppb	4.93	0.25%
Mo 202.031†	4662.1	548.09	µg/L	3.977	548.09	ppb	3.977	0.73%
Na 589.592 Radial†	26366.8	6602.9	µg/L	59.08	6602.9	ppb	59.08	0.89%

Ni 231.604†	8777.6	480.24 µg/L	3.944	480.24 ppb	3.944	0.82%
P 214.914†	1404.2	2668.8 µg/L	15.83	2668.8 ppb	15.83	0.59%
Pb 220.353†	3211.9	836.77 µg/L	5.773	836.77 ppb	5.773	0.69%
S 181.975 Axial†	5178.2	25334 µg/L	116.1	25334 ppb	116.1	0.46%
Sb 206.836†	622.4	518.77 µg/L	3.393	518.77 ppb	3.393	0.65%
Se 196.026†	309.2	595.58 µg/L	5.512	595.58 ppb	5.512	0.93%
SiO2†	1379108.5	253250 µg/L	5766.3	253250 ppb	5766.3	2.28%
Si 251.611†	1574286.3	116310 µg/L	2595.9	116310 ppb	2595.9	2.23%
Sn 189.927†	679.6	611.14 µg/L	3.462	611.14 ppb	3.462	0.57%
Sr 421.552†	439431.6	2208.6 µg/L	19.05	2208.6 ppb	19.05	0.86%
Ti 334.940†	2001946.5	4497.9 µg/L	15.29	4497.9 ppb	15.29	0.34%
Tl 190.801†	338.6	390.96 µg/L	9.904	390.96 ppb	9.904	2.53%
U 409.014†	5449.5	503.54 µg/L	6.139	503.54 ppb	6.139	1.22%
V 292.402†	60788.3	695.75 µg/L	0.446	695.75 ppb	0.446	0.06%
Zn 213.857†	79729.6	2098.8 µg/L	0.56	2098.8 ppb	0.56	0.03%

Sequence No.: 6
Sample ID: 1201977919|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 306
Date Collected: 12/10/2009 07:50:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977919|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113790.5	113790.5	97.6	%			07:51:06
1	Al 396.153Radial†	149703.8	153314.4	76155	µg/L	76155	ppb	07:51:06
1	Ca 317.933Radial†	2370640.0	2429355.7	939970	µg/L	939970	ppb	07:51:06
1	Fe 238.204 Radial†	11082.6	11343.9	72157	µg/L	72157	ppb	07:51:12
1	K 766.490 Radial†	16340.8	16065.9	8222.3	µg/L	8222.3	ppb	07:51:12
1	Mg 279.077 IEC†	5674.6	5800.7	35721	µg/L	35721	ppb	07:51:12
1	Na 589.592 Radial†	24679.6	25929.2	6493.3	µg/L	6493.3	ppb	07:51:06
1	Sr 421.552†	370919.0	380232.7	1911.0	µg/L	1911.0	ppb	07:51:06
1	Sc 361.383	1878738.7	1878738.7	92.905	%			07:51:50
1	Y 371.029	1163101.2	1163101.2	92.401	%			07:51:50
1	Ag 328.068†	51598.1	55528.4	516.31	µg/L	516.31	ppb	07:51:56
1	As 188.979†	345.4	369.6	527.52	µg/L	527.52	ppb	07:52:16
1	B 249.677†	13463.8	14354.2	599.60	µg/L	599.60	ppb	07:51:56
1	Ba 233.527†	46557.4	50191.2	1288.7	µg/L	1288.7	ppb	07:51:56
1	Be 313.107†	743935.9	797236.7	497.41	µg/L	497.41	ppb	07:51:50
1	Cd 226.502†	16115.7	17445.5	459.58	µg/L	459.58	ppb	07:51:56
1	Co 228.616†	8889.7	9635.3	458.55	µg/L	458.55	ppb	07:52:16
1	Cr 267.716†	24592.5	26570.5	558.74	µg/L	558.74	ppb	07:51:56
1	Cu 324.752†	108441.9	112454.2	795.53	µg/L	795.53	ppb	07:51:56
1	Mn 257.610†	509465.7	548576.5	1760.7	µg/L	1760.7	ppb	07:51:50
1	Mo 202.031†	4224.2	4550.5	534.35	µg/L	534.35	ppb	07:52:16
1	Ni 231.604†	8124.3	8469.2	463.36	µg/L	463.36	ppb	07:52:16
1	P 214.914†	1127.9	1013.1	1901.6	µg/L	1901.6	ppb	07:52:16
1	Pb 220.353†	2834.5	2994.8	779.77	µg/L	779.77	ppb	07:52:16
1	S 181.975 Axial†	4426.1	4742.0	23202	µg/L	23202	ppb	07:52:16
1	Sb 206.836†	576.6	599.5	510.15	µg/L	510.15	ppb	07:52:16
1	Se 196.026†	304.6	318.0	573.32	µg/L	573.32	ppb	07:52:16
1	SiO2†	1300676.2	1397261.5	256580	µg/L	256580	ppb	07:51:50
1	Si 251.611†	1481151.9	1593946.8	117790	µg/L	117790	ppb	07:51:50
1	Sn 189.927†	671.6	700.4	581.24	µg/L	581.24	ppb	07:52:16
1	Ti 334.940†	1617193.0	1739928.5	3910.6	µg/L	3910.6	ppb	07:51:50
1	Tl 190.801†	294.2	337.0	408.76	µg/L	408.76	ppb	07:52:16
1	U 409.014†	5652.3	5353.6	494.20	µg/L	494.20	ppb	07:51:56
1	V 292.402†	53095.0	57276.7	654.68	µg/L	654.68	ppb	07:51:56
1	Zn 213.857†	66632.8	71195.1	1874.8	µg/L	1874.8	ppb	07:51:56
2	Sc RADIAL	113965.4	113965.4	97.7	%			07:51:19
2	Al 396.153Radial†	150168.4	153554.4	76275	µg/L	76275	ppb	07:51:19
2	Ca 317.933Radial†	2371324.4	2426327.7	938790	µg/L	938790	ppb	07:51:19
2	Fe 238.204 Radial†	11096.8	11340.9	72138	µg/L	72138	ppb	07:51:24
2	K 766.490 Radial†	16377.6	16077.8	8228.4	µg/L	8228.4	ppb	07:51:24
2	Mg 279.077 IEC†	5708.0	5825.9	35877	µg/L	35877	ppb	07:51:24
2	Na 589.592 Radial†	24753.7	25966.3	6502.6	µg/L	6502.6	ppb	07:51:19
2	Sr 421.552†	371371.7	380112.7	1910.4	µg/L	1910.4	ppb	07:51:19
2	Sc 361.383	1892928.9	1892928.9	93.606	%			07:52:24
2	Y 371.029	1169154.7	1169154.7	92.882	%			07:52:24
2	Ag 328.068†	51491.6	54998.3	511.45	µg/L	511.45	ppb	07:52:30
2	As 188.979†	352.7	374.5	536.64	µg/L	536.64	ppb	07:52:50
2	B 249.677†	13487.0	14270.3	595.97	µg/L	595.97	ppb	07:52:30
2	Ba 233.527†	46580.3	49839.9	1279.7	µg/L	1279.7	ppb	07:52:30
2	Be 313.107†	745164.8	792546.8	494.48	µg/L	494.48	ppb	07:52:24
2	Cd 226.502†	16170.4	17373.9	457.67	µg/L	457.67	ppb	07:52:30
2	Co 228.616†	8929.5	9606.1	457.19	µg/L	457.19	ppb	07:52:50
2	Cr 267.716†	24631.8	26414.0	555.45	µg/L	555.45	ppb	07:52:30
2	Cu 324.752†	108163.2	111281.4	787.39	µg/L	787.39	ppb	07:52:30
2	Mn 257.610†	510335.3	545394.7	1750.5	µg/L	1750.5	ppb	07:52:24
2	Mo 202.031†	4249.4	4543.3	533.51	µg/L	533.51	ppb	07:52:50
2	Ni 231.604†	8144.9	8425.6	460.97	µg/L	460.97	ppb	07:52:50
2	P 214.914†	1128.4	1004.5	1885.2	µg/L	1885.2	ppb	07:52:50
2	Pb 220.353†	2866.9	3006.4	782.82	µg/L	782.82	ppb	07:52:50

2	S 181.975 Axial†	4453.5	4735.5	23170 µg/L	23170 ppb	07:52:50
2	Sb 206.836†	586.9	605.9	516.41 µg/L	516.41 ppb	07:52:50
2	Se 196.026†	298.9	309.5	562.12 µg/L	562.12 ppb	07:52:50
2	SiO2†	1371775.7	1462722.2	268600 µg/L	268600 ppb	07:52:24
2	Si 251.611†	1560068.5	1666302.3	123140 µg/L	123140 ppb	07:52:24
2	Sn 189.927†	670.0	693.4	577.38 µg/L	577.38 ppb	07:52:50
2	Ti 334.940†	1619952.8	1729827.7	3887.6 µg/L	3887.6 ppb	07:52:24
2	Tl 190.801†	299.7	340.5	414.16 µg/L	414.16 ppb	07:52:50
2	U 409.014†	5621.8	5275.3	487.09 µg/L	487.09 ppb	07:52:30
2	V 292.402†	53137.4	56893.6	650.35 µg/L	650.35 ppb	07:52:30
2	Zn 213.857†	66487.3	70502.0	1856.5 µg/L	1856.5 ppb	07:52:30
3	Sc RADIAL	113709.0	113709.0	97.5 %		07:51:31
3	Al 396.153Radial†	150917.5	154669.2	76829 µg/L	76829 ppb	07:51:31
3	Ca 317.933Radial†	2379748.8	2440439.4	944250 µg/L	944250 ppb	07:51:31
3	Fe 238.204 Radial†	11137.1	11407.9	72564 µg/L	72564 ppb	07:51:36
3	K 766.490 Radial†	16389.8	16128.2	8254.2 µg/L	8254.2 ppb	07:51:36
3	Mg 279.077 IEC†	5747.3	5879.5	36207 µg/L	36207 ppb	07:51:36
3	Na 589.592 Radial†	24866.9	26139.5	6546.0 µg/L	6546.0 ppb	07:51:31
3	Sr 421.552†	373255.2	382901.3	1924.5 µg/L	1924.5 ppb	07:51:31
3	Sc 361.383	1889477.8	1889477.8	93.436 %		07:52:58
3	Y 371.029	1169777.7	1169777.7	92.932 %		07:52:58
3	Ag 328.068†	51688.4	55309.3	514.34 µg/L	514.34 ppb	07:53:04
3	As 188.979†	348.8	371.0	529.47 µg/L	529.47 ppb	07:53:24
3	B 249.677†	13510.6	14322.0	598.07 µg/L	598.07 ppb	07:53:04
3	Ba 233.527†	46691.5	50049.9	1285.1 µg/L	1285.1 ppb	07:53:04
3	Be 313.107†	746961.3	795923.5	496.59 µg/L	496.59 ppb	07:52:58
3	Cd 226.502†	16186.2	17422.3	458.91 µg/L	458.91 ppb	07:53:04
3	Co 228.616†	8911.5	9604.2	457.07 µg/L	457.07 ppb	07:53:24
3	Cr 267.716†	24644.5	26475.7	556.75 µg/L	556.75 ppb	07:53:04
3	Cu 324.752†	108660.0	112024.1	792.63 µg/L	792.63 ppb	07:53:04
3	Mn 257.610†	511054.4	547160.1	1756.2 µg/L	1756.2 ppb	07:52:58
3	Mo 202.031†	4231.6	4532.6	532.27 µg/L	532.27 ppb	07:53:24
3	Ni 231.604†	8116.0	8410.6	460.15 µg/L	460.15 ppb	07:53:24
3	P 214.914†	1135.7	1014.6	1904.7 µg/L	1904.7 ppb	07:53:24
3	Pb 220.353†	2841.9	2985.3	777.38 µg/L	777.38 ppb	07:53:24
3	S 181.975 Axial†	4431.7	4720.9	23099 µg/L	23099 ppb	07:53:24
3	Sb 206.836†	589.0	609.3	519.24 µg/L	519.24 ppb	07:53:24
3	Se 196.026†	292.5	303.2	555.09 µg/L	555.09 ppb	07:53:24
3	SiO2†	1298216.1	1386671.3	254640 µg/L	254640 ppb	07:52:58
3	Si 251.611†	1476974.9	1580415.0	116790 µg/L	116790 ppb	07:52:58
3	Sn 189.927†	670.1	694.8	579.42 µg/L	579.42 ppb	07:53:24
3	Ti 334.940†	1621458.9	1734600.6	3898.2 µg/L	3898.2 ppb	07:52:58
3	Tl 190.801†	295.4	336.5	407.21 µg/L	407.21 ppb	07:53:24
3	U 409.014†	5511.3	5168.1	477.41 µg/L	477.41 ppb	07:53:04
3	V 292.402†	53241.3	57108.6	652.78 µg/L	652.78 ppb	07:53:04
3	Zn 213.857†	66833.4	71002.1	1869.7 µg/L	1869.7 ppb	07:53:04

Mean Data: 1201977919|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1887048.5	93.316	%	0.3660				0.39%
Sc RADIAL	113821.6	97.6	%	0.11				0.12%
Y 371.029	1167344.5	92.739	%	0.2930				0.32%
Ag 328.068†	55278.7	514.03	µg/L	2.446	514.03	ppb	2.446	0.48%
Al 396.153Radial†	153846.0	76419	µg/L	359.3	76419	ppb	359.3	0.47%
As 188.979†	371.7	531.21	µg/L	4.804	531.21	ppb	4.804	0.90%
B 249.677†	14315.5	597.88	µg/L	1.823	597.88	ppb	1.823	0.30%
Ba 233.527†	50027.0	1284.5	µg/L	4.54	1284.5	ppb	4.54	0.35%
Be 313.107†	795235.6	496.16	µg/L	1.510	496.16	ppb	1.510	0.30%
Ca 317.933Radial†	2432040.9	941000	µg/L	2874.5	941000	ppb	2874.5	0.31%
Cd 226.502†	17413.9	458.72	µg/L	0.971	458.72	ppb	0.971	0.21%
Co 228.616†	9615.2	457.60	µg/L	0.824	457.60	ppb	0.824	0.18%
Cr 267.716†	26486.8	556.98	µg/L	1.658	556.98	ppb	1.658	0.30%
Cu 324.752†	111919.9	791.85	µg/L	4.125	791.85	ppb	4.125	0.52%
Fe 238.204 Radial†	11364.2	72286	µg/L	240.7	72286	ppb	240.7	0.33%
K 766.490 Radial†	16090.6	8235.0	µg/L	16.92	8235.0	ppb	16.92	0.21%
Mg 279.077 IEC†	5835.4	35935	µg/L	248.1	35935	ppb	248.1	0.69%
Mn 257.610†	547043.7	1755.8	µg/L	5.09	1755.8	ppb	5.09	0.29%
Mo 202.031†	4542.1	533.38	µg/L	1.043	533.38	ppb	1.043	0.20%
Na 589.592 Radial†	26011.7	6514.0	µg/L	28.11	6514.0	ppb	28.11	0.43%

Ni 231.604†	8435.1	461.49 µg/L	1.665	461.49 ppb	1.665	0.36%
P 214.914†	1010.8	1897.2 µg/L	10.46	1897.2 ppb	10.46	0.55%
Pb 220.353†	2995.5	779.99 µg/L	2.722	779.99 ppb	2.722	0.35%
S 181.975 Axial†	4732.8	23157 µg/L	53.0	23157 ppb	53.0	0.23%
Sb 206.836†	604.9	515.27 µg/L	4.650	515.27 ppb	4.650	0.90%
Se 196.026†	310.2	563.51 µg/L	9.198	563.51 ppb	9.198	1.63%
SiO2†	1415551.6	259940 µg/L	7564.3	259940 ppb	7564.3	2.91%
Si 251.611†	1613554.7	119240 µg/L	3417.7	119240 ppb	3417.7	2.87%
Sn 189.927†	696.2	579.35 µg/L	1.931	579.35 ppb	1.931	0.33%
Sr 421.552†	381082.2	1915.3 µg/L	7.92	1915.3 ppb	7.92	0.41%
Ti 334.940†	1734785.6	3898.8 µg/L	11.48	3898.8 ppb	11.48	0.29%
Tl 190.801†	338.0	410.04 µg/L	3.645	410.04 ppb	3.645	0.89%
U 409.014†	5265.7	486.23 µg/L	8.428	486.23 ppb	8.428	1.73%
V 292.402†	57093.0	652.60 µg/L	2.170	652.60 ppb	2.170	0.33%
Zn 213.857†	70899.7	1867.0 µg/L	9.46	1867.0 ppb	9.46	0.51%

Sequence No.: 7
Sample ID: 1201977917|930799|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 307
Date Collected: 12/10/2009 07:53:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977917|930799|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116190.9	116190.9	99.6	%			07:54:06
1	Al 396.153Radial†	33425.4	33428.0	16609	µg/L	16609	ppb	07:54:06
1	Ca 317.933Radial†	579463.8	581234.3	224890	µg/L	224890	ppb	07:54:06
1	Fe 238.204 Radial†	2817.5	2812.9	17889	µg/L	17889	ppb	07:54:27
1	K 766.490 Radial†	2260.0	1586.1	811.72	µg/L	811.72	ppb	07:54:27
1	Mg 279.077 IEC†	1226.0	1215.1	7476.3	µg/L	7476.3	ppb	07:54:27
1	Na 589.592 Radial†	1028.4	1666.4	417.31	µg/L	417.31	ppb	07:54:27
1	Sr 421.552†	70118.5	70445.0	354.05	µg/L	354.05	ppb	07:54:06
1	Sc 361.383	1986322.1	1986322.1	98.225	%			07:55:30
1	Y 371.029	1233388.4	1233388.4	97.985	%			07:55:30
1	Ag 328.068†	-248.2	-263.1	-0.7343	µg/L	-0.7343	ppb	07:55:36
1	As 188.979†	38.7	37.2	32.952	µg/L	32.952	ppb	07:55:56
1	B 249.677†	744.0	619.6	21.237	µg/L	21.237	ppb	07:55:36
1	Ba 233.527†	6523.1	6719.1	172.41	µg/L	172.41	ppb	07:55:36
1	Be 313.107†	4921.1	1494.2	0.6372	µg/L	0.6372	ppb	07:55:36
1	Cd 226.502†	16.5	115.8	1.6975	µg/L	1.6975	ppb	07:55:56
1	Co 228.616†	54.5	122.1	4.2460	µg/L	4.2460	ppb	07:55:56
1	Cr 267.716†	803.8	918.1	19.341	µg/L	19.341	ppb	07:55:56
1	Cu 324.752†	11800.0	7743.5	57.555	µg/L	57.555	ppb	07:55:36
1	Mn 257.610†	93139.8	95024.6	305.66	µg/L	305.66	ppb	07:55:36
1	Mo 202.031†	88.4	93.7	11.650	µg/L	11.650	ppb	07:55:56
1	Ni 231.604†	375.8	107.0	5.8560	µg/L	5.8560	ppb	07:55:56
1	P 214.914†	370.5	176.3	332.45	µg/L	332.45	ppb	07:55:56
1	Pb 220.353†	324.5	274.1	72.016	µg/L	72.016	ppb	07:55:56
1	S 181.975 Axial†	827.3	820.1	4011.6	µg/L	4011.6	ppb	07:55:56
1	Sb 206.836†	67.4	47.5	28.280	µg/L	28.280	ppb	07:55:56
1	Se 196.026†	-42.0	-52.6	-26.427	µg/L	-26.427	ppb	07:55:56
1	SiO2†	332649.8	335910.9	61684	µg/L	61684	ppb	07:55:30
1	Si 251.611†	378948.8	385472.8	28500	µg/L	28500	ppb	07:55:30
1	Sn 189.927†	-159.7	-185.0	-41.624	µg/L	-41.624	ppb	07:55:56
1	Ti 334.940†	347607.3	353115.7	791.72	µg/L	791.72	ppb	07:55:30
1	Tl 190.801†	22.6	43.4	39.624	µg/L	39.624	ppb	07:55:56
1	U 409.014†	643.7	-75.1	-4.8222	µg/L	-4.8222	ppb	07:55:36
1	V 292.402†	3096.6	3279.4	38.414	µg/L	38.414	ppb	07:55:36
1	Zn 213.857†	13589.4	13308.4	350.52	µg/L	350.52	ppb	07:55:36
2	Sc RADIAL	115193.5	115193.5	98.8	%			07:54:32
2	Al 396.153Radial†	33369.4	33661.8	16725	µg/L	16725	ppb	07:54:32
2	Ca 317.933Radial†	579815.8	586626.7	226980	µg/L	226980	ppb	07:54:32
2	Fe 238.204 Radial†	2822.6	2842.6	18078	µg/L	18078	ppb	07:54:53
2	K 766.490 Radial†	2205.0	1550.0	793.27	µg/L	793.27	ppb	07:54:53
2	Mg 279.077 IEC†	1230.6	1230.5	7571.0	µg/L	7571.0	ppb	07:54:53
2	Na 589.592 Radial†	1007.6	1654.3	414.27	µg/L	414.27	ppb	07:54:53
2	Sr 421.552†	70112.3	71048.1	357.09	µg/L	357.09	ppb	07:54:32
2	Sc 361.383	1974432.6	1974432.6	97.637	%			07:56:03
2	Y 371.029	1222534.3	1222534.3	97.123	%			07:56:03
2	Ag 328.068†	-287.6	-305.0	-1.0995	µg/L	-1.0995	ppb	07:56:09
2	As 188.979†	34.0	32.6	24.252	µg/L	24.252	ppb	07:56:29
2	B 249.677†	751.7	632.0	21.714	µg/L	21.714	ppb	07:56:09
2	Ba 233.527†	6511.6	6747.3	173.14	µg/L	173.14	ppb	07:56:09
2	Be 313.107†	4892.7	1495.2	0.6389	µg/L	0.6389	ppb	07:56:09
2	Cd 226.502†	21.1	120.6	1.8108	µg/L	1.8108	ppb	07:56:29
2	Co 228.616†	62.9	131.1	4.6824	µg/L	4.6824	ppb	07:56:29
2	Cr 267.716†	802.9	922.2	19.427	µg/L	19.427	ppb	07:56:29
2	Cu 324.752†	11713.9	7727.7	57.486	µg/L	57.486	ppb	07:56:09
2	Mn 257.610†	92907.3	95357.4	306.75	µg/L	306.75	ppb	07:56:09
2	Mo 202.031†	80.2	85.9	10.740	µg/L	10.740	ppb	07:56:29
2	Ni 231.604†	375.6	109.1	5.9701	µg/L	5.9701	ppb	07:56:29
2	P 214.914†	369.3	177.4	334.50	µg/L	334.50	ppb	07:56:29
2	Pb 220.353†	315.8	267.2	70.248	µg/L	70.248	ppb	07:56:29

2	S 181.975 Axial†	832.0	830.0	4060.2 µg/L	4060.2 ppb	07:56:29
2	Sb 206.836†	61.4	41.8	22.460 µg/L	22.460 ppb	07:56:29
2	Se 196.026†	-41.0	-51.9	-25.098 µg/L	-25.098 ppb	07:56:29
2	SiO2†	329713.5	334942.9	61506 µg/L	61506 ppb	07:56:03
2	Si 251.611†	375509.3	384273.2	28412 µg/L	28412 ppb	07:56:03
2	Sn 189.927†	-157.1	-183.3	-40.248 µg/L	-40.248 ppb	07:56:29
2	Ti 334.940†	344269.3	351827.9	788.67 µg/L	788.67 ppb	07:56:03
2	Tl 190.801†	13.6	34.3	25.327 µg/L	25.327 ppb	07:56:29
2	U 409.014†	660.9	-53.6	-2.8540 µg/L	-2.8540 ppb	07:56:09
2	V 292.402†	3099.8	3301.5	38.675 µg/L	38.675 ppb	07:56:09
2	Zn 213.857†	13565.7	13367.4	352.06 µg/L	352.06 ppb	07:56:09
3	Sc RADIAL	116380.6	116380.6	99.8 %		07:54:58
3	Al 396.153Radial†	33216.3	33163.8	16477 µg/L	16477 ppb	07:54:58
3	Ca 317.933Radial†	578833.9	579654.7	224280 µg/L	224280 ppb	07:54:58
3	Fe 238.204 Radial†	2816.7	2807.6	17855 µg/L	17855 ppb	07:55:19
3	K 766.490 Radial†	2219.5	1541.7	789.05 µg/L	789.05 ppb	07:55:19
3	Mg 279.077 IEC†	1222.9	1210.1	7445.3 µg/L	7445.3 ppb	07:55:19
3	Na 589.592 Radial†	1011.9	1648.2	412.75 µg/L	412.75 ppb	07:55:19
3	Sr 421.552†	69865.5	70076.7	352.20 µg/L	352.20 ppb	07:54:58
3	Sc 361.383	1986880.3	1986880.3	98.252 %		07:56:36
3	Y 371.029	1231022.5	1231022.5	97.797 %		07:56:36
3	Ag 328.068†	-217.1	-231.4	-0.4426 µg/L	-0.4426 ppb	07:56:42
3	As 188.979†	37.8	36.2	31.252 µg/L	31.252 ppb	07:57:02
3	B 249.677†	699.2	573.8	19.262 µg/L	19.262 ppb	07:56:42
3	Ba 233.527†	6577.7	6772.7	173.79 µg/L	173.79 ppb	07:56:42
3	Be 313.107†	4797.6	1367.1	0.5589 µg/L	0.5589 ppb	07:56:42
3	Cd 226.502†	-1.2	97.8	1.2234 µg/L	1.2234 ppb	07:57:02
3	Co 228.616†	54.7	122.3	4.2649 µg/L	4.2649 ppb	07:57:02
3	Cr 267.716†	808.4	922.5	19.436 µg/L	19.436 ppb	07:57:02
3	Cu 324.752†	11741.7	7680.8	57.113 µg/L	57.113 ppb	07:56:42
3	Mn 257.610†	93216.2	95075.7	305.82 µg/L	305.82 ppb	07:56:42
3	Mo 202.031†	96.5	101.9	12.607 µg/L	12.607 ppb	07:57:02
3	Ni 231.604†	370.7	101.7	5.5652 µg/L	5.5652 ppb	07:57:02
3	P 214.914†	372.9	178.7	337.26 µg/L	337.26 ppb	07:57:02
3	Pb 220.353†	313.5	262.8	69.101 µg/L	69.101 ppb	07:57:02
3	S 181.975 Axial†	822.4	814.8	3985.9 µg/L	3985.9 ppb	07:57:02
3	Sb 206.836†	56.7	36.6	17.660 µg/L	17.660 ppb	07:57:02
3	Se 196.026†	-32.8	-43.3	-14.626 µg/L	-14.626 ppb	07:57:02
3	SiO2†	331497.3	334642.7	61451 µg/L	61451 ppb	07:56:36
3	Si 251.611†	378076.6	384476.8	28427 µg/L	28427 ppb	07:56:36
3	Sn 189.927†	-164.2	-189.5	-44.065 µg/L	-44.065 ppb	07:57:02
3	Ti 334.940†	346318.7	351704.7	788.54 µg/L	788.54 ppb	07:56:36
3	Tl 190.801†	23.6	44.4	41.269 µg/L	41.269 ppb	07:57:02
3	U 409.014†	692.5	-25.7	-0.3484 µg/L	-0.3484 ppb	07:56:42
3	V 292.402†	3167.0	3350.0	39.220 µg/L	39.220 ppb	07:56:42
3	Zn 213.857†	13618.9	13334.6	351.22 µg/L	351.22 ppb	07:56:42

Mean Data: 1201977917|930799|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1982545.0	98.038	%	0.3477				0.35%
Sc RADIAL	115921.7	99.4	%	0.55				0.55%
Y 371.029	1228981.7	97.635	%	0.4534				0.46%
Ag 328.068†	-266.5	-0.7588	µg/L	0.32915	-0.7588	ppb	0.32915	43.38%
Al 396.153Radial†	33417.9	16604	µg/L	123.8	16604	ppb	123.8	0.75%
As 188.979†	35.3	29.485	µg/L	4.6110	29.485	ppb	4.6110	15.64%
B 249.677†	608.5	20.738	µg/L	1.2998	20.738	ppb	1.2998	6.27%
Ba 233.527†	6746.4	173.11	µg/L	0.689	173.11	ppb	0.689	0.40%
Be 313.107†	1452.2	0.6117	µg/L	0.04573	0.6117	ppb	0.04573	7.48%
Ca 317.933Radial†	582505.3	225380	µg/L	1414.4	225380	ppb	1414.4	0.63%
Cd 226.502†	111.4	1.5772	µg/L	0.31162	1.5772	ppb	0.31162	19.76%
Co 228.616†	125.2	4.3978	µg/L	0.24668	4.3978	ppb	0.24668	5.61%
Cr 267.716†	920.9	19.401	µg/L	0.0523	19.401	ppb	0.0523	0.27%
Cu 324.752†	7717.3	57.384	µg/L	0.2379	57.384	ppb	0.2379	0.41%
Fe 238.204 Radial†	2821.0	17941	µg/L	119.9	17941	ppb	119.9	0.67%
K 766.490 Radial†	1559.3	798.01	µg/L	12.059	798.01	ppb	12.059	1.51%
Mg 279.077 IEC†	1218.6	7497.5	µg/L	65.52	7497.5	ppb	65.52	0.87%
Mn 257.610†	95152.6	306.08	µg/L	0.587	306.08	ppb	0.587	0.19%
Mo 202.031†	93.8	11.666	µg/L	0.9334	11.666	ppb	0.9334	8.00%
Na 589.592 Radial†	1656.3	414.77	µg/L	2.324	414.77	ppb	2.324	0.56%

Ni 231.604†	106.0	5.7971	µg/L	0.20878	5.7971	ppb	0.20878	3.60%
P 214.914†	177.4	334.74	µg/L	2.411	334.74	ppb	2.411	0.72%
Pb 220.353†	268.0	70.455	µg/L	1.4685	70.455	ppb	1.4685	2.08%
S 181.975 Axial†	821.6	4019.2	µg/L	37.72	4019.2	ppb	37.72	0.94%
Sb 206.836†	42.0	22.800	µg/L	5.3183	22.800	ppb	5.3183	23.33%
Se 196.026†	-49.3	-22.050	µg/L	6.4642	-22.050	ppb	6.4642	29.32%
SiO2†	335165.5	61547	µg/L	121.7	61547	ppb	121.7	0.20%
Si 251.611†	384740.9	28446	µg/L	47.4	28446	ppb	47.4	0.17%
Sn 189.927†	-185.9	-41.979	µg/L	1.9335	-41.979	ppb	1.9335	4.61%
Sr 421.552†	70523.3	354.45	µg/L	2.465	354.45	ppb	2.465	0.70%
Ti 334.940†	352216.1	789.65	µg/L	1.800	789.65	ppb	1.800	0.23%
Tl 190.801†	40.7	35.407	µg/L	8.7681	35.407	ppb	8.7681	24.76%
U 409.014†	-51.4	-2.6749	µg/L	2.24226	-2.6749	ppb	2.24226	83.83%
V 292.402†	3310.3	38.770	µg/L	0.4114	38.770	ppb	0.4114	1.06%
Zn 213.857†	13336.8	351.26	µg/L	0.771	351.26	ppb	0.771	0.22%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 08:04:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115401.2	115401.2	98.9	%			08:05:08
1	Al 396.153Radial†	10471.1	10459.2	5177.4	µg/L	5177.4	ppb	08:05:08
1	Ca 317.933Radial†	13799.6	13533.6	5236.4	µg/L	5236.4	ppb	08:05:28
1	Fe 238.204 Radial†	807.1	800.6	5107.7	µg/L	5107.7	ppb	08:05:28
1	K 766.490 Radial†	10514.4	9943.7	5089.1	µg/L	5089.1	ppb	08:05:08
1	Mg 279.077 IEC†	845.4	839.0	5185.0	µg/L	5185.0	ppb	08:05:28
1	Na 589.592 Radial†	40160.4	41221.6	10323	µg/L	10323	ppb	08:05:08
1	Sr 421.552†	98300.6	99408.5	499.62	µg/L	499.62	ppb	08:05:08
1	Sc 361.383	2016316.7	2016316.7	99.708	%			08:06:31
1	Y 371.029	1259420.4	1259420.4	100.05	%			08:06:31
1	Ag 328.068†	55557.7	55710.0	511.65	µg/L	511.65	ppb	08:06:37
1	As 188.979†	280.8	279.4	506.21	µg/L	506.21	ppb	08:06:57
1	B 249.677†	11487.0	11382.8	491.86	µg/L	491.86	ppb	08:06:37
1	Ba 233.527†	19175.7	19309.9	496.32	µg/L	496.32	ppb	08:06:37
1	Be 313.107†	797192.9	796012.5	497.92	µg/L	497.92	ppb	08:06:31
1	Cd 226.502†	18589.9	18743.3	499.36	µg/L	499.36	ppb	08:06:37
1	Co 228.616†	10216.2	10312.7	498.45	µg/L	498.45	ppb	08:06:37
1	Cr 267.716†	23361.2	23529.4	494.62	µg/L	494.62	ppb	08:06:37
1	Cu 324.752†	75319.3	71270.2	495.46	µg/L	495.46	ppb	08:06:37
1	Mn 257.610†	152705.7	153354.4	490.30	µg/L	490.30	ppb	08:06:37
1	Mo 202.031†	4330.0	4346.4	507.87	µg/L	507.87	ppb	08:06:57
1	Ni 231.604†	9357.6	9109.5	498.39	µg/L	498.39	ppb	08:06:37
1	P 214.914†	1421.2	1224.4	2419.7	µg/L	2419.7	ppb	08:06:57
1	Pb 220.353†	2001.6	1951.2	505.05	µg/L	505.05	ppb	08:06:57
1	S 181.975 Axial†	238.9	217.5	1063.2	µg/L	1063.2	ppb	08:06:57
1	Sb 206.836†	545.3	525.8	513.18	µg/L	513.18	ppb	08:06:57
1	Se 196.026†	410.1	401.5	515.21	µg/L	515.21	ppb	08:06:57
1	SiO2†	32841.6	30186.4	5543.2	µg/L	5543.2	ppb	08:06:37
1	Si 251.611†	35214.7	34992.6	2540.6	µg/L	2540.6	ppb	08:06:37
1	Sn 189.927†	1032.4	1013.1	521.54	µg/L	521.54	ppb	08:06:57
1	Ti 334.940†	224312.7	224195.4	510.40	µg/L	510.40	ppb	08:06:31
1	Tl 190.801†	305.8	327.0	504.59	µg/L	504.59	ppb	08:06:57
1	U 409.014†	6127.9	5415.4	490.18	µg/L	490.18	ppb	08:06:37
1	V 292.402†	43682.4	43937.1	498.99	µg/L	498.99	ppb	08:06:37
1	Zn 213.857†	19333.5	18863.5	495.98	µg/L	495.98	ppb	08:06:37
2	Sc RADIAL	116297.5	116297.5	99.7	%			08:05:34
2	Al 396.153Radial†	10375.1	10281.4	5089.2	µg/L	5089.2	ppb	08:05:34
2	Ca 317.933Radial†	13895.5	13522.3	5232.0	µg/L	5232.0	ppb	08:05:54
2	Fe 238.204 Radial†	809.5	796.6	5082.6	µg/L	5082.6	ppb	08:05:54
2	K 766.490 Radial†	10470.7	9818.1	5024.8	µg/L	5024.8	ppb	08:05:34
2	Mg 279.077 IEC†	842.8	829.8	5128.2	µg/L	5128.2	ppb	08:05:54
2	Na 589.592 Radial†	39951.1	40699.0	10192	µg/L	10192	ppb	08:05:34
2	Sr 421.552†	97993.8	98335.2	494.23	µg/L	494.23	ppb	08:05:34
2	Sc 361.383	2024666.6	2024666.6	100.12	%			08:07:04
2	Y 371.029	1263207.3	1263207.3	100.35	%			08:07:04
2	Ag 328.068†	55674.3	55596.7	510.61	µg/L	510.61	ppb	08:07:10
2	As 188.979†	278.5	275.9	499.89	µg/L	499.89	ppb	08:07:30
2	B 249.677†	11514.5	11362.8	491.01	µg/L	491.01	ppb	08:07:10
2	Ba 233.527†	19242.9	19297.7	496.00	µg/L	496.00	ppb	08:07:10
2	Be 313.107†	802510.6	798026.4	499.18	µg/L	499.18	ppb	08:07:04
2	Cd 226.502†	18587.5	18664.1	497.25	µg/L	497.25	ppb	08:07:10
2	Co 228.616†	10250.9	10305.2	498.07	µg/L	498.07	ppb	08:07:10
2	Cr 267.716†	23416.5	23488.0	493.75	µg/L	493.75	ppb	08:07:10
2	Cu 324.752†	75457.4	71096.6	494.25	µg/L	494.25	ppb	08:07:10
2	Mn 257.610†	153009.2	153026.0	489.25	µg/L	489.25	ppb	08:07:10
2	Mo 202.031†	4321.3	4319.7	504.76	µg/L	504.76	ppb	08:07:30
2	Ni 231.604†	9358.4	9071.6	496.32	µg/L	496.32	ppb	08:07:10
2	P 214.914†	1417.3	1214.7	2400.2	µg/L	2400.2	ppb	08:07:30
2	Pb 220.353†	1979.6	1920.9	497.21	µg/L	497.21	ppb	08:07:30

2	S 181.975 Axial†	238.3	215.8	1055.2 µg/L	1055.2 ppb	08:07:30
2	Sb 206.836†	535.6	513.8	501.45 µg/L	501.45 ppb	08:07:30
2	Se 196.026†	409.7	399.4	512.56 µg/L	512.56 ppb	08:07:30
2	SiO2†	32787.6	29996.7	5508.3 µg/L	5508.3 ppb	08:07:10
2	Si 251.611†	35155.3	34787.7	2525.6 µg/L	2525.6 ppb	08:07:10
2	Sn 189.927†	1030.1	1006.5	518.16 µg/L	518.16 ppb	08:07:30
2	Ti 334.940†	225319.1	224272.8	510.58 µg/L	510.58 ppb	08:07:04
2	Tl 190.801†	306.2	326.2	503.34 µg/L	503.34 ppb	08:07:30
2	U 409.014†	6119.3	5381.4	487.11 µg/L	487.11 ppb	08:07:10
2	V 292.402†	43821.8	43895.7	498.50 µg/L	498.50 ppb	08:07:10
2	Zn 213.857†	19430.1	18880.0	496.44 µg/L	496.44 ppb	08:07:10
3	Sc RADIAL	114799.5	114799.5	98.4 %		08:06:00
3	Al 396.153Radial†	10412.3	10454.9	5175.6 µg/L	5175.6 ppb	08:06:00
3	Ca 317.933Radial†	13500.5	13302.8	5147.1 µg/L	5147.1 ppb	08:06:20
3	Fe 238.204 Radial†	797.0	794.5	5069.1 µg/L	5069.1 ppb	08:06:20
3	K 766.490 Radial†	10534.5	10019.9	5128.1 µg/L	5128.1 ppb	08:06:00
3	Mg 279.077 IEC†	834.8	832.6	5145.7 µg/L	5145.7 ppb	08:06:20
3	Na 589.592 Radial†	39859.5	41128.7	10300 µg/L	10300 ppb	08:06:00
3	Sr 421.552†	97728.2	99347.6	499.32 µg/L	499.32 ppb	08:06:00
3	Sc 361.383	2020951.7	2020951.7	99.937 %		08:07:37
3	Y 371.029	1258212.6	1258212.6	99.957 %		08:07:37
3	Ag 328.068†	55437.6	55462.1	509.38 µg/L	509.38 ppb	08:07:43
3	As 188.979†	274.3	272.3	493.24 µg/L	493.24 ppb	08:08:03
3	B 249.677†	11539.3	11408.7	493.00 µg/L	493.00 ppb	08:07:43
3	Ba 233.527†	19174.6	19264.7	495.16 µg/L	495.16 ppb	08:07:43
3	Be 313.107†	801802.9	798791.7	499.66 µg/L	499.66 ppb	08:07:37
3	Cd 226.502†	18554.8	18665.4	497.28 µg/L	497.28 ppb	08:07:43
3	Co 228.616†	10229.2	10302.3	497.93 µg/L	497.93 ppb	08:07:43
3	Cr 267.716†	23383.7	23498.3	493.96 µg/L	493.96 ppb	08:07:43
3	Cu 324.752†	75189.0	70966.6	493.34 µg/L	493.34 ppb	08:07:43
3	Mn 257.610†	152741.1	153038.5	489.29 µg/L	489.29 ppb	08:07:43
3	Mo 202.031†	4279.0	4285.4	500.75 µg/L	500.75 ppb	08:08:03
3	Ni 231.604†	9337.1	9067.4	496.09 µg/L	496.09 ppb	08:07:43
3	P 214.914†	1416.6	1216.6	2404.0 µg/L	2404.0 ppb	08:08:03
3	Pb 220.353†	1980.6	1925.6	498.41 µg/L	498.41 ppb	08:08:03
3	S 181.975 Axial†	240.9	218.9	1070.1 µg/L	1070.1 ppb	08:08:03
3	Sb 206.836†	536.4	515.6	503.24 µg/L	503.24 ppb	08:08:03
3	Se 196.026†	415.3	405.7	520.55 µg/L	520.55 ppb	08:08:03
3	SiO2†	32701.3	29970.5	5503.5 µg/L	5503.5 ppb	08:07:43
3	Si 251.611†	35249.0	34946.0	2537.5 µg/L	2537.5 ppb	08:07:43
3	Sn 189.927†	1017.9	996.2	512.86 µg/L	512.86 ppb	08:08:03
3	Ti 334.940†	225035.5	224402.8	510.88 µg/L	510.88 ppb	08:07:37
3	Tl 190.801†	313.3	333.8	515.05 µg/L	515.05 ppb	08:08:03
3	U 409.014†	6015.6	5288.9	478.72 µg/L	478.72 ppb	08:07:43
3	V 292.402†	43693.7	43847.9	497.92 µg/L	497.92 ppb	08:07:43
3	Zn 213.857†	19367.2	18852.8	495.72 µg/L	495.72 ppb	08:07:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020645.0	99.922	%	0.2069				0.21%
Sc RADIAL	115499.4	99.0	%	0.65				0.65%
Y 371.029	1260280.1	100.12	%	0.207				0.21%
Ag 328.068†	55589.6	510.55	µg/L	1.137	510.55	ppb	1.137	0.22%
QC value within limits for Ag 328.068 Recovery = 102.11%								
Al 396.153Radial†	10398.5	5147.4	µg/L	50.43	5147.4	ppb	50.43	0.98%
QC value within limits for Al 396.153Radial Recovery = 102.95%								
As 188.979†	275.9	499.78	µg/L	6.484	499.78	ppb	6.484	1.30%
QC value within limits for As 188.979 Recovery = 99.96%								
B 249.677†	11384.8	491.96	µg/L	1.001	491.96	ppb	1.001	0.20%
QC value within limits for B 249.677 Recovery = 98.39%								
Ba 233.527†	19290.8	495.82	µg/L	0.601	495.82	ppb	0.601	0.12%
QC value within limits for Ba 233.527 Recovery = 99.16%								
Be 313.107†	797610.2	498.92	µg/L	0.898	498.92	ppb	0.898	0.18%
QC value within limits for Be 313.107 Recovery = 99.78%								
Ca 317.933Radial†	13452.9	5205.2	µg/L	50.33	5205.2	ppb	50.33	0.97%
QC value within limits for Ca 317.933Radial Recovery = 104.10%								
Cd 226.502†	18690.9	497.96	µg/L	1.211	497.96	ppb	1.211	0.24%
QC value within limits for Cd 226.502 Recovery = 99.59%								
Co 228.616†	10306.7	498.15	µg/L	0.268	498.15	ppb	0.268	0.05%

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   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            23505.2      494.11 µg/L        0.453      494.11 ppb          0.453   0.09%
   QC value within limits for Cr 267.716  Recovery = 98.82%
Cu 324.752†            71111.1      494.35 µg/L        1.061      494.35 ppb          1.061   0.21%
   QC value within limits for Cu 324.752  Recovery = 98.87%
Fe 238.204 Radial†       797.2      5086.4 µg/L        19.60      5086.4 ppb          19.60   0.39%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.73%
K 766.490 Radial†       9927.2      5080.6 µg/L        52.16      5080.6 ppb          52.16   1.03%
   QC value within limits for K 766.490 Radial  Recovery = 101.61%
Mg 279.077 IEC†          833.8      5153.0 µg/L        29.08      5153.0 ppb          29.08   0.56%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.06%
Mn 257.610†           153139.6      489.61 µg/L        0.596      489.61 ppb          0.596   0.12%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†            4317.2      504.46 µg/L        3.570      504.46 ppb          3.570   0.71%
   QC value within limits for Mo 202.031  Recovery = 100.89%
Na 589.592 Radial†     41016.4       10272 µg/L         69.8       10272 ppb           69.8   0.68%
   QC value within limits for Na 589.592 Radial  Recovery = 102.72%
Ni 231.604†            9082.8      496.93 µg/L        1.268      496.93 ppb          1.268   0.26%
   QC value within limits for Ni 231.604  Recovery = 99.39%
P 214.914†             1218.6      2408.0 µg/L        10.36      2408.0 ppb          10.36   0.43%
   QC value within limits for P 214.914  Recovery = 96.32%
Pb 220.353†            1932.6      500.22 µg/L        4.221      500.22 ppb          4.221   0.84%
   QC value within limits for Pb 220.353  Recovery = 100.04%
S 181.975 Axial†        217.4      1062.8 µg/L         7.47      1062.8 ppb           7.47   0.70%
   QC value within limits for S 181.975 Axial  Recovery = 106.28%
Sb 206.836†             518.4      505.95 µg/L        6.316      505.95 ppb          6.316   1.25%
   QC value within limits for Sb 206.836  Recovery = 101.19%
Se 196.026†             402.2      516.11 µg/L        4.071      516.11 ppb          4.071   0.79%
   QC value within limits for Se 196.026  Recovery = 103.22%
SiO2†                  30051.2      5518.3 µg/L        21.64      5518.3 ppb          21.64   0.39%
   QC value within limits for SiO2  Recovery = 103.19%
Si 251.611†            34908.8      2534.6 µg/L         7.91      2534.6 ppb           7.91   0.31%
   QC value within limits for Si 251.611  Recovery = 101.38%
Sn 189.927†            1005.2      517.52 µg/L        4.375      517.52 ppb          4.375   0.85%
   QC value within limits for Sn 189.927  Recovery = 103.50%
Sr 421.552†            99030.4      497.72 µg/L        3.030      497.72 ppb          3.030   0.61%
   QC value within limits for Sr 421.552  Recovery = 99.54%
Ti 334.940†           224290.3      510.62 µg/L        0.241      510.62 ppb          0.241   0.05%
   QC value within limits for Ti 334.940  Recovery = 102.12%
Tl 190.801†             329.0      507.66 µg/L        6.431      507.66 ppb          6.431   1.27%
   QC value within limits for Tl 190.801  Recovery = 101.53%
U 409.014†             5361.9      485.34 µg/L        5.931      485.34 ppb          5.931   1.22%
   QC value within limits for U 409.014  Recovery = 97.07%
V 292.402†             43893.6      498.47 µg/L        0.538      498.47 ppb          0.538   0.11%
   QC value within limits for V 292.402  Recovery = 99.69%
Zn 213.857†            18865.4      496.05 µg/L        0.363      496.05 ppb          0.363   0.07%
   QC value within limits for Zn 213.857  Recovery = 99.21%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 08:08:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114023.9	114023.9	97.8	%			08:08:45
1	Al 396.153Radial†	179.0	59.8	29.678	µg/L	29.678	ppb	08:08:45
1	Ca 317.933Radial†	565.2	165.4	63.981	µg/L	63.981	ppb	08:09:06
1	Fe 238.204 Radial†	21.1	6.4	40.927	µg/L	40.927	ppb	08:09:06
1	K 766.490 Radial†	752.6	87.3	44.669	µg/L	44.669	ppb	08:08:45
1	Mg 279.077 IEC†	16.8	1.7	10.474	µg/L	10.474	ppb	08:09:06
1	Na 589.592 Radial†	-492.9	130.0	32.543	µg/L	32.543	ppb	08:08:45
1	Sr 421.552†	3.3	65.7	0.3302	µg/L	0.3302	ppb	08:08:45
1	Sc 361.383	2014246.2	2014246.2	99.606	%			08:10:08
1	Y 371.029	1257444.9	1257444.9	99.896	%			08:10:08
1	Ag 328.068†	162.9	153.1	1.3991	µg/L	1.3991	ppb	08:10:13
1	As 188.979†	2.3	0.1	0.2255	µg/L	0.2255	ppb	08:10:34
1	B 249.677†	191.1	54.0	2.3300	µg/L	2.3300	ppb	08:10:34
1	Ba 233.527†	-60.2	17.6	0.4520	µg/L	0.4520	ppb	08:10:34
1	Be 313.107†	3602.1	100.5	0.0623	µg/L	0.0623	ppb	08:10:13
1	Cd 226.502†	-98.4	0.2	0.0034	µg/L	0.0034	ppb	08:10:34
1	Co 228.616†	-69.4	-3.0	-0.1450	µg/L	-0.1450	ppb	08:10:34
1	Cr 267.716†	-110.1	-10.8	-0.2262	µg/L	-0.2262	ppb	08:10:13
1	Cu 324.752†	4181.6	-71.6	-0.4882	µg/L	-0.4882	ppb	08:10:13
1	Mn 257.610†	-1.4	199.9	0.6436	µg/L	0.6436	ppb	08:10:34
1	Mo 202.031†	5.5	9.2	1.0762	µg/L	1.0762	ppb	08:10:34
1	Ni 231.604†	302.6	28.3	1.5457	µg/L	1.5457	ppb	08:10:34
1	P 214.914†	189.6	-10.5	-21.295	µg/L	-21.295	ppb	08:10:34
1	Pb 220.353†	48.5	-7.6	-1.9486	µg/L	-1.9486	ppb	08:10:34
1	S 181.975 Axial†	32.1	10.1	49.496	µg/L	49.496	ppb	08:10:34
1	Sb 206.836†	19.5	-1.6	-1.5188	µg/L	-1.5188	ppb	08:10:34
1	Se 196.026†	7.7	-2.1	-2.6718	µg/L	-2.6718	ppb	08:10:34
1	SiO2†	3177.8	439.0	80.623	µg/L	80.623	ppb	08:10:13
1	Si 251.611†	938.3	616.8	45.611	µg/L	45.611	ppb	08:10:34
1	Sn 189.927†	19.3	-3.1	-1.5521	µg/L	-1.5521	ppb	08:10:34
1	Ti 334.940†	1475.3	706.8	1.6063	µg/L	1.6063	ppb	08:10:13
1	Tl 190.801†	-17.5	2.8	4.2649	µg/L	4.2649	ppb	08:10:34
1	U 409.014†	735.8	8.3	0.7457	µg/L	0.7457	ppb	08:10:13
1	V 292.402†	-125.7	0.5	0.0179	µg/L	0.0179	ppb	08:10:13
1	Zn 213.857†	587.9	63.6	1.6745	µg/L	1.6745	ppb	08:10:34
2	Sc RADIAL	114135.7	114135.7	97.9	%			08:09:11
2	Al 396.153Radial†	180.7	61.3	30.436	µg/L	30.436	ppb	08:09:11
2	Ca 317.933Radial†	678.8	280.8	108.66	µg/L	108.66	ppb	08:09:31
2	Fe 238.204 Radial†	21.9	7.2	46.042	µg/L	46.042	ppb	08:09:31
2	K 766.490 Radial†	742.9	76.7	39.234	µg/L	39.234	ppb	08:09:11
2	Mg 279.077 IEC†	13.5	-1.7	-10.340	µg/L	-10.340	ppb	08:09:31
2	Na 589.592 Radial†	-493.5	129.8	32.502	µg/L	32.502	ppb	08:09:11
2	Sr 421.552†	-36.6	24.9	0.1253	µg/L	0.1253	ppb	08:09:11
2	Sc 361.383	2008809.2	2008809.2	99.337	%			08:10:40
2	Y 371.029	1254538.4	1254538.4	99.666	%			08:10:40
2	Ag 328.068†	122.9	113.3	1.0350	µg/L	1.0350	ppb	08:10:45
2	As 188.979†	0.4	-1.8	-3.3755	µg/L	-3.3755	ppb	08:11:06
2	B 249.677†	184.0	47.4	2.0391	µg/L	2.0391	ppb	08:11:06
2	Ba 233.527†	-61.7	16.0	0.4096	µg/L	0.4096	ppb	08:11:06
2	Be 313.107†	3528.1	35.8	0.0220	µg/L	0.0220	ppb	08:10:45
2	Cd 226.502†	-99.6	-1.3	-0.0447	µg/L	-0.0447	ppb	08:11:06
2	Co 228.616†	-61.3	5.0	0.2411	µg/L	0.2411	ppb	08:11:06
2	Cr 267.716†	-115.3	-16.2	-0.3412	µg/L	-0.3412	ppb	08:10:45
2	Cu 324.752†	4093.3	-149.1	-1.0245	µg/L	-1.0245	ppb	08:10:45
2	Mn 257.610†	-58.5	142.5	0.4606	µg/L	0.4606	ppb	08:11:06
2	Mo 202.031†	6.6	10.3	1.2075	µg/L	1.2075	ppb	08:11:06
2	Ni 231.604†	301.7	28.1	1.5379	µg/L	1.5379	ppb	08:11:06
2	P 214.914†	188.0	-11.7	-23.618	µg/L	-23.618	ppb	08:11:06
2	Pb 220.353†	45.3	-10.6	-2.7317	µg/L	-2.7317	ppb	08:11:06

2	S 181.975 Axial†	30.4	8.4	41.150 µg/L	41.150 ppb		08:11:06
2	Sb 206.836†	20.5	-0.4	-0.4397 µg/L	-0.4397 ppb		08:11:06
2	Se 196.026†	14.0	4.2	5.4601 µg/L	5.4601 ppb		08:11:06
2	SiO2†	3223.4	493.5	90.629 µg/L	90.629 ppb		08:10:45
2	Si 251.611†	1095.4	777.5	57.577 µg/L	57.577 ppb		08:11:06
2	Sn 189.927†	16.4	-5.9	-3.0034 µg/L	-3.0034 ppb		08:11:06
2	Ti 334.940†	1311.3	545.6	1.2368 µg/L	1.2368 ppb		08:10:45
2	Tl 190.801†	-21.5	-1.3	-2.0056 µg/L	-2.0056 ppb		08:11:06
2	U 409.014†	602.2	-124.3	-11.273 µg/L	-11.273 ppb		08:10:45
2	V 292.402†	-142.0	-16.2	-0.1888 µg/L	-0.1888 ppb		08:10:45
2	Zn 213.857†	572.2	49.3	1.2965 µg/L	1.2965 ppb		08:11:06
3	Sc RADIAL	113888.1	113888.1	97.7 %			08:09:37
3	Al 396.153Radial†	142.6	22.7	11.290 µg/L	11.290 ppb		08:09:37
3	Ca 317.933Radial†	675.5	279.0	107.95 µg/L	107.95 ppb		08:09:57
3	Fe 238.204 Radial†	19.9	5.2	33.335 µg/L	33.335 ppb		08:09:57
3	K 766.490 Radial†	779.0	115.2	58.969 µg/L	58.969 ppb		08:09:37
3	Mg 279.077 IEC†	11.2	-4.0	-24.655 µg/L	-24.655 ppb		08:09:57
3	Na 589.592 Radial†	-516.9	104.7	26.226 µg/L	26.226 ppb		08:09:37
3	Sr 421.552†	-66.5	-5.8	-0.0290 µg/L	-0.0290 ppb		08:09:37
3	Sc 361.383	2030726.8	2030726.8	100.42 %			08:11:12
3	Y 371.029	1267162.5	1267162.5	100.67 %			08:11:12
3	Ag 328.068†	98.3	87.5	0.8017 µg/L	0.8017 ppb		08:11:18
3	As 188.979†	3.7	1.4	2.5864 µg/L	2.5864 ppb		08:11:38
3	B 249.677†	183.4	44.8	1.9325 µg/L	1.9325 ppb		08:11:38
3	Ba 233.527†	-54.8	23.5	0.6024 µg/L	0.6024 ppb		08:11:38
3	Be 313.107†	3533.2	2.6	0.0011 µg/L	0.0011 ppb		08:11:18
3	Cd 226.502†	-85.7	13.6	0.3623 µg/L	0.3623 ppb		08:11:38
3	Co 228.616†	-70.9	-4.0	-0.1936 µg/L	-0.1936 ppb		08:11:38
3	Cr 267.716†	-124.0	-23.7	-0.4963 µg/L	-0.4963 ppb		08:11:18
3	Cu 324.752†	4161.9	-125.2	-0.8616 µg/L	-0.8616 ppb		08:11:18
3	Mn 257.610†	44.9	246.1	0.7898 µg/L	0.7898 ppb		08:11:38
3	Mo 202.031†	-0.7	3.0	0.3465 µg/L	0.3465 ppb		08:11:38
3	Ni 231.604†	305.1	28.3	1.5475 µg/L	1.5475 ppb		08:11:38
3	P 214.914†	190.8	-10.9	-21.884 µg/L	-21.884 ppb		08:11:38
3	Pb 220.353†	41.4	-15.1	-3.8944 µg/L	-3.8944 ppb		08:11:38
3	S 181.975 Axial†	33.1	10.8	52.741 µg/L	52.741 ppb		08:11:38
3	Sb 206.836†	18.3	-2.9	-2.8644 µg/L	-2.8644 ppb		08:11:38
3	Se 196.026†	10.2	0.3	0.4111 µg/L	0.4111 ppb		08:11:38
3	SiO2†	3815.0	1047.7	192.39 µg/L	192.39 ppb		08:11:18
3	Si 251.611†	4722.1	4377.1	323.82 µg/L	323.82 ppb		08:11:38
Saturated within auto integration window (code 4)							
3	Sn 189.927†	23.9	1.4	0.7418 µg/L	0.7418 ppb		08:11:38
3	Ti 334.940†	1346.0	565.9	1.2831 µg/L	1.2831 ppb		08:11:18
3	Tl 190.801†	-17.4	3.0	4.6315 µg/L	4.6315 ppb		08:11:38
3	U 409.014†	736.7	3.2	0.2857 µg/L	0.2857 ppb		08:11:18
3	V 292.402†	-111.4	15.8	0.1833 µg/L	0.1833 ppb		08:11:18
3	Zn 213.857†	585.2	56.1	1.4780 µg/L	1.4780 ppb		08:11:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017927.4	99.788	%	0.5644				0.57%
Sc RADIAL	114015.9	97.8	%	0.11				0.11%
Y 371.029	1259715.3	100.08	%	0.525				0.52%
Ag 328.068†	118.0	1.0786	µg/L	0.30110	1.0786	ppb	0.30110	27.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	48.0	23.801	µg/L	10.8420	23.801	ppb	10.8420	45.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.1879	µg/L	3.00240	-0.1879	ppb	3.00240	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	48.7	2.1005	µg/L	0.20575	2.1005	ppb	0.20575	9.79%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.0	0.4880	µg/L	0.10131	0.4880	ppb	0.10131	20.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	46.3	0.0285	µg/L	0.03111	0.0285	ppb	0.03111	109.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	241.7	93.532	µg/L	25.5948	93.532	ppb	25.5948	27.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.2	0.1070	µg/L	0.22244	0.1070	ppb	0.22244	207.89%
QC value within limits for Cd 226.502 Recovery = Not calculated								

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Co 228.616†                -0.7     -0.0325 µg/L       0.23819     -0.0325 ppb        0.23819 733.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -16.9     -0.3545 µg/L       0.13554     -0.3545 ppb        0.13554  38.23%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -115.3     -0.7914 µg/L       0.27494     -0.7914 ppb        0.27494  34.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          6.3      40.101 µg/L        6.3936      40.101 ppb         6.3936  15.94%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.1      47.624 µg/L       10.1940      47.624 ppb        10.1940  21.41%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.3      -8.1739 µg/L      17.66460     -8.1739 ppb       17.66460 216.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               196.2       0.6313 µg/L       0.16494      0.6313 ppb        0.16494  26.13%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.5       0.8767 µg/L       0.46388      0.8767 ppb        0.46388  52.91%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        121.5      30.424 µg/L        3.6355      30.424 ppb         3.6355  11.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                28.2       1.5437 µg/L       0.00513      1.5437 ppb        0.00513   0.33%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -11.0     -22.266 µg/L        1.2074     -22.266 ppb         1.2074   5.42%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.1      -2.8582 µg/L       0.97906      -2.8582 ppb        0.97906  34.25%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            9.8      47.796 µg/L        5.9794      47.796 ppb         5.9794  12.51%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -1.6      -1.6076 µg/L       1.21479      -1.6076 ppb        1.21479  75.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.8       1.0665 µg/L       4.10537       1.0665 ppb        4.10537 384.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     660.1     121.21 µg/L         61.840      121.21 ppb         61.840  51.02%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              1923.8     142.34 µg/L        157.283      142.34 ppb        157.283 110.50%
   Saturated within auto integration window (code 4)
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.5      -1.2712 µg/L       1.88836      -1.2712 ppb        1.88836 148.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                28.3       0.1422 µg/L       0.18016       0.1422 ppb        0.18016 126.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               606.1       1.3754 µg/L       0.20131       1.3754 ppb        0.20131  14.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.5       2.2969 µg/L       3.73058       2.2969 ppb        3.73058 162.42%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -37.6      -3.4138 µg/L       6.80994      -3.4138 ppb        6.80994 199.48%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  0.0       0.0041 µg/L       0.18641       0.0041 ppb        0.18641 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                56.4       1.4830 µg/L       0.18907       1.4830 ppb        0.18907  12.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 16
Sample ID: 241417001|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 314
Date Collected: 12/10/2009 08:26:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241417001|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117131.9	117131.9	100	%			08:27:01
1	Al 396.153Radial†	86064.8	85571.8	42517	µg/L	42517	ppb	08:27:01
1	Ca 317.933Radial†	57344.9	56685.8	21933	µg/L	21933	ppb	08:27:01
1	Fe 238.204 Radial†	15928.2	15844.6	100760	µg/L	100760	ppb	08:27:21
1	K 766.490 Radial†	13035.9	12297.4	6293.7	µg/L	6293.7	ppb	08:27:01
1	Mg 279.077 IEC†	1847.5	1824.1	11113	µg/L	11113	ppb	08:27:21
1	Na 589.592 Radial†	1603.5	2230.7	558.63	µg/L	558.63	ppb	08:27:21
1	Sr 421.552†	21459.2	21429.3	107.70	µg/L	107.70	ppb	08:27:01
1	Sc 361.383	2038820.5	2038820.5	100.82	%			08:28:26
1	Y 371.029	1308812.1	1308812.1	103.98	%			08:28:26
1	Ag 328.068†	9550.8	9462.6	95.114	µg/L	95.114	ppb	08:28:31
1	As 188.979†	14.3	12.0	12.946	µg/L	12.946	ppb	08:28:52
1	B 249.677†	1362.7	1213.8	20.934	µg/L	20.934	ppb	08:28:31
1	Ba 233.527†	20331.9	20244.4	519.52	µg/L	519.52	ppb	08:28:31
1	Be 313.107†	13258.4	9634.6	4.7655	µg/L	4.7655	ppb	08:28:31
1	Cd 226.502†	343.0	439.2	3.9007	µg/L	3.9007	ppb	08:28:52
1	Co 228.616†	544.2	606.4	22.185	µg/L	22.185	ppb	08:28:52
1	Cr 267.716†	9528.7	9550.9	200.61	µg/L	200.61	ppb	08:28:31
1	Cu 324.752†	27464.6	22971.2	180.98	µg/L	180.98	ppb	08:28:31
1	Mn 257.610†	582058.3	577521.5	1856.7	µg/L	1856.7	ppb	08:28:26
1	Mo 202.031†	33.8	37.2	8.2998	µg/L	8.2998	ppb	08:28:52
1	Ni 231.604†	1069.7	785.5	42.974	µg/L	42.974	ppb	08:28:52
1	P 214.914†	1199.3	988.6	1873.7	µg/L	1873.7	ppb	08:28:52
1	Pb 220.353†	612.7	551.4	144.78	µg/L	144.78	ppb	08:28:52
1	S 181.975 Axial†	109.5	86.4	406.52	µg/L	406.52	ppb	08:28:52
1	Sb 206.836†	21.2	-0.1	9.6589	µg/L	9.6589	ppb	08:28:52
1	Se 196.026†	-28.4	-38.0	20.417	µg/L	20.417	ppb	08:28:52
1	SiO2†	101671.0	98091.9	18013	µg/L	18013	ppb	08:28:31
1	Si 251.611†	114331.4	113075.4	8243.6	µg/L	8243.6	ppb	08:28:31
1	Sn 189.927†	-38.6	-60.7	-12.155	µg/L	-12.155	ppb	08:28:52
1	Ti 334.940†	1511044.0	1497969.1	3411.0	µg/L	3411.0	ppb	08:28:26
1	Tl 190.801†	-39.8	-19.1	-0.1107	µg/L	-0.1107	ppb	08:28:52
1	U 409.014†	301.6	-431.3	-57.402	µg/L	-57.402	ppb	08:28:26
1	V 292.402†	11658.6	11690.4	139.69	µg/L	139.69	ppb	08:28:31
1	Zn 213.857†	15985.1	15328.4	394.78	µg/L	394.78	ppb	08:28:31
2	Sc RADIAL	117208.7	117208.7	100	%			08:27:27
2	Al 396.153Radial†	86008.4	85459.5	42461	µg/L	42461	ppb	08:27:27
2	Ca 317.933Radial†	56927.7	56233.3	21758	µg/L	21758	ppb	08:27:27
2	Fe 238.204 Radial†	15950.5	15856.4	100840	µg/L	100840	ppb	08:27:47
2	K 766.490 Radial†	13012.9	12266.0	6277.6	µg/L	6277.6	ppb	08:27:27
2	Mg 279.077 IEC†	1843.7	1819.1	11083	µg/L	11083	ppb	08:27:47
2	Na 589.592 Radial†	1596.8	2223.0	556.71	µg/L	556.71	ppb	08:27:47
2	Sr 421.552†	21374.3	21330.9	107.21	µg/L	107.21	ppb	08:27:27
2	Sc 361.383	2036874.1	2036874.1	100.72	%			08:28:59
2	Y 371.029	1309125.7	1309125.7	104.00	%			08:28:59
2	Ag 328.068†	9619.1	9539.5	95.823	µg/L	95.823	ppb	08:29:05
2	As 188.979†	20.0	17.6	23.170	µg/L	23.170	ppb	08:29:25
2	B 249.677†	1393.0	1245.1	22.267	µg/L	22.267	ppb	08:29:05
2	Ba 233.527†	20358.6	20290.2	520.70	µg/L	520.70	ppb	08:29:05
2	Be 313.107†	13368.9	9756.9	4.8472	µg/L	4.8472	ppb	08:29:05
2	Cd 226.502†	330.1	426.7	3.5566	µg/L	3.5566	ppb	08:29:25
2	Co 228.616†	536.1	598.9	21.850	µg/L	21.850	ppb	08:29:25
2	Cr 267.716†	9527.5	9558.8	200.77	µg/L	200.77	ppb	08:29:05
2	Cu 324.752†	27399.0	22932.1	180.73	µg/L	180.73	ppb	08:29:05
2	Mn 257.610†	579512.2	575545.4	1850.4	µg/L	1850.4	ppb	08:28:59
2	Mo 202.031†	35.6	39.0	8.5168	µg/L	8.5168	ppb	08:29:25
2	Ni 231.604†	1053.8	770.7	42.165	µg/L	42.165	ppb	08:29:25
2	P 214.914†	1207.6	998.0	1892.6	µg/L	1892.6	ppb	08:29:25
2	Pb 220.353†	608.0	547.4	143.74	µg/L	143.74	ppb	08:29:25

2	S 181.975 Axial†	106.9	83.9	394.39 µg/L	394.39 ppb	08:29:25
2	Sb 206.836†	23.2	2.0	11.619 µg/L	11.619 ppb	08:29:25
2	Se 196.026†	-41.5	-51.0	3.8441 µg/L	3.8441 ppb	08:29:25
2	SiO2†	102033.2	98548.0	18097 µg/L	18097 ppb	08:29:05
2	Si 251.611†	114686.0	113535.9	8278.3 µg/L	8278.3 ppb	08:29:05
2	Sn 189.927†	-41.6	-63.7	-13.757 µg/L	-13.757 ppb	08:29:25
2	Ti 334.940†	1503416.6	1491828.7	3397.0 µg/L	3397.0 ppb	08:28:59
2	Tl 190.801†	-34.8	-14.2	7.4394 µg/L	7.4394 ppb	08:29:25
2	U 409.014†	244.8	-487.4	-62.506 µg/L	-62.506 ppb	08:28:59
2	V 292.402†	11670.2	11713.0	139.95 µg/L	139.95 ppb	08:29:05
2	Zn 213.857†	16018.8	15377.0	396.07 µg/L	396.07 ppb	08:29:05
3	Sc RADIAL	117649.5	117649.5	101 %		08:27:53
3	Al 396.153Radial†	86195.0	85323.7	42394 µg/L	42394 ppb	08:27:53
3	Ca 317.933Radial†	57053.7	56145.8	21724 µg/L	21724 ppb	08:27:53
3	Fe 238.204 Radial†	15933.7	15780.2	100360 µg/L	100360 ppb	08:28:13
3	K 766.490 Radial†	13047.7	12252.0	6270.4 µg/L	6270.4 ppb	08:27:53
3	Mg 279.077 IEC†	1849.9	1818.4	11079 µg/L	11079 ppb	08:28:13
3	Na 589.592 Radial†	1589.0	2209.3	553.26 µg/L	553.26 ppb	08:28:13
3	Sr 421.552†	21481.5	21357.4	107.34 µg/L	107.34 ppb	08:27:53
3	Sc 361.383	2035688.5	2035688.5	100.67 %		08:29:33
3	Y 371.029	1309024.3	1309024.3	103.99 %		08:29:33
3	Ag 328.068†	9662.4	9588.1	96.232 µg/L	96.232 ppb	08:29:38
3	As 188.979†	16.5	14.2	17.071 µg/L	17.071 ppb	08:29:59
3	B 249.677†	1387.1	1240.0	22.201 µg/L	22.201 ppb	08:29:38
3	Ba 233.527†	20421.0	20364.0	522.59 µg/L	522.59 ppb	08:29:38
3	Be 313.107†	13425.7	9821.0	4.8827 µg/L	4.8827 ppb	08:29:38
3	Cd 226.502†	333.5	430.3	3.6911 µg/L	3.6911 ppb	08:29:59
3	Co 228.616†	519.6	582.8	21.046 µg/L	21.046 ppb	08:29:59
3	Cr 267.716†	9619.4	9655.6	202.81 µg/L	202.81 ppb	08:29:38
3	Cu 324.752†	27631.5	23178.9	182.34 µg/L	182.34 ppb	08:29:38
3	Mn 257.610†	582054.2	578405.6	1859.5 µg/L	1859.5 ppb	08:29:33
3	Mo 202.031†	37.5	40.9	8.7221 µg/L	8.7221 ppb	08:29:59
3	Ni 231.604†	1051.6	769.0	42.075 µg/L	42.075 ppb	08:29:59
3	P 214.914†	1207.9	999.0	1895.1 µg/L	1895.1 ppb	08:29:59
3	Pb 220.353†	603.0	542.7	142.53 µg/L	142.53 ppb	08:29:59
3	S 181.975 Axial†	100.7	77.9	364.82 µg/L	364.82 ppb	08:29:59
3	Sb 206.836†	22.8	1.6	11.273 µg/L	11.273 ppb	08:29:59
3	Se 196.026†	-41.0	-50.6	4.0616 µg/L	4.0616 ppb	08:29:59
3	SiO2†	102683.0	99252.5	18226 µg/L	18226 ppb	08:29:38
3	Si 251.611†	115355.2	114267.0	8331.8 µg/L	8331.8 ppb	08:29:38
3	Sn 189.927†	-36.1	-58.2	-11.020 µg/L	-11.020 ppb	08:29:59
3	Ti 334.940†	1508141.9	1497392.1	3409.7 µg/L	3409.7 ppb	08:29:33
3	Tl 190.801†	-27.5	-6.9	18.679 µg/L	18.679 ppb	08:29:59
3	U 409.014†	266.2	-466.1	-60.480 µg/L	-60.480 ppb	08:29:33
3	V 292.402†	11708.8	11758.1	140.42 µg/L	140.42 ppb	08:29:38
3	Zn 213.857†	16109.8	15476.6	398.76 µg/L	398.76 ppb	08:29:38

Mean Data: 241417001|930799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2037127.7	100.74	%	0.078				0.08%
Sc RADIAL	117330.0	101	%	0.2				0.24%
Y 371.029	1308987.4	103.99	%	0.013				0.01%
Ag 328.068†	9530.1	95.723	µg/L	0.5652	95.723	ppb	0.5652	0.59%
Al 396.153Radial†	85451.7	42457	µg/L	61.7	42457	ppb	61.7	0.15%
As 188.979†	14.6	17.729	µg/L	5.1439	17.729	ppb	5.1439	29.01%
B 249.677†	1233.0	21.801	µg/L	0.7516	21.801	ppb	0.7516	3.45%
Ba 233.527†	20299.5	520.94	µg/L	1.549	520.94	ppb	1.549	0.30%
Be 313.107†	9737.5	4.8318	µg/L	0.06007	4.8318	ppb	0.06007	1.24%
Ca 317.933Radial†	56355.0	21805	µg/L	112.1	21805	ppb	112.1	0.51%
Cd 226.502†	432.1	3.7161	µg/L	0.17340	3.7161	ppb	0.17340	4.67%
Co 228.616†	596.0	21.694	µg/L	0.5853	21.694	ppb	0.5853	2.70%
Cr 267.716†	9588.4	201.40	µg/L	1.223	201.40	ppb	1.223	0.61%
Cu 324.752†	23027.4	181.35	µg/L	0.864	181.35	ppb	0.864	0.48%
Fe 238.204 Radial†	15827.1	100650	µg/L	260.8	100650	ppb	260.8	0.26%
K 766.490 Radial†	12271.8	6280.6	µg/L	11.89	6280.6	ppb	11.89	0.19%
Mg 279.077 IEC†	1820.5	11092	µg/L	18.9	11092	ppb	18.9	0.17%
Mn 257.610†	577157.5	1855.5	µg/L	4.65	1855.5	ppb	4.65	0.25%
Mo 202.031†	39.0	8.5129	µg/L	0.21117	8.5129	ppb	0.21117	2.48%
Na 589.592 Radial†	2221.0	556.20	µg/L	2.720	556.20	ppb	2.720	0.49%

Ni 231.604†	775.1	42.405	µg/L	0.4952	42.405	ppb	0.4952	1.17%
P 214.914†	995.2	1887.1	µg/L	11.69	1887.1	ppb	11.69	0.62%
Pb 220.353†	547.2	143.68	µg/L	1.127	143.68	ppb	1.127	0.78%
S 181.975 Axial†	82.7	388.58	µg/L	21.447	388.58	ppb	21.447	5.52%
Sb 206.836†	1.2	10.850	µg/L	1.0464	10.850	ppb	1.0464	9.64%
Se 196.026†	-46.6	9.4410	µg/L	9.50636	9.4410	ppb	9.50636	100.69%
SiO2†	98630.8	18112	µg/L	107.4	18112	ppb	107.4	0.59%
Si 251.611†	113626.1	8284.6	µg/L	44.43	8284.6	ppb	44.43	0.54%
Sn 189.927†	-60.9	-12.310	µg/L	1.3752	-12.310	ppb	1.3752	11.17%
Sr 421.552†	21372.5	107.42	µg/L	0.256	107.42	ppb	0.256	0.24%
Ti 334.940†	1495729.9	3405.9	µg/L	7.72	3405.9	ppb	7.72	0.23%
Tl 190.801†	-13.4	8.6692	µg/L	9.45498	8.6692	ppb	9.45498	109.06%
U 409.014†	-461.6	-60.129	µg/L	2.5700	-60.129	ppb	2.5700	4.27%
V 292.402†	11720.5	140.02	µg/L	0.369	140.02	ppb	0.369	0.26%
Zn 213.857†	15394.0	396.54	µg/L	2.029	396.54	ppb	2.029	0.51%

Sequence No.: 17
Sample ID: 241417002|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 315
Date Collected: 12/10/2009 08:30:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241417002|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116991.4	116991.4	100	%			08:30:40
1	Al 396.153Radial†	97593.1	97167.2	48278	µg/L	48278	ppb	08:30:40
1	Ca 317.933Radial†	26413.7	25919.0	10029	µg/L	10029	ppb	08:31:00
1	Fe 238.204 Radial†	18367.2	18295.1	116350	µg/L	116350	ppb	08:31:00
1	K 766.490 Radial†	14808.2	14079.8	7205.9	µg/L	7205.9	ppb	08:30:40
1	Mg 279.077 IEC†	2014.6	1992.9	12133	µg/L	12133	ppb	08:31:00
1	Na 589.592 Radial†	4823.3	5442.4	1362.9	µg/L	1362.9	ppb	08:31:00
1	Sr 421.552†	15434.2	15448.7	77.645	µg/L	77.645	ppb	08:30:40
1	Sc 361.383	2067571.6	2067571.6	102.24	%			08:32:05
1	Y 371.029	1351377.0	1351377.0	107.36	%			08:32:05
1	Ag 328.068†	-680.9	-676.3	3.6321	µg/L	3.6321	ppb	08:32:10
1	As 188.979†	5.4	3.1	-1.7746	µg/L	-1.7746	ppb	08:32:31
1	B 249.677†	1423.6	1254.5	17.799	µg/L	17.799	ppb	08:32:10
1	Ba 233.527†	9003.3	8883.9	228.05	µg/L	228.05	ppb	08:32:10
1	Be 313.107†	16749.0	12865.8	6.5365	µg/L	6.5365	ppb	08:32:10
1	Cd 226.502†	330.8	422.5	2.1620	µg/L	2.1620	ppb	08:32:31
1	Co 228.616†	333.5	392.9	10.460	µg/L	10.460	ppb	08:32:31
1	Cr 267.716†	2949.4	2984.5	62.802	µg/L	62.802	ppb	08:32:31
1	Cu 324.752†	3615.2	-733.8	19.901	µg/L	19.901	ppb	08:32:10
1	Mn 257.610†	558582.8	546532.7	1759.7	µg/L	1759.7	ppb	08:32:05
1	Mo 202.031†	72.2	74.3	13.250	µg/L	13.250	ppb	08:32:31
1	Ni 231.604†	889.6	594.5	32.526	µg/L	32.526	ppb	08:32:31
1	P 214.914†	621.9	407.4	703.65	µg/L	703.65	ppb	08:32:31
1	Pb 220.353†	435.1	369.3	98.356	µg/L	98.356	ppb	08:32:31
1	S 181.975 Axial†	44.5	21.3	85.447	µg/L	85.447	ppb	08:32:31
1	Sb 206.836†	14.9	-6.5	7.6008	µg/L	7.6008	ppb	08:32:31
1	Se 196.026†	-43.2	-52.1	11.269	µg/L	11.269	ppb	08:32:31
1	SiO2†	105545.9	100479.6	18451	µg/L	18451	ppb	08:32:10
1	Si 251.611†	118812.2	115881.1	8426.3	µg/L	8426.3	ppb	08:32:10
1	Sn 189.927†	-37.3	-58.9	-11.842	µg/L	-11.842	ppb	08:32:31
1	Ti 334.940†	1836575.5	1795519.6	4089.5	µg/L	4089.5	ppb	08:32:05
1	Tl 190.801†	-42.6	-21.3	3.0961	µg/L	3.0961	ppb	08:32:31
1	U 409.014†	-889.3	-1600.3	-166.58	µg/L	-166.58	ppb	08:32:05
1	V 292.402†	8066.4	8016.2	99.491	µg/L	99.491	ppb	08:32:10
1	Zn 213.857†	18708.6	17771.6	458.15	µg/L	458.15	ppb	08:32:10
2	Sc RADIAL	117929.5	117929.5	101	%			08:31:06
2	Al 396.153Radial†	98764.2	97551.5	48469	µg/L	48469	ppb	08:31:06
2	Ca 317.933Radial†	26808.7	26100.3	10099	µg/L	10099	ppb	08:31:26
2	Fe 238.204 Radial†	18480.2	18261.2	116130	µg/L	116130	ppb	08:31:26
2	K 766.490 Radial†	15041.7	14193.3	7264.0	µg/L	7264.0	ppb	08:31:06
2	Mg 279.077 IEC†	2022.0	1984.3	12080	µg/L	12080	ppb	08:31:26
2	Na 589.592 Radial†	4874.4	5454.8	1366.0	µg/L	1366.0	ppb	08:31:26
2	Sr 421.552†	15718.2	15607.2	78.441	µg/L	78.441	ppb	08:31:06
2	Sc 361.383	2057276.4	2057276.4	101.73	%			08:32:38
2	Y 371.029	1345567.9	1345567.9	106.90	%			08:32:38
2	Ag 328.068†	-595.6	-595.8	4.3499	µg/L	4.3499	ppb	08:32:44
2	As 188.979†	16.6	14.1	18.367	µg/L	18.367	ppb	08:33:04
2	B 249.677†	1450.2	1287.6	19.303	µg/L	19.303	ppb	08:32:44
2	Ba 233.527†	8943.7	8869.4	227.68	µg/L	227.68	ppb	08:32:44
2	Be 313.107†	16821.8	13019.4	6.6227	µg/L	6.6227	ppb	08:32:44
2	Cd 226.502†	338.4	431.6	2.4212	µg/L	2.4212	ppb	08:33:04
2	Co 228.616†	327.3	388.4	10.185	µg/L	10.185	ppb	08:33:04
2	Cr 267.716†	2942.8	2992.5	62.969	µg/L	62.969	ppb	08:33:04
2	Cu 324.752†	3574.6	-756.1	19.701	µg/L	19.701	ppb	08:32:44
2	Mn 257.610†	558787.2	549467.7	1769.1	µg/L	1769.1	ppb	08:32:38
2	Mo 202.031†	69.6	72.1	12.981	µg/L	12.981	ppb	08:33:04
2	Ni 231.604†	898.9	608.0	33.263	µg/L	33.263	ppb	08:33:04
2	P 214.914†	610.1	398.8	686.63	µg/L	686.63	ppb	08:33:04
2	Pb 220.353†	454.7	390.7	103.89	µg/L	103.89	ppb	08:33:04

2	S 181.975 Axial†	45.8	22.8	92.796 µg/L	92.796 ppb	08:33:04
2	Sb 206.836†	13.9	-7.4	6.7864 µg/L	6.7864 ppb	08:33:04
2	Se 196.026†	-38.7	-47.9	16.556 µg/L	16.556 ppb	08:33:04
2	SiO2†	106115.2	101555.8	18649 µg/L	18649 ppb	08:32:44
2	Si 251.611†	119348.1	116989.4	8507.4 µg/L	8507.4 ppb	08:32:44
2	Sn 189.927†	-36.6	-58.4	-11.596 µg/L	-11.596 ppb	08:33:04
2	Ti 334.940†	1839390.3	1807275.6	4116.3 µg/L	4116.3 ppb	08:32:38
2	Tl 190.801†	-44.3	-23.2	0.3821 µg/L	0.3821 ppb	08:33:04
2	U 409.014†	-896.5	-1611.7	-167.58 µg/L	-167.58 ppb	08:32:38
2	V 292.402†	8038.8	8028.6	99.609 µg/L	99.609 ppb	08:32:44
2	Zn 213.857†	18665.4	17820.7	459.47 µg/L	459.47 ppb	08:32:44
3	Sc RADIAL	117261.7	117261.7	101 %		08:31:32
3	Al 396.153Radial†	98974.8	98317.1	48849 µg/L	48849 ppb	08:31:32
3	Ca 317.933Radial†	26916.9	26358.9	10199 µg/L	10199 ppb	08:31:52
3	Fe 238.204 Radial†	18534.3	18419.1	117140 µg/L	117140 ppb	08:31:52
3	K 766.490 Radial†	15000.9	14237.5	7286.6 µg/L	7286.6 ppb	08:31:32
3	Mg 279.077 IEC†	2028.5	2002.1	12189 µg/L	12189 ppb	08:31:52
3	Na 589.592 Radial†	4871.4	5479.2	1372.1 µg/L	1372.1 ppb	08:31:52
3	Sr 421.552†	15807.1	15784.1	79.330 µg/L	79.330 ppb	08:31:32
3	Sc 361.383	2090228.0	2090228.0	103.36 %		08:33:12
3	Y 371.029	1366077.0	1366077.0	108.53 %		08:33:12
3	Ag 328.068†	-645.8	-635.2	4.0559 µg/L	4.0559 ppb	08:33:17
3	As 188.979†	13.9	11.3	12.671 µg/L	12.671 ppb	08:33:38
3	B 249.677†	1509.5	1322.6	20.501 µg/L	20.501 ppb	08:33:17
3	Ba 233.527†	8924.0	8711.7	223.63 µg/L	223.63 ppb	08:33:17
3	Be 313.107†	16730.6	12670.4	6.4520 µg/L	6.4520 ppb	08:33:17
3	Cd 226.502†	324.6	413.0	1.8476 µg/L	1.8476 ppb	08:33:38
3	Co 228.616†	327.0	383.0	10.196 µg/L	10.196 ppb	08:33:38
3	Cr 267.716†	2966.2	2969.5	62.483 µg/L	62.483 ppb	08:33:38
3	Cu 324.752†	3542.6	-842.4	19.318 µg/L	19.318 ppb	08:33:17
3	Mn 257.610†	549403.8	531730.6	1712.5 µg/L	1712.5 ppb	08:33:12
3	Mo 202.031†	74.1	75.4	13.410 µg/L	13.410 ppb	08:33:38
3	Ni 231.604†	901.1	596.3	32.622 µg/L	32.622 ppb	08:33:38
3	P 214.914†	624.8	403.6	695.26 µg/L	695.26 ppb	08:33:38
3	Pb 220.353†	435.1	364.7	97.203 µg/L	97.203 ppb	08:33:38
3	S 181.975 Axial†	49.6	25.8	107.29 µg/L	107.29 ppb	08:33:38
3	Sb 206.836†	18.8	-2.9	10.758 µg/L	10.758 ppb	08:33:38
3	Se 196.026†	-46.6	-55.0	8.1464 µg/L	8.1464 ppb	08:33:38
3	SiO2†	110705.2	104352.1	19162 µg/L	19162 ppb	08:33:17
3	Si 251.611†	124783.5	120398.6	8764.4 µg/L	8764.4 ppb	08:33:17
3	Sn 189.927†	-43.4	-64.4	-14.530 µg/L	-14.530 ppb	08:33:38
3	Ti 334.940†	1810400.4	1750725.7	3987.4 µg/L	3987.4 ppb	08:33:12
3	Tl 190.801†	-44.2	-22.3	0.4951 µg/L	0.4951 ppb	08:33:38
3	U 409.014†	-917.0	-1617.6	-168.30 µg/L	-168.30 ppb	08:33:12
3	V 292.402†	7973.5	7840.9	97.581 µg/L	97.581 ppb	08:33:17
3	Zn 213.857†	18533.3	17403.7	448.31 µg/L	448.31 ppb	08:33:17

Mean Data: 241417002|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2071692.0	102.45	%	0.834				0.81%
Sc RADIAL	117394.2	101	%	0.4				0.41%
Y 371.029	1354340.6	107.59	%	0.840				0.78%
Ag 328.068†	-635.8	4.0126	µg/L	0.36087	4.0126	ppb	0.36087	8.99%
Al 396.153Radial†	97678.6	48532	µg/L	290.9	48532	ppb	290.9	0.60%
As 188.979†	9.5	9.7544	µg/L	10.38260	9.7544	ppb	10.38260	106.44%
B 249.677†	1288.2	19.201	µg/L	1.3537	19.201	ppb	1.3537	7.05%
Ba 233.527†	8821.7	226.45	µg/L	2.452	226.45	ppb	2.452	1.08%
Be 313.107†	12851.8	6.5371	µg/L	0.08535	6.5371	ppb	0.08535	1.31%
Ca 317.933Radial†	26126.0	10109	µg/L	85.5	10109	ppb	85.5	0.85%
Cd 226.502†	422.4	2.1436	µg/L	0.28724	2.1436	ppb	0.28724	13.40%
Co 228.616†	388.1	10.280	µg/L	0.1554	10.280	ppb	0.1554	1.51%
Cr 267.716†	2982.2	62.751	µg/L	0.2473	62.751	ppb	0.2473	0.39%
Cu 324.752†	-777.4	19.640	µg/L	0.2966	19.640	ppb	0.2966	1.51%
Fe 238.204 Radial†	18325.1	116540	µg/L	528.5	116540	ppb	528.5	0.45%
K 766.490 Radial†	14170.2	7252.1	µg/L	41.63	7252.1	ppb	41.63	0.57%
Mg 279.077 IEC†	1993.1	12134	µg/L	54.3	12134	ppb	54.3	0.45%
Mn 257.610†	542577.0	1747.1	µg/L	30.29	1747.1	ppb	30.29	1.73%
Mo 202.031†	73.9	13.213	µg/L	0.2169	13.213	ppb	0.2169	1.64%
Na 589.592 Radial†	5458.8	1367.0	µg/L	4.69	1367.0	ppb	4.69	0.34%

Ni 231.604†	599.6	32.804	µg/L	0.4008	32.804	ppb	0.4008	1.22%
P 214.914†	403.2	695.18	µg/L	8.510	695.18	ppb	8.510	1.22%
Pb 220.353†	374.9	99.816	µg/L	3.5742	99.816	ppb	3.5742	3.58%
S 181.975 Axial†	23.3	95.176	µg/L	11.1118	95.176	ppb	11.1118	11.67%
Sb 206.836†	-5.6	8.3817	µg/L	2.09771	8.3817	ppb	2.09771	25.03%
Se 196.026†	-51.7	11.990	µg/L	4.2508	11.990	ppb	4.2508	35.45%
SiO2†	102129.1	18754	µg/L	367.1	18754	ppb	367.1	1.96%
Si 251.611†	117756.3	8566.0	µg/L	176.51	8566.0	ppb	176.51	2.06%
Sn 189.927†	-60.6	-12.656	µg/L	1.6275	-12.656	ppb	1.6275	12.86%
Sr 421.552†	15613.3	78.472	µg/L	0.8434	78.472	ppb	0.8434	1.07%
Ti 334.940†	1784507.0	4064.4	µg/L	67.98	4064.4	ppb	67.98	1.67%
Tl 190.801†	-22.3	1.3244	µg/L	1.53538	1.3244	ppb	1.53538	115.93%
U 409.014†	-1609.9	-167.48	µg/L	0.863	-167.48	ppb	0.863	0.52%
V 292.402†	7961.9	98.894	µg/L	1.1382	98.894	ppb	1.1382	1.15%
Zn 213.857†	17665.3	455.31	µg/L	6.096	455.31	ppb	6.096	1.34%

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 08:41:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	115906.5	115906.5	99.4	%			08:41:43
1	Al 396.153Radial†	10451.4	10393.2	5144.6	µg/L	5144.6	ppb	08:41:43
1	Ca 317.933Radial†	13347.9	13018.3	5037.0	µg/L	5037.0	ppb	08:42:04
1	Fe 238.204 Radial†	804.5	794.3	5067.9	µg/L	5067.9	ppb	08:42:04
1	K 766.490 Radial†	10471.8	9854.6	5043.5	µg/L	5043.5	ppb	08:41:43
1	Mg 279.077 IEC†	838.6	828.4	5119.9	µg/L	5119.9	ppb	08:42:04
1	Na 589.592 Radial†	40180.5	41065.0	10284	µg/L	10284	ppb	08:41:43
1	Sr 421.552†	98277.9	98952.6	497.33	µg/L	497.33	ppb	08:41:43
1	Sc 361.383	2014614.8	2014614.8	99.624	%			08:43:08
1	Y 371.029	1258875.0	1258875.0	100.01	%			08:43:08
1	Ag 328.068†	55513.0	55712.3	511.66	µg/L	511.66	ppb	08:43:13
1	As 188.979†	269.4	268.2	485.95	µg/L	485.95	ppb	08:43:34
1	B 249.677†	11444.7	11350.1	490.46	µg/L	490.46	ppb	08:43:13
1	Ba 233.527†	19068.9	19218.9	493.98	µg/L	493.98	ppb	08:43:13
1	Be 313.107†	793345.7	792826.2	495.92	µg/L	495.92	ppb	08:43:08
1	Cd 226.502†	18473.1	18641.9	496.65	µg/L	496.65	ppb	08:43:13
1	Co 228.616†	10175.8	10280.9	496.91	µg/L	496.91	ppb	08:43:13
1	Cr 267.716†	23195.2	23382.6	491.53	µg/L	491.53	ppb	08:43:13
1	Cu 324.752†	75103.8	71117.7	494.39	µg/L	494.39	ppb	08:43:13
1	Mn 257.610†	153931.9	154714.6	494.64	µg/L	494.64	ppb	08:43:08
1	Mo 202.031†	4341.3	4361.3	509.62	µg/L	509.62	ppb	08:43:34
1	Ni 231.604†	9278.1	9037.6	494.46	µg/L	494.46	ppb	08:43:13
1	P 214.914†	1425.7	1230.2	2431.5	µg/L	2431.5	ppb	08:43:34
1	Pb 220.353†	1982.3	1933.5	500.48	µg/L	500.48	ppb	08:43:34
1	S 181.975 Axial†	236.1	214.9	1050.6	µg/L	1050.6	ppb	08:43:34
1	Sb 206.836†	542.3	523.3	510.72	µg/L	510.72	ppb	08:43:34
1	Se 196.026†	408.2	399.8	513.10	µg/L	513.10	ppb	08:43:34
1	SiO2†	32208.2	29578.5	5431.5	µg/L	5431.5	ppb	08:43:13
1	Si 251.611†	34579.9	34385.2	2495.6	µg/L	2495.6	ppb	08:43:13
1	Sn 189.927†	1034.0	1015.5	522.73	µg/L	522.73	ppb	08:43:34
1	Ti 334.940†	223962.5	224033.9	510.05	µg/L	510.05	ppb	08:43:08
1	Tl 190.801†	311.8	333.3	514.33	µg/L	514.33	ppb	08:43:34
1	U 409.014†	6095.2	5387.8	487.68	µg/L	487.68	ppb	08:43:13
1	V 292.402†	43500.3	43791.3	497.36	µg/L	497.36	ppb	08:43:13
1	Zn 213.857†	19289.7	18835.9	495.28	µg/L	495.28	ppb	08:43:13
2	Sc RADIAL	116043.1	116043.1	99.5	%			08:42:09
2	Al 396.153Radial†	10532.7	10462.6	5179.2	µg/L	5179.2	ppb	08:42:09
2	Ca 317.933Radial†	13307.4	12961.8	5015.2	µg/L	5015.2	ppb	08:42:30
2	Fe 238.204 Radial†	806.1	795.0	5072.1	µg/L	5072.1	ppb	08:42:30
2	K 766.490 Radial†	10523.7	9894.4	5063.8	µg/L	5063.8	ppb	08:42:09
2	Mg 279.077 IEC†	841.3	830.1	5130.2	µg/L	5130.2	ppb	08:42:30
2	Na 589.592 Radial†	40403.3	41241.3	10328	µg/L	10328	ppb	08:42:09
2	Sr 421.552†	98769.0	99329.7	499.23	µg/L	499.23	ppb	08:42:09
2	Sc 361.383	2030014.8	2030014.8	100.39	%			08:43:41
2	Y 371.029	1265623.8	1265623.8	100.55	%			08:43:41
2	Ag 328.068†	55696.2	55472.0	509.45	µg/L	509.45	ppb	08:43:47
2	As 188.979†	278.2	274.9	498.04	µg/L	498.04	ppb	08:44:07
2	B 249.677†	11545.9	11363.7	491.05	µg/L	491.05	ppb	08:43:47
2	Ba 233.527†	19146.4	19151.0	492.23	µg/L	492.23	ppb	08:43:47
2	Be 313.107†	803081.5	796483.4	498.21	µg/L	498.21	ppb	08:43:41
2	Cd 226.502†	18566.2	18593.9	495.38	µg/L	495.38	ppb	08:43:47
2	Co 228.616†	10224.1	10251.6	495.48	µg/L	495.48	ppb	08:43:47
2	Cr 267.716†	23313.9	23324.2	490.30	µg/L	490.30	ppb	08:43:47
2	Cu 324.752†	75507.8	70948.2	493.21	µg/L	493.21	ppb	08:43:47
2	Mn 257.610†	155905.8	155508.8	497.18	µg/L	497.18	ppb	08:43:41
2	Mo 202.031†	4329.7	4316.8	504.41	µg/L	504.41	ppb	08:44:07
2	Ni 231.604†	9318.9	9007.6	492.82	µg/L	492.82	ppb	08:43:47
2	P 214.914†	1421.8	1215.5	2401.8	µg/L	2401.8	ppb	08:44:07
2	Pb 220.353†	1992.7	1928.8	499.26	µg/L	499.26	ppb	08:44:07

2	S 181.975 Axial†	245.5	222.4	1087.4 µg/L	1087.4 ppb	08:44:07
2	Sb 206.836†	545.7	522.5	509.98 µg/L	509.98 ppb	08:44:07
2	Se 196.026†	411.9	400.4	513.84 µg/L	513.84 ppb	08:44:07
2	SiO2†	32221.9	29346.9	5389.0 µg/L	5389.0 ppb	08:43:47
2	Si 251.611†	34622.9	34164.8	2479.5 µg/L	2479.5 ppb	08:43:47
2	Sn 189.927†	1029.7	1003.3	516.49 µg/L	516.49 ppb	08:44:07
2	Ti 334.940†	226842.6	225197.6	512.70 µg/L	512.70 ppb	08:43:41
2	Tl 190.801†	313.3	332.5	513.05 µg/L	513.05 ppb	08:44:07
2	U 409.014†	6155.9	5401.8	488.95 µg/L	488.95 ppb	08:43:47
2	V 292.402†	43643.9	43603.1	495.21 µg/L	495.21 ppb	08:43:47
2	Zn 213.857†	19354.1	18753.2	493.10 µg/L	493.10 ppb	08:43:47
3	Sc RADIAL	115981.2	115981.2	99.4 %		08:42:35
3	Al 396.153Radial†	10397.9	10332.7	5115.1 µg/L	5115.1 ppb	08:42:35
3	Ca 317.933Radial†	13422.6	13084.8	5062.8 µg/L	5062.8 ppb	08:42:56
3	Fe 238.204 Radial†	807.0	796.3	5080.9 µg/L	5080.9 ppb	08:42:56
3	K 766.490 Radial†	10504.5	9880.6	5056.8 µg/L	5056.8 ppb	08:42:35
3	Mg 279.077 IEC†	845.4	834.7	5158.2 µg/L	5158.2 ppb	08:42:56
3	Na 589.592 Radial†	40016.3	40873.8	10236 µg/L	10236 ppb	08:42:35
3	Sr 421.552†	97581.3	98188.4	493.49 µg/L	493.49 ppb	08:42:35
3	Sc 361.383	2038620.0	2038620.0	100.81 %		08:44:14
3	Y 371.029	1269563.4	1269563.4	100.86 %		08:44:14
3	Ag 328.068†	56244.1	55781.3	512.30 µg/L	512.30 ppb	08:44:20
3	As 188.979†	271.9	267.5	484.56 µg/L	484.56 ppb	08:44:40
3	B 249.677†	11665.2	11433.6	494.07 µg/L	494.07 ppb	08:44:20
3	Ba 233.527†	19369.1	19291.4	495.84 µg/L	495.84 ppb	08:44:20
3	Be 313.107†	795352.3	785439.5	491.30 µg/L	491.30 ppb	08:44:14
3	Cd 226.502†	18796.9	18744.7	499.39 µg/L	499.39 ppb	08:44:20
3	Co 228.616†	10360.8	10344.1	499.94 µg/L	499.94 ppb	08:44:20
3	Cr 267.716†	23639.8	23549.5	495.04 µg/L	495.04 ppb	08:44:20
3	Cu 324.752†	76274.3	71391.1	496.29 µg/L	496.29 ppb	08:44:20
3	Mn 257.610†	154367.7	153327.5	490.21 µg/L	490.21 ppb	08:44:14
3	Mo 202.031†	4259.0	4228.4	494.09 µg/L	494.09 ppb	08:44:40
3	Ni 231.604†	9434.0	9082.5	496.92 µg/L	496.92 ppb	08:44:20
3	P 214.914†	1399.0	1186.9	2343.3 µg/L	2343.3 ppb	08:44:40
3	Pb 220.353†	1959.3	1887.3	488.49 µg/L	488.49 ppb	08:44:40
3	S 181.975 Axial†	239.5	215.4	1053.3 µg/L	1053.3 ppb	08:44:40
3	Sb 206.836†	534.1	508.7	496.48 µg/L	496.48 ppb	08:44:40
3	Se 196.026†	402.7	389.6	500.06 µg/L	500.06 ppb	08:44:40
3	SiO2†	32613.5	29599.9	5435.5 µg/L	5435.5 ppb	08:44:20
3	Si 251.611†	35014.5	34407.7	2498.5 µg/L	2498.5 ppb	08:44:20
3	Sn 189.927†	1004.3	973.8	501.40 µg/L	501.40 ppb	08:44:40
3	Ti 334.940†	224706.5	222124.8	505.70 µg/L	505.70 ppb	08:44:14
3	Tl 190.801†	306.3	324.2	500.25 µg/L	500.25 ppb	08:44:40
3	U 409.014†	6199.0	5418.6	490.48 µg/L	490.48 ppb	08:44:20
3	V 292.402†	44204.5	43975.8	499.33 µg/L	499.33 ppb	08:44:20
3	Zn 213.857†	19621.9	18937.5	497.95 µg/L	497.95 ppb	08:44:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027749.9	100.27	%	0.601				0.60%
Sc RADIAL	115976.9	99.4	%	0.06				0.06%
Y 371.029	1264687.4	100.47	%	0.429				0.43%
Ag 328.068†	55655.2	511.14	µg/L	1.494	511.14	ppb	1.494	0.29%
QC value within limits for Ag 328.068 Recovery = 102.23%								
Al 396.153Radial†	10396.2	5146.3	µg/L	32.11	5146.3	ppb	32.11	0.62%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	270.2	489.52	µg/L	7.413	489.52	ppb	7.413	1.51%
QC value within limits for As 188.979 Recovery = 97.90%								
B 249.677†	11382.4	491.86	µg/L	1.940	491.86	ppb	1.940	0.39%
QC value within limits for B 249.677 Recovery = 98.37%								
Ba 233.527†	19220.4	494.02	µg/L	1.805	494.02	ppb	1.805	0.37%
QC value within limits for Ba 233.527 Recovery = 98.80%								
Be 313.107†	791583.1	495.15	µg/L	3.519	495.15	ppb	3.519	0.71%
QC value within limits for Be 313.107 Recovery = 99.03%								
Ca 317.933Radial†	13021.6	5038.3	µg/L	23.82	5038.3	ppb	23.82	0.47%
QC value within limits for Ca 317.933Radial Recovery = 100.77%								
Cd 226.502†	18660.2	497.14	µg/L	2.053	497.14	ppb	2.053	0.41%
QC value within limits for Cd 226.502 Recovery = 99.43%								
Co 228.616†	10292.2	497.44	µg/L	2.278	497.44	ppb	2.278	0.46%

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   QC value within limits for Co 228.616  Recovery = 99.49%
Cr 267.716†            23418.8      492.29 µg/L         2.456      492.29 ppb          2.456   0.50%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†            71152.3      494.63 µg/L         1.551      494.63 ppb          1.551   0.31%
   QC value within limits for Cu 324.752  Recovery = 98.93%
Fe 238.204 Radial†       795.2      5073.6 µg/L          6.62      5073.6 ppb           6.62   0.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.47%
K 766.490 Radial†       9876.5      5054.7 µg/L         10.34      5054.7 ppb          10.34   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 101.09%
Mg 279.077 IEC†          831.1      5136.1 µg/L         19.82      5136.1 ppb          19.82   0.39%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.72%
Mn 257.610†           154517.0      494.01 µg/L         3.524      494.01 ppb          3.524   0.71%
   QC value within limits for Mn 257.610  Recovery = 98.80%
Mo 202.031†             4302.2      502.71 µg/L         7.904      502.71 ppb          7.904   1.57%
   QC value within limits for Mo 202.031  Recovery = 100.54%
Na 589.592 Radial†     41060.0       10282 µg/L          46.0       10282 ppb           46.0   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 102.82%
Ni 231.604†             9042.6      494.73 µg/L         2.064      494.73 ppb          2.064   0.42%
   QC value within limits for Ni 231.604  Recovery = 98.95%
P 214.914†              1210.8      2392.2 µg/L         44.88      2392.2 ppb          44.88   1.88%
   QC value within limits for P 214.914  Recovery = 95.69%
Pb 220.353†             1916.5      496.07 µg/L         6.600      496.07 ppb          6.600   1.33%
   QC value within limits for Pb 220.353  Recovery = 99.21%
S 181.975 Axial†         217.6      1063.7 µg/L         20.51      1063.7 ppb          20.51   1.93%
   QC value within limits for S 181.975 Axial  Recovery = 106.37%
Sb 206.836†              518.2      505.73 µg/L         8.019      505.73 ppb          8.019   1.59%
   QC value within limits for Sb 206.836  Recovery = 101.15%
Se 196.026†              396.6      509.00 µg/L         7.750      509.00 ppb          7.750   1.52%
   QC value within limits for Se 196.026  Recovery = 101.80%
SiO2†                  29508.4      5418.7 µg/L         25.76      5418.7 ppb          25.76   0.48%
   QC value within limits for SiO2  Recovery = 101.33%
Si 251.611†            34319.3      2491.2 µg/L         10.23      2491.2 ppb          10.23   0.41%
   QC value within limits for Si 251.611  Recovery = 99.65%
Sn 189.927†              997.5      513.54 µg/L        10.970      513.54 ppb         10.970   2.14%
   QC value within limits for Sn 189.927  Recovery = 102.71%
Sr 421.552†            98823.5      496.68 µg/L         2.923      496.68 ppb          2.923   0.59%
   QC value within limits for Sr 421.552  Recovery = 99.34%
Ti 334.940†           223785.4      509.48 µg/L         3.535      509.48 ppb          3.535   0.69%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†              330.0      509.21 µg/L         7.786      509.21 ppb          7.786   1.53%
   QC value within limits for Tl 190.801  Recovery = 101.84%
U 409.014†              5402.7      489.04 µg/L         1.402      489.04 ppb          1.402   0.29%
   QC value within limits for U 409.014  Recovery = 97.81%
V 292.402†             43790.1      497.30 µg/L         2.062      497.30 ppb          2.062   0.41%
   QC value within limits for V 292.402  Recovery = 99.46%
Zn 213.857†            18842.2      495.44 µg/L         2.433      495.44 ppb          2.433   0.49%
   QC value within limits for Zn 213.857  Recovery = 99.09%
All analyte(s) passed QC.
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Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 08:44:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114652.2	114652.2	98.3	%			08:45:22
1	Al 396.153Radial†	164.5	44.0	21.845	µg/L	21.845	ppb	08:45:22
1	Ca 317.933Radial†	483.4	79.0	30.557	µg/L	30.557	ppb	08:45:42
1	Fe 238.204 Radial†	24.5	9.8	62.085	µg/L	62.085	ppb	08:45:42
1	K 766.490 Radial†	801.0	132.3	67.711	µg/L	67.711	ppb	08:45:22
1	Mg 279.077 IEC†	8.4	-6.9	-42.781	µg/L	-42.781	ppb	08:45:42
1	Na 589.592 Radial†	-516.0	109.2	27.355	µg/L	27.355	ppb	08:45:22
1	Sr 421.552†	-55.3	6.1	0.0306	µg/L	0.0306	ppb	08:45:22
1	Sc 361.383	2035715.8	2035715.8	100.67	%			08:46:44
1	Y 371.029	1271585.5	1271585.5	101.02	%			08:46:44
1	Ag 328.068†	139.2	127.8	1.1724	µg/L	1.1724	ppb	08:46:50
1	As 188.979†	3.2	0.9	1.6561	µg/L	1.6561	ppb	08:47:10
1	B 249.677†	173.6	34.6	1.4798	µg/L	1.4798	ppb	08:47:10
1	Ba 233.527†	-64.3	14.2	0.3653	µg/L	0.3653	ppb	08:47:10
1	Be 313.107†	3588.4	48.7	0.0298	µg/L	0.0298	ppb	08:46:50
1	Cd 226.502†	-102.9	-3.2	-0.0970	µg/L	-0.0970	ppb	08:47:10
1	Co 228.616†	-74.6	-7.5	-0.3630	µg/L	-0.3630	ppb	08:47:10
1	Cr 267.716†	-145.8	-45.1	-0.9444	µg/L	-0.9444	ppb	08:46:50
1	Cu 324.752†	4126.8	-170.3	-1.1683	µg/L	-1.1683	ppb	08:46:50
1	Mn 257.610†	-49.2	152.5	0.4946	µg/L	0.4946	ppb	08:47:10
1	Mo 202.031†	3.2	6.8	0.8006	µg/L	0.8006	ppb	08:47:10
1	Ni 231.604†	299.1	21.6	1.1815	µg/L	1.1815	ppb	08:47:10
1	P 214.914†	186.0	-16.1	-32.433	µg/L	-32.433	ppb	08:47:10
1	Pb 220.353†	49.8	-6.8	-1.7381	µg/L	-1.7381	ppb	08:47:10
1	S 181.975 Axial†	31.3	9.0	43.859	µg/L	43.859	ppb	08:47:10
1	Sb 206.836†	19.8	-1.5	-1.4360	µg/L	-1.4360	ppb	08:47:10
1	Se 196.026†	5.2	-4.7	-5.9689	µg/L	-5.9689	ppb	08:47:10
1	SiO2†	2877.1	106.6	19.580	µg/L	19.580	ppb	08:46:50
1	Si 251.611†	559.6	230.7	16.966	µg/L	16.966	ppb	08:47:10
1	Sn 189.927†	22.5	-0.1	-0.0344	µg/L	-0.0344	ppb	08:47:10
1	Ti 334.940†	1596.3	811.3	1.8465	µg/L	1.8465	ppb	08:46:50
1	Tl 190.801†	-20.6	-0.1	-0.1110	µg/L	-0.1110	ppb	08:47:10
1	U 409.014†	611.1	-123.4	-11.200	µg/L	-11.200	ppb	08:46:50
1	V 292.402†	-101.0	26.4	0.2900	µg/L	0.2900	ppb	08:46:50
1	Zn 213.857†	565.3	34.9	0.9146	µg/L	0.9146	ppb	08:47:10
2	Sc RADIAL	114296.2	114296.2	98.0	%			08:45:48
2	Al 396.153Radial†	173.8	54.1	26.823	µg/L	26.823	ppb	08:45:48
2	Ca 317.933Radial†	480.7	77.7	30.076	µg/L	30.076	ppb	08:46:08
2	Fe 238.204 Radial†	23.2	8.5	53.769	µg/L	53.769	ppb	08:46:08
2	K 766.490 Radial†	702.2	34.0	17.413	µg/L	17.413	ppb	08:45:48
2	Mg 279.077 IEC†	13.0	-2.2	-13.350	µg/L	-13.350	ppb	08:46:08
2	Na 589.592 Radial†	-563.2	59.4	14.882	µg/L	14.882	ppb	08:45:48
2	Sr 421.552†	-40.8	20.7	0.1040	µg/L	0.1040	ppb	08:45:48
2	Sc 361.383	2020871.5	2020871.5	99.933	%			08:47:16
2	Y 371.029	1262102.8	1262102.8	100.27	%			08:47:16
2	Ag 328.068†	109.2	98.8	0.9032	µg/L	0.9032	ppb	08:47:22
2	As 188.979†	-1.5	-3.7	-6.7694	µg/L	-6.7694	ppb	08:47:42
2	B 249.677†	186.8	49.0	2.1094	µg/L	2.1094	ppb	08:47:42
2	Ba 233.527†	-65.0	13.0	0.3323	µg/L	0.3323	ppb	08:47:42
2	Be 313.107†	3577.4	64.0	0.0395	µg/L	0.0395	ppb	08:47:22
2	Cd 226.502†	-91.9	7.0	0.1766	µg/L	0.1766	ppb	08:47:42
2	Co 228.616†	-75.7	-9.1	-0.4406	µg/L	-0.4406	ppb	08:47:42
2	Cr 267.716†	-110.9	-11.2	-0.2359	µg/L	-0.2359	ppb	08:47:22
2	Cu 324.752†	4103.7	-163.3	-1.1215	µg/L	-1.1215	ppb	08:47:22
2	Mn 257.610†	-103.6	97.6	0.3185	µg/L	0.3185	ppb	08:47:42
2	Mo 202.031†	4.2	7.8	0.9176	µg/L	0.9176	ppb	08:47:42
2	Ni 231.604†	298.5	23.2	1.2676	µg/L	1.2676	ppb	08:47:42
2	P 214.914†	186.0	-14.8	-29.720	µg/L	-29.720	ppb	08:47:42
2	Pb 220.353†	45.3	-10.9	-2.8073	µg/L	-2.8073	ppb	08:47:42

2	S 181.975 Axial†	30.4	8.2	40.334 µg/L	40.334 ppb		08:47:42
2	Sb 206.836†	21.9	0.8	0.7777 µg/L	0.7777 ppb		08:47:42
2	Se 196.026†	13.1	3.2	4.1724 µg/L	4.1724 ppb		08:47:42
2	SiO2†	2820.0	70.5	12.941 µg/L	12.941 ppb		08:47:22
2	Si 251.611†	544.2	219.4	16.163 µg/L	16.163 ppb		08:47:42
2	Sn 189.927†	22.3	-0.1	-0.0548 µg/L	-0.0548 ppb		08:47:42
2	Ti 334.940†	1429.9	656.4	1.4936 µg/L	1.4936 ppb		08:47:22
2	Tl 190.801†	-17.9	2.5	3.8272 µg/L	3.8272 ppb		08:47:42
2	U 409.014†	624.1	-105.9	-9.6129 µg/L	-9.6129 ppb		08:47:22
2	V 292.402†	-152.5	-25.9	-0.2962 µg/L	-0.2962 ppb		08:47:22
2	Zn 213.857†	564.8	38.5	1.0114 µg/L	1.0114 ppb		08:47:42
3	Sc RADIAL	114076.9	114076.9	97.8 %			08:46:14
3	Al 396.153Radial†	160.2	40.5	20.102 µg/L	20.102 ppb		08:46:14
3	Ca 317.933Radial†	440.9	38.0	14.718 µg/L	14.718 ppb		08:46:34
3	Fe 238.204 Radial†	20.2	5.5	35.030 µg/L	35.030 ppb		08:46:34
3	K 766.490 Radial†	788.2	123.4	63.146 µg/L	63.146 ppb		08:46:14
3	Mg 279.077 IEC†	11.1	-4.1	-25.206 µg/L	-25.206 ppb		08:46:34
3	Na 589.592 Radial†	-494.2	128.8	32.258 µg/L	32.258 ppb		08:46:14
3	Sr 421.552†	-30.6	31.0	0.1560 µg/L	0.1560 ppb		08:46:14
3	Sc 361.383	2019338.6	2019338.6	99.857 %			08:47:48
3	Y 371.029	1260383.4	1260383.4	100.13 %			08:47:48
3	Ag 328.068†	121.8	111.6	1.0199 µg/L	1.0199 ppb		08:47:54
3	As 188.979†	1.0	-1.2	-2.2338 µg/L	-2.2338 ppb		08:48:14
3	B 249.677†	158.0	20.4	0.8737 µg/L	0.8737 ppb		08:48:14
3	Ba 233.527†	-60.3	17.7	0.4536 µg/L	0.4536 ppb		08:48:14
3	Be 313.107†	3502.1	-8.8	-0.0061 µg/L	-0.0061 ppb		08:47:54
3	Cd 226.502†	-95.9	3.0	0.0759 µg/L	0.0759 ppb		08:48:14
3	Co 228.616†	-70.1	-3.5	-0.1736 µg/L	-0.1736 ppb		08:48:14
3	Cr 267.716†	-127.5	-27.8	-0.5840 µg/L	-0.5840 ppb		08:47:54
3	Cu 324.752†	4071.1	-192.9	-1.3302 µg/L	-1.3302 ppb		08:47:54
3	Mn 257.610†	28.4	229.7	0.7379 µg/L	0.7379 ppb		08:48:14
3	Mo 202.031†	1.2	4.8	0.5668 µg/L	0.5668 ppb		08:48:14
3	Ni 231.604†	310.7	35.6	1.9481 µg/L	1.9481 ppb		08:48:14
3	P 214.914†	188.3	-12.3	-24.748 µg/L	-24.748 ppb		08:48:14
3	Pb 220.353†	42.5	-13.7	-3.5421 µg/L	-3.5421 ppb		08:48:14
3	S 181.975 Axial†	29.2	7.1	34.573 µg/L	34.573 ppb		08:48:14
3	Sb 206.836†	22.9	1.9	1.8186 µg/L	1.8186 ppb		08:48:14
3	Se 196.026†	12.9	3.0	3.9287 µg/L	3.9287 ppb		08:48:14
3	SiO2†	2830.4	83.0	15.250 µg/L	15.250 ppb		08:47:54
3	Si 251.611†	616.8	292.5	21.487 µg/L	21.487 ppb		08:48:14
3	Sn 189.927†	25.7	3.3	1.6886 µg/L	1.6886 ppb		08:48:14
3	Ti 334.940†	1489.9	717.6	1.6338 µg/L	1.6338 ppb		08:47:54
3	Tl 190.801†	-18.9	1.4	2.1541 µg/L	2.1541 ppb		08:48:14
3	U 409.014†	689.5	-40.0	-3.6301 µg/L	-3.6301 ppb		08:47:54
3	V 292.402†	-126.9	-0.4	-0.0032 µg/L	-0.0032 ppb		08:47:54
3	Zn 213.857†	564.8	38.9	1.0207 µg/L	1.0207 ppb		08:48:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025308.6	100.15	%	0.447				0.45%
Sc RADIAL	114341.8	98.0	%	0.25				0.25%
Y 371.029	1264690.6	100.47	%	0.479				0.48%
Ag 328.068†	112.7	1.0318	µg/L	0.13497	1.0318	ppb	0.13497	13.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	46.2	22.923	µg/L	3.4881	22.923	ppb	3.4881	15.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-2.4490	µg/L	4.21682	-2.4490	ppb	4.21682	172.18%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	34.7	1.4876	µg/L	0.61788	1.4876	ppb	0.61788	41.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.0	0.3838	µg/L	0.06272	0.3838	ppb	0.06272	16.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	34.6	0.0211	µg/L	0.02400	0.0211	ppb	0.02400	113.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	64.9	25.117	µg/L	9.0094	25.117	ppb	9.0094	35.87%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.3	0.0518	µg/L	0.13840	0.0518	ppb	0.13840	267.04%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-6.7	-0.3257	µg/L	0.13734	-0.3257	ppb	0.13734	42.16%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -28.0     -0.5881 µg/L       0.35426     -0.5881 ppb        0.35426  60.23%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -175.5     -1.2066 µg/L       0.10951     -1.2066 ppb        0.10951   9.08%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         7.9      50.295 µg/L       13.8578      50.295 ppb        13.8578  27.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         96.6      49.423 µg/L       27.8154      49.423 ppb        27.8154  56.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.4     -27.112 µg/L       14.8079     -27.112 ppb        14.8079  54.62%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              159.9      0.5170 µg/L       0.21063      0.5170 ppb        0.21063  40.74%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.5      0.7617 µg/L       0.17861      0.7617 ppb        0.17861  23.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        99.2      24.832 µg/L        8.9587      24.832 ppb         8.9587  36.08%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               26.8      1.4657 µg/L       0.41997      1.4657 ppb        0.41997  28.65%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -14.4     -28.967 µg/L        3.8974     -28.967 ppb         3.8974  13.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -10.5     -2.6958 µg/L       0.90716     -2.6958 ppb        0.90716  33.65%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.1      39.588 µg/L        4.6874      39.588 ppb         4.6874  11.84%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.4      0.3868 µg/L       1.66216      0.3868 ppb        1.66216 429.76%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.5      0.7107 µg/L       5.78602      0.7107 ppb        5.78602 814.13%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     86.7      15.924 µg/L        3.3704      15.924 ppb         3.3704  21.17%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              247.5      18.205 µg/L        2.8702      18.205 ppb         2.8702  15.77%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.0      0.5331 µg/L       1.00076      0.5331 ppb        1.00076 187.72%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               19.3      0.0969 µg/L       0.06300      0.0969 ppb        0.06300  65.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              728.5      1.6580 µg/L       0.17765      1.6580 ppb        0.17765  10.71%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.3      1.9568 µg/L       1.97649      1.9568 ppb        1.97649 101.01%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -89.8     -8.1475 µg/L       3.99181     -8.1475 ppb        3.99181  48.99%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 0.1     -0.0031 µg/L       0.29307     -0.0031 ppb        0.29307 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               37.5      0.9822 µg/L       0.05876      0.9822 ppb        0.05876   5.98%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 121409

Sample ID: Hg_ReAlign

Hg 253.652 **Rep: 1**

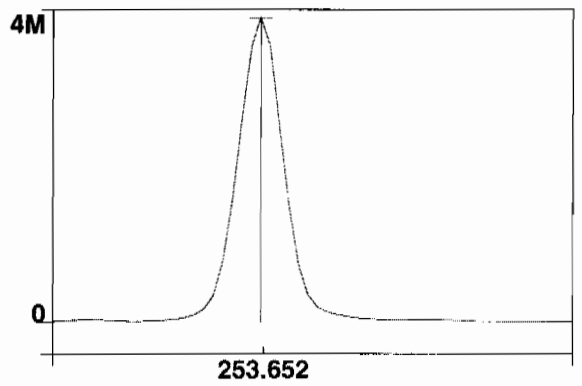

Intensity: 3589377.5 cps
Conc:

1

Reprocessing Begun
Logged In Analyst: Optima3 Technique: ICP Continuous

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX Method Last Saved: 12/4/2009 11:11:52
IEC File: 101209.iec MSF File:
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 12/4/2009 09:01:19
Analyst: Data Type: Reprocessed on 12/4/2009 11:13:20
Logged In Analyst (Original) : Optima3
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00]	ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00]	ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00]	ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00]	ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00]	ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00]	ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00]	ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00]	ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00]	ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00]	ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00]	ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00]	ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00]	ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00]	ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00]	ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00]	ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00]	ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00]	ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00]	ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00]	ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00]	ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00]	ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00]	ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00]	ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00]	ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00]	ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00]	ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00]	ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00]	ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00]	ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43	%	09:04:58
2	Sc Radial	4907.6	4907.6	100.0	%	09:03:36
2	Y 371.029	887859.3	887859.3	100.38	%	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74	%	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00]	ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00]	ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00]	ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00]	ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00]	ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00]	ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00]	ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00]	ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00]	ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00]	ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00]	ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00]	ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00]	ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00]	ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00]	ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00]	ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00]	ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00]	ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00]	ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00]	ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00]	ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00]	ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00]	ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00]	ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00]	ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00]	ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00]	ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00]	ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00]	ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00]	ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00]	ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260	%	09:05:29
3	Sc Radial	4823.8	4823.8	98.2	%	09:04:01
3	Y 371.029	877949.7	877949.7	99.263	%	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13	%	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7 ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22 ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3 ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80 ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2 ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9 ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52 ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75 ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38 ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56 ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50 ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65 ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16 ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453 ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293 %		09:38:03
3	Sc Radial	4901.3	4901.3	99.8 %		09:36:44
3	Y 371.029	861618.1	861618.1	97.417 %		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79 %		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44 ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6 ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49 ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04 ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71 ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45 ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3 ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32 ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52 ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91 ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13 ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4 ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2 ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8 ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16 ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72 ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3 ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30 ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6 ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68 ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4 ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17 ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8 ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3 ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45 ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46 ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68 ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65 ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14 ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35 ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97 ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560 ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

Ca 317.933Radial†	2844.7	5036.6 ug/L	62.48	5036.6 ppb	62.48	1.24%
QC value within limits for Ca 317.933Radial Recovery = 100.73%						
Cd 226.502†	58712.0	511.84 ug/L	0.548	511.84 ppb	0.548	0.11%
QC value within limits for Cd 226.502 Recovery = 102.37%						
Co 228.616†	31299.0	515.85 ug/L	4.347	515.85 ppb	4.347	0.84%
QC value within limits for Co 228.616 Recovery = 103.17%						
Cr 267.716†	55808.3	502.22 ug/L	0.664	502.22 ppb	0.664	0.13%
QC value within limits for Cr 267.716 Recovery = 100.44%						
Cu 324.752†	194870.1	520.66 ug/L	0.629	520.66 ppb	0.629	0.12%
QC value within limits for Cu 324.752 Recovery = 104.13%						
Fe 238.204 Radial†	417.6	5064.8 ug/L	94.14	5064.8 ppb	94.14	1.86%
QC value within limits for Fe 238.204 Radial Recovery = 101.30%						
K 766.490 Radial†	13749.0	2500.5 ug/L	7.68	2500.5 ppb	7.68	0.31%
QC value within limits for K 766.490 Radial Recovery = 100.02%						
Mg 279.077 IEC†	117.5	5266.4 ug/L	91.10	5266.4 ppb	91.10	1.73%
QC value within limits for Mg 279.077 IEC Recovery = 105.33%						
Mn 257.610†	554773.8	525.75 ug/L	0.407	525.75 ppb	0.407	0.08%
QC value within limits for Mn 257.610 Recovery = 105.15%						
Mo 202.031†	10431.0	553.90 ug/L	4.052	553.90 ppb	4.052	0.73%
QC value greater than the upper limit for Mo 202.031 Recovery = 110.78%						
Na 589.592 Radial†	8728.4	2448.3 ug/L	22.68	2448.3 ppb	22.68	0.93%
QC value within limits for Na 589.592 Radial Recovery = 97.93%						
Ni 231.604†	26132.9	511.71 ug/L	4.139	511.71 ppb	4.139	0.81%
QC value within limits for Ni 231.604 Recovery = 102.34%						
P 214.914†	5812.7	2521.9 ug/L	18.35	2521.9 ppb	18.35	0.73%
QC value within limits for P 214.914 Recovery = 100.88%						
Pb 220.353†	5504.1	518.39 ug/L	2.831	518.39 ppb	2.831	0.55%
QC value within limits for Pb 220.353 Recovery = 103.68%						
S 181.975 Axial†	2375.5	2558.4 ug/L	15.13	2558.4 ppb	15.13	0.59%
QC value within limits for S 181.975 Axial Recovery = 102.33%						
Sb 206.836†	1947.3	522.68 ug/L	3.231	522.68 ppb	3.231	0.62%
QC value within limits for Sb 206.836 Recovery = 104.54%						
Se 196.026†	5969.5	2664.5 ug/L	20.95	2664.5 ppb	20.95	0.79%
QC value within limits for Se 196.026 Recovery = 106.58%						
Si 251.611†	193620.3	4905.1 ug/L	2.68	4905.1 ppb	2.68	0.05%
QC value within limits for Si 251.611 Recovery = 98.10%						
Sn 189.927†	4161.1	550.94 ug/L	4.468	550.94 ppb	4.468	0.81%
QC value greater than the upper limit for Sn 189.927 Recovery = 110.19%						
Sr 421.552†	100372.3	526.55 ug/L	0.859	526.55 ppb	0.859	0.16%
QC value within limits for Sr 421.552 Recovery = 105.31%						
Ti 334.940†	367149.6	506.26 ug/L	0.490	506.26 ppb	0.490	0.10%
QC value within limits for Ti 334.940 Recovery = 101.25%						
Tl 190.801†	2251.7	547.80 ug/L	5.406	547.80 ppb	5.406	0.99%
QC value within limits for Tl 190.801 Recovery = 109.56%						
U 409.014†	19450.3	501.27 ug/L	1.183	501.27 ppb	1.183	0.24%
QC value within limits for U 409.014 Recovery = 100.25%						
V 292.402†	90935.8	528.06 ug/L	0.368	528.06 ppb	0.368	0.07%
QC value within limits for V 292.402 Recovery = 105.61%						
Zn 213.857†	71271.1	519.16 ug/L	0.195	519.16 ppb	0.195	0.04%
QC value within limits for Zn 213.857 Recovery = 103.83%						
SiO2†	194471.8	10543 ug/L	82.7	10543 ppb	82.7	0.78%
QC value within limits for SiO2 Recovery = 98.58%						

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573	ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874	ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858	ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828	ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035	ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137	ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619	ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177	ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430	ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693	ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067	ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993	ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191	ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448	ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62	%		09:45:16
3	Sc Radial	4809.8	4809.8	98.0	%		09:43:49
3	Y 371.029	891134.4	891134.4	100.75	%		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29	%		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441	ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723	ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610	ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180	ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992	ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472	ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457	ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343	ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153	ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058	ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762	ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825	ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115	ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478	ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335	ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760	ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264	ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146	ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869	ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168	ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676	ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895	ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168	ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177	ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090	ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625	ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335	ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911	ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862	ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122	ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761	ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033	ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %		09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %		09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

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Ca 317.933Radial†        114.9      203.44 ug/L        5.843      203.44 ppb        5.843   2.87%
   QC value within limits for Ca 317.933Radial  Recovery = 101.72%
Cd 226.502†              583.9      5.0878 ug/L      0.03067      5.0878 ppb      0.03067   0.60%
   QC value within limits for Cd 226.502  Recovery = 101.76%
Co 228.616†              304.8      5.0359 ug/L      0.08115      5.0359 ppb      0.08115   1.61%
   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†              568.2      5.0983 ug/L      0.10423      5.0983 ppb      0.10423   2.04%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†             3983.8      10.643 ug/L       0.4808      10.643 ppb       0.4808   4.52%
   QC value within limits for Cu 324.752  Recovery = 106.43%
Fe 238.204 Radial†         6.6      79.730 ug/L      29.0033      79.730 ppb      29.0033  36.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 79.73%
K 766.490 Radial†        889.4      161.88 ug/L       26.810      161.88 ppb       26.810  16.56%
   QC value within limits for K 766.490 Radial  Recovery = 107.92%
Mg 279.077 IEC†            7.3      326.69 ug/L       36.025      326.69 ppb       36.025  11.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.90%
Mn 257.610†            11132.0      10.543 ug/L       0.1659      10.543 ppb       0.1659   1.57%
   QC value within limits for Mn 257.610  Recovery = 105.43%
Mo 202.031†              195.8      10.395 ug/L       0.7057      10.395 ppb       0.7057   6.79%
   QC value within limits for Mo 202.031  Recovery = 103.95%
Na 589.592 Radial†      1041.2      292.04 ug/L       11.429      292.04 ppb       11.429   3.91%
   QC value within limits for Na 589.592 Radial  Recovery = 97.35%
Ni 231.604†              277.1      5.4266 ug/L      0.08048      5.4266 ppb      0.08048   1.48%
   QC value within limits for Ni 231.604  Recovery = 108.53%
P 214.914†               338.0      149.63 ug/L        3.816      149.63 ppb        3.816   2.55%
   QC value within limits for P 214.914  Recovery = 99.75%
Pb 220.353†               96.3      9.0961 ug/L      1.14169      9.0961 ppb      1.14169  12.55%
   QC value within limits for Pb 220.353  Recovery = 90.96%
S 181.975 Axial†          89.5      96.357 ug/L       7.4396      96.357 ppb       7.4396   7.72%
   QC value within limits for S 181.975 Axial  Recovery = 96.36%
Sb 206.836†               43.7      11.807 ug/L       0.5867      11.807 ppb       0.5867   4.97%
   QC value within limits for Sb 206.836  Recovery = 118.07%
Se 196.026†               65.7      29.405 ug/L       2.6665      29.405 ppb       2.6665   9.07%
   QC value within limits for Se 196.026  Recovery = 98.02%
Si 251.611†             4059.5      102.83 ug/L        1.217      102.83 ppb        1.217   1.18%
   QC value within limits for Si 251.611  Recovery = 102.83%
Sn 189.927†               80.0      10.600 ug/L       0.2084      10.600 ppb       0.2084   1.97%
   QC value within limits for Sn 189.927  Recovery = 106.00%
Sr 421.552†              936.7      4.9127 ug/L      0.04891      4.9127 ppb      0.04891   1.00%
   QC value within limits for Sr 421.552  Recovery = 98.25%
Ti 334.940†             3574.6      4.9172 ug/L      0.11528      4.9172 ppb      0.11528   2.34%
   QC value within limits for Ti 334.940  Recovery = 98.34%
Tl 190.801†               82.0      19.906 ug/L       0.6555      19.906 ppb       0.6555   3.29%
   QC value within limits for Tl 190.801  Recovery = 99.53%
U 409.014†              1925.7      49.768 ug/L       2.3685      49.768 ppb       2.3685   4.76%
   QC value within limits for U 409.014  Recovery = 99.54%
V 292.402†               835.7      5.0170 ug/L      0.03359      5.0170 ppb      0.03359   0.67%
   QC value within limits for V 292.402  Recovery = 100.34%
Zn 213.857†             1408.8      10.286 ug/L       0.1748      10.286 ppb       0.1748   1.70%
   QC value within limits for Zn 213.857  Recovery = 102.86%
SiO2†                   4025.3      218.19 ug/L        1.897      218.19 ppb        1.897   0.87%
   QC value within limits for SiO2  Recovery = 102.44%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125 ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358 ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332 ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716 ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926 ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720 ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740 ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396 ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397 ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291 ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433 ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413 ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610 ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770 ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657 %		09:58:28
3	Sc Radial	4452.3	4452.3	90.7 %		09:57:29
3	Y 371.029	763138.6	763138.6	86.282 %		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26 %		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167 ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860 ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512 ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439 ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675 ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922 ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820 ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732 ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789 ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279 ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638 ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310 ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175 ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750 ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540 ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843 ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311 ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227 ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915 ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746 ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932 ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176 ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896 ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226 ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013 ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829 ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545 ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683 ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715 ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573 ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528 ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768 ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

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Ca 317.933Radial†     272506.6      482480 ug/L        5269.3      482480 ppb         5269.3   1.09%
   QC value within limits for Ca 317.933Radial  Recovery = 96.50%
Cd 226.502†            56301.0      472.81 ug/L         3.758      472.81 ppb          3.758   0.79%
   QC value within limits for Cd 226.502  Recovery = 94.56%
Co 228.616†            28228.3      462.55 ug/L         3.948      462.55 ppb          3.948   0.85%
   QC value within limits for Co 228.616  Recovery = 92.51%
Cr 267.716†            53154.8      481.60 ug/L         2.521      481.60 ppb          2.521   0.52%
   QC value within limits for Cr 267.716  Recovery = 96.32%
Cu 324.752†           211552.8      574.38 ug/L         6.835      574.38 ppb          6.835   1.19%
   QC value within limits for Cu 324.752  Recovery = 114.88%
Fe 238.204 Radial†     15285.8      184820 ug/L        1613.6      184820 ppb         1613.6   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.41%
K 766.490 Radial†      30276.9      5529.3 ug/L         61.46      5529.3 ppb          61.46   1.11%
   QC value within limits for K 766.490 Radial  Recovery = 110.59%
Mg 279.077 IEC†        11072.2      495270 ug/L        3223.1      495270 ppb         3223.1   0.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.05%
Mn 257.610†           519055.3      500.72 ug/L         5.664      500.72 ppb          5.664   1.13%
   QC value within limits for Mn 257.610  Recovery = 100.14%
Mo 202.031†             9037.2      492.69 ug/L         3.967      492.69 ppb          3.967   0.81%
   QC value within limits for Mo 202.031  Recovery = 98.54%
Na 589.592 Radial†     18579.3      5211.5 ug/L         48.18      5211.5 ppb          48.18   0.92%
   QC value within limits for Na 589.592 Radial  Recovery = 104.23%
Ni 231.604†            23602.9      462.17 ug/L         3.523      462.17 ppb          3.523   0.76%
   QC value within limits for Ni 231.604  Recovery = 92.43%
P 214.914†              5752.3      2520.4 ug/L         39.08      2520.4 ppb          39.08   1.55%
   QC value within limits for P 214.914  Recovery = 100.81%
Pb 220.353†             3920.0      473.36 ug/L         5.165      473.36 ppb          5.165   1.09%
   QC value within limits for Pb 220.353  Recovery = 94.67%
S 181.975 Axial†        2522.0      2612.1 ug/L         33.01      2612.1 ppb          33.01   1.26%
   QC value within limits for S 181.975 Axial  Recovery = 104.49%
Sb 206.836†             2110.6      551.22 ug/L         2.592      551.22 ppb          2.592   0.47%
   QC value within limits for Sb 206.836  Recovery = 110.24%
Se 196.026†             4382.9      2608.9 ug/L         24.27      2608.9 ppb          24.27   0.93%
   QC value within limits for Se 196.026  Recovery = 104.36%
Si 251.611†           211822.2      5368.0 ug/L         59.89      5368.0 ppb          59.89   1.12%
   QC value within limits for Si 251.611  Recovery = 107.36%
Sn 189.927†             3306.5      490.18 ug/L         5.219      490.18 ppb          5.219   1.06%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            95213.6      495.06 ug/L         5.584      495.06 ppb          5.584   1.13%
   QC value within limits for Sr 421.552  Recovery = 99.01%
Ti 334.940†           354526.5      513.76 ug/L         5.094      513.76 ppb          5.094   0.99%
   QC value within limits for Ti 334.940  Recovery = 102.75%
Tl 190.801†             1932.2      484.94 ug/L         3.312      484.94 ppb          3.312   0.68%
   QC value within limits for Tl 190.801  Recovery = 96.99%
U 409.014†             20126.5      496.18 ug/L         5.005      496.18 ppb          5.005   1.01%
   QC value within limits for U 409.014  Recovery = 99.24%
V 292.402†             91259.0      512.63 ug/L         5.805      512.63 ppb          5.805   1.13%
   QC value within limits for V 292.402  Recovery = 102.53%
Zn 213.857†            71647.8      488.25 ug/L         4.200      488.25 ppb          4.200   0.86%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                 212042.7       11499 ug/L         145.5       11499 ppb          145.5   1.27%
   QC value within limits for SiO2  Recovery = 107.52%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756	ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667	ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135	ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848	ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093	ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797	ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198	ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818	ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763	ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182	ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618	ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359	ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817	ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239	ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303	%		10:09:54
3	Sc Radial	4249.7	4249.7	86.6	%		10:08:52
3	Y 371.029	725964.8	725964.8	82.079	%		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68	%		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798	ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190	ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643	ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484	ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540	ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451	ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510	ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493	ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166	ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306	ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824	ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920	ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523	ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000	ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543	ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915	ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130	ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607	ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07	ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769	ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606	ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498	ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648	ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634	ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188	ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173	ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661	ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929	ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598	ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512	ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635	ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674	ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731	ug/L	14731 ppb	10:16:40
2	Pb 220.353†	248482.1	260348.9	24447	ug/L	24447 ppb	10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788	ug/L	51788 ppb	10:16:40
2	Sb 206.836†	38447.2	40237.0	10413	ug/L	10413 ppb	10:16:40
2	Se 196.026†	22029.2	23096.0	10261	ug/L	10261 ppb	10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861	ug/L	47861 ppb	10:16:35
2	Sn 189.927†	75436.2	79020.2	10451	ug/L	10451 ppb	10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6	ug/L	9440.6 ppb	10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9	ug/L	9887.9 ppb	10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4	ug/L	9993.4 ppb	10:16:40
2	U 409.014†	-1890.4	793.9	-25.762	ug/L	-25.762 ppb	10:16:40
2	V 292.402†	1672052.7	1753005.2	10154	ug/L	10154 ppb	10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064	ug/L	14064 ppb	10:16:35
2	SiO2†	1854816.0	1942233.7	104910	ug/L	104910 ppb	10:17:14
3	Sc 361.383	988641.8	988641.8	95.109	%		10:16:54
3	Sc Radial	4729.3	4729.3	96.3	%		10:15:38
3	Y 371.029	819320.7	819320.7	92.634	%		10:16:54
3	Y RADIAL	5365.7	5365.7	95.02	%		10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602	ug/L	3.2602 ppb	10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512	ug/L	89.512 ppb	10:15:38
3	As 188.979†	30234.5	31825.9	10000	ug/L	10000 ppb	10:17:00
3	B 249.677†	253820.4	267339.4	5029.4	ug/L	5029.4 ppb	10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711	ug/L	13711 ppb	10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8	ug/L	2949.8 ppb	10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255	ug/L	41.255 ppb	10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7	ug/L	9764.7 ppb	10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6	ug/L	9048.6 ppb	10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049	ug/L	24049 ppb	10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842	ug/L	20842 ppb	10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040	ug/L	-4.8040 ppb	10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920	ug/L	288920 ppb	10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120	ug/L	67.120 ppb	10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3	ug/L	9608.3 ppb	10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1	ug/L	9732.1 ppb	10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49	ug/L	158.49 ppb	10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0	ug/L	9890.0 ppb	10:16:54
3	P 214.914†	38530.7	40247.0	14805	ug/L	14805 ppb	10:17:00
3	Pb 220.353†	247695.8	260509.3	24462	ug/L	24462 ppb	10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768	ug/L	51768 ppb	10:17:00
3	Sb 206.836†	38484.3	40428.7	10462	ug/L	10462 ppb	10:17:00
3	Se 196.026†	22001.3	23154.1	10287	ug/L	10287 ppb	10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957	ug/L	47957 ppb	10:16:54
3	Sn 189.927†	75099.1	78965.5	10444	ug/L	10444 ppb	10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4	ug/L	9338.4 ppb	10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1	ug/L	9968.1 ppb	10:16:48
3	Tl 190.801†	39204.4	41264.8	10043	ug/L	10043 ppb	10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525	ug/L	-16.525 ppb	10:17:00
3	V 292.402†	1668512.3	1755925.1	10171	ug/L	10171 ppb	10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095	ug/L	14095 ppb	10:16:54
3	SiO2†	1844505.7	1938761.5	104720	ug/L	104720 ppb	10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

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   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb         20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L         28.6       24016 ppb          28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L         68.9       20784 ppb          68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L      12.73507      7.1483 ppb      12.73507 178.15%
K 766.490 Radial†   1604818.8      292410 ug/L       3446.4      292410 ppb        3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†         -5.2     -33.655 ug/L      97.1262     -33.655 ppb       97.1262 288.59%
Mn 257.610†        10099618.1      9563.8 ug/L        44.75      9563.8 ppb         44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb          5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb        0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb         11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb          37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb          16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb          14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb          35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb          21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb          48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb           3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb        113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb         40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb          24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb        5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb           8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb          18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb        1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

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Ca 317.933Radial†        2842.6      5033.0 ug/L         38.86      5033.0 ppb          38.86   0.77%
   QC value within limits for Ca 317.933Radial  Recovery = 100.66%
Cd 226.502†             57296.6      499.49 ug/L         1.604      499.49 ppb          1.604   0.32%
   QC value within limits for Cd 226.502  Recovery = 99.90%
Co 228.616†             29764.2      490.44 ug/L         1.510      490.44 ppb          1.510   0.31%
   QC value within limits for Co 228.616  Recovery = 98.09%
Cr 267.716†             55373.5      498.28 ug/L         1.039      498.28 ppb          1.039   0.21%
   QC value within limits for Cr 267.716  Recovery = 99.66%
Cu 324.752†            186833.2      499.20 ug/L         1.013      499.20 ppb          1.013   0.20%
   QC value within limits for Cu 324.752  Recovery = 99.84%
Fe 238.204 Radial†        413.6      5016.3 ug/L         43.97      5016.3 ppb          43.97   0.88%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.33%
K 766.490 Radial†       27646.2      5030.3 ug/L         29.10      5030.3 ppb          29.10   0.58%
   QC value within limits for K 766.490 Radial  Recovery = 100.61%
Mg 279.077 IEC†           115.0      5152.7 ug/L         45.64      5152.7 ppb          45.64   0.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.05%
Mn 257.610†            527884.4      500.28 ug/L         0.793      500.28 ppb          0.793   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.06%
Mo 202.031†             9375.3       497.87 ug/L         2.477      497.87 ppb          2.477   0.50%
   QC value within limits for Mo 202.031  Recovery = 99.57%
Na 589.592 Radial†      34004.4      9538.2 ug/L         12.76      9538.2 ppb          12.76   0.13%
   QC value within limits for Na 589.592 Radial  Recovery = 95.38%
Ni 231.604†             25164.0      492.74 ug/L         1.916      492.74 ppb          1.916   0.39%
   QC value within limits for Ni 231.604  Recovery = 98.55%
P 214.914†               5537.8      2401.6 ug/L          5.33      2401.6 ppb           5.33   0.22%
   QC value within limits for P 214.914  Recovery = 96.06%
Pb 220.353†              5333.7      502.25 ug/L         2.030      502.25 ppb          2.030   0.40%
   QC value within limits for Pb 220.353  Recovery = 100.45%
S 181.975 Axial†          914.8      984.56 ug/L        14.228      984.56 ppb         14.228   1.45%
   QC value within limits for S 181.975 Axial  Recovery = 98.46%
Sb 206.836†              1878.1      502.30 ug/L         0.614      502.30 ppb          0.614   0.12%
   QC value within limits for Sb 206.836  Recovery = 100.46%
Se 196.026†              1126.1      518.56 ug/L         3.244      518.56 ppb          3.244   0.63%
   QC value within limits for Se 196.026  Recovery = 103.71%
Si 251.611†             97340.7      2460.2 ug/L          4.93      2460.2 ppb           4.93   0.20%
   QC value within limits for Si 251.611  Recovery = 98.41%
Sn 189.927†              3741.6      495.45 ug/L         2.400      495.45 ppb          2.400   0.48%
   QC value within limits for Sn 189.927  Recovery = 99.09%
Sr 421.552†             93386.6      489.90 ug/L         1.389      489.90 ppb          1.389   0.28%
   QC value within limits for Sr 421.552  Recovery = 97.98%
Ti 334.940†            359415.4      495.61 ug/L         0.472      495.61 ppb          0.472   0.10%
   QC value within limits for Ti 334.940  Recovery = 99.12%
Tl 190.801†              2062.9      502.10 ug/L         2.272      502.10 ppb          2.272   0.45%
   QC value within limits for Tl 190.801  Recovery = 100.42%
U 409.014†              18512.1      477.03 ug/L         1.407      477.03 ppb          1.407   0.29%
   QC value within limits for U 409.014  Recovery = 95.41%
V 292.402†              86553.8      502.14 ug/L         0.660      502.14 ppb          0.660   0.13%
   QC value within limits for V 292.402  Recovery = 100.43%
Zn 213.857†             67981.0      495.14 ug/L         0.700      495.14 ppb          0.700   0.14%
   QC value within limits for Zn 213.857  Recovery = 99.03%
SiO2†                   97459.5      5271.0 ug/L         21.25      5271.0 ppb          21.25   0.40%
   QC value within limits for SiO2  Recovery = 98.57%
All analyte(s) passed QC.
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Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142	ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204	ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748	ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236	ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607	ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238	ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416	ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924	ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677	ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894	ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750	ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873	ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359	ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940	ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70	%		10:46:30
3	Sc Radial	4898.4	4898.4	99.8	%		10:45:03
3	Y 371.029	891482.0	891482.0	100.79	%		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70	%		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626	ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479	ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415	ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651	ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466	ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383	ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758	ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172	ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063	ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401	ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056	ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671	ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339	ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75	ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452	ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415	ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775	ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537	ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081	ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238	ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446	ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873	ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933	ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715	ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116	ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563	ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284	ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025	ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651	ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454	ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553	ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424	ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5     -1.5484 ug/L       2.77737     -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2     -4.5703 ug/L       5.15146     -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2       3.7743 ug/L       1.87844       3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.9597 ug/L       2.16197     -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2       1.5615 ug/L       0.21151       1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5       1.5214 ug/L       0.96781       1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5     -0.0343 ug/L       0.07167     -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1     -0.0500 ug/L       0.01994     -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446       0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -175.7     -4.5411 ug/L       3.27969     -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -22.7     -0.1300 ug/L       0.15236     -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217       0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3       2.3658 ug/L       1.17872       2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753	ug/L	-8.3753 ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374	ug/L	0.9374 ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728	ug/L	17.728 ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640	ug/L	1.8640 ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03	ug/L	183.03 ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144	ug/L	-36.144 ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244	ug/L	-0.8244 ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527	ug/L	0.3527 ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635	ug/L	-0.1635 ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719	ug/L	-3.3719 ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309	ug/L	4.2309 ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606	ug/L	-6.7606 ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455	ug/L	-0.4455 ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451	ug/L	-81.451 ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220	%		10:53:23
3	Sc Radial	4812.6	4812.6	98.0	%		10:52:05
3	Y 371.029	862360.3	862360.3	97.500	%		10:53:23
3	Y RADIAL	5507.3	5507.3	97.52	%		10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149	ug/L	-2.3149 ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070	ug/L	-4.1070 ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627	ug/L	-11.627 ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198	ug/L	1.4198 ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813	ug/L	-0.0813 ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080	ug/L	0.0080 ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437	ug/L	21.437 ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926	ug/L	-0.8926 ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116	ug/L	0.0116 ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157	ug/L	0.1157 ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678	ug/L	-5.1678 ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140	ug/L	382140 ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864	ug/L	62.864 ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088	ug/L	-8.8088 ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260	ug/L	-6.2260 ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035	ug/L	0.0035 ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218	ug/L	10.218 ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003	ug/L	2.5003 ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049	ug/L	-17.049 ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633	ug/L	0.8633 ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577	ug/L	16.577 ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703	ug/L	1.2703 ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98	ug/L	187.98 ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230	ug/L	-36.230 ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851	ug/L	0.0851 ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075	ug/L	0.5075 ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587	ug/L	-0.1587 ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379	ug/L	-1.5379 ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506	ug/L	6.4506 ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115	ug/L	-7.3115 ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488	ug/L	-0.5488 ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404	ug/L	-87.404 ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774	13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122	678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903	2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898	87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095	54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575	16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955	33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103	38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019	16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134	87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174	2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643	0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699	166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835	18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037	6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860	37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671	54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332	7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455	68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899	5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8 ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07 ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86 ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37 ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66 ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8 ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84 ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95 ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61 ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62 ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09 ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56 ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99 ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0 ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71 %		11:00:17
3	Sc Radial	4925.8	4925.8	100 %		10:58:53
3	Y 371.029	877905.3	877905.3	99.258 %		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84 %		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35 ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8 ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79 ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35 ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61 ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82 ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2 ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62 ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69 ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61 ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06 ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7 ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2 ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0 ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71 ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33 ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1 ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55 ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1 ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20 ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00 ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56 ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51 ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1 ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74 ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39 ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24 ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29 ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34 ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66 ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31 ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1 ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

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Ca 317.933Radial†        2795.2      4949.0 ug/L        61.06      4949.0 ppb        61.06   1.23%
   QC value within limits for Ca 317.933Radial  Recovery = 98.98%
Cd 226.502†             57300.2      499.53 ug/L        1.852      499.53 ppb        1.852   0.37%
   QC value within limits for Cd 226.502  Recovery = 99.91%
Co 228.616†             29608.9      487.87 ug/L        1.689      487.87 ppb        1.689   0.35%
   QC value within limits for Co 228.616  Recovery = 97.57%
Cr 267.716†             55297.6      497.60 ug/L        1.743      497.60 ppb        1.743   0.35%
   QC value within limits for Cr 267.716  Recovery = 99.52%
Cu 324.752†            186009.6      496.99 ug/L        1.464      496.99 ppb        1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 99.40%
Fe 238.204 Radial†        405.0      4912.1 ug/L        80.46      4912.1 ppb        80.46   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.24%
K 766.490 Radial†       27016.4      4915.6 ug/L        26.56      4915.6 ppb        26.56   0.54%
   QC value within limits for K 766.490 Radial  Recovery = 98.31%
Mg 279.077 IEC†           111.4      4989.5 ug/L        96.39      4989.5 ppb        96.39   1.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.79%
Mn 257.610†            527731.1      500.13 ug/L        1.476      500.13 ppb        1.476   0.30%
   QC value within limits for Mn 257.610  Recovery = 100.03%
Mo 202.031†              9298.8      493.81 ug/L        2.195      493.81 ppb        2.195   0.44%
   QC value within limits for Mo 202.031  Recovery = 98.76%
Na 589.592 Radial†      33372.8      9361.1 ug/L        50.41      9361.1 ppb        50.41   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†             25005.0      489.63 ug/L        1.726      489.63 ppb        1.726   0.35%
   QC value within limits for Ni 231.604  Recovery = 97.93%
P 214.914†               5502.4      2386.1 ug/L        11.15      2386.1 ppb        11.15   0.47%
   QC value within limits for P 214.914  Recovery = 95.45%
Pb 220.353†              5299.9      499.06 ug/L        1.860      499.06 ppb        1.860   0.37%
   QC value within limits for Pb 220.353  Recovery = 99.81%
S 181.975 Axial†          903.8      972.73 ug/L        4.706      972.73 ppb        4.706   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 97.27%
Sb 206.836†              1847.1      494.01 ug/L        3.403      494.01 ppb        3.403   0.69%
   QC value within limits for Sb 206.836  Recovery = 98.80%
Se 196.026†              1106.9      509.66 ug/L        6.212      509.66 ppb        6.212   1.22%
   QC value within limits for Se 196.026  Recovery = 101.93%
Si 251.611†             97204.8      2456.9 ug/L         7.70      2456.9 ppb         7.70   0.31%
   QC value within limits for Si 251.611  Recovery = 98.28%
Sn 189.927†              3719.5      492.52 ug/L        2.434      492.52 ppb        2.434   0.49%
   QC value within limits for Sn 189.927  Recovery = 98.50%
Sr 421.552†             92292.4      484.16 ug/L        1.112      484.16 ppb        1.112   0.23%
   QC value within limits for Sr 421.552  Recovery = 96.83%
Ti 334.940†            358750.6      494.69 ug/L        1.509      494.69 ppb        1.509   0.31%
   QC value within limits for Ti 334.940  Recovery = 98.94%
Tl 190.801†              2050.0      498.98 ug/L        1.719      498.98 ppb        1.719   0.34%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†              18423.6      474.75 ug/L        1.188      474.75 ppb        1.188   0.25%
   QC value within limits for U 409.014  Recovery = 94.95%
V 292.402†              86361.9      501.00 ug/L        1.491      501.00 ppb        1.491   0.30%
   QC value within limits for V 292.402  Recovery = 100.20%
Zn 213.857†             67835.2      494.11 ug/L        1.146      494.11 ppb        1.146   0.23%
   QC value within limits for Zn 213.857  Recovery = 98.82%
SiO2†                   96661.6      5227.9 ug/L        22.02      5227.9 ppb        22.02   0.42%
   QC value within limits for SiO2  Recovery = 97.76%
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951	ug/L	0.9951 ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458	ug/L	1.7458 ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298	ug/L	-2.7298 ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989	ug/L	2.8989 ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951	ug/L	-3.2951 ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309	ug/L	0.5309 ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661	ug/L	1.2661 ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167	ug/L	-0.1167 ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867	ug/L	-0.0867 ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171	ug/L	-1.7171 ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062	ug/L	0.7062 ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749	ug/L	-0.3749 ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912	ug/L	0.1912 ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073	ug/L	2.4073 ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43	%		11:07:13
3	Sc Radial	4909.9	4909.9	100	%		11:05:46
3	Y 371.029	889449.2	889449.2	100.56	%		11:07:13
3	Y RADIAL	5657.3	5657.3	100.2	%		11:05:46
3	Ag 328.068†	489.6	13.4	0.0605	ug/L	0.0605 ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350	ug/L	22.350 ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242	ug/L	0.7242 ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618	ug/L	7.2618 ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758	ug/L	0.0758 ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242	ug/L	0.0242 ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990	ug/L	3.8990 ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798	ug/L	0.1798 ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058	ug/L	0.0058 ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718	ug/L	0.1718 ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108	ug/L	-0.2108 ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976	ug/L	16.976 ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709	ug/L	25.709 ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52	ug/L	-176.52 ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313	ug/L	0.0313 ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939	ug/L	0.1939 ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755	ug/L	1.0755 ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707	ug/L	-0.0707 ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232	ug/L	0.5232 ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380	ug/L	0.5380 ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618	ug/L	-7.9618 ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903	ug/L	2.2903 ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492	ug/L	0.3492 ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962	ug/L	0.5962 ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103	ug/L	2.2103 ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222	ug/L	-0.0222 ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947	ug/L	-0.0947 ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125	ug/L	-2.2125 ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983	ug/L	-2.0983 ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210	ug/L	0.0210 ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153	ug/L	0.3153 ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484	ug/L	1.7484 ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5 ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62 ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4 ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79 ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50 ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7 ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14 ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22 ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73 ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06 ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23 ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73 ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1 ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2 %		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86 %		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9 ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9 ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0 ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6 ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3 ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8 ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49 ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849 %		12:17:52
3	Y 371.029	872084.7	872084.7	98.600 %		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61 ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35 ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70 ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37 ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30 ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46 ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38 ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43 ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62 ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50 ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54 ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00 ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1 ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64 ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0 ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03 ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64 ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1 ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18 ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49 ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93 ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25 ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98 ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35 ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4 ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L         3.149      507.31 ppb          3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L         3.818      500.79 ppb          3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L         3.018      504.61 ppb          3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L         2.623      506.08 ppb          2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L        45.45      5082.5 ppb         45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L        68.50      4957.3 ppb         68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L        11.74      5217.9 ppb         11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L         3.320      507.64 ppb          3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L         3.216      507.25 ppb          3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L       135.46      9625.8 ppb        135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L         3.555      502.09 ppb          3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L        11.55      2454.7 ppb         11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L         3.072      511.03 ppb          3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L         2.21      1000.2 ppb          2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L         3.960      508.48 ppb          3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L         3.225      525.79 ppb          3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L        14.63      2500.7 ppb         14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L         3.651      502.21 ppb          3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L         6.861      494.05 ppb          6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L         2.661      502.89 ppb          2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L         2.825      511.74 ppb          2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L         2.617      485.15 ppb          2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L         2.757      508.62 ppb          2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L         3.269      502.43 ppb          3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L        57.67      5346.1 ppb         57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -23.990 ug/L       73.3513     -23.990 ppb        73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time:** 11/30/2009 06:07:59
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/4/2009 12:48:33
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L         53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L         85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L        105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L         48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L        151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L         43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L         52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L         47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750	ug/L	0.7750	ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466	ug/L	0.1466	ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347	ug/L	-4.2347	ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960	ug/L	1.3960	ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216	ug/L	-2.6216	ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014	ug/L	3.2014	ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740	ug/L	1.3740	ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164	ug/L	-0.2164	ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635	ug/L	-1.8635	ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594	ug/L	-1.7594	ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408	ug/L	-0.5408	ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073	ug/L	0.3073	ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106	ug/L	3.7106	ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8	%			12:58:08
3	Y RADIAL	5648.1	5648.1	100.0	%			12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013	ug/L	11.013	ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244	ug/L	1.4244	ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453	ug/L	-9.9453	ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928	ug/L	30.928	ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436	ug/L	-19.436	ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845	ug/L	23.845	ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165	ug/L	0.0165	ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628	%			12:59:35
3	Y 371.029	880903.4	880903.4	99.597	%			12:59:35
3	Ag 328.068†	534.0	61.9	0.2441	ug/L	0.2441	ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565	ug/L	-0.5565	ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068	ug/L	4.0068	ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624	ug/L	0.0624	ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288	ug/L	0.0288	ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633	ug/L	-0.0633	ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888	ug/L	0.0888	ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060	ug/L	0.3060	ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141	ug/L	0.2141	ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162	ug/L	0.0162	ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630	ug/L	0.0630	ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537	ug/L	0.1537	ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106	ug/L	-2.5106	ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791	ug/L	-0.2791	ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859	ug/L	1.8859	ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539	ug/L	2.9539	ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160	ug/L	-1.6160	ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207	ug/L	2.4207	ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458	ug/L	1.1458	ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330	ug/L	-0.0330	ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739	ug/L	-0.4739	ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096	ug/L	-3.3096	ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533	ug/L	-0.2533	ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302	ug/L	0.4302	ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247	ug/L	5.8247	ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8     34.227 ug/L       24.6248     34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L         59.61      5111.0 ppb          59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L         21.18      4935.4 ppb          21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L        115.16      5203.3 ppb         115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L         50.94      9844.4 ppb          50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L          8.70      2446.0 ppb           8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L          3.24      2497.1 ppb           3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L         23.52      5346.5 ppb          23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758	ug/L	7.6758	ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119	ug/L	2.2119	ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324	ug/L	-7.1324	ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069	ug/L	3.1069	ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363	ug/L	-1.9363	ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149	ug/L	1.8149	ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313	ug/L	0.4313	ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017	ug/L	0.1017	ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009	ug/L	-1.3009	ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491	ug/L	-1.7491	ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527	ug/L	0.3527	ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144	ug/L	0.3144	ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249	ug/L	3.2249	ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0	%			14:06:39
3	Y RADIAL	5653.4	5653.4	100.1	%			14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078	ug/L	9.0078	ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238	ug/L	25.238	ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557	ug/L	-11.557	ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614	ug/L	26.614	ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277	ug/L	-67.277	ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433	ug/L	13.433	ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743	ug/L	-0.0743	ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53	%			14:08:07
3	Y 371.029	887847.1	887847.1	100.38	%			14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092	ug/L	-0.0092	ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368	ug/L	0.7368	ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077	ug/L	3.0077	ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964	ug/L	0.0964	ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077	ug/L	-0.0077	ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791	ug/L	0.1791	ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226	ug/L	-0.0226	ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834	ug/L	0.0834	ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251	ug/L	0.3251	ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064	ug/L	0.0064	ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662	ug/L	-0.0662	ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191	ug/L	-0.1191	ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622	ug/L	-4.6622	ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536	ug/L	-1.2536	ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407	ug/L	-6.9407	ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302	ug/L	2.5302	ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220	ug/L	-5.9220	ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899	ug/L	2.1899	ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576	ug/L	-0.1576	ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379	ug/L	0.0379	ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674	ug/L	-2.8674	ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636	ug/L	2.5636	ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930	ug/L	-0.1930	ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247	ug/L	0.2247	ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671	ug/L	4.2671	ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         141.0     25.699 ug/L        9.7077     25.699 ppb         9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.9    -40.386 ug/L       44.6154    -40.386 ppb        44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         56.4     15.809 ug/L       12.6890     15.809 ppb        12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb         59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb         14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb        179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb         10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb         13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L         5.14      2504.1 ppb           5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb         40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
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Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237 ug/L	8.7237 ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503 ug/L	-0.7503 ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231 ug/L	-7.3231 ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716 ug/L	4.0716 ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231 ug/L	-1.9231 ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718 ug/L	1.4718 ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274 ug/L	1.5274 ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146 ug/L	-0.1146 ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667 ug/L	-0.1667 ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992 ug/L	-4.3992 ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848 ug/L	-0.0848 ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817 ug/L	0.1817 ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213 ug/L	3.4213 ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101 %		15:02:30
3	Y RADIAL	5692.8	5692.8	100.8 %		15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650 ug/L	-1.9650 ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501 ug/L	16.501 ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962 ug/L	-12.962 ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364 ug/L	13.364 ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663 ug/L	48.663 ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078 ug/L	36.078 ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131 ug/L	-0.1131 ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06 %		15:03:57
3	Y 371.029	884765.2	884765.2	100.03 %		15:03:57
3	Ag 328.068†	546.5	72.1	0.2822 ug/L	0.2822 ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412 ug/L	1.2412 ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362 ug/L	0.7362 ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116 ug/L	-0.0116 ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116 ug/L	0.0116 ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212 ug/L	0.0212 ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510 ug/L	0.2510 ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157 ug/L	0.3157 ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543 ug/L	0.3543 ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154 ug/L	0.0154 ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656 ug/L	-0.0656 ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330 ug/L	-0.1330 ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179 ug/L	1.9179 ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499 ug/L	-1.5499 ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618 ug/L	-1.6618 ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470 ug/L	1.9470 ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666 ug/L	-1.0666 ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213 ug/L	1.7213 ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060 ug/L	-0.0060 ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030 ug/L	0.0030 ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751 ug/L	1.5751 ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249 ug/L	-2.0249 ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440 ug/L	-0.2440 ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181 ug/L	0.3181 ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869 ug/L	1.9869 ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3    -15.423 ug/L        6.5866    -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2     20.428 ug/L       19.9912     20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7     29.809 ug/L       20.4595     29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2     32.884 ug/L        2.9232     32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb		15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb		15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb		15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb		15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb		15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb		15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb		15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb		15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb		15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb		15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb		15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb		15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb		15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %			15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %			15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb		15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb		15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb		15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb		15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb		15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb		15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb		15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %			15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %			15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb		15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb		15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb		15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb		15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb		15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb		15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb		15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb		15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb		15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb		15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb		15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb		15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb		15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb		15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb		15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb		15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb		15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb		15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb		15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb		15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb		15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb		15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb		15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb		15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb		15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L         2.287      511.43 ppb          2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L         1.146      503.91 ppb          1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L         1.662      508.31 ppb          1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L         2.326      511.16 ppb          2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L        25.16      5027.1 ppb         25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L        44.05      4939.1 ppb         44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L        81.91      5126.5 ppb         81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L         2.081      512.46 ppb          2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L         1.419      507.72 ppb          1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L        66.05      9820.7 ppb         66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L         1.302      503.63 ppb          1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L        10.07      2478.2 ppb         10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L         0.126      512.95 ppb          0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L         2.77      1003.1 ppb          2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L         3.500      515.53 ppb          3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L         2.058      527.42 ppb          2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L         9.97      2519.4 ppb          9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L         1.147      506.74 ppb          1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L         3.343      499.14 ppb          3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L         2.319      508.04 ppb          2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L         1.578      508.52 ppb          1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L         2.387      493.42 ppb          2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L         2.377      512.95 ppb          2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L         1.824      506.84 ppb          1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L        37.27      5379.2 ppb         37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120	ug/L	2.5120	ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279	ug/L	-1.9279	ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495	ug/L	-0.1495	ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770	ug/L	1.6770	ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989	ug/L	-2.4989	ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415	ug/L	1.7415	ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240	ug/L	2.0240	ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840	ug/L	0.0840	ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260	ug/L	-1.7260	ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950	ug/L	0.4950	ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658	ug/L	0.1658	ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793	ug/L	0.3793	ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045	ug/L	1.4045	ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9	%			15:58:24
3	Y RADIAL	5536.8	5536.8	98.05	%			15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014	ug/L	-2.7014	ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137	ug/L	10.137	ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928	ug/L	-19.928	ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858	ug/L	37.858	ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734	ug/L	69.734	ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211	ug/L	45.211	ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220	ug/L	-0.2220	ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773	%			15:59:52
3	Y 371.029	882258.7	882258.7	99.750	%			15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838	ug/L	-0.2838	ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697	ug/L	0.9697	ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790	ug/L	1.1790	ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208	ug/L	0.0208	ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339	ug/L	0.0339	ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026	ug/L	0.1026	ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501	ug/L	-0.2501	ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010	ug/L	0.1010	ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474	ug/L	0.1474	ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012	ug/L	0.0012	ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361	ug/L	0.1361	ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230	ug/L	0.2230	ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402	ug/L	3.5402	ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038	ug/L	1.3038	ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872	ug/L	-2.2872	ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858	ug/L	5.1858	ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930	ug/L	-1.6930	ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103	ug/L	1.3103	ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187	ug/L	1.9187	ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536	ug/L	0.0536	ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928	ug/L	-0.6928	ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296	ug/L	1.2296	ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732	ug/L	-0.2732	ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459	ug/L	0.3459	ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862	ug/L	3.4862	ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -20.252 ug/L       10.1579     -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0001 ug/L       0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1199 ug/L       0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7      0.1902 ug/L       0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      4.1321 ug/L       1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4     -0.1226 ug/L       1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0     -0.0008 ug/L       2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      2.4728 ug/L       2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1     -2.3223 ug/L       0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0      1.3081 ug/L       0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.3975 ug/L       0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5     -0.0971 ug/L       0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5      0.0132 ug/L       0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -0.5672 ug/L       1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9      0.7761 ug/L       0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4     -0.0073 ug/L       0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0      0.3381 ug/L       0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6      2.8325 ug/L       1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0 ug/L	2467.0 ppb	17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00 ug/L	510.00 ppb	17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08 ug/L	988.08 ppb	17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65 ug/L	511.65 ppb	17:02:35
2	Se 196.026†	1101.6	1134.9	522.91 ug/L	522.91 ppb	17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9 ug/L	2523.9 ppb	17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00 ug/L	505.00 ppb	17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34 ug/L	508.34 ppb	17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32 ug/L	505.32 ppb	17:02:35
2	U 409.014†	16132.6	19081.4	491.71 ug/L	491.71 ppb	17:02:15
2	V 292.402†	85992.6	88533.4	513.61 ug/L	513.61 ppb	17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27 ug/L	506.27 ppb	17:02:15
2	SiO2†	99096.4	99571.7	5385.4 ug/L	5385.4 ppb	17:03:13
3	Sc Radial	4783.8	4783.8	97.4 %		17:01:19
3	Y RADIAL	5474.3	5474.3	96.94 %		17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1 ug/L	5154.1 ppb	17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7 ug/L	5093.7 ppb	17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5 ug/L	5010.5 ppb	17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8 ug/L	5005.8 ppb	17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6 ug/L	5244.6 ppb	17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6 ug/L	9733.6 ppb	17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13 ug/L	501.13 ppb	17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474 %		17:02:43
3	Y 371.029	860032.6	860032.6	97.237 %		17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06 ug/L	509.06 ppb	17:02:43
3	As 188.979†	1574.3	1635.3	513.94 ug/L	513.94 ppb	17:03:03
3	B 249.677†	25888.6	26755.8	503.69 ug/L	503.69 ppb	17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18 ug/L	511.18 ppb	17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43 ug/L	511.43 ppb	17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37 ug/L	511.37 ppb	17:02:43
3	Co 228.616†	30331.0	30887.2	508.95 ug/L	508.95 ppb	17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88 ug/L	509.88 ppb	17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19 ug/L	511.19 ppb	17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05 ug/L	512.05 ppb	17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93 ug/L	513.93 ppb	17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25 ug/L	508.25 ppb	17:03:03
3	P 214.914†	5929.5	5756.2	2497.7 ug/L	2497.7 ppb	17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78 ug/L	517.78 ppb	17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4 ug/L	1006.4 ppb	17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71 ug/L	516.71 ppb	17:03:03
3	Se 196.026†	1126.1	1164.9	535.77 ug/L	535.77 ppb	17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5 ug/L	2520.5 ppb	17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39 ug/L	512.39 ppb	17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94 ug/L	507.94 ppb	17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85 ug/L	515.85 ppb	17:03:03
3	U 409.014†	16138.4	19162.4	493.81 ug/L	493.81 ppb	17:02:43
3	V 292.402†	85723.1	88659.8	514.45 ug/L	514.45 ppb	17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31 ug/L	506.31 ppb	17:02:43
3	SiO2†	99466.9	100408.9	5430.6 ug/L	5430.6 ppb	17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L         1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L         3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L         0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L         0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L        62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L        18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L        10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L         0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L         3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L        43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L         2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L        15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L         4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L        13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L         3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L         6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L         3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L         3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L         1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L         0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L         5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L         2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L         0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L         1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L        22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
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Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628 ug/L	-2.1628 ppb		17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982 ug/L	1.3982 ppb		17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236 ug/L	2.6236 ppb		17:09:34
2	Sb 206.836†	49.9	15.7	4.1740 ug/L	4.1740 ppb		17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105 ug/L	-1.6105 ppb		17:09:34
2	Si 251.611†	628.2	76.8	1.9315 ug/L	1.9315 ppb		17:09:34
2	Sn 189.927†	5.3	9.7	1.2851 ug/L	1.2851 ppb		17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699 ug/L	0.0699 ppb		17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234 ug/L	-0.2234 ppb		17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719 ug/L	-3.0719 ppb		17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052 ug/L	-0.4052 ppb		17:09:14
2	Zn 213.857†	959.6	83.5	0.6171 ug/L	0.6171 ppb		17:09:34
2	SiO2†	603.8	10.7	0.5423 ug/L	0.5423 ppb		17:10:14
3	Sc Radial	4823.8	4823.8	98.3 %			17:08:12
3	Y RADIAL	5537.0	5537.0	98.05 %			17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834 ug/L	11.834 ppb		17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300 ug/L	10.300 ppb		17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132 ug/L	-18.132 ppb		17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822 ug/L	13.822 ppb		17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369 ug/L	60.369 ppb		17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232 ug/L	30.232 ppb		17:08:12
3	Sr 421.552†	12.6	20.3	0.1063 ug/L	0.1063 ppb		17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05 %			17:09:39
3	Y 371.029	885792.9	885792.9	100.15 %			17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296 ug/L	-0.3296 ppb		17:09:44
3	As 188.979†	-34.7	1.9	0.5789 ug/L	0.5789 ppb		17:10:04
3	B 249.677†	-424.2	42.1	0.7986 ug/L	0.7986 ppb		17:10:04
3	Ba 233.527†	12.8	12.8	0.0818 ug/L	0.0818 ppb		17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557 ug/L	0.0557 ppb		17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147 ug/L	0.1147 ppb		17:10:04
3	Co 228.616†	-81.4	5.0	0.0830 ug/L	0.0830 ppb		17:10:04
3	Cr 267.716†	106.9	19.1	0.1704 ug/L	0.1704 ppb		17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477 ug/L	0.1477 ppb		17:09:44
3	Mn 257.610†	610.1	33.1	0.0284 ug/L	0.0284 ppb		17:10:04
3	Mo 202.031†	31.4	2.1	0.1121 ug/L	0.1121 ppb		17:10:04
3	Ni 231.604†	133.0	1.0	0.0189 ug/L	0.0189 ppb		17:10:04
3	P 214.914†	272.4	7.2	3.2450 ug/L	3.2450 ppb		17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314 ug/L	0.1314 ppb		17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316 ug/L	-0.9316 ppb		17:10:04
3	Sb 206.836†	35.8	1.1	0.3268 ug/L	0.3268 ppb		17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605 ug/L	-2.1605 ppb		17:10:04
3	Si 251.611†	612.6	54.6	1.3742 ug/L	1.3742 ppb		17:10:04
3	Sn 189.927†	12.1	16.5	2.1777 ug/L	2.1777 ppb		17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180 ug/L	-0.0180 ppb		17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673 ug/L	-1.9673 ppb		17:10:04
3	U 409.014†	-2701.8	73.4	1.9008 ug/L	1.9008 ppb		17:09:39
3	V 292.402†	-1606.8	2.4	0.0234 ug/L	0.0234 ppb		17:09:44
3	Zn 213.857†	941.9	55.9	0.4102 ug/L	0.4102 ppb		17:10:04
3	SiO2†	646.1	46.8	2.5143 ug/L	2.5143 ppb		17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         115.7      21.072 ug/L        7.6270      21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.0     -42.772 ug/L       91.5125     -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        125.9      35.327 ug/L        6.6209      35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 18:01:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4830.0	4830.0	98.4	%			18:03:34
1	Y RADIAL	5529.5	5529.5	97.92	%			18:03:34
1	Al 396.153Radial†	7608.5	7777.9	5114.3	ug/L	5114.3	ppb	18:03:34
1	Ca 317.933Radial†	2838.8	2867.8	5077.6	ug/L	5077.6	ppb	18:03:54
1	Fe 238.204 Radial†	423.3	419.3	5084.9	ug/L	5084.9	ppb	18:03:54
1	K 766.490 Radial†	29286.1	27199.9	4948.8	ug/L	4948.8	ppb	18:03:34
1	Mg 279.077 IEC†	113.0	112.4	5035.0	ug/L	5035.0	ppb	18:03:54
1	Na 589.592 Radial†	33434.5	35266.2	9892.2	ug/L	9892.2	ppb	18:03:34
1	Sr 421.552†	94452.4	96018.5	503.71	ug/L	503.71	ppb	18:03:34
1	Sc 361.383	1035614.3	1035614.3	99.628	%			18:04:53
1	Y 371.029	868981.8	868981.8	98.249	%			18:04:53
1	Ag 328.068†	126389.0	126387.2	504.08	ug/L	504.08	ppb	18:04:53
1	As 188.979†	1566.5	1609.0	505.73	ug/L	505.73	ppb	18:05:13
1	B 249.677†	25789.7	26352.1	496.08	ug/L	496.08	ppb	18:04:53
1	Ba 233.527†	78461.3	78754.5	507.26	ug/L	507.26	ppb	18:04:53
1	Be 313.107†	1611683.8	1622579.0	506.90	ug/L	506.90	ppb	18:04:53
1	Cd 226.502†	57528.7	57979.3	505.44	ug/L	505.44	ppb	18:04:53
1	Co 228.616†	30048.6	30247.1	498.39	ug/L	498.39	ppb	18:05:13
1	Cr 267.716†	55897.5	56018.6	504.09	ug/L	504.09	ppb	18:04:53
1	Cu 324.752†	197518.4	189318.8	505.84	ug/L	505.84	ppb	18:04:53
1	Mn 257.610†	534062.2	535480.8	507.48	ug/L	507.48	ppb	18:04:53
1	Mo 202.031†	9485.8	9492.0	504.07	ug/L	504.07	ppb	18:05:13
1	Ni 231.604†	25499.9	25463.2	498.60	ug/L	498.60	ppb	18:05:13
1	P 214.914†	5884.7	5641.6	2447.0	ug/L	2447.0	ppb	18:05:13
1	Pb 220.353†	5298.3	5393.7	507.89	ug/L	507.89	ppb	18:05:13
1	S 181.975 Axial†	974.6	918.2	988.21	ug/L	988.21	ppb	18:05:13
1	Sb 206.836†	1936.0	1908.6	510.46	ug/L	510.46	ppb	18:05:13
1	Se 196.026†	1104.7	1130.2	520.64	ug/L	520.64	ppb	18:05:13
1	Si 251.611†	99034.8	98847.1	2498.4	ug/L	2498.4	ppb	18:04:53
1	Sn 189.927†	3777.7	3796.2	502.67	ug/L	502.67	ppb	18:05:13
1	Ti 334.940†	362106.9	364720.2	502.92	ug/L	502.92	ppb	18:04:53
1	Tl 190.801†	2016.9	2068.7	503.55	ug/L	503.55	ppb	18:05:13
1	U 409.014†	15956.3	18789.9	484.19	ug/L	484.19	ppb	18:04:53
1	V 292.402†	85828.1	87757.3	509.11	ug/L	509.11	ppb	18:04:53
1	Zn 213.857†	69570.7	68945.1	502.18	ug/L	502.18	ppb	18:04:53
1	SiO2†	99394.4	99166.7	5363.6	ug/L	5363.6	ppb	18:06:13
2	Sc Radial	4837.6	4837.6	98.5	%			18:03:59
2	Y RADIAL	5523.5	5523.5	97.81	%			18:03:59
2	Al 396.153Radial†	7635.5	7793.2	5124.5	ug/L	5124.5	ppb	18:03:59
2	Ca 317.933Radial†	2827.0	2851.3	5048.3	ug/L	5048.3	ppb	18:04:19
2	Fe 238.204 Radial†	425.3	420.7	5101.5	ug/L	5101.5	ppb	18:04:19
2	K 766.490 Radial†	29236.2	27102.5	4931.0	ug/L	4931.0	ppb	18:03:59
2	Mg 279.077 IEC†	116.1	115.4	5167.3	ug/L	5167.3	ppb	18:04:19
2	Na 589.592 Radial†	33358.2	35135.5	9855.5	ug/L	9855.5	ppb	18:03:59
2	Sr 421.552†	94046.6	95456.0	500.76	ug/L	500.76	ppb	18:03:59
2	Sc 361.383	1035808.6	1035808.6	99.646	%			18:05:20
2	Y 371.029	867528.3	867528.3	98.085	%			18:05:20
2	Ag 328.068†	126769.6	126745.3	505.50	ug/L	505.50	ppb	18:05:20
2	As 188.979†	1557.5	1599.7	502.84	ug/L	502.84	ppb	18:05:41
2	B 249.677†	25701.8	26259.1	494.32	ug/L	494.32	ppb	18:05:20
2	Ba 233.527†	78605.2	78884.1	508.09	ug/L	508.09	ppb	18:05:20
2	Be 313.107†	1608110.3	1618689.4	505.69	ug/L	505.69	ppb	18:05:20
2	Cd 226.502†	57666.3	58106.5	506.55	ug/L	506.55	ppb	18:05:20
2	Co 228.616†	29927.7	30120.2	496.29	ug/L	496.29	ppb	18:05:41
2	Cr 267.716†	55912.4	56023.0	504.13	ug/L	504.13	ppb	18:05:20
2	Cu 324.752†	197921.4	189686.1	506.82	ug/L	506.82	ppb	18:05:20
2	Mn 257.610†	534944.8	536266.0	508.23	ug/L	508.23	ppb	18:05:20
2	Mo 202.031†	9432.8	9437.1	501.16	ug/L	501.16	ppb	18:05:41
2	Ni 231.604†	25444.8	25403.1	497.42	ug/L	497.42	ppb	18:05:41

2	P 214.914†	5862.9	5618.6	2436.5 ug/L	2436.5 ppb	18:05:41
2	Pb 220.353†	5283.8	5378.1	506.42 ug/L	506.42 ppb	18:05:41
2	S 181.975 Axial†	962.8	906.1	975.23 ug/L	975.23 ppb	18:05:41
2	Sb 206.836†	1917.4	1889.5	505.30 ug/L	505.30 ppb	18:05:41
2	Se 196.026†	1087.0	1112.2	512.72 ug/L	512.72 ppb	18:05:41
2	Si 251.611†	99182.7	98977.0	2501.8 ug/L	2501.8 ppb	18:05:20
2	Sn 189.927†	3754.3	3771.9	499.47 ug/L	499.47 ppb	18:05:41
2	Ti 334.940†	362842.0	365389.7	503.84 ug/L	503.84 ppb	18:05:20
2	Tl 190.801†	1992.7	2044.0	497.59 ug/L	497.59 ppb	18:05:41
2	U 409.014†	15978.8	18809.5	484.69 ug/L	484.69 ppb	18:05:20
2	V 292.402†	85852.5	87765.6	509.12 ug/L	509.12 ppb	18:05:20
2	Zn 213.857†	69526.6	68887.7	501.76 ug/L	501.76 ppb	18:05:20
2	SiO2†	99499.1	99253.0	5368.4 ug/L	5368.4 ppb	18:06:19
3	Sc Radial	4799.2	4799.2	97.7 %		18:04:24
3	Y RADIAL	5498.6	5498.6	97.37 %		18:04:24
3	Al 396.153Radial†	7619.7	7839.0	5154.6 ug/L	5154.6 ppb	18:04:24
3	Ca 317.933Radial†	2853.2	2901.0	5136.3 ug/L	5136.3 ppb	18:04:44
3	Fe 238.204 Radial†	431.9	430.9	5225.2 ug/L	5225.2 ppb	18:04:44
3	K 766.490 Radial†	29093.2	27193.5	4947.7 ug/L	4947.7 ppb	18:04:24
3	Mg 279.077 IEC†	119.0	119.2	5339.1 ug/L	5339.1 ppb	18:04:44
3	Na 589.592 Radial†	32907.5	34945.0	9802.1 ug/L	9802.1 ppb	18:04:24
3	Sr 421.552†	93251.9	95406.2	500.50 ug/L	500.50 ppb	18:04:24
3	Sc 361.383	1038206.6	1038206.6	99.877 %		18:05:48
3	Y 371.029	871182.2	871182.2	98.498 %		18:05:48
3	Ag 328.068†	126926.4	126608.4	504.99 ug/L	504.99 ppb	18:05:48
3	As 188.979†	1576.5	1615.1	507.65 ug/L	507.65 ppb	18:06:08
3	B 249.677†	25829.6	26327.4	495.59 ug/L	495.59 ppb	18:05:48
3	Ba 233.527†	78220.4	78316.7	504.45 ug/L	504.45 ppb	18:05:48
3	Be 313.107†	1610405.9	1617260.4	505.24 ug/L	505.24 ppb	18:05:48
3	Cd 226.502†	57420.6	57726.9	503.22 ug/L	503.22 ppb	18:05:48
3	Co 228.616†	30208.3	30331.8	499.79 ug/L	499.79 ppb	18:06:08
3	Cr 267.716†	55861.2	55842.1	502.50 ug/L	502.50 ppb	18:05:48
3	Cu 324.752†	198284.6	189591.0	506.57 ug/L	506.57 ppb	18:05:48
3	Mn 257.610†	533597.1	533676.7	505.78 ug/L	505.78 ppb	18:05:48
3	Mo 202.031†	9542.9	9525.4	505.86 ug/L	505.86 ppb	18:06:08
3	Ni 231.604†	25662.7	25562.4	500.54 ug/L	500.54 ppb	18:06:08
3	P 214.914†	5892.8	5635.0	2443.9 ug/L	2443.9 ppb	18:06:08
3	Pb 220.353†	5325.7	5407.8	509.22 ug/L	509.22 ppb	18:06:08
3	S 181.975 Axial†	987.2	928.3	999.15 ug/L	999.15 ppb	18:06:08
3	Sb 206.836†	1957.6	1925.3	514.98 ug/L	514.98 ppb	18:06:08
3	Se 196.026†	1116.3	1139.0	525.06 ug/L	525.06 ppb	18:06:08
3	Si 251.611†	98993.5	98557.6	2491.0 ug/L	2491.0 ppb	18:05:48
3	Sn 189.927†	3799.2	3808.2	504.27 ug/L	504.27 ppb	18:06:08
3	Ti 334.940†	362935.3	364642.1	502.82 ug/L	502.82 ppb	18:05:48
3	Tl 190.801†	2018.1	2064.8	502.60 ug/L	502.60 ppb	18:06:08
3	U 409.014†	16280.7	19074.7	491.53 ug/L	491.53 ppb	18:05:48
3	V 292.402†	85865.0	87579.2	508.12 ug/L	508.12 ppb	18:05:48
3	Zn 213.857†	69400.3	68600.1	499.61 ug/L	499.61 ppb	18:05:48
3	SiO2†	98935.3	98458.0	5325.0 ug/L	5325.0 ppb	18:06:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036543.2	99.717	%	0.1389				0.14%
Sc Radial	4822.3	98.2	%	0.41				0.42%
Y 371.029	869230.8	98.277	%	0.2080				0.21%
Y RADIAL	5517.2	97.70	%	0.290				0.30%
Ag 328.068†	126580.3	504.86	ug/L	0.722	504.86	ppb	0.722	0.14%
QC value within limits for Ag 328.068 Recovery = 100.97%								
Al 396.153Radial†	7803.3	5131.1	ug/L	20.93	5131.1	ppb	20.93	0.41%
QC value within limits for Al 396.153Radial Recovery = 102.62%								
As 188.979†	1607.9	505.41	ug/L	2.420	505.41	ppb	2.420	0.48%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	26312.9	495.33	ug/L	0.906	495.33	ppb	0.906	0.18%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	78651.7	506.60	ug/L	1.909	506.60	ppb	1.909	0.38%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1619509.6	505.94	ug/L	0.858	505.94	ppb	0.858	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	2873.4	5087.4	ug/L	44.83	5087.4	ppb	44.83	0.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.75%
Cd 226.502†            57937.6      505.07 ug/L         1.691      505.07 ppb          1.691   0.33%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†            30233.1      498.16 ug/L         1.760      498.16 ppb          1.760   0.35%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            55961.2      503.57 ug/L         0.928      503.57 ppb          0.928   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.71%
Cu 324.752†           189532.0      506.41 ug/L         0.510      506.41 ppb          0.510   0.10%
   QC value within limits for Cu 324.752  Recovery = 101.28%
Fe 238.204 Radial†       423.6      5137.2 ug/L        76.66      5137.2 ppb          76.66   1.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27165.3      4942.5 ug/L         9.94      4942.5 ppb           9.94   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          115.6      5180.4 ug/L       152.48      5180.4 ppb         152.48   2.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.61%
Mn 257.610†           535141.2      507.16 ug/L         1.252      507.16 ppb          1.252   0.25%
   QC value within limits for Mn 257.610  Recovery = 101.43%
Mo 202.031†             9484.8      503.70 ug/L         2.371      503.70 ppb          2.371   0.47%
   QC value within limits for Mo 202.031  Recovery = 100.74%
Na 589.592 Radial†     35115.6      9849.9 ug/L        45.31      9849.9 ppb          45.31   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†            25476.2      498.85 ug/L         1.575      498.85 ppb          1.575   0.32%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              5631.7      2442.5 ug/L         5.37      2442.5 ppb           5.37   0.22%
   QC value within limits for P 214.914  Recovery = 97.70%
Pb 220.353†             5393.2      507.84 ug/L         1.401      507.84 ppb          1.401   0.28%
   QC value within limits for Pb 220.353  Recovery = 101.57%
S 181.975 Axial†         917.5      987.53 ug/L        11.972      987.53 ppb         11.972   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 98.75%
Sb 206.836†             1907.8      510.25 ug/L         4.840      510.25 ppb          4.840   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.05%
Se 196.026†             1127.2      519.48 ug/L         6.252      519.48 ppb          6.252   1.20%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            98793.9      2497.0 ug/L         5.50      2497.0 ppb           5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 99.88%
Sn 189.927†             3792.1      502.14 ug/L         2.448      502.14 ppb          2.448   0.49%
   QC value within limits for Sn 189.927  Recovery = 100.43%
Sr 421.552†            95626.9      501.65 ug/L         1.784      501.65 ppb          1.784   0.36%
   QC value within limits for Sr 421.552  Recovery = 100.33%
Ti 334.940†           364917.3      503.19 ug/L         0.566      503.19 ppb          0.566   0.11%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†             2059.2      501.25 ug/L         3.199      501.25 ppb          3.199   0.64%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†             18891.3      486.80 ug/L         4.105      486.80 ppb          4.105   0.84%
   QC value within limits for U 409.014  Recovery = 97.36%
V 292.402†             87700.7      508.78 ug/L         0.576      508.78 ppb          0.576   0.11%
   QC value within limits for V 292.402  Recovery = 101.76%
Zn 213.857†            68811.0      501.18 ug/L         1.379      501.18 ppb          1.379   0.28%
   QC value within limits for Zn 213.857  Recovery = 100.24%
SiO2†                  98959.2      5352.4 ug/L        23.80      5352.4 ppb          23.80   0.44%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
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Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 18:08:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4766.6	4766.6	97.1	%			18:10:25
1	Y RADIAL	5473.3	5473.3	96.92	%			18:10:25
1	Al 396.153Radial†	-20.4	22.8	15.038	ug/L	15.038	ppb	18:10:25
1	Ca 317.933Radial†	22.5	5.3	9.4050	ug/L	9.4050	ppb	18:10:45
1	Fe 238.204 Radial†	8.0	-2.8	-33.253	ug/L	-33.253	ppb	18:10:45
1	K 766.490 Radial†	2545.0	51.9	9.4686	ug/L	9.4686	ppb	18:10:25
1	Mg 279.077 IEC†	4.0	1.6	72.341	ug/L	72.341	ppb	18:10:45
1	Na 589.592 Radial†	-1272.2	-30.5	-8.5443	ug/L	-8.5443	ppb	18:10:25
1	Sr 421.552†	-32.1	-25.7	-0.1348	ug/L	-0.1348	ppb	18:10:25
1	Sc 361.383	1034609.2	1034609.2	99.531	%			18:11:42
1	Y 371.029	881696.7	881696.7	99.687	%			18:11:42
1	Ag 328.068†	446.5	-25.5	-0.1118	ug/L	-0.1118	ppb	18:11:47
1	As 188.979†	-33.8	2.6	0.8128	ug/L	0.8128	ppb	18:12:07
1	B 249.677†	-454.8	9.1	0.1770	ug/L	0.1770	ppb	18:12:07
1	Ba 233.527†	-2.6	-2.6	-0.0192	ug/L	-0.0192	ppb	18:12:07
1	Be 313.107†	-4791.6	59.7	0.0187	ug/L	0.0187	ppb	18:11:47
1	Cd 226.502†	-228.8	5.7	0.0536	ug/L	0.0536	ppb	18:12:07
1	Co 228.616†	-84.4	1.6	0.0263	ug/L	0.0263	ppb	18:12:07
1	Cr 267.716†	106.0	18.8	0.1679	ug/L	0.1679	ppb	18:12:07
1	Cu 324.752†	8941.8	46.4	0.1223	ug/L	0.1223	ppb	18:11:47
1	Mn 257.610†	570.8	-3.2	-0.0077	ug/L	-0.0077	ppb	18:12:07
1	Mo 202.031†	29.9	0.8	0.0391	ug/L	0.0391	ppb	18:12:07
1	Ni 231.604†	151.8	20.6	0.4030	ug/L	0.4030	ppb	18:12:07
1	P 214.914†	248.4	-15.6	-6.9397	ug/L	-6.9397	ppb	18:12:07
1	Pb 220.353†	-71.0	4.3	0.4060	ug/L	0.4060	ppb	18:12:07
1	S 181.975 Axial†	60.8	0.9	1.0132	ug/L	1.0132	ppb	18:12:07
1	Sb 206.836†	49.6	15.2	4.0184	ug/L	4.0184	ppb	18:12:07
1	Se 196.026†	-29.1	-7.9	-3.6032	ug/L	-3.6032	ppb	18:12:07
1	Si 251.611†	580.7	25.8	0.6494	ug/L	0.6494	ppb	18:12:07
1	Sn 189.927†	0.4	4.7	0.6278	ug/L	0.6278	ppb	18:12:07
1	Ti 334.940†	-1230.3	24.3	0.0350	ug/L	0.0350	ppb	18:11:47
1	Tl 190.801†	-42.1	1.9	0.4708	ug/L	0.4708	ppb	18:12:07
1	U 409.014†	-2850.8	-90.3	-2.3302	ug/L	-2.3302	ppb	18:11:42
1	V 292.402†	-1689.4	-88.8	-0.5058	ug/L	-0.5058	ppb	18:11:47
1	Zn 213.857†	887.3	5.9	0.0415	ug/L	0.0415	ppb	18:12:07
1	SiO2†	594.9	-1.3	-0.0849	ug/L	-0.0849	ppb	18:13:13
2	Sc Radial	4831.6	4831.6	98.4	%			18:10:50
2	Y RADIAL	5539.0	5539.0	98.08	%			18:10:50
2	Al 396.153Radial†	-19.9	23.6	15.571	ug/L	15.571	ppb	18:10:50
2	Ca 317.933Radial†	20.6	3.1	5.4395	ug/L	5.4395	ppb	18:11:10
2	Fe 238.204 Radial†	12.0	1.2	14.105	ug/L	14.105	ppb	18:11:10
2	K 766.490 Radial†	2640.1	113.3	20.647	ug/L	20.647	ppb	18:10:50
2	Mg 279.077 IEC†	6.5	4.1	183.27	ug/L	183.27	ppb	18:11:10
2	Na 589.592 Radial†	-1259.8	-0.2	-0.0693	ug/L	-0.0693	ppb	18:10:50
2	Sr 421.552†	-7.2	0.1	0.0004	ug/L	0.0004	ppb	18:10:50
2	Sc 361.383	1027067.1	1027067.1	98.806	%			18:12:12
2	Y 371.029	874594.2	874594.2	98.884	%			18:12:12
2	Ag 328.068†	449.8	-18.9	-0.0704	ug/L	-0.0704	ppb	18:12:17
2	As 188.979†	-40.3	-4.2	-1.3039	ug/L	-1.3039	ppb	18:12:37
2	B 249.677†	-427.8	33.1	0.6230	ug/L	0.6230	ppb	18:12:37
2	Ba 233.527†	-2.6	-2.6	-0.0166	ug/L	-0.0166	ppb	18:12:37
2	Be 313.107†	-4776.7	39.5	0.0122	ug/L	0.0122	ppb	18:12:17
2	Cd 226.502†	-219.3	13.7	0.1183	ug/L	0.1183	ppb	18:12:37
2	Co 228.616†	-75.9	9.5	0.1565	ug/L	0.1565	ppb	18:12:37
2	Cr 267.716†	97.6	11.0	0.0989	ug/L	0.0989	ppb	18:12:37
2	Cu 324.752†	8954.3	125.1	0.3347	ug/L	0.3347	ppb	18:12:17
2	Mn 257.610†	567.3	-2.6	-0.0044	ug/L	-0.0044	ppb	18:12:37
2	Mo 202.031†	27.2	-1.7	-0.0888	ug/L	-0.0888	ppb	18:12:37
2	Ni 231.604†	137.1	6.8	0.1336	ug/L	0.1336	ppb	18:12:37

2	P 214.914†	289.4	27.8	12.395	ug/L	12.395 ppb	18:12:37
2	Pb 220.353†	-86.1	-11.5	-1.0822	ug/L	-1.0822 ppb	18:12:37
2	S 181.975 Axial†	51.7	-7.8	-8.3923	ug/L	-8.3923 ppb	18:12:37
2	Sb 206.836†	34.7	0.5	0.1412	ug/L	0.1412 ppb	18:12:37
2	Se 196.026†	-20.9	0.2	0.1369	ug/L	0.1369 ppb	18:12:37
2	Si 251.611†	575.3	24.6	0.6161	ug/L	0.6161 ppb	18:12:37
2	Sn 189.927†	3.8	8.2	1.0891	ug/L	1.0891 ppb	18:12:37
2	Ti 334.940†	-1271.1	-26.0	-0.0353	ug/L	-0.0353 ppb	18:12:17
2	Tl 190.801†	-40.7	3.1	0.7471	ug/L	0.7471 ppb	18:12:37
2	U 409.014†	-2766.3	-25.8	-0.6692	ug/L	-0.6692 ppb	18:12:12
2	V 292.402†	-1617.8	-28.8	-0.1657	ug/L	-0.1657 ppb	18:12:17
2	Zn 213.857†	888.8	14.0	0.0937	ug/L	0.0937 ppb	18:12:37
2	SiO2†	620.8	29.3	1.5731	ug/L	1.5731 ppb	18:13:18
3	Sc Radial	4720.5	4720.5	96.1	%		18:11:15
3	Y RADIAL	5456.3	5456.3	96.62	%		18:11:15
3	Al 396.153Radial†	-34.8	7.6	5.0192	ug/L	5.0192 ppb	18:11:15
3	Ca 317.933Radial†	12.2	-5.1	-9.1137	ug/L	-9.1137 ppb	18:11:35
3	Fe 238.204 Radial†	9.7	-0.9	-10.769	ug/L	-10.769 ppb	18:11:35
3	K 766.490 Radial†	2595.0	129.5	23.622	ug/L	23.622 ppb	18:11:15
3	Mg 279.077 IEC†	2.1	-0.3	-11.938	ug/L	-11.938 ppb	18:11:35
3	Na 589.592 Radial†	-1312.6	-85.3	-23.919	ug/L	-23.919 ppb	18:11:15
3	Sr 421.552†	1.0	8.4	0.0443	ug/L	0.0443 ppb	18:11:15
3	Sc 361.383	1017127.6	1017127.6	97.849	%		18:12:42
3	Y 371.029	865924.7	865924.7	97.903	%		18:12:42
3	Ag 328.068†	366.4	-99.6	-0.4011	ug/L	-0.4011 ppb	18:12:47
3	As 188.979†	-29.3	6.6	2.0560	ug/L	2.0560 ppb	18:13:07
3	B 249.677†	-440.2	16.3	0.3089	ug/L	0.3089 ppb	18:13:07
3	Ba 233.527†	9.3	9.5	0.0592	ug/L	0.0592 ppb	18:13:07
3	Be 313.107†	-4801.3	-32.9	-0.0104	ug/L	-0.0104 ppb	18:12:47
3	Cd 226.502†	-236.4	-5.9	-0.0502	ug/L	-0.0502 ppb	18:13:07
3	Co 228.616†	-91.6	-7.3	-0.1196	ug/L	-0.1196 ppb	18:13:07
3	Cr 267.716†	114.8	29.6	0.2642	ug/L	0.2642 ppb	18:13:07
3	Cu 324.752†	8925.1	183.8	0.4903	ug/L	0.4903 ppb	18:12:47
3	Mn 257.610†	576.7	12.7	0.0111	ug/L	0.0111 ppb	18:13:07
3	Mo 202.031†	31.1	2.6	0.1363	ug/L	0.1363 ppb	18:13:07
3	Ni 231.604†	141.1	12.2	0.2399	ug/L	0.2399 ppb	18:13:07
3	P 214.914†	272.2	13.1	5.7950	ug/L	5.7950 ppb	18:13:07
3	Pb 220.353†	-73.4	0.5	0.0523	ug/L	0.0523 ppb	18:13:07
3	S 181.975 Axial†	54.0	-4.9	-5.2941	ug/L	-5.2941 ppb	18:13:07
3	Sb 206.836†	34.2	0.3	0.1003	ug/L	0.1003 ppb	18:13:07
3	Se 196.026†	-20.9	0.0	-0.0283	ug/L	-0.0283 ppb	18:13:07
3	Si 251.611†	567.7	22.6	0.5592	ug/L	0.5592 ppb	18:13:07
3	Sn 189.927†	3.6	8.0	1.0610	ug/L	1.0610 ppb	18:13:07
3	Ti 334.940†	-1272.2	-39.7	-0.0555	ug/L	-0.0555 ppb	18:12:47
3	Tl 190.801†	-39.6	3.8	0.9126	ug/L	0.9126 ppb	18:13:07
3	U 409.014†	-2696.8	17.9	0.4644	ug/L	0.4644 ppb	18:12:42
3	V 292.402†	-1683.0	-111.5	-0.6339	ug/L	-0.6339 ppb	18:12:47
3	Zn 213.857†	892.5	26.6	0.1945	ug/L	0.1945 ppb	18:13:07
3	SiO2†	608.0	22.3	1.1842	ug/L	1.1842 ppb	18:13:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026268.0	98.729	%	0.8435				0.85%
Sc Radial	4772.9	97.2	%	1.14				1.17%
Y 371.029	874071.9	98.825	%	0.8931				0.90%
Y RADIAL	5489.5	97.21	%	0.774				0.80%
Ag 328.068†	-48.0	-0.1945	ug/L	0.18018	-0.1945	ppb	0.18018	92.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.0	11.876	ug/L	5.9441	11.876	ppb	5.9441	50.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	0.5216	ug/L	1.69881	0.5216	ppb	1.69881	325.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.5	0.3696	ug/L	0.22913	0.3696	ppb	0.22913	61.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0078	ug/L	0.04452	0.0078	ppb	0.04452	572.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.1	0.0069	ug/L	0.01526	0.0069	ppb	0.01526	222.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	1.9103	ug/L	9.75075	1.9103	ppb	9.75075	510.44%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.5      0.0406 ug/L       0.08501      0.0406 ppb        0.08501 209.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.3      0.0211 ug/L       0.13814      0.0211 ppb        0.13814 655.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.8      0.1770 ug/L       0.08304      0.1770 ppb        0.08304  46.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               118.4      0.3158 ug/L       0.18470      0.3158 ppb        0.18470  58.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -9.9724 ug/L      23.68902     -9.9724 ppb       23.68902 237.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          98.3      17.912 ug/L        7.4622      17.912 ppb         7.4622  41.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.8      81.225 ug/L       97.9077      81.225 ppb        97.9077 120.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0003 ug/L       0.01006     -0.0003 ppb        0.01006 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0289 ug/L       0.11291      0.0289 ppb        0.11291 390.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -38.7     -10.844 ug/L      12.0902     -10.844 ppb        12.0902 111.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.2      0.2588 ug/L       0.13570      0.2588 ppb        0.13570  52.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7502 ug/L       9.82845      3.7502 ppb        9.82845 262.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.3     -0.2079 ug/L       0.77747     -0.2079 ppb        0.77747 373.89%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.9     -4.2244 ug/L       4.79313     -4.2244 ppb        4.79313 113.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.3      1.4200 ug/L       2.25041      1.4200 ppb        2.25041 158.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.5     -1.1649 ug/L       2.11326     -1.1649 ppb        2.11326 181.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.3      0.6082 ug/L       0.04564      0.6082 ppb        0.04564   7.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.0      0.9260 ug/L       0.25857      0.9260 ppb        0.25857  27.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.7     -0.0300 ug/L       0.09336     -0.0300 ppb        0.09336 310.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.8     -0.0186 ug/L       0.04751     -0.0186 ppb        0.04751 255.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      0.7102 ug/L       0.22320      0.7102 ppb        0.22320  31.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.7     -0.8450 ug/L       1.40556     -0.8450 ppb        1.40556 166.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -76.4     -0.4351 ug/L       0.24200     -0.4351 ppb        0.24200  55.62%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                15.5      0.1099 ug/L       0.07776      0.1099 ppb        0.07776  70.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      16.8      0.8908 ug/L       0.86705      0.8908 ppb        0.86705  97.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 19:19:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4734.3	4734.3	96.4	%			19:21:09
1	Y RADIAL	5406.0	5406.0	95.73	%			19:21:09
1	Al 396.153Radial†	7520.0	7842.3	5156.8	ug/L	5156.8	ppb	19:21:09
1	Ca 317.933Radial†	2824.2	2911.0	5154.0	ug/L	5154.0	ppb	19:21:29
1	Fe 238.204 Radial†	417.6	422.1	5118.6	ug/L	5118.6	ppb	19:21:29
1	K 766.490 Radial†	28948.3	27451.3	4994.6	ug/L	4994.6	ppb	19:21:09
1	Mg 279.077 IEC†	112.6	114.3	5118.6	ug/L	5118.6	ppb	19:21:29
1	Na 589.592 Radial†	32433.3	34914.9	9793.6	ug/L	9793.6	ppb	19:21:09
1	Sr 421.552†	92081.5	95500.4	500.99	ug/L	500.99	ppb	19:21:09
1	Sc 361.383	1033401.4	1033401.4	99.415	%			19:22:28
1	Y 371.029	865851.8	865851.8	97.895	%			19:22:28
1	Ag 328.068†	127285.7	127560.8	508.74	ug/L	508.74	ppb	19:22:28
1	As 188.979†	1572.9	1618.7	508.81	ug/L	508.81	ppb	19:22:48
1	B 249.677†	26054.4	26673.9	502.15	ug/L	502.15	ppb	19:22:28
1	Ba 233.527†	79037.3	79502.5	512.07	ug/L	512.07	ppb	19:22:28
1	Be 313.107†	1617567.7	1631961.8	509.83	ug/L	509.83	ppb	19:22:28
1	Cd 226.502†	58065.0	58642.4	511.22	ug/L	511.22	ppb	19:22:28
1	Co 228.616†	30149.0	30412.8	501.11	ug/L	501.11	ppb	19:22:48
1	Cr 267.716†	56148.9	56391.5	507.44	ug/L	507.44	ppb	19:22:28
1	Cu 324.752†	198503.5	190734.3	509.62	ug/L	509.62	ppb	19:22:28
1	Mn 257.610†	537564.0	540151.2	511.91	ug/L	511.91	ppb	19:22:28
1	Mo 202.031†	9476.2	9502.7	504.65	ug/L	504.65	ppb	19:22:48
1	Ni 231.604†	25566.4	25584.9	500.98	ug/L	500.98	ppb	19:22:48
1	P 214.914†	5881.3	5650.8	2450.5	ug/L	2450.5	ppb	19:22:48
1	Pb 220.353†	5299.7	5406.5	509.10	ug/L	509.10	ppb	19:22:48
1	S 181.975 Axial†	975.7	921.3	991.62	ug/L	991.62	ppb	19:22:48
1	Sb 206.836†	1937.8	1914.6	511.96	ug/L	511.96	ppb	19:22:48
1	Se 196.026†	1106.3	1134.2	522.52	ug/L	522.52	ppb	19:22:48
1	Si 251.611†	99946.8	99977.3	2527.1	ug/L	2527.1	ppb	19:22:28
1	Sn 189.927†	3766.0	3792.5	502.20	ug/L	502.20	ppb	19:22:48
1	Ti 334.940†	364631.3	368037.8	507.50	ug/L	507.50	ppb	19:22:28
1	Tl 190.801†	2033.0	2089.2	508.54	ug/L	508.54	ppb	19:22:48
1	U 409.014†	16208.7	19078.1	491.63	ug/L	491.63	ppb	19:22:28
1	V 292.402†	86101.1	88216.4	511.75	ug/L	511.75	ppb	19:22:28
1	Zn 213.857†	69834.6	69360.0	505.20	ug/L	505.20	ppb	19:22:28
1	SiO2†	99520.5	99507.2	5382.1	ug/L	5382.1	ppb	19:23:48
2	Sc Radial	4785.5	4785.5	97.5	%			19:21:34
2	Y RADIAL	5470.8	5470.8	96.88	%			19:21:34
2	Al 396.153Radial†	7596.8	7837.7	5153.6	ug/L	5153.6	ppb	19:21:34
2	Ca 317.933Radial†	2796.5	2851.2	5048.2	ug/L	5048.2	ppb	19:21:54
2	Fe 238.204 Radial†	417.0	416.8	5055.5	ug/L	5055.5	ppb	19:21:54
2	K 766.490 Radial†	29186.6	27374.5	4980.7	ug/L	4980.7	ppb	19:21:34
2	Mg 279.077 IEC†	113.5	114.0	5106.5	ug/L	5106.5	ppb	19:21:54
2	Na 589.592 Radial†	32666.5	34794.2	9759.8	ug/L	9759.8	ppb	19:21:34
2	Sr 421.552†	93027.7	95449.3	500.72	ug/L	500.72	ppb	19:21:34
2	Sc 361.383	1026012.3	1026012.3	98.704	%			19:22:55
2	Y 371.029	860635.0	860635.0	97.305	%			19:22:55
2	Ag 328.068†	126120.5	127302.4	507.70	ug/L	507.70	ppb	19:22:55
2	As 188.979†	1582.1	1639.5	515.25	ug/L	515.25	ppb	19:23:15
2	B 249.677†	25839.3	26644.7	501.60	ug/L	501.60	ppb	19:22:55
2	Ba 233.527†	77930.9	78954.2	508.54	ug/L	508.54	ppb	19:22:55
2	Be 313.107†	1600999.0	1626893.3	508.25	ug/L	508.25	ppb	19:22:55
2	Cd 226.502†	57183.2	58169.6	507.10	ug/L	507.10	ppb	19:22:55
2	Co 228.616†	30107.6	30589.2	504.04	ug/L	504.04	ppb	19:23:15
2	Cr 267.716†	55469.2	56109.7	504.91	ug/L	504.91	ppb	19:22:55
2	Cu 324.752†	196925.1	190573.2	509.19	ug/L	509.19	ppb	19:22:55
2	Mn 257.610†	531288.3	537687.2	509.57	ug/L	509.57	ppb	19:22:55
2	Mo 202.031†	9505.9	9601.4	509.88	ug/L	509.88	ppb	19:23:15
2	Ni 231.604†	25542.1	25745.5	504.13	ug/L	504.13	ppb	19:23:15

2	P 214.914†	5874.3	5686.3	2466.5 ug/L	2466.5 ppb	19:23:15
2	Pb 220.353†	5291.5	5436.6	511.94 ug/L	511.94 ppb	19:23:15
2	S 181.975 Axial†	980.6	933.4	1004.6 ug/L	1004.6 ppb	19:23:15
2	Sb 206.836†	1940.2	1931.0	516.49 ug/L	516.49 ppb	19:23:15
2	Se 196.026†	1107.9	1143.8	526.56 ug/L	526.56 ppb	19:23:15
2	Si 251.611†	98767.5	99506.6	2515.0 ug/L	2515.0 ppb	19:22:55
2	Sn 189.927†	3748.6	3802.2	503.46 ug/L	503.46 ppb	19:23:15
2	Ti 334.940†	361053.9	367054.8	506.14 ug/L	506.14 ppb	19:22:55
2	Tl 190.801†	2027.9	2098.8	510.82 ug/L	510.82 ppb	19:23:15
2	U 409.014†	16079.4	19064.5	491.29 ug/L	491.29 ppb	19:22:55
2	V 292.402†	85328.7	88057.5	510.93 ug/L	510.93 ppb	19:22:55
2	Zn 213.857†	69041.3	69062.2	503.00 ug/L	503.00 ppb	19:22:55
2	SiO2†	99115.1	99817.4	5398.7 ug/L	5398.7 ppb	19:23:53
3	Sc Radial	4799.7	4799.7	97.8 %		19:21:59
3	Y RADIAL	5465.7	5465.7	96.79 %		19:21:59
3	Al 396.153Radial†	7583.0	7800.6	5129.2 ug/L	5129.2 ppb	19:21:59
3	Ca 317.933Radial†	2825.1	2872.0	5084.9 ug/L	5084.9 ppb	19:22:19
3	Fe 238.204 Radial†	417.4	415.9	5044.6 ug/L	5044.6 ppb	19:22:19
3	K 766.490 Radial†	29293.9	27395.8	4984.4 ug/L	4984.4 ppb	19:21:59
3	Mg 279.077 IEC†	115.6	115.8	5186.8 ug/L	5186.8 ppb	19:22:19
3	Na 589.592 Radial†	32936.4	34971.3	9809.4 ug/L	9809.4 ppb	19:21:59
3	Sr 421.552†	93348.6	95495.6	500.96 ug/L	500.96 ppb	19:21:59
3	Sc 361.383	1029039.8	1029039.8	98.995 %		19:23:23
3	Y 371.029	861082.3	861082.3	97.356 %		19:23:23
3	Ag 328.068†	127149.9	127966.3	510.33 ug/L	510.33 ppb	19:23:23
3	As 188.979†	1573.5	1626.0	511.09 ug/L	511.09 ppb	19:23:43
3	B 249.677†	26080.1	26810.8	504.74 ug/L	504.74 ppb	19:23:23
3	Ba 233.527†	78942.9	79744.1	513.62 ug/L	513.62 ppb	19:23:23
3	Be 313.107†	1613383.4	1634631.2	510.67 ug/L	510.67 ppb	19:23:23
3	Cd 226.502†	57882.5	58705.6	511.78 ug/L	511.78 ppb	19:23:23
3	Co 228.616†	30053.5	30444.9	501.64 ug/L	501.64 ppb	19:23:43
3	Cr 267.716†	56141.1	56623.1	509.52 ug/L	509.52 ppb	19:23:23
3	Cu 324.752†	198524.5	191601.8	511.93 ug/L	511.93 ppb	19:23:23
3	Mn 257.610†	537675.2	542555.3	514.18 ug/L	514.18 ppb	19:23:23
3	Mo 202.031†	9456.1	9522.9	505.71 ug/L	505.71 ppb	19:23:43
3	Ni 231.604†	25447.2	25573.5	500.76 ug/L	500.76 ppb	19:23:43
3	P 214.914†	5869.1	5663.6	2455.9 ug/L	2455.9 ppb	19:23:43
3	Pb 220.353†	5261.2	5390.2	507.57 ug/L	507.57 ppb	19:23:43
3	S 181.975 Axial†	980.3	930.1	1001.1 ug/L	1001.1 ppb	19:23:43
3	Sb 206.836†	1917.3	1902.2	508.63 ug/L	508.63 ppb	19:23:43
3	Se 196.026†	1106.5	1139.1	524.44 ug/L	524.44 ppb	19:23:43
3	Si 251.611†	99912.6	100369.0	2537.0 ug/L	2537.0 ppb	19:23:23
3	Sn 189.927†	3745.3	3787.6	501.55 ug/L	501.55 ppb	19:23:43
3	Ti 334.940†	364672.1	369633.5	509.69 ug/L	509.69 ppb	19:23:23
3	Tl 190.801†	2011.5	2076.2	505.42 ug/L	505.42 ppb	19:23:43
3	U 409.014†	16224.5	19163.1	493.83 ug/L	493.83 ppb	19:23:23
3	V 292.402†	85974.8	88455.8	513.15 ug/L	513.15 ppb	19:23:23
3	Zn 213.857†	69723.6	69545.6	506.57 ug/L	506.57 ppb	19:23:23
3	SiO2†	99840.5	100254.7	5422.7 ug/L	5422.7 ppb	19:23:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1029484.5	99.038	%	0.3573				0.36%
Sc Radial	4773.2	97.2	%	0.70				0.72%
Y 371.029	862523.0	97.519	%	0.3269				0.34%
Y RADIAL	5447.5	96.46	%	0.638				0.66%
Ag 328.068†	127609.8	508.92	ug/L	1.327	508.92	ppb	1.327	0.26%
QC value within limits for Ag 328.068 Recovery = 101.78%								
Al 396.153Radial†	7826.9	5146.5	ug/L	15.11	5146.5	ppb	15.11	0.29%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	1628.1	511.72	ug/L	3.263	511.72	ppb	3.263	0.64%
QC value within limits for As 188.979 Recovery = 102.34%								
B 249.677†	26709.8	502.83	ug/L	1.681	502.83	ppb	1.681	0.33%
QC value within limits for B 249.677 Recovery = 100.57%								
Ba 233.527†	79400.2	511.41	ug/L	2.603	511.41	ppb	2.603	0.51%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1631162.1	509.58	ug/L	1.229	509.58	ppb	1.229	0.24%
QC value within limits for Be 313.107 Recovery = 101.92%								
Ca 317.933Radial†	2878.1	5095.7	ug/L	53.75	5095.7	ppb	53.75	1.05%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.91%
Cd 226.502†            58505.9      510.03 ug/L         2.552      510.03 ppb          2.552   0.50%
   QC value within limits for Cd 226.502  Recovery = 102.01%
Co 228.616†            30482.3      502.26 ug/L         1.557      502.26 ppb          1.557   0.31%
   QC value within limits for Co 228.616  Recovery = 100.45%
Cr 267.716†            56374.8      507.29 ug/L         2.312      507.29 ppb          2.312   0.46%
   QC value within limits for Cr 267.716  Recovery = 101.46%
Cu 324.752†           190969.7      510.25 ug/L         1.476      510.25 ppb          1.476   0.29%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5072.9 ug/L        39.96      5072.9 ppb         39.96   0.79%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27407.2      4986.6 ug/L         7.20      4986.6 ppb          7.20   0.14%
   QC value within limits for K 766.490 Radial  Recovery = 99.73%
Mg 279.077 IEC†          114.7      5137.3 ug/L        43.26      5137.3 ppb         43.26   0.84%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.75%
Mn 257.610†           540131.2      511.88 ug/L         2.304      511.88 ppb          2.304   0.45%
   QC value within limits for Mn 257.610  Recovery = 102.38%
Mo 202.031†             9542.3      506.74 ug/L         2.766      506.74 ppb          2.766   0.55%
   QC value within limits for Mo 202.031  Recovery = 101.35%
Na 589.592 Radial†     34893.5      9787.6 ug/L        25.38      9787.6 ppb         25.38   0.26%
   QC value within limits for Na 589.592 Radial  Recovery = 97.88%
Ni 231.604†            25634.6      501.95 ug/L         1.883      501.95 ppb          1.883   0.38%
   QC value within limits for Ni 231.604  Recovery = 100.39%
P 214.914†              5666.9      2457.7 ug/L         8.16      2457.7 ppb          8.16   0.33%
   QC value within limits for P 214.914  Recovery = 98.31%
Pb 220.353†             5411.1      509.54 ug/L         2.216      509.54 ppb          2.216   0.43%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         928.3      999.11 ug/L         6.718      999.11 ppb          6.718   0.67%
   QC value within limits for S 181.975 Axial  Recovery = 99.91%
Sb 206.836†             1915.9      512.36 ug/L         3.943      512.36 ppb          3.943   0.77%
   QC value within limits for Sb 206.836  Recovery = 102.47%
Se 196.026†             1139.0      524.51 ug/L         2.021      524.51 ppb          2.021   0.39%
   QC value within limits for Se 196.026  Recovery = 104.90%
Si 251.611†            99951.0      2526.4 ug/L        11.01      2526.4 ppb         11.01   0.44%
   QC value within limits for Si 251.611  Recovery = 101.05%
Sn 189.927†             3794.1      502.40 ug/L         0.975      502.40 ppb          0.975   0.19%
   QC value within limits for Sn 189.927  Recovery = 100.48%
Sr 421.552†            95481.8      500.89 ug/L         0.147      500.89 ppb          0.147   0.03%
   QC value within limits for Sr 421.552  Recovery = 100.18%
Ti 334.940†           368242.1      507.78 ug/L         1.794      507.78 ppb          1.794   0.35%
   QC value within limits for Ti 334.940  Recovery = 101.56%
Tl 190.801†             2088.1      508.26 ug/L         2.710      508.26 ppb          2.710   0.53%
   QC value within limits for Tl 190.801  Recovery = 101.65%
U 409.014†             19101.9      492.25 ug/L         1.381      492.25 ppb          1.381   0.28%
   QC value within limits for U 409.014  Recovery = 98.45%
V 292.402†             88243.3      511.95 ug/L         1.124      511.95 ppb          1.124   0.22%
   QC value within limits for V 292.402  Recovery = 102.39%
Zn 213.857†            69322.6      504.92 ug/L         1.801      504.92 ppb          1.801   0.36%
   QC value within limits for Zn 213.857  Recovery = 100.98%
SiO2†                  99859.8      5401.2 ug/L        20.41      5401.2 ppb         20.41   0.38%
   QC value within limits for SiO2  Recovery = 101.00%
All analyte(s) passed QC.
```

Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 19:26:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4859.6	4859.6	99.0	%			19:28:00
1	Y RADIAL	5593.3	5593.3	99.05	%			19:28:00
1	Al 396.153Radial†	-40.8	2.6	1.7303	ug/L	1.7303	ppb	19:28:00
1	Ca 317.933Radial†	22.6	5.0	8.9356	ug/L	8.9356	ppb	19:28:20
1	Fe 238.204 Radial†	9.0	-1.9	-22.856	ug/L	-22.856	ppb	19:28:20
1	K 766.490 Radial†	2744.6	203.5	37.066	ug/L	37.066	ppb	19:28:00
1	Mg 279.077 IEC†	3.4	0.9	40.419	ug/L	40.419	ppb	19:28:20
1	Na 589.592 Radial†	-1155.6	112.5	31.546	ug/L	31.546	ppb	19:28:00
1	Sr 421.552†	-48.7	-41.8	-0.2194	ug/L	-0.2194	ppb	19:28:00
1	Sc 361.383	1021125.3	1021125.3	98.234	%			19:29:17
1	Y 371.029	867915.2	867915.2	98.129	%			19:29:17
1	Ag 328.068†	462.9	-2.9	-0.0206	ug/L	-0.0206	ppb	19:29:22
1	As 188.979†	-36.9	-1.0	-0.3161	ug/L	-0.3161	ppb	19:29:42
1	B 249.677†	-320.6	139.7	2.6438	ug/L	2.6438	ppb	19:29:42
1	Ba 233.527†	5.5	5.6	0.0351	ug/L	0.0351	ppb	19:29:42
1	Be 313.107†	-4888.0	-101.9	-0.0321	ug/L	-0.0321	ppb	19:29:22
1	Cd 226.502†	-223.3	8.3	0.0746	ug/L	0.0746	ppb	19:29:42
1	Co 228.616†	-87.7	-3.0	-0.0486	ug/L	-0.0486	ppb	19:29:42
1	Cr 267.716†	99.2	13.2	0.1175	ug/L	0.1175	ppb	19:29:42
1	Cu 324.752†	8965.9	189.6	0.5051	ug/L	0.5051	ppb	19:29:22
1	Mn 257.610†	613.2	47.6	0.0420	ug/L	0.0420	ppb	19:29:42
1	Mo 202.031†	25.5	-3.3	-0.1741	ug/L	-0.1741	ppb	19:29:42
1	Ni 231.604†	116.0	-13.9	-0.2714	ug/L	-0.2714	ppb	19:29:42
1	P 214.914†	270.6	10.3	4.5763	ug/L	4.5763	ppb	19:29:42
1	Pb 220.353†	-67.8	6.5	0.6136	ug/L	0.6136	ppb	19:29:42
1	S 181.975 Axial†	58.0	-1.1	-1.1385	ug/L	-1.1385	ppb	19:29:42
1	Sb 206.836†	45.4	11.6	3.0650	ug/L	3.0650	ppb	19:29:42
1	Se 196.026†	-20.7	0.3	0.0561	ug/L	0.0561	ppb	19:29:42
1	Si 251.611†	693.1	147.9	3.7429	ug/L	3.7429	ppb	19:29:42
1	Sn 189.927†	4.9	9.3	1.2360	ug/L	1.2360	ppb	19:29:42
1	Ti 334.940†	-1354.4	-118.3	-0.1636	ug/L	-0.1636	ppb	19:29:22
1	Tl 190.801†	-38.9	4.6	1.1230	ug/L	1.1230	ppb	19:29:42
1	U 409.014†	-2649.8	76.5	1.9812	ug/L	1.9812	ppb	19:29:17
1	V 292.402†	-1586.9	-6.9	-0.0336	ug/L	-0.0336	ppb	19:29:22
1	Zn 213.857†	891.7	22.2	0.1648	ug/L	0.1648	ppb	19:29:42
1	SiO2†	691.8	105.2	5.6857	ug/L	5.6857	ppb	19:30:48
2	Sc Radial	4973.2	4973.2	101	%			19:28:25
2	Y RADIAL	5719.4	5719.4	101.3	%			19:28:25
2	Al 396.153Radial†	-19.7	24.3	16.050	ug/L	16.050	ppb	19:28:25
2	Ca 317.933Radial†	18.3	0.2	0.4419	ug/L	0.4419	ppb	19:28:45
2	Fe 238.204 Radial†	9.5	-1.6	-19.945	ug/L	-19.945	ppb	19:28:45
2	K 766.490 Radial†	2626.7	23.6	4.2865	ug/L	4.2865	ppb	19:28:25
2	Mg 279.077 IEC†	1.9	-0.6	-28.589	ug/L	-28.589	ppb	19:28:45
2	Na 589.592 Radial†	-1152.3	142.3	39.923	ug/L	39.923	ppb	19:28:25
2	Sr 421.552†	-30.3	-22.5	-0.1180	ug/L	-0.1180	ppb	19:28:25
2	Sc 361.383	1022927.5	1022927.5	98.407	%			19:29:47
2	Y 371.029	869879.4	869879.4	98.351	%			19:29:47
2	Ag 328.068†	404.4	-63.1	-0.2583	ug/L	-0.2583	ppb	19:29:52
2	As 188.979†	-30.4	5.7	1.7705	ug/L	1.7705	ppb	19:30:12
2	B 249.677†	-344.7	115.9	2.1918	ug/L	2.1918	ppb	19:30:12
2	Ba 233.527†	-1.2	-1.2	-0.0093	ug/L	-0.0093	ppb	19:30:12
2	Be 313.107†	-4878.6	-83.7	-0.0263	ug/L	-0.0263	ppb	19:29:52
2	Cd 226.502†	-258.3	-26.8	-0.2320	ug/L	-0.2320	ppb	19:30:12
2	Co 228.616†	-78.4	6.6	0.1096	ug/L	0.1096	ppb	19:30:12
2	Cr 267.716†	110.6	24.6	0.2201	ug/L	0.2201	ppb	19:30:12
2	Cu 324.752†	8839.3	44.9	0.1188	ug/L	0.1188	ppb	19:29:52
2	Mn 257.610†	617.9	51.2	0.0470	ug/L	0.0470	ppb	19:30:12
2	Mo 202.031†	27.5	-1.3	-0.0686	ug/L	-0.0686	ppb	19:30:12
2	Ni 231.604†	127.6	-2.3	-0.0455	ug/L	-0.0455	ppb	19:30:12

2	P 214.914†	262.7	1.9	0.8608 ug/L	0.8608 ppb		19:30:12
2	Pb 220.353†	-89.8	-15.7	-1.4658 ug/L	-1.4658 ppb		19:30:12
2	S 181.975 Axial†	60.3	1.2	1.3132 ug/L	1.3132 ppb		19:30:12
2	Sb 206.836†	51.4	17.6	4.6687 ug/L	4.6687 ppb		19:30:12
2	Se 196.026†	-24.0	-3.0	-1.3881 ug/L	-1.3881 ppb		19:30:12
2	Si 251.611†	694.1	147.7	3.7462 ug/L	3.7462 ppb		19:30:12
2	Sn 189.927†	8.2	12.7	1.6790 ug/L	1.6790 ppb		19:30:12
2	Ti 334.940†	-1312.1	-72.9	-0.1008 ug/L	-0.1008 ppb		19:29:52
2	Tl 190.801†	-38.6	5.0	1.2170 ug/L	1.2170 ppb		19:30:12
2	U 409.014†	-2709.4	20.7	0.5367 ug/L	0.5367 ppb		19:29:47
2	V 292.402†	-1645.6	-63.8	-0.3625 ug/L	-0.3625 ppb		19:29:52
2	Zn 213.857†	909.3	38.5	0.2858 ug/L	0.2858 ppb		19:30:12
2	SiO2†	681.2	93.2	5.0540 ug/L	5.0540 ppb		19:30:53
3	Sc Radial	4734.5	4734.5	96.4 %			19:28:50
3	Y RADIAL	5469.4	5469.4	96.85 %			19:28:50
3	Al 396.153Radial†	-57.9	-16.2	-10.705 ug/L	-10.705 ppb		19:28:50
3	Ca 317.933Radial†	19.2	2.0	3.6020 ug/L	3.6020 ppb		19:29:10
3	Fe 238.204 Radial†	12.9	2.4	28.804 ug/L	28.804 ppb		19:29:10
3	K 766.490 Radial†	2588.2	114.5	20.867 ug/L	20.867 ppb		19:28:50
3	Mg 279.077 IEC†	2.7	0.3	12.846 ug/L	12.846 ppb		19:29:10
3	Na 589.592 Radial†	-1173.4	63.2	17.714 ug/L	17.714 ppb		19:28:50
3	Sr 421.552†	-25.4	-18.9	-0.0992 ug/L	-0.0992 ppb		19:28:50
3	Sc 361.383	1032249.4	1032249.4	99.304 %			19:30:17
3	Y 371.029	877796.3	877796.3	99.246 %			19:30:17
3	Ag 328.068†	478.9	8.2	0.0429 ug/L	0.0429 ppb		19:30:22
3	As 188.979†	-33.0	3.3	1.0373 ug/L	1.0373 ppb		19:30:42
3	B 249.677†	-362.9	100.7	1.8983 ug/L	1.8983 ppb		19:30:42
3	Ba 233.527†	-11.7	-11.8	-0.0748 ug/L	-0.0748 ppb		19:30:42
3	Be 313.107†	-4885.3	-45.6	-0.0143 ug/L	-0.0143 ppb		19:30:22
3	Cd 226.502†	-235.2	-1.2	-0.0134 ug/L	-0.0134 ppb		19:30:42
3	Co 228.616†	-70.9	14.9	0.2453 ug/L	0.2453 ppb		19:30:42
3	Cr 267.716†	101.8	14.7	0.1334 ug/L	0.1334 ppb		19:30:42
3	Cu 324.752†	8905.9	30.8	0.0836 ug/L	0.0836 ppb		19:30:22
3	Mn 257.610†	593.8	21.3	0.0228 ug/L	0.0228 ppb		19:30:42
3	Mo 202.031†	28.5	-0.6	-0.0281 ug/L	-0.0281 ppb		19:30:42
3	Ni 231.604†	124.5	-6.6	-0.1289 ug/L	-0.1289 ppb		19:30:42
3	P 214.914†	276.2	13.0	5.7884 ug/L	5.7884 ppb		19:30:42
3	Pb 220.353†	-85.6	-10.6	-1.0028 ug/L	-1.0028 ppb		19:30:42
3	S 181.975 Axial†	60.9	1.2	1.2949 ug/L	1.2949 ppb		19:30:42
3	Sb 206.836†	42.7	8.3	2.1980 ug/L	2.1980 ppb		19:30:42
3	Se 196.026†	-29.7	-8.5	-3.6795 ug/L	-3.6795 ppb		19:30:42
3	Si 251.611†	830.1	278.2	7.0587 ug/L	7.0587 ppb		19:30:42
3	Sn 189.927†	-1.8	2.5	0.3286 ug/L	0.3286 ppb		19:30:42
3	Ti 334.940†	-1281.0	-29.6	-0.0398 ug/L	-0.0398 ppb		19:30:22
3	Tl 190.801†	-33.4	10.7	2.5775 ug/L	2.5775 ppb		19:30:42
3	U 409.014†	-2829.9	-75.8	-1.9637 ug/L	-1.9637 ppb		19:30:17
3	V 292.402†	-1608.9	-11.6	-0.0750 ug/L	-0.0750 ppb		19:30:22
3	Zn 213.857†	917.9	38.8	0.2827 ug/L	0.2827 ppb		19:30:42
3	SiO2†	710.3	116.2	6.3012 ug/L	6.3012 ppb		19:30:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025434.0	98.648	%	0.5744				0.58%
Sc Radial	4855.8	98.9	%	2.43				2.46%
Y 371.029	871863.7	98.575	%	0.5914				0.60%
Y RADIAL	5594.0	99.06	%	2.214				2.23%
Ag 328.068†	-19.3	-0.0786	ug/L	0.15877	-0.0786	ppb	0.15877	201.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.6	2.3583	ug/L	13.38841	2.3583	ppb	13.38841	567.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.7	0.8305	ug/L	1.05856	0.8305	ppb	1.05856	127.45%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	118.8	2.2446	ug/L	0.37555	2.2446	ppb	0.37555	16.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.5	-0.0163	ug/L	0.05531	-0.0163	ppb	0.05531	339.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-77.1	-0.0242	ug/L	0.00907	-0.0242	ppb	0.00907	37.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.4	4.3265	ug/L	4.29295	4.3265	ppb	4.29295	99.22%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -6.6     -0.0569 ug/L       0.15788     -0.0569 ppb        0.15788 277.35%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.2      0.1021 ug/L       0.14708      0.1021 ppb        0.14708 144.04%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.5      0.1570 ug/L       0.05521      0.1570 ppb        0.05521  35.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                88.4      0.2359 ug/L       0.23386      0.2359 ppb        0.23386  99.15%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.4     -4.6659 ug/L      29.02191     -4.6659 ppb       29.02191 622.01%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         113.9     20.740 ug/L       16.3900      20.740 ppb        16.3900  79.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      8.2252 ug/L      34.73562      8.2252 ppb       34.73562 422.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.0      0.0373 ug/L       0.01278      0.0373 ppb        0.01278  34.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.7     -0.0903 ug/L       0.07539     -0.0903 ppb        0.07539  83.53%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        106.0     29.728 ug/L       11.2159      29.728 ppb        11.2159  37.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.6     -0.1486 ug/L       0.11427     -0.1486 ppb        0.11427  76.90%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7418 ug/L       2.56760      3.7418 ppb        2.56760  68.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.6     -0.6183 ug/L       1.09168     -0.6183 ppb        1.09168 176.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.4899 ug/L       1.41023      0.4899 ppb        1.41023 287.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.5      3.3106 ug/L       1.25350      3.3106 ppb        1.25350  37.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.7     -1.6705 ug/L       1.88373     -1.6705 ppb        1.88373 112.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               191.3      4.8493 ug/L       1.91339      4.8493 ppb        1.91339  39.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.2      1.0812 ug/L       0.68841      1.0812 ppb        0.68841  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -27.7     -0.1455 ug/L       0.06465     -0.1455 ppb        0.06465  44.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -73.6     -0.1014 ug/L       0.06191     -0.1014 ppb        0.06191  61.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.8      1.6392 ug/L       0.81398      1.6392 ppb        0.81398  49.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  7.1      0.1847 ug/L       1.99587      0.1847 ppb        1.99587 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -27.4     -0.1570 ug/L       0.17915     -0.1570 ppb        0.17915 114.08%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                33.2      0.2444 ug/L       0.06898      0.2444 ppb        0.06898  28.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     104.9      5.6803 ug/L       0.62364      5.6803 ppb        0.62364  10.98%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 67
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 20:30:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4702.0	4702.0	95.8	%			20:31:55
1	Y RADIAL	5377.3	5377.3	95.22	%			20:31:55
1	Al 396.153Radial†	7431.8	7803.8	5131.4	ug/L	5131.4	ppb	20:31:55
1	Ca 317.933Radial†	2829.4	2936.5	5199.2	ug/L	5199.2	ppb	20:32:15
1	Fe 238.204 Radial†	424.4	432.2	5240.9	ug/L	5240.9	ppb	20:32:15
1	K 766.490 Radial†	28853.9	27558.8	5014.1	ug/L	5014.1	ppb	20:31:55
1	Mg 279.077 IEC†	115.4	118.0	5286.1	ug/L	5286.1	ppb	20:32:15
1	Na 589.592 Radial†	32504.2	35219.8	9879.1	ug/L	9879.1	ppb	20:31:55
1	Sr 421.552†	91622.1	95676.2	501.91	ug/L	501.91	ppb	20:31:55
1	Sc 361.383	1027536.7	1027536.7	98.851	%			20:33:14
1	Y 371.029	860937.1	860937.1	97.340	%			20:33:14
1	Ag 328.068†	126985.9	127988.2	510.48	ug/L	510.48	ppb	20:33:14
1	As 188.979†	1559.9	1614.7	507.59	ug/L	507.59	ppb	20:33:34
1	B 249.677†	25901.3	26668.5	502.03	ug/L	502.03	ppb	20:33:14
1	Ba 233.527†	78653.3	79567.8	512.50	ug/L	512.50	ppb	20:33:14
1	Be 313.107†	1610870.8	1634473.5	510.62	ug/L	510.62	ppb	20:33:14
1	Cd 226.502†	57778.0	58685.4	511.58	ug/L	511.58	ppb	20:33:14
1	Co 228.616†	30035.1	30470.6	502.06	ug/L	502.06	ppb	20:33:34
1	Cr 267.716†	55939.4	56502.0	508.44	ug/L	508.44	ppb	20:33:14
1	Cu 324.752†	198760.0	192133.4	513.36	ug/L	513.36	ppb	20:33:14
1	Mn 257.610†	537058.6	542726.0	514.36	ug/L	514.36	ppb	20:33:14
1	Mo 202.031†	9428.1	9508.5	504.96	ug/L	504.96	ppb	20:33:34
1	Ni 231.604†	25429.0	25592.7	501.13	ug/L	501.13	ppb	20:33:34
1	P 214.914†	5864.0	5667.0	2457.0	ug/L	2457.0	ppb	20:33:34
1	Pb 220.353†	5274.2	5411.0	509.51	ug/L	509.51	ppb	20:33:34
1	S 181.975 Axial†	964.8	915.9	985.74	ug/L	985.74	ppb	20:33:34
1	Sb 206.836†	1912.4	1900.0	508.03	ug/L	508.03	ppb	20:33:34
1	Se 196.026†	1108.8	1143.1	526.92	ug/L	526.92	ppb	20:33:34
1	Si 251.611†	99572.9	100172.9	2532.0	ug/L	2532.0	ppb	20:33:14
1	Sn 189.927†	3725.2	3772.9	499.61	ug/L	499.61	ppb	20:33:34
1	Ti 334.940†	364552.3	370051.2	510.28	ug/L	510.28	ppb	20:33:14
1	Tl 190.801†	2006.9	2074.5	505.00	ug/L	505.00	ppb	20:33:34
1	U 409.014†	16191.2	19153.4	493.56	ug/L	493.56	ppb	20:33:14
1	V 292.402†	86005.3	88613.8	514.02	ug/L	514.02	ppb	20:33:14
1	Zn 213.857†	69770.4	69696.0	507.65	ug/L	507.65	ppb	20:33:14
1	SiO2†	98276.4	98819.9	5344.7	ug/L	5344.7	ppb	20:34:35
2	Sc Radial	4785.6	4785.6	97.5	%			20:32:20
2	Y RADIAL	5467.4	5467.4	96.82	%			20:32:20
2	Al 396.153Radial†	7580.1	7820.5	5142.2	ug/L	5142.2	ppb	20:32:20
2	Ca 317.933Radial†	2839.7	2895.5	5126.5	ug/L	5126.5	ppb	20:32:40
2	Fe 238.204 Radial†	427.8	427.9	5189.6	ug/L	5189.6	ppb	20:32:40
2	K 766.490 Radial†	29213.9	27402.2	4985.6	ug/L	4985.6	ppb	20:32:20
2	Mg 279.077 IEC†	113.7	114.1	5112.2	ug/L	5112.2	ppb	20:32:40
2	Na 589.592 Radial†	32954.8	35089.6	9842.6	ug/L	9842.6	ppb	20:32:20
2	Sr 421.552†	93125.5	95548.5	501.24	ug/L	501.24	ppb	20:32:20
2	Sc 361.383	1026644.8	1026644.8	98.765	%			20:33:42
2	Y 371.029	859634.7	859634.7	97.192	%			20:33:42
2	Ag 328.068†	126641.1	127750.7	509.52	ug/L	509.52	ppb	20:33:42
2	As 188.979†	1566.1	1622.3	509.93	ug/L	509.93	ppb	20:34:02
2	B 249.677†	25929.8	26720.2	503.00	ug/L	503.00	ppb	20:33:42
2	Ba 233.527†	78497.2	79478.9	511.92	ug/L	511.92	ppb	20:33:42
2	Be 313.107†	1606450.2	1631413.4	509.66	ug/L	509.66	ppb	20:33:42
2	Cd 226.502†	57791.5	58749.8	512.15	ug/L	512.15	ppb	20:33:42
2	Co 228.616†	30272.6	30737.5	506.47	ug/L	506.47	ppb	20:34:02
2	Cr 267.716†	55859.6	56470.3	508.15	ug/L	508.15	ppb	20:33:42
2	Cu 324.752†	197635.0	191169.0	510.78	ug/L	510.78	ppb	20:33:42
2	Mn 257.610†	535808.2	541932.0	513.60	ug/L	513.60	ppb	20:33:42
2	Mo 202.031†	9531.1	9621.0	510.93	ug/L	510.93	ppb	20:34:02
2	Ni 231.604†	25651.1	25840.0	505.97	ug/L	505.97	ppb	20:34:02

2	P 214.914†	5929.5	5738.6	2489.6 ug/L	2489.6 ppb	20:34:02
2	Pb 220.353†	5318.5	5460.6	514.18 ug/L	514.18 ppb	20:34:02
2	S 181.975 Axial†	981.4	933.5	1004.8 ug/L	1004.8 ppb	20:34:02
2	Sb 206.836†	1941.8	1931.5	516.59 ug/L	516.59 ppb	20:34:02
2	Se 196.026†	1121.2	1156.6	532.71 ug/L	532.71 ppb	20:34:02
2	Si 251.611†	99220.3	99903.5	2525.1 ug/L	2525.1 ppb	20:33:42
2	Sn 189.927†	3770.5	3822.0	506.10 ug/L	506.10 ppb	20:34:02
2	Ti 334.940†	363645.0	369453.0	509.45 ug/L	509.45 ppb	20:33:42
2	Tl 190.801†	2036.5	2106.2	512.65 ug/L	512.65 ppb	20:34:02
2	U 409.014†	16111.0	19086.4	491.83 ug/L	491.83 ppb	20:33:42
2	V 292.402†	85677.7	88357.7	512.64 ug/L	512.64 ppb	20:33:42
2	Zn 213.857†	69552.8	69537.0	506.46 ug/L	506.46 ppb	20:33:42
2	SiO2†	98637.1	99271.6	5369.0 ug/L	5369.0 ppb	20:34:40
3	Sc Radial	4803.0	4803.0	97.8 %		20:32:45
3	Y RADIAL	5492.6	5492.6	97.26 %		20:32:45
3	Al 396.153Radial†	7555.9	7767.6	5107.2 ug/L	5107.2 ppb	20:32:45
3	Ca 317.933Radial†	2839.4	2884.6	5107.4 ug/L	5107.4 ppb	20:33:05
3	Fe 238.204 Radial†	421.7	420.1	5095.0 ug/L	5095.0 ppb	20:33:05
3	K 766.490 Radial†	29167.5	27246.0	4957.2 ug/L	4957.2 ppb	20:32:45
3	Mg 279.077 IEC†	115.1	115.1	5157.4 ug/L	5157.4 ppb	20:33:05
3	Na 589.592 Radial†	32894.9	34905.7	9791.0 ug/L	9791.0 ppb	20:32:45
3	Sr 421.552†	93186.1	95263.8	499.75 ug/L	499.75 ppb	20:32:45
3	Sc 361.383	1019479.4	1019479.4	98.076 %		20:34:09
3	Y 371.029	854951.8	854951.8	96.663 %		20:34:09
3	Ag 328.068†	125810.9	127805.5	509.71 ug/L	509.71 ppb	20:34:09
3	As 188.979†	1564.7	1632.0	512.94 ug/L	512.94 ppb	20:34:29
3	B 249.677†	25680.2	26650.2	501.69 ug/L	501.69 ppb	20:34:09
3	Ba 233.527†	77943.4	79472.8	511.88 ug/L	511.88 ppb	20:34:09
3	Be 313.107†	1597867.7	1634094.7	510.50 ug/L	510.50 ppb	20:34:09
3	Cd 226.502†	57340.4	58701.2	511.74 ug/L	511.74 ppb	20:34:09
3	Co 228.616†	30063.8	30740.1	506.51 ug/L	506.51 ppb	20:34:29
3	Cr 267.716†	55561.3	56563.7	508.99 ug/L	508.99 ppb	20:34:09
3	Cu 324.752†	196076.0	190985.9	510.29 ug/L	510.29 ppb	20:34:09
3	Mn 257.610†	531811.3	541669.7	513.34 ug/L	513.34 ppb	20:34:09
3	Mo 202.031†	9455.5	9611.8	510.43 ug/L	510.43 ppb	20:34:29
3	Ni 231.604†	25501.1	25869.5	506.55 ug/L	506.55 ppb	20:34:29
3	P 214.914†	5870.0	5720.0	2481.4 ug/L	2481.4 ppb	20:34:29
3	Pb 220.353†	5276.6	5455.7	513.72 ug/L	513.72 ppb	20:34:29
3	S 181.975 Axial†	963.3	922.1	992.48 ug/L	992.48 ppb	20:34:29
3	Sb 206.836†	1929.1	1932.3	516.76 ug/L	516.76 ppb	20:34:29
3	Se 196.026†	1093.6	1136.4	523.45 ug/L	523.45 ppb	20:34:29
3	Si 251.611†	98515.1	99890.5	2524.8 ug/L	2524.8 ppb	20:34:09
3	Sn 189.927†	3733.3	3810.9	504.63 ug/L	504.63 ppb	20:34:29
3	Ti 334.940†	360954.1	369297.1	509.23 ug/L	509.23 ppb	20:34:09
3	Tl 190.801†	2032.2	2116.3	515.09 ug/L	515.09 ppb	20:34:29
3	U 409.014†	16100.6	19190.5	494.53 ug/L	494.53 ppb	20:34:09
3	V 292.402†	85203.8	88484.2	513.38 ug/L	513.38 ppb	20:34:09
3	Zn 213.857†	68958.9	69426.4	505.65 ug/L	505.65 ppb	20:34:09
3	SiO2†	99215.7	100563.5	5439.3 ug/L	5439.3 ppb	20:34:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1024553.6	98.564	%	0.4249				0.43%
Sc Radial	4763.5	97.0	%	1.10				1.13%
Y 371.029	858507.8	97.065	%	0.3559				0.37%
Y RADIAL	5445.8	96.43	%	1.074				1.11%
Ag 328.068†	127848.1	509.91	ug/L	0.509	509.91	ppb	0.509	0.10%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 396.153Radial†	7797.3	5126.9	ug/L	17.89	5126.9	ppb	17.89	0.35%
QC value within limits for Al 396.153Radial Recovery = 102.54%								
As 188.979†	1623.0	510.16	ug/L	2.681	510.16	ppb	2.681	0.53%
QC value within limits for As 188.979 Recovery = 102.03%								
B 249.677†	26679.6	502.24	ug/L	0.680	502.24	ppb	0.680	0.14%
QC value within limits for B 249.677 Recovery = 100.45%								
Ba 233.527†	79506.5	512.10	ug/L	0.345	512.10	ppb	0.345	0.07%
QC value within limits for Ba 233.527 Recovery = 102.42%								
Be 313.107†	1633327.2	510.26	ug/L	0.521	510.26	ppb	0.521	0.10%
QC value within limits for Be 313.107 Recovery = 102.05%								
Ca 317.933Radial†	2905.5	5144.4	ug/L	48.43	5144.4	ppb	48.43	0.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.89%
Cd 226.502†            58712.1      511.82 ug/L         0.295      511.82 ppb          0.295   0.06%
   QC value within limits for Cd 226.502  Recovery = 102.36%
Co 228.616†            30649.4      505.02 ug/L         2.561      505.02 ppb          2.561   0.51%
   QC value within limits for Co 228.616  Recovery = 101.00%
Cr 267.716†            56512.0      508.53 ug/L         0.426      508.53 ppb          0.426   0.08%
   QC value within limits for Cr 267.716  Recovery = 101.71%
Cu 324.752†           191429.4      511.48 ug/L         1.650      511.48 ppb          1.650   0.32%
   QC value within limits for Cu 324.752  Recovery = 102.30%
Fe 238.204 Radial†       426.7      5175.2 ug/L        74.03      5175.2 ppb          74.03   1.43%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.50%
K 766.490 Radial†      27402.3      4985.6 ug/L        28.46      4985.6 ppb          28.46   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 99.71%
Mg 279.077 IEC†          115.8      5185.2 ug/L        90.21      5185.2 ppb          90.21   1.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.70%
Mn 257.610†           542109.3      513.77 ug/L         0.526      513.77 ppb          0.526   0.10%
   QC value within limits for Mn 257.610  Recovery = 102.75%
Mo 202.031†             9580.4      508.77 ug/L         3.312      508.77 ppb          3.312   0.65%
   QC value within limits for Mo 202.031  Recovery = 101.75%
Na 589.592 Radial†     35071.7      9837.6 ug/L        44.26      9837.6 ppb          44.26   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 98.38%
Ni 231.604†            25767.4      504.55 ug/L         2.976      504.55 ppb          2.976   0.59%
   QC value within limits for Ni 231.604  Recovery = 100.91%
P 214.914†              5708.5      2476.0 ug/L        16.93      2476.0 ppb          16.93   0.68%
   QC value within limits for P 214.914  Recovery = 99.04%
Pb 220.353†             5442.4      512.47 ug/L         2.575      512.47 ppb          2.575   0.50%
   QC value within limits for Pb 220.353  Recovery = 102.49%
S 181.975 Axial†         923.8      994.32 ug/L         9.641      994.32 ppb          9.641   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 99.43%
Sb 206.836†             1921.3      513.79 ug/L         4.990      513.79 ppb          4.990   0.97%
   QC value within limits for Sb 206.836  Recovery = 102.76%
Se 196.026†             1145.4      527.69 ug/L         4.679      527.69 ppb          4.679   0.89%
   QC value within limits for Se 196.026  Recovery = 105.54%
Si 251.611†            99989.0      2527.3 ug/L          4.11      2527.3 ppb           4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.09%
Sn 189.927†             3801.9      503.45 ug/L         3.403      503.45 ppb          3.403   0.68%
   QC value within limits for Sn 189.927  Recovery = 100.69%
Sr 421.552†            95496.2      500.97 ug/L         1.107      500.97 ppb          1.107   0.22%
   QC value within limits for Sr 421.552  Recovery = 100.19%
Ti 334.940†           369600.4      509.65 ug/L         0.552      509.65 ppb          0.552   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.93%
Tl 190.801†             2099.0      510.91 ug/L         5.263      510.91 ppb          5.263   1.03%
   QC value within limits for Tl 190.801  Recovery = 102.18%
U 409.014†             19143.5      493.31 ug/L         1.368      493.31 ppb          1.368   0.28%
   QC value within limits for U 409.014  Recovery = 98.66%
V 292.402†             88485.2      513.34 ug/L         0.690      513.34 ppb          0.690   0.13%
   QC value within limits for V 292.402  Recovery = 102.67%
Zn 213.857†            69553.1      506.59 ug/L         1.003      506.59 ppb          1.003   0.20%
   QC value within limits for Zn 213.857  Recovery = 101.32%
SiO2†                  99551.7      5384.3 ug/L        49.11      5384.3 ppb          49.11   0.91%
   QC value within limits for SiO2  Recovery = 100.69%
All analyte(s) passed QC.
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Sequence No.: 68
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 20:36:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4812.6	4812.6	98.0	%			20:38:46
1	Y RADIAL	5523.3	5523.3	97.81	%			20:38:46
1	Al 396.153Radial†	-20.7	22.6	14.921	ug/L	14.921	ppb	20:38:46
1	Ca 317.933Radial†	20.2	2.8	4.9844	ug/L	4.9844	ppb	20:39:06
1	Fe 238.204 Radial†	10.6	-0.2	-2.6844	ug/L	-2.6844	ppb	20:39:06
1	K 766.490 Radial†	2567.1	49.4	8.9866	ug/L	8.9866	ppb	20:38:46
1	Mg 279.077 IEC†	5.1	2.7	121.07	ug/L	121.07	ppb	20:39:06
1	Na 589.592 Radial†	-1148.9	107.9	30.257	ug/L	30.257	ppb	20:38:46
1	Sr 421.552†	-2.9	4.5	0.0234	ug/L	0.0234	ppb	20:38:46
1	Sc 361.383	1040681.4	1040681.4	100.12	%			20:40:03
1	Y 371.029	885157.6	885157.6	100.08	%			20:40:03
1	Ag 328.068†	490.2	15.5	0.0601	ug/L	0.0601	ppb	20:40:08
1	As 188.979†	-47.5	-10.8	-3.3792	ug/L	-3.3792	ppb	20:40:28
1	B 249.677†	-388.8	77.8	1.4702	ug/L	1.4702	ppb	20:40:28
1	Ba 233.527†	-1.4	-1.4	-0.0090	ug/L	-0.0090	ppb	20:40:28
1	Be 313.107†	-4852.4	27.1	0.0086	ug/L	0.0086	ppb	20:40:08
1	Cd 226.502†	-231.1	4.8	0.0417	ug/L	0.0417	ppb	20:40:28
1	Co 228.616†	-85.6	0.8	0.0147	ug/L	0.0147	ppb	20:40:28
1	Cr 267.716†	85.6	-2.3	-0.0210	ug/L	-0.0210	ppb	20:40:28
1	Cu 324.752†	9023.5	75.6	0.2018	ug/L	0.2018	ppb	20:40:08
1	Mn 257.610†	623.8	46.4	0.0414	ug/L	0.0414	ppb	20:40:28
1	Mo 202.031†	40.9	11.6	0.6171	ug/L	0.6171	ppb	20:40:28
1	Ni 231.604†	114.0	-18.1	-0.3537	ug/L	-0.3537	ppb	20:40:28
1	P 214.914†	268.4	3.0	1.3352	ug/L	1.3352	ppb	20:40:28
1	Pb 220.353†	-75.6	0.1	0.0122	ug/L	0.0122	ppb	20:40:28
1	S 181.975 Axial†	52.7	-7.5	-8.0489	ug/L	-8.0489	ppb	20:40:28
1	Sb 206.836†	47.9	13.2	3.5146	ug/L	3.5146	ppb	20:40:28
1	Se 196.026†	-22.8	-1.4	-0.6463	ug/L	-0.6463	ppb	20:40:28
1	Si 251.611†	636.7	78.4	1.9742	ug/L	1.9742	ppb	20:40:28
1	Sn 189.927†	1.2	5.5	0.7321	ug/L	0.7321	ppb	20:40:28
1	Ti 334.940†	-1223.5	38.3	0.0529	ug/L	0.0529	ppb	20:40:08
1	Tl 190.801†	-49.2	-4.9	-1.1792	ug/L	-1.1792	ppb	20:40:28
1	U 409.014†	-2752.4	24.7	0.6391	ug/L	0.6391	ppb	20:40:03
1	V 292.402†	-1612.2	-1.8	0.0029	ug/L	0.0029	ppb	20:40:08
1	Zn 213.857†	878.7	-7.9	-0.0601	ug/L	-0.0601	ppb	20:40:28
1	SiO2†	640.5	40.7	2.1761	ug/L	2.1761	ppb	20:41:34
2	Sc Radial	4826.9	4826.9	98.3	%			20:39:11
2	Y RADIAL	5564.4	5564.4	98.53	%			20:39:11
2	Al 396.153Radial†	-23.3	20.1	13.261	ug/L	13.261	ppb	20:39:11
2	Ca 317.933Radial†	14.8	-2.8	-4.9687	ug/L	-4.9687	ppb	20:39:31
2	Fe 238.204 Radial†	10.1	-0.8	-9.2048	ug/L	-9.2048	ppb	20:39:31
2	K 766.490 Radial†	2555.3	29.6	5.3974	ug/L	5.3974	ppb	20:39:11
2	Mg 279.077 IEC†	1.6	-0.8	-37.045	ug/L	-37.045	ppb	20:39:31
2	Na 589.592 Radial†	-1190.6	68.9	19.327	ug/L	19.327	ppb	20:39:11
2	Sr 421.552†	-10.4	-3.1	-0.0165	ug/L	-0.0165	ppb	20:39:11
2	Sc 361.383	1027744.7	1027744.7	98.871	%			20:40:33
2	Y 371.029	873701.1	873701.1	98.783	%			20:40:33
2	Ag 328.068†	474.1	5.4	0.0186	ug/L	0.0186	ppb	20:40:38
2	As 188.979†	-34.2	2.0	0.6224	ug/L	0.6224	ppb	20:40:58
2	B 249.677†	-406.4	55.0	1.0412	ug/L	1.0412	ppb	20:40:58
2	Ba 233.527†	-8.3	-8.3	-0.0545	ug/L	-0.0545	ppb	20:40:58
2	Be 313.107†	-4885.4	-67.2	-0.0213	ug/L	-0.0213	ppb	20:40:38
2	Cd 226.502†	-238.0	-5.0	-0.0430	ug/L	-0.0430	ppb	20:40:58
2	Co 228.616†	-84.6	0.8	0.0139	ug/L	0.0139	ppb	20:40:58
2	Cr 267.716†	97.8	11.1	0.0997	ug/L	0.0997	ppb	20:40:58
2	Cu 324.752†	8932.2	96.7	0.2577	ug/L	0.2577	ppb	20:40:38
2	Mn 257.610†	614.8	45.1	0.0425	ug/L	0.0425	ppb	20:40:58
2	Mo 202.031†	36.7	7.8	0.4150	ug/L	0.4150	ppb	20:40:58
2	Ni 231.604†	129.9	-0.5	-0.0106	ug/L	-0.0106	ppb	20:40:58

2	P 214.914†	298.1	36.4	16.259	ug/L	16.259 ppb	20:40:58
2	Pb 220.353†	-83.9	-9.3	-0.8664	ug/L	-0.8664 ppb	20:40:58
2	S 181.975 Axial†	50.6	-9.0	-9.6579	ug/L	-9.6579 ppb	20:40:58
2	Sb 206.836†	35.5	1.2	0.3502	ug/L	0.3502 ppb	20:40:58
2	Se 196.026†	-35.8	-14.8	-6.6064	ug/L	-6.6064 ppb	20:40:58
2	Si 251.611†	629.3	78.9	1.9907	ug/L	1.9907 ppb	20:40:58
2	Sn 189.927†	4.1	8.5	1.1255	ug/L	1.1255 ppb	20:40:58
2	Ti 334.940†	-1360.7	-115.8	-0.1595	ug/L	-0.1595 ppb	20:40:38
2	Tl 190.801†	-47.7	-4.0	-0.9589	ug/L	-0.9589 ppb	20:40:58
2	U 409.014†	-2795.5	-53.4	-1.3802	ug/L	-1.3802 ppb	20:40:33
2	V 292.402†	-1640.2	-50.5	-0.2849	ug/L	-0.2849 ppb	20:40:38
2	Zn 213.857†	880.9	5.4	0.0419	ug/L	0.0419 ppb	20:40:58
2	SiO2†	642.6	50.9	2.7392	ug/L	2.7392 ppb	20:41:39
3	Sc Radial	4828.7	4828.7	98.4	%		20:39:36
3	Y RADIAL	5560.2	5560.2	98.46	%		20:39:36
3	Al 396.153Radial†	-29.5	13.8	9.0944	ug/L	9.0944 ppb	20:39:36
3	Ca 317.933Radial†	20.4	3.0	5.2305	ug/L	5.2305 ppb	20:39:56
3	Fe 238.204 Radial†	10.4	-0.4	-4.9292	ug/L	-4.9292 ppb	20:39:56
3	K 766.490 Radial†	2650.6	125.6	22.878	ug/L	22.878 ppb	20:39:36
3	Mg 279.077 IEC†	3.7	1.3	58.592	ug/L	58.592 ppb	20:39:56
3	Na 589.592 Radial†	-1156.4	104.1	29.209	ug/L	29.209 ppb	20:39:36
3	Sr 421.552†	11.2	18.8	0.0987	ug/L	0.0987 ppb	20:39:36
3	Sc 361.383	1029854.8	1029854.8	99.074	%		20:41:03
3	Y 371.029	874784.5	874784.5	98.905	%		20:41:03
3	Ag 328.068†	442.4	-27.5	-0.1088	ug/L	-0.1088 ppb	20:41:09
3	As 188.979†	-42.0	-5.8	-1.7955	ug/L	-1.7955 ppb	20:41:29
3	B 249.677†	-424.6	37.5	0.7097	ug/L	0.7097 ppb	20:41:29
3	Ba 233.527†	-5.0	-5.1	-0.0322	ug/L	-0.0322 ppb	20:41:29
3	Be 313.107†	-4858.6	-30.1	-0.0093	ug/L	-0.0093 ppb	20:41:09
3	Cd 226.502†	-233.7	-0.3	-0.0018	ug/L	-0.0018 ppb	20:41:29
3	Co 228.616†	-93.7	-8.2	-0.1348	ug/L	-0.1348 ppb	20:41:29
3	Cr 267.716†	124.9	38.3	0.3450	ug/L	0.3450 ppb	20:41:29
3	Cu 324.752†	8892.5	38.2	0.1017	ug/L	0.1017 ppb	20:41:09
3	Mn 257.610†	601.3	30.2	0.0270	ug/L	0.0270 ppb	20:41:29
3	Mo 202.031†	37.6	8.7	0.4599	ug/L	0.4599 ppb	20:41:29
3	Ni 231.604†	146.3	15.7	0.3079	ug/L	0.3079 ppb	20:41:29
3	P 214.914†	290.5	28.1	12.563	ug/L	12.563 ppb	20:41:29
3	Pb 220.353†	-61.3	13.7	1.2877	ug/L	1.2877 ppb	20:41:29
3	S 181.975 Axial†	57.8	-1.7	-1.8852	ug/L	-1.8852 ppb	20:41:29
3	Sb 206.836†	40.5	6.2	1.6719	ug/L	1.6719 ppb	20:41:29
3	Se 196.026†	-21.1	0.1	0.0088	ug/L	0.0088 ppb	20:41:29
3	Si 251.611†	621.1	69.3	1.7388	ug/L	1.7388 ppb	20:41:29
3	Sn 189.927†	8.5	12.9	1.7113	ug/L	1.7113 ppb	20:41:29
3	Ti 334.940†	-1217.0	32.0	0.0449	ug/L	0.0449 ppb	20:41:09
3	Tl 190.801†	-54.6	-10.9	-2.6257	ug/L	-2.6257 ppb	20:41:29
3	U 409.014†	-2796.2	-48.3	-1.2499	ug/L	-1.2499 ppb	20:41:03
3	V 292.402†	-1562.1	31.8	0.1879	ug/L	0.1879 ppb	20:41:09
3	Zn 213.857†	895.5	18.4	0.1312	ug/L	0.1312 ppb	20:41:29
3	SiO2†	678.0	85.3	4.5910	ug/L	4.5910 ppb	20:41:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1032760.3	99.353	%	0.6677				0.67%
Sc Radial	4822.8	98.2	%	0.18				0.18%
Y 371.029	877881.1	99.255	%	0.7151				0.72%
Y RADIAL	5549.3	98.27	%	0.401				0.41%
Ag 328.068†	-2.2	-0.0100	ug/L	0.08805	-0.0100	ppb	0.08805	877.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.8	12.426	ug/L	3.0019	12.426	ppb	3.0019	24.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.9	-1.5174	ug/L	2.01527	-1.5174	ppb	2.01527	132.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.8	1.0737	ug/L	0.38131	1.0737	ppb	0.38131	35.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.9	-0.0319	ug/L	0.02279	-0.0319	ppb	0.02279	71.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-23.4	-0.0073	ug/L	0.01501	-0.0073	ppb	0.01501	204.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	1.7487	ug/L	5.81876	1.7487	ppb	5.81876	332.75%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -0.2     -0.0010 ug/L       0.04236     -0.0010 ppb        0.04236 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.2     -0.0354 ug/L       0.08607     -0.0354 ppb        0.08607 243.13%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                15.7      0.1412 ug/L       0.18654      0.1412 ppb        0.18654 132.08%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                70.2      0.1871 ug/L       0.07906      0.1871 ppb        0.07906  42.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -5.6061 ug/L       3.31252     -5.6061 ppb        3.31252  59.09%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          68.2      12.421 ug/L        9.2325      12.421 ppb         9.2325  74.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.1      47.540 ug/L       79.6362      47.540 ppb        79.6362 167.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.6      0.0370 ug/L       0.00864      0.0370 ppb        0.00864  23.36%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.4      0.4973 ug/L       0.10610      0.4973 ppb        0.10610  21.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         93.6      26.264 ug/L        6.0309      26.264 ppb         6.0309  22.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.0     -0.0188 ug/L       0.33087     -0.0188 ppb        0.33087 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 22.5      10.052 ug/L        7.7722      10.052 ppb         7.7722  77.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.5      0.1445 ug/L       1.08312      0.1445 ppb        1.08312 749.59%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -6.1     -6.5307 ug/L       4.10270     -6.5307 ppb        4.10270  62.82%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.9      1.8456 ug/L       1.58934      1.8456 ppb        1.58934  86.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.4     -2.4146 ug/L       3.64495     -2.4146 ppb        3.64495 150.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                75.5      1.9012 ug/L       0.14094      1.9012 ppb        0.14094   7.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.0      1.1896 ug/L       0.49272      1.1896 ppb        0.49272  41.42%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 6.7      0.0352 ug/L       0.05850      0.0352 ppb        0.05850 166.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.2     -0.0206 ug/L       0.12036     -0.0206 ppb        0.12036 585.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -6.6     -1.5879 ug/L       0.90543     -1.5879 ppb        0.90543  57.02%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -25.7     -0.6637 ug/L       1.13010     -0.6637 ppb        1.13010 170.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -6.8     -0.0314 ug/L       0.23824     -0.0314 ppb        0.23824 759.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 5.3      0.0377 ug/L       0.09572      0.0377 ppb        0.09572 254.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      59.0      3.1688 ug/L       1.26346      3.1688 ppb        1.26346  39.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 77
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 21:40:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4890.1	4890.1	99.6	%			21:42:34
1	Y RADIAL	5623.9	5623.9	99.59	%			21:42:34
1	Al 396.153Radial†	7665.8	7740.4	5089.3	ug/L	5089.3	ppb	21:42:34
1	Ca 317.933Radial†	2790.7	2784.1	4929.3	ug/L	4929.3	ppb	21:42:54
1	Fe 238.204 Radial†	419.1	409.8	4970.8	ug/L	4970.8	ppb	21:42:54
1	K 766.490 Radial†	29440.3	26988.8	4910.3	ug/L	4910.3	ppb	21:42:34
1	Mg 279.077 IEC†	112.4	110.3	4943.1	ug/L	4943.1	ppb	21:42:54
1	Na 589.592 Radial†	33401.2	34815.1	9765.6	ug/L	9765.6	ppb	21:42:34
1	Sr 421.552†	94490.9	94877.2	497.72	ug/L	497.72	ppb	21:42:34
1	Sc 361.383	1022148.7	1022148.7	98.332	%			21:43:54
1	Y 371.029	857288.2	857288.2	96.927	%			21:43:54
1	Ag 328.068†	126449.9	128120.3	510.92	ug/L	510.92	ppb	21:43:54
1	As 188.979†	1554.7	1617.7	508.48	ug/L	508.48	ppb	21:44:14
1	B 249.677†	25682.4	26584.0	500.46	ug/L	500.46	ppb	21:43:54
1	Ba 233.527†	78064.2	79388.1	511.33	ug/L	511.33	ppb	21:43:54
1	Be 313.107†	1605119.3	1637214.5	511.47	ug/L	511.47	ppb	21:43:54
1	Cd 226.502†	57460.6	58670.7	511.48	ug/L	511.48	ppb	21:43:54
1	Co 228.616†	29953.6	30547.9	503.35	ug/L	503.35	ppb	21:44:14
1	Cr 267.716†	55656.2	56512.3	508.53	ug/L	508.53	ppb	21:43:54
1	Cu 324.752†	197442.3	191853.2	512.60	ug/L	512.60	ppb	21:43:54
1	Mn 257.610†	532950.9	541412.6	513.09	ug/L	513.09	ppb	21:43:54
1	Mo 202.031†	9454.1	9585.2	509.01	ug/L	509.01	ppb	21:44:14
1	Ni 231.604†	25461.0	25760.9	504.43	ug/L	504.43	ppb	21:44:14
1	P 214.914†	5871.1	5705.5	2474.6	ug/L	2474.6	ppb	21:44:14
1	Pb 220.353†	5273.3	5438.3	512.09	ug/L	512.09	ppb	21:44:14
1	S 181.975 Axial†	963.6	919.9	990.04	ug/L	990.04	ppb	21:44:14
1	Sb 206.836†	1918.1	1916.0	512.42	ug/L	512.42	ppb	21:44:14
1	Se 196.026†	1085.7	1125.5	518.17	ug/L	518.17	ppb	21:44:14
1	Si 251.611†	99190.9	100315.4	2535.6	ug/L	2535.6	ppb	21:43:54
1	Sn 189.927†	3737.8	3805.5	503.90	ug/L	503.90	ppb	21:44:14
1	Ti 334.940†	361901.3	369299.2	509.22	ug/L	509.22	ppb	21:43:54
1	Tl 190.801†	2002.0	2080.2	506.36	ug/L	506.36	ppb	21:44:14
1	U 409.014†	16098.1	19145.1	493.38	ug/L	493.38	ppb	21:43:54
1	V 292.402†	85422.5	88479.7	513.34	ug/L	513.34	ppb	21:43:54
1	Zn 213.857†	69272.5	69561.7	506.68	ug/L	506.68	ppb	21:43:54
1	SiO2†	99897.5	100992.6	5462.7	ug/L	5462.7	ppb	21:45:14
2	Sc Radial	4765.6	4765.6	97.1	%			21:43:00
2	Y RADIAL	5427.4	5427.4	96.11	%			21:43:00
2	Al 396.153Radial†	7485.7	7755.9	5099.5	ug/L	5099.5	ppb	21:43:00
2	Ca 317.933Radial†	2824.8	2892.4	5121.1	ug/L	5121.1	ppb	21:43:20
2	Fe 238.204 Radial†	425.1	427.0	5178.2	ug/L	5178.2	ppb	21:43:20
2	K 766.490 Radial†	28845.6	27148.6	4939.4	ug/L	4939.4	ppb	21:43:00
2	Mg 279.077 IEC†	119.3	120.4	5392.1	ug/L	5392.1	ppb	21:43:20
2	Na 589.592 Radial†	32528.1	34792.0	9759.1	ug/L	9759.1	ppb	21:43:00
2	Sr 421.552†	91997.4	94787.7	497.25	ug/L	497.25	ppb	21:43:00
2	Sc 361.383	1020467.1	1020467.1	98.171	%			21:44:21
2	Y 371.029	857323.5	857323.5	96.931	%			21:44:21
2	Ag 328.068†	126179.2	128056.4	510.74	ug/L	510.74	ppb	21:44:21
2	As 188.979†	1571.5	1637.4	514.66	ug/L	514.66	ppb	21:44:41
2	B 249.677†	25622.6	26566.2	500.09	ug/L	500.09	ppb	21:44:21
2	Ba 233.527†	77898.1	79349.7	511.09	ug/L	511.09	ppb	21:44:21
2	Be 313.107†	1603707.5	1638466.3	511.86	ug/L	511.86	ppb	21:44:21
2	Cd 226.502†	57368.7	58673.4	511.49	ug/L	511.49	ppb	21:44:21
2	Co 228.616†	30031.3	30677.3	505.48	ug/L	505.48	ppb	21:44:41
2	Cr 267.716†	55637.5	56586.5	509.20	ug/L	509.20	ppb	21:44:21
2	Cu 324.752†	196554.4	191279.7	511.08	ug/L	511.08	ppb	21:44:21
2	Mn 257.610†	531554.1	540882.9	512.60	ug/L	512.60	ppb	21:44:21
2	Mo 202.031†	9476.6	9624.0	511.09	ug/L	511.09	ppb	21:44:41
2	Ni 231.604†	25515.7	25859.2	506.35	ug/L	506.35	ppb	21:44:41

2	P 214.914†	5884.1	5728.6	2485.0 ug/L	2485.0 ppb	21:44:41
2	Pb 220.353†	5312.4	5486.9	516.65 ug/L	516.65 ppb	21:44:41
2	S 181.975 Axial†	972.0	930.0	1000.9 ug/L	1000.9 ppb	21:44:41
2	Sb 206.836†	1912.0	1913.0	511.65 ug/L	511.65 ppb	21:44:41
2	Se 196.026†	1112.6	1154.7	531.83 ug/L	531.83 ppb	21:44:41
2	Si 251.611†	98859.6	100144.2	2531.2 ug/L	2531.2 ppb	21:44:21
2	Sn 189.927†	3730.3	3804.2	503.74 ug/L	503.74 ppb	21:44:41
2	Ti 334.940†	361448.2	369444.2	509.44 ug/L	509.44 ppb	21:44:21
2	Tl 190.801†	2029.1	2111.1	513.84 ug/L	513.84 ppb	21:44:41
2	U 409.014†	15945.8	19016.9	490.03 ug/L	490.03 ppb	21:44:21
2	V 292.402†	85399.1	88599.0	514.03 ug/L	514.03 ppb	21:44:21
2	Zn 213.857†	69184.0	69587.6	506.82 ug/L	506.82 ppb	21:44:21
2	SiO2†	98500.4	99736.9	5394.3 ug/L	5394.3 ppb	21:45:19
3	Sc Radial	4812.4	4812.4	98.0 %		21:43:25
3	Y RADIAL	5504.8	5504.8	97.48 %		21:43:25
3	Al 396.153Radial†	7617.7	7815.5	5138.9 ug/L	5138.9 ppb	21:43:25
3	Ca 317.933Radial†	2787.1	2825.7	5002.9 ug/L	5002.9 ppb	21:43:45
3	Fe 238.204 Radial†	414.7	412.1	4998.8 ug/L	4998.8 ppb	21:43:45
3	K 766.490 Radial†	29333.1	27356.9	4977.3 ug/L	4977.3 ppb	21:43:25
3	Mg 279.077 IEC†	111.3	111.1	4976.6 ug/L	4976.6 ppb	21:43:45
3	Na 589.592 Radial†	33369.1	35324.0	9908.4 ug/L	9908.4 ppb	21:43:25
3	Sr 421.552†	94268.0	96182.1	504.57 ug/L	504.57 ppb	21:43:25
3	Sc 361.383	1021109.7	1021109.7	98.232 %		21:44:48
3	Y 371.029	856254.7	856254.7	96.810 %		21:44:48
3	Ag 328.068†	126137.4	127933.0	510.19 ug/L	510.19 ppb	21:44:48
3	As 188.979†	1558.4	1623.0	510.15 ug/L	510.15 ppb	21:45:09
3	B 249.677†	25675.0	26603.0	500.82 ug/L	500.82 ppb	21:44:48
3	Ba 233.527†	78080.4	79485.3	511.96 ug/L	511.96 ppb	21:44:48
3	Be 313.107†	1599607.4	1633264.3	510.24 ug/L	510.24 ppb	21:44:48
3	Cd 226.502†	57353.5	58621.2	511.05 ug/L	511.05 ppb	21:44:48
3	Co 228.616†	30025.6	30652.1	505.07 ug/L	505.07 ppb	21:45:09
3	Cr 267.716†	55545.8	56457.5	508.03 ug/L	508.03 ppb	21:44:48
3	Cu 324.752†	197040.1	191648.1	512.05 ug/L	512.05 ppb	21:44:48
3	Mn 257.610†	532363.3	541365.8	513.05 ug/L	513.05 ppb	21:44:48
3	Mo 202.031†	9466.7	9607.8	510.21 ug/L	510.21 ppb	21:45:09
3	Ni 231.604†	25449.1	25775.1	504.70 ug/L	504.70 ppb	21:45:09
3	P 214.914†	5864.4	5704.8	2474.4 ug/L	2474.4 ppb	21:45:09
3	Pb 220.353†	5291.7	5462.5	514.37 ug/L	514.37 ppb	21:45:09
3	S 181.975 Axial†	975.2	932.6	1003.8 ug/L	1003.8 ppb	21:45:09
3	Sb 206.836†	1921.5	1921.5	513.90 ug/L	513.90 ppb	21:45:09
3	Se 196.026†	1089.8	1130.8	520.59 ug/L	520.59 ppb	21:45:09
3	Si 251.611†	99112.5	100338.3	2536.1 ug/L	2536.1 ppb	21:44:48
3	Sn 189.927†	3733.7	3805.2	503.86 ug/L	503.86 ppb	21:45:09
3	Ti 334.940†	361617.6	369385.0	509.35 ug/L	509.35 ppb	21:44:48
3	Tl 190.801†	2021.6	2102.3	511.70 ug/L	511.70 ppb	21:45:09
3	U 409.014†	16093.5	19157.0	493.68 ug/L	493.68 ppb	21:44:48
3	V 292.402†	85298.0	88441.4	513.14 ug/L	513.14 ppb	21:44:48
3	Zn 213.857†	69230.4	69590.6	506.89 ug/L	506.89 ppb	21:44:48
3	SiO2†	98371.3	99542.4	5383.8 ug/L	5383.8 ppb	21:45:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021241.9	98.245	%	0.0816				0.08%
Sc Radial	4822.7	98.2	%	1.28				1.30%
Y 371.029	856955.5	96.889	%	0.0686				0.07%
Y RADIAL	5518.7	97.73	%	1.752				1.79%
Ag 328.068†	128036.6	510.62	ug/L	0.383	510.62	ppb	0.383	0.07%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7770.6	5109.2	ug/L	26.19	5109.2	ppb	26.19	0.51%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	1626.1	511.10	ug/L	3.194	511.10	ppb	3.194	0.62%
QC value within limits for As 188.979 Recovery = 102.22%								
B 249.677†	26584.4	500.46	ug/L	0.361	500.46	ppb	0.361	0.07%
QC value within limits for B 249.677 Recovery = 100.09%								
Ba 233.527†	79407.7	511.46	ug/L	0.446	511.46	ppb	0.446	0.09%
QC value within limits for Ba 233.527 Recovery = 102.29%								
Be 313.107†	1636315.1	511.19	ug/L	0.847	511.19	ppb	0.847	0.17%
QC value within limits for Be 313.107 Recovery = 102.24%								
Ca 317.933Radial†	2834.1	5017.8	ug/L	96.77	5017.8	ppb	96.77	1.93%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58655.1      511.34 ug/L         0.252      511.34 ppb          0.252   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.27%
Co 228.616†            30625.8      504.63 ug/L         1.131      504.63 ppb          1.131   0.22%
   QC value within limits for Co 228.616  Recovery = 100.93%
Cr 267.716†            56518.8      508.59 ug/L         0.585      508.59 ppb          0.585   0.11%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191593.7      511.91 ug/L         0.770      511.91 ppb          0.770   0.15%
   QC value within limits for Cu 324.752  Recovery = 102.38%
Fe 238.204 Radial†       416.3      5049.2 ug/L        112.52      5049.2 ppb         112.52   2.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.98%
K 766.490 Radial†      27164.8      4942.4 ug/L         33.60      4942.4 ppb          33.60   0.68%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          113.9      5103.9 ug/L        250.10      5103.9 ppb         250.10   4.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.08%
Mn 257.610†           541220.4      512.91 ug/L         0.271      512.91 ppb          0.271   0.05%
   QC value within limits for Mn 257.610  Recovery = 102.58%
Mo 202.031†             9605.7      510.10 ug/L         1.040      510.10 ppb          1.040   0.20%
   QC value within limits for Mo 202.031  Recovery = 102.02%
Na 589.592 Radial†     34977.0      9811.0 ug/L         84.35      9811.0 ppb          84.35   0.86%
   QC value within limits for Na 589.592 Radial  Recovery = 98.11%
Ni 231.604†            25798.4      505.16 ug/L         1.041      505.16 ppb          1.041   0.21%
   QC value within limits for Ni 231.604  Recovery = 101.03%
P 214.914†              5713.0      2478.0 ug/L          6.08      2478.0 ppb           6.08   0.25%
   QC value within limits for P 214.914  Recovery = 99.12%
Pb 220.353†             5462.6      514.37 ug/L         2.277      514.37 ppb          2.277   0.44%
   QC value within limits for Pb 220.353  Recovery = 102.87%
S 181.975 Axial†         927.5      998.25 ug/L         7.249      998.25 ppb          7.249   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 99.82%
Sb 206.836†             1916.8      512.66 ug/L         1.139      512.66 ppb          1.139   0.22%
   QC value within limits for Sb 206.836  Recovery = 102.53%
Se 196.026†             1137.0      523.53 ug/L         7.291      523.53 ppb          7.291   1.39%
   QC value within limits for Se 196.026  Recovery = 104.71%
Si 251.611†           100266.0      2534.3 ug/L          2.71      2534.3 ppb           2.71   0.11%
   QC value within limits for Si 251.611  Recovery = 101.37%
Sn 189.927†             3805.0      503.83 ug/L         0.082      503.83 ppb          0.082   0.02%
   QC value within limits for Sn 189.927  Recovery = 100.77%
Sr 421.552†            95282.3      499.85 ug/L         4.095      499.85 ppb          4.095   0.82%
   QC value within limits for Sr 421.552  Recovery = 99.97%
Ti 334.940†           369376.1      509.34 ug/L         0.106      509.34 ppb          0.106   0.02%
   QC value within limits for Ti 334.940  Recovery = 101.87%
Tl 190.801†             2097.9      510.63 ug/L         3.852      510.63 ppb          3.852   0.75%
   QC value within limits for Tl 190.801  Recovery = 102.13%
U 409.014†             19106.3      492.36 ug/L         2.023      492.36 ppb          2.023   0.41%
   QC value within limits for U 409.014  Recovery = 98.47%
V 292.402†             88506.7      513.50 ug/L         0.466      513.50 ppb          0.466   0.09%
   QC value within limits for V 292.402  Recovery = 102.70%
Zn 213.857†            69580.0      506.80 ug/L         0.106      506.80 ppb          0.106   0.02%
   QC value within limits for Zn 213.857  Recovery = 101.36%
SiO2†                 100090.6      5413.6 ug/L         42.84      5413.6 ppb          42.84   0.79%
   QC value within limits for SiO2  Recovery = 101.24%
All analyte(s) passed QC.
```

Sequence No.: 78
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 21:47:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5040.1	5040.1	103	%			21:49:26
1	Y RADIAL	5787.6	5787.6	102.5	%			21:49:26
1	Al 396.153Radial†	-21.8	22.6	14.879	ug/L	14.879	ppb	21:49:26
1	Ca 317.933Radial†	19.4	1.1	1.9413	ug/L	1.9413	ppb	21:49:46
1	Fe 238.204 Radial†	9.2	-2.1	-25.139	ug/L	-25.139	ppb	21:49:46
1	K 766.490 Radial†	2572.3	-63.7	-11.628	ug/L	-11.628	ppb	21:49:26
1	Mg 279.077 IEC†	5.2	2.5	113.89	ug/L	113.89	ppb	21:49:46
1	Na 589.592 Radial†	-1229.6	82.2	23.052	ug/L	23.052	ppb	21:49:26
1	Sr 421.552†	6.3	13.6	0.0713	ug/L	0.0713	ppb	21:49:26
1	Sc 361.383	1022554.3	1022554.3	98.371	%			21:50:43
1	Y 371.029	869982.1	869982.1	98.362	%			21:50:43
1	Ag 328.068†	423.0	-44.0	-0.1825	ug/L	-0.1825	ppb	21:50:48
1	As 188.979†	-36.4	-0.4	-0.1243	ug/L	-0.1243	ppb	21:51:08
1	B 249.677†	-421.5	37.7	0.7157	ug/L	0.7157	ppb	21:51:08
1	Ba 233.527†	3.9	3.9	0.0243	ug/L	0.0243	ppb	21:51:08
1	Be 313.107†	-4890.7	-97.8	-0.0306	ug/L	-0.0306	ppb	21:50:48
1	Cd 226.502†	-227.2	4.7	0.0433	ug/L	0.0433	ppb	21:51:08
1	Co 228.616†	-103.0	-18.4	-0.3017	ug/L	-0.3017	ppb	21:51:08
1	Cr 267.716†	110.5	24.6	0.2202	ug/L	0.2202	ppb	21:51:08
1	Cu 324.752†	8928.6	138.9	0.3698	ug/L	0.3698	ppb	21:50:48
1	Mn 257.610†	606.5	39.9	0.0331	ug/L	0.0331	ppb	21:51:08
1	Mo 202.031†	37.4	8.7	0.4619	ug/L	0.4619	ppb	21:51:08
1	Ni 231.604†	107.3	-22.8	-0.4470	ug/L	-0.4470	ppb	21:51:08
1	P 214.914†	274.6	14.0	6.2571	ug/L	6.2571	ppb	21:51:08
1	Pb 220.353†	-80.1	-5.9	-0.5461	ug/L	-0.5461	ppb	21:51:08
1	S 181.975 Axial†	61.4	2.3	2.5171	ug/L	2.5171	ppb	21:51:08
1	Sb 206.836†	39.3	5.3	1.4134	ug/L	1.4134	ppb	21:51:08
1	Se 196.026†	-24.6	-3.7	-1.7129	ug/L	-1.7129	ppb	21:51:08
1	Si 251.611†	646.6	99.6	2.5235	ug/L	2.5235	ppb	21:51:08
1	Sn 189.927†	2.5	6.9	0.9141	ug/L	0.9141	ppb	21:51:08
1	Ti 334.940†	-1285.7	-46.6	-0.0640	ug/L	-0.0640	ppb	21:50:48
1	Tl 190.801†	-49.4	-6.0	-1.4524	ug/L	-1.4524	ppb	21:51:08
1	U 409.014†	-2742.7	-14.1	-0.3621	ug/L	-0.3621	ppb	21:50:43
1	V 292.402†	-1590.1	-7.9	-0.0330	ug/L	-0.0330	ppb	21:50:48
1	Zn 213.857†	912.1	41.6	0.3066	ug/L	0.3066	ppb	21:51:08
1	SiO2†	713.3	126.1	6.8394	ug/L	6.8394	ppb	21:52:14
2	Sc Radial	4780.7	4780.7	97.4	%			21:49:51
2	Y RADIAL	5465.2	5465.2	96.78	%			21:49:51
2	Al 396.153Radial†	-65.1	-23.1	-15.291	ug/L	-15.291	ppb	21:49:51
2	Ca 317.933Radial†	18.3	0.9	1.6184	ug/L	1.6184	ppb	21:50:11
2	Fe 238.204 Radial†	12.2	1.5	18.657	ug/L	18.657	ppb	21:50:11
2	K 766.490 Radial†	2589.3	89.6	16.327	ug/L	16.327	ppb	21:49:51
2	Mg 279.077 IEC†	1.6	-0.9	-40.434	ug/L	-40.434	ppb	21:50:11
2	Na 589.592 Radial†	-1197.6	50.1	14.044	ug/L	14.044	ppb	21:49:51
2	Sr 421.552†	-31.6	-25.1	-0.1315	ug/L	-0.1315	ppb	21:49:51
2	Sc 361.383	1030244.0	1030244.0	99.111	%			21:51:13
2	Y 371.029	876739.0	876739.0	99.126	%			21:51:13
2	Ag 328.068†	344.0	-127.0	-0.5001	ug/L	-0.5001	ppb	21:51:18
2	As 188.979†	-28.7	7.7	2.3958	ug/L	2.3958	ppb	21:51:38
2	B 249.677†	-466.9	-5.0	-0.0974	ug/L	-0.0974	ppb	21:51:38
2	Ba 233.527†	-1.3	-1.3	-0.0087	ug/L	-0.0087	ppb	21:51:38
2	Be 313.107†	-4823.4	7.3	0.0023	ug/L	0.0023	ppb	21:51:18
2	Cd 226.502†	-241.9	-8.4	-0.0746	ug/L	-0.0746	ppb	21:51:38
2	Co 228.616†	-74.4	11.2	0.1861	ug/L	0.1861	ppb	21:51:38
2	Cr 267.716†	92.2	5.3	0.0466	ug/L	0.0466	ppb	21:51:38
2	Cu 324.752†	8841.2	-17.0	-0.0446	ug/L	-0.0446	ppb	21:51:18
2	Mn 257.610†	621.8	50.7	0.0507	ug/L	0.0507	ppb	21:51:38
2	Mo 202.031†	41.4	12.5	0.6650	ug/L	0.6650	ppb	21:51:38
2	Ni 231.604†	151.6	21.1	0.4123	ug/L	0.4123	ppb	21:51:38

2	P 214.914†	285.1	22.5	10.085	ug/L	10.085	ppb	21:51:38
2	Pb 220.353†	-78.4	-3.6	-0.3399	ug/L	-0.3399	ppb	21:51:38
2	S 181.975 Axial†	60.3	0.7	0.7490	ug/L	0.7490	ppb	21:51:38
2	Sb 206.836†	49.6	15.4	4.0872	ug/L	4.0872	ppb	21:51:38
2	Se 196.026†	-27.2	-6.0	-2.6014	ug/L	-2.6014	ppb	21:51:38
2	Si 251.611†	664.9	113.2	2.8554	ug/L	2.8554	ppb	21:51:38
2	Sn 189.927†	4.5	8.9	1.1761	ug/L	1.1761	ppb	21:51:38
2	Ti 334.940†	-1220.8	28.7	0.0395	ug/L	0.0395	ppb	21:51:18
2	Tl 190.801†	-50.5	-6.6	-1.6073	ug/L	-1.6073	ppb	21:51:38
2	U 409.014†	-2733.6	15.9	0.4089	ug/L	0.4089	ppb	21:51:13
2	V 292.402†	-1696.8	-103.5	-0.5860	ug/L	-0.5860	ppb	21:51:18
2	Zn 213.857†	905.4	27.9	0.2022	ug/L	0.2022	ppb	21:51:38
2	SiO2†	685.1	92.2	4.9640	ug/L	4.9640	ppb	21:52:19
3	Sc Radial	4788.6	4788.6	97.5	%			21:50:16
3	Y RADIAL	5467.5	5467.5	96.82	%			21:50:16
3	Al 396.153Radial†	-36.4	6.4	4.2310	ug/L	4.2310	ppb	21:50:16
3	Ca 317.933Radial†	17.4	-0.0	-0.0388	ug/L	-0.0388	ppb	21:50:36
3	Fe 238.204 Radial†	11.4	0.7	8.1139	ug/L	8.1139	ppb	21:50:36
3	K 766.490 Radial†	2680.4	178.8	32.565	ug/L	32.565	ppb	21:50:16
3	Mg 279.077 IEC†	5.7	3.4	150.15	ug/L	150.15	ppb	21:50:36
3	Na 589.592 Radial†	-1132.3	119.0	33.377	ug/L	33.377	ppb	21:50:16
3	Sr 421.552†	1.2	8.7	0.0455	ug/L	0.0455	ppb	21:50:16
3	Sc 361.383	1026701.1	1026701.1	98.770	%			21:51:43
3	Y 371.029	872343.9	872343.9	98.629	%			21:51:43
3	Ag 328.068†	397.4	-71.7	-0.2845	ug/L	-0.2845	ppb	21:51:48
3	As 188.979†	-39.7	-3.6	-1.1085	ug/L	-1.1085	ppb	21:52:08
3	B 249.677†	-435.9	24.8	0.4672	ug/L	0.4672	ppb	21:52:08
3	Ba 233.527†	-8.3	-8.4	-0.0542	ug/L	-0.0542	ppb	21:52:08
3	Be 313.107†	-4848.9	-35.3	-0.0111	ug/L	-0.0111	ppb	21:51:48
3	Cd 226.502†	-222.3	10.6	0.0913	ug/L	0.0913	ppb	21:52:08
3	Co 228.616†	-93.9	-8.8	-0.1438	ug/L	-0.1438	ppb	21:52:08
3	Cr 267.716†	102.3	15.8	0.1406	ug/L	0.1406	ppb	21:52:08
3	Cu 324.752†	8943.6	117.5	0.3142	ug/L	0.3142	ppb	21:51:48
3	Mn 257.610†	596.0	26.8	0.0234	ug/L	0.0234	ppb	21:52:08
3	Mo 202.031†	36.7	7.9	0.4215	ug/L	0.4215	ppb	21:52:08
3	Ni 231.604†	105.8	-24.8	-0.4865	ug/L	-0.4865	ppb	21:52:08
3	P 214.914†	272.3	10.6	4.7081	ug/L	4.7081	ppb	21:52:08
3	Pb 220.353†	-82.0	-7.5	-0.7002	ug/L	-0.7002	ppb	21:52:08
3	S 181.975 Axial†	56.1	-3.3	-3.5446	ug/L	-3.5446	ppb	21:52:08
3	Sb 206.836†	43.6	9.6	2.5399	ug/L	2.5399	ppb	21:52:08
3	Se 196.026†	-33.2	-12.2	-5.3898	ug/L	-5.3898	ppb	21:52:08
3	Si 251.611†	651.9	102.4	2.5795	ug/L	2.5795	ppb	21:52:08
3	Sn 189.927†	3.0	7.3	0.9696	ug/L	0.9696	ppb	21:52:08
3	Ti 334.940†	-1272.6	-28.0	-0.0394	ug/L	-0.0394	ppb	21:51:48
3	Tl 190.801†	-53.0	-9.4	-2.2674	ug/L	-2.2674	ppb	21:52:08
3	U 409.014†	-2674.4	66.3	1.7135	ug/L	1.7135	ppb	21:51:43
3	V 292.402†	-1650.3	-62.3	-0.3451	ug/L	-0.3451	ppb	21:51:48
3	Zn 213.857†	906.9	32.6	0.2365	ug/L	0.2365	ppb	21:52:08
3	SiO2†	687.8	97.4	5.2451	ug/L	5.2451	ppb	21:52:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026499.8	98.751	%	0.3703				0.37%
Sc Radial	4869.8	99.2	%	3.00				3.03%
Y 371.029	873021.7	98.706	%	0.3877				0.39%
Y RADIAL	5573.4	98.69	%	3.284				3.33%
Ag 328.068†	-80.9	-0.3224	ug/L	0.16218	-0.3224	ppb	0.16218	50.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.0	1.2729	ug/L	15.30100	1.2729	ppb	15.30100	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	0.3877	ug/L	1.80737	0.3877	ppb	1.80737	466.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.1	0.3618	ug/L	0.41666	0.3618	ppb	0.41666	115.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0129	ug/L	0.03943	-0.0129	ppb	0.03943	306.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-41.9	-0.0131	ug/L	0.01657	-0.0131	ppb	0.01657	126.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.7	1.1736	ug/L	1.06233	1.1736	ppb	1.06233	90.52%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 2.3      0.0200 ug/L       0.08538      0.0200 ppb        0.08538 427.65%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.0865 ug/L       0.24890     -0.0865 ppb        0.24890 287.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                15.2      0.1358 ug/L       0.08694      0.1358 ppb        0.08694  64.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                79.8      0.2131 ug/L       0.22489      0.2131 ppb        0.22489 105.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.5441 ug/L      22.85815      0.5441 ppb       22.85815 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          68.2      12.422 ug/L       22.3536      12.422 ppb        22.3536 179.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.7      74.535 ug/L      101.2033      74.535 ppb       101.2033 135.78%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                39.1      0.0357 ug/L       0.01383      0.0357 ppb        0.01383  38.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.7      0.5162 ug/L       0.13051      0.5162 ppb        0.13051  25.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         83.7      23.491 ug/L        9.6740      23.491 ppb         9.6740  41.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -8.9     -0.1737 ug/L       0.50791     -0.1737 ppb        0.50791 292.40%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.7      7.0166 ug/L       2.76756      7.0166 ppb        2.76756  39.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -5.6     -0.5287 ug/L       0.18076     -0.5287 ppb        0.18076  34.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.1     -0.0928 ug/L       3.11728     -0.0928 ppb        3.11728 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                10.1      2.6802 ug/L       1.34240      2.6802 ppb        1.34240  50.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.3     -3.2347 ug/L       1.91851     -3.2347 ppb        1.91851  59.31%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.1      2.6528 ug/L       0.17767      2.6528 ppb        0.17767   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.7      1.0199 ug/L       0.13804      1.0199 ppb        0.13804  13.53%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.9     -0.0049 ug/L       0.11036     -0.0049 ppb        0.11036 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.3     -0.0213 ug/L       0.05410     -0.0213 ppb        0.05410 254.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -7.3     -1.7757 ug/L       0.43279     -1.7757 ppb        0.43279  24.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 22.7      0.5867 ug/L       1.04917      0.5867 ppb        1.04917 178.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -57.9     -0.3214 ug/L       0.27724     -0.3214 ppb        0.27724  86.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                34.0      0.2484 ug/L       0.05318      0.2484 ppb        0.05318  21.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     105.2      5.6828 ug/L       1.01143      5.6828 ppb        1.01143  17.80%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 23:14:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4714.7	4714.7	96.0	%			23:15:56
1	Y RADIAL	5400.3	5400.3	95.63	%			23:15:56
1	Al 396.153Radial†	7509.6	7863.9	5171.0	ug/L	5171.0	ppb	23:15:56
1	Ca 317.933Radial†	2790.4	2887.9	5113.2	ug/L	5113.2	ppb	23:16:16
1	Fe 238.204 Radial†	410.7	416.7	5053.8	ug/L	5053.8	ppb	23:16:16
1	K 766.490 Radial†	28936.2	27563.4	5015.0	ug/L	5015.0	ppb	23:15:56
1	Mg 279.077 IEC†	112.0	114.1	5112.4	ug/L	5112.4	ppb	23:16:16
1	Na 589.592 Radial†	32821.6	35458.9	9946.2	ug/L	9946.2	ppb	23:15:56
1	Sr 421.552†	92586.5	96423.0	505.83	ug/L	505.83	ppb	23:15:56
1	Sc 361.383	1017505.4	1017505.4	97.886	%			23:17:16
1	Y 371.029	854009.4	854009.4	96.556	%			23:17:16
1	Ag 328.068†	125397.8	127632.4	509.01	ug/L	509.01	ppb	23:17:16
1	As 188.979†	1550.0	1620.1	509.24	ug/L	509.24	ppb	23:17:36
1	B 249.677†	25388.6	26403.1	497.03	ug/L	497.03	ppb	23:17:16
1	Ba 233.527†	77356.9	79027.9	509.02	ug/L	509.02	ppb	23:17:16
1	Be 313.107†	1585415.9	1624534.7	507.52	ug/L	507.52	ppb	23:17:16
1	Cd 226.502†	56729.9	58190.9	507.29	ug/L	507.29	ppb	23:17:16
1	Co 228.616†	29804.8	30534.9	503.13	ug/L	503.13	ppb	23:17:36
1	Cr 267.716†	55236.9	56342.3	507.00	ug/L	507.00	ppb	23:17:16
1	Cu 324.752†	195572.8	190859.6	509.95	ug/L	509.95	ppb	23:17:16
1	Mn 257.610†	528787.2	539632.3	511.41	ug/L	511.41	ppb	23:17:16
1	Mo 202.031†	9376.8	9550.1	507.15	ug/L	507.15	ppb	23:17:36
1	Ni 231.604†	25212.9	25625.6	501.78	ug/L	501.78	ppb	23:17:36
1	P 214.914†	5821.7	5682.3	2464.6	ug/L	2464.6	ppb	23:17:36
1	Pb 220.353†	5232.7	5421.3	510.50	ug/L	510.50	ppb	23:17:36
1	S 181.975 Axial†	966.0	926.8	997.47	ug/L	997.47	ppb	23:17:36
1	Sb 206.836†	1917.3	1924.1	514.51	ug/L	514.51	ppb	23:17:36
1	Se 196.026†	1094.7	1139.7	524.74	ug/L	524.74	ppb	23:17:36
1	Si 251.611†	98033.7	99593.5	2517.3	ug/L	2517.3	ppb	23:17:16
1	Sn 189.927†	3704.6	3788.9	501.72	ug/L	501.72	ppb	23:17:36
1	Ti 334.940†	359437.1	368461.3	508.08	ug/L	508.08	ppb	23:17:16
1	Tl 190.801†	1999.1	2086.6	507.89	ug/L	507.89	ppb	23:17:36
1	U 409.014†	16020.8	19140.8	493.26	ug/L	493.26	ppb	23:17:16
1	V 292.402†	84856.9	88298.3	512.27	ug/L	512.27	ppb	23:17:16
1	Zn 213.857†	68408.6	69000.6	502.56	ug/L	502.56	ppb	23:17:16
1	SiO2†	97937.3	99453.7	5379.1	ug/L	5379.1	ppb	23:18:36
2	Sc Radial	4693.4	4693.4	95.6	%			23:16:22
2	Y RADIAL	5372.6	5372.6	95.14	%			23:16:22
2	Al 396.153Radial†	7426.4	7812.5	5137.0	ug/L	5137.0	ppb	23:16:22
2	Ca 317.933Radial†	2765.6	2875.2	5090.7	ug/L	5090.7	ppb	23:16:42
2	Fe 238.204 Radial†	408.7	416.5	5051.8	ug/L	5051.8	ppb	23:16:42
2	K 766.490 Radial†	28682.5	27434.9	4991.6	ug/L	4991.6	ppb	23:16:22
2	Mg 279.077 IEC†	110.2	112.8	5053.5	ug/L	5053.5	ppb	23:16:42
2	Na 589.592 Radial†	32168.8	34931.3	9798.2	ug/L	9798.2	ppb	23:16:22
2	Sr 421.552†	91350.1	95567.6	501.34	ug/L	501.34	ppb	23:16:22
2	Sc 361.383	1017546.5	1017546.5	97.890	%			23:17:43
2	Y 371.029	853335.7	853335.7	96.480	%			23:17:43
2	Ag 328.068†	125443.7	127674.0	509.17	ug/L	509.17	ppb	23:17:43
2	As 188.979†	1549.8	1619.8	509.14	ug/L	509.14	ppb	23:18:03
2	B 249.677†	25451.0	26465.8	498.22	ug/L	498.22	ppb	23:17:43
2	Ba 233.527†	77553.5	79225.5	510.29	ug/L	510.29	ppb	23:17:43
2	Be 313.107†	1585661.2	1624719.8	507.58	ug/L	507.58	ppb	23:17:43
2	Cd 226.502†	56912.5	58375.1	508.90	ug/L	508.90	ppb	23:17:43
2	Co 228.616†	29868.0	30598.2	504.17	ug/L	504.17	ppb	23:18:03
2	Cr 267.716†	55200.9	56303.2	506.64	ug/L	506.64	ppb	23:17:43
2	Cu 324.752†	195984.2	191271.9	511.05	ug/L	511.05	ppb	23:17:43
2	Mn 257.610†	529531.6	540370.9	512.11	ug/L	512.11	ppb	23:17:43
2	Mo 202.031†	9388.3	9561.5	507.76	ug/L	507.76	ppb	23:18:03
2	Ni 231.604†	25250.9	25663.4	502.52	ug/L	502.52	ppb	23:18:03

2	P 214.914†	5824.6	5685.0	2465.7 ug/L	2465.7 ppb	23:18:03
2	Pb 220.353†	5245.7	5434.3	511.72 ug/L	511.72 ppb	23:18:03
2	S 181.975 Axial†	973.1	933.9	1005.2 ug/L	1005.2 ppb	23:18:03
2	Sb 206.836†	1933.9	1941.0	519.07 ug/L	519.07 ppb	23:18:03
2	Se 196.026†	1094.7	1139.7	524.72 ug/L	524.72 ppb	23:18:03
2	Si 251.611†	98139.4	99697.5	2519.9 ug/L	2519.9 ppb	23:17:43
2	Sn 189.927†	3740.9	3825.9	506.60 ug/L	506.60 ppb	23:18:03
2	Ti 334.940†	360172.5	369197.8	509.09 ug/L	509.09 ppb	23:17:43
2	Tl 190.801†	1998.4	2085.7	507.70 ug/L	507.70 ppb	23:18:03
2	U 409.014†	16275.1	19400.0	499.96 ug/L	499.96 ppb	23:17:43
2	V 292.402†	84923.8	88363.1	512.66 ug/L	512.66 ppb	23:17:43
2	Zn 213.857†	68522.3	69114.0	503.39 ug/L	503.39 ppb	23:17:43
2	SiO2†	98851.1	100383.1	5429.5 ug/L	5429.5 ppb	23:18:41
3	Sc Radial	4677.3	4677.3	95.3 %		23:16:47
3	Y RADIAL	5333.1	5333.1	94.44 %		23:16:47
3	Al 396.153Radial†	7346.1	7754.9	5099.0 ug/L	5099.0 ppb	23:16:47
3	Ca 317.933Radial†	2770.2	2890.0	5116.9 ug/L	5116.9 ppb	23:17:07
3	Fe 238.204 Radial†	412.2	421.7	5113.9 ug/L	5113.9 ppb	23:17:07
3	K 766.490 Radial†	28487.4	27333.3	4973.1 ug/L	4973.1 ppb	23:16:47
3	Mg 279.077 IEC†	114.7	117.9	5283.2 ug/L	5283.2 ppb	23:17:07
3	Na 589.592 Radial†	32021.9	34893.0	9787.5 ug/L	9787.5 ppb	23:16:47
3	Sr 421.552†	90635.2	95146.1	499.13 ug/L	499.13 ppb	23:16:47
3	Sc 361.383	1017820.0	1017820.0	97.916 %		23:18:10
3	Y 371.029	852862.6	852862.6	96.427 %		23:18:10
3	Ag 328.068†	125601.8	127801.1	509.70 ug/L	509.70 ppb	23:18:10
3	As 188.979†	1539.9	1609.3	505.87 ug/L	505.87 ppb	23:18:31
3	B 249.677†	25599.7	26610.6	500.95 ug/L	500.95 ppb	23:18:10
3	Ba 233.527†	77742.2	79397.0	511.39 ug/L	511.39 ppb	23:18:10
3	Be 313.107†	1585449.3	1624068.1	507.37 ug/L	507.37 ppb	23:18:10
3	Cd 226.502†	57090.7	58541.4	510.34 ug/L	510.34 ppb	23:18:10
3	Co 228.616†	29866.0	30588.0	504.00 ug/L	504.00 ppb	23:18:31
3	Cr 267.716†	55247.6	56335.8	506.94 ug/L	506.94 ppb	23:18:10
3	Cu 324.752†	195576.6	190801.8	509.80 ug/L	509.80 ppb	23:18:10
3	Mn 257.610†	530410.5	541123.1	512.83 ug/L	512.83 ppb	23:18:10
3	Mo 202.031†	9367.5	9537.7	506.50 ug/L	506.50 ppb	23:18:31
3	Ni 231.604†	25262.4	25668.1	502.61 ug/L	502.61 ppb	23:18:31
3	P 214.914†	5819.9	5678.7	2463.0 ug/L	2463.0 ppb	23:18:31
3	Pb 220.353†	5224.5	5411.2	509.53 ug/L	509.53 ppb	23:18:31
3	S 181.975 Axial†	979.3	940.1	1011.8 ug/L	1011.8 ppb	23:18:31
3	Sb 206.836†	1916.7	1922.8	514.22 ug/L	514.22 ppb	23:18:31
3	Se 196.026†	1092.7	1137.4	523.93 ug/L	523.93 ppb	23:18:31
3	Si 251.611†	98151.4	99682.8	2519.6 ug/L	2519.6 ppb	23:18:10
3	Sn 189.927†	3724.7	3808.3	504.29 ug/L	504.29 ppb	23:18:31
3	Ti 334.940†	360231.9	369159.5	509.04 ug/L	509.04 ppb	23:18:10
3	Tl 190.801†	2003.3	2090.2	508.78 ug/L	508.78 ppb	23:18:31
3	U 409.014†	15900.2	19012.6	489.94 ug/L	489.94 ppb	23:18:10
3	V 292.402†	84932.2	88348.5	512.54 ug/L	512.54 ppb	23:18:10
3	Zn 213.857†	68684.2	69260.5	504.46 ug/L	504.46 ppb	23:18:10
3	SiO2†	97977.4	99463.8	5379.6 ug/L	5379.6 ppb	23:18:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1017624.0	97.897	%	0.0165				0.02%
Sc Radial	4695.1	95.6	%	0.38				0.40%
Y 371.029	853402.5	96.488	%	0.0652				0.07%
Y RADIAL	5368.7	95.07	%	0.598				0.63%
Ag 328.068†	127702.5	509.29	ug/L	0.362	509.29	ppb	0.362	0.07%
QC value within limits for Ag 328.068 Recovery = 101.86%								
Al 396.153Radial†	7810.4	5135.7	ug/L	35.99	5135.7	ppb	35.99	0.70%
QC value within limits for Al 396.153Radial Recovery = 102.71%								
As 188.979†	1616.4	508.08	ug/L	1.916	508.08	ppb	1.916	0.38%
QC value within limits for As 188.979 Recovery = 101.62%								
B 249.677†	26493.2	498.73	ug/L	2.007	498.73	ppb	2.007	0.40%
QC value within limits for B 249.677 Recovery = 99.75%								
Ba 233.527†	79216.8	510.23	ug/L	1.188	510.23	ppb	1.188	0.23%
QC value within limits for Ba 233.527 Recovery = 102.05%								
Be 313.107†	1624440.9	507.49	ug/L	0.104	507.49	ppb	0.104	0.02%
QC value within limits for Be 313.107 Recovery = 101.50%								
Ca 317.933Radial†	2884.4	5106.9	ug/L	14.16	5106.9	ppb	14.16	0.28%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.14%
Cd 226.502†            58369.2      508.84 ug/L         1.526      508.84 ppb          1.526   0.30%
   QC value within limits for Cd 226.502  Recovery = 101.77%
Co 228.616†            30573.7      503.77 ug/L         0.559      503.77 ppb          0.559   0.11%
   QC value within limits for Co 228.616  Recovery = 100.75%
Cr 267.716†            56327.1      506.86 ug/L         0.190      506.86 ppb          0.190   0.04%
   QC value within limits for Cr 267.716  Recovery = 101.37%
Cu 324.752†           190977.8      510.27 ug/L         0.684      510.27 ppb          0.684   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5073.2 ug/L        35.32      5073.2 ppb         35.32   0.70%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27443.9      4993.2 ug/L        20.99      4993.2 ppb         20.99   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 99.86%
Mg 279.077 IEC†          115.0      5149.7 ug/L       119.29      5149.7 ppb        119.29   2.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.99%
Mn 257.610†           540375.4      512.12 ug/L         0.707      512.12 ppb          0.707   0.14%
   QC value within limits for Mn 257.610  Recovery = 102.42%
Mo 202.031†             9549.7      507.14 ug/L         0.630      507.14 ppb          0.630   0.12%
   QC value within limits for Mo 202.031  Recovery = 101.43%
Na 589.592 Radial†     35094.4      9844.0 ug/L        88.71      9844.0 ppb         88.71   0.90%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25652.4      502.30 ug/L         0.456      502.30 ppb          0.456   0.09%
   QC value within limits for Ni 231.604  Recovery = 100.46%
P 214.914†              5682.0      2464.4 ug/L         1.38      2464.4 ppb          1.38   0.06%
   QC value within limits for P 214.914  Recovery = 98.58%
Pb 220.353†             5422.3      510.58 ug/L         1.096      510.58 ppb          1.096   0.21%
   QC value within limits for Pb 220.353  Recovery = 102.12%
S 181.975 Axial†         933.6      1004.8 ug/L         7.18      1004.8 ppb          7.18   0.71%
   QC value within limits for S 181.975 Axial  Recovery = 100.48%
Sb 206.836†             1929.3      515.93 ug/L         2.720      515.93 ppb          2.720   0.53%
   QC value within limits for Sb 206.836  Recovery = 103.19%
Se 196.026†             1138.9      524.46 ug/L         0.464      524.46 ppb          0.464   0.09%
   QC value within limits for Se 196.026  Recovery = 104.89%
Si 251.611†            99657.9      2518.9 ug/L         1.43      2518.9 ppb          1.43   0.06%
   QC value within limits for Si 251.611  Recovery = 100.76%
Sn 189.927†             3807.7      504.21 ug/L         2.441      504.21 ppb          2.441   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.84%
Sr 421.552†            95712.2      502.10 ug/L         3.413      502.10 ppb          3.413   0.68%
   QC value within limits for Sr 421.552  Recovery = 100.42%
Ti 334.940†           368939.6      508.74 ug/L         0.571      508.74 ppb          0.571   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.75%
Tl 190.801†             2087.5      508.12 ug/L         0.578      508.12 ppb          0.578   0.11%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             19184.5      494.38 ug/L         5.106      494.38 ppb          5.106   1.03%
   QC value within limits for U 409.014  Recovery = 98.88%
V 292.402†             88336.6      512.49 ug/L         0.199      512.49 ppb          0.199   0.04%
   QC value within limits for V 292.402  Recovery = 102.50%
Zn 213.857†            69125.0      503.47 ug/L         0.949      503.47 ppb          0.949   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.69%
SiO2†                  99766.9      5396.1 ug/L        28.97      5396.1 ppb         28.97   0.54%
   QC value within limits for SiO2  Recovery = 100.91%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: PQL
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 12/4/2009 23:20:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4801.8	4801.8	97.8	%			23:22:48
1	Y RADIAL	5499.8	5499.8	97.39	%			23:22:48
1	Al 396.153Radial†	270.5	320.3	211.10	ug/L	211.10	ppb	23:22:48
1	Ca 317.933Radial†	131.3	116.4	206.03	ug/L	206.03	ppb	23:23:08
1	Fe 238.204 Radial†	20.1	9.5	115.14	ug/L	115.14	ppb	23:23:08
1	K 766.490 Radial†	3379.3	885.8	161.20	ug/L	161.20	ppb	23:22:48
1	Mg 279.077 IEC†	5.2	2.8	124.00	ug/L	124.00	ppb	23:23:08
1	Na 589.592 Radial†	-68.3	1210.1	339.44	ug/L	339.44	ppb	23:22:48
1	Sr 421.552†	928.6	956.8	5.0181	ug/L	5.0181	ppb	23:22:48
1	Sc 361.383	1023931.8	1023931.8	98.504	%			23:24:05
1	Y 371.029	871465.8	871465.8	98.530	%			23:24:05
1	Ag 328.068†	1661.9	1213.1	4.8160	ug/L	4.8160	ppb	23:24:10
1	As 188.979†	52.0	89.4	27.879	ug/L	27.879	ppb	23:24:30
1	B 249.677†	2129.5	2628.0	49.637	ug/L	49.637	ppb	23:24:10
1	Ba 233.527†	781.8	793.7	5.1145	ug/L	5.1145	ppb	23:24:30
1	Be 313.107†	10804.8	15842.9	4.9496	ug/L	4.9496	ppb	23:24:10
1	Cd 226.502†	336.6	577.4	5.0270	ug/L	5.0270	ppb	23:24:30
1	Co 228.616†	207.2	296.7	4.9008	ug/L	4.9008	ppb	23:24:30
1	Cr 267.716†	658.1	580.4	5.2076	ug/L	5.2076	ppb	23:24:30
1	Cu 324.752†	12741.3	3997.3	10.681	ug/L	10.681	ppb	23:24:10
1	Mn 257.610†	11629.9	11229.9	10.643	ug/L	10.643	ppb	23:24:10
1	Mo 202.031†	216.8	190.8	10.135	ug/L	10.135	ppb	23:24:30
1	Ni 231.604†	402.3	276.4	5.4134	ug/L	5.4134	ppb	23:24:30
1	P 214.914†	605.9	349.9	154.96	ug/L	154.96	ppb	23:24:30
1	Pb 220.353†	32.3	108.3	10.223	ug/L	10.223	ppb	23:24:30
1	S 181.975 Axial†	151.9	94.2	101.40	ug/L	101.40	ppb	23:24:30
1	Sb 206.836†	84.6	51.2	13.806	ug/L	13.806	ppb	23:24:30
1	Se 196.026†	39.0	61.0	27.463	ug/L	27.463	ppb	23:24:30
1	Si 251.611†	4564.1	4075.8	103.24	ug/L	103.24	ppb	23:24:10
1	Sn 189.927†	85.6	91.2	12.083	ug/L	12.083	ppb	23:24:30
1	Ti 334.940†	2376.2	3672.8	5.0511	ug/L	5.0511	ppb	23:24:10
1	Tl 190.801†	32.2	76.9	18.678	ug/L	18.678	ppb	23:24:30
1	U 409.014†	-698.3	2065.1	53.367	ug/L	53.367	ppb	23:24:05
1	V 292.402†	-731.4	866.0	5.1837	ug/L	5.1837	ppb	23:24:10
1	Zn 213.857†	2234.6	1383.0	10.100	ug/L	10.100	ppb	23:24:30
1	SiO2†	4486.3	3955.4	214.39	ug/L	214.39	ppb	23:25:36
2	Sc Radial	4744.2	4744.2	96.6	%			23:23:14
2	Y RADIAL	5463.2	5463.2	96.74	%			23:23:14
2	Al 396.153Radial†	267.8	321.0	211.52	ug/L	211.52	ppb	23:23:14
2	Ca 317.933Radial†	129.5	116.1	205.64	ug/L	205.64	ppb	23:23:34
2	Fe 238.204 Radial†	17.0	6.6	80.295	ug/L	80.295	ppb	23:23:34
2	K 766.490 Radial†	3455.4	1006.4	183.19	ug/L	183.19	ppb	23:23:14
2	Mg 279.077 IEC†	7.5	5.3	235.23	ug/L	235.23	ppb	23:23:34
2	Na 589.592 Radial†	-62.1	1215.7	340.99	ug/L	340.99	ppb	23:23:14
2	Sr 421.552†	907.6	946.7	4.9647	ug/L	4.9647	ppb	23:23:14
2	Sc 361.383	1030987.4	1030987.4	99.183	%			23:24:36
2	Y 371.029	877089.0	877089.0	99.166	%			23:24:36
2	Ag 328.068†	1678.5	1218.3	4.8247	ug/L	4.8247	ppb	23:24:41
2	As 188.979†	58.8	95.9	29.900	ug/L	29.900	ppb	23:25:01
2	B 249.677†	2110.4	2593.8	48.997	ug/L	48.997	ppb	23:24:41
2	Ba 233.527†	784.1	790.5	5.0923	ug/L	5.0923	ppb	23:25:01
2	Be 313.107†	10954.8	15919.0	4.9732	ug/L	4.9732	ppb	23:24:41
2	Cd 226.502†	356.1	594.7	5.1813	ug/L	5.1813	ppb	23:25:01
2	Co 228.616†	196.6	284.6	4.7014	ug/L	4.7014	ppb	23:25:01
2	Cr 267.716†	644.4	561.9	5.0411	ug/L	5.0411	ppb	23:25:01
2	Cu 324.752†	12830.8	3999.1	10.684	ug/L	10.684	ppb	23:24:41
2	Mn 257.610†	11652.0	11171.4	10.582	ug/L	10.582	ppb	23:24:41
2	Mo 202.031†	213.6	186.1	9.8810	ug/L	9.8810	ppb	23:25:01
2	Ni 231.604†	392.4	263.7	5.1633	ug/L	5.1633	ppb	23:25:01

2	P 214.914†	594.8	334.6	148.10	ug/L	148.10 ppb	23:25:01
2	Pb 220.353†	50.6	126.5	11.935	ug/L	11.935 ppb	23:25:01
2	S 181.975 Axial†	148.5	89.6	96.533	ug/L	96.533 ppb	23:25:01
2	Sb 206.836†	88.4	54.5	14.620	ug/L	14.620 ppb	23:25:01
2	Se 196.026†	36.5	58.2	26.109	ug/L	26.109 ppb	23:25:01
2	Si 251.611†	4523.6	4003.2	101.40	ug/L	101.40 ppb	23:24:41
2	Sn 189.927†	68.8	73.7	9.7759	ug/L	9.7759 ppb	23:25:01
2	Ti 334.940†	2335.4	3615.1	4.9717	ug/L	4.9717 ppb	23:24:41
2	Tl 190.801†	36.6	81.1	19.693	ug/L	19.693 ppb	23:25:01
2	U 409.014†	-709.8	2058.3	53.196	ug/L	53.196 ppb	23:24:36
2	V 292.402†	-772.1	830.1	4.9819	ug/L	4.9819 ppb	23:24:41
2	Zn 213.857†	2255.4	1388.4	10.141	ug/L	10.141 ppb	23:25:01
2	SiO2†	4532.3	3970.6	215.23	ug/L	215.23 ppb	23:25:41
3	Sc Radial	4849.7	4849.7	98.8	%		23:23:39
3	Y RADIAL	5571.3	5571.3	98.66	%		23:23:39
3	Al 396.153Radial†	281.1	328.3	216.34	ug/L	216.34 ppb	23:23:39
3	Ca 317.933Radial†	134.9	118.7	210.17	ug/L	210.17 ppb	23:23:59
3	Fe 238.204 Radial†	21.1	10.3	125.08	ug/L	125.08 ppb	23:23:59
3	K 766.490 Radial†	3411.6	884.4	160.94	ug/L	160.94 ppb	23:23:39
3	Mg 279.077 IEC†	9.9	7.5	335.60	ug/L	335.60 ppb	23:23:59
3	Na 589.592 Radial†	-36.1	1243.4	348.78	ug/L	348.78 ppb	23:23:39
3	Sr 421.552†	917.9	936.7	4.9123	ug/L	4.9123 ppb	23:23:39
3	Sc 361.383	1021503.5	1021503.5	98.270	%		23:25:06
3	Y 371.029	868276.8	868276.8	98.169	%		23:25:06
3	Ag 328.068†	1705.9	1261.9	5.0129	ug/L	5.0129 ppb	23:25:11
3	As 188.979†	38.9	76.2	23.756	ug/L	23.756 ppb	23:25:31
3	B 249.677†	2201.6	2706.4	51.117	ug/L	51.117 ppb	23:25:11
3	Ba 233.527†	766.6	780.1	5.0267	ug/L	5.0267 ppb	23:25:31
3	Be 313.107†	10958.3	16025.2	5.0064	ug/L	5.0064 ppb	23:25:11
3	Cd 226.502†	335.2	576.7	5.0206	ug/L	5.0206 ppb	23:25:31
3	Co 228.616†	223.3	313.6	5.1806	ug/L	5.1806 ppb	23:25:31
3	Cr 267.716†	653.0	576.7	5.1751	ug/L	5.1751 ppb	23:25:31
3	Cu 324.752†	12833.0	4121.4	11.013	ug/L	11.013 ppb	23:25:11
3	Mn 257.610†	11731.4	11361.2	10.765	ug/L	10.765 ppb	23:25:11
3	Mo 202.031†	224.0	198.7	10.554	ug/L	10.554 ppb	23:25:31
3	Ni 231.604†	399.0	274.0	5.3662	ug/L	5.3662 ppb	23:25:31
3	P 214.914†	595.7	341.1	150.91	ug/L	150.91 ppb	23:25:31
3	Pb 220.353†	7.8	83.5	7.8955	ug/L	7.8955 ppb	23:25:31
3	S 181.975 Axial†	145.6	88.1	94.834	ug/L	94.834 ppb	23:25:31
3	Sb 206.836†	93.6	60.6	16.266	ug/L	16.266 ppb	23:25:31
3	Se 196.026†	42.8	64.9	29.231	ug/L	29.231 ppb	23:25:31
3	Si 251.611†	4592.6	4115.8	104.26	ug/L	104.26 ppb	23:25:11
3	Sn 189.927†	77.3	83.0	11.003	ug/L	11.003 ppb	23:25:31
3	Ti 334.940†	2339.1	3640.7	5.0081	ug/L	5.0081 ppb	23:25:11
3	Tl 190.801†	44.6	89.7	21.755	ug/L	21.755 ppb	23:25:31
3	U 409.014†	-784.6	1975.6	51.051	ug/L	51.051 ppb	23:25:06
3	V 292.402†	-802.4	791.9	4.7645	ug/L	4.7645 ppb	23:25:11
3	Zn 213.857†	2251.2	1405.2	10.255	ug/L	10.255 ppb	23:25:31
3	SiO2†	4519.1	3999.6	216.79	ug/L	216.79 ppb	23:25:46

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025474.2	98.652	%	0.4739				0.48%
Sc Radial	4798.6	97.7	%	1.08				1.10%
Y 371.029	872277.2	98.622	%	0.5045				0.51%
Y RADIAL	5511.4	97.60	%	0.974				1.00%
Ag 328.068†	1231.1	4.8845	ug/L	0.11126	4.8845	ppb	0.11126	2.28%
QC value within limits for Ag 328.068 Recovery = 97.69%								
Al 396.153Radial†	323.2	212.99	ug/L	2.915	212.99	ppb	2.915	1.37%
QC value within limits for Al 396.153Radial Recovery = 106.49%								
As 188.979†	87.2	27.178	ug/L	3.1313	27.178	ppb	3.1313	11.52%
QC value within limits for As 188.979 Recovery = 90.59%								
B 249.677†	2642.7	49.917	ug/L	1.0875	49.917	ppb	1.0875	2.18%
QC value within limits for B 249.677 Recovery = 99.83%								
Ba 233.527†	788.1	5.0778	ug/L	0.04568	5.0778	ppb	0.04568	0.90%
QC value within limits for Ba 233.527 Recovery = 101.56%								
Be 313.107†	15929.0	4.9764	ug/L	0.02851	4.9764	ppb	0.02851	0.57%
QC value within limits for Be 313.107 Recovery = 99.53%								
Ca 317.933Radial†	117.1	207.28	ug/L	2.511	207.28	ppb	2.511	1.21%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.64%
Cd 226.502†              582.9      5.0763 ug/L       0.09099      5.0763 ppb        0.09099   1.79%
   QC value within limits for Cd 226.502  Recovery = 101.53%
Co 228.616†              298.3      4.9276 ug/L       0.24071      4.9276 ppb        0.24071   4.88%
   QC value within limits for Co 228.616  Recovery = 98.55%
Cr 267.716†              573.0      5.1413 ug/L       0.08828      5.1413 ppb        0.08828   1.72%
   QC value within limits for Cr 267.716  Recovery = 102.83%
Cu 324.752†             4039.3      10.792 ug/L        0.1908      10.792 ppb         0.1908   1.77%
   QC value within limits for Cu 324.752  Recovery = 107.92%
Fe 238.204 Radial†         8.8      106.84 ug/L        23.519      106.84 ppb         23.519  22.01%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.84%
K 766.490 Radial†        925.5      168.44 ug/L        12.773      168.44 ppb         12.773   7.58%
   QC value within limits for K 766.490 Radial  Recovery = 112.29%
Mg 279.077 IEC†            5.2      231.61 ug/L       105.846      231.61 ppb        105.846  45.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 77.20%
Mn 257.610†            11254.1      10.663 ug/L        0.0928      10.663 ppb         0.0928   0.87%
   QC value within limits for Mn 257.610  Recovery = 106.63%
Mo 202.031†              191.9      10.190 ug/L        0.3397      10.190 ppb         0.3397   3.33%
   QC value within limits for Mo 202.031  Recovery = 101.90%
Na 589.592 Radial†      1223.1      343.07 ug/L         5.006      343.07 ppb          5.006   1.46%
   QC value within limits for Na 589.592 Radial  Recovery = 114.36%
Ni 231.604†              271.4      5.3143 ug/L       0.13286      5.3143 ppb        0.13286   2.50%
   QC value within limits for Ni 231.604  Recovery = 106.29%
P 214.914†               341.9      151.33 ug/L         3.451      151.33 ppb          3.451   2.28%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              106.1      10.018 ug/L        2.0275      10.018 ppb         2.0275  20.24%
   QC value within limits for Pb 220.353  Recovery = 100.18%
S 181.975 Axial†          90.6      97.588 ug/L        3.4066      97.588 ppb         3.4066   3.49%
   QC value within limits for S 181.975 Axial  Recovery = 97.59%
Sb 206.836†               55.4      14.897 ug/L        1.2535      14.897 ppb         1.2535   8.41%
   QC value greater than the upper limit for Sb 206.836  Recovery = 148.97%
Se 196.026†               61.4      27.601 ug/L        1.5654      27.601 ppb         1.5654   5.67%
   QC value within limits for Se 196.026  Recovery = 92.00%
Si 251.611†             4064.9      102.97 ug/L         1.446      102.97 ppb          1.446   1.40%
   QC value within limits for Si 251.611  Recovery = 102.97%
Sn 189.927†               82.6      10.954 ug/L        1.1545      10.954 ppb         1.1545  10.54%
   QC value within limits for Sn 189.927  Recovery = 109.54%
Sr 421.552†              946.7      4.9650 ug/L       0.05292      4.9650 ppb        0.05292   1.07%
   QC value within limits for Sr 421.552  Recovery = 99.30%
Ti 334.940†             3642.8      5.0103 ug/L       0.03975      5.0103 ppb        0.03975   0.79%
   QC value within limits for Ti 334.940  Recovery = 100.21%
Tl 190.801†               82.6      20.042 ug/L        1.5683      20.042 ppb         1.5683   7.83%
   QC value within limits for Tl 190.801  Recovery = 100.21%
U 409.014†              2033.0      52.538 ug/L        1.2906      52.538 ppb         1.2906   2.46%
   QC value within limits for U 409.014  Recovery = 105.08%
V 292.402†               829.3      4.9767 ug/L       0.20963      4.9767 ppb        0.20963   4.21%
   QC value within limits for V 292.402  Recovery = 99.53%
Zn 213.857†             1392.2      10.165 ug/L        0.0804      10.165 ppb         0.0804   0.79%
   QC value within limits for Zn 213.857  Recovery = 101.65%
SiO2†                   3975.2      215.47 ug/L         1.216      215.47 ppb          1.216   0.56%
   QC value within limits for SiO2  Recovery = 101.16%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 23:27:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4871.5	4871.5	99.2	%			23:29:49
1	Y RADIAL	5607.3	5607.3	99.29	%			23:29:49
1	Al 396.153Radial†	-52.1	-8.7	-5.7846	ug/L	-5.7846	ppb	23:29:49
1	Ca 317.933Radial†	22.9	5.2	9.2806	ug/L	9.2806	ppb	23:30:09
1	Fe 238.204 Radial†	9.8	-1.2	-13.977	ug/L	-13.977	ppb	23:30:09
1	K 766.490 Radial†	2510.6	-39.2	-7.1844	ug/L	-7.1844	ppb	23:29:49
1	Mg 279.077 IEC†	5.7	3.3	146.35	ug/L	146.35	ppb	23:30:09
1	Na 589.592 Radial†	-1046.6	225.2	63.160	ug/L	63.160	ppb	23:29:49
1	Sr 421.552†	2.2	9.7	0.0506	ug/L	0.0506	ppb	23:29:49
1	Sc 361.383	1013672.5	1013672.5	97.517	%			23:31:05
1	Y 371.029	862264.0	862264.0	97.490	%			23:31:05
1	Ag 328.068†	396.0	-68.0	-0.2713	ug/L	-0.2713	ppb	23:31:10
1	As 188.979†	-44.3	-8.8	-2.7519	ug/L	-2.7519	ppb	23:31:30
1	B 249.677†	-513.5	-60.5	-1.1410	ug/L	-1.1410	ppb	23:31:30
1	Ba 233.527†	-16.6	-17.0	-0.1105	ug/L	-0.1105	ppb	23:31:30
1	Be 313.107†	-4862.2	-112.1	-0.0351	ug/L	-0.0351	ppb	23:31:10
1	Cd 226.502†	-218.8	11.3	0.0998	ug/L	0.0998	ppb	23:31:30
1	Co 228.616†	-93.2	-9.3	-0.1511	ug/L	-0.1511	ppb	23:31:30
1	Cr 267.716†	105.4	20.3	0.1833	ug/L	0.1833	ppb	23:31:30
1	Cu 324.752†	8978.5	269.7	0.7194	ug/L	0.7194	ppb	23:31:10
1	Mn 257.610†	691.6	132.5	0.1213	ug/L	0.1213	ppb	23:31:30
1	Mo 202.031†	35.8	7.5	0.3978	ug/L	0.3978	ppb	23:31:30
1	Ni 231.604†	131.4	2.8	0.0542	ug/L	0.0542	ppb	23:31:30
1	P 214.914†	284.5	26.6	11.832	ug/L	11.832	ppb	23:31:30
1	Pb 220.353†	-90.8	-17.5	-1.6454	ug/L	-1.6454	ppb	23:31:30
1	S 181.975 Axial†	59.1	0.5	0.5268	ug/L	0.5268	ppb	23:31:30
1	Sb 206.836†	41.8	8.2	2.2020	ug/L	2.2020	ppb	23:31:30
1	Se 196.026†	-27.4	-6.8	-3.0462	ug/L	-3.0462	ppb	23:31:30
1	Si 251.611†	580.1	37.2	0.9342	ug/L	0.9342	ppb	23:31:30
1	Sn 189.927†	10.6	15.2	2.0176	ug/L	2.0176	ppb	23:31:30
1	Ti 334.940†	-1290.1	-62.5	-0.0839	ug/L	-0.0839	ppb	23:31:10
1	Tl 190.801†	-46.0	-2.9	-0.6933	ug/L	-0.6933	ppb	23:31:30
1	U 409.014†	-2869.4	-168.4	-4.3534	ug/L	-4.3534	ppb	23:31:05
1	V 292.402†	-1604.7	-37.0	-0.2094	ug/L	-0.2094	ppb	23:31:10
1	Zn 213.857†	935.4	73.7	0.5363	ug/L	0.5363	ppb	23:31:30
1	SiO2†	628.3	45.3	2.4370	ug/L	2.4370	ppb	23:32:36
2	Sc Radial	4835.2	4835.2	98.5	%			23:30:14
2	Y RADIAL	5566.2	5566.2	98.57	%			23:30:14
2	Al 396.153Radial†	-22.1	21.3	14.087	ug/L	14.087	ppb	23:30:14
2	Ca 317.933Radial†	27.4	9.9	17.604	ug/L	17.604	ppb	23:30:34
2	Fe 238.204 Radial†	10.0	-0.8	-9.9083	ug/L	-9.9083	ppb	23:30:34
2	K 766.490 Radial†	2641.1	112.3	20.436	ug/L	20.436	ppb	23:30:14
2	Mg 279.077 IEC†	-0.8	-3.4	-150.32	ug/L	-150.32	ppb	23:30:34
2	Na 589.592 Radial†	-1027.3	236.8	66.427	ug/L	66.427	ppb	23:30:14
2	Sr 421.552†	-33.9	-27.0	-0.1421	ug/L	-0.1421	ppb	23:30:14
2	Sc 361.383	1020698.7	1020698.7	98.193	%			23:31:36
2	Y 371.029	869465.6	869465.6	98.304	%			23:31:36
2	Ag 328.068†	360.6	-106.8	-0.4282	ug/L	-0.4282	ppb	23:31:41
2	As 188.979†	-42.0	-6.2	-1.9339	ug/L	-1.9339	ppb	23:32:01
2	B 249.677†	-513.0	-56.4	-1.0641	ug/L	-1.0641	ppb	23:32:01
2	Ba 233.527†	-2.7	-2.7	-0.0180	ug/L	-0.0180	ppb	23:32:01
2	Be 313.107†	-4926.8	-143.5	-0.0448	ug/L	-0.0448	ppb	23:31:41
2	Cd 226.502†	-240.7	-9.5	-0.0820	ug/L	-0.0820	ppb	23:32:01
2	Co 228.616†	-86.0	-1.3	-0.0218	ug/L	-0.0218	ppb	23:32:01
2	Cr 267.716†	106.7	20.9	0.1868	ug/L	0.1868	ppb	23:32:01
2	Cu 324.752†	9044.3	273.3	0.7293	ug/L	0.7293	ppb	23:31:41
2	Mn 257.610†	677.5	113.3	0.1091	ug/L	0.1091	ppb	23:32:01
2	Mo 202.031†	20.0	-8.9	-0.4705	ug/L	-0.4705	ppb	23:32:01
2	Ni 231.604†	131.2	1.7	0.0338	ug/L	0.0338	ppb	23:32:01

2	P 214.914†	283.0	23.1	10.248	ug/L	10.248 ppb	23:32:01
2	Pb 220.353†	-91.0	-17.1	-1.6020	ug/L	-1.6020 ppb	23:32:01
2	S 181.975 Axial†	57.0	-2.1	-2.2662	ug/L	-2.2662 ppb	23:32:01
2	Sb 206.836†	48.1	14.3	3.7867	ug/L	3.7867 ppb	23:32:01
2	Se 196.026†	-24.6	-3.7	-1.6569	ug/L	-1.6569 ppb	23:32:01
2	Si 251.611†	614.5	68.2	1.7289	ug/L	1.7289 ppb	23:32:01
2	Sn 189.927†	7.5	12.0	1.5919	ug/L	1.5919 ppb	23:32:01
2	Ti 334.940†	-1245.4	-7.9	-0.0103	ug/L	-0.0103 ppb	23:31:41
2	Tl 190.801†	-55.4	-12.1	-2.9308	ug/L	-2.9308 ppb	23:32:01
2	U 409.014†	-2693.7	30.7	0.7943	ug/L	0.7943 ppb	23:31:36
2	V 292.402†	-1612.5	-33.7	-0.1999	ug/L	-0.1999 ppb	23:31:41
2	Zn 213.857†	922.1	53.5	0.3982	ug/L	0.3982 ppb	23:32:01
2	SiO2†	669.2	82.5	4.4753	ug/L	4.4753 ppb	23:32:41
3	Sc Radial	4748.4	4748.4	96.7	%		23:30:39
3	Y RADIAL	5479.6	5479.6	97.03	%		23:30:39
3	Al 396.153Radial†	-33.9	8.7	5.7621	ug/L	5.7621 ppb	23:30:39
3	Ca 317.933Radial†	28.1	11.2	19.840	ug/L	19.840 ppb	23:30:59
3	Fe 238.204 Radial†	8.8	-1.9	-23.358	ug/L	-23.358 ppb	23:30:59
3	K 766.490 Radial†	2558.4	75.8	13.787	ug/L	13.787 ppb	23:30:39
3	Mg 279.077 IEC†	3.9	1.6	70.670	ug/L	70.670 ppb	23:30:59
3	Na 589.592 Radial†	-1075.4	168.0	47.119	ug/L	47.119 ppb	23:30:39
3	Sr 421.552†	14.0	21.9	0.1146	ug/L	0.1146 ppb	23:30:39
3	Sc 361.383	1015576.5	1015576.5	97.700	%		23:32:06
3	Y 371.029	863771.4	863771.4	97.660	%		23:32:06
3	Ag 328.068†	380.9	-84.2	-0.3412	ug/L	-0.3412 ppb	23:32:11
3	As 188.979†	-32.5	3.3	1.0392	ug/L	1.0392 ppb	23:32:31
3	B 249.677†	-537.6	-84.2	-1.5884	ug/L	-1.5884 ppb	23:32:31
3	Ba 233.527†	4.0	4.1	0.0246	ug/L	0.0246 ppb	23:32:31
3	Be 313.107†	-4876.0	-116.8	-0.0365	ug/L	-0.0365 ppb	23:32:11
3	Cd 226.502†	-224.9	5.4	0.0498	ug/L	0.0498 ppb	23:32:31
3	Co 228.616†	-81.1	3.3	0.0540	ug/L	0.0540 ppb	23:32:31
3	Cr 267.716†	76.1	-9.9	-0.0895	ug/L	-0.0895 ppb	23:32:31
3	Cu 324.752†	8939.7	212.7	0.5668	ug/L	0.5668 ppb	23:32:11
3	Mn 257.610†	692.6	132.2	0.1215	ug/L	0.1215 ppb	23:32:31
3	Mo 202.031†	25.7	-2.9	-0.1571	ug/L	-0.1571 ppb	23:32:31
3	Ni 231.604†	129.4	0.5	0.0103	ug/L	0.0103 ppb	23:32:31
3	P 214.914†	279.4	20.8	9.2607	ug/L	9.2607 ppb	23:32:31
3	Pb 220.353†	-94.3	-21.0	-1.9687	ug/L	-1.9687 ppb	23:32:31
3	S 181.975 Axial†	60.9	2.2	2.3676	ug/L	2.3676 ppb	23:32:31
3	Sb 206.836†	47.9	14.4	3.7978	ug/L	3.7978 ppb	23:32:31
3	Se 196.026†	-31.5	-10.8	-4.8785	ug/L	-4.8785 ppb	23:32:31
3	Si 251.611†	605.5	62.1	1.5733	ug/L	1.5733 ppb	23:32:31
3	Sn 189.927†	2.5	6.9	0.9119	ug/L	0.9119 ppb	23:32:31
3	Ti 334.940†	-1255.0	-24.1	-0.0314	ug/L	-0.0314 ppb	23:32:11
3	Tl 190.801†	-58.6	-15.8	-3.8131	ug/L	-3.8131 ppb	23:32:31
3	U 409.014†	-2781.8	-73.3	-1.8919	ug/L	-1.8919 ppb	23:32:06
3	V 292.402†	-1624.8	-54.5	-0.3128	ug/L	-0.3128 ppb	23:32:11
3	Zn 213.857†	931.6	68.0	0.4988	ug/L	0.4988 ppb	23:32:31
3	SiO2†	633.2	49.1	2.6561	ug/L	2.6561 ppb	23:32:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1016649.2	97.803	%	0.3496				0.36%
Sc Radial	4818.3	98.1	%	1.29				1.31%
Y 371.029	865167.0	97.818	%	0.4294				0.44%
Y RADIAL	5551.0	98.30	%	1.154				1.17%
Ag 328.068†	-86.3	-0.3469	ug/L	0.07860	-0.3469	ppb	0.07860	22.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.1	4.6881	ug/L	9.97909	4.6881	ppb	9.97909	212.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.9	-1.2155	ug/L	1.99504	-1.2155	ppb	1.99504	164.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-67.0	-1.2645	ug/L	0.28313	-1.2645	ppb	0.28313	22.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0346	ug/L	0.06907	-0.0346	ppb	0.06907	199.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-124.1	-0.0388	ug/L	0.00523	-0.0388	ppb	0.00523	13.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.8	15.575	ug/L	5.5643	15.575	ppb	5.5643	35.73%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                2.4      0.0225 ug/L       0.09392      0.0225 ppb        0.09392 417.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -2.4     -0.0396 ug/L       0.10367     -0.0396 ppb        0.10367 261.60%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               10.4      0.0935 ug/L       0.15853      0.0935 ppb        0.15853 169.54%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              251.9      0.6718 ug/L       0.09112      0.6718 ppb        0.09112  13.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.3     -15.748 ug/L        6.8974     -15.748 ppb         6.8974  43.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         49.6      9.0129 ug/L      14.41589      9.0129 ppb       14.41589 159.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.5      22.236 ug/L      154.1510      22.236 ppb       154.1510 693.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              126.0      0.1173 ug/L       0.00712      0.1173 ppb        0.00712   6.06%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.4     -0.0766 ug/L       0.43970     -0.0766 ppb        0.43970 574.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       210.0      58.902 ug/L       10.3344      58.902 ppb        10.3344  17.55%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                1.7      0.0328 ug/L       0.02200      0.0328 ppb        0.02200  67.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                23.5      10.447 ug/L        1.2973      10.447 ppb         1.2973  12.42%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -18.5     -1.7387 ug/L       0.20035     -1.7387 ppb        0.20035  11.52%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.2094 ug/L       2.33316      0.2094 ppb        2.33316 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               12.3      3.2622 ug/L       0.91815      3.2622 ppb        0.91815  28.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -7.1     -3.1939 ug/L       1.61586     -3.1939 ppb        1.61586  50.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.9      1.4121 ug/L       0.42116      1.4121 ppb        0.42116  29.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.4      1.5071 ug/L       0.55775      1.5071 ppb        0.55775  37.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                1.5      0.0077 ug/L       0.13358      0.0077 ppb        0.13358 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -31.5     -0.0419 ug/L       0.03787     -0.0419 ppb        0.03787  90.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -10.3     -2.4791 ug/L       1.60823     -2.4791 ppb        1.60823  64.87%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -70.3     -1.8170 ug/L       2.57465     -1.8170 ppb        2.57465 141.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -41.7     -0.2407 ug/L       0.06263     -0.2407 ppb        0.06263  26.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               65.1      0.4778 ug/L       0.07141      0.4778 ppb        0.07141  14.95%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     58.9      3.1895 ug/L       1.11895      3.1895 ppb        1.11895  35.08%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: 1201977915|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 12/4/2009 23:34:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977915|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4882.3	4882.3	99.4	%			23:36:49
1	Y RADIAL	5615.0	5615.0	99.43	%			23:36:49
1	Al 396.153Radial†	-7.7	36.0	23.772	ug/L	23.772	ppb	23:36:49
1	Ca 317.933Radial†	62.5	45.0	79.616	ug/L	79.616	ppb	23:37:09
1	Fe 238.204 Radial†	16.1	5.2	62.731	ug/L	62.731	ppb	23:37:09
1	K 766.490 Radial†	2570.9	15.8	2.8350	ug/L	2.8350	ppb	23:36:49
1	Mg 279.077 IEC†	0.4	-2.1	-94.686	ug/L	-94.686	ppb	23:37:09
1	Na 589.592 Radial†	-1044.6	229.5	64.363	ug/L	64.363	ppb	23:36:49
1	Sr 421.552†	-8.1	-0.7	-0.0045	ug/L	-0.0045	ppb	23:36:49
1	Sc 361.383	1027601.9	1027601.9	98.857	%			23:38:06
1	Y 371.029	874714.0	874714.0	98.897	%			23:38:06
1	Ag 328.068†	371.1	-98.7	-0.3749	ug/L	-0.3749	ppb	23:38:11
1	As 188.979†	-42.5	-6.4	-1.9771	ug/L	-1.9771	ppb	23:38:31
1	B 249.677†	-503.0	-42.7	-0.8151	ug/L	-0.8151	ppb	23:38:31
1	Ba 233.527†	107.7	108.9	0.7014	ug/L	0.7014	ppb	23:38:31
1	Be 313.107†	-4840.0	-22.1	-0.0057	ug/L	-0.0057	ppb	23:38:11
1	Cd 226.502†	-218.4	14.8	0.1226	ug/L	0.1226	ppb	23:38:31
1	Co 228.616†	-84.5	0.8	0.0123	ug/L	0.0123	ppb	23:38:31
1	Cr 267.716†	138.2	52.0	0.4676	ug/L	0.4676	ppb	23:38:31
1	Cu 324.752†	8981.6	147.9	0.3982	ug/L	0.3982	ppb	23:38:11
1	Mn 257.610†	1626.7	1068.8	1.0201	ug/L	1.0201	ppb	23:38:11
1	Mo 202.031†	33.2	4.3	0.2344	ug/L	0.2344	ppb	23:38:31
1	Ni 231.604†	145.8	15.6	0.3048	ug/L	0.3048	ppb	23:38:31
1	P 214.914†	284.0	22.2	9.8370	ug/L	9.8370	ppb	23:38:31
1	Pb 220.353†	-64.6	10.2	0.9580	ug/L	0.9580	ppb	23:38:31
1	S 181.975 Axial†	66.1	6.8	7.2729	ug/L	7.2729	ppb	23:38:31
1	Sb 206.836†	44.5	10.3	2.7431	ug/L	2.7431	ppb	23:38:31
1	Se 196.026†	-22.8	-1.6	-0.4966	ug/L	-0.4966	ppb	23:38:31
1	Si 251.611†	1550.4	1010.7	25.658	ug/L	25.658	ppb	23:38:31
1	Sn 189.927†	7.5	11.9	1.5806	ug/L	1.5806	ppb	23:38:31
1	Ti 334.940†	-820.4	430.6	0.5973	ug/L	0.5973	ppb	23:38:11
1	Tl 190.801†	-46.5	-2.7	-0.6532	ug/L	-0.6532	ppb	23:38:31
1	U 409.014†	-2688.0	54.9	1.4094	ug/L	1.4094	ppb	23:38:06
1	V 292.402†	-1647.7	-58.2	-0.3399	ug/L	-0.3399	ppb	23:38:11
1	Zn 213.857†	1096.2	223.3	1.6359	ug/L	1.6359	ppb	23:38:31
1	SiO2†	1620.8	1040.5	56.531	ug/L	56.531	ppb	23:39:37
2	Sc Radial	4888.6	4888.6	99.6	%			23:37:14
2	Y RADIAL	5631.2	5631.2	99.72	%			23:37:14
2	Al 396.153Radial†	-10.9	32.8	21.687	ug/L	21.687	ppb	23:37:14
2	Ca 317.933Radial†	67.3	49.7	88.036	ug/L	88.036	ppb	23:37:34
2	Fe 238.204 Radial†	14.1	3.2	38.144	ug/L	38.144	ppb	23:37:34
2	K 766.490 Radial†	2415.2	-143.9	-26.287	ug/L	-26.287	ppb	23:37:14
2	Mg 279.077 IEC†	4.5	2.0	90.655	ug/L	90.655	ppb	23:37:34
2	Na 589.592 Radial†	-961.3	314.5	88.210	ug/L	88.210	ppb	23:37:14
2	Sr 421.552†	8.3	15.7	0.0818	ug/L	0.0818	ppb	23:37:14
2	Sc 361.383	1043207.5	1043207.5	100.36	%			23:38:36
2	Y 371.029	886608.6	886608.6	100.24	%			23:38:36
2	Ag 328.068†	335.8	-139.5	-0.5449	ug/L	-0.5449	ppb	23:38:41
2	As 188.979†	-34.5	2.2	0.7110	ug/L	0.7110	ppb	23:39:01
2	B 249.677†	-520.1	-52.2	-0.9907	ug/L	-0.9907	ppb	23:39:01
2	Ba 233.527†	114.6	114.3	0.7346	ug/L	0.7346	ppb	23:39:01
2	Be 313.107†	-4875.7	15.7	0.0060	ug/L	0.0060	ppb	23:38:41
2	Cd 226.502†	-230.6	5.9	0.0476	ug/L	0.0476	ppb	23:39:01
2	Co 228.616†	-99.0	-12.4	-0.2067	ug/L	-0.2067	ppb	23:39:01
2	Cr 267.716†	148.8	60.5	0.5432	ug/L	0.5432	ppb	23:39:01
2	Cu 324.752†	9044.1	74.4	0.2005	ug/L	0.2005	ppb	23:38:41
2	Mn 257.610†	1582.6	1000.3	0.9493	ug/L	0.9493	ppb	23:38:41
2	Mo 202.031†	20.0	-9.3	-0.4917	ug/L	-0.4917	ppb	23:39:01
2	Ni 231.604†	153.0	20.5	0.4014	ug/L	0.4014	ppb	23:39:01

2	P 214.914†	281.7	15.6	6.9283	ug/L	6.9283 ppb	23:39:01
2	Pb 220.353†	-92.8	-16.9	-1.5859	ug/L	-1.5859 ppb	23:39:01
2	S 181.975 Axial†	64.8	4.5	4.7929	ug/L	4.7929 ppb	23:39:01
2	Sb 206.836†	51.5	16.7	4.3713	ug/L	4.3713 ppb	23:39:01
2	Se 196.026†	-30.2	-8.7	-3.7080	ug/L	-3.7080 ppb	23:39:01
2	Si 251.611†	1572.4	1009.1	25.644	ug/L	25.644 ppb	23:39:01
2	Sn 189.927†	-1.3	3.0	0.4127	ug/L	0.4127 ppb	23:39:01
2	Ti 334.940†	-855.8	407.7	0.5661	ug/L	0.5661 ppb	23:38:41
2	Tl 190.801†	-42.3	2.1	0.5143	ug/L	0.5143 ppb	23:39:01
2	U 409.014†	-2725.2	58.5	1.5069	ug/L	1.5069 ppb	23:38:36
2	V 292.402†	-1687.9	-73.4	-0.4288	ug/L	-0.4288 ppb	23:38:41
2	Zn 213.857†	1088.0	198.6	1.4497	ug/L	1.4497 ppb	23:39:01
2	SiO2†	1594.7	990.0	53.843	ug/L	53.843 ppb	23:39:42
3	Sc Radial	4894.7	4894.7	99.7	%		23:37:39
3	Y RADIAL	5621.1	5621.1	99.54	%		23:37:39
3	Al 396.153Radial†	-24.1	19.6	12.966	ug/L	12.966 ppb	23:37:39
3	Ca 317.933Radial†	67.3	49.7	87.951	ug/L	87.951 ppb	23:37:59
3	Fe 238.204 Radial†	14.0	3.1	36.899	ug/L	36.899 ppb	23:37:59
3	K 766.490 Radial†	2621.8	60.3	10.941	ug/L	10.941 ppb	23:37:39
3	Mg 279.077 IEC†	-0.1	-2.6	-116.21	ug/L	-116.21 ppb	23:37:59
3	Na 589.592 Radial†	-986.5	290.4	81.462	ug/L	81.462 ppb	23:37:39
3	Sr 421.552†	34.0	41.5	0.2169	ug/L	0.2169 ppb	23:37:39
3	Sc 361.383	1039454.8	1039454.8	99.997	%		23:39:07
3	Y 371.029	881791.9	881791.9	99.697	%		23:39:07
3	Ag 328.068†	396.8	-77.3	-0.2962	ug/L	-0.2962 ppb	23:39:12
3	As 188.979†	-35.9	0.7	0.2284	ug/L	0.2284 ppb	23:39:32
3	B 249.677†	-544.2	-78.1	-1.4816	ug/L	-1.4816 ppb	23:39:32
3	Ba 233.527†	111.7	111.8	0.7193	ug/L	0.7193 ppb	23:39:32
3	Be 313.107†	-4926.8	-53.0	-0.0157	ug/L	-0.0157 ppb	23:39:12
3	Cd 226.502†	-221.1	14.6	0.1236	ug/L	0.1236 ppb	23:39:32
3	Co 228.616†	-87.3	-1.0	-0.0186	ug/L	-0.0186 ppb	23:39:32
3	Cr 267.716†	139.7	51.9	0.4670	ug/L	0.4670 ppb	23:39:32
3	Cu 324.752†	9014.5	77.3	0.2083	ug/L	0.2083 ppb	23:39:12
3	Mn 257.610†	1564.1	987.5	0.9410	ug/L	0.9410 ppb	23:39:12
3	Mo 202.031†	23.4	-5.9	-0.3089	ug/L	-0.3089 ppb	23:39:32
3	Ni 231.604†	143.8	11.9	0.2323	ug/L	0.2323 ppb	23:39:32
3	P 214.914†	276.8	11.7	5.2114	ug/L	5.2114 ppb	23:39:32
3	Pb 220.353†	-84.5	-9.0	-0.8425	ug/L	-0.8425 ppb	23:39:32
3	S 181.975 Axial†	57.0	-3.1	-3.3464	ug/L	-3.3464 ppb	23:39:32
3	Sb 206.836†	39.7	5.1	1.3560	ug/L	1.3560 ppb	23:39:32
3	Se 196.026†	-19.3	2.0	1.0379	ug/L	1.0379 ppb	23:39:32
3	Si 251.611†	1548.7	991.1	25.166	ug/L	25.166 ppb	23:39:32
3	Sn 189.927†	12.8	17.1	2.2768	ug/L	2.2768 ppb	23:39:32
3	Ti 334.940†	-946.5	313.9	0.4373	ug/L	0.4373 ppb	23:39:12
3	Tl 190.801†	-48.4	-4.1	-0.9917	ug/L	-0.9917 ppb	23:39:32
3	U 409.014†	-2761.2	12.7	0.3222	ug/L	0.3222 ppb	23:39:07
3	V 292.402†	-1611.3	-2.8	-0.0287	ug/L	-0.0287 ppb	23:39:12
3	Zn 213.857†	1083.8	198.3	1.4556	ug/L	1.4556 ppb	23:39:32
3	SiO2†	1625.6	1026.6	55.786	ug/L	55.786 ppb	23:39:47

Mean Data: 1201977915|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036754.7	99.737	%	0.7836				0.79%
Sc Radial	4888.5	99.6	%	0.13				0.13%
Y 371.029	881038.2	99.612	%	0.6765				0.68%
Y RADIAL	5622.4	99.56	%	0.145				0.15%
Ag 328.068†	-105.1	-0.4053	ug/L	0.12709	-0.4053	ppb	0.12709	31.36%
Al 396.153Radial†	29.5	19.475	ug/L	5.7324	19.475	ppb	5.7324	29.43%
As 188.979†	-1.2	-0.3459	ug/L	1.43309	-0.3459	ppb	1.43309	414.30%
B 249.677†	-57.7	-1.0958	ug/L	0.34544	-1.0958	ppb	0.34544	31.52%
Ba 233.527†	111.7	0.7184	ug/L	0.01658	0.7184	ppb	0.01658	2.31%
Be 313.107†	-19.8	-0.0051	ug/L	0.01085	-0.0051	ppb	0.01085	211.28%
Ca 317.933Radial†	48.1	85.201	ug/L	4.8370	85.201	ppb	4.8370	5.68%
Cd 226.502†	11.7	0.0979	ug/L	0.04358	0.0979	ppb	0.04358	44.50%
Co 228.616†	-4.2	-0.0710	ug/L	0.11852	-0.0710	ppb	0.11852	166.91%
Cr 267.716†	54.8	0.4926	ug/L	0.04385	0.4926	ppb	0.04385	8.90%
Cu 324.752†	99.9	0.2690	ug/L	0.11199	0.2690	ppb	0.11199	41.63%
Fe 238.204 Radial†	3.8	45.924	ug/L	14.5681	45.924	ppb	14.5681	31.72%
K 766.490 Radial†	-22.6	-4.1703	ug/L	19.57797	-4.1703	ppb	19.57797	469.46%

Mg 279.077 IEC†	-0.9	-40.080	ug/L	113.7309	-40.080	ppb	113.7309 283.76%
Mn 257.610†	1018.9	0.9701	ug/L	0.04349	0.9701	ppb	0.04349 4.48%
Mo 202.031†	-3.6	-0.1887	ug/L	0.37763	-0.1887	ppb	0.37763 200.09%
Na 589.592 Radial†	278.1	78.012	ug/L	12.2924	78.012	ppb	12.2924 15.76%
Ni 231.604†	16.0	0.3128	ug/L	0.08486	0.3128	ppb	0.08486 27.13%
P 214.914†	16.5	7.3255	ug/L	2.33825	7.3255	ppb	2.33825 31.92%
Pb 220.353†	-5.2	-0.4901	ug/L	1.30803	-0.4901	ppb	1.30803 266.86%
S 181.975 Axial†	2.7	2.9065	ug/L	5.55529	2.9065	ppb	5.55529 191.13%
Sb 206.836†	10.7	2.8235	ug/L	1.50925	2.8235	ppb	1.50925 53.45%
Se 196.026†	-2.8	-1.0555	ug/L	2.42185	-1.0555	ppb	2.42185 229.44%
Si 251.611†	1003.6	25.489	ug/L	0.2801	25.489	ppb	0.2801 1.10%
Sn 189.927†	10.7	1.4234	ug/L	0.94195	1.4234	ppb	0.94195 66.18%
Sr 421.552†	18.8	0.0981	ug/L	0.11158	0.0981	ppb	0.11158 113.78%
Ti 334.940†	384.1	0.5336	ug/L	0.08483	0.5336	ppb	0.08483 15.90%
Tl 190.801†	-1.6	-0.3769	ug/L	0.79008	-0.3769	ppb	0.79008 209.65%
U 409.014†	42.0	1.0795	ug/L	0.65766	1.0795	ppb	0.65766 60.92%
V 292.402†	-44.8	-0.2658	ug/L	0.21009	-0.2658	ppb	0.21009 79.04%
Zn 213.857†	206.7	1.5138	ug/L	0.10580	1.5138	ppb	0.10580 6.99%
SiO2†	1019.1	55.387	ug/L	1.3879	55.387	ppb	1.3879 2.51%

Sequence No.: 15
Sample ID: 1201977920|925187|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 12/4/2009 23:41:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977920|925187|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4828.0	4828.0	98.3	%			23:44:12
1	Y RADIAL	5876.7	5876.7	104.1	%			23:44:12
1	Al 396.153Radial†	65740.3	66896.8	44155	ug/L	44155	ppb	23:43:52
1	Ca 317.933Radial†	10572.6	10733.7	19004	ug/L	19004	ppb	23:43:52
1	Fe 238.204 Radial†	9192.3	9336.9	112900	ug/L	112900	ppb	23:43:52
1	K 766.490 Radial†	68367.0	66954.6	12186	ug/L	12186	ppb	23:43:52
1	Mg 279.077 IEC†	347.9	351.3	15631	ug/L	15631	ppb	23:44:12
1	Na 589.592 Radial†	8784.3	10212.9	2864.7	ug/L	2864.7	ppb	23:43:52
1	Sr 421.552†	154544.9	157167.9	824.40	ug/L	824.40	ppb	23:43:52
1	Sc 361.383	1037404.5	1037404.5	99.800	%			23:45:11
1	Y 371.029	934150.4	934150.4	105.62	%			23:45:11
1	Ag 328.068†	160388.3	160235.6	674.18	ug/L	674.18	ppb	23:45:11
1	As 188.979†	4070.6	4115.3	1317.4	ug/L	1317.4	ppb	23:45:31
1	B 249.677†	37297.1	37837.9	699.03	ug/L	699.03	ppb	23:45:11
1	Ba 233.527†	371258.6	372002.6	2395.9	ug/L	2395.9	ppb	23:45:11
1	Be 313.107†	1442745.2	1450510.2	456.56	ug/L	456.56	ppb	23:45:11
1	Cd 226.502†	68117.4	68489.6	586.33	ug/L	586.33	ppb	23:45:11
1	Co 228.616†	25700.6	25838.5	421.31	ug/L	421.31	ppb	23:45:31
1	Cr 267.716†	46798.2	46804.2	424.01	ug/L	424.01	ppb	23:45:11
1	Cu 324.752†	207369.5	198847.5	536.78	ug/L	536.78	ppb	23:45:11
1	Mn 257.610†	2049592.7	2053123.2	1955.2	ug/L	1955.2	ppb	23:45:11
1	Mo 202.031†	7813.1	7799.6	421.91	ug/L	421.91	ppb	23:45:31
1	Ni 231.604†	26480.8	26401.9	517.04	ug/L	517.04	ppb	23:45:31
1	P 214.914†	9178.0	8931.3	3841.2	ug/L	3841.2	ppb	23:45:31
1	Pb 220.353†	8868.2	8961.5	842.48	ug/L	842.48	ppb	23:45:31
1	S 181.975 Axial†	1038.1	980.1	1047.3	ug/L	1047.3	ppb	23:45:31
1	Sb 206.836†	1827.1	1796.2	478.28	ug/L	478.28	ppb	23:45:31
1	Se 196.026†	1374.5	1398.7	1030.6	ug/L	1030.6	ppb	23:45:31
1	Si 251.611†	404584.5	404837.6	10269	ug/L	10269	ppb	23:45:11
1	Sn 189.927†	4036.7	4049.2	539.05	ug/L	539.05	ppb	23:45:31
1	Ti 334.940†	1580997.8	1585426.5	2187.7	ug/L	2187.7	ppb	23:45:11
1	Tl 190.801†	4109.7	4162.2	1031.9	ug/L	1031.9	ppb	23:45:31
1	U 409.014†	-9046.7	-6290.8	-177.66	ug/L	-177.66	ppb	23:45:11
1	V 292.402†	142438.4	144332.4	812.46	ug/L	812.46	ppb	23:45:11
1	Zn 213.857†	142480.8	141880.8	1027.3	ug/L	1027.3	ppb	23:45:11
1	SiO2†	405090.3	405303.1	22000	ug/L	22000	ppb	23:46:32
2	Sc Radial	4822.4	4822.4	98.2	%			23:44:37
2	Y RADIAL	5870.3	5870.3	104.0	%			23:44:37
2	Al 396.153Radial†	66072.0	67312.3	44430	ug/L	44430	ppb	23:44:17
2	Ca 317.933Radial†	10569.2	10742.8	19021	ug/L	19021	ppb	23:44:17
2	Fe 238.204 Radial†	9248.9	9405.4	113730	ug/L	113730	ppb	23:44:17
2	K 766.490 Radial†	68707.0	67381.8	12264	ug/L	12264	ppb	23:44:17
2	Mg 279.077 IEC†	352.9	356.7	15874	ug/L	15874	ppb	23:44:37
2	Na 589.592 Radial†	9000.3	10443.3	2929.3	ug/L	2929.3	ppb	23:44:17
2	Sr 421.552†	155834.0	158663.7	832.24	ug/L	832.24	ppb	23:44:17
2	Sc 361.383	1034430.1	1034430.1	99.514	%			23:45:39
2	Y 371.029	930864.4	930864.4	105.25	%			23:45:39
2	Ag 328.068†	159893.1	160200.1	674.31	ug/L	674.31	ppb	23:45:39
2	As 188.979†	4060.7	4117.1	1318.1	ug/L	1318.1	ppb	23:45:59
2	B 249.677†	37304.5	37952.8	701.08	ug/L	701.08	ppb	23:45:39
2	Ba 233.527†	370961.4	372773.7	2400.9	ug/L	2400.9	ppb	23:45:39
2	Be 313.107†	1439781.8	1451689.3	456.93	ug/L	456.93	ppb	23:45:39
2	Cd 226.502†	67985.0	68552.8	586.80	ug/L	586.80	ppb	23:45:39
2	Co 228.616†	25777.0	25989.2	423.78	ug/L	423.78	ppb	23:45:59
2	Cr 267.716†	46824.1	46965.0	425.48	ug/L	425.48	ppb	23:45:39
2	Cu 324.752†	207140.1	199214.5	537.81	ug/L	537.81	ppb	23:45:39
2	Mn 257.610†	2048149.8	2057578.6	1959.5	ug/L	1959.5	ppb	23:45:39
2	Mo 202.031†	7821.6	7830.6	423.61	ug/L	423.61	ppb	23:45:59
2	Ni 231.604†	26538.5	26536.2	519.67	ug/L	519.67	ppb	23:45:59

2	P 214.914†	9213.9	8993.8	3868.5	ug/L	3868.5 ppb	23:45:59
2	Pb 220.353†	8910.8	9029.9	848.89	ug/L	848.89 ppb	23:45:59
2	S 181.975 Axial†	1053.8	998.8	1067.4	ug/L	1067.4 ppb	23:45:59
2	Sb 206.836†	1817.3	1791.6	477.12	ug/L	477.12 ppb	23:45:59
2	Se 196.026†	1388.3	1416.5	1041.5	ug/L	1041.5 ppb	23:45:59
2	Si 251.611†	404438.8	405856.9	10294	ug/L	10294 ppb	23:45:39
2	Sn 189.927†	4048.9	4073.0	542.21	ug/L	542.21 ppb	23:45:59
2	Ti 334.940†	1578840.2	1587813.5	2190.9	ug/L	2190.9 ppb	23:45:39
2	Tl 190.801†	4111.6	4176.0	1035.3	ug/L	1035.3 ppb	23:45:59
2	U 409.014†	-9132.0	-6402.6	-180.66	ug/L	-180.66 ppb	23:45:39
2	V 292.402†	142241.7	144545.1	813.57	ug/L	813.57 ppb	23:45:39
2	Zn 213.857†	142519.5	142330.1	1030.5	ug/L	1030.5 ppb	23:45:39
2	SiO2†	407210.0	408600.2	22179	ug/L	22179 ppb	23:46:37
3	Sc Radial	4836.5	4836.5	98.5	%		23:45:02
3	Y RADIAL	5879.1	5879.1	104.1	%		23:45:02
3	Al 396.153Radial†	66632.9	67684.7	44676	ug/L	44676 ppb	23:44:42
3	Ca 317.933Radial†	10645.0	10788.2	19101	ug/L	19101 ppb	23:44:42
3	Fe 238.204 Radial†	9300.8	9430.5	114030	ug/L	114030 ppb	23:44:42
3	K 766.490 Radial†	68548.9	67016.4	12198	ug/L	12198 ppb	23:44:42
3	Mg 279.077 IEC†	351.4	354.2	15759	ug/L	15759 ppb	23:45:02
3	Na 589.592 Radial†	8805.1	10218.2	2866.2	ug/L	2866.2 ppb	23:44:42
3	Sr 421.552†	156287.0	158658.8	832.22	ug/L	832.22 ppb	23:44:42
3	Sc 361.383	1041068.9	1041068.9	100.15	%		23:46:06
3	Y 371.029	935758.1	935758.1	105.80	%		23:46:06
3	Ag 328.068†	160724.5	160005.6	673.62	ug/L	673.62 ppb	23:46:06
3	As 188.979†	4070.5	4100.9	1313.1	ug/L	1313.1 ppb	23:46:26
3	B 249.677†	37306.4	37715.6	696.56	ug/L	696.56 ppb	23:46:06
3	Ba 233.527†	372494.1	371926.8	2395.4	ug/L	2395.4 ppb	23:46:06
3	Be 313.107†	1444480.8	1447154.8	455.51	ug/L	455.51 ppb	23:46:06
3	Cd 226.502†	68203.8	68335.5	584.87	ug/L	584.87 ppb	23:46:06
3	Co 228.616†	25800.1	25847.2	421.43	ug/L	421.43 ppb	23:46:26
3	Cr 267.716†	47031.7	46872.3	424.64	ug/L	424.64 ppb	23:46:06
3	Cu 324.752†	208081.7	198827.3	536.79	ug/L	536.79 ppb	23:46:06
3	Mn 257.610†	2055836.7	2052129.0	1954.3	ug/L	1954.3 ppb	23:46:06
3	Mo 202.031†	7829.3	7788.1	421.38	ug/L	421.38 ppb	23:46:26
3	Ni 231.604†	26523.1	26350.8	516.04	ug/L	516.04 ppb	23:46:26
3	P 214.914†	9181.6	8902.5	3827.6	ug/L	3827.6 ppb	23:46:26
3	Pb 220.353†	8910.0	8972.0	843.49	ug/L	843.49 ppb	23:46:26
3	S 181.975 Axial†	1040.2	978.6	1045.5	ug/L	1045.5 ppb	23:46:26
3	Sb 206.836†	1815.7	1778.3	473.50	ug/L	473.50 ppb	23:46:26
3	Se 196.026†	1359.2	1378.5	1025.7	ug/L	1025.7 ppb	23:46:26
3	Si 251.611†	405818.8	404643.1	10264	ug/L	10264 ppb	23:46:06
3	Sn 189.927†	4031.9	4030.1	536.55	ug/L	536.55 ppb	23:46:26
3	Ti 334.940†	1586633.9	1585477.9	2187.7	ug/L	2187.7 ppb	23:46:06
3	Tl 190.801†	4126.0	4164.0	1032.3	ug/L	1032.3 ppb	23:46:26
3	U 409.014†	-9074.6	-6286.8	-177.70	ug/L	-177.70 ppb	23:46:06
3	V 292.402†	142690.5	144081.7	810.85	ug/L	810.85 ppb	23:46:06
3	Zn 213.857†	143067.6	141964.1	1027.8	ug/L	1027.8 ppb	23:46:06
3	SiO2†	404916.9	403701.2	21913	ug/L	21913 ppb	23:46:43

Mean Data: 1201977920|925187|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037634.5	99.822	%	0.3199				0.32%
Sc Radial	4829.0	98.4	%	0.15				0.15%
Y 371.029	933591.0	105.55	%	0.282				0.27%
Y RADIAL	5875.4	104.0	%	0.08				0.08%
Ag 328.068†	160147.1	674.04	ug/L	0.366	674.04	ppb	0.366	0.05%
Al 396.153Radial†	67297.9	44420	ug/L	260.3	44420	ppb	260.3	0.59%
As 188.979†	4111.1	1316.2	ug/L	2.73	1316.2	ppb	2.73	0.21%
B 249.677†	37835.5	698.89	ug/L	2.261	698.89	ppb	2.261	0.32%
Ba 233.527†	372234.4	2397.4	ug/L	3.02	2397.4	ppb	3.02	0.13%
Be 313.107†	1449784.8	456.33	ug/L	0.736	456.33	ppb	0.736	0.16%
Ca 317.933Radial†	10754.9	19042	ug/L	51.7	19042	ppb	51.7	0.27%
Cd 226.502†	68459.3	586.00	ug/L	1.005	586.00	ppb	1.005	0.17%
Co 228.616†	25891.6	422.17	ug/L	1.391	422.17	ppb	1.391	0.33%
Cr 267.716†	46880.5	424.71	ug/L	0.733	424.71	ppb	0.733	0.17%
Cu 324.752†	198963.1	537.13	ug/L	0.589	537.13	ppb	0.589	0.11%
Fe 238.204 Radial†	9390.9	113550	ug/L	585.5	113550	ppb	585.5	0.52%
K 766.490 Radial†	67117.6	12216	ug/L	42.0	12216	ppb	42.0	0.34%

Mg 279.077 IEC†	354.1	15754	ug/L	121.5	15754	ppb	121.5	0.77%
Mn 257.610†	2054276.9	1956.3	ug/L	2.75	1956.3	ppb	2.75	0.14%
Mo 202.031†	7806.1	422.30	ug/L	1.166	422.30	ppb	1.166	0.28%
Na 589.592 Radial†	10291.5	2886.8	ug/L	36.89	2886.8	ppb	36.89	1.28%
Ni 231.604†	26429.7	517.58	ug/L	1.876	517.58	ppb	1.876	0.36%
P 214.914†	8942.5	3845.7	ug/L	20.84	3845.7	ppb	20.84	0.54%
Pb 220.353†	8987.8	844.95	ug/L	3.449	844.95	ppb	3.449	0.41%
S 181.975 Axial†	985.8	1053.4	ug/L	12.16	1053.4	ppb	12.16	1.15%
Sb 206.836†	1788.7	476.30	ug/L	2.495	476.30	ppb	2.495	0.52%
Se 196.026†	1397.9	1032.6	ug/L	8.06	1032.6	ppb	8.06	0.78%
Si 251.611†	405112.6	10276	ug/L	16.5	10276	ppb	16.5	0.16%
Sn 189.927†	4050.8	539.27	ug/L	2.840	539.27	ppb	2.840	0.53%
Sr 421.552†	158163.5	829.62	ug/L	4.523	829.62	ppb	4.523	0.55%
Ti 334.940†	1586239.3	2188.8	ug/L	1.88	2188.8	ppb	1.88	0.09%
Tl 190.801†	4167.4	1033.2	ug/L	1.83	1033.2	ppb	1.83	0.18%
U 409.014†	-6326.8	-178.67	ug/L	1.720	-178.67	ppb	1.720	0.96%
V 292.402†	144319.7	812.29	ug/L	1.370	812.29	ppb	1.370	0.17%
Zn 213.857†	142058.3	1028.6	ug/L	1.72	1028.6	ppb	1.72	0.17%
SiO2†	405868.1	22031	ug/L	135.7	22031	ppb	135.7	0.62%

Sequence No.: 20
Sample ID: 1201977916|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 12/5/2009 00:16:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977916|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4590.5	4590.5	93.5	%			00:19:13
1	Y RADIAL	5824.9	5824.9	103.1	%			00:19:13
1	Al 396.153Radial†	100428.0	107455.4	70953	ug/L	70953	ppb	00:18:53
1	Ca 317.933Radial†	358445.9	383353.8	678740	ug/L	678740	ppb	00:18:53
1	Fe 238.204 Radial†	12344.1	13191.5	159490	ug/L	159490	ppb	00:19:13
1	K 766.490 Radial†	42637.7	43033.2	7731.9	ug/L	7731.9	ppb	00:18:53
1	Mg 279.077 IEC†	1328.6	1418.5	63333	ug/L	63333	ppb	00:19:13
1	Na 589.592 Radial†	12018.1	14133.8	3964.5	ug/L	3964.5	ppb	00:18:53
1	Sr 421.552†	271621.5	290517.0	1517.9	ug/L	1517.9	ppb	00:18:53
1	Sc 361.383	950241.8	950241.8	91.415	%			00:20:12
1	Y 371.029	882132.0	882132.0	99.736	%			00:20:12
1	Ag 328.068†	-9483.5	-10848.2	-1.0063	ug/L	-1.0063	ppb	00:20:17
1	As 188.979†	14.5	52.4	100.38	ug/L	100.38	ppb	00:20:37
1	B 249.677†	10412.0	11855.9	202.61	ug/L	202.61	ppb	00:20:17
1	Ba 233.527†	1467932.3	1605792.7	10323	ug/L	10323	ppb	00:20:12
1	Be 313.107†	-42484.1	-41600.1	0.6602	ug/L	0.6602	ppb	00:20:17
1	Cd 226.502†	1543.3	1923.9	4.4826	ug/L	4.4826	ppb	00:20:37
1	Co 228.616†	6355.0	7038.1	102.81	ug/L	102.81	ppb	00:20:37
1	Cr 267.716†	217937.7	238317.5	2144.4	ug/L	2144.4	ppb	00:20:17
1	Cu 324.752†	5850312.1	6390804.7	17075	ug/L	17075	ppb	00:20:12
1	Mn 257.610†	3895949.1	4261259.2	4049.9	ug/L	4049.9	ppb	00:20:12
1	Mo 202.031†	753.0	794.5	53.475	ug/L	53.475	ppb	00:20:37
1	Ni 231.604†	264982.4	289736.2	5676.9	ug/L	5676.9	ppb	00:20:17
1	P 214.914†	13747.7	14773.7	3766.0	ug/L	3766.0	ppb	00:20:17
1	Pb 220.353†	3756.6	4185.0	382.47	ug/L	382.47	ppb	00:20:37
1	S 181.975 Axial†	10979.7	11950.7	12862	ug/L	12862	ppb	00:20:37
1	Sb 206.836†	406.3	409.8	38.606	ug/L	38.606	ppb	00:20:37
1	Se 196.026†	-1071.0	-1150.2	69.263	ug/L	69.263	ppb	00:20:37
1	Si 251.611†	1283937.0	1403959.9	35652	ug/L	35652	ppb	00:20:12
1	Sn 189.927†	-70.6	-72.9	62.980	ug/L	62.980	ppb	00:20:37
1	Ti 334.940†	4595107.5	5027915.9	6969.6	ug/L	6969.6	ppb	00:20:12
1	Tl 190.801†	-337.7	-325.1	-1.0457	ug/L	-1.0457	ppb	00:20:37
1	U 409.014†	-5337.6	-3064.9	-103.44	ug/L	-103.44	ppb	00:20:17
1	V 292.402†	43812.4	49535.5	252.71	ug/L	252.71	ppb	00:20:17
1	Zn 213.857†	213939.3	233145.7	1639.1	ug/L	1639.1	ppb	00:20:17
1	SiO2†	1279322.6	1398870.7	76021	ug/L	76021	ppb	00:21:49
2	Sc Radial	4556.5	4556.5	92.8	%			00:19:38
2	Y RADIAL	5797.3	5797.3	102.7	%			00:19:38
2	Al 396.153Radial†	100005.4	107800.5	71181	ug/L	71181	ppb	00:19:18
2	Ca 317.933Radial†	357275.1	384949.2	681560	ug/L	681560	ppb	00:19:18
2	Fe 238.204 Radial†	12342.6	13288.2	160660	ug/L	160660	ppb	00:19:38
2	K 766.490 Radial†	42417.1	43135.3	7750.3	ug/L	7750.3	ppb	00:19:18
2	Mg 279.077 IEC†	1323.5	1423.5	63558	ug/L	63558	ppb	00:19:38
2	Na 589.592 Radial†	11848.1	14046.4	3940.0	ug/L	3940.0	ppb	00:19:18
2	Sr 421.552†	269709.9	290622.3	1518.4	ug/L	1518.4	ppb	00:19:18
2	Sc 361.383	939611.1	939611.1	90.392	%			00:20:45
2	Y 371.029	870922.9	870922.9	98.469	%			00:20:45
2	Ag 328.068†	-9610.7	-11106.3	-1.6775	ug/L	-1.6775	ppb	00:20:50
2	As 188.979†	15.9	54.2	101.06	ug/L	101.06	ppb	00:21:10
2	B 249.677†	10374.5	11943.3	204.10	ug/L	204.10	ppb	00:20:50
2	Ba 233.527†	1450855.5	1605068.5	10318	ug/L	10318	ppb	00:20:45
2	Be 313.107†	-42407.3	-42040.9	0.5108	ug/L	0.5108	ppb	00:20:50
2	Cd 226.502†	1513.8	1910.3	4.2888	ug/L	4.2888	ppb	00:21:10
2	Co 228.616†	6384.7	7149.7	104.64	ug/L	104.64	ppb	00:21:10
2	Cr 267.716†	217830.6	240896.2	2167.6	ug/L	2167.6	ppb	00:20:50
2	Cu 324.752†	5773489.1	6378221.9	17041	ug/L	17041	ppb	00:20:45
2	Mn 257.610†	3851792.9	4260627.4	4049.4	ug/L	4049.4	ppb	00:20:45
2	Mo 202.031†	760.2	811.8	54.477	ug/L	54.477	ppb	00:21:10
2	Ni 231.604†	265017.5	293054.6	5741.9	ug/L	5741.9	ppb	00:20:50

2	P 214.914†	13784.2	14984.2	3864.7	ug/L	3864.7 ppb	00:20:50
2	Pb 220.353†	3795.5	4274.5	390.86	ug/L	390.86 ppb	00:21:10
2	S 181.975 Axial†	10998.6	12107.5	13031	ug/L	13031 ppb	00:21:10
2	Sb 206.836†	399.8	407.7	37.531	ug/L	37.531 ppb	00:21:10
2	Se 196.026†	-1067.2	-1159.2	69.527	ug/L	69.527 ppb	00:21:10
2	Si 251.611†	1269121.4	1403460.0	35640	ug/L	35640 ppb	00:20:45
2	Sn 189.927†	-76.2	-79.9	62.361	ug/L	62.361 ppb	00:21:10
2	Ti 334.940†	4539718.2	5023510.1	6963.6	ug/L	6963.6 ppb	00:20:45
2	Tl 190.801†	-340.5	-332.4	-2.8682	ug/L	-2.8682 ppb	00:21:10
2	U 409.014†	-5601.9	-3423.4	-112.90	ug/L	-112.90 ppb	00:20:50
2	V 292.402†	43855.3	50125.2	255.91	ug/L	255.91 ppb	00:20:50
2	Zn 213.857†	214429.7	236336.1	1662.1	ug/L	1662.1 ppb	00:20:50
2	SiO2†	1276544.8	1411631.0	76715	ug/L	76715 ppb	00:21:55
3	Sc Radial	4558.6	4558.6	92.8	%		00:20:03
3	Y RADIAL	5783.0	5783.0	102.4	%		00:20:03
3	Al 396.153Radial†	100284.8	108053.4	71348	ug/L	71348 ppb	00:19:43
3	Ca 317.933Radial†	357545.7	385069.0	681780	ug/L	681780 ppb	00:19:43
3	Fe 238.204 Radial†	12339.8	13279.4	160550	ug/L	160550 ppb	00:20:03
3	K 766.490 Radial†	42392.8	43088.7	7742.0	ug/L	7742.0 ppb	00:19:43
3	Mg 279.077 IEC†	1327.3	1427.1	63717	ug/L	63717 ppb	00:20:03
3	Na 589.592 Radial†	11866.9	14060.9	3944.1	ug/L	3944.1 ppb	00:19:43
3	Sr 421.552†	269818.0	290609.1	1518.3	ug/L	1518.3 ppb	00:19:43
3	Sc 361.383	947624.1	947624.1	91.163	%		00:21:17
3	Y 371.029	878882.9	878882.9	99.369	%		00:21:17
3	Ag 328.068†	-9448.6	-10838.5	-0.6707	ug/L	-0.6707 ppb	00:21:23
3	As 188.979†	13.5	51.5	100.15	ug/L	100.15 ppb	00:21:43
3	B 249.677†	10338.0	11806.3	201.53	ug/L	201.53 ppb	00:21:23
3	Ba 233.527†	1458980.8	1600409.3	10288	ug/L	10288 ppb	00:21:17
3	Be 313.107†	-42514.8	-41762.1	0.5910	ug/L	0.5910 ppb	00:21:23
3	Cd 226.502†	1518.7	1901.6	4.1685	ug/L	4.1685 ppb	00:21:43
3	Co 228.616†	6295.0	6991.5	102.04	ug/L	102.04 ppb	00:21:43
3	Cr 267.716†	216731.6	237653.0	2138.5	ug/L	2138.5 ppb	00:21:23
3	Cu 324.752†	5820891.2	6376210.3	17036	ug/L	17036 ppb	00:21:17
3	Mn 257.610†	3874540.4	4249547.9	4038.9	ug/L	4038.9 ppb	00:21:17
3	Mo 202.031†	748.3	791.6	53.397	ug/L	53.397 ppb	00:21:43
3	Ni 231.604†	263293.7	288684.5	5656.3	ug/L	5656.3 ppb	00:21:23
3	P 214.914†	13533.4	14580.2	3684.9	ug/L	3684.9 ppb	00:21:23
3	Pb 220.353†	3764.5	4204.9	384.38	ug/L	384.38 ppb	00:21:43
3	S 181.975 Axial†	10834.6	11824.8	12726	ug/L	12726 ppb	00:21:43
3	Sb 206.836†	374.5	376.2	29.877	ug/L	29.877 ppb	00:21:43
3	Se 196.026†	-1066.4	-1148.4	73.939	ug/L	73.939 ppb	00:21:43
3	Si 251.611†	1278234.7	1401584.6	35592	ug/L	35592 ppb	00:21:17
3	Sn 189.927†	-92.4	-97.0	60.123	ug/L	60.123 ppb	00:21:43
3	Ti 334.940†	4576154.0	5021010.5	6960.2	ug/L	6960.2 ppb	00:21:17
3	Tl 190.801†	-318.1	-304.6	3.7886	ug/L	3.7886 ppb	00:21:43
3	U 409.014†	-5521.5	-3282.7	-109.20	ug/L	-109.20 ppb	00:21:23
3	V 292.402†	43650.6	49490.5	252.30	ug/L	252.30 ppb	00:21:23
3	Zn 213.857†	212321.5	232017.6	1630.9	ug/L	1630.9 ppb	00:21:23
3	SiO2†	1285364.7	1409364.3	76592	ug/L	76592 ppb	00:22:01

Mean Data: 1201977916|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	945825.7	90.990	%	0.5328				0.59%
Sc Radial	4568.5	93.1	%	0.39				0.42%
Y 371.029	877312.6	99.191	%	0.6520				0.66%
Y RADIAL	5801.7	102.7	%	0.38				0.37%
Ag 328.068†	-10931.0	-1.1182	ug/L	0.51264	-1.1182	ppb	0.51264	45.85%
Al 396.153Radial†	107769.8	71160	ug/L	198.2	71160	ppb	198.2	0.28%
As 188.979†	52.7	100.53	ug/L	0.472	100.53	ppb	0.472	0.47%
B 249.677†	11868.5	202.75	ug/L	1.290	202.75	ppb	1.290	0.64%
Ba 233.527†	1603756.8	10310	ug/L	18.8	10310	ppb	18.8	0.18%
Be 313.107†	-41801.0	0.5873	ug/L	0.07476	0.5873	ppb	0.07476	12.73%
Ca 317.933Radial†	384457.3	680690	ug/L	1695.4	680690	ppb	1695.4	0.25%
Cd 226.502†	1912.0	4.3133	ug/L	0.15849	4.3133	ppb	0.15849	3.67%
Co 228.616†	7059.8	103.16	ug/L	1.335	103.16	ppb	1.335	1.29%
Cr 267.716†	238955.6	2150.2	ug/L	15.40	2150.2	ppb	15.40	0.72%
Cu 324.752†	6381745.6	17051	ug/L	21.1	17051	ppb	21.1	0.12%
Fe 238.204 Radial†	13253.0	160230	ug/L	646.6	160230	ppb	646.6	0.40%
K 766.490 Radial†	43085.7	7741.4	ug/L	9.21	7741.4	ppb	9.21	0.12%

Mg 279.077 IEC†	1423.0	63536	ug/L	193.0	63536	ppb	193.0	0.30%
Mn 257.610†	4257144.8	4046.1	ug/L	6.21	4046.1	ppb	6.21	0.15%
Mo 202.031†	799.3	53.783	ug/L	0.6023	53.783	ppb	0.6023	1.12%
Na 589.592 Radial†	14080.4	3949.5	ug/L	13.14	3949.5	ppb	13.14	0.33%
Ni 231.604†	290491.8	5691.7	ug/L	44.69	5691.7	ppb	44.69	0.79%
P 214.914†	14779.3	3771.9	ug/L	90.02	3771.9	ppb	90.02	2.39%
Pb 220.353†	4221.5	385.90	ug/L	4.397	385.90	ppb	4.397	1.14%
S 181.975 Axial†	11961.0	12873	ug/L	152.6	12873	ppb	152.6	1.19%
Sb 206.836†	397.9	35.338	ug/L	4.7596	35.338	ppb	4.7596	13.47%
Se 196.026†	-1152.6	70.910	ug/L	2.6267	70.910	ppb	2.6267	3.70%
Si 251.611†	1403001.5	35628	ug/L	31.8	35628	ppb	31.8	0.09%
Sn 189.927†	-83.3	61.821	ug/L	1.5032	61.821	ppb	1.5032	2.43%
Sr 421.552†	290582.8	1518.2	ug/L	0.29	1518.2	ppb	0.29	0.02%
Ti 334.940†	5024145.5	6964.5	ug/L	4.74	6964.5	ppb	4.74	0.07%
Tl 190.801†	-320.7	-0.0418	ug/L	3.44005	-0.0418	ppb	3.44005	>999.9%
U 409.014†	-3257.0	-108.51	ug/L	4.768	-108.51	ppb	4.768	4.39%
V 292.402†	49717.1	253.64	ug/L	1.975	253.64	ppb	1.975	0.78%
Zn 213.857†	233833.1	1644.0	ug/L	16.16	1644.0	ppb	16.16	0.98%
SiO2†	1406622.0	76443	ug/L	370.0	76443	ppb	370.0	0.48%

Sequence No.: 21
Sample ID: 1201977918|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 12/5/2009 00:24:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977918|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4464.8	4464.8	90.9	%			00:26:25
1	Y RADIAL	5460.2	5460.2	96.69	%			00:26:25
1	Al 396.153Radial†	106279.3	116914.3	77178	ug/L	77178	ppb	00:26:05
1	Ca 317.933Radial†	407525.2	448119.1	793410	ug/L	793410	ppb	00:26:05
1	Fe 238.204 Radial†	7801.4	8567.8	103600	ug/L	103600	ppb	00:26:25
1	K 766.490 Radial†	70476.6	74930.5	13556	ug/L	13556	ppb	00:26:05
1	Mg 279.077 IEC†	923.9	1013.5	45271	ug/L	45271	ppb	00:26:25
1	Na 589.592 Radial†	25706.7	29548.5	8288.3	ug/L	8288.3	ppb	00:26:05
1	Sr 421.552†	344657.0	379011.0	1981.1	ug/L	1981.1	ppb	00:26:05
1	Sc 361.383	953097.7	953097.7	91.690	%			00:27:24
1	Y 371.029	846374.6	846374.6	95.693	%			00:27:24
1	Ag 328.068†	120887.9	131370.7	544.56	ug/L	544.56	ppb	00:27:24
1	As 188.979†	1636.9	1821.8	621.32	ug/L	621.32	ppb	00:27:29
1	B 249.677†	41748.5	45998.5	854.27	ug/L	854.27	ppb	00:27:24
1	Ba 233.527†	1549111.5	1689518.0	10859	ug/L	10859	ppb	00:27:24
1	Be 313.107†	1497817.9	1638449.3	519.84	ug/L	519.84	ppb	00:27:24
1	Cd 226.502†	50662.8	55490.4	474.06	ug/L	474.06	ppb	00:27:29
1	Co 228.616†	28312.1	30964.6	504.78	ug/L	504.78	ppb	00:27:29
1	Cr 267.716†	76896.7	83778.6	755.65	ug/L	755.65	ppb	00:27:24
1	Cu 324.752†	2100185.7	2281602.4	6098.3	ug/L	6098.3	ppb	00:27:24
1	Mn 257.610†	2059669.6	2245774.8	2136.1	ug/L	2136.1	ppb	00:27:24
1	Mo 202.031†	9228.0	10035.2	539.89	ug/L	539.89	ppb	00:27:29
1	Ni 231.604†	35927.4	39051.8	764.84	ug/L	764.84	ppb	00:27:29
1	P 214.914†	6526.6	6853.0	2037.9	ug/L	2037.9	ppb	00:27:29
1	Pb 220.353†	9097.1	9997.2	943.83	ug/L	943.83	ppb	00:27:29
1	S 181.975 Axial†	16967.4	18445.2	19858	ug/L	19858	ppb	00:27:29
1	Sb 206.836†	1852.4	1985.6	514.73	ug/L	514.73	ppb	00:27:29
1	Se 196.026†	414.8	473.8	587.11	ug/L	587.11	ppb	00:27:29
1	Si 251.611†	1128821.6	1230576.8	31237	ug/L	31237	ppb	00:27:24
1	Sn 189.927†	3637.7	3971.7	609.07	ug/L	609.07	ppb	00:27:29
1	Ti 334.940†	3038225.0	3314860.5	4613.0	ug/L	4613.0	ppb	00:27:24
1	Tl 190.801†	1652.8	1846.9	492.03	ug/L	492.03	ppb	00:27:29
1	U 409.014†	13146.9	17112.5	427.94	ug/L	427.94	ppb	00:27:24
1	V 292.402†	115004.2	127036.4	715.64	ug/L	715.64	ppb	00:27:24
1	Zn 213.857†	325015.8	353588.6	2574.6	ug/L	2574.6	ppb	00:27:24
1	SiO2†	1118034.0	1218770.1	66206	ug/L	66206	ppb	00:28:00
2	Sc Radial	4503.0	4503.0	91.7	%			00:26:50
2	Y RADIAL	5486.6	5486.6	97.16	%			00:26:50
2	Al 396.153Radial†	105592.8	115172.8	76028	ug/L	76028	ppb	00:26:30
2	Ca 317.933Radial†	404471.8	440982.4	780770	ug/L	780770	ppb	00:26:30
2	Fe 238.204 Radial†	7846.9	8544.6	103320	ug/L	103320	ppb	00:26:50
2	K 766.490 Radial†	69703.8	73429.3	13284	ug/L	13284	ppb	00:26:30
2	Mg 279.077 IEC†	925.3	1006.4	44951	ug/L	44951	ppb	00:26:50
2	Na 589.592 Radial†	25424.3	29000.3	8134.6	ug/L	8134.6	ppb	00:26:30
2	Sr 421.552†	341814.4	372691.6	1948.1	ug/L	1948.1	ppb	00:26:30
2	Sc 361.383	946745.0	946745.0	91.078	%			00:27:37
2	Y 371.029	840575.1	840575.1	95.037	%			00:27:37
2	Ag 328.068†	120295.2	131604.7	545.58	ug/L	545.58	ppb	00:27:37
2	As 188.979†	1629.5	1825.7	622.57	ug/L	622.57	ppb	00:27:42
2	B 249.677†	41310.5	45823.1	850.99	ug/L	850.99	ppb	00:27:37
2	Ba 233.527†	1540875.1	1691811.5	10874	ug/L	10874	ppb	00:27:37
2	Be 313.107†	1489136.4	1639878.6	520.31	ug/L	520.31	ppb	00:27:37
2	Cd 226.502†	50394.0	55566.0	474.74	ug/L	474.74	ppb	00:27:42
2	Co 228.616†	28190.9	31038.6	505.99	ug/L	505.99	ppb	00:27:42
2	Cr 267.716†	76366.4	83759.1	755.47	ug/L	755.47	ppb	00:27:37
2	Cu 324.752†	2093116.5	2289210.1	6118.6	ug/L	6118.6	ppb	00:27:37
2	Mn 257.610†	2049338.6	2249504.8	2139.6	ug/L	2139.6	ppb	00:27:37
2	Mo 202.031†	9166.1	10034.8	539.85	ug/L	539.85	ppb	00:27:42
2	Ni 231.604†	35803.2	39178.3	767.32	ug/L	767.32	ppb	00:27:42

2	P 214.914†	6475.7	6844.9	2030.8 ug/L	2030.8 ppb	00:27:42
2	Pb 220.353†	9064.2	10027.7	946.44 ug/L	946.44 ppb	00:27:42
2	S 181.975 Axial†	16834.3	18423.2	19834 ug/L	19834 ppb	00:27:42
2	Sb 206.836†	1891.1	2041.7	529.43 ug/L	529.43 ppb	00:27:42
2	Se 196.026†	431.3	494.9	595.44 ug/L	595.44 ppb	00:27:42
2	Si 251.611†	1122746.6	1232167.6	31278 ug/L	31278 ppb	00:27:37
2	Sn 189.927†	3575.6	3930.2	602.27 ug/L	602.27 ppb	00:27:42
2	Ti 334.940†	3024348.6	3321859.1	4622.0 ug/L	4622.0 ppb	00:27:37
2	Tl 190.801†	1629.1	1832.9	488.72 ug/L	488.72 ppb	00:27:42
2	U 409.014†	13089.6	17145.8	428.84 ug/L	428.84 ppb	00:27:37
2	V 292.402†	114300.5	127105.3	716.06 ug/L	716.06 ppb	00:27:37
2	Zn 213.857†	323290.3	354072.7	2578.2 ug/L	2578.2 ppb	00:27:37
2	SiO2†	1118390.8	1227343.7	66673 ug/L	66673 ppb	00:28:06
3	Sc Radial	4466.9	4466.9	91.0 %		00:27:16
3	Y RADIAL	5438.7	5438.7	96.31 %		00:27:16
3	Al 396.153Radial†	107270.4	117947.4	77860 ug/L	77860 ppb	00:26:56
3	Ca 317.933Radial†	410977.9	451698.2	799750 ug/L	799750 ppb	00:26:56
3	Fe 238.204 Radial†	7814.0	8577.6	103720 ug/L	103720 ppb	00:27:16
3	K 766.490 Radial†	70941.9	75404.5	13642 ug/L	13642 ppb	00:26:56
3	Mg 279.077 IEC†	917.3	1005.7	44922 ug/L	44922 ppb	00:27:16
3	Na 589.592 Radial†	25785.8	29621.8	8308.9 ug/L	8308.9 ppb	00:26:56
3	Sr 421.552†	346893.0	381286.1	1993.0 ug/L	1993.0 ppb	00:26:56
3	Sc 361.383	946581.0	946581.0	91.063 %		00:27:49
3	Y 371.029	840367.3	840367.3	95.014 %		00:27:49
3	Ag 328.068†	119955.3	131254.3	544.04 ug/L	544.04 ppb	00:27:49
3	As 188.979†	1659.3	1858.8	632.87 ug/L	632.87 ppb	00:27:54
3	B 249.677†	41235.6	45748.8	849.52 ug/L	849.52 ppb	00:27:49
3	Ba 233.527†	1538320.5	1689299.3	10858 ug/L	10858 ppb	00:27:49
3	Be 313.107†	1487353.6	1638204.1	519.77 ug/L	519.77 ppb	00:27:49
3	Cd 226.502†	50772.6	55991.4	478.42 ug/L	478.42 ppb	00:27:54
3	Co 228.616†	28439.3	31316.8	510.59 ug/L	510.59 ppb	00:27:54
3	Cr 267.716†	76398.3	83808.7	755.93 ug/L	755.93 ppb	00:27:49
3	Cu 324.752†	2087345.3	2283270.7	6102.8 ug/L	6102.8 ppb	00:27:49
3	Mn 257.610†	2045047.6	2245182.5	2135.6 ug/L	2135.6 ppb	00:27:49
3	Mo 202.031†	9256.2	10135.4	545.21 ug/L	545.21 ppb	00:27:54
3	Ni 231.604†	36192.1	39612.2	775.82 ug/L	775.82 ppb	00:27:54
3	P 214.914†	6470.5	6840.5	2031.9 ug/L	2031.9 ppb	00:27:54
3	Pb 220.353†	9082.3	10049.2	948.87 ug/L	948.87 ppb	00:27:54
3	S 181.975 Axial†	17034.3	18646.1	20074 ug/L	20074 ppb	00:27:54
3	Sb 206.836†	1879.4	2029.3	526.46 ug/L	526.46 ppb	00:27:54
3	Se 196.026†	471.0	538.6	616.24 ug/L	616.24 ppb	00:27:54
3	Si 251.611†	1120643.4	1230071.5	31224 ug/L	31224 ppb	00:27:49
3	Sn 189.927†	3668.9	4033.3	617.88 ug/L	617.88 ppb	00:27:54
3	Ti 334.940†	3019060.3	3316627.1	4615.8 ug/L	4615.8 ppb	00:27:49
3	Tl 190.801†	1645.8	1851.6	493.19 ug/L	493.19 ppb	00:27:54
3	U 409.014†	12938.6	16982.5	424.56 ug/L	424.56 ppb	00:27:49
3	V 292.402†	114126.6	126936.1	715.11 ug/L	715.11 ppb	00:27:49
3	Zn 213.857†	322490.9	353256.3	2572.1 ug/L	2572.1 ppb	00:27:49
3	SiO2†	1113930.5	1222658.3	66417 ug/L	66417 ppb	00:28:12

Mean Data: 1201977918|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	948807.9	91.277	%	0.3575				0.39%
Sc Radial	4478.3	91.2	%	0.44				0.48%
Y 371.029	842439.0	95.248	%	0.3855				0.40%
Y RADIAL	5461.8	96.72	%	0.425				0.44%
Ag 328.068†	131409.9	544.73	ug/L	0.784	544.73	ppb	0.784	0.14%
Al 396.153Radial†	116678.1	77022	ug/L	925.8	77022	ppb	925.8	1.20%
As 188.979†	1835.4	625.59	ug/L	6.339	625.59	ppb	6.339	1.01%
B 249.677†	45856.8	851.59	ug/L	2.432	851.59	ppb	2.432	0.29%
Ba 233.527†	1690209.6	10864	ug/L	8.9	10864	ppb	8.9	0.08%
Be 313.107†	1638844.0	519.97	ug/L	0.291	519.97	ppb	0.291	0.06%
Ca 317.933Radial†	446933.2	791310	ug/L	9659.0	791310	ppb	9659.0	1.22%
Cd 226.502†	55682.6	475.74	ug/L	2.346	475.74	ppb	2.346	0.49%
Co 228.616†	31106.7	507.12	ug/L	3.064	507.12	ppb	3.064	0.60%
Cr 267.716†	83782.1	755.68	ug/L	0.228	755.68	ppb	0.228	0.03%
Cu 324.752†	2284694.4	6106.6	ug/L	10.67	6106.6	ppb	10.67	0.17%
Fe 238.204 Radial†	8563.3	103550	ug/L	204.9	103550	ppb	204.9	0.20%
K 766.490 Radial†	74588.1	13494	ug/L	187.0	13494	ppb	187.0	1.39%

Mg 279.077 IEC†	1008.5	45048	ug/L	193.7	45048	ppb	193.7	0.43%
Mn 257.610†	2246820.7	2137.1	ug/L	2.20	2137.1	ppb	2.20	0.10%
Mo 202.031†	10068.5	541.65	ug/L	3.087	541.65	ppb	3.087	0.57%
Na 589.592 Radial†	29390.2	8243.9	ug/L	95.26	8243.9	ppb	95.26	1.16%
Ni 231.604†	39280.8	769.33	ug/L	5.757	769.33	ppb	5.757	0.75%
P 214.914†	6846.1	2033.5	ug/L	3.85	2033.5	ppb	3.85	0.19%
Pb 220.353†	10024.7	946.38	ug/L	2.518	946.38	ppb	2.518	0.27%
S 181.975 Axial†	18504.8	19922	ug/L	132.2	19922	ppb	132.2	0.66%
Sb 206.836†	2018.9	523.54	ug/L	7.774	523.54	ppb	7.774	1.48%
Se 196.026†	502.4	599.60	ug/L	15.002	599.60	ppb	15.002	2.50%
Si 251.611†	1230938.6	31246	ug/L	27.9	31246	ppb	27.9	0.09%
Sn 189.927†	3978.4	609.74	ug/L	7.827	609.74	ppb	7.827	1.28%
Sr 421.552†	377662.9	1974.1	ug/L	23.27	1974.1	ppb	23.27	1.18%
Ti 334.940†	3317782.2	4616.9	ug/L	4.61	4616.9	ppb	4.61	0.10%
Tl 190.801†	1843.8	491.31	ug/L	2.321	491.31	ppb	2.321	0.47%
U 409.014†	17080.2	427.12	ug/L	2.254	427.12	ppb	2.254	0.53%
V 292.402†	127025.9	715.61	ug/L	0.478	715.61	ppb	0.478	0.07%
Zn 213.857†	353639.2	2575.0	ug/L	3.05	2575.0	ppb	3.05	0.12%
SiO2†	1222924.0	66432	ug/L	233.5	66432	ppb	233.5	0.35%

Sequence No.: 22
Sample ID: 1201977919|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 12/5/2009 00:30:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977919|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4260.3	4260.3	86.8	%			00:32:37
1	Y RADIAL	5277.4	5277.4	93.45	%			00:32:37
1	Al 396.153Radial†	123547.7	142425.5	94023	ug/L	94023	ppb	00:32:17
1	Ca 317.933Radial†	495371.9	570870.0	1010700	ug/L	1010700	ppb	00:32:17
1	Fe 238.204 Radial†	7803.8	8982.5	108620	ug/L	108620	ppb	00:32:37
1	K 766.490 Radial†	72184.9	80619.4	14570	ug/L	14570	ppb	00:32:17
1	Mg 279.077 IEC†	1082.2	1244.7	55611	ug/L	55611	ppb	00:32:37
1	Na 589.592 Radial†	27569.4	33052.2	9271.1	ug/L	9271.1	ppb	00:32:17
1	Sr 421.552†	444331.2	512073.8	2677.2	ug/L	2677.2	ppb	00:32:17
1	Sc 361.383	938642.8	938642.8	90.299	%			00:33:36
1	Y 371.029	843534.4	843534.4	95.372	%			00:33:36
1	Ag 328.068†	120774.0	133275.0	550.53	ug/L	550.53	ppb	00:33:36
1	As 188.979†	1713.5	1934.2	655.86	ug/L	655.86	ppb	00:33:41
1	B 249.677†	35263.9	39518.5	731.12	ug/L	731.12	ppb	00:33:36
1	Ba 233.527†	1101335.7	1219654.8	7841.0	ug/L	7841.0	ppb	00:33:36
1	Be 313.107†	1475833.1	1639259.3	519.80	ug/L	519.80	ppb	00:33:36
1	Cd 226.502†	49997.6	55604.6	474.54	ug/L	474.54	ppb	00:33:41
1	Co 228.616†	28356.6	31489.3	512.37	ug/L	512.37	ppb	00:33:41
1	Cr 267.716†	67800.4	74996.6	676.85	ug/L	676.85	ppb	00:33:36
1	Cu 324.752†	392890.7	426162.4	1143.6	ug/L	1143.6	ppb	00:33:36
1	Mn 257.610†	2106646.8	2332392.1	2218.4	ug/L	2218.4	ppb	00:33:36
1	Mo 202.031†	9267.3	10233.7	550.78	ug/L	550.78	ppb	00:33:41
1	Ni 231.604†	34555.8	38136.2	746.90	ug/L	746.90	ppb	00:33:41
1	P 214.914†	5484.8	5808.9	2367.1	ug/L	2367.1	ppb	00:33:41
1	Pb 220.353†	8922.5	9956.6	947.28	ug/L	947.28	ppb	00:33:41
1	S 181.975 Axial†	19800.5	21867.6	23542	ug/L	23542	ppb	00:33:41
1	Sb 206.836†	1751.7	1905.3	495.44	ug/L	495.44	ppb	00:33:41
1	Se 196.026†	440.8	509.5	620.99	ug/L	620.99	ppb	00:33:41
1	Si 251.611†	1024704.1	1134232.8	28790	ug/L	28790	ppb	00:33:36
1	Sn 189.927†	3468.3	3845.2	614.98	ug/L	614.98	ppb	00:33:41
1	Ti 334.940†	2894671.7	3206913.5	4475.5	ug/L	4475.5	ppb	00:33:36
1	Tl 190.801†	1604.2	1820.8	485.49	ug/L	485.49	ppb	00:33:41
1	U 409.014†	11000.5	14956.3	371.72	ug/L	371.72	ppb	00:33:36
1	V 292.402†	111872.6	125499.8	706.55	ug/L	706.55	ppb	00:33:36
1	Zn 213.857†	318148.6	351442.5	2564.1	ug/L	2564.1	ppb	00:33:36
1	SiO2†	1030194.2	1140271.4	61939	ug/L	61939	ppb	00:34:12
2	Sc Radial	4462.1	4462.1	90.9	%			00:33:02
2	Y RADIAL	5516.0	5516.0	97.68	%			00:33:02
2	Al 396.153Radial†	121144.0	133340.3	88024	ug/L	88024	ppb	00:32:42
2	Ca 317.933Radial†	486710.9	535517.2	948150	ug/L	948150	ppb	00:32:42
2	Fe 238.204 Radial†	7677.1	8436.2	102010	ug/L	102010	ppb	00:33:02
2	K 766.490 Radial†	70994.6	75546.8	13652	ug/L	13652	ppb	00:32:42
2	Mg 279.077 IEC†	1066.5	1171.0	52320	ug/L	52320	ppb	00:33:02
2	Na 589.592 Radial†	26945.5	30928.4	8675.4	ug/L	8675.4	ppb	00:32:42
2	Sr 421.552†	435746.3	479465.3	2506.7	ug/L	2506.7	ppb	00:32:42
2	Sc 361.383	942195.1	942195.1	90.641	%			00:33:49
2	Y 371.029	846148.9	846148.9	95.668	%			00:33:49
2	Ag 328.068†	121615.3	133698.9	551.03	ug/L	551.03	ppb	00:33:49
2	As 188.979†	1753.8	1971.5	666.55	ug/L	666.55	ppb	00:33:54
2	B 249.677†	35567.9	39706.7	735.54	ug/L	735.54	ppb	00:33:49
2	Ba 233.527†	1109026.1	1223540.9	7865.7	ug/L	7865.7	ppb	00:33:49
2	Be 313.107†	1485399.5	1643651.5	521.20	ug/L	521.20	ppb	00:33:49
2	Cd 226.502†	50581.9	56040.5	479.01	ug/L	479.01	ppb	00:33:54
2	Co 228.616†	28698.2	31747.9	516.71	ug/L	516.71	ppb	00:33:54
2	Cr 267.716†	68209.6	75165.0	678.25	ug/L	678.25	ppb	00:33:49
2	Cu 324.752†	396073.6	428033.5	1148.3	ug/L	1148.3	ppb	00:33:49
2	Mn 257.610†	2122061.3	2340602.5	2225.6	ug/L	2225.6	ppb	00:33:49
2	Mo 202.031†	9303.0	10234.4	550.35	ug/L	550.35	ppb	00:33:54
2	Ni 231.604†	35033.6	38519.2	754.40	ug/L	754.40	ppb	00:33:54

2	P 214.914†	5594.2	5906.7	2413.3 ug/L	2413.3 ppb	00:33:54
2	Pb 220.353†	9068.1	10080.0	958.06 ug/L	958.06 ppb	00:33:54
2	S 181.975 Axial†	20151.0	22171.7	23870 ug/L	23870 ppb	00:33:54
2	Sb 206.836†	1786.8	1936.7	503.67 ug/L	503.67 ppb	00:33:54
2	Se 196.026†	434.0	500.2	592.93 ug/L	592.93 ppb	00:33:54
2	Si 251.611†	1032098.9	1138112.7	28889 ug/L	28889 ppb	00:33:49
2	Sn 189.927†	3470.4	3833.1	606.79 ug/L	606.79 ppb	00:33:54
2	Ti 334.940†	2913703.3	3215824.3	4484.5 ug/L	4484.5 ppb	00:33:49
2	Tl 190.801†	1636.8	1850.0	492.52 ug/L	492.52 ppb	00:33:54
2	U 409.014†	11077.0	14994.7	373.54 ug/L	373.54 ppb	00:33:49
2	V 292.402†	112518.5	125745.4	708.88 ug/L	708.88 ppb	00:33:49
2	Zn 213.857†	320361.3	352555.3	2572.9 ug/L	2572.9 ppb	00:33:49
2	SiO2†	1029626.2	1135343.4	61672 ug/L	61672 ppb	00:34:18
3	Sc Radial	4501.3	4501.3	91.7 %		00:33:27
3	Y RADIAL	5535.9	5535.9	98.03 %		00:33:27
3	Al 396.153Radial†	118793.2	129616.0	85564 ug/L	85564 ppb	00:33:07
3	Ca 317.933Radial†	479215.8	522681.0	925420 ug/L	925420 ppb	00:33:07
3	Fe 238.204 Radial†	7698.5	8386.1	101400 ug/L	101400 ppb	00:33:27
3	K 766.490 Radial†	69798.4	73562.2	13292 ug/L	13292 ppb	00:33:07
3	Mg 279.077 IEC†	1067.4	1161.7	51904 ug/L	51904 ppb	00:33:27
3	Na 589.592 Radial†	26394.5	30069.4	8434.5 ug/L	8434.5 ppb	00:33:07
3	Sr 421.552†	426782.2	465514.9	2433.7 ug/L	2433.7 ppb	00:33:07
3	Sc 361.383	932249.4	932249.4	89.684 %		00:34:01
3	Y 371.029	837104.1	837104.1	94.645 %		00:34:01
3	Ag 328.068†	120056.3	133391.9	549.95 ug/L	549.95 ppb	00:34:01
3	As 188.979†	1739.3	1976.0	667.84 ug/L	667.84 ppb	00:34:06
3	B 249.677†	35173.7	39685.8	735.22 ug/L	735.22 ppb	00:34:01
3	Ba 233.527†	1095660.5	1221691.2	7853.8 ug/L	7853.8 ppb	00:34:01
3	Be 313.107†	1464536.0	1637871.3	519.39 ug/L	519.39 ppb	00:34:01
3	Cd 226.502†	50076.3	56072.1	479.34 ug/L	479.34 ppb	00:34:06
3	Co 228.616†	28402.3	31755.7	516.86 ug/L	516.86 ppb	00:34:06
3	Cr 267.716†	67310.4	74965.1	676.44 ug/L	676.44 ppb	00:34:01
3	Cu 324.752†	391304.0	427377.1	1146.5 ug/L	1146.5 ppb	00:34:01
3	Mn 257.610†	2096751.9	2337358.5	2222.5 ug/L	2222.5 ppb	00:34:01
3	Mo 202.031†	9267.2	10304.0	553.99 ug/L	553.99 ppb	00:34:06
3	Ni 231.604†	34586.1	38432.5	752.70 ug/L	752.70 ppb	00:34:06
3	P 214.914†	5543.2	5915.7	2417.4 ug/L	2417.4 ppb	00:34:06
3	Pb 220.353†	8961.7	10068.1	956.44 ug/L	956.44 ppb	00:34:06
3	S 181.975 Axial†	19856.6	22080.6	23773 ug/L	23773 ppb	00:34:06
3	Sb 206.836†	1784.0	1954.5	508.66 ug/L	508.66 ppb	00:34:06
3	Se 196.026†	472.7	548.4	612.14 ug/L	612.14 ppb	00:34:06
3	Si 251.611†	1020161.2	1136949.7	28859 ug/L	28859 ppb	00:34:01
3	Sn 189.927†	3470.2	3873.7	609.79 ug/L	609.79 ppb	00:34:06
3	Ti 334.940†	2881808.7	3214555.3	4481.6 ug/L	4481.6 ppb	00:34:01
3	Tl 190.801†	1609.3	1838.7	489.68 ug/L	489.68 ppb	00:34:06
3	U 409.014†	11010.6	15051.0	375.07 ug/L	375.07 ppb	00:34:01
3	V 292.402†	111151.8	125545.8	707.88 ug/L	707.88 ppb	00:34:01
3	Zn 213.857†	316441.1	351954.8	2568.6 ug/L	2568.6 ppb	00:34:01
3	SiO2†	1033339.1	1151602.0	62556 ug/L	62556 ppb	00:34:24

Mean Data: 1201977919|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	937695.8	90.208	%	0.4849				0.54%
Sc Radial	4407.9	89.8	%	2.63				2.93%
Y 371.029	842262.4	95.228	%	0.5263				0.55%
Y RADIAL	5443.1	96.39	%	2.547				2.64%
Ag 328.068†	133455.3	550.50	ug/L	0.542	550.50	ppb	0.542	0.10%
Al 396.153Radial†	135127.3	89204	ug/L	4350.9	89204	ppb	4350.9	4.88%
As 188.979†	1960.5	663.42	ug/L	6.575	663.42	ppb	6.575	0.99%
B 249.677†	39637.0	733.96	ug/L	2.467	733.96	ppb	2.467	0.34%
Ba 233.527†	1221629.0	7853.5	ug/L	12.36	7853.5	ppb	12.36	0.16%
Be 313.107†	1640260.7	520.13	ug/L	0.946	520.13	ppb	0.946	0.18%
Ca 317.933Radial†	543022.7	961440	ug/L	44185.1	961440	ppb	44185.1	4.60%
Cd 226.502†	55905.7	477.63	ug/L	2.681	477.63	ppb	2.681	0.56%
Co 228.616†	31664.3	515.31	ug/L	2.547	515.31	ppb	2.547	0.49%
Cr 267.716†	75042.2	677.18	ug/L	0.948	677.18	ppb	0.948	0.14%
Cu 324.752†	427191.0	1146.1	ug/L	2.35	1146.1	ppb	2.35	0.21%
Fe 238.204 Radial†	8601.6	104010	ug/L	3999.6	104010	ppb	3999.6	3.85%
K 766.490 Radial†	76576.2	13838	ug/L	659.1	13838	ppb	659.1	4.76%

Mg 279.077 IEC†	1192.5	53278	ug/L	2030.7	53278	ppb	2030.7	3.81%
Mn 257.610†	2336784.4	2222.2	ug/L	3.60	2222.2	ppb	3.60	0.16%
Mo 202.031†	10257.3	551.71	ug/L	1.993	551.71	ppb	1.993	0.36%
Na 589.592 Radial†	31350.0	8793.7	ug/L	430.68	8793.7	ppb	430.68	4.90%
Ni 231.604†	38362.6	751.33	ug/L	3.933	751.33	ppb	3.933	0.52%
P 214.914†	5877.1	2399.3	ug/L	27.91	2399.3	ppb	27.91	1.16%
Pb 220.353†	10034.9	953.93	ug/L	5.811	953.93	ppb	5.811	0.61%
S 181.975 Axial†	22040.0	23728	ug/L	168.9	23728	ppb	168.9	0.71%
Sb 206.836†	1932.2	502.59	ug/L	6.675	502.59	ppb	6.675	1.33%
Se 196.026†	519.4	608.69	ug/L	14.345	608.69	ppb	14.345	2.36%
Si 251.611†	1136431.8	28846	ug/L	50.7	28846	ppb	50.7	0.18%
Sn 189.927†	3850.7	610.52	ug/L	4.144	610.52	ppb	4.144	0.68%
Sr 421.552†	485684.7	2539.2	ug/L	124.95	2539.2	ppb	124.95	4.92%
Ti 334.940†	3212431.0	4480.6	ug/L	4.60	4480.6	ppb	4.60	0.10%
Tl 190.801†	1836.5	489.23	ug/L	3.536	489.23	ppb	3.536	0.72%
U 409.014†	15000.7	373.44	ug/L	1.681	373.44	ppb	1.681	0.45%
V 292.402†	125597.0	707.77	ug/L	1.166	707.77	ppb	1.166	0.16%
Zn 213.857†	351984.2	2568.6	ug/L	4.43	2568.6	ppb	4.43	0.17%
SiO2†	1142405.6	62055	ug/L	453.2	62055	ppb	453.2	0.73%

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 00:36:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4724.2	4724.2	96.2	%			00:38:27
1	Y RADIAL	5387.3	5387.3	95.40	%			00:38:27
1	Al 396.153Radial†	7249.2	7577.7	4982.0	ug/L	4982.0	ppb	00:38:27
1	Ca 317.933Radial†	2821.6	2914.5	5160.3	ug/L	5160.3	ppb	00:38:47
1	Fe 238.204 Radial†	426.6	432.4	5243.1	ug/L	5243.1	ppb	00:38:47
1	K 766.490 Radial†	29528.4	28118.4	5115.8	ug/L	5115.8	ppb	00:38:27
1	Mg 279.077 IEC†	112.5	114.5	5127.0	ug/L	5127.0	ppb	00:38:47
1	Na 589.592 Radial†	34706.3	37349.1	10476	ug/L	10476	ppb	00:38:27
1	Sr 421.552†	92671.3	96317.7	505.28	ug/L	505.28	ppb	00:38:27
1	Sc 361.383	1022442.0	1022442.0	98.361	%			00:39:46
1	Y 371.029	856449.7	856449.7	96.832	%			00:39:46
1	Ag 328.068†	126514.0	128148.6	511.11	ug/L	511.11	ppb	00:39:46
1	As 188.979†	1537.9	1600.1	503.06	ug/L	503.06	ppb	00:40:06
1	B 249.677†	26015.4	26915.1	506.69	ug/L	506.69	ppb	00:39:46
1	Ba 233.527†	78278.0	79582.7	512.59	ug/L	512.59	ppb	00:39:46
1	Be 313.107†	1597600.9	1629102.6	508.95	ug/L	508.95	ppb	00:39:46
1	Cd 226.502†	57507.6	58701.7	511.73	ug/L	511.73	ppb	00:39:46
1	Co 228.616†	29880.2	30464.6	501.96	ug/L	501.96	ppb	00:40:06
1	Cr 267.716†	55698.3	56538.9	508.77	ug/L	508.77	ppb	00:39:46
1	Cu 324.752†	197695.8	192053.4	513.15	ug/L	513.15	ppb	00:39:46
1	Mn 257.610†	533851.9	542173.1	513.84	ug/L	513.84	ppb	00:39:46
1	Mo 202.031†	9394.8	9522.1	505.68	ug/L	505.68	ppb	00:40:06
1	Ni 231.604†	25313.7	25603.7	501.35	ug/L	501.35	ppb	00:40:06
1	P 214.914†	5844.6	5676.9	2461.5	ug/L	2461.5	ppb	00:40:06
1	Pb 220.353†	5250.1	5413.2	509.68	ug/L	509.68	ppb	00:40:06
1	S 181.975 Axial†	982.4	938.7	1010.3	ug/L	1010.3	ppb	00:40:06
1	Sb 206.836†	1921.6	1919.0	513.10	ug/L	513.10	ppb	00:40:06
1	Se 196.026†	1112.7	1152.7	531.17	ug/L	531.17	ppb	00:40:06
1	Si 251.611†	99140.4	100235.2	2533.6	ug/L	2533.6	ppb	00:39:46
1	Sn 189.927†	3723.6	3790.0	501.86	ug/L	501.86	ppb	00:40:06
1	Ti 334.940†	362915.1	370224.4	510.51	ug/L	510.51	ppb	00:39:46
1	Tl 190.801†	2016.8	2094.6	509.88	ug/L	509.88	ppb	00:40:06
1	U 409.014†	16241.7	19286.4	496.99	ug/L	496.99	ppb	00:39:46
1	V 292.402†	85409.3	88441.4	513.04	ug/L	513.04	ppb	00:39:46
1	Zn 213.857†	69340.0	69610.2	507.02	ug/L	507.02	ppb	00:39:46
1	SiO2†	97449.4	98474.6	5325.8	ug/L	5325.8	ppb	00:41:06
2	Sc Radial	4697.0	4697.0	95.7	%			00:38:52
2	Y RADIAL	5379.3	5379.3	95.26	%			00:38:52
2	Al 396.153Radial†	7258.8	7631.3	5017.4	ug/L	5017.4	ppb	00:38:52
2	Ca 317.933Radial†	2830.0	2940.3	5205.9	ug/L	5205.9	ppb	00:39:12
2	Fe 238.204 Radial†	431.9	440.5	5341.7	ug/L	5341.7	ppb	00:39:12
2	K 766.490 Radial†	29376.2	28136.9	5119.2	ug/L	5119.2	ppb	00:38:52
2	Mg 279.077 IEC†	112.0	114.6	5133.9	ug/L	5133.9	ppb	00:39:12
2	Na 589.592 Radial†	34567.4	37412.6	10494	ug/L	10494	ppb	00:38:52
2	Sr 421.552†	92372.6	96562.9	506.56	ug/L	506.56	ppb	00:38:52
2	Sc 361.383	1018914.9	1018914.9	98.021	%			00:40:13
2	Y 371.029	853792.7	853792.7	96.532	%			00:40:13
2	Ag 328.068†	126054.5	128125.0	511.06	ug/L	511.06	ppb	00:40:13
2	As 188.979†	1550.5	1618.4	508.75	ug/L	508.75	ppb	00:40:33
2	B 249.677†	26055.6	27047.7	509.17	ug/L	509.17	ppb	00:40:13
2	Ba 233.527†	77935.8	79509.1	512.13	ug/L	512.13	ppb	00:40:13
2	Be 313.107†	1592539.8	1629561.7	509.09	ug/L	509.09	ppb	00:40:13
2	Cd 226.502†	57262.3	58653.8	511.30	ug/L	511.30	ppb	00:40:13
2	Co 228.616†	29949.4	30640.3	504.86	ug/L	504.86	ppb	00:40:33
2	Cr 267.716†	55485.9	56518.2	508.58	ug/L	508.58	ppb	00:40:13
2	Cu 324.752†	197135.2	192177.2	513.48	ug/L	513.48	ppb	00:40:13
2	Mn 257.610†	531491.5	541643.9	513.34	ug/L	513.34	ppb	00:40:13
2	Mo 202.031†	9394.4	9554.8	507.43	ug/L	507.43	ppb	00:40:33
2	Ni 231.604†	25328.0	25707.4	503.38	ug/L	503.38	ppb	00:40:33

2	P 214.914†	5849.1	5702.0	2472.6	ug/L	2472.6 ppb	00:40:33
2	Pb 220.353†	5248.9	5430.4	511.30	ug/L	511.30 ppb	00:40:33
2	S 181.975 Axial†	985.1	944.9	1017.0	ug/L	1017.0 ppb	00:40:33
2	Sb 206.836†	1931.0	1935.4	517.52	ug/L	517.52 ppb	00:40:33
2	Se 196.026†	1113.2	1157.1	533.49	ug/L	533.49 ppb	00:40:33
2	Si 251.611†	98867.7	100305.8	2535.3	ug/L	2535.3 ppb	00:40:13
2	Sn 189.927†	3735.6	3815.3	505.22	ug/L	505.22 ppb	00:40:33
2	Ti 334.940†	361572.2	370131.5	510.39	ug/L	510.39 ppb	00:40:13
2	Tl 190.801†	2006.8	2091.5	509.11	ug/L	509.11 ppb	00:40:33
2	U 409.014†	16168.5	19268.8	496.53	ug/L	496.53 ppb	00:40:13
2	V 292.402†	85315.0	88645.7	514.22	ug/L	514.22 ppb	00:40:13
2	Zn 213.857†	69007.1	69514.6	506.30	ug/L	506.30 ppb	00:40:13
2	SiO2†	98365.7	99752.3	5395.2	ug/L	5395.2 ppb	00:41:11
3	Sc Radial	4739.6	4739.6	96.5	%		00:39:17
3	Y RADIAL	5396.1	5396.1	95.55	%		00:39:17
3	Al 396.153Radial†	7294.9	7600.5	4996.8	ug/L	4996.8 ppb	00:39:17
3	Ca 317.933Radial†	2856.0	2940.6	5206.5	ug/L	5206.5 ppb	00:39:37
3	Fe 238.204 Radial†	433.9	438.5	5317.8	ug/L	5317.8 ppb	00:39:37
3	K 766.490 Radial†	29539.7	28030.4	5099.8	ug/L	5099.8 ppb	00:39:17
3	Mg 279.077 IEC†	116.7	118.4	5304.7	ug/L	5304.7 ppb	00:39:37
3	Na 589.592 Radial†	34691.3	37216.3	10439	ug/L	10439 ppb	00:39:17
3	Sr 421.552†	92705.4	96039.9	503.82	ug/L	503.82 ppb	00:39:17
3	Sc 361.383	1014054.8	1014054.8	97.554	%		00:40:41
3	Y 371.029	850716.7	850716.7	96.184	%		00:40:41
3	Ag 328.068†	125109.0	127772.2	509.65	ug/L	509.65 ppb	00:40:41
3	As 188.979†	1565.7	1641.6	515.95	ug/L	515.95 ppb	00:41:01
3	B 249.677†	25823.6	26937.3	507.08	ug/L	507.08 ppb	00:40:41
3	Ba 233.527†	77508.1	79451.7	511.76	ug/L	511.76 ppb	00:40:41
3	Be 313.107†	1583424.5	1628004.6	508.60	ug/L	508.60 ppb	00:40:41
3	Cd 226.502†	57046.4	58712.6	511.82	ug/L	511.82 ppb	00:40:41
3	Co 228.616†	30057.3	30897.3	509.11	ug/L	509.11 ppb	00:41:01
3	Cr 267.716†	55205.2	56501.8	508.44	ug/L	508.44 ppb	00:40:41
3	Cu 324.752†	195462.7	191426.6	511.48	ug/L	511.48 ppb	00:40:41
3	Mn 257.610†	528161.9	540829.5	512.57	ug/L	512.57 ppb	00:40:41
3	Mo 202.031†	9437.8	9645.2	512.22	ug/L	512.22 ppb	00:41:01
3	Ni 231.604†	25432.0	25937.8	507.89	ug/L	507.89 ppb	00:41:01
3	P 214.914†	5888.8	5771.3	2504.0	ug/L	2504.0 ppb	00:41:01
3	Pb 220.353†	5299.8	5508.3	518.62	ug/L	518.62 ppb	00:41:01
3	S 181.975 Axial†	987.2	951.9	1024.6	ug/L	1024.6 ppb	00:41:01
3	Sb 206.836†	1940.8	1954.9	522.86	ug/L	522.86 ppb	00:41:01
3	Se 196.026†	1100.8	1149.8	530.20	ug/L	530.20 ppb	00:41:01
3	Si 251.611†	98099.0	100001.3	2527.5	ug/L	2527.5 ppb	00:40:41
3	Sn 189.927†	3752.1	3850.5	509.88	ug/L	509.88 ppb	00:41:01
3	Ti 334.940†	358864.3	369123.7	509.00	ug/L	509.00 ppb	00:40:41
3	Tl 190.801†	2019.8	2114.7	514.68	ug/L	514.68 ppb	00:41:01
3	U 409.014†	15957.1	19131.2	492.97	ug/L	492.97 ppb	00:40:41
3	V 292.402†	84864.2	88600.8	514.04	ug/L	514.04 ppb	00:40:41
3	Zn 213.857†	68662.3	69498.5	506.15	ug/L	506.15 ppb	00:40:41
3	SiO2†	97968.1	99825.7	5399.0	ug/L	5399.0 ppb	00:41:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1018470.6	97.979	%	0.4051				0.41%
Sc Radial	4720.3	96.1	%	0.44				0.46%
Y 371.029	853653.0	96.516	%	0.3244				0.34%
Y RADIAL	5387.6	95.40	%	0.149				0.16%
Ag 328.068†	128015.3	510.61	ug/L	0.828	510.61	ppb	0.828	0.16%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7603.2	4998.7	ug/L	17.74	4998.7	ppb	17.74	0.35%
QC value within limits for Al 396.153Radial Recovery = 99.97%								
As 188.979†	1620.0	509.25	ug/L	6.463	509.25	ppb	6.463	1.27%
QC value within limits for As 188.979 Recovery = 101.85%								
B 249.677†	26966.7	507.65	ug/L	1.336	507.65	ppb	1.336	0.26%
QC value within limits for B 249.677 Recovery = 101.53%								
Ba 233.527†	79514.5	512.16	ug/L	0.419	512.16	ppb	0.419	0.08%
QC value within limits for Ba 233.527 Recovery = 102.43%								
Be 313.107†	1628889.7	508.88	ug/L	0.251	508.88	ppb	0.251	0.05%
QC value within limits for Be 313.107 Recovery = 101.78%								
Ca 317.933Radial†	2931.8	5190.9	ug/L	26.50	5190.9	ppb	26.50	0.51%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.82%
Cd 226.502†            58689.4      511.61 ug/L         0.276      511.61 ppb          0.276   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.32%
Co 228.616†            30667.4      505.31 ug/L         3.595      505.31 ppb          3.595   0.71%
   QC value within limits for Co 228.616  Recovery = 101.06%
Cr 267.716†            56519.6      508.60 ug/L         0.165      508.60 ppb          0.165   0.03%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191885.7      512.70 ug/L         1.074      512.70 ppb          1.074   0.21%
   QC value within limits for Cu 324.752  Recovery = 102.54%
Fe 238.204 Radial†       437.1      5300.9 ug/L        51.45      5300.9 ppb         51.45   0.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.02%
K 766.490 Radial†      28095.2      5111.6 ug/L        10.35      5111.6 ppb         10.35   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 102.23%
Mg 279.077 IEC†          115.8      5188.5 ug/L       100.69      5188.5 ppb        100.69   1.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.77%
Mn 257.610†           541548.8      513.25 ug/L         0.639      513.25 ppb          0.639   0.12%
   QC value within limits for Mn 257.610  Recovery = 102.65%
Mo 202.031†             9574.1      508.44 ug/L         3.386      508.44 ppb          3.386   0.67%
   QC value within limits for Mo 202.031  Recovery = 101.69%
Na 589.592 Radial†     37326.0       10470 ug/L          28.1       10470 ppb           28.1   0.27%
   QC value within limits for Na 589.592 Radial  Recovery = 104.70%
Ni 231.604†            25749.6      504.21 ug/L         3.349      504.21 ppb          3.349   0.66%
   QC value within limits for Ni 231.604  Recovery = 100.84%
P 214.914†              5716.8      2479.4 ug/L        22.07      2479.4 ppb         22.07   0.89%
   QC value within limits for P 214.914  Recovery = 99.18%
Pb 220.353†             5450.6      513.20 ug/L         4.761      513.20 ppb          4.761   0.93%
   QC value within limits for Pb 220.353  Recovery = 102.64%
S 181.975 Axial†         945.1      1017.3 ug/L         7.12      1017.3 ppb          7.12   0.70%
   QC value within limits for S 181.975 Axial  Recovery = 101.73%
Sb 206.836†             1936.4      517.83 ug/L         4.883      517.83 ppb          4.883   0.94%
   QC value within limits for Sb 206.836  Recovery = 103.57%
Se 196.026†             1153.2      531.62 ug/L         1.691      531.62 ppb          1.691   0.32%
   QC value within limits for Se 196.026  Recovery = 106.32%
Si 251.611†           100180.8      2532.1 ug/L         4.11      2532.1 ppb           4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.28%
Sn 189.927†             3818.6      505.65 ug/L         4.024      505.65 ppb          4.024   0.80%
   QC value within limits for Sn 189.927  Recovery = 101.13%
Sr 421.552†            96306.8      505.22 ug/L         1.373      505.22 ppb          1.373   0.27%
   QC value within limits for Sr 421.552  Recovery = 101.04%
Ti 334.940†           369826.6      509.96 ug/L         0.840      509.96 ppb          0.840   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.99%
Tl 190.801†             2100.3      511.22 ug/L         3.017      511.22 ppb          3.017   0.59%
   QC value within limits for Tl 190.801  Recovery = 102.24%
U 409.014†             19228.8      495.50 ug/L         2.199      495.50 ppb          2.199   0.44%
   QC value within limits for U 409.014  Recovery = 99.10%
V 292.402†             88562.6      513.77 ug/L         0.634      513.77 ppb          0.634   0.12%
   QC value within limits for V 292.402  Recovery = 102.75%
Zn 213.857†            69541.1      506.49 ug/L         0.468      506.49 ppb          0.468   0.09%
   QC value within limits for Zn 213.857  Recovery = 101.30%
SiO2†                  99350.9      5373.3 ug/L        41.18      5373.3 ppb         41.18   0.77%
   QC value within limits for SiO2  Recovery = 100.48%
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 00:43:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4521.7	4521.7	92.1	%			00:45:18
1	Y RADIAL	5191.1	5191.1	91.92	%			00:45:18
1	Al 396.153Radial†	-5.4	37.9	25.009	ug/L	25.009	ppb	00:45:18
1	Ca 317.933Radial†	54.7	41.5	73.564	ug/L	73.564	ppb	00:45:38
1	Fe 238.204 Radial†	11.0	0.9	11.351	ug/L	11.351	ppb	00:45:38
1	K 766.490 Radial†	3177.9	881.1	160.57	ug/L	160.57	ppb	00:45:18
1	Mg 279.077 IEC†	3.2	1.0	43.808	ug/L	43.808	ppb	00:45:38
1	Na 589.592 Radial†	-1030.4	161.2	45.214	ug/L	45.214	ppb	00:45:18
1	Sr 421.552†	2.1	9.7	0.0501	ug/L	0.0501	ppb	00:45:18
1	Sc 361.383	1050972.6	1050972.6	101.11	%			00:46:35
1	Y 371.029	892918.2	892918.2	100.96	%			00:46:35
1	Ag 328.068†	361.4	-116.6	-0.4594	ug/L	-0.4594	ppb	00:46:40
1	As 188.979†	-31.6	5.4	1.6699	ug/L	1.6699	ppb	00:47:00
1	B 249.677†	-219.7	248.8	4.7003	ug/L	4.7003	ppb	00:47:00
1	Ba 233.527†	52.6	52.0	0.3350	ug/L	0.3350	ppb	00:47:00
1	Be 313.107†	-4864.3	62.8	0.0199	ug/L	0.0199	ppb	00:46:40
1	Cd 226.502†	-217.5	20.5	0.1775	ug/L	0.1775	ppb	00:47:00
1	Co 228.616†	-90.2	-2.9	-0.0477	ug/L	-0.0477	ppb	00:47:00
1	Cr 267.716†	132.7	43.5	0.3910	ug/L	0.3910	ppb	00:47:00
1	Cu 324.752†	9084.0	47.2	0.1265	ug/L	0.1265	ppb	00:46:40
1	Mn 257.610†	753.9	168.9	0.1603	ug/L	0.1603	ppb	00:47:00
1	Mo 202.031†	34.3	4.6	0.2472	ug/L	0.2472	ppb	00:47:00
1	Ni 231.604†	134.4	1.0	0.0198	ug/L	0.0198	ppb	00:47:00
1	P 214.914†	285.8	17.6	7.8873	ug/L	7.8873	ppb	00:47:00
1	Pb 220.353†	-78.9	-2.4	-0.2247	ug/L	-0.2247	ppb	00:47:00
1	S 181.975 Axial†	65.8	5.0	5.3960	ug/L	5.3960	ppb	00:47:00
1	Sb 206.836†	44.0	8.9	2.3854	ug/L	2.3854	ppb	00:47:00
1	Se 196.026†	-23.7	-2.1	-0.8829	ug/L	-0.8829	ppb	00:47:00
1	Si 251.611†	659.4	94.5	2.3346	ug/L	2.3346	ppb	00:47:00
1	Sn 189.927†	16.6	20.8	2.7581	ug/L	2.7581	ppb	00:47:00
1	Ti 334.940†	-1162.7	110.4	0.1558	ug/L	0.1558	ppb	00:46:40
1	Tl 190.801†	-49.4	-4.6	-1.0998	ug/L	-1.0998	ppb	00:47:00
1	U 409.014†	-2785.1	19.3	0.4972	ug/L	0.4972	ppb	00:46:35
1	V 292.402†	-1602.5	23.6	0.1383	ug/L	0.1383	ppb	00:46:40
1	Zn 213.857†	1007.1	110.6	0.8096	ug/L	0.8096	ppb	00:47:00
1	SiO2†	683.6	77.1	4.0425	ug/L	4.0425	ppb	00:48:06
2	Sc Radial	4647.0	4647.0	94.6	%			00:45:43
2	Y RADIAL	5327.0	5327.0	94.33	%			00:45:43
2	Al 396.153Radial†	-18.8	24.0	15.793	ug/L	15.793	ppb	00:45:43
2	Ca 317.933Radial†	53.0	38.1	67.531	ug/L	67.531	ppb	00:46:03
2	Fe 238.204 Radial†	9.4	-1.0	-12.306	ug/L	-12.306	ppb	00:46:03
2	K 766.490 Radial†	3194.5	805.6	146.80	ug/L	146.80	ppb	00:45:43
2	Mg 279.077 IEC†	2.7	0.3	14.785	ug/L	14.785	ppb	00:46:03
2	Na 589.592 Radial†	-1082.3	136.4	38.274	ug/L	38.274	ppb	00:45:43
2	Sr 421.552†	21.5	30.1	0.1573	ug/L	0.1573	ppb	00:45:43
2	Sc 361.383	1018433.6	1018433.6	97.975	%			00:47:05
2	Y 371.029	866004.9	866004.9	97.913	%			00:47:05
2	Ag 328.068†	386.3	-79.7	-0.3217	ug/L	-0.3217	ppb	00:47:10
2	As 188.979†	-29.6	6.4	1.9970	ug/L	1.9970	ppb	00:47:30
2	B 249.677†	-226.3	235.1	4.4446	ug/L	4.4446	ppb	00:47:30
2	Ba 233.527†	63.7	65.0	0.4175	ug/L	0.4175	ppb	00:47:30
2	Be 313.107†	-4837.8	-63.9	-0.0198	ug/L	-0.0198	ppb	00:47:10
2	Cd 226.502†	-220.8	10.3	0.0907	ug/L	0.0907	ppb	00:47:30
2	Co 228.616†	-94.2	-9.8	-0.1603	ug/L	-0.1603	ppb	00:47:30
2	Cr 267.716†	111.1	25.6	0.2293	ug/L	0.2293	ppb	00:47:30
2	Cu 324.752†	8998.6	247.1	0.6594	ug/L	0.6594	ppb	00:47:10
2	Mn 257.610†	772.9	212.2	0.1994	ug/L	0.1994	ppb	00:47:30
2	Mo 202.031†	40.5	12.1	0.6427	ug/L	0.6427	ppb	00:47:30
2	Ni 231.604†	129.9	0.7	0.0129	ug/L	0.0129	ppb	00:47:30

2	P 214.914†	279.2	19.8	8.7896 ug/L	8.7896 ppb	00:47:30
2	Pb 220.353†	-67.9	6.2	0.5917 ug/L	0.5917 ppb	00:47:30
2	S 181.975 Axial†	68.7	10.0	10.778 ug/L	10.778 ppb	00:47:30
2	Sb 206.836†	41.1	7.3	1.9597 ug/L	1.9597 ppb	00:47:30
2	Se 196.026†	-17.8	3.2	1.3932 ug/L	1.3932 ppb	00:47:30
2	Si 251.611†	653.7	109.5	2.7176 ug/L	2.7176 ppb	00:47:30
2	Sn 189.927†	5.7	10.1	1.3438 ug/L	1.3438 ppb	00:47:30
2	Ti 334.940†	-1180.8	55.2	0.0792 ug/L	0.0792 ppb	00:47:10
2	Tl 190.801†	-40.3	3.1	0.7634 ug/L	0.7634 ppb	00:47:30
2	U 409.014†	-2681.6	36.9	0.9562 ug/L	0.9562 ppb	00:47:05
2	V 292.402†	-1569.4	6.7	0.0514 ug/L	0.0514 ppb	00:47:10
2	Zn 213.857†	1024.5	160.1	1.1763 ug/L	1.1763 ppb	00:47:30
2	SiO2†	683.9	99.0	5.2392 ug/L	5.2392 ppb	00:48:11
3	Sc Radial	4821.8	4821.8	98.2 %		00:46:08
3	Y RADIAL	5518.4	5518.4	97.72 %		00:46:08
3	Al 396.153Radial†	-23.3	20.0	13.226 ug/L	13.226 ppb	00:46:08
3	Ca 317.933Radial†	57.3	40.5	71.703 ug/L	71.703 ppb	00:46:28
3	Fe 238.204 Radial†	10.5	-0.3	-3.7245 ug/L	-3.7245 ppb	00:46:28
3	K 766.490 Radial†	3087.2	573.9	104.56 ug/L	104.56 ppb	00:46:08
3	Mg 279.077 IEC†	2.0	-0.5	-20.834 ug/L	-20.834 ppb	00:46:28
3	Na 589.592 Radial†	-956.0	306.5	85.983 ug/L	85.983 ppb	00:46:08
3	Sr 421.552†	35.6	43.6	0.2282 ug/L	0.2282 ppb	00:46:08
3	Sc 361.383	995395.5	995395.5	95.759 %		00:47:35
3	Y 371.029	847159.0	847159.0	95.782 %		00:47:35
3	Ag 328.068†	467.6	14.2	0.0541 ug/L	0.0541 ppb	00:47:40
3	As 188.979†	-42.5	-7.7	-2.4165 ug/L	-2.4165 ppb	00:48:00
3	B 249.677†	-206.8	250.1	4.7272 ug/L	4.7272 ppb	00:48:00
3	Ba 233.527†	67.0	70.0	0.4475 ug/L	0.4475 ppb	00:48:00
3	Be 313.107†	-4854.6	-195.7	-0.0612 ug/L	-0.0612 ppb	00:47:40
3	Cd 226.502†	-214.8	11.4	0.0996 ug/L	0.0996 ppb	00:48:00
3	Co 228.616†	-85.5	-3.0	-0.0490 ug/L	-0.0490 ppb	00:48:00
3	Cr 267.716†	124.6	42.3	0.3799 ug/L	0.3799 ppb	00:48:00
3	Cu 324.752†	9014.1	475.9	1.2706 ug/L	1.2706 ppb	00:47:40
3	Mn 257.610†	774.6	232.2	0.2199 ug/L	0.2199 ppb	00:48:00
3	Mo 202.031†	29.3	1.4	0.0742 ug/L	0.0742 ppb	00:48:00
3	Ni 231.604†	130.9	4.8	0.0934 ug/L	0.0934 ppb	00:48:00
3	P 214.914†	294.4	42.4	18.763 ug/L	18.763 ppb	00:48:00
3	Pb 220.353†	-84.5	-12.7	-1.1900 ug/L	-1.1900 ppb	00:48:00
3	S 181.975 Axial†	68.1	11.0	11.882 ug/L	11.882 ppb	00:48:00
3	Sb 206.836†	42.7	10.0	2.6294 ug/L	2.6294 ppb	00:48:00
3	Se 196.026†	-21.3	-0.9	-0.4117 ug/L	-0.4117 ppb	00:48:00
3	Si 251.611†	666.8	138.7	3.4851 ug/L	3.4851 ppb	00:48:00
3	Sn 189.927†	1.0	5.4	0.7209 ug/L	0.7209 ppb	00:48:00
3	Ti 334.940†	-1270.4	-66.2	-0.0861 ug/L	-0.0861 ppb	00:47:40
3	Tl 190.801†	-40.7	1.7	0.4199 ug/L	0.4199 ppb	00:48:00
3	U 409.014†	-2795.2	-145.1	-3.7507 ug/L	-3.7507 ppb	00:47:35
3	V 292.402†	-1677.5	-143.3	-0.8267 ug/L	-0.8267 ppb	00:47:40
3	Zn 213.857†	1013.0	172.3	1.2652 ug/L	1.2652 ppb	00:48:00
3	SiO2†	700.2	132.2	7.0999 ug/L	7.0999 ppb	00:48:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021600.6	98.280	%	2.6863				2.73%
Sc Radial	4663.5	95.0	%	3.07				3.23%
Y 371.029	868694.0	98.217	%	2.6002				2.65%
Y RADIAL	5345.5	94.66	%	2.911				3.08%
Ag 328.068†	-60.7	-0.2423	ug/L	0.26579	-0.2423	ppb	0.26579	109.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.3	18.009	ug/L	6.1963	18.009	ppb	6.1963	34.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4168	ug/L	2.45921	0.4168	ppb	2.45921	590.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	244.7	4.6240	ug/L	0.15595	4.6240	ppb	0.15595	3.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	62.3	0.4000	ug/L	0.05826	0.4000	ppb	0.05826	14.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-65.6	-0.0204	ug/L	0.04054	-0.0204	ppb	0.04054	199.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	40.1	70.932	ug/L	3.0895	70.932	ppb	3.0895	4.36%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              14.0      0.1226 ug/L       0.04776      0.1226 ppb        0.04776  38.95%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -5.3     -0.0857 ug/L       0.06462     -0.0857 ppb        0.06462  75.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              37.1      0.3334 ug/L       0.09031      0.3334 ppb        0.09031  27.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             256.7      0.6855 ug/L       0.57248      0.6855 ppb        0.57248  83.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.1     -1.5600 ug/L      11.97601     -1.5600 ppb       11.97601 767.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        753.6      137.31 ug/L        29.186      137.31 ppb         29.186  21.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.3      12.587 ug/L       32.3769      12.587 ppb        32.3769 257.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              204.4      0.1932 ug/L       0.03029      0.1932 ppb        0.03029  15.68%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.1      0.3214 ug/L       0.29141      0.3214 ppb        0.29141  90.68%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       201.4      56.490 ug/L       25.7761      56.490 ppb        25.7761  45.63%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               2.1      0.0420 ug/L       0.04461      0.0420 ppb        0.04461 106.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               26.6      11.813 ug/L        6.0357      11.813 ppb         6.0357  51.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -3.0     -0.2743 ug/L       0.89188     -0.2743 ppb        0.89188 325.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          8.7      9.3521 ug/L       3.47029      9.3521 ppb        3.47029  37.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.7      2.3248 ug/L       0.33890      2.3248 ppb        0.33890  14.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.1      0.0329 ug/L       1.20138      0.0329 ppb        1.20138 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              114.3      2.8458 ug/L       0.58587      2.8458 ppb        0.58587  20.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              12.1      1.6076 ug/L       1.04389      1.6076 ppb        1.04389  64.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              27.8      0.1452 ug/L       0.08967      0.1452 ppb        0.08967  61.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              33.1      0.0496 ug/L       0.12363      0.0496 ppb        0.12363 249.14%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.1      0.0278 ug/L       0.99153      0.0278 ppb        0.99153 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -29.6     -0.7657 ug/L       2.59518     -0.7657 ppb        2.59518 338.91%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -37.7     -0.2123 ug/L       0.53382     -0.2123 ppb        0.53382 251.43%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              147.7      1.0837 ug/L       0.24149      1.0837 ppb        0.24149  22.28%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    102.8      5.4605 ug/L       1.54071      5.4605 ppb        1.54071  28.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 25
Sample ID: 1201977917|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 12/5/2009 00:50:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977917|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4627.2	4627.2	94.2	%			00:52:19
1	Y RADIAL	5322.6	5322.6	94.25	%			00:52:19
1	Al 396.153Radial†	21122.0	22455.5	14827	ug/L	14827	ppb	00:52:19
1	Ca 317.933Radial†	104285.1	110635.2	195880	ug/L	195880	ppb	00:52:19
1	Fe 238.204 Radial†	1666.1	1756.8	21241	ug/L	21241	ppb	00:52:39
1	K 766.490 Radial†	9224.7	7218.5	1292.0	ug/L	1292.0	ppb	00:52:19
1	Mg 279.077 IEC†	189.7	198.8	8876.5	ug/L	8876.5	ppb	00:52:39
1	Na 589.592 Radial†	538.0	1850.8	519.16	ug/L	519.16	ppb	00:52:19
1	Sr 421.552†	46585.4	49437.4	257.55	ug/L	257.55	ppb	00:52:19
1	Sc 361.383	967648.0	967648.0	93.089	%			00:53:36
1	Y 371.029	816426.4	816426.4	92.307	%			00:53:36
1	Ag 328.068†	-669.3	-1193.0	-0.6434	ug/L	-0.6434	ppb	00:53:36
1	As 188.979†	14.4	52.1	26.835	ug/L	26.835	ppb	00:53:56
1	B 249.677†	4492.5	5292.1	97.163	ug/L	97.163	ppb	00:53:36
1	Ba 233.527†	268443.6	288372.1	1853.5	ug/L	1853.5	ppb	00:53:36
1	Be 313.107†	-9229.7	-5041.0	0.1583	ug/L	0.1583	ppb	00:53:36
1	Cd 226.502†	37.7	276.2	0.6628	ug/L	0.6628	ppb	00:53:56
1	Co 228.616†	622.2	754.7	11.098	ug/L	11.098	ppb	00:53:56
1	Cr 267.716†	2431.2	2523.9	23.142	ug/L	23.142	ppb	00:53:56
1	Cu 324.752†	585079.7	619576.8	1655.7	ug/L	1655.7	ppb	00:53:36
1	Mn 257.610†	386300.6	414401.8	394.37	ug/L	394.37	ppb	00:53:36
1	Mo 202.031†	144.9	126.4	8.2149	ug/L	8.2149	ppb	00:53:56
1	Ni 231.604†	28047.6	29997.9	587.76	ug/L	587.76	ppb	00:53:36
1	P 214.914†	1577.4	1429.4	361.40	ug/L	361.40	ppb	00:53:56
1	Pb 220.353†	992.1	1141.3	107.45	ug/L	107.45	ppb	00:53:56
1	S 181.975 Axial†	3255.2	3436.8	3699.8	ug/L	3699.8	ppb	00:53:56
1	Sb 206.836†	71.0	41.7	7.6521	ug/L	7.6521	ppb	00:53:56
1	Se 196.026†	-143.9	-133.2	18.039	ug/L	18.039	ppb	00:53:56
1	Si 251.611†	370287.6	397219.0	10088	ug/L	10088	ppb	00:53:36
1	Sn 189.927†	-235.6	-248.7	-12.270	ug/L	-12.270	ppb	00:53:56
1	Ti 334.940†	592877.9	638151.9	890.40	ug/L	890.40	ppb	00:53:36
1	Tl 190.801†	-112.6	-76.7	-9.2527	ug/L	-9.2527	ppb	00:53:56
1	U 409.014†	-2863.7	-302.3	-10.533	ug/L	-10.533	ppb	00:53:36
1	V 292.402†	6322.3	8400.2	44.160	ug/L	44.160	ppb	00:53:36
1	Zn 213.857†	56900.7	60239.3	434.59	ug/L	434.59	ppb	00:53:36
1	SiO2†	368537.9	395298.1	21483	ug/L	21483	ppb	00:54:54
2	Sc Radial	4611.5	4611.5	93.9	%			00:52:44
2	Y RADIAL	5340.8	5340.8	94.57	%			00:52:44
2	Al 396.153Radial†	21290.1	22710.6	14996	ug/L	14996	ppb	00:52:44
2	Ca 317.933Radial†	104919.0	111685.6	197740	ug/L	197740	ppb	00:52:44
2	Fe 238.204 Radial†	1664.1	1760.7	21288	ug/L	21288	ppb	00:53:04
2	K 766.490 Radial†	9214.6	7241.0	1295.9	ug/L	1295.9	ppb	00:52:44
2	Mg 279.077 IEC†	191.6	201.5	8996.5	ug/L	8996.5	ppb	00:53:04
2	Na 589.592 Radial†	569.7	1886.5	529.17	ug/L	529.17	ppb	00:52:44
2	Sr 421.552†	46862.8	49900.5	259.97	ug/L	259.97	ppb	00:52:44
2	Sc 361.383	977749.1	977749.1	94.061	%			00:54:02
2	Y 371.029	825470.0	825470.0	93.330	%			00:54:02
2	Ag 328.068†	-631.6	-1145.5	-0.4674	ug/L	-0.4674	ppb	00:54:02
2	As 188.979†	-2.2	34.3	21.303	ug/L	21.303	ppb	00:54:22
2	B 249.677†	4572.5	5327.3	97.824	ug/L	97.824	ppb	00:54:02
2	Ba 233.527†	270882.0	287985.3	1851.0	ug/L	1851.0	ppb	00:54:02
2	Be 313.107†	-9246.2	-4956.0	0.1850	ug/L	0.1850	ppb	00:54:02
2	Cd 226.502†	33.5	271.2	0.6138	ug/L	0.6138	ppb	00:54:22
2	Co 228.616†	627.3	753.2	11.072	ug/L	11.072	ppb	00:54:22
2	Cr 267.716†	2433.2	2499.1	22.920	ug/L	22.920	ppb	00:54:22
2	Cu 324.752†	591805.4	620234.0	1657.4	ug/L	1657.4	ppb	00:54:02
2	Mn 257.610†	389429.9	413441.5	393.46	ug/L	393.46	ppb	00:54:02
2	Mo 202.031†	156.9	137.5	8.8093	ug/L	8.8093	ppb	00:54:22
2	Ni 231.604†	28242.9	29894.2	585.73	ug/L	585.73	ppb	00:54:02

2	P 214.914†	1576.2	1410.6	352.78 ug/L	352.78 ppb	00:54:22
2	Pb 220.353†	991.0	1129.2	106.34 ug/L	106.34 ppb	00:54:22
2	S 181.975 Axial†	3252.3	3397.5	3657.5 ug/L	3657.5 ppb	00:54:22
2	Sb 206.836†	88.0	59.0	12.268 ug/L	12.268 ppb	00:54:22
2	Se 196.026†	-152.7	-141.0	14.754 ug/L	14.754 ppb	00:54:22
2	Si 251.611†	373356.9	396372.8	10066 ug/L	10066 ppb	00:54:02
2	Sn 189.927†	-222.1	-231.7	-9.8330 ug/L	-9.8330 ppb	00:54:22
2	Ti 334.940†	599122.6	638211.2	890.58 ug/L	890.58 ppb	00:54:02
2	Tl 190.801†	-105.5	-67.9	-7.1321 ug/L	-7.1321 ppb	00:54:22
2	U 409.014†	-2952.0	-364.4	-12.142 ug/L	-12.142 ppb	00:54:02
2	V 292.402†	6330.1	8338.3	43.807 ug/L	43.807 ppb	00:54:02
2	Zn 213.857†	57407.9	60147.0	433.91 ug/L	433.91 ppb	00:54:02
2	SiO2†	370717.5	393525.3	21387 ug/L	21387 ppb	00:54:59
3	Sc Radial	4573.1	4573.1	93.1 %		00:53:09
3	Y RADIAL	5230.9	5230.9	92.63 %		00:53:09
3	Al 396.153Radial†	20938.7	22524.0	14873 ug/L	14873 ppb	00:53:09
3	Ca 317.933Radial†	103386.3	110979.5	196490 ug/L	196490 ppb	00:53:09
3	Fe 238.204 Radial†	1671.5	1783.6	21564 ug/L	21564 ppb	00:53:29
3	K 766.490 Radial†	9115.5	7217.1	1291.7 ug/L	1291.7 ppb	00:53:09
3	Mg 279.077 IEC†	189.3	200.7	8961.9 ug/L	8961.9 ppb	00:53:29
3	Na 589.592 Radial†	534.5	1853.8	519.99 ug/L	519.99 ppb	00:53:09
3	Sr 421.552†	46023.3	49418.8	257.45 ug/L	257.45 ppb	00:53:09
3	Sc 361.383	975183.0	975183.0	93.814 %		00:54:28
3	Y 371.029	824648.1	824648.1	93.237 %		00:54:28
3	Ag 328.068†	-695.1	-1215.0	-0.6332 ug/L	-0.6332 ppb	00:54:28
3	As 188.979†	4.3	41.2	23.497 ug/L	23.497 ppb	00:54:48
3	B 249.677†	4519.3	5283.4	96.955 ug/L	96.955 ppb	00:54:28
3	Ba 233.527†	269989.9	287792.2	1849.8 ug/L	1849.8 ppb	00:54:28
3	Be 313.107†	-9307.1	-5046.9	0.1554 ug/L	0.1554 ppb	00:54:28
3	Cd 226.502†	29.4	267.0	0.5481 ug/L	0.5481 ppb	00:54:48
3	Co 228.616†	638.2	766.6	11.290 ug/L	11.290 ppb	00:54:48
3	Cr 267.716†	2423.7	2495.7	22.895 ug/L	22.895 ppb	00:54:48
3	Cu 324.752†	589170.7	619081.2	1654.4 ug/L	1654.4 ppb	00:54:28
3	Mn 257.610†	388309.1	413336.3	393.39 ug/L	393.39 ppb	00:54:28
3	Mo 202.031†	157.5	138.6	8.8851 ug/L	8.8851 ppb	00:54:48
3	Ni 231.604†	28122.1	29844.4	584.75 ug/L	584.75 ppb	00:54:28
3	P 214.914†	1575.5	1414.3	354.63 ug/L	354.63 ppb	00:54:48
3	Pb 220.353†	1001.6	1143.2	107.61 ug/L	107.61 ppb	00:54:48
3	S 181.975 Axial†	3248.7	3402.8	3663.2 ug/L	3663.2 ppb	00:54:48
3	Sb 206.836†	92.2	63.7	13.494 ug/L	13.494 ppb	00:54:48
3	Se 196.026†	-165.4	-155.0	9.5565 ug/L	9.5565 ppb	00:54:48
3	Si 251.611†	372607.3	396618.2	10072 ug/L	10072 ppb	00:54:28
3	Sn 189.927†	-232.8	-243.8	-11.553 ug/L	-11.553 ppb	00:54:48
3	Ti 334.940†	597132.2	637765.7	889.90 ug/L	889.90 ppb	00:54:28
3	Tl 190.801†	-90.3	-52.0	-3.3008 ug/L	-3.3008 ppb	00:54:48
3	U 409.014†	-2960.5	-381.8	-12.627 ug/L	-12.627 ppb	00:54:28
3	V 292.402†	6428.3	8460.7	44.465 ug/L	44.465 ppb	00:54:28
3	Zn 213.857†	57225.3	60113.0	433.65 ug/L	433.65 ppb	00:54:28
3	SiO2†	371172.2	395047.1	21470 ug/L	21470 ppb	00:55:05

Mean Data: 1201977917|925187|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	973526.7	93.655	%	0.5051				0.54%
Sc Radial	4603.9	93.8	%	0.57				0.60%
Y 371.029	822181.5	92.958	%	0.5654				0.61%
Y RADIAL	5298.1	93.82	%	1.043				1.11%
Ag 328.068†	-1184.5	-0.5813	ug/L	0.09882	-0.5813	ppb	0.09882	17.00%
Al 396.153Radial†	22563.4	14899	ug/L	87.2	14899	ppb	87.2	0.59%
As 188.979†	42.5	23.878	ug/L	2.7855	23.878	ppb	2.7855	11.67%
B 249.677†	5300.9	97.314	ug/L	0.4534	97.314	ppb	0.4534	0.47%
Ba 233.527†	288049.9	1851.4	ug/L	1.89	1851.4	ppb	1.89	0.10%
Be 313.107†	-5014.6	0.1662	ug/L	0.01628	0.1662	ppb	0.01628	9.79%
Ca 317.933Radial†	111100.1	196710	ug/L	948.1	196710	ppb	948.1	0.48%
Cd 226.502†	271.5	0.6082	ug/L	0.05758	0.6082	ppb	0.05758	9.47%
Co 228.616†	758.2	11.153	ug/L	0.1189	11.153	ppb	0.1189	1.07%
Cr 267.716†	2506.2	22.986	ug/L	0.1359	22.986	ppb	0.1359	0.59%
Cu 324.752†	619630.7	1655.8	ug/L	1.54	1655.8	ppb	1.54	0.09%
Fe 238.204 Radial†	1767.1	21364	ug/L	174.9	21364	ppb	174.9	0.82%
K 766.490 Radial†	7225.5	1293.2	ug/L	2.35	1293.2	ppb	2.35	0.18%

Mg 279.077 IEC†	200.3	8945.0	ug/L	61.76	8945.0	ppb	61.76	0.69%
Mn 257.610†	413726.5	393.74	ug/L	0.545	393.74	ppb	0.545	0.14%
Mo 202.031†	134.2	8.6364	ug/L	0.36704	8.6364	ppb	0.36704	4.25%
Na 589.592 Radial†	1863.7	522.77	ug/L	5.553	522.77	ppb	5.553	1.06%
Ni 231.604†	29912.2	586.08	ug/L	1.534	586.08	ppb	1.534	0.26%
P 214.914†	1418.1	356.27	ug/L	4.536	356.27	ppb	4.536	1.27%
Pb 220.353†	1137.9	107.13	ug/L	0.690	107.13	ppb	0.690	0.64%
S 181.975 Axial†	3412.4	3673.5	ug/L	22.95	3673.5	ppb	22.95	0.62%
Sb 206.836†	54.8	11.138	ug/L	3.0805	11.138	ppb	3.0805	27.66%
Se 196.026†	-143.0	14.117	ug/L	4.2772	14.117	ppb	4.2772	30.30%
Si 251.611†	396736.7	10075	ug/L	11.1	10075	ppb	11.1	0.11%
Sn 189.927†	-241.4	-11.219	ug/L	1.2526	-11.219	ppb	1.2526	11.16%
Sr 421.552†	49585.6	258.32	ug/L	1.424	258.32	ppb	1.424	0.55%
Ti 334.940†	638042.9	890.29	ug/L	0.352	890.29	ppb	0.352	0.04%
Tl 190.801†	-65.5	-6.5619	ug/L	3.01665	-6.5619	ppb	3.01665	45.97%
U 409.014†	-349.5	-11.767	ug/L	1.0963	-11.767	ppb	1.0963	9.32%
V 292.402†	8399.7	44.144	ug/L	0.3295	44.144	ppb	0.3295	0.75%
Zn 213.857†	60166.4	434.05	ug/L	0.485	434.05	ppb	0.485	0.11%
SiO2†	394623.5	21447	ug/L	52.2	21447	ppb	52.2	0.24%

Sequence No.: 29
Sample ID: 241417001|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 12/5/2009 01:18:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241417001|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4911.1	4911.1	100	%			01:20:54
1	Y RADIAL	6489.4	6489.4	114.9	%			01:20:54
1	Al 396.153Radial†	118996.5	119007.0	78582	ug/L	78582	ppb	01:20:34
1	Ca 317.933Radial†	14544.1	14522.2	25712	ug/L	25712	ppb	01:20:34
1	Fe 238.204 Radial†	11333.7	11319.5	136860	ug/L	136860	ppb	01:20:34
1	K 766.490 Radial†	52021.7	49437.6	8992.6	ug/L	8992.6	ppb	01:20:34
1	Mg 279.077 IEC†	340.1	337.5	14983	ug/L	14983	ppb	01:20:54
1	Na 589.592 Radial†	2083.6	3363.0	943.31	ug/L	943.31	ppb	01:20:34
1	Sr 421.552†	26840.9	26840.8	140.58	ug/L	140.58	ppb	01:20:34
1	Sc 361.383	1043125.4	1043125.4	100.35	%			01:21:52
1	Y 371.029	1023477.0	1023477.0	115.72	%			01:21:52
1	Ag 328.068†	17990.8	17453.9	113.36	ug/L	113.36	ppb	01:21:58
1	As 188.979†	-117.1	-80.1	38.510	ug/L	38.510	ppb	01:22:18
1	B 249.677†	1350.1	1811.5	15.991	ug/L	15.991	ppb	01:21:58
1	Ba 233.527†	98306.0	97962.8	634.86	ug/L	634.86	ppb	01:21:58
1	Be 313.107†	-21974.3	-17023.6	4.5853	ug/L	4.5853	ppb	01:21:58
1	Cd 226.502†	1504.5	1734.9	1.4841	ug/L	1.4841	ppb	01:22:18
1	Co 228.616†	2038.4	2117.7	22.426	ug/L	22.426	ppb	01:22:18
1	Cr 267.716†	23540.1	23370.1	212.84	ug/L	212.84	ppb	01:22:18
1	Cu 324.752†	83557.0	74327.8	205.47	ug/L	205.47	ppb	01:21:58
1	Mn 257.610†	2504247.2	2494927.0	2375.9	ug/L	2375.9	ppb	01:21:52
1	Mo 202.031†	25.1	-4.2	9.4827	ug/L	9.4827	ppb	01:22:18
1	Ni 231.604†	3038.0	2895.5	56.710	ug/L	56.710	ppb	01:22:18
1	P 214.914†	4843.7	4561.6	1924.9	ug/L	1924.9	ppb	01:22:18
1	Pb 220.353†	1635.5	1705.3	166.33	ug/L	166.33	ppb	01:22:18
1	S 181.975 Axial†	435.2	373.6	387.04	ug/L	387.04	ppb	01:22:18
1	Sb 206.836†	99.1	64.2	-1.4278	ug/L	-1.4278	ppb	01:22:18
1	Se 196.026†	-820.2	-795.9	143.78	ug/L	143.78	ppb	01:22:18
1	Si 251.611†	808727.7	805346.4	20450	ug/L	20450	ppb	01:21:52
1	Sn 189.927†	3.6	7.9	5.5914	ug/L	5.5914	ppb	01:22:18
1	Ti 334.940†	3660764.0	3649242.9	5034.7	ug/L	5034.7	ppb	01:21:52
1	Tl 190.801†	-266.2	-221.0	0.5567	ug/L	0.5567	ppb	01:22:18
1	U 409.014†	-12839.6	-10020.8	-276.70	ug/L	-276.70	ppb	01:21:58
1	V 292.402†	33251.6	34744.0	172.29	ug/L	172.29	ppb	01:21:58
1	Zn 213.857†	70135.7	69005.2	492.88	ug/L	492.88	ppb	01:21:58
1	SiO2†	803767.6	800362.3	43493	ug/L	43493	ppb	01:23:28
2	Sc Radial	4968.1	4968.1	101	%			01:21:19
2	Y RADIAL	6547.7	6547.7	115.9	%			01:21:19
2	Al 396.153Radial†	117419.2	116082.7	76651	ug/L	76651	ppb	01:20:59
2	Ca 317.933Radial†	14316.1	14130.0	25018	ug/L	25018	ppb	01:20:59
2	Fe 238.204 Radial†	11180.2	11037.8	133450	ug/L	133450	ppb	01:20:59
2	K 766.490 Radial†	51610.7	48434.5	8809.6	ug/L	8809.6	ppb	01:20:59
2	Mg 279.077 IEC†	333.9	327.5	14538	ug/L	14538	ppb	01:21:19
2	Na 589.592 Radial†	1971.2	3228.0	905.46	ug/L	905.46	ppb	01:20:59
2	Sr 421.552†	26473.7	26169.9	137.07	ug/L	137.07	ppb	01:20:59
2	Sc 361.383	1046696.2	1046696.2	100.69	%			01:22:24
2	Y 371.029	1027803.1	1027803.1	116.21	%			01:22:24
2	Ag 328.068†	17886.4	17289.1	111.63	ug/L	111.63	ppb	01:22:30
2	As 188.979†	-109.2	-71.8	40.501	ug/L	40.501	ppb	01:22:50
2	B 249.677†	1326.4	1783.3	15.912	ug/L	15.912	ppb	01:22:30
2	Ba 233.527†	97793.5	97119.7	629.32	ug/L	629.32	ppb	01:22:30
2	Be 313.107†	-22416.4	-17388.0	4.4576	ug/L	4.4576	ppb	01:22:30
2	Cd 226.502†	1501.6	1726.9	1.7541	ug/L	1.7541	ppb	01:22:50
2	Co 228.616†	2015.6	2088.0	21.999	ug/L	21.999	ppb	01:22:50
2	Cr 267.716†	23484.2	23234.6	211.55	ug/L	211.55	ppb	01:22:50
2	Cu 324.752†	82860.1	73351.6	202.69	ug/L	202.69	ppb	01:22:30
2	Mn 257.610†	2507164.6	2489311.0	2370.3	ug/L	2370.3	ppb	01:22:24
2	Mo 202.031†	26.7	-2.7	9.3215	ug/L	9.3215	ppb	01:22:50
2	Ni 231.604†	3024.7	2871.9	56.249	ug/L	56.249	ppb	01:22:50

2	P 214.914†	4827.8	4529.5	1913.0 ug/L	1913.0 ppb	01:22:50
2	Pb 220.353†	1649.2	1713.4	166.93 ug/L	166.93 ppb	01:22:50
2	S 181.975 Axial†	431.7	368.6	382.09 ug/L	382.09 ppb	01:22:50
2	Sb 206.836†	109.0	73.6	1.1369 ug/L	1.1369 ppb	01:22:50
2	Se 196.026†	-834.7	-807.6	126.26 ug/L	126.26 ppb	01:22:50
2	Si 251.611†	809165.9	803032.3	20391 ug/L	20391 ppb	01:22:24
2	Sn 189.927†	18.9	23.1	7.4770 ug/L	7.4770 ppb	01:22:50
2	Ti 334.940†	3668023.0	3644007.0	5027.4 ug/L	5027.4 ppb	01:22:24
2	Tl 190.801†	-265.8	-219.7	0.7490 ug/L	0.7490 ppb	01:22:50
2	U 409.014†	-12677.2	-9815.9	-270.97 ug/L	-270.97 ppb	01:22:30
2	V 292.402†	33118.3	34498.6	171.41 ug/L	171.41 ppb	01:22:30
2	Zn 213.857†	69691.5	68325.7	488.24 ug/L	488.24 ppb	01:22:30
2	SiO2†	799942.7	793831.2	43138 ug/L	43138 ppb	01:23:34
3	Sc Radial	4898.6	4898.6	99.8 %		01:21:44
3	Y RADIAL	6468.6	6468.6	114.5 %		01:21:44
3	Al 396.153Radial†	117634.0	117945.2	77881 ug/L	77881 ppb	01:21:24
3	Ca 317.933Radial†	14368.4	14383.2	25466 ug/L	25466 ppb	01:21:24
3	Fe 238.204 Radial†	11271.6	11286.2	136450 ug/L	136450 ppb	01:21:24
3	K 766.490 Radial†	51742.3	49290.5	8965.8 ug/L	8965.8 ppb	01:21:24
3	Mg 279.077 IEC†	336.6	334.8	14866 ug/L	14866 ppb	01:21:44
3	Na 589.592 Radial†	2060.4	3345.1	938.29 ug/L	938.29 ppb	01:21:24
3	Sr 421.552†	26503.5	26571.2	139.17 ug/L	139.17 ppb	01:21:24
3	Sc 361.383	1047733.4	1047733.4	100.79 %		01:22:57
3	Y 371.029	1029334.4	1029334.4	116.38 %		01:22:57
3	Ag 328.068†	17890.9	17276.0	112.53 ug/L	112.53 ppb	01:23:02
3	As 188.979†	-108.8	-71.3	41.113 ug/L	41.113 ppb	01:23:22
3	B 249.677†	1446.4	1901.1	17.739 ug/L	17.739 ppb	01:23:02
3	Ba 233.527†	98077.5	97305.3	630.62 ug/L	630.62 ppb	01:23:02
3	Be 313.107†	-22318.5	-17268.8	4.4925 ug/L	4.4925 ppb	01:23:02
3	Cd 226.502†	1491.3	1715.2	1.3520 ug/L	1.3520 ppb	01:23:22
3	Co 228.616†	2021.2	2091.6	22.020 ug/L	22.020 ppb	01:23:22
3	Cr 267.716†	23509.0	23236.2	211.62 ug/L	211.62 ppb	01:23:22
3	Cu 324.752†	83075.5	73483.9	203.20 ug/L	203.20 ppb	01:23:02
3	Mn 257.610†	2510385.4	2490041.4	2371.3 ug/L	2371.3 ppb	01:22:57
3	Mo 202.031†	29.1	-0.3	9.6617 ug/L	9.6617 ppb	01:23:22
3	Ni 231.604†	3035.8	2880.0	56.408 ug/L	56.408 ppb	01:23:22
3	P 214.914†	4843.8	4540.5	1915.9 ug/L	1915.9 ppb	01:23:22
3	Pb 220.353†	1669.1	1731.5	168.66 ug/L	168.66 ppb	01:23:22
3	S 181.975 Axial†	427.7	364.3	377.13 ug/L	377.13 ppb	01:23:22
3	Sb 206.836†	92.7	57.4	-3.1239 ug/L	-3.1239 ppb	01:23:22
3	Se 196.026†	-830.5	-802.6	139.36 ug/L	139.36 ppb	01:23:22
3	Si 251.611†	810146.0	803209.1	20396 ug/L	20396 ppb	01:22:57
3	Sn 189.927†	18.2	22.4	7.4794 ug/L	7.4794 ppb	01:23:22
3	Ti 334.940†	3670824.2	3643179.9	5026.3 ug/L	5026.3 ppb	01:22:57
3	Tl 190.801†	-279.4	-233.0	-2.4352 ug/L	-2.4352 ppb	01:23:22
3	U 409.014†	-12945.7	-10069.8	-277.92 ug/L	-277.92 ppb	01:23:02
3	V 292.402†	33128.6	34476.3	170.82 ug/L	170.82 ppb	01:23:02
3	Zn 213.857†	69980.2	68543.6	489.54 ug/L	489.54 ppb	01:23:02
3	SiO2†	799519.9	792625.3	43073 ug/L	43073 ppb	01:23:40

Mean Data: 241417001|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045851.7	100.61	%	0.233				0.23%
Sc Radial	4925.9	100	%	0.8				0.75%
Y 371.029	1026871.5	116.10	%	0.343				0.30%
Y RADIAL	6501.9	115.1	%	0.73				0.63%
Ag 328.068†	17339.7	112.51	ug/L	0.869	112.51	ppb	0.869	0.77%
Al 396.153Radial†	117678.3	77705	ug/L	977.5	77705	ppb	977.5	1.26%
As 188.979†	-74.4	40.042	ug/L	1.3612	40.042	ppb	1.3612	3.40%
B 249.677†	1832.0	16.547	ug/L	1.0328	16.547	ppb	1.0328	6.24%
Ba 233.527†	97462.6	631.60	ug/L	2.900	631.60	ppb	2.900	0.46%
Be 313.107†	-17226.8	4.5118	ug/L	0.06605	4.5118	ppb	0.06605	1.46%
Ca 317.933Radial†	14345.1	25399	ug/L	352.0	25399	ppb	352.0	1.39%
Cd 226.502†	1725.6	1.5301	ug/L	0.20495	1.5301	ppb	0.20495	13.39%
Co 228.616†	2099.1	22.148	ug/L	0.2405	22.148	ppb	0.2405	1.09%
Cr 267.716†	23280.3	212.01	ug/L	0.721	212.01	ppb	0.721	0.34%
Cu 324.752†	73721.1	203.79	ug/L	1.481	203.79	ppb	1.481	0.73%
Fe 238.204 Radial†	11214.5	135590	ug/L	1861.0	135590	ppb	1861.0	1.37%
K 766.490 Radial†	49054.2	8922.7	ug/L	98.84	8922.7	ppb	98.84	1.11%

Mg 279.077 IEC†	333.3	14796	ug/L	230.6	14796	ppb	230.6	1.56%
Mn 257.610†	2491426.5	2372.5	ug/L	3.02	2372.5	ppb	3.02	0.13%
Mo 202.031†	-2.4	9.4886	ug/L	0.17021	9.4886	ppb	0.17021	1.79%
Na 589.592 Radial†	3312.0	929.02	ug/L	20.560	929.02	ppb	20.560	2.21%
Ni 231.604†	2882.5	56.456	ug/L	0.2346	56.456	ppb	0.2346	0.42%
P 214.914†	4543.9	1917.9	ug/L	6.18	1917.9	ppb	6.18	0.32%
Pb 220.353†	1716.7	167.31	ug/L	1.212	167.31	ppb	1.212	0.72%
S 181.975 Axial†	368.8	382.08	ug/L	4.957	382.08	ppb	4.957	1.30%
Sb 206.836†	65.0	-1.1383	ug/L	2.14515	-1.1383	ppb	2.14515	188.45%
Se 196.026†	-802.0	136.47	ug/L	9.112	136.47	ppb	9.112	6.68%
Si 251.611†	803862.6	20412	ug/L	32.7	20412	ppb	32.7	0.16%
Sn 189.927†	17.8	6.8493	ug/L	1.08936	6.8493	ppb	1.08936	15.90%
Sr 421.552†	26527.3	138.94	ug/L	1.768	138.94	ppb	1.768	1.27%
Ti 334.940†	3645476.6	5029.5	ug/L	4.55	5029.5	ppb	4.55	0.09%
Tl 190.801†	-224.5	-0.3765	ug/L	1.78550	-0.3765	ppb	1.78550	474.21%
U 409.014†	-9968.8	-275.20	ug/L	3.708	-275.20	ppb	3.708	1.35%
V 292.402†	34573.0	171.51	ug/L	0.737	171.51	ppb	0.737	0.43%
Zn 213.857†	68624.9	490.22	ug/L	2.397	490.22	ppb	2.397	0.49%
SiO2†	795606.2	43235	ug/L	226.2	43235	ppb	226.2	0.52%

Sequence No.: 30
Sample ID: 241417002|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 12/5/2009 01:25:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241417002|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4944.6	4944.6	101	%			01:27:44
1	Y RADIAL	7043.2	7043.2	124.7	%			01:27:44
1	Al 396.153Radial†	97536.6	96891.8	63979	ug/L	63979	ppb	01:27:44
1	Ca 317.933Radial†	5709.6	5651.4	10006	ug/L	10006	ppb	01:27:44
1	Fe 238.204 Radial†	9983.8	9902.3	119720	ug/L	119720	ppb	01:27:44
1	K 766.490 Radial†	38187.0	35347.9	6426.2	ug/L	6426.2	ppb	01:27:44
1	Mg 279.077 IEC†	255.8	251.4	11149	ug/L	11149	ppb	01:28:04
1	Na 589.592 Radial†	3550.6	4805.5	1347.9	ug/L	1347.9	ppb	01:27:44
1	Sr 421.552†	13663.6	13574.6	71.126	ug/L	71.126	ppb	01:27:44
1	Sc 361.383	1049673.5	1049673.5	100.98	%			01:29:02
1	Y 371.029	1101572.7	1101572.7	124.55	%			01:29:02
1	Ag 328.068†	-8478.0	-8869.8	3.6624	ug/L	3.6624	ppb	01:29:07
1	As 188.979†	-132.3	-94.4	31.043	ug/L	31.043	ppb	01:29:27
1	B 249.677†	942.0	1399.0	10.501	ug/L	10.501	ppb	01:29:07
1	Ba 233.527†	66630.0	65983.2	428.59	ug/L	428.59	ppb	01:29:07
1	Be 313.107†	-20350.0	-15278.6	5.0721	ug/L	5.0721	ppb	01:29:07
1	Cd 226.502†	1155.5	1379.9	0.0892	ug/L	0.0892	ppb	01:29:27
1	Co 228.616†	1255.3	1329.4	9.7324	ug/L	9.7324	ppb	01:29:27
1	Cr 267.716†	5894.7	5749.7	54.155	ug/L	54.155	ppb	01:29:07
1	Cu 324.752†	15281.4	6195.6	22.652	ug/L	22.652	ppb	01:29:07
1	Mn 257.610†	2309468.9	2286472.2	2176.9	ug/L	2176.9	ppb	01:29:02
1	Mo 202.031†	118.3	87.9	13.159	ug/L	13.159	ppb	01:29:27
1	Ni 231.604†	2075.2	1923.1	37.667	ug/L	37.667	ppb	01:29:27
1	P 214.914†	1954.3	1670.2	669.57	ug/L	669.57	ppb	01:29:27
1	Pb 220.353†	765.7	833.8	82.801	ug/L	82.801	ppb	01:29:27
1	S 181.975 Axial†	184.0	122.1	118.97	ug/L	118.97	ppb	01:29:27
1	Sb 206.836†	91.1	55.6	0.2837	ug/L	0.2837	ppb	01:29:27
1	Se 196.026†	-772.5	-743.6	104.86	ug/L	104.86	ppb	01:29:27
1	Si 251.611†	715028.9	707529.8	17967	ug/L	17967	ppb	01:29:02
1	Sn 189.927†	-7.0	-2.6	2.3260	ug/L	2.3260	ppb	01:29:27
1	Ti 334.940†	3662374.0	3628080.7	5004.8	ug/L	5004.8	ppb	01:29:02
1	Tl 190.801†	-284.4	-237.4	-4.9285	ug/L	-4.9285	ppb	01:29:27
1	U 409.014†	-22156.7	-19167.6	-510.72	ug/L	-510.72	ppb	01:29:02
1	V 292.402†	18308.6	19739.4	88.616	ug/L	88.616	ppb	01:29:07
1	Zn 213.857†	62113.6	60625.0	433.41	ug/L	433.41	ppb	01:29:07
1	SiO2†	711365.0	703860.2	38250	ug/L	38250	ppb	01:30:37
2	Sc Radial	4905.9	4905.9	99.9	%			01:28:09
2	Y RADIAL	7019.3	7019.3	124.3	%			01:28:09
2	Al 396.153Radial†	98445.7	98566.3	65085	ug/L	65085	ppb	01:28:09
2	Ca 317.933Radial†	5790.2	5776.9	10228	ug/L	10228	ppb	01:28:09
2	Fe 238.204 Radial†	10056.1	10053.0	121540	ug/L	121540	ppb	01:28:09
2	K 766.490 Radial†	38638.8	36099.5	6563.4	ug/L	6563.4	ppb	01:28:09
2	Mg 279.077 IEC†	251.8	249.4	11058	ug/L	11058	ppb	01:28:29
2	Na 589.592 Radial†	3638.3	4921.1	1380.4	ug/L	1380.4	ppb	01:28:09
2	Sr 421.552†	13811.6	13829.8	72.463	ug/L	72.463	ppb	01:28:09
2	Sc 361.383	1055575.4	1055575.4	101.55	%			01:29:34
2	Y 371.029	1109622.3	1109622.3	125.46	%			01:29:34
2	Ag 328.068†	-8333.3	-8680.3	4.9872	ug/L	4.9872	ppb	01:29:39
2	As 188.979†	-119.3	-80.9	35.472	ug/L	35.472	ppb	01:30:00
2	B 249.677†	960.1	1411.6	10.499	ug/L	10.499	ppb	01:29:39
2	Ba 233.527†	66839.1	65820.2	427.61	ug/L	427.61	ppb	01:29:39
2	Be 313.107†	-20623.5	-15435.1	5.0094	ug/L	5.0094	ppb	01:29:39
2	Cd 226.502†	1130.5	1348.9	-0.3632	ug/L	-0.3632	ppb	01:30:00
2	Co 228.616†	1232.8	1300.3	9.2392	ug/L	9.2392	ppb	01:30:00
2	Cr 267.716†	6023.1	5843.5	55.028	ug/L	55.028	ppb	01:29:39
2	Cu 324.752†	15080.3	5912.9	21.991	ug/L	21.991	ppb	01:29:39
2	Mn 257.610†	2317125.6	2281224.8	2172.1	ug/L	2172.1	ppb	01:29:34
2	Mo 202.031†	109.0	78.1	12.767	ug/L	12.767	ppb	01:30:00
2	Ni 231.604†	2076.2	1912.6	37.462	ug/L	37.462	ppb	01:30:00

2	P 214.914†	1970.2	1675.0	670.77	ug/L	670.77	ppb	01:30:00
2	Pb 220.353†	774.8	838.6	83.345	ug/L	83.345	ppb	01:30:00
2	S 181.975 Axial†	176.7	113.9	109.89	ug/L	109.89	ppb	01:30:00
2	Sb 206.836†	86.9	50.9	-0.9521	ug/L	-0.9521	ppb	01:30:00
2	Se 196.026†	-773.9	-740.7	112.77	ug/L	112.77	ppb	01:30:00
2	Si 251.611†	718162.5	706656.6	17944	ug/L	17944	ppb	01:29:34
2	Sn 189.927†	-0.7	3.7	3.2105	ug/L	3.2105	ppb	01:30:00
2	Ti 334.940†	3677754.8	3622948.7	4997.8	ug/L	4997.8	ppb	01:29:34
2	Tl 190.801†	-292.3	-243.6	-6.4828	ug/L	-6.4828	ppb	01:30:00
2	U 409.014†	-22312.3	-19198.2	-511.75	ug/L	-511.75	ppb	01:29:34
2	V 292.402†	18253.4	19583.6	87.444	ug/L	87.444	ppb	01:29:39
2	Zn 213.857†	62301.4	60466.0	432.08	ug/L	432.08	ppb	01:29:39
2	SiO2†	724314.7	712673.6	38729	ug/L	38729	ppb	01:30:43
3	Sc Radial	5009.3	5009.3	102	%			01:28:34
3	Y RADIAL	7102.6	7102.6	125.8	%			01:28:34
3	Al 396.153Radial†	99508.1	97573.9	64430	ug/L	64430	ppb	01:28:34
3	Ca 317.933Radial†	5866.7	5732.3	10149	ug/L	10149	ppb	01:28:34
3	Fe 238.204 Radial†	10176.2	9963.0	120450	ug/L	120450	ppb	01:28:34
3	K 766.490 Radial†	39062.1	35716.2	6493.4	ug/L	6493.4	ppb	01:28:34
3	Mg 279.077 IEC†	251.4	243.9	10812	ug/L	10812	ppb	01:28:54
3	Na 589.592 Radial†	3696.2	4902.7	1375.2	ug/L	1375.2	ppb	01:28:34
3	Sr 421.552†	14041.6	13769.9	72.149	ug/L	72.149	ppb	01:28:34
3	Sc 361.383	1046477.0	1046477.0	100.67	%			01:30:06
3	Y 371.029	1099300.2	1099300.2	124.29	%			01:30:06
3	Ag 328.068†	-8390.9	-8808.9	4.1366	ug/L	4.1366	ppb	01:30:11
3	As 188.979†	-125.5	-88.0	33.143	ug/L	33.143	ppb	01:30:32
3	B 249.677†	913.1	1373.1	9.9147	ug/L	9.9147	ppb	01:30:11
3	Ba 233.527†	66749.0	66303.0	430.67	ug/L	430.67	ppb	01:30:11
3	Be 313.107†	-20393.4	-15383.2	5.0395	ug/L	5.0395	ppb	01:30:11
3	Cd 226.502†	1131.6	1359.6	-0.1612	ug/L	-0.1612	ppb	01:30:32
3	Co 228.616†	1236.8	1314.9	9.4797	ug/L	9.4797	ppb	01:30:32
3	Cr 267.716†	5986.2	5858.5	55.145	ug/L	55.145	ppb	01:30:11
3	Cu 324.752†	15094.4	6056.1	22.317	ug/L	22.317	ppb	01:30:11
3	Mn 257.610†	2304877.2	2288897.1	2179.3	ug/L	2179.3	ppb	01:30:06
3	Mo 202.031†	98.9	69.0	12.205	ug/L	12.205	ppb	01:30:32
3	Ni 231.604†	2057.9	1912.2	37.453	ug/L	37.453	ppb	01:30:32
3	P 214.914†	1961.3	1683.1	675.01	ug/L	675.01	ppb	01:30:32
3	Pb 220.353†	774.9	845.3	83.919	ug/L	83.919	ppb	01:30:32
3	S 181.975 Axial†	172.1	110.8	106.75	ug/L	106.75	ppb	01:30:32
3	Sb 206.836†	90.6	55.4	0.2245	ug/L	0.2245	ppb	01:30:32
3	Se 196.026†	-755.2	-728.8	114.10	ug/L	114.10	ppb	01:30:32
3	Si 251.611†	713498.7	708172.8	17983	ug/L	17983	ppb	01:30:06
3	Sn 189.927†	10.8	15.1	4.6935	ug/L	4.6935	ppb	01:30:32
3	Ti 334.940†	3651251.6	3628110.9	5004.9	ug/L	5004.9	ppb	01:30:06
3	Tl 190.801†	-294.9	-248.6	-7.6218	ug/L	-7.6218	ppb	01:30:32
3	U 409.014†	-22073.1	-19151.6	-510.40	ug/L	-510.40	ppb	01:30:06
3	V 292.402†	18328.6	19814.6	88.914	ug/L	88.914	ppb	01:30:11
3	Zn 213.857†	62344.7	61042.5	436.42	ug/L	436.42	ppb	01:30:11
3	SiO2†	714818.2	709442.0	38553	ug/L	38553	ppb	01:30:48

Mean Data: 241417002|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1050575.3	101.07	%	0.444				0.44%
Sc Radial	4953.3	101	%	1.1				1.05%
Y 371.029	1103498.4	124.76	%	0.613				0.49%
Y RADIAL	7055.0	124.9	%	0.76				0.61%
Ag 328.068†	-8786.3	4.2621	ug/L	0.67126	4.2621	ppb	0.67126	15.75%
Al 396.153Radial†	97677.3	64498	ug/L	556.0	64498	ppb	556.0	0.86%
As 188.979†	-87.8	33.219	ug/L	2.2155	33.219	ppb	2.2155	6.67%
B 249.677†	1394.5	10.305	ug/L	0.3380	10.305	ppb	0.3380	3.28%
Ba 233.527†	66035.4	428.95	ug/L	1.565	428.95	ppb	1.565	0.36%
Be 313.107†	-15365.6	5.0403	ug/L	0.03137	5.0403	ppb	0.03137	0.62%
Ca 317.933Radial†	5720.2	10128	ug/L	112.6	10128	ppb	112.6	1.11%
Cd 226.502†	1362.8	-0.1451	ug/L	0.22665	-0.1451	ppb	0.22665	156.23%
Co 228.616†	1314.9	9.4838	ug/L	0.24659	9.4838	ppb	0.24659	2.60%
Cr 267.716†	5817.2	54.776	ug/L	0.5412	54.776	ppb	0.5412	0.99%
Cu 324.752†	6054.8	22.320	ug/L	0.3310	22.320	ppb	0.3310	1.48%
Fe 238.204 Radial†	9972.7	120570	ug/L	916.7	120570	ppb	916.7	0.76%
K 766.490 Radial†	35721.2	6494.3	ug/L	68.61	6494.3	ppb	68.61	1.06%

Mg 279.077 IEC†	248.3	11006	ug/L	173.9	11006	ppb	173.9	1.58%
Mn 257.610†	2285531.4	2176.1	ug/L	3.65	2176.1	ppb	3.65	0.17%
Mo 202.031†	78.3	12.710	ug/L	0.4792	12.710	ppb	0.4792	3.77%
Na 589.592 Radial†	4876.4	1367.8	ug/L	17.43	1367.8	ppb	17.43	1.27%
Ni 231.604†	1916.0	37.527	ug/L	0.1213	37.527	ppb	0.1213	0.32%
P 214.914†	1676.1	671.78	ug/L	2.854	671.78	ppb	2.854	0.42%
Pb 220.353†	839.2	83.355	ug/L	0.5592	83.355	ppb	0.5592	0.67%
S 181.975 Axial†	115.6	111.87	ug/L	6.347	111.87	ppb	6.347	5.67%
Sb 206.836†	54.0	-0.1480	ug/L	0.69702	-0.1480	ppb	0.69702	471.11%
Se 196.026†	-737.7	110.58	ug/L	4.993	110.58	ppb	4.993	4.52%
Si 251.611†	707453.1	17965	ug/L	19.3	17965	ppb	19.3	0.11%
Sn 189.927†	5.4	3.4100	ug/L	1.19631	3.4100	ppb	1.19631	35.08%
Sr 421.552†	13724.8	71.912	ug/L	0.6992	71.912	ppb	0.6992	0.97%
Ti 334.940†	3626380.1	5002.5	ug/L	4.09	5002.5	ppb	4.09	0.08%
Tl 190.801†	-243.2	-6.3443	ug/L	1.35196	-6.3443	ppb	1.35196	21.31%
U 409.014†	-19172.5	-510.96	ug/L	0.701	-510.96	ppb	0.701	0.14%
V 292.402†	19712.5	88.325	ug/L	0.7771	88.325	ppb	0.7771	0.88%
Zn 213.857†	60711.2	433.97	ug/L	2.227	433.97	ppb	2.227	0.51%
SiO2†	708658.6	38511	ug/L	242.3	38511	ppb	242.3	0.63%

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 01:47:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4299.3	4299.3	87.6	%			01:49:11
1	Y RADIAL	4894.4	4894.4	86.67	%			01:49:11
1	Al 396.153Radial†	7477.1	8582.5	5645.2	ug/L	5645.2	ppb	01:49:11
1	Ca 317.933Radial†	2804.8	3185.2	5639.4	ug/L	5639.4	ppb	01:49:31
1	Fe 238.204 Radial†	423.4	472.6	5729.4	ug/L	5729.4	ppb	01:49:31
1	K 766.490 Radial†	29126.4	30692.4	5584.7	ug/L	5584.7	ppb	01:49:11
1	Mg 279.077 IEC†	116.5	130.6	5847.8	ug/L	5847.8	ppb	01:49:31
1	Na 589.592 Radial†	34383.3	40545.3	11373	ug/L	11373	ppb	01:49:11
1	Sr 421.552†	93422.8	106695.0	559.72	ug/L	559.72	ppb	01:49:11
1	Sc 361.383	1012171.3	1012171.3	97.373	%			01:50:30
1	Y 371.029	849502.2	849502.2	96.047	%			01:50:30
1	Ag 328.068†	125286.8	128193.4	511.44	ug/L	511.44	ppb	01:50:30
1	As 188.979†	1554.8	1633.4	513.48	ug/L	513.48	ppb	01:50:50
1	B 249.677†	25408.1	26559.8	499.89	ug/L	499.89	ppb	01:50:30
1	Ba 233.527†	77302.3	79388.3	511.36	ug/L	511.36	ppb	01:50:30
1	Be 313.107†	1582466.1	1630040.8	509.24	ug/L	509.24	ppb	01:50:30
1	Cd 226.502†	56989.2	58762.6	512.21	ug/L	512.21	ppb	01:50:30
1	Co 228.616†	30027.3	30923.9	509.54	ug/L	509.54	ppb	01:50:50
1	Cr 267.716†	55013.9	56410.6	507.62	ug/L	507.62	ppb	01:50:30
1	Cu 324.752†	195092.1	191418.9	511.48	ug/L	511.48	ppb	01:50:30
1	Mn 257.610†	527540.9	541199.2	512.95	ug/L	512.95	ppb	01:50:30
1	Mo 202.031†	9434.7	9660.1	513.04	ug/L	513.04	ppb	01:50:50
1	Ni 231.604†	25403.3	25956.9	508.26	ug/L	508.26	ppb	01:50:50
1	P 214.914†	5894.0	5787.9	2511.3	ug/L	2511.3	ppb	01:50:50
1	Pb 220.353†	5261.6	5479.2	516.00	ug/L	516.00	ppb	01:50:50
1	S 181.975 Axial†	977.0	943.3	1015.2	ug/L	1015.2	ppb	01:50:50
1	Sb 206.836†	1924.8	1942.1	519.44	ug/L	519.44	ppb	01:50:50
1	Se 196.026†	1115.1	1166.6	539.11	ug/L	539.11	ppb	01:50:50
1	Si 251.611†	98040.2	100128.0	2530.5	ug/L	2530.5	ppb	01:50:30
1	Sn 189.927†	3720.3	3825.0	506.56	ug/L	506.56	ppb	01:50:50
1	Ti 334.940†	358657.4	369595.8	509.67	ug/L	509.67	ppb	01:50:30
1	Tl 190.801†	2010.5	2109.0	513.33	ug/L	513.33	ppb	01:50:50
1	U 409.014†	16019.7	19225.9	495.37	ug/L	495.37	ppb	01:50:30
1	V 292.402†	84695.3	88589.2	513.94	ug/L	513.94	ppb	01:50:30
1	Zn 213.857†	68453.4	69414.9	505.47	ug/L	505.47	ppb	01:50:30
1	SiO2†	97533.4	99566.2	5384.5	ug/L	5384.5	ppb	01:51:50
2	Sc Radial	4803.9	4803.9	97.8	%			01:49:36
2	Y RADIAL	5500.3	5500.3	97.40	%			01:49:36
2	Al 396.153Radial†	7416.3	7623.5	5012.1	ug/L	5012.1	ppb	01:49:36
2	Ca 317.933Radial†	2803.4	2847.3	5041.2	ug/L	5041.2	ppb	01:49:56
2	Fe 238.204 Radial†	421.7	420.0	5093.8	ug/L	5093.8	ppb	01:49:56
2	K 766.490 Radial†	29115.7	27187.7	4946.4	ug/L	4946.4	ppb	01:49:36
2	Mg 279.077 IEC†	115.7	115.8	5187.2	ug/L	5187.2	ppb	01:49:56
2	Na 589.592 Radial†	34198.5	36232.0	10163	ug/L	10163	ppb	01:49:36
2	Sr 421.552†	92976.3	95032.4	498.54	ug/L	498.54	ppb	01:49:36
2	Sc 361.383	1019716.1	1019716.1	98.098	%			01:50:57
2	Y 371.029	854661.7	854661.7	96.630	%			01:50:57
2	Ag 328.068†	125935.2	127902.4	510.09	ug/L	510.09	ppb	01:50:57
2	As 188.979†	1566.4	1633.3	513.37	ug/L	513.37	ppb	01:51:18
2	B 249.677†	25543.0	26504.3	498.93	ug/L	498.93	ppb	01:50:57
2	Ba 233.527†	77916.8	79427.3	511.59	ug/L	511.59	ppb	01:50:57
2	Be 313.107†	1591692.7	1627421.7	508.42	ug/L	508.42	ppb	01:50:57
2	Cd 226.502†	57336.1	58683.2	511.58	ug/L	511.58	ppb	01:50:57
2	Co 228.616†	30081.1	30750.6	506.69	ug/L	506.69	ppb	01:51:18
2	Cr 267.716†	55495.7	56483.7	508.27	ug/L	508.27	ppb	01:50:57
2	Cu 324.752†	196283.9	191151.4	510.73	ug/L	510.73	ppb	01:50:57
2	Mn 257.610†	531306.5	541029.2	512.74	ug/L	512.74	ppb	01:50:57
2	Mo 202.031†	9441.1	9594.9	509.54	ug/L	509.54	ppb	01:51:18
2	Ni 231.604†	25470.5	25832.3	505.83	ug/L	505.83	ppb	01:51:18

2	P 214.914†	5875.2	5723.9	2483.1 ug/L	2483.1 ppb	01:51:18
2	Pb 220.353†	5305.6	5484.0	516.35 ug/L	516.35 ppb	01:51:18
2	S 181.975 Axial†	979.0	937.9	1009.5 ug/L	1009.5 ppb	01:51:18
2	Sb 206.836†	1941.0	1944.0	519.89 ug/L	519.89 ppb	01:51:18
2	Se 196.026†	1112.7	1155.6	531.94 ug/L	531.94 ppb	01:51:18
2	Si 251.611†	98770.7	100127.8	2530.8 ug/L	2530.8 ppb	01:50:57
2	Sn 189.927†	3759.7	3836.9	508.06 ug/L	508.06 ppb	01:51:18
2	Ti 334.940†	360907.6	369164.3	509.04 ug/L	509.04 ppb	01:50:57
2	Tl 190.801†	2030.8	2114.4	514.63 ug/L	514.63 ppb	01:51:18
2	U 409.014†	16204.4	19292.5	497.17 ug/L	497.17 ppb	01:50:57
2	V 292.402†	85148.9	88408.0	512.93 ug/L	512.93 ppb	01:50:57
2	Zn 213.857†	69026.4	69478.9	506.04 ug/L	506.04 ppb	01:50:57
2	SiO2†	98416.0	99724.8	5393.7 ug/L	5393.7 ppb	01:51:56
3	Sc Radial	4653.9	4653.9	94.8 %		01:50:01
3	Y RADIAL	5285.5	5285.5	93.60 %		01:50:01
3	Al 396.153Radial†	7374.8	7824.0	5144.9 ug/L	5144.9 ppb	01:50:01
3	Ca 317.933Radial†	2775.7	2910.5	5153.0 ug/L	5153.0 ppb	01:50:21
3	Fe 238.204 Radial†	420.1	432.2	5240.5 ug/L	5240.5 ppb	01:50:21
3	K 766.490 Radial†	28686.0	27693.4	5038.5 ug/L	5038.5 ppb	01:50:01
3	Mg 279.077 IEC†	113.3	117.0	5241.8 ug/L	5241.8 ppb	01:50:21
3	Na 589.592 Radial†	33614.3	36742.0	10306 ug/L	10306 ppb	01:50:01
3	Sr 421.552†	91948.8	97010.7	508.91 ug/L	508.91 ppb	01:50:01
3	Sc 361.383	1026292.2	1026292.2	98.731 %		01:51:25
3	Y 371.029	859974.2	859974.2	97.231 %		01:51:25
3	Ag 328.068†	126896.0	128053.0	510.73 ug/L	510.73 ppb	01:51:25
3	As 188.979†	1550.3	1606.9	505.15 ug/L	505.15 ppb	01:51:45
3	B 249.677†	25960.1	26759.9	503.77 ug/L	503.77 ppb	01:51:25
3	Ba 233.527†	78365.6	79372.9	511.24 ug/L	511.24 ppb	01:51:25
3	Be 313.107†	1601191.8	1626646.3	508.18 ug/L	508.18 ppb	01:51:25
3	Cd 226.502†	57747.8	58725.7	511.93 ug/L	511.93 ppb	01:51:25
3	Co 228.616†	29723.5	30191.9	497.46 ug/L	497.46 ppb	01:51:45
3	Cr 267.716†	55821.4	56451.1	507.98 ug/L	507.98 ppb	01:51:25
3	Cu 324.752†	198006.8	191614.3	511.98 ug/L	511.98 ppb	01:51:25
3	Mn 257.610†	534643.9	540939.1	512.66 ug/L	512.66 ppb	01:51:25
3	Mo 202.031†	9319.7	9410.2	499.75 ug/L	499.75 ppb	01:51:45
3	Ni 231.604†	25146.3	25337.5	496.14 ug/L	496.14 ppb	01:51:45
3	P 214.914†	5813.5	5623.1	2437.6 ug/L	2437.6 ppb	01:51:45
3	Pb 220.353†	5214.3	5356.9	504.41 ug/L	504.41 ppb	01:51:45
3	S 181.975 Axial†	962.4	914.7	984.49 ug/L	984.49 ppb	01:51:45
3	Sb 206.836†	1911.6	1901.6	508.30 ug/L	508.30 ppb	01:51:45
3	Se 196.026†	1101.0	1136.5	523.98 ug/L	523.98 ppb	01:51:45
3	Si 251.611†	99331.7	100050.8	2529.0 ug/L	2529.0 ppb	01:51:25
3	Sn 189.927†	3699.0	3750.9	496.69 ug/L	496.69 ppb	01:51:45
3	Ti 334.940†	363362.3	369293.1	509.23 ug/L	509.23 ppb	01:51:25
3	Tl 190.801†	1992.9	2062.8	502.19 ug/L	502.19 ppb	01:51:45
3	U 409.014†	16432.7	19417.9	500.39 ug/L	500.39 ppb	01:51:25
3	V 292.402†	85649.8	88359.2	512.50 ug/L	512.50 ppb	01:51:25
3	Zn 213.857†	69536.9	69545.1	506.57 ug/L	506.57 ppb	01:51:25
3	SiO2†	99250.6	99927.3	5405.1 ug/L	5405.1 ppb	01:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1019393.2	98.067	%	0.6798				0.69%
Sc Radial	4585.7	93.4	%	5.28				5.65%
Y 371.029	854712.7	96.636	%	0.5920				0.61%
Y RADIAL	5226.7	92.55	%	5.439				5.88%
Ag 328.068†	128049.6	510.76	ug/L	0.677	510.76	ppb	0.677	0.13%
QC value within limits for Ag 328.068 Recovery = 102.15%								
Al 396.153Radial†	8010.0	5267.4	ug/L	333.86	5267.4	ppb	333.86	6.34%
QC value within limits for Al 396.153Radial Recovery = 105.35%								
As 188.979†	1624.5	510.67	ug/L	4.776	510.67	ppb	4.776	0.94%
QC value within limits for As 188.979 Recovery = 102.13%								
B 249.677†	26608.0	500.86	ug/L	2.560	500.86	ppb	2.560	0.51%
QC value within limits for B 249.677 Recovery = 100.17%								
Ba 233.527†	79396.2	511.40	ug/L	0.175	511.40	ppb	0.175	0.03%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1628036.3	508.61	ug/L	0.555	508.61	ppb	0.555	0.11%
QC value within limits for Be 313.107 Recovery = 101.72%								
Ca 317.933Radial†	2981.0	5277.9	ug/L	318.04	5277.9	ppb	318.04	6.03%

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   QC value within limits for Ca 317.933Radial  Recovery = 105.56%
Cd 226.502†            58723.8      511.91 ug/L         0.316      511.91 ppb          0.316   0.06%
   QC value within limits for Cd 226.502  Recovery = 102.38%
Co 228.616†            30622.1      504.56 ug/L         6.316      504.56 ppb          6.316   1.25%
   QC value within limits for Co 228.616  Recovery = 100.91%
Cr 267.716†            56448.5      507.96 ug/L         0.322      507.96 ppb          0.322   0.06%
   QC value within limits for Cr 267.716  Recovery = 101.59%
Cu 324.752†           191394.9      511.40 ug/L         0.626      511.40 ppb          0.626   0.12%
   QC value within limits for Cu 324.752  Recovery = 102.28%
Fe 238.204 Radial†       441.6      5354.6 ug/L        332.82      5354.6 ppb         332.82   6.22%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.09%
K 766.490 Radial†      28524.5      5189.8 ug/L        345.01      5189.8 ppb         345.01   6.65%
   QC value within limits for K 766.490 Radial  Recovery = 103.80%
Mg 279.077 IEC†          121.1      5425.6 ug/L        366.67      5425.6 ppb         366.67   6.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.51%
Mn 257.610†           541055.9      512.78 ug/L         0.148      512.78 ppb          0.148   0.03%
   QC value within limits for Mn 257.610  Recovery = 102.56%
Mo 202.031†             9555.1      507.44 ug/L         6.890      507.44 ppb          6.890   1.36%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     37839.8       10614 ug/L         661.1       10614 ppb          661.1   6.23%
   QC value within limits for Na 589.592 Radial  Recovery = 106.14%
Ni 231.604†            25708.9      503.41 ug/L         6.415      503.41 ppb          6.415   1.27%
   QC value within limits for Ni 231.604  Recovery = 100.68%
P 214.914†              5711.6      2477.3 ug/L        37.20      2477.3 ppb         37.20   1.50%
   QC value within limits for P 214.914  Recovery = 99.09%
Pb 220.353†             5440.0      512.26 ug/L         6.794      512.26 ppb          6.794   1.33%
   QC value within limits for Pb 220.353  Recovery = 102.45%
S 181.975 Axial†         932.0      1003.1 ug/L        16.32      1003.1 ppb         16.32   1.63%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1929.2      515.88 ug/L         6.569      515.88 ppb          6.569   1.27%
   QC value within limits for Sb 206.836  Recovery = 103.18%
Se 196.026†             1152.9      531.67 ug/L         7.571      531.67 ppb          7.571   1.42%
   QC value within limits for Se 196.026  Recovery = 106.33%
Si 251.611†           100102.2      2530.1 ug/L         0.96      2530.1 ppb          0.96   0.04%
   QC value within limits for Si 251.611  Recovery = 101.20%
Sn 189.927†             3804.3      503.77 ug/L         6.174      503.77 ppb          6.174   1.23%
   QC value within limits for Sn 189.927  Recovery = 100.75%
Sr 421.552†            99579.4      522.39 ug/L        32.741      522.39 ppb         32.741   6.27%
   QC value within limits for Sr 421.552  Recovery = 104.48%
Ti 334.940†           369351.0      509.31 ug/L         0.323      509.31 ppb          0.323   0.06%
   QC value within limits for Ti 334.940  Recovery = 101.86%
Tl 190.801†             2095.4      510.05 ug/L         6.834      510.05 ppb          6.834   1.34%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19312.1      497.65 ug/L         2.545      497.65 ppb          2.545   0.51%
   QC value within limits for U 409.014  Recovery = 99.53%
V 292.402†             88452.2      513.12 ug/L         0.736      513.12 ppb          0.736   0.14%
   QC value within limits for V 292.402  Recovery = 102.62%
Zn 213.857†            69479.6      506.03 ug/L         0.550      506.03 ppb          0.550   0.11%
   QC value within limits for Zn 213.857  Recovery = 101.21%
SiO2†                  99739.4      5394.4 ug/L        10.32      5394.4 ppb         10.32   0.19%
   QC value within limits for SiO2  Recovery = 100.88%
All analyte(s) passed QC.
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Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 01:54:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4684.7	4684.7	95.4	%			01:56:02
1	Y RADIAL	5376.2	5376.2	95.20	%			01:56:02
1	Al 396.153Radial†	-33.0	9.2	6.0923	ug/L	6.0923	ppb	01:56:02
1	Ca 317.933Radial†	27.5	10.9	19.356	ug/L	19.356	ppb	01:56:22
1	Fe 238.204 Radial†	9.3	-1.2	-15.086	ug/L	-15.086	ppb	01:56:22
1	K 766.490 Radial†	2611.2	167.1	30.437	ug/L	30.437	ppb	01:56:02
1	Mg 279.077 IEC†	3.0	0.7	30.807	ug/L	30.807	ppb	01:56:22
1	Na 589.592 Radial†	-1139.2	86.0	24.124	ug/L	24.124	ppb	01:56:02
1	Sr 421.552†	-24.6	-18.4	-0.0967	ug/L	-0.0967	ppb	01:56:02
1	Sc 361.383	1013939.4	1013939.4	97.543	%			01:57:19
1	Y 371.029	863202.3	863202.3	97.596	%			01:57:19
1	Ag 328.068†	488.6	26.9	0.1039	ug/L	0.1039	ppb	01:57:24
1	As 188.979†	-31.8	4.0	1.2379	ug/L	1.2379	ppb	01:57:44
1	B 249.677†	-365.6	91.3	1.7277	ug/L	1.7277	ppb	01:57:24
1	Ba 233.527†	8.8	9.1	0.0584	ug/L	0.0584	ppb	01:57:44
1	Be 313.107†	-4811.4	-58.7	-0.0184	ug/L	-0.0184	ppb	01:57:24
1	Cd 226.502†	-233.7	-3.9	-0.0328	ug/L	-0.0328	ppb	01:57:44
1	Co 228.616†	-104.6	-20.9	-0.3443	ug/L	-0.3443	ppb	01:57:44
1	Cr 267.716†	86.2	0.5	0.0056	ug/L	0.0056	ppb	01:57:44
1	Cu 324.752†	9039.6	329.9	0.8802	ug/L	0.8802	ppb	01:57:24
1	Mn 257.610†	676.1	116.5	0.1082	ug/L	0.1082	ppb	01:57:44
1	Mo 202.031†	28.7	0.2	0.0084	ug/L	0.0084	ppb	01:57:44
1	Ni 231.604†	126.0	-2.8	-0.0537	ug/L	-0.0537	ppb	01:57:44
1	P 214.914†	276.9	18.8	8.2734	ug/L	8.2734	ppb	01:57:44
1	Pb 220.353†	-52.2	22.0	2.0705	ug/L	2.0705	ppb	01:57:44
1	S 181.975 Axial†	58.5	-0.1	-0.1531	ug/L	-0.1531	ppb	01:57:44
1	Sb 206.836†	44.0	10.5	2.7760	ug/L	2.7760	ppb	01:57:44
1	Se 196.026†	-32.5	-11.9	-5.3425	ug/L	-5.3425	ppb	01:57:44
1	Si 251.611†	648.3	107.0	2.7074	ug/L	2.7074	ppb	01:57:44
1	Sn 189.927†	-3.4	0.9	0.1154	ug/L	0.1154	ppb	01:57:44
1	Ti 334.940†	-1263.1	-34.5	-0.0459	ug/L	-0.0459	ppb	01:57:24
1	Tl 190.801†	-55.5	-12.6	-3.0554	ug/L	-3.0554	ppb	01:57:44
1	U 409.014†	-2764.2	-59.9	-1.5458	ug/L	-1.5458	ppb	01:57:19
1	V 292.402†	-1522.6	47.6	0.2726	ug/L	0.2726	ppb	01:57:24
1	Zn 213.857†	958.3	96.9	0.7119	ug/L	0.7119	ppb	01:57:44
1	SiO2†	660.0	77.6	4.1938	ug/L	4.1938	ppb	01:58:50
2	Sc Radial	4711.8	4711.8	96.0	%			01:56:27
2	Y RADIAL	5341.3	5341.3	94.58	%			01:56:27
2	Al 396.153Radial†	-50.5	-8.8	-5.8553	ug/L	-5.8553	ppb	01:56:27
2	Ca 317.933Radial†	35.7	19.3	34.231	ug/L	34.231	ppb	01:56:47
2	Fe 238.204 Radial†	12.8	2.4	28.467	ug/L	28.467	ppb	01:56:47
2	K 766.490 Radial†	2724.4	269.3	49.073	ug/L	49.073	ppb	01:56:27
2	Mg 279.077 IEC†	1.2	-1.3	-57.256	ug/L	-57.256	ppb	01:56:47
2	Na 589.592 Radial†	-1160.9	70.3	19.712	ug/L	19.712	ppb	01:56:27
2	Sr 421.552†	-45.9	-40.4	-0.2123	ug/L	-0.2123	ppb	01:56:27
2	Sc 361.383	1035025.5	1035025.5	99.571	%			01:57:49
2	Y 371.029	879839.7	879839.7	99.477	%			01:57:49
2	Ag 328.068†	348.9	-123.6	-0.4830	ug/L	-0.4830	ppb	01:57:54
2	As 188.979†	-35.8	0.7	0.2088	ug/L	0.2088	ppb	01:58:14
2	B 249.677†	-347.3	117.3	2.2117	ug/L	2.2117	ppb	01:57:54
2	Ba 233.527†	26.1	26.2	0.1691	ug/L	0.1691	ppb	01:58:14
2	Be 313.107†	-4859.6	-6.6	-0.0020	ug/L	-0.0020	ppb	01:57:54
2	Cd 226.502†	-242.4	-7.8	-0.0707	ug/L	-0.0707	ppb	01:58:14
2	Co 228.616†	-74.7	11.3	0.1871	ug/L	0.1871	ppb	01:58:14
2	Cr 267.716†	112.9	25.6	0.2302	ug/L	0.2302	ppb	01:58:14
2	Cu 324.752†	8971.2	72.3	0.1946	ug/L	0.1946	ppb	01:57:54
2	Mn 257.610†	700.1	126.5	0.1236	ug/L	0.1236	ppb	01:58:14
2	Mo 202.031†	34.8	5.7	0.3045	ug/L	0.3045	ppb	01:58:14
2	Ni 231.604†	128.8	-2.6	-0.0513	ug/L	-0.0513	ppb	01:58:14

2	P 214.914†	276.7	12.8	5.6620 ug/L	5.6620 ppb	01:58:14
2	Pb 220.353†	-76.9	-1.7	-0.1641 ug/L	-0.1641 ppb	01:58:14
2	S 181.975 Axial†	54.3	-5.5	-5.9676 ug/L	-5.9676 ppb	01:58:14
2	Sb 206.836†	49.6	15.2	4.0138 ug/L	4.0138 ppb	01:58:14
2	Se 196.026†	-23.0	-1.7	-0.6625 ug/L	-0.6625 ppb	01:58:14
2	Si 251.611†	625.9	71.0	1.7803 ug/L	1.7803 ppb	01:58:14
2	Sn 189.927†	-2.0	2.3	0.3133 ug/L	0.3133 ppb	01:58:14
2	Ti 334.940†	-1240.2	14.9	0.0219 ug/L	0.0219 ppb	01:57:54
2	Tl 190.801†	-48.5	-4.4	-1.0752 ug/L	-1.0752 ppb	01:58:14
2	U 409.014†	-2735.4	26.8	0.6878 ug/L	0.6878 ppb	01:57:49
2	V 292.402†	-1644.0	-42.6	-0.2439 ug/L	-0.2439 ppb	01:57:54
2	Zn 213.857†	954.7	73.3	0.5378 ug/L	0.5378 ppb	01:58:14
2	SiO2†	633.2	36.9	1.9538 ug/L	1.9538 ppb	01:58:55
3	Sc Radial	4760.6	4760.6	97.0 %		01:56:52
3	Y RADIAL	5428.0	5428.0	96.12 %		01:56:52
3	Al 396.153Radial†	-11.5	31.9	21.063 ug/L	21.063 ppb	01:56:52
3	Ca 317.933Radial†	26.6	9.6	17.052 ug/L	17.052 ppb	01:57:12
3	Fe 238.204 Radial†	11.9	1.3	15.259 ug/L	15.259 ppb	01:57:12
3	K 766.490 Radial†	2736.4	252.6	46.017 ug/L	46.017 ppb	01:56:52
3	Mg 279.077 IEC†	1.9	-0.5	-24.024 ug/L	-24.024 ppb	01:57:12
3	Na 589.592 Radial†	-1099.6	145.9	40.924 ug/L	40.924 ppb	01:56:52
3	Sr 421.552†	11.9	19.6	0.1029 ug/L	0.1029 ppb	01:56:52
3	Sc 361.383	1016726.7	1016726.7	97.811 %		01:58:19
3	Y 371.029	863841.9	863841.9	97.668 %		01:58:19
3	Ag 328.068†	512.1	49.5	0.2013 ug/L	0.2013 ppb	01:58:25
3	As 188.979†	-40.7	-5.0	-1.5457 ug/L	-1.5457 ppb	01:58:45
3	B 249.677†	-398.0	59.2	1.1169 ug/L	1.1169 ppb	01:58:25
3	Ba 233.527†	31.6	32.3	0.2081 ug/L	0.2081 ppb	01:58:45
3	Be 313.107†	-4826.9	-61.0	-0.0189 ug/L	-0.0189 ppb	01:58:25
3	Cd 226.502†	-219.6	11.1	0.0952 ug/L	0.0952 ppb	01:58:45
3	Co 228.616†	-93.4	-9.2	-0.1519 ug/L	-0.1519 ppb	01:58:45
3	Cr 267.716†	108.1	22.7	0.2046 ug/L	0.2046 ppb	01:58:45
3	Cu 324.752†	8950.2	213.0	0.5697 ug/L	0.5697 ppb	01:58:25
3	Mn 257.610†	675.2	113.6	0.1095 ug/L	0.1095 ppb	01:58:45
3	Mo 202.031†	24.0	-4.8	-0.2510 ug/L	-0.2510 ppb	01:58:45
3	Ni 231.604†	120.5	-8.7	-0.1708 ug/L	-0.1708 ppb	01:58:45
3	P 214.914†	283.8	25.0	11.102 ug/L	11.102 ppb	01:58:45
3	Pb 220.353†	-58.8	15.5	1.4561 ug/L	1.4561 ppb	01:58:45
3	S 181.975 Axial†	63.9	5.2	5.5995 ug/L	5.5995 ppb	01:58:45
3	Sb 206.836†	42.3	8.6	2.2753 ug/L	2.2753 ppb	01:58:45
3	Se 196.026†	-29.2	-8.5	-3.7225 ug/L	-3.7225 ppb	01:58:45
3	Si 251.611†	646.3	103.2	2.6076 ug/L	2.6076 ppb	01:58:45
3	Sn 189.927†	-0.4	3.9	0.5167 ug/L	0.5167 ppb	01:58:45
3	Ti 334.940†	-1206.0	27.4	0.0389 ug/L	0.0389 ppb	01:58:25
3	Tl 190.801†	-37.9	5.5	1.3441 ug/L	1.3441 ppb	01:58:45
3	U 409.014†	-2736.9	-24.2	-0.6275 ug/L	-0.6275 ppb	01:58:19
3	V 292.402†	-1578.7	-5.6	-0.0396 ug/L	-0.0396 ppb	01:58:25
3	Zn 213.857†	960.4	96.4	0.7080 ug/L	0.7080 ppb	01:58:45
3	SiO2†	663.0	78.8	4.2533 ug/L	4.2533 ppb	01:59:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021897.2	98.308	%	1.1019				1.12%
Sc Radial	4719.0	96.1	%	0.78				0.81%
Y 371.029	868961.3	98.247	%	1.0658				1.08%
Y RADIAL	5381.9	95.30	%	0.772				0.81%
Ag 328.068†	-15.7	-0.0593	ug/L	0.37021	-0.0593	ppb	0.37021	624.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.8	7.1000	ug/L	13.48742	7.1000	ppb	13.48742	189.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0330	ug/L	1.40746	-0.0330	ppb	1.40746	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	89.2	1.6855	ug/L	0.54862	1.6855	ppb	0.54862	32.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.5	0.1452	ug/L	0.07767	0.1452	ppb	0.07767	53.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-42.1	-0.0131	ug/L	0.00961	-0.0131	ppb	0.00961	73.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.3	23.546	ug/L	9.3245	23.546	ppb	9.3245	39.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -0.2     -0.0028 ug/L       0.08689     -0.0028 ppb        0.08689 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -6.3     -0.1030 ug/L       0.26902     -0.1030 ppb        0.26902 261.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              16.3      0.1468 ug/L       0.12293      0.1468 ppb        0.12293  83.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             205.1      0.5481 ug/L       0.34331      0.5481 ppb        0.34331  62.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.8      9.5465 ug/L      22.33121      9.5465 ppb       22.33121 233.92%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       229.7     41.843 ug/L        9.9945     41.843 ppb         9.9945  23.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4    -16.824 ug/L       44.4707    -16.824 ppb        44.4707 264.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             118.8      0.1138 ug/L       0.00855      0.1138 ppb        0.00855   7.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.4      0.0206 ug/L       0.27798      0.0206 ppb        0.27798 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      100.7     28.254 ug/L       11.1925     28.254 ppb        11.1925  39.61%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -4.7     -0.0919 ug/L       0.06830     -0.0919 ppb        0.06830  74.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               18.9      8.3457 ug/L       2.72050      8.3457 ppb        2.72050  32.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              11.9      1.1208 ug/L       1.15443      1.1208 ppb        1.15443 103.00%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.2     -0.1738 ug/L       5.78356     -0.1738 ppb        5.78356 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              11.5      3.0217 ug/L       0.89490      3.0217 ppb        0.89490  29.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -7.4     -3.2425 ug/L       2.37661     -3.2425 ppb        2.37661  73.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              93.7      2.3651 ug/L       0.50890      2.3651 ppb        0.50890  21.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.4      0.3151 ug/L       0.20064      0.3151 ppb        0.20064  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -13.1     -0.0687 ug/L       0.15945     -0.0687 ppb        0.15945 232.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               2.6      0.0050 ug/L       0.04488      0.0050 ppb        0.04488 901.20%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.8     -0.9288 ug/L       2.20340     -0.9288 ppb        2.20340 237.22%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -19.1     -0.4952 ug/L       1.12265     -0.4952 ppb        1.12265 226.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -0.2     -0.0036 ug/L       0.26014     -0.0036 ppb        0.26014 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              88.9      0.6526 ug/L       0.09938      0.6526 ppb        0.09938  15.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    64.4      3.4669 ug/L       1.31078      3.4669 ppb        1.31078  37.81%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120909
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120909A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/9/2009 10:30:28**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/9/2009 08:10:12**
Analyst: **Data Type: Reprocessed on 12/9/2009 10:32:11**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	881145.1	881145.1	99.568	%	08:13:21
1	Sc Radial	5712.8	5712.8	101	%	08:12:05
1	Y 371.029	737967.2	737967.2	99.447	%	08:13:21
1	Y RADIAL	6224.1	6224.1	101.1	%	08:12:05
1	Ag 328.068†	293.6	294.9	[0.00]	ug/L	08:13:21

1	Al 396.153Radial†	-21.8	-21.6	[0.00]	ug/L	08:12:25
1	As 188.979†	-24.7	-24.8	[0.00]	ug/L	08:13:41
1	B 249.677†	-515.2	-517.4	[0.00]	ug/L	08:13:41
1	Ba 233.527†	-17.3	-17.4	[0.00]	ug/L	08:13:41
1	Be 313.107†	-5302.3	-5325.3	[0.00]	ug/L	08:13:21
1	Ca 317.933Radial†	15.6	15.5	[0.00]	ug/L	08:12:25
1	Cd 226.502†	-183.7	-184.5	[0.00]	ug/L	08:13:41
1	Co 228.616†	-69.8	-70.1	[0.00]	ug/L	08:13:41
1	Cr 267.716†	96.3	96.7	[0.00]	ug/L	08:13:41
1	Cu 324.752†	6732.9	6762.1	[0.00]	ug/L	08:13:21
1	Fe 238.204 Radial†	5.2	5.2	[0.00]	ug/L	08:12:25
1	K 766.490 Radial†	2115.2	2096.9	[0.00]	ug/L	08:12:05
1	Mg 279.077 IEC†	1.5	1.5	[0.00]	ug/L	08:12:25
1	Mn 257.610†	417.4	419.2	[0.00]	ug/L	08:13:41
1	Mo 202.031†	22.7	22.8	[0.00]	ug/L	08:13:41
1	Na 589.592 Radial†	-635.2	-629.7	[0.00]	ug/L	08:12:05
1	Ni 231.604†	79.5	79.9	[0.00]	ug/L	08:13:41
1	P 214.914†	222.8	223.8	[0.00]	ug/L	08:13:41
1	Pb 220.353†	-47.1	-47.3	[0.00]	ug/L	08:13:41
1	S 181.975 Axial†	45.8	46.0	[0.00]	ug/L	08:13:41
1	Sb 206.836†	23.0	23.1	[0.00]	ug/L	08:13:41
1	Se 196.026†	-26.5	-26.6	[0.00]	ug/L	08:13:41
1	Si 251.611†	570.2	572.6	[0.00]	ug/L	08:13:41
1	Sn 189.927†	2.0	2.0	[0.00]	ug/L	08:13:41
1	Sr 421.552†	-3.7	-3.7	[0.00]	ug/L	08:12:05
1	Ti 334.940†	-960.4	-964.5	[0.00]	ug/L	08:13:21
1	Tl 190.801†	-39.2	-39.4	[0.00]	ug/L	08:13:41
1	U 409.014†	-1974.7	-1983.3	[0.00]	ug/L	08:13:21
1	V 292.402†	-1254.3	-1259.7	[0.00]	ug/L	08:13:21
1	Zn 213.857†	800.9	804.4	[0.00]	ug/L	08:13:41
1	SiO2†	475.1	477.1	[0.00]	ug/L	08:14:52
2	Sc 361.383	888195.9	888195.9	100.36	%	08:13:47
2	Sc Radial	5655.8	5655.8	99.9	%	08:12:30
2	Y 371.029	745171.0	745171.0	100.42	%	08:13:47
2	Y RADIAL	6147.2	6147.2	99.81	%	08:12:30
2	Ag 328.068†	168.6	168.0	[0.00]	ug/L	08:13:47
2	Al 396.153Radial†	-15.8	-15.8	[0.00]	ug/L	08:12:50
2	As 188.979†	-29.1	-29.0	[0.00]	ug/L	08:14:07
2	B 249.677†	-536.1	-534.2	[0.00]	ug/L	08:14:07
2	Ba 233.527†	-13.6	-13.5	[0.00]	ug/L	08:14:07
2	Be 313.107†	-5391.5	-5371.9	[0.00]	ug/L	08:13:47
2	Ca 317.933Radial†	16.6	16.6	[0.00]	ug/L	08:12:50
2	Cd 226.502†	-185.1	-184.4	[0.00]	ug/L	08:14:07
2	Co 228.616†	-74.7	-74.4	[0.00]	ug/L	08:14:07
2	Cr 267.716†	74.6	74.4	[0.00]	ug/L	08:14:07
2	Cu 324.752†	6764.2	6739.7	[0.00]	ug/L	08:13:47
2	Fe 238.204 Radial†	7.2	7.2	[0.00]	ug/L	08:12:50
2	K 766.490 Radial†	2143.7	2146.5	[0.00]	ug/L	08:12:30
2	Mg 279.077 IEC†	0.4	0.4	[0.00]	ug/L	08:12:50
2	Mn 257.610†	398.6	397.1	[0.00]	ug/L	08:14:07
2	Mo 202.031†	21.1	21.0	[0.00]	ug/L	08:14:07
2	Na 589.592 Radial†	-615.4	-616.2	[0.00]	ug/L	08:12:30
2	Ni 231.604†	68.6	68.3	[0.00]	ug/L	08:14:07
2	P 214.914†	215.1	214.3	[0.00]	ug/L	08:14:07
2	Pb 220.353†	-48.8	-48.6	[0.00]	ug/L	08:14:07
2	S 181.975 Axial†	38.9	38.8	[0.00]	ug/L	08:14:07
2	Sb 206.836†	30.5	30.4	[0.00]	ug/L	08:14:07
2	Se 196.026†	-20.3	-20.2	[0.00]	ug/L	08:14:07
2	Si 251.611†	478.0	476.3	[0.00]	ug/L	08:14:07
2	Sn 189.927†	1.5	1.5	[0.00]	ug/L	08:14:07
2	Sr 421.552†	12.4	12.4	[0.00]	ug/L	08:12:30
2	Ti 334.940†	-938.2	-934.8	[0.00]	ug/L	08:13:47
2	Tl 190.801†	-37.7	-37.6	[0.00]	ug/L	08:14:07
2	U 409.014†	-1867.0	-1860.2	[0.00]	ug/L	08:13:47
2	V 292.402†	-1298.6	-1293.9	[0.00]	ug/L	08:13:47
2	Zn 213.857†	816.9	813.9	[0.00]	ug/L	08:14:07
2	SiO2†	492.0	490.3	[0.00]	ug/L	08:15:12
3	Sc 361.383	885576.2	885576.2	100.07	%	08:14:12
3	Sc Radial	5621.4	5621.4	99.3	%	08:12:55
3	Y 371.029	743077.5	743077.5	100.14	%	08:14:12
3	Y RADIAL	6104.9	6104.9	99.13	%	08:12:55

3	Ag 328.068†	220.0	219.8	[0.00] ug/L	08:14:12
3	Al 396.153Radial†	-23.4	-23.6	[0.00] ug/L	08:13:15
3	As 188.979†	-33.8	-33.8	[0.00] ug/L	08:14:32
3	B 249.677†	-520.3	-520.0	[0.00] ug/L	08:14:32
3	Ba 233.527†	-5.2	-5.2	[0.00] ug/L	08:14:32
3	Be 313.107†	-5267.1	-5263.5	[0.00] ug/L	08:14:12
3	Ca 317.933Radial†	20.8	21.0	[0.00] ug/L	08:13:15
3	Cd 226.502†	-194.8	-194.6	[0.00] ug/L	08:14:32
3	Co 228.616†	-70.8	-70.7	[0.00] ug/L	08:14:32
3	Cr 267.716†	89.9	89.8	[0.00] ug/L	08:14:32
3	Cu 324.752†	6808.8	6804.1	[0.00] ug/L	08:14:12
3	Fe 238.204 Radial†	5.7	5.7	[0.00] ug/L	08:13:15
3	K 766.490 Radial†	2250.7	2267.5	[0.00] ug/L	08:12:55
3	Mg 279.077 IEC†	3.3	3.3	[0.00] ug/L	08:13:15
3	Mn 257.610†	394.2	393.9	[0.00] ug/L	08:14:32
3	Mo 202.031†	16.3	16.2	[0.00] ug/L	08:14:32
3	Na 589.592 Radial†	-597.5	-602.0	[0.00] ug/L	08:12:55
3	Ni 231.604†	62.2	62.2	[0.00] ug/L	08:14:32
3	P 214.914†	221.9	221.8	[0.00] ug/L	08:14:32
3	Pb 220.353†	-61.8	-61.7	[0.00] ug/L	08:14:32
3	S 181.975 Axial†	39.6	39.6	[0.00] ug/L	08:14:32
3	Sb 206.836†	35.3	35.3	[0.00] ug/L	08:14:32
3	Se 196.026†	-23.5	-23.5	[0.00] ug/L	08:14:32
3	Si 251.611†	475.5	475.1	[0.00] ug/L	08:14:32
3	Sn 189.927†	9.4	9.4	[0.00] ug/L	08:14:32
3	Sr 421.552†	1.5	1.5	[0.00] ug/L	08:12:55
3	Ti 334.940†	-996.4	-995.7	[0.00] ug/L	08:14:12
3	Tl 190.801†	-33.6	-33.6	[0.00] ug/L	08:14:32
3	U 409.014†	-2044.4	-2043.0	[0.00] ug/L	08:14:12
3	V 292.402†	-1336.8	-1335.8	[0.00] ug/L	08:14:12
3	Zn 213.857†	804.0	803.5	[0.00] ug/L	08:14:32
3	SiO2†	499.4	499.1	[0.00] ug/L	08:15:32

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	884972.4	3563.94	0.40%	100.00	%
Sc Radial	5663.3	46.19	0.82%	100	%
Y 371.029	742071.9	3705.68	0.50%	100.00	%
Y RADIAL	6158.7	60.42	0.98%	100.0	%
Ag 328.068†	227.6	63.78	28.02%	[0.00]	ug/L
Al 396.153Radial†	-20.3	4.06	19.97%	[0.00]	ug/L
As 188.979†	-29.2	4.46	15.27%	[0.00]	ug/L
B 249.677†	-523.9	9.03	1.72%	[0.00]	ug/L
Ba 233.527†	-12.0	6.24	51.89%	[0.00]	ug/L
Be 313.107†	-5320.2	54.40	1.02%	[0.00]	ug/L
Ca 317.933Radial†	17.7	2.91	16.44%	[0.00]	ug/L
Cd 226.502†	-187.8	5.89	3.14%	[0.00]	ug/L
Co 228.616†	-71.7	2.34	3.26%	[0.00]	ug/L
Cr 267.716†	87.0	11.43	13.15%	[0.00]	ug/L
Cu 324.752†	6768.6	32.71	0.48%	[0.00]	ug/L
Fe 238.204 Radial†	6.0	1.02	16.96%	[0.00]	ug/L
K 766.490 Radial†	2170.3	87.73	4.04%	[0.00]	ug/L
Mg 279.077 IEC†	1.8	1.48	84.32%	[0.00]	ug/L
Mn 257.610†	403.4	13.77	3.41%	[0.00]	ug/L
Mo 202.031†	20.0	3.37	16.86%	[0.00]	ug/L
Na 589.592 Radial†	-616.0	13.86	2.25%	[0.00]	ug/L
Ni 231.604†	70.1	8.98	12.80%	[0.00]	ug/L
P 214.914†	220.0	5.00	2.27%	[0.00]	ug/L
Pb 220.353†	-52.5	7.99	15.21%	[0.00]	ug/L
S 181.975 Axial†	41.5	3.95	9.53%	[0.00]	ug/L
Sb 206.836†	29.6	6.13	20.71%	[0.00]	ug/L
Se 196.026†	-23.4	3.18	13.58%	[0.00]	ug/L
Si 251.611†	508.0	55.98	11.02%	[0.00]	ug/L
Sn 189.927†	4.3	4.41	103.33%	[0.00]	ug/L
Sr 421.552†	3.4	8.23	240.79%	[0.00]	ug/L
Ti 334.940†	-965.0	30.47	3.16%	[0.00]	ug/L
Tl 190.801†	-36.9	2.97	8.05%	[0.00]	ug/L
U 409.014†	-1962.2	93.24	4.75%	[0.00]	ug/L
V 292.402†	-1296.5	38.13	2.94%	[0.00]	ug/L

Zn 213.857†	807.3	5.79	0.72%	[0.00] ug/L
SiO2†	488.8	11.06	2.26%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/9/2009 08:17:43
Data Type: Reprocessed on 12/9/2009 10:32:13

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	915606.8	915606.8	103.46	%	08:20:07
1	Sc Radial	5337.0	5337.0	94.2	%	08:19:41
1	Y 371.029	763081.0	763081.0	102.83	%	08:20:07
1	Y RADIAL	5831.6	5831.6	94.69	%	08:19:41
1	Ag 328.068†	22161.7	21192.6	[100]	ug/L	08:20:12
1	As 188.979†	207.1	229.4	[100]	ug/L	08:20:32
1	B 249.677†	4002.0	4392.0	[100]	ug/L	08:20:12
1	Ba 233.527†	13564.0	13122.2	[100]	ug/L	08:20:12
1	Be 313.107†	254917.7	251708.9	[100]	ug/L	08:20:07
1	Cd 226.502†	9233.5	9112.4	[100]	ug/L	08:20:12
1	Co 228.616†	4967.8	4873.4	[100]	ug/L	08:20:32
1	Cr 267.716†	9596.1	9188.1	[100]	ug/L	08:20:12
1	Cu 324.752†	41626.8	33465.4	[100]	ug/L	08:20:12
1	K 766.490 Radial†	7987.7	6305.9	[1000]	ug/L	08:19:36
1	Mn 257.610†	95038.4	91455.2	[100]	ug/L	08:20:12
1	Mo 202.031†	1541.1	1469.5	[100]	ug/L	08:20:32
1	Ni 231.604†	4194.9	3984.4	[100]	ug/L	08:20:32
1	P 214.914†	1036.1	781.5	[500]	ug/L	08:20:32
1	Pb 220.353†	813.8	839.1	[100]	ug/L	08:20:32
1	S 181.975 Axial†	170.2	123.1	[200]	ug/L	08:20:32
1	Sb 206.836†	331.0	290.3	[100]	ug/L	08:20:32
1	Se 196.026†	135.3	154.3	[100]	ug/L	08:20:32
1	Si 251.611†	16988.8	15912.3	[500]	ug/L	08:20:12
1	Sn 189.927†	583.2	559.5	[100]	ug/L	08:20:32
1	Sr 421.552†	15114.5	16035.4	[100]	ug/L	08:19:41
1	Ti 334.940†	62021.0	60910.9	[100]	ug/L	08:20:12
1	Tl 190.801†	314.9	341.2	[100]	ug/L	08:20:32
1	U 409.014†	1340.0	3257.4	[100]	ug/L	08:20:12
1	V 292.402†	13721.3	14558.7	[100]	ug/L	08:20:12
1	Zn 213.857†	12043.1	10832.9	[100]	ug/L	08:20:12
1	SiO2†	16434.1	15395.5	[1069.5]	ug/L	08:21:39
2	Sc 361.383	900223.3	900223.3	101.72	%	08:20:38
2	Sc Radial	5743.1	5743.1	101	%	08:19:51
2	Y 371.029	750252.5	750252.5	101.10	%	08:20:38
2	Y RADIAL	6209.4	6209.4	100.8	%	08:19:51
2	Ag 328.068†	21711.3	21115.9	[100]	ug/L	08:20:43
2	As 188.979†	208.5	234.1	[100]	ug/L	08:21:03
2	B 249.677†	3895.0	4352.9	[100]	ug/L	08:20:43
2	Ba 233.527†	13261.4	13048.8	[100]	ug/L	08:20:43
2	Be 313.107†	258852.8	259787.7	[100]	ug/L	08:20:38
2	Cd 226.502†	9026.6	9061.5	[100]	ug/L	08:20:43
2	Co 228.616†	4991.7	4978.9	[100]	ug/L	08:21:03
2	Cr 267.716†	9375.7	9129.9	[100]	ug/L	08:20:43
2	Cu 324.752†	40530.5	33075.2	[100]	ug/L	08:20:43
2	K 766.490 Radial†	7752.9	5474.8	[1000]	ug/L	08:19:46
2	Mn 257.610†	92417.4	90448.3	[100]	ug/L	08:20:43
2	Mo 202.031†	1544.4	1498.2	[100]	ug/L	08:21:03
2	Ni 231.604†	4238.1	4096.2	[100]	ug/L	08:21:03
2	P 214.914†	1039.7	802.2	[500]	ug/L	08:21:03
2	Pb 220.353†	799.1	838.1	[100]	ug/L	08:21:03
2	S 181.975 Axial†	168.2	123.9	[200]	ug/L	08:21:03
2	Sb 206.836†	333.8	298.5	[100]	ug/L	08:21:03
2	Se 196.026†	139.2	160.3	[100]	ug/L	08:21:03
2	Si 251.611†	16401.5	15615.6	[500]	ug/L	08:20:43
2	Sn 189.927†	584.1	569.9	[100]	ug/L	08:21:03
2	Sr 421.552†	15040.1	14827.7	[100]	ug/L	08:19:51
2	Ti 334.940†	60191.0	60136.4	[100]	ug/L	08:20:43
2	Tl 190.801†	300.7	332.5	[100]	ug/L	08:21:03

2	U 409.014†	1180.4	3122.6	[100]	ug/L	08:20:43
2	V 292.402†	13324.1	14394.9	[100]	ug/L	08:20:43
2	Zn 213.857†	11685.5	10680.3	[100]	ug/L	08:20:43
2	SiO2†	16279.4	15514.8	[1069.5]	ug/L	08:21:44
3	Sc 361.383	895201.6	895201.6	101.16	%	08:21:08
3	Sc Radial	5702.1	5702.1	101	%	08:20:01
3	Y 371.029	746415.6	746415.6	100.59	%	08:21:08
3	Y RADIAL	6190.6	6190.6	100.5	%	08:20:01
3	Ag 328.068†	21753.4	21277.2	[100]	ug/L	08:21:13
3	As 188.979†	221.0	247.7	[100]	ug/L	08:21:33
3	B 249.677†	3919.0	4398.1	[100]	ug/L	08:21:13
3	Ba 233.527†	13184.2	13045.6	[100]	ug/L	08:21:13
3	Be 313.107†	258647.0	261011.7	[100]	ug/L	08:21:08
3	Cd 226.502†	8997.0	9082.1	[100]	ug/L	08:21:13
3	Co 228.616†	4993.3	5008.0	[100]	ug/L	08:21:33
3	Cr 267.716†	9391.6	9197.3	[100]	ug/L	08:21:13
3	Cu 324.752†	41071.5	33833.6	[100]	ug/L	08:21:13
3	K 766.490 Radial†	7638.8	5416.6	[1000]	ug/L	08:19:56
3	Mn 257.610†	92630.0	91168.1	[100]	ug/L	08:21:13
3	Mo 202.031†	1533.1	1495.6	[100]	ug/L	08:21:33
3	Ni 231.604†	4215.0	4096.7	[100]	ug/L	08:21:33
3	P 214.914†	1041.5	809.6	[500]	ug/L	08:21:33
3	Pb 220.353†	791.9	835.3	[100]	ug/L	08:21:33
3	S 181.975 Axial†	165.1	121.7	[200]	ug/L	08:21:33
3	Sb 206.836†	327.5	294.1	[100]	ug/L	08:21:33
3	Se 196.026†	134.7	156.6	[100]	ug/L	08:21:33
3	Si 251.611†	16478.1	15781.8	[500]	ug/L	08:21:13
3	Sn 189.927†	578.0	567.1	[100]	ug/L	08:21:33
3	Sr 421.552†	15083.5	14977.5	[100]	ug/L	08:20:01
3	Ti 334.940†	60410.1	60684.9	[100]	ug/L	08:21:13
3	Tl 190.801†	315.9	349.1	[100]	ug/L	08:21:33
3	U 409.014†	1408.7	3354.8	[100]	ug/L	08:21:13
3	V 292.402†	13290.3	14434.9	[100]	ug/L	08:21:13
3	Zn 213.857†	11746.4	10804.9	[100]	ug/L	08:21:13
3	SiO2†	16488.6	15811.4	[1069.5]	ug/L	08:21:49

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	903677.2	10632.00	1.18%	102.11	%
Sc Radial	5594.1	223.60	4.00%	98.8	%
Y 371.029	753249.7	8727.64	1.16%	101.51	%
Y RADIAL	6077.2	212.91	3.50%	98.68	%
Ag 328.068†	21195.2	80.70	0.38%	[100]	ug/L
As 188.979†	237.1	9.48	4.00%	[100]	ug/L
B 249.677†	4381.0	24.52	0.56%	[100]	ug/L
Ba 233.527†	13072.2	43.32	0.33%	[100]	ug/L
Be 313.107†	257502.8	5054.82	1.96%	[100]	ug/L
Cd 226.502†	9085.3	25.57	0.28%	[100]	ug/L
Co 228.616†	4953.4	70.84	1.43%	[100]	ug/L
Cr 267.716†	9171.8	36.54	0.40%	[100]	ug/L
Cu 324.752†	33458.1	379.24	1.13%	[100]	ug/L
K 766.490 Radial†	5732.4	497.48	8.68%	[1000]	ug/L
Mn 257.610†	91023.9	518.69	0.57%	[100]	ug/L
Mo 202.031†	1487.8	15.86	1.07%	[100]	ug/L
Ni 231.604†	4059.1	64.66	1.59%	[100]	ug/L
P 214.914†	797.8	14.56	1.82%	[500]	ug/L
Pb 220.353†	837.5	1.95	0.23%	[100]	ug/L
S 181.975 Axial†	122.9	1.09	0.89%	[200]	ug/L
Sb 206.836†	294.3	4.09	1.39%	[100]	ug/L
Se 196.026†	157.1	3.06	1.95%	[100]	ug/L
Si 251.611†	15769.9	148.71	0.94%	[500]	ug/L
Sn 189.927†	565.5	5.41	0.96%	[100]	ug/L
Sr 421.552†	15280.2	658.29	4.31%	[100]	ug/L
Ti 334.940†	60577.4	398.30	0.66%	[100]	ug/L
Tl 190.801†	340.9	8.33	2.44%	[100]	ug/L
U 409.014†	3244.9	116.62	3.59%	[100]	ug/L
V 292.402†	14462.8	85.40	0.59%	[100]	ug/L
Zn 213.857†	10772.7	81.22	0.75%	[100]	ug/L
SiO2†	15573.9	214.18	1.38%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2009 08:23:59
Data Type: Reprocessed on 12/9/2009 10:32:18

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	904434.8	904434.8	102.20	%	08:27:09
1	Sc Radial	5397.2	5397.2	95.3	%	08:25:51
1	Y 371.029	745813.4	745813.4	100.50	%	08:27:09
1	Y RADIAL	5821.5	5821.5	94.52	%	08:25:51
1	Ag 328.068†	110747.4	108136.6	[500]	ug/L	08:27:14
1	Al 396.153Radial†	6353.8	6687.4	[5000]	ug/L	08:25:51
1	As 188.979†	1184.6	1188.3	[500]	ug/L	08:27:34
1	B 249.677†	22269.5	22314.1	[500]	ug/L	08:27:14
1	Ba 233.527†	65708.8	64306.9	[500]	ug/L	08:27:14
1	Be 313.107†	1322017.1	1298889.0	[500]	ug/L	08:27:09
1	Ca 317.933Radial†	3266.8	3410.2	[5000]	ug/L	08:26:12
1	Cd 226.502†	45906.7	45106.7	[500]	ug/L	08:27:14
1	Co 228.616†	25668.9	25188.3	[500]	ug/L	08:27:14
1	Cr 267.716†	46222.9	45141.3	[500]	ug/L	08:27:14
1	Cu 324.752†	177131.3	166550.9	[500]	ug/L	08:27:14
1	K 766.490 Radial†	28650.1	27892.3	[5000]	ug/L	08:25:51
1	Mg 279.077 IEC†	135.5	140.4	[5000]	ug/L	08:26:12
1	Mn 257.610†	455958.3	445743.2	[500]	ug/L	08:27:09
1	Mo 202.031†	7796.0	7608.2	[500]	ug/L	08:27:34
1	Ni 231.604†	21161.1	20635.6	[500]	ug/L	08:27:14
1	P 214.914†	4385.5	4071.2	[2500]	ug/L	08:27:34
1	Pb 220.353†	4210.4	4172.3	[500]	ug/L	08:27:34
1	S 181.975 Axial†	737.8	680.4	[1000]	ug/L	08:27:34
1	Sb 206.836†	1594.1	1530.2	[500]	ug/L	08:27:34
1	Se 196.026†	815.7	821.6	[500]	ug/L	08:27:34
1	Si 251.611†	82827.2	80536.9	[2500]	ug/L	08:27:14
1	Sn 189.927†	3011.7	2942.6	[500]	ug/L	08:27:34
1	Sr 421.552†	73249.6	76857.5	[500]	ug/L	08:25:51
1	Ti 334.940†	312876.3	307108.6	[500]	ug/L	08:27:14
1	Tl 190.801†	1706.2	1706.3	[500]	ug/L	08:27:34
1	U 409.014†	15802.6	17424.7	[500]	ug/L	08:27:14
1	V 292.402†	72068.0	71813.7	[500]	ug/L	08:27:14
1	Zn 213.857†	56449.9	54427.9	[500]	ug/L	08:27:14
1	SiO2†	82752.8	80483.2	[5347.5]	ug/L	08:28:41
2	Sc 361.383	891526.1	891526.1	100.74	%	08:27:40
2	Sc Radial	5732.8	5732.8	101	%	08:26:17
2	Y 371.029	734672.0	734672.0	99.003	%	08:27:40
2	Y RADIAL	6169.8	6169.8	100.2	%	08:26:17
2	Ag 328.068†	108767.6	107740.4	[500]	ug/L	08:27:45
2	Al 396.153Radial†	6574.1	6514.8	[5000]	ug/L	08:26:17
2	As 188.979†	1189.1	1209.5	[500]	ug/L	08:28:05
2	B 249.677†	21903.5	22266.3	[500]	ug/L	08:27:45
2	Ba 233.527†	64546.4	64083.9	[500]	ug/L	08:27:45
2	Be 313.107†	1325989.4	1321562.2	[500]	ug/L	08:27:40
2	Ca 317.933Radial†	3244.1	3187.1	[5000]	ug/L	08:26:37
2	Cd 226.502†	45217.0	45072.4	[500]	ug/L	08:27:45
2	Co 228.616†	25322.9	25208.5	[500]	ug/L	08:27:45
2	Cr 267.716†	45599.0	45176.8	[500]	ug/L	08:27:45
2	Cu 324.752†	173851.2	165804.6	[500]	ug/L	08:27:45
2	K 766.490 Radial†	29550.8	27022.3	[5000]	ug/L	08:26:17
2	Mg 279.077 IEC†	136.9	133.4	[5000]	ug/L	08:26:37
2	Mn 257.610†	457085.2	453321.7	[500]	ug/L	08:27:40
2	Mo 202.031†	7806.1	7728.8	[500]	ug/L	08:28:05
2	Ni 231.604†	20894.9	20671.1	[500]	ug/L	08:27:45
2	P 214.914†	4394.4	4142.2	[2500]	ug/L	08:28:05
2	Pb 220.353†	4208.4	4230.0	[500]	ug/L	08:28:05
2	S 181.975 Axial†	739.1	692.2	[1000]	ug/L	08:28:05
2	Sb 206.836†	1589.3	1548.1	[500]	ug/L	08:28:05

2	Se 196.026†	818.1	835.5	[500]	ug/L	08:28:05
2	Si 251.611†	81408.0	80301.6	[2500]	ug/L	08:27:45
2	Sn 189.927†	3012.0	2985.6	[500]	ug/L	08:28:05
2	Sr 421.552†	75683.5	74762.5	[500]	ug/L	08:26:17
2	Ti 334.940†	307362.6	306068.2	[500]	ug/L	08:27:45
2	Tl 190.801†	1709.1	1733.4	[500]	ug/L	08:28:05
2	U 409.014†	15520.9	17369.0	[500]	ug/L	08:27:45
2	V 292.402†	71037.8	71812.1	[500]	ug/L	08:27:45
2	Zn 213.857†	55598.1	54382.2	[500]	ug/L	08:27:45
2	SiO2†	83026.8	81927.6	[5347.5]	ug/L	08:28:47
3	Sc 361.383	899136.3	899136.3	101.60	%	08:28:11
3	Sc Radial	5706.9	5706.9	101	%	08:26:42
3	Y 371.029	741948.7	741948.7	99.983	%	08:28:11
3	Y RADIAL	6177.1	6177.1	100.3	%	08:26:42
3	Ag 328.068†	109406.8	107455.7	[500]	ug/L	08:28:16
3	Al 396.153Radial†	6511.0	6481.7	[5000]	ug/L	08:26:42
3	As 188.979†	1195.7	1206.1	[500]	ug/L	08:28:36
3	B 249.677†	22048.7	22225.2	[500]	ug/L	08:28:16
3	Ba 233.527†	65054.9	64042.1	[500]	ug/L	08:28:16
3	Be 313.107†	1337323.5	1321577.1	[500]	ug/L	08:28:11
3	Ca 317.933Radial†	3245.6	3203.1	[5000]	ug/L	08:27:02
3	Cd 226.502†	45520.2	44991.0	[500]	ug/L	08:28:16
3	Co 228.616†	25427.5	25098.7	[500]	ug/L	08:28:16
3	Cr 267.716†	45999.4	45187.8	[500]	ug/L	08:28:16
3	Cu 324.752†	174872.4	165349.0	[500]	ug/L	08:28:16
3	K 766.490 Radial†	29635.6	27239.3	[5000]	ug/L	08:26:42
3	Mg 279.077 IEC†	137.9	135.1	[5000]	ug/L	08:27:02
3	Mn 257.610†	459261.8	451623.7	[500]	ug/L	08:28:11
3	Mo 202.031†	7805.6	7662.7	[500]	ug/L	08:28:36
3	Ni 231.604†	21024.4	20623.1	[500]	ug/L	08:28:16
3	P 214.914†	4384.9	4095.8	[2500]	ug/L	08:28:36
3	Pb 220.353†	4201.2	4187.5	[500]	ug/L	08:28:36
3	S 181.975 Axial†	733.3	680.3	[1000]	ug/L	08:28:36
3	Sb 206.836†	1586.5	1531.9	[500]	ug/L	08:28:36
3	Se 196.026†	808.2	819.0	[500]	ug/L	08:28:36
3	Si 251.611†	81886.6	80088.6	[2500]	ug/L	08:28:16
3	Sn 189.927†	3013.3	2961.6	[500]	ug/L	08:28:36
3	Sr 421.552†	75338.5	74760.6	[500]	ug/L	08:26:42
3	Ti 334.940†	309552.3	305641.0	[500]	ug/L	08:28:16
3	Tl 190.801†	1699.9	1710.0	[500]	ug/L	08:28:36
3	U 409.014†	15597.8	17314.3	[500]	ug/L	08:28:16
3	V 292.402†	71536.7	71706.3	[500]	ug/L	08:28:16
3	Zn 213.857†	55938.2	54249.7	[500]	ug/L	08:28:16
3	SiO2†	82872.9	81078.6	[5347.5]	ug/L	08:28:52

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	898365.7	6488.79	0.72%	101.51	%
Sc Radial	5612.3	186.71	3.33%	99.1	%
Y 371.029	740811.3	5657.11	0.76%	99.830	%
Y RADIAL	6056.1	203.26	3.36%	98.33	%
Ag 328.068†	107777.6	341.95	0.32%	[500]	ug/L
Al 396.153Radial†	6561.3	110.45	1.68%	[5000]	ug/L
As 188.979†	1201.3	11.39	0.95%	[500]	ug/L
B 249.677†	22268.6	44.51	0.20%	[500]	ug/L
Ba 233.527†	64144.3	142.34	0.22%	[500]	ug/L
Be 313.107†	1314009.5	13094.70	1.00%	[500]	ug/L
Ca 317.933Radial†	3266.8	124.44	3.81%	[5000]	ug/L
Cd 226.502†	45056.7	59.44	0.13%	[500]	ug/L
Co 228.616†	25165.2	58.44	0.23%	[500]	ug/L
Cr 267.716†	45168.6	24.29	0.05%	[500]	ug/L
Cu 324.752†	165901.5	606.79	0.37%	[500]	ug/L
K 766.490 Radial†	27384.6	452.85	1.65%	[5000]	ug/L
Mg 279.077 IEC†	136.3	3.65	2.68%	[5000]	ug/L
Mn 257.610†	450229.5	3976.95	0.88%	[500]	ug/L
Mo 202.031†	7666.6	60.36	0.79%	[500]	ug/L
Ni 231.604†	20643.3	24.94	0.12%	[500]	ug/L
P 214.914†	4103.1	36.05	0.88%	[2500]	ug/L
Pb 220.353†	4196.6	29.89	0.71%	[500]	ug/L

S 181.975 Axial†	684.3	6.82	1.00%	[1000]	ug/L
Sb 206.836†	1536.7	9.88	0.64%	[500]	ug/L
Se 196.026†	825.4	8.91	1.08%	[500]	ug/L
Si 251.611†	80309.0	224.22	0.28%	[2500]	ug/L
Sn 189.927†	2963.3	21.57	0.73%	[500]	ug/L
Sr 421.552†	75460.2	1210.12	1.60%	[500]	ug/L
Ti 334.940†	306272.6	754.85	0.25%	[500]	ug/L
Tl 190.801†	1716.6	14.68	0.86%	[500]	ug/L
U 409.014†	17369.3	55.20	0.32%	[500]	ug/L
V 292.402†	71777.4	61.55	0.09%	[500]	ug/L
Zn 213.857†	54353.3	92.53	0.17%	[500]	ug/L
SiO2†	81163.1	725.88	0.89%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/9/2009 08:31:02
Data Type: Reprocessed on 12/9/2009 10:32:19

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	850251.5	850251.5	96.077	%	08:34:18
1	Sc Radial	5533.5	5533.5	97.7	%	08:32:55
1	Y 371.029	701415.8	701415.8	94.521	%	08:34:18
1	Y RADIAL	6014.0	6014.0	97.65	%	08:32:55
1	Ag 328.068†	212503.6	220953.8	[1000]	ug/L	08:34:18
1	Al 396.153Radial†	13115.4	13443.4	[10000]	ug/L	08:32:55
1	As 188.979†	2381.3	2507.8	[1000]	ug/L	08:34:39
1	B 249.677†	44947.2	47306.5	[1000]	ug/L	08:34:18
1	Ba 233.527†	130054.0	135377.0	[1000]	ug/L	08:34:18
1	Be 313.107†	2668005.7	2782276.6	[1000]	ug/L	08:34:13
1	Ca 317.933Radial†	6484.0	6618.4	[10000]	ug/L	08:32:55
1	Cd 226.502†	90844.2	94741.8	[1000]	ug/L	08:34:18
1	Co 228.616†	50910.3	53061.1	[1000]	ug/L	08:34:18
1	Cr 267.716†	91753.4	95413.3	[1000]	ug/L	08:34:18
1	Cu 324.752†	346853.3	354248.8	[1000]	ug/L	08:34:18
1	Fe 238.204 Radial†	961.1	977.6	[10000]	ug/L	08:33:15
1	K 766.490 Radial†	56384.8	55537.2	[10000]	ug/L	08:32:55
1	Mg 279.077 IEC†	266.6	271.1	[10000]	ug/L	08:33:15
1	Mn 257.610†	915289.7	952263.1	[1000]	ug/L	08:34:13
1	Mo 202.031†	15078.9	15674.7	[1000]	ug/L	08:34:39
1	Na 589.592 Radial†	23620.3	24790.4	[10000]	ug/L	08:32:55
1	Ni 231.604†	41597.5	43226.0	[1000]	ug/L	08:34:18
1	P 214.914†	8503.1	8630.4	[5000]	ug/L	08:34:39
1	Pb 220.353†	8383.2	8778.1	[1000]	ug/L	08:34:39
1	S 181.975 Axial†	1377.9	1392.6	[2000]	ug/L	08:34:39
1	Sb 206.836†	3049.5	3144.4	[1000]	ug/L	08:34:39
1	Se 196.026†	1618.5	1708.1	[1000]	ug/L	08:34:39
1	Si 251.611†	161724.8	167820.9	[5000]	ug/L	08:34:18
1	Sn 189.927†	5789.0	6021.1	[1000]	ug/L	08:34:39
1	Sr 421.552†	144955.4	148352.3	[1000]	ug/L	08:32:55
1	Ti 334.940†	607181.7	632941.6	[1000]	ug/L	08:34:18
1	Tl 190.801†	3388.0	3563.2	[1000]	ug/L	08:34:39
1	U 409.014†	33553.3	36885.7	[1000]	ug/L	08:34:18
1	V 292.402†	145285.4	152514.7	[1000]	ug/L	08:34:18
1	Zn 213.857†	110499.0	114204.0	[1000]	ug/L	08:34:18
1	SiO2†	160588.3	166657.3	[10695]	ug/L	08:35:47
2	Sc 361.383	876826.0	876826.0	99.079	%	08:34:50
2	Sc Radial	5769.1	5769.1	102	%	08:33:20
2	Y 371.029	725945.2	725945.2	97.827	%	08:34:50
2	Y RADIAL	6233.8	6233.8	101.2	%	08:33:20
2	Ag 328.068†	211821.3	213561.7	[1000]	ug/L	08:34:50
2	Al 396.153Radial†	13223.3	13001.2	[10000]	ug/L	08:33:20
2	As 188.979†	2383.7	2435.1	[1000]	ug/L	08:35:10
2	B 249.677†	44853.4	45794.0	[1000]	ug/L	08:34:50
2	Ba 233.527†	129340.2	130553.9	[1000]	ug/L	08:34:50
2	Be 313.107†	2640831.9	2670687.5	[1000]	ug/L	08:34:44
2	Ca 317.933Radial†	6545.8	6408.1	[10000]	ug/L	08:33:20
2	Cd 226.502†	90370.0	91397.4	[1000]	ug/L	08:34:50
2	Co 228.616†	50520.5	51061.6	[1000]	ug/L	08:34:50
2	Cr 267.716†	91349.0	92110.7	[1000]	ug/L	08:34:50
2	Cu 324.752†	345284.8	341724.1	[1000]	ug/L	08:34:50
2	Fe 238.204 Radial†	965.7	942.0	[10000]	ug/L	08:33:40
2	K 766.490 Radial†	56969.8	53754.9	[10000]	ug/L	08:33:20
2	Mg 279.077 IEC†	263.9	257.3	[10000]	ug/L	08:33:40
2	Mn 257.610†	904052.2	912048.1	[1000]	ug/L	08:34:44
2	Mo 202.031†	15064.1	15184.0	[1000]	ug/L	08:35:10
2	Na 589.592 Radial†	23815.7	23995.0	[10000]	ug/L	08:33:20
2	Ni 231.604†	41490.8	41806.2	[1000]	ug/L	08:34:50

2	P 214.914†	8521.8	8381.0	[5000]	ug/L	08:35:10
2	Pb 220.353†	8346.4	8476.5	[1000]	ug/L	08:35:10
2	S 181.975 Axial†	1382.2	1353.5	[2000]	ug/L	08:35:10
2	Sb 206.836†	3047.9	3046.6	[1000]	ug/L	08:35:10
2	Se 196.026†	1624.6	1663.1	[1000]	ug/L	08:35:10
2	Si 251.611†	160771.4	161757.0	[5000]	ug/L	08:34:50
2	Sn 189.927†	5776.1	5825.5	[1000]	ug/L	08:35:10
2	Sr 421.552†	146272.8	143587.4	[1000]	ug/L	08:33:20
2	Ti 334.940†	604367.5	610947.6	[1000]	ug/L	08:34:50
2	Tl 190.801†	3400.0	3468.4	[1000]	ug/L	08:35:10
2	U 409.014†	33305.7	35577.3	[1000]	ug/L	08:34:50
2	V 292.402†	144462.0	147100.6	[1000]	ug/L	08:34:50
2	Zn 213.857†	109920.3	110134.2	[1000]	ug/L	08:34:50
2	SiO2†	160175.3	161174.6	[10695]	ug/L	08:35:52
3	Sc 361.383	872930.7	872930.7	98.639	%	08:35:21
3	Sc Radial	5474.2	5474.2	96.7	%	08:33:46
3	Y 371.029	721425.0	721425.0	97.218	%	08:35:21
3	Y RADIAL	5944.1	5944.1	96.52	%	08:33:46
3	Ag 328.068†	212333.5	215034.9	[1000]	ug/L	08:35:21
3	Al 396.153Radial†	13175.8	13651.4	[10000]	ug/L	08:33:46
3	As 188.979†	2386.3	2448.5	[1000]	ug/L	08:35:42
3	B 249.677†	45175.6	46322.6	[1000]	ug/L	08:35:21
3	Ba 233.527†	129824.3	131627.2	[1000]	ug/L	08:35:21
3	Be 313.107†	2629626.7	2671221.4	[1000]	ug/L	08:35:16
3	Ca 317.933Radial†	6502.5	6709.5	[10000]	ug/L	08:33:46
3	Cd 226.502†	90539.7	91976.5	[1000]	ug/L	08:35:21
3	Co 228.616†	50628.1	51398.3	[1000]	ug/L	08:35:21
3	Cr 267.716†	91620.2	92797.1	[1000]	ug/L	08:35:21
3	Cu 324.752†	346849.9	344865.9	[1000]	ug/L	08:35:21
3	Fe 238.204 Radial†	967.0	994.4	[10000]	ug/L	08:34:06
3	K 766.490 Radial†	56413.8	56193.0	[10000]	ug/L	08:33:46
3	Mg 279.077 IEC†	268.9	276.4	[10000]	ug/L	08:34:06
3	Mn 257.610†	899357.4	911360.2	[1000]	ug/L	08:35:16
3	Mo 202.031†	15037.0	15224.5	[1000]	ug/L	08:35:42
3	Na 589.592 Radial†	23657.5	25090.9	[10000]	ug/L	08:33:46
3	Ni 231.604†	41585.6	42089.2	[1000]	ug/L	08:35:21
3	P 214.914†	8511.2	8408.6	[5000]	ug/L	08:35:42
3	Pb 220.353†	8367.1	8535.0	[1000]	ug/L	08:35:42
3	S 181.975 Axial†	1383.1	1360.7	[2000]	ug/L	08:35:42
3	Sb 206.836†	3050.9	3063.4	[1000]	ug/L	08:35:42
3	Se 196.026†	1636.4	1682.4	[1000]	ug/L	08:35:42
3	Si 251.611†	161444.9	163163.9	[5000]	ug/L	08:35:21
3	Sn 189.927†	5806.5	5882.4	[1000]	ug/L	08:35:42
3	Sr 421.552†	145221.8	150236.7	[1000]	ug/L	08:33:46
3	Ti 334.940†	606384.0	615713.8	[1000]	ug/L	08:35:21
3	Tl 190.801†	3395.9	3479.6	[1000]	ug/L	08:35:42
3	U 409.014†	33383.6	35806.3	[1000]	ug/L	08:35:21
3	V 292.402†	145043.8	148341.1	[1000]	ug/L	08:35:21
3	Zn 213.857†	110326.9	111041.6	[1000]	ug/L	08:35:21
3	SiO2†	161376.9	163114.2	[10695]	ug/L	08:35:58

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	866669.4	14351.09	1.66%	97.932	%
Sc Radial	5592.3	156.00	2.79%	98.7	%
Y 371.029	716262.0	13054.32	1.82%	96.522	%
Y RADIAL	6064.0	151.18	2.49%	98.46	%
Ag 328.068†	216516.8	3912.52	1.81%	[1000]	ug/L
Al 396.153Radial†	13365.3	332.06	2.48%	[10000]	ug/L
As 188.979†	2463.8	38.69	1.57%	[1000]	ug/L
B 249.677†	46474.4	767.60	1.65%	[1000]	ug/L
Ba 233.527†	132519.3	2532.28	1.91%	[1000]	ug/L
Be 313.107†	2708061.8	64272.46	2.37%	[1000]	ug/L
Ca 317.933Radial†	6578.7	154.56	2.35%	[10000]	ug/L
Cd 226.502†	92705.2	1787.31	1.93%	[1000]	ug/L
Co 228.616†	51840.3	1070.50	2.06%	[1000]	ug/L
Cr 267.716†	93440.4	1742.72	1.87%	[1000]	ug/L
Cu 324.752†	346946.3	6516.33	1.88%	[1000]	ug/L
Fe 238.204 Radial†	971.3	26.76	2.76%	[10000]	ug/L

K 766.490 Radial†	55161.7	1261.67	2.29%	[10000]	ug/L
Mg 279.077 IEC†	268.3	9.87	3.68%	[10000]	ug/L
Mn 257.610†	925223.8	23419.23	2.53%	[1000]	ug/L
Mo 202.031†	15361.1	272.34	1.77%	[1000]	ug/L
Na 589.592 Radial†	24625.4	566.30	2.30%	[10000]	ug/L
Ni 231.604†	42373.8	751.50	1.77%	[1000]	ug/L
P 214.914†	8473.3	136.72	1.61%	[5000]	ug/L
Pb 220.353†	8596.5	159.94	1.86%	[1000]	ug/L
S 181.975 Axial†	1369.0	20.82	1.52%	[2000]	ug/L
Sb 206.836†	3084.8	52.28	1.69%	[1000]	ug/L
Se 196.026†	1684.6	22.56	1.34%	[1000]	ug/L
Si 251.611†	164247.3	3173.79	1.93%	[5000]	ug/L
Sn 189.927†	5909.7	100.64	1.70%	[1000]	ug/L
Sr 421.552†	147392.1	3427.10	2.33%	[1000]	ug/L
Ti 334.940†	619867.7	11570.45	1.87%	[1000]	ug/L
Tl 190.801†	3503.7	51.77	1.48%	[1000]	ug/L
U 409.014†	36089.8	698.72	1.94%	[1000]	ug/L
V 292.402†	149318.8	2836.39	1.90%	[1000]	ug/L
Zn 213.857†	111793.3	2136.49	1.91%	[1000]	ug/L
SiO2†	163648.7	2780.16	1.70%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/9/2009 08:38:08
Data Type: Reprocessed on 12/9/2009 10:32:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860444.2	860444.2	97.228	%	08:41:19
1	Sc Radial	5563.2	5563.2	98.2	%	08:40:22
1	Y 371.029	705763.8	705763.8	95.107	%	08:41:19
1	Y RADIAL	5976.4	5976.4	97.04	%	08:40:22
1	Al 396.153Radial†	64915.4	66104.8	[50000]	ug/L	08:40:02
1	Ca 317.933Radial†	31391.5	31939.2	[50000]	ug/L	08:40:02
1	Fe 238.204 Radial†	1937.0	1965.8	[20000]	ug/L	08:40:22
1	Mg 279.077 IEC†	1300.4	1322.0	[50000]	ug/L	08:40:22
1	Na 589.592 Radial†	51369.4	52910.5	[20000]	ug/L	08:40:02
2	Sc 361.383	865149.4	865149.4	97.760	%	08:41:24
2	Sc Radial	5442.2	5442.2	96.1	%	08:40:47
2	Y 371.029	708522.0	708522.0	95.479	%	08:41:24
2	Y RADIAL	5843.9	5843.9	94.89	%	08:40:47
2	Al 396.153Radial†	65821.3	68516.6	[50000]	ug/L	08:40:27
2	Ca 317.933Radial†	31762.2	33035.3	[50000]	ug/L	08:40:27
2	Fe 238.204 Radial†	1937.0	2009.7	[20000]	ug/L	08:40:47
2	Mg 279.077 IEC†	1297.3	1348.3	[50000]	ug/L	08:40:47
2	Na 589.592 Radial†	52102.0	54835.3	[20000]	ug/L	08:40:27
3	Sc 361.383	870309.3	870309.3	98.343	%	08:41:30
3	Sc Radial	5484.6	5484.6	96.8	%	08:41:12
3	Y 371.029	713259.8	713259.8	96.117	%	08:41:30
3	Y RADIAL	5873.4	5873.4	95.37	%	08:41:12
3	Al 396.153Radial†	66266.7	68446.0	[50000]	ug/L	08:40:52
3	Ca 317.933Radial†	32068.2	33095.3	[50000]	ug/L	08:40:52
3	Fe 238.204 Radial†	1958.1	2015.8	[20000]	ug/L	08:41:12
3	Mg 279.077 IEC†	1316.2	1357.3	[50000]	ug/L	08:41:12
3	Na 589.592 Radial†	52525.2	54852.4	[20000]	ug/L	08:40:52

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	865300.9	4934.29	0.57%	97.777	%
Sc Radial	5496.7	61.38	1.12%	97.1	%
Y 371.029	709181.8	3791.32	0.53%	95.568	%
Y RADIAL	5897.9	69.54	1.18%	95.77	%
Al 396.153Radial†	67689.1	1372.53	2.03%	[50000]	ug/L
Ca 317.933Radial†	32689.9	650.87	1.99%	[50000]	ug/L
Fe 238.204 Radial†	1997.1	27.27	1.37%	[20000]	ug/L
Mg 279.077 IEC†	1342.5	18.31	1.36%	[50000]	ug/L
Na 589.592 Radial†	54199.4	1116.28	2.06%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	216.3	0.00000	0.999997	
Al 396.153Radial	3	Lin Thru 0	0.0	1.353	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	2.451	0.00000	0.999946	
B 249.677	3	Lin Thru 0	0.0	46.07	0.00000	0.999850	
Ba 233.527	3	Lin Thru 0	0.0	131.7	0.00000	0.999918	
Be 313.107	3	Lin Thru 0	0.0	2691	0.00000	0.999922	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6539	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	92.18	0.00000	0.999936	
Co 228.616	3	Lin Thru 0	0.0	51.52	0.00000	0.999926	
Cr 267.716	3	Lin Thru 0	0.0	92.81	0.00000	0.999911	
Cu 324.752	3	Lin Thru 0	0.0	343.8	0.00000	0.999843	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0993	0.00000	0.999940	

K 766.490 Radial	3	Lin Thru 0	0.0	5.510	0.00000	0.999989
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0269	0.00000	0.999999
Mn 257.610	3	Lin Thru 0	0.0	920.2	0.00000	0.999942
Mo 202.031	3	Lin Thru 0	0.0	15.35	0.00000	0.999996
Na 589.592 Radia	2	Lin Thru 0	0.0	2.660	0.00000	0.999309
Ni 231.604	3	Lin Thru 0	0.0	42.14	0.00000	0.999942
P 214.914	3	Lin Thru 0	0.0	1.683	0.00000	0.999909
Pb 220.353	3	Lin Thru 0	0.0	8.554	0.00000	0.999953
S 181.975 Axial	3	Lin Thru 0	0.0	0.6839	0.00000	0.999959
Sb 206.836	3	Lin Thru 0	0.0	3.081	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	1.677	0.00000	0.999952
Si 251.611	3	Lin Thru 0	0.0	32.70	0.00000	0.999956
Sn 189.927	3	Lin Thru 0	0.0	5.911	0.00000	0.999992
Sr 421.552	3	Lin Thru 0	0.0	148.1	0.00000	0.999951
Ti 334.940	3	Lin Thru 0	0.0	618.3	0.00000	0.999987
Tl 190.801	3	Lin Thru 0	0.0	3.489	0.00000	0.999965
U 409.014	3	Lin Thru 0	0.0	35.79	0.00000	0.999852
V 292.402	3	Lin Thru 0	0.0	148.1	0.00000	0.999878
Zn 213.857	3	Lin Thru 0	0.0	111.1	0.00000	0.999935
SiO2	3	Lin Thru 0	0.0	15.27	0.00000	0.999986

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/9/2009 08:43:41
Data Type: Reprocessed on 12/9/2009 10:32:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899143.1	899143.1	101.60	%			08:46:51
1	Sc Radial	5755.3	5755.3	102	%			08:45:34
1	Y 371.029	745083.4	745083.4	100.41	%			08:46:51
1	Y RADIAL	6211.5	6211.5	100.9	%			08:45:34
1	Ag 328.068†	56632.9	55512.7	259.75	ug/L	259.75	ppb	08:46:51
1	Al 396.153Radial†	6818.1	6729.6	4951.6	ug/L	4951.6	ppb	08:45:34
1	As 188.979†	1135.6	1146.9	472.32	ug/L	472.32	ppb	08:47:11
1	B 249.677†	23247.5	23405.0	506.12	ug/L	506.12	ppb	08:46:51
1	Ba 233.527†	67271.4	66223.2	504.28	ug/L	504.28	ppb	08:46:51
1	Be 313.107†	695042.6	689408.8	257.18	ug/L	257.18	ppb	08:46:51
1	Ca 317.933Radial†	3308.0	3237.5	4950.6	ug/L	4950.6	ppb	08:45:54
1	Cd 226.502†	45903.3	45367.7	492.00	ug/L	492.00	ppb	08:46:51
1	Co 228.616†	25866.2	25530.3	495.84	ug/L	495.84	ppb	08:47:11
1	Cr 267.716†	45516.9	44712.6	482.58	ug/L	482.58	ppb	08:46:51
1	Cu 324.752†	180623.3	171008.0	497.60	ug/L	497.60	ppb	08:46:51
1	Fe 238.204 Radial†	515.8	501.5	5065.9	ug/L	5065.9	ppb	08:45:54
1	K 766.490 Radial†	16132.4	13704.5	2482.0	ug/L	2482.0	ppb	08:45:34
1	Mg 279.077 IEC†	147.3	143.2	5338.3	ug/L	5338.3	ppb	08:45:54
1	Mn 257.610†	473453.9	465588.7	506.37	ug/L	506.37	ppb	08:46:51
1	Mo 202.031†	8477.5	8323.9	542.58	ug/L	542.58	ppb	08:47:11
1	Na 589.592 Radial†	5744.7	6268.9	2356.3	ug/L	2356.3	ppb	08:45:34
1	Ni 231.604†	21194.2	20790.0	492.99	ug/L	492.99	ppb	08:47:11
1	P 214.914†	4454.0	4163.9	2399.0	ug/L	2399.0	ppb	08:47:11
1	Pb 220.353†	4241.1	4226.8	495.74	ug/L	495.74	ppb	08:47:11
1	S 181.975 Axial†	1765.6	1696.3	2479.4	ug/L	2479.4	ppb	08:47:11
1	Sb 206.836†	1591.5	1536.8	508.08	ug/L	508.08	ppb	08:47:11
1	Se 196.026†	4216.6	4173.6	2506.7	ug/L	2506.7	ppb	08:47:11
1	Si 251.611†	158477.4	155471.8	4743.2	ug/L	4743.2	ppb	08:46:51
1	Sn 189.927†	3253.6	3198.1	541.63	ug/L	541.63	ppb	08:47:11
1	Sr 421.552†	80003.9	78722.8	531.38	ug/L	531.38	ppb	08:45:34
1	Ti 334.940†	317575.3	313535.2	506.97	ug/L	506.97	ppb	08:46:51
1	Tl 190.801†	1811.6	1819.9	524.93	ug/L	524.93	ppb	08:47:11
1	U 409.014†	15263.7	16985.4	472.98	ug/L	472.98	ppb	08:46:51
1	V 292.402†	74003.4	74133.6	507.71	ug/L	507.71	ppb	08:46:51
1	Zn 213.857†	57517.5	55803.7	497.65	ug/L	497.65	ppb	08:46:51
1	SiO2†	158528.2	155540.9	10159	ug/L	10159	ppb	08:48:09
2	Sc 361.383	900929.8	900929.8	101.80	%			08:47:17
2	Sc Radial	5526.2	5526.2	97.6	%			08:45:59
2	Y 371.029	747790.7	747790.7	100.77	%			08:47:17
2	Y RADIAL	5987.0	5987.0	97.21	%			08:45:59
2	Ag 328.068†	56755.1	55522.2	259.83	ug/L	259.83	ppb	08:47:17
2	Al 396.153Radial†	6648.7	6834.0	5028.9	ug/L	5028.9	ppb	08:45:59
2	As 188.979†	1138.7	1147.8	472.69	ug/L	472.69	ppb	08:47:38
2	B 249.677†	23267.4	23379.2	505.54	ug/L	505.54	ppb	08:47:17
2	Ba 233.527†	67420.8	66238.6	504.40	ug/L	504.40	ppb	08:47:17
2	Be 313.107†	696988.5	689963.5	257.38	ug/L	257.38	ppb	08:47:17
2	Ca 317.933Radial†	3262.6	3325.9	5085.8	ug/L	5085.8	ppb	08:46:19
2	Cd 226.502†	45961.1	45334.9	491.63	ug/L	491.63	ppb	08:47:17
2	Co 228.616†	25875.1	25488.6	495.02	ug/L	495.02	ppb	08:47:38
2	Cr 267.716†	45637.8	44742.5	482.90	ug/L	482.90	ppb	08:47:17
2	Cu 324.752†	181032.7	171057.5	497.75	ug/L	497.75	ppb	08:47:17
2	Fe 238.204 Radial†	507.2	513.7	5188.5	ug/L	5188.5	ppb	08:46:19
2	K 766.490 Radial†	15882.2	14106.0	2554.8	ug/L	2554.8	ppb	08:45:59
2	Mg 279.077 IEC†	144.7	146.5	5463.2	ug/L	5463.2	ppb	08:46:19
2	Mn 257.610†	473926.8	465129.1	505.88	ug/L	505.88	ppb	08:47:17
2	Mo 202.031†	8455.1	8285.4	540.07	ug/L	540.07	ppb	08:47:38
2	Na 589.592 Radial†	5656.1	6412.4	2410.3	ug/L	2410.3	ppb	08:45:59
2	Ni 231.604†	21190.5	20745.1	491.93	ug/L	491.93	ppb	08:47:38

2	P 214.914†	4449.0	4150.2	2390.7 ug/L	2390.7 ppb	08:47:38
2	Pb 220.353†	4244.7	4222.1	495.20 ug/L	495.20 ppb	08:47:38
2	S 181.975 Axial†	1768.7	1695.9	2478.8 ug/L	2478.8 ppb	08:47:38
2	Sb 206.836†	1584.1	1526.4	504.59 ug/L	504.59 ppb	08:47:38
2	Se 196.026†	4230.6	4179.1	2510.4 ug/L	2510.4 ppb	08:47:38
2	Si 251.611†	158592.9	155275.9	4737.3 ug/L	4737.3 ppb	08:47:17
2	Sn 189.927†	3239.3	3177.6	538.18 ug/L	538.18 ppb	08:47:38
2	Sr 421.552†	77858.2	79787.0	538.56 ug/L	538.56 ppb	08:45:59
2	Ti 334.940†	318127.1	313457.4	506.85 ug/L	506.85 ppb	08:47:17
2	Tl 190.801†	1807.6	1812.4	522.78 ug/L	522.78 ppb	08:47:38
2	U 409.014†	15446.1	17134.7	477.14 ug/L	477.14 ppb	08:47:17
2	V 292.402†	74257.6	74238.8	508.38 ug/L	508.38 ppb	08:47:17
2	Zn 213.857†	57541.4	55714.9	496.85 ug/L	496.85 ppb	08:47:17
2	SiO2†	160259.5	156932.1	10251 ug/L	10251 ppb	08:48:14
3	Sc 361.383	892907.1	892907.1	100.90 %		08:47:44
3	Sc Radial	5572.6	5572.6	98.4 %		08:46:24
3	Y 371.029	740826.1	740826.1	99.832 %		08:47:44
3	Y RADIAL	6045.8	6045.8	98.17 %		08:46:24
3	Ag 328.068†	56455.6	55726.3	260.76 ug/L	260.76 ppb	08:47:44
3	Al 396.153Radial†	6733.8	6863.8	5050.6 ug/L	5050.6 ppb	08:46:24
3	As 188.979†	1138.0	1157.1	476.47 ug/L	476.47 ppb	08:48:04
3	B 249.677†	23201.0	23518.7	508.56 ug/L	508.56 ppb	08:47:44
3	Ba 233.527†	67082.8	66498.7	506.38 ug/L	506.38 ppb	08:47:44
3	Be 313.107†	692991.5	692153.6	258.20 ug/L	258.20 ppb	08:47:44
3	Ca 317.933Radial†	3266.2	3301.7	5048.9 ug/L	5048.9 ppb	08:46:44
3	Cd 226.502†	45892.6	45672.6	495.30 ug/L	495.30 ppb	08:47:44
3	Co 228.616†	26031.4	25871.8	502.48 ug/L	502.48 ppb	08:48:04
3	Cr 267.716†	45399.9	44909.5	484.71 ug/L	484.71 ppb	08:47:44
3	Cu 324.752†	179963.6	171595.7	499.31 ug/L	499.31 ppb	08:47:44
3	Fe 238.204 Radial†	503.9	506.1	5111.6 ug/L	5111.6 ppb	08:46:44
3	K 766.490 Radial†	16069.5	14161.0	2564.8 ug/L	2564.8 ppb	08:46:24
3	Mg 279.077 IEC†	140.9	141.4	5273.9 ug/L	5273.9 ppb	08:46:44
3	Mn 257.610†	471754.2	467158.6	508.09 ug/L	508.09 ppb	08:47:44
3	Mo 202.031†	8505.1	8409.6	548.16 ug/L	548.16 ppb	08:48:04
3	Na 589.592 Radial†	5701.6	6410.4	2409.5 ug/L	2409.5 ppb	08:46:24
3	Ni 231.604†	21331.0	21071.3	499.66 ug/L	499.66 ppb	08:48:04
3	P 214.914†	4494.3	4234.4	2440.7 ug/L	2440.7 ppb	08:48:04
3	Pb 220.353†	4273.3	4287.9	502.92 ug/L	502.92 ppb	08:48:04
3	S 181.975 Axial†	1777.7	1720.4	2514.6 ug/L	2514.6 ppb	08:48:04
3	Sb 206.836†	1606.7	1562.8	516.70 ug/L	516.70 ppb	08:48:04
3	Se 196.026†	4269.7	4255.2	2555.6 ug/L	2555.6 ppb	08:48:04
3	Si 251.611†	158021.7	156109.4	4762.6 ug/L	4762.6 ppb	08:47:44
3	Sn 189.927†	3261.6	3228.3	546.75 ug/L	546.75 ppb	08:48:04
3	Sr 421.552†	78802.8	80082.9	540.56 ug/L	540.56 ppb	08:46:24
3	Ti 334.940†	316188.4	314343.7	508.28 ug/L	508.28 ppb	08:47:44
3	Tl 190.801†	1831.5	1852.0	534.12 ug/L	534.12 ppb	08:48:04
3	U 409.014†	15219.2	17046.2	474.67 ug/L	474.67 ppb	08:47:44
3	V 292.402†	73844.6	74484.8	510.15 ug/L	510.15 ppb	08:47:44
3	Zn 213.857†	57412.5	56095.0	500.23 ug/L	500.23 ppb	08:47:44
3	SiO2†	157396.8	155509.3	10157 ug/L	10157 ppb	08:48:20

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	897660.0	101.43	%	0.476				0.47%
Sc Radial	5618.0	99.2	%	2.14				2.16%
Y 371.029	744566.7	100.34	%	0.473				0.47%
Y RADIAL	6081.4	98.74	%	1.890				1.91%
Ag 328.068†	55587.1	260.12	ug/L	0.561	260.12	ppb	0.561	0.22%
QC value within limits for Ag 328.068 Recovery = 104.05%								
Al 396.153Radial†	6809.1	5010.4	ug/L	52.04	5010.4	ppb	52.04	1.04%
QC value within limits for Al 396.153Radial Recovery = 100.21%								
As 188.979†	1150.6	473.82	ug/L	2.297	473.82	ppb	2.297	0.48%
QC value within limits for As 188.979 Recovery = 94.76%								
B 249.677†	23434.3	506.74	ug/L	1.604	506.74	ppb	1.604	0.32%
QC value within limits for B 249.677 Recovery = 101.35%								
Ba 233.527†	66320.2	505.02	ug/L	1.178	505.02	ppb	1.178	0.23%
QC value within limits for Ba 233.527 Recovery = 101.00%								
Be 313.107†	690508.6	257.58	ug/L	0.541	257.58	ppb	0.541	0.21%
QC value within limits for Be 313.107 Recovery = 103.03%								

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Ca 317.933Radial†       3288.3      5028.4 ug/L         69.89      5028.4 ppb          69.89   1.39%
   QC value within limits for Ca 317.933Radial  Recovery = 100.57%
Cd 226.502†            45458.4      492.98 ug/L         2.025      492.98 ppb          2.025   0.41%
   QC value within limits for Cd 226.502  Recovery = 98.60%
Co 228.616†            25630.2      497.78 ug/L         4.090      497.78 ppb          4.090   0.82%
   QC value within limits for Co 228.616  Recovery = 99.56%
Cr 267.716†            44788.2      483.40 ug/L         1.145      483.40 ppb          1.145   0.24%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†           171220.4      498.22 ug/L         0.948      498.22 ppb          0.948   0.19%
   QC value within limits for Cu 324.752  Recovery = 99.64%
Fe 238.204 Radial†       507.1      5122.0 ug/L         62.00      5122.0 ppb          62.00   1.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.44%
K 766.490 Radial†      13990.5      2533.9 ug/L         45.22      2533.9 ppb          45.22   1.78%
   QC value within limits for K 766.490 Radial  Recovery = 101.36%
Mg 279.077 IEC†          143.7      5358.5 ug/L         96.24      5358.5 ppb          96.24   1.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.17%
Mn 257.610†           465958.8      506.78 ug/L         1.156      506.78 ppb          1.156   0.23%
   QC value within limits for Mn 257.610  Recovery = 101.36%
Mo 202.031†             8339.6      543.60 ug/L         4.138      543.60 ppb          4.138   0.76%
   QC value within limits for Mo 202.031  Recovery = 108.72%
Na 589.592 Radial†      6363.9      2392.0 ug/L         30.94      2392.0 ppb          30.94   1.29%
   QC value within limits for Na 589.592 Radial  Recovery = 95.68%
Ni 231.604†            20868.8      494.86 ug/L         4.193      494.86 ppb          4.193   0.85%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4182.8      2410.2 ug/L         26.77      2410.2 ppb          26.77   1.11%
   QC value within limits for P 214.914  Recovery = 96.41%
Pb 220.353†             4245.6      497.95 ug/L         4.310      497.95 ppb          4.310   0.87%
   QC value within limits for Pb 220.353  Recovery = 99.59%
S 181.975 Axial†        1704.2      2490.9 ug/L         20.51      2490.9 ppb          20.51   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 99.64%
Sb 206.836†             1542.0      509.79 ug/L         6.233      509.79 ppb          6.233   1.22%
   QC value within limits for Sb 206.836  Recovery = 101.96%
Se 196.026†             4202.7      2524.2 ug/L         27.20      2524.2 ppb          27.20   1.08%
   QC value within limits for Se 196.026  Recovery = 100.97%
Si 251.611†           155619.0      4747.7 ug/L         13.24      4747.7 ppb          13.24   0.28%
   QC value within limits for Si 251.611  Recovery = 94.95%
Sn 189.927†             3201.3      542.19 ug/L         4.315      542.19 ppb          4.315   0.80%
   QC value within limits for Sn 189.927  Recovery = 108.44%
Sr 421.552†            79530.9      536.83 ug/L         4.828      536.83 ppb          4.828   0.90%
   QC value within limits for Sr 421.552  Recovery = 107.37%
Ti 334.940†           313778.8      507.37 ug/L         0.794      507.37 ppb          0.794   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.47%
Tl 190.801†             1828.1      527.28 ug/L         6.020      527.28 ppb          6.020   1.14%
   QC value within limits for Tl 190.801  Recovery = 105.46%
U 409.014†             17055.4      474.93 ug/L         2.090      474.93 ppb          2.090   0.44%
   QC value within limits for U 409.014  Recovery = 94.99%
V 292.402†             74285.7      508.75 ug/L         1.263      508.75 ppb          1.263   0.25%
   QC value within limits for V 292.402  Recovery = 101.75%
Zn 213.857†            55871.2      498.24 ug/L         1.766      498.24 ppb          1.766   0.35%
   QC value within limits for Zn 213.857  Recovery = 99.65%
SiO2†                 155994.1       10189 ug/L          53.3       10189 ppb           53.3   0.52%
   QC value within limits for SiO2  Recovery = 95.27%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/9/2009 08:50:30
Data Type: Reprocessed on 12/9/2009 10:32:22

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885039.3	885039.3	100.01	%			08:53:40
1	Sc Radial	6007.8	6007.8	106	%			08:52:23
1	Y 371.029	743826.3	743826.3	100.24	%			08:53:40
1	Y RADIAL	6510.4	6510.4	105.7	%			08:52:23
1	Ag 328.068†	220.0	-7.6	-0.0265	ug/L	-0.0265	ppb	08:53:40
1	Al 396.153Radial†	-24.9	-3.1	-2.2915	ug/L	-2.2915	ppb	08:52:43
1	As 188.979†	-24.6	4.6	1.8821	ug/L	1.8821	ppb	08:54:00
1	B 249.677†	-224.5	299.4	6.4983	ug/L	6.4983	ppb	08:54:00
1	Ba 233.527†	-23.4	-11.4	-0.0848	ug/L	-0.0848	ppb	08:54:00
1	Be 313.107†	-5243.3	77.4	0.0283	ug/L	0.0283	ppb	08:53:40
1	Ca 317.933Radial†	18.8	0.0	0.0108	ug/L	0.0108	ppb	08:52:43
1	Cd 226.502†	-163.5	24.3	0.2632	ug/L	0.2632	ppb	08:54:00
1	Co 228.616†	-75.4	-3.6	-0.0698	ug/L	-0.0698	ppb	08:54:00
1	Cr 267.716†	75.3	-11.7	-0.1233	ug/L	-0.1233	ppb	08:54:00
1	Cu 324.752†	6855.2	86.1	0.2507	ug/L	0.2507	ppb	08:53:40
1	Fe 238.204 Radial†	7.2	0.7	7.2006	ug/L	7.2006	ppb	08:52:43
1	K 766.490 Radial†	2180.9	-114.5	-20.779	ug/L	-20.779	ppb	08:52:23
1	Mg 279.077 IEC†	1.3	-0.6	-21.220	ug/L	-21.220	ppb	08:52:43
1	Mn 257.610†	412.7	9.3	0.0112	ug/L	0.0112	ppb	08:54:00
1	Mo 202.031†	20.4	0.4	0.0294	ug/L	0.0294	ppb	08:54:00
1	Na 589.592 Radial†	-632.0	20.2	7.6089	ug/L	7.6089	ppb	08:52:23
1	Ni 231.604†	83.6	13.5	0.3200	ug/L	0.3200	ppb	08:54:00
1	P 214.914†	206.1	-13.9	-8.3010	ug/L	-8.3010	ppb	08:54:00
1	Pb 220.353†	-33.4	19.2	2.2424	ug/L	2.2424	ppb	08:54:00
1	S 181.975 Axial†	38.2	-3.3	-4.7613	ug/L	-4.7613	ppb	08:54:00
1	Sb 206.836†	34.3	4.7	1.5120	ug/L	1.5120	ppb	08:54:00
1	Se 196.026†	-29.9	-6.5	-3.8251	ug/L	-3.8251	ppb	08:54:00
1	Si 251.611†	459.2	-48.9	-1.4872	ug/L	-1.4872	ppb	08:54:00
1	Sn 189.927†	0.8	-3.4	-0.5799	ug/L	-0.5799	ppb	08:54:00
1	Sr 421.552†	17.2	12.8	0.0865	ug/L	0.0865	ppb	08:52:23
1	Ti 334.940†	-1119.0	-153.9	-0.2468	ug/L	-0.2468	ppb	08:53:40
1	Tl 190.801†	-22.7	14.2	4.0585	ug/L	4.0585	ppb	08:54:00
1	U 409.014†	-2134.0	-171.6	-4.7958	ug/L	-4.7958	ppb	08:53:40
1	V 292.402†	-1205.4	91.1	0.6051	ug/L	0.6051	ppb	08:53:40
1	Zn 213.857†	940.6	133.2	1.1963	ug/L	1.1963	ppb	08:54:00
1	SiO2†	476.1	-12.8	-0.8192	ug/L	-0.8192	ppb	08:54:56
2	Sc 361.383	884186.2	884186.2	99.911	%			08:54:05
2	Sc Radial	5598.7	5598.7	98.9	%			08:52:48
2	Y 371.029	743197.1	743197.1	100.15	%			08:54:05
2	Y RADIAL	6093.1	6093.1	98.93	%			08:52:48
2	Ag 328.068†	347.5	120.3	0.5593	ug/L	0.5593	ppb	08:54:05
2	Al 396.153Radial†	-26.2	-6.2	-4.5398	ug/L	-4.5398	ppb	08:53:08
2	As 188.979†	-18.3	10.9	4.4392	ug/L	4.4392	ppb	08:54:25
2	B 249.677†	-211.2	312.4	6.7796	ug/L	6.7796	ppb	08:54:25
2	Ba 233.527†	-17.8	-5.7	-0.0442	ug/L	-0.0442	ppb	08:54:25
2	Be 313.107†	-5176.8	138.8	0.0514	ug/L	0.0514	ppb	08:54:05
2	Ca 317.933Radial†	19.1	1.6	2.4285	ug/L	2.4285	ppb	08:53:08
2	Cd 226.502†	-164.7	23.0	0.2483	ug/L	0.2483	ppb	08:54:25
2	Co 228.616†	-69.8	1.9	0.0363	ug/L	0.0363	ppb	08:54:25
2	Cr 267.716†	71.7	-15.2	-0.1644	ug/L	-0.1644	ppb	08:54:25
2	Cu 324.752†	6794.8	32.2	0.0945	ug/L	0.0945	ppb	08:54:05
2	Fe 238.204 Radial†	7.5	1.5	15.338	ug/L	15.338	ppb	08:53:08
2	K 766.490 Radial†	2238.8	94.3	17.130	ug/L	17.130	ppb	08:52:48
2	Mg 279.077 IEC†	1.1	-0.7	-25.524	ug/L	-25.524	ppb	08:53:08
2	Mn 257.610†	412.1	9.0	0.0118	ug/L	0.0118	ppb	08:54:25
2	Mo 202.031†	17.1	-2.8	-0.1835	ug/L	-0.1835	ppb	08:54:25
2	Na 589.592 Radial†	-665.5	-57.2	-21.494	ug/L	-21.494	ppb	08:52:48
2	Ni 231.604†	83.6	13.5	0.3209	ug/L	0.3209	ppb	08:54:25

2	P 214.914†	199.9	-19.9	-11.852	ug/L	-11.852 ppb	08:54:25
2	Pb 220.353†	-52.6	-0.1	-0.0194	ug/L	-0.0194 ppb	08:54:25
2	S 181.975 Axial†	41.9	0.5	0.7238	ug/L	0.7238 ppb	08:54:25
2	Sb 206.836†	32.0	2.4	0.8056	ug/L	0.8056 ppb	08:54:25
2	Se 196.026†	-26.3	-2.9	-1.6864	ug/L	-1.6864 ppb	08:54:25
2	Si 251.611†	483.1	-24.5	-0.7548	ug/L	-0.7548 ppb	08:54:25
2	Sn 189.927†	8.1	3.8	0.6470	ug/L	0.6470 ppb	08:54:25
2	Sr 421.552†	9.6	6.3	0.0423	ug/L	0.0423 ppb	08:52:48
2	Ti 334.940†	-1018.8	-54.7	-0.0879	ug/L	-0.0879 ppb	08:54:05
2	Tl 190.801†	-32.8	4.0	1.1521	ug/L	1.1521 ppb	08:54:25
2	U 409.014†	-1984.7	-24.2	-0.6790	ug/L	-0.6790 ppb	08:54:05
2	V 292.402†	-1373.3	-78.1	-0.5337	ug/L	-0.5337 ppb	08:54:05
2	Zn 213.857†	924.7	118.3	1.0616	ug/L	1.0616 ppb	08:54:25
2	SiO2†	497.5	9.1	0.5882	ug/L	0.5882 ppb	08:55:01
3	Sc 361.383	880642.4	880642.4	99.511	%		08:54:30
3	Sc Radial	5554.9	5554.9	98.1	%		08:53:13
3	Y 371.029	740637.9	740637.9	99.807	%		08:54:30
3	Y RADIAL	6040.2	6040.2	98.08	%		08:53:13
3	Ag 328.068†	199.9	-26.6	-0.1242	ug/L	-0.1242 ppb	08:54:30
3	Al 396.153Radial†	-25.2	-5.3	-3.9345	ug/L	-3.9345 ppb	08:53:33
3	As 188.979†	-18.3	10.8	4.4225	ug/L	4.4225 ppb	08:54:51
3	B 249.677†	-202.0	320.9	6.9648	ug/L	6.9648 ppb	08:54:51
3	Ba 233.527†	-10.4	1.6	0.0114	ug/L	0.0114 ppb	08:54:51
3	Be 313.107†	-5210.3	84.4	0.0315	ug/L	0.0315 ppb	08:54:30
3	Ca 317.933Radial†	17.7	0.3	0.4667	ug/L	0.4667 ppb	08:53:33
3	Cd 226.502†	-163.1	24.0	0.2605	ug/L	0.2605 ppb	08:54:51
3	Co 228.616†	-66.1	5.4	0.1030	ug/L	0.1030 ppb	08:54:51
3	Cr 267.716†	75.8	-10.8	-0.1169	ug/L	-0.1169 ppb	08:54:51
3	Cu 324.752†	6867.1	132.2	0.3845	ug/L	0.3845 ppb	08:54:30
3	Fe 238.204 Radial†	5.8	-0.1	-1.1921	ug/L	-1.1921 ppb	08:53:33
3	K 766.490 Radial†	2207.8	80.7	14.635	ug/L	14.635 ppb	08:53:13
3	Mg 279.077 IEC†	2.1	0.3	12.561	ug/L	12.561 ppb	08:53:33
3	Mn 257.610†	406.6	5.2	0.0053	ug/L	0.0053 ppb	08:54:51
3	Mo 202.031†	13.2	-6.8	-0.4408	ug/L	-0.4408 ppb	08:54:51
3	Na 589.592 Radial†	-602.7	1.5	0.5493	ug/L	0.5493 ppb	08:53:13
3	Ni 231.604†	83.5	13.8	0.3265	ug/L	0.3265 ppb	08:54:51
3	P 214.914†	195.4	-23.6	-14.059	ug/L	-14.059 ppb	08:54:51
3	Pb 220.353†	-65.5	-13.3	-1.5534	ug/L	-1.5534 ppb	08:54:51
3	S 181.975 Axial†	44.3	3.1	4.4794	ug/L	4.4794 ppb	08:54:51
3	Sb 206.836†	38.2	8.8	2.8570	ug/L	2.8570 ppb	08:54:51
3	Se 196.026†	-24.4	-1.0	-0.6240	ug/L	-0.6240 ppb	08:54:51
3	Si 251.611†	485.7	-19.9	-0.6080	ug/L	-0.6080 ppb	08:54:51
3	Sn 189.927†	6.6	2.4	0.4063	ug/L	0.4063 ppb	08:54:51
3	Sr 421.552†	15.9	12.8	0.0863	ug/L	0.0863 ppb	08:53:13
3	Ti 334.940†	-921.1	39.4	0.0639	ug/L	0.0639 ppb	08:54:30
3	Tl 190.801†	-27.3	9.4	2.6959	ug/L	2.6959 ppb	08:54:51
3	U 409.014†	-1968.7	-16.2	-0.4536	ug/L	-0.4536 ppb	08:54:30
3	V 292.402†	-1329.2	-39.3	-0.2718	ug/L	-0.2718 ppb	08:54:30
3	Zn 213.857†	928.1	125.4	1.1255	ug/L	1.1255 ppb	08:54:51
3	SiO2†	478.8	-7.7	-0.5018	ug/L	-0.5018 ppb	08:55:06

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883289.3	99.810	%	0.2635				0.26%
Sc Radial	5720.5	101	%	4.4				4.37%
Y 371.029	742553.8	100.06	%	0.228				0.23%
Y RADIAL	6214.6	100.9	%	4.18				4.14%
Ag 328.068†	28.7	0.1362	ug/L	0.36969	0.1362	ppb	0.36969	271.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.9	-3.5886	ug/L	1.16340	-3.5886	ppb	1.16340	32.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.5813	ug/L	1.47158	3.5813	ppb	1.47158	41.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	310.9	6.7476	ug/L	0.23493	6.7476	ppb	0.23493	3.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0392	ug/L	0.04829	-0.0392	ppb	0.04829	123.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	100.2	0.0370	ug/L	0.01254	0.0370	ppb	0.01254	33.84%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          0.6      0.9687 ug/L       1.28460      0.9687 ppb        1.28460 132.62%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               23.8      0.2573 ug/L       0.00793      0.2573 ppb        0.00793   3.08%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.2      0.0232 ug/L       0.08712      0.0232 ppb        0.08712 376.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -12.6     -0.1349 ug/L       0.02582     -0.1349 ppb        0.02582  19.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               83.5      0.2432 ug/L       0.14514      0.2432 ppb        0.14514  59.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      7.1156 ug/L       8.26554      7.1156 ppb        8.26554 116.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         20.2      3.6621 ug/L      21.20314      3.6621 ppb       21.20314 578.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3    -11.394 ug/L       20.8573    -11.394 ppb        20.8573 183.05%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                7.8      0.0094 ug/L       0.00359      0.0094 ppb        0.00359  38.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -3.1     -0.1983 ug/L       0.23544     -0.1983 ppb        0.23544 118.74%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -11.8     -4.4452 ug/L      15.18056     -4.4452 ppb       15.18056 341.51%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               13.6      0.3225 ug/L       0.00351      0.3225 ppb        0.00351   1.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -19.1    -11.404 ug/L        2.9048    -11.404 ppb         2.9048  25.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.9      0.2232 ug/L       1.90946      0.2232 ppb        1.90946 855.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.1      0.1473 ug/L       4.64729      0.1473 ppb        4.64729 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                5.3      1.7249 ug/L       1.04211      1.7249 ppb        1.04211  60.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.5     -2.0452 ug/L       1.63044     -2.0452 ppb        1.63044  79.72%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.1     -0.9500 ug/L       0.47099     -0.9500 ppb        0.47099  49.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.9      0.1578 ug/L       0.65011      0.1578 ppb        0.65011 412.03%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.6      0.0717 ug/L       0.02547      0.0717 ppb        0.02547  35.50%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -56.4     -0.0903 ug/L       0.15535     -0.0903 ppb        0.15535 172.11%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                9.2      2.6355 ug/L       1.45412      2.6355 ppb        1.45412  55.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -70.7     -1.9761 ug/L       2.44454     -1.9761 ppb        2.44454 123.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -8.7     -0.0668 ug/L       0.59642     -0.0668 ppb        0.59642 892.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              125.6      1.1278 ug/L       0.06737      1.1278 ppb        0.06737   5.97%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -3.8     -0.2443 ug/L       0.73817     -0.2443 ppb        0.73817 302.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/9/2009 08:57:17
Data Type: Reprocessed on 12/9/2009 10:32:23
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896476.4	896476.4	101.30	%			09:00:27
1	Sc Radial	5639.9	5639.9	99.6	%			08:59:10
1	Y 371.029	751861.8	751861.8	101.32	%			09:00:27
1	Y RADIAL	6141.4	6141.4	99.72	%			08:59:10
1	Ag 328.068†	1439.7	1193.6	5.5275	ug/L	5.5275	ppb	09:00:27
1	Al 396.153Radial†	258.9	280.3	206.82	ug/L	206.82	ppb	08:59:10
1	As 188.979†	43.4	72.1	29.441	ug/L	29.441	ppb	09:00:47
1	B 249.677†	1840.1	2340.3	50.773	ug/L	50.773	ppb	09:00:27
1	Ba 233.527†	636.6	640.5	4.8797	ug/L	4.8797	ppb	09:00:47
1	Be 313.107†	7816.4	13036.3	4.8572	ug/L	4.8572	ppb	09:00:27
1	Ca 317.933Radial†	148.1	131.0	200.36	ug/L	200.36	ppb	08:59:30
1	Cd 226.502†	296.0	480.1	5.2002	ug/L	5.2002	ppb	09:00:47
1	Co 228.616†	183.3	252.7	4.9146	ug/L	4.9146	ppb	09:00:47
1	Cr 267.716†	516.6	423.0	4.5517	ug/L	4.5517	ppb	09:00:47
1	Cu 324.752†	10374.0	3472.2	10.104	ug/L	10.104	ppb	09:00:27
1	Fe 238.204 Radial†	17.3	11.4	114.69	ug/L	114.69	ppb	08:59:30
1	K 766.490 Radial†	2975.0	817.0	148.06	ug/L	148.06	ppb	08:59:10
1	Mg 279.077 IEC†	11.4	9.7	362.42	ug/L	362.42	ppb	08:59:30
1	Mn 257.610†	9934.1	9403.2	10.223	ug/L	10.223	ppb	09:00:27
1	Mo 202.031†	170.3	148.1	9.6541	ug/L	9.6541	ppb	09:00:47
1	Na 589.592 Radial†	174.3	790.9	297.29	ug/L	297.29	ppb	08:59:10
1	Ni 231.604†	301.4	227.5	5.3940	ug/L	5.3940	ppb	09:00:47
1	P 214.914†	459.7	233.8	137.40	ug/L	137.40	ppb	09:00:47
1	Pb 220.353†	28.5	80.6	9.4798	ug/L	9.4798	ppb	09:00:47
1	S 181.975 Axial†	109.5	66.6	97.367	ug/L	97.367	ppb	09:00:47
1	Sb 206.836†	59.8	29.5	9.8092	ug/L	9.8092	ppb	09:00:47
1	Se 196.026†	26.7	49.8	30.127	ug/L	30.127	ppb	09:00:47
1	Si 251.611†	3572.6	3018.7	92.084	ug/L	92.084	ppb	09:00:47
1	Sn 189.927†	59.2	54.2	9.1911	ug/L	9.1911	ppb	09:00:47
1	Sr 421.552†	742.0	741.7	5.0050	ug/L	5.0050	ppb	08:59:10
1	Ti 334.940†	3181.4	4105.6	6.6263	ug/L	6.6263	ppb	09:00:27
1	Tl 190.801†	30.0	66.5	19.130	ug/L	19.130	ppb	09:00:47
1	U 409.014†	-119.8	1844.0	51.494	ug/L	51.494	ppb	09:00:27
1	V 292.402†	-576.7	727.2	5.1283	ug/L	5.1283	ppb	09:00:27
1	Zn 213.857†	1760.6	930.7	8.3039	ug/L	8.3039	ppb	09:00:47
1	SiO2†	3702.5	3166.1	206.79	ug/L	206.79	ppb	09:01:43
2	Sc 361.383	889696.1	889696.1	100.53	%			09:00:52
2	Sc Radial	5497.7	5497.7	97.1	%			08:59:35
2	Y 371.029	748074.5	748074.5	100.81	%			09:00:52
2	Y RADIAL	6002.9	6002.9	97.47	%			08:59:35
2	Ag 328.068†	1455.6	1220.3	5.6550	ug/L	5.6550	ppb	09:00:52
2	Al 396.153Radial†	248.9	276.7	204.18	ug/L	204.18	ppb	08:59:35
2	As 188.979†	44.9	73.9	30.185	ug/L	30.185	ppb	09:01:12
2	B 249.677†	1849.6	2363.6	51.275	ug/L	51.275	ppb	09:00:52
2	Ba 233.527†	663.8	672.3	5.1222	ug/L	5.1222	ppb	09:01:12
2	Be 313.107†	7969.5	13247.4	4.9325	ug/L	4.9325	ppb	09:00:52
2	Ca 317.933Radial†	145.2	131.9	201.65	ug/L	201.65	ppb	08:59:55
2	Cd 226.502†	261.6	448.1	4.8505	ug/L	4.8505	ppb	09:01:12
2	Co 228.616†	183.3	254.1	4.9439	ug/L	4.9439	ppb	09:01:12
2	Cr 267.716†	517.0	427.3	4.5977	ug/L	4.5977	ppb	09:01:12
2	Cu 324.752†	10333.8	3510.3	10.216	ug/L	10.216	ppb	09:00:52
2	Fe 238.204 Radial†	19.2	13.7	138.17	ug/L	138.17	ppb	08:59:55
2	K 766.490 Radial†	2995.5	915.5	165.94	ug/L	165.94	ppb	08:59:35
2	Mg 279.077 IEC†	13.0	11.6	433.28	ug/L	433.28	ppb	08:59:55
2	Mn 257.610†	9913.7	9457.7	10.284	ug/L	10.284	ppb	09:00:52
2	Mo 202.031†	163.1	142.2	9.2742	ug/L	9.2742	ppb	09:01:12
2	Na 589.592 Radial†	94.1	712.9	267.96	ug/L	267.96	ppb	08:59:35
2	Ni 231.604†	294.4	222.8	5.2825	ug/L	5.2825	ppb	09:01:12

2	P 214.914†	452.6	230.2	135.23 ug/L	135.23 ppb	09:01:12
2	Pb 220.353†	38.2	90.5	10.632 ug/L	10.632 ppb	09:01:12
2	S 181.975 Axial†	106.4	64.4	94.079 ug/L	94.079 ppb	09:01:12
2	Sb 206.836†	59.8	29.8	9.9548 ug/L	9.9548 ppb	09:01:12
2	Se 196.026†	20.7	44.0	26.718 ug/L	26.718 ppb	09:01:12
2	Si 251.611†	3576.5	3049.5	93.021 ug/L	93.021 ppb	09:01:12
2	Sn 189.927†	67.2	62.5	10.603 ug/L	10.603 ppb	09:01:12
2	Sr 421.552†	704.7	722.5	4.8754 ug/L	4.8754 ppb	08:59:35
2	Ti 334.940†	2138.6	3092.3	4.9858 ug/L	4.9858 ppb	09:00:52
2	Tl 190.801†	33.8	70.5	20.262 ug/L	20.262 ppb	09:01:12
2	U 409.014†	5.4	1967.6	54.945 ug/L	54.945 ppb	09:00:52
2	V 292.402†	-579.5	720.1	5.0813 ug/L	5.0813 ppb	09:00:52
2	Zn 213.857†	1770.3	953.6	8.5058 ug/L	8.5058 ppb	09:01:12
2	SiO2†	3692.8	3184.3	207.98 ug/L	207.98 ppb	09:01:48
3	Sc 361.383	911746.6	911746.6	103.03 %		09:01:18
3	Sc Radial	5691.2	5691.2	100 %		09:00:00
3	Y 371.029	767276.2	767276.2	103.40 %		09:01:18
3	Y RADIAL	6175.4	6175.4	100.3 %		09:00:00
3	Ag 328.068†	1410.1	1141.1	5.2890 ug/L	5.2890 ppb	09:01:18
3	Al 396.153Radial†	235.7	254.9	188.05 ug/L	188.05 ppb	09:00:00
3	As 188.979†	36.4	64.5	26.352 ug/L	26.352 ppb	09:01:38
3	B 249.677†	1919.5	2386.9	51.782 ug/L	51.782 ppb	09:01:18
3	Ba 233.527†	656.1	648.9	4.9443 ug/L	4.9443 ppb	09:01:38
3	Be 313.107†	7943.6	13030.6	4.8515 ug/L	4.8515 ppb	09:01:18
3	Ca 317.933Radial†	151.4	132.9	203.27 ug/L	203.27 ppb	09:00:20
3	Cd 226.502†	277.2	456.9	4.9462 ug/L	4.9462 ppb	09:01:38
3	Co 228.616†	183.2	249.6	4.8573 ug/L	4.8573 ppb	09:01:38
3	Cr 267.716†	522.0	419.7	4.5162 ug/L	4.5162 ppb	09:01:38
3	Cu 324.752†	10328.2	3256.2	9.4770 ug/L	9.4770 ppb	09:01:18
3	Fe 238.204 Radial†	19.6	13.5	135.71 ug/L	135.71 ppb	09:00:20
3	K 766.490 Radial†	3044.5	859.3	155.74 ug/L	155.74 ppb	09:00:00
3	Mg 279.077 IEC†	8.5	6.7	250.23 ug/L	250.23 ppb	09:00:20
3	Mn 257.610†	9907.6	9213.2	10.021 ug/L	10.021 ppb	09:01:18
3	Mo 202.031†	165.5	140.7	9.1734 ug/L	9.1734 ppb	09:01:38
3	Na 589.592 Radial†	122.1	737.5	277.19 ug/L	277.19 ppb	09:00:00
3	Ni 231.604†	288.7	210.1	4.9830 ug/L	4.9830 ppb	09:01:38
3	P 214.914†	457.7	224.3	131.83 ug/L	131.83 ppb	09:01:38
3	Pb 220.353†	43.7	94.9	11.145 ug/L	11.145 ppb	09:01:38
3	S 181.975 Axial†	115.0	70.1	102.50 ug/L	102.50 ppb	09:01:38
3	Sb 206.836†	64.7	33.2	11.050 ug/L	11.050 ppb	09:01:38
3	Se 196.026†	30.6	53.1	32.145 ug/L	32.145 ppb	09:01:38
3	Si 251.611†	3564.3	2951.6	90.034 ug/L	90.034 ppb	09:01:38
3	Sn 189.927†	65.4	59.2	10.032 ug/L	10.032 ppb	09:01:38
3	Sr 421.552†	738.1	731.0	4.9331 ug/L	4.9331 ppb	09:00:00
3	Ti 334.940†	2081.2	2985.1	4.8129 ug/L	4.8129 ppb	09:01:18
3	Tl 190.801†	28.3	64.3	18.493 ug/L	18.493 ppb	09:01:38
3	U 409.014†	-9.5	1953.0	54.537 ug/L	54.537 ppb	09:01:18
3	V 292.402†	-574.5	738.8	5.2022 ug/L	5.2022 ppb	09:01:18
3	Zn 213.857†	1772.2	912.9	8.1486 ug/L	8.1486 ppb	09:01:38
3	SiO2†	3724.3	3126.1	204.18 ug/L	204.18 ppb	09:01:53

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899306.4	101.62	%	1.276				1.26%
Sc Radial	5609.6	99.1	%	1.77				1.79%
Y 371.029	755737.5	101.84	%	1.371				1.35%
Y RADIAL	6106.6	99.15	%	1.484				1.50%
Ag 328.068†	1185.0	5.4905	ug/L	0.18581	5.4905	ppb	0.18581	3.38%
QC value within limits for Ag 328.068 Recovery = 109.81%								
Al 396.153Radial†	270.7	199.68	ug/L	10.163	199.68	ppb	10.163	5.09%
QC value within limits for Al 396.153Radial Recovery = 99.84%								
As 188.979†	70.2	28.659	ug/L	2.0326	28.659	ppb	2.0326	7.09%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2363.6	51.277	ug/L	0.5046	51.277	ppb	0.5046	0.98%
QC value within limits for B 249.677 Recovery = 102.55%								
Ba 233.527†	653.9	4.9821	ug/L	0.12557	4.9821	ppb	0.12557	2.52%
QC value within limits for Ba 233.527 Recovery = 99.64%								
Be 313.107†	13104.8	4.8804	ug/L	0.04516	4.8804	ppb	0.04516	0.93%
QC value within limits for Be 313.107 Recovery = 97.61%								

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Ca 317.933Radial†        131.9      201.76 ug/L        1.457      201.76 ppb        1.457   0.72%
   QC value within limits for Ca 317.933Radial  Recovery = 100.88%
Cd 226.502†              461.7      4.9990 ug/L      0.18071      4.9990 ppb      0.18071   3.61%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†              252.1      4.9053 ug/L      0.04406      4.9053 ppb      0.04406   0.90%
   QC value within limits for Co 228.616  Recovery = 98.11%
Cr 267.716†              423.4      4.5552 ug/L      0.04086      4.5552 ppb      0.04086   0.90%
   QC value within limits for Cr 267.716  Recovery = 91.10%
Cu 324.752†             3412.9      9.9323 ug/L      0.39829      9.9323 ppb      0.39829   4.01%
   QC value within limits for Cu 324.752  Recovery = 99.32%
Fe 238.204 Radial†        12.8      129.52 ug/L       12.901      129.52 ppb       12.901   9.96%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.52%
K 766.490 Radial†        863.9      156.58 ug/L        8.970      156.58 ppb        8.970   5.73%
   QC value within limits for K 766.490 Radial  Recovery = 104.39%
Mg 279.077 IEC†           9.4      348.64 ug/L       92.297      348.64 ppb       92.297  26.47%
   QC value within limits for Mg 279.077 IEC  Recovery = 116.21%
Mn 257.610†             9358.0      10.176 ug/L       0.1375      10.176 ppb       0.1375   1.35%
   QC value within limits for Mn 257.610  Recovery = 101.76%
Mo 202.031†              143.7      9.3672 ug/L      0.25349      9.3672 ppb      0.25349   2.71%
   QC value within limits for Mo 202.031  Recovery = 93.67%
Na 589.592 Radial†       747.1      280.82 ug/L       14.998      280.82 ppb       14.998   5.34%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†              220.1      5.2199 ug/L      0.21252      5.2199 ppb      0.21252   4.07%
   QC value within limits for Ni 231.604  Recovery = 104.40%
P 214.914†               229.4      134.82 ug/L        2.807      134.82 ppb        2.807   2.08%
   QC value within limits for P 214.914  Recovery = 89.88%
Pb 220.353†               88.7      10.419 ug/L       0.8528      10.419 ppb       0.8528   8.19%
   QC value within limits for Pb 220.353  Recovery = 104.19%
S 181.975 Axial†          67.0      97.983 ug/L       4.2452      97.983 ppb       4.2452   4.33%
   QC value within limits for S 181.975 Axial  Recovery = 97.98%
Sb 206.836†               30.8      10.271 ug/L       0.6785      10.271 ppb       0.6785   6.61%
   QC value within limits for Sb 206.836  Recovery = 102.71%
Se 196.026†               49.0      29.663 ug/L       2.7433      29.663 ppb       2.7433   9.25%
   QC value within limits for Se 196.026  Recovery = 98.88%
Si 251.611†             3006.6      91.713 ug/L       1.5276      91.713 ppb       1.5276   1.67%
   QC value within limits for Si 251.611  Recovery = 91.71%
Sn 189.927†               58.6      9.9422 ug/L      0.71035      9.9422 ppb      0.71035   7.14%
   QC value within limits for Sn 189.927  Recovery = 99.42%
Sr 421.552†              731.7      4.9378 ug/L      0.06490      4.9378 ppb      0.06490   1.31%
   QC value within limits for Sr 421.552  Recovery = 98.76%
Ti 334.940†             3394.3      5.4750 ug/L      1.00080      5.4750 ppb      1.00080  18.28%
   QC value within limits for Ti 334.940  Recovery = 109.50%
Tl 190.801†               67.1      19.295 ug/L       0.8963      19.295 ppb       0.8963   4.65%
   QC value within limits for Tl 190.801  Recovery = 96.47%
U 409.014†              1921.5      53.659 ug/L       1.8853      53.659 ppb       1.8853   3.51%
   QC value within limits for U 409.014  Recovery = 107.32%
V 292.402†               728.7      5.1373 ug/L      0.06097      5.1373 ppb      0.06097   1.19%
   QC value within limits for V 292.402  Recovery = 102.75%
Zn 213.857†              932.4      8.3194 ug/L      0.17911      8.3194 ppb      0.17911   2.15%
   QC value within limits for Zn 213.857  Recovery = 83.19%
SiO2†                   3158.9      206.32 ug/L        1.943      206.32 ppb        1.943   0.94%
   QC value within limits for SiO2  Recovery = 96.86%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/9/2009 09:04:05
Data Type: Reprocessed on 12/9/2009 10:32:24
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	766943.3	766943.3	86.663	%			09:06:31
1	Sc Radial	5161.3	5161.3	91.1	%			09:06:04
1	Y 371.029	627463.9	627463.9	84.556	%			09:06:31
1	Y RADIAL	5628.8	5628.8	91.40	%			09:06:04
1	Ag 328.068†	-9591.5	-11295.2	0.4346	ug/L	0.4346	ppb	09:06:31
1	Al 396.153Radial†	635373.7	697200.9	515400	ug/L	515400	ppb	09:05:59
1	As 188.979†	-79.1	-62.1	3.3536	ug/L	3.3536	ppb	09:06:51
1	B 249.677†	563.8	1174.4	0.6643	ug/L	0.6643	ppb	09:06:31
1	Ba 233.527†	-440.7	-496.5	3.2085	ug/L	3.2085	ppb	09:06:51
1	Be 313.107†	-5691.8	-1247.5	-0.5174	ug/L	-0.5174	ppb	09:06:31
1	Ca 317.933Radial†	282566.8	310036.2	474100	ug/L	474100	ppb	09:05:59
1	Cd 226.502†	1440.2	1849.6	1.3590	ug/L	1.3590	ppb	09:06:51
1	Co 228.616†	-29.5	37.7	-1.9298	ug/L	-1.9298	ppb	09:06:51
1	Cr 267.716†	-117.5	-222.5	0.9709	ug/L	0.9709	ppb	09:06:51
1	Cu 324.752†	4309.8	-1795.6	4.3244	ug/L	4.3244	ppb	09:06:31
1	Fe 238.204 Radial†	16943.3	18585.4	187140	ug/L	187140	ppb	09:06:04
1	K 766.490 Radial†	2130.7	167.7	46.717	ug/L	46.717	ppb	09:06:04
1	Mg 279.077 IEC†	11941.9	13101.8	487730	ug/L	487730	ppb	09:06:04
1	Mn 257.610†	575.1	260.2	9.8617	ug/L	9.8617	ppb	09:06:31
1	Mo 202.031†	-243.6	-301.0	-6.3338	ug/L	-6.3338	ppb	09:06:51
1	Na 589.592 Radial†	-477.6	91.9	34.544	ug/L	34.544	ppb	09:06:04
1	Ni 231.604†	200.7	161.4	3.8298	ug/L	3.8298	ppb	09:06:51
1	P 214.914†	155.6	-40.4	-0.3493	ug/L	-0.3493	ppb	09:06:51
1	Pb 220.353†	-752.7	-816.0	4.8633	ug/L	4.8633	ppb	09:06:51
1	S 181.975 Axial†	82.4	53.6	-22.981	ug/L	-22.981	ppb	09:06:51
1	Sb 206.836†	51.5	29.8	-2.8372	ug/L	-2.8372	ppb	09:06:51
1	Se 196.026†	-952.6	-1075.7	6.8174	ug/L	6.8174	ppb	09:06:51
1	Si 251.611†	456.2	18.4	1.1083	ug/L	1.1083	ppb	09:06:51
1	Sn 189.927†	-350.0	-408.2	-17.045	ug/L	-17.045	ppb	09:06:51
1	Sr 421.552†	523.9	571.5	-0.5365	ug/L	-0.5365	ppb	09:06:04
1	Ti 334.940†	-15509.4	-16931.2	-2.6642	ug/L	-2.6642	ppb	09:06:31
1	Tl 190.801†	-86.9	-63.4	-4.3006	ug/L	-4.3006	ppb	09:06:51
1	U 409.014†	-890.5	934.7	2.5732	ug/L	2.5732	ppb	09:06:31
1	V 292.402†	1061.3	2521.1	-0.6421	ug/L	-0.6421	ppb	09:06:51
1	Zn 213.857†	3253.7	2947.1	-8.0725	ug/L	-8.0725	ppb	09:06:51
1	SiO2†	664.6	278.1	19.399	ug/L	19.399	ppb	09:07:47
2	Sc 361.383	764245.3	764245.3	86.358	%			09:06:56
2	Sc Radial	5162.4	5162.4	91.2	%			09:06:14
2	Y 371.029	624372.6	624372.6	84.139	%			09:06:56
2	Y RADIAL	5563.1	5563.1	90.33	%			09:06:14
2	Ag 328.068†	-9701.4	-11461.5	-0.6081	ug/L	-0.6081	ppb	09:06:56
2	Al 396.153Radial†	630403.1	691597.3	511260	ug/L	511260	ppb	09:06:09
2	As 188.979†	-96.0	-81.9	-4.8844	ug/L	-4.8844	ppb	09:07:16
2	B 249.677†	717.6	1354.8	4.7079	ug/L	4.7079	ppb	09:06:56
2	Ba 233.527†	-465.6	-527.1	2.9406	ug/L	2.9406	ppb	09:07:16
2	Be 313.107†	-5728.6	-1313.3	-0.5410	ug/L	-0.5410	ppb	09:06:56
2	Ca 317.933Radial†	281090.2	308349.3	471520	ug/L	471520	ppb	09:06:09
2	Cd 226.502†	1414.8	1826.2	1.2008	ug/L	1.2008	ppb	09:07:16
2	Co 228.616†	-0.8	70.8	-1.2709	ug/L	-1.2709	ppb	09:07:16
2	Cr 267.716†	-87.2	-188.0	1.3244	ug/L	1.3244	ppb	09:07:16
2	Cu 324.752†	4253.3	-1843.4	4.1359	ug/L	4.1359	ppb	09:06:56
2	Fe 238.204 Radial†	16859.4	18489.4	186180	ug/L	186180	ppb	09:06:14
2	K 766.490 Radial†	2153.5	192.2	50.834	ug/L	50.834	ppb	09:06:14
2	Mg 279.077 IEC†	11966.3	13125.7	488620	ug/L	488620	ppb	09:06:14
2	Mn 257.610†	536.7	218.0	9.7029	ug/L	9.7029	ppb	09:06:56
2	Mo 202.031†	-225.5	-281.1	-5.1062	ug/L	-5.1062	ppb	09:07:16
2	Na 589.592 Radial†	-525.6	39.4	14.807	ug/L	14.807	ppb	09:06:14
2	Ni 231.604†	191.8	152.0	3.6067	ug/L	3.6067	ppb	09:07:16

2	P 214.914†	186.0	-4.6	20.288	ug/L	20.288 ppb	09:07:16
2	Pb 220.353†	-733.3	-796.5	6.2948	ug/L	6.2948 ppb	09:07:16
2	S 181.975 Axial†	77.0	47.7	-30.838	ug/L	-30.838 ppb	09:07:16
2	Sb 206.836†	58.0	37.6	-0.2059	ug/L	-0.2059 ppb	09:07:16
2	Se 196.026†	-961.5	-1089.9	-5.1919	ug/L	-5.1919 ppb	09:07:16
2	Si 251.611†	472.5	39.1	1.7195	ug/L	1.7195 ppb	09:07:16
2	Sn 189.927†	-351.8	-411.6	-17.908	ug/L	-17.908 ppb	09:07:16
2	Sr 421.552†	511.6	557.9	-0.6046	ug/L	-0.6046 ppb	09:06:14
2	Ti 334.940†	-15217.0	-16655.7	-2.3559	ug/L	-2.3559 ppb	09:06:56
2	Tl 190.801†	-74.8	-49.7	-0.5025	ug/L	-0.5025 ppb	09:07:16
2	U 409.014†	-703.0	1148.1	8.6579	ug/L	8.6579 ppb	09:06:56
2	V 292.402†	1097.2	2567.0	-0.1353	ug/L	-0.1353 ppb	09:07:16
2	Zn 213.857†	3249.4	2955.4	-7.9349	ug/L	-7.9349 ppb	09:07:16
2	SiO2†	433.3	13.0	1.9883	ug/L	1.9883 ppb	09:07:52
3	Sc 361.383	767298.0	767298.0	86.703	%		09:07:21
3	Sc Radial	5118.2	5118.2	90.4	%		09:06:24
3	Y 371.029	626529.7	626529.7	84.430	%		09:07:21
3	Y RADIAL	5591.8	5591.8	90.79	%		09:06:24
3	Ag 328.068†	-9719.7	-11437.9	-0.3226	ug/L	-0.3226 ppb	09:07:21
3	Al 396.153Radial†	621881.8	688142.3	508710	ug/L	508710 ppb	09:06:19
3	As 188.979†	-91.9	-76.8	-2.7216	ug/L	-2.7216 ppb	09:07:42
3	B 249.677†	642.6	1265.1	2.6882	ug/L	2.6882 ppb	09:07:21
3	Ba 233.527†	-467.0	-526.6	2.9636	ug/L	2.9636 ppb	09:07:42
3	Be 313.107†	-5860.9	-1439.5	-0.5875	ug/L	-0.5875 ppb	09:07:21
3	Ca 317.933Radial†	278239.3	307858.4	470770	ug/L	470770 ppb	09:06:19
3	Cd 226.502†	1473.5	1887.3	1.8105	ug/L	1.8105 ppb	09:07:42
3	Co 228.616†	4.0	76.4	-1.1731	ug/L	-1.1731 ppb	09:07:42
3	Cr 267.716†	-115.6	-220.3	0.9845	ug/L	0.9845 ppb	09:07:42
3	Cu 324.752†	4378.8	-1718.3	4.5270	ug/L	4.5270 ppb	09:07:21
3	Fe 238.204 Radial†	16762.7	18542.2	186710	ug/L	186710 ppb	09:06:24
3	K 766.490 Radial†	2256.8	326.9	74.991	ug/L	74.991 ppb	09:06:24
3	Mg 279.077 IEC†	11908.3	13175.0	490450	ug/L	490450 ppb	09:06:24
3	Mn 257.610†	624.1	316.4	9.8287	ug/L	9.8287 ppb	09:07:21
3	Mo 202.031†	-233.3	-289.1	-5.5891	ug/L	-5.5891 ppb	09:07:42
3	Na 589.592 Radial†	-457.6	109.6	41.195	ug/L	41.195 ppb	09:06:24
3	Ni 231.604†	176.2	133.1	3.1573	ug/L	3.1573 ppb	09:07:42
3	P 214.914†	175.4	-17.7	11.206	ug/L	11.206 ppb	09:07:42
3	Pb 220.353†	-744.4	-806.0	4.5657	ug/L	4.5657 ppb	09:07:42
3	S 181.975 Axial†	70.1	39.4	-42.497	ug/L	-42.497 ppb	09:07:42
3	Sb 206.836†	64.3	44.5	2.1615	ug/L	2.1615 ppb	09:07:42
3	Se 196.026†	-961.9	-1086.0	-1.6214	ug/L	-1.6214 ppb	09:07:42
3	Si 251.611†	441.3	1.0	0.5480	ug/L	0.5480 ppb	09:07:42
3	Sn 189.927†	-341.3	-397.9	-15.662	ug/L	-15.662 ppb	09:07:42
3	Sr 421.552†	510.7	561.7	-0.5719	ug/L	-0.5719 ppb	09:06:24
3	Ti 334.940†	-15170.6	-16532.2	-2.1967	ug/L	-2.1967 ppb	09:07:21
3	Tl 190.801†	-68.0	-41.5	1.7765	ug/L	1.7765 ppb	09:07:42
3	U 409.014†	-596.4	1274.3	12.118	ug/L	12.118 ppb	09:07:21
3	V 292.402†	1085.2	2548.1	-0.3030	ug/L	-0.3030 ppb	09:07:42
3	Zn 213.857†	3243.0	2933.1	-8.2463	ug/L	-8.2463 ppb	09:07:42
3	SiO2†	432.8	10.4	1.8063	ug/L	1.8063 ppb	09:07:57

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	766162.2	86.575	%	0.1887				0.22%
Sc Radial	5147.3	90.9	%	0.45				0.49%
Y 371.029	626122.1	84.375	%	0.2136				0.25%
Y RADIAL	5594.6	90.84	%	0.535				0.59%
Ag 328.068†	-11398.2	-0.1654	ug/L	0.53884	-0.1654	ppb	0.53884	325.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	692313.5	511790	ug/L	3379.6	511790	ppb	3379.6	0.66%
QC value within limits for Al 396.153Radial Recovery = 102.36%								
As 188.979†	-73.6	-1.4174	ug/L	4.27106	-1.4174	ppb	4.27106	301.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1264.8	2.6868	ug/L	2.02176	2.6868	ppb	2.02176	75.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-516.7	3.0375	ug/L	0.14849	3.0375	ppb	0.14849	4.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1333.4	-0.5486	ug/L	0.03565	-0.5486	ppb	0.03565	6.50%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     308747.9      472130 ug/L        1746.8      472130 ppb        1746.8   0.37%
   QC value within limits for Ca 317.933Radial  Recovery = 94.43%
Cd 226.502†             1854.4      1.4568 ug/L       0.31637      1.4568 ppb       0.31637  21.72%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.6     -1.4580 ug/L       0.41157     -1.4580 ppb       0.41157  28.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -210.2      1.0933 ug/L       0.20027      1.0933 ppb       0.20027  18.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -1785.8      4.3291 ug/L       0.19559      4.3291 ppb       0.19559   4.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     18539.0      186680 ug/L         484.3      186680 ppb         484.3   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.34%
K 766.490 Radial†        228.9      57.514 ug/L       15.2747      57.514 ppb       15.2747  26.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        13134.2      488940 ug/L        1388.6      488940 ppb        1388.6   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.79%
Mn 257.610†              264.9      9.7978 ug/L       0.08380      9.7978 ppb       0.08380   0.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -290.4     -5.6764 ug/L       0.61843     -5.6764 ppb       0.61843  10.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        80.3      30.182 ug/L       13.7241      30.182 ppb       13.7241  45.47%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              148.9      3.5313 ug/L       0.34251      3.5313 ppb       0.34251   9.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -20.9      10.382 ug/L       10.3435      10.382 ppb       10.3435  99.63%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -806.2      5.2413 ug/L       0.92442      5.2413 ppb       0.92442  17.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          46.9     -32.105 ug/L        9.8196     -32.105 ppb        9.8196  30.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               37.3     -0.2938 ug/L       2.50051     -0.2938 ppb       2.50051 851.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1083.9      0.0013 ug/L       6.16695      0.0013 ppb       6.16695 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               19.5      1.1253 ug/L       0.58594      1.1253 ppb       0.58594  52.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -405.9     -16.872 ug/L        1.1328     -16.872 ppb        1.1328   6.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              563.7     -0.5710 ug/L       0.03408     -0.5710 ppb       0.03408   5.97%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16706.4     -2.4056 ug/L       0.23766     -2.4056 ppb       0.23766   9.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -51.6     -1.0089 ug/L       3.07003     -1.0089 ppb       3.07003 304.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1119.1      7.7830 ug/L       4.83222      7.7830 ppb       4.83222  62.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2545.4     -0.3602 ug/L       0.25817     -0.3602 ppb       0.25817  71.68%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             2945.2     -8.0845 ug/L       0.15604     -8.0845 ppb       0.15604   1.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    100.5      7.7312 ug/L      10.10504      7.7312 ppb      10.10504 130.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/9/2009 09:10:08
Data Type: Reprocessed on 12/9/2009 10:32:25
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	780445.9	780445.9	88.189	%			09:12:34
1	Sc Radial	5114.4	5114.4	90.3	%			09:12:06
1	Y 371.029	635832.4	635832.4	85.683	%			09:12:34
1	Y RADIAL	5537.7	5537.7	89.92	%			09:12:06
1	Ag 328.068†	41866.3	47245.9	273.54	ug/L	273.54	ppb	09:12:34
1	Al 396.153Radial†	630325.8	698004.9	515980	ug/L	515980	ppb	09:12:01
1	As 188.979†	991.3	1153.3	503.46	ug/L	503.46	ppb	09:12:54
1	B 249.677†	21231.0	24598.3	507.60	ug/L	507.60	ppb	09:12:34
1	Ba 233.527†	55815.1	63302.6	488.99	ug/L	488.99	ppb	09:12:34
1	Be 313.107†	562241.9	642864.2	239.85	ug/L	239.85	ppb	09:12:34
1	Ca 317.933Radial†	282747.7	313080.0	478750	ug/L	478750	ppb	09:12:01
1	Cd 226.502†	39025.0	44439.6	463.38	ug/L	463.38	ppb	09:12:34
1	Co 228.616†	19801.1	22524.9	434.70	ug/L	434.70	ppb	09:12:54
1	Cr 267.716†	38642.3	43730.8	475.32	ug/L	475.32	ppb	09:12:34
1	Cu 324.752†	170780.1	186884.3	553.22	ug/L	553.22	ppb	09:12:34
1	Fe 238.204 Radial†	17064.7	18890.4	190230	ug/L	190230	ppb	09:12:06
1	K 766.490 Radial†	29740.0	30762.0	5592.1	ug/L	5592.1	ppb	09:12:01
1	Mg 279.077 IEC†	11973.4	13256.8	493510	ug/L	493510	ppb	09:12:06
1	Mn 257.610†	384453.9	435541.1	483.09	ug/L	483.09	ppb	09:12:34
1	Mo 202.031†	6369.3	7202.4	482.65	ug/L	482.65	ppb	09:12:54
1	Na 589.592 Radial†	13215.3	15249.8	5731.9	ug/L	5731.9	ppb	09:12:06
1	Ni 231.604†	16373.4	18496.2	438.60	ug/L	438.60	ppb	09:12:54
1	P 214.914†	3863.7	4161.2	2412.2	ug/L	2412.2	ppb	09:12:54
1	Pb 220.353†	2656.6	3064.9	459.19	ug/L	459.19	ppb	09:12:54
1	S 181.975 Axial†	1676.8	1859.9	2618.2	ug/L	2618.2	ppb	09:12:54
1	Sb 206.836†	1446.8	1611.0	517.85	ug/L	517.85	ppb	09:12:54
1	Se 196.026†	2709.8	3096.2	2505.7	ug/L	2505.7	ppb	09:12:54
1	Si 251.611†	150356.9	169986.4	5187.8	ug/L	5187.8	ppb	09:12:34
1	Sn 189.927†	2207.7	2499.1	475.32	ug/L	475.32	ppb	09:12:54
1	Sr 421.552†	71827.2	79533.6	532.46	ug/L	532.46	ppb	09:12:01
1	Ti 334.940†	267261.3	304021.1	516.29	ug/L	516.29	ppb	09:12:34
1	Tl 190.801†	1322.9	1537.0	457.80	ug/L	457.80	ppb	09:12:54
1	U 409.014†	14007.6	17845.8	473.75	ug/L	473.75	ppb	09:12:34
1	V 292.402†	65551.7	75627.6	499.67	ug/L	499.67	ppb	09:12:34
1	Zn 213.857†	51418.0	57497.2	478.79	ug/L	478.79	ppb	09:12:34
1	SiO2†	149270.3	168773.5	11027	ug/L	11027	ppb	09:13:52
2	Sc 361.383	775696.5	775696.5	87.652	%			09:13:00
2	Sc Radial	5138.5	5138.5	90.7	%			09:12:16
2	Y 371.029	633790.1	633790.1	85.408	%			09:13:00
2	Y RADIAL	5552.8	5552.8	90.16	%			09:12:16
2	Ag 328.068†	41631.8	47269.1	273.46	ug/L	273.46	ppb	09:13:00
2	Al 396.153Radial†	635086.3	699975.6	517430	ug/L	517430	ppb	09:12:11
2	As 188.979†	986.8	1155.0	504.07	ug/L	504.07	ppb	09:13:20
2	B 249.677†	21119.8	24618.9	508.12	ug/L	508.12	ppb	09:13:00
2	Ba 233.527†	55464.4	63290.0	488.87	ug/L	488.87	ppb	09:13:00
2	Be 313.107†	558868.7	642919.3	239.87	ug/L	239.87	ppb	09:13:00
2	Ca 317.933Radial†	284423.5	313457.4	479330	ug/L	479330	ppb	09:12:11
2	Cd 226.502†	38722.8	44365.7	462.64	ug/L	462.64	ppb	09:13:00
2	Co 228.616†	19762.0	22617.7	436.52	ug/L	436.52	ppb	09:13:20
2	Cr 267.716†	38399.3	43721.8	475.22	ug/L	475.22	ppb	09:13:00
2	Cu 324.752†	169147.6	186207.5	551.22	ug/L	551.22	ppb	09:13:00
2	Fe 238.204 Radial†	17094.8	18834.9	189670	ug/L	189670	ppb	09:12:16
2	K 766.490 Radial†	29861.5	30741.4	5588.5	ug/L	5588.5	ppb	09:12:11
2	Mg 279.077 IEC†	12022.3	13248.6	493200	ug/L	493200	ppb	09:12:16
2	Mn 257.610†	381195.7	434493.1	481.90	ug/L	481.90	ppb	09:13:00
2	Mo 202.031†	6387.5	7267.4	486.84	ug/L	486.84	ppb	09:13:20
2	Na 589.592 Radial†	13168.6	15129.7	5686.8	ug/L	5686.8	ppb	09:12:16
2	Ni 231.604†	16304.0	18530.7	439.42	ug/L	439.42	ppb	09:13:20

2	P 214.914†	3843.7	4165.2	2415.9 ug/L	2415.9 ppb	09:13:20
2	Pb 220.353†	2660.5	3087.9	462.25 ug/L	462.25 ppb	09:13:20
2	S 181.975 Axial†	1648.1	1838.8	2587.0 ug/L	2587.0 ppb	09:13:20
2	Sb 206.836†	1446.5	1620.6	521.00 ug/L	521.00 ppb	09:13:20
2	Se 196.026†	2712.6	3118.2	2517.3 ug/L	2517.3 ppb	09:13:20
2	Si 251.611†	149037.3	169524.8	5173.6 ug/L	5173.6 ppb	09:13:00
2	Sn 189.927†	2190.0	2494.2	474.55 ug/L	474.55 ppb	09:13:20
2	Sr 421.552†	72301.3	79682.9	533.46 ug/L	533.46 ppb	09:12:11
2	Ti 334.940†	264911.8	303196.2	514.99 ug/L	514.99 ppb	09:13:00
2	Tl 190.801†	1308.5	1529.7	455.73 ug/L	455.73 ppb	09:13:20
2	U 409.014†	13749.8	17649.0	468.32 ug/L	468.32 ppb	09:13:00
2	V 292.402†	65041.7	75500.9	498.94 ug/L	498.94 ppb	09:13:00
2	Zn 213.857†	50996.0	57372.8	477.73 ug/L	477.73 ppb	09:13:00
2	SiO2†	149212.3	169743.7	11091 ug/L	11091 ppb	09:13:57
3	Sc 361.383	781218.8	781218.8	88.276 %		09:13:26
3	Sc Radial	5178.3	5178.3	91.4 %		09:12:27
3	Y 371.029	637300.9	637300.9	85.881 %		09:13:26
3	Y RADIAL	5577.3	5577.3	90.56 %		09:12:27
3	Ag 328.068†	41948.8	47292.5	273.33 ug/L	273.33 ppb	09:13:26
3	Al 396.153Radial†	637978.3	697749.6	515790 ug/L	515790 ppb	09:12:22
3	As 188.979†	975.4	1134.2	495.43 ug/L	495.43 ppb	09:13:46
3	B 249.677†	21255.5	24602.4	507.87 ug/L	507.87 ppb	09:13:26
3	Ba 233.527†	55834.0	63261.3	488.62 ug/L	488.62 ppb	09:13:26
3	Be 313.107†	563317.0	643451.4	240.06 ug/L	240.06 ppb	09:13:26
3	Ca 317.933Radial†	285215.9	311910.6	476960 ug/L	476960 ppb	09:12:22
3	Cd 226.502†	39066.4	44442.6	463.55 ug/L	463.55 ppb	09:13:26
3	Co 228.616†	19878.9	22590.7	436.01 ug/L	436.01 ppb	09:13:46
3	Cr 267.716†	38681.8	43732.2	475.31 ug/L	475.31 ppb	09:13:26
3	Cu 324.752†	170015.5	185826.6	550.07 ug/L	550.07 ppb	09:13:26
3	Fe 238.204 Radial†	17150.0	18750.2	188820 ug/L	188820 ppb	09:12:27
3	K 766.490 Radial†	30111.2	30761.1	5592.1 ug/L	5592.1 ppb	09:12:22
3	Mg 279.077 IEC†	12021.1	13145.2	489350 ug/L	489350 ppb	09:12:27
3	Mn 257.610†	383873.4	434452.2	481.85 ug/L	481.85 ppb	09:13:26
3	Mo 202.031†	6399.7	7229.7	484.33 ug/L	484.33 ppb	09:13:46
3	Na 589.592 Radial†	13269.8	15128.5	5686.4 ug/L	5686.4 ppb	09:12:27
3	Ni 231.604†	16386.9	18493.1	438.53 ug/L	438.53 ppb	09:13:46
3	P 214.914†	3884.9	4180.9	2425.5 ug/L	2425.5 ppb	09:13:46
3	Pb 220.353†	2672.5	3080.0	461.03 ug/L	461.03 ppb	09:13:46
3	S 181.975 Axial†	1677.0	1858.3	2615.7 ug/L	2615.7 ppb	09:13:46
3	Sb 206.836†	1483.5	1650.9	530.81 ug/L	530.81 ppb	09:13:46
3	Se 196.026†	2703.6	3086.2	2495.4 ug/L	2495.4 ppb	09:13:46
3	Si 251.611†	150003.2	169417.1	5170.4 ug/L	5170.4 ppb	09:13:26
3	Sn 189.927†	2201.7	2489.9	473.55 ug/L	473.55 ppb	09:13:46
3	Sr 421.552†	72639.7	79439.4	531.84 ug/L	531.84 ppb	09:12:22
3	Ti 334.940†	266461.0	302814.7	514.25 ug/L	514.25 ppb	09:13:26
3	Tl 190.801†	1325.4	1538.3	458.16 ug/L	458.16 ppb	09:13:46
3	U 409.014†	13866.4	17670.2	469.02 ug/L	469.02 ppb	09:13:26
3	V 292.402†	65552.9	75555.5	499.32 ug/L	499.32 ppb	09:13:26
3	Zn 213.857†	51255.7	57255.7	476.90 ug/L	476.90 ppb	09:13:26
3	SiO2†	149513.2	168881.2	11034 ug/L	11034 ppb	09:14:02

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	779120.4	88.039	%	0.3379				0.38%
Sc Radial	5143.7	90.8	%	0.57				0.63%
Y 371.029	635641.1	85.658	%	0.2376				0.28%
Y RADIAL	5555.9	90.21	%	0.324				0.36%
Ag 328.068†	47269.2	273.45	ug/L	0.104	273.45	ppb	0.104	0.04%
QC value within limits for Ag 328.068 Recovery = 109.38%								
Al 396.153Radial†	698576.7	516400	ug/L	900.4	516400	ppb	900.4	0.17%
QC value within limits for Al 396.153Radial Recovery = 103.28%								
As 188.979†	1147.5	500.99	ug/L	4.823	500.99	ppb	4.823	0.96%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	24606.5	507.87	ug/L	0.258	507.87	ppb	0.258	0.05%
QC value within limits for B 249.677 Recovery = 101.57%								
Ba 233.527†	63284.6	488.82	ug/L	0.187	488.82	ppb	0.187	0.04%
QC value within limits for Ba 233.527 Recovery = 97.76%								
Be 313.107†	643078.3	239.93	ug/L	0.119	239.93	ppb	0.119	0.05%
QC value within limits for Be 313.107 Recovery = 95.97%								

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Ca 317.933Radial†     312816.0      478350 ug/L        1233.3      478350 ppb         1233.3   0.26%
   QC value within limits for Ca 317.933Radial  Recovery = 95.67%
Cd 226.502†            44416.0      463.19 ug/L         0.488      463.19 ppb          0.488   0.11%
   QC value within limits for Cd 226.502  Recovery = 92.64%
Co 228.616†            22577.8      435.74 ug/L         0.940      435.74 ppb          0.940   0.22%
   QC value within limits for Co 228.616  Recovery = 87.15%
Cr 267.716†            43728.2      475.28 ug/L         0.059      475.28 ppb          0.059   0.01%
   QC value within limits for Cr 267.716  Recovery = 95.06%
Cu 324.752†           186306.1      551.50 ug/L         1.593      551.50 ppb          1.593   0.29%
   QC value within limits for Cu 324.752  Recovery = 110.30%
Fe 238.204 Radial†     18825.2      189570 ug/L         710.8      189570 ppb          710.8   0.37%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.79%
K 766.490 Radial†      30754.8      5590.9 ug/L          2.08      5590.9 ppb           2.08   0.04%
   QC value within limits for K 766.490 Radial  Recovery = 111.82%
Mg 279.077 IEC†        13216.9      492020 ug/L        2315.9      492020 ppb         2315.9   0.47%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.40%
Mn 257.610†           434828.8      482.28 ug/L         0.704      482.28 ppb          0.704   0.15%
   QC value within limits for Mn 257.610  Recovery = 96.46%
Mo 202.031†             7233.1      484.61 ug/L         2.110      484.61 ppb          2.110   0.44%
   QC value within limits for Mo 202.031  Recovery = 96.92%
Na 589.592 Radial†     15169.3      5701.7 ug/L         26.18      5701.7 ppb          26.18   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 114.03%
Ni 231.604†            18506.6      438.85 ug/L         0.495      438.85 ppb          0.495   0.11%
   QC value within limits for Ni 231.604  Recovery = 87.77%
P 214.914†              4169.1      2417.9 ug/L          6.84      2417.9 ppb           6.84   0.28%
   QC value within limits for P 214.914  Recovery = 96.71%
Pb 220.353†             3077.6      460.82 ug/L         1.542      460.82 ppb          1.542   0.33%
   QC value within limits for Pb 220.353  Recovery = 92.16%
S 181.975 Axial†        1852.3      2607.0 ug/L         17.35      2607.0 ppb          17.35   0.67%
   QC value within limits for S 181.975 Axial  Recovery = 104.28%
Sb 206.836†             1627.5      523.22 ug/L         6.758      523.22 ppb          6.758   1.29%
   QC value within limits for Sb 206.836  Recovery = 104.64%
Se 196.026†             3100.2      2506.1 ug/L         11.00      2506.1 ppb          11.00   0.44%
   QC value within limits for Se 196.026  Recovery = 100.24%
Si 251.611†           169642.8      5177.3 ug/L          9.27      5177.3 ppb           9.27   0.18%
   QC value within limits for Si 251.611  Recovery = 103.55%
Sn 189.927†             2494.4      474.47 ug/L         0.883      474.47 ppb          0.883   0.19%
   QC value within limits for Sn 189.927  Recovery = 94.89%
Sr 421.552†            79552.0      532.59 ug/L         0.818      532.59 ppb          0.818   0.15%
   QC value within limits for Sr 421.552  Recovery = 106.52%
Ti 334.940†           303344.0      515.18 ug/L         1.034      515.18 ppb          1.034   0.20%
   QC value within limits for Ti 334.940  Recovery = 103.04%
Tl 190.801†             1535.0      457.23 ug/L         1.309      457.23 ppb          1.309   0.29%
   QC value within limits for Tl 190.801  Recovery = 91.45%
U 409.014†             17721.7      470.36 ug/L         2.954      470.36 ppb          2.954   0.63%
   QC value within limits for U 409.014  Recovery = 94.07%
V 292.402†             75561.3      499.31 ug/L         0.363      499.31 ppb          0.363   0.07%
   QC value within limits for V 292.402  Recovery = 99.86%
Zn 213.857†            57375.3      477.80 ug/L         0.948      477.80 ppb          0.948   0.20%
   QC value within limits for Zn 213.857  Recovery = 95.56%
SiO2†                 169132.8       11051 ug/L          34.7       11051 ppb           34.7   0.31%
   QC value within limits for SiO2  Recovery = 103.33%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/9/2009 09:16:12
Data Type: Reprocessed on 12/9/2009 10:32:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	763793.8	763793.8	86.307	%			09:18:38
1	Sc Radial	5036.5	5036.5	88.9	%			09:18:10
1	Y 371.029	625631.0	625631.0	84.309	%			09:18:38
1	Y RADIAL	5462.4	5462.4	88.69	%			09:18:10
1	Ag 328.068†	-22623.6	-26440.5	-2.4851	ug/L	-2.4851	ppb	09:18:38
1	Al 396.153Radial†	612350.3	688582.2	509030	ug/L	509030	ppb	09:18:05
1	As 188.979†	-205.0	-208.4	-17.747	ug/L	-17.747	ppb	09:18:58
1	B 249.677†	1673.4	2462.8	-4.4154	ug/L	-4.4154	ppb	09:18:38
1	Ba 233.527†	-1280.7	-1471.9	5.0617	ug/L	5.0617	ppb	09:18:58
1	Be 313.107†	-12272.9	-8899.8	-3.3362	ug/L	-3.3362	ppb	09:18:38
1	Ca 317.933Radial†	272811.8	306747.5	469070	ug/L	469070	ppb	09:18:05
1	Cd 226.502†	3628.2	4391.6	4.0431	ug/L	4.0431	ppb	09:18:58
1	Co 228.616†	214.5	320.3	-0.0771	ug/L	-0.0771	ppb	09:18:58
1	Cr 267.716†	32.6	-49.2	2.6890	ug/L	2.6890	ppb	09:18:58
1	Cu 324.752†	1614.1	-4898.5	8.0026	ug/L	8.0026	ppb	09:18:38
1	Fe 238.204 Radial†	38525.8	43314.6	436150	ug/L	436150	ppb	09:18:10
1	K 766.490 Radial†	4725.2	3143.0	369.49	ug/L	369.49	ppb	09:18:10
1	Mg 279.077 IEC†	11576.1	13015.1	484290	ug/L	484290	ppb	09:18:10
1	Mn 257.610†	-23673.7	-27833.0	4.2239	ug/L	4.2239	ppb	09:18:38
1	Mo 202.031†	-506.0	-606.3	-8.5555	ug/L	-8.5555	ppb	09:18:58
1	Na 589.592 Radial†	1209136.0	1360237.8	511270	ug/L	511270	ppb	09:18:05
1	Ni 231.604†	266.7	238.8	5.6635	ug/L	5.6635	ppb	09:18:58
1	P 214.914†	534.1	398.9	59.048	ug/L	59.048	ppb	09:18:58
1	Pb 220.353†	-498.0	-524.4	17.040	ug/L	17.040	ppb	09:18:58
1	S 181.975 Axial†	105.9	81.2	18.595	ug/L	18.595	ppb	09:18:58
1	Sb 206.836†	53.7	32.6	1.7192	ug/L	1.7192	ppb	09:18:58
1	Se 196.026†	-2237.2	-2568.7	-122.29	ug/L	-122.29	ppb	09:18:58
1	Si 251.611†	-528.9	-1120.9	-33.552	ug/L	-33.552	ppb	09:18:58
1	Sn 189.927†	-375.4	-439.2	-19.491	ug/L	-19.491	ppb	09:18:58
1	Sr 421.552†	749.4	839.2	1.3173	ug/L	1.3173	ppb	09:18:10
1	Ti 334.940†	-8730.6	-9150.7	3.3150	ug/L	3.3150	ppb	09:18:38
1	Tl 190.801†	-114.2	-95.4	-13.795	ug/L	-13.795	ppb	09:18:58
1	U 409.014†	442887.7	515115.6	14337	ug/L	14337	ppb	09:18:38
1	V 292.402†	2549.7	4250.6	0.6803	ug/L	0.6803	ppb	09:18:58
1	Zn 213.857†	6483.0	6704.3	2.0653	ug/L	2.0653	ppb	09:18:58
1	SiO2†	-535.5	-1109.3	-71.070	ug/L	-71.070	ppb	09:19:55
2	Sc 361.383	752540.0	752540.0	85.035	%			09:19:04
2	Sc Radial	5004.3	5004.3	88.4	%			09:18:21
2	Y 371.029	616389.8	616389.8	83.063	%			09:19:04
2	Y RADIAL	5509.4	5509.4	89.46	%			09:18:21
2	Ag 328.068†	-22360.4	-26523.0	-1.9431	ug/L	-1.9431	ppb	09:19:04
2	Al 396.153Radial†	625834.9	708278.4	523590	ug/L	523590	ppb	09:18:16
2	As 188.979†	-193.6	-198.5	-13.190	ug/L	-13.190	ppb	09:19:24
2	B 249.677†	1627.5	2437.7	-5.4032	ug/L	-5.4032	ppb	09:19:04
2	Ba 233.527†	-1330.7	-1552.9	4.5717	ug/L	4.5717	ppb	09:19:24
2	Be 313.107†	-12185.2	-9009.3	-3.3768	ug/L	-3.3768	ppb	09:19:04
2	Ca 317.933Radial†	278076.2	314681.4	481200	ug/L	481200	ppb	09:18:16
2	Cd 226.502†	3667.6	4500.9	4.8957	ug/L	4.8957	ppb	09:19:24
2	Co 228.616†	229.0	341.0	0.2719	ug/L	0.2719	ppb	09:19:24
2	Cr 267.716†	78.5	5.3	3.3505	ug/L	3.3505	ppb	09:19:24
2	Cu 324.752†	1555.8	-4939.1	8.0547	ug/L	8.0547	ppb	09:19:04
2	Fe 238.204 Radial†	38572.1	43646.1	439490	ug/L	439490	ppb	09:18:21
2	K 766.490 Radial†	4818.1	3282.4	389.26	ug/L	389.26	ppb	09:18:21
2	Mg 279.077 IEC†	11577.0	13099.9	487440	ug/L	487440	ppb	09:18:21
2	Mn 257.610†	-23155.3	-27633.6	4.7147	ug/L	4.7147	ppb	09:19:04
2	Mo 202.031†	-517.7	-628.8	-9.7851	ug/L	-9.7851	ppb	09:19:24
2	Na 589.592 Radial†	1234729.5	1397960.7	525450	ug/L	525450	ppb	09:18:16
2	Ni 231.604†	301.7	284.7	6.7502	ug/L	6.7502	ppb	09:19:24

2	P 214.914†	553.7	431.2	80.461 ug/L	80.461 ppb	09:19:24
2	Pb 220.353†	-497.8	-532.9	19.042 ug/L	19.042 ppb	09:19:24
2	S 181.975 Axial†	92.1	66.8	-5.3200 ug/L	-5.3200 ppb	09:19:24
2	Sb 206.836†	69.9	52.6	7.7971 ug/L	7.7971 ppb	09:19:24
2	Se 196.026†	-2285.9	-2664.7	-167.18 ug/L	-167.18 ppb	09:19:24
2	Si 251.611†	-502.7	-1099.1	-32.867 ug/L	-32.867 ppb	09:19:24
2	Sn 189.927†	-376.2	-446.7	-19.443 ug/L	-19.443 ppb	09:19:24
2	Sr 421.552†	750.5	845.9	1.2503 ug/L	1.2503 ppb	09:18:21
2	Ti 334.940†	-8569.2	-9112.2	4.0286 ug/L	4.0286 ppb	09:19:04
2	Tl 190.801†	-95.5	-75.4	-7.6618 ug/L	-7.6618 ppb	09:19:24
2	U 409.014†	435064.2	513589.1	14294 ug/L	14294 ppb	09:19:04
2	V 292.402†	2602.1	4356.5	0.8542 ug/L	0.8542 ppb	09:19:24
2	Zn 213.857†	6474.1	6806.1	2.5476 ug/L	2.5476 ppb	09:19:24
2	SiO2†	-591.2	-1184.1	-75.918 ug/L	-75.918 ppb	09:20:00
3	Sc 361.383	757512.2	757512.2	85.597 %		09:19:30
3	Sc Radial	5109.7	5109.7	90.2 %		09:18:31
3	Y 371.029	619781.3	619781.3	83.520 %		09:19:30
3	Y RADIAL	5556.0	5556.0	90.21 %		09:18:31
3	Ag 328.068†	-22684.0	-26728.4	-3.9162 ug/L	-3.9162 ppb	09:19:30
3	Al 396.153Radial†	610370.7	676525.8	500120 ug/L	500120 ppb	09:18:26
3	As 188.979†	-196.5	-200.3	-14.576 ug/L	-14.576 ppb	09:19:50
3	B 249.677†	1758.4	2578.2	-1.8195 ug/L	-1.8195 ppb	09:19:30
3	Ba 233.527†	-1312.5	-1521.3	4.6611 ug/L	4.6611 ppb	09:19:50
3	Be 313.107†	-12269.1	-9013.3	-3.3776 ug/L	-3.3776 ppb	09:19:30
3	Ca 317.933Radial†	271617.6	301030.2	460330 ug/L	460330 ppb	09:18:26
3	Cd 226.502†	3616.2	4412.5	4.3385 ug/L	4.3385 ppb	09:19:50
3	Co 228.616†	213.7	321.4	-0.0448 ug/L	-0.0448 ppb	09:19:50
3	Cr 267.716†	61.5	-15.1	3.0404 ug/L	3.0404 ppb	09:19:50
3	Cu 324.752†	1610.8	-4886.8	8.0014 ug/L	8.0014 ppb	09:19:30
3	Fe 238.204 Radial†	39023.8	43246.1	435460 ug/L	435460 ppb	09:18:31
3	K 766.490 Radial†	4896.4	3256.6	394.83 ug/L	394.83 ppb	09:18:31
3	Mg 279.077 IEC†	11676.6	12940.1	481490 ug/L	481490 ppb	09:18:31
3	Mn 257.610†	-23282.4	-27603.3	4.4568 ug/L	4.4568 ppb	09:19:30
3	Mo 202.031†	-489.2	-591.5	-7.6426 ug/L	-7.6426 ppb	09:19:50
3	Na 589.592 Radial†	1199637.3	1330236.1	500000 ug/L	500000 ppb	09:18:26
3	Ni 231.604†	292.0	271.0	6.4257 ug/L	6.4257 ppb	09:19:50
3	P 214.914†	573.8	450.4	87.128 ug/L	87.128 ppb	09:19:50
3	Pb 220.353†	-520.3	-555.3	11.493 ug/L	11.493 ppb	09:19:50
3	S 181.975 Axial†	97.8	72.8	8.0967 ug/L	8.0967 ppb	09:19:50
3	Sb 206.836†	51.4	30.5	1.2334 ug/L	1.2334 ppb	09:19:50
3	Se 196.026†	-2285.5	-2646.7	-172.18 ug/L	-172.18 ppb	09:19:50
3	Si 251.611†	-506.1	-1099.2	-32.905 ug/L	-32.905 ppb	09:19:50
3	Sn 189.927†	-387.2	-456.6	-23.362 ug/L	-23.362 ppb	09:19:50
3	Sr 421.552†	747.3	824.9	1.3016 ug/L	1.3016 ppb	09:18:31
3	Ti 334.940†	-8457.1	-8915.0	3.2352 ug/L	3.2352 ppb	09:19:30
3	Tl 190.801†	-105.6	-86.5	-11.468 ug/L	-11.468 ppb	09:19:50
3	U 409.014†	439572.3	515497.6	14347 ug/L	14347 ppb	09:19:30
3	V 292.402†	2550.6	4276.3	0.9291 ug/L	0.9291 ppb	09:19:50
3	Zn 213.857†	6453.4	6732.0	2.4709 ug/L	2.4709 ppb	09:19:50
3	SiO2†	-475.8	-1044.7	-66.870 ug/L	-66.870 ppb	09:20:05

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757948.7	85.647	%	0.6373				0.74%
Sc Radial	5050.2	89.2	%	0.95				1.07%
Y 371.029	620600.7	83.631	%	0.6300				0.75%
Y RADIAL	5509.3	89.46	%	0.760				0.85%
Ag 328.068†	-26564.0	-2.7814	ug/L	1.01938	-2.7814	ppb	1.01938	36.65%
Al 396.153Radial†	691128.8	510920	ug/L	11849.2	510920	ppb	11849.2	2.32%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	-202.4	-15.171	ug/L	2.3361	-15.171	ppb	2.3361	15.40%
B 249.677†	2492.9	-3.8794	ug/L	1.85099	-3.8794	ppb	1.85099	47.71%
Ba 233.527†	-1515.3	4.7648	ug/L	0.26096	4.7648	ppb	0.26096	5.48%
Be 313.107†	-8974.1	-3.3635	ug/L	0.02368	-3.3635	ppb	0.02368	0.70%
Ca 317.933Radial†	307486.4	470200	ug/L	10483.3	470200	ppb	10483.3	2.23%
QC value within limits for Ca 317.933Radial Recovery = 94.04%								
Cd 226.502†	4435.0	4.4258	ug/L	0.43292	4.4258	ppb	0.43292	9.78%
Co 228.616†	327.6	0.0500	ug/L	0.19286	0.0500	ppb	0.19286	385.54%
Cr 267.716†	-19.7	3.0266	ug/L	0.33097	3.0266	ppb	0.33097	10.94%

Cu 324.752†	-4908.1	8.0196 ug/L	0.03044	8.0196 ppb	0.03044	0.38%
Fe 238.204 Radial†	43402.3	437030 ug/L	2153.8	437030 ppb	2153.8	0.49%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.41%						
K 766.490 Radial†	3227.4	384.53 ug/L	13.318	384.53 ppb	13.318	3.46%
Mg 279.077 IEC†	13018.4	484410 ug/L	2976.0	484410 ppb	2976.0	0.61%
QC value within limits for Mg 279.077 IEC Recovery = 96.88%						
Mn 257.610†	-27690.0	4.4652 ug/L	0.24550	4.4652 ppb	0.24550	5.50%
Mo 202.031†	-608.9	-8.6611 ug/L	1.07513	-8.6611 ppb	1.07513	12.41%
Na 589.592 Radial†	1362811.5	512240 ug/L	12755.4	512240 ppb	12755.4	2.49%
QC value within limits for Na 589.592 Radial Recovery = 102.45%						
Ni 231.604†	264.8	6.2798 ug/L	0.55785	6.2798 ppb	0.55785	8.88%
P 214.914†	426.8	75.545 ug/L	14.6710	75.545 ppb	14.6710	19.42%
Pb 220.353†	-537.5	15.858 ug/L	3.9109	15.858 ppb	3.9109	24.66%
S 181.975 Axial†	73.6	7.1239 ug/L	11.98708	7.1239 ppb	11.98708	168.27%
Sb 206.836†	38.6	3.5832 ug/L	3.65740	3.5832 ppb	3.65740	102.07%
Se 196.026†	-2626.7	-153.88 ug/L	27.475	-153.88 ppb	27.475	17.85%
Si 251.611†	-1106.4	-33.108 ug/L	0.3852	-33.108 ppb	0.3852	1.16%
Sn 189.927†	-447.5	-20.765 ug/L	2.2491	-20.765 ppb	2.2491	10.83%
Sr 421.552†	836.7	1.2897 ug/L	0.03506	1.2897 ppb	0.03506	2.72%
Ti 334.940†	-9059.3	3.5263 ug/L	0.43690	3.5263 ppb	0.43690	12.39%
Tl 190.801†	-85.8	-10.975 ug/L	3.0965	-10.975 ppb	3.0965	28.21%
U 409.014†	514734.1	14326 ug/L	28.5	14326 ppb	28.5	0.20%
QC value within limits for U 409.014 Recovery = 95.51%						
V 292.402†	4294.5	0.8212 ug/L	0.12765	0.8212 ppb	0.12765	15.54%
Zn 213.857†	6747.4	2.3613 ug/L	0.25918	2.3613 ppb	0.25918	10.98%
SiO2†	-1112.7	-71.286 ug/L	4.5278	-71.286 ppb	4.5278	6.35%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/9/2009 09:22:15
Data Type: Reprocessed on 12/9/2009 10:32:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	867325.0	867325.0	98.006	%			09:25:50
1	Sc Radial	5544.9	5544.9	97.9	%			09:24:13
1	Y 371.029	706892.5	706892.5	95.259	%			09:25:50
1	Y RADIAL	5940.1	5940.1	96.45	%			09:24:13
1	Ag 328.068†	-7523.4	-7904.0	2.0207	ug/L	2.0207	ppb	09:25:55
1	Al 396.153Radial†	617.2	650.7	63.318	ug/L	63.318	ppb	09:24:13
1	As 188.979†	23642.1	24152.3	9938.6	ug/L	9938.6	ppb	09:25:55
1	B 249.677†	221355.9	226383.6	4890.5	ug/L	4890.5	ppb	09:25:50
1	Ba 233.527†	1360252.9	1387941.8	10564	ug/L	10564	ppb	09:25:50
1	Be 313.107†	7468179.0	7625453.3	2853.3	ug/L	2853.3	ppb	09:25:44
1	Ca 317.933Radial†	35.6	18.7	28.537	ug/L	28.537	ppb	09:24:33
1	Cd 226.502†	862126.7	879856.2	9551.6	ug/L	9551.6	ppb	09:25:50
1	Co 228.616†	468823.1	478433.9	9286.0	ug/L	9286.0	ppb	09:25:55
1	Cr 267.716†	2142447.0	2185952.1	23570	ug/L	23570	ppb	09:25:50
1	Cu 324.752†	6705690.7	6835361.9	19879	ug/L	19879	ppb	09:25:44
1	Fe 238.204 Radial†	-18.8	-25.2	38.706	ug/L	38.706	ppb	09:24:33
1	K 766.490 Radial†	1602148.0	1634203.9	296500	ug/L	296500	ppb	09:24:08
1	Mg 279.077 IEC†	-4.4	-6.3	-36.702	ug/L	-36.702	ppb	09:24:33
1	Mn 257.610†	8321385.3	8490296.0	9226.6	ug/L	9226.6	ppb	09:25:44
1	Mo 202.031†	146819.2	149786.6	9757.0	ug/L	9757.0	ppb	09:25:55
1	Na 589.592 Radial†	139.1	758.0	284.91	ug/L	284.91	ppb	09:24:13
1	Ni 231.604†	397646.3	405667.1	9619.8	ug/L	9619.8	ppb	09:25:50
1	P 214.914†	30925.9	31335.2	15572	ug/L	15572	ppb	09:25:55
1	Pb 220.353†	196436.0	200485.4	23445	ug/L	23445	ppb	09:25:55
1	S 181.975 Axial†	34416.4	35075.2	51288	ug/L	51288	ppb	09:25:55
1	Sb 206.836†	31654.7	32269.2	10288	ug/L	10288	ppb	09:25:55
1	Se 196.026†	16507.2	16866.5	10088	ug/L	10088	ppb	09:25:55
1	Si 251.611†	1523978.6	1554478.8	47244	ug/L	47244	ppb	09:25:50
1	Sn 189.927†	60430.6	61655.9	10431	ug/L	10431	ppb	09:25:55
1	Sr 421.552†	1415036.5	1445262.1	9756.4	ug/L	9756.4	ppb	09:24:08
1	Ti 334.940†	6077176.8	6201793.4	10022	ug/L	10022	ppb	09:25:44
1	Tl 190.801†	32675.7	33377.4	9627.5	ug/L	9627.5	ppb	09:25:55
1	U 409.014†	-795.6	1150.4	-13.323	ug/L	-13.323	ppb	09:25:55
1	V 292.402†	1427957.0	1458307.9	9963.5	ug/L	9963.5	ppb	09:25:50
1	Zn 213.857†	1517160.0	1547222.2	13835	ug/L	13835	ppb	09:25:50
1	SiO2†	1518071.3	1548470.5	100740	ug/L	100740	ppb	09:26:43
2	Sc 361.383	866044.1	866044.1	97.861	%			09:26:10
2	Sc Radial	5569.9	5569.9	98.3	%			09:24:43
2	Y 371.029	704578.8	704578.8	94.948	%			09:26:10
2	Y RADIAL	5950.7	5950.7	96.62	%			09:24:43
2	Ag 328.068†	-7530.9	-7923.0	1.9331	ug/L	1.9331	ppb	09:26:15
2	Al 396.153Radial†	574.7	604.7	29.417	ug/L	29.417	ppb	09:24:43
2	As 188.979†	23599.4	24144.4	9935.1	ug/L	9935.1	ppb	09:26:15
2	B 249.677†	221672.2	227040.9	4904.8	ug/L	4904.8	ppb	09:26:10
2	Ba 233.527†	1358565.2	1388270.0	10566	ug/L	10566	ppb	09:26:10
2	Be 313.107†	7440005.0	7607934.0	2846.7	ug/L	2846.7	ppb	09:26:03
2	Ca 317.933Radial†	35.7	18.6	28.494	ug/L	28.494	ppb	09:25:03
2	Cd 226.502†	861453.4	880469.2	9558.2	ug/L	9558.2	ppb	09:26:10
2	Co 228.616†	467836.6	478133.4	9280.2	ug/L	9280.2	ppb	09:26:15
2	Cr 267.716†	2141059.7	2187767.7	23590	ug/L	23590	ppb	09:26:10
2	Cu 324.752†	6671124.4	6810159.8	19806	ug/L	19806	ppb	09:26:03
2	Fe 238.204 Radial†	-21.3	-27.7	13.481	ug/L	13.481	ppb	09:25:03
2	K 766.490 Radial†	1625834.8	1650946.0	299540	ug/L	299540	ppb	09:24:38
2	Mg 279.077 IEC†	-6.2	-8.0	-101.98	ug/L	-101.98	ppb	09:25:03
2	Mn 257.610†	8299437.9	8480427.1	9215.9	ug/L	9215.9	ppb	09:26:03
2	Mo 202.031†	146563.2	149746.4	9754.4	ug/L	9754.4	ppb	09:26:15
2	Na 589.592 Radial†	99.2	716.9	269.45	ug/L	269.45	ppb	09:24:43
2	Ni 231.604†	397468.1	406085.0	9629.7	ug/L	9629.7	ppb	09:26:10

2	P 214.914†	30769.9	31222.4	15517 ug/L	15517 ppb	09:26:15
2	Pb 220.353†	196381.4	200726.0	23473 ug/L	23473 ppb	09:26:15
2	S 181.975 Axial†	34262.7	34970.1	51134 ug/L	51134 ppb	09:26:15
2	Sb 206.836†	31620.7	32282.2	10292 ug/L	10292 ppb	09:26:15
2	Se 196.026†	16474.4	16857.9	10083 ug/L	10083 ppb	09:26:15
2	Si 251.611†	1522772.8	1555546.5	47275 ug/L	47275 ppb	09:26:10
2	Sn 189.927†	60510.9	61829.2	10460 ug/L	10460 ppb	09:26:15
2	Sr 421.552†	1435353.3	1459435.2	9852.1 ug/L	9852.1 ppb	09:24:38
2	Ti 334.940†	6049605.8	6182791.1	9991.3 ug/L	9991.3 ppb	09:26:03
2	Tl 190.801†	32590.6	33339.8	9616.4 ug/L	9616.4 ppb	09:26:15
2	U 409.014†	-893.2	1049.4	-16.178 ug/L	-16.178 ppb	09:26:15
2	V 292.402†	1426061.1	1458525.5	9965.0 ug/L	9965.0 ppb	09:26:10
2	Zn 213.857†	1516284.3	1548616.9	13848 ug/L	13848 ppb	09:26:10
2	SiO2†	1536175.4	1569261.2	102100 ug/L	102100 ppb	09:26:50
3	Sc 361.383	866098.1	866098.1	97.867 %		09:26:30
3	Sc Radial	5547.1	5547.1	97.9 %		09:25:14
3	Y 371.029	705507.1	705507.1	95.073 %		09:26:30
3	Y RADIAL	5954.2	5954.2	96.68 %		09:25:14
3	Ag 328.068†	-7546.1	-7938.1	1.8621 ug/L	1.8621 ppb	09:26:35
3	Al 396.153Radial†	588.4	621.1	37.989 ug/L	37.989 ppb	09:25:14
3	As 188.979†	23907.2	24457.4	10062 ug/L	10062 ppb	09:26:35
3	B 249.677†	221004.5	226344.6	4889.4 ug/L	4889.4 ppb	09:26:30
3	Ba 233.527†	1357439.2	1387033.0	10557 ug/L	10557 ppb	09:26:30
3	Be 313.107†	7354407.1	7519996.7	2813.8 ug/L	2813.8 ppb	09:26:23
3	Ca 317.933Radial†	37.2	20.2	30.949 ug/L	30.949 ppb	09:25:34
3	Cd 226.502†	860569.2	879510.8	9547.8 ug/L	9547.8 ppb	09:26:30
3	Co 228.616†	471689.0	482040.0	9356.4 ug/L	9356.4 ppb	09:26:35
3	Cr 267.716†	2140617.3	2187179.2	23583 ug/L	23583 ppb	09:26:30
3	Cu 324.752†	6579330.7	6715940.7	19532 ug/L	19532 ppb	09:26:23
3	Fe 238.204 Radial†	-18.9	-25.3	40.404 ug/L	40.404 ppb	09:25:34
3	K 766.490 Radial†	1595804.6	1627059.5	295210 ug/L	295210 ppb	09:25:09
3	Mg 279.077 IEC†	-4.4	-6.2	-31.546 ug/L	-31.546 ppb	09:25:34
3	Mn 257.610†	8223078.7	8401875.0	9130.6 ug/L	9130.6 ppb	09:26:23
3	Mo 202.031†	147803.6	151004.6	9836.3 ug/L	9836.3 ppb	09:26:35
3	Na 589.592 Radial†	-8.0	607.8	228.46 ug/L	228.46 ppb	09:25:14
3	Ni 231.604†	396993.2	405574.5	9617.6 ug/L	9617.6 ppb	09:26:30
3	P 214.914†	31020.1	31476.1	15713 ug/L	15713 ppb	09:26:35
3	Pb 220.353†	197558.6	201916.4	23613 ug/L	23613 ppb	09:26:35
3	S 181.975 Axial†	34609.5	35322.2	51649 ug/L	51649 ppb	09:26:35
3	Sb 206.836†	31916.8	32582.7	10393 ug/L	10393 ppb	09:26:35
3	Se 196.026†	16623.9	17009.7	10174 ug/L	10174 ppb	09:26:35
3	Si 251.611†	1520420.3	1553045.8	47199 ug/L	47199 ppb	09:26:30
3	Sn 189.927†	60867.3	62189.5	10521 ug/L	10521 ppb	09:26:35
3	Sr 421.552†	1408462.0	1437959.8	9707.1 ug/L	9707.1 ppb	09:25:09
3	Ti 334.940†	5989689.3	6121183.3	9891.7 ug/L	9891.7 ppb	09:26:23
3	Tl 190.801†	32850.9	33603.6	9690.4 ug/L	9690.4 ppb	09:26:35
3	U 409.014†	-696.7	1250.3	-10.557 ug/L	-10.557 ppb	09:26:35
3	V 292.402†	1425986.3	1458358.3	9965.1 ug/L	9965.1 ppb	09:26:30
3	Zn 213.857†	1513091.8	1545258.2	13818 ug/L	13818 ppb	09:26:30
3	SiO2†	1528564.5	1561386.6	101580 ug/L	101580 ppb	09:26:57

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866489.1	97.911	%	0.0819				0.08%
Sc Radial	5554.0	98.1	%	0.24				0.25%
Y 371.029	705659.5	95.093	%	0.1569				0.17%
Y RADIAL	5948.3	96.58	%	0.120				0.12%
Ag 328.068†	-7921.7	1.9386	ug/L	0.07944	1.9386	ppb	0.07944	4.10%
Al 396.153Radial†	625.5	43.575	ug/L	17.6273	43.575	ppb	17.6273	40.45%
As 188.979†	24251.4	9978.5	ug/L	72.21	9978.5	ppb	72.21	0.72%
QC value within limits for As 188.979 Recovery = 99.78%								
B 249.677†	226589.7	4894.9	ug/L	8.56	4894.9	ppb	8.56	0.17%
QC value within limits for B 249.677 Recovery = 97.90%								
Ba 233.527†	1387748.3	10562	ug/L	4.9	10562	ppb	4.9	0.05%
QC value less than the lower limit for Ba 233.527 Recovery = 70.41%								
Be 313.107†	7584461.4	2837.9	ug/L	21.13	2837.9	ppb	21.13	0.74%
QC value within limits for Be 313.107 Recovery = 94.60%								
Ca 317.933Radial†	19.2	29.327	ug/L	1.4053	29.327	ppb	1.4053	4.79%
Cd 226.502†	879945.4	9552.5	ug/L	5.27	9552.5	ppb	5.27	0.06%

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   QC value within limits for Cd 226.502  Recovery = 95.53%
Co 228.616†          479535.8      9307.5 ug/L        42.45      9307.5 ppb         42.45   0.46%
   QC value within limits for Co 228.616  Recovery = 93.08%
Cr 267.716†         2186966.3       23581 ug/L         10.0       23581 ppb          10.0   0.04%
   QC value within limits for Cr 267.716  Recovery = 94.32%
Cu 324.752†         6787154.2       19739 ug/L        183.1       19739 ppb         183.1   0.93%
   QC value within limits for Cu 324.752  Recovery = 98.70%
Fe 238.204 Radial†       -26.1      30.864 ug/L      15.0776      30.864 ppb       15.0776  48.85%
K 766.490 Radial†    1637403.1      297090 ug/L       2224.5      297090 ppb        2224.5   0.75%
   QC value within limits for K 766.490 Radial  Recovery = 99.03%
Mg 279.077 IEC†           -6.8     -56.741 ug/L      39.2592     -56.741 ppb       39.2592  69.19%
Mn 257.610†          8457532.7      9191.0 ug/L        52.65      9191.0 ppb         52.65   0.57%
   QC value within limits for Mn 257.610  Recovery = 91.91%
Mo 202.031†           150179.2      9782.6 ug/L        46.58      9782.6 ppb         46.58   0.48%
   QC value within limits for Mo 202.031  Recovery = 97.83%
Na 589.592 Radial†       694.2      260.94 ug/L       29.168      260.94 ppb        29.168  11.18%
Ni 231.604†           405775.5      9622.4 ug/L         6.47      9622.4 ppb         6.47   0.07%
   QC value within limits for Ni 231.604  Recovery = 96.22%
P 214.914†             31344.6       15601 ug/L        100.8       15601 ppb        100.8   0.65%
   QC value within limits for P 214.914  Recovery = 104.00%
Pb 220.353†           201042.6       23510 ug/L         89.8       23510 ppb         89.8   0.38%
   QC value within limits for Pb 220.353  Recovery = 94.04%
S 181.975 Axial†       35122.5       51357 ug/L        264.3       51357 ppb        264.3   0.51%
   QC value within limits for S 181.975 Axial  Recovery = 102.71%
Sb 206.836†            32378.0       10324 ug/L         59.5       10324 ppb         59.5   0.58%
   QC value within limits for Sb 206.836  Recovery = 103.24%
Se 196.026†            16911.3       10115 ug/L         51.0       10115 ppb         51.0   0.50%
   QC value within limits for Se 196.026  Recovery = 101.15%
Si 251.611†          1554357.0       47239 ug/L         38.5       47239 ppb         38.5   0.08%
   QC value within limits for Si 251.611  Recovery = 94.48%
Sn 189.927†            61891.5       10471 ug/L         46.1       10471 ppb         46.1   0.44%
   QC value within limits for Sn 189.927  Recovery = 104.71%
Sr 421.552†          1447552.3      9771.8 ug/L        73.71      9771.8 ppb         73.71   0.75%
   QC value within limits for Sr 421.552  Recovery = 97.72%
Ti 334.940†          6168589.3      9968.4 ug/L        68.16      9968.4 ppb         68.16   0.68%
   QC value within limits for Ti 334.940  Recovery = 99.68%
Tl 190.801†            33440.3      9644.8 ug/L        39.90      9644.8 ppb         39.90   0.41%
   QC value within limits for Tl 190.801  Recovery = 96.45%
U 409.014†              1150.0     -13.353 ug/L       2.8107     -13.353 ppb        2.8107  21.05%
V 292.402†           1458397.2      9964.5 ug/L         0.89      9964.5 ppb         0.89   0.01%
   QC value within limits for V 292.402  Recovery = 99.65%
Zn 213.857†          1547032.5       13834 ug/L         15.0       13834 ppb         15.0   0.11%
   QC value within limits for Zn 213.857  Recovery = 92.22%
SiO2†                1559706.1      101470 ug/L        686.1      101470 ppb        686.1   0.68%
   QC value within limits for SiO2  Recovery = 94.84%
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 09:43:20
Data Type: Reprocessed on 12/9/2009 10:32:31

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	910696.2	910696.2	102.91	%			09:46:30
1	Sc Radial	5714.3	5714.3	101	%			09:45:13
1	Y 371.029	751846.8	751846.8	101.32	%			09:46:30
1	Y RADIAL	6150.6	6150.6	99.87	%			09:45:13
1	Ag 328.068†	110405.9	107059.7	497.97	ug/L	497.97	ppb	09:46:35
1	Al 396.153Radial†	6700.1	6660.7	4902.8	ug/L	4902.8	ppb	09:45:13
1	As 188.979†	1210.7	1205.7	496.24	ug/L	496.24	ppb	09:46:55
1	B 249.677†	22934.9	22810.9	493.26	ug/L	493.26	ppb	09:46:35
1	Ba 233.527†	65619.0	63777.5	485.66	ug/L	485.66	ppb	09:46:35
1	Be 313.107†	1335598.1	1303192.5	485.22	ug/L	485.22	ppb	09:46:30
1	Ca 317.933Radial†	3256.0	3209.3	4907.6	ug/L	4907.6	ppb	09:45:33
1	Cd 226.502†	46127.0	45011.9	488.14	ug/L	488.14	ppb	09:46:35
1	Co 228.616†	25714.1	25059.5	486.60	ug/L	486.60	ppb	09:46:35
1	Cr 267.716†	46284.7	44890.4	484.46	ug/L	484.46	ppb	09:46:35
1	Cu 324.752†	176586.6	164830.1	479.63	ug/L	479.63	ppb	09:46:35
1	Fe 238.204 Radial†	501.5	491.0	4958.9	ug/L	4958.9	ppb	09:45:33
1	K 766.490 Radial†	30258.9	27818.9	5040.4	ug/L	5040.4	ppb	09:45:13
1	Mg 279.077 IEC†	139.7	136.7	5096.6	ug/L	5096.6	ppb	09:45:33
1	Mn 257.610†	459115.9	445744.1	484.80	ug/L	484.80	ppb	09:46:30
1	Mo 202.031†	7823.7	7582.7	494.28	ug/L	494.28	ppb	09:46:55
1	Na 589.592 Radial†	25561.1	25949.2	9753.6	ug/L	9753.6	ppb	09:45:13
1	Ni 231.604†	21225.4	20555.8	487.44	ug/L	487.44	ppb	09:46:35
1	P 214.914†	4429.4	4084.3	2354.1	ug/L	2354.1	ppb	09:46:55
1	Pb 220.353†	4206.8	4140.5	485.55	ug/L	485.55	ppb	09:46:55
1	S 181.975 Axial†	740.9	678.5	991.15	ug/L	991.15	ppb	09:46:55
1	Sb 206.836†	1602.1	1527.2	503.04	ug/L	503.04	ppb	09:46:55
1	Se 196.026†	821.5	821.8	507.45	ug/L	507.45	ppb	09:46:55
1	Si 251.611†	82828.4	79980.8	2434.4	ug/L	2434.4	ppb	09:46:35
1	Sn 189.927†	3010.1	2920.9	494.72	ug/L	494.72	ppb	09:46:55
1	Sr 421.552†	75843.1	75163.6	507.35	ug/L	507.35	ppb	09:45:13
1	Ti 334.940†	312104.3	304253.5	491.95	ug/L	491.95	ppb	09:46:35
1	Tl 190.801†	1725.1	1713.3	494.20	ug/L	494.20	ppb	09:46:55
1	U 409.014†	15879.6	17393.2	484.39	ug/L	484.39	ppb	09:46:35
1	V 292.402†	72323.0	71576.6	489.81	ug/L	489.81	ppb	09:46:35
1	Zn 213.857†	56574.5	54169.2	483.02	ug/L	483.02	ppb	09:46:35
1	SiO2†	81869.3	79068.0	5151.9	ug/L	5151.9	ppb	09:48:03
2	Sc 361.383	904058.2	904058.2	102.16	%			09:47:01
2	Sc Radial	5729.4	5729.4	101	%			09:45:38
2	Y 371.029	745786.4	745786.4	100.50	%			09:47:01
2	Y RADIAL	6175.9	6175.9	100.3	%			09:45:38
2	Ag 328.068†	109423.8	106886.2	497.15	ug/L	497.15	ppb	09:47:06
2	Al 396.153Radial†	6614.7	6558.8	4827.5	ug/L	4827.5	ppb	09:45:38
2	As 188.979†	1189.4	1193.5	491.26	ug/L	491.26	ppb	09:47:26
2	B 249.677†	22706.7	22751.2	491.97	ug/L	491.97	ppb	09:47:06
2	Ba 233.527†	64985.0	63625.1	484.50	ug/L	484.50	ppb	09:47:06
2	Be 313.107†	1324099.1	1301465.9	484.58	ug/L	484.58	ppb	09:47:01
2	Ca 317.933Radial†	3240.8	3185.7	4871.5	ug/L	4871.5	ppb	09:45:58
2	Cd 226.502†	45575.0	44800.7	485.86	ug/L	485.86	ppb	09:47:06
2	Co 228.616†	25488.7	25022.3	485.87	ug/L	485.87	ppb	09:47:06
2	Cr 267.716†	45934.6	44877.9	484.32	ug/L	484.32	ppb	09:47:06
2	Cu 324.752†	175131.0	164665.1	479.15	ug/L	479.15	ppb	09:47:06
2	Fe 238.204 Radial†	498.5	486.7	4916.1	ug/L	4916.1	ppb	09:45:58
2	K 766.490 Radial†	30025.1	27508.5	4984.1	ug/L	4984.1	ppb	09:45:38
2	Mg 279.077 IEC†	138.7	135.4	5046.4	ug/L	5046.4	ppb	09:45:58
2	Mn 257.610†	456255.1	446219.6	485.32	ug/L	485.32	ppb	09:47:01
2	Mo 202.031†	7714.2	7531.3	490.93	ug/L	490.93	ppb	09:47:26
2	Na 589.592 Radial†	25179.1	25504.6	9586.5	ug/L	9586.5	ppb	09:45:38
2	Ni 231.604†	21058.3	20543.6	487.15	ug/L	487.15	ppb	09:47:06

2	P 214.914†	4333.4	4021.9	2317.0 ug/L	2317.0 ppb	09:47:26
2	Pb 220.353†	4157.8	4122.6	483.43 ug/L	483.43 ppb	09:47:26
2	S 181.975 Axial†	729.4	672.6	982.47 ug/L	982.47 ppb	09:47:26
2	Sb 206.836†	1582.8	1519.8	500.51 ug/L	500.51 ppb	09:47:26
2	Se 196.026†	810.1	816.4	504.11 ug/L	504.11 ppb	09:47:26
2	Si 251.611†	82145.1	79902.9	2432.1 ug/L	2432.1 ppb	09:47:06
2	Sn 189.927†	2971.9	2904.8	492.01 ug/L	492.01 ppb	09:47:26
2	Sr 421.552†	74820.3	73953.8	499.19 ug/L	499.19 ppb	09:45:38
2	Ti 334.940†	309543.5	303973.7	491.50 ug/L	491.50 ppb	09:47:06
2	Tl 190.801†	1694.9	1695.9	489.24 ug/L	489.24 ppb	09:47:26
2	U 409.014†	15674.2	17305.5	481.94 ug/L	481.94 ppb	09:47:06
2	V 292.402†	71451.9	71239.9	487.49 ug/L	487.49 ppb	09:47:06
2	Zn 213.857†	56121.6	54129.5	482.67 ug/L	482.67 ppb	09:47:06
2	SiO2†	83418.2	81168.3	5289.6 ug/L	5289.6 ppb	09:48:08
3	Sc 361.383	913585.2	913585.2	103.23 %		09:47:32
3	Sc Radial	5645.2	5645.2	99.7 %		09:46:03
3	Y 371.029	753100.0	753100.0	101.49 %		09:47:32
3	Y RADIAL	6103.0	6103.0	99.10 %		09:46:03
3	Ag 328.068†	110300.8	106618.6	495.95 ug/L	495.95 ppb	09:47:37
3	Al 396.153Radial†	6567.5	6609.0	4864.7 ug/L	4864.7 ppb	09:46:03
3	As 188.979†	1201.7	1193.3	491.18 ug/L	491.18 ppb	09:47:57
3	B 249.677†	22946.7	22751.9	491.98 ug/L	491.98 ppb	09:47:37
3	Ba 233.527†	65486.7	63447.7	483.15 ug/L	483.15 ppb	09:47:37
3	Be 313.107†	1327487.0	1291231.3	480.78 ug/L	480.78 ppb	09:47:32
3	Ca 317.933Radial†	3252.9	3245.7	4963.3 ug/L	4963.3 ppb	09:46:23
3	Cd 226.502†	45883.1	44633.9	484.03 ug/L	484.03 ppb	09:47:37
3	Co 228.616†	25566.4	24837.4	482.28 ug/L	482.28 ppb	09:47:37
3	Cr 267.716†	46141.4	44609.3	481.43 ug/L	481.43 ppb	09:47:37
3	Cu 324.752†	176552.5	164254.4	477.96 ug/L	477.96 ppb	09:47:37
3	Fe 238.204 Radial†	504.4	500.0	5050.3 ug/L	5050.3 ppb	09:46:23
3	K 766.490 Radial†	29830.3	27756.1	5029.1 ug/L	5029.1 ppb	09:46:03
3	Mg 279.077 IEC†	139.3	137.9	5142.4 ug/L	5142.4 ppb	09:46:23
3	Mn 257.610†	457214.1	442491.1	481.28 ug/L	481.28 ppb	09:47:32
3	Mo 202.031†	7772.2	7508.8	489.48 ug/L	489.48 ppb	09:47:57
3	Na 589.592 Radial†	24785.3	25481.1	9577.6 ug/L	9577.6 ppb	09:46:03
3	Ni 231.604†	21097.1	20366.2	482.95 ug/L	482.95 ppb	09:47:37
3	P 214.914†	4364.1	4007.4	2308.5 ug/L	2308.5 ppb	09:47:57
3	Pb 220.353†	4174.7	4096.5	480.38 ug/L	480.38 ppb	09:47:57
3	S 181.975 Axial†	735.7	671.1	980.40 ug/L	980.40 ppb	09:47:57
3	Sb 206.836†	1593.5	1514.0	498.62 ug/L	498.62 ppb	09:47:57
3	Se 196.026†	818.4	816.2	504.42 ug/L	504.42 ppb	09:47:57
3	Si 251.611†	82678.8	79581.3	2422.3 ug/L	2422.3 ppb	09:47:37
3	Sn 189.927†	2989.9	2892.0	489.85 ug/L	489.85 ppb	09:47:57
3	Sr 421.552†	74076.5	74311.6	501.60 ug/L	501.60 ppb	09:46:03
3	Ti 334.940†	312067.0	303258.3	490.35 ug/L	490.35 ppb	09:47:37
3	Tl 190.801†	1683.9	1668.0	481.22 ug/L	481.22 ppb	09:47:57
3	U 409.014†	15771.8	17240.0	480.10 ug/L	480.10 ppb	09:47:37
3	V 292.402†	72008.5	71049.8	486.17 ug/L	486.17 ppb	09:47:37
3	Zn 213.857†	56282.4	53712.4	478.93 ug/L	478.93 ppb	09:47:37
3	SiO2†	82661.7	79583.9	5185.9 ug/L	5185.9 ppb	09:48:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	909446.6	102.77	%	0.552				0.54%
Sc Radial	5696.3	101	%	0.8				0.79%
Y 371.029	750244.4	101.10	%	0.527				0.52%
Y RADIAL	6143.2	99.75	%	0.601				0.60%
Ag 328.068†	106854.8	497.02	ug/L	1.016	497.02	ppb	1.016	0.20%
QC value within limits for Ag 328.068 Recovery = 99.40%								
Al 396.153Radial†	6609.5	4865.0	ug/L	37.62	4865.0	ppb	37.62	0.77%
QC value within limits for Al 396.153Radial Recovery = 97.30%								
As 188.979†	1197.5	492.89	ug/L	2.900	492.89	ppb	2.900	0.59%
QC value within limits for As 188.979 Recovery = 98.58%								
B 249.677†	22771.3	492.40	ug/L	0.742	492.40	ppb	0.742	0.15%
QC value within limits for B 249.677 Recovery = 98.48%								
Ba 233.527†	63616.8	484.44	ug/L	1.256	484.44	ppb	1.256	0.26%
QC value within limits for Ba 233.527 Recovery = 96.89%								
Be 313.107†	1298629.9	483.53	ug/L	2.404	483.53	ppb	2.404	0.50%
QC value within limits for Be 313.107 Recovery = 96.71%								

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Ca 317.933Radial†       3213.6      4914.1 ug/L         46.22      4914.1 ppb          46.22   0.94%
   QC value within limits for Ca 317.933Radial  Recovery = 98.28%
Cd 226.502†            44815.5      486.01 ug/L          2.061      486.01 ppb           2.061   0.42%
   QC value within limits for Cd 226.502  Recovery = 97.20%
Co 228.616†            24973.1      484.92 ug/L          2.313      484.92 ppb           2.313   0.48%
   QC value within limits for Co 228.616  Recovery = 96.98%
Cr 267.716†            44792.5      483.40 ug/L          1.712      483.40 ppb           1.712   0.35%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†           164583.2      478.91 ug/L          0.859      478.91 ppb           0.859   0.18%
   QC value within limits for Cu 324.752  Recovery = 95.78%
Fe 238.204 Radial†       492.6      4975.1 ug/L         68.56      4975.1 ppb          68.56   1.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.50%
K 766.490 Radial†      27694.5      5017.9 ug/L         29.77      5017.9 ppb          29.77   0.59%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†          136.7      5095.1 ug/L         48.03      5095.1 ppb          48.03   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.90%
Mn 257.610†           444818.3      483.80 ug/L          2.199      483.80 ppb           2.199   0.45%
   QC value within limits for Mn 257.610  Recovery = 96.76%
Mo 202.031†             7540.9      491.56 ug/L          2.465      491.56 ppb           2.465   0.50%
   QC value within limits for Mo 202.031  Recovery = 98.31%
Na 589.592 Radial†     25645.0      9639.2 ug/L         99.14      9639.2 ppb          99.14   1.03%
   QC value within limits for Na 589.592 Radial  Recovery = 96.39%
Ni 231.604†            20488.5      485.85 ug/L          2.516      485.85 ppb           2.516   0.52%
   QC value within limits for Ni 231.604  Recovery = 97.17%
P 214.914†              4037.9      2326.5 ug/L         24.22      2326.5 ppb          24.22   1.04%
   QC value within limits for P 214.914  Recovery = 93.06%
Pb 220.353†             4119.9      483.12 ug/L          2.601      483.12 ppb           2.601   0.54%
   QC value within limits for Pb 220.353  Recovery = 96.62%
S 181.975 Axial†         674.1      984.67 ug/L          5.702      984.67 ppb           5.702   0.58%
   QC value within limits for S 181.975 Axial  Recovery = 98.47%
Sb 206.836†             1520.3      500.72 ug/L          2.220      500.72 ppb           2.220   0.44%
   QC value within limits for Sb 206.836  Recovery = 100.14%
Se 196.026†              818.1      505.33 ug/L          1.849      505.33 ppb           1.849   0.37%
   QC value within limits for Se 196.026  Recovery = 101.07%
Si 251.611†            79821.7      2429.6 ug/L           6.44      2429.6 ppb           6.44   0.26%
   QC value within limits for Si 251.611  Recovery = 97.19%
Sn 189.927†             2905.9      492.19 ug/L          2.442      492.19 ppb           2.442   0.50%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            74476.3      502.71 ug/L          4.195      502.71 ppb           4.195   0.83%
   QC value within limits for Sr 421.552  Recovery = 100.54%
Ti 334.940†           303828.5      491.26 ug/L          0.827      491.26 ppb           0.827   0.17%
   QC value within limits for Ti 334.940  Recovery = 98.25%
Tl 190.801†             1692.4      488.22 ug/L          6.552      488.22 ppb           6.552   1.34%
   QC value within limits for Tl 190.801  Recovery = 97.64%
U 409.014†             17312.9      482.14 ug/L          2.150      482.14 ppb           2.150   0.45%
   QC value within limits for U 409.014  Recovery = 96.43%
V 292.402†             71288.8      487.82 ug/L          1.844      487.82 ppb           1.844   0.38%
   QC value within limits for V 292.402  Recovery = 97.56%
Zn 213.857†            54003.7      481.54 ug/L          2.267      481.54 ppb           2.267   0.47%
   QC value within limits for Zn 213.857  Recovery = 96.31%
SiO2†                  79940.1      5209.1 ug/L         71.74      5209.1 ppb          71.74   1.38%
   QC value within limits for SiO2  Recovery = 97.41%
All analyte(s) passed QC.
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Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 09:50:23
Data Type: Reprocessed on 12/9/2009 10:32:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	883487.1	883487.1	99.832	%			09:53:33
1	Sc Radial	5780.6	5780.6	102	%			09:52:16
1	Y 371.029	742503.0	742503.0	100.06	%			09:53:33
1	Y RADIAL	6319.3	6319.3	102.6	%			09:52:16
1	Ag 328.068†	300.6	73.6	0.3412	ug/L	0.3412	ppb	09:53:33
1	Al 396.153Radial†	-15.3	5.4	3.9593	ug/L	3.9593	ppb	09:52:36
1	As 188.979†	-13.6	15.6	6.3379	ug/L	6.3379	ppb	09:53:53
1	B 249.677†	154.7	678.8	14.735	ug/L	14.735	ppb	09:53:53
1	Ba 233.527†	-5.5	6.5	0.0495	ug/L	0.0495	ppb	09:53:53
1	Be 313.107†	-5163.9	147.7	0.0546	ug/L	0.0546	ppb	09:53:33
1	Ca 317.933Radial†	17.0	-1.0	-1.5997	ug/L	-1.5997	ppb	09:52:36
1	Cd 226.502†	-155.4	32.2	0.3494	ug/L	0.3494	ppb	09:53:53
1	Co 228.616†	-70.3	1.3	0.0275	ug/L	0.0275	ppb	09:53:53
1	Cr 267.716†	57.3	-29.6	-0.3184	ug/L	-0.3184	ppb	09:53:53
1	Cu 324.752†	6871.1	114.0	0.3317	ug/L	0.3317	ppb	09:53:33
1	Fe 238.204 Radial†	6.4	0.2	2.0231	ug/L	2.0231	ppb	09:52:36
1	K 766.490 Radial†	2626.6	403.0	73.133	ug/L	73.133	ppb	09:52:16
1	Mg 279.077 IEC†	1.5	-0.3	-9.8264	ug/L	-9.8264	ppb	09:52:36
1	Mn 257.610†	402.6	-0.1	0.0003	ug/L	0.0003	ppb	09:53:53
1	Mo 202.031†	28.5	8.5	0.5556	ug/L	0.5556	ppb	09:53:53
1	Na 589.592 Radial†	-557.2	70.1	26.355	ug/L	26.355	ppb	09:52:16
1	Ni 231.604†	82.1	12.1	0.2868	ug/L	0.2868	ppb	09:53:53
1	P 214.914†	219.8	0.2	0.0528	ug/L	0.0528	ppb	09:53:53
1	Pb 220.353†	-56.5	-4.0	-0.4713	ug/L	-0.4713	ppb	09:53:53
1	S 181.975 Axial†	44.9	3.6	5.1910	ug/L	5.1910	ppb	09:53:53
1	Sb 206.836†	52.1	22.6	7.3665	ug/L	7.3665	ppb	09:53:53
1	Se 196.026†	-22.0	1.4	0.8373	ug/L	0.8373	ppb	09:53:53
1	Si 251.611†	513.2	6.1	0.1511	ug/L	0.1511	ppb	09:53:53
1	Sn 189.927†	6.1	1.8	0.3061	ug/L	0.3061	ppb	09:53:53
1	Sr 421.552†	-10.8	-14.0	-0.0943	ug/L	-0.0943	ppb	09:52:16
1	Ti 334.940†	-1046.4	-83.1	-0.1344	ug/L	-0.1344	ppb	09:53:33
1	Tl 190.801†	-28.5	8.3	2.3736	ug/L	2.3736	ppb	09:53:53
1	U 409.014†	-1960.2	-1.4	-0.0375	ug/L	-0.0375	ppb	09:53:33
1	V 292.402†	-1278.7	15.6	0.1130	ug/L	0.1130	ppb	09:53:33
1	Zn 213.857†	689.1	-117.0	-1.0549	ug/L	-1.0549	ppb	09:53:53
1	SiO2†	552.8	64.9	4.1704	ug/L	4.1704	ppb	09:54:49
2	Sc 361.383	884739.8	884739.8	99.974	%			09:53:58
2	Sc Radial	5764.0	5764.0	102	%			09:52:41
2	Y 371.029	742644.3	742644.3	100.08	%			09:53:58
2	Y RADIAL	6265.5	6265.5	101.7	%			09:52:41
2	Ag 328.068†	300.2	72.7	0.3397	ug/L	0.3397	ppb	09:53:58
2	Al 396.153Radial†	-19.5	1.2	0.8344	ug/L	0.8344	ppb	09:53:01
2	As 188.979†	-13.4	15.8	6.4281	ug/L	6.4281	ppb	09:54:18
2	B 249.677†	129.7	653.5	14.185	ug/L	14.185	ppb	09:54:18
2	Ba 233.527†	-24.2	-12.1	-0.0918	ug/L	-0.0918	ppb	09:54:18
2	Be 313.107†	-5215.7	103.1	0.0380	ug/L	0.0380	ppb	09:53:58
2	Ca 317.933Radial†	14.9	-3.0	-4.6310	ug/L	-4.6310	ppb	09:53:01
2	Cd 226.502†	-148.1	39.7	0.4296	ug/L	0.4296	ppb	09:54:18
2	Co 228.616†	-70.0	1.7	0.0348	ug/L	0.0348	ppb	09:54:18
2	Cr 267.716†	72.1	-14.9	-0.1599	ug/L	-0.1599	ppb	09:54:18
2	Cu 324.752†	6864.6	97.8	0.2849	ug/L	0.2849	ppb	09:53:58
2	Fe 238.204 Radial†	7.2	1.0	10.224	ug/L	10.224	ppb	09:53:01
2	K 766.490 Radial†	2593.8	378.2	68.622	ug/L	68.622	ppb	09:52:41
2	Mg 279.077 IEC†	1.9	0.1	4.5790	ug/L	4.5790	ppb	09:53:01
2	Mn 257.610†	422.1	18.8	0.0213	ug/L	0.0213	ppb	09:54:18
2	Mo 202.031†	31.0	11.0	0.7187	ug/L	0.7187	ppb	09:54:18
2	Na 589.592 Radial†	-535.9	89.4	33.593	ug/L	33.593	ppb	09:52:41
2	Ni 231.604†	84.6	14.5	0.3432	ug/L	0.3432	ppb	09:54:18

2	P 214.914†	222.2	2.3	1.3036 ug/L	1.3036 ppb	09:54:18
2	Pb 220.353†	-48.3	4.3	0.4997 ug/L	0.4997 ppb	09:54:18
2	S 181.975 Axial†	35.4	-6.0	-8.7915 ug/L	-8.7915 ppb	09:54:18
2	Sb 206.836†	49.5	20.0	6.5211 ug/L	6.5211 ppb	09:54:18
2	Se 196.026†	-17.3	6.1	3.6975 ug/L	3.6975 ppb	09:54:18
2	Si 251.611†	503.4	-4.5	-0.1782 ug/L	-0.1782 ppb	09:54:18
2	Sn 189.927†	12.4	8.2	1.3837 ug/L	1.3837 ppb	09:54:18
2	Sr 421.552†	-27.1	-30.1	-0.2029 ug/L	-0.2029 ppb	09:52:41
2	Ti 334.940†	-1080.5	-115.7	-0.1873 ug/L	-0.1873 ppb	09:53:58
2	Tl 190.801†	-32.4	4.4	1.2673 ug/L	1.2673 ppb	09:54:18
2	U 409.014†	-1967.4	-5.7	-0.1603 ug/L	-0.1603 ppb	09:53:58
2	V 292.402†	-1289.8	6.4	0.0517 ug/L	0.0517 ppb	09:53:58
2	Zn 213.857†	701.1	-106.0	-0.9576 ug/L	-0.9576 ppb	09:54:18
2	SiO2†	506.6	17.9	1.0831 ug/L	1.0831 ppb	09:54:54
3	Sc 361.383	887271.0	887271.0	100.26 %		09:54:24
3	Sc Radial	5784.6	5784.6	102 %		09:53:06
3	Y 371.029	744463.2	744463.2	100.32 %		09:54:24
3	Y RADIAL	6304.1	6304.1	102.4 %		09:53:06
3	Ag 328.068†	243.1	14.9	0.0755 ug/L	0.0755 ppb	09:54:24
3	Al 396.153Radial†	-26.2	-5.3	-3.9397 ug/L	-3.9397 ppb	09:53:26
3	As 188.979†	-11.1	18.1	7.3933 ug/L	7.3933 ppb	09:54:44
3	B 249.677†	106.2	629.8	13.670 ug/L	13.670 ppb	09:54:44
3	Ba 233.527†	2.1	14.1	0.1077 ug/L	0.1077 ppb	09:54:44
3	Be 313.107†	-5267.2	66.7	0.0249 ug/L	0.0249 ppb	09:54:24
3	Ca 317.933Radial†	17.9	-0.1	-0.1892 ug/L	-0.1892 ppb	09:53:26
3	Cd 226.502†	-155.1	33.1	0.3583 ug/L	0.3583 ppb	09:54:44
3	Co 228.616†	-67.9	4.0	0.0786 ug/L	0.0786 ppb	09:54:44
3	Cr 267.716†	84.9	-2.3	-0.0233 ug/L	-0.0233 ppb	09:54:44
3	Cu 324.752†	6925.6	139.0	0.4049 ug/L	0.4049 ppb	09:54:24
3	Fe 238.204 Radial†	7.4	1.2	12.352 ug/L	12.352 ppb	09:53:26
3	K 766.490 Radial†	2550.2	326.5	59.239 ug/L	59.239 ppb	09:53:06
3	Mg 279.077 IEC†	-1.3	-3.0	-113.52 ug/L	-113.52 ppb	09:53:26
3	Mn 257.610†	415.8	11.3	0.0157 ug/L	0.0157 ppb	09:54:44
3	Mo 202.031†	24.3	4.3	0.2789 ug/L	0.2789 ppb	09:54:44
3	Na 589.592 Radial†	-562.9	64.9	24.394 ug/L	24.394 ppb	09:53:06
3	Ni 231.604†	89.0	18.7	0.4434 ug/L	0.4434 ppb	09:54:44
3	P 214.914†	222.4	1.9	1.0543 ug/L	1.0543 ppb	09:54:44
3	Pb 220.353†	-60.5	-7.8	-0.9111 ug/L	-0.9111 ppb	09:54:44
3	S 181.975 Axial†	43.6	2.0	2.9267 ug/L	2.9267 ppb	09:54:44
3	Sb 206.836†	45.8	16.1	5.2510 ug/L	5.2510 ppb	09:54:44
3	Se 196.026†	-22.4	1.1	0.6700 ug/L	0.6700 ppb	09:54:44
3	Si 251.611†	494.9	-14.4	-0.4691 ug/L	-0.4691 ppb	09:54:44
3	Sn 189.927†	13.0	8.7	1.4763 ug/L	1.4763 ppb	09:54:44
3	Sr 421.552†	-8.5	-11.8	-0.0795 ug/L	-0.0795 ppb	09:53:06
3	Ti 334.940†	-918.1	49.3	0.0809 ug/L	0.0809 ppb	09:54:24
3	Tl 190.801†	-25.4	11.5	3.2959 ug/L	3.2959 ppb	09:54:44
3	U 409.014†	-2059.3	-91.8	-2.5658 ug/L	-2.5658 ppb	09:54:24
3	V 292.402†	-1282.9	16.9	0.1084 ug/L	0.1084 ppb	09:54:24
3	Zn 213.857†	688.0	-121.0	-1.0895 ug/L	-1.0895 ppb	09:54:44
3	SiO2†	559.7	69.4	4.4787 ug/L	4.4787 ppb	09:54:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885166.0	100.02	%	0.218				0.22%
Sc Radial	5776.4	102	%	0.2				0.19%
Y 371.029	743203.5	100.15	%	0.147				0.15%
Y RADIAL	6296.3	102.2	%	0.45				0.44%
Ag 328.068†	53.7	0.2521	ug/L	0.15298	0.2521	ppb	0.15298	60.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.2847	ug/L	3.97809	0.2847	ppb	3.97809	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	16.5	6.7198	ug/L	0.58506	6.7198	ppb	0.58506	8.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	654.1	14.196	ug/L	0.5326	14.196	ppb	0.5326	3.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.8	0.0218	ug/L	0.10259	0.0218	ppb	0.10259	470.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	105.8	0.0392	ug/L	0.01487	0.0392	ppb	0.01487	37.98%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.4     -2.1400 ug/L       2.26967     -2.1400 ppb        2.26967 106.06%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                35.0      0.3791 ug/L       0.04397      0.3791 ppb        0.04397  11.60%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.3      0.0470 ug/L       0.02766      0.0470 ppb        0.02766  58.90%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -15.6     -0.1672 ug/L       0.14766     -0.1672 ppb        0.14766  88.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               116.9      0.3405 ug/L       0.06050      0.3405 ppb        0.06050  17.77%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.8      8.1998 ug/L       5.45386      8.1998 ppb        5.45386  66.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         369.2     66.998 ug/L        7.0880     66.998 ppb         7.0880  10.58%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.1    -39.588 ug/L       64.4280    -39.588 ppb        64.4280 162.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.0      0.0124 ug/L       0.01089      0.0124 ppb        0.01089  87.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.9      0.5177 ug/L       0.22238      0.5177 ppb        0.22238  42.95%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         74.8     28.114 ug/L        4.8453     28.114 ppb         4.8453  17.23%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.1      0.3578 ug/L       0.07931      0.3578 ppb        0.07931  22.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.4      0.8036 ug/L       0.66205      0.8036 ppb        0.66205  82.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.5     -0.2943 ug/L       0.72189     -0.2943 ppb        0.72189 245.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.2246 ug/L       7.50507     -0.2246 ppb        7.50507 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                19.6      6.3795 ug/L       1.06484      6.3795 ppb        1.06484  16.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.9      1.7349 ug/L       1.70167      1.7349 ppb        1.70167  98.08%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                -4.3     -0.1654 ug/L       0.31028     -0.1654 ppb        0.31028 187.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.2      1.0554 ug/L       0.65051      1.0554 ppb        0.65051  61.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.6     -0.1256 ug/L       0.06737     -0.1256 ppb        0.06737  53.66%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -49.8     -0.0803 ug/L       0.14204     -0.0803 ppb        0.14204 176.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.1      2.3123 ug/L       1.01567      2.3123 ppb        1.01567  43.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.9     -0.9212 ug/L       1.42557     -0.9212 ppb        1.42557 154.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 12.9      0.0910 ug/L       0.03411      0.0910 ppb        0.03411  37.48%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -114.7     -1.0340 ug/L       0.06840     -1.0340 ppb        0.06840   6.61%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      50.7      3.2441 ug/L       1.87777      3.2441 ppb        1.87777  57.88%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/9/2009 09:57:09
Data Type: Reprocessed on 12/9/2009 10:32:33
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	887319.3	887319.3	100.27	%			10:00:20
1	Sc Radial	5605.4	5605.4	99.0	%			09:59:02
1	Y 371.029	738820.1	738820.1	99.562	%			10:00:20
1	Y RADIAL	6070.3	6070.3	98.56	%			09:59:02
1	Ag 328.068†	-25507.1	-25667.2	0.4653	ug/L	0.4653	ppb	10:00:20
1	Al 396.153Radial†	-53.3	-33.5	-23.660	ug/L	-23.660	ppb	09:59:02
1	As 188.979†	-212.3	-182.5	-16.747	ug/L	-16.747	ppb	10:00:40
1	B 249.677†	2542.2	3059.3	16.807	ug/L	16.807	ppb	10:00:20
1	Ba 233.527†	-1747.2	-1730.6	0.8462	ug/L	0.8462	ppb	10:00:20
1	Be 313.107†	-5195.5	138.5	0.0511	ug/L	0.0511	ppb	10:00:20
1	Ca 317.933Radial†	19.0	1.5	2.2325	ug/L	2.2325	ppb	09:59:22
1	Cd 226.502†	3562.1	3740.5	3.2119	ug/L	3.2119	ppb	10:00:20
1	Co 228.616†	213.6	284.8	0.1277	ug/L	0.1277	ppb	10:00:40
1	Cr 267.716†	-567.9	-653.3	-0.2725	ug/L	-0.2725	ppb	10:00:20
1	Cu 324.752†	432.3	-6337.5	0.6363	ug/L	0.6363	ppb	10:00:20
1	Fe 238.204 Radial†	36747.7	37121.7	373790	ug/L	373790	ppb	09:59:02
1	K 766.490 Radial†	2101.5	-47.1	3.7100	ug/L	3.7100	ppb	09:59:02
1	Mg 279.077 IEC†	11.5	9.8	45.122	ug/L	45.122	ppb	09:59:22
1	Mn 257.610†	-36408.4	-36715.6	-2.6309	ug/L	-2.6309	ppb	10:00:20
1	Mo 202.031†	-385.1	-404.1	0.1946	ug/L	0.1946	ppb	10:00:20
1	Na 589.592 Radial†	-562.7	47.4	17.835	ug/L	17.835	ppb	09:59:02
1	Ni 231.604†	177.0	106.4	2.5217	ug/L	2.5217	ppb	10:00:40
1	P 214.914†	725.0	503.2	0.4044	ug/L	0.4044	ppb	10:00:40
1	Pb 220.353†	238.6	290.5	3.2201	ug/L	3.2201	ppb	10:00:40
1	S 181.975 Axial†	47.1	5.5	8.0097	ug/L	8.0097	ppb	10:00:40
1	Sb 206.836†	11.4	-18.2	-0.1644	ug/L	-0.1644	ppb	10:00:40
1	Se 196.026†	-1992.6	-1963.8	-27.011	ug/L	-27.011	ppb	10:00:40
1	Si 251.611†	-727.5	-1233.6	-37.252	ug/L	-37.252	ppb	10:00:20
1	Sn 189.927†	-24.8	-29.0	0.0868	ug/L	0.0868	ppb	10:00:40
1	Sr 421.552†	25.0	21.8	0.1474	ug/L	0.1474	ppb	09:59:02
1	Ti 334.940†	-1084.3	-116.4	-0.2084	ug/L	-0.2084	ppb	10:00:20
1	Tl 190.801†	-47.3	-10.3	-3.3433	ug/L	-3.3433	ppb	10:00:40
1	U 409.014†	-115.4	1847.1	4.5916	ug/L	4.5916	ppb	10:00:20
1	V 292.402†	7058.1	8335.9	-0.8511	ug/L	-0.8511	ppb	10:00:20
1	Zn 213.857†	4904.2	4083.9	1.0474	ug/L	1.0474	ppb	10:00:40
1	SiO2†	-785.5	-1272.2	-82.275	ug/L	-82.275	ppb	10:01:37
2	Sc 361.383	936084.1	936084.1	105.78	%			10:00:46
2	Sc Radial	5571.4	5571.4	98.4	%			09:59:27
2	Y 371.029	777476.7	777476.7	104.77	%			10:00:46
2	Y RADIAL	6035.2	6035.2	97.99	%			09:59:27
2	Ag 328.068†	-24782.0	-23656.4	10.021	ug/L	10.021	ppb	10:00:46
2	Al 396.153Radial†	-49.3	-29.8	-21.007	ug/L	-21.007	ppb	09:59:27
2	As 188.979†	-227.8	-186.2	-18.093	ug/L	-18.093	ppb	10:01:06
2	B 249.677†	2566.3	2950.1	14.324	ug/L	14.324	ppb	10:00:46
2	Ba 233.527†	-1715.2	-1609.5	1.7908	ug/L	1.7908	ppb	10:00:46
2	Be 313.107†	-5181.6	421.5	0.1568	ug/L	0.1568	ppb	10:00:46
2	Ca 317.933Radial†	21.1	3.8	5.7622	ug/L	5.7622	ppb	09:59:47
2	Cd 226.502†	3450.8	3450.2	-0.0229	ug/L	-0.0229	ppb	10:00:46
2	Co 228.616†	217.5	277.4	-0.0230	ug/L	-0.0230	ppb	10:01:06
2	Cr 267.716†	-513.8	-572.7	0.6063	ug/L	0.6063	ppb	10:00:46
2	Cu 324.752†	495.0	-6300.6	0.7868	ug/L	0.7868	ppb	10:00:46
2	Fe 238.204 Radial†	36608.0	37205.9	374640	ug/L	374640	ppb	09:59:27
2	K 766.490 Radial†	2214.3	80.6	26.877	ug/L	26.877	ppb	09:59:27
2	Mg 279.077 IEC†	9.1	7.5	-40.941	ug/L	-40.941	ppb	09:59:47
2	Mn 257.610†	-35425.9	-33895.0	0.5204	ug/L	0.5204	ppb	10:00:46
2	Mo 202.031†	-371.1	-370.9	2.4170	ug/L	2.4170	ppb	10:00:46
2	Na 589.592 Radial†	-555.0	51.8	19.455	ug/L	19.455	ppb	09:59:27
2	Ni 231.604†	160.3	81.4	1.9289	ug/L	1.9289	ppb	10:01:06

2	P 214.914†	709.0	450.3	-31.693	ug/L	-31.693 ppb	10:01:06
2	Pb 220.353†	240.7	280.1	1.9397	ug/L	1.9397 ppb	10:01:06
2	S 181.975 Axial†	62.7	17.8	26.101	ug/L	26.101 ppb	10:01:06
2	Sb 206.836†	16.3	-14.2	1.1751	ug/L	1.1751 ppb	10:01:06
2	Se 196.026†	-1976.4	-1845.0	46.457	ug/L	46.457 ppb	10:01:06
2	Si 251.611†	-694.7	-1164.8	-35.194	ug/L	-35.194 ppb	10:00:46
2	Sn 189.927†	-26.3	-29.1	0.0788	ug/L	0.0788 ppb	10:01:06
2	Sr 421.552†	45.6	42.9	0.2897	ug/L	0.2897 ppb	09:59:27
2	Ti 334.940†	-959.2	58.2	0.0736	ug/L	0.0736 ppb	10:00:46
2	Tl 190.801†	-41.2	-2.1	-0.9645	ug/L	-0.9645 ppb	10:01:06
2	U 409.014†	-108.2	1859.9	4.8410	ug/L	4.8410 ppb	10:00:46
2	V 292.402†	7016.3	7929.6	-3.6938	ug/L	-3.6938 ppb	10:00:46
2	Zn 213.857†	4863.0	3790.2	-1.6697	ug/L	-1.6697 ppb	10:01:06
2	SiO2†	-750.0	-1197.9	-77.508	ug/L	-77.508 ppb	10:01:42
3	Sc 361.383	879120.8	879120.8	99.339	%		10:01:12
3	Sc Radial	5736.5	5736.5	101	%		09:59:52
3	Y 371.029	730593.9	730593.9	98.453	%		10:01:12
3	Y RADIAL	6234.5	6234.5	101.2	%		09:59:52
3	Ag 328.068†	-25461.6	-25858.7	-2.5167	ug/L	-2.5167 ppb	10:01:12
3	Al 396.153Radial†	-33.0	-12.2	-7.9618	ug/L	-7.9618 ppb	09:59:52
3	As 188.979†	-215.8	-188.0	-20.019	ug/L	-20.019 ppb	10:01:32
3	B 249.677†	2628.4	3169.8	20.082	ug/L	20.082 ppb	10:01:12
3	Ba 233.527†	-1639.6	-1638.5	1.3026	ug/L	1.3026 ppb	10:01:12
3	Be 313.107†	-5245.7	39.6	0.0144	ug/L	0.0144 ppb	10:01:12
3	Ca 317.933Radial†	15.5	-2.4	-3.6204	ug/L	-3.6204 ppb	10:00:12
3	Cd 226.502†	3567.6	3779.2	4.2922	ug/L	4.2922 ppb	10:01:12
3	Co 228.616†	217.9	291.1	0.3481	ug/L	0.3481 ppb	10:01:32
3	Cr 267.716†	-576.3	-667.1	-0.5364	ug/L	-0.5364 ppb	10:01:12
3	Cu 324.752†	487.2	-6278.2	0.4716	ug/L	0.4716 ppb	10:01:12
3	Fe 238.204 Radial†	36942.5	36465.4	367180	ug/L	367180 ppb	09:59:52
3	K 766.490 Radial†	2115.6	-81.7	-2.7680	ug/L	-2.7680 ppb	09:59:52
3	Mg 279.077 IEC†	14.4	12.4	147.83	ug/L	147.83 ppb	10:00:12
3	Mn 257.610†	-36324.2	-36969.4	-3.5676	ug/L	-3.5676 ppb	10:01:12
3	Mo 202.031†	-358.8	-381.1	1.2190	ug/L	1.2190 ppb	10:01:12
3	Na 589.592 Radial†	-557.1	65.9	24.782	ug/L	24.782 ppb	09:59:52
3	Ni 231.604†	163.8	94.7	2.2442	ug/L	2.2442 ppb	10:01:32
3	P 214.914†	716.7	501.5	4.6905	ug/L	4.6905 ppb	10:01:32
3	Pb 220.353†	226.2	280.2	2.5693	ug/L	2.5693 ppb	10:01:32
3	S 181.975 Axial†	59.8	18.7	27.371	ug/L	27.371 ppb	10:01:32
3	Sb 206.836†	25.9	-3.6	4.4954	ug/L	4.4954 ppb	10:01:32
3	Se 196.026†	-1979.5	-1969.2	-50.424	ug/L	-50.424 ppb	10:01:32
3	Si 251.611†	-703.8	-1216.5	-36.752	ug/L	-36.752 ppb	10:01:12
3	Sn 189.927†	-31.1	-35.6	-1.1147	ug/L	-1.1147 ppb	10:01:32
3	Sr 421.552†	45.7	41.7	0.2812	ug/L	0.2812 ppb	09:59:52
3	Ti 334.940†	-1068.5	-110.6	-0.1981	ug/L	-0.1981 ppb	10:01:12
3	Tl 190.801†	-58.9	-22.5	-6.8342	ug/L	-6.8342 ppb	10:01:32
3	U 409.014†	-208.2	1752.5	2.7815	ug/L	2.7815 ppb	10:01:12
3	V 292.402†	7139.6	8483.6	1.1693	ug/L	1.1693 ppb	10:01:12
3	Zn 213.857†	4917.4	4142.9	2.2071	ug/L	2.2071 ppb	10:01:32
3	SiO2†	-764.6	-1258.5	-81.423	ug/L	-81.423 ppb	10:01:47

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900841.4	101.79	%	3.480				3.42%
Sc Radial	5637.8	99.5	%	1.54				1.55%
Y 371.029	748963.5	100.93	%	3.373				3.34%
Y RADIAL	6113.4	99.26	%	1.728				1.74%
Ag 328.068†	-25060.8	2.6565	ug/L	6.54972	2.6565	ppb	6.54972	246.56%
Al 396.153Radial†	-25.2	-17.543	ug/L	8.4031	-17.543	ppb	8.4031	47.90%
As 188.979†	-185.6	-18.286	ug/L	1.6449	-18.286	ppb	1.6449	8.99%
B 249.677†	3059.7	17.071	ug/L	2.8882	17.071	ppb	2.8882	16.92%
Ba 233.527†	-1659.5	1.3132	ug/L	0.47241	1.3132	ppb	0.47241	35.97%
Be 313.107†	199.9	0.0741	ug/L	0.07396	0.0741	ppb	0.07396	99.84%
Ca 317.933Radial†	1.0	1.4581	ug/L	4.73901	1.4581	ppb	4.73901	325.02%
Cd 226.502†	3656.7	2.4937	ug/L	2.24541	2.4937	ppb	2.24541	90.04%
Co 228.616†	284.4	0.1509	ug/L	0.18663	0.1509	ppb	0.18663	123.67%
Cr 267.716†	-631.1	-0.0675	ug/L	0.59827	-0.0675	ppb	0.59827	885.82%
Cu 324.752†	-6305.5	0.6316	ug/L	0.15766	0.6316	ppb	0.15766	24.96%
Fe 238.204 Radial†	36931.0	371870	ug/L	4082.4	371870	ppb	4082.4	1.10%

K 766.490 Radial†	-16.1	9.2731	ug/L	15.58594	9.2731	ppb	15.58594 168.08%
Mg 279.077 IEC†	9.9	50.671	ug/L	94.5094	50.671	ppb	94.5094 186.51%
Mn 257.610†	-35860.0	-1.8927	ug/L	2.14164	-1.8927	ppb	2.14164 113.15%
Mo 202.031†	-385.4	1.2769	ug/L	1.11230	1.2769	ppb	1.11230 87.11%
Na 589.592 Radial†	55.0	20.691	ug/L	3.6346	20.691	ppb	3.6346 17.57%
Ni 231.604†	94.2	2.2316	ug/L	0.29660	2.2316	ppb	0.29660 13.29%
P 214.914†	485.0	-8.8661	ug/L	19.88462	-8.8661	ppb	19.88462 224.28%
Pb 220.353†	283.6	2.5764	ug/L	0.64025	2.5764	ppb	0.64025 24.85%
S 181.975 Axial†	14.0	20.494	ug/L	10.8304	20.494	ppb	10.8304 52.85%
Sb 206.836†	-12.0	1.8354	ug/L	2.39901	1.8354	ppb	2.39901 130.71%
Se 196.026†	-1926.0	-10.326	ug/L	50.5497	-10.326	ppb	50.5497 489.54%
Si 251.611†	-1205.0	-36.399	ug/L	1.0735	-36.399	ppb	1.0735 2.95%
Sn 189.927†	-31.2	-0.3163	ug/L	0.69139	-0.3163	ppb	0.69139 218.56%
Sr 421.552†	35.5	0.2394	ug/L	0.07983	0.2394	ppb	0.07983 33.34%
Ti 334.940†	-56.3	-0.1110	ug/L	0.15992	-0.1110	ppb	0.15992 144.10%
Tl 190.801†	-11.6	-3.7140	ug/L	2.95237	-3.7140	ppb	2.95237 79.49%
U 409.014†	1819.9	4.0714	ug/L	1.12397	4.0714	ppb	1.12397 27.61%
V 292.402†	8249.7	-1.1252	ug/L	2.44315	-1.1252	ppb	2.44315 217.13%
Zn 213.857†	4005.7	0.5283	ug/L	1.98985	0.5283	ppb	1.98985 376.67%
SiO2†	-1242.9	-80.402	ug/L	2.5425	-80.402	ppb	2.5425 3.16%

Sequence No.: 18
Sample ID: LR2
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/9/2009 10:03:58
Data Type: Reprocessed on 12/9/2009 10:32:34
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	911921.9	911921.9	103.05	%			10:07:09
1	Sc Radial	5737.0	5737.0	101	%			10:05:52
1	Y 371.029	765966.6	765966.6	103.22	%			10:07:09
1	Y RADIAL	6214.8	6214.8	100.9	%			10:05:52
1	Ag 328.068†	348.9	111.0	0.5170	ug/L	0.5170	ppb	10:07:14
1	Al 396.153Radial†	-6.8	13.6	10.067	ug/L	10.067	ppb	10:05:52
1	As 188.979†	-9.9	19.6	8.0099	ug/L	8.0099	ppb	10:07:34
1	B 249.677†	-142.2	385.8	8.3865	ug/L	8.3865	ppb	10:07:34
1	Ba 233.527†	1328395.7	1289150.4	9791.1	ug/L	9791.1	ppb	10:07:09
1	Be 313.107†	-5235.7	239.2	0.0888	ug/L	0.0888	ppb	10:07:14
1	Ca 317.933Radial†	35.2	17.1	26.123	ug/L	26.123	ppb	10:06:12
1	Cd 226.502†	-140.8	51.2	0.5561	ug/L	0.5561	ppb	10:07:34
1	Co 228.616†	-316.7	-235.6	-0.1719	ug/L	-0.1719	ppb	10:07:34
1	Cr 267.716†	85.5	-4.0	-0.0417	ug/L	-0.0417	ppb	10:07:34
1	Cu 324.752†	6919.7	-53.4	-0.1555	ug/L	-0.1555	ppb	10:07:14
1	Fe 238.204 Radial†	6.1	-0.0	-0.4234	ug/L	-0.4234	ppb	10:06:12
1	K 766.490 Radial†	2390.1	189.1	34.319	ug/L	34.319	ppb	10:05:52
1	Mg 279.077 IEC†	2.0	0.2	8.1529	ug/L	8.1529	ppb	10:06:12
1	Mn 257.610†	416.2	0.5	0.0003	ug/L	0.0003	ppb	10:07:34
1	Mo 202.031†	22.0	1.4	0.0888	ug/L	0.0888	ppb	10:07:34
1	Na 589.592 Radial†	-579.3	44.1	16.594	ug/L	16.594	ppb	10:05:52
1	Ni 231.604†	99.8	26.8	0.6383	ug/L	0.6383	ppb	10:07:34
1	P 214.914†	210.8	-15.4	-9.0917	ug/L	-9.0917	ppb	10:07:34
1	Pb 220.353†	-53.0	1.2	0.1376	ug/L	0.1376	ppb	10:07:34
1	S 181.975 Axial†	40.5	-2.2	-3.1619	ug/L	-3.1619	ppb	10:07:34
1	Sb 206.836†	37.1	6.4	2.1078	ug/L	2.1078	ppb	10:07:34
1	Se 196.026†	-14.9	9.0	5.3573	ug/L	5.3573	ppb	10:07:34
1	Si 251.611†	471.7	-50.3	-1.5536	ug/L	-1.5536	ppb	10:07:34
1	Sn 189.927†	9.0	4.5	0.7588	ug/L	0.7588	ppb	10:07:34
1	Sr 421.552†	-16.0	-19.3	-0.1302	ug/L	-0.1302	ppb	10:05:52
1	Ti 334.940†	-1043.1	-47.3	-0.0734	ug/L	-0.0734	ppb	10:07:14
1	Tl 190.801†	-28.9	8.8	2.5596	ug/L	2.5596	ppb	10:07:34
1	U 409.014†	-2160.2	-134.2	-3.7479	ug/L	-3.7479	ppb	10:07:09
1	V 292.402†	-1302.4	32.6	0.2144	ug/L	0.2144	ppb	10:07:14
1	Zn 213.857†	828.6	-3.2	-0.0329	ug/L	-0.0329	ppb	10:07:34
1	SiO2†	495.3	-8.2	-0.5689	ug/L	-0.5689	ppb	10:08:40
2	Sc 361.383	906063.3	906063.3	102.38	%			10:07:39
2	Sc Radial	5826.9	5826.9	103	%			10:06:17
2	Y 371.029	760076.9	760076.9	102.43	%			10:07:39
2	Y RADIAL	6340.6	6340.6	103.0	%			10:06:17
2	Ag 328.068†	379.1	142.7	0.6702	ug/L	0.6702	ppb	10:07:44
2	Al 396.153Radial†	-25.1	-4.0	-2.9620	ug/L	-2.9620	ppb	10:06:17
2	As 188.979†	-23.5	6.3	2.5583	ug/L	2.5583	ppb	10:08:04
2	B 249.677†	-151.1	376.3	8.1768	ug/L	8.1768	ppb	10:08:04
2	Ba 233.527†	1330239.4	1299286.8	9868.1	ug/L	9868.1	ppb	10:07:39
2	Be 313.107†	-5299.5	144.1	0.0534	ug/L	0.0534	ppb	10:07:44
2	Ca 317.933Radial†	33.3	14.7	22.471	ug/L	22.471	ppb	10:06:37
2	Cd 226.502†	-159.3	32.2	0.3488	ug/L	0.3488	ppb	10:08:04
2	Co 228.616†	-302.8	-224.0	0.0854	ug/L	0.0854	ppb	10:08:04
2	Cr 267.716†	102.3	13.0	0.1427	ug/L	0.1427	ppb	10:08:04
2	Cu 324.752†	6853.3	-74.8	-0.2171	ug/L	-0.2171	ppb	10:07:44
2	Fe 238.204 Radial†	7.4	1.2	11.833	ug/L	11.833	ppb	10:06:37
2	K 766.490 Radial†	2542.9	301.2	54.660	ug/L	54.660	ppb	10:06:17
2	Mg 279.077 IEC†	3.1	1.2	45.853	ug/L	45.853	ppb	10:06:37
2	Mn 257.610†	424.1	10.8	0.0121	ug/L	0.0121	ppb	10:08:04
2	Mo 202.031†	9.2	-11.0	-0.7181	ug/L	-0.7181	ppb	10:08:04
2	Na 589.592 Radial†	-622.3	11.1	4.1905	ug/L	4.1905	ppb	10:06:17
2	Ni 231.604†	85.2	13.1	0.3137	ug/L	0.3137	ppb	10:08:04

2	P 214.914†	210.4	-14.4	-8.5541 ug/L	-8.5541 ppb	10:08:04
2	Pb 220.353†	-46.3	7.3	0.8501 ug/L	0.8501 ppb	10:08:04
2	S 181.975 Axial†	49.8	7.1	10.427 ug/L	10.427 ppb	10:08:04
2	Sb 206.836†	38.2	7.7	2.4973 ug/L	2.4973 ppb	10:08:04
2	Se 196.026†	-30.7	-6.5	-3.8387 ug/L	-3.8387 ppb	10:08:04
2	Si 251.611†	469.2	-49.7	-1.5269 ug/L	-1.5269 ppb	10:08:04
2	Sn 189.927†	4.9	0.5	0.0935 ug/L	0.0935 ppb	10:08:04
2	Sr 421.552†	-9.2	-12.4	-0.0837 ug/L	-0.0837 ppb	10:06:17
2	Ti 334.940†	-1028.1	-39.1	-0.0590 ug/L	-0.0590 ppb	10:07:44
2	Tl 190.801†	-30.2	7.4	2.1299 ug/L	2.1299 ppb	10:08:04
2	U 409.014†	-2270.8	-255.8	-7.1473 ug/L	-7.1473 ppb	10:07:39
2	V 292.402†	-1291.0	35.5	0.2146 ug/L	0.2146 ppb	10:07:44
2	Zn 213.857†	834.7	8.0	0.0679 ug/L	0.0679 ppb	10:08:04
2	SiO2†	462.7	-36.9	-2.4319 ug/L	-2.4319 ppb	10:08:45
3	Sc 361.383	899417.1	899417.1	101.63 %		10:08:09
3	Sc Radial	5782.9	5782.9	102 %		10:06:42
3	Y 371.029	755364.8	755364.8	101.79 %		10:08:09
3	Y RADIAL	6284.5	6284.5	102.0 %		10:06:42
3	Ag 328.068†	291.0	58.7	0.2871 ug/L	0.2871 ppb	10:08:14
3	Al 396.153Radial†	-11.6	9.0	6.6395 ug/L	6.6395 ppb	10:06:42
3	As 188.979†	-10.5	18.8	7.6829 ug/L	7.6829 ppb	10:08:35
3	B 249.677†	-146.1	380.1	8.2595 ug/L	8.2595 ppb	10:08:35
3	Ba 233.527†	1320540.7	1299344.7	9868.5 ug/L	9868.5 ppb	10:08:09
3	Be 313.107†	-5272.3	132.6	0.0494 ug/L	0.0494 ppb	10:08:14
3	Ca 317.933Radial†	40.4	21.9	33.423 ug/L	33.423 ppb	10:07:02
3	Cd 226.502†	-149.8	40.5	0.4373 ug/L	0.4373 ppb	10:08:35
3	Co 228.616†	-326.9	-249.9	-0.4160 ug/L	-0.4160 ppb	10:08:35
3	Cr 267.716†	88.5	0.1	0.0055 ug/L	0.0055 ppb	10:08:35
3	Cu 324.752†	7060.6	178.6	0.5204 ug/L	0.5204 ppb	10:08:14
3	Fe 238.204 Radial†	8.1	1.9	19.094 ug/L	19.094 ppb	10:07:02
3	K 766.490 Radial†	2495.9	274.0	49.718 ug/L	49.718 ppb	10:06:42
3	Mg 279.077 IEC†	-1.2	-3.0	-110.26 ug/L	-110.26 ppb	10:07:02
3	Mn 257.610†	412.7	2.6	0.0068 ug/L	0.0068 ppb	10:08:35
3	Mo 202.031†	20.1	-0.2	-0.0110 ug/L	-0.0110 ppb	10:08:35
3	Na 589.592 Radial†	-562.9	64.7	24.325 ug/L	24.325 ppb	10:06:42
3	Ni 231.604†	73.0	1.8	0.0447 ug/L	0.0447 ppb	10:08:35
3	P 214.914†	207.6	-15.6	-9.3830 ug/L	-9.3830 ppb	10:08:35
3	Pb 220.353†	-52.0	1.4	0.1642 ug/L	0.1642 ppb	10:08:35
3	S 181.975 Axial†	33.5	-8.5	-12.393 ug/L	-12.393 ppb	10:08:35
3	Sb 206.836†	36.1	5.9	1.9358 ug/L	1.9358 ppb	10:08:35
3	Se 196.026†	-22.6	1.2	0.7890 ug/L	0.7890 ppb	10:08:35
3	Si 251.611†	487.0	-28.9	-0.9015 ug/L	-0.9015 ppb	10:08:35
3	Sn 189.927†	8.9	4.4	0.7546 ug/L	0.7546 ppb	10:08:35
3	Sr 421.552†	-21.7	-24.6	-0.1666 ug/L	-0.1666 ppb	10:06:42
3	Ti 334.940†	-937.1	43.0	0.0759 ug/L	0.0759 ppb	10:08:14
3	Tl 190.801†	-26.7	10.6	3.0509 ug/L	3.0509 ppb	10:08:35
3	U 409.014†	-2375.5	-375.1	-10.483 ug/L	-10.483 ppb	10:08:09
3	V 292.402†	-1273.9	43.1	0.2646 ug/L	0.2646 ppb	10:08:14
3	Zn 213.857†	835.6	14.9	0.1349 ug/L	0.1349 ppb	10:08:35
3	SiO2†	494.1	-2.6	-0.2146 ug/L	-0.2146 ppb	10:08:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905800.7	102.35	%	0.707				0.69%
Sc Radial	5782.3	102	%	0.8				0.78%
Y 371.029	760469.4	102.48	%	0.716				0.70%
Y RADIAL	6280.0	102.0	%	1.02				1.00%
Ag 328.068†	104.1	0.4914	ug/L	0.19283	0.4914	ppb	0.19283	39.24%
Al 396.153Radial†	6.2	4.5814	ug/L	6.75373	4.5814	ppb	6.75373	147.42%
As 188.979†	14.9	6.0837	ug/L	3.05744	6.0837	ppb	3.05744	50.26%
B 249.677†	380.7	8.2742	ug/L	0.10562	8.2742	ppb	0.10562	1.28%
Ba 233.527†	1295927.3	9842.6	ug/L	44.58	9842.6	ppb	44.58	0.45%
Be 313.107†	172.0	0.0639	ug/L	0.02165	0.0639	ppb	0.02165	33.91%
Ca 317.933Radial†	17.9	27.339	ug/L	5.5762	27.339	ppb	5.5762	20.40%
Cd 226.502†	41.3	0.4474	ug/L	0.10399	0.4474	ppb	0.10399	23.24%
Co 228.616†	-236.5	-0.1675	ug/L	0.25071	-0.1675	ppb	0.25071	149.68%
Cr 267.716†	3.0	0.0355	ug/L	0.09578	0.0355	ppb	0.09578	269.54%
Cu 324.752†	16.8	0.0493	ug/L	0.40915	0.0493	ppb	0.40915	830.05%
Fe 238.204 Radial†	1.0	10.168	ug/L	9.8646	10.168	ppb	9.8646	97.02%

K 766.490 Radial†	254.8	46.232	ug/L	10.6088	46.232	ppb	10.6088	22.95%
Mg 279.077 IEC†	-0.5	-18.751	ug/L	81.4590	-18.751	ppb	81.4590	434.43%
Mn 257.610†	4.6	0.0064	ug/L	0.00587	0.0064	ppb	0.00587	91.59%
Mo 202.031†	-3.3	-0.2134	ug/L	0.43988	-0.2134	ppb	0.43988	206.09%
Na 589.592 Radial†	40.0	15.036	ug/L	10.1571	15.036	ppb	10.1571	67.55%
Ni 231.604†	13.9	0.3322	ug/L	0.29722	0.3322	ppb	0.29722	89.47%
P 214.914†	-15.2	-9.0096	ug/L	0.42051	-9.0096	ppb	0.42051	4.67%
Pb 220.353†	3.3	0.3840	ug/L	0.40392	0.3840	ppb	0.40392	105.20%
S 181.975 Axial†	-1.2	-1.7093	ug/L	11.47907	-1.7093	ppb	11.47907	671.58%
Sb 206.836†	6.7	2.1803	ug/L	0.28766	2.1803	ppb	0.28766	13.19%
Se 196.026†	1.2	0.7692	ug/L	4.59805	0.7692	ppb	4.59805	597.76%
Si 251.611†	-43.0	-1.3274	ug/L	0.36903	-1.3274	ppb	0.36903	27.80%
Sn 189.927†	3.1	0.5356	ug/L	0.38286	0.5356	ppb	0.38286	71.48%
Sr 421.552†	-18.8	-0.1269	ug/L	0.04153	-0.1269	ppb	0.04153	32.73%
Ti 334.940†	-14.5	-0.0188	ug/L	0.08237	-0.0188	ppb	0.08237	437.29%
Tl 190.801†	8.9	2.5801	ug/L	0.46085	2.5801	ppb	0.46085	17.86%
U 409.014†	-255.0	-7.1262	ug/L	3.36777	-7.1262	ppb	3.36777	47.26%
V 292.402†	37.0	0.2312	ug/L	0.02892	0.2312	ppb	0.02892	12.51%
Zn 213.857†	6.6	0.0567	ug/L	0.08447	0.0567	ppb	0.08447	149.06%
SiO2†	-15.9	-1.0718	ug/L	1.19115	-1.0718	ppb	1.19115	111.14%

Sequence No.: 19
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 10:11:01
Data Type: Reprocessed on 12/9/2009 10:32:35

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	905387.0	905387.0	102.31	%			10:14:10
1	Sc Radial	5757.4	5757.4	102	%			10:12:53
1	Y 371.029	747390.8	747390.8	100.72	%			10:14:10
1	Y RADIAL	6187.6	6187.6	100.5	%			10:12:53
1	Ag 328.068†	109631.7	106932.1	497.41	ug/L	497.41	ppb	10:14:15
1	Al 396.153Radial†	6657.5	6569.1	4835.1	ug/L	4835.1	ppb	10:12:53
1	As 188.979†	1187.1	1189.5	489.65	ug/L	489.65	ppb	10:14:35
1	B 249.677†	22332.3	22352.6	483.30	ug/L	483.30	ppb	10:14:15
1	Ba 233.527†	65192.2	63734.3	485.33	ug/L	485.33	ppb	10:14:15
1	Be 313.107†	1327773.7	1303155.4	485.21	ug/L	485.21	ppb	10:14:10
1	Ca 317.933Radial†	3278.0	3206.8	4903.7	ug/L	4903.7	ppb	10:13:13
1	Cd 226.502†	45822.7	44977.4	487.76	ug/L	487.76	ppb	10:14:15
1	Co 228.616†	25503.1	24999.8	485.44	ug/L	485.44	ppb	10:14:15
1	Cr 267.716†	46047.7	44922.5	484.81	ug/L	484.81	ppb	10:14:15
1	Cu 324.752†	175594.6	164866.7	479.74	ug/L	479.74	ppb	10:14:15
1	Fe 238.204 Radial†	516.0	501.5	5065.1	ug/L	5065.1	ppb	10:13:13
1	K 766.490 Radial†	29983.5	27323.4	4950.3	ug/L	4950.3	ppb	10:12:53
1	Mg 279.077 IEC†	142.6	138.5	5162.5	ug/L	5162.5	ppb	10:13:13
1	Mn 257.610†	455894.8	445211.9	484.23	ug/L	484.23	ppb	10:14:10
1	Mo 202.031†	7765.2	7570.1	493.47	ug/L	493.47	ppb	10:14:35
1	Na 589.592 Radial†	26492.5	26675.7	10027	ug/L	10027	ppb	10:12:53
1	Ni 231.604†	21105.9	20559.9	487.54	ug/L	487.54	ppb	10:14:15
1	P 214.914†	4367.2	4048.8	2332.9	ug/L	2332.9	ppb	10:14:35
1	Pb 220.353†	4216.4	4173.9	489.42	ug/L	489.42	ppb	10:14:35
1	S 181.975 Axial†	734.7	676.6	988.45	ug/L	988.45	ppb	10:14:35
1	Sb 206.836†	1573.9	1508.8	497.10	ug/L	497.10	ppb	10:14:35
1	Se 196.026†	816.1	821.1	507.39	ug/L	507.39	ppb	10:14:35
1	Si 251.611†	82345.1	79980.4	2434.5	ug/L	2434.5	ppb	10:14:15
1	Sn 189.927†	3008.2	2936.1	497.31	ug/L	497.31	ppb	10:14:35
1	Sr 421.552†	76890.1	75630.6	510.51	ug/L	510.51	ppb	10:12:53
1	Ti 334.940†	310381.6	304348.1	492.10	ug/L	492.10	ppb	10:14:15
1	Tl 190.801†	1701.0	1699.5	490.26	ug/L	490.26	ppb	10:14:35
1	U 409.014†	15621.5	17231.5	479.85	ug/L	479.85	ppb	10:14:15
1	V 292.402†	71824.9	71501.9	489.27	ug/L	489.27	ppb	10:14:15
1	Zn 213.857†	56177.1	54103.1	482.42	ug/L	482.42	ppb	10:14:15
1	SiO2†	83150.8	80787.1	5264.6	ug/L	5264.6	ppb	10:15:43
2	Sc 361.383	900981.4	900981.4	101.81	%			10:14:41
2	Sc Radial	5822.1	5822.1	103	%			10:13:18
2	Y 371.029	741943.7	741943.7	99.983	%			10:14:41
2	Y RADIAL	6300.2	6300.2	102.3	%			10:13:18
2	Ag 328.068†	110964.8	108765.6	505.87	ug/L	505.87	ppb	10:14:46
2	Al 396.153Radial†	6739.5	6576.0	4839.9	ug/L	4839.9	ppb	10:13:18
2	As 188.979†	1198.2	1206.1	496.45	ug/L	496.45	ppb	10:15:06
2	B 249.677†	22648.0	22769.4	492.34	ug/L	492.34	ppb	10:14:46
2	Ba 233.527†	65913.6	64754.4	493.09	ug/L	493.09	ppb	10:14:46
2	Be 313.107†	1335877.3	1317461.1	490.54	ug/L	490.54	ppb	10:14:41
2	Ca 317.933Radial†	3249.3	3142.9	4806.1	ug/L	4806.1	ppb	10:13:38
2	Cd 226.502†	46173.7	45541.1	493.89	ug/L	493.89	ppb	10:14:46
2	Co 228.616†	25838.6	25451.2	494.20	ug/L	494.20	ppb	10:14:46
2	Cr 267.716†	46509.9	45596.5	492.08	ug/L	492.08	ppb	10:14:46
2	Cu 324.752†	177549.4	167626.0	487.76	ug/L	487.76	ppb	10:14:46
2	Fe 238.204 Radial†	508.6	488.7	4936.8	ug/L	4936.8	ppb	10:13:38
2	K 766.490 Radial†	30180.6	27187.0	4925.5	ug/L	4925.5	ppb	10:13:18
2	Mg 279.077 IEC†	141.6	135.9	5067.8	ug/L	5067.8	ppb	10:13:38
2	Mn 257.610†	460073.3	451495.1	491.05	ug/L	491.05	ppb	10:14:41
2	Mo 202.031†	7819.8	7660.9	499.37	ug/L	499.37	ppb	10:15:06
2	Na 589.592 Radial†	26816.2	26700.7	10036	ug/L	10036	ppb	10:13:18
2	Ni 231.604†	21261.3	20813.4	493.55	ug/L	493.55	ppb	10:14:46

2	P 214.914†	4413.6	4115.2	2371.2 ug/L	2371.2 ppb	10:15:06
2	Pb 220.353†	4213.2	4190.9	491.43 ug/L	491.43 ppb	10:15:06
2	S 181.975 Axial†	726.6	672.2	981.93 ug/L	981.93 ppb	10:15:06
2	Sb 206.836†	1593.6	1535.6	505.86 ug/L	505.86 ppb	10:15:06
2	Se 196.026†	819.3	828.2	511.21 ug/L	511.21 ppb	10:15:06
2	Si 251.611†	83107.3	81122.6	2469.3 ug/L	2469.3 ppb	10:14:46
2	Sn 189.927†	3035.2	2977.0	504.20 ug/L	504.20 ppb	10:15:06
2	Sr 421.552†	77983.9	75853.3	512.01 ug/L	512.01 ppb	10:13:18
2	Ti 334.940†	313586.0	308979.1	499.58 ug/L	499.58 ppb	10:14:46
2	Tl 190.801†	1703.9	1710.5	493.45 ug/L	493.45 ppb	10:15:06
2	U 409.014†	15887.9	17567.8	489.25 ug/L	489.25 ppb	10:14:46
2	V 292.402†	72477.5	72486.2	496.02 ug/L	496.02 ppb	10:14:46
2	Zn 213.857†	56772.8	54956.8	490.06 ug/L	490.06 ppb	10:14:46
2	SiO2†	82463.9	80509.8	5246.1 ug/L	5246.1 ppb	10:15:48
3	Sc 361.383	895885.9	895885.9	101.23 %		10:15:12
3	Sc Radial	5571.4	5571.4	98.4 %		10:13:43
3	Y 371.029	738996.2	738996.2	99.586 %		10:15:12
3	Y RADIAL	6031.2	6031.2	97.93 %		10:13:43
3	Ag 328.068†	110847.1	109269.2	508.31 ug/L	508.31 ppb	10:15:17
3	Al 396.153Radial†	6614.1	6743.7	4963.8 ug/L	4963.8 ppb	10:13:43
3	As 188.979†	1205.7	1220.2	502.29 ug/L	502.29 ppb	10:15:37
3	B 249.677†	22742.3	22989.1	497.06 ug/L	497.06 ppb	10:15:17
3	Ba 233.527†	65729.4	64940.7	494.53 ug/L	494.53 ppb	10:15:17
3	Be 313.107†	1330697.2	1319807.1	491.42 ug/L	491.42 ppb	10:15:12
3	Ca 317.933Radial†	3306.3	3343.2	5112.3 ug/L	5112.3 ppb	10:14:03
3	Cd 226.502†	46027.7	45654.8	495.09 ug/L	495.09 ppb	10:15:17
3	Co 228.616†	25740.0	25498.2	495.10 ug/L	495.10 ppb	10:15:17
3	Cr 267.716†	46474.5	45821.4	494.51 ug/L	494.51 ppb	10:15:17
3	Cu 324.752†	178128.2	169189.6	492.32 ug/L	492.32 ppb	10:15:17
3	Fe 238.204 Radial†	519.4	521.9	5271.2 ug/L	5271.2 ppb	10:14:03
3	K 766.490 Radial†	29664.0	27983.4	5070.0 ug/L	5070.0 ppb	10:13:43
3	Mg 279.077 IEC†	138.9	139.5	5199.4 ug/L	5199.4 ppb	10:14:03
3	Mn 257.610†	457963.5	451981.2	491.61 ug/L	491.61 ppb	10:15:12
3	Mo 202.031†	7783.7	7668.9	499.92 ug/L	499.92 ppb	10:15:37
3	Na 589.592 Radial†	25978.9	27023.8	10157 ug/L	10157 ppb	10:13:43
3	Ni 231.604†	21267.2	20938.0	496.50 ug/L	496.50 ppb	10:15:17
3	P 214.914†	4365.7	4092.6	2356.8 ug/L	2356.8 ppb	10:15:37
3	Pb 220.353†	4186.5	4188.0	491.10 ug/L	491.10 ppb	10:15:37
3	S 181.975 Axial†	726.6	676.3	987.95 ug/L	987.95 ppb	10:15:37
3	Sb 206.836†	1579.5	1530.7	504.14 ug/L	504.14 ppb	10:15:37
3	Se 196.026†	828.6	841.9	520.46 ug/L	520.46 ppb	10:15:37
3	Si 251.611†	83053.4	81533.7	2481.8 ug/L	2481.8 ppb	10:15:17
3	Sn 189.927†	2996.8	2956.0	500.69 ug/L	500.69 ppb	10:15:37
3	Sr 421.552†	76276.7	77532.7	523.34 ug/L	523.34 ppb	10:13:43
3	Ti 334.940†	313907.0	311048.1	502.94 ug/L	502.94 ppb	10:15:17
3	Tl 190.801†	1704.9	1721.0	496.49 ug/L	496.49 ppb	10:15:37
3	U 409.014†	15975.5	17743.0	494.10 ug/L	494.10 ppb	10:15:17
3	V 292.402†	72457.4	72871.2	498.59 ug/L	498.59 ppb	10:15:17
3	Zn 213.857†	56687.5	55189.7	492.10 ug/L	492.10 ppb	10:15:17
3	SiO2†	81855.0	80369.1	5236.8 ug/L	5236.8 ppb	10:15:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900751.4	101.78	%	0.537				0.53%
Sc Radial	5717.0	101	%	2.3				2.28%
Y 371.029	742776.9	100.10	%	0.574				0.57%
Y RADIAL	6173.0	100.2	%	2.19				2.19%
Ag 328.068†	108322.3	503.86	ug/L	5.716	503.86	ppb	5.716	1.13%
QC value within limits for Ag 328.068 Recovery = 100.77%								
Al 396.153Radial†	6629.6	4879.6	ug/L	72.99	4879.6	ppb	72.99	1.50%
QC value within limits for Al 396.153Radial Recovery = 97.59%								
As 188.979†	1205.3	496.13	ug/L	6.327	496.13	ppb	6.327	1.28%
QC value within limits for As 188.979 Recovery = 99.23%								
B 249.677†	22703.7	490.90	ug/L	6.994	490.90	ppb	6.994	1.42%
QC value within limits for B 249.677 Recovery = 98.18%								
Ba 233.527†	64476.5	490.98	ug/L	4.945	490.98	ppb	4.945	1.01%
QC value within limits for Ba 233.527 Recovery = 98.20%								
Be 313.107†	1313474.5	489.06	ug/L	3.360	489.06	ppb	3.360	0.69%
QC value within limits for Be 313.107 Recovery = 97.81%								

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Ca 317.933Radial†       3231.0      4940.7 ug/L        156.41      4940.7 ppb         156.41   3.17%
   QC value within limits for Ca 317.933Radial  Recovery = 98.81%
Cd 226.502†            45391.1      492.25 ug/L         3.934      492.25 ppb          3.934   0.80%
   QC value within limits for Cd 226.502  Recovery = 98.45%
Co 228.616†            25316.4      491.58 ug/L         5.339      491.58 ppb          5.339   1.09%
   QC value within limits for Co 228.616  Recovery = 98.32%
Cr 267.716†            45446.8      490.46 ug/L         5.048      490.46 ppb          5.048   1.03%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†           167227.4      486.61 ug/L         6.370      486.61 ppb          6.370   1.31%
   QC value within limits for Cu 324.752  Recovery = 97.32%
Fe 238.204 Radial†       504.1      5091.0 ug/L        168.71      5091.0 ppb        168.71   3.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.82%
K 766.490 Radial†      27498.0      4982.0 ug/L         77.25      4982.0 ppb         77.25   1.55%
   QC value within limits for K 766.490 Radial  Recovery = 99.64%
Mg 279.077 IEC†          138.0      5143.2 ug/L         67.85      5143.2 ppb         67.85   1.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.86%
Mn 257.610†           449562.8      488.96 ug/L         4.107      488.96 ppb          4.107   0.84%
   QC value within limits for Mn 257.610  Recovery = 97.79%
Mo 202.031†             7633.3      497.59 ug/L         3.578      497.59 ppb          3.578   0.72%
   QC value within limits for Mo 202.031  Recovery = 99.52%
Na 589.592 Radial†     26800.1       10073 ug/L          73.0       10073 ppb           73.0   0.72%
   QC value within limits for Na 589.592 Radial  Recovery = 100.73%
Ni 231.604†            20770.4      492.53 ug/L         4.569      492.53 ppb          4.569   0.93%
   QC value within limits for Ni 231.604  Recovery = 98.51%
P 214.914†              4085.5      2353.6 ug/L         19.38      2353.6 ppb         19.38   0.82%
   QC value within limits for P 214.914  Recovery = 94.14%
Pb 220.353†             4184.3      490.65 ug/L         1.076      490.65 ppb          1.076   0.22%
   QC value within limits for Pb 220.353  Recovery = 98.13%
S 181.975 Axial†         675.0      986.11 ug/L         3.629      986.11 ppb          3.629   0.37%
   QC value within limits for S 181.975 Axial  Recovery = 98.61%
Sb 206.836†             1525.0      502.37 ug/L         4.643      502.37 ppb          4.643   0.92%
   QC value within limits for Sb 206.836  Recovery = 100.47%
Se 196.026†              830.4      513.02 ug/L         6.716      513.02 ppb          6.716   1.31%
   QC value within limits for Se 196.026  Recovery = 102.60%
Si 251.611†            80878.9      2461.9 ug/L         24.53      2461.9 ppb         24.53   1.00%
   QC value within limits for Si 251.611  Recovery = 98.47%
Sn 189.927†             2956.4      500.73 ug/L         3.450      500.73 ppb          3.450   0.69%
   QC value within limits for Sn 189.927  Recovery = 100.15%
Sr 421.552†            76338.9      515.29 ug/L         7.018      515.29 ppb          7.018   1.36%
   QC value within limits for Sr 421.552  Recovery = 103.06%
Ti 334.940†           308125.1      498.21 ug/L         5.548      498.21 ppb          5.548   1.11%
   QC value within limits for Ti 334.940  Recovery = 99.64%
Tl 190.801†             1710.4      493.40 ug/L         3.111      493.40 ppb          3.111   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.68%
U 409.014†             17514.1      487.74 ug/L         7.244      487.74 ppb          7.244   1.49%
   QC value within limits for U 409.014  Recovery = 97.55%
V 292.402†             72286.4      494.63 ug/L         4.813      494.63 ppb          4.813   0.97%
   QC value within limits for V 292.402  Recovery = 98.93%
Zn 213.857†            54749.9      488.19 ug/L         5.105      488.19 ppb          5.105   1.05%
   QC value within limits for Zn 213.857  Recovery = 97.64%
SiO2†                  80555.3      5249.2 ug/L         14.11      5249.2 ppb         14.11   0.27%
   QC value within limits for SiO2  Recovery = 98.16%
All analyte(s) passed QC.
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Sequence No.: 20
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 10:18:03
Data Type: Reprocessed on 12/9/2009 10:32:36

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	934147.0	934147.0	105.56	%			10:21:12
1	Sc Radial	5920.6	5920.6	105	%			10:19:56
1	Y 371.029	791293.4	791293.4	106.63	%			10:21:12
1	Y RADIAL	6437.5	6437.5	104.5	%			10:19:56
1	Ag 328.068†	421.0	171.3	0.7872	ug/L	0.7872	ppb	10:21:12
1	Al 396.153Radial†	-8.6	12.1	8.9030	ug/L	8.9030	ppb	10:19:56
1	As 188.979†	-17.8	12.3	5.0171	ug/L	5.0171	ppb	10:21:32
1	B 249.677†	-62.1	465.0	10.096	ug/L	10.096	ppb	10:21:32
1	Ba 233.527†	-5.4	6.9	0.0531	ug/L	0.0531	ppb	10:21:32
1	Be 313.107†	-5196.0	397.8	0.1478	ug/L	0.1478	ppb	10:21:12
1	Ca 317.933Radial†	19.8	1.3	1.9325	ug/L	1.9325	ppb	10:20:16
1	Cd 226.502†	-166.7	29.9	0.3269	ug/L	0.3269	ppb	10:21:32
1	Co 228.616†	-65.1	10.1	0.1971	ug/L	0.1971	ppb	10:21:32
1	Cr 267.716†	85.1	-6.3	-0.0676	ug/L	-0.0676	ppb	10:21:32
1	Cu 324.752†	6827.0	-301.0	-0.8766	ug/L	-0.8766	ppb	10:21:12
1	Fe 238.204 Radial†	4.2	-2.0	-20.618	ug/L	-20.618	ppb	10:20:16
1	K 766.490 Radial†	2447.9	171.3	31.087	ug/L	31.087	ppb	10:19:56
1	Mg 279.077 IEC†	-1.1	-2.8	-104.47	ug/L	-104.47	ppb	10:20:16
1	Mn 257.610†	388.9	-35.0	-0.0381	ug/L	-0.0381	ppb	10:21:32
1	Mo 202.031†	31.0	9.4	0.6115	ug/L	0.6115	ppb	10:21:32
1	Na 589.592 Radial†	-619.7	23.1	8.6971	ug/L	8.6971	ppb	10:19:56
1	Ni 231.604†	83.9	9.4	0.2220	ug/L	0.2220	ppb	10:21:32
1	P 214.914†	213.0	-18.2	-10.626	ug/L	-10.626	ppb	10:21:32
1	Pb 220.353†	-56.2	-0.7	-0.0787	ug/L	-0.0787	ppb	10:21:32
1	S 181.975 Axial†	46.1	2.2	3.2409	ug/L	3.2409	ppb	10:21:32
1	Sb 206.836†	41.5	9.7	3.1886	ug/L	3.1886	ppb	10:21:32
1	Se 196.026†	-23.4	1.3	0.7164	ug/L	0.7164	ppb	10:21:32
1	Si 251.611†	504.9	-29.7	-0.9326	ug/L	-0.9326	ppb	10:21:32
1	Sn 189.927†	10.0	5.2	0.8852	ug/L	0.8852	ppb	10:21:32
1	Sr 421.552†	21.4	17.0	0.1150	ug/L	0.1150	ppb	10:19:56
1	Ti 334.940†	-1027.4	-8.3	-0.0135	ug/L	-0.0135	ppb	10:21:12
1	Tl 190.801†	-30.7	7.7	2.2179	ug/L	2.2179	ppb	10:21:32
1	U 409.014†	-2052.9	17.4	0.4878	ug/L	0.4878	ppb	10:21:12
1	V 292.402†	-1278.4	85.4	0.5869	ug/L	0.5869	ppb	10:21:12
1	Zn 213.857†	652.4	-189.2	-1.6973	ug/L	-1.6973	ppb	10:21:32
1	SiO2†	464.4	-48.9	-3.2545	ug/L	-3.2545	ppb	10:22:28
2	Sc 361.383	894600.3	894600.3	101.09	%			10:21:38
2	Sc Radial	6090.2	6090.2	108	%			10:20:21
2	Y 371.029	750601.0	750601.0	101.15	%			10:21:38
2	Y RADIAL	6649.1	6649.1	108.0	%			10:20:21
2	Ag 328.068†	333.6	102.4	0.4806	ug/L	0.4806	ppb	10:21:38
2	Al 396.153Radial†	-47.4	-23.7	-17.563	ug/L	-17.563	ppb	10:20:21
2	As 188.979†	-16.3	13.1	5.3524	ug/L	5.3524	ppb	10:21:58
2	B 249.677†	-87.8	437.0	9.4827	ug/L	9.4827	ppb	10:21:58
2	Ba 233.527†	-13.3	-1.1	-0.0074	ug/L	-0.0074	ppb	10:21:58
2	Be 313.107†	-5298.5	78.7	0.0291	ug/L	0.0291	ppb	10:21:38
2	Ca 317.933Radial†	18.5	-0.4	-0.6880	ug/L	-0.6880	ppb	10:20:41
2	Cd 226.502†	-174.3	15.4	0.1653	ug/L	0.1653	ppb	10:21:58
2	Co 228.616†	-58.6	13.7	0.2674	ug/L	0.2674	ppb	10:21:58
2	Cr 267.716†	84.0	-3.9	-0.0414	ug/L	-0.0414	ppb	10:21:58
2	Cu 324.752†	6911.1	68.0	0.1989	ug/L	0.1989	ppb	10:21:38
2	Fe 238.204 Radial†	8.6	2.0	19.673	ug/L	19.673	ppb	10:20:41
2	K 766.490 Radial†	2359.2	23.5	4.2593	ug/L	4.2593	ppb	10:20:21
2	Mg 279.077 IEC†	3.8	1.8	66.983	ug/L	66.983	ppb	10:20:41
2	Mn 257.610†	408.3	0.5	0.0012	ug/L	0.0012	ppb	10:21:58
2	Mo 202.031†	24.5	4.2	0.2770	ug/L	0.2770	ppb	10:21:58
2	Na 589.592 Radial†	-583.6	73.3	27.543	ug/L	27.543	ppb	10:20:21
2	Ni 231.604†	83.0	12.0	0.2853	ug/L	0.2853	ppb	10:21:58

2	P 214.914†	215.2	-7.1	-4.2613 ug/L	-4.2613 ppb	10:21:58
2	Pb 220.353†	-50.5	2.6	0.2953 ug/L	0.2953 ppb	10:21:58
2	S 181.975 Axial†	42.4	0.5	0.6666 ug/L	0.6666 ppb	10:21:58
2	Sb 206.836†	35.2	5.2	1.7253 ug/L	1.7253 ppb	10:21:58
2	Se 196.026†	-25.1	-1.4	-0.7648 ug/L	-0.7648 ppb	10:21:58
2	Si 251.611†	492.4	-20.9	-0.6482 ug/L	-0.6482 ppb	10:21:58
2	Sn 189.927†	10.9	6.5	1.0992 ug/L	1.0992 ppb	10:21:58
2	Sr 421.552†	-9.5	-12.2	-0.0824 ug/L	-0.0824 ppb	10:20:21
2	Ti 334.940†	-1021.5	-45.5	-0.0733 ug/L	-0.0733 ppb	10:21:38
2	Tl 190.801†	-35.6	1.6	0.4669 ug/L	0.4669 ppb	10:21:58
2	U 409.014†	-2010.7	-26.9	-0.7549 ug/L	-0.7549 ppb	10:21:38
2	V 292.402†	-1301.0	9.4	0.0649 ug/L	0.0649 ppb	10:21:38
2	Zn 213.857†	657.5	-156.8	-1.4170 ug/L	-1.4170 ppb	10:21:58
2	SiO2†	509.5	15.2	0.9772 ug/L	0.9772 ppb	10:22:33
3	Sc 361.383	892413.2	892413.2	100.84 %		10:22:03
3	Sc Radial	5597.0	5597.0	98.8 %		10:20:46
3	Y 371.029	750328.3	750328.3	101.11 %		10:22:03
3	Y RADIAL	6124.2	6124.2	99.44 %		10:20:46
3	Ag 328.068†	288.2	58.2	0.2707 ug/L	0.2707 ppb	10:22:03
3	Al 396.153Radial†	1.0	21.4	15.808 ug/L	15.808 ppb	10:20:46
3	As 188.979†	-21.2	8.2	3.3419 ug/L	3.3419 ppb	10:22:23
3	B 249.677†	-79.0	445.5	9.6700 ug/L	9.6700 ppb	10:22:23
3	Ba 233.527†	-12.8	-0.7	-0.0043 ug/L	-0.0043 ppb	10:22:23
3	Be 313.107†	-5201.9	161.7	0.0598 ug/L	0.0598 ppb	10:22:03
3	Ca 317.933Radial†	21.8	4.3	6.6107 ug/L	6.6107 ppb	10:21:06
3	Cd 226.502†	-177.8	11.5	0.1246 ug/L	0.1246 ppb	10:22:23
3	Co 228.616†	-67.9	4.5	0.0856 ug/L	0.0856 ppb	10:22:23
3	Cr 267.716†	69.6	-18.0	-0.1935 ug/L	-0.1935 ppb	10:22:23
3	Cu 324.752†	6854.4	28.6	0.0835 ug/L	0.0835 ppb	10:22:03
3	Fe 238.204 Radial†	6.6	0.7	6.6005 ug/L	6.6005 ppb	10:21:06
3	K 766.490 Radial†	2350.0	207.5	37.659 ug/L	37.659 ppb	10:20:46
3	Mg 279.077 IEC†	-1.0	-2.7	-102.07 ug/L	-102.07 ppb	10:21:06
3	Mn 257.610†	408.3	1.5	0.0041 ug/L	0.0041 ppb	10:22:23
3	Mo 202.031†	13.7	-6.4	-0.4166 ug/L	-0.4166 ppb	10:22:23
3	Na 589.592 Radial†	-598.7	10.2	3.8362 ug/L	3.8362 ppb	10:20:46
3	Ni 231.604†	93.0	22.1	0.5247 ug/L	0.5247 ppb	10:22:23
3	P 214.914†	207.3	-14.4	-8.5749 ug/L	-8.5749 ppb	10:22:23
3	Pb 220.353†	-47.1	5.8	0.6838 ug/L	0.6838 ppb	10:22:23
3	S 181.975 Axial†	38.3	-3.4	-5.0466 ug/L	-5.0466 ppb	10:22:23
3	Sb 206.836†	42.2	12.3	3.9740 ug/L	3.9740 ppb	10:22:23
3	Se 196.026†	-24.1	-0.4	-0.2276 ug/L	-0.2276 ppb	10:22:23
3	Si 251.611†	467.2	-44.7	-1.3716 ug/L	-1.3716 ppb	10:22:23
3	Sn 189.927†	4.2	-0.1	-0.0099 ug/L	-0.0099 ppb	10:22:23
3	Sr 421.552†	-24.6	-28.3	-0.1913 ug/L	-0.1913 ppb	10:20:46
3	Ti 334.940†	-1068.3	-94.4	-0.1530 ug/L	-0.1530 ppb	10:22:03
3	Tl 190.801†	-26.5	10.6	3.0234 ug/L	3.0234 ppb	10:22:23
3	U 409.014†	-1921.0	57.2	1.5988 ug/L	1.5988 ppb	10:22:03
3	V 292.402†	-1275.4	31.7	0.2082 ug/L	0.2082 ppb	10:22:03
3	Zn 213.857†	648.0	-164.7	-1.4826 ug/L	-1.4826 ppb	10:22:23
3	SiO2†	463.4	-29.3	-1.9307 ug/L	-1.9307 ppb	10:22:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907053.5	102.50	%	2.654				2.59%
Sc Radial	5869.3	104	%	4.4				4.27%
Y 371.029	764074.2	102.96	%	3.177				3.09%
Y RADIAL	6403.6	104.0	%	4.29				4.12%
Ag 328.068†	110.6	0.5128	ug/L	0.25976	0.5128	ppb	0.25976	50.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.2	2.3827	ug/L	17.61549	2.3827	ppb	17.61549	739.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	11.2	4.5705	ug/L	1.07713	4.5705	ppb	1.07713	23.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	449.2	9.7496	ug/L	0.31434	9.7496	ppb	0.31434	3.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0138	ug/L	0.03406	0.0138	ppb	0.03406	246.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	212.7	0.0789	ug/L	0.06160	0.0789	ppb	0.06160	78.08%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.7      2.6184 ug/L       3.69740      2.6184 ppb        3.69740 141.21%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               18.9      0.2056 ug/L       0.10702      0.2056 ppb        0.10702  52.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                9.4      0.1834 ug/L       0.09167      0.1834 ppb        0.09167  50.00%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -9.4     -0.1008 ug/L       0.08132     -0.1008 ppb        0.08132  80.64%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -68.1     -0.1981 ug/L       0.59043     -0.1981 ppb        0.59043 298.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.2      1.8854 ug/L      20.55520      1.8854 ppb       20.55520 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        134.1      24.335 ug/L       17.6941      24.335 ppb        17.6941  72.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.2     -46.518 ug/L       98.3017     -46.518 ppb        98.3017 211.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -11.0     -0.0109 ug/L       0.02361     -0.0109 ppb        0.02361 216.20%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.4      0.1573 ug/L       0.52444      0.1573 ppb        0.52444 333.37%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        35.5      13.359 ug/L       12.5220      13.359 ppb        12.5220  93.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.5      0.3440 ug/L       0.15968      0.3440 ppb        0.15968  46.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -13.2     -7.8207 ug/L       3.24871     -7.8207 ppb        3.24871  41.54%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                2.6      0.3001 ug/L       0.38126      0.3001 ppb        0.38126 127.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.3     -0.3797 ug/L       4.24167     -0.3797 ppb        4.24167 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.1      2.9626 ug/L       1.14121      2.9626 ppb        1.14121  38.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.2     -0.0920 ug/L       0.74986     -0.0920 ppb        0.74986 815.09%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.8     -0.9841 ug/L       0.36446     -0.9841 ppb        0.36446  37.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                3.9      0.6582 ug/L       0.58840      0.6582 ppb        0.58840  89.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -7.8     -0.0529 ug/L       0.15525     -0.0529 ppb        0.15525 293.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -49.4     -0.0799 ug/L       0.06999     -0.0799 ppb        0.06999  87.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.6      1.9027 ug/L       1.30704      1.9027 ppb        1.30704  68.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                15.9      0.4439 ug/L       1.17743      0.4439 ppb        1.17743 265.26%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                42.2      0.2866 ug/L       0.26970      0.2866 ppb        0.26970  94.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -170.2     -1.5323 ug/L       0.14659     -1.5323 ppb        0.14659   9.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -21.0     -1.4027 ug/L       2.16473     -1.4027 ppb        2.16473 154.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 11:31:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5695.9	5695.9	101	%			11:33:47
1	Y RADIAL	6145.4	6145.4	99.78	%			11:33:47
1	Al 396.153Radial†	6664.7	6647.0	4892.3	ug/L	4892.3	ppb	11:33:47
1	Ca 317.933Radial†	3296.2	3259.7	4984.6	ug/L	4984.6	ppb	11:34:07
1	Fe 238.204 Radial†	517.4	508.5	5135.3	ug/L	5135.3	ppb	11:34:07
1	K 766.490 Radial†	29981.1	27639.5	5007.4	ug/L	5007.4	ppb	11:33:47
1	Mg 279.077 IEC†	142.9	140.3	5232.1	ug/L	5232.1	ppb	11:34:07
1	Na 589.592 Radial†	27169.3	27630.0	10385	ug/L	10385	ppb	11:33:47
1	Sr 421.552†	78007.2	77558.1	523.52	ug/L	523.52	ppb	11:33:47
1	Sc 361.383	893907.0	893907.0	101.01	%			11:35:04
1	Y 371.029	737277.9	737277.9	99.354	%			11:35:04
1	Ag 328.068†	109313.6	107993.4	502.35	ug/L	502.35	ppb	11:35:10
1	As 188.979†	1185.7	1203.1	495.24	ug/L	495.24	ppb	11:35:30
1	B 249.677†	22124.3	22427.0	484.89	ug/L	484.89	ppb	11:35:10
1	Ba 233.527†	65087.3	64448.8	490.77	ug/L	490.77	ppb	11:35:10
1	Be 313.107†	1332185.1	1324190.2	493.04	ug/L	493.04	ppb	11:35:04
1	Cd 226.502†	45574.4	45306.8	491.33	ug/L	491.33	ppb	11:35:10
1	Co 228.616†	25514.4	25331.1	491.87	ug/L	491.87	ppb	11:35:10
1	Cr 267.716†	45842.2	45297.0	488.85	ug/L	488.85	ppb	11:35:10
1	Cu 324.752†	175181.1	166661.5	484.96	ug/L	484.96	ppb	11:35:10
1	Mn 257.610†	459814.9	454815.6	494.68	ug/L	494.68	ppb	11:35:04
1	Mo 202.031†	7793.8	7695.9	501.67	ug/L	501.67	ppb	11:35:30
1	Ni 231.604†	20991.5	20711.6	491.13	ug/L	491.13	ppb	11:35:10
1	P 214.914†	4398.9	4135.0	2383.3	ug/L	2383.3	ppb	11:35:30
1	Pb 220.353†	4205.1	4215.6	494.32	ug/L	494.32	ppb	11:35:30
1	S 181.975 Axial†	728.6	679.8	993.12	ug/L	993.12	ppb	11:35:30
1	Sb 206.836†	1588.8	1543.3	508.51	ug/L	508.51	ppb	11:35:30
1	Se 196.026†	807.9	823.3	508.92	ug/L	508.92	ppb	11:35:30
1	Si 251.611†	82498.0	81165.4	2470.5	ug/L	2470.5	ppb	11:35:10
1	Sn 189.927†	3017.5	2983.1	505.26	ug/L	505.26	ppb	11:35:30
1	Ti 334.940†	310092.3	307958.0	497.94	ug/L	497.94	ppb	11:35:10
1	Tl 190.801†	1708.2	1728.0	498.49	ug/L	498.49	ppb	11:35:30
1	U 409.014†	15720.7	17525.7	488.06	ug/L	488.06	ppb	11:35:10
1	V 292.402†	71444.1	72026.5	492.93	ug/L	492.93	ppb	11:35:10
1	Zn 213.857†	55861.9	54496.3	485.92	ug/L	485.92	ppb	11:35:10
1	SiO2†	83421.9	82099.3	5350.1	ug/L	5350.1	ppb	11:36:37
2	Sc Radial	5645.1	5645.1	99.7	%			11:34:12
2	Y RADIAL	6072.6	6072.6	98.60	%			11:34:12
2	Al 396.153Radial†	6603.0	6644.6	4890.5	ug/L	4890.5	ppb	11:34:12
2	Ca 317.933Radial†	3295.4	3288.3	5028.4	ug/L	5028.4	ppb	11:34:32
2	Fe 238.204 Radial†	521.6	517.2	5223.6	ug/L	5223.6	ppb	11:34:32
2	K 766.490 Radial†	29684.4	27609.9	5002.1	ug/L	5002.1	ppb	11:34:12
2	Mg 279.077 IEC†	140.2	138.9	5178.6	ug/L	5178.6	ppb	11:34:32
2	Na 589.592 Radial†	26740.4	27442.7	10315	ug/L	10315	ppb	11:34:12
2	Sr 421.552†	76785.3	77029.7	519.95	ug/L	519.95	ppb	11:34:12
2	Sc 361.383	893485.7	893485.7	100.96	%			11:35:35
2	Y 371.029	737607.6	737607.6	99.398	%			11:35:35
2	Ag 328.068†	109180.3	107912.5	502.01	ug/L	502.01	ppb	11:35:41
2	As 188.979†	1189.4	1207.3	496.96	ug/L	496.96	ppb	11:36:01
2	B 249.677†	22102.6	22415.9	484.63	ug/L	484.63	ppb	11:35:41
2	Ba 233.527†	65107.2	64498.9	491.16	ug/L	491.16	ppb	11:35:41
2	Be 313.107†	1333991.5	1326601.3	493.94	ug/L	493.94	ppb	11:35:35
2	Cd 226.502†	45642.6	45395.5	492.28	ug/L	492.28	ppb	11:35:41
2	Co 228.616†	25494.7	25323.5	491.72	ug/L	491.72	ppb	11:35:41
2	Cr 267.716†	45905.3	45380.9	489.75	ug/L	489.75	ppb	11:35:41
2	Cu 324.752†	175196.0	166758.1	485.25	ug/L	485.25	ppb	11:35:41
2	Mn 257.610†	459798.5	455014.1	494.90	ug/L	494.90	ppb	11:35:35
2	Mo 202.031†	7791.3	7697.0	501.75	ug/L	501.75	ppb	11:36:01
2	Ni 231.604†	21003.8	20733.6	491.66	ug/L	491.66	ppb	11:35:41

2	P 214.914†	4392.7	4130.9	2380.7 ug/L	2380.7 ppb	11:36:01
2	Pb 220.353†	4184.1	4196.7	492.11 ug/L	492.11 ppb	11:36:01
2	S 181.975 Axial†	740.8	692.3	1011.3 ug/L	1011.3 ppb	11:36:01
2	Sb 206.836†	1594.0	1549.2	510.40 ug/L	510.40 ppb	11:36:01
2	Se 196.026†	813.9	829.6	512.94 ug/L	512.94 ppb	11:36:01
2	Si 251.611†	82303.5	81011.3	2465.8 ug/L	2465.8 ppb	11:35:41
2	Sn 189.927†	3019.2	2986.2	505.79 ug/L	505.79 ppb	11:36:01
2	Ti 334.940†	310607.0	308612.5	499.00 ug/L	499.00 ppb	11:35:41
2	Tl 190.801†	1693.6	1714.3	494.57 ug/L	494.57 ppb	11:36:01
2	U 409.014†	15612.2	17425.6	485.25 ug/L	485.25 ppb	11:35:41
2	V 292.402†	71468.0	72083.5	493.29 ug/L	493.29 ppb	11:35:41
2	Zn 213.857†	55862.1	54522.6	486.14 ug/L	486.14 ppb	11:35:41
2	SiO2†	82826.4	81548.4	5314.0 ug/L	5314.0 ppb	11:36:42
3	Sc Radial	5667.4	5667.4	100 %		11:34:37
3	Y RADIAL	6109.4	6109.4	99.20 %		11:34:37
3	Al 396.153Radial†	6607.2	6622.8	4874.4 ug/L	4874.4 ppb	11:34:37
3	Ca 317.933Radial†	3285.2	3265.1	4992.9 ug/L	4992.9 ppb	11:34:57
3	Fe 238.204 Radial†	516.6	510.2	5152.9 ug/L	5152.9 ppb	11:34:57
3	K 766.490 Radial†	29831.2	27639.7	5007.5 ug/L	5007.5 ppb	11:34:37
3	Mg 279.077 IEC†	138.7	136.8	5100.4 ug/L	5100.4 ppb	11:34:57
3	Na 589.592 Radial†	26893.4	27490.2	10333 ug/L	10333 ppb	11:34:37
3	Sr 421.552†	77277.3	77218.9	521.23 ug/L	521.23 ppb	11:34:37
3	Sc 361.383	895133.7	895133.7	101.15 %		11:36:06
3	Y 371.029	737987.3	737987.3	99.450 %		11:36:06
3	Ag 328.068†	110156.4	108678.4	505.53 ug/L	505.53 ppb	11:36:12
3	As 188.979†	1177.3	1193.1	491.21 ug/L	491.21 ppb	11:36:32
3	B 249.677†	22347.7	22617.9	489.02 ug/L	489.02 ppb	11:36:12
3	Ba 233.527†	65636.8	64903.7	494.23 ug/L	494.23 ppb	11:36:12
3	Be 313.107†	1334695.5	1324864.6	493.30 ug/L	493.30 ppb	11:36:06
3	Cd 226.502†	46026.0	45691.3	495.50 ug/L	495.50 ppb	11:36:12
3	Co 228.616†	25720.3	25500.1	495.15 ug/L	495.15 ppb	11:36:12
3	Cr 267.716†	46265.4	45653.2	492.69 ug/L	492.69 ppb	11:36:12
3	Cu 324.752†	176742.0	167967.0	488.76 ug/L	488.76 ppb	11:36:12
3	Mn 257.610†	461685.7	456041.4	496.01 ug/L	496.01 ppb	11:36:06
3	Mo 202.031†	7810.7	7702.1	502.07 ug/L	502.07 ppb	11:36:32
3	Ni 231.604†	21167.1	20856.7	494.58 ug/L	494.58 ppb	11:36:12
3	P 214.914†	4397.3	4127.4	2378.2 ug/L	2378.2 ppb	11:36:32
3	Pb 220.353†	4207.8	4212.6	493.97 ug/L	493.97 ppb	11:36:32
3	S 181.975 Axial†	736.8	687.0	1003.5 ug/L	1003.5 ppb	11:36:32
3	Sb 206.836†	1600.3	1552.5	511.39 ug/L	511.39 ppb	11:36:32
3	Se 196.026†	818.2	832.3	514.38 ug/L	514.38 ppb	11:36:32
3	Si 251.611†	83154.0	81702.0	2486.9 ug/L	2486.9 ppb	11:36:12
3	Sn 189.927†	3016.1	2977.6	504.33 ug/L	504.33 ppb	11:36:32
3	Ti 334.940†	312886.1	310299.3	501.73 ug/L	501.73 ppb	11:36:12
3	Tl 190.801†	1695.7	1713.3	494.30 ug/L	494.30 ppb	11:36:32
3	U 409.014†	15822.6	17605.2	490.27 ug/L	490.27 ppb	11:36:12
3	V 292.402†	71977.8	72457.2	495.83 ug/L	495.83 ppb	11:36:12
3	Zn 213.857†	56342.7	54895.9	489.49 ug/L	489.49 ppb	11:36:12
3	SiO2†	82994.6	81563.7	5315.0 ug/L	5315.0 ppb	11:36:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	894175.5	101.04	%	0.097				0.10%
Sc Radial	5669.5	100	%	0.4				0.45%
Y 371.029	737624.3	99.401	%	0.0478				0.05%
Y RADIAL	6109.1	99.19	%	0.591				0.60%
Ag 328.068†	108194.8	503.29	ug/L	1.944	503.29	ppb	1.944	0.39%
QC value within limits for Ag 328.068 Recovery = 100.66%								
Al 396.153Radial†	6638.1	4885.7	ug/L	9.84	4885.7	ppb	9.84	0.20%
QC value within limits for Al 396.153Radial Recovery = 97.71%								
As 188.979†	1201.2	494.47	ug/L	2.952	494.47	ppb	2.952	0.60%
QC value within limits for As 188.979 Recovery = 98.89%								
B 249.677†	22486.9	486.18	ug/L	2.462	486.18	ppb	2.462	0.51%
QC value within limits for B 249.677 Recovery = 97.24%								
Ba 233.527†	64617.1	492.05	ug/L	1.898	492.05	ppb	1.898	0.39%
QC value within limits for Ba 233.527 Recovery = 98.41%								
Be 313.107†	1325218.7	493.42	ug/L	0.462	493.42	ppb	0.462	0.09%
QC value within limits for Be 313.107 Recovery = 98.68%								
Ca 317.933Radial†	3271.0	5002.0	ug/L	23.23	5002.0	ppb	23.23	0.46%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.04%
Cd 226.502†            45464.5      493.04 ug/L         2.186      493.04 ppb          2.186   0.44%
   QC value within limits for Cd 226.502  Recovery = 98.61%
Co 228.616†            25384.9      492.91 ug/L         1.935      492.91 ppb          1.935   0.39%
   QC value within limits for Co 228.616  Recovery = 98.58%
Cr 267.716†            45443.7      490.43 ug/L         2.009      490.43 ppb          2.009   0.41%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†           167128.9      486.32 ug/L         2.115      486.32 ppb          2.115   0.43%
   QC value within limits for Cu 324.752  Recovery = 97.26%
Fe 238.204 Radial†       512.0      5170.6 ug/L        46.73      5170.6 ppb         46.73   0.90%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.41%
K 766.490 Radial†      27629.7      5005.7 ug/L         3.09      5005.7 ppb          3.09   0.06%
   QC value within limits for K 766.490 Radial  Recovery = 100.11%
Mg 279.077 IEC†          138.7      5170.4 ug/L        66.21      5170.4 ppb         66.21   1.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.41%
Mn 257.610†           455290.4      495.20 ug/L         0.715      495.20 ppb          0.715   0.14%
   QC value within limits for Mn 257.610  Recovery = 99.04%
Mo 202.031†             7698.3      501.83 ug/L         0.214      501.83 ppb          0.214   0.04%
   QC value within limits for Mo 202.031  Recovery = 100.37%
Na 589.592 Radial†     27521.0       10344 ug/L         36.6       10344 ppb         36.6   0.35%
   QC value within limits for Na 589.592 Radial  Recovery = 103.44%
Ni 231.604†            20767.3      492.46 ug/L         1.855      492.46 ppb          1.855   0.38%
   QC value within limits for Ni 231.604  Recovery = 98.49%
P 214.914†              4131.1      2380.7 ug/L         2.58      2380.7 ppb          2.58   0.11%
   QC value within limits for P 214.914  Recovery = 95.23%
Pb 220.353†             4208.3      493.47 ug/L         1.186      493.47 ppb          1.186   0.24%
   QC value within limits for Pb 220.353  Recovery = 98.69%
S 181.975 Axial†         686.4      1002.7 ug/L         9.13      1002.7 ppb          9.13   0.91%
   QC value within limits for S 181.975 Axial  Recovery = 100.27%
Sb 206.836†             1548.4      510.10 ug/L         1.464      510.10 ppb          1.464   0.29%
   QC value within limits for Sb 206.836  Recovery = 102.02%
Se 196.026†              828.4      512.08 ug/L         2.832      512.08 ppb          2.832   0.55%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†            81292.9      2474.4 ug/L        11.09      2474.4 ppb         11.09   0.45%
   QC value within limits for Si 251.611  Recovery = 98.98%
Sn 189.927†             2982.3      505.13 ug/L         0.735      505.13 ppb          0.735   0.15%
   QC value within limits for Sn 189.927  Recovery = 101.03%
Sr 421.552†            77268.9      521.56 ug/L         1.807      521.56 ppb          1.807   0.35%
   QC value within limits for Sr 421.552  Recovery = 104.31%
Ti 334.940†           308956.6      499.56 ug/L         1.952      499.56 ppb          1.952   0.39%
   QC value within limits for Ti 334.940  Recovery = 99.91%
Tl 190.801†             1718.5      495.78 ug/L         2.343      495.78 ppb          2.343   0.47%
   QC value within limits for Tl 190.801  Recovery = 99.16%
U 409.014†             17518.8      487.86 ug/L         2.516      487.86 ppb          2.516   0.52%
   QC value within limits for U 409.014  Recovery = 97.57%
V 292.402†             72189.1      494.02 ug/L         1.583      494.02 ppb          1.583   0.32%
   QC value within limits for V 292.402  Recovery = 98.80%
Zn 213.857†            54638.2      487.18 ug/L         2.000      487.18 ppb          2.000   0.41%
   QC value within limits for Zn 213.857  Recovery = 97.44%
SiO2†                  81737.1      5326.4 ug/L        20.55      5326.4 ppb         20.55   0.39%
   QC value within limits for SiO2  Recovery = 99.60%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 11:38:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4980.8	4980.8	87.9	%			11:40:50
1	Y RADIAL	5415.5	5415.5	87.93	%			11:40:50
1	Al 396.153Radial†	-23.7	-6.6	-4.8811	ug/L	-4.8811	ppb	11:41:10
1	Ca 317.933Radial†	18.4	3.3	4.9714	ug/L	4.9714	ppb	11:41:10
1	Fe 238.204 Radial†	6.9	1.8	17.809	ug/L	17.809	ppb	11:41:10
1	K 766.490 Radial†	2271.9	412.9	74.951	ug/L	74.951	ppb	11:40:50
1	Mg 279.077 IEC†	1.9	0.4	13.110	ug/L	13.110	ppb	11:41:10
1	Na 589.592 Radial†	-586.9	-51.4	-19.304	ug/L	-19.304	ppb	11:40:50
1	Sr 421.552†	19.5	18.7	0.1262	ug/L	0.1262	ppb	11:40:50
1	Sc 361.383	892845.1	892845.1	100.89	%			11:42:06
1	Y 371.029	748327.2	748327.2	100.84	%			11:42:06
1	Ag 328.068†	313.4	83.0	0.4006	ug/L	0.4006	ppb	11:42:12
1	As 188.979†	-22.7	6.7	2.7447	ug/L	2.7447	ppb	11:42:32
1	B 249.677†	-228.5	297.4	6.4531	ug/L	6.4531	ppb	11:42:32
1	Ba 233.527†	-30.6	-18.3	-0.1377	ug/L	-0.1377	ppb	11:42:32
1	Be 313.107†	-5299.6	67.3	0.0251	ug/L	0.0251	ppb	11:42:12
1	Cd 226.502†	-169.8	19.5	0.2101	ug/L	0.2101	ppb	11:42:32
1	Co 228.616†	-79.2	-6.8	-0.1304	ug/L	-0.1304	ppb	11:42:32
1	Cr 267.716†	68.0	-19.6	-0.2063	ug/L	-0.2063	ppb	11:42:32
1	Cu 324.752†	6819.5	-9.2	-0.0259	ug/L	-0.0259	ppb	11:42:12
1	Mn 257.610†	409.1	2.0	0.0037	ug/L	0.0037	ppb	11:42:32
1	Mo 202.031†	26.4	6.2	0.4021	ug/L	0.4021	ppb	11:42:32
1	Ni 231.604†	95.1	24.1	0.5725	ug/L	0.5725	ppb	11:42:32
1	P 214.914†	215.0	-6.9	-4.0931	ug/L	-4.0931	ppb	11:42:32
1	Pb 220.353†	-48.8	4.2	0.4906	ug/L	0.4906	ppb	11:42:32
1	S 181.975 Axial†	36.2	-5.6	-8.2082	ug/L	-8.2082	ppb	11:42:32
1	Sb 206.836†	24.8	-5.0	-1.6028	ug/L	-1.6028	ppb	11:42:32
1	Se 196.026†	-27.2	-3.5	-2.0278	ug/L	-2.0278	ppb	11:42:32
1	Si 251.611†	773.1	258.2	7.8654	ug/L	7.8654	ppb	11:42:32
1	Sn 189.927†	5.7	1.4	0.2361	ug/L	0.2361	ppb	11:42:32
1	Ti 334.940†	-951.8	21.7	0.0405	ug/L	0.0405	ppb	11:42:12
1	Tl 190.801†	-31.3	5.8	1.6741	ug/L	1.6741	ppb	11:42:32
1	U 409.014†	-2402.2	-418.9	-11.705	ug/L	-11.705	ppb	11:42:12
1	V 292.402†	-1270.3	37.3	0.2327	ug/L	0.2327	ppb	11:42:12
1	Zn 213.857†	655.1	-157.9	-1.4265	ug/L	-1.4265	ppb	11:42:32
1	SiO2†	757.1	261.6	17.055	ug/L	17.055	ppb	11:43:37
2	Sc Radial	5956.2	5956.2	105	%			11:41:15
2	Y RADIAL	6441.8	6441.8	104.6	%			11:41:15
2	Al 396.153Radial†	-14.9	6.2	4.5536	ug/L	4.5536	ppb	11:41:35
2	Ca 317.933Radial†	20.6	1.9	2.9000	ug/L	2.9000	ppb	11:41:35
2	Fe 238.204 Radial†	5.5	-0.8	-8.4169	ug/L	-8.4169	ppb	11:41:35
2	K 766.490 Radial†	2141.6	-134.0	-24.340	ug/L	-24.340	ppb	11:41:15
2	Mg 279.077 IEC†	-0.1	-1.8	-68.060	ug/L	-68.060	ppb	11:41:35
2	Na 589.592 Radial†	-502.9	137.8	51.789	ug/L	51.789	ppb	11:41:15
2	Sr 421.552†	34.2	29.1	0.1965	ug/L	0.1965	ppb	11:41:15
2	Sc 361.383	911727.2	911727.2	103.02	%			11:42:37
2	Y 371.029	763518.3	763518.3	102.89	%			11:42:37
2	Ag 328.068†	294.5	58.3	0.2777	ug/L	0.2777	ppb	11:42:42
2	As 188.979†	-23.9	6.0	2.4491	ug/L	2.4491	ppb	11:43:02
2	B 249.677†	-222.8	307.6	6.6783	ug/L	6.6783	ppb	11:43:02
2	Ba 233.527†	-39.5	-26.3	-0.1994	ug/L	-0.1994	ppb	11:43:02
2	Be 313.107†	-5269.7	205.2	0.0765	ug/L	0.0765	ppb	11:42:42
2	Cd 226.502†	-175.0	17.9	0.1956	ug/L	0.1956	ppb	11:43:02
2	Co 228.616†	-65.8	7.9	0.1542	ug/L	0.1542	ppb	11:43:02
2	Cr 267.716†	81.8	-7.5	-0.0771	ug/L	-0.0771	ppb	11:43:02
2	Cu 324.752†	6913.2	-58.3	-0.1699	ug/L	-0.1699	ppb	11:42:42
2	Mn 257.610†	405.3	-10.0	-0.0104	ug/L	-0.0104	ppb	11:43:02
2	Mo 202.031†	28.5	7.7	0.5000	ug/L	0.5000	ppb	11:43:02
2	Ni 231.604†	84.9	12.3	0.2921	ug/L	0.2921	ppb	11:43:02

2	P 214.914†	226.9	0.3	0.2099 ug/L	0.2099 ppb	11:43:02
2	Pb 220.353†	-55.0	-0.8	-0.0938 ug/L	-0.0938 ppb	11:43:02
2	S 181.975 Axial†	42.2	-0.5	-0.6911 ug/L	-0.6911 ppb	11:43:02
2	Sb 206.836†	35.1	4.5	1.4885 ug/L	1.4885 ppb	11:43:02
2	Se 196.026†	-22.7	1.4	0.8072 ug/L	0.8072 ppb	11:43:02
2	Si 251.611†	729.1	199.7	6.1042 ug/L	6.1042 ppb	11:43:02
2	Sn 189.927†	10.6	6.0	1.0155 ug/L	1.0155 ppb	11:43:02
2	Ti 334.940†	-930.9	61.5	0.1044 ug/L	0.1044 ppb	11:42:42
2	Tl 190.801†	-26.1	11.5	3.3063 ug/L	3.3063 ppb	11:43:02
2	U 409.014†	-2419.3	-386.1	-10.786 ug/L	-10.786 ppb	11:42:42
2	V 292.402†	-1271.6	62.2	0.4057 ug/L	0.4057 ppb	11:42:42
2	Zn 213.857†	667.7	-159.2	-1.4305 ug/L	-1.4305 ppb	11:43:02
2	SiO2†	754.4	243.5	15.935 ug/L	15.935 ppb	11:43:42
3	Sc Radial	5738.2	5738.2	101 %		11:41:40
3	Y RADIAL	6269.4	6269.4	101.8 %		11:41:40
3	Al 396.153Radial†	-8.0	12.4	9.1826 ug/L	9.1826 ppb	11:42:00
3	Ca 317.933Radial†	23.4	5.4	8.3221 ug/L	8.3221 ppb	11:42:00
3	Fe 238.204 Radial†	6.0	-0.1	-0.8655 ug/L	-0.8655 ppb	11:42:00
3	K 766.490 Radial†	2222.6	23.3	4.2106 ug/L	4.2106 ppb	11:41:40
3	Mg 279.077 IEC†	2.2	0.4	15.387 ug/L	15.387 ppb	11:42:00
3	Na 589.592 Radial†	-544.4	78.7	29.563 ug/L	29.563 ppb	11:41:40
3	Sr 421.552†	-0.5	-3.9	-0.0262 ug/L	-0.0262 ppb	11:41:40
3	Sc 361.383	897162.0	897162.0	101.38 %		11:43:07
3	Y 371.029	750910.6	750910.6	101.19 %		11:43:07
3	Ag 328.068†	311.0	79.2	0.3732 ug/L	0.3732 ppb	11:43:12
3	As 188.979†	-18.7	10.8	4.4035 ug/L	4.4035 ppb	11:43:32
3	B 249.677†	-264.9	262.5	5.6981 ug/L	5.6981 ppb	11:43:32
3	Ba 233.527†	-12.5	-0.3	-0.0019 ug/L	-0.0019 ppb	11:43:32
3	Be 313.107†	-5409.8	-16.0	-0.0060 ug/L	-0.0060 ppb	11:43:12
3	Cd 226.502†	-180.7	9.6	0.1043 ug/L	0.1043 ppb	11:43:32
3	Co 228.616†	-63.3	9.3	0.1804 ug/L	0.1804 ppb	11:43:32
3	Cr 267.716†	63.7	-24.2	-0.2575 ug/L	-0.2575 ppb	11:43:32
3	Cu 324.752†	6904.1	41.6	0.1210 ug/L	0.1210 ppb	11:43:12
3	Mn 257.610†	419.6	10.5	0.0110 ug/L	0.0110 ppb	11:43:32
3	Mo 202.031†	21.8	1.5	0.0995 ug/L	0.0995 ppb	11:43:32
3	Ni 231.604†	81.2	10.0	0.2367 ug/L	0.2367 ppb	11:43:32
3	P 214.914†	224.6	1.6	0.9206 ug/L	0.9206 ppb	11:43:32
3	Pb 220.353†	-67.4	-13.9	-1.6279 ug/L	-1.6279 ppb	11:43:32
3	S 181.975 Axial†	34.5	-7.4	-10.864 ug/L	-10.864 ppb	11:43:32
3	Sb 206.836†	31.9	1.9	0.6099 ug/L	0.6099 ppb	11:43:32
3	Se 196.026†	-23.8	-0.1	-0.0373 ug/L	-0.0373 ppb	11:43:32
3	Si 251.611†	733.6	215.6	6.5924 ug/L	6.5924 ppb	11:43:32
3	Sn 189.927†	3.5	-0.8	-0.1333 ug/L	-0.1333 ppb	11:43:32
3	Ti 334.940†	-993.7	-15.2	-0.0206 ug/L	-0.0206 ppb	11:43:12
3	Tl 190.801†	-38.5	-1.1	-0.3256 ug/L	-0.3256 ppb	11:43:32
3	U 409.014†	-2269.8	-276.8	-7.7322 ug/L	-7.7322 ppb	11:43:12
3	V 292.402†	-1277.6	36.2	0.2316 ug/L	0.2316 ppb	11:43:12
3	Zn 213.857†	670.1	-146.3	-1.3183 ug/L	-1.3183 ppb	11:43:32
3	SiO2†	743.2	244.2	15.988 ug/L	15.988 ppb	11:43:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900578.1	101.76	%	1.118				1.10%
Sc Radial	5558.4	98.1	%	9.04				9.21%
Y 371.029	754252.0	101.64	%	1.095				1.08%
Y RADIAL	6042.2	98.11	%	8.923				9.09%
Ag 328.068†	73.5	0.3505	ug/L	0.06450	0.3505	ppb	0.06450	18.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.0	2.9517	ug/L	7.16741	2.9517	ppb	7.16741	242.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.8	3.1991	ug/L	1.05344	3.1991	ppb	1.05344	32.93%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	289.2	6.2765	ug/L	0.51342	6.2765	ppb	0.51342	8.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.0	-0.1130	ug/L	0.10106	-0.1130	ppb	0.10106	89.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	85.5	0.0318	ug/L	0.04164	0.0318	ppb	0.04164	130.74%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3978	ug/L	2.73609	5.3978	ppb	2.73609	50.69%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.7      0.1700 ug/L       0.05739      0.1700 ppb        0.05739  33.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               3.5      0.0680 ug/L       0.17238      0.0680 ppb        0.17238 253.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -17.1     -0.1803 ug/L       0.09297     -0.1803 ppb        0.09297  51.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -8.6     -0.0250 ug/L       0.14547     -0.0250 ppb        0.14547 582.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.3      2.8422 ug/L      13.50029      2.8422 ppb       13.50029 475.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       100.7     18.274 ug/L       51.1174     18.274 ppb        51.1174 279.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4    -13.188 ug/L       47.5348    -13.188 ppb        47.5348 360.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               0.8      0.0014 ug/L       0.01091      0.0014 ppb        0.01091 761.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.1      0.3339 ug/L       0.20875      0.3339 ppb        0.20875  62.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       55.0     20.683 ug/L       36.3688     20.683 ppb        36.3688 175.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              15.5      0.3671 ug/L       0.18004      0.3671 ppb        0.18004  49.04%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -1.7     -0.9875 ug/L       2.71287     -0.9875 ppb        2.71287 274.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -3.5     -0.4104 ug/L       1.09414     -0.4104 ppb        1.09414 266.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -4.5     -6.5877 ug/L       5.27637     -6.5877 ppb        5.27637  80.09%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               0.5      0.1652 ug/L       1.59295      0.1652 ppb        1.59295 964.31%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.7     -0.4193 ug/L       1.45559     -0.4193 ppb        1.45559 347.12%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             224.5      6.8540 ug/L       0.90924      6.8540 ppb        0.90924  13.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.2      0.3727 ug/L       0.58646      0.3727 ppb        0.58646 157.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              14.7      0.0989 ug/L       0.11385      0.0989 ppb        0.11385 115.16%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              22.7      0.0414 ug/L       0.06251      0.0414 ppb        0.06251 150.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               5.4      1.5516 ug/L       1.81908      1.5516 ppb        1.81908 117.24%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -360.6    -10.074 ug/L        2.0798    -10.074 ppb         2.0798  20.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               45.3      0.2900 ug/L       0.10021      0.2900 ppb        0.10021  34.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -154.5     -1.3918 ug/L       0.06366     -1.3918 ppb        0.06366   4.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   249.8     16.326 ug/L        0.6321     16.326 ppb         0.6321   3.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: 1201977916|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 12/9/2009 12:13:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977916|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5496.5	5496.5	97.1	%			12:15:45
1	Y RADIAL	6025.4	6025.4	97.84	%			12:15:45
1	Al 396.153Radial†	19390.3	19999.3	14784	ug/L	14784	ppb	12:15:25
1	Ca 317.933Radial†	93179.8	95990.7	146790	ug/L	146790	ppb	12:15:25
1	Fe 238.204 Radial†	3489.0	3588.8	36138	ug/L	36138	ppb	12:15:45
1	K 766.490 Radial†	10979.5	9142.5	1635.5	ug/L	1635.5	ppb	12:15:25
1	Mg 279.077 IEC†	374.2	383.8	14262	ug/L	14262	ppb	12:15:45
1	Na 589.592 Radial†	1828.4	2499.9	939.63	ug/L	939.63	ppb	12:15:25
1	Sr 421.552†	47526.5	48965.8	329.19	ug/L	329.19	ppb	12:15:25
1	Sc 361.383	864369.7	864369.7	97.672	%			12:16:42
1	Y 371.029	729800.6	729800.6	98.346	%			12:16:42
1	Ag 328.068†	-1560.8	-1825.6	1.1555	ug/L	1.1555	ppb	12:16:42
1	As 188.979†	-16.2	12.6	23.556	ug/L	23.556	ppb	12:17:03
1	B 249.677†	1406.0	1963.3	37.763	ug/L	37.763	ppb	12:16:42
1	Ba 233.527†	276012.2	282603.1	2147.8	ug/L	2147.8	ppb	12:16:42
1	Be 313.107†	-12208.1	-7178.9	0.2745	ug/L	0.2745	ppb	12:16:42
1	Cd 226.502†	156.2	347.7	0.9221	ug/L	0.9221	ppb	12:17:03
1	Co 228.616†	1132.9	1231.6	21.016	ug/L	21.016	ppb	12:17:03
1	Cr 267.716†	39837.4	40700.0	439.28	ug/L	439.28	ppb	12:16:42
1	Cu 324.752†	1076808.7	1095706.3	3188.5	ug/L	3188.5	ppb	12:16:42
1	Mn 257.610†	754474.5	772054.4	842.35	ug/L	842.35	ppb	12:16:42
1	Mo 202.031†	110.0	92.6	8.5955	ug/L	8.5955	ppb	12:17:03
1	Ni 231.604†	48895.1	49990.4	1186.2	ug/L	1186.2	ppb	12:16:42
1	P 214.914†	2632.3	2475.1	934.52	ug/L	934.52	ppb	12:17:03
1	Pb 220.353†	643.7	711.6	81.067	ug/L	81.067	ppb	12:17:03
1	S 181.975 Axial†	1702.0	1701.1	2484.4	ug/L	2484.4	ppb	12:17:03
1	Sb 206.836†	86.6	59.0	3.9950	ug/L	3.9950	ppb	12:17:03
1	Se 196.026†	-191.2	-172.3	10.035	ug/L	10.035	ppb	12:17:03
1	Si 251.611†	250301.3	255759.3	7822.1	ug/L	7822.1	ppb	12:16:42
1	Sn 189.927†	-247.4	-257.6	-27.853	ug/L	-27.853	ppb	12:17:03
1	Ti 334.940†	903027.4	925516.6	1504.4	ug/L	1504.4	ppb	12:16:42
1	Tl 190.801†	-101.0	-66.6	-2.5330	ug/L	-2.5330	ppb	12:17:03
1	U 409.014†	-2681.7	-783.4	-27.281	ug/L	-27.281	ppb	12:16:42
1	V 292.402†	7096.7	8562.3	50.848	ug/L	50.848	ppb	12:16:42
1	Zn 213.857†	38514.6	38625.4	332.18	ug/L	332.18	ppb	12:16:42
1	SiO2†	245297.8	250655.8	16413	ug/L	16413	ppb	12:18:00
2	Sc Radial	5485.0	5485.0	96.9	%			12:16:10
2	Y RADIAL	6014.9	6014.9	97.66	%			12:16:10
2	Al 396.153Radial†	19017.3	19656.1	14530	ug/L	14530	ppb	12:15:50
2	Ca 317.933Radial†	91659.6	94622.4	144690	ug/L	144690	ppb	12:15:50
2	Fe 238.204 Radial†	3498.9	3606.7	36318	ug/L	36318	ppb	12:16:10
2	K 766.490 Radial†	10753.7	8933.1	1597.9	ug/L	1597.9	ppb	12:15:50
2	Mg 279.077 IEC†	369.3	379.6	14104	ug/L	14104	ppb	12:16:10
2	Na 589.592 Radial†	1831.2	2506.7	942.19	ug/L	942.19	ppb	12:15:50
2	Sr 421.552†	46646.4	48159.8	323.77	ug/L	323.77	ppb	12:15:50
2	Sc 361.383	869045.4	869045.4	98.200	%			12:17:08
2	Y 371.029	733916.9	733916.9	98.901	%			12:17:08
2	Ag 328.068†	-1594.6	-1851.4	1.1185	ug/L	1.1185	ppb	12:17:08
2	As 188.979†	-18.3	10.6	22.525	ug/L	22.525	ppb	12:17:29
2	B 249.677†	1368.8	1917.8	36.750	ug/L	36.750	ppb	12:17:08
2	Ba 233.527†	271657.6	276648.3	2102.6	ug/L	2102.6	ppb	12:17:08
2	Be 313.107†	-12187.5	-7090.6	0.2561	ug/L	0.2561	ppb	12:17:08
2	Cd 226.502†	154.6	345.2	0.8621	ug/L	0.8621	ppb	12:17:29
2	Co 228.616†	1133.5	1226.0	20.944	ug/L	20.944	ppb	12:17:29
2	Cr 267.716†	39225.5	39857.4	430.20	ug/L	430.20	ppb	12:17:08
2	Cu 324.752†	1066503.6	1079280.8	3140.7	ug/L	3140.7	ppb	12:17:08
2	Mn 257.610†	743856.6	757085.9	826.11	ug/L	826.11	ppb	12:17:08
2	Mo 202.031†	109.1	91.1	8.5097	ug/L	8.5097	ppb	12:17:29
2	Ni 231.604†	48195.8	49008.9	1162.9	ug/L	1162.9	ppb	12:17:08

2	P 214.914†	2595.5	2423.1	911.09 ug/L	911.09 ppb	12:17:29
2	Pb 220.353†	620.6	684.5	77.862 ug/L	77.862 ppb	12:17:29
2	S 181.975 Axial†	1694.8	1684.4	2460.1 ug/L	2460.1 ppb	12:17:29
2	Sb 206.836†	86.5	58.5	4.1412 ug/L	4.1412 ppb	12:17:29
2	Se 196.026†	-199.7	-179.9	6.0340 ug/L	6.0340 ppb	12:17:29
2	Si 251.611†	246835.5	250851.3	7671.9 ug/L	7671.9 ppb	12:17:08
2	Sn 189.927†	-245.1	-253.8	-27.431 ug/L	-27.431 ppb	12:17:29
2	Ti 334.940†	892080.0	909394.2	1478.2 ug/L	1478.2 ppb	12:17:08
2	Tl 190.801†	-92.4	-57.3	-0.1597 ug/L	-0.1597 ppb	12:17:29
2	U 409.014†	-2582.1	-667.3	-24.042 ug/L	-24.042 ppb	12:17:08
2	V 292.402†	7042.2	8467.7	50.216 ug/L	50.216 ppb	12:17:08
2	Zn 213.857†	38038.9	37928.8	326.11 ug/L	326.11 ppb	12:17:08
2	SiO2†	242924.5	246887.7	16166 ug/L	16166 ppb	12:18:05
3	Sc Radial	5532.4	5532.4	97.7 %		12:16:35
3	Y RADIAL	6055.5	6055.5	98.32 %		12:16:35
3	Al 396.153Radial†	19065.1	19536.8	14442 ug/L	14442 ppb	12:16:15
3	Ca 317.933Radial†	91865.2	94022.1	143780 ug/L	143780 ppb	12:16:15
3	Fe 238.204 Radial†	3497.5	3574.3	35991 ug/L	35991 ppb	12:16:35
3	K 766.490 Radial†	10753.9	8838.2	1580.9 ug/L	1580.9 ppb	12:16:15
3	Mg 279.077 IEC†	369.4	376.4	13986 ug/L	13986 ppb	12:16:35
3	Na 589.592 Radial†	1772.6	2430.5	913.57 ug/L	913.57 ppb	12:16:15
3	Sr 421.552†	46750.7	47854.0	321.71 ug/L	321.71 ppb	12:16:15
3	Sc 361.383	872857.0	872857.0	98.631 %		12:17:34
3	Y 371.029	735741.4	735741.4	99.147 %		12:17:34
3	Ag 328.068†	-1636.5	-1886.8	0.8656 ug/L	0.8656 ppb	12:17:34
3	As 188.979†	-18.2	10.8	22.418 ug/L	22.418 ppb	12:17:55
3	B 249.677†	1372.2	1915.1	36.736 ug/L	36.736 ppb	12:17:34
3	Ba 233.527†	270822.9	274594.0	2087.0 ug/L	2087.0 ppb	12:17:34
3	Be 313.107†	-12069.7	-6917.0	0.2899 ug/L	0.2899 ppb	12:17:34
3	Cd 226.502†	149.3	339.2	0.8227 ug/L	0.8227 ppb	12:17:55
3	Co 228.616†	1127.5	1214.9	20.761 ug/L	20.761 ppb	12:17:55
3	Cr 267.716†	39081.4	39536.8	426.74 ug/L	426.74 ppb	12:17:34
3	Cu 324.752†	1058598.8	1066523.7	3103.6 ug/L	3103.6 ppb	12:17:34
3	Mn 257.610†	740856.3	750736.1	819.18 ug/L	819.18 ppb	12:17:34
3	Mo 202.031†	118.4	100.1	9.0708 ug/L	9.0708 ppb	12:17:55
3	Ni 231.604†	47988.9	48584.9	1152.8 ug/L	1152.8 ppb	12:17:34
3	P 214.914†	2596.1	2412.2	910.76 ug/L	910.76 ppb	12:17:55
3	Pb 220.353†	608.0	669.0	76.084 ug/L	76.084 ppb	12:17:55
3	S 181.975 Axial†	1676.3	1658.1	2421.7 ug/L	2421.7 ppb	12:17:55
3	Sb 206.836†	89.2	60.8	5.0085 ug/L	5.0085 ppb	12:17:55
3	Se 196.026†	-191.5	-170.8	10.479 ug/L	10.479 ppb	12:17:55
3	Si 251.611†	245873.2	248778.0	7608.5 ug/L	7608.5 ppb	12:17:34
3	Sn 189.927†	-251.2	-258.9	-28.392 ug/L	-28.392 ppb	12:17:55
3	Ti 334.940†	886460.5	899729.7	1462.5 ug/L	1462.5 ppb	12:17:34
3	Tl 190.801†	-102.0	-66.6	-2.9936 ug/L	-2.9936 ppb	12:17:55
3	U 409.014†	-2731.0	-806.8	-27.891 ug/L	-27.891 ppb	12:17:34
3	V 292.402†	6990.2	8383.7	49.715 ug/L	49.715 ppb	12:17:34
3	Zn 213.857†	37956.0	37675.6	323.97 ug/L	323.97 ppb	12:17:34
3	SiO2†	244854.6	247764.4	16223 ug/L	16223 ppb	12:18:11

Mean Data: 1201977916|925187|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868757.4	98.168	%	0.4803				0.49%
Sc Radial	5504.6	97.2	%	0.44				0.45%
Y 371.029	733153.0	98.798	%	0.4101				0.42%
Y RADIAL	6031.9	97.94	%	0.342				0.35%
Ag 328.068†	-1854.6	1.0465	ug/L	0.15783	1.0465	ppb	0.15783	15.08%
Al 396.153Radial†	19730.7	14586	ug/L	177.5	14586	ppb	177.5	1.22%
As 188.979†	11.3	22.833	ug/L	0.6283	22.833	ppb	0.6283	2.75%
B 249.677†	1932.1	37.083	ug/L	0.5889	37.083	ppb	0.5889	1.59%
Ba 233.527†	277948.5	2112.5	ug/L	31.60	2112.5	ppb	31.60	1.50%
Be 313.107†	-7062.2	0.2735	ug/L	0.01692	0.2735	ppb	0.01692	6.19%
Ca 317.933Radial†	94878.4	145090	ug/L	1542.8	145090	ppb	1542.8	1.06%
Cd 226.502†	344.1	0.8690	ug/L	0.05007	0.8690	ppb	0.05007	5.76%
Co 228.616†	1224.2	20.907	ug/L	0.1314	20.907	ppb	0.1314	0.63%
Cr 267.716†	40031.4	432.08	ug/L	6.475	432.08	ppb	6.475	1.50%
Cu 324.752†	1080503.6	3144.3	ug/L	42.55	3144.3	ppb	42.55	1.35%
Fe 238.204 Radial†	3589.9	36149	ug/L	163.4	36149	ppb	163.4	0.45%
K 766.490 Radial†	8971.3	1604.8	ug/L	27.96	1604.8	ppb	27.96	1.74%

Mg 279.077 IEC†	379.9	14117	ug/L	138.4	14117	ppb	138.4	0.98%
Mn 257.610†	759958.8	829.21	ug/L	11.896	829.21	ppb	11.896	1.43%
Mo 202.031†	94.6	8.7253	ug/L	0.30226	8.7253	ppb	0.30226	3.46%
Na 589.592 Radial†	2479.0	931.80	ug/L	15.836	931.80	ppb	15.836	1.70%
Ni 231.604†	49194.7	1167.3	ug/L	17.11	1167.3	ppb	17.11	1.47%
P 214.914†	2436.8	918.79	ug/L	13.625	918.79	ppb	13.625	1.48%
Pb 220.353†	688.4	78.338	ug/L	2.5253	78.338	ppb	2.5253	3.22%
S 181.975 Axial†	1681.2	2455.4	ug/L	31.62	2455.4	ppb	31.62	1.29%
Sb 206.836†	59.5	4.3816	ug/L	0.54783	4.3816	ppb	0.54783	12.50%
Se 196.026†	-174.3	8.8492	ug/L	2.44814	8.8492	ppb	2.44814	27.67%
Si 251.611†	251796.2	7700.8	ug/L	109.65	7700.8	ppb	109.65	1.42%
Sn 189.927†	-256.8	-27.892	ug/L	0.4815	-27.892	ppb	0.4815	1.73%
Sr 421.552†	48326.5	324.89	ug/L	3.863	324.89	ppb	3.863	1.19%
Ti 334.940†	911546.8	1481.7	ug/L	21.15	1481.7	ppb	21.15	1.43%
Tl 190.801†	-63.5	-1.8955	ug/L	1.52072	-1.8955	ppb	1.52072	80.23%
U 409.014†	-752.5	-26.405	ug/L	2.0687	-26.405	ppb	2.0687	7.83%
V 292.402†	8471.3	50.260	ug/L	0.5678	50.260	ppb	0.5678	1.13%
Zn 213.857†	38076.6	327.42	ug/L	4.258	327.42	ppb	4.258	1.30%
SiO2†	248436.0	16267	ug/L	129.1	16267	ppb	129.1	0.79%

Sequence No.: 16
Sample ID: 1201977918|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 12/9/2009 12:20:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977918|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5633.4	5633.4	99.5	%			12:22:14
1	Y RADIAL	6139.5	6139.5	99.69	%			12:22:14
1	Al 396.153Radial†	19801.9	19927.5	14727	ug/L	14727	ppb	12:22:14
1	Ca 317.933Radial†	105465.5	106008.3	162100	ug/L	162100	ppb	12:22:14
1	Fe 238.204 Radial†	2122.5	2127.7	21428	ug/L	21428	ppb	12:22:34
1	K 766.490 Radial†	16917.5	14837.1	2672.0	ug/L	2672.0	ppb	12:22:14
1	Mg 279.077 IEC†	250.2	249.7	9284.1	ug/L	9284.1	ppb	12:22:34
1	Na 589.592 Radial†	3934.8	4571.7	1718.4	ug/L	1718.4	ppb	12:22:14
1	Sr 421.552†	61023.8	61344.7	412.61	ug/L	412.61	ppb	12:22:14
1	Sc 361.383	845734.2	845734.2	95.566	%			12:23:31
1	Y 371.029	714414.6	714414.6	96.273	%			12:23:31
1	Ag 328.068†	21541.7	22313.5	108.11	ug/L	108.11	ppb	12:23:31
1	As 188.979†	244.2	284.7	127.38	ug/L	127.38	ppb	12:23:51
1	B 249.677†	6927.4	7772.6	165.61	ug/L	165.61	ppb	12:23:31
1	Ba 233.527†	282826.4	295960.3	2248.9	ug/L	2248.9	ppb	12:23:31
1	Be 313.107†	261760.0	279224.7	105.64	ug/L	105.64	ppb	12:23:31
1	Cd 226.502†	8910.2	9511.4	101.15	ug/L	101.15	ppb	12:23:51
1	Co 228.616†	5157.5	5468.5	105.04	ug/L	105.04	ppb	12:23:51
1	Cr 267.716†	13918.4	14477.2	156.60	ug/L	156.60	ppb	12:23:31
1	Cu 324.752†	385768.9	396898.2	1155.4	ug/L	1155.4	ppb	12:23:31
1	Mn 257.610†	382962.0	400326.3	437.01	ug/L	437.01	ppb	12:23:31
1	Mo 202.031†	1628.4	1684.0	111.21	ug/L	111.21	ppb	12:23:51
1	Ni 231.604†	6606.1	6842.4	162.29	ug/L	162.29	ppb	12:23:51
1	P 214.914†	1297.3	1137.5	479.31	ug/L	479.31	ppb	12:23:51
1	Pb 220.353†	1571.8	1697.3	199.33	ug/L	199.33	ppb	12:23:51
1	S 181.975 Axial†	2638.9	2719.9	3974.2	ug/L	3974.2	ppb	12:23:51
1	Sb 206.836†	335.2	321.2	101.72	ug/L	101.72	ppb	12:23:51
1	Se 196.026†	50.5	76.3	113.56	ug/L	113.56	ppb	12:23:51
1	Si 251.611†	238436.7	248991.0	7612.5	ug/L	7612.5	ppb	12:23:31
1	Sn 189.927†	396.4	410.5	86.569	ug/L	86.569	ppb	12:23:51
1	Ti 334.940†	564382.7	591532.5	965.06	ug/L	965.06	ppb	12:23:31
1	Tl 190.801†	275.7	325.4	102.68	ug/L	102.68	ppb	12:23:51
1	U 409.014†	1274.5	3295.8	89.083	ug/L	89.083	ppb	12:23:31
1	V 292.402†	19730.6	21942.5	145.70	ug/L	145.70	ppb	12:23:31
1	Zn 213.857†	57176.9	59022.4	526.24	ug/L	526.24	ppb	12:23:31
1	SiO2†	239539.2	250163.9	16375	ug/L	16375	ppb	12:24:47
2	Sc Radial	5531.3	5531.3	97.7	%			12:22:39
2	Y RADIAL	6049.4	6049.4	98.23	%			12:22:39
2	Al 396.153Radial†	19604.8	20093.1	14849	ug/L	14849	ppb	12:22:39
2	Ca 317.933Radial†	104122.5	106590.3	162990	ug/L	162990	ppb	12:22:39
2	Fe 238.204 Radial†	2123.0	2167.7	21831	ug/L	21831	ppb	12:22:59
2	K 766.490 Radial†	16714.4	14943.1	2691.2	ug/L	2691.2	ppb	12:22:39
2	Mg 279.077 IEC†	246.4	250.5	9312.7	ug/L	9312.7	ppb	12:22:59
2	Na 589.592 Radial†	3882.5	4591.1	1725.7	ug/L	1725.7	ppb	12:22:39
2	Sr 421.552†	60105.6	61536.9	413.90	ug/L	413.90	ppb	12:22:39
2	Sc 361.383	837348.7	837348.7	94.619	%			12:23:56
2	Y 371.029	704895.9	704895.9	94.990	%			12:23:56
2	Ag 328.068†	21147.9	22123.1	107.34	ug/L	107.34	ppb	12:23:56
2	As 188.979†	249.0	292.4	130.52	ug/L	130.52	ppb	12:24:16
2	B 249.677†	6798.8	7709.4	164.18	ug/L	164.18	ppb	12:23:56
2	Ba 233.527†	279378.5	295280.0	2243.8	ug/L	2243.8	ppb	12:23:56
2	Be 313.107†	257893.1	277880.8	105.13	ug/L	105.13	ppb	12:23:56
2	Cd 226.502†	8904.7	9598.9	102.06	ug/L	102.06	ppb	12:24:16
2	Co 228.616†	5143.5	5507.8	105.81	ug/L	105.81	ppb	12:24:16
2	Cr 267.716†	13814.6	14513.3	156.99	ug/L	156.99	ppb	12:23:56
2	Cu 324.752†	377211.5	391896.6	1140.9	ug/L	1140.9	ppb	12:23:56
2	Mn 257.610†	377334.6	398391.8	434.95	ug/L	434.95	ppb	12:23:56
2	Mo 202.031†	1624.7	1697.1	112.10	ug/L	112.10	ppb	12:24:16
2	Ni 231.604†	6580.0	6884.1	163.28	ug/L	163.28	ppb	12:24:16

2	P 214.914†	1289.1	1142.4	484.29 ug/L	484.29 ppb	12:24:16
2	Pb 220.353†	1581.3	1723.8	202.43 ug/L	202.43 ppb	12:24:16
2	S 181.975 Axial†	2627.6	2735.5	3997.0 ug/L	3997.0 ppb	12:24:16
2	Sb 206.836†	324.1	313.0	99.134 ug/L	99.134 ppb	12:24:16
2	Se 196.026†	46.7	72.8	112.76 ug/L	112.76 ppb	12:24:16
2	Si 251.611†	234444.4	247270.2	7559.9 ug/L	7559.9 ppb	12:23:56
2	Sn 189.927†	408.5	427.5	89.538 ug/L	89.538 ppb	12:24:16
2	Ti 334.940†	555609.3	588174.3	959.68 ug/L	959.68 ppb	12:23:56
2	Tl 190.801†	276.9	329.5	103.80 ug/L	103.80 ppb	12:24:16
2	U 409.014†	1170.1	3198.8	86.323 ug/L	86.323 ppb	12:23:56
2	V 292.402†	19317.0	21712.1	144.10 ug/L	144.10 ppb	12:23:56
2	Zn 213.857†	56321.9	58717.9	523.47 ug/L	523.47 ppb	12:23:56
2	SiO2†	239728.3	252873.9	16552 ug/L	16552 ppb	12:24:53
3	Sc Radial	5545.7	5545.7	97.9 %		12:23:04
3	Y RADIAL	6037.6	6037.6	98.03 %		12:23:04
3	Al 396.153Radial†	19667.9	20105.4	14858 ug/L	14858 ppb	12:23:04
3	Ca 317.933Radial†	104861.0	107067.5	163720 ug/L	163720 ppb	12:23:04
3	Fe 238.204 Radial†	2121.8	2160.8	21761 ug/L	21761 ppb	12:23:24
3	K 766.490 Radial†	16735.2	14919.9	2686.9 ug/L	2686.9 ppb	12:23:04
3	Mg 279.077 IEC†	245.8	249.2	9264.5 ug/L	9264.5 ppb	12:23:24
3	Na 589.592 Radial†	3924.8	4624.0	1738.0 ug/L	1738.0 ppb	12:23:04
3	Sr 421.552†	60603.1	61885.1	416.24 ug/L	416.24 ppb	12:23:04
3	Sc 361.383	850075.7	850075.7	96.057 %		12:24:22
3	Y 371.029	718524.0	718524.0	96.827 %		12:24:22
3	Ag 328.068†	21595.4	22254.3	107.92 ug/L	107.92 ppb	12:24:22
3	As 188.979†	242.0	281.1	125.95 ug/L	125.95 ppb	12:24:42
3	B 249.677†	6942.2	7751.1	165.10 ug/L	165.10 ppb	12:24:22
3	Ba 233.527†	284436.7	296125.2	2250.2 ug/L	2250.2 ppb	12:24:22
3	Be 313.107†	262577.2	278676.6	105.43 ug/L	105.43 ppb	12:24:22
3	Cd 226.502†	8932.7	9487.3	100.85 ug/L	100.85 ppb	12:24:42
3	Co 228.616†	5154.2	5437.5	104.43 ug/L	104.43 ppb	12:24:42
3	Cr 267.716†	14015.7	14504.1	156.90 ug/L	156.90 ppb	12:24:22
3	Cu 324.752†	387275.6	396405.1	1154.0 ug/L	1154.0 ppb	12:24:22
3	Mn 257.610†	384800.2	400193.3	436.90 ug/L	436.90 ppb	12:24:22
3	Mo 202.031†	1613.6	1659.9	109.67 ug/L	109.67 ppb	12:24:42
3	Ni 231.604†	6598.3	6799.0	161.26 ug/L	161.26 ppb	12:24:42
3	P 214.914†	1298.7	1132.0	476.04 ug/L	476.04 ppb	12:24:42
3	Pb 220.353†	1570.7	1687.7	198.21 ug/L	198.21 ppb	12:24:42
3	S 181.975 Axial†	2636.3	2703.0	3949.5 ug/L	3949.5 ppb	12:24:42
3	Sb 206.836†	336.1	320.3	101.40 ug/L	101.40 ppb	12:24:42
3	Se 196.026†	42.8	68.0	109.69 ug/L	109.69 ppb	12:24:42
3	Si 251.611†	239521.9	248846.5	7608.1 ug/L	7608.1 ppb	12:24:22
3	Sn 189.927†	399.1	411.2	86.858 ug/L	86.858 ppb	12:24:42
3	Ti 334.940†	566732.5	590962.6	964.23 ug/L	964.23 ppb	12:24:22
3	Tl 190.801†	266.4	314.1	99.454 ug/L	99.454 ppb	12:24:42
3	U 409.014†	1337.0	3354.1	90.669 ug/L	90.669 ppb	12:24:22
3	V 292.402†	19785.3	21893.9	145.31 ug/L	145.31 ppb	12:24:22
3	Zn 213.857†	57440.0	58990.7	525.93 ug/L	525.93 ppb	12:24:22
3	SiO2†	239668.3	249018.2	16300 ug/L	16300 ppb	12:24:58

Mean Data: 1201977918|925187|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	844386.2	95.414	%	0.7311				0.77%
Sc Radial	5570.1	98.4	%	0.98				0.99%
Y 371.029	712611.5	96.030	%	0.9420				0.98%
Y RADIAL	6075.5	98.65	%	0.905				0.92%
Ag 328.068†	22230.3	107.79	ug/L	0.400	107.79	ppb	0.400	0.37%
Al 396.153Radial†	20042.0	14811	ug/L	73.5	14811	ppb	73.5	0.50%
As 188.979†	286.1	127.95	ug/L	2.341	127.95	ppb	2.341	1.83%
B 249.677†	7744.3	164.96	ug/L	0.724	164.96	ppb	0.724	0.44%
Ba 233.527†	295788.5	2247.6	ug/L	3.40	2247.6	ppb	3.40	0.15%
Be 313.107†	278594.0	105.40	ug/L	0.257	105.40	ppb	0.257	0.24%
Ca 317.933Radial†	106555.4	162940	ug/L	811.1	162940	ppb	811.1	0.50%
Cd 226.502†	9532.5	101.35	ug/L	0.629	101.35	ppb	0.629	0.62%
Co 228.616†	5471.3	105.09	ug/L	0.690	105.09	ppb	0.690	0.66%
Cr 267.716†	14498.2	156.83	ug/L	0.205	156.83	ppb	0.205	0.13%
Cu 324.752†	395066.6	1150.1	ug/L	8.01	1150.1	ppb	8.01	0.70%
Fe 238.204 Radial†	2152.1	21673	ug/L	215.2	21673	ppb	215.2	0.99%
K 766.490 Radial†	14900.0	2683.4	ug/L	10.07	2683.4	ppb	10.07	0.38%

Mg 279.077 IEC†	249.8	9287.1	ug/L	24.23	9287.1	ppb	24.23	0.26%
Mn 257.610†	399637.1	436.29	ug/L	1.160	436.29	ppb	1.160	0.27%
Mo 202.031†	1680.3	110.99	ug/L	1.230	110.99	ppb	1.230	1.11%
Na 589.592 Radial†	4595.6	1727.4	ug/L	9.94	1727.4	ppb	9.94	0.58%
Ni 231.604†	6841.8	162.28	ug/L	1.009	162.28	ppb	1.009	0.62%
P 214.914†	1137.3	479.88	ug/L	4.155	479.88	ppb	4.155	0.87%
Pb 220.353†	1702.9	199.99	ug/L	2.190	199.99	ppb	2.190	1.10%
S 181.975 Axial†	2719.5	3973.6	ug/L	23.76	3973.6	ppb	23.76	0.60%
Sb 206.836†	318.1	100.75	ug/L	1.410	100.75	ppb	1.410	1.40%
Se 196.026†	72.4	112.01	ug/L	2.042	112.01	ppb	2.042	1.82%
Si 251.611†	248369.3	7593.5	ug/L	29.22	7593.5	ppb	29.22	0.38%
Sn 189.927†	416.4	87.655	ug/L	1.6373	87.655	ppb	1.6373	1.87%
Sr 421.552†	61588.9	414.25	ug/L	1.842	414.25	ppb	1.842	0.44%
Ti 334.940†	590223.1	962.99	ug/L	2.897	962.99	ppb	2.897	0.30%
Tl 190.801†	323.0	101.98	ug/L	2.255	101.98	ppb	2.255	2.21%
U 409.014†	3282.9	88.692	ug/L	2.1994	88.692	ppb	2.1994	2.48%
V 292.402†	21849.5	145.04	ug/L	0.835	145.04	ppb	0.835	0.58%
Zn 213.857†	58910.3	525.21	ug/L	1.517	525.21	ppb	1.517	0.29%
SiO2†	250685.3	16409	ug/L	129.6	16409	ppb	129.6	0.79%

Sequence No.: 17
Sample ID: 1201977919|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 12/9/2009 12:27:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977919|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5609.0	5609.0	99.0	%			12:29:01
1	Y RADIAL	6111.8	6111.8	99.24	%			12:29:01
1	Al 396.153Radial†	22634.6	22874.3	16905	ug/L	16905	ppb	12:29:01
1	Ca 317.933Radial†	127469.4	128687.2	196780	ug/L	196780	ppb	12:29:01
1	Fe 238.204 Radial†	2120.6	2135.2	21503	ug/L	21503	ppb	12:29:21
1	K 766.490 Radial†	16863.6	14856.8	2671.9	ug/L	2671.9	ppb	12:29:01
1	Mg 279.077 IEC†	291.1	292.2	10864	ug/L	10864	ppb	12:29:21
1	Na 589.592 Radial†	4248.8	4905.9	1844.0	ug/L	1844.0	ppb	12:29:01
1	Sr 421.552†	78296.9	79052.4	531.83	ug/L	531.83	ppb	12:29:01
1	Sc 361.383	845253.5	845253.5	95.512	%			12:30:18
1	Y 371.029	707031.0	707031.0	95.278	%			12:30:18
1	Ag 328.068†	21602.3	22389.8	107.98	ug/L	107.98	ppb	12:30:18
1	As 188.979†	261.6	303.1	134.61	ug/L	134.61	ppb	12:30:38
1	B 249.677†	5811.9	6608.8	140.33	ug/L	140.33	ppb	12:30:18
1	Ba 233.527†	204982.3	214626.5	1631.2	ug/L	1631.2	ppb	12:30:18
1	Be 313.107†	259952.6	277488.1	104.93	ug/L	104.93	ppb	12:30:18
1	Cd 226.502†	8879.6	9484.7	100.85	ug/L	100.85	ppb	12:30:38
1	Co 228.616†	5214.1	5530.8	106.05	ug/L	106.05	ppb	12:30:38
1	Cr 267.716†	12414.9	12911.3	139.73	ug/L	139.73	ppb	12:30:18
1	Cu 324.752†	76437.8	73261.0	214.16	ug/L	214.16	ppb	12:30:18
1	Mn 257.610†	396955.2	415204.9	453.16	ug/L	453.16	ppb	12:30:18
1	Mo 202.031†	1645.4	1702.7	112.44	ug/L	112.44	ppb	12:30:38
1	Ni 231.604†	6410.7	6641.9	157.53	ug/L	157.53	ppb	12:30:38
1	P 214.914†	1062.8	892.8	485.49	ug/L	485.49	ppb	12:30:38
1	Pb 220.353†	1560.6	1686.4	199.28	ug/L	199.28	ppb	12:30:38
1	S 181.975 Axial†	3108.0	3212.6	4694.2	ug/L	4694.2	ppb	12:30:38
1	Sb 206.836†	310.7	295.7	93.817	ug/L	93.817	ppb	12:30:38
1	Se 196.026†	50.1	75.9	113.88	ug/L	113.88	ppb	12:30:38
1	Si 251.611†	226619.8	236760.7	7238.5	ug/L	7238.5	ppb	12:30:18
1	Sn 189.927†	363.3	376.1	84.348	ug/L	84.348	ppb	12:30:38
1	Ti 334.940†	545534.0	572133.9	935.51	ug/L	935.51	ppb	12:30:18
1	Tl 190.801†	272.7	322.3	101.71	ug/L	101.71	ppb	12:30:38
1	U 409.014†	829.3	2830.4	76.104	ug/L	76.104	ppb	12:30:18
1	V 292.402†	19199.1	21397.7	142.08	ug/L	142.08	ppb	12:30:18
1	Zn 213.857†	56538.2	58387.7	521.63	ug/L	521.63	ppb	12:30:18
1	SiO2†	227206.7	237394.4	15539	ug/L	15539	ppb	12:31:34
2	Sc Radial	5721.2	5721.2	101	%			12:29:26
2	Y RADIAL	6276.0	6276.0	101.9	%			12:29:26
2	Al 396.153Radial†	23072.7	22859.6	16894	ug/L	16894	ppb	12:29:26
2	Ca 317.933Radial†	129737.4	128407.4	196360	ug/L	196360	ppb	12:29:26
2	Fe 238.204 Radial†	2132.4	2104.8	21198	ug/L	21198	ppb	12:29:46
2	K 766.490 Radial†	17098.3	14755.0	2653.5	ug/L	2653.5	ppb	12:29:26
2	Mg 279.077 IEC†	295.4	290.7	10808	ug/L	10808	ppb	12:29:46
2	Na 589.592 Radial†	4405.5	4976.9	1870.7	ug/L	1870.7	ppb	12:29:26
2	Sr 421.552†	79729.7	78919.8	530.94	ug/L	530.94	ppb	12:29:26
2	Sc 361.383	842173.8	842173.8	95.164	%			12:30:43
2	Y 371.029	706573.4	706573.4	95.216	%			12:30:43
2	Ag 328.068†	21498.2	22363.1	107.76	ug/L	107.76	ppb	12:30:43
2	As 188.979†	264.0	306.7	136.00	ug/L	136.00	ppb	12:31:03
2	B 249.677†	5804.1	6622.9	140.68	ug/L	140.68	ppb	12:30:43
2	Ba 233.527†	203409.0	213758.1	1624.6	ug/L	1624.6	ppb	12:30:43
2	Be 313.107†	259227.1	277721.0	105.01	ug/L	105.01	ppb	12:30:43
2	Cd 226.502†	8884.9	9524.2	101.31	ug/L	101.31	ppb	12:31:03
2	Co 228.616†	5206.9	5543.3	106.30	ug/L	106.30	ppb	12:31:03
2	Cr 267.716†	12419.5	12963.7	140.29	ug/L	140.29	ppb	12:30:43
2	Cu 324.752†	75828.8	72913.7	213.14	ug/L	213.14	ppb	12:30:43
2	Mn 257.610†	393909.7	413524.5	451.30	ug/L	451.30	ppb	12:30:43
2	Mo 202.031†	1654.8	1718.9	113.47	ug/L	113.47	ppb	12:31:03
2	Ni 231.604†	6434.6	6691.5	158.71	ug/L	158.71	ppb	12:31:03

2	P 214.914†	1067.7	902.0	491.37 ug/L	491.37 ppb	12:31:03
2	Pb 220.353†	1576.3	1708.9	201.93 ug/L	201.93 ppb	12:31:03
2	S 181.975 Axial†	3125.3	3242.6	4738.1 ug/L	4738.1 ppb	12:31:03
2	Sb 206.836†	304.8	290.7	92.192 ug/L	92.192 ppb	12:31:03
2	Se 196.026†	54.1	80.3	115.58 ug/L	115.58 ppb	12:31:03
2	Si 251.611†	224645.5	235553.7	7201.5 ug/L	7201.5 ppb	12:30:43
2	Sn 189.927†	361.2	375.3	84.167 ug/L	84.167 ppb	12:31:03
2	Ti 334.940†	541800.4	570299.3	932.52 ug/L	932.52 ppb	12:30:43
2	Tl 190.801†	263.7	313.9	99.278 ug/L	99.278 ppb	12:31:03
2	U 409.014†	736.7	2736.3	73.511 ug/L	73.511 ppb	12:30:43
2	V 292.402†	19123.1	21391.4	142.10 ug/L	142.10 ppb	12:30:43
2	Zn 213.857†	56133.2	58178.6	519.77 ug/L	519.77 ppb	12:30:43
2	SiO2†	227612.4	238690.6	15624 ug/L	15624 ppb	12:31:40
3	Sc Radial	5657.1	5657.1	99.9 %		12:29:51
3	Y RADIAL	6186.5	6186.5	100.5 %		12:29:51
3	Al 396.153Radial†	22938.9	22984.4	16986 ug/L	16986 ppb	12:29:51
3	Ca 317.933Radial†	128456.4	128579.7	196620 ug/L	196620 ppb	12:29:51
3	Fe 238.204 Radial†	2108.5	2104.8	21197 ug/L	21197 ppb	12:30:11
3	K 766.490 Radial†	16921.2	14769.5	2656.0 ug/L	2656.0 ppb	12:29:51
3	Mg 279.077 IEC†	287.9	286.4	10651 ug/L	10651 ppb	12:30:11
3	Na 589.592 Radial†	4380.3	5001.1	1879.8 ug/L	1879.8 ppb	12:29:51
3	Sr 421.552†	79131.2	79214.6	532.92 ug/L	532.92 ppb	12:29:51
3	Sc 361.383	855830.3	855830.3	96.707 %		12:31:09
3	Y 371.029	717320.8	717320.8	96.665 %		12:31:09
3	Ag 328.068†	21866.8	22383.8	107.86 ug/L	107.86 ppb	12:31:09
3	As 188.979†	256.8	294.8	131.16 ug/L	131.16 ppb	12:31:29
3	B 249.677†	5933.3	6659.2	141.47 ug/L	141.47 ppb	12:31:09
3	Ba 233.527†	207514.0	214592.1	1630.9 ug/L	1630.9 ppb	12:31:09
3	Be 313.107†	264071.4	278383.7	105.26 ug/L	105.26 ppb	12:31:09
3	Cd 226.502†	8938.4	9430.6	100.29 ug/L	100.29 ppb	12:31:29
3	Co 228.616†	5249.5	5500.0	105.45 ug/L	105.45 ppb	12:31:29
3	Cr 267.716†	12582.5	12924.0	139.86 ug/L	139.86 ppb	12:31:09
3	Cu 324.752†	77162.6	73021.4	213.45 ug/L	213.45 ppb	12:31:09
3	Mn 257.610†	401574.7	414845.4	452.74 ug/L	452.74 ppb	12:31:09
3	Mo 202.031†	1642.5	1678.5	110.84 ug/L	110.84 ppb	12:31:29
3	Ni 231.604†	6442.0	6591.3	156.33 ug/L	156.33 ppb	12:31:29
3	P 214.914†	1071.8	888.4	483.25 ug/L	483.25 ppb	12:31:29
3	Pb 220.353†	1596.7	1703.6	201.33 ug/L	201.33 ppb	12:31:29
3	S 181.975 Axial†	3117.5	3182.2	4649.7 ug/L	4649.7 ppb	12:31:29
3	Sb 206.836†	313.5	294.6	93.418 ug/L	93.418 ppb	12:31:29
3	Se 196.026†	45.0	69.9	109.41 ug/L	109.41 ppb	12:31:29
3	Si 251.611†	228644.3	235922.0	7212.8 ug/L	7212.8 ppb	12:31:09
3	Sn 189.927†	374.0	382.4	85.400 ug/L	85.400 ppb	12:31:29
3	Ti 334.940†	551951.1	571710.8	934.82 ug/L	934.82 ppb	12:31:09
3	Tl 190.801†	275.1	321.3	101.41 ug/L	101.41 ppb	12:31:29
3	U 409.014†	787.4	2776.4	74.634 ug/L	74.634 ppb	12:31:09
3	V 292.402†	19491.4	21451.6	142.47 ug/L	142.47 ppb	12:31:09
3	Zn 213.857†	57174.6	58314.2	521.01 ug/L	521.01 ppb	12:31:09
3	SiO2†	227767.7	235034.7	15384 ug/L	15384 ppb	12:31:45

Mean Data: 1201977919|925187|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	847752.5	95.794	%	0.8094				0.84%
Sc Radial	5662.4	100.0	%	0.99				0.99%
Y 371.029	710308.4	95.720	%	0.8190				0.86%
Y RADIAL	6191.4	100.5	%	1.33				1.33%
Ag 328.068†	22378.9	107.87	ug/L	0.106	107.87	ppb	0.106	0.10%
Al 396.153Radial†	22906.1	16929	ug/L	50.5	16929	ppb	50.5	0.30%
As 188.979†	301.5	133.92	ug/L	2.489	133.92	ppb	2.489	1.86%
B 249.677†	6630.3	140.82	ug/L	0.582	140.82	ppb	0.582	0.41%
Ba 233.527†	214325.6	1628.9	ug/L	3.74	1628.9	ppb	3.74	0.23%
Be 313.107†	277864.3	105.07	ug/L	0.173	105.07	ppb	0.173	0.16%
Ca 317.933Radial†	128558.1	196590	ug/L	215.9	196590	ppb	215.9	0.11%
Cd 226.502†	9479.8	100.82	ug/L	0.509	100.82	ppb	0.509	0.51%
Co 228.616†	5524.7	105.93	ug/L	0.436	105.93	ppb	0.436	0.41%
Cr 267.716†	12933.0	139.96	ug/L	0.293	139.96	ppb	0.293	0.21%
Cu 324.752†	73065.4	213.58	ug/L	0.526	213.58	ppb	0.526	0.25%
Fe 238.204 Radial†	2114.9	21299	ug/L	176.6	21299	ppb	176.6	0.83%
K 766.490 Radial†	14793.8	2660.5	ug/L	9.97	2660.5	ppb	9.97	0.37%

Mg 279.077 IEC†	289.8	10774	ug/L	110.3	10774	ppb	110.3	1.02%
Mn 257.610†	414524.9	452.40	ug/L	0.974	452.40	ppb	0.974	0.22%
Mo 202.031†	1700.0	112.25	ug/L	1.326	112.25	ppb	1.326	1.18%
Na 589.592 Radial†	4961.3	1864.8	ug/L	18.60	1864.8	ppb	18.60	1.00%
Ni 231.604†	6641.5	157.52	ug/L	1.188	157.52	ppb	1.188	0.75%
P 214.914†	894.4	486.70	ug/L	4.191	486.70	ppb	4.191	0.86%
Pb 220.353†	1699.7	200.84	ug/L	1.392	200.84	ppb	1.392	0.69%
S 181.975 Axial†	3212.5	4694.0	ug/L	44.23	4694.0	ppb	44.23	0.94%
Sb 206.836†	293.6	93.142	ug/L	0.8466	93.142	ppb	0.8466	0.91%
Se 196.026†	75.4	112.96	ug/L	3.187	112.96	ppb	3.187	2.82%
Si 251.611†	236078.8	7217.6	ug/L	18.92	7217.6	ppb	18.92	0.26%
Sn 189.927†	377.9	84.639	ug/L	0.6658	84.639	ppb	0.6658	0.79%
Sr 421.552†	79062.3	531.90	ug/L	0.996	531.90	ppb	0.996	0.19%
Ti 334.940†	571381.3	934.28	ug/L	1.564	934.28	ppb	1.564	0.17%
Tl 190.801†	319.2	100.80	ug/L	1.327	100.80	ppb	1.327	1.32%
U 409.014†	2781.0	74.750	ug/L	1.3003	74.750	ppb	1.3003	1.74%
V 292.402†	21413.6	142.22	ug/L	0.215	142.22	ppb	0.215	0.15%
Zn 213.857†	58293.5	520.80	ug/L	0.946	520.80	ppb	0.946	0.18%
SiO2†	237039.9	15516	ug/L	121.3	15516	ppb	121.3	0.78%

Sequence No.: 18
Sample ID: 1201977917|925187|25
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 12/9/2009 12:33:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977917|925187|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5577.8	5577.8	98.5	%			12:35:48
1	Y RADIAL	6065.9	6065.9	98.49	%			12:35:48
1	Al 396.153Radial†	3787.0	3865.4	2857.5	ug/L	2857.5	ppb	12:35:48
1	Ca 317.933Radial†	25385.2	25756.8	39386	ug/L	39386	ppb	12:35:48
1	Fe 238.204 Radial†	431.9	432.5	4355.0	ug/L	4355.0	ppb	12:36:08
1	K 766.490 Radial†	3515.8	1399.4	249.26	ug/L	249.26	ppb	12:35:48
1	Mg 279.077 IEC†	50.8	49.8	1850.4	ug/L	1850.4	ppb	12:36:08
1	Na 589.592 Radial†	-323.0	288.0	108.25	ug/L	108.25	ppb	12:35:48
1	Sr 421.552†	7742.6	7857.9	52.681	ug/L	52.681	ppb	12:35:48
1	Sc 361.383	904790.2	904790.2	102.24	%			12:37:05
1	Y 371.029	752342.8	752342.8	101.38	%			12:37:05
1	Ag 328.068†	33.6	-194.7	-0.0499	ug/L	-0.0499	ppb	12:37:05
1	As 188.979†	-13.9	15.6	8.4564	ug/L	8.4564	ppb	12:37:25
1	B 249.677†	352.0	868.2	18.261	ug/L	18.261	ppb	12:37:25
1	Ba 233.527†	47201.6	46179.8	350.92	ug/L	350.92	ppb	12:37:05
1	Be 313.107†	-6040.6	-588.0	0.1153	ug/L	0.1153	ppb	12:37:05
1	Cd 226.502†	-129.4	61.2	0.3003	ug/L	0.3003	ppb	12:37:25
1	Co 228.616†	50.5	121.1	2.0829	ug/L	2.0829	ppb	12:37:25
1	Cr 267.716†	520.4	422.0	4.6432	ug/L	4.6432	ppb	12:37:25
1	Cu 324.752†	111725.8	102510.0	298.35	ug/L	298.35	ppb	12:37:05
1	Mn 257.610†	70057.3	68119.4	74.427	ug/L	74.427	ppb	12:37:05
1	Mo 202.031†	15.5	-4.8	-0.0064	ug/L	-0.0064	ppb	12:37:25
1	Ni 231.604†	4862.6	4686.0	111.19	ug/L	111.19	ppb	12:37:25
1	P 214.914†	430.0	200.7	68.355	ug/L	68.355	ppb	12:37:25
1	Pb 220.353†	122.2	172.0	20.160	ug/L	20.160	ppb	12:37:25
1	S 181.975 Axial†	498.2	445.8	651.29	ug/L	651.29	ppb	12:37:25
1	Sb 206.836†	40.4	9.9	2.0366	ug/L	2.0366	ppb	12:37:25
1	Se 196.026†	-40.7	-16.4	3.9768	ug/L	3.9768	ppb	12:37:25
1	Si 251.611†	69714.9	67679.9	2070.1	ug/L	2070.1	ppb	12:37:05
1	Sn 189.927†	-206.5	-206.2	-30.743	ug/L	-30.743	ppb	12:37:25
1	Ti 334.940†	106368.1	105003.3	171.88	ug/L	171.88	ppb	12:37:05
1	Tl 190.801†	-56.8	-18.7	-3.5910	ug/L	-3.5910	ppb	12:37:25
1	U 409.014†	-2229.5	-218.5	-6.6623	ug/L	-6.6623	ppb	12:37:05
1	V 292.402†	63.7	1358.8	8.3469	ug/L	8.3469	ppb	12:37:25
1	Zn 213.857†	10089.9	9061.6	79.981	ug/L	79.981	ppb	12:37:25
1	SiO2†	69185.9	67181.7	4399.4	ug/L	4399.4	ppb	12:38:22
2	Sc Radial	5613.7	5613.7	99.1	%			12:36:13
2	Y RADIAL	6070.3	6070.3	98.56	%			12:36:13
2	Al 396.153Radial†	3735.1	3788.4	2800.6	ug/L	2800.6	ppb	12:36:13
2	Ca 317.933Radial†	25026.8	25230.5	38582	ug/L	38582	ppb	12:36:13
2	Fe 238.204 Radial†	428.2	425.9	4289.0	ug/L	4289.0	ppb	12:36:33
2	K 766.490 Radial†	3486.4	1346.9	239.81	ug/L	239.81	ppb	12:36:13
2	Mg 279.077 IEC†	50.5	49.1	1826.5	ug/L	1826.5	ppb	12:36:33
2	Na 589.592 Radial†	-316.0	297.2	111.70	ug/L	111.70	ppb	12:36:13
2	Sr 421.552†	7639.7	7703.9	51.648	ug/L	51.648	ppb	12:36:13
2	Sc 361.383	897872.6	897872.6	101.46	%			12:37:31
2	Y 371.029	747765.0	747765.0	100.77	%			12:37:31
2	Ag 328.068†	4.3	-223.4	-0.1894	ug/L	-0.1894	ppb	12:37:31
2	As 188.979†	-18.5	11.0	6.5682	ug/L	6.5682	ppb	12:37:51
2	B 249.677†	346.6	865.5	18.212	ug/L	18.212	ppb	12:37:51
2	Ba 233.527†	46658.6	46000.3	349.55	ug/L	349.55	ppb	12:37:31
2	Be 313.107†	-6044.3	-637.2	0.0959	ug/L	0.0959	ppb	12:37:31
2	Cd 226.502†	-119.0	70.6	0.4086	ug/L	0.4086	ppb	12:37:51
2	Co 228.616†	59.2	130.1	2.2594	ug/L	2.2594	ppb	12:37:51
2	Cr 267.716†	510.7	416.4	4.5819	ug/L	4.5819	ppb	12:37:51
2	Cu 324.752†	110622.9	102264.9	297.64	ug/L	297.64	ppb	12:37:31
2	Mn 257.610†	69194.4	67796.8	74.071	ug/L	74.071	ppb	12:37:31
2	Mo 202.031†	22.7	2.4	0.4575	ug/L	0.4575	ppb	12:37:51
2	Ni 231.604†	4834.7	4695.1	111.41	ug/L	111.41	ppb	12:37:51

2	P 214.914†	429.8	203.7	70.282 ug/L	70.282 ppb	12:37:51
2	Pb 220.353†	129.1	179.8	21.059 ug/L	21.059 ppb	12:37:51
2	S 181.975 Axial†	496.9	448.3	654.96 ug/L	654.96 ppb	12:37:51
2	Sb 206.836†	34.6	4.5	0.2755 ug/L	0.2755 ppb	12:37:51
2	Se 196.026†	-41.6	-17.6	3.0730 ug/L	3.0730 ppb	12:37:51
2	Si 251.611†	68822.4	67325.6	2059.2 ug/L	2059.2 ppb	12:37:31
2	Sn 189.927†	-212.0	-213.2	-32.007 ug/L	-32.007 ppb	12:37:51
2	Ti 334.940†	105185.4	104639.2	171.25 ug/L	171.25 ppb	12:37:31
2	Tl 190.801†	-56.3	-18.7	-3.5793 ug/L	-3.5793 ppb	12:37:51
2	U 409.014†	-2285.9	-290.9	-8.6748 ug/L	-8.6748 ppb	12:37:31
2	V 292.402†	86.6	1381.9	8.5153 ug/L	8.5153 ppb	12:37:51
2	Zn 213.857†	10053.8	9102.1	80.351 ug/L	80.351 ppb	12:37:51
2	SiO2†	68349.6	66878.8	4379.5 ug/L	4379.5 ppb	12:38:27
3	Sc Radial	5727.7	5727.7	101 %		12:36:38
3	Y RADIAL	6198.3	6198.3	100.6 %		12:36:38
3	Al 396.153Radial†	3815.2	3792.7	2803.7 ug/L	2803.7 ppb	12:36:38
3	Ca 317.933Radial†	25475.5	25171.6	38492 ug/L	38492 ppb	12:36:38
3	Fe 238.204 Radial†	425.8	415.0	4179.1 ug/L	4179.1 ppb	12:36:58
3	K 766.490 Radial†	3454.0	1244.9	221.30 ug/L	221.30 ppb	12:36:38
3	Mg 279.077 IEC†	50.2	47.9	1778.8 ug/L	1778.8 ppb	12:36:58
3	Na 589.592 Radial†	-311.2	308.2	115.86 ug/L	115.86 ppb	12:36:38
3	Sr 421.552†	7743.8	7653.4	51.308 ug/L	51.308 ppb	12:36:38
3	Sc 361.383	898844.3	898844.3	101.57 %		12:37:56
3	Y 371.029	749514.2	749514.2	101.00 %		12:37:56
3	Ag 328.068†	1.5	-226.1	-0.2356 ug/L	-0.2356 ppb	12:37:56
3	As 188.979†	-12.1	17.3	9.1324 ug/L	9.1324 ppb	12:38:16
3	B 249.677†	344.5	863.1	18.173 ug/L	18.173 ppb	12:38:16
3	Ba 233.527†	46571.3	45864.6	348.52 ug/L	348.52 ppb	12:37:56
3	Be 313.107†	-6037.5	-624.0	0.1007 ug/L	0.1007 ppb	12:37:56
3	Cd 226.502†	-119.9	69.8	0.4114 ug/L	0.4114 ppb	12:38:16
3	Co 228.616†	55.4	126.3	2.1883 ug/L	2.1883 ppb	12:38:16
3	Cr 267.716†	514.9	419.9	4.6185 ug/L	4.6185 ppb	12:38:16
3	Cu 324.752†	110787.4	102309.0	297.76 ug/L	297.76 ppb	12:37:56
3	Mn 257.610†	69226.6	67754.9	74.015 ug/L	74.015 ppb	12:37:56
3	Mo 202.031†	25.4	5.0	0.6244 ug/L	0.6244 ppb	12:38:16
3	Ni 231.604†	4840.9	4696.0	111.43 ug/L	111.43 ppb	12:38:16
3	P 214.914†	413.1	186.8	60.346 ug/L	60.346 ppb	12:38:16
3	Pb 220.353†	118.8	169.5	19.870 ug/L	19.870 ppb	12:38:16
3	S 181.975 Axial†	509.4	460.1	672.18 ug/L	672.18 ppb	12:38:16
3	Sb 206.836†	40.6	10.4	2.2367 ug/L	2.2367 ppb	12:38:16
3	Se 196.026†	-31.0	-7.1	8.9946 ug/L	8.9946 ppb	12:38:16
3	Si 251.611†	68919.8	67348.1	2059.9 ug/L	2059.9 ppb	12:37:56
3	Sn 189.927†	-198.1	-199.3	-29.664 ug/L	-29.664 ppb	12:38:16
3	Ti 334.940†	105295.4	104635.4	171.24 ug/L	171.24 ppb	12:37:56
3	Tl 190.801†	-43.2	-5.7	0.1541 ug/L	0.1541 ppb	12:38:16
3	U 409.014†	-2323.1	-325.1	-9.6166 ug/L	-9.6166 ppb	12:37:56
3	V 292.402†	64.1	1359.6	8.3816 ug/L	8.3816 ppb	12:38:16
3	Zn 213.857†	10070.1	9107.4	80.411 ug/L	80.411 ppb	12:38:16
3	SiO2†	69335.6	67776.7	4438.3 ug/L	4438.3 ppb	12:38:32

Mean Data: 1201977917|925187|25

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900502.4	101.75	%	0.423				0.42%
Sc Radial	5639.7	99.6	%	1.38				1.39%
Y 371.029	749874.0	101.05	%	0.311				0.31%
Y RADIAL	6111.5	99.23	%	1.221				1.23%
Ag 328.068†	-214.7	-0.1583	ug/L	0.09668	-0.1583	ppb	0.09668	61.08%
Al 396.153Radial†	3815.5	2820.6	ug/L	32.00	2820.6	ppb	32.00	1.13%
As 188.979†	14.7	8.0523	ug/L	1.32901	8.0523	ppb	1.32901	16.50%
B 249.677†	865.6	18.215	ug/L	0.0439	18.215	ppb	0.0439	0.24%
Ba 233.527†	46014.9	349.66	ug/L	1.204	349.66	ppb	1.204	0.34%
Be 313.107†	-616.4	0.1040	ug/L	0.01010	0.1040	ppb	0.01010	9.72%
Ca 317.933Radial†	25386.3	38820	ug/L	492.7	38820	ppb	492.7	1.27%
Cd 226.502†	67.2	0.3734	ug/L	0.06332	0.3734	ppb	0.06332	16.96%
Co 228.616†	125.8	2.1769	ug/L	0.08883	2.1769	ppb	0.08883	4.08%
Cr 267.716†	419.4	4.6145	ug/L	0.03083	4.6145	ppb	0.03083	0.67%
Cu 324.752†	102361.3	297.92	ug/L	0.383	297.92	ppb	0.383	0.13%
Fe 238.204 Radial†	424.5	4274.4	ug/L	88.87	4274.4	ppb	88.87	2.08%
K 766.490 Radial†	1330.4	236.79	ug/L	14.222	236.79	ppb	14.222	6.01%

Mg 279.077 IEC†	48.9	1818.6	ug/L	36.49	1818.6	ppb	36.49	2.01%
Mn 257.610†	67890.4	74.171	ug/L	0.2237	74.171	ppb	0.2237	0.30%
Mo 202.031†	0.8	0.3585	ug/L	0.32684	0.3585	ppb	0.32684	91.17%
Na 589.592 Radial†	297.8	111.94	ug/L	3.810	111.94	ppb	3.810	3.40%
Ni 231.604†	4692.4	111.34	ug/L	0.132	111.34	ppb	0.132	0.12%
P 214.914†	197.0	66.328	ug/L	5.2692	66.328	ppb	5.2692	7.94%
Pb 220.353†	173.8	20.363	ug/L	0.6201	20.363	ppb	0.6201	3.04%
S 181.975 Axial†	451.4	659.48	ug/L	11.156	659.48	ppb	11.156	1.69%
Sb 206.836†	8.3	1.5162	ug/L	1.07918	1.5162	ppb	1.07918	71.17%
Se 196.026†	-13.7	5.3481	ug/L	3.19012	5.3481	ppb	3.19012	59.65%
Si 251.611†	67451.2	2063.1	ug/L	6.07	2063.1	ppb	6.07	0.29%
Sn 189.927†	-206.2	-30.804	ug/L	1.1728	-30.804	ppb	1.1728	3.81%
Sr 421.552†	7738.4	51.879	ug/L	0.7147	51.879	ppb	0.7147	1.38%
Ti 334.940†	104759.3	171.46	ug/L	0.367	171.46	ppb	0.367	0.21%
Tl 190.801†	-14.4	-2.3387	ug/L	2.15887	-2.3387	ppb	2.15887	92.31%
U 409.014†	-278.2	-8.3179	ug/L	1.50912	-8.3179	ppb	1.50912	18.14%
V 292.402†	1366.8	8.4146	ug/L	0.08895	8.4146	ppb	0.08895	1.06%
Zn 213.857†	9090.4	80.248	ug/L	0.2331	80.248	ppb	0.2331	0.29%
SiO2†	67279.1	4405.7	ug/L	29.91	4405.7	ppb	29.91	0.68%

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 12:40:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5623.4	5623.4	99.3	%			12:42:34
1	Y RADIAL	6077.8	6077.8	98.69	%			12:42:34
1	Al 396.153Radial†	6513.5	6580.2	4843.3	ug/L	4843.3	ppb	12:42:34
1	Ca 317.933Radial†	3257.6	3263.1	4989.8	ug/L	4989.8	ppb	12:42:54
1	Fe 238.204 Radial†	505.2	502.7	5077.6	ug/L	5077.6	ppb	12:42:54
1	K 766.490 Radial†	29555.9	27595.6	4999.8	ug/L	4999.8	ppb	12:42:34
1	Mg 279.077 IEC†	139.8	139.0	5183.2	ug/L	5183.2	ppb	12:42:54
1	Na 589.592 Radial†	25670.0	26468.4	9948.7	ug/L	9948.7	ppb	12:42:34
1	Sr 421.552†	75185.9	75716.8	511.09	ug/L	511.09	ppb	12:42:34
1	Sc 361.383	903498.7	903498.7	102.09	%			12:43:52
1	Y 371.029	744787.9	744787.9	100.37	%			12:43:52
1	Ag 328.068†	110161.8	107675.3	500.85	ug/L	500.85	ppb	12:43:57
1	As 188.979†	1172.3	1177.5	484.78	ug/L	484.78	ppb	12:44:17
1	B 249.677†	22188.6	22257.5	481.22	ug/L	481.22	ppb	12:43:57
1	Ba 233.527†	65645.2	64311.2	489.72	ug/L	489.72	ppb	12:43:57
1	Be 313.107†	1318453.3	1296738.5	482.83	ug/L	482.83	ppb	12:43:52
1	Cd 226.502†	46250.3	45489.8	493.32	ug/L	493.32	ppb	12:43:57
1	Co 228.616†	25747.3	25291.1	491.08	ug/L	491.08	ppb	12:43:57
1	Cr 267.716†	46385.2	45347.1	489.38	ug/L	489.38	ppb	12:43:57
1	Cu 324.752†	175722.3	165350.4	481.15	ug/L	481.15	ppb	12:43:57
1	Mn 257.610†	455771.8	446022.8	485.12	ug/L	485.12	ppb	12:43:52
1	Mo 202.031†	7721.2	7542.9	491.70	ug/L	491.70	ppb	12:44:17
1	Ni 231.604†	21195.8	20691.1	490.65	ug/L	490.65	ppb	12:43:57
1	P 214.914†	4342.3	4033.3	2323.4	ug/L	2323.4	ppb	12:44:17
1	Pb 220.353†	4173.4	4140.3	485.50	ug/L	485.50	ppb	12:44:17
1	S 181.975 Axial†	727.4	671.0	980.23	ug/L	980.23	ppb	12:44:17
1	Sb 206.836†	1584.4	1522.3	501.26	ug/L	501.26	ppb	12:44:17
1	Se 196.026†	802.4	809.4	500.42	ug/L	500.42	ppb	12:44:17
1	Si 251.611†	82681.3	80477.9	2449.7	ug/L	2449.7	ppb	12:43:57
1	Sn 189.927†	2981.0	2915.6	493.83	ug/L	493.83	ppb	12:44:17
1	Ti 334.940†	311817.6	306388.8	495.41	ug/L	495.41	ppb	12:43:57
1	Tl 190.801†	1681.7	1684.0	485.82	ug/L	485.82	ppb	12:44:17
1	U 409.014†	15806.2	17444.3	485.79	ug/L	485.79	ppb	12:43:57
1	V 292.402†	71937.4	71758.8	490.98	ug/L	490.98	ppb	12:43:57
1	Zn 213.857†	56469.8	54504.6	486.00	ug/L	486.00	ppb	12:43:57
1	SiO2†	81805.1	79638.8	5189.4	ug/L	5189.4	ppb	12:45:24
2	Sc Radial	5743.6	5743.6	101	%			12:42:59
2	Y RADIAL	6228.6	6228.6	101.1	%			12:42:59
2	Al 396.153Radial†	6551.0	6479.8	4769.1	ug/L	4769.1	ppb	12:42:59
2	Ca 317.933Radial†	3239.4	3176.4	4857.3	ug/L	4857.3	ppb	12:43:19
2	Fe 238.204 Radial†	501.7	488.6	4935.3	ug/L	4935.3	ppb	12:43:19
2	K 766.490 Radial†	29650.2	27065.4	4903.6	ug/L	4903.6	ppb	12:42:59
2	Mg 279.077 IEC†	140.2	136.5	5089.2	ug/L	5089.2	ppb	12:43:19
2	Na 589.592 Radial†	25780.5	26036.0	9786.2	ug/L	9786.2	ppb	12:42:59
2	Sr 421.552†	75852.1	74788.2	504.82	ug/L	504.82	ppb	12:42:59
2	Sc 361.383	899867.3	899867.3	101.68	%			12:44:23
2	Y 371.029	742925.5	742925.5	100.12	%			12:44:23
2	Ag 328.068†	108320.2	106299.7	494.43	ug/L	494.43	ppb	12:44:28
2	As 188.979†	1173.2	1183.0	486.92	ug/L	486.92	ppb	12:44:48
2	B 249.677†	21762.2	21925.9	474.06	ug/L	474.06	ppb	12:44:28
2	Ba 233.527†	64286.9	63234.8	481.53	ug/L	481.53	ppb	12:44:28
2	Be 313.107†	1313584.3	1297161.7	482.97	ug/L	482.97	ppb	12:44:23
2	Cd 226.502†	45106.5	44547.8	483.11	ug/L	483.11	ppb	12:44:28
2	Co 228.616†	25148.4	24803.9	481.64	ug/L	481.64	ppb	12:44:28
2	Cr 267.716†	45515.5	44675.1	482.13	ug/L	482.13	ppb	12:44:28
2	Cu 324.752†	172526.6	162902.2	474.02	ug/L	474.02	ppb	12:44:28
2	Mn 257.610†	453581.6	445670.3	484.72	ug/L	484.72	ppb	12:44:23
2	Mo 202.031†	7703.1	7555.6	492.52	ug/L	492.52	ppb	12:44:48
2	Ni 231.604†	20757.0	20343.3	482.40	ug/L	482.40	ppb	12:44:28

2	P 214.914†	4336.2	4044.4	2331.2 ug/L	2331.2 ppb	12:44:48
2	Pb 220.353†	4157.5	4141.2	485.61 ug/L	485.61 ppb	12:44:48
2	S 181.975 Axial†	723.3	669.8	978.48 ug/L	978.48 ppb	12:44:48
2	Sb 206.836†	1561.9	1506.4	496.31 ug/L	496.31 ppb	12:44:48
2	Se 196.026†	801.3	811.5	501.24 ug/L	501.24 ppb	12:44:48
2	Si 251.611†	81032.0	79182.8	2410.1 ug/L	2410.1 ppb	12:44:28
2	Sn 189.927†	2973.9	2920.5	494.65 ug/L	494.65 ppb	12:44:48
2	Ti 334.940†	305984.4	301884.6	488.12 ug/L	488.12 ppb	12:44:28
2	Tl 190.801†	1683.0	1692.0	488.10 ug/L	488.10 ppb	12:44:48
2	U 409.014†	15508.3	17213.8	479.38 ug/L	479.38 ppb	12:44:28
2	V 292.402†	70802.1	70926.7	485.40 ug/L	485.40 ppb	12:44:28
2	Zn 213.857†	55316.4	53593.5	477.89 ug/L	477.89 ppb	12:44:28
2	SiO2†	81973.0	80127.4	5221.4 ug/L	5221.4 ppb	12:45:29
3	Sc Radial	5696.3	5696.3	101 %		12:43:24
3	Y RADIAL	6125.3	6125.3	99.46 %		12:43:24
3	Al 396.153Radial†	6521.7	6504.3	4787.1 ug/L	4787.1 ppb	12:43:24
3	Ca 317.933Radial†	3284.9	3248.2	4967.1 ug/L	4967.1 ppb	12:43:44
3	Fe 238.204 Radial†	512.6	503.6	5086.3 ug/L	5086.3 ppb	12:43:44
3	K 766.490 Radial†	29631.7	27289.9	4944.3 ug/L	4944.3 ppb	12:43:24
3	Mg 279.077 IEC†	138.1	135.6	5054.2 ug/L	5054.2 ppb	12:43:44
3	Na 589.592 Radial†	25615.0	26082.7	9803.7 ug/L	9803.7 ppb	12:43:24
3	Sr 421.552†	75260.6	74821.6	505.04 ug/L	505.04 ppb	12:43:24
3	Sc 361.383	894001.1	894001.1	101.02 %		12:44:54
3	Y 371.029	739096.7	739096.7	99.599 %		12:44:54
3	Ag 328.068†	108862.3	107535.3	500.21 ug/L	500.21 ppb	12:44:59
3	As 188.979†	1163.5	1181.0	486.19 ug/L	486.19 ppb	12:45:19
3	B 249.677†	21982.2	22284.0	481.80 ug/L	481.80 ppb	12:44:59
3	Ba 233.527†	64624.5	63983.9	487.24 ug/L	487.24 ppb	12:44:59
3	Be 313.107†	1309109.3	1301208.5	484.49 ug/L	484.49 ppb	12:44:54
3	Cd 226.502†	45419.6	45148.7	489.62 ug/L	489.62 ppb	12:44:59
3	Co 228.616†	25349.0	25164.7	488.64 ug/L	488.64 ppb	12:44:59
3	Cr 267.716†	45712.0	45163.4	487.41 ug/L	487.41 ppb	12:44:59
3	Cu 324.752†	173656.7	165134.3	480.52 ug/L	480.52 ppb	12:44:59
3	Mn 257.610†	450513.2	445559.9	484.62 ug/L	484.62 ppb	12:44:54
3	Mo 202.031†	7706.4	7608.6	495.98 ug/L	495.98 ppb	12:45:19
3	Ni 231.604†	20950.4	20668.7	490.12 ug/L	490.12 ppb	12:44:59
3	P 214.914†	4339.3	4075.5	2348.6 ug/L	2348.6 ppb	12:45:19
3	Pb 220.353†	4118.7	4129.7	484.25 ug/L	484.25 ppb	12:45:19
3	S 181.975 Axial†	730.4	681.6	995.70 ug/L	995.70 ppb	12:45:19
3	Sb 206.836†	1571.6	1526.1	502.70 ug/L	502.70 ppb	12:45:19
3	Se 196.026†	812.2	827.5	511.24 ug/L	511.24 ppb	12:45:19
3	Si 251.611†	81584.8	80252.9	2442.8 ug/L	2442.8 ppb	12:44:59
3	Sn 189.927†	2977.7	2943.3	498.53 ug/L	498.53 ppb	12:45:19
3	Ti 334.940†	308067.8	305921.5	494.65 ug/L	494.65 ppb	12:44:59
3	Tl 190.801†	1678.7	1698.6	489.99 ug/L	489.99 ppb	12:45:19
3	U 409.014†	15681.2	17485.0	486.93 ug/L	486.93 ppb	12:44:59
3	V 292.402†	71263.8	71840.6	491.60 ug/L	491.60 ppb	12:44:59
3	Zn 213.857†	55564.5	54196.1	483.24 ug/L	483.24 ppb	12:44:59
3	SiO2†	82256.0	80936.4	5274.2 ug/L	5274.2 ppb	12:45:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	899122.4	101.60	%	0.542				0.53%
Sc Radial	5687.8	100	%	1.1				1.07%
Y 371.029	742270.0	100.03	%	0.391				0.39%
Y RADIAL	6143.9	99.76	%	1.252				1.25%
Ag 328.068†	107170.1	498.50	ug/L	3.536	498.50	ppb	3.536	0.71%
QC value within limits for Ag 328.068 Recovery = 99.70%								
Al 396.153Radial†	6521.4	4799.8	ug/L	38.72	4799.8	ppb	38.72	0.81%
QC value within limits for Al 396.153Radial Recovery = 96.00%								
As 188.979†	1180.5	485.96	ug/L	1.090	485.96	ppb	1.090	0.22%
QC value within limits for As 188.979 Recovery = 97.19%								
B 249.677†	22155.8	479.03	ug/L	4.309	479.03	ppb	4.309	0.90%
QC value within limits for B 249.677 Recovery = 95.81%								
Ba 233.527†	63843.3	486.16	ug/L	4.201	486.16	ppb	4.201	0.86%
QC value within limits for Ba 233.527 Recovery = 97.23%								
Be 313.107†	1298369.6	483.43	ug/L	0.920	483.43	ppb	0.920	0.19%
QC value within limits for Be 313.107 Recovery = 96.69%								
Ca 317.933Radial†	3229.2	4938.0	ug/L	70.86	4938.0	ppb	70.86	1.43%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.76%
Cd 226.502†            45062.1      488.68 ug/L         5.169      488.68 ppb          5.169   1.06%
   QC value within limits for Cd 226.502  Recovery = 97.74%
Co 228.616†            25086.6      487.12 ug/L         4.898      487.12 ppb          4.898   1.01%
   QC value within limits for Co 228.616  Recovery = 97.42%
Cr 267.716†            45061.9      486.31 ug/L         3.748      486.31 ppb          3.748   0.77%
   QC value within limits for Cr 267.716  Recovery = 97.26%
Cu 324.752†           164462.3      478.56 ug/L         3.946      478.56 ppb          3.946   0.82%
   QC value within limits for Cu 324.752  Recovery = 95.71%
Fe 238.204 Radial†       498.3      5033.0 ug/L         84.79      5033.0 ppb          84.79   1.68%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.66%
K 766.490 Radial†      27317.0      4949.2 ug/L         48.26      4949.2 ppb          48.26   0.98%
   QC value within limits for K 766.490 Radial  Recovery = 98.98%
Mg 279.077 IEC†          137.0      5108.9 ug/L         66.72      5108.9 ppb          66.72   1.31%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.18%
Mn 257.610†           445751.0      484.82 ug/L         0.264      484.82 ppb          0.264   0.05%
   QC value within limits for Mn 257.610  Recovery = 96.96%
Mo 202.031†             7569.0      493.40 ug/L         2.271      493.40 ppb          2.271   0.46%
   QC value within limits for Mo 202.031  Recovery = 98.68%
Na 589.592 Radial†     26195.7      9846.2 ug/L         89.20      9846.2 ppb          89.20   0.91%
   QC value within limits for Na 589.592 Radial  Recovery = 98.46%
Ni 231.604†            20567.7      487.72 ug/L         4.616      487.72 ppb          4.616   0.95%
   QC value within limits for Ni 231.604  Recovery = 97.54%
P 214.914†              4051.1      2334.4 ug/L         12.89      2334.4 ppb          12.89   0.55%
   QC value within limits for P 214.914  Recovery = 93.38%
Pb 220.353†             4137.1      485.12 ug/L         0.754      485.12 ppb          0.754   0.16%
   QC value within limits for Pb 220.353  Recovery = 97.02%
S 181.975 Axial†         674.1      984.80 ug/L         9.475      984.80 ppb          9.475   0.96%
   QC value within limits for S 181.975 Axial  Recovery = 98.48%
Sb 206.836†             1518.3      500.09 ug/L         3.353      500.09 ppb          3.353   0.67%
   QC value within limits for Sb 206.836  Recovery = 100.02%
Se 196.026†              816.1      504.30 ug/L         6.029      504.30 ppb          6.029   1.20%
   QC value within limits for Se 196.026  Recovery = 100.86%
Si 251.611†            79971.2      2434.2 ug/L         21.14      2434.2 ppb          21.14   0.87%
   QC value within limits for Si 251.611  Recovery = 97.37%
Sn 189.927†             2926.4      495.67 ug/L         2.510      495.67 ppb          2.510   0.51%
   QC value within limits for Sn 189.927  Recovery = 99.13%
Sr 421.552†            75108.9      506.98 ug/L         3.555      506.98 ppb          3.555   0.70%
   QC value within limits for Sr 421.552  Recovery = 101.40%
Ti 334.940†           304731.7      492.72 ug/L         4.006      492.72 ppb          4.006   0.81%
   QC value within limits for Ti 334.940  Recovery = 98.54%
Tl 190.801†             1691.5      487.97 ug/L         2.087      487.97 ppb          2.087   0.43%
   QC value within limits for Tl 190.801  Recovery = 97.59%
U 409.014†             17381.0      484.03 ug/L         4.069      484.03 ppb          4.069   0.84%
   QC value within limits for U 409.014  Recovery = 96.81%
V 292.402†             71508.7      489.32 ug/L         3.417      489.32 ppb          3.417   0.70%
   QC value within limits for V 292.402  Recovery = 97.86%
Zn 213.857†            54098.0      482.38 ug/L         4.127      482.38 ppb          4.127   0.86%
   QC value within limits for Zn 213.857  Recovery = 96.48%
SiO2†                  80234.2      5228.4 ug/L         42.83      5228.4 ppb          42.83   0.82%
   QC value within limits for SiO2  Recovery = 97.77%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 12:47:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5770.6	5770.6	102	%			12:49:37
1	Y RADIAL	6247.3	6247.3	101.4	%			12:49:37
1	Al 396.153Radial†	-15.7	4.9	3.6504	ug/L	3.6504	ppb	12:49:37
1	Ca 317.933Radial†	23.4	5.3	8.0852	ug/L	8.0852	ppb	12:49:57
1	Fe 238.204 Radial†	6.6	0.5	4.9431	ug/L	4.9431	ppb	12:49:57
1	K 766.490 Radial†	2236.1	24.3	4.3858	ug/L	4.3858	ppb	12:49:37
1	Mg 279.077 IEC†	1.1	-0.7	-24.705	ug/L	-24.705	ppb	12:49:57
1	Na 589.592 Radial†	-512.2	113.3	42.580	ug/L	42.580	ppb	12:49:37
1	Sr 421.552†	16.5	12.8	0.0864	ug/L	0.0864	ppb	12:49:37
1	Sc 361.383	903607.9	903607.9	102.11	%			12:50:54
1	Y 371.029	758651.9	758651.9	102.23	%			12:50:54
1	Ag 328.068†	321.7	87.4	0.4137	ug/L	0.4137	ppb	12:50:59
1	As 188.979†	-24.5	5.2	2.1305	ug/L	2.1305	ppb	12:51:19
1	B 249.677†	-324.9	205.7	4.4635	ug/L	4.4635	ppb	12:51:19
1	Ba 233.527†	-23.2	-10.7	-0.0808	ug/L	-0.0808	ppb	12:51:19
1	Be 313.107†	-5275.4	153.6	0.0570	ug/L	0.0570	ppb	12:50:59
1	Cd 226.502†	-176.2	15.3	0.1657	ug/L	0.1657	ppb	12:51:19
1	Co 228.616†	-68.6	4.5	0.0883	ug/L	0.0883	ppb	12:51:19
1	Cr 267.716†	70.1	-18.3	-0.1945	ug/L	-0.1945	ppb	12:51:19
1	Cu 324.752†	6814.2	-95.0	-0.2760	ug/L	-0.2760	ppb	12:50:59
1	Mn 257.610†	426.9	14.7	0.0169	ug/L	0.0169	ppb	12:51:19
1	Mo 202.031†	20.0	-0.5	-0.0291	ug/L	-0.0291	ppb	12:51:19
1	Ni 231.604†	86.7	14.8	0.3514	ug/L	0.3514	ppb	12:51:19
1	P 214.914†	219.6	-4.9	-2.8430	ug/L	-2.8430	ppb	12:51:19
1	Pb 220.353†	-61.0	-7.2	-0.8404	ug/L	-0.8404	ppb	12:51:19
1	S 181.975 Axial†	40.2	-2.1	-3.0921	ug/L	-3.0921	ppb	12:51:19
1	Sb 206.836†	37.3	7.0	2.2897	ug/L	2.2897	ppb	12:51:19
1	Se 196.026†	-22.0	1.9	1.1622	ug/L	1.1622	ppb	12:51:19
1	Si 251.611†	561.6	42.0	1.2796	ug/L	1.2796	ppb	12:51:19
1	Sn 189.927†	14.0	9.4	1.5962	ug/L	1.5962	ppb	12:51:19
1	Ti 334.940†	-1024.8	-38.6	-0.0580	ug/L	-0.0580	ppb	12:50:59
1	Tl 190.801†	-31.1	6.4	1.8306	ug/L	1.8306	ppb	12:51:19
1	U 409.014†	-2328.2	-318.0	-8.8850	ug/L	-8.8850	ppb	12:50:59
1	V 292.402†	-1307.7	15.7	0.0874	ug/L	0.0874	ppb	12:50:59
1	Zn 213.857†	684.0	-137.4	-1.2379	ug/L	-1.2379	ppb	12:51:19
1	SiO2†	583.2	82.3	5.3773	ug/L	5.3773	ppb	12:52:25
2	Sc Radial	5947.3	5947.3	105	%			12:50:02
2	Y RADIAL	6456.8	6456.8	104.8	%			12:50:02
2	Al 396.153Radial†	-32.3	-10.4	-7.7205	ug/L	-7.7205	ppb	12:50:02
2	Ca 317.933Radial†	21.1	2.4	3.6745	ug/L	3.6745	ppb	12:50:22
2	Fe 238.204 Radial†	5.7	-0.6	-5.8945	ug/L	-5.8945	ppb	12:50:22
2	K 766.490 Radial†	2245.8	-31.7	-5.7758	ug/L	-5.7758	ppb	12:50:02
2	Mg 279.077 IEC†	2.1	0.2	9.0627	ug/L	9.0627	ppb	12:50:22
2	Na 589.592 Radial†	-531.3	110.1	41.375	ug/L	41.375	ppb	12:50:02
2	Sr 421.552†	5.6	1.9	0.0129	ug/L	0.0129	ppb	12:50:02
2	Sc 361.383	902742.4	902742.4	102.01	%			12:51:24
2	Y 371.029	759404.3	759404.3	102.34	%			12:51:24
2	Ag 328.068†	346.0	111.6	0.5223	ug/L	0.5223	ppb	12:51:29
2	As 188.979†	-22.2	7.4	3.0285	ug/L	3.0285	ppb	12:51:49
2	B 249.677†	-328.8	201.5	4.3752	ug/L	4.3752	ppb	12:51:49
2	Ba 233.527†	-6.2	5.9	0.0454	ug/L	0.0454	ppb	12:51:49
2	Be 313.107†	-5161.4	260.4	0.0969	ug/L	0.0969	ppb	12:51:29
2	Cd 226.502†	-172.2	19.1	0.2077	ug/L	0.2077	ppb	12:51:49
2	Co 228.616†	-66.0	7.1	0.1369	ug/L	0.1369	ppb	12:51:49
2	Cr 267.716†	85.3	-3.3	-0.0325	ug/L	-0.0325	ppb	12:51:49
2	Cu 324.752†	6839.0	-64.3	-0.1872	ug/L	-0.1872	ppb	12:51:29
2	Mn 257.610†	425.1	13.3	0.0137	ug/L	0.0137	ppb	12:51:49
2	Mo 202.031†	18.8	-1.6	-0.1019	ug/L	-0.1019	ppb	12:51:49
2	Ni 231.604†	86.9	15.1	0.3580	ug/L	0.3580	ppb	12:51:49

2	P 214.914†	218.3	-6.0	-3.5159 ug/L	-3.5159 ppb	12:51:49
2	Pb 220.353†	-63.2	-9.4	-1.1028 ug/L	-1.1028 ppb	12:51:49
2	S 181.975 Axial†	40.0	-2.2	-3.2455 ug/L	-3.2455 ppb	12:51:49
2	Sb 206.836†	34.5	4.2	1.3767 ug/L	1.3767 ppb	12:51:49
2	Se 196.026†	-13.2	10.5	6.2668 ug/L	6.2668 ppb	12:51:49
2	Si 251.611†	566.4	47.3	1.4461 ug/L	1.4461 ppb	12:51:49
2	Sn 189.927†	11.1	6.6	1.1238 ug/L	1.1238 ppb	12:51:49
2	Ti 334.940†	-936.3	47.1	0.0803 ug/L	0.0803 ppb	12:51:29
2	Tl 190.801†	-38.3	-0.7	-0.1910 ug/L	-0.1910 ppb	12:51:49
2	U 409.014†	-2322.0	-314.1	-8.7753 ug/L	-8.7753 ppb	12:51:29
2	V 292.402†	-1290.0	31.9	0.1978 ug/L	0.1978 ppb	12:51:29
2	Zn 213.857†	693.4	-127.5	-1.1490 ug/L	-1.1490 ppb	12:51:49
2	SiO2†	559.2	59.3	3.8854 ug/L	3.8854 ppb	12:52:30
3	Sc Radial	5936.1	5936.1	105 %		12:50:27
3	Y RADIAL	6451.1	6451.1	104.7 %		12:50:27
3	Al 396.153Radial†	-39.5	-17.4	-12.855 ug/L	-12.855 ppb	12:50:27
3	Ca 317.933Radial†	21.6	2.9	4.4388 ug/L	4.4388 ppb	12:50:47
3	Fe 238.204 Radial†	4.8	-1.5	-14.777 ug/L	-14.777 ppb	12:50:47
3	K 766.490 Radial†	2169.1	-100.9	-18.336 ug/L	-18.336 ppb	12:50:27
3	Mg 279.077 IEC†	3.5	1.6	58.379 ug/L	58.379 ppb	12:50:47
3	Na 589.592 Radial†	-498.0	140.9	52.948 ug/L	52.948 ppb	12:50:27
3	Sr 421.552†	43.1	37.7	0.2543 ug/L	0.2543 ppb	12:50:27
3	Sc 361.383	902267.9	902267.9	101.95 %		12:51:54
3	Y 371.029	757493.1	757493.1	102.08 %		12:51:54
3	Ag 328.068†	288.3	55.2	0.2557 ug/L	0.2557 ppb	12:51:59
3	As 188.979†	-22.2	7.4	3.0155 ug/L	3.0155 ppb	12:52:19
3	B 249.677†	-300.9	228.8	4.9675 ug/L	4.9675 ppb	12:52:19
3	Ba 233.527†	-19.3	-6.9	-0.0538 ug/L	-0.0538 ppb	12:52:19
3	Be 313.107†	-5234.1	186.5	0.0693 ug/L	0.0693 ppb	12:51:59
3	Cd 226.502†	-166.1	24.9	0.2716 ug/L	0.2716 ppb	12:52:19
3	Co 228.616†	-72.5	0.6	0.0123 ug/L	0.0123 ppb	12:52:19
3	Cr 267.716†	72.3	-16.0	-0.1713 ug/L	-0.1713 ppb	12:52:19
3	Cu 324.752†	6853.0	-47.0	-0.1374 ug/L	-0.1374 ppb	12:51:59
3	Mn 257.610†	425.2	13.6	0.0122 ug/L	0.0122 ppb	12:52:19
3	Mo 202.031†	17.3	-3.0	-0.1965 ug/L	-0.1965 ppb	12:52:19
3	Ni 231.604†	86.4	14.7	0.3477 ug/L	0.3477 ppb	12:52:19
3	P 214.914†	211.9	-12.2	-7.1623 ug/L	-7.1623 ppb	12:52:19
3	Pb 220.353†	-72.3	-18.4	-2.1486 ug/L	-2.1486 ppb	12:52:19
3	S 181.975 Axial†	48.2	5.8	8.5533 ug/L	8.5533 ppb	12:52:19
3	Sb 206.836†	33.2	3.0	1.0038 ug/L	1.0038 ppb	12:52:19
3	Se 196.026†	-20.5	3.4	1.9682 ug/L	1.9682 ppb	12:52:19
3	Si 251.611†	587.3	68.0	2.0842 ug/L	2.0842 ppb	12:52:19
3	Sn 189.927†	16.3	11.7	1.9755 ug/L	1.9755 ppb	12:52:19
3	Ti 334.940†	-975.1	8.7	0.0175 ug/L	0.0175 ppb	12:51:59
3	Tl 190.801†	-24.9	12.4	3.5624 ug/L	3.5624 ppb	12:52:19
3	U 409.014†	-2261.6	-256.1	-7.1533 ug/L	-7.1533 ppb	12:51:59
3	V 292.402†	-1357.5	-35.0	-0.2495 ug/L	-0.2495 ppb	12:51:59
3	Zn 213.857†	671.3	-148.8	-1.3417 ug/L	-1.3417 ppb	12:52:19
3	SiO2†	591.0	90.8	5.9537 ug/L	5.9537 ppb	12:52:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902872.8	102.02	%	0.077				0.08%
Sc Radial	5884.7	104	%	1.7				1.68%
Y 371.029	758516.4	102.22	%	0.130				0.13%
Y RADIAL	6385.1	103.7	%	1.94				1.87%
Ag 328.068†	84.7	0.3973	ug/L	0.13403	0.3973	ppb	0.13403	33.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.6	-5.6417	ug/L	8.44680	-5.6417	ppb	8.44680	149.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.7	2.7248	ug/L	0.51476	2.7248	ppb	0.51476	18.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	212.0	4.6021	ug/L	0.31951	4.6021	ppb	0.31951	6.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.9	-0.0297	ug/L	0.06646	-0.0297	ppb	0.06646	223.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	200.2	0.0744	ug/L	0.02046	0.0744	ppb	0.02046	27.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3995	ug/L	2.35706	5.3995	ppb	2.35706	43.65%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                19.7      0.2150 ug/L       0.05331      0.2150 ppb        0.05331  24.79%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 4.1      0.0792 ug/L       0.06278      0.0792 ppb        0.06278  79.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.6     -0.1327 ug/L       0.08759     -0.1327 ppb        0.08759  65.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -68.7     -0.2002 ug/L       0.07021     -0.2002 ppb        0.07021  35.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -5.2429 ug/L       9.87632     -5.2429 ppb        9.87632 188.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -36.1     -6.5755 ug/L      11.38212     -6.5755 ppb       11.38212 173.10%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.4      14.246 ug/L       41.7838      14.246 ppb        41.7838 293.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                13.9      0.0143 ug/L       0.00241      0.0143 ppb        0.00241  16.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.7     -0.1092 ug/L       0.08390     -0.1092 ppb        0.08390  76.87%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        121.4      45.635 ug/L        6.3625      45.635 ppb         6.3625  13.94%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.9      0.3524 ug/L       0.00521      0.3524 ppb        0.00521   1.48%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.7     -4.5071 ug/L       2.32395     -4.5071 ppb        2.32395  51.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.7     -1.3639 ug/L       0.69208     -1.3639 ppb        0.69208  50.74%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.7386 ug/L       6.76817      0.7386 ppb        6.76817 916.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.7      1.5567 ug/L       0.66160      1.5567 ppb        0.66160  42.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.3      3.1324 ug/L       2.74421      3.1324 ppb        2.74421  87.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.4      1.6033 ug/L       0.42469      1.6033 ppb        0.42469  26.49%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.2      1.5652 ug/L       0.42666      1.5652 ppb        0.42666  27.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                17.5      0.1179 ug/L       0.12372      0.1179 ppb        0.12372 104.96%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 5.7      0.0133 ug/L       0.06926      0.0133 ppb        0.06926 522.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.1      1.7340 ug/L       1.87860      1.7340 ppb        1.87860 108.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -296.1     -8.2712 ug/L       0.96965     -8.2712 ppb        0.96965  11.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 4.2      0.0119 ug/L       0.23303      0.0119 ppb        0.23303 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -137.9     -1.2429 ug/L       0.09644     -1.2429 ppb        0.09644   7.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      77.5      5.0721 ug/L       1.06739      5.0721 ppb        1.06739  21.04%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, December 07, 2009 18:08:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1416
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5792.2	5792.174	47.680	0.8
	Mg	24.0	51312.8	51312.793	311.105	0.6
	Co	58.9	104991.6	104991.633	1073.307	1.0
	Rh	102.9	197321.7	197321.652	1275.464	0.6
	In	114.9	283136.0	283136.040	2435.359	0.9
	Pb	208.0	190760.9	190760.913	2085.603	1.1
⌈>	Ba	137.9	277644.2	277644.185	2333.519	0.8
⌊	Ba++	69.0	5120.7	0.018	0.000	2.2
⌈>	Ce	139.9	334832.9	334832.867	2459.124	0.7
⌊	CeO	155.9	8352.1	0.025	0.001	3.4
	Bkgd	220.0	16.5	16.500	3.984	24.1

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	6.3	5990.9
Co	59	11	6.3	98720.9
In	115	11	6.8	285928.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	593	2060	0.634
Be	9.0	9.0	2044	2070	0.662
Mg	24.0	24.0	5697	2080	0.650
Mg	25.0	25.0	5925	2075	0.626
Mg	26.0	25.9	6179	2070	0.686
Co	58.9	58.9	14188	2110	0.635
Rh	102.9	102.9	24873	2160	0.647
In	114.9	114.9	27787	2180	0.640
Ce	139.9	139.9	33871	2195	0.670
Pb	206.0	206.0	49948	2290	0.634
Pb	207.0	207.0	50159	2260	0.625
Pb	208.0	208.0	50451	2280	0.667
U	238.1	238.0	57722	2285	0.696

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 07, 2009 18:44:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Blank.407

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		124	
	Be	9		ug/L		30	
	B	11		ug/L		1317	
	Na	23		ug/L		81570	
	Mg	24		ug/L		7669	
	Al	27		ug/L		16344	
	P	31		ug/L		9693	
	K	39		ug/L		576399	
	Ca	43		ug/L		383	
>	Sc	45		ug/L		902978	
	Ti	47		ug/L		469	
	V	51		ug/L		13835	
	Cr	52		ug/L		-3560	
	Cr	53		ug/L		121270	
	Mn	55		ug/L		1514	
	Fe	57		ug/L		6199	
	Co	59		ug/L		463	
	Ni	60		ug/L		187	
	Cu	63		ug/L		413	
	Cu	65		ug/L		198	
	Zn	66		ug/L		515	
	Zn	67		ug/L		16509	
	Zn	68		ug/L		1985	
>	Ge	74		ug/L		611690	
	As	75		ug/L		-203	
	Se	77		ug/L		6879	
	Se	82		ug/L		3	
	Kr	83		ug/L		135	
	Sr	88		ug/L		805	
	Y	89		ug/L		73	
	Mo	98		ug/L		280	
	Ag	107		ug/L		175	
	Cd	111		ug/L		112	
	Cd	114		ug/L		240	
>	In	115		ug/L		404760	
	Sn	120		ug/L		898	
	Sb	121		ug/L		4520	
	Sb	123		ug/L		3469	
	Ba	135		ug/L		120	
	Ba	137		ug/L		211	
	Ho	165		ug/L		57	
>	Lu	175		ug/L		580054	
	Tl	205		ug/L		1551	
	Pb	208		ug/L		2761	
	Bi	209		ug/L		251	
	Th	232		ug/L		4231	
	U	238		ug/L		1858	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Simple Linear	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 07, 2009 18:50:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Standard 1.408

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.000**	**ug/L**	2.398	24406	0.027
	Be	9	**10.000**	**ug/L**	2.254	5009	0.005
	B	11	**20.000**	**ug/L**	2.139	12130	0.012
	Na	23	**1000.000**	**ug/L**	9.116	4755930	5.146
	Mg	24	**1000.000**	**ug/L**	6.493	3534839	3.886
	Al	27	**1000.000**	**ug/L**	8.662	5391158	5.922
	P	31	**1000.000**	**ug/L**	0.337	316288	0.338
	K	39	**1000.000**	**ug/L**	7.157	7269145	7.367
	Ca	43	**1000.000**	**ug/L**	2.128	16808	0.018
>	Sc	45		**ug/L**		907809	907808.781
	Ti	47	**10.000**	**ug/L**	1.357	8462	0.009
	V	51	**10.000**	**ug/L**	1.152	103745	0.099
	Cr	52	**10.000**	**ug/L**	1.135	68524	0.079
	Cr	53		**ug/L**		121029	-0.001
	Mn	55	**10.000**	**ug/L**	1.181	119780	0.130
	Fe	57	**1000.000**	**ug/L**	1.380	246721	0.265
	Co	59	**10.000**	**ug/L**	0.692	90660	0.099
	Ni	60	**10.000**	**ug/L**	3.550	19182	0.021
	Cu	63		**ug/L**		47391	0.052
	Cu	65	**10.000**	**ug/L**	1.632	23480	0.026
	Zn	66	**10.000**	**ug/L**	1.585	16602	0.027
	Zn	67		**ug/L**		18016	0.003
	Zn	68		**ug/L**		13534	0.019
>	Ge	74		**ug/L**		596910	596910.249
	As	75	**10.000**	**ug/L**	5.091	15203	0.026
	Se	77		**ug/L**		7558	0.001
	Se	82	**10.000**	**ug/L**	1.674	1718	0.003
	Kr	83		**ug/L**		120	-0.000
	Sr	88	**10.000**	**ug/L**	0.668	205437	0.515
	Y	89		**ug/L**		86	0.000
	Mo	98	**10.000**	**ug/L**	0.991	44917	0.112
	Ag	107	**10.000**	**ug/L**	2.259	81387	0.204
	Cd	111	**10.000**	**ug/L**	2.028	19545	0.049
	Cd	114		**ug/L**		47092	0.118
>	In	115		**ug/L**		397240	397239.843
	Sn	120	**10.000**	**ug/L**	0.347	85405	0.213
	Sb	121	**10.000**	**ug/L**	12.493	58453	0.136
	Sb	123		**ug/L**		45937	0.107
	Ba	135		**ug/L**		21853	0.038
	Ba	137	**10.000**	**ug/L**	2.533	39161	0.067
	Ho	165		**ug/L**		62	0.000
>	Lu	175		**ug/L**		578181	578180.577
	Tl	205	**10.000**	**ug/L**	1.204	220598	0.379
	Pb	208	**10.000**	**ug/L**	1.710	338082	0.580
	Bi	209		**ug/L**		294	0.000
	Th	232	**10.000**	**ug/L**	2.032	374902	0.641
	U	238	**10.000**	**ug/L**	1.355	404290	0.696

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, December 07, 2009 18:56:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Standard 2.409

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.013**	ug/L	3.605	241793	0.271
	Be	9	**100.003**	ug/L	5.510	49083	0.055
	B	11	**200.041**	ug/L	2.824	109731	0.122
	Na	23	**10011.816**	ug/L	5.938	52183069	58.430
	Mg	24	**9993.297**	ug/L	8.064	32420546	36.393
	Al	27	**10001.101**	ug/L	8.835	53339305	59.881
	P	31	**9992.869**	ug/L	6.451	2815843	3.150
	K	39	**10004.421**	ug/L	9.164	69335755	77.108
	Ca	43	**9996.642**	ug/L	5.887	156331	0.175
>	Sc	45		ug/L		893043	893042.642
	Ti	47	**99.995**	ug/L	5.296	78515	0.088
	V	51	**99.945**	ug/L	6.492	848974	0.938
	Cr	52	**99.931**	ug/L	6.094	657970	0.742
	Cr	53		ug/L		179458	0.067
	Mn	55	**99.915**	ug/L	6.436	1070643	1.200
	Fe	57	**9980.581**	ug/L	6.751	1978558	2.214
	Co	59	**99.902**	ug/L	5.863	805773	0.904
	Ni	60	**99.950**	ug/L	7.475	177580	0.199
	Cu	63		ug/L		428507	0.480
	Cu	65	**99.937**	ug/L	5.379	215045	0.241
	Zn	66	**99.959**	ug/L	1.550	149894	0.259
	Zn	67		ug/L		38824	0.040
	Zn	68		ug/L		109992	0.187
>	Ge	74		ug/L		576751	576751.422
	As	75	**100.029**	ug/L	2.031	153013	0.266
	Se	77		ug/L		17694	0.019
	Se	82	**99.972**	ug/L	1.947	16122	0.028
	Kr	83		ug/L		156	0.000
	Sr	88	**99.881**	ug/L	0.867	1735691	4.597
	Y	89		ug/L		238	0.000
	Mo	98	**99.999**	ug/L	0.799	424109	1.123
	Ag	107	**99.936**	ug/L	1.873	724997	1.920
	Cd	111	**99.999**	ug/L	2.294	184679	0.489
	Cd	114		ug/L		434397	1.150
>	In	115		ug/L		377424	377423.660
	Sn	120	**99.967**	ug/L	1.166	777661	2.058
	Sb	121	**100.097**	ug/L	7.224	573288	1.508
	Sb	123		ug/L		457049	1.202
	Ba	135		ug/L		209550	0.372
	Ba	137	**99.963**	ug/L	2.316	366242	0.650
	Ho	165		ug/L		69	0.000
>	Lu	175		ug/L		563643	563642.867
	Tl	205	**99.807**	ug/L	0.967	1788243	3.170
	Pb	208	**99.887**	ug/L	2.307	2937612	5.208
	Bi	209		ug/L		474	0.000
	Th	232	**99.937**	ug/L	2.835	3402063	6.029
	U	238	**99.886**	ug/L	2.827	3519623	6.243

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, December 07, 2009 19:02:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 1.410

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.409**	ug/L	3.393	121024	0.134
	Be	9	**50.483**	ug/L	4.185	25121	0.028
	B	11	**103.059**	ug/L	4.074	57856	0.063
	Na	23	**4503.360**	ug/L	12.795	23814219	26.282
	Mg	24	**5204.267**	ug/L	3.542	17125225	18.953
	Al	27	**5102.167**	ug/L	9.052	27614354	30.549
	P	31	**4807.701**	ug/L	4.201	1378074	1.515
	K	39	**4732.465**	ug/L	11.040	33492695	36.475
	Ca	43	**4814.025**	ug/L	3.739	76496	0.084
>	Sc	45		ug/L		903987	903987.017
	Ti	47	**50.177**	ug/L	3.267	40159	0.044
	V	51	**50.820**	ug/L	3.498	444417	0.477
	Cr	52	**51.868**	ug/L	2.100	344611	0.385
	Cr	53		ug/L		142062	0.023
	Mn	55	**52.217**	ug/L	4.322	567804	0.627
	Fe	57	**5242.341**	ug/L	4.093	1056383	1.163
	Co	59	**50.530**	ug/L	2.962	413341	0.457
	Ni	60	**50.535**	ug/L	4.018	91125	0.101
	Cu	63		ug/L		225386	0.249
	Cu	65	**51.655**	ug/L	6.018	112650	0.125
	Zn	66	**51.347**	ug/L	1.326	76213	0.133
	Zn	67		ug/L		26238	0.019
	Zn	68		ug/L		56915	0.097
>	Ge	74		ug/L		569085	569084.603
	As	75	**47.854**	ug/L	2.164	72137	0.127
	Se	77		ug/L		11811	0.010
	Se	82	**50.396**	ug/L	2.125	8022	0.014
	Kr	83		ug/L		125	-0.000
	Sr	88	**51.972**	ug/L	0.505	916136	2.392
	Y	89		ug/L		104	0.000
	Mo	98	**49.365**	ug/L	1.337	212402	0.554
	Ag	107	**50.781**	ug/L	0.597	373607	0.976
	Cd	111	**50.070**	ug/L	2.088	93803	0.245
	Cd	114		ug/L		221964	0.579
>	In	115		ug/L		382693	382692.516
	Sn	120	**51.048**	ug/L	1.539	403032	1.051
	Sb	121	**52.378**	ug/L	5.787	306310	0.789
	Sb	123		ug/L		241836	0.623
	Ba	135		ug/L		105304	0.185
	Ba	137	**49.715**	ug/L	1.892	183505	0.323
	Ho	165		ug/L		111	0.000
>	Lu	175		ug/L		567427	567426.985
	Tl	205	**52.290**	ug/L	0.383	943990	1.661
	Pb	208	**53.848**	ug/L	0.258	1595833	2.808
	Bi	209		ug/L		338	0.000
	Th	232	**49.640**	ug/L	1.478	1703558	2.995
	U	238	**50.317**	ug/L	0.188	1786291	3.145

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.819				
	Be	9	100.965				
	B	11	103.059				
	Na	23	90.067				
	Mg	24	104.085				
	Al	27	101.033				
	P	31	96.154				
	K	39	94.649				
	Ca	43	96.281				
>	Sc	45		100.1			
	Ti	47	100.354				
	V	51	101.641				
	Cr	52	103.735				
	Cr	53					
	Mn	55	104.433				
	Fe	57	104.847				
	Co	59	101.060				
	Ni	60	101.070				
	Cu	63					
	Cu	65	103.311				
	Zn	66	102.694				
	Zn	67					
	Zn	68					
>	Ge	74		93.0			
	As	75	95.708				
	Se	77					
	Se	82	100.792				
	Kr	83					
	Sr	88	103.945				
	Y	89					
	Mo	98	98.729				
	Ag	107	101.562				
	Cd	111	100.140				
	Cd	114					
>	In	115		94.5			
	Sn	120	102.095				
	Sb	121	104.757				
	Sb	123					
	Ba	135					
	Ba	137	99.430				
	Ho	165					
>	Lu	175		97.8			
	Tl	205	104.580				
	Pb	208	107.695				
	Bi	209					
	Th	232	99.281				
	U	238	100.635				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, December 07, 2009 19:08:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 2.411

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.021**	ug/L	22.766	72	-0.000
	Be	9	**-0.024**	ug/L	3.883	18	-0.000
	B	11	**4.839**	ug/L	12.092	4003	0.003
	Na	23	**-0.959**	ug/L	205.386	77211	-0.006
	Mg	24	**-0.441**	ug/L	251.178	6335	-0.002
	Al	27	**-0.402**	ug/L	144.318	14341	-0.002
	P	31	**0.186**	ug/L	1133.152	9820	0.000
	K	39	**-6.872**	ug/L	30.691	532757	-0.053
	Ca	43	**0.566**	ug/L	110.134	395	0.000
>	Sc	45		ug/L		910393	910393.046
	Ti	47	**0.037**	ug/L	119.119	502	0.000
	V	51	**-0.180**	ug/L	252.832	12339	-0.002
	Cr	52	**0.231**	ug/L	19.689	-2021	0.002
	Cr	53		ug/L		104787	-0.019
	Mn	55	**-0.026**	ug/L	7.317	1240	-0.000
	Fe	57	**-1.141**	ug/L	70.330	6019	-0.000
	Co	59	**-0.028**	ug/L	5.287	239	-0.000
	Ni	60	**-0.028**	ug/L	30.622	138	-0.000
	Cu	63		ug/L		266	-0.000
	Cu	65	**0.025**	ug/L	297.234	257	0.000
	Zn	66	**0.001**	ug/L	195.090	492	0.000
	Zn	67		ug/L		14574	-0.002
	Zn	68		ug/L		1660	-0.000
>	Ge	74		ug/L		582985	582984.972
	As	75	**0.145**	ug/L	81.815	31	0.000
	Se	77		ug/L		5873	-0.001
	Se	82	**0.064**	ug/L	135.093	14	0.000
	Kr	83		ug/L		110	-0.000
	Sr	88	**-0.017**	ug/L	7.196	463	-0.001
	Y	89		ug/L		54	-0.000
	Mo	98	**0.080**	ug/L	30.655	611	0.001
	Ag	107	**-0.006**	ug/L	16.054	124	-0.000
	Cd	111	**-0.022**	ug/L	21.473	64	-0.000
	Cd	114		ug/L		112	-0.000
>	In	115		ug/L		383418	383418.112
	Sn	120	**0.400**	ug/L	15.033	4012	0.008
	Sb	121	**1.757**	ug/L	26.205	14442	0.026
	Sb	123		ug/L		11284	0.021
	Ba	135		ug/L		59	-0.000
	Ba	137	**-0.024**	ug/L	10.451	118	-0.000
	Ho	165		ug/L		60	0.000
>	Lu	175		ug/L		569036	569035.875
	Tl	205	**0.284**	ug/L	26.659	6647	0.009
	Pb	208	**-0.030**	ug/L	4.445	1822	-0.002
	Bi	209		ug/L		242	-0.000
	Th	232	**0.600**	ug/L	25.550	24732	0.036
	U	238	**-0.008**	ug/L	74.487	1526	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, December 07, 2009 19:14:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 3.412

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.852**	**ug/L**	6.882	26644	0.029
	Be	9	**0.511**	**ug/L**	1.866	285	0.000
	B	11	**17.182**	**ug/L**	5.450	10739	0.010
	Na	23	**224.963**	**ug/L**	19.255	1265519	1.313
	Mg	24	**13.441**	**ug/L**	19.368	51761	0.049
	Al	27	**28.720**	**ug/L**	19.569	170690	0.172
	P	31	**54.903**	**ug/L**	3.344	25349	0.017
	K	39	**274.594**	**ug/L**	9.303	2494967	2.116
	Ca	43	**209.245**	**ug/L**	3.427	3692	0.004
>	Sc	45		**ug/L**		904549	904548.592
	Ti	47	**8.615**	**ug/L**	5.547	7278	0.008
	V	51	**10.968**	**ug/L**	8.294	106653	0.103
	Cr	52	**11.095**	**ug/L**	6.332	70787	0.082
	Cr	53		**ug/L**		117936	-0.004
	Mn	55	**5.891**	**ug/L**	8.054	65289	0.071
	Fe	57	**122.573**	**ug/L**	9.188	30709	0.027
	Co	59	**1.090**	**ug/L**	7.497	9352	0.010
	Ni	60	**2.260**	**ug/L**	8.556	4249	0.005
	Cu	63		**ug/L**		5309	0.005
	Cu	65	**1.126**	**ug/L**	7.700	2648	0.003
	Zn	66	**11.161**	**ug/L**	0.961	17338	0.029
	Zn	67		**ug/L**		17595	0.003
	Zn	68		**ug/L**		13897	0.021
>	Ge	74		**ug/L**		582432	582432.039
	As	75	**5.398**	**ug/L**	5.165	8154	0.014
	Se	77		**ug/L**		6652	0.000
	Se	82	**5.591**	**ug/L**	0.825	914	0.002
	Kr	83		**ug/L**		110	-0.000
	Sr	88	**12.149**	**ug/L**	1.721	217297	0.559
	Y	89		**ug/L**		56	-0.000
	Mo	98	**0.519**	**ug/L**	3.223	2525	0.006
	Ag	107	**1.071**	**ug/L**	1.192	8134	0.021
	Cd	111	**1.032**	**ug/L**	1.221	2061	0.005
	Cd	114		**ug/L**		4886	0.012
>	In	115		**ug/L**		387268	387268.142
	Sn	120	**5.624**	**ug/L**	3.712	45689	0.116
	Sb	121	**3.022**	**ug/L**	12.353	21938	0.046
	Sb	123		**ug/L**		17090	0.036
	Ba	135		**ug/L**		4508	0.008
	Ba	137	**2.103**	**ug/L**	1.180	7917	0.014
	Ho	165		**ug/L**		52	-0.000
>	Lu	175		**ug/L**		564374	564374.499
	Tl	205	**1.311**	**ug/L**	0.833	25007	0.042
	Pb	208	**2.340**	**ug/L**	0.490	71544	0.122
	Bi	209		**ug/L**		255	0.000
	Th	232	**1.361**	**ug/L**	2.691	50435	0.082
	U	238	**0.218**	**ug/L**	1.894	9484	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	108.515				
	Be	9	102.158				
	B	11	114.547				
	Na	23	89.985				
	Mg	24	89.609				
	Al	27	95.735				
	P	31	109.806				
	K	39	91.531				
	Ca	43	104.623				
>	Sc	45		100.2			
	Ti	47	86.153				
	V	51	109.682				
	Cr	52	110.948				
	Cr	53					
	Mn	55	117.812				
	Fe	57	122.573				
	Co	59	108.969				
	Ni	60	113.021				
	Cu	63					
	Cu	65	112.644				
	Zn	66	111.613				
	Zn	67					
	Zn	68					
>	Ge	74		95.2			
	As	75	107.965				
	Se	77					
	Se	82	111.820				
	Kr	83					
	Sr	88	121.489				
	Y	89					
	Mo	98	103.833				
	Ag	107	107.057				
	Cd	111	103.154				
	Cd	114					
>	In	115		95.7			
	Sn	120	112.474				
	Sb	121	100.736				
	Sb	123					
	Ba	135					
	Ba	137	105.137				
	Ho	165					
>	Lu	175		97.3			
	Tl	205	131.080				
	Pb	208	116.998				
	Bi	209					
	Th	232	136.051				
	U	238	108.796				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Tl	205	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, December 07, 2009 19:21:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 4.413

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.080**	ug/L	17.930	298	0.000
	Be	9	**0.025**	ug/L	112.931	39	0.000
	B	11	**1.695**	ug/L	8.994	2097	0.001
	Na	23	**88980.310**	ug/L	1.831	436984404	519.299
	Mg	24	**99784.255**	ug/L	10.993	304924521	363.390
	Al	27	**91241.219**	ug/L	4.432	459560986	546.306
	P	31	**93522.650**	ug/L	3.355	24798896	29.479
	K	39	**S**	ug/L	S	S	S
	Ca	43	**91885.049**	ug/L	3.288	1353141	1.609
>	Sc	45		ug/L		841830	841829.984
	Ti	47	**1431.743**	ug/L	4.056	1054556	1.254
	V	51	**0.119**	ug/L	266.528	13784	0.001
	Cr	52	**3.375**	ug/L	6.176	17747	0.025
	Cr	53		ug/L		89027	-0.029
	Mn	55	**6.388**	ug/L	4.462	65907	0.077
	Fe	57	**117003.499**	ug/L	5.145	21821222	25.957
	Co	59	**0.294**	ug/L	3.897	2671	0.003
	Ni	60	**2.961**	ug/L	6.332	5131	0.006
	Cu	63		ug/L		16798	0.020
	Cu	65	**5.042**	ug/L	6.354	10404	0.012
	Zn	66	**4.146**	ug/L	2.994	6316	0.011
	Zn	67		ug/L		12880	-0.003
	Zn	68		ug/L		2698	0.002
>	Ge	74		ug/L		545037	545037.017
	As	75	**0.495**	ug/L	58.734	537	0.001
	Se	77		ug/L		8106	0.004
	Se	82	**-1.208**	ug/L	27.640	-181	-0.000
	Kr	83		ug/L		411	0.001
	Sr	88	**1.295**	ug/L	2.281	22120	0.060
	Y	89		ug/L		619	0.002
	Mo	98	**2036.681**	ug/L	1.342	8217892	22.872
	Ag	107	**0.058**	ug/L	18.590	557	0.001
	Cd	111	**0.513**	ug/L	41.143	1002	0.003
	Cd	114		ug/L		13035	0.036
>	In	115		ug/L		359288	359287.680
	Sn	120	**0.278**	ug/L	3.277	2852	0.006
	Sb	121	**0.261**	ug/L	63.143	5425	0.004
	Sb	123		ug/L		4294	0.003
	Ba	135		ug/L		1415	0.003
	Ba	137	**0.675**	ug/L	1.501	2429	0.004
	Ho	165		ug/L		1339	0.003
>	Lu	175		ug/L		511061	511061.218
	Tl	205	**0.048**	ug/L	13.133	2151	0.002
	Pb	208	**0.153**	ug/L	4.352	6517	0.008
	Bi	209		ug/L		1261	0.002
	Th	232	**0.662**	ug/L	30.052	24192	0.040
	U	238	**-0.036**	ug/L	1.536	503	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	88.980				
	Mg	24	99.784				
	Al	27	91.241				
	P	31	93.523				
	K	39	S				
	Ca	43	91.885				
>	Sc	45			93.2		
	Ti	47	71.587				
	V	51					
	Cr	52	91.209				
	Cr	53					
	Mn	55	110.137				
	Fe	57	117.003				
	Co	59	117.785				
	Ni	60	109.666				
	Cu	63					
	Cu	65	173.874				
	Zn	66	115.176				
	Zn	67					
	Zn	68					
>	Ge	74			89.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	107.889				
	Y	89					
	Mo	98	101.834				
	Ag	107					
	Cd	111	128.191				
	Cd	114					
>	In	115			88.8		
	Sn	120					
	Sb	121	260.796				
	Sb	123					
	Ba	135					
	Ba	137	100.801				
	Ho	165					
>	Lu	175			88.1		
	Tl	205					
	Pb	208	76.655				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	K	39	ICSA is out of limits
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, December 07, 2009 19:27:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 5.414

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.481**	ug/L	1.667	44061	0.053
	Be	9	**18.822**	ug/L	3.289	8652	0.010
	B	11	**17.996**	ug/L	0.636	10318	0.011
	Na	23	**81051.634**	ug/L	4.461	394040731	473.026
	Mg	24	**92465.824**	ug/L	3.890	280359173	336.738
	Al	27	**88280.228**	ug/L	9.853	439940260	528.577
	P	31	**89596.358**	ug/L	1.417	23523938	28.241
	K	39	**S**	ug/L	S	S	S
	Ca	43	**88393.989**	ug/L	1.293	1288888	1.547
>	Sc	45		ug/L		832723	832722.801
	Ti	47	**1389.267**	ug/L	3.137	1013307	1.217
	V	51	**22.252**	ug/L	4.857	186543	0.209
	Cr	52	**24.466**	ug/L	1.659	148051	0.182
	Cr	53		ug/L		98594	-0.016
	Mn	55	**28.256**	ug/L	2.252	283942	0.339
	Fe	57	**116070.500**	ug/L	1.846	21449881	25.750
	Co	59	**21.027**	ug/L	1.539	158822	0.190
	Ni	60	**22.344**	ug/L	2.366	37245	0.045
	Cu	63		ug/L		91923	0.110
	Cu	65	**23.472**	ug/L	3.457	47317	0.057
	Zn	66	**22.846**	ug/L	1.889	31860	0.059
	Zn	67		ug/L		16361	0.004
	Zn	68		ug/L		21681	0.038
>	Ge	74		ug/L		530589	530589.261
	As	75	**20.490**	ug/L	3.656	28702	0.054
	Se	77		ug/L		10203	0.008
	Se	82	**19.392**	ug/L	2.187	2880	0.005
	Kr	83		ug/L		395	0.001
	Sr	88	**25.459**	ug/L	1.407	410640	1.172
	Y	89		ug/L		596	0.002
	Mo	98	**2056.818**	ug/L	0.636	8080639	23.098
	Ag	107	**19.186**	ug/L	0.629	129138	0.369
	Cd	111	**20.022**	ug/L	0.433	34352	0.098
	Cd	114		ug/L		93010	0.265
>	In	115		ug/L		349842	349841.603
	Sn	120	**21.095**	ug/L	2.450	152696	0.434
	Sb	121	**23.884**	ug/L	2.700	129751	0.360
	Sb	123		ug/L		102817	0.285
	Ba	135		ug/L		41584	0.081
	Ba	137	**21.889**	ug/L	1.048	72883	0.142
	Ho	165		ug/L		1335	0.003
>	Lu	175		ug/L		511126	511125.579
	Tl	205	**22.471**	ug/L	0.642	366194	0.714
	Pb	208	**22.456**	ug/L	0.370	600899	1.171
	Bi	209		ug/L		1657	0.003
	Th	232	**23.139**	ug/L	0.747	717273	1.396
	U	238	**23.989**	ug/L	0.722	767973	1.499

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.407				
	Be	9	94.110				
	B	11	89.978				
	Na	23	81.052				
	Mg	24	92.466				
	Al	27	88.280				
	P	31	89.596				
	K	39	S				
	Ca	43	88.394				
>	Sc	45		92.2			
	Ti	47	69.463				
	V	51	111.261				
	Cr	52	103.233				
	Cr	53					
	Mn	55	109.518				
	Fe	57	116.071				
	Co	59	103.838				
	Ni	60	98.431				
	Cu	63					
	Cu	65	102.496				
	Zn	66	96.806				
	Zn	67					
	Zn	68					
>	Ge	74		86.7			
	As	75	102.449				
	Se	77					
	Se	82	96.960				
	Kr	83					
	Sr	88	120.091				
	Y	89					
	Mo	98	102.841				
	Ag	107	95.930				
	Cd	111	98.146				
	Cd	114					
>	In	115		86.4			
	Sn	120	105.474				
	Sb	121	118.823				
	Sb	123					
	Ba	135					
	Ba	137	105.900				
	Ho	165					
>	Lu	175		88.1			
	Tl	205	112.357				
	Pb	208	111.168				
	Bi	209					
	Th	232	115.697				
	U	238	119.947				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	K	39	ICSAB is out of limits
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	Sr	88	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 19:33:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.415

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.665**	ug/L	1.435	112383	0.137
	Be	9	**51.284**	ug/L	1.924	23111	0.028
	B	11	**95.626**	ug/L	3.978	48697	0.058
	Na	23	**4616.800**	ug/L	7.213	22122498	26.944
	Mg	24	**4765.577**	ug/L	8.496	14192915	17.355
	Al	27	**5099.131**	ug/L	10.028	24998257	30.531
	P	31	**4725.764**	ug/L	1.768	1227087	1.490
	K	39	**4579.072**	ug/L	7.118	29379557	35.293
	Ca	43	**4770.542**	ug/L	0.957	68656	0.084
>	Sc	45		ug/L		817972	817971.909
	Ti	47	**52.987**	ug/L	3.352	38371	0.046
	V	51	**51.316**	ug/L	3.420	406174	0.481
	Cr	52	**52.185**	ug/L	1.726	313847	0.388
	Cr	53		ug/L		128229	0.022
	Mn	55	**52.786**	ug/L	2.732	519809	0.634
	Fe	57	**5400.767**	ug/L	1.813	985506	1.198
	Co	59	**51.404**	ug/L	2.198	380704	0.465
	Ni	60	**50.587**	ug/L	2.379	82611	0.101
	Cu	63		ug/L		208431	0.254
	Cu	65	**52.572**	ug/L	2.872	103878	0.127
	Zn	66	**50.535**	ug/L	1.469	71169	0.131
	Zn	67		ug/L		23834	0.017
	Zn	68		ug/L		53014	0.095
>	Ge	74		ug/L		539981	539981.323
	As	75	**47.336**	ug/L	1.625	67698	0.126
	Se	77		ug/L		11004	0.009
	Se	82	**50.915**	ug/L	1.783	7689	0.014
	Kr	83		ug/L		124	0.000
	Sr	88	**52.020**	ug/L	0.816	866320	2.394
	Y	89		ug/L		105	0.000
	Mo	98	**50.328**	ug/L	1.151	204592	0.565
	Ag	107	**51.026**	ug/L	1.065	354680	0.981
	Cd	111	**50.148**	ug/L	0.600	88770	0.245
	Cd	114		ug/L		209630	0.579
>	In	115		ug/L		361557	361557.232
	Sn	120	**51.093**	ug/L	1.488	381133	1.052
	Sb	121	**51.418**	ug/L	9.885	284007	0.775
	Sb	123		ug/L		223999	0.611
	Ba	135		ug/L		100845	0.181
	Ba	137	**49.504**	ug/L	0.658	179458	0.322
	Ho	165		ug/L		108	0.000
>	Lu	175		ug/L		557270	557269.916
	Tl	205	**52.929**	ug/L	1.607	938294	1.681
	Pb	208	**55.119**	ug/L	1.234	1604158	2.874
	Bi	209		ug/L		376	0.000
	Th	232	**51.835**	ug/L	2.694	1746484	3.127
	U	238	**53.044**	ug/L	2.273	1848975	3.315

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	101.331				
|	Be	9	102.567				
|	B	11	95.626				
|	Na	23	92.336				
|	Mg	24	95.312				
|	Al	27	100.973				
|	P	31	94.515				
|	K	39	91.581				
|	Ca	43	95.411				
|>	Sc	45		90.6			
|	Ti	47	105.973				
|	V	51	102.633				
|	Cr	52	104.370				
|	Cr	53					
|	Mn	55	105.571				
|	Fe	57	108.015				
|	Co	59	102.808				
|	Ni	60	101.174				
|	Cu	63					
⌊	Cu	65	105.144				
⌈	Zn	66	101.071				
|	Zn	67					
|	Zn	68					
|>	Ge	74		88.3			
|	As	75	94.671				
|	Se	77					
|	Se	82	101.829				
⌊	Kr	83					
⌈	Sr	88	104.041				
|	Y	89					
|	Mo	98	100.656				
|	Ag	107	102.052				
|	Cd	111	100.297				
|	Cd	114					
|>	In	115		89.3			
|	Sn	120	102.186				
|	Sb	121	102.837				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	99.009				
|	Ho	165					
|>	Lu	175		96.1			
|	Tl	205	105.857				
|	Pb	208	110.237				
|	Bi	209					
|	Th	232	103.671				
⌊	U	238	106.088				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Pb	208	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 19:39:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.416

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.016	ug/L	25.106	77	-0.000
	Be	9	-0.021	ug/L	13.948	18	-0.000
	B	11	2.878	ug/L	16.162	2656	0.002
	Na	23	-0.245	ug/L	1255.575	73526	-0.001
	Mg	24	-0.678	ug/L	45.586	5001	-0.002
	Al	27	-0.339	ug/L	124.257	13340	-0.002
	P	31	-0.770	ug/L	393.065	8684	-0.000
	K	39	-9.173	ug/L	16.610	470283	-0.071
	Ca	43	1.465	ug/L	91.122	373	0.000
>	Sc	45		ug/L		828733	828733.326
	Ti	47	0.987	ug/L	11.014	1146	0.001
	V	51	-0.599	ug/L	29.611	8056	-0.006
	Cr	52	0.162	ug/L	5.525	-2270	0.001
	Cr	53		ug/L		97590	-0.016
	Mn	55	-0.025	ug/L	18.292	1145	-0.000
	Fe	57	1.903	ug/L	49.257	6037	0.000
	Co	59	-0.027	ug/L	1.790	219	-0.000
	Ni	60	-0.016	ug/L	39.983	146	-0.000
	Cu	63		ug/L		268	-0.000
	Cu	65	-0.017	ug/L	50.632	147	-0.000
	Zn	66	0.012	ug/L	58.718	463	0.000
	Zn	67		ug/L		12716	-0.003
	Zn	68		ug/L		1434	-0.001
>	Ge	74		ug/L		530585	530585.325
	As	75	-0.024	ug/L	731.908	-212	-0.000
	Se	77		ug/L		5394	-0.001
	Se	82	-0.023	ug/L	269.283	-0	-0.000
	Kr	83		ug/L		121	0.000
	Sr	88	-0.020	ug/L	2.873	390	-0.001
	Y	89		ug/L		57	-0.000
	Mo	98	0.229	ug/L	12.608	1192	0.003
	Ag	107	-0.005	ug/L	45.578	122	-0.000
	Cd	111	-0.022	ug/L	22.738	61	-0.000
	Cd	114		ug/L		114	-0.000
>	In	115		ug/L		364785	364784.690
	Sn	120	0.298	ug/L	14.528	3045	0.006
	Sb	121	0.843	ug/L	41.171	8712	0.013
	Sb	123		ug/L		6872	0.010
	Ba	135		ug/L		58	-0.000
	Ba	137	-0.027	ug/L	6.495	104	-0.000
	Ho	165		ug/L		58	0.000
>	Lu	175		ug/L		561097	561096.627
	Tl	205	0.299	ug/L	23.862	6820	0.009
	Pb	208	-0.029	ug/L	2.681	1818	-0.002
	Bi	209		ug/L		254	0.000
	Th	232	0.395	ug/L	31.799	17435	0.024
	U	238	-0.014	ug/L	26.300	1290	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			86.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Monday, December 07, 2009 19:45:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 10.417

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**841.969**	ug/L	3.596	1891651	2.281
	Be	9	**909.593**	ug/L	4.158	415091	0.501
	B	11	**1.106**	ug/L	11.838	1767	0.001
	Na	23	**40881.296**	ug/L	1.090	198061424	238.588
	Mg	24	**48020.483**	ug/L	2.394	145106938	174.879
	Al	27	**44098.314**	ug/L	3.775	219316106	264.038
	P	31	**22411.963**	ug/L	2.168	5869188	7.064
	K	39	**44753.786**	ug/L	1.290	286744477	344.937
	Ca	43	**45823.813**	ug/L	3.382	665664	0.802
>	Sc	45		ug/L		829984	829983.531
	Ti	47	**44.268**	ug/L	6.259	32564	0.039
	V	51	**956.301**	ug/L	1.098	7457289	8.971
	Cr	52	**922.640**	ug/L	1.906	5683170	6.854
	Cr	53		ug/L		772653	0.798
	Mn	55	**921.261**	ug/L	2.868	9177850	11.064
	Fe	57	**56870.355**	ug/L	1.054	10477409	12.616
	Co	59	**897.667**	ug/L	1.459	6737417	8.120
	Ni	60	**830.655**	ug/L	3.473	1372851	1.655
	Cu	63		ug/L		3473167	4.188
	Cu	65	**793.794**	ug/L	3.503	1587934	1.915
	Zn	66	**2386.035**	ug/L	2.090	3223378	6.184
	Zn	67		ug/L		505976	0.944
	Zn	68		ug/L		2099050	4.021
>	Ge	74		ug/L		521185	521184.562
	As	75	**855.553**	ug/L	1.547	1183924	2.272
	Se	77		ug/L		60140	0.104
	Se	82	**490.483**	ug/L	1.196	71481	0.137
	Kr	83		ug/L		242	0.000
	Sr	88	**1076.196**	ug/L	2.219	16487189	49.530
	Y	89		ug/L		526	0.001
	Mo	98	**1100.201**	ug/L	3.207	4112338	12.355
	Ag	107	**235.747**	ug/L	1.793	1508235	4.530
	Cd	111	**878.056**	ug/L	1.973	1429455	4.294
	Cd	114		ug/L		3693066	11.096
>	In	115		ug/L		332948	332948.399
	Sn	120	**996.341**	ug/L	4.722	6826876	20.514
	Sb	121	**239.497**	ug/L	12.968	1203087	3.608
	Sb	123		ug/L		965830	2.897
	Ba	135		ug/L		1672656	3.158
	Ba	137	**955.100**	ug/L	1.736	3288113	6.206
	Ho	165		ug/L		427	0.001
>	Lu	175		ug/L		529780	529779.962
	Tl	205	**492.208**	ug/L	2.142	8282626	15.635
	Pb	208	**4752.476**	ug/L	1.366	131264706	247.797
	Bi	209		ug/L		3725	0.007
	Th	232	**2480.761**	ug/L	2.226	79277626	149.666
	U	238	**5045.837**	ug/L	0.614	167070315	315.366

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	84.197				
	Be	9	90.959				
	B	11					
	Na	23	81.763				
	Mg	24	96.041				
	Al	27	88.197				
	P	31	89.648				
	K	39	89.508				
	Ca	43	91.648				
>	Sc	45		91.9			
	Ti	47					
	V	51	95.630				
	Cr	52	92.264				
	Cr	53					
	Mn	55	92.126				
	Fe	57	113.741				
	Co	59	89.767				
	Ni	60	83.065				
	Cu	63					
	Cu	65	79.379				
	Zn	66	95.441				
	Zn	67					
	Zn	68					
>	Ge	74		85.2			
	As	75	85.555				
	Se	77					
	Se	82	98.097				
	Kr	83					
	Sr	88	107.620				
	Y	89					
	Mo	98	110.020				
	Ag	107	94.299				
	Cd	111	87.806				
	Cd	114					
>	In	115		82.3			
	Sn	120	99.634				
	Sb	121	95.799				
	Sb	123					
	Ba	135					
	Ba	137	95.510				
	Ho	165					
>	Lu	175		91.3			
	Tl	205	98.442				
	Pb	208	95.050				
	Bi	209					
	Th	232	99.230				
	U	238	100.917				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Li	7	LRS is out of limits (+/- 10%)
QC Std 10	Na	23	LRS is out of limits (+/- 10%)
QC Std 10	Al	27	LRS is out of limits (+/- 10%)
QC Std 10	P	31	LRS is out of limits (+/- 10%)
QC Std 10	K	39	LRS is out of limits (+/- 10%)
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)

QC Std 10	Ni	60LRS is out of limits (+/- 10%)
QC Std 10	Cu	65LRS is out of limits (+/- 10%)
QC Std 10	As	75LRS is out of limits (+/- 10%)
QC Std 10	Mo	98LRS is out of limits (+/- 10%)
QC Std 10	Cd	111LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Monday, December 07, 2009 19:51:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 11.418

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.556**	**ug/L**	5.753	117413	0.129
	Be	9	**48.717**	**ug/L**	6.428	24433	0.027
	B	11	**91.639**	**ug/L**	6.983	52000	0.056
	Na	23	**4201.458**	**ug/L**	8.827	22382763	24.520
	Mg	24	**4876.230**	**ug/L**	3.599	16185726	17.758
	Al	27	**4635.165**	**ug/L**	5.500	25288935	27.753
	P	31	**4531.011**	**ug/L**	4.541	1310418	1.428
	K	39	**4428.916**	**ug/L**	13.117	31583024	34.136
	Ca	43	**4563.416**	**ug/L**	3.527	73166	0.080
>	Sc	45		**ug/L**		912022	912021.869
	Ti	47	**46.929**	**ug/L**	6.370	37876	0.041
	V	51	**47.771**	**ug/L**	4.095	422152	0.448
	Cr	52	**49.128**	**ug/L**	3.700	328893	0.365
	Cr	53		**ug/L**		136998	0.016
	Mn	55	**50.192**	**ug/L**	6.911	550079	0.603
	Fe	57	**5063.854**	**ug/L**	6.217	1028753	1.123
	Co	59	**47.600**	**ug/L**	3.443	392777	0.431
	Ni	60	**47.137**	**ug/L**	5.625	85702	0.094
	Cu	63		**ug/L**		215580	0.236
	Cu	65	**49.651**	**ug/L**	5.435	109235	0.120
	Zn	66	**51.203**	**ug/L**	2.471	73739	0.133
	Zn	67		**ug/L**		25881	0.020
	Zn	68		**ug/L**		54785	0.096
>	Ge	74		**ug/L**		552298	552297.758
	As	75	**48.433**	**ug/L**	1.461	70845	0.129
	Se	77		**ug/L**		11290	0.009
	Se	82	**50.734**	**ug/L**	1.712	7836	0.014
	Kr	83		**ug/L**		137	0.000
	Sr	88	**53.040**	**ug/L**	1.421	893010	2.441
	Y	89		**ug/L**		100	0.000
	Mo	98	**50.335**	**ug/L**	2.120	206860	0.565
	Ag	107	**51.387**	**ug/L**	1.587	361116	0.988
	Cd	111	**49.999**	**ug/L**	1.246	89477	0.245
	Cd	114		**ug/L**		212689	0.581
>	In	115		**ug/L**		365537	365536.667
	Sn	120	**56.917**	**ug/L**	0.531	429171	1.172
	Sb	121	**58.265**	**ug/L**	5.229	324817	0.878
	Sb	123		**ug/L**		256912	0.694
	Ba	135		**ug/L**		102619	0.186
	Ba	137	**50.200**	**ug/L**	2.494	180174	0.326
	Ho	165		**ug/L**		120	0.000
>	Lu	175		**ug/L**		551968	551968.228
	Tl	205	**53.887**	**ug/L**	3.489	945765	1.712
	Pb	208	**54.879**	**ug/L**	2.191	1581518	2.861
	Bi	209		**ug/L**		343	0.000
	Th	232	**54.760**	**ug/L**	0.895	1827371	3.304
	U	238	**52.171**	**ug/L**	2.229	1800950	3.261

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	95.112				
	Be	9	97.433				
	B	11	91.639				
	Na	23	84.029				
	Mg	24	97.525				
	Al	27	91.785				
	P	31	90.620				
	K	39	88.578				
	Ca	43	91.268				
>	Sc	45		101.0			
	Ti	47	93.858				
	V	51	95.542				
	Cr	52	98.256				
	Cr	53					
	Mn	55	100.384				
	Fe	57	101.277				
	Co	59	95.200				
	Ni	60	94.274				
	Cu	63					
	Cu	65	99.302				
	Zn	66	102.406				
	Zn	67					
	Zn	68					
>	Ge	74		90.3			
	As	75	96.866				
	Se	77					
	Se	82	101.468				
	Kr	83					
	Sr	88	106.080				
	Y	89					
	Mo	98	100.670				
	Ag	107	102.775				
	Cd	111	99.997				
	Cd	114					
>	In	115		90.3			
	Sn	120	113.835				
	Sb	121	116.530				
	Sb	123					
	Ba	135					
	Ba	137	100.399				
	Ho	165					
>	Lu	175		95.2			
	Tl	205	107.774				
	Pb	208	109.758				
	Bi	209					
	Th	232	109.521				
	U	238	104.341				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Na	23	CCV is out of limits (+/- 10%)
QC Std 11	K	39	CCV is out of limits (+/- 10%)
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Monday, December 07, 2009 19:57:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 12.419

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.003**	ug/L	155.139	128	0.000
	Be	9	**-0.011**	ug/L	56.429	24	-0.000
	B	11	**2.420**	ug/L	15.529	2585	0.001
	Na	23	**-1.317**	ug/L	21.682	72852	-0.008
	Mg	24	**-0.040**	ug/L	4116.192	7336	-0.000
	Al	27	**-0.815**	ug/L	31.302	11671	-0.005
	P	31	**-3.027**	ug/L	13.397	8622	-0.001
	K	39	**-7.537**	ug/L	108.545	512466	-0.058
	Ca	43	**-2.081**	ug/L	39.221	341	-0.000
>	Sc	45		ug/L		881715	881714.567
	Ti	47	**0.168**	ug/L	24.472	587	0.000
	V	51	**-0.409**	ug/L	122.403	10061	-0.004
	Cr	52	**0.228**	ug/L	14.709	-1985	0.002
	Cr	53		ug/L		98820	-0.022
	Mn	55	**-0.016**	ug/L	17.631	1310	-0.000
	Fe	57	**-1.018**	ug/L	94.563	5853	-0.000
	Co	59	**0.004**	ug/L	53.611	487	0.000
	Ni	60	**-0.010**	ug/L	47.643	165	-0.000
	Cu	63		ug/L		419	0.000
	Cu	65	**0.010**	ug/L	38.680	214	0.000
	Zn	66	**0.024**	ug/L	44.267	495	0.000
	Zn	67		ug/L		13569	-0.002
	Zn	68		ug/L		1586	-0.000
>	Ge	74		ug/L		547704	547703.968
	As	75	**0.332**	ug/L	66.433	303	0.001
	Se	77		ug/L		5370	-0.001
	Se	82	**-0.071**	ug/L	43.222	-8	-0.000
	Kr	83		ug/L		127	0.000
	Sr	88	**-0.012**	ug/L	3.953	529	-0.001
	Y	89		ug/L		56	-0.000
	Mo	98	**0.238**	ug/L	14.164	1238	0.003
	Ag	107	**-0.001**	ug/L	61.469	151	-0.000
	Cd	111	**-0.014**	ug/L	45.945	76	-0.000
	Cd	114		ug/L		148	-0.000
>	In	115		ug/L		368196	368196.150
	Sn	120	**1.871**	ug/L	7.949	15009	0.039
	Sb	121	**2.692**	ug/L	19.124	19058	0.041
	Sb	123		ug/L		15089	0.032
	Ba	135		ug/L		93	-0.000
	Ba	137	**-0.015**	ug/L	32.605	146	-0.000
	Ho	165		ug/L		55	0.000
>	Lu	175		ug/L		552194	552194.094
	Tl	205	**0.418**	ug/L	17.927	8820	0.013
	Pb	208	**0.011**	ug/L	25.862	2940	0.001
	Bi	209		ug/L		232	-0.000
	Th	232	**1.059**	ug/L	13.373	39324	0.064
	U	238	**0.093**	ug/L	13.903	4979	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			97.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			89.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Th	232	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977921
Sample Date/Time: Monday, December 07, 2009 20:03:48
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977921.420

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.026**	ug/L	11.989	62	-0.000
	Be	9	**-0.028**	ug/L	28.910	17	-0.000
	B	11	**0.547**	ug/L	31.724	1660	0.000
	Na	23	**15.981**	ug/L	20.397	170350	0.093
	Mg	24	**1.342**	ug/L	154.855	12340	0.005
	Al	27	**0.834**	ug/L	170.995	21351	0.005
	P	31	**19.464**	ug/L	6.300	15648	0.006
	K	39	**-11.076**	ug/L	64.850	512755	-0.085
	Ca	43	**15.432**	ug/L	15.416	643	0.000
>	Sc	45		ug/L		927883	927883.208
	Ti	47	**0.360**	ug/L	11.203	774	0.000
	V	51	**-0.425**	ug/L	26.777	10519	-0.004
	Cr	52	**0.743**	ug/L	3.599	1467	0.006
	Cr	53		ug/L		81534	-0.046
	Mn	55	**0.171**	ug/L	7.774	3455	0.002
	Fe	57	**5.708**	ug/L	35.779	7539	0.001
	Co	59	**-0.023**	ug/L	19.807	281	-0.000
	Ni	60	**0.029**	ug/L	68.463	246	0.000
	Cu	63		ug/L		790	0.000
	Cu	65	**0.093**	ug/L	1.202	411	0.000
	Zn	66	**0.999**	ug/L	2.342	1924	0.003
	Zn	67		ug/L		11512	-0.006
	Zn	68		ug/L		2416	0.001
>	Ge	74		ug/L		560831	560831.326
	As	75	**0.270**	ug/L	57.138	215	0.001
	Se	77		ug/L		4248	-0.004
	Se	82	**-0.096**	ug/L	34.856	-12	-0.000
	Kr	83		ug/L		126	0.000
	Sr	88	**0.004**	ug/L	106.403	816	0.000
	Y	89		ug/L		89	0.000
	Mo	98	**0.102**	ug/L	19.529	695	0.001
	Ag	107	**-0.011**	ug/L	17.853	86	-0.000
	Cd	111	**-0.024**	ug/L	18.963	60	-0.000
	Cd	114		ug/L		73	-0.000
>	In	115		ug/L		378712	378711.921
	Sn	120	**0.784**	ug/L	1.379	6952	0.016
	Sb	121	**1.095**	ug/L	19.603	10476	0.016
	Sb	123		ug/L		8328	0.013
	Ba	135		ug/L		327	0.000
	Ba	137	**0.097**	ug/L	3.701	579	0.001
	Ho	165		ug/L		64	0.000
>	Lu	175		ug/L		583937	583937.066
	Tl	205	**0.173**	ug/L	13.384	4779	0.006
	Pb	208	**-0.028**	ug/L	7.145	1923	-0.001
	Bi	209		ug/L		337	0.000
	Th	232	**0.876**	ug/L	17.268	35126	0.053
	U	238	**0.018**	ug/L	50.361	2514	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Monday, December 07, 2009 20:16:01
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|40|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977926.422

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1.917**	ug/L	1.221	4809	0.005
	Be	9	**22.841**	ug/L	1.733	11369	0.013
	B	11	**35.195**	ug/L	0.490	20603	0.021
	Na	23	**183.449**	ug/L	2.693	1047396	1.071
	Mg	24	**777.516**	ug/L	1.569	2561866	2.832
	Al	27	**2024.297**	ug/L	8.001	10943550	12.120
	P	31	**187.147**	ug/L	3.558	62883	0.059
	K	39	**574.155**	ug/L	10.899	4569898	4.425
	Ca	43	**966.333**	ug/L	2.243	15640	0.017
>	Sc	45		ug/L		902084	902083.758
	Ti	47	**51.056**	ug/L	1.578	40795	0.045
	V	51	**32.102**	ug/L	1.653	285439	0.301
	Cr	52	**17.974**	ug/L	1.610	116882	0.134
	Cr	53		ug/L		106526	-0.016
	Mn	55	**92.153**	ug/L	1.851	999772	1.107
	Fe	57	**2814.946**	ug/L	1.080	569509	0.624
	Co	59	**22.064**	ug/L	1.305	180485	0.200
	Ni	60	**26.707**	ug/L	1.530	48191	0.053
	Cu	63		ug/L		110929	0.123
	Cu	65	**25.815**	ug/L	0.996	56369	0.062
	Zn	66	**55.973**	ug/L	2.033	78531	0.145
	Zn	67		ug/L		25910	0.021
	Zn	68		ug/L		60346	0.109
>	Ge	74		ug/L		538216	538215.515
	As	75	**67.878**	ug/L	1.076	96844	0.180
	Se	77		ug/L		10449	0.008
	Se	82	**47.718**	ug/L	1.851	7184	0.013
	Kr	83		ug/L		188	0.000
	Sr	88	**47.083**	ug/L	2.004	791727	2.167
	Y	89		ug/L		73559	0.201
	Mo	98	**21.440**	ug/L	2.314	88139	0.241
	Ag	107	**4.050**	ug/L	1.249	28571	0.078
	Cd	111	**32.910**	ug/L	1.310	58853	0.161
	Cd	114		ug/L		142287	0.389
>	In	115		ug/L		365076	365076.399
	Sn	120	**13.898**	ug/L	2.011	105264	0.286
	Sb	121	**6.163**	ug/L	2.424	37968	0.093
	Sb	123		ug/L		29506	0.072
	Ba	135		ug/L		256762	0.464
	Ba	137	**122.210**	ug/L	1.179	439624	0.794
	Ho	165		ug/L		4870	0.009
>	Lu	175		ug/L		553376	553375.549
	Tl	205	**59.113**	ug/L	1.870	1040468	1.878
	Pb	208	**48.810**	ug/L	0.266	1410959	2.545
	Bi	209		ug/L		2652	0.004
	Th	232	**3.415**	ug/L	0.695	118031	0.206
	U	238	**0.428**	ug/L	1.937	16560	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, December 07, 2009 20:40:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.426

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.217**	ug/L	1.301	117108	0.125
	Be	9	**47.900**	ug/L	1.852	24658	0.026
	B	11	**88.266**	ug/L	3.172	51450	0.054
	Na	23	**4306.988**	ug/L	7.437	23553954	25.136
	Mg	24	**4660.350**	ug/L	3.128	15859913	16.972
	Al	27	**4549.244**	ug/L	10.456	25434273	27.239
	P	31	**4518.218**	ug/L	2.207	1340287	1.424
	K	39	**4038.563**	ug/L	1.711	29673353	31.127
	Ca	43	**4537.138**	ug/L	0.708	74602	0.079
>	Sc	45		ug/L		934335	934334.976
	Ti	47	**47.097**	ug/L	2.943	39006	0.041
	V	51	**48.212**	ug/L	5.615	436575	0.452
	Cr	52	**48.861**	ug/L	2.258	335365	0.363
	Cr	53		ug/L		131917	0.007
	Mn	55	**49.903**	ug/L	3.324	561303	0.599
	Fe	57	**5014.840**	ug/L	3.737	1045526	1.113
	Co	59	**48.051**	ug/L	3.070	406431	0.435
	Ni	60	**47.527**	ug/L	2.845	88650	0.095
	Cu	63		ug/L		218154	0.233
	Cu	65	**48.150**	ug/L	2.754	108679	0.116
	Zn	66	**50.688**	ug/L	0.687	74569	0.131
	Zn	67		ug/L		24105	0.016
	Zn	68		ug/L		56014	0.096
>	Ge	74		ug/L		563995	563994.615
	As	75	**47.931**	ug/L	1.158	71610	0.127
	Se	77		ug/L		11205	0.009
	Se	82	**50.060**	ug/L	1.082	7897	0.014
	Kr	83		ug/L		135	0.000
	Sr	88	**53.070**	ug/L	1.627	896186	2.442
	Y	89		ug/L		195	0.000
	Mo	98	**50.401**	ug/L	1.341	207773	0.566
	Ag	107	**51.685**	ug/L	1.912	364288	0.993
	Cd	111	**50.570**	ug/L	1.378	90789	0.247
	Cd	114		ug/L		214454	0.584
>	In	115		ug/L		366665	366665.326
	Sn	120	**50.181**	ug/L	2.754	379702	1.033
	Sb	121	**51.363**	ug/L	7.930	287605	0.774
	Sb	123		ug/L		226609	0.610
	Ba	135		ug/L		102033	0.184
	Ba	137	**50.075**	ug/L	1.425	180487	0.325
	Ho	165		ug/L		103	0.000
>	Lu	175		ug/L		554165	554164.764
	Tl	205	**52.322**	ug/L	1.345	922333	1.662
	Pb	208	**53.755**	ug/L	1.602	1555579	2.803
	Bi	209		ug/L		458	0.000
	Th	232	**49.900**	ug/L	2.538	1671875	3.011
	U	238	**50.462**	ug/L	2.340	1749064	3.154

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	92.435				
	Be	9	95.801				
	B	11	88.266				
	Na	23	86.140				
	Mg	24	93.207				
	Al	27	90.084				
	P	31	90.364				
	K	39	80.771				
	Ca	43	90.743				
>	Sc	45		103.5			
	Ti	47	94.194				
	V	51	96.423				
	Cr	52	97.722				
	Cr	53					
	Mn	55	99.805				
	Fe	57	100.297				
	Co	59	96.103				
	Ni	60	95.053				
	Cu	63					
	Cu	65	96.299				
	Zn	66	101.375				
	Zn	67					
	Zn	68					
>	Ge	74		92.2			
	As	75	95.863				
	Se	77					
	Se	82	100.119				
	Kr	83					
	Sr	88	106.139				
	Y	89					
	Mo	98	100.802				
	Ag	107	103.370				
	Cd	111	101.140				
	Cd	114					
>	In	115		90.6			
	Sn	120	100.362				
	Sb	121	102.726				
	Sb	123					
	Ba	135					
	Ba	137	100.151				
	Ho	165					
>	Lu	175		95.5			
	Tl	205	104.643				
	Pb	208	107.510				
	Bi	209					
	Th	232	99.800				
	U	238	100.923				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	B	11	CCV is out of limits (+/- 10%)
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Monday, December 07, 2009 20:46:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.427

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.011	ug/L	9.816	96	-0.000
	Be	9	-0.028	ug/L	8.066	16	-0.000
	B	11	2.119	ug/L	26.092	2432	0.001
	Na	23	-3.089	ug/L	25.191	64144	-0.018
	Mg	24	-0.397	ug/L	503.714	6336	-0.001
	Al	27	-0.829	ug/L	49.708	11672	-0.005
	P	31	-3.616	ug/L	67.236	8504	-0.001
	K	39	-7.022	ug/L	49.305	518604	-0.054
	Ca	43	-2.919	ug/L	4.017	331	-0.000
>	Sc	45		ug/L		887191	887190.566
	Ti	47	0.171	ug/L	14.724	593	0.000
	V	51	-0.701	ug/L	64.677	7719	-0.007
	Cr	52	0.346	ug/L	8.546	-1219	0.003
	Cr	53		ug/L		94226	-0.028
	Mn	55	0.029	ug/L	7.397	1791	0.000
	Fe	57	-1.026	ug/L	144.420	5885	-0.000
	Co	59	-0.020	ug/L	11.767	290	-0.000
	Ni	60	-0.008	ug/L	52.841	170	-0.000
	Cu	63		ug/L		278	-0.000
	Cu	65	-0.020	ug/L	30.237	153	-0.000
	Zn	66	-0.024	ug/L	85.586	427	-0.000
	Zn	67		ug/L		12204	-0.005
	Zn	68		ug/L		1425	-0.001
>	Ge	74		ug/L		549043	549043.079
	As	75	0.030	ug/L	508.333	-139	0.000
	Se	77		ug/L		5405	-0.001
	Se	82	-0.186	ug/L	3.784	-25	-0.000
	Kr	83		ug/L		132	0.000
	Sr	88	-0.018	ug/L	2.371	422	-0.001
	Y	89		ug/L		86	0.000
	Mo	98	0.060	ug/L	35.967	496	0.001
	Ag	107	-0.004	ug/L	24.620	129	-0.000
	Cd	111	-0.023	ug/L	10.938	59	-0.000
	Cd	114		ug/L		98	-0.000
>	In	115		ug/L		362892	362892.354
	Sn	120	0.373	ug/L	13.558	3595	0.008
	Sb	121	0.920	ug/L	42.129	9080	0.014
	Sb	123		ug/L		7081	0.011
	Ba	135		ug/L		79	-0.000
	Ba	137	-0.020	ug/L	26.818	127	-0.000
	Ho	165		ug/L		65	0.000
>	Lu	175		ug/L		547880	547879.809
	Tl	205	0.262	ug/L	17.819	6033	0.008
	Pb	208	-0.034	ug/L	3.059	1640	-0.002
	Bi	209		ug/L		317	0.000
	Th	232	0.418	ug/L	23.428	17819	0.025
	U	238	-0.008	ug/L	21.293	1471	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977922
Sample Date/Time: Monday, December 07, 2009 20:58:58
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925189|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977922.429

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**26.087**	ug/L	3.959	72857	0.071
	Be	9	**1.606**	ug/L	5.613	944	0.001
	B	11	**168.472**	ug/L	2.135	106835	0.102
	Na	23	**669.903**	ug/L	6.020	4119502	3.910
	Mg	24	**17177.329**	ug/L	1.586	64412627	62.556
	Al	27	**32886.720**	ug/L	1.017	202747494	196.909
	P	31	**649.761**	ug/L	2.848	221834	0.205
	K	39	**3565.291**	ug/L	3.373	28938864	27.479
	Ca	43	**295705.405**	ug/L	1.646	5328333	5.177
>	Sc	45		ug/L		1029406	1029406.445
	Ti	47	**1009.311**	ug/L	2.534	910068	0.884
	V	51	**71.729**	ug/L	0.717	708348	0.673
	Cr	52	**38.650**	ug/L	1.451	291447	0.287
	Cr	53		ug/L		93073	-0.044
	Mn	55	**914.129**	ug/L	3.130	11298822	10.979
	Fe	57	**41997.553**	ug/L	1.492	9596638	9.317
	Co	59	**16.914**	ug/L	0.701	158014	0.153
	Ni	60	**23.065**	ug/L	2.473	47525	0.046
	Cu	63		ug/L		468866	0.455
	Cu	65	**98.219**	ug/L	4.070	243965	0.237
	Zn	66	**706.075**	ug/L	1.362	959883	1.830
	Zn	67		ug/L		234145	0.420
	Zn	68		ug/L		915959	1.744
>	Ge	74		ug/L		524301	524300.878
	As	75	**41.073**	ug/L	1.745	57021	0.109
	Se	77		ug/L		10589	0.009
	Se	82	**-1.074**	ug/L	18.487	-154	-0.000
	Kr	83		ug/L		439	0.001
	Sr	88	**690.221**	ug/L	0.773	11329753	31.766
	Y	89		ug/L		871719	2.445
	Mo	98	**16.895**	ug/L	1.127	67912	0.190
	Ag	107	**0.544**	ug/L	2.052	3883	0.010
	Cd	111	**3.327**	ug/L	1.274	5902	0.016
	Cd	114		ug/L		7704	0.021
>	In	115		ug/L		356664	356663.618
	Sn	120	**6.165**	ug/L	1.768	46057	0.127
	Sb	121	**4.653**	ug/L	2.296	28975	0.070
	Sb	123		ug/L		22871	0.056
	Ba	135		ug/L		20410990	39.493
	Ba	137	**10376.214**	ug/L	0.307	34845991	67.422
	Ho	165		ug/L		54218	0.105
>	Lu	175		ug/L		516829	516828.930
	Tl	205	**0.329**	ug/L	1.311	6787	0.010
	Pb	208	**194.343**	ug/L	1.227	5239462	10.133
	Bi	209		ug/L		14540	0.028
	Th	232	**18.081**	ug/L	2.302	567549	1.091
	U	238	**8.008**	ug/L	0.579	260322	0.500

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		114.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ca 43 Upper, S, EE	Ca	43	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977924
Sample Date/Time: Monday, December 07, 2009 21:05:04
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977924.430

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.857**	ug/L	1.992	147093	0.130
	Be	9	**19.701**	ug/L	1.861	12326	0.011
	B	11	**213.896**	ug/L	1.760	148927	0.130
	Na	23	**2431.001**	ug/L	4.635	16187243	14.188
	Mg	24	**15083.839**	ug/L	2.273	62270300	54.932
	Al	27	**31986.219**	ug/L	4.585	217136025	191.517
	P	31	**1358.204**	ug/L	2.215	497403	0.428
	K	39	**4591.266**	ug/L	3.844	40837584	35.387
	Ca	43	**246564.857**	ug/L	0.757	4892471	4.316
>	Sc	45		ug/L		1133392	1133391.976
	Ti	47	**1008.874**	ug/L	1.021	1001849	0.883
	V	51	**87.800**	ug/L	1.344	950811	0.824
	Cr	52	**60.381**	ug/L	0.709	503922	0.449
	Cr	53		ug/L		119050	-0.029
	Mn	55	**909.215**	ug/L	3.678	12376996	10.920
	Fe	57	**40453.523**	ug/L	2.904	10178488	8.974
	Co	59	**34.969**	ug/L	1.688	359083	0.316
	Ni	60	**40.699**	ug/L	1.551	92160	0.081
	Cu	63		ug/L		503200	0.444
	Cu	65	**95.482**	ug/L	1.284	261263	0.230
	Zn	66	**713.053**	ug/L	0.946	1004100	1.848
	Zn	67		ug/L		256403	0.445
	Zn	68		ug/L		994977	1.829
>	Ge	74		ug/L		543083	543082.659
	As	75	**77.135**	ug/L	1.661	111073	0.205
	Se	77		ug/L		11079	0.009
	Se	82	**7.862**	ug/L	0.396	1197	0.002
	Kr	83		ug/L		452	0.001
	Sr	88	**579.474**	ug/L	1.417	9715292	26.669
	Y	89		ug/L		929765	2.552
	Mo	98	**43.954**	ug/L	2.056	180057	0.494
	Ag	107	**25.253**	ug/L	1.032	176925	0.485
	Cd	111	**9.261**	ug/L	1.724	16598	0.045
	Cd	114		ug/L		31188	0.085
>	In	115		ug/L		364244	364243.814
	Sn	120	**50.513**	ug/L	0.723	379626	1.040
	Sb	121	**62.159**	ug/L	2.199	345134	0.936
	Sb	123		ug/L		272814	0.740
	Ba	135		ug/L		24386443	46.202
	Ba	137	**12191.830**	ug/L	0.881	41814240	79.220
	Ho	165		ug/L		59723	0.113
>	Lu	175		ug/L		527826	527826.000
	Tl	205	**55.726**	ug/L	0.931	935698	1.770
	Pb	208	**275.013**	ug/L	1.889	7571063	14.339
	Bi	209		ug/L		14595	0.027
	Th	232	**43.855**	ug/L	1.152	1400371	2.646
	U	238	**35.629**	ug/L	0.601	1177065	2.227

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		125.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
B 11 Upper, S, EEE	B	11	Sample is out of limits (over linear range)
Ca 43 Upper, S, EE	Ca	43	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977925
Sample Date/Time: Monday, December 07, 2009 21:11:12
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977925.431

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.848**	ug/L	0.858	140466	0.122
	Be	9	**19.186**	ug/L	0.979	12232	0.011
	B	11	**286.081**	ug/L	3.856	202327	0.174
	Na	23	**1423.584**	ug/L	6.751	9705026	8.308
	Mg	24	**16948.078**	ug/L	3.726	71268073	61.721
	Al	27	**33338.313**	ug/L	2.580	230507186	199.613
	P	31	**1457.209**	ug/L	0.722	542830	0.459
	K	39	**4044.804**	ug/L	5.034	36724446	31.175
	Ca	43	**301399.289**	ug/L	2.431	6092105	5.276
>	Sc	45		ug/L		1154811	1154810.627
	Ti	47	**1075.853**	ug/L	0.552	1088554	0.942
	V	51	**85.705**	ug/L	4.126	945764	0.804
	Cr	52	**61.407**	ug/L	2.199	522131	0.456
	Cr	53		ug/L		122102	-0.029
	Mn	55	**920.534**	ug/L	1.112	12768446	11.056
	Fe	57	**39002.909**	ug/L	2.771	9997434	8.653
	Co	59	**35.367**	ug/L	1.758	369984	0.320
	Ni	60	**42.608**	ug/L	2.397	98268	0.085
	Cu	63		ug/L		584113	0.505
	Cu	65	**108.799**	ug/L	1.702	303261	0.262
	Zn	66	**855.520**	ug/L	0.806	1207152	2.217
	Zn	67		ug/L		283237	0.493
	Zn	68		ug/L		1121219	2.057
>	Ge	74		ug/L		544215	544214.609
	As	75	**83.389**	ug/L	1.101	120344	0.221
	Se	77		ug/L		12668	0.012
	Se	82	**7.624**	ug/L	4.345	1163	0.002
	Kr	83		ug/L		495	0.001
	Sr	88	**636.882**	ug/L	1.215	10596762	29.311
	Y	89		ug/L		796882	2.204
	Mo	98	**49.336**	ug/L	1.772	200530	0.554
	Ag	107	**25.610**	ug/L	0.963	178069	0.492
	Cd	111	**8.921**	ug/L	2.126	15872	0.044
	Cd	114		ug/L		29370	0.081
>	In	115		ug/L		361525	361525.359
	Sn	120	**37.060**	ug/L	2.003	276626	0.763
	Sb	121	**62.755**	ug/L	2.004	345744	0.945
	Sb	123		ug/L		274217	0.750
	Ba	135		ug/L		21997462	42.925
	Ba	137	**11155.123**	ug/L	1.256	37143835	72.484
	Ho	165		ug/L		49131	0.096
>	Lu	175		ug/L		512446	512445.692
	Tl	205	**56.347**	ug/L	1.541	918489	1.790
	Pb	208	**291.064**	ug/L	0.342	7779516	15.176
	Bi	209		ug/L		19136	0.037
	Th	232	**41.907**	ug/L	1.466	1299282	2.528
	U	238	**35.865**	ug/L	0.315	1150334	2.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		127.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		88.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
B 11 Upper, S, EEE	B	11	Sample is out of limits (over linear range)
Ca 43 Upper, S, EEE	Ca	43	Sample is out of limits (over linear range)
Sc 45 Int Std for san	Sc	45	
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EEE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977923
Sample Date/Time: Monday, December 07, 2009 21:17:19
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925189|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977923.432

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**6.083**	ug/L	1.390	16952	0.016
	Be	9	**0.390**	ug/L	5.913	253	0.000
	B	11	**48.680**	ug/L	1.742	31669	0.030
	Na	23	**358.233**	ug/L	15.658	2219298	2.091
	Mg	24	**3065.733**	ug/L	5.372	11390038	11.165
	Al	27	**7513.828**	ug/L	1.751	45927031	44.989
	P	31	**146.779**	ug/L	3.534	58134	0.046
	K	39	**747.535**	ug/L	2.826	6527770	5.762
	Ca	43	**47707.854**	ug/L	1.290	852446	0.835
>	Sc	45		ug/L		1020360	1020360.248
	Ti	47	**194.505**	ug/L	4.981	174185	0.170
	V	51	**15.266**	ug/L	3.904	161647	0.143
	Cr	52	**8.775**	ug/L	3.354	62453	0.065
	Cr	53		ug/L		88752	-0.047
	Mn	55	**191.576**	ug/L	4.875	2347314	2.301
	Fe	57	**7526.607**	ug/L	3.689	1709618	1.670
	Co	59	**3.480**	ug/L	3.788	32618	0.031
	Ni	60	**5.062**	ug/L	4.307	10496	0.010
	Cu	63		ug/L		85410	0.083
	Cu	65	**17.699**	ug/L	2.957	43761	0.043
	Zn	66	**160.672**	ug/L	0.614	234900	0.416
	Zn	67		ug/L		69107	0.096
	Zn	68		ug/L		243798	0.430
>	Ge	74		ug/L		562939	562939.251
	As	75	**6.750**	ug/L	1.475	9905	0.018
	Se	77		ug/L		6450	0.000
	Se	82	**-0.106**	ug/L	153.511	-13	-0.000
	Kr	83		ug/L		161	0.000
	Sr	88	**95.181**	ug/L	2.022	1635288	4.381
	Y	89		ug/L		208991	0.560
	Mo	98	**2.636**	ug/L	2.179	11306	0.030
	Ag	107	**0.094**	ug/L	6.860	834	0.002
	Cd	111	**0.890**	ug/L	2.690	1727	0.004
	Cd	114		ug/L		2918	0.007
>	In	115		ug/L		373190	373190.462
	Sn	120	**1.330**	ug/L	2.843	11049	0.027
	Sb	121	**0.607**	ug/L	4.736	7582	0.009
	Sb	123		ug/L		5971	0.007
	Ba	135		ug/L		5873470	10.614
	Ba	137	**2770.537**	ug/L	1.454	9961359	18.002
	Ho	165		ug/L		12956	0.023
>	Lu	175		ug/L		553420	553420.403
	Tl	205	**0.145**	ug/L	7.530	4026	0.005
	Pb	208	**41.592**	ug/L	2.024	1202496	2.169
	Bi	209		ug/L		3593	0.006
	Th	232	**4.013**	ug/L	4.453	137965	0.242
	U	238	**1.599**	ug/L	2.923	57049	0.100

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		113.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, December 07, 2009 21:29:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.434

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.392**	ug/L	1.563	125970	0.126
	Be	9	**46.876**	ug/L	0.681	25865	0.026
	B	11	**92.118**	ug/L	0.224	57496	0.056
	Na	23	**3974.311**	ug/L	14.558	23293689	23.195
	Mg	24	**4645.775**	ug/L	2.925	16946698	16.919
	Al	27	**4415.028**	ug/L	21.476	26451644	26.435
	P	31	**4365.104**	ug/L	2.806	1388127	1.376
	K	39	**4048.987**	ug/L	9.527	31876819	31.207
	Ca	43	**4470.916**	ug/L	1.666	78782	0.078
>	Sc	45		ug/L		1001249	1001248.885
	Ti	47	**46.106**	ug/L	0.773	40944	0.040
	V	51	**45.637**	ug/L	3.344	443926	0.428
	Cr	52	**46.273**	ug/L	2.230	340190	0.344
	Cr	53		ug/L		131237	-0.003
	Mn	55	**47.213**	ug/L	1.385	569394	0.567
	Fe	57	**4762.890**	ug/L	0.608	1064853	1.057
	Co	59	**45.478**	ug/L	2.211	412398	0.411
	Ni	60	**45.153**	ug/L	1.920	90290	0.090
	Cu	63		ug/L		225865	0.225
	Cu	65	**46.324**	ug/L	2.263	112080	0.112
	Zn	66	**51.850**	ug/L	1.964	77005	0.134
	Zn	67		ug/L		25125	0.017
	Zn	68		ug/L		56826	0.097
>	Ge	74		ug/L		569494	569493.635
	As	75	**47.390**	ug/L	1.825	71483	0.126
	Se	77		ug/L		11209	0.008
	Se	82	**50.588**	ug/L	2.362	8057	0.014
	Kr	83		ug/L		130	0.000
	Sr	88	**52.846**	ug/L	2.171	904323	2.432
	Y	89		ug/L		158	0.000
	Mo	98	**49.452**	ug/L	2.966	206567	0.555
	Ag	107	**51.085**	ug/L	2.344	364877	0.982
	Cd	111	**49.557**	ug/L	1.339	90152	0.242
	Cd	114		ug/L		215649	0.580
>	In	115		ug/L		371604	371604.103
	Sn	120	**51.295**	ug/L	1.722	393213	1.056
	Sb	121	**50.473**	ug/L	6.613	286599	0.760
	Sb	123		ug/L		227635	0.604
	Ba	135		ug/L		103961	0.187
	Ba	137	**50.568**	ug/L	0.260	182847	0.329
	Ho	165		ug/L		119	0.000
>	Lu	175		ug/L		555849	555848.983
	Tl	205	**52.575**	ug/L	0.350	929773	1.670
	Pb	208	**54.039**	ug/L	1.100	1568748	2.818
	Bi	209		ug/L		439	0.000
	Th	232	**50.139**	ug/L	0.981	1685534	3.025
	U	238	**51.050**	ug/L	0.665	1775247	3.191

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	92.784				
	Be	9	93.751				
	B	11	92.118				
	Na	23	79.486				
	Mg	24	92.916				
	Al	27	87.426				
	P	31	87.302				
	K	39	80.980				
	Ca	43	89.418				
>	Sc	45		110.9			
	Ti	47	92.211				
	V	51	91.274				
	Cr	52	92.545				
	Cr	53					
	Mn	55	94.426				
	Fe	57	95.258				
	Co	59	90.957				
	Ni	60	90.307				
	Cu	63					
	Cu	65	92.648				
	Zn	66	103.700				
	Zn	67					
	Zn	68					
>	Ge	74		93.1			
	As	75	94.781				
	Se	77					
	Se	82	101.176				
	Kr	83					
	Sr	88	105.691				
	Y	89					
	Mo	98	98.903				
	Ag	107	102.169				
	Cd	111	99.115				
	Cd	114					
>	In	115		91.8			
	Sn	120	102.590				
	Sb	121	100.947				
	Sb	123					
	Ba	135					
	Ba	137	101.137				
	Ho	165					
>	Lu	175		95.8			
	Tl	205	105.151				
	Pb	208	108.078				
	Bi	209					
	Th	232	100.278				
	U	238	102.100				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	Al	27	CCV is out of limits (+/- 10%)
QC Std 8	P	31	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
QC Std 8	Ca	43	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Monday, December 07, 2009 21:35:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.435

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.003**	ug/L	123.833	130	-0.000
	Be	9	**-0.024**	ug/L	25.768	21	-0.000
	B	11	**4.643**	ug/L	12.833	4346	0.003
	Na	23	**-3.762**	ug/L	5.810	69502	-0.022
	Mg	24	**-0.254**	ug/L	255.746	7669	-0.001
	Al	27	**0.332**	ug/L	224.202	20348	0.002
	P	31	**-4.627**	ug/L	20.930	9429	-0.001
	K	39	**-11.727**	ug/L	88.055	555344	-0.090
	Ca	43	**-4.013**	ug/L	52.245	359	-0.000
>	Sc	45		ug/L		1016356	1016355.527
	Ti	47	**0.086**	ug/L	55.000	603	0.000
	V	51	**-0.670**	ug/L	52.311	9174	-0.006
	Cr	52	**0.209**	ug/L	16.120	-2428	0.002
	Cr	53		ug/L		98920	-0.037
	Mn	55	**0.006**	ug/L	79.745	1771	0.000
	Fe	57	**-0.544**	ug/L	118.619	6852	-0.000
	Co	59	**-0.024**	ug/L	6.126	296	-0.000
	Ni	60	**-0.023**	ug/L	25.720	165	-0.000
	Cu	63		ug/L		255	-0.000
	Cu	65	**-0.025**	ug/L	2.474	161	-0.000
	Zn	66	**-0.022**	ug/L	134.524	451	-0.000
	Zn	67		ug/L		13668	-0.003
	Zn	68		ug/L		1608	-0.000
>	Ge	74		ug/L		575644	575644.063
	As	75	**0.054**	ug/L	537.816	-113	0.000
	Se	77		ug/L		5633	-0.001
	Se	82	**-0.121**	ug/L	36.939	-16	-0.000
	Kr	83		ug/L		127	-0.000
	Sr	88	**-0.012**	ug/L	13.072	548	-0.001
	Y	89		ug/L		62	-0.000
	Mo	98	**0.050**	ug/L	37.031	476	0.001
	Ag	107	**-0.005**	ug/L	17.978	131	-0.000
	Cd	111	**-0.016**	ug/L	22.228	76	-0.000
	Cd	114		ug/L		103	-0.000
>	In	115		ug/L		379963	379962.931
	Sn	120	**0.317**	ug/L	15.520	3324	0.007
	Sb	121	**0.821**	ug/L	49.485	8923	0.012
	Sb	123		ug/L		6941	0.010
	Ba	135		ug/L		545	0.001
	Ba	137	**0.207**	ug/L	2.691	953	0.001
	Ho	165		ug/L		58	0.000
>	Lu	175		ug/L		558231	558231.249
	Tl	205	**0.216**	ug/L	17.777	5312	0.007
	Pb	208	**-0.037**	ug/L	6.161	1588	-0.002
	Bi	209		ug/L		312	0.000
	Th	232	**0.372**	ug/L	24.501	16594	0.022
	U	238	**-0.010**	ug/L	5.385	1434	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		112.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241417001
Sample Date/Time: Monday, December 07, 2009 21:54:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241417001.438

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.483**	ug/L	0.413	160755	0.131
	Be	9	**1.881**	ug/L	1.922	1307	0.001
	B	11	**6.599**	ug/L	6.346	6682	0.004
	Na	23	**338.362**	ug/L	2.461	2525381	1.975
	Mg	24	**5361.345**	ug/L	14.627	23851239	19.525
	Al	27	**23872.757**	ug/L	10.621	174551785	142.938
	P	31	**790.224**	ug/L	4.362	317503	0.249
	K	39	**3285.786**	ug/L	3.938	31729922	25.325
	Ca	43	**8509.449**	ug/L	2.392	182592	0.149
>	Sc	45		ug/L		1222611	1222611.369
	Ti	47	**710.830**	ug/L	3.364	761369	0.622
	V	51	**50.905**	ug/L	5.485	602175	0.478
	Cr	52	**68.324**	ug/L	4.372	615443	0.508
	Cr	53		ug/L		149146	-0.012
	Mn	55	**634.880**	ug/L	4.271	9319545	7.625
	Fe	57	**41178.452**	ug/L	3.215	11172925	9.135
	Co	59	**7.927**	ug/L	3.768	88260	0.072
	Ni	60	**16.382**	ug/L	3.670	40154	0.033
	Cu	63		ug/L		345058	0.282
	Cu	65	**59.246**	ug/L	2.892	174924	0.143
	Zn	66	**154.101**	ug/L	2.878	240349	0.399
	Zn	67		ug/L		51120	0.058
	Zn	68		ug/L		183744	0.303
>	Ge	74		ug/L		600614	600614.119
	As	75	**8.393**	ug/L	2.184	13187	0.022
	Se	77		ug/L		4391	-0.004
	Se	82	**0.315**	ug/L	49.978	56	0.000
	Kr	83		ug/L		319	0.000
	Sr	88	**60.969**	ug/L	1.712	1114807	2.806
	Y	89		ug/L		1250266	3.149
	Mo	98	**2.993**	ug/L	2.986	13618	0.034
	Ag	107	**37.617**	ug/L	2.758	287150	0.723
	Cd	111	**1.665**	ug/L	2.365	3342	0.008
	Cd	114		ug/L		3515	0.008
>	In	115		ug/L		397049	397049.040
	Sn	120	**3.931**	ug/L	2.031	33011	0.081
	Sb	121	**-0.294**	ug/L	6.224	2673	-0.004
	Sb	123		ug/L		2135	-0.003
	Ba	135		ug/L		549531	0.950
	Ba	137	**248.680**	ug/L	1.565	934586	1.616
	Ho	165		ug/L		85245	0.147
>	Lu	175		ug/L		578301	578301.471
	Tl	205	**0.521**	ug/L	0.300	11124	0.017
	Pb	208	**68.345**	ug/L	1.061	2063433	3.564
	Bi	209		ug/L		70515	0.122
	Th	232	**21.482**	ug/L	0.533	753695	1.296
	U	238	**3.235**	ug/L	1.417	118793	0.202

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		135.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241417002
Sample Date/Time: Monday, December 07, 2009 22:00:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241417002.439

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**62.039**	ug/L	1.101	215610	0.168
	Be	9	**2.132**	ug/L	3.908	1546	0.001
	B	11	**9.064**	ug/L	1.977	8927	0.006
	Na	23	**1674.846**	ug/L	3.056	12651304	9.775
	Mg	24	**4988.039**	ug/L	7.012	23279952	18.165
	Al	27	**27367.373**	ug/L	4.264	210159768	163.862
	P	31	**277.548**	ug/L	2.660	125866	0.087
	K	39	**2861.128**	ug/L	1.704	29085762	22.052
	Ca	43	**5278.220**	ug/L	0.955	118979	0.092
>	Sc	45		ug/L		1281892	1281891.914
	Ti	47	**696.995**	ug/L	3.244	782713	0.610
	V	51	**25.607**	ug/L	3.041	327523	0.240
	Cr	52	**17.879**	ug/L	3.331	165134	0.133
	Cr	53		ug/L		95061	-0.060
	Mn	55	**543.546**	ug/L	3.125	8366478	6.528
	Fe	57	**36894.567**	ug/L	1.854	10498316	8.185
	Co	59	**4.143**	ug/L	1.302	48692	0.037
	Ni	60	**12.040**	ug/L	3.131	31009	0.024
	Cu	63		ug/L		58811	0.045
	Cu	65	**9.853**	ug/L	2.762	30734	0.024
	Zn	66	**140.666**	ug/L	1.628	220775	0.365
	Zn	67		ug/L		46005	0.049
	Zn	68		ug/L		164432	0.269
>	Ge	74		ug/L		604236	604235.553
	As	75	**4.796**	ug/L	1.829	7495	0.013
	Se	77		ug/L		4647	-0.004
	Se	82	**0.606**	ug/L	4.080	106	0.000
	Kr	83		ug/L		376	0.000
	Sr	88	**44.504**	ug/L	0.455	808253	2.048
	Y	89		ug/L		1653279	4.193
	Mo	98	**4.490**	ug/L	3.022	20149	0.050
	Ag	107	**1.816**	ug/L	1.307	13929	0.035
	Cd	111	**1.683**	ug/L	4.875	3354	0.008
	Cd	114		ug/L		710	0.001
>	In	115		ug/L		394244	394243.750
	Sn	120	**2.938**	ug/L	1.327	24726	0.060
	Sb	121	**-0.281**	ug/L	2.284	2736	-0.004
	Sb	123		ug/L		2232	-0.003
	Ba	135		ug/L		246379	0.424
	Ba	137	**112.989**	ug/L	1.500	426944	0.734
	Ho	165		ug/L		124141	0.213
>	Lu	175		ug/L		581291	581290.841
	Tl	205	**0.784**	ug/L	1.417	16037	0.025
	Pb	208	**39.929**	ug/L	1.695	1212767	2.082
	Bi	209		ug/L		26930	0.046
	Th	232	**22.876**	ug/L	1.688	806375	1.380
	U	238	**1.740**	ug/L	1.598	65056	0.109

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		142.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 22:18:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.442

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**43.416**	ug/L	2.606	132188	0.118
	Be	9	**44.810**	ug/L	2.959	27719	0.025
	B	11	**85.063**	ug/L	0.865	59672	0.052
	Na	23	**3930.825**	ug/L	9.165	25896336	22.941
	Mg	24	**4817.102**	ug/L	6.075	19709407	17.543
	Al	27	**4515.970**	ug/L	1.694	30375789	27.039
	P	31	**4437.249**	ug/L	3.557	1581795	1.399
	K	39	**4382.111**	ug/L	3.819	38634118	33.775
	Ca	43	**4425.171**	ug/L	2.969	87425	0.077
>	Sc	45		ug/L		1122920	1122920.241
	Ti	47	**45.805**	ug/L	3.568	45604	0.040
	V	51	**45.876**	ug/L	2.768	500276	0.430
	Cr	52	**46.867**	ug/L	3.992	386305	0.348
	Cr	53		ug/L		143441	-0.006
	Mn	55	**46.734**	ug/L	2.923	631870	0.561
	Fe	57	**4624.282**	ug/L	1.184	1159577	1.026
	Co	59	**44.507**	ug/L	1.960	452524	0.403
	Ni	60	**44.633**	ug/L	3.865	100050	0.089
	Cu	63		ug/L		244345	0.217
	Cu	65	**45.188**	ug/L	3.678	122574	0.109
	Zn	66	**51.765**	ug/L	1.505	82826	0.134
	Zn	67		ug/L		26554	0.016
	Zn	68		ug/L		62117	0.098
>	Ge	74		ug/L		613535	613534.788
	As	75	**48.752**	ug/L	1.329	79231	0.129
	Se	77		ug/L		12275	0.009
	Se	82	**50.289**	ug/L	1.315	8629	0.014
	Kr	83		ug/L		122	-0.000
	Sr	88	**53.945**	ug/L	1.938	970616	2.483
	Y	89		ug/L		237	0.000
	Mo	98	**50.639**	ug/L	1.292	222405	0.569
	Ag	107	**51.456**	ug/L	1.500	386430	0.989
	Cd	111	**50.351**	ug/L	1.097	96295	0.246
	Cd	114		ug/L		227808	0.583
>	In	115		ug/L		390632	390631.890
	Sn	120	**49.863**	ug/L	3.457	401881	1.027
	Sb	121	**50.973**	ug/L	7.444	304279	0.768
	Sb	123		ug/L		239992	0.606
	Ba	135		ug/L		108232	0.198
	Ba	137	**52.833**	ug/L	1.927	187373	0.343
	Ho	165		ug/L		123	0.000
>	Lu	175		ug/L		545312	545312.471
	Tl	205	**52.703**	ug/L	0.342	914330	1.674
	Pb	208	**54.071**	ug/L	1.049	1539873	2.819
	Bi	209		ug/L		427	0.000
	Th	232	**49.510**	ug/L	1.670	1632629	2.987
	U	238	**49.785**	ug/L	2.381	1698286	3.112

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	86.832				
	Be	9	89.620				
	B	11	85.063				
	Na	23	78.617				
	Mg	24	96.342				
	Al	27	89.425				
	P	31	88.745				
	K	39	87.642				
	Ca	43	88.503				
>	Sc	45		124.4			
	Ti	47	91.611				
	V	51	91.752				
	Cr	52	93.733				
	Cr	53					
	Mn	55	93.468				
	Fe	57	92.486				
	Co	59	89.013				
	Ni	60	89.265				
	Cu	63					
	Cu	65	90.376				
	Zn	66	103.531				
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75	97.503				
	Se	77					
	Se	82	100.579				
	Kr	83					
	Sr	88	107.891				
	Y	89					
	Mo	98	101.278				
	Ag	107	102.911				
	Cd	111	100.702				
	Cd	114					
>	In	115		96.5			
	Sn	120	99.726				
	Sb	121	101.947				
	Sb	123					
	Ba	135					
	Ba	137	105.665				
	Ho	165					
>	Lu	175		94.0			
	Tl	205	105.406				
	Pb	208	108.143				
	Bi	209					
	Th	232	99.021				
	U	238	99.571				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)
QC Std 6	P	31	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Std 6	Ca	43CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45
QC Std 6	Co	59CCV is out of limits (+/- 10%)
QC Std 6	Ni	60CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 22:24:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.443

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.009	ug/L	57.345	123	-0.000
	Be	9	-0.032	ug/L	17.145	18	-0.000
	B	11	1.967	ug/L	23.599	2917	0.001
	Na	23	-0.264	ug/L	958.458	97673	-0.002
	Mg	24	-0.666	ug/L	42.239	6668	-0.002
	Al	27	-0.487	ug/L	21.976	16676	-0.003
	P	31	-3.080	ug/L	7.686	10727	-0.001
	K	39	-17.198	ug/L	13.058	555604	-0.133
	Ca	43	-3.757	ug/L	25.552	393	-0.000
>	Sc	45		ug/L		1098701	1098701.334
	Ti	47	0.110	ug/L	12.782	676	0.000
	V	51	-0.663	ug/L	31.820	9982	-0.006
	Cr	52	0.412	ug/L	6.142	-968	0.003
	Cr	53		ug/L		103607	-0.040
	Mn	55	0.016	ug/L	20.803	2050	0.000
	Fe	57	-0.474	ug/L	153.490	7427	-0.000
	Co	59	-0.029	ug/L	7.495	276	-0.000
	Ni	60	-0.024	ug/L	39.293	175	-0.000
	Cu	63		ug/L		294	-0.000
	Cu	65	-0.038	ug/L	4.175	140	-0.000
	Zn	66	-0.048	ug/L	46.402	437	-0.000
	Zn	67		ug/L		13942	-0.004
	Zn	68		ug/L		1612	-0.001
>	Ge	74		ug/L		608567	608566.512
	As	75	-0.108	ug/L	214.818	-374	-0.000
	Se	77		ug/L		5936	-0.001
	Se	82	-0.127	ug/L	23.213	-18	-0.000
	Kr	83		ug/L		129	-0.000
	Sr	88	-0.014	ug/L	15.707	531	-0.001
	Y	89		ug/L		92	0.000
	Mo	98	0.053	ug/L	43.654	503	0.001
	Ag	107	-0.002	ug/L	82.250	151	-0.000
	Cd	111	-0.027	ug/L	21.499	57	-0.000
	Cd	114		ug/L		106	-0.000
>	In	115		ug/L		390266	390265.631
	Sn	120	0.296	ug/L	17.079	3242	0.006
	Sb	121	0.732	ug/L	54.487	8647	0.011
	Sb	123		ug/L		6781	0.009
	Ba	135		ug/L		182	0.000
	Ba	137	0.033	ug/L	15.404	324	0.000
	Ho	165		ug/L		61	0.000
>	Lu	175		ug/L		557919	557919.228
	Tl	205	0.197	ug/L	23.564	4993	0.006
	Pb	208	-0.039	ug/L	4.787	1535	-0.002
	Bi	209		ug/L		310	0.000
	Th	232	0.343	ug/L	26.998	15627	0.021
	U	238	-0.013	ug/L	20.161	1350	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		121.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 08:37:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\Blank.546

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		78	
	Be	9		ug/L		18	
>	Sc	45		ug/L		1015394	
	Ni	60		ug/L		172	
>	Lu	175		ug/L		527344	
	Tl	205		ug/L		5176	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 08:39:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\Standard 1.547

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.000**	**ug/L**	1.722	27048	0.027
	Be	9	**10.000**	**ug/L**	0.778	5381	0.005
>	Sc	45		**ug/L**		1007992	1007991.603
	Ni	60	**10.000**	**ug/L**	0.853	17645	0.017
>	Lu	175		**ug/L**		527120	527119.650
	Tl	205	**10.000**	**ug/L**	2.738	200925	0.371

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 08:42:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\Standard 2.548

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.993**	**ug/L**	3.325	270157	0.266
	Be	9	**99.980**	**ug/L**	1.345	53037	0.052
>	Sc	45		**ug/L**		1016281	1016280.857
	Ni	60	**99.955**	**ug/L**	1.526	168643	0.166
>	Lu	175		**ug/L**		512839	512839.146
	Tl	205	**99.846**	**ug/L**	1.123	1653341	3.214

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 08:44:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 1.549

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.356**	**ug/L**	1.316	136822	0.134
	Be	9	**51.800**	**ug/L**	0.517	27633	0.027
>	Sc	45		**ug/L**		1021634	1021633.508
	Ni	60	**50.874**	**ug/L**	3.797	86350	0.084
>	Lu	175		**ug/L**		516637	516637.055
	Tl	205	**51.387**	**ug/L**	1.412	859665	1.654

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.712				
	Be	9	103.600				
>	Sc	45		100.6			
	Ni	60	101.747				
>	Lu	175		98.0			
	Tl	205	102.774				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 08:46:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 2.550

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.000**	**ug/L**	633.910	77	-0.000
	Be	9	**0.004**	**ug/L**	72.017	20	0.000
>	Sc	45		**ug/L**		1013668	1013667.932
	Ni	60	**-0.002**	**ug/L**	884.362	169	-0.000
>	Lu	175		**ug/L**		521415	521415.042
	Tl	205	**0.509**	**ug/L**	1.482	13656	0.016

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		99.8			
	Ni	60					
>	Lu	175		98.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 08:49:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 3.551

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.587**	**ug/L**	1.671	28542	0.028
	Be	9	**0.517**	**ug/L**	2.933	291	0.000
>	Sc	45		**ug/L**		1011561	1011560.857
	Ni	60	**2.118**	**ug/L**	1.948	3724	0.004
>	Lu	175		**ug/L**		526935	526935.377
	Tl	205	**1.279**	**ug/L**	2.626	26866	0.041

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.875				
	Be	9	103.479				
>	Sc	45			99.6		
	Ni	60	105.881				
>	Lu	175			99.9		
	Tl	205	127.900				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 08:51:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 4.552

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.064**	**ug/L**	7.916	245	0.000
	Be	9	**0.048**	**ug/L**	23.154	42	0.000
>	Sc	45		**ug/L**		996101	996100.942
	Ni	60	**3.124**	**ug/L**	2.325	5328	0.005
>	Lu	175		**ug/L**		460563	460563.368
	Tl	205	**0.011**	**ug/L**	117.047	4676	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45			98.1		
	Ni	60	115.699				
>	Lu	175			87.3		
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 08:54:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 5.553

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.348**	**ug/L**	3.098	51726	0.054
	Be	9	**19.175**	**ug/L**	1.236	9575	0.010
>	Sc	45		**ug/L**		955368	955367.619
	Ni	60	**22.935**	**ug/L**	2.960	36488	0.038
>	Lu	175		**ug/L**		459751	459751.145
	Tl	205	**20.777**	**ug/L**	2.754	311981	0.669

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.738				
	Be	9	95.877				
>	Sc	45		94.1			
	Ni	60	101.036				
>	Lu	175		87.2			
	Tl	205	103.887				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 08:56:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.554

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.606**	**ug/L**	1.873	130170	0.132
	Be	9	**51.257**	**ug/L**	0.597	26412	0.027
>	Sc	45		**ug/L**		986823	986822.658
	Ni	60	**51.389**	**ug/L**	2.041	84252	0.085
>	Lu	175		**ug/L**		523995	523995.340
	Tl	205	**49.491**	**ug/L**	1.450	839781	1.593

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	99.211				
	Be	9	102.513				
>	Sc	45		97.2			
	Ni	60	102.779				
>	Lu	175		99.4			
	Tl	205	98.982				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 08:58:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.555

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.004**	**ug/L**	73.426	89	0.000
	Be	9	**0.012**	**ug/L**	125.198	24	0.000
>	Sc	45		**ug/L**		1003588	1003587.760
	Ni	60	**-0.007**	**ug/L**	104.267	158	-0.000
>	Lu	175		**ug/L**		521547	521547.139
	Tl	205	**0.525**	**ug/L**	2.178	13938	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		98.8			
	Ni	60					
>	Lu	175		98.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977921
Sample Date/Time: Tuesday, December 08, 2009 09:01:10
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977921.556

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.011**	**ug/L**	35.882	50	-0.000
	Be	9	**-0.003**	**ug/L**	75.277	17	-0.000
>	Sc	45		**ug/L**		1052235	1052234.511
	Ni	60	**0.030**	**ug/L**	13.160	230	0.000
>	Lu	175		**ug/L**		531743	531743.251
	Tl	205	**0.224**	**ug/L**	7.775	9049	0.007

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		103.6			
	Ni	60					
>	Lu	175		100.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Tuesday, December 08, 2009 09:03:31
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|20|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977926.557

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.982**	**ug/L**	2.782	10923	0.011
	Be	9	**48.713**	**ug/L**	1.135	26066	0.025
>	Sc	45		**ug/L**		1024804	1024804.057
	Ni	60	**57.118**	**ug/L**	1.963	97229	0.095
>	Lu	175		**ug/L**		523851	523851.123
	Tl	205	**102.785**	**ug/L**	1.444	1738193	3.309

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		100.9			
	Ni	60					
>	Lu	175		99.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Tuesday, December 08, 2009 09:05:53
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|40|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977926.558

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.050**	**ug/L**	2.562	5502	0.005
	Be	9	**24.626**	**ug/L**	1.187	12813	0.013
>	Sc	45		**ug/L**		995828	995827.798
	Ni	60	**29.000**	**ug/L**	2.072	48061	0.048
>	Lu	175		**ug/L**		523520	523519.600
	Tl	205	**55.822**	**ug/L**	1.153	945886	1.797

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		98.1			
	Ni	60					
>	Lu	175		99.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 09:15:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.562

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.809**	**ug/L**	0.342	136509	0.135
	Be	9	**51.830**	**ug/L**	1.534	27341	0.027
>	Sc	45		**ug/L**		1010200	1010199.820
	Ni	60	**51.673**	**ug/L**	1.770	86739	0.086
>	Lu	175		**ug/L**		518602	518602.225
	Tl	205	**49.679**	**ug/L**	2.124	834310	1.599

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	101.619				
	Be	9	103.660				
>	Sc	45		99.5			
	Ni	60	103.346				
>	Lu	175		98.3			
	Tl	205	99.359				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 09:17:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.563

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.005**	**ug/L**	87.569	91	0.000
	Be	9	**0.009**	**ug/L**	17.342	22	0.000
>	Sc	45		**ug/L**		1008200	1008200.273
	Ni	60	**-0.006**	**ug/L**	163.270	161	-0.000
>	Lu	175		**ug/L**		522837	522836.924
	Tl	205	**0.402**	**ug/L**	1.864	11898	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		99.3			
	Ni	60					
>	Lu	175		99.1			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977922
Sample Date/Time: Tuesday, December 08, 2009 09:22:36
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977922.565

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**28.460**	**ug/L**	3.823	81248	0.076
	Be	9	**1.851**	**ug/L**	1.986	1055	0.001
>	Sc	45		**ug/L**		1073184	1073184.472
	Ni	60	**26.827**	**ug/L**	0.941	47929	0.044
>	Lu	175		**ug/L**		470590	470590.056
	Tl	205	**0.280**	**ug/L**	7.979	8854	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		105.7			
	Ni	60					
>	Lu	175		89.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977924
Sample Date/Time: Tuesday, December 08, 2009 09:24:58
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977924.566

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.978**	**ug/L**	1.356	164036	0.143
	Be	9	**22.701**	**ug/L**	0.550	13557	0.012
>	Sc	45		**ug/L**		1142730	1142729.960
	Ni	60	**47.315**	**ug/L**	1.389	89864	0.078
>	Lu	175		**ug/L**		470905	470904.960
	Tl	205	**55.742**	**ug/L**	0.357	849572	1.794

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		112.5			
	Ni	60					
>	Lu	175		89.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977925
Sample Date/Time: Tuesday, December 08, 2009 09:27:20
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977925.567

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.409**	**ug/L**	1.973	156780	0.137
	Be	9	**22.394**	**ug/L**	2.404	13420	0.012
>	Sc	45		**ug/L**		1146805	1146805.310
	Ni	60	**49.603**	**ug/L**	0.696	94532	0.082
>	Lu	175		**ug/L**		456409	456409.489
	Tl	205	**56.671**	**ug/L**	0.705	837040	1.824

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		112.9			
	Ni	60					
>	Lu	175		86.5			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977923
Sample Date/Time: Tuesday, December 08, 2009 09:29:43
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925189|10|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977923.568

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**6.818**	**ug/L**	2.531	18796	0.018
	Be	9	**0.482**	**ug/L**	6.710	278	0.000
>	Sc	45		**ug/L**		1032899	1032899.076
	Ni	60	**5.911**	**ug/L**	2.492	10300	0.010
>	Lu	175		**ug/L**		505475	505475.015
	Tl	205	**0.260**	**ug/L**	7.692	9198	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		101.7			
	Ni	60					
>	Lu	175		95.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 09:36:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.571

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.708**	**ug/L**	3.248	137210	0.135
	Be	9	**52.627**	**ug/L**	1.075	27962	0.027
>	Sc	45		**ug/L**		1017598	1017597.501
	Ni	60	**50.960**	**ug/L**	1.932	86156	0.085
>	Lu	175		**ug/L**		503454	503453.591
	Tl	205	**50.281**	**ug/L**	1.931	819669	1.619

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	101.417				
	Be	9	105.255				
>	Sc	45		100.2			
	Ni	60	101.920				
>	Lu	175		95.5			
	Tl	205	100.563				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 09:39:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.572

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.004**	**ug/L**	102.479	90	0.000
	Be	9	**0.001**	**ug/L**	616.041	18	0.000
>	Sc	45		**ug/L**		1018391	1018390.731
	Ni	60	**-0.007**	**ug/L**	44.500	160	-0.000
>	Lu	175		**ug/L**		510256	510255.998
	Tl	205	**0.311**	**ug/L**	1.600	10121	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		100.3			
	Ni	60					
>	Lu	175		96.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241417001
Sample Date/Time: Tuesday, December 08, 2009 09:44:06
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\241417001.574

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.114**	**ug/L**	2.275	166139	0.144
	Be	9	**2.189**	**ug/L**	4.307	1338	0.001
>	Sc	45		**ug/L**		1154689	1154689.489
	Ni	60	**19.394**	**ug/L**	0.960	37339	0.032
>	Lu	175		**ug/L**		528282	528281.898
	Tl	205	**0.437**	**ug/L**	7.936	12612	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		113.7			
	Ni	60					
>	Lu	175		100.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241417002
Sample Date/Time: Tuesday, December 08, 2009 09:46:28
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\241417002.575

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**71.783**	**ug/L**	3.223	230080	0.191
	Be	9	**2.462**	**ug/L**	2.169	1570	0.001
>	Sc	45		**ug/L**		1205557	1205556.765
	Ni	60	**13.916**	**ug/L**	1.075	28026	0.023
>	Lu	175		**ug/L**		529223	529223.202
	Tl	205	**0.639**	**ug/L**	1.744	16075	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		118.7			
	Ni	60					
>	Lu	175		100.4			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 09:53:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.578

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.181**	**ug/L**	5.106	140600	0.133
	Be	9	**51.476**	**ug/L**	2.773	28328	0.027
>	Sc	45		**ug/L**		1054345	1054345.320
	Ni	60	**50.922**	**ug/L**	2.467	89196	0.084
>	Lu	175		**ug/L**		509131	509131.464
	Tl	205	**49.200**	**ug/L**	1.052	811311	1.584

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.361				
	Be	9	102.952				
>	Sc	45		103.8			
	Ni	60	101.845				
>	Lu	175		96.5			
	Tl	205	98.401				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 09:56:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.579

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.007**	**ug/L**	63.894	99	0.000
	Be	9	**0.003**	**ug/L**	122.581	20	0.000
>	Sc	45		**ug/L**		1046206	1046206.189
	Ni	60	**-0.007**	**ug/L**	160.262	165	-0.000
>	Lu	175		**ug/L**		511422	511421.768
	Tl	205	**0.253**	**ug/L**	6.194	9180	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		103.0			
	Ni	60					
>	Lu	175		97.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 08, 2009 12:14:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1420
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	7284.7	7284.658	173.033	2.4
	Mg	24.0	60061.7	60061.712	2059.059	3.4
	Co	58.9	158942.6	158942.583	1686.378	1.1
	Rh	102.9	311119.2	311119.217	1716.347	0.6
	In	114.9	405143.7	405143.712	1793.513	0.4
	Pb	208.0	250960.4	250960.382	2944.999	1.2
⌈>	Ba	137.9	382380.2	382380.208	5414.019	1.4
⌊	Ba++	69.0	8329.3	0.022	0.000	1.4
⌈>	Ce	139.9	466717.1	466717.070	5925.086	1.3
⌊	CeO	155.9	12652.4	0.027	0.000	1.6
	Bkgd	220.0	22.6	22.600	3.209	14.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.8	7387.6
Co	59	15	6.8	162601.5
In	115	15	7.5	393283.0

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2060	0.660
Be	9.0	9.0	2042	2070	0.677
Mg	24.0	24.0	5679	2080	0.685
Mg	25.0	25.0	5919	2075	0.643
Mg	26.0	26.0	6187	2070	0.701
Co	58.9	58.9	14182	2110	0.663
Rh	102.9	102.9	24876	2160	0.666
In	114.9	114.9	27790	2180	0.661
Ce	139.9	139.9	33862	2195	0.685
Pb	206.0	206.0	49948	2290	0.674
Pb	207.0	207.0	50147	2260	0.631
Pb	208.0	208.0	50451	2280	0.677
U	238.1	238.1	57727	2285	0.720

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, December 09, 2009 08:53:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Blank.361

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		555897	
	Tl	205		ug/L		4295	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, December 09, 2009 08:56:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.362

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		551394	551394.225
⌊	Tl	205	10.000	ug/L	0.949	221530	0.394

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, December 09, 2009 08:59:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.363

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		555311	555311.357
⌊	Tl	205	99.826	ug/L	0.462	1864209	3.349

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, December 09, 2009 09:01:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.364

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		559606	559605.828
	Tl	205	50.051	ug/L	0.325	944079	1.679

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.7			
	Tl	205	100.103				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, December 09, 2009 09:04:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.365

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		557702	557701.974
	Tl	205	**0.298**	**ug/L**	8.159	9889	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, December 09, 2009 09:06:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.366

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		554608	554607.767
⌊	Tl	205	1.203	ug/L	0.831	26669	0.040

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		99.8			
⌊	Tl	205	120.292				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, December 09, 2009 09:09:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.367

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		506620	506619.896
	Tl	205	-0.048	ug/L	9.069	3094	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		91.1			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, December 09, 2009 09:12:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.368

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		506707	506706.852
	Tl	205	21.083	ug/L	2.070	362313	0.707

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		91.2			
	Tl	205	105.417				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 09, 2009 09:14:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.369

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		547665	547665.458
	Tl	205	49.562	ug/L	0.940	914975	1.663

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.5			
	Tl	205	99.124				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 09, 2009 09:17:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.370

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		542941	542941.119
⌊	Tl	205	0.230	ug/L	4.425	8391	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.7			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977921
Sample Date/Time: Wednesday, December 09, 2009 09:20:19
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977921.371

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		547123	547123.232
⌊	Tl	205	0.015	ug/L	12.125	4494	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Wednesday, December 09, 2009 09:23:00
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|40|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977926.372

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		528153	528152.880
⌊	Tl	205	56.684	ug/L	1.610	1008384	1.902

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		95.0			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 09:33:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.376

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		508766	508766.404
	Tl	205	50.803	ug/L	1.414	871097	1.705

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		91.5			
	Tl	205	101.606				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 09:36:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.377

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		511973	511973.387
⌊	Tl	205	0.228	ug/L	18.273	7876	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		92.1			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977922
Sample Date/Time: Wednesday, December 09, 2009 09:41:56
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977922.379

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		509251	509251.021
⌊	Tl	205	0.225	ug/L	2.523	7776	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		91.6			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977924
Sample Date/Time: Wednesday, December 09, 2009 09:44:37
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977924.380

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		511509	511509.285
⌊	Tl	205	59.125	ug/L	0.647	1018665	1.984

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		92.0			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977925
Sample Date/Time: Wednesday, December 09, 2009 09:47:19
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977925.381

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		486247	486247.325
⌊	Tl	205	61.491	ug/L	1.079	1006929	2.063

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		87.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977923
Sample Date/Time: Wednesday, December 09, 2009 09:50:01
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925189|10|ba|
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977923.382

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		542102	542101.639
⌊	Tl	205	**0.370**	**ug/L**	2.709	10919	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 09:52:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.383

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		542279	542279.197
⌊	Tl	205	51.255	ug/L	2.067	936399	1.720

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.6			
⌊	Tl	205	102.509				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 09:55:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.384

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		546159	546159.266
⌊	Tl	205	0.254	ug/L	6.427	8874	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241417001
Sample Date/Time: Wednesday, December 09, 2009 10:06:17
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241417001.388

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		558424	558424.333
	Tl	205	0.424	ug/L	3.465	12256	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.5			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241417002
Sample Date/Time: Wednesday, December 09, 2009 10:08:59
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241417002.389

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		550431	550430.521
⌊	Tl	205	0.664	ug/L	6.315	16510	0.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		99.0			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 10:17:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.392

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		500812	500811.536
⌊	Tl	205	**52.421**	ug/L	2.682	884385	1.759

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		90.1			
⌊	Tl	205	104.842				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 10:19:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.393

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		515865	515864.930
⌊	Tl	205	0.130	ug/L	2.662	6236	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		92.8			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/07/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120709S1.SIF Results Data Set Name: 120709S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/07/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0043	09:54:40	No
2			0.0044	0.0044	09:55:15	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.5786			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/07/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0056	09:56:37	No
2			0.0017	0.0060	09:57:13	No
Mean:			0.0014			
SD :			0.0003			
%RSD:			21.7220			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00720
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/07/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0041	0.0085	09:58:35	No
2			0.0040	0.0084	09:59:11	No
Mean:			0.0041			
SD :			0.0001			
%RSD:			1.6133			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99849 Slope: 0.00824
Intercept : -0.00008

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/07/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0165	0.0209	10:00:35	No
2			0.0168	0.0211	10:01:10	No
Mean:			0.0166			
SD :			0.0002			
%RSD:			1.1765			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99992 Slope: 0.00837
Intercept : -0.00010

==========

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/07/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0406	0.0449	10:02:36	No
2			0.0407	0.0451	10:03:10	No
Mean:			0.0406			
SD :			0.0001			
%RSD:			0.2535			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99993 Slope: 0.00815
Intercept : 0.00001

==========

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/07/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0801	0.0845	10:04:36	No
2			0.0817	0.0860	10:05:11	No
Mean:			0.0809			
SD :			0.0011			
%RSD:			1.3799			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00809
Intercept : 0.00008

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0014	0.200	0.168	0.0003	21.7
S0.5	0.0041	0.500	0.497	0.0001	1.6
S2.0	0.0166	2.000	2.047	0.0002	1.2
S5.0	0.0406	5.000	5.011	0.0001	0.3
S10	0.0809	10.000	9.986	0.0011	1.4
Calib Blank	0.0044	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00809 Intercept: 0.0001

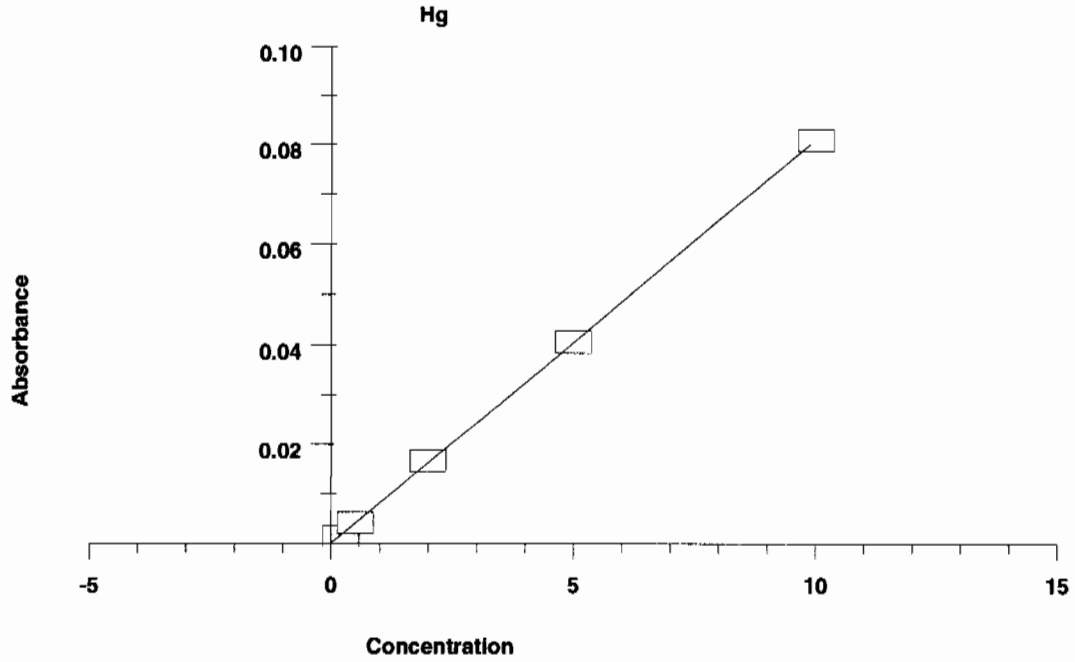

==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/07/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0421	0.0465	10:06:40	No
2	5.181	5.181	0.0420	0.0464	10:07:15	No
Mean:	5.188	5.188	0.0421			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.2	0.2	0.2028			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/07/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:08:38	No
2	-0.104	-0.104	-0.0008	0.0036	10:09:13	No
Mean:	-0.096	-0.096	-0.0007			
SD :	0.0124	0.0124	0.0001			
%RSD:	13.0	13.0	14.4602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/07/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0014	0.0057	10:10:35	No
2	0.148	0.148	0.0013	0.0056	10:11:10	No
Mean:	0.155	0.155	0.0013			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.9	5.9	5.5112			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0420	0.0463	10:12:35	No
2	5.181	5.181	0.0420	0.0464	10:13:09	No
Mean:	5.178	5.178	0.0420			
SD :	0.0040	0.0040	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0006	0.0037	10:14:37	No
2	-0.106	-0.106	-0.0008	0.0036	10:15:12	No
Mean:	-0.098	-0.098	-0.0007			
SD :	0.0123	0.0123	0.0001			
%RSD:	12.5	12.5	13.8998			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978905|i||925609|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0039	10:16:38	No
2	-0.093	-0.093	-0.0007	0.0037	10:17:13	No
Mean:	-0.077	-0.077	-0.0005			
SD :	0.0218	0.0218	0.0002			
%RSD:	28.2	28.2	32.1293			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978906|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.940	3.940	0.0320	0.0363	10:18:37	No
2	3.939	3.939	0.0319	0.0363	10:19:12	No
Mean:	3.939	3.939	0.0320			
SD :	0.0008	0.0008	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241604001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0057	10:20:38	No
2	0.157	0.157	0.0014	0.0057	10:21:14	No
Mean:	0.158	0.158	0.0014			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.5109			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241604002|i|||

%RSD: 7.6 7.6 8.0893

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/07/2009
Sample ID: 241608002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0013	0.0057	10:34:28	No
2	0.136	0.136	0.0012	0.0055	10:35:03	No
Mean:	0.143	0.143	0.0012			
SD :	0.0106	0.0106	0.0001			
%RSD:	7.4	7.4	6.9743			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.376	5.376	0.0436	0.0479	10:36:28	No
2	5.389	5.389	0.0437	0.0481	10:37:02	No
Mean:	5.383	5.383	0.0436			
SD :	0.0096	0.0096	0.0001			
%RSD:	0.2	0.2	0.1786			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:38:30	No
2	-0.095	-0.095	-0.0007	0.0037	10:39:04	No
Mean:	-0.091	-0.091	-0.0007			
SD :	0.0058	0.0058	0.0000			
%RSD:	6.4	6.4	7.1360			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201977155|i||924862|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0038	10:40:29	No
2	-0.083	-0.083	-0.0006	0.0038	10:41:04	No
Mean:	-0.083	-0.083	-0.0006			
SD :	0.0010	0.0010	0.0000			
%RSD:	1.2	1.2	1.4027			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201977156|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.825	3.825	0.0310	0.0354	10:42:28	No
2	3.817	3.817	0.0310	0.0353	10:43:02	No
Mean:	3.821	3.821	0.0310			
SD :	0.0054	0.0054	0.0000			
%RSD:	0.1	0.1	0.1420			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/07/2009
Sample ID: 241417001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.888	2.888	0.0235	0.0278	10:44:27	No
2	2.900	2.900	0.0235	0.0279	10:45:02	No
Mean:	2.894	2.894	0.0235			
SD :	0.0086	0.0086	0.0001			
%RSD:	0.3	0.3	0.2966			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 12/07/2009
Sample ID: 241417002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.116	0.116	0.0010	0.0054	10:46:26	No
2	0.109	0.109	0.0010	0.0053	10:47:01	No
Mean:	0.113	0.113	0.0010			
SD :	0.0053	0.0053	0.0000			
%RSD:	4.7	4.7	4.3036			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 12/07/2009
Sample ID: 241419001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0001	0.0043	10:48:25	No
2	-0.051	-0.051	-0.0003	0.0040	10:49:00	No
Mean:	-0.033	-0.033	-0.0002			
SD :	0.0246	0.0246	0.0002			
%RSD:	74.3	74.3	104.1788			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 12/07/2009
Sample ID: 241419002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.058	-0.058	-0.0004	0.0040	10:50:25	No
2	-0.076	-0.076	-0.0005	0.0038	10:51:00	No
Mean:	-0.067	-0.067	-0.0005			
SD :	0.0124	0.0124	0.0001			
%RSD:	18.5	18.5	21.6076			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 12/07/2009
Sample ID: 241419003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.053	-0.053	-0.0004	0.0040	10:52:26	No
2	-0.059	-0.059	-0.0004	0.0040	10:53:01	No
Mean:	-0.056	-0.056	-0.0004			
SD :	0.0042	0.0042	0.0000			
%RSD:	7.5	7.5	8.9936			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 12/07/2009
Sample ID: 241419004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.313	0.313	0.0026	0.0070	10:54:27	No
2	0.305	0.305	0.0025	0.0069	10:55:03	No
Mean:	0.309	0.309	0.0026			
SD :	0.0058	0.0058	0.0000			

%RSD: 1.9 1.9 1.8136

==========

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 12/07/2009
Sample ID: 241419005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.410	0.410	0.0034	0.0078	10:56:30	No
2	0.392	0.392	0.0033	0.0076	10:57:05	No
Mean:	0.401	0.401	0.0033			
SD :	0.0126	0.0126	0.0001			
%RSD:	3.1	3.1	3.0692			

==========

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 12/07/2009
Sample ID: 241419006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.446	0.446	0.0037	0.0080	10:58:33	No
2	0.430	0.430	0.0036	0.0079	10:59:07	No
Mean:	0.438	0.438	0.0036			
SD :	0.0109	0.0109	0.0001			
%RSD:	2.5	2.5	2.4393			

==========

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.212	5.212	0.0423	0.0466	11:00:33	No
2	5.240	5.240	0.0425	0.0468	11:01:08	No
Mean:	5.226	5.226	0.0424			
SD :	0.0193	0.0193	0.0002			
%RSD:	0.4	0.4	0.3682			

QC value within specified limits.

==========

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.122	-0.122	-0.0009	0.0035	11:02:36	No
2	-0.111	-0.111	-0.0008	0.0035	11:03:10	No
Mean:	-0.116	-0.116	-0.0009			
SD :	0.0079	0.0079	0.0001			
%RSD:	6.8	6.8	7.3534			

QC value within specified limits.

==========

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 12/07/2009
Sample ID: 241419007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.387	0.387	0.0032	0.0076	11:04:34	No
2	0.368	0.368	0.0031	0.0074	11:05:09	No
Mean:	0.377	0.377	0.0031			
SD :	0.0133	0.0133	0.0001			
%RSD:	3.5	3.5	3.4418			

==========

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 12/07/2009
Sample ID: 241419008|i|||

%RSD: 1.8 1.8 1.7307

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/07/2009
Sample ID: 241419014|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0000	0.0043	11:18:08	No
2	-0.016	-0.016	-0.0001	0.0043	11:18:43	No
Mean:	-0.015	-0.015	0.0000			
SD :	0.0014	0.0014	0.0000			
%RSD:	9.3	9.3	24.9239			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/07/2009
Sample ID: 241419015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.432	0.432	0.0036	0.0079	11:20:06	No
2	0.415	0.415	0.0034	0.0078	11:20:41	No
Mean:	0.423	0.423	0.0035			
SD :	0.0118	0.0118	0.0001			
%RSD:	2.8	2.8	2.7227			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/07/2009
Sample ID: 241419016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0045	11:22:05	No
2	0.006	0.006	0.0001	0.0045	11:22:40	No
Mean:	0.004	0.004	0.0001			
SD :	0.0027	0.0027	0.0000			
%RSD:	70.3	70.3	20.4054			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.803	5.803	0.0470	0.0514	11:24:05	No
2	5.786	5.786	0.0469	0.0513	11:24:40	No
Mean:	5.795	5.795	0.0470			
SD :	0.0123	0.0123	0.0001			
%RSD:	0.2	0.2	0.2123			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0009	0.0034	11:26:08	No
2	-0.150	-0.150	-0.0011	0.0032	11:26:43	No
Mean:	-0.136	-0.136	-0.0010			
SD :	0.0186	0.0186	0.0002			
%RSD:	13.6	13.6	14.6683			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/07/2009
Sample ID: 241425001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.868	2.868	0.0233	0.0276	11:28:09	No
2	2.861	2.861	0.0232	0.0276	11:28:44	No
Mean:	2.865	2.865	0.0233			
SD :	0.0046	0.0046	0.0000			
%RSD:	0.2	0.2	0.1589			

Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 12/07/2009
Sample ID: 1201977157|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.634	2.634	0.0214	0.0258	11:30:10	No
2	2.629	2.629	0.0214	0.0257	11:30:45	No
Mean:	2.632	2.632	0.0214			
SD :	0.0036	0.0036	0.0000			
%RSD:	0.1	0.1	0.1374			

Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 12/07/2009
Sample ID: 1201977158|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	6.031	6.031	0.0489	0.0532	11:32:10	No
2	6.016	6.016	0.0488	0.0531	11:32:44	No
Mean:	6.023	6.023	0.0488			
SD :	0.0102	0.0102	0.0001			
%RSD:	0.2	0.2	0.1685			

Element: Hg Seq. No.: 51 AS Loc.: 45 Date: 12/07/2009
Sample ID: 1201977160|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	9.631	9.631	0.0780	0.0824	11:34:10	No
2	9.609	9.609	0.0778	0.0822	11:34:45	No
Mean:	9.620	9.620	0.0779			
SD :	0.0155	0.0155	0.0001			
%RSD:	0.2	0.2	0.1611			

Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 12/07/2009
Sample ID: 1201977159|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.402	0.402	0.0033	0.0077	11:36:11	No
2	0.382	0.382	0.0032	0.0075	11:36:46	No
Mean:	0.392	0.392	0.0032			
SD :	0.0147	0.0147	0.0001			
%RSD:	3.8	3.8	3.6721			

Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 12/07/2009
Sample ID: 241425002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	1.093	1.093	0.0089	0.0133	11:38:13	No
2	1.079	1.079	0.0088	0.0132	11:38:48	No
Mean:	1.086	1.086	0.0089			
SD :	0.0101	0.0101	0.0001			

%RSD: 0.9 0.9 0.9205

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/07/2009
Sample ID: 1201978947|i||925629|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0007	0.0036	11:40:13	No
2	-0.115	-0.115	-0.0009	0.0035	11:40:47	No
Mean:	-0.107	-0.107	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	10.2	10.2	11.2501			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/07/2009
Sample ID: 1201978948|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.055	4.055	0.0329	0.0373	11:42:08	No
2	4.065	4.065	0.0330	0.0373	11:42:43	No
Mean:	4.060	4.060	0.0329			
SD :	0.0066	0.0066	0.0001			
%RSD:	0.2	0.2	0.1622			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/07/2009
Sample ID: 241539001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.375	0.375	0.0031	0.0075	11:44:03	No
2	0.392	0.392	0.0032	0.0076	11:44:38	No
Mean:	0.383	0.383	0.0032			
SD :	0.0119	0.0119	0.0001			
%RSD:	3.1	3.1	3.0346			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/07/2009
Sample ID: 241539002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0012	0.0056	11:45:59	No
2	0.120	0.120	0.0010	0.0054	11:46:34	No
Mean:	0.132	0.132	0.0011			
SD :	0.0167	0.0167	0.0001			
%RSD:	12.7	12.7	11.8118			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.520	5.520	0.0447	0.0491	11:47:58	No
2	5.454	5.454	0.0442	0.0486	11:48:33	No
Mean:	5.487	5.487	0.0445			
SD :	0.0470	0.0470	0.0004			
%RSD:	0.9	0.9	0.8544			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0043	11:50:01	No
2	-0.023	-0.023	-0.0001	0.0042	11:50:36	No
Mean:	-0.022	-0.022	-0.0001			
SD :	0.0019	0.0019	0.0000			
%RSD:	8.7	8.7	15.3097			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/07/2009
Sample ID: 241539003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.086	0.086	0.0008	0.0051	11:52:01	No
2	0.084	0.084	0.0008	0.0051	11:52:37	No
Mean:	0.085	0.085	0.0008			
SD :	0.0009	0.0009	0.0000			
%RSD:	1.1	1.1	0.9509			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/07/2009
Sample ID: 241539004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.221	0.221	0.0019	0.0062	11:53:59	No
2	0.209	0.209	0.0018	0.0061	11:54:34	No
Mean:	0.215	0.215	0.0018			
SD :	0.0083	0.0083	0.0001			
%RSD:	3.8	3.8	3.6864			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/07/2009
Sample ID: 241541001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.546	0.546	0.0045	0.0089	11:55:56	No
2	0.545	0.545	0.0045	0.0089	11:56:31	No
Mean:	0.546	0.546	0.0045			
SD :	0.0002	0.0002	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/07/2009
Sample ID: 1201978949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.487	0.487	0.0040	0.0084	11:57:54	No
2	0.483	0.483	0.0040	0.0083	11:58:29	No
Mean:	0.485	0.485	0.0040			
SD :	0.0026	0.0026	0.0000			
%RSD:	0.5	0.5	0.5236			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/07/2009
Sample ID: 1201978950|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	11:59:52	No
2	3.254	3.254	0.0264	0.0308	12:00:27	No
Mean:	3.240	3.240	0.0263			
SD :	0.0199	0.0199	0.0002			

Miscellaneous

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925186

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977920	UI652380	.51	g
MS	1201977918	UI091124-01	.25	mL
MS	1201977918	UI091124-06	.25	mL
MSD	1201977919	UI091124-01	.25	mL
MSD	1201977919	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977915		SW846 3050B	24-NOV-2009 09:57	0.505 g	50 mL	99.0099	SOIL
LCS	1201977920		SW846 3050B	24-NOV-2009 09:57	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241180001		SW846 3050B	24-NOV-2009 09:57	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241180002		SW846 3050B	24-NOV-2009 09:57	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241180003		SW846 3050B	24-NOV-2009 09:57	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241190001		SW846 3050B	24-NOV-2009 09:57	0.503 g	50 mL	99.40358	SOIL
DUP	1201977916	241190001	SW846 3050B	24-NOV-2009 09:57	0.521 g	50 mL	95.96929	SOIL
SDILT	1201977917	241190001	SW846 3050B	24-NOV-2009 09:57	0.503 g	50 mL	99.40358	SOIL
MS	1201977918	241190001	SW846 3050B	24-NOV-2009 09:57	0.503 g	50 mL	99.40358	SOIL
MSD	1201977919	241190001	SW846 3050B	24-NOV-2009 09:57	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241301001		SW846 3050B	24-NOV-2009 09:57	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241336001		SW846 3050B	24-NOV-2009 09:57	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241336002		SW846 3050B	24-NOV-2009 09:57	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241417001		SW846 3050B	24-NOV-2009 09:57	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241417002		SW846 3050B	24-NOV-2009 09:57	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241425001		SW846 3050B	24-NOV-2009 09:57	0.5 g	50 mL	100	SOIL
SAMPLE	241425002		SW846 3050B	24-NOV-2009 09:57	0.501 g	50 mL	99.8004	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments The QC sample is grey concrete chunks.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925188

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977926	UI647733-01	.511	g
MS	1201977924	UI091015-A	.5	mL
MS	1201977924	UI091015-B	.5	mL
MSD	1201977925	UI091015-A	.5	mL
MSD	1201977925	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977921		SW846 3050B	05-DEC-2009 10:00	0.503 g	50 mL	99.40358	SOIL
LCS	1201977926		SW846 3050B	05-DEC-2009 10:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241180001		SW846 3050B	05-DEC-2009 10:00	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241180002		SW846 3050B	05-DEC-2009 10:00	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241180003		SW846 3050B	05-DEC-2009 10:00	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241190001		SW846 3050B	05-DEC-2009 10:00	0.502 g	50 mL	99.60159	SOIL
DUP	1201977922	241190001	SW846 3050B	05-DEC-2009 10:00	0.511 g	50 mL	97.84736	SOIL
SDILT	1201977923	241190001	SW846 3050B	05-DEC-2009 10:00	0.502 g	50 mL	99.60159	SOIL
MS	1201977924	241190001	SW846 3050B	05-DEC-2009 10:00	0.521 g	50 mL	95.96929	SOIL
MSD	1201977925	241190001	SW846 3050B	05-DEC-2009 10:00	0.552 g	50 mL	90.57971	SOIL
SAMPLE	241301001		SW846 3050B	05-DEC-2009 10:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241336001		SW846 3050B	05-DEC-2009 10:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241336002		SW846 3050B	05-DEC-2009 10:00	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241417001		SW846 3050B	05-DEC-2009 10:00	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241417002		SW846 3050B	05-DEC-2009 10:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241425001		SW846 3050B	05-DEC-2009 10:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241425002		SW846 3050B	05-DEC-2009 10:00	0.508 g	50 mL	98.4252	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments The QC sample is grey concrete chunks.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 930798

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201990788	UI062540-I	.505	g
MS	1201977918	UI091119-01	.25	mL
MS	1201977918	UI091119-06	.25	mL
MSD	1201977919	UI091119-01	.25	mL
MSD	1201977919	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201990787		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL
LCS	1201990788		SW846 3050B	09-DEC-2009 18:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241180001		SW846 3050B	09-DEC-2009 18:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241180002		SW846 3050B	09-DEC-2009 18:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241180003		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241190001		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL
DUP	1201977916	241190001	SW846 3050B	09-DEC-2009 18:00	0.5 g	50 mL	100	SOIL
SDILT	1201977917	241190001	SW846 3050B	09-DEC-2009 18:00	0.52 g	50 mL	96.15385	SOIL
MS	1201977918	241190001	SW846 3050B	09-DEC-2009 18:00	0.503 g	50 mL	99.40358	SOIL
MSD	1201977919	241190001	SW846 3050B	09-DEC-2009 18:00	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241301001		SW846 3050B	09-DEC-2009 18:00	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241336001		SW846 3050B	09-DEC-2009 18:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241336002		SW846 3050B	09-DEC-2009 18:00	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241417001		SW846 3050B	09-DEC-2009 18:00	0.5 g	50 mL	100	SOIL
SAMPLE	241417002		SW846 3050B	09-DEC-2009 18:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241425001		SW846 3050B	09-DEC-2009 18:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241425002		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238341	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: sample#241180001 is a gray solid rocky material.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 924861

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977156	UI031809A	.203	g
MS	1201977158	WHG091204-14	.3	mL
MSD	1201977160	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977155		SW846 7471A Prep	04-DEC-2009 10:35	0.576 g	30 mL	52.08333	SOIL
LCS	1201977156		SW846 7471A Prep	04-DEC-2009 10:35	0.203 g	30 mL	147.78325	SOIL
SAMPLE	241417001		SW846 7471A Prep	04-DEC-2009 10:35	0.58 g	30 mL	51.72414	SOIL
SAMPLE	241417002		SW846 7471A Prep	04-DEC-2009 10:35	0.52 g	30 mL	57.69231	SOIL
SAMPLE	241419001		SW846 7471A Prep	04-DEC-2009 10:35	0.544 g	30 mL	55.14706	SOIL
SAMPLE	241419002		SW846 7471A Prep	04-DEC-2009 10:35	0.548 g	30 mL	54.74453	SOIL
SAMPLE	241419003		SW846 7471A Prep	04-DEC-2009 10:35	0.526 g	30 mL	57.03422	SOIL
SAMPLE	241419004		SW846 7471A Prep	04-DEC-2009 10:35	0.5 g	30 mL	60	SOIL
SAMPLE	241419005		SW846 7471A Prep	04-DEC-2009 10:35	0.565 g	30 mL	53.09735	SOIL
SAMPLE	241419006		SW846 7471A Prep	04-DEC-2009 10:35	0.534 g	30 mL	56.17978	SOIL
SAMPLE	241419007		SW846 7471A Prep	04-DEC-2009 10:35	0.548 g	30 mL	54.74453	SOIL
SAMPLE	241419008		SW846 7471A Prep	04-DEC-2009 10:35	0.575 g	30 mL	52.17391	SOIL
SAMPLE	241419009		SW846 7471A Prep	04-DEC-2009 10:35	0.504 g	30 mL	59.52381	SOIL
SAMPLE	241419010		SW846 7471A Prep	04-DEC-2009 10:35	0.564 g	30 mL	53.19149	SOIL
SAMPLE	241419011		SW846 7471A Prep	04-DEC-2009 10:35	0.502 g	30 mL	59.76096	SOIL
SAMPLE	241419012		SW846 7471A Prep	04-DEC-2009 10:35	0.511 g	30 mL	58.70841	SOIL
SAMPLE	241419013		SW846 7471A Prep	04-DEC-2009 10:35	0.513 g	30 mL	58.47953	SOIL
SAMPLE	241419014		SW846 7471A Prep	04-DEC-2009 10:35	0.523 g	30 mL	57.36138	SOIL
SAMPLE	241419015		SW846 7471A Prep	04-DEC-2009 10:35	0.536 g	30 mL	55.97015	SOIL
SAMPLE	241419016		SW846 7471A Prep	04-DEC-2009 10:35	0.553 g	30 mL	54.24955	SOIL
SAMPLE	241425001		SW846 7471A Prep	04-DEC-2009 10:35	0.516 g	30 mL	58.13953	SOIL
DUP	1201977157	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.514 g	30 mL	58.36576	SOIL
MS	1201977158	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.536 g	30 mL	55.97015	SOIL
MSD	1201977160	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.506 g	30 mL	59.28854	SOIL
SDILT	1201977159	241425001	SW846 7471A Prep	04-DEC-2009 10:35	0.516 g	30 mL	58.13953	SOIL
SAMPLE	241425002		SW846 7471A Prep	04-DEC-2009 10:35	0.513 g	30 mL	58.47953	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution

Comments: Sample 241425001 is a brown soil.
Digestion Start Date: 04-DEC-09 10:35
Digestion End Date: 04-DEC-09 11:05

Prep LogBook

1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

NCR Report No.: 766704
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7471A	Solid	LANL
Batch ID:	**Sample Numbers:**		
924862	See Below		

Potentially affected work order(s)(SDG): 241417(10-575),241419(10-577),241425(10-579)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201977158MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1201977160MSD 3. Failed Recovery for MSD/PSD: QC 1201977160MSD	1. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Hg due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix dup spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Jason Loy 07-DEC-09

Data Validator/Group Leader:
Eric Lawson 08-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925189	See Below		

Potentially affected work order(s)(SDG): 241180(10-520),241190(10-500),241301(10-532),241336(10-546),241417(10-575),241425(10-579)

Application Issues:

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201977922DUP 2. Failed Recovery for MSD/PSD: QC 1201977925MSD	The sample and sample duplicate % RPD failed outside the control limits for As due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. The matrix spike duplicate recovery failed outside of the control limits for Li due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Elizabeth Janssen 12-DEC-09

Data Validator/Group Leader:

Paul Boyd 13-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925187	See Below		

Potentially affected work order(s)(SDG): 241180(10-520),241190(10-500),241301(10-532),241336(10-546),241417(10-575),241425(10-579)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:

1. Failed Recovery for MS/PS:

   QC 1201977918MS

2. Failed RPD for DUP:

   QC 1201977916DUP

3. Failed RPD for MS/MSD, or PS/PSD:

   QC 1201977919MSD

4. Failed Recovery for MSD/PSD:

   QC 1201977919MSD

NRG Disposition:

1. The matrix spike recovery failed outside of the control limits for boron,chromium,manganese and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The sample and sample duplicate % RPD failed outside the control limits for antimony,boron,chromium,cobalt,copper,iron,lead,magnesium, manganese,sodium,titanium,zinc,calcium and potassium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

3.The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for barium and copper due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

4. The matrix spike duplicate recovery failed outside of the control limits for boron,manganese,sodium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 12-DEC-09

Data Validator/Group Leader:

Jamie Johnson 12-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
930799	See Below		

Potentially affected work order(s)(SDG): 241180(10-520),241190(10-500),241301(10-532),241336(10-546),241417(10-575),241425(10-579)

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201977916DUP	1. The sample and sample duplicate % RPD failed outside the control limits for aluminum and silicon due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 12-DEC-09

Data Validator/Group Leader:

Jamie Johnson 12-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si

Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI

Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L

Analyte	Concentration	Analyte	Concentration
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI

Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

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Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Standard Logbook

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Carnello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091209-42 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091209-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091209-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091209-43 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091209-44 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091209-45 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091209-46 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091209-47 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091210-43 **Opened:** 10-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 11-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WMS091207-04 **Opened:** 07-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 07-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091207-04A **Opened:** 07-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091207-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091207-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091207-05 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091207-07 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 07-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-08 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-70 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091208-04 **Opened:** 08-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091208-04A **Opened:** 08-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091208-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091208-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091208-05 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091208-06 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 08-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091208-07 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 08-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091208-08 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 08-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Standard Logbook

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238341 **Opened:** 04-DEC-09 **Lot Number :** H44032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-575

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	924475	**Method:**	SW846 9012A
Prep Batch :	924474	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241417001	RE03-09-13812
241417002	RE03-09-13811
1201976322	Method Blank (MB)
1201976323	241322004(RE03-09-13619) Sample Duplicate (DUP)
1201976324	241322005(RE03-09-13624) Sample Duplicate (DUP)
1201976325	241322004(RE03-09-13619) Matrix Spike (MS)
1201976326	241322005(RE03-09-13624) Matrix Spike (MS)
1201976327	241322004(RE03-09-13619) Matrix Spike Duplicate (MSD)
1201976328	241322005(RE03-09-13624) Matrix Spike Duplicate (MSD)
1201976329	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241322004 (RE03-09-13619) and 241322005 (RE03-09-13624).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable. 1201976326 (RE03-09-13624) and 1201976328 (RE03-09-13624).

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201976323 (RE03-09-13619).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201976329 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 762014 1201976326 (RE03-09-13624), 1201976328 (RE03-09-13624), 241417001 (RE03-09-13812) and 241417002 (RE03-09-13811).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 15Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-575 GEL Work Order: 241417

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-575

Client Sample ID:	RE03-09-13812	Project:	LANL01004
Sample ID:	241417001	Client ID:	LANL010
Matrix:	Soil		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	7.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		554	70.4	259	ug/kg	1	AXC2 11/23/09	1537	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 2, 2009

Client SDG: 10-575

Client Sample ID:	RE03-09-13811	Project:	LANL01004
Sample ID:	241417002	Client ID:	LANL010
Matrix:	Soil		
Collect Date:	17-NOV-09 12:00		
Receive Date:	19-NOV-09		
Collector:	Client		
Moisture:	9.96%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.9	257	ug/kg	1	AXC2 11/23/09	1538	924475	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 2, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241417

Parmname	NOM	Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 924475											
QC1201976323 241322004 DUP											
Cyanide, Total		-3.6		-49.6	ug/kg	173	^		(+/-257)	AXC2	11/23/09 15:13
QC1201976324 241322005 DUP											
Cyanide, Total		1540		1460	ug/kg	5.29	^		(+/-311)		11/23/09 15:17
QC1201976329 LCS											
Cyanide, Total	67900			64300	ug/kg			94.6	(46%-145%)		11/23/09 15:12
QC1201976322 MB											
Cyanide, Total				-96.5	ug/kg						11/23/09 15:11
QC1201976325 241322004 MS											
Cyanide, Total	5740	-3.6		4940	ug/kg			86.1	(50%-130%)		11/23/09 15:14
QC1201976326 241322005 MS											
Cyanide, Total	5570	1540		6020	ug/kg			80.4	(50%-130%)		11/23/09 15:18
QC1201976327 241322004 MSD											
Cyanide, Total	5850	-3.6		5190	ug/kg	4.84		88.6	(0%-30%)		11/23/09 15:15
QC1201976328 241322005 MSD											
Cyanide, Total	6220	1540		9020	ug/kg	39.8*		120	(0%-30%)		11/23/09 15:19

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor

QC Summary

Workorder: 241417

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 02-DEC-2009 11:26

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-575

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**23-NOV-2009 13:51:02**	**OM_11-23-2009_13-43-07**	**146**	**150**	**97**	**(90%-110%)**	**Yes**
CCV	23-NOV-2009 15:07:34	OM_11-23-2009_13-43-07	102	100	102	(90%-110%)	Yes
CCV	23-NOV-2009 15:20:06	OM_11-23-2009_13-43-07	105	100	105	(90%-110%)	Yes
CCV	23-NOV-2009 15:32:38	OM_11-23-2009_13-43-07	101	100	101	(90%-110%)	Yes
CCV	23-NOV-2009 15:45:15	OM_11-23-2009_13-43-07	100	100	100	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-NOV-2009 13:52:52**	**OM_11-23-2009_13-43-07**	**0.99**	**5**	**Yes**
CCB	23-NOV-2009 15:09:25	OM_11-23-2009_13-43-07	-0.0136	5	Yes
CCB	23-NOV-2009 15:21:55	OM_11-23-2009_13-43-07	0.299	5	Yes
CCB	23-NOV-2009 15:34:28	OM_11-23-2009_13-43-07	0.197	5	Yes
CCB	23-NOV-2009 15:47:06	OM_11-23-2009_13-43-07	-0.667	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 924474

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201976329	URF1200957-01	.25	g
MS	1201976325	URF1184831-02	.025	mL
MS	1201976326	URF1184831-02	.025	mL
MSD	1201976327	URF1184831-02	.025	mL
MSD	1201976328	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201976322		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
LCS	1201976329		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241322004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1201976323	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.57 g	25 mL	43.85965	SOIL
MS	1201976325	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1201976327	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241322005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201976324	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
MS	1201976326	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.58 g	25 mL	43.10345	SOIL
MSD	1201976328	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322006		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322007		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322008		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322009		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322010		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241322011		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322012		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241336001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241336002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241351001		SW846 9010C Distillation	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOLID
SAMPLE	241358001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.511 g	25 mL	48.92368	MISC SOLID
SAMPLE	241417001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241417002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241419001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241419002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419003		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241419004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091120-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/23/2009 13:43:53	OM_11-23-2009_13-43-07
150 ppb		1	axc2	11/23/2009 13:44:44	OM_11-23-2009_13-43-07
100 ppb		1	axc2	11/23/2009 13:45:37	OM_11-23-2009_13-43-07
50 ppb		1	axc2	11/23/2009 13:46:30	OM_11-23-2009_13-43-07
10 ppb		1	axc2	11/23/2009 13:47:23	OM_11-23-2009_13-43-07
CRDL 5.0 ppb		1	axc2	11/23/2009 13:48:17	OM_11-23-2009_13-43-07
ICAL-00		1	axc2	11/23/2009 13:49:11	OM_11-23-2009_13-43-07
ICV		1	axc2	11/23/2009 13:51:02	OM_11-23-2009_13-43-07
ICB		1	axc2	11/23/2009 13:52:52	OM_11-23-2009_13-43-07
CRDL		1	axc2	11/23/2009 13:54:42	OM_11-23-2009_13-43-07
1201977264	924911	1	axc2	11/23/2009 13:56:32	OM_11-23-2009_13-43-07
1201977271	924911	25	axc2	11/23/2009 13:57:25	OM_11-23-2009_13-43-07
240999001	924911	1	axc2	11/23/2009 13:58:18	OM_11-23-2009_13-43-07
1201977265	924911	1	axc2	11/23/2009 13:59:11	OM_11-23-2009_13-43-07
1201977267	924911	1	axc2	11/23/2009 14:00:04	OM_11-23-2009_13-43-07
1201977269	924911	1	axc2	11/23/2009 14:00:57	OM_11-23-2009_13-43-07
241414003	924911	1	axc2	11/23/2009 14:01:50	OM_11-23-2009_13-43-07
1201977266	924911	1	axc2	11/23/2009 14:02:42	OM_11-23-2009_13-43-07
1201977268	924911	1	axc2	11/23/2009 14:03:34	OM_11-23-2009_13-43-07
1201977270	924911	1	axc2	11/23/2009 14:04:27	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:05:20	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:07:09	OM_11-23-2009_13-43-07
241414004	924911	1	axc2	11/23/2009 14:08:57	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:09:49	OM_11-23-2009_13-43-07
1201974823	923850	25	axc2	11/23/2009 14:10:42	OM_11-23-2009_13-43-07
241029014	923850	1	axc2	11/23/2009 14:11:33	OM_11-23-2009_13-43-07
1201974817	923850	1	axc2	11/23/2009 14:12:25	OM_11-23-2009_13-43-07
1201974819	923850	1	axc2	11/23/2009 14:13:19	OM_11-23-2009_13-43-07
1201974821*	923850	1	axc2	11/23/2009 14:14:12	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:15:04	OM_11-23-2009_13-43-07
241105010	923850	1	axc2	11/23/2009 14:15:57	OM_11-23-2009_13-43-07
241105011	923850	1	axc2	11/23/2009 14:16:51	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:17:43	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:19:34	OM_11-23-2009_13-43-07
1201974816	923850	1	axc2	11/23/2009 14:21:21	OM_11-23-2009_13-43-07
1201974821	923850	1	axc2	11/23/2009 14:22:15	OM_11-23-2009_13-43-07
241105012	923850	1	axc2	11/23/2009 14:23:09	OM_11-23-2009_13-43-07
241106001	923850	1	axc2	11/23/2009 14:24:01	OM_11-23-2009_13-43-07
241106002	923850	1	axc2	11/23/2009 14:24:54	OM_11-23-2009_13-43-07
241178001	923850	1	axc2	11/23/2009 14:25:47	OM_11-23-2009_13-43-07
241178002*	923850	1	axc2	11/23/2009 14:26:40	OM_11-23-2009_13-43-07
241178003	923850	1	axc2	11/23/2009 14:27:32	OM_11-23-2009_13-43-07
241178004	923850	1	axc2	11/23/2009 14:28:24	OM_11-23-2009_13-43-07
241178005	923850	1	axc2	11/23/2009 14:29:17	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:30:10	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:31:59	OM_11-23-2009_13-43-07
241178002	923850	1	axc2	11/23/2009 14:33:48	OM_11-23-2009_13-43-07
241178006	923850	1	axc2	11/23/2009 14:34:40	OM_11-23-2009_13-43-07
241178007	923850	1	axc2	11/23/2009 14:35:31	OM_11-23-2009_13-43-07
241178008	923850	1	axc2	11/23/2009 14:36:24	OM_11-23-2009_13-43-07
241178009	923850	1	axc2	11/23/2009 14:37:18	OM_11-23-2009_13-43-07
241227001	923850	1	axc2	11/23/2009 14:38:11	OM_11-23-2009_13-43-07
1201974818	923850	1	axc2	11/23/2009 14:39:05	OM_11-23-2009_13-43-07
1201974820	923850	1	axc2	11/23/2009 14:39:59	OM_11-23-2009_13-43-07
1201974822	923850	1	axc2	11/23/2009 14:40:52	OM_11-23-2009_13-43-07
241227002	923850	1	axc2	11/23/2009 14:41:45	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:42:37	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:44:27	OM_11-23-2009_13-43-07

241227007	923850	1	axc2	11/23/2009	14:46:17	OM_11-23-2009_13-43-07
241227008	923850	1	axc2	11/23/2009	14:47:10	OM_11-23-2009_13-43-07
241227009	923850	1	axc2	11/23/2009	14:48:03	OM_11-23-2009_13-43-07
1201972404	922839	1	axc2	11/23/2009	14:48:55	OM_11-23-2009_13-43-07
1201972411*	922839	25	axc2	11/23/2009	14:49:47	OM_11-23-2009_13-43-07
241044009	922839	1	axc2	11/23/2009	14:50:40	OM_11-23-2009_13-43-07
1201972405	922839	1	axc2	11/23/2009	14:51:32	OM_11-23-2009_13-43-07
1201972407	922839	1	axc2	11/23/2009	14:52:24	OM_11-23-2009_13-43-07
1201972409	922839	1	axc2	11/23/2009	14:53:16	OM_11-23-2009_13-43-07
241044010	922839	1	axc2	11/23/2009	14:54:10	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	14:55:02	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	14:56:52	OM_11-23-2009_13-43-07
1201972406	922839	1	axc2	11/23/2009	14:58:43	OM_11-23-2009_13-43-07
1201972408	922839	1	axc2	11/23/2009	14:59:37	OM_11-23-2009_13-43-07
1201972410	922839	1	axc2	11/23/2009	15:00:31	OM_11-23-2009_13-43-07
1201972411	922839	1	axc2	11/23/2009	15:01:23	OM_11-23-2009_13-43-07
241044011	922839	1	axc2	11/23/2009	15:02:17	OM_11-23-2009_13-43-07
241044012	922839	1	axc2	11/23/2009	15:03:10	OM_11-23-2009_13-43-07
241044013	922839	1	axc2	11/23/2009	15:04:03	OM_11-23-2009_13-43-07
241044014	922839	1	axc2	11/23/2009	15:04:56	OM_11-23-2009_13-43-07
241044015	922839	1	axc2	11/23/2009	15:05:49	OM_11-23-2009_13-43-07
241044016	922839	1	axc2	11/23/2009	15:06:42	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:07:34	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:09:25	OM_11-23-2009_13-43-07
1201976322	924475	1	axc2	11/23/2009	15:11:16	OM_11-23-2009_13-43-07
1201976329	924475	25	axc2	11/23/2009	15:12:08	OM_11-23-2009_13-43-07
241322004	924475	1	axc2	11/23/2009	15:13:01	OM_11-23-2009_13-43-07
1201976323	924475	1	axc2	11/23/2009	15:13:53	OM_11-23-2009_13-43-07
1201976325	924475	1	axc2	11/23/2009	15:14:46	OM_11-23-2009_13-43-07
1201976327	924475	1	axc2	11/23/2009	15:15:39	OM_11-23-2009_13-43-07
241322005	924475	1	axc2	11/23/2009	15:16:31	OM_11-23-2009_13-43-07
1201976324	924475	1	axc2	11/23/2009	15:17:24	OM_11-23-2009_13-43-07
1201976326	924475	1	axc2	11/23/2009	15:18:19	OM_11-23-2009_13-43-07
1201976328	924475	1	axc2	11/23/2009	15:19:13	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:20:06	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:21:55	OM_11-23-2009_13-43-07
241322006	924475	1	axc2	11/23/2009	15:23:45	OM_11-23-2009_13-43-07
241322007	924475	1	axc2	11/23/2009	15:24:40	OM_11-23-2009_13-43-07
241322008	924475	1	axc2	11/23/2009	15:25:33	OM_11-23-2009_13-43-07
241322009	924475	1	axc2	11/23/2009	15:26:27	OM_11-23-2009_13-43-07
241322010	924475	1	axc2	11/23/2009	15:27:20	OM_11-23-2009_13-43-07
241322011	924475	1	axc2	11/23/2009	15:28:14	OM_11-23-2009_13-43-07
241322012	924475	1	axc2	11/23/2009	15:29:07	OM_11-23-2009_13-43-07
241336001	924475	1	axc2	11/23/2009	15:30:00	OM_11-23-2009_13-43-07
241336002	924475	1	axc2	11/23/2009	15:30:53	OM_11-23-2009_13-43-07
241351001	924475	1	axc2	11/23/2009	15:31:46	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:32:38	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:34:28	OM_11-23-2009_13-43-07
241358001	924475	1	axc2	11/23/2009	15:36:17	OM_11-23-2009_13-43-07
241417001	924475	1	axc2	11/23/2009	15:37:10	OM_11-23-2009_13-43-07
241417002	924475	1	axc2	11/23/2009	15:38:02	OM_11-23-2009_13-43-07
241419001	924475	1	axc2	11/23/2009	15:38:57	OM_11-23-2009_13-43-07
241419002	924475	1	axc2	11/23/2009	15:39:51	OM_11-23-2009_13-43-07
241419003	924475	1	axc2	11/23/2009	15:40:45	OM_11-23-2009_13-43-07
241419004	924475	1	axc2	11/23/2009	15:41:39	OM_11-23-2009_13-43-07
241419005	924475	1	axc2	11/23/2009	15:42:34	OM_11-23-2009_13-43-07
1201976319	924469	1	axc2	11/23/2009	15:43:28	OM_11-23-2009_13-43-07
1201976321	924469	1	axc2	11/23/2009	15:44:22	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:45:15	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:47:06	OM_11-23-2009_13-43-07

241351001	924469	1	axc2	11/23/2009	15:48:58	OM_11-23-2009_13-43-07
241358001	924469	1	axc2	11/23/2009	15:49:51	OM_11-23-2009_13-43-07
1201976320	924469	1	axc2	11/23/2009	15:50:44	OM_11-23-2009_13-43-07
1201977272	924915	1	axc2	11/23/2009	15:51:37	OM_11-23-2009_13-43-07
1201977274	924915	1	axc2	11/23/2009	15:52:31	OM_11-23-2009_13-43-07
241372013	924915	1	axc2	11/23/2009	15:53:24	OM_11-23-2009_13-43-07
1201977273	924915	1	axc2	11/23/2009	15:54:17	OM_11-23-2009_13-43-07
1201974883*	923869	1	axc2	11/23/2009	15:55:10	OM_11-23-2009_13-43-07
1201974885	923869	250	axc2	11/23/2009	15:56:05	OM_11-23-2009_13-43-07
241243008	923869	1	axc2	11/23/2009	15:56:59	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:57:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:59:42	OM_11-23-2009_13-43-07
1201974884	923869	1	axc2	11/23/2009	16:01:33	OM_11-23-2009_13-43-07
241305001	923869	1	axc2	11/23/2009	16:02:27	OM_11-23-2009_13-43-07
241310001	923869	1	axc2	11/23/2009	16:03:21	OM_11-23-2009_13-43-07
1201974883	923869	1	axc2	11/23/2009	16:04:14	OM_11-23-2009_13-43-07
241372013	924915	25	axc2	11/23/2009	16:05:07	OM_11-23-2009_13-43-07
1201977273	924915	25	axc2	11/23/2009	16:06:00	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	16:06:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	16:08:43	OM_11-23-2009_13-43-07

Author: axc2 Date : 11/23/2009

Original Run Filename: OM_11-23-2009_13-43-07.OMN created 11/23/2009 13:43:07
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-23-2009_13-43-07.OMN last modified 11/23/2009 16:09:47
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091123-01	1	S1	200	7.32	11/23/2009@13:43:53			200 ppb
WCN091123-02	1	S2	150	5.67	11/23/2009@13:44:44			150 ppb
WCN091123-03	1	S3	100	3.86	11/23/2009@13:45:37			100 ppb
WCN091123-04	1	S4	50.0	2.03	11/23/2009@13:46:30			50 ppb
WCN091123-05	1	S5	10.0	0.478	11/23/2009@13:47:23			10 ppb
WCN091123-06	1	S6	5.00	0.278	11/23/2009@13:48:17			CRDL 5.0 ppb
WCN091123-08	1	S7	0.00	0.0410	11/23/2009@13:49:11			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99962 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091123-07	1	S8	146	5.46	11/23/2009@13:51:02			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091123-08	1	S7	0.990	0.157	11/23/2009@13:52:52			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.990 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.990 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091123-06	1	S6	3.65	0.254	11/23/2009@13:54:42			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.65 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.65 > 2.50					
		Message	Pass					
		Action	None					
1201977264|924911|MB	1	1	-1.60	0.0619	11/23/2009@13:56:32			
1201977271||LCS	1	2	47.2	1.85	11/23/2009@13:57:25			
240999001	1	3	1.47	0.174	11/23/2009@13:58:18			
1201977265||DUP	1	4	-0.419	0.105	11/23/2009@13:59:11			
1201977267||MS	1	5	96.0	3.63	11/23/2009@14:00:04			
1201977269||MSD	1	6	100	3.79	11/23/2009@14:00:57			
241414003	1	7	0.930	0.154	11/23/2009@14:01:50			
1201977266||DUP	1	8	-1.21	0.0761	11/23/2009@14:02:42			
1201977268||MS	1	9	97.9	3.70	11/23/2009@14:03:34			
1201977270||MSD	1	10	100	3.79	11/23/2009@14:04:27			
WCN091123-03	1	S3	102	3.84	11/23/2009@14:05:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.820	0.0904	11/23/2009@14:07:09			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-0.820 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-0.820 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241414004	1	11	-1.68	0.0592	11/23/2009@14:08:57			
1201974816|923850|MB	1	12	329	12.2	11/23/2009@14:09:49			
1201974823||LCS	1	13	32.8	1.32	11/23/2009@14:10:42		25.00	
241029014	1	14	-0.305	0.109	11/23/2009@14:11:33			
1201974817||DUP	1	15	-0.427	0.105	11/23/2009@14:12:25			
1201974819||MS	1	16	87.8	3.33	11/23/2009@14:13:19			
1201974821||MSD	1	17	1.31e+3	48.0	11/23/2009@14:14:12			
1201974816|923850|MB	1	12	37.3	1.49	11/23/2009@14:15:04			
241105010	1	18	1.27	0.167	11/23/2009@14:15:57			
241105011	1	19	4.57	0.288	11/23/2009@14:16:51			
WCN091123-03	1	S3	98.7	3.73	11/23/2009@14:17:43			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.283	0.131	11/23/2009@14:19:34			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.283 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.283 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974816|923850|MB	1	12	-0.327	0.108	11/23/2009@14:21:21			
1201974821||MSD	1	17	86.6	3.29	11/23/2009@14:22:15			
241105012	1	20	7.92	0.410	11/23/2009@14:23:09			
241106001	1	21	3.76	0.258	11/23/2009@14:24:01			
241106002	1	22	3.78	0.259	11/23/2009@14:24:54			
241178001	1	23	1.84	0.188	11/23/2009@14:25:47			
241178002	1	24	11.2	0.532	11/23/2009@14:26:40			
241178003	1	25	0.189	0.127	11/23/2009@14:27:32			
241178004	1	26	1.98	0.193	11/23/2009@14:28:24			
241178005	1	27	0.997	0.157	11/23/2009@14:29:17			
WCN091123-03	1	S3	100	3.78	11/23/2009@14:30:10			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.825	0.0902	11/23/2009@14:31:59			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	-0.825 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.825 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241178002	1	24	5.73	0.330	11/23/2009@14:33:48			
241178006	1	28	5.86	0.335	11/23/2009@14:34:40			
241178007	1	29	-0.190	0.113	11/23/2009@14:35:31			
241178008	1	30	-1.36	0.0706	11/23/2009@14:36:24			
241178009	1	31	1.84	0.188	11/23/2009@14:37:18			
241227001	1	32	-0.273	0.110	11/23/2009@14:38:11			
1201974818||DUP	1	33	-0.588	0.0989	11/23/2009@14:39:05			
1201974820||MS	1	34	75.0	2.86	11/23/2009@14:39:59			
1201974822||MSD	1	35	94.3	3.57	11/23/2009@14:40:52			
241227002	1	36	2.66	0.218	11/23/2009@14:41:45			
WCN091123-03	1	S3	103	3.90	11/23/2009@14:42:37			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.0197	0.121	11/23/2009@14:44:27			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.0197 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.0197 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241227007	1	37	-0.734	0.0936	11/23/2009@14:46:17			
241227008	1	38	-0.129	0.116	11/23/2009@14:47:10			
241227009	1	39	-1.21	0.0763	11/23/2009@14:48:03			
1201972404|922839|MB	1	40	-1.55	0.0639	11/23/2009@14:48:55			
1201972411||LCS	1	41	6.31	0.351	11/23/2009@14:49:47		25.00	
241044009	1	42	1.63	0.180	11/23/2009@14:50:40			
1201972405||DUP	1	43	3.10	0.234	11/23/2009@14:51:32			
1201972407||MS	1	44	96.7	3.66	11/23/2009@14:52:24			
1201972409||MSD	1	45	57.8	2.23	11/23/2009@14:53:16			
241044010	1	46	35.5	1.42	11/23/2009@14:54:10			
WCN091123-03	1	S3	103	3.89	11/23/2009@14:55:02			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.383	0.134	11/23/2009@14:56:52			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.383 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.383 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1201972406||DUP	1	47	104	3.93	11/23/2009@14:58:43			
1201972408||MS	1	48	83.1	3.16	11/23/2009@14:59:37			
1201972410||MSD	1	49	124	4.64	11/23/2009@15:00:31			
1201972411||LCS	1	41	30.2	1.22	11/23/2009@15:01:23		25.00	
241044011	1	50	1.28	0.167	11/23/2009@15:02:17			
241044012	1	51	130	4.88	11/23/2009@15:03:10			
241044013	1	52	84.2	3.20	11/23/2009@15:04:03			
241044014	1	53	43.9	1.73	11/23/2009@15:04:56			
241044015	1	54	3.47	0.247	11/23/2009@15:05:49			
241044016	1	55	1.61	0.179	11/23/2009@15:06:42			
WCN091123-03	1	S3	102	3.84	11/23/2009@15:07:34			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.0136	0.120	11/23/2009@15:09:25			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.0136 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.0136 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201976322|924475|MB	1	68	-1.93	0.0498	11/23/2009@15:11:16			
1201976329||LCS	1	69	25.7	1.06	11/23/2009@15:12:08		25.00	
241322004	1	70	-0.0665	0.118	11/23/2009@15:13:01			
1201976323||DUP	1	71	-0.966	0.0851	11/23/2009@15:13:53			
1201976325||MS	1	72	86.1	3.27	11/23/2009@15:14:46			
1201976327||MSD	1	73	88.6	3.36	11/23/2009@15:15:39			
241322005	1	74	24.3	1.01	11/23/2009@15:16:31			
1201976324||DUP	1	75	23.5	0.978	11/23/2009@15:17:24			
1201976326||MS	1	76	108	4.06	11/23/2009@15:18:19			
1201976328||MSD	1	77	145	5.43	11/23/2009@15:19:13			
WCN091123-03	1	S3	105	3.97	11/23/2009@15:20:06			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.299	0.131	11/23/2009@15:21:55			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.299 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.299 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241322006	1	78	-1.16	0.0778	11/23/2009@15:23:45			
241322007	1	79	20.1	0.856	11/23/2009@15:24:40			
241322008	1	80	-0.573	0.0995	11/23/2009@15:25:33			
241322009	1	81	31.1	1.26	11/23/2009@15:26:27			
241322010	1	82	5.38	0.317	11/23/2009@15:27:20			
241322011	1	83	-0.970	0.0849	11/23/2009@15:28:14			
241322012	1	84	-1.30	0.0730	11/23/2009@15:29:07			
241336001	1	85	-0.872	0.0885	11/23/2009@15:30:00			

241336002	1	86	-1.18	0.0773	11/23/2009@15:30:53			
241351001	1	87	-0.356	0.107	11/23/2009@15:31:46			
WCN091123-03	1	S3	101	3.80	11/23/2009@15:32:38			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		0.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		0.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	0.197	0.128	11/23/2009@15:34:28			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		0.197 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.197 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241358001	1	88	-0.601	0.0984	11/23/2009@15:36:17			
241417001	1	89	10.7	0.512	11/23/2009@15:37:10			
241417002	1	90	-0.304	0.109	11/23/2009@15:38:02			
241419001	1	91	-1.19	0.0767	11/23/2009@15:38:57			
241419002	1	92	-0.704	0.0946	11/23/2009@15:39:51			
241419003	1	93	-1.52	0.0648	11/23/2009@15:40:45			
241419004	1	94	-1.69	0.0587	11/23/2009@15:41:39			
241419005	1	95	-0.486	0.103	11/23/2009@15:42:34			
1201976319|924469|MB	1	96	-1.53	0.0643	11/23/2009@15:43:28			
1201976321||LCS	1	97	-1.96	0.0489	11/23/2009@15:44:22			
WCN091123-03	1	S3	100	3.78	11/23/2009@15:45:15			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		0.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		0.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	-0.667	0.0960	11/23/2009@15:47:06			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.667 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.667 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241351001	1	98	7.19	0.383	11/23/2009@15:48:58			
241358001	1	99	1.09	0.160	11/23/2009@15:49:51			
1201976320||DUP	1	100	2.18	0.200	11/23/2009@15:50:44			
1201977272|924915|MB	1	101	-1.40	0.0691	11/23/2009@15:51:37			
1201977274||LCS	1	102	-1.86	0.0525	11/23/2009@15:52:31			
241372013	1	103	1.47e+3	53.8	11/23/2009@15:53:24			
1201977273||DUP	1	104	1.37e+3	50.2	11/23/2009@15:54:17			
1201974883|923869|MB	1	105	37.0	1.47	11/23/2009@15:55:10			
1201974885||LCS	1	106	77.3	2.94	11/23/2009@15:56:05			
241243008	1	107	2.12	0.198	11/23/2009@15:56:59			
WCN091123-03	1	S3	103	3.88	11/23/2009@15:57:52			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		2.8 < 10.0					
	Message		CCV Passed					
	Action		Continue					

DQM Test: < - Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.854	0.152	11/23/2009@15:59:42			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.854 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.854 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974884||DUP	1	108	-2.22	0.0393	11/23/2009@16:01:33			
241305001	1	109	-1.40	0.0694	11/23/2009@16:02:27			
241310001	1	110	-0.820	0.0904	11/23/2009@16:03:21			
1201974883|923869|MB	1	105	-0.331	0.108	11/23/2009@16:04:14			
241372013|924915|	1	103	98.6	3.73	11/23/2009@16:05:07		25.00	
1201977273||DUP	1	104	70.4	2.70	11/23/2009@16:06:00		25.00	
WCN091123-03	1	S3	102	3.86	11/23/2009@16:06:52			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	1.27	0.167	11/23/2009@16:08:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.27 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.27 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_11-23-2009_13-43-07.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2

Date : 11/23/2009

Channel 1: Current View

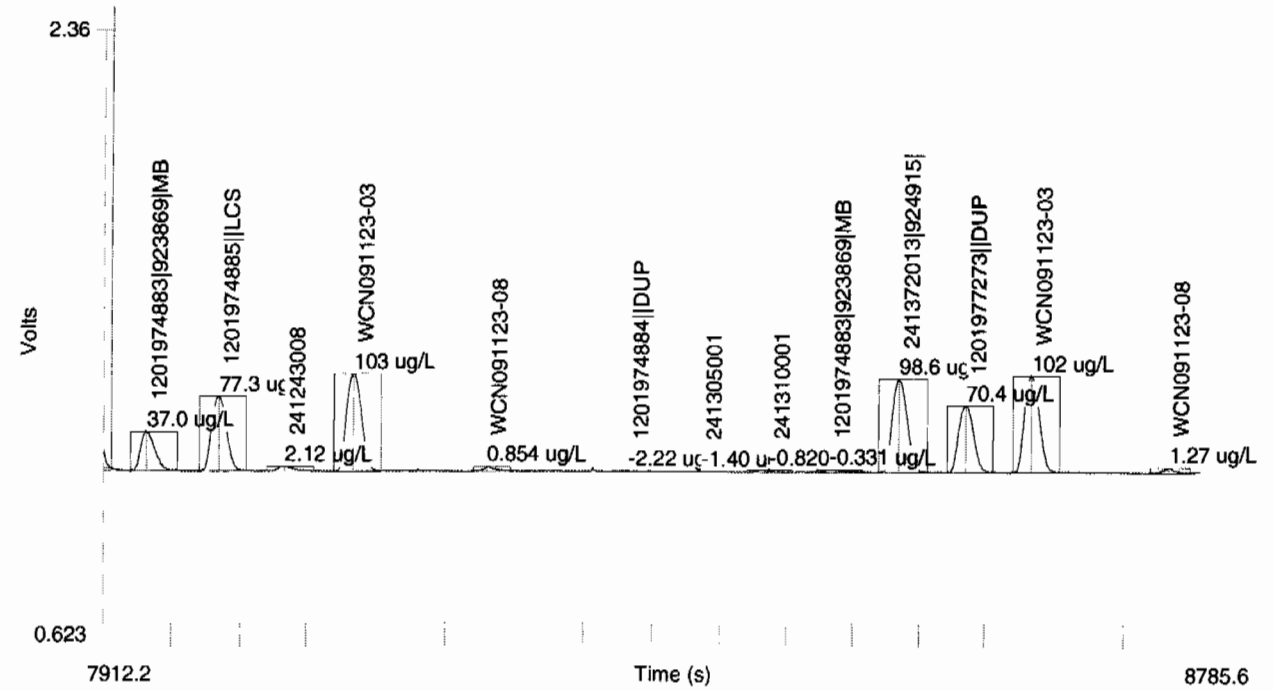

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.32	0.539	1.5	11/23/2009	13:44:56
2	150	1	5.67	0.419	-1.2	11/23/2009	13:45:48
3	100	1	3.86	0.284	-2.2	11/23/2009	13:46:40
4	50.0	1	2.03	0.148	-3.9	11/23/2009	13:47:33
5	10.0	1	0.478	0.0334	2.0	11/23/2009	13:48:26
6	5.00	1	0.278	0.0178	8.7	11/23/2009	13:49:20
7	0.00	1	0.0410	0.00186		11/23/2009	13:50:14

Figure 1: TCYANIDE

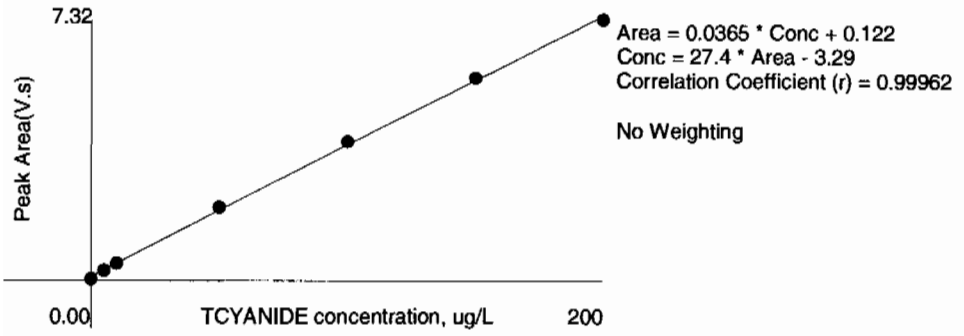

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
24-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	SW846 9012A	Solid	CARE, LANL, MECP
Batch ID:	**Sample Numbers:**		
924475	See Below		

Potentially affected work order(s)(SDG): 241322(10-544),241336(10-546),241351(EUI-7395),241358,241417(10-575),241419(10-577)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for MS/MSD: QC 1201976326MS QC 1201976328MSD	1. The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable.
2. Container scanning event for custody missed: 241322 004, 005, 006, 007, 008, 009, 010, 011, 012 241336 001, 002 241417 001, 002, 241419 001, 002, 003, 004, 005	2. The following samples were not scanned prior to analysis. However samples were in custody of analyst during time of analysis.

Originator's Name:

Ashley Earl 24-NOV-09

Data Validator/Group Leader:

Elzbieta Szulc 24-NOV-09

Tuesday, November 17, 2009

REQUEST NUMBER: 10-546

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-546

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	EPA:906.0	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	HASL-300:ISOPU	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:6010B	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5527	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5530	W	11/16/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 17, 2009

REQUEST NUMBER: 10-546

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-10-5897	R	11/16/2009	
	SW-846:6020	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5527	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5530	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5897	R	11/16/2009	
	SW-846:6850	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:7471A	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8082	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8260B	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8270C	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:9012A	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5527	W	11/16/2009	
		1	RE03-10-5530	W	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:9045C	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	

Final Page of REQUEST NUMBER 10-546

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-546

REQUEST NUMBER: 10-546

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13770	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13770	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13770	1	POLY	AM-241+SR90+ISOPU	Ice	S
RE03-09-13770	1	POLY	H3	Ice	S
RE03-09-13770	1	POLY	METALS-GEL	Ice	S
RE03-09-13770	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-5530	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-5527	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-5530	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-5527	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-5897	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE03-10-5897	1	GLASS	8270C+8082+TPH-DRO	Ice	R
RE03-10-5897	1	POLY	AM-241+SR90+ISOPU	Ice	R
RE03-10-5897	1	POLY	H3	Ice	R
RE03-10-5897	1	POLY	METALS-GEL	Ice	R
RE03-10-5897	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2272 **EVENT NAME:** Soil Sampling at CU 03-014(a)-99, Part 2

SAMPLE ID: RE03-09-13770 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	QTB 3
TIME COLLECTED (HH:MM)		0950	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(o)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608280		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	6 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	7 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ R 11/16/09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+SR90+ISOPU	500 ML POLY	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: tuff QBt3, dk reddish gray (5YR 4/2), hard, sl. moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014(o)-S

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0 ppm
Background
α: 28.7
β: 1776

Samples:
MDA>

COLLECTED BY (PRINT) L. Horne, M. Mauck, M. Shendo **REVIEWED BY (PRINT)** J. Trujillo

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains	11/16/09	(Printed Name) Sherri Sherwood	1715
(Signature) Megan Rains	1715	(Signature) Sherri Sherwood	11-16-09
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2272 **EVENT NAME:** Soil Sampling at CU 03-014(a)-99, Part 2

SAMPLE ID: RE03-10-5527 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1200	SUB-MEDIA:	OTHER	
PRS ID:	03-014(o)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608279	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-10-5897
NO3NO2 250mL poly ICE Y
SW-846 6850 250mL H2SO4 Y

SAMPLE COMMENTS: NA

LOCATION DESC: 140-6

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck

REVIEWED BY (PRINT) Maurice Shenck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-16-09	(Printed Name) Sherrit Sherwood	11-16-09
(Signature)	1715	(Signature) Sherrit Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2272 **EVENT NAME:** Soil Sampling at CU 03-014(a)-99, Part 2

SAMPLE ID: RE03-10-5530 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1155	SUB-MEDIA:	OTHER	
PRS ID:	03-014(o)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608279	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	Plus, B, Li, Si, Ti, U
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-10-5897

NO_3NO_2 250 ML poly ICE Y

SW-846:6850 250 ML poly H_2SO_4 Y

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** Maurice Shenda

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-16-09 1715	(Printed Name) Sherri Sherwood	11-16-09 1715
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2272 **EVENT NAME:** Soil Sampling at CU 03-014(a)-99, Part 2

SAMPLE ID: RE03-10-5897 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	UA QBT 3	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	UA	
PRS ID:	03-014(o)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608279		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	6 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	7 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+SR90+ISOPU	500 ML POLY	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: ~~Sandy gravel fill Dark reddish brown (5YR 3/3)~~
Dark Reddish gray tuff (5YR 4/2) m 11/16/09

SAMPLE COMMENTS: NA

LOCATION DESC: 014(o)-6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background
α: 26.7
β: 1776

SAMPLES:
MDA>

COLLECTED BY (PRINT) M. Shende, D. Thomas, L. Horne

REVIEWED BY (PRINT) J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11-16-09	(Printed Name) Sherri Sherwood	1715
(Signature) [signature]	1715	(Signature) Sherri Sherwood	11-16-09
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV/CCV %Ds were >20% for acetone; 2-butanone; and 2-hexanone. The acetone and 2-hexanone results for sample RE03-10-5897 were detects and, thus, were qualified J,V7c. The remaining associated sample results were NDs and, thus, were qualified UJ,V7c.
2. The CCV was not analyzed at the appropriate method frequency for all analytes. The acetone and 2-hexanone results for sample -10-5897 were detects and, thus, were qualified J,V7d. The remaining associated sample results were NDs and, thus, were qualified UJ,V7d.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: DATE: 01/25/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☒	☐	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☐	☒	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241336001	Date Received:	11/18/2009 08:50	%Moisture:	10
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13770	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	925381	Inst:	VOA1.I	Dilution:	1
Run Date:	11/21/2009 15:55	Analyst:	GRB2	Purge Vol:	5 mL
Prep Date:	11/21/2009 12:46	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1m619.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11	UJ,V7d
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11	
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11	
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	UJ,V7d
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55	
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55	
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	UJ,V7d
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11	
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11	UJ,V7d
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11	

MLD 01/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 15:55	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m619.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11	UJ,V7d
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22	
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11	
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11	
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11	
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11	
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11	
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11	
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11	
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

MLD 01/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	R
Lab Sample ID:	241336002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-5897	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 16:26	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m620.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07	UJ,V7d
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07	
67-64-1	Acetone	J	2.57	ug/kg	1.78	5.37	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	UJ,V7d
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37	
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37	
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	UJ,V7d
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.355	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.355	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
591-78-6	2-Hexanone	J	3.92	ug/kg	1.61	5.37	J,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07	UJ,V7d
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07	

MLD 01/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241336002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-5897**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 16:26**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 12:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m620.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07	UJ,V7d
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15	
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07	
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07	
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07	
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07	
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07	
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07	
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07	
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07	
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07	
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07	
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07	
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07	
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07	
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07	
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07	
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07	
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07	
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

MLD 01/25/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS SVOC

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV/CCV %Ds were >20% for hexachlorocyclopentadiene; 2,4-dinitrophenol; and benzo(g,h,i)perylene All associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The MS/MSD RPD was > the laboratory acceptance limit for benzyl alcohol. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/25/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241336001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13770**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s610406.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370	
108-95-2	Phenol	U	370	ug/kg	74.0	370	
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370	
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370	
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370	
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370	
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0	
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370	
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370	
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370	
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0	
110-86-1	Pyridine	U	370	ug/kg	74.0	370	
62-53-3	Aniline	U	370	ug/kg	111	370	
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370	
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370	
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370	
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370	
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370	
95-48-7	o-Cresol	U	370	ug/kg	74.0	370	
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370	
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370	
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370	
78-59-1	Isophorone	U	370	ug/kg	74.0	370	
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370	
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370	
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370	
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370	
65-85-0	Benzoic acid	U	740	ug/kg	185	740	
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0	
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370	
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370	
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0	
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370	
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370	
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	370	ug/kg	74.0	370	
99-09-2	3-Nitroaniline	U	370	ug/kg	74.0	370	

MLD 01/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241336001	Date Received:	11/18/2009 08:50	%Moisture:	10
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13770	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 12:00	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s610406.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370	
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370	
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0	
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740	UJ,SV7c
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370	
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370	
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0	
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370	
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370	
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370	
122-66-7	Azobenzene	U	370	ug/kg	74.0	370	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370	
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370	
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0	
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0	
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370	
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0	
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370	
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0	
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370	
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370	
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370	
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0	
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0	
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0	
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0	
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	282	ug/kg		JA

MLD 01/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	R
Lab Sample ID:	241336002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-5897	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 12:28	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s6l0407.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.6	358	
108-95-2	Phenol	U	358	ug/kg	71.6	358	
95-57-8	2-Chlorophenol	U	358	ug/kg	71.6	358	
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.6	358	
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.6	358	
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.6	358	
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8	
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358	
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358	
87-86-5	Pentachlorophenol	U	358	ug/kg	89.5	358	
129-00-0	Pyrene	U	35.8	ug/kg	10.7	35.8	
110-86-1	Pyridine	U	358	ug/kg	71.6	358	
62-53-3	Aniline	U	358	ug/kg	107	358	
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.6	358	
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.6	358	
100-51-6	Benzyl alcohol	U	358	ug/kg	107	358	
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.6	358	
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.6	358	
95-48-7	o-Cresol	U	358	ug/kg	71.6	358	
65794-96-9	m,p-Cresols	U	358	ug/kg	107	358	
67-72-1	Hexachloroethane	U	358	ug/kg	71.6	358	
98-95-3	Nitrobenzene	U	358	ug/kg	71.6	358	
78-59-1	Isophorone	U	358	ug/kg	71.6	358	
88-75-5	2-Nitrophenol	U	358	ug/kg	71.6	358	
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358	
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.6	358	
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.6	358	
65-85-0	Benzoic acid	U	716	ug/kg	179	716	
91-20-3	Naphthalene	U	35.8	ug/kg	10.7	35.8	
106-47-8	4-Chloroaniline	U	358	ug/kg	71.6	358	
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.6	358	
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.16	35.8	
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.6	358	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.6	358	
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.6	358	
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	358	ug/kg	71.6	358	
99-09-2	3-Nitroaniline	U	358	ug/kg	71.6	358	

MLD 01/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	Date Collected:	11/16/2009 12:00	Matrix:	R
Lab Sample ID:	241336002	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-5897	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 12:28	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s6l0407.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	358	ug/kg	71.6	358	
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358	
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.7	35.8	
51-28-5	2,4-Dinitrophenol	U	716	ug/kg	136	716	UJ,SV7c
132-64-9	Dibenzofuran	U	358	ug/kg	71.6	358	
84-66-2	Diethylphthalate	U	358	ug/kg	71.6	358	
86-73-7	Fluorene	U	35.8	ug/kg	10.7	35.8	
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.6	358	
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.6	358	
100-01-6	4-Nitroaniline	U	358	ug/kg	107	358	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	358	ug/kg	71.6	358	
122-66-7	Azobenzene	U	358	ug/kg	71.6	358	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.6	358	
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.6	358	
85-01-8	Phenanthrene	U	35.8	ug/kg	10.7	35.8	
120-12-7	Anthracene	U	35.8	ug/kg	7.16	35.8	
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.6	358	
206-44-0	Fluoranthene	U	35.8	ug/kg	10.7	35.8	
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.6	358	
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.7	35.8	
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	107	358	
218-01-9	Chrysene	U	35.8	ug/kg	10.7	35.8	
117-81-7	bis(2-Ethylhexyl)phthalate	J	87.7	ug/kg	71.6	358	
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.6	358	
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.7	35.8	
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.7	35.8	
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.7	35.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.7	35.8	
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.7	35.8	
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.7	35.8	UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.6	358	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	322	ug/kg		JA

MLD 01/25/10

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☒ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Perchlorate in soil and water

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the soil and aqueous MS/MSD analyses were performed on LANL samples from other RNs, and parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/25/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☒	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R. PERC7f
☐	☐	☒	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
☐	☐	☒	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
☐	☒	☐	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
☐	☒	☐	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
☐	☒	☐	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
☐	☒	☐	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
☐	☒	☐	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
☐	☒	☐	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
☐	☒	☐	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
☐	☒	☐	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
☐	☒	☐	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 **LC/MS/MS Perchlorate Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
☐	☐	☒	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
☐	☐	☒	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
☐	☐	☒	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
☐	☐	☒	31. The Interference Check Sample was not within ±20% of the known value.	UJ, PERC16a	J, PERC16a
☐	☐	☒	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
☐	☒	☐	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13770

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546

GEL Sample ID: 241336001

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.555	ug/kg	U	1	20-NOV-09 20:40	per1120038a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:40	per1120038a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	20-NOV-09 20:40	per1120038a
	Perchlorate-O(18)			5.51	ug/kg		1	20-NOV-09 20:40	per1120038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-5897

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546

GEL Sample ID: 241336002

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	20-NOV-09 20:48	per1120039a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:48	per1120039a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	20-NOV-09 20:48	per1120039a
	Perchlorate-O(18)			5.69	ug/kg		1	20-NOV-09 20:48	per1120039a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-5530

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 241337001

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:52	per1127032a
	Perchlorate Isotope Ratio						1	27-NOV-09 15:52	per1127032a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:52	per1127032a
	Perchlorate-O(18)			0.479	ug/L		1	27-NOV-09 15:52	per1127032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-5527

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 241337002

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 16:00	per1127033a
	Perchlorate Isotope Ratio						1	27-NOV-09 16:00	per1127033a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 16:00	per1127033a
	Perchlorate-O(18)			0.474	ug/L		1	27-NOV-09 16:00	per1127033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

MLD 01/25/10

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DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/25/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 **TPH GRO and DRO Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–546	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241336001	Date Received:	11/18/2009 08:50	%Moisture:	10
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13770	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 11:39	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.1 g	Final Volume:	1 mL
Data File:	026f2601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.38	mg/kg	2.40	7.38

MLD 01/25/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-546	Date Collected:	11/16/2009 12:00	Matrix:	R
Lab Sample ID:	241336002	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-5897	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 12:17	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	027f2701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.98	mg/kg	2.32	7.13

MLD 01/25/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The MS and/or MSD %Rs were outside laboratory acceptance limits for Aroclors 1016 and 1260, and the MS/MSD RPD was > the laboratory acceptance limit for Aroclor 1260. It should be noted that the MS/MSD were analyzed at a dilution, the MS/MSD parent sample was from another LANL RN, and the parent sample raw data were not included in the data package. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/25/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 23:47	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	082f8201.d	**Column:**	1 CLP1	**Level:**	LOW
	082b8201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.23	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.23	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.23	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.23	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.23	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.23	3.68	1
11096-82-5	Aroclor-1260	J	1.60	ug/kg	1.23	3.68	1

MLD 01/25/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	R
Lab Sample ID:	241336002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-5897	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 23:58	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	083f8301.d	**Column:**	1 CLP1	**Level:**	LOW
	083b8301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.9	ug/kg	5.96	17.9	1
11104-28-2	Aroclor-1221	U	17.9	ug/kg	5.96	17.9	1
11141-16-5	Aroclor-1232	U	17.9	ug/kg	5.96	17.9	1
53469-21-9	Aroclor-1242	U	17.9	ug/kg	5.96	17.9	1
12672-29-6	Aroclor-1248	U	17.9	ug/kg	5.96	17.9	1
11097-69-1	Aroclor-1254		47.4	ug/kg	5.96	17.9	1
11096-82-5	Aroclor-1260		53.5	ug/kg	5.96	17.9	2

MLD 01/25/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Target analytes Ca and Na were detected in the soil MB. The Ca result for sample RE03-10-5897 was a detect >50X the MB concentration and, thus, was not qualified, based on professional judgment. The remaining associated sample results were detects >5X but ≤50X the MB concentrations and, thus, were qualified J,I4a.
2. Target analyte Tl was detected in the CCBs bracketing the aqueous samples. The associated sample results were NDs and, thus, were not qualified. Target analytes Si and K were detected in CCBs bracketing the soil samples. The associated sample results were >5X the greatest CCB concentrations and, thus, were not qualified.
3. Target analytes Cr, Fe, Mn, Ni, Si, and Na were detected in FR blank sample -10-5527, which was associated with both soil samples. All associated sample results were detects >5X the FR blank concentrations and, thus, were not qualified.
4. The aqueous LCS %R was > the laboratory UAL for Hg. The associated sample results were NDs and, thus, were not qualified.
5. The soil MS %Rs were < the laboratory LAL but ≥10% for B and Mn. The associated B sample results were NDs and, thus, were qualified UJ,I6a. The associated Mn sample results were detects and, thus, were qualified J-,I6a. The soil MS %Rs were > the laboratory UALs for Cr and K. The associated Cr sample results were detects and, thus, were qualified J+,I6b. The MS was analyzed at a dilution for K and, thus, no sample data were qualified, based on professional judgment. The soil MS %Rs were <10% for Ca, Cu, Fe, and Si, < the laboratory LALs but ≥10% for Mg and Ti, and > the laboratory UALs for Al and Be. The parent sample concentrations were >4X the spike concentrations; thus, those associated sample results were not qualified, based on professional judgment.
6. The soil sample and duplicate concentrations were ≥5X the PQLs, and the duplicate RPDs were >35% for Al, Cr, Co, Cu, Fe, Mn, Si, Na, and Ti. The associated sample results were detects and, thus, were qualified J,I10a.

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

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7. It should be noted that the and aqueous matrix QC analyses were performed on a LANL sample from another RN for ICP-AES and ICP-MS, and parent sample raw data were not included in the data package. In addition, the aqueous matrix QC analyses for CVAA were performed on a LANL sample from another RN. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/25/10

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 **Metals Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☒	☐	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241336001 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13770 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1640000	ug/Kg		7330	21600	21600	1	P	HSC	12/10/09 08:19	121009-1	930799
7440-36-0	Antimony		1100	ug/Kg	U	364	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-38-2	Arsenic		0.777	mg/kg	J	0.217	1.08	1.08	2	MS	BAJ	12/07/09 21:41	091207-4	925189
7440-39-3	Barium		18600	ug/Kg		110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-41-7	Beryllium		0.495	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 09:34	091207-8	925189
7440-42-8	Boron	UJ,I6a	5510	ug/Kg	U	1100	5510	5510	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-43-9	Cadmium		551	ug/Kg	U	110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-70-2	Calcium	J,I4a	411000	ug/Kg		8820	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-47-3	Chromium	J+,I6b	8780	ug/Kg		165	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-48-4	Cobalt	J,I10a	515	ug/Kg	J	165	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-50-8	Copper		2490	ug/Kg		331	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-89-6	Iron		8470000	ug/Kg		8820	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-92-1	Lead		3690	ug/Kg		276	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-93-2	Lithium		3.09	mg/kg		0.434	2.17	2.17	2	MS	BAJ	12/08/09 09:34	091207-8	925189
7439-95-4	Magnesium		353000	ug/Kg		9370	33100	33100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-96-5	Manganese	J-,I6a	346000	ug/Kg		220	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-97-6	Mercury		5.17	ug/kg	J	4.45	13.1	13.1	1	AV	JXL1	12/03/09 11:01	120309S1-10	924854
7440-02-0	Nickel		2.55	mg/kg		0.108	0.434	0.434	2	MS	BAJ	12/08/09 09:34	091207-8	925189
7440-09-7	Potassium		344000	ug/Kg		7050	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7782-49-2	Selenium		1.08	mg/kg	U	0.542	1.08	1.08	2	MS	BAJ	12/07/09 21:41	091207-4	925189
7440-21-3	Silicon	J,I10a	715000	ug/Kg		1620	10800	10800	1	P	HSC	12/10/09 08:19	121009-1	930799
7440-22-4	Silver		223	ug/Kg	J	110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-23-5	Sodium	J,I4a	155000	ug/Kg		7710	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-28-0	Thallium		0.217	mg/kg	U	0.0651	0.217	0.217	2	MS	BAJ	12/09/09 10:00	091208-9	925189
7440-32-6	Titanium	J,I10a	488000	ug/Kg		110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-61-1	Uranium		0.407	mg/kg		0.0143	0.0434	0.0434	2	MS	BAJ	12/07/09 21:41	091207-4	925189
7440-62-2	Vanadium		4140	ug/Kg		110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-66-6	Zinc		47500	ug/Kg		364	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.509	g	30	mL	12/02/09	TXB3
925187	925186	SW846 3050B	0.504	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.512	g	50	mL	12/05/09	BCD1

MLD 01/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241336002 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-5897 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1530000	ug/Kg		7070	20800	20800	1	P	HSC	12/10/09 08:22	121009-1	930799
7440-36-0	Antimony		1050	ug/Kg	U	348	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-38-2	Arsenic		0.796	mg/kg	J	0.212	1.06	1.06	2	MS	BAJ	12/07/09 21:48	091207-4	925189
7440-39-3	Barium		33800	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-41-7	Beryllium		0.353	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 09:41	091207-8	925189
7440-42-8	Boron	UJ,I6a	5270	ug/Kg	U	1050	5270	5270	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-43-9	Cadmium		527	ug/Kg	U	105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-70-2	Calcium		890000	ug/Kg		8430	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-47-3	Chromium	J+,I6b	17600	ug/Kg		158	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-48-4	Cobalt	J,I10a	967	ug/Kg		158	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-50-8	Copper		4770	ug/Kg		316	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-89-6	Iron		10500000	ug/Kg		8430	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-92-1	Lead		12100	ug/Kg		263	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-93-2	Lithium		3.35	mg/kg		0.423	2.12	2.12	2	MS	BAJ	12/08/09 09:41	091207-8	925189
7439-95-4	Magnesium		488000	ug/Kg		8960	31600	31600	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-96-5	Manganese	J-,I6a	369000	ug/Kg		211	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-97-6	Mercury		14.5	ug/kg		4.08	12	12	1	AV	JXL1	12/03/09 11:15	120309S1-10	924854
7440-02-0	Nickel		3.74	mg/kg		0.106	0.423	0.423	2	MS	BAJ	12/08/09 09:41	091207-8	925189
7440-09-7	Potassium		322000	ug/Kg		6740	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7782-49-2	Selenium		1.06	mg/kg	U	0.529	1.06	1.06	2	MS	BAJ	12/07/09 21:48	091207-4	925189
7440-21-3	Silicon	J,I10a	633000	ug/Kg		1560	10400	10400	1	P	HSC	12/10/09 08:22	121009-1	930799
7440-22-4	Silver		620	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-23-5	Sodium	J,I4a	135000	ug/Kg		7380	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-28-0	Thallium		0.212	mg/kg	U	0.0635	0.212	0.212	2	MS	BAJ	12/09/09 10:03	091208-9	925189
7440-32-6	Titanium	J,I10a	539000	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-61-1	Uranium		0.476	mg/kg		0.014	0.0423	0.0423	2	MS	BAJ	12/07/09 21:48	091207-4	925189
7440-62-2	Vanadium		6910	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-66-6	Zinc		55500	ug/Kg		348	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.537	g	30	mL	12/02/09	TXB3
925187	925186	SW846 3050B	0.51	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.508	g	50	mL	12/05/09	BCD1

MLD 01/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241337001 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-5530 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:33	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:27	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 16:51	120409A-1	925377
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 16:51	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 16:51	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:42	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 16:51	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:38	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 16:51	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

MLD 01/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241337002 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-5527 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:36	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:28	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-47-3	Chromium	3.29	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:12	120409A-1	925377
7439-89-6	Iron	45.1	ug/L	J	30	100	100	1	P	HSC	12/04/09 17:12	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:12	120409A-1	925377
7439-96-5	Manganese	3.88	ug/L	J	1	5	5	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:48	112509W1-7	924857
7440-02-0	Nickel	1.84	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:12	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-21-3	Silicon	78.5	ug/L	J	25	100	100	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-23-5	Sodium	239	ug/L	J	100	300	300	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:40	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 17:12	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

MLD 01/25/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Nitrate/nitrite-N was detected in the aqueous MB. The associated sample results were NDs and, thus, were not qualified.
2. Total cyanide was detected in the ICB associated with the aqueous samples. The associated sample results were NDs and, thus, were not qualified.
3. The soil MS %R was > the laboratory UAL for nitrate. The associated sample results were NDs and, thus, were qualified UJ,I6b.
4. The matrix QC analyses were performed on LANL samples from other RNs for pH and soil and aqueous total cyanide. It should be noted that the matrix QC analyses were performed on FB sample RE03-10-5530 for the nitrate/nitrite-N analysis. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: DATE: 01/25/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☒	☐	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-546

Client Sample ID: RE03-09-13770
Sample ID: 241336001
Matrix: S
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client
Moisture: 9.99%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal												
SW9045C pH Federal "As Received"												
pH at Temp 20.7C	H	8.36		0.010	0.100	SU	1	TXT1	11/19/09	1532	924497	1
Flow Injection Analysis Federal												
SW9012A Cyanide, Total Federal "Dry Weight Corrected"												
Cyanide, Total	U	ND		75.5	278	ug/kg	1	AXC2	11/23/09	1530	924475	2
Ion Chromatography Federal												
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"												
Nitrate-N	U	ND	UJ,I6b	0.299	0.996	mg/kg	1	VH1	12/09/09	1439	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

MLD 01/25/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-546

Client Sample ID:	RE03-10-5897	Project:	LANL01004
Sample ID:	241336002	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.97%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.7C	H	8.55		0.010	0.100	SU	1	TXT1 11/19/09	1534	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND		70.3	258	ug/kg	1	AXC2 11/23/09	1530	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6b	0.317	1.06	mg/kg	1	VH1 12/09/09	1505	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

MLD 01/25/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 30, 2009

Client SDG: 10-546-1

Client Sample ID: RE03-10-5530
Sample ID: 241337001
Matrix: W
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1705	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.050	0.250	mg/L	5	AXH3 11/30/09	0929	925977	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

MLD 01/25/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 30, 2009

Client SDG: 10-546-1

Client Sample ID:	RE03-10-5527	Project:	LANL01004
Sample ID:	241337002	Client ID:	LANL010
Matrix:	W		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1706	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.050	0.250	mg/L	5	AXH3 11/30/09	0933	925977	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

MLD 01/25/10

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-546 VALIDATION DATE: 01/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☒ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. An MS was not analyzed for tritium. An LCS was analyzed, and met QC acceptance criteria. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/26/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/25/10

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☐	☒	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☐	☒	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☒	☐	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☒	☐	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☒	☐	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☐	☒	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13770	Project:	LANL01004
Sample ID:	241336001	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	9.99%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00309	0.0322	+/-0.00225	0.050	pCi/g		HAKB	12/10/09	1238	927530	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00252	0.0205	+/-0.00472	0.050	pCi/g		HAKB	12/10/09	1031	927531	3
Plutonium-239/240	U	-0.00126	0.0231	+/-0.00282	0.050	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	0.00915	0.254	+/-0.0714	0.500	pCi/g		JXR1	12/04/09	1232	925141	4
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium	U	15.2	100	+/-29.5	250	pCi/L		KXK2	12/04/09	1639	927653	5

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EPA 905.0 Modified
5	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	73.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	89.8	(50%-105%)
Strontium Carrier	SR90 "Dry Weight Corrected"	73.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

MLD 01/25/10

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-10-5897	Project:	LANL01004
Sample ID:	241336002	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.97%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00597	0.0256	+/-0.00497	0.050	pCi/g		HAKB	12/10/09	1238	927530	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	5.71E-10	0.0195	+/-0.00379	0.050	pCi/g		HAKB	12/10/09	1031	927531	3
Plutonium-239/240	U	0.00479	0.0219	+/-0.0034	0.050	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	-0.116	0.242	+/-0.0616	0.500	pCi/g		JXR1	12/04/09	1232	925141	4
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium	U	-65.7	99.9	+/-27.4	250	pCi/L		KXK2	12/04/09	1841	927653	5

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EPA 905.0 Modified
5	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	86.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	89.5	(50%-105%)
Strontium Carrier	SR90 "Dry Weight Corrected"	78.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound

MLD 01/25/10

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-546

REQUEST NUMBER: 10-546

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241336, 241337

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13770	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13770	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13770	1	POLY	AM-241+SR90+ISOPU	Ice	S
RE03-09-13770	1	POLY	H3	Ice	S
RE03-09-13770	1	POLY	METALS-GEL	Ice	S
RE03-09-13770	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-5530	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-5527	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-5530	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-5527	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-5897	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE03-10-5897	1	GLASS	8270C+8082+TPH-DRO	Ice	R
RE03-10-5897	1	POLY	AM-241+SR90+ISOPU	Ice	R
RE03-10-5897	1	POLY	H3	Ice	R
RE03-10-5897	1	POLY	METALS-GEL	Ice	R
RE03-10-5897	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/17/09	1400	Patricia Dover-Dent	P.W. Dent	11-18-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: Date Time

Printed Name Signature

Remarks:

Tuesday, November 17, 2009

REQUEST NUMBER: 10-546

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-546
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009
TURNAROUND/REPORT DUE: 12/17/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	EPA:906.0	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	HASL-300:ISOPU	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:6010B	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5527	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5530	W	11/16/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 17, 2009

REQUEST NUMBER: 10-546

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-10-5897	R	11/16/2009	
	SW-846:6020	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5527	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5530	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5897	R	11/16/2009	
	SW-846:6850	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:7471A	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8082	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8260B	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8270C	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:9012A	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5527	W	11/16/2009	
		1	RE03-10-5530	W	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:9045C	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	

Final Page of REQUEST NUMBER 10-546

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 24, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241336 241337
SDG: 10-546

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 18, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-546
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241336 and 241337
SDG: 10-546

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Quality Control Data 1954
Raw Data..... 1958
Background and Efficiency Data 2021
Standards Data 2071
Runlogs 2098

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241336 and 241337
SDG # : 10-546

November 24, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 18, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. There were discrepancies with the number of containers received. Los Alamos was notified. Please see attached e-mail. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. The containers for radiochemistry were received at 15C temperature. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
241337001	RE03-10-5530
241337002	RE03-10-5527

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Valerie Davis

Valerie Davis

Project Manager

List of current GEL Certifications as of 24 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-546

REQUEST NUMBER: 10-546

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241336, 241337

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13770	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13770	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13770	1	POLY	AM-241+SR90+ISOPU	Ice	S
RE03-09-13770	1	POLY	H3	Ice	S
RE03-09-13770	1	POLY	METALS-GEL	Ice	S
RE03-09-13770	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-5530	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-5527	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-5530	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-5527	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-5897	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE03-10-5897	1	GLASS	8270C+8082+TPH-DRO	Ice	R
RE03-10-5897	1	POLY	AM-241+SR90+ISOPU	Ice	R
RE03-10-5897	1	POLY	H3	Ice	R
RE03-10-5897	1	POLY	METALS-GEL	Ice	R
RE03-10-5897	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/17/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-18-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 17, 2009

REQUEST NUMBER: 10-546

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-546

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	EPA:906.0	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	HASL-300:ISOPU	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:6010B	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5527	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5530	W	11/16/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 17, 2009

REQUEST NUMBER: 10-546

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-10-5897	R	11/16/2009	
	SW-846:6020	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5527	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5530	W	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5897	R	11/16/2009	
	SW-846:6850	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:7471A	1	RE03-09-13770	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8082	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8260B	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:8270C	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:9012A	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5527	W	11/16/2009	
		1	RE03-10-5530	W	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	
	SW-846:9045C	1	RE03-09-13770	S	11/16/2009	
		1	RE03-10-5897	R	11/16/2009	

Final Page of REQUEST NUMBER 10-546

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-546**
Received By: Patricia Dover-Dent	**Date Received: November 18, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 30 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other (describe) **3-6C** **15C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?			X	Sample ID's affected: **time written on containers, not on COC**
11	Number of containers received match number indicated on COC?			X	Sample ID's affected: RE03-10-5897, *5527,5530 **the lab did not receive a poly H3 container, *rec'd poly containers for NO3NO2 and Perchlorate not listed on the COC**
12	COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S
7209 7848 9307 3C **7209 7848 9260 15C**
7209 7848 9362 3C
7209 7848 9270 4C
7209 7848 9329 4C
7209 7848 9351 5C
7209 7848 9318 5C
7209 7848 9330 6C
7209 7848 9373 15C

PM (or PMA) review: Initials BF Date 11/19/09

Subject: Re: Sample Receipt for 11/18/09
From: Keith Grene <kgreene@lanl.gov>
Date: Mon, 23 Nov 2009 09:07:57 -0700
To: Dionne Francis <Dionne.Francis@gel.com>

yes

At 08:50 AM 11/23/2009, you wrote:

> Keith,
>
> The following container were rec'd and not listed on the COC (RN#10-546)
> RE03-10-5527 SW-846:6850, NO3NO2 250 ML Poly
> RE03-10-5530 SW-846:6850, NO3NO3 250 ML Poly
>
> Would you like us to add these sample containers? Please advise.
>
> Thanks,
> Dionne
>
> --
> Dionne Francis
> Project Manager Assistant
> GEL Laboratories, LLC
> 2040 Savage Road
> Charleston, SC (USA) 29407
> Direct: 843.769.7376 Ext. 4432
> Main: 843.556.8171
> Fax: 843.766.1178
> E-mail: daf@gel.com
> Web: www.gel.com
>
> Let the Bible fill the memory, rule the heart, and guide the feet.

Subject: Re: Sample Receipt for 11/18/09
From: Keith Grene <kgreene@lanl.gov>
Date: Mon, 23 Nov 2009 08:53:13 -0700
To: Dionne Francis <Dionne.Francis@gel.com>

go ahead and take aliquot from another container for H-3

At 04:37 PM 11/20/2009, you wrote:

> Keith,
>
> RN#10-546, the lab did not receive a poly H3 container for sample RE03-10-5897. However, we did received a poly container without a label. There is sufficient volume to take an aliquot from another container. Please advise.
>
> RN#10-542 and 553, the Gross A/B containers were preserved prior to analysis.
>
> RN#10-552, the lab rec'd (1) 40ml vial 8260B container for sample CASA-10-3718 instead of (2) as indicated on the COC.
>
> Thanks,
> Dionne
>
> --
> Dionne Francis
> Project Manager Assistant
> GEL Laboratories, LLC
> 2040 Savage Road
> Charleston, SC (USA) 29407
> Direct: 843.769.7376 Ext. 4432
> Main: 843.556.8171
> Fax: 843.766.1178
> E-mail: daf@gel.com
> Web: www.gel.com
>
> Let the Bible fill the memory, rule the heart, and guide the feet.

ENE VALDEZ
ALAMOS NATL LAB.
) BLDG 1237 DPU 03

ALAMOS, NM 87545
TED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

ILERIE DAVIS
:NERAL ENGINEERING LAB
)40 SAVAGE RD

HARLESTON SC 29407
33)556-8171
EF: 6B010AWE6L11570000

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FedEx Express

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PRIORITY OVERNIGHT

RK# 201 7209 7848 9307

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LOS ALAMOS, NM 87545
UNITED STATES US

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

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ID: SAFA (505)665-9968
E VALDEZ
AMOS NATL LAB.
LDG 1237 DPU 03

AMOS, NM 87545
D STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

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-# 7209 7848 9259 0201

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PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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2 of 2
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Mstr# 7209 7848 9318 0201

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PRIORITY OVERNIGHT

XX CHSA

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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

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FedEx Express

1 of 2
TRK# 7209 7848 9351
MASTER

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PRIORITY OVERNIGHT

29407
SC-US
CHS

X CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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1 of 2
TRK# 0201 7209 7848 9318
MASTER

WED - 18NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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FedEx Express

TRK# 0201 7209 7848 9330

WED - 18NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A0224JFTO

15°

FedEx Express

WED - 18NOV A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9373

XX CHSA

29407
SC-US
CHS

Part # 156146-434 NRIT V3 09-06

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWLO

15°

FedEx Express

2 of 3

WED - 18NOV A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9260
MstrW 7209 7848 9259 0201

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-546

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	925381
Prep Batch Number:	925380

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201978340	Method Blank (MB)
1201978343	Laboratory Control Sample (LCS)
1201978344	Laboratory Control Sample (LCS)
1201978341	241336001(RE03-09-13770) Post Spike (PS)
1201978342	241336001(RE03-09-13770) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241336001 (RE03-09-13770) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-546 GEL Work Order: 241336

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 11 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-546 VOA

This roadmap was analyzed by gel00735 on 11-22-2009, 13:09.
This roadmap was reviewed by sar00518 on 11-24-2009, 13:21.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112109v1/1m619.d	241336001	RE03-09-13770	21-NOV-2009	15:55	10-546.sub	1	925381	
☐	N	/chem/VOA1.i/112109v1/1m620.d	241336002	RE03-10-5897	21-NOV-2009	16:26	10-546.sub	1	925381	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112109v1/1m609SLLA.d	1201978343	LCS	lcs	21-NOV-2009	10:51	all.sub	1	925381	
☐	N	/chem/VOA1.i/112109v1/1m610SSLA.d	1201978344	LCS	lcs	21-NOV-2009	11:21	all.sub	1	925381	
☐	N	/chem/VOA1.i/112109v1/1m614SBLA.d	1201978340	BLANK	mb	21-NOV-2009	13:23	all.sub	1	925381	
☐	N	/chem/VOA1.i/112109v1/1m628.d	1201978341	RE03-09-13770MS	ms	21-NOV-2009	20:28	10-546.sub	1	925381	
☐	N	/chem/VOA1.i/112109v1/1m629.d	1201978342	RE03-09-13770MSD	msd	21-NOV-2009	20:58	10-546.sub	1	925381	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241336001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13770**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 15:55**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 12:46**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m619.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 15:55	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m619.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	R
Lab Sample ID:	241336002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-5897	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 16:26	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m620.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	J	2.57	ug/kg	1.78	5.37
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.355	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.355	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	J	3.92	ug/kg	1.61	5.37
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	R
Lab Sample ID:	241336002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-5897	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 16:26	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m620.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-546

Matrix Type: SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201978343	LCS for batch 925380	116	101	92
1201978344	LCS for batch 925380	100	98	92
1201978340	MB for batch 925380	106	104	97
241336001	RE03-09-13770	115	108	97
241336002	RE03-10-5897	117	106	99
1201978341	RE03-09-13770PS	120	104	92
1201978342	RE03-09-13770PSD	121	107	95

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13770PS
Lab Sample ID: 1201978341
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 10
Analysis Date: 11/21/2009 20:28
Prep Batch ID: 925380
Batch ID: 925381
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	48.6	97	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	48.4	97	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	46.4	93	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	52.3	105	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	51.0	102	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	55.9	112	51-151
67-64-1	PS	Acetone	250	0.00	U	192	77	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	48.4	97	61-125
74-88-4	PS	Iodomethane	250	0.00	U	258	103	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	40.8	82	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	270	108	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	48.0	96	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	48.7	97	62-125
78-93-3	PS	2-Butanone	250	0.00	U	203	81	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	50.5	101	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	49.1	98	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	49.6	99	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	55.0	110	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	50.2	100	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	48.9	98	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	51.9	104	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	50.9	102	58-126

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13770PS
Lab Sample ID: 1201978341
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 10
Analysis Date: 11/21/2009 20:28
Dilution: 1
Prep Batch ID: 925380
Batch ID: 925381

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	48.2	96	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	49.4	99	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	50.6	101	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	51.6	103	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	52.6	105	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	229	92	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	51.9	104	54-133
108-88-3	PS	Toluene	50.0	0.00	U	48.1	96	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	51.2	102	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	49.8	100	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	199	79	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	49.5	99	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	50.8	102	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	54.7	109	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	51.7	103	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	49.9	100	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	47.6	95	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	99.3	99	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	50.6	101	52-127
100-42-5	PS	Styrene	50.0	0.00	U	51.3	103	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	54.4	109	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	51.3	103	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13770PS
Lab Sample ID: 1201978341
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 10
Analysis Date: 11/21/2009 20:28
Prep Batch ID: 925380
Batch ID: 925381
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	47.8	96	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	51.5	103	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	47.1	94	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	47.6	95	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	47.3	95	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	48.0	96	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	48.0	96	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	48.6	97	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	48.4	97	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	48.4	97	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	49.8	100	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	51.8	104	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	52.0	104	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	48.2	96	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	54.7	109	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	51.1	102	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	51.2	102	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13770PSD
Lab Sample ID: 1201978342
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 10
Analysis Date: 11/21/2009 20:58
Prep Batch ID: 925380
Batch ID: 925381
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	47.9	96	25-149	1	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	49.2	98	39-140	2	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	48.5	97	47-129	4	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	53.9	108	31-135	3	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	53.9	108	53-128	6	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	54.4	109	51-151	3	0-25
67-64-1	PSD	Acetone	250	0.00	U	197	79	21-153	3	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	48.6	97	61-125	0	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	263	105	53-142	2	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	41.3	83	59-136	1	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	277	111	46-129	3	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	50.1	100	56-126	4	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	49.0	98	62-125	1	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	207	83	26-152	2	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	51.0	102	60-130	1	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	48.9	98	55-135	0	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	49.5	99	60-127	0	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	56.8	114	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	48.4	97	59-131	4	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	49.9	100	57-128	2	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	50.5	101	58-136	3	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	49.4	99	58-126	3	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13770PSD
Lab Sample ID: 1201978342
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 10
Analysis Date: 11/21/2009 20:58
Dilution: 1
Prep Batch ID: 925380
Batch ID: 925381

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	49.7	99	56-123	3	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	50.1	100	51-137	1	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	51.5	103	60-126	2	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	51.7	103	55-138	0	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	53.0	106	60-132	1	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	246	98	58-136	7	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	51.5	103	54-133	1	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	49.8	100	52-128	4	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	52.3	105	53-137	2	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	51.9	104	59-130	4	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	208	83	31-148	5	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	51.4	103	57-127	4	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	51.4	103	51-128	1	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	55.5	111	59-139	1	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	54.5	109	57-133	5	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	51.4	103	53-122	3	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	49.3	99	51-125	3	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	103	103	50-126	4	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	51.8	104	52-127	2	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	52.8	106	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	57.7	115	57-149	6	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	55.1	110	63-127	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13770PSD
Lab Sample ID: 1201978342
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 10
Analysis Date: 11/21/2009 20:58
Dilution: 1
Prep Batch ID: 925380
Batch ID: 925381

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	49.6	99	57-149	4	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	53.1	106	49-131	3	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	49.0	98	40-136	4	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	49.8	100	44-135	4	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	49.9	100	44-140	6	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	49.1	98	42-140	2	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	49.7	99	44-132	4	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	50.6	101	42-142	4	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	49.9	100	43-137	3	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	50.0	100	39-139	3	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	51.6	103	38-145	3	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	54.2	108	43-129	4	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	52.0	104	44-125	0	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	49.5	99	36-141	3	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	58.4	117	47-151	6	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	53.2	106	59-131	4	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	53.9	108	43-129	5	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: LCS for batch 925380
Lab Sample ID: 1201978343
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/21/2009 10:51
Dilution: 1
Prep Batch ID: 925380
Batch ID: 925381

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	45.3	91	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	48.5	97	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	45.8	92	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	53.8	108	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	53.7	107	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	52.5	105	67-151
67-64-1	LCS	Acetone	250	0.0	197	79	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	46.7	93	70-125
74-88-4	LCS	Iodomethane	250	0.0	265	106	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	42.2	84	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	277	111	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	50.6	101	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	48.7	97	75-120
78-93-3	LCS	2-Butanone	250	0.0	208	83	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	51.5	103	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	48.9	98	74-135
67-66-3	LCS	Chloroform	50.0	0.0	49.0	98	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	56.0	112	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	48.0	96	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	49.4	99	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	48.8	98	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	47.3	95	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 925380 **Matrix:** SOIL

Lab Sample ID: 1201978343

Instrument: VOA1.I **Analysis Date:** 11/21/2009 10:51 **Dilution:** 1

Analyst: GRB2 **Prep Batch ID** 925380

Purge Vol: 5 mL **Batch ID:** 925381

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	50.0	100	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	49.1	98	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	52.6	105	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	51.3	103	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	51.7	103	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	233	93	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	52.7	105	80-125
108-88-3	LCS	Toluene	50.0	0.0	50.3	101	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	52.4	105	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	50.5	101	76-120
591-78-6	LCS	2-Hexanone	250	0.0	205	82	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	50.1	100	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	52.5	105	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	54.1	108	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	52.6	105	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	51.2	102	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	47.4	95	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	103	103	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	52.3	105	74-120
100-42-5	LCS	Styrene	50.0	0.0	52.3	105	76-125
75-25-2	LCS	Bromoform	50.0	0.0	55.2	110	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	52.1	104	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: LCS for batch 925380
Lab Sample ID: 1201978343
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/21/2009 10:51
Dilution: 1
Prep Batch ID: 925380
Batch ID: 925381

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	45.1	90	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	53.5	107	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	47.5	95	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	49.1	98	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	48.6	97	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	49.2	98	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	50.3	101	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	47.9	96	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	49.8	100	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	47.3	95	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	50.6	101	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	54.8	110	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	54.1	108	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	49.4	99	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	52.1	104	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	51.2	102	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	51.4	103	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: LCS for batch 925380
Lab Sample ID: 1201978344
Instrument: VOA1.I
Analyst: GRB2
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/21/2009 11:21
Dilution: 1
Prep Batch ID: 925380
Batch ID: 925381

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	264	106	52-139

Method Blank Summary

SDG Number:	10-546	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925380	Instrument ID:	VOA1.I	Data File:	1m614SBLA.d
Lab Sample ID:	1201978340	Prep Date:	11/21/2009 10:00	Analyzed:	11/21/09 13:23
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 925380	1201978343	1m609SLLA.d	11/21/09	1051
02	LCS for batch 925380	1201978344	1m610SSLA.d	11/21/09	1121
03	RE03-09-13770	241336001	1m619.d	11/21/09	1555
04	RE03-10-5897	241336002	1m620.d	11/21/09	1626
05	RE03-09-13770PS	1201978341	1m628.d	11/21/09	2028
06	RE03-09-13770PSD	1201978342	1m629.d	11/21/09	2058

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-546

Instrument ID: VOA1.I **Injection Date/Time:** 13-NOV-09 22:17

Column Description: RTX-Volatiles **Lab File ID** /111309v1/11507.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	59
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.1
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W1VM091113-05	/111309v1/11509.d	13-NOV-09 23:18
VSTD001	W1VM091113-07	/111309v1/11511.d	14-NOV-09 00:18
VSTD002	W1VM091113-08	/111309v1/11512.d	14-NOV-09 00:48
VSTD005	W1VM091113-09	/111309v1/11513.d	14-NOV-09 01:19
VSTD010	W1VM091113-10	/111309v1/11514.d	14-NOV-09 01:49
VSTD020	W1VM091113-11	/111309v1/11515.d	14-NOV-09 02:19
VSTD050	W1VM091113-12	/111309v1/11516.d	14-NOV-09 02:49
VSTD100	W1VM091113-13	/111309v1/11517.d	14-NOV-09 03:19
VSTD005S	W1VM091113-14	/111309v1/11519.d	14-NOV-09 04:20
VSTD010S	W1VM091113-15	/111309v1/11520.d	14-NOV-09 04:50
VSTD025S	W1VM091113-16	/111309v1/11521.d	14-NOV-09 05:20
VSTD050S	W1VM091113-17	/111309v1/11522.d	14-NOV-09 05:50
VSTD100S	W1VM091113-18	/111309v1/11523.d	14-NOV-09 06:20
VSTD250S	W1VM091113-19	/111309v1/11524.d	14-NOV-09 06:51
VSTD500S	W1VM091113-20	/111309v1/11525.d	14-NOV-09 07:21
SHORTICV	W1VM091113-19	/111309v1/11528.d	14-NOV-09 08:52

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-546

Instrument ID: VOA1.I **Injection Date/Time:** 16-NOV-09 14:01

Column Description: RTX-Volatiles **Lab File ID** /111609v1/1m108BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	55
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050/LICV	W1VM091116-05	/111609v1/1m108.d	16-NOV-09 14:01

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-546

Instrument ID: VOA1.I **Injection Date/Time:** 21-NOV-09 10:21

Column Description: RTX-Volatiles **Lab File ID** /112109v1/1m608.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	56.6
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	1.1
174	50.0 - 100.0% of mass 95	63.1
175	5.0 -9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	98.6
177	5.0 - 9.0% of mass 176	7.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091121-06	/112109v1/1m609.d	21-NOV-09 10:51
LCS	1201978343	/112109v1/1m609SLLA.d	21-NOV-09 10:51
VSTD250S	W1VM091121-07	/112109v1/1m610.d	21-NOV-09 11:21
LCS	1201978344	/112109v1/1m610SSLA.d	21-NOV-09 11:21
BLANK	1201978340	/112109v1/1m614SBLA.d	21-NOV-09 13:23
RE03-09-13770	241336001	/112109v1/1m619.d	21-NOV-09 15:55
RE03-10-5897	241336002	/112109v1/1m620.d	21-NOV-09 16:26
RE03-09-13770MS	1201978341	/112109v1/1m628.d	21-NOV-09 20:28
RE03-09-13770MSD	1201978342	/112109v1/1m629.d	21-NOV-09 20:58

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-546

STD Analysis Time: 21-NOV-09 10:51

Data File: 1m609.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1062730		13.7		873765		17.2		497490		19.6	
Upper Limit	2125460		14.2		1747530		17.7		994980		20.1	
Lower Limit	531365		13.2		436883		16.7		248745		19.1	
Sample ID												
BLK01LCS	1062730		13.7		873765		17.2		497490		19.6	
BLK01SLCS	1135111		13.7		943868		17.2		515435		19.6	
BLK01	949937		13.7		761101		17.2		408531		19.6	
RE03-09-13770	918714		13.7		732540		17.2		403819		19.6	
RE03-10-5897	884322		13.7		703595		17.2		384095		19.6	
RE03-09-13770MS	833514		13.7		696655		17.2		411006		19.6	
RE03-09-13770MSD	883158		13.7		719134		17.2		410673		19.6	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 15:55	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m619.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 15:55	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m619.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m619.d
Lab Smp Id: 241336001 Client Smp ID: RE03-09-13770
Inj Date : 21-NOV-2009 15:55
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |241336001|925381|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.98650	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	918714	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	732540	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	403819	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	658678	57.6399	64.0
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1613563	54.1206	60.1
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	658636	48.5767	54.0

ION RATIO REPORT

VOA REPORT

Data file: 1m619.d
Report Date: 11/22/2009 07:05
Lab. ID: 241336001 SampleType: SAMPLE
Injection Date: 21-NOV-2009 15:55
Operator: GRB2 Instrument: VOA1.i
Sample Info: |241336001|925381|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-546
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	17429	13.68	13.44	80-120	100	(T)
64	3271	13.68	13.44	2- 62	19	(T)
47 Benzene			CAS#: 71-43-2			
78	873	13.33	13.34	80-120	100	( )
77	19638	13.68	13.33	0- 53	2249	(QT)
51	202440	13.34	13.34	5- 65	23187	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	16128	15.51	15.36	80-120	100	(T)
43	8740	15.51	15.36	217-277	54	(QT)
100	1000621	15.52	15.36	0- 60	6204	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m619.d
Lab Smp Id: 241336001 Client Smp ID: RE03-09-13770
Inj Date : 21-NOV-2009 15:55
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |241336001|925381|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112109v1/1m619.d

Date : 21-NOV-2009 15:55

Client ID: RE03-09-13770

Sample Info: |241336001|925381|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: GRB2

Column diameter: 0.25

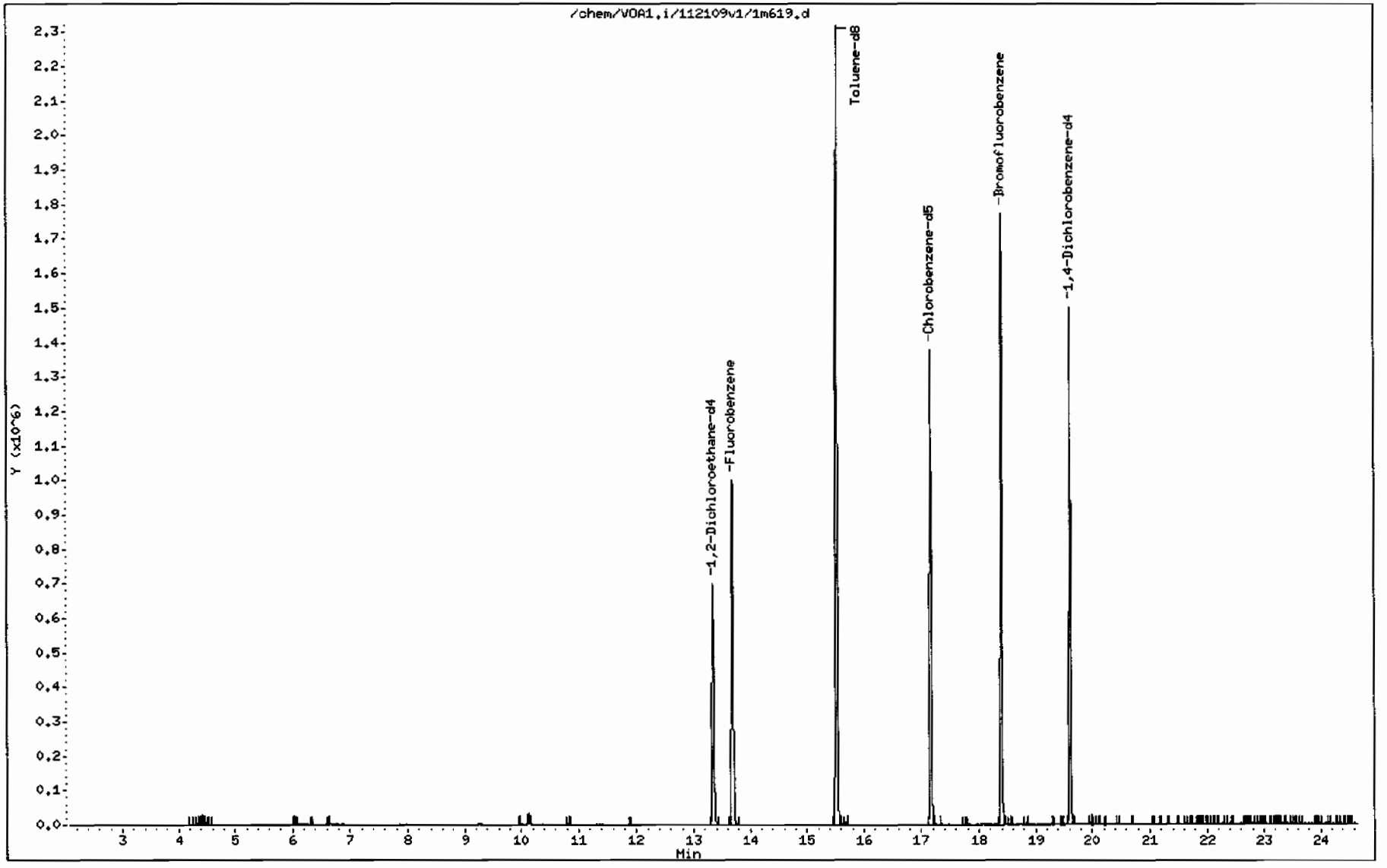

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241336002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-5897**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 16:26**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 12:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m620.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	J	2.57	ug/kg	1.78	5.37
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.355	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.355	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	J	3.92	ug/kg	1.61	5.37
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	R
Lab Sample ID:	241336002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-5897	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 16:26	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m620.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m620.d
Lab Smp Id: 241336002 Client Smp ID: RE03-10-5897
Inj Date : 21-NOV-2009 16:26
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |241336002|925381|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.97410	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	884322	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	703595	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	384095	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	641975	58.3631	62.7
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1515298	52.9155	56.9
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	636193	49.3309	53.0
16 Acetone	43	9.254	9.254	(0.676)	12289	2.39468	2.6(a)
71 2-Hexanone	43	16.273	16.269	(0.948)	25110	3.64503	3.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 1m620.d
Report Date: 11/22/2009 07:05
Lab. ID: 241336002 SampleType: SAMPLE
Injection Date: 21-NOV-2009 16:26
Operator: GRB2 Instrument: VOA1.i
Sample Info: |241336002|925381|1|VOAF|1|
Miscellaneous Info: LANL 5g N/A
Comment:
Method used: /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-546
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
16 Acetone			CAS#: 67-64-1			
43	12289	9.25	9.25	80-120	100	( )
58	3393	9.26	9.25	0- 59	28	( )
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	17140	13.68	13.44	80-120	100	(T)
64	2990	13.67	13.44	2- 62	17	(T)
47 Benzene			CAS#: 71-43-2			
78	1435	13.34	13.34	80-120	100	( )
77	19242	13.68	13.33	0- 53	1341	(QT)
51	195899	13.34	13.34	5- 65	13651	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	16265	15.52	15.36	80-120	100	(T)
43	8564	15.51	15.36	217-277	53	(QT)
100	939472	15.52	15.36	0- 60	5776	(QT)
71 2-Hexanone			CAS#: 591-78-6			
43	25110	16.27	16.27	80-120	100	( )
58	13260	16.27	16.27	26- 86	53	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m620.d
Lab Smp Id: 241336002 Client Smp ID: RE03-10-5897
Inj Date : 21-NOV-2009 16:26
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |241336002|925381|1|VOAF|1|
Misc Info : LANL 5g N/A
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112109v1/1m620.d
Date : 21-NOV-2009 16:26
Client ID: RE03-10-5897
Sample Info: |24133600219253811|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: GRB2
Column diameter: 0.25

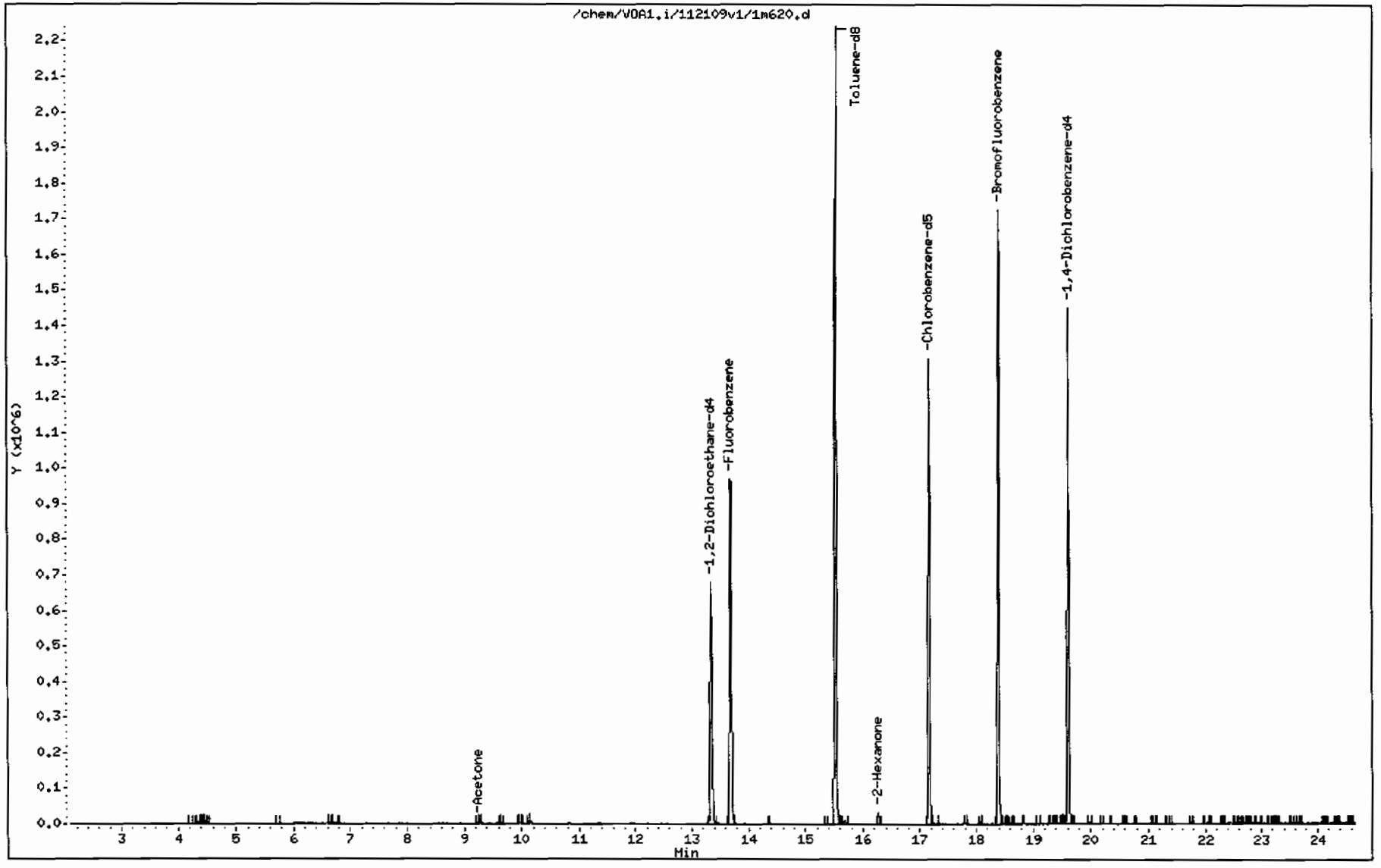

Data File: /chem/VOA1.i/112109v1/1m620.d

Date : 21-NOV-2009 16:26

Client ID: RE03-10-5897

Instrument: VOA1.i

Sample Info: |2413360021925381|1|VOAF|1|

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 2.6 ug/Kg

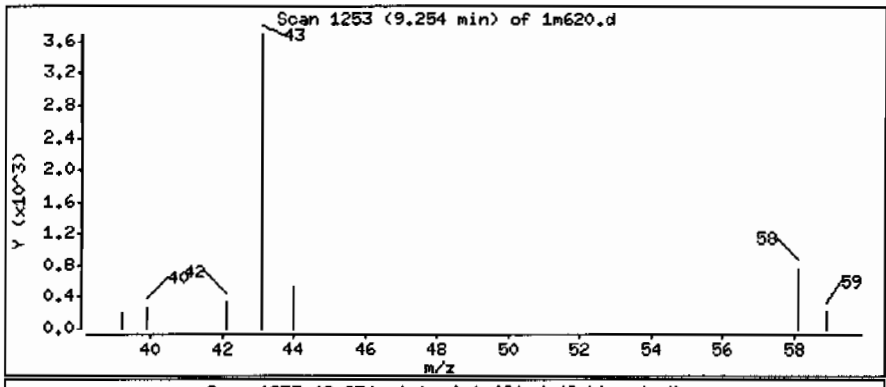

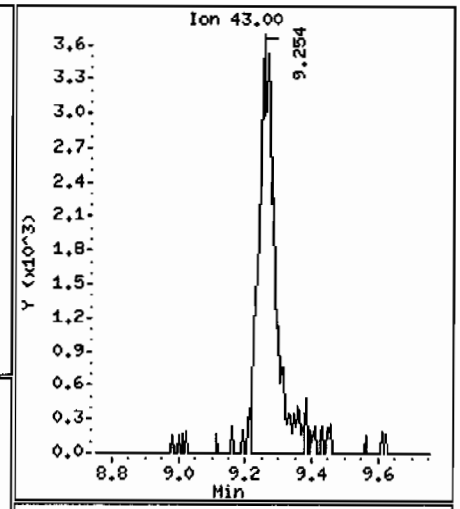

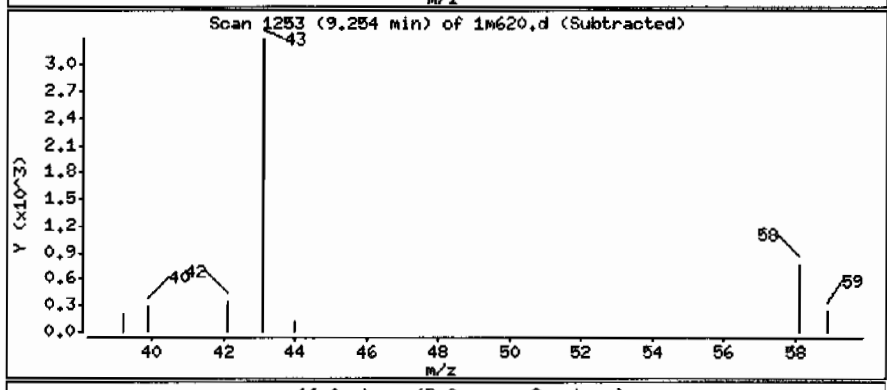

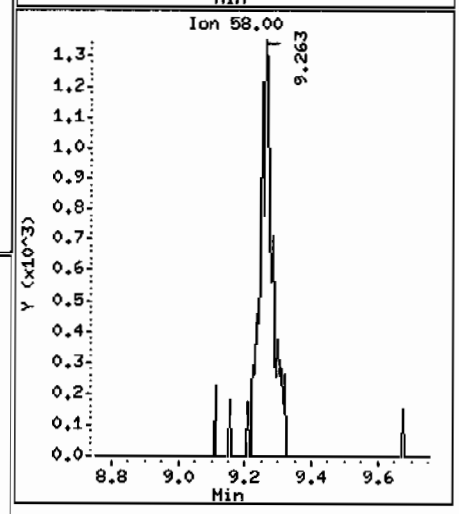

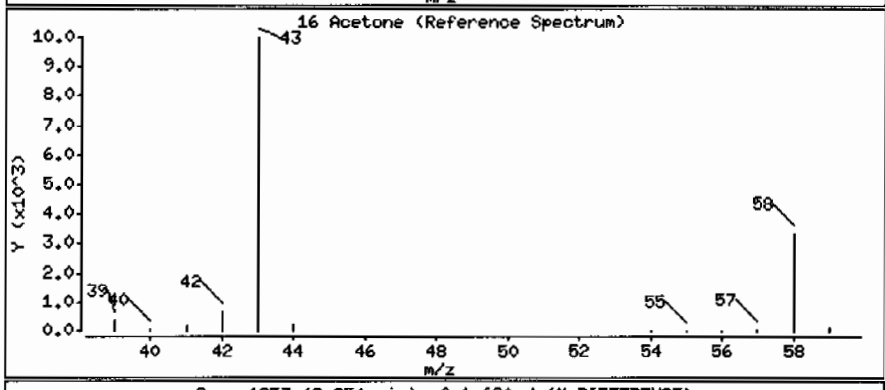

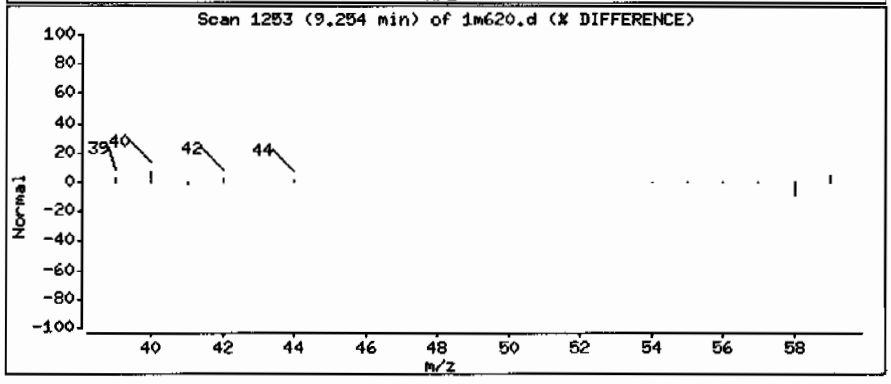

Data File: /chem/VOA1.i/112109v1/1m620.d

Date : 21-NOV-2009 16:26

Client ID: RE03-10-5897

Instrument: VOA1.i

Sample Info: |2413360021925381|1|VOAF|1|

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

71 2-Hexanone

Concentration: 3.9 ug/Kg

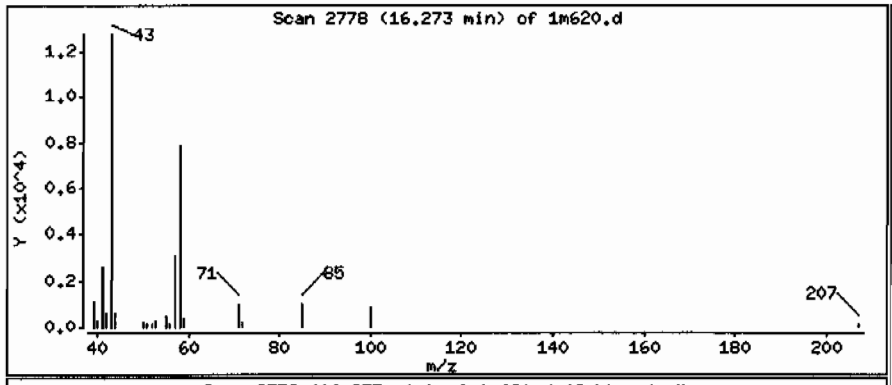

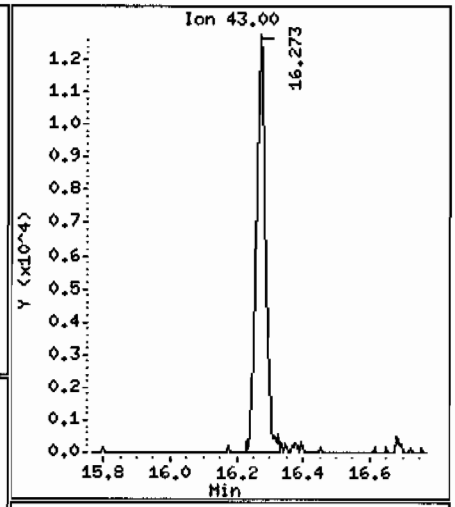

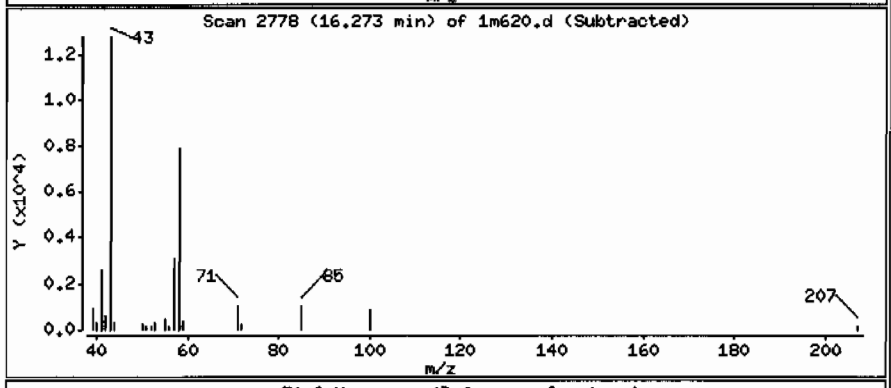

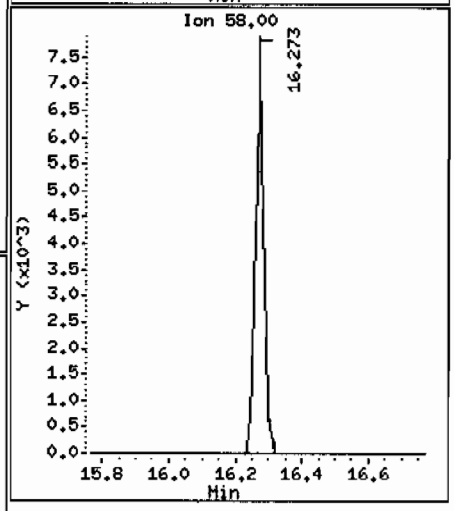

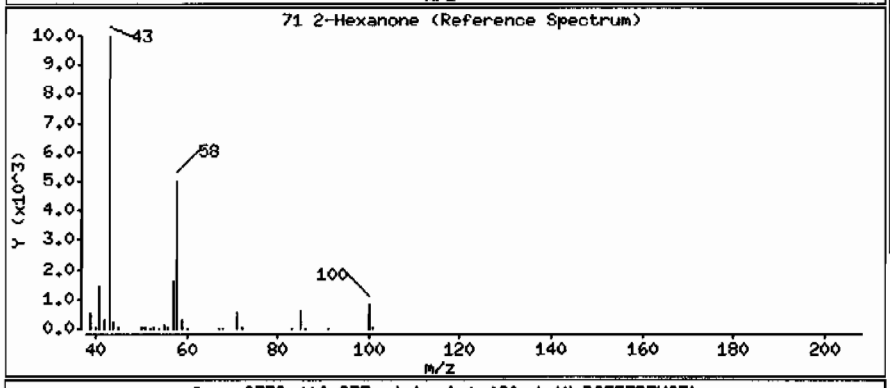

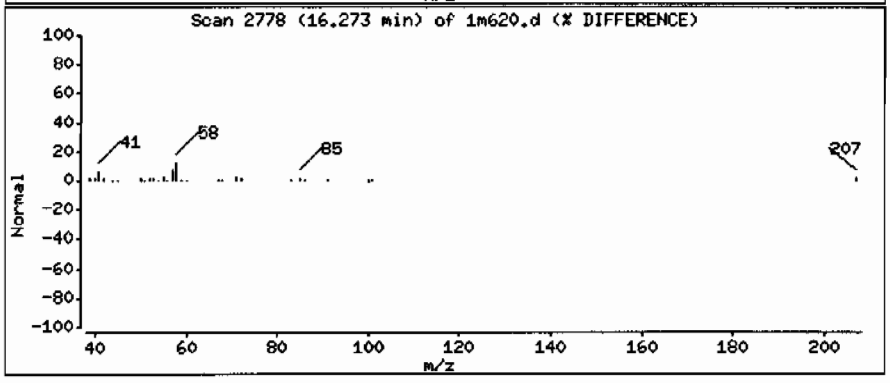

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 21-Nov-2009 14:19

Calibration History

Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Start Cal Date: 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 04:20	ICALsubS	/chem/VOA1.i/111309v1/11519.d
14-NOV-2009 00:18	CALsubL+	/chem/VOA1.i/111309v1/11511.d
Cal Level: 2 , Cal Amount: 2.00000		
14-NOV-2009 04:50	ICALsubS	/chem/VOA1.i/111309v1/11520.d
14-NOV-2009 00:48	CALsubL+	/chem/VOA1.i/111309v1/11512.d
Cal Level: 3 , Cal Amount: 5.00000		
14-NOV-2009 05:20	ICALsubS	/chem/VOA1.i/111309v1/11521.d
14-NOV-2009 01:19	CALsubL+	/chem/VOA1.i/111309v1/11513.d
Cal Level: 4 , Cal Amount: 10.00000		
14-NOV-2009 05:50	ICALsubS	/chem/VOA1.i/111309v1/11522.d
14-NOV-2009 01:49	CALsubL+	/chem/VOA1.i/111309v1/11514.d
Cal Level: 5 , Cal Amount: 20.00000		
14-NOV-2009 06:20	ICALsubS	/chem/VOA1.i/111309v1/11523.d
14-NOV-2009 02:19	CALsubL+	/chem/VOA1.i/111309v1/11515.d
Cal Level: 6 , Cal Amount: 50.00000		
14-NOV-2009 06:51	ICALsubS	/chem/VOA1.i/111309v1/11524.d
14-NOV-2009 02:49	CALsubL+	/chem/VOA1.i/111309v1/11516.d
Cal Level: 7 , Cal Amount: 100.00000		
14-NOV-2009 07:21	ICALsubS	/chem/VOA1.i/111309v1/11525.d
14-NOV-2009 03:19	CALsubL+	/chem/VOA1.i/111309v1/11517.d
Cal Level: 8 , Cal Amount: 200.00000		
13-NOV-2009 23:18	BENZENE+	/chem/VOA1.i/111309v1/11509.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0
21-NOV-2009 10:51 | CALsubL+ | /chem/VOA1.i/112109v1/1m609.d
Ccal Level: 6 , Ccal Amount: 50.0
21-NOV-2009 11:21 | CALsubS+SS | /chem/VOA1.i/112109v1/1m610.d
Ccal Level: 6 , Ccal Amount: 50.0
21-NOV-2009 09:51 | CALsubS+SS | /chem/VOA1.i/112109v1/1m607.d
Ccal Level: 6 , Ccal Amount: 50.0
21-NOV-2009 09:21 | CALsubL+ | /chem/VOA1.i/112109v1/1m606.d
Ccal Level: 6 , Ccal Amount: 50.0
21-NOV-2009 08:20 | CALsubL+ | /chem/VOA1.i/112109v1/1m604.d
Ccal Level: 6 , Ccal Amount: 50.0
21-NOV-2009 08:51 | CALsubS+SS | /chem/VOA1.i/112109v1/1m605.d
Ccal Level: 6 , Ccal Amount: 50.0
21-NOV-2009 07:20 | CALsubL+ | /chem/VOA1.i/112109v1/1m602.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Calibration File Names:
Level 1: /chem/VOA1.i/111309v1/11519.d
Level 2: /chem/VOA1.i/111309v1/11520.d
Level 3: /chem/VOA1.i/111309v1/11521.d
Level 4: /chem/VOA1.i/111309v1/11522.d
Level 5: /chem/VOA1.i/111309v1/11523.d
Level 6: /chem/VOA1.i/111309v1/11524.d
Level 7: /chem/VOA1.i/111309v1/11525.d
Level 8: /chem/VOA1.i/111309v1/11509.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.81227	0.73137	0.78894	0.72498	0.74753	0.76443					
	0.83207	+++++					AVRG		0.77166		5.29958
M 2 1,2-Dichloroethylene (total)	0.34833	0.34223	0.35784	0.33479	0.33448	0.33077					
	0.34829	+++++					AVRG		0.34239		2.83215
M 3 1,3-Dichloropropylene	0.70586	0.72835	0.78706	0.78242	0.78994	0.81396					
	0.86766	+++++					AVRG		0.78218		6.82978
4 Chlorotrifluoroethylene	0.13485	0.14655	0.15206	0.14935	0.17832	0.16711					
	0.16995	+++++					AVRG		0.15688		9.76231
5 Dichlorodifluoromethane	0.38136	0.29154	0.34309	0.34840	0.34284	0.32399					
	0.30590	+++++					AVRG		0.33388		8.90427

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
6 Chloromethane	0.36352	0.41180	0.43566	0.42653	0.42921	0.41976					
	0.40514	+++++					AVRG		0.41309		5.86079
7 Vinyl chloride	0.37166	0.41882	0.39367	0.36887	0.36084	0.34024					
	0.32820	+++++					AVRG		0.36890		8.32266
8 2-Chloro-1,1,1-trifluoroethan	+++++	0.33998	0.31048	0.30901	0.32578	0.34040					
	0.34703	+++++					AVRG		0.32878		4.95745
9 Bromomethane	0.21690	0.22761	0.23531	0.22897	0.22468	0.21559					
	0.20365	+++++					AVRG		0.22182		4.75715
10 Chloroethane	0.19204	0.24536	0.23794	0.23300	0.23259	0.23061					
	0.22732	+++++					AVRG		0.22841		7.46771
11 Trichlorofluoromethane	0.43608	0.52008	0.53827	0.53954	0.53870	0.53853					
	0.52430	+++++					AVRG		0.51936		7.23277
12 Ethyl Ether	13883	16946	33985	58858	108474	271086					
	556612	+++++					WLINR	-0.01699	0.31004		0.99399
13 Acrolein	0.05333	0.04888	0.04523	0.05392	0.05442	+++++					
	+++++	+++++					AVRG		0.05116		7.77888
14 Trichlorotrifluoroethane	0.38443	0.29919	0.26333	0.27368	0.28733	0.26637					
	0.27318	+++++					AVRG		0.29250		14.49372

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 1,1-Dichloroethylene	0.66544	0.72486	0.72849	0.75349	0.72602	0.70860					
	0.70169	+++++					AVRG		0.71551		3.85053
16 Acetone	0.27960	0.29041	0.29028	0.29519	0.28855	0.29877					
	0.28827	+++++					AVRG		0.29015		2.07413
17 Isopropyl Alcohol	+++++	0.01880	0.01931	0.02045	0.01791	0.02228					
	0.02251	+++++					AVRG		0.02021		9.32492
18 Iodomethane	0.47134	0.45473	0.46938	0.46784	0.46221	0.46114					
	0.45366	+++++					AVRG		0.46290		1.51011
19 Carbon disulfide	0.96269	0.92797	0.89305	0.94299	0.92514	0.93790					
	0.86070	+++++					AVRG		0.92149		3.70371
20 Allyl chloride	0.09501	0.09361	0.09290	0.10507	0.12042	0.13013					
	+++++	+++++					AVRG		0.10619		14.81176
21 Methyl acetate	0.26593	0.25494	0.25595	0.25694	0.24207	0.22786					
	0.23511	+++++					AVRG		0.24840		5.49716
22 Acetonitrile	0.03907	0.03505	0.03613	0.03588	0.03452	0.03371					
	0.03550	+++++					AVRG		0.03569		4.76986
23 Methylene chloride	+++++	24051	41818	70969	131447	316200					
	681164	+++++					LINR	-0.03083	0.35083		0.99980

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
24 tert-Butyl Alcohol	0.03736	0.03924	0.03623	0.04125	0.03045	0.04033					
	0.04086	+++++					AVRG		0.03796		9.99389
25 tert-Butyl methyl ether	1.02944	1.16134	1.14779	1.21755	1.11739	1.12980					
	1.16499	+++++					AVRG		1.13833		5.06877
26 trans-1,2-Dichloroethylene	0.34072	0.33605	0.34935	0.32977	0.32190	0.31967					
	0.32891	+++++					AVRG		0.33234		3.15938
27 Acrylonitrile	0.11445	0.10516	0.09582	0.09726	0.11027	0.10992					
	0.11442	+++++					AVRG		0.10676		7.18031
28 Isopropyl ether	+++++	1.14017	1.11343	1.15572	1.20439	1.22887					
	1.32967	+++++					AVRG		1.19537		6.54156
29 Vinyl acetate	0.47200	0.53409	0.59574	0.55445	0.52377	0.60780					
	0.57002	+++++					AVRG		0.55113		8.40353
30 1,1-Dichloroethane	0.71917	0.72889	0.80378	0.74289	0.72120	0.71174					
	0.74337	+++++					AVRG		0.73872		4.20348
31 2-Chloro-1,3-butadiene	0.65721	0.59215	0.56354	0.55911	0.62777	0.61361					
	0.65818	+++++					AVRG		0.61022		6.67178
32 Ethyl tert-butyl ether	+++++	1.12815	1.09366	1.08936	1.06318	1.18087					
	1.29073	+++++					AVRG		1.14099		7.34719

GEL Laboratories LLC

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Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
33 2,2-Dichloropropane	0.48989	0.52491	0.58120	0.54053	0.55119	0.53778					
	0.55150	+++++					AVRG		0.53957		5.18583
34 Ethyl acetate	0.33965	0.28932	0.26285	0.29260	0.27580	0.29649					
	0.28868	+++++					AVRG		0.29220		8.17282
35 2-Butanone	0.25793	0.27740	0.26965	0.27914	0.28942	0.30924					
	0.30740	+++++					AVRG		0.28431		6.68266
36 cis-1,2-Dichloroethylene	0.35593	0.34838	0.36631	0.33981	0.34705	0.34186					
	0.36768	+++++					AVRG		0.35243		3.18020
37 Propionitrile	0.04783	0.04230	0.03731	0.04306	0.04379	0.04424					
	0.04431	+++++					AVRG		0.04326		7.28248
38 Tetrahydrofuran	0.23152	0.20954	0.20440	0.19096	0.19197	0.21633					
	0.18821	+++++					AVRG		0.20471		7.72518
39 Bromochloromethane	0.13887	0.13222	0.13837	0.14209	0.13930	0.14049					
	0.14893	+++++					AVRG		0.14004		3.56145
40 Methacrylonitrile	0.24963	0.22678	0.21065	0.22890	0.23535	0.24087					
	0.23039	+++++					AVRG		0.23180		5.27167
41 Chloroform	0.74775	0.77887	0.82572	0.78772	0.78034	0.77383					
	0.81096	+++++					AVRG		0.78646		3.24006

GEL Laboratories LLC

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Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
42 Cyclohexane	0.66345	0.64389	0.63890	0.66407	0.64404	0.63011					
	0.64678	+++++					AVRG		0.64732		1.92383
43 1,1,1-Trichloroethane	0.54517	0.62302	0.63779	0.62522	0.62893	0.61320					
	0.63805	+++++					AVRG		0.61591		5.25541
44 Carbon tetrachloride	0.56294	0.58644	0.63641	0.63628	0.63185	0.62091					
	0.64429	+++++					AVRG		0.61702		4.94513
45 1,1-Dichloropropene	0.55100	0.55607	0.56975	0.55980	0.55465	0.55195					
	0.58405	+++++					AVRG		0.56104		2.12886
46 Isobutyl alcohol	0.01033	0.01111	0.01036	0.01037	0.00985	0.01223					
	0.01175	+++++					AVRG		0.01086		7.98726
47 Benzene	36755	49089	122794	236505	464924	1202457					
	2698240	23667					LINR	0.00708	1.40915		0.99937
49 Methyl tert-amyl ether	+++++	0.88273	0.85934	0.84815	0.87620	0.96177					
	1.02973	+++++					AVRG		0.90966		7.81866
50 Cyclohexene	0.53615	0.51960	0.53427	0.54352	0.53716	0.52183					
	0.54823	+++++					AVRG		0.53439		1.96596
51 1,2-Dichloroethane	0.63028	0.70033	0.72243	0.70806	0.70200	0.69617					
	0.69894	+++++					AVRG		0.69403		4.24176

GEL Laboratories LLC

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Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
53 n-Butyl alcohol	0.00840	0.00793	0.00871	0.00963	0.00810	0.00978					
	0.01083	+++++					AVRG		0.00905		11.70077
54 Trichloroethylene	0.38407	0.37942	0.39497	0.37726	0.38205	0.37012					
	0.39468	+++++					AVRG		0.38323		2.36496
55 Methylcyclohexane	0.61415	0.59438	0.58177	0.58292	0.58847	0.57365					
	0.60973	+++++					AVRG		0.59215		2.53002
56 Methyl methacrylate	0.21424	0.18730	0.18064	0.19254	0.19905	0.20650					
	0.20620	+++++					AVRG		0.19807		6.00920
57 1,2-Dichloropropane	0.39078	0.35768	0.35900	0.35500	0.35022	0.35218					
	0.37196	+++++					AVRG		0.36240		3.96416
58 1,4-Dioxane	0.00305	0.00245	0.00266	0.00286	0.00318	0.00288					
	0.00289	+++++					AVRG		0.00285		8.49652
59 Dibromomethane	0.20277	0.23410	0.23268	0.22085	0.21845	0.22248					
	0.23307	+++++					AVRG		0.22349		5.00706
60 Bromodichloromethane	0.51667	0.56051	0.62592	0.60782	0.59837	0.61544					
	0.63717	+++++					AVRG		0.59456		7.08633
61 2-Chloroethylvinyl ether	2224	2878	11313	21547	54379	210498					
	505362	+++++					LINR	0.39134	0.05430		0.99355

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
62 2-Nitropropane	0.10211	0.09608	0.09548	0.10761	0.11835	0.11732					
	0.11890	+++++					AVRG		0.10798		9.61347
63 cis-1,3-Dichloropropylene	0.56705	0.57716	0.62105	0.61985	0.62451	0.64527					
	0.67992	+++++					AVRG		0.61926		6.21449
64 4-Methyl-2-pentanone	0.15705	0.17262	0.17271	0.18512	0.18978	0.21108					
	0.20813	+++++					AVRG		0.18521		10.62392
66 Toluene	1.14017	1.06414	1.10843	1.06181	1.07135	1.08649					
	1.15420	+++++					AVRG		1.09808		3.39614
67 Ethyl methacrylate	0.52322	0.48434	0.48427	0.53223	0.51154	0.52546					
	0.51582	+++++					AVRG		0.51098		3.79655
68 trans-1,3-Dichloropropylene	0.69838	0.72713	0.78298	0.78308	0.78831	0.81706					
	0.87099	+++++					AVRG		0.78113		7.23969
69 1,1,2-Trichloroethane	0.31590	0.30169	0.29945	0.29278	0.30402	0.30261					
	0.32301	+++++					AVRG		0.30563		3.37459
70 Tetrachloroethylene	0.34151	0.33330	0.33889	0.32547	0.32471	0.32346					
	0.34458	+++++					AVRG		0.33313		2.62174
71 2-Hexanone	0.42866	0.44990	0.45866	0.46921	0.50138	0.56178					
	0.55722	+++++					AVRG		0.48954		10.73922

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INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
72 1,3-Dichloropropane	0.67890	0.68207	0.69734	0.65590	0.66618	0.66440					
	0.71069	+++++					AVRG		0.67935		2.85695
73 Dibromochloromethane	0.38469	0.38394	0.44512	0.43782	0.44944	0.47113					
	0.49706	+++++					AVRG		0.43846		9.55461
74 1,2-Dibromoethane	0.34045	0.34527	0.36316	0.35106	0.36203	0.36864					
	0.38538	+++++					AVRG		0.35943		4.26461
75 1-Chlorohexane	+++++	0.39312	0.39282	0.32524	0.40104	0.42060					
	0.43305	+++++					AVRG		0.39431		9.49685
77 Chlorobenzene	1.21373	1.15844	1.14111	1.07587	1.08040	1.10429					
	1.17692	+++++					AVRG		1.13582		4.54042
78 Ethylbenzene	2.40687	2.33669	2.47268	2.23463	2.29813	2.32214					
	2.46303	+++++					AVRG		2.36203		3.74714
79 1,1,1,2-Tetrachloroethane	0.42049	0.43141	0.45326	0.42496	0.43613	0.44494					
	0.47082	+++++					AVRG		0.44029		3.98244
80 m,p-Xylenes	0.80780	0.74989	0.79953	0.72779	0.75646	0.76931					
	0.84008	+++++					AVRG		0.77870		4.98818
81 o-Xylene	0.82120	0.69429	0.76774	0.71936	0.72965	0.75467					
	0.81606	+++++					AVRG		0.75757		6.33656

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
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Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
82 Styrene	1.30914	1.18192	1.31601	1.23212	1.27501	1.34034					
	1.43319	+++++					AVRG		1.29825		6.19894
83 Bromoform	0.42221	0.45244	0.46276	0.49988	0.51775	0.53547					
	0.59142	+++++					AVRG		0.49742		11.48564
84 Isopropylbenzene	3.92962	3.81106	4.36021	3.96245	4.03248	4.02489					
	4.35218	+++++					AVRG		4.06756		5.17225
85 cis-1,4-Dichloro-2-butene	0.30225	0.29462	0.29877	0.29084	0.32781	0.32850					
	0.31209	+++++					AVRG		0.30784		4.99910
86 Cyclohexanone	12846	23538	58910	150579	381845	+++++					
	+++++	+++++					LINR	0.49988	0.04909		0.99135
88 1,1,2,2-Tetrachloroethane	0.75610	0.74369	0.81649	0.79419	0.78783	0.79158					
	0.86202	+++++					AVRG		0.79313		4.92083
89 n-Propylbenzene	4.79404	4.78851	5.23968	4.82134	4.89570	4.92964					
	5.21295	+++++					AVRG		4.95455		3.89310
90 trans-1,4-Dichloro-2-butene	0.29812	0.31352	0.28782	0.26998	0.31695	0.31835					
	0.29727	+++++					AVRG		0.30029		5.87400
91 Bromobenzene	0.85156	0.84147	0.85882	0.81020	0.81428	0.82700					
	0.88455	+++++					AVRG		0.84112		3.13963

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
92 1,2,3-Trichloropropane	0.28022	0.26897	0.25372	0.25204	0.25423	0.25360					
	0.26290	+++++					AVRG		0.26081		4.05216
93 1,3,5-Trimethylbenzene	3.43446	3.49218	3.68233	3.44662	3.56449	3.59826					
	3.86366	+++++					AVRG		3.58314		4.23441
94 2-Chlorotoluene	3.47821	3.57761	3.79930	3.46640	3.52829	3.52154					
	3.75641	+++++					AVRG		3.58968		3.73610
95 4-Chlorotoluene	3.35203	3.17426	3.34752	3.10435	3.16879	3.17490					
	3.33681	+++++					AVRG		3.23695		3.22667
96 tert-Butylbenzene	2.87089	2.74977	2.84522	2.66297	2.72776	2.70387					
	2.96377	+++++					AVRG		2.78918		3.84011
97 1,2,4-Trimethylbenzene	3.70191	3.60410	3.79540	3.52090	3.56225	3.61987					
	3.87066	+++++					AVRG		3.66787		3.47855
98 Pentachloroethane	0.32060	0.31703	0.32398	0.24876	0.30297	0.37777					
	0.29193	+++++					AVRG		0.31186		12.45420
99 sec-Butylbenzene	4.44800	4.34644	4.60966	4.23567	4.42485	4.37976					
	4.71803	+++++					AVRG		4.45177		3.66292
100 4-Isopropyltoluene	3.36328	3.22054	3.51684	3.17589	3.32966	3.36325					
	3.58839	+++++					AVRG		3.36541		4.38795

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
101 1,3-Dichlorobenzene	1.67374	1.55428	1.66831	1.53164	1.55944	1.58328					
	1.67251	+++++					AVRG		1.60617		3.91972
103 1,4-Dichlorobenzene	1.76616	1.66887	1.68200	1.51979	1.57239	1.60865					
	1.70636	+++++					AVRG		1.64632		5.12085
104 Benzyl chloride	1.62969	1.55776	1.60390	1.34298	1.74375	1.69429					
	1.59116	+++++					AVRG		1.59479		8.02116
105 n-Butylbenzene	3.64538	3.69207	3.98159	3.55254	3.74217	3.76878					
	3.99375	+++++					AVRG		3.76804		4.39399
106 1,2-Dichlorobenzene	1.66043	1.49940	1.55636	1.46965	1.48387	1.49852					
	1.59506	+++++					AVRG		1.53761		4.53952
107 bis(2-Chloroisopropyl)ether	0.37106	0.36662	0.32099	0.32780	0.38946	0.39192					
	0.35359	+++++					AVRG		0.36021		7.73065
108 1,2-Dibromo-3-chloropropane	0.14172	0.13191	0.14045	0.15188	0.15917	0.15194					
	0.18132	+++++					AVRG		0.15120		10.62760
109 1,2,4-Trichlorobenzene	1.16045	1.14150	1.16560	1.09295	1.12242	1.11980					
	1.19388	+++++					AVRG		1.14237		2.96216
110 Hexachlorobutadiene	0.84192	0.81403	0.87311	0.75366	0.80851	0.77001					
	0.79946	+++++					AVRG		0.80867		5.02102

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
111 Naphthalene	2.12943	2.03059	1.99480	2.09592	2.16328	2.08234					
	2.33666	+++++					AVRG		2.11900		5.26088
112 1,2,3-Trichlorobenzene	0.93318	0.98133	0.98253	0.97572	0.96237	0.91436					
	0.97897	+++++					AVRG		0.96121		2.80673
$ 48 1,2-Dichloroethane-d4	0.52359	0.62803	0.63025	0.66045	0.64311	0.66027					
	0.60778	+++++					AVRG		0.62193		7.59277
$ 65 Toluene-d8	1.93610	2.03435	2.05225	2.06640	2.00752	2.08350					
	2.06482	+++++					AVRG		2.03499		2.46206
$ 87 Bromofluorobenzene	1.60564	1.67611	1.67667	1.73493	1.66503	1.69222					
	1.70106	+++++					AVRG		1.67881		2.35520

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Cal Date : 21-Nov-2009 11:43 gel00735

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 14-NOV-2009 08:52
Lab File ID: 11528.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091113-19 Quant Type: ISTD
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.14763	0.14763	0.010	-5.90175	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.36322	0.36322	0.010	10.47439	30.00000	Averaged
13 Acrolein	0.05116	0.04667	0.04667	0.001	-8.77636	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.27186	0.27186	0.030	-7.05527	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02305	0.02305	0.000	14.05893	40.00000	Averaged
20 Allyl chloride	0.10619	0.13404	0.13404	0.010	26.22620	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.04061	0.04061	0.010	6.98257	40.00000	Averaged
27 Acrylonitrile	0.10676	0.10533	0.10533	0.010	-1.33680	30.00000	Averaged
28 Isopropyl ether	1.19537	1.28737	1.28737	0.010	7.69603	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.60811	0.60811	0.010	-0.34717	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.22940	1.22940	0.010	7.74850	30.00000	Averaged
37 Propionitrile	0.04326	0.04095	0.04095	0.010	-5.34093	30.00000	Averaged
34 Ethyl acetate	0.29220	0.26253	0.26253	0.010	-10.15296	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.22054	0.22054	0.010	-4.85685	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.19333	0.19333	0.010	-5.55867	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01041	0.01041	0.001	-4.14907	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	0.98494	0.98494	0.010	8.27576	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.19115	0.19115	0.010	-3.48960	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.48311	0.48311	0.010	-5.45482	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.40080	0.40080	0.000	1.64453	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00267	0.00267	0.001	-6.48301	40.00000	Averaged
62 2-Nitropropane	0.10798	0.10490	0.10490	0.000	-2.85062	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.29808	0.29808	0.010	-3.17173	30.00000	Averaged
86 Cyclohexanone	555	1250	0.02080	0.010	-55.62459	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.28505	0.28505	0.010	-5.07396	30.00000	Averaged
98 Pentachloroethane	0.31186	0.25219	0.25219	0.010	-19.13515	30.00000	Averaged
104 Benzyl chloride	1.59479	1.35725	1.35725	0.010	-14.89504	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.35032	0.35032	0.010	-2.74499	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.54180	0.54180	0.010	-12.88362	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.03543	2.03543	0.010	0.02147	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.62823	1.62823	0.010	-3.01305	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 14-NOV-2009 08:52
Lab File ID: 11528.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091113-19 Quant Type: ISTD
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

Average %D / Drift Results.
Calculated Average %D/Drift = 8.75563
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111309v1/11528.d
Lab Smp Id: W1VM091113-19 Client Smp ID: SHORTICV
Inj Date : 14-NOV-2009 08:52
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091113-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091023-08A/UVM091105-02A
Comment :
Method : /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m
Meth Date : 18-Nov-2009 11:01 eh1 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	493699	150.000	141
8 2-Chloro-1,1,1-trifluoroethane	118	6.298	6.298	(0.460)	1214708	150.000	166
13 Acrolein	56	8.959	8.959	(0.655)	260116	250.000	228
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1515317	250.000	232
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1284719	2500.00	2850
20 Allyl chloride	76	9.856	9.856	(0.720)	747101	250.000	316
24 tert-Butyl Alcohol	59	10.202	10.202	(0.745)	2263586	2500.00	2670
27 Acrylonitrile	53	10.671	10.671	(0.780)	587086	250.000	247
28 Isopropyl ether	45	11.201	11.201	(0.818)	1435106	50.0000	53.8
31 2-Chloro-1,3-butadiene	53	11.399	11.399	(0.833)	677890	50.0000	49.8
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1370484	50.0000	53.9
37 Propionitrile	54	12.407	12.407	(0.906)	228260	250.000	237
34 Ethyl acetate	43	12.167	12.167	(0.889)	1463298	250.000	225
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1229233	250.000	238
38 Tetrahydrofuran	42	12.545	12.545	(0.640)	489608	250.000	236

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
46 Isobutyl alcohol	41	13.111	13.111	(0.958)	580033	2500.00	2400
49 Methyl tert-amyl ether	73	13.350	13.350	(0.975)	1097966	50.0000	54.1
56 Methyl methacrylate	69	14.441	14.441	(1.055)	1065456	250.000	241
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2164928	250.000	236
75 1-Chlorohexane	55	17.033	17.033	(1.244)	446791	50.0000	50.8
58 1,4-Dioxane	88	14.547	14.547	(1.063)	148599	2500.00	2340
62 2-Nitropropane	43	15.081	15.081	(1.102)	584679	250.000	243
85 cis-1,4-Dichloro-2-butene	53	18.275	18.275	(0.932)	754892	250.000	242
86 Cyclohexanone	55	18.386	18.386	(1.071)	466077	1250.00	555
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	721901	250.000	237
98 Pentachloroethane	167	19.201	19.201	(0.979)	638677	250.000	202
104 Benzyl chloride	91	19.776	19.776	(1.008)	3437283	250.000	213
107 bis(2-Chloroisopropyl)ether	45	20.167	20.167	(1.028)	887198	250.000	243
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1114758	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	896248	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	506508	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	603976	50.0000	43.6
$ 65 Toluene-d8	98	15.523	15.523	(0.904)	1824247	50.0000	50.0
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	824709	50.0000	48.5

Data File: /chem/VOA1.i/111309v1/11528.d
Date : 14-NOV-2009 08:52
Client ID: SHORTICV
Sample Info: |W1VM091113-19|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

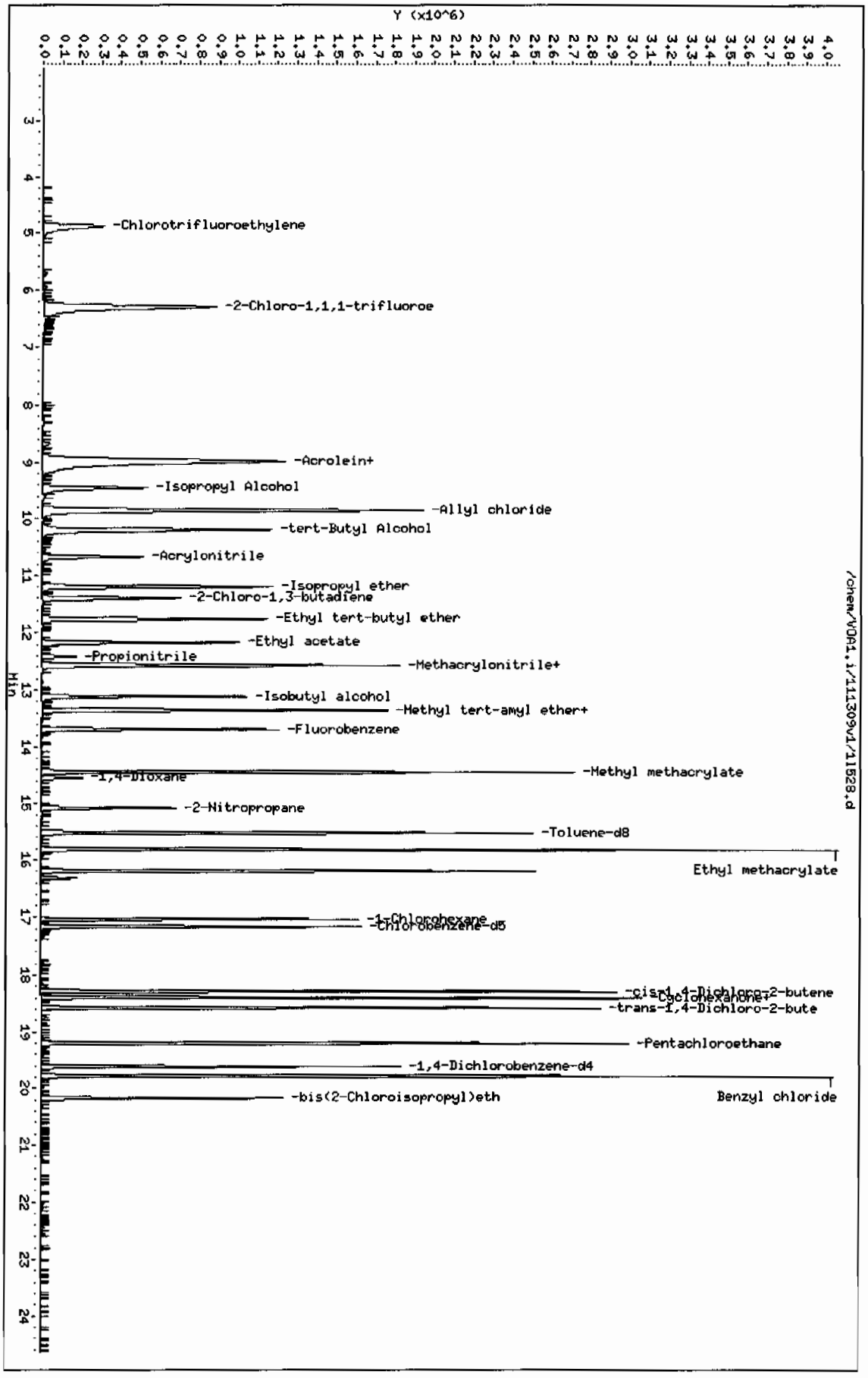

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M	1 Xylenes (total)	0.77166	0.78659	0.78659	0.050	1.93501	30.00000	Averaged
M	2 1,2-Dichloroethylene (total	0.34239	0.34829	0.34829	0.050	1.72438	30.00000	Averaged
M	3 1,3-Dichloropropylene	0.78218	0.76082	0.76082	0.050	-2.73046	30.00000	Averaged
	5 Dichlorodifluoromethane	0.33388	0.28961	0.28961	0.050	-13.25713	30.00000	Averaged
	6 Chloromethane	0.41309	0.34567	0.34567	0.100	-16.32056	30.00000	Averaged spcc
	7 Vinyl chloride	0.36890	0.30586	0.30586	0.050	-17.08914	20.00000	Averaged ccc
	9 Bromomethane	0.22174	0.21949	0.21949	0.050	-1.01260	30.00000	Averaged
	10 Chloroethane	0.22841	0.24501	0.24501	0.050	7.27015	30.00000	Averaged
	11 Trichlorofluoromethane	0.51936	0.53920	0.53920	0.050	3.81924	30.00000	Averaged
	12 Ethyl Ether	45.83993	50.00000	0.28952	0.010	-8.32014	30.00000	Wt Linear
	16 Acetone	0.29015	0.19861	0.19861	0.000	-31.55015	40.00000	Averaged
	22 Acetonitrile	0.03569	0.03488	0.03488	0.010	-2.28372	30.00000	Averaged
	15 1,1-Dichloroethylene	0.71551	0.66262	0.66262	0.050	-7.39264	20.00000	Averaged ccc
	21 Methyl acetate	0.24838	0.21471	0.21471	0.010	-13.55590	40.00000	Averaged
	18 Iodomethane	0.46290	0.47705	0.47705	0.050	3.05775	30.00000	Averaged
	23 Methylene chloride	49.69453	50.00000	0.35951	0.000	-0.61094	30.00000	Linear
	19 Carbon disulfide	0.92149	1.06038	1.06038	0.050	15.07243	30.00000	Averaged
	25 tert-Butyl methyl ether	1.13833	1.01424	1.01424	0.050	-10.90101	30.00000	Averaged
	26 trans-1,2-Dichloroethylene	0.33234	0.34226	0.34226	0.050	2.98628	30.00000	Averaged
	29 Vinyl acetate	0.55113	0.66089	0.66089	0.010	19.91591	40.00000	Averaged
	30 1,1-Dichloroethane	0.73872	0.68036	0.68036	0.100	-7.89939	30.00000	Averaged spcc
	35 2-Butanone	0.28431	0.21356	0.21356	0.030	-24.88572	40.00000	Averaged
	36 cis-1,2-Dichloroethylene	0.35243	0.35432	0.35432	0.050	0.53641	30.00000	Averaged
	33 2,2-Dichloropropane	0.53957	0.52117	0.52117	0.050	-3.41129	30.00000	Averaged
	41 Chloroform	0.78646	0.70224	0.70224	0.010	-10.70855	20.00000	Averaged ccc
	39 Bromochloromethane	0.14004	0.14700	0.14700	0.010	4.97038	30.00000	Averaged
	43 1,1,1-Trichloroethane	0.61591	0.56828	0.56828	0.010	-7.73277	30.00000	Averaged
	42 Cyclohexane	0.64732	0.70592	0.70592	0.010	9.05253	30.00000	Averaged
	45 1,1-Dichloropropene	0.56104	0.55571	0.55571	0.010	-0.95042	30.00000	Averaged
	53 n-Butyl alcohol	0.00905	0.00962	0.00962	0.001	6.25892	40.00000	Averaged
	44 Carbon tetrachloride	0.61702	0.57859	0.57859	0.010	-6.22742	30.00000	Averaged
$	48 1,2-Dichloroethane-d4	0.62106	0.48336	0.48336	0.010	-22.17142	30.00000	Averaged
	51 1,2-Dichloroethane	0.69403	0.55944	0.55944	0.010	-19.39207	30.00000	Averaged
	47 Benzene	50.28606	50.00000	1.40724	0.010	0.57211	30.00000	Linear
	50 Cyclohexene	0.53439	0.52276	0.52276	0.010	-2.17678	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.37928	0.37928	0.010	-1.03062	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.35751	0.35751	0.010	-1.35037	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.64311	0.64311	0.010	8.60482	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.53560	0.53560	0.010	-9.91614	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20094	0.20094	0.010	-10.08947	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	197	250	0.03848	0.000	-21.31056	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.16731	0.16731	0.010	-9.66493	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.60977	0.60977	0.010	-1.53290	30.00000	Averaged	
$	65 Toluene-d8	2.03499	1.97166	1.97166	0.010	-3.11196	30.00000	Averaged	
	66 Toluene	1.09808	1.09311	1.09311	0.010	-0.45345	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.75103	0.75103	0.010	-3.85367	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.29722	0.29722	0.010	-2.75287	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.37565	0.37565	0.010	-23.26575	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.63720	0.63720	0.010	-6.20551	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34435	0.34435	0.010	3.36940	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.42649	0.42649	0.010	-2.73068	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.35320	0.35320	0.010	-1.73152	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.16153	1.16153	0.300	2.26365	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.42501	0.42501	0.010	-3.47076	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.28751	2.28751	0.010	-3.15483	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.80163	0.80163	0.010	2.94558	30.00000	Averaged	
	81 o-Xylene	0.75757	0.75650	0.75650	0.010	-0.14143	30.00000	Averaged	
	82 Styrene	1.29825	1.33826	1.33826	0.010	3.08236	30.00000	Averaged	
	83 Bromoform	0.49742	0.51659	0.51659	0.100	3.85450	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	4.09104	4.09104	0.010	0.57739	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.80201	0.80201	0.300	1.11984	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.59852	1.59852	0.010	-4.78243	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.22267	0.22267	0.010	-14.62239	30.00000	Averaged	
	91 Bromobenzene	0.84113	0.86234	0.86234	0.010	2.52236	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.95567	4.95567	0.010	0.02259	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.47589	3.47589	0.010	-3.16985	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.53161	3.53161	0.010	-1.43822	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.13706	3.13706	0.010	-3.08595	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.83816	2.83816	0.010	1.75609	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.59991	3.59991	0.010	-1.85290	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.49320	4.49320	0.010	0.93061	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.51635	3.51635	0.010	4.48521	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.71300	1.71300	0.010	6.65131	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.70171	1.70171	0.010	3.36466	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.75570	3.75570	0.010	-0.32761	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.59378	1.59378	0.010	3.65299	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.16033	0.16033	0.010	6.03864	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20851	1.20851	0.010	5.78950	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.82340	0.82340	0.010	1.82157	30.00000	Averaged
111 Naphthalene	2.11900	2.27355	2.27355	0.010	7.29312	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.98434	0.98434	0.010	2.40643	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.36236
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111609v1/1m108ICV.d
Lab Smp Id: W1VM091116-05 Client Smp ID: ICV
Inj Date : 16-NOV-2009 14:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091116-05|CCV/LCS/ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m
Meth Date : 01-Dec-2009 16:53 slg Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2088100	150.000	153
M 2 1,2-Dichloroethylene (total)	96				778988	100.000	102
M 3 1,3-Dichloropropylene	75				1346471	100.000	97.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	323873	50.0000	43.4
6 Chloromethane	50	5.550	5.550	(0.405)	386561	50.0000	41.8
7 Vinyl chloride	62	5.923	5.923	(0.433)	342039	50.0000	41.4
9 Bromomethane	96	6.948	6.948	(0.508)	245458	50.0000	49.5
10 Chloroethane	64	7.215	7.215	(0.527)	273997	50.0000	53.6
11 Trichlorofluoromethane	101	7.836	7.836	(0.573)	602979	50.0000	51.9
12 Ethyl Ether	59	8.476	8.476	(0.619)	323763	50.0000	45.8
16 Acetone	43	9.254	9.254	(0.676)	1110521	250.000	171
22 Acetonitrile	41	9.976	9.976	(0.729)	975078	1250.00	1220
15 1,1-Dichloroethylene	61	9.093	9.093	(0.664)	741002	50.0000	46.3
21 Methyl acetate	43	9.838	9.838	(0.719)	1200537	250.000	216
18 Iodomethane	142	9.470	9.470	(0.692)	2667438	250.000	258

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Methylene chloride	84	10.137	10.137	(0.741)	402034	50.0000	49.7
	19 Carbon disulfide	76	9.571	9.571	(0.699)	5929090	250.000	288
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1134219	50.0000	44.5
	26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	382752	50.0000	51.5
	29 Vinyl acetate	43	11.297	11.297	(0.825)	3695328	250.000	300
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	760846	50.0000	46.0
	35 2-Butanone	43	12.186	12.186	(0.890)	1194107	250.000	188
	36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	396236	50.0000	50.3
	33 2,2-Dichloropropane	77	12.158	12.158	(0.888)	582817	50.0000	48.3
	41 Chloroform	83	12.614	12.614	(0.922)	785308	50.0000	44.6
	39 Bromochloromethane	128	12.559	12.559	(0.918)	164387	50.0000	52.5
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	635509	50.0000	46.1
	42 Cyclohexane	56	12.839	12.839	(0.938)	789422	50.0000	54.5
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	621443	50.0000	49.5
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1075626	5000.00	5310
	44 Carbon tetrachloride	117	13.024	13.024	(0.952)	647037	50.0000	46.9
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	540540	50.0000	38.9
	51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	625621	50.0000	40.3
	47 Benzene	78	13.337	13.337	(0.974)	1573713	50.0000	50.3
	50 Cyclohexene	54	13.396	13.396	(0.979)	584602	50.0000	48.9
*	52 Fluorobenzene	96	13.686	13.686	(1.000)	1118294	50.0000	
	54 Trichloroethylene	95	14.119	14.119	(1.032)	424142	50.0000	49.5
	57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	399800	50.0000	49.3
	55 Methylcyclohexane	83	14.285	14.285	(1.044)	719182	50.0000	54.3
	60 Bromodichloromethane	83	14.754	14.754	(1.078)	598959	50.0000	45.0
	59 Dibromomethane	93	14.621	14.621	(1.068)	224707	50.0000	45.0
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	215138	250.000	197
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	740258	250.000	226
	63 cis-1,3-Dichloropropylene	75	15.261	15.261	(1.115)	681900	50.0000	49.2
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1744680	50.0000	48.4
	66 Toluene	92	15.597	15.597	(0.909)	967265	50.0000	49.8
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	664571	50.0000	48.1
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	263004	50.0000	48.6
	71 2-Hexanone	43	16.269	16.269	(0.948)	1662015	250.000	192
	72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	563840	50.0000	46.9
	70 Tetrachloroethylene	164	16.195	16.195	(0.944)	304712	50.0000	51.7
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	377389	50.0000	48.6
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	312543	50.0000	49.1
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	884878	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	1027816	50.0000	51.1
	79 1,1,1,2-Tetrachloroethane	131	17.263	17.263	(1.006)	376079	50.0000	48.3
	78 Ethylbenzene	91	17.222	17.222	(1.003)	2024165	50.0000	48.4
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1418694	100.000	103
	81 o-Xylene	106	17.783	17.783	(1.036)	669406	50.0000	49.9
	82 Styrene	104	17.806	17.806	(1.038)	1184200	50.0000	51.5
	83 Bromoform	173	18.105	18.105	(0.923)	253734	50.0000	51.9
	84 Isopropylbenzene	105	18.133	18.133	(0.924)	2009401	50.0000	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.510	18.510	(0.944)	393924	50.0000	50.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	785147	50.0000	47.6
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	109371	50.0000	42.7
91 Bromobenzene	156	18.593	18.593	(0.948)	423557	50.0000	51.3
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2434081	50.0000	50.0
94 2-Chlorotoluene	91	18.745	18.745	(0.956)	1707258	50.0000	48.4
93 1,3,5-Trimethylbenzene	105	18.722	18.722	(0.954)	1734624	50.0000	49.3
95 4-Chlorotoluene	91	18.856	18.856	(0.961)	1540833	50.0000	48.4
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1394021	50.0000	50.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1768170	50.0000	49.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2206931	50.0000	50.5
100 4-Isopropyltoluene	119	19.426	19.426	(0.990)	1727131	50.0000	52.2
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.996)	841377	50.0000	53.3
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.615	(1.000)	491171	50.0000	
103 1,4-Dichlorobenzene	146	19.643	19.643	(1.001)	835831	50.0000	51.7
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1844689	50.0000	49.8
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	782819	50.0000	51.8
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78748	50.0000	53.0
109 1,2,4-Trichlorobenzene	180	22.027	22.027	(1.123)	593584	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	404431	50.0000	50.9
111 Naphthalene	128	22.441	22.441	(1.144)	1116700	50.0000	53.6
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	483479	50.0000	51.2

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Date : 16-NOV-2009 14:01
Client ID: ICV
Sample Info: IW1VH091116-05ICCV/LCS/ICV11|VOAF11|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

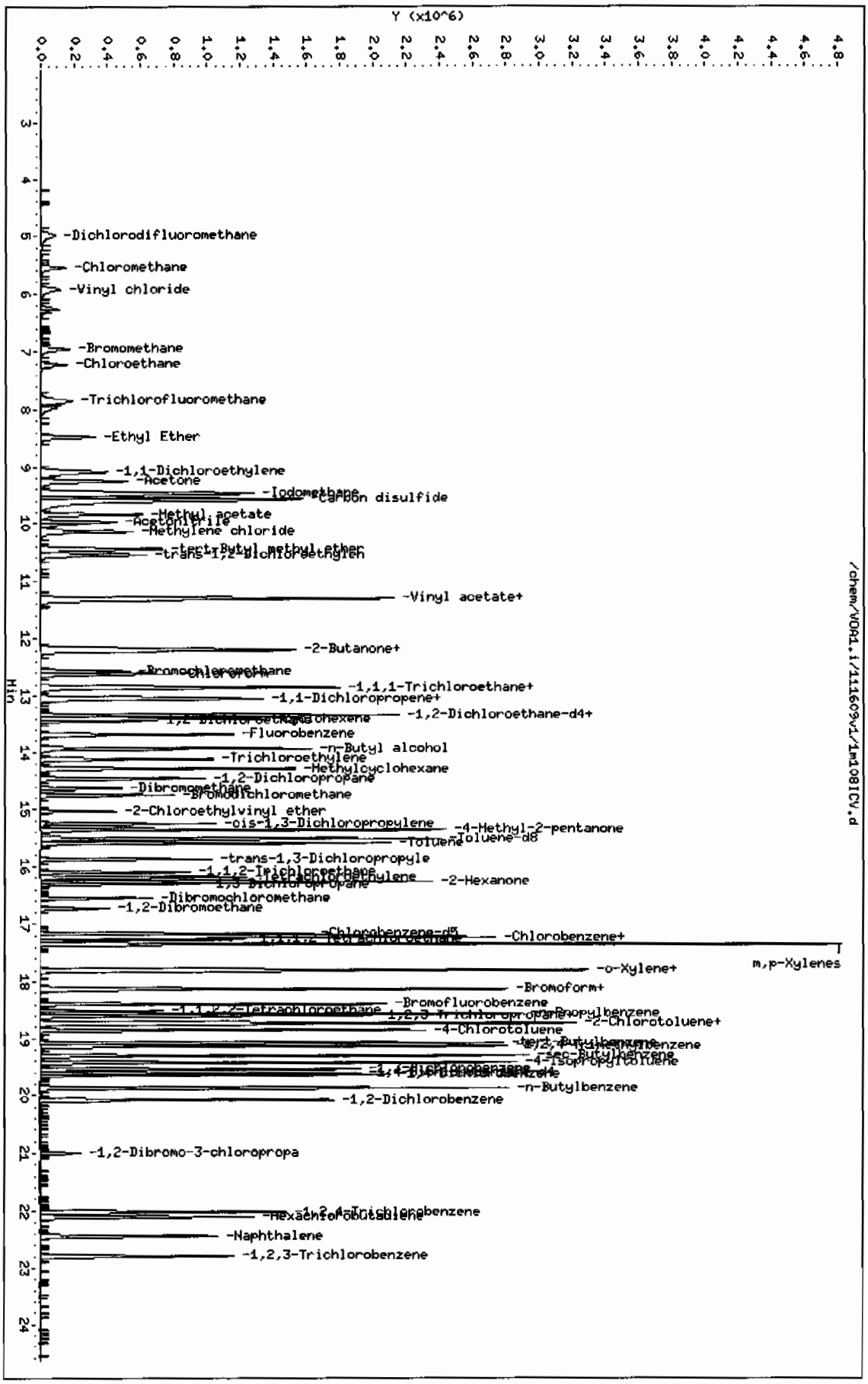

Page 1

Data File: /chem/VOA1.i/112109v1/1m609.d
Report Date: 10-Dec-2009 16:10

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1m609.d
Analysis Type: SOIL
Lab Sample ID: W1VM091121-06
Method: /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m

Injection Date: 21-NOV-2009 10:51
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.79740	0.79740	0.050	3.33619	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34940	0.34940	0.050	2.04677	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.80641	0.80641	0.050	3.09799	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.30275	0.30275	0.050	-9.32133	30.00000	Averaged	
	6 Chloromethane	0.41309	0.40044	0.40044	0.100	-3.06167	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.33798	0.33798	0.050	-8.38275	20.00000	Averaged	ccc
	9 Bromomethane	0.22182	0.23871	0.23871	0.050	7.61596	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24550	0.24550	0.050	7.48264	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.54531	0.54531	0.050	4.99592	30.00000	Averaged	
	12 Ethyl Ether	49.54902	50.00000	0.31251	0.010	-0.90196	30.00000	Wt Linear	
	16 Acetone	0.29015	0.22847	0.22847	0.000	-21.26015	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03677	0.03677	0.010	3.02355	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.66856	0.66856	0.050	-6.56167	20.00000	Averaged	ccc
	21 Methyl acetate	0.24840	0.23037	0.23037	0.010	-7.25832	40.00000	Averaged	
	18 Iodomethane	0.46290	0.49010	0.49010	0.050	5.87569	30.00000	Averaged	
	23 Methylene chloride	51.40110	50.00000	0.37148	0.000	2.80220	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.02019	1.02019	0.050	10.71057	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.12292	1.12292	0.050	-1.35363	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.33610	0.33610	0.050	1.13020	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.75460	0.75460	0.010	36.91963	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.71907	0.71907	0.100	-2.65957	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.23676	0.23676	0.030	-16.72412	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.36270	0.36270	0.050	2.91306	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52746	0.52746	0.050	-2.24461	30.00000	Averaged	
	41 Chloroform	0.78646	0.77021	0.77021	0.010	-2.06581	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.15673	0.15673	0.010	11.92145	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.59185	0.59185	0.010	-3.90583	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.66305	0.66305	0.010	2.43051	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55468	0.55468	0.010	-1.13252	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.01017	0.01017	0.001	12.32633	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.60179	0.60179	0.010	-2.46869	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62193	0.72333	0.72333	0.010	16.30416	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.65649	0.65649	0.010	-5.40946	30.00000	Averaged	
	47 Benzene	49.99739	50.00000	1.39911	0.010	-0.00522	30.00000	Linear	
	50 Cyclohexene	0.53439	0.51456	0.51456	0.010	-3.71084	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 21-NOV-2009 10:51
Lab File ID: 1m609.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091121-06 Quant Type: ISTD
Method: /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.37654	0.37654	0.010	-1.74561	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.38127	0.38127	0.010	5.20616	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.59522	0.59522	0.010	0.51715	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.60975	0.60975	0.010	2.55509	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.23128	0.23128	0.010	3.48824	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	23.21248	250	0.00079	0.000	-90.71501	30.00000	Linear	<-
	64 4-Methyl-2-pentanone	0.18521	0.17291	0.17291	0.010	-6.64358	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.65318	0.65318	0.010	5.47707	30.00000	Averaged	
$	65 Toluene-d8	2.03499	2.05698	2.05698	0.010	1.08049	30.00000	Averaged	
	66 Toluene	1.09808	1.10527	1.10527	0.010	0.65420	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.81839	0.81839	0.010	4.76901	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.30872	0.30872	0.010	1.00889	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.40050	0.40050	0.010	-18.18850	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.68132	0.68132	0.010	0.28952	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34989	0.34989	0.010	5.03243	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.47473	0.47473	0.010	8.27202	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.37839	0.37839	0.010	5.27650	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.16352	1.16352	0.300	2.43869	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.45058	0.45058	0.010	2.33678	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.23695	2.23695	0.010	-5.29510	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.79980	0.79980	0.010	2.70962	30.00000	Averaged	
	81 o-Xylene	0.75757	0.79261	0.79261	0.010	4.62532	30.00000	Averaged	
	82 Styrene	1.29825	1.35739	1.35739	0.010	4.55561	30.00000	Averaged	
	83 Bromoform	0.49742	0.54879	0.54879	0.100	10.32734	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	3.95208	3.95208	0.010	-2.83891	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.82671	0.82671	0.300	4.23411	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.54897	1.54897	0.010	-7.73385	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.23502	0.23502	0.010	-9.88806	30.00000	Averaged	
	91 Bromobenzene	0.84112	0.90039	0.90039	0.010	7.04617	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.71091	4.71091	0.010	-4.91755	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.52433	3.52433	0.010	-1.82055	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.52329	3.52329	0.010	-1.67030	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.25836	3.25836	0.010	0.66144	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.66966	2.66966	0.010	-4.28491	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.65397	3.65397	0.010	-0.37885	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.21486	4.21486	0.010	-5.32172	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1m609.d
Analysis Type: SOIL
Lab Sample ID: W1VM091121-06
Method: /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m

Injection Date: 21-NOV-2009 10:51
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.40794	3.40794	0.010	1.26368	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.76013	1.76013	0.010	9.58549	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.78152	1.78152	0.010	8.21211	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.72195	3.72195	0.010	-1.22317	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.58204	1.58204	0.010	2.88940	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.15744	0.15744	0.010	4.12657	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20777	1.20777	0.010	5.72520	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.79839	0.79839	0.010	-1.27189	30.00000	Averaged
111 Naphthalene	2.11900	2.14874	2.14874	0.010	1.40341	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	1.00663	1.00663	0.010	4.72557	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.39249
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m609.d
Lab Smp Id: W1VM091121-06 Client Smp ID: VSTD050
Inj Date : 21-NOV-2009 10:51
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |W1VM091121-06|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01C/IVM091116-01
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 10-Dec-2009 16:10 eh1 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2090218	150.000	155
M 2 1,2-Dichloroethylene (total)	96				742629	100.000	102
M 3 1,3-Dichloropropylene	75				1409229	100.000	105
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	321746	50.0000	45.3
6 Chloromethane	50	5.542	5.542	(0.405)	425561	50.0000	48.5
7 Vinyl chloride	62	5.915	5.915	(0.432)	359177	50.0000	45.8
9 Bromomethane	96	6.952	6.952	(0.508)	253685	50.0000	53.8
10 Chloroethane	64	7.219	7.219	(0.528)	260899	50.0000	53.7
11 Trichlorofluoromethane	101	7.840	7.840	(0.573)	579512	50.0000	52.5
12 Ethyl Ether	59	8.476	8.476	(0.619)	332119	50.0000	49.5
16 Acetone	43	9.254	9.254	(0.676)	1213992	250.000	197
22 Acetonitrile	41	9.972	9.972	(0.729)	976958	1250.00	1290

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	710503	50.0000	46.7
	21 Methyl acetate	43	9.838	9.838	(0.719)	1224103	250.000	232
	18 Iodomethane	142	9.465	9.465	(0.692)	2604215	250.000	265
	23 Methylene chloride	84	10.142	10.142	(0.741)	394784	50.0000	51.4
	19 Carbon disulfide	76	9.576	9.576	(0.700)	5420917	250.000	277
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1193362	50.0000	49.3
	26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	357179	50.0000	50.6
	29 Vinyl acetate	43	11.297	11.297	(0.826)	4009672	250.000	342
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	764178	50.0000	48.7
	35 2-Butanone	43	12.186	12.186	(0.891)	1258076	250.000	208
	36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	385450	50.0000	51.4
	33 2,2-Dichloropropane	77	12.167	12.167	(0.889)	560549	50.0000	48.9
	41 Chloroform	83	12.614	12.614	(0.922)	818524	50.0000	49.0
	39 Bromochloromethane	128	12.559	12.559	(0.918)	166564	50.0000	56.0
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.939)	628982	50.0000	48.0
	42 Cyclohexane	56	12.839	12.839	(0.938)	704644	50.0000	51.2
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	589480	50.0000	49.4
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1080549	5000.00	5620
	44 Carbon tetrachloride	117	13.024	13.024	(0.952)	639535	50.0000	48.8
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	768701	50.0000	58.2
	51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	697667	50.0000	47.3
	47 Benzene	78	13.337	13.337	(0.975)	1486875	50.0000	50.0
	50 Cyclohexene	54	13.396	13.396	(0.979)	546843	50.0000	48.1
*	52 Fluorobenzene	96	13.682	13.682	(1.000)	1062730	50.0000	
	54 Trichloroethylene	95	14.119	14.119	(1.032)	400156	50.0000	49.1
	57 1,2-Dichloropropane	63	14.460	14.460	(1.057)	405187	50.0000	52.6
	55 Methylcyclohexane	83	14.285	14.285	(1.044)	632553	50.0000	50.2
	60 Bromodichloromethane	83	14.754	14.754	(1.078)	647999	50.0000	51.3
	59 Dibromomethane	93	14.625	14.625	(1.069)	245790	50.0000	51.7
	61 2-Chloroethylvinyl ether	63	15.261	15.261	(1.115)	4207	250.000	23.2
	64 4-Methyl-2-pentanone	58	15.357	15.357	(0.895)	755409	250.000	233
	63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	694152	50.0000	52.7
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1797315	50.0000	50.5
	66 Toluene	92	15.597	15.597	(0.909)	965745	50.0000	50.3
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	715077	50.0000	52.4
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	269747	50.0000	50.5
	71 2-Hexanone	43	16.269	16.269	(0.948)	1749731	250.000	204
	72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	595313	50.0000	50.1
	70 Tetrachloroethylene	164	16.190	16.190	(0.943)	305726	50.0000	52.5
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	414802	50.0000	54.1
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	330627	50.0000	52.6
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	873765	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	1016645	50.0000	51.2
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	393698	50.0000	51.2
	78 Ethylbenzene	91	17.221	17.221	(1.003)	1954572	50.0000	47.4
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1397666	100.000	103
	81 o-Xylene	106	17.783	17.783	(1.036)	692552	50.0000	52.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
82 Styrene	104	17.801	17.801	(1.037)	1186040	50.0000	52.3
83 Bromoform	173	18.105	18.105	(0.923)	273016	50.0000	55.2
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1966121	50.0000	48.6
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	411280	50.0000	52.1
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	770598	50.0000	46.1
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	116921	50.0000	45.0
91 Bromobenzene	156	18.593	18.593	(0.948)	447936	50.0000	53.5
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2343629	50.0000	47.5
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1753318	50.0000	49.1
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1752803	50.0000	49.2
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1621002	50.0000	50.3
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1328131	50.0000	47.8
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1817815	50.0000	49.8
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2096852	50.0000	47.3
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1695414	50.0000	50.6
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	875647	50.0000	54.8
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	497490	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	886286	50.0000	54.1
105 n-Butylbenzene	91	19.873	19.873	(1.013)	1851633	50.0000	49.4
106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	787049	50.0000	51.4
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78323	50.0000	52.1
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	600855	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	397189	50.0000	49.4
111 Naphthalene	128	22.437	22.437	(1.144)	1068978	50.0000	50.7
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	500789	50.0000	52.4

Data File: /chem/VOA1.i/112109v1/1m609.d
Date : 21-NOV-2009 10:51
Client ID: VSTD050
Sample Info: IW1VH091121-06|CCV/LCS|1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: CRR2
Column diameter: 0.25

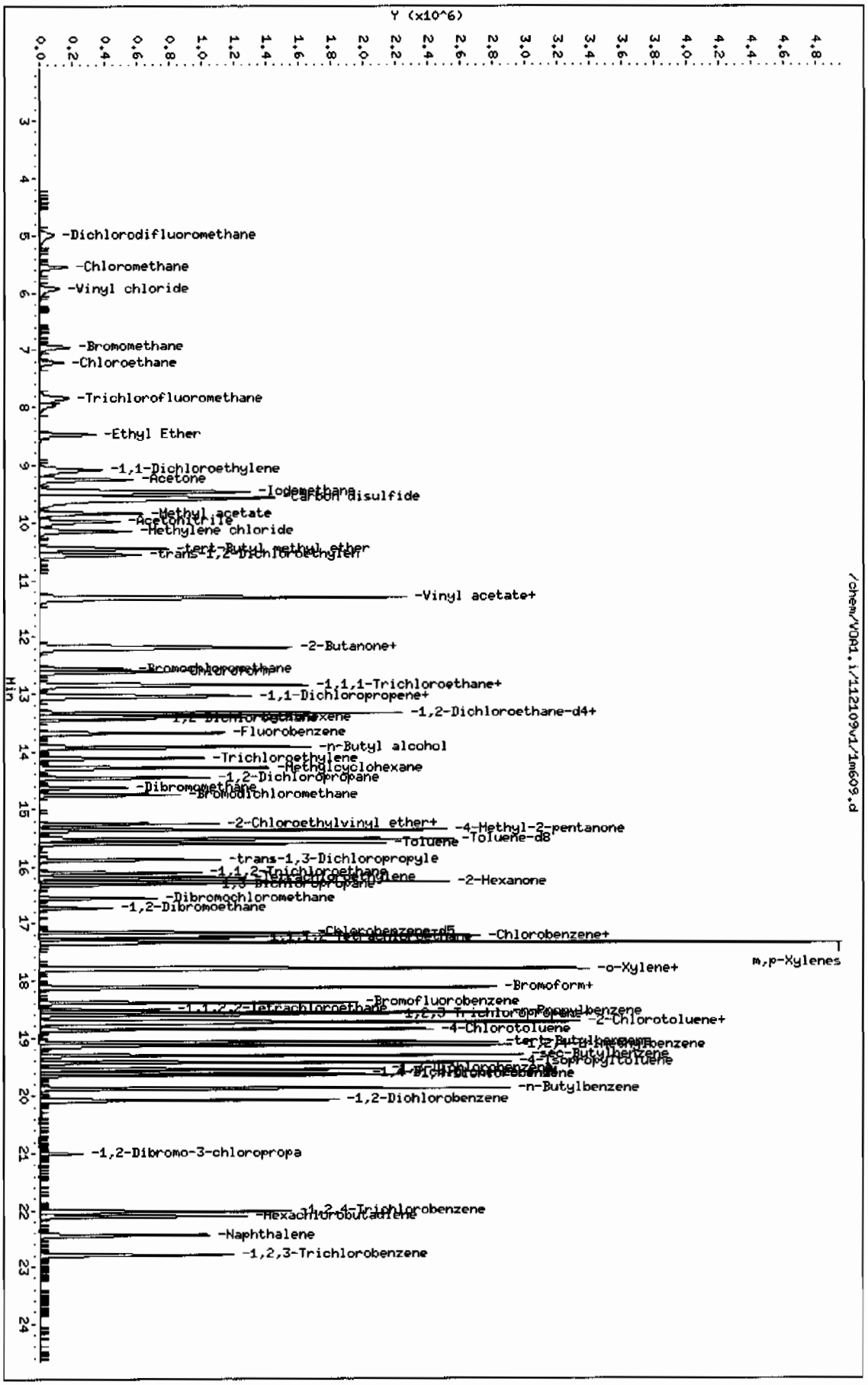

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 21-NOV-2009 11:21
Lab File ID: 1m610.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091121-07 Quant Type: ISTD
Method: /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.12777	0.12777	0.010	-18.55782	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.31755	0.31755	0.010	-3.41617	30.00000	Averaged
13 Acrolein	0.05116	0.06321	0.06321	0.001	23.55342	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.30897	0.30897	0.030	5.63061	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02113	0.02113	0.000	4.54402	40.00000	Averaged
20 Allyl chloride	0.10619	0.15202	0.15202	0.010	43.15718	30.00000	Averaged <-
24 tert-Butyl Alcohol	0.03796	0.03828	0.03828	0.010	0.83600	40.00000	Averaged
27 Acrylonitrile	0.10676	0.11346	0.11346	0.010	6.27806	30.00000	Averaged
28 Isopropyl ether	1.19537	1.17825	1.17825	0.010	-1.43238	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.67842	0.67842	0.010	11.17614	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.17542	1.17542	0.010	3.01739	30.00000	Averaged
37 Propionitrile	0.04326	0.04412	0.04412	0.010	1.97977	30.00000	Averaged
34 Ethyl acetate	0.29220	0.28428	0.28428	0.010	-2.71148	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.23950	0.23950	0.010	3.32164	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.20452	0.20452	0.010	-0.08873	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01071	0.01071	0.001	-1.35007	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	0.96166	0.96166	0.010	5.71703	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.21242	0.21242	0.010	7.24918	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.52676	0.52676	0.010	3.08753	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.37017	0.37017	0.000	-6.12159	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00274	0.00274	0.001	-3.90704	40.00000	Averaged
62 2-Nitropropane	0.10798	0.11317	0.11317	0.000	4.80689	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.35104	0.35104	0.010	14.03139	30.00000	Averaged
86 Cyclohexanone	739	1250	0.02805	0.010	-40.86271	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.33571	0.33571	0.010	11.79689	30.00000	Averaged
98 Pentachloroethane	0.31186	0.54968	0.54968	0.010	76.25517	30.00000	Averaged <-
104 Benzyl chloride	1.59479	1.96404	1.96404	0.010	23.15325	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.37635	0.37635	0.010	4.48263	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.61931	0.61931	0.010	-0.42015	30.00000	Averaged
$ 65 Toluene-d8	2.03499	1.99386	1.99386	0.010	-2.02099	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.54093	1.54093	0.010	-8.21285	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1m610.d
Analysis Type: SOIL
Lab Sample ID: W1VM091121-07
Method: /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m

Injection Date: 21-NOV-2009 11:21
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

Average %D / Drift Results.	
Calculated Average %D/Drift =	11.07020
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m610.d
Lab Smp Id: W1VM091121-07 Client Smp ID: VSTD250S
Inj Date : 21-NOV-2009 11:21
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |W1VM091121-07|SHORT|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091118-08A/UVM091105-02B
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:41 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.890	4.890	(0.357)	435099	150.000	122
8 2-Chloro-1,1,1-trifluoroethane	118	6.298	6.298	(0.460)	1081366	150.000	145
13 Acrolein	56	8.954	8.954	(0.654)	358733	250.000	309
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1753583	250.000	264
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1199046	2500.00	2610
20 Allyl chloride	76	9.852	9.852	(0.720)	862781	250.000	358
24 tert-Butyl Alcohol	59	10.197	10.197	(0.745)	2172489	2500.00	2520
27 Acrylonitrile	53	10.671	10.671	(0.780)	643944	250.000	266
28 Isopropyl ether	45	11.201	11.201	(0.818)	1337447	50.0000	49.3
31 2-Chloro-1,3-butadiene	53	11.399	11.399	(0.833)	770086	50.0000	55.6
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1334232	50.0000	51.5
37 Propionitrile	54	12.407	12.407	(0.906)	250403	250.000	255
34 Ethyl acetate	43	12.167	12.167	(0.889)	1613424	250.000	243

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1359271	250.000	258
38 Tetrahydrofuran	42	12.540	12.540	(0.639)	527095	250.000	250
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	607870	2500.00	2470
49 Methyl tert-amyl ether	73	13.346	13.346	(0.975)	1091592	50.0000	52.8
56 Methyl methacrylate	69	14.441	14.441	(1.055)	1205628	250.000	268
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2485957	250.000	258
75 1-Chlorohexane	55	17.028	17.028	(1.244)	420188	50.0000	46.9
58 1,4-Dioxane	88	14.547	14.547	(1.063)	155480	2500.00	2400
62 2-Nitropropane	43	15.081	15.081	(1.102)	642281	250.000	262
85 cis-1,4-Dichloro-2-butene	53	18.280	18.280	(0.932)	904680	250.000	285
86 Cyclohexanone	55	18.386	18.386	(1.071)	661828	1250.00	739
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	865187	250.000	279
98 Pentachloroethane	167	19.201	19.201	(0.979)	1416614	250.000	441(A)
104 Benzyl chloride	91	19.776	19.776	(1.008)	5061679	250.000	308
107 bis(2-Chloroisopropyl)ether	45	20.167	20.167	(1.028)	969931	250.000	261
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1135111	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	943868	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	515435	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	702990	50.0000	49.8
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1881945	50.0000	49.0
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	794250	50.0000	45.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA1.i/112109v1/1m610.d
Date : 21-NOV-2009 11:21
Client ID: VSTD250S
Sample Info: IW1VH091121-07ISHORTI1IVOAF1I1

Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: CRB2
Column diameter: 0.25

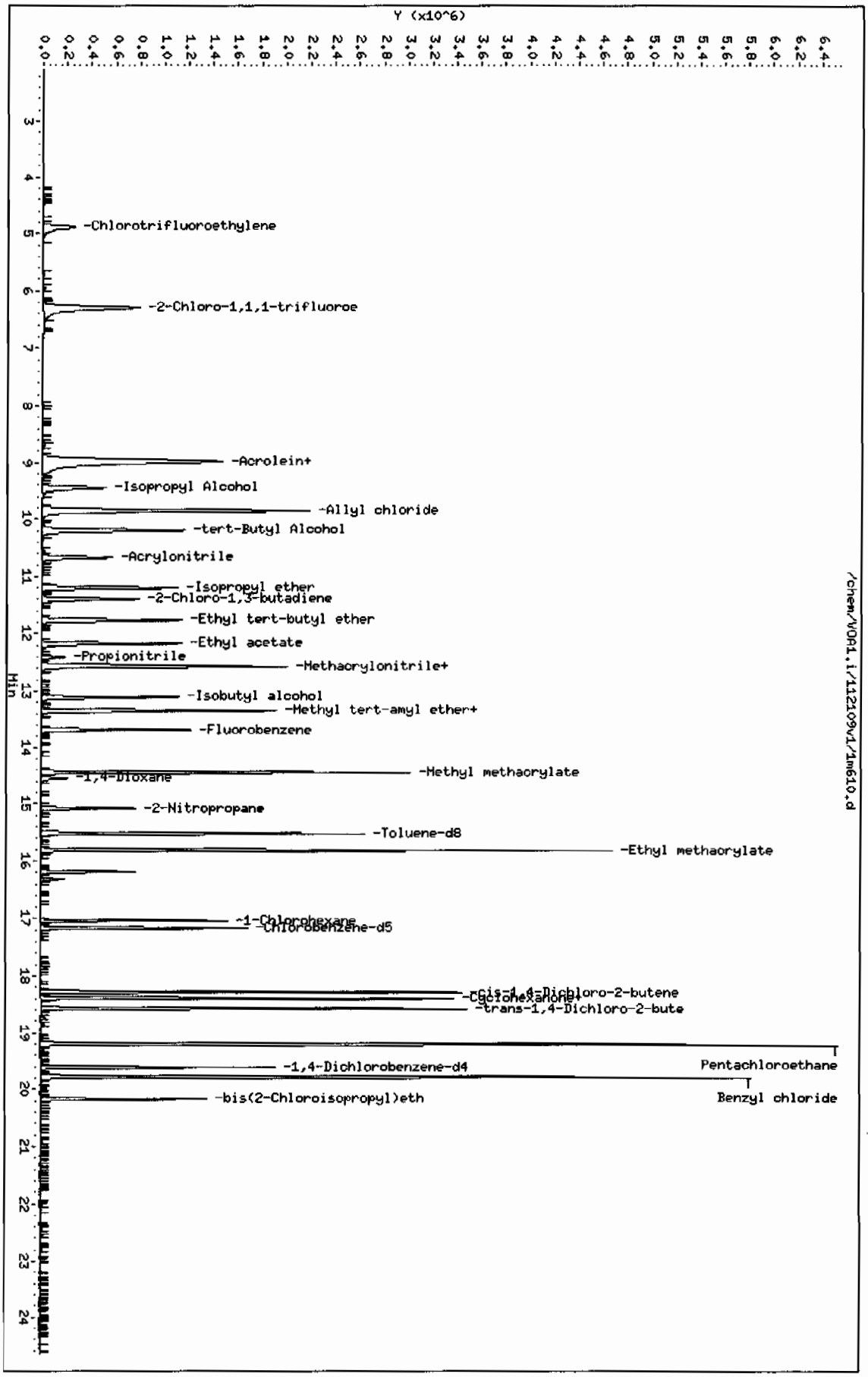

Page 1

QC Data

Data File: /chem/VOA1.i/111309v1/11507.d

Page 1

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

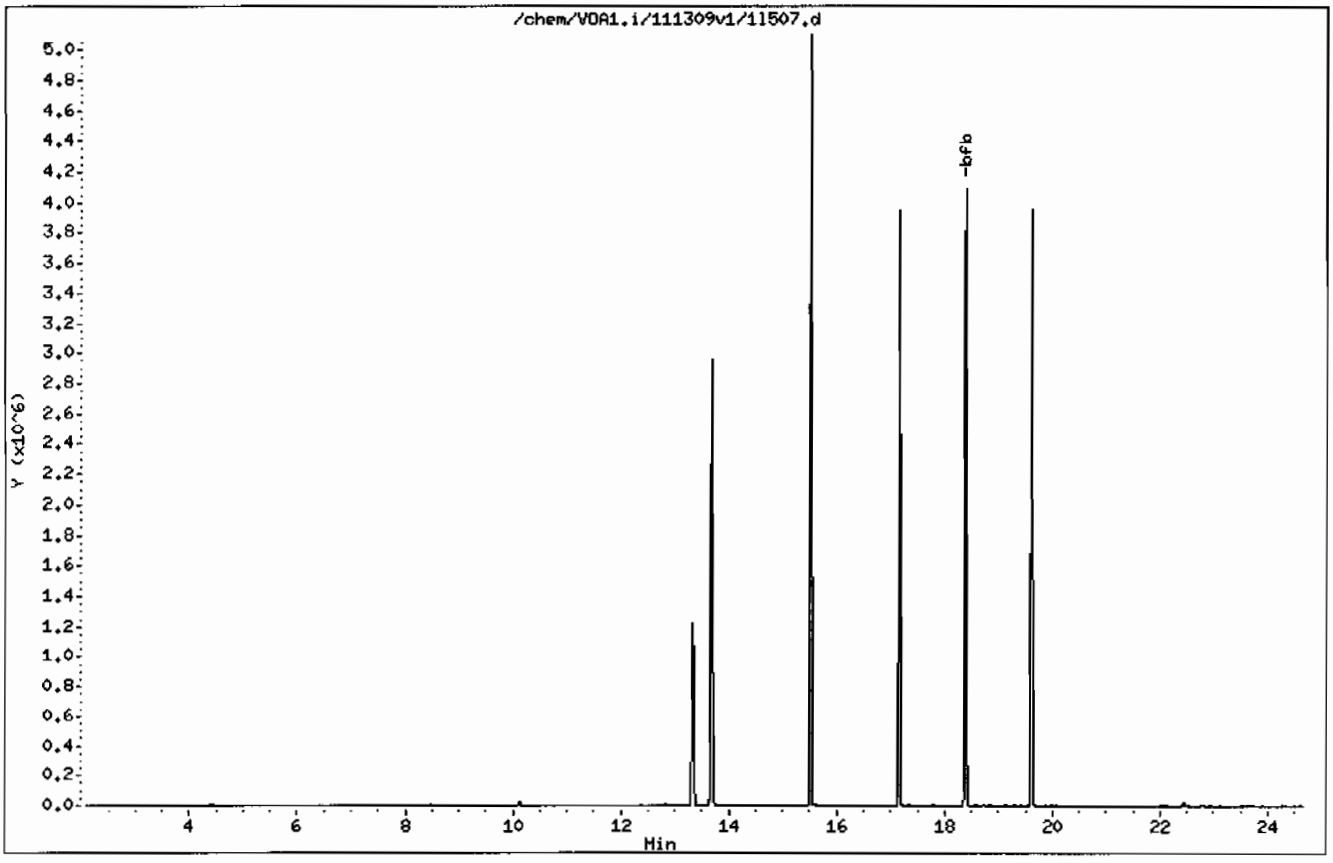

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

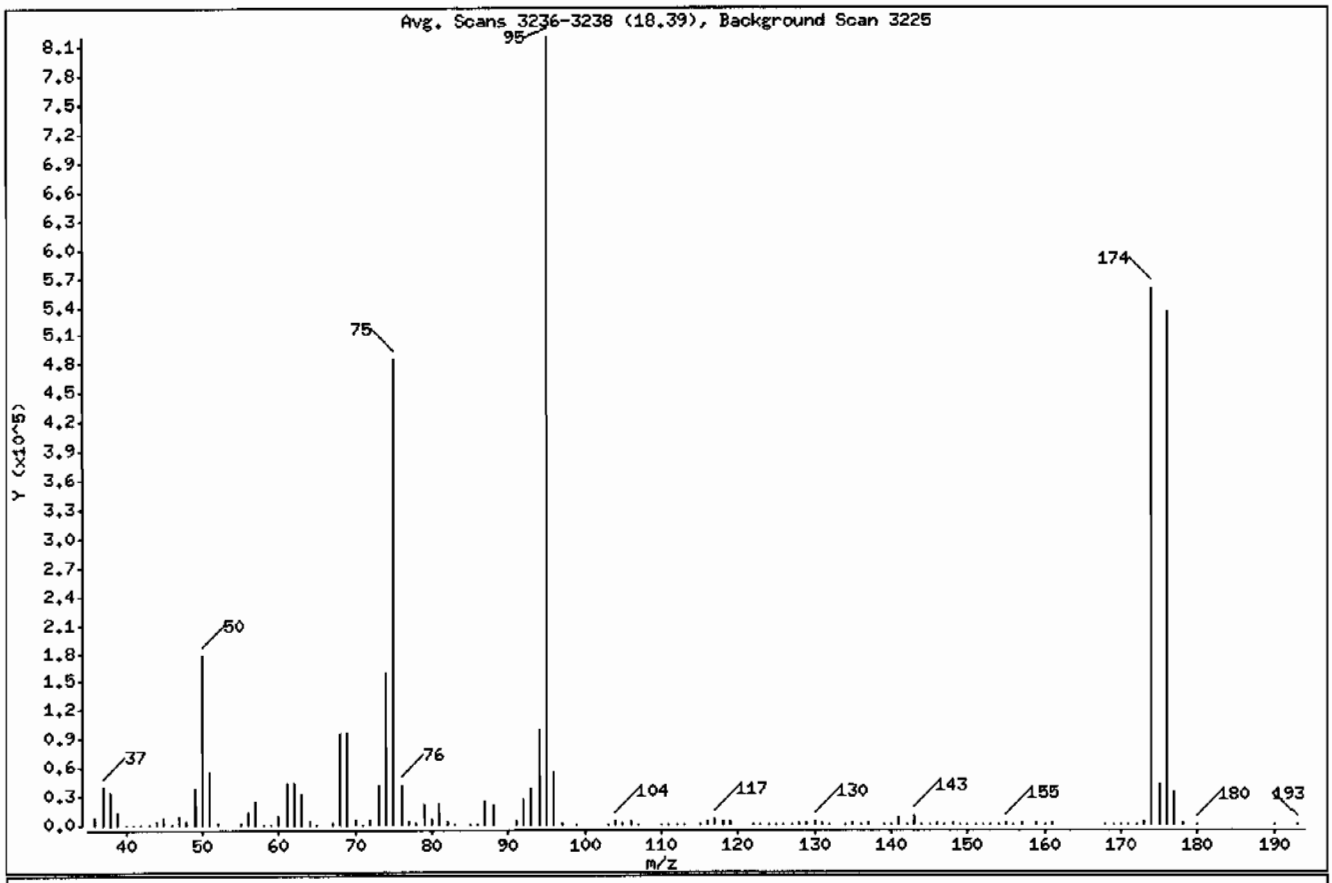

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.72
75	30.00 - 60.00% of mass 95	59.02
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.49 (0.72)
174	50.00 - 100.00% of mass 95	68.14
175	5.00 - 9.00% of mass 174	4.99 (7.33)
176	95.00 - 101.00% of mass 174	65.07 (95.50)
177	5.00 - 9.00% of mass 176	4.22 (6.48)

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 11507.d

Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7225	70.00	6120	110.00	479	146.00	1188
37.00	39360	71.00	217	111.00	606	147.00	494
38.00	33392	72.00	5094	112.00	379	148.00	1977
39.00	13646	73.00	41472	113.00	584	149.00	463
40.00	251	74.00	158400	115.00	797	150.00	811
41.00	50	75.00	483904	116.00	2966	151.00	74
42.00	138	76.00	42152	117.00	5025	152.00	425
43.00	423	77.00	4070	118.00	2850	153.00	568
44.00	4049	78.00	2614	119.00	3829	154.00	504
45.00	7085	79.00	20536	122.00	323	155.00	1883
46.00	389	80.00	5933	123.00	301	156.00	430
47.00	8871	81.00	21704	124.00	508	157.00	1202
48.00	4657	82.00	3708	125.00	172	159.00	1015
49.00	37544	83.00	554	126.00	282	160.00	117
50.00	178048	85.00	50	127.00	21	161.00	1118
51.00	55256	86.00	546	128.00	2650	168.00	58
52.00	2192	87.00	24184	129.00	1544	169.00	60
55.00	2170	88.00	20208	130.00	3040	170.00	440
56.00	12658	91.00	3132	131.00	1311	171.00	182
57.00	24424	92.00	25640	132.00	121	172.00	596
58.00	905	93.00	38600	134.00	219	173.00	4037
59.00	131	94.00	99912	135.00	1394	174.00	558656
60.00	8890	95.00	819904	136.00	360	175.00	40952
61.00	42584	96.00	54800	137.00	1272	176.00	533504
62.00	42856	97.00	1967	139.00	373	177.00	34584
63.00	32200	99.00	52	140.00	657	178.00	987
64.00	3117	103.00	491	141.00	8405	180.00	56
65.00	197	104.00	3451	142.00	877	190.00	52
67.00	2068	105.00	1217	143.00	9022	193.00	80
68.00	94512	106.00	3389	144.00	613		
69.00	96344	107.00	757	145.00	540		

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VH091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

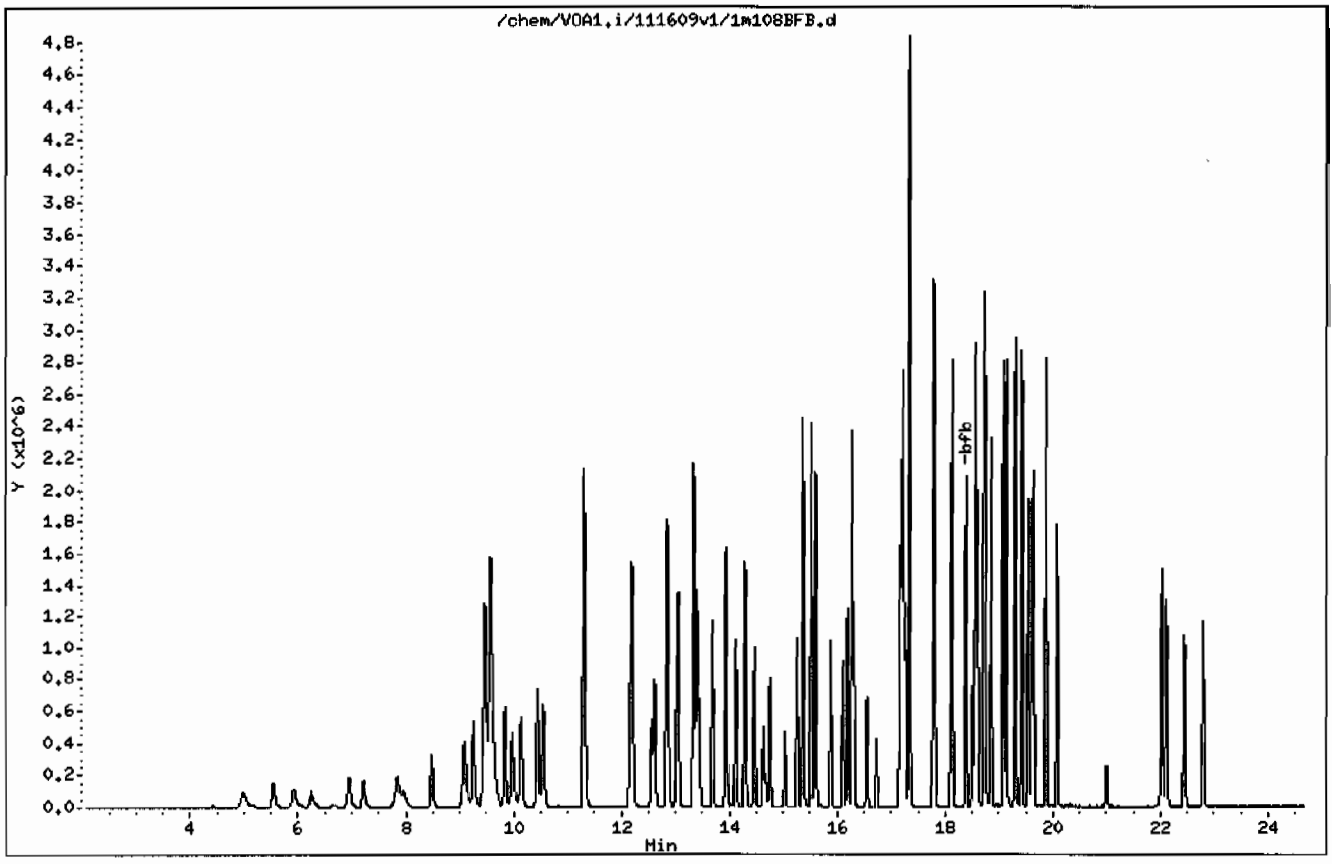

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

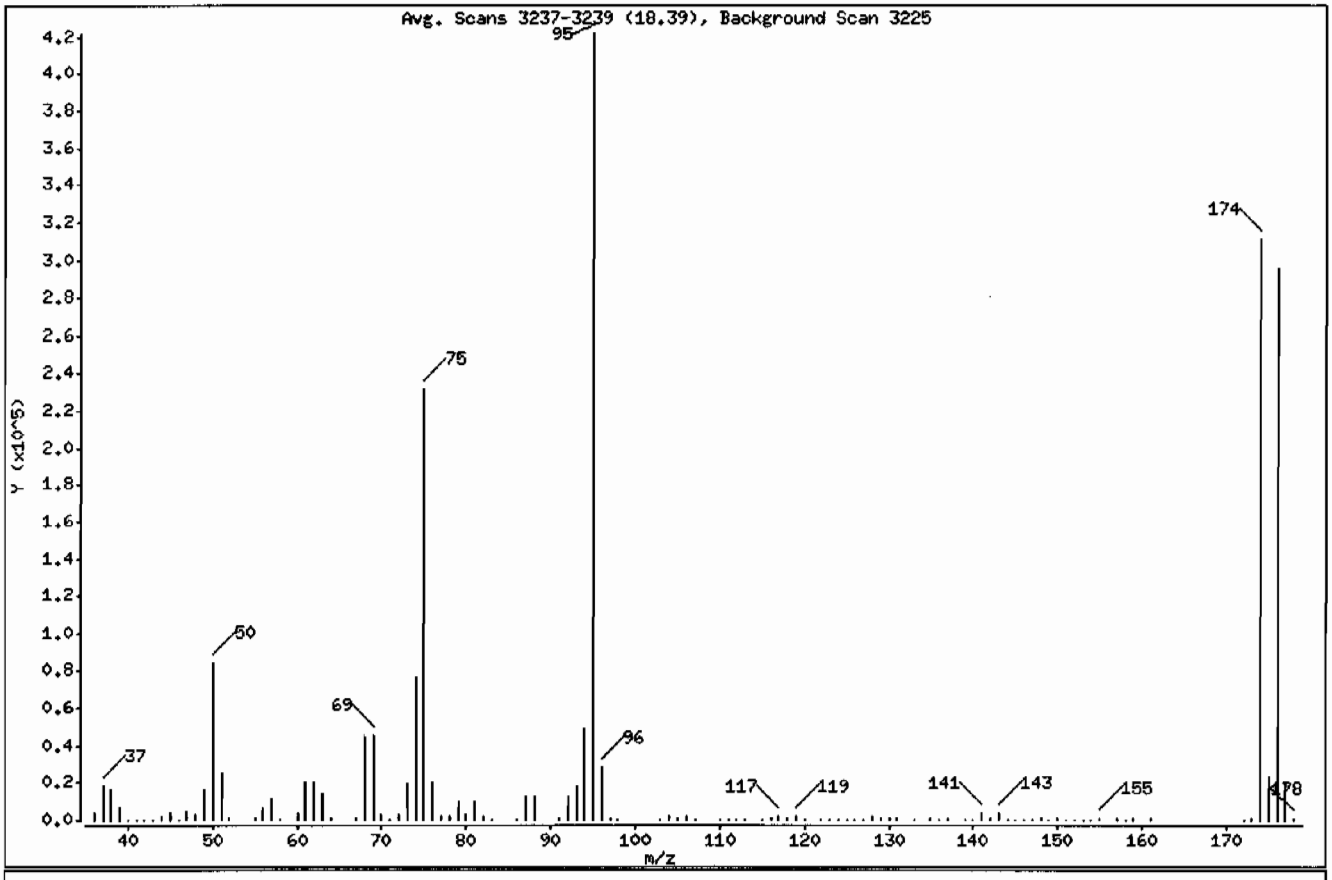

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.05
75	30.00 - 60.00% of mass 95	55.05
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.24 (0.33)
174	50.00 - 100.00% of mass 95	73.77
175	5.00 - 9.00% of mass 174	5.55 (7.52)
176	95.00 - 101.00% of mass 174	70.16 (95.10)
177	5.00 - 9.00% of mass 176	4.80 (6.85)

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1m108BFB.d
Spectrum: Avg. Scans 3237-3239 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3659	69.00	45424	105.00	693	140.00	369
37.00	18736	70.00	3367	106.00	1646	141.00	4255
38.00	16169	71.00	52	107.00	372	142.00	516
39.00	6393	72.00	2726	110.00	174	143.00	4228
40.00	197	73.00	19232	111.00	270	144.00	219
41.00	211	74.00	76640	112.00	131	145.00	352
42.00	88	75.00	232128	113.00	343	146.00	482
43.00	101	76.00	20048	115.00	393	147.00	319
44.00	1967	77.00	2016	116.00	1253	148.00	958
45.00	3625	78.00	1571	117.00	2412	149.00	257
46.00	225	79.00	9321	118.00	1200	150.00	553
47.00	4876	80.00	2593	119.00	2051	151.00	69
48.00	2650	81.00	10141	120.00	65	152.00	268
49.00	16864	82.00	1900	122.00	51	153.00	303
50.00	84536	83.00	304	123.00	52	154.00	398
51.00	25456	86.00	357	124.00	134	155.00	1157
52.00	1092	87.00	13023	125.00	172	157.00	819
55.00	1440	88.00	12376	126.00	137	158.00	66
56.00	6484	91.00	1301	127.00	134	159.00	539
57.00	11568	92.00	12794	128.00	1472	161.00	538
58.00	395	93.00	18184	129.00	873	172.00	156
60.00	4192	94.00	49672	130.00	1342	173.00	1032
61.00	20288	95.00	421696	131.00	645	174.00	311104
62.00	19928	96.00	28576	133.00	54	175.00	23400
63.00	14761	97.00	689	135.00	775	176.00	295872
64.00	1430	98.00	65	136.00	53	177.00	20256
67.00	1159	103.00	156	137.00	650	178.00	602
68.00	44552	104.00	1551	139.00	58		

Data File: /chem/VOA1.i/112109v1/1m608.d

Page 1

Date : 21-NOV-2009 10:21

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

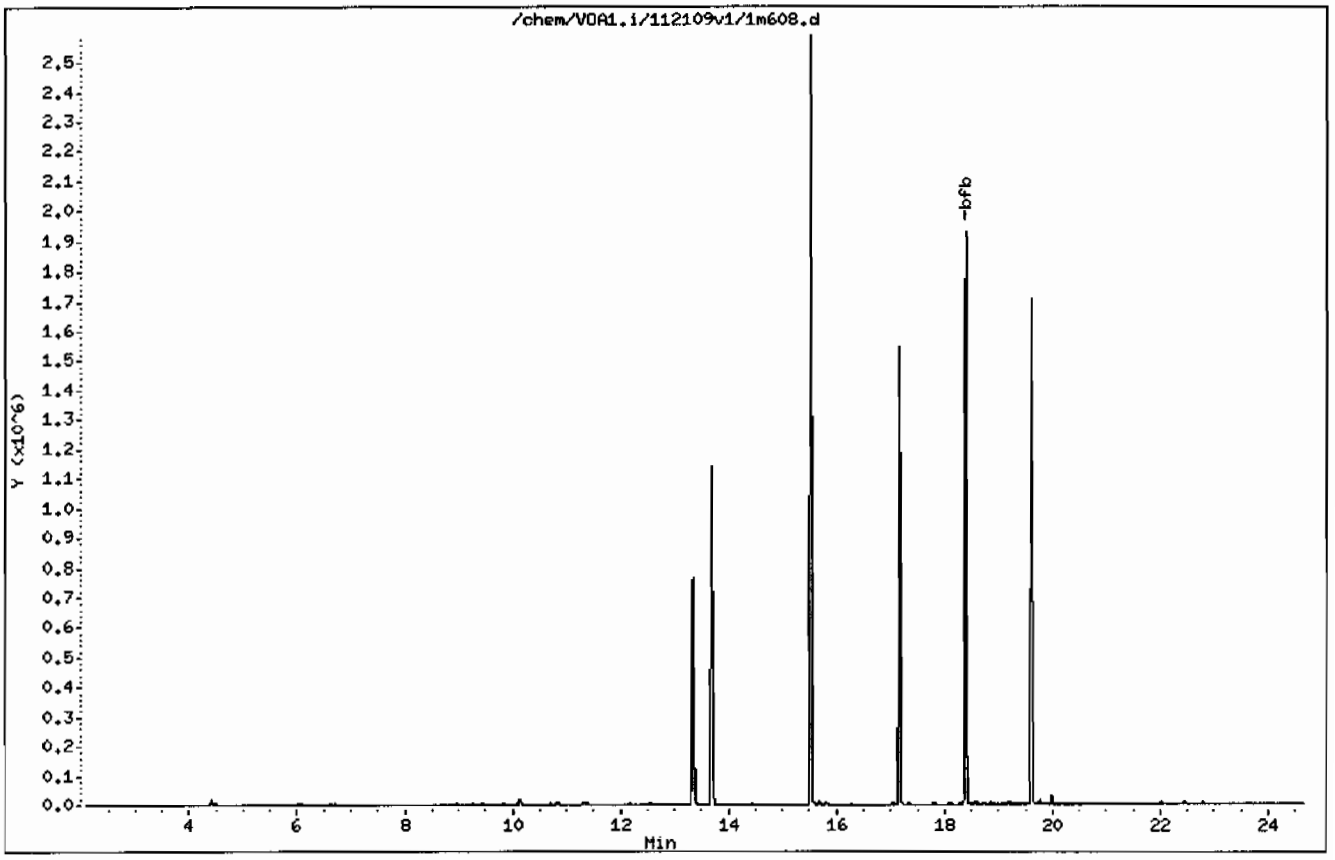

Data File: /chem/VOA1.i/112109v1/1m608.d

Date : 21-NOV-2009 10:21

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

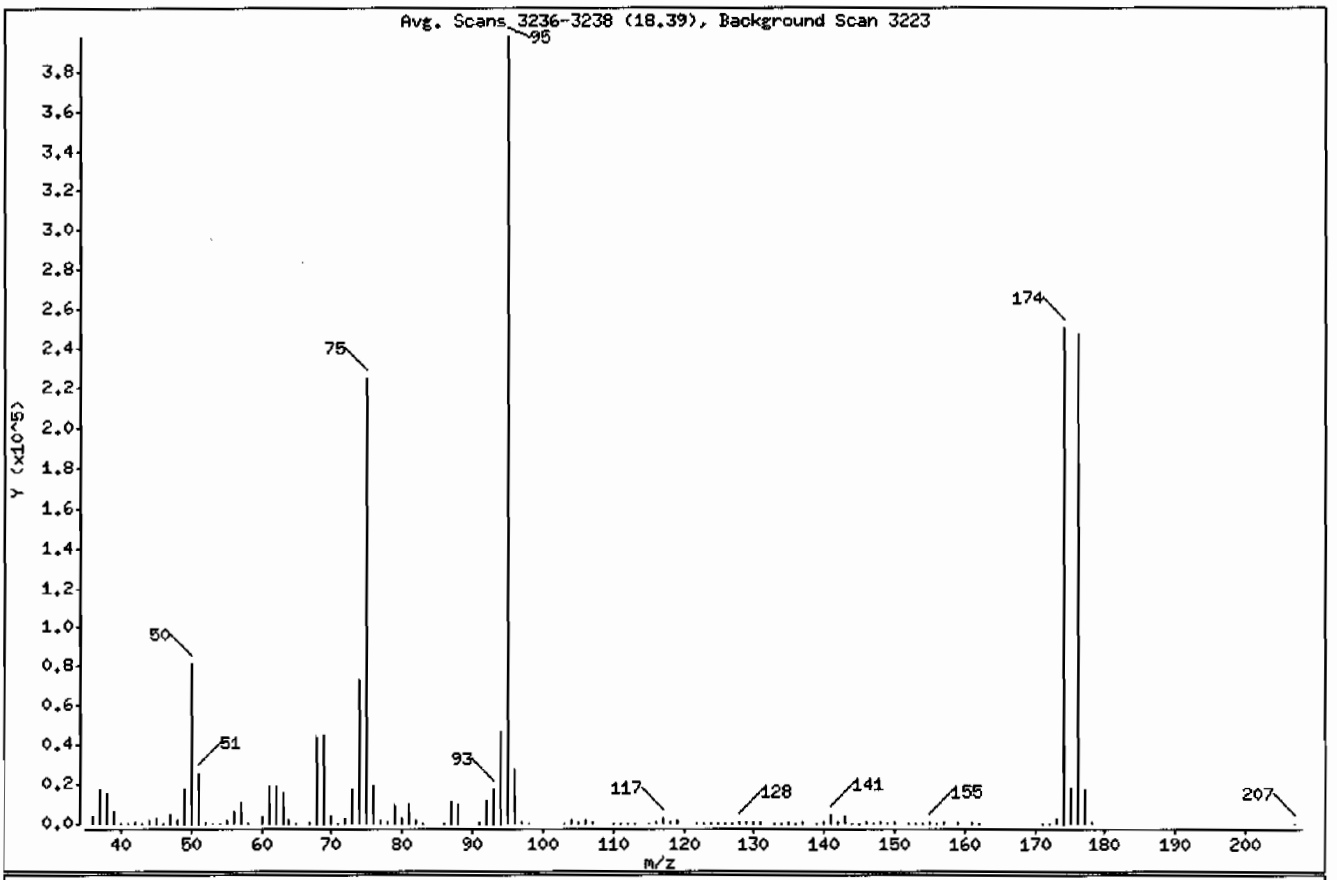

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.36
75	30.00 - 60.00% of mass 95	56.63
96	5.00 - 9.00% of mass 95	6.81
173	Less than 2.00% of mass 174	0.67 (1.06)
174	50.00 - 100.00% of mass 95	63.09
175	5.00 - 9.00% of mass 174	4.69 (7.43)
176	95.00 - 101.00% of mass 174	62.24 (98.65)
177	5.00 - 9.00% of mass 176	4.46 (7.17)

Data File: /chem/VOA1.i/112109v1/1m608.d

Date : 21-NOV-2009 10:21

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1m608.d
Spectrum: Avg. Scans 3236-3238 (18,39), Background Scan 3223
Location of Maximum: 95.00
Number of points: 116

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3217	68.00	44032	106.00	1733	143.00	4106
37.00	17696	69.00	44432	107.00	467	144.00	223
38.00	15818	70.00	3439	110.00	221	145.00	270
39.00	6133	71.00	128	111.00	408	146.00	579
40.00	178	72.00	2345	112.00	77	147.00	113
41.00	423	73.00	17800	113.00	308	148.00	729
42.00	1083	74.00	73200	115.00	429	149.00	345
43.00	376	75.00	224896	116.00	1135	150.00	537
44.00	1975	76.00	19136	117.00	2311	152.00	146
45.00	3132	77.00	1937	118.00	1171	153.00	223
46.00	122	78.00	1266	119.00	1532	154.00	195
47.00	4285	79.00	9511	122.00	120	155.00	892
48.00	2186	80.00	2682	123.00	57	156.00	58
49.00	17424	81.00	9598	124.00	253	157.00	775
50.00	80864	82.00	1737	125.00	65	159.00	563
51.00	25880	83.00	368	126.00	172	161.00	633
52.00	1031	86.00	246	127.00	286	162.00	52
53.00	52	87.00	10948	128.00	1225	171.00	114
54.00	136	88.00	10191	129.00	483	172.00	214
55.00	2156	91.00	1281	130.00	1175	173.00	2659
56.00	6535	92.00	11695	131.00	723	174.00	250560
57.00	10982	93.00	17248	133.00	60	175.00	18624
58.00	350	94.00	46944	134.00	149	176.00	247168
60.00	4025	95.00	397120	135.00	796	177.00	17720
61.00	19352	96.00	27040	136.00	54	178.00	535
62.00	19144	97.00	907	137.00	511	207.00	190
63.00	15461	98.00	442	139.00	120		
64.00	1515	103.00	302	140.00	460		
65.00	62	104.00	1581	141.00	4216		
67.00	1031	105.00	495	142.00	522		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546			**Matrix:**	SOIL
Lab Sample ID:	1201978340				
Client Sample:	QC for batch 925380	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 925380	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 13:23	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 10:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m614SBLA.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546			**Matrix:**	SOIL
Lab Sample ID:	1201978340				
Client Sample:	QC for batch 925380	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 925380	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 13:23	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 10:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m614SBLA.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m614SBLA.d
Lab Smp Id: 1201978340 Client Smp ID: BLANK
Inj Date : 21-NOV-2009 13:23
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |1201978340|925381|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	628307	53.1750	53.2
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	949937	50.0000	
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1616397	52.1811	52.2
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	761101	50.0000	
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	665187	48.4940	48.5
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	408531	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m614SBLA.d
Lab Smp Id: 1201978340 Client Smp ID: BLANK
Inj Date : 21-NOV-2009 13:23
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |1201978340|925381|1|VOAF|1|
Misc Info : GEL 5g N/A
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 ge100735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112109v1/1m614SBLA.d

Date : 21-NOV-2009 13:23

Client ID: BLANK

Sample Info: |120197834019253811|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: GRB2

Column diameter: 0.25

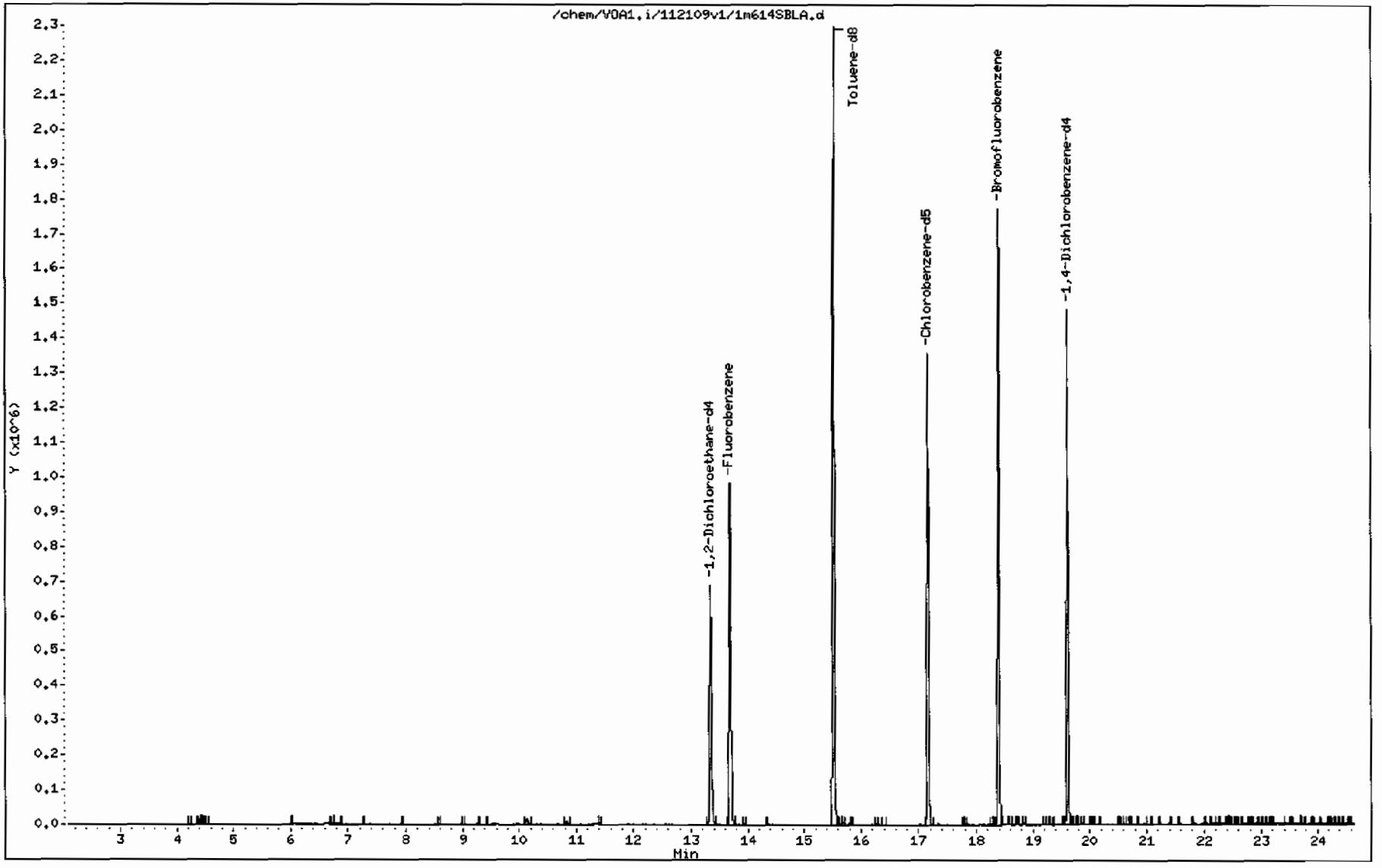

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978343**				
Client Sample:	**QC for batch 925380**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925380**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 10:51**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 10:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m609SLLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		45.3	ug/kg	0.340	1.00
74-87-3	Chloromethane		48.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		53.8	ug/kg	0.300	1.00
75-00-3	Chloroethane		53.7	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		52.5	ug/kg	0.300	1.00
67-64-1	Acetone		197	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		46.7	ug/kg	0.300	1.00
74-88-4	Iodomethane		265	ug/kg	1.60	5.00
75-09-2	Methylene chloride		42.2	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		277	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		50.6	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		48.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		208	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		51.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		48.9	ug/kg	0.300	1.00
67-66-3	Chloroform		49.0	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		56.0	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		48.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		49.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		48.8	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		47.3	ug/kg	0.300	1.00
71-43-2	Benzene		50.0	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		49.1	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		52.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.3	ug/kg	0.300	1.00
74-95-3	Dibromomethane		51.7	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		233	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		52.7	ug/kg	0.300	1.00
108-88-3	Toluene		50.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		52.4	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.5	ug/kg	0.300	1.00
591-78-6	2-Hexanone		205	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		50.1	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		52.5	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		54.1	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		52.6	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		51.2	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978343**				
Client Sample:	**QC for batch 925380**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925380**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 10:51**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 10:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m609SLLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.4	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		103	ug/kg	0.300	2.00
95-47-6	o-Xylene		52.3	ug/kg	0.300	1.00
100-42-5	Styrene		52.3	ug/kg	0.300	1.00
75-25-2	Bromoform		55.2	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		52.1	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		45.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		53.5	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		47.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		49.1	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		48.6	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		49.2	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		50.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		47.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		49.8	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		47.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		50.6	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		54.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		54.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		49.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.1	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		51.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		51.4	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m609SLLA.d
Lab Smp Id: 1201978343 Client Smp ID: LCS
Inj Date : 21-NOV-2009 10:51
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |1201978343|925381|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01C/IVM091116-01
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2090218	155.022	155
M 2 1,2-Dichloroethylene (total)	96				742629	102.022	102
M 3 1,3-Dichloropropylene	75				1409229	105.123	105
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	321746	45.3393	45.3
6 Chloromethane	50	5.542	5.542	(0.405)	425561	48.4692	48.5
7 Vinyl chloride	62	5.915	5.915	(0.432)	359177	45.8086	45.8
9 Bromomethane	96	6.952	6.952	(0.508)	253685	53.8080	53.8
10 Chloroethane	64	7.219	7.219	(0.528)	260899	53.7413	53.7
11 Trichlorofluoromethane	101	7.840	7.840	(0.573)	579512	52.4980	52.5
12 Ethyl Ether	59	8.476	8.476	(0.619)	332119	49.5490	49.5
15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	710503	46.7192	46.7
16 Acetone	43	9.254	9.254	(0.676)	1213992	196.850	197

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	18 Iodomethane	142	9.465	9.465	(0.692)	2604215	264.689	265
	19 Carbon disulfide	76	9.576	9.576	(0.700)	5420917	276.776	277
	21 Methyl acetate	43	9.838	9.838	(0.719)	1224103	231.854	232
	22 Acetonitrile	41	9.972	9.972	(0.729)	976958	1287.79	1290
	23 Methylene chloride	84	10.142	10.142	(0.741)	394784	42.1856	42.2
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1193362	49.3232	49.3
	26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	357179	50.5651	50.6
	29 Vinyl acetate	43	11.297	11.297	(0.826)	4009672	342.299	342(R)
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	764178	48.6702	48.7
	33 2,2-Dichloropropane	77	12.167	12.167	(0.889)	560549	48.8777	48.9
	35 2-Butanone	43	12.186	12.186	(0.891)	1258076	208.190	208
	36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	385450	51.4565	51.4
	39 Bromochloromethane	128	12.559	12.559	(0.918)	166564	55.9607	56.0
	41 Chloroform	83	12.614	12.614	(0.922)	818524	48.9671	49.0
	42 Cyclohexane	56	12.839	12.839	(0.938)	704644	51.2153	51.2
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.939)	628982	48.0471	48.0
	44 Carbon tetrachloride	117	13.024	13.024	(0.952)	639535	48.7657	48.8
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	589480	49.4337	49.4
	47 Benzene	78	13.337	13.337	(0.975)	1486875	49.9974	50.0
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	768701	58.1521	58.2
	50 Cyclohexene	54	13.396	13.396	(0.979)	546843	48.1446	48.1
	51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	697667	47.2953	47.3
*	52 Fluorobenzene	96	13.682	13.682	(1.000)	1062730	50.0000	
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1080549	5616.32	5620
	54 Trichloroethylene	95	14.119	14.119	(1.032)	400156	49.1272	49.1
	55 Methylcyclohexane	83	14.285	14.285	(1.044)	632553	50.2586	50.2
	57 1,2-Dichloropropane	63	14.460	14.460	(1.057)	405187	52.6031	52.6
	59 Dibromomethane	93	14.625	14.625	(1.069)	245790	51.7441	51.7
	60 Bromodichloromethane	83	14.754	14.754	(1.078)	647999	51.2775	51.3
	61 2-Chloroethylvinyl ether	63	15.261	15.261	(1.115)	4207	23.2125	23.2(R)
	63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	694152	52.7385	52.7
	64 4-Methyl-2-pentanone	58	15.357	15.357	(0.895)	755409	233.391	233
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1797315	50.5402	50.5
	66 Toluene	92	15.597	15.597	(0.909)	965745	50.3271	50.3
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	715077	52.3845	52.4
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	269747	50.5044	50.5
	70 Tetrachloroethylene	164	16.190	16.190	(0.943)	305726	52.5162	52.5
	71 2-Hexanone	43	16.269	16.269	(0.948)	1749731	204.529	204
	72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	595313	50.1448	50.1
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	414802	54.1360	54.1
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	330627	52.6383	52.6
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	873765	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	1016645	51.2193	51.2
	78 Ethylbenzene	91	17.221	17.221	(1.003)	1954572	47.3525	47.4
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	393698	51.1684	51.2
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1397666	102.710	103
	81 o-Xylene	106	17.783	17.783	(1.036)	692552	52.3127	52.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
82 Styrene	104	17.801	17.801	(1.037)	1186040	52.2778	52.3
83 Bromoform	173	18.105	18.105	(0.923)	273016	55.1637	55.2
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1966121	48.5805	48.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	770598	46.1331	46.1
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	411280	52.1171	52.1
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2343629	47.5412	47.5
91 Bromobenzene	156	18.593	18.593	(0.948)	447936	53.5231	53.5
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	116921	45.0560	45.0
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1752803	49.1648	49.2
94 2-Chlorotoluene	91	18.740	18.740	(0.956)	1753318	49.0897	49.1
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1621002	50.3307	50.3
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1328131	47.8575	47.8
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1817815	49.8106	49.8
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2096852	47.3391	47.3
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1695414	50.6318	50.6
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	875647	54.7927	54.8
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	497490	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	886286	54.1061	54.1
105 n-Butylbenzene	91	19.873	19.873	(1.013)	1851633	49.3884	49.4
106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	787049	51.4447	51.4
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78323	52.0633	52.1
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	600855	52.8626	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	397189	49.3641	49.4
111 Naphthalene	128	22.437	22.437	(1.144)	1068978	50.7017	50.7
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	500789	52.3628	52.4

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112109v1/1m609SLLA.d

Date : 21-NOV-2009 10:51

Client ID: LCS

Sample Info: |120197834319253811|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: GRB2

Column diameter: 0.25

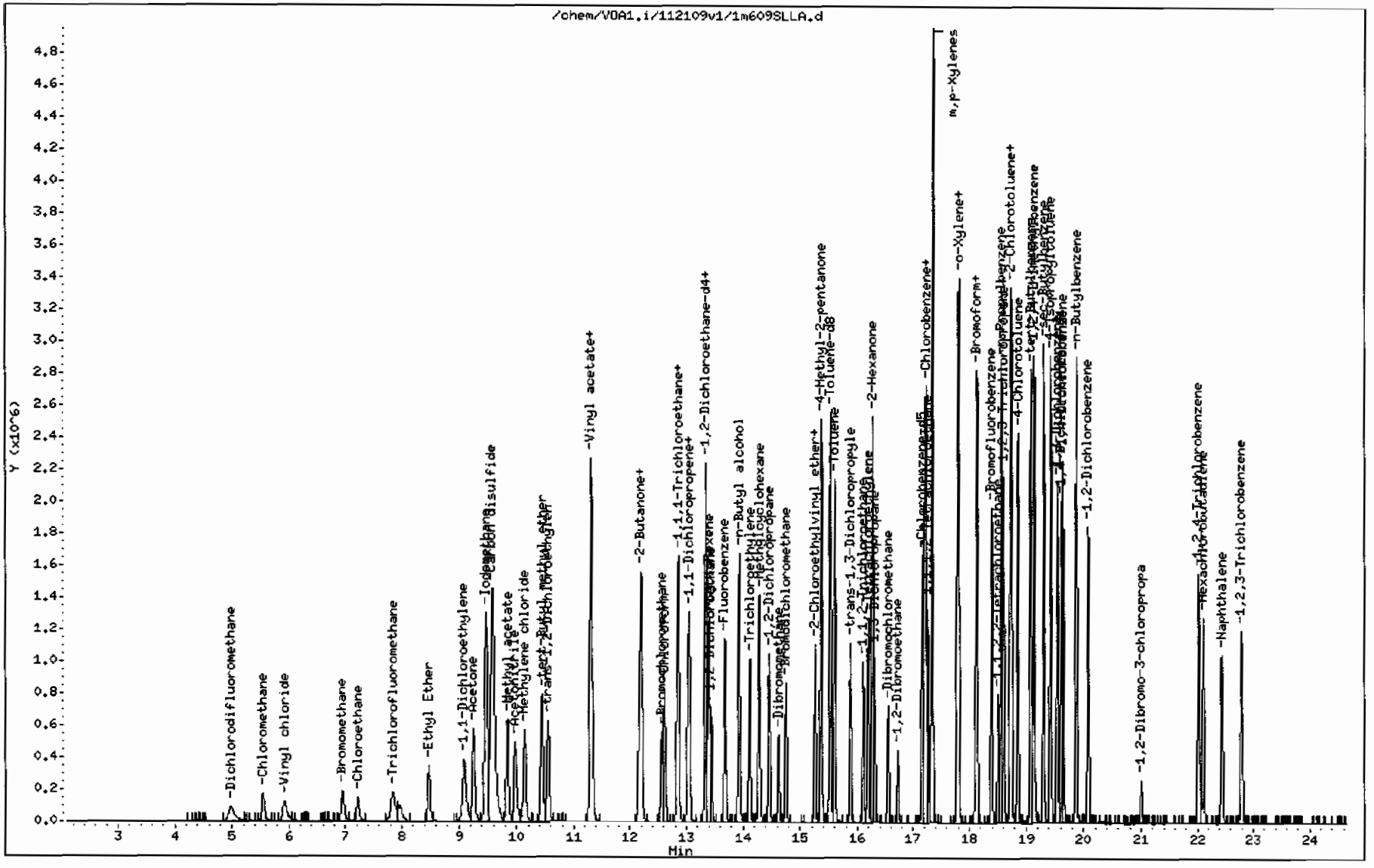

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546			**Matrix:**	SOIL
Lab Sample ID:	1201978344				
Client Sample:	QC for batch 925380	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 925380	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 11:21	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 10:04	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m610SSLA.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201978344**				
Client Sample:	**QC for batch 925380**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925380**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 11:21**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 10:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m610SSLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		264	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m610SSLA.d
Lab Smp Id: 1201978344 Client Smp ID: LCS
Inj Date : 21-NOV-2009 11:21
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |1201978344|925381|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091118-08A/UVM091105-02B
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
4 Chlorotrifluoroethylene	116	4.890	4.890	(0.357)	435099	122.163	122
8 2-Chloro-1,1,1-trifluoroethane	118	6.298	6.298	(0.460)	1081366	144.876	145
13 Acrolein	56	8.954	8.954	(0.654)	358733	308.883	309(A)
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1753583	264.077	264
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1199046	2613.60	2610
20 Allyl chloride	76	9.852	9.852	(0.720)	862781	357.893	358(AR)
24 tert-Butyl Alcohol	59	10.197	10.197	(0.745)	2172489	2520.90	2520
27 Acrylonitrile	53	10.671	10.671	(0.780)	643944	265.695	266
28 Isopropyl ether	45	11.201	11.201	(0.818)	1337447	49.2838	49.3
31 2-Chloro-1,3-butadiene	53	11.399	11.399	(0.833)	770086	55.5881	55.6
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1334232	51.5087	51.5
34 Ethyl acetate	43	12.167	12.167	(0.889)	1613424	243.221	243

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	37 Propionitrile	54	12.407	12.407	(0.906)	250403	254.950	255
	38 Tetrahydrofuran	42	12.540	12.540	(0.639)	527095	249.778	250
	40 Methacrylonitrile	41	12.563	12.563	(0.918)	1359271	258.304	258
	46 Isobutyl alcohol	41	13.106	13.106	(0.958)	607870	2466.25	2470
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	702990	49.7899	49.8
	49 Methyl tert-amyl ether	73	13.346	13.346	(0.975)	1091592	52.8585	52.8
*	52 Fluorobenzene	96	13.686	13.682	(1.000)	1135111	50.0000	
	56 Methyl methacrylate	69	14.441	14.441	(1.055)	1205628	268.123	268
	58 1,4-Dioxane	88	14.547	14.547	(1.063)	155480	2402.32	2400
	62 2-Nitropropane	43	15.081	15.081	(1.102)	642281	262.017	262
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1881945	48.9895	49.0
	67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2485957	257.719	258
	75 1-Chlorohexane	55	17.028	17.028	(1.244)	420188	46.9392	46.9
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	943868	50.0000	
	85 cis-1,4-Dichloro-2-butene	53	18.280	18.280	(0.932)	904680	285.079	285
	86 Cyclohexanone	55	18.386	18.386	(1.071)	661828	739.216	739
$	87 Bromofluorobenzene	95	18.391	18.391	(0.938)	794250	45.8936	45.9
	90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	865187	279.492	279
	98 Pentachloroethane	167	19.201	19.201	(0.979)	1416614	440.639	441(AR)
*	102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	515435	50.0000	
	104 Benzyl chloride	91	19.776	19.776	(1.008)	5061679	307.884	308
	107 bis(2-Chloroisopropyl)ether	45	20.167	20.167	(1.028)	969931	261.207	261

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112109v1/1m610SSLA.d

Date : 21-NOV-2009 11:21

Client ID: LCS

Sample Info: |12019783441925381|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: GRB2

Column diameter: 0.25

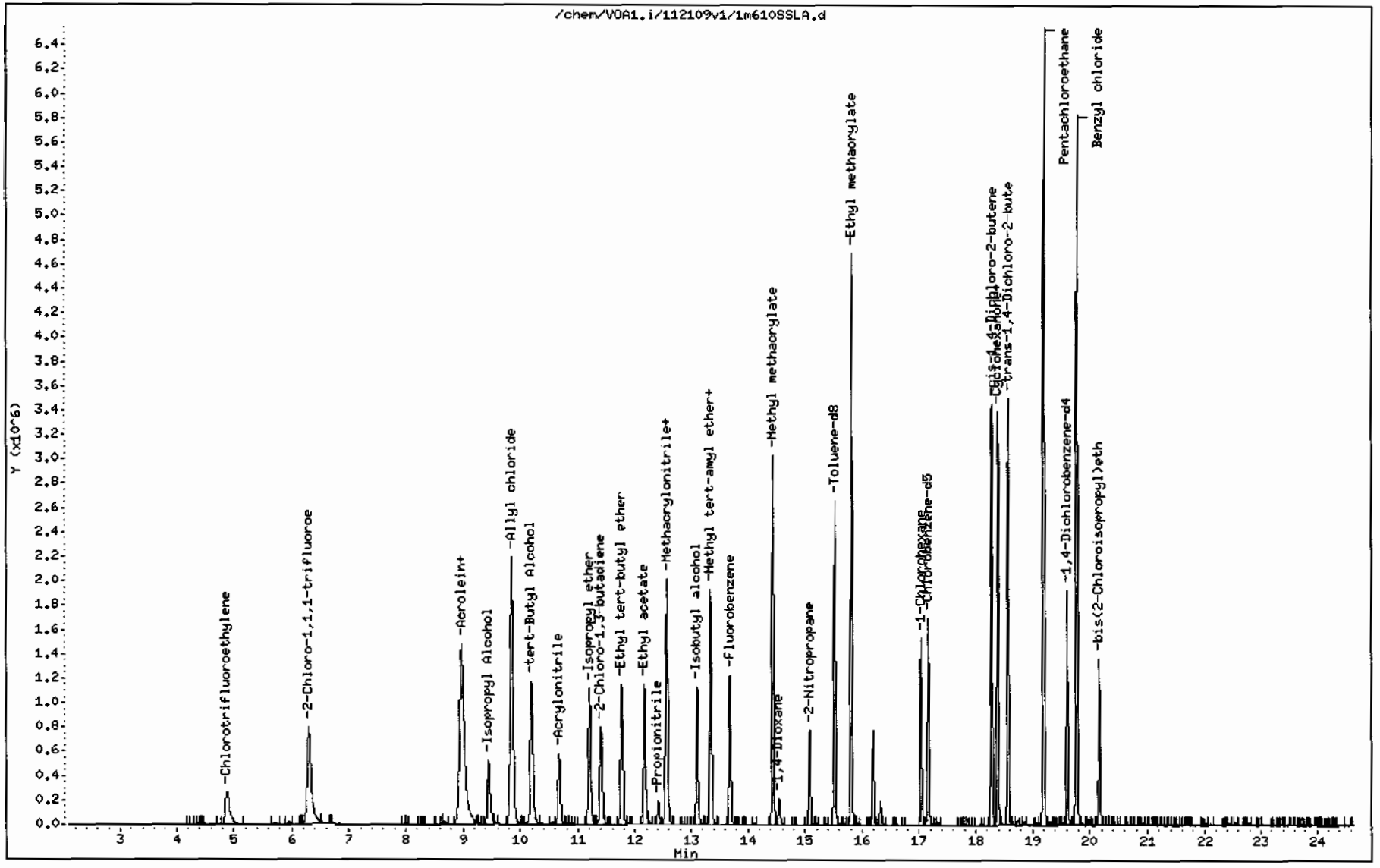

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201978341	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
Client Sample:	QC for batch 925380	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13770PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 20:28	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:48	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m628.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		54.0	ug/kg	0.378	1.11
74-87-3	Chloromethane		53.7	ug/kg	0.333	1.11
75-01-4	Vinyl chloride		51.5	ug/kg	0.333	1.11
74-83-9	Bromomethane		58.2	ug/kg	0.333	1.11
75-00-3	Chloroethane		56.6	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane		62.1	ug/kg	0.333	1.11
67-64-1	Acetone		213	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene		53.7	ug/kg	0.333	1.11
74-88-4	Iodomethane		286	ug/kg	1.78	5.55
75-09-2	Methylene chloride		45.3	ug/kg	2.22	5.55
75-15-0	Carbon disulfide		300	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene		53.3	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane		54.1	ug/kg	0.333	1.11
78-93-3	2-Butanone		226	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene		56.1	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane		54.5	ug/kg	0.333	1.11
67-66-3	Chloroform		55.1	ug/kg	0.333	1.11
74-97-5	Bromochloromethane		61.1	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane		55.8	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene		54.3	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride		57.7	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane		56.5	ug/kg	0.333	1.11
71-43-2	Benzene		53.5	ug/kg	0.333	1.11
79-01-6	Trichloroethylene		54.9	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane		56.2	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane		57.3	ug/kg	0.333	1.11
74-95-3	Dibromomethane		58.4	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone		255	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene		57.7	ug/kg	0.333	1.11
108-88-3	Toluene		53.4	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene		56.9	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane		55.3	ug/kg	0.333	1.11
591-78-6	2-Hexanone		221	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane		55.0	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene		56.4	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane		60.8	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane		57.4	ug/kg	0.333	1.11
108-90-7	Chlorobenzene		55.5	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978341**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**10**
Client Sample:	**QC for batch 925380**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13770PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 20:28**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 12:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m628.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.9	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes		110	ug/kg	0.333	2.22
95-47-6	o-Xylene		56.2	ug/kg	0.333	1.11
100-42-5	Styrene		57.0	ug/kg	0.333	1.11
75-25-2	Bromoform		60.5	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane		57.0	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane		53.1	ug/kg	0.333	1.11
108-86-1	Bromobenzene		57.2	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene		52.4	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene		52.9	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene		52.5	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene		53.3	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene		53.3	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene		54.0	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene		53.8	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene		53.8	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene		55.4	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene		57.6	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene		57.8	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene		53.5	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane		60.8	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane		56.8	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene		56.9	ug/kg	0.333	1.11

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m628.d
Lab Smp Id: 1201978341 Client Smp ID: RE03-09-13770MS
Inj Date : 21-NOV-2009 20:28
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |1201978341|925381|1|VOAF|1|
Misc Info : LANL 5g N/A MS 241336001
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 28 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.98650	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.682	(1.000)	833514	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	696655	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	411006	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	623219	60.1116	66.8
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1474466	52.0026	57.8
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	636200	46.1014	51.2
5 Dichlorodifluoromethane	85	4.997	4.990	(0.365)	270409	48.5840	54.0
6 Chloromethane	50	5.542	5.542	(0.405)	333086	48.3693	53.7
7 Vinyl chloride	62	5.922	5.915	(0.433)	285165	46.3708	51.5
9 Bromomethane	96	6.952	6.952	(0.508)	193576	52.3496	58.2
10 Chloroethane	64	7.214	7.219	(0.527)	194074	50.9698	56.6
11 Trichlorofluoromethane	101	7.845	7.840	(0.573)	483765	55.8759	62.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.254	9.254	(0.676)	926630	191.573	213
15 1,1-Dichloroethylene	61	9.083	9.088	(0.664)	576990	48.3735	53.7
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	703485	51.9832	57.8
18 Iodomethane	142	9.465	9.465	(0.692)	1989152	257.773	286
23 Methylene chloride	84	10.142	10.142	(0.741)	299444	40.7972	45.3
19 Carbon disulfide	76	9.576	9.576	(0.700)	4152201	270.299	300
26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	265808	47.9781	53.3
30 1,1-Dichloroethane	63	11.325	11.320	(0.827)	599405	48.6742	54.1
35 2-Butanone	43	12.186	12.186	(0.890)	962498	203.078	226
36 cis-1,2-Dichloroethylene	96	12.199	12.204	(0.891)	296771	50.5131	56.1
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	684226	51.8239	57.6
33 2,2-Dichloropropane	77	12.163	12.167	(0.889)	441410	49.0738	54.5
41 Chloroform	83	12.609	12.614	(0.921)	650234	49.5967	55.1
106 1,2-Dichlorobenzene	146	20.080	20.075	(1.024)	647312	51.2140	56.9
39 Bromochloromethane	128	12.559	12.559	(0.918)	128413	55.0074	61.1
43 1,1,1-Trichloroethane	97	12.848	12.844	(0.939)	515265	50.1845	55.8
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	457384	48.9041	54.3
44 Carbon tetrachloride	117	13.023	13.024	(0.952)	533945	51.9106	57.7
51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	588517	50.8673	56.5
47 Benzene	78	13.332	13.337	(0.974)	1123212	48.1684	53.5
54 Trichloroethylene	95	14.114	14.119	(1.031)	315750	49.4249	54.9
57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	305761	50.6113	56.2
60 Bromodichloromethane	83	14.750	14.754	(1.078)	511500	51.6070	57.3
59 Dibromomethane	93	14.621	14.625	(1.068)	195797	52.5549	58.4
64 4-Methyl-2-pentanone	58	15.362	15.357	(0.895)	591743	229.304	255
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	535807	51.9029	57.7
66 Toluene	92	15.597	15.597	(0.909)	735398	48.0661	53.4
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	557335	51.2086	56.9
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	212069	49.7997	55.3
71 2-Hexanone	43	16.269	16.269	(0.948)	1354712	198.613	221
72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	468879	49.5356	55.0
70 Tetrachloroethylene	164	16.190	16.190	(0.943)	235593	50.7575	56.4
73 Dibromochloromethane	129	16.549	16.549	(0.964)	334099	54.6887	60.8
74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	258750	51.6678	57.4
77 Chlorobenzene	112	17.194	17.194	(1.002)	790448	49.9476	55.5
79 1,1,1,2-Tetrachloroethane	131	17.263	17.258	(1.006)	313748	51.1442	56.8
78 Ethylbenzene	91	17.221	17.221	(1.003)	1567775	47.6378	52.9
80 m,p-Xylenes	106	17.336	17.337	(1.010)	1077487	99.3108	110
81 o-Xylene	106	17.783	17.783	(1.036)	533710	50.5634	56.2
82 Styrene	104	17.806	17.801	(1.038)	927324	51.2656	57.0
83 Bromoform	173	18.105	18.105	(0.923)	222490	54.4141	60.4
88 1,1,2,2-Tetrachloroethane	83	18.510	18.506	(0.944)	334528	51.3111	57.0
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	102407	47.7667	53.1(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	356206	51.5184	57.2
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1919652	47.1346	52.4
94 2-Chlorotoluene	91	18.745	18.740	(0.956)	1404995	47.6147	52.9
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1580138	47.2589	52.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1414200	48.0141	53.3
95 4-Chlorotoluene	91	18.855	18.856	(0.962)	1276286	47.9660	53.3
96 tert-Butylbenzene	119	19.076	19.077	(0.973)	1113911	48.5843	54.0
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1459315	48.4013	53.8
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1772541	48.4379	53.8
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1378713	49.8377	55.4
105 n-Butylbenzene	91	19.868	19.873	(1.013)	1492475	48.1852	53.5
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	68009	54.7198	60.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112109v1/1m628.d
Date : 21-NOV-2009 20:28
Client ID: RE03-09-13770MS
Sample Info: 1120197834119253811|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: GRB2
Column diameter: 0.25

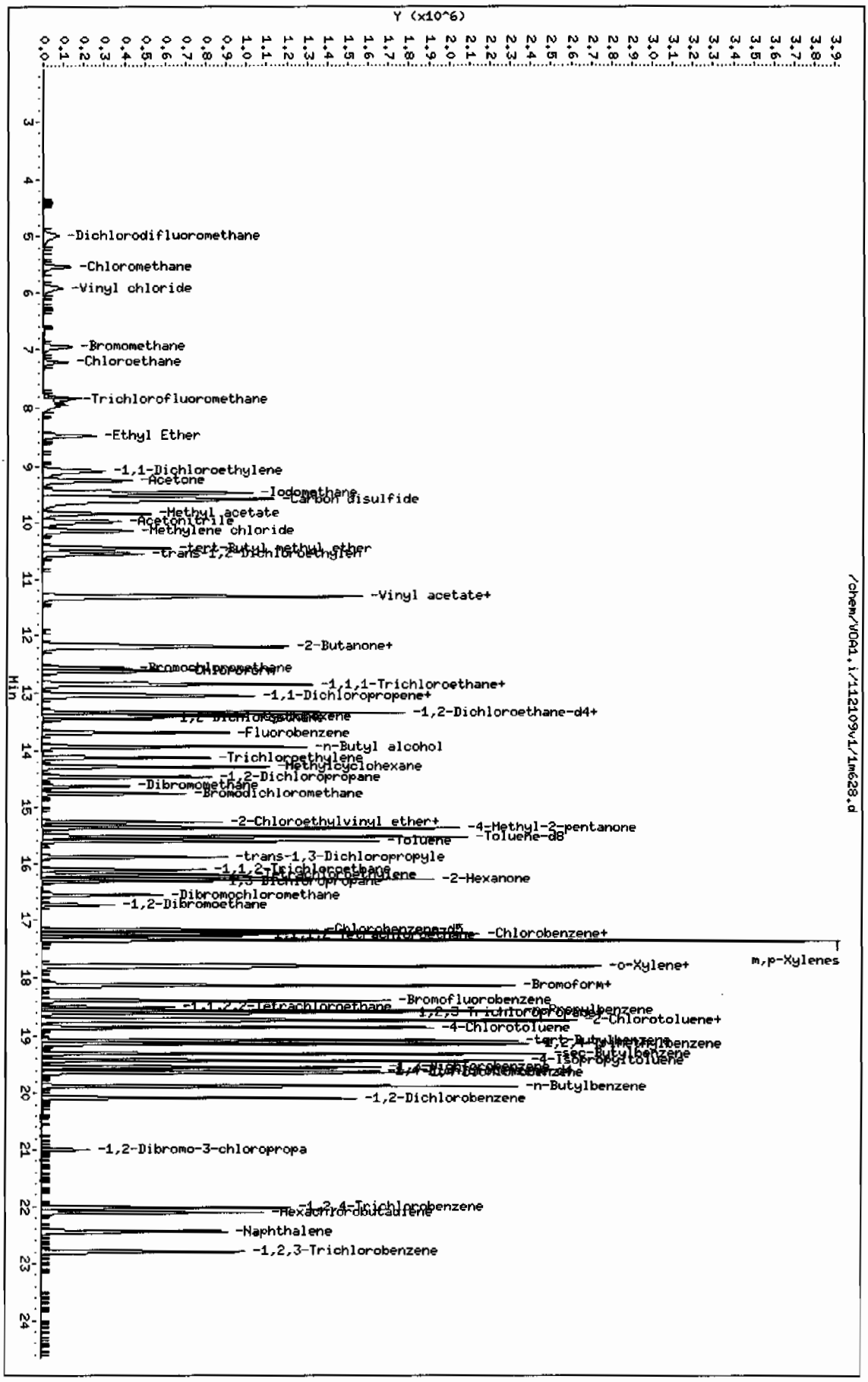

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201978342	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
Client Sample:	QC for batch 925380	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13770PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	925381	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/21/2009 20:58	**Analyst:**	GRB2	**Purge Vol:**	5 mL
Prep Date:	11/21/2009 12:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1m629.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		53.3	ug/kg	0.378	1.11
74-87-3	Chloromethane		54.7	ug/kg	0.333	1.11
75-01-4	Vinyl chloride		53.9	ug/kg	0.333	1.11
74-83-9	Bromomethane		59.9	ug/kg	0.333	1.11
75-00-3	Chloroethane		59.9	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane		60.4	ug/kg	0.333	1.11
67-64-1	Acetone		218	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene		54.0	ug/kg	0.333	1.11
74-88-4	Iodomethane		293	ug/kg	1.78	5.55
75-09-2	Methylene chloride		45.9	ug/kg	2.22	5.55
75-15-0	Carbon disulfide		308	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene		55.6	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane		54.4	ug/kg	0.333	1.11
78-93-3	2-Butanone		229	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene		56.7	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane		54.3	ug/kg	0.333	1.11
67-66-3	Chloroform		55.0	ug/kg	0.333	1.11
74-97-5	Bromochloromethane		63.1	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane		53.8	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene		55.4	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride		56.1	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane		54.9	ug/kg	0.333	1.11
71-43-2	Benzene		55.2	ug/kg	0.333	1.11
79-01-6	Trichloroethylene		55.7	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane		57.2	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane		57.4	ug/kg	0.333	1.11
74-95-3	Dibromomethane		58.9	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone		274	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene		57.2	ug/kg	0.333	1.11
108-88-3	Toluene		55.4	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene		58.1	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane		57.7	ug/kg	0.333	1.11
591-78-6	2-Hexanone		231	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane		57.1	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene		57.1	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane		61.6	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane		60.6	ug/kg	0.333	1.11
108-90-7	Chlorobenzene		57.1	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201978342**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**10**
Client Sample:	**QC for batch 925380**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13770PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**925381**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/21/2009 20:58**	**Analyst:**	**GRB2**	**Purge Vol:**	**5 mL**
Prep Date:	**11/21/2009 12:50**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1m629.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		54.7	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes		115	ug/kg	0.333	2.22
95-47-6	o-Xylene		57.6	ug/kg	0.333	1.11
100-42-5	Styrene		58.6	ug/kg	0.333	1.11
75-25-2	Bromoform		64.1	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane		61.2	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane		55.2	ug/kg	0.333	1.11
108-86-1	Bromobenzene		59.0	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene		54.4	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene		55.3	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene		55.5	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene		54.5	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene		55.2	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene		56.2	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene		55.5	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene		55.6	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene		57.3	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene		60.2	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene		57.8	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene		55.0	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane		64.8	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane		59.2	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene		59.9	ug/kg	0.333	1.11

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112109v1/1m629.d
Lab Smp Id: 1201978342 Client Smp ID: RE03-09-13770MSD
Inj Date : 21-NOV-2009 20:58
Operator : GRB2 Inst ID: VOA1.i
Smp Info : |1201978342|925381|1|VOAF|1|
Misc Info : LANL 5g N/A MSD 241336001
Comment :
Method : /chem/VOA1.i/112109v1/VOA1-8260ox-111309.m
Meth Date : 21-Nov-2009 11:43 gel00735 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 29 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.98650	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	883158	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.162	(1.000)	719134	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	410673	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	665873	60.6155	67.3
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1561122	53.3378	59.2
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	654970	47.5001	52.8
5 Dichlorodifluoromethane	85	4.983	4.990	(0.364)	282709	47.9387	53.2
6 Chloromethane	50	5.543	5.542	(0.405)	359142	49.2215	54.7
7 Vinyl chloride	62	5.923	5.915	(0.433)	315859	48.4749	53.8
9 Bromomethane	96	6.948	6.952	(0.508)	211095	53.8784	59.8
10 Chloroethane	64	7.215	7.219	(0.527)	217467	53.9031	59.9
11 Trichlorofluoromethane	101	7.841	7.840	(0.573)	499144	54.4115	60.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
16 Acetone	43	9.249	9.254	(0.676)	1007957	196.673	218
15 1,1-Dichloroethylene	61	9.088	9.088	(0.664)	614133	48.5933	54.0
103 1,4-Dichlorobenzene	146	19.643	19.638	(1.002)	703778	52.0470	57.8
18 Iodomethane	142	9.465	9.465	(0.692)	2154160	263.464	293
23 Methylene chloride	84	10.138	10.142	(0.741)	321264	41.3096	45.9
19 Carbon disulfide	76	9.576	9.576	(0.700)	4515280	277.412	308
26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	294038	50.0902	55.6
30 1,1-Dichloroethane	63	11.325	11.320	(0.828)	639156	48.9847	54.4
35 2-Butanone	43	12.186	12.186	(0.891)	1037178	206.533	229
36 cis-1,2-Dichloroethylene	96	12.204	12.204	(0.892)	317750	51.0437	56.7
101 1,3-Dichlorobenzene	146	19.542	19.541	(0.996)	714900	54.1910	60.2
33 2,2-Dichloropropane	77	12.163	12.167	(0.889)	465943	48.8894	54.3
41 Chloroform	83	12.609	12.614	(0.922)	687439	49.4871	55.0
106 1,2-Dichlorobenzene	146	20.080	20.075	(1.024)	680946	53.9187	59.9
39 Bromochloromethane	128	12.563	12.559	(0.918)	140384	56.7550	63.0
43 1,1,1-Trichloroethane	97	12.849	12.844	(0.939)	526358	48.3832	53.8
45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	494595	49.9101	55.4
44 Carbon tetrachloride	117	13.024	13.024	(0.952)	550209	50.4850	56.1
51 1,2-Dichloroethane	62	13.443	13.442	(0.982)	605978	49.4323	54.9
47 Benzene	78	13.332	13.337	(0.974)	1228834	49.7242	55.2
54 Trichloroethylene	95	14.119	14.119	(1.032)	339344	50.1323	55.7
57 1,2-Dichloropropane	63	14.460	14.460	(1.057)	329565	51.4851	57.2
60 Bromodichloromethane	83	14.750	14.754	(1.078)	542561	51.6638	57.4
59 Dibromomethane	93	14.625	14.625	(1.069)	209163	52.9866	58.9
64 4-Methyl-2-pentanone	58	15.362	15.357	(0.895)	655811	246.187	274
63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	562883	51.4608	57.2
66 Toluene	92	15.597	15.597	(0.909)	787125	49.8388	55.4
68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	587743	52.3145	58.1
69 1,1,2-Trichloroethane	83	16.103	16.103	(0.939)	228125	51.8956	57.6
71 2-Hexanone	43	16.269	16.269	(0.948)	1466578	208.292	231
72 1,3-Dichloropropane	76	16.306	16.310	(0.950)	502595	51.4379	57.1
70 Tetrachloroethylene	164	16.191	16.190	(0.944)	246342	51.4143	57.1
73 Dibromochloromethane	129	16.550	16.549	(0.965)	349828	55.4734	61.6
74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	281951	54.5408	60.6
77 Chlorobenzene	112	17.194	17.194	(1.002)	840008	51.4201	57.1
79 1,1,1,2-Tetrachloroethane	131	17.263	17.258	(1.006)	337171	53.2444	59.2
78 Ethylbenzene	91	17.222	17.221	(1.004)	1674064	49.2774	54.7
80 m,p-Xylenes	106	17.337	17.337	(1.010)	1154890	103.118	114
81 o-Xylene	106	17.783	17.783	(1.036)	564489	51.8078	57.6
82 Styrene	104	17.806	17.801	(1.038)	984976	52.7507	58.6
83 Bromoform	173	18.105	18.105	(0.923)	235763	57.7071	64.1
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	359056	55.1179	61.2
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	106343	49.6429	55.2(Q)
91 Bromobenzene	156	18.593	18.593	(0.948)	367019	53.1254	59.0
89 n-Propylbenzene	91	18.561	18.561	(0.946)	1994313	49.0076	54.4
94 2-Chlorotoluene	91	18.741	18.740	(0.956)	1467844	49.7849	55.3
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1668364	49.9380	55.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	18.718	18.717	(0.954)	1443906	49.0624	54.5
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1321152	49.6925	55.2
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1158172	50.5558	56.2
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1504647	49.9453	55.5
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1828932	50.0194	55.6
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1425239	51.5613	57.3
105 n-Butylbenzene	91	19.873	19.873	(1.013)	1532753	49.5257	55.0
108 1,2-Dibromo-3-chloropropane	157	21.001	21.005	(1.071)	72485	58.3685	64.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/112109v1/1m629.d
Date : 21-NOV-2009 20:58
Client ID: RE03-09-13770MSD
Sample Info: 1120197834219253811|1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: CRB2
Column diameter: 0.25

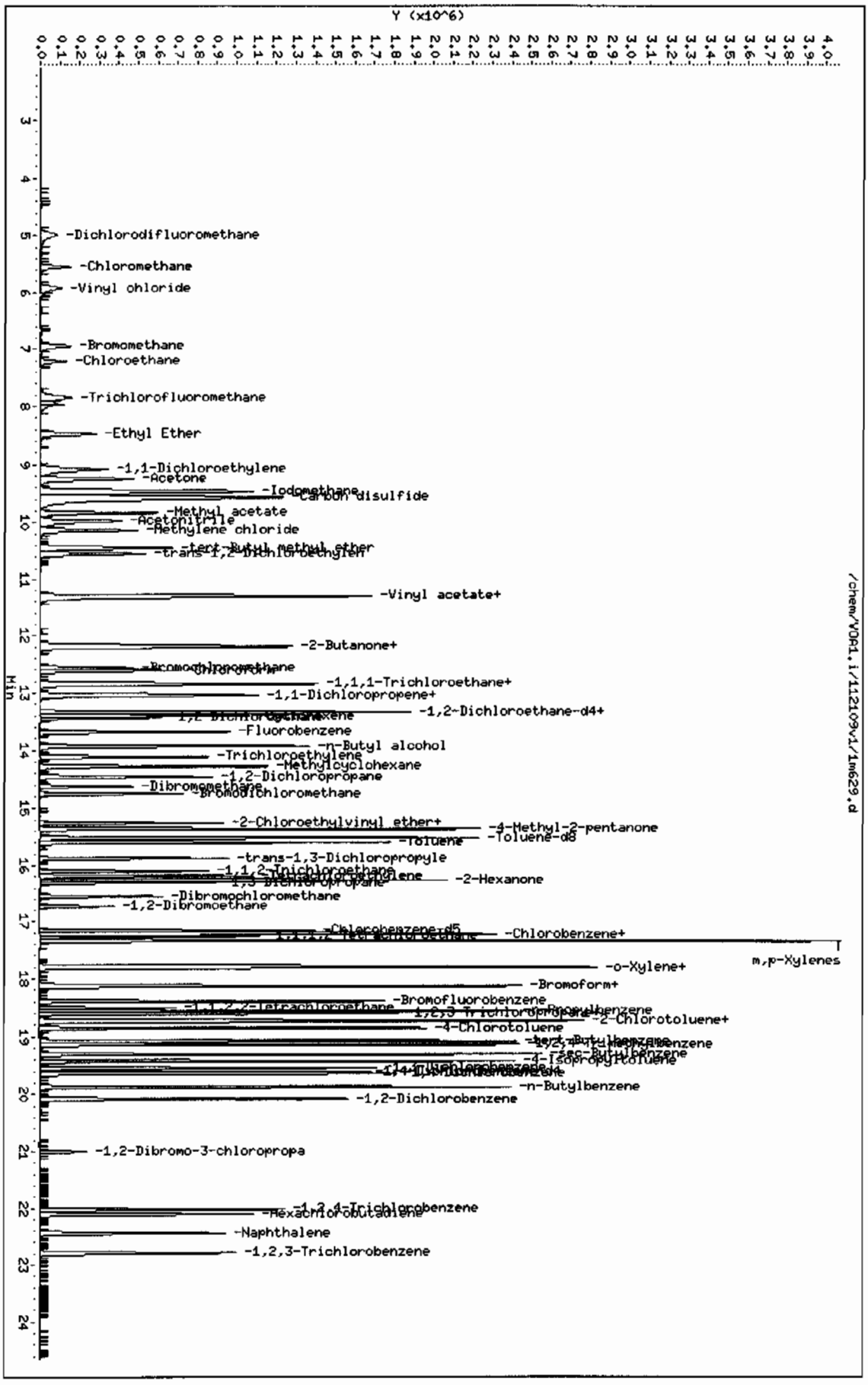

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **925380** Verified by: _____

Analyst: Gelester Baskett

Method: SW846 5030

Lab SOP: GL-OA-E-038 REV# 12

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201978340 MB	21-NOV-2009 10:00:00	Soil	5	5	1	
1201978343 LCS	21-NOV-2009 10:02:00	Soil	5	5	1	
1201978344 LCS	21-NOV-2009 10:04:00	Soil	5	5	1	
241059001	21-NOV-2009 12:40:00	Soil	5	5	1	
241059002	21-NOV-2009 12:42:00	Soil	5	5	1	
241059003	21-NOV-2009 12:44:00	Soil	5	5	1	
241336001	21-NOV-2009 12:46:00	Soil	5	5	1	
1201978341 PS (241336001)	21-NOV-2009 12:48:00	Soil	5	5	1	
1201978342 PSD (241336001)	21-NOV-2009 12:50:00	Soil	5	5	1	
241336002	21-NOV-2009 12:52:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/13/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: CJS
DATE: 12/17/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111309v1

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
ICV	W1VM091113-18		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
BFB	UVM090821-02				1
SHORT ICV	W1VM091113-19		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

RAE 12/02/09

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/13/2009 22:17	1L507.D	UVM090821-02	GEL	BFB2	5ML	1	N/A	1	W	ACJ	N/A	O	Passed.
11/13/2009 22:47	1L508.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
11/13/2009 23:18	1L509.D	W1VM091113-05	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM090911-01B/UVM091012-01D
11/13/2009 23:48	1L510.D	W1VM091113-06	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	N/A	X	UVM090911-02B/UVM091012-02D: See 1L511
11/14/2009 0:18	1L511.D	W1VM091113-07	GEL	VSTD001	5ML	1	N/A	5	W	ACJ	N/A	O	UVM090911-02B/UVM091012-02D
11/14/2009 0:48	1L512.D	W1VM091113-08	GEL	VSTD002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM090911-03B/UVM091012-03D
11/14/2009 1:19	1L513.D	W1VM091113-09	GEL	VSTD005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM090911-04B/UVM091012-04D
11/14/2009 1:49	1L514.D	W1VM091113-10	GEL	VSTD010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM090911-05B/UVM091012-05D
11/14/2009 2:19	1L515.D	W1VM091113-11	GEL	VSTD020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM090911-06B/UVM091012-06D
11/14/2009 2:49	1L516.D	W1VM091113-12	GEL	VSTD050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM090911-07B/UVM091012-07D
11/14/2009 3:19	1L517.D	W1VM091113-13	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM090911-08B/UVM091012-08D
11/14/2009 3:50	1L518.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	Rinse
11/14/2009 4:20	1L519.D	W1VM091113-14	GEL	VSTD005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091023-01/UVM091110-01E
11/14/2009 4:50	1L520.D	W1VM091113-15	GEL	VSTD010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091023-02/UVM091110-02E
11/14/2009 5:20	1L521.D	W1VM091113-16	GEL	VSTD025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091023-03/UVM091110-03E
11/14/2009 5:50	1L522.D	W1VM091113-17	GEL	VSTD050S	5ML	1	N/A	16	W	ACJ	N/A	O	UVM091023-04/UVM091110-04E
11/14/2009 6:20	1L523.D	W1VM091113-18	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091023-05/UVM091110-05E
11/14/2009 6:51	1L524.D	W1VM091113-19	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091023-06/UVM091110-06E
11/14/2009 7:21	1L525.D	W1VM091113-20	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091023-07/UVM091110-07E
11/14/2009 7:51	1L526.D	12019---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	Rinse
11/14/2009 8:21	1L527.D	W1VM091113-18	GEL	ICV	5ML	1	N/A	21	W	ACJ	N/A	X	UVM091111-01A/IVM091111-01; Vinyl Chloride low. See 11/16/09
11/14/2009 8:52	1L528.D	W1VM091113-19	GEL	SHORT ICV	5ML	1	N/A	22	W	ACJ	N/A	O	UVM091023-08A/UVM091105-02B

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: CDS
DATE: 12/02/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

RAE 12/02/09

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/16/2009 9:04	1M101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	Passed. See 1M106
11/16/2009 9:35	1M102.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	RXM4	N/A	X	
11/16/2009 10:14	1M103.D	W1VM091116-01	GEL	CCV/LCS/ICV	5ML	1	N/A	3	W	RXM4	N/A	X	
11/16/2009 10:45	1M104.D	W1VM091116-02	GEL	LCSD	5ML	1	N/A	4	W	RXM4	N/A	X	
11/16/2009 12:25	1M105.D	W1VM091116-03	GEL	SHORTICV	5ML	1	N/A	5	W	RXM4	N/A	X	Decreased multiplier
11/16/2009 13:00	1M106.D	UVM090821-02	GEL	BFB	5ML	1	N/A	6	W	RXM4	N/A	X	See 1M108
11/16/2009 13:30	1M107.D	W1VM091116-04	GEL	CCV/LCS/ICV	5ML	1	N/A	7	W	RXM4	N/A	X	UVM091111-01A/IVM0901111-01
11/16/2009 14:01	**1M108.D**	**W1VM091116-05**	**GEL**	**BFB/CCV/LCS/ICV**	**5ML**	**1**	**N/A**	**8**	**W**	**RXM4**	**N/A**	**O**	UVM091111-01B/IVM0901111-01
11/16/2009 14:48	1M109.D	W1VM091116-06	GEL	SHORT	5ML	1	N/A	9	W	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 15:20	1M110.D	W1VM091116-07	GEL	LCS	5G	1	N/A	10	S	RXM4	N/A	O	UVM091111-01B/IVM0901111-01
11/16/2009 15:51	1M111.D	W1VM091116-08	GEL	SHORT	5G	1	N/A	11	S	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:21	1M112.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	RXM4	N/A	X	waters were not analyzed. Not needed.
11/16/2009 16:51	1M113.D	12019---	GEL	BLANK	5G	1	N/A	13	S	RXM4	N/A	O	
11/16/2009 17:22	1M114.D	240630001	LANL	923274	5G	1	N/A	14	S	RXM4	N/A	O	
11/16/2009 17:52	1M115.D	240630002	LANL	923274	5G	1	N/A	15	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 18:22	1M116.D	240630003	LANL	923274	5G	1	N/A	16	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 18:52	1M117.D	240630004	LANL	923274	5G	1	N/A	17	S	RXM4	N/A	O	
11/16/2009 19:23	1M118.D	240630005	LANL	923274	5G	1	N/A	18	S	RXM4	N/A	O	
11/16/2009 19:53	1M119.D	240630006	LANL	923274	5G	1	N/A	19	S	RXM4	N/A	O	
11/16/2009 20:23	1M120.D	240630007	LANL	923274	5G	1	N/A	20	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 20:53	1M121.D	240630008	LANL	923274	5G	1	N/A	21	S	RXM4	N/A	X	IS Failure, See RA 11/17/09
11/16/2009 21:23	1M122.D	240630009	LANL	923274	5G	1	N/A	22	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:54	1M123.D	240630010	LANL	923274	5G	1	N/A	23	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 22:24	1M124.D	240630011	LANL	923274	5G	1	N/A	24	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 22:55	1M125.D	240634001	LANL	923274	5G	1	N/A	25	S	RXM4	N/A	O	
11/16/2009 23:25	1M126.D	240634002	LANL	923274	5G	1	N/A	26	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 23:55	1M127.D	240634003	LANL	923274	5G	1	N/A	27	S	RXM4	N/A	O	
11/17/2009 0:25	1M128.D	240634004	LANL	923274	5G	1	N/A	28	S	RXM4	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: [illegible]
DATE: 12/02/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

RJE 12/02/09

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/17/2009 0:55	1M129.D	240634005	LANL	923274	5G	1	N/A	29	S	RXM4	N/A	O	
11/17/2009 1:25	1M130.D	240634006	LANL	923274	5G	1	N/A	30	S	RXM4	N/A	O	
11/17/2009 1:56	1M131.D	1201973574	LANL	923274	5G	1	N/A	31	S	RXM4	N/A	X	MS 240630001; See 11/17/09
11/17/2009 2:26	1M132.D	1201973575	LANL	923274	5G	1	N/A	32	S	RXM4	N/A	X	MSD 240630001; out of tune. See 11/17/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/21/2009 Method 8260B/624 Operator: GRB

REVIEWED BY: KP
DATE: 11/24/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 112109V1

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091121-06		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091121-06/08			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091121-07/09		5+5	5+5	
	N/A				

BRB 11-22-09

5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/21/2009 6:50	1M601.D	UVM090821-02	GEL	BFB	5ml	1	N/A	1	w	GRB	N/A	X	
11/21/2009 7:20	1M602.D	W1VM091121-01	GEL	CCV/LCS	5g	1	N/A	2	s	GRB	N/A	X	UVM091111-01B+IVM091116-01
11/21/2009 7:50	1M603.D	UVM090821-02	GEL	BFB	5ml	1	N/A	3	w	GRB	N/A	X	
11/21/2009 8:20	1M604.D	W1VM091121-02	GEL	CCV/LCS	5g	1	N/A	4	s	GRB	N/A	X	UVM091111-01B+IVM091116-01
11/21/2009 8:51	1M605.D	W1VM091121-03	GEL	SHORT	5g	1	N/A	5	s	GRB	N/A	X	UVM091118-08A+UVM091105-02B
11/21/2009 9:21	1M606.D	W1VM091121-04	GEL	CCV/LCS	5g	1	N/A	6	s	GRB	N/A	X	UVM091111-01B+IVM091116-01
11/21/2009 9:51	1M607.D	W1VM091121-05	GEL	SHORT	5g	1	N/A	7	s	GRB	N/A	X	UVM091118-08A+UVM091105-02B
11/21/2009 10:21	1M608.D	UVM090821-02	GEL	BFB	5ml	1	N/A	8	w	GRB	N/A	O	
11/21/2009 10:51	1M609.D	W1VM091121-06	GEL	CCV/LCS	5g	1	N/A	9	s	GRB	N/A	O	UVM091111-01C+IVM091116-01
11/21/2009 11:21	1M610.D	W1VM091121-07	GEL	SHORT	5g	1	N/A	10	s	GRB	N/A	O	UVM091118-08A+UVM091105-02B
11/21/2009 11:52	1M611.D	W1VM091121-08	GEL	LCS	5ml	1	N/A	11	w	GRB	N/A	O	UVM091111-01C+IVM091116-01
11/21/2009 12:22	1M612.D	W1VM091121-09	GEL	SHORT	5ml	1	N/A	12	w	GRB	N/A	O	UVM091118-08A+UVM091105-02B
11/21/2009 12:52	1M613.D	12019---	GEL	BLANK	5ml	1	N/A	13	w	GRB	N/A	X	CONTAMINATED
11/21/2009 13:23	1M614.D	12019---	GEL	BLANK	5g	1	N/A	14	s	GRB	N/A	O	
11/21/2009 13:53	1M615.D	12019---	GEL	BLANK	5ml	1	N/A	15	w	GRB	N/A	O	
11/21/2009 14:24	1M616.D	241059001	LANL	925381	5g	1	N/A	16	s	GRB	N/A	O	
11/21/2009 14:54	1M617.D	241059002	LANL	925381	5g	1	N/A	17	s	GRB	N/A	O	
11/21/2009 15:25	1M618.D	241059003	LANL	925381	5g	1	N/A	18	s	GRB	N/A	O	
11/21/2009 15:55	1M619.D	241336001	LANL	925381	5g	1	N/A	19	s	GRB	N/A	O	
11/21/2009 16:26	1M620.D	241336002	LANL	925381	5g	1	N/A	20	s	GRB	N/A	O	
11/21/2009 16:56	1M621.D	241359001	PNTX	925392	5ml	1	ph2	21	w	GRB	N	O	
11/21/2009 17:26	1M622.D	241359002	PNTX	925392	5ml	1	ph2	22	w	GRB	N	O	
11/21/2009 17:57	1M623.D	241359003	PNTX	925392	5ml	1	ph2	23	w	GRB	N	O	
11/21/2009 18:27	1M624.D	241359004	PNTX	925392	5ml	1	ph2	24	w	GRB	N	O	
11/21/2009 18:58	1M625.D	241359005	PNTX	925392	5ml	1	ph2	25	w	GRB	N	O	
11/21/2009 19:28	1M626.D	241359006	PNTX	925392	5ml	1	ph2	26	w	GRB	N	O	
11/21/2009 19:58	1M627.D	241359007	PNTX	925392	5ml	1	ph2	27	w	GRB	N	O	
11/21/2009 20:28	1M628.D	1201978341	LANL	925381	5g	1	N/A	28	s	GRB	N/A	O	MS 241336001

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	925661
Prep Batch Number:	925648

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201979040	Method Blank (MB)
1201979041	241417001(RE03-09-13812) Matrix Spike (MS)
1201979042	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)
1201979043	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
The non-SDG sample 241417001 (RE03-09-13812) was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The MS/MSD RPD value for Benzyl alcohol was 39% (limit: 30%). Because the individual MS and MSD recoveries for that analyte were acceptable, the data were reported un-qualified for the RPD value failure.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
A non-conformance report was not required for the samples reported in this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beckham **Date:** 12-14-09

Roadmap for LANL 10-546 SVOA

This roadmap was analyzed by nat00999 on 12-05-2009, 17:11.
This roadmap was reviewed by bar00895 on 12-09-2009, 09:02.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD6.i/s120409.b/s610406.d	241336001	04-DEC-2009	12:00	10-546.sub	RE03-09-13770	1	925661	
☐	N	/chem/MSD6.i/s120409.b/s610407.d	241336002	04-DEC-2009	12:28	10-546.sub	RE03-10-5897	1	925661	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD6.i/s120409.b/s610404.d	1201979040	mb	04-DEC-2009	11:05	10-546.sub	SBLK01	1	925661	
■	N	/chem/MSD6.i/s120409.b/s610405.d	1201979043	lcs	04-DEC-2009	11:32	10-546.sub	SBLK01LCS	1	925661	DUSE - see s610505
☐	N	/chem/MSD6.i/s120509.b/s610505.d	1201979043	lcs	05-DEC-2009	12:18	10-546.sub	SBLK01LCS	1	925661	USE - rr of s610405

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241336001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13770**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s610406.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	370	ug/kg	74.0	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.1	**Dilution:**	1
Run Date:	12/04/2009 12:00	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s6l0406.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	282	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241336002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-5897**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:28**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0407.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.6	358
108-95-2	Phenol	U	358	ug/kg	71.6	358
95-57-8	2-Chlorophenol	U	358	ug/kg	71.6	358
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.6	358
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.6	358
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.6	358
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358
87-86-5	Pentachlorophenol	U	358	ug/kg	89.5	358
129-00-0	Pyrene	U	35.8	ug/kg	10.7	35.8
110-86-1	Pyridine	U	358	ug/kg	71.6	358
62-53-3	Aniline	U	358	ug/kg	107	358
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.6	358
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.6	358
100-51-6	Benzyl alcohol	U	358	ug/kg	107	358
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.6	358
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.6	358
95-48-7	o-Cresol	U	358	ug/kg	71.6	358
65794-96-9	m,p-Cresols	U	358	ug/kg	107	358
67-72-1	Hexachloroethane	U	358	ug/kg	71.6	358
98-95-3	Nitrobenzene	U	358	ug/kg	71.6	358
78-59-1	Isophorone	U	358	ug/kg	71.6	358
88-75-5	2-Nitrophenol	U	358	ug/kg	71.6	358
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.6	358
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.6	358
65-85-0	Benzoic acid	U	716	ug/kg	179	716
91-20-3	Naphthalene	U	35.8	ug/kg	10.7	35.8
106-47-8	4-Chloroaniline	U	358	ug/kg	71.6	358
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.6	358
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.16	35.8
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.6	358
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.6	358
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.6	358
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8
88-74-4	2-Nitroaniline	U	358	ug/kg	71.6	358
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	358	ug/kg	71.6	358

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	Date Collected:	11/16/2009 12:00	Matrix:	R
Lab Sample ID:	241336002	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-5897	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	925661	Inst:	MSD6.I	Dilution:	1
Run Date:	12/04/2009 12:28	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/24/2009 21:57	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s610407.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	358	ug/kg	71.6	358
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.7	35.8
51-28-5	2,4-Dinitrophenol	U	716	ug/kg	136	716
132-64-9	Dibenzofuran	U	358	ug/kg	71.6	358
84-66-2	Diethylphthalate	U	358	ug/kg	71.6	358
86-73-7	Fluorene	U	35.8	ug/kg	10.7	35.8
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.6	358
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.6	358
100-01-6	4-Nitroaniline	U	358	ug/kg	107	358
	p-Nitroaniline					
122-39-4	Diphenylamine	U	358	ug/kg	71.6	358
122-66-7	Azobenzene	U	358	ug/kg	71.6	358
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.6	358
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.6	358
85-01-8	Phenanthrene	U	35.8	ug/kg	10.7	35.8
120-12-7	Anthracene	U	35.8	ug/kg	7.16	35.8
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.6	358
206-44-0	Fluoranthene	U	35.8	ug/kg	10.7	35.8
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.6	358
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.7	35.8
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	107	358
218-01-9	Chrysene	U	35.8	ug/kg	10.7	35.8
117-81-7	bis(2-Ethylhexyl)phthalate	J	87.7	ug/kg	71.6	358
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.6	358
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.7	35.8
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.7	35.8
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.7	35.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.7	35.8
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.7	35.8
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.7	35.8
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.6	358

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	322	ug/kg		JA

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-546

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201979040	MB for batch 925648	76	77	84	82	86	93
241336001	RE03-09-13770	52	52	56	57	54	65
241336002	RE03-10-5897	61	63	68	69	69	84
1201979043	LCS for batch 925648	60	69	72	78	97	93

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(35%-96%)
PHL	=	Phenol-d5	(36%-96%)
NBZ	=	Nitrobenzene-d5	(34%-104%)
FBP	=	2-Fluorobiphenyl	(36%-100%)
TBP	=	2,4,6-Tribromophenol	(37%-106%)
TPH	=	p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13812MS
Lab Sample ID: 1201979041
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 12:44
Prep Batch ID: 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1790	0.00	U	677	38	32-90
108-95-2	MS	Phenol	1790	0.00	U	1100	61	32-105
95-57-8	MS	2-Chlorophenol	1790	0.00	U	1120	63	33-106
106-46-7	MS	1,4-Dichlorobenzene	1790	0.00	U	1110	62	33-95
621-64-7	MS	N-Nitrosodipropylamine	1790	0.00	U	1240	70	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1790	0.00	U	1430	80	38-119
83-32-9	MS	Acenaphthene	1790	0.00	U	1230	69	39-100
121-14-2	MS	2,4-Dinitrotoluene	1790	0.00	U	1480	83	42-107
100-02-7	MS	4-Nitrophenol	1790	0.00	U	1130	64	24-120
87-86-5	MS	Pentachlorophenol	1790	0.00	U	1430	80	26-121
129-00-0	MS	Pyrene	1790	0.00	U	1430	80	34-120
110-86-1	MS	Pyridine	1790	0.00	U	681	38	30-95
62-53-3	MS	Aniline	1790	0.00	U	1150	64	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1790	0.00	U	1030	58	34-101
541-73-1	MS	1,3-Dichlorobenzene	1790	0.00	U	1090	61	31-97
100-51-6	MS	Benzyl alcohol	1790	0.00	U	548	31	17-120
95-50-1	MS	1,2-Dichlorobenzene	1790	0.00	U	1160	65	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1790	0.00	U	1160	65	32-113
95-48-7	MS	o-Cresol	1790	0.00	U	1220	68	31-119
65794-96-9	MS	m,p-Cresols	1790	0.00	U	1480	83	35-125
67-72-1	MS	Hexachloroethane	1790	0.00	U	1100	62	30-100
98-95-3	MS	Nitrobenzene	1790	0.00	U	1220	68	33-108

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-546

Client ID: RE03-09-13812MS

Lab Sample ID: 1201979041

Instrument: MSD6.I

Analyst: NAG1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: SOIL

%Moisture: 7.1

Analysis Date: 12/05/2009 12:44

Dilution: 1

Prep Batch ID: 925648

Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1790	0.00	U	1310	73	34-110
88-75-5	MS	2-Nitrophenol	1790	0.00	U	1320	74	32-108
105-67-9	MS	2,4-Dimethylphenol	1790	0.00	U	1080	61	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1790	0.00	U	1230	69	35-108
120-83-2	MS	2,4-Dichlorophenol	1790	0.00	U	1350	75	38-110
65-85-0	MS	Benzoic acid	3570	0.00	U	2470	69	18-134
91-20-3	MS	Naphthalene	1790	0.00	U	1200	67	31-105
106-47-8	MS	4-Chloroaniline	1790	0.00	U	1120	63	29-123
87-68-3	MS	Hexachlorobutadiene	1790	0.00	U	1220	68	31-109
91-57-6	MS	2-Methylnaphthalene	1790	0.00	U	1450	81	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1790	0.00	U	1340	75	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1790	0.00	U	1290	72	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1790	0.00	U	1420	80	37-116
91-58-7	MS	2-Chloronaphthalene	1790	0.00	U	1260	70	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1790	0.00	U	1130	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1790	0.00	U	1240	70	39-117
131-11-3	MS	Dimethylphthalate	1790	0.00	U	1360	76	41-105
606-20-2	MS	2,6-Dinitrotoluene	1790	0.00	U	1410	79	41-103
208-96-8	MS	Acenaphthylene	1790	0.00	U	1360	76	41-103
51-28-5	MS	2,4-Dinitrophenol	1790	0.00	U	1490	83	25-104
132-64-9	MS	Dibenzofuran	1790	0.00	U	1610	90	40-114
84-66-2	MS	Diethylphthalate	1790	0.00	U	1410	79	43-110

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-546

Client ID: RE03-09-13812MS

Lab Sample ID: 1201979041

Instrument: MSD6.I

Analyst: NAG1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: SOIL

%Moisture: 7.1

Analysis Date: 12/05/2009 12:44

Dilution: 1

Prep Batch ID: 925648

Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1790	0.00	U	1380	77	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1790	0.00	U	1410	79	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1790	0.00	U	1370	76	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1790	0.00	U	1450	81	35-139
122-39-4	MS	Diphenylamine	1790	0.00	U	1390	78	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1790	0.00	U	1370	77	37-118
101-55-3	MS	4-Bromophenylphenylether	1790	0.00	U	1500	84	39-112
118-74-1	MS	Hexachlorobenzene	1790	0.00	U	1510	85	38-113
85-01-8	MS	Phenanthrene	1790	0.00	U	1430	80	38-110
120-12-7	MS	Anthracene	1790	0.00	U	1460	82	38-112
84-74-2	MS	Di-n-butylphthalate	1790	0.00	U	1630	91	42-119
206-44-0	MS	Fluoranthene	1790	0.00	U	1590	89	38-119
85-68-7	MS	Butylbenzylphthalate	1790	0.00	U	1640	92	39-126
56-55-3	MS	Benzo(a)anthracene	1790	0.00	U	1490	83	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1790	0.00	U	1290	72	35-106
218-01-9	MS	Chrysene	1790	0.00	U	1540	86	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1790	0.00	U	1720	96	40-125
117-84-0	MS	Di-n-octylphthalate	1790	0.00	U	1760	98	30-147
205-99-2	MS	Benzo(b)fluoranthene	1790	0.00	U	1590	89	38-117
207-08-9	MS	Benzo(k)fluoranthene	1790	0.00	U	1600	89	39-120
50-32-8	MS	Benzo(a)pyrene	1790	0.00	U	1660	93	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1790	0.00	U	1570	88	32-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13812MS
Lab Sample ID: 1201979041
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 12:44
Prep Batch ID: 925648
Batch ID: 925661
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1790	0.00	U	1600	90	32-124
191-24-2	MS	Benzo(ghi)perylene	1790	0.00	U	1650	92	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1790	0.00	U	1230	69	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13
Dilution: 1
Prep Batch ID 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD	N-Methyl-N-nitrosomethylam	1790	0.00	U	692	39	32-90	2	0-30
108-95-2	MSD	Phenol	1790	0.00	U	1120	63	32-105	2	0-30
95-57-8	MSD	2-Chlorophenol	1790	0.00	U	1150	65	33-106	3	0-30
106-46-7	MSD	1,4-Dichlorobenzene	1790	0.00	U	1120	63	33-95	1	0-30
621-64-7	MSD	N-Nitrosodipropylamine	1790	0.00	U	1260	71	31-109	2	0-30
59-50-7	MSD	4-Chloro-3-methylphenol	1790	0.00	U	1110	62	38-119	25	0-30
83-32-9	MSD	Acenaphthene	1790	0.00	U	1210	68	39-100	2	0-30
121-14-2	MSD	2,4-Dinitrotoluene	1790	0.00	U	1410	79	42-107	5	0-30
100-02-7	MSD	4-Nitrophenol	1790	0.00	U	1150	64	24-120	1	0-30
87-86-5	MSD	Pentachlorophenol	1790	0.00	U	1330	74	26-121	7	0-30
129-00-0	MSD	Pyrene	1790	0.00	U	1280	72	34-120	11	0-30
110-86-1	MSD	Pyridine	1790	0.00	U	701	39	30-95	3	0-30
62-53-3	MSD	Aniline	1790	0.00	U	1170	66	34-111	2	0-30
111-44-4	MSD	bis(2-Chloroethyl) ether	1790	0.00	U	1060	59	34-101	3	0-30
541-73-1	MSD	1,3-Dichlorobenzene	1790	0.00	U	1130	63	31-97	4	0-30
100-51-6	MSD	Benzyl alcohol	1790	0.00	U	368	21	17-120	39 *	0-30
95-50-1	MSD	1,2-Dichlorobenzene	1790	0.00	U	1200	67	32-102	3	0-30
108-60-1	MSD	bis(2-Chloroisopropyl)ether	1790	0.00	U	1200	67	32-113	3	0-30
95-48-7	MSD	o-Cresol	1790	0.00	U	1080	61	31-119	12	0-30
65794-96-9	MSD	m,p-Cresols	1790	0.00	U	1300	73	35-125	13	0-30
67-72-1	MSD	Hexachloroethane	1790	0.00	U	1130	63	30-100	3	0-30
98-95-3	MSD	Nitrobenzene	1790	0.00	U	1210	68	33-108	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-546**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13812MSD**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201979042**	**%Moisture:**	**7.1**
Instrument:	**MSD6.I**	**Analysis Date:**	**12/05/2009 13:13**
Analyst:	**NAG1**	**Prep Batch ID:**	**925648**
Inj. Vol:	**.5 uL**	**Batch ID:**	**925661**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD	Isophorone	1790	0.00	U	1320	74	34-110	1	0-30
88-75-5	MSD	2-Nitrophenol	1790	0.00	U	1330	74	32-108	1	0-30
105-67-9	MSD	2,4-Dimethylphenol	1790	0.00	U	1070	60	32-115	1	0-30
111-91-1	MSD	bis(2-Chloroethoxy)methane	1790	0.00	U	1250	70	35-108	1	0-30
120-83-2	MSD	2,4-Dichlorophenol	1790	0.00	U	1330	74	38-110	2	0-30
65-85-0	MSD	Benzoic acid	3570	0.00	U	2380	67	18-134	4	0-30
91-20-3	MSD	Naphthalene	1790	0.00	U	1200	67	31-105	0	0-30
106-47-8	MSD	4-Chloroaniline	1790	0.00	U	1120	63	29-123	0	0-30
87-68-3	MSD	Hexachlorobutadiene	1790	0.00	U	1230	69	31-109	1	0-30
91-57-6	MSD	2-Methylnaphthalene	1790	0.00	U	1440	81	32-110	0	0-30
77-47-4	MSD	Hexachlorocyclopentadiene	1790	0.00	U	1400	78	21-122	4	0-30
88-06-2	MSD	2,4,6-Trichlorophenol	1790	0.00	U	1230	69	37-108	4	0-30
95-95-4	MSD	2,4,5-Trichlorophenol	1790	0.00	U	1370	77	37-116	4	0-30
91-58-7	MSD	2-Chloronaphthalene	1790	0.00	U	1240	69	37-103	2	0-30
88-74-4	MSD	2-Nitroaniline *o-Nitroaniline*	1790	0.00	U	1120	63	36-115	1	0-30
99-09-2	MSD	3-Nitroaniline *m-Nitroaniline*	1790	0.00	U	1230	69	39-117	1	0-30
131-11-3	MSD	Dimethylphthalate	1790	0.00	U	1320	74	41-105	4	0-30
606-20-2	MSD	2,6-Dinitrotoluene	1790	0.00	U	1360	76	41-103	4	0-30
208-96-8	MSD	Acenaphthylene	1790	0.00	U	1310	73	41-103	4	0-30
51-28-5	MSD	2,4-Dinitrophenol	1790	0.00	U	1380	77	25-104	7	0-30
132-64-9	MSD	Dibenzofuran	1790	0.00	U	1550	87	40-114	4	0-30
84-66-2	MSD	Diethylphthalate	1790	0.00	U	1320	74	43-110	7	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13
Dilution: 1
Prep Batch ID 925648
Batch ID: 925661

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD Fluorene	1790	0.00	U	1340	75	48-99	3	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1790	0.00	U	1350	76	42-111	5	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1790	0.00	U	1260	70	19-118	8	0-30
100-01-6	MSD 4-Nitroaniline *p-Nitroaniline*	1790	0.00	U	1380	77	35-139	5	0-30
122-39-4	MSD Diphenylamine	1790	0.00	U	1300	73	41-112	7	0-30
122-66-7	MSD Azobenzene *1,2-Diphenylhydrazine*	1790	0.00	U	1300	73	37-118	5	0-30
101-55-3	MSD 4-Bromophenylphenylether	1790	0.00	U	1360	76	39-112	10	0-30
118-74-1	MSD Hexachlorobenzene	1790	0.00	U	1370	76	38-113	10	0-30
85-01-8	MSD Phenanthrene	1790	0.00	U	1300	73	38-110	9	0-30
120-12-7	MSD Anthracene	1790	0.00	U	1360	76	38-112	8	0-30
84-74-2	MSD Di-n-butylphthalate	1790	0.00	U	1450	81	42-119	12	0-30
206-44-0	MSD Fluoranthene	1790	0.00	U	1450	81	38-119	9	0-30
85-68-7	MSD Butylbenzylphthalate	1790	0.00	U	1450	81	39-126	12	0-30
56-55-3	MSD Benzo(a)anthracene	1790	0.00	U	1350	75	39-110	10	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1790	0.00	U	1180	66	35-106	9	0-30
218-01-9	MSD Chrysene	1790	0.00	U	1370	77	39-109	11	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1790	0.00	U	1480	83	40-125	15	0-30
117-84-0	MSD Di-n-octylphthalate	1790	0.00	U	1600	89	30-147	9	0-30
205-99-2	MSD Benzo(b)fluoranthene	1790	0.00	U	1410	79	38-117	12	0-30
207-08-9	MSD Benzo(k)fluoranthene	1790	0.00	U	1450	81	39-120	10	0-30
50-32-8	MSD Benzo(a)pyrene	1790	0.00	U	1490	83	40-115	11	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1790	0.00	U	1340	75	32-120	16	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201979042
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/05/2009 13:13
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1790	0.00	U	1330	74	32-124	19	0-30
191-24-2	MSD Benzo(ghi)perylene	1790	0.00	U	1330	75	28-119	21	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1790	0.00	U	1230	69	31-105	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID: 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	726	44	31-95
108-95-2	LCS	Phenol	1670	0.0	1140	68	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1160	70	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1170	70	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1280	77	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1350	81	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1250	75	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1510	90	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1140	68	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1540	92	38-116
129-00-0	LCS	Pyrene	1670	0.0	1320	79	43-108
110-86-1	LCS	Pyridine	1670	0.0	721	43	13-129
62-53-3	LCS	Aniline	1670	0.0	1020	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1080	65	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1170	70	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	796	48	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1230	74	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1210	73	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1190	72	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1440	87	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1180	71	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1250	75	37-110

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-546

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 925648

Matrix: SOIL

Lab Sample ID: 1201979043

Instrument: MSD6.I

Analysis Date: 12/05/2009 12:18

Dilution: 1

Analyst: NAG1

Prep Batch ID: 925648

Inj. Vol: .5 uL

Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1340	80	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1360	81	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1100	66	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1260	75	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1350	81	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	3350	101	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1230	74	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	988	59	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1270	76	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1460	88	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1480	89	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1290	77	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1410	85	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1260	76	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1150	69	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1210	73	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1400	84	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1430	86	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1350	81	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1570	94	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1590	95	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1400	84	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1380	83	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1400	84	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1390	83	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1390	84	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1340	80	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1340	81	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1430	86	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1440	87	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1370	82	45-107
120-12-7	LCS	Anthracene	1670	0.0	1400	84	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1560	94	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1530	92	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1480	89	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1430	86	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1250	75	45-98
218-01-9	LCS	Chrysene	1670	0.0	1450	87	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1530	92	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1490	89	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1450	87	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1490	89	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1550	93	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1630	98	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: LCS for batch 925648
Lab Sample ID: 1201979043
Instrument: MSD6.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 12:18
Dilution: 1
Prep Batch ID 925648
Batch ID: 925661

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1680	101	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1740	105	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1280	77	36-109

Method Blank Summary

SDG Number:	10-546	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925648	Instrument ID:	MSD6.I	Data File:	s6l0404-1.d
Lab Sample ID:	1201979040	Prep Date:	11/24/2009 21:57	Analyzed:	12/04/09 11:05
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	RE03-09-13770	241336001	s6l0406.d	12/04/09	1200
02	RE03-10-5897	241336002	s6l0407.d	12/04/09	1228
03	LCS for batch 925648	1201979043	s6l0505.d	12/05/09	1218

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-546

Instrument ID: MSD6.I **Injection Date/Time:** 04-DEC-09 09:48

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120409.b/s610401.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.9
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	40.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.1
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	22.9
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	75.1
442	Greater than 40% of mass 198	74.9
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.2	/chem/MSD6.i/s120409.b/s610402	04-DEC-09 10:02
APCVS	WBN091201-03.2	/chem/MSD6.i/s120409.b/s610403	04-DEC-09 10:30
SBLK01	1201979040	/chem/MSD6.i/s120409.b/s610404	04-DEC-09 11:05
RE03-09-13770	241336001	/chem/MSD6.i/s120409.b/s610406	04-DEC-09 12:00
RE03-10-5897	241336002	/chem/MSD6.i/s120409.b/s610407	04-DEC-09 12:28

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-546

Instrument ID: MSD6.I **Injection Date/Time:** 05-DEC-09 10:31

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s120509.b/s6l0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.4
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	38.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	74.8
442	Greater than 40% of mass 198	84.1
443	17 - 23% of mass 442	19.1

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.4	/chem/MSD6.i/s120509.b/s6l0502	05-DEC-09 10:46
APCVS	WBN091201-03.2	/chem/MSD6.i/s120509.b/s6l0503	05-DEC-09 11:14
SBLK01LCS	1201979043	/chem/MSD6.i/s120509.b/s6l0505	05-DEC-09 12:18

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-546

Instrument ID: MSD6.I **Injection Date/Time:** 09-NOV-09 18:00

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0911.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.7
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	73.9
442	Greater than 40% of mass 198	77.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL	WBN091106-08	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 18:53
MEGAICAL	WBN091106-07	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 19:31
MEGAICAL	WBN091106-06	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:09
MEGAICAL	WBN091106-05.1	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 20:46
MEGAICAL	WBN091106-04	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 21:25
MEGAICAL	WBN091106-03	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:01
MEGAICAL	WBN091106-02	/chem/MSD6.i/s110909.b/s6k091	09-NOV-09 22:39
MEGAICAL	WBN091106-01	/chem/MSD6.i/s110909.b/s6k092	09-NOV-09 23:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-546

Instrument ID: MSD6.I **Injection Date/Time:** 10-NOV-09 11:07

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD6.i/s110909.b/s6k0921.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	72.6
442	Greater than 40% of mass 198	76
443	17 - 23% of mass 442	19.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICAL	WBN091016-01	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 11:59
AP12ICAL	WBN091016-02	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 12:36
AP12ICAL	WBN091016-03	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:13
AP12ICAL	WBN091016-04	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 13:51
AP12ICAL	WBN091016-05	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 14:30
AP12ICAL	WBN091016-06	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:06
AP12ICAL	WBN091016-07	/chem/MSD6.i/s110909.b/s6k092	10-NOV-09 15:43
MEGAICV	WBN091106-09.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 20:29
AP12ICV	WBN091016-08.1	/chem/MSD6.i/s110909.b/s6k093	10-NOV-09 21:07

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD6.I

GC Column: J&W DB-5MS

Client SDG: 10-546

STD Analysis Time: 04-DEC-09 10:02

Data File: s6l0402.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	225677		4.73	911417		5.99	476654		7.86	854008		9.47	749694		12.5	697713		14.7
Upper Limit	451354		5.23	1822834		6.49	953308		8.36	1708016		9.97	1499388		13.0	1395426		15.2
Lower Limit	112839		4.23	455709		5.49	238327		7.36	427004		8.97	374847		12.0	348857		14.2
Sample ID																		
BLK01	216526		4.73	816435		5.99	446630		7.85	758251		9.46	627358		12.5	547730		14.7
RE03-09-13770	225193		4.73	853217		5.99	461443		7.85	783659		9.47	643186		12.5	576307		14.7
RE03-10-5897	202993		4.73	764072		5.99	422788		7.85	728363		9.46	614390		12.5	544774		14.7

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD6.I

GC Column: J&W DB-5MS

Client SDG: 10-546

STD Analysis Time: 05-DEC-09 10:46

Data File: s6l0502.d

	1,4-Dichlorobenzene-d4				Naphthalene-d8				Acenaphthene-d10				Phenanthrene-d10				Chrysene-d12				Perylene-d12			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	232623		4.72		1017627		5.99		527825		7.86		924477		9.47		791288		12.5		729958		14.7	
Upper Limit	465246		5.22		2035254		6.49		1055650		8.36		1848954		9.97		1582576		13.0		1459916		15.2	
Lower Limit	116312		4.22		508814		5.49		263913		7.36		462239		8.97		395644		12.0		364979		14.2	
Sample ID																								
BLK01LCS	202793		4.72		868816		5.99		487733		7.85		862246		9.46		740083		12.5		677291		14.7	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241336001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13770**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0406.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	370	ug/kg	74.0	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	925661	**Inst:**	MSD6.I	**Dilution:**	1
Run Date:	12/04/2009 12:00	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/24/2009 21:57	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s610406.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	282	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610406.d
Lab Smp Id: 241336001 Client Smp ID: RE03-09-13770
Inj Date : 04-DEC-2009 12:00
Operator : nagl Inst ID: MSD6.i
Smp Info : |241336001|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.98650	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	225193	40.0000	
* 29 Naphthalene-d8	136	5.988	5.993	(1.000)	853217	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	461443	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.469	(1.000)	783659	40.0000	
* 91 Chrysene-d12	240	12.450	12.463	(1.000)	643186	40.0000	
* 98 Perylene-d12	264	14.731	14.741	(1.000)	576307	40.0000	
$ 3 2-Fluorophenol	112	3.600	3.590	(0.761)	290638	51.5376	1910
$ 5 Phenol-d5	99	4.350	4.352	(0.920)	370604	52.0685	1930
$ 20 Nitrobenzene-d5	82	5.252	5.259	(0.877)	167972	27.8301	1030
$ 39 2-Fluorobiphenyl	172	7.112	7.117	(0.906)	340166	28.6052	1060
$ 60 2,4,6-Tribromophenol	329	8.702	8.709	(1.108)	72341	53.7122	1990
$ 81 p-Terphenyl-d14	244	11.179	11.181	(0.898)	338642	32.6482	1210

ION RATIO REPORT

SV REPORT

Data file: s610406.d
Report Date: 12/04/2009 14:22
Lab. ID: 241336001 SampleType: SAMPLE
Injection Date: 04-DEC-2009 12:00
Operator: nagl Instrument: MSD6.i
Sample Info: |241336001|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-546
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	17207	4.35	4.42	80-120	100	(T)
93	161	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	23439	5.25	5.10	80-120	100	(T)
42	14087	5.25	5.10	40-100	60	(T)
22 Isophorone			CAS#: 78-59-1			
82	167972	5.25	5.52	80-120	100	(T)
138	4592	5.99	5.52	0- 49	3	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	83545	7.86	7.55	80-120	100	(T)
164	461443	7.85	7.55	0- 40	552	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	60364	7.85	8.06	80-120	100	(T)
89	653	7.85	8.06	41-101	1	(QT)
63	359	7.85	8.06	18- 78	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	4320	8.70	8.45	80-120	100	(T)
165	4445	8.70	8.45	62-122	103	(T)
167	1467	8.70	8.45	0- 44	34	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610406.d
Lab Smp Id: 241336001 Client Smp ID: RE03-09-13770
Inj Date : 04-DEC-2009 12:00
Operator : nagl Inst ID: MSD6.i
Smp Info : |241336001|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.98650	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1310082	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
3.371	250002	7.63317990	282	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610406.d

Date : 04-DEC-2009 12:00

Client ID: RE03-09-13770

Sample Info: |241336001|925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nagl

Column diameter: 0.20

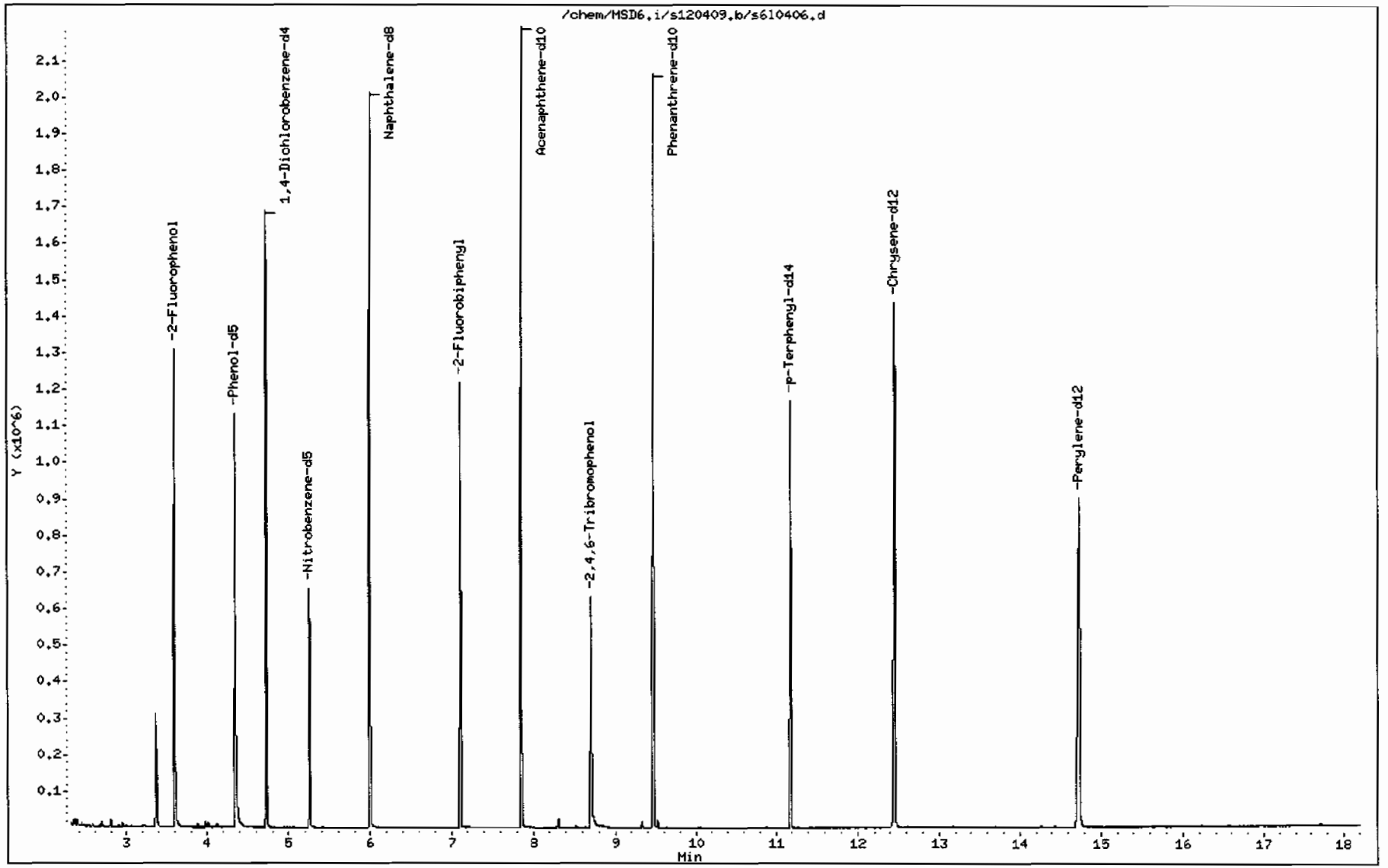

Data File: /chem/MSD6.i/s120409.b/s610406.d

Date : 04-DEC-2009 12:00

Client ID: RE03-09-13770

Instrument: MSD6.i

Sample Info: 1241336001192566111SVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

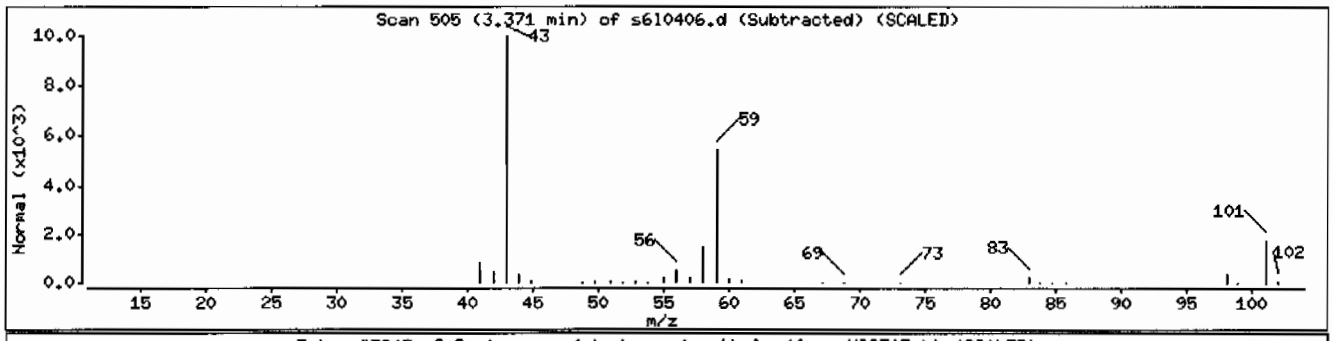

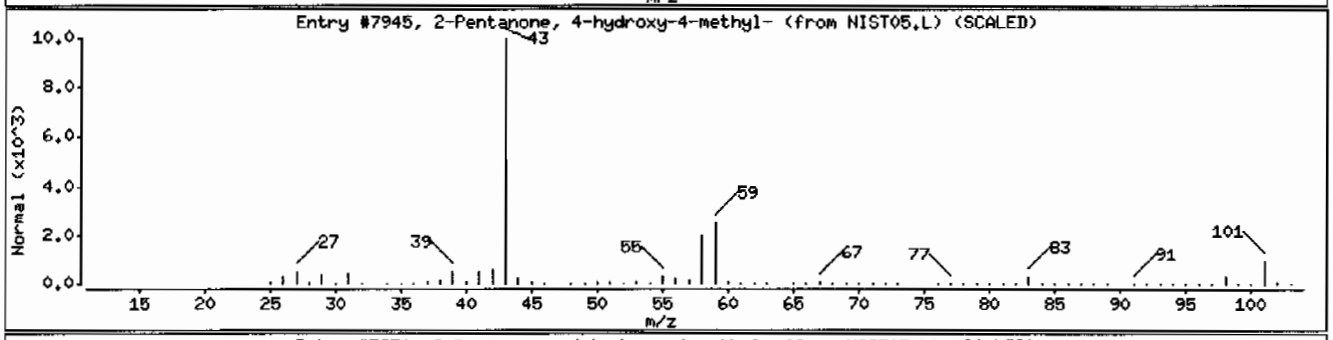

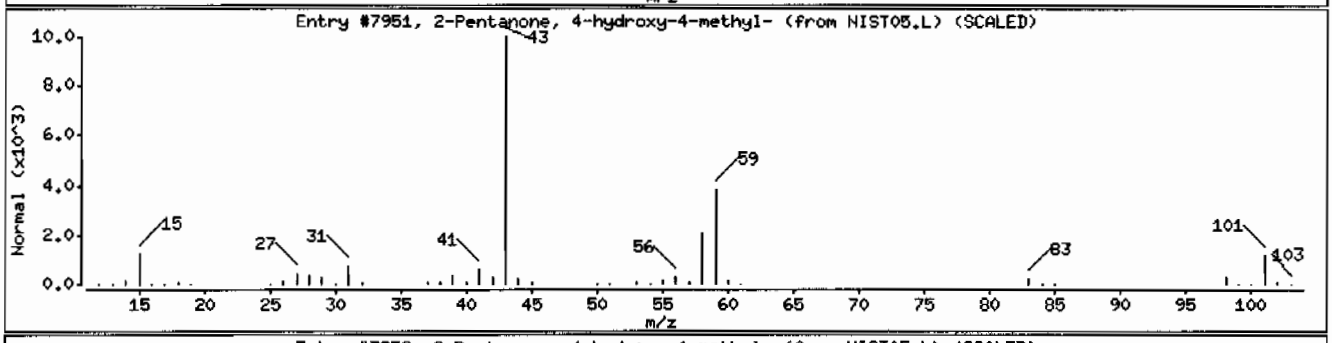

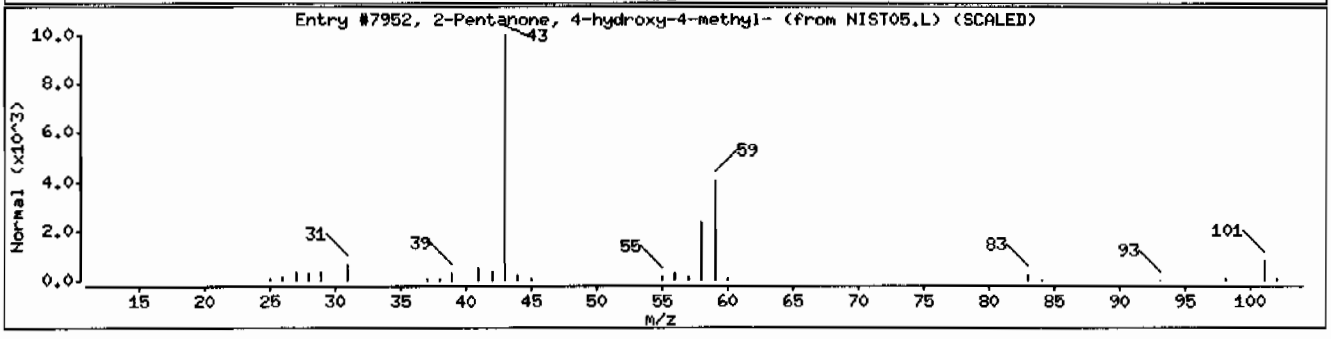

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241336002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-5897**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:28**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s610407.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.6	358
108-95-2	Phenol	U	358	ug/kg	71.6	358
95-57-8	2-Chlorophenol	U	358	ug/kg	71.6	358
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.6	358
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.6	358
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.6	358
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358
87-86-5	Pentachlorophenol	U	358	ug/kg	89.5	358
129-00-0	Pyrene	U	35.8	ug/kg	10.7	35.8
110-86-1	Pyridine	U	358	ug/kg	71.6	358
62-53-3	Aniline	U	358	ug/kg	107	358
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.6	358
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.6	358
100-51-6	Benzyl alcohol	U	358	ug/kg	107	358
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.6	358
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.6	358
95-48-7	o-Cresol	U	358	ug/kg	71.6	358
65794-96-9	m,p-Cresols	U	358	ug/kg	107	358
67-72-1	Hexachloroethane	U	358	ug/kg	71.6	358
98-95-3	Nitrobenzene	U	358	ug/kg	71.6	358
78-59-1	Isophorone	U	358	ug/kg	71.6	358
88-75-5	2-Nitrophenol	U	358	ug/kg	71.6	358
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.6	358
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.6	358
65-85-0	Benzoic acid	U	716	ug/kg	179	716
91-20-3	Naphthalene	U	35.8	ug/kg	10.7	35.8
106-47-8	4-Chloroaniline	U	358	ug/kg	71.6	358
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.6	358
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.16	35.8
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.6	358
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.6	358
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.6	358
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8
88-74-4	2-Nitroaniline	U	358	ug/kg	71.6	358
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	358	ug/kg	71.6	358

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241336002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-5897**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:28**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0407.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	358	ug/kg	71.6	358
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.7	35.8
51-28-5	2,4-Dinitrophenol	U	716	ug/kg	136	716
132-64-9	Dibenzofuran	U	358	ug/kg	71.6	358
84-66-2	Diethylphthalate	U	358	ug/kg	71.6	358
86-73-7	Fluorene	U	35.8	ug/kg	10.7	35.8
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.6	358
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.6	358
100-01-6	4-Nitroaniline	U	358	ug/kg	107	358
	p-Nitroaniline					
122-39-4	Diphenylamine	U	358	ug/kg	71.6	358
122-66-7	Azobenzene	U	358	ug/kg	71.6	358
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.6	358
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.6	358
85-01-8	Phenanthrene	U	35.8	ug/kg	10.7	35.8
120-12-7	Anthracene	U	35.8	ug/kg	7.16	35.8
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.6	358
206-44-0	Fluoranthene	U	35.8	ug/kg	10.7	35.8
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.6	358
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.7	35.8
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	107	358
218-01-9	Chrysene	U	35.8	ug/kg	10.7	35.8
117-81-7	bis(2-Ethylhexyl)phthalate	J	87.7	ug/kg	71.6	358
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.6	358
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.7	35.8
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.7	35.8
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.7	35.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.7	35.8
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.7	35.8
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.7	35.8
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.6	358

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.37	322	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610407.d
Lab Smp Id: 241336002 Client Smp ID: RE03-10-5897
Inj Date : 04-DEC-2009 12:28
Operator : nagl Inst ID: MSD6.i
Smp Info : |241336002|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	6.97410	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	202993	40.0000	
* 29 Naphthalene-d8	136	5.991	5.993	(1.000)	764072	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	422788	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.469	(1.000)	728363	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	614390	40.0000	
* 98 Perylene-d12	264	14.730	14.741	(1.000)	544774	40.0000	
$ 3 2-Fluorophenol	112	3.600	3.590	(0.761)	311101	61.1994	2190
$ 5 Phenol-d5	99	4.350	4.352	(0.920)	404863	63.1026	2260
$ 20 Nitrobenzene-d5	82	5.252	5.259	(0.877)	184082	34.0577	1220
$ 39 2-Fluorobiphenyl	172	7.112	7.117	(0.906)	376213	34.5290	1240
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	85214	69.0549	2470
$ 81 p-Terphenyl-d14	244	11.178	11.181	(0.898)	417336	42.1208	1510

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.419	(0.997)	21966	2.44795	87.6(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s610407.d
Report Date: 12/04/2009 14:22
Lab. ID: 241336002 SampleType: SAMPLE
Injection Date: 04-DEC-2009 12:28
Operator: nagl Instrument: MSD6.i
Sample Info: |241336002|925661|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-546
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	19498	4.35	4.42	80-120	100	(T)
93	185	4.47	4.42	223-283	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	25449	5.25	5.10	80-120	100	(T)
42	15526	5.25	5.10	40-100	61	(T)
22 Isophorone			CAS#: 78-59-1			
82	184082	5.25	5.52	80-120	100	(T)
138	4344	5.99	5.52	0- 49	2	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	75820	7.85	7.55	80-120	100	(T)
164	422788	7.85	7.55	0- 40	558	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	55547	7.85	8.06	80-120	100	(T)
89	553	7.85	8.06	41-101	1	(QT)
63	828	7.86	8.06	18- 78	1	(QT)
52 4-Nitrophenol				CAS#: 100-02-7		
139	110	7.86	7.99	80-120	100	(T)
109	661	7.85	7.99	30- 90	597	(QT)
65	1649	7.86	7.99	63-123	1487	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	4879	8.70	8.45	80-120	100	(T)
165	5533	8.70	8.45	62-122	113	(T)
167	1733	8.70	8.45	0- 44	36	(T)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	146	8.70	8.50	80-120	100	(T)
105	566	8.70	8.50	11- 71	386	(QT)
51	305	8.70	8.50	22- 82	208	(QT)
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	21966	12.41	12.42	80-120	100	( )
167	6216	12.41	12.42	0- 60	28	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610407.d
Lab Smp Id: 241336002 Client Smp ID: RE03-10-5897
Inj Date : 04-DEC-2009 12:28
Operator : nagl Inst ID: MSD6.i
Smp Info : |241336002|925661|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	6.97410	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1176424	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.371	264776	9.00274554	322	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610407.d
Date : 04-DEC-2009 12:28
Client ID: RE03-10-5897
Sample Info: |241336002|925661|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1
Column diameter: 0.20

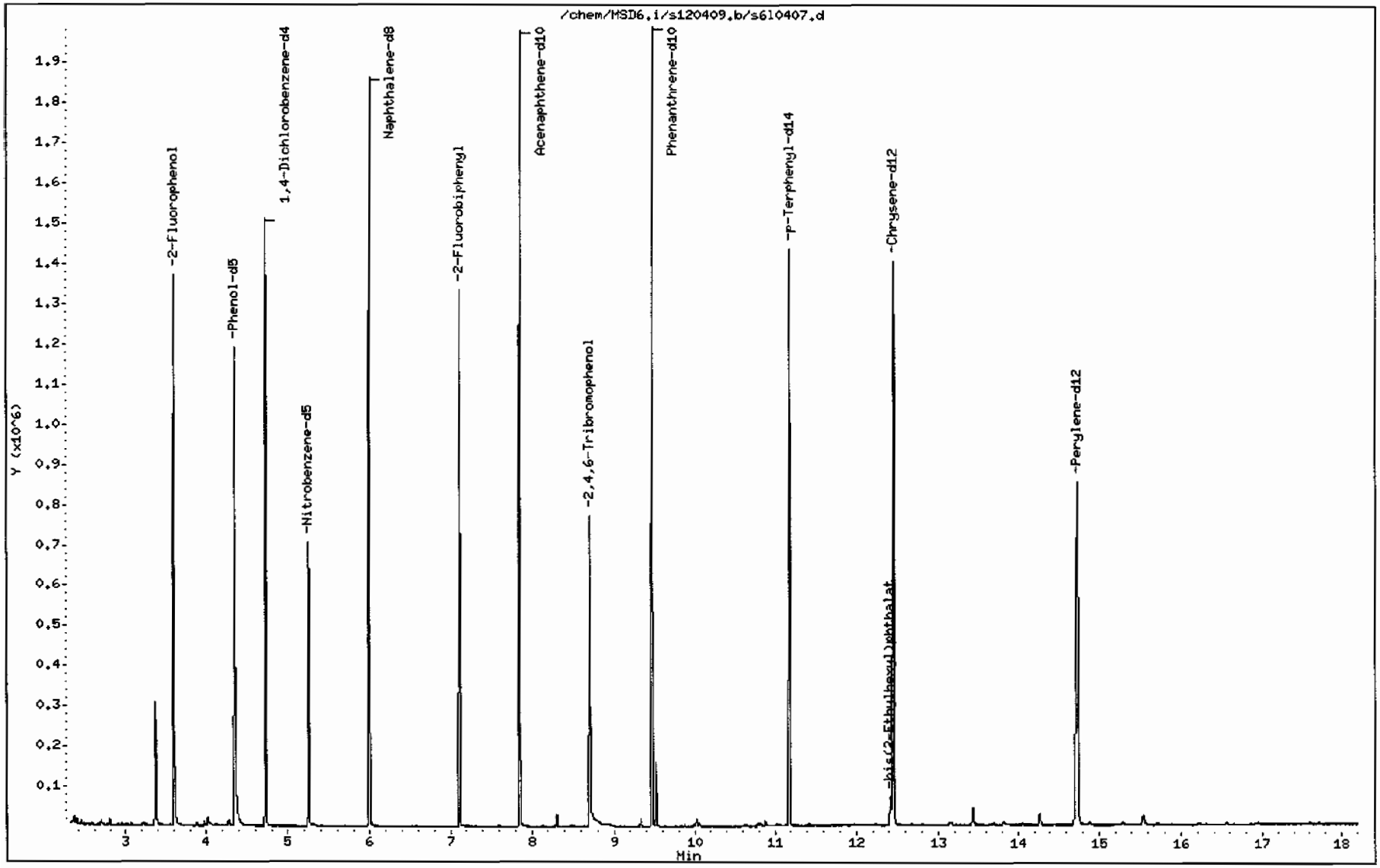

Data File: /chem/MSD6.i/s120409.b/s610407.d

Date : 04-DEC-2009 12:28

Client ID: RE03-10-5897

Instrument: MSD6.i

Sample Info: |2413360021925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 87.6 ug/Kg

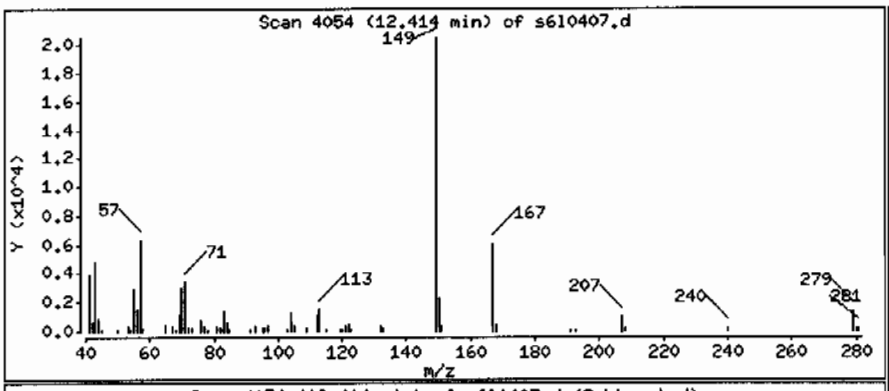

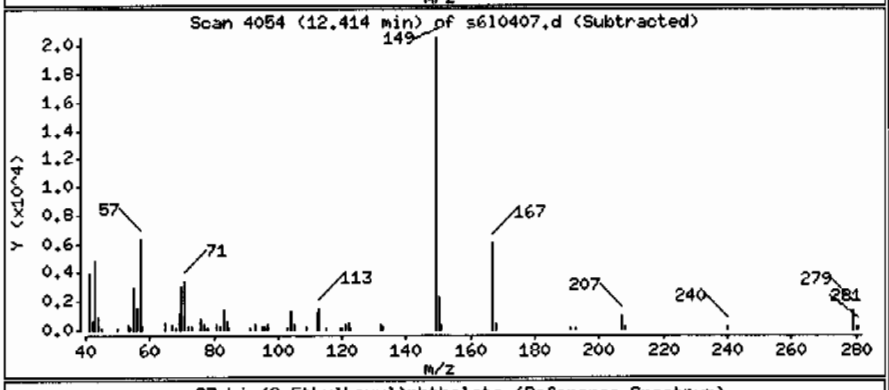

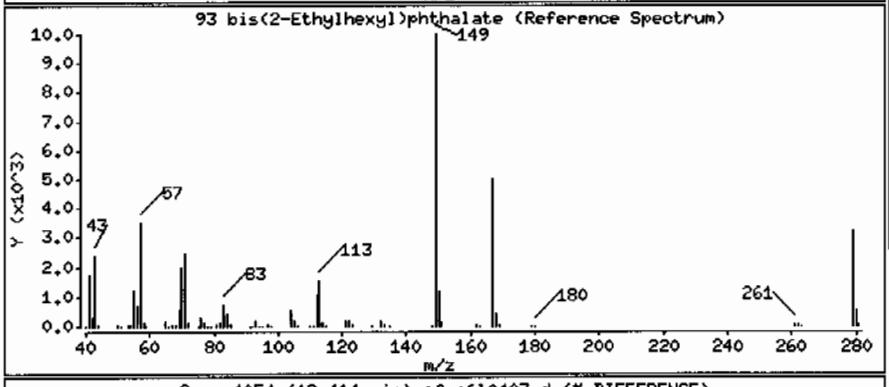

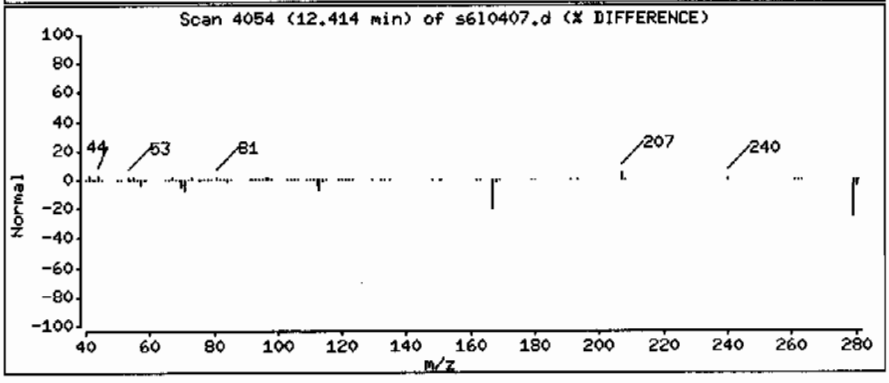

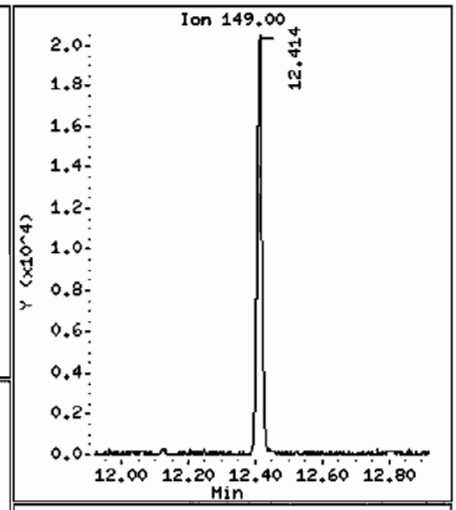

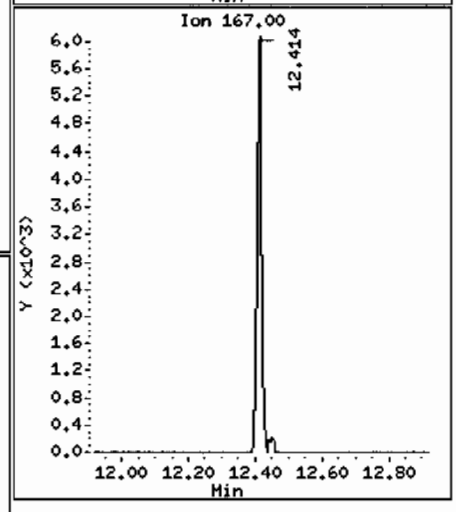

Data File: /chem/MSD6.i/s120409.b/s610407.d

Date : 04-DEC-2009 12:28

Client ID: RE03-10-5897

Instrument: MSD6.i

Sample Info: |2413360021925661|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116

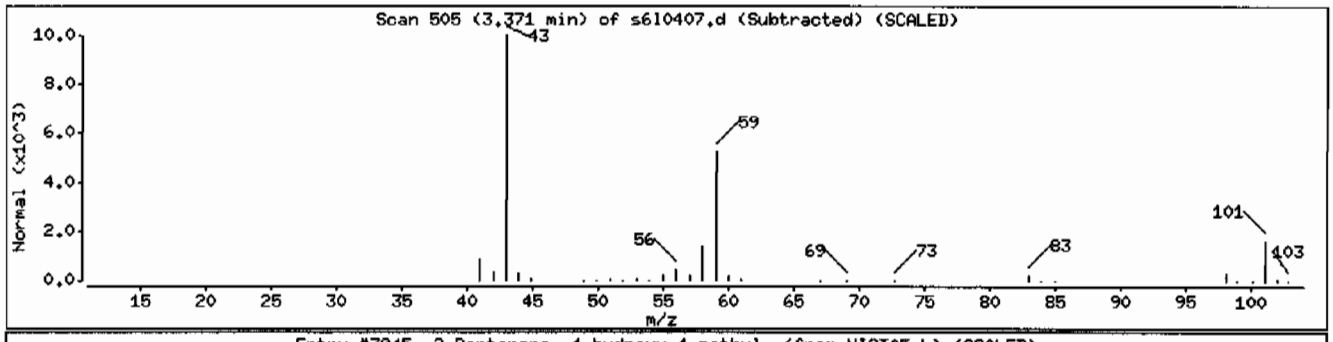

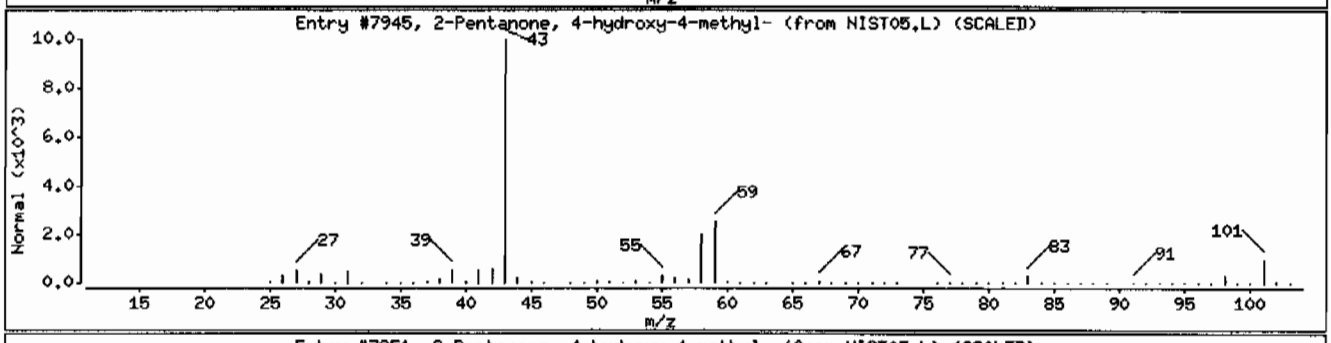

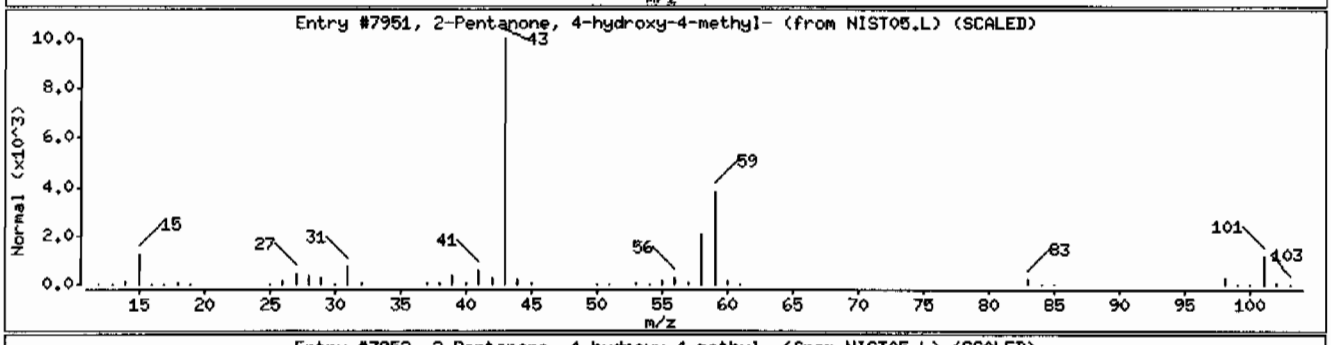

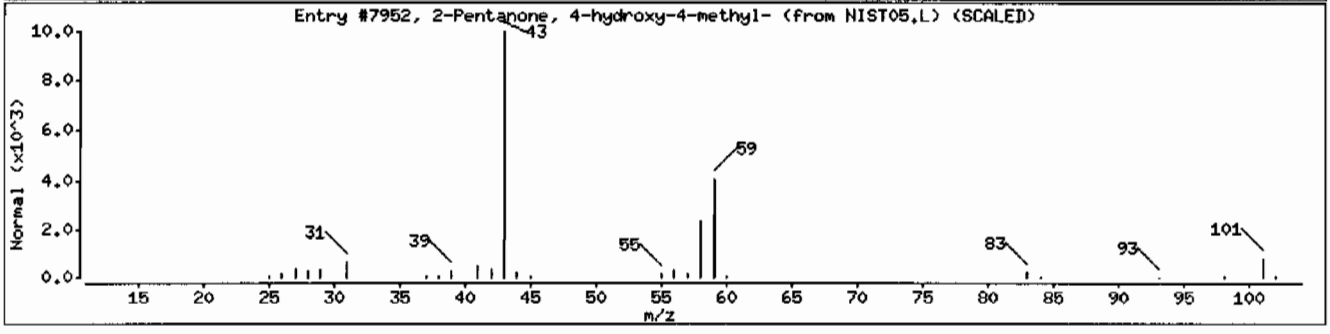

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 04-Dec-2009 15:01

Calibration History

Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Start Cal Date: 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
09-NOV-2009 18:53	MEGA	/chem/MSD6.i/s110909.b/s6k0913.d

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 10.00000		
11-NOV-2009 01:47	NEV	/chem/MSD6.i/s110909.b/s6k0948.d
10-NOV-2009 22:55	HEX	/chem/MSD6.i/s110909.b/s6k0942.d
10-NOV-2009 16:20	PEST	/chem/MSD6.i/s110909.b/s6k0930.d
10-NOV-2009 11:59	AP12	/chem/MSD6.i/s110909.b/s6k0923.d
09-NOV-2009 19:31	MEGA	/chem/MSD6.i/s110909.b/s6k0914.d

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 20.00000		
11-NOV-2009 02:16	NEV	/chem/MSD6.i/s110909.b/s6k0949.d
10-NOV-2009 23:24	HEX	/chem/MSD6.i/s110909.b/s6k0943.d
10-NOV-2009 16:56	PEST	/chem/MSD6.i/s110909.b/s6k0931.d
10-NOV-2009 12:36	AP12	/chem/MSD6.i/s110909.b/s6k0924.d
09-NOV-2009 20:09	MEGA	/chem/MSD6.i/s110909.b/s6k0915.d

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 40.00000		
11-NOV-2009 02:44	NEV	/chem/MSD6.i/s110909.b/s6k0950.d
10-NOV-2009 23:53	HEX	/chem/MSD6.i/s110909.b/s6k0944.d
10-NOV-2009 17:33	PEST	/chem/MSD6.i/s110909.b/s6k0932.d
10-NOV-2009 13:13	AP12	/chem/MSD6.i/s110909.b/s6k0925.d
09-NOV-2009 20:46	MEGA	/chem/MSD6.i/s110909.b/s6k0916.d

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 50.00000		
11-NOV-2009 03:12	NEV	/chem/MSD6.i/s110909.b/s6k0951.d
11-NOV-2009 00:21	HEX	/chem/MSD6.i/s110909.b/s6k0945.d
10-NOV-2009 18:09	PEST	/chem/MSD6.i/s110909.b/s6k0933.d
10-NOV-2009 13:51	AP12	/chem/MSD6.i/s110909.b/s6k0926.d
09-NOV-2009 21:25	MEGA	/chem/MSD6.i/s110909.b/s6k0917.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 80.00000		
11-NOV-2009 03:41	NEV	/chem/MSD6.i/s110909.b/s6k0952.d
11-NOV-2009 00:50	HEX	/chem/MSD6.i/s110909.b/s6k0946.d
10-NOV-2009 18:45	PEST	/chem/MSD6.i/s110909.b/s6k0934.d
10-NOV-2009 14:30	AP12	/chem/MSD6.i/s110909.b/s6k0927.d
09-NOV-2009 22:01	MEGA	/chem/MSD6.i/s110909.b/s6k0918.d

Cal Level: 7 , Cal Amount: 100.00000

11-NOV-2009 04:10	NEV	/chem/MSD6.i/s110909.b/s6k0953.d
11-NOV-2009 01:18	HEX	/chem/MSD6.i/s110909.b/s6k0947.d
10-NOV-2009 19:21	PEST	/chem/MSD6.i/s110909.b/s6k0935.d
10-NOV-2009 15:06	AP12	/chem/MSD6.i/s110909.b/s6k0928.d
09-NOV-2009 22:39	MEGA	/chem/MSD6.i/s110909.b/s6k0919.d

Cal Level: 8 , Cal Amount: 120.00000		
11-NOV-2009 04:38	NEV	/chem/MSD6.i/s110909.b/s6k0954.d
10-NOV-2009 19:58	PEST	/chem/MSD6.i/s110909.b/s6k0936.d
10-NOV-2009 15:43	AP12	/chem/MSD6.i/s110909.b/s6k0929.d
09-NOV-2009 23:16	MEGA	/chem/MSD6.i/s110909.b/s6k0920.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
04-DEC-2009 10:02	MEGA	/chem/MSD6.i/s120409.b/s610402.d
Ccal Level: 4 , Ccal Amount: 40.0		
04-DEC-2009 10:30	AP12	/chem/MSD6.i/s120409.b/s610403.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Calibration File Names:
Level 1: /chem/MSD6.i/s110909.b/s6k0913.d
Level 2: /chem/MSD6.i/s110909.b/s6k0948.d
Level 3: /chem/MSD6.i/s110909.b/s6k0949.d
Level 4: /chem/MSD6.i/s110909.b/s6k0950.d
Level 5: /chem/MSD6.i/s110909.b/s6k0951.d
Level 6: /chem/MSD6.i/s110909.b/s6k0952.d
Level 7: /chem/MSD6.i/s110909.b/s6k0953.d
Level 8: /chem/MSD6.i/s110909.b/s6k0954.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.62711	0.72014	0.69994	0.71294	0.67761					
	0.66245	0.66663					AVRG		0.68098		4.78734
2 Pyridine	+++++	0.78506	0.84345	0.94451	0.94132	0.77430					
	0.82190	0.82246					AVRG		0.84757		8.16958
4 Aniline	+++++	0.51792	0.56281	0.52949	0.53182	0.51964					
	0.51849	0.51247					AVRG		0.52752		3.21865
209 Benzaldehyde	+++++	0.94297	0.91161	0.92064	0.86617	0.84259					
	0.79828	0.74667					AVRG		0.86127		8.23824
6 Phenol	+++++	1.29580	1.38609	1.27955	1.27629	1.24279					
	1.20107	1.21677					AVRG		1.27120		4.82676

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Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.93365	0.90056	0.92748	0.85273	0.86174	0.82247					
	0.79075	0.79709					AVRG		0.86081		6.48811
8 2-Chlorophenol	+++++	1.05270	1.10343	1.04994	1.05384	0.99340					
	0.95375	0.94058					AVRG		1.02109		5.85808
203 n-Decane	+++++	1.57696	1.59018	1.40648	1.36249	1.17658					
	+++++	+++++					AVRG		1.42254		11.98709
9 1,3-Dichlorobenzene	+++++	1.22415	1.27608	1.20806	1.21136	1.14335					
	1.08668	1.07881					AVRG		1.17550		6.31837
11 1,4-Dichlorobenzene	+++++	1.27202	1.32037	1.21925	1.20743	1.15141					
	1.09639	1.07447					AVRG		1.19162		7.54222
12 Benzyl alcohol	+++++	0.60900	0.65716	0.63043	0.62465	0.64143					
	0.63021	0.64767					AVRG		0.63436		2.50657
13 1,2-Dichlorobenzene	+++++	1.16666	1.21707	1.13327	1.12016	1.08966					
	1.03460	1.02472					AVRG		1.11231		6.21300
14 bis(2-Chloroisopropyl)ether	+++++	2.07635	2.13325	1.99088	1.97675	1.86028					
	1.72252	1.69272					AVRG		1.92182		8.81925
15 o-Cresol	+++++	0.82992	0.88629	0.84024	0.85639	0.80893					
	0.80386	0.79407					AVRG		0.83139		3.92027

GEL Laboratories LLC

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.20921	1.17591	1.21168	1.15285	1.16925					
	1.13524	1.12939					AVRG		1.16908		2.80572
17 N-Nitrosodipropylamine	0.65638	0.74117	0.78851	0.72893	0.73002	0.72328					
	0.70725	0.59369					AVRG		0.70865		8.34285
18 m,p-Cresols	+++++	1.03591	1.12590	1.04958	1.05532	1.04720					
	1.02399	1.03632					AVRG		1.05346		3.18987
19 Hexachloroethane	+++++	0.45806	0.49524	0.47390	0.46960	0.45628					
	0.43995	0.43396					AVRG		0.46100		4.53111
21 Nitrobenzene	+++++	0.31691	0.32516	0.29885	0.29715	0.27038					
	0.24823	0.23966					AVRG		0.28519		11.62250
22 Isophorone	+++++	0.55891	0.57824	0.53268	0.53266	0.49425					
	0.45829	0.38358					AVRG		0.50552		13.23015
23 2-Nitrophenol	+++++	0.13453	0.14214	0.13601	0.13806	0.12888					
	0.12072	0.12047					AVRG		0.13154		6.43934
24 2,4-Dimethylphenol	+++++	0.23987	0.22536	0.21067	0.20421	0.21065					
	0.21868	0.21622					AVRG		0.21795		5.40955
25 bis(2-Chloroethoxy)methane	+++++	0.33208	0.34147	0.30906	0.30442	0.28195					
	0.26036	0.25310					AVRG		0.29749		11.40063

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19875	0.21444	0.20921	0.20622	0.19391					
	0.18142	0.17985					AVRG		0.19769		6.80078
27 Benzoic acid	+++++	+++++	0.10585	0.12338	0.14032	0.14157					
	0.15049	0.14556					AVRG		0.13453		12.46641
28 1,2,4-Trichlorobenzene	+++++	0.27809	0.27557	0.25214	0.25046	0.22876					
	0.21050	0.20278					AVRG		0.24261		12.25857
30 Naphthalene	0.93577	0.85146	0.85267	0.76017	0.74029	0.64713					
	+++++	+++++					AVRG		0.79792		12.82401
204 alpha-Terpineol	+++++	0.23577	0.25490	0.22003	0.21987	0.20427					
	0.17723	+++++					AVRG		0.21868		12.15593
31 4-Chloroaniline	+++++	0.26389	0.28196	0.26991	0.26064	0.24995					
	0.23771	0.23114					AVRG		0.25646		7.00922
189 Caprolactam	+++++	0.06766	0.07272	0.08214	0.08102	0.07115					
	0.07075	0.07172					AVRG		0.07388		7.43636
32 Hexachlorobutadiene	+++++	0.14265	0.14557	0.13182	0.13097	0.11864					
	0.10931	0.10542					AVRG		0.12634		12.40746
33 4-Chloro-3-methylphenol	+++++	0.20824	0.22585	0.20971	0.20633	0.19424					
	0.17957	0.17303					AVRG		0.19957		9.25582

GEL Laboratories LLC

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Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.56779	0.53746	0.54769	0.49857	0.47476	0.43707					
	0.39981	0.38884					AVRG		0.48150		14.15789
35 1-Methylnaphthalene	0.55872	0.52838	0.53208	0.48366	0.46920	0.42612					
	0.38935	0.38051					AVRG		0.47100		14.29869
36 Hexachlorocyclopentadiene	+++++	0.13520	0.17775	0.15114	0.16219	0.15378					
	0.18308	0.16783					AVRG		0.16157		10.19735
208 1,1'-Biphenyl	+++++	1.32152	1.23439	1.25731	1.19710	1.16580					
	1.12776	1.10528					AVRG		1.20131		6.32036
205 2,3-Dichloroaniline	+++++	0.51880	0.53286	0.48272	0.49159	0.46096					
	0.42997	0.43664					AVRG		0.47908		8.16477
37 2,4,6-Trichlorophenol	+++++	0.27570	0.29634	0.28058	0.28008	0.26989					
	0.25242	0.25556					AVRG		0.27294		5.58990
38 2,4,5-Trichlorophenol	+++++	0.28031	0.30282	0.29443	0.29832	0.29160					
	0.28523	0.28197					AVRG		0.29067		2.92500
40 2-Chloronaphthalene	0.91208	0.94921	0.97975	0.90835	0.91949	0.87198					
	0.81926	0.82647					AVRG		0.89832		6.24992
42 o-Nitroaniline	+++++	0.28653	0.32807	0.30812	0.31848	0.31056					
	0.29539	0.30412					AVRG		0.30732		4.50651

GEL Laboratories LLC

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Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.19029	0.23187	0.23025	0.23197	0.23511					
	0.22216	0.23314					AVRG		0.22497		7.03906
43 Dimethylphthalate	+++++	1.10253	1.11895	1.05121	1.05401	1.01311					
	0.95493	0.88796					AVRG		1.02610		7.97599
44 2,6-Dinitrotoluene	+++++	0.24859	0.25869	0.24751	0.24771	0.24514					
	0.22903	0.23656					AVRG		0.24475		3.87474
45 Acenaphthylene	1.45077	1.53234	1.59736	1.47314	1.47686	1.41153					
	1.30118	1.31187					AVRG		1.44438		7.03164
47 Acenaphthene	0.97754	0.93463	0.97051	0.90906	0.90733	0.85875					
	0.82122	0.83304					AVRG		0.90151		6.58830
48 2,4-Dinitrophenol	+++++	+++++	15920	45695	60199	121040					
	185455	+++++					LINR	0.36255	0.13077		0.99262
49 Dibenzofuran	+++++	1.31036	1.35172	1.24091	1.23630	1.17505					
	1.09035	1.11352					AVRG		1.21689		7.96140
50 2,4-Dinitrotoluene	+++++	0.28688	0.32526	0.31392	0.31582	0.31468					
	0.30077	0.30301					AVRG		0.30862		4.09740
51 Diethylphthalate	+++++	1.08427	1.13193	1.06273	1.05585	1.00787					
	0.93441	0.95637					AVRG		1.03335		6.84784

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INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
52 4-Nitrophenol	+++++	12277	40572	90802	114423	208122					
	294363	379687					LINR	0.18209	0.20146		0.99664
53 Fluorene	1.06940	1.05468	1.10259	1.00777	1.00699	0.94775					
	0.89677	0.90440					AVRG		0.99879		7.65829
54 4-Chlorophenylphenylether	+++++	0.49941	0.52344	0.48539	0.48490	0.45443					
	0.43029	0.42560					AVRG		0.47192		7.71070
55 2-Methyl-4,6-dinitrophenol	+++++	9251	34357	85168	107219	199515					
	279188	346834					LINR	0.17722	0.10780		0.99957
56 p-Nitroaniline	+++++	18297	49968	114446	144020	267165					
	377942	477974					LINR	0.17663	0.25514		0.99741
133 Diphenylamine	+++++	0.51235	0.51279	0.48995	0.49110	0.46341					
	0.45142	0.45392					AVRG		0.48213		5.41113
58 1,2-Diphenylhydrazine	+++++	0.65288	0.67935	0.62730	0.62752	0.58724					
	0.56393	0.55466					AVRG		0.61327		7.55575
59 Tributylphosphate	+++++	1.19922	1.25332	1.24022	1.27997	1.24188					
	1.19433	1.14050					AVRG		1.22135		3.81011
61 4-Bromophenylphenylether	+++++	0.16321	0.16758	0.15949	0.16092	0.15366					
	0.14977	0.15022					AVRG		0.15784		4.30183

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.17072	0.17525	0.16702	0.16690	0.16190					
	0.15730	0.15822					AVRG		0.16533		3.97990
207 Atrazine	+++++	0.04466	0.04316	0.04336	0.04050	0.04104					
	0.03746	0.03425					AVRG		0.04063		9.04410
65 Pentachlorophenol	+++++	12427	38945	80211	100581	192628					
	259470	326879					LINR	0.13427	0.09964		0.99838
206 n-Octadecane	+++++	0.51627	0.51598	0.45832	0.46068	0.40718					
	0.37377	0.35992					AVRG		0.44173		14.37986
68 Phenanthrene	0.95060	0.88603	0.89746	0.83221	0.81673	0.77346					
	0.73349	0.72773					AVRG		0.82721		9.72714
69 Anthracene	0.87683	0.86194	0.90534	0.83970	0.83829	0.78921					
	0.75133	0.75196					AVRG		0.82682		6.91971
72 Di-n-butylphthalate	+++++	1.00113	1.04654	0.99105	0.98676	0.92173					
	0.85606	0.84350					AVRG		0.94954		8.15043
76 Fluoranthene	0.78392	0.79487	0.87026	0.82674	0.81613	0.77420					
	0.73596	0.73727					AVRG		0.79242		5.73137
77 Benzidine	+++++	0.35813	0.40641	0.39242	0.37729	0.37701					
	0.39765	0.44234					AVRG		0.39304		6.85454

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	1.12114	1.31021	1.22539	1.10007	1.11660	1.02083					
	0.96007	0.94734					AVRG		1.10021		11.38295
85 Butylbenzylphthalate	+++++	0.52543	0.54028	0.51608	0.52406	0.49119					
	0.46906	0.45845					AVRG		0.50351		6.16544
89 Benzo(a)anthracene	0.94221	0.85505	0.89830	0.85692	0.85716	0.83423					
	0.82127	0.83891					AVRG		0.86301		4.55256
90 3,3'-Dichlorobenzidine	+++++	0.23529	0.28074	0.29290	0.29384	0.28532					
	0.28779	0.30173					AVRG		0.28252		7.74710
92 Chrysene	0.87195	0.83557	0.87346	0.82487	0.82639	0.80729					
	0.78155	0.79409					AVRG		0.82690		4.03552
93 bis(2-Ethylhexyl)phthalate	7340	107837	270739	551016	645048	1078889					
	1389660	1700943					WLINR	0.01019	0.70092		0.99014
94 Di-n-octylphthalate	+++++	1.19610	1.35485	1.31605	1.35770	1.25055					
	1.27306	1.15060					AVRG		1.27127		6.18607
95 Benzo(b)fluoranthene	0.74161	0.85750	0.94279	0.90432	0.93361	0.89239					
	0.89332	0.91506					AVRG		0.88507		7.19928
96 Benzo(k)fluoranthene	0.73172	0.86857	0.95518	0.92430	0.92244	0.89945					
	0.88010	0.85909					AVRG		0.88011		7.72381

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.54179	0.70605	0.81133	0.81358	0.82559	0.80913					
	0.80179	0.80647					AVRG		0.76447		12.74919
99 Indeno(1,2,3-cd)pyrene	5888	60939	200863	402882	510813	1012558					
	1348903	1889688					LINR	0.07592	0.78768		0.99752
100 Dibenzo(a,h)anthracene	3385	46770	157194	361792	411532	815285					
	1094612	1529825					LINR	0.06768	0.63666		0.99908
101 Benzo(ghi)perylene	0.41694	0.53228	0.60870	0.60962	0.60436	0.63133					
	0.62968	0.63931					AVRG		0.58403		12.88683
102 1,4-Dioxane	+++++	0.37671	0.37043	0.39061	0.37803	0.36375					
	0.35237	0.33052					AVRG		0.36606		5.38827
103 Methyl methacrylate	+++++	0.19626	0.19646	0.20436	0.20625	0.18540					
	0.18964	0.17876					AVRG		0.19388		5.13081
104 Ethyl methacrylate	+++++	0.79650	0.81191	0.84398	0.82898	0.80568					
	0.79571	0.75648					AVRG		0.80561		3.45659
105 2-Picoline	+++++	1.39124	1.31746	1.36987	1.31904	1.28927					
	1.27506	1.19912					AVRG		1.30872		4.85814
106 N-Nitrosomethylethylamine	+++++	0.50512	0.48970	0.52453	0.49928	0.51969					
	0.51463	0.52429					AVRG		0.51104		2.61826

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.56429	0.53321	0.56316	0.50377	0.53102					
	0.50923	0.49498					AVRG		0.52852		5.24900
108 N-Nitrosodiethylamine	+++++	0.50310	0.47987	0.51154	0.48534	0.49862					
	0.49304	0.49722					AVRG		0.49553		2.15019
109 Ethyl Methanesulfonate	+++++	0.65808	0.64977	0.67344	0.62747	0.66045					
	0.64399	0.64860					AVRG		0.65169		2.21442
110 Pentachloroethane	+++++	0.32209	0.31386	0.33094	0.32010	0.31614					
	0.31148	0.30303					AVRG		0.31681		2.78134
111 N-Nitrosopyrrolidine	+++++	0.44182	0.46376	0.50830	0.47779	0.50143					
	0.49385	0.44600					AVRG		0.47614		5.57640
113 N-Nitrosomorpholine	+++++	0.71032	0.67134	0.71256	0.65887	0.68726					
	0.65974	0.65547					AVRG		0.67936		3.58698
114 o-Toluidine	+++++	1.74797	1.65530	1.71709	1.64005	1.64679					
	1.58070	1.58178					AVRG		1.65281		3.79762
115 N-Nitrosopiperidine	+++++	0.13834	0.13623	0.14736	0.13885	0.14290					
	0.13997	0.14373					AVRG		0.14105		2.69891
116 a,a-Dimethylphenethylamine	+++++	0.78770	0.81587	0.88476	0.87463	0.88336					
	0.86623	0.87565					AVRG		0.85546		4.44785

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.14741	0.14492	0.13783	0.14116	0.13439					
	0.12857	0.12370					AVRG		0.13685		6.28357
118 2,6-Dichlorophenol	+++++	0.19682	0.19992	0.21240	0.20960	0.21251					
	0.20568	0.21118					AVRG		0.20687		3.05257
119 Hexachloropropene	+++++	0.08644	0.09499	0.10791	0.10350	0.10830					
	0.10654	0.11112					AVRG		0.10269		8.60612
120 p-Phenylenediamine	+++++	0.19714	0.24091	0.25567	0.24421	0.23168					
	0.22043	0.21678					AVRG		0.22955		8.57933
121 N-Nitrosodi-n-butylamine	+++++	0.22447	0.22501	0.22216	0.21154	0.19839					
	0.19348	0.19524					AVRG		0.21004		6.76180
122 Safrole	+++++	0.18675	0.18585	0.19677	0.19040	0.18675					
	0.17956	0.17958					AVRG		0.18653		3.22597
123 1,2,4,5-Tetrachlorobenzene	+++++	0.45393	0.42422	0.44255	0.41650	0.41676					
	0.40609	0.40229					AVRG		0.42319		4.45863
124 Isosafrole	+++++	0.34011	0.33198	0.35164	0.33779	0.34233					
	0.33627	0.33702					AVRG		0.33959		1.83025
125 1,4-Naphthoquinone	+++++	0.30018	0.32824	0.34894	0.32634	0.29745					
	0.28366	0.26235					AVRG		0.30674		9.65282

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.15441	0.17500	0.17160	0.17355	0.17392					
	0.16754	0.16904					AVRG		0.16929		4.19006
127 Pentachlorobenzene	+++++	0.38426	0.36575	0.37736	0.36552	0.35674					
	0.35182	0.35035					AVRG		0.36454		3.50537
128 1-Naphthylamine	+++++	0.90674	0.92102	0.95184	0.91692	0.90718					
	0.86367	0.88454					AVRG		0.90742		3.07978
129 2-Naphthylamine	+++++	0.96578	1.00999	1.02440	0.99125	0.97953					
	0.93471	0.95520					AVRG		0.98012		3.19024
130 2,3,4,6-Tetrachlorophenol	+++++	0.20640	0.23481	0.21862	0.21374	0.22201					
	0.21460	0.22254					AVRG		0.21896		4.07356
131 5-Nitro-o-toluidine	+++++	0.22084	0.26615	0.28994	0.29013	0.29251					
	0.28841	0.30508					AVRG		0.27901		10.07623
132 Thionazin	+++++	0.16760	0.17396	0.17237	0.17849	0.17822					
	0.16987	0.16398					AVRG		0.17207		3.11896
134 Sulfotepp	+++++	0.08934	0.08802	0.08507	0.08886	0.08655					
	0.08265	0.08005					AVRG		0.08579		4.00843
135 Phorate	+++++	0.38230	0.38968	0.37391	0.38904	0.37359					
	0.35020	0.32660					AVRG		0.36933		6.25438

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	14861	45341	104071	130665	222134					
	265730	408609					LINR	0.09141	0.12978		0.99734
137 Phenacetin	+++++	0.21732	0.25812	0.27209	0.26902	0.27044					
	0.26738	0.28241					AVRG		0.26240		8.05167
138 Diallate	+++++	0.26191	0.24374	0.25182	0.23998	0.23522					
	0.22716	0.22410					AVRG		0.24056		5.55643
139 Dimethoate	+++++	0.18955	0.19806	0.21061	0.22946	0.23158					
	0.22398	0.21950					AVRG		0.21468		7.45885
140 4-Aminobiphenyl	+++++	0.50489	0.50584	0.54599	0.56556	0.56494					
	0.53276	0.52934					AVRG		0.53562		4.66298
141 Pentachloronitrobenzene	+++++	0.06195	0.06081	0.06546	0.06329	0.06151					
	0.06084	0.05959					AVRG		0.06192		3.12402
142 Pronamide	+++++	0.26962	0.26582	0.27431	0.26759	0.26151					
	0.25173	0.25174					AVRG		0.26319		3.31411
143 Dinoseb	+++++	11996	47856	123552	154632	280906					
	375481	479562					LINR	0.15482	0.14736		0.99949
144 Disulfoton	+++++	0.31933	0.32969	0.31920	0.32975	0.31125					
	0.29624	0.27823					AVRG		0.31196		6.02930

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	100 Level 7	120 Level 8										
145 Methyl parathion	+++++	0.14493	0.15978	0.17270	0.18140	0.18775						
	0.18141	0.17864					AVRG		0.17237		8.70434	
146 4-Nitroquinoline-1-oxide	+++++	0.02012	0.03296	0.02700	0.02533	0.02224						
	0.01930	0.01750					AVRG		0.02349		22.76469	<-
147 Methapyrilene	+++++	0.40623	0.42209	0.41103	0.39768	0.37937						
	0.35132	0.33430					AVRG		0.38600		8.45747	
148 Isodrin	+++++	0.10136	0.09753	0.10130	0.09757	0.09481						
	0.09122	0.09037					AVRG		0.09631		4.58453	
149 Aramite	+++++	0.03841	0.04251	0.04600	0.04566	0.04690						
	0.04564	0.04428					AVRG		0.04420		6.60357	
150 Kepone	+++++	0.05674	0.06191	0.06311	0.06098	0.06085						
	0.06194	0.06656					AVRG		0.06173		4.75009	
151 p-(Dimethylamino)azobenzene	+++++	0.31224	0.31378	0.33288	0.32474	0.31931						
	0.31446	0.30396					AVRG		0.31734		2.95033	
152 Chlorobenzilate	+++++	0.30009	0.27506	0.30295	0.29512	0.29377						
	0.29203	0.28006					AVRG		0.29130		3.50189	
153 3,3'-Dimethylbenzidine	+++++	0.49489	0.52397	0.53487	0.52482	0.53397						
	0.53619	0.54473					AVRG		0.52763		3.04743	

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	100 Level 7	120 Level 8									
154 Famphur	+++++	0.28850	0.33742	0.33640	0.36516	0.37704					
	0.35655	0.33317					AVRG		0.34203		8.41381
155 2-Acetylaminofluorene	+++++	23996	98558	217618	290992	478700					
	598627	953419					LINR	0.12414	0.37309		0.99874
157 7,12Dimethylbenz(a)anthracene	+++++	0.45745	0.44941	0.48919	0.48420	0.49542					
	0.49422	0.48353					AVRG		0.47906		3.80416
158 3-Methylcholanthrene	+++++	0.29343	0.35502	0.37871	0.37695	0.38953					
	0.38995	0.40328					AVRG		0.36955		9.94080
26 Phthalic anhydride	+++++	10939	40864	83487	108159	203846					
	306459	+++++					LINR	0.14938	0.09004		0.99590
173 Carbazole	0.68572	0.63216	0.65059	0.65023	0.64669	0.65901					
	0.65208	0.65947					AVRG		0.65449		2.32370
174 Hexachlorophene	+++++	0.04700	0.06194	0.06687	0.06701	0.06606					
	+++++	+++++					AVRG		0.06178		13.78238
179 Dibenzo(a,e)pyrene	+++++	21397	67635	183254	214017	467062					
	+++++	+++++					LINR	0.16800	0.36891		0.99459
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

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Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	0.09983	0.11502	0.14598	0.13665	0.14571					
	0.12211	0.12583					AVRG		0.12730		13.25929
191 Parathion	+++++	0.05089	0.05709	0.06102	0.06360	0.06315					
	0.06253	0.06173					AVRG		0.06000		7.60183
192 Methoxychlor	+++++	0.54663	0.59527	0.57022	0.57190	0.55995					
	0.49223	0.53082					AVRG		0.55243		6.05482
210 m-Toluidine	+++++	1.07152	1.09862	1.08267	1.09477	1.19760					
	1.39731	0.92523					AVRG		1.12396		12.87193
211 p-Toluidine	+++++	0.98878	1.01175	0.93629	0.93823	0.84629					
	0.67790	+++++					AVRG		0.89987		13.64283
212 Cis Diallate	+++++	0.25680	0.24216	0.25774	0.25015	0.25647					
	0.24871	0.25860					AVRG		0.25295		2.41779
213 Trans Diallate	+++++	0.30813	0.28675	0.29626	0.28232	0.27673					
	0.26725	0.26364					AVRG		0.28301		5.55643
214 1,4-Dinitrobenzene	+++++	0.15465	0.18602	0.18671	0.19154	0.19074					
	0.18381	0.19324					AVRG		0.18382		7.23195
215 2-Ethoxyethanol	+++++	0.69474	0.75708	0.72314	0.72734	0.69576					
	0.68979	0.68463					AVRG		0.71035		3.71426

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	11622	37526	94270	117296	226774					
	306702	394688					LINR	0.14094	0.14618		0.99920
229 2,2'-Dichlorobenzil	+++++	0.65548	0.70788	0.67278	+++++	0.85557					
	0.79635	+++++					AVRG		0.73761		11.58274
230 4-Chlorothioanisole	+++++	65505	120100	275307	+++++	727615					
	828249	+++++					LINR	0.13623	0.30665		0.99347
231 4-Chlorothiophenol	+++++	14955	49890	195788	+++++	593706					
	683100	+++++					LINR	0.29380	0.27176		0.99219
232 bis(p-Chlorophenyl)sulfone	+++++	0.41911	0.42098	0.38909	+++++	0.48605					
	0.44832	+++++					AVRG		0.43271		8.42306
233 bis(p-Chlorophenyl)disulfide	+++++	0.19644	0.20913	0.18244	+++++	0.22594					
	0.20806	+++++					AVRG		0.20440		7.90920
234 Diphenyl disulfide	+++++	0.20078	0.21401	0.19911	+++++	0.24759					
	0.23595	+++++					AVRG		0.21949		9.81334
235 Diphenyl sulfide	+++++	0.77537	0.76082	0.73538	+++++	0.86393					
	0.82035	+++++					AVRG		0.79117		6.45415
236 Phenyl sulfone	+++++	0.43220	0.43102	0.40994	+++++	0.50304					
	0.47114	+++++					AVRG		0.44947		8.28032

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INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.14671	0.15531	0.12673	+++++	0.19818						
	0.17963	+++++					AVRG		0.16131		17.36813	<-
238 Phthalic acid	+++++	13646	40994	115933	+++++	343308						
	402020	+++++					LINR	0.25337	0.15547		0.99358	
239 Thiophenol	+++++	41092	104698	327879	+++++	922601						
	1046955	+++++					LINR	0.23456	1.46946		0.99364	
240 bis(Chloromethyl)ether	+++++	1.01755	1.00429	0.94829	+++++	1.10480						
	1.05711	+++++					AVRG		1.02641		5.71407	
241 Octachlorostyrene	+++++	0.06097	0.06109	0.05953	+++++	0.07399						
	0.07072	+++++					AVRG		0.06526		10.12747	
M 225 Trichlorophenols	+++++	0.27800	0.29958	0.28751	0.28920	0.28074						
	0.26883	0.26877					AVRG		0.28180		3.98593	
M 226 Tetrachlorophenols	+++++	0.20640	0.23481	0.21862	0.21374	0.22201						
	0.21460	0.22254					AVRG		0.21896		4.07356	
M 227 Benzo(b,k)fluoranthene	0.73667	0.86303	0.94898	0.91431	0.92802	0.89592						
	0.88671	0.88707					AVRG		0.88259		7.33906	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.98202	1.07204	1.02934	1.03017	0.98830						
	0.95348	0.95648					AVRG		1.00169		4.36295	
$ 5 Phenol-d5	+++++	1.23734	1.34586	1.27212	1.28456	1.26316						
	1.22407	1.22277					AVRG		1.26427		3.41674	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.30745	0.31426	0.29453	0.29315	0.27101						
	0.25359	0.24671					AVRG		0.28296		9.27927	
$ 39 2-Fluorobiphenyl	+++++	1.11512	1.14628	1.04977	1.05601	0.99136						
	0.92488	0.93239					AVRG		1.03083		8.29816	
$ 60 2,4,6-Tribromophenol	+++++	0.10485	0.11685	0.11180	0.11267	0.12310						
	0.12190	0.12607					AVRG		0.11675		6.41378	
$ 81 p-Terphenyl-d14	+++++	0.71309	0.69797	0.64349	0.66522	0.61764						
	0.59401	0.58404					AVRG		0.64507		7.73004	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 18:53
End Cal Date : 11-NOV-2009 04:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Cal Date : 04-Dec-2009 14:19 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Report Date: 11-Nov-2009 10:50

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 20:29
Lab File ID: s6k0937.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.00169	1.03466	1.03466	0.000	3.29147	60.00000	Averaged
$ 5 Phenol-d5	1.26427	1.24245	1.24245	0.000	-1.72556	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28296	0.29902	0.29902	0.000	5.67523	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.03083	1.08174	1.08174	0.000	4.93820	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11675	0.12945	0.12945	0.000	10.88297	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.64507	0.72359	0.72359	0.000	12.17316	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.68098	0.64081	0.64081	0.000	-5.89855	60.00000	Averaged
2 Pyridine	0.84757	0.77144	0.77144	0.000	-8.98267	60.00000	Averaged
4 Aniline	0.52752	0.51930	0.51930	0.000	-1.55765	60.00000	Averaged
6 Phenol	1.27120	1.23489	1.23489	0.001	-2.85632	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.86081	0.80936	0.80936	0.000	-5.97614	60.00000	Averaged
8 2-Chlorophenol	1.02109	1.01772	1.01772	0.000	-0.32996	60.00000	Averaged
203 n-Decane	1.42254	1.44155	1.44155	0.000	1.33631	60.00000	Averaged
9 1,3-Dichlorobenzene	1.17550	1.19665	1.19665	0.000	1.79939	60.00000	Averaged
11 1,4-Dichlorobenzene	1.19162	1.18877	1.18877	0.001	-0.23932	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.11231	1.12583	1.12583	0.000	1.21558	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.92182	1.94108	1.94108	0.000	1.00230	60.00000	Averaged
12 Benzyl alcohol	0.63436	0.65075	0.65075	0.000	2.58272	60.00000	Averaged
15 o-Cresol	0.83139	0.83798	0.83798	0.000	0.79318	60.00000	Averaged
18 m,p-Cresols	1.05346	1.05662	1.05662	0.000	0.29972	60.00000	Averaged
17 N-Nitrosodipropylamine	0.70865	0.69204	0.69204	0.050	-2.34415	60.00000	Averaged spcc
19 Hexachloroethane	0.46100	0.44650	0.44650	0.000	-3.14409	60.00000	Averaged
21 Nitrobenzene	0.28519	0.29957	0.29957	0.000	5.04113	60.00000	Averaged
22 Isophorone	0.50552	0.52435	0.52435	0.000	3.72478	60.00000	Averaged
23 2-Nitrophenol	0.13154	0.13639	0.13639	0.001	3.68222	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21795	0.23088	0.23088	0.000	5.93159	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29749	0.30276	0.30276	0.000	1.77222	60.00000	Averaged
26 2,4-Dichlorophenol	0.19769	0.20590	0.20590	0.001	4.15386	20.00000	Averaged ccc
27 Benzoic acid	0.13453	0.14567	0.14567	0.000	8.28081	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24261	0.24953	0.24953	0.000	2.85087	60.00000	Averaged
30 Naphthalene	0.79792	0.83170	0.83170	0.000	4.23406	60.00000	Averaged
204 alpha-Terpineol	0.21868	0.21801	0.21801	0.000	-0.30655	60.00000	Averaged
31 4-Chloroaniline	0.25646	0.26546	0.26546	0.000	3.51176	60.00000	Averaged
32 Hexachlorobutadiene	0.12634	0.13489	0.13489	0.001	6.77038	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19957	0.20148	0.20148	0.001	0.96147	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.48150	0.55976	0.55976	0.000	16.25394	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.47100	0.53047	0.53047	0.000	12.62514	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.16157	0.12441	0.12441	0.050	-22.99690	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.47908	0.48878	0.48878	0.000	2.02564	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.27294	0.27425	0.27425	0.001	0.48093	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.29067	0.30912	0.30912	0.000	6.34737	60.00000	Averaged	
40	2-Chloronaphthalene	0.89832	0.89821	0.89821	0.000	-0.01212	60.00000	Averaged	
42	o-Nitroaniline	0.30732	0.29883	0.29883	0.000	-2.76487	60.00000	Averaged	
41	m-Nitroaniline	0.22497	0.22544	0.22544	0.000	0.20968	60.00000	Averaged	
43	Dimethylphthalate	1.02610	1.07233	1.07233	0.000	4.50566	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.24475	0.24571	0.24571	0.000	0.39287	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.30862	0.32387	0.32387	0.000	4.94261	60.00000	Averaged	
45	Acenaphthylene	1.44438	1.60997	1.60997	0.000	11.46448	60.00000	Averaged	
47	Acenaphthene	0.90151	0.96315	0.96315	0.001	6.83729	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	35.88405	40.00000	0.06990	0.050	-10.28987	60.00000	Linear	spcc
49	Dibenzofuran	1.21689	1.24464	1.24464	0.000	2.28092	60.00000	Averaged	
51	Diethylphthalate	1.03335	1.08103	1.08103	0.000	4.61479	60.00000	Averaged	
52	4-Nitrophenol	37.16907	40.00000	0.15052	0.050	-7.07733	60.00000	Linear	spcc
53	Fluorene	0.99879	1.09503	1.09503	0.000	9.63571	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.47192	0.49481	0.49481	0.000	4.84948	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	44.79678	40.00000	0.10162	0.000	11.99194	60.00000	Linear	
56	p-Nitroaniline	37.18126	40.00000	0.19210	0.000	-7.04684	60.00000	Linear	
133	Diphenylamine	0.48213	0.48382	0.48382	0.001	0.34977	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.61327	0.61966	0.61966	0.000	1.04277	60.00000	Averaged	
61	4-Bromophenylphenylether	0.15784	0.15705	0.15705	0.000	-0.50023	60.00000	Averaged	
63	Hexachlorobenzene	0.16533	0.16268	0.16268	0.000	-1.60406	60.00000	Averaged	
65	Pentachlorophenol	41.23337	40.00000	0.08933	0.001	3.08343	20.00000	Linear	ccc
206	n-Octadecane	0.44173	0.45929	0.45929	0.000	3.97491	60.00000	Averaged	
68	Phenanthrene	0.82721	0.88585	0.88585	0.000	7.08867	60.00000	Averaged	
69	Anthracene	0.82682	0.90991	0.90991	0.000	10.04830	60.00000	Averaged	
72	Di-n-butylphthalate	0.94954	1.02135	1.02135	0.000	7.56331	60.00000	Averaged	
76	Fluoranthene	0.79242	0.90654	0.90654	0.001	14.40110	20.00000	Averaged	ccc
79	Pyrene	1.10021	1.20816	1.20816	0.000	9.81213	60.00000	Averaged	
85	Butylbenzylphthalate	0.50351	0.54090	0.54090	0.000	7.42706	60.00000	Averaged	
89	Benzo(a)anthracene	0.86301	0.92157	0.92157	0.000	6.78546	60.00000	Averaged	
92	Chrysene	0.82690	0.90169	0.90169	0.000	9.04505	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	41.60196	40.00000	0.72185	0.000	4.00491	60.00000	Wt Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0937.d
Analysis Type:
Lab Sample ID: WBN091106-09.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 20:29
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.35676	1.35676	0.001	6.72426	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.99154	0.99154	0.000	12.02912	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	1.01364	1.01364	0.000	15.17242	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.88080	0.88080	0.001	15.21790	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	40.05227	40.00000	0.72891	0.000	0.13069	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	37.95723	40.00000	0.56106	0.000	-5.10692	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.61594	0.61594	0.000	5.46367	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17081	0.17081	0.000	0.89311	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
	143 Dinoseb	37.88463	40.00000	0.11675	0.000	-5.28842	60.00000	Linear	
	173 Carbazole	0.65449	0.70032	0.70032	0.000	7.00193	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.14364	0.14364	0.000	12.83157	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.57593	0.57593	0.000	4.25434	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.90823	0.90823	0.000	0.92871	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.11262	1.11262	0.000	-1.00903	60.00000	Averaged	
	26 Phthalic anhydride	71.32284	40.00000	0.14710	0.000	78.30709	60.00000	Linear	<-
	179 Dibenzo(a,e)pyrene	23.04060	40.00000	0.15052	0.000	-42.39851	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17485	0.17485	0.000	-4.87689	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.75383	0.75383	0.000	6.12038	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.25405	40.00000	0.11920	0.000	-4.36487	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.29168	0.29168	0.000	3.50642	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.23318	0.23318	0.000	6.49309	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	1.00259	1.00259	0.000	13.59635	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s110909.b/s6k0937.d
Lab Smp Id: WBN091106-09.1 Client Smp ID: MEGAICV
Inj Date : 10-NOV-2009 20:29
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091106-09.1|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 10:50 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	267857	40.0000	
* 29 Naphthalene-d8	136	6.116	6.116	(1.000)	1007489	40.0000	
* 46 Acenaphthene-d10	164	7.986	7.986	(1.000)	511035	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	891521	40.0000	
* 91 Chrysene-d12	240	12.618	12.618	(1.000)	688764	40.0000	
* 98 Perylene-d12	264	14.955	14.955	(1.000)	524055	40.0000	
$ 3 2-Fluorophenol	112	3.646	3.646	(0.754)	277141	40.0000	41.3
$ 5 Phenol-d5	99	4.431	4.431	(0.917)	332800	40.0000	39.3
$ 20 Nitrobenzene-d5	82	5.371	5.371	(0.878)	301256	40.0000	42.3
$ 39 2-Fluorobiphenyl	172	7.242	7.242	(0.907)	552805	40.0000	42.0
$ 60 2,4,6-Tribromophenol	329	8.834	8.834	(1.106)	66156	40.0000	44.4
$ 81 p-Terphenyl-d14	244	11.306	11.306	(0.896)	498384	40.0000	44.9
1 N-Methyl-N-nitrosomethylamine	74	2.663	2.663	(0.551)	171645	40.0000	37.6
2 Pyridine	79	2.701	2.701	(0.559)	206635	40.0000	36.4
4 Aniline	66	4.518	4.518	(0.935)	139099	40.0000	39.4
6 Phenol	94	4.444	4.444	(0.919)	330773	40.0000	38.8
7 bis(2-Chloroethyl) ether	63	4.559	4.559	(0.943)	216794	40.0000	37.6
8 2-Chlorophenol	128	4.633	4.633	(0.958)	272604	40.0000	39.9
203 n-Decane	43	4.643	4.643	(0.960)	386128	40.0000	40.5
9 1,3-Dichlorobenzene	146	4.783	4.783	(0.989)	320531	40.0000	40.7
11 1,4-Dichlorobenzene	146	4.852	4.852	(1.004)	318420	40.0000	39.9
13 1,2-Dichlorobenzene	146	5.002	5.002	(1.035)	301561	40.0000	40.5
14 bis(2-Chloroisopropyl)ether	45	5.068	5.068	(1.048)	519933	40.0000	40.4
12 Benzyl alcohol	108	4.941	4.941	(1.022)	174307	40.0000	41.0
15 o-Cresol	107	5.025	5.025	(1.040)	224459	40.0000	40.3
18 m,p-Cresols	107	5.180	5.180	(1.072)	283022	40.0000	40.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.206	5.206	(1.077)	185368	40.0000	39.1
19 Hexachloroethane	117	5.338	5.338	(1.104)	119599	40.0000	38.7
21 Nitrobenzene	77	5.392	5.392	(0.882)	301811	40.0000	42.0
22 Isophorone	82	5.626	5.626	(0.920)	528272	40.0000	41.5
23 2-Nitrophenol	139	5.708	5.708	(0.933)	137410	40.0000	41.5
24 2,4-Dimethylphenol	122	5.718	5.718	(0.935)	232609	40.0000	42.4
25 bis(2-Chloroethoxy)methane	93	5.825	5.825	(0.952)	305032	40.0000	40.7
26 2,4-Dichlorophenol	162	5.950	5.950	(0.973)	207439	40.0000	41.7
27 Benzoic acid	105	5.812	5.812	(0.950)	146760	40.0000	43.3(H)
28 1,2,4-Trichlorobenzene	180	6.047	6.047	(0.989)	251400	40.0000	41.1
30 Naphthalene	128	6.138	6.138	(1.004)	837929	40.0000	41.7
204 alpha-Terpineol	59	6.123	6.123	(1.001)	219641	40.0000	39.9
31 4-Chloroaniline	127	6.172	6.172	(1.009)	267452	40.0000	41.4
32 Hexachlorobutadiene	225	6.251	6.251	(1.022)	135904	40.0000	42.7
33 4-Chloro-3-methylphenol	107	6.653	6.653	(1.088)	202993	40.0000	40.4
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	563953	40.0000	46.5
35 1-Methylnaphthalene	142	6.969	6.969	(1.140)	534441	40.0000	45.0
36 Hexachlorocyclopentadiene	237	7.020	7.020	(0.879)	63579	40.0000	30.8
205 2,3-Dichloroaniline	161	7.155	7.155	(0.896)	249785	40.0000	40.8
37 2,4,6-Trichlorophenol	196	7.147	7.147	(0.895)	140152	40.0000	40.2
38 2,4,5-Trichlorophenol	196	7.183	7.183	(0.899)	157970	40.0000	42.5
40 2-Chloronaphthalene	162	7.384	7.384	(0.925)	459019	40.0000	40.0
42 o-Nitroaniline	65	7.479	7.479	(0.936)	152711	40.0000	38.9
41 m-Nitroaniline	138	7.922	7.922	(0.992)	115209	40.0000	40.1
43 Dimethylphthalate	163	7.670	7.670	(0.960)	548000	40.0000	41.8
44 2,6-Dinitrotoluene	165	7.739	7.739	(0.969)	125566	40.0000	40.2
50 2,4-Dinitrotoluene	165	8.172	8.172	(1.023)	165511	40.0000	42.0
45 Acenaphthylene	152	7.835	7.835	(0.981)	822752	40.0000	44.6
47 Acenaphthene	154	8.024	8.024	(1.005)	492203	40.0000	42.7
48 2,4-Dinitrophenol	184	8.029	8.029	(1.005)	35722	40.0000	35.9
49 Dibenzofuran	168	8.205	8.205	(1.027)	636057	40.0000	40.9
51 Diethylphthalate	149	8.424	8.424	(1.055)	552446	40.0000	41.8
52 4-Nitrophenol	139	8.070	8.070	(1.011)	76920	40.0000	37.2
53 Fluorene	166	8.577	8.577	(1.074)	559601	40.0000	43.8
54 4-Chlorophenylphenylether	204	8.564	8.564	(1.072)	252864	40.0000	41.9
55 2-Methyl-4,6-dinitrophenol	198	8.613	8.613	(0.897)	90597	40.0000	44.8
56 p-Nitroaniline	138	8.582	8.582	(1.075)	98168	40.0000	37.2
133 Diphenylamine	169	8.689	8.689	(0.905)	431336	40.0000	40.1
58 1,2-Diphenylhydrazine	77	8.738	8.738	(0.910)	552443	40.0000	40.4
61 4-Bromophenylphenylether	248	9.094	9.094	(0.947)	140012	40.0000	39.8
63 Hexachlorobenzene	284	9.173	9.173	(0.956)	145031	40.0000	39.4
65 Pentachlorophenol	266	9.375	9.375	(0.977)	79644	40.0000	41.2
206 n-Octadecane	57	9.431	9.431	(0.982)	409467	40.0000	41.6
68 Phenanthrene	178	9.624	9.624	(1.003)	789756	40.0000	42.8
69 Anthracene	178	9.680	9.680	(1.008)	811200	40.0000	44.0
72 Di-n-butylphthalate	149	10.190	10.190	(1.062)	910557	40.0000	43.0
76 Fluoranthene	202	10.914	10.914	(1.137)	808196	40.0000	45.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	11.166	11.166	(0.885)	832137	40.0000	43.9
85 Butylbenzylphthalate	149	11.841	11.841	(0.938)	372553	40.0000	43.0
89 Benzo(a)anthracene	228	12.598	12.598	(0.998)	634741	40.0000	42.7
92 Chrysene	228	12.654	12.654	(1.003)	621053	40.0000	43.6
93 bis(2-Ethylhexyl)phthalate	149	12.570	12.570	(0.996)	497186	40.0000	41.6
94 Di-n-octylphthalate	149	13.561	13.561	(0.907)	711015	40.0000	42.7
95 Benzo(b)fluoranthene	252	14.275	14.275	(0.954)	519622	40.0000	44.8
96 Benzo(k)fluoranthene	252	14.326	14.326	(0.958)	531203	40.0000	46.1
97 Benzo(a)pyrene	252	14.853	14.853	(0.993)	461589	40.0000	46.1
99 Indeno(1,2,3-cd)pyrene	276	16.945	16.945	(1.133)	381990	40.0000	40.0
100 Dibenzo(a,h)anthracene	278	16.978	16.978	(1.135)	294025	40.0000	38.0
101 Benzo(ghi)perylene	276	17.460	17.460	(1.167)	322785	40.0000	42.2
126 m-Dinitrobenzene	168	7.708	7.708	(0.965)	87288	40.0000	40.4
130 2,3,4,6-Tetrachlorophenol	232	8.325	8.325	(1.042)	119161	40.0000	42.6
143 Dinoseb	211	9.561	9.561	(0.996)	104085	40.0000	37.9
173 Carbazole	167	9.841	9.841	(1.025)	624352	40.0000	42.8
184 p-Benzoquinone	54	4.085	4.085	(0.845)	38475	40.0000	45.1
192 Methoxychlor	227	12.468	12.468	(0.988)	396683	40.0000	41.7
211 p-Toluidine	106	5.252	5.252	(1.086)	243276	40.0000	40.4
210 m-Toluidine	106	5.285	5.285	(1.093)	298023	40.0000	39.6
26 Phthalic anhydride	104	6.911	6.911	(1.130)	148201	40.0000	71.3
179 Dibenzo(a,e)pyrene	302	21.182	21.182	(1.416)	78881	40.0000	23.0
214 1,4-Dinitrobenzene	75	7.624	7.624	(0.955)	89355	40.0000	38.0
215 2-Ethoxyethanol	59	2.454	2.454	(0.508)	201919	40.0000	42.4
216 Methylenebis(2-chloroaniline)	231	12.539	12.539	(0.994)	82098	40.0000	38.2
M 225 Trichlorophenols	196				298122	80.0000	82.8
M 226 Tetrachlorophenols	232				119161	40.0000	42.6
M 227 Benzo(b,k)fluoranthene	252				1050825	80.0000	90.9

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s110909.b/s6k0937.d
Date : 10-NOV-2009 20:29
Client ID: MEGAICV
Sample Info: IWBN091106-09,1ll40 PPM111SVMF111MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: JMB3
Column diameter: 0.20

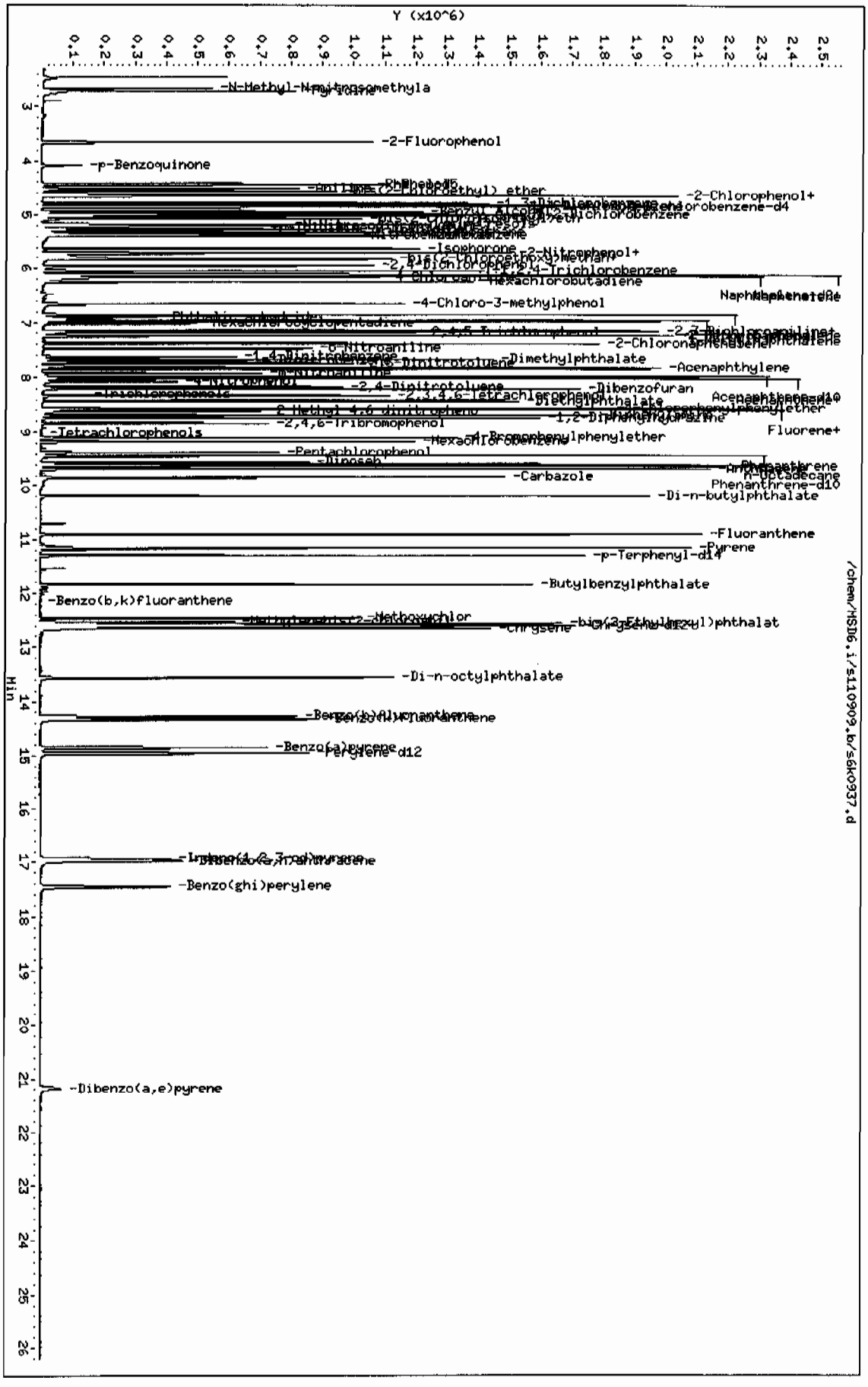

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 10-NOV-2009 21:07
Lab File ID: s6k0938.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091016-08.1 Quant Type: ISTD
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.67526	0.67526	0.000	-21.59733	60.00000	Averaged
16 Acetophenone	1.16908	1.08481	1.08481	0.000	-7.20809	60.00000	Averaged
189 Caprolactam	0.07388	0.08118	0.08118	0.000	9.87786	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.15865	1.15865	0.000	-3.55099	60.00000	Averaged
207 Atrazine	0.04063	0.03738	0.03738	0.000	-8.01727	60.00000	Averaged
77 Benzidine	0.39304	0.35886	0.35886	0.000	-8.69608	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.30132	0.30132	0.000	6.65684	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.45837	0.45837	0.000	25.21672	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.26059	0.26059	0.000	34.40927	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.97594	0.97594	0.000	21.14390	60.00000	Averaged
105 2-Picoline	1.30872	1.36092	1.36092	0.000	3.98846	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.53755	0.53755	0.000	5.18772	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.52223	0.52223	0.000	-1.19058	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.51026	0.51026	0.000	2.97098	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.73760	0.73760	0.000	13.18337	60.00000	Averaged
110 Pentachloroethane	0.31681	0.42390	0.42390	0.000	33.80401	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.46325	0.46325	0.000	-2.70540	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.65676	0.65676	0.000	-3.32751	60.00000	Averaged
114 o-Toluidine	1.65281	1.64899	1.64899	0.000	-0.23102	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.14180	0.14180	0.000	0.52679	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.87204	0.87204	0.000	1.93819	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20008	0.20008	0.000	-3.28259	60.00000	Averaged
119 Hexachloropropene	0.10269	0.14537	0.14537	0.000	41.57055	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.23182	0.23182	0.000	0.99155	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.21749	0.21749	0.000	3.54470	60.00000	Averaged
122 Safrole	0.18653	0.20933	0.20933	0.000	12.22661	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.42512	0.42512	0.000	0.45545	60.00000	Averaged
124 Isosafrole	0.33959	0.43257	0.43257	0.000	27.38086	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.30375	0.30375	0.000	-0.97466	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36394	0.36394	0.000	-0.16566	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.91190	0.91190	0.000	0.49410	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.91865	0.91865	0.000	-6.27177	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.28996	0.28996	0.000	3.92480	60.00000	Averaged
136 1,3,5-Trinitrobenzene	46.05690	40.00000	0.13757	0.000	15.14226	60.00000	Linear
137 Phenacetin	0.26240	0.25991	0.25991	0.000	-0.94903	60.00000	Averaged
138 Diallate	0.24056	0.23148	0.23148	0.000	-3.77545	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s6k0938.d
Analysis Type:
Lab Sample ID: WBN091016-08.1
Method: /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m

Injection Date: 10-NOV-2009 21:07
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.58994	0.58994	0.000	10.14239	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.06213	0.06213	0.000	0.34079	60.00000	Averaged
142 Pronamide	0.26319	0.26234	0.26234	0.000	-0.32101	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02580	0.02580	0.000	9.82299	60.00000	Averaged
147 Methapyrilene	0.38600	0.39422	0.39422	0.000	2.12820	60.00000	Averaged
148 Isodrin	0.09631	0.08838	0.08838	0.000	-8.22821	60.00000	Averaged
149 Aramite	0.04420	0.04155	0.04155	0.000	-5.99495	60.00000	Averaged
150 Kepone	0.06173	0.05889	0.05889	0.000	-4.59530	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.33079	0.33079	0.000	4.23929	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.29321	0.29321	0.000	0.65640	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.57778	0.57778	0.000	9.50435	60.00000	Averaged
155 2-Acetylaminofluorene	41.44131	40.00000	0.34022	0.000	3.60328	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace .	0.47906	0.41447	0.41447	0.000	-13.48259	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.35869	0.35869	0.000	-2.93887	60.00000	Averaged
212 Cis Diallate	0.25295	0.25705	0.25705	0.000	1.62146	60.00000	Averaged
213 Trans Diallate	0.28301	0.27233	0.27233	0.000	-3.77545	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s110909.b/s6k0938.d
Lab Smp Id: WBN091016-08.1 Client Smp ID: AP12ICV
Inj Date : 10-NOV-2009 21:07
Operator : JMB3 Inst ID: MSD6.i
Smp Info : |WBN091016-08.1|40 PPM|1|SVMF|1|AP12ICV
Misc Info : |MSD8270|WBN091106-10
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s110909.b/MSD6-M8270C-AQA-110909.m
Meth Date : 11-Nov-2009 09:25 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 02:44 Cal File: s6k0950.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclpl

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.834	4.834	(1.000)	282437	40.0000	
* 29 Naphthalene-d8	136	6.113	6.113	(1.000)	974498	40.0000	
* 46 Acenaphthene-d10	164	7.983	7.983	(1.000)	519475	40.0000	
* 67 Phenanthrene-d10	188	9.599	9.599	(1.000)	914999	40.0000	
* 91 Chrysene-d12	240	12.613	12.613	(1.000)	718441	40.0000	
* 98 Perylene-d12	264	14.950	14.950	(1.000)	524113	40.0000	
209 Benzaldehyde	77	4.428	4.428	(0.916)	190719	40.0000	31.4
16 Acetophenone	105	5.211	5.211	(1.078)	306390	40.0000	37.1
189 Caprolactam	113	6.531	6.531	(1.068)	79108	40.0000	44.0
208 1,1'-Biphenyl	154	7.354	7.354	(0.921)	601890	40.0000	38.6
207 Atrazine	173	9.249	9.249	(0.964)	34200	40.0000	36.8
77 Benzidine	184	11.038	11.038	(0.875)	257818	40.0000	36.5
90 3,3'-Dichlorobenzidine	252	12.539	12.539	(0.994)	216482	40.0000	42.7
102 1,4-Dioxane	88	2.456	2.456	(0.508)	129460	40.0000	50.1
103 Methyl methacrylate	100	2.454	2.454	(0.508)	73600	40.0000	53.8
104 Ethyl methacrylate	69	2.971	2.971	(0.615)	275642	40.0000	48.4
105 2-Picoline	93	3.228	3.228	(0.668)	384374	40.0000	41.6
106 N-Nitrosomethylethylamine	88	3.297	3.297	(0.682)	151823	40.0000	42.1
107 Methyl methanesulfonate	80	3.521	3.521	(0.728)	147497	40.0000	39.5
108 N-Nitrosodiethylamine	102	3.858	3.858	(0.798)	144115	40.0000	41.2
109 Ethyl Methanesulfonate	79	4.097	4.097	(0.848)	208326	40.0000	45.3
110 Pentachloroethane	167	4.574	4.574	(0.946)	119725	40.0000	53.5
111 N-Nitrosopyrrolidine	100	5.190	5.190	(1.074)	130840	40.0000	38.9(Q)
113 N-Nitrosomorpholine	56	5.223	5.223	(1.081)	185493	40.0000	38.7
114 o-Toluidine	106	5.249	5.249	(1.086)	465737	40.0000	39.9
115 N-Nitrosopiperidine	114	5.539	5.539	(0.906)	138180	40.0000	40.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.962	5.962	(0.975)	849798	40.0000	40.8
118 2,6-Dichlorophenol	162	6.184	6.184	(1.012)	194979	40.0000	38.7
119 Hexachloropropene	213	6.222	6.222	(1.018)	141665	40.0000	56.6
120 p-Phenylenediamine	108	6.541	6.541	(1.070)	225910	40.0000	40.4
121 N-Nitrosodi-n-butylamine	84	6.515	6.515	(1.066)	211942	40.0000	41.4(T)
122 Safrole	162	6.750	6.750	(1.104)	203993	40.0000	44.9
123 1,2,4,5-Tetrachlorobenzene	216	7.035	7.035	(0.881)	220840	40.0000	40.2
124 Isosafrole	162	7.305	7.305	(0.915)	224711	40.0000	51.0
125 1,4-Naphthoquinone	158	7.565	7.565	(0.948)	157789	40.0000	39.6
127 Pentachlorobenzene	250	8.156	8.156	(1.022)	189057	40.0000	39.9
128 1-Naphthylamine	143	8.284	8.284	(1.038)	473709	40.0000	40.2
129 2-Naphthylamine	143	8.368	8.368	(1.048)	477216	40.0000	37.5
131 5-Nitro-o-toluidine	152	8.574	8.574	(1.074)	150626	40.0000	41.6
136 1,3,5-Trinitrobenzene	75	8.946	8.946	(0.932)	125876	40.0000	46.0
137 Phenacetin	108	9.010	9.010	(0.939)	237813	40.0000	39.6(Q)
138 Diallate	86	8.990	8.990	(0.937)	211803	40.0000	38.5
140 4-Aminobiphenyl	169	9.374	9.374	(0.977)	539794	40.0000	44.0
141 Pentachloronitrobenzene	237	9.392	9.392	(0.978)	56852	40.0000	40.1(Q)
142 Pronamide	173	9.423	9.423	(0.982)	240044	40.0000	39.9
146 4-Nitroquinoline-1-oxide	101	10.445	10.445	(1.088)	23608	40.0000	43.9
147 Methapyrilene	58	10.518	10.518	(1.096)	360709	40.0000	40.8
148 Isodrin	193	10.750	10.750	(1.120)	80870	40.0000	36.7
149 Aramite	185	11.265	11.265	(1.174)	38019	40.0000	37.6
150 Kepone	272	11.933	11.933	(1.243)	53886	40.0000	38.2
151 p-(Dimethylamino)azobenzene	120	11.456	11.456	(0.908)	237654	40.0000	41.7
152 Chlorobenzilate	251	11.499	11.499	(0.912)	210653	40.0000	40.3
153 3,3'-Dimethylbenzidine	212	11.838	11.838	(0.939)	415103	40.0000	43.8
155 2-Acetylaminofluorene	181	12.154	12.154	(0.964)	244425	40.0000	41.4
157 7,12Dimethylbenz(a)anthracene	256	14.251	14.251	(0.953)	217229	40.0000	34.6
158 3-Methylcholanthrene	268	15.477	15.477	(1.035)	187994	40.0000	38.8(Q)
212 Cis Diallate	86	9.092	9.092	(0.947)	35280	6.00000	6.1
213 Trans Diallate	86	8.990	8.990	(0.937)	211803	34.0000	32.7

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s110909.b/s6k0938.d

Date : 10-NOV-2009 21:07

Client ID: AP12ICV

Sample Info: |WBN091016-08.1|40 PPM|1|SVMF|1|AP12ICV

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: JMB3

Column diameter: 0.20

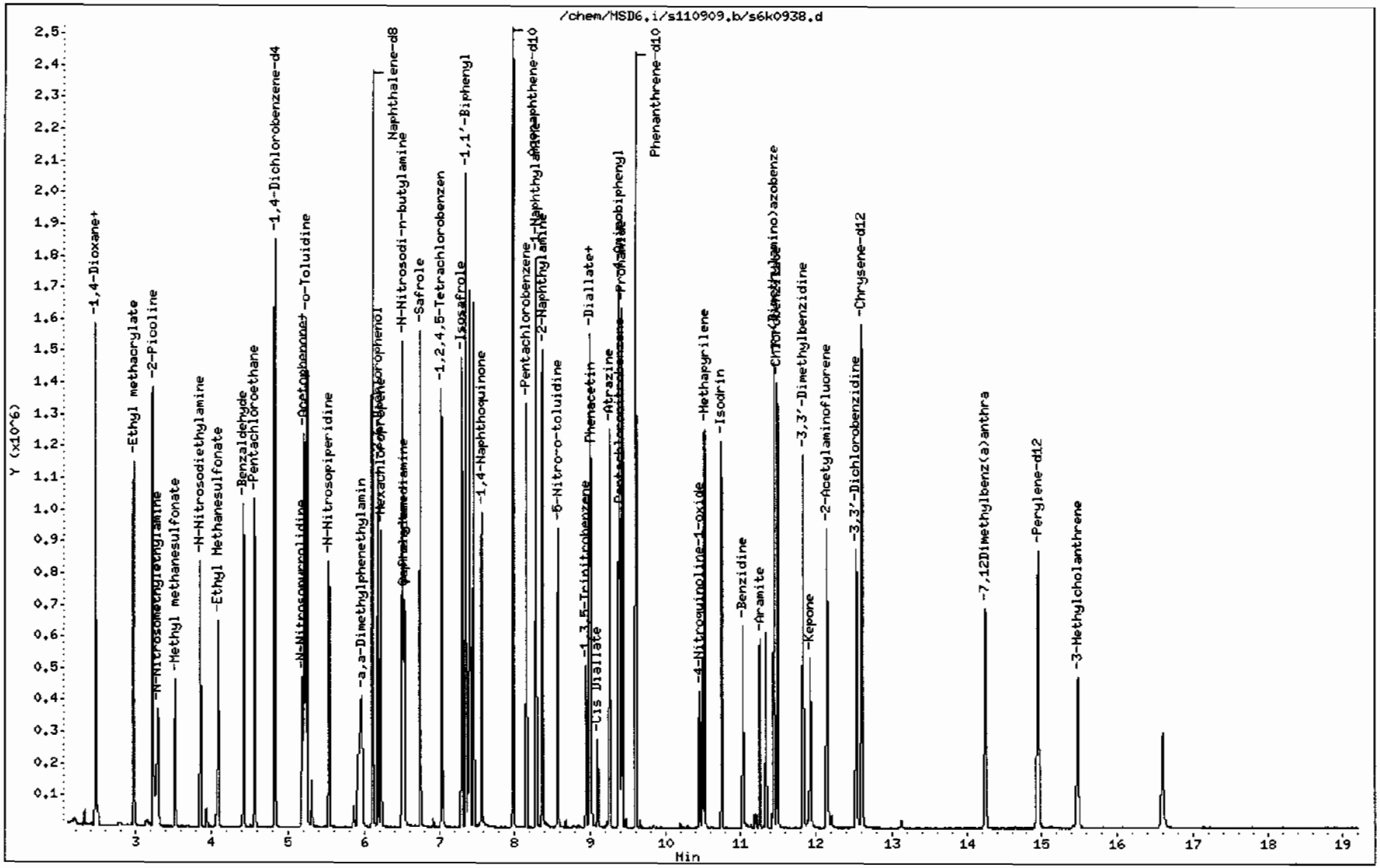

Data File: /chem/MSD6.i/s120409.b/s610402.d
Report Date: 04-Dec-2009 14:19

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	1.00169	0.97640	0.97640	0.000	-2.52518	60.00000	Averaged	
$	5 Phenol-d5	1.26427	1.29785	1.29785	0.000	2.65649	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.28296	0.27597	0.27597	0.000	-2.46803	60.00000	Averaged	
$	39 2-Fluorobiphenyl	1.03083	1.03275	1.03275	0.000	0.18643	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.11675	0.13838	0.13838	0.000	18.52335	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.64507	0.61648	0.61648	0.000	-4.43189	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.68098	0.62406	0.62406	0.000	-8.35865	60.00000	Averaged	
	2 Pyridine	0.84757	0.78760	0.78760	0.000	-7.07537	60.00000	Averaged	
	4 Aniline	0.52752	0.49969	0.49969	0.000	-5.27527	60.00000	Averaged	
	6 Phenol	1.27120	1.30773	1.30773	0.001	2.87379	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.86081	0.80899	0.80899	0.000	-6.01938	60.00000	Averaged	
	8 2-Chlorophenol	1.02109	1.03419	1.03419	0.000	1.28243	60.00000	Averaged	
	203 n-Decane	1.42254	1.23857	1.23857	0.000	-12.93249	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.17550	1.22643	1.22643	0.000	4.33317	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.19162	1.23193	1.23193	0.001	3.38265	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.11231	1.16356	1.16356	0.000	4.60749	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	1.92182	1.85138	1.85138	0.000	-3.66534	60.00000	Averaged	
	12 Benzyl alcohol	0.63436	0.52905	0.52905	0.000	-16.60093	60.00000	Averaged	
	15 o-Cresol	0.83139	0.84537	0.84537	0.000	1.68220	60.00000	Averaged	
	18 m,p-Cresols	1.05346	1.06021	1.06021	0.000	0.64045	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.70865	0.74903	0.74903	0.050	5.69721	60.00000	Averaged	spcc
	19 Hexachloroethane	0.46100	0.46476	0.46476	0.000	0.81558	60.00000	Averaged	
	21 Nitrobenzene	0.28519	0.27599	0.27599	0.000	-3.22500	60.00000	Averaged	
	22 Isophorone	0.50552	0.51153	0.51153	0.000	1.18903	60.00000	Averaged	
	23 2-Nitrophenol	0.13154	0.14495	0.14495	0.001	10.19234	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.21795	0.23235	0.23235	0.000	6.60570	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.29749	0.29970	0.29970	0.000	0.74330	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.19769	0.21016	0.21016	0.001	6.31063	20.00000	Averaged	ccc
	27 Benzoic acid	0.13453	0.15969	0.15969	0.000	18.70616	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24261	0.25766	0.25766	0.000	6.20012	60.00000	Averaged	
	30 Naphthalene	0.79792	0.73723	0.73723	0.000	-7.60612	60.00000	Averaged	
	204 alpha-Terpineol	0.21868	0.22273	0.22273	0.000	1.85067	60.00000	Averaged	
	31 4-Chloroaniline	0.25646	0.25818	0.25818	0.000	0.67042	60.00000	Averaged	
	32 Hexachlorobutadiene	0.12634	0.13413	0.13413	0.001	6.16552	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.19957	0.21492	0.21492	0.001	7.69256	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.48150	0.49831	0.49831	0.000	3.49055	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:02
Lab File ID: s610402.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.47100	0.49228	0.49228	0.000	4.51626	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16157	0.18559	0.18559	0.050	14.86920	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.47908	0.47169	0.47169	0.000	-1.54125	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27294	0.27929	0.27929	0.001	2.32726	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.29067	0.30745	0.30745	0.000	5.77340	60.00000	Averaged
40 2-Chloronaphthalene	0.89832	0.90392	0.90392	0.000	0.62253	60.00000	Averaged
42 o-Nitroaniline	0.30732	0.28764	0.28764	0.000	-6.40548	60.00000	Averaged
41 m-Nitroaniline	0.22497	0.22802	0.22802	0.000	1.35665	60.00000	Averaged
43 Dimethylphthalate	1.02610	1.02791	1.02791	0.000	0.17622	60.00000	Averaged
44 2,6-Dinitrotoluene	0.24475	0.24841	0.24841	0.000	1.49670	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30862	0.31932	0.31932	0.000	3.46620	60.00000	Averaged
45 Acenaphthylene	1.44438	1.46306	1.46306	0.000	1.29315	60.00000	Averaged
47 Acenaphthene	0.90151	0.87235	0.87235	0.001	-3.23488	20.00000	Averaged ccc
48 2,4-Dinitrophenol	52.77220	40.00000	0.12511	0.050	31.93051	60.00000	Linear spcc
49 Dibenzofuran	1.21689	1.25516	1.25516	0.000	3.14537	60.00000	Averaged
51 Diethylphthalate	1.03335	1.03182	1.03182	0.000	-0.14758	60.00000	Averaged
52 4-Nitrophenol	43.77804	40.00000	0.18380	0.050	9.44511	60.00000	Linear spcc
53 Fluorene	0.99879	1.02927	1.02927	0.000	3.05138	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47192	0.49607	0.49607	0.000	5.11798	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	43.39990	40.00000	0.09786	0.000	8.49974	60.00000	Linear
56 p-Nitroaniline	42.19462	40.00000	0.22407	0.000	5.48655	60.00000	Linear
133 Diphenylamine	0.48213	0.48587	0.48587	0.001	0.77589	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.61327	0.57988	0.57988	0.000	-5.44400	60.00000	Averaged
61 4-Bromophenylphenylether	0.15784	0.16183	0.16183	0.000	2.53130	60.00000	Averaged
63 Hexachlorobenzene	0.16533	0.16948	0.16948	0.000	2.51126	60.00000	Averaged
65 Pentachlorophenol	44.52110	40.00000	0.09752	0.001	11.30274	20.00000	Linear ccc
206 n-Octadecane	0.44173	0.43893	0.43893	0.000	-0.63476	60.00000	Averaged
68 Phenanthrene	0.82721	0.82830	0.82830	0.000	0.13104	60.00000	Averaged
69 Anthracene	0.82682	0.83156	0.83156	0.000	0.57339	60.00000	Averaged
72 Di-n-butylphthalate	0.94954	0.98125	0.98125	0.000	3.33991	60.00000	Averaged
76 Fluoranthene	0.79242	0.83105	0.83105	0.001	4.87486	20.00000	Averaged ccc
79 Pyrene	1.10021	1.00753	1.00753	0.000	-8.42356	60.00000	Averaged
85 Butylbenzylphthalate	0.50351	0.48002	0.48002	0.000	-4.66383	60.00000	Averaged
89 Benzo(a)anthracene	0.86301	0.85166	0.85166	0.000	-1.31465	60.00000	Averaged
92 Chrysene	0.82690	0.83255	0.83255	0.000	0.68349	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	39.45585	40.00000	0.68425	0.000	-1.36038	60.00000	Wt Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610402.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.2
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

Injection Date: 04-DEC-2009 10:02
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.21644	1.21644	0.001	-4.31356	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.86707	0.86707	0.000	-2.03373	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	0.86925	0.86925	0.000	-1.23353	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.81522	0.81522	0.001	6.63855	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	45.94450	40.00000	0.84494	0.000	14.86125	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	46.34947	40.00000	0.69463	0.000	15.87367	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.70848	0.70848	0.000	21.30910	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17634	0.17634	0.000	4.16283	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.24655	0.24655	0.000	12.60018	60.00000	Averaged	
	143 Dinoseb	41.98772	40.00000	0.13187	0.000	4.96931	60.00000	Linear	
	173 Carbazole	0.65449	0.65896	0.65896	0.000	0.68183	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.04944	0.04944	0.000	-61.16573	60.00000	Averaged	<-
	192 Methoxychlor	0.55243	0.52649	0.52649	0.000	-4.69610	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.91477	0.91477	0.000	1.65560	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.05029	1.05029	0.000	-6.55469	60.00000	Averaged	
	26 Phthalic anhydride	19.49077	40.00000	0.03042	0.000	-51.27308	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.18139	0.18139	0.000	-1.31871	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.58527	0.58527	0.000	-17.60940	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	41.87935	40.00000	0.13244	0.000	4.69836	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.29337	0.29337	0.000	4.10453	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.24655	0.24655	0.000	12.60018	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	0.86816	0.86816	0.000	-1.63475	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610402.d
Lab Smp Id: WBN091106-05.2 Client Smp ID: MEGACVS
Inj Date : 04-DEC-2009 10:02
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091106-05.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	225677	40.0000	
* 29 Naphthalene-d8	136	5.993	5.993	(1.000)	911417	40.0000	
* 46 Acenaphthene-d10	164	7.858	7.858	(1.000)	476654	40.0000	
* 67 Phenanthrene-d10	188	9.469	9.469	(1.000)	854008	40.0000	
* 91 Chrysene-d12	240	12.463	12.463	(1.000)	749694	40.0000	
* 98 Perylene-d12	264	14.741	14.741	(1.000)	697713	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.590	(0.759)	220350	40.0000	39.0
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	292896	40.0000	41.1
$ 20 Nitrobenzene-d5	82	5.259	5.259	(0.878)	251528	40.0000	39.0
$ 39 2-Fluorobiphenyl	172	7.117	7.117	(0.906)	492266	40.0000	40.1
$ 60 2,4,6-Tribromophenol	329	8.709	8.709	(1.108)	65957	40.0000	47.4
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.897)	462170	40.0000	38.2
1 N-Methyl-N-nitrosomethylamine	74	2.665	2.665	(0.564)	140835	40.0000	36.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.706	2.706	(0.572)	177744	40.0000	37.2
4 Aniline	66	4.421	4.421	(0.935)	112769	40.0000	37.9
6 Phenol	94	4.365	4.365	(0.923)	295124	40.0000	41.1(Q)
7 bis(2-Chloroethyl) ether	63	4.459	4.459	(0.943)	182571	40.0000	37.6
8 2-Chlorophenol	128	4.535	4.535	(0.959)	233392	40.0000	40.5
203 n-Decane	43	4.541	4.541	(0.960)	279516	40.0000	34.8
9 1,3-Dichlorobenzene	146	4.678	4.678	(0.989)	276778	40.0000	41.7
11 1,4-Dichlorobenzene	146	4.744	4.744	(1.003)	278018	40.0000	41.4
13 1,2-Dichlorobenzene	146	4.890	4.890	(1.034)	262588	40.0000	41.8
14 bis(2-Chloroisopropyl)ether	45	4.958	4.958	(1.048)	417814	40.0000	38.5
12 Benzyl alcohol	108	4.841	4.841	(1.024)	119395	40.0000	33.4
15 o-Cresol	107	4.928	4.928	(1.042)	190781	40.0000	40.7
18 m,p-Cresols	107	5.083	5.083	(1.075)	239264	40.0000	40.2
17 N-Nitrosodipropylamine	70	5.096	5.096	(1.078)	169038	40.0000	42.3
19 Hexachloroethane	117	5.221	5.221	(1.104)	104885	40.0000	40.3
21 Nitrobenzene	77	5.279	5.279	(0.881)	251545	40.0000	38.7
22 Isophorone	82	5.519	5.519	(0.921)	466214	40.0000	40.5
23 2-Nitrophenol	139	5.593	5.593	(0.933)	132112	40.0000	44.1
24 2,4-Dimethylphenol	122	5.613	5.613	(0.937)	211767	40.0000	42.6
25 bis(2-Chloroethoxy)methane	93	5.710	5.710	(0.953)	273155	40.0000	40.3
26 2,4-Dichlorophenol	162	5.840	5.840	(0.974)	191544	40.0000	42.5
27 Benzoic acid	105	5.725	5.725	(0.955)	145548	40.0000	47.5
28 1,2,4-Trichlorobenzene	180	5.924	5.924	(0.989)	234833	40.0000	42.5
30 Naphthalene	128	6.016	6.016	(1.004)	671920	40.0000	37.0
204 alpha-Terpineol	59	6.006	6.006	(1.002)	202996	40.0000	40.7
31 4-Chloroaniline	127	6.057	6.057	(1.011)	235307	40.0000	40.3
32 Hexachlorobutadiene	225	6.125	6.125	(1.022)	122248	40.0000	42.5
33 4-Chloro-3-methylphenol	107	6.551	6.551	(1.093)	195879	40.0000	43.1
34 2-Methylnaphthalene	142	6.737	6.737	(1.124)	454164	40.0000	41.4
35 1-Methylnaphthalene	142	6.844	6.844	(1.142)	448668	40.0000	41.8
36 Hexachlorocyclopentadiene	237	6.895	6.895	(0.877)	88463	40.0000	45.9
205 2,3-Dichloroaniline	161	7.033	7.033	(0.895)	224835	40.0000	39.4
37 2,4,6-Trichlorophenol	196	7.030	7.030	(0.895)	133125	40.0000	40.9
38 2,4,5-Trichlorophenol	196	7.073	7.073	(0.900)	146547	40.0000	42.3
40 2-Chloronaphthalene	162	7.257	7.257	(0.923)	430855	40.0000	40.2
42 o-Nitroaniline	65	7.361	7.361	(0.937)	137104	40.0000	37.4
41 m-Nitroaniline	138	7.807	7.807	(0.994)	108688	40.0000	40.5
43 Dimethylphthalate	163	7.555	7.555	(0.961)	489957	40.0000	40.1
44 2,6-Dinitrotoluene	165	7.621	7.621	(0.970)	118406	40.0000	40.6
50 2,4-Dinitrotoluene	165	8.057	8.057	(1.025)	152204	40.0000	41.4
45 Acenaphthylene	152	7.708	7.708	(0.981)	697373	40.0000	40.5
47 Acenaphthene	154	7.894	7.894	(1.005)	415808	40.0000	38.7
48 2,4-Dinitrophenol	184	7.919	7.919	(1.008)	59635	40.0000	52.8
49 Dibenzofuran	168	8.077	8.077	(1.028)	598279	40.0000	41.2
51 Diethylphthalate	149	8.304	8.304	(1.057)	491822	40.0000	39.9
52 4-Nitrophenol	139	7.988	7.988	(1.017)	87611	40.0000	43.8
53 Fluorene	166	8.449	8.449	(1.075)	490606	40.0000	41.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.437	8.437	(1.074)	236456	40.0000	42.0
55 2-Methyl-4,6-dinitrophenol	198	8.498	8.498	(0.897)	83570	40.0000	43.4
56 p-Nitroaniline	138	8.470	8.470	(1.078)	106806	40.0000	42.2
133 Diphenylamine	169	8.564	8.564	(0.904)	414941	40.0000	40.3
58 1,2-Diphenylhydrazine	77	8.610	8.610	(0.909)	495224	40.0000	37.8
61 4-Bromophenylphenylether	248	8.967	8.967	(0.947)	138207	40.0000	41.0
63 Hexachlorobenzene	284	9.043	9.043	(0.955)	144739	40.0000	41.0
65 Pentachlorophenol	266	9.252	9.252	(0.977)	83287	40.0000	44.5
206 n-Octadecane	57	9.308	9.308	(0.983)	374848	40.0000	39.7
68 Phenanthrene	178	9.497	9.497	(1.003)	707373	40.0000	40.0
69 Anthracene	178	9.550	9.550	(1.009)	710163	40.0000	40.2
72 Di-n-butylphthalate	149	10.065	10.065	(1.063)	837995	40.0000	41.3
76 Fluoranthene	202	10.783	10.783	(1.139)	709722	40.0000	41.9
79 Pyrene	202	11.036	11.036	(0.886)	755339	40.0000	36.6
85 Butylbenzylphthalate	149	11.708	11.708	(0.939)	359870	40.0000	38.1
89 Benzo(a)anthracene	228	12.440	12.440	(0.998)	638485	40.0000	39.5
92 Chrysene	228	12.496	12.496	(1.003)	624158	40.0000	40.3
93 bis(2-Ethylhexyl)phthalate	149	12.419	12.419	(0.997)	512975	40.0000	39.4
94 Di-n-octylphthalate	149	13.380	13.380	(0.908)	848723	40.0000	38.3
95 Benzo(b)fluoranthene	252	14.076	14.076	(0.955)	604969	40.0000	39.2
96 Benzo(k)fluoranthene	252	14.124	14.124	(0.958)	606487	40.0000	39.5
97 Benzo(a)pyrene	252	14.639	14.639	(0.993)	568787	40.0000	42.6
99 Indeno(1,2,3-cd)pyrene	276	16.695	16.695	(1.133)	589527	40.0000	45.9
100 Dibenzo(a,h)anthracene	278	16.728	16.728	(1.135)	484654	40.0000	46.3
101 Benzo(ghi)perylene	276	17.200	17.200	(1.167)	494315	40.0000	48.5
126 m-Dinitrobenzene	168	7.596	7.596	(0.967)	84054	40.0000	41.7
130 2,3,4,6-Tetrachlorophenol	232	8.205	8.205	(1.044)	117518	40.0000	45.0
143 Dinoseb	211	9.438	9.438	(0.997)	112614	40.0000	42.0
173 Carbazole	167	9.716	9.716	(1.026)	562755	40.0000	40.3
184 p-Benzoquinone	54	3.998	3.998	(0.845)	11157	40.0000	15.5
192 Methoxychlor	227	12.320	12.320	(0.989)	394706	40.0000	38.1
211 p-Toluidine	106	5.142	5.142	(1.087)	206443	40.0000	40.7
210 m-Toluidine	106	5.175	5.175	(1.094)	237026	40.0000	37.4
26 Phthalic anhydride	104	6.796	6.796	(1.134)	27729	40.0000	19.5
214 1,4-Dinitrobenzene	75	7.512	7.512	(0.956)	86461	40.0000	39.5
215 2-Ethoxyethanol	59	2.474	2.474	(0.523)	132081	40.0000	33.0
216 Methylenebis(2-chloroaniline)	231	12.389	12.389	(0.994)	99293	40.0000	41.9(Q)
M 225 Trichlorophenols	196				279672	80.0000	83.3
M 226 Tetrachlorophenols	232				117518	40.0000	45.0
M 227 Benzo(b,k)fluoranthene	252				1211456	80.0000	78.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120409.b/s610402.d
Date : 04-DEC-2009 10:02
Client ID: MECACVS
Sample Info: IWBN091106-05,2|40 PPM|1|SVMF1|1MECACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

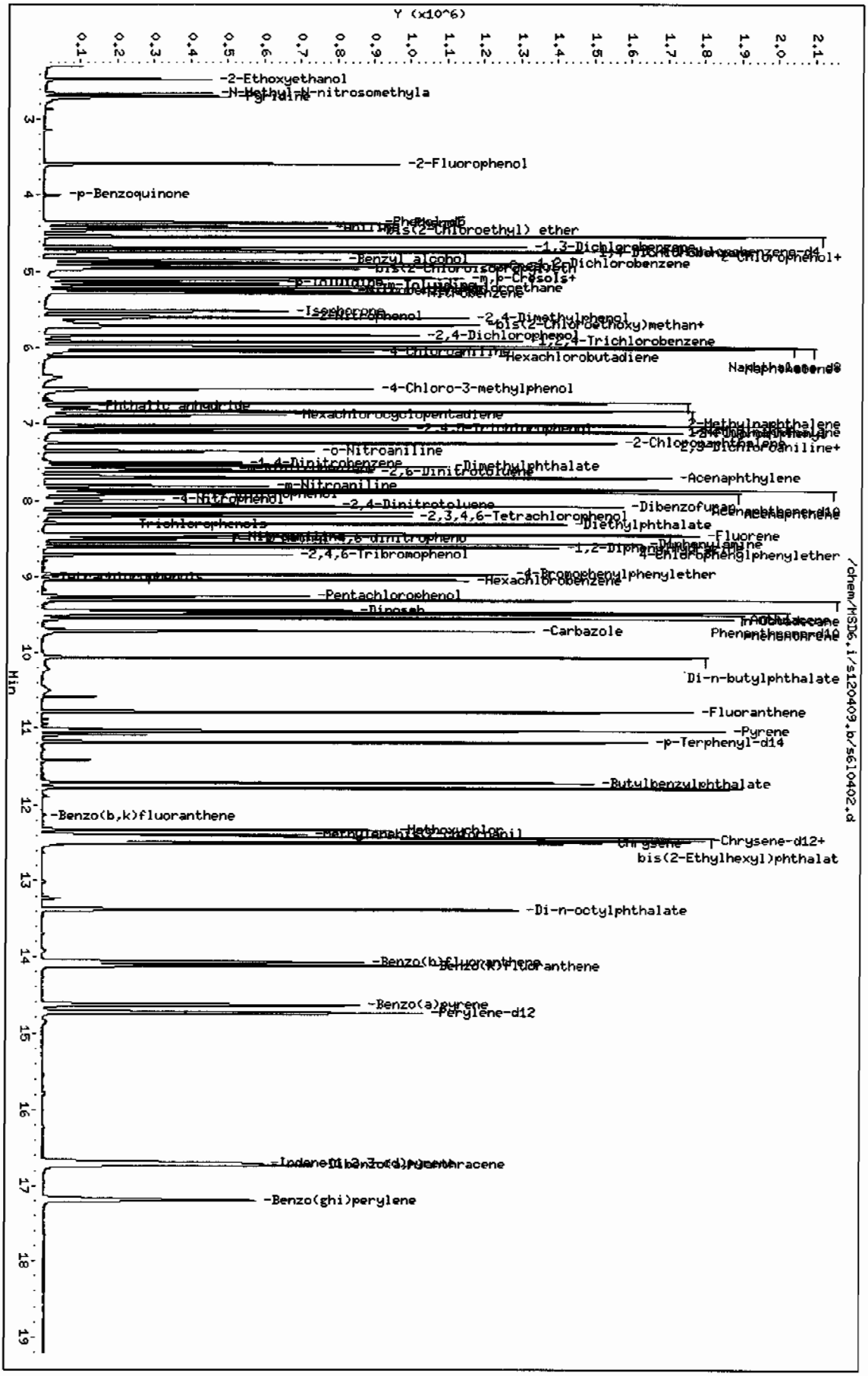

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:30
Lab File ID: s610403.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.86384	0.86384	0.000	0.29732	60.00000	Averaged
16 Acetophenone	1.16908	1.14719	1.14719	0.000	-1.87213	60.00000	Averaged
189 Caprolactam	0.07388	0.08380	0.08380	0.000	13.42166	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.13540	1.13540	0.000	-5.48628	60.00000	Averaged
207 Atrazine	0.04063	0.03853	0.03853	0.000	-5.18077	60.00000	Averaged
77 Benzidine	0.39304	0.39359	0.39359	0.000	0.14164	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.29238	0.29238	0.000	3.49156	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.33379	0.33379	0.000	-8.81449	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.18464	0.18464	0.000	-4.76584	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.71781	0.71781	0.000	-10.89815	60.00000	Averaged
105 2-Picoline	1.30872	1.19166	1.19166	0.000	-8.94509	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.47088	0.47088	0.000	-7.85776	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.47460	0.47460	0.000	-10.20162	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.48508	0.48508	0.000	-2.10895	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.60114	0.60114	0.000	-7.75679	60.00000	Averaged
110 Pentachloroethane	0.31681	0.31032	0.31032	0.000	-2.04621	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.52389	0.52389	0.000	10.02928	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.66181	0.66181	0.000	-2.58439	60.00000	Averaged
114 o-Toluidine	1.65281	1.61706	1.61706	0.000	-2.16342	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.14180	0.14180	0.000	0.52663	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.80876	0.80876	0.000	-5.45843	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.21325	0.21325	0.000	3.08158	60.00000	Averaged
119 Hexachloropropene	0.10269	0.10480	0.10480	0.000	2.05585	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.22937	0.22937	0.000	-0.07586	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.20121	0.20121	0.000	-4.20314	60.00000	Averaged
122 Safrole	0.18653	0.19023	0.19023	0.000	1.98745	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.40304	0.40304	0.000	-4.76235	60.00000	Averaged
124 Isosafrole	0.33959	0.32781	0.32781	0.000	-3.46892	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.26662	0.26662	0.000	-13.07706	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36587	0.36587	0.000	0.36364	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.90808	0.90808	0.000	0.07313	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.98608	0.98608	0.000	0.60813	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.28585	0.28585	0.000	2.45340	60.00000	Averaged
136 1,3,5-Trinitrobenzene	36.62659	40.00000	0.10697	0.000	-8.43353	60.00000	Linear
137 Phenacetin	0.26240	0.25209	0.25209	0.000	-3.92721	60.00000	Averaged
138 Diallate	0.24056	0.22939	0.22939	0.000	-4.64205	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 04-DEC-2009 10:30
Lab File ID: s610403.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.56434	0.56434	0.000	5.36241	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.05938	0.05938	0.000	-4.10423	60.00000	Averaged
142 Pronamide	0.26319	0.24970	0.24970	0.000	-5.12637	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02138	0.02138	0.000	-8.98875	60.00000	Averaged
147 Methapyrilene	0.38600	0.37363	0.37363	0.000	-3.20660	60.00000	Averaged
148 Isodrin	0.09631	0.09869	0.09869	0.000	2.47720	60.00000	Averaged
149 Aramite	0.04420	0.04722	0.04722	0.000	6.83133	60.00000	Averaged
150 Kepone	0.06173	0.07035	0.07035	0.000	13.96758	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.27305	0.27305	0.000	-13.95626	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.26334	0.26334	0.000	-9.59810	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.51809	0.51809	0.000	-1.80860	60.00000	Averaged
155 2-Acetylaminofluorene	41.91862	40.00000	0.34467	0.000	4.79655	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.42632	0.42632	0.000	-11.00999	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.39925	0.39925	0.000	8.03534	60.00000	Averaged
212 Cis Diallate	0.25295	0.23080	0.23080	0.000	-8.75707	60.00000	Averaged
213 Trans Diallate	0.28301	0.26988	0.26988	0.000	-4.64205	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610403.d
Lab Smp Id: WBN091201-03.2 Client Smp ID: APCVS
Inj Date : 04-DEC-2009 10:30
Operator : nag1 Inst ID: MSD6.i
Smp Info : |WBN091201-03.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.727	4.727	(1.000)	226850	40.0000	
* 29 Naphthalene-d8	136	5.990	5.990	(1.000)	838473	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.853	(1.000)	476434	40.0000	
* 67 Phenanthrene-d10	188	9.469	9.469	(1.000)	850357	40.0000	
* 91 Chrysene-d12	240	12.452	12.452	(1.000)	769541	40.0000	
* 98 Perylene-d12	264	14.733	14.733	(1.000)	694904	40.0000	
209 Benzaldehyde	77	4.332	4.332	(0.916)	195961	40.0000	40.1
16 Acetophenone	105	5.099	5.099	(1.079)	260240	40.0000	39.2
189 Caprolactam	113	6.424	6.424	(1.072)	70261	40.0000	45.4
208 1,1'-Biphenyl	154	7.226	7.226	(0.920)	540944	40.0000	37.8
207 Atrazine	173	9.132	9.132	(0.964)	32764	40.0000	37.9
77 Benzidine	184	10.913	10.913	(0.876)	302886	40.0000	40.0
90 3,3'-Dichlorobenzidine	252	12.384	12.384	(0.994)	224998	40.0000	41.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.477	2.477	(0.524)	75721	40.0000	36.5
103 Methyl methacrylate	100	2.472	2.472	(0.523)	41885	40.0000	38.1
104 Ethyl methacrylate	69	2.940	2.940	(0.622)	162835	40.0000	35.6
105 2-Picoline	93	3.185	3.185	(0.674)	270327	40.0000	36.4
106 N-Nitrosomethylethylamine	88	3.246	3.246	(0.687)	106819	40.0000	36.8
107 Methyl methanesulfonate	80	3.463	3.463	(0.733)	107664	40.0000	35.9
108 N-Nitrosodiethylamine	102	3.781	3.781	(0.800)	110041	40.0000	39.2
109 Ethyl Methanesulfonate	79	4.011	4.011	(0.848)	136368	40.0000	36.9
110 Pentachloroethane	167	4.472	4.472	(0.946)	70397	40.0000	39.2
111 N-Nitrosopyrrolidine	100	5.083	5.083	(1.075)	118844	40.0000	44.0(Q)
113 N-Nitrosomorpholine	56	5.116	5.116	(1.082)	150131	40.0000	39.0
114 o-Toluidine	106	5.137	5.137	(1.087)	366829	40.0000	39.1
115 N-Nitrosopiperidine	114	5.425	5.425	(0.906)	118892	40.0000	40.2
116 a,a-Dimethylphenethylamine	58	5.799	5.799	(0.968)	678125	40.0000	37.8
118 2,6-Dichlorophenol	162	6.067	6.067	(1.013)	178802	40.0000	41.2
119 Hexachloropropene	213	6.097	6.097	(1.018)	87869	40.0000	40.8
120 p-Phenylenediamine	108	6.431	6.431	(1.074)	192322	40.0000	40.0
121 N-Nitrosodi-n-butylamine	84	6.396	6.396	(1.068)	168713	40.0000	38.3(T)
122 Safrole	162	6.627	6.627	(1.106)	159505	40.0000	40.8
123 1,2,4,5-Tetrachlorobenzene	216	6.908	6.908	(0.880)	192022	40.0000	38.1
124 Isosafrole	162	7.180	7.180	(0.914)	156180	40.0000	38.6
125 1,4-Naphthoquinone	158	7.440	7.440	(0.947)	127029	40.0000	34.8
127 Pentachlorobenzene	250	8.029	8.029	(1.022)	174312	40.0000	40.1
128 1-Naphthylamine	143	8.159	8.159	(1.039)	432640	40.0000	40.0
129 2-Naphthylamine	143	8.243	8.243	(1.050)	469803	40.0000	40.2
131 5-Nitro-o-toluidine	152	8.452	8.452	(1.076)	136190	40.0000	41.0
136 1,3,5-Trinitrobenzene	75	8.842	8.842	(0.934)	90965	40.0000	36.6
137 Phenacetin	108	8.895	8.895	(0.939)	214367	40.0000	38.4(Q)
138 Diallate	86	8.862	8.862	(0.936)	195067	40.0000	38.1
140 4-Aminobiphenyl	169	9.249	9.249	(0.977)	479888	40.0000	42.1
141 Pentachloronitrobenzene	237	9.265	9.265	(0.978)	50495	40.0000	38.4(Q)
142 Pronamide	173	9.300	9.300	(0.982)	212331	40.0000	37.9
146 4-Nitroquinoline-1-oxide	101	10.322	10.322	(1.090)	18182	40.0000	36.4
147 Methapyrilene	58	10.391	10.391	(1.097)	317715	40.0000	38.7
148 Isodrin	193	10.615	10.615	(1.121)	83924	40.0000	41.0
149 Aramite	185	11.140	11.140	(1.177)	40154	40.0000	42.7
150 Kepone	272	11.787	11.787	(1.245)	59823	40.0000	45.6
151 p-(Dimethylamino)azobenzene	120	11.329	11.329	(0.910)	210123	40.0000	34.4
152 Chlorobenzilate	251	11.372	11.372	(0.913)	202649	40.0000	36.2
153 3,3'-Dimethylbenzidine	212	11.703	11.703	(0.940)	398693	40.0000	39.3
155 2-Acetylaminofluorene	181	12.017	12.017	(0.965)	265236	40.0000	41.9
157 7,12Dimethylbenz(a)anthracene	256	14.048	14.048	(0.953)	296248	40.0000	35.6
158 3-Methylcholanthrene	268	15.253	15.253	(1.035)	277437	40.0000	43.2(Q)
212 Cis Diallate	86	8.962	8.962	(0.946)	29439	6.00000	5.5
213 Trans Diallate	86	8.862	8.862	(0.936)	195067	34.0000	32.4

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120409.b/s610403.d

Date : 04-DEC-2009 10:30

Client ID: APCVS

Sample Info: IWBN091201-03,2|40 PPM|1|SVMF|1|APCVS

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

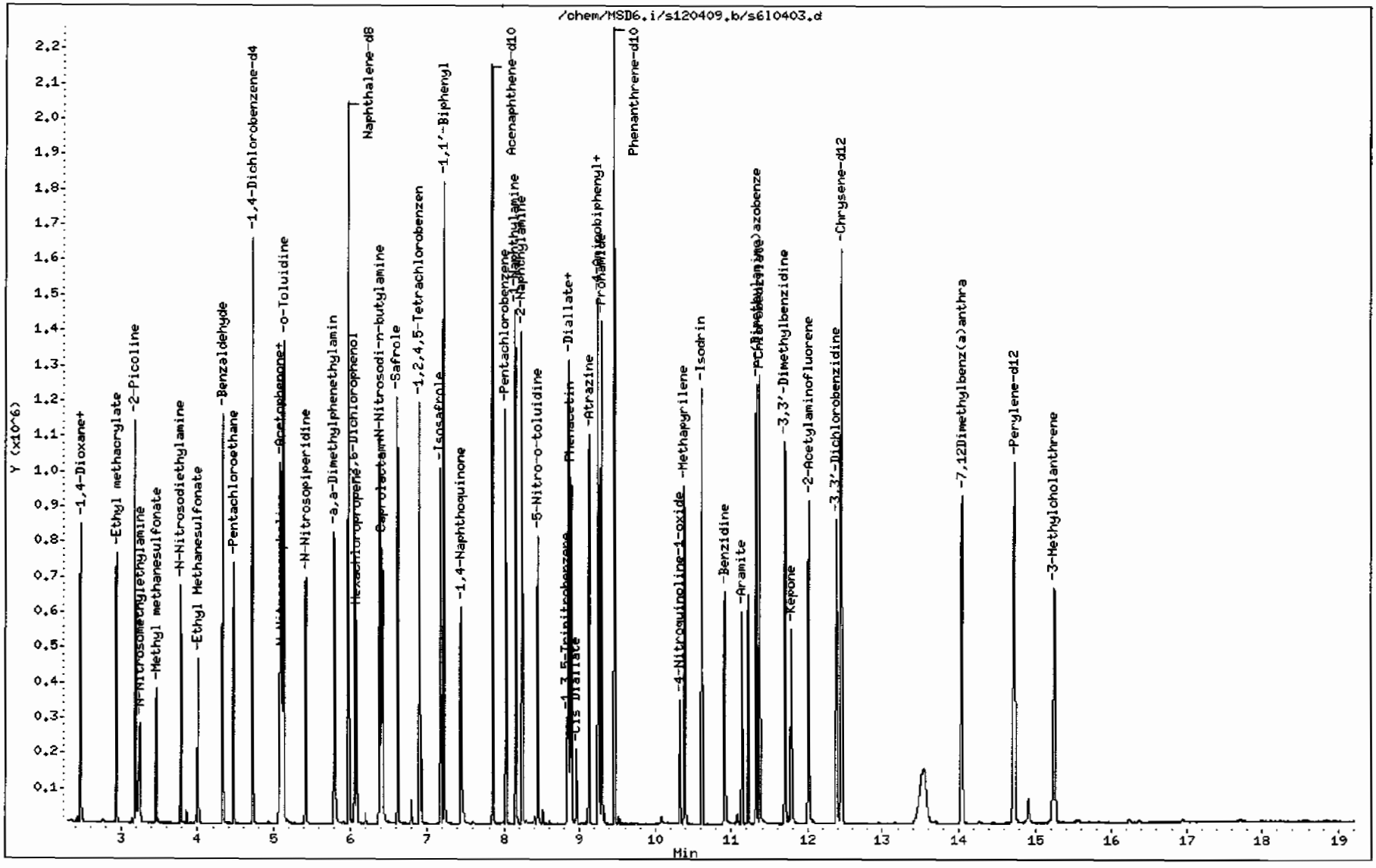

Data File: /chem/MSD6.i/s120509.b/s610502.d
Report Date: 05-Dec-2009 15:04

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610502.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.4 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

Injection Date: 05-DEC-2009 10:46
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	1.00169	0.80670	0.80670	0.000	-19.46566	60.00000	Averaged	
$	5 Phenol-d5	1.26427	1.17175	1.17175	0.000	-7.31838	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.28296	0.24736	0.24736	0.000	-12.58217	60.00000	Averaged	
$	39 2-Fluorobiphenyl	1.03083	0.99499	0.99499	0.000	-3.47725	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.11675	0.13041	0.13041	0.000	11.70482	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.64507	0.60201	0.60201	0.000	-6.67406	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.68098	0.45940	0.45940	0.000	-32.53738	60.00000	Averaged	
	2 Pyridine	0.84757	0.53734	0.53734	0.000	-36.60279	60.00000	Averaged	
	4 Aniline	0.52752	0.45729	0.45729	0.000	-13.31259	60.00000	Averaged	
	6 Phenol	1.27120	1.17240	1.17240	0.001	-7.77196	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.86081	0.74407	0.74407	0.000	-13.56132	60.00000	Averaged	
	8 2-Chlorophenol	1.02109	0.96674	0.96674	0.000	-5.32285	60.00000	Averaged	
	203 n-Decane	1.42254	1.16523	1.16523	0.000	-18.08762	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.17550	1.14778	1.14778	0.000	-2.35762	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.19162	1.16978	1.16978	0.001	-1.83310	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.11231	1.12061	1.12061	0.000	0.74618	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	1.92182	1.77994	1.77994	0.000	-7.38267	60.00000	Averaged	
	12 Benzyl alcohol	0.63436	0.37599	0.37599	0.000	-40.73011	60.00000	Averaged	
	15 o-Cresol	0.83139	0.78339	0.78339	0.000	-5.77281	60.00000	Averaged	
	18 m,p-Cresols	1.05346	1.00421	1.00421	0.000	-4.67468	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.70865	0.74628	0.74628	0.050	5.30914	60.00000	Averaged	spcc
	19 Hexachloroethane	0.46100	0.45060	0.45060	0.000	-2.25440	60.00000	Averaged	
	21 Nitrobenzene	0.28519	0.25637	0.25637	0.000	-10.10681	60.00000	Averaged	
	22 Isophorone	0.50552	0.48509	0.48509	0.000	-4.04014	60.00000	Averaged	
	23 2-Nitrophenol	0.13154	0.13461	0.13461	0.001	2.32882	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.21795	0.18735	0.18735	0.000	-14.04177	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.29749	0.27923	0.27923	0.000	-6.14009	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.19769	0.19642	0.19642	0.001	-0.64128	20.00000	Averaged	ccc
	27 Benzoic acid	0.13453	0.13799	0.13799	0.000	2.57316	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24261	0.23692	0.23692	0.000	-2.34565	60.00000	Averaged	
	30 Naphthalene	0.79792	0.70047	0.70047	0.000	-12.21297	60.00000	Averaged	
	204 alpha-Terpineol	0.21868	0.21088	0.21088	0.000	-3.56502	60.00000	Averaged	
	31 4-Chloroaniline	0.25646	0.24532	0.24532	0.000	-4.34264	60.00000	Averaged	
	32 Hexachlorobutadiene	0.12634	0.12169	0.12169	0.001	-3.68374	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.19957	0.20460	0.20460	0.001	2.52111	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.48150	0.47801	0.47801	0.000	-0.72529	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 10:46
Lab File ID: s610502.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091106-05.4 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35	1-Methylnaphthalene	0.47100	0.47002	0.47002	0.000	-0.20965	60.00000	Averaged
36	Hexachlorocyclopentadiene	0.16157	0.18968	0.18968	0.050	17.40098	60.00000	Averaged spcc
205	2,3-Dichloroaniline	0.47908	0.45744	0.45744	0.000	-4.51712	60.00000	Averaged
37	2,4,6-Trichlorophenol	0.27294	0.26748	0.26748	0.001	-2.00108	20.00000	Averaged ccc
38	2,4,5-Trichlorophenol	0.29067	0.27733	0.27733	0.000	-4.58985	60.00000	Averaged
40	2-Chloronaphthalene	0.89832	0.87190	0.87190	0.000	-2.94195	60.00000	Averaged
42	o-Nitroaniline	0.30732	0.26977	0.26977	0.000	-12.22112	60.00000	Averaged
41	m-Nitroaniline	0.22497	0.20886	0.20886	0.000	-7.16256	60.00000	Averaged
43	Dimethylphthalate	1.02610	1.00433	1.00433	0.000	-2.12162	60.00000	Averaged
44	2,6-Dinitrotoluene	0.24475	0.24005	0.24005	0.000	-1.92047	60.00000	Averaged
50	2,4-Dinitrotoluene	0.30862	0.30491	0.30491	0.000	-1.20165	60.00000	Averaged
45	Acenaphthylene	1.44438	1.41727	1.41727	0.000	-1.87682	60.00000	Averaged
47	Acenaphthene	0.90151	0.84184	0.84184	0.001	-6.61898	20.00000	Averaged ccc
48	2,4-Dinitrophenol	48.48831	40.00000	0.11111	0.050	21.22078	60.00000	Linear spcc
49	Dibenzofuran	1.21689	1.19777	1.19777	0.000	-1.57077	60.00000	Averaged
51	Diethylphthalate	1.03335	1.00202	1.00202	0.000	-3.03199	60.00000	Averaged
52	4-Nitrophenol	39.29622	40.00000	0.16123	0.050	-1.75945	60.00000	Linear spcc
53	Fluorene	0.99879	0.98682	0.98682	0.000	-1.19906	60.00000	Averaged
54	4-Chlorophenylphenylether	0.47192	0.47369	0.47369	0.000	0.37530	60.00000	Averaged
55	2-Methyl-4,6-dinitrophenol	42.33229	40.00000	0.09498	0.000	5.83073	60.00000	Linear
56	p-Nitroaniline	37.52631	40.00000	0.19430	0.000	-6.18422	60.00000	Linear
133	Diphenylamine	0.48213	0.47114	0.47114	0.001	-2.27985	20.00000	Averaged ccc
58	1,2-Diphenylhydrazine	0.61327	0.56973	0.56973	0.000	-7.09982	60.00000	Averaged
61	4-Bromophenylphenylether	0.15784	0.15797	0.15797	0.000	0.08661	60.00000	Averaged
63	Hexachlorobenzene	0.16533	0.16565	0.16565	0.000	0.19175	60.00000	Averaged
65	Pentachlorophenol	41.09697	40.00000	0.08900	0.001	2.74243	20.00000	Linear ccc
206	n-Octadecane	0.44173	0.42475	0.42475	0.000	-3.84528	60.00000	Averaged
68	Phenanthrene	0.82721	0.79982	0.79982	0.000	-3.31214	60.00000	Averaged
69	Anthracene	0.82682	0.81069	0.81069	0.000	-1.95109	60.00000	Averaged
72	Di-n-butylphthalate	0.94954	0.95959	0.95959	0.000	1.05851	60.00000	Averaged
76	Fluoranthene	0.79242	0.79502	0.79502	0.001	0.32799	20.00000	Averaged ccc
79	Pyrene	1.10021	0.97786	0.97786	0.000	-11.12063	60.00000	Averaged
85	Butylbenzylphthalate	0.50351	0.47745	0.47745	0.000	-5.17512	60.00000	Averaged
89	Benzo(a)anthracene	0.86301	0.81555	0.81555	0.000	-5.49953	60.00000	Averaged
92	Chrysene	0.82690	0.80336	0.80336	0.000	-2.84602	60.00000	Averaged
93	bis(2-Ethylhexyl)phthalate	39.33104	40.00000	0.68206	0.000	-1.67239	60.00000	Wt Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610502.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.4
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

Injection Date: 05-DEC-2009 10:46
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.27127	1.22300	1.22300	0.001	-3.79727	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.88507	0.83101	0.83101	0.000	-6.10866	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.88011	0.85201	0.85201	0.000	-3.19277	60.00000	Averaged	
	97 Benzo(a)pyrene	0.76447	0.77620	0.77620	0.001	1.53457	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	43.60546	40.00000	0.79888	0.000	9.01366	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	44.22736	40.00000	0.66086	0.000	10.56839	60.00000	Linear	
	101 Benzo(ghi)perylene	0.58403	0.67457	0.67457	0.000	15.50263	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16929	0.17288	0.17288	0.000	2.11758	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21896	0.22733	0.22733	0.000	3.82373	60.00000	Averaged	
	143 Dinoseb	41.03302	40.00000	0.12835	0.000	2.58255	60.00000	Linear	
	173 Carbazole	0.65449	0.60296	0.60296	0.000	-7.87362	60.00000	Averaged	
	184 p-Benzoquinone	0.12730	0.08219	0.08219	0.000	-35.43941	60.00000	Averaged	
	192 Methoxychlor	0.55243	0.53643	0.53643	0.000	-2.89729	60.00000	Averaged	
	211 p-Toluidine	0.89987	0.82200	0.82200	0.000	-8.65437	60.00000	Averaged	
	210 m-Toluidine	1.12396	1.08508	1.08508	0.000	-3.45911	60.00000	Averaged	
	26 Phthalic anhydride	28.75720	40.00000	0.05128	0.000	-28.10700	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.18382	0.17085	0.17085	0.000	-7.05345	60.00000	Averaged	
	215 2-Ethoxyethanol	0.71035	0.33704	0.33704	0.000	-52.55345	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	38.07476	40.00000	0.11854	0.000	-4.81310	60.00000	Linear	
M	225 Trichlorophenols	0.28180	0.27240	0.27240	0.000	-3.33619	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21896	0.22733	0.22733	0.000	3.82373	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.88259	0.84151	0.84151	0.000	-4.65482	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610502.d
Lab Smp Id: WBN091106-05.4 Client Smp ID: MEGACVS
Inj Date : 05-DEC-2009 10:46
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091106-05.4|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.719	4.719	(1.000)	232623	40.0000	
* 29 Naphthalene-d8	136	5.988	5.988	(1.000)	1017627	40.0000	
* 46 Acenaphthene-d10	164	7.856	7.856	(1.000)	527825	40.0000	
* 67 Phenanthrene-d10	188	9.466	9.466	(1.000)	924477	40.0000	
* 91 Chrysene-d12	240	12.460	12.460	(1.000)	791288	40.0000	
* 98 Perylene-d12	264	14.736	14.736	(1.000)	729958	40.0000	
$ 3 2-Fluorophenol	112	3.577	3.577	(0.758)	187658	40.0000	32.2
$ 5 Phenol-d5	99	4.342	4.342	(0.920)	272575	40.0000	37.1
$ 20 Nitrobenzene-d5	82	5.251	5.251	(0.877)	251716	40.0000	35.0
$ 39 2-Fluorobiphenyl	172	7.112	7.112	(0.905)	525179	40.0000	38.6
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.108)	68836	40.0000	44.7
$ 81 p-Terphenyl-d14	244	11.178	11.178	(0.897)	476367	40.0000	37.3
1 N-Methyl-N-nitrosomethylamine	74	2.642	2.642	(0.560)	106868	40.0000	27.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.686	2.686	(0.569)	124997	40.0000	25.4
4 Aniline	66	4.411	4.411	(0.935)	106377	40.0000	34.7
6 Phenol	94	4.357	4.357	(0.923)	272727	40.0000	36.9
7 bis(2-Chloroethyl) ether	63	4.451	4.451	(0.943)	173088	40.0000	34.6
8 2-Chlorophenol	128	4.525	4.525	(0.959)	224886	40.0000	37.9
203 n-Decane	43	4.533	4.533	(0.961)	271060	40.0000	32.8
9 1,3-Dichlorobenzene	146	4.671	4.671	(0.990)	267001	40.0000	39.0
11 1,4-Dichlorobenzene	146	4.737	4.737	(1.004)	272117	40.0000	39.3
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.035)	260679	40.0000	40.3
14 bis(2-Chloroisopropyl)ether	45	4.953	4.953	(1.050)	414055	40.0000	37.0
12 Benzyl alcohol	108	4.834	4.834	(1.024)	87463	40.0000	23.7
15 o-Cresol	107	4.920	4.920	(1.043)	182235	40.0000	37.7
18 m,p-Cresols	107	5.076	5.076	(1.076)	233603	40.0000	38.1
17 N-Nitrosodipropylamine	70	5.091	5.091	(1.079)	173601	40.0000	42.1
19 Hexachloroethane	117	5.213	5.213	(1.105)	104821	40.0000	39.1
21 Nitrobenzene	77	5.272	5.272	(0.880)	260886	40.0000	36.0
22 Isophorone	82	5.509	5.509	(0.920)	493643	40.0000	38.4
23 2-Nitrophenol	139	5.585	5.585	(0.933)	136981	40.0000	40.9
24 2,4-Dimethylphenol	122	5.606	5.606	(0.936)	190650	40.0000	34.4
25 bis(2-Chloroethoxy)methane	93	5.705	5.705	(0.953)	284148	40.0000	37.5
26 2,4-Dichlorophenol	162	5.835	5.835	(0.974)	199880	40.0000	39.7
27 Benzoic acid	105	5.718	5.718	(0.955)	140423	40.0000	41.0
28 1,2,4-Trichlorobenzene	180	5.919	5.919	(0.988)	241100	40.0000	39.1
30 Naphthalene	128	6.011	6.011	(1.004)	712814	40.0000	35.1
204 alpha-Terpineol	59	6.001	6.001	(1.002)	214600	40.0000	38.6
31 4-Chloroaniline	127	6.049	6.049	(1.010)	249645	40.0000	38.3
32 Hexachlorobutadiene	225	6.120	6.120	(1.022)	123831	40.0000	38.5
33 4-Chloro-3-methylphenol	107	6.546	6.546	(1.093)	208203	40.0000	41.0
34 2-Methylnaphthalene	142	6.729	6.729	(1.124)	486432	40.0000	39.7
35 1-Methylnaphthalene	142	6.836	6.836	(1.142)	478301	40.0000	39.9
36 Hexachlorocyclopentadiene	237	6.890	6.890	(0.877)	100119	40.0000	47.0
205 2,3-Dichloroaniline	161	7.028	7.028	(0.895)	241447	40.0000	38.2
37 2,4,6-Trichlorophenol	196	7.025	7.025	(0.894)	141181	40.0000	39.2
38 2,4,5-Trichlorophenol	196	7.068	7.068	(0.900)	146380	40.0000	38.2
40 2-Chloronaphthalene	162	7.254	7.254	(0.923)	460208	40.0000	38.8
42 o-Nitroaniline	65	7.359	7.359	(0.937)	142389	40.0000	35.1
41 m-Nitroaniline	138	7.802	7.802	(0.993)	110240	40.0000	37.1
43 Dimethylphthalate	163	7.550	7.550	(0.961)	530111	40.0000	39.2
44 2,6-Dinitrotoluene	165	7.616	7.616	(0.970)	126703	40.0000	39.2
50 2,4-Dinitrotoluene	165	8.054	8.054	(1.025)	160940	40.0000	39.5
45 Acenaphthylene	152	7.703	7.703	(0.981)	748072	40.0000	39.2
47 Acenaphthene	154	7.891	7.891	(1.005)	444344	40.0000	37.4
48 2,4-Dinitrophenol	184	7.914	7.914	(1.007)	58645	40.0000	48.5
49 Dibenzofuran	168	8.072	8.072	(1.028)	632215	40.0000	39.4
51 Diethylphthalate	149	8.299	8.299	(1.056)	528889	40.0000	38.8
52 4-Nitrophenol	139	7.983	7.983	(1.016)	85102	40.0000	39.3
53 Fluorene	166	8.444	8.444	(1.075)	520867	40.0000	39.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	8.432	8.432	(1.073)	250027	40.0000	40.2
55 2-Methyl-4,6-dinitrophenol	198	8.493	8.493	(0.897)	87806	40.0000	42.3
56 p-Nitroaniline	138	8.465	8.465	(1.078)	102555	40.0000	37.5
133 Diphenylamine	169	8.561	8.561	(0.904)	435560	40.0000	39.1
58 1,2-Diphenylhydrazine	77	8.605	8.605	(0.909)	526700	40.0000	37.2
61 4-Bromophenylphenylether	248	8.964	8.964	(0.947)	146044	40.0000	40.0
63 Hexachlorobenzene	284	9.041	9.041	(0.955)	153137	40.0000	40.1
65 Pentachlorophenol	266	9.249	9.249	(0.977)	82274	40.0000	41.1
206 n-Octadecane	57	9.303	9.303	(0.983)	392668	40.0000	38.5
68 Phenanthrene	178	9.492	9.492	(1.003)	739411	40.0000	38.7
69 Anthracene	178	9.548	9.548	(1.009)	749466	40.0000	39.2
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	887116	40.0000	40.4
76 Fluoranthene	202	10.781	10.781	(1.139)	734976	40.0000	40.1
79 Pyrene	202	11.031	11.031	(0.885)	773766	40.0000	35.6
85 Butylbenzylphthalate	149	11.706	11.706	(0.939)	377799	40.0000	37.9
89 Benzo(a)anthracene	228	12.440	12.440	(0.998)	645331	40.0000	37.8
92 Chrysene	228	12.493	12.493	(1.003)	635693	40.0000	38.9
93 bis(2-Ethylhexyl)phthalate	149	12.417	12.417	(0.997)	539705	40.0000	39.3
94 Di-n-octylphthalate	149	13.377	13.377	(0.908)	892738	40.0000	38.5
95 Benzo(b)fluoranthene	252	14.073	14.073	(0.955)	606601	40.0000	37.6
96 Benzo(k)fluoranthene	252	14.119	14.119	(0.958)	621929	40.0000	38.7
97 Benzo(a)pyrene	252	14.636	14.636	(0.993)	566592	40.0000	40.6
99 Indeno(1,2,3-cd)pyrene	276	16.692	16.692	(1.133)	583150	40.0000	43.6
100 Dibenzo(a,h)anthracene	278	16.726	16.726	(1.135)	482397	40.0000	44.2
101 Benzo(ghi)perylene	276	17.197	17.197	(1.167)	492406	40.0000	46.2(Q)
126 m-Dinitrobenzene	168	7.593	7.593	(0.967)	91250	40.0000	40.8
130 2,3,4,6-Tetrachlorophenol	232	8.200	8.200	(1.044)	119991	40.0000	41.5
143 Dinoseb	211	9.433	9.433	(0.996)	118655	40.0000	41.0
173 Carbazole	167	9.711	9.711	(1.026)	557425	40.0000	36.8
184 p-Benzoquinone	54	3.988	3.988	(0.845)	19119	40.0000	25.8
192 Methoxychlor	227	12.317	12.317	(0.989)	424468	40.0000	38.8
211 p-Toluidine	106	5.134	5.134	(1.088)	191215	40.0000	36.5
210 m-Toluidine	106	5.170	5.170	(1.096)	252415	40.0000	38.6
26 Phthalic anhydride	104	6.793	6.793	(1.134)	52187	40.0000	28.8
214 1,4-Dinitrobenzene	75	7.507	7.507	(0.956)	90179	40.0000	37.2
215 2-Ethoxyethanol	59	2.449	2.449	(0.519)	78403	40.0000	19.0
216 Methylenebis(2-chloroaniline)	231	12.386	12.386	(0.994)	93800	40.0000	38.1(Q)
M 225 Trichlorophenols	196				287561	80.0000	77.3
M 226 Tetrachlorophenols	232				119991	40.0000	41.5
M 227 Benzo(b,k)fluoranthene	252				1228530	80.0000	76.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610502.d
Date : 05-DEC-2009 10:46
Client ID: MEGACVS
Sample Info: IWBN091106-05,4140 PPM!!!SVMF!!!MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nag1
Column diameter: 0.20

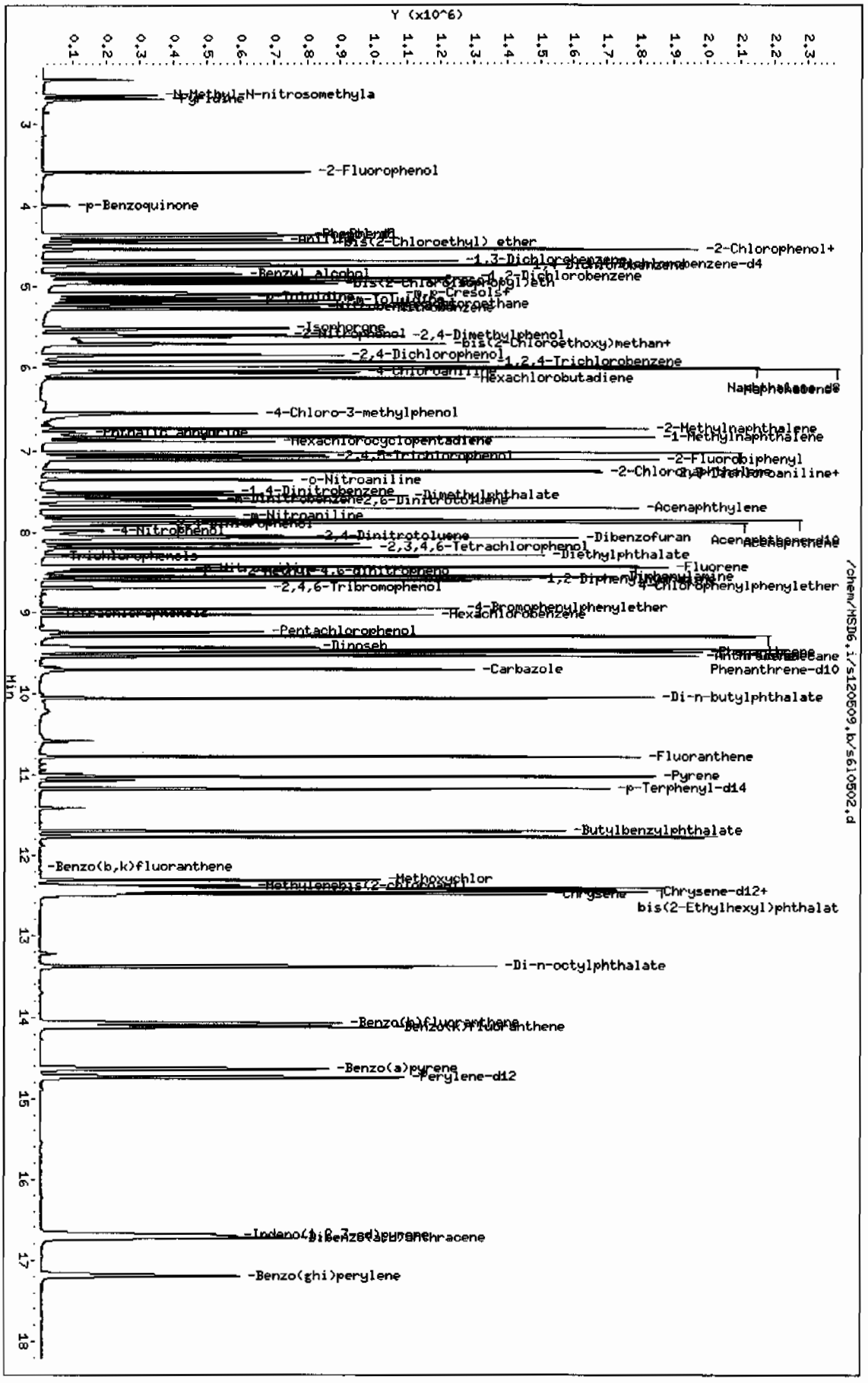

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 05-DEC-2009 11:14
Lab File ID: s610503.d Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Analysis Type: WATER Init. Cal. Times: 18:53 04:38
Lab Sample ID: WBN091201-03.2 Quant Type: ISTD
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86127	0.79237	0.79237	0.000	-8.00023	60.00000	Averaged
16 Acetophenone	1.16908	1.13445	1.13445	0.000	-2.96193	60.00000	Averaged
189 Caprolactam	0.07388	0.08138	0.08138	0.000	10.14494	60.00000	Averaged
208 1,1'-Biphenyl	1.20131	1.10939	1.10939	0.000	-7.65148	60.00000	Averaged
207 Atrazine	0.04063	0.03811	0.03811	0.000	-6.21191	60.00000	Averaged
77 Benzidine	0.39304	0.34950	0.34950	0.000	-11.07792	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.28252	0.27841	0.27841	0.000	-1.45488	60.00000	Averaged
102 1,4-Dioxane	0.36606	0.23366	0.23366	0.000	-36.16814	60.00000	Averaged
103 Methyl methacrylate	0.19388	0.12854	0.12854	0.000	-33.70159	60.00000	Averaged
104 Ethyl methacrylate	0.80561	0.53934	0.53934	0.000	-33.05202	60.00000	Averaged
105 2-Picoline	1.30872	0.93437	0.93437	0.000	-28.60452	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.51104	0.36686	0.36686	0.000	-28.21262	60.00000	Averaged
107 Methyl methanesulfonate	0.52852	0.37774	0.37774	0.000	-28.52940	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49553	0.41358	0.41358	0.000	-16.53787	60.00000	Averaged
109 Ethyl Methanesulfonate	0.65169	0.52516	0.52516	0.000	-19.41506	60.00000	Averaged
110 Pentachloroethane	0.31681	0.29185	0.29185	0.000	-7.87686	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47614	0.51847	0.51847	0.000	8.89214	60.00000	Averaged
113 N-Nitrosomorpholine	0.67936	0.63777	0.63777	0.000	-6.12276	60.00000	Averaged
114 o-Toluidine	1.65281	1.63900	1.63900	0.000	-0.83545	60.00000	Averaged
115 N-Nitrosopiperidine	0.14105	0.13254	0.13254	0.000	-6.03854	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.85546	0.73038	0.73038	0.000	-14.62137	60.00000	Averaged
118 2,6-Dichlorophenol	0.20687	0.20897	0.20897	0.000	1.01481	60.00000	Averaged
119 Hexachloropropene	0.10269	0.09611	0.09611	0.000	-6.40055	60.00000	Averaged
120 p-Phenylenediamine	0.22955	0.20409	0.20409	0.000	-11.08869	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21004	0.19596	0.19596	0.000	-6.70330	60.00000	Averaged
122 Safrole	0.18653	0.18463	0.18463	0.000	-1.01436	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42319	0.39797	0.39797	0.000	-5.96048	60.00000	Averaged
124 Isosafrole	0.33959	0.31895	0.31895	0.000	-6.07854	60.00000	Averaged
125 1,4-Naphthoquinone	0.30674	0.28848	0.28848	0.000	-5.95269	60.00000	Averaged
127 Pentachlorobenzene	0.36454	0.36337	0.36337	0.000	-0.32040	60.00000	Averaged
128 1-Naphthylamine	0.90742	0.87871	0.87871	0.000	-3.16392	60.00000	Averaged
129 2-Naphthylamine	0.98012	0.94272	0.94272	0.000	-3.81637	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27901	0.27318	0.27318	0.000	-2.08763	60.00000	Averaged
136 1,3,5-Trinitrobenzene	37.46063	40.00000	0.10968	0.000	-6.34843	60.00000	Linear
137 Phenacetin	0.26240	0.24221	0.24221	0.000	-7.69463	60.00000	Averaged
138 Diallate	0.24056	0.22772	0.22772	0.000	-5.33793	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i
Lab File ID: s610503.d
Analysis Type: WATER
Lab Sample ID: WBN091201-03.2
Method: /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m

Injection Date: 05-DEC-2009 11:14
Init. Cal. Date(s): 09-NOV-2009 11-NOV-2009
Init. Cal. Times: 18:53 04:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.53562	0.54964	0.54964	0.000	2.61777	60.00000	Averaged
141 Pentachloronitrobenzene	0.06192	0.05729	0.05729	0.000	-7.47829	60.00000	Averaged
142 Pronamide	0.26319	0.24237	0.24237	0.000	-7.90894	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02349	0.02303	0.02303	0.000	-1.95806	60.00000	Averaged
147 Methapyrilene	0.38600	0.34584	0.34584	0.000	-10.40471	60.00000	Averaged
148 Isodrin	0.09631	0.09698	0.09698	0.000	0.70286	60.00000	Averaged
149 Aramite	0.04420	0.04500	0.04500	0.000	1.81854	60.00000	Averaged
150 Kepone	0.06173	0.07109	0.07109	0.000	15.16824	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31734	0.27374	0.27374	0.000	-13.73966	60.00000	Averaged
152 Chlorobenzilate	0.29130	0.25861	0.25861	0.000	-11.22143	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52763	0.47756	0.47756	0.000	-9.49117	60.00000	Averaged
155 2-Acetylaminofluorene	39.44427	40.00000	0.32159	0.000	-1.38933	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.47906	0.42852	0.42852	0.000	-10.55060	60.00000	Averaged
158 3-Methylcholanthrene	0.36955	0.39080	0.39080	0.000	5.75086	60.00000	Averaged
212 Cis Diallate	0.25295	0.23132	0.23132	0.000	-8.54848	60.00000	Averaged
213 Trans Diallate	0.28301	0.26791	0.26791	0.000	-5.33793	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610503.d
Lab Smp Id: WBN091201-03.2 Client Smp ID: APCVS
Inj Date : 05-DEC-2009 11:14
Operator : nagl Inst ID: MSD6.i
Smp Info : |WBN091201-03.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.719	4.719	(1.000)	226673	40.0000	
* 29 Naphthalene-d8	136	5.983	5.983	(1.000)	916713	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.851	(1.000)	514494	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.464	(1.000)	887756	40.0000	
* 91 Chrysene-d12	240	12.450	12.450	(1.000)	768226	40.0000	
* 98 Perylene-d12	264	14.728	14.728	(1.000)	685228	40.0000	
209 Benzaldehyde	77	4.322	4.322	(0.916)	179609	40.0000	36.8
16 Acetophenone	105	5.091	5.091	(1.079)	257149	40.0000	38.8
189 Caprolactam	113	6.419	6.419	(1.073)	74598	40.0000	44.0
208 1,1'-Biphenyl	154	7.221	7.221	(0.920)	570775	40.0000	36.9
207 Atrazine	173	9.127	9.127	(0.964)	33833	40.0000	37.5
77 Benzidine	184	10.911	10.911	(0.876)	268492	40.0000	35.6
90 3,3'-Dichlorobenzidine	252	12.381	12.381	(0.994)	213878	40.0000	39.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
102 1,4-Dioxane	88	2.451	2.451	(0.519)	52965	40.0000	25.5
103 Methyl methacrylate	100	2.446	2.446	(0.518)	29136	40.0000	26.5
104 Ethyl methacrylate	69	2.923	2.923	(0.619)	122253	40.0000	26.8
105 2-Picoline	93	3.170	3.170	(0.672)	211796	40.0000	28.6
106 N-Nitrosomethylethylamine	88	3.231	3.231	(0.685)	83157	40.0000	28.7
107 Methyl methanesulfonate	80	3.450	3.450	(0.731)	85623	40.0000	28.6
108 N-Nitrosodiethylamine	102	3.771	3.771	(0.799)	93748	40.0000	33.4
109 Ethyl Methanesulfonate	79	4.000	4.000	(0.848)	119040	40.0000	32.2
110 Pentachloroethane	167	4.462	4.462	(0.945)	66155	40.0000	36.8
111 N-Nitrosopyrrolidine	100	5.078	5.078	(1.076)	117524	40.0000	43.6(Q)
113 N-Nitrosomorpholine	56	5.111	5.111	(1.083)	144565	40.0000	37.6
114 o-Toluidine	106	5.129	5.129	(1.087)	371518	40.0000	39.7
115 N-Nitrosopiperidine	114	5.417	5.417	(0.905)	121497	40.0000	37.6
116 a,a-Dimethylphenethylamine	58	5.792	5.792	(0.968)	669546	40.0000	34.2
118 2,6-Dichlorophenol	162	6.062	6.062	(1.013)	191567	40.0000	40.4
119 Hexachloropropene	213	6.090	6.090	(1.018)	88108	40.0000	37.4
120 p-Phenylenediamine	108	6.426	6.426	(1.074)	187094	40.0000	35.6
121 N-Nitrosodi-n-butylamine	84	6.391	6.391	(1.068)	179642	40.0000	37.3(T)
122 Safrole	162	6.620	6.620	(1.106)	169256	40.0000	39.6
123 1,2,4,5-Tetrachlorobenzene	216	6.903	6.903	(0.879)	204753	40.0000	37.6
124 Isosafrole	162	7.175	7.175	(0.914)	164097	40.0000	37.6
125 1,4-Naphthoquinone	158	7.435	7.435	(0.947)	148420	40.0000	37.6
127 Pentachlorobenzene	250	8.024	8.024	(1.022)	186954	40.0000	39.9
128 1-Naphthylamine	143	8.154	8.154	(1.039)	452089	40.0000	38.7
129 2-Naphthylamine	143	8.238	8.238	(1.049)	485022	40.0000	38.5
131 5-Nitro-o-toluidine	152	8.447	8.447	(1.076)	140551	40.0000	39.2
136 1,3,5-Trinitrobenzene	75	8.839	8.839	(0.934)	97368	40.0000	37.5
137 Phenacetin	108	8.893	8.893	(0.940)	215019	40.0000	36.9(Q)
138 Diallate	86	8.860	8.860	(0.936)	202160	40.0000	37.9
140 4-Aminobiphenyl	169	9.247	9.247	(0.977)	487943	40.0000	41.0
141 Pentachloronitrobenzene	237	9.260	9.260	(0.978)	50861	40.0000	37.0(Q)
142 Pronamide	173	9.295	9.295	(0.982)	215168	40.0000	36.8
146 4-Nitroquinoline-1-oxide	101	10.317	10.317	(1.090)	20448	40.0000	39.2
147 Methapyrilene	58	10.383	10.383	(1.097)	307022	40.0000	35.8
148 Isodrin	193	10.613	10.613	(1.121)	86098	40.0000	40.3
149 Aramite	185	11.138	11.138	(1.177)	39953	40.0000	40.7
150 Kepone	272	11.782	11.782	(1.245)	63112	40.0000	46.1
151 p-(Dimethylamino)azobenzene	120	11.326	11.326	(0.910)	210292	40.0000	34.5
152 Chlorobenzilate	251	11.370	11.370	(0.913)	198670	40.0000	35.5
153 3,3'-Dimethylbenzidine	212	11.701	11.701	(0.940)	366871	40.0000	36.2
155 2-Acetylaminofluorene	181	12.012	12.012	(0.965)	247053	40.0000	39.4
157 7,12Dimethylbenz(a)anthracene	256	14.045	14.045	(0.954)	293631	40.0000	35.8
158 3-Methylcholanthrene	268	15.243	15.243	(1.035)	267789	40.0000	42.3(Q)
212 Cis Diallate	86	8.959	8.959	(0.947)	30804	6.00000	5.5
213 Trans Diallate	86	8.860	8.860	(0.936)	202160	34.0000	32.2

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610503.d

Date : 05-DEC-2009 11:14

Client ID: APCVS

Sample Info: IWBN091201-03.2|40 PPM|1|SVMF|1|APCVS

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

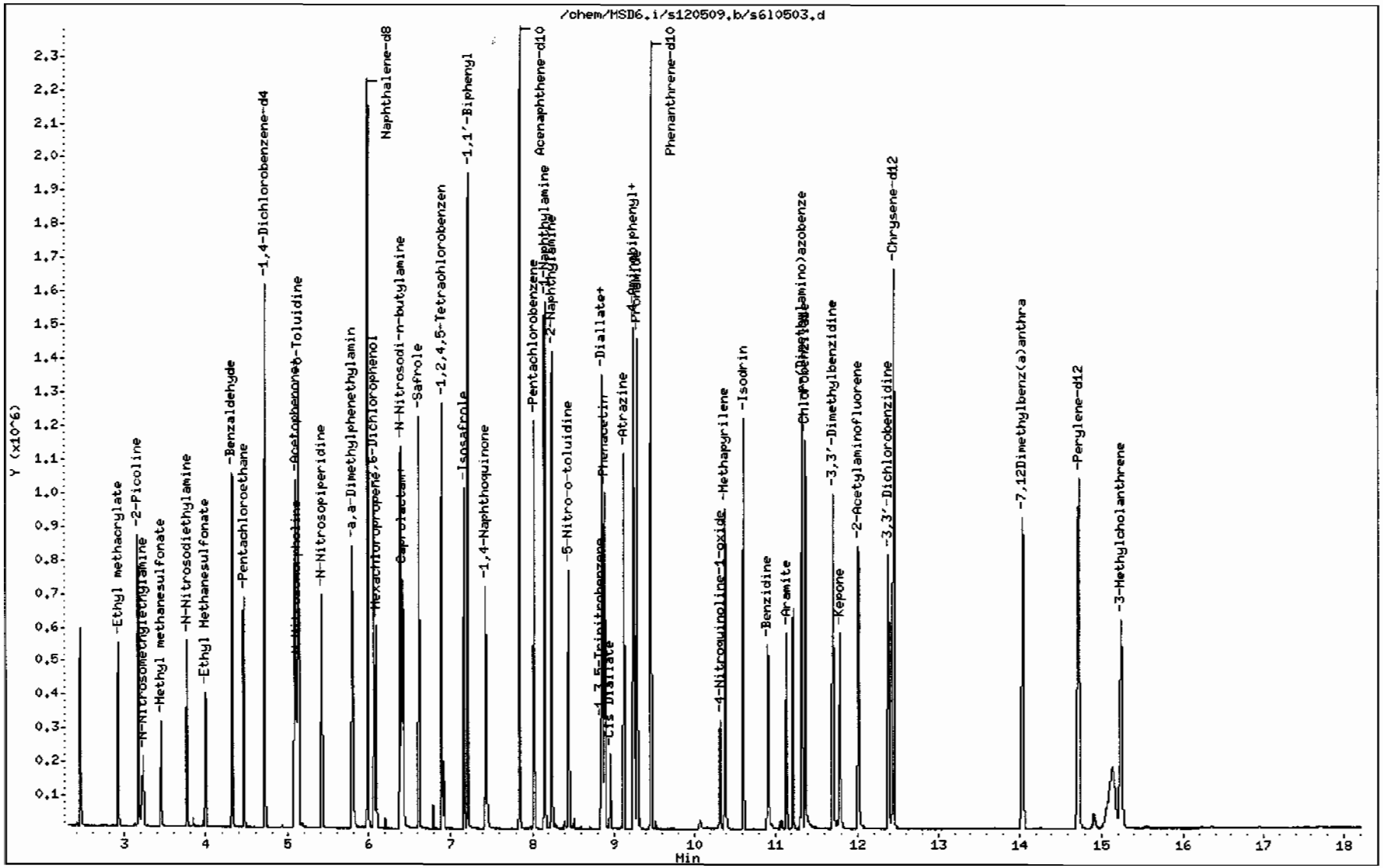

QC Data

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

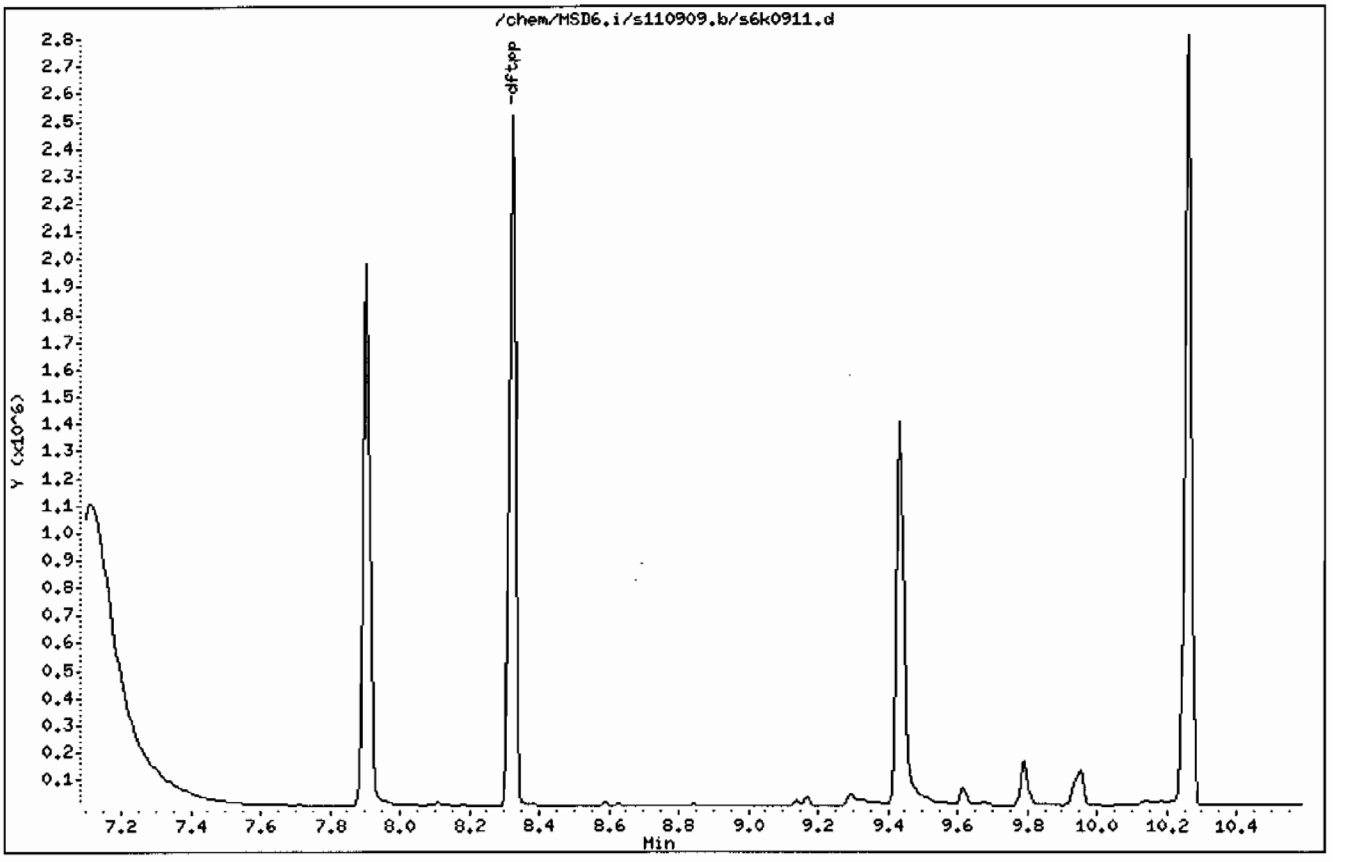

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

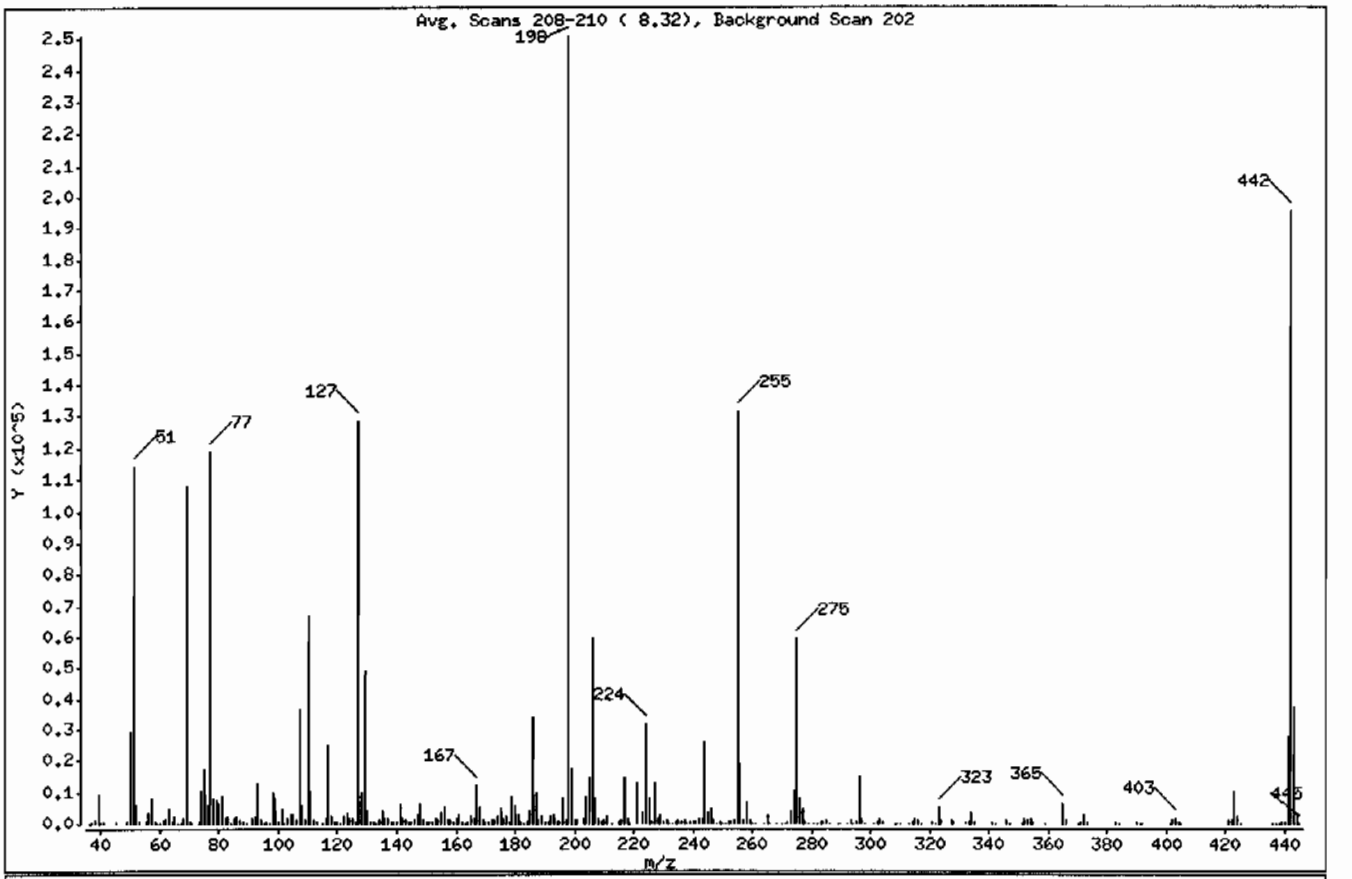

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.40
68	Less than 2.00% of mass 69	0.67 (1.56)
69	Mass 69 relative abundance	42.98
70	Less than 2.00% of mass 69	0.23 (0.53)
127	40.00 - 60.00% of mass 198	51.37
197	Less than 1.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 30.00% of mass 198	23.67
365	Greater than 1.00% of mass 198	2.45
441	Present, but less than mass 443	11.05
442	Greater than 40.00% of mass 198	77.94
443	17.00 - 23.00% of mass 442	14.94 (19.17)

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8,32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8	122.00	2302	198.00	250752	284.00	336
37.00	393	123.00	3695	199.00	17344	285.00	937
38.00	1200	124.00	1621	200.00	1195	286.00	170
39.00	9016	125.00	1448	201.00	1207	289.00	255
40.00	406	126.00	632	203.00	1659	290.00	159
41.00	292	127.00	128832	204.00	8363	292.00	259
45.00	305	128.00	9787	205.00	14289	293.00	1083
49.00	640	129.00	49280	206.00	59576	294.00	255
50.00	29544	130.00	4085	207.00	7878	295.00	324
51.00	113864	131.00	795	208.00	1898	296.00	14712
52.00	5719	132.00	464	209.00	609	297.00	1998
53.00	291	133.00	153	210.00	1016	298.00	48
55.00	556	134.00	1412	211.00	2089	301.00	220
56.00	3212	135.00	3908	213.00	96	302.00	374
57.00	7977	136.00	1509	215.00	674	303.00	1716
58.00	306	137.00	2002	216.00	1188	304.00	518
59.00	43	138.00	459	217.00	14324	308.00	142
60.00	144	139.00	392	218.00	1841	309.00	104
61.00	1384	140.00	751	219.00	194	310.00	127
62.00	1579	141.00	6116	221.00	12869	313.00	98
63.00	4522	142.00	1931	223.00	3368	314.00	758
64.00	592	143.00	1380	224.00	31752	315.00	1571
65.00	2251	144.00	329	225.00	7987	316.00	915
66.00	47	145.00	339	226.00	839	317.00	119
67.00	98	146.00	1032	227.00	12952	321.00	481
68.00	1681	147.00	3100	228.00	1848	322.00	229
69.00	107792	148.00	6347	229.00	2774	323.00	5178
70.00	566	149.00	1410	230.00	478	324.00	998
71.00	154	150.00	411	231.00	1257	327.00	960
73.00	818	151.00	692	232.00	280	328.00	487
74.00	10556	152.00	489	233.00	226	332.00	397
75.00	17208	153.00	1814	234.00	759	333.00	430
76.00	5735	154.00	1411	235.00	1001	334.00	3299
77.00	118792	155.00	3187	236.00	589	335.00	849
78.00	8119	156.00	5061	237.00	1093	341.00	644

Data File: /chem/MSD6.i/s110909.b/s6k0911.d

Date : 09-NOV-2009 18:00

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	7616	157.00	1047	238.00	176	342.00	184
80.00	6053	158.00	1005	239.00	483	346.00	1112
81.00	8741	159.00	819	240.00	449	347.00	197
82.00	1932	160.00	1690	241.00	776	351.00	99
83.00	2188	161.00	2737	242.00	1684	352.00	1491
84.00	232	162.00	809	243.00	1819	353.00	1169
85.00	1461	163.00	190	244.00	25832	354.00	1725
86.00	2130	164.00	335	245.00	3598	355.00	318
87.00	1162	165.00	2034	246.00	4786	359.00	103
88.00	449	166.00	1979	247.00	980	365.00	6134
89.00	268	167.00	12360	248.00	210	366.00	872
91.00	1835	168.00	5121	249.00	829	370.00	96
92.00	2163	169.00	1038	250.00	174	371.00	434
93.00	12786	170.00	446	251.00	238	372.00	2651
94.00	908	171.00	470	252.00	289	373.00	754
95.00	251	172.00	1064	253.00	569	383.00	711
96.00	626	173.00	1291	254.00	1047	384.00	258
97.00	236	174.00	2515	255.00	131328	390.00	402
98.00	9808	175.00	4789	256.00	18784	391.00	259
99.00	8032	176.00	1446	257.00	1424	392.00	153
100.00	745	177.00	2269	258.00	6873	401.00	116
101.00	4358	178.00	802	259.00	1148	402.00	1140
102.00	258	179.00	8475	260.00	228	403.00	1594
103.00	1616	180.00	5994	261.00	261	404.00	514
104.00	3096	181.00	2983	264.00	141	405.00	98
105.00	2795	182.00	429	265.00	2620	421.00	1430
106.00	910	183.00	259	266.00	251	422.00	1234
107.00	36184	184.00	679	268.00	180	423.00	10131
108.00	5604	185.00	3929	270.00	163	424.00	2144
109.00	997	186.00	34256	271.00	257	425.00	193
110.00	66656	187.00	9747	272.00	290	436.00	45
111.00	10177	188.00	1146	273.00	3906	437.00	191
112.00	1133	189.00	2105	274.00	10561	438.00	232
113.00	472	190.00	292	275.00	59368	439.00	301
115.00	217	191.00	815	276.00	7957	440.00	309

Date : 09-NOV-2009 18:00

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s6k0911.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1841	192.00	2423	277.00	4641	441.00	27712
117.00	25072	193.00	3008	278.00	676	442.00	195456
118.00	2060	194.00	699	279.00	175	443.00	37472
119.00	345	195.00	448	281.00	87	444.00	3400
120.00	476	196.00	7876	282.00	46	445.00	197
121.00	165	197.00	1433	283.00	505		

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JHB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

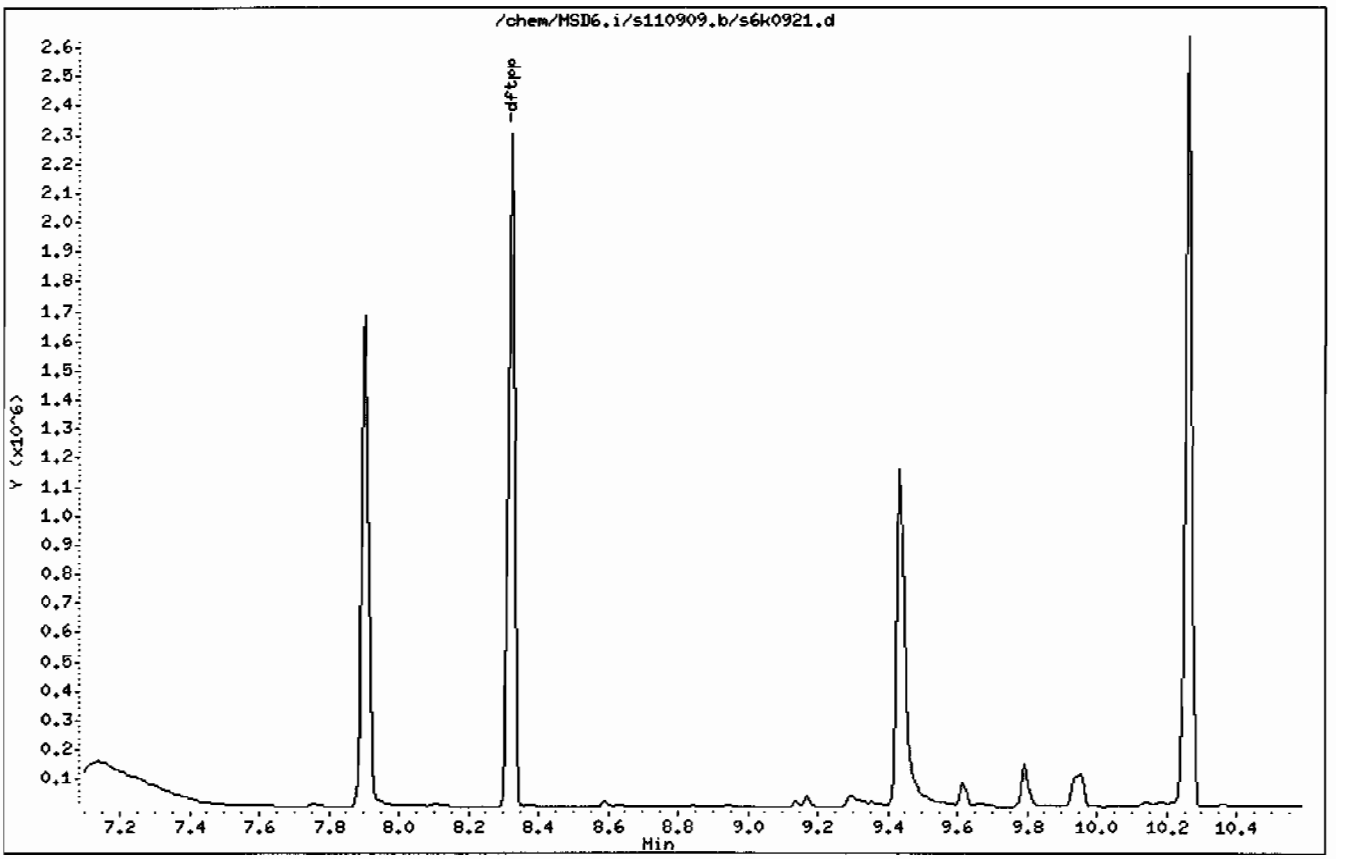

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

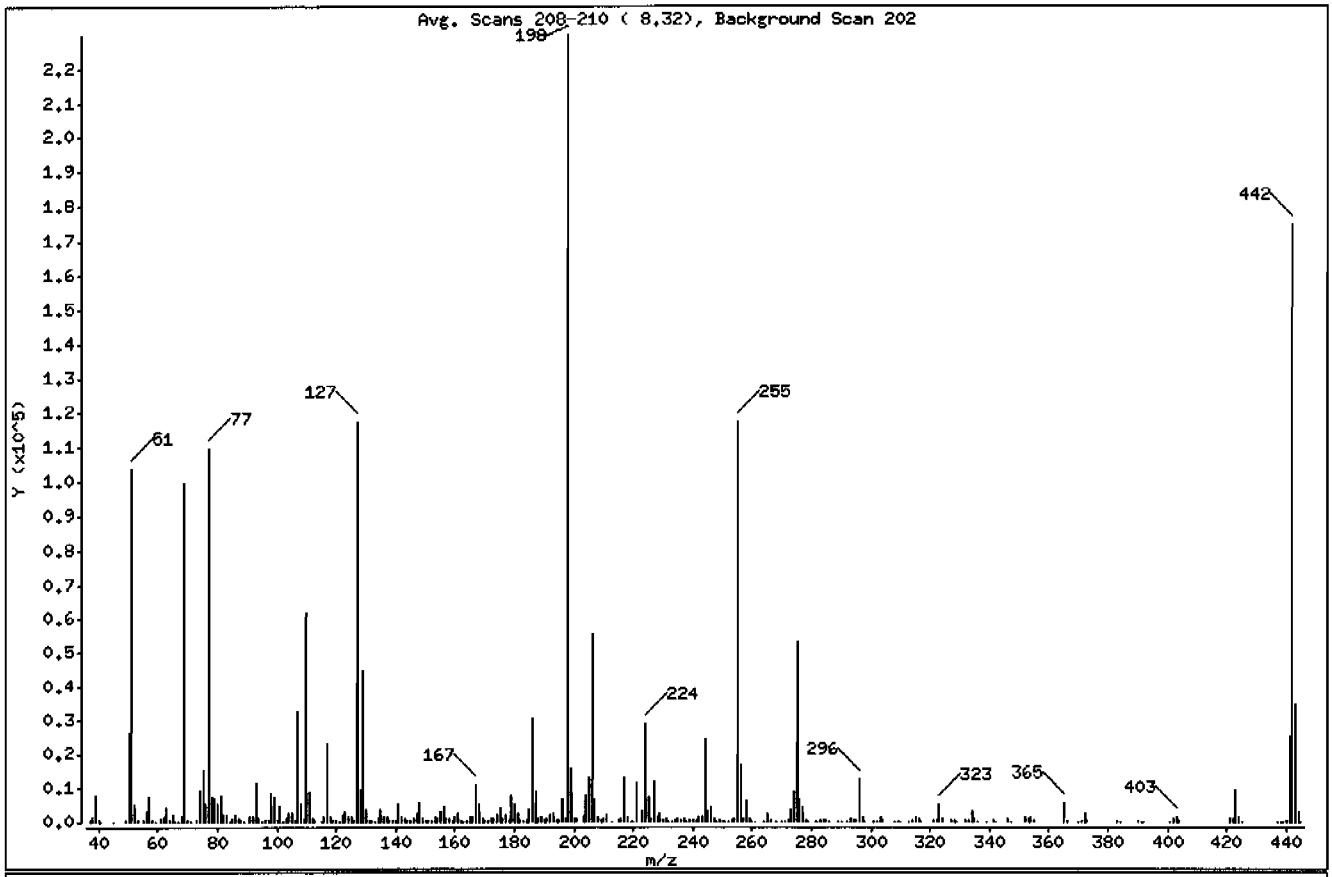

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.09
68	Less than 2.00% of mass 69	0.69 (1.59)
69	Mass 69 relative abundance	43.13
70	Less than 2.00% of mass 69	0.21 (0.50)
127	40.00 - 60.00% of mass 198	50.95
197	Less than 1.00% of mass 198	0.38
199	5.00 - 9.00% of mass 198	7.01
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.61
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	76.04
443	17.00 - 23.00% of mass 442	15.14 (19.92)

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	446	124.00	1597	200.00	1296	285.00	727
38.00	1364	125.00	1527	201.00	1130	286.00	93
39.00	8081	126.00	500	203.00	1398	289.00	109
40.00	429	127.00	117112	204.00	7870	290.00	48
41.00	123	128.00	9305	205.00	12990	292.00	179
45.00	232	129.00	44864	206.00	55704	293.00	996
49.00	676	130.00	3877	207.00	6919	294.00	284
50.00	26328	131.00	762	208.00	1589	295.00	295
51.00	103656	132.00	413	209.00	492	296.00	12743
52.00	5217	133.00	83	210.00	869	297.00	1758
53.00	281	134.00	1179	211.00	2059	298.00	106
55.00	508	135.00	3584	213.00	155	301.00	200
56.00	3141	136.00	1380	215.00	501	302.00	236
57.00	7300	137.00	1770	216.00	1098	303.00	1828
58.00	351	138.00	422	217.00	13179	304.00	578
59.00	89	139.00	313	218.00	1725	308.00	164
61.00	1282	140.00	577	219.00	178	309.00	120
62.00	1522	141.00	5319	220.00	48	310.00	179
63.00	4035	142.00	1826	221.00	11795	313.00	116
64.00	709	143.00	1268	223.00	3181	314.00	633
65.00	2010	144.00	322	224.00	29056	315.00	1462
66.00	201	145.00	315	225.00	7532	316.00	903
67.00	136	146.00	853	226.00	796	317.00	97
68.00	1576	147.00	2856	227.00	12169	321.00	535
69.00	99128	148.00	5896	228.00	1834	322.00	301
70.00	492	149.00	1137	229.00	2389	323.00	5031
71.00	87	150.00	371	230.00	448	324.00	932
73.00	640	151.00	713	231.00	1077	327.00	782
74.00	9704	152.00	430	232.00	217	328.00	460
75.00	15458	153.00	1634	233.00	234	329.00	92
76.00	5031	154.00	1294	234.00	764	332.00	329
77.00	109208	155.00	2977	235.00	895	333.00	541
78.00	7381	156.00	4520	236.00	588	334.00	3026
79.00	6803	157.00	931	237.00	934	335.00	912
80.00	5387	158.00	937	238.00	52	336.00	92

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	7979	159.00	792	239.00	457	339.00	88
82.00	2000	160.00	1501	240.00	364	341.00	550
83.00	1851	161.00	2637	241.00	638	342.00	176
84.00	203	162.00	756	242.00	1412	346.00	1020
85.00	1319	163.00	204	243.00	1572	347.00	119
86.00	1985	164.00	328	244.00	24152	352.00	1335
87.00	1000	165.00	1810	245.00	3200	353.00	950
88.00	412	166.00	1695	246.00	4314	354.00	1475
89.00	260	167.00	10891	247.00	844	355.00	296
91.00	1676	168.00	5136	248.00	166	365.00	5995
92.00	1806	169.00	973	249.00	748	366.00	747
93.00	11677	170.00	306	250.00	170	370.00	103
94.00	892	171.00	442	251.00	190	371.00	323
95.00	199	172.00	897	252.00	210	372.00	2543
96.00	636	173.00	1105	253.00	472	373.00	611
97.00	286	174.00	2178	254.00	899	383.00	675
98.00	8556	175.00	4297	255.00	117320	384.00	156
99.00	7312	176.00	1290	256.00	16728	390.00	314
100.00	595	177.00	2105	257.00	1320	391.00	189
101.00	4548	178.00	636	258.00	6484	392.00	157
102.00	251	179.00	8002	259.00	1064	401.00	199
103.00	1289	180.00	5191	260.00	200	402.00	1090
104.00	2626	181.00	2701	261.00	212	403.00	1396
105.00	2533	182.00	448	264.00	192	404.00	427
106.00	724	183.00	312	265.00	2469	421.00	1265
107.00	33008	184.00	599	266.00	401	422.00	1145
108.00	5264	185.00	3797	268.00	43	423.00	9473
109.00	994	186.00	30448	270.00	167	424.00	1846
110.00	61616	187.00	8914	271.00	186	425.00	183
111.00	9026	188.00	970	272.00	329	437.00	54
112.00	1057	189.00	1726	273.00	3492	438.00	170
113.00	367	190.00	298	274.00	9124	439.00	228
115.00	227	191.00	976	275.00	53576	440.00	294
116.00	1610	192.00	2282	276.00	7126	441.00	25272
117.00	23152	193.00	2535	277.00	3970	442.00	174784

Data File: /chem/MSD6.i/s110909.b/s6k0921.d

Date : 10-NOV-2009 11:07

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6k0921.d
Spectrum: Avg. Scans 208-210 (8.32), Background Scan 202
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1681	194.00	518	278.00	653	443.00	34808
119.00	280	195.00	333	279.00	140	444.00	3177
120.00	427	196.00	6863	281.00	140	445.00	129
121.00	176	197.00	878	282.00	42		
122.00	2199	198.00	229824	283.00	507		
123.00	3315	199.00	16104	284.00	294		

Data File: /chem/MSD6.i/s120409.b/s610401.d

Page 1

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

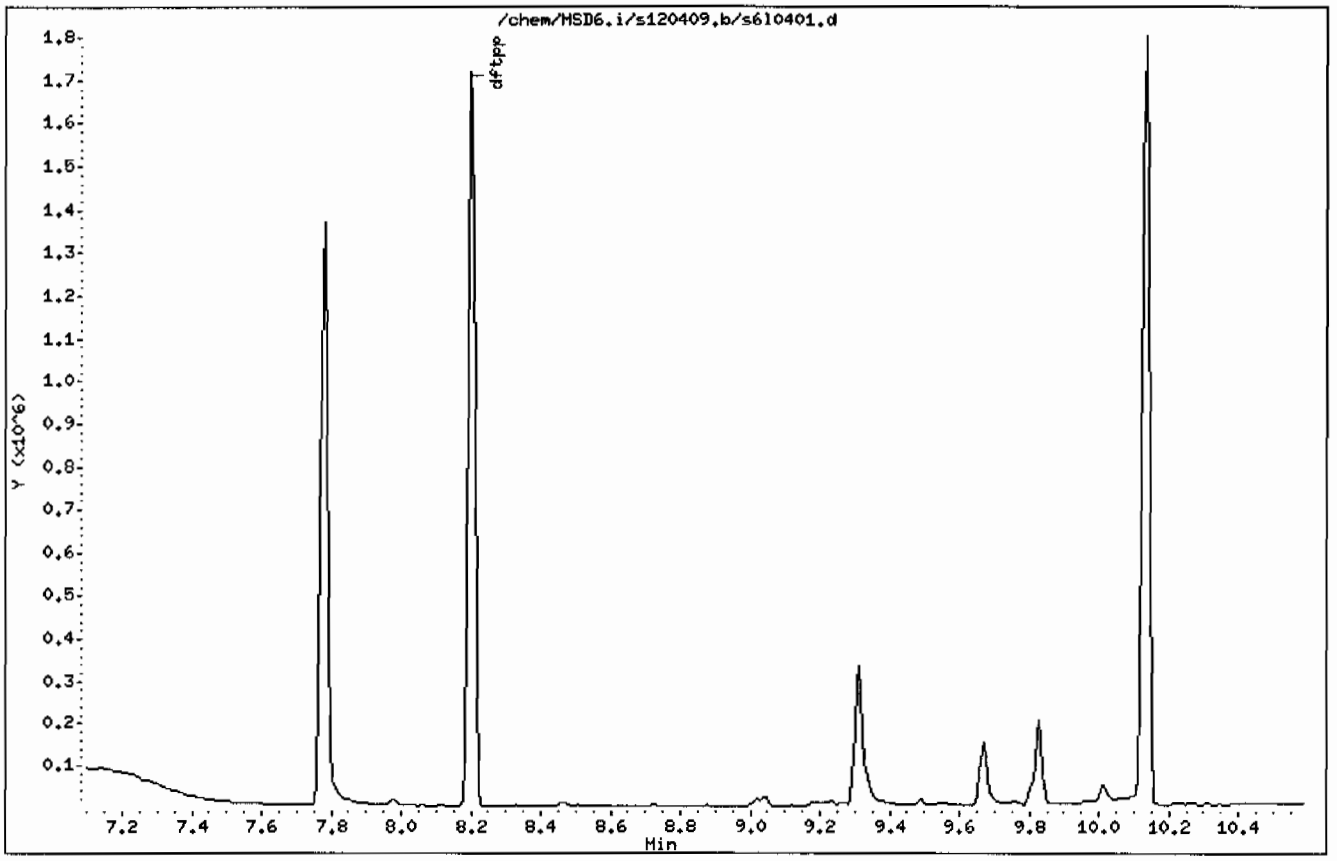

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

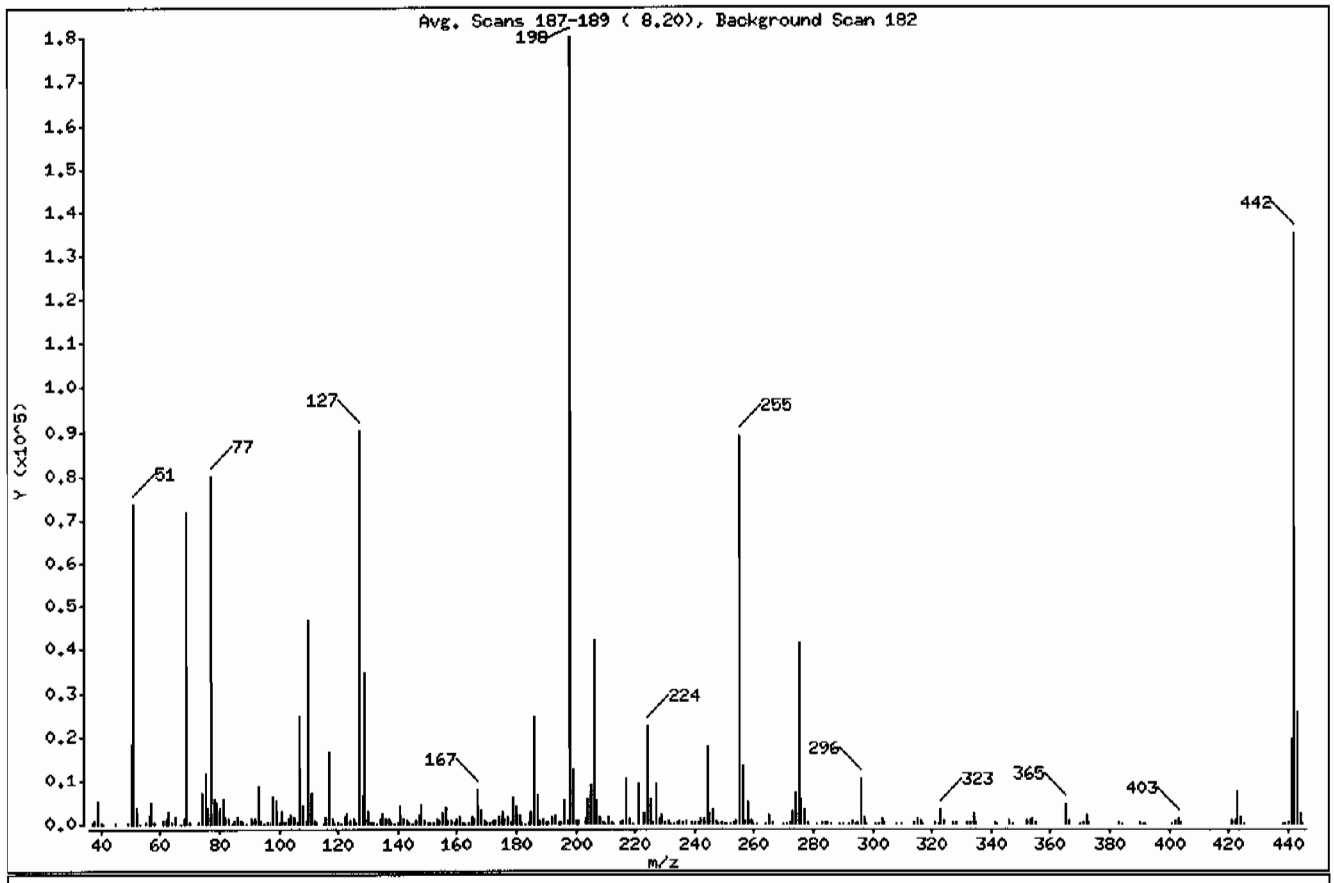

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.88
68	Less than 2.00% of mass 69	0.66 (1.64)
69	Mass 69 relative abundance	40.07
70	Less than 2.00% of mass 69	0.21 (0.53)
127	40.00 - 60.00% of mass 198	50.13
197	Less than 1.00% of mass 198	0.53
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 30.00% of mass 198	22.95
365	Greater than 1.00% of mass 198	2.44
441	Present, but less than mass 443	10.71
442	Greater than 40.00% of mass 198	74.88
443	17.00 - 23.00% of mass 442	14.26 (19.05)

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610401.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	295	124.00	1032	197.00	949	283.00	386
38.00	928	125.00	1173	198.00	180096	284.00	244
39.00	5316	126.00	368	199.00	12363	285.00	533
40.00	338	127.00	90280	200.00	953	286.00	102
41.00	42	128.00	6784	201.00	859	289.00	123
45.00	266	129.00	34920	203.00	1069	290.00	93
49.00	507	130.00	2795	204.00	5633	292.00	184
50.00	18088	131.00	554	205.00	9273	293.00	807
51.00	73624	132.00	288	206.00	42232	294.00	136
52.00	3674	133.00	43	207.00	5311	295.00	252
53.00	167	134.00	1086	208.00	1455	296.00	10160
55.00	253	135.00	2621	209.00	422	297.00	1505
56.00	2226	136.00	1211	210.00	198	298.00	44
57.00	5106	137.00	1280	211.00	1509	301.00	124
58.00	267	138.00	273	212.00	222	302.00	191
61.00	945	139.00	159	213.00	115	303.00	1308
62.00	1065	140.00	420	215.00	469	304.00	318
63.00	3075	141.00	4319	216.00	866	308.00	123
64.00	388	142.00	1438	217.00	10307	310.00	105
65.00	1455	143.00	933	218.00	1312	314.00	527
67.00	88	144.00	266	219.00	97	315.00	1099
68.00	1182	145.00	204	221.00	9219	316.00	695
69.00	72152	146.00	714	223.00	2308	317.00	111
70.00	383	147.00	2147	224.00	22208	321.00	311
73.00	492	148.00	4357	225.00	5800	322.00	151
74.00	7192	149.00	973	226.00	544	323.00	3494
75.00	11516	150.00	228	227.00	8923	324.00	688
76.00	3757	151.00	515	228.00	1237	327.00	581
77.00	79768	152.00	374	229.00	2009	328.00	292
78.00	5676	153.00	1346	230.00	277	332.00	273
79.00	5119	154.00	1008	231.00	803	333.00	348
80.00	3910	155.00	2415	232.00	103	334.00	2395
81.00	5813	156.00	3537	233.00	183	335.00	598
82.00	1465	157.00	708	234.00	540	341.00	459
83.00	1371	158.00	775	235.00	690	342.00	92

Date : 04-DEC-2009 09:48

Client ID: DFTPP Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s610401.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	203	159.00	580	236.00	422	346.00	737
85.00	1034	160.00	1193	237.00	777	347.00	126
86.00	1603	161.00	1808	239.00	345	352.00	894
87.00	747	162.00	585	240.00	261	353.00	771
88.00	309	163.00	173	241.00	542	354.00	1155
89.00	171	164.00	249	242.00	1178	355.00	252
91.00	1398	165.00	1527	243.00	1259	365.00	4393
92.00	1368	166.00	1138	244.00	17632	366.00	729
93.00	8569	167.00	8011	245.00	2397	370.00	87
94.00	630	168.00	3496	246.00	3294	371.00	258
95.00	200	169.00	634	247.00	624	372.00	1954
96.00	482	170.00	236	248.00	123	373.00	501
97.00	211	171.00	356	249.00	578	383.00	532
98.00	6139	172.00	753	250.00	109	384.00	121
99.00	5182	173.00	901	251.00	173	390.00	237
100.00	472	174.00	1763	252.00	124	391.00	134
101.00	2979	175.00	3073	253.00	368	392.00	107
102.00	218	176.00	1118	254.00	635	401.00	95
103.00	1071	177.00	1524	255.00	88808	402.00	781
104.00	2018	178.00	475	256.00	13127	403.00	1122
105.00	1852	179.00	6005	257.00	967	404.00	356
106.00	587	180.00	4210	258.00	4963	421.00	889
107.00	24912	181.00	1940	259.00	746	422.00	874
108.00	3935	182.00	290	260.00	94	423.00	7271
109.00	647	183.00	174	261.00	109	424.00	1454
110.00	46944	184.00	490	264.00	194	425.00	121
111.00	7096	185.00	2765	265.00	1873	438.00	48
112.00	825	186.00	24368	266.00	247	439.00	53
113.00	237	187.00	6599	270.00	104	440.00	239
115.00	136	188.00	687	271.00	196	441.00	19288
116.00	1458	189.00	1360	272.00	221	442.00	134848
117.00	16568	190.00	233	273.00	2726	443.00	25688
118.00	1305	191.00	615	274.00	7076	444.00	2368
119.00	167	192.00	1785	275.00	41320	445.00	132
120.00	337	193.00	2239	276.00	5823		

Data File: /chem/MSD6.i/s120409.b/s610401.d

Date : 04-DEC-2009 09:48

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610401.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 182
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
121.00	143	194.00	480	277.00	3274		
122.00	1518	195.00	303	278.00	568		
123.00	2452	196.00	5484	281.00	140		

Data File: /chem/MSD6.i/s120509.b/s610501.d

Page 1

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

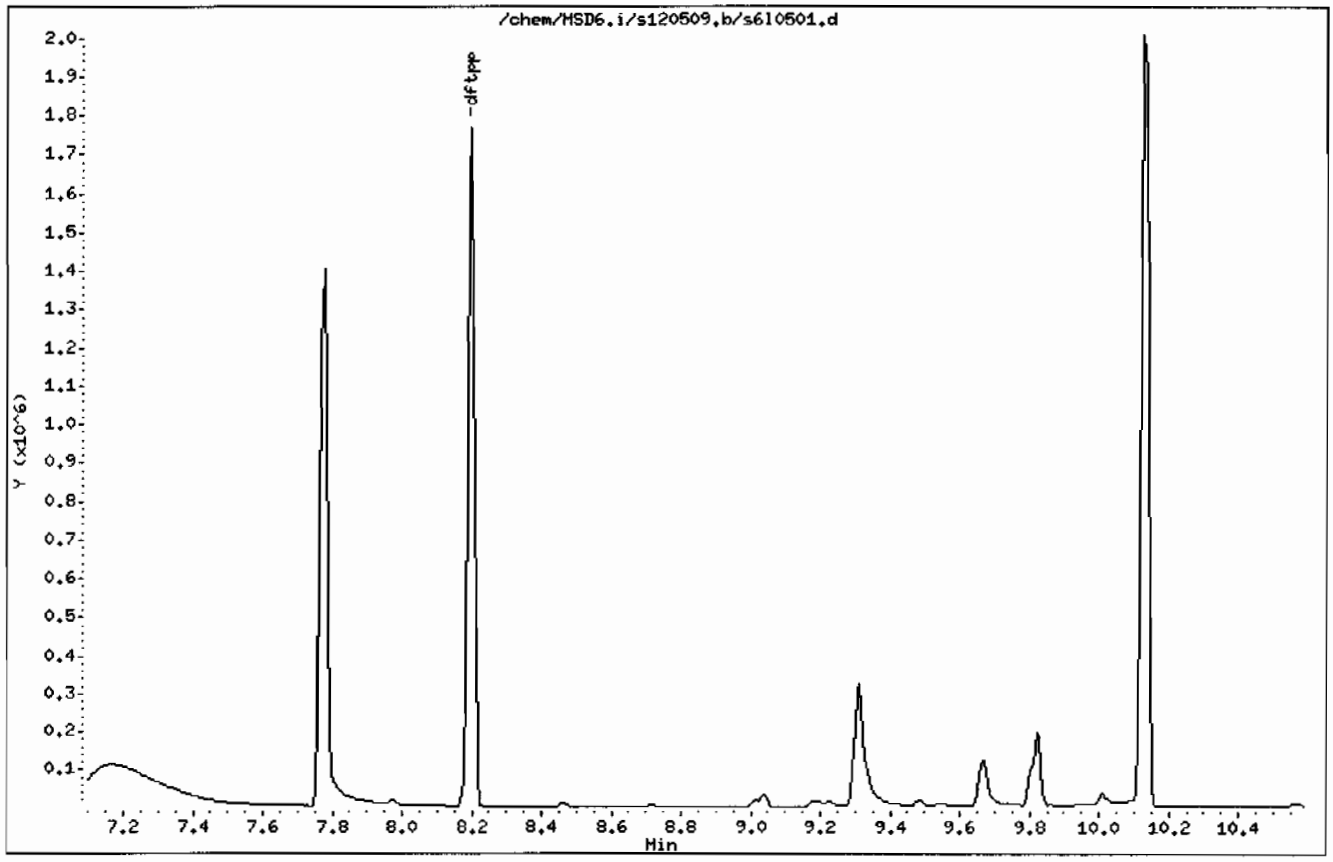

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

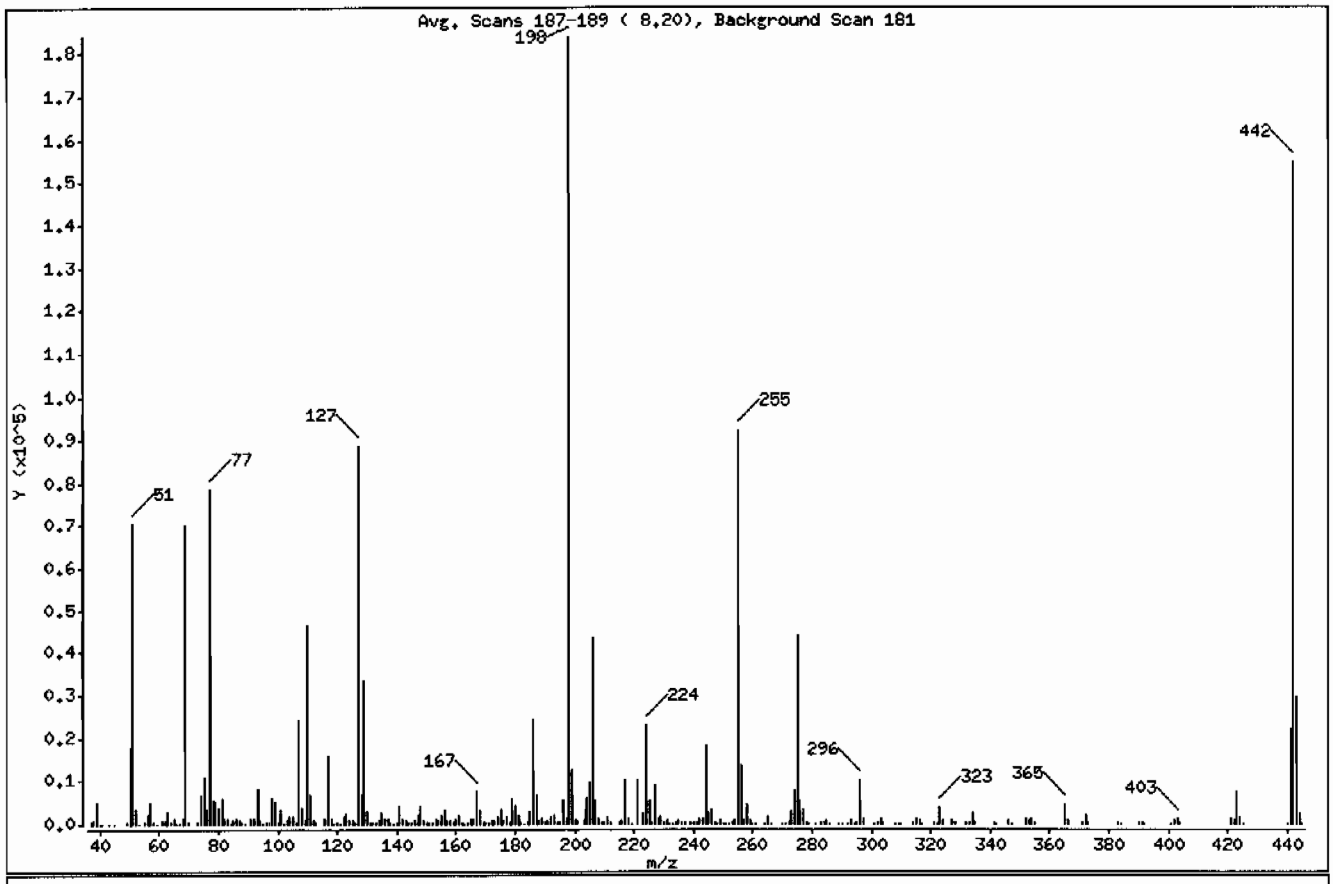

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.42
68	Less than 2.00% of mass 69	0.63 (1.65)
69	Mass 69 relative abundance	38.25
70	Less than 2.00% of mass 69	0.17 (0.46)
127	40.00 - 60.00% of mass 198	48.34
197	Less than 1.00% of mass 198	0.71
199	5.00 - 9.00% of mass 198	6.80
275	10.00 - 30.00% of mass 198	23.81
365	Greater than 1.00% of mass 198	2.59
441	Present, but less than mass 443	12.04
442	Greater than 40.00% of mass 198	84.12
443	17.00 - 23.00% of mass 442	16.09 (19.13)

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d

Spectrum: Avg. Scans 187-189 (8.20), Background Scan 181

Location of Maximum: 198.00

Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	272	121.00	48	193.00	2218	276.00	5684
38.00	868	122.00	1555	194.00	504	277.00	3450
39.00	5172	123.00	2442	195.00	290	278.00	538
40.00	84	124.00	1049	196.00	5662	279.00	96
41.00	80	125.00	1052	197.00	1308	281.00	135
43.00	4	126.00	416	198.00	183936	283.00	351
45.00	188	127.00	88912	199.00	12499	284.00	299
49.00	527	128.00	6698	200.00	846	285.00	653
50.00	17704	129.00	33400	201.00	885	286.00	43
51.00	70672	130.00	3014	203.00	1053	289.00	93
52.00	3529	131.00	622	204.00	5882	290.00	45
53.00	175	132.00	402	205.00	9714	292.00	103
55.00	276	133.00	216	206.00	43416	293.00	744
56.00	2179	134.00	948	207.00	5537	294.00	170
57.00	4950	135.00	2620	208.00	1440	295.00	221
58.00	242	136.00	1126	209.00	442	296.00	10034
59.00	43	137.00	1283	210.00	568	297.00	1453
61.00	893	138.00	289	211.00	1631	301.00	100
62.00	911	139.00	125	212.00	407	302.00	215
63.00	2782	140.00	403	215.00	444	303.00	1343
64.00	411	141.00	4139	216.00	845	304.00	332
65.00	1455	142.00	1299	217.00	10338	308.00	179
66.00	101	143.00	896	218.00	1333	309.00	95
67.00	145	144.00	339	219.00	88	310.00	110
68.00	1161	145.00	260	221.00	10103	314.00	511
69.00	70352	146.00	723	223.00	2347	315.00	1140
70.00	321	147.00	2102	224.00	22888	316.00	745
73.00	458	148.00	4277	225.00	5701	317.00	43
74.00	6810	149.00	984	226.00	568	321.00	359
75.00	11072	150.00	268	227.00	8833	322.00	177
76.00	3542	151.00	528	228.00	1251	323.00	3933
77.00	78576	152.00	373	229.00	1868	324.00	661
78.00	5398	153.00	1230	230.00	291	327.00	638
79.00	5008	154.00	967	231.00	777	328.00	372
80.00	4006	155.00	2304	232.00	104	332.00	237

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBN091128-01150 PPMI1|SVMFI1|DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 181
Location of Maximum: 198.00
Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5834	156.00	3552	233.00	198	333.00	334
82.00	1368	157.00	767	234.00	620	334.00	2414
83.00	1276	158.00	763	235.00	667	335.00	606
84.00	174	159.00	595	236.00	380	341.00	438
85.00	1011	160.00	1260	237.00	622	342.00	99
86.00	1349	161.00	1928	239.00	289	346.00	757
87.00	704	162.00	552	240.00	273	347.00	153
88.00	271	163.00	208	241.00	478	352.00	1184
89.00	106	164.00	225	242.00	1250	353.00	865
91.00	1277	165.00	1268	243.00	1259	354.00	1311
92.00	1354	166.00	1206	244.00	18096	355.00	250
93.00	8000	167.00	7650	245.00	2374	365.00	4755
94.00	732	168.00	3247	246.00	3230	366.00	684
95.00	87	169.00	609	247.00	623	371.00	267
96.00	501	170.00	251	248.00	95	372.00	2014
97.00	220	171.00	310	249.00	721	373.00	477
98.00	6061	172.00	687	250.00	114	383.00	569
99.00	5010	173.00	990	251.00	185	384.00	177
100.00	517	174.00	1570	252.00	208	390.00	253
101.00	3213	175.00	3375	253.00	365	391.00	239
102.00	195	176.00	1021	254.00	702	392.00	154
103.00	1039	177.00	1606	255.00	92016	401.00	46
104.00	1884	178.00	581	256.00	13468	402.00	855
105.00	1707	179.00	6086	257.00	1016	403.00	1118
106.00	564	180.00	4308	258.00	4709	404.00	424
107.00	24072	181.00	1964	259.00	774	421.00	1109
108.00	3697	182.00	332	260.00	164	422.00	1001
109.00	660	183.00	106	261.00	102	423.00	7781
110.00	46600	184.00	435	264.00	82	424.00	1640
111.00	6953	185.00	2879	265.00	1810	425.00	156
112.00	723	186.00	23944	266.00	109	440.00	157
113.00	253	187.00	6622	270.00	136	441.00	22136
116.00	1183	188.00	656	271.00	193	442.00	154688
117.00	15818	189.00	1444	272.00	259	443.00	29600
118.00	1199	190.00	262	273.00	2758	444.00	2738

Data File: /chem/MSD6.i/s120509.b/s610501.d

Date : 05-DEC-2009 10:31

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: 1WBN091128-01150 PPM11SVMF11DFTPP

Operator: nagl

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s610501.d
Spectrum: Avg. Scans 187-189 (8.20), Background Scan 181
Location of Maximum: 198.00
Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	177	191.00	635	274.00	7792	445.00	153
120.00	318	192.00	1857	275.00	43784		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979040**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:05**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s610404-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979040**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:05**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s610404-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.23	2610	ug/kg		J
	Unknown Aldol Condensate	3.38	358	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610404.d
Lab Smp Id: 1201979040 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:05
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979040|925661|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.729	4.729	(1.000)	216526	40.0000	
* 29 Naphthalene-d8	136	5.988	5.993	(1.000)	816435	40.0000	
* 46 Acenaphthene-d10	164	7.853	7.858	(1.000)	446630	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.469	(1.000)	758251	40.0000	
* 91 Chrysene-d12	240	12.453	12.463	(1.000)	627358	40.0000	
* 98 Perylene-d12	264	14.730	14.741	(1.000)	547730	40.0000	
$ 3 2-Fluorophenol	112	3.603	3.590	(0.762)	411971	75.9772	2530
$ 5 Phenol-d5	99	4.352	4.352	(0.920)	525716	76.8177	2560
$ 20 Nitrobenzene-d5	82	5.254	5.259	(0.877)	241733	41.8555	1400
$ 39 2-Fluorobiphenyl	172	7.114	7.117	(0.906)	470795	40.9031	1360
$ 60 2,4,6-Tribromophenol	329	8.704	8.709	(1.108)	111616	85.6219	2850
$ 81 p-Terphenyl-d14	244	11.181	11.181	(0.898)	470132	46.4686	1550

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120409.b/s610404.d
Lab Smp Id: 1201979040 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:05
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979040|925661|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120409.b/MSD6-M8270C-AQA-110909.m
Meth Date : 04-Dec-2009 14:19 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.729	1249915	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.229	2442929	78.1789987	2600	0		0	10
Unknown Aldol Condensate				CAS #:			
3.376	335144	10.7253168	358	0		0	10

Data File: /chem/MSD6.i/s120409.b/s610404.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01

Sample Info: |1201979040|92566|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20

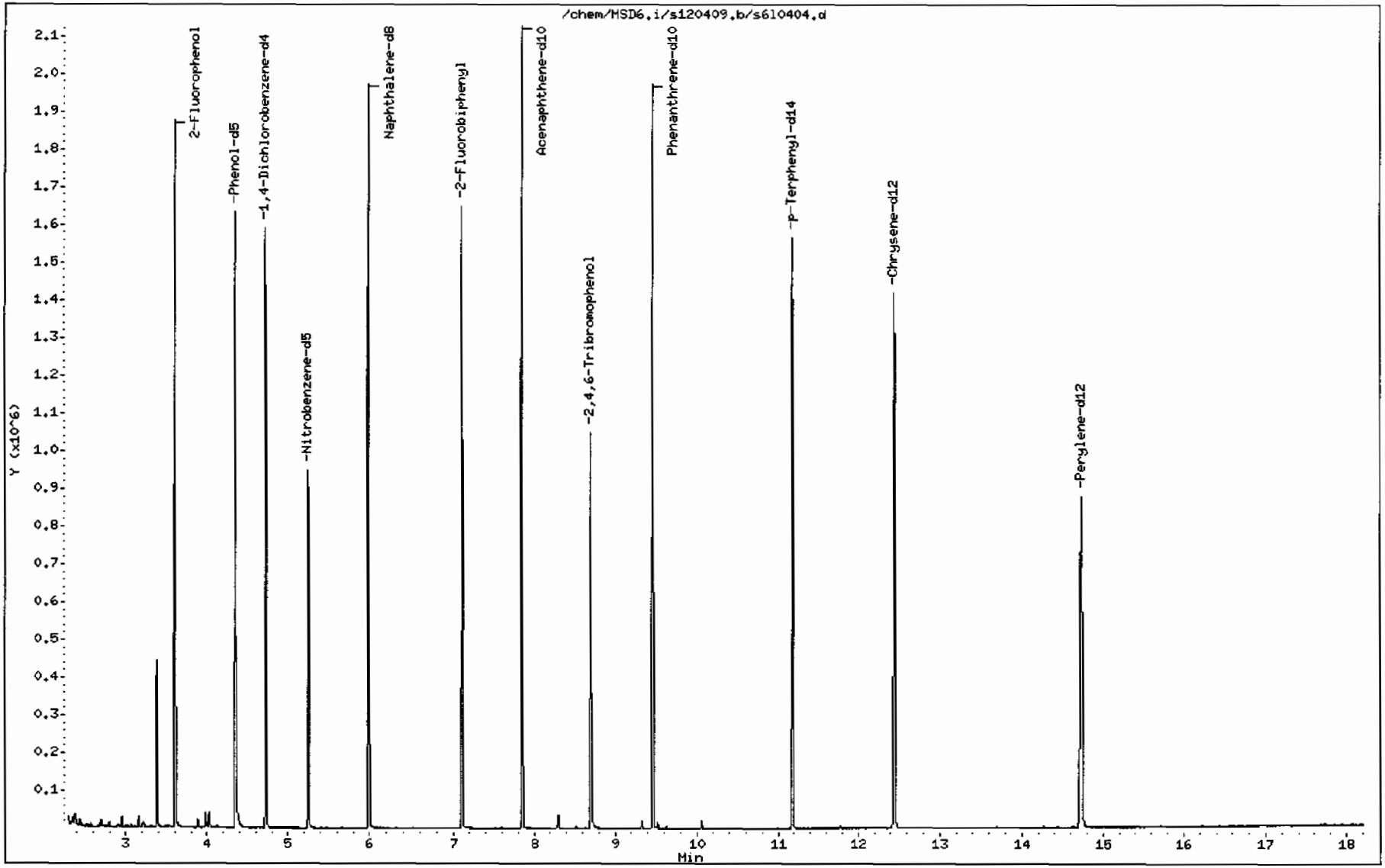

Data File: /chem/MSD6.i/s120409.b/s610404.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: |1201979040|925661|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	39	C5H12O2	104

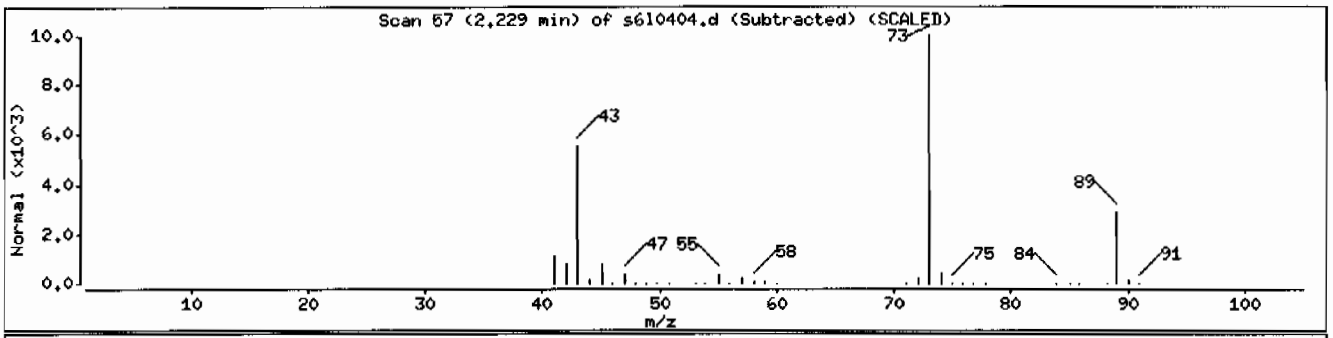

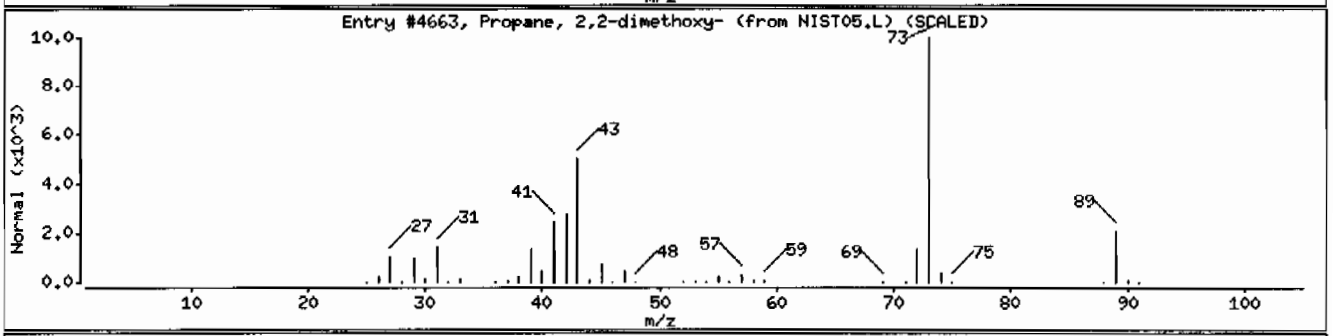

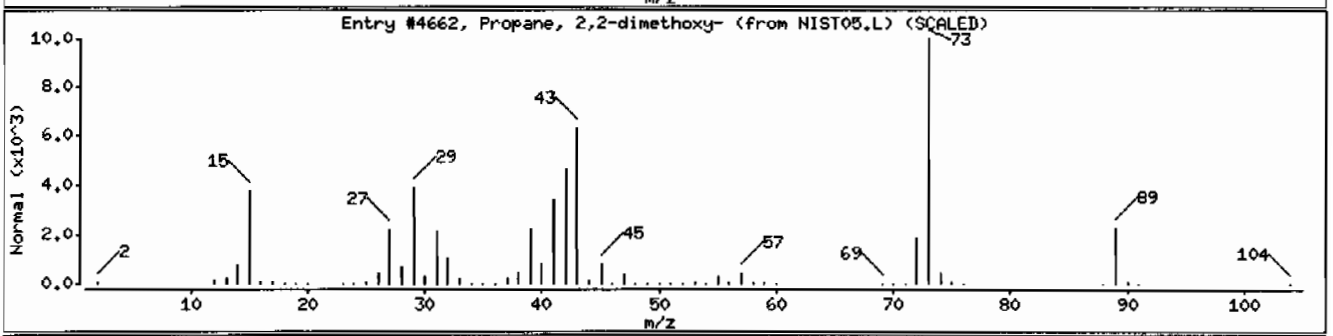

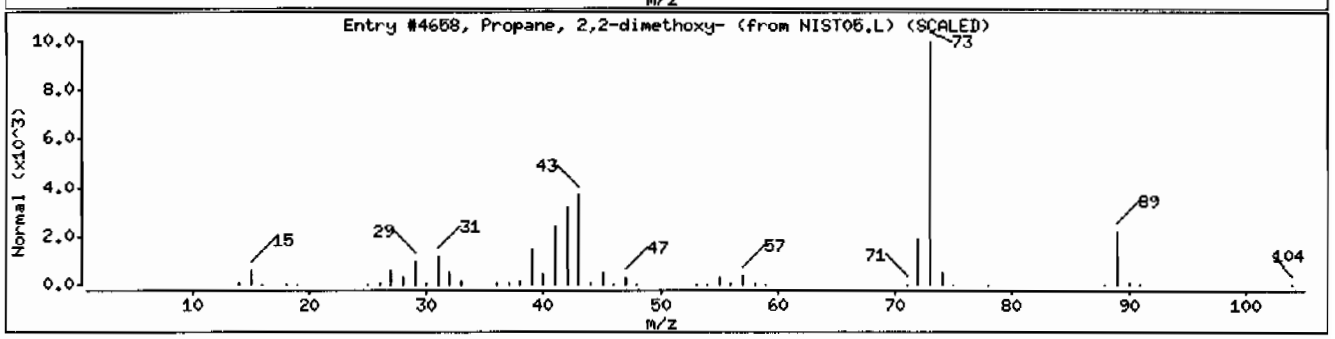

Data File: /chem/MSD6.i/s120409.b/s610404.d

Date : 04-DEC-2009 11:05

Client ID: SBLK01 Instrument: MSD6.i

Sample Info: |120197904019256611|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116

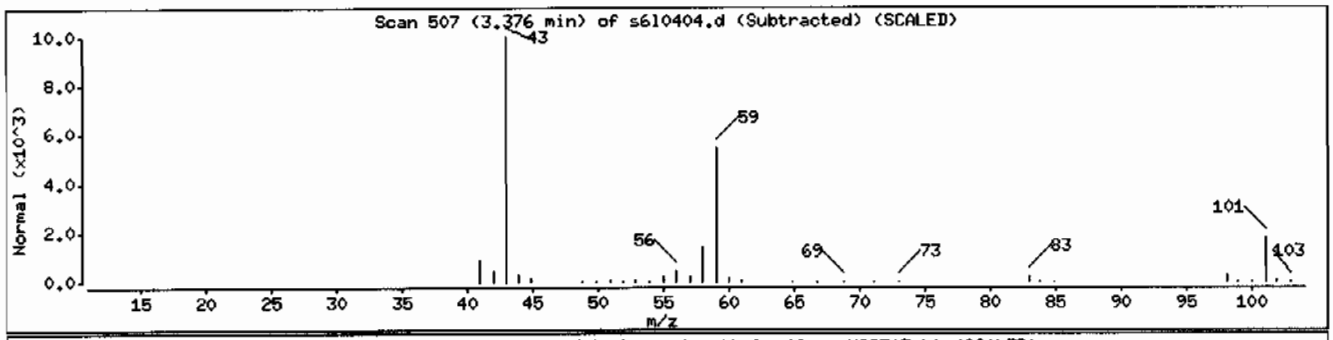

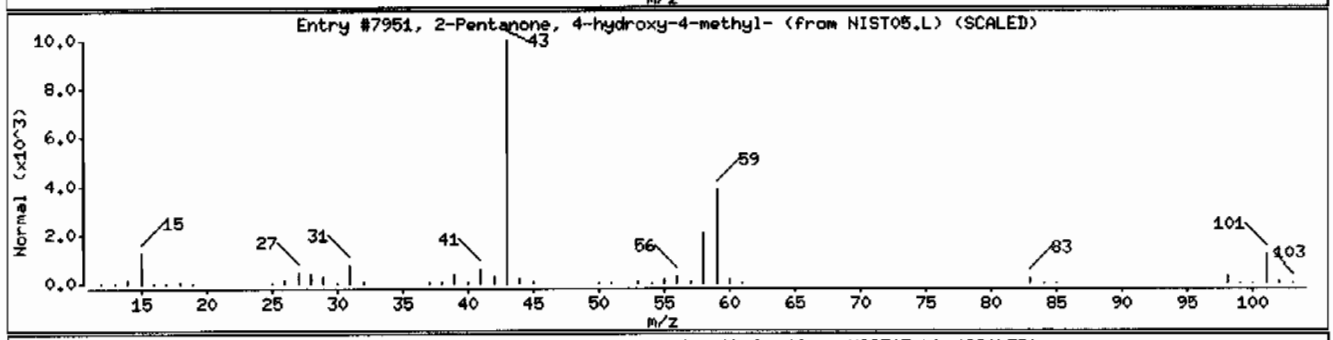

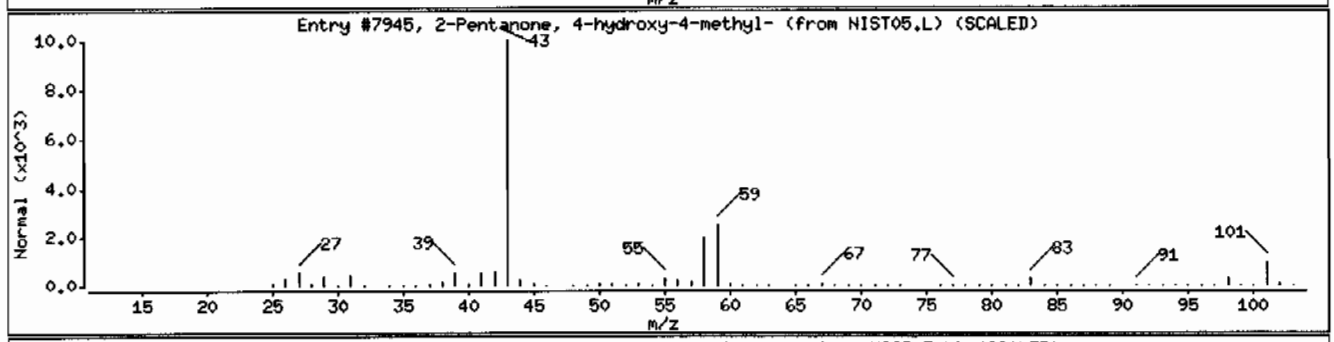

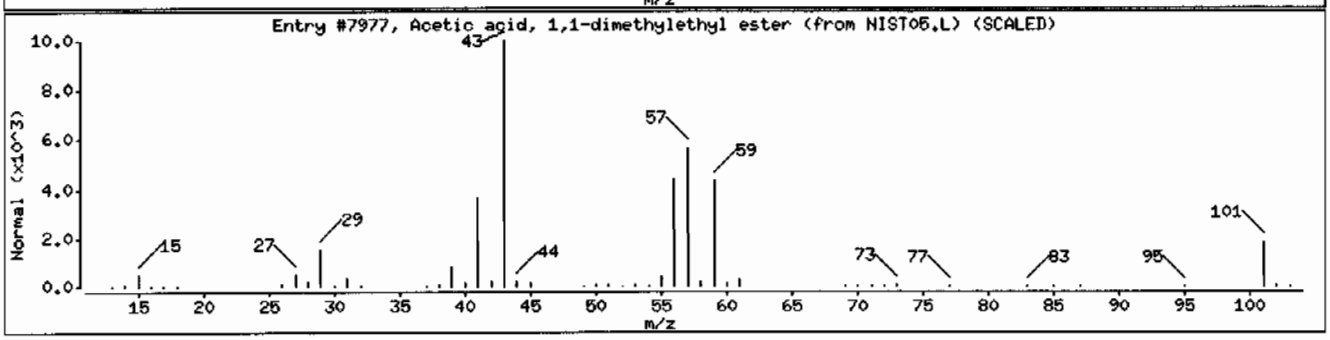

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979043**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 12:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0505.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		726	ug/kg	66.7	333
108-95-2	Phenol		1140	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1160	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1170	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1280	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1350	ug/kg	66.7	333
83-32-9	Acenaphthene		1250	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1510	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1140	ug/kg	110	333
87-86-5	Pentachlorophenol		1540	ug/kg	83.3	333
129-00-0	Pyrene		1320	ug/kg	10.0	33.3
110-86-1	Pyridine		721	ug/kg	66.7	333
62-53-3	Aniline		1020	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1080	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1170	ug/kg	66.7	333
100-51-6	Benzyl alcohol		796	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1230	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1210	ug/kg	66.7	333
95-48-7	o-Cresol		1190	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1440	ug/kg	100	333
67-72-1	Hexachloroethane		1180	ug/kg	66.7	333
98-95-3	Nitrobenzene		1250	ug/kg	66.7	333
78-59-1	Isophorone		1340	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1360	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1100	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1260	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1350	ug/kg	66.7	333
65-85-0	Benzoic acid		3350	ug/kg	167	667
91-20-3	Naphthalene		1230	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		988	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1270	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1460	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1480	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1290	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1410	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1260	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1150	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1210	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201979043**				
Client Sample:	**QC for batch 925648**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 925648**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**925661**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 12:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/24/2009 21:57**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s6l0505.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1400	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1430	ug/kg	33.3	333
208-96-8	Acenaphthylene		1350	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1570	ug/kg	127	667
132-64-9	Dibenzofuran		1590	ug/kg	66.7	333
84-66-2	Diethylphthalate		1400	ug/kg	66.7	333
86-73-7	Fluorene		1380	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1400	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1390	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1390	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1340	ug/kg	66.7	333
122-66-7	Azobenzene		1340	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1430	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1440	ug/kg	66.7	333
85-01-8	Phenanthrene		1370	ug/kg	10.0	33.3
120-12-7	Anthracene		1400	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1560	ug/kg	66.7	333
206-44-0	Fluoranthene		1530	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1480	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1430	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1250	ug/kg	100	333
218-01-9	Chrysene		1450	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1530	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1490	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1450	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1490	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1550	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1630	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1680	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1740	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1280	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610505.d
Lab Smp Id: 1201979043 Client Smp ID: SBLK01LCS
Inj Date : 05-DEC-2009 12:18
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979043|925661|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-546.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.722	4.719	(1.000)	202793	40.0000	
* 29 Naphthalene-d8	136	5.986	5.988	(1.000)	868816	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	487733	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	862246	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	740083	40.0000	
* 98 Perylene-d12	264	14.731	14.736	(1.000)	677291	40.0000	
$ 3 2-Fluorophenol	112	3.593	3.577	(0.761)	306461	60.3461	2010
$ 5 Phenol-d5	99	4.350	4.342	(0.921)	440218	68.6808	2290
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	222353	36.1787	1200
$ 39 2-Fluorobiphenyl	172	7.112	7.112	(0.906)	487539	38.7882	1290
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	138504	97.2941	3240
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.897)	552550	46.2963	1540

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.362	4.357	(0.924)	220528	34.2183	1140
8 2-Chlorophenol	128	4.531	4.525	(0.960)	180591	34.8850	1160
11 1,4-Dichlorobenzene	146	4.739	4.737	(1.004)	211634	35.0312	1170
17 N-Nitrosodipropylamine	70	5.089	5.091	(1.078)	137557	38.2874	1280(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	201607	38.2579	1280
33 4-Chloro-3-methylphenol	107	6.554	6.546	(1.095)	175125	40.4013	1350
47 Acenaphthene	154	7.886	7.891	(1.005)	412715	37.5455	1250
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	170130	45.2100	1510
52 4-Nitrophenol	139	8.009	7.983	(1.020)	65882	34.1034	1140
65 Pentachlorophenol	266	9.250	9.249	(0.977)	87451	46.0857	1540
79 Pyrene	202	11.031	11.031	(0.886)	805176	39.5545	1320
2 Pyridine	79	2.724	2.686	(0.577)	92996	21.6419	721
4 Aniline	66	4.413	4.411	(0.935)	81453	30.4562	1020
7 bis(2-Chloroethyl) ether	63	4.452	4.451	(0.943)	140810	32.2652	1080
9 1,3-Dichlorobenzene	146	4.673	4.671	(0.990)	208615	35.0050	1170
12 Benzyl alcohol	108	4.836	4.834	(1.024)	76757	23.8664	796
13 1,2-Dichlorobenzene	146	4.885	4.882	(1.035)	207275	36.7561	1220
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	354400	36.3737	1210
15 o-Cresol	107	4.926	4.920	(1.043)	150996	35.8236	1190
18 m,p-Cresols	107	5.076	5.076	(1.075)	231102	43.2706	1440
19 Hexachloroethane	117	5.213	5.213	(1.104)	82895	35.4680	1180
21 Nitrobenzene	77	5.272	5.272	(0.881)	232112	37.4709	1250
22 Isophorone	82	5.506	5.509	(0.920)	441195	40.1817	1340
23 2-Nitrophenol	139	5.585	5.585	(0.933)	116224	40.6775	1360
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	155598	32.8682	1100
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	243857	37.7391	1260
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	173458	40.3972	1350
27 Benzoic acid	105	5.754	5.718	(0.961)	294019	100.622	3350
30 Naphthalene	128	6.008	6.011	(1.004)	640574	36.9610	1230
31 4-Chloroaniline	127	6.052	6.049	(1.011)	165094	29.6379	988
32 Hexachlorobutadiene	225	6.118	6.120	(1.022)	104641	38.1323	1270
34 2-Methylnaphthalene	142	6.730	6.729	(1.124)	459065	43.8946	1460
36 Hexachlorocyclopentadiene	237	6.888	6.890	(0.877)	87307	44.3172	1480
37 2,4,6-Trichlorophenol	196	7.023	7.025	(0.894)	128334	38.5616	1280
38 2,4,5-Trichlorophenol	196	7.076	7.068	(0.901)	150418	42.4405	1410
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	414390	37.8316	1260
42 o-Nitroaniline	65	7.356	7.359	(0.937)	128935	34.4074	1150
41 m-Nitroaniline	138	7.800	7.802	(0.994)	99673	36.3353	1210
43 Dimethylphthalate	163	7.537	7.550	(0.960)	524865	41.9503	1400
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	128021	42.8983	1430
45 Acenaphthylene	152	7.698	7.703	(0.981)	712449	40.4529	1350
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	51997	47.1126	1570
49 Dibenzofuran	168	8.070	8.072	(1.028)	705591	47.5532	1580
51 Diethylphthalate	149	8.297	8.299	(1.057)	528635	41.9554	1400
53 Fluorene	166	8.442	8.444	(1.075)	505811	41.5327	1380
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	241998	42.0552	1400
55 2-Methyl-4,6-dinitrophenol	198	8.490	8.493	(0.897)	80510	41.7361	1390

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	108069	41.8026	1390
133 Diphenylamine	169	8.559	8.561	(0.904)	416329	40.0588	1340
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	533102	40.3263	1340
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	145645	42.8068	1430
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	154396	43.3224	1440
68 Phenanthrene	178	9.489	9.492	(1.003)	732079	41.0553	1370
69 Anthracene	178	9.545	9.548	(1.009)	750456	42.1057	1400
72 Di-n-butylphthalate	149	10.060	10.062	(1.063)	960386	46.9206	1560
76 Fluoranthene	202	10.778	10.781	(1.139)	781951	45.7776	1520
85 Butylbenzylphthalate	149	11.701	11.706	(0.939)	414075	44.4482	1480
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	683426	42.8013	1430
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	196060	37.5082	1250
92 Chrysene	228	12.488	12.493	(1.003)	665667	43.5095	1450
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	591116	45.9884	1530
94 Di-n-octylphthalate	149	13.378	13.377	(0.908)	959331	44.5671	1480
95 Benzo(b)fluoranthene	252	14.071	14.073	(0.955)	652652	43.5498	1450
96 Benzo(k)fluoranthene	252	14.117	14.119	(0.958)	666482	44.7237	1490
97 Benzo(a)pyrene	252	14.631	14.636	(0.993)	601626	46.4786	1550
99 Indeno(1,2,3-cd)pyrene	276	16.693	16.692	(1.133)	611358	48.8751	1630
100 Dibenzo(a,h)anthracene	278	16.721	16.726	(1.135)	515064	50.4863	1680
101 Benzo(ghi)perylene	276	17.195	17.197	(1.167)	517312	52.3123	1740(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.676	2.642	(0.567)	75231	21.7907	726

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s120509.b/s610505.d
Date : 05-DEC-2009 12:18
Client ID: SBLK01LCS
Sample Info: 1120197904319256611|SVHF|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagi
Column diameter: 0.20

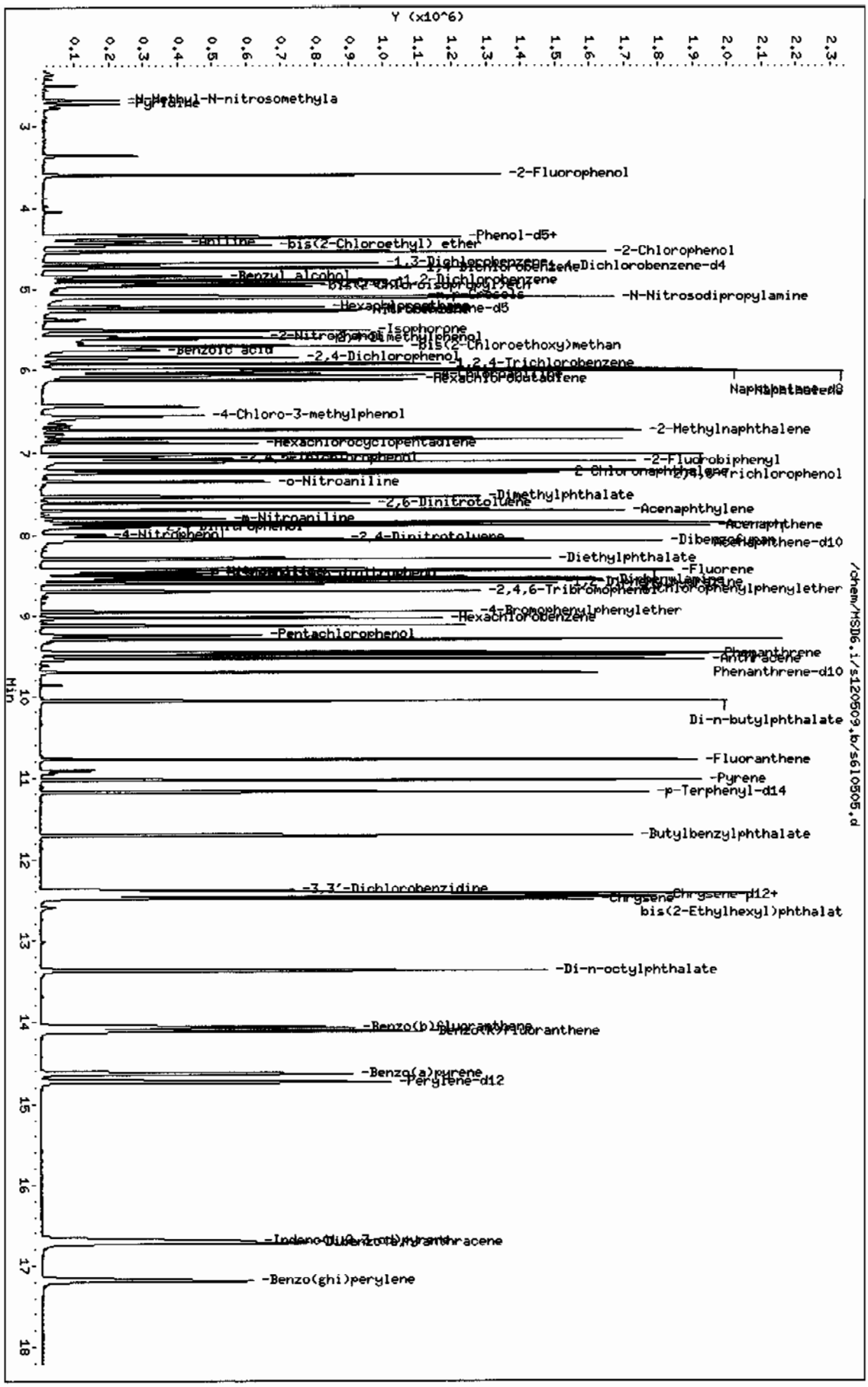

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 925648 **Verified by:** _____
Analyst: Alberto Velasco
Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201979040 MB	24-NOV-2009 21:57:44	30	1	0.03333
1201979043 LCS	24-NOV-2009 21:57:44	30	1	0.03333
241336001	24-NOV-2009 21:57:44	30.03	1	0.0333
241336002	24-NOV-2009 21:57:44	30.02	1	0.03331
241417001	24-NOV-2009 21:57:44	30.03	1	0.0333
1201979041 MS (241417001)	24-NOV-2009 21:57:44	30.12	1	0.0332
1201979042 MSD (241417001)	24-NOV-2009 21:57:44	30.14	1	0.03318
241417002	24-NOV-2009 21:57:44	30.02	1	0.03331
241418001	24-NOV-2009 21:57:44	30.02	1	0.03331
241418002	24-NOV-2009 21:57:44	30.14	1	0.03318
241418003	24-NOV-2009 21:57:44	30.06	1	0.03327
241418004	24-NOV-2009 21:57:44	30.06	1	0.03327
241418005	24-NOV-2009 21:57:44	30.12	1	0.0332
241418006	24-NOV-2009 21:57:44	30.04	1	0.03329
241418007	24-NOV-2009 21:57:44	30.01	1	0.03332
241418008	24-NOV-2009 21:57:44	30.06	1	0.03327
241418009	24-NOV-2009 21:57:44	30.13	1	0.03319
241418010	24-NOV-2009 21:57:44	30.15	1	0.03317
241418011	24-NOV-2009 21:57:44	30.02	1	0.03331
241418012	24-NOV-2009 21:57:44	30.06	1	0.03327
241418013	24-NOV-2009 21:57:44	30.17	1	0.03315
241418014	24-NOV-2009 21:57:44	30.18	1	0.03313
241418015	24-NOV-2009 21:57:44	30.01	1	0.03332
241418016	24-NOV-2009 21:57:44	30.07	1	0.03326

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201979043	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201979043	BENZIDINE LCS	UE091117-20	1	mL
MS	1201979041	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201979041	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201979042	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201979042	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Methylene Chloride	1233148-D	150	mL
REGNT	All	Acetone	1233927	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS
Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/04/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610401.d	WBN091128-01	nagl	04-DEC-2009 09:48	50 PPM	s120409	1.0	DFTPP	
s610402.d	WBN091106-05.2	nagl	04-DEC-2009 10:02	40 PPM	s120409	1.0	MEGACVS	225677
s610403.d	WBN091201-03.2	nagl	04-DEC-2009 10:30	40 PPM	s120409	1.0	APCVS	
s610404.d	1201979040	nagl	04-DEC-2009 11:05	925661	10-546	1.0	SBLK01	
s610405.d	1201979043	nagl	04-DEC-2009 11:32	925661	10-546	1.0	SBLK01LCS	DUSE - see s610505
s610406.d	241336001	nagl	04-DEC-2009 12:00	925661	10-546	1.0	LANL	
s610407.d	241336002	nagl	04-DEC-2009 12:28	925661	10-546	1.0	LANL	
s610408.d	241417001	nagl	04-DEC-2009 12:54	925661	10-575	1.0	LANL	
s610409.d	1201979041	nagl	04-DEC-2009 13:21	925661	10-575	1.0	LANL001MS	DUSE - see s610506
s610410.d	1201979042	nagl	04-DEC-2009 13:49	925661	10-575	1.0	LANL001MSD	DUSE - see s610507
s610411.d	241417002	nagl	04-DEC-2009 14:18	925661	10-575	1.0	LANL	
s610412.d	241418001	nagl	04-DEC-2009 14:45	925661	10-576	1.0	LANL	
s610413.d	241418002	nagl	04-DEC-2009 15:13	925661	10-576	1.0	LANL	
s610414.d	241418003	nagl	04-DEC-2009 15:41	925661	10-576	1.0	LANL	
s610415.d	241418004	nagl	04-DEC-2009 16:10	925661	10-576	1.0	LANL	
s610416.d	241418005	nagl	04-DEC-2009 16:38	925661	10-576	1.0	LANL	
s610417.d	241418006	nagl	04-DEC-2009 17:06	925661	10-576	1.0	LANL	
s610418.d	241418007	nagl	04-DEC-2009 17:34	925661	10-576	1.0	LANL	
s610419.d	241418008	nagl	04-DEC-2009 18:01	925661	10-576	1.0	LANL	DUSE - see s610508

s610420.d	241418009	nag1	04-DEC-2009 18:29	925661	10-576	1.0	LANL	
s610421.d	241418010	nag1	04-DEC-2009 18:56	925661	10-576	1.0	LANL	
s610422.d	241418011	nag1	04-DEC-2009 19:23	925661	10-576	1.0	LANL	
s610423.d	241418012	nag1	04-DEC-2009 19:51	925661	10-576	1.0	LANL	
s610424.d	241418013	nag1	04-DEC-2009 20:17	925661	10-576	1.0	LANL	
s610425.d	241418014	nag1	04-DEC-2009 20:45	925661	10-576	1.0	LANL	
s610426.d	241418015	nag1	04-DEC-2009 21:13	925661	10-576	1.0	LANL	
s610427.d	241418016	nag1	04-DEC-2009 21:40	925661	10-576	1.0	LANL	DUSE - see s610509

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 12/05/2009 METHOD: See raw data OPERATOR: nagl REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s120509.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s610501.d	WBN091128-01	nagl	05-DEC-2009 10:31	50 PPM	s120509	1.0	DFTPP	
s610502.d	WBN091106-05.4	nagl	05-DEC-2009 10:46	40 PPM	s120509	1.0	MEGACVS	232623
s610503.d	WBN091201-03.2	nagl	05-DEC-2009 11:14	40 PPM	s120509	1.0	APCVS	
s610504.d	inst blk	nagl	05-DEC-2009 11:50	--------	s120509	1.0	INST BLK	
s610505.d	1201979043	nagl	05-DEC-2009 12:18	925661	10-546	1.0	SBLK01LCS	USE - rr of s610405
s610506.d	1201979041	nagl	05-DEC-2009 12:44	925661	10-575	1.0	LANL001MS	USE - rr of s610409
s610507.d	1201979042	nagl	05-DEC-2009 13:13	925661	s120509	1.0	LANL001MSD	USE - rr of s610410
s610508.d	241418008	nagl	05-DEC-2009 13:41	925661	10-576	1.0	LANL	USE - rr of s610419
s610509.d	241418016	nagl	05-DEC-2009 14:08	925661	10-576	1.0	LANL	USE - rr of s610427

Instrument Batch: /chem/MSD6.i/s120509.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD6

DATE: 11/09/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1198658-D
Multiplier Voltage: 1565 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD6.i/s110909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6k0901.d	WBN091101-01	JMB3	09-NOV-2009 11:20	50 PPM	s110909	1.0	DFTPP	DUSE
s6k0902.d	inst blk	JMB3	09-NOV-2009 11:35	--------	s110909	1.0	INST BLK	DUSE
s6k0903.d	WBN091106-08	JMB3	09-NOV-2009 12:23	1 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0904.d	WBN091106-07	JMB3	09-NOV-2009 13:00	10 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0905.d	WBN091106-06	JMB3	09-NOV-2009 13:36	20 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0906.d	WBN091106-05.1	JMB3	09-NOV-2009 14:14	40 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0907.d	WBN091106-04	JMB3	09-NOV-2009 14:52	50 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0908.d	WBN091106-03	JMB3	09-NOV-2009 15:30	80 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0909.d	WBN091106-02	JMB3	09-NOV-2009 16:06	100 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0910.d	WBN091106-01	JMB3	09-NOV-2009 16:43	120 PPM	s110909	1.0	MEGAICAL	DUSE
s6k0911-D.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0911.d	WBN091101-01	JMB3	09-NOV-2009 18:00	50 PPM	s110909	1.0	DFTPP	
s6k0912.d	inst blk	JMB3	09-NOV-2009 18:15	--------	s110909	1.0	INST BLK	
s6k0913.d	WBN091106-08	JMB3	09-NOV-2009 18:53	1 PPM	s110909	1.0	MEGAICAL	
s6k0914.d	WBN091106-07	JMB3	09-NOV-2009 19:31	10 PPM	s110909	1.0	MEGAICAL	
s6k0915.d	WBN091106-06	JMB3	09-NOV-2009 20:09	20 PPM	s110909	1.0	MEGAICAL	
s6k0916.d	WBN091106-05.1	JMB3	09-NOV-2009 20:46	40 PPM	s110909	1.0	MEGAICAL	
s6k0917.d	WBN091106-04	JMB3	09-NOV-2009 21:25	50 PPM	s110909	1.0	MEGAICAL	
s6k0918.d	WBN091106-03	JMB3	09-NOV-2009 22:01	80 PPM	s110909	1.0	MEGAICAL	

s6k0919.d	WBN091106-02	JMB3	09-NOV-2009 22:39	100 PPM	s110909	1.0	MEGA1CAL	
s6k0920.d	WBN091106-01	JMB3	09-NOV-2009 23:16	120 PPM	s110909	1.0	MEGAICAL	
s6k0921-D.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0921.d	WBN091101-01	JMB3	10-NOV-2009 11:07	50 PPM	s110909	1.0	DFTPP	
s6k0922.d	inst blk	JMB3	10-NOV-2009 11:21	--------	s110909	1.0	INST BLK	
s6k0923.d	WBN091016-01	JMB3	10-NOV-2009 11:59	10 PPM	s110909	1.0	AP12ICAL	
s6k0924.d	WBN091016-02	JMB3	10-NOV-2009 12:36	20 PPM	s110909	1.0	AP12ICAL	
s6k0925.d	WBN091016-03	JMB3	10-NOV-2009 13:13	40 PPM	s110909	1.0	AP12ICAL	
s6k0926.d	WBN091016-04	JMB3	10-NOV-2009 13:51	50 PPM	s110909	1.0	AP12ICAL	
s6k0927.d	WBN091016-05	JMB3	10-NOV-2009 14:30	80 PPM	s110909	1.0	AP12ICAL	
s6k0928.d	WBN091016-06	JMB3	10-NOV-2009 15:06	100 PPM	s110909	1.0	AP12ICAL	
s6k0929.d	WBN091016-07	JMB3	10-NOV-2009 15:43	120 PPM	s110909	1.0	AP12ICAL	
s6k0930.d	WBN091029-25	JMB3	10-NOV-2009 16:20	10 PPM	s110909	1.0	PESTICAL	
s6k0931.d	WBN091029-24	JMB3	10-NOV-2009 16:56	20 PPM	s110909	1.0	PESTICAL	
s6k0932.d	WBN091029-23.1	JMB3	10-NOV-2009 17:33	40 PPM	s110909	1.0	PESTICAL	
s6k0933.d	WBN091029-22	JMB3	10-NOV-2009 18:09	50 PPM	s110909	1.0	PESTICAL	
s6k0934.d	WBN091029-21	JMB3	10-NOV-2009 18:45	80 PPM	s110909	1.0	PESTICAL	
s6k0935.d	WBN091029-20	JMB3	10-NOV-2009 19:21	100 PPM	s110909	1.0	PESTICAL	
s6k0936.d	WBN091029-19	JMB3	10-NOV-2009 19:58	120 PPM	s110909	1.0	PESTICAL	
s6k0937-D.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	FAILED SC 8270D
s6k0937.d	WBN091106-09.1	JMB3	10-NOV-2009 20:29	40 PPM	s110909	1.0	MEGAICV	
s6k0938-D.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0938.d	WBN091016-08.1	JMB3	10-NOV-2009 21:07	40 PPM	s110909	1.0	AP12ICV	
s6k0939-D.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0939.d	WBN091029-26.1	JMB3	10-NOV-2009 21:35	40 PPM	s110909	1.0	PESTICV	
s6k0940-D.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	
s6k0940.d	WBN091101-01	JMB3	10-NOV-2009 22:12	50 PPM	s110909	1.0	DFTPP	

s6k0941.d	inst blk	JMB3	10-NOV-2009 22:26	--------	s110909	1.0	INST BLK	
s6k0942.d	WBN091016-16	JMB3	10-NOV-2009 22:55	500 PPM	s110909	1.0	HEXICAL	
s6k0943.d	WBN091016-15	JMB3	10-NOV-2009 23:24	1000 PPM	s110909	1.0	HEXICAL	
s6k0944.d	WBN091016-14	JMB3	10-NOV-2009 23:53	1250 PPM	s110909	1.0	HEXICAL	
s6k0945.d	WBN091016-13	JMB3	11-NOV-2009 00:21	1500 PPM	s110909	1.0	HEXICAL	
s6k0946.d	WBN091016-12	JMB3	11-NOV-2009 00:50	1750 PPM	s110909	1.0	HEXICAL	
s6k0947.d	UBN090828-02.4-16	JMB3	11-NOV-2009 01:18	500 PPM	s110909	1.0	HEXICAL	
s6k0948.d	UBN090924-01	JMB3	11-NOV-2009 01:47	10 PPM	s110909	1.0	NEVICAL	
s6k0949.d	UBN090924-02	JMB3	11-NOV-2009 02:16	20 PPM	s110909	1.0	NEVICAL	
s6k0950.d	UBN090924-03	JMB3	11-NOV-2009 02:44	40 PPM	s110909	1.0	NEVICAL	
s6k0951.d	UBN090924-04	JMB3	11-NOV-2009 03:12	50 PPM	s110909	1.0	NEVICAL	
s6k0952.d	UBN090924-05	JMB3	11-NOV-2009 03:41	80 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0953.d	UBN090924-06	JMB3	11-NOV-2009 04:10	100 PPM	s110909	1.0	NEVICAL	
s6k0954.d	UBN090924-07	JMB3	11-NOV-2009 04:38	120 PPM	s110909	1.0	NEVICAL	DUSE - disabled
s6k0955-D.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	DUSE - failed >70%-130%
s6k0955.d	WBN091016-10.1	JMB3	11-NOV-2009 05:07	1250 PPM	s110909	1.0	HEXICV	

NCR Report No.: 766334
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
05-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
925661	See Below		

Potentially affected work order(s)(SDG): 241336(10-546),241417(10-575),241418(10-576)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The MS(1201979041)/MSD(1201979042) RPD for Benzyl alcohol was 39%. The limit is 30%.	1. Since Benzyl alcohol was individually within the acceptance limits for the MS and MSD, the data results have been reported.

Originator's Name:

Nathan Greene 05-DEC-09

Data Validator/Group Leader:

Barbara Bailey 08-DEC-09

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610506.d
Lab Smp Id: 1201979041 Client Smp ID: RE03-09-13812MS
Inj Date : 05-DEC-2009 12:44
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979041|925661|1|SVMF|1|LANL001MS
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.721	4.719	(1.000)	200466	40.0000	
* 29 Naphthalene-d8	136	5.985	5.988	(1.000)	857738	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	484280	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	832631	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	675290	40.0000	
* 98 Perylene-d12	264	14.730	14.736	(1.000)	577986	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	269842	53.7521	1920
$ 5 Phenol-d5	99	4.347	4.342	(0.921)	389250	61.4339	2200
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	193823	31.9439	1140
$ 39 2-Fluorobiphenyl	172	7.109	7.112	(0.906)	434987	34.8540	1240
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	127218	90.0033	3220
$ 81 p-Terphenyl-d14	244	11.173	11.178	(0.897)	501532	46.0536	1640

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.360	4.357	(0.923)	195248	30.6474	1100
8 2-Chlorophenol	128	4.528	4.525	(0.959)	160733	31.4094	1120
11 1,4-Dichlorobenzene	146	4.737	4.737	(1.003)	185317	31.0311	1110
17 N-Nitrosodipropylamine	70	5.086	5.091	(1.077)	123441	34.7572	1240(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	178627	34.3349	1230
33 4-Chloro-3-methylphenol	107	6.556	6.546	(1.095)	171781	40.1417	1430
47 Acenaphthene	154	7.886	7.891	(1.005)	377045	34.5451	1230
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	154383	41.3179	1480
52 4-Nitrophenol	139	8.003	7.983	(1.019)	59686	31.7544	1130
65 Pentachlorophenol	266	9.252	9.249	(0.978)	71883	40.0280	1430
79 Pyrene	202	11.028	11.031	(0.885)	743420	40.0249	1430
2 Pyridine	79	2.714	2.686	(0.575)	80941	19.0551	681
4 Aniline	66	4.413	4.411	(0.935)	85179	32.2191	1150
7 bis(2-Chloroethyl) ether	63	4.451	4.451	(0.943)	124073	28.7601	1030
9 1,3-Dichlorobenzene	146	4.671	4.671	(0.989)	178959	30.3774	1080
12 Benzyl alcohol	108	4.834	4.834	(1.024)	48712	15.3221	548
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.034)	180290	32.3419	1160
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	313092	32.5071	1160
15 o-Cresol	107	4.923	4.920	(1.043)	142313	34.1555	1220
18 m,p-Cresols	107	5.073	5.076	(1.074)	218854	41.4530	1480
19 Hexachloroethane	117	5.213	5.213	(1.104)	71191	30.8138	1100
21 Nitrobenzene	77	5.272	5.272	(0.881)	209208	34.2096	1220
22 Isophorone	82	5.504	5.509	(0.920)	396946	36.6186	1310
23 2-Nitrophenol	139	5.585	5.585	(0.933)	103930	36.8445	1320
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	141850	30.3511	1080
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	220252	34.5262	1230
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	159761	37.6879	1350
27 Benzoic acid	105	5.736	5.718	(0.958)	199536	69.1689	2470
30 Naphthalene	128	6.008	6.011	(1.004)	576164	33.6740	1200
31 4-Chloroaniline	127	6.052	6.049	(1.011)	171988	31.2743	1120
32 Hexachlorobutadiene	225	6.118	6.120	(1.022)	92343	34.0854	1220
34 2-Methylnaphthalene	142	6.727	6.729	(1.124)	417516	40.4374	1440
36 Hexachlorocyclopentadiene	237	6.887	6.890	(0.877)	73151	37.3963	1340
37 2,4,6-Trichlorophenol	196	7.022	7.025	(0.894)	119209	36.0751	1290
38 2,4,5-Trichlorophenol	196	7.073	7.068	(0.901)	140017	39.7875	1420
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	382271	35.1481	1260
42 o-Nitroaniline	65	7.354	7.359	(0.937)	117654	31.6209	1130
41 m-Nitroaniline	138	7.797	7.802	(0.993)	94712	34.7730	1240
43 Dimethylphthalate	163	7.537	7.550	(0.960)	474177	38.1693	1360
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	117027	39.4940	1410
45 Acenaphthylene	152	7.698	7.703	(0.981)	664045	37.9734	1360
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	42827	41.5531	1480
49 Dibenzofuran	168	8.070	8.072	(1.028)	661917	44.9279	1600
51 Diethylphthalate	149	8.294	8.299	(1.056)	495099	39.5740	1410
53 Fluorene	166	8.442	8.444	(1.075)	467522	38.6625	1380
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	225680	39.4990	1410
55 2-Methyl-4,6-dinitrophenol	198	8.488	8.493	(0.897)	69856	38.2204	1360

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	103915	40.7055	1450
133 Diphenylamine	169	8.559	8.561	(0.904)	390865	38.9463	1390
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	490692	38.4384	1370
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	138051	42.0180	1500
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	145649	42.3217	1510
68 Phenanthrene	178	9.489	9.492	(1.003)	687057	39.9009	1420
69 Anthracene	178	9.545	9.548	(1.009)	704771	40.9489	1460
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	903373	45.7049	1630
76 Fluoranthene	202	10.778	10.781	(1.139)	732201	44.3898	1590
85 Butylbenzylphthalate	149	11.701	11.706	(0.939)	390101	45.8926	1640
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	606144	41.6037	1490
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	172190	36.1024	1290
92 Chrysene	228	12.488	12.493	(1.003)	599787	42.9650	1540
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	563652	48.0408	1720
94 Di-n-octylphthalate	149	13.375	13.377	(0.908)	902314	49.1204	1760
95 Benzo(b)fluoranthene	252	14.068	14.073	(0.955)	567920	44.4069	1590
96 Benzo(k)fluoranthene	252	14.114	14.119	(0.958)	568388	44.6943	1600
97 Benzo(a)pyrene	252	14.629	14.636	(0.993)	512796	46.4225	1660
99 Indeno(1,2,3-cd)pyrene	276	16.687	16.692	(1.133)	465348	43.9223	1570
100 Dibenzo(a,h)anthracene	278	16.721	16.726	(1.135)	387179	44.7941	1600
101 Benzo(ghi)perylene	276	17.189	17.197	(1.167)	389876	46.1993	1650(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.665	2.642	(0.564)	64606	18.9304	676

QC Flag Legend

Q - Qualifier signal failed the ratio test.

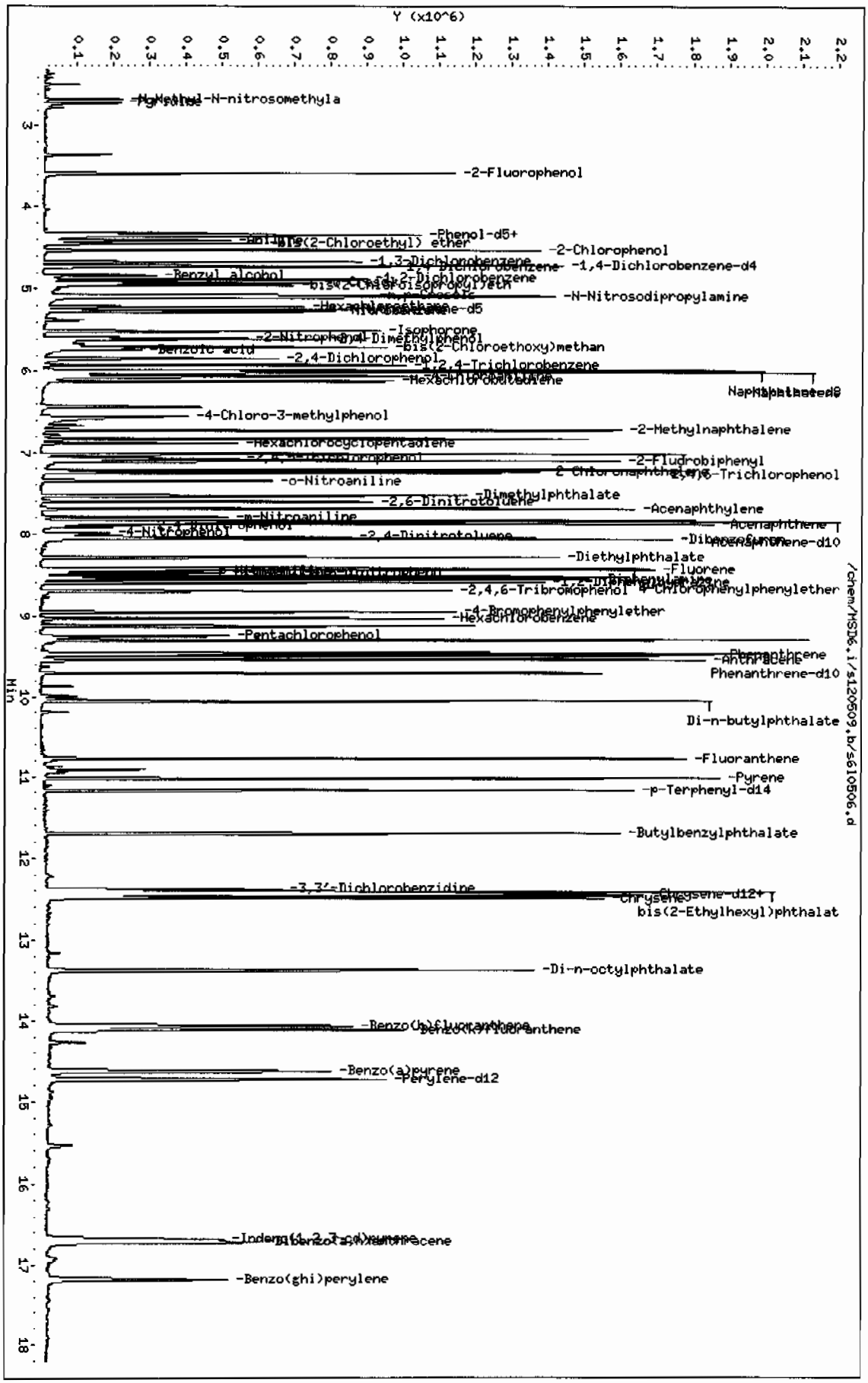
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Date : 05-DEC-2009 12:44
Client ID: RE03-09-13812MS
Sample Info: 1201979041192566114|SVMF11|LANL001MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS
Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-d5+
-2-Chlorophenol
-1,4-Dichlorobenzene-d4
-Benzyl alcohol
-N-Nitrosodipropylamine
-Isophorone
-Benzoic acid
-2,4-Dichlorophenol
-4-Chloro-3-methylphenol
-2-Methylnaphthalene
-2-Fludrobiphenyl
-o-Nitroaniline
-Dimethylphthalate
-Acenaphthylene
-m-Nitroaniline
-Acenaphthene
-Diethylphthalate
-Fluorene
-2,4,6-Tribromophenol
-4-Bromophenylphenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene
-Anthracene
Phenanthrene-d10
Di-n-butylphthalate
-Fluoranthene
-Pyrene
-p-Terphenyl-d14
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine
-Chrysene
bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-d12
-Indeno(1,2,3-cd)pyrene
-Benzo(ghi)perylene
/chem/MSD6.i/s120509.b/s610506.d

GEL Laboratories LLC

Data file : /chem/MSD6.i/s120509.b/s610507.d
Lab Smp Id: 1201979042 Client Smp ID: RE03-09-13812MSD
Inj Date : 05-DEC-2009 13:13
Operator : nagl Inst ID: MSD6.i
Smp Info : |1201979042|925661|1|SVMF|1|LANL001MSD
Misc Info : |MSD8270-SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD6.i/s120509.b/MSD6-M8270C-AQA-110909.m
Meth Date : 05-Dec-2009 15:04 nat00999 Quant Type: ISTD
Cal Date : 11-NOV-2009 04:38 Cal File: s6k0954.d
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-575.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	7.09880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.722	4.719	(1.000)	212844	40.0000	
* 29 Naphthalene-d8	136	5.985	5.988	(1.000)	913923	40.0000	
* 46 Acenaphthene-d10	164	7.851	7.856	(1.000)	507549	40.0000	
* 67 Phenanthrene-d10	188	9.464	9.466	(1.000)	884578	40.0000	
* 91 Chrysene-d12	240	12.455	12.460	(1.000)	735909	40.0000	
* 98 Perylene-d12	264	14.733	14.736	(1.000)	596420	40.0000	
$ 3 2-Fluorophenol	112	3.590	3.577	(0.760)	279036	52.3511	1870
$ 5 Phenol-d5	99	4.350	4.342	(0.921)	404984	60.2000	2150
$ 20 Nitrobenzene-d5	82	5.252	5.251	(0.877)	201006	31.0912	1110
$ 39 2-Fluorobiphenyl	172	7.109	7.112	(0.906)	427432	32.6784	1170
$ 60 2,4,6-Tribromophenol	329	8.704	8.704	(1.109)	117056	79.0173	2820
$ 81 p-Terphenyl-d14	244	11.176	11.178	(0.897)	457000	38.5077	1380

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.360	4.357	(0.923)	212334	31.3910	1120
8 2-Chlorophenol	128	4.531	4.525	(0.960)	175421	32.2861	1150
11 1,4-Dichlorobenzene	146	4.739	4.737	(1.004)	199393	31.4464	1120
17 N-Nitrosodipropylamine	70	5.089	5.091	(1.078)	133477	35.3974	1260(Q)
28 1,2,4-Trichlorobenzene	180	5.917	5.919	(0.988)	191411	34.5303	1230
33 4-Chloro-3-methylphenol	107	6.556	6.546	(1.095)	142092	31.1627	1110
47 Acenaphthene	154	7.886	7.891	(1.005)	388765	33.9859	1210
50 2,4-Dinitrotoluene	165	8.047	8.054	(1.025)	154180	39.3718	1410
52 4-Nitrophenol	139	8.011	7.983	(1.020)	63681	32.1953	1150
65 Pentachlorophenol	266	9.252	9.249	(0.978)	70061	37.1659	1330
79 Pyrene	202	11.031	11.031	(0.886)	725063	35.8210	1280
2 Pyridine	79	2.716	2.686	(0.575)	88527	19.6290	701
4 Aniline	66	4.413	4.411	(0.935)	92195	32.8448	1170
7 bis(2-Chloroethyl) ether	63	4.452	4.451	(0.943)	135459	29.5733	1060
9 1,3-Dichlorobenzene	146	4.673	4.671	(0.990)	197670	31.6022	1130
12 Benzyl alcohol	108	4.836	4.834	(1.024)	34768	10.3001	368
13 1,2-Dichlorobenzene	146	4.882	4.882	(1.034)	198308	33.5053	1200
14 bis(2-Chloroisopropyl)ether	45	4.951	4.953	(1.049)	342454	33.4879	1200
15 o-Cresol	107	4.925	4.920	(1.043)	134088	30.3100	1080
18 m,p-Cresols	107	5.073	5.076	(1.074)	203865	36.3684	1300
19 Hexachloroethane	117	5.213	5.213	(1.104)	77816	31.7226	1130
21 Nitrobenzene	77	5.272	5.272	(0.881)	220982	33.9134	1210
22 Isophorone	82	5.504	5.509	(0.920)	425636	36.8514	1320
23 2-Nitrophenol	139	5.585	5.585	(0.933)	111799	37.1976	1330
24 2,4-Dimethylphenol	122	5.606	5.606	(0.937)	149283	29.9778	1070
25 bis(2-Chloroethoxy)methane	93	5.703	5.705	(0.953)	237132	34.8871	1240
26 2,4-Dichlorophenol	162	5.838	5.835	(0.975)	167764	37.1428	1330
27 Benzoic acid	105	5.731	5.718	(0.957)	205023	66.7017	2380
30 Naphthalene	128	6.008	6.011	(1.004)	614081	33.6836	1200
31 4-Chloroaniline	127	6.052	6.049	(1.011)	183595	31.3325	1120
32 Hexachlorobutadiene	225	6.121	6.120	(1.023)	99253	34.3837	1230
34 2-Methylnaphthalene	142	6.730	6.729	(1.124)	443900	40.3497	1440
36 Hexachlorocyclopentadiene	237	6.888	6.890	(0.877)	80091	39.0671	1400
37 2,4,6-Trichlorophenol	196	7.023	7.025	(0.894)	119735	34.5731	1230
38 2,4,5-Trichlorophenol	196	7.076	7.068	(0.901)	141121	38.2628	1370
40 2-Chloronaphthalene	162	7.252	7.254	(0.924)	394927	34.6470	1240
42 o-Nitroaniline	65	7.356	7.359	(0.937)	121958	31.2749	1120
41 m-Nitroaniline	138	7.797	7.802	(0.993)	98509	34.5090	1230
43 Dimethylphthalate	163	7.537	7.550	(0.960)	479666	36.8410	1320
44 2,6-Dinitrotoluene	165	7.611	7.616	(0.969)	118176	38.0533	1360
45 Acenaphthylene	152	7.700	7.703	(0.981)	671677	36.6489	1310
48 2,4-Dinitrophenol	184	7.912	7.914	(1.008)	39976	38.5947	1380
49 Dibenzofuran	168	8.070	8.072	(1.028)	670138	43.4006	1550
51 Diethylphthalate	149	8.294	8.299	(1.056)	483397	36.8672	1320
53 Fluorene	166	8.442	8.444	(1.075)	476764	37.6192	1340
54 4-Chlorophenylphenylether	204	8.429	8.432	(1.074)	226252	37.7837	1350
55 2-Methyl-4,6-dinitrophenol	198	8.490	8.493	(0.897)	66882	35.1446	1260

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.462	8.465	(1.078)	102477	38.7191	1380
133 Diphenylamine	169	8.559	8.561	(0.904)	387106	36.3066	1300
58 1,2-Diphenylhydrazine	77	8.602	8.605	(0.909)	495167	36.5111	1300
61 4-Bromophenylphenylether	248	8.962	8.964	(0.947)	133063	38.1215	1360
63 Hexachlorobenzene	284	9.038	9.041	(0.955)	139756	38.2245	1360
68 Phenanthrene	178	9.489	9.492	(1.003)	667316	36.4785	1300
69 Anthracene	178	9.545	9.548	(1.009)	694403	37.9772	1360
72 Di-n-butylphthalate	149	10.062	10.062	(1.063)	854376	40.6875	1450
76 Fluoranthene	202	10.778	10.781	(1.139)	710989	40.5725	1450
85 Butylbenzylphthalate	149	11.703	11.706	(0.940)	376015	40.5917	1450
89 Benzo(a)anthracene	228	12.435	12.440	(0.998)	599007	37.7271	1350
90 3,3'-Dichlorobenzidine	252	12.384	12.381	(0.994)	171120	32.9226	1180
92 Chrysene	228	12.488	12.493	(1.003)	583352	38.3455	1370
93 bis(2-Ethylhexyl)phthalate	149	12.414	12.417	(0.997)	529814	41.4931	1480
94 Di-n-octylphthalate	149	13.375	13.377	(0.908)	847355	44.7028	1600
95 Benzo(b)fluoranthene	252	14.068	14.073	(0.955)	521923	39.5489	1410
96 Benzo(k)fluoranthene	252	14.116	14.119	(0.958)	531503	40.5022	1450
97 Benzo(a)pyrene	252	14.631	14.636	(0.993)	474032	41.5869	1480
99 Indeno(1,2,3-cd)pyrene	276	16.682	16.692	(1.132)	405734	37.5828	1340
100 Dibenzo(a,h)anthracene	278	16.716	16.726	(1.135)	326581	37.1098	1320
101 Benzo(ghi)perylene	276	17.187	17.197	(1.167)	325496	37.3783	1330(Q)
1 N-Methyl-N-nitrosomethylamine	74	2.670	2.642	(0.566)	70217	19.3780	692

QC Flag Legend

Q - Qualifier signal failed the ratio test.

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Client ID: RE03-09-13312MSD
Sample Info: 1120197904219256611ISVHF111LANL001MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD6.i
Operator: nagl
Column diameter: 0.20

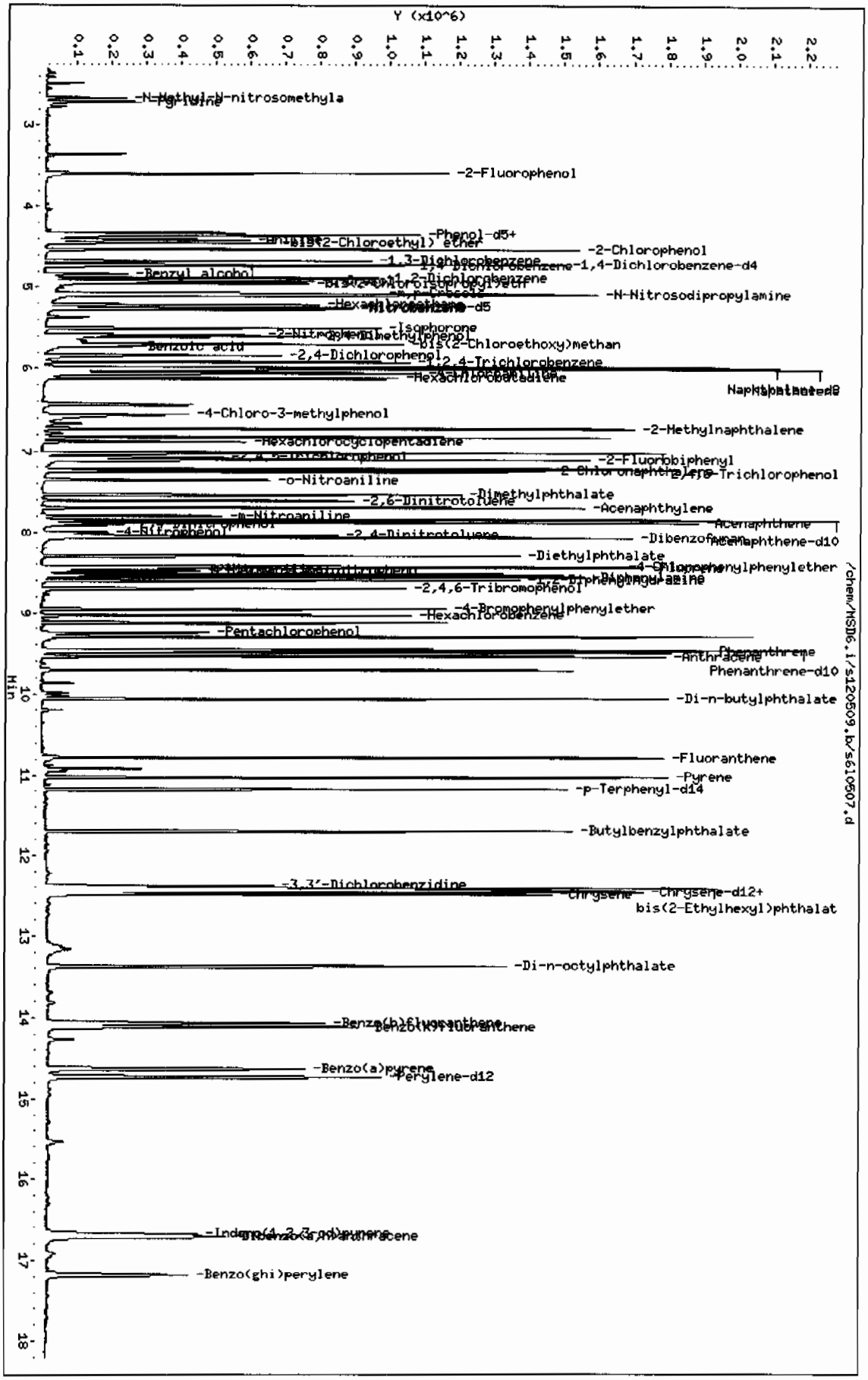

Page 1

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-546

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	924759
Prep Batch Number:	924758

Sample Analysis

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201976896	Interference Check Sample (ICS)
1201976892	Method Blank (MB)
1201976893	Laboratory Control Sample (LCS)
1201976894	241322001(RE03-09-13618) Matrix Spike (MS)
1201976895	241322001(RE03-09-13618) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

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CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Client sample 241322001 (RE03-09-13618) from SDG 10-544 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

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Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M Mauer **Date:** 11/27/09

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13770

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546

GEL Sample ID: 241336001

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.555	ug/kg	U	1	20-NOV-09 20:40	per1120038a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:40	per1120038a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	20-NOV-09 20:40	per1120038a
	Perchlorate-O(18)			5.51	ug/kg		1	20-NOV-09 20:40	per1120038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-5897

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546

GEL Sample ID: 241336002

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	20-NOV-09 20:48	per1120039a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:48	per1120039a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	20-NOV-09 20:48	per1120039a
	Perchlorate-O(18)			5.69	ug/kg		1	20-NOV-09 20:48	per1120039a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-546

Extract Batch Code: 924758

Date Filtered: 20-NOV-09

Matrix: SOIL

Sample ID: 1201976893

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.98	ug/kg	99.1		–
Perchlorate Isotope Ratio		3.04				–
Perchlorate-101	2.00	1.94	ug/kg	97.2		–
Perchlorate-O(18)		4.74	ug/kg			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-546

Extract Batch Code: 924758

Date Filtered: 20-NOV-09

Matrix: SOIL

Sample ID: 1201976896

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.07	ug/kg	103		70 – 130
Perchlorate Isotope Ratio		2.92				
Perchlorate–101	2.00	2.11	ug/kg	105		70 – 130
Perchlorate–O(18)		4.99	ug/kg			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120014a
Date: 20-Nov-2009
Time: 17:51:54
ID: 1201976896
Vial: 1:3,C

ILAW | 924759 | 50120 | ICS | 11

CWW 11-22-09

Perchlorate

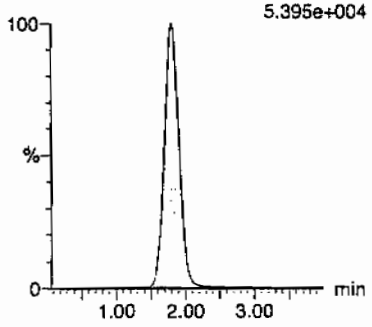

Perchlorate

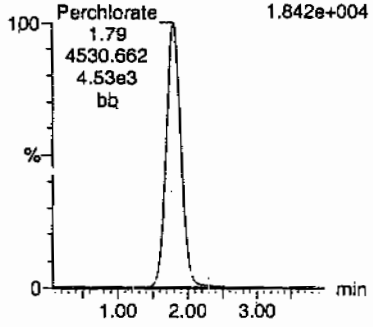

Perchlorate-101

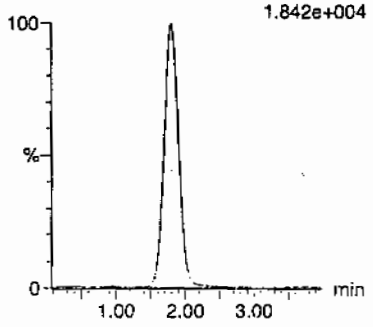

Perchlorate-O(18)

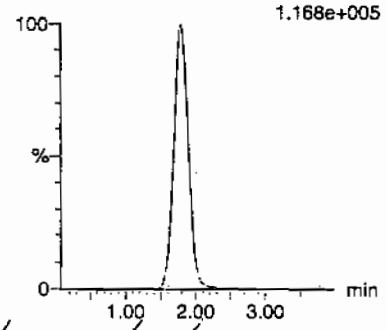

Hmc 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976896	Perchlorate	99 > 83	1.81	13246.484	13246.484	bb			0.2068	103.41	3.41	1155.4...	2.92
1201976896	Perchlorate-101	101 > 85	1.79	4530.662	4530.662	bb			0.2109	105.46	5.46	1584.0...	
1201976896	Perchlorate-O(18)	107 > 89	1.79	28574.160	28574.160	bb			0.4987	99.75	-0.25	7102.4...	

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–546

Extract Batch Code: 924758

Date Extracted: 20–NOV–09

GEL MS/PS ID: 1201976894

Client ID: RE03–09–13618

GEL MSD/PSD ID: 1201976895

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.33	0.0314	ug/kg	2.42	103	2.33	98.4	4.09	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.08		2.98		0		–
Perchlorate–101	2.33	0.0324	ug/kg	2.35	99.2	2.33	98.3	.915	30	75 – 125
Perchlorate–O(18)	0	5.73	ug/kg	5.90		5.77		2.16		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–546

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	20–NOV–09	per1120001a	IPB001
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120001a	IPB001
Perchlorate	0.00	0	NA	20–NOV–09	per1120002a	IPB001
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120002a	IPB001

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112009a.cdb 21 Nov 2009 12:25:49

ame: per1120001a
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I: IPB001
ial: 1:1,A

CWW
11-22-09

erchlorate

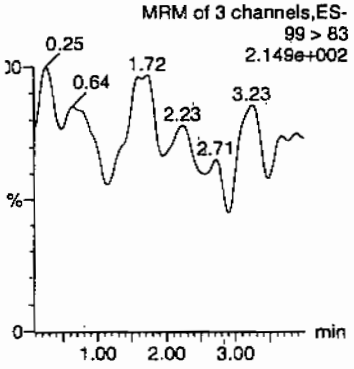

Perchlorate

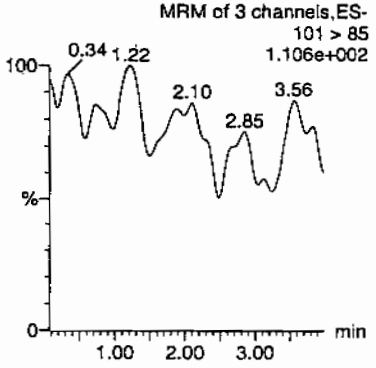

Perchlorate-101

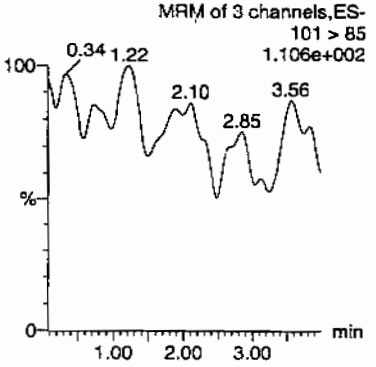

Perchlorate-O(18)

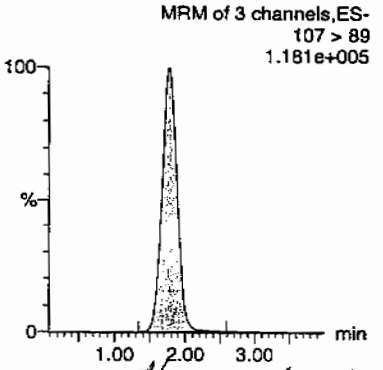

HMM 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83											0.00
B001	Perchlorate-101	101 > 85											
B001	Perchlorate-O(18)	107 > 89	1.77	29454.158	29454.158	bb			0.5141	102.82	2.82	35946....	

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

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rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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me: 16:27:28
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AWJ 11-22-09

erchlorate

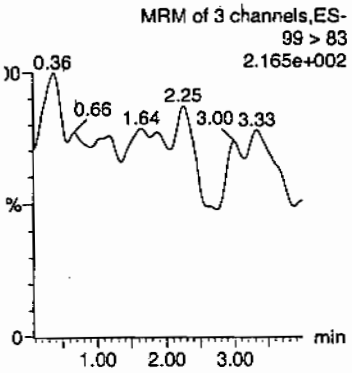

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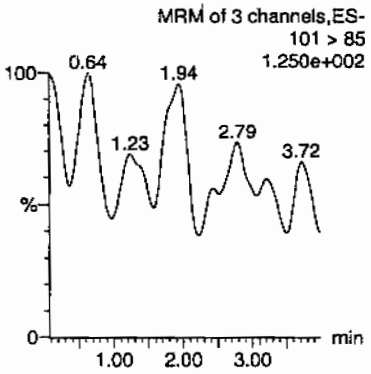

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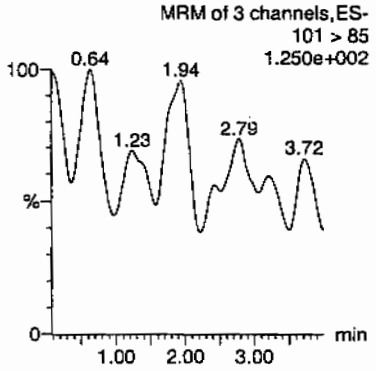

Perchlorate-O(18)

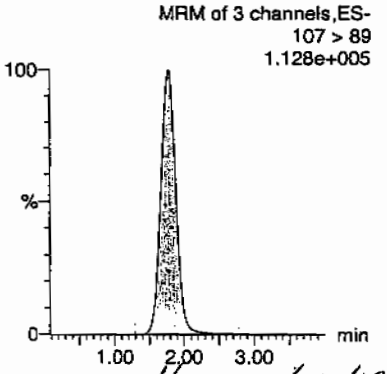

HMM 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3001	Perchlorate	99 > 83											0.00
3001	Perchlorate-101	101 > 85											
3001	Perchlorate-O(18)	107 > 89	1.78	28289.766	28289.766	bb			0.4938	98.75	-1.25	6551.1...	

:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–546

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	20–NOV–09	per1120008a	IPB002
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120008a	IPB002
Perchlorate	0.00	0	NA	20–NOV–09	per1120010a	IPB003
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120010a	IPB003
Perchlorate	0.00	0	NA	20–NOV–09	per1120023a	IPB004
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120023a	IPB004
Perchlorate	0.00	0	NA	20–NOV–09	per1120036a	IPB005
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120036a	IPB005
Perchlorate	0.00	0	NA	20–NOV–09	per1120040a	IPB006
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120040a	IPB006
Perchlorate	0.00	0	NA	20–NOV–09	per1120047a	IPB007
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120047a	IPB007

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

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rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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11-22-09

erchlorate

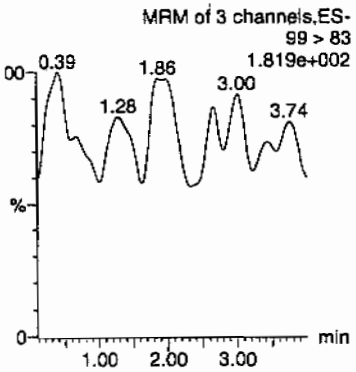

Perchlorate

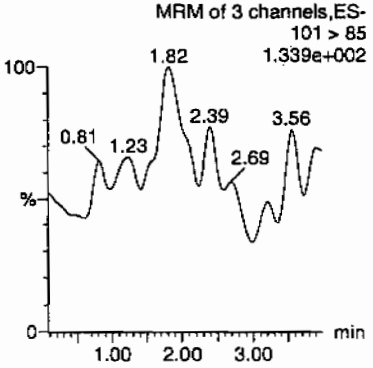

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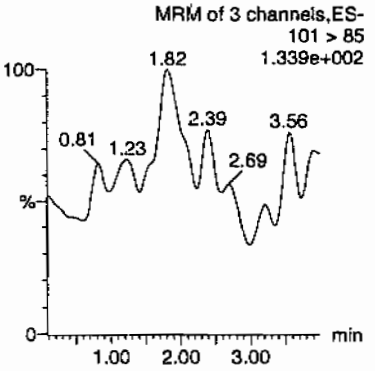

Perchlorate-O(18)

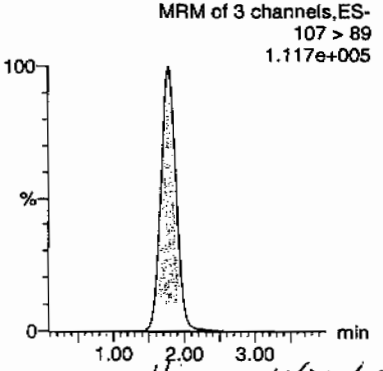

HMM 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B002	Perchlorate	99 > 83											0.00
B002	Perchlorate-101	101 > 85											
B002	Perchlorate-O(18)	107 > 89	1.78	27978.033	27978.033	bb			0.4883	97.67	-2.33	14990....	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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11-11-09

erchlorate

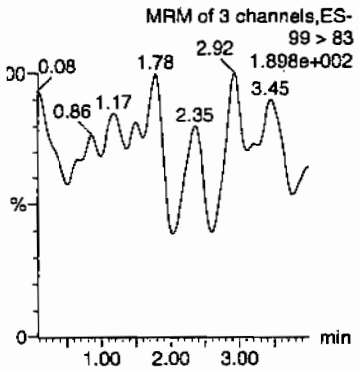

Perchlorate

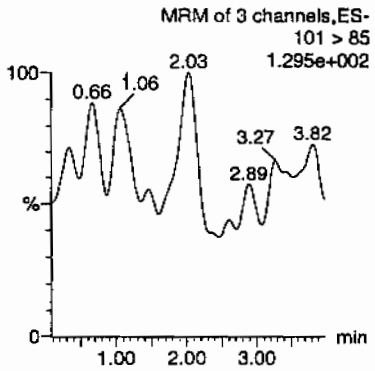

Perchlorate-101

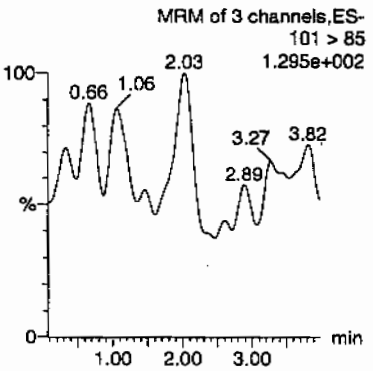

Perchlorate-O(18)

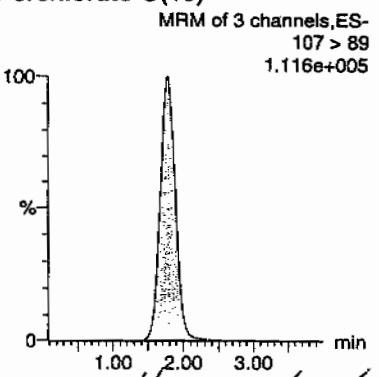

HMM 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B003	Perchlorate	99 > 83											0.00
B003	Perchlorate-101	101 > 85											
B003	Perchlorate-O(18)	107 > 89	1.78	28084.123	28084.123	bb			0.4902	98.04	-1.96	8665.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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ate: 20-Nov-2009
ime: 18:55:15
): IPB004
ial: 1:1,A

CWW
11-22-09

erchlorate

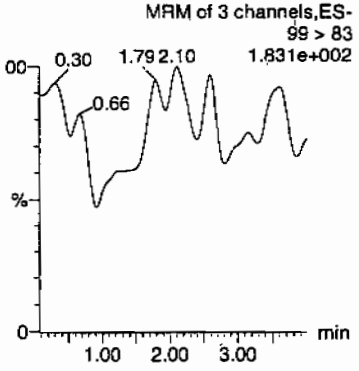

Perchlorate

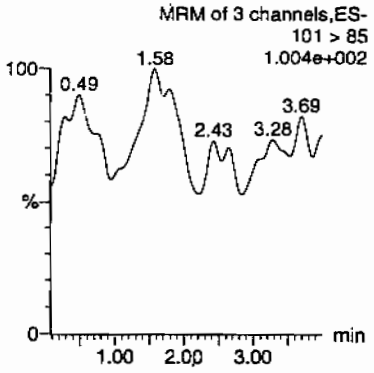

Perchlorate-101

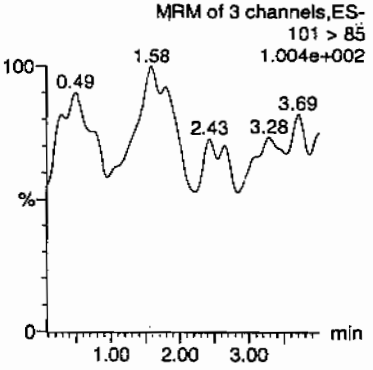

Perchlorate-O(18)

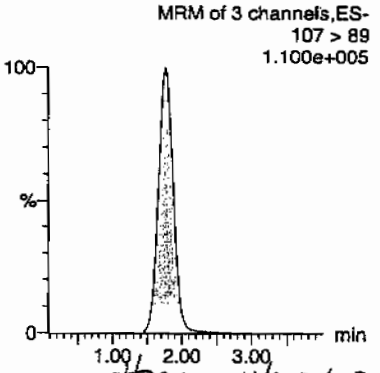

HMM 11/23/09

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B004	Perchlorate	99 > 83											0.00
'B004	Perchlorate-101	101 > 85											
'B004	Perchlorate-O(18)	107 > 89	1.77	27506.287	27506.287	bb			0.4801	96.02	-3.98	1744.5...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

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Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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Date: 20-Nov-2009
Time: 20:26:51
ID: IPB005
Vial: 1:1,A

11-22-09

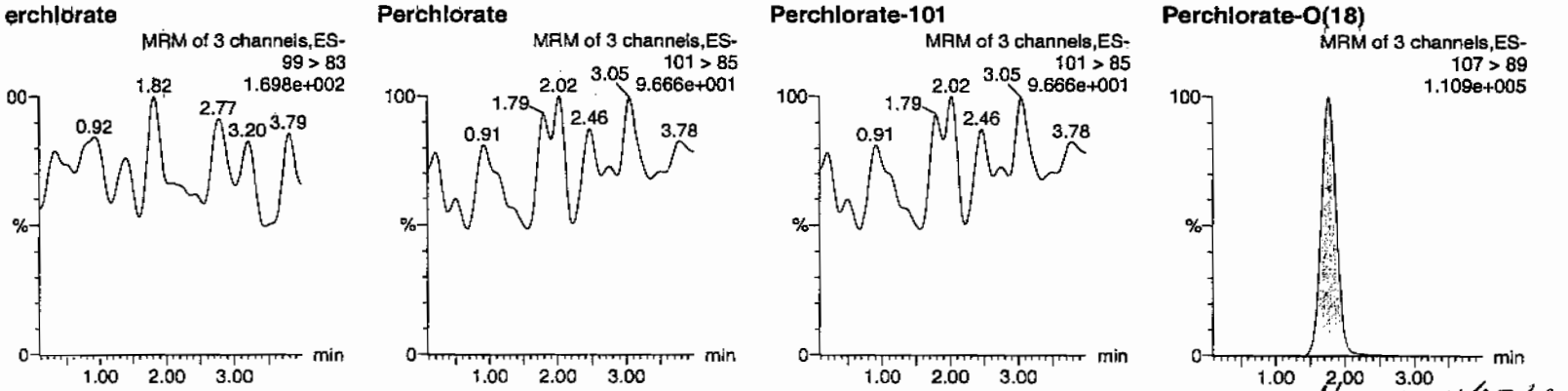

11/23/09

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IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	1.77	27715.293	27715.293	bb			0.4837	96.75*	-3.25	3186.6...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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CWW 11-22-09

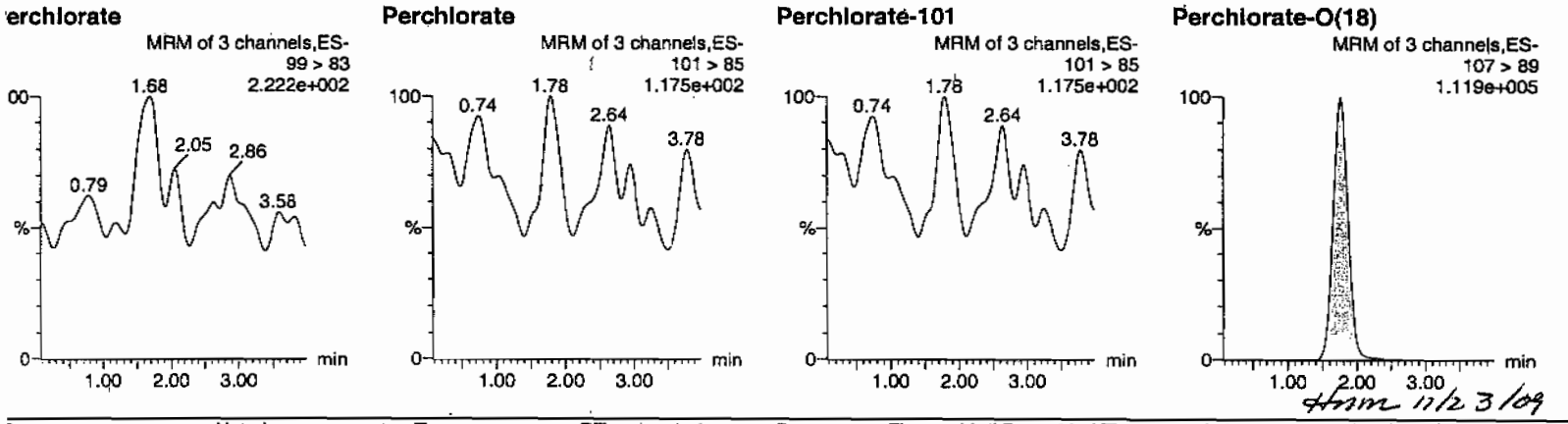

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	1.76	28056.973	28056.973	bb			0.4897	97.94	-2.06	2522.6...	

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

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rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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ate: 20-Nov-2009
ime: 21:44:40
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11-22-09

erchlorate

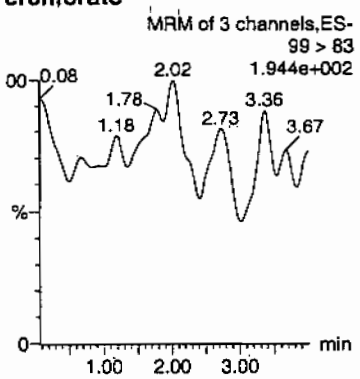

Perchlorate

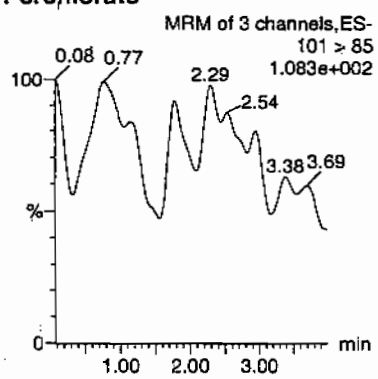

Perchlorate-101

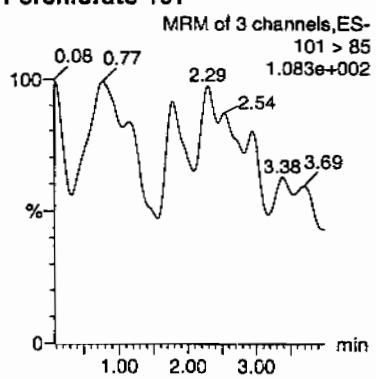

Perchlorate-O(18)

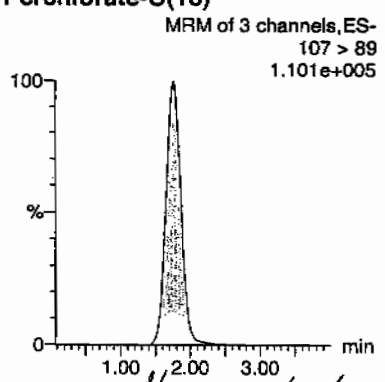

Hum 11/23/09

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B007	Perchlorate	99 > 83											0.00
'B007	Perchlorate-101	101 > 85											
'B007	Perchlorate-O(18)	107 > 89	1.76	27531.139	27531.139	bb			0.4805	96.11	-3.89	12047....	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWJ 01-01-08

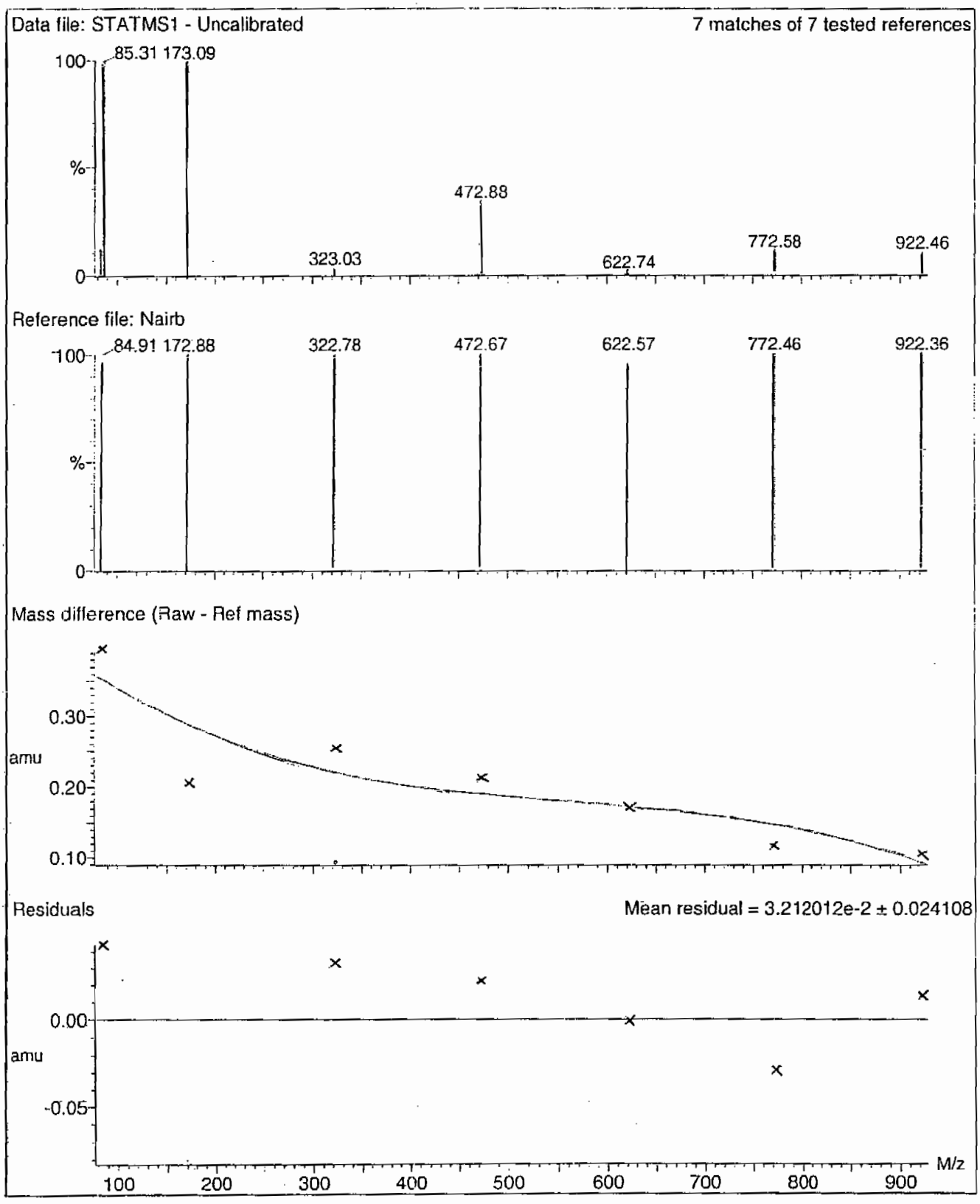

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Calibration Report ~ MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

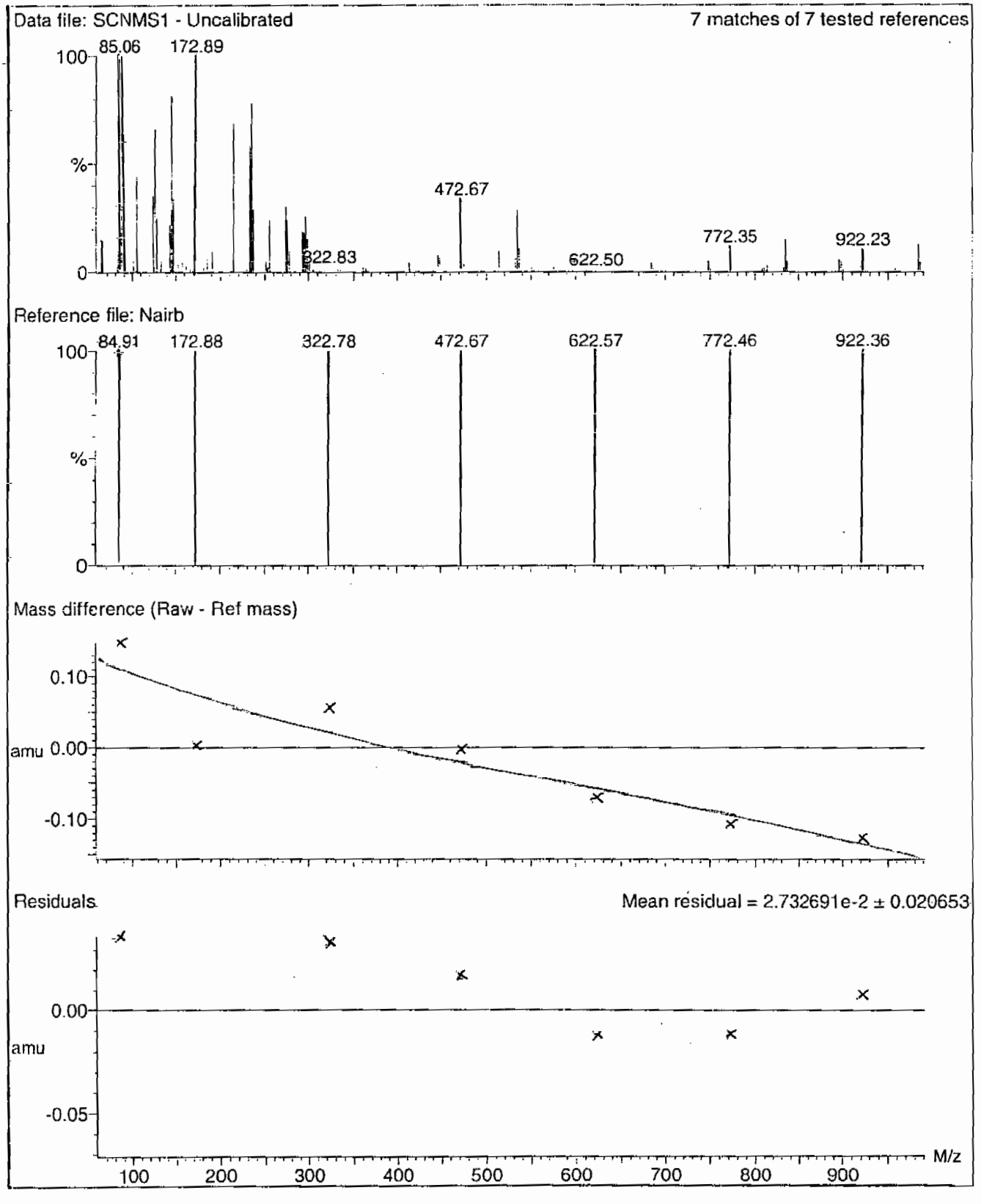

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Calibration Report - MS1 Scan Speed Compensation

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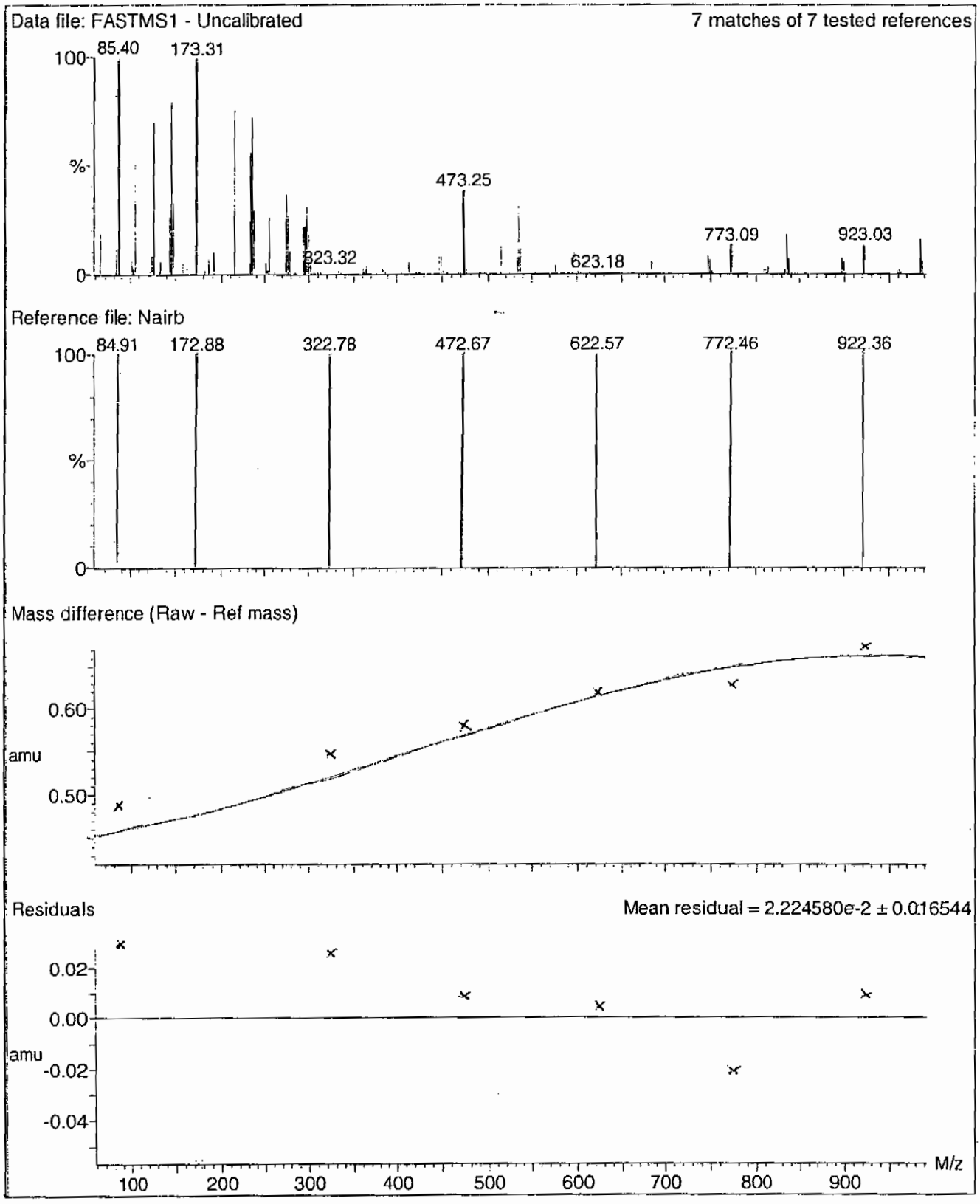

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Static

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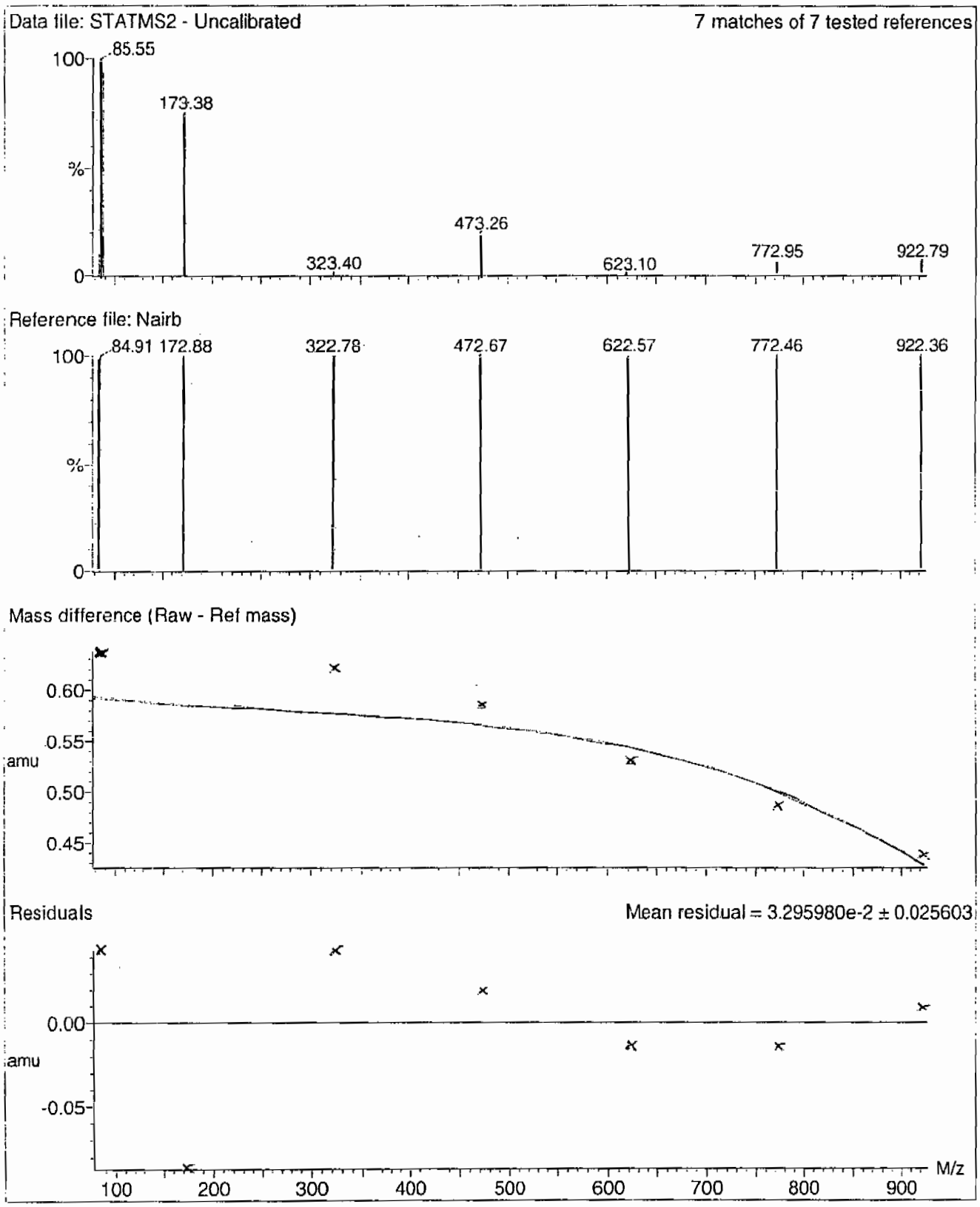

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scanning

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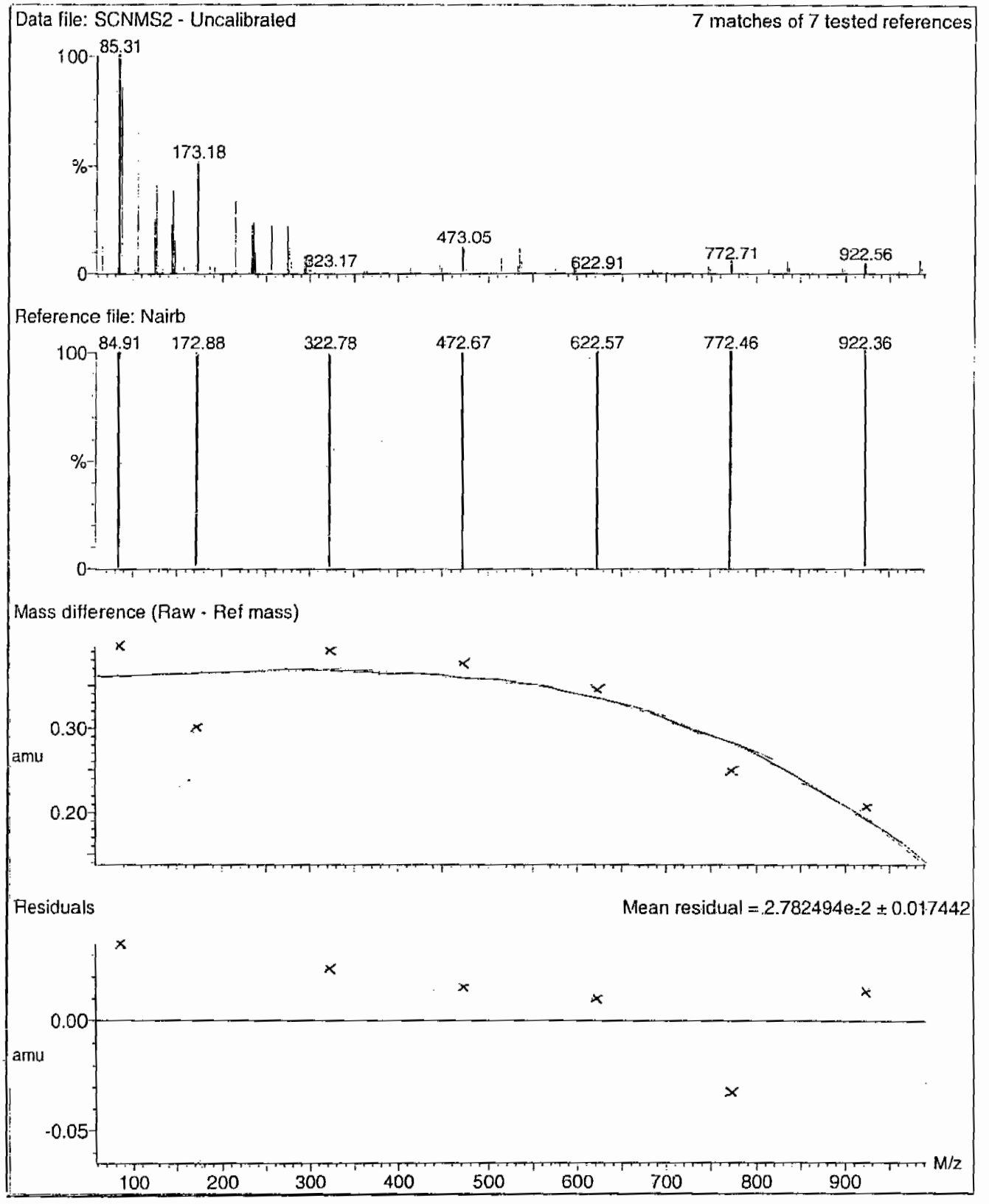

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scan Speed Compensation

Printed: Tue Jan 08 12:23:51 2008

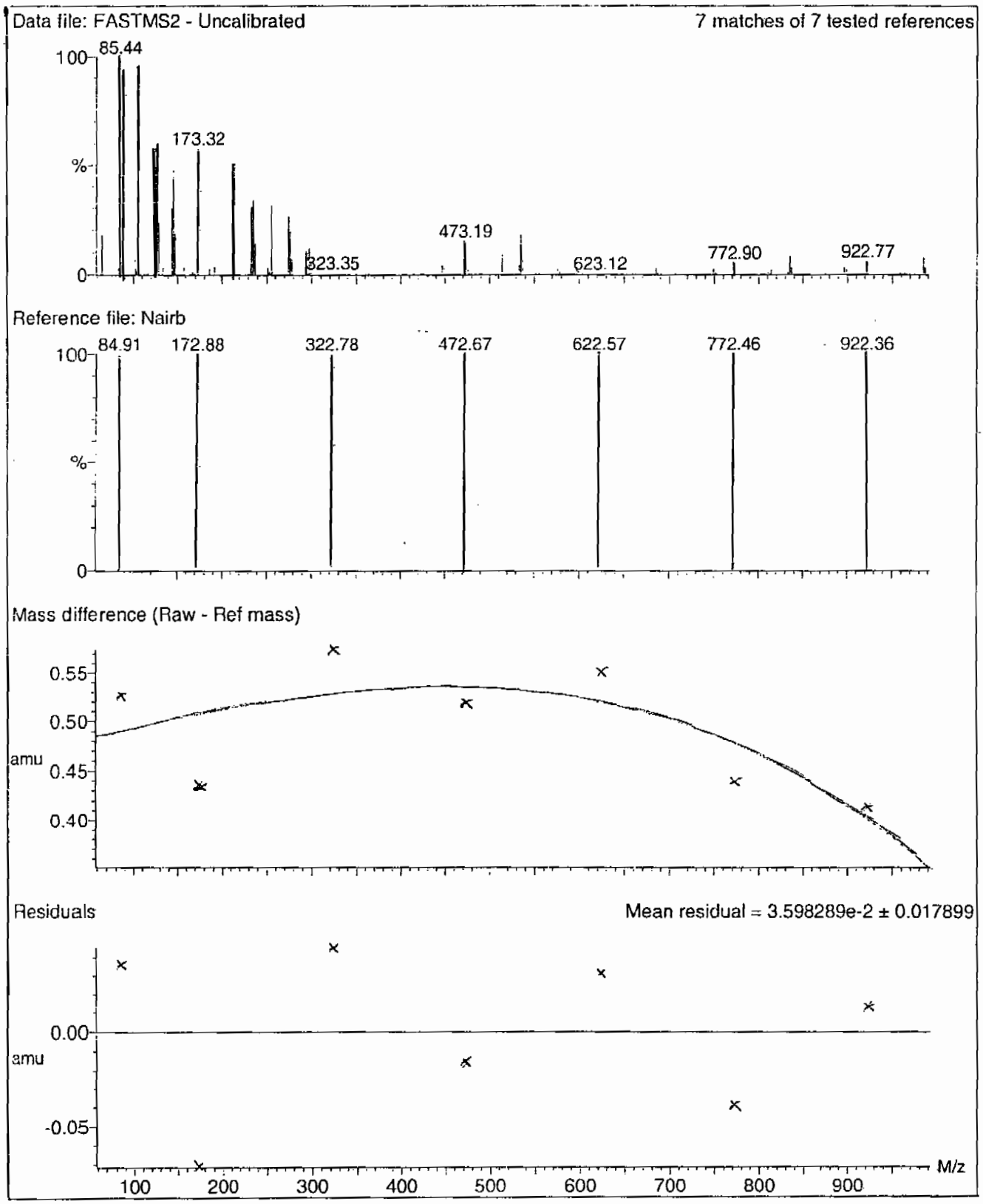

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, November 20, 2009 15:21:00 Eastern Standard Time

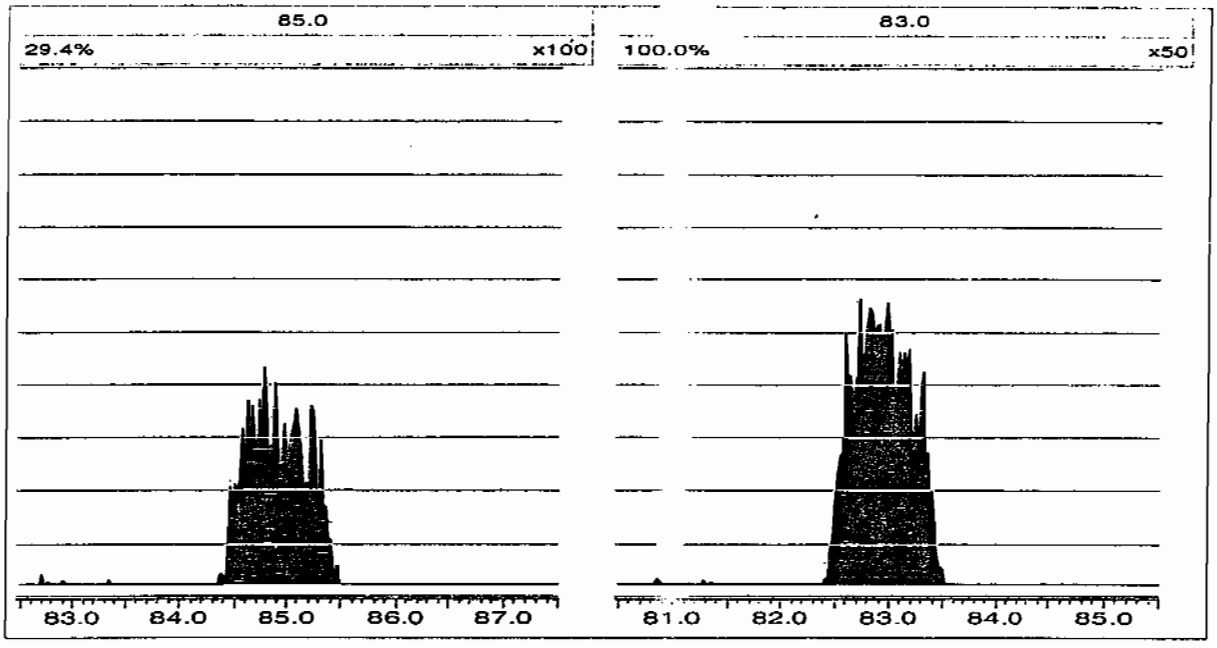

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–546

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1120006a**	**20–NOV–09**	**28311**				
Lower Area Limit			**14155.5**				
Upper Area Limit			**56622**				
1201976892	per1120012a	20–NOV–09 17:37	27838.9	1.77	1.79343	1.013	
1201976893	per1120013a	20–NOV–09 17:44	27138.9	1.77	1.78097	1.006	
1201976896	per1120014a	20–NOV–09 17:51	28574.2	1.79	1.80573	1.009	
241336001	per1120038a	20–NOV–09 20:40	28437.8	1.76	1.7685	1.005	
241336002	per1120039a	20–NOV–09 20:48	30312.5	1.76	1.7685	1.005	

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SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13770

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546

GEL Sample ID: 241336001

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.555	ug/kg	U	1	20-NOV-09 20:40	per1120038a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:40	per1120038a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	20-NOV-09 20:40	per1120038a
	Perchlorate-O(18)			5.51	ug/kg		1	20-NOV-09 20:40	per1120038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120038a
Date: 20-Nov-2009
Time: 20:40:57
ID: 241336001
Vial: 1:6,C

|LANL|924759|50103|1|

11-22-09

Perchlorate

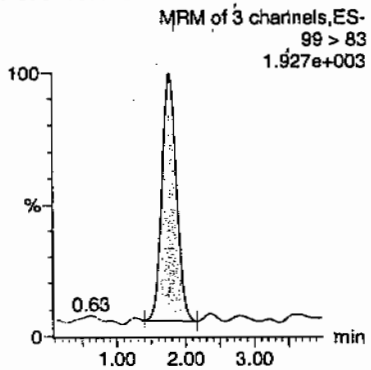

Perchlorate

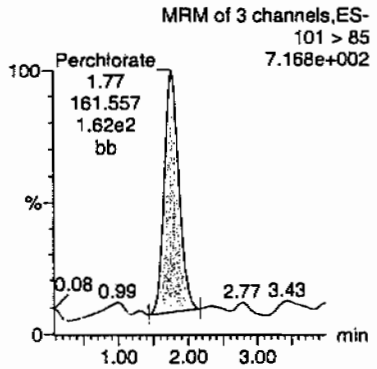

Perchlorate-101

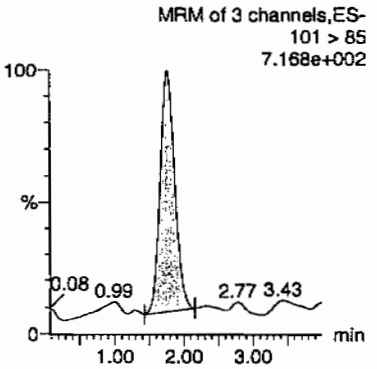

Perchlorate-O(18)

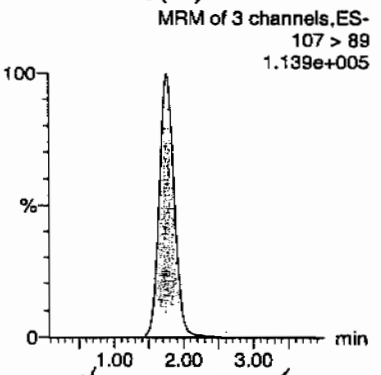

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241336001	Perchlorate	99 > 83	1.77	448.238	448.238	bb			0.0070			110.578	2.77
241336001	Perchlorate-101	101 > 85	1.77	161.557	161.557	bb			0.0075			106.872	
241336001	Perchlorate-O(18)	107 > 89	1.76	28437.809	28437.809	bb			0.4964	99.27	-0.73	2302.9...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-5897

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546

GEL Sample ID: 241336002

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	20-NOV-09 20:48	per1120039a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:48	per1120039a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	20-NOV-09 20:48	per1120039a
	Perchlorate-O(18)			5.69	ug/kg		1	20-NOV-09 20:48	per1120039a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120039a
Date: 20-Nov-2009
Time: 20:48:00
ID: 241336002
Vial: 1:6,D

| LANL | 924759 | SOL20 | 1 |

11-22-09

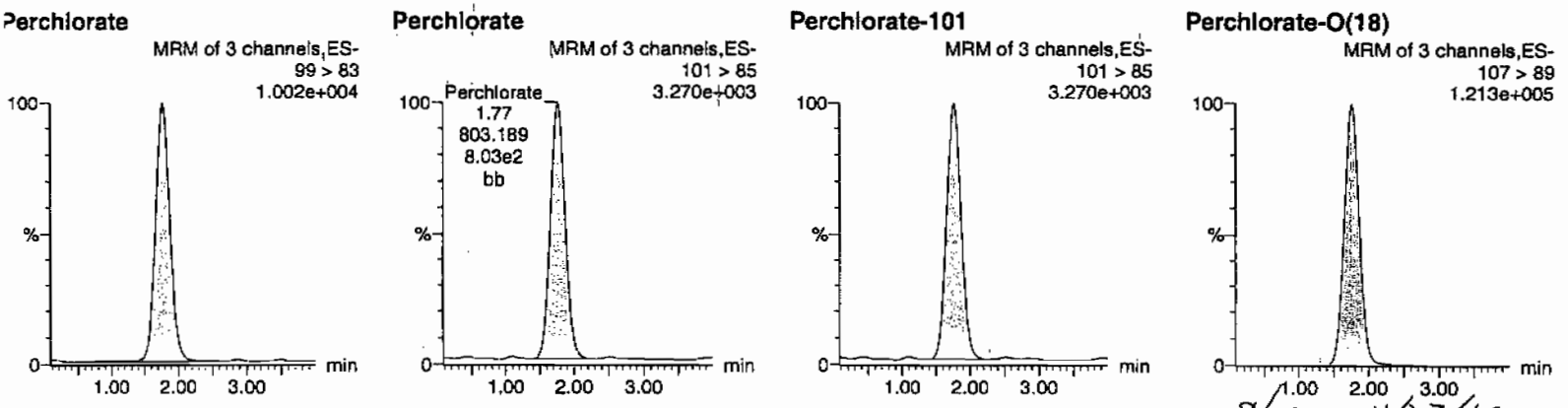

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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241336002	Perchlorate-101	101 > 85	1.77	803.189	803.189	bb			0.0374			324.108	
241336002	Perchlorate-O(18)	107 > 89	1.76	30312.502	30312.502	bb			0.5291	105.82	5.82	1337.2...	

11/23/09

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-546

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 20-NOV-09

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 64050.42

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-546

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 20-NOV-09

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 21480.02

Response Type: External Standard

Curve Type: RF

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uantify Calibration Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per112009a.mdb 21 Nov 2009 12:25:39
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112009a.cdb 21 Nov 2009 12:25:49

ompound name: Perchlorate
esponse Factor: 64050.4
RF SD: 1386.36, % Relative SD: 2.16449
esponse type: External Std, Area
urve type: RF

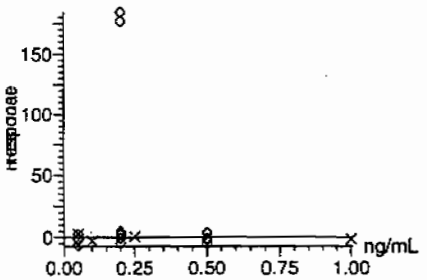

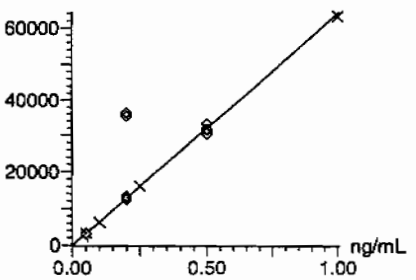

11-22-09

ompound name: Perchlorate-101
esponse Factor: 21480
RF SD: 609.561, % Relative SD: 2.8378
esponse type: External Std, Area
urve type: RF

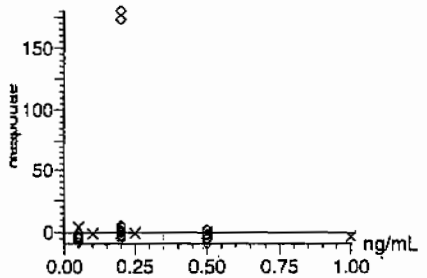

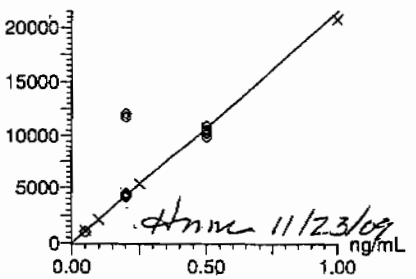

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uantify Calibration Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

ompound name: Perchlorate-O(18)
esponse Factor: 57293.3
RF SD: 1288.75, % Relative SD: 2.24938
esponse type: External Std, Area
urve type: RF

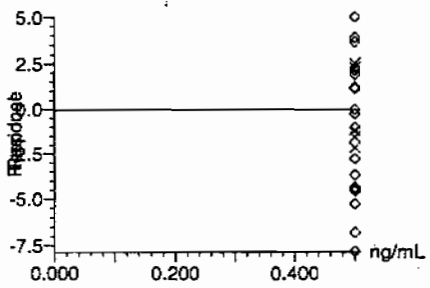

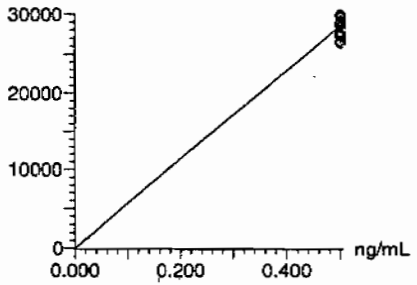

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-546

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.59	20-NOV-09 17:16	per1120009a
Perchlorate Isotope Ratio		3.03		20-NOV-09 17:16	per1120009a
Perchlorate-101	.5	.49	98.01	20-NOV-09 17:16	per1120009a

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
11-21-09

ame: per1120009a
ate: 20-Nov-2009
ime: 17:16:39
): WCL091120-06ICV
ial: 1:2,A

erchlorate

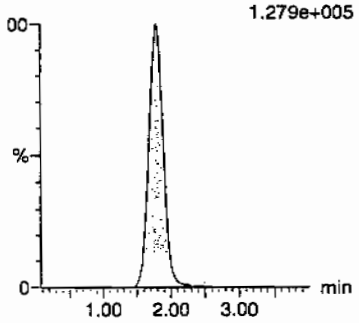

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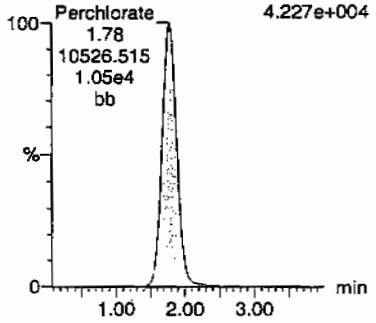

Perchlorate-101

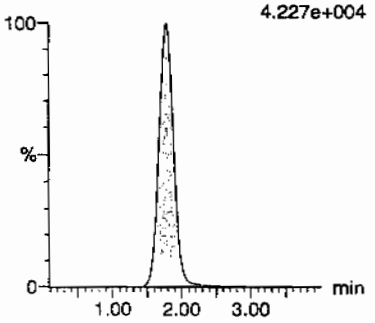

Perchlorate-O(18)

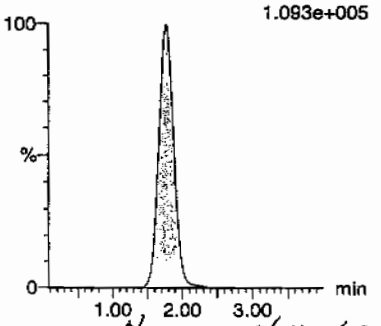

AM 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091120-06ICV	Perchlorate	99 > 83	1.78	31893.199	31893.199	bb			0.4979	99.59	-0.41	9158.5...	3.03
CL091120-06ICV	Perchlorate-101	101 > 85	1.78	10526.515	10526.515	bb			0.4901	98.01	-1.99	1967.4...	
CL091120-06ICV	Perchlorate-O(18)	107 > 89	1.77	27390.957	27390.957	bb			0.4781	95.62	-4.38	9562.7...	

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-546

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	97.87	20-NOV-09 18:48	per1120022a
Perchlorate Isotope Ratio		3.07		20-NOV-09 18:48	per1120022a
Perchlorate-101	.5	.47	94.91	20-NOV-09 18:48	per1120022a
Perchlorate	.5	.49	98.67	20-NOV-09 20:19	per1120035a
Perchlorate Isotope Ratio		3.08		20-NOV-09 20:19	per1120035a
Perchlorate-101	.5	.48	95.57	20-NOV-09 20:19	per1120035a
Perchlorate	.5	.47	94.77	20-NOV-09 21:37	per1120046a
Perchlorate Isotope Ratio		3.08		20-NOV-09 21:37	per1120046a
Perchlorate-101	.5	.46	91.75	20-NOV-09 21:37	per1120046a

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uantify Sample Report **MassLynx 4.0 SP4**
ne GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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11-22-09

ame: per1120022a
ate: 20-Nov-2009
ime: 18:48:12
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ial: 1:2,A

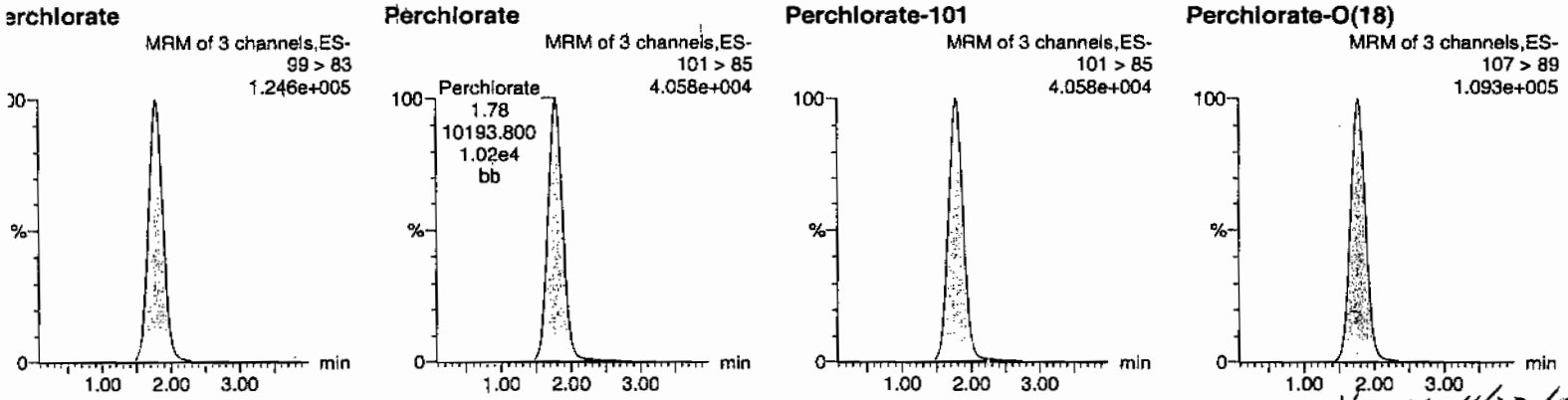

HMM 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091120-06CCV	Perchlorate	99 > 83	1.78	31341.922	31341.922	bb			0.4893	97.87	-2.13	8056.4...	3.07
CL091120-06CCV	Perchlorate-101	101 > 85	1.78	10193.800	10193.800	bb			0.4746	94.91	-5.09	3510.7...	
CL091120-06CCV	Perchlorate-O(18)	107 > 89	1.77	27360.660	27360.660	bb			0.4776	95.51	-4.49	8210.7...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

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Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
11-22-09

Name: per1120035a
Date: 20-Nov-2009
Time: 20:19:48
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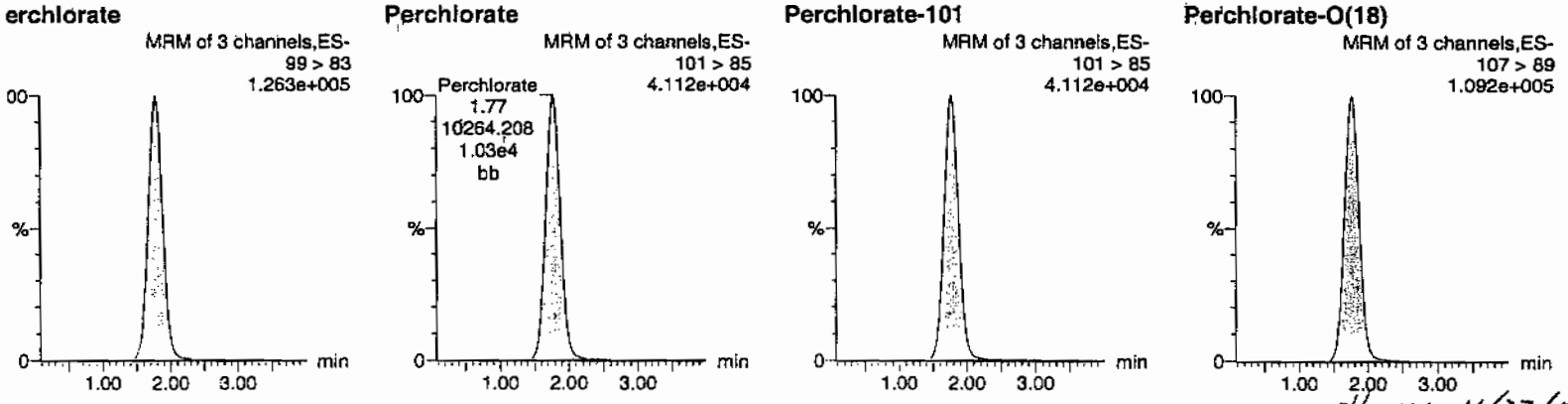

HMM 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.77	31599.609	31599.609	bb			0.4934	98.67	-1.33	4575.6...	3.08
WCL091120-06CCV	Perchlorate-101	101 > 85	1.77	10264.208	10264.208	bb			0.4778	95.57	-4.43	9270.9...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.76	27401.268	27401.268	bb			0.4783	95.65	-4.35	4666.1...	

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
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11-22-09

ame: per1120046a
ate: 20-Nov-2009
ime: 21:37:23
): WCL091120-06CCV
ial: 1:2,A

erchlorate

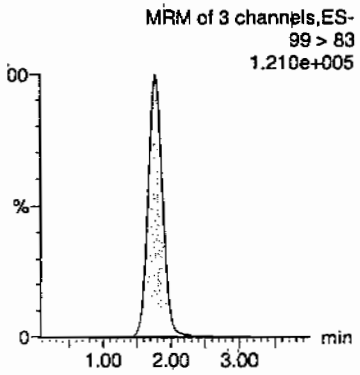

Perchlorate

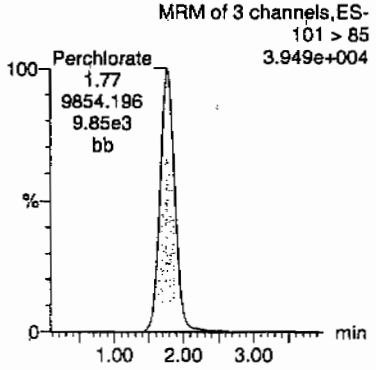

Perchlorate-101

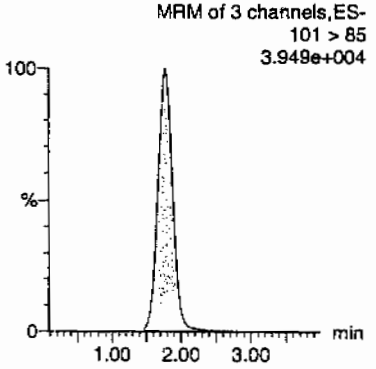

Perchlorate-O(18)

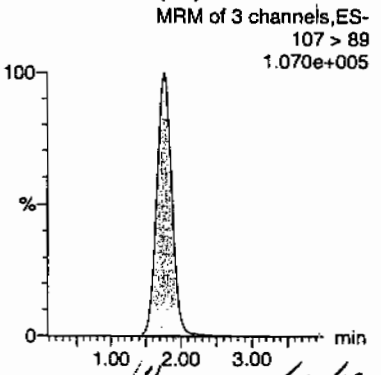

HMM 11/23/09

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL091120-06CCV	Perchlorate	99 > 83	1.77	30349.555	30349.555	bb			0.4738	94.77	-5.23	7315.3...	3.08
/CL091120-06CCV	Perchlorate-101	101 > 85	1.77	9854.196	9854.196	bb			0.4588	91.75	-8.25	3944.7...	
/CL091120-06CCV	Perchlorate-O(18)	107 > 89	1.76	26702.354	26702.354	bb			0.4661	93.21	-6.79	4973.5...	

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–546

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.91	20–NOV–09 17:30	per1120011a
Perchlorate Isotope Ratio		3.02		20–NOV–09 17:30	per1120011a
Perchlorate–101	.05	.05	96.56	20–NOV–09 17:30	per1120011a
Perchlorate	.05	.05	93.61	20–NOV–09 19:02	per1120024a
Perchlorate Isotope Ratio		3.03		20–NOV–09 19:02	per1120024a
Perchlorate–101	.05	.05	92.25	20–NOV–09 19:02	per1120024a
Perchlorate	.05	.05	98.72	20–NOV–09 20:33	per1120037a
Perchlorate Isotope Ratio		3.04		20–NOV–09 20:33	per1120037a
Perchlorate–101	.05	.05	96.92	20–NOV–09 20:33	per1120037a
Perchlorate	.05	.05	98.24	20–NOV–09 21:51	per1120048a
Perchlorate Isotope Ratio		3.09		20–NOV–09 21:51	per1120048a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–546

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate–101	.05	.05	94.79	20–NOV–09 21:51	per1120048a

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
ow
11-22-09

ame: per1120011a
ate: 20-Nov-2009
ime: 17:30:44
): WCL091120-07CRI
lal: 1:2,B

erchlorate

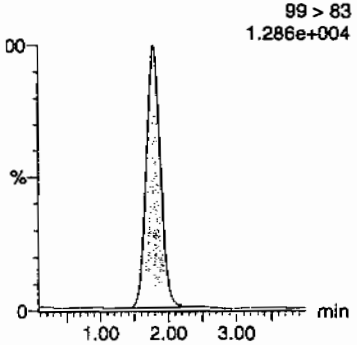

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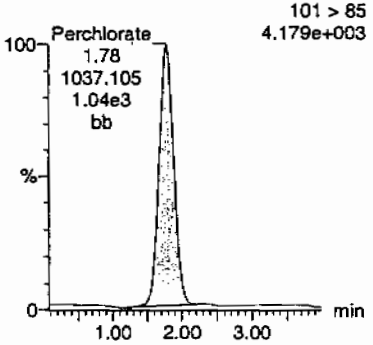

Perchlorate-101

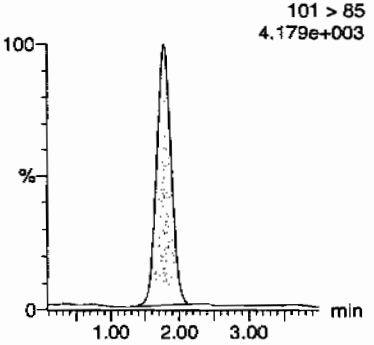

Perchlorate-O(18)

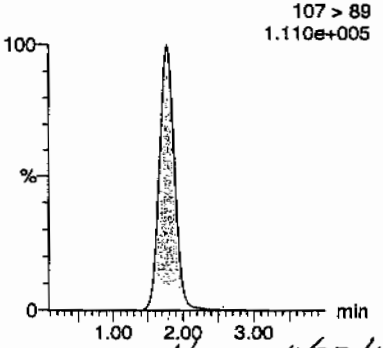

HMW 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091120-07CRI	Perchlorate	99 > 83	1.78	3135.594	3135.594	bb			0.0490	97.91	-2.09	468.931	3.02
CL091120-07CRI	Perchlorate-101	101 > 85	1.78	1037.105	1037.105	bb			0.0483	96.56	-3.44	983.251	
CL091120-07CRI	Perchlorate-O(18)	107 > 89	1.77	27854.799	27854.799	bb			0.4862	97.24	-2.76	3676.6...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

11-22-09

Name: per1120024a
Date: 20-Nov-2009
Time: 19:02:17
ID: WCL091120-07CRI
Vial: 1:2,B

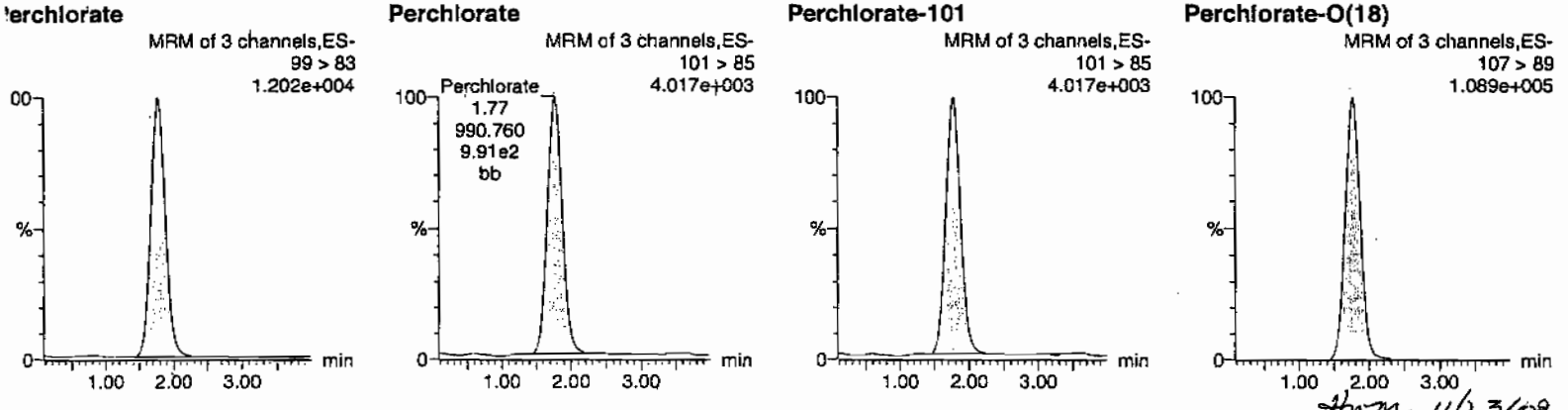

11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.77	2997.856	2997.856	bb			0.0468	93.61	-6.39	613.183	3.03
WCL091120-07CRI	Perchlorate-101	101 > 85	1.77	990.760	990.760	bb			0.0461	92.25	-7.75	487.680	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.77	27410.371	27410.371	bb			0.4784	95.68	-4.32	991.364	

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The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

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Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
CW
11-21-09

Name: per1120037a
Date: 20-Nov-2009
Time: 20:33:53
ID: WCL091120-07CRI
Vial: 1:2,B

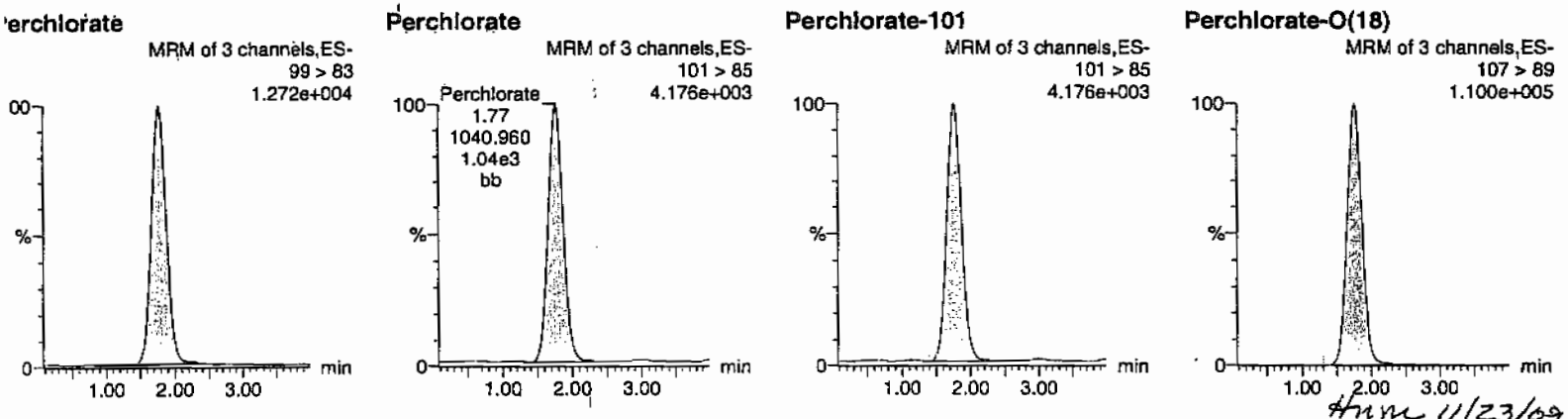

Hm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL091120-07CRI	Perchlorate	99 > 83	1.77	3161.534	3161.534	bb			0.0494	98.72	-1.28	1012.3...	3.04
/CL091120-07CRI	Perchlorate-101	101 > 85	1.77	1040.960	1040.960	bb			0.0485	96.92	-3.08	411.517	
/CL091120-07CRI	Perchlorate-O(18)	107 > 89	1.76	27600.906	27600.906	bb			0.4817	96.35	-3.65	8086.4...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
11-22-09

Name: per1120048a
Date: 20-Nov-2009
Time: 21:51:43
ID: WCL091120-07CRI
Vial: 1:2,B

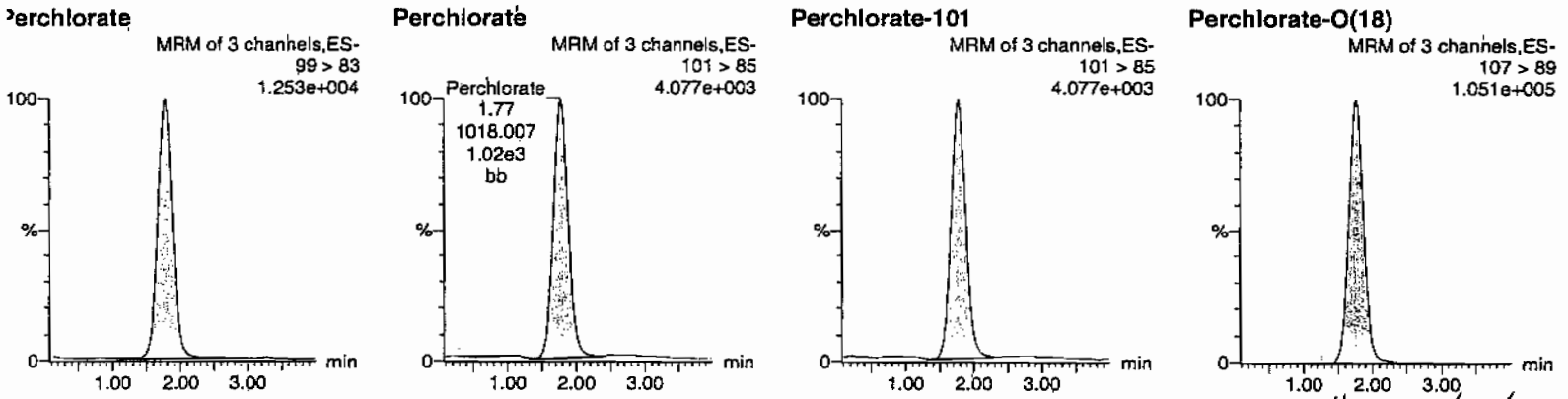

Hnm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.77	3146.271	3146.271	bb			0.0491	98.24	-1.76	814.125	3.09
WCL091120-07CRI	Perchlorate-101	101 > 85	1.77	1018.007	1018.007	bb			0.0474	94.79	-5.21	799.564	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.76	26411.518	26411.518	bb			0.4610	92.20	-7.80	10001....	

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QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 20-NOV-09

GEL Job No (SDG): 10-546

GEL Sample ID: 1201976892

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	20-NOV-09 17:37	per1120012a
	Perchlorate Isotope Ratio						1	20-NOV-09 17:37	per1120012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	20-NOV-09 17:37	per1120012a
	Perchlorate-O(18)			4.86	ug/kg		1	20-NOV-09 17:37	per1120012a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120012a
Date: 20-Nov-2009
Time: 17:37:48
ID: 1201976892
Vial: 1:3,A

|LANL|924759|3020|MB|1|

CWW
11-22-09

Perchlorate

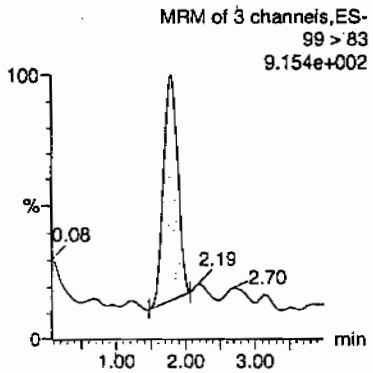

Perchlorate

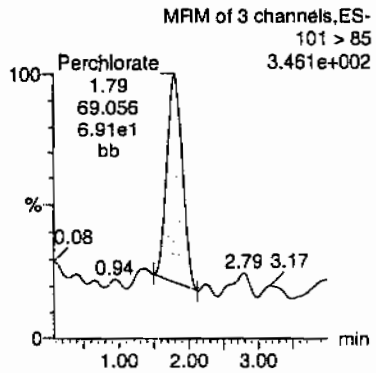

Perchlorate-101

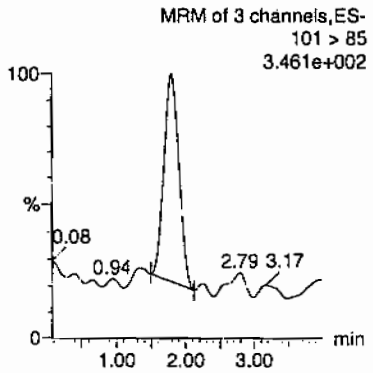

Perchlorate-O(18)

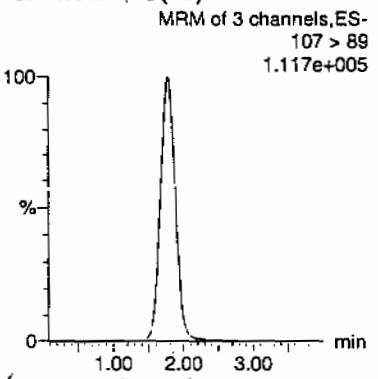

Hmc 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976892	Perchlorate	99 > 83	1.79	186.294	186.294	bb			0.0029			67.872	2.70
1201976892	Perchlorate-101	101 > 85	1.79	69.056	69.056	bb			0.0032			15.332	
1201976892	Perchlorate-O(18)	107 > 89	1.77	27838.857	27838.857	bb			0.4859	97.18	-2.82	5111.8...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 20–NOV–09

GEL Job No (SDG): 10–546

GEL Sample ID: 1201976893

Date Filtered: 20–NOV–09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.5	2	1.98	ug/kg	J	1	20–NOV–09 17:44	per1120013a
	Perchlorate Isotope Ratio			3.04			1	20–NOV–09 17:44	per1120013a
14797–73–0	Perchlorate–101	.5	2	1.94	ug/kg	J	1	20–NOV–09 17:44	per1120013a
	Perchlorate–O(18)			4.74	ug/kg		1	20–NOV–09 17:44	per1120013a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120013a
Date: 20-Nov-2009
Time: 17:44:51
ID: 1201976893
Vial: 1:3,B

|LANL|924754|50020|LCS|1|

CWW 11-22-09

Perchlorate

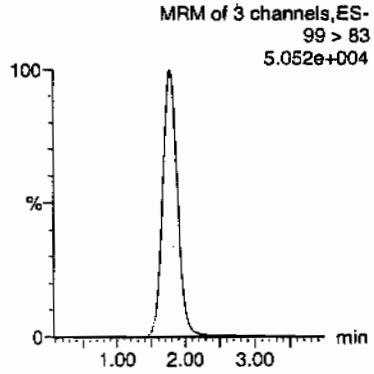

Perchlorate

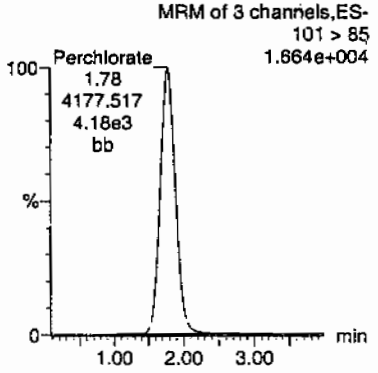

Perchlorate-101

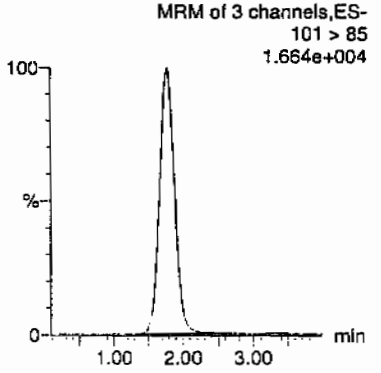

Perchlorate-O(18)

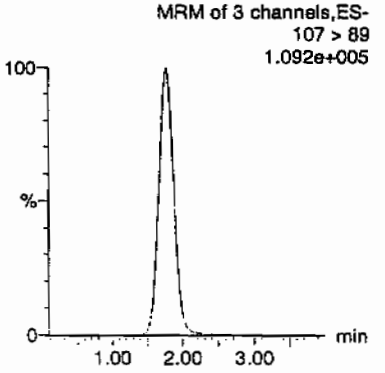

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976893	Perchlorate	99 > 83	1.78	12700.790	12700.790	bb			0.1983	99.15	-0.85	1874.7...	3.04
1201976893	Perchlorate-101	101 > 85	1.78	4177.517	4177.517	bb			0.1945	97.24	-2.76	564.736	
1201976893	Perchlorate-O(18)	107 > 89	1.77	27138.947	27138.947	bb			0.4737	94.74	-5.26	11258....	

$\frac{12700.790}{64050.4} = 0.1983$

HMC 11/23/09

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 924758 **Verified by:** _____

Analyst: Jareth Shirley **Lab SOP:** GL-OA-E-067 REV# 6

Method: SW846 6850 Modified **Instrument:** MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201976892 MB	20-NOV-2009 13:35:20	2	20	10
1201976893 LCS	20-NOV-2009 13:35:20	2	20	10
241180001	20-NOV-2009 13:35:20	2	20	10
241180002	20-NOV-2009 13:35:20	2	20	10
241180003	20-NOV-2009 13:35:20	2	20	10
241322001	20-NOV-2009 13:35:20	2	20	10
1201976894 MS (241322001)	20-NOV-2009 13:35:20	2	20	10
1201976895 MSD (241322001)	20-NOV-2009 13:35:20	2	20	10
241322002	20-NOV-2009 13:35:20	2	20	10
241322003	20-NOV-2009 13:35:20	2	20	10
241322004	20-NOV-2009 13:35:20	2	20	10
241322005	20-NOV-2009 13:35:20	2	20	10
241322006	20-NOV-2009 13:35:20	2	20	10
241322007	20-NOV-2009 13:35:20	2	20	10
241322008	20-NOV-2009 13:35:20	2	20	10
241322009	20-NOV-2009 13:35:20	2	20	10
241322010	20-NOV-2009 13:35:20	2	20	10
241322011	20-NOV-2009 13:35:20	2	20	10
241322012	20-NOV-2009 13:35:20	2	20	10
241336001	20-NOV-2009 13:35:20	2	20	10
241336002	20-NOV-2009 13:35:20	2	20	10
1201976896 ICS	20-NOV-2009 13:35:20	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201976896	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL
LCS	1201976893	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL
MS	1201976894	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL
MSD	1201976895	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL

Comments:

Desalting cartridges used: 090914-1-H & 090817-1-Ba

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 11/20/09
Extr. Injection Volume: 20uL
Sequence Number: per112009a
Initial Calibration Date: 11/20/09

Method: EPA 6850-Modified
Int. Std.: UCL090612-01.2
Mobile Phase Lot#: 1191829, 1197509
Standard-Samp Reagent Lot#:: 1197509

Reviewed BY: [illegible]
Date: 11/23/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091120-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1120001a	IPB001	CWW	11/20/2009 16:20			1		USE	B
per1120002a	IPB001	CWW	11/20/2009 16:27			1		USE	B
per1120003a	WCLICAL-01	CWW	11/20/2009 16:34			1		USE	I
per1120004a	WCLICAL-02	CWW	11/20/2009 16:41			1		USE	I
per1120005a	WCLICAL-03	CWW	11/20/2009 16:48			1		USE	I
per1120006a	WCLICAL-04	CWW	11/20/2009 16:55			1		USE	I
per1120007a	WCLICAL-05	CWW	11/20/2009 17:02			1		USE	I
per1120008a	IPB002	CWW	11/20/2009 17:09			1		USE	B
per1120009a	WCLICV	CWW	11/20/2009 17:16			1		USE	C
per1120010a	IPB003	CWW	11/20/2009 17:23			1		USE	B
per1120011a	WCLCRI	CWW	11/20/2009 17:30			1		USE	C
per1120012a	1201976892	CWW	11/20/2009 17:37	924759	VARIOUS	1	LANL	USE	S
per1120013a	1201976893	CWW	11/20/2009 17:44	924759	VARIOUS	1	LANL	USE	S
per1120014a	1201976896	CWW	11/20/2009 17:51	924759	VARIOUS	1	LANL	USE	S
per1120015a	241180001	CWW	11/20/2009 17:58	924759	10-520	1	LANL	USE	S
per1120016a	241180002	CWW	11/20/2009 18:05	924759	10-520	1	LANL	USE	S
per1120017a	241180003	CWW	11/20/2009 18:12	924759	10-520	1	LANL	USE	S
per1120018a	241322001	CWW	11/20/2009 18:20	924759	10-544	1	LANL	USE	S
per1120019a	1201976894	CWW	11/20/2009 18:27	924759	10-544	1	LANL	USE	S
per1120020a	1201976895	CWW	11/20/2009 18:34	924759	10-544	1	LANL	USE	S
per1120021a	241322002	CWW	11/20/2009 18:41	924759	10-544	1	LANL	USE	S
per1120022a	WCLCCV	CWW	11/20/2009 18:48			1		USE	C
per1120023a	IPB004	CWW	11/20/2009 18:55			1		USE	B
per1120024a	WCLCRI	CWW	11/20/2009 19:02			1		USE	C
per1120025a	241322003	CWW	11/20/2009 19:09	924759	10-544	1	LANL	USE	S
per1120026a	241322004	CWW	11/20/2009 19:16	924759	10-544	1	LANL	USE	S
per1120027a	241322005	CWW	11/20/2009 19:23	924759	10-544	1	LANL	USE	S
per1120028a	241322006	CWW	11/20/2009 19:30	924759	10-544	1	LANL	USE	S
per1120029a	241322007	CWW	11/20/2009 19:37	924759	10-544	1	LANL	USE	S

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per1120030a	241322008	CWW	11/20/2009 19:44	924759	10-544	1	LANL	USE	S
per1120031a	241322009	CWW	11/20/2009 19:51	924759	10-544	1	LANL	USE	S
per1120032a	241322010	CWW	11/20/2009 19:58	924759	10-544	1	LANL	USE	S
per1120033a	241322011	CWW	11/20/2009 20:05	924759	10-544	1	LANL	USE	S
per1120034a	241322012	CWW	11/20/2009 20:12	924759	10-544	1	LANL	USE	S
per1120035a	WCLCCV	CWW	11/20/2009 20:19			1		USE	C
per1120036a	IPB005	CWW	11/20/2009 20:26			1		USE	B
per1120037a	WCLCRI	CWW	11/20/2009 20:33			1		USE	C
per1120038a	241336001	CWW	11/20/2009 20:40	924759	10-546	1	LANL	USE	S
per1120039a	241336002	CWW	11/20/2009 20:48	924759	10-546	1	LANL	USE	S
per1120040a	IPB006	CWW	11/20/2009 20:55			1		USE	B
per1120041a	1201977650	CWW	11/20/2009 21:02	925084	VARIOUS	1	LANL	USE	S
per1120042a	1201977651	CWW	11/20/2009 21:09	925084	VARIOUS	1	LANL	USE	S
per1120043a	1201977659	CWW	11/20/2009 21:16	925084	VARIOUS	1	LANL	USE	S
per1120044a	240744001	CWW	11/20/2009 21:23	925084	10-411	200	LANL	USE	S
per1120045a	240744004	CWW	11/20/2009 21:30	925084	10-411	200	LANL	USE	S
per1120046a	WCLCCV	CWW	11/20/2009 21:37			1		USE	C
per1120047a	IPB007	CWW	11/20/2009 21:44			1		USE	B
per1120048a	WCLCRI	CWW	11/20/2009 21:51			1		USE	C
per1120049a	240744006	CWW	11/20/2009 21:58	925084	10-411	1	LANL	USE	S
per1120050a	1201977652	CWW	11/20/2009 22:05	925084	10-411	1	LANL	USE	S
per1120051a	1201977653	CWW	11/20/2009 22:13	925084	10-411	1	LANL	USE	S
per1120052a	240750002	CWW	11/20/2009 22:20	925084	10-417	4	LANL	USE	S
per1120053a	240811002	CWW	11/20/2009 22:27	925084	10-423	1	LANL	USE	S
per1120054a	240811004	CWW	11/20/2009 22:34	925084	10-423	1	LANL	USE	S
per1120055a	240815001	CWW	11/20/2009 22:41	925084	10-430	10	LANL	USE	S
per1120056a	240867003	CWW	11/20/2009 22:48	925084	10-446	1	LANL	USE	S
per1120057a	240869001	CWW	11/20/2009 22:55	925084	10-447	10	LANL	USE	S
per1120058a	240869004	CWW	11/20/2009 23:02	925084	10-447	20	LANL	USE	S
per1120059a	WCLCCV	CWW	11/20/2009 23:09			1		USE	C
per1120060a	IPB008	CWW	11/20/2009 23:16			1		USE	B
per1120061a	WCLCRI	CWW	11/20/2009 23:23			1		USE	C
per1120062a	241023002	CWW	11/20/2009 23:30	925084	10-452	1	LANL	USE	S
per1120063a	241023004	CWW	11/20/2009 23:37	925084	10-452	1	LANL	USE	S
per1120064a	241100001	CWW	11/20/2009 23:44	925084	10-483	1	LANL	USE	S
per1120065a	241100003	CWW	11/20/2009 23:51	925084	10-483	2	LANL	USE	S
per1120066a	241104001	CWW	11/20/2009 23:58	925084	10-485-1	1	LANL	USE	S

per1120067a	1201977666	CWW	11/21/2009 0:05	925084	10-485-1	1	LANL	USE	S
per1120068a	1201977667	CWW	11/21/2009 0:13	925084	10-485-1	1	LANL	USE	S
per1120069a	241104002	CWW	11/21/2009 0:20	925084	10-485-1	1	LANL	USE	S
per1120070a	241113002	CWW	11/21/2009 0:27	925084	10-494	1	LANL	USE	S
per1120071a	241113003	CWW	11/21/2009 0:34	925084	10-494	1	LANL	USE	S
per1120072a	WCLCCV	CWW	11/21/2009 0:41			1		USE	C
per1120073a	IPB009	CWW	11/21/2009 0:48			1		USE	B
per1120074a	WCLCRI	CWW	11/21/2009 0:55			1		USE	C

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ıst Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

ame: per1120019a
ate: 20-Nov-2009
me: 18:27:04
: 1201976894
al: 1:4,B

|LANL|924759|50620|MS|1|

11-22-09

erchlorate

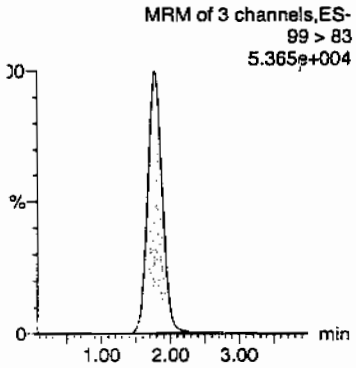

Perchlorate

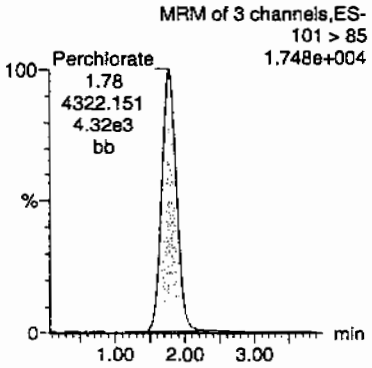

Perchlorate-101

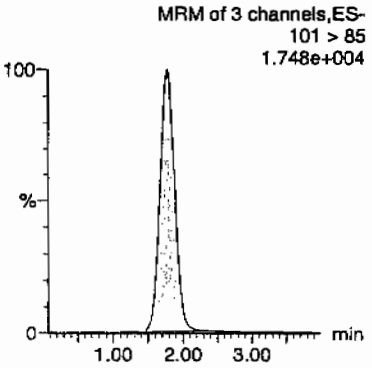

Perchlorate-O(18)

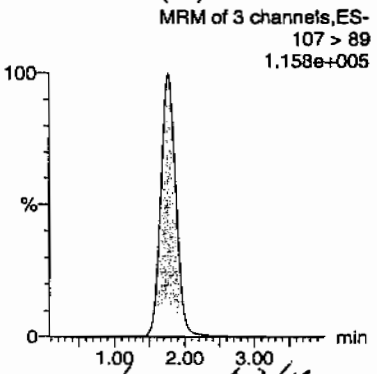

11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
201976894	Perchlorate	99 > 83	1.78	13304.989	13304.989	bb			0.2077	103.86	3.86	5855.1...	3.08
201976894	Perchlorate-101	101 > 85	1.78	4322.151	4322.151	bb			0.2012	100.61	0.61	2441.1...	
201976894	Perchlorate-O(18)	107 > 89	1.77	28978.936	28978.936	bb			0.5058	101.16	1.16	12898....	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

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ate: 20-Nov-2009
ime: 18:34:07
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|LANL|924759|50120|MSD|11|

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erchlorate

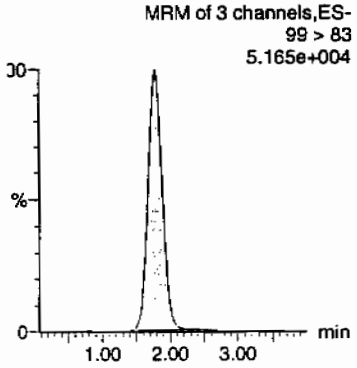

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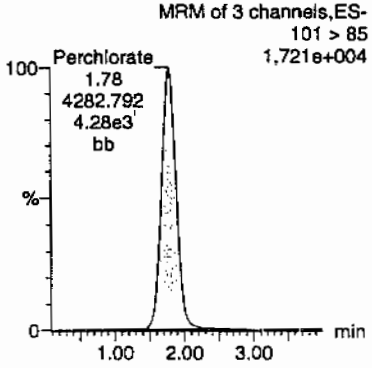

Perchlorate-101

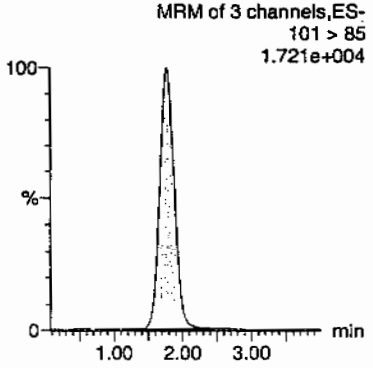

Perchlorate-O(18)

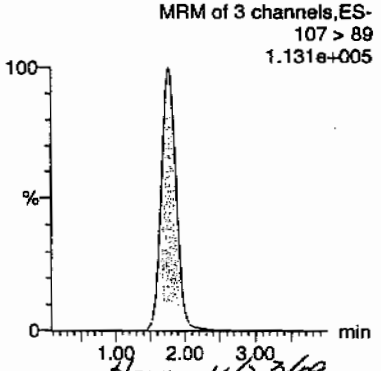

Hmm 11/23/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
201976895	Perchlorate	99 > 83	1.78	12772.271	12772.271	bb			0.1994	99.70	-0.30	3294.7...	2.98
201976895	Perchlorate-101	101 > 85	1.78	4282.792	4282.792	bb			0.1994	99.69	-0.31	1403.2...	
201976895	Perchlorate-O(18)	107 > 89	1.77	28359.275	28359.275	bb			0.4950	99.00	-1.00	9719.9...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-546-1

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	926862
Prep Batch Number:	926861

Sample Analysis

Sample ID	Client ID
241337001	RE03-10-5530
241337002	RE03-10-5527
1201981688	Interference Check Sample (ICS)
1201981682	Method Blank (MB)
1201981683	Laboratory Control Sample (LCS)
1201981686	241612001(RE03-10-7037) Matrix Spike (MS)
1201981687	241612001(RE03-10-7037) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

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CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Client sample 241612001 (RE03-10-7037) from SDG 10-642-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

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Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M Maier **Date:** 12/05/09

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-5530

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 241337001

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:52	per1127032a
	Perchlorate Isotope Ratio						1	27-NOV-09 15:52	per1127032a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:52	per1127032a
	Perchlorate-O(18)			0.479	ug/L		1	27-NOV-09 15:52	per1127032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-5527

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 241337002

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 16:00	per1127033a
	Perchlorate Isotope Ratio						1	27-NOV-09 16:00	per1127033a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 16:00	per1127033a
	Perchlorate-O(18)			0.474	ug/L		1	27-NOV-09 16:00	per1127033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-546-1

Extract Batch Code: 926861

Date Filtered: 25-NOV-09

Matrix: GROUND WATER

Sample ID: 1201981683

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.196	ug/L	97.8		85 – 115
Perchlorate Isotope Ratio		3				–
Perchlorate-101	0.200	.193	ug/L	96.6		85 – 115
Perchlorate-O(18)		.474	ug/L			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–546–1

Extract Batch Code: 926861

Date Filtered: 25–NOV–09

Matrix: WATER

Sample ID: 1201981688

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.203	ug/L	102		70 – 130
Perchlorate Isotope Ratio		2.9				
Perchlorate–101	0.200	.208	ug/L	104		70 – 130
Perchlorate–O(18)		.522	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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EL Group, LLC Analyst: Michael A. Penny

:et: C:\MassLynx\Perchlorate.PRO\per112709a.qld

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d: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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01981688 | LANE | 926862 | GEO | IOS | 1 |
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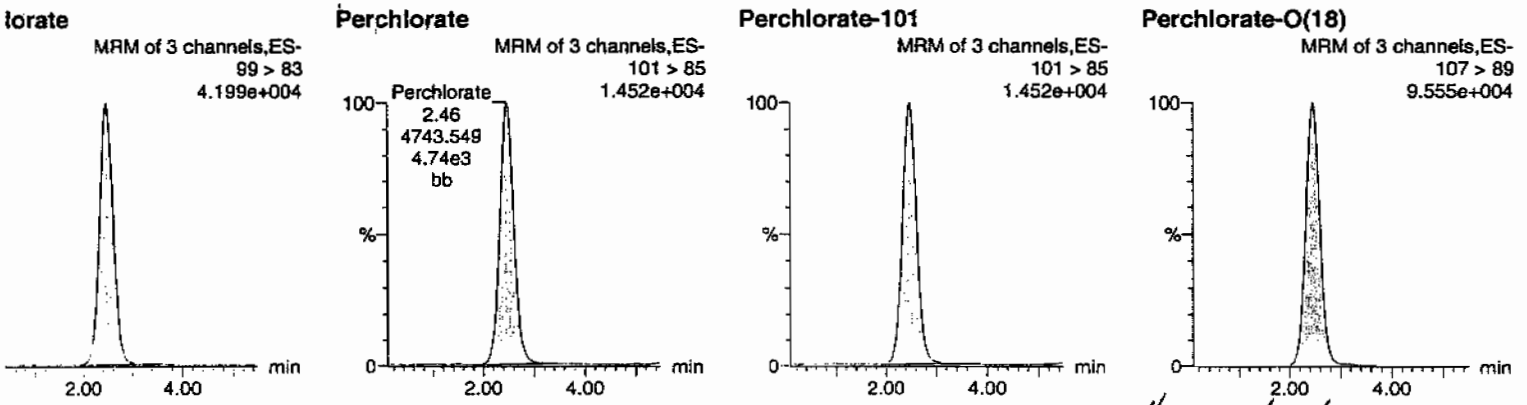

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	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
31688	Perchlorate	99 > 83	2.48	13757.928	13757.928	bb			0.2034	101.71	1.71	2301.0...	2.90
31688	Perchlorate-101	101 > 85	2.46	4743.549	4743.549	bb			0.2077	103.84	3.84	999.711	
31688	Perchlorate-O(18)	107 > 89	2.46	31523.852	31523.852	bb			0.5216	104.33	4.33	4825.0...	

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-546-1

Extract Batch Code: 926861

Date Extracted: 25-NOV-09

GEL MS/PS ID: 1201981686

Client ID: RE03-10-7037

GEL MSD/PSD ID: 1201981687

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.000872	ug/L	0.189	93.9	.199	98.8	5.06	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.05		3.03		0		–
Perchlorate-101	0.200	0.00	ug/L	0.184	91.8	.194	97.1	5.65	30	75 – 125
Perchlorate-O(18)	0	0.469	ug/L	0.472		.474		.438		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-546-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	27-NOV-09	per1127001a	IPB001
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127001a	IPB001
Perchlorate	0.00	0	NA	27-NOV-09	per1127002a	IPB001
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127002a	IPB001

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ify Sample Report MassLynx 4.0 SP4
EL Group, LLC Analyst: Michael A. Penny

et: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ltered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
d: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

d: C:\MassLynx\Perchlorate.PRO\MethDB\per112709a.mdb 27 Nov 2009 12:37:59
ation: C:\MassLynx\Perchlorate.PRO\CurveDB\per112709a.cdb 28 Nov 2009 09:29:21

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27-Nov-2009
11:27:26
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MMP 11/28/09

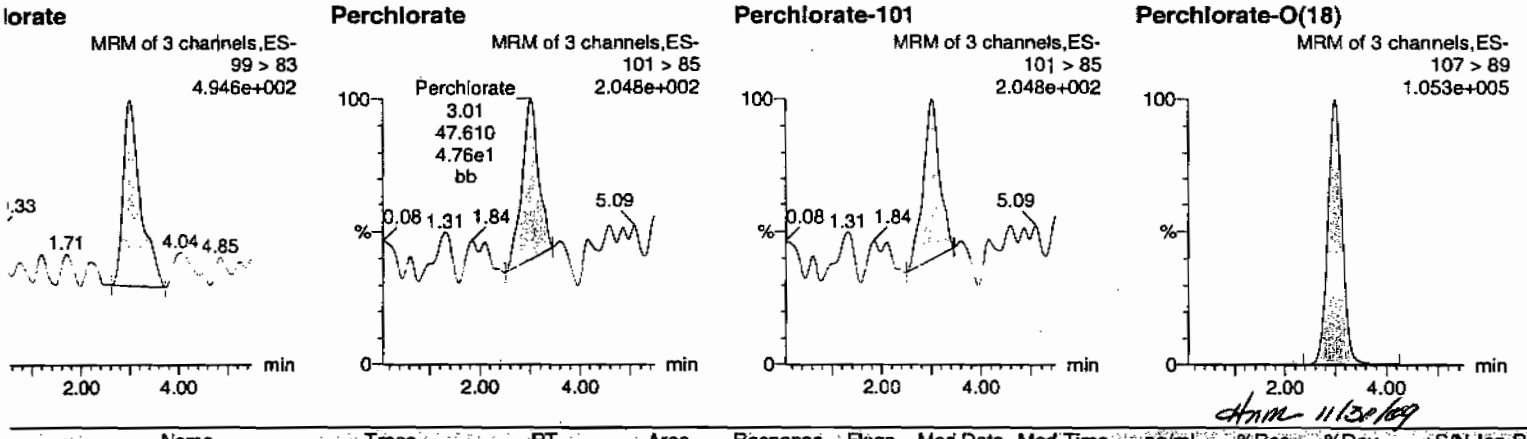

dmm 11/30/09

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.01	142.772	142.772	bb			0.0021			12.725	3.00
Perchlorate-101	101 > 85	3.01	47.610	47.610	bb			0.0021			10.521	
Perchlorate-O(18)	107 > 89	3.00	34610.707	34610.707	bb			0.5727	114.54	14.54	2958.7...	

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ify Sample Report MassLynx 4.0 SP4
EL Group, LLC Analyst: Michael A. Penny

:t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

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l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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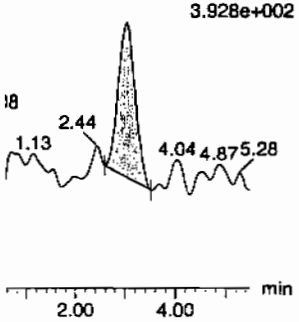

Perchlorate

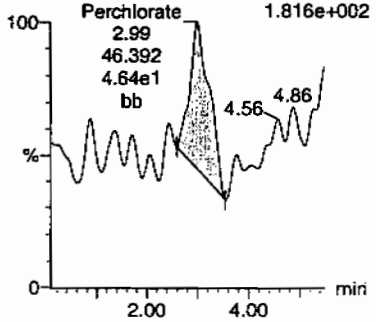

Perchlorate-101

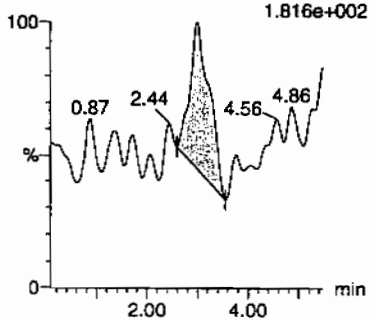

Perchlorate-O(18)

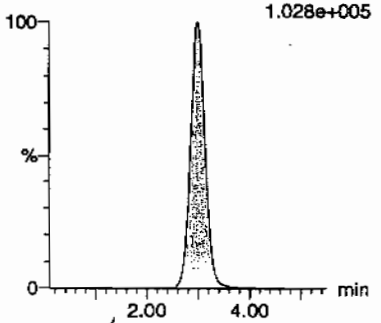

dhm 11/30

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.05	91.043	91.043	bb			0.0013			7.119	1.96
Perchlorate-101	101 > 85	2.99	46.392	46.392	bb			0.0020			4.431	
Perchlorate-O(18)	107 > 89	3.00	33834.148	33834.148	bb			0.5599	111.97	11.97	2112.1...	

)P GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-546-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	27-NOV-09	per1127008a	IPB002
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127008a	IPB002
Perchlorate	0.00	0	NA	27-NOV-09	per1127010a	IPB003
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127010a	IPB003
Perchlorate	0.00	0	NA	27-NOV-09	per1127021a	IPB004
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127021a	IPB004
Perchlorate	0.00	0	NA	27-NOV-09	per1127027a	IPB005
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127027a	IPB005
Perchlorate	0.00	0	NA	27-NOV-09	per1127039a	IPB006
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127039a	IPB006

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it: C:\MassLynx\Perchlorate.PRO\per112709a.qld

tered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127008a
27-Nov-2009
12:27:06
1002
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MMT 11/28/09

orate

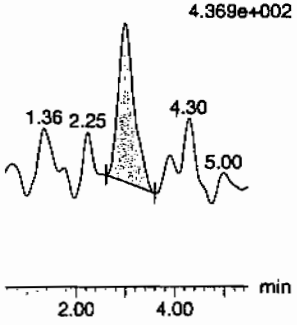

Perchlorate

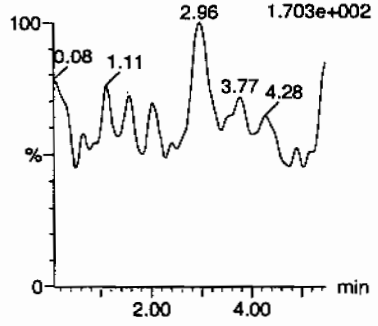

Perchlorate-101

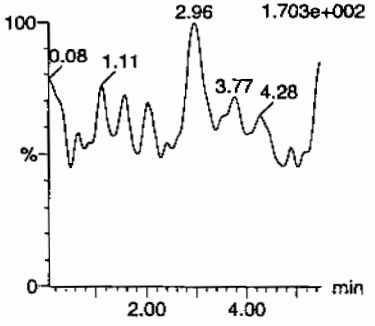

Perchlorate-O(18)

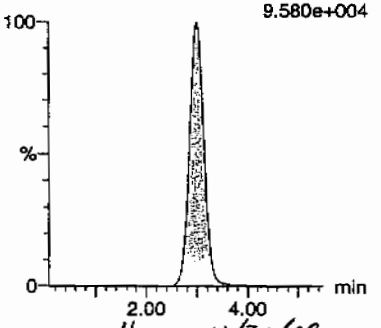

Hmm 11/30/09

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.02	101.601	101.601	bb			0.0015			8.596	0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.00	31692.451	31692.451	bb			0.5244	104.89	4.89	3323.1...	

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ify Sample Report MassLynx 4.0 SP4
EL Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

tered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127010a
27-Nov-2009
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3003
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LMP 11/28/09

orate

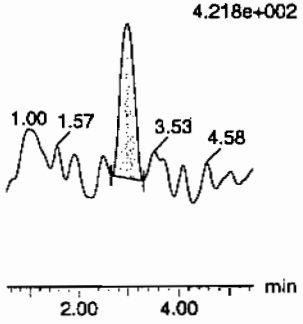

Perchlorate

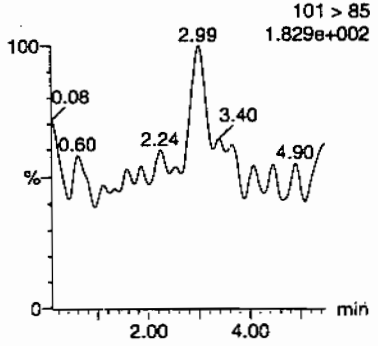

Perchlorate-101

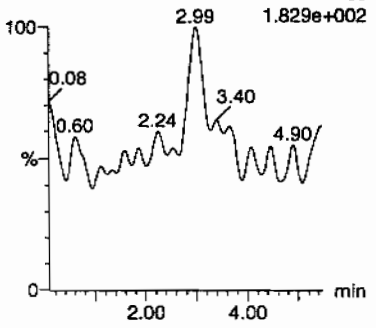

Perchlorate-O(18)

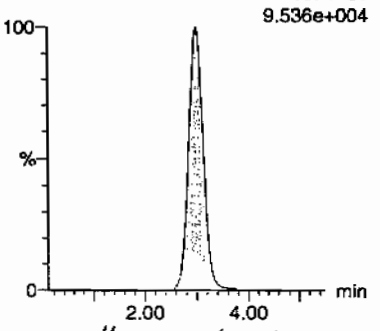

dtm 11/30/09

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.02	79.958	79.958	bb			0.0012			13.832	0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	2.99	31328.656	31328.656	bb			0.5184	103.68	3.68	11321....	

OP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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fy Sample Report MassLynx 4.0 SP4
:L Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
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per1127021a
7-Nov-2009
14:18:12
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MAT 11/18/09

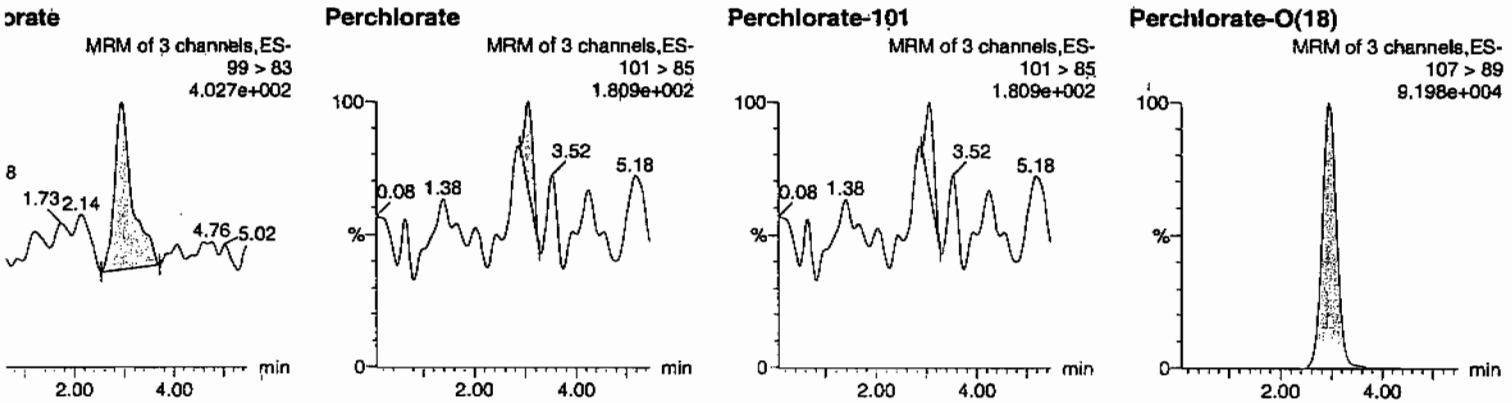

HMM 11/30/09

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	2.95	105.218	105.218	bb			0.0016			29.068	9.03
Perchlorate-101	101 > 85	3.06	11.650	11.650	bb			0.0005			7.152	
Perchlorate-O(18)	107 > 89	2.96	30248.572	30248.572	bb			0.5005	100.11	0.11	5361.9...	

DP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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EL Group, LLC Analyst: Michael A. Penny

:t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

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l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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27-Nov-2009
15:09:28
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MM 11/30/09

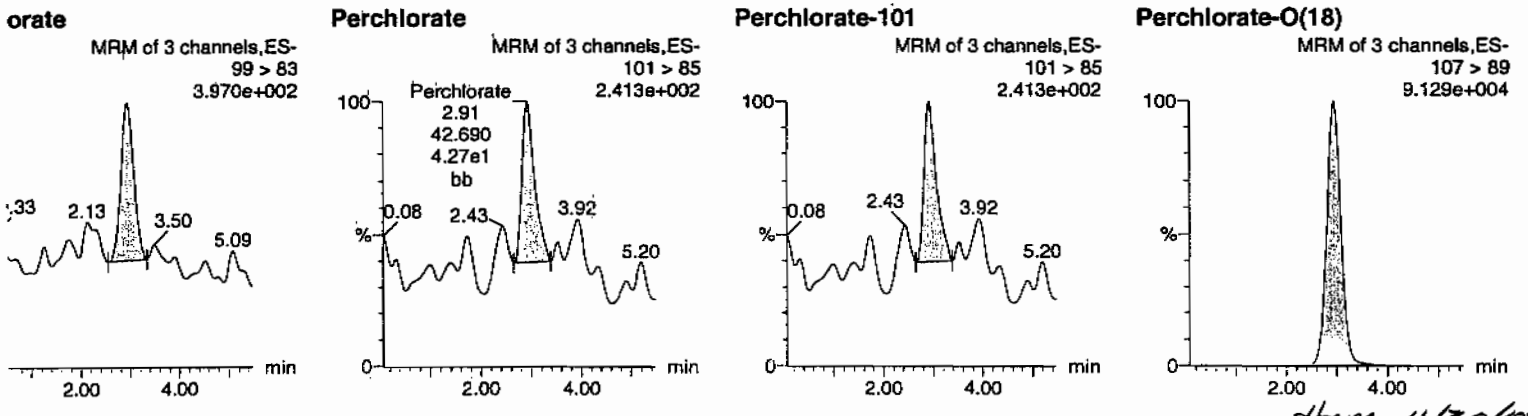

Hrm 11/30/09

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	2.94	72.538	72.538	bb			0.0011			9.240	1.70
Perchlorate-101	101 > 85	2.91	42.690	42.690	bb			0.0019			17.488	
Perchlorate-O(18)	107 > 89	2.95	29974.137	29974.137	bb			0.4960	99.20	-0.80	5218.8...	

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:L Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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7-Nov-2009
16:52:07
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LMT 11/28/09

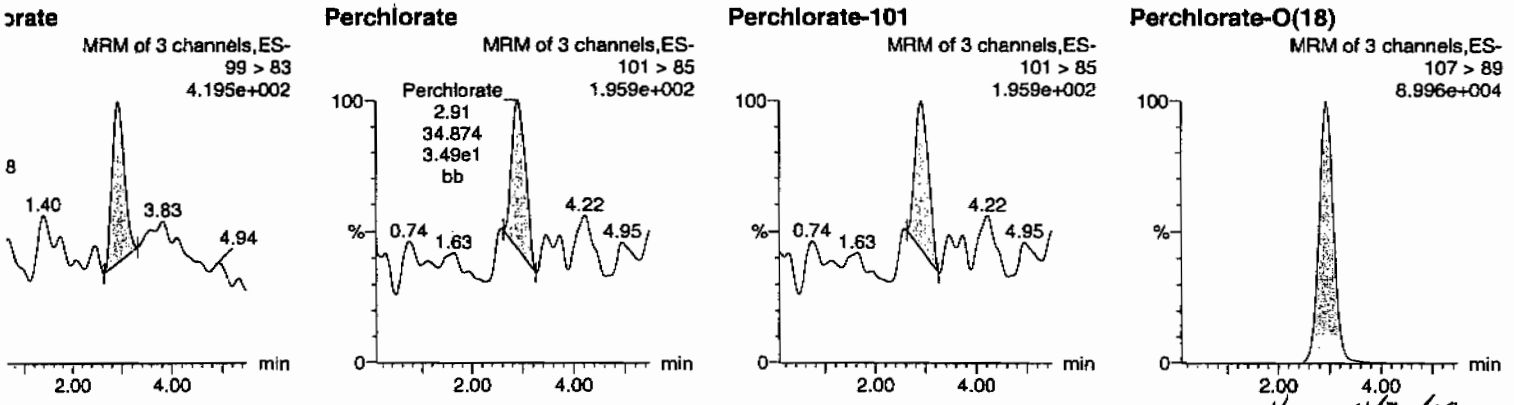

Hmm 11/30/09

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	2.94	73.642	73.642	bb			0.0011			12.971	2.11
Perchlorate-101	101 > 85	2.91	34.874	34.874	bb			0.0015			8.957	
Perchlorate-O(18)	107 > 89	2.94	29365.887	29365.887	bb			0.4859	97.19	-2.81	8411.9...	

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWM 01-09-08

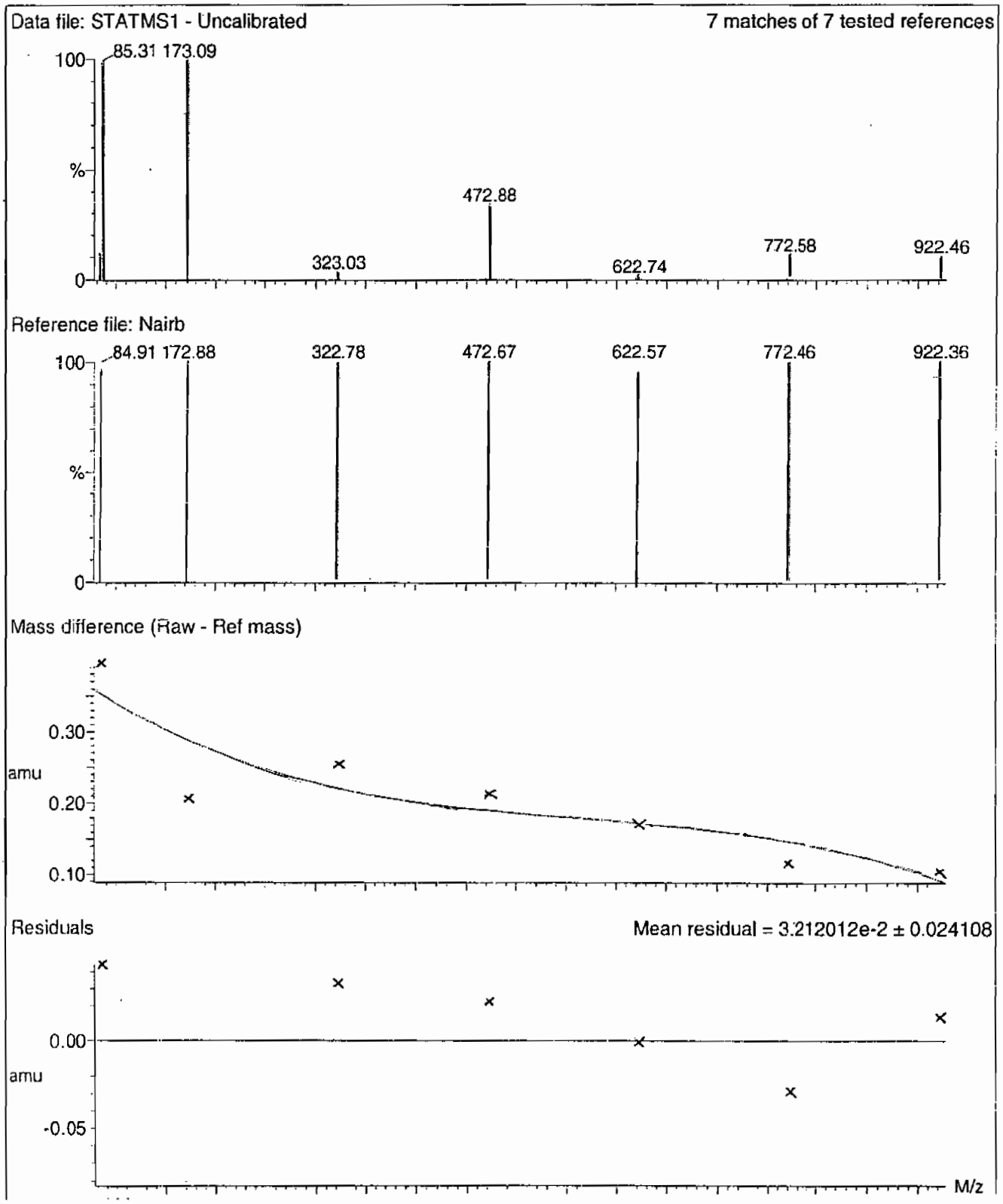

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Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

7 matches of 7 tested references

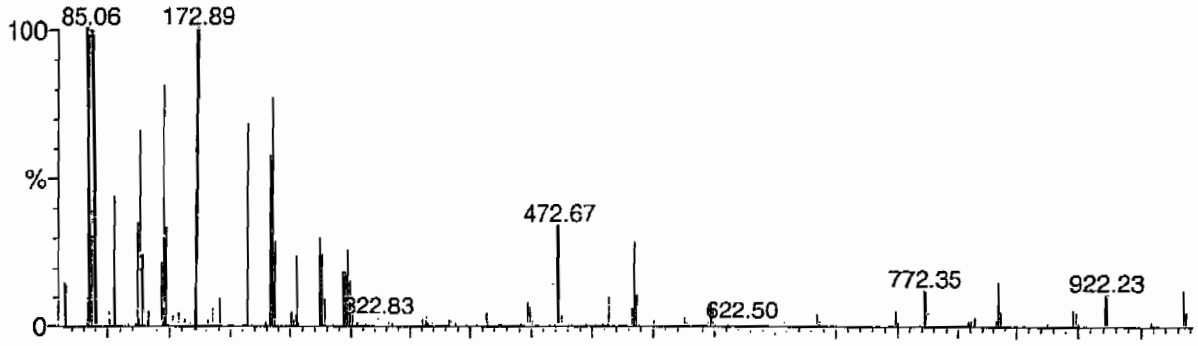

Reference file: Nairb

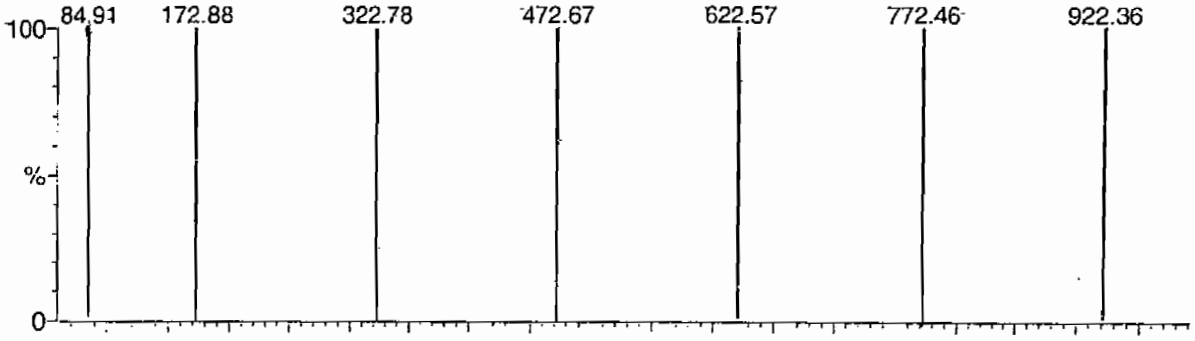

Mass difference (Raw - Ref mass)

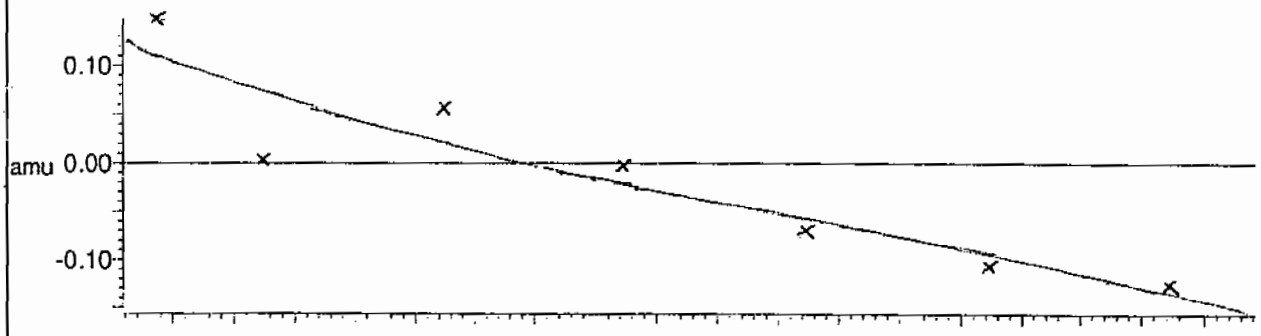

Residuals

Mean residual = 2.732691e-2 ± 0.020653

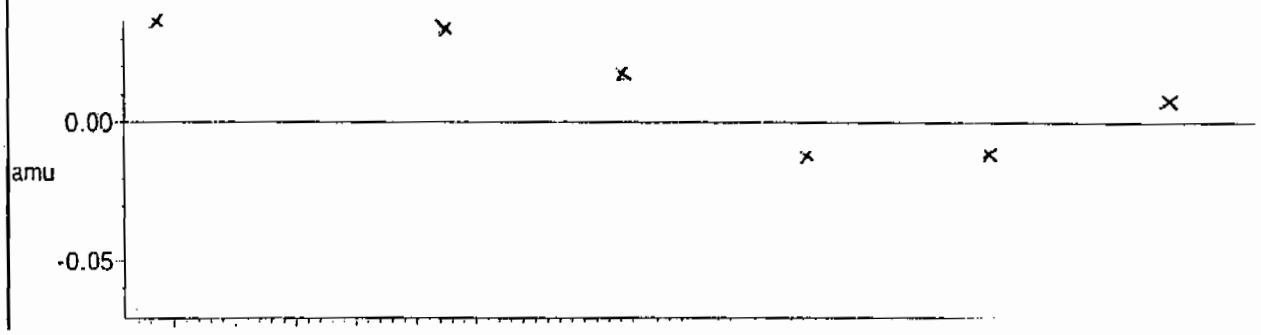

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS1 Scan Speed Compensation

Printed: Tue Jan 08 12:21:04 2008

Data file: FASTMS1 - Uncalibrated

7 matches of 7 tested references

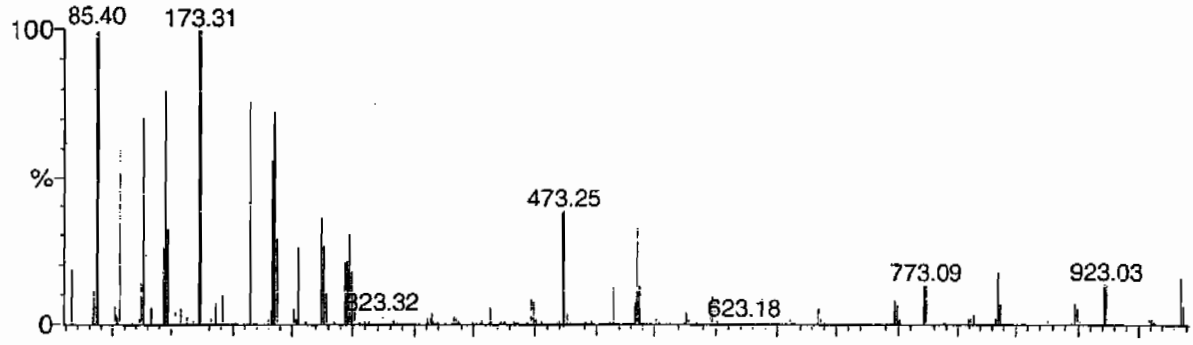

Reference file: Nairb

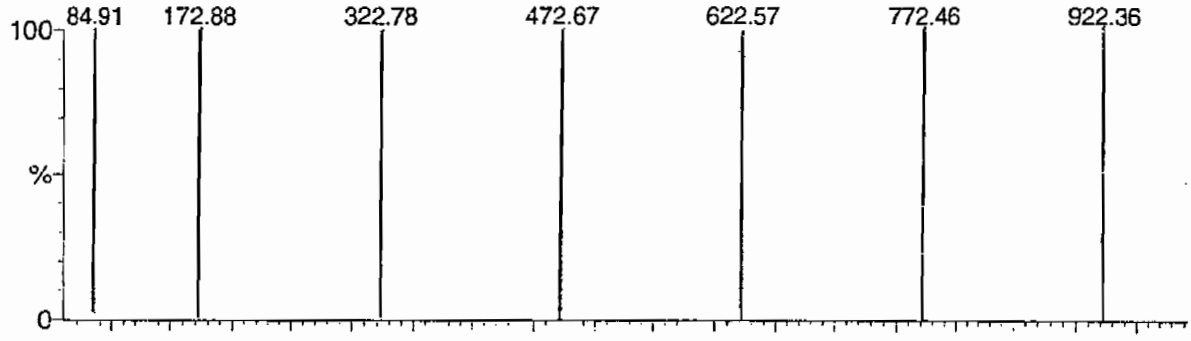

Mass difference (Raw - Ref mass)

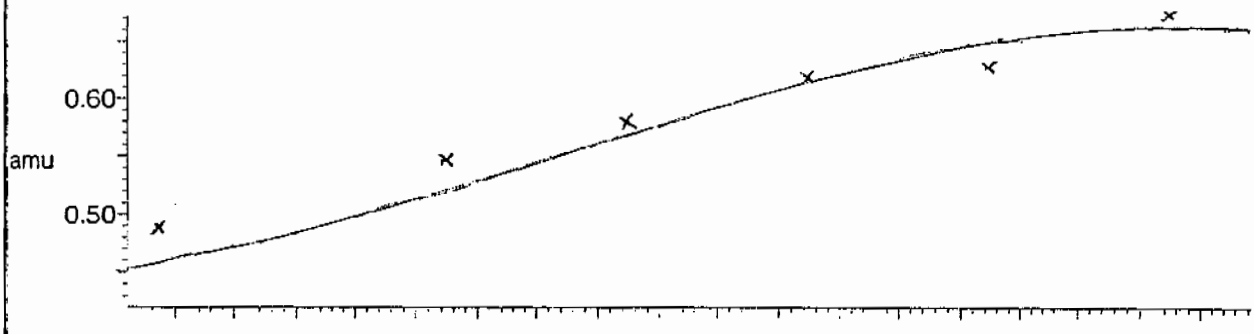

Residuals

Mean residual = 2.224580e-2 ± 0.016544

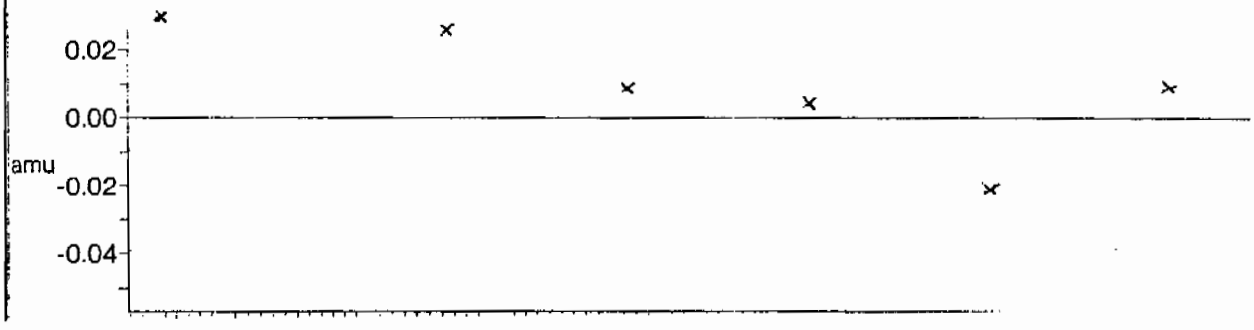

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Calibration Report - MS2 Static

Printed: Tue Jan 08 12:21:59 2008

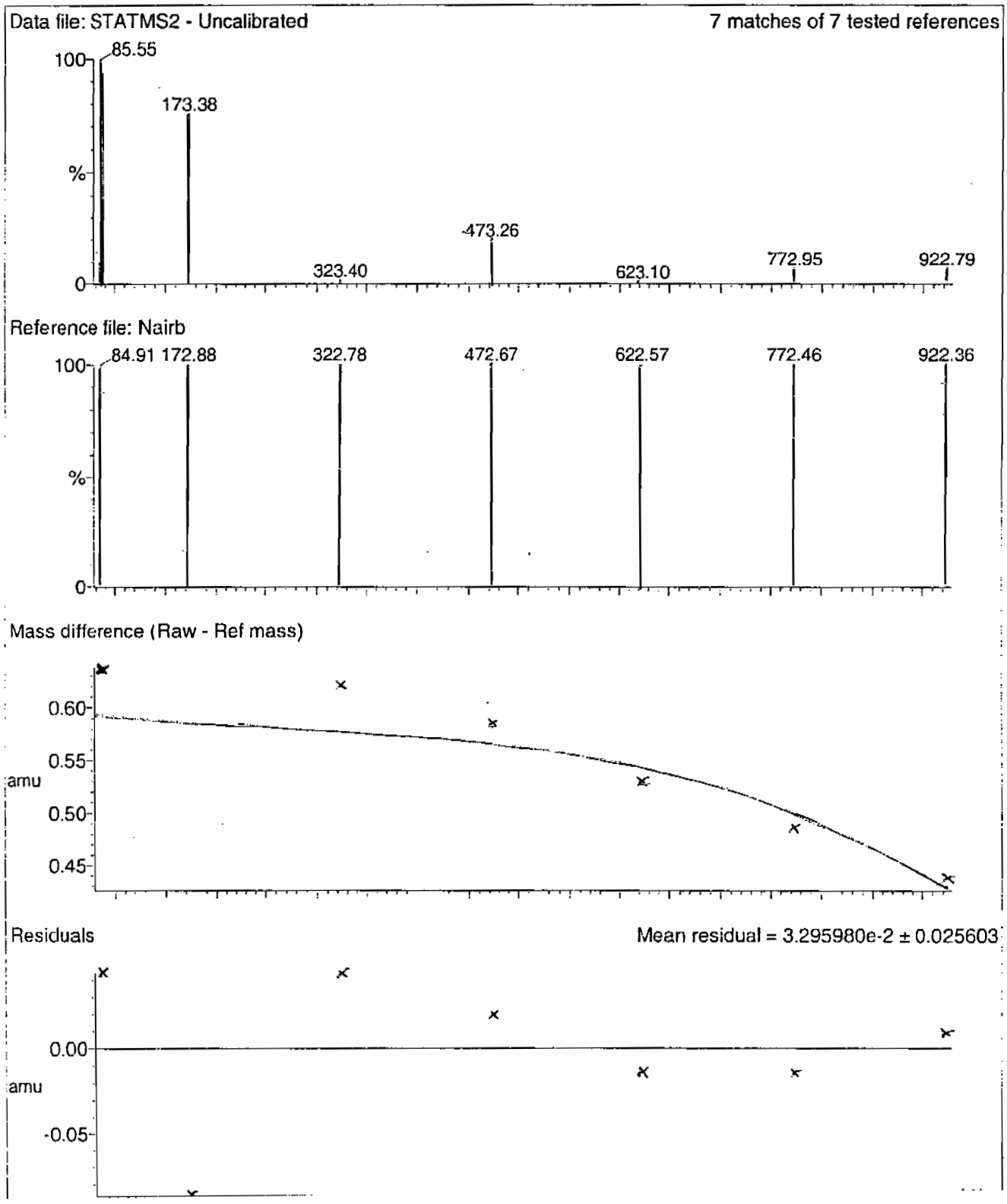

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Calibration Report - MS2 Scanning

Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

7 matches of 7 tested references

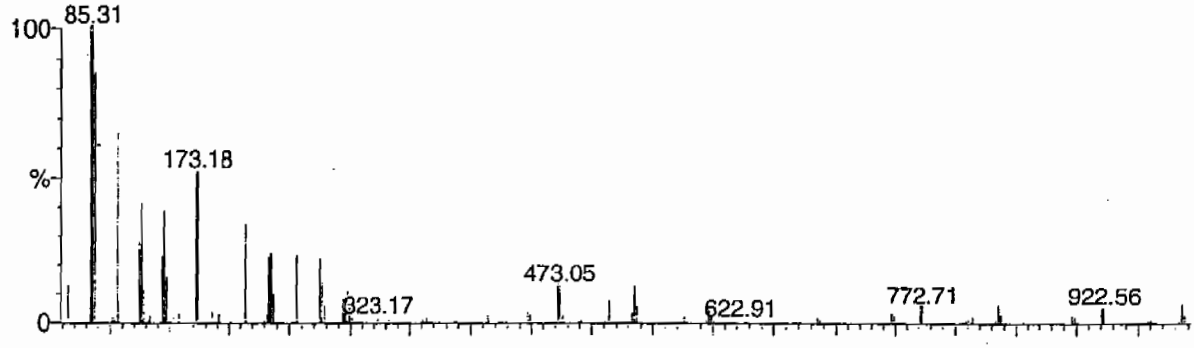

Reference file: Nairb

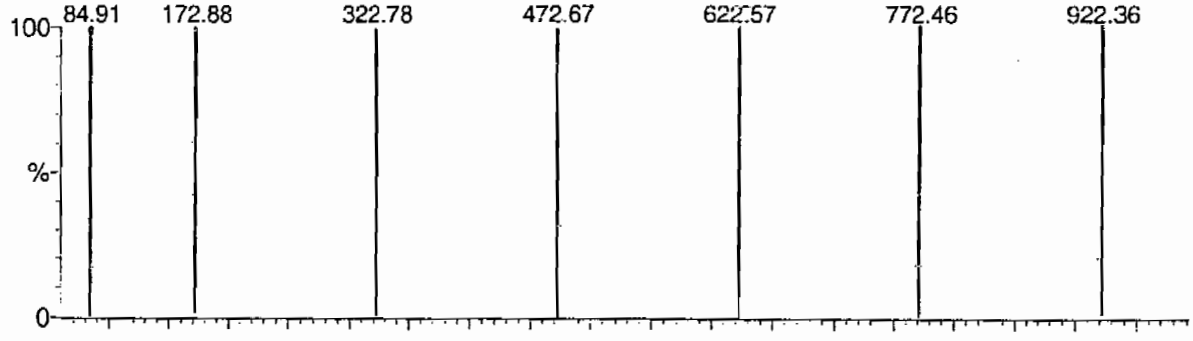

Mass difference (Raw - Ref mass)

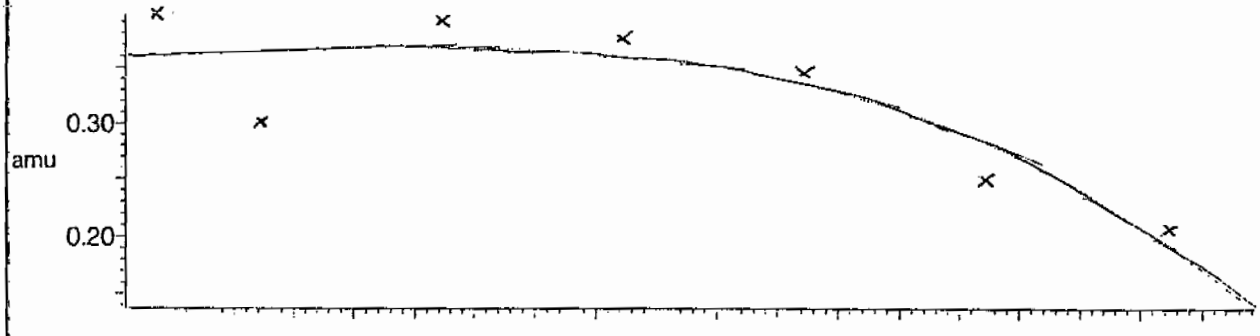

Residuals

Mean residual = 2.782494e-2 ± 0.017442

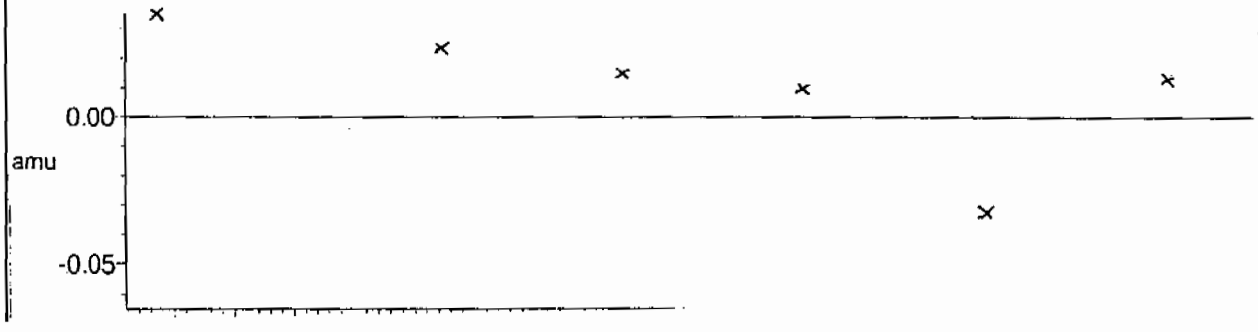

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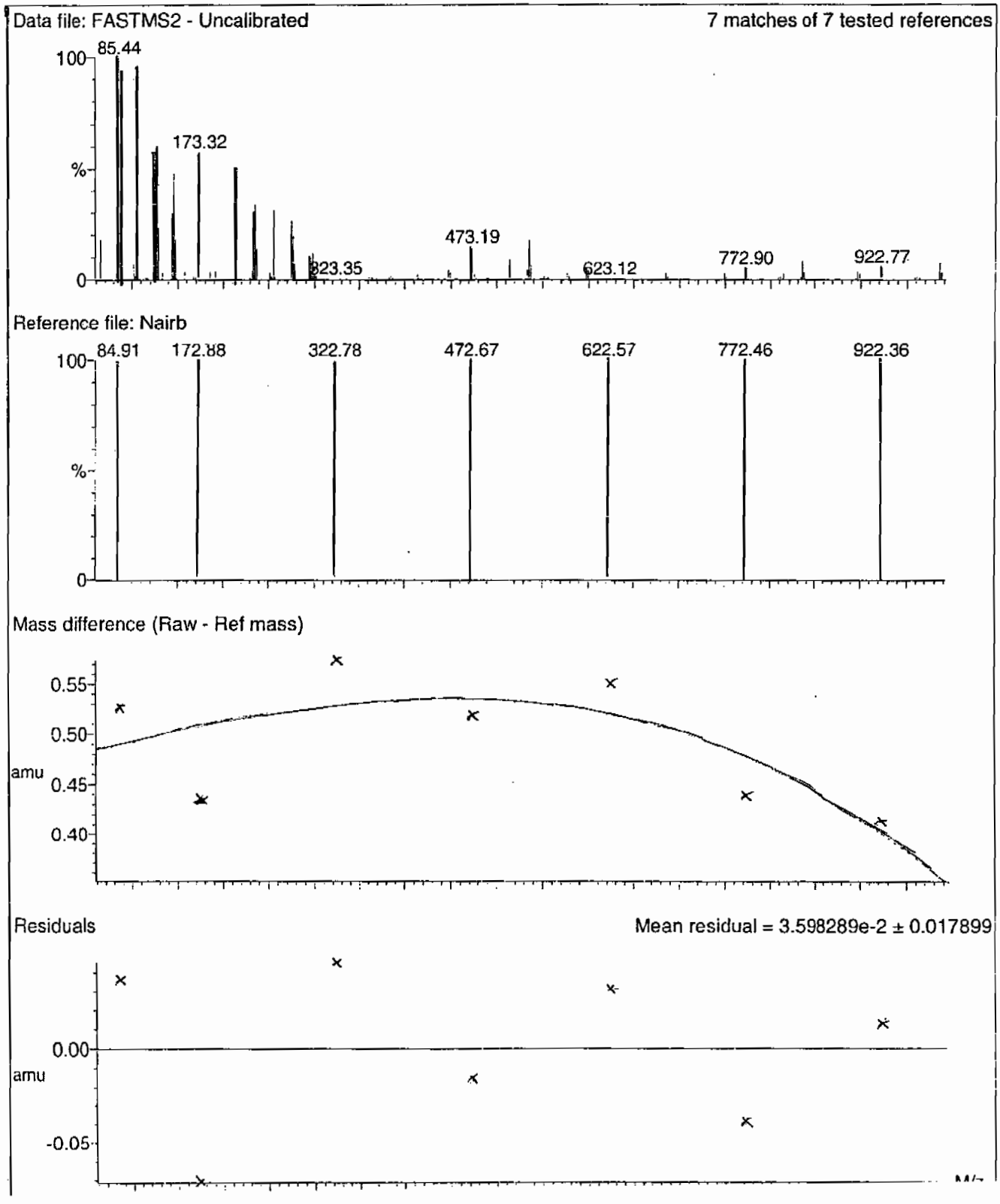

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File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, November 27, 2009 09:52:02 Eastern Standard Time

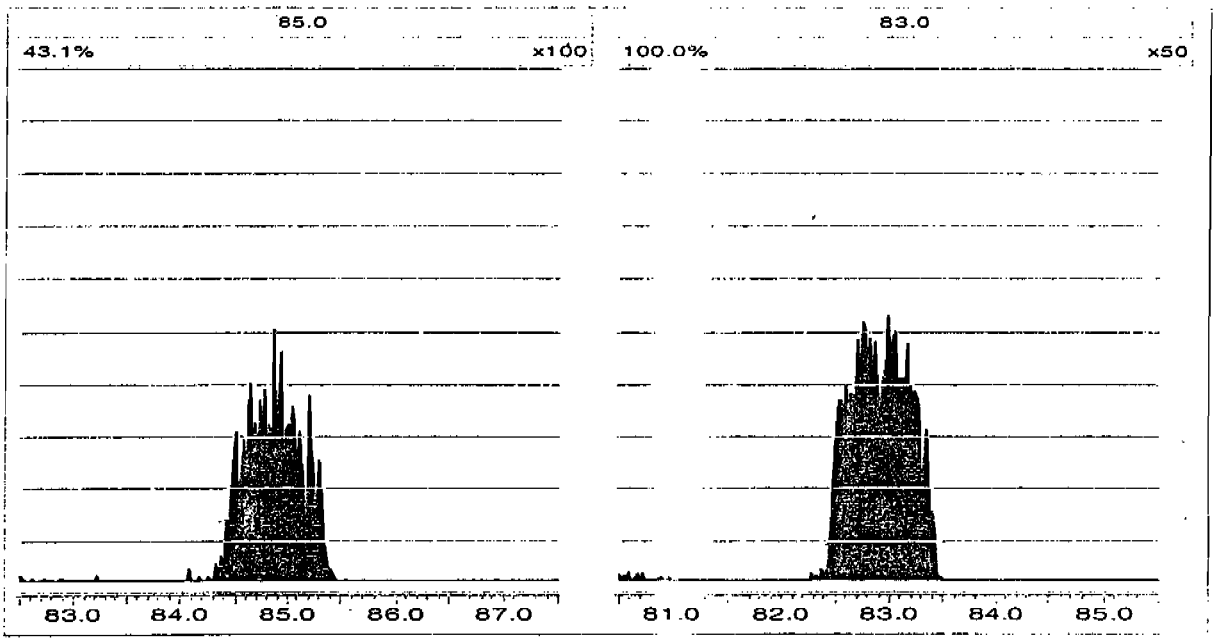

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–546–1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1127006a**	**27–NOV–09**	**30216.3**				
Lower Area Limit			**15108.15**				
Upper Area Limit			**60432.6**				
1201981682	per1127029a	27–NOV–09 15:26	31438.4	2.95	2.96103	1.004	
1201981683	per1127030a	27–NOV–09 15:35	28663.8	2.95	2.96103	1.004	
1201981688	per1127031a	27–NOV–09 15:43	31523.9	2.46	2.47655	1.007	
241337001	per1127032a	27–NOV–09 15:52	28971.7	2.94	2.91142	.99	
241337002	per1127033a	27–NOV–09 16:00	28668.8	2.94	2.92377	.994	

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SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-5530

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 241337001

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:52	per1127032a
	Perchlorate Isotope Ratio						1	27-NOV-09 15:52	per1127032a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:52	per1127032a
	Perchlorate-O(18)			0.479	ug/L		1	27-NOV-09 15:52	per1127032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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EL Group, LLC Analyst: Michael A. Penny

et: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ltered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
d: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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27-Nov-2009
15:52:14
1337001 | LANL | 926362 | LQ | 1 |
:6,D

MM 11/28/09

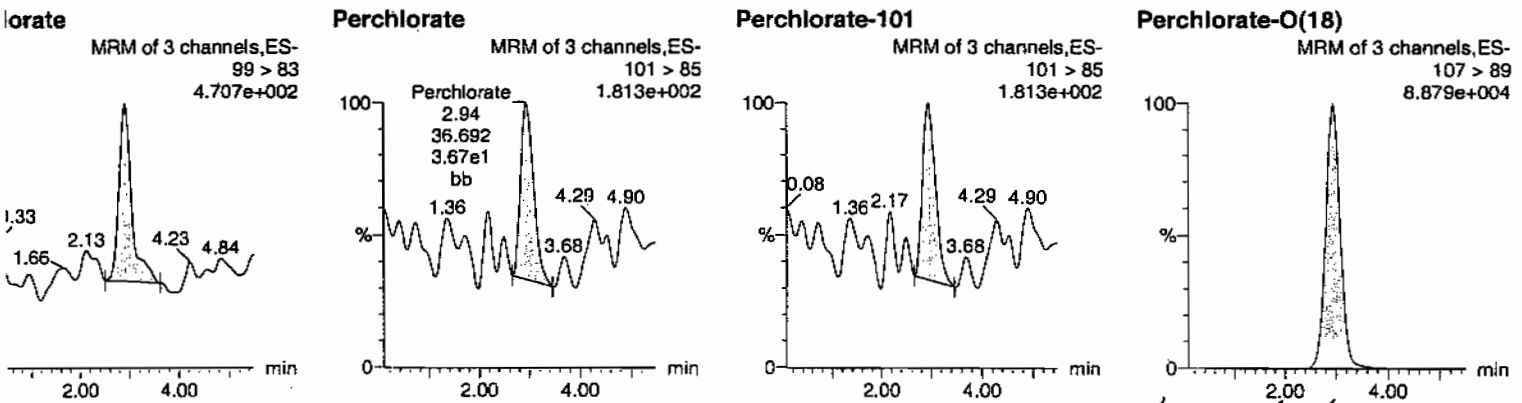

HMM 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
001	Perchlorate	99 > 83	2.91	96.951	96.951	bb			0.0014			15.391	2.64
001	Perchlorate-101	101 > 85	2.94	36.692	36.692	bb			0.0016			11.775	
001	Perchlorate-O(18)	107 > 89	2.94	28971.746	28971.746	bb			0.4794	95.88	-4.12	4922.0...	

OP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-5527

Date Received: 18-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 241337002

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 16:00	per1127033a
	Perchlorate Isotope Ratio						1	27-NOV-09 16:00	per1127033a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 16:00	per1127033a
	Perchlorate-O(18)			0.474	ug/L		1	27-NOV-09 16:00	per1127033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ify Sample Report MassLynx 4.0 SP4
EL Group, LLC Analyst: Michael A. Penny

:t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ltered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

: per1127033a
27-Nov-2009
16:00:48
1337002 | LANL | 926862 | LIQ | 1 |
:6,E

MAP 11/28/09

lorate

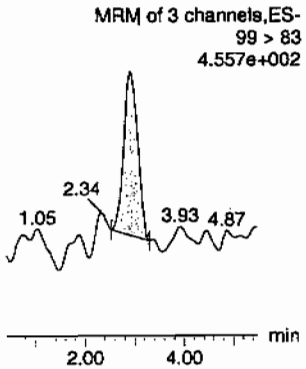

Perchlorate

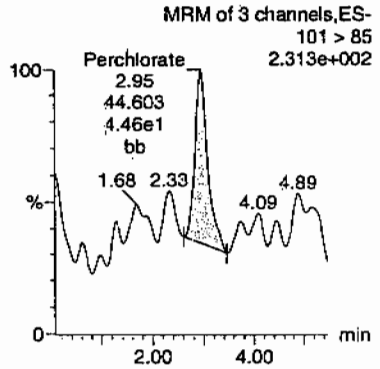

Perchlorate-101

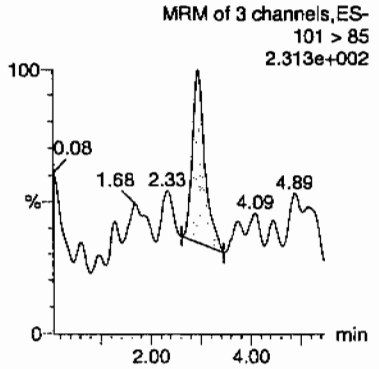

Perchlorate-O(18)

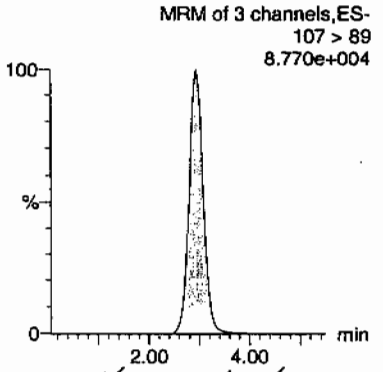

HMR 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'002	Perchlorate	99 > 83	2.92	92.654	92.654	bb			0.0014			5.139	2.08
'002	Perchlorate-101	101 > 85	2.95	44.603	44.603	bb			0.0020			9.613	
'002	Perchlorate-O(18)	107 > 89	2.94	28668.824	28668.824	bb			0.4744	94.88	-5.12	7695.6...	

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–546–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 27–NOV–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 67635.72

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–546–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 27–NOV–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 22841.12

Response Type: External Standard

Curve Type: RF

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fy Calibration Report MassLynx 4.0 SP4
EL Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

tered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

d: C:\MassLynx\Perchlorate.PRO\MethDB\per112709a.mdb 27 Nov 2009 12:37:59
ation: C:\MassLynx\Perchlorate.PRO\CurveDB\per112709a.cdb 28 Nov 2009 09:29:21

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D: 1736.18, % Relative SD: 2.56695
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ype: RF

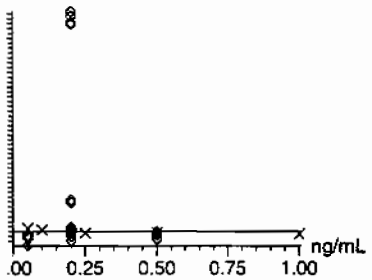

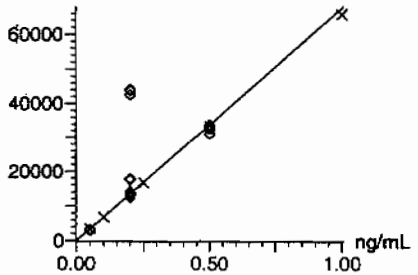

MMT 11/28/09

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nse type: External Std, Area
ype: RF

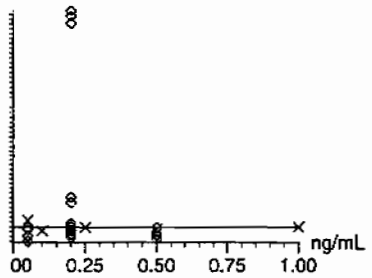

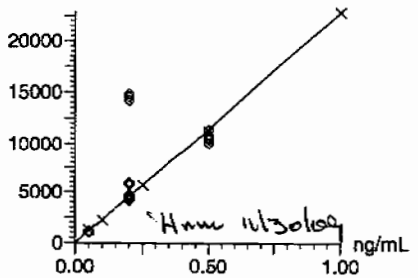

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OP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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ly Calibration Report MassLynx 4.0 SP4
:L Group, LLC Analyst: Michael A. Penny

l: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

und name: Perchlorate-O(18)
ıse Factor: 60432.2
): 1392.99, % Relative SD: 2.30504
ıse type: External Std, Area
ype: RF

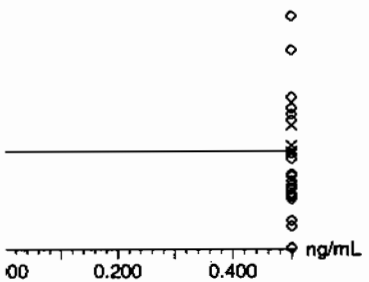

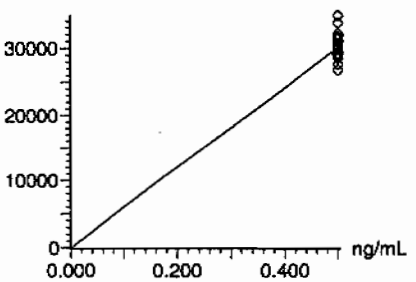

)P GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-546-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.17	27-NOV-09 12:35	per1127009a
Perchlorate Isotope Ratio		2.99		27-NOV-09 12:35	per1127009a
Perchlorate-101	.5	.5	99.21	27-NOV-09 12:35	per1127009a

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:L Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

lered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127009a
:7-Nov-2009
12:35:39
:L091120-06ICV
2,A

MJT 11/30/09

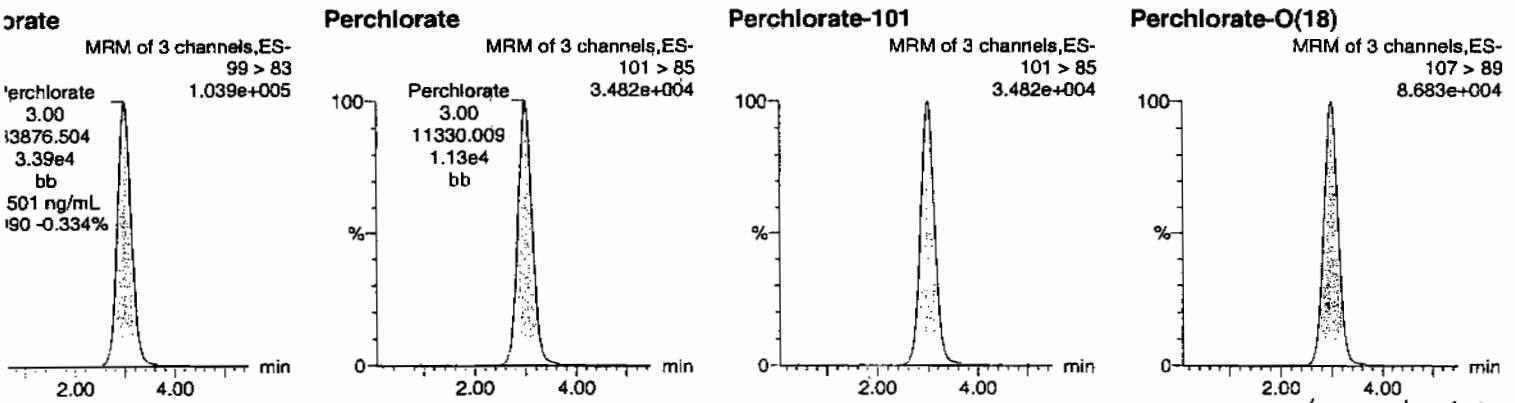

Hmm 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
120-06ICV	Perchlorate	99 > 83	3.00	33876.504	33876.504	bb			0.5009	100.17	0.17	1303.9...	2.99
120-06ICV	Perchlorate-101	101 > 85	3.00	11330.009	11330.009	bb			0.4960	99.21	-0.79	2787.4...	
120-06ICV	Perchlorate-O(18)	107 > 89	2.99	28685.504	28685.504	bb			0.4747	94.93	-5.07	7078.1...	

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–546–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.61	27–NOV–09 14:09	per1127020a
Perchlorate Isotope Ratio		3.07		27–NOV–09 14:09	per1127020a
Perchlorate–101	.5	.48	95.07	27–NOV–09 14:09	per1127020a
Perchlorate	.5	.48	96.02	27–NOV–09 15:00	per1127026a
Perchlorate Isotope Ratio		3.07		27–NOV–09 15:00	per1127026a
Perchlorate–101	.5	.46	92.59	27–NOV–09 15:00	per1127026a
Perchlorate	.5	.48	95.99	27–NOV–09 16:43	per1127038a
Perchlorate Isotope Ratio		3.06		27–NOV–09 16:43	per1127038a
Perchlorate–101	.5	.46	92.83	27–NOV–09 16:43	per1127038a

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EL Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

tered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127020a
7-Nov-2009
14:09:39
L091120-06CCV
2,A

MM 12/8/09

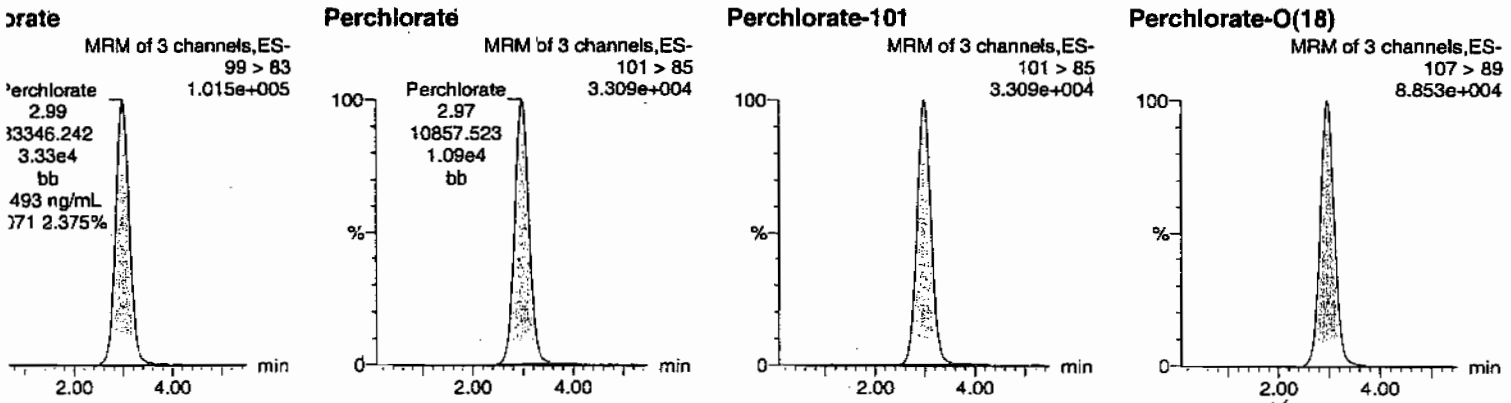

Hum 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
120-06CCV	Perchlorate	99 > 83	2.99	33346.242	33346.242	bb			0.4930	98.61	-1.39	2672.6...	3.07
120-06CCV	Perchlorate-101	101 > 85	2.97	10857.523	10857.523	bb			0.4753	95.07	-4.93	1375.7...	
120-06CCV	Perchlorate-O(18)	107 > 89	2.96	29143.736	29143.736	bb			0.4823	96.45	-3.55	5001.0...	

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EL Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

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l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127026a
27-Nov-2009
15:00:56
CL091120-06CCV
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MMT 11/28/09

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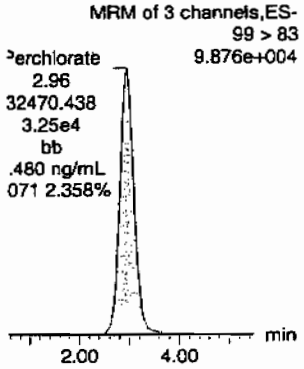

Perchlorate

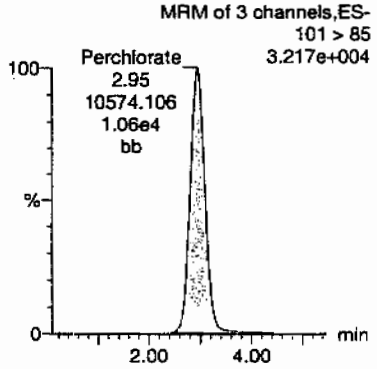

Perchlorate-101

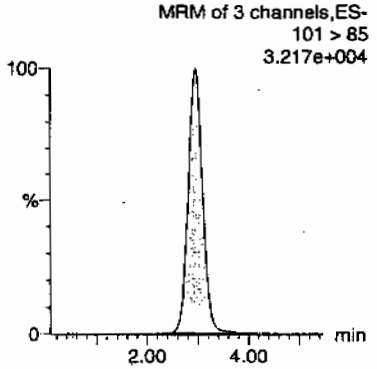

Perchlorate-O(18)

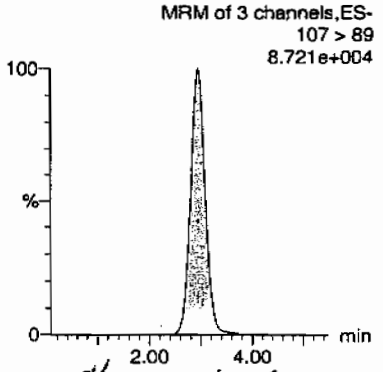

Hmm 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1120-06CCV	Perchlorate	99 > 83	2.96	32470.438	32470.438	bb			0.4801	96.02	-3.98	2039.3...	3.07
1120-06CCV	Perchlorate-101	101 > 85	2.95	10574.106	10574.106	bb			0.4629	92.59	-7.41	2214.6...	
1120-06CCV	Perchlorate-O(18)	107 > 89	2.95	28860.313	28860.313	bb			0.4776	95.51	-4.49	6231.5...	

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l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127038a
27-Nov-2009
16:43:34
CL091120-06CCV
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MAT 11/28/09

orate

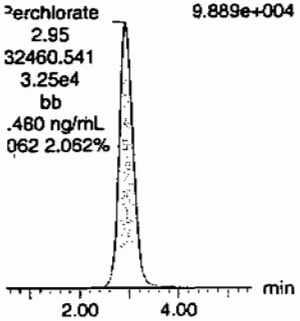

Perchlorate

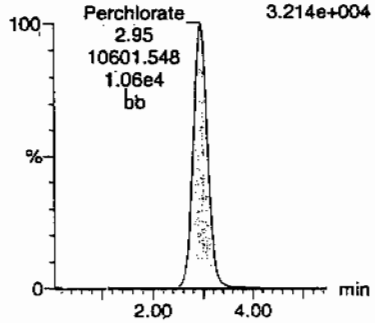

Perchlorate-101

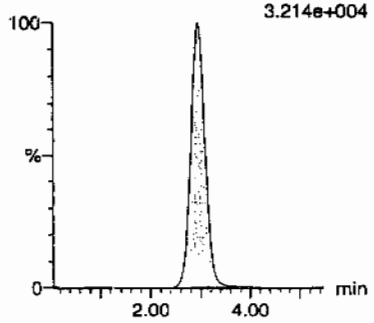

Perchlorate-O(18)

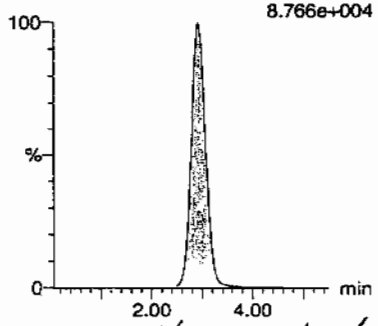

Hmm 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1120-06CCV	Perchlorate	99 > 83	2.95	32460.541	32460.541	bb			0.4799	95.99	-4.01	9775.8...	3.06
1120-06CCV	Perchlorate-101	101 > 85	2.95	10601.548	10601.548	bb			0.4641	92.83	-7.17	3863.4...	
1120-06CCV	Perchlorate-O(18)	107 > 89	2.94	28678.410	28678.410	bb			0.4746	94.91	-5.09	3451.9...	

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-546-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	96.51	27-NOV-09 12:52	per1127011a
Perchlorate Isotope Ratio		2.87		27-NOV-09 12:52	per1127011a
Perchlorate-101	.05	.05	99.49	27-NOV-09 12:52	per1127011a
Perchlorate	.05	.05	95.67	27-NOV-09 14:26	per1127022a
Perchlorate Isotope Ratio		3.33		27-NOV-09 14:26	per1127022a
Perchlorate-101	.05	.04	84.96	27-NOV-09 14:26	per1127022a
Perchlorate	.05	.05	93.94	27-NOV-09 15:18	per1127028a
Perchlorate Isotope Ratio		3.05		27-NOV-09 15:18	per1127028a
Perchlorate-101	.05	.05	91.29	27-NOV-09 15:18	per1127028a
Perchlorate	.05	.05	94.56	27-NOV-09 17:00	per1127040a
Perchlorate Isotope Ratio		2.89		27-NOV-09 17:00	per1127040a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-546-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	96.91	27-NOV-09 17:00	per1127040a

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EL Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

tered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127011a
27-Nov-2009
12:52:43
:L091120-07CRI
:2,B

MT 11/30/09

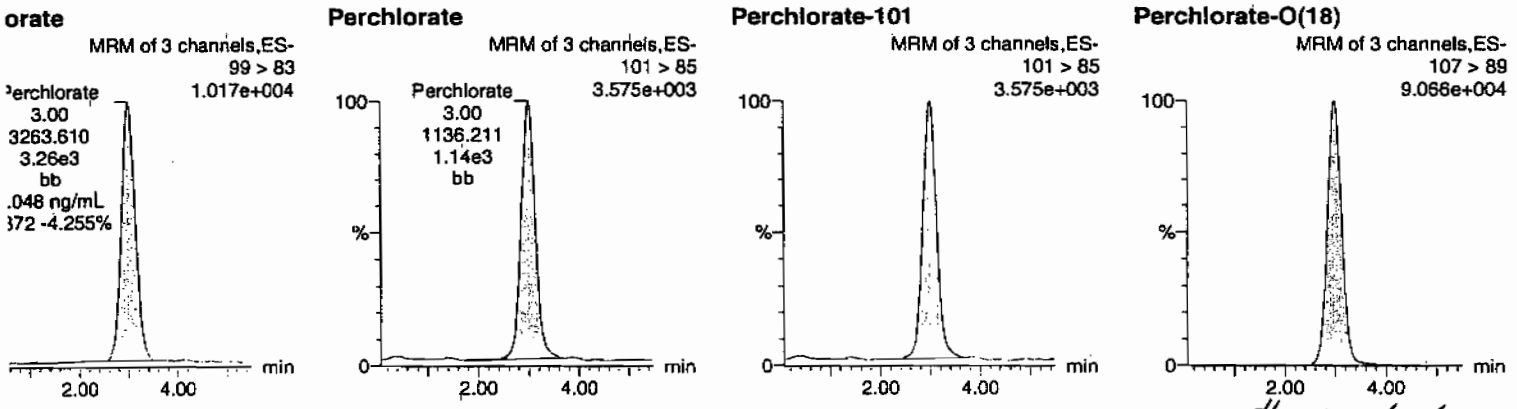

HMM 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1120-07CRI	Perchlorate	99 > 83	3.00	3263.610	3263.610	bb			0.0483	96.51	-3.49	973.019	2.87
1120-07CRI	Perchlorate-101	101 > 85	3.00	1136.211	1136.211	bb			0.0497	99.49	-0.51	162.821	
1120-07CRI	Perchlorate-O(18)	107 > 89	2.99	29936.482	29936.482	bb			0.4954	99.07	-0.93	1367.3...	

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EL Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

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: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

per1127022a
27-Nov-2009
14:26:44
L091120-07CRI
2,B

MMT 11/28/09

orate

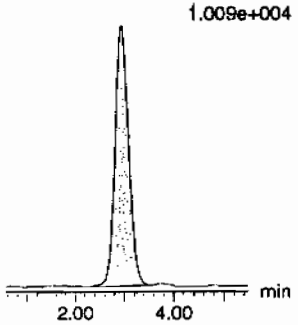

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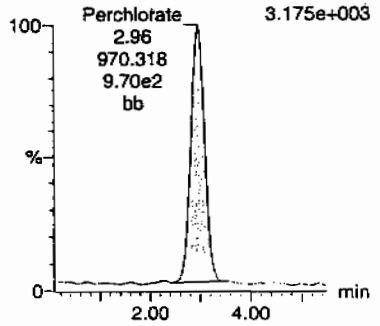

Perchlorate-101

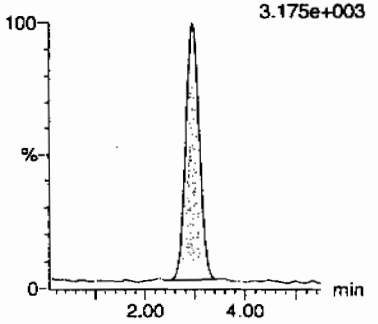

Perchlorate-O(18)

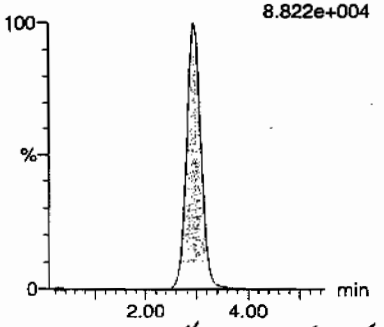

HMK 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1120-07CRI	Perchlorate	99 > 83	2.97	3235.419	3235.419	bb			0.0478	95.67	-4.33	280.439	3.33
1120-07CRI	Perchlorate-101	101 > 85	2.96	970.318	970.318	bb			0.0425	84.96	-15.04	331.526	
1120-07CRI	Perchlorate-O(18)	107 > 89	2.95	28746.084	28746.084	bb			0.4757	95.14	-4.86	3069.2...	

OP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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27-Nov-2009
15:18:01
:L091120-07CRI
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MM 11/28/09

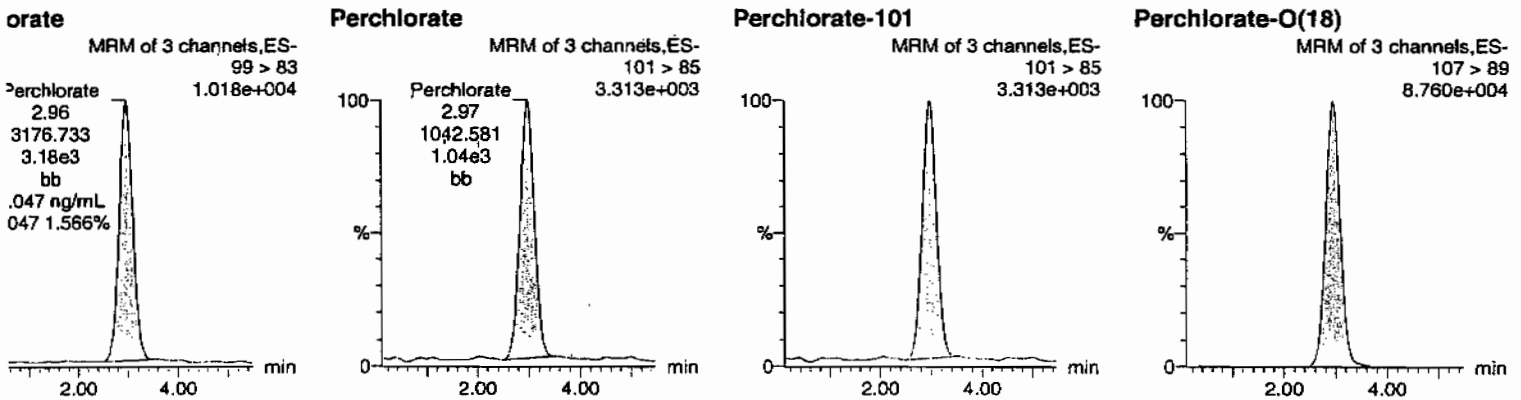

Hmm 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1120-07CRI	Perchlorate	99 > 83	2.96	3176.733	3176.733	bb			0.0470	93.94	-6.06	311.753	3.05
1120-07CRI	Perchlorate-101	101 > 85	2.97	1042.581	1042.581	bb			0.0456	91.29	-8.71	191.639	
1120-07CRI	Perchlorate-O(18)	107 > 89	2.95	29016.242	29016.242	bb			0.4801	96.03	-3.97	3841.1...	

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EL Group, LLC Analyst: Michael A. Penny

t: C:\MassLynx\Perchlorate.PRO\per112709a.qld

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MM 11/28/09

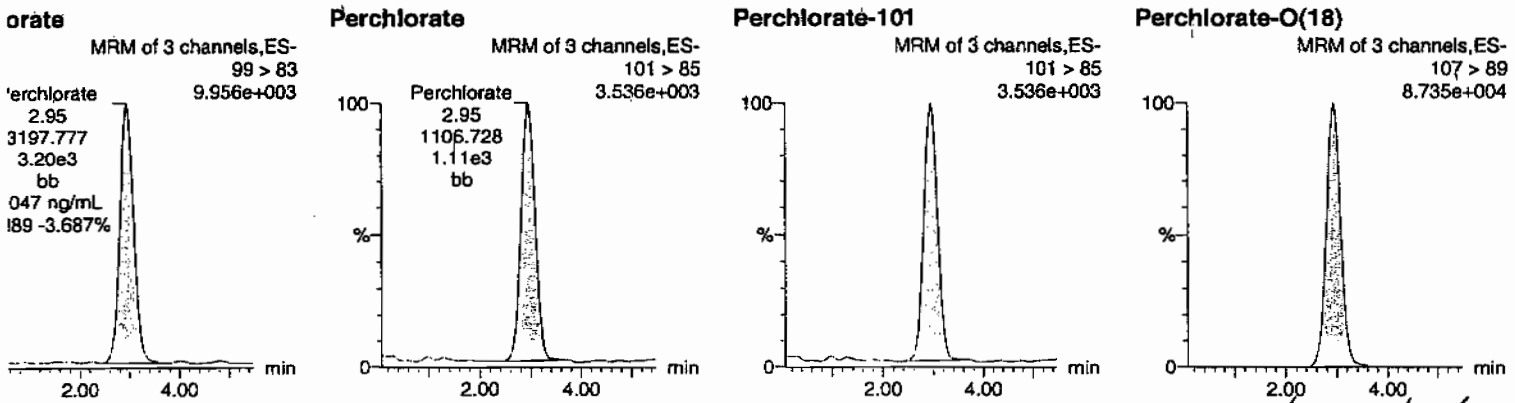

Amm 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1120-07CRI	Perchlorate	99 > 83	2.95	3197.777	3197.777	bb			0.0473	94.56	-5.44	299.884	2.89
1120-07CRI	Perchlorate-101	101 > 85	2.95	1106.728	1106.728	bb			0.0485	96.91	-3.09	68.355	
1120-07CRI	Perchlorate-O(18)	107 > 89	2.94	28633.686	28633.686	bb			0.4738	94.76	-5.24	5521.7...	

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QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 25-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 1201981682

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:26	per1127029a
	Perchlorate Isotope Ratio						1	27-NOV-09 15:26	per1127029a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 15:26	per1127029a
	Perchlorate-O(18)			0.520	ug/L		1	27-NOV-09 15:26	per1127029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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EL Group, LLC Analyst: Michael A. Penny

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ltered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
l: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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27-Nov-2009
15:26:33
01981682 | LANL | 926862 | LIQ | MB | 1 |
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MAP 11/28/09

lorate

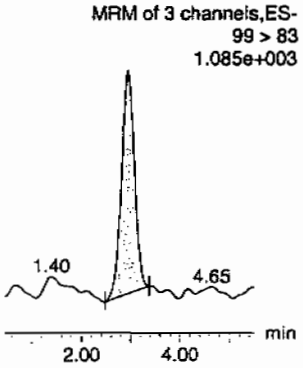

Perchlorate

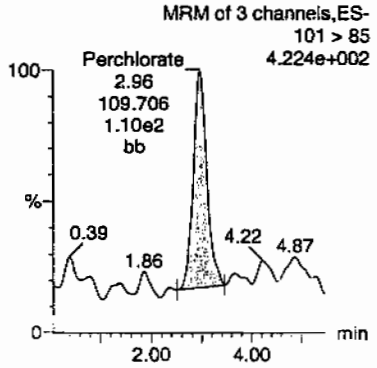

Perchlorate-101

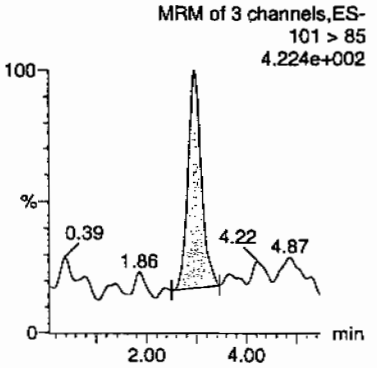

Perchlorate-O(18)

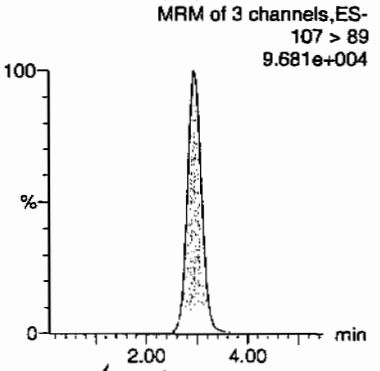

Hmm 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1682	Perchlorate	99 > 83	2.96	285.520	285.520	bb			0.0042			38.156	2.60
1682	Perchlorate-101	101 > 85	2.96	109.706	109.706	bb			0.0048			28.306	
1682	Perchlorate-O(18)	107 > 89	2.95	31438.354	31438.354	bb			0.5202	104.05	4.05	5167.3...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 926861

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

LCS

Date Received: 25-NOV-09

GEL Job No (SDG): 10-546-1

GEL Sample ID: 1201981683

Date Filtered: 25-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.196	ug/L	J	1	27-NOV-09 15:35	per1127030a
	Perchlorate Isotope Ratio			3			1	27-NOV-09 15:35	per1127030a
14797-73-0	Perchlorate-101	.05	.2	0.193	ug/L	J	1	27-NOV-09 15:35	per1127030a
	Perchlorate-O(18)			0.474	ug/L		1	27-NOV-09 15:35	per1127030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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EL Group, LLC Analyst: Michael A. Penny

et: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ltered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
d: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

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27-Nov-2009
: 15:35:06
01981683 | LANL | 926862 | LIQ | LCS | 1 |
1:6,B

MAT 11/28/09

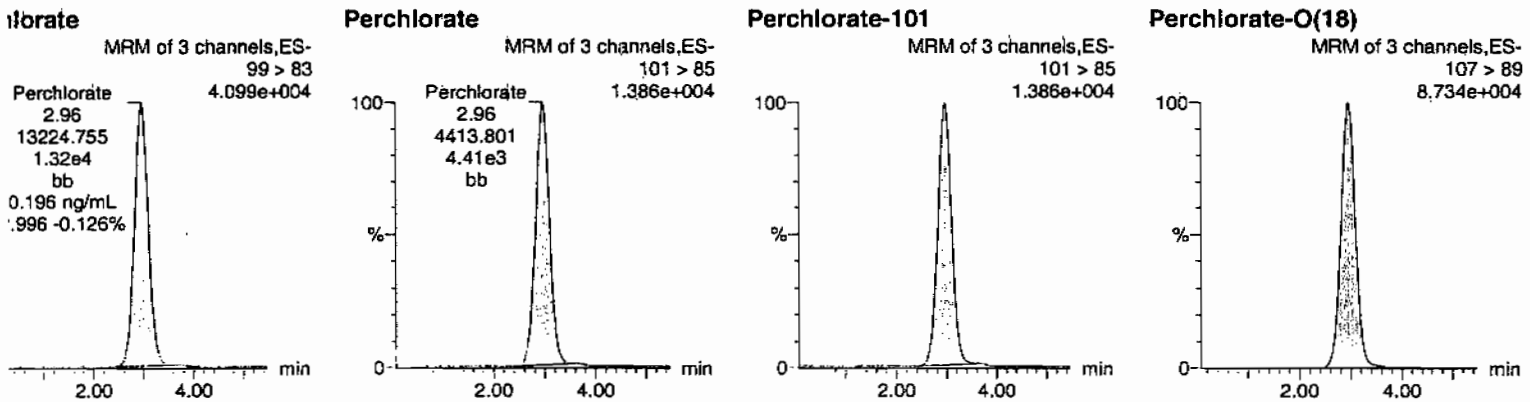

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
81683	Perchlorate	99 > 83	2.96	13224.755	13224.755	bb			0.1955	97.76	-2.24	994.738	3.00
81683	Perchlorate-101	101 > 85	2.96	4413.801	4413.801	bb			0.1932	96.62	-3.38	1000.5...	
81683	Perchlorate-O(18)	107 > 89	2.95	28663.850	28663.850	bb			0.4743	94.86	-5.14	4522.8...	

$$\frac{13224.755}{67635.7} = 0.1955$$

HAM 11/30/09

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 926861 **Verified by:** _____

Analyst: Lynne Russell **Lab SOP:** GL-OA-E-067 REV# 6

Method: SW846 6850 Modified **Instrument:** MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1201981682 MB	25-NOV-2009 15:14:15	10	10	1
1201981683 LCS	25-NOV-2009 15:14:15	10	10	1
241337001	25-NOV-2009 15:14:15	10	10	1
241337002	25-NOV-2009 15:14:15	10	10	1
241600003	25-NOV-2009 15:14:15	10	10	1
1201981684 MS (241600003)	25-NOV-2009 15:14:15	10	10	1
1201981685 MSD (241600003)	25-NOV-2009 15:14:15	10	10	1
241600004	25-NOV-2009 15:14:15	10	10	1
241601001	25-NOV-2009 15:14:15	10	10	1
241601003	25-NOV-2009 15:14:15	10	10	1
241606001	25-NOV-2009 15:14:15	10	10	1
241612001	25-NOV-2009 15:14:15	10	10	1
1201981686 MS (241612001)	25-NOV-2009 15:14:15	10	10	1
1201981687 MSD (241612001)	25-NOV-2009 15:14:15	10	10	1
241612002	25-NOV-2009 15:14:15	10	10	1
241813007	25-NOV-2009 15:14:15	10	10	1
1201981688 ICS	25-NOV-2009 15:14:15	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201981688	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
LCS	1201981683	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MS	1201981684	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MS	1201981686	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MSD	1201981685	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MSD	1201981687	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1133543	10	mL

Comments:

De-salting cartridges used: 090415-1-Ba and 090902-1-H

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 11/27/09
Extr. Injection Volume: 20uL
Sequence Number: per112709a
Initial Calibration Date: 11/27/09

Method: EPA 6850-Modified
Int. Std.: UCL090612-01.2
Mobile Phase Lot#: 1191829, 1197509
Standard-Samp Reagent Lot#:: 1197509

Reviewed BY: Hnm
Date: 11/30/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091120-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1127001a	IPB001	MAP	11/27/2009 11:27			1		USE	B
per1127002a	IPB001	MAP	11/27/2009 11:35			1		USE	B
per1127003a	WCLICAL-01	MAP	11/27/2009 11:44			1		USE	I
per1127004a	WCLICAL-02	MAP	11/27/2009 11:53			1		USE	I
per1127005a	WCLICAL-03	MAP	11/27/2009 12:01			1		USE	I
per1127006a	WCLICAL-04	MAP	11/27/2009 12:10			1		USE	I
per1127007a	WCLICAL-05	MAP	11/27/2009 12:18			1		USE	I
per1127008a	IPB002	MAP	11/27/2009 12:27			1		USE	B
per1127009a	WCLICV	MAP	11/27/2009 12:35			1		USE	C
per1127010a	IPB003	MAP	11/27/2009 12:44			1		USE	B
per1127011a	WCLCRI	MAP	11/27/2009 12:52			1		USE	C
per1127012a	1201982077	MAP	11/27/2009 13:01	927048	Various	1	LANL	USE	S
per1127013a	1201982078	MAP	11/27/2009 13:09	927048	Various	1	LANL	USE	S
per1127014a	1201982083	MAP	11/27/2009 13:18	927048	Various	1	LANL	USE	S
per1127015a	241848004	MAP	11/27/2009 13:26	927048	10-683	1	LANL	USE	S
per1127016a	241848005	MAP	11/27/2009 13:35	927048	10-683	1	LANL	USE	S
per1127017a	241848006	MAP	11/27/2009 13:44	927048	10-683	1	LANL	USE	S
per1127018a	1201982081	MAP	11/27/2009 13:52	927048	10-683	1	LANL	USE	S
per1127019a	1201982082	MAP	11/27/2009 14:01	927048	10-683	1	LANL	USE	S
per1127020a	WCLCCV	MAP	11/27/2009 14:09			1		USE	C
per1127021a	IPB004	MAP	11/27/2009 14:18			1		USE	B
per1127022a	WCLCRI	MAP	11/27/2009 14:26			1		USE	C
per1127023a	241850001	MAP	11/27/2009 14:35	927048	10-686	1	LANL	USE	S
per1127024a	1201982079	MAP	11/27/2009 14:43	927048	10-686	1	LANL	USE	S
per1127025a	1201982080	MAP	11/27/2009 14:52	927048	10-686	1	LANL	USE	S
per1127026a	WCLCCV	MAP	11/27/2009 15:00			1		USE	C
per1127027a	IPB005	MAP	11/27/2009 15:09			1		USE	B
per1127028a	WCLCRI	MAP	11/27/2009 15:18			1		USE	C
per1127029a	1201981682	MAP	11/27/2009 15:26	926862	Various	1	LANL	USE	S

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per1127030a	1201981683	MAP	11/27/2009 15:35	926862	Various	1	LANL	USE	S
per1127031a	1201981688	MAP	11/27/2009 15:43	926862	Various	1	LANL	USE	S
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per1127033a	241337002	MAP	11/27/2009 16:00	926862	10-546-1	1	LANL	USE	S
per1127034a	241600003	MAP	11/27/2009 16:09	926862	10-633	1	LANL	USE	S
per1127035a	1201981684	MAP	11/27/2009 16:17	926862	10-633	1	LANL	USE	S
per1127036a	1201981685	MAP	11/27/2009 16:26	926862	10-633	1	LANL	USE	S
per1127037a	241600004	MAP	11/27/2009 16:35	926862	10-633	1	LANL	USE	S
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per1127039a	IPB006	MAP	11/27/2009 16:52			1		USE	B
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per1127042a	241601003	MAP	11/27/2009 17:17	926862	10-636	1	LANL	USE	S
per1127043a	241606001	MAP	11/27/2009 17:26	926862	10-638-1	1	LANL	USE	S
per1127044a	241612001	MAP	11/27/2009 17:34	926862	10-642-1	1	LANL	USE	S
per1127045a	1201981686	MAP	11/27/2009 17:43	926862	10-642-1	1	LANL	USE	S
per1127046a	1201981687	MAP	11/27/2009 17:52	926862	10-642-1	1	LANL	USE	S
per1127047a	241612002	MAP	11/27/2009 18:00	926862	10-642-1	1	LANL	USE	S
per1127048a	241813007	MAP	11/27/2009 18:09	926862	10-671	1	LANL	USE	S
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per1127056a	241181002	MAP	11/27/2009 19:17	924871	10-520-1	1	LANL	USE	S
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per1127059a	1201977186	MAP	11/27/2009 19:43	924871	10-521	1	LANL	USE	S
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per1127064a	241187003	MAP	11/27/2009 20:26	924871	10-521	1	LANL	USE	S
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per1127066a	241192003	MAP	11/27/2009 20:43	924871	10-500-2	1	LANL	USE	S

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per1127067a	241325001	MAP	11/27/2009 20:51	924871	10-544-1	1	LANL	USE	S
per1127068a	241325002	MAP	11/27/2009 21:00	924871	10-544-1	1	LANL	USE	S
per1127069a	241414003	MAP	11/27/2009 21:08	924871	10-560	1	LANL	USE	S
per1127070a	241414004	MAP	11/27/2009 21:17	924871	10-560	1	LANL	USE	S
per1127071a	1201977177	MAP	11/27/2009 21:25	924871	10-560	1	LANL	USE	S
per1127072a	1201977178	MAP	11/27/2009 21:34	924871	10-560	1	LANL	USE	S
per1127073a	WCLCCV	MAP	11/27/2009 21:42			1		USE	C
per1127074a	IPB009	MAP	11/27/2009 21:51			1		USE	B
per1127075a	WCLCRI	MAP	11/27/2009 22:00			1		USE	C

EL Group, LLC Analyst: Michael A. Penny

ɜt: C:\MassLynx\Perchlorate.PRO\per112709a.qid

ltered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
d: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

: per1127045a
27-Nov-2009
17:43:25
01981686 | LAW | 926862 | LID | 241612001 ng | 1 |
:8,B

MAP 11/28/09

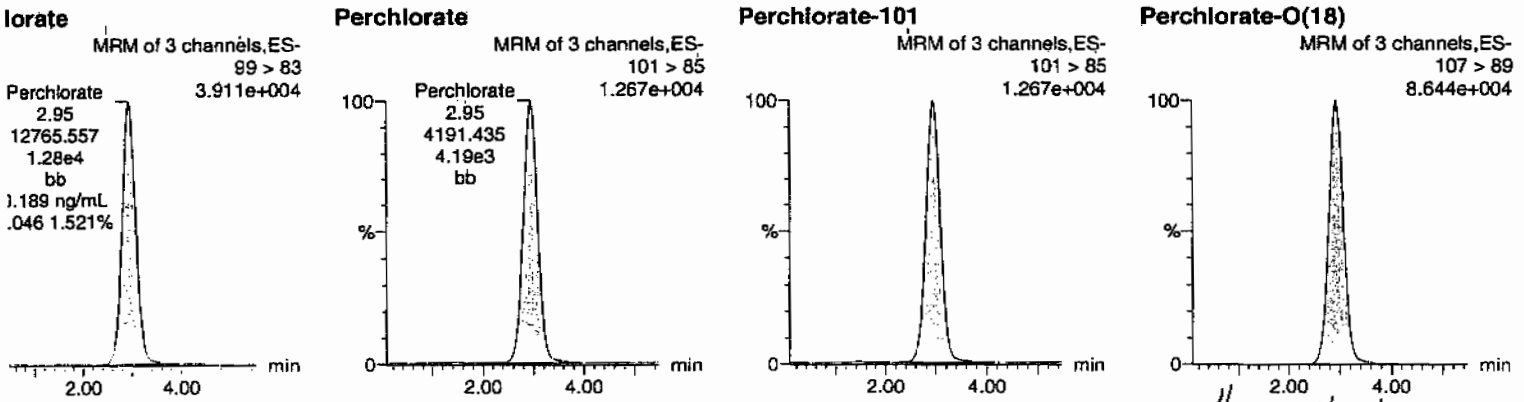

HMM 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1686	Perchlorate	99 > 83	2.95	12765.557	12765.557	bb			0.1887	94.37	-5.63	1821.7...	3.05
1686	Perchlorate-101	101 > 85	2.95	4191.435	4191.435	bb			0.1835	91.75	-8.25	1166.7...	
1686	Perchlorate-O(18)	107 > 89	2.94	28512.824	28512.824	bb			0.4718	94.36	-5.64	1727.4...	

OP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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lify Sample Report MassLynx 4.0 SP4
EL Group, LLC Analyst: Michael A. Penny

et: C:\MassLynx\Perchlorate.PRO\per112709a.qld

ltered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
d: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

: per1127046a
27-Nov-2009
17:52:00
01981687 | LAW | 926862 | LCS | 241612001 MSD | 1 |
:8,C

MAP 11/28/09

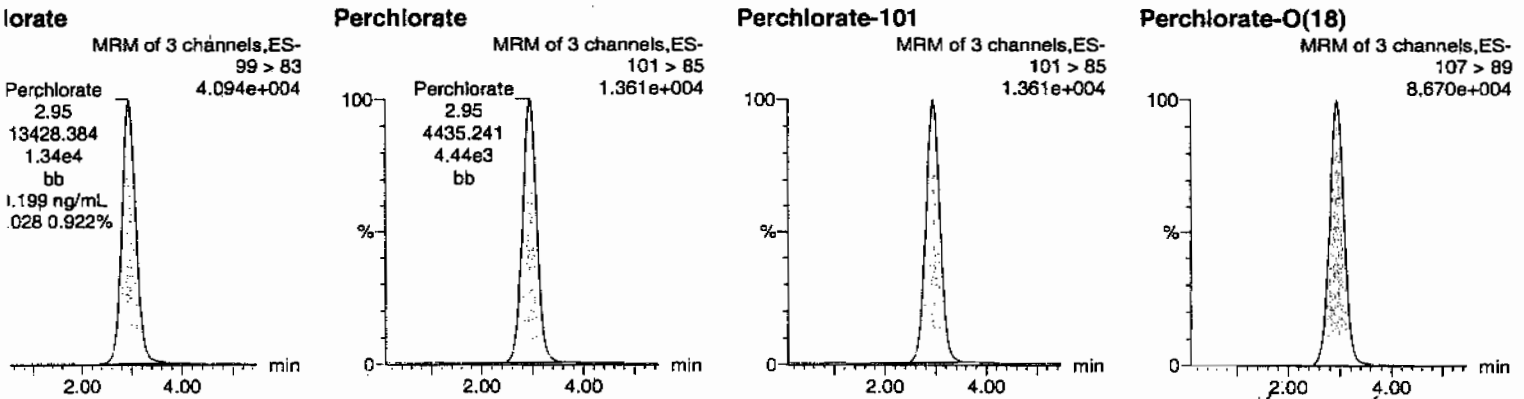

AMM 11/30/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1687	Perchlorate	99 > 83	2.95	13428.384	13428.384	bb			0.1985	99.27	-0.73	1631.6...	3.03
1687	Perchlorate-101	101 > 85	2.95	4435.241	4435.241	bb			0.1942	97.09	-2.91	1389.3...	
1687	Perchlorate-O(18)	107 > 89	2.94	28637.871	28637.871	bb			0.4739	94.78	-5.22	3784.8...	

OP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

GC SEMIVOLATILE DRO ANALYSIS

DRO Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546

Method/Analysis Information

Procedure:	**Analysis of Diesel Range Organics by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	925774
Prep Batch Number:	925769

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201979310	Method Blank (MB)
1201979313	Laboratory Control Sample (LCS)
1201979311	241318008(RE03-09-13621) Matrix Spike (MS)
1201979312	241318008(RE03-09-13621) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-543) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned

and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimi Cao **Date:** 12/14/09

Roadmap for LANL 10-546 DRO

This roadmap was analyzed by KEV01577 on 11-30-2009, 11:37.
This roadmap was reviewed by jcb on 11-30-2009, 15:08.
This roadmap was packaged by yml on 12-12-2009, 07:26.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/112509dr/026f2601.d	241336001	26-NOV-2009	11:39	10-546.sub	RE03-09-13770	1.00000	925774	USE
☐	N	/chem/fid5.i/112509dr/027f2701.d	241336002	26-NOV-2009	12:17	10-546.sub	RE03-10-5897	1.00000	925774	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/112509dr/005f0501b.d	1201979310	mb	25-NOV-2009	22:16	10-546.sub	DBLK01	1.00000	925774	
☐	N	/chem/fid5.i/112509dr/006f0601b.d	1201979313	lcs	25-NOV-2009	22:54	10-546.sub	DBLK01LCS	1.00000	925774	

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–546	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241336001	Date Received:	11/18/2009 08:50	%Moisture:	10
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13770	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 11:39	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.1 g	Final Volume:	1 mL
Data File:	026f2601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.38	mg/kg	2.40	7.38

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–546	Date Collected:	11/16/2009 12:00	Matrix:	R
Lab Sample ID:	241336002	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–5897	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 12:17	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	027f2701.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.98	mg/kg	2.32	7.13

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10-546

Matrix Type: SOLID

CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC
1201979310	MB for batch 925769	60
1201979313	LCS for batch 925769	83
241336001	RE03-09-13770	54
241336002	RE03-10-5897	45

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10--546
Client ID: LCS for batch 925769
Lab Sample ID: 1201979313
Instrument: FID5.I
Analyst: KXR2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 22:54
Dilution: 1
Prep Batch ID: 925769
Batch ID: 925774

CAS No	Parmname		Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	28.0	84	53–114

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10–543**	**Sample Type:**	**Matrix Spike**	
Client ID:	**RE03–09–13621MS**	**Matrix:**	**S**	
Lab Sample ID:	**1201979311**	**%Moisture:**	**4.6**	
Instrument:	**FID5.I**	**Analysis Date:**	**11/26/2009 07:49**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID**	**925769**	
Inj. Vol:	**1 uL**	**Batch ID:**	**925774**	

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	34.8	7.52	35.4	80	21–122

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	10-543	Sample Type:	Matrix Spike Duplicate
Client ID:	RE03-09-13621MSD	Matrix:	S
Lab Sample ID:	1201979312	%Moisture:	4.6
Instrument:	FID5.I	Analysis Date:	11/26/2009 08:27
Analyst:	KXR2	Prep Batch ID:	925769
Inj. Vol:	1 uL	Batch ID:	925774

Dilution: 1

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	34.9	7.52	39.1	91	21-122	10	0-30

Method Blank Summary

SDG Number:	10-546	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 925769	Instrument ID:	FID5.I	Data File:	005f0501.d
Lab Sample ID:	1201979310	Prep Date:	11/24/2009 21:12	Analyzed:	11/25/09 22:16
Column:	DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 925769	1201979313	006f0601.d	11/25/09	2254
04 RE03-09-13770	241336001	026f2601.d	11/26/09	1139
05 RE03-10-5897	241336002	027f2701.d	11/26/09	1217

SAMPLE
DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-546	Date Collected:	11/16/2009 12:00	Matrix:	S
Lab Sample ID:	241336001	Date Received:	11/18/2009 08:50	%Moisture:	10
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13770	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 11:39	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.1 g	Final Volume:	1 mL
Data File:	026f2601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.38	mg/kg	2.40	7.38

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/026f2601.d
Lab Smp Id: 241336001 Client Smp ID: RE03-09-13770
Inj Date : 26-NOV-2009 11:39
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241336001|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.10000	Weigth of sample extracted (g)
M	9.98650	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.144	14.148	-0.004	2278613	10.7190	0.40

Data File: /chem/fid5.i/112509dr/026f2601.d
Date : 26-NOV-2009 11:39
Client ID: RE03-09-13770
Sample Info: |241336001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

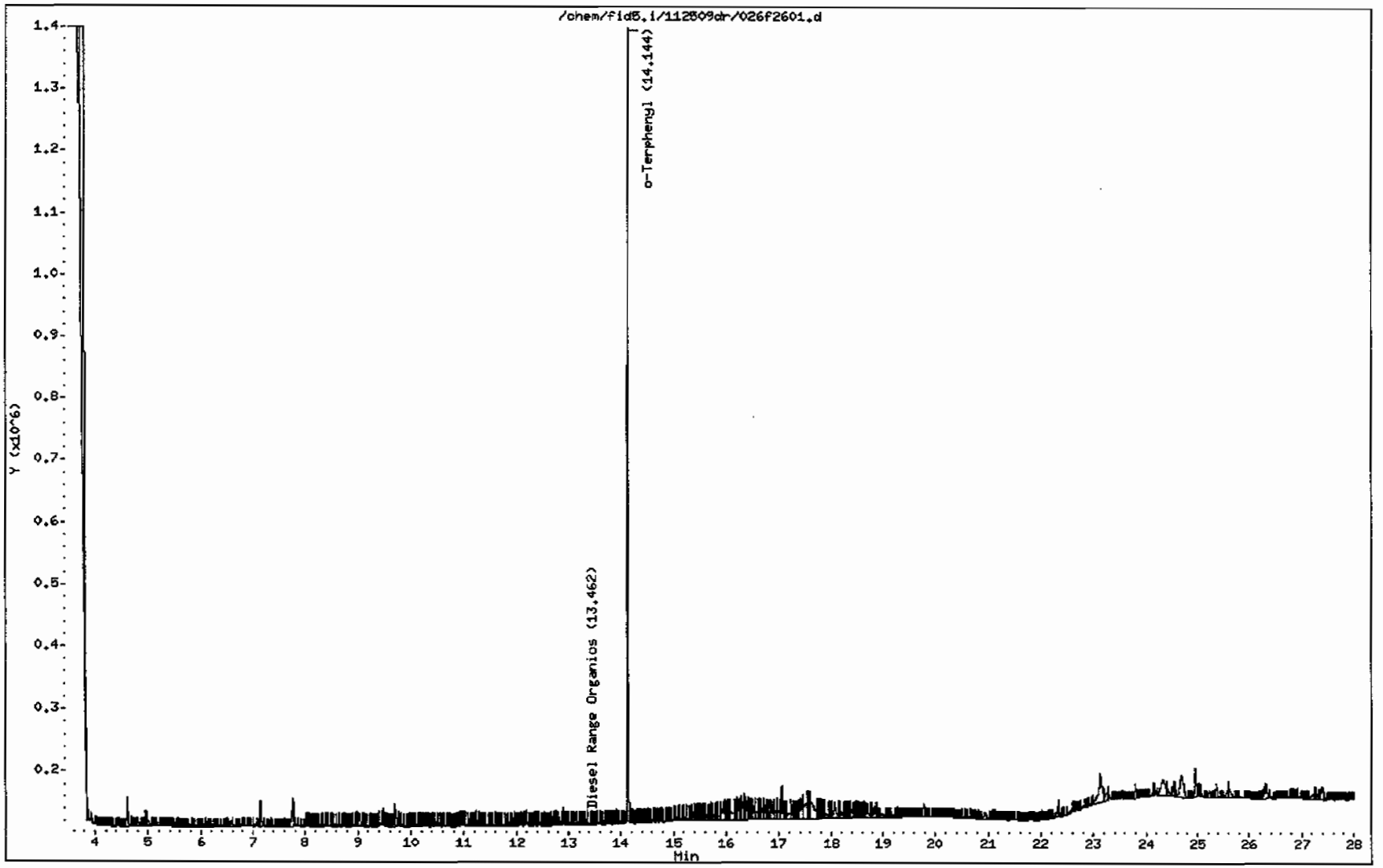

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-546	Date Collected:	11/16/2009 12:00	Matrix:	R
Lab Sample ID:	241336002	Date Received:	11/18/2009 08:50	%Moisture:	7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-5897	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/26/2009 12:17	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	027f2701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.98	mg/kg	2.32	7.13

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/027f2701.d
Lab Smp Id: 241336002 Client Smp ID: RE03-10-5897
Inj Date : 26-NOV-2009 12:17
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241336002|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	6.97410	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			11252867	83.5811	3.0	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.142	14.148	-0.006	1896375	8.92092	0.32	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /ohem/fid5.i/112509dr/027f2701.d
Date : 26-NOV-2009 12:17
Client ID: RE03-10-5897
Sample Info: |241336002|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

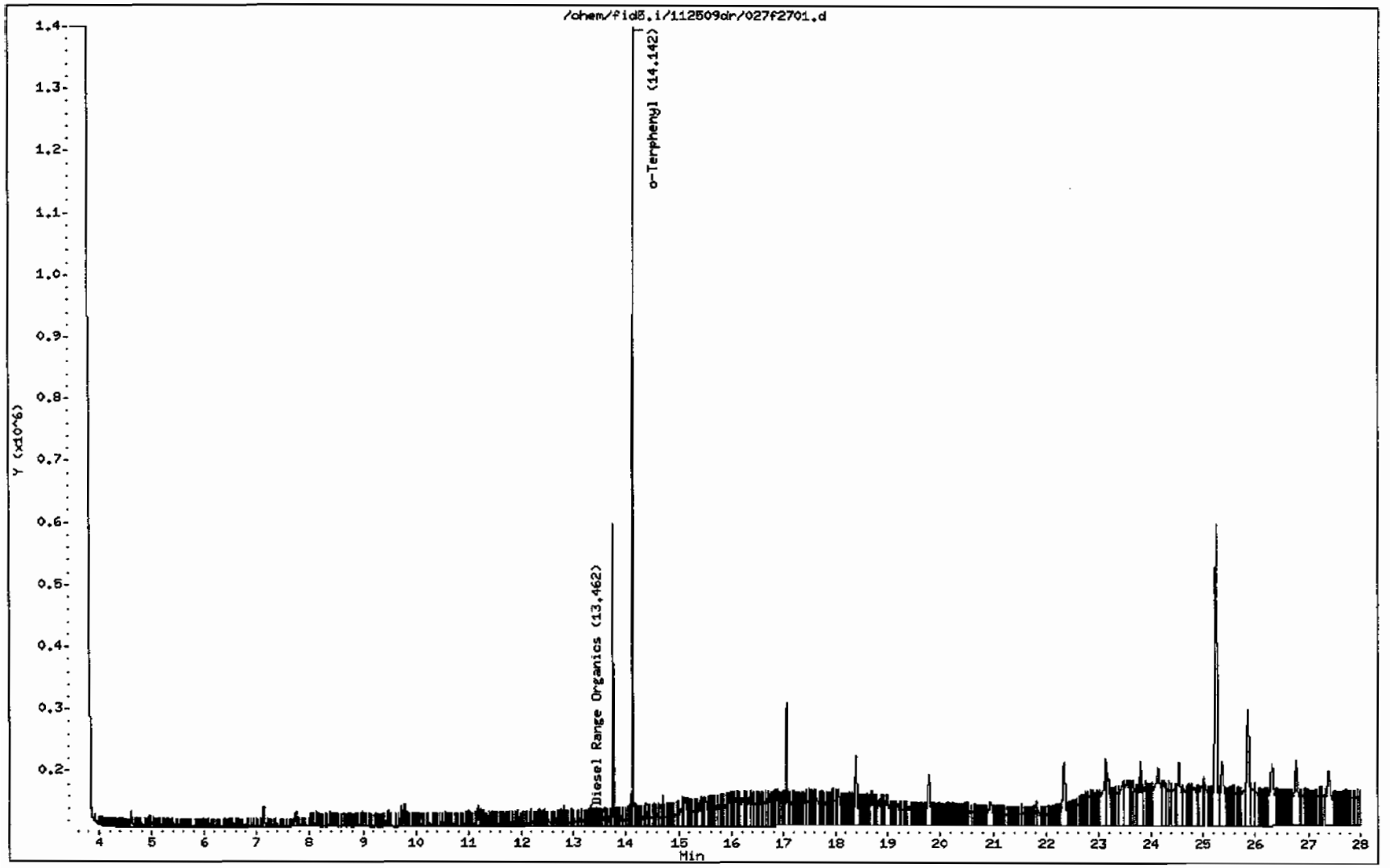

Data File: /chem/fid5.i/112509dr/027f2701.d
Injection Date: 26-NOV-2009 12:17
Instrument: fid5.i
Client Sample ID: RE03-10-5897

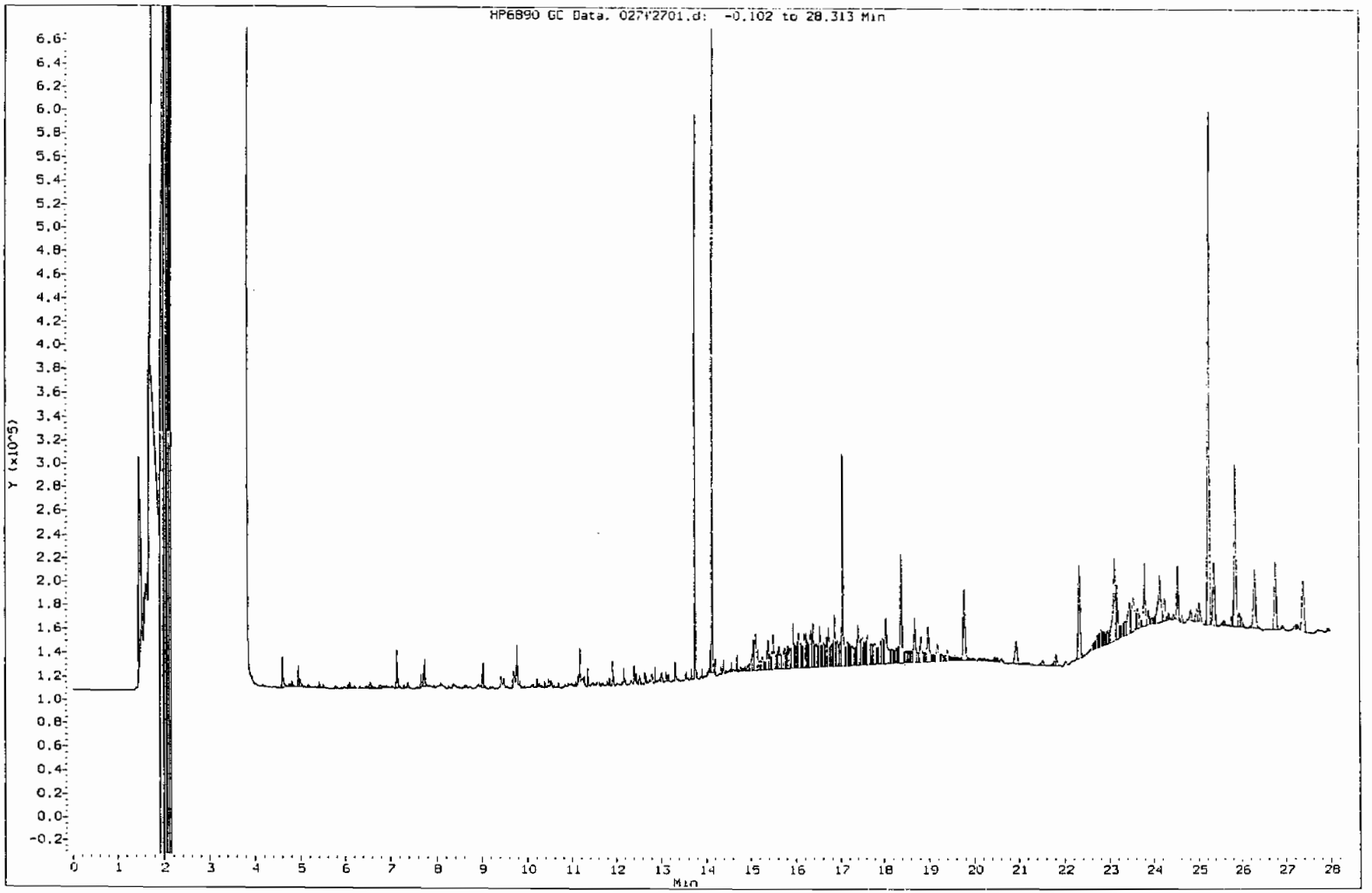

Data File: /chem/fid5.i/112509dr/027f2701.d
Injection Date: 26-NOV-2009 12:17
Instrument: fid5.i
Client Sample ID: RE03-10-5897

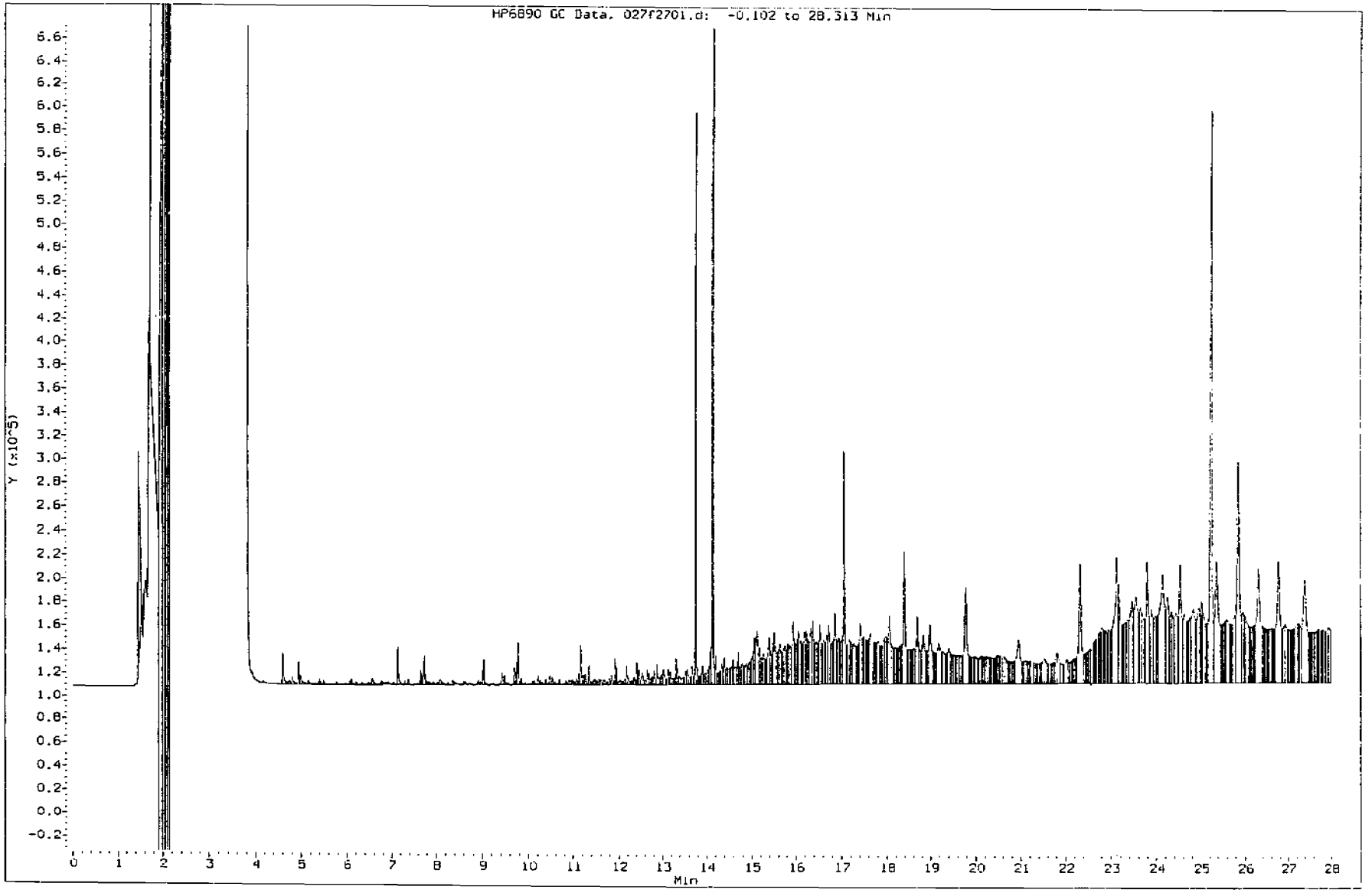

STANDARDS DATA

Report Date: 30-Nov-2009 10:03

Calibration History

Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
26-NOV-2009 12:55	dro	/chem/fid5.i/112509dr/028f2801.d
Ccal Level: 5 , Ccal Amount: 1000		
26-NOV-2009 05:16	dro	/chem/fid5.i/112509dr/016f1601.d
Ccal Level: 5 , Ccal Amount: 1000		
25-NOV-2009 21:00	dro	/chem/fid5.i/112509dr/003f0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 27-Nov-2009 06:37 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

	Compound	RT	RT Window	RF
	3 Decane (C10)	8.038	8.008-8.068	
S	1 Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2 o-Terphenyl	14.148	14.118-14.178	2.126e+05
	4 Octacosane (C28)	18.892	18.862-18.922	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Cal Date : 27-Nov-2009 06:37 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	___ RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: FID5 Calibration Date: 11/25/09 Time: 2100

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	134530.47	0.01	-0.1	15.0
o-Terphenyl	212576.33	196195.57	0.01	-7.7	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: FID5 Calibration Date: 11/26/09 Time: 0516

Lab File ID: 016F1601 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	139350.91	0.01	3.5	15.0
o-Terphenyl	212576.33	203491.74	0.01	-4.3	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: FID5 Calibration Date: 11/26/09 Time: 1255

Lab File ID: 028F2801 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	133096.18	0.01	-1.1	15.0
o-Terphenyl	212576.33	202932.18	0.01	-4.5	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 25-NOV-2009 21:00
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			134530467	1000.00	999
$ 2 o-Terphenyl					CAS #: 84-15-1
14.148	14.148	0.000	4904889	25.0000	23.1

Data File: /chem/fid5.i/112509dr/003f0301.d
Date : 25-NOV-2009 21:00
Client ID: DSTD01
Sample Info: IUFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

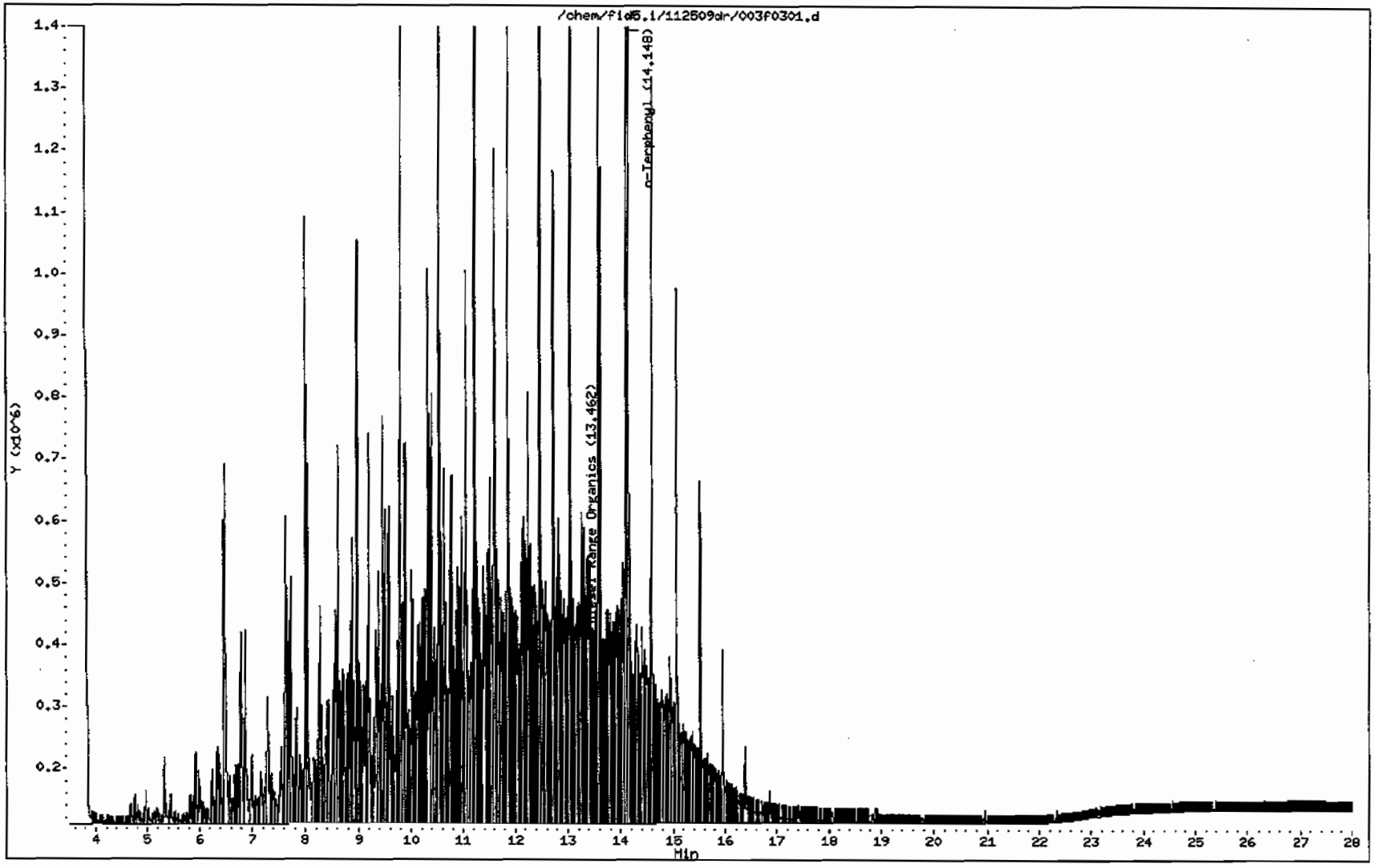

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/016f1601.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 26-NOV-2009 05:16
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			139350908	1000.00	1040
$	2 o-Terphenyl					CAS #: 84-15-1
	14.150	14.148	0.002	5087293	25.0000	23.9

Data File: /chem/fid5.i/112509dr/016f1601.d
Date : 26-NOV-2009 05:16
Client ID: DSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

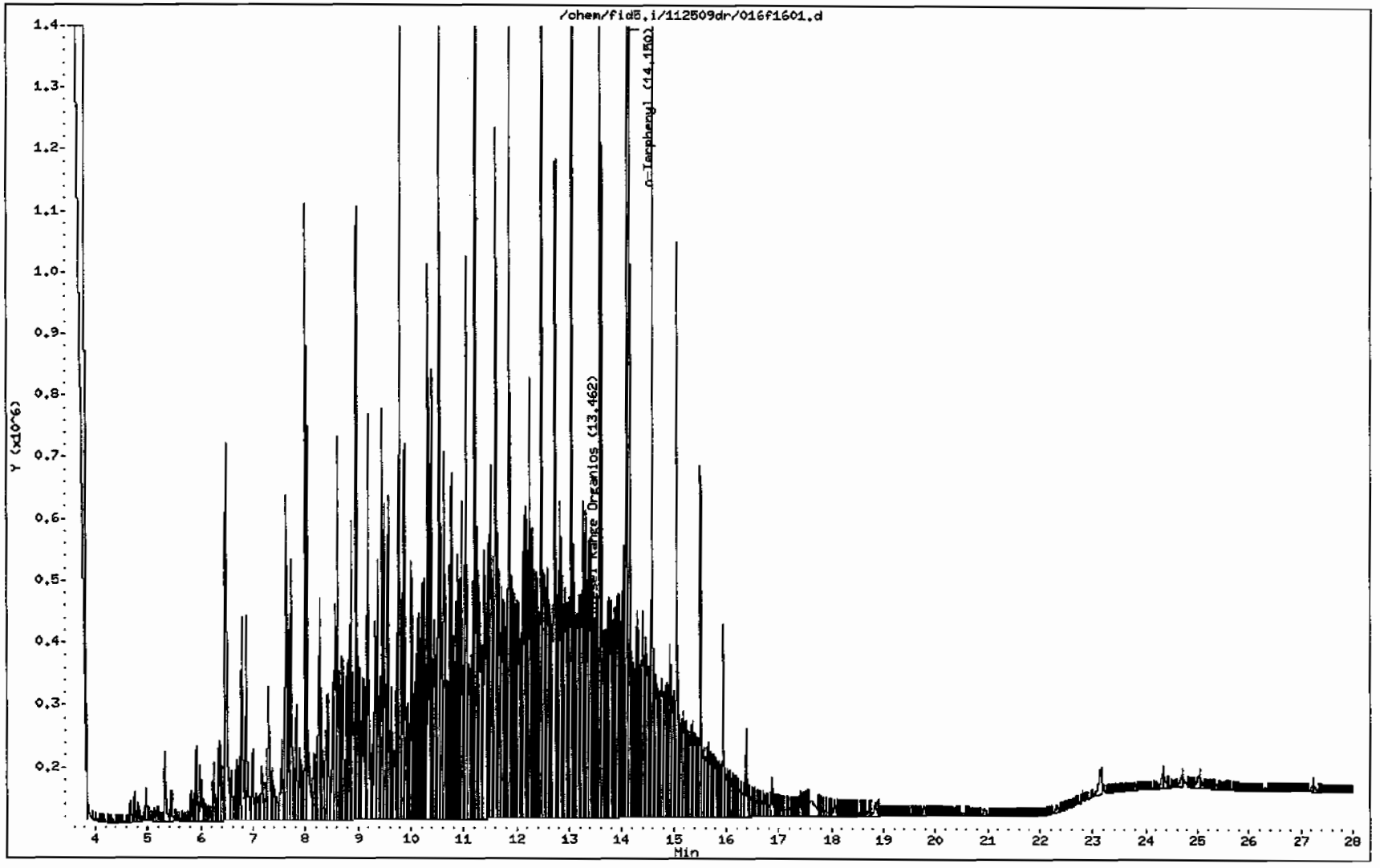

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/028f2801.d
Lab Smp Id: UFI091118-01 D3 Client Smp ID: DSTD03
Inj Date : 26-NOV-2009 12:55
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D3
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			133096178	1000.00	988
$	2 o-Terphenyl					CAS #: 84-15-1
	14.149	14.148	0.001	5073304	25.0000	23.9

Data File: /chem/fid5.i/112509dr/028f2801.d
Date : 26-NOV-2009 12:55
Client ID: DSTD03
Sample Info: IUFI091118-01 D3

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

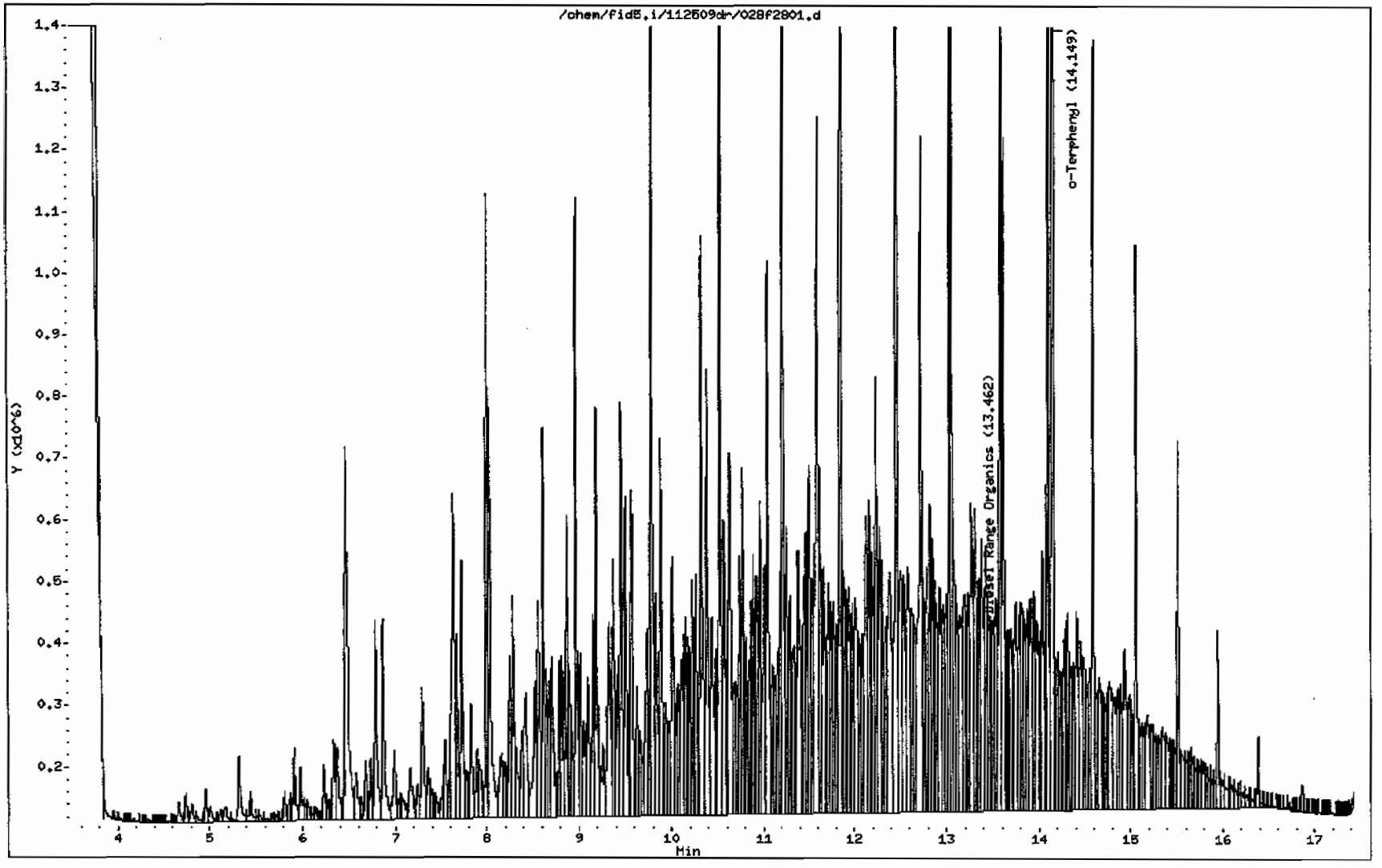

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT
01	DIBLK01	WFI090723-06	11/25/09	1945	14.15		
02	RTMARKER	UFI091013-03	11/25/09	2022			
03	DSTD01	UFI091118-01	11/25/09	2100	14.15		
04	DIBLK02	WFI090723-06	11/25/09	2139	14.14		
05	DBLK01	1201979310	11/25/09	2216	14.14		
06	DBLK01LCS	1201979313	11/25/09	2254	14.14		
07	ZZZZZ	ZZZZZ	11/25/09	2333	14.14		
08	ZZZZZ	ZZZZZ	11/26/09	0011	14.14		
09	ZZZZZ	ZZZZZ	11/26/09	0049	14.14		
10	ZZZZZ	ZZZZZ	11/26/09	0127	14.14		
11	ZZZZZ	ZZZZZ	11/26/09	0206	14.14		
12	ZZZZZ	ZZZZZ	11/26/09	0244	14.15		
13	ZZZZZ	ZZZZZ	11/26/09	0322	14.14		
14	ZZZZZ	ZZZZZ	11/26/09	0400	14.14		
15	ZZZZZ	ZZZZZ	11/26/09	0438	14.14		
16	DSTD02	UFI091118-01	11/26/09	0516	14.15		
17	DIBLK03	WFI090723-06	11/26/09	0555	14.15		
18	ZZZZZ	ZZZZZ	11/26/09	0633	14.14		
19	ZZZZZ	ZZZZZ	11/26/09	0711	14.14		
20	ZZZZZ	ZZZZZ	11/26/09	0749	14.15		
21	ZZZZZ	ZZZZZ	11/26/09	0827	14.15		
22	ZZZZZ	ZZZZZ	11/26/09	0905	14.14		
23	ZZZZZ	ZZZZZ	11/26/09	0944	14.14		
24	ZZZZZ	ZZZZZ	11/26/09	1022	14.14		
25	ZZZZZ	ZZZZZ	11/26/09	1101	14.14		
26	RE03-09-13770	241336001	11/26/09	1139	14.14		
27	RE03-10-5897	241336002	11/26/09	1217	14.14		
28	DSTD03	UFI091118-01	11/26/09	1255	14.15		
29							
30							
31							
32							

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–546			Matrix:	SOIL
Lab Sample ID:	1201979310				
Client Sample:	QC for batch 925769	Client:	LANL010	Project:	QC
Client ID:	MB for batch 925769	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/25/2009 22:16	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30 g	Final Volume:	1 mL
Data File:	005f0501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/005f0501b.d
Lab Smp Id: 1201979310 Client Smp ID: DBLK01
Inj Date : 25-NOV-2009 22:16
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979310|1|
Misc Info : |FIDDRO_SF|925774|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.143	14.148	-0.005	2539206	11.9449	0.40

Data File: /chem/fid5.i/112509dr/005f0501b.d
Date : 25-NOV-2009 22:16
Client ID: DBLK01
Sample Info: |1201979310|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

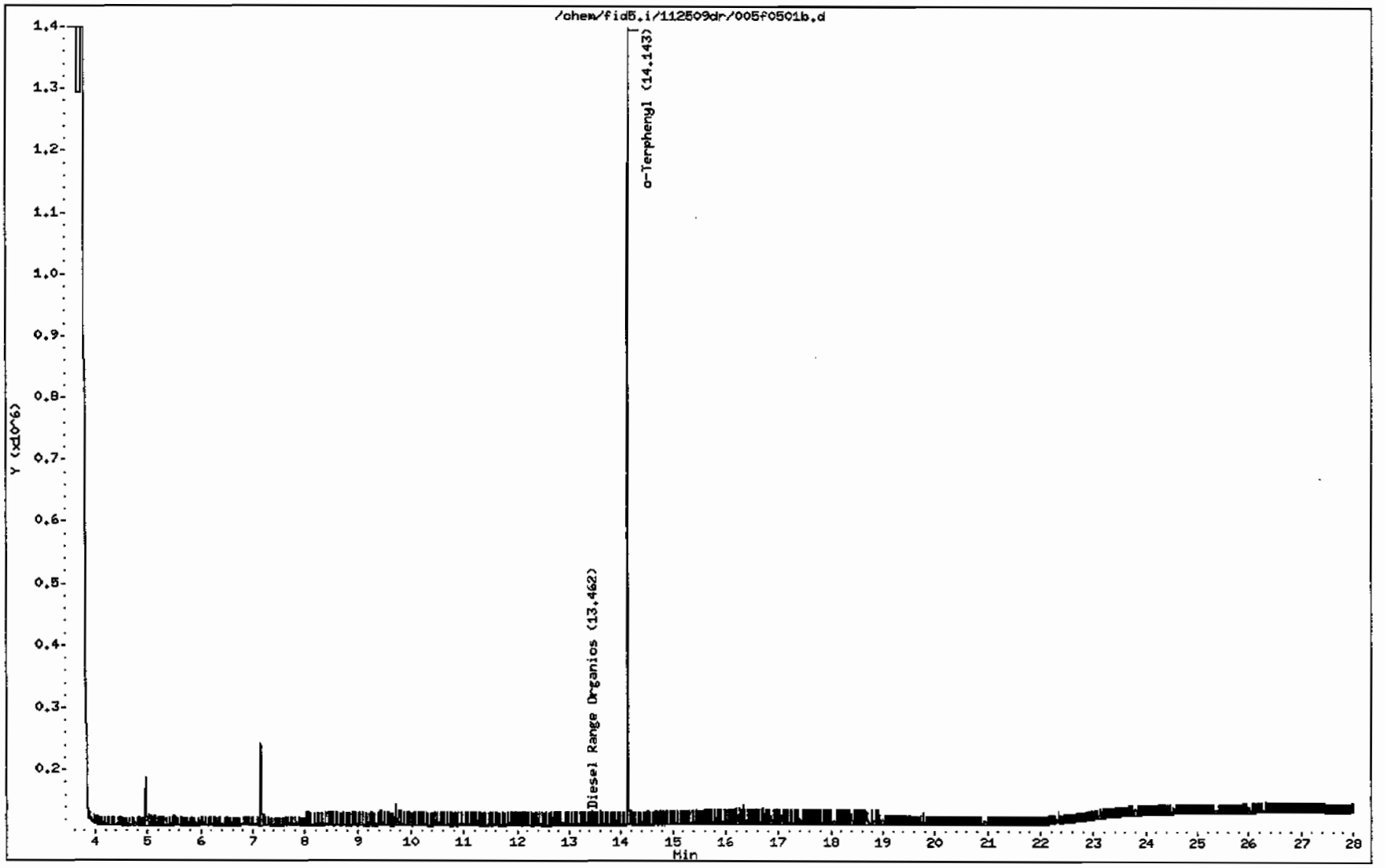

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-546			Matrix:	SOIL
Lab Sample ID:	1201979313				
Client Sample:	QC for batch 925769	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 925769	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	925774	Inst:	FID5.I	Dilution:	1
Run Date:	11/25/2009 22:54	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/24/2009 21:12	Aliquot:	30 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		28.0	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/006f0601b.d
Lab Smp Id: 1201979313 Client Smp ID: DBLK01LCS
Inj Date : 25-NOV-2009 22:54
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979313|1|
Misc Info : |FIDDRO_SF|925774|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			113039315	839.604	28.0
$ 2 o-Terphenyl					CAS #: 84-15-1
14.145	14.148	-0.003	3515400	16.5371	0.55

Data File: /chem/fid5.i/112509dr/006f0601b.d
Date : 25-NOV-2009 22:54
Client ID: DBLK01LCS
Sample Info: |120197931311|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

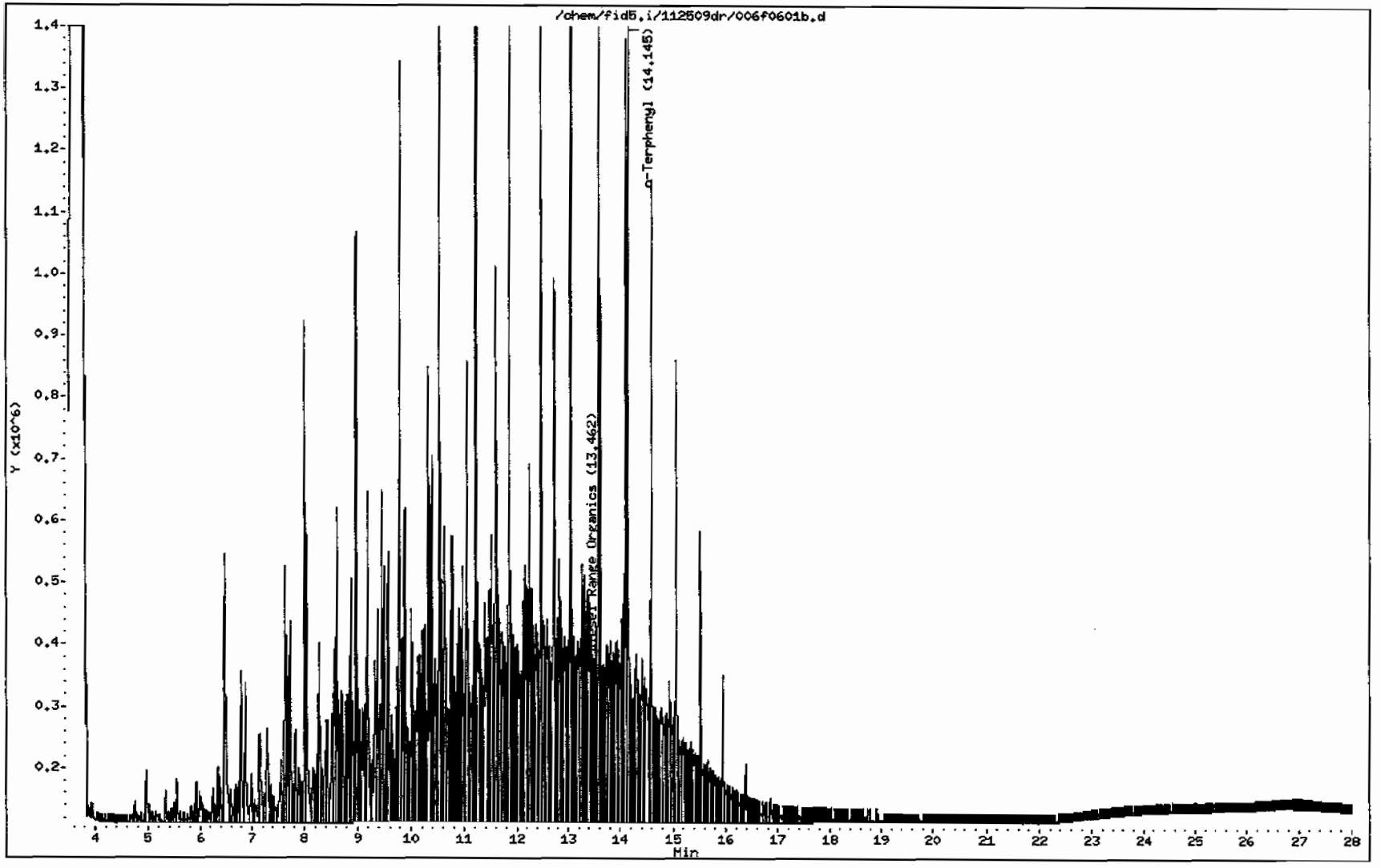

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORH	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MBSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359		1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359		1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359		1.0	LANL	USE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359		1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359		1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359		1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359		1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359		1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08			SDGa26875	1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46			SDGa26875	1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359		1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359		1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359		1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359		1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359		1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359		1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359		1.0	LANL	USE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29			SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875	1.0		CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359	1.0	LANL	USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359	1.0	LANL	USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359	1.0	LANL	USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359	1.0	LANL	USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406	1.0	LANL	USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406		1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406		1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875		1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875		1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875		1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385		1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385		1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385		1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385		1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385		1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385		1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385		1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385		1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385		1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42		SDGa26875		1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20		SDGa26875		1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58		SDGa26875		1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35		SDGa26875		1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.1

DATE: 11/27/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:112509DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	25-NOV-2009 19:45		SDGa14715	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	25-NOV-2009 20:22		SDGa14715	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	25-NOV-2009 21:00		SDGa14715	1.0		PASSES
004f0401.d	WFI090723-06 B2	KXR2	25-NOV-2009 21:39		SDGa14715	1.0		CLEAN
005f0501.d	1201979310	KXR2	25-NOV-2009 22:16	925774	10-519	1.0	MB	USE
006f0601.d	1201979313	KXR2	25-NOV-2009 22:54	925774	10-519	1.0	LCS	USE
007f0701.d	241183002	KXR2	25-NOV-2009 23:33	925774	10-519	1.0	LANL	USE
008f0801.d	241183003	KXR2	26-NOV-2009 00:11	925774	10-519	1.0	LANL	USE
009f0901.d	241183004	KXR2	26-NOV-2009 00:49	925774	10-519	1.0	LANL	USE
010f1001.d	241318001	KXR2	26-NOV-2009 01:27	925774	10-543	1.0	LANL	USE
011f1101.d	241318002	KXR2	26-NOV-2009 02:06	925774	10-543	1.0	LANL	USE
012f1201.d	241318003	KXR2	26-NOV-2009 02:44	925774	10-543	1.0	LANL	USE
013f1301.d	241318004	KXR2	26-NOV-2009 03:22	925774	10-543	1.0	LANL	USE
014f1401.d	241318005	KXR2	26-NOV-2009 04:00	925774	10-543	10.0	LANL	USE
015f1501.d	241318006	KXR2	26-NOV-2009 04:38	925774	10-543	1.0	LANL	USE

Instrument Batch: /chem/fid5.i/112509dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	UFI091118-01 D2	KXR2	26-NOV-2009 05:16		SDGa14715	1.0		PASSES

017f1701.d	WFI090723-06 B3	KXR2	26-NOV-2009 05:55			SDGa14715	1.0		CLEAN
018f1801.d	241318007	KXR2	26-NOV-2009 06:33	925774	10-543		1.0	LANL	USE
019f1901.d	241318008	KXR2	26-NOV-2009 07:11	925774	10-543		1.0	LANL	USE
020f2001.d	1201979311	KXR2	26-NOV-2009 07:49	925774	10-543		1.0	MS	USE
021f2101.d	1201979312	KXR2	26-NOV-2009 08:27	925774	10-543		1.0	MSD	USE
022f2201.d	241318009	KXR2	26-NOV-2009 09:05	925774	10-543		1.0	LANL	USE
023f2301.d	241318010	KXR2	26-NOV-2009 09:44	925774	10-543		1.0	LANL	USE
024f2401.d	241318013	KXR2	26-NOV-2009 10:22	925774	10-543		1.0	LANL	USE
025f2501.d	241318014	KXR2	26-NOV-2009 11:01	925774	10-543		1.0	LANL	USE
026f2601.d	241336001	KXR2	26-NOV-2009 11:39	925774	10-546		1.0	LANL	USE
027f2701.d	241336002	KXR2	26-NOV-2009 12:17	925774	10-546		1.0	LANL	USE
028f2801.d	UFI091118-01 D3	KXR2	26-NOV-2009 12:55			SDGa14715	1.0		PASSES

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 925769 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201979310 MB	24-NOV-2009 21:12:13	30	1	0.03333
1201979313 LCS	24-NOV-2009 21:12:13	30	1	0.03333
241183002	24-NOV-2009 21:12:13	30.14	1	0.03318
241183003	24-NOV-2009 21:12:13	30.13	1	0.03319
241183004	24-NOV-2009 21:12:13	30.15	1	0.03317
241318001	24-NOV-2009 21:12:13	30.11	1	0.03321
241318002	24-NOV-2009 21:12:13	30.08	1	0.03324
241318003	24-NOV-2009 21:12:13	30.14	1	0.03318
241318004	24-NOV-2009 21:12:13	30.03	1	0.0333
241318005	24-NOV-2009 21:12:13	30.12	1	0.0332
241318006	24-NOV-2009 21:12:13	30.12	1	0.0332
241318007	24-NOV-2009 21:12:13	30.08	1	0.03324
241318008	24-NOV-2009 21:12:13	30.17	1	0.03315
1201979311 MS (241318008)	24-NOV-2009 21:12:13	30.15	1	0.03317
1201979312 MSD (241318008)	24-NOV-2009 21:12:13	30.07	1	0.03326
241318009	24-NOV-2009 21:12:13	30.12	1	0.0332
241318010	24-NOV-2009 21:12:13	30.06	1	0.03327
241318013	24-NOV-2009 21:12:13	30.03	1	0.0333
241318014	24-NOV-2009 21:12:13	30.17	1	0.03315
241336001	24-NOV-2009 21:12:13	30.1	1	0.03322
241336002	24-NOV-2009 21:12:13	30.17	1	0.03315

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201979313	TPH DRO LCS	UE091030-08	1	mL
MS	1201979311	TPH DRO LCS	UE091030-08	1	mL
MSD	1201979312	TPH DRO LCS	UE091030-08	1	mL
SURR	All	20 ppm surrogate	WE091121-04	1	mL
REGNT	All	Methylene Chloride	1233148-D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/020f2001.d
Lab Smp Id: 1201979311 Client Smp ID: RE03-09-13621MS
Inj Date : 26-NOV-2009 07:49
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979311|1|
Misc Info : |FIDDRO_SF|925774|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weigth of sample extracted (g)
M	4.64490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			137030255	1017.80	35.4	
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.146	14.148	-0.002	3336659	15.6963	0.54	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/020f2001.d
Date : 26-NOV-2009 07:49
Client ID: RE03-09-13621MS
Sample Info: |1201979311|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

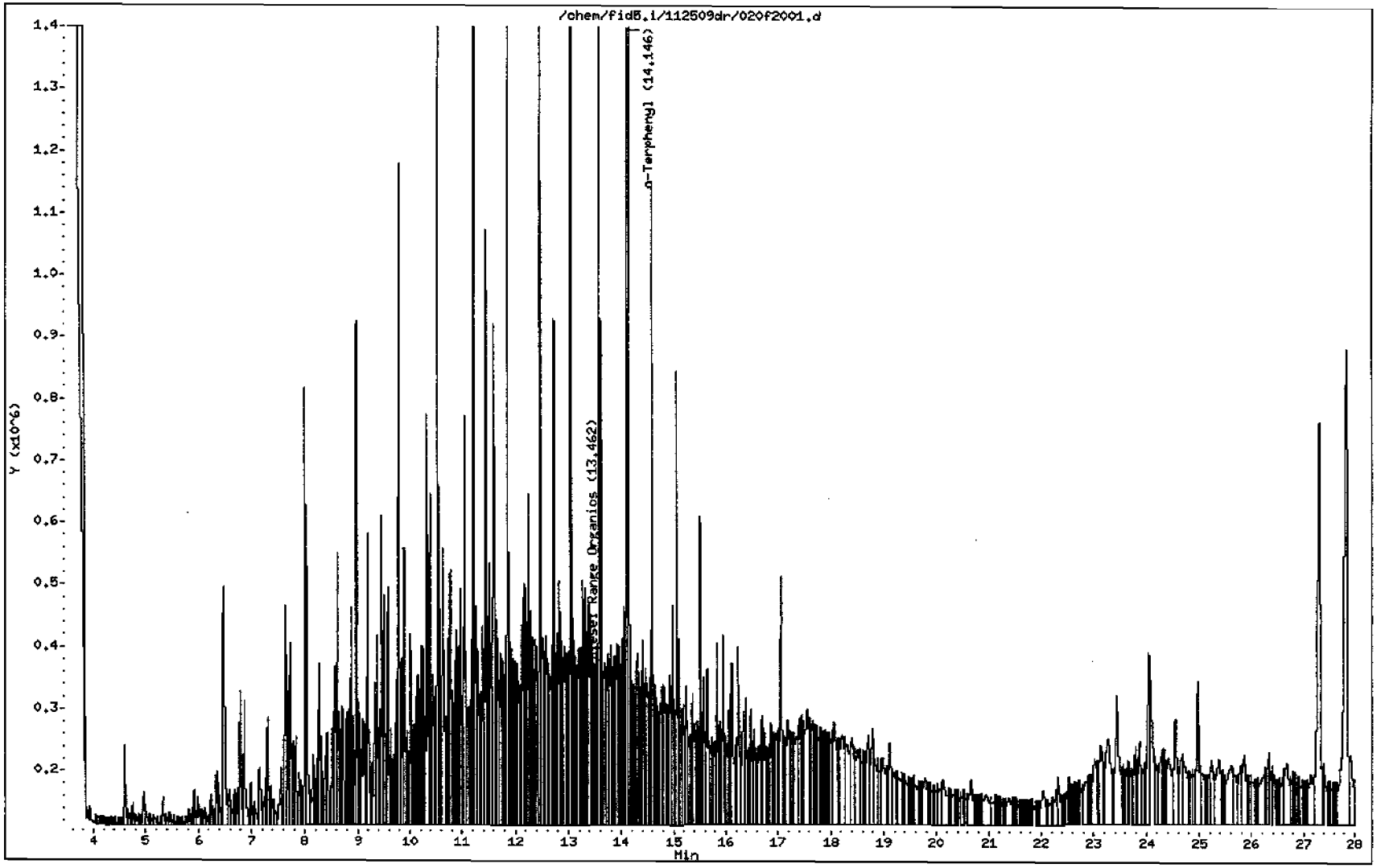

Before KM 11/26/09

Data File: /chem/fid5.i/112509dr/020f2001.d
Injection Date: 26-NOV-2009 07:49
Instrument: fid5.i
Client Sample ID: RE03-09-13621MS

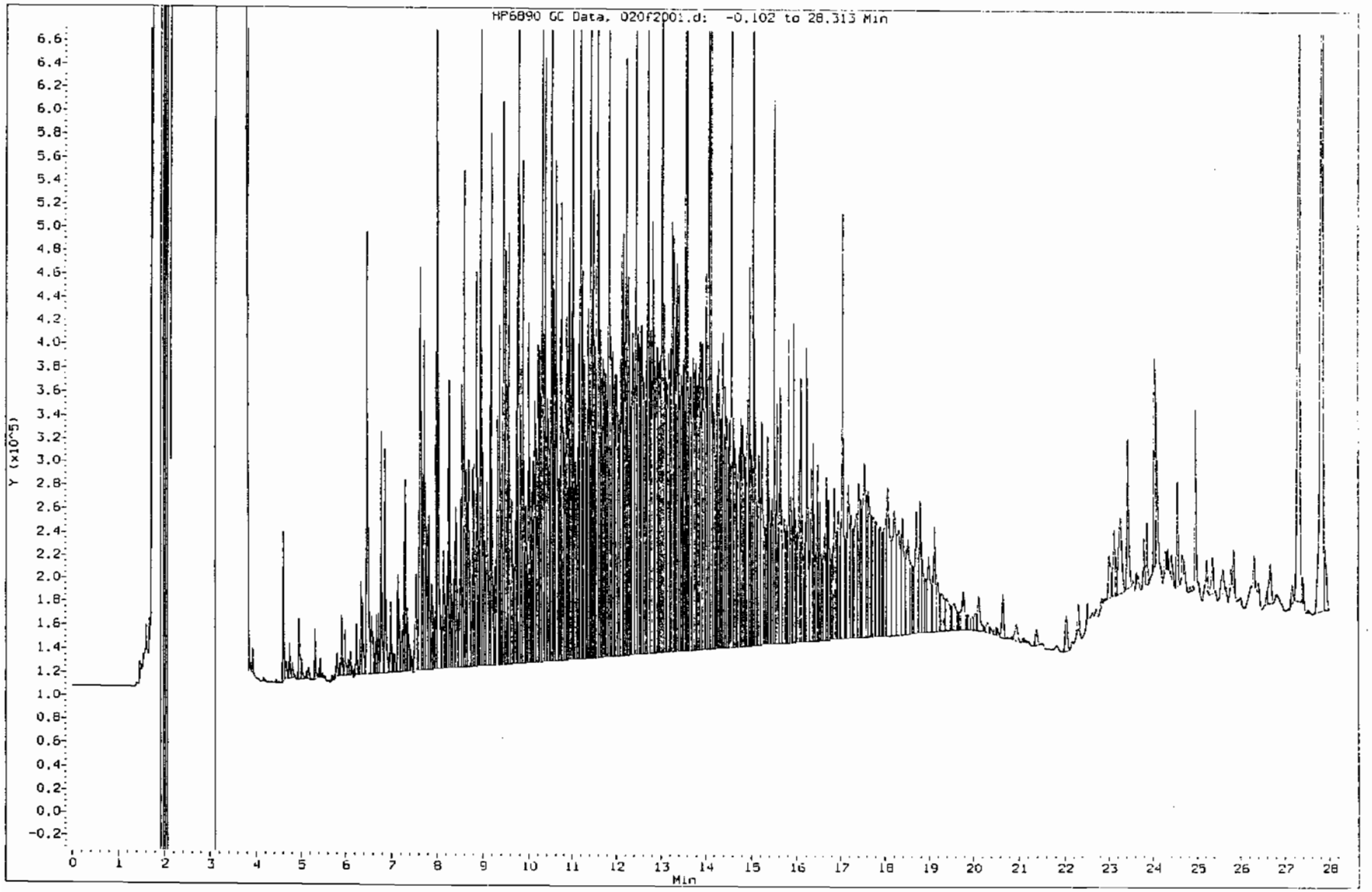

Data File: /chem/fid5.i/112509dr/020f2001.d
Injection Date: 26-NOV-2009 07:49
Instrument: fid5.i
Client Sample ID: RE03-09-13621MS

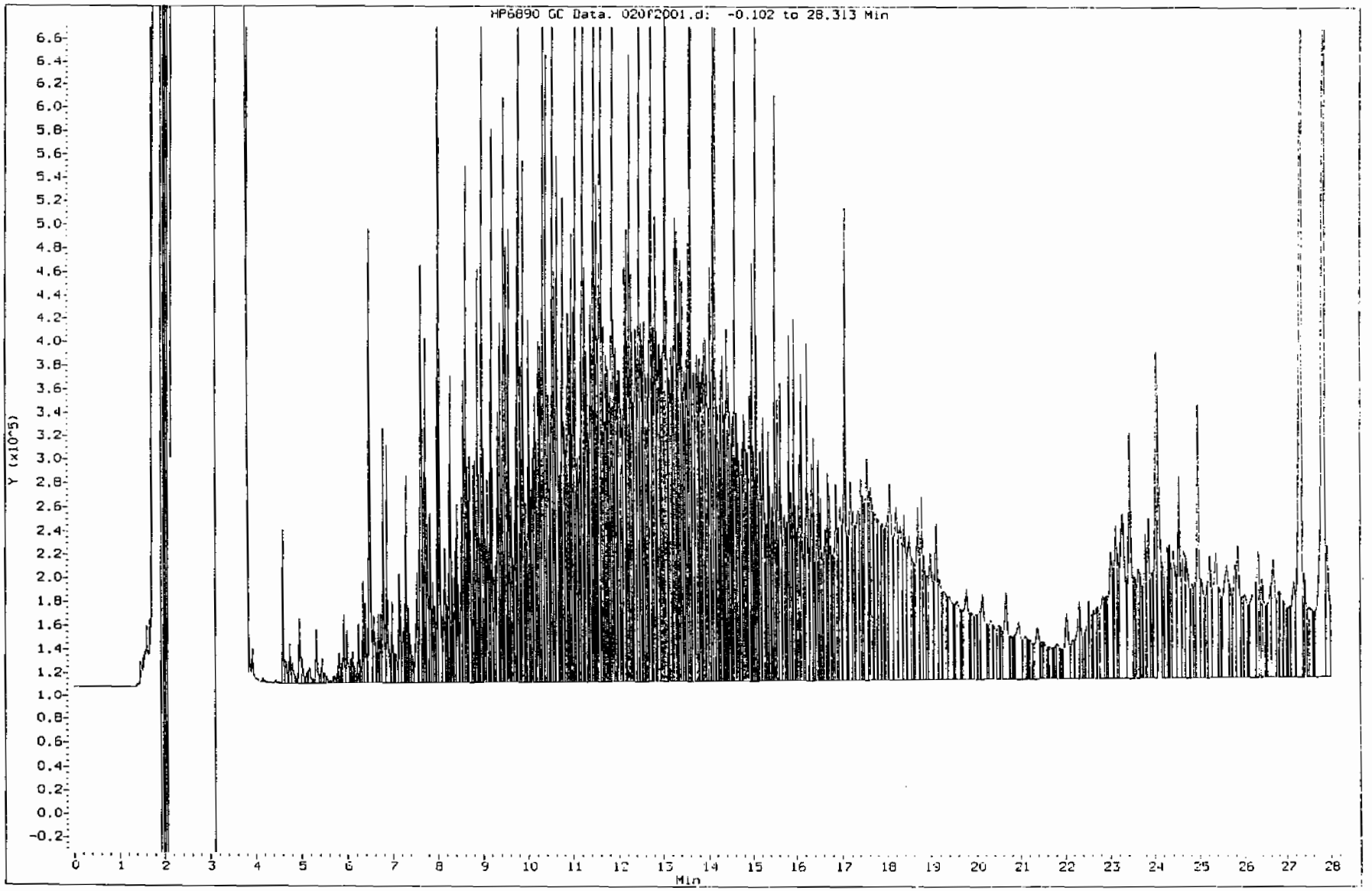

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/112509dr/021f2101.d
Lab Smp Id: 1201979312 Client Smp ID: RE03-09-13621MSD
Inj Date : 26-NOV-2009 08:27
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201979312|1|
Misc Info : |FIDDRO_SF|925774|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/112509dr/FID5a.i_b_DRO_111709.m
Meth Date : 27-Nov-2009 06:37 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-543.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weigth of sample extracted (g)
M	4.64490	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	8.008- 18.916			150965650	1121.30	39.1	
$	2 o-Terphenyl					CAS #: 84-15-1	
	14.145	14.148	-0.003	3415097	16.0653	0.56	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid5.i/112509dr/021f2101.d
Date : 26-NOV-2009 08:27
Client ID: RE03-09-13621MSD
Sample Info: |120197931211|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

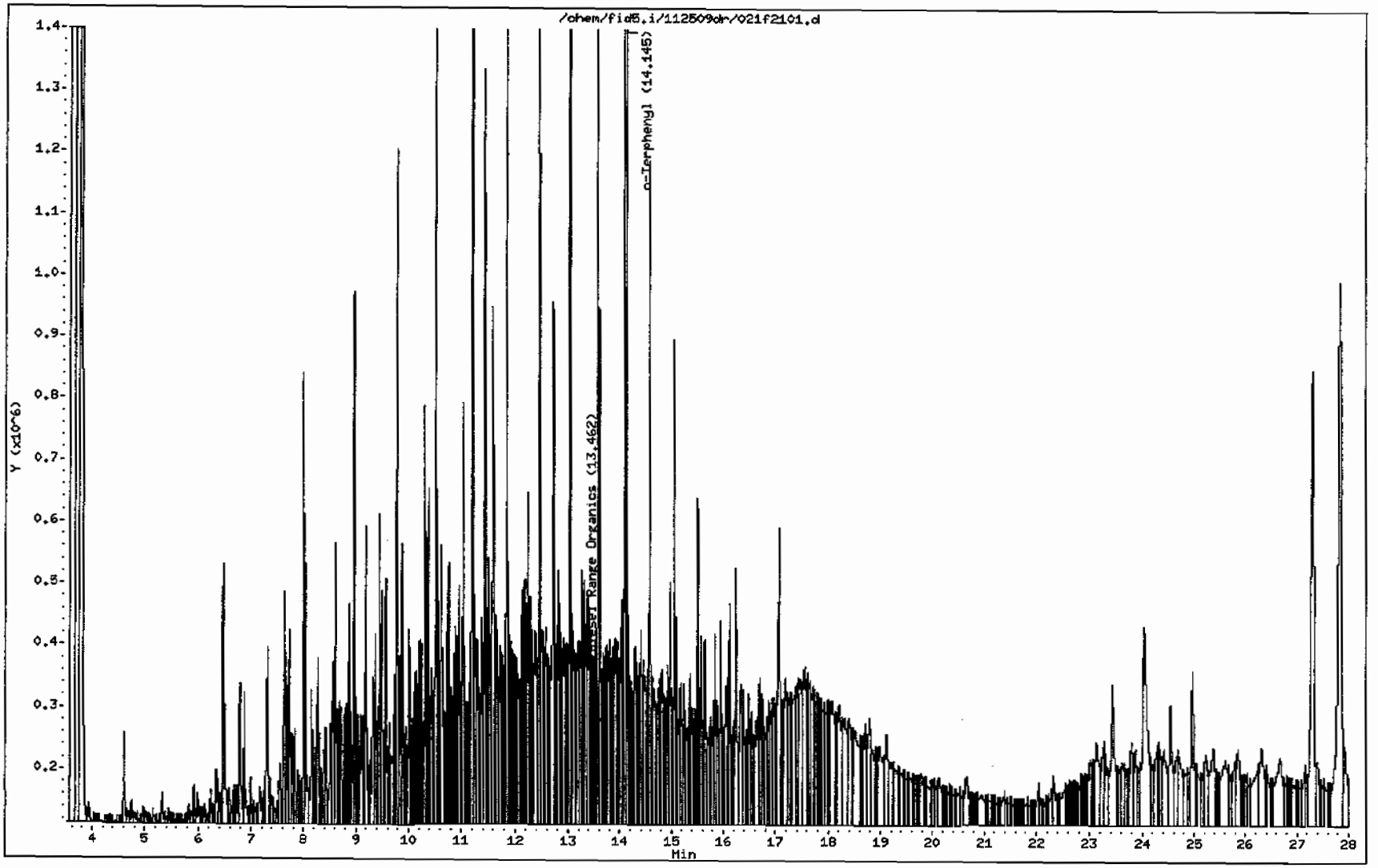

Data File: /chem/fid5.i/112509dr/021f2101.d
Injection Date: 26-NOV-2009 08:27
Instrument: fid5.i
Client Sample ID: RE03-09-13621MSD

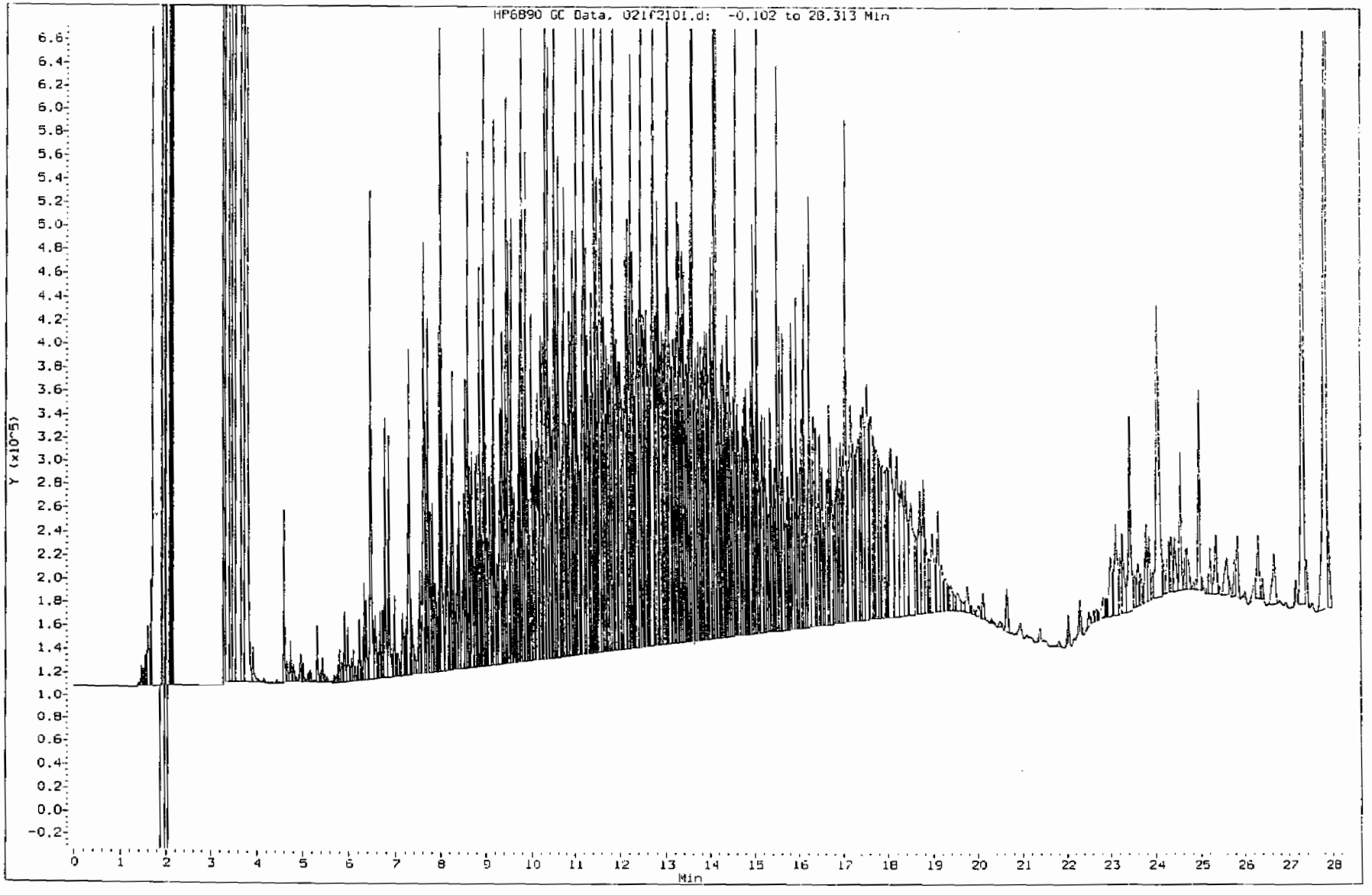

Data File: /chem/fid5.i/112509dr/021f2101.d
Injection Date: 26-NOV-2009 08:27
Instrument: fid5.i
Client Sample ID: RE03-09-13621MSD

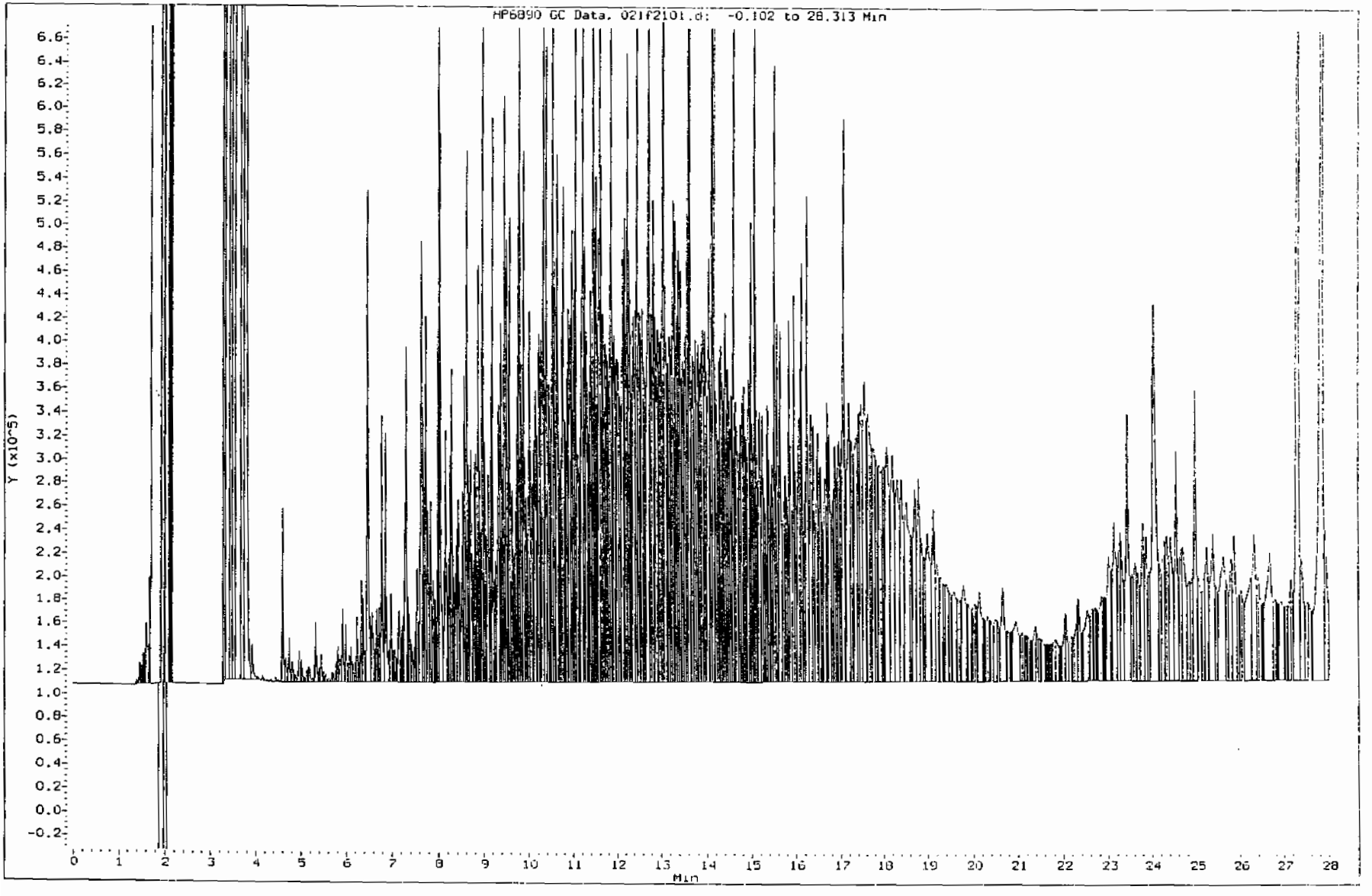

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	926712
Prep Batch Number:	926709

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201981383	Method Blank (MB)
1201981386	Laboratory Control Sample (LCS)
1201981384	241417001(RE03-09-13812) Matrix Spike (MS)
1201981385	241417001(RE03-09-13812) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and

reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria for theAroclors.

Surrogate recovery did not meet the acceptance criteria in Aroclor-1254 standard analyzed for this SDG; however this had no adverse effects on the data as all other standards associated with this SDG and all samples in this SDG met surrogate recovery acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-575) was selected for the matrix spike and matrix spike duplicate analysis for this batch.

Matrix Spike (MS) Recovery Statement
The MS recoveries were not within the established acceptance limits due to dilution and sample matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the established acceptance limits due to dilution and sample matrix interference.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD did not meet the acceptance limits due to dilution and sample matrix interference.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 241336002 (RE03-10-5897) was at 1:5 diluted prior to analysis due to the oily matrix of the extract.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation

Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/14/09

Roadmap for LANL 10-546 PCB

This roadmap was analyzed by jcn01212 on 12-02-2009, 14:22.
This roadmap was reviewed by jcb on 12-03-2009, 09:27.
This roadmap was packaged by sha01289 on 12-14-2009, 10:16.
This roadmap was validated by jim01140 on 12-14-2009, 13:23.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/082f8201.d	241336001	sample	30-NOV-2009	23:47	10-546.sub	RE03-09-13770	1.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/083f8301.d	241336002	sample	30-NOV-2009	23:58	10-546.sub	RE03-10-5897	5.00000	926712	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/082b8201.d	241336001	sample	30-NOV-2009	23:47	10-546.sub	RE03-09-13770	1.00000	926712	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/113009a.b/083b8301.d	241336002	sample	30-NOV-2009	23:58	10-546.sub	RE03-10-5897	5.00000	926712	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/062f6201-3.d	1201981383	mb	30-NOV-2009	20:05	10-546.sub	PBLK01	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/063f6301-3.d	1201981386	lcs	30-NOV-2009	20:16	10-546.sub	PBLK01LCS	1.00000	926712	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/113009a.b/062b6201-3.d	1201981383	mb	30-NOV-2009	20:05	10-546.sub	PBLK01	1.00000	926712	
☐	N	/chem/ecd2a.i/113009a.b/063b6301-3.d	1201981386	lcs	30-NOV-2009	20:16	10-546.sub	PBLK01LCS	1.00000	926712	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	S
Lab Sample ID:	241336001	**Date Received:**	11/18/2009 08:50	**%Moisture:**	10
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13770	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 23:47	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	082f8201.d	**Column:**	1 CLP1	**Level:**	LOW
	082b8201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.23	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.23	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.23	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.23	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.23	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.23	3.68	1
11096-82-5	Aroclor-1260	J	1.60	ug/kg	1.23	3.68	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241336002**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-5897**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**5**
Run Date:	**11/30/2009 23:58**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**083f8301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	083b8301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	17.9	ug/kg	5.96	17.9	1
11104-28-2	Aroclor-1221	U	17.9	ug/kg	5.96	17.9	1
11141-16-5	Aroclor-1232	U	17.9	ug/kg	5.96	17.9	1
53469-21-9	Aroclor-1242	U	17.9	ug/kg	5.96	17.9	1
12672-29-6	Aroclor-1248	U	17.9	ug/kg	5.96	17.9	1
11097-69-1	Aroclor-1254		47.4	ug/kg	5.96	17.9	1
11096-82-5	Aroclor-1260		53.5	ug/kg	5.96	17.9	2

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-546

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201981383	MB for batch 926709	94		99		88		99	
1201981386	LCS for batch 926709	88		92		83		93	
241336001	RE03-09-13770	88		92		83		93	
241336002	RE03-10-5897	97	D	98	D	93	D	98	D

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-546
Client ID: LCS for batch 926709
Lab Sample ID: 1201981386
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 20:16
Dilution: 1
Prep Batch ID: 926709
Batch ID: 926712

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	26.5	80	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	30.8	92	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-575**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-13812MS**	**Matrix:**	**SOIL**
Lab Sample ID:	**1201981384**	**%Moisture:**	**7.1**
Instrument:	**ECD2A.I**	**Analysis Date:**	**12/01/2009 00:42**
Analyst:	**JAOC**	**Prep Batch ID**	**926709**
Inj. Vol:	**1 uL**	**Batch ID:**	**926712**

Dilution: 10

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	35.7	0.00	U	35.3	99	23-117
11096-82-5	MS	Aroclor-1260	35.7	76.9		76.4	-1 *	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-575
Client ID: RE03-09-13812MSD
Lab Sample ID: 1201981385
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 7.1
Analysis Date: 12/01/2009 00:53
Prep Batch ID: 926709
Batch ID: 926712
Dilution: 10

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	35.7	0.00	U	44.3	124 *	23-117	23	0-30
11096-82-5	MSD Aroclor-1260	35.7	76.9		109	90	27-116	35 *	0-30

Method Blank Summary

SDG Number:	10-546	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926709	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	062b6201-1.d 062f6201-1.d
Lab Sample ID:	1201981383				
Column:	CLP2 CLP1	Prep Date:	11/27/2009 22:34	Analyzed:	11/30/09 20:05
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926709	1201981386	063f6301-1.d 063b6301-1.d	11/30/09	2016
02 RE03-09-13770	241336001	082f8201.d 082b8201.d	11/30/09	2347
03 RE03-10-5897	241336002	083f8301.d 083b8301.d	11/30/09	2358

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**	**Date Collected:**	**11/16/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241336001**	**Date Received:**	**11/18/2009 08:50**	**%Moisture:**	**10**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13770**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 23:47**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**082f8201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	082b8201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.23	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.23	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.23	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.23	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.23	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.23	3.68	1
11096-82-5	Aroclor-1260	J	1.60	ug/kg	1.23	3.68	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/082f8201.d
Lab Smp Id: 241336001 Client Smp ID: RE03-09-13770
Inj Date : 30-NOV-2009 23:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241336001|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13770|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 82
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	9.98650	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	10102944	175.060	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	9065432	165.339	6.1	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	212309	52.2055	1.9	80.00- 120.00	100.00(a)
4.289	4.290	-0.001	100669	39.8168	1.5	41.58- 81.58	47.42
4.455	4.455	0.000	94381	36.5367	1.3	43.08- 83.08	44.45
4.666	4.667	-0.001	221568	36.7072	1.4	129.99- 169.99	104.36
4.856	4.856	0.000	146313	50.2461	1.8	51.44- 91.44	68.92
			Average of Peak Concentrations =		1.6		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/082f8201.d

Date : 30-NOV-2009 23:47

Client ID: RE03-09-13770

Sample Info: |241336001|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

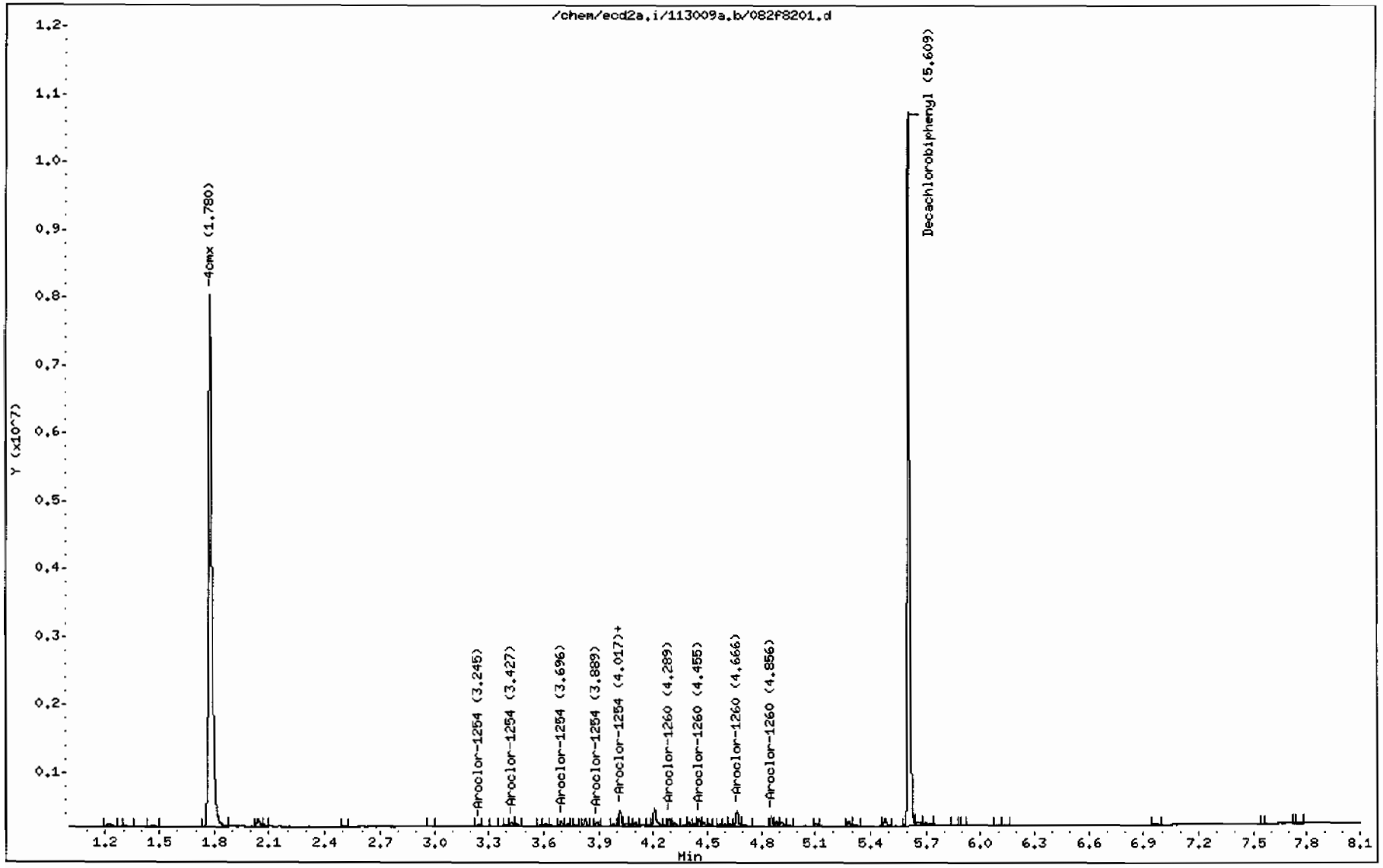

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/082b8201.d
Lab Smp Id: 241336001 Client Smp ID: RE03-09-13770
Inj Date : 30-NOV-2009 23:47
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241336001|1|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-09-13770|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 82
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	9.98650	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	21662673	183.272	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	20150901	185.481	6.8	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	208916	37.8977	1.4	80.00- 120.00	100.00(a)
4.570	4.570	0.000	347560	48.7328	1.8	108.85- 148.85	166.36
4.681	4.682	-0.001	216854	45.8335	1.7	65.38- 105.38	103.80
4.879	4.880	-0.001	235463	40.5926	1.5	82.89- 122.89	112.71
5.505	5.505	0.000	350311	38.7484	1.4	145.10- 185.10	167.68
Average of Peak Concentrations =					1.6		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd2a.i/113009a.b/082b8201.d

Date : 30-NOV-2009 23:47

Client ID: RE03-09-13770

Sample Info: |241336001|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

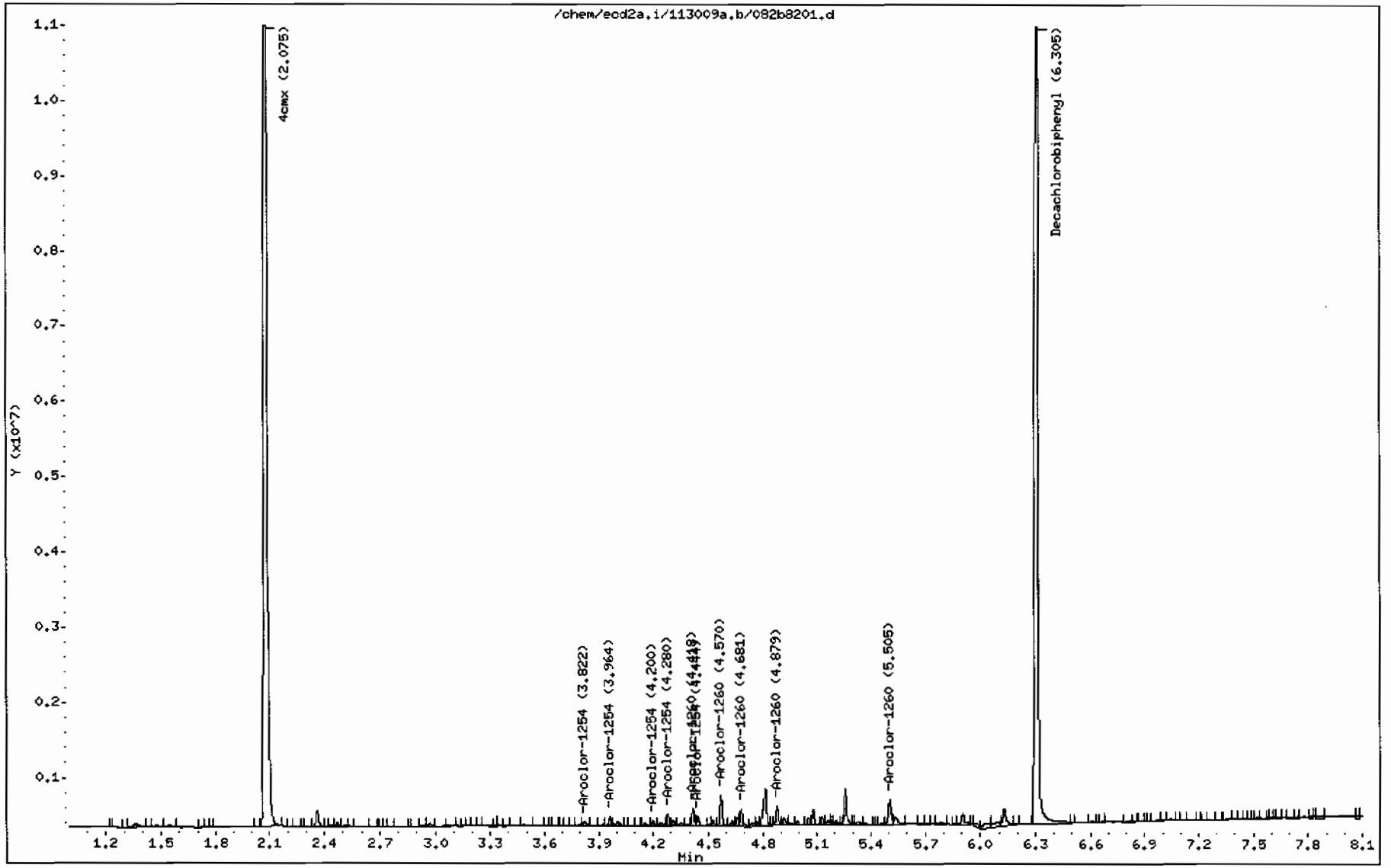

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–546	**Date Collected:**	11/16/2009 12:00	**Matrix:**	R
Lab Sample ID:	241336002	**Date Received:**	11/18/2009 08:50	**%Moisture:**	7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–5897	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	5
Run Date:	11/30/2009 23:58	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	083f8301.d	**Column:**	1 CLP1	**Level:**	LOW
	083b8301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	17.9	ug/kg	5.96	17.9	1
11104–28–2	Aroclor–1221	U	17.9	ug/kg	5.96	17.9	1
11141–16–5	Aroclor–1232	U	17.9	ug/kg	5.96	17.9	1
53469–21–9	Aroclor–1242	U	17.9	ug/kg	5.96	17.9	1
12672–29–6	Aroclor–1248	U	17.9	ug/kg	5.96	17.9	1
11097–69–1	Aroclor–1254		47.4	ug/kg	5.96	17.9	1
11096–82–5	Aroclor–1260		53.5	ug/kg	5.96	17.9	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/083f8301.d
Lab Smp Id: 241336002 Client Smp ID: RE03-10-5897
Inj Date : 30-NOV-2009 23:58
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241336002|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-10-5897|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 83
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	6.97410	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	2229447	38.6311	6.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	2043698	37.2739	6.7	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	355961	171.131	30.6	80.00- 120.00	100.00
3.427	3.427	0.000	574072	207.086	37.1	115.68- 155.68	161.27
3.697	3.697	0.000	854065	228.213	40.8	166.12- 206.12	239.93
3.888	3.889	-0.001	471994	169.617	30.4	117.34- 157.34	132.60
4.017	4.018	-0.001	1513811	548.474	98.2	114.59- 154.59	425.27

Average of Peak Concentrations = 47.4

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1513811	372.237	66.6	80.00- 120.00	100.00
4.289	4.290	-0.001	595595	235.570	42.2	41.58- 81.58	39.34
4.455	4.455	0.000	559075	216.427	38.7	43.08- 83.08	36.93
4.667	4.667	0.000	1228957	203.601	36.4	129.99- 169.99	81.18
4.856	4.856	0.000	737406	253.235	45.3	51.44- 91.44	48.71
Average of Peak Concentrations =					45.8		

Data File: /chem/ecd2a.i/113009a.b/083f8301.d
Date : 30-NOV-2009 23:58
Client ID: RE03-10-5897
Sample Info: |241336002|5|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

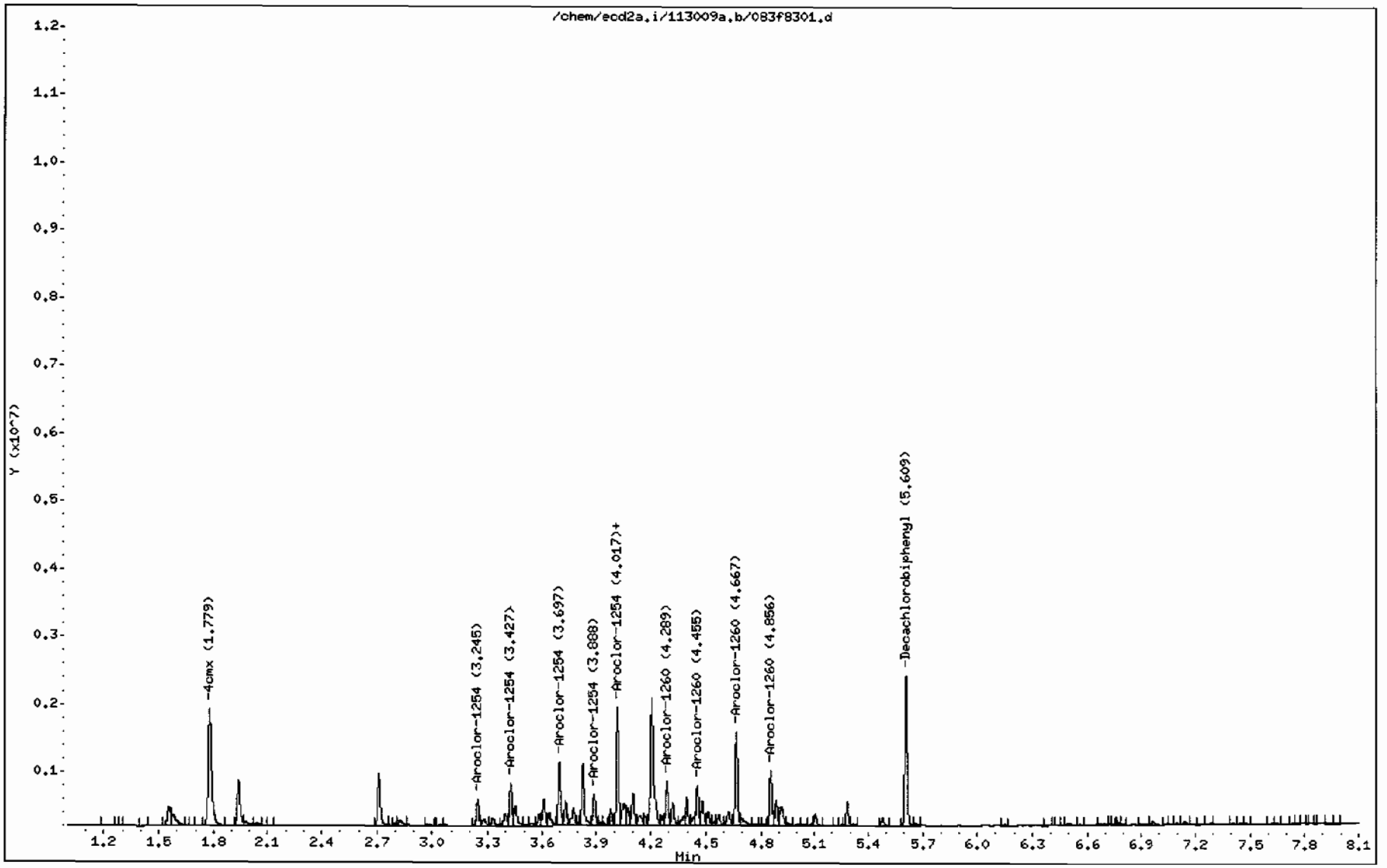

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/083b8301.d
Lab Smp Id: 241336002 Client Smp ID: RE03-10-5897
Inj Date : 30-NOV-2009 23:58
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241336002|5|
Misc Info : |ECD82P_1SF|926712|SVAF|LANL|SOIL|RE03-10-5897|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 83
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	6.97410	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	4652437	39.3608	7.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	4248416	39.1049	7.0	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.822	3.823	-0.001	929780	186.504	33.4	80.00- 120.00	100.00
3.963	3.964	-0.001	1200732	207.060	37.1	97.16- 137.16	129.14
4.201	4.201	0.000	624898	155.332	27.8	61.89- 101.89	67.21
4.281	4.282	-0.001	1730517	223.831	40.1	138.47- 178.47	186.12
4.444	4.445	-0.001	823978	146.921	26.3	96.59- 136.59	88.62

Average of Peak Concentrations = 32.9

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	1790909	324.873	58.2	80.00- 120.00	100.00
4.570	4.570	0.000	2547529	357.199	64.0	108.85- 148.85	142.25
4.681	4.682	-0.001	1594492	337.005	60.3	65.38- 105.38	89.03
4.879	4.880	-0.001	1466738	252.857	45.3	82.89- 122.89	81.90
5.505	5.505	0.000	2014467	222.822	39.9	145.10- 185.10	112.48
			Average of Peak Concentrations =		53.5		

Data File: /chem/ecd2a.i/113009a.b/083b8301.d

Date : 30-NOV-2009 23:58

Client ID: RE03-10-5897

Sample Info: 1241336002151

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

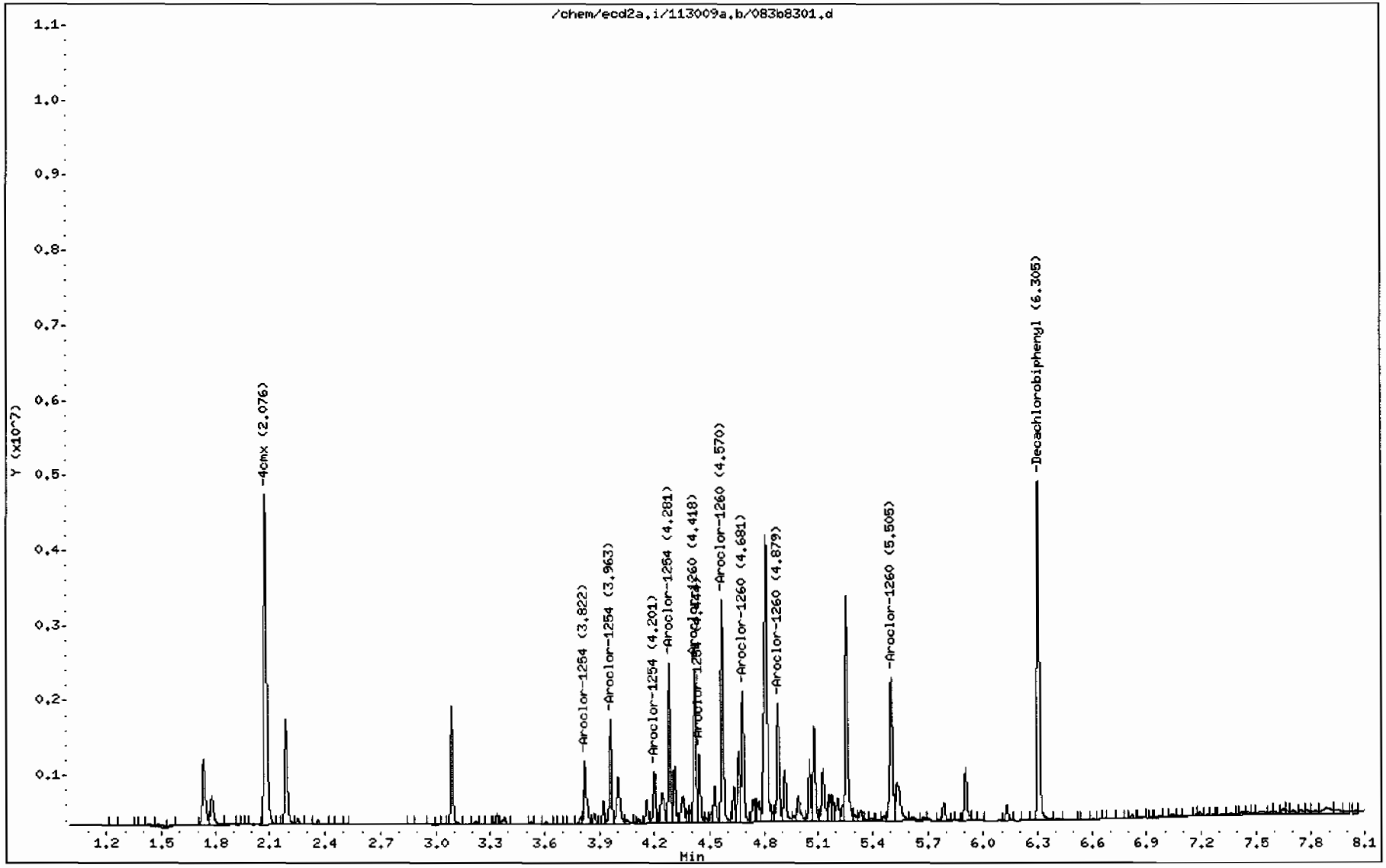

STANDARDS DATA

Report Date: 30-Nov-2009 14:29

Calibration History

Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008f0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 13:36	AR1660	/chem/ecd2a.i/113009a.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 12:02	AR1268	/chem/ecd2a.i/113009a.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:51	AR1262	/chem/ecd2a.i/113009a.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:40	AR1221	/chem/ecd2a.i/113009a.b/019f1901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:29	AR1248	/chem/ecd2a.i/113009a.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:18	AR1232	/chem/ecd2a.i/113009a.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:07	AR1248	/chem/ecd2a.i/113009a.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:01	AR1660	/chem/ecd2a.i/113009a.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:50	AR1242	/chem/ecd2a.i/113009a.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:38	AR1254	/chem/ecd2a.i/113009a.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 08:32	AR1660	/chem/ecd2a.i/113009a.b/002f0201.d

Report Date: 03-Dec-2009 08:04

Calibration History

Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
12-NOV-2009 11:22	AR1262	/chem/ecd2a.i/111209a.b/008b0801.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000 |

01-DEC-2009 01:16	AR1660	/chem/ecd2a.i/113009a.b/090b9001.d
Ccal Level: 4 , Ccal Amount: 1000		
01-DEC-2009 00:09	AR1660	/chem/ecd2a.i/113009a.b/084b8401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 21:55	AR1660	/chem/ecd2a.i/113009a.b/072b7201.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 19:42	AR1660	/chem/ecd2a.i/113009a.b/060b6001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 18:31	AR1660	/chem/ecd2a.i/113009a.b/054b5401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 16:51	AR1660	/chem/ecd2a.i/113009a.b/045b4501.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 15:12	AR1660	/chem/ecd2a.i/113009a.b/036b3601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 13:36	AR1660	/chem/ecd2a.i/113009a.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:38	AR1254	/chem/ecd2a.i/113009a.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 12:02	AR1268	/chem/ecd2a.i/113009a.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:51	AR1262	/chem/ecd2a.i/113009a.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:40	AR1221	/chem/ecd2a.i/113009a.b/019b1901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:29	AR1248	/chem/ecd2a.i/113009a.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:18	AR1232	/chem/ecd2a.i/113009a.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 11:07	AR1248	/chem/ecd2a.i/113009a.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 10:01	AR1660	/chem/ecd2a.i/113009a.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 09:50	AR1242	/chem/ecd2a.i/113009a.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		

30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-NOV-2009 08:32	AR1660	/chem/ecd2a.i/113009a.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 13:52 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.281	2.251-2.311	2.100e+03
	2.603	2.573-2.633	4.505e+03
	2.694	2.664-2.724	1.820e+03
	2.829	2.799-2.859	9.329e+02
	2.980	2.950-3.010	1.378e+03
2 Aroclor-1221	1.445	1.415-1.475	4.641e+02
	1.905	1.875-1.935	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.033	2.003-2.063	1.165e+03
	2.281	2.251-2.311	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.736	2.706-2.766	5.102e+02
	2.979	2.949-3.009	5.840e+02
4 Aroclor-1242	2.280	2.250-2.310	1.733e+03
	2.693	2.663-2.723	1.484e+03
	2.736	2.706-2.766	9.058e+02
	2.828	2.798-2.858	7.269e+02
	2.979	2.949-3.009	1.120e+03
5 Aroclor-1248	2.827	2.797-2.857	1.527e+03
	2.979	2.949-3.009	2.027e+03
	3.038	3.008-3.068	1.571e+03
	3.272	3.242-3.302	2.218e+03
	3.425	3.395-3.455	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.245	3.215-3.275	2.080e+03
	3.427	3.397-3.457	2.772e+03
	3.697	3.667-3.727	3.742e+03
	3.889	3.859-3.919	2.783e+03
	4.018	3.988-4.048	2.760e+03
7 Aroclor-1260	4.018	3.988-4.048	4.067e+03
	4.290	4.260-4.320	2.528e+03
	4.455	4.425-4.485	2.583e+03
	4.667	4.637-4.697	6.036e+03
	4.856	4.826-4.886	2.912e+03
8 Aroclor-1262	3.826	3.796-3.856	1.983e+03
	4.018	3.988-4.048	2.689e+03
	4.290	4.260-4.320	3.536e+03
	4.455	4.425-4.485	3.145e+03
	4.856	4.825-4.886	2.254e+03
9 Aroclor-1268	4.885	4.855-4.915	9.392e+03
	4.912	4.882-4.942	9.361e+03
	5.045	5.015-5.075	7.073e+03
	5.284	5.254-5.314	3.056e+03
	5.479	5.449-5.509	2.201e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.780	1.750-1.810	5.771e+04
$ 12 Decachlorobiphenyl	5.610	5.580-5.640	5.483e+04
13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Nov-2009 13:47 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.752	2.722-2.782	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.336	3.306-3.366	1.979e+03
	3.365	3.335-3.395	2.061e+03
	3.523	3.493-3.553	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.403	2.373-2.433	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.449	2.419-2.479	2.061e+03
	2.752	2.722-2.782	1.960e+03
	3.185	3.155-3.215	1.498e+03
	3.257	3.227-3.287	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.751	2.721-2.781	3.445e+03
	3.185	3.155-3.215	2.681e+03
	3.257	3.227-3.287	1.637e+03
	3.336	3.306-3.366	1.508e+03
	3.523	3.493-3.553	2.145e+03
5 Aroclor-1248	3.336	3.306-3.366	3.282e+03
	3.522	3.492-3.552	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.798	3.768-3.828	4.697e+03
	3.827	3.797-3.857	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.823	3.793-3.853	4.863e+03
		3.964	3.934-3.994	5.652e+03
		4.201	4.171-4.231	3.906e+03
		4.282	4.252-4.312	7.490e+03
		4.445	4.415-4.475	5.479e+03
	7 Aroclor-1260	4.419	4.389-4.449	5.513e+03
		4.570	4.540-4.600	7.132e+03
		4.682	4.652-4.712	4.731e+03
		4.880	4.850-4.910	5.801e+03
		5.505	5.475-5.535	9.041e+03
	8 Aroclor-1262	4.418	4.388-4.448	3.827e+03
		4.570	4.540-4.600	5.052e+03
		4.879	4.849-4.909	7.695e+03
		5.079	5.049-5.109	6.486e+03
		5.257	5.227-5.287	1.455e+04
	9 Aroclor-1268	5.503	5.473-5.533	2.032e+04
		5.535	5.505-5.565	2.018e+04
		5.707	5.677-5.737	1.496e+04
		5.906	5.876-5.936	6.438e+03
		6.130	6.100-6.160	4.409e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.076	2.046-2.106	1.182e+05
$	12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
	13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
	14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
	15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Cal Date : 30-Nov-2009 13:52 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035f3501.d
Level 2: /chem/ecd2a.i/111209a.b/036f3601.d
Level 3: /chem/ecd2a.i/111209a.b/037f3701.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/111209a.b/039f3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Cal Date : 30-Nov-2009 13:52 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
(2)	2598	2539	2501	2535	2469	2528	1.903
(3)	2625	2577	2548	2609	2557	2583	1.287
(4)	5914	5894	5999	6196	6179	6036	2.381
(5)	2944	2846	2851	2940	2978	2912	2.044
8 Aroclor-1262(1)	+++++	+++++	+++++	1983	+++++	1983	0.000
(2)	+++++	+++++	+++++	2689	+++++	2689	0.000
(3)	+++++	+++++	+++++	3536	+++++	3536	0.000
(4)	+++++	+++++	+++++	3145	+++++	3145	0.000
(5)	+++++	+++++	+++++	2254	+++++	2254	0.000
9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
(2)	9332	9272	9238	9197	9765	9361	2.470
(3)	6985	6923	6953	6984	7523	7073	3.568
(4)	3112	3015	2984	2964	3207	3056	3.331
(5)	21397	21592	21760	21851	23464	22013	3.767
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$ 11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$ 12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Cal Date : 30-Nov-2009 16:02 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/111209a.b/035b3501.d
Level 2: /chem/ecd2a.i/111209a.b/036b3601.d
Level 3: /chem/ecd2a.i/111209a.b/037b3701.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/111209a.b/039b3901.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 30-NOV-2009 10:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Cal Date : 30-Nov-2009 16:02 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	+++++	+++++	+++++	3827	+++++	3827	0.000
(2)	+++++	+++++	+++++	5052	+++++	5052	0.000
(3)	+++++	+++++	+++++	7695	+++++	7695	0.000
(4)	+++++	+++++	+++++	6486	+++++	6486	0.000
(5)	+++++	+++++	+++++	14548	+++++	14548	0.000
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 0938

Lab File ID: 008F0801 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	1989.434	0.01	-4.4	15.0
(2)	2772.138	2699.271	0.01	-2.6	15.0
(3)	3742.400	3702.763	0.01	-1.0	15.0
(4)	2782.705	2732.349	0.01	-1.8	15.0
(5)	2760.043	2677.493	0.01	-3.0	15.0
4cmx	57711.247	66194.820	0.01	14.7	15.0
Decachlorobiphenyl	54829.246	56393.900	0.01	2.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 0938

Lab File ID: 008B0801 Init. Calib. Date(s): 11/30/09 11/30/09

Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	4985.297	4974.047	0.01	-0.2	15.0	
(2)	5798.946	5827.527	0.01	0.5	15.0	
(3)	4022.990	4073.257	0.01	1.2	15.0	
(4)	7731.372	7882.366	0.01	2.0	15.0	
(5)	5608.308	5799.096	0.01	3.4	15.0	
4cmx	118199.83	140299.55	0.01	18.7	15.0	<-
Decachlorobiphenyl	108641.52	117729.78	0.01	8.4	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1001

Lab File ID: 010F1001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1978.468	0.01	-5.8	15.0
(2)	4504.513	4261.729	0.01	-5.4	15.0
(3)	1820.211	1682.401	0.01	-7.6	15.0
(4)	932.883	838.621	0.01	-10.1	15.0
(5)	1378.125	1291.604	0.01	-6.3	15.0
Aroclor-1260	4066.794	4068.904	0.01	0.0	15.0
(2)	2528.317	2483.392	0.01	-1.8	15.0
(3)	2583.202	2543.166	0.01	-1.5	15.0
(4)	6036.106	6041.869	0.01	0.1	15.0
(5)	2911.947	2868.024	0.01	-1.5	15.0
4cmx	57711.247	61965.910	0.01	7.4	15.0
Decachlorobiphenyl	54829.246	50777.650	0.01	-7.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1001

Lab File ID: 010B1001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4173.489	0.01	-2.0	15.0
(2)	3444.681	3357.058	0.01	-2.5	15.0
(3)	1979.487	1945.702	0.01	-1.7	15.0
(4)	2061.253	2043.240	0.01	-0.9	15.0
(5)	2754.170	2757.838	0.01	0.1	15.0
Aroclor-1260	5512.644	5766.118	0.01	4.6	15.0
(2)	7131.968	7438.440	0.01	4.3	15.0
(3)	4731.365	4933.515	0.01	4.3	15.0
(4)	5800.657	5948.704	0.01	2.6	15.0
(5)	9040.681	9441.654	0.01	4.4	15.0
4cmx	118199.83	131769.63	0.01	11.5	15.0
Decachlorobiphenyl	108641.52	106858.72	0.01	-1.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1942

Lab File ID: 060F6001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1933.010	0.01	-7.9	15.0
(2)	4504.513	4217.365	0.01	-6.4	15.0
(3)	1820.211	1668.882	0.01	-8.3	15.0
(4)	932.883	842.674	0.01	-9.7	15.0
(5)	1378.125	1280.903	0.01	-7.0	15.0
Aroclor-1260	4066.794	4041.106	0.01	-0.6	15.0
(2)	2528.317	2494.289	0.01	-1.3	15.0
(3)	2583.202	2559.863	0.01	-0.9	15.0
(4)	6036.106	6076.875	0.01	0.7	15.0
(5)	2911.947	2890.332	0.01	-0.7	15.0
4cmx	57711.247	60978.950	0.01	5.7	15.0
Decachlorobiphenyl	54829.246	53638.350	0.01	-2.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 1942

Lab File ID: 060B6001 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4147.516	0.01	-2.6	15.0
(2)	3444.681	3338.194	0.01	-3.1	15.0
(3)	1979.487	1931.223	0.01	-2.4	15.0
(4)	2061.253	2026.640	0.01	-1.7	15.0
(5)	2754.170	2736.734	0.01	-0.6	15.0
Aroclor-1260	5512.644	5707.094	0.01	3.5	15.0
(2)	7131.968	7325.451	0.01	2.7	15.0
(3)	4731.365	4866.123	0.01	2.8	15.0
(4)	5800.657	5882.184	0.01	1.4	15.0
(5)	9040.681	9343.503	0.01	3.3	15.0
4cmx	118199.83	130229.09	0.01	10.2	15.0
Decachlorobiphenyl	108641.52	109824.65	0.01	1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 2155

Lab File ID: 072F7201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1930.672	0.01	-8.0	15.0
(2)	4504.513	4222.979	0.01	-6.2	15.0
(3)	1820.211	1665.504	0.01	-8.5	15.0
(4)	932.883	831.367	0.01	-10.9	15.0
(5)	1378.125	1279.233	0.01	-7.2	15.0
Aroclor-1260	4066.794	4070.896	0.01	0.1	15.0
(2)	2528.317	2513.820	0.01	-0.6	15.0
(3)	2583.202	2576.179	0.01	-0.3	15.0
(4)	6036.106	6093.310	0.01	0.9	15.0
(5)	2911.947	2912.572	0.01	0.0	15.0
4cmx	57711.247	60799.280	0.01	5.4	15.0
Decachlorobiphenyl	54829.246	52497.030	0.01	-4.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 11/30/09 Time: 2155

Lab File ID: 072B7201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4110.584	0.01	-3.5	15.0
(2)	3444.681	3321.649	0.01	-3.6	15.0
(3)	1979.487	1920.571	0.01	-3.0	15.0
(4)	2061.253	1996.450	0.01	-3.1	15.0
(5)	2754.170	2724.972	0.01	-1.1	15.0
Aroclor-1260	5512.644	5674.547	0.01	2.9	15.0
(2)	7131.968	7298.534	0.01	2.3	15.0
(3)	4731.365	4828.748	0.01	2.0	15.0
(4)	5800.657	5817.967	0.01	0.3	15.0
(5)	9040.681	9235.477	0.01	2.2	15.0
4cmx	118199.83	129374.12	0.01	9.4	15.0
Decachlorobiphenyl	108641.52	108070.87	0.01	-0.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0009

Lab File ID: 084F8401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	1952.367	0.01	-7.0	15.0
(2)	4504.513	4266.269	0.01	-5.3	15.0
(3)	1820.211	1683.812	0.01	-7.5	15.0
(4)	932.883	836.486	0.01	-10.3	15.0
(5)	1378.125	1291.869	0.01	-6.2	15.0
Aroclor-1260	4066.794	4074.980	0.01	0.2	15.0
(2)	2528.317	2503.389	0.01	-1.0	15.0
(3)	2583.202	2559.185	0.01	-0.9	15.0
(4)	6036.106	6100.779	0.01	1.1	15.0
(5)	2911.947	2920.454	0.01	0.3	15.0
4cmx	57711.247	61356.690	0.01	6.3	15.0
Decachlorobiphenyl	54829.246	52557.370	0.01	-4.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

Instrument ID: ECD2A Calibration Date: 12/01/09 Time: 0009

Lab File ID: 084B8401 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4158.775	0.01	-2.3	15.0
(2)	3444.681	3350.373	0.01	-2.7	15.0
(3)	1979.487	1931.547	0.01	-2.4	15.0
(4)	2061.253	2010.024	0.01	-2.5	15.0
(5)	2754.170	2746.844	0.01	-0.3	15.0
Aroclor-1260	5512.644	5760.526	0.01	4.5	15.0
(2)	7131.968	7410.662	0.01	3.9	15.0
(3)	4731.365	4897.495	0.01	3.5	15.0
(4)	5800.657	5899.028	0.01	1.7	15.0
(5)	9040.681	9366.909	0.01	3.6	15.0
4cmx	118199.83	130933.89	0.01	10.8	15.0
Decachlorobiphenyl	108641.52	108655.55	0.01	0.0	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/008f0801.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 30-NOV-2009 09:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	6619482	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.610	0.001	5639390	100.000	103	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	1989434	1000.00	956	80.00- 120.00	100.00
3.427	3.427	0.000	2699270	1000.00	974	115.68- 155.68	135.68
3.697	3.697	0.000	3702762	1000.00	989	166.12- 206.12	186.12
3.889	3.889	0.000	2732348	1000.00	982	117.34- 157.34	137.34
4.018	4.018	0.000	2677492	1000.00	970	114.59- 154.59	134.59
Average of Peak Amounts =					974		

Data File: /chem/ecd2a.i/113009a.b/008f0801.d
Date : 30-NOV-2009 09:38
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

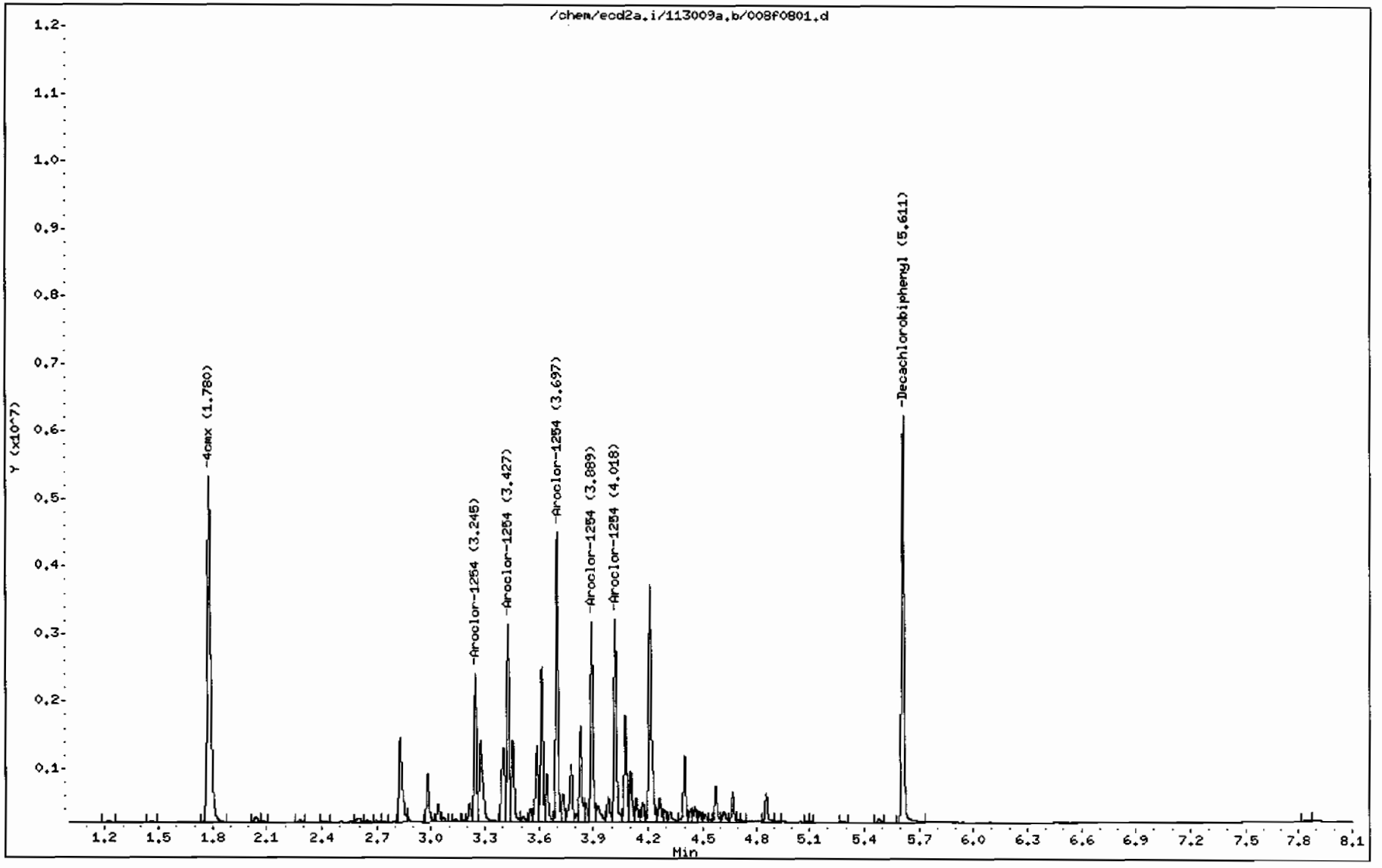

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/008b0801.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 30-NOV-2009 09:38
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 16:02 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	14029955	100.000	119	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11772978	100.000	108	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	4974047	1000.00	998	80.00- 120.00	100.00
3.964	3.964	0.000	5827527	1000.00	1000	97.16- 137.16	117.16
4.201	4.201	0.000	4073257	1000.00	1010	61.89- 101.89	81.89
4.282	4.282	0.000	7882366	1000.00	1020	138.47- 178.47	158.47
4.445	4.445	0.000	5799096	1000.00	1030	96.59- 136.59	116.59

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/113009a.b/008b0801.d
Date : 30-NOV-2009 09:38
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

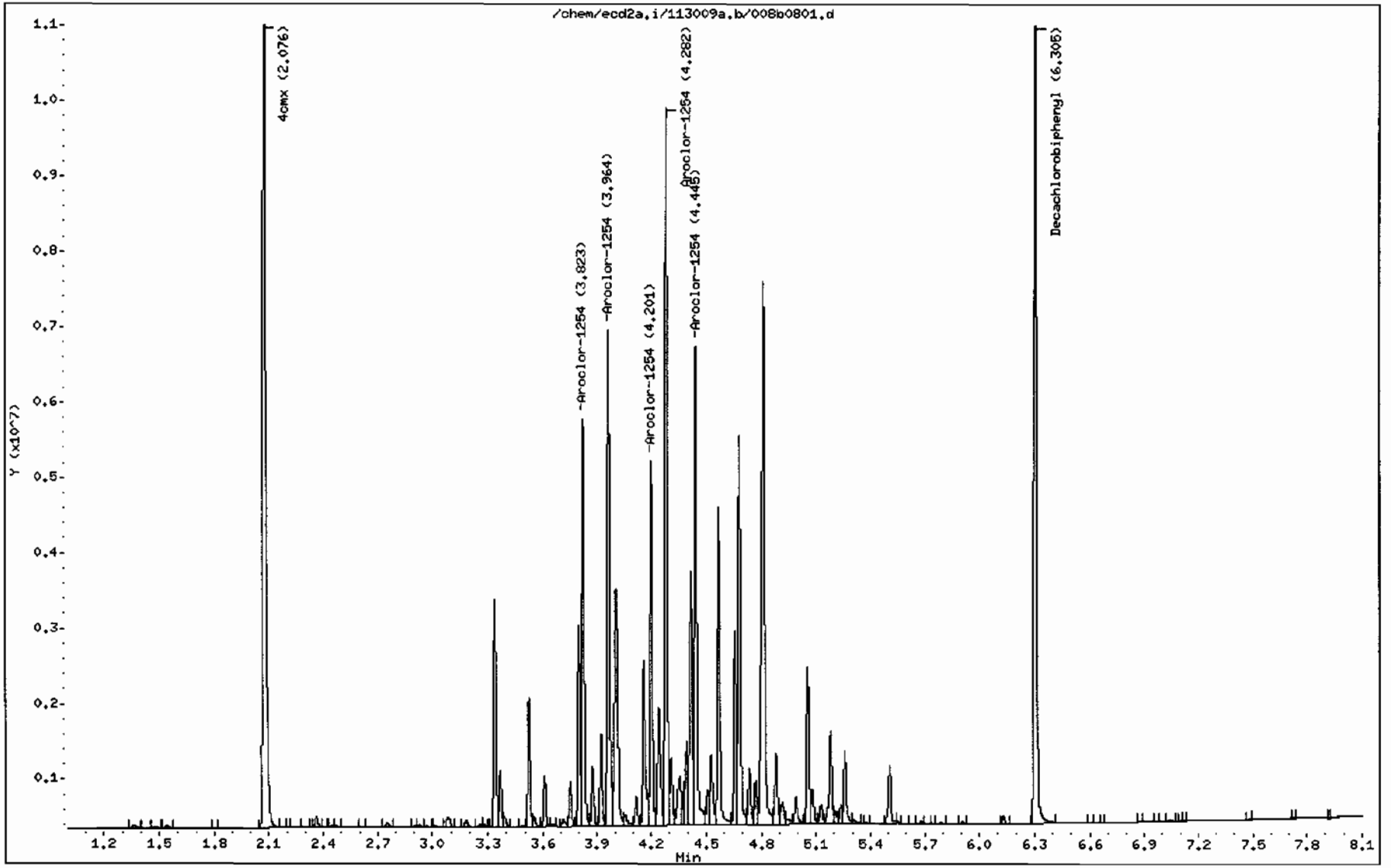

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/009f0901.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 30-NOV-2009 09:50
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6570476	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5634570	100.000	103	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.280	2.280	0.000	1755483	1000.00	1010	80.00- 120.00	100.00(M)
2.693	2.693	0.000	1468918	1000.00	990	63.68- 103.68	83.68
2.736	2.736	0.000	908042	1000.00	1000	31.73- 71.73	51.73
2.828	2.828	0.000	700038	1000.00	963	19.88- 59.88	39.88
2.979	2.979	0.000	1112656	1000.00	994	43.38- 83.38	63.38
Average of Peak Amounts =					992		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/009f0901.d

Date : 30-NOV-2009 09:50

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

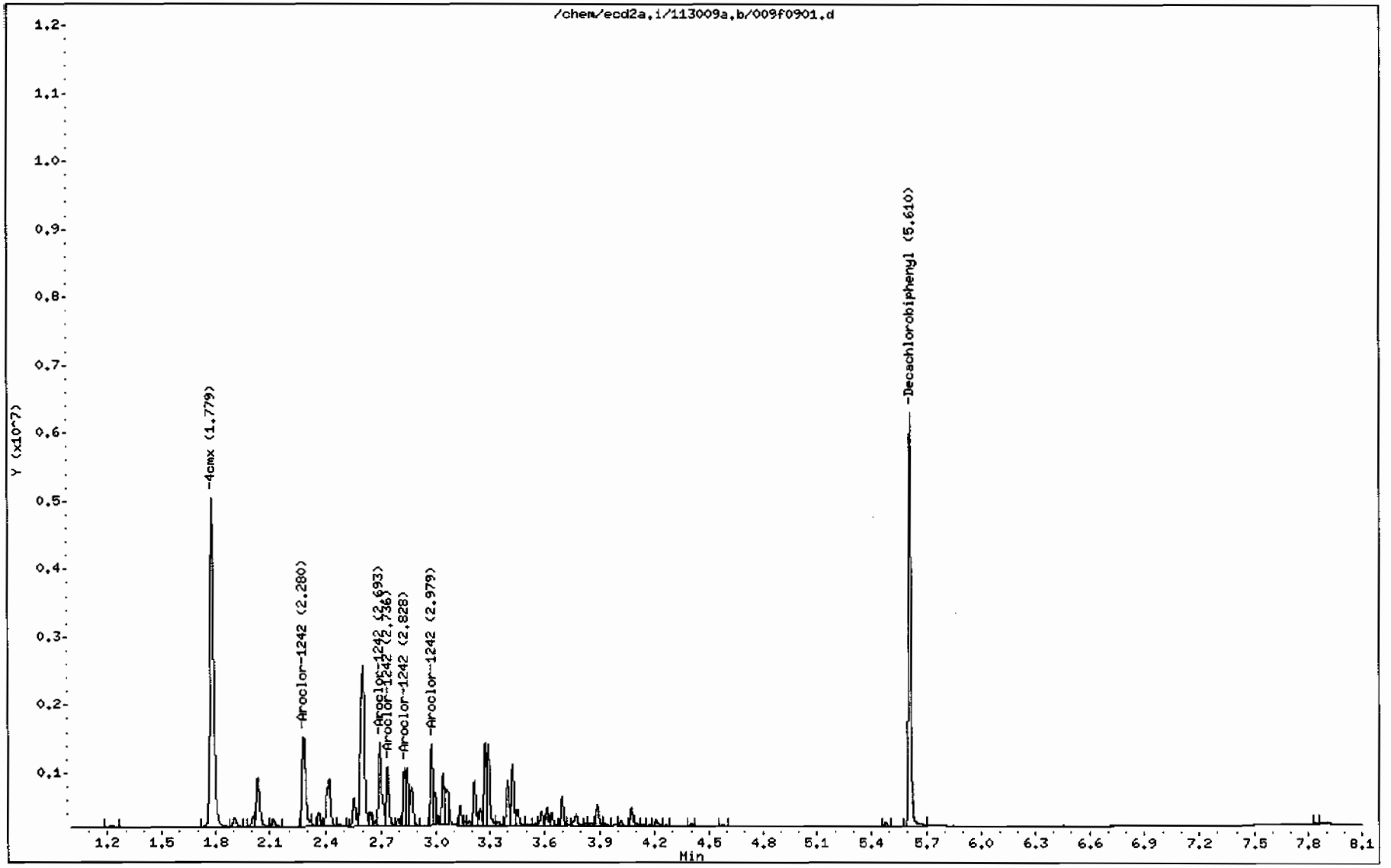

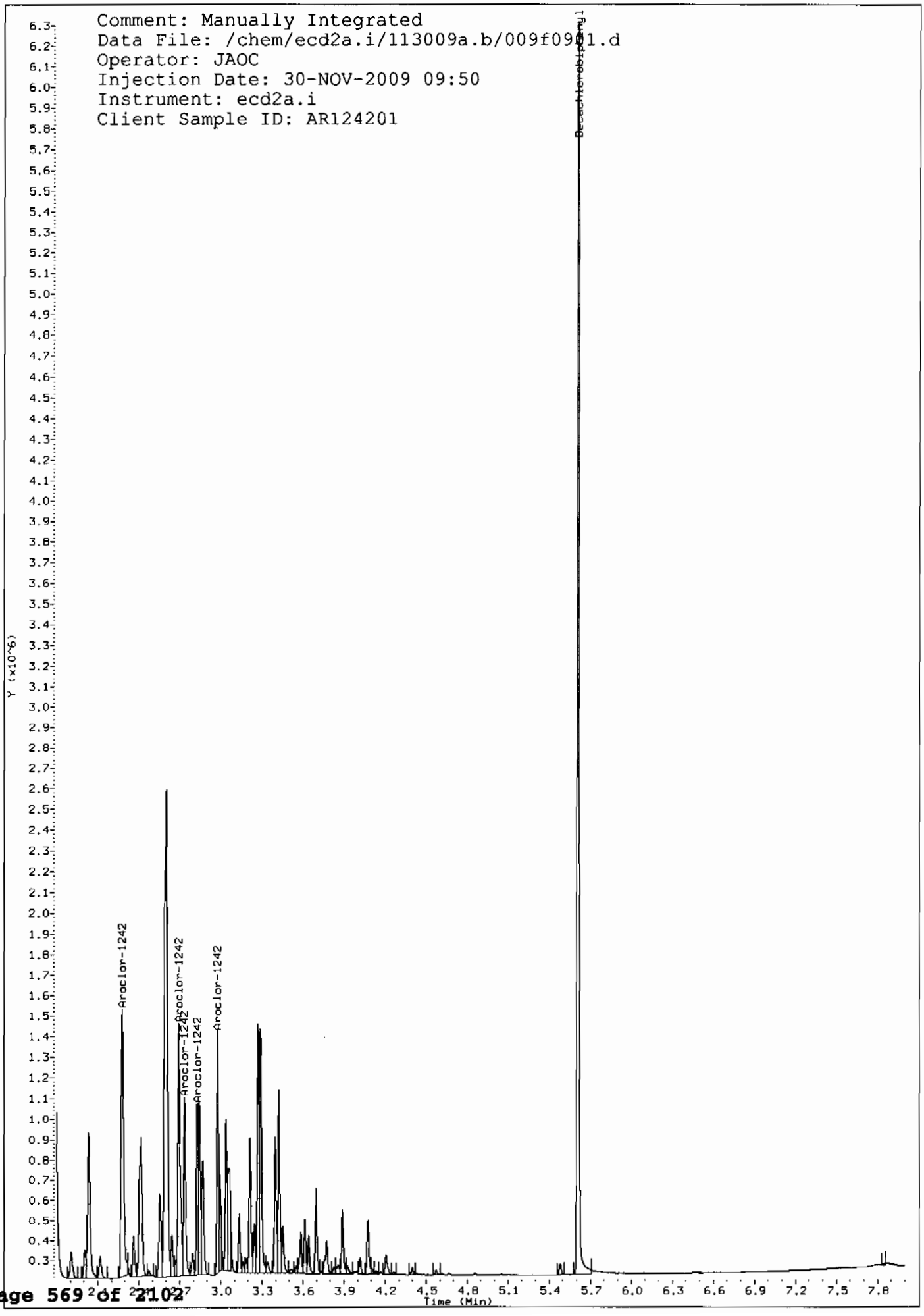
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/009f0901.d
Operator: JAOC
Injection Date: 30-NOV-2009 09:50
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

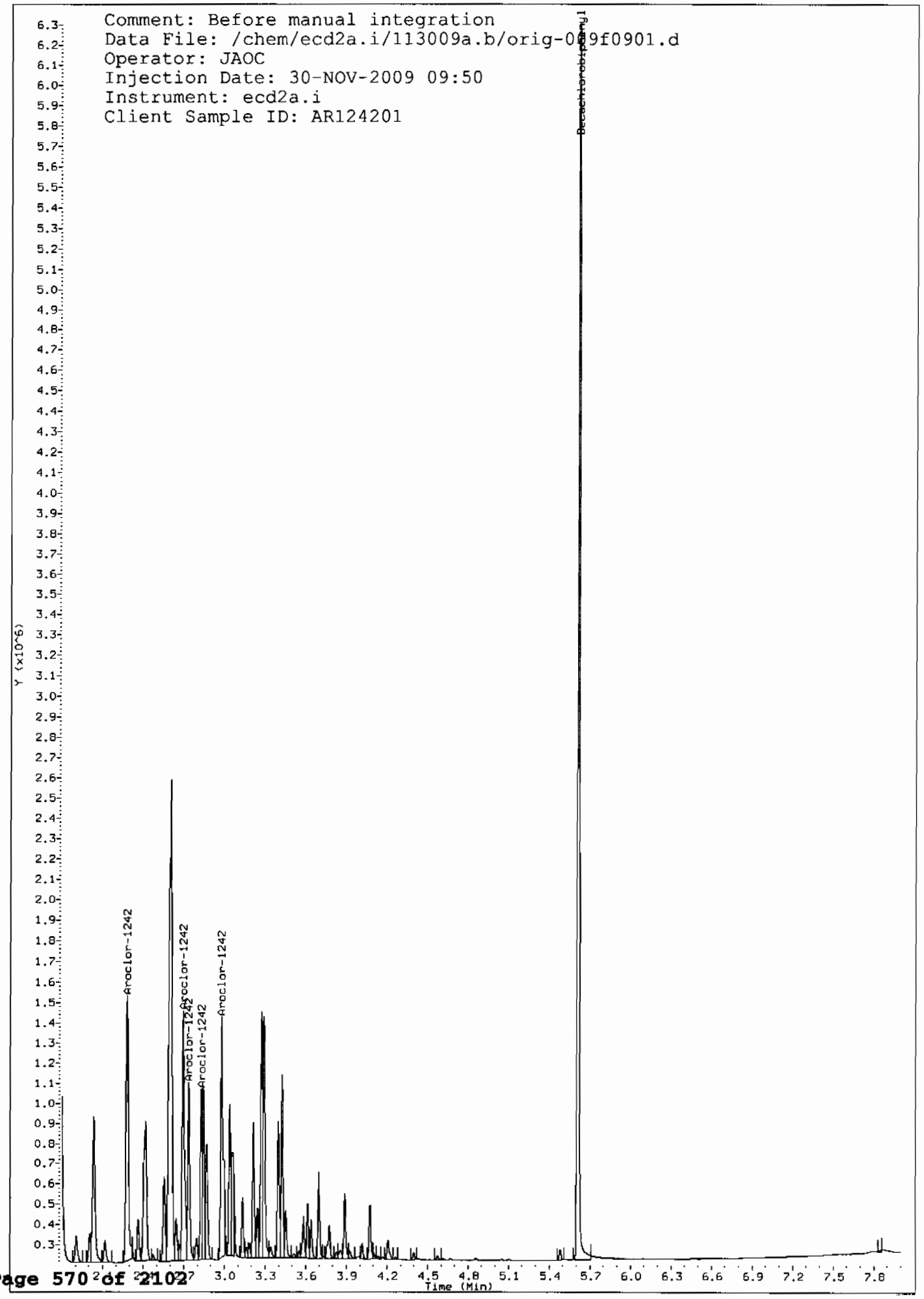
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-0[illegible]9f0901.d
Operator: JAOC
Injection Date: 30-NOV-2009 09:50
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/009b0901.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 30-NOV-2009 09:50
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 15:49 Cal File: 032b3201.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	13959492	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11817209	100.000	109	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.751	2.751	0.000	3684803	1000.00	1070	80.00- 120.00	100.00
3.185	3.185	0.000	2896136	1000.00	1080	58.60- 98.60	78.60
3.257	3.257	0.000	1750227	1000.00	1070	27.50- 67.50	47.50
3.336	3.336	0.000	1638839	1000.00	1090	24.48- 64.48	44.48
3.523	3.523	0.000	2366567	1000.00	1100	44.23- 84.23	64.23

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd2a.i/113009a.b/009b0901.d

Date : 30-NOV-2009 09:50

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

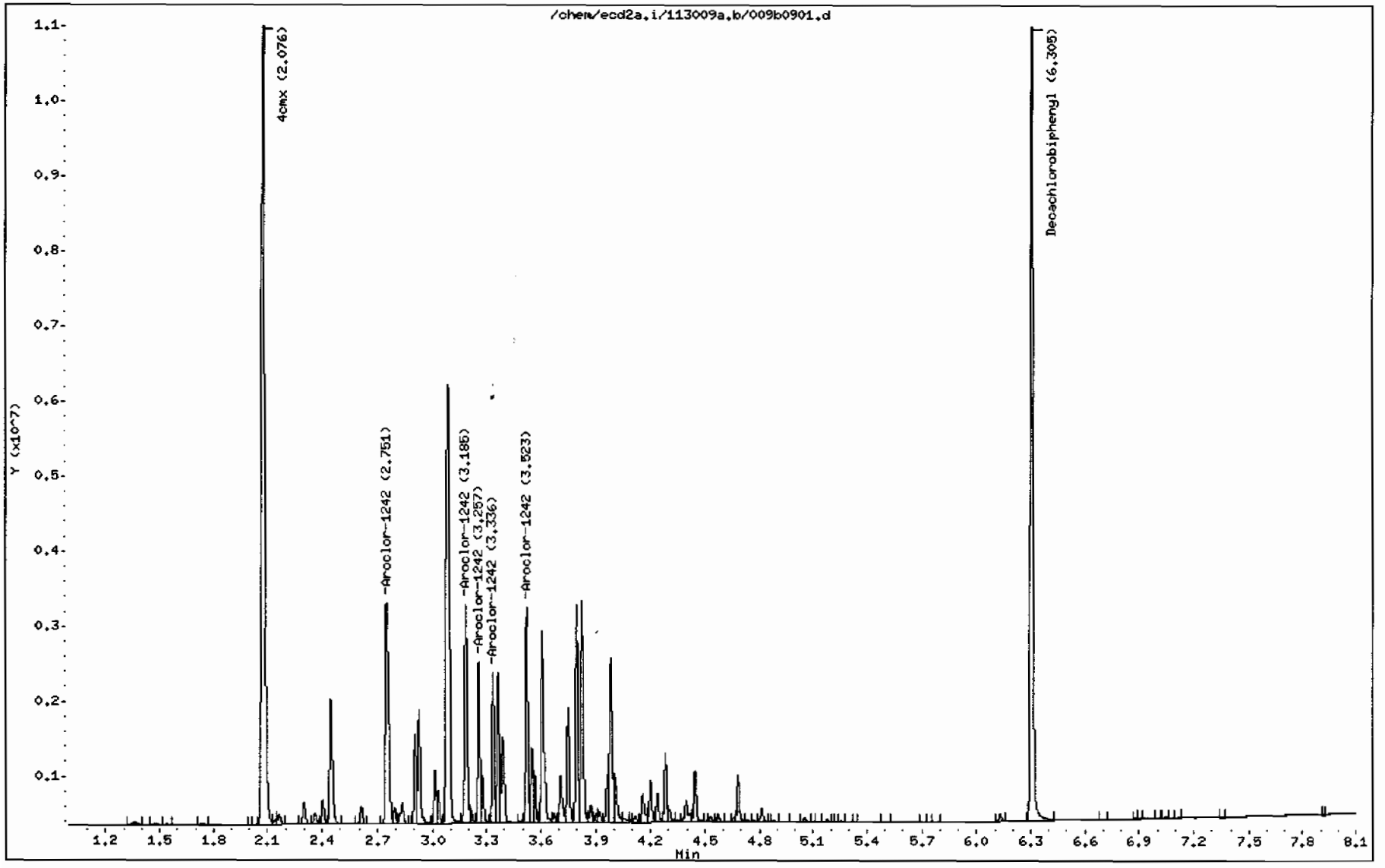

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/010f1001.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 30-NOV-2009 10:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	6196591	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5077765	100.000	92.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.281	0.000	1978468	1000.00	942	80.00- 120.00	100.00(M)
2.603	2.603	0.000	4261729	1000.00	946	200.70- 240.70	215.41
2.694	2.694	0.000	1682401	1000.00	924	66.33- 106.33	85.04
2.829	2.829	0.000	838621	1000.00	899	23.94- 63.94	42.39
2.980	2.980	0.000	1291604	1000.00	937	46.48- 86.48	65.28
Average of Peak Amounts =					930		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4068904	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2483392	1000.00	982	41.40- 81.40	61.03
4.455	4.455	0.000	2543166	1000.00	984	42.98- 82.98	62.50
4.667	4.667	0.000	6041869	1000.00	1000	129.48- 169.48	148.49
4.856	4.856	0.000	2868024	1000.00	985	51.53- 91.53	70.49
Average of Peak Amounts =					991		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/010f1001.d

Date : 30-NOV-2009 10:01

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

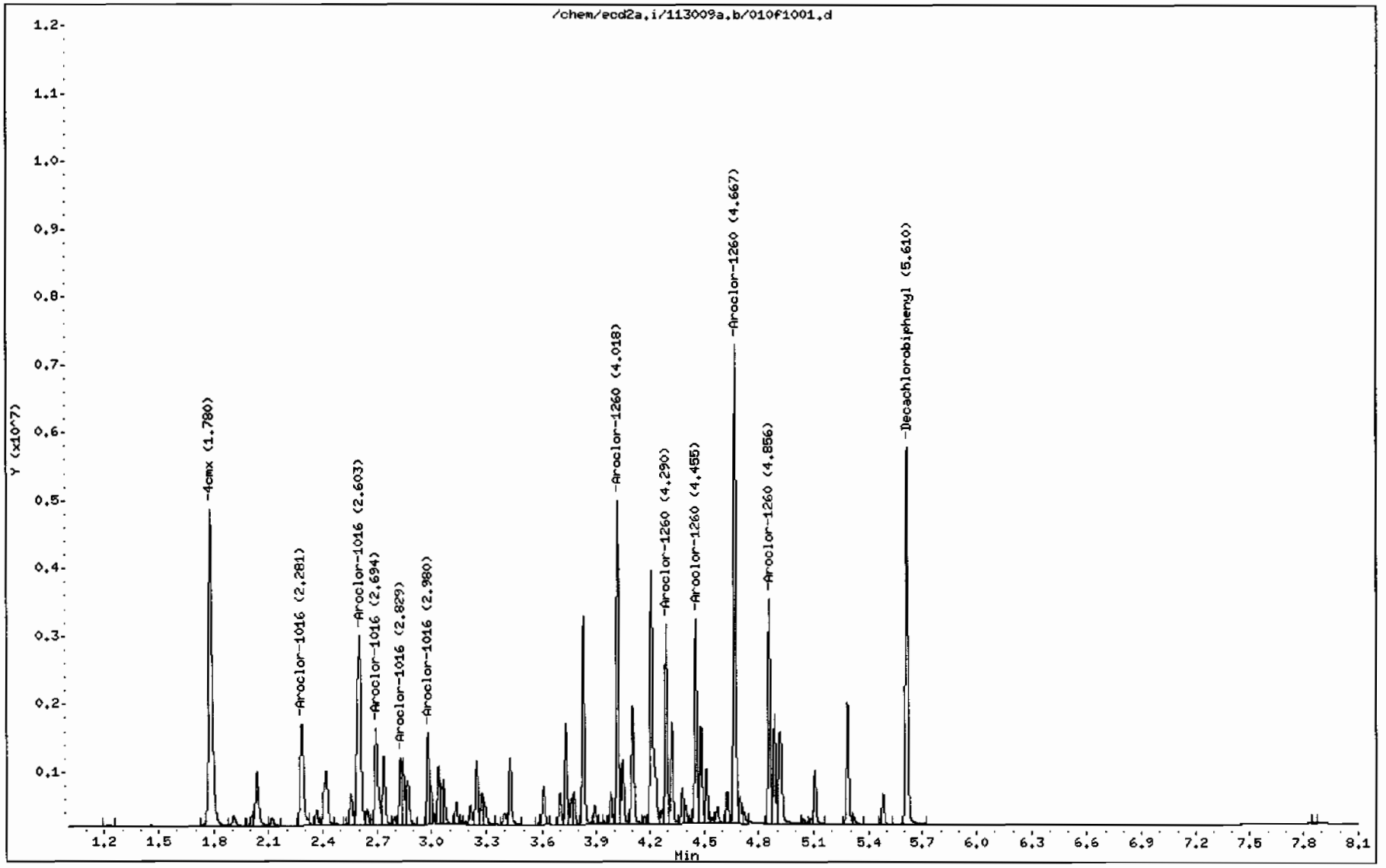

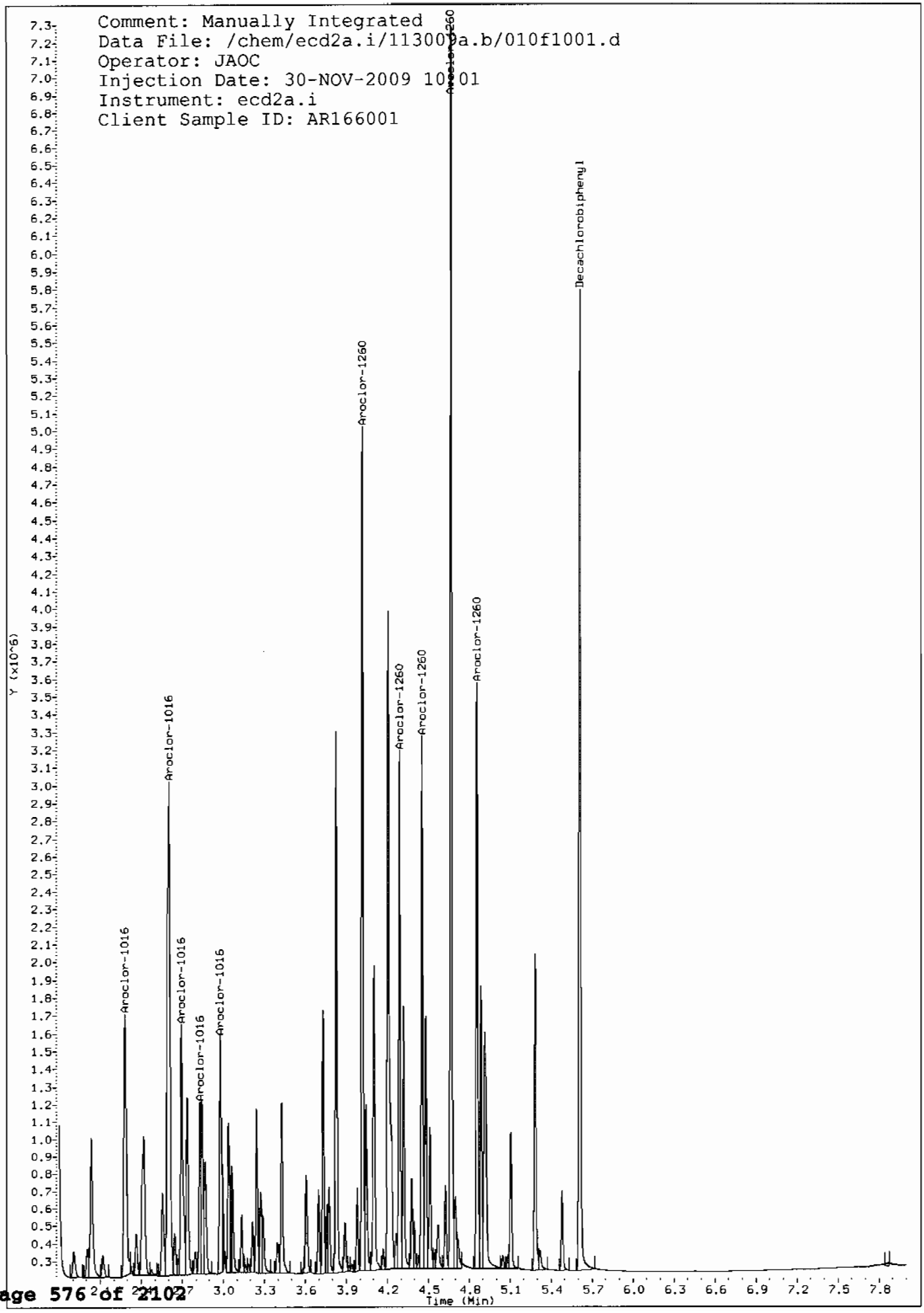
Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/010f1001.d
Operator: JAOC
Injection Date: 30-NOV-2009 10:01
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

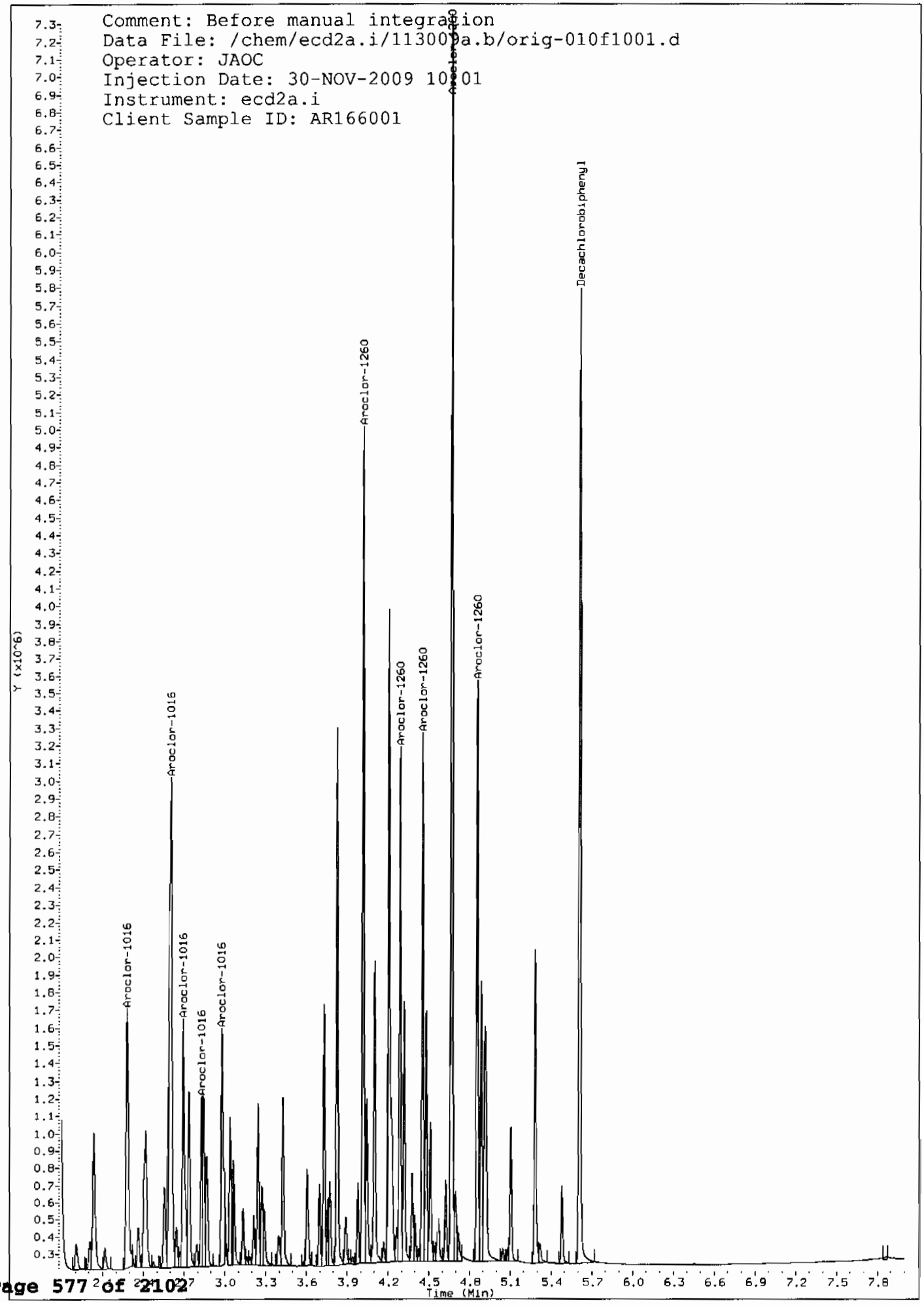
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-010f1001.d
Operator: JAOC
Injection Date: 30-NOV-2009 10:01
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/010b1001.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 30-NOV-2009 10:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 15:49 Cal File: 032b3201.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	13176963	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10685872	100.000	98.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	4173488	1000.00	980	80.00- 120.00	100.00
3.185	3.185	0.000	3357057	1000.00	974	60.34- 100.34	80.44
3.336	3.336	0.000	1945702	1000.00	983	26.76- 66.76	46.62
3.365	3.365	0.000	2043240	1000.00	991	28.59- 68.59	48.96
3.523	3.523	0.000	2757838	1000.00	1000	45.90- 85.90	66.08
Average of Peak Amounts =					986		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5766117	1000.00	1040	80.00- 120.00	100.00
4.570	4.570	0.000	7438440	1000.00	1040	109.55- 149.55	129.00
4.682	4.682	0.000	4933514	1000.00	1040	66.53- 106.53	85.56
4.880	4.880	0.000	5948703	1000.00	1020	83.52- 123.52	103.17
5.505	5.505	0.000	9441654	1000.00	1040	145.03- 185.03	163.74
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/113009a.b/010b1001.d

Date : 30-NOV-2009 10:01

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

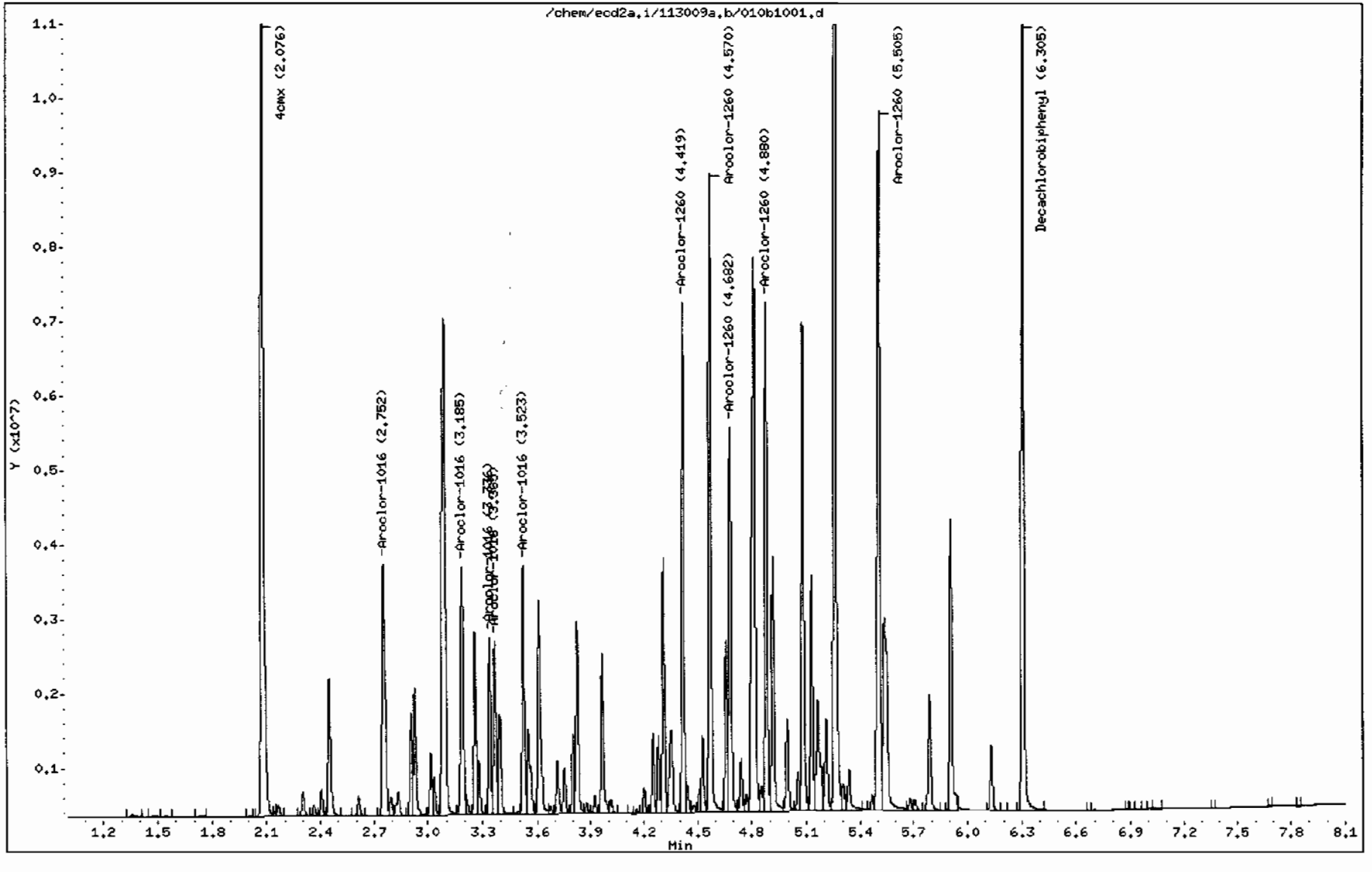

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/017f1701.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 30-NOV-2009 11:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	8531635	100.000	148	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	7379390	100.000	134	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.033	2.033	0.000	1313610	1000.00	1130	80.00- 120.00	100.00
2.281	2.281	0.000	1065304	1000.00	1140	61.10- 101.10	81.10
2.694	2.694	0.000	914957	1000.00	1140	49.65- 89.65	69.65
2.736	2.736	0.000	586250	1000.00	1150	24.63- 64.63	44.63
2.979	2.979	0.000	850224	1000.00	1460	44.72- 84.72	64.72

Average of Peak Amounts = 1.2e+03

Data File: /chem/ecd2a.i/113009a.b/017f1701.d
Date : 30-NOV-2009 11:18
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

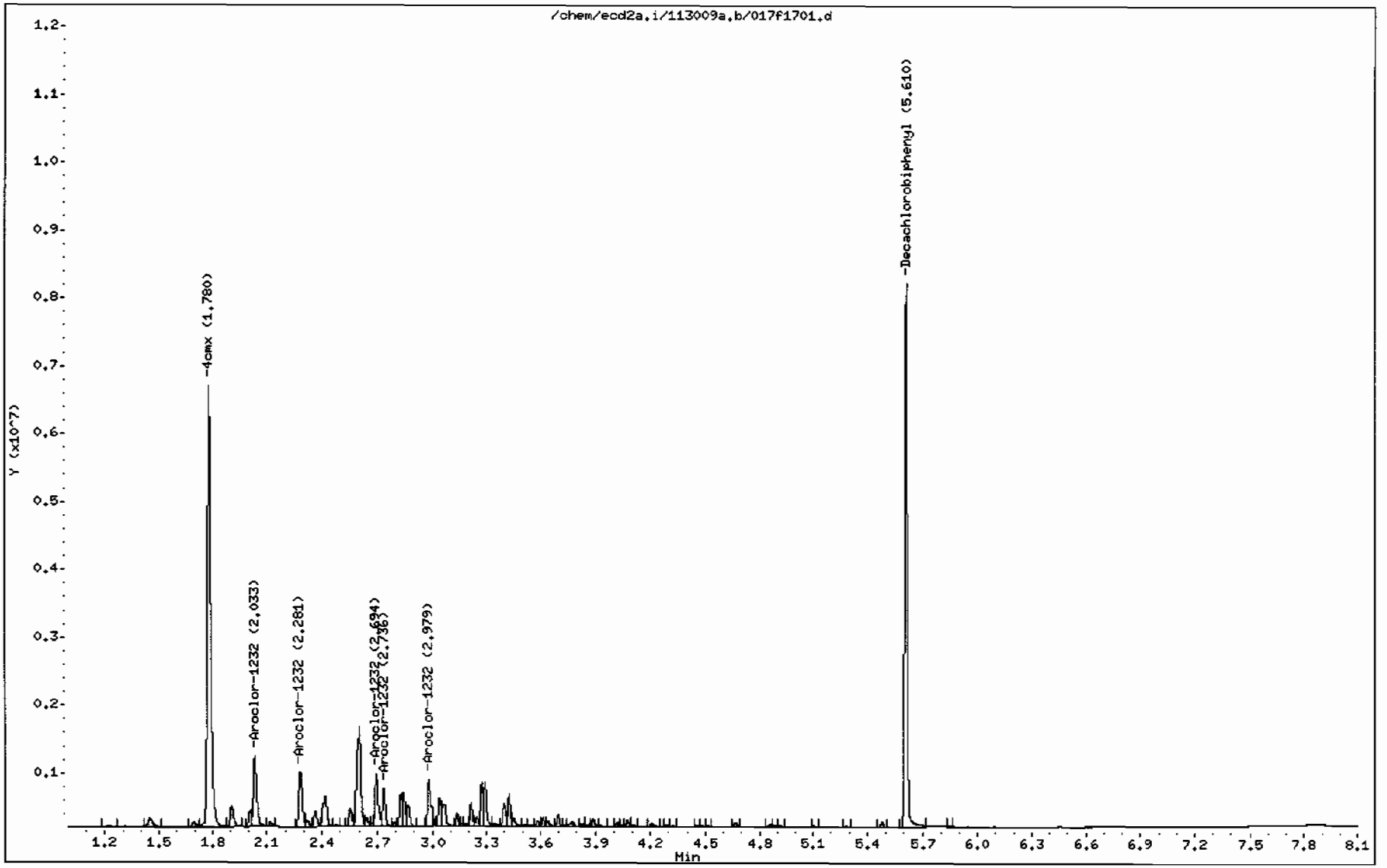

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/017b1701.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 30-NOV-2009 11:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	18108908	100.000	153	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15551881	100.000	143	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.449	2.449	0.000	2396862	1000.00	1160	80.00- 120.00	100.00
2.752	2.752	0.000	2305145	1000.00	1180	76.17- 116.17	96.17
3.185	3.185	0.000	1903054	1000.00	1270	59.40- 99.40	79.40
3.257	3.257	0.000	1112987	1000.00	1200	26.44- 66.44	46.44
3.523	3.523	0.000	1384932	1000.00	1250	37.78- 77.78	57.78

Average of Peak Amounts = 1.21e+03

Data File: /chem/ecd2a.i/113009a.b/017b1701.d
Date : 30-NOV-2009 11:18
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

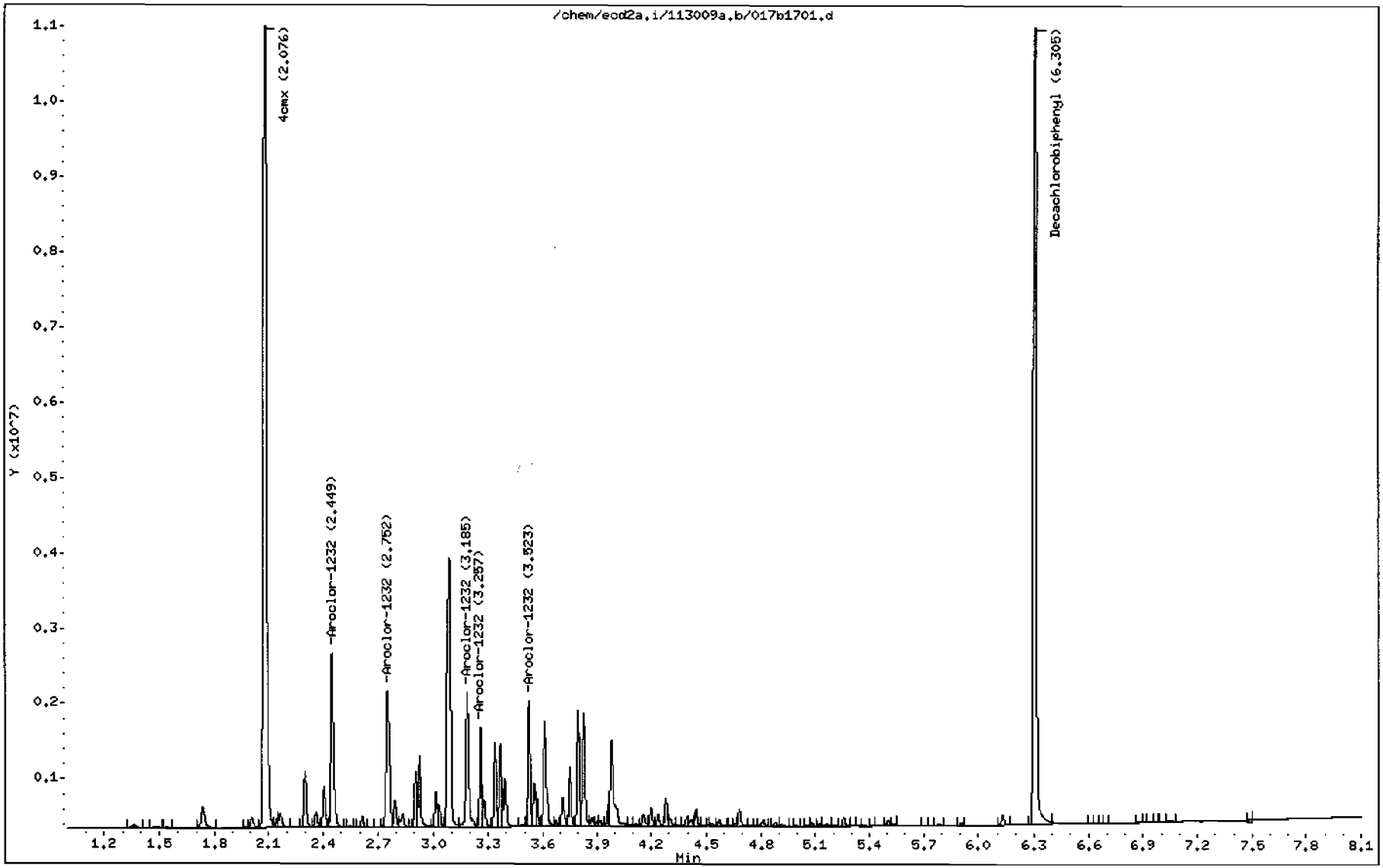

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/018f1801.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 30-NOV-2009 11:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx						CAS #: 877-09-8		
	1.778	1.780	-0.002	7109031	100.000	123	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
	5.611	5.610	0.001	6272632	100.000	114	80.00- 120.00	100.00
5 Aroclor-1248						CAS #: 12672-29-6		
	2.827	2.827	0.000	1446897	1000.00	948	80.00- 120.00	100.00(M)
	2.979	2.979	0.000	1934737	1000.00	954	113.72- 153.72	133.72
	3.038	3.038	0.000	1530041	1000.00	974	85.75- 125.75	105.75
	3.272	3.272	0.000	2181149	1000.00	983	130.75- 170.75	150.75
	3.425	3.425	0.000	1839367	1000.00	962	107.12- 147.12	127.12
			Average of Peak Amounts =			964		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/018f1801.d
Date : 30-NOV-2009 11:29
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

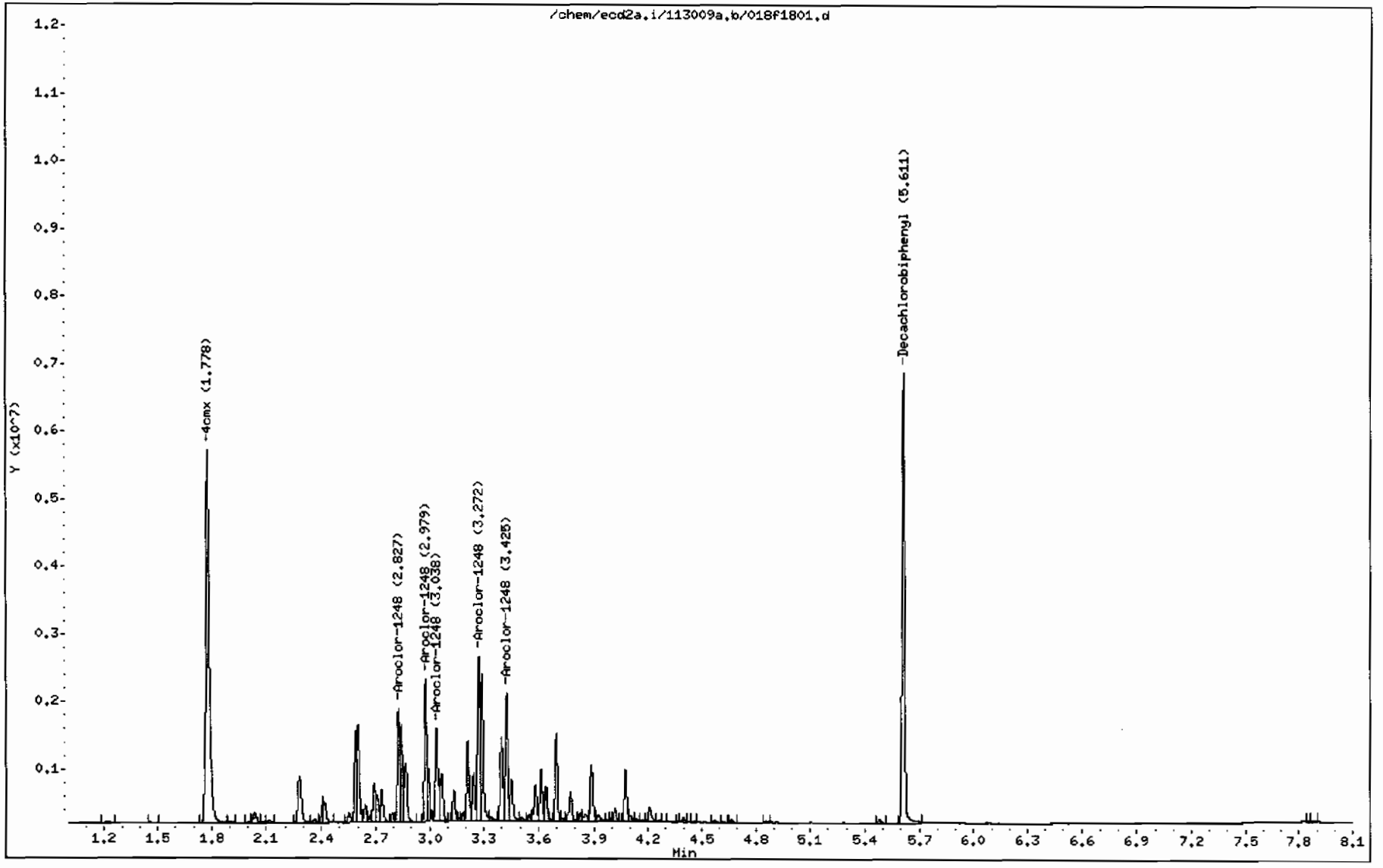

Comment: Manually Integrated
Data File: /chem/ecd2a.i/113009a.b/018f18801.d
Operator: JAOC
Injection Date: 30-NOV-2009 11:29
Instrument: ecd2a.i
Client Sample ID: AR124801

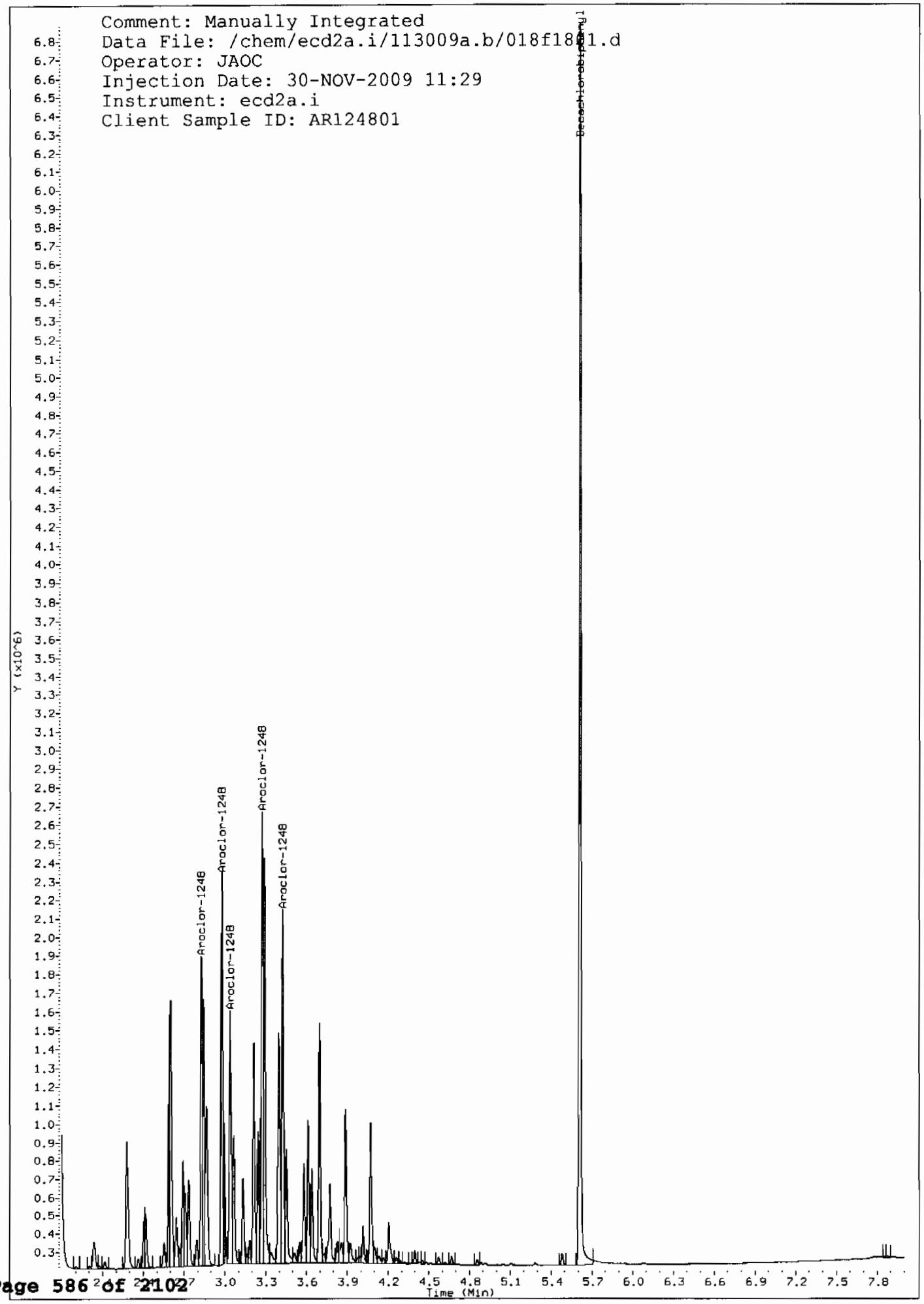

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-018f1801.d
Operator: JAOC
Injection Date: 30-NOV-2009 11:29
Instrument: ecd2a.i
Client Sample ID: AR124801

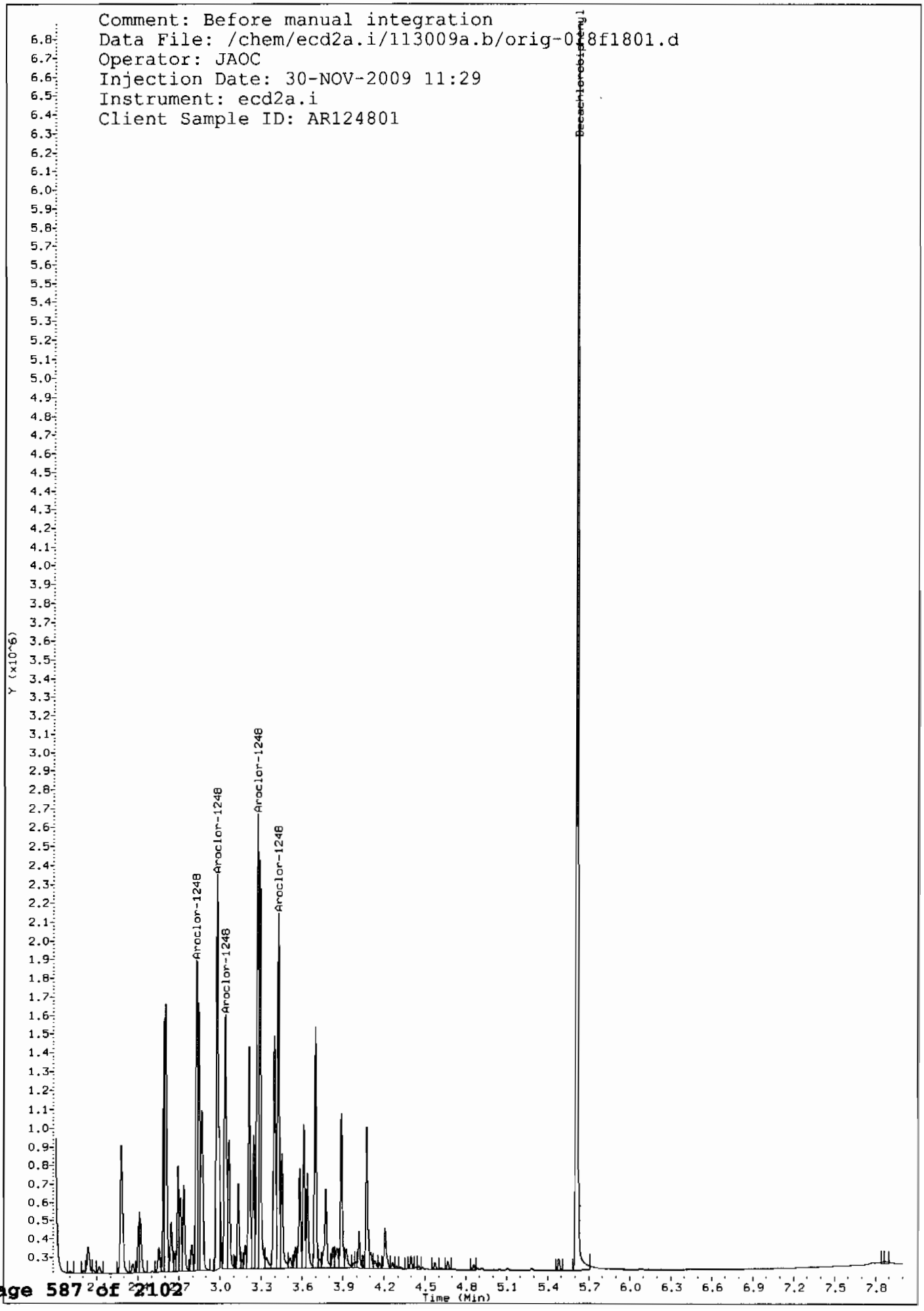

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/018b1801.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 30-NOV-2009 11:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	15148730	100.000	128	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	13300825	100.000	122	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	3317920	1000.00	1010	80.00- 120.00	100.00
3.522	3.522	0.000	4246080	1000.00	1010	107.97- 147.97	127.97
3.609	3.609	0.000	4509127	1000.00	1010	115.90- 155.90	135.90
3.798	3.798	0.000	4787444	1000.00	1020	124.29- 164.29	144.29
3.827	3.827	0.000	5425831	1000.00	1010	143.53- 183.53	163.53

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/113009a.b/018b1801.d

Date : 30-NOV-2009 11:29

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

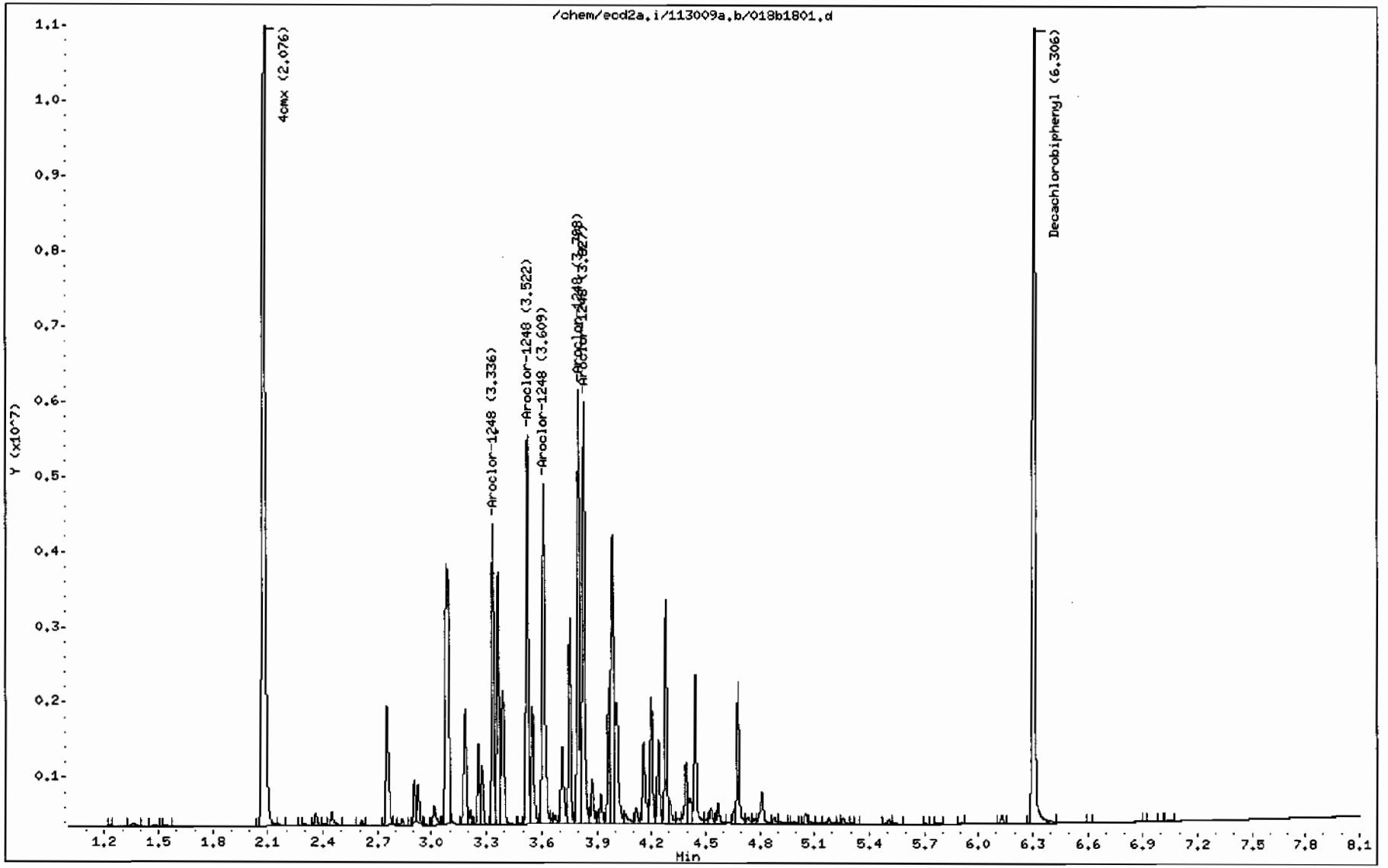

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/019f1901.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 30-NOV-2009 11:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 30-Nov-2009 13:52 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6593393	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	5710697	100.000	104	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.445	1.445	0.000	503780	1000.00	1080	80.00- 120.00	100.00
1.905	1.905	0.000	730976	1000.00	1110	125.10- 165.10	145.10
2.005	2.005	0.000	393878	1000.00	1140	58.18- 98.18	78.18

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd2a.i/113009a.b/019f1901.d
Date : 30-NOV-2009 11:40
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

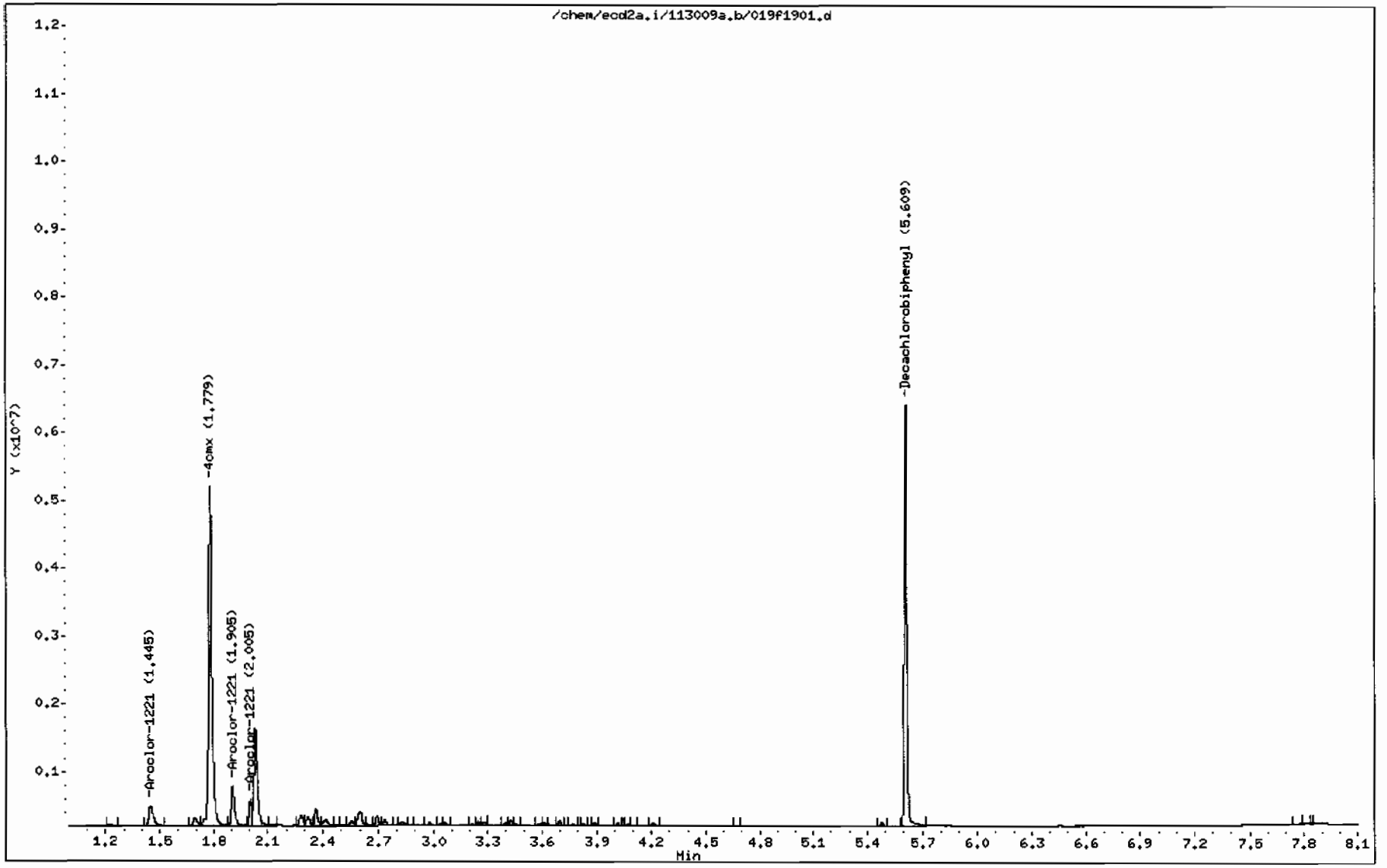

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/019b1901.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 30-NOV-2009 11:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 30-Nov-2009 13:47 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13835551	100.000	117	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.303	6.305	-0.002	11993777	100.000	110	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1394076	1000.00	1100	80.00- 120.00	100.00
2.403	2.403	0.000	852399	1000.00	1100	41.14- 81.14	61.14
2.448	2.448	0.000	3385211	1000.00	1110	222.83- 262.83	242.83

Average of Peak Amounts = 1.1e+03

Data File: /chem/ecd2a.i/113009a.b/019b1901.d

Date : 30-NOV-2009 11:40

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

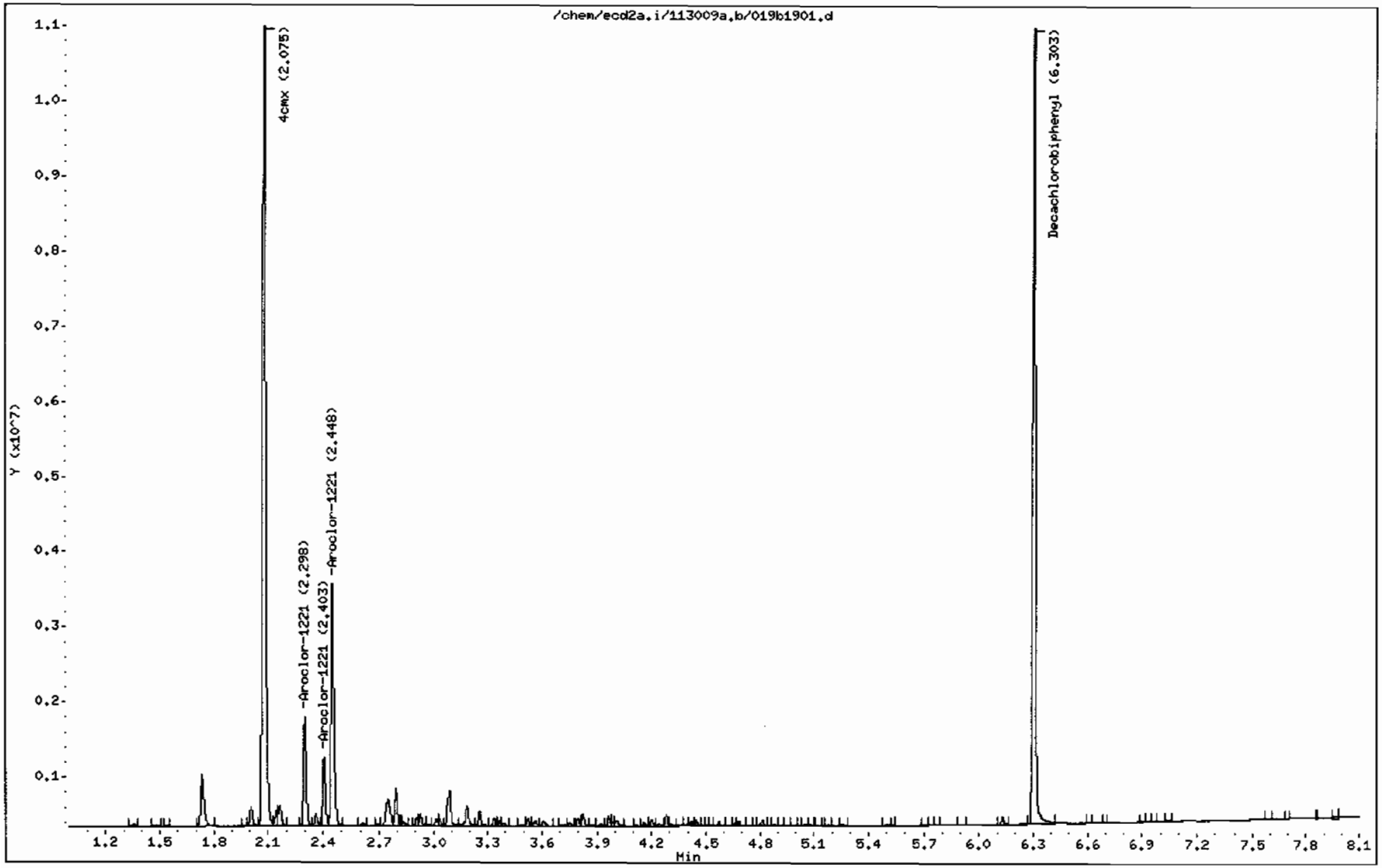

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/060f6001.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 30-NOV-2009 19:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	6097895	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.607	5.610	-0.003	5363835	100.000	97.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.278	2.281	-0.003	1933010	1000.00	920	80.00- 120.00	100.00(M)
2.600	2.603	-0.003	4217365	1000.00	936	198.19- 238.19	218.18
2.691	2.694	-0.003	1668882	1000.00	917	66.30- 106.30	86.34
2.825	2.829	-0.004	842674	1000.00	903	23.34- 63.34	43.59
2.976	2.980	-0.004	1280903	1000.00	929	44.93- 84.93	66.26
Average of Peak Amounts =					921		
7 Aroclor-1260					CAS #: 11096-82-5		
4.015	4.018	-0.003	4041106	1000.00	994	80.00- 120.00	100.00
4.285	4.290	-0.005	2494289	1000.00	986	41.58- 81.58	61.72
4.451	4.455	-0.004	2559863	1000.00	991	43.08- 83.08	63.35
4.664	4.667	-0.003	6076875	1000.00	1010	129.99- 169.99	150.38
4.853	4.856	-0.003	2890332	1000.00	992	51.44- 91.44	71.52
Average of Peak Amounts =					994		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/060f6001.d

Date : 30-NOV-2009 19:42

Client ID: AR166006

Sample Info: IWAR091119-60 06

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

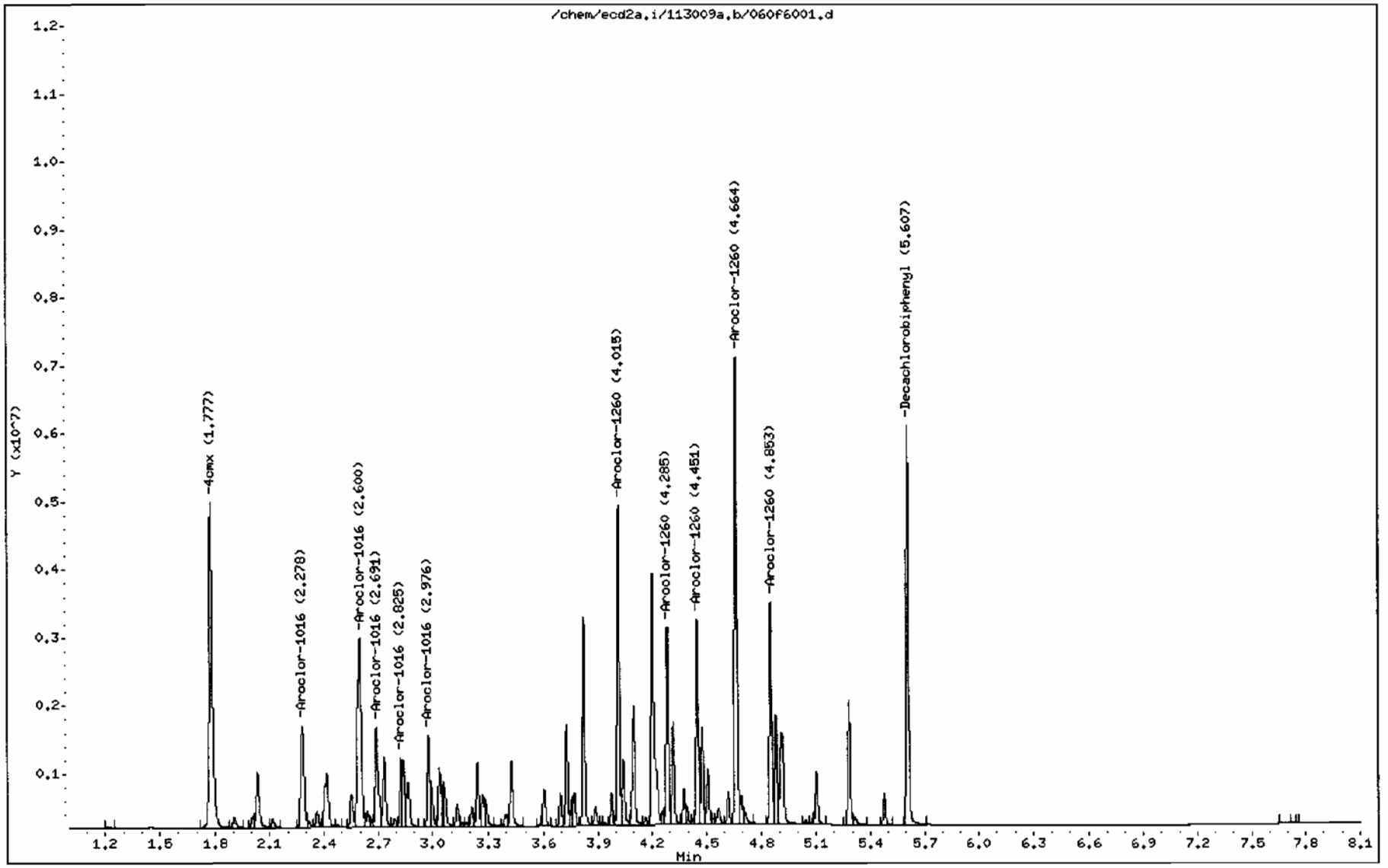

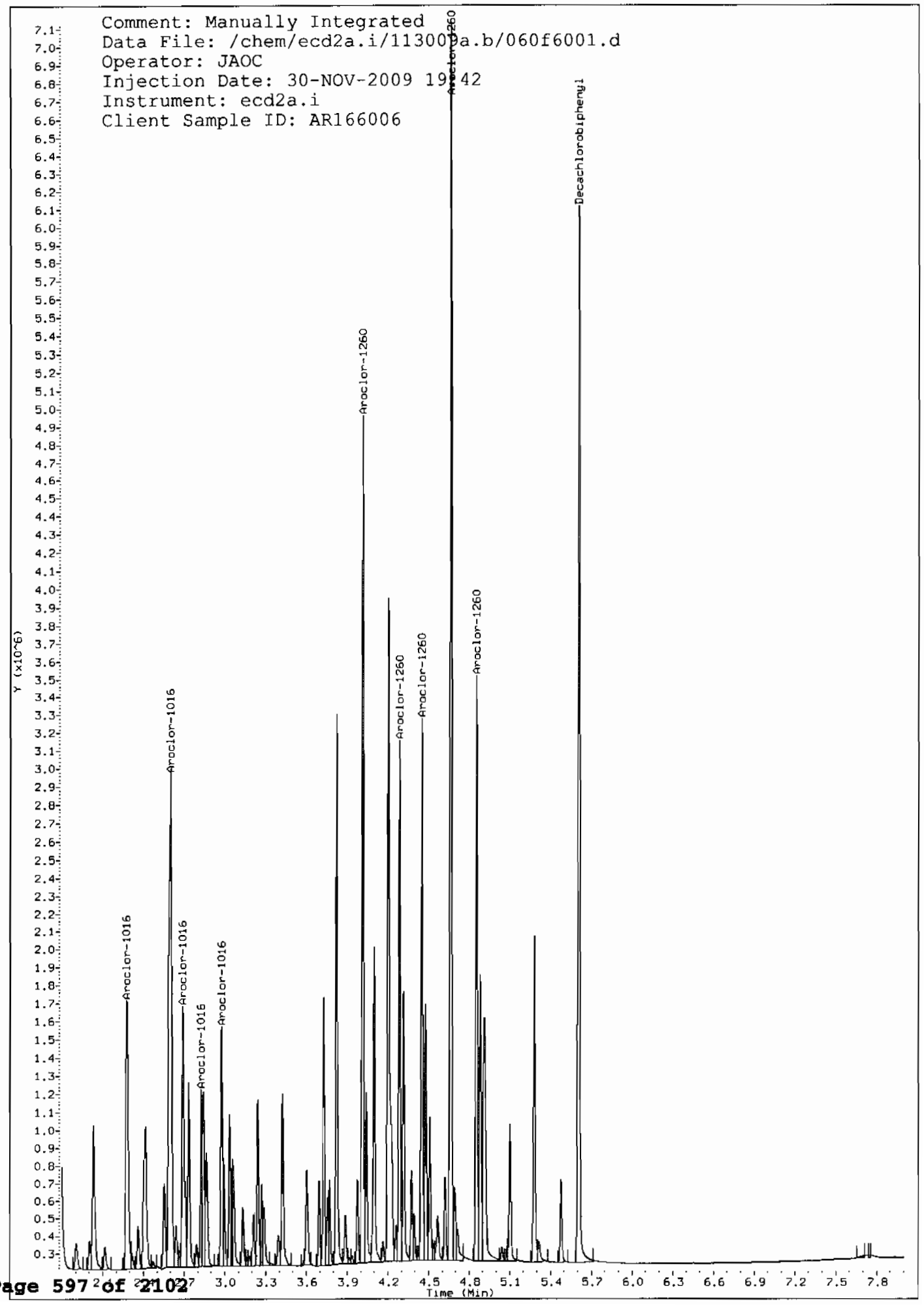
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Operator: JAOC
Injection Date: 30-NOV-2009 19:42
Instrument: ecd2a.i
Client Sample ID: AR166006
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-060f6001.d
Operator: JAOC
Injection Date: 30-NOV-2009 19:42
Instrument: ecd2a.i
Client Sample ID: AR166006

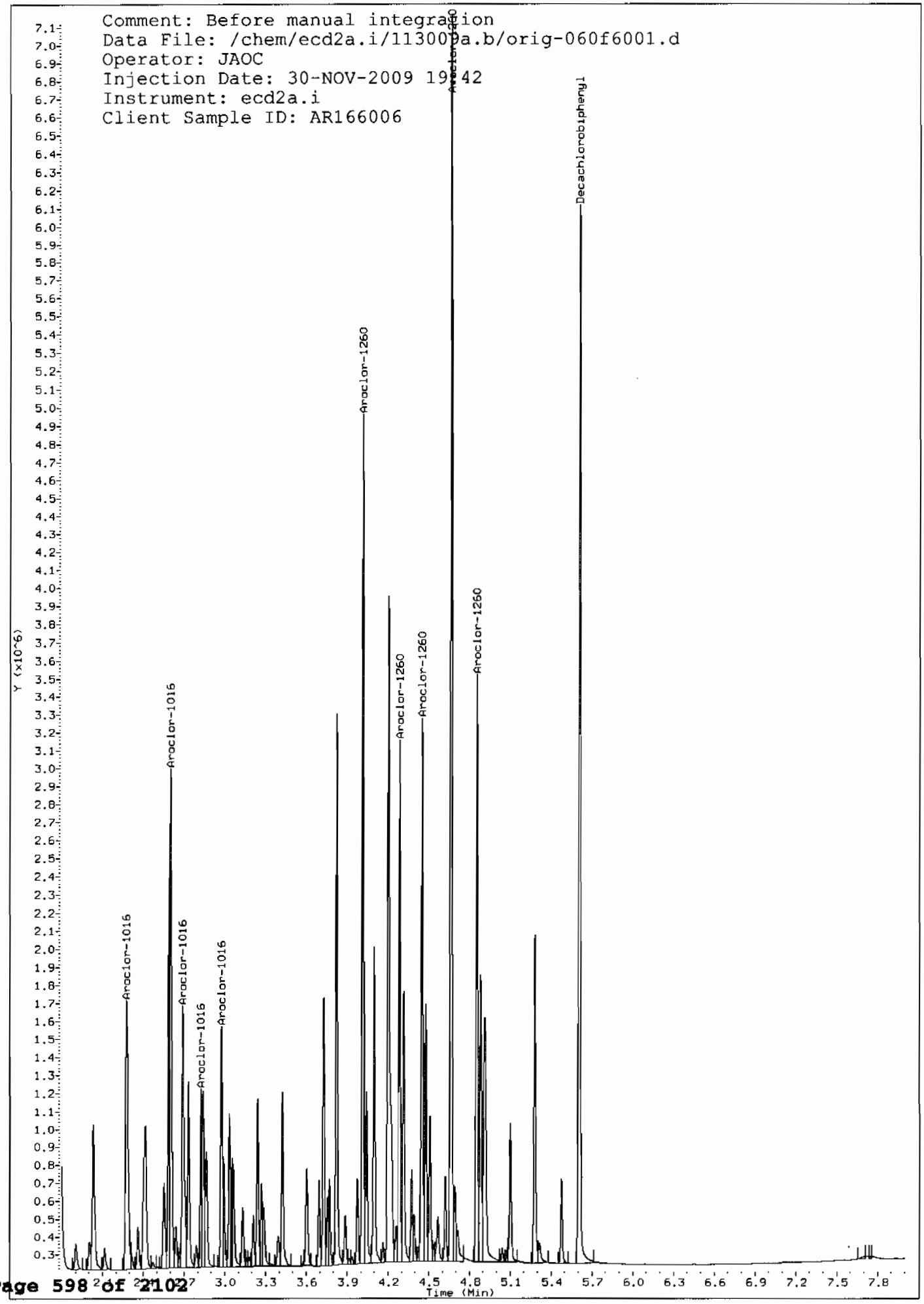

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/060b6001.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 30-NOV-2009 19:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 06
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 60 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13022909	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.303	6.305	-0.002	10982465	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.750	2.752	-0.002	4147515	1000.00	974	80.00- 120.00	100.00
3.183	3.185	-0.002	3338194	1000.00	969	60.91- 100.91	80.49
3.334	3.336	-0.002	1931223	1000.00	976	26.69- 66.69	46.56
3.362	3.365	-0.003	2026640	1000.00	983	29.14- 69.14	48.86
3.521	3.523	-0.002	2736733	1000.00	994	46.31- 86.31	65.98
Average of Peak Amounts =					979		
7 Aroclor-1260					CAS #: 11096-82-5		
4.416	4.419	-0.003	5707093	1000.00	1040	80.00- 120.00	100.00
4.568	4.570	-0.002	7325450	1000.00	1030	108.85- 148.85	128.36
4.680	4.682	-0.002	4866123	1000.00	1030	65.38- 105.38	85.26
4.876	4.880	-0.004	5882183	1000.00	1010	82.89- 122.89	103.07
5.502	5.505	-0.003	9343503	1000.00	1030	145.10- 185.10	163.72
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/113009a.b/060b6001.d

Date : 30-NOV-2009 19:42

Client ID: AR166006

Sample Info: IWAR091119-60 06

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

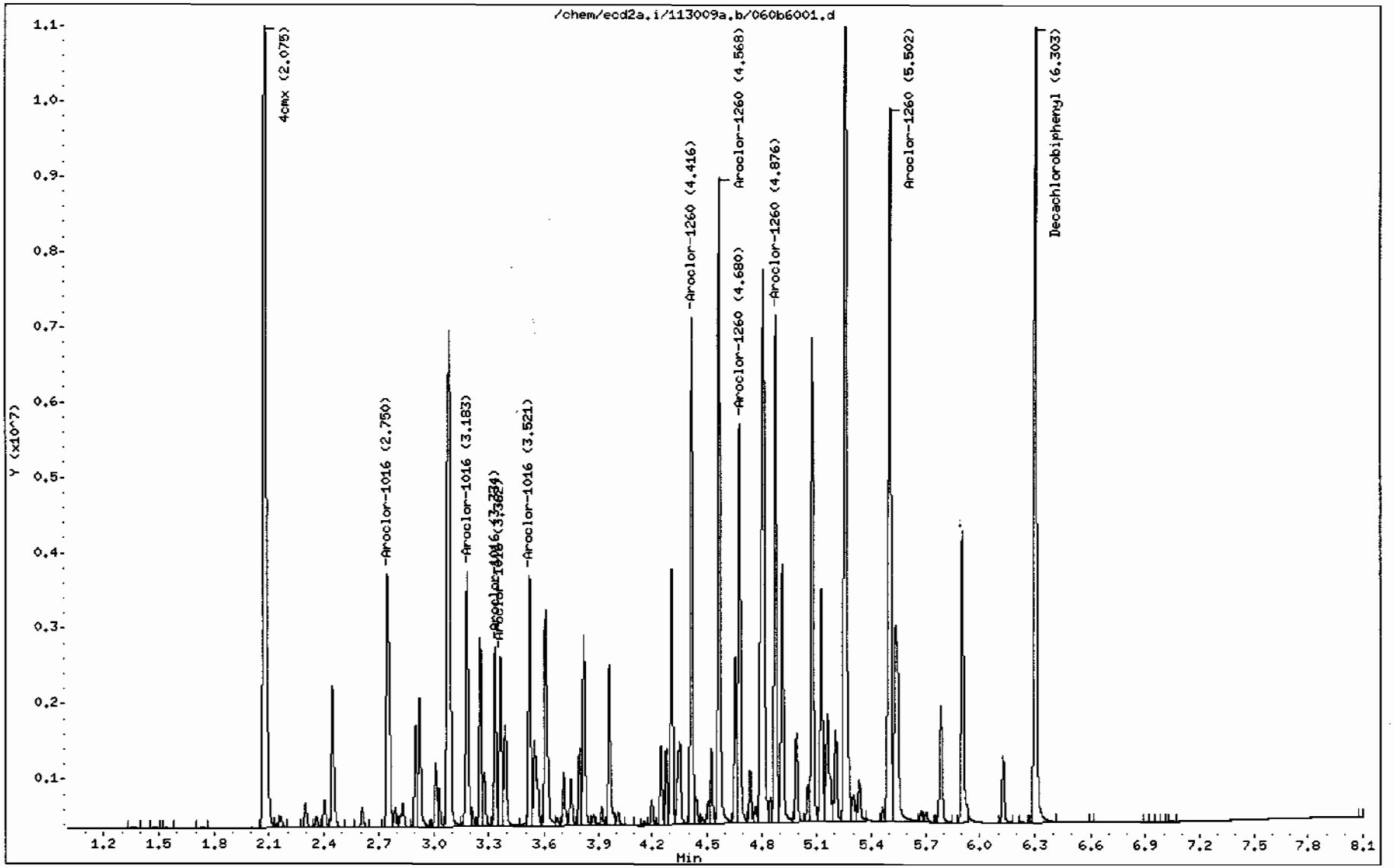

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/072f7201.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 30-NOV-2009 21:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6079928	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5249703	100.000	95.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1930672	1000.00	919	80.00- 120.00	100.00(M)
2.602	2.603	-0.001	4222979	1000.00	937	198.19- 238.19	218.73
2.693	2.694	-0.001	1665504	1000.00	915	66.30- 106.30	86.27
2.828	2.829	-0.001	831367	1000.00	891	23.34- 63.34	43.06
2.979	2.980	-0.001	1279233	1000.00	928	44.93- 84.93	66.26
Average of Peak Amounts =					918		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4070896	1000.00	1000	80.00- 120.00	100.00
4.289	4.290	-0.001	2513820	1000.00	994	41.58- 81.58	61.75
4.455	4.455	0.000	2576179	1000.00	997	43.08- 83.08	63.28
4.667	4.667	0.000	6093310	1000.00	1010	129.99- 169.99	149.68
4.856	4.856	0.000	2912572	1000.00	1000	51.44- 91.44	71.55
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/072f7201.d

Date : 30-NOV-2009 21:55

Client ID: AR166007

Sample Info: !WAR091119-60 07

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

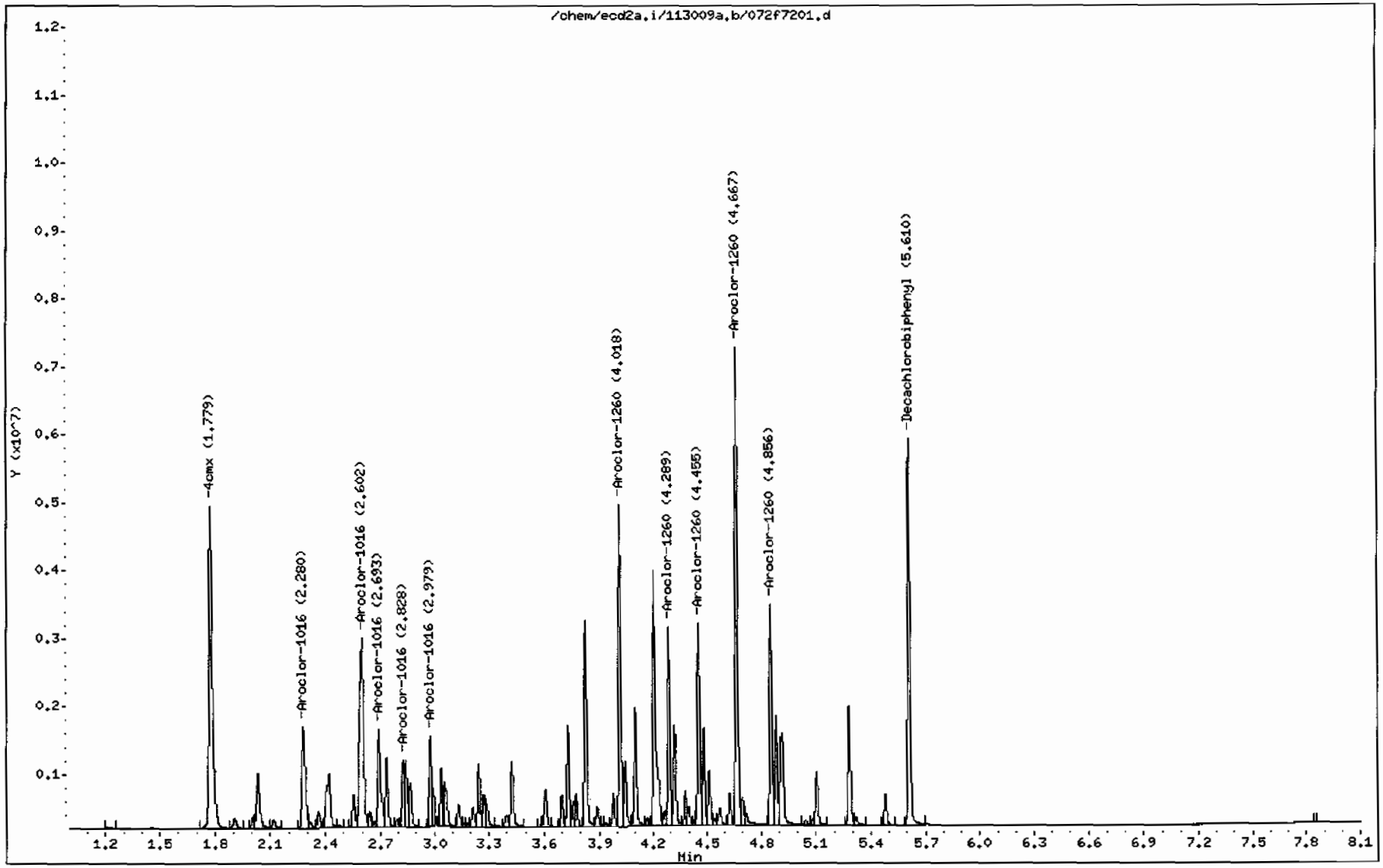

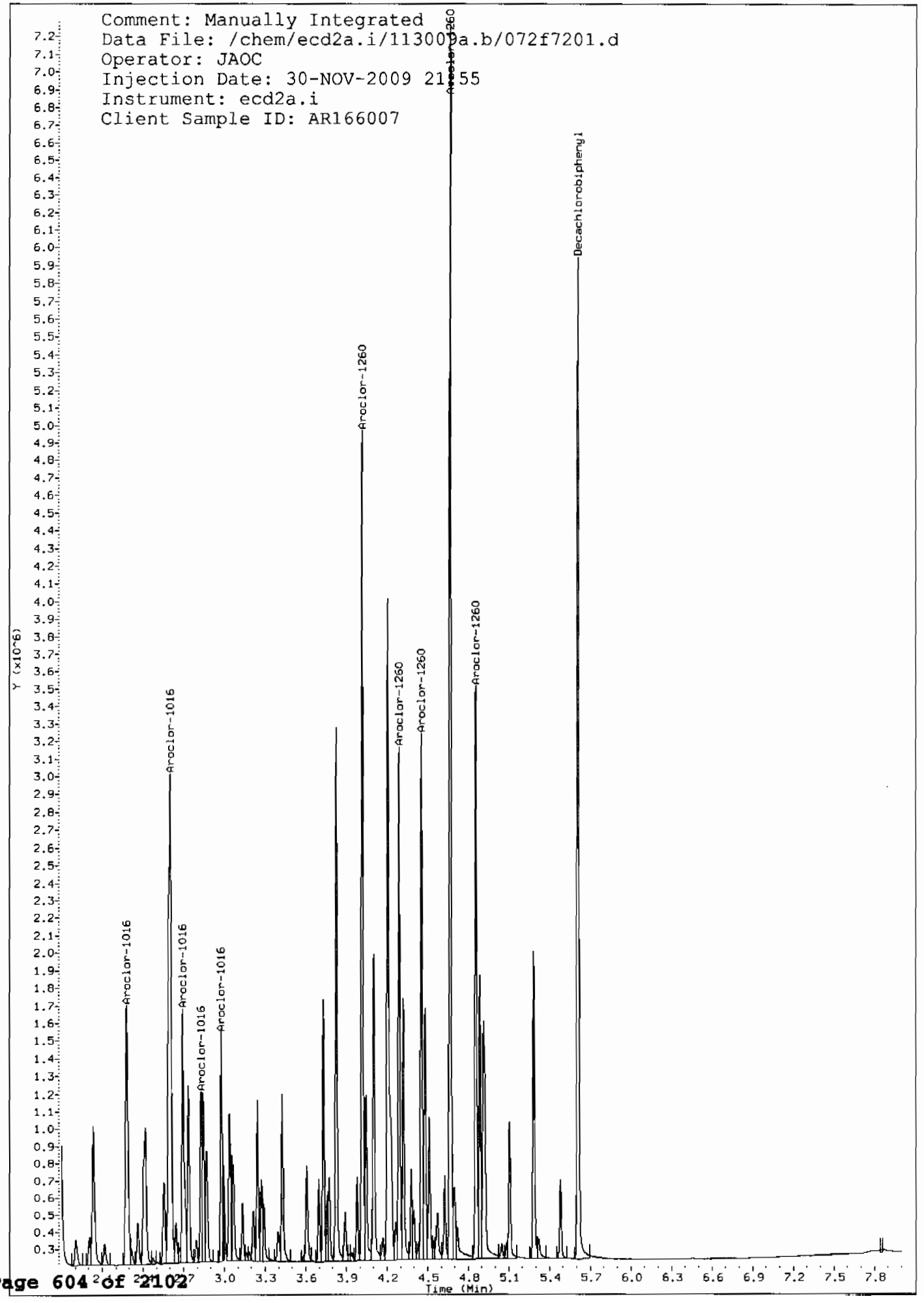
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Data File: /chem/ecd2a.i/113009a.b/072f7201.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:55
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-072f7201.d
Operator: JAOC
Injection Date: 30-NOV-2009 21:55
Instrument: ecd2a.i
Client Sample ID: AR166007

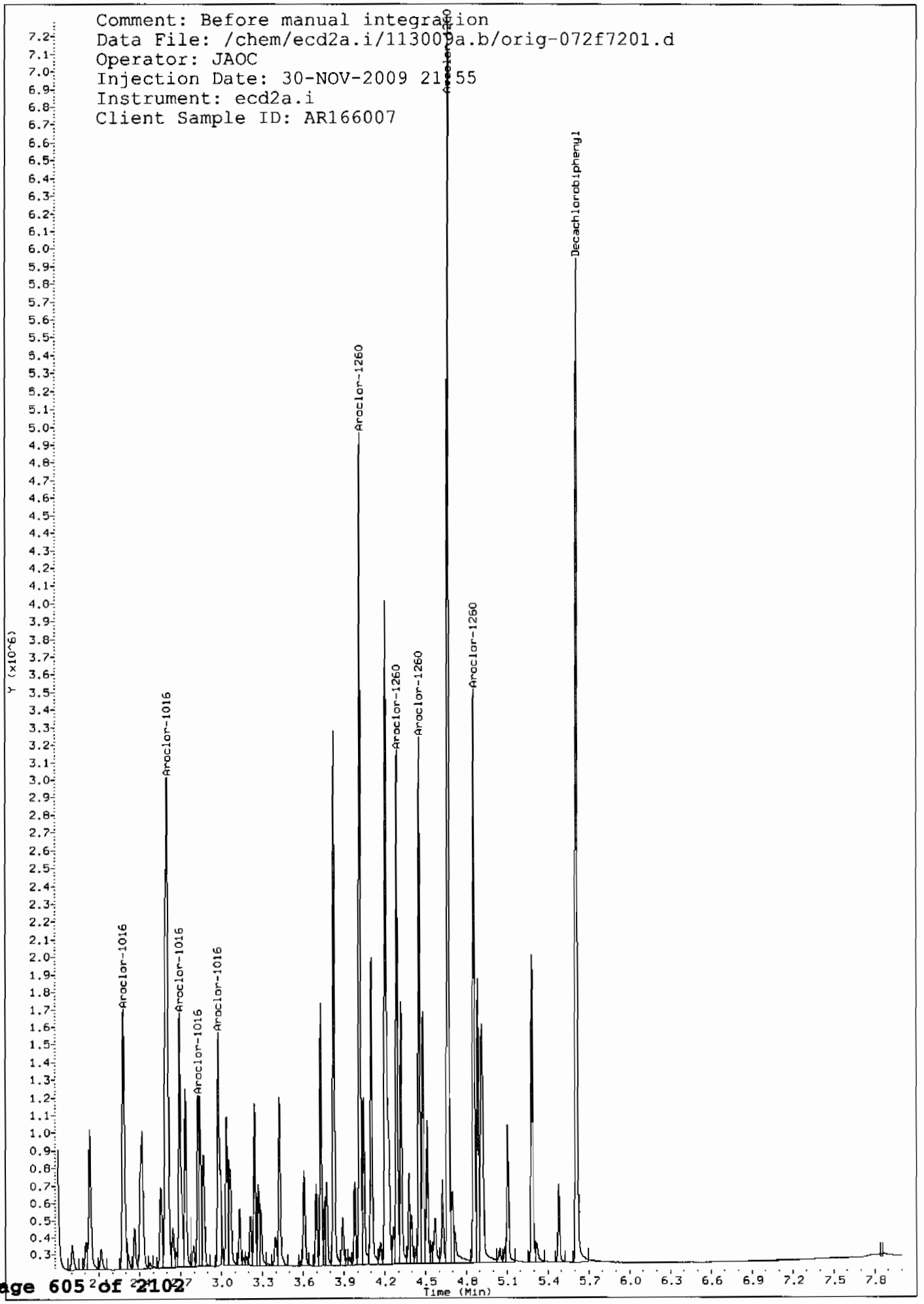

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/072b7201.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 30-NOV-2009 21:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	12937412	100.000	109	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	10807087	100.000	99.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	4110584	1000.00	965	80.00- 120.00	100.00
3.184	3.185	-0.001	3321649	1000.00	964	60.91- 100.91	80.81
3.335	3.336	-0.001	1920571	1000.00	970	26.69- 66.69	46.72
3.364	3.365	-0.001	1996449	1000.00	968	29.14- 69.14	48.57
3.522	3.523	-0.001	2724972	1000.00	989	46.31- 86.31	66.29
Average of Peak Amounts =					972		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5674547	1000.00	1030	80.00- 120.00	100.00
4.570	4.570	0.000	7298534	1000.00	1020	108.85- 148.85	128.62
4.681	4.682	-0.001	4828747	1000.00	1020	65.38- 105.38	85.09
4.879	4.880	-0.001	5817967	1000.00	1000	82.89- 122.89	102.53
5.505	5.505	0.000	9235476	1000.00	1020	145.10- 185.10	162.75
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd2a.i/113009a.b/072b7201.d

Date : 30-NOV-2009 21:55

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

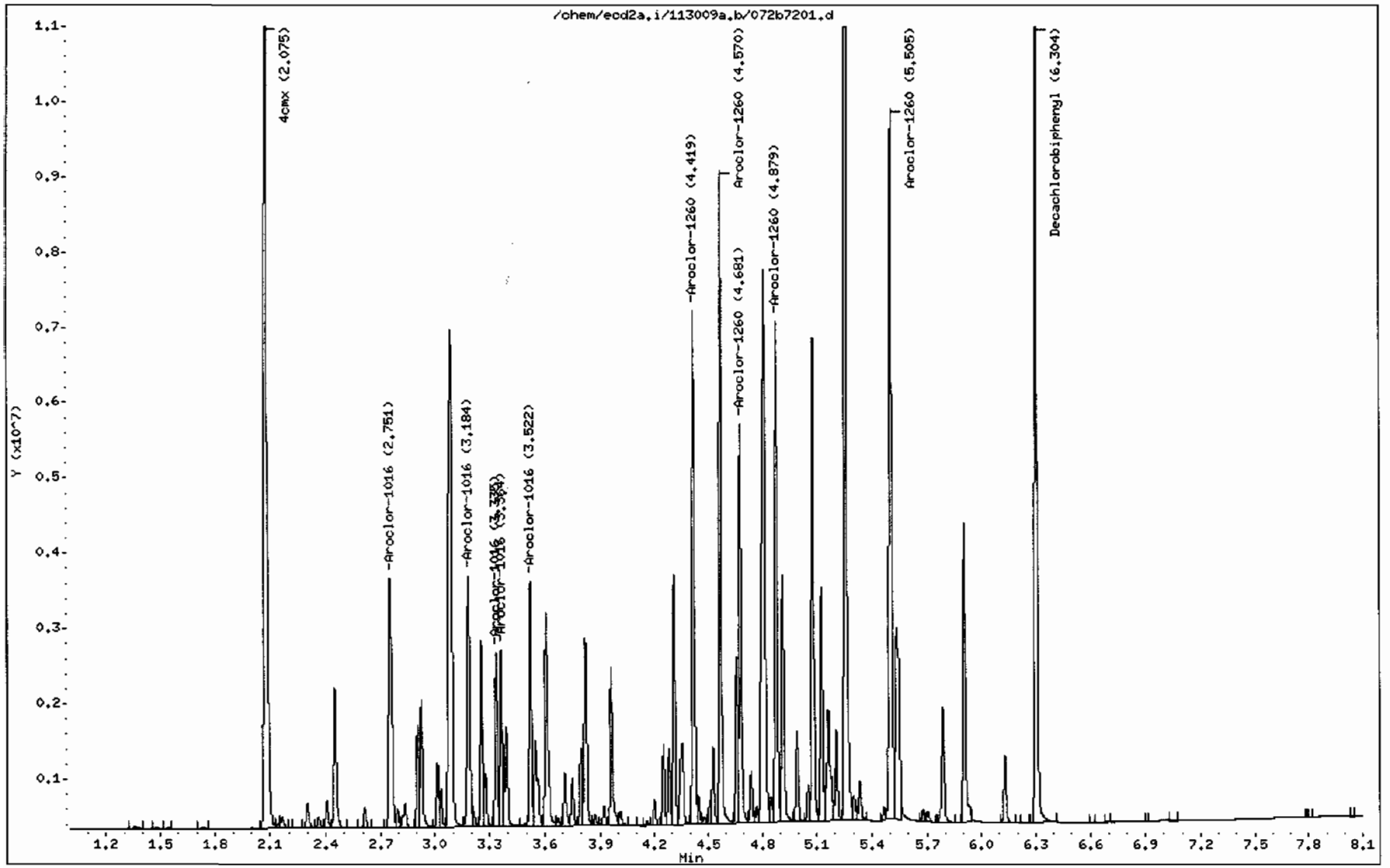

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/084f8401.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 01-DEC-2009 00:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 84 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	6135669	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	5255737	100.000	95.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1952367	1000.00	930	80.00- 120.00	100.00(M)
2.602	2.603	-0.001	4266269	1000.00	947	198.19- 238.19	218.52
2.693	2.694	-0.001	1683812	1000.00	925	66.30- 106.30	86.24
2.827	2.829	-0.002	836486	1000.00	897	23.34- 63.34	42.84
2.979	2.980	-0.001	1291869	1000.00	937	44.93- 84.93	66.17
Average of Peak Amounts =					927		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.018	0.000	4074980	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2503389	1000.00	990	41.58- 81.58	61.43
4.455	4.455	0.000	2559185	1000.00	991	43.08- 83.08	62.80
4.667	4.667	0.000	6100779	1000.00	1010	129.99- 169.99	149.71
4.856	4.856	0.000	2920454	1000.00	1000	51.44- 91.44	71.67
Average of Peak Amounts =					999		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/084f8401.d

Date : 01-DEC-2009 00:09

Client ID: AR166008

Sample Info: IWAR091119-60 08

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

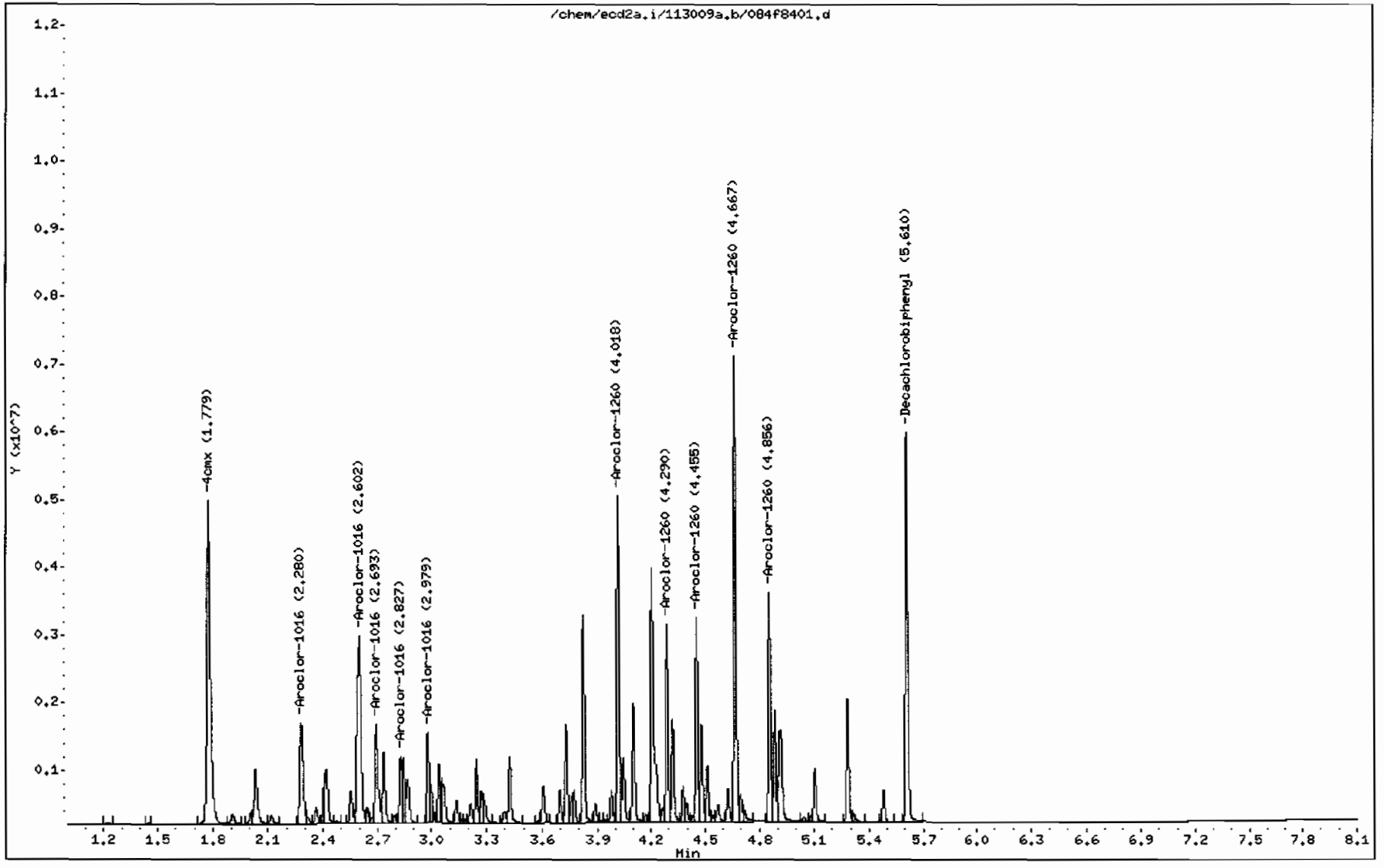

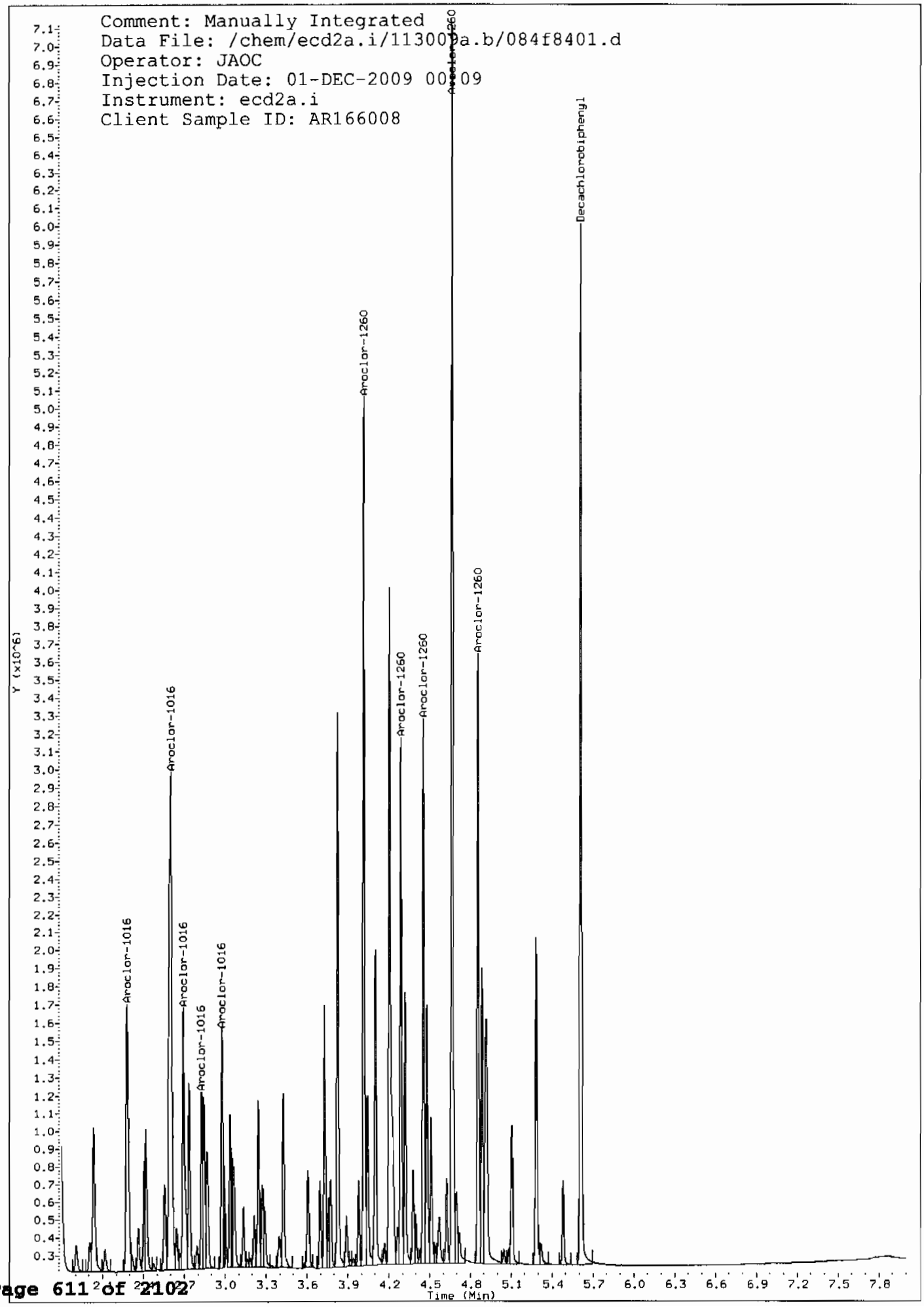
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Data File: /chem/ecd2a.i/113009a.b/084f8401.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:09
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

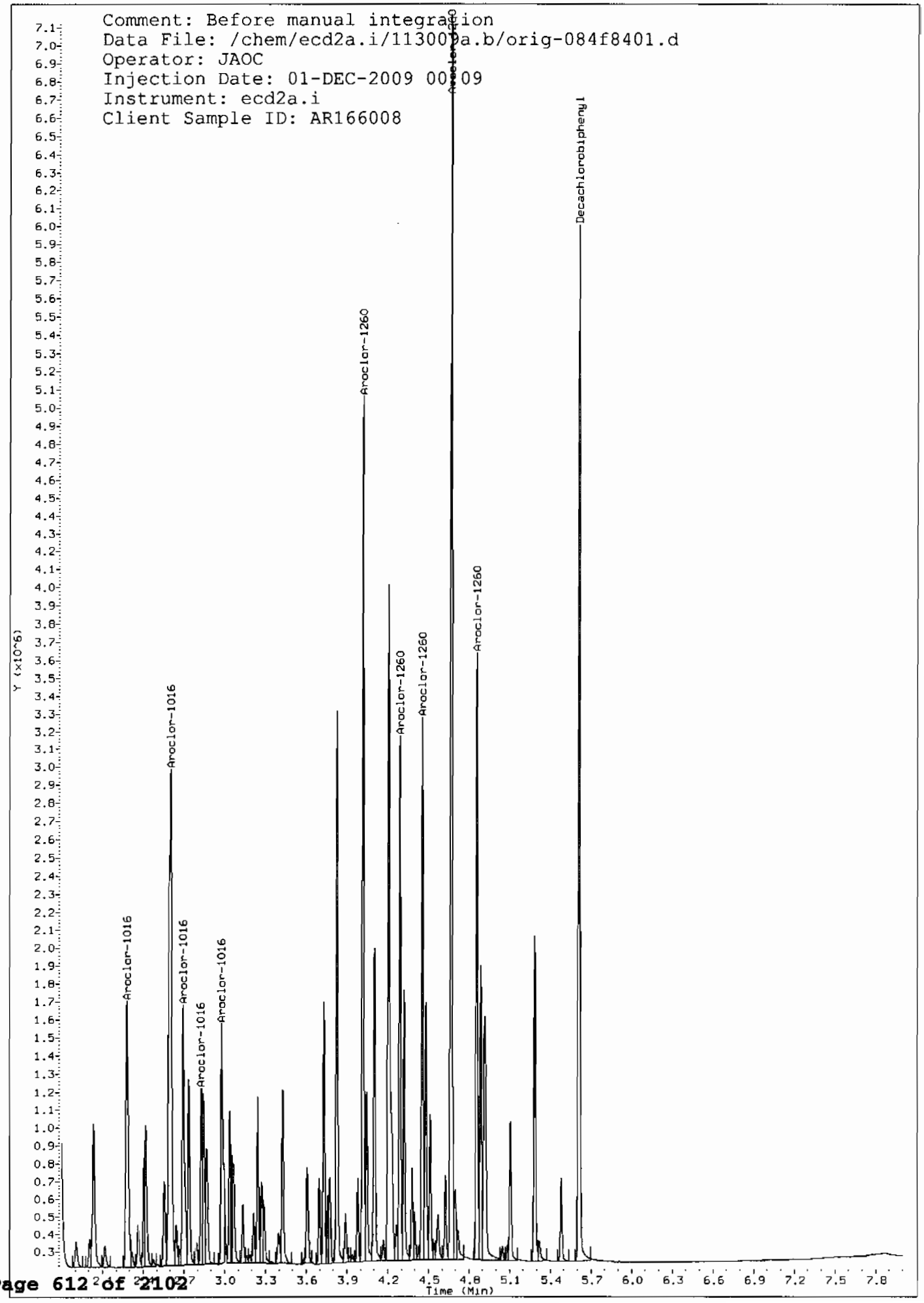
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-084f8401.d
Operator: JAOC
Injection Date: 01-DEC-2009 00:09
Instrument: ecd2a.i
Client Sample ID: AR166008
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/084b8401.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 01-DEC-2009 00:09
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 84 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	13093389	100.000	111	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10865555	100.000	100	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	4158774	1000.00	977	80.00- 120.00	100.00
3.185	3.185	0.000	3350372	1000.00	973	60.91- 100.91	80.56
3.335	3.336	-0.001	1931546	1000.00	976	26.69- 66.69	46.45
3.365	3.365	0.000	2010024	1000.00	975	29.14- 69.14	48.33
3.523	3.523	0.000	2746843	1000.00	997	46.31- 86.31	66.05
Average of Peak Amounts =					980		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5760526	1000.00	1040	80.00- 120.00	100.00
4.570	4.570	0.000	7410661	1000.00	1040	108.85- 148.85	128.65
4.682	4.682	0.000	4897495	1000.00	1040	65.38- 105.38	85.02
4.879	4.880	-0.001	5899028	1000.00	1020	82.89- 122.89	102.40
5.505	5.505	0.000	9366908	1000.00	1040	145.10- 185.10	162.61
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd2a.i/113009a.b/084b8401.d

Date : 01-DEC-2009 00:09

Client ID: AR166008

Sample Info: IWAR091119-60 08

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

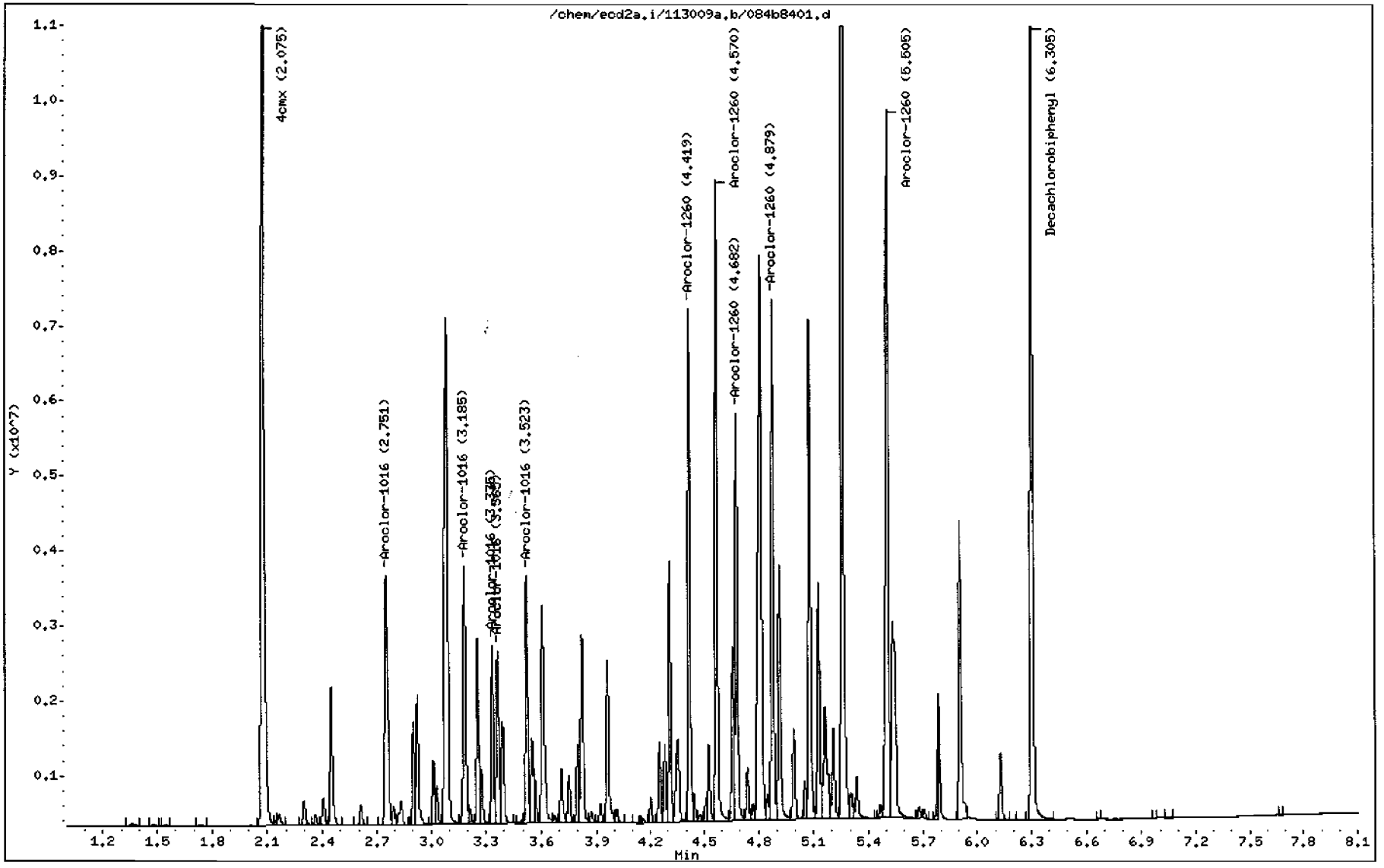

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	AR166001	WAR091102-60	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	AR124801	WAR091027-48	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	AR166001	WAR091102-60	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	AR124801	WAR091027-48	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	ZZZZZ	ZZZZZ	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	1434	1.78	5.62
02	ZZZZZ	ZZZZZ	11/30/09	1445		
03	ZZZZZ	ZZZZZ	11/30/09	1456		
04	AR166003	WAR091119-60	11/30/09	1512	1.78	5.61
05	PIBLK04	WAR090916-99	11/30/09	1523	1.78	5.61
06	ZZZZZ	ZZZZZ	11/30/09	1534	1.78	5.61
07	ZZZZZ	ZZZZZ	11/30/09	1545	1.78	5.61
08	ZZZZZ	ZZZZZ	11/30/09	1556	1.78	5.61
09	ZZZZZ	ZZZZZ	11/30/09	1607	1.78	5.61
10	ZZZZZ	ZZZZZ	11/30/09	1618	1.78	5.61
11	ZZZZZ	ZZZZZ	11/30/09	1629	1.78	5.61
12	ZZZZZ	ZZZZZ	11/30/09	1640	1.78	5.61
13	AR166004	WAR091119-60	11/30/09	1651	1.78	5.61
14	PIBLK05	WAR090916-99	11/30/09	1702	1.78	5.61
15	ZZZZZ	ZZZZZ	11/30/09	1713	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	1724	1.78	5.61
17	ZZZZZ	ZZZZZ	11/30/09	1736	1.78	5.61
18	ZZZZZ	ZZZZZ	11/30/09	1747	1.78	5.61
19	ZZZZZ	ZZZZZ	11/30/09	1758	1.78	5.61
20	ZZZZZ	ZZZZZ	11/30/09	1809	1.78	5.61
21	ZZZZZ	ZZZZZ	11/30/09	1820	1.78	5.61
22	AR166005	WAR091119-60	11/30/09	1831	1.78	5.61
23	PIBLK06	WAR090916-99	11/30/09	1842	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1853	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1904	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1915	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1926		5.61
28	AR166006	WAR091119-60	11/30/09	1942	1.78	5.61
29	PIBLK07	WAR090916-99	11/30/09	1953	1.78	5.61
30	PBLK01	1201981383	11/30/09	2005	1.78	5.61
31	PBLK01LCS	1201981386	11/30/09	2016	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	2027	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	2038	1.78	5.61
02	ZZZZZ	ZZZZZ	11/30/09	2049	1.78	5.61
03	ZZZZZ	ZZZZZ	11/30/09	2100	1.78	5.61
04	ZZZZZ	ZZZZZ	11/30/09	2111	1.78	5.61
05	ZZZZZ	ZZZZZ	11/30/09	2122	1.78	5.61
06	ZZZZZ	ZZZZZ	11/30/09	2133	1.78	5.61
07	ZZZZZ	ZZZZZ	11/30/09	2144	1.78	5.61
08	AR166007	WAR091119-60	11/30/09	2155	1.78	5.61
09	PIBLK08	WAR090916-99	11/30/09	2207	1.78	5.61
10	ZZZZZ	ZZZZZ	11/30/09	2218	1.78	5.61
11	ZZZZZ	ZZZZZ	11/30/09	2229	1.78	5.61
12	ZZZZZ	ZZZZZ	11/30/09	2240	1.78	5.61
13	ZZZZZ	ZZZZZ	11/30/09	2251	1.78	5.61
14	ZZZZZ	ZZZZZ	11/30/09	2302	1.78	5.61
15	ZZZZZ	ZZZZZ	11/30/09	2313	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	2324	1.78	5.61
17	ZZZZZ	ZZZZZ	11/30/09	2336	1.78	5.61
18	RE03-09-13770	241336001	11/30/09	2347	1.78	5.61
19	RE03-10-5897	241336002	11/30/09	2358	1.78	5.61
20	AR166008	WAR091119-60	12/01/09	0009	1.78	5.61
21	PIBLK09	WAR090916-99	12/01/09	0020	1.78	5.61
22	ZZZZZ	ZZZZZ	12/01/09	0031	1.78	5.61
23	ZZZZZ	ZZZZZ	12/01/09	0042	1.78	5.61
24	ZZZZZ	ZZZZZ	12/01/09	0053	1.78	5.61
25	ZZZZZ	ZZZZZ	12/01/09	0105	1.78	5.61
26	AR166009	WAR091119-60	12/01/09	0116	1.78	5.61
27	PIBLK10	WAR090916-99	12/01/09	0127	1.78	5.61
28						
29						
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08	6.31
02	ZZZZZ	ZZZZZ	11/30/09	0832	2.08	6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08	6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08	6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08	6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08	6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08	6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08	6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08	6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08	6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08	6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08	6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08	6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08	6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08	6.31
16	ZZZZZ	ZZZZZ	11/30/09	1107	2.08	6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08	6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08	6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08	6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08	6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08	6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08	6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07	6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08	6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08	6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08	6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08	6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07	6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08	6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07	6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	1434	2.08	6.31
02	ZZZZZ	ZZZZZ	11/30/09	1445		
03	ZZZZZ	ZZZZZ	11/30/09	1456		
04	AR166003	WAR091119-60	11/30/09	1512	2.07	6.30
05	PIBLK04	WAR090916-99	11/30/09	1523	2.08	6.31
06	ZZZZZ	ZZZZZ	11/30/09	1534	2.07	6.30
07	ZZZZZ	ZZZZZ	11/30/09	1545	2.08	6.30
08	ZZZZZ	ZZZZZ	11/30/09	1556	2.08	6.30
09	ZZZZZ	ZZZZZ	11/30/09	1607	2.07	6.30
10	ZZZZZ	ZZZZZ	11/30/09	1618	2.08	6.30
11	ZZZZZ	ZZZZZ	11/30/09	1629	2.08	6.30
12	ZZZZZ	ZZZZZ	11/30/09	1640	2.07	6.30
13	AR166004	WAR091119-60	11/30/09	1651	2.07	6.31
14	PIBLK05	WAR090916-99	11/30/09	1702	2.08	6.30
15	ZZZZZ	ZZZZZ	11/30/09	1713	2.08	6.30
16	ZZZZZ	ZZZZZ	11/30/09	1724	2.08	6.30
17	ZZZZZ	ZZZZZ	11/30/09	1736	2.08	6.30
18	ZZZZZ	ZZZZZ	11/30/09	1747	2.08	6.31
19	ZZZZZ	ZZZZZ	11/30/09	1758	2.07	6.31
20	ZZZZZ	ZZZZZ	11/30/09	1809	2.08	6.31
21	ZZZZZ	ZZZZZ	11/30/09	1820	2.08	6.31
22	AR166005	WAR091119-60	11/30/09	1831	2.08	6.30
23	PIBLK06	WAR090916-99	11/30/09	1842	2.08	6.30
24	ZZZZZ	ZZZZZ	11/30/09	1853	2.08	6.31
25	ZZZZZ	ZZZZZ	11/30/09	1904	2.07	6.31
26	ZZZZZ	ZZZZZ	11/30/09	1915	2.08	6.31
27	ZZZZZ	ZZZZZ	11/30/09	1926	2.08	6.31
28	AR166006	WAR091119-60	11/30/09	1942	2.07	6.30
29	PIBLK07	WAR090916-99	11/30/09	1953	2.08	6.30
30	PBLK01	1201981383	11/30/09	2005	2.07	6.31
31	PBLK01LCS	1201981386	11/30/09	2016	2.08	6.31
32	ZZZZZ	ZZZZZ	11/30/09	2027	2.08	6.31

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-546

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	11/30/09	2038	2.08	6.30
02	ZZZZZ	ZZZZZ	11/30/09	2049	2.08	6.30
03	ZZZZZ	ZZZZZ	11/30/09	2100	2.08	6.30
04	ZZZZZ	ZZZZZ	11/30/09	2111	2.07	6.31
05	ZZZZZ	ZZZZZ	11/30/09	2122	2.08	6.30
06	ZZZZZ	ZZZZZ	11/30/09	2133	2.08	6.30
07	ZZZZZ	ZZZZZ	11/30/09	2144	2.08	6.30
08	AR166007	WAR091119-60	11/30/09	2155	2.08	6.30
09	PIBLK08	WAR090916-99	11/30/09	2207	2.08	6.30
10	ZZZZZ	ZZZZZ	11/30/09	2218	2.08	6.30
11	ZZZZZ	ZZZZZ	11/30/09	2229	2.08	6.30
12	ZZZZZ	ZZZZZ	11/30/09	2240	2.08	6.30
13	ZZZZZ	ZZZZZ	11/30/09	2251	2.08	6.30
14	ZZZZZ	ZZZZZ	11/30/09	2302	2.08	6.30
15	ZZZZZ	ZZZZZ	11/30/09	2313	2.08	6.31
16	ZZZZZ	ZZZZZ	11/30/09	2324	2.07	6.30
17	ZZZZZ	ZZZZZ	11/30/09	2336	2.08	6.30
18	RE03-09-13770	241336001	11/30/09	2347	2.08	6.30
19	RE03-10-5897	241336002	11/30/09	2358	2.08	6.30
20	AR166008	WAR091119-60	12/01/09	0009	2.08	6.30
21	PIBLK09	WAR090916-99	12/01/09	0020	2.08	6.30
22	ZZZZZ	ZZZZZ	12/01/09	0031	2.08	6.30
23	ZZZZZ	ZZZZZ	12/01/09	0042	2.08	6.30
24	ZZZZZ	ZZZZZ	12/01/09	0053	2.08	6.30
25	ZZZZZ	ZZZZZ	12/01/09	0105	2.08	6.30
26	AR166009	WAR091119-60	12/01/09	0116	2.08	6.30
27	PIBLK10	WAR090916-99	12/01/09	0127	2.08	6.30
28						
29						
30						
31						
32						

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10-546 **Client ID:** LCS for batch 926709

Lab Sample ID: 1201981386

Data File:	063f6301.d	**Data File:**	063b6301.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30-NOV-09 20:16	**Analyzed:**	30-NOV-09 20:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							3.53
Column 1	1	2.28	2.25 – 2.31	25.7		ug/kg	
	2	2.6	2.57 – 2.63	26		ug/kg	
	3	2.69	2.66 – 2.72	24.9		ug/kg	
	4	2.83	2.8 – 2.86	24.8		ug/kg	
	5	2.98	2.95 – 3.01	26.3		ug/kg	
					25.5		
Column 2	1	2.75	2.72 – 2.78	26.3		ug/kg	
	2	3.19	3.16 – 3.22	26.3		ug/kg	
	3	3.34	3.31 – 3.37	27.4		ug/kg	
	4	3.36	3.33 – 3.39	25.1		ug/kg	
	5	3.52	3.49 – 3.55	27.2		ug/kg	
					26.5		
Aroclor-1260							1.08
Column 1	1	4.02	3.99 – 4.05	30.3		ug/kg	
	2	4.29	4.26 – 4.32	30.2		ug/kg	
	3	4.45	4.42 – 4.48	29.9		ug/kg	
	4	4.67	4.64 – 4.7	31.6		ug/kg	
	5	4.86	4.83 – 4.89	30.1		ug/kg	
					30.4		
Column 2	1	4.42	4.39 – 4.45	30.5		ug/kg	
	2	4.57	4.54 – 4.6	31.7		ug/kg	
	3	4.68	4.65 – 4.71	30.9		ug/kg	
	4	4.88	4.85 – 4.91	31.1		ug/kg	
	5	5.5	5.48 – 5.54	29.6		ug/kg	
					30.8		

Identification Summary

SDG Number: 10–546 **Client ID:** RE03–09–13770

Lab Sample ID: 241336001

Data File:	082f8201.d	**Data File:**	082b8201.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30–NOV–09 23:47	**Analyzed:**	30–NOV–09 23:47

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							1.74
Column 1	1	4.02	3.99 – 4.05	1.92		ug/kg	
	2	4.29	4.26 – 4.32	1.47		ug/kg	
	3	4.45	4.42 – 4.48	1.35		ug/kg	
	4	4.67	4.64 – 4.7	1.35		ug/kg	
	5	4.86	4.83 – 4.89	1.85		ug/kg	
					1.59		
Column 2	1	4.42	4.39 – 4.45	1.4		ug/kg	
	2	4.57	4.54 – 4.6	1.8		ug/kg	
	3	4.68	4.65 – 4.71	1.69		ug/kg	
	4	4.88	4.85 – 4.91	1.5		ug/kg	
	5	5.51	5.48 – 5.54	1.43		ug/kg	
					1.56		

Identification Summary

SDG Number: 10–546 **Client ID:** RE03–10–5897

Lab Sample ID: 241336002

Data File:	083f8301.d	**Data File:**	083b8301.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	30–NOV–09 23:58	**Analyzed:**	30–NOV–09 23:58

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							36.1
Column 1	1	3.24	3.21 – 3.27	30.6		ug/kg	
	2	3.43	3.4 – 3.46	37.1		ug/kg	
	3	3.7	3.67 – 3.73	40.9		ug/kg	
	4	3.89	3.86 – 3.92	30.4		ug/kg	
	5	4.02	3.99 – 4.05	98.2		ug/kg	
					47.4		
Column 2	1	3.82	3.79 – 3.85	33.4		ug/kg	
	2	3.96	3.93 – 3.99	37.1		ug/kg	
	3	4.2	4.17 – 4.23	27.8		ug/kg	
	4	4.28	4.25 – 4.31	40.1		ug/kg	
	5	4.44	4.41 – 4.47	26.3		ug/kg	
					32.9		
Aroclor–1260							15.4
Column 1	1	4.02	3.99 – 4.05	66.6		ug/kg	
	2	4.29	4.26 – 4.32	42.2		ug/kg	
	3	4.45	4.42 – 4.48	38.7		ug/kg	
	4	4.67	4.64 – 4.7	36.5		ug/kg	
	5	4.86	4.83 – 4.89	45.3		ug/kg	
					45.9		
Column 2	1	4.42	4.39 – 4.45	58.2		ug/kg	
	2	4.57	4.54 – 4.6	64		ug/kg	
	3	4.68	4.65 – 4.71	60.3		ug/kg	
	4	4.88	4.85 – 4.91	45.3		ug/kg	
	5	5.5	5.48 – 5.54	39.9		ug/kg	
					53.5		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-546**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981383**				
Client Sample:	**QC for batch 926709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926709**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**926712**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 20:05**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/27/2009 22:34**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**062f6201-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	062b6201-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/062f6201-3.d
Lab Smp Id: 1201981383 Client Smp ID: PBLK01
Inj Date : 30-NOV-2009 20:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981383|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 62 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.777	1.780	-0.003	10895979	188.802	6.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	9597879	175.050	5.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/062f6201-3.d

Page 1

Date : 30-NOV-2009 20:05

Client ID: PBLK01

Instrument: ecd2a.i

Sample Info: |120198138311|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

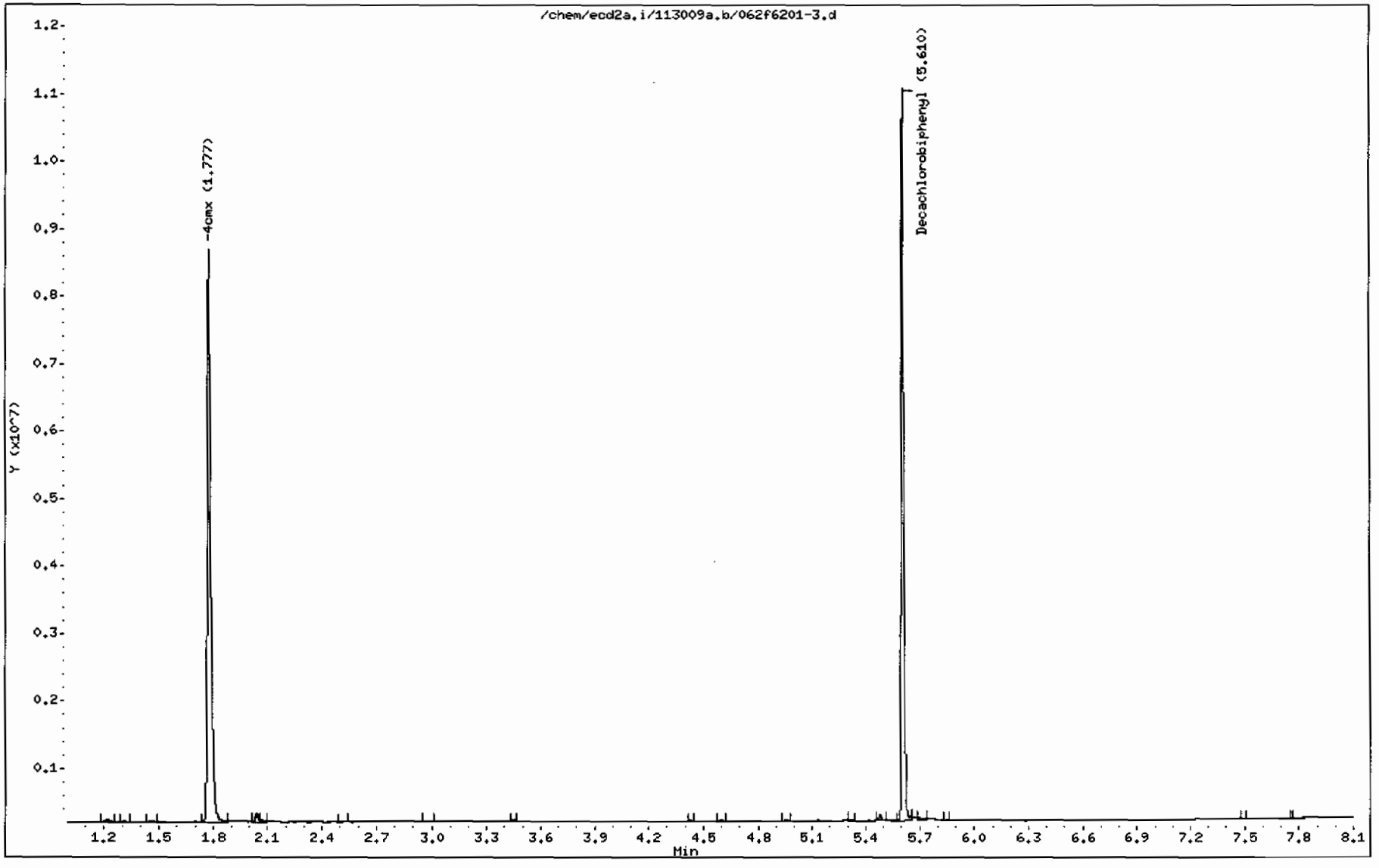

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/062b6201-3.d
Lab Smp Id: 1201981383 Client Smp ID: PBLK01
Inj Date : 30-NOV-2009 20:05
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981383|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 62 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	23422973	198.164	6.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	21469886	197.621	6.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/113009a.b/062b6201-3.d

Date : 30-NOV-2009 20:05

Client ID: PBLK01

Sample Info: |1201981383|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

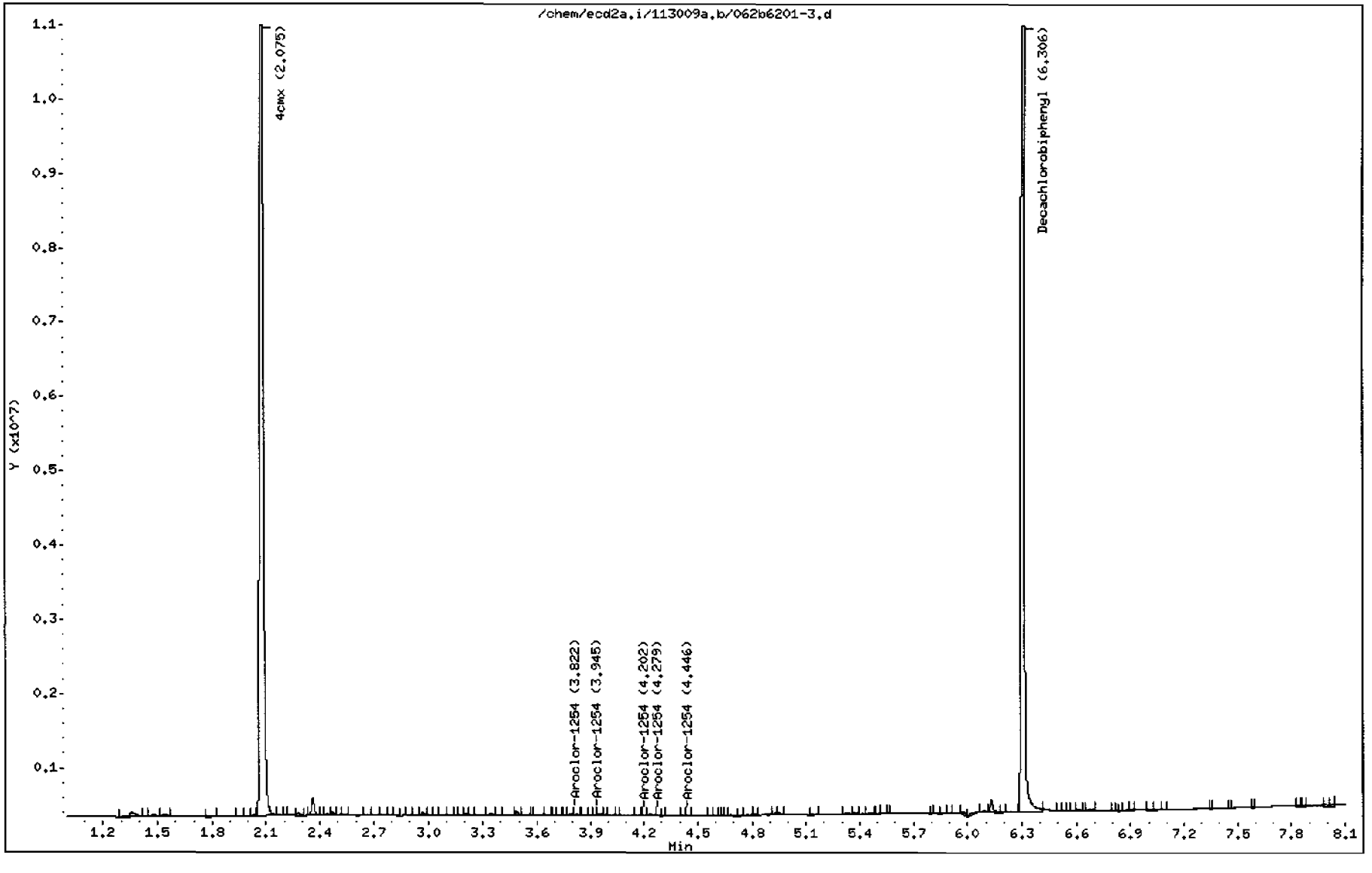

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-546			**Matrix:**	SOIL
Lab Sample ID:	1201981386				
Client Sample:	QC for batch 926709	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926709	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	926712	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	11/30/2009 20:16	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	11/27/2009 22:34	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	063f6301-1.d	**Column:**	1 CLP1	**Level:**	LOW
	063b6301-1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		26.5	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		30.8	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/063f6301-3.d
Lab Smp Id: 1201981386 Client Smp ID: PBLK01LCS
Inj Date : 30-NOV-2009 20:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981386|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 63 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	10115527	175.278	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.609	5.610	-0.001	9156412	166.999	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	1621507	772.218	25.7	80.00- 120.00	100.00(M)
2.603	2.603	0.000	3512511	779.776	26.0	198.19- 238.19	216.62
2.693	2.694	-0.001	1360284	747.322	24.9	66.30- 106.30	83.89
2.828	2.829	-0.001	694592	744.565	24.8	23.34- 63.34	42.84

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.979	2.980	-0.001	1087022	788.769	26.3	44.93- 84.93	67.04
		Average of Peak Concentrations =			25.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	3702340	910.383	30.3	80.00- 120.00	100.00
4.289	4.290	-0.001	2289506	905.545	30.2	41.58- 81.58	61.84
4.454	4.455	-0.001	2321235	898.588	30.0	43.08- 83.08	62.70
4.666	4.667	-0.001	5727314	948.843	31.6	129.99- 169.99	154.69
4.855	4.856	-0.001	2629528	903.014	30.1	51.44- 91.44	71.02
		Average of Peak Concentrations =			30.4		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/063f6301-3.d
Date : 30-NOV-2009 20:16
Client ID: PBLK01LCS
Sample Info: 1120198138611
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

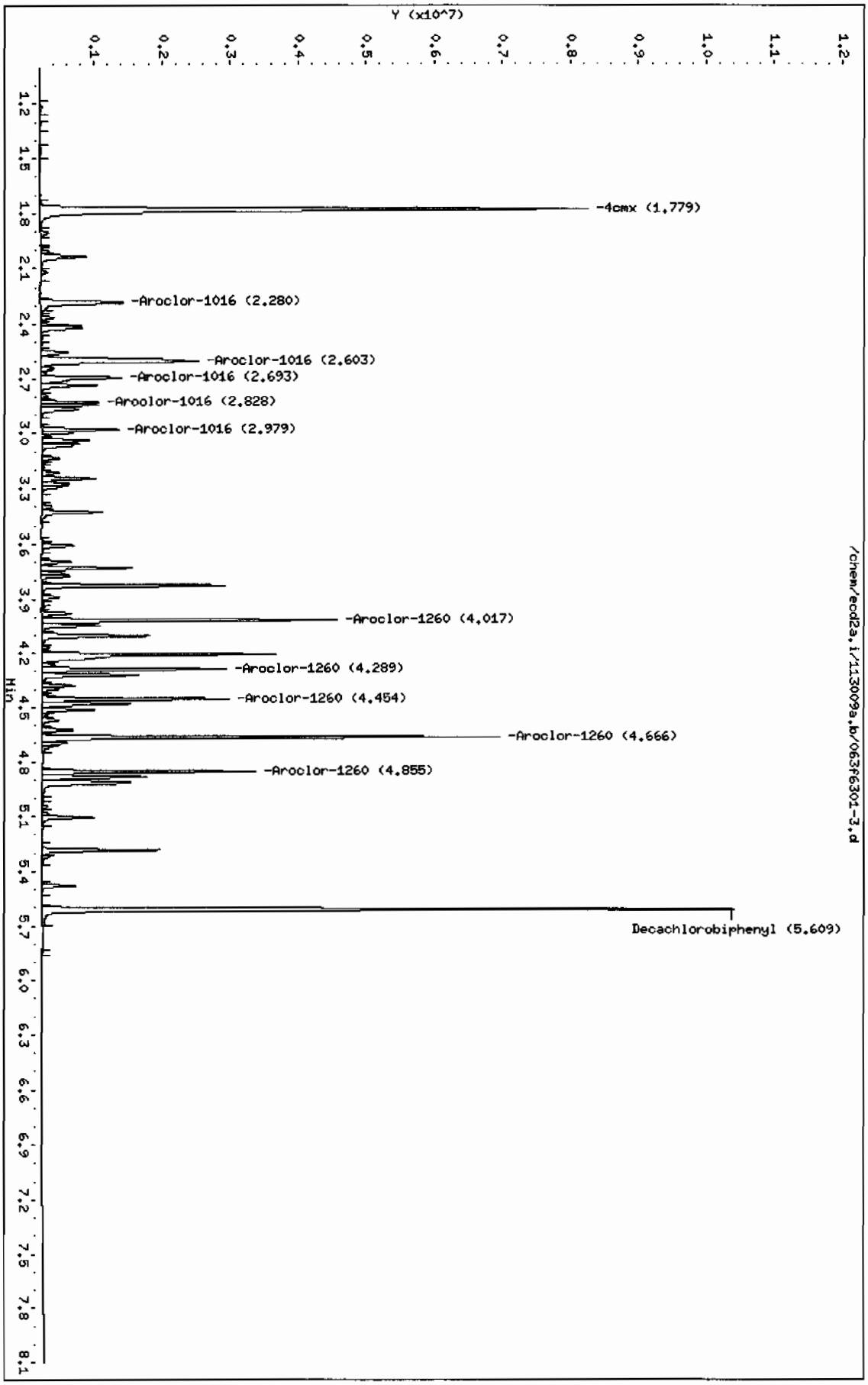

Page 1

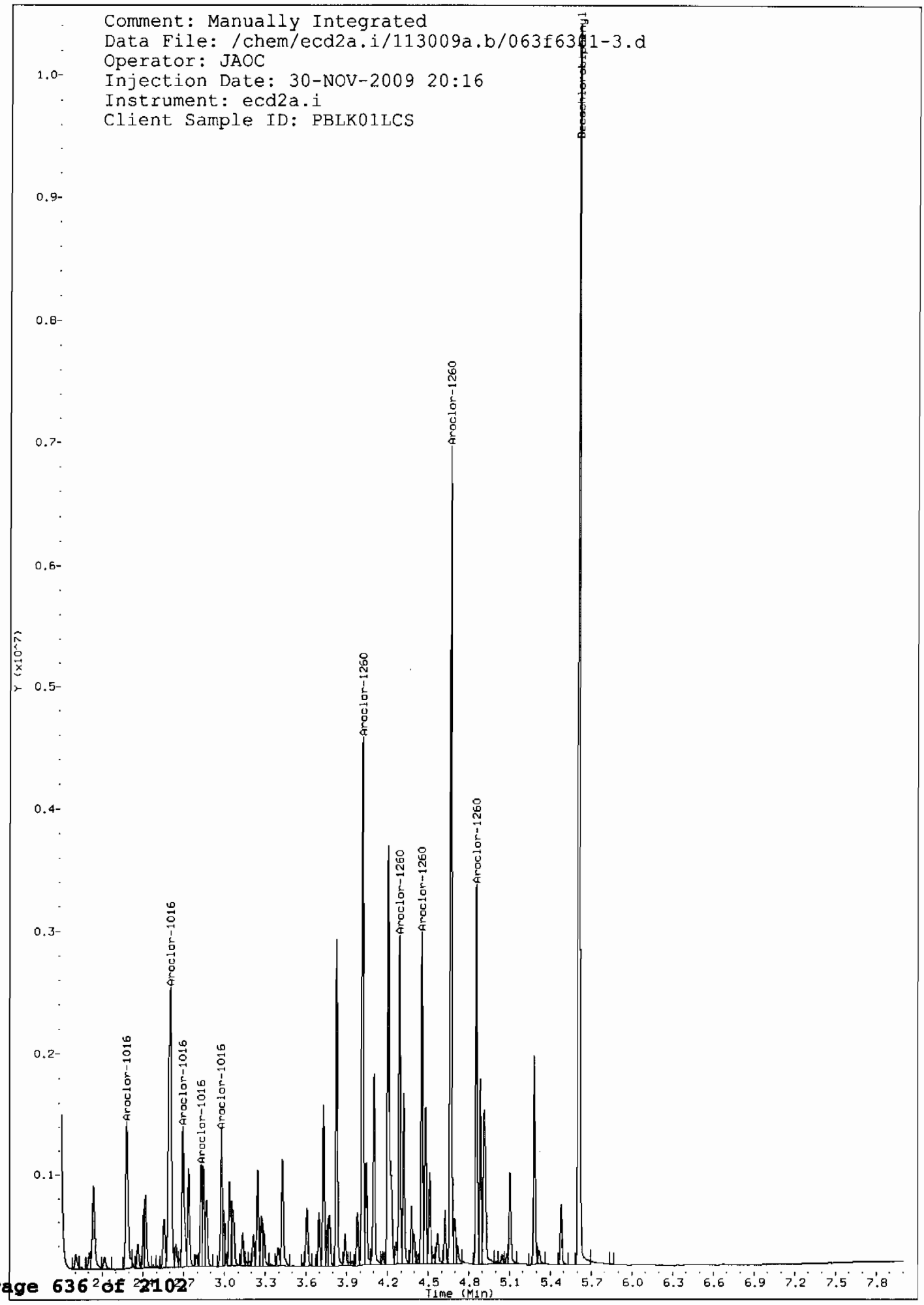
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Operator: JAOC
Injection Date: 30-NOV-2009 20:16
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1
5.4
5.7
6.0
6.3
6.6
6.9
7.2
7.5
7.8
Time (Min)

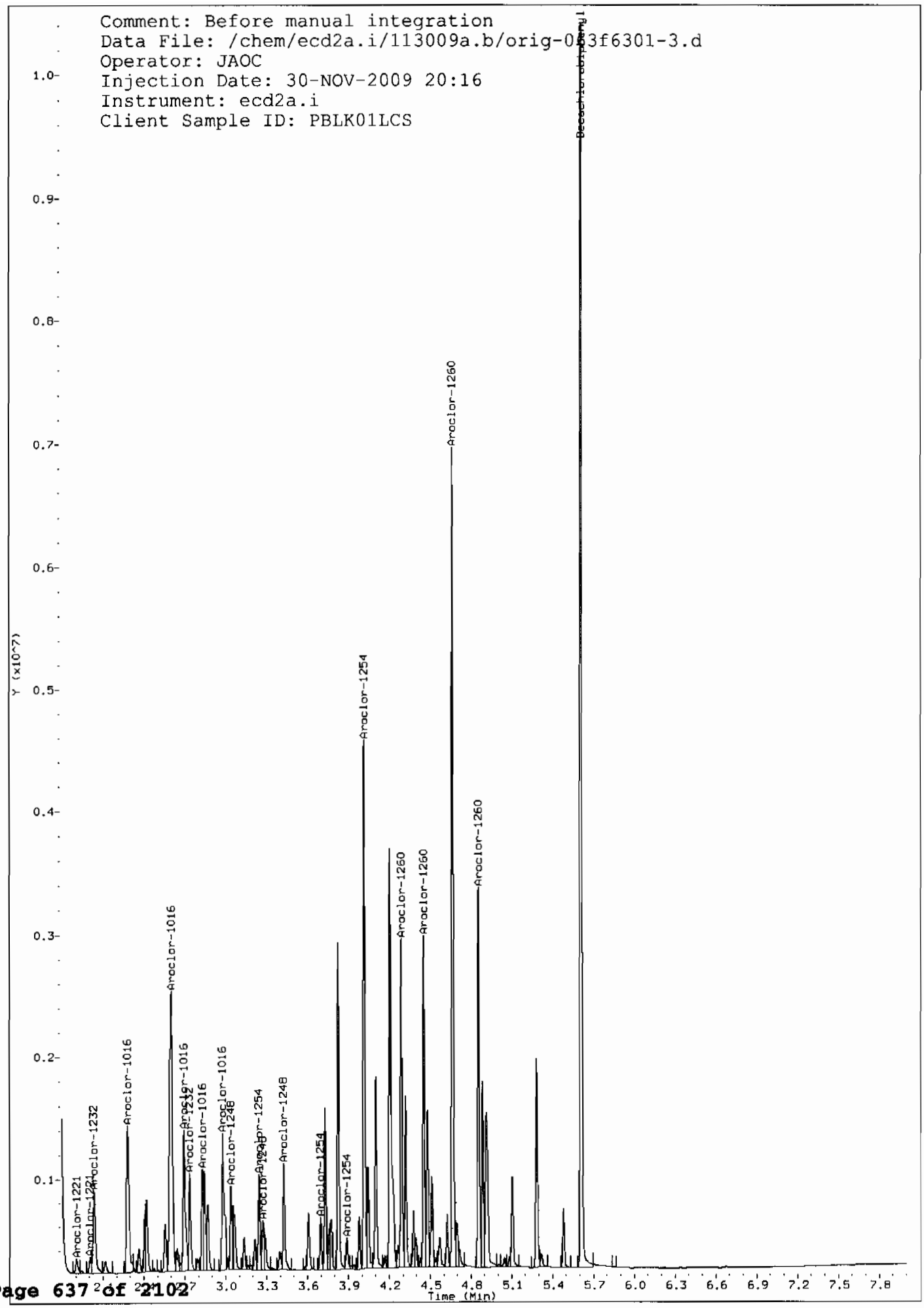
Comment: Before manual integration
Data File: /chem/ecd2a.i/113009a.b/orig-0f3f6301-3.d
Operator: JAOC
Injection Date: 30-NOV-2009 20:16
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Y (x10^7)
Time (Min)
Aroclor-1221
Aroclor-1232
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1260

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/063b6301-3.d
Lab Smp Id: 1201981386 Client Smp ID: PBLK01LCS
Inj Date : 30-NOV-2009 20:16
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981386|1|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 63 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-546.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	21700397	183.591	6.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	20147515	185.449	6.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	3361403	789.423	26.3	80.00- 120.00	100.00
3.185	3.185	0.000	2715289	788.255	26.3	60.91- 100.91	80.78
3.336	3.336	0.000	1625894	821.371	27.4	26.69- 66.69	48.37
3.364	3.365	-0.001	1554186	754.001	25.1	29.14- 69.14	46.24

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.523	0.000	2251036	817.319	27.2	46.31- 86.31	66.97
Average of Peak Concentrations =					26.5		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	5047570	915.635	30.5	80.00- 120.00	100.00
4.569	4.570	-0.001	6783885	951.194	31.7	108.85- 148.85	134.40
4.681	4.682	-0.001	4392993	928.483	30.9	65.38- 105.38	87.03
4.879	4.880	-0.001	5416528	933.778	31.1	82.89- 122.89	107.31
5.504	5.505	-0.001	8016416	886.705	29.6	145.10- 185.10	158.82
Average of Peak Concentrations =					30.8		

Data File: /chem/ecd2a.i/113009a.b/063b6301-3.d
Date : 30-NOV-2009 20:16
Client ID: PBLK01LCS
Sample Info: 1120198138611
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JADC
Column diameter: 0.25

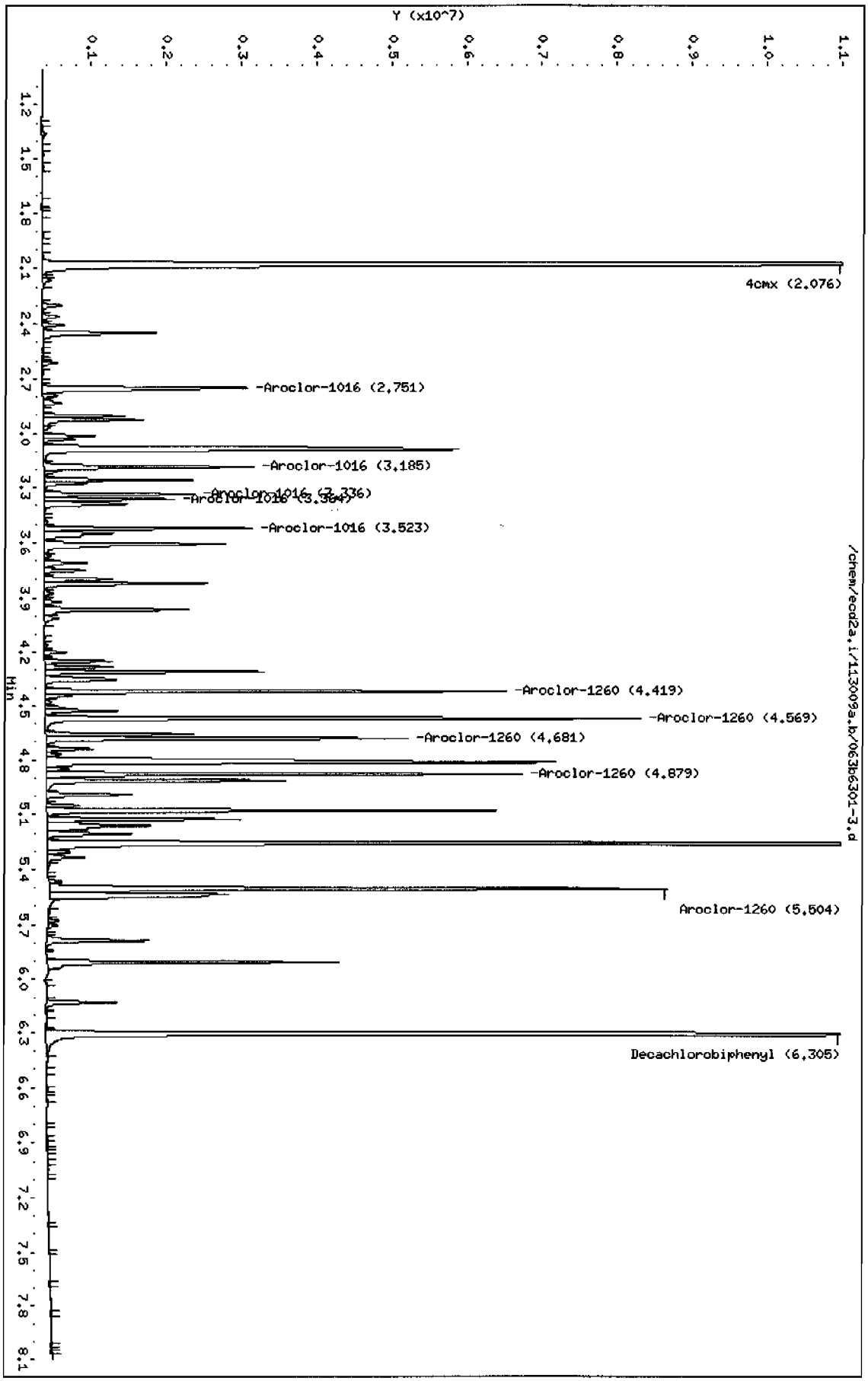

Page 1

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0	DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0	CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0	PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0	CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809	1.0		PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:DA385
ALUMINA LOT:1206399-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0		DUSE
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0		1254 LEVEL 1
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0		1254 LEVEL 2
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0		1254 LEVEL 3
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0		1254 LEVEL 4
007f0701.d	IAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0		1254 LEVEL 5
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0		1248 LEVEL 1
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0		1248 LEVEL 2
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0		1248 LEVEL 3
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0		1248 LEVEL 4
015f1501.d	IAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0		1248 LEVEL 5

Instrument Batch: /chem/ecd2a.i/113009a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0		DUSE

017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18		113009a	1.0		PATTERN ONLY
018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29		113009a	1.0		PASSES BOTH COLUMNS
019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40		113009a	1.0		PATTERN ONLY
020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51		113009a	1.0		PATTERN ONLY
021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02		113009a	1.0		PATTERN ONLY
022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13		113009a	1.0		DDT
023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25		113009a	1.0		CLEAN
024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399	1.0	QC A	UPLOAD BOTH, USE HIGHER
025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399	1.0	QC A	UPLOAD BOTH, USE HIGHER
026f2601.d	241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399	200.0	CARE	UPLOAD BOTH, USE HIGHER
027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399	200.0	QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399	200.0	QC A	UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36		113009a	1.0		PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47		113009a	1.0		CLEAN
031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	241688	1.0	QC A	UPLOAD BOTH, USE HIGHER
032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	241688	1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	241688	1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	241688001	JAOC	30-NOV-2009 14:45	926760	241688	1000.0	ROIT	UPLOAD BOTH, USE HIGHER
035f3501.d	241688002	JAOC	30-NOV-2009 14:56	926760	241688	1000.0	ROIT	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091119-60 03	JAOC	30-NOV-2009 15:12		113009a	1.0		PASSES BOTH COLUMNS
037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23		113009a	1.0		CLEAN
038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463	1.0	LANL	UPLOAD BOTH, USE HIGHER
040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463	5.0	LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463	20.0	LANL	UPLOAD BOTH, USE HIGHER

042f4201.d	241034016	JAOC	30-NOV-2009 16:18	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
043f4301.d	241034017	JAOC	30-NOV-2009 16:29	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
044f4401.d	241038002	JAOC	30-NOV-2009 16:40	925599	10-462	10.0	LANL	UPLOAD BOTH, USE HIGHER
045f4501.d	WAR091119-60 04	JAOC	30-NOV-2009 16:51		113009a	1.0		PASSES BOTH COLUMNS
046f4601.d	WAR090916-99 05	JAOC	30-NOV-2009 17:02		113009a	1.0		CLEAN
047f4701.d	1201980278	JAOC	30-NOV-2009 17:13	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
048f4801.d	1201980281	JAOC	30-NOV-2009 17:24	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
049f4901.d	240638001	JAOC	30-NOV-2009 17:36	926186	10-390	1.0	LANL	UPLOAD BOTH, USE HIGHER
050f5001.d	1201980279	JAOC	30-NOV-2009 17:47	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
051f5101.d	1201980280	JAOC	30-NOV-2009 17:58	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
052f5201.d	240740003	JAOC	30-NOV-2009 18:09	926186	10-407	1.0	LANL	UPLOAD BOTH, USE HIGHER
053f5301.d	240740005	JAOC	30-NOV-2009 18:20	926186	10-407	5.0	LANL	UPLOAD BOTH, USE HIGHER
054f5401.d	WAR091119-60 05	JAOC	30-NOV-2009 18:31		113009a	1.0		PASSES BOTH COLUMNS
055f5501.d	WAR090916-99 06	JAOC	30-NOV-2009 18:42		113009a	1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1201981445	JAOC	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
057f5701.d	1201981446	JAOC	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
058f5801.d	1201981447	JAOC	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
059f5901.d	241365001	JAOC	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
060f6001.d	WAR091119-60 06	JAOC	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
061f6101.d	WAR090916-99 07	JAOC	30-NOV-2009 19:53		113009a	1.0		CLEAN
062f6201.d	1201981383	JAOC	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	1201981386	JAOC	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
064f6401.d	241033012	JAOC	30-NOV-2009 20:27	926712	10-460	10.0	LANL	UPLOAD BOTH, USE HIGHER
065f6501.d	241183002	JAOC	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

066f6601.d	241183003	JAOC	30-NOV-2009 20:49	926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
067f6701.d	241183004	JAOC	30-NOV-2009 21:00	926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
068f6801.d	241318001	JAOC	30-NOV-2009 21:11	926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
069f6901.d	241318002	JAOC	30-NOV-2009 21:22	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
070f7001.d	241318003	JAOC	30-NOV-2009 21:33	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
071f7101.d	241318004	JAOC	30-NOV-2009 21:44	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
072f7201.d	WAR091119-60 07	JAOC	30-NOV-2009 21:55		113009a	1.0		PASSES BOTH COLUMNS
073f7301.d	WAR090916-99 08	JAOC	30-NOV-2009 22:07		113009a	1.0		CLEAN
074f7401.d	241318005	JAOC	30-NOV-2009 22:18	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241318006	JAOC	30-NOV-2009 22:29	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241318007	JAOC	30-NOV-2009 22:40	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241318008	JAOC	30-NOV-2009 22:51	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241318009	JAOC	30-NOV-2009 23:02	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241318010	JAOC	30-NOV-2009 23:13	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241318013	JAOC	30-NOV-2009 23:24	926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	241318014	JAOC	30-NOV-2009 23:36	926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
082f8201.d	241336001	JAOC	30-NOV-2009 23:47	926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
083f8301.d	241336002	JAOC	30-NOV-2009 23:58	926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	WAR091119-60 08	JAOC	01-DEC-2009 00:09		113009a	1.0		PASSES BOTH COLUMNS
085f8501.d	WAR090916-99 09	JAOC	01-DEC-2009 00:20		113009a	1.0		CLEAN
086f8601.d	241417001	JAOC	01-DEC-2009 00:31	926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
089f8901.d	241417002	JAOC	01-DEC-2009 01:05	926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
090f9001.d	WAR091119-60 09	JAOC	01-DEC-2009 01:16		113009a	1.0		PASSES BOTH COLUMNS

091f9101.d	WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a	1.0	CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/087b8701.d
Lab Smp Id: 1201981384 Client Smp ID: RE03-09-13812MS
Inj Date : 01-DEC-2009 00:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981384|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 87 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.076	0.000	1884697	15.9450	5.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	1713211	15.7694	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	366924	86.1718	30.8	80.00- 120.00	100.00(a)
3.185	3.185	0.000	329596	95.6826	34.2	60.91- 100.91	89.83
3.336	3.336	0.000	197962	100.007	35.7	26.69- 66.69	53.95
3.365	3.365	0.000	183712	89.1264	31.8	29.14- 69.14	50.07
3.523	3.523	0.000	243175	88.2934	31.5	46.31- 86.31	66.27
			Average of Peak Concentrations =		32.8		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	349250	70.0560	25.0	80.00- 120.00	100.00(a)
3.964	3.964	0.000	478068	82.4405	29.4	97.16- 137.16	136.88
4.200	4.201	-0.001	144817	35.9974	12.8	61.89- 101.89	41.47
4.280	4.282	-0.002	533417	68.9938	24.6	138.47- 178.47	152.73
4.444	4.445	-0.001	237464	42.3415	15.1	96.59- 136.59	67.99
Average of Peak Concentrations =					21.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.419	0.000	1156007	209.701	74.9	80.00- 120.00	100.00(R)
4.570	4.570	0.000	1748193	245.121	87.5	108.85- 148.85	151.23
4.681	4.682	-0.001	998920	211.127	75.4	65.38- 105.38	86.41
4.879	4.880	-0.001	1178256	203.125	72.5	82.89- 122.89	101.92
5.505	5.505	0.000	1820006	201.313	71.9	145.10- 185.10	157.44
Average of Peak Concentrations =					76.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd2a.i/113009a.b/087b8701.d

Date : 01-DEC-2009 00:42

Client ID: RE03-09-13812MS

Sample Info: #12019813841101

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

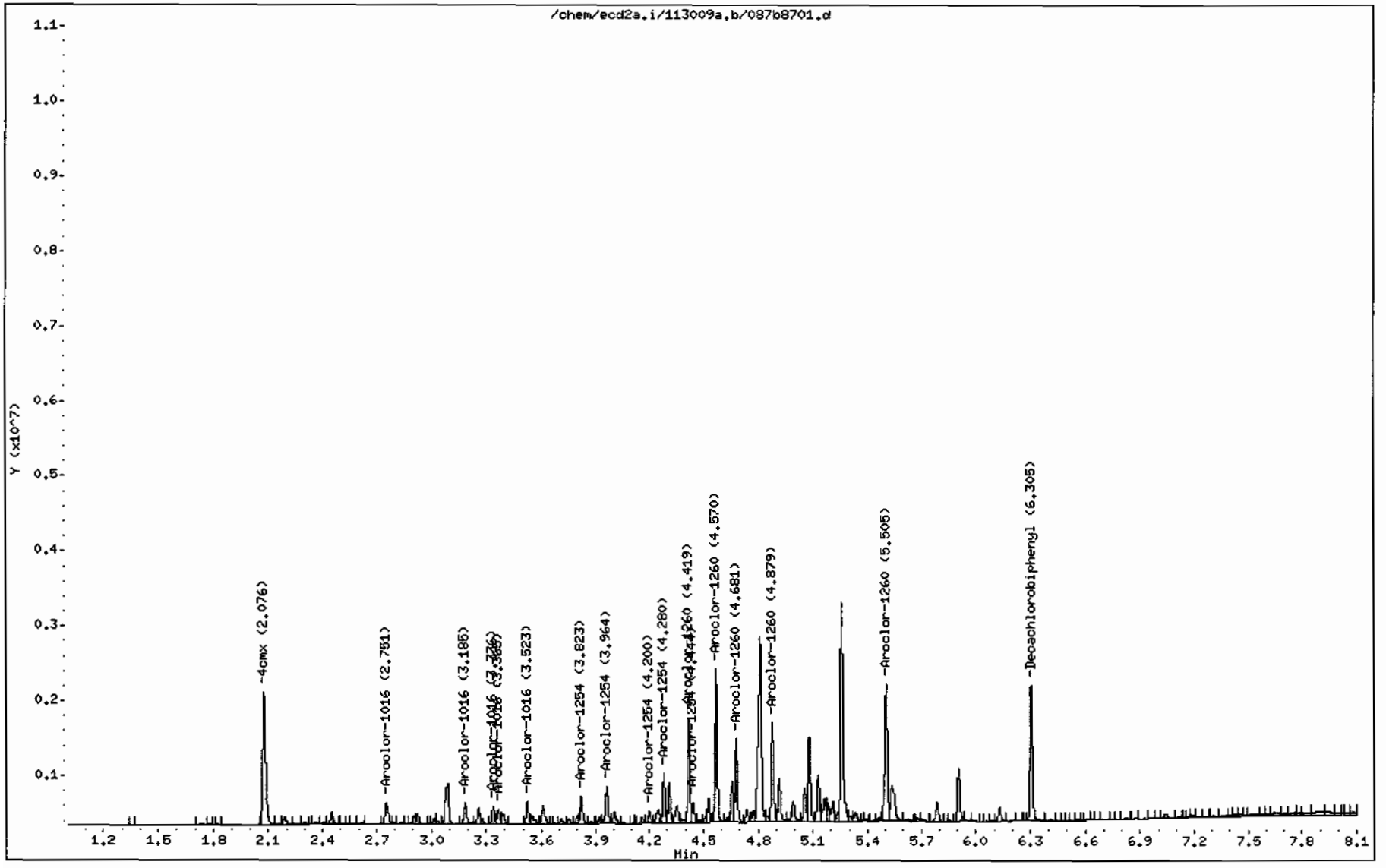

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/087f8701.d
Lab Smp Id: 1201981384 Client Smp ID: RE03-09-13812MS
Inj Date : 01-DEC-2009 00:42
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981384|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 87 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.780	0.000	945449	16.3824	5.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	865486	15.7851	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	210831	100.405	35.8	80.00- 120.00	100.00(aM)
2.603	2.603	0.000	403736	89.6292	32.0	198.19- 238.19	191.50
2.694	2.694	0.000	170449	93.6424	33.4	66.30- 106.30	80.85
2.828	2.829	-0.001	103638	111.094	39.7	23.34- 63.34	49.16
2.980	2.980	0.000	138292	100.348	35.8	44.93- 84.93	89.35
Average of Peak Concentrations =					35.3		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	157543	75.7399	27.0	80.00- 120.00	100.00
3.427	3.427	0.000	227743	82.1543	29.3	115.68- 155.68	144.56
3.697	3.697	0.000	290842	77.7154	27.8	166.12- 206.12	184.61
3.890	3.889	0.001	165190	59.3631	21.2	117.34- 157.34	104.85
4.017	4.018	-0.001	1030103	373.220	133	114.59- 154.59	653.85
Average of Peak Concentrations =					47.7		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1030103	253.296	90.5	80.00- 120.00	100.00(R)
4.289	4.290	-0.001	521982	206.454	73.7	41.58- 81.58	50.67
4.455	4.455	0.000	500949	193.926	69.2	43.08- 83.08	48.63
4.667	4.667	0.000	1166980	193.333	69.0	129.99- 169.99	113.29
4.856	4.856	0.000	654902	224.902	80.3	51.44- 91.44	63.58
Average of Peak Concentrations =					76.5		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/087f8701.d

Date : 01-DEC-2009 00:42

Client ID: RE03-09-13812MS

Sample Info: |1201981384|10|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

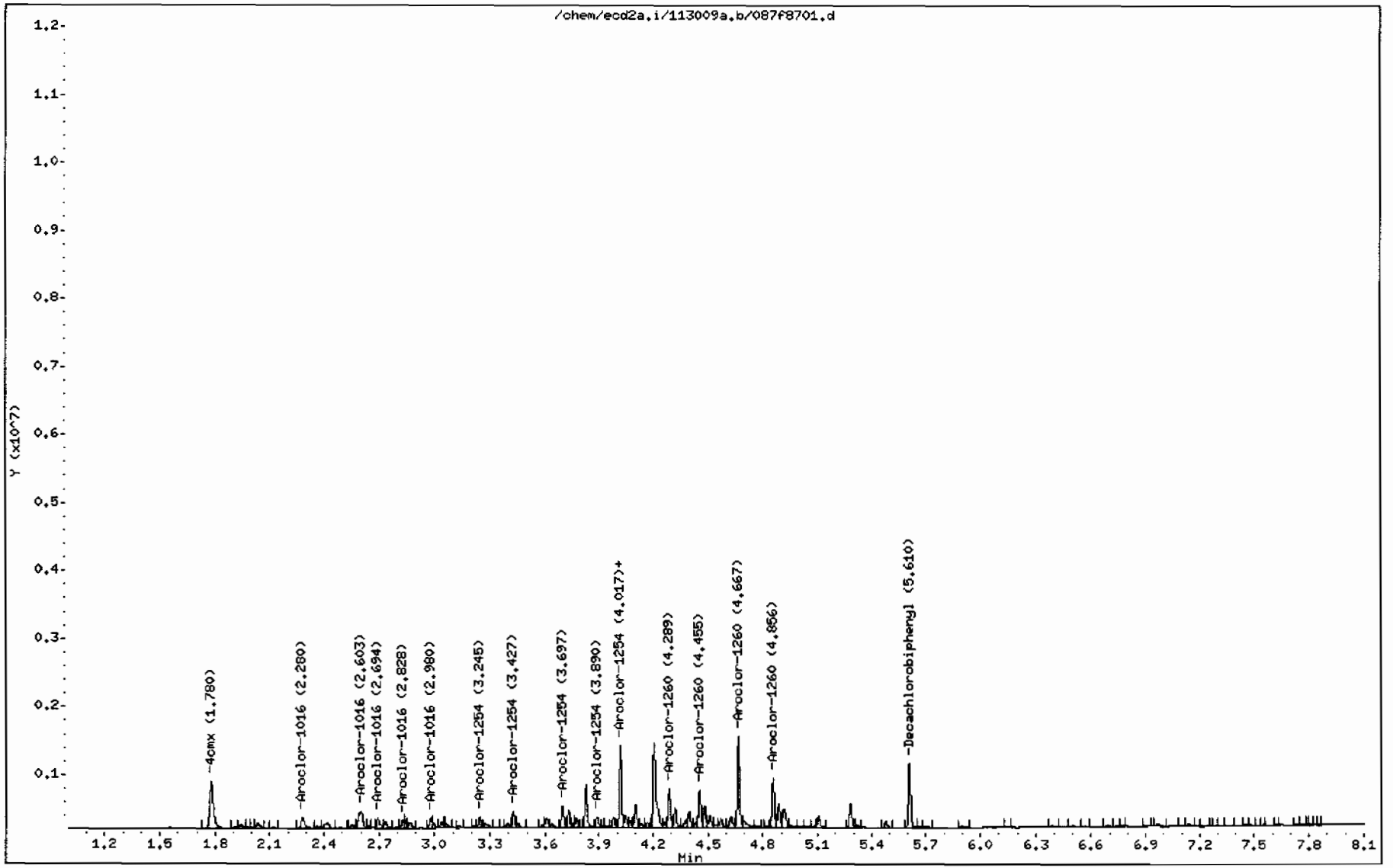

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/088b8801.d
Lab Smp Id: 1201981385 Client Smp ID: RE03-09-13812MSD
Inj Date : 01-DEC-2009 00:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981385|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-B-8082-111209A.m
Meth Date : 01-Dec-2009 08:29 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039b3901.d
Als bottle: 88 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.075	2.076	-0.001	2365836	20.0156	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	2102573	19.3533	6.9	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.751	2.752	-0.001	459752	107.972	38.6	80.00- 120.00	100.00(RM)
3.185	3.185	0.000	392218	113.862	40.7	60.91- 100.91	85.31
3.336	3.336	0.000	282077	142.500	50.9	26.69- 66.69	61.35
3.364	3.365	-0.001	252001	122.256	43.7	29.14- 69.14	54.81
3.523	3.523	0.000	330798	120.108	42.9	46.31- 86.31	71.95

Average of Peak Concentrations = 43.4

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	549454	110.215	39.4	80.00- 120.00	100.00(M)
3.964	3.964	0.000	750432	129.408	46.2	97.16- 137.16	136.58
4.200	4.201	-0.001	278012	69.1058	24.7	61.89- 101.89	50.60
4.280	4.282	-0.002	911879	117.945	42.1	138.47- 178.47	165.96
4.444	4.445	-0.001	430951	76.8415	27.4	96.59- 136.59	78.43
Average of Peak Concentrations =					36.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.418	4.419	-0.001	1673278	303.535	108	80.00- 120.00	100.00(R)
4.569	4.570	-0.001	2530905	354.868	127	108.85- 148.85	151.25
4.681	4.682	-0.001	1467844	310.237	111	65.38- 105.38	87.72
4.879	4.880	-0.001	1629259	280.875	100	82.89- 122.89	97.37
5.505	5.505	0.000	2526002	279.404	99.8	145.10- 185.10	150.96
Average of Peak Concentrations =					109		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/088b8801.d

Date : 01-DEC-2009 00:53

Client ID: RE03-09-13812MSD

Sample Info: |1201981385|10|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

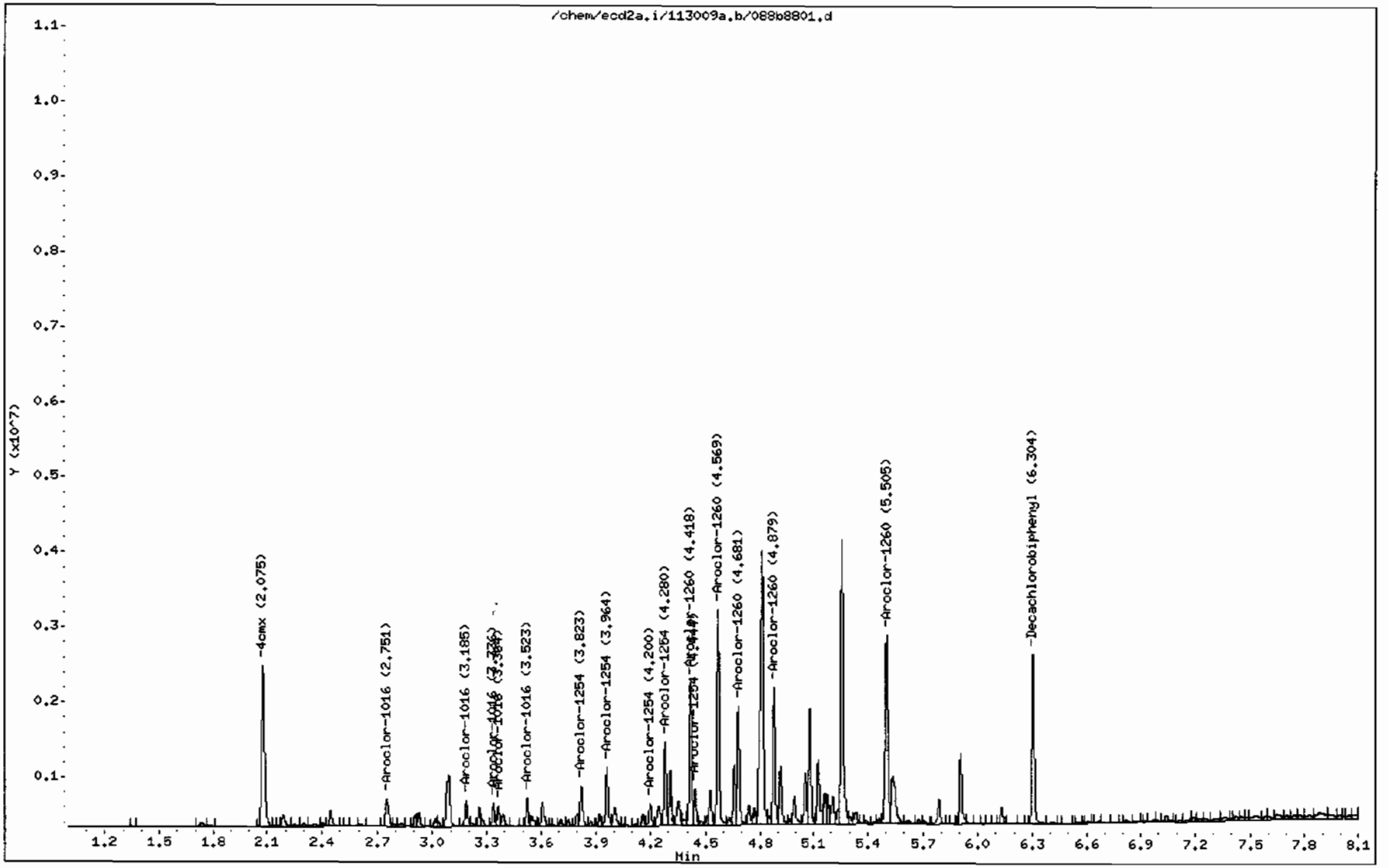

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/113009a.b/088f8801.d
Lab Smp Id: 1201981385 Client Smp ID: RE03-09-13812MSD
Inj Date : 01-DEC-2009 00:53
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201981385|10|
Misc Info : |ECD82P_1SF|926712|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/113009a.b/ECD2-F-8082-111209A.m
Meth Date : 01-Dec-2009 08:56 jen01212 Quant Type: ESTD
Cal Date : 12-NOV-2009 17:07 Cal File: 039f3901.d
Als bottle: 88 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-575.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.09880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.780	-0.001	1165201	20.1902	7.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.610	0.000	1046084	19.0789	6.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.280	2.281	-0.001	253152	120.560	43.0	80.00- 120.00	100.00(RM)
2.602	2.603	-0.001	496456	110.213	39.4	198.19- 238.19	196.11
2.694	2.694	0.000	209188	114.925	41.0	66.30- 106.30	82.63
2.828	2.829	-0.001	142339	152.580	54.5	23.34- 63.34	56.23
2.979	2.980	-0.001	168563	122.313	43.7	44.93- 84.93	91.96

Average of Peak Concentrations = 44.3

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.245	3.245	0.000	223667	107.530	38.4	80.00- 120.00	100.00
3.427	3.427	0.000	326718	117.858	42.1	115.68- 155.68	146.07
3.697	3.697	0.000	444356	118.736	42.4	166.12- 206.12	198.67
3.889	3.889	0.000	255422	91.7891	32.8	117.34- 157.34	114.20
4.017	4.018	-0.001	1438348	521.132	186	114.59- 154.59	643.07
Average of Peak Concentrations =					68.3		
7 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.018	-0.001	1438348	353.681	126	80.00- 120.00	100.00(R)
4.289	4.290	-0.001	683561	270.362	96.6	41.58- 81.58	47.52
4.454	4.455	-0.001	653446	252.960	90.3	43.08- 83.08	45.43
4.666	4.667	-0.001	1538492	254.882	91.0	129.99- 169.99	106.96
4.855	4.856	-0.001	878884	301.820	108	51.44- 91.44	61.10
Average of Peak Concentrations =					102		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/113009a.b/088f8801.d

Date : 01-DEC-2009 00:53

Client ID: RE03-09-13812MSD

Sample Info: |1201981385|10|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

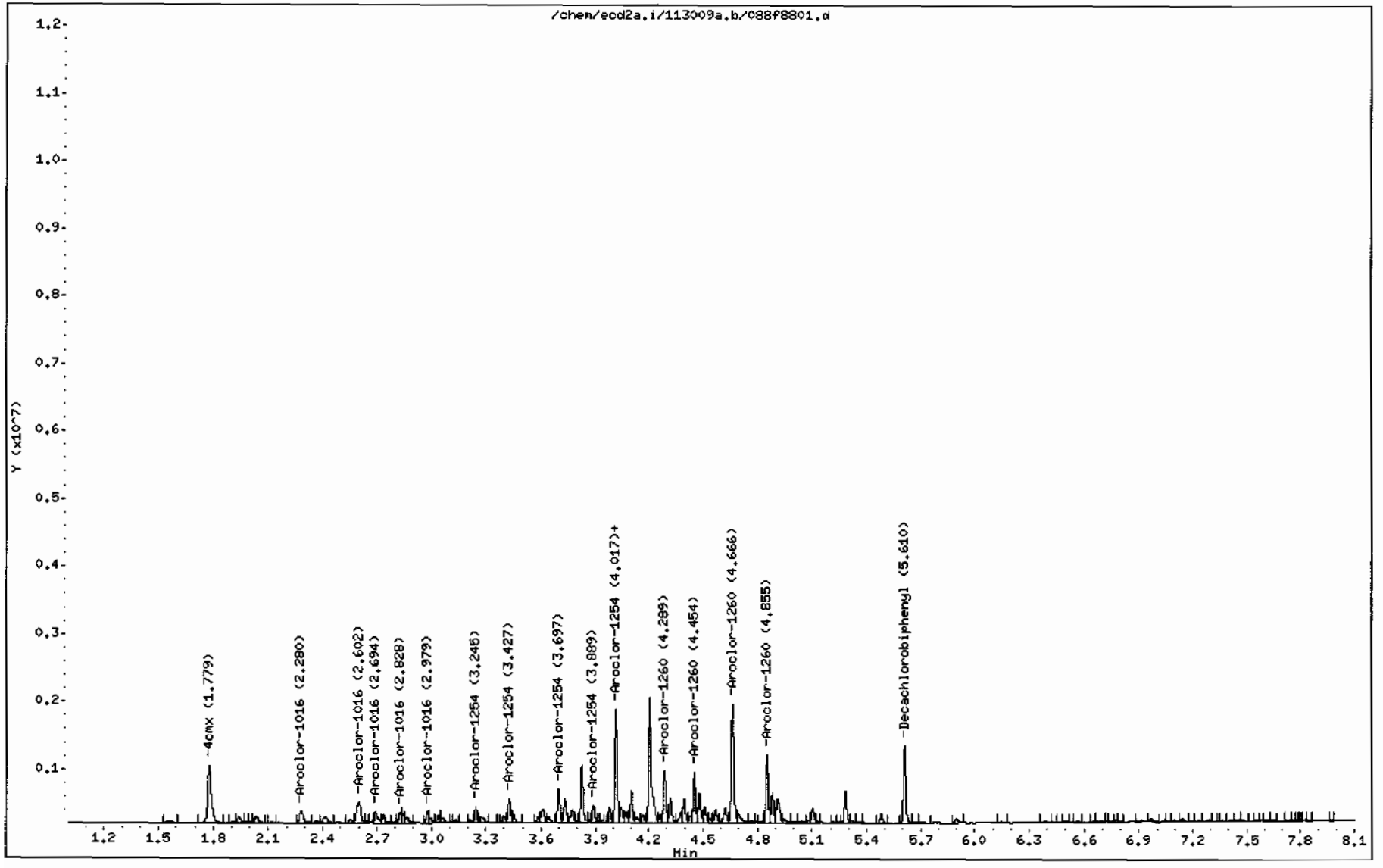

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926709 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981383 MB	27-NOV-2009 22:34:22	30	H2SO4/KMn2		2	9	1	0.03333
1201981386 LCS	27-NOV-2009 22:34:22	30	H2SO4/KMn2		2	9	1	0.03333
241033012 - 2	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241183002	27-NOV-2009 22:34:22	30.13	H2SO4/KMn2		2	9	1	0.03319
241183003	27-NOV-2009 22:34:22	30.07	H2SO4/KMn2		2	9	1	0.03326
241183004	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
241318001	27-NOV-2009 22:34:22	30.08	H2SO4/KMn2		2	9	1	0.03324
241318002	27-NOV-2009 22:34:22	30.12	H2SO4/KMn2		2	9	1	0.0332
241318003	27-NOV-2009 22:34:22	30.13	H2SO4/KMn2		2	9	1	0.03319
241318004	27-NOV-2009 22:34:22	30.16	H2SO4/KMn2		2	9	1	0.03316
241318005	27-NOV-2009 22:34:22	30.17	H2SO4/KMn2		2	9	1	0.03315
241318006	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241318007	27-NOV-2009 22:34:22	30.16	H2SO4/KMn2		2	9	1	0.03316
241318008	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241318009	27-NOV-2009 22:34:22	30.17	H2SO4/KMn2		2	9	1	0.03315
241318010	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
241318013	27-NOV-2009 22:34:22	30.01	H2SO4/KMn2		2	9	1	0.03332
241318014	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241336001	27-NOV-2009 22:34:22	30.15	H2SO4/KMn2		2	9	1	0.03317
241336002	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331
241417001	27-NOV-2009 22:34:22	30.04	H2SO4/KMn2		2	9	1	0.03329
1201981384 MS (241417001)	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
1201981385 MSD (241417001)	27-NOV-2009 22:34:22	30.14	H2SO4/KMn2		2	9	1	0.03318
241417002	27-NOV-2009 22:34:22	30.02	H2SO4/KMn2		2	9	1	0.03331

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981386	PCB Laboratory Control	WE091113-07	1	mL
MS	1201981384	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201981385	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/27/2009

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546

Sample Analysis

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201977915	Method Blank (MB) **ICP**
1201990787	Method Blank (MB) **ICP**
1201977920	Laboratory Control Sample (LCS)
1201990788	Laboratory Control Sample (LCS)
1201977917	241190001(WST16-10-4667L) Serial Dilution (SD)
1201977916	241190001(WST16-10-4667D) Sample Duplicate (DUP)
1201977918	241190001(WST16-10-4667S) Matrix Spike (MS)
1201977919	241190001(WST16-10-4667SD) Matrix Spike Duplicate (MSD)
1201977921	Method Blank (MB) **ICP-MS**
1201977926	Laboratory Control Sample (LCS)
1201977923	241190001(WST16-10-4667L) Serial Dilution (SD)
1201977922	241190001(WST16-10-4667D) Sample Duplicate (DUP)
1201977924	241190001(WST16-10-4667S) Matrix Spike (MS)
1201977925	241190001(WST16-10-4667SD) Matrix Spike Duplicate (MSD)
1201977144	Method Blank (MB) **CVAA**
1201977145	Laboratory Control Sample (LCS)
1201977148	241336001(RE03-09-13770L) Serial Dilution (SD)
1201977146	241336001(RE03-09-13770D) Sample Duplicate (DUP)
1201977147	241336001(RE03-09-13770S) Matrix Spike (MS)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925187, 930799, 925189 and 924854
Prep Batch :	925186, 930798, 925188 and 924853
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria for all applicable analytes with the exception of silicon. CCB10 analyzed 10-DEC-09 08:08 failed high for silicon, however, all bracketed samples contained silicon at levels greater than 10x the PQL/RDL.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241190001 and 241336001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of boron, chromium, manganese and potassium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of boron, manganese, potassium, sodium and lithium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of barium and copper, as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of aluminum, antimony, boron, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, potassium, silicon, sodium, titanium, zinc and arsenic, as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 768079, 769018 and 769304. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristin Parson **Date:** 12/14/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241336001 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13770 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1640000	ug/Kg		7330	21600	21600	1	P	HSC	12/10/09 08:19	121009-1	930799
7440-36-0	Antimony	1100	ug/Kg	U	364	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-38-2	Arsenic	0.777	mg/kg	J	0.217	1.08	1.08	2	MS	BAJ	12/07/09 21:41	091207-4	925189
7440-39-3	Barium	18600	ug/Kg		110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-41-7	Beryllium	0.495	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 09:34	091207-8	925189
7440-42-8	Boron	5510	ug/Kg	U	1100	5510	5510	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-70-2	Calcium	411000	ug/Kg		8820	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-47-3	Chromium	8780	ug/Kg		165	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-48-4	Cobalt	515	ug/Kg	J	165	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-50-8	Copper	2490	ug/Kg		331	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-89-6	Iron	8470000	ug/Kg		8820	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-92-1	Lead	3690	ug/Kg		276	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-93-2	Lithium	3.09	mg/kg		0.434	2.17	2.17	2	MS	BAJ	12/08/09 09:34	091207-8	925189
7439-95-4	Magnesium	353000	ug/Kg		9370	33100	33100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-96-5	Manganese	346000	ug/Kg		220	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187
7439-97-6	Mercury	5.17	ug/kg	J	4.45	13.1	13.1	1	AV	JXL1	12/03/09 11:01	120309S1-10	924854
7440-02-0	Nickel	2.55	mg/kg		0.108	0.434	0.434	2	MS	BAJ	12/08/09 09:34	091207-8	925189
7440-09-7	Potassium	344000	ug/Kg		7050	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7782-49-2	Selenium	1.08	mg/kg	U	0.542	1.08	1.08	2	MS	BAJ	12/07/09 21:41	091207-4	925189
7440-21-3	Silicon	715000	ug/Kg		1620	10800	10800	1	P	HSC	12/10/09 08:19	121009-1	930799
7440-22-4	Silver	223	ug/Kg	J	110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-23-5	Sodium	155000	ug/Kg		7710	27600	27600	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-28-0	Thallium	0.217	mg/kg	U	0.0651	0.217	0.217	2	MS	BAJ	12/09/09 10:00	091208-9	925189
7440-32-6	Titanium	488000	ug/Kg		110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-61-1	Uranium	0.407	mg/kg		0.0143	0.0434	0.0434	2	MS	BAJ	12/07/09 21:41	091207-4	925189
7440-62-2	Vanadium	4140	ug/Kg		110	551	551	1	P	HSC	12/05/09 01:04	120409A-2	925187
7440-66-6	Zinc	47500	ug/Kg		364	1100	1100	1	P	HSC	12/05/09 01:04	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.509	g	30	mL	12/02/09	TXB3
925187	925186	SW846 3050B	0.504	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.512	g	50	mL	12/05/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930799	930798	SW846 3050B	0.515	g	50	mL	12/09/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241336002 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-5897 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1530000	ug/Kg		7070	20800	20800	1	P	HSC	12/10/09 08:22	121009-1	930799
7440-36-0	Antimony	1050	ug/Kg	U	348	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-38-2	Arsenic	0.796	mg/kg	J	0.212	1.06	1.06	2	MS	BAJ	12/07/09 21:48	091207-4	925189
7440-39-3	Barium	33800	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-41-7	Beryllium	0.353	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 09:41	091207-8	925189
7440-42-8	Boron	5270	ug/Kg	U	1050	5270	5270	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-43-9	Cadmium	527	ug/Kg	U	105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-70-2	Calcium	890000	ug/Kg		8430	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-47-3	Chromium	17600	ug/Kg		158	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-48-4	Cobalt	967	ug/Kg		158	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-50-8	Copper	4770	ug/Kg		316	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-89-6	Iron	10500000	ug/Kg		8430	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-92-1	Lead	12100	ug/Kg		263	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-93-2	Lithium	3.35	mg/kg		0.423	2.12	2.12	2	MS	BAJ	12/08/09 09:41	091207-8	925189
7439-95-4	Magnesium	488000	ug/Kg		8960	31600	31600	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-96-5	Manganese	369000	ug/Kg		211	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187
7439-97-6	Mercury	14.5	ug/kg		4.08	12	12	1	AV	JXL1	12/03/09 11:15	120309S1-10	924854
7440-02-0	Nickel	3.74	mg/kg		0.106	0.423	0.423	2	MS	BAJ	12/08/09 09:41	091207-8	925189
7440-09-7	Potassium	322000	ug/Kg		6740	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7782-49-2	Selenium	1.06	mg/kg	U	0.529	1.06	1.06	2	MS	BAJ	12/07/09 21:48	091207-4	925189
7440-21-3	Silicon	633000	ug/Kg		1560	10400	10400	1	P	HSC	12/10/09 08:22	121009-1	930799
7440-22-4	Silver	620	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-23-5	Sodium	135000	ug/Kg		7380	26300	26300	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-28-0	Thallium	0.212	mg/kg	U	0.0635	0.212	0.212	2	MS	BAJ	12/09/09 10:03	091208-9	925189
7440-32-6	Titanium	539000	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-61-1	Uranium	0.476	mg/kg		0.014	0.0423	0.0423	2	MS	BAJ	12/07/09 21:48	091207-4	925189
7440-62-2	Vanadium	6910	ug/Kg		105	527	527	1	P	HSC	12/05/09 01:11	120409A-2	925187
7440-66-6	Zinc	55500	ug/Kg		348	1050	1050	1	P	HSC	12/05/09 01:11	120409A-2	925187

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.537	g	30	mL	12/02/09	TXB3
925187	925186	SW846 3050B	0.51	g	50	mL	11/24/09	BCD1
925189	925188	SW846 3050B	0.508	g	50	mL	12/05/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930799	930798	SW846 3050B	0.517	g	50	mL	12/09/09	BXA1

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.01	ug/L	5	ug/L	100.1	90.0 – 110.0	AV	03–DEC–09 09:51	120309S1–10
	Antimony	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Lead	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Manganese	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Arsenic	47.9	ug/L	50	ug/L	95.7	90.0 – 110.0	MS	07–DEC–09 19:02	091207–4
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	07–DEC–09 19:02	091207–4
	Uranium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	07–DEC–09 19:02	091207–4
	Beryllium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	08–DEC–09 08:44	091207–8
	Lithium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	08–DEC–09 08:44	091207–8
	Nickel	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	08–DEC–09 08:44	091207–8
	Calcium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	09–DEC–09 08:43	120909A–3
	Potassium	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	09–DEC–09 08:43	120909A–3
	Thallium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	09–DEC–09 09:01	091208–9
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	10–DEC–09 02:42	121009–1
	Silicon	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	10–DEC–09 02:42	121009–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Mercury	4.93	ug/L	5	ug/L	98.7	80.0 – 120.0	AV	03–DEC–09 09:57	120309S1–10
	Antimony	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Boron	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Cadmium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Lead	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Manganese	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Titanium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:35	120409A–2
	Arsenic	47.3	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	07–DEC–09 19:33	091207–4
	Selenium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	07–DEC–09 19:33	091207–4
	Uranium	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	07–DEC–09 19:33	091207–4
	Beryllium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	08–DEC–09 08:56	091207–8
	Lithium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	08–DEC–09 08:56	091207–8
	Nickel	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	08–DEC–09 08:56	091207–8
	Thallium	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	09–DEC–09 09:14	091208–9
	Calcium	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 09:43	120909A–3
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	09–DEC–09 09:43	120909A–3
	Aluminum	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	10–DEC–09 03:05	121009–1
	Silicon	2480	ug/L	2500	ug/L	99.2	90.0 – 110.0	P	10–DEC–09 03:05	121009–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	03-DEC-09 10:21	120309S1-10
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Boron	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Cadmium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Lead	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04-DEC-09 10:56	120409A-2
	Arsenic	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	07-DEC-09 19:51	091207-4
	Selenium	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	07-DEC-09 19:51	091207-4
	Uranium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	07-DEC-09 19:51	091207-4
	Beryllium	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	08-DEC-09 09:15	091207-8
	Lithium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	08-DEC-09 09:15	091207-8
	Nickel	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	08-DEC-09 09:15	091207-8
	Thallium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	09-DEC-09 09:33	091208-9
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	09-DEC-09 10:11	120909A-3
	Potassium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	09-DEC-09 10:11	120909A-3
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	10-DEC-09 03:39	121009-1
	Silicon	2440	ug/L	2500	ug/L	97.5	90.0 – 110.0	P	10-DEC-09 03:39	121009-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Mercury	5.2	ug/L	5	ug/L	104	80.0 – 120.0	AV	03-DEC-09 10:45	120309S1-10
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Cadmium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Lead	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Manganese	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:13	120409A-2
	Arsenic	47.9	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	07-DEC-09 20:40	091207-4
	Selenium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	07-DEC-09 20:40	091207-4
	Uranium	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	07-DEC-09 20:40	091207-4
	Beryllium	52.6	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	08-DEC-09 09:36	091207-8
	Lithium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	08-DEC-09 09:36	091207-8
	Nickel	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	08-DEC-09 09:36	091207-8
	Thallium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	09-DEC-09 09:52	091208-9
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	09-DEC-09 11:31	120909A-3
	Potassium	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	09-DEC-09 11:31	120909A-3
	Aluminum	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	10-DEC-09 04:06	121009-1
	Silicon	2420	ug/L	2500	ug/L	96.7	90.0 – 110.0	P	10-DEC-09 04:06	121009-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Mercury	5.33	ug/L	5	ug/L	106.6	80.0 – 120.0	AV	03-DEC-09 11:09	120309S1-10
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Lead	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Arsenic	47.4	ug/L	50	ug/L	94.8	90.0 – 110.0	MS	07-DEC-09 21:29	091207-4
	Selenium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	07-DEC-09 21:29	091207-4
	Uranium	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	07-DEC-09 21:29	091207-4
	Beryllium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	08-DEC-09 09:53	091207-8
	Lithium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	08-DEC-09 09:53	091207-8
	Nickel	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	08-DEC-09 09:53	091207-8
	Thallium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	09-DEC-09 10:17	091208-9
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	09-DEC-09 12:40	120909A-3
	Potassium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	09-DEC-09 12:40	120909A-3
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	10-DEC-09 04:40	121009-1
	Silicon	2420	ug/L	2500	ug/L	97	90.0 – 110.0	P	10-DEC-09 04:40	121009-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Mercury	5.3	ug/L	5	ug/L	106	80.0 – 120.0	AV	03–DEC–09 11:33	120309S1–10
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Arsenic	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	07–DEC–09 22:18	091207–4
	Selenium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	07–DEC–09 22:18	091207–4
	Uranium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	07–DEC–09 22:18	091207–4
	Aluminum	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	10–DEC–09 05:19	121009–1
	Silicon	2420	ug/L	2500	ug/L	96.8	90.0 – 110.0	P	10–DEC–09 05:19	121009–1
CCV06										
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Boron	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Cadmium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Lead	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Manganese	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	10-DEC-09 05:48	121009-1
	Silicon	2420	ug/L	2500	ug/L	96.9	90.0 – 110.0	P	10-DEC-09 05:48	121009-1
CCV07										
	Antimony	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Boron	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Copper	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Lead	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Manganese	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Aluminum	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	10-DEC-09 06:21	121009-1
	Silicon	2420	ug/L	2500	ug/L	96.8	90.0 – 110.0	P	10-DEC-09 06:21	121009-1
CCV08										
	Antimony	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Chromium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Lead	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	10-DEC-09 06:47	121009-1
	Silicon	2450	ug/L	2500	ug/L	98.1	90.0 – 110.0	P	10-DEC-09 06:47	121009-1
CCV09										
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Cadmium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Manganese	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Aluminum	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	10–DEC–09 07:14	121009–1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	10–DEC–09 07:14	121009–1
CCV10										
	Antimony	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Calcium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Chromium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Cobalt	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Copper	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Sodium	9790	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	10–DEC–09 08:04	121009–1
	Silicon	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	10–DEC–09 08:04	121009–1
CCV11										
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Calcium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Iron	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Lead	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Manganese	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Titanium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Vanadium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Zinc	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	10–DEC–09 08:41	121009–1
	Silicon	2490	ug/L	2500	ug/L	99.7	90.0 – 110.0	P	10–DEC–09 08:41	121009–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV12										
	Antimony	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Barium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Boron	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Copper	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Iron	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Lead	514	ug/L	500	ug/L	102.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Magnesium	5100	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Silver	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
CCV13										
	Antimony	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Barium	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Boron	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Chromium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Copper	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Lead	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Titanium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Vanadium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
	Zinc	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 23:14	120409A–2
CCV14										
	Antimony	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Boron	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Copper	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Iron	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Lead	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Silver	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Sodium	10500	ug/L	10000	ug/L	104.7	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Titanium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
	Zinc	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	05–DEC–09 00:36	120409A–2
CCV15										
	Antimony	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Chromium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Copper	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Iron	5350	ug/L	5000	ug/L	107.1	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Lead	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Magnesium	5430	ug/L	5000	ug/L	108.5	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Silver	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Sodium	10600	ug/L	10000	ug/L	106.1	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Zinc	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.194	ug/L	.2	ug/L	97.2	70.0 – 130.0	AV	03–DEC–09 09:55	120309S1–10
	Arsenic	5.4	ug/L	5	ug/L	108	70.0 – 130.0	MS	07–DEC–09 19:14	091207–4
	Selenium	5.59	ug/L	5	ug/L	111.8	70.0 – 130.0	MS	07–DEC–09 19:14	091207–4
	Uranium	.218	ug/L	.2	ug/L	109	70.0 – 130.0	MS	07–DEC–09 19:14	091207–4
	Nickel	2.12	ug/L	2	ug/L	105.9	70.0 – 130.0	MS	08–DEC–09 08:49	091207–8
	Beryllium	.517	ug/L	.5	ug/L	103.4	70.0 – 130.0	MS	08–DEC–09 08:49	091207–8
	Lithium	10.6	ug/L	10	ug/L	105.9	70.0 – 130.0	MS	08–DEC–09 08:49	091207–8
	Thallium	1.2	ug/L	1	ug/L	120.3	70.0 – 130.0	MS	09–DEC–09 09:06	091208–9
PQL01										
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Lead	9.1	ug/L	10	ug/L	91	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Manganese	10.5	ug/L	10	ug/L	105.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Potassium	162	ug/L	150	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Antimony	11.8	ug/L	10	ug/L	118.1	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Barium	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Cadmium	5.09	ug/L	5	ug/L	101.8	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Chromium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Calcium	203	ug/L	200	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Potassium	157	ug/L	150	ug/L	104.4	70.0 – 130.0	P	09–DEC–09 08:57	120909A–3
	Calcium	202	ug/L	200	ug/L	100.9	70.0 – 130.0	P	09–DEC–09 08:57	120909A–3
	Aluminum	217	ug/L	200	ug/L	108.4	70.0 – 130.0	P	10–DEC–09 02:49	121009–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Silicon	97.9	ug/L	100	ug/L	97.9	70.0 – 130.0	P	10–DEC–09 02:49	121009–1
PQL02										
	Iron	107	ug/L	100	ug/L	106.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Lead	10	ug/L	10	ug/L	100.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Magnesium	232	ug/L	300	ug/L	77.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Barium	5.08	ug/L	5	ug/L	101.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Chromium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Copper	10.8	ug/L	10	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Titanium	5.01	ug/L	5	ug/L	100.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Boron	49.9	ug/L	50	ug/L	99.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Calcium	207	ug/L	200	ug/L	103.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Zinc	10.2	ug/L	10	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Vanadium	4.98	ug/L	5	ug/L	99.5	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Cobalt	4.93	ug/L	5	ug/L	98.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Cadmium	5.08	ug/L	5	ug/L	101.5	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Manganese	10.7	ug/L	10	ug/L	106.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Potassium	168	ug/L	150	ug/L	112.3	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Silver	4.88	ug/L	5	ug/L	97.7	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Sodium	343	ug/L	300	ug/L	114.4	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Antimony	14.9	ug/L	10	ug/L	149	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	03–DEC–09 09:53	120309S1–10
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 09:41	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 09:41	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 19:08	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 19:08	091207–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 19:08	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 08:46	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 08:46	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 08:46	091207–8
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 08:50	120909A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 08:50	120909A–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 09:04	091208–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 02:45	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 02:45	121009–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB01										
	Mercury	-0.093	+/-.2	J	0.068	0.2	SOL	AV	03-DEC-09 09:59	120309S1-10
	Antimony	3.77	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Boron	10.73	+/-50	J	10.0	50.0	SOL	P	04-DEC-09 10:42	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 10:42	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Potassium	101.63	+/-250	J	64.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	07-DEC-09 19:39	091207-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 19:39	091207-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	07-DEC-09 19:39	091207-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	08-DEC-09 08:58	091207-8
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	08-DEC-09 08:58	091207-8
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-DEC-09 08:58	091207-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	09-DEC-09 09:17	091208-9
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 09:50	120909A-3
	Potassium	67.0	+/-250	J	64.0	250	SOL	P	09-DEC-09 09:50	120909A-3
	Aluminum	76.18	+/-200	J	68.0	200	SOL	P	10-DEC-09 03:08	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 03:08	121009-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB02										
	Mercury	–0.107	+/–.2	J	0.068	0.2	SOL	AV	03–DEC–09 10:23	120309S1–10
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 11:03	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 11:03	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 19:57	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 19:57	091207–4
	Uranium	0.093	+/–.2	J	0.066	0.2	SOL	MS	07–DEC–09 19:57	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 09:17	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 09:17	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 09:17	091207–8
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 09:36	091208–9
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 10:18	120909A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 10:18	120909A–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 03:43	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 03:43	121009–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB03										
	Mercury	–0.117	+/–.2	J	0.068	0.2	SOL	AV	03–DEC–09 10:47	120309S1–10
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 12:20	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 12:20	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 12:20	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:20	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:20	120409A–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 20:46	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 20:46	091207–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 20:46	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 09:39	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 09:39	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 09:39	091207–8
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 09:55	091208–9
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 11:38	120909A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 11:38	120909A–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 04:10	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 04:10	121009–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB04										
	Mercury	–0.122	+/–.2	J	0.068	0.2	SOL	AV	03–DEC–09 11:11	120309S1–10
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 12:55	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 12:55	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 21:35	091207–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 21:35	091207–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 21:35	091207–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 09:56	091207–8
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 09:56	091207–8
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 09:56	091207–8
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	09–DEC–09 10:19	091208–9
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 12:47	120909A–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 12:47	120909A–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 04:43	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 04:43	121009–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Mercury	-0.076	+/-.2	J	0.068	0.2	SOL	AV	03-DEC-09 11:35	120309S1-10
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 14:03	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 14:03	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 14:03	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	07-DEC-09 22:24	091207-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 22:24	091207-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	07-DEC-09 22:24	091207-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 05:22	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 05:22	121009-1
CCB06										
	Antimony	3.35	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 14:59	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 14:59	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:59	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:59	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 14:59	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 05:51	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 05:51	121009–1
CCB07										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 15:55	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 15:55	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 15:55	120409A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 06:25	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 06:25	121009-1
CCB08										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 17:05	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 17:05	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 06:51	121009-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 06:51	121009-1
CCB09										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 18:08	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 18:08	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 18:08	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 18:08	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 18:08	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 07:17	121009–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 07:17	121009–1
CCB10										
	Antimony	3.31	+/–10	J	3.3	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 19:26	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 19:26	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 19:26	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 19:26	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 19:26	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 19:26	120409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 08:08	121009–1
	Silicon	142.34	+/–100		15.0	100	SOL	P	10–DEC–09 08:08	121009–1
CCB11										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 20:36	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 20:36	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 08:44	121009–1
	Silicon	18.21	+/–100	J	15.0	100	SOL	P	10–DEC–09 08:44	121009–1
CCB12										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 21:47	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 21:47	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 21:47	120409A-2
CCB13										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 23:27	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 23:27	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 23:27	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 23:27	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 23:27	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 23:27	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 23:27	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 23:27	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 23:27	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 23:27	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 23:27	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 23:27	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 23:27	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 23:27	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 23:27	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 23:27	120409A-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 23:27	120409A–2
CCB14										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 00:43	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Potassium	137.31	+/–250	J	64.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 00:43	120409A–2
CCB15										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 01:54	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 01:54	120409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 01:54	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 01:54	120409A–2

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-546

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201977144								
	Mercury	-4.48	ug/kg	+/-10.695	J	AV	3.64	10.7
1201977915								
	Calcium	8440	ug/Kg	+/-24752.475	J	P	7920	24800
	Chromium	149	ug/Kg	+/-495.05	U	P	149	495
	Cobalt	149	ug/Kg	+/-495.05	U	P	149	495
	Copper	297	ug/Kg	+/-990.099	U	P	297	990
	Iron	7920	ug/Kg	+/-24752.475	U	P	7920	24800
	Lead	248	ug/Kg	+/-990.099	U	P	248	990
	Magnesium	8420	ug/Kg	+/-29702.97	U	P	8420	29700
	Manganese	198	ug/Kg	+/-990.099	U	P	198	990
	Potassium	6340	ug/Kg	+/-24752.475	U	P	6340	24800
	Cadmium	99	ug/Kg	+/-495.05	U	P	99	495
	Boron	990	ug/Kg	+/-4950.495	U	P	990	4950
	Barium	99	ug/Kg	+/-495.05	U	P	99	495
	Antimony	327	ug/Kg	+/-990.099	U	P	327	990
	Silver	99	ug/Kg	+/-495.05	U	P	99	495
	Sodium	7720	ug/Kg	+/-24752.475	J	P	6930	24800
	Titanium	99	ug/Kg	+/-495.05	U	P	99	495
	Vanadium	99	ug/Kg	+/-495.05	U	P	99	495
	Zinc	327	ug/Kg	+/-990.099	U	P	327	990
1201977921								
	Arsenic	0.199	mg/kg	+/-0.994	U	MS	0.199	0.994
	Beryllium	0.0199	mg/kg	+/-0.099	U	MS	0.0199	0.0994
	Lithium	0.398	mg/kg	+/-1.988	U	MS	0.398	1.99
	Nickel	0.0994	mg/kg	+/-0.398	U	MS	0.0994	0.398
	Selenium	0.497	mg/kg	+/-0.994	U	MS	0.497	0.994
	Thallium	0.0596	mg/kg	+/-0.199	U	MS	0.0596	0.199
	Uranium	0.0131	mg/kg	+/-0.04	U	MS	0.0131	0.0398
1201990787								
	Aluminum	6750	ug/Kg	+/-19841.27	U	P	6750	19800
	Silicon	1490	ug/Kg	+/-9920.635	U	P	1490	9920

METALS
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Interference Check Sample

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 – 120.0	10–DEC–09 02:52	121009–1
	Silicon	22.1	ug/L					10–DEC–09 02:52	121009–1
ICSAB01									
	Aluminum	512000	ug/L	500000	ug/L	102	80.0 – 120.0	10–DEC–09 02:55	121009–1
	Silicon	5120	ug/L	5000	ug/L	102	80.0 – 120.0	10–DEC–09 02:55	121009–1

METALS
-4-
Interference Check Sample

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	4.98	ug/L					04-DEC-09 09:55	120409A-2
	Barium	1.92	ug/L					04-DEC-09 09:55	120409A-2
	Boron	-5.89	ug/L					04-DEC-09 09:55	120409A-2
	Cadmium	-0.11	ug/L					04-DEC-09 09:55	120409A-2
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 - 120.0	04-DEC-09 09:55	120409A-2
	Chromium	1.28	ug/L					04-DEC-09 09:55	120409A-2
	Cobalt	-1.39	ug/L					04-DEC-09 09:55	120409A-2
	Copper	1.06	ug/L					04-DEC-09 09:55	120409A-2
	Iron	184000	ug/L	200000	ug/L	92	80.0 - 120.0	04-DEC-09 09:55	120409A-2
	Lead	-2.66	ug/L					04-DEC-09 09:55	120409A-2
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 - 120.0	04-DEC-09 09:55	120409A-2
	Manganese	7.66	ug/L					04-DEC-09 09:55	120409A-2
	Potassium	-19.7	ug/L					04-DEC-09 09:55	120409A-2
	Silver	-1.58	ug/L					04-DEC-09 09:55	120409A-2
	Sodium	24.7	ug/L					04-DEC-09 09:55	120409A-2
	Titanium	-0.536	ug/L					04-DEC-09 09:55	120409A-2
	Vanadium	-1.65	ug/L					04-DEC-09 09:55	120409A-2
	Zinc	-7.1	ug/L					04-DEC-09 09:55	120409A-2
ICSAB01									
	Antimony	551	ug/L	500	ug/L	110	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Barium	505	ug/L	500	ug/L	101	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Boron	519	ug/L	500	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Cadmium	473	ug/L	500	ug/L	94.6	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Chromium	482	ug/L	500	ug/L	96.3	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Copper	574	ug/L	500	ug/L	115	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Lead	473	ug/L	500	ug/L	94.7	80.0 - 120.0	04-DEC-09 10:01	120409A-2

METALS
-4-
Interference Check Sample

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Manganese	501	ug/L	500	ug/L	100	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Potassium	5530	ug/L	5000	ug/L	111	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Silver	274	ug/L	250	ug/L	110	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Sodium	5210	ug/L	5000	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Titanium	514	ug/L	500	ug/L	103	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Vanadium	513	ug/L	500	ug/L	103	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Zinc	488	ug/L	500	ug/L	97.7	80.0 - 120.0	04-DEC-09 10:01	120409A-2

METALS
–4–
Interference Check Sample

SDG No: 10–546

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Calcium	472000	ug/L	500000	ug/L	94.4	80.0 – 120.0	09–DEC–09 09:04	120909A–3
	Potassium	57.5	ug/L					09–DEC–09 09:04	120909A–3
ICSAB01									
	Calcium	478000	ug/L	500000	ug/L	95.7	80.0 – 120.0	09–DEC–09 09:10	120909A–3
	Potassium	5590	ug/L	5000	ug/L	112	80.0 – 120.0	09–DEC–09 09:10	120909A–3

METALS
-4-
Interference Check Sample

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.495	ug/L					07-DEC-09 19:21	091207-4
	Selenium	-1.21	ug/L					07-DEC-09 19:21	091207-4
	Uranium	-0.036	ug/L					07-DEC-09 19:21	091207-4
ICSAB01									
	Arsenic	20.5	ug/L	20	ug/L	102	80.0 - 120.0	07-DEC-09 19:27	091207-4
	Selenium	19.4	ug/L	20	ug/L	97	80.0 - 120.0	07-DEC-09 19:27	091207-4
	Uranium	24.0	ug/L	20	ug/L	120	80.0 - 120.0	07-DEC-09 19:27	091207-4

METALS
-4-
Interference Check Sample

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.048	ug/L					08-DEC-09 08:51	091207-8
	Lithium	0.064	ug/L					08-DEC-09 08:51	091207-8
	Nickel	3.12	ug/L					08-DEC-09 08:51	091207-8
ICSAB01									
	Beryllium	19.2	ug/L	20	ug/L	95.9	80.0 - 120.0	08-DEC-09 08:54	091207-8
	Lithium	20.4	ug/L	20	ug/L	102	80.0 - 120.0	08-DEC-09 08:54	091207-8
	Nickel	22.9	ug/L	22.7	ug/L	101	80.0 - 120.0	08-DEC-09 08:54	091207-8

METALS
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Interference Check Sample

SDG No: 10-546

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	-0.048	ug/L					09-DEC-09 09:09	091208-9
ICSAB01									
	Thallium	21.1	ug/L	20	ug/L	105	80.0 - 120.0	09-DEC-09 09:12	091208-9

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–546 **Client ID** RE03–09–13770S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241336001 **Spike ID:** 1201977147

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	145		5.17	J	127	110		AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–546 **Client ID** RE03–09–13770SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241336001 **Spike ID:** 1201977149

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	149		5.17	J	131	110		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–546 **Client ID** WST16–10–4667S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977918

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		9330000		8480000		522000	162	N/A	P
Antimony	ug/Kg	75–125	54700		5430		52200	94.3		P
Barium	ug/Kg		1130000		925000		52200	400	N/A	P
Boron	ug/Kg	75–125	88900		52500		52200	69.8	N	P
Cadmium	ug/Kg	75–125	49700		318	J	52200	94.5		P
Calcium	ug/Kg		85100000		100000000		522000	–2940	N/A	P
Chromium	ug/Kg	75–125	78900		11500		52200	129	N	P
Cobalt	ug/Kg	75–125	52900		5630		52200	90.6		P
Copper	ug/Kg		638000		910000		52200	–522	N/A	P
Iron	ug/Kg		10800000		10900000		522000	–25.4	N/A	P
Lead	ug/Kg	75–125	98800		53400		52200	87		P
Magnesium	ug/Kg		4700000		4570000		522000	25.4	N/A	P
Manganese	ug/Kg	75–125	223000		198000		52200	47.5	N	P
Potassium	ug/Kg	75–125	1400000		634000		522000	147	N	P
Silicon	ug/Kg		12100000		14400000		522000	–428	N/A	P
Silver	ug/Kg	75–125	56900		104	U	52200	109		P
Sodium	ug/Kg	75–125	861000		252000		522000	117		P
Titanium	ug/Kg		482000		456000		52200	50.2	N/A	P
Vanadium	ug/Kg	75–125	74700		22900		52200	99.2		P
Zinc	ug/Kg		269000		223000		52200	87.4	N/A	P

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-546 **Client ID** WST16-10-4667SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977919

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		7730000		8480000		506000	-148	N/A	P
Antimony	ug/Kg	75-125	50300		5430		50000	89.7		P
Barium	ug/Kg		786000		925000		50000	-280	N/A	P
Boron	ug/Kg	75-125	73400		52500		50000	41.9	N	P
Cadmium	ug/Kg	75-125	47800		318	J	50000	94.9		P
Calcium	ug/Kg		98300000		100000000		500000	-416	N/A	P
Chromium	ug/Kg	75-125	67700		11500		50000	112		P
Cobalt	ug/Kg	75-125	51500		5630		50000	91.8		P
Copper	ug/Kg		115000		910000		50000	-1590	N/A	P
Iron	ug/Kg		10400000		10900000		500000	-108	N/A	P
Lead	ug/Kg	75-125	95400		53400		50000	84		P
Magnesium	ug/Kg		5330000		4570000		500000	152	N/A	P
Manganese	ug/Kg	75-125	222000		198000		50000	47.9	N	P
Potassium	ug/Kg	75-125	1330000		634000		500000	139	N	P
Silicon	ug/Kg		12100000		14400000		506000	-457	N/A	P
Silver	ug/Kg	75-125	55100		104	U	50000	110		P
Sodium	ug/Kg	75-125	880000		252000		500000	126	N	P
Titanium	ug/Kg		448000		456000		50000	-15.3	N/A	P
Vanadium	ug/Kg	75-125	70800		22900		50000	95.7		P
Zinc	ug/Kg		257000		223000		50000	67.4	N/A	P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–546 **Client ID** WST16–10–4667S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977924

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	15.5		6.78		8.06	109		MS
Beryllium	mg/kg	75–125	4.58		0.427		5.04	82.3		MS
Lithium	mg/kg	75–125	10.9		6.27		5.04	91.5		MS
Nickel	mg/kg	75–125	9.54		5.45		5.04	81.1		MS
Selenium	mg/kg	75–125	1.58		0.523	U	2.02	78.6		MS
Thallium	mg/kg	75–125	11.9		0.0697	J	10.1	118		MS
Uranium	mg/kg	75–125	7.18		1.66		5.04	110		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–546 **Client ID** WST16–10–4667SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 95.2

Sample ID: 241190001 **Spike ID:** 1201977925

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	15.9		6.78		7.61	119		MS
Beryllium	mg/kg	75–125	4.26		0.427		4.76	80.6		MS
Lithium	mg/kg	75–125	9.78		6.27		4.76	73.8	N	MS
Nickel	mg/kg	75–125	9.44		5.45		4.76	83.8		MS
Selenium	mg/kg	75–125	1.45		0.523	U	1.9	76.2		MS
Thallium	mg/kg	75–125	11.7		0.0697	J	9.51	122		MS
Uranium	mg/kg	75–125	6.82		1.66		4.76	109		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-546

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13770D

Sample ID: 241336001 **Duplicate ID:** 1201977146 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-12.6	5.17	J	6.89	J	28.5		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–546

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13770SD

Sample ID: 1201977147 **Duplicate ID:** 1201977149 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	145		149		2.95		AV

Metals
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Duplicate Sample Summary

SDG No.: 10-546

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16-10-4667D

Sample ID: 241190001 **Duplicate ID:** 1201977916 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	8480000		2990000		95.7	*	P
Antimony	ug/Kg	+/-1010	5430		3560		41.5	*	P
Barium	ug/Kg	+/-20%	925000		1040000		11.6		P
Boron	ug/Kg	+/-5040	52500		20400		87.9	*	P
Cadmium	ug/Kg	+/-504	318	J	435	J	30.9		P
Calcium	ug/Kg	+/-20%	100000000		73100000		31.4	*	P
Chromium	ug/Kg	+/-20%	11500		217000		180	*	P
Cobalt	ug/Kg	+/-20%	5630		10400		59.5	*	P
Copper	ug/Kg	+/-20%	910000		1720000		61.5	*	P
Iron	ug/Kg	+/-20%	10900000		16200000		38.4	*	P
Lead	ug/Kg	+/-20%	53400		38900		31.4	*	P
Magnesium	ug/Kg	+/-20%	4570000		6400000		33.4	*	P
Manganese	ug/Kg	+/-20%	198000		408000		69.1	*	P
Potassium	ug/Kg	+/-20%	634000		809000		24.3	*	P
Silicon	ug/Kg	+/-20%	14400000		4440000		106	*	P
Silver	ug/Kg		104	U	101	U			P
Sodium	ug/Kg	+/-20%	252000		398000		45.1	*	P
Titanium	ug/Kg	+/-20%	456000		702000		42.5	*	P
Vanadium	ug/Kg	+/-20%	22900		25600		10.9		P
Zinc	ug/Kg	+/-20%	223000		166000		29.6	*	P

Metals
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Duplicate Sample Summary

SDG No.: 10-546

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16-10-4667SD

Sample ID: 1201977918 **Duplicate ID:** 1201977919 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	9330000		7730000		18.7		P
Antimony	ug/Kg	+/-20	54700		50300		8.36		P
Barium	ug/Kg	+/-20	1130000		786000		36.3	*	P
Boron	ug/Kg	+/-20	88900		73400		19.1		P
Cadmium	ug/Kg	+/-20	49700		47800		3.88		P
Calcium	ug/Kg	+/-20	85100000		98300000		14.5		P
Chromium	ug/Kg	+/-20	78900		67700		15.2		P
Cobalt	ug/Kg	+/-20	52900		51500		2.68		P
Copper	ug/Kg	+/-20	638000		115000		139	*	P
Iron	ug/Kg	+/-20	10800000		10400000		3.84		P
Lead	ug/Kg	+/-20	98800		95400		3.49		P
Magnesium	ug/Kg	+/-20	4700000		5330000		12.5		P
Manganese	ug/Kg	+/-20	223000		222000		.376		P
Potassium	ug/Kg	+/-20	1400000		1330000		5.14		P
Silicon	ug/Kg	+/-20	12100000		12100000		.643		P
Silver	ug/Kg	+/-20	56900		55100		3.23		P
Sodium	ug/Kg	+/-20	861000		880000		2.18		P
Titanium	ug/Kg	+/-20	482000		448000		7.27		P
Vanadium	ug/Kg	+/-20	74700		70800		5.38		P
Zinc	ug/Kg	+/-20	269000		257000		4.53		P

Metals
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Duplicate Sample Summary

SDG No.: 10–546

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16–10–4667D

Sample ID: 241190001 **Duplicate ID:** 1201977922 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20%	6.78		8.44		21.8	*	MS
Beryllium	mg/kg	+/–.103	0.427		0.38		11.4		MS
Lithium	mg/kg	+/–2.06	6.27		5.85		6.97		MS
Nickel	mg/kg	+/–20%	5.45		5.51		1.16		MS
Selenium	mg/kg		0.523	U	0.514	U			MS
Thallium	mg/kg		0.0697	J	0.0617	U	200		MS
Uranium	mg/kg	+/–20%	1.66		1.65		.786		MS

Metals
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Duplicate Sample Summary

SDG No.: 10-546

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST16-10-4667SD

Sample ID: 1201977924 **Duplicate ID:** 1201977925 **Percent Solids for Dup:** 95.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	15.5		15.9		2.02		MS
Beryllium	mg/kg	+/-20	4.58		4.26		7.14		MS
Lithium	mg/kg	+/-20	10.9		9.78		10.6		MS
Nickel	mg/kg	+/-20	9.54		9.44		1.06		MS
Selenium	mg/kg	+/-20	1.58		1.45		8.85		MS
Thallium	mg/kg	+/-20	11.9		11.7		1.86		MS
Uranium	mg/kg	+/-20	7.18		6.82		5.12		MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10-546

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977145								
	Mercury	ug/kg	5150	5780		112	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-546

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977920								
	Antimony	ug/Kg	121000	93400		77.2	39.1-132.1	P
	Barium	ug/Kg	475000	470000		99	82-110.6	P
	Boron	ug/Kg	139000	137000		98.6	74.9-113.6	P
	Cadmium	ug/Kg	116000	115000		99.1	77.9-115.2	P
	Calcium	ug/Kg	3720000	3730000		100	77.4-111.7	P
	Chromium	ug/Kg	84000	83300		99.1	66.6-116.5	P
	Cobalt	ug/Kg	83000	82800		99.7	79-113.9	P
	Copper	ug/Kg	105000	105000		100	77.6-112	P
	Iron	ug/Kg	20000000	22300000		112	51.5-145.5	P
	Lead	ug/Kg	161000	166000		103	83.1-114.7	P
	Magnesium	ug/Kg	2980000	3090000		104	81-114.3	P
	Manganese	ug/Kg	398000	384000		96.4	76.6-106.6	P
	Potassium	ug/Kg	2390000	2400000		100	72.2-111.1	P
	Silver	ug/Kg	133000	132000		99.4	81.7-115.7	P
	Sodium	ug/Kg	614000	566000		92.2	71.5-109.3	P
	Titanium	ug/Kg	382000	429000		112	41.7-148.3	P
	Vanadium	ug/Kg	166000	159000		95.9	65-118.6	P
	Zinc	ug/Kg	195000	202000		103	82.8-111.9	P

METALS
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Laboratory Control Sample Summary

SDG NO. 10-546

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977926								
	Arsenic	mg/kg	255	266		104	83-120	MS
	Beryllium	mg/kg	86.4	96.4		112	81.2-126.8	MS
	Lithium	mg/kg	8.01	7.79	J	97.3	66.7-133.7	MS
	Nickel	mg/kg	101	114		112	83.3-121.4	MS
	Selenium	mg/kg	171	187		109	80.2-125.9	MS
	Thallium	mg/kg	203	222		109	78-123.2	MS
	Uranium	mg/kg	2.12	1.68		79	61.9-130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-546

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201990788								
	Aluminum	ug/Kg	10500000	8730000		83.1	56-144	P
	Silicon	ug/Kg	1210000	1130000		93.3	10-190	P

METALS
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Serial Dilution Sample Summary

SDG NO. 10-546 **Client ID** RE03-09-13770L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241336001 **Serial Dilution ID:** 1201977148

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.079	J	.34	U	100			AV

METALS
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Serial Dilution Sample Summary

SDG NO. 10–546 **Client ID** WST16–10–4667L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241190001 **Serial Dilution ID:** 1201977917

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	81400		83000		1.97		10	P
Antimony	52		55.5		6.73			P
Barium	8860		9250		4.4		10	P
Boron	502		487		3.09		10	P
Cadmium	3.05	J	5	U	100			P
Calcium	192000		194000		1.04		10	P
Chromium	110		115		4.55		10	P
Cobalt	53.9		56		3.9			P
Copper	8720		8300		4.82		10	P
Iron	105000		107000		1.9		10	P
Lead	511		535		4.7		10	P
Magnesium	43800		44800		2.17		10	P
Manganese	1900		1970		3.68		10	P
Potassium	1210		1190	J	2.07			P
Silicon	138000		142000		2.9		10	P
Silver	1	U	5	U				P
Sodium	2410		2620		8.51			P
Titanium	4370		4450		1.83		10	P
Vanadium	220		221		.227		10	P
Zinc	2140		2170		1.4		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-546 **Client ID** WST16-10-4667L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241190001 **Serial Dilution ID:** 1201977923

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	32.4		33.8		4.17			MS
Beryllium	2.04		2.41	J	18.1			MS
Lithium	30		34.1	J	13.7			MS
Nickel	26.1		29.6		13.2			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.333	J	1.85	J	456			MS
Uranium	7.93		8		.883		10	MS

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–546 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925186							
1201977915	MB for batch 925186	MB	S	24–NOV–09	.505g	50mL	
1201977920	LCS for batch 925186	LCS	S	24–NOV–09	.51g	50mL	
1201977918	WST16–10–4667S	MS	S	24–NOV–09	.503g	50mL	
1201977919	WST16–10–4667SD	MSD	S	24–NOV–09	.525g	50mL	
1201977916	WST16–10–4667D	DUP	S	24–NOV–09	.521g	50mL	
241336001	RE03–09–13770	SAMPLE	S	24–NOV–09	.504g	50mL	
241336002	RE03–10–5897	SAMPLE	S	24–NOV–09	.51g	50mL	
Batch Number 930798							
1201990787	MB for batch 930798	MB	S	09–DEC–09	.504g	50mL	
1201990788	LCS for batch 930798	LCS	S	09–DEC–09	.505g	50mL	
1201977918	WST16–10–4667S	MS	S	09–DEC–09	.503g	50mL	
1201977919	WST16–10–4667SD	MSD	S	09–DEC–09	.519g	50mL	
1201977916	WST16–10–4667D	DUP	S	09–DEC–09	.5g	50mL	
241336001	RE03–09–13770	SAMPLE	S	09–DEC–09	.515g	50mL	
241336002	RE03–10–5897	SAMPLE	S	09–DEC–09	.517g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-546 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925188							
1201977921	MB for batch 925188	MB	S	05-DEC-09	.503g	50mL	
1201977926	LCS for batch 925188	LCS	S	05-DEC-09	.511g	50mL	
1201977924	WST16-10-4667S	MS	S	05-DEC-09	.521g	50mL	
1201977925	WST16-10-4667SD	MSD	S	05-DEC-09	.552g	50mL	
1201977922	WST16-10-4667D	DUP	S	05-DEC-09	.511g	50mL	
241336001	RE03-09-13770	SAMPLE	S	05-DEC-09	.512g	50mL	
241336002	RE03-10-5897	SAMPLE	S	05-DEC-09	.508g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-546 **Method Type**: AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 924853							
1201977144	MB for batch 924853	MB	S	02-DEC-09	.561g	30mL	
1201977145	LCS for batch 924853	LCS	S	02-DEC-09	.202g	30mL	
1201977147	RE03-09-13770S	MS	S	02-DEC-09	.526g	30mL	
1201977149	RE03-09-13770SD	MSD	S	02-DEC-09	.51g	30mL	
1201977146	RE03-09-13770D	DUP	S	02-DEC-09	.529g	30mL	
241336001	RE03-09-13770	SAMPLE	S	02-DEC-09	.509g	30mL	
241336002	RE03-10-5897	SAMPLE	S	02-DEC-09	.537g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 07–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–546
Method MS
Data File: 091207–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	18:44			X																	X						X		
S10	1	18:50			X																	X						X		
S100	1	18:56			X																	X						X		
ICV01	1	19:02			X																	X						X		
ICB01	1	19:08			X																	X						X		
CRDL01	1	19:14			X																	X						X		
ICSA01	1	19:21			X																	X						X		
ICSAB01	1	19:27			X																	X						X		
CCV01	1	19:33			X																	X						X		
CCB01	1	19:39			X																	X						X		
LR01	1	19:45			X																	X						X		
CCV02	1	19:51			X																	X						X		
CCB02	1	19:57			X																	X						X		
1201977921	2	20:03			X																	X						X		
ZZZZZZ	20	20:09																												
1201977926	40	20:16			X																	X						X		
ZZZZZZ	2	20:22																												
ZZZZZZ	2	20:28																												
ZZZZZZ	2	20:34																												
CCV03	1	20:40			X																	X						X		
CCB03	1	20:46			X																	X						X		
ZZZZZZ	2	20:52																												
1201977922	2	20:58			X																	X						X		
1201977924	2	21:05			X																	X						X		
1201977925	2	21:11			X																	X						X		
1201977923	10	21:17			X																	X						X		
ZZZZZZ	2	21:23																												
CCV04	1	21:29			X																	X						X		
CCB04	1	21:35			X																	X						X		
241336001	2	21:41			X																	X						X		
241336002	2	21:48			X																	X						X		
ZZZZZZ	2	21:54																												
ZZZZZZ	2	22:00																												
ZZZZZZ	2	22:06																												
ZZZZZZ	2	22:12																												
CCV05	1	22:18			X																	X						X		
CCB05	1	22:24			X																	X						X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 07–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–546
Method MS
Data File: 091207–8

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:37					X									X				X										
S10	1	08:39					X									X				X										
S100	1	08:42					X									X				X										
ICV01	1	08:44					X									X				X										
ICB01	1	08:46					X									X				X										
CRDL01	1	08:49					X									X				X										
ICSA01	1	08:51					X									X				X										
ICSAB01	1	08:54					X									X				X										
CCV01	1	08:56					X									X				X										
CCB01	1	08:58					X									X				X										
1201977921	2	09:01					X									X				X										
1201977926	20	09:03														X														
1201977926	40	09:05					X													X										
ZZZZZZ	2	09:08																												
ZZZZZZ	2	09:10																												
ZZZZZZ	2	09:13																												
CCV02	1	09:15					X									X				X										
CCB02	1	09:17					X									X				X										
ZZZZZZ	2	09:20																												
1201977922	2	09:22					X									X				X										
1201977924	2	09:24					X									X				X										
1201977925	2	09:27					X									X				X										
1201977923	10	09:29					X									X				X										
ZZZZZZ	2	09:32																												
241336001	2	09:34					X									X				X										
CCV03	1	09:36					X									X				X										
CCB03	1	09:39					X									X				X										
241336002	2	09:41					X									X				X										
ZZZZZZ	2	09:44																												
ZZZZZZ	2	09:46																												
ZZZZZZ	2	09:48																												
ZZZZZZ	2	09:51																												
CCV04	1	09:53					X									X				X										
CCB04	1	09:56					X									X				X										

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 09–DEC–09 **End Date:** 09–DEC–09

Client Sdg: 10–546
Method MS
Data File: 091208–9

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:53																								X				
S10	1	08:56																								X				
S100	1	08:59																								X				
ICV01	1	09:01																								X				
ICB01	1	09:04																								X				
CRDL01	1	09:06																								X				
ICSA01	1	09:09																								X				
ICSAB01	1	09:12																								X				
CCV01	1	09:14																								X				
CCB01	1	09:17																								X				
1201977921	2	09:20																								X				
1201977926	40	09:23																								X				
ZZZZZZ	2	09:25																												
ZZZZZZ	2	09:28																												
ZZZZZZ	2	09:31																												
CCV02	1	09:33																								X				
CCB02	1	09:36																								X				
ZZZZZZ	2	09:39																												
1201977922	2	09:41																								X				
1201977924	2	09:44																								X				
1201977925	2	09:47																								X				
1201977923	10	09:50																								X				
CCV03	1	09:52																								X				
CCB03	1	09:55																								X				
ZZZZZZ	2	09:58																												
241336001	2	10:00																								X				
241336002	2	10:03																								X				
ZZZZZZ	2	10:06																												
ZZZZZZ	2	10:08																												
ZZZZZZ	2	10:11																												
ZZZZZZ	2	10:14																												
CCV04	1	10:17																								X				
CCB04	1	10:19																								X				

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04-DEC-09 **End Date:** 05-DEC-09

Client Sdg: 10-546
Method P
Data File: 120409A-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	09:08		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	09:14		X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	09:21		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	09:28								X				X			X								X					
ICV01	1	09:34		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	09:41		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	09:48		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	09:55		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	10:01		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	10:06		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	10:12		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	10:42		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	10:49		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	10:56		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	11:03		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	12:20		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV04	1	12:48		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	12:55		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
CCB05	1	14:03		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	14:10																											
ZZZZZZ	1	14:18																											
ZZZZZZ	1	14:24																											
ZZZZZZ	1	14:31																											
ZZZZZZ	1	14:38																											
ZZZZZZ	1	14:45																											
CCV06	1	14:52		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	14:59		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	15:06																											
ZZZZZZ	1	15:13																											
ZZZZZZ	5	15:20																											
ZZZZZZ	1	15:27																											
ZZZZZZ	1	15:34																											
ZZZZZZ	1	15:41																											
CCV07	1	15:48		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	15:55		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	16:02																											
ZZZZZZ	1	16:09																											
ZZZZZZ	1	16:16																											
ZZZZZZ	1	16:23																											
ZZZZZZ	1	16:30																											
ZZZZZZ	5	16:37																											
ZZZZZZ	1	16:44																											
ZZZZZZ	1	16:51																											
CCV08	1	16:58		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	17:05		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	17:12																											
ZZZZZZ	1	17:19																											
ZZZZZZ	1	17:26																											
ZZZZZZ	1	17:33																											
ZZZZZZ	1	17:40																											
ZZZZZZ	1	17:47																											
ZZZZZZ	1	17:54																											
CCV09	1	18:01		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	18:08		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	18:15																											
ZZZZZZ	2	18:22																											
ZZZZZZ	1	18:29																											
ZZZZZZ	1	18:36																											

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	18:43																												
ZZZZZZ	1	18:50																												
ZZZZZZ	5	18:58																												
ZZZZZZ	1	19:05																												
ZZZZZZ	1	19:12																												
CCV10	1	19:19		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB10	1	19:26		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	19:33																												
ZZZZZZ	1	19:40																												
ZZZZZZ	1	19:47																												
ZZZZZZ	1	19:54																												
ZZZZZZ	1	20:01																												
ZZZZZZ	1	20:08																												
ZZZZZZ	1	20:15																												
ZZZZZZ	1	20:22																												
CCV11	1	20:30		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB11	1	20:36		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	20:43																												
ZZZZZZ	1	20:50																												
ZZZZZZ	1	20:58																												
ZZZZZZ	1	21:05																												
ZZZZZZ	1	21:12																												
ZZZZZZ	1	21:19																												
ZZZZZZ	1	21:26																												
ZZZZZZ	1	21:33																												
CCV12	1	21:40		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB12	1	21:47		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	22:03																												
ZZZZZZ	1	22:10																												
ZZZZZZ	1	22:17																												
ZZZZZZ	1	22:24																												
ZZZZZZ	1	22:31																												
ZZZZZZ	1	22:38																												
ZZZZZZ	1	22:45																												
ZZZZZZ	1	22:53																												
ZZZZZZ	5	23:00																												
ZZZZZZ	1	23:07																												
CCV13	1	23:14		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL02	1	23:20		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB13	1	23:27		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
1201977915	1	23:34		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977920	2	23:41		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	23:48																											
ZZZZZZ	1	23:55																											
ZZZZZZ	1	00:02																											
ZZZZZZ	1	00:10																											
1201977916	1	00:16		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
1201977918	1	00:24		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
1201977919	1	00:30		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
CCV14	1	00:36		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB14	1	00:43		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977917	5	00:50		X		X		X	X		X	X	X	X	X		X	X						X	X		X		X	X
ZZZZZZ	1	00:57																											
241336001	1	01:04		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241336002	1	01:11		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	01:18																											
ZZZZZZ	1	01:25																											
ZZZZZZ	1	01:33																											
ZZZZZZ	1	01:40																											
CCV15	1	01:47		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB15	1	01:54		X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 09–DEC–09 **End Date:** 09–DEC–09

Client Sdg: 10–546
Method P
Data File: 120909A–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:10								X											X									
S0.1	1	08:17																			X									
S0.5	1	08:23								X											X									
SCAL	1	08:31								X											X									
S10	1	08:38								X																				
ICV01	1	08:43								X											X									
ICB01	1	08:50								X											X									
PQL01	1	08:57								X											X									
ICSA01	1	09:04								X											X									
ICSAB01	1	09:10								X											X									
LR01	1	09:16								X											X									
LR02	1	09:22								X											X									
ZZZZZZ	1	09:29																												
ZZZZZZ	1	09:36																												
CCV01	1	09:43								X											X									
CCB01	1	09:50								X											X									
LR03	1	09:57								X											X									
LR04	1	10:03								X											X									
CCV02	1	10:11								X											X									
CCB02	1	10:18								X											X									
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:43																												
ZZZZZZ	1	10:50																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:11																												
ZZZZZZ	1	11:17																												
ZZZZZZ	5	11:24																												
CCV03	1	11:31								X											X									
CCB03	1	11:38								X											X									
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:53																												
ZZZZZZ	1	11:59																												
ZZZZZZ	5	12:06																												
1201977916	5	12:13								X											X									
1201977918	5	12:20								X											X									
1201977919	5	12:27								X											X									
1201977917	25	12:33								X											X									
CCV04	1	12:40								X											X									
CCB04	1	12:47								X											X									

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 03-DEC-09 **End Date:** 03-DEC-09

Client Sdg: 10-546
Method AV
Data File: 120309S1-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:39																	X											
S0.2	1	09:41																	X											
S0.5	1	09:43																	X											
S2.0	1	09:45																	X											
S5.0	1	09:47																	X											
S10	1	09:49																	X											
ICV01	1	09:51																	X											
ICB01	1	09:53																	X											
CRDL01	1	09:55																	X											
CCV01	1	09:57																	X											
CCB01	1	09:59																	X											
ZZZZZZ	1	10:01																												
ZZZZZZ	10	10:03																												
ZZZZZZ	1	10:05																												
ZZZZZZ	1	10:07																												
ZZZZZZ	1	10:09																												
ZZZZZZ	1	10:11																												
ZZZZZZ	1	10:13																												
ZZZZZZ	1	10:15																												
ZZZZZZ	1	10:17																												
ZZZZZZ	5	10:19																												
CCV02	1	10:21																	X											
CCB02	1	10:23																	X											
ZZZZZZ	1	10:25																												
1201977144	1	10:27																	X											
1201977145	10	10:29																	X											
ZZZZZZ	1	10:31																												
ZZZZZZ	1	10:33																												
ZZZZZZ	1	10:35																												
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												
ZZZZZZ	1	10:41																												
ZZZZZZ	1	10:43																												
CCV03	1	10:45																	X											
CCB03	1	10:47																	X											
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	1	10:55																												
ZZZZZZ	1	10:57																												

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	10:59																											
241336001	1	11:01																X											
1201977146	1	11:03																X											
1201977147	1	11:05																X											
1201977149	1	11:07																X											
CCV04	1	11:09																X											
CCB04	1	11:11																X											
1201977148	5	11:13																X											
241336002	1	11:15																X											
ZZZZZZ	1	11:17																											
ZZZZZZ	1	11:19																											
ZZZZZZ	1	11:21																											
ZZZZZZ	1	11:23																											
ZZZZZZ	1	11:25																											
ZZZZZZ	1	11:27																											
ZZZZZZ	5	11:29																											
ZZZZZZ	1	11:31																											
CCV05	1	11:33																X											
CCB05	1	11:35																X											

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 10-DEC-09 **End Date:** 10-DEC-09

Client Sdg: 10-546
Method P
Data File: 121009-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:26	X																				X							
S0.1	1	02:29																					X							
S0.5	1	02:32	X																				X							
SCAL	1	02:36	X																				X							
S10	1	02:39	X																											
ICV01	1	02:42	X																				X							
ICB01	1	02:45	X																				X							
PQL01	1	02:49	X																				X							
ICSA01	1	02:52	X																				X							
ICSAB01	1	02:55	X																				X							
LR01	1	02:58	X																				X							
LR02	1	03:01	X																				X							
CCV01	1	03:05	X																				X							
CCB01	1	03:08	X																				X							
ZZZZZZ	1	03:20																												
ZZZZZZ	1	03:24																												
ZZZZZZ	1	03:28																												
ZZZZZZ	1	03:31																												
ZZZZZZ	1	03:35																												
CCV02	1	03:39	X																				X							
CCB02	1	03:43	X																				X							
ZZZZZZ	1	03:47																												
ZZZZZZ	1	03:51																												
ZZZZZZ	5	03:55																												
ZZZZZZ	1	03:59																												
ZZZZZZ	1	04:02																												
CCV03	1	04:06	X																				X							
CCB03	1	04:10	X																				X							
ZZZZZZ	1	04:14																												
ZZZZZZ	1	04:17																												
ZZZZZZ	1	04:21																												
ZZZZZZ	1	04:25																												
ZZZZZZ	1	04:28																												
ZZZZZZ	5	04:32																												
ZZZZZZ	1	04:36																												
CCV04	1	04:40	X																				X							
CCB04	1	04:43	X																				X							
ZZZZZZ	1	04:47																												
ZZZZZZ	1	04:51																												
ZZZZZZ	1	04:55																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	04:59																											
ZZZZZZ	1	05:03																											
ZZZZZZ	1	05:07																											
ZZZZZZ	1	05:11																											
ZZZZZZ	1	05:15																											
CCV05	1	05:19	X																			X							
CCB05	1	05:22	X																			X							
ZZZZZZ	1	05:26																											
ZZZZZZ	1	05:29																											
ZZZZZZ	1	05:33																											
ZZZZZZ	1	05:37																											
ZZZZZZ	1	05:40																											
ZZZZZZ	5	05:44																											
CCV06	1	05:48	X																			X							
CCB06	1	05:51	X																			X							
ZZZZZZ	1	05:55																											
ZZZZZZ	1	05:59																											
ZZZZZZ	1	06:02																											
ZZZZZZ	1	06:06																											
ZZZZZZ	1	06:10																											
ZZZZZZ	1	06:14																											
ZZZZZZ	1	06:18																											
CCV07	1	06:21	X																			X							
CCB07	1	06:25	X																			X							
ZZZZZZ	1	06:28																											
ZZZZZZ	1	06:32																											
ZZZZZZ	1	06:36																											
ZZZZZZ	1	06:39																											
ZZZZZZ	1	06:41																											
ZZZZZZ	1	06:44																											
CCV08	1	06:47	X																			X							
CCB08	1	06:51	X																			X							
ZZZZZZ	5	06:55																											
ZZZZZZ	1	06:58																											
ZZZZZZ	1	07:02																											
ZZZZZZ	1	07:05																											
ZZZZZZ	1	07:08																											
ZZZZZZ	1	07:11																											
CCV09	1	07:14	X																			X							
CCB09	1	07:17	X																			X							

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
1201990787	1	07:33	X																				X							
1201990788	2	07:37	X																				X							
ZZZZZZ	1	07:40																												
1201977916	1	07:43	X																				X							
1201977918	1	07:47	X																				X							
1201977919	1	07:50	X																				X							
1201977917	5	07:53	X																				X							
ZZZZZZ	1	07:57																												
ZZZZZZ	1	08:00																												
CCV10	1	08:04	X																				X							
CCB10	1	08:08	X																				X							
ZZZZZZ	1	08:11																												
ZZZZZZ	1	08:15																												
241336001	1	08:19	X																				X							
241336002	1	08:22	X																				X							
ZZZZZZ	1	08:26																												
ZZZZZZ	1	08:30																												
ZZZZZZ	1	08:33																												
ZZZZZZ	1	08:37																												
CCV11	1	08:41	X																				X							
CCB11	1	08:44	X																				X							

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–546

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–546

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–546

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–546
Effective Dates: 01–NOV–09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	–0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–546
Effective Dates: 01–NOV–09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	–0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	–0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	–0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10–546
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	–33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
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Linear Ranges

SDG NO. 10–546

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–546

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
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Linear Ranges

SDG NO. 10-546

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

Raw Data

Method: Hg_ReAlign
Result: 121409A

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

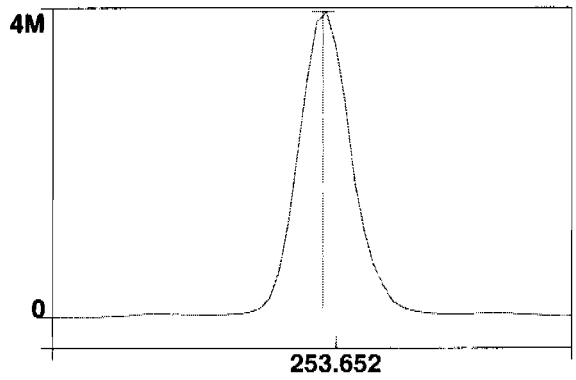

Intensity: 4054442.2 cps
Conc:

1

==========
12/10/2009 02:24:56 Hg ReAlign... Actual peak offset (nm): 0.005
Drift (nm): -0.000 Slit adjustment: -3
==========

==========
Analysis Begun

Start Time: 12/10/2009 02:26:08 **Plasma On Time: 12/6/2009 23:29:48**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\120909.sif
Batch ID:
Results Data Set: 121009
Results Library: c:\pe\optima1\Results\Results.mdb

==========
Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/9/2009 10:29:07**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

==========
Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/10/2009 02:26:11**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time

1	Sc RADIAL	116394.7	116394.7	99.8	%	02:26:45
1	Al 396.153Radial†	122.6	122.8	[0.00]	µg/L	02:26:45
1	Ca 317.933Radial†	415.6	416.5	[0.00]	µg/L	02:27:05
1	Fe 238.204 Radial†	15.8	15.8	[0.00]	µg/L	02:27:05
1	K 766.490 Radial†	724.9	726.3	[0.00]	µg/L	02:26:45
1	Mg 279.077 IEC†	15.3	15.3	[0.00]	µg/L	02:27:05
1	Na 589.592 Radial†	-603.5	-604.8	[0.00]	µg/L	02:26:45
1	Sr 421.552†	-57.0	-57.1	[0.00]	µg/L	02:26:45
1	Sc 361.383	2011794.4	2011794.4	99.484	%	02:28:07
1	Y 371.029	1256223.9	1256223.9	99.799	%	02:28:07
1	Ag 328.068†	21.7	21.8	[0.00]	µg/L	02:28:13
1	As 188.979†	1.5	1.5	[0.00]	µg/L	02:28:33
1	B 249.677†	137.7	138.4	[0.00]	µg/L	02:28:33
1	Ba 233.527†	-72.3	-72.7	[0.00]	µg/L	02:28:33
1	Be 313.107†	3486.9	3505.0	[0.00]	µg/L	02:28:13
1	Cd 226.502†	-96.5	-97.0	[0.00]	µg/L	02:28:33
1	Co 228.616†	-68.3	-68.6	[0.00]	µg/L	02:28:33
1	Cr 267.716†	-90.5	-90.9	[0.00]	µg/L	02:28:13
1	Cu 324.752†	4270.4	4292.6	[0.00]	µg/L	02:28:13
1	Mn 257.610†	-207.5	-208.6	[0.00]	µg/L	02:28:33
1	Mo 202.031†	-4.2	-4.2	[0.00]	µg/L	02:28:33
1	Ni 231.604†	271.5	272.9	[0.00]	µg/L	02:28:33
1	P 214.914†	201.2	202.3	[0.00]	µg/L	02:28:33
1	Pb 220.353†	49.5	49.8	[0.00]	µg/L	02:28:33
1	S 181.975 Axial†	23.8	23.9	[0.00]	µg/L	02:28:33
1	Sb 206.836†	26.1	26.3	[0.00]	µg/L	02:28:33
1	Se 196.026†	4.7	4.7	[0.00]	µg/L	02:28:33
1	SiO2†	2754.9	2769.2	[0.00]	µg/L	02:28:13
1	Si 251.611†	322.6	324.3	[0.00]	µg/L	02:28:33
1	Sn 189.927†	22.1	22.2	[0.00]	µg/L	02:28:33
1	Ti 334.940†	750.7	754.6	[0.00]	µg/L	02:28:13
1	Tl 190.801†	-25.8	-25.9	[0.00]	µg/L	02:28:33
1	U 409.014†	687.2	690.8	[0.00]	µg/L	02:28:13
1	V 292.402†	-154.1	-154.9	[0.00]	µg/L	02:28:13
1	Zn 213.857†	529.4	532.1	[0.00]	µg/L	02:28:33
2	Sc RADIAL	117444.7	117444.7	101	%	02:27:11
2	Al 396.153Radial†	118.9	118.1	[0.00]	µg/L	02:27:11
2	Ca 317.933Radial†	402.2	399.4	[0.00]	µg/L	02:27:31
2	Fe 238.204 Radial†	13.6	13.5	[0.00]	µg/L	02:27:31
2	K 766.490 Radial†	678.0	673.3	[0.00]	µg/L	02:27:11
2	Mg 279.077 IEC†	15.2	15.1	[0.00]	µg/L	02:27:31
2	Na 589.592 Radial†	-639.2	-634.8	[0.00]	µg/L	02:27:11
2	Sr 421.552†	-81.6	-81.0	[0.00]	µg/L	02:27:11
2	Sc 361.383	2015611.3	2015611.3	99.673	%	02:28:39
2	Y 371.029	1254118.8	1254118.8	99.632	%	02:28:39
2	Ag 328.068†	-13.2	-13.3	[0.00]	µg/L	02:28:45
2	As 188.979†	0.5	0.5	[0.00]	µg/L	02:29:06
2	B 249.677†	142.0	142.4	[0.00]	µg/L	02:29:06
2	Ba 233.527†	-79.5	-79.8	[0.00]	µg/L	02:29:06
2	Be 313.107†	3562.3	3573.9	[0.00]	µg/L	02:28:45
2	Cd 226.502†	-99.7	-100.1	[0.00]	µg/L	02:29:06
2	Co 228.616†	-71.2	-71.4	[0.00]	µg/L	02:29:06
2	Cr 267.716†	-107.4	-107.7	[0.00]	µg/L	02:28:45
2	Cu 324.752†	4279.3	4293.3	[0.00]	µg/L	02:28:45
2	Mn 257.610†	-190.8	-191.5	[0.00]	µg/L	02:29:06
2	Mo 202.031†	-2.0	-2.0	[0.00]	µg/L	02:29:06
2	Ni 231.604†	272.7	273.6	[0.00]	µg/L	02:29:06
2	P 214.914†	196.6	197.3	[0.00]	µg/L	02:29:06
2	Pb 220.353†	59.7	59.9	[0.00]	µg/L	02:29:06
2	S 181.975 Axial†	21.8	21.8	[0.00]	µg/L	02:29:06
2	Sb 206.836†	18.6	18.6	[0.00]	µg/L	02:29:06
2	Se 196.026†	11.5	11.5	[0.00]	µg/L	02:29:06
2	SiO2†	2765.7	2774.8	[0.00]	µg/L	02:28:45
2	Si 251.611†	319.5	320.5	[0.00]	µg/L	02:29:06
2	Sn 189.927†	20.9	21.0	[0.00]	µg/L	02:29:06
2	Ti 334.940†	799.3	801.9	[0.00]	µg/L	02:28:45
2	Tl 190.801†	-21.0	-21.1	[0.00]	µg/L	02:29:06
2	U 409.014†	716.4	718.8	[0.00]	µg/L	02:28:45
2	V 292.402†	-129.9	-130.4	[0.00]	µg/L	02:28:45
2	Zn 213.857†	516.6	518.3	[0.00]	µg/L	02:29:06
3	Sc RADIAL	116046.5	116046.5	99.5	%	02:27:37

3	Al 396.153Radial†	128.3	129.0	[0.00]	µg/L	02:27:37
3	Ca 317.933Radial†	420.3	422.5	[0.00]	µg/L	02:27:57
3	Fe 238.204 Radial†	16.0	16.1	[0.00]	µg/L	02:27:57
3	K 766.490 Radial†	644.5	647.8	[0.00]	µg/L	02:27:37
3	Mg 279.077 IEC†	15.8	15.9	[0.00]	µg/L	02:27:57
3	Na 589.592 Radial†	-659.5	-662.8	[0.00]	µg/L	02:27:37
3	Sr 421.552†	-48.6	-48.8	[0.00]	µg/L	02:27:37
3	Sc 361.383	2039265.3	2039265.3	100.84	%	02:29:12
3	Y 371.029	1265900.8	1265900.8	100.57	%	02:29:12
3	Ag 328.068†	22.9	22.7	[0.00]	µg/L	02:29:17
3	As 188.979†	4.6	4.6	[0.00]	µg/L	02:29:38
3	B 249.677†	133.8	132.7	[0.00]	µg/L	02:29:38
3	Ba 233.527†	-82.4	-81.7	[0.00]	µg/L	02:29:38
3	Be 313.107†	3497.9	3468.7	[0.00]	µg/L	02:29:17
3	Cd 226.502†	-100.6	-99.8	[0.00]	µg/L	02:29:38
3	Co 228.616†	-60.4	-59.9	[0.00]	µg/L	02:29:38
3	Cr 267.716†	-101.6	-100.7	[0.00]	µg/L	02:29:17
3	Cu 324.752†	4259.0	4223.4	[0.00]	µg/L	02:29:17
3	Mn 257.610†	-205.7	-204.0	[0.00]	µg/L	02:29:38
3	Mo 202.031†	-4.9	-4.9	[0.00]	µg/L	02:29:38
3	Ni 231.604†	282.6	280.2	[0.00]	µg/L	02:29:38
3	P 214.914†	204.9	203.2	[0.00]	µg/L	02:29:38
3	Pb 220.353†	59.6	59.1	[0.00]	µg/L	02:29:38
3	S 181.975 Axial†	20.9	20.7	[0.00]	µg/L	02:29:38
3	Sb 206.836†	18.6	18.4	[0.00]	µg/L	02:29:38
3	Se 196.026†	13.5	13.4	[0.00]	µg/L	02:29:38
3	SiO2†	2733.0	2710.1	[0.00]	µg/L	02:29:17
3	Si 251.611†	333.6	330.8	[0.00]	µg/L	02:29:38
3	Sn 189.927†	24.2	24.0	[0.00]	µg/L	02:29:38
3	Ti 334.940†	773.2	766.7	[0.00]	µg/L	02:29:17
3	Tl 190.801†	-14.2	-14.1	[0.00]	µg/L	02:29:38
3	U 409.014†	788.4	781.8	[0.00]	µg/L	02:29:17
3	V 292.402†	-95.8	-95.0	[0.00]	µg/L	02:29:17
3	Zn 213.857†	534.0	529.5	[0.00]	µg/L	02:29:38

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2022223.7	14881.34	0.74%	100.000	%
Sc RADIAL	116628.7	727.82	0.62%	100	%
Y 371.029	1258747.8	6283.42	0.50%	100.00	%
Ag 328.068†	10.4	20.53	197.25%	[0.00]	µg/L
Al 396.153Radial†	123.3	5.46	4.43%	[0.00]	µg/L
As 188.979†	2.2	2.12	95.86%	[0.00]	µg/L
B 249.677†	137.9	4.88	3.54%	[0.00]	µg/L
Ba 233.527†	-78.0	4.76	6.10%	[0.00]	µg/L
Be 313.107†	3515.9	53.46	1.52%	[0.00]	µg/L
Ca 317.933Radial†	412.8	11.97	2.90%	[0.00]	µg/L
Cd 226.502†	-99.0	1.66	1.68%	[0.00]	µg/L
Co 228.616†	-66.7	6.02	9.04%	[0.00]	µg/L
Cr 267.716†	-99.8	8.43	8.45%	[0.00]	µg/L
Cu 324.752†	4269.8	40.16	0.94%	[0.00]	µg/L
Fe 238.204 Radial†	15.2	1.41	9.29%	[0.00]	µg/L
K 766.490 Radial†	682.5	40.08	5.87%	[0.00]	µg/L
Mg 279.077 IEC†	15.4	0.42	2.70%	[0.00]	µg/L
Mn 257.610†	-201.3	8.86	4.40%	[0.00]	µg/L
Mo 202.031†	-3.7	1.51	41.20%	[0.00]	µg/L
Na 589.592 Radial†	-634.1	29.02	4.58%	[0.00]	µg/L
Ni 231.604†	275.6	4.06	1.47%	[0.00]	µg/L
P 214.914†	200.9	3.19	1.59%	[0.00]	µg/L
Pb 220.353†	56.3	5.64	10.03%	[0.00]	µg/L
S 181.975 Axial†	22.2	1.65	7.47%	[0.00]	µg/L
Sb 206.836†	21.1	4.46	21.15%	[0.00]	µg/L
Se 196.026†	9.9	4.58	46.43%	[0.00]	µg/L
SiO2†	2751.4	35.82	1.30%	[0.00]	µg/L
Si 251.611†	325.2	5.22	1.61%	[0.00]	µg/L
Sn 189.927†	22.4	1.52	6.78%	[0.00]	µg/L
Sr 421.552†	-62.3	16.72	26.84%	[0.00]	µg/L
Ti 334.940†	774.4	24.57	3.17%	[0.00]	µg/L
Tl 190.801†	-20.4	5.94	29.15%	[0.00]	µg/L

U 409.014†	730.5	46.63	6.38%	[0.00] µg/L
V 292.402†	-126.7	30.12	23.77%	[0.00] µg/L
Zn 213.857†	526.6	7.34	1.39%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/10/2009 02:29:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	117559.6	117559.6	101	%	02:30:22
1	K 766.490 Radial†	2726.3	2022.2	[1000]	µg/L	02:30:22
1	Sr 421.552†	20442.1	20342.5	[100]	µg/L	02:30:22
1	Sc 361.383	2023025.9	2023025.9	100.04	%	02:30:44
1	Y 371.029	1260425.7	1260425.7	100.13	%	02:30:44
1	Ag 328.068†	11176.8	11162.0	[100]	µg/L	02:30:50
1	As 188.979†	59.6	57.4	[100]	µg/L	02:31:10
1	B 249.677†	2449.1	2310.3	[100]	µg/L	02:30:50
1	Ba 233.527†	3928.2	4004.7	[100]	µg/L	02:30:50
1	Be 313.107†	165785.9	162204.3	[100]	µg/L	02:30:44
1	Cd 226.502†	3792.3	3889.8	[100]	µg/L	02:30:50
1	Co 228.616†	2047.7	2113.5	[100]	µg/L	02:31:10
1	Cr 267.716†	4750.5	4848.4	[100]	µg/L	02:30:50
1	Cu 324.752†	19139.5	14862.2	[100]	µg/L	02:30:50
1	Mn 257.610†	32038.9	32227.5	[100]	µg/L	02:30:50
1	Mo 202.031†	865.1	868.4	[100]	µg/L	02:31:10
1	Ni 231.604†	2188.1	1911.7	[100]	µg/L	02:30:50
1	P 214.914†	452.6	251.6	[500]	µg/L	02:31:10
1	Pb 220.353†	461.9	405.4	[100]	µg/L	02:31:10
1	S 181.975 Axial†	65.3	43.1	[200]	µg/L	02:31:10
1	Sb 206.836†	129.3	108.2	[100]	µg/L	02:31:10
1	Se 196.026†	93.4	83.4	[100]	µg/L	02:31:10
1	SiO2†	8649.5	5894.7	[1069.5]	µg/L	02:30:50
1	Si 251.611†	7136.5	6808.4	[500]	µg/L	02:30:50
1	Sn 189.927†	217.7	195.2	[100]	µg/L	02:31:10
1	Ti 334.940†	44240.9	43449.0	[100]	µg/L	02:30:50
1	Tl 190.801†	49.9	70.2	[100]	µg/L	02:31:10
1	U 409.014†	1782.6	1051.5	[100]	µg/L	02:30:50
1	V 292.402†	8907.2	9030.4	[100]	µg/L	02:30:50
1	Zn 213.857†	4441.6	3913.2	[100]	µg/L	02:30:50
2	Sc RADIAL	117486.7	117486.7	101	%	02:30:28
2	K 766.490 Radial†	2767.7	2065.0	[1000]	µg/L	02:30:28
2	Sr 421.552†	20343.1	20256.8	[100]	µg/L	02:30:28
2	Sc 361.383	2037610.9	2037610.9	100.76	%	02:31:17
2	Y 371.029	1270288.6	1270288.6	100.92	%	02:31:17
2	Ag 328.068†	11067.9	10973.9	[100]	µg/L	02:31:22
2	As 188.979†	56.8	54.2	[100]	µg/L	02:31:43
2	B 249.677†	2395.1	2239.1	[100]	µg/L	02:31:22
2	Ba 233.527†	3899.6	3948.2	[100]	µg/L	02:31:22
2	Be 313.107†	165931.2	161162.3	[100]	µg/L	02:31:17
2	Cd 226.502†	3799.6	3869.8	[100]	µg/L	02:31:22
2	Co 228.616†	1969.8	2021.6	[100]	µg/L	02:31:43
2	Cr 267.716†	4740.5	4804.5	[100]	µg/L	02:31:22
2	Cu 324.752†	19057.2	14643.5	[100]	µg/L	02:31:22
2	Mn 257.610†	32022.8	31982.3	[100]	µg/L	02:31:22
2	Mo 202.031†	833.7	831.1	[100]	µg/L	02:31:43
2	Ni 231.604†	2180.8	1888.8	[100]	µg/L	02:31:22
2	P 214.914†	448.4	244.1	[500]	µg/L	02:31:43
2	Pb 220.353†	448.4	388.8	[100]	µg/L	02:31:43
2	S 181.975 Axial†	65.6	43.0	[200]	µg/L	02:31:43
2	Sb 206.836†	117.6	95.6	[100]	µg/L	02:31:43
2	Se 196.026†	94.0	83.4	[100]	µg/L	02:31:43
2	SiO2†	8636.2	5819.6	[1069.5]	µg/L	02:31:22
2	Si 251.611†	7108.1	6729.3	[500]	µg/L	02:31:22
2	Sn 189.927†	212.6	188.6	[100]	µg/L	02:31:43
2	Ti 334.940†	44293.6	43184.7	[100]	µg/L	02:31:22
2	Tl 190.801†	42.5	62.5	[100]	µg/L	02:31:43
2	U 409.014†	1871.4	1126.8	[100]	µg/L	02:31:22
2	V 292.402†	8925.8	8985.1	[100]	µg/L	02:31:22

2	Zn 213.857†	4419.3	3859.3	[100]	µg/L	02:31:22
3	Sc RADIAL	118235.9	118235.9	101	%	02:30:34
3	K 766.490 Radial†	2767.8	2047.7	[1000]	µg/L	02:30:34
3	Sr 421.552†	20472.9	20256.9	[100]	µg/L	02:30:34
3	Sc 361.383	2034992.9	2034992.9	100.63	%	02:31:49
3	Y 371.029	1270927.6	1270927.6	100.97	%	02:31:49
3	Ag 328.068†	11140.1	11059.8	[100]	µg/L	02:31:55
3	As 188.979†	61.6	59.0	[100]	µg/L	02:32:15
3	B 249.677†	2378.5	2225.7	[100]	µg/L	02:31:55
3	Ba 233.527†	3905.2	3958.7	[100]	µg/L	02:31:55
3	Be 313.107†	166370.3	161810.5	[100]	µg/L	02:31:49
3	Cd 226.502†	3801.0	3876.2	[100]	µg/L	02:31:55
3	Co 228.616†	2030.4	2084.3	[100]	µg/L	02:32:15
3	Cr 267.716†	4755.4	4825.3	[100]	µg/L	02:31:55
3	Cu 324.752†	19183.5	14793.3	[100]	µg/L	02:31:55
3	Mn 257.610†	31952.0	31952.8	[100]	µg/L	02:31:55
3	Mo 202.031†	860.8	859.1	[100]	µg/L	02:32:15
3	Ni 231.604†	2184.5	1895.2	[100]	µg/L	02:31:55
3	P 214.914†	447.2	243.4	[500]	µg/L	02:32:15
3	Pb 220.353†	456.1	397.0	[100]	µg/L	02:32:15
3	S 181.975 Axial†	66.6	44.0	[200]	µg/L	02:32:15
3	Sb 206.836†	126.4	104.5	[100]	µg/L	02:32:15
3	Se 196.026†	92.0	81.6	[100]	µg/L	02:32:15
3	SiO2†	8640.5	5834.9	[1069.5]	µg/L	02:31:55
3	Si 251.611†	7151.3	6781.2	[500]	µg/L	02:31:55
3	Sn 189.927†	226.0	202.2	[100]	µg/L	02:32:15
3	Ti 334.940†	44226.1	43174.2	[100]	µg/L	02:31:55
3	Tl 190.801†	45.6	65.7	[100]	µg/L	02:32:15
3	U 409.014†	1892.5	1150.2	[100]	µg/L	02:31:55
3	V 292.402†	8866.6	8937.7	[100]	µg/L	02:31:55
3	Zn 213.857†	4411.5	3857.2	[100]	µg/L	02:31:55

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2031876.5	7775.87	0.38%	100.48	%
Sc RADIAL	117760.7	413.13	0.35%	101	%
Y 371.029	1267213.9	5887.44	0.46%	100.67	%
Ag 328.068†	11065.2	94.16	0.85%	[100]	µg/L
As 188.979†	56.9	2.47	4.34%	[100]	µg/L
B 249.677†	2258.4	45.43	2.01%	[100]	µg/L
Ba 233.527†	3970.6	30.07	0.76%	[100]	µg/L
Be 313.107†	161725.7	526.16	0.33%	[100]	µg/L
Cd 226.502†	3878.6	10.19	0.26%	[100]	µg/L
Co 228.616†	2073.2	46.96	2.27%	[100]	µg/L
Cr 267.716†	4826.1	21.98	0.46%	[100]	µg/L
Cu 324.752†	14766.3	111.80	0.76%	[100]	µg/L
K 766.490 Radial†	2045.0	21.54	1.05%	[1000]	µg/L
Mn 257.610†	32054.2	150.82	0.47%	[100]	µg/L
Mo 202.031†	852.9	19.43	2.28%	[100]	µg/L
Ni 231.604†	1898.6	11.81	0.62%	[100]	µg/L
P 214.914†	246.4	4.51	1.83%	[500]	µg/L
Pb 220.353†	397.0	8.34	2.10%	[100]	µg/L
S 181.975 Axial†	43.4	0.57	1.32%	[200]	µg/L
Sb 206.836†	102.8	6.47	6.30%	[100]	µg/L
Se 196.026†	82.8	1.05	1.27%	[100]	µg/L
SiO2†	5849.7	39.68	0.68%	[1069.5]	µg/L
Si 251.611†	6773.0	40.22	0.59%	[500]	µg/L
Sn 189.927†	195.3	6.79	3.48%	[100]	µg/L
Sr 421.552†	20285.4	49.47	0.24%	[100]	µg/L
Ti 334.940†	43269.3	155.71	0.36%	[100]	µg/L
Tl 190.801†	66.2	3.88	5.86%	[100]	µg/L
U 409.014†	1109.5	51.61	4.65%	[100]	µg/L
V 292.402†	8984.4	46.33	0.52%	[100]	µg/L
Zn 213.857†	3876.5	31.73	0.82%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/10/2009 02:32:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	118394.2	118394.2	102	%	02:32:57
1	Al 396.153Radial†	10512.5	10232.5	[5000]	µg/L	02:32:57
1	Ca 317.933Radial†	13569.3	12954.2	[5000]	µg/L	02:33:18
1	K 766.490 Radial†	10544.3	9704.6	[5000]	µg/L	02:32:57
1	Mg 279.077 IEC†	850.4	822.3	[5000]	µg/L	02:33:18
1	Sr 421.552†	100733.3	99293.4	[500]	µg/L	02:32:57
1	Sc 361.383	2040216.3	2040216.3	100.89	%	02:34:21
1	Y 371.029	1264250.0	1264250.0	100.44	%	02:34:21
1	Ag 328.068†	56207.3	55701.2	[500]	µg/L	02:34:27
1	As 188.979†	278.3	273.6	[500]	µg/L	02:34:48
1	B 249.677†	11560.8	11321.0	[500]	µg/L	02:34:27
1	Ba 233.527†	19454.6	19361.1	[500]	µg/L	02:34:27
1	Be 313.107†	801779.7	791192.9	[500]	µg/L	02:34:21
1	Cd 226.502†	18808.6	18741.7	[500]	µg/L	02:34:27
1	Co 228.616†	10358.1	10333.4	[500]	µg/L	02:34:27
1	Cr 267.716†	23700.0	23590.8	[500]	µg/L	02:34:27
1	Cu 324.752†	76431.4	71487.6	[500]	µg/L	02:34:27
1	Mn 257.610†	156312.6	155135.4	[500]	µg/L	02:34:21
1	Mo 202.031†	4354.2	4319.5	[500]	µg/L	02:34:48
1	Ni 231.604†	9444.1	9085.3	[500]	µg/L	02:34:27
1	P 214.914†	1457.6	1243.8	[2500]	µg/L	02:34:48
1	Pb 220.353†	2000.2	1926.3	[500]	µg/L	02:34:48
1	S 181.975 Axial†	230.0	205.9	[1000]	µg/L	02:34:48
1	Sb 206.836†	539.9	514.1	[500]	µg/L	02:34:48
1	Se 196.026†	404.0	390.6	[500]	µg/L	02:34:48
1	SiO2†	32284.4	29248.3	[5347.5]	µg/L	02:34:27
1	Si 251.611†	34556.5	33926.5	[2500]	µg/L	02:34:27
1	Sn 189.927†	1031.7	1000.1	[500]	µg/L	02:34:48
1	Ti 334.940†	224213.3	221461.6	[500]	µg/L	02:34:21
1	Tl 190.801†	308.7	326.4	[500]	µg/L	02:34:48
1	U 409.014†	6308.9	5522.8	[500]	µg/L	02:34:27
1	V 292.402†	44245.2	43981.7	[500]	µg/L	02:34:27
1	Zn 213.857†	19570.7	18871.5	[500]	µg/L	02:34:27
2	Sc RADIAL	117609.6	117609.6	101	%	02:33:23
2	Al 396.153Radial†	10471.7	10261.1	[5000]	µg/L	02:33:23
2	Ca 317.933Radial†	13607.4	13081.2	[5000]	µg/L	02:33:44
2	K 766.490 Radial†	10455.1	9685.5	[5000]	µg/L	02:33:23
2	Mg 279.077 IEC†	851.4	828.9	[5000]	µg/L	02:33:44
2	Sr 421.552†	99948.5	99177.1	[500]	µg/L	02:33:23
2	Sc 361.383	2030613.9	2030613.9	100.41	%	02:34:55
2	Y 371.029	1259458.6	1259458.6	100.06	%	02:34:55
2	Ag 328.068†	56316.8	56073.7	[500]	µg/L	02:35:00
2	As 188.979†	277.3	273.9	[500]	µg/L	02:35:21
2	B 249.677†	11641.0	11455.1	[500]	µg/L	02:35:00
2	Ba 233.527†	19417.1	19414.9	[500]	µg/L	02:35:00
2	Be 313.107†	804946.4	798104.6	[500]	µg/L	02:34:55
2	Cd 226.502†	18766.4	18787.8	[500]	µg/L	02:35:00
2	Co 228.616†	10321.4	10345.4	[500]	µg/L	02:35:00
2	Cr 267.716†	23744.9	23746.6	[500]	µg/L	02:35:00
2	Cu 324.752†	76426.4	71840.8	[500]	µg/L	02:35:00
2	Mn 257.610†	156983.3	156536.0	[500]	µg/L	02:34:55
2	Mo 202.031†	4320.6	4306.4	[500]	µg/L	02:35:21
2	Ni 231.604†	9503.7	9188.8	[500]	µg/L	02:35:00
2	P 214.914†	1432.8	1226.0	[2500]	µg/L	02:35:21
2	Pb 220.353†	1995.9	1931.4	[500]	µg/L	02:35:21
2	S 181.975 Axial†	227.7	204.6	[1000]	µg/L	02:35:21
2	Sb 206.836†	535.9	512.5	[500]	µg/L	02:35:21
2	Se 196.026†	408.3	396.7	[500]	µg/L	02:35:21
2	SiO2†	32247.8	29363.2	[5347.5]	µg/L	02:35:00

2	Si 251.611†	34579.2	34111.1	[2500]	µg/L	02:35:00
2	Sn 189.927†	1018.4	991.8	[500]	µg/L	02:35:21
2	Ti 334.940†	225492.0	223785.9	[500]	µg/L	02:34:55
2	Tl 190.801†	299.7	318.8	[500]	µg/L	02:35:21
2	U 409.014†	6151.3	5395.5	[500]	µg/L	02:35:00
2	V 292.402†	44349.8	44293.3	[500]	µg/L	02:35:00
2	Zn 213.857†	19564.7	18957.2	[500]	µg/L	02:35:00
3	Sc RADIAL	117511.1	117511.1	101	%	02:33:49
3	Al 396.153Radial†	10422.2	10220.7	[5000]	µg/L	02:33:49
3	Ca 317.933Radial†	13536.7	13022.2	[5000]	µg/L	02:34:10
3	K 766.490 Radial†	10415.1	9654.4	[5000]	µg/L	02:33:49
3	Mg 279.077 IEC†	854.9	833.1	[5000]	µg/L	02:34:10
3	Sr 421.552†	99843.4	99156.0	[500]	µg/L	02:33:49
3	Sc 361.383	2035673.7	2035673.7	100.67	%	02:35:28
3	Y 371.029	1262009.6	1262009.6	100.26	%	02:35:28
3	Ag 328.068†	56490.3	56106.7	[500]	µg/L	02:35:34
3	As 188.979†	272.4	268.4	[500]	µg/L	02:35:54
3	B 249.677†	11695.9	11480.8	[500]	µg/L	02:35:34
3	Ba 233.527†	19519.1	19468.2	[500]	µg/L	02:35:34
3	Be 313.107†	804893.5	796059.5	[500]	µg/L	02:35:28
3	Cd 226.502†	18841.0	18815.4	[500]	µg/L	02:35:34
3	Co 228.616†	10390.5	10388.5	[500]	µg/L	02:35:34
3	Cr 267.716†	23786.3	23728.9	[500]	µg/L	02:35:34
3	Cu 324.752†	76720.2	71943.6	[500]	µg/L	02:35:34
3	Mn 257.610†	156901.6	156066.3	[500]	µg/L	02:35:28
3	Mo 202.031†	4250.9	4226.4	[500]	µg/L	02:35:54
3	Ni 231.604†	9551.4	9212.8	[500]	µg/L	02:35:34
3	P 214.914†	1420.4	1210.1	[2500]	µg/L	02:35:54
3	Pb 220.353†	1971.3	1902.0	[500]	µg/L	02:35:54
3	S 181.975 Axial†	230.1	206.4	[1000]	µg/L	02:35:54
3	Sb 206.836†	524.0	499.4	[500]	µg/L	02:35:54
3	Se 196.026†	402.6	390.1	[500]	µg/L	02:35:54
3	SiO2†	32438.5	29472.8	[5347.5]	µg/L	02:35:34
3	Si 251.611†	34758.0	34203.2	[2500]	µg/L	02:35:34
3	Sn 189.927†	1003.3	974.3	[500]	µg/L	02:35:54
3	Ti 334.940†	225143.6	222881.6	[500]	µg/L	02:35:28
3	Tl 190.801†	304.7	323.1	[500]	µg/L	02:35:54
3	U 409.014†	6242.2	5470.5	[500]	µg/L	02:35:34
3	V 292.402†	44464.6	44297.5	[500]	µg/L	02:35:34
3	Zn 213.857†	19586.3	18930.3	[500]	µg/L	02:35:34

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2035501.3	4803.51	0.24%	100.66	%
Sc RADIAL	117838.3	483.97	0.41%	101	%
Y 371.029	1261906.1	2397.38	0.19%	100.25	%
Ag 328.068†	55960.5	225.20	0.40%	[500]	µg/L
Al 396.153Radial†	10238.1	20.79	0.20%	[5000]	µg/L
As 188.979†	272.0	3.09	1.14%	[500]	µg/L
B 249.677†	11418.9	85.82	0.75%	[500]	µg/L
Ba 233.527†	19414.7	53.55	0.28%	[500]	µg/L
Be 313.107†	795119.0	3550.50	0.45%	[500]	µg/L
Ca 317.933Radial†	13019.2	63.54	0.49%	[5000]	µg/L
Cd 226.502†	18781.6	37.27	0.20%	[500]	µg/L
Co 228.616†	10355.8	28.95	0.28%	[500]	µg/L
Cr 267.716†	23688.8	85.32	0.36%	[500]	µg/L
Cu 324.752†	71757.3	239.19	0.33%	[500]	µg/L
K 766.490 Radial†	9681.5	25.32	0.26%	[5000]	µg/L
Mg 279.077 IEC†	828.1	5.45	0.66%	[5000]	µg/L
Mn 257.610†	155912.6	712.85	0.46%	[500]	µg/L
Mo 202.031†	4284.1	50.37	1.18%	[500]	µg/L
Ni 231.604†	9162.3	67.76	0.74%	[500]	µg/L
P 214.914†	1226.6	16.85	1.37%	[2500]	µg/L
Pb 220.353†	1919.9	15.70	0.82%	[500]	µg/L
S 181.975 Axial†	205.6	0.90	0.44%	[1000]	µg/L
Sb 206.836†	508.7	8.07	1.59%	[500]	µg/L
Se 196.026†	392.5	3.71	0.94%	[500]	µg/L
SiO2†	29361.4	112.27	0.38%	[5347.5]	µg/L
Si 251.611†	34080.3	140.90	0.41%	[2500]	µg/L

Sn 189.927†	988.7	13.21	1.34%	[500] µg/L
Sr 421.552†	99208.8	73.97	0.07%	[500] µg/L
Ti 334.940†	222709.7	1171.66	0.53%	[500] µg/L
Tl 190.801†	322.8	3.79	1.17%	[500] µg/L
U 409.014†	5462.9	63.99	1.17%	[500] µg/L
V 292.402†	44190.8	181.11	0.41%	[500] µg/L
Zn 213.857†	18919.7	43.82	0.23%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/10/2009 02:36:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	119743.9	119743.9	103	%	02:36:36
1	Al 396.153Radial†	20616.9	19957.2	[10000]	µg/L	02:36:36
1	Ca 317.933Radial†	27133.5	26014.8	[10000]	µg/L	02:36:56
1	Fe 238.204 Radial†	1640.9	1583.1	[10000]	µg/L	02:36:56
1	K 766.490 Radial†	20307.4	19096.6	[10000]	µg/L	02:36:36
1	Mg 279.077 IEC†	1713.2	1653.2	[10000]	µg/L	02:36:56
1	Na 589.592 Radial†	40142.2	39731.9	[10000]	µg/L	02:36:36
1	Sr 421.552†	199391.3	194266.2	[1000]	µg/L	02:36:36
1	Sc 361.383	2048864.6	2048864.6	101.32	%	02:38:01
1	Y 371.029	1264226.7	1264226.7	100.44	%	02:38:01
1	Ag 328.068†	109177.1	107747.1	[1000]	µg/L	02:38:06
1	As 188.979†	560.4	550.9	[1000]	µg/L	02:38:27
1	B 249.677†	23259.8	22819.5	[1000]	µg/L	02:38:06
1	Ba 233.527†	39002.6	38573.5	[1000]	µg/L	02:38:06
1	Be 313.107†	1621159.0	1596563.6	[1000]	µg/L	02:38:01
1	Cd 226.502†	37482.2	37093.8	[1000]	µg/L	02:38:06
1	Co 228.616†	20629.7	20428.1	[1000]	µg/L	02:38:06
1	Cr 267.716†	47676.6	47156.5	[1000]	µg/L	02:38:06
1	Cu 324.752†	148795.1	142590.6	[1000]	µg/L	02:38:06
1	Mn 257.610†	316772.8	312855.3	[1000]	µg/L	02:38:01
1	Mo 202.031†	8535.8	8428.5	[1000]	µg/L	02:38:06
1	Ni 231.604†	18577.4	18060.3	[1000]	µg/L	02:38:06
1	P 214.914†	2694.5	2458.5	[5000]	µg/L	02:38:27
1	Pb 220.353†	3944.3	3836.8	[1000]	µg/L	02:38:27
1	S 181.975 Axial†	435.0	407.2	[2000]	µg/L	02:38:27
1	Sb 206.836†	1049.1	1014.4	[1000]	µg/L	02:38:27
1	Se 196.026†	795.5	775.2	[1000]	µg/L	02:38:27
1	SiO2†	60968.5	57424.4	[10695]	µg/L	02:38:06
1	Si 251.611†	67766.2	66559.8	[5000]	µg/L	02:38:06
1	Sn 189.927†	1987.5	1939.2	[1000]	µg/L	02:38:27
1	Ti 334.940†	442941.1	436407.2	[1000]	µg/L	02:38:01
1	Tl 190.801†	633.8	646.0	[1000]	µg/L	02:38:27
1	U 409.014†	11805.2	10921.2	[1000]	µg/L	02:38:06
1	V 292.402†	88964.1	87934.1	[1000]	µg/L	02:38:06
1	Zn 213.857†	38215.5	37191.9	[1000]	µg/L	02:38:06
2	Sc RADIAL	119056.1	119056.1	102	%	02:37:02
2	Al 396.153Radial†	21203.3	20647.7	[10000]	µg/L	02:37:02
2	Ca 317.933Radial†	27106.2	26140.8	[10000]	µg/L	02:37:22
2	Fe 238.204 Radial†	1634.3	1585.8	[10000]	µg/L	02:37:22
2	K 766.490 Radial†	20803.8	19697.2	[10000]	µg/L	02:37:02
2	Mg 279.077 IEC†	1706.7	1656.4	[10000]	µg/L	02:37:22
2	Na 589.592 Radial†	41070.8	40867.5	[10000]	µg/L	02:37:02
2	Sr 421.552†	204769.9	200657.1	[1000]	µg/L	02:37:02
2	Sc 361.383	2013723.8	2013723.8	99.580	%	02:38:34
2	Y 371.029	1244074.5	1244074.5	98.834	%	02:38:34
2	Ag 328.068†	109694.1	110146.7	[1000]	µg/L	02:38:39
2	As 188.979†	558.3	558.4	[1000]	µg/L	02:39:00
2	B 249.677†	23401.1	23362.0	[1000]	µg/L	02:38:39
2	Ba 233.527†	39199.2	39442.7	[1000]	µg/L	02:38:39
2	Be 313.107†	1595181.2	1598398.6	[1000]	µg/L	02:38:34
2	Cd 226.502†	37768.9	38027.3	[1000]	µg/L	02:38:39
2	Co 228.616†	20736.6	20890.8	[1000]	µg/L	02:38:39
2	Cr 267.716†	48017.7	48320.1	[1000]	µg/L	02:38:39
2	Cu 324.752†	149257.8	145618.1	[1000]	µg/L	02:38:39
2	Mn 257.610†	311708.4	313225.4	[1000]	µg/L	02:38:34
2	Mo 202.031†	8623.4	8663.5	[1000]	µg/L	02:38:39
2	Ni 231.604†	18636.3	18439.4	[1000]	µg/L	02:38:39
2	P 214.914†	2711.0	2521.5	[5000]	µg/L	02:39:00
2	Pb 220.353†	3976.4	3937.0	[1000]	µg/L	02:39:00

2	S 181.975 Axial†	431.7	411.3	[2000]	µg/L	02:39:00
2	Sb 206.836†	1059.2	1042.6	[1000]	µg/L	02:39:00
2	Se 196.026†	796.4	789.8	[1000]	µg/L	02:39:00
2	SiO2†	61237.4	58744.6	[10695]	µg/L	02:38:39
2	Si 251.611†	68123.7	68086.0	[5000]	µg/L	02:38:39
2	Sn 189.927†	1994.6	1980.6	[1000]	µg/L	02:39:00
2	Ti 334.940†	436107.6	437174.0	[1000]	µg/L	02:38:34
2	Tl 190.801†	639.8	662.9	[1000]	µg/L	02:39:00
2	U 409.014†	11787.5	11106.8	[1000]	µg/L	02:38:39
2	V 292.402†	89426.4	89930.6	[1000]	µg/L	02:38:39
2	Zn 213.857†	38502.4	38138.2	[1000]	µg/L	02:38:39
3	Sc RADIAL	117907.6	117907.6	101	%	02:37:28
3	Al 396.153Radial†	21174.5	20821.5	[10000]	µg/L	02:37:28
3	Ca 317.933Radial†	26926.1	26221.3	[10000]	µg/L	02:37:49
3	Fe 238.204 Radial†	1619.4	1586.6	[10000]	µg/L	02:37:49
3	K 766.490 Radial†	20837.9	19929.4	[10000]	µg/L	02:37:28
3	Mg 279.077 IEC†	1696.3	1662.5	[10000]	µg/L	02:37:49
3	Na 589.592 Radial†	41077.3	41265.9	[10000]	µg/L	02:37:28
3	Sr 421.552†	204426.3	202271.2	[1000]	µg/L	02:37:28
3	Sc 361.383	2012021.1	2012021.1	99.495	%	02:39:07
3	Y 371.029	1244191.8	1244191.8	98.844	%	02:39:07
3	Ag 328.068†	108949.8	109491.9	[1000]	µg/L	02:39:13
3	As 188.979†	547.1	547.6	[1000]	µg/L	02:39:33
3	B 249.677†	23225.9	23205.8	[1000]	µg/L	02:39:13
3	Ba 233.527†	38770.5	39045.2	[1000]	µg/L	02:39:13
3	Be 313.107†	1599961.6	1604558.8	[1000]	µg/L	02:39:07
3	Cd 226.502†	37279.1	37567.1	[1000]	µg/L	02:39:13
3	Co 228.616†	20580.2	20751.2	[1000]	µg/L	02:39:13
3	Cr 267.716†	47443.6	47783.9	[1000]	µg/L	02:39:13
3	Cu 324.752†	148191.1	144672.7	[1000]	µg/L	02:39:13
3	Mn 257.610†	312485.6	314271.5	[1000]	µg/L	02:39:07
3	Mo 202.031†	8541.0	8587.9	[1000]	µg/L	02:39:13
3	Ni 231.604†	18456.8	18274.8	[1000]	µg/L	02:39:13
3	P 214.914†	2650.2	2462.7	[5000]	µg/L	02:39:33
3	Pb 220.353†	3890.7	3854.1	[1000]	µg/L	02:39:33
3	S 181.975 Axial†	424.0	404.0	[2000]	µg/L	02:39:33
3	Sb 206.836†	1027.6	1011.7	[1000]	µg/L	02:39:33
3	Se 196.026†	785.1	779.2	[1000]	µg/L	02:39:33
3	SiO2†	60631.2	58187.2	[10695]	µg/L	02:39:13
3	Si 251.611†	67579.4	67596.8	[5000]	µg/L	02:39:13
3	Sn 189.927†	1933.0	1920.4	[1000]	µg/L	02:39:33
3	Ti 334.940†	437339.8	438783.0	[1000]	µg/L	02:39:07
3	Tl 190.801†	625.3	648.8	[1000]	µg/L	02:39:33
3	U 409.014†	11805.2	11134.6	[1000]	µg/L	02:39:13
3	V 292.402†	88610.0	89186.0	[1000]	µg/L	02:39:13
3	Zn 213.857†	38077.2	37743.7	[1000]	µg/L	02:39:13

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2024869.8	20797.47	1.03%	100.13	%
Sc RADIAL	118902.6	927.75	0.78%	102	%
Y 371.029	1250831.0	11601.19	0.93%	99.371	%
Ag 328.068†	109128.6	1240.37	1.14%	[1000]	µg/L
Al 396.153Radial†	20475.5	457.18	2.23%	[10000]	µg/L
As 188.979†	552.3	5.54	1.00%	[1000]	µg/L
B 249.677†	23129.1	279.25	1.21%	[1000]	µg/L
Ba 233.527†	39020.5	435.13	1.12%	[1000]	µg/L
Be 313.107†	1599840.3	4188.04	0.26%	[1000]	µg/L
Ca 317.933Radial†	26125.6	104.07	0.40%	[10000]	µg/L
Cd 226.502†	37562.7	466.80	1.24%	[1000]	µg/L
Co 228.616†	20690.0	237.32	1.15%	[1000]	µg/L
Cr 267.716†	47753.5	582.40	1.22%	[1000]	µg/L
Cu 324.752†	144293.8	1548.92	1.07%	[1000]	µg/L
Fe 238.204 Radial†	1585.2	1.87	0.12%	[10000]	µg/L
K 766.490 Radial†	19574.4	429.77	2.20%	[10000]	µg/L
Mg 279.077 IEC†	1657.4	4.73	0.29%	[10000]	µg/L
Mn 257.610†	313450.7	734.49	0.23%	[1000]	µg/L
Mo 202.031†	8560.0	119.98	1.40%	[1000]	µg/L
Na 589.592 Radial†	40621.7	795.95	1.96%	[10000]	µg/L

Ni 231.604†	18258.1	190.09	1.04%	[1000]	µg/L
P 214.914†	2480.9	35.24	1.42%	[5000]	µg/L
Pb 220.353†	3876.0	53.53	1.38%	[1000]	µg/L
S 181.975 Axial†	407.5	3.67	0.90%	[2000]	µg/L
Sb 206.836†	1022.9	17.12	1.67%	[1000]	µg/L
Se 196.026†	781.4	7.55	0.97%	[1000]	µg/L
SiO2†	58118.7	662.73	1.14%	[10695]	µg/L
Si 251.611†	67414.2	779.31	1.16%	[5000]	µg/L
Sn 189.927†	1946.7	30.78	1.58%	[1000]	µg/L
Sr 421.552†	199064.8	4233.36	2.13%	[1000]	µg/L
Ti 334.940†	437454.7	1212.55	0.28%	[1000]	µg/L
Tl 190.801†	652.6	9.08	1.39%	[1000]	µg/L
U 409.014†	11054.2	116.01	1.05%	[1000]	µg/L
V 292.402†	89016.9	1008.96	1.13%	[1000]	µg/L
Zn 213.857†	37691.3	475.32	1.26%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/10/2009 02:39:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	117579.4	117579.4	101	%	02:40:15
1	Al 396.153Radial†	102713.5	101759.7	[50000]	µg/L	02:40:15
1	Ca 317.933Radial†	132449.9	130966.2	[50000]	µg/L	02:40:15
1	Fe 238.204 Radial†	3188.2	3147.2	[20000]	µg/L	02:40:35
1	Mg 279.077 IEC†	8192.1	8110.4	[50000]	µg/L	02:40:35
1	Na 589.592 Radial†	80464.3	80447.7	[20000]	µg/L	02:40:15
1	Sc 361.383	2020400.8	2020400.8	99.910	%	02:41:39
1	Y 371.029	1238955.1	1238955.1	98.428	%	02:41:39
2	Sc RADIAL	117418.3	117418.3	101	%	02:40:41
2	Al 396.153Radial†	102440.1	101627.9	[50000]	µg/L	02:40:41
2	Ca 317.933Radial†	131997.2	130696.7	[50000]	µg/L	02:40:41
2	Fe 238.204 Radial†	3177.0	3140.5	[20000]	µg/L	02:41:01
2	Mg 279.077 IEC†	8154.2	8083.9	[50000]	µg/L	02:41:01
2	Na 589.592 Radial†	80330.3	80424.1	[20000]	µg/L	02:40:41
2	Sc 361.383	2020059.9	2020059.9	99.893	%	02:41:47
2	Y 371.029	1238410.6	1238410.6	98.384	%	02:41:47
3	Sc RADIAL	118489.3	118489.3	102	%	02:41:07
3	Al 396.153Radial†	99940.4	98247.7	[50000]	µg/L	02:41:07
3	Ca 317.933Radial†	128243.8	125817.1	[50000]	µg/L	02:41:07
3	Fe 238.204 Radial†	3193.2	3127.9	[20000]	µg/L	02:41:27
3	Mg 279.077 IEC†	8217.1	8072.7	[50000]	µg/L	02:41:27
3	Na 589.592 Radial†	78282.4	77687.2	[20000]	µg/L	02:41:07
3	Sc 361.383	2010279.6	2010279.6	99.409	%	02:41:55
3	Y 371.029	1234084.4	1234084.4	98.041	%	02:41:55

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2016913.5	5747.58	0.28%	99.737	%
Sc RADIAL	117829.0	577.49	0.49%	101	%
Y 371.029	1237150.0	2668.87	0.22%	98.284	%
Al 396.153Radial†	100545.1	1990.69	1.98%	[50000]	µg/L
Ca 317.933Radial†	129160.0	2898.14	2.24%	[50000]	µg/L
Fe 238.204 Radial†	3138.5	9.79	0.31%	[20000]	µg/L
Mg 279.077 IEC†	8089.0	19.38	0.24%	[50000]	µg/L
Na 589.592 Radial†	79519.7	1587.00	2.00%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	109.7	0.00000	0.999948	
Al 396.153Radial	3	Lin Thru 0	0.0	2.013	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	0.5508	0.00000	0.999977	
B 249.677	3	Lin Thru 0	0.0	23.07	0.00000	0.999986	
Ba 233.527	3	Lin Thru 0	0.0	38.99	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	1598	0.00000	0.999997	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.585	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	37.57	0.00000	0.999996	
Co 228.616	3	Lin Thru 0	0.0	20.69	0.00000	1.000000	
Cr 267.716	3	Lin Thru 0	0.0	47.68	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	144.2	0.00000	0.999995	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1572	0.00000	0.999992	
K 766.490 Radial	3	Lin Thru 0	0.0	1.954	0.00000	0.999982	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1620	0.00000	0.999987	
Mn 257.610	3	Lin Thru 0	0.0	313.2	0.00000	0.999996	
Mo 202.031	3	Lin Thru 0	0.0	8.561	0.00000	1.000000	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.993	0.00000	0.999963	

Ni 231.604	3	Lin Thru 0	0.0	18.28	0.00000	0.999993
P 214.914	3	Lin Thru 0	0.0	0.4951	0.00000	0.999990
Pb 220.353	3	Lin Thru 0	0.0	3.870	0.00000	0.999990
S 181.975 Axial	3	Lin Thru 0	0.0	0.2042	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	1.022	0.00000	0.999998
Se 196.026	3	Lin Thru 0	0.0	0.7825	0.00000	0.999985
SiO2	3	Lin Thru 0	0.0	5.446	0.00000	0.999991
Si 251.611	3	Lin Thru 0	0.0	13.51	0.00000	0.999990
Sn 189.927	3	Lin Thru 0	0.0	1.953	0.00000	0.999980
Sr 421.552	3	Lin Thru 0	0.0	199.0	0.00000	0.999998
Ti 334.940	3	Lin Thru 0	0.0	439.0	0.00000	0.999973
Tl 190.801	3	Lin Thru 0	0.0	0.6512	0.00000	0.999990
U 409.014	3	Lin Thru 0	0.0	11.03	0.00000	0.999989
V 292.402	3	Lin Thru 0	0.0	88.90	0.00000	0.999995
Zn 213.857	3	Lin Thru 0	0.0	37.73	0.00000	0.999996

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/10/2009 02:42:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	118253.7	118253.7	101	%			02:42:37
1	Al 396.153Radial†	10571.7	10303.1	5099.2	µg/L	5099.2	ppb	02:42:37
1	Ca 317.933Radial†	13538.4	12939.6	5006.6	µg/L	5006.6	ppb	02:42:57
1	Fe 238.204 Radial†	824.2	797.7	5089.8	µg/L	5089.8	ppb	02:42:57
1	K 766.490 Radial†	5468.8	4711.2	2411.1	µg/L	2411.1	ppb	02:42:37
1	Mg 279.077 IEC†	851.6	824.5	5096.1	µg/L	5096.1	ppb	02:42:57
1	Na 589.592 Radial†	9534.0	10037.1	2513.5	µg/L	2513.5	ppb	02:42:37
1	Sr 421.552†	105600.3	104211.4	523.76	µg/L	523.76	ppb	02:42:37
1	Sc 361.383	2030054.5	2030054.5	100.39	%			02:44:01
1	Y 371.029	1258208.0	1258208.0	99.957	%			02:44:01
1	Ag 328.068†	27988.3	27869.9	257.85	µg/L	257.85	ppb	02:44:06
1	As 188.979†	266.8	263.5	477.30	µg/L	477.30	ppb	02:44:27
1	B 249.677†	12099.7	11915.2	514.95	µg/L	514.95	ppb	02:44:06
1	Ba 233.527†	19765.6	19767.4	508.05	µg/L	508.05	ppb	02:44:06
1	Be 313.107†	411393.3	406290.5	254.06	µg/L	254.06	ppb	02:44:01
1	Cd 226.502†	18701.6	18728.4	498.93	µg/L	498.93	ppb	02:44:06
1	Co 228.616†	10482.5	10508.8	508.00	µg/L	508.00	ppb	02:44:06
1	Cr 267.716†	23365.3	23374.9	491.37	µg/L	491.37	ppb	02:44:06
1	Cu 324.752†	77406.1	72837.8	506.33	µg/L	506.33	ppb	02:44:06
1	Mn 257.610†	155319.3	154921.5	495.30	µg/L	495.30	ppb	02:44:01
1	Mo 202.031†	4509.2	4495.5	525.29	µg/L	525.29	ppb	02:44:27
1	Ni 231.604†	9218.5	8907.4	487.33	µg/L	487.33	ppb	02:44:06
1	P 214.914†	1447.1	1240.6	2451.4	µg/L	2451.4	ppb	02:44:27
1	Pb 220.353†	1990.9	1926.9	498.82	µg/L	498.82	ppb	02:44:27
1	S 181.975 Axial†	524.8	500.6	2449.7	µg/L	2449.7	ppb	02:44:27
1	Sb 206.836†	518.7	495.6	483.55	µg/L	483.55	ppb	02:44:27
1	Se 196.026†	1990.8	1973.2	2523.8	µg/L	2523.8	ppb	02:44:27
1	SiO2†	60530.6	57545.7	10567	µg/L	10567	ppb	02:44:06
1	Si 251.611†	67349.6	66764.6	4892.6	µg/L	4892.6	ppb	02:44:06
1	Sn 189.927†	1071.1	1044.6	537.60	µg/L	537.60	ppb	02:44:27
1	Ti 334.940†	216180.0	214571.7	488.50	µg/L	488.50	ppb	02:44:01
1	Tl 190.801†	316.0	335.2	516.96	µg/L	516.96	ppb	02:44:27
1	U 409.014†	5896.1	5142.9	465.48	µg/L	465.48	ppb	02:44:06
1	V 292.402†	43934.5	43891.8	498.56	µg/L	498.56	ppb	02:44:06
1	Zn 213.857†	19285.1	18684.0	491.27	µg/L	491.27	ppb	02:44:06
2	Sc RADIAL	117252.8	117252.8	101	%			02:43:03
2	Al 396.153Radial†	10561.5	10382.0	5138.3	µg/L	5138.3	ppb	02:43:03
2	Ca 317.933Radial†	13539.5	13054.6	5051.1	µg/L	5051.1	ppb	02:43:23
2	Fe 238.204 Radial†	825.9	806.4	5145.1	µg/L	5145.1	ppb	02:43:23
2	K 766.490 Radial†	5526.1	4814.2	2463.8	µg/L	2463.8	ppb	02:43:03
2	Mg 279.077 IEC†	850.1	830.2	5131.2	µg/L	5131.2	ppb	02:43:23
2	Na 589.592 Radial†	9450.3	10034.1	2512.8	µg/L	2512.8	ppb	02:43:03
2	Sr 421.552†	105207.8	104710.1	526.27	µg/L	526.27	ppb	02:43:03
2	Sc 361.383	2026539.7	2026539.7	100.21	%			02:44:34
2	Y 371.029	1256791.4	1256791.4	99.845	%			02:44:34
2	Ag 328.068†	28161.9	28091.5	259.89	µg/L	259.89	ppb	02:44:40
2	As 188.979†	270.5	267.7	484.93	µg/L	484.93	ppb	02:45:00
2	B 249.677†	12175.5	12011.7	519.12	µg/L	519.12	ppb	02:44:40
2	Ba 233.527†	19803.6	19839.4	509.90	µg/L	509.90	ppb	02:44:40
2	Be 313.107†	413927.5	409530.1	256.08	µg/L	256.08	ppb	02:44:34
2	Cd 226.502†	18775.7	18834.7	501.77	µg/L	501.77	ppb	02:44:40
2	Co 228.616†	10502.0	10546.3	509.81	µg/L	509.81	ppb	02:44:40
2	Cr 267.716†	23395.5	23445.4	492.86	µg/L	492.86	ppb	02:44:40
2	Cu 324.752†	77788.3	73352.9	509.91	µg/L	509.91	ppb	02:44:40
2	Mn 257.610†	156423.0	156291.2	499.68	µg/L	499.68	ppb	02:44:34
2	Mo 202.031†	4519.8	4513.9	527.44	µg/L	527.44	ppb	02:45:00
2	Ni 231.604†	9239.8	8944.6	489.37	µg/L	489.37	ppb	02:44:40
2	P 214.914†	1469.2	1265.2	2500.7	µg/L	2500.7	ppb	02:45:00
2	Pb 220.353†	2001.8	1941.3	502.53	µg/L	502.53	ppb	02:45:00

2	S 181.975 Axial†	526.7	503.4	2463.3 µg/L	2463.3 ppb	02:45:00
2	Sb 206.836†	523.6	501.4	489.20 µg/L	489.20 ppb	02:45:00
2	Se 196.026†	1989.7	1975.6	2527.0 µg/L	2527.0 ppb	02:45:00
2	SiO2†	60808.8	57927.9	10637 µg/L	10637 ppb	02:44:40
2	Si 251.611†	67522.3	67053.3	4913.8 µg/L	4913.8 ppb	02:44:40
2	Sn 189.927†	1072.4	1047.7	539.25 µg/L	539.25 ppb	02:45:00
2	Ti 334.940†	217522.1	216284.4	492.39 µg/L	492.39 ppb	02:44:34
2	Tl 190.801†	312.1	331.8	511.81 µg/L	511.81 ppb	02:45:00
2	U 409.014†	6002.1	5258.9	475.98 µg/L	475.98 ppb	02:44:40
2	V 292.402†	44068.7	44101.6	500.96 µg/L	500.96 ppb	02:44:40
2	Zn 213.857†	19329.9	18762.1	493.32 µg/L	493.32 ppb	02:44:40
3	Sc RADIAL	117095.1	117095.1	100 %		02:43:29
3	Al 396.153Radial†	10617.1	10451.6	5173.6 µg/L	5173.6 ppb	02:43:29
3	Ca 317.933Radial†	13602.6	13135.7	5082.5 µg/L	5082.5 ppb	02:43:49
3	Fe 238.204 Radial†	830.4	811.9	5180.2 µg/L	5180.2 ppb	02:43:49
3	K 766.490 Radial†	5536.0	4831.4	2472.7 µg/L	2472.7 ppb	02:43:29
3	Mg 279.077 IEC†	853.6	834.7	5158.8 µg/L	5158.8 ppb	02:43:49
3	Na 589.592 Radial†	9494.4	10090.6	2526.9 µg/L	2526.9 ppb	02:43:29
3	Sr 421.552†	105501.1	105143.2	528.45 µg/L	528.45 ppb	02:43:29
3	Sc 361.383	2023199.8	2023199.8	100.05 %		02:45:07
3	Y 371.029	1256679.8	1256679.8	99.836 %		02:45:07
3	Ag 328.068†	27856.5	27832.6	257.51 µg/L	257.51 ppb	02:45:13
3	As 188.979†	257.6	255.2	462.27 µg/L	462.27 ppb	02:45:34
3	B 249.677†	12047.9	11904.3	514.45 µg/L	514.45 ppb	02:45:13
3	Ba 233.527†	19648.7	19717.3	506.76 µg/L	506.76 ppb	02:45:13
3	Be 313.107†	413871.5	410156.0	256.47 µg/L	256.47 ppb	02:45:07
3	Cd 226.502†	18596.3	18686.3	497.81 µg/L	497.81 ppb	02:45:13
3	Co 228.616†	10405.9	10467.6	505.97 µg/L	505.97 ppb	02:45:13
3	Cr 267.716†	23138.4	23227.0	488.27 µg/L	488.27 ppb	02:45:13
3	Cu 324.752†	77072.0	72765.1	505.84 µg/L	505.84 ppb	02:45:13
3	Mn 257.610†	156264.3	156390.2	500.00 µg/L	500.00 ppb	02:45:07
3	Mo 202.031†	4359.0	4360.6	509.53 µg/L	509.53 ppb	02:45:34
3	Ni 231.604†	9107.2	8827.2	482.95 µg/L	482.95 ppb	02:45:13
3	P 214.914†	1424.4	1222.8	2415.0 µg/L	2415.0 ppb	02:45:34
3	Pb 220.353†	1946.7	1889.5	489.11 µg/L	489.11 ppb	02:45:34
3	S 181.975 Axial†	508.8	486.4	2380.0 µg/L	2380.0 ppb	02:45:34
3	Sb 206.836†	506.0	484.6	472.83 µg/L	472.83 ppb	02:45:34
3	Se 196.026†	1938.2	1927.4	2465.3 µg/L	2465.3 ppb	02:45:34
3	SiO2†	60311.5	57531.0	10565 µg/L	10565 ppb	02:45:13
3	Si 251.611†	66947.1	66589.6	4880.5 µg/L	4880.5 ppb	02:45:13
3	Sn 189.927†	1028.2	1005.3	517.52 µg/L	517.52 ppb	02:45:34
3	Ti 334.940†	217570.8	216691.5	493.32 µg/L	493.32 ppb	02:45:07
3	Tl 190.801†	311.0	331.2	510.87 µg/L	510.87 ppb	02:45:34
3	U 409.014†	5973.8	5240.5	474.31 µg/L	474.31 ppb	02:45:13
3	V 292.402†	43700.4	43806.0	497.51 µg/L	497.51 ppb	02:45:13
3	Zn 213.857†	19164.5	18628.6	489.81 µg/L	489.81 ppb	02:45:13

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026598.0	100.22	%	0.170				0.17%
Sc RADIAL	117533.9	101	%	0.5				0.53%
Y 371.029	1257226.4	99.879	%	0.0677				0.07%
Ag 328.068†	27931.3	258.42	µg/L	1.287	258.42	ppb	1.287	0.50%
QC value within limits for Ag 328.068 Recovery = 103.37%								
Al 396.153Radial†	10378.9	5137.0	µg/L	37.20	5137.0	ppb	37.20	0.72%
QC value within limits for Al 396.153Radial Recovery = 102.74%								
As 188.979†	262.2	474.83	µg/L	11.528	474.83	ppb	11.528	2.43%
QC value within limits for As 188.979 Recovery = 94.97%								
B 249.677†	11943.7	516.17	µg/L	2.563	516.17	ppb	2.563	0.50%
QC value within limits for B 249.677 Recovery = 103.23%								
Ba 233.527†	19774.7	508.24	µg/L	1.578	508.24	ppb	1.578	0.31%
QC value within limits for Ba 233.527 Recovery = 101.65%								
Be 313.107†	408658.9	255.54	µg/L	1.297	255.54	ppb	1.297	0.51%
QC value within limits for Be 313.107 Recovery = 102.22%								
Ca 317.933Radial†	13043.3	5046.7	µg/L	38.13	5046.7	ppb	38.13	0.76%
QC value within limits for Ca 317.933Radial Recovery = 100.93%								
Cd 226.502†	18749.8	499.50	µg/L	2.041	499.50	ppb	2.041	0.41%
QC value within limits for Cd 226.502 Recovery = 99.90%								
Co 228.616†	10507.5	507.93	µg/L	1.925	507.93	ppb	1.925	0.38%

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   QC value within limits for Co 228.616  Recovery = 101.59%
Cr 267.716†            23349.1      490.83 µg/L        2.342      490.83 ppb        2.342   0.48%
   QC value within limits for Cr 267.716  Recovery = 98.17%
Cu 324.752†            72985.2      507.36 µg/L        2.223      507.36 ppb        2.223   0.44%
   QC value within limits for Cu 324.752  Recovery = 101.47%
Fe 238.204 Radial†       805.3      5138.4 µg/L       45.56      5138.4 ppb       45.56   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.77%
K 766.490 Radial†       4785.6      2449.2 µg/L       33.27      2449.2 ppb       33.27   1.36%
   QC value within limits for K 766.490 Radial  Recovery = 97.97%
Mg 279.077 IEC†          829.8      5128.7 µg/L       31.41      5128.7 ppb       31.41   0.61%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.57%
Mn 257.610†           155867.7      498.33 µg/L        2.626      498.33 ppb        2.626   0.53%
   QC value within limits for Mn 257.610  Recovery = 99.67%
Mo 202.031†             4456.6      520.75 µg/L        9.777      520.75 ppb        9.777   1.88%
   QC value within limits for Mo 202.031  Recovery = 104.15%
Na 589.592 Radial†     10054.0      2517.8 µg/L        7.96      2517.8 ppb        7.96   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 100.71%
Ni 231.604†             8893.1      486.55 µg/L        3.281      486.55 ppb        3.281   0.67%
   QC value within limits for Ni 231.604  Recovery = 97.31%
P 214.914†              1242.9      2455.7 µg/L       42.99      2455.7 ppb       42.99   1.75%
   QC value within limits for P 214.914  Recovery = 98.23%
Pb 220.353†             1919.2      496.82 µg/L        6.931      496.82 ppb        6.931   1.40%
   QC value within limits for Pb 220.353  Recovery = 99.36%
S 181.975 Axial†         496.8      2431.0 µg/L       44.69      2431.0 ppb       44.69   1.84%
   QC value within limits for S 181.975 Axial  Recovery = 97.24%
Sb 206.836†              493.9      481.86 µg/L        8.316      481.86 ppb        8.316   1.73%
   QC value within limits for Sb 206.836  Recovery = 96.37%
Se 196.026†             1958.7      2505.4 µg/L       34.74      2505.4 ppb       34.74   1.39%
   QC value within limits for Se 196.026  Recovery = 100.21%
SiO2†                  57668.2       10590 µg/L        41.3       10590 ppb        41.3   0.39%
   QC value within limits for SiO2  Recovery = 99.02%
Si 251.611†            66802.5      4895.6 µg/L       16.81      4895.6 ppb       16.81   0.34%
   QC value within limits for Si 251.611  Recovery = 97.91%
Sn 189.927†             1032.5      531.46 µg/L       12.100      531.46 ppb       12.100   2.28%
   QC value within limits for Sn 189.927  Recovery = 106.29%
Sr 421.552†           104688.2      526.16 µg/L        2.343      526.16 ppb        2.343   0.45%
   QC value within limits for Sr 421.552  Recovery = 105.23%
Ti 334.940†           215849.2      491.40 µg/L        2.560      491.40 ppb        2.560   0.52%
   QC value within limits for Ti 334.940  Recovery = 98.28%
Tl 190.801†              332.7      513.21 µg/L        3.283      513.21 ppb        3.283   0.64%
   QC value within limits for Tl 190.801  Recovery = 102.64%
U 409.014†              5214.1      471.92 µg/L        5.646      471.92 ppb        5.646   1.20%
   QC value within limits for U 409.014  Recovery = 94.38%
V 292.402†             43933.1      499.01 µg/L        1.768      499.01 ppb        1.768   0.35%
   QC value within limits for V 292.402  Recovery = 99.80%
Zn 213.857†            18691.6      491.47 µg/L        1.761      491.47 ppb        1.761   0.36%
   QC value within limits for Zn 213.857  Recovery = 98.29%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/10/2009 02:45:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114557.6	114557.6	98.2	%			02:46:16
1	Al 396.153Radial†	162.5	42.2	20.921	µg/L	20.921	ppb	02:46:16
1	Ca 317.933Radial†	416.5	11.3	4.3776	µg/L	4.3776	ppb	02:46:37
1	Fe 238.204 Radial†	17.3	2.4	15.286	µg/L	15.286	ppb	02:46:37
1	K 766.490 Radial†	624.9	-46.2	-23.667	µg/L	-23.667	ppb	02:46:16
1	Mg 279.077 IEC†	9.0	-6.3	-38.899	µg/L	-38.899	ppb	02:46:37
1	Na 589.592 Radial†	-637.4	-14.8	-3.7070	µg/L	-3.7070	ppb	02:46:16
1	Sr 421.552†	-52.2	9.2	0.0463	µg/L	0.0463	ppb	02:46:16
1	Sc 361.383	1993683.0	1993683.0	98.589	%			02:47:39
1	Y 371.029	1242102.5	1242102.5	98.678	%			02:47:39
1	Ag 328.068†	84.8	75.6	0.6939	µg/L	0.6939	ppb	02:47:44
1	As 188.979†	6.0	3.8	6.9356	µg/L	6.9356	ppb	02:48:05
1	B 249.677†	201.0	66.0	2.8557	µg/L	2.8557	ppb	02:48:05
1	Ba 233.527†	-56.3	20.9	0.5373	µg/L	0.5373	ppb	02:48:05
1	Be 313.107†	4077.6	620.1	0.3877	µg/L	0.3877	ppb	02:47:44
1	Cd 226.502†	-66.5	31.6	0.8372	µg/L	0.8372	ppb	02:48:05
1	Co 228.616†	-59.2	6.6	0.3167	µg/L	0.3167	ppb	02:48:05
1	Cr 267.716†	-81.3	17.3	0.3647	µg/L	0.3647	ppb	02:47:44
1	Cu 324.752†	4264.0	55.2	0.3863	µg/L	0.3863	ppb	02:47:44
1	Mn 257.610†	-57.8	142.7	0.4575	µg/L	0.4575	ppb	02:48:05
1	Mo 202.031†	1.5	5.2	0.6065	µg/L	0.6065	ppb	02:48:05
1	Ni 231.604†	285.7	14.2	0.7768	µg/L	0.7768	ppb	02:48:05
1	P 214.914†	203.7	5.7	11.442	µg/L	11.442	ppb	02:48:05
1	Pb 220.353†	52.4	-3.1	-0.8008	µg/L	-0.8008	ppb	02:48:05
1	S 181.975 Axial†	26.6	4.8	23.664	µg/L	23.664	ppb	02:48:05
1	Sb 206.836†	17.9	-3.0	-2.9003	µg/L	-2.9003	ppb	02:48:05
1	Se 196.026†	17.1	7.5	9.6292	µg/L	9.6292	ppb	02:48:05
1	SiO2†	2802.0	90.7	16.661	µg/L	16.661	ppb	02:47:44
1	Si 251.611†	380.1	60.4	4.3182	µg/L	4.3182	ppb	02:48:05
1	Sn 189.927†	27.8	5.7	2.9337	µg/L	2.9337	ppb	02:48:05
1	Ti 334.940†	1166.6	408.9	0.9311	µg/L	0.9311	ppb	02:47:44
1	Tl 190.801†	-24.7	-4.7	-7.1707	µg/L	-7.1707	ppb	02:48:05
1	U 409.014†	684.6	-36.0	-3.2694	µg/L	-3.2694	ppb	02:47:44
1	V 292.402†	-83.2	42.4	0.4767	µg/L	0.4767	ppb	02:47:44
1	Zn 213.857†	547.1	28.3	0.7460	µg/L	0.7460	ppb	02:48:05
2	Sc RADIAL	114325.9	114325.9	98.0	%			02:46:42
2	Al 396.153Radial†	150.9	30.6	15.182	µg/L	15.182	ppb	02:46:42
2	Ca 317.933Radial†	417.0	12.6	4.8884	µg/L	4.8884	ppb	02:47:03
2	Fe 238.204 Radial†	15.5	0.7	4.4025	µg/L	4.4025	ppb	02:47:03
2	K 766.490 Radial†	639.6	-30.0	-15.364	µg/L	-15.364	ppb	02:46:42
2	Mg 279.077 IEC†	14.7	-0.4	-2.7607	µg/L	-2.7607	ppb	02:47:03
2	Na 589.592 Radial†	-610.4	11.4	2.8562	µg/L	2.8562	ppb	02:46:42
2	Sr 421.552†	-7.6	54.6	0.2743	µg/L	0.2743	ppb	02:46:42
2	Sc 361.383	1993045.4	1993045.4	98.557	%			02:48:11
2	Y 371.029	1242168.7	1242168.7	98.683	%			02:48:11
2	Ag 328.068†	98.8	89.9	0.8206	µg/L	0.8206	ppb	02:48:16
2	As 188.979†	3.5	1.3	2.3811	µg/L	2.3811	ppb	02:48:37
2	B 249.677†	183.9	48.8	2.1121	µg/L	2.1121	ppb	02:48:37
2	Ba 233.527†	-51.5	25.8	0.6624	µg/L	0.6624	ppb	02:48:37
2	Be 313.107†	3759.4	298.6	0.1866	µg/L	0.1866	ppb	02:48:16
2	Cd 226.502†	-76.1	21.8	0.5833	µg/L	0.5833	ppb	02:48:37
2	Co 228.616†	-66.0	-0.3	-0.0145	µg/L	-0.0145	ppb	02:48:37
2	Cr 267.716†	-112.4	-14.3	-0.2990	µg/L	-0.2990	ppb	02:48:16
2	Cu 324.752†	4194.0	-14.3	-0.0985	µg/L	-0.0985	ppb	02:48:16
2	Mn 257.610†	-104.3	95.5	0.3055	µg/L	0.3055	ppb	02:48:37
2	Mo 202.031†	3.3	7.1	0.8237	µg/L	0.8237	ppb	02:48:37
2	Ni 231.604†	295.4	24.2	1.3214	µg/L	1.3214	ppb	02:48:37
2	P 214.914†	194.4	-3.7	-7.4496	µg/L	-7.4496	ppb	02:48:37
2	Pb 220.353†	59.9	4.5	1.1651	µg/L	1.1651	ppb	02:48:37

2	S 181.975 Axial†	28.2	6.4	31.387 µg/L	31.387 ppb	02:48:37
2	Sb 206.836†	21.2	0.4	0.3885 µg/L	0.3885 ppb	02:48:37
2	Se 196.026†	16.4	6.8	8.6516 µg/L	8.6516 ppb	02:48:37
2	SiO2†	2740.3	29.1	5.3415 µg/L	5.3415 ppb	02:48:16
2	Si 251.611†	385.3	65.7	4.8142 µg/L	4.8142 ppb	02:48:37
2	Sn 189.927†	22.8	0.7	0.3848 µg/L	0.3848 ppb	02:48:37
2	Ti 334.940†	1084.0	325.5	0.7411 µg/L	0.7411 ppb	02:48:16
2	Tl 190.801†	-21.4	-1.3	-1.9814 µg/L	-1.9814 ppb	02:48:37
2	U 409.014†	762.9	43.6	3.9560 µg/L	3.9560 ppb	02:48:16
2	V 292.402†	-112.5	12.6	0.1542 µg/L	0.1542 ppb	02:48:16
2	Zn 213.857†	539.5	20.8	0.5439 µg/L	0.5439 ppb	02:48:37
3	Sc RADIAL	112118.0	112118.0	96.1 %		02:47:08
3	Al 396.153Radial†	121.3	2.9	1.4154 µg/L	1.4154 ppb	02:47:08
3	Ca 317.933Radial†	468.8	74.9	28.964 µg/L	28.964 ppb	02:47:28
3	Fe 238.204 Radial†	22.6	8.4	53.142 µg/L	53.142 ppb	02:47:28
3	K 766.490 Radial†	725.0	71.7	36.676 µg/L	36.676 ppb	02:47:08
3	Mg 279.077 IEC†	23.0	8.5	52.405 µg/L	52.405 ppb	02:47:28
3	Na 589.592 Radial†	-600.1	9.9	2.4705 µg/L	2.4705 ppb	02:47:08
3	Sr 421.552†	-61.2	-1.3	-0.0066 µg/L	-0.0066 ppb	02:47:08
3	Sc 361.383	2021689.1	2021689.1	99.974 %		02:48:43
3	Y 371.029	1256954.7	1256954.7	99.858 %		02:48:43
3	Ag 328.068†	119.2	108.8	0.9973 µg/L	0.9973 ppb	02:48:48
3	As 188.979†	6.4	4.2	7.6108 µg/L	7.6108 ppb	02:49:09
3	B 249.677†	155.3	17.5	0.7400 µg/L	0.7400 ppb	02:49:09
3	Ba 233.527†	-67.3	10.7	0.2753 µg/L	0.2753 ppb	02:49:09
3	Be 313.107†	3756.1	241.2	0.1508 µg/L	0.1508 ppb	02:48:48
3	Cd 226.502†	-77.8	21.2	0.5589 µg/L	0.5589 ppb	02:49:09
3	Co 228.616†	-60.7	5.9	0.2849 µg/L	0.2849 ppb	02:49:09
3	Cr 267.716†	-138.1	-38.3	-0.8029 µg/L	-0.8029 ppb	02:48:48
3	Cu 324.752†	4223.1	-45.6	-0.3047 µg/L	-0.3047 ppb	02:48:48
3	Mn 257.610†	-133.7	67.6	0.2226 µg/L	0.2226 ppb	02:49:09
3	Mo 202.031†	-0.6	3.0	0.3556 µg/L	0.3556 ppb	02:49:09
3	Ni 231.604†	280.2	4.7	0.2581 µg/L	0.2581 ppb	02:49:09
3	P 214.914†	192.6	-8.3	-16.786 µg/L	-16.786 ppb	02:49:09
3	Pb 220.353†	48.5	-7.7	-2.0002 µg/L	-2.0002 ppb	02:49:09
3	S 181.975 Axial†	25.9	3.7	18.204 µg/L	18.204 ppb	02:49:09
3	Sb 206.836†	26.2	5.1	4.9871 µg/L	4.9871 ppb	02:49:09
3	Se 196.026†	11.2	1.3	1.6891 µg/L	1.6891 ppb	02:49:09
3	SiO2†	2773.5	22.9	4.2038 µg/L	4.2038 ppb	02:48:48
3	Si 251.611†	360.3	35.2	2.6466 µg/L	2.6466 ppb	02:49:09
3	Sn 189.927†	18.5	-3.9	-1.9748 µg/L	-1.9748 ppb	02:49:09
3	Ti 334.940†	991.3	217.1	0.4930 µg/L	0.4930 ppb	02:48:48
3	Tl 190.801†	-20.4	-0.0	-0.0160 µg/L	-0.0160 ppb	02:49:09
3	U 409.014†	712.4	-17.8	-1.6275 µg/L	-1.6275 ppb	02:48:48
3	V 292.402†	-114.0	12.8	0.1476 µg/L	0.1476 ppb	02:48:48
3	Zn 213.857†	537.1	10.6	0.2722 µg/L	0.2722 ppb	02:49:09

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2002805.8	99.040	%	0.8088				0.82%
Sc RADIAL	113667.2	97.5	%	1.15				1.18%
Y 371.029	1247075.3	99.073	%	0.6797				0.69%
Ag 328.068†	91.4	0.8372	µg/L	0.15243	0.8372	ppb	0.15243	18.21%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	25.2	12.506	µg/L	10.0242	12.506	ppb	10.0242	80.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.1	5.6425	µg/L	2.84456	5.6425	ppb	2.84456	50.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	44.1	1.9026	µg/L	1.07329	1.9026	ppb	1.07329	56.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.1	0.4917	µg/L	0.19752	0.4917	ppb	0.19752	40.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	386.7	0.2417	µg/L	0.12773	0.2417	ppb	0.12773	52.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	32.9	12.743	µg/L	14.0501	12.743	ppb	14.0501	110.25%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	24.8	0.6598	µg/L	0.15407	0.6598	ppb	0.15407	23.35%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.1	0.1957	µg/L	0.18270	0.1957	ppb	0.18270	93.35%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -11.7     -0.2457 µg/L       0.58563     -0.2457 ppb        0.58563 238.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -1.6     -0.0056 µg/L       0.35474     -0.0056 ppb        0.35474 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.8      24.277 µg/L       25.5834      24.277 ppb        25.5834 105.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -1.5     -0.7850 µg/L      32.70716     -0.7850 ppb       32.70716 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.6      3.5817 µg/L      45.98133      3.5817 ppb       45.98133 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              101.9      0.3286 µg/L       0.11914      0.3286 ppb        0.11914  36.26%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.1      0.5953 µg/L       0.23422      0.5953 ppb        0.23422  39.35%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         2.2      0.5399 µg/L       3.68297      0.5399 ppb        3.68297 682.17%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.4      0.7855 µg/L       0.53171      0.7855 ppb        0.53171  67.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.1     -4.2643 µg/L      14.38110     -4.2643 ppb       14.38110 337.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.1     -0.5453 µg/L       1.59802     -0.5453 ppb        1.59802 293.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           5.0      24.419 µg/L        6.6239      24.419 ppb         6.6239  27.13%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.8      0.8251 µg/L       3.96177      0.8251 ppb        3.96177 480.16%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.2      6.6566 µg/L       4.32972      6.6566 ppb        4.32972  65.04%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     47.6      8.7356 µg/L       6.88753      8.7356 ppb        6.88753  78.84%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               53.8      3.9263 µg/L       1.13572      3.9263 ppb        1.13572  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.9      0.4479 µg/L       2.45488      0.4479 ppb        2.45488 548.12%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               20.8      0.1047 µg/L       0.14928      0.1047 ppb        0.14928 142.64%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              317.2      0.7217 µg/L       0.21972      0.7217 ppb        0.21972  30.44%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.0     -3.0560 µg/L       3.69642     -3.0560 ppb        3.69642 120.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -3.4     -0.3137 µg/L       3.78768     -0.3137 ppb        3.78768 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                22.6      0.2595 µg/L       0.18810      0.2595 ppb        0.18810  72.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               19.9      0.5207 µg/L       0.23773      0.5207 ppb        0.23773  45.65%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/10/2009 02:49:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115322.0	115322.0	98.9	%			02:49:51
1	Al 396.153Radial†	556.3	439.3	217.89	µg/L	217.89	ppb	02:49:51
1	Ca 317.933Radial†	947.0	544.9	210.85	µg/L	210.85	ppb	02:50:11
1	Fe 238.204 Radial†	36.7	21.9	139.59	µg/L	139.59	ppb	02:50:11
1	K 766.490 Radial†	1010.1	339.0	173.51	µg/L	173.51	ppb	02:49:51
1	Mg 279.077 IEC†	63.4	48.7	300.59	µg/L	300.59	ppb	02:50:11
1	Na 589.592 Radial†	641.8	1283.2	321.34	µg/L	321.34	ppb	02:49:51
1	Sr 421.552†	966.2	1039.5	5.2245	µg/L	5.2245	ppb	02:49:51
1	Sc 361.383	2008463.3	2008463.3	99.320	%			02:51:13
1	Y 371.029	1249809.3	1249809.3	99.290	%			02:51:13
1	Ag 328.068†	651.9	646.0	5.9341	µg/L	5.9341	ppb	02:51:19
1	As 188.979†	16.8	14.7	26.661	µg/L	26.661	ppb	02:51:39
1	B 249.677†	1270.9	1141.7	49.451	µg/L	49.451	ppb	02:51:19
1	Ba 233.527†	127.0	205.9	5.2929	µg/L	5.2929	ppb	02:51:39
1	Be 313.107†	11369.7	7931.7	4.9613	µg/L	4.9613	ppb	02:51:19
1	Cd 226.502†	90.6	190.2	5.0993	µg/L	5.0993	ppb	02:51:39
1	Co 228.616†	26.6	93.5	4.5307	µg/L	4.5307	ppb	02:51:39
1	Cr 267.716†	123.6	224.2	4.7140	µg/L	4.7140	ppb	02:51:19
1	Cu 324.752†	5710.7	1480.1	10.296	µg/L	10.296	ppb	02:51:19
1	Mn 257.610†	2970.2	3191.9	10.209	µg/L	10.209	ppb	02:51:19
1	Mo 202.031†	85.4	89.7	10.478	µg/L	10.478	ppb	02:51:39
1	Ni 231.604†	369.3	96.2	5.2646	µg/L	5.2646	ppb	02:51:39
1	P 214.914†	266.6	67.5	135.21	µg/L	135.21	ppb	02:51:39
1	Pb 220.353†	91.0	35.4	9.1262	µg/L	9.1262	ppb	02:51:39
1	S 181.975 Axial†	43.3	21.4	104.70	µg/L	104.70	ppb	02:51:39
1	Sb 206.836†	25.8	4.9	4.7700	µg/L	4.7700	ppb	02:51:39
1	Se 196.026†	42.4	32.8	41.910	µg/L	41.910	ppb	02:51:39
1	SiO2†	3925.0	1200.5	220.45	µg/L	220.45	ppb	02:51:19
1	Si 251.611†	1656.6	1342.8	98.556	µg/L	98.556	ppb	02:51:39
1	Sn 189.927†	41.3	19.2	9.9508	µg/L	9.9508	ppb	02:51:39
1	Ti 334.940†	3070.5	2317.1	5.2664	µg/L	5.2664	ppb	02:51:19
1	Tl 190.801†	-6.4	14.0	21.477	µg/L	21.477	ppb	02:51:39
1	U 409.014†	1368.6	647.5	58.689	µg/L	58.689	ppb	02:51:19
1	V 292.402†	316.9	445.8	5.1946	µg/L	5.1946	ppb	02:51:19
1	Zn 213.857†	906.4	386.0	10.165	µg/L	10.165	ppb	02:51:39
2	Sc RADIAL	115523.7	115523.7	99.1	%			02:50:17
2	Al 396.153Radial†	532.9	414.7	205.65	µg/L	205.65	ppb	02:50:17
2	Ca 317.933Radial†	939.0	535.2	207.09	µg/L	207.09	ppb	02:50:37
2	Fe 238.204 Radial†	33.8	19.0	120.97	µg/L	120.97	ppb	02:50:37
2	K 766.490 Radial†	1028.8	356.2	182.30	µg/L	182.30	ppb	02:50:17
2	Mg 279.077 IEC†	68.4	53.6	331.29	µg/L	331.29	ppb	02:50:37
2	Na 589.592 Radial†	652.2	1292.5	323.68	µg/L	323.68	ppb	02:50:17
2	Sr 421.552†	954.5	1025.9	5.1564	µg/L	5.1564	ppb	02:50:17
2	Sc 361.383	2015459.0	2015459.0	99.665	%			02:51:46
2	Y 371.029	1256823.8	1256823.8	99.847	%			02:51:46
2	Ag 328.068†	556.5	548.0	5.0389	µg/L	5.0389	ppb	02:51:51
2	As 188.979†	18.6	16.4	29.742	µg/L	29.742	ppb	02:52:12
2	B 249.677†	1272.3	1138.7	49.327	µg/L	49.327	ppb	02:51:51
2	Ba 233.527†	119.4	197.9	5.0854	µg/L	5.0854	ppb	02:52:12
2	Be 313.107†	11424.6	7947.1	4.9709	µg/L	4.9709	ppb	02:51:51
2	Cd 226.502†	91.2	190.4	5.0976	µg/L	5.0976	ppb	02:52:12
2	Co 228.616†	31.1	97.9	4.7428	µg/L	4.7428	ppb	02:52:12
2	Cr 267.716†	138.5	238.7	5.0182	µg/L	5.0182	ppb	02:51:51
2	Cu 324.752†	5720.5	1469.9	10.222	µg/L	10.222	ppb	02:51:51
2	Mn 257.610†	3029.4	3240.9	10.364	µg/L	10.364	ppb	02:51:51
2	Mo 202.031†	86.0	90.0	10.513	µg/L	10.513	ppb	02:52:12
2	Ni 231.604†	385.2	110.9	6.0691	µg/L	6.0691	ppb	02:52:12
2	P 214.914†	274.4	74.4	149.23	µg/L	149.23	ppb	02:52:12
2	Pb 220.353†	96.1	40.2	10.374	µg/L	10.374	ppb	02:52:12

2	S 181.975 Axial†	44.2	22.2	108.55 µg/L	108.55 ppb	02:52:12
2	Sb 206.836†	34.3	13.3	12.965 µg/L	12.965 ppb	02:52:12
2	Se 196.026†	46.4	36.7	46.905 µg/L	46.905 ppb	02:52:12
2	SiO2†	3881.9	1143.6	210.00 µg/L	210.00 ppb	02:51:51
2	Si 251.611†	1658.5	1338.9	98.166 µg/L	98.166 ppb	02:52:12
2	Sn 189.927†	46.1	23.8	12.323 µg/L	12.323 ppb	02:52:12
2	Ti 334.940†	3148.5	2384.7	5.4205 µg/L	5.4205 ppb	02:51:51
2	Tl 190.801†	-10.9	9.5	14.556 µg/L	14.556 ppb	02:52:12
2	U 409.014†	1217.7	491.4	44.533 µg/L	44.533 ppb	02:51:51
2	V 292.402†	311.2	438.9	5.0928 µg/L	5.0928 ppb	02:51:51
2	Zn 213.857†	900.6	376.9	9.9224 µg/L	9.9224 ppb	02:52:12
3	Sc RADIAL	114605.5	114605.5	98.3 %		02:50:43
3	Al 396.153Radial†	570.2	456.9	226.64 µg/L	226.64 ppb	02:50:43
3	Ca 317.933Radial†	920.6	524.1	202.77 µg/L	202.77 ppb	02:51:03
3	Fe 238.204 Radial†	35.0	20.4	129.93 µg/L	129.93 ppb	02:51:03
3	K 766.490 Radial†	1005.7	341.0	174.50 µg/L	174.50 ppb	02:50:43
3	Mg 279.077 IEC†	62.3	48.0	296.25 µg/L	296.25 ppb	02:51:03
3	Na 589.592 Radial†	596.4	1241.1	310.80 µg/L	310.80 ppb	02:50:43
3	Sr 421.552†	965.6	1044.9	5.2517 µg/L	5.2517 ppb	02:50:43
3	Sc 361.383	2024345.6	2024345.6	100.10 %		02:52:18
3	Y 371.029	1263256.8	1263256.8	100.36 %		02:52:18
3	Ag 328.068†	582.5	571.5	5.2543 µg/L	5.2543 ppb	02:52:23
3	As 188.979†	18.2	16.0	28.974 µg/L	28.974 ppb	02:52:44
3	B 249.677†	1244.1	1104.9	47.859 µg/L	47.859 ppb	02:52:23
3	Ba 233.527†	117.2	195.1	5.0147 µg/L	5.0147 ppb	02:52:44
3	Be 313.107†	11278.2	7750.5	4.8480 µg/L	4.8480 ppb	02:52:23
3	Cd 226.502†	81.0	179.9	4.8190 µg/L	4.8190 ppb	02:52:44
3	Co 228.616†	33.9	100.6	4.8719 µg/L	4.8719 ppb	02:52:44
3	Cr 267.716†	131.8	231.5	4.8657 µg/L	4.8657 ppb	02:52:23
3	Cu 324.752†	5701.2	1425.5	9.9155 µg/L	9.9155 ppb	02:52:23
3	Mn 257.610†	2953.5	3151.8	10.080 µg/L	10.080 ppb	02:52:23
3	Mo 202.031†	84.0	87.6	10.239 µg/L	10.239 ppb	02:52:44
3	Ni 231.604†	373.8	97.8	5.3508 µg/L	5.3508 ppb	02:52:44
3	P 214.914†	267.3	66.1	132.42 µg/L	132.42 ppb	02:52:44
3	Pb 220.353†	91.6	35.3	9.1064 µg/L	9.1064 ppb	02:52:44
3	S 181.975 Axial†	40.4	18.2	89.053 µg/L	89.053 ppb	02:52:44
3	Sb 206.836†	23.9	2.8	2.6916 µg/L	2.6916 ppb	02:52:44
3	Se 196.026†	34.7	24.8	31.669 µg/L	31.669 ppb	02:52:44
3	SiO2†	3909.0	1153.5	211.82 µg/L	211.82 ppb	02:52:23
3	Si 251.611†	1646.8	1319.8	96.955 µg/L	96.955 ppb	02:52:44
3	Sn 189.927†	36.9	14.4	7.5091 µg/L	7.5091 ppb	02:52:44
3	Ti 334.940†	3105.4	2327.7	5.2909 µg/L	5.2909 ppb	02:52:23
3	Tl 190.801†	-5.1	15.2	23.422 µg/L	23.422 ppb	02:52:44
3	U 409.014†	1281.7	549.9	49.844 µg/L	49.844 ppb	02:52:23
3	V 292.402†	313.2	439.6	5.1073 µg/L	5.1073 ppb	02:52:23
3	Zn 213.857†	898.7	371.1	9.7717 µg/L	9.7717 ppb	02:52:44

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2016089.3	99.697	%	0.3936				0.39%
Sc RADIAL	115150.4	98.7	%	0.41				0.42%
Y 371.029	1256630.0	99.832	%	0.5343				0.54%
Ag 328.068†	588.5	5.4091	µg/L	0.46727	5.4091	ppb	0.46727	8.64%
QC value within limits for Ag 328.068 Recovery = 108.18%								
Al 396.153Radial†	437.0	216.73	µg/L	10.544	216.73	ppb	10.544	4.87%
QC value within limits for Al 396.153Radial Recovery = 108.36%								
As 188.979†	15.7	28.459	µg/L	1.6037	28.459	ppb	1.6037	5.64%
QC value within limits for As 188.979 Recovery = 94.86%								
B 249.677†	1128.4	48.879	µg/L	0.8857	48.879	ppb	0.8857	1.81%
QC value within limits for B 249.677 Recovery = 97.76%								
Ba 233.527†	199.6	5.1310	µg/L	0.14457	5.1310	ppb	0.14457	2.82%
QC value within limits for Ba 233.527 Recovery = 102.62%								
Be 313.107†	7876.4	4.9267	µg/L	0.06839	4.9267	ppb	0.06839	1.39%
QC value within limits for Be 313.107 Recovery = 98.53%								
Ca 317.933Radial†	534.7	206.90	µg/L	4.042	206.90	ppb	4.042	1.95%
QC value within limits for Ca 317.933Radial Recovery = 103.45%								
Cd 226.502†	186.8	5.0053	µg/L	0.16132	5.0053	ppb	0.16132	3.22%
QC value within limits for Cd 226.502 Recovery = 100.11%								
Co 228.616†	97.3	4.7151	µg/L	0.17226	4.7151	ppb	0.17226	3.65%

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   QC value within limits for Co 228.616  Recovery = 94.30%
Cr 267.716†              231.5      4.8660 µg/L       0.15212      4.8660 ppb        0.15212   3.13%
   QC value within limits for Cr 267.716  Recovery = 97.32%
Cu 324.752†             1458.5      10.145 µg/L        0.2018      10.145 ppb         0.2018   1.99%
   QC value within limits for Cu 324.752  Recovery = 101.45%
Fe 238.204 Radial†        20.4      130.17 µg/L         9.310      130.17 ppb          9.310   7.15%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 130.17%
K 766.490 Radial†        345.4      176.77 µg/L         4.815      176.77 ppb          4.815   2.72%
   QC value within limits for K 766.490 Radial  Recovery = 117.84%
Mg 279.077 IEC†           50.1      309.38 µg/L        19.098      309.38 ppb         19.098   6.17%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.13%
Mn 257.610†             3194.9      10.218 µg/L        0.1420      10.218 ppb         0.1420   1.39%
   QC value within limits for Mn 257.610  Recovery = 102.18%
Mo 202.031†               89.1      10.410 µg/L        0.1491      10.410 ppb         0.1491   1.43%
   QC value within limits for Mo 202.031  Recovery = 104.10%
Na 589.592 Radial†      1272.3      318.61 µg/L         6.866      318.61 ppb          6.866   2.15%
   QC value within limits for Na 589.592 Radial  Recovery = 106.20%
Ni 231.604†              101.7      5.5615 µg/L       0.44174      5.5615 ppb        0.44174   7.94%
   QC value within limits for Ni 231.604  Recovery = 111.23%
P 214.914†                69.3      138.95 µg/L         9.013      138.95 ppb          9.013   6.49%
   QC value within limits for P 214.914  Recovery = 92.64%
Pb 220.353†               36.9      9.5355 µg/L       0.72606      9.5355 ppb        0.72606   7.61%
   QC value within limits for Pb 220.353  Recovery = 95.35%
S 181.975 Axial†          20.6      100.77 µg/L        10.325      100.77 ppb         10.325  10.25%
   QC value within limits for S 181.975 Axial  Recovery = 100.77%
Sb 206.836†                7.0      6.8090 µg/L       5.43193      6.8090 ppb        5.43193  79.78%
   QC value less than the lower limit for Sb 206.836  Recovery = 68.09%
Se 196.026†               31.4      40.161 µg/L        7.7671      40.161 ppb         7.7671  19.34%
   QC value greater than the upper limit for Se 196.026  Recovery = 133.87%
SiO2†                   1165.9      214.09 µg/L         5.585      214.09 ppb          5.585   2.61%
   QC value within limits for SiO2  Recovery = 100.51%
Si 251.611†             1333.8      97.893 µg/L        0.8347      97.893 ppb         0.8347   0.85%
   QC value within limits for Si 251.611  Recovery = 97.89%
Sn 189.927†               19.1      9.9277 µg/L       2.40711      9.9277 ppb        2.40711  24.25%
   QC value within limits for Sn 189.927  Recovery = 99.28%
Sr 421.552†             1036.8      5.2109 µg/L       0.04911      5.2109 ppb        0.04911   0.94%
   QC value within limits for Sr 421.552  Recovery = 104.22%
Ti 334.940†             2343.2      5.3259 µg/L       0.08282      5.3259 ppb        0.08282   1.56%
   QC value within limits for Ti 334.940  Recovery = 106.52%
Tl 190.801†               12.9      19.818 µg/L        4.6603      19.818 ppb         4.6603  23.52%
   QC value within limits for Tl 190.801  Recovery = 99.09%
U 409.014†               562.9      51.022 µg/L        7.1510      51.022 ppb         7.1510  14.02%
   QC value within limits for U 409.014  Recovery = 102.04%
V 292.402†               441.5      5.1315 µg/L       0.05505      5.1315 ppb        0.05505   1.07%
   QC value within limits for V 292.402  Recovery = 102.63%
Zn 213.857†              378.0      9.9531 µg/L       0.19848      9.9531 ppb        0.19848   1.99%
   QC value within limits for Zn 213.857  Recovery = 99.53%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/10/2009 02:52:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112284.4	112284.4	96.3	%			02:53:34
1	Al 396.153Radial†	1015707.8	1054881.9	524130	µg/L	524130	ppb	02:53:28
1	Ca 317.933Radial†	1243220.2	1290907.3	499480	µg/L	499480	ppb	02:53:28
1	Fe 238.204 Radial†	28495.3	29582.6	188130	µg/L	188130	ppb	02:53:34
1	K 766.490 Radial†	709.1	54.0	27.649	µg/L	27.649	ppb	02:53:34
1	Mg 279.077 IEC†	76114.9	79044.3	487750	µg/L	487750	ppb	02:53:34
1	Na 589.592 Radial†	-514.9	99.3	24.864	µg/L	24.864	ppb	02:53:34
1	Sr 421.552†	642.9	730.1	3.6695	µg/L	3.6695	ppb	02:53:34
1	Sc 361.383	1866598.6	1866598.6	92.304	%			02:54:08
1	Y 371.029	1133613.3	1133613.3	90.059	%			02:54:08
1	Ag 328.068†	-1920.8	-2091.4	-4.3283	µg/L	-4.3283	ppb	02:54:08
1	As 188.979†	38.4	39.3	-31.699	µg/L	-31.699	ppb	02:54:28
1	B 249.677†	1997.6	2026.3	28.683	µg/L	28.683	ppb	02:54:08
1	Ba 233.527†	160.1	251.5	6.4179	µg/L	6.4179	ppb	02:54:28
1	Be 313.107†	2543.5	-760.3	-0.4856	µg/L	-0.4856	ppb	02:54:08
1	Cd 226.502†	534.1	677.6	3.4787	µg/L	3.4787	ppb	02:54:28
1	Co 228.616†	-89.8	-30.6	-1.5652	µg/L	-1.5652	ppb	02:54:28
1	Cr 267.716†	-238.3	-158.4	-3.3577	µg/L	-3.3577	ppb	02:54:28
1	Cu 324.752†	-399.3	-4702.3	7.7929	µg/L	7.7929	ppb	02:54:08
1	Mn 257.610†	-2429.5	-2430.7	15.887	µg/L	15.887	ppb	02:54:08
1	Mo 202.031†	-107.2	-112.4	-5.7399	µg/L	-5.7399	ppb	02:54:28
1	Ni 231.604†	248.6	-6.2	-0.3418	µg/L	-0.3418	ppb	02:54:28
1	P 214.914†	200.1	15.9	3.2456	µg/L	3.2456	ppb	02:54:28
1	Pb 220.353†	-65.1	-126.8	10.533	µg/L	10.533	ppb	02:54:28
1	S 181.975 Axial†	59.1	41.8	107.26	µg/L	107.26	ppb	02:54:28
1	Sb 206.836†	65.0	49.3	1.5449	µg/L	1.5449	ppb	02:54:28
1	Se 196.026†	21.8	13.7	18.143	µg/L	18.143	ppb	02:54:28
1	SiO2†	2554.5	16.1	2.9532	µg/L	2.9532	ppb	02:54:28
1	Si 251.611†	556.6	277.8	28.684	µg/L	28.684	ppb	02:54:28
1	Sn 189.927†	-393.6	-448.8	0.6631	µg/L	0.6631	ppb	02:54:28
1	Ti 334.940†	11442.8	11622.4	-1.6106	µg/L	-1.6106	ppb	02:54:08
1	Tl 190.801†	31.2	54.2	16.520	µg/L	16.520	ppb	02:54:28
1	U 409.014†	992.8	345.1	8.0003	µg/L	8.0003	ppb	02:54:08
1	V 292.402†	-1390.2	-1379.4	-0.2096	µg/L	-0.2096	ppb	02:54:08
1	Zn 213.857†	1761.8	1382.0	3.3392	µg/L	3.3392	ppb	02:54:28
2	Sc RADIAL	112711.7	112711.7	96.6	%			02:53:45
2	Al 396.153Radial†	1005475.3	1040294.3	516880	µg/L	516880	ppb	02:53:40
2	Ca 317.933Radial†	1227908.3	1270167.9	491450	µg/L	491450	ppb	02:53:40
2	Fe 238.204 Radial†	28859.6	29847.4	189810	µg/L	189810	ppb	02:53:45
2	K 766.490 Radial†	684.3	25.6	13.098	µg/L	13.098	ppb	02:53:45
2	Mg 279.077 IEC†	76926.0	79583.9	491080	µg/L	491080	ppb	02:53:45
2	Na 589.592 Radial†	-506.3	110.2	27.589	µg/L	27.589	ppb	02:53:45
2	Sr 421.552†	661.6	746.9	3.7537	µg/L	3.7537	ppb	02:53:45
2	Sc 361.383	1873254.9	1873254.9	92.633	%			02:54:35
2	Y 371.029	1142871.7	1142871.7	90.794	%			02:54:35
2	Ag 328.068†	-1934.3	-2098.5	-4.2628	µg/L	-4.2628	ppb	02:54:35
2	As 188.979†	38.5	39.4	-30.675	µg/L	-30.675	ppb	02:54:56
2	B 249.677†	2043.5	2068.2	29.971	µg/L	29.971	ppb	02:54:35
2	Ba 233.527†	151.7	241.8	6.1692	µg/L	6.1692	ppb	02:54:56
2	Be 313.107†	2471.1	-848.3	-0.5407	µg/L	-0.5407	ppb	02:54:35
2	Cd 226.502†	545.1	687.4	3.6100	µg/L	3.6100	ppb	02:54:56
2	Co 228.616†	-87.2	-27.4	-1.4096	µg/L	-1.4096	ppb	02:54:56
2	Cr 267.716†	-227.7	-146.0	-3.0984	µg/L	-3.0984	ppb	02:54:56
2	Cu 324.752†	-452.2	-4757.9	7.7691	µg/L	7.7691	ppb	02:54:35
2	Mn 257.610†	-2446.7	-2439.9	16.069	µg/L	16.069	ppb	02:54:35
2	Mo 202.031†	-97.6	-101.7	-4.4138	µg/L	-4.4138	ppb	02:54:56
2	Ni 231.604†	242.3	-14.0	-0.7661	µg/L	-0.7661	ppb	02:54:56
2	P 214.914†	201.6	16.7	0.2447	µg/L	0.2447	ppb	02:54:56
2	Pb 220.353†	-63.1	-124.4	10.514	µg/L	10.514	ppb	02:54:56

2	S 181.975 Axial†	61.1	43.8	116.04	µg/L	116.04 ppb	02:54:56
2	Sb 206.836†	52.4	35.5	-11.281	µg/L	-11.281 ppb	02:54:56
2	Se 196.026†	23.3	15.3	18.845	µg/L	18.845 ppb	02:54:56
2	SiO2†	2468.5	-86.6	-15.897	µg/L	-15.897 ppb	02:54:56
2	Si 251.611†	443.7	153.8	19.663	µg/L	19.663 ppb	02:54:56
2	Sn 189.927†	-403.5	-458.0	-4.9572	µg/L	-4.9572 ppb	02:54:56
2	Ti 334.940†	11563.8	11709.0	-0.9623	µg/L	-0.9623 ppb	02:54:35
2	Tl 190.801†	23.3	45.5	4.2671	µg/L	4.2671 ppb	02:54:56
2	U 409.014†	1037.9	390.0	11.562	µg/L	11.562 ppb	02:54:35
2	V 292.402†	-1425.8	-1412.5	-0.4293	µg/L	-0.4293 ppb	02:54:35
2	Zn 213.857†	1769.1	1383.1	3.0996	µg/L	3.0996 ppb	02:54:56
3	Sc RADIAL	112495.2	112495.2	96.5	%		02:53:57
3	Al 396.153Radial†	1006819.3	1043689.7	518570	µg/L	518570 ppb	02:53:51
3	Ca 317.933Radial†	1229286.9	1274041.9	492950	µg/L	492950 ppb	02:53:51
3	Fe 238.204 Radial†	29027.8	30079.2	191290	µg/L	191290 ppb	02:53:57
3	K 766.490 Radial†	730.1	74.5	38.107	µg/L	38.107 ppb	02:53:57
3	Mg 279.077 IEC†	77486.5	80318.2	495610	µg/L	495610 ppb	02:53:57
3	Na 589.592 Radial†	-526.4	88.4	22.139	µg/L	22.139 ppb	02:53:57
3	Sr 421.552†	607.3	691.9	3.4774	µg/L	3.4774 ppb	02:53:57
3	Sc 361.383	1863246.7	1863246.7	92.139	%		02:55:03
3	Y 371.029	1138140.3	1138140.3	90.418	%		02:55:03
3	Ag 328.068†	-1947.6	-2124.1	-4.3788	µg/L	-4.3788 ppb	02:55:03
3	As 188.979†	38.4	39.5	-30.950	µg/L	-30.950 ppb	02:55:23
3	B 249.677†	2007.8	2041.3	28.340	µg/L	28.340 ppb	02:55:03
3	Ba 233.527†	158.2	249.8	6.3738	µg/L	6.3738 ppb	02:55:23
3	Be 313.107†	2432.0	-876.3	-0.5583	µg/L	-0.5583 ppb	02:55:03
3	Cd 226.502†	557.8	704.4	3.9605	µg/L	3.9605 ppb	02:55:23
3	Co 228.616†	-87.8	-28.7	-1.4688	µg/L	-1.4688 ppb	02:55:23
3	Cr 267.716†	-213.8	-132.2	-2.8101	µg/L	-2.8101 ppb	02:55:23
3	Cu 324.752†	-452.9	-4761.4	8.0619	µg/L	8.0619 ppb	02:55:03
3	Mn 257.610†	-2442.6	-2449.7	16.223	µg/L	16.223 ppb	02:55:03
3	Mo 202.031†	-99.4	-104.2	-4.6498	µg/L	-4.6498 ppb	02:55:23
3	Ni 231.604†	233.8	-21.8	-1.1926	µg/L	-1.1926 ppb	02:55:23
3	P 214.914†	210.0	27.0	19.822	µg/L	19.822 ppb	02:55:23
3	Pb 220.353†	-69.8	-132.0	8.6465	µg/L	8.6465 ppb	02:55:23
3	S 181.975 Axial†	43.5	25.1	23.779	µg/L	23.779 ppb	02:55:23
3	Sb 206.836†	60.3	44.3	-2.7487	µg/L	-2.7487 ppb	02:55:23
3	Se 196.026†	20.9	12.8	15.013	µg/L	15.013 ppb	02:55:23
3	SiO2†	2453.2	-88.9	-16.320	µg/L	-16.320 ppb	02:55:23
3	Si 251.611†	419.1	129.6	17.968	µg/L	17.968 ppb	02:55:23
3	Sn 189.927†	-405.9	-463.0	-6.0982	µg/L	-6.0982 ppb	02:55:23
3	Ti 334.940†	11534.2	11744.0	-0.9669	µg/L	-0.9669 ppb	02:55:03
3	Tl 190.801†	19.9	41.9	-1.3947	µg/L	-1.3947 ppb	02:55:23
3	U 409.014†	1202.3	574.5	28.050	µg/L	28.050 ppb	02:55:03
3	V 292.402†	-1399.5	-1392.2	-0.0560	µg/L	-0.0560 ppb	02:55:03
3	Zn 213.857†	1767.2	1391.4	3.0406	µg/L	3.0406 ppb	02:55:23

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1867700.1	92.359	%	0.2519				0.27%
Sc RADIAL	112497.1	96.5	%	0.18				0.19%
Y 371.029	1138208.4	90.424	%	0.3678				0.41%
Ag 328.068†	-2104.7	-4.3233	µg/L	0.05814	-4.3233	ppb	0.05814	1.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1046288.6	519860	µg/L	3792.6	519860	ppb	3792.6	0.73%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	39.4	-31.108	µg/L	0.5301	-31.108	ppb	0.5301	1.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2045.2	28.998	µg/L	0.8600	28.998	ppb	0.8600	2.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	247.7	6.3203	µg/L	0.13273	6.3203	ppb	0.13273	2.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-828.3	-0.5282	µg/L	0.03794	-0.5282	ppb	0.03794	7.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1278372.3	494630	µg/L	4266.6	494630	ppb	4266.6	0.86%
QC value within limits for Ca 317.933Radial Recovery = 98.93%								
Cd 226.502†	689.8	3.6831	µg/L	0.24907	3.6831	ppb	0.24907	6.76%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-28.9	-1.4812	µg/L	0.07852	-1.4812	ppb	0.07852	5.30%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -145.5     -3.0888 µg/L      0.27393     -3.0888 ppb       0.27393   8.87%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4740.5      7.8746 µg/L      0.16259      7.8746 ppb       0.16259   2.06%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    29836.4      189740 µg/L       1580.1      189740 ppb        1580.1   0.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.87%
K 766.490 Radial†        51.4      26.285 µg/L      12.5603      26.285 ppb       12.5603  47.79%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       79648.8      491480 µg/L       3945.4      491480 ppb        3945.4   0.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.30%
Mn 257.610†           -2440.1      16.060 µg/L       0.1684      16.060 ppb        0.1684   1.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -106.1     -4.9345 µg/L      0.70739     -4.9345 ppb       0.70739  14.34%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       99.3      24.864 µg/L       2.7250      24.864 ppb        2.7250  10.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -14.0     -0.7669 µg/L      0.42541     -0.7669 ppb       0.42541  55.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               19.9      7.7708 µg/L     10.54396      7.7708 ppb      10.54396 135.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -127.7      9.8980 µg/L      1.08392      9.8980 ppb       1.08392  10.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         36.9      82.359 µg/L      50.9214      82.359 ppb       50.9214  61.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              43.0     -4.1615 µg/L      6.52845     -4.1615 ppb       6.52845 156.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              13.9      17.334 µg/L       2.0398      17.334 ppb        2.0398  11.77%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -53.1     -9.7546 µg/L     11.00728     -9.7546 ppb      11.00728 112.84%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             187.0      22.105 µg/L       5.7601      22.105 ppb        5.7601  26.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -456.6     -3.4641 µg/L      3.61953     -3.4641 ppb       3.61953 104.49%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             723.0      3.6336 µg/L      0.14167      3.6336 ppb       0.14167   3.90%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11691.8     -1.1800 µg/L      0.37299     -1.1800 ppb       0.37299  31.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              47.2      6.4642 µg/L      9.15726      6.4642 ppb       9.15726 141.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              436.5      15.871 µg/L      10.6968      15.871 ppb       10.6968  67.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1394.7     -0.2316 µg/L      0.18758     -0.2316 ppb       0.18758  80.98%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1385.5      3.1598 µg/L      0.15811      3.1598 ppb       0.15811   5.00%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/10/2009 02:55:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112601.6	112601.6	96.5	%			02:56:12
1	Al 396.153Radial†	1002078.1	1037792.7	515620	µg/L	515620	ppb	02:56:06
1	Ca 317.933Radial†	1224021.9	1267384.6	490380	µg/L	490380	ppb	02:56:06
1	Fe 238.204 Radial†	29078.7	30103.5	191460	µg/L	191460	ppb	02:56:12
1	K 766.490 Radial†	10580.2	10276.1	5259.2	µg/L	5259.2	ppb	02:56:12
1	Mg 279.077 IEC†	78014.1	80788.7	498530	µg/L	498530	ppb	02:56:12
1	Na 589.592 Radial†	19777.2	21118.6	5288.6	µg/L	5288.6	ppb	02:56:12
1	Sr 421.552†	98444.3	102027.3	512.79	µg/L	512.79	ppb	02:56:12
1	Sc 361.383	1861040.3	1861040.3	92.029	%			02:56:46
1	Y 371.029	1136362.9	1136362.9	90.277	%			02:56:46
1	Ag 328.068†	25163.6	27332.5	267.64	µg/L	267.64	ppb	02:56:52
1	As 188.979†	302.0	325.9	489.95	µg/L	489.95	ppb	02:57:13
1	B 249.677†	12970.8	13956.4	544.83	µg/L	544.83	ppb	02:56:52
1	Ba 233.527†	17722.2	19335.2	496.96	µg/L	496.96	ppb	02:56:52
1	Be 313.107†	359334.4	386940.2	241.93	µg/L	241.93	ppb	02:56:46
1	Cd 226.502†	16681.3	18225.0	471.04	µg/L	471.04	ppb	02:56:52
1	Co 228.616†	8163.5	8937.2	431.87	µg/L	431.87	ppb	02:57:13
1	Cr 267.716†	20819.9	22722.9	477.69	µg/L	477.69	ppb	02:56:52
1	Cu 324.752†	73247.1	75321.2	563.58	µg/L	563.58	ppb	02:56:52
1	Mn 257.610†	133074.9	144801.8	486.42	µg/L	486.42	ppb	02:56:52
1	Mo 202.031†	3789.8	4121.7	488.96	µg/L	488.96	ppb	02:57:13
1	Ni 231.604†	7555.0	7933.8	434.07	µg/L	434.07	ppb	02:57:13
1	P 214.914†	1349.7	1265.7	2463.6	µg/L	2463.6	ppb	02:57:13
1	Pb 220.353†	1627.4	1712.1	485.31	µg/L	485.31	ppb	02:57:13
1	S 181.975 Axial†	550.8	576.4	2722.6	µg/L	2722.6	ppb	02:57:13
1	Sb 206.836†	532.1	557.1	498.43	µg/L	498.43	ppb	02:57:13
1	Se 196.026†	1681.3	1817.1	2319.4	µg/L	2319.4	ppb	02:57:13
1	SiO2†	57741.9	59991.5	11016	µg/L	11016	ppb	02:56:52
1	Si 251.611†	64526.9	69790.4	5124.5	µg/L	5124.5	ppb	02:56:52
1	Sn 189.927†	520.8	543.5	509.35	µg/L	509.35	ppb	02:57:13
1	Ti 334.940†	216652.8	234642.5	506.92	µg/L	506.92	ppb	02:56:52
1	Tl 190.801†	289.6	335.0	452.28	µg/L	452.28	ppb	02:57:13
1	U 409.014†	5516.3	5263.6	453.12	µg/L	453.12	ppb	02:56:52
1	V 292.402†	40099.2	43698.9	511.31	µg/L	511.31	ppb	02:56:52
1	Zn 213.857†	18245.0	19298.6	474.50	µg/L	474.50	ppb	02:56:52
2	Sc RADIAL	114472.9	114472.9	98.2	%			02:56:24
2	Al 396.153Radial†	1001900.0	1020644.4	507100	µg/L	507100	ppb	02:56:18
2	Ca 317.933Radial†	1224144.8	1246784.9	482410	µg/L	482410	ppb	02:56:18
2	Fe 238.204 Radial†	29309.9	29846.7	189820	µg/L	189820	ppb	02:56:24
2	K 766.490 Radial†	10657.2	10175.4	5207.6	µg/L	5207.6	ppb	02:56:24
2	Mg 279.077 IEC†	78509.6	79972.7	493490	µg/L	493490	ppb	02:56:24
2	Na 589.592 Radial†	19883.7	20892.3	5231.9	µg/L	5231.9	ppb	02:56:24
2	Sr 421.552†	99154.4	101084.0	508.05	µg/L	508.05	ppb	02:56:24
2	Sc 361.383	1864640.5	1864640.5	92.207	%			02:57:19
2	Y 371.029	1139661.9	1139661.9	90.539	%			02:57:19
2	Ag 328.068†	25128.0	27241.2	266.68	µg/L	266.68	ppb	02:57:25
2	As 188.979†	304.2	327.7	494.68	µg/L	494.68	ppb	02:57:46
2	B 249.677†	12999.5	13960.2	545.52	µg/L	545.52	ppb	02:57:25
2	Ba 233.527†	17730.6	19307.0	496.24	µg/L	496.24	ppb	02:57:25
2	Be 313.107†	357681.5	384393.8	240.34	µg/L	240.34	ppb	02:57:19
2	Cd 226.502†	16651.6	18157.8	469.38	µg/L	469.38	ppb	02:57:25
2	Co 228.616†	8165.5	8922.2	431.14	µg/L	431.14	ppb	02:57:46
2	Cr 267.716†	20852.4	22714.5	477.52	µg/L	477.52	ppb	02:57:25
2	Cu 324.752†	73328.3	75255.6	562.78	µg/L	562.78	ppb	02:57:25
2	Mn 257.610†	133083.4	144531.8	485.35	µg/L	485.35	ppb	02:57:25
2	Mo 202.031†	3796.7	4121.2	488.83	µg/L	488.83	ppb	02:57:46
2	Ni 231.604†	7539.1	7900.6	432.25	µg/L	432.25	ppb	02:57:46
2	P 214.914†	1354.9	1268.5	2468.3	µg/L	2468.3	ppb	02:57:46
2	Pb 220.353†	1626.5	1707.7	483.44	µg/L	483.44	ppb	02:57:46

2	S 181.975 Axial†	547.4	571.5	2699.4 µg/L	2699.4 ppb	02:57:46
2	Sb 206.836†	530.4	554.1	496.31 µg/L	496.31 ppb	02:57:46
2	Se 196.026†	1676.1	1807.9	2307.4 µg/L	2307.4 ppb	02:57:46
2	SiO2†	57868.5	60007.7	11019 µg/L	11019 ppb	02:57:25
2	Si 251.611†	64657.3	69796.4	5124.9 µg/L	5124.9 ppb	02:57:25
2	Sn 189.927†	526.3	548.4	508.89 µg/L	508.89 ppb	02:57:46
2	Ti 334.940†	217071.3	234641.8	507.37 µg/L	507.37 ppb	02:57:25
2	Tl 190.801†	297.3	342.8	465.33 µg/L	465.33 ppb	02:57:46
2	U 409.014†	5585.4	5327.0	458.99 µg/L	458.99 ppb	02:57:25
2	V 292.402†	40196.6	43720.5	511.43 µg/L	511.43 ppb	02:57:25
2	Zn 213.857†	18311.6	19332.6	475.73 µg/L	475.73 ppb	02:57:25
3	Sc RADIAL	113610.9	113610.9	97.4 %		02:56:35
3	Al 396.153Radial†	1006505.3	1033117.4	513290 µg/L	513290 ppb	02:56:30
3	Ca 317.933Radial†	1229991.4	1262250.5	488390 µg/L	488390 ppb	02:56:30
3	Fe 238.204 Radial†	29103.6	29861.5	189920 µg/L	189920 ppb	02:56:35
3	K 766.490 Radial†	10600.3	10199.4	5219.9 µg/L	5219.9 ppb	02:56:35
3	Mg 279.077 IEC†	77880.0	79933.2	493250 µg/L	493250 ppb	02:56:35
3	Na 589.592 Radial†	19810.0	20970.3	5251.5 µg/L	5251.5 ppb	02:56:35
3	Sr 421.552†	98489.3	101167.7	508.47 µg/L	508.47 ppb	02:56:35
3	Sc 361.383	1859128.7	1859128.7	91.935 %		02:57:52
3	Y 371.029	1136430.4	1136430.4	90.283 %		02:57:52
3	Ag 328.068†	25048.2	27235.2	266.63 µg/L	266.63 ppb	02:57:58
3	As 188.979†	293.0	316.5	473.37 µg/L	473.37 ppb	02:58:18
3	B 249.677†	12959.2	13958.2	545.40 µg/L	545.40 ppb	02:57:58
3	Ba 233.527†	17691.9	19322.0	496.62 µg/L	496.62 ppb	02:57:58
3	Be 313.107†	360826.7	388964.9	243.20 µg/L	243.20 ppb	02:57:52
3	Cd 226.502†	16630.6	18188.5	470.19 µg/L	470.19 ppb	02:57:58
3	Co 228.616†	8193.0	8978.4	433.86 µg/L	433.86 ppb	02:58:18
3	Cr 267.716†	20730.3	22648.7	476.14 µg/L	476.14 ppb	02:57:58
3	Cu 324.752†	72972.3	75104.2	561.75 µg/L	561.75 ppb	02:57:58
3	Mn 257.610†	132691.7	144533.6	485.37 µg/L	485.37 ppb	02:57:58
3	Mo 202.031†	3800.7	4137.8	490.77 µg/L	490.77 ppb	02:58:18
3	Ni 231.604†	7565.5	7953.6	435.15 µg/L	435.15 ppb	02:58:18
3	P 214.914†	1354.3	1272.2	2477.8 µg/L	2477.8 ppb	02:58:18
3	Pb 220.353†	1632.4	1719.4	487.02 µg/L	487.02 ppb	02:58:18
3	S 181.975 Axial†	554.6	581.1	2746.5 µg/L	2746.5 ppb	02:58:18
3	Sb 206.836†	540.8	567.2	508.51 µg/L	508.51 ppb	02:58:18
3	Se 196.026†	1696.3	1835.2	2343.4 µg/L	2343.4 ppb	02:58:18
3	SiO2†	57529.3	59824.8	10986 µg/L	10986 ppb	02:57:58
3	Si 251.611†	64428.3	69755.1	5122.0 µg/L	5122.0 ppb	02:57:58
3	Sn 189.927†	516.3	539.2	505.45 µg/L	505.45 ppb	02:58:18
3	Ti 334.940†	216419.5	234630.8	507.01 µg/L	507.01 ppb	02:57:58
3	Tl 190.801†	296.3	342.7	464.36 µg/L	464.36 ppb	02:58:18
3	U 409.014†	5460.9	5209.5	448.46 µg/L	448.46 ppb	02:57:58
3	V 292.402†	40032.8	43671.5	510.88 µg/L	510.88 ppb	02:57:58
3	Zn 213.857†	18258.5	19333.6	475.74 µg/L	475.74 ppb	02:57:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1861603.2	92.057	%	0.1384				0.15%
Sc RADIAL	113561.8	97.4	%	0.80				0.82%
Y 371.029	1137485.1	90.366	%	0.1498				0.17%
Ag 328.068†	27269.6	266.99	µg/L	0.570	266.99	ppb	0.570	0.21%
QC value within limits for Ag 328.068 Recovery = 106.79%								
Al 396.153Radial†	1030518.2	512000	µg/L	4404.5	512000	ppb	4404.5	0.86%
QC value within limits for Al 396.153Radial Recovery = 102.40%								
As 188.979†	323.4	486.00	µg/L	11.193	486.00	ppb	11.193	2.30%
QC value within limits for As 188.979 Recovery = 97.20%								
B 249.677†	13958.3	545.25	µg/L	0.364	545.25	ppb	0.364	0.07%
QC value within limits for B 249.677 Recovery = 109.05%								
Ba 233.527†	19321.4	496.61	µg/L	0.361	496.61	ppb	0.361	0.07%
QC value within limits for Ba 233.527 Recovery = 99.32%								
Be 313.107†	386766.3	241.82	µg/L	1.433	241.82	ppb	1.433	0.59%
QC value within limits for Be 313.107 Recovery = 96.73%								
Ca 317.933Radial†	1258806.7	487060	µg/L	4148.9	487060	ppb	4148.9	0.85%
QC value within limits for Ca 317.933Radial Recovery = 97.41%								
Cd 226.502†	18190.4	470.20	µg/L	0.831	470.20	ppb	0.831	0.18%
QC value within limits for Cd 226.502 Recovery = 94.04%								
Co 228.616†	8945.9	432.29	µg/L	1.410	432.29	ppb	1.410	0.33%

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   QC value within limits for Co 228.616  Recovery = 86.46%
Cr 267.716†            22695.4      477.12 µg/L        0.852      477.12 ppb          0.852   0.18%
   QC value within limits for Cr 267.716  Recovery = 95.42%
Cu 324.752†            75227.0      562.70 µg/L        0.920      562.70 ppb          0.920   0.16%
   QC value within limits for Cu 324.752  Recovery = 112.54%
Fe 238.204 Radial†     29937.2      190400 µg/L        916.9      190400 ppb          916.9   0.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.20%
K 766.490 Radial†      10217.0      5228.9 µg/L        26.91      5228.9 ppb          26.91   0.51%
   QC value within limits for K 766.490 Radial  Recovery = 104.58%
Mg 279.077 IEC†        80231.5      495090 µg/L       2980.3      495090 ppb         2980.3   0.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.02%
Mn 257.610†           144622.4      485.71 µg/L        0.611      485.71 ppb          0.611   0.13%
   QC value within limits for Mn 257.610  Recovery = 97.14%
Mo 202.031†             4126.9      489.52 µg/L        1.085      489.52 ppb          1.085   0.22%
   QC value within limits for Mo 202.031  Recovery = 97.90%
Na 589.592 Radial†     20993.7      5257.3 µg/L        28.79      5257.3 ppb          28.79   0.55%
   QC value within limits for Na 589.592 Radial  Recovery = 105.15%
Ni 231.604†             7929.3      433.82 µg/L        1.465      433.82 ppb          1.465   0.34%
   QC value within limits for Ni 231.604  Recovery = 86.76%
P 214.914†              1268.8      2469.9 µg/L         7.25      2469.9 ppb           7.25   0.29%
   QC value within limits for P 214.914  Recovery = 98.79%
Pb 220.353†             1713.1      485.26 µg/L        1.790      485.26 ppb          1.790   0.37%
   QC value within limits for Pb 220.353  Recovery = 97.05%
S 181.975 Axial†         576.3      2722.8 µg/L        23.52      2722.8 ppb          23.52   0.86%
   QC value within limits for S 181.975 Axial  Recovery = 108.91%
Sb 206.836†              559.5      501.09 µg/L        6.517      501.09 ppb          6.517   1.30%
   QC value within limits for Sb 206.836  Recovery = 100.22%
Se 196.026†             1820.1      2323.4 µg/L        18.33      2323.4 ppb          18.33   0.79%
   QC value within limits for Se 196.026  Recovery = 92.94%
SiO2†                  59941.3       11007 µg/L         18.6       11007 ppb           18.6   0.17%
   QC value within limits for SiO2  Recovery = 102.92%
Si 251.611†            69780.6      5123.8 µg/L         1.58      5123.8 ppb          1.58   0.03%
   QC value within limits for Si 251.611  Recovery = 102.48%
Sn 189.927†              543.7      507.89 µg/L        2.132      507.89 ppb          2.132   0.42%
   QC value within limits for Sn 189.927  Recovery = 101.58%
Sr 421.552†           101426.3      509.77 µg/L        2.624      509.77 ppb          2.624   0.51%
   QC value within limits for Sr 421.552  Recovery = 101.95%
Ti 334.940†           234638.4      507.10 µg/L        0.237      507.10 ppb          0.237   0.05%
   QC value within limits for Ti 334.940  Recovery = 101.42%
Tl 190.801†              340.2      460.66 µg/L        7.271      460.66 ppb          7.271   1.58%
   QC value within limits for Tl 190.801  Recovery = 92.13%
U 409.014†              5266.7      453.52 µg/L        5.276      453.52 ppb          5.276   1.16%
   QC value within limits for U 409.014  Recovery = 90.70%
V 292.402†             43697.0      511.21 µg/L        0.288      511.21 ppb          0.288   0.06%
   QC value within limits for V 292.402  Recovery = 102.24%
Zn 213.857†            19321.6      475.32 µg/L        0.709      475.32 ppb          0.709   0.15%
   QC value within limits for Zn 213.857  Recovery = 95.06%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/10/2009 02:58:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111504.9	111504.9	95.6	%			02:59:09
1	Al 396.153Radial†	983487.9	1028557.3	511050	µg/L	511050	ppb	02:59:03
1	Ca 317.933Radial†	1212074.4	1267358.2	490370	µg/L	490370	ppb	02:59:03
1	Fe 238.204 Radial†	68115.9	71230.8	452990	µg/L	452990	ppb	02:59:09
1	K 766.490 Radial†	702.0	51.8	26.504	µg/L	26.504	ppb	02:59:09
1	Mg 279.077 IEC†	74475.0	77881.8	480180	µg/L	480180	ppb	02:59:09
1	Na 589.592 Radial†	1879972.5	1966994.0	492580	µg/L	492580	ppb	02:59:03
1	Sr 421.552†	866.1	968.2	4.8660	µg/L	4.8660	ppb	02:59:09
1	Sc 361.383	1864230.3	1864230.3	92.187	%			02:59:44
1	Y 371.029	1127608.4	1127608.4	89.582	%			02:59:44
1	Ag 328.068†	-3721.5	-4047.3	-1.5222	µg/L	-1.5222	ppb	02:59:50
1	As 188.979†	33.6	34.2	-78.094	µg/L	-78.094	ppb	03:00:11
1	B 249.677†	4583.2	4833.8	67.107	µg/L	67.107	ppb	02:59:50
1	Ba 233.527†	256.0	355.8	9.0131	µg/L	9.0131	ppb	03:00:11
1	Be 313.107†	-2140.2	-5837.4	-3.6679	µg/L	-3.6679	ppb	02:59:50
1	Cd 226.502†	1348.6	1561.8	16.279	µg/L	16.279	ppb	02:59:50
1	Co 228.616†	47.4	118.1	5.5657	µg/L	5.5657	ppb	03:00:11
1	Cr 267.716†	-277.5	-201.2	-4.3449	µg/L	-4.3449	ppb	03:00:11
1	Cu 324.752†	-7537.0	-12445.5	10.975	µg/L	10.975	ppb	02:59:50
1	Mn 257.610†	-13415.1	-14350.7	11.119	µg/L	11.119	ppb	02:59:50
1	Mo 202.031†	-195.8	-208.7	-6.5794	µg/L	-6.5794	ppb	03:00:11
1	Ni 231.604†	229.4	-26.7	-1.4620	µg/L	-1.4620	ppb	03:00:11
1	P 214.914†	350.9	179.8	23.404	µg/L	23.404	ppb	03:00:11
1	Pb 220.353†	16.5	-38.4	17.421	µg/L	17.421	ppb	03:00:11
1	S 181.975 Axial†	63.9	47.2	95.333	µg/L	95.333	ppb	03:00:11
1	Sb 206.836†	49.3	32.3	-6.4970	µg/L	-6.4970	ppb	03:00:11
1	Se 196.026†	-106.7	-125.7	27.298	µg/L	27.298	ppb	03:00:11
1	SiO2†	2280.7	-277.4	-50.944	µg/L	-50.944	ppb	03:00:11
1	Si 251.611†	-223.0	-567.1	-33.078	µg/L	-33.078	ppb	03:00:11
1	Sn 189.927†	-443.4	-503.4	0.2752	µg/L	0.2752	ppb	03:00:11
1	Ti 334.940†	17175.9	17857.1	13.104	µg/L	13.104	ppb	02:59:50
1	Tl 190.801†	2.7	23.3	-29.751	µg/L	-29.751	ppb	03:00:11
1	U 409.014†	140637.9	151826.5	13693	µg/L	13693	ppb	02:59:50
1	V 292.402†	-4505.9	-4761.1	5.4978	µg/L	5.4978	ppb	02:59:50
1	Zn 213.857†	2977.7	2703.4	10.438	µg/L	10.438	ppb	03:00:11
2	Sc RADIAL	111318.2	111318.2	95.4	%			02:59:21
2	Al 396.153Radial†	980837.3	1027504.9	510530	µg/L	510530	ppb	02:59:16
2	Ca 317.933Radial†	1207186.3	1264362.3	489210	µg/L	489210	ppb	02:59:16
2	Fe 238.204 Radial†	68784.0	72050.2	458200	µg/L	458200	ppb	02:59:21
2	K 766.490 Radial†	737.0	89.6	45.880	µg/L	45.880	ppb	02:59:21
2	Mg 279.077 IEC†	75131.5	78700.2	485230	µg/L	485230	ppb	02:59:21
2	Na 589.592 Radial†	1874931.3	1965009.0	492090	µg/L	492090	ppb	02:59:16
2	Sr 421.552†	900.5	1005.7	5.0548	µg/L	5.0548	ppb	02:59:21
2	Sc 361.383	1835548.6	1835548.6	90.769	%			03:00:17
2	Y 371.029	1110309.3	1110309.3	88.207	%			03:00:17
2	Ag 328.068†	-3708.4	-4096.0	-1.5597	µg/L	-1.5597	ppb	03:00:22
2	As 188.979†	34.5	35.8	-75.844	µg/L	-75.844	ppb	03:00:43
2	B 249.677†	4565.6	4892.1	67.996	µg/L	67.996	ppb	03:00:22
2	Ba 233.527†	254.6	358.5	9.0810	µg/L	9.0810	ppb	03:00:43
2	Be 313.107†	-2271.6	-6018.4	-3.7814	µg/L	-3.7814	ppb	03:00:22
2	Cd 226.502†	1409.5	1651.9	18.454	µg/L	18.454	ppb	03:00:22
2	Co 228.616†	37.3	107.8	5.0638	µg/L	5.0638	ppb	03:00:43
2	Cr 267.716†	-252.9	-178.8	-3.8771	µg/L	-3.8771	ppb	03:00:43
2	Cu 324.752†	-7653.6	-12701.8	10.317	µg/L	10.317	ppb	03:00:22
2	Mn 257.610†	-13452.0	-14618.7	10.919	µg/L	10.919	ppb	03:00:22
2	Mo 202.031†	-197.2	-213.6	-6.9402	µg/L	-6.9402	ppb	03:00:43
2	Ni 231.604†	213.6	-40.3	-2.2029	µg/L	-2.2029	ppb	03:00:43
2	P 214.914†	374.8	212.1	82.338	µg/L	82.338	ppb	03:00:43
2	Pb 220.353†	21.4	-32.6	18.586	µg/L	18.586	ppb	03:00:43

2	S 181.975 Axial†	67.3	52.0	117.47	µg/L	117.47 ppb	03:00:43
2	Sb 206.836†	55.9	40.5	1.7280	µg/L	1.7280 ppb	03:00:43
2	Se 196.026†	-119.1	-141.1	8.9989	µg/L	8.9989 ppb	03:00:43
2	SiO2†	2257.4	-264.4	-48.549	µg/L	-48.549 ppb	03:00:43
2	Si 251.611†	-251.6	-602.4	-35.393	µg/L	-35.393 ppb	03:00:43
2	Sn 189.927†	-451.5	-519.9	-6.7782	µg/L	-6.7782 ppb	03:00:43
2	Ti 334.940†	17219.0	18195.8	13.940	µg/L	13.940 ppb	03:00:22
2	Tl 190.801†	8.0	29.2	-20.528	µg/L	-20.528 ppb	03:00:43
2	U 409.014†	141065.2	154681.1	13951	µg/L	13951 ppb	03:00:22
2	V 292.402†	-4498.4	-4829.1	5.5721	µg/L	5.5721 ppb	03:00:22
2	Zn 213.857†	2959.4	2733.7	10.555	µg/L	10.555 ppb	03:00:43
3	Sc RADIAL	111262.9	111262.9	95.4	%		02:59:34
3	Al 396.153Radial†	980927.6	1028110.1	510830	µg/L	510830 ppb	02:59:29
3	Ca 317.933Radial†	1208004.7	1265848.6	489780	µg/L	489780 ppb	02:59:29
3	Fe 238.204 Radial†	68676.3	71973.1	457710	µg/L	457710 ppb	02:59:34
3	K 766.490 Radial†	787.5	143.0	73.186	µg/L	73.186 ppb	02:59:34
3	Mg 279.077 IEC†	74943.4	78542.2	484250	µg/L	484250 ppb	02:59:34
3	Na 589.592 Radial†	1873584.8	1964573.5	491980	µg/L	491980 ppb	02:59:29
3	Sr 421.552†	861.2	965.1	4.8505	µg/L	4.8505 ppb	02:59:34
3	Sc 361.383	1848335.3	1848335.3	91.401	%		03:00:49
3	Y 371.029	1117737.4	1117737.4	88.798	%		03:00:49
3	Ag 328.068†	-3682.7	-4039.5	-1.0889	µg/L	-1.0889 ppb	03:00:55
3	As 188.979†	35.3	36.4	-74.787	µg/L	-74.787 ppb	03:01:15
3	B 249.677†	4721.4	5027.7	74.029	µg/L	74.029 ppb	03:00:55
3	Ba 233.527†	273.3	377.1	9.5554	µg/L	9.5554 ppb	03:01:15
3	Be 313.107†	-2251.1	-5978.7	-3.7564	µg/L	-3.7564 ppb	03:00:55
3	Cd 226.502†	1402.6	1633.6	17.970	µg/L	17.970 ppb	03:00:55
3	Co 228.616†	26.6	95.8	4.4828	µg/L	4.4828 ppb	03:01:15
3	Cr 267.716†	-259.7	-184.4	-3.9959	µg/L	-3.9959 ppb	03:01:15
3	Cu 324.752†	-7695.7	-12689.4	10.297	µg/L	10.297 ppb	03:00:55
3	Mn 257.610†	-13482.6	-14549.7	11.077	µg/L	11.077 ppb	03:00:55
3	Mo 202.031†	-206.5	-222.3	-7.9773	µg/L	-7.9773 ppb	03:01:15
3	Ni 231.604†	237.2	-16.0	-0.8774	µg/L	-0.8774 ppb	03:01:15
3	P 214.914†	382.2	217.2	93.525	µg/L	93.525 ppb	03:01:15
3	Pb 220.353†	11.9	-43.3	15.909	µg/L	15.909 ppb	03:01:15
3	S 181.975 Axial†	58.0	41.3	65.172	µg/L	65.172 ppb	03:01:15
3	Sb 206.836†	58.5	42.9	4.0189	µg/L	4.0189 ppb	03:01:15
3	Se 196.026†	-102.5	-122.0	33.507	µg/L	33.507 ppb	03:01:15
3	SiO2†	2287.5	-248.6	-45.657	µg/L	-45.657 ppb	03:01:15
3	Si 251.611†	-256.1	-605.4	-35.747	µg/L	-35.747 ppb	03:01:15
3	Sn 189.927†	-447.4	-511.9	-2.8484	µg/L	-2.8484 ppb	03:01:15
3	Ti 334.940†	17124.3	17960.9	13.373	µg/L	13.373 ppb	03:00:55
3	Tl 190.801†	17.5	39.5	-4.8719	µg/L	-4.8719 ppb	03:01:15
3	U 409.014†	141529.7	154114.1	13900	µg/L	13900 ppb	03:00:55
3	V 292.402†	-4590.5	-4895.7	4.6932	µg/L	4.6932 ppb	03:00:55
3	Zn 213.857†	2967.3	2719.8	10.260	µg/L	10.260 ppb	03:01:15

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1849371.4	91.452	%	0.7105				0.78%
Sc RADIAL	111362.0	95.5	%	0.11				0.11%
Y 371.029	1118551.7	88.862	%	0.6894				0.78%
Ag 328.068†	-4060.9	-1.3903	µg/L	0.26162	-1.3903	ppb	0.26162	18.82%
Al 396.153Radial†	1028057.4	510800	µg/L	262.4	510800	ppb	262.4	0.05%
QC value within limits for Al 396.153Radial Recovery = 102.16%								
As 188.979†	35.5	-76.242	µg/L	1.6891	-76.242	ppb	1.6891	2.22%
B 249.677†	4917.9	69.711	µg/L	3.7661	69.711	ppb	3.7661	5.40%
Ba 233.527†	363.8	9.2165	µg/L	0.29546	9.2165	ppb	0.29546	3.21%
Be 313.107†	-5944.9	-3.7352	µg/L	0.05966	-3.7352	ppb	0.05966	1.60%
Ca 317.933Radial†	1265856.4	489780	µg/L	579.6	489780	ppb	579.6	0.12%
QC value within limits for Ca 317.933Radial Recovery = 97.96%								
Cd 226.502†	1615.8	17.568	µg/L	1.1422	17.568	ppb	1.1422	6.50%
Co 228.616†	107.2	5.0374	µg/L	0.54194	5.0374	ppb	0.54194	10.76%
Cr 267.716†	-188.1	-4.0726	µg/L	0.24311	-4.0726	ppb	0.24311	5.97%
Cu 324.752†	-12612.2	10.530	µg/L	0.3858	10.530	ppb	0.3858	3.66%
Fe 238.204 Radial†	71751.4	456300	µg/L	2877.6	456300	ppb	2877.6	0.63%
QC value within limits for Fe 238.204 Radial Recovery = 91.26%								
K 766.490 Radial†	94.8	48.523	µg/L	23.4529	48.523	ppb	23.4529	48.33%
Mg 279.077 IEC†	78374.7	483220	µg/L	2676.3	483220	ppb	2676.3	0.55%

QC value within limits for Mg 279.077 IEC Recovery = 96.64%

Mn 257.610†	-14506.4	11.038 µg/L	0.1059	11.038 ppb	0.1059	0.96%
Mo 202.031†	-214.9	-7.1656 µg/L	0.72568	-7.1656 ppb	0.72568	10.13%
Na 589.592 Radial†	1965525.5	492220 µg/L	323.1	492220 ppb	323.1	0.07%

QC value within limits for Na 589.592 Radial Recovery = 98.44%

Ni 231.604†	-27.7	-1.5141 µg/L	0.66432	-1.5141 ppb	0.66432	43.87%
P 214.914†	203.0	66.422 µg/L	37.6725	66.422 ppb	37.6725	56.72%
Pb 220.353†	-38.1	17.305 µg/L	1.3422	17.305 ppb	1.3422	7.76%
S 181.975 Axial†	46.8	92.658 µg/L	26.2517	92.658 ppb	26.2517	28.33%
Sb 206.836†	38.6	-0.2501 µg/L	5.52995	-0.2501 ppb	5.52995	>999.9%
Se 196.026†	-129.6	23.268 µg/L	12.7414	23.268 ppb	12.7414	54.76%
SiO2†	-263.5	-48.384 µg/L	2.6475	-48.384 ppb	2.6475	5.47%
Si 251.611†	-591.6	-34.739 µg/L	1.4493	-34.739 ppb	1.4493	4.17%
Sn 189.927†	-511.7	-3.1171 µg/L	3.53438	-3.1171 ppb	3.53438	113.39%
Sr 421.552†	979.7	4.9238 µg/L	0.11371	4.9238 ppb	0.11371	2.31%
Ti 334.940†	18004.6	13.472 µg/L	0.4271	13.472 ppb	0.4271	3.17%
Tl 190.801†	30.7	-18.383 µg/L	12.5772	-18.383 ppb	12.5772	68.42%
U 409.014†	153540.6	13848 µg/L	136.5	13848 ppb	136.5	0.99%

QC value within limits for U 409.014 Recovery = 92.32%

V 292.402†	-4828.6	5.2543 µg/L	0.48738	5.2543 ppb	0.48738	9.28%
Zn 213.857†	2719.0	10.417 µg/L	0.1485	10.417 ppb	0.1485	1.43%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/10/2009 03:01:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	123511.7	123511.7	106	%			03:02:07
1	Al 396.153Radial†	967.4	790.2	22.239	µg/L	22.239	ppb	03:02:07
1	Ca 317.933Radial†	660.8	211.2	81.710	µg/L	81.710	ppb	03:02:27
1	Fe 238.204 Radial†	17.2	1.1	320.45	µg/L	320.45	ppb	03:02:27
1	K 766.490 Radial†	575490.0	542736.5	277770	µg/L	277770	ppb	03:02:01
1	Mg 279.077 IEC†	-34.0	-47.5	-50.348	µg/L	-50.348	ppb	03:02:27
1	Na 589.592 Radial†	-137.0	504.8	126.40	µg/L	126.40	ppb	03:02:07
1	Sr 421.552†	1923685.9	1816544.9	9129.9	µg/L	9129.9	ppb	03:02:01
1	Sc 361.383	1995017.0	1995017.0	98.655	%			03:03:59
1	Y 371.029	1209781.9	1209781.9	96.110	%			03:03:59
1	Ag 328.068†	-7099.5	-7206.7	2.0971	µg/L	2.0971	ppb	03:03:59
1	As 188.979†	5263.9	5333.5	9692.2	µg/L	9692.2	ppb	03:04:04
1	B 249.677†	110947.4	112322.6	4869.4	µg/L	4869.4	ppb	03:03:59
1	Ba 233.527†	548878.1	556441.3	14293	µg/L	14293	ppb	03:03:59
1	Be 313.107†	4560535.9	4619213.4	2886.8	µg/L	2886.8	ppb	03:03:48
1	Cd 226.502†	356212.9	361169.6	9623.2	µg/L	9623.2	ppb	03:03:59
1	Co 228.616†	193481.2	196186.4	9482.0	µg/L	9482.0	ppb	03:03:59
1	Cr 267.716†	1124902.6	1140343.0	23938	µg/L	23938	ppb	03:03:59
1	Cu 324.752†	2905093.7	2940441.6	20396	µg/L	20396	ppb	03:03:59
1	Mn 257.610†	2884294.6	2923829.9	9335.8	µg/L	9335.8	ppb	03:03:59
1	Mo 202.031†	82256.8	83382.3	9739.4	µg/L	9739.4	ppb	03:03:59
1	Ni 231.604†	173740.5	175834.3	9620.1	µg/L	9620.1	ppb	03:03:59
1	P 214.914†	8758.1	8676.6	15253	µg/L	15253	ppb	03:04:04
1	Pb 220.353†	94834.6	96071.6	24829	µg/L	24829	ppb	03:03:59
1	S 181.975 Axial†	10279.0	10397.0	50906	µg/L	50906	ppb	03:04:04
1	Sb 206.836†	10261.2	10380.1	10068	µg/L	10068	ppb	03:04:04
1	Se 196.026†	7423.8	7515.2	9604.2	µg/L	9604.2	ppb	03:04:04
1	SiO2†	530846.7	535334.7	98304	µg/L	98304	ppb	03:03:59
1	Si 251.611†	610758.6	618762.5	44747	µg/L	44747	ppb	03:03:59
1	Sn 189.927†	20718.1	20978.2	10742	µg/L	10742	ppb	03:04:04
1	Ti 334.940†	4305220.4	4363157.6	9938.9	µg/L	9938.9	ppb	03:03:48
1	Tl 190.801†	6189.8	6294.6	9726.4	µg/L	9726.4	ppb	03:04:04
1	U 409.014†	1864.0	1159.0	105.09	µg/L	105.09	ppb	03:03:59
1	V 292.402†	867605.6	879564.1	9962.2	µg/L	9962.2	ppb	03:03:59
1	Zn 213.857†	544709.1	551610.8	14541	µg/L	14541	ppb	03:03:59
2	Sc RADIAL	119662.2	119662.2	103	%			03:02:39
2	Al 396.153Radial†	1213.5	1059.5	151.82	µg/L	151.82	ppb	03:02:39
2	Ca 317.933Radial†	904.9	469.2	181.53	µg/L	181.53	ppb	03:02:59
2	Fe 238.204 Radial†	20.9	5.2	349.97	µg/L	349.97	ppb	03:02:59
2	K 766.490 Radial†	582179.6	566738.1	290050	µg/L	290050	ppb	03:02:33
2	Mg 279.077 IEC†	-19.1	-34.1	35.389	µg/L	35.389	ppb	03:02:59
2	Na 589.592 Radial†	25.1	658.5	164.91	µg/L	164.91	ppb	03:02:39
2	Sr 421.552†	1947743.9	1898428.4	9541.4	µg/L	9541.4	ppb	03:02:33
2	Sc 361.383	1991028.4	1991028.4	98.457	%			03:04:24
2	Y 371.029	1210880.7	1210880.7	96.197	%			03:04:24
2	Ag 328.068†	-7192.8	-7315.9	1.8070	µg/L	1.8070	ppb	03:04:24
2	As 188.979†	5296.2	5376.9	9770.7	µg/L	9770.7	ppb	03:04:29
2	B 249.677†	111834.2	113448.5	4918.2	µg/L	4918.2	ppb	03:04:24
2	Ba 233.527†	553631.3	562383.6	14446	µg/L	14446	ppb	03:04:24
2	Be 313.107†	4535937.6	4603490.4	2877.0	µg/L	2877.0	ppb	03:04:13
2	Cd 226.502†	359304.8	365033.4	9726.1	µg/L	9726.1	ppb	03:04:24
2	Co 228.616†	195093.1	198216.5	9580.4	µg/L	9580.4	ppb	03:04:24
2	Cr 267.716†	1133922.9	1151788.9	24179	µg/L	24179	ppb	03:04:24
2	Cu 324.752†	2927972.4	2969577.8	20598	µg/L	20598	ppb	03:04:24
2	Mn 257.610†	2906208.6	2951944.2	9425.6	µg/L	9425.6	ppb	03:04:24
2	Mo 202.031†	83022.9	84327.3	9849.8	µg/L	9849.8	ppb	03:04:24
2	Ni 231.604†	175062.5	177529.8	9712.9	µg/L	9712.9	ppb	03:04:24
2	P 214.914†	8799.7	8736.7	15350	µg/L	15350	ppb	03:04:29
2	Pb 220.353†	95569.2	97010.3	25071	µg/L	25071	ppb	03:04:24

2	S 181.975 Axial†	10268.8	10407.5	50958	µg/L	50958 ppb	03:04:29
2	Sb 206.836†	10297.5	10437.7	10123	µg/L	10123 ppb	03:04:29
2	Se 196.026†	7392.2	7498.1	9582.4	µg/L	9582.4 ppb	03:04:29
2	SiO2†	535028.9	540660.3	99282	µg/L	99282 ppb	03:04:24
2	Si 251.611†	615643.4	624964.0	45200	µg/L	45200 ppb	03:04:24
2	Sn 189.927†	20734.6	21037.1	10772	µg/L	10772 ppb	03:04:29
2	Ti 334.940†	4282611.0	4348936.2	9906.5	µg/L	9906.5 ppb	03:04:13
2	Tl 190.801†	6192.0	6309.4	9748.8	µg/L	9748.8 ppb	03:04:29
2	U 409.014†	1808.8	1106.7	100.34	µg/L	100.34 ppb	03:04:24
2	V 292.402†	874856.6	888690.5	10066	µg/L	10066 ppb	03:04:24
2	Zn 213.857†	548147.9	556209.6	14662	µg/L	14662 ppb	03:04:24
3	Sc RADIAL	115737.2	115737.2	99.2	%		03:03:11
3	Al 396.153Radial†	806.5	689.5	-29.272	µg/L	-29.272 ppb	03:03:11
3	Ca 317.933Radial†	709.2	301.9	116.81	µg/L	116.81 ppb	03:03:31
3	Fe 238.204 Radial†	10.7	-4.4	286.77	µg/L	286.77 ppb	03:03:31
3	K 766.490 Radial†	580258.2	584045.4	298910	µg/L	298910 ppb	03:03:05
3	Mg 279.077 IEC†	-33.0	-48.7	-56.262	µg/L	-56.262 ppb	03:03:31
3	Na 589.592 Radial†	-312.6	319.1	79.917	µg/L	79.917 ppb	03:03:11
3	Sr 421.552†	1941195.7	1956210.8	9831.9	µg/L	9831.9 ppb	03:03:05
3	Sc 361.383	1987125.1	1987125.1	98.264	%		03:04:49
3	Y 371.029	1209146.7	1209146.7	96.059	%		03:04:49
3	Ag 328.068†	-7118.4	-7254.5	1.8505	µg/L	1.8505 ppb	03:04:49
3	As 188.979†	5201.9	5291.5	9616.1	µg/L	9616.1 ppb	03:04:54
3	B 249.677†	111423.3	113253.5	4909.8	µg/L	4909.8 ppb	03:04:49
3	Ba 233.527†	548637.9	558406.5	14343	µg/L	14343 ppb	03:04:49
3	Be 313.107†	4563466.4	4640554.9	2900.1	µg/L	2900.1 ppb	03:04:38
3	Cd 226.502†	356039.5	362427.2	9656.7	µg/L	9656.7 ppb	03:04:49
3	Co 228.616†	193139.6	196617.6	9502.8	µg/L	9502.8 ppb	03:04:49
3	Cr 267.716†	1121485.7	1141394.3	23960	µg/L	23960 ppb	03:04:49
3	Cu 324.752†	2905622.0	2952674.1	20481	µg/L	20481 ppb	03:04:49
3	Mn 257.610†	2880301.2	2931377.2	9359.9	µg/L	9359.9 ppb	03:04:49
3	Mo 202.031†	82252.0	83708.5	9777.5	µg/L	9777.5 ppb	03:04:49
3	Ni 231.604†	173402.0	176189.2	9639.5	µg/L	9639.5 ppb	03:04:49
3	P 214.914†	8605.0	8556.1	14994	µg/L	14994 ppb	03:04:54
3	Pb 220.353†	94780.1	96397.9	24913	µg/L	24913 ppb	03:04:49
3	S 181.975 Axial†	10066.0	10221.6	50047	µg/L	50047 ppb	03:04:54
3	Sb 206.836†	10058.0	10214.5	9905.7	µg/L	9905.7 ppb	03:04:54
3	Se 196.026†	7247.3	7365.5	9412.9	µg/L	9412.9 ppb	03:04:54
3	SiO2†	532030.5	538676.3	98918	µg/L	98918 ppb	03:04:49
3	Si 251.611†	611781.1	622261.8	45005	µg/L	45005 ppb	03:04:49
3	Sn 189.927†	20156.3	20489.9	10492	µg/L	10492 ppb	03:04:54
3	Ti 334.940†	4312010.6	4387399.1	9994.1	µg/L	9994.1 ppb	03:04:38
3	Tl 190.801†	6124.3	6252.9	9662.8	µg/L	9662.8 ppb	03:04:54
3	U 409.014†	1776.0	1076.9	97.649	µg/L	97.649 ppb	03:04:49
3	V 292.402†	866616.3	882050.1	9990.4	µg/L	9990.4 ppb	03:04:49
3	Zn 213.857†	543533.1	552606.8	14567	µg/L	14567 ppb	03:04:49

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1991056.9	98.459	%	0.1951				0.20%
Sc RADIAL	119637.0	103	%	3.3				3.25%
Y 371.029	1209936.4	96.122	%	0.0697				0.07%
Ag 328.068†	-7259.1	1.9182	µg/L	0.15643	1.9182	ppb	0.15643	8.16%
Al 396.153Radial†	846.4	48.261	µg/L	93.3060	48.261	ppb	93.3060	193.34%
As 188.979†	5334.0	9693.0	µg/L	77.34	9693.0	ppb	77.34	0.80%
QC value within limits for As 188.979 Recovery = 96.93%								
B 249.677†	113008.2	4899.1	µg/L	26.08	4899.1	ppb	26.08	0.53%
QC value within limits for B 249.677 Recovery = 97.98%								
Ba 233.527†	559077.1	14361	µg/L	77.8	14361	ppb	77.8	0.54%
QC value within limits for Ba 233.527 Recovery = 95.74%								
Be 313.107†	4621086.2	2888.0	µg/L	11.62	2888.0	ppb	11.62	0.40%
QC value within limits for Be 313.107 Recovery = 96.27%								
Ca 317.933Radial†	327.4	126.68	µg/L	50.636	126.68	ppb	50.636	39.97%
Cd 226.502†	362876.7	9668.7	µg/L	52.50	9668.7	ppb	52.50	0.54%
QC value within limits for Cd 226.502 Recovery = 96.69%								
Co 228.616†	197006.8	9521.7	µg/L	51.87	9521.7	ppb	51.87	0.54%
QC value within limits for Co 228.616 Recovery = 95.22%								
Cr 267.716†	1144508.7	24026	µg/L	132.8	24026	ppb	132.8	0.55%
QC value within limits for Cr 267.716 Recovery = 96.10%								

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Cu 324.752†          2954231.2       20492 µg/L        101.5       20492 ppb        101.5   0.50%
   QC value within limits for Cu 324.752  Recovery = 102.46%
Fe 238.204 Radial†         0.6      319.06 µg/L       31.624      319.06 ppb       31.624   9.91%
K 766.490 Radial†     564506.7      288910 µg/L      10616.8      288910 ppb      10616.8   3.67%
   QC value within limits for K 766.490 Radial  Recovery = 96.30%
Mg 279.077 IEC†          -43.4     -23.740 µg/L      51.2929     -23.740 ppb      51.2929 216.06%
Mn 257.610†          2935717.1      9373.8 µg/L        46.46      9373.8 ppb        46.46   0.50%
   QC value within limits for Mn 257.610  Recovery = 93.74%
Mo 202.031†            83806.0      9788.9 µg/L        56.07      9788.9 ppb        56.07   0.57%
   QC value within limits for Mo 202.031  Recovery = 97.89%
Na 589.592 Radial†       494.1      123.75 µg/L       42.560      123.75 ppb       42.560  34.39%
Ni 231.604†           176517.8      9657.5 µg/L        48.92      9657.5 ppb        48.92   0.51%
   QC value within limits for Ni 231.604  Recovery = 96.57%
P 214.914†              8656.5      15199 µg/L        184.3       15199 ppb        184.3   1.21%
   QC value within limits for P 214.914  Recovery = 101.33%
Pb 220.353†            96493.3      24938 µg/L        123.2       24938 ppb        123.2   0.49%
   QC value within limits for Pb 220.353  Recovery = 99.75%
S 181.975 Axial†       10342.1      50637 µg/L        511.3       50637 ppb        511.3   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 101.27%
Sb 206.836†            10344.1      10032 µg/L        112.8       10032 ppb        112.8   1.12%
   QC value within limits for Sb 206.836  Recovery = 100.32%
Se 196.026†             7459.6      9533.2 µg/L       104.74      9533.2 ppb       104.74   1.10%
   QC value within limits for Se 196.026  Recovery = 95.33%
SiO2†                 538223.8      98835 µg/L        494.2       98835 ppb        494.2   0.50%
   QC value within limits for SiO2  Recovery = 92.37%
Si 251.611†           621996.1      44984 µg/L        227.0       44984 ppb        227.0   0.50%
   QC value less than the lower limit for Si 251.611  Recovery = 89.97%
Sn 189.927†            20835.1      10669 µg/L        153.8       10669 ppb        153.8   1.44%
   QC value within limits for Sn 189.927  Recovery = 106.69%
Sr 421.552†          1890394.7      9501.1 µg/L       352.72      9501.1 ppb       352.72   3.71%
   QC value within limits for Sr 421.552  Recovery = 95.01%
Ti 334.940†          4366497.6      9946.5 µg/L        44.30      9946.5 ppb        44.30   0.45%
   QC value within limits for Ti 334.940  Recovery = 99.47%
Tl 190.801†             6285.6      9712.7 µg/L        44.63      9712.7 ppb        44.63   0.46%
   QC value within limits for Tl 190.801  Recovery = 97.13%
U 409.014†              1114.2      101.02 µg/L        3.766      101.02 ppb        3.766   3.73%
V 292.402†            883434.9      10006 µg/L         53.5       10006 ppb         53.5   0.53%
   QC value within limits for V 292.402  Recovery = 100.06%
Zn 213.857†           553475.7      14590 µg/L         63.7       14590 ppb         63.7   0.44%
   QC value within limits for Zn 213.857  Recovery = 97.27%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:05:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114144.5	114144.5	97.9	%			03:05:41
1	Al 396.153Radial†	10436.6	10540.5	5217.6	µg/L	5217.6	ppb	03:05:41
1	Ca 317.933Radial†	13444.9	13324.8	5155.6	µg/L	5155.6	ppb	03:06:01
1	Fe 238.204 Radial†	805.8	808.2	5156.2	µg/L	5156.2	ppb	03:06:01
1	K 766.490 Radial†	10527.8	10074.4	5156.0	µg/L	5156.0	ppb	03:05:41
1	Mg 279.077 IEC†	848.6	851.6	5263.2	µg/L	5263.2	ppb	03:06:01
1	Na 589.592 Radial†	39836.4	41337.4	10352	µg/L	10352	ppb	03:05:41
1	Sr 421.552†	98847.3	101060.8	507.93	µg/L	507.93	ppb	03:05:41
1	Sc 361.383	1981668.3	1981668.3	97.995	%			03:07:05
1	Y 371.029	1243227.2	1243227.2	98.767	%			03:07:05
1	Ag 328.068†	55086.8	56203.8	516.19	µg/L	516.19	ppb	03:07:11
1	As 188.979†	280.1	283.7	513.94	µg/L	513.94	ppb	03:07:31
1	B 249.677†	11537.3	11635.6	502.81	µg/L	502.81	ppb	03:07:11
1	Ba 233.527†	18979.6	19446.1	499.82	µg/L	499.82	ppb	03:07:11
1	Be 313.107†	791780.9	804469.0	503.20	µg/L	503.20	ppb	03:07:05
1	Cd 226.502†	18405.4	18881.0	503.03	µg/L	503.03	ppb	03:07:11
1	Co 228.616†	10118.1	10391.8	502.24	µg/L	502.24	ppb	03:07:11
1	Cr 267.716†	23267.9	23843.9	501.22	µg/L	501.22	ppb	03:07:11
1	Cu 324.752†	75053.4	72319.6	502.75	µg/L	502.75	ppb	03:07:11
1	Mn 257.610†	154624.5	157990.3	505.11	µg/L	505.11	ppb	03:07:05
1	Mo 202.031†	4306.2	4398.0	513.91	µg/L	513.91	ppb	03:07:31
1	Ni 231.604†	9286.9	9201.4	503.42	µg/L	503.42	ppb	03:07:11
1	P 214.914†	1416.1	1244.1	2458.7	µg/L	2458.7	ppb	03:07:31
1	Pb 220.353†	1988.6	1973.1	510.71	µg/L	510.71	ppb	03:07:31
1	S 181.975 Axial†	231.6	214.2	1047.1	µg/L	1047.1	ppb	03:07:31
1	Sb 206.836†	544.3	534.4	521.61	µg/L	521.61	ppb	03:07:31
1	Se 196.026†	403.0	401.4	515.11	µg/L	515.11	ppb	03:07:31
1	SiO2†	31674.8	29571.7	5430.3	µg/L	5430.3	ppb	03:07:11
1	Si 251.611†	33910.5	34279.3	2486.9	µg/L	2486.9	ppb	03:07:11
1	Sn 189.927†	1018.2	1016.6	523.37	µg/L	523.37	ppb	03:07:31
1	Ti 334.940†	228089.7	231983.2	528.15	µg/L	528.15	ppb	03:07:05
1	Tl 190.801†	308.6	335.3	517.48	µg/L	517.48	ppb	03:07:31
1	U 409.014†	6124.4	5519.3	499.59	µg/L	499.59	ppb	03:07:11
1	V 292.402†	43315.8	44329.0	503.46	µg/L	503.46	ppb	03:07:11
1	Zn 213.857†	19223.4	19090.2	501.95	µg/L	501.95	ppb	03:07:11
2	Sc RADIAL	114667.4	114667.4	98.3	%			03:06:07
2	Al 396.153Radial†	10372.1	10426.2	5161.1	µg/L	5161.1	ppb	03:06:07
2	Ca 317.933Radial†	13402.6	13219.0	5114.7	µg/L	5114.7	ppb	03:06:27
2	Fe 238.204 Radial†	801.6	800.1	5104.9	µg/L	5104.9	ppb	03:06:27
2	K 766.490 Radial†	10389.3	9884.6	5058.8	µg/L	5058.8	ppb	03:06:07
2	Mg 279.077 IEC†	849.9	849.0	5246.7	µg/L	5246.7	ppb	03:06:27
2	Na 589.592 Radial†	39629.5	40941.5	10253	µg/L	10253	ppb	03:06:07
2	Sr 421.552†	98064.9	99804.5	501.61	µg/L	501.61	ppb	03:06:07
2	Sc 361.383	2005021.9	2005021.9	99.149	%			03:07:38
2	Y 371.029	1253973.1	1253973.1	99.621	%			03:07:38
2	Ag 328.068†	55400.1	55865.0	513.08	µg/L	513.08	ppb	03:07:44
2	As 188.979†	267.3	267.4	484.37	µg/L	484.37	ppb	03:08:05
2	B 249.677†	11616.4	11578.3	500.34	µg/L	500.34	ppb	03:07:44
2	Ba 233.527†	19178.0	19420.5	499.16	µg/L	499.16	ppb	03:07:44
2	Be 313.107†	796648.5	799967.3	500.39	µg/L	500.39	ppb	03:07:38
2	Cd 226.502†	18542.5	18800.5	500.88	µg/L	500.88	ppb	03:07:44
2	Co 228.616†	10194.4	10348.5	500.15	µg/L	500.15	ppb	03:07:44
2	Cr 267.716†	23441.5	23742.4	499.09	µg/L	499.09	ppb	03:07:44
2	Cu 324.752†	75567.0	71945.5	500.14	µg/L	500.14	ppb	03:07:44
2	Mn 257.610†	155451.5	156986.5	501.90	µg/L	501.90	ppb	03:07:38
2	Mo 202.031†	4298.1	4338.6	506.97	µg/L	506.97	ppb	03:08:05
2	Ni 231.604†	9268.7	9072.6	496.37	µg/L	496.37	ppb	03:07:44
2	P 214.914†	1413.0	1224.3	2418.7	µg/L	2418.7	ppb	03:08:05
2	Pb 220.353†	1997.0	1957.9	506.77	µg/L	506.77	ppb	03:08:05

2	S 181.975 Axial†	231.6	211.5	1034.0 µg/L	1034.0 ppb	03:08:05
2	Sb 206.836†	529.1	512.5	500.19 µg/L	500.19 ppb	03:08:05
2	Se 196.026†	391.5	384.9	494.06 µg/L	494.06 ppb	03:08:05
2	SiO2†	31848.7	29370.6	5393.4 µg/L	5393.4 ppb	03:07:44
2	Si 251.611†	34119.2	34086.7	2473.4 µg/L	2473.4 ppb	03:07:44
2	Sn 189.927†	1015.1	1001.4	515.54 µg/L	515.54 ppb	03:08:05
2	Ti 334.940†	228032.7	229214.7	521.84 µg/L	521.84 ppb	03:07:38
2	Tl 190.801†	300.8	323.8	499.73 µg/L	499.73 ppb	03:08:05
2	U 409.014†	6157.9	5480.3	496.06 µg/L	496.06 ppb	03:07:44
2	V 292.402†	43595.4	44096.2	500.79 µg/L	500.79 ppb	03:07:44
2	Zn 213.857†	19377.0	19016.6	500.04 µg/L	500.04 ppb	03:07:44
3	Sc RADIAL	115758.8	115758.8	99.3 %		03:06:33
3	Al 396.153Radial†	10512.7	10468.4	5182.4 µg/L	5182.4 ppb	03:06:33
3	Ca 317.933Radial†	13441.8	13130.0	5080.3 µg/L	5080.3 ppb	03:06:54
3	Fe 238.204 Radial†	803.7	794.6	5069.6 µg/L	5069.6 ppb	03:06:54
3	K 766.490 Radial†	10567.8	9964.7	5099.8 µg/L	5099.8 ppb	03:06:33
3	Mg 279.077 IEC†	848.2	839.1	5185.7 µg/L	5185.7 ppb	03:06:54
3	Na 589.592 Radial†	40049.8	40984.9	10264 µg/L	10264 ppb	03:06:33
3	Sr 421.552†	99216.5	100024.4	502.72 µg/L	502.72 ppb	03:06:33
3	Sc 361.383	1999085.5	1999085.5	98.856 %		03:08:12
3	Y 371.029	1246729.6	1246729.6	99.045 %		03:08:12
3	Ag 328.068†	55248.9	55878.0	513.20 µg/L	513.20 ppb	03:08:17
3	As 188.979†	273.7	274.6	497.60 µg/L	497.60 ppb	03:08:38
3	B 249.677†	11581.1	11577.2	500.31 µg/L	500.31 ppb	03:08:17
3	Ba 233.527†	19153.8	19453.5	500.01 µg/L	500.01 ppb	03:08:17
3	Be 313.107†	790801.9	796439.0	498.18 µg/L	498.18 ppb	03:08:12
3	Cd 226.502†	18500.0	18813.1	501.23 µg/L	501.23 ppb	03:08:17
3	Co 228.616†	10194.3	10379.0	501.61 µg/L	501.61 ppb	03:08:17
3	Cr 267.716†	23445.2	23816.3	500.64 µg/L	500.64 ppb	03:08:17
3	Cu 324.752†	75436.1	72039.5	500.78 µg/L	500.78 ppb	03:08:17
3	Mn 257.610†	154128.5	156113.8	499.11 µg/L	499.11 ppb	03:08:12
3	Mo 202.031†	4217.2	4269.6	498.91 µg/L	498.91 ppb	03:08:38
3	Ni 231.604†	9320.7	9153.0	500.77 µg/L	500.77 ppb	03:08:17
3	P 214.914†	1385.8	1200.9	2371.5 µg/L	2371.5 ppb	03:08:38
3	Pb 220.353†	1945.4	1911.7	494.80 µg/L	494.80 ppb	03:08:38
3	S 181.975 Axial†	227.9	208.4	1018.9 µg/L	1018.9 ppb	03:08:38
3	Sb 206.836†	527.6	512.6	500.32 µg/L	500.32 ppb	03:08:38
3	Se 196.026†	405.1	399.9	513.13 µg/L	513.13 ppb	03:08:38
3	SiO2†	31834.9	29452.0	5408.3 µg/L	5408.3 ppb	03:08:17
3	Si 251.611†	34097.9	34167.4	2479.8 µg/L	2479.8 ppb	03:08:17
3	Sn 189.927†	1001.2	990.4	509.88 µg/L	509.88 ppb	03:08:38
3	Ti 334.940†	225520.7	227356.6	517.61 µg/L	517.61 ppb	03:08:12
3	Tl 190.801†	300.7	324.6	500.89 µg/L	500.89 ppb	03:08:38
3	U 409.014†	6145.2	5485.9	496.58 µg/L	496.58 ppb	03:08:17
3	V 292.402†	43585.7	44216.9	502.09 µg/L	502.09 ppb	03:08:17
3	Zn 213.857†	19355.7	19053.1	500.99 µg/L	500.99 ppb	03:08:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1995258.6	98.667	%	0.6002				0.61%
Sc RADIAL	114856.9	98.5	%	0.71				0.72%
Y 371.029	1247976.6	99.144	%	0.4354				0.44%
Ag 328.068†	55982.3	514.16	µg/L	1.761	514.16	ppb	1.761	0.34%
QC value within limits for Ag 328.068 Recovery = 102.83%								
Al 396.153Radial†	10478.4	5187.0	µg/L	28.55	5187.0	ppb	28.55	0.55%
QC value within limits for Al 396.153Radial Recovery = 103.74%								
As 188.979†	275.2	498.64	µg/L	14.812	498.64	ppb	14.812	2.97%
QC value within limits for As 188.979 Recovery = 99.73%								
B 249.677†	11597.0	501.15	µg/L	1.435	501.15	ppb	1.435	0.29%
QC value within limits for B 249.677 Recovery = 100.23%								
Ba 233.527†	19440.0	499.66	µg/L	0.446	499.66	ppb	0.446	0.09%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	800291.8	500.59	µg/L	2.517	500.59	ppb	2.517	0.50%
QC value within limits for Be 313.107 Recovery = 100.12%								
Ca 317.933Radial†	13224.6	5116.9	µg/L	37.72	5116.9	ppb	37.72	0.74%
QC value within limits for Ca 317.933Radial Recovery = 102.34%								
Cd 226.502†	18831.6	501.71	µg/L	1.154	501.71	ppb	1.154	0.23%
QC value within limits for Cd 226.502 Recovery = 100.34%								
Co 228.616†	10373.1	501.33	µg/L	1.075	501.33	ppb	1.075	0.21%

```
   QC value within limits for Co 228.616  Recovery = 100.27%
Cr 267.716†            23800.9      500.32 µg/L        1.104      500.32 ppb         1.104   0.22%
   QC value within limits for Cr 267.716  Recovery = 100.06%
Cu 324.752†            72101.6      501.22 µg/L        1.357      501.22 ppb         1.357   0.27%
   QC value within limits for Cu 324.752  Recovery = 100.24%
Fe 238.204 Radial†       800.9      5110.2 µg/L       43.57      5110.2 ppb        43.57   0.85%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.20%
K 766.490 Radial†       9974.6      5104.9 µg/L       48.78      5104.9 ppb        48.78   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 102.10%
Mg 279.077 IEC†         846.6      5231.9 µg/L       40.80      5231.9 ppb        40.80   0.78%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.64%
Mn 257.610†           157030.2      502.04 µg/L        3.004      502.04 ppb         3.004   0.60%
   QC value within limits for Mn 257.610  Recovery = 100.41%
Mo 202.031†             4335.4      506.60 µg/L        7.506      506.60 ppb         7.506   1.48%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†     41087.9       10289 µg/L       54.4        10289 ppb        54.4   0.53%
   QC value within limits for Na 589.592 Radial  Recovery = 102.89%
Ni 231.604†             9142.4      500.19 µg/L        3.559      500.19 ppb         3.559   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.04%
P 214.914†              1223.1      2416.3 µg/L       43.65      2416.3 ppb        43.65   1.81%
   QC value within limits for P 214.914  Recovery = 96.65%
Pb 220.353†             1947.6      504.09 µg/L        8.284      504.09 ppb         8.284   1.64%
   QC value within limits for Pb 220.353  Recovery = 100.82%
S 181.975 Axial†         211.4      1033.3 µg/L       14.10      1033.3 ppb        14.10   1.36%
   QC value within limits for S 181.975 Axial  Recovery = 103.33%
Sb 206.836†              519.8      507.37 µg/L       12.333      507.37 ppb        12.333   2.43%
   QC value within limits for Sb 206.836  Recovery = 101.47%
Se 196.026†              395.4      507.43 µg/L       11.620      507.43 ppb        11.620   2.29%
   QC value within limits for Se 196.026  Recovery = 101.49%
SiO2†                  29464.7      5410.7 µg/L       18.58      5410.7 ppb        18.58   0.34%
   QC value within limits for SiO2  Recovery = 101.18%
Si 251.611†            34177.8      2480.0 µg/L        6.79      2480.0 ppb         6.79   0.27%
   QC value within limits for Si 251.611  Recovery = 99.20%
Sn 189.927†             1002.8      516.26 µg/L        6.774      516.26 ppb         6.774   1.31%
   QC value within limits for Sn 189.927  Recovery = 103.25%
Sr 421.552†           100296.6      504.09 µg/L        3.372      504.09 ppb         3.372   0.67%
   QC value within limits for Sr 421.552  Recovery = 100.82%
Ti 334.940†           229518.2      522.54 µg/L        5.301      522.54 ppb         5.301   1.01%
   QC value within limits for Ti 334.940  Recovery = 104.51%
Tl 190.801†              327.9      506.04 µg/L        9.929      506.04 ppb         9.929   1.96%
   QC value within limits for Tl 190.801  Recovery = 101.21%
U 409.014†              5495.1      497.41 µg/L        1.905      497.41 ppb         1.905   0.38%
   QC value within limits for U 409.014  Recovery = 99.48%
V 292.402†             44214.0      502.11 µg/L        1.339      502.11 ppb         1.339   0.27%
   QC value within limits for V 292.402  Recovery = 100.42%
Zn 213.857†            19053.3      500.99 µg/L        0.952      500.99 ppb         0.952   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.20%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 03:08:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114417.2	114417.2	98.1	%			03:09:19
1	Al 396.153Radial†	347.2	230.6	114.52	µg/L	114.52	ppb	03:09:19
1	Ca 317.933Radial†	488.7	85.4	33.037	µg/L	33.037	ppb	03:09:40
1	Fe 238.204 Radial†	22.9	8.1	51.712	µg/L	51.712	ppb	03:09:40
1	K 766.490 Radial†	766.2	98.5	50.423	µg/L	50.423	ppb	03:09:19
1	Mg 279.077 IEC†	12.4	-2.8	-17.126	µg/L	-17.126	ppb	03:09:40
1	Na 589.592 Radial†	-462.2	163.0	40.817	µg/L	40.817	ppb	03:09:19
1	Sr 421.552†	208.4	274.7	1.3807	µg/L	1.3807	ppb	03:09:19
1	Sc 361.383	1995000.1	1995000.1	98.654	%			03:10:42
1	Y 371.029	1245351.6	1245351.6	98.936	%			03:10:42
1	Ag 328.068†	93.2	84.1	0.7790	µg/L	0.7790	ppb	03:10:48
1	As 188.979†	0.7	-1.5	-2.7125	µg/L	-2.7125	ppb	03:11:08
1	B 249.677†	246.8	112.3	4.8518	µg/L	4.8518	ppb	03:10:48
1	Ba 233.527†	-31.5	46.1	1.1852	µg/L	1.1852	ppb	03:11:08
1	Be 313.107†	4185.9	727.1	0.4533	µg/L	0.4533	ppb	03:10:48
1	Cd 226.502†	-49.1	49.2	1.3105	µg/L	1.3105	ppb	03:11:08
1	Co 228.616†	-56.0	9.9	0.4733	µg/L	0.4733	ppb	03:11:08
1	Cr 267.716†	16.7	116.8	2.4519	µg/L	2.4519	ppb	03:10:48
1	Cu 324.752†	4508.1	299.9	2.0912	µg/L	2.0912	ppb	03:10:48
1	Mn 257.610†	17.4	218.9	0.7056	µg/L	0.7056	ppb	03:11:08
1	Mo 202.031†	6.1	9.9	1.1576	µg/L	1.1576	ppb	03:11:08
1	Ni 231.604†	302.8	31.4	1.7169	µg/L	1.7169	ppb	03:11:08
1	P 214.914†	193.1	-5.2	-10.742	µg/L	-10.742	ppb	03:11:08
1	Pb 220.353†	54.9	-0.6	-0.1573	µg/L	-0.1573	ppb	03:11:08
1	S 181.975 Axial†	27.1	5.3	26.179	µg/L	26.179	ppb	03:11:08
1	Sb 206.836†	24.0	3.2	3.1558	µg/L	3.1558	ppb	03:11:08
1	Se 196.026†	17.4	7.7	9.9118	µg/L	9.9118	ppb	03:11:08
1	SiO2†	2767.2	53.6	9.8478	µg/L	9.8478	ppb	03:10:48
1	Si 251.611†	414.4	94.9	6.7462	µg/L	6.7462	ppb	03:11:08
1	Sn 189.927†	25.5	3.4	1.7733	µg/L	1.7733	ppb	03:11:08
1	Ti 334.940†	2766.1	2029.5	4.6211	µg/L	4.6211	ppb	03:10:48
1	Tl 190.801†	-19.7	0.4	0.6021	µg/L	0.6021	ppb	03:11:08
1	U 409.014†	754.9	34.8	3.1444	µg/L	3.1444	ppb	03:10:48
1	V 292.402†	-13.1	113.5	1.2937	µg/L	1.2937	ppb	03:10:48
1	Zn 213.857†	588.1	69.5	1.8259	µg/L	1.8259	ppb	03:11:08
2	Sc RADIAL	117860.7	117860.7	101	%			03:09:45
2	Al 396.153Radial†	214.4	88.9	44.127	µg/L	44.127	ppb	03:09:45
2	Ca 317.933Radial†	486.6	68.7	26.590	µg/L	26.590	ppb	03:10:06
2	Fe 238.204 Radial†	22.8	7.4	46.771	µg/L	46.771	ppb	03:10:06
2	K 766.490 Radial†	795.0	104.2	53.316	µg/L	53.316	ppb	03:09:45
2	Mg 279.077 IEC†	23.1	7.4	45.512	µg/L	45.512	ppb	03:10:06
2	Na 589.592 Radial†	-523.3	116.3	29.127	µg/L	29.127	ppb	03:09:45
2	Sr 421.552†	29.3	91.3	0.4590	µg/L	0.4590	ppb	03:09:45
2	Sc 361.383	1997369.1	1997369.1	98.771	%			03:11:14
2	Y 371.029	1246763.1	1246763.1	99.048	%			03:11:14
2	Ag 328.068†	52.4	42.6	0.3985	µg/L	0.3985	ppb	03:11:20
2	As 188.979†	1.8	-0.4	-0.7433	µg/L	-0.7433	ppb	03:11:41
2	B 249.677†	245.0	110.2	4.7625	µg/L	4.7625	ppb	03:11:20
2	Ba 233.527†	-25.7	52.0	1.3351	µg/L	1.3351	ppb	03:11:41
2	Be 313.107†	3856.7	388.8	0.2418	µg/L	0.2418	ppb	03:11:20
2	Cd 226.502†	-47.5	50.9	1.3473	µg/L	1.3473	ppb	03:11:41
2	Co 228.616†	-53.7	12.3	0.5872	µg/L	0.5872	ppb	03:11:41
2	Cr 267.716†	-29.5	69.9	1.4682	µg/L	1.4682	ppb	03:11:20
2	Cu 324.752†	4431.3	216.6	1.5127	µg/L	1.5127	ppb	03:11:20
2	Mn 257.610†	5.8	207.2	0.6675	µg/L	0.6675	ppb	03:11:41
2	Mo 202.031†	6.0	9.7	1.1376	µg/L	1.1376	ppb	03:11:41
2	Ni 231.604†	295.7	23.8	1.3032	µg/L	1.3032	ppb	03:11:41
2	P 214.914†	185.0	-13.6	-27.633	µg/L	-27.633	ppb	03:11:41
2	Pb 220.353†	66.0	10.6	2.7495	µg/L	2.7495	ppb	03:11:41

2	S 181.975 Axial†	30.3	8.6	41.862 µg/L	41.862 ppb	03:11:41
2	Sb 206.836†	19.9	-1.0	-0.9352 µg/L	-0.9352 ppb	03:11:41
2	Se 196.026†	14.8	5.1	6.5079 µg/L	6.5079 ppb	03:11:41
2	SiO2†	2749.9	32.8	6.0158 µg/L	6.0158 ppb	03:11:20
2	Si 251.611†	402.0	81.8	5.6975 µg/L	5.6975 ppb	03:11:41
2	Sn 189.927†	30.8	8.7	4.4984 µg/L	4.4984 ppb	03:11:41
2	Ti 334.940†	2483.1	1739.6	3.9611 µg/L	3.9611 ppb	03:11:20
2	Tl 190.801†	-19.2	1.0	1.4890 µg/L	1.4890 ppb	03:11:41
2	U 409.014†	643.7	-78.7	-7.1468 µg/L	-7.1468 ppb	03:11:20
2	V 292.402†	-44.6	81.6	0.9182 µg/L	0.9182 ppb	03:11:20
2	Zn 213.857†	590.3	71.0	1.8660 µg/L	1.8660 ppb	03:11:41
3	Sc RADIAL	114149.3	114149.3	97.9 %		03:10:11
3	Al 396.153Radial†	258.4	140.7	69.882 µg/L	69.882 ppb	03:10:11
3	Ca 317.933Radial†	524.0	122.6	47.438 µg/L	47.438 ppb	03:10:32
3	Fe 238.204 Radial†	22.6	7.9	50.241 µg/L	50.241 ppb	03:10:32
3	K 766.490 Radial†	820.7	156.0	79.855 µg/L	79.855 ppb	03:10:11
3	Mg 279.077 IEC†	19.1	4.1	25.232 µg/L	25.232 ppb	03:10:32
3	Na 589.592 Radial†	-445.2	179.3	44.892 µg/L	44.892 ppb	03:10:11
3	Sr 421.552†	148.6	214.1	1.0760 µg/L	1.0760 ppb	03:10:11
3	Sc 361.383	1997534.1	1997534.1	98.779 %		03:11:47
3	Y 371.029	1246478.5	1246478.5	99.025 %		03:11:47
3	Ag 328.068†	30.6	20.6	0.1969 µg/L	0.1969 ppb	03:11:52
3	As 188.979†	5.6	3.4	6.2527 µg/L	6.2527 ppb	03:12:13
3	B 249.677†	205.1	69.8	3.0115 µg/L	3.0115 ppb	03:11:52
3	Ba 233.527†	-24.9	52.9	1.3578 µg/L	1.3578 ppb	03:12:13
3	Be 313.107†	3828.2	359.6	0.2237 µg/L	0.2237 ppb	03:11:52
3	Cd 226.502†	-50.7	47.6	1.2686 µg/L	1.2686 ppb	03:12:13
3	Co 228.616†	-41.8	24.4	1.1731 µg/L	1.1731 ppb	03:12:13
3	Cr 267.716†	-67.0	32.0	0.6721 µg/L	0.6721 ppb	03:11:52
3	Cu 324.752†	4349.8	133.8	0.9387 µg/L	0.9387 ppb	03:11:52
3	Mn 257.610†	-3.7	197.6	0.6372 µg/L	0.6372 ppb	03:12:13
3	Mo 202.031†	7.6	11.3	1.3250 µg/L	1.3250 ppb	03:12:13
3	Ni 231.604†	285.7	13.7	0.7498 µg/L	0.7498 ppb	03:12:13
3	P 214.914†	195.4	-3.1	-6.3589 µg/L	-6.3589 ppb	03:12:13
3	Pb 220.353†	60.1	4.5	1.1735 µg/L	1.1735 ppb	03:12:13
3	S 181.975 Axial†	24.6	2.7	13.314 µg/L	13.314 ppb	03:12:13
3	Sb 206.836†	21.8	1.0	0.9558 µg/L	0.9558 ppb	03:12:13
3	Se 196.026†	14.0	4.3	5.5866 µg/L	5.5866 ppb	03:12:13
3	SiO2†	2715.5	-2.3	-0.4193 µg/L	-0.4193 ppb	03:11:52
3	Si 251.611†	416.1	96.0	6.9174 µg/L	6.9174 ppb	03:12:13
3	Sn 189.927†	22.5	0.4	0.2175 µg/L	0.2175 ppb	03:12:13
3	Ti 334.940†	2314.1	1568.3	3.5698 µg/L	3.5698 ppb	03:11:52
3	Tl 190.801†	-18.9	1.2	1.9016 µg/L	1.9016 ppb	03:12:13
3	U 409.014†	797.9	77.3	6.9967 µg/L	6.9967 ppb	03:11:52
3	V 292.402†	-54.1	72.0	0.8343 µg/L	0.8343 ppb	03:11:52
3	Zn 213.857†	589.1	69.7	1.8361 µg/L	1.8361 ppb	03:12:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1996634.4	98.735	%	0.0701				0.07%
Sc RADIAL	115475.7	99.0	%	1.77				1.79%
Y 371.029	1246197.7	99.003	%	0.0593				0.06%
Ag 328.068†	49.1	0.4581	µg/L	0.29562	0.4581	ppb	0.29562	64.53%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	153.4	76.176	µg/L	35.6155	76.176	ppb	35.6155	46.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.9323	µg/L	4.71163	0.9323	ppb	4.71163	505.38%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	97.4	4.2086	µg/L	1.03768	4.2086	ppb	1.03768	24.66%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	50.3	1.2927	µg/L	0.09375	1.2927	ppb	0.09375	7.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	491.8	0.3063	µg/L	0.12764	0.3063	ppb	0.12764	41.68%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	92.2	35.688	µg/L	10.6736	35.688	ppb	10.6736	29.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	49.2	1.3088	µg/L	0.03934	1.3088	ppb	0.03934	3.01%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	15.5	0.7445	µg/L	0.37548	0.7445	ppb	0.37548	50.43%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	72.9	1.5307 µg/L	0.89151	1.5307 ppb	0.89151	58.24%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	216.8	1.5142 µg/L	0.57628	1.5142 ppb	0.57628	38.06%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	7.8	49.575 µg/L	2.5370	49.575 ppb	2.5370	5.12%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	119.6	61.198 µg/L	16.2219	61.198 ppb	16.2219	26.51%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	2.9	17.873 µg/L	31.9613	17.873 ppb	31.9613	178.83%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	207.9	0.6701 µg/L	0.03427	0.6701 ppb	0.03427	5.11%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	10.3	1.2067 µg/L	0.10290	1.2067 ppb	0.10290	8.53%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	152.9	38.278 µg/L	8.1834	38.278 ppb	8.1834	21.38%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	23.0	1.2567 µg/L	0.48524	1.2567 ppb	0.48524	38.61%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-7.3	-14.911 µg/L	11.2330	-14.911 ppb	11.2330	75.33%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	4.8	1.2552 µg/L	1.45510	1.2552 ppb	1.45510	115.92%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	5.5	27.118 µg/L	14.2972	27.118 ppb	14.2972	52.72%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	1.1	1.0588 µg/L	2.04743	1.0588 ppb	2.04743	193.37%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	5.7	7.3354 µg/L	2.27825	7.3354 ppb	2.27825	31.06%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2†	28.0	5.1481 µg/L	5.18826	5.1481 ppb	5.18826	100.78%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	90.9	6.4537 µg/L	0.66048	6.4537 ppb	0.66048	10.23%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	4.2	2.1631 µg/L	2.16689	2.1631 ppb	2.16689	100.18%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	193.4	0.9719 µg/L	0.46956	0.9719 ppb	0.46956	48.31%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	1779.1	4.0507 µg/L	0.53134	4.0507 ppb	0.53134	13.12%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	0.9	1.3309 µg/L	0.66401	1.3309 ppb	0.66401	49.89%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	11.1	0.9981 µg/L	7.31195	0.9981 ppb	7.31195	732.59%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	89.0	1.0154 µg/L	0.24466	1.0154 ppb	0.24466	24.10%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	70.1	1.8427 µg/L	0.02084	1.8427 ppb	0.02084	1.13%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 6
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:39:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	119102.6	119102.6	102	%			03:40:24
1	Al 396.153Radial†	10313.6	9976.0	4937.6	µg/L	4937.6	ppb	03:40:24
1	Ca 317.933Radial†	13526.7	12832.9	4965.3	µg/L	4965.3	ppb	03:40:44
1	Fe 238.204 Radial†	803.0	771.2	4920.6	µg/L	4920.6	ppb	03:40:44
1	K 766.490 Radial†	10448.0	9548.6	4886.8	µg/L	4886.8	ppb	03:40:24
1	Mg 279.077 IEC†	848.2	815.1	5037.8	µg/L	5037.8	ppb	03:40:44
1	Na 589.592 Radial†	41105.5	40885.8	10239	µg/L	10239	ppb	03:40:24
1	Sr 421.552†	98068.7	96094.0	482.97	µg/L	482.97	ppb	03:40:24
1	Sc 361.383	2073293.8	2073293.8	102.53	%			03:41:48
1	Y 371.029	1280044.1	1280044.1	101.69	%			03:41:48
1	Ag 328.068†	56424.5	55024.2	505.36	µg/L	505.36	ppb	03:41:54
1	As 188.979†	284.5	275.3	498.72	µg/L	498.72	ppb	03:42:14
1	B 249.677†	12484.4	12039.0	520.37	µg/L	520.37	ppb	03:41:54
1	Ba 233.527†	19653.9	19247.8	494.72	µg/L	494.72	ppb	03:41:54
1	Be 313.107†	813355.6	789804.8	494.04	µg/L	494.04	ppb	03:41:48
1	Cd 226.502†	19115.7	18743.8	499.38	µg/L	499.38	ppb	03:41:54
1	Co 228.616†	10469.6	10278.4	496.79	µg/L	496.79	ppb	03:41:54
1	Cr 267.716†	23953.2	23463.0	493.21	µg/L	493.21	ppb	03:41:54
1	Cu 324.752†	76369.4	70218.5	488.12	µg/L	488.12	ppb	03:41:54
1	Mn 257.610†	158087.5	154394.8	493.60	µg/L	493.60	ppb	03:41:48
1	Mo 202.031†	4397.7	4293.0	501.64	µg/L	501.64	ppb	03:42:14
1	Ni 231.604†	9601.3	9089.3	497.28	µg/L	497.28	ppb	03:41:54
1	P 214.914†	1461.8	1224.9	2421.5	µg/L	2421.5	ppb	03:42:14
1	Pb 220.353†	2032.0	1925.6	498.43	µg/L	498.43	ppb	03:42:14
1	S 181.975 Axial†	243.3	215.1	1051.9	µg/L	1051.9	ppb	03:42:14
1	Sb 206.836†	546.6	512.0	499.67	µg/L	499.67	ppb	03:42:14
1	Se 196.026†	408.4	388.4	498.45	µg/L	498.45	ppb	03:42:14
1	SiO2†	32390.7	28841.5	5296.2	µg/L	5296.2	ppb	03:41:54
1	Si 251.611†	34828.3	33645.2	2441.6	µg/L	2441.6	ppb	03:41:54
1	Sn 189.927†	1048.6	1000.4	514.93	µg/L	514.93	ppb	03:42:14
1	Ti 334.940†	226183.6	219837.8	500.49	µg/L	500.49	ppb	03:41:48
1	Tl 190.801†	311.5	324.2	500.19	µg/L	500.19	ppb	03:42:14
1	U 409.014†	6157.9	5275.8	477.56	µg/L	477.56	ppb	03:41:54
1	V 292.402†	44572.5	43601.3	495.14	µg/L	495.14	ppb	03:41:54
1	Zn 213.857†	19724.7	18712.2	492.01	µg/L	492.01	ppb	03:41:54
2	Sc RADIAL	119473.2	119473.2	102	%			03:40:50
2	Al 396.153Radial†	10374.6	10004.3	4951.6	µg/L	4951.6	ppb	03:40:50
2	Ca 317.933Radial†	13530.0	12795.1	4950.7	µg/L	4950.7	ppb	03:41:10
2	Fe 238.204 Radial†	811.5	777.0	4958.0	µg/L	4958.0	ppb	03:41:10
2	K 766.490 Radial†	10606.8	9671.8	4949.9	µg/L	4949.9	ppb	03:40:50
2	Mg 279.077 IEC†	851.7	816.0	5043.4	µg/L	5043.4	ppb	03:41:10
2	Na 589.592 Radial†	40679.7	40345.2	10103	µg/L	10103	ppb	03:40:50
2	Sr 421.552†	99361.2	97057.8	487.81	µg/L	487.81	ppb	03:40:50
2	Sc 361.383	2085453.2	2085453.2	103.13	%			03:42:21
2	Y 371.029	1289070.2	1289070.2	102.41	%			03:42:21
2	Ag 328.068†	56316.5	54598.6	501.47	µg/L	501.47	ppb	03:42:27
2	As 188.979†	295.6	284.4	515.33	µg/L	515.33	ppb	03:42:47
2	B 249.677†	12384.7	11871.4	513.09	µg/L	513.09	ppb	03:42:27
2	Ba 233.527†	19723.9	19203.9	493.58	µg/L	493.58	ppb	03:42:27
2	Be 313.107†	827955.1	799336.2	500.00	µg/L	500.00	ppb	03:42:21
2	Cd 226.502†	19172.3	18690.0	497.93	µg/L	497.93	ppb	03:42:27
2	Co 228.616†	10494.1	10242.6	495.05	µg/L	495.05	ppb	03:42:27
2	Cr 267.716†	24040.9	23411.8	492.13	µg/L	492.13	ppb	03:42:27
2	Cu 324.752†	76365.6	69780.5	485.09	µg/L	485.09	ppb	03:42:27
2	Mn 257.610†	160819.2	156144.6	499.19	µg/L	499.19	ppb	03:42:21
2	Mo 202.031†	4436.1	4305.3	503.07	µg/L	503.07	ppb	03:42:47
2	Ni 231.604†	9553.2	8988.0	491.74	µg/L	491.74	ppb	03:42:27
2	P 214.914†	1477.8	1232.1	2436.4	µg/L	2436.4	ppb	03:42:47
2	Pb 220.353†	2058.7	1940.0	502.16	µg/L	502.16	ppb	03:42:47

2	S 181.975 Axial†	237.3	208.0	1016.8 µg/L	1016.8 ppb	03:42:47
2	Sb 206.836†	552.5	514.7	502.32 µg/L	502.32 ppb	03:42:47
2	Se 196.026†	417.1	394.6	506.35 µg/L	506.35 ppb	03:42:47
2	SiO2†	32486.7	28750.4	5279.5 µg/L	5279.5 ppb	03:42:27
2	Si 251.611†	34837.8	33456.4	2427.3 µg/L	2427.3 ppb	03:42:27
2	Sn 189.927†	1058.7	1004.2	516.89 µg/L	516.89 ppb	03:42:47
2	Ti 334.940†	230176.6	222423.4	506.38 µg/L	506.38 ppb	03:42:21
2	Tl 190.801†	314.7	325.5	502.28 µg/L	502.28 ppb	03:42:47
2	U 409.014†	6143.8	5227.0	473.13 µg/L	473.13 ppb	03:42:27
2	V 292.402†	44654.8	43427.7	493.19 µg/L	493.19 ppb	03:42:27
2	Zn 213.857†	19811.8	18684.5	491.31 µg/L	491.31 ppb	03:42:27
3	Sc RADIAL	118270.2	118270.2	101 %		03:41:16
3	Al 396.153Radial†	10386.7	10119.3	5009.1 µg/L	5009.1 ppb	03:41:16
3	Ca 317.933Radial†	13646.3	13044.1	5047.0 µg/L	5047.0 ppb	03:41:36
3	Fe 238.204 Radial†	815.3	788.9	5033.2 µg/L	5033.2 ppb	03:41:36
3	K 766.490 Radial†	10469.3	9641.5	4934.4 µg/L	4934.4 ppb	03:41:16
3	Mg 279.077 IEC†	859.1	831.7	5140.1 µg/L	5140.1 ppb	03:41:36
3	Na 589.592 Radial†	40383.3	40456.9	10131 µg/L	10131 ppb	03:41:16
3	Sr 421.552†	99237.2	97922.2	492.15 µg/L	492.15 ppb	03:41:16
3	Sc 361.383	2075214.7	2075214.7	102.62 %		03:42:54
3	Y 371.029	1283122.2	1283122.2	101.94 %		03:42:54
3	Ag 328.068†	56469.9	55017.5	505.32 µg/L	505.32 ppb	03:43:00
3	As 188.979†	277.8	268.5	486.41 µg/L	486.41 ppb	03:43:21
3	B 249.677†	12345.0	11891.9	513.96 µg/L	513.96 ppb	03:43:00
3	Ba 233.527†	19803.0	19375.4	497.99 µg/L	497.99 ppb	03:43:00
3	Be 313.107†	822121.4	797612.5	498.92 µg/L	498.92 ppb	03:42:54
3	Cd 226.502†	19233.1	18840.9	501.97 µg/L	501.97 ppb	03:43:00
3	Co 228.616†	10520.6	10318.6	498.71 µg/L	498.71 ppb	03:43:00
3	Cr 267.716†	24111.6	23595.7	496.00 µg/L	496.00 ppb	03:43:00
3	Cu 324.752†	76394.4	70173.9	487.84 µg/L	487.84 ppb	03:43:00
3	Mn 257.610†	159748.2	155870.3	498.33 µg/L	498.33 ppb	03:42:54
3	Mo 202.031†	4334.1	4227.1	493.93 µg/L	493.93 ppb	03:43:21
3	Ni 231.604†	9691.8	9168.7	501.63 µg/L	501.63 ppb	03:43:00
3	P 214.914†	1457.6	1219.4	2410.3 µg/L	2410.3 ppb	03:43:21
3	Pb 220.353†	2019.5	1911.7	494.79 µg/L	494.79 ppb	03:43:21
3	S 181.975 Axial†	238.9	210.6	1029.7 µg/L	1029.7 ppb	03:43:21
3	Sb 206.836†	535.8	501.0	488.91 µg/L	488.91 ppb	03:43:21
3	Se 196.026†	402.7	382.6	491.02 µg/L	491.02 ppb	03:43:21
3	SiO2†	32450.3	28870.3	5301.5 µg/L	5301.5 ppb	03:43:00
3	Si 251.611†	34870.5	33654.9	2442.6 µg/L	2442.6 ppb	03:43:00
3	Sn 189.927†	1033.2	984.4	506.82 µg/L	506.82 ppb	03:43:21
3	Ti 334.940†	228381.2	221775.1	504.90 µg/L	504.90 ppb	03:42:54
3	Tl 190.801†	311.9	324.3	500.48 µg/L	500.48 ppb	03:43:21
3	U 409.014†	6337.8	5445.5	492.92 µg/L	492.92 ppb	03:43:00
3	V 292.402†	44744.5	43728.7	496.55 µg/L	496.55 ppb	03:43:00
3	Zn 213.857†	19847.3	18813.9	494.67 µg/L	494.67 ppb	03:43:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2077987.2	102.76	%	0.323				0.31%
Sc RADIAL	118948.7	102	%	0.5				0.52%
Y 371.029	1284078.8	102.01	%	0.365				0.36%
Ag 328.068†	54880.1	504.05	µg/L	2.234	504.05	ppb	2.234	0.44%
QC value within limits for Ag 328.068 Recovery = 100.81%								
Al 396.153Radial†	10033.2	4966.1	µg/L	37.87	4966.1	ppb	37.87	0.76%
QC value within limits for Al 396.153Radial Recovery = 99.32%								
As 188.979†	276.1	500.16	µg/L	14.513	500.16	ppb	14.513	2.90%
QC value within limits for As 188.979 Recovery = 100.03%								
B 249.677†	11934.1	515.81	µg/L	3.976	515.81	ppb	3.976	0.77%
QC value within limits for B 249.677 Recovery = 103.16%								
Ba 233.527†	19275.7	495.43	µg/L	2.288	495.43	ppb	2.288	0.46%
QC value within limits for Ba 233.527 Recovery = 99.09%								
Be 313.107†	795584.5	497.65	µg/L	3.177	497.65	ppb	3.177	0.64%
QC value within limits for Be 313.107 Recovery = 99.53%								
Ca 317.933Radial†	12890.7	4987.7	µg/L	51.91	4987.7	ppb	51.91	1.04%
QC value within limits for Ca 317.933Radial Recovery = 99.75%								
Cd 226.502†	18758.2	499.76	µg/L	2.045	499.76	ppb	2.045	0.41%
QC value within limits for Cd 226.502 Recovery = 99.95%								
Co 228.616†	10279.9	496.85	µg/L	1.827	496.85	ppb	1.827	0.37%

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   QC value within limits for Co 228.616  Recovery = 99.37%
Cr 267.716†            23490.2      493.78 µg/L        1.994      493.78 ppb          1.994   0.40%
   QC value within limits for Cr 267.716  Recovery = 98.76%
Cu 324.752†            70057.6      487.02 µg/L        1.673      487.02 ppb          1.673   0.34%
   QC value within limits for Cu 324.752  Recovery = 97.40%
Fe 238.204 Radial†       779.0      4970.6 µg/L       57.37      4970.6 ppb         57.37   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.41%
K 766.490 Radial†       9620.6      4923.7 µg/L       32.86      4923.7 ppb         32.86   0.67%
   QC value within limits for K 766.490 Radial  Recovery = 98.47%
Mg 279.077 IEC†          820.9      5073.7 µg/L       57.52      5073.7 ppb         57.52   1.13%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.47%
Mn 257.610†           155469.9      497.04 µg/L        3.010      497.04 ppb          3.010   0.61%
   QC value within limits for Mn 257.610  Recovery = 99.41%
Mo 202.031†             4275.1      499.55 µg/L        4.912      499.55 ppb          4.912   0.98%
   QC value within limits for Mo 202.031  Recovery = 99.91%
Na 589.592 Radial†     40562.7       10158 µg/L         71.5       10158 ppb           71.5   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 101.58%
Ni 231.604†             9082.0      496.89 µg/L        4.956      496.89 ppb          4.956   1.00%
   QC value within limits for Ni 231.604  Recovery = 99.38%
P 214.914†              1225.4      2422.7 µg/L       13.11      2422.7 ppb         13.11   0.54%
   QC value within limits for P 214.914  Recovery = 96.91%
Pb 220.353†             1925.8      498.46 µg/L        3.684      498.46 ppb          3.684   0.74%
   QC value within limits for Pb 220.353  Recovery = 99.69%
S 181.975 Axial†         211.2      1032.8 µg/L       17.75      1032.8 ppb         17.75   1.72%
   QC value within limits for S 181.975 Axial  Recovery = 103.28%
Sb 206.836†              509.2      496.97 µg/L        7.099      496.97 ppb          7.099   1.43%
   QC value within limits for Sb 206.836  Recovery = 99.39%
Se 196.026†              388.5      498.61 µg/L        7.670      498.61 ppb          7.670   1.54%
   QC value within limits for Se 196.026  Recovery = 99.72%
SiO2†                  28820.7      5292.4 µg/L       11.49      5292.4 ppb         11.49   0.22%
   QC value within limits for SiO2  Recovery = 98.97%
Si 251.611†            33585.5      2437.2 µg/L        8.56      2437.2 ppb          8.56   0.35%
   QC value within limits for Si 251.611  Recovery = 97.49%
Sn 189.927†              996.3      512.88 µg/L        5.335      512.88 ppb          5.335   1.04%
   QC value within limits for Sn 189.927  Recovery = 102.58%
Sr 421.552†            97024.7      487.64 µg/L        4.597      487.64 ppb          4.597   0.94%
   QC value within limits for Sr 421.552  Recovery = 97.53%
Ti 334.940†           221345.4      503.93 µg/L        3.064      503.93 ppb          3.064   0.61%
   QC value within limits for Ti 334.940  Recovery = 100.79%
Tl 190.801†              324.7      500.98 µg/L        1.133      500.98 ppb          1.133   0.23%
   QC value within limits for Tl 190.801  Recovery = 100.20%
U 409.014†              5316.1      481.20 µg/L       10.388      481.20 ppb         10.388   2.16%
   QC value within limits for U 409.014  Recovery = 96.24%
V 292.402†             43585.9      494.96 µg/L        1.687      494.96 ppb          1.687   0.34%
   QC value within limits for V 292.402  Recovery = 98.99%
Zn 213.857†            18736.9      492.66 µg/L        1.774      492.66 ppb          1.774   0.36%
   QC value within limits for Zn 213.857  Recovery = 98.53%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 03:43:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117089.0	117089.0	100	%			03:44:02
1	Al 396.153Radial†	148.5	24.6	12.236	µg/L	12.236	ppb	03:44:02
1	Ca 317.933Radial†	432.6	18.2	7.0268	µg/L	7.0268	ppb	03:44:23
1	Fe 238.204 Radial†	17.5	2.3	14.641	µg/L	14.641	ppb	03:44:23
1	K 766.490 Radial†	844.7	158.9	81.339	µg/L	81.339	ppb	03:44:02
1	Mg 279.077 IEC†	18.6	3.1	18.947	µg/L	18.947	ppb	03:44:23
1	Na 589.592 Radial†	-199.3	435.6	109.09	µg/L	109.09	ppb	03:44:02
1	Sr 421.552†	-61.2	1.4	0.0069	µg/L	0.0069	ppb	03:44:02
1	Sc 361.383	2025357.8	2025357.8	100.15	%			03:45:25
1	Y 371.029	1260935.3	1260935.3	100.17	%			03:45:25
1	Ag 328.068†	89.0	78.5	0.7186	µg/L	0.7186	ppb	03:45:30
1	As 188.979†	2.9	0.7	1.2387	µg/L	1.2387	ppb	03:45:51
1	B 249.677†	558.1	419.4	18.177	µg/L	18.177	ppb	03:45:30
1	Ba 233.527†	-71.5	6.7	0.1717	µg/L	0.1717	ppb	03:45:51
1	Be 313.107†	3697.0	175.4	0.1094	µg/L	0.1094	ppb	03:45:30
1	Cd 226.502†	-84.9	14.2	0.3796	µg/L	0.3796	ppb	03:45:51
1	Co 228.616†	-76.3	-9.6	-0.4639	µg/L	-0.4639	ppb	03:45:51
1	Cr 267.716†	-146.5	-46.4	-0.9735	µg/L	-0.9735	ppb	03:45:30
1	Cu 324.752†	4172.4	-103.8	-0.7171	µg/L	-0.7171	ppb	03:45:30
1	Mn 257.610†	-212.9	-11.3	-0.0341	µg/L	-0.0341	ppb	03:45:51
1	Mo 202.031†	-4.2	-0.5	-0.0614	µg/L	-0.0614	ppb	03:45:51
1	Ni 231.604†	289.4	13.4	0.7326	µg/L	0.7326	ppb	03:45:51
1	P 214.914†	202.3	1.1	2.2453	µg/L	2.2453	ppb	03:45:51
1	Pb 220.353†	57.5	1.1	0.2932	µg/L	0.2932	ppb	03:45:51
1	S 181.975 Axial†	30.1	7.9	38.651	µg/L	38.651	ppb	03:45:51
1	Sb 206.836†	22.5	1.3	1.3215	µg/L	1.3215	ppb	03:45:51
1	Se 196.026†	10.6	0.8	0.9643	µg/L	0.9643	ppb	03:45:51
1	SiO2†	2690.9	-64.6	-11.862	µg/L	-11.862	ppb	03:45:30
1	Si 251.611†	348.9	23.2	1.6188	µg/L	1.6188	ppb	03:45:51
1	Sn 189.927†	24.0	1.6	0.8183	µg/L	0.8183	ppb	03:45:51
1	Ti 334.940†	1194.3	418.0	0.9519	µg/L	0.9519	ppb	03:45:30
1	Tl 190.801†	-16.2	4.2	6.4273	µg/L	6.4273	ppb	03:45:51
1	U 409.014†	755.0	23.4	2.1186	µg/L	2.1186	ppb	03:45:30
1	V 292.402†	-102.2	24.6	0.2814	µg/L	0.2814	ppb	03:45:30
1	Zn 213.857†	545.0	17.5	0.4586	µg/L	0.4586	ppb	03:45:51
2	Sc RADIAL	113832.5	113832.5	97.6	%			03:44:28
2	Al 396.153Radial†	144.3	24.6	12.204	µg/L	12.204	ppb	03:44:28
2	Ca 317.933Radial†	436.6	34.6	13.388	µg/L	13.388	ppb	03:44:49
2	Fe 238.204 Radial†	19.2	4.5	28.580	µg/L	28.580	ppb	03:44:49
2	K 766.490 Radial†	712.6	47.6	24.383	µg/L	24.383	ppb	03:44:28
2	Mg 279.077 IEC†	17.8	2.8	16.948	µg/L	16.948	ppb	03:44:49
2	Na 589.592 Radial†	39.4	674.5	168.91	µg/L	168.91	ppb	03:44:28
2	Sr 421.552†	-63.2	-2.4	-0.0122	µg/L	-0.0122	ppb	03:44:28
2	Sc 361.383	2028517.3	2028517.3	100.31	%			03:45:57
2	Y 371.029	1263352.3	1263352.3	100.37	%			03:45:57
2	Ag 328.068†	55.1	44.6	0.4097	µg/L	0.4097	ppb	03:46:03
2	As 188.979†	1.3	-0.9	-1.6949	µg/L	-1.6949	ppb	03:46:23
2	B 249.677†	498.4	359.0	15.553	µg/L	15.553	ppb	03:46:03
2	Ba 233.527†	-69.2	9.1	0.2326	µg/L	0.2326	ppb	03:46:23
2	Be 313.107†	3596.3	69.3	0.0430	µg/L	0.0430	ppb	03:46:03
2	Cd 226.502†	-80.9	18.4	0.4916	µg/L	0.4916	ppb	03:46:23
2	Co 228.616†	-67.3	-0.4	-0.0211	µg/L	-0.0211	ppb	03:46:23
2	Cr 267.716†	-93.8	6.2	0.1315	µg/L	0.1315	ppb	03:46:03
2	Cu 324.752†	4156.5	-126.2	-0.8693	µg/L	-0.8693	ppb	03:46:03
2	Mn 257.610†	-207.3	-5.3	-0.0134	µg/L	-0.0134	ppb	03:46:23
2	Mo 202.031†	-4.3	-0.6	-0.0682	µg/L	-0.0682	ppb	03:46:23
2	Ni 231.604†	295.5	19.0	1.0421	µg/L	1.0421	ppb	03:46:23
2	P 214.914†	192.3	-9.2	-18.517	µg/L	-18.517	ppb	03:46:23
2	Pb 220.353†	55.0	-1.5	-0.3822	µg/L	-0.3822	ppb	03:46:23

2	S 181.975 Axial†	31.4	9.1	44.639	µg/L	44.639 ppb	03:46:23
2	Sb 206.836†	18.4	-2.8	-2.7400	µg/L	-2.7400 ppb	03:46:23
2	Se 196.026†	11.2	1.2	1.6029	µg/L	1.6029 ppb	03:46:23
2	SiO2†	2675.2	-84.5	-15.519	µg/L	-15.519 ppb	03:46:03
2	Si 251.611†	344.9	18.6	1.3210	µg/L	1.3210 ppb	03:46:23
2	Sn 189.927†	23.5	1.1	0.5528	µg/L	0.5528 ppb	03:46:23
2	Ti 334.940†	1146.6	368.6	0.8389	µg/L	0.8389 ppb	03:46:03
2	Tl 190.801†	-24.7	-4.3	-6.5271	µg/L	-6.5271 ppb	03:46:23
2	U 409.014†	794.1	61.2	5.5401	µg/L	5.5401 ppb	03:46:03
2	V 292.402†	-110.3	16.8	0.1999	µg/L	0.1999 ppb	03:46:03
2	Zn 213.857†	542.9	14.6	0.3780	µg/L	0.3780 ppb	03:46:23
3	Sc RADIAL	115492.1	115492.1	99.0	%		03:44:54
3	Al 396.153Radial†	145.2	23.3	11.589	µg/L	11.589 ppb	03:44:54
3	Ca 317.933Radial†	436.7	28.3	10.943	µg/L	10.943 ppb	03:45:14
3	Fe 238.204 Radial†	15.2	0.2	1.0069	µg/L	1.0069 ppb	03:45:14
3	K 766.490 Radial†	690.6	14.9	7.6272	µg/L	7.6272 ppb	03:44:54
3	Mg 279.077 IEC†	17.1	1.8	11.341	µg/L	11.341 ppb	03:45:14
3	Na 589.592 Radial†	-186.8	445.4	111.55	µg/L	111.55 ppb	03:44:54
3	Sr 421.552†	-32.6	29.4	0.1476	µg/L	0.1476 ppb	03:44:54
3	Sc 361.383	2021784.9	2021784.9	99.978	%		03:46:29
3	Y 371.029	1258730.2	1258730.2	99.999	%		03:46:29
3	Ag 328.068†	37.5	27.1	0.2464	µg/L	0.2464 ppb	03:46:35
3	As 188.979†	3.0	0.8	1.4497	µg/L	1.4497 ppb	03:46:55
3	B 249.677†	485.2	347.5	15.064	µg/L	15.064 ppb	03:46:35
3	Ba 233.527†	-67.1	10.9	0.2793	µg/L	0.2793 ppb	03:46:55
3	Be 313.107†	3582.7	67.6	0.0420	µg/L	0.0420 ppb	03:46:35
3	Cd 226.502†	-96.5	2.5	0.0583	µg/L	0.0583 ppb	03:46:55
3	Co 228.616†	-67.8	-1.2	-0.0572	µg/L	-0.0572 ppb	03:46:55
3	Cr 267.716†	-157.6	-57.9	-1.2135	µg/L	-1.2135 ppb	03:46:35
3	Cu 324.752†	4159.9	-109.0	-0.7555	µg/L	-0.7555 ppb	03:46:35
3	Mn 257.610†	-224.0	-22.7	-0.0724	µg/L	-0.0724 ppb	03:46:55
3	Mo 202.031†	-2.9	0.8	0.0957	µg/L	0.0957 ppb	03:46:55
3	Ni 231.604†	287.3	11.8	0.6476	µg/L	0.6476 ppb	03:46:55
3	P 214.914†	202.7	1.8	3.8020	µg/L	3.8020 ppb	03:46:55
3	Pb 220.353†	46.2	-10.0	-2.5785	µg/L	-2.5785 ppb	03:46:55
3	S 181.975 Axial†	26.2	4.1	19.890	µg/L	19.890 ppb	03:46:55
3	Sb 206.836†	14.1	-7.0	-6.8593	µg/L	-6.8593 ppb	03:46:55
3	Se 196.026†	10.7	0.8	0.9986	µg/L	0.9986 ppb	03:46:55
3	SiO2†	2736.0	-14.8	-2.7145	µg/L	-2.7145 ppb	03:46:35
3	Si 251.611†	355.7	30.6	2.2227	µg/L	2.2227 ppb	03:46:55
3	Sn 189.927†	22.9	0.5	0.2415	µg/L	0.2415 ppb	03:46:55
3	Ti 334.940†	1119.0	344.9	0.7850	µg/L	0.7850 ppb	03:46:35
3	Tl 190.801†	-20.7	-0.3	-0.5112	µg/L	-0.5112 ppb	03:46:55
3	U 409.014†	605.1	-125.2	-11.352	µg/L	-11.352 ppb	03:46:35
3	V 292.402†	-136.1	-9.4	-0.1228	µg/L	-0.1228 ppb	03:46:35
3	Zn 213.857†	536.9	10.4	0.2717	µg/L	0.2717 ppb	03:46:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025220.0	100.15	%	0.167				0.17%
Sc RADIAL	115471.2	99.0	%	1.40				1.41%
Y 371.029	1261005.9	100.18	%	0.184				0.18%
Ag 328.068†	50.0	0.4582	µg/L	0.23980	0.4582	ppb	0.23980	52.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	24.2	12.010	µg/L	0.3646	12.010	ppb	0.3646	3.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.3312	µg/L	1.75779	0.3312	ppb	1.75779	530.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	375.3	16.265	µg/L	1.6745	16.265	ppb	1.6745	10.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.9	0.2279	µg/L	0.05398	0.2279	ppb	0.05398	23.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	104.1	0.0648	µg/L	0.03861	0.0648	ppb	0.03861	59.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	27.0	10.452	µg/L	3.2087	10.452	ppb	3.2087	30.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.7	0.3098	µg/L	0.22493	0.3098	ppb	0.22493	72.60%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-3.7	-0.1807	µg/L	0.24589	-0.1807	ppb	0.24589	136.07%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -32.7     -0.6851 µg/L       0.71734     -0.6851 ppb        0.71734 104.70%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -113.0     -0.7807 µg/L       0.07913     -0.7807 ppb        0.07913  10.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.3      14.743 µg/L       13.7867      14.743 ppb        13.7867  93.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         73.8      37.783 µg/L       38.6397      37.783 ppb        38.6397 102.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.6      15.746 µg/L        3.9431      15.746 ppb         3.9431  25.04%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -13.1     -0.0400 µg/L       0.02992     -0.0400 ppb        0.02992  74.81%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.1     -0.0113 µg/L       0.09275     -0.0113 ppb        0.09275 821.72%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       518.5      129.85 µg/L        33.849      129.85 ppb         33.849  26.07%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.8      0.8074 µg/L       0.20766      0.8074 ppb        0.20766  25.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.1     -4.1566 µg/L      12.46085     -4.1566 ppb       12.46085 299.79%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -3.5     -0.8892 µg/L       1.50143     -0.8892 ppb        1.50143 168.86%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           7.0      34.393 µg/L       12.9124      34.393 ppb        12.9124  37.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.8     -2.7593 µg/L       4.09048     -2.7593 ppb        4.09048 148.25%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.9      1.1886 µg/L       0.35923      1.1886 ppb        0.35923  30.22%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -54.6     -10.032 µg/L        6.5955     -10.032 ppb         6.5955  65.75%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               24.1      1.7208 µg/L       0.45944      1.7208 ppb        0.45944  26.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.0      0.5375 µg/L       0.28871      0.5375 ppb        0.28871  53.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.4      0.0475 µg/L       0.08728      0.0475 ppb        0.08728 183.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              377.2      0.8586 µg/L       0.08517      0.8586 ppb        0.08517   9.92%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.1     -0.2037 µg/L       6.48268     -0.2037 ppb        6.48268 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -13.6     -1.2311 µg/L       8.93033     -1.2311 ppb        8.93033 725.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                10.7      0.1195 µg/L       0.21379      0.1195 ppb        0.21379 178.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.1      0.3694 µg/L       0.09378      0.3694 ppb        0.09378  25.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 04:06:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	119005.9	119005.9	102	%			04:07:26
1	Al 396.153Radial†	10293.7	9964.8	4932.1	µg/L	4932.1	ppb	04:07:26
1	Ca 317.933Radial†	13436.7	12755.6	4935.4	µg/L	4935.4	ppb	04:07:47
1	Fe 238.204 Radial†	806.0	774.8	4943.3	µg/L	4943.3	ppb	04:07:47
1	K 766.490 Radial†	10443.3	9552.2	4888.7	µg/L	4888.7	ppb	04:07:26
1	Mg 279.077 IEC†	840.9	808.6	4997.7	µg/L	4997.7	ppb	04:07:47
1	Na 589.592 Radial†	39923.3	39759.9	9956.9	µg/L	9956.9	ppb	04:07:26
1	Sr 421.552†	98401.2	96497.9	485.00	µg/L	485.00	ppb	04:07:26
1	Sc 361.383	2042485.1	2042485.1	101.00	%			04:08:51
1	Y 371.029	1260543.1	1260543.1	100.14	%			04:08:51
1	Ag 328.068†	55349.9	54790.4	503.21	µg/L	503.21	ppb	04:08:56
1	As 188.979†	281.9	276.9	501.64	µg/L	501.64	ppb	04:09:17
1	B 249.677†	11646.5	11393.1	492.36	µg/L	492.36	ppb	04:08:56
1	Ba 233.527†	19122.3	19010.6	488.62	µg/L	488.62	ppb	04:08:56
1	Be 313.107†	795411.9	784005.5	490.41	µg/L	490.41	ppb	04:08:51
1	Cd 226.502†	18574.8	18489.5	492.60	µg/L	492.60	ppb	04:08:56
1	Co 228.616†	10195.5	10161.0	491.12	µg/L	491.12	ppb	04:08:56
1	Cr 267.716†	23352.6	23220.7	488.12	µg/L	488.12	ppb	04:08:56
1	Cu 324.752†	75047.3	70033.1	486.84	µg/L	486.84	ppb	04:08:56
1	Mn 257.610†	154776.5	153442.4	490.56	µg/L	490.56	ppb	04:08:51
1	Mo 202.031†	4311.9	4272.8	499.28	µg/L	499.28	ppb	04:09:17
1	Ni 231.604†	9335.0	8966.8	490.59	µg/L	490.59	ppb	04:08:56
1	P 214.914†	1424.8	1209.7	2391.0	µg/L	2391.0	ppb	04:09:17
1	Pb 220.353†	1999.9	1923.8	497.93	µg/L	497.93	ppb	04:09:17
1	S 181.975 Axial†	230.0	205.6	1005.3	µg/L	1005.3	ppb	04:09:17
1	Sb 206.836†	538.3	511.8	499.50	µg/L	499.50	ppb	04:09:17
1	Se 196.026†	412.9	398.9	511.85	µg/L	511.85	ppb	04:09:17
1	SiO2†	31694.8	28629.0	5257.2	µg/L	5257.2	ppb	04:08:56
1	Si 251.611†	33953.1	33291.1	2415.6	µg/L	2415.6	ppb	04:08:56
1	Sn 189.927†	1026.6	994.0	511.67	µg/L	511.67	ppb	04:09:17
1	Ti 334.940†	222234.5	219255.5	499.17	µg/L	499.17	ppb	04:08:51
1	Tl 190.801†	309.7	327.0	504.60	µg/L	504.60	ppb	04:09:17
1	U 409.014†	6123.0	5331.8	482.63	µg/L	482.63	ppb	04:08:56
1	V 292.402†	43592.7	43287.0	491.59	µg/L	491.59	ppb	04:08:56
1	Zn 213.857†	19273.8	18556.0	487.91	µg/L	487.91	ppb	04:08:56
2	Sc RADIAL	117749.8	117749.8	101	%			04:07:52
2	Al 396.153Radial†	10335.9	10114.2	5006.3	µg/L	5006.3	ppb	04:07:52
2	Ca 317.933Radial†	13430.4	12889.7	4987.3	µg/L	4987.3	ppb	04:08:13
2	Fe 238.204 Radial†	808.8	786.0	5014.4	µg/L	5014.4	ppb	04:08:13
2	K 766.490 Radial†	10392.7	9611.3	4918.9	µg/L	4918.9	ppb	04:07:52
2	Mg 279.077 IEC†	839.1	815.6	5041.0	µg/L	5041.0	ppb	04:08:13
2	Na 589.592 Radial†	39891.3	40145.6	10053	µg/L	10053	ppb	04:07:52
2	Sr 421.552†	98127.3	97255.3	488.80	µg/L	488.80	ppb	04:07:52
2	Sc 361.383	2034901.1	2034901.1	100.63	%			04:09:24
2	Y 371.029	1260510.3	1260510.3	100.14	%			04:09:24
2	Ag 328.068†	54042.4	53695.3	493.17	µg/L	493.17	ppb	04:09:29
2	As 188.979†	284.0	280.0	507.30	µg/L	507.30	ppb	04:09:50
2	B 249.677†	11404.7	11195.8	483.79	µg/L	483.79	ppb	04:09:29
2	Ba 233.527†	18782.3	18743.3	481.75	µg/L	481.75	ppb	04:09:29
2	Be 313.107†	783195.9	774800.7	484.65	µg/L	484.65	ppb	04:09:24
2	Cd 226.502†	18132.3	18118.3	482.69	µg/L	482.69	ppb	04:09:29
2	Co 228.616†	9982.2	9986.7	482.71	µg/L	482.71	ppb	04:09:29
2	Cr 267.716†	22854.1	22811.5	479.52	µg/L	479.52	ppb	04:09:29
2	Cu 324.752†	73321.6	68595.0	476.88	µg/L	476.88	ppb	04:09:29
2	Mn 257.610†	152395.7	151647.6	484.84	µg/L	484.84	ppb	04:09:24
2	Mo 202.031†	4314.2	4291.0	501.40	µg/L	501.40	ppb	04:09:50
2	Ni 231.604†	9124.7	8792.3	481.04	µg/L	481.04	ppb	04:09:29
2	P 214.914†	1424.1	1214.3	2401.5	µg/L	2401.5	ppb	04:09:50
2	Pb 220.353†	2001.1	1932.3	500.19	µg/L	500.19	ppb	04:09:50

2	S 181.975 Axial†	232.3	208.7	1020.6 µg/L	1020.6 ppb	04:09:50
2	Sb 206.836†	536.3	511.8	499.54 µg/L	499.54 ppb	04:09:50
2	Se 196.026†	403.2	390.8	501.57 µg/L	501.57 ppb	04:09:50
2	SiO2†	31161.1	28215.6	5181.3 µg/L	5181.3 ppb	04:09:29
2	Si 251.611†	33294.0	32761.3	2376.5 µg/L	2376.5 ppb	04:09:29
2	Sn 189.927†	1025.0	996.2	512.80 µg/L	512.80 ppb	04:09:50
2	Ti 334.940†	219712.3	217569.0	495.32 µg/L	495.32 ppb	04:09:24
2	Tl 190.801†	307.8	326.2	503.31 µg/L	503.31 ppb	04:09:50
2	U 409.014†	5921.8	5154.5	466.54 µg/L	466.54 ppb	04:09:29
2	V 292.402†	42697.9	42558.6	483.40 µg/L	483.40 ppb	04:09:29
2	Zn 213.857†	18825.1	18181.2	478.03 µg/L	478.03 ppb	04:09:29
3	Sc RADIAL	118925.1	118925.1	102 %		04:08:18
3	Al 396.153Radial†	10385.0	10061.1	4980.1 µg/L	4980.1 ppb	04:08:18
3	Ca 317.933Radial†	13472.5	12799.6	4952.4 µg/L	4952.4 ppb	04:08:39
3	Fe 238.204 Radial†	812.8	781.9	4989.1 µg/L	4989.1 ppb	04:08:39
3	K 766.490 Radial†	10466.2	9581.6	4903.7 µg/L	4903.7 ppb	04:08:18
3	Mg 279.077 IEC†	842.2	810.5	5008.9 µg/L	5008.9 ppb	04:08:39
3	Na 589.592 Radial†	40126.6	39985.9	10013 µg/L	10013 ppb	04:08:18
3	Sr 421.552†	99040.4	97190.2	488.48 µg/L	488.48 ppb	04:08:18
3	Sc 361.383	2020476.4	2020476.4	99.914 %		04:09:57
3	Y 371.029	1249610.6	1249610.6	99.274 %		04:09:57
3	Ag 328.068†	55583.9	55621.6	510.84 µg/L	510.84 ppb	04:10:03
3	As 188.979†	266.2	264.2	478.68 µg/L	478.68 ppb	04:10:23
3	B 249.677†	11766.0	11638.3	502.98 µg/L	502.98 ppb	04:10:03
3	Ba 233.527†	19299.0	19393.7	498.47 µg/L	498.47 ppb	04:10:03
3	Be 313.107†	788210.1	785375.8	491.27 µg/L	491.27 ppb	04:09:57
3	Cd 226.502†	18670.4	18785.5	500.49 µg/L	500.49 ppb	04:10:03
3	Co 228.616†	10245.5	10321.0	498.84 µg/L	498.84 ppb	04:10:03
3	Cr 267.716†	23540.9	23661.0	497.38 µg/L	497.38 ppb	04:10:03
3	Cu 324.752†	75321.4	71116.7	494.37 µg/L	494.37 ppb	04:10:03
3	Mn 257.610†	153329.5	153663.4	491.27 µg/L	491.27 ppb	04:09:57
3	Mo 202.031†	4240.5	4247.8	496.36 µg/L	496.36 ppb	04:10:23
3	Ni 231.604†	9423.7	9156.3	500.95 µg/L	500.95 ppb	04:10:03
3	P 214.914†	1410.1	1210.4	2391.4 µg/L	2391.4 ppb	04:10:23
3	Pb 220.353†	1957.9	1903.3	492.63 µg/L	492.63 ppb	04:10:23
3	S 181.975 Axial†	225.7	203.7	995.89 µg/L	995.89 ppb	04:10:23
3	Sb 206.836†	535.2	514.6	502.20 µg/L	502.20 ppb	04:10:23
3	Se 196.026†	391.0	381.5	489.63 µg/L	489.63 ppb	04:10:23
3	SiO2†	31888.4	29164.6	5355.5 µg/L	5355.5 ppb	04:10:03
3	Si 251.611†	34149.9	33854.2	2457.4 µg/L	2457.4 ppb	04:10:03
3	Sn 189.927†	1011.8	990.3	509.76 µg/L	509.76 ppb	04:10:23
3	Ti 334.940†	220246.6	219662.6	500.10 µg/L	500.10 ppb	04:09:57
3	Tl 190.801†	298.9	319.5	493.07 µg/L	493.07 ppb	04:10:23
3	U 409.014†	6145.2	5420.1	490.62 µg/L	490.62 ppb	04:10:03
3	V 292.402†	43772.3	43936.9	498.90 µg/L	498.90 ppb	04:10:03
3	Zn 213.857†	19413.9	18904.0	497.06 µg/L	497.06 ppb	04:10:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032620.9	100.51	%	0.553				0.55%
Sc RADIAL	118560.2	102	%	0.6				0.59%
Y 371.029	1256888.0	99.852	%	0.5007				0.50%
Ag 328.068†	54702.4	502.41	µg/L	8.860	502.41	ppb	8.860	1.76%
QC value within limits for Ag 328.068 Recovery = 100.48%								
Al 396.153Radial†	10046.7	4972.8	µg/L	37.60	4972.8	ppb	37.60	0.76%
QC value within limits for Al 396.153Radial Recovery = 99.46%								
As 188.979†	273.7	495.87	µg/L	15.159	495.87	ppb	15.159	3.06%
QC value within limits for As 188.979 Recovery = 99.17%								
B 249.677†	11409.1	493.04	µg/L	9.613	493.04	ppb	9.613	1.95%
QC value within limits for B 249.677 Recovery = 98.61%								
Ba 233.527†	19049.2	489.61	µg/L	8.401	489.61	ppb	8.401	1.72%
QC value within limits for Ba 233.527 Recovery = 97.92%								
Be 313.107†	781394.0	488.78	µg/L	3.598	488.78	ppb	3.598	0.74%
QC value within limits for Be 313.107 Recovery = 97.76%								
Ca 317.933Radial†	12815.0	4958.4	µg/L	26.46	4958.4	ppb	26.46	0.53%
QC value within limits for Ca 317.933Radial Recovery = 99.17%								
Cd 226.502†	18464.4	491.93	µg/L	8.919	491.93	ppb	8.919	1.81%
QC value within limits for Cd 226.502 Recovery = 98.39%								
Co 228.616†	10156.2	490.89	µg/L	8.069	490.89	ppb	8.069	1.64%

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   QC value within limits for Co 228.616  Recovery = 98.18%
Cr 267.716†            23231.1      488.34 µg/L        8.928      488.34 ppb          8.928   1.83%
   QC value within limits for Cr 267.716  Recovery = 97.67%
Cu 324.752†            69914.9      486.03 µg/L        8.771      486.03 ppb          8.771   1.80%
   QC value within limits for Cu 324.752  Recovery = 97.21%
Fe 238.204 Radial†       780.9      4982.2 µg/L       36.03      4982.2 ppb         36.03   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.64%
K 766.490 Radial†       9581.7      4903.8 µg/L       15.11      4903.8 ppb         15.11   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 98.08%
Mg 279.077 IEC†          811.6      5015.9 µg/L       22.44      5015.9 ppb         22.44   0.45%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.32%
Mn 257.610†           152917.8      488.89 µg/L       3.527      488.89 ppb         3.527   0.72%
   QC value within limits for Mn 257.610  Recovery = 97.78%
Mo 202.031†             4270.5      499.01 µg/L       2.534      499.01 ppb         2.534   0.51%
   QC value within limits for Mo 202.031  Recovery = 99.80%
Na 589.592 Radial†     39963.8       10008 µg/L        48.5       10008 ppb          48.5   0.48%
   QC value within limits for Na 589.592 Radial  Recovery = 100.08%
Ni 231.604†             8971.8      490.86 µg/L       9.959      490.86 ppb         9.959   2.03%
   QC value within limits for Ni 231.604  Recovery = 98.17%
P 214.914†              1211.5      2394.6 µg/L        5.97      2394.6 ppb          5.97   0.25%
   QC value within limits for P 214.914  Recovery = 95.79%
Pb 220.353†             1919.8      496.92 µg/L       3.880      496.92 ppb         3.880   0.78%
   QC value within limits for Pb 220.353  Recovery = 99.38%
S 181.975 Axial†         206.0      1007.2 µg/L       12.46      1007.2 ppb         12.46   1.24%
   QC value within limits for S 181.975 Axial  Recovery = 100.72%
Sb 206.836†              512.7      500.42 µg/L       1.548      500.42 ppb         1.548   0.31%
   QC value within limits for Sb 206.836  Recovery = 100.08%
Se 196.026†              390.4      501.02 µg/L      11.121      501.02 ppb        11.121   2.22%
   QC value within limits for Se 196.026  Recovery = 100.20%
SiO2†                  28669.7      5264.7 µg/L       87.37      5264.7 ppb         87.37   1.66%
   QC value within limits for SiO2  Recovery = 98.45%
Si 251.611†            33302.2      2416.5 µg/L       40.46      2416.5 ppb         40.46   1.67%
   QC value within limits for Si 251.611  Recovery = 96.66%
Sn 189.927†              993.5      511.41 µg/L       1.533      511.41 ppb         1.533   0.30%
   QC value within limits for Sn 189.927  Recovery = 102.28%
Sr 421.552†            96981.2      487.42 µg/L       2.110      487.42 ppb         2.110   0.43%
   QC value within limits for Sr 421.552  Recovery = 97.48%
Ti 334.940†           218829.1      498.20 µg/L       2.530      498.20 ppb         2.530   0.51%
   QC value within limits for Ti 334.940  Recovery = 99.64%
Tl 190.801†              324.3      500.33 µg/L       6.320      500.33 ppb         6.320   1.26%
   QC value within limits for Tl 190.801  Recovery = 100.07%
U 409.014†              5302.1      479.93 µg/L      12.266      479.93 ppb        12.266   2.56%
   QC value within limits for U 409.014  Recovery = 95.99%
V 292.402†             43260.8      491.30 µg/L       7.757      491.30 ppb         7.757   1.58%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†            18547.1      487.67 µg/L       9.519      487.67 ppb         9.519   1.95%
   QC value within limits for Zn 213.857  Recovery = 97.53%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 04:10:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115639.0	115639.0	99.2	%			04:11:05
1	Al 396.153Radial†	156.9	35.0	17.356	µg/L	17.356	ppb	04:11:05
1	Ca 317.933Radial†	436.6	27.6	10.676	µg/L	10.676	ppb	04:11:25
1	Fe 238.204 Radial†	18.5	3.5	22.446	µg/L	22.446	ppb	04:11:25
1	K 766.490 Radial†	786.8	111.1	56.847	µg/L	56.847	ppb	04:11:05
1	Mg 279.077 IEC†	11.0	-4.3	-26.840	µg/L	-26.840	ppb	04:11:25
1	Na 589.592 Radial†	-267.9	363.9	91.129	µg/L	91.129	ppb	04:11:05
1	Sr 421.552†	-68.1	-6.4	-0.0321	µg/L	-0.0321	ppb	04:11:05
1	Sc 361.383	2046993.6	2046993.6	101.22	%			04:12:27
1	Y 371.029	1273420.2	1273420.2	101.17	%			04:12:27
1	Ag 328.068†	77.0	65.6	0.5997	µg/L	0.5997	ppb	04:12:33
1	As 188.979†	2.3	0.1	0.1715	µg/L	0.1715	ppb	04:12:53
1	B 249.677†	367.3	225.0	9.7477	µg/L	9.7477	ppb	04:12:33
1	Ba 233.527†	-65.5	13.4	0.3427	µg/L	0.3427	ppb	04:12:53
1	Be 313.107†	3542.7	-16.0	-0.0103	µg/L	-0.0103	ppb	04:12:33
1	Cd 226.502†	-91.5	8.5	0.2274	µg/L	0.2274	ppb	04:12:53
1	Co 228.616†	-60.8	6.6	0.3171	µg/L	0.3171	ppb	04:12:53
1	Cr 267.716†	-145.2	-43.6	-0.9148	µg/L	-0.9148	ppb	04:12:33
1	Cu 324.752†	4166.8	-153.4	-1.0593	µg/L	-1.0593	ppb	04:12:33
1	Mn 257.610†	-217.5	-13.6	-0.0405	µg/L	-0.0405	ppb	04:12:53
1	Mo 202.031†	-1.1	2.6	0.3058	µg/L	0.3058	ppb	04:12:53
1	Ni 231.604†	297.2	18.0	0.9874	µg/L	0.9874	ppb	04:12:53
1	P 214.914†	197.4	-5.9	-11.829	µg/L	-11.829	ppb	04:12:53
1	Pb 220.353†	49.6	-7.2	-1.8707	µg/L	-1.8707	ppb	04:12:53
1	S 181.975 Axial†	25.8	3.4	16.470	µg/L	16.470	ppb	04:12:53
1	Sb 206.836†	19.6	-1.8	-1.7395	µg/L	-1.7395	ppb	04:12:53
1	Se 196.026†	9.2	-0.8	-0.9878	µg/L	-0.9878	ppb	04:12:53
1	SiO2†	2736.9	-47.6	-8.7330	µg/L	-8.7330	ppb	04:12:33
1	Si 251.611†	351.8	22.4	1.6130	µg/L	1.6130	ppb	04:12:53
1	Sn 189.927†	22.2	-0.4	-0.2305	µg/L	-0.2305	ppb	04:12:53
1	Ti 334.940†	1084.8	297.3	0.6766	µg/L	0.6766	ppb	04:12:33
1	Tl 190.801†	-19.9	0.8	1.1576	µg/L	1.1576	ppb	04:12:53
1	U 409.014†	756.3	16.7	1.5112	µg/L	1.5112	ppb	04:12:33
1	V 292.402†	-131.0	-2.6	-0.0233	µg/L	-0.0233	ppb	04:12:33
1	Zn 213.857†	539.7	6.5	0.1683	µg/L	0.1683	ppb	04:12:53
2	Sc RADIAL	115483.1	115483.1	99.0	%			04:11:31
2	Al 396.153Radial†	139.0	17.1	8.4812	µg/L	8.4812	ppb	04:11:31
2	Ca 317.933Radial†	416.1	7.5	2.9040	µg/L	2.9040	ppb	04:11:51
2	Fe 238.204 Radial†	13.6	-1.4	-8.9957	µg/L	-8.9957	ppb	04:11:51
2	K 766.490 Radial†	755.8	80.8	41.341	µg/L	41.341	ppb	04:11:31
2	Mg 279.077 IEC†	14.0	-1.3	-7.7965	µg/L	-7.7965	ppb	04:11:51
2	Na 589.592 Radial†	-313.4	317.6	79.527	µg/L	79.527	ppb	04:11:31
2	Sr 421.552†	-77.3	-15.8	-0.0792	µg/L	-0.0792	ppb	04:11:31
2	Sc 361.383	2028601.9	2028601.9	100.32	%			04:12:59
2	Y 371.029	1262475.9	1262475.9	100.30	%			04:12:59
2	Ag 328.068†	25.2	14.7	0.1335	µg/L	0.1335	ppb	04:13:05
2	As 188.979†	2.0	-0.2	-0.3754	µg/L	-0.3754	ppb	04:13:25
2	B 249.677†	363.4	224.4	9.7303	µg/L	9.7303	ppb	04:13:05
2	Ba 233.527†	-67.7	10.5	0.2701	µg/L	0.2701	ppb	04:13:25
2	Be 313.107†	3500.1	-26.8	-0.0170	µg/L	-0.0170	ppb	04:13:05
2	Cd 226.502†	-77.2	22.1	0.5844	µg/L	0.5844	ppb	04:13:25
2	Co 228.616†	-64.0	2.9	0.1382	µg/L	0.1382	ppb	04:13:25
2	Cr 267.716†	-112.7	-12.5	-0.2623	µg/L	-0.2623	ppb	04:13:05
2	Cu 324.752†	4176.8	-106.1	-0.7380	µg/L	-0.7380	ppb	04:13:05
2	Mn 257.610†	-218.5	-16.4	-0.0536	µg/L	-0.0536	ppb	04:13:25
2	Mo 202.031†	-0.4	3.3	0.3795	µg/L	0.3795	ppb	04:13:25
2	Ni 231.604†	286.7	10.3	0.5611	µg/L	0.5611	ppb	04:13:25
2	P 214.914†	203.8	2.2	4.7067	µg/L	4.7067	ppb	04:13:25
2	Pb 220.353†	50.8	-5.6	-1.4386	µg/L	-1.4386	ppb	04:13:25

2	S 181.975 Axial†	30.4	8.1	39.742 µg/L	39.742 ppb	04:13:25
2	Sb 206.836†	12.6	-8.6	-8.3972 µg/L	-8.3972 ppb	04:13:25
2	Se 196.026†	8.7	-1.2	-1.5563 µg/L	-1.5563 ppb	04:13:25
2	SiO2†	2747.0	-13.0	-2.3964 µg/L	-2.3964 ppb	04:13:05
2	Si 251.611†	345.6	19.3	1.2542 µg/L	1.2542 ppb	04:13:25
2	Sn 189.927†	29.0	6.5	3.3311 µg/L	3.3311 ppb	04:13:25
2	Ti 334.940†	1024.5	246.9	0.5622 µg/L	0.5622 ppb	04:13:05
2	Tl 190.801†	-19.2	1.2	1.8761 µg/L	1.8761 ppb	04:13:25
2	U 409.014†	674.2	-58.4	-5.2889 µg/L	-5.2889 ppb	04:13:05
2	V 292.402†	-120.2	6.9	0.0712 µg/L	0.0712 ppb	04:13:05
2	Zn 213.857†	548.9	20.5	0.5438 µg/L	0.5438 ppb	04:13:25
3	Sc RADIAL	116381.2	116381.2	99.8 %		04:11:57
3	Al 396.153Radial†	165.2	42.3	20.986 µg/L	20.986 ppb	04:11:57
3	Ca 317.933Radial†	426.0	14.2	5.4851 µg/L	5.4851 ppb	04:12:17
3	Fe 238.204 Radial†	14.7	-0.5	-2.9914 µg/L	-2.9914 ppb	04:12:17
3	K 766.490 Radial†	719.2	38.3	19.577 µg/L	19.577 ppb	04:11:57
3	Mg 279.077 IEC†	17.8	2.4	14.819 µg/L	14.819 ppb	04:12:17
3	Na 589.592 Radial†	-316.5	317.0	79.379 µg/L	79.379 ppb	04:11:57
3	Sr 421.552†	-108.3	-46.2	-0.2324 µg/L	-0.2324 ppb	04:11:57
3	Sc 361.383	2033268.1	2033268.1	100.55 %		04:13:31
3	Y 371.029	1265609.7	1265609.7	100.55 %		04:13:31
3	Ag 328.068†	54.2	43.5	0.3944 µg/L	0.3944 ppb	04:13:37
3	As 188.979†	11.2	8.9	16.117 µg/L	16.117 ppb	04:13:57
3	B 249.677†	370.9	231.1	10.019 µg/L	10.019 ppb	04:13:37
3	Ba 233.527†	-73.9	4.5	0.1156 µg/L	0.1156 ppb	04:13:57
3	Be 313.107†	3543.9	8.8	0.0052 µg/L	0.0052 ppb	04:13:37
3	Cd 226.502†	-81.8	17.6	0.4688 µg/L	0.4688 ppb	04:13:57
3	Co 228.616†	-69.7	-2.6	-0.1278 µg/L	-0.1278 ppb	04:13:57
3	Cr 267.716†	-121.9	-21.4	-0.4498 µg/L	-0.4498 ppb	04:13:37
3	Cu 324.752†	4190.7	-101.8	-0.7067 µg/L	-0.7067 ppb	04:13:37
3	Mn 257.610†	-208.3	-5.9	-0.0191 µg/L	-0.0191 ppb	04:13:57
3	Mo 202.031†	-1.3	2.4	0.2782 µg/L	0.2782 ppb	04:13:57
3	Ni 231.604†	284.9	7.7	0.4239 µg/L	0.4239 ppb	04:13:57
3	P 214.914†	193.9	-8.1	-16.212 µg/L	-16.212 ppb	04:13:57
3	Pb 220.353†	53.8	-2.7	-0.6997 µg/L	-0.6997 ppb	04:13:57
3	S 181.975 Axial†	24.7	2.4	11.779 µg/L	11.779 ppb	04:13:57
3	Sb 206.836†	17.5	-3.7	-3.5889 µg/L	-3.5889 ppb	04:13:57
3	Se 196.026†	12.4	2.5	3.1776 µg/L	3.1776 ppb	04:13:57
3	SiO2†	2749.8	-16.5	-3.0271 µg/L	-3.0271 ppb	04:13:37
3	Si 251.611†	367.0	39.8	2.9265 µg/L	2.9265 ppb	04:13:57
3	Sn 189.927†	21.4	-1.1	-0.5616 µg/L	-0.5616 ppb	04:13:57
3	Ti 334.940†	1118.9	338.4	0.7705 µg/L	0.7705 ppb	04:13:37
3	Tl 190.801†	-18.9	1.6	2.4301 µg/L	2.4301 ppb	04:13:57
3	U 409.014†	709.9	-24.4	-2.2159 µg/L	-2.2159 ppb	04:13:37
3	V 292.402†	-149.3	-21.7	-0.2465 µg/L	-0.2465 ppb	04:13:37
3	Zn 213.857†	547.0	17.4	0.4600 µg/L	0.4600 ppb	04:13:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2036287.9	100.70	%	0.473				0.47%
Sc RADIAL	115834.4	99.3	%	0.41				0.41%
Y 371.029	1267168.6	100.67	%	0.448				0.44%
Ag 328.068†	41.2	0.3759	µg/L	0.23365	0.3759	ppb	0.23365	62.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	31.4	15.608	µg/L	6.4332	15.608	ppb	6.4332	41.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.9	5.3044	µg/L	9.36814	5.3044	ppb	9.36814	176.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	226.8	9.8322	µg/L	0.16167	9.8322	ppb	0.16167	1.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.5	0.2428	µg/L	0.11602	0.2428	ppb	0.11602	47.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-11.4	-0.0074	µg/L	0.01137	-0.0074	ppb	0.01137	154.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.4	6.3551	µg/L	3.95851	6.3551	ppb	3.95851	62.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	16.1	0.4269	µg/L	0.18219	0.4269	ppb	0.18219	42.68%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.3	0.1092	µg/L	0.22387	0.1092	ppb	0.22387	205.03%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -25.9     -0.5423 µg/L       0.33594     -0.5423 ppb        0.33594  61.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -120.4     -0.8347 µg/L       0.19516     -0.8347 ppb        0.19516  23.38%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      3.4864 µg/L      16.69195      3.4864 ppb       16.69195 478.78%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         76.7     39.255 µg/L       18.7226      39.255 ppb        18.7226  47.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.1     -6.6059 µg/L      20.85538     -6.6059 ppb       20.85538 315.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -12.0     -0.0377 µg/L       0.01741     -0.0377 ppb        0.01741  46.14%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.7      0.3212 µg/L       0.05237      0.3212 ppb        0.05237  16.31%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       332.8     83.345 µg/L        6.7413     83.345 ppb         6.7413   8.09%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               12.0      0.6575 µg/L       0.29387      0.6575 ppb        0.29387  44.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.9     -7.7782 µg/L      11.03213     -7.7782 ppb       11.03213 141.83%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.2     -1.3363 µg/L       0.59213     -1.3363 ppb        0.59213  44.31%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.6     22.664 µg/L       14.9752     22.664 ppb        14.9752  66.08%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -4.7     -4.5752 µg/L       3.43668     -4.5752 ppb        3.43668  75.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.2      0.2112 µg/L       2.58468      0.2112 ppb        2.58468 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -25.7     -4.7188 µg/L       3.49064     -4.7188 ppb        3.49064  73.97%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               27.1      1.9312 µg/L       0.88039      1.9312 ppb        0.88039  45.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.7      0.8463 µg/L       2.15822      0.8463 ppb        2.15822 255.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -22.8     -0.1146 µg/L       0.10474     -0.1146 ppb        0.10474  91.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              294.2      0.6698 µg/L       0.10433      0.6698 ppb        0.10433  15.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.2      1.8213 µg/L       0.63805      1.8213 ppb        0.63805  35.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -22.0     -1.9979 µg/L       3.40527     -1.9979 ppb        3.40527 170.45%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.8     -0.0662 µg/L       0.16313     -0.0662 ppb        0.16313 246.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.8      0.3907 µg/L       0.19708      0.3907 ppb        0.19708  50.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 04:40:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117131.8	117131.8	100	%			04:40:46
1	Al 396.153Radial†	10298.6	10131.1	5014.8	µg/L	5014.8	ppb	04:40:46
1	Ca 317.933Radial†	13241.0	12771.4	4941.5	µg/L	4941.5	ppb	04:41:06
1	Fe 238.204 Radial†	794.4	775.8	4949.8	µg/L	4949.8	ppb	04:41:06
1	K 766.490 Radial†	10374.1	9647.1	4937.2	µg/L	4937.2	ppb	04:40:46
1	Mg 279.077 IEC†	832.7	813.7	5028.7	µg/L	5028.7	ppb	04:41:06
1	Na 589.592 Radial†	39970.9	40433.3	10125	µg/L	10125	ppb	04:40:46
1	Sr 421.552†	97142.2	96787.2	486.45	µg/L	486.45	ppb	04:40:46
1	Sc 361.383	2010513.1	2010513.1	99.421	%			04:42:10
1	Y 371.029	1241971.9	1241971.9	98.667	%			04:42:10
1	Ag 328.068†	54362.3	54668.5	502.07	µg/L	502.07	ppb	04:42:15
1	As 188.979†	264.3	263.7	477.67	µg/L	477.67	ppb	04:42:36
1	B 249.677†	11352.9	11281.1	487.51	µg/L	487.51	ppb	04:42:15
1	Ba 233.527†	18588.5	18774.8	482.57	µg/L	482.57	ppb	04:42:15
1	Be 313.107†	778478.3	779496.8	487.59	µg/L	487.59	ppb	04:42:10
1	Cd 226.502†	17947.5	18151.0	483.58	µg/L	483.58	ppb	04:42:15
1	Co 228.616†	9918.1	10042.5	485.38	µg/L	485.38	ppb	04:42:15
1	Cr 267.716†	22771.1	23003.6	483.56	µg/L	483.56	ppb	04:42:15
1	Cu 324.752†	73941.2	70102.1	487.32	µg/L	487.32	ppb	04:42:15
1	Mn 257.610†	151757.2	152842.5	488.65	µg/L	488.65	ppb	04:42:10
1	Mo 202.031†	4219.2	4247.5	496.32	µg/L	496.32	ppb	04:42:36
1	Ni 231.604†	9071.8	8849.1	484.14	µg/L	484.14	ppb	04:42:15
1	P 214.914†	1394.3	1201.5	2374.2	µg/L	2374.2	ppb	04:42:36
1	Pb 220.353†	1946.4	1901.5	492.18	µg/L	492.18	ppb	04:42:36
1	S 181.975 Axial†	227.2	206.4	1009.1	µg/L	1009.1	ppb	04:42:36
1	Sb 206.836†	528.4	510.4	498.15	µg/L	498.15	ppb	04:42:36
1	Se 196.026†	395.7	388.1	498.09	µg/L	498.09	ppb	04:42:36
1	SiO2†	31122.5	28552.4	5243.1	µg/L	5243.1	ppb	04:42:15
1	Si 251.611†	33348.7	33217.7	2410.5	µg/L	2410.5	ppb	04:42:15
1	Sn 189.927†	997.9	981.4	505.19	µg/L	505.19	ppb	04:42:36
1	Ti 334.940†	218849.0	219349.4	499.38	µg/L	499.38	ppb	04:42:10
1	Tl 190.801†	306.2	328.4	506.69	µg/L	506.69	ppb	04:42:36
1	U 409.014†	6015.1	5319.7	481.53	µg/L	481.53	ppb	04:42:15
1	V 292.402†	42531.4	42905.9	487.29	µg/L	487.29	ppb	04:42:15
1	Zn 213.857†	18805.9	18388.8	483.51	µg/L	483.51	ppb	04:42:15
2	Sc RADIAL	116562.1	116562.1	99.9	%			04:41:12
2	Al 396.153Radial†	10283.1	10165.7	5032.0	µg/L	5032.0	ppb	04:41:12
2	Ca 317.933Radial†	13213.0	12807.8	4955.6	µg/L	4955.6	ppb	04:41:32
2	Fe 238.204 Radial†	792.9	778.2	4965.1	µg/L	4965.1	ppb	04:41:32
2	K 766.490 Radial†	10444.5	9768.0	4999.1	µg/L	4999.1	ppb	04:41:12
2	Mg 279.077 IEC†	829.4	814.4	5033.5	µg/L	5033.5	ppb	04:41:32
2	Na 589.592 Radial†	40229.8	40886.9	10239	µg/L	10239	ppb	04:41:12
2	Sr 421.552†	97706.8	97824.9	491.67	µg/L	491.67	ppb	04:41:12
2	Sc 361.383	2006234.6	2006234.6	99.209	%			04:42:43
2	Y 371.029	1242302.8	1242302.8	98.694	%			04:42:43
2	Ag 328.068†	54951.8	55379.4	508.59	µg/L	508.59	ppb	04:42:49
2	As 188.979†	270.9	270.8	490.61	µg/L	490.61	ppb	04:43:09
2	B 249.677†	11387.5	11340.4	490.07	µg/L	490.07	ppb	04:42:49
2	Ba 233.527†	18829.2	19057.3	489.83	µg/L	489.83	ppb	04:42:49
2	Be 313.107†	779345.1	782040.4	489.18	µg/L	489.18	ppb	04:42:43
2	Cd 226.502†	18159.2	18402.9	490.30	µg/L	490.30	ppb	04:42:49
2	Co 228.616†	10047.4	10194.1	492.71	µg/L	492.71	ppb	04:42:49
2	Cr 267.716†	22990.3	23273.3	489.23	µg/L	489.23	ppb	04:42:49
2	Cu 324.752†	74696.4	71021.9	493.70	µg/L	493.70	ppb	04:42:49
2	Mn 257.610†	151782.0	153193.0	489.77	µg/L	489.77	ppb	04:42:43
2	Mo 202.031†	4223.3	4260.7	497.86	µg/L	497.86	ppb	04:43:09
2	Ni 231.604†	9171.8	8969.3	490.72	µg/L	490.72	ppb	04:42:49
2	P 214.914†	1399.2	1209.4	2389.5	µg/L	2389.5	ppb	04:43:09
2	Pb 220.353†	1940.4	1899.6	491.67	µg/L	491.67	ppb	04:43:09

2	S 181.975 Axial†	232.2	211.9	1036.2 µg/L	1036.2 ppb	04:43:09
2	Sb 206.836†	531.2	514.3	501.96 µg/L	501.96 ppb	04:43:09
2	Se 196.026†	398.0	391.3	502.18 µg/L	502.18 ppb	04:43:09
2	SiO2†	31320.7	28818.9	5292.1 µg/L	5292.1 ppb	04:42:49
2	Si 251.611†	33588.9	33531.4	2433.5 µg/L	2433.5 ppb	04:42:49
2	Sn 189.927†	999.2	984.7	506.93 µg/L	506.93 ppb	04:43:09
2	Ti 334.940†	219290.3	220263.5	501.46 µg/L	501.46 ppb	04:42:43
2	Tl 190.801†	306.6	329.4	508.19 µg/L	508.19 ppb	04:43:09
2	U 409.014†	6100.9	5419.1	490.54 µg/L	490.54 ppb	04:42:49
2	V 292.402†	43026.3	43495.9	493.95 µg/L	493.95 ppb	04:42:49
2	Zn 213.857†	18963.2	18587.7	488.73 µg/L	488.73 ppb	04:42:49
3	Sc RADIAL	116475.4	116475.4	99.9 %		04:41:38
3	Al 396.153Radial†	10372.7	10263.1	5080.7 µg/L	5080.7 ppb	04:41:38
3	Ca 317.933Radial†	13235.6	12840.2	4968.1 µg/L	4968.1 ppb	04:41:58
3	Fe 238.204 Radial†	793.7	779.6	4973.9 µg/L	4973.9 ppb	04:41:58
3	K 766.490 Radial†	10499.6	9831.0	5031.4 µg/L	5031.4 ppb	04:41:38
3	Mg 279.077 IEC†	827.0	812.7	5022.4 µg/L	5022.4 ppb	04:41:58
3	Na 589.592 Radial†	40701.6	41389.3	10365 µg/L	10365 ppb	04:41:38
3	Sr 421.552†	97969.4	98160.7	493.35 µg/L	493.35 ppb	04:41:38
3	Sc 361.383	2012177.2	2012177.2	99.503 %		04:43:16
3	Y 371.029	1244322.9	1244322.9	98.854 %		04:43:16
3	Ag 328.068†	54982.4	55246.5	507.38 µg/L	507.38 ppb	04:43:22
3	As 188.979†	270.5	269.6	488.51 µg/L	488.51 ppb	04:43:42
3	B 249.677†	11410.5	11329.7	489.60 µg/L	489.60 ppb	04:43:22
3	Ba 233.527†	18842.5	19014.6	488.73 µg/L	488.73 ppb	04:43:22
3	Be 313.107†	782780.9	783173.3	489.89 µg/L	489.89 ppb	04:43:16
3	Cd 226.502†	18220.9	18410.9	490.51 µg/L	490.51 ppb	04:43:22
3	Co 228.616†	10075.1	10192.0	492.59 µg/L	492.59 ppb	04:43:22
3	Cr 267.716†	23099.4	23314.6	490.10 µg/L	490.10 ppb	04:43:22
3	Cu 324.752†	74719.3	70822.6	492.32 µg/L	492.32 ppb	04:43:22
3	Mn 257.610†	152397.5	153359.7	490.30 µg/L	490.30 ppb	04:43:16
3	Mo 202.031†	4169.8	4194.3	490.10 µg/L	490.10 ppb	04:43:42
3	Ni 231.604†	9189.9	8960.2	490.22 µg/L	490.22 ppb	04:43:22
3	P 214.914†	1379.8	1185.8	2341.7 µg/L	2341.7 ppb	04:43:42
3	Pb 220.353†	1930.5	1883.9	487.60 µg/L	487.60 ppb	04:43:42
3	S 181.975 Axial†	227.4	206.4	1009.0 µg/L	1009.0 ppb	04:43:42
3	Sb 206.836†	518.4	499.9	487.89 µg/L	487.89 ppb	04:43:42
3	Se 196.026†	390.6	382.6	491.10 µg/L	491.10 ppb	04:43:42
3	SiO2†	31361.1	28766.3	5282.4 µg/L	5282.4 ppb	04:43:22
3	Si 251.611†	33628.0	33470.7	2429.5 µg/L	2429.5 ppb	04:43:22
3	Sn 189.927†	984.4	966.9	497.78 µg/L	497.78 ppb	04:43:42
3	Ti 334.940†	220111.7	220436.3	501.86 µg/L	501.86 ppb	04:43:16
3	Tl 190.801†	290.5	312.4	482.06 µg/L	482.06 ppb	04:43:42
3	U 409.014†	6071.7	5371.6	486.23 µg/L	486.23 ppb	04:43:22
3	V 292.402†	43139.8	43481.9	493.73 µg/L	493.73 ppb	04:43:22
3	Zn 213.857†	19050.2	18618.7	489.56 µg/L	489.56 ppb	04:43:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2009641.7	99.378	%	0.1516				0.15%
Sc RADIAL	116723.1	100	%	0.3				0.31%
Y 371.029	1242865.9	98.738	%	0.1011				0.10%
Ag 328.068†	55098.1	506.01	µg/L	3.472	506.01	ppb	3.472	0.69%
QC value within limits for Ag 328.068 Recovery = 101.20%								
Al 396.153Radial†	10186.6	5042.5	µg/L	34.15	5042.5	ppb	34.15	0.68%
QC value within limits for Al 396.153Radial Recovery = 100.85%								
As 188.979†	268.0	485.60	µg/L	6.941	485.60	ppb	6.941	1.43%
QC value within limits for As 188.979 Recovery = 97.12%								
B 249.677†	11317.1	489.06	µg/L	1.366	489.06	ppb	1.366	0.28%
QC value within limits for B 249.677 Recovery = 97.81%								
Ba 233.527†	18948.9	487.04	µg/L	3.914	487.04	ppb	3.914	0.80%
QC value within limits for Ba 233.527 Recovery = 97.41%								
Be 313.107†	781570.2	488.88	µg/L	1.178	488.88	ppb	1.178	0.24%
QC value within limits for Be 313.107 Recovery = 97.78%								
Ca 317.933Radial†	12806.5	4955.1	µg/L	13.33	4955.1	ppb	13.33	0.27%
QC value within limits for Ca 317.933Radial Recovery = 99.10%								
Cd 226.502†	18321.6	488.13	µg/L	3.940	488.13	ppb	3.940	0.81%
QC value within limits for Cd 226.502 Recovery = 97.63%								
Co 228.616†	10142.9	490.23	µg/L	4.196	490.23	ppb	4.196	0.86%

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   QC value within limits for Co 228.616  Recovery = 98.05%
Cr 267.716†            23197.2      487.63 µg/L        3.551      487.63 ppb         3.551   0.73%
   QC value within limits for Cr 267.716  Recovery = 97.53%
Cu 324.752†            70648.9      491.12 µg/L        3.359      491.12 ppb         3.359   0.68%
   QC value within limits for Cu 324.752  Recovery = 98.22%
Fe 238.204 Radial†       777.8      4962.9 µg/L       12.20      4962.9 ppb        12.20   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.26%
K 766.490 Radial†       9748.7      4989.3 µg/L       47.83      4989.3 ppb        47.83   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 99.79%
Mg 279.077 IEC†          813.6      5028.2 µg/L        5.61      5028.2 ppb         5.61   0.11%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.56%
Mn 257.610†           153131.7      489.57 µg/L        0.844      489.57 ppb        0.844   0.17%
   QC value within limits for Mn 257.610  Recovery = 97.91%
Mo 202.031†             4234.1      494.76 µg/L        4.105      494.76 ppb        4.105   0.83%
   QC value within limits for Mo 202.031  Recovery = 98.95%
Na 589.592 Radial†     40903.2       10243 µg/L      119.7        10243 ppb       119.7   1.17%
   QC value within limits for Na 589.592 Radial  Recovery = 102.43%
Ni 231.604†             8926.2      488.36 µg/L        3.663      488.36 ppb        3.663   0.75%
   QC value within limits for Ni 231.604  Recovery = 97.67%
P 214.914†              1198.9      2368.5 µg/L       24.41      2368.5 ppb        24.41   1.03%
   QC value within limits for P 214.914  Recovery = 94.74%
Pb 220.353†             1895.0      490.48 µg/L        2.512      490.48 ppb        2.512   0.51%
   QC value within limits for Pb 220.353  Recovery = 98.10%
S 181.975 Axial†         208.2      1018.1 µg/L       15.69      1018.1 ppb        15.69   1.54%
   QC value within limits for S 181.975 Axial  Recovery = 101.81%
Sb 206.836†              508.2      496.00 µg/L        7.277      496.00 ppb        7.277   1.47%
   QC value within limits for Sb 206.836  Recovery = 99.20%
Se 196.026†              387.4      497.12 µg/L        5.606      497.12 ppb        5.606   1.13%
   QC value within limits for Se 196.026  Recovery = 99.42%
SiO2†                  28712.5      5272.5 µg/L       25.92      5272.5 ppb        25.92   0.49%
   QC value within limits for SiO2  Recovery = 98.60%
Si 251.611†            33406.6      2424.5 µg/L       12.30      2424.5 ppb        12.30   0.51%
   QC value within limits for Si 251.611  Recovery = 96.98%
Sn 189.927†              977.6      503.30 µg/L        4.858      503.30 ppb        4.858   0.97%
   QC value within limits for Sn 189.927  Recovery = 100.66%
Sr 421.552†            97590.9      490.49 µg/L        3.599      490.49 ppb        3.599   0.73%
   QC value within limits for Sr 421.552  Recovery = 98.10%
Ti 334.940†           220016.4      500.90 µg/L        1.330      500.90 ppb        1.330   0.27%
   QC value within limits for Ti 334.940  Recovery = 100.18%
Tl 190.801†              323.4      498.98 µg/L       14.670      498.98 ppb       14.670   2.94%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†              5370.1      486.10 µg/L        4.504      486.10 ppb        4.504   0.93%
   QC value within limits for U 409.014  Recovery = 97.22%
V 292.402†             43294.6      491.66 µg/L        3.786      491.66 ppb        3.786   0.77%
   QC value within limits for V 292.402  Recovery = 98.33%
Zn 213.857†            18531.7      487.27 µg/L        3.281      487.27 ppb        3.281   0.67%
   QC value within limits for Zn 213.857  Recovery = 97.45%
All analyte(s) passed QC.
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Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 04:43:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113588.2	113588.2	97.4	%			04:44:24
1	Al 396.153Radial†	148.9	29.6	14.679	µg/L	14.679	ppb	04:44:24
1	Ca 317.933Radial†	426.0	24.7	9.5432	µg/L	9.5432	ppb	04:44:44
1	Fe 238.204 Radial†	14.5	-0.3	-1.8215	µg/L	-1.8215	ppb	04:44:44
1	K 766.490 Radial†	784.9	123.4	63.155	µg/L	63.155	ppb	04:44:24
1	Mg 279.077 IEC†	15.5	0.4	2.7231	µg/L	2.7231	ppb	04:44:44
1	Na 589.592 Radial†	-371.7	252.5	63.233	µg/L	63.233	ppb	04:44:24
1	Sr 421.552†	-43.3	17.8	0.0895	µg/L	0.0895	ppb	04:44:24
1	Sc 361.383	2019606.0	2019606.0	99.871	%			04:45:46
1	Y 371.029	1257603.9	1257603.9	99.909	%			04:45:46
1	Ag 328.068†	18.1	7.7	0.0761	µg/L	0.0761	ppb	04:45:52
1	As 188.979†	-0.0	-2.3	-4.1113	µg/L	-4.1113	ppb	04:46:13
1	B 249.677†	256.4	118.9	5.1535	µg/L	5.1535	ppb	04:46:13
1	Ba 233.527†	-64.3	13.6	0.3514	µg/L	0.3514	ppb	04:46:13
1	Be 313.107†	3828.5	317.6	0.1985	µg/L	0.1985	ppb	04:45:52
1	Cd 226.502†	-92.0	6.8	0.1751	µg/L	0.1751	ppb	04:46:13
1	Co 228.616†	-67.5	-1.0	-0.0477	µg/L	-0.0477	ppb	04:46:13
1	Cr 267.716†	-99.6	0.1	0.0042	µg/L	0.0042	ppb	04:45:52
1	Cu 324.752†	4138.4	-126.0	-0.8743	µg/L	-0.8743	ppb	04:45:52
1	Mn 257.610†	-173.7	27.4	0.0872	µg/L	0.0872	ppb	04:46:13
1	Mo 202.031†	-1.3	2.4	0.2806	µg/L	0.2806	ppb	04:46:13
1	Ni 231.604†	269.1	-6.1	-0.3349	µg/L	-0.3349	ppb	04:46:13
1	P 214.914†	186.2	-14.5	-29.126	µg/L	-29.126	ppb	04:46:13
1	Pb 220.353†	49.1	-7.1	-1.8261	µg/L	-1.8261	ppb	04:46:13
1	S 181.975 Axial†	26.7	4.6	22.630	µg/L	22.630	ppb	04:46:13
1	Sb 206.836†	19.8	-1.3	-1.2436	µg/L	-1.2436	ppb	04:46:13
1	Se 196.026†	7.0	-2.9	-3.6953	µg/L	-3.6953	ppb	04:46:13
1	SiO2†	2740.0	-7.8	-1.4274	µg/L	-1.4274	ppb	04:45:52
1	Si 251.611†	361.5	36.7	2.7509	µg/L	2.7509	ppb	04:46:13
1	Sn 189.927†	18.3	-4.1	-2.1159	µg/L	-2.1159	ppb	04:46:13
1	Ti 334.940†	1036.9	263.8	0.6004	µg/L	0.6004	ppb	04:45:52
1	Tl 190.801†	-17.5	2.9	4.3949	µg/L	4.3949	ppb	04:46:13
1	U 409.014†	631.6	-98.1	-8.8903	µg/L	-8.8903	ppb	04:45:52
1	V 292.402†	-54.2	72.5	0.8029	µg/L	0.8029	ppb	04:45:52
1	Zn 213.857†	538.6	12.7	0.3395	µg/L	0.3395	ppb	04:46:13
2	Sc RADIAL	114563.0	114563.0	98.2	%			04:44:50
2	Al 396.153Radial†	127.5	6.5	3.2427	µg/L	3.2427	ppb	04:44:50
2	Ca 317.933Radial†	405.9	0.5	0.1836	µg/L	0.1836	ppb	04:45:10
2	Fe 238.204 Radial†	19.7	4.9	30.923	µg/L	30.923	ppb	04:45:10
2	K 766.490 Radial†	644.2	-26.7	-13.657	µg/L	-13.657	ppb	04:44:50
2	Mg 279.077 IEC†	14.4	-0.8	-4.9726	µg/L	-4.9726	ppb	04:45:10
2	Na 589.592 Radial†	-333.3	294.8	73.824	µg/L	73.824	ppb	04:44:50
2	Sr 421.552†	-70.6	-9.6	-0.0481	µg/L	-0.0481	ppb	04:44:50
2	Sc 361.383	2010407.0	2010407.0	99.416	%			04:46:19
2	Y 371.029	1252503.3	1252503.3	99.504	%			04:46:19
2	Ag 328.068†	109.0	99.3	0.9072	µg/L	0.9072	ppb	04:46:24
2	As 188.979†	-4.3	-6.6	-11.899	µg/L	-11.899	ppb	04:46:45
2	B 249.677†	248.8	112.4	4.8633	µg/L	4.8633	ppb	04:46:45
2	Ba 233.527†	-65.7	11.9	0.3063	µg/L	0.3063	ppb	04:46:45
2	Be 313.107†	3440.8	-54.8	-0.0345	µg/L	-0.0345	ppb	04:46:24
2	Cd 226.502†	-88.1	10.3	0.2741	µg/L	0.2741	ppb	04:46:45
2	Co 228.616†	-62.7	3.6	0.1725	µg/L	0.1725	ppb	04:46:45
2	Cr 267.716†	-134.9	-35.9	-0.7536	µg/L	-0.7536	ppb	04:46:24
2	Cu 324.752†	4133.9	-111.6	-0.7672	µg/L	-0.7672	ppb	04:46:24
2	Mn 257.610†	-180.7	19.6	0.0663	µg/L	0.0663	ppb	04:46:45
2	Mo 202.031†	-9.0	-5.4	-0.6277	µg/L	-0.6277	ppb	04:46:45
2	Ni 231.604†	281.2	7.3	0.3970	µg/L	0.3970	ppb	04:46:45
2	P 214.914†	196.8	-3.0	-5.9870	µg/L	-5.9870	ppb	04:46:45
2	Pb 220.353†	51.7	-4.3	-1.1016	µg/L	-1.1016	ppb	04:46:45

2	S 181.975 Axial†	26.5	4.5	21.922 µg/L	21.922 ppb	04:46:45
2	Sb 206.836†	14.7	-6.4	-6.2096 µg/L	-6.2096 ppb	04:46:45
2	Se 196.026†	9.4	-0.4	-0.5135 µg/L	-0.5135 ppb	04:46:45
2	SiO2†	2691.8	-43.7	-8.0328 µg/L	-8.0328 ppb	04:46:24
2	Si 251.611†	351.0	27.8	2.1528 µg/L	2.1528 ppb	04:46:45
2	Sn 189.927†	17.3	-5.0	-2.5604 µg/L	-2.5604 ppb	04:46:45
2	Ti 334.940†	1040.3	272.0	0.6196 µg/L	0.6196 ppb	04:46:24
2	Tl 190.801†	-15.7	4.6	7.0621 µg/L	7.0621 ppb	04:46:45
2	U 409.014†	736.6	10.4	0.9400 µg/L	0.9400 ppb	04:46:24
2	V 292.402†	-128.7	-2.7	-0.0310 µg/L	-0.0310 ppb	04:46:24
2	Zn 213.857†	550.5	27.1	0.7145 µg/L	0.7145 ppb	04:46:45
3	Sc RADIAL	114473.5	114473.5	98.2 %		04:45:16
3	Al 396.153Radial†	134.5	13.8	6.8406 µg/L	6.8406 ppb	04:45:16
3	Ca 317.933Radial†	430.0	25.3	9.7966 µg/L	9.7966 ppb	04:45:36
3	Fe 238.204 Radial†	18.4	3.6	22.942 µg/L	22.942 ppb	04:45:36
3	K 766.490 Radial†	733.1	64.5	32.991 µg/L	32.991 ppb	04:45:16
3	Mg 279.077 IEC†	12.3	-2.9	-17.757 µg/L	-17.757 ppb	04:45:36
3	Na 589.592 Radial†	-437.7	188.1	47.115 µg/L	47.115 ppb	04:45:16
3	Sr 421.552†	-39.0	22.5	0.1133 µg/L	0.1133 ppb	04:45:16
3	Sc 361.383	2029864.0	2029864.0	100.38 %		04:46:51
3	Y 371.029	1265029.6	1265029.6	100.50 %		04:46:51
3	Ag 328.068†	43.1	32.5	0.2971 µg/L	0.2971 ppb	04:46:56
3	As 188.979†	0.6	-1.6	-2.8570 µg/L	-2.8570 ppb	04:47:17
3	B 249.677†	240.3	101.5	4.3943 µg/L	4.3943 ppb	04:47:17
3	Ba 233.527†	-70.1	8.2	0.2106 µg/L	0.2106 ppb	04:47:17
3	Be 313.107†	3502.1	-27.0	-0.0170 µg/L	-0.0170 ppb	04:46:56
3	Cd 226.502†	-90.3	9.0	0.2387 µg/L	0.2387 ppb	04:47:17
3	Co 228.616†	-61.3	5.6	0.2707 µg/L	0.2707 ppb	04:47:17
3	Cr 267.716†	-119.2	-19.0	-0.3987 µg/L	-0.3987 ppb	04:46:56
3	Cu 324.752†	4134.5	-150.9	-1.0415 µg/L	-1.0415 ppb	04:46:56
3	Mn 257.610†	-193.4	8.7	0.0306 µg/L	0.0306 ppb	04:47:17
3	Mo 202.031†	-3.1	0.6	0.0664 µg/L	0.0664 ppb	04:47:17
3	Ni 231.604†	282.2	5.6	0.3043 µg/L	0.3043 ppb	04:47:17
3	P 214.914†	185.5	-16.1	-32.354 µg/L	-32.354 ppb	04:47:17
3	Pb 220.353†	54.1	-2.4	-0.6163 µg/L	-0.6163 ppb	04:47:17
3	S 181.975 Axial†	27.7	5.4	26.623 µg/L	26.623 ppb	04:47:17
3	Sb 206.836†	19.6	-1.6	-1.5540 µg/L	-1.5540 ppb	04:47:17
3	Se 196.026†	13.6	3.7	4.7718 µg/L	4.7718 ppb	04:47:17
3	SiO2†	2677.3	-84.1	-15.444 µg/L	-15.444 ppb	04:46:56
3	Si 251.611†	350.1	23.6	1.7564 µg/L	1.7564 ppb	04:47:17
3	Sn 189.927†	20.5	-2.0	-0.9976 µg/L	-0.9976 ppb	04:47:17
3	Ti 334.940†	954.5	176.5	0.4015 µg/L	0.4015 ppb	04:46:56
3	Tl 190.801†	-21.4	-1.0	-1.5316 µg/L	-1.5316 ppb	04:47:17
3	U 409.014†	747.3	14.0	1.2688 µg/L	1.2688 ppb	04:46:56
3	V 292.402†	-137.9	-10.7	-0.1156 µg/L	-0.1156 ppb	04:46:56
3	Zn 213.857†	532.3	3.7	0.0958 µg/L	0.0958 ppb	04:47:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2019959.0	99.888	%	0.4813				0.48%
Sc RADIAL	114208.2	97.9	%	0.46				0.47%
Y 371.029	1258378.9	99.971	%	0.5004				0.50%
Ag 328.068†	46.5	0.4268	µg/L	0.43048	0.4268	ppb	0.43048	100.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.6	8.2542	µg/L	5.84794	8.2542	ppb	5.84794	70.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.5	-6.2890	µg/L	4.89846	-6.2890	ppb	4.89846	77.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	110.9	4.8037	µg/L	0.38308	4.8037	ppb	0.38308	7.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.3	0.2894	µg/L	0.07193	0.2894	ppb	0.07193	24.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.6	0.0490	µg/L	0.12979	0.0490	ppb	0.12979	264.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.8	6.5078	µg/L	5.47836	6.5078	ppb	5.47836	84.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	8.7	0.2293	µg/L	0.05015	0.2293	ppb	0.05015	21.87%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.8	0.1319	µg/L	0.16305	0.1319	ppb	0.16305	123.65%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -18.3     -0.3827 µg/L       0.37919     -0.3827 ppb        0.37919  99.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -129.5     -0.8944 µg/L       0.13823     -0.8944 ppb        0.13823  15.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.7      17.348 µg/L       17.0742      17.348 ppb        17.0742  98.42%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         53.7      27.496 µg/L       38.6996      27.496 ppb        38.6996 140.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.1     -6.6688 µg/L      10.34480     -6.6688 ppb       10.34480 155.12%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.5      0.0614 µg/L       0.02862      0.0614 ppb        0.02862  46.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.8     -0.0935 µg/L       0.47479     -0.0935 ppb        0.47479 507.57%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       245.1      61.391 µg/L       13.4493      61.391 ppb        13.4493  21.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.2      0.1221 µg/L       0.39848      0.1221 ppb        0.39848 326.29%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -11.2     -22.489 µg/L       14.3819     -22.489 ppb        14.3819  63.95%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.6     -1.1813 µg/L       0.60882     -1.1813 ppb        0.60882  51.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.8      23.725 µg/L        2.5344      23.725 ppb         2.5344  10.68%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.1     -3.0024 µg/L       2.78185     -3.0024 ppb        2.78185  92.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.1      0.1877 µg/L       4.27688      0.1877 ppb        4.27688 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -45.2     -8.3015 µg/L       7.01231     -8.3015 ppb        7.01231  84.47%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               29.4      2.2200 µg/L       0.50065      2.2200 ppb        0.50065  22.55%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.7     -1.8913 µg/L       0.80527     -1.8913 ppb        0.80527  42.58%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.3      0.0516 µg/L       0.08711      0.0516 ppb        0.08711 168.93%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              237.4      0.5405 µg/L       0.12075      0.5405 ppb        0.12075  22.34%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.2      3.3085 µg/L       4.39867      3.3085 ppb        4.39867 132.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -24.5     -2.2272 µg/L       5.77282     -2.2272 ppb        5.77282 259.20%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.7      0.2188 µg/L       0.50762      0.2188 ppb        0.50762 232.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.5      0.3833 µg/L       0.31163      0.3833 ppb        0.31163  81.31%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 05:19:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117579.6	117579.6	101	%			05:19:38
1	Al 396.153Radial†	10298.8	10092.2	4995.5	µg/L	4995.5	ppb	05:19:38
1	Ca 317.933Radial†	13164.9	12645.7	4892.9	µg/L	4892.9	ppb	05:19:59
1	Fe 238.204 Radial†	789.4	767.9	4899.3	µg/L	4899.3	ppb	05:19:59
1	K 766.490 Radial†	10620.6	9852.2	5042.2	µg/L	5042.2	ppb	05:19:38
1	Mg 279.077 IEC†	824.5	802.4	4959.4	µg/L	4959.4	ppb	05:19:59
1	Na 589.592 Radial†	40861.0	41164.6	10309	µg/L	10309	ppb	05:19:38
1	Sr 421.552†	97952.3	97222.3	488.64	µg/L	488.64	ppb	05:19:38
1	Sc 361.383	2028849.9	2028849.9	100.33	%			05:21:02
1	Y 371.029	1253689.1	1253689.1	99.598	%			05:21:02
1	Ag 328.068†	54836.4	54646.9	501.89	µg/L	501.89	ppb	05:21:07
1	As 188.979†	270.6	267.5	484.67	µg/L	484.67	ppb	05:21:28
1	B 249.677†	12214.9	12037.1	520.30	µg/L	520.30	ppb	05:21:07
1	Ba 233.527†	18864.9	18881.4	485.31	µg/L	485.31	ppb	05:21:07
1	Be 313.107†	784629.4	778550.9	487.00	µg/L	487.00	ppb	05:21:02
1	Cd 226.502†	18220.9	18260.3	486.50	µg/L	486.50	ppb	05:21:07
1	Co 228.616†	10026.5	10060.4	486.25	µg/L	486.25	ppb	05:21:07
1	Cr 267.716†	23122.5	23146.8	486.57	µg/L	486.57	ppb	05:21:07
1	Cu 324.752†	74484.2	69971.2	486.40	µg/L	486.40	ppb	05:21:07
1	Mn 257.610†	150751.3	150460.3	481.03	µg/L	481.03	ppb	05:21:07
1	Mo 202.031†	4268.4	4258.1	497.55	µg/L	497.55	ppb	05:21:28
1	Ni 231.604†	9198.4	8892.8	486.53	µg/L	486.53	ppb	05:21:07
1	P 214.914†	1408.5	1203.0	2377.3	µg/L	2377.3	ppb	05:21:28
1	Pb 220.353†	1962.0	1899.3	491.62	µg/L	491.62	ppb	05:21:28
1	S 181.975 Axial†	278.7	255.7	1250.3	µg/L	1250.3	ppb	05:21:28
1	Sb 206.836†	534.5	511.7	499.38	µg/L	499.38	ppb	05:21:28
1	Se 196.026†	402.6	391.5	502.33	µg/L	502.33	ppb	05:21:28
1	SiO2†	31367.7	28513.9	5236.0	µg/L	5236.0	ppb	05:21:07
1	Si 251.611†	33605.3	33170.4	2407.0	µg/L	2407.0	ppb	05:21:07
1	Sn 189.927†	1003.7	978.0	503.47	µg/L	503.47	ppb	05:21:28
1	Ti 334.940†	220219.3	218725.6	497.96	µg/L	497.96	ppb	05:21:02
1	Tl 190.801†	301.8	321.2	495.59	µg/L	495.59	ppb	05:21:28
1	U 409.014†	6088.0	5337.7	483.17	µg/L	483.17	ppb	05:21:07
1	V 292.402†	43205.2	43190.8	490.50	µg/L	490.50	ppb	05:21:07
1	Zn 213.857†	18968.7	18380.1	483.27	µg/L	483.27	ppb	05:21:07
2	Sc RADIAL	116388.5	116388.5	99.8	%			05:20:04
2	Al 396.153Radial†	10220.0	10117.8	5008.2	µg/L	5008.2	ppb	05:20:04
2	Ca 317.933Radial†	13089.3	12703.5	4915.3	µg/L	4915.3	ppb	05:20:24
2	Fe 238.204 Radial†	788.1	774.6	4942.3	µg/L	4942.3	ppb	05:20:24
2	K 766.490 Radial†	10578.1	9917.4	5075.6	µg/L	5075.6	ppb	05:20:04
2	Mg 279.077 IEC†	829.6	815.9	5042.5	µg/L	5042.5	ppb	05:20:24
2	Na 589.592 Radial†	40630.5	41348.4	10355	µg/L	10355	ppb	05:20:04
2	Sr 421.552†	97143.0	97405.7	489.56	µg/L	489.56	ppb	05:20:04
2	Sc 361.383	2016378.8	2016378.8	99.711	%			05:21:35
2	Y 371.029	1245556.1	1245556.1	98.952	%			05:21:35
2	Ag 328.068†	55026.1	55175.2	506.73	µg/L	506.73	ppb	05:21:40
2	As 188.979†	265.1	263.6	477.63	µg/L	477.63	ppb	05:22:01
2	B 249.677†	12175.6	12073.1	521.84	µg/L	521.84	ppb	05:21:40
2	Ba 233.527†	18939.0	19071.9	490.20	µg/L	490.20	ppb	05:21:40
2	Be 313.107†	783614.2	782369.8	489.38	µg/L	489.38	ppb	05:21:35
2	Cd 226.502†	18268.4	18420.4	490.77	µg/L	490.77	ppb	05:21:40
2	Co 228.616†	10056.1	10151.9	490.67	µg/L	490.67	ppb	05:21:40
2	Cr 267.716†	23100.9	23267.7	489.11	µg/L	489.11	ppb	05:21:40
2	Cu 324.752†	74768.3	70715.3	491.57	µg/L	491.57	ppb	05:21:40
2	Mn 257.610†	151243.8	151883.6	485.58	µg/L	485.58	ppb	05:21:40
2	Mo 202.031†	4251.0	4267.0	498.59	µg/L	498.59	ppb	05:22:01
2	Ni 231.604†	9224.0	8975.1	491.04	µg/L	491.04	ppb	05:21:40
2	P 214.914†	1402.8	1206.0	2382.8	µg/L	2382.8	ppb	05:22:01
2	Pb 220.353†	1975.1	1924.5	498.12	µg/L	498.12	ppb	05:22:01

2	S 181.975 Axial†	267.7	246.3	1204.5 µg/L	1204.5 ppb	05:22:01
2	Sb 206.836†	529.8	510.2	497.93 µg/L	497.93 ppb	05:22:01
2	Se 196.026†	399.7	391.0	501.77 µg/L	501.77 ppb	05:22:01
2	SiO2†	31517.0	28857.0	5299.1 µg/L	5299.1 ppb	05:21:40
2	Si 251.611†	33727.3	33499.8	2431.1 µg/L	2431.1 ppb	05:21:40
2	Sn 189.927†	1008.3	988.8	508.99 µg/L	508.99 ppb	05:22:01
2	Ti 334.940†	220290.3	220154.5	501.22 µg/L	501.22 ppb	05:21:35
2	Tl 190.801†	306.1	327.3	505.02 µg/L	505.02 ppb	05:22:01
2	U 409.014†	6103.6	5390.8	487.98 µg/L	487.98 ppb	05:21:40
2	V 292.402†	43207.6	43459.6	493.54 µg/L	493.54 ppb	05:21:40
2	Zn 213.857†	19029.2	18557.7	487.94 µg/L	487.94 ppb	05:21:40
3	Sc RADIAL	116439.5	116439.5	99.8 %		05:20:30
3	Al 396.153Radial†	10328.6	10222.1	5060.4 µg/L	5060.4 ppb	05:20:30
3	Ca 317.933Radial†	13130.7	12739.2	4929.1 µg/L	4929.1 ppb	05:20:50
3	Fe 238.204 Radial†	790.3	776.5	4954.1 µg/L	4954.1 ppb	05:20:50
3	K 766.490 Radial†	10660.5	9995.3	5115.5 µg/L	5115.5 ppb	05:20:30
3	Mg 279.077 IEC†	836.6	822.6	5083.4 µg/L	5083.4 ppb	05:20:50
3	Na 589.592 Radial†	40938.8	41639.4	10428 µg/L	10428 ppb	05:20:30
3	Sr 421.552†	98058.0	98279.6	493.95 µg/L	493.95 ppb	05:20:30
3	Sc 361.383	2037404.5	2037404.5	100.75 %		05:22:08
3	Y 371.029	1259573.1	1259573.1	100.07 %		05:22:08
3	Ag 328.068†	55391.6	54968.4	504.84 µg/L	504.84 ppb	05:22:13
3	As 188.979†	268.9	264.7	479.58 µg/L	479.58 ppb	05:22:34
3	B 249.677†	12155.9	11927.4	515.52 µg/L	515.52 ppb	05:22:13
3	Ba 233.527†	19088.2	19024.0	488.97 µg/L	488.97 ppb	05:22:13
3	Be 313.107†	790038.1	780635.6	488.30 µg/L	488.30 ppb	05:22:08
3	Cd 226.502†	18453.0	18414.5	490.61 µg/L	490.61 ppb	05:22:13
3	Co 228.616†	10158.2	10149.1	490.52 µg/L	490.52 ppb	05:22:13
3	Cr 267.716†	23336.8	23262.7	489.01 µg/L	489.01 ppb	05:22:13
3	Cu 324.752†	75258.7	70428.1	489.58 µg/L	489.58 ppb	05:22:13
3	Mn 257.610†	152462.4	151527.8	484.45 µg/L	484.45 ppb	05:22:13
3	Mo 202.031†	4202.6	4174.9	487.84 µg/L	487.84 ppb	05:22:34
3	Ni 231.604†	9299.3	8954.4	489.91 µg/L	489.91 ppb	05:22:13
3	P 214.914†	1386.0	1174.7	2319.8 µg/L	2319.8 ppb	05:22:34
3	Pb 220.353†	1948.9	1878.1	486.11 µg/L	486.11 ppb	05:22:34
3	S 181.975 Axial†	267.2	243.0	1188.4 µg/L	1188.4 ppb	05:22:34
3	Sb 206.836†	525.5	500.5	488.41 µg/L	488.41 ppb	05:22:34
3	Se 196.026†	390.2	377.4	484.41 µg/L	484.41 ppb	05:22:34
3	SiO2†	31667.5	28680.1	5266.6 µg/L	5266.6 ppb	05:22:13
3	Si 251.611†	33963.7	33385.4	2423.2 µg/L	2423.2 ppb	05:22:13
3	Sn 189.927†	1001.1	971.3	500.04 µg/L	500.04 ppb	05:22:34
3	Ti 334.940†	221758.4	219331.7	499.34 µg/L	499.34 ppb	05:22:08
3	Tl 190.801†	304.7	322.8	498.05 µg/L	498.05 ppb	05:22:34
3	U 409.014†	6215.8	5439.0	492.35 µg/L	492.35 ppb	05:22:13
3	V 292.402†	43585.1	43387.1	492.66 µg/L	492.66 ppb	05:22:13
3	Zn 213.857†	19211.3	18541.5	487.52 µg/L	487.52 ppb	05:22:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027544.4	100.26	%	0.523				0.52%
Sc RADIAL	116802.6	100	%	0.6				0.58%
Y 371.029	1252939.4	99.539	%	0.5592				0.56%
Ag 328.068†	54930.2	504.48	µg/L	2.439	504.48	ppb	2.439	0.48%
QC value within limits for Ag 328.068 Recovery = 100.90%								
Al 396.153Radial†	10144.0	5021.3	µg/L	34.39	5021.3	ppb	34.39	0.68%
QC value within limits for Al 396.153Radial Recovery = 100.43%								
As 188.979†	265.3	480.63	µg/L	3.636	480.63	ppb	3.636	0.76%
QC value within limits for As 188.979 Recovery = 96.13%								
B 249.677†	12012.5	519.22	µg/L	3.294	519.22	ppb	3.294	0.63%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	18992.4	488.16	µg/L	2.545	488.16	ppb	2.545	0.52%
QC value within limits for Ba 233.527 Recovery = 97.63%								
Be 313.107†	780518.8	488.23	µg/L	1.196	488.23	ppb	1.196	0.24%
QC value within limits for Be 313.107 Recovery = 97.65%								
Ca 317.933Radial†	12696.2	4912.4	µg/L	18.27	4912.4	ppb	18.27	0.37%
QC value within limits for Ca 317.933Radial Recovery = 98.25%								
Cd 226.502†	18365.1	489.29	µg/L	2.419	489.29	ppb	2.419	0.49%
QC value within limits for Cd 226.502 Recovery = 97.86%								
Co 228.616†	10120.5	489.15	µg/L	2.508	489.15	ppb	2.508	0.51%

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   QC value within limits for Co 228.616  Recovery = 97.83%
Cr 267.716†            23225.7      488.23 µg/L         1.438      488.23 ppb          1.438   0.29%
   QC value within limits for Cr 267.716  Recovery = 97.65%
Cu 324.752†            70371.5      489.18 µg/L         2.608      489.18 ppb          2.608   0.53%
   QC value within limits for Cu 324.752  Recovery = 97.84%
Fe 238.204 Radial†       773.0      4931.9 µg/L        28.87      4931.9 ppb         28.87   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.64%
K 766.490 Radial†       9921.6      5077.8 µg/L        36.66      5077.8 ppb         36.66   0.72%
   QC value within limits for K 766.490 Radial  Recovery = 101.56%
Mg 279.077 IEC†          813.6      5028.5 µg/L        63.20      5028.5 ppb         63.20   1.26%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.57%
Mn 257.610†           151290.5      483.69 µg/L         2.368      483.69 ppb          2.368   0.49%
   QC value within limits for Mn 257.610  Recovery = 96.74%
Mo 202.031†             4233.3      494.66 µg/L         5.930      494.66 ppb          5.930   1.20%
   QC value within limits for Mo 202.031  Recovery = 98.93%
Na 589.592 Radial†     41384.2       10364 µg/L          60.0       10364 ppb           60.0   0.58%
   QC value within limits for Na 589.592 Radial  Recovery = 103.64%
Ni 231.604†             8940.8      489.16 µg/L         2.344      489.16 ppb          2.344   0.48%
   QC value within limits for Ni 231.604  Recovery = 97.83%
P 214.914†              1194.6      2360.0 µg/L        34.91      2360.0 ppb         34.91   1.48%
   QC value within limits for P 214.914  Recovery = 94.40%
Pb 220.353†             1900.7      491.95 µg/L         6.015      491.95 ppb          6.015   1.22%
   QC value within limits for Pb 220.353  Recovery = 98.39%
S 181.975 Axial†         248.3      1214.4 µg/L        32.11      1214.4 ppb         32.11   2.64%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 121.44%
Sb 206.836†              507.4      495.24 µg/L         5.955      495.24 ppb          5.955   1.20%
   QC value within limits for Sb 206.836  Recovery = 99.05%
Se 196.026†              386.6      496.17 µg/L        10.189      496.17 ppb         10.189   2.05%
   QC value within limits for Se 196.026  Recovery = 99.23%
SiO2†                  28683.7      5267.2 µg/L        31.51      5267.2 ppb         31.51   0.60%
   QC value within limits for SiO2  Recovery = 98.50%
Si 251.611†            33351.9      2420.4 µg/L        12.25      2420.4 ppb         12.25   0.51%
   QC value within limits for Si 251.611  Recovery = 96.82%
Sn 189.927†              979.4      504.17 µg/L         4.518      504.17 ppb          4.518   0.90%
   QC value within limits for Sn 189.927  Recovery = 100.83%
Sr 421.552†            97635.9      490.72 µg/L         2.839      490.72 ppb          2.839   0.58%
   QC value within limits for Sr 421.552  Recovery = 98.14%
Ti 334.940†           219403.9      499.51 µg/L         1.633      499.51 ppb          1.633   0.33%
   QC value within limits for Ti 334.940  Recovery = 99.90%
Tl 190.801†              323.8      499.55 µg/L         4.892      499.55 ppb          4.892   0.98%
   QC value within limits for Tl 190.801  Recovery = 99.91%
U 409.014†              5389.2      487.83 µg/L         4.591      487.83 ppb          4.591   0.94%
   QC value within limits for U 409.014  Recovery = 97.57%
V 292.402†             43345.8      492.23 µg/L         1.565      492.23 ppb          1.565   0.32%
   QC value within limits for V 292.402  Recovery = 98.45%
Zn 213.857†            18493.1      486.25 µg/L         2.583      486.25 ppb          2.583   0.53%
   QC value within limits for Zn 213.857  Recovery = 97.25%
QC Failed.  Continue with analysis.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 05:22:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115329.1	115329.1	98.9	%			05:23:15
1	Al 396.153Radial†	153.5	31.9	15.843	µg/L	15.843	ppb	05:23:15
1	Ca 317.933Radial†	458.9	51.3	19.844	µg/L	19.844	ppb	05:23:35
1	Fe 238.204 Radial†	13.7	-1.4	-8.5985	µg/L	-8.5985	ppb	05:23:35
1	K 766.490 Radial†	839.2	166.1	85.028	µg/L	85.028	ppb	05:23:15
1	Mg 279.077 IEC†	11.3	-4.0	-24.664	µg/L	-24.664	ppb	05:23:35
1	Na 589.592 Radial†	962.8	1607.7	402.61	µg/L	402.61	ppb	05:23:15
1	Sr 421.552†	16.5	79.0	0.3972	µg/L	0.3972	ppb	05:23:15
1	Sc 361.383	1999901.7	1999901.7	98.896	%			05:24:37
1	Y 371.029	1243400.7	1243400.7	98.781	%			05:24:37
1	Ag 328.068†	79.2	69.7	0.6367	µg/L	0.6367	ppb	05:24:43
1	As 188.979†	2.2	-0.0	-0.0624	µg/L	-0.0624	ppb	05:25:03
1	B 249.677†	611.9	480.9	20.849	µg/L	20.849	ppb	05:24:43
1	Ba 233.527†	-73.2	4.0	0.1033	µg/L	0.1033	ppb	05:25:03
1	Be 313.107†	3550.8	74.6	0.0464	µg/L	0.0464	ppb	05:24:43
1	Cd 226.502†	-89.2	8.8	0.2356	µg/L	0.2356	ppb	05:25:03
1	Co 228.616†	-70.0	-4.1	-0.2016	µg/L	-0.2016	ppb	05:25:03
1	Cr 267.716†	-114.7	-16.2	-0.3385	µg/L	-0.3385	ppb	05:24:43
1	Cu 324.752†	4109.1	-114.8	-0.7979	µg/L	-0.7979	ppb	05:24:43
1	Mn 257.610†	-201.0	-1.9	-0.0073	µg/L	-0.0073	ppb	05:25:03
1	Mo 202.031†	-3.6	0.0	0.0002	µg/L	0.0002	ppb	05:25:03
1	Ni 231.604†	284.6	12.2	0.6678	µg/L	0.6678	ppb	05:25:03
1	P 214.914†	191.6	-7.2	-14.432	µg/L	-14.432	ppb	05:25:03
1	Pb 220.353†	45.8	-9.9	-2.5695	µg/L	-2.5695	ppb	05:25:03
1	S 181.975 Axial†	70.0	48.6	238.11	µg/L	238.11	ppb	05:25:03
1	Sb 206.836†	24.1	3.2	3.1691	µg/L	3.1691	ppb	05:25:03
1	Se 196.026†	11.8	2.1	2.6743	µg/L	2.6743	ppb	05:25:03
1	SiO2†	2653.0	-68.8	-12.634	µg/L	-12.634	ppb	05:24:43
1	Si 251.611†	360.0	38.8	2.8648	µg/L	2.8648	ppb	05:25:03
1	Sn 189.927†	19.8	-2.4	-1.2283	µg/L	-1.2283	ppb	05:25:03
1	Ti 334.940†	1054.2	291.6	0.6631	µg/L	0.6631	ppb	05:24:43
1	Tl 190.801†	-15.3	4.9	7.5755	µg/L	7.5755	ppb	05:25:03
1	U 409.014†	740.0	17.8	1.6205	µg/L	1.6205	ppb	05:24:43
1	V 292.402†	-96.9	28.8	0.3259	µg/L	0.3259	ppb	05:24:43
1	Zn 213.857†	548.0	27.5	0.7280	µg/L	0.7280	ppb	05:25:03
2	Sc RADIAL	114187.4	114187.4	97.9	%			05:23:41
2	Al 396.153Radial†	156.9	37.0	18.391	µg/L	18.391	ppb	05:23:41
2	Ca 317.933Radial†	468.3	65.5	25.351	µg/L	25.351	ppb	05:24:01
2	Fe 238.204 Radial†	16.8	2.0	12.686	µg/L	12.686	ppb	05:24:01
2	K 766.490 Radial†	867.1	203.1	103.96	µg/L	103.96	ppb	05:23:41
2	Mg 279.077 IEC†	13.9	-1.3	-7.8939	µg/L	-7.8939	ppb	05:24:01
2	Na 589.592 Radial†	1827.0	2500.2	626.10	µg/L	626.10	ppb	05:23:41
2	Sr 421.552†	-22.5	39.4	0.1978	µg/L	0.1978	ppb	05:23:41
2	Sc 361.383	2017457.6	2017457.6	99.764	%			05:25:09
2	Y 371.029	1254873.9	1254873.9	99.692	%			05:25:09
2	Ag 328.068†	16.9	6.6	0.0607	µg/L	0.0607	ppb	05:25:15
2	As 188.979†	-0.1	-2.3	-4.2418	µg/L	-4.2418	ppb	05:25:35
2	B 249.677†	572.6	436.1	18.903	µg/L	18.903	ppb	05:25:15
2	Ba 233.527†	-76.0	1.9	0.0480	µg/L	0.0480	ppb	05:25:35
2	Be 313.107†	3599.2	91.9	0.0573	µg/L	0.0573	ppb	05:25:15
2	Cd 226.502†	-93.6	5.1	0.1285	µg/L	0.1285	ppb	05:25:35
2	Co 228.616†	-75.4	-9.0	-0.4346	µg/L	-0.4346	ppb	05:25:35
2	Cr 267.716†	-132.0	-32.5	-0.6823	µg/L	-0.6823	ppb	05:25:15
2	Cu 324.752†	4119.9	-140.1	-0.9693	µg/L	-0.9693	ppb	05:25:15
2	Mn 257.610†	-201.5	-0.7	-0.0006	µg/L	-0.0006	ppb	05:25:35
2	Mo 202.031†	-4.6	-1.0	-0.1144	µg/L	-0.1144	ppb	05:25:35
2	Ni 231.604†	280.1	5.2	0.2835	µg/L	0.2835	ppb	05:25:35
2	P 214.914†	184.4	-16.1	-32.455	µg/L	-32.455	ppb	05:25:35
2	Pb 220.353†	49.4	-6.7	-1.7272	µg/L	-1.7272	ppb	05:25:35

2	S 181.975 Axial†	63.0	41.0	200.78 µg/L	200.78 ppb		05:25:35
2	Sb 206.836†	19.4	-1.6	-1.5925 µg/L	-1.5925 ppb		05:25:35
2	Se 196.026†	13.2	3.4	4.3394 µg/L	4.3394 ppb		05:25:35
2	SiO2†	2686.1	-58.9	-10.812 µg/L	-10.812 ppb		05:25:15
2	Si 251.611†	353.1	28.7	2.1222 µg/L	2.1222 ppb		05:25:35
2	Sn 189.927†	19.5	-2.8	-1.4527 µg/L	-1.4527 ppb		05:25:35
2	Ti 334.940†	1029.9	257.9	0.5861 µg/L	0.5861 ppb		05:25:15
2	Tl 190.801†	-15.8	4.6	6.9990 µg/L	6.9990 ppb		05:25:35
2	U 409.014†	620.6	-108.4	-9.8289 µg/L	-9.8289 ppb		05:25:15
2	V 292.402†	-128.4	-1.9	-0.0374 µg/L	-0.0374 ppb		05:25:15
2	Zn 213.857†	544.8	19.4	0.5138 µg/L	0.5138 ppb		05:25:35
3	Sc RADIAL	114187.2	114187.2	97.9 %			05:24:07
3	Al 396.153Radial†	161.1	41.2	20.500 µg/L	20.500 ppb		05:24:07
3	Ca 317.933Radial†	446.7	43.5	16.817 µg/L	16.817 ppb		05:24:27
3	Fe 238.204 Radial†	16.0	1.2	7.5319 µg/L	7.5319 ppb		05:24:27
3	K 766.490 Radial†	917.1	254.2	130.11 µg/L	130.11 ppb		05:24:07
3	Mg 279.077 IEC†	13.7	-1.4	-8.7847 µg/L	-8.7847 ppb		05:24:27
3	Na 589.592 Radial†	3044.5	3743.7	937.52 µg/L	937.52 ppb		05:24:07
3	Sr 421.552†	-5.4	56.8	0.2854 µg/L	0.2854 ppb		05:24:07
3	Sc 361.383	2009601.7	2009601.7	99.376 %			05:25:41
3	Y 371.029	1250014.9	1250014.9	99.306 %			05:25:41
3	Ag 328.068†	72.8	62.8	0.5750 µg/L	0.5750 ppb		05:25:47
3	As 188.979†	5.2	3.0	5.3929 µg/L	5.3929 ppb		05:26:07
3	B 249.677†	523.9	389.3	16.876 µg/L	16.876 ppb		05:25:47
3	Ba 233.527†	-70.1	7.5	0.1934 µg/L	0.1934 ppb		05:26:07
3	Be 313.107†	3453.1	-41.1	-0.0258 µg/L	-0.0258 ppb		05:25:47
3	Cd 226.502†	-92.9	5.5	0.1427 µg/L	0.1427 ppb		05:26:07
3	Co 228.616†	-79.2	-13.0	-0.6296 µg/L	-0.6296 ppb		05:26:07
3	Cr 267.716†	-112.7	-13.6	-0.2850 µg/L	-0.2850 ppb		05:25:47
3	Cu 324.752†	4167.7	-75.9	-0.5249 µg/L	-0.5249 ppb		05:25:47
3	Mn 257.610†	-206.4	-6.4	-0.0194 µg/L	-0.0194 ppb		05:26:07
3	Mo 202.031†	-6.0	-2.4	-0.2747 µg/L	-0.2747 ppb		05:26:07
3	Ni 231.604†	298.2	24.5	1.3432 µg/L	1.3432 ppb		05:26:07
3	P 214.914†	193.7	-5.9	-11.941 µg/L	-11.941 ppb		05:26:07
3	Pb 220.353†	50.0	-5.9	-1.5268 µg/L	-1.5268 ppb		05:26:07
3	S 181.975 Axial†	55.1	33.2	162.80 µg/L	162.80 ppb		05:26:07
3	Sb 206.836†	24.5	3.6	3.5143 µg/L	3.5143 ppb		05:26:07
3	Se 196.026†	17.1	7.3	9.3555 µg/L	9.3555 ppb		05:26:07
3	SiO2†	2693.8	-40.7	-7.4736 µg/L	-7.4736 ppb		05:25:47
3	Si 251.611†	343.1	20.1	1.4206 µg/L	1.4206 ppb		05:26:07
3	Sn 189.927†	22.7	0.4	0.2189 µg/L	0.2189 ppb		05:26:07
3	Ti 334.940†	917.6	148.9	0.3383 µg/L	0.3383 ppb		05:25:47
3	Tl 190.801†	-23.3	-3.0	-4.6569 µg/L	-4.6569 ppb		05:26:07
3	U 409.014†	657.1	-69.2	-6.2761 µg/L	-6.2761 ppb		05:25:47
3	V 292.402†	-101.9	24.2	0.2610 µg/L	0.2610 ppb		05:25:47
3	Zn 213.857†	539.6	16.4	0.4277 µg/L	0.4277 ppb		05:26:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2008987.0	99.345	%	0.4349				0.44%
Sc RADIAL	114567.9	98.2	%	0.57				0.58%
Y 371.029	1249429.8	99.260	%	0.4575				0.46%
Ag 328.068†	46.3	0.4241	µg/L	0.31625	0.4241	ppb	0.31625	74.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	36.7	18.245	µg/L	2.3323	18.245	ppb	2.3323	12.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.3629	µg/L	4.83143	0.3629	ppb	4.83143	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	435.4	18.876	µg/L	1.9870	18.876	ppb	1.9870	10.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.1149	µg/L	0.07340	0.1149	ppb	0.07340	63.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.8	0.0260	µg/L	0.04518	0.0260	ppb	0.04518	174.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	53.4	20.671	µg/L	4.3269	20.671	ppb	4.3269	20.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.5	0.1689	µg/L	0.05814	0.1689	ppb	0.05814	34.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.7	-0.4219	µg/L	0.21432	-0.4219	ppb	0.21432	50.80%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -20.8     -0.4352 µg/L       0.21558     -0.4352 ppb        0.21558  49.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -110.3     -0.7641 µg/L       0.22412     -0.7641 ppb        0.22412  29.33%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.6      3.8733 µg/L      11.10410      3.8733 ppb       11.10410 286.69%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        207.8      106.37 µg/L        22.638      106.37 ppb         22.638  21.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.2     -13.781 µg/L        9.4354     -13.781 ppb         9.4354  68.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -3.0     -0.0091 µg/L       0.00953     -0.0091 ppb        0.00953 104.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.1     -0.1297 µg/L       0.13808     -0.1297 ppb        0.13808 106.49%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      2617.2      655.41 µg/L       268.656      655.41 ppb        268.656  40.99%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.0      0.7648 µg/L       0.53646      0.7648 ppb        0.53646  70.14%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.7     -19.609 µg/L       11.1941     -19.609 ppb        11.1941  57.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -7.5     -1.9412 µg/L       0.55331     -1.9412 ppb        0.55331  28.50%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          41.0      200.56 µg/L        37.658      200.56 ppb         37.658  18.78%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                1.7      1.6970 µg/L       2.85395      1.6970 ppb        2.85395 168.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                4.3      5.4564 µg/L       3.47784      5.4564 ppb        3.47784  63.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -56.1     -10.307 µg/L        2.6172     -10.307 ppb         2.6172  25.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               29.2      2.1359 µg/L       0.72220      2.1359 ppb        0.72220  33.81%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.6     -0.8207 µg/L       0.90729     -0.8207 ppb        0.90729 110.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               58.4      0.2935 µg/L       0.09994      0.2935 ppb        0.09994  34.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              232.8      0.5292 µg/L       0.16974      0.5292 ppb        0.16974  32.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.2      3.3058 µg/L       6.90199      3.3058 ppb        6.90199 208.78%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -53.2     -4.8282 µg/L       5.86042     -4.8282 ppb        5.86042 121.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                17.0      0.1832 µg/L       0.19377      0.1832 ppb        0.19377 105.78%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               21.1      0.5565 µg/L       0.15462      0.5565 ppb        0.15462  27.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 40
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 05:48:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115837.9	115837.9	99.3	%			05:48:40
1	Al 396.153Radial†	10200.3	10146.6	5022.4	µg/L	5022.4	ppb	05:48:40
1	Ca 317.933Radial†	13122.9	12799.8	4952.5	µg/L	4952.5	ppb	05:49:00
1	Fe 238.204 Radial†	787.7	777.9	4963.5	µg/L	4963.5	ppb	05:49:00
1	K 766.490 Radial†	10323.1	9711.1	4970.0	µg/L	4970.0	ppb	05:48:40
1	Mg 279.077 IEC†	826.4	816.6	5047.0	µg/L	5047.0	ppb	05:49:00
1	Na 589.592 Radial†	39478.0	40381.6	10113	µg/L	10113	ppb	05:48:40
1	Sr 421.552†	96827.5	97550.9	490.29	µg/L	490.29	ppb	05:48:40
1	Sc 361.383	2005122.6	2005122.6	99.154	%			05:50:04
1	Y 371.029	1243470.3	1243470.3	98.786	%			05:50:04
1	Ag 328.068†	55033.0	55491.9	509.64	µg/L	509.64	ppb	05:50:09
1	As 188.979†	273.1	273.2	495.02	µg/L	495.02	ppb	05:50:30
1	B 249.677†	11436.9	11396.6	492.51	µg/L	492.51	ppb	05:50:09
1	Ba 233.527†	18928.1	19167.5	492.66	µg/L	492.66	ppb	05:50:09
1	Be 313.107†	778861.2	781988.0	489.15	µg/L	489.15	ppb	05:50:04
1	Cd 226.502†	18338.7	18594.1	495.39	µg/L	495.39	ppb	05:50:09
1	Co 228.616†	10064.0	10216.5	493.80	µg/L	493.80	ppb	05:50:09
1	Cr 267.716†	23116.4	23413.3	492.18	µg/L	492.18	ppb	05:50:09
1	Cu 324.752†	74736.7	71104.3	494.27	µg/L	494.27	ppb	05:50:09
1	Mn 257.610†	151323.5	152815.4	488.56	µg/L	488.56	ppb	05:50:04
1	Mo 202.031†	4244.6	4284.5	500.64	µg/L	500.64	ppb	05:50:30
1	Ni 231.604†	9206.9	9009.8	492.94	µg/L	492.94	ppb	05:50:09
1	P 214.914†	1400.8	1211.9	2394.3	µg/L	2394.3	ppb	05:50:30
1	Pb 220.353†	1950.3	1910.7	494.54	µg/L	494.54	ppb	05:50:30
1	S 181.975 Axial†	250.0	230.0	1124.5	µg/L	1124.5	ppb	05:50:30
1	Sb 206.836†	527.4	510.7	498.46	µg/L	498.46	ppb	05:50:30
1	Se 196.026†	397.7	391.2	502.02	µg/L	502.02	ppb	05:50:30
1	SiO2†	31463.7	28980.6	5321.8	µg/L	5321.8	ppb	05:50:09
1	Si 251.611†	33738.6	33701.1	2446.0	µg/L	2446.0	ppb	05:50:09
1	Sn 189.927†	1000.0	986.1	507.65	µg/L	507.65	ppb	05:50:30
1	Ti 334.940†	218707.3	219798.2	500.40	µg/L	500.40	ppb	05:50:04
1	Tl 190.801†	297.8	320.7	494.80	µg/L	494.80	ppb	05:50:30
1	U 409.014†	6102.1	5423.7	490.96	µg/L	490.96	ppb	05:50:09
1	V 292.402†	43241.2	43736.8	496.68	µg/L	496.68	ppb	05:50:09
1	Zn 213.857†	19101.5	18737.8	492.70	µg/L	492.70	ppb	05:50:09
2	Sc RADIAL	115966.7	115966.7	99.4	%			05:49:05
2	Al 396.153Radial†	10318.2	10253.8	5075.7	µg/L	5075.7	ppb	05:49:05
2	Ca 317.933Radial†	13127.2	12789.3	4948.4	µg/L	4948.4	ppb	05:49:26
2	Fe 238.204 Radial†	786.3	775.6	4948.5	µg/L	4948.5	ppb	05:49:26
2	K 766.490 Radial†	10413.4	9790.3	5010.6	µg/L	5010.6	ppb	05:49:05
2	Mg 279.077 IEC†	826.3	815.6	5040.6	µg/L	5040.6	ppb	05:49:26
2	Na 589.592 Radial†	39824.1	40685.5	10189	µg/L	10189	ppb	05:49:05
2	Sr 421.552†	97615.0	98234.5	493.72	µg/L	493.72	ppb	05:49:05
2	Sc 361.383	2019908.0	2019908.0	99.885	%			05:50:37
2	Y 371.029	1251573.5	1251573.5	99.430	%			05:50:37
2	Ag 328.068†	54745.4	54797.8	503.26	µg/L	503.26	ppb	05:50:42
2	As 188.979†	277.8	275.9	499.97	µg/L	499.97	ppb	05:51:03
2	B 249.677†	11365.3	11240.4	485.74	µg/L	485.74	ppb	05:50:42
2	Ba 233.527†	18792.2	18891.8	485.57	µg/L	485.57	ppb	05:50:42
2	Be 313.107†	787523.7	784910.7	490.97	µg/L	490.97	ppb	05:50:37
2	Cd 226.502†	18204.3	18324.1	488.20	µg/L	488.20	ppb	05:50:42
2	Co 228.616†	10002.9	10081.0	487.24	µg/L	487.24	ppb	05:50:42
2	Cr 267.716†	22903.8	23029.9	484.12	µg/L	484.12	ppb	05:50:42
2	Cu 324.752†	74357.5	70173.0	487.81	µg/L	487.81	ppb	05:50:42
2	Mn 257.610†	152942.3	153319.0	490.17	µg/L	490.17	ppb	05:50:37
2	Mo 202.031†	4268.3	4276.9	499.75	µg/L	499.75	ppb	05:51:03
2	Ni 231.604†	9166.1	8901.0	486.98	µg/L	486.98	ppb	05:50:42
2	P 214.914†	1407.1	1207.8	2387.0	µg/L	2387.0	ppb	05:51:03
2	Pb 220.353†	1958.8	1904.8	493.05	µg/L	493.05	ppb	05:51:03

2	S 181.975 Axial†	246.3	224.4	1097.4 µg/L	1097.4 ppb	05:51:03
2	Sb 206.836†	541.3	520.8	508.34 µg/L	508.34 ppb	05:51:03
2	Se 196.026†	402.0	392.6	503.80 µg/L	503.80 ppb	05:51:03
2	SiO2†	31335.0	28619.5	5255.4 µg/L	5255.4 ppb	05:50:42
2	Si 251.611†	33587.5	33300.8	2416.3 µg/L	2416.3 ppb	05:50:42
2	Sn 189.927†	1010.8	989.6	509.41 µg/L	509.41 ppb	05:51:03
2	Ti 334.940†	221209.4	220688.6	502.43 µg/L	502.43 ppb	05:50:37
2	Tl 190.801†	301.7	322.5	497.58 µg/L	497.58 ppb	05:51:03
2	U 409.014†	6120.9	5397.4	488.58 µg/L	488.58 ppb	05:50:42
2	V 292.402†	42971.4	43147.4	490.04 µg/L	490.04 ppb	05:50:42
2	Zn 213.857†	18989.9	18485.0	486.04 µg/L	486.04 ppb	05:50:42
3	Sc RADIAL	115915.6	115915.6	99.4 %		05:49:31
3	Al 396.153Radial†	10213.9	10153.4	5026.3 µg/L	5026.3 ppb	05:49:31
3	Ca 317.933Radial†	13108.5	12776.3	4943.4 µg/L	4943.4 ppb	05:49:52
3	Fe 238.204 Radial†	785.6	775.3	4946.5 µg/L	4946.5 ppb	05:49:52
3	K 766.490 Radial†	10354.7	9736.0	4982.7 µg/L	4982.7 ppb	05:49:31
3	Mg 279.077 IEC†	830.7	820.4	5070.1 µg/L	5070.1 ppb	05:49:52
3	Na 589.592 Radial†	39382.4	40258.8	10082 µg/L	10082 ppb	05:49:31
3	Sr 421.552†	96711.2	97368.5	489.37 µg/L	489.37 ppb	05:49:31
3	Sc 361.383	2028648.8	2028648.8	100.32 %		05:51:10
3	Y 371.029	1257270.3	1257270.3	99.883 %		05:51:10
3	Ag 328.068†	54760.2	54576.3	501.23 µg/L	501.23 ppb	05:51:16
3	As 188.979†	270.5	267.4	484.52 µg/L	484.52 ppb	05:51:36
3	B 249.677†	11404.7	11230.7	485.32 µg/L	485.32 ppb	05:51:16
3	Ba 233.527†	18836.3	18854.7	484.62 µg/L	484.62 ppb	05:51:16
3	Be 313.107†	787723.4	781712.7	488.97 µg/L	488.97 ppb	05:51:10
3	Cd 226.502†	18219.1	18260.3	486.49 µg/L	486.49 ppb	05:51:16
3	Co 228.616†	9999.6	10034.6	484.98 µg/L	484.98 ppb	05:51:16
3	Cr 267.716†	23006.5	23033.5	484.19 µg/L	484.19 ppb	05:51:16
3	Cu 324.752†	74386.3	69880.9	485.78 µg/L	485.78 ppb	05:51:16
3	Mn 257.610†	153111.2	152827.6	488.60 µg/L	488.60 ppb	05:51:10
3	Mo 202.031†	4171.3	4161.8	486.31 µg/L	486.31 ppb	05:51:36
3	Ni 231.604†	9177.0	8872.3	485.41 µg/L	485.41 ppb	05:51:16
3	P 214.914†	1383.4	1178.1	2326.8 µg/L	2326.8 ppb	05:51:36
3	Pb 220.353†	1917.4	1855.1	480.17 µg/L	480.17 ppb	05:51:36
3	S 181.975 Axial†	239.8	216.9	1060.3 µg/L	1060.3 ppb	05:51:36
3	Sb 206.836†	523.6	500.8	488.80 µg/L	488.80 ppb	05:51:36
3	Se 196.026†	394.1	383.0	491.50 µg/L	491.50 ppb	05:51:36
3	SiO2†	31366.2	28515.5	5236.3 µg/L	5236.3 ppb	05:51:16
3	Si 251.611†	33573.6	33142.0	2405.6 µg/L	2405.6 ppb	05:51:16
3	Sn 189.927†	979.5	953.9	491.17 µg/L	491.17 ppb	05:51:36
3	Ti 334.940†	221039.2	219564.7	499.87 µg/L	499.87 ppb	05:51:10
3	Tl 190.801†	301.9	321.3	495.87 µg/L	495.87 ppb	05:51:36
3	U 409.014†	5989.2	5239.8	474.28 µg/L	474.28 ppb	05:51:16
3	V 292.402†	42978.3	42968.9	487.91 µg/L	487.91 ppb	05:51:16
3	Zn 213.857†	18996.1	18409.3	484.05 µg/L	484.05 ppb	05:51:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017893.1	99.786	%	0.5881				0.59%
Sc RADIAL	115906.7	99.4	%	0.06				0.06%
Y 371.029	1250771.4	99.366	%	0.5509				0.55%
Ag 328.068†	54955.3	504.71	µg/L	4.387	504.71	ppb	4.387	0.87%
QC value within limits for Ag 328.068 Recovery = 100.94%								
Al 396.153Radial†	10184.6	5041.5	µg/L	29.69	5041.5	ppb	29.69	0.59%
QC value within limits for Al 396.153Radial Recovery = 100.83%								
As 188.979†	272.2	493.17	µg/L	7.891	493.17	ppb	7.891	1.60%
QC value within limits for As 188.979 Recovery = 98.63%								
B 249.677†	11289.3	487.86	µg/L	4.034	487.86	ppb	4.034	0.83%
QC value within limits for B 249.677 Recovery = 97.57%								
Ba 233.527†	18971.4	487.62	µg/L	4.393	487.62	ppb	4.393	0.90%
QC value within limits for Ba 233.527 Recovery = 97.52%								
Be 313.107†	782870.5	489.70	µg/L	1.108	489.70	ppb	1.108	0.23%
QC value within limits for Be 313.107 Recovery = 97.94%								
Ca 317.933Radial†	12788.5	4948.1	µg/L	4.54	4948.1	ppb	4.54	0.09%
QC value within limits for Ca 317.933Radial Recovery = 98.96%								
Cd 226.502†	18392.8	490.03	µg/L	4.724	490.03	ppb	4.724	0.96%
QC value within limits for Cd 226.502 Recovery = 98.01%								
Co 228.616†	10110.7	488.67	µg/L	4.581	488.67	ppb	4.581	0.94%

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   QC value within limits for Co 228.616  Recovery = 97.73%
Cr 267.716†            23158.9      486.83 µg/L        4.632      486.83 ppb          4.632   0.95%
   QC value within limits for Cr 267.716  Recovery = 97.37%
Cu 324.752†            70386.1      489.29 µg/L        4.434      489.29 ppb          4.434   0.91%
   QC value within limits for Cu 324.752  Recovery = 97.86%
Fe 238.204 Radial†       776.3      4952.8 µg/L         9.29      4952.8 ppb           9.29   0.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.06%
K 766.490 Radial†       9745.8      4987.8 µg/L        20.73      4987.8 ppb          20.73   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 99.76%
Mg 279.077 IEC†          817.5      5052.6 µg/L        15.54      5052.6 ppb          15.54   0.31%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.05%
Mn 257.610†           152987.3      489.11 µg/L        0.917      489.11 ppb          0.917   0.19%
   QC value within limits for Mn 257.610  Recovery = 97.82%
Mo 202.031†             4241.1      495.57 µg/L        8.030      495.57 ppb          8.030   1.62%
   QC value within limits for Mo 202.031  Recovery = 99.11%
Na 589.592 Radial†     40442.0       10128 µg/L         55.0       10128 ppb           55.0   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 101.28%
Ni 231.604†             8927.7      488.45 µg/L        3.968      488.45 ppb          3.968   0.81%
   QC value within limits for Ni 231.604  Recovery = 97.69%
P 214.914†              1199.3      2369.4 µg/L        37.06      2369.4 ppb          37.06   1.56%
   QC value within limits for P 214.914  Recovery = 94.78%
Pb 220.353†             1890.2      489.25 µg/L        7.903      489.25 ppb          7.903   1.62%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†         223.7      1094.1 µg/L        32.22      1094.1 ppb          32.22   2.94%
   QC value within limits for S 181.975 Axial  Recovery = 109.41%
Sb 206.836†              510.8      498.53 µg/L        9.768      498.53 ppb          9.768   1.96%
   QC value within limits for Sb 206.836  Recovery = 99.71%
Se 196.026†              388.9      499.11 µg/L        6.648      499.11 ppb          6.648   1.33%
   QC value within limits for Se 196.026  Recovery = 99.82%
SiO2†                  28705.2      5271.2 µg/L        44.83      5271.2 ppb          44.83   0.85%
   QC value within limits for SiO2  Recovery = 98.57%
Si 251.611†            33381.3      2422.6 µg/L        20.97      2422.6 ppb          20.97   0.87%
   QC value within limits for Si 251.611  Recovery = 96.91%
Sn 189.927†              976.6      502.74 µg/L       10.064      502.74 ppb         10.064   2.00%
   QC value within limits for Sn 189.927  Recovery = 100.55%
Sr 421.552†            97718.0      491.13 µg/L        2.295      491.13 ppb          2.295   0.47%
   QC value within limits for Sr 421.552  Recovery = 98.23%
Ti 334.940†           220017.2      500.90 µg/L        1.351      500.90 ppb          1.351   0.27%
   QC value within limits for Ti 334.940  Recovery = 100.18%
Tl 190.801†              321.5      496.09 µg/L        1.403      496.09 ppb          1.403   0.28%
   QC value within limits for Tl 190.801  Recovery = 99.22%
U 409.014†              5353.6      484.61 µg/L        9.018      484.61 ppb          9.018   1.86%
   QC value within limits for U 409.014  Recovery = 96.92%
V 292.402†             43284.4      491.54 µg/L        4.572      491.54 ppb          4.572   0.93%
   QC value within limits for V 292.402  Recovery = 98.31%
Zn 213.857†            18544.0      487.60 µg/L        4.532      487.60 ppb          4.532   0.93%
   QC value within limits for Zn 213.857  Recovery = 97.52%
All analyte(s) passed QC.
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Sequence No.: 41
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 05:51:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114637.1	114637.1	98.3	%			05:52:20
1	Al 396.153Radial†	135.1	14.2	7.0565	µg/L	7.0565	ppb	05:52:20
1	Ca 317.933Radial†	411.0	5.3	2.0690	µg/L	2.0690	ppb	05:52:40
1	Fe 238.204 Radial†	16.7	1.8	11.709	µg/L	11.709	ppb	05:52:40
1	K 766.490 Radial†	790.9	122.1	62.501	µg/L	62.501	ppb	05:52:20
1	Mg 279.077 IEC†	15.5	0.4	2.1558	µg/L	2.1558	ppb	05:52:40
1	Na 589.592 Radial†	-326.1	302.4	75.716	µg/L	75.716	ppb	05:52:20
1	Sr 421.552†	-99.9	-39.3	-0.1974	µg/L	-0.1974	ppb	05:52:20
1	Sc 361.383	2009804.3	2009804.3	99.386	%			05:53:42
1	Y 371.029	1252128.0	1252128.0	99.474	%			05:53:42
1	Ag 328.068†	32.0	21.8	0.1992	µg/L	0.1992	ppb	05:53:48
1	As 188.979†	4.4	2.2	3.9813	µg/L	3.9813	ppb	05:54:08
1	B 249.677†	255.4	119.1	5.1594	µg/L	5.1594	ppb	05:54:08
1	Ba 233.527†	-75.7	1.9	0.0486	µg/L	0.0486	ppb	05:54:08
1	Be 313.107†	3600.3	106.6	0.0665	µg/L	0.0665	ppb	05:53:48
1	Cd 226.502†	-89.6	8.8	0.2327	µg/L	0.2327	ppb	05:54:08
1	Co 228.616†	-66.2	0.0	-0.0010	µg/L	-0.0010	ppb	05:54:08
1	Cr 267.716†	-100.4	-1.2	-0.0256	µg/L	-0.0256	ppb	05:53:48
1	Cu 324.752†	4098.3	-146.2	-1.0115	µg/L	-1.0115	ppb	05:53:48
1	Mn 257.610†	-203.2	-3.1	-0.0085	µg/L	-0.0085	ppb	05:54:08
1	Mo 202.031†	-3.5	0.2	0.0238	µg/L	0.0238	ppb	05:54:08
1	Ni 231.604†	295.7	21.9	1.2007	µg/L	1.2007	ppb	05:54:08
1	P 214.914†	199.1	-0.6	-1.0127	µg/L	-1.0127	ppb	05:54:08
1	Pb 220.353†	51.6	-4.3	-1.1084	µg/L	-1.1084	ppb	05:54:08
1	S 181.975 Axial†	42.1	20.2	98.774	µg/L	98.774	ppb	05:54:08
1	Sb 206.836†	16.5	-4.5	-4.4186	µg/L	-4.4186	ppb	05:54:08
1	Se 196.026†	15.2	5.5	6.9918	µg/L	6.9918	ppb	05:54:08
1	SiO2†	2657.5	-77.5	-14.229	µg/L	-14.229	ppb	05:53:48
1	Si 251.611†	356.7	33.7	2.4232	µg/L	2.4232	ppb	05:54:08
1	Sn 189.927†	23.7	1.4	0.7176	µg/L	0.7176	ppb	05:54:08
1	Ti 334.940†	1043.5	275.6	0.6276	µg/L	0.6276	ppb	05:53:48
1	Tl 190.801†	-16.3	4.0	6.1069	µg/L	6.1069	ppb	05:54:08
1	U 409.014†	704.6	-21.5	-1.9550	µg/L	-1.9550	ppb	05:53:48
1	V 292.402†	-135.8	-9.9	-0.1133	µg/L	-0.1133	ppb	05:53:48
1	Zn 213.857†	539.3	16.0	0.4179	µg/L	0.4179	ppb	05:54:08
2	Sc RADIAL	115125.2	115125.2	98.7	%			05:52:46
2	Al 396.153Radial†	146.3	24.9	12.364	µg/L	12.364	ppb	05:52:46
2	Ca 317.933Radial†	421.9	14.7	5.6684	µg/L	5.6684	ppb	05:53:06
2	Fe 238.204 Radial†	15.5	0.5	3.4418	µg/L	3.4418	ppb	05:53:06
2	K 766.490 Radial†	839.3	167.7	85.849	µg/L	85.849	ppb	05:52:46
2	Mg 279.077 IEC†	13.7	-1.6	-9.7881	µg/L	-9.7881	ppb	05:53:06
2	Na 589.592 Radial†	-379.9	249.2	62.405	µg/L	62.405	ppb	05:52:46
2	Sr 421.552†	-49.0	12.7	0.0638	µg/L	0.0638	ppb	05:52:46
2	Sc 361.383	2003156.0	2003156.0	99.057	%			05:54:14
2	Y 371.029	1247675.9	1247675.9	99.120	%			05:54:14
2	Ag 328.068†	28.9	18.7	0.1720	µg/L	0.1720	ppb	05:54:20
2	As 188.979†	5.6	3.5	6.2888	µg/L	6.2888	ppb	05:54:41
2	B 249.677†	251.7	116.2	5.0374	µg/L	5.0374	ppb	05:54:41
2	Ba 233.527†	-69.6	7.8	0.2011	µg/L	0.2011	ppb	05:54:41
2	Be 313.107†	3675.4	194.5	0.1215	µg/L	0.1215	ppb	05:54:20
2	Cd 226.502†	-88.3	9.8	0.2614	µg/L	0.2614	ppb	05:54:41
2	Co 228.616†	-62.5	3.6	0.1730	µg/L	0.1730	ppb	05:54:41
2	Cr 267.716†	-138.9	-40.5	-0.8483	µg/L	-0.8483	ppb	05:54:20
2	Cu 324.752†	4137.2	-93.2	-0.6456	µg/L	-0.6456	ppb	05:54:20
2	Mn 257.610†	-199.4	0.1	0.0006	µg/L	0.0006	ppb	05:54:41
2	Mo 202.031†	-1.0	2.7	0.3129	µg/L	0.3129	ppb	05:54:41
2	Ni 231.604†	297.6	24.9	1.3629	µg/L	1.3629	ppb	05:54:41
2	P 214.914†	190.0	-9.1	-18.259	µg/L	-18.259	ppb	05:54:41
2	Pb 220.353†	49.2	-6.6	-1.7084	µg/L	-1.7084	ppb	05:54:41

2	S 181.975 Axial†	35.5	13.6	66.757 µg/L	66.757 ppb	05:54:41
2	Sb 206.836†	19.0	-2.0	-1.9198 µg/L	-1.9198 ppb	05:54:41
2	Se 196.026†	20.0	10.3	13.185 µg/L	13.185 ppb	05:54:41
2	SiO2†	2669.4	-56.6	-10.394 µg/L	-10.394 ppb	05:54:20
2	Si 251.611†	353.9	32.1	2.3977 µg/L	2.3977 ppb	05:54:41
2	Sn 189.927†	18.1	-4.1	-2.0975 µg/L	-2.0975 ppb	05:54:41
2	Ti 334.940†	993.2	228.2	0.5195 µg/L	0.5195 ppb	05:54:20
2	Tl 190.801†	-22.1	-2.0	-3.0439 µg/L	-3.0439 ppb	05:54:41
2	U 409.014†	699.8	-24.0	-2.1789 µg/L	-2.1789 ppb	05:54:20
2	V 292.402†	-113.5	12.1	0.1353 µg/L	0.1353 ppb	05:54:20
2	Zn 213.857†	530.1	8.5	0.2203 µg/L	0.2203 ppb	05:54:41
3	Sc RADIAL	114101.3	114101.3	97.8 %		05:53:12
3	Al 396.153Radial†	104.3	-16.7	-8.3266 µg/L	-8.3266 ppb	05:53:12
3	Ca 317.933Radial†	425.4	22.0	8.5151 µg/L	8.5151 ppb	05:53:32
3	Fe 238.204 Radial†	16.9	2.1	13.269 µg/L	13.269 ppb	05:53:32
3	K 766.490 Radial†	741.9	75.8	38.817 µg/L	38.817 ppb	05:53:12
3	Mg 279.077 IEC†	15.3	0.2	1.3248 µg/L	1.3248 ppb	05:53:32
3	Na 589.592 Radial†	-387.0	238.6	59.745 µg/L	59.745 ppb	05:53:12
3	Sr 421.552†	-63.7	-2.8	-0.0140 µg/L	-0.0140 ppb	05:53:12
3	Sc 361.383	2029979.0	2029979.0	100.38 %		05:54:47
3	Y 371.029	1264771.0	1264771.0	100.48 %		05:54:47
3	Ag 328.068†	113.4	102.5	0.9349 µg/L	0.9349 ppb	05:54:52
3	As 188.979†	0.7	-1.5	-2.6930 µg/L	-2.6930 ppb	05:55:13
3	B 249.677†	248.1	109.3	4.7358 µg/L	4.7358 ppb	05:55:13
3	Ba 233.527†	-68.5	9.8	0.2524 µg/L	0.2524 ppb	05:55:13
3	Be 313.107†	3659.8	130.0	0.0812 µg/L	0.0812 ppb	05:54:52
3	Cd 226.502†	-80.8	18.4	0.4862 µg/L	0.4862 ppb	05:55:13
3	Co 228.616†	-67.4	-0.5	-0.0231 µg/L	-0.0231 ppb	05:55:13
3	Cr 267.716†	-138.5	-38.2	-0.8015 µg/L	-0.8015 ppb	05:54:52
3	Cu 324.752†	4098.9	-186.5	-1.2910 µg/L	-1.2910 ppb	05:54:52
3	Mn 257.610†	-201.9	0.2	0.0022 µg/L	0.0022 ppb	05:55:13
3	Mo 202.031†	6.2	9.8	1.1472 µg/L	1.1472 ppb	05:55:13
3	Ni 231.604†	285.9	9.2	0.5053 µg/L	0.5053 ppb	05:55:13
3	P 214.914†	196.4	-5.3	-10.601 µg/L	-10.601 ppb	05:55:13
3	Pb 220.353†	46.6	-9.8	-2.5263 µg/L	-2.5263 ppb	05:55:13
3	S 181.975 Axial†	34.5	12.2	59.623 µg/L	59.623 ppb	05:55:13
3	Sb 206.836†	17.4	-3.8	-3.6736 µg/L	-3.6736 ppb	05:55:13
3	Se 196.026†	15.5	5.5	7.0909 µg/L	7.0909 ppb	05:55:13
3	SiO2†	2697.7	-64.0	-11.745 µg/L	-11.745 ppb	05:54:52
3	Si 251.611†	367.0	40.4	3.0765 µg/L	3.0765 ppb	05:55:13
3	Sn 189.927†	15.6	-6.9	-3.5046 µg/L	-3.5046 ppb	05:55:13
3	Ti 334.940†	965.4	187.3	0.4262 µg/L	0.4262 ppb	05:54:52
3	Tl 190.801†	-22.4	-1.9	-2.9318 µg/L	-2.9318 ppb	05:55:13
3	U 409.014†	665.9	-67.1	-6.0880 µg/L	-6.0880 ppb	05:54:52
3	V 292.402†	-136.1	-8.9	-0.1006 µg/L	-0.1006 ppb	05:54:52
3	Zn 213.857†	537.6	8.9	0.2328 µg/L	0.2328 ppb	05:55:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2014313.1	99.609	%	0.6907				0.69%
Sc RADIAL	114621.2	98.3	%	0.44				0.45%
Y 371.029	1254858.3	99.691	%	0.7046				0.71%
Ag 328.068†	47.7	0.4354	µg/L	0.43283	0.4354	ppb	0.43283	99.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.5	3.6980	µg/L	10.74639	3.6980	ppb	10.74639	290.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.4	2.5257	µg/L	4.66444	2.5257	ppb	4.66444	184.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	114.9	4.9775	µg/L	0.21805	4.9775	ppb	0.21805	4.38%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.5	0.1674	µg/L	0.10603	0.1674	ppb	0.10603	63.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	143.7	0.0897	µg/L	0.02849	0.0897	ppb	0.02849	31.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	14.0	5.4175	µg/L	3.23041	5.4175	ppb	3.23041	59.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	12.4	0.3268	µg/L	0.13884	0.3268	ppb	0.13884	42.49%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.0	0.0496	µg/L	0.10740	0.0496	ppb	0.10740	216.52%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -26.6     -0.5585 µg/L       0.46210     -0.5585 ppb        0.46210  82.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -142.0     -0.9827 µg/L       0.32366     -0.9827 ppb        0.32366  32.94%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.5      9.4733 µg/L       5.28125      9.4733 ppb        5.28125  55.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        121.9      62.389 µg/L       23.5165      62.389 ppb        23.5165  37.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3     -2.1025 µg/L       6.66887     -2.1025 ppb        6.66887 317.19%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -1.0     -0.0019 µg/L       0.00581     -0.0019 ppb        0.00581 306.80%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.2      0.4946 µg/L       0.58334      0.4946 ppb        0.58334 117.94%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       263.4      65.955 µg/L        8.5573      65.955 ppb         8.5573  12.97%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               18.7      1.0230 µg/L       0.45560      1.0230 ppb        0.45560  44.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -5.0     -9.9577 µg/L       8.64129     -9.9577 ppb        8.64129  86.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -6.9     -1.7810 µg/L       0.71173     -1.7810 ppb        0.71173  39.96%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          15.3      75.051 µg/L       20.8519      75.051 ppb        20.8519  27.78%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.4     -3.3373 µg/L       1.28287     -3.3373 ppb        1.28287  38.44%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                7.1      9.0892 µg/L       3.54730      9.0892 ppb        3.54730  39.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -66.0     -12.123 µg/L        1.9450     -12.123 ppb         1.9450  16.04%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               35.4      2.6324 µg/L       0.38473      2.6324 ppb        0.38473  14.61%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.2     -1.6282 µg/L       2.14989     -1.6282 ppb        2.14989 132.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -9.8     -0.0492 µg/L       0.13413     -0.0492 ppb        0.13413 272.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              230.4      0.5245 µg/L       0.10079      0.5245 ppb        0.10079  19.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.0      0.0437 µg/L       5.25117      0.0437 ppb        5.25117 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -37.6     -3.4073 µg/L       2.32424     -3.4073 ppb        2.32424  68.21%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -2.2     -0.0262 µg/L       0.14000     -0.0262 ppb        0.14000 534.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               11.1      0.2903 µg/L       0.11066      0.2903 ppb        0.11066  38.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 49
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 06:21:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116748.5	116748.5	100	%			06:22:18
1	Al 396.153Radial†	10225.1	10091.3	4995.2	µg/L	4995.2	ppb	06:22:18
1	Ca 317.933Radial†	13075.1	12648.9	4894.1	µg/L	4894.1	ppb	06:22:38
1	Fe 238.204 Radial†	786.1	770.1	4913.6	µg/L	4913.6	ppb	06:22:38
1	K 766.490 Radial†	10518.4	9825.1	5028.4	µg/L	5028.4	ppb	06:22:18
1	Mg 279.077 IEC†	828.6	812.3	5020.3	µg/L	5020.3	ppb	06:22:38
1	Na 589.592 Radial†	39675.6	40269.0	10084	µg/L	10084	ppb	06:22:18
1	Sr 421.552†	96587.8	96550.9	485.26	µg/L	485.26	ppb	06:22:18
1	Sc 361.383	2048636.3	2048636.3	101.31	%			06:23:42
1	Y 371.029	1263771.4	1263771.4	100.40	%			06:23:42
1	Ag 328.068†	54765.9	54049.4	496.40	µg/L	496.40	ppb	06:23:47
1	As 188.979†	270.1	264.4	479.06	µg/L	479.06	ppb	06:24:08
1	B 249.677†	11392.5	11107.7	480.00	µg/L	480.00	ppb	06:23:47
1	Ba 233.527†	18877.7	18712.3	480.96	µg/L	480.96	ppb	06:23:47
1	Be 313.107†	791545.4	777824.4	486.54	µg/L	486.54	ppb	06:23:42
1	Cd 226.502†	18270.9	18134.3	483.13	µg/L	483.13	ppb	06:23:47
1	Co 228.616†	10047.2	9984.4	482.57	µg/L	482.57	ppb	06:23:47
1	Cr 267.716†	23063.2	22865.7	480.66	µg/L	480.66	ppb	06:23:47
1	Cu 324.752†	74446.1	69216.6	481.17	µg/L	481.17	ppb	06:23:47
1	Mn 257.610†	150853.9	149110.3	476.73	µg/L	476.73	ppb	06:23:47
1	Mo 202.031†	4266.2	4214.9	492.51	µg/L	492.51	ppb	06:24:08
1	Ni 231.604†	9223.5	8829.0	483.04	µg/L	483.04	ppb	06:23:47
1	P 214.914†	1414.6	1195.5	2362.8	µg/L	2362.8	ppb	06:24:08
1	Pb 220.353†	1976.3	1894.6	490.39	µg/L	490.39	ppb	06:24:08
1	S 181.975 Axial†	250.3	224.9	1099.8	µg/L	1099.8	ppb	06:24:08
1	Sb 206.836†	540.6	512.5	500.25	µg/L	500.25	ppb	06:24:08
1	Se 196.026†	406.2	391.1	501.82	µg/L	501.82	ppb	06:24:08
1	SiO2†	31330.3	28175.0	5173.8	µg/L	5173.8	ppb	06:23:47
1	Si 251.611†	33650.7	32891.6	2386.5	µg/L	2386.5	ppb	06:23:47
1	Sn 189.927†	1015.3	979.7	504.36	µg/L	504.36	ppb	06:24:08
1	Ti 334.940†	221398.7	217769.8	495.79	µg/L	495.79	ppb	06:23:42
1	Tl 190.801†	303.3	319.8	493.40	µg/L	493.40	ppb	06:24:08
1	U 409.014†	6041.6	5233.3	473.70	µg/L	473.70	ppb	06:23:47
1	V 292.402†	43095.2	42666.3	484.55	µg/L	484.55	ppb	06:23:47
1	Zn 213.857†	19055.2	18282.9	480.72	µg/L	480.72	ppb	06:23:47
2	Sc RADIAL	116740.6	116740.6	100	%			06:22:44
2	Al 396.153Radial†	10289.2	10156.0	5027.2	µg/L	5027.2	ppb	06:22:44
2	Ca 317.933Radial†	13118.1	12692.8	4911.1	µg/L	4911.1	ppb	06:23:04
2	Fe 238.204 Radial†	785.4	769.5	4909.8	µg/L	4909.8	ppb	06:23:04
2	K 766.490 Radial†	10526.7	9834.1	5033.0	µg/L	5033.0	ppb	06:22:44
2	Mg 279.077 IEC†	830.6	814.4	5033.2	µg/L	5033.2	ppb	06:23:04
2	Na 589.592 Radial†	40195.1	40790.6	10215	µg/L	10215	ppb	06:22:44
2	Sr 421.552†	97435.3	97404.1	489.55	µg/L	489.55	ppb	06:22:44
2	Sc 361.383	2019809.7	2019809.7	99.881	%			06:24:15
2	Y 371.029	1247980.0	1247980.0	99.145	%			06:24:15
2	Ag 328.068†	55294.0	55349.7	508.32	µg/L	508.32	ppb	06:24:20
2	As 188.979†	276.3	274.5	497.27	µg/L	497.27	ppb	06:24:41
2	B 249.677†	11511.4	11387.3	492.12	µg/L	492.12	ppb	06:24:20
2	Ba 233.527†	19016.4	19117.2	491.36	µg/L	491.36	ppb	06:24:20
2	Be 313.107†	785120.2	782542.7	489.49	µg/L	489.49	ppb	06:24:15
2	Cd 226.502†	18408.7	18529.7	493.68	µg/L	493.68	ppb	06:24:20
2	Co 228.616†	10158.9	10237.7	494.82	µg/L	494.82	ppb	06:24:20
2	Cr 267.716†	23223.1	23350.7	490.86	µg/L	490.86	ppb	06:24:20
2	Cu 324.752†	75067.0	70886.9	492.75	µg/L	492.75	ppb	06:24:20
2	Mn 257.610†	152114.5	152497.7	487.54	µg/L	487.54	ppb	06:24:20
2	Mo 202.031†	4255.7	4264.4	498.30	µg/L	498.30	ppb	06:24:41
2	Ni 231.604†	9263.8	8999.3	492.36	µg/L	492.36	ppb	06:24:20
2	P 214.914†	1407.5	1208.3	2387.5	µg/L	2387.5	ppb	06:24:41
2	Pb 220.353†	1964.5	1910.6	494.51	µg/L	494.51	ppb	06:24:41

2	S 181.975 Axial†	246.3	224.4	1097.4 µg/L	1097.4 ppb	06:24:41
2	Sb 206.836†	533.0	512.5	500.19 µg/L	500.19 ppb	06:24:41
2	Se 196.026†	399.5	390.1	500.59 µg/L	500.59 ppb	06:24:41
2	SiO2†	31560.0	28846.3	5297.1 µg/L	5297.1 ppb	06:24:20
2	Si 251.611†	33860.1	33575.3	2436.5 µg/L	2436.5 ppb	06:24:20
2	Sn 189.927†	1020.9	999.7	514.58 µg/L	514.58 ppb	06:24:41
2	Ti 334.940†	220067.2	219555.8	499.85 µg/L	499.85 ppb	06:24:15
2	Tl 190.801†	302.8	323.5	499.19 µg/L	499.19 ppb	06:24:41
2	U 409.014†	6070.2	5347.0	484.02 µg/L	484.02 ppb	06:24:20
2	V 292.402†	43393.9	43572.5	494.80 µg/L	494.80 ppb	06:24:20
2	Zn 213.857†	19230.7	18727.0	492.43 µg/L	492.43 ppb	06:24:20
3	Sc RADIAL	116320.4	116320.4	99.7 %		06:23:10
3	Al 396.153Radial†	10194.2	10097.9	4998.5 µg/L	4998.5 ppb	06:23:10
3	Ca 317.933Radial†	13074.0	12695.9	4912.3 µg/L	4912.3 ppb	06:23:30
3	Fe 238.204 Radial†	785.5	772.4	4928.6 µg/L	4928.6 ppb	06:23:30
3	K 766.490 Radial†	10409.0	9754.1	4992.0 µg/L	4992.0 ppb	06:23:10
3	Mg 279.077 IEC†	825.6	812.3	5020.5 µg/L	5020.5 ppb	06:23:30
3	Na 589.592 Radial†	39616.2	40355.3	10106 µg/L	10106 ppb	06:23:10
3	Sr 421.552†	96283.7	96601.2	485.51 µg/L	485.51 ppb	06:23:10
3	Sc 361.383	2019100.1	2019100.1	99.846 %		06:24:48
3	Y 371.029	1248568.4	1248568.4	99.191 %		06:24:48
3	Ag 328.068†	55208.6	55283.6	507.72 µg/L	507.72 ppb	06:24:53
3	As 188.979†	264.4	262.5	475.65 µg/L	475.65 ppb	06:25:14
3	B 249.677†	11509.2	11389.2	492.20 µg/L	492.20 ppb	06:24:53
3	Ba 233.527†	19010.4	19117.8	491.38 µg/L	491.38 ppb	06:24:53
3	Be 313.107†	780104.3	777795.3	486.52 µg/L	486.52 ppb	06:24:48
3	Cd 226.502†	18430.6	18558.1	494.44 µg/L	494.44 ppb	06:24:53
3	Co 228.616†	10140.8	10223.1	494.11 µg/L	494.11 ppb	06:24:53
3	Cr 267.716†	23231.3	23367.0	491.20 µg/L	491.20 ppb	06:24:53
3	Cu 324.752†	74842.1	70688.1	491.38 µg/L	491.38 ppb	06:24:53
3	Mn 257.610†	151889.5	152325.8	486.99 µg/L	486.99 ppb	06:24:53
3	Mo 202.031†	4201.1	4211.2	492.08 µg/L	492.08 ppb	06:25:14
3	Ni 231.604†	9286.5	9025.3	493.78 µg/L	493.78 ppb	06:24:53
3	P 214.914†	1389.3	1190.5	2351.5 µg/L	2351.5 ppb	06:25:14
3	Pb 220.353†	1956.7	1903.5	492.67 µg/L	492.67 ppb	06:25:14
3	S 181.975 Axial†	245.1	223.3	1091.8 µg/L	1091.8 ppb	06:25:14
3	Sb 206.836†	527.7	507.4	495.16 µg/L	495.16 ppb	06:25:14
3	Se 196.026†	391.6	382.3	490.69 µg/L	490.69 ppb	06:25:14
3	SiO2†	31560.9	28858.4	5299.3 µg/L	5299.3 ppb	06:24:53
3	Si 251.611†	33862.8	33590.0	2438.2 µg/L	2438.2 ppb	06:24:53
3	Sn 189.927†	1001.9	981.0	505.01 µg/L	505.01 ppb	06:25:14
3	Ti 334.940†	218659.2	218223.1	496.82 µg/L	496.82 ppb	06:24:48
3	Tl 190.801†	299.6	320.4	494.39 µg/L	494.39 ppb	06:25:14
3	U 409.014†	6154.8	5433.9	491.89 µg/L	491.89 ppb	06:24:53
3	V 292.402†	43358.3	43552.2	494.54 µg/L	494.54 ppb	06:24:53
3	Zn 213.857†	19209.6	18712.6	492.04 µg/L	492.04 ppb	06:24:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2029182.0	100.34	%	0.833				0.83%
Sc RADIAL	116603.2	100.0	%	0.21				0.21%
Y 371.029	1253439.9	99.578	%	0.7112				0.71%
Ag 328.068†	54894.2	504.15	µg/L	6.717	504.15	ppb	6.717	1.33%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	10115.1	5007.0	µg/L	17.56	5007.0	ppb	17.56	0.35%
QC value within limits for Al 396.153Radial Recovery = 100.14%								
As 188.979†	267.1	483.99	µg/L	11.625	483.99	ppb	11.625	2.40%
QC value within limits for As 188.979 Recovery = 96.80%								
B 249.677†	11294.7	488.11	µg/L	7.020	488.11	ppb	7.020	1.44%
QC value within limits for B 249.677 Recovery = 97.62%								
Ba 233.527†	18982.5	487.90	µg/L	6.012	487.90	ppb	6.012	1.23%
QC value within limits for Ba 233.527 Recovery = 97.58%								
Be 313.107†	779387.4	487.52	µg/L	1.709	487.52	ppb	1.709	0.35%
QC value within limits for Be 313.107 Recovery = 97.50%								
Ca 317.933Radial†	12679.2	4905.8	µg/L	10.17	4905.8	ppb	10.17	0.21%
QC value within limits for Ca 317.933Radial Recovery = 98.12%								
Cd 226.502†	18407.4	490.42	µg/L	6.317	490.42	ppb	6.317	1.29%
QC value within limits for Cd 226.502 Recovery = 98.08%								
Co 228.616†	10148.4	490.50	µg/L	6.874	490.50	ppb	6.874	1.40%

```
   QC value within limits for Co 228.616  Recovery = 98.10%
Cr 267.716†            23194.5      487.57 µg/L         5.988      487.57 ppb          5.988   1.23%
   QC value within limits for Cr 267.716  Recovery = 97.51%
Cu 324.752†            70263.9      488.43 µg/L         6.329      488.43 ppb          6.329   1.30%
   QC value within limits for Cu 324.752  Recovery = 97.69%
Fe 238.204 Radial†       770.7      4917.3 µg/L          9.97      4917.3 ppb           9.97   0.20%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.35%
K 766.490 Radial†       9804.5      5017.8 µg/L         22.42      5017.8 ppb          22.42   0.45%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†          813.0      5024.6 µg/L          7.37      5024.6 ppb           7.37   0.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.49%
Mn 257.610†           151311.2      483.75 µg/L         6.093      483.75 ppb          6.093   1.26%
   QC value within limits for Mn 257.610  Recovery = 96.75%
Mo 202.031†             4230.2      494.30 µg/L         3.471      494.30 ppb          3.471   0.70%
   QC value within limits for Mo 202.031  Recovery = 98.86%
Na 589.592 Radial†     40471.7       10135 µg/L          70.0       10135 ppb           70.0   0.69%
   QC value within limits for Na 589.592 Radial  Recovery = 101.35%
Ni 231.604†             8951.2      489.73 µg/L         5.834      489.73 ppb          5.834   1.19%
   QC value within limits for Ni 231.604  Recovery = 97.95%
P 214.914†              1198.1      2367.3 µg/L         18.42      2367.3 ppb          18.42   0.78%
   QC value within limits for P 214.914  Recovery = 94.69%
Pb 220.353†             1902.9      492.52 µg/L         2.067      492.52 ppb          2.067   0.42%
   QC value within limits for Pb 220.353  Recovery = 98.50%
S 181.975 Axial†         224.2      1096.3 µg/L          4.14      1096.3 ppb           4.14   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 109.63%
Sb 206.836†              510.8      498.53 µg/L         2.922      498.53 ppb          2.922   0.59%
   QC value within limits for Sb 206.836  Recovery = 99.71%
Se 196.026†              387.8      497.70 µg/L         6.104      497.70 ppb          6.104   1.23%
   QC value within limits for Se 196.026  Recovery = 99.54%
SiO2†                  28626.5      5256.7 µg/L         71.83      5256.7 ppb          71.83   1.37%
   QC value within limits for SiO2  Recovery = 98.30%
Si 251.611†            33352.3      2420.4 µg/L         29.34      2420.4 ppb          29.34   1.21%
   QC value within limits for Si 251.611  Recovery = 96.82%
Sn 189.927†              986.8      507.98 µg/L         5.720      507.98 ppb          5.720   1.13%
   QC value within limits for Sn 189.927  Recovery = 101.60%
Sr 421.552†            96852.1      486.78 µg/L         2.406      486.78 ppb          2.406   0.49%
   QC value within limits for Sr 421.552  Recovery = 97.36%
Ti 334.940†           218516.2      497.49 µg/L         2.114      497.49 ppb          2.114   0.43%
   QC value within limits for Ti 334.940  Recovery = 99.50%
Tl 190.801†              321.2      495.66 µg/L         3.098      495.66 ppb          3.098   0.63%
   QC value within limits for Tl 190.801  Recovery = 99.13%
U 409.014†              5338.1      483.20 µg/L         9.123      483.20 ppb          9.123   1.89%
   QC value within limits for U 409.014  Recovery = 96.64%
V 292.402†             43263.6      491.30 µg/L         5.845      491.30 ppb          5.845   1.19%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†            18574.2      488.39 µg/L         6.649      488.39 ppb          6.649   1.36%
   QC value within limits for Zn 213.857  Recovery = 97.68%
All analyte(s) passed QC.
```

Sequence No.: 50
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 06:25:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113892.6	113892.6	97.7	%			06:25:57
1	Al 396.153Radial†	134.1	14.0	6.9338	µg/L	6.9338	ppb	06:25:57
1	Ca 317.933Radial†	425.4	22.8	8.8357	µg/L	8.8357	ppb	06:26:18
1	Fe 238.204 Radial†	16.1	1.4	8.6980	µg/L	8.6980	ppb	06:26:18
1	K 766.490 Radial†	873.7	212.2	108.61	µg/L	108.61	ppb	06:25:57
1	Mg 279.077 IEC†	16.5	1.4	8.7757	µg/L	8.7757	ppb	06:26:18
1	Na 589.592 Radial†	-112.3	519.1	129.99	µg/L	129.99	ppb	06:25:57
1	Sr 421.552†	-25.3	36.4	0.1828	µg/L	0.1828	ppb	06:25:57
1	Sc 361.383	2013279.5	2013279.5	99.558	%			06:27:20
1	Y 371.029	1252788.1	1252788.1	99.527	%			06:27:20
1	Ag 328.068†	43.5	33.3	0.3073	µg/L	0.3073	ppb	06:27:26
1	As 188.979†	3.3	1.1	1.9199	µg/L	1.9199	ppb	06:27:46
1	B 249.677†	227.7	90.9	3.9376	µg/L	3.9376	ppb	06:27:26
1	Ba 233.527†	-69.1	8.6	0.2219	µg/L	0.2219	ppb	06:27:46
1	Be 313.107†	3568.1	68.1	0.0425	µg/L	0.0425	ppb	06:27:26
1	Cd 226.502†	-93.4	5.1	0.1303	µg/L	0.1303	ppb	06:27:46
1	Co 228.616†	-67.2	-0.9	-0.0413	µg/L	-0.0413	ppb	06:27:46
1	Cr 267.716†	-125.9	-26.6	-0.5573	µg/L	-0.5573	ppb	06:27:26
1	Cu 324.752†	4113.4	-138.1	-0.9557	µg/L	-0.9557	ppb	06:27:26
1	Mn 257.610†	-195.2	5.3	0.0179	µg/L	0.0179	ppb	06:27:46
1	Mo 202.031†	0.3	4.0	0.4687	µg/L	0.4687	ppb	06:27:46
1	Ni 231.604†	288.0	13.7	0.7481	µg/L	0.7481	ppb	06:27:46
1	P 214.914†	191.1	-9.0	-18.048	µg/L	-18.048	ppb	06:27:46
1	Pb 220.353†	53.9	-2.2	-0.5464	µg/L	-0.5464	ppb	06:27:46
1	S 181.975 Axial†	40.3	18.3	89.534	µg/L	89.534	ppb	06:27:46
1	Sb 206.836†	20.4	-0.6	-0.6067	µg/L	-0.6067	ppb	06:27:46
1	Se 196.026†	7.6	-2.3	-2.9062	µg/L	-2.9062	ppb	06:27:46
1	SiO2†	2712.7	-26.6	-4.8879	µg/L	-4.8879	ppb	06:27:26
1	Si 251.611†	361.7	38.1	2.8016	µg/L	2.8016	ppb	06:27:46
1	Sn 189.927†	20.1	-2.2	-1.1324	µg/L	-1.1324	ppb	06:27:46
1	Ti 334.940†	925.6	155.3	0.3532	µg/L	0.3532	ppb	06:27:26
1	Tl 190.801†	-24.4	-4.2	-6.4149	µg/L	-6.4149	ppb	06:27:46
1	U 409.014†	632.6	-95.1	-8.6204	µg/L	-8.6204	ppb	06:27:26
1	V 292.402†	-84.6	41.8	0.4598	µg/L	0.4598	ppb	06:27:26
1	Zn 213.857†	531.3	7.0	0.1819	µg/L	0.1819	ppb	06:27:46
2	Sc RADIAL	114170.3	114170.3	97.9	%			06:26:23
2	Al 396.153Radial†	141.2	21.0	10.415	µg/L	10.415	ppb	06:26:23
2	Ca 317.933Radial†	415.1	11.3	4.3666	µg/L	4.3666	ppb	06:26:44
2	Fe 238.204 Radial†	15.8	0.9	5.9649	µg/L	5.9649	ppb	06:26:44
2	K 766.490 Radial†	799.9	134.7	68.923	µg/L	68.923	ppb	06:26:23
2	Mg 279.077 IEC†	14.9	-0.2	-1.1572	µg/L	-1.1572	ppb	06:26:44
2	Na 589.592 Radial†	-138.3	492.8	123.41	µg/L	123.41	ppb	06:26:23
2	Sr 421.552†	-68.7	-7.9	-0.0396	µg/L	-0.0396	ppb	06:26:23
2	Sc 361.383	2006719.9	2006719.9	99.233	%			06:27:52
2	Y 371.029	1249750.1	1249750.1	99.285	%			06:27:52
2	Ag 328.068†	76.7	66.9	0.6098	µg/L	0.6098	ppb	06:27:58
2	As 188.979†	1.3	-0.9	-1.5991	µg/L	-1.5991	ppb	06:28:18
2	B 249.677†	214.3	78.1	3.3836	µg/L	3.3836	ppb	06:27:58
2	Ba 233.527†	-75.8	1.6	0.0416	µg/L	0.0416	ppb	06:28:18
2	Be 313.107†	3567.3	79.0	0.0493	µg/L	0.0493	ppb	06:27:58
2	Cd 226.502†	-79.7	18.7	0.4948	µg/L	0.4948	ppb	06:28:18
2	Co 228.616†	-64.9	1.2	0.0593	µg/L	0.0593	ppb	06:28:18
2	Cr 267.716†	-142.8	-44.2	-0.9261	µg/L	-0.9261	ppb	06:27:58
2	Cu 324.752†	4071.8	-166.5	-1.1539	µg/L	-1.1539	ppb	06:27:58
2	Mn 257.610†	-185.2	14.7	0.0476	µg/L	0.0476	ppb	06:28:18
2	Mo 202.031†	-1.2	2.4	0.2846	µg/L	0.2846	ppb	06:28:18
2	Ni 231.604†	292.8	19.5	1.0680	µg/L	1.0680	ppb	06:28:18
2	P 214.914†	190.2	-9.2	-18.538	µg/L	-18.538	ppb	06:28:18
2	Pb 220.353†	52.0	-3.9	-0.9877	µg/L	-0.9877	ppb	06:28:18

2	S 181.975 Axial†	41.9	20.0	98.036 µg/L	98.036 ppb	06:28:18
2	Sb 206.836†	10.6	-10.4	-10.207 µg/L	-10.207 ppb	06:28:18
2	Se 196.026†	17.0	7.2	9.2538 µg/L	9.2538 ppb	06:28:18
2	SiO2†	2717.4	-12.9	-2.3772 µg/L	-2.3772 ppb	06:27:58
2	Si 251.611†	364.1	41.7	3.0755 µg/L	3.0755 ppb	06:28:18
2	Sn 189.927†	20.6	-1.6	-0.8430 µg/L	-0.8430 ppb	06:28:18
2	Ti 334.940†	899.6	132.2	0.3008 µg/L	0.3008 ppb	06:27:58
2	Tl 190.801†	-18.9	1.3	1.9778 µg/L	1.9778 ppb	06:28:18
2	U 409.014†	672.2	-53.0	-4.8083 µg/L	-4.8083 ppb	06:27:58
2	V 292.402†	-131.2	-5.4	-0.0666 µg/L	-0.0666 ppb	06:27:58
2	Zn 213.857†	539.7	17.3	0.4535 µg/L	0.4535 ppb	06:28:18
3	Sc RADIAL	114292.5	114292.5	98.0 %		06:26:49
3	Al 396.153Radial†	129.8	9.2	4.5635 µg/L	4.5635 ppb	06:26:49
3	Ca 317.933Radial†	412.0	7.7	2.9633 µg/L	2.9633 ppb	06:27:10
3	Fe 238.204 Radial†	15.8	1.0	6.2506 µg/L	6.2506 ppb	06:27:10
3	K 766.490 Radial†	836.8	171.5	87.752 µg/L	87.752 ppb	06:26:49
3	Mg 279.077 IEC†	15.1	-0.0	-0.1313 µg/L	-0.1313 ppb	06:27:10
3	Na 589.592 Radial†	322.5	963.2	241.20 µg/L	241.20 ppb	06:26:49
3	Sr 421.552†	-55.9	5.3	0.0264 µg/L	0.0264 ppb	06:26:49
3	Sc 361.383	2010058.1	2010058.1	99.398 %		06:28:25
3	Y 371.029	1250621.1	1250621.1	99.354 %		06:28:25
3	Ag 328.068†	82.4	72.5	0.6602 µg/L	0.6602 ppb	06:28:30
3	As 188.979†	3.3	1.1	1.9255 µg/L	1.9255 ppb	06:28:51
3	B 249.677†	197.0	60.3	2.6131 µg/L	2.6131 ppb	06:28:30
3	Ba 233.527†	-69.9	7.7	0.1977 µg/L	0.1977 ppb	06:28:51
3	Be 313.107†	3478.7	-16.1	-0.0102 µg/L	-0.0102 ppb	06:28:30
3	Cd 226.502†	-90.4	8.1	0.2141 µg/L	0.2141 ppb	06:28:51
3	Co 228.616†	-59.4	6.9	0.3313 µg/L	0.3313 ppb	06:28:51
3	Cr 267.716†	-120.3	-21.3	-0.4467 µg/L	-0.4467 ppb	06:28:30
3	Cu 324.752†	4082.7	-162.4	-1.1252 µg/L	-1.1252 ppb	06:28:30
3	Mn 257.610†	-187.8	12.4	0.0404 µg/L	0.0404 ppb	06:28:51
3	Mo 202.031†	-4.3	-0.7	-0.0810 µg/L	-0.0810 ppb	06:28:51
3	Ni 231.604†	294.0	20.2	1.1048 µg/L	1.1048 ppb	06:28:51
3	P 214.914†	195.7	-4.0	-7.9568 µg/L	-7.9568 ppb	06:28:51
3	Pb 220.353†	49.0	-6.9	-1.7885 µg/L	-1.7885 ppb	06:28:51
3	S 181.975 Axial†	41.0	19.1	93.502 µg/L	93.502 ppb	06:28:51
3	Sb 206.836†	22.0	1.0	1.0081 µg/L	1.0081 ppb	06:28:51
3	Se 196.026†	14.7	4.9	6.2356 µg/L	6.2356 ppb	06:28:51
3	SiO2†	2646.1	-89.2	-16.387 µg/L	-16.387 ppb	06:28:30
3	Si 251.611†	346.9	23.7	1.7725 µg/L	1.7725 ppb	06:28:51
3	Sn 189.927†	19.4	-2.9	-1.5024 µg/L	-1.5024 ppb	06:28:51
3	Ti 334.940†	903.3	134.3	0.3059 µg/L	0.3059 ppb	06:28:30
3	Tl 190.801†	-21.1	-0.8	-1.2444 µg/L	-1.2444 ppb	06:28:51
3	U 409.014†	706.7	-19.5	-1.7710 µg/L	-1.7710 ppb	06:28:30
3	V 292.402†	-144.9	-19.0	-0.2169 µg/L	-0.2169 ppb	06:28:30
3	Zn 213.857†	541.5	18.1	0.4747 µg/L	0.4747 ppb	06:28:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2010019.1	99.396	%	0.1622				0.16%
Sc RADIAL	114118.4	97.8	%	0.18				0.18%
Y 371.029	1251053.1	99.389	%	0.1243				0.13%
Ag 328.068†	57.6	0.5258	µg/L	0.19082	0.5258	ppb	0.19082	36.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	7.3042	µg/L	2.94352	7.3042	ppb	2.94352	40.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.4	0.7488	µg/L	2.03331	0.7488	ppb	2.03331	271.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	76.4	3.3114	µg/L	0.66522	3.3114	ppb	0.66522	20.09%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.0	0.1537	µg/L	0.09789	0.1537	ppb	0.09789	63.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	43.7	0.0272	µg/L	0.03257	0.0272	ppb	0.03257	119.72%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.9	5.3885	µg/L	3.06669	5.3885	ppb	3.06669	56.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.6	0.2797	µg/L	0.19089	0.2797	ppb	0.19089	68.24%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.4	0.1164	µg/L	0.19277	0.1164	ppb	0.19277	165.58%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -30.7     -0.6433 µg/L       0.25104     -0.6433 ppb        0.25104  39.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -155.7     -1.0783 µg/L       0.10710     -1.0783 ppb        0.10710   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.1      6.9712 µg/L       1.50229      6.9712 ppb        1.50229  21.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        172.8      88.428 µg/L       19.8512      88.428 ppb        19.8512  22.45%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.4      2.4957 µg/L       5.46279      2.4957 ppb        5.46279 218.89%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               10.8      0.0353 µg/L       0.01551      0.0353 ppb        0.01551  43.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.9      0.2241 µg/L       0.27979      0.2241 ppb        0.27979 124.86%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       658.4      164.87 µg/L        66.188      164.87 ppb         66.188  40.15%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               17.8      0.9736 µg/L       0.19621      0.9736 ppb        0.19621  20.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -7.4     -14.847 µg/L        5.9725     -14.847 ppb         5.9725  40.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.3     -1.1076 µg/L       0.62967     -1.1076 ppb        0.62967  56.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          19.1      93.691 µg/L        4.2537      93.691 ppb         4.2537   4.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.3     -3.2687 µg/L       6.06310     -3.2687 ppb        6.06310 185.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.3      4.1944 µg/L       6.33174      4.1944 ppb        6.33174 150.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -42.9     -7.8841 µg/L       7.47025     -7.8841 ppb        7.47025  94.75%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               34.5      2.5499 µg/L       0.68700      2.5499 ppb        0.68700  26.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.3     -1.1593 µg/L       0.33057     -1.1593 ppb        0.33057  28.52%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               11.2      0.0565 µg/L       0.11421      0.0565 ppb        0.11421 202.12%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              140.6      0.3200 µg/L       0.02892      0.3200 ppb        0.02892   9.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.2     -1.8938 µg/L       4.23387     -1.8938 ppb        4.23387 223.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -55.9     -5.0666 µg/L       3.43201     -5.0666 ppb        3.43201  67.74%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 5.8      0.0588 µg/L       0.35534      0.0588 ppb        0.35534 604.77%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.1      0.3700 µg/L       0.16326      0.3700 ppb        0.16326  44.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 06:47:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114319.3	114319.3	98.0	%			06:48:26
1	Al 396.153Radial†	10479.2	10567.6	5231.7	µg/L	5231.7	ppb	06:48:26
1	Ca 317.933Radial†	13073.4	12924.7	5000.8	µg/L	5000.8	ppb	06:48:47
1	Fe 238.204 Radial†	799.1	800.1	5104.6	µg/L	5104.6	ppb	06:48:47
1	K 766.490 Radial†	10338.6	9865.0	5048.8	µg/L	5048.8	ppb	06:48:26
1	Mg 279.077 IEC†	824.6	825.8	5103.3	µg/L	5103.3	ppb	06:48:47
1	Na 589.592 Radial†	39533.0	40965.7	10259	µg/L	10259	ppb	06:48:26
1	Sr 421.552†	96435.2	98445.6	494.78	µg/L	494.78	ppb	06:48:26
1	Sc 361.383	2004032.1	2004032.1	99.100	%			06:49:50
1	Y 371.029	1246917.0	1246917.0	99.060	%			06:49:50
1	Ag 328.068†	54782.5	55269.4	507.60	µg/L	507.60	ppb	06:49:56
1	As 188.979†	272.5	272.8	494.18	µg/L	494.18	ppb	06:50:16
1	B 249.677†	11281.6	11246.1	485.94	µg/L	485.94	ppb	06:49:56
1	Ba 233.527†	18772.5	19021.0	488.89	µg/L	488.89	ppb	06:49:56
1	Be 313.107†	779611.8	783172.8	489.89	µg/L	489.89	ppb	06:49:50
1	Cd 226.502†	18206.2	18470.4	492.08	µg/L	492.08	ppb	06:49:56
1	Co 228.616†	10005.9	10163.4	491.23	µg/L	491.23	ppb	06:49:56
1	Cr 267.716†	22918.8	23226.6	488.25	µg/L	488.25	ppb	06:49:56
1	Cu 324.752†	74267.7	70672.1	491.31	µg/L	491.31	ppb	06:49:56
1	Mn 257.610†	150178.2	151742.8	485.16	µg/L	485.16	ppb	06:49:56
1	Mo 202.031†	4218.0	4260.0	497.79	µg/L	497.79	ppb	06:50:16
1	Ni 231.604†	9167.4	8975.0	491.03	µg/L	491.03	ppb	06:49:56
1	P 214.914†	1398.2	1210.0	2390.9	µg/L	2390.9	ppb	06:50:16
1	Pb 220.353†	1939.2	1900.6	491.95	µg/L	491.95	ppb	06:50:16
1	S 181.975 Axial†	233.0	213.0	1041.4	µg/L	1041.4	ppb	06:50:16
1	Sb 206.836†	531.2	514.9	502.52	µg/L	502.52	ppb	06:50:16
1	Se 196.026†	401.9	395.7	507.85	µg/L	507.85	ppb	06:50:16
1	SiO2†	31520.0	29054.7	5335.4	µg/L	5335.4	ppb	06:49:56
1	Si 251.611†	33791.4	33772.9	2451.3	µg/L	2451.3	ppb	06:49:56
1	Sn 189.927†	1001.8	988.4	508.87	µg/L	508.87	ppb	06:50:16
1	Ti 334.940†	218508.7	219717.8	500.22	µg/L	500.22	ppb	06:49:50
1	Tl 190.801†	296.5	319.6	493.16	µg/L	493.16	ppb	06:50:16
1	U 409.014†	6034.1	5358.5	485.02	µg/L	485.02	ppb	06:49:56
1	V 292.402†	42934.6	43451.1	493.45	µg/L	493.45	ppb	06:49:56
1	Zn 213.857†	19011.9	18657.8	490.58	µg/L	490.58	ppb	06:49:56
2	Sc RADIAL	115890.0	115890.0	99.4	%			06:48:53
2	Al 396.153Radial†	10330.5	10273.1	5085.3	µg/L	5085.3	ppb	06:48:53
2	Ca 317.933Radial†	13016.4	12686.6	4908.7	µg/L	4908.7	ppb	06:49:13
2	Fe 238.204 Radial†	790.2	780.1	4977.3	µg/L	4977.3	ppb	06:49:13
2	K 766.490 Radial†	10399.8	9783.6	5007.1	µg/L	5007.1	ppb	06:48:53
2	Mg 279.077 IEC†	827.1	816.9	5049.0	µg/L	5049.0	ppb	06:49:13
2	Na 589.592 Radial†	39461.3	40346.9	10104	µg/L	10104	ppb	06:48:53
2	Sr 421.552†	96648.3	97326.7	489.16	µg/L	489.16	ppb	06:48:53
2	Sc 361.383	2012293.1	2012293.1	99.509	%			06:50:23
2	Y 371.029	1251324.9	1251324.9	99.410	%			06:50:23
2	Ag 328.068†	54780.7	55040.6	505.49	µg/L	505.49	ppb	06:50:29
2	As 188.979†	274.1	273.2	495.00	µg/L	495.00	ppb	06:50:49
2	B 249.677†	11385.4	11303.7	488.48	µg/L	488.48	ppb	06:50:29
2	Ba 233.527†	18815.3	18986.2	488.00	µg/L	488.00	ppb	06:50:29
2	Be 313.107†	786355.0	786719.8	492.11	µg/L	492.11	ppb	06:50:23
2	Cd 226.502†	18251.6	18440.7	491.30	µg/L	491.30	ppb	06:50:29
2	Co 228.616†	10028.9	10145.0	490.34	µg/L	490.34	ppb	06:50:29
2	Cr 267.716†	23028.8	23242.3	488.58	µg/L	488.58	ppb	06:50:29
2	Cu 324.752†	74217.0	70313.5	488.79	µg/L	488.79	ppb	06:50:29
2	Mn 257.610†	150279.8	151222.7	483.48	µg/L	483.48	ppb	06:50:29
2	Mo 202.031†	4247.5	4272.1	499.20	µg/L	499.20	ppb	06:50:49
2	Ni 231.604†	9169.6	8939.2	489.08	µg/L	489.08	ppb	06:50:29
2	P 214.914†	1402.5	1208.5	2388.3	µg/L	2388.3	ppb	06:50:49
2	Pb 220.353†	1949.9	1903.3	492.66	µg/L	492.66	ppb	06:50:49

2	S 181.975 Axial†	242.6	221.7	1084.0 µg/L	1084.0 ppb	06:50:49
2	Sb 206.836†	528.7	510.2	497.95 µg/L	497.95 ppb	06:50:49
2	Se 196.026†	405.6	397.8	510.42 µg/L	510.42 ppb	06:50:49
2	SiO2†	31594.8	28999.3	5325.2 µg/L	5325.2 ppb	06:50:29
2	Si 251.611†	33849.1	33691.0	2445.2 µg/L	2445.2 ppb	06:50:29
2	Sn 189.927†	1006.8	989.4	509.32 µg/L	509.32 ppb	06:50:49
2	Ti 334.940†	220193.0	220505.2	502.02 µg/L	502.02 ppb	06:50:23
2	Tl 190.801†	303.9	325.8	502.66 µg/L	502.66 ppb	06:50:49
2	U 409.014†	6005.3	5304.4	480.14 µg/L	480.14 ppb	06:50:29
2	V 292.402†	42960.4	43299.1	491.73 µg/L	491.73 ppb	06:50:29
2	Zn 213.857†	19010.9	18578.1	488.49 µg/L	488.49 ppb	06:50:29
3	Sc RADIAL	115171.0	115171.0	98.8 %		06:49:19
3	Al 396.153Radial†	10371.9	10379.8	5138.4 µg/L	5138.4 ppb	06:49:19
3	Ca 317.933Radial†	13068.4	12821.0	4960.7 µg/L	4960.7 ppb	06:49:39
3	Fe 238.204 Radial†	794.5	789.4	5036.6 µg/L	5036.6 ppb	06:49:39
3	K 766.490 Radial†	10371.6	9820.3	5025.9 µg/L	5025.9 ppb	06:49:19
3	Mg 279.077 IEC†	819.0	813.9	5030.1 µg/L	5030.1 ppb	06:49:39
3	Na 589.592 Radial†	39486.5	40620.3	10172 µg/L	10172 ppb	06:49:19
3	Sr 421.552†	96771.1	98058.2	492.84 µg/L	492.84 ppb	06:49:19
3	Sc 361.383	2007332.3	2007332.3	99.264 %		06:50:56
3	Y 371.029	1247335.9	1247335.9	99.093 %		06:50:56
3	Ag 328.068†	54901.0	55297.9	507.86 µg/L	507.86 ppb	06:51:02
3	As 188.979†	269.2	269.0	487.39 µg/L	487.39 ppb	06:51:22
3	B 249.677†	11431.1	11378.0	491.68 µg/L	491.68 ppb	06:51:02
3	Ba 233.527†	18854.1	19072.0	490.21 µg/L	490.21 ppb	06:51:02
3	Be 313.107†	782162.4	784449.0	490.69 µg/L	490.69 ppb	06:50:56
3	Cd 226.502†	18282.2	18516.8	493.32 µg/L	493.32 ppb	06:51:02
3	Co 228.616†	10035.1	10176.2	491.85 µg/L	491.85 ppb	06:51:02
3	Cr 267.716†	23024.4	23295.0	489.69 µg/L	489.69 ppb	06:51:02
3	Cu 324.752†	74504.3	70787.3	492.09 µg/L	492.09 ppb	06:51:02
3	Mn 257.610†	150551.9	151870.1	485.55 µg/L	485.55 ppb	06:51:02
3	Mo 202.031†	4229.2	4264.3	498.28 µg/L	498.28 ppb	06:51:22
3	Ni 231.604†	9205.5	8998.2	492.30 µg/L	492.30 ppb	06:51:02
3	P 214.914†	1395.7	1205.1	2381.0 µg/L	2381.0 ppb	06:51:22
3	Pb 220.353†	1956.5	1914.7	495.62 µg/L	495.62 ppb	06:51:22
3	S 181.975 Axial†	238.5	218.1	1066.5 µg/L	1066.5 ppb	06:51:22
3	Sb 206.836†	533.8	516.7	504.24 µg/L	504.24 ppb	06:51:22
3	Se 196.026†	399.0	392.1	503.25 µg/L	503.25 ppb	06:51:22
3	SiO2†	31583.7	29066.6	5337.5 µg/L	5337.5 ppb	06:51:02
3	Si 251.611†	33926.1	33852.6	2457.3 µg/L	2457.3 ppb	06:51:02
3	Sn 189.927†	1001.6	986.6	507.89 µg/L	507.89 ppb	06:51:22
3	Ti 334.940†	219011.5	219861.8	500.55 µg/L	500.55 ppb	06:50:56
3	Tl 190.801†	306.5	329.1	507.76 µg/L	507.76 ppb	06:51:22
3	U 409.014†	5938.0	5251.6	475.34 µg/L	475.34 ppb	06:51:02
3	V 292.402†	43051.5	43497.6	493.95 µg/L	493.95 ppb	06:51:02
3	Zn 213.857†	19013.7	18628.2	489.79 µg/L	489.79 ppb	06:51:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2007885.8	99.291	%	0.2056				0.21%
Sc RADIAL	115126.7	98.7	%	0.67				0.68%
Y 371.029	1248525.9	99.188	%	0.1933				0.19%
Ag 328.068†	55202.6	506.98	µg/L	1.298	506.98	ppb	1.298	0.26%
QC value within limits for Ag 328.068 Recovery = 101.40%								
Al 396.153Radial†	10406.8	5151.8	µg/L	74.12	5151.8	ppb	74.12	1.44%
QC value within limits for Al 396.153Radial Recovery = 103.04%								
As 188.979†	271.7	492.19	µg/L	4.178	492.19	ppb	4.178	0.85%
QC value within limits for As 188.979 Recovery = 98.44%								
B 249.677†	11309.3	488.70	µg/L	2.877	488.70	ppb	2.877	0.59%
QC value within limits for B 249.677 Recovery = 97.74%								
Ba 233.527†	19026.4	489.03	µg/L	1.109	489.03	ppb	1.109	0.23%
QC value within limits for Ba 233.527 Recovery = 97.81%								
Be 313.107†	784780.5	490.89	µg/L	1.124	490.89	ppb	1.124	0.23%
QC value within limits for Be 313.107 Recovery = 98.18%								
Ca 317.933Radial†	12810.8	4956.8	µg/L	46.19	4956.8	ppb	46.19	0.93%
QC value within limits for Ca 317.933Radial Recovery = 99.14%								
Cd 226.502†	18475.9	492.23	µg/L	1.019	492.23	ppb	1.019	0.21%
QC value within limits for Cd 226.502 Recovery = 98.45%								
Co 228.616†	10161.5	491.14	µg/L	0.757	491.14	ppb	0.757	0.15%

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   QC value within limits for Co 228.616  Recovery = 98.23%
Cr 267.716†            23254.6      488.84 µg/L        0.753      488.84 ppb          0.753   0.15%
   QC value within limits for Cr 267.716  Recovery = 97.77%
Cu 324.752†            70591.0      490.73 µg/L        1.723      490.73 ppb          1.723   0.35%
   QC value within limits for Cu 324.752  Recovery = 98.15%
Fe 238.204 Radial†       789.9      5039.5 µg/L       63.70      5039.5 ppb         63.70   1.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.79%
K 766.490 Radial†       9823.0      5027.3 µg/L       20.86      5027.3 ppb         20.86   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 100.55%
Mg 279.077 IEC†          818.9      5060.8 µg/L       38.01      5060.8 ppb         38.01   0.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.22%
Mn 257.610†           151611.9      484.73 µg/L        1.101      484.73 ppb          1.101   0.23%
   QC value within limits for Mn 257.610  Recovery = 96.95%
Mo 202.031†             4265.5      498.42 µg/L        0.716      498.42 ppb          0.716   0.14%
   QC value within limits for Mo 202.031  Recovery = 99.68%
Na 589.592 Radial†     40644.3       10178 µg/L         77.7       10178 ppb          77.7   0.76%
   QC value within limits for Na 589.592 Radial  Recovery = 101.78%
Ni 231.604†             8970.8      490.80 µg/L        1.625      490.80 ppb          1.625   0.33%
   QC value within limits for Ni 231.604  Recovery = 98.16%
P 214.914†              1207.9      2386.7 µg/L        5.13      2386.7 ppb           5.13   0.21%
   QC value within limits for P 214.914  Recovery = 95.47%
Pb 220.353†             1906.2      493.41 µg/L        1.946      493.41 ppb          1.946   0.39%
   QC value within limits for Pb 220.353  Recovery = 98.68%
S 181.975 Axial†         217.6      1063.9 µg/L       21.42      1063.9 ppb         21.42   2.01%
   QC value within limits for S 181.975 Axial  Recovery = 106.39%
Sb 206.836†              513.9      501.57 µg/L        3.253      501.57 ppb          3.253   0.65%
   QC value within limits for Sb 206.836  Recovery = 100.31%
Se 196.026†              395.2      507.17 µg/L        3.631      507.17 ppb          3.631   0.72%
   QC value within limits for Se 196.026  Recovery = 101.43%
SiO2†                  29040.2      5332.7 µg/L        6.59      5332.7 ppb           6.59   0.12%
   QC value within limits for SiO2  Recovery = 99.72%
Si 251.611†            33772.1      2451.3 µg/L        6.04      2451.3 ppb           6.04   0.25%
   QC value within limits for Si 251.611  Recovery = 98.05%
Sn 189.927†              988.1      508.69 µg/L        0.732      508.69 ppb          0.732   0.14%
   QC value within limits for Sn 189.927  Recovery = 101.74%
Sr 421.552†            97943.5      492.26 µg/L        2.856      492.26 ppb          2.856   0.58%
   QC value within limits for Sr 421.552  Recovery = 98.45%
Ti 334.940†           220028.3      500.93 µg/L        0.958      500.93 ppb          0.958   0.19%
   QC value within limits for Ti 334.940  Recovery = 100.19%
Tl 190.801†              324.8      501.19 µg/L        7.409      501.19 ppb          7.409   1.48%
   QC value within limits for Tl 190.801  Recovery = 100.24%
U 409.014†              5304.8      480.17 µg/L        4.837      480.17 ppb          4.837   1.01%
   QC value within limits for U 409.014  Recovery = 96.03%
V 292.402†             43415.9      493.04 µg/L        1.165      493.04 ppb          1.165   0.24%
   QC value within limits for V 292.402  Recovery = 98.61%
Zn 213.857†            18621.3      489.62 µg/L        1.053      489.62 ppb          1.053   0.22%
   QC value within limits for Zn 213.857  Recovery = 97.92%
All analyte(s) passed QC.
```

Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 06:51:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113967.3	113967.3	97.7	%			06:52:06
1	Al 396.153Radial†	165.3	45.9	22.738	µg/L	22.738	ppb	06:52:06
1	Ca 317.933Radial†	428.9	26.2	10.133	µg/L	10.133	ppb	06:52:27
1	Fe 238.204 Radial†	23.8	9.2	58.473	µg/L	58.473	ppb	06:52:27
1	K 766.490 Radial†	786.9	122.8	62.847	µg/L	62.847	ppb	06:52:06
1	Mg 279.077 IEC†	17.9	2.9	18.034	µg/L	18.034	ppb	06:52:27
1	Na 589.592 Radial†	-452.1	171.5	42.944	µg/L	42.944	ppb	06:52:06
1	Sr 421.552†	-90.4	-30.2	-0.1518	µg/L	-0.1518	ppb	06:52:06
1	Sc 361.383	2011620.7	2011620.7	99.476	%			06:53:29
1	Y 371.029	1254148.3	1254148.3	99.635	%			06:53:29
1	Ag 328.068†	132.0	122.3	1.1217	µg/L	1.1217	ppb	06:53:34
1	As 188.979†	3.3	1.2	2.0779	µg/L	2.0779	ppb	06:53:55
1	B 249.677†	222.8	86.1	3.7158	µg/L	3.7158	ppb	06:53:55
1	Ba 233.527†	-48.4	29.3	0.7532	µg/L	0.7532	ppb	06:53:55
1	Be 313.107†	3576.9	79.8	0.0497	µg/L	0.0497	ppb	06:53:34
1	Cd 226.502†	-86.0	12.5	0.3341	µg/L	0.3341	ppb	06:53:55
1	Co 228.616†	-62.8	3.5	0.1701	µg/L	0.1701	ppb	06:53:55
1	Cr 267.716†	-138.7	-39.6	-0.8298	µg/L	-0.8298	ppb	06:53:34
1	Cu 324.752†	4100.5	-147.7	-1.0117	µg/L	-1.0117	ppb	06:53:34
1	Mn 257.610†	-36.0	165.2	0.5348	µg/L	0.5348	ppb	06:53:55
1	Mo 202.031†	6.3	10.0	1.1739	µg/L	1.1739	ppb	06:53:55
1	Ni 231.604†	297.6	23.6	1.2927	µg/L	1.2927	ppb	06:53:55
1	P 214.914†	186.7	-13.2	-26.653	µg/L	-26.653	ppb	06:53:55
1	Pb 220.353†	47.7	-8.3	-2.1353	µg/L	-2.1353	ppb	06:53:55
1	S 181.975 Axial†	34.1	12.1	59.147	µg/L	59.147	ppb	06:53:55
1	Sb 206.836†	24.0	3.0	2.9668	µg/L	2.9668	ppb	06:53:55
1	Se 196.026†	11.8	2.0	2.6337	µg/L	2.6337	ppb	06:53:55
1	SiO2†	2771.3	34.5	6.3418	µg/L	6.3418	ppb	06:53:34
1	Si 251.611†	463.2	140.4	10.244	µg/L	10.244	ppb	06:53:55
1	Sn 189.927†	26.1	3.8	1.9826	µg/L	1.9826	ppb	06:53:55
1	Ti 334.940†	1108.4	339.9	0.7736	µg/L	0.7736	ppb	06:53:34
1	Tl 190.801†	-19.2	1.0	1.6062	µg/L	1.6062	ppb	06:53:55
1	U 409.014†	799.1	72.9	6.5957	µg/L	6.5957	ppb	06:53:34
1	V 292.402†	-97.8	28.4	0.3431	µg/L	0.3431	ppb	06:53:34
1	Zn 213.857†	546.7	22.9	0.5959	µg/L	0.5959	ppb	06:53:55
2	Sc RADIAL	114874.9	114874.9	98.5	%			06:52:32
2	Al 396.153Radial†	170.2	49.5	24.571	µg/L	24.571	ppb	06:52:32
2	Ca 317.933Radial†	443.1	37.1	14.373	µg/L	14.373	ppb	06:52:53
2	Fe 238.204 Radial†	21.2	6.4	40.467	µg/L	40.467	ppb	06:52:53
2	K 766.490 Radial†	747.7	76.6	39.206	µg/L	39.206	ppb	06:52:32
2	Mg 279.077 IEC†	16.7	1.5	9.2979	µg/L	9.2979	ppb	06:52:53
2	Na 589.592 Radial†	-406.0	221.9	55.559	µg/L	55.559	ppb	06:52:32
2	Sr 421.552†	-5.6	56.6	0.2843	µg/L	0.2843	ppb	06:52:32
2	Sc 361.383	2002324.3	2002324.3	99.016	%			06:54:01
2	Y 371.029	1249453.9	1249453.9	99.262	%			06:54:01
2	Ag 328.068†	39.8	29.8	0.2767	µg/L	0.2767	ppb	06:54:07
2	As 188.979†	7.2	5.0	9.0855	µg/L	9.0855	ppb	06:54:27
2	B 249.677†	211.8	76.1	3.2861	µg/L	3.2861	ppb	06:54:27
2	Ba 233.527†	-59.3	18.2	0.4667	µg/L	0.4667	ppb	06:54:27
2	Be 313.107†	3716.9	238.0	0.1488	µg/L	0.1488	ppb	06:54:07
2	Cd 226.502†	-82.3	15.8	0.4181	µg/L	0.4181	ppb	06:54:27
2	Co 228.616†	-66.2	-0.2	-0.0126	µg/L	-0.0126	ppb	06:54:27
2	Cr 267.716†	-130.9	-32.4	-0.6783	µg/L	-0.6783	ppb	06:54:07
2	Cu 324.752†	4163.0	-65.4	-0.4446	µg/L	-0.4446	ppb	06:54:07
2	Mn 257.610†	-121.9	78.2	0.2549	µg/L	0.2549	ppb	06:54:27
2	Mo 202.031†	-2.3	1.3	0.1586	µg/L	0.1586	ppb	06:54:27
2	Ni 231.604†	314.3	41.9	2.2898	µg/L	2.2898	ppb	06:54:27
2	P 214.914†	192.4	-6.6	-13.435	µg/L	-13.435	ppb	06:54:27
2	Pb 220.353†	50.7	-5.1	-1.3032	µg/L	-1.3032	ppb	06:54:27

2	S 181.975 Axial†	33.9	12.1	59.256 µg/L	59.256 ppb	06:54:27
2	Sb 206.836†	19.7	-1.2	-1.2058 µg/L	-1.2058 ppb	06:54:27
2	Se 196.026†	12.6	2.9	3.7126 µg/L	3.7126 ppb	06:54:27
2	SiO2†	2768.5	44.6	8.1932 µg/L	8.1932 ppb	06:54:07
2	Si 251.611†	460.9	140.2	10.402 µg/L	10.402 ppb	06:54:27
2	Sn 189.927†	19.3	-2.9	-1.4658 µg/L	-1.4658 ppb	06:54:27
2	Ti 334.940†	952.1	187.2	0.4256 µg/L	0.4256 ppb	06:54:07
2	Tl 190.801†	-21.8	-1.7	-2.5495 µg/L	-2.5495 ppb	06:54:27
2	U 409.014†	678.5	-45.2	-4.1094 µg/L	-4.1094 ppb	06:54:07
2	V 292.402†	-103.6	22.1	0.2466 µg/L	0.2466 ppb	06:54:07
2	Zn 213.857†	539.2	17.9	0.4588 µg/L	0.4588 ppb	06:54:27
3	Sc RADIAL	116525.7	116525.7	99.9 %		06:52:58
3	Al 396.153Radial†	328.7	205.7	102.20 µg/L	102.20 ppb	06:52:58
3	Ca 317.933Radial†	451.8	39.4	15.250 µg/L	15.250 ppb	06:53:19
3	Fe 238.204 Radial†	24.2	9.0	57.310 µg/L	57.310 ppb	06:53:19
3	K 766.490 Radial†	732.7	50.8	26.018 µg/L	26.018 ppb	06:52:58
3	Mg 279.077 IEC†	17.5	2.1	12.684 µg/L	12.684 ppb	06:53:19
3	Na 589.592 Radial†	-324.2	309.6	77.543 µg/L	77.543 ppb	06:52:58
3	Sr 421.552†	8.5	70.9	0.3561 µg/L	0.3561 ppb	06:52:58
3	Sc 361.383	2001635.2	2001635.2	98.982 %		06:54:33
3	Y 371.029	1246863.9	1246863.9	99.056 %		06:54:33
3	Ag 328.068†	72.2	62.6	0.5744 µg/L	0.5744 ppb	06:54:39
3	As 188.979†	1.6	-0.6	-1.0811 µg/L	-1.0811 ppb	06:54:59
3	B 249.677†	196.2	60.4	2.5995 µg/L	2.5995 ppb	06:54:59
3	Ba 233.527†	-66.7	10.7	0.2738 µg/L	0.2738 ppb	06:54:59
3	Be 313.107†	3589.6	110.7	0.0691 µg/L	0.0691 ppb	06:54:39
3	Cd 226.502†	-85.4	12.7	0.3286 µg/L	0.3286 ppb	06:54:59
3	Co 228.616†	-59.2	6.8	0.3277 µg/L	0.3277 ppb	06:54:59
3	Cr 267.716†	-100.0	-1.3	-0.0267 µg/L	-0.0267 ppb	06:54:39
3	Cu 324.752†	4098.0	-129.7	-0.8871 µg/L	-0.8871 ppb	06:54:39
3	Mn 257.610†	-107.0	93.2	0.3048 µg/L	0.3048 ppb	06:54:59
3	Mo 202.031†	-4.4	-0.7	-0.0847 µg/L	-0.0847 ppb	06:54:59
3	Ni 231.604†	292.6	20.1	1.0980 µg/L	1.0980 ppb	06:54:59
3	P 214.914†	195.4	-3.5	-6.9865 µg/L	-6.9865 ppb	06:54:59
3	Pb 220.353†	33.1	-22.9	-5.8942 µg/L	-5.8942 ppb	06:54:59
3	S 181.975 Axial†	31.3	9.5	46.375 µg/L	46.375 ppb	06:54:59
3	Sb 206.836†	17.6	-3.3	-3.2563 µg/L	-3.2563 ppb	06:54:59
3	Se 196.026†	13.6	3.8	4.9319 µg/L	4.9319 ppb	06:54:59
3	SiO2†	2766.6	43.7	8.0174 µg/L	8.0174 ppb	06:54:39
3	Si 251.611†	456.9	136.4	10.094 µg/L	10.094 ppb	06:54:59
3	Sn 189.927†	21.2	-1.0	-0.4991 µg/L	-0.4991 ppb	06:54:59
3	Ti 334.940†	933.1	168.3	0.3825 µg/L	0.3825 ppb	06:54:39
3	Tl 190.801†	-17.0	3.1	4.8360 µg/L	4.8360 ppb	06:54:59
3	U 409.014†	642.5	-81.4	-7.3892 µg/L	-7.3892 ppb	06:54:39
3	V 292.402†	-131.3	-5.9	-0.0740 µg/L	-0.0740 ppb	06:54:39
3	Zn 213.857†	534.2	13.1	0.3351 µg/L	0.3351 ppb	06:54:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005193.4	99.158	%	0.2758				0.28%
Sc RADIAL	115122.6	98.7	%	1.11				1.13%
Y 371.029	1250155.4	99.317	%	0.2933				0.30%
Ag 328.068†	71.6	0.6576	µg/L	0.42860	0.6576	ppb	0.42860	65.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	100.3	49.836	µg/L	45.3568	49.836	ppb	45.3568	91.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	3.3608	µg/L	5.20326	3.3608	ppb	5.20326	154.82%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	74.2	3.2005	µg/L	0.56305	3.2005	ppb	0.56305	17.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.4	0.4979	µg/L	0.24124	0.4979	ppb	0.24124	48.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	142.8	0.0892	µg/L	0.05250	0.0892	ppb	0.05250	58.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	34.2	13.252	µg/L	2.7365	13.252	ppb	2.7365	20.65%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.7	0.3603	µg/L	0.05017	0.3603	ppb	0.05017	13.93%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.4	0.1618	µg/L	0.17029	0.1618	ppb	0.17029	105.27%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -24.4     -0.5116 µg/L       0.42670     -0.5116 ppb        0.42670  83.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -114.2     -0.7812 µg/L       0.29802     -0.7812 ppb        0.29802  38.15%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         8.2      52.083 µg/L      10.0770      52.083 ppb       10.0770  19.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         83.4      42.690 µg/L      18.6603      42.690 ppb       18.6603  43.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      13.338 µg/L       4.4047      13.338 ppb        4.4047  33.02%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              112.2       0.3648 µg/L       0.14931      0.3648 ppb       0.14931  40.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.5       0.4159 µg/L       0.66762      0.4159 ppb       0.66762 160.51%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       234.3      58.682 µg/L      17.5098      58.682 ppb       17.5098  29.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               28.5       1.5602 µg/L       0.63933      1.5602 ppb       0.63933  40.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -7.8     -15.691 µg/L      10.0253     -15.691 ppb       10.0253  63.89%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -12.1      -3.1109 µg/L       2.44606      -3.1109 ppb       2.44606  78.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          11.2      54.926 µg/L       7.4056      54.926 ppb        7.4056  13.48%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.5      -0.4984 µg/L       3.17130      -0.4984 ppb       3.17130 636.27%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.9       3.7594 µg/L       1.14983       3.7594 ppb       1.14983  30.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     40.9       7.5175 µg/L       1.02192       7.5175 ppb       1.02192  13.59%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              139.0      10.247 µg/L        0.1540      10.247 ppb        0.1540   1.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.0       0.0059 µg/L       1.77876       0.0059 ppb       1.77876 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               32.4       0.1629 µg/L       0.27486       0.1629 ppb       0.27486 168.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              231.8       0.5272 µg/L       0.21446       0.5272 ppb       0.21446  40.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.8       1.2975 µg/L       3.70240       1.2975 ppb       3.70240 285.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -17.9      -1.6343 µg/L       7.31360      -1.6343 ppb       7.31360 447.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                14.9       0.1719 µg/L       0.21837       0.1719 ppb       0.21837 127.05%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               18.0       0.4633 µg/L       0.13046       0.4633 ppb       0.13046  28.16%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 65
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 07:14:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112917.3	112917.3	96.8	%			07:14:36
1	Al 396.153Radial†	10322.0	10538.0	5216.9	µg/L	5216.9	ppb	07:14:36
1	Ca 317.933Radial†	13073.0	13089.9	5064.7	µg/L	5064.7	ppb	07:14:56
1	Fe 238.204 Radial†	790.1	800.9	5109.8	µg/L	5109.8	ppb	07:14:56
1	K 766.490 Radial†	10300.5	9956.5	5095.6	µg/L	5095.6	ppb	07:14:36
1	Mg 279.077 IEC†	823.4	835.0	5160.2	µg/L	5160.2	ppb	07:14:56
1	Na 589.592 Radial†	39312.0	41238.3	10327	µg/L	10327	ppb	07:14:36
1	Sr 421.552†	95886.7	99100.6	498.08	µg/L	498.08	ppb	07:14:36
1	Sc 361.383	2006610.4	2006610.4	99.228	%			07:16:00
1	Y 371.029	1248498.0	1248498.0	99.186	%			07:16:00
1	Ag 328.068†	55104.9	55523.2	509.93	µg/L	509.93	ppb	07:16:06
1	As 188.979†	276.1	276.1	500.14	µg/L	500.14	ppb	07:16:26
1	B 249.677†	11464.3	11415.6	493.29	µg/L	493.29	ppb	07:16:06
1	Ba 233.527†	19036.2	19262.4	495.09	µg/L	495.09	ppb	07:16:06
1	Be 313.107†	790200.8	792833.4	495.93	µg/L	495.93	ppb	07:16:00
1	Cd 226.502†	18355.5	18597.3	495.46	µg/L	495.46	ppb	07:16:06
1	Co 228.616†	10092.4	10237.5	494.80	µg/L	494.80	ppb	07:16:06
1	Cr 267.716†	23170.9	23451.0	492.96	µg/L	492.96	ppb	07:16:06
1	Cu 324.752†	74979.9	71293.6	495.62	µg/L	495.62	ppb	07:16:06
1	Mn 257.610†	154312.4	155714.4	497.84	µg/L	497.84	ppb	07:16:00
1	Mo 202.031†	4235.4	4272.0	499.19	µg/L	499.19	ppb	07:16:26
1	Ni 231.604†	9209.8	9005.9	492.72	µg/L	492.72	ppb	07:16:06
1	P 214.914†	1396.0	1206.0	2382.2	µg/L	2382.2	ppb	07:16:26
1	Pb 220.353†	1964.2	1923.3	497.81	µg/L	497.81	ppb	07:16:26
1	S 181.975 Axial†	236.4	216.1	1056.6	µg/L	1056.6	ppb	07:16:26
1	Sb 206.836†	535.0	518.0	505.60	µg/L	505.60	ppb	07:16:26
1	Se 196.026†	406.0	399.3	512.43	µg/L	512.43	ppb	07:16:26
1	SiO2†	31738.0	29233.6	5368.2	µg/L	5368.2	ppb	07:16:06
1	Si 251.611†	34053.2	33992.9	2467.4	µg/L	2467.4	ppb	07:16:06
1	Sn 189.927†	1003.9	989.3	509.31	µg/L	509.31	ppb	07:16:26
1	Ti 334.940†	221121.3	222067.4	505.57	µg/L	505.57	ppb	07:16:00
1	Tl 190.801†	306.6	329.4	508.26	µg/L	508.26	ppb	07:16:26
1	U 409.014†	6018.3	5334.7	482.86	µg/L	482.86	ppb	07:16:06
1	V 292.402†	43224.3	43687.4	496.11	µg/L	496.11	ppb	07:16:06
1	Zn 213.857†	19349.8	18973.7	498.93	µg/L	498.93	ppb	07:16:06
2	Sc RADIAL	114382.4	114382.4	98.1	%			07:15:02
2	Al 396.153Radial†	10230.7	10308.4	5102.7	µg/L	5102.7	ppb	07:15:02
2	Ca 317.933Radial†	13106.5	12951.1	5011.0	µg/L	5011.0	ppb	07:15:22
2	Fe 238.204 Radial†	790.9	791.2	5048.0	µg/L	5048.0	ppb	07:15:22
2	K 766.490 Radial†	10322.5	9842.7	5037.4	µg/L	5037.4	ppb	07:15:02
2	Mg 279.077 IEC†	835.6	836.6	5170.1	µg/L	5170.1	ppb	07:15:22
2	Na 589.592 Radial†	39219.9	40624.3	10173	µg/L	10173	ppb	07:15:02
2	Sr 421.552†	95938.4	97884.8	491.97	µg/L	491.97	ppb	07:15:02
2	Sc 361.383	1998268.6	1998268.6	98.815	%			07:16:33
2	Y 371.029	1243111.0	1243111.0	98.758	%			07:16:33
2	Ag 328.068†	54691.2	55336.5	508.20	µg/L	508.20	ppb	07:16:39
2	As 188.979†	278.2	279.3	506.05	µg/L	506.05	ppb	07:16:59
2	B 249.677†	11310.1	11307.8	488.63	µg/L	488.63	ppb	07:16:39
2	Ba 233.527†	18917.5	19222.3	494.06	µg/L	494.06	ppb	07:16:39
2	Be 313.107†	780792.8	786637.0	492.05	µg/L	492.05	ppb	07:16:33
2	Cd 226.502†	18117.1	18433.2	491.09	µg/L	491.09	ppb	07:16:39
2	Co 228.616†	9969.3	10155.4	490.85	µg/L	490.85	ppb	07:16:39
2	Cr 267.716†	22901.9	23276.2	489.29	µg/L	489.29	ppb	07:16:39
2	Cu 324.752†	74282.0	70902.7	492.89	µg/L	492.89	ppb	07:16:39
2	Mn 257.610†	151907.8	153930.2	492.13	µg/L	492.13	ppb	07:16:33
2	Mo 202.031†	4248.9	4303.5	502.87	µg/L	502.87	ppb	07:16:59
2	Ni 231.604†	9145.5	8979.5	491.28	µg/L	491.28	ppb	07:16:39
2	P 214.914†	1391.1	1206.9	2384.4	µg/L	2384.4	ppb	07:16:59
2	Pb 220.353†	1961.6	1928.8	499.26	µg/L	499.26	ppb	07:16:59

2	S 181.975 Axial†	241.6	222.4	1087.4 µg/L	1087.4 ppb	07:16:59
2	Sb 206.836†	522.6	507.8	495.57 µg/L	495.57 ppb	07:16:59
2	Se 196.026†	406.3	401.3	514.93 µg/L	514.93 ppb	07:16:59
2	SiO2†	31437.4	29062.9	5336.9 µg/L	5336.9 ppb	07:16:39
2	Si 251.611†	33751.1	33830.5	2455.3 µg/L	2455.3 ppb	07:16:39
2	Sn 189.927†	1006.2	995.9	512.68 µg/L	512.68 ppb	07:16:59
2	Ti 334.940†	218679.3	220526.4	502.06 µg/L	502.06 ppb	07:16:33
2	Tl 190.801†	301.3	325.3	501.89 µg/L	501.89 ppb	07:16:59
2	U 409.014†	5943.1	5283.9	478.27 µg/L	478.27 ppb	07:16:39
2	V 292.402†	42795.7	43435.4	493.29 µg/L	493.29 ppb	07:16:39
2	Zn 213.857†	19208.2	18911.8	497.31 µg/L	497.31 ppb	07:16:39
3	Sc RADIAL	113802.2	113802.2	97.6 %		07:15:28
3	Al 396.153Radial†	10180.7	10310.2	5103.9 µg/L	5103.9 ppb	07:15:28
3	Ca 317.933Radial†	13127.4	13040.7	5045.7 µg/L	5045.7 ppb	07:15:48
3	Fe 238.204 Radial†	796.7	801.3	5112.3 µg/L	5112.3 ppb	07:15:48
3	K 766.490 Radial†	10249.9	9822.0	5026.8 µg/L	5026.8 ppb	07:15:28
3	Mg 279.077 IEC†	838.6	844.0	5215.6 µg/L	5215.6 ppb	07:15:48
3	Na 589.592 Radial†	39216.1	40824.1	10223 µg/L	10223 ppb	07:15:28
3	Sr 421.552†	95579.5	98015.7	492.62 µg/L	492.62 ppb	07:15:28
3	Sc 361.383	1995882.6	1995882.6	98.697 %		07:17:07
3	Y 371.029	1240911.4	1240911.4	98.583 %		07:17:07
3	Ag 328.068†	54566.4	55276.2	507.66 µg/L	507.66 ppb	07:17:12
3	As 188.979†	277.6	279.0	505.57 µg/L	505.57 ppb	07:17:33
3	B 249.677†	11307.9	11319.3	489.11 µg/L	489.11 ppb	07:17:12
3	Ba 233.527†	18850.6	19177.4	492.91 µg/L	492.91 ppb	07:17:12
3	Be 313.107†	785406.9	792256.6	495.57 µg/L	495.57 ppb	07:17:07
3	Cd 226.502†	18185.2	18524.2	493.52 µg/L	493.52 ppb	07:17:12
3	Co 228.616†	10001.5	10200.2	492.99 µg/L	492.99 ppb	07:17:12
3	Cr 267.716†	22937.0	23339.5	490.62 µg/L	490.62 ppb	07:17:12
3	Cu 324.752†	74064.1	70771.8	492.00 µg/L	492.00 ppb	07:17:12
3	Mn 257.610†	152539.1	154753.6	494.77 µg/L	494.77 ppb	07:17:07
3	Mo 202.031†	4187.9	4246.8	496.25 µg/L	496.25 ppb	07:17:33
3	Ni 231.604†	9165.0	9010.4	492.97 µg/L	492.97 ppb	07:17:12
3	P 214.914†	1385.4	1202.8	2376.2 µg/L	2376.2 ppb	07:17:33
3	Pb 220.353†	1944.4	1913.8	495.35 µg/L	495.35 ppb	07:17:33
3	S 181.975 Axial†	236.4	217.4	1062.7 µg/L	1062.7 ppb	07:17:33
3	Sb 206.836†	525.5	511.4	499.09 µg/L	499.09 ppb	07:17:33
3	Se 196.026†	398.3	393.7	505.23 µg/L	505.23 ppb	07:17:33
3	SiO2†	31354.4	29016.8	5328.4 µg/L	5328.4 ppb	07:17:12
3	Si 251.611†	33720.3	33840.1	2456.2 µg/L	2456.2 ppb	07:17:12
3	Sn 189.927†	994.6	985.3	507.29 µg/L	507.29 ppb	07:17:33
3	Ti 334.940†	219779.2	221905.4	505.20 µg/L	505.20 ppb	07:17:07
3	Tl 190.801†	305.7	330.1	509.39 µg/L	509.39 ppb	07:17:33
3	U 409.014†	6031.5	5380.7	487.03 µg/L	487.03 ppb	07:17:12
3	V 292.402†	42759.8	43450.9	493.44 µg/L	493.44 ppb	07:17:12
3	Zn 213.857†	19142.8	18868.8	496.15 µg/L	496.15 ppb	07:17:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2000253.9	98.914	%	0.2785				0.28%
Sc RADIAL	113700.6	97.5	%	0.63				0.65%
Y 371.029	1244173.5	98.842	%	0.3101				0.31%
Ag 328.068†	55378.6	508.60	µg/L	1.185	508.60	ppb	1.185	0.23%
QC value within limits for Ag 328.068 Recovery = 101.72%								
Al 396.153Radial†	10385.5	5141.1	µg/L	65.61	5141.1	ppb	65.61	1.28%
QC value within limits for Al 396.153Radial Recovery = 102.82%								
As 188.979†	278.1	503.92	µg/L	3.279	503.92	ppb	3.279	0.65%
QC value within limits for As 188.979 Recovery = 100.78%								
B 249.677†	11347.6	490.34	µg/L	2.561	490.34	ppb	2.561	0.52%
QC value within limits for B 249.677 Recovery = 98.07%								
Ba 233.527†	19220.7	494.02	µg/L	1.093	494.02	ppb	1.093	0.22%
QC value within limits for Ba 233.527 Recovery = 98.80%								
Be 313.107†	790575.7	494.52	µg/L	2.141	494.52	ppb	2.141	0.43%
QC value within limits for Be 313.107 Recovery = 98.90%								
Ca 317.933Radial†	13027.2	5040.5	µg/L	27.23	5040.5	ppb	27.23	0.54%
QC value within limits for Ca 317.933Radial Recovery = 100.81%								
Cd 226.502†	18518.2	493.36	µg/L	2.188	493.36	ppb	2.188	0.44%
QC value within limits for Cd 226.502 Recovery = 98.67%								
Co 228.616†	10197.7	492.88	µg/L	1.978	492.88	ppb	1.978	0.40%

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   QC value within limits for Co 228.616  Recovery = 98.58%
Cr 267.716†            23355.6      490.96 µg/L        1.859      490.96 ppb        1.859   0.38%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†            70989.4      493.50 µg/L        1.885      493.50 ppb        1.885   0.38%
   QC value within limits for Cu 324.752  Recovery = 98.70%
Fe 238.204 Radial†       797.8      5090.1 µg/L       36.43      5090.1 ppb       36.43   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.80%
K 766.490 Radial†       9873.7      5053.3 µg/L       37.09      5053.3 ppb       37.09   0.73%
   QC value within limits for K 766.490 Radial  Recovery = 101.07%
Mg 279.077 IEC†          838.5      5182.0 µg/L       29.55      5182.0 ppb       29.55   0.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.64%
Mn 257.610†           154799.4      494.91 µg/L        2.855      494.91 ppb        2.855   0.58%
   QC value within limits for Mn 257.610  Recovery = 98.98%
Mo 202.031†             4274.1      499.43 µg/L        3.318      499.43 ppb        3.318   0.66%
   QC value within limits for Mo 202.031  Recovery = 99.89%
Na 589.592 Radial†     40895.6       10241 µg/L         78.4       10241 ppb         78.4   0.77%
   QC value within limits for Na 589.592 Radial  Recovery = 102.41%
Ni 231.604†             8998.6      492.32 µg/L        0.913      492.32 ppb        0.913   0.19%
   QC value within limits for Ni 231.604  Recovery = 98.46%
P 214.914†              1205.2      2380.9 µg/L         4.28      2380.9 ppb         4.28   0.18%
   QC value within limits for P 214.914  Recovery = 95.24%
Pb 220.353†             1922.0      497.48 µg/L        1.976      497.48 ppb        1.976   0.40%
   QC value within limits for Pb 220.353  Recovery = 99.50%
S 181.975 Axial†         218.6      1068.9 µg/L       16.29      1068.9 ppb       16.29   1.52%
   QC value within limits for S 181.975 Axial  Recovery = 106.89%
Sb 206.836†              512.4      500.09 µg/L        5.088      500.09 ppb        5.088   1.02%
   QC value within limits for Sb 206.836  Recovery = 100.02%
Se 196.026†              398.1      510.86 µg/L        5.036      510.86 ppb        5.036   0.99%
   QC value within limits for Se 196.026  Recovery = 102.17%
SiO2†                  29104.4      5344.5 µg/L       20.97      5344.5 ppb       20.97   0.39%
   QC value within limits for SiO2  Recovery = 99.94%
Si 251.611†            33887.8      2459.6 µg/L        6.72      2459.6 ppb         6.72   0.27%
   QC value within limits for Si 251.611  Recovery = 98.39%
Sn 189.927†              990.1      509.76 µg/L        2.725      509.76 ppb        2.725   0.53%
   QC value within limits for Sn 189.927  Recovery = 101.95%
Sr 421.552†            98333.7      494.22 µg/L        3.354      494.22 ppb        3.354   0.68%
   QC value within limits for Sr 421.552  Recovery = 98.84%
Ti 334.940†           221499.7      504.27 µg/L        1.927      504.27 ppb        1.927   0.38%
   QC value within limits for Ti 334.940  Recovery = 100.85%
Tl 190.801†              328.3      506.51 µg/L        4.043      506.51 ppb        4.043   0.80%
   QC value within limits for Tl 190.801  Recovery = 101.30%
U 409.014†              5333.1      482.72 µg/L        4.384      482.72 ppb        4.384   0.91%
   QC value within limits for U 409.014  Recovery = 96.54%
V 292.402†             43524.5      494.28 µg/L        1.588      494.28 ppb        1.588   0.32%
   QC value within limits for V 292.402  Recovery = 98.86%
Zn 213.857†            18918.1      497.47 µg/L        1.396      497.47 ppb        1.396   0.28%
   QC value within limits for Zn 213.857  Recovery = 99.49%
All analyte(s) passed QC.
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Sequence No.: 66
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 07:17:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112989.9	112989.9	96.9	%			07:18:15
1	Al 396.153Radial†	150.2	31.7	15.783	µg/L	15.783	ppb	07:18:15
1	Ca 317.933Radial†	439.0	40.4	15.633	µg/L	15.633	ppb	07:18:36
1	Fe 238.204 Radial†	21.7	7.2	45.695	µg/L	45.695	ppb	07:18:36
1	K 766.490 Radial†	710.7	51.1	26.173	µg/L	26.173	ppb	07:18:15
1	Mg 279.077 IEC†	10.0	-5.1	-31.347	µg/L	-31.347	ppb	07:18:36
1	Na 589.592 Radial†	-480.6	138.1	34.573	µg/L	34.573	ppb	07:18:15
1	Sr 421.552†	-61.7	-1.4	-0.0068	µg/L	-0.0068	ppb	07:18:15
1	Sc 361.383	2003994.4	2003994.4	99.099	%			07:19:38
1	Y 371.029	1249084.7	1249084.7	99.232	%			07:19:38
1	Ag 328.068†	44.7	34.7	0.3198	µg/L	0.3198	ppb	07:19:43
1	As 188.979†	7.8	5.7	10.264	µg/L	10.264	ppb	07:20:04
1	B 249.677†	185.7	49.6	2.1350	µg/L	2.1350	ppb	07:20:04
1	Ba 233.527†	-31.3	46.4	1.1912	µg/L	1.1912	ppb	07:20:04
1	Be 313.107†	3572.5	89.1	0.0555	µg/L	0.0555	ppb	07:19:43
1	Cd 226.502†	-86.7	11.5	0.2991	µg/L	0.2991	ppb	07:20:04
1	Co 228.616†	-71.0	-5.0	-0.2437	µg/L	-0.2437	ppb	07:20:04
1	Cr 267.716†	-146.5	-48.0	-1.0068	µg/L	-1.0068	ppb	07:19:43
1	Cu 324.752†	4073.5	-159.2	-1.0943	µg/L	-1.0943	ppb	07:19:43
1	Mn 257.610†	64.8	266.7	0.8575	µg/L	0.8575	ppb	07:20:04
1	Mo 202.031†	-6.5	-2.9	-0.3324	µg/L	-0.3324	ppb	07:20:04
1	Ni 231.604†	287.6	14.7	0.8024	µg/L	0.8024	ppb	07:20:04
1	P 214.914†	191.3	-7.9	-15.817	µg/L	-15.817	ppb	07:20:04
1	Pb 220.353†	55.3	-0.5	-0.1150	µg/L	-0.1150	ppb	07:20:04
1	S 181.975 Axial†	31.7	9.9	48.384	µg/L	48.384	ppb	07:20:04
1	Sb 206.836†	25.2	4.3	4.2065	µg/L	4.2065	ppb	07:20:04
1	Se 196.026†	3.9	-6.0	-7.5633	µg/L	-7.5633	ppb	07:20:04
1	SiO2†	2752.0	25.7	4.7189	µg/L	4.7189	ppb	07:19:43
1	Si 251.611†	465.0	144.0	10.665	µg/L	10.665	ppb	07:20:04
1	Sn 189.927†	20.5	-1.7	-0.8695	µg/L	-0.8695	ppb	07:20:04
1	Ti 334.940†	1032.8	267.8	0.6090	µg/L	0.6090	ppb	07:19:43
1	Tl 190.801†	-17.8	2.4	3.6555	µg/L	3.6555	ppb	07:20:04
1	U 409.014†	664.2	-60.2	-5.4675	µg/L	-5.4675	ppb	07:19:43
1	V 292.402†	-124.8	0.8	0.0012	µg/L	0.0012	ppb	07:19:43
1	Zn 213.857†	632.7	111.9	2.9580	µg/L	2.9580	ppb	07:20:04
2	Sc RADIAL	114035.1	114035.1	97.8	%			07:18:41
2	Al 396.153Radial†	173.0	53.6	26.627	µg/L	26.627	ppb	07:18:41
2	Ca 317.933Radial†	438.1	35.3	13.674	µg/L	13.674	ppb	07:19:02
2	Fe 238.204 Radial†	20.7	6.0	38.276	µg/L	38.276	ppb	07:19:02
2	K 766.490 Radial†	742.4	76.8	39.328	µg/L	39.328	ppb	07:18:41
2	Mg 279.077 IEC†	14.8	-0.3	-1.6390	µg/L	-1.6390	ppb	07:19:02
2	Na 589.592 Radial†	-518.5	103.8	25.986	µg/L	25.986	ppb	07:18:41
2	Sr 421.552†	-71.6	-10.9	-0.0547	µg/L	-0.0547	ppb	07:18:41
2	Sc 361.383	2012333.3	2012333.3	99.511	%			07:20:10
2	Y 371.029	1255023.0	1255023.0	99.704	%			07:20:10
2	Ag 328.068†	152.2	142.5	1.3006	µg/L	1.3006	ppb	07:20:15
2	As 188.979†	6.3	4.1	7.4023	µg/L	7.4023	ppb	07:20:36
2	B 249.677†	192.9	56.0	2.4159	µg/L	2.4159	ppb	07:20:36
2	Ba 233.527†	-18.7	59.3	1.5195	µg/L	1.5195	ppb	07:20:36
2	Be 313.107†	3508.6	10.0	0.0061	µg/L	0.0061	ppb	07:20:15
2	Cd 226.502†	-92.2	6.4	0.1629	µg/L	0.1629	ppb	07:20:36
2	Co 228.616†	-61.1	5.3	0.2539	µg/L	0.2539	ppb	07:20:36
2	Cr 267.716†	-117.8	-18.6	-0.3897	µg/L	-0.3897	ppb	07:20:15
2	Cu 324.752†	4096.9	-152.7	-1.0513	µg/L	-1.0513	ppb	07:20:15
2	Mn 257.610†	144.0	346.1	1.1099	µg/L	1.1099	ppb	07:20:36
2	Mo 202.031†	-0.5	3.2	0.3725	µg/L	0.3725	ppb	07:20:36
2	Ni 231.604†	296.6	22.5	1.2293	µg/L	1.2293	ppb	07:20:36
2	P 214.914†	179.3	-20.7	-41.699	µg/L	-41.699	ppb	07:20:36
2	Pb 220.353†	47.6	-8.5	-2.1787	µg/L	-2.1787	ppb	07:20:36

2	S 181.975 Axial†	29.6	7.6	37.149 µg/L	37.149 ppb	07:20:36
2	Sb 206.836†	18.5	-2.5	-2.4613 µg/L	-2.4613 ppb	07:20:36
2	Se 196.026†	7.7	-2.2	-2.7247 µg/L	-2.7247 ppb	07:20:36
2	SiO2†	2721.1	-16.9	-3.1123 µg/L	-3.1123 ppb	07:20:15
2	Si 251.611†	435.1	112.0	8.2802 µg/L	8.2802 ppb	07:20:36
2	Sn 189.927†	21.0	-1.3	-0.6590 µg/L	-0.6590 ppb	07:20:36
2	Ti 334.940†	907.2	137.3	0.3119 µg/L	0.3119 ppb	07:20:15
2	Tl 190.801†	-14.0	6.3	9.6422 µg/L	9.6422 ppb	07:20:36
2	U 409.014†	654.7	-72.6	-6.5871 µg/L	-6.5871 ppb	07:20:15
2	V 292.402†	-146.3	-20.3	-0.2328 µg/L	-0.2328 ppb	07:20:15
2	Zn 213.857†	650.8	127.4	3.3678 µg/L	3.3678 ppb	07:20:36
3	Sc RADIAL	112710.7	112710.7	96.6 %		07:19:07
3	Al 396.153Radial†	131.5	12.8	6.3588 µg/L	6.3588 ppb	07:19:07
3	Ca 317.933Radial†	437.8	40.2	15.572 µg/L	15.572 ppb	07:19:27
3	Fe 238.204 Radial†	20.2	5.7	36.215 µg/L	36.215 ppb	07:19:27
3	K 766.490 Radial†	697.2	39.0	19.952 µg/L	19.952 ppb	07:19:07
3	Mg 279.077 IEC†	16.1	1.2	7.6302 µg/L	7.6302 ppb	07:19:27
3	Na 589.592 Radial†	-511.7	104.6	26.202 µg/L	26.202 ppb	07:19:07
3	Sr 421.552†	-39.0	21.9	0.1102 µg/L	0.1102 ppb	07:19:07
3	Sc 361.383	2015562.4	2015562.4	99.671 %		07:20:42
3	Y 371.029	1257218.0	1257218.0	99.878 %		07:20:42
3	Ag 328.068†	95.6	85.5	0.7832 µg/L	0.7832 ppb	07:20:48
3	As 188.979†	-2.3	-4.6	-8.2969 µg/L	-8.2969 ppb	07:21:08
3	B 249.677†	191.0	53.8	2.3215 µg/L	2.3215 ppb	07:21:08
3	Ba 233.527†	-21.3	56.7	1.4549 µg/L	1.4549 ppb	07:21:08
3	Be 313.107†	3610.3	106.3	0.0664 µg/L	0.0664 ppb	07:20:48
3	Cd 226.502†	-88.8	9.9	0.2615 µg/L	0.2615 ppb	07:21:08
3	Co 228.616†	-62.1	4.4	0.2099 µg/L	0.2099 ppb	07:21:08
3	Cr 267.716†	-104.0	-4.6	-0.0954 µg/L	-0.0954 ppb	07:20:48
3	Cu 324.752†	4159.7	-96.3	-0.6604 µg/L	-0.6604 ppb	07:20:48
3	Mn 257.610†	165.6	367.4	1.1778 µg/L	1.1778 ppb	07:21:08
3	Mo 202.031†	-6.4	-2.8	-0.3202 µg/L	-0.3202 ppb	07:21:08
3	Ni 231.604†	292.9	18.3	1.0020 µg/L	1.0020 ppb	07:21:08
3	P 214.914†	183.3	-17.0	-34.259 µg/L	-34.259 ppb	07:21:08
3	Pb 220.353†	52.9	-3.1	-0.8130 µg/L	-0.8130 ppb	07:21:08
3	S 181.975 Axial†	28.9	6.9	33.570 µg/L	33.570 ppb	07:21:08
3	Sb 206.836†	28.0	6.9	6.7908 µg/L	6.7908 ppb	07:21:08
3	Se 196.026†	15.7	5.9	7.5200 µg/L	7.5200 ppb	07:21:08
3	SiO2†	2727.0	-15.3	-2.8137 µg/L	-2.8137 ppb	07:20:48
3	Si 251.611†	437.2	113.4	8.3190 µg/L	8.3190 ppb	07:21:08
3	Sn 189.927†	25.3	3.0	1.5335 µg/L	1.5335 ppb	07:21:08
3	Ti 334.940†	928.2	156.8	0.3564 µg/L	0.3564 ppb	07:20:48
3	Tl 190.801†	-20.8	-0.5	-0.7579 µg/L	-0.7579 ppb	07:21:08
3	U 409.014†	730.9	2.8	0.2514 µg/L	0.2514 ppb	07:20:48
3	V 292.402†	-115.1	11.2	0.1272 µg/L	0.1272 ppb	07:20:48
3	Zn 213.857†	644.6	120.1	3.1750 µg/L	3.1750 ppb	07:21:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2010630.1	99.427	%	0.2952				0.30%
Sc RADIAL	113245.2	97.1	%	0.60				0.62%
Y 371.029	1253775.2	99.605	%	0.3343				0.34%
Ag 328.068†	87.6	0.8012	µg/L	0.49065	0.8012	ppb	0.49065	61.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	32.7	16.256	µg/L	10.1426	16.256	ppb	10.1426	62.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	3.1232	µg/L	9.99310	3.1232	ppb	9.99310	319.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.1	2.2908	µg/L	0.14294	2.2908	ppb	0.14294	6.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	54.1	1.3885	µg/L	0.17389	1.3885	ppb	0.17389	12.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	68.5	0.0427	µg/L	0.03213	0.0427	ppb	0.03213	75.28%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	38.7	14.960	µg/L	1.1137	14.960	ppb	1.1137	7.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.2	0.2412	µg/L	0.07037	0.2412	ppb	0.07037	29.18%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.5	0.0734	µg/L	0.27547	0.0734	ppb	0.27547	375.37%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -23.7     -0.4973 µg/L       0.46510     -0.4973 ppb        0.46510  93.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -136.1     -0.9353 µg/L       0.23906     -0.9353 ppb        0.23906  25.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         6.3      40.062 µg/L        4.9859      40.062 ppb         4.9859  12.45%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         55.7      28.484 µg/L        9.8922      28.484 ppb         9.8922  34.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.4      -8.4519 µg/L      20.36206     -8.4519 ppb       20.36206 240.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              326.8       1.0484 µg/L       0.16879      1.0484 ppb        0.16879  16.10%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.8      -0.0934 µg/L       0.40346     -0.0934 ppb        0.40346 432.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       115.5      28.920 µg/L        4.8963      28.920 ppb         4.8963  16.93%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               18.5       1.0113 µg/L       0.21359      1.0113 ppb        0.21359  21.12%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.2     -30.592 µg/L       13.3252     -30.592 ppb        13.3252  43.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.0      -1.0356 µg/L       1.04972     -1.0356 ppb        1.04972 101.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.1      39.701 µg/L        7.7295      39.701 ppb         7.7295  19.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.9       2.8453 µg/L       4.77391      2.8453 ppb        4.77391 167.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.7      -0.9227 µg/L       7.70142     -0.9227 ppb        7.70142 834.68%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -2.2      -0.4024 µg/L       4.43765     -0.4024 ppb        4.43765 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              123.1       9.0881 µg/L       1.36581      9.0881 ppb        1.36581  15.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.0       0.0017 µg/L       1.33076      0.0017 ppb        1.33076 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.2       0.0162 µg/L       0.08484      0.0162 ppb        0.08484 522.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              187.3       0.4258 µg/L       0.16027      0.4258 ppb        0.16027  37.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.7       4.1799 µg/L       5.21983      4.1799 ppb        5.21983 124.88%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -43.3      -3.9344 µg/L       3.66797     -3.9344 ppb        3.66797  93.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -2.8      -0.0348 µg/L       0.18272     -0.0348 ppb        0.18272 525.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              119.8       3.1669 µg/L       0.20503      3.1669 ppb        0.20503   6.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/10/2009 07:33:30 Plasma On Time: 12/6/2009 23:29:48
Logged In Analyst: optima Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121009A.sif
Batch ID:
Results Data Set: 121009
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Sequence No.: 1 Autosampler Location: 301
Sample ID: 1201990787|930799|1 Date Collected: 12/10/2009 07:33:32
Analyst: HSC Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 1201990787|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115054.4	115054.4	98.7	%			07:34:08
1	Al 396.153Radial†	139.7	18.3	9.1267	µg/L	9.1267	ppb	07:34:08
1	Ca 317.933Radial†	471.9	65.6	25.396	µg/L	25.396	ppb	07:34:29
1	Fe 238.204 Radial†	23.7	8.9	56.387	µg/L	56.387	ppb	07:34:29
1	K 766.490 Radial†	813.1	141.7	72.545	µg/L	72.545	ppb	07:34:08
1	Mg 279.077 IEC†	12.3	-3.0	-18.714	µg/L	-18.714	ppb	07:34:29
1	Na 589.592 Radial†	-504.1	123.1	30.831	µg/L	30.831	ppb	07:34:08
1	Sr 421.552†	-3.3	58.9	0.2962	µg/L	0.2962	ppb	07:34:08
1	Sc 361.383	2006376.9	2006376.9	99.216	%			07:35:31
1	Y 371.029	1242435.5	1242435.5	98.704	%			07:35:31
1	Ag 328.068†	105.5	96.0	0.8809	µg/L	0.8809	ppb	07:35:36
1	As 188.979†	-1.3	-3.5	-6.4533	µg/L	-6.4533	ppb	07:35:57
1	B 249.677†	205.5	69.3	2.9864	µg/L	2.9864	ppb	07:35:57
1	Ba 233.527†	-50.5	27.2	0.6976	µg/L	0.6976	ppb	07:35:57
1	Be 313.107†	3506.5	18.3	0.0113	µg/L	0.0113	ppb	07:35:36
1	Cd 226.502†	-90.8	7.4	0.1937	µg/L	0.1937	ppb	07:35:57
1	Co 228.616†	-73.3	-7.2	-0.3507	µg/L	-0.3507	ppb	07:35:57
1	Cr 267.716†	-103.0	-4.0	-0.0841	µg/L	-0.0841	ppb	07:35:36
1	Cu 324.752†	4125.2	-112.0	-0.7645	µg/L	-0.7645	ppb	07:35:36
1	Mn 257.610†	-45.7	155.2	0.5027	µg/L	0.5027	ppb	07:35:57
1	Mo 202.031†	-5.9	-2.3	-0.2686	µg/L	-0.2686	ppb	07:35:57
1	Ni 231.604†	305.8	32.7	1.7886	µg/L	1.7886	ppb	07:35:57
1	P 214.914†	189.1	-10.3	-20.898	µg/L	-20.898	ppb	07:35:57
1	Pb 220.353†	51.5	-4.4	-1.1259	µg/L	-1.1259	ppb	07:35:57
1	S 181.975 Axial†	36.3	14.5	70.763	µg/L	70.763	ppb	07:35:57
1	Sb 206.836†	22.6	1.7	1.6566	µg/L	1.6566	ppb	07:35:57
1	Se 196.026†	9.8	-0.0	-0.0076	µg/L	-0.0076	ppb	07:35:57
1	SiO2†	2776.6	47.2	8.6624	µg/L	8.6624	ppb	07:35:36
1	Si 251.611†	465.1	143.6	10.676	µg/L	10.676	ppb	07:35:57
1	Sn 189.927†	17.8	-4.5	-2.2709	µg/L	-2.2709	ppb	07:35:57
1	Ti 334.940†	939.6	172.6	0.3917	µg/L	0.3917	ppb	07:35:36
1	Tl 190.801†	-20.7	-0.5	-0.7001	µg/L	-0.7001	ppb	07:35:57
1	U 409.014†	706.1	-18.8	-1.7103	µg/L	-1.7103	ppb	07:35:36
1	V 292.402†	-105.2	20.7	0.2331	µg/L	0.2331	ppb	07:35:36
1	Zn 213.857†	618.6	96.8	2.5524	µg/L	2.5524	ppb	07:35:57
2	Sc RADIAL	114242.5	114242.5	98.0	%			07:34:34
2	Al 396.153Radial†	161.1	41.1	20.429	µg/L	20.429	ppb	07:34:34
2	Ca 317.933Radial†	481.1	78.4	30.323	µg/L	30.323	ppb	07:34:55
2	Fe 238.204 Radial†	26.8	12.2	77.404	µg/L	77.404	ppb	07:34:55
2	K 766.490 Radial†	701.1	33.3	17.025	µg/L	17.025	ppb	07:34:34
2	Mg 279.077 IEC†	14.1	-1.0	-6.4009	µg/L	-6.4009	ppb	07:34:55
2	Na 589.592 Radial†	-483.7	140.3	35.127	µg/L	35.127	ppb	07:34:34
2	Sr 421.552†	-17.9	44.0	0.2214	µg/L	0.2214	ppb	07:34:34
2	Sc 361.383	2006706.8	2006706.8	99.233	%			07:36:03
2	Y 371.029	1245552.3	1245552.3	98.952	%			07:36:03
2	Ag 328.068†	109.0	99.4	0.9086	µg/L	0.9086	ppb	07:36:08
2	As 188.979†	0.8	-1.4	-2.6129	µg/L	-2.6129	ppb	07:36:29

2	B 249.677†	224.2	88.1	3.7950 µg/L	3.7950 ppb	07:36:29
2	Ba 233.527†	-43.4	34.3	0.8796 µg/L	0.8796 ppb	07:36:29
2	Be 313.107†	3444.9	-44.3	-0.0279 µg/L	-0.0279 ppb	07:36:08
2	Cd 226.502†	-92.2	6.1	0.1578 µg/L	0.1578 ppb	07:36:29
2	Co 228.616†	-72.0	-5.9	-0.2864 µg/L	-0.2864 ppb	07:36:29
2	Cr 267.716†	-108.0	-9.1	-0.1915 µg/L	-0.1915 ppb	07:36:08
2	Cu 324.752†	4018.6	-220.1	-1.5099 µg/L	-1.5099 ppb	07:36:08
2	Mn 257.610†	-11.0	190.3	0.6173 µg/L	0.6173 ppb	07:36:29
2	Mo 202.031†	-2.3	1.4	0.1637 µg/L	0.1637 ppb	07:36:29
2	Ni 231.604†	317.9	44.8	2.4512 µg/L	2.4512 ppb	07:36:29
2	P 214.914†	190.4	-9.0	-18.202 µg/L	-18.202 ppb	07:36:29
2	Pb 220.353†	58.6	2.8	0.7345 µg/L	0.7345 ppb	07:36:29
2	S 181.975 Axial†	40.6	18.7	91.591 µg/L	91.591 ppb	07:36:29
2	Sb 206.836†	28.2	7.3	7.1597 µg/L	7.1597 ppb	07:36:29
2	Se 196.026†	14.2	4.4	5.6990 µg/L	5.6990 ppb	07:36:29
2	SiO2†	2713.5	-16.9	-3.1022 µg/L	-3.1022 ppb	07:36:08
2	Si 251.611†	461.3	139.6	10.473 µg/L	10.473 ppb	07:36:29
2	Sn 189.927†	13.7	-8.6	-4.3944 µg/L	-4.3944 ppb	07:36:29
2	Ti 334.940†	1019.8	253.2	0.5752 µg/L	0.5752 ppb	07:36:08
2	Tl 190.801†	-17.1	3.2	4.8960 µg/L	4.8960 ppb	07:36:29
2	U 409.014†	712.2	-12.7	-1.1693 µg/L	-1.1693 ppb	07:36:08
2	V 292.402†	-174.4	-49.0	-0.5460 µg/L	-0.5460 ppb	07:36:08
2	Zn 213.857†	625.9	104.1	2.7397 µg/L	2.7397 ppb	07:36:29
3	Sc RADIAL	114264.7	114264.7	98.0 %		07:35:00
3	Al 396.153Radial†	146.5	26.2	13.018 µg/L	13.018 ppb	07:35:00
3	Ca 317.933Radial†	484.3	81.6	31.565 µg/L	31.565 ppb	07:35:20
3	Fe 238.204 Radial†	21.6	6.9	44.005 µg/L	44.005 ppb	07:35:20
3	K 766.490 Radial†	747.7	80.7	41.285 µg/L	41.285 ppb	07:35:00
3	Mg 279.077 IEC†	11.8	-3.4	-20.998 µg/L	-20.998 ppb	07:35:20
3	Na 589.592 Radial†	-499.9	123.9	31.026 µg/L	31.026 ppb	07:35:00
3	Sr 421.552†	-75.7	-15.0	-0.0753 µg/L	-0.0753 ppb	07:35:00
3	Sc 361.383	2001934.6	2001934.6	98.997 %		07:36:35
3	Y 371.029	1241996.1	1241996.1	98.669 %		07:36:35
3	Ag 328.068†	96.6	87.2	0.7960 µg/L	0.7960 ppb	07:36:40
3	As 188.979†	-0.4	-2.6	-4.7378 µg/L	-4.7378 ppb	07:37:01
3	B 249.677†	205.7	70.0	3.0193 µg/L	3.0193 ppb	07:37:01
3	Ba 233.527†	-44.2	33.4	0.8570 µg/L	0.8570 ppb	07:37:01
3	Be 313.107†	3501.2	20.8	0.0129 µg/L	0.0129 ppb	07:36:40
3	Cd 226.502†	-99.5	-1.5	-0.0443 µg/L	-0.0443 ppb	07:37:01
3	Co 228.616†	-64.4	1.6	0.0758 µg/L	0.0758 ppb	07:37:01
3	Cr 267.716†	-68.6	30.5	0.6390 µg/L	0.6390 ppb	07:36:40
3	Cu 324.752†	4101.9	-126.3	-0.8668 µg/L	-0.8668 ppb	07:36:40
3	Mn 257.610†	6.4	207.8	0.6691 µg/L	0.6691 ppb	07:37:01
3	Mo 202.031†	-3.9	-0.3	-0.0289 µg/L	-0.0289 ppb	07:37:01
3	Ni 231.604†	302.2	29.7	1.6268 µg/L	1.6268 ppb	07:37:01
3	P 214.914†	196.0	-3.0	-5.9556 µg/L	-5.9556 ppb	07:37:01
3	Pb 220.353†	58.7	3.0	0.7874 µg/L	0.7874 ppb	07:37:01
3	S 181.975 Axial†	37.1	15.3	74.798 µg/L	74.798 ppb	07:37:01
3	Sb 206.836†	20.0	-0.9	-0.8440 µg/L	-0.8440 ppb	07:37:01
3	Se 196.026†	17.0	7.3	9.4139 µg/L	9.4139 ppb	07:37:01
3	SiO2†	2752.1	28.6	5.2560 µg/L	5.2560 ppb	07:36:40
3	Si 251.611†	466.5	146.1	10.837 µg/L	10.837 ppb	07:37:01
3	Sn 189.927†	19.3	-2.9	-1.4984 µg/L	-1.4984 ppb	07:37:01
3	Ti 334.940†	951.1	186.3	0.4227 µg/L	0.4227 ppb	07:36:40
3	Tl 190.801†	-24.2	-4.1	-6.2390 µg/L	-6.2390 ppb	07:37:01
3	U 409.014†	683.7	-39.8	-3.6194 µg/L	-3.6194 ppb	07:36:40
3	V 292.402†	-157.6	-32.5	-0.3681 µg/L	-0.3681 ppb	07:36:40
3	Zn 213.857†	630.1	109.8	2.8995 µg/L	2.8995 ppb	07:37:01

Mean Data: 1201990787|930799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005006.1	99.149	%	0.1318				0.13%
Sc RADIAL	114520.5	98.2	%	0.40				0.40%
Y 371.029	1243328.0	98.775	%	0.1540				0.16%
Ag 328.068†	94.2	0.8618	µg/L	0.05867	0.8618	ppb	0.05867	6.81%
Al 396.153Radial†	28.6	14.191	µg/L	5.7416	14.191	ppb	5.7416	40.46%
As 188.979†	-2.5	-4.6013	µg/L	1.92384	-4.6013	ppb	1.92384	41.81%
B 249.677†	75.8	3.2669	µg/L	0.45768	3.2669	ppb	0.45768	14.01%
Ba 233.527†	31.7	0.8114	µg/L	0.09915	0.8114	ppb	0.09915	12.22%

Be 313.107†	-1.7	-0.0013	µg/L	0.02311	-0.0013	ppb	0.02311	>999.9%
Ca 317.933Radial†	75.2	29.095	µg/L	3.2626	29.095	ppb	3.2626	11.21%
Cd 226.502†	4.0	0.1024	µg/L	0.12830	0.1024	ppb	0.12830	125.26%
Co 228.616†	-3.8	-0.1871	µg/L	0.22995	-0.1871	ppb	0.22995	122.92%
Cr 267.716†	5.8	0.1211	µg/L	0.45172	0.1211	ppb	0.45172	372.88%
Cu 324.752†	-152.8	-1.0471	µg/L	0.40403	-1.0471	ppb	0.40403	38.59%
Fe 238.204 Radial†	9.3	59.265	µg/L	16.8846	59.265	ppb	16.8846	28.49%
K 766.490 Radial†	85.2	43.619	µg/L	27.8335	43.619	ppb	27.8335	63.81%
Mg 279.077 IEC†	-2.5	-15.371	µg/L	7.8519	-15.371	ppb	7.8519	51.08%
Mn 257.610†	184.4	0.5964	µg/L	0.08511	0.5964	ppb	0.08511	14.27%
Mo 202.031†	-0.4	-0.0446	µg/L	0.21657	-0.0446	ppb	0.21657	485.68%
Na 589.592 Radial†	129.1	32.328	µg/L	2.4257	32.328	ppb	2.4257	7.50%
Ni 231.604†	35.7	1.9555	µg/L	0.43681	1.9555	ppb	0.43681	22.34%
P 214.914†	-7.4	-15.018	µg/L	7.9636	-15.018	ppb	7.9636	53.03%
Pb 220.353†	0.5	0.1320	µg/L	1.08970	0.1320	ppb	1.08970	825.47%
S 181.975 Axial†	16.1	79.051	µg/L	11.0462	79.051	ppb	11.0462	13.97%
Sb 206.836†	2.7	2.6574	µg/L	4.09467	2.6574	ppb	4.09467	154.08%
Se 196.026†	3.9	5.0351	µg/L	4.74567	5.0351	ppb	4.74567	94.25%
SiO2†	19.6	3.6054	µg/L	6.05352	3.6054	ppb	6.05352	167.90%
Si 251.611†	143.1	10.662	µg/L	0.1821	10.662	ppb	0.1821	1.71%
Sn 189.927†	-5.3	-2.7213	µg/L	1.49961	-2.7213	ppb	1.49961	55.11%
Sr 421.552†	29.3	0.1474	µg/L	0.19650	0.1474	ppb	0.19650	133.27%
Ti 334.940†	204.1	0.4632	µg/L	0.09821	0.4632	ppb	0.09821	21.20%
Tl 190.801†	-0.4	-0.6811	µg/L	5.56751	-0.6811	ppb	5.56751	817.48%
U 409.014†	-23.8	-2.1664	µg/L	1.28712	-2.1664	ppb	1.28712	59.41%
V 292.402†	-20.3	-0.2270	µg/L	0.40827	-0.2270	ppb	0.40827	179.88%
Zn 213.857†	103.6	2.7306	µg/L	0.17375	2.7306	ppb	0.17375	6.36%

Sequence No.: 2
Sample ID: 1201990788|930799|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 302
Date Collected: 12/10/2009 07:37:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201990788|930799|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	118709.8	118709.8	102	%			07:37:43
1	Al 396.153Radial†	89775.7	88078.5	43753	µg/L	43753	ppb	07:37:43
1	Ca 317.933Radial†	134726.0	131951.3	51055	µg/L	51055	ppb	07:37:43
1	Fe 238.204 Radial†	14961.7	14684.2	93399	µg/L	93399	ppb	07:38:04
1	K 766.490 Radial†	39849.3	38468.2	19688	µg/L	19688	ppb	07:37:43
1	Mg 279.077 IEC†	3131.5	3061.1	18768	µg/L	18768	ppb	07:38:04
1	Na 589.592 Radial†	18782.0	19086.8	4779.8	µg/L	4779.8	ppb	07:37:43
1	Sr 421.552†	215091.5	211383.0	1062.4	µg/L	1062.4	ppb	07:37:43
1	Sc 361.383	2027398.8	2027398.8	100.26	%			07:39:08
1	Y 371.029	1259913.9	1259913.9	100.09	%			07:39:08
1	Ag 328.068†	15510.8	15460.8	152.29	µg/L	152.29	ppb	07:39:14
1	As 188.979†	293.0	290.0	512.69	µg/L	512.69	ppb	07:39:35
1	B 249.677†	17326.2	17144.1	713.86	µg/L	713.86	ppb	07:39:14
1	Ba 233.527†	36371.8	36357.0	933.74	µg/L	933.74	ppb	07:39:14
1	Be 313.107†	616807.2	611716.9	381.70	µg/L	381.70	ppb	07:39:08
1	Cd 226.502†	10886.4	10957.5	285.07	µg/L	285.07	ppb	07:39:35
1	Co 228.616†	9178.0	9221.3	440.05	µg/L	440.05	ppb	07:39:35
1	Cr 267.716†	53193.6	53157.6	1116.2	µg/L	1116.2	ppb	07:39:14
1	Cu 324.752†	131572.1	126966.5	900.76	µg/L	900.76	ppb	07:39:14
1	Mn 257.610†	820366.0	818473.3	2625.1	µg/L	2625.1	ppb	07:39:08
1	Mo 202.031†	2144.3	2142.6	253.93	µg/L	253.93	ppb	07:39:35
1	Ni 231.604†	12115.8	11809.3	646.11	µg/L	646.11	ppb	07:39:35
1	P 214.914†	2141.5	1935.1	3716.8	µg/L	3716.8	ppb	07:39:35
1	Pb 220.353†	1666.5	1606.0	417.27	µg/L	417.27	ppb	07:39:35
1	S 181.975 Axial†	415.2	392.0	1902.7	µg/L	1902.7	ppb	07:39:35
1	Sb 206.836†	954.7	931.2	911.77	µg/L	911.77	ppb	07:39:35
1	Se 196.026†	1064.3	1051.7	1408.8	µg/L	1408.8	ppb	07:39:35
1	SiO2†	71309.4	68376.0	12556	µg/L	12556	ppb	07:39:14
1	Si 251.611†	79466.1	78938.0	5706.5	µg/L	5706.5	ppb	07:39:14
1	Sn 189.927†	927.2	902.4	488.09	µg/L	488.09	ppb	07:39:35
1	Ti 334.940†	1289787.0	1285720.2	2925.9	µg/L	2925.9	ppb	07:39:08
1	Tl 190.801†	375.7	395.1	629.16	µg/L	629.16	ppb	07:39:35
1	U 409.014†	208.0	-523.0	-63.644	µg/L	-63.644	ppb	07:39:14
1	V 292.402†	51672.1	51666.9	590.48	µg/L	590.48	ppb	07:39:14
1	Zn 213.857†	108441.7	107638.2	2837.8	µg/L	2837.8	ppb	07:39:14
2	Sc RADIAL	117866.3	117866.3	101	%			07:38:09
2	Al 396.153Radial†	90269.7	89198.6	44309	µg/L	44309	ppb	07:38:09
2	Ca 317.933Radial†	135491.3	133655.8	51714	µg/L	51714	ppb	07:38:09
2	Fe 238.204 Radial†	14906.6	14734.9	93721	µg/L	93721	ppb	07:38:30
2	K 766.490 Radial†	40221.2	39116.4	20019	µg/L	20019	ppb	07:38:09
2	Mg 279.077 IEC†	3121.9	3073.7	18845	µg/L	18845	ppb	07:38:30
2	Na 589.592 Radial†	18879.7	19315.5	4837.1	µg/L	4837.1	ppb	07:38:09
2	Sr 421.552†	216285.3	214076.4	1075.9	µg/L	1075.9	ppb	07:38:09
2	Sc 361.383	2029309.7	2029309.7	100.35	%			07:39:42
2	Y 371.029	1261658.9	1261658.9	100.23	%			07:39:42
2	Ag 328.068†	15444.8	15380.4	151.58	µg/L	151.58	ppb	07:39:47
2	As 188.979†	292.7	289.5	511.60	µg/L	511.60	ppb	07:40:08
2	B 249.677†	17415.8	17217.1	716.93	µg/L	716.93	ppb	07:39:47
2	Ba 233.527†	36346.4	36297.5	932.21	µg/L	932.21	ppb	07:39:47
2	Be 313.107†	617811.8	612138.7	381.96	µg/L	381.96	ppb	07:39:42
2	Cd 226.502†	10941.9	11002.6	286.25	µg/L	286.25	ppb	07:40:08
2	Co 228.616†	9215.2	9249.7	441.43	µg/L	441.43	ppb	07:40:08
2	Cr 267.716†	53044.2	52958.8	1112.0	µg/L	1112.0	ppb	07:39:47
2	Cu 324.752†	131528.3	126799.2	899.66	µg/L	899.66	ppb	07:39:47
2	Mn 257.610†	821494.0	818826.8	2626.3	µg/L	2626.3	ppb	07:39:42
2	Mo 202.031†	2152.5	2148.7	254.65	µg/L	254.65	ppb	07:40:08
2	Ni 231.604†	12175.0	11856.9	648.71	µg/L	648.71	ppb	07:40:08
2	P 214.914†	2150.3	1941.9	3730.4	µg/L	3730.4	ppb	07:40:08
2	Pb 220.353†	1684.3	1622.1	421.49	µg/L	421.49	ppb	07:40:08

2	S 181.975 Axial†	421.1	397.4	1929.3 µg/L	1929.3 ppb		07:40:08
2	Sb 206.836†	958.8	934.3	914.78 µg/L	914.78 ppb		07:40:08
2	Se 196.026†	1061.1	1047.5	1403.8 µg/L	1403.8 ppb		07:40:08
2	SiO2†	71390.6	68390.0	12559 µg/L	12559 ppb		07:39:47
2	Si 251.611†	79640.9	79037.6	5713.8 µg/L	5713.8 ppb		07:39:47
2	Sn 189.927†	929.9	904.3	489.24 µg/L	489.24 ppb		07:40:08
2	Ti 334.940†	1289793.5	1284515.3	2923.1 µg/L	2923.1 ppb		07:39:42
2	Tl 190.801†	376.6	395.6	629.85 µg/L	629.85 ppb		07:40:08
2	U 409.014†	151.5	-579.5	-68.814 µg/L	-68.814 ppb		07:39:47
2	V 292.402†	51674.8	51621.1	589.99 µg/L	589.99 ppb		07:39:47
2	Zn 213.857†	108344.1	107439.1	2832.5 µg/L	2832.5 ppb		07:39:47
3	Sc RADIAL	117862.7	117862.7	101 %			07:38:35
3	Al 396.153Radial†	89907.8	88843.1	44133 µg/L	44133 ppb		07:38:35
3	Ca 317.933Radial†	134819.4	132995.0	51458 µg/L	51458 ppb		07:38:35
3	Fe 238.204 Radial†	14845.7	14675.1	93341 µg/L	93341 ppb		07:38:56
3	K 766.490 Radial†	40095.6	38993.3	19956 µg/L	19956 ppb		07:38:35
3	Mg 279.077 IEC†	3114.2	3066.2	18799 µg/L	18799 ppb		07:38:56
3	Na 589.592 Radial†	18814.2	19251.3	4821.0 µg/L	4821.0 ppb		07:38:35
3	Sr 421.552†	215434.8	213241.4	1071.7 µg/L	1071.7 ppb		07:38:35
3	Sc 361.383	2026773.6	2026773.6	100.22 %			07:40:15
3	Y 371.029	1260125.6	1260125.6	100.11 %			07:40:15
3	Ag 328.068†	15266.0	15221.4	150.07 µg/L	150.07 ppb		07:40:21
3	As 188.979†	289.1	286.2	505.79 µg/L	505.79 ppb		07:40:41
3	B 249.677†	17225.9	17049.4	709.78 µg/L	709.78 ppb		07:40:21
3	Ba 233.527†	35980.0	35977.3	923.99 µg/L	923.99 ppb		07:40:21
3	Be 313.107†	617481.6	612579.5	382.24 µg/L	382.24 ppb		07:40:15
3	Cd 226.502†	10895.6	10970.1	285.42 µg/L	285.42 ppb		07:40:41
3	Co 228.616†	9171.9	9218.0	439.89 µg/L	439.89 ppb		07:40:41
3	Cr 267.716†	52543.1	52524.9	1102.9 µg/L	1102.9 ppb		07:40:21
3	Cu 324.752†	130199.8	125637.7	891.53 µg/L	891.53 ppb		07:40:21
3	Mn 257.610†	821015.2	819373.4	2628.0 µg/L	2628.0 ppb		07:40:15
3	Mo 202.031†	2128.6	2127.4	252.16 µg/L	252.16 ppb		07:40:41
3	Ni 231.604†	12121.8	11819.0	646.64 µg/L	646.64 ppb		07:40:41
3	P 214.914†	2132.2	1926.5	3700.9 µg/L	3700.9 ppb		07:40:41
3	Pb 220.353†	1666.2	1606.2	417.36 µg/L	417.36 ppb		07:40:41
3	S 181.975 Axial†	414.7	391.6	1901.0 µg/L	1901.0 ppb		07:40:41
3	Sb 206.836†	958.3	935.0	915.56 µg/L	915.56 ppb		07:40:41
3	Se 196.026†	1068.8	1056.5	1414.9 µg/L	1414.9 ppb		07:40:41
3	SiO2†	71131.5	68220.4	12527 µg/L	12527 ppb		07:40:21
3	Si 251.611†	79284.3	78781.1	5694.5 µg/L	5694.5 ppb		07:40:21
3	Sn 189.927†	942.6	918.1	496.20 µg/L	496.20 ppb		07:40:41
3	Ti 334.940†	1289817.6	1286147.6	2926.8 µg/L	2926.8 ppb		07:40:15
3	Tl 190.801†	370.3	389.8	621.02 µg/L	621.02 ppb		07:40:41
3	U 409.014†	281.6	-449.5	-56.963 µg/L	-56.963 ppb		07:40:21
3	V 292.402†	51137.0	51148.9	584.65 µg/L	584.65 ppb		07:40:21
3	Zn 213.857†	107271.2	106503.8	2807.8 µg/L	2807.8 ppb		07:40:21

Mean Data: 1201990788|930799|2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027827.4	100.28	%	0.065				0.07%
Sc RADIAL	118146.3	101	%	0.4				0.41%
Y 371.029	1260566.1	100.14	%	0.076				0.08%
Ag 328.068†	15354.2	151.31	µg/L	1.138	151.31	ppb	1.138	0.75%
Al 396.153Radial†	88706.7	44065	µg/L	284.4	44065	ppb	284.4	0.65%
As 188.979†	288.6	510.03	µg/L	3.712	510.03	ppb	3.712	0.73%
B 249.677†	17136.9	713.52	µg/L	3.589	713.52	ppb	3.589	0.50%
Ba 233.527†	36210.6	929.98	µg/L	5.245	929.98	ppb	5.245	0.56%
Be 313.107†	612145.0	381.97	µg/L	0.270	381.97	ppb	0.270	0.07%
Ca 317.933Radial†	132867.4	51409	µg/L	332.5	51409	ppb	332.5	0.65%
Cd 226.502†	10976.7	285.58	µg/L	0.603	285.58	ppb	0.603	0.21%
Co 228.616†	9229.6	440.46	µg/L	0.849	440.46	ppb	0.849	0.19%
Cr 267.716†	52880.4	1110.4	µg/L	6.79	1110.4	ppb	6.79	0.61%
Cu 324.752†	126467.8	897.32	µg/L	5.043	897.32	ppb	5.043	0.56%
Fe 238.204 Radial†	14698.1	93487	µg/L	204.9	93487	ppb	204.9	0.22%
K 766.490 Radial†	38859.3	19888	µg/L	176.2	19888	ppb	176.2	0.89%
Mg 279.077 IEC†	3067.0	18804	µg/L	38.8	18804	ppb	38.8	0.21%
Mn 257.610†	818891.2	2626.5	µg/L	1.44	2626.5	ppb	1.44	0.05%
Mo 202.031†	2139.6	253.58	µg/L	1.282	253.58	ppb	1.282	0.51%
Na 589.592 Radial†	19217.9	4812.6	µg/L	29.54	4812.6	ppb	29.54	0.61%

Ni 231.604†	11828.4	647.15	µg/L	1.375	647.15	ppb	1.375	0.21%
P 214.914†	1934.5	3716.0	µg/L	14.78	3716.0	ppb	14.78	0.40%
Pb 220.353†	1611.5	418.71	µg/L	2.408	418.71	ppb	2.408	0.58%
S 181.975 Axial†	393.7	1911.0	µg/L	15.86	1911.0	ppb	15.86	0.83%
Sb 206.836†	933.5	914.04	µg/L	2.000	914.04	ppb	2.000	0.22%
Se 196.026†	1051.9	1409.2	µg/L	5.59	1409.2	ppb	5.59	0.40%
SiO2†	68328.8	12547	µg/L	17.3	12547	ppb	17.3	0.14%
Si 251.611†	78918.9	5705.0	µg/L	9.76	5705.0	ppb	9.76	0.17%
Sn 189.927†	908.3	491.18	µg/L	4.387	491.18	ppb	4.387	0.89%
Sr 421.552†	212900.3	1070.0	µg/L	6.93	1070.0	ppb	6.93	0.65%
Ti 334.940†	1285461.1	2925.3	µg/L	1.94	2925.3	ppb	1.94	0.07%
Tl 190.801†	393.5	626.68	µg/L	4.909	626.68	ppb	4.909	0.78%
U 409.014†	-517.3	-63.140	µg/L	5.9413	-63.140	ppb	5.9413	9.41%
V 292.402†	51479.0	588.37	µg/L	3.235	588.37	ppb	3.235	0.55%
Zn 213.857†	107193.7	2826.0	µg/L	16.04	2826.0	ppb	16.04	0.57%

Sequence No.: 4
Sample ID: 1201977916|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 304
Date Collected: 12/10/2009 07:43:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977916|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114763.3	114763.3	98.4	%			07:44:23
1	Al 396.153Radial†	56118.7	56907.6	28274	µg/L	28274	ppb	07:44:23
1	Ca 317.933Radial†	987280.2	1002915.0	388050	µg/L	388050	ppb	07:44:23
1	Fe 238.204 Radial†	4408.3	4464.8	28394	µg/L	28394	ppb	07:44:43
1	K 766.490 Radial†	3579.7	2955.4	1512.5	µg/L	1512.5	ppb	07:44:23
1	Mg 279.077 IEC†	2033.4	2051.0	12622	µg/L	12622	ppb	07:44:43
1	Na 589.592 Radial†	1409.4	2066.4	517.49	µg/L	517.49	ppb	07:44:43
1	Sr 421.552†	108946.7	110779.9	556.78	µg/L	556.78	ppb	07:44:23
1	Sc 361.383	1934012.5	1934012.5	95.638	%			07:45:48
1	Y 371.029	1196115.8	1196115.8	95.024	%			07:45:48
1	Ag 328.068†	-553.6	-589.3	-2.7339	µg/L	-2.7339	ppb	07:45:54
1	As 188.979†	55.9	56.2	42.849	µg/L	42.849	ppb	07:46:15
1	B 249.677†	1086.9	998.6	34.364	µg/L	34.364	ppb	07:46:15
1	Ba 233.527†	13241.1	13923.1	357.23	µg/L	357.23	ppb	07:45:54
1	Be 313.107†	5699.0	2443.1	1.0071	µg/L	1.0071	ppb	07:45:54
1	Cd 226.502†	51.6	152.9	1.8612	µg/L	1.8612	ppb	07:46:15
1	Co 228.616†	167.1	241.4	8.7712	µg/L	8.7712	ppb	07:46:15
1	Cr 267.716†	1839.8	2023.5	42.574	µg/L	42.574	ppb	07:46:15
1	Cu 324.752†	17227.1	13743.1	101.43	µg/L	101.43	ppb	07:45:54
1	Mn 257.610†	193596.3	202627.6	650.56	µg/L	650.56	ppb	07:45:54
1	Mo 202.031†	177.9	189.7	23.271	µg/L	23.271	ppb	07:46:15
1	Ni 231.604†	430.4	174.5	9.5461	µg/L	9.5461	ppb	07:46:15
1	P 214.914†	561.7	386.4	743.51	µg/L	743.51	ppb	07:46:15
1	Pb 220.353†	503.8	470.5	123.65	µg/L	123.65	ppb	07:46:15
1	S 181.975 Axial†	1371.9	1412.3	6908.9	µg/L	6908.9	ppb	07:46:15
1	Sb 206.836†	74.0	56.3	23.688	µg/L	23.688	ppb	07:46:15
1	Se 196.026†	-39.6	-51.3	3.2257	µg/L	3.2257	ppb	07:46:15
1	SiO2†	478672.1	497753.2	91403	µg/L	91403	ppb	07:45:48
1	Si 251.611†	546284.7	570875.7	42199	µg/L	42199	ppb	07:45:48
1	Sn 189.927†	-179.8	-210.4	-16.427	µg/L	-16.427	ppb	07:46:15
1	Ti 334.940†	592343.2	618585.8	1387.3	µg/L	1387.3	ppb	07:45:48
1	Tl 190.801†	20.7	42.0	18.515	µg/L	18.515	ppb	07:46:15
1	U 409.014†	438.3	-272.2	-20.787	µg/L	-20.787	ppb	07:45:54
1	V 292.402†	4814.7	5161.1	60.487	µg/L	60.487	ppb	07:46:15
1	Zn 213.857†	21909.8	22382.5	589.68	µg/L	589.68	ppb	07:45:54
2	Sc RADIAL	113796.8	113796.8	97.6	%			07:44:49
2	Al 396.153Radial†	56284.6	57561.9	28599	µg/L	28599	ppb	07:44:49
2	Ca 317.933Radial†	982816.3	1006860.8	389570	µg/L	389570	ppb	07:44:49
2	Fe 238.204 Radial†	4395.2	4489.4	28551	µg/L	28551	ppb	07:45:10
2	K 766.490 Radial†	3630.6	3038.4	1555.0	µg/L	1555.0	ppb	07:44:49
2	Mg 279.077 IEC†	2027.4	2062.4	12692	µg/L	12692	ppb	07:45:10
2	Na 589.592 Radial†	1434.9	2104.7	527.07	µg/L	527.07	ppb	07:45:10
2	Sr 421.552†	108935.7	111708.9	561.45	µg/L	561.45	ppb	07:44:49
2	Sc 361.383	1940438.3	1940438.3	95.956	%			07:46:21
2	Y 371.029	1200436.9	1200436.9	95.368	%			07:46:21
2	Ag 328.068†	-471.6	-501.8	-1.9283	µg/L	-1.9283	ppb	07:46:27
2	As 188.979†	52.5	52.5	35.809	µg/L	35.809	ppb	07:46:48
2	B 249.677†	1080.0	987.7	33.840	µg/L	33.840	ppb	07:46:48
2	Ba 233.527†	13386.5	14028.7	359.94	µg/L	359.94	ppb	07:46:27
2	Be 313.107†	5906.9	2640.0	1.1306	µg/L	1.1306	ppb	07:46:27
2	Cd 226.502†	54.4	155.7	1.9220	µg/L	1.9220	ppb	07:46:48
2	Co 228.616†	170.2	244.1	8.9026	µg/L	8.9026	ppb	07:46:48
2	Cr 267.716†	1841.3	2018.7	42.470	µg/L	42.470	ppb	07:46:48
2	Cu 324.752†	17506.9	13975.0	103.07	µg/L	103.07	ppb	07:46:27
2	Mn 257.610†	196439.4	204920.3	657.90	µg/L	657.90	ppb	07:46:27
2	Mo 202.031†	176.5	187.6	23.031	µg/L	23.031	ppb	07:46:48
2	Ni 231.604†	446.9	190.2	10.405	µg/L	10.405	ppb	07:46:48
2	P 214.914†	562.2	385.0	740.34	µg/L	740.34	ppb	07:46:48
2	Pb 220.353†	508.6	473.8	124.54	µg/L	124.54	ppb	07:46:48

2	S 181.975 Axial†	1360.7	1395.9	6828.6 µg/L	6828.6 ppb	07:46:48
2	Sb 206.836†	77.3	59.5	26.660 µg/L	26.660 ppb	07:46:48
2	Se 196.026†	-51.3	-63.3	-11.783 µg/L	-11.783 ppb	07:46:48
2	SiO2†	480016.9	497497.2	91356 µg/L	91356 ppb	07:46:21
2	Si 251.611†	548019.6	570792.3	42193 µg/L	42193 ppb	07:46:21
2	Sn 189.927†	-182.5	-212.6	-17.188 µg/L	-17.188 ppb	07:46:48
2	Ti 334.940†	593942.6	618201.6	1386.3 µg/L	1386.3 ppb	07:46:21
2	Tl 190.801†	27.5	49.1	29.202 µg/L	29.202 ppb	07:46:48
2	U 409.014†	400.4	-313.2	-24.501 µg/L	-24.501 ppb	07:46:27
2	V 292.402†	4783.5	5111.8	59.938 µg/L	59.938 ppb	07:46:48
2	Zn 213.857†	22175.2	22583.2	594.98 µg/L	594.98 ppb	07:46:27
3	Sc RADIAL	115227.5	115227.5	98.8 %		07:45:16
3	Al 396.153Radial†	56978.1	57547.7	28592 µg/L	28592 ppb	07:45:16
3	Ca 317.933Radial†	997592.8	1009310.9	390520 µg/L	390520 ppb	07:45:16
3	Fe 238.204 Radial†	4421.6	4460.2	28365 µg/L	28365 ppb	07:45:36
3	K 766.490 Radial†	3699.7	3062.2	1567.2 µg/L	1567.2 ppb	07:45:16
3	Mg 279.077 IEC†	2041.9	2051.2	12623 µg/L	12623 ppb	07:45:36
3	Na 589.592 Radial†	1410.6	2061.9	516.34 µg/L	516.34 ppb	07:45:36
3	Sr 421.552†	110316.3	111720.1	561.50 µg/L	561.50 ppb	07:45:16
3	Sc 361.383	1928611.0	1928611.0	95.371 %		07:46:55
3	Y 371.029	1192519.3	1192519.3	94.739 %		07:46:55
3	Ag 328.068†	-533.8	-570.1	-2.5619 µg/L	-2.5619 ppb	07:47:00
3	As 188.979†	57.4	58.0	45.676 µg/L	45.676 ppb	07:47:21
3	B 249.677†	1067.4	981.3	33.623 µg/L	33.623 ppb	07:47:21
3	Ba 233.527†	13368.2	14095.1	361.65 µg/L	361.65 ppb	07:47:00
3	Be 313.107†	5839.5	2607.1	1.1070 µg/L	1.1070 ppb	07:47:00
3	Cd 226.502†	62.6	164.6	2.1685 µg/L	2.1685 ppb	07:47:21
3	Co 228.616†	164.8	239.5	8.6653 µg/L	8.6653 ppb	07:47:21
3	Cr 267.716†	1821.2	2009.4	42.276 µg/L	42.276 ppb	07:47:21
3	Cu 324.752†	17304.2	13874.3	102.33 µg/L	102.33 ppb	07:47:00
3	Mn 257.610†	195399.9	205085.8	658.41 µg/L	658.41 ppb	07:47:00
3	Mo 202.031†	176.6	188.8	23.171 µg/L	23.171 ppb	07:47:21
3	Ni 231.604†	454.8	201.3	11.013 µg/L	11.013 ppb	07:47:21
3	P 214.914†	565.4	392.0	754.64 µg/L	754.64 ppb	07:47:21
3	Pb 220.353†	504.9	473.2	124.38 µg/L	124.38 ppb	07:47:21
3	S 181.975 Axial†	1378.0	1422.8	6960.2 µg/L	6960.2 ppb	07:47:21
3	Sb 206.836†	84.9	67.9	34.854 µg/L	34.854 ppb	07:47:21
3	Se 196.026†	-48.7	-61.0	-8.8078 µg/L	-8.8078 ppb	07:47:21
3	SiO2†	480953.7	501547.3	92100 µg/L	92100 ppb	07:46:55
3	Si 251.611†	549033.9	575358.2	42530 µg/L	42530 ppb	07:46:55
3	Sn 189.927†	-184.9	-216.3	-18.906 µg/L	-18.906 ppb	07:47:21
3	Ti 334.940†	593691.1	621733.8	1394.3 µg/L	1394.3 ppb	07:46:55
3	Tl 190.801†	29.2	50.9	31.966 µg/L	31.966 ppb	07:47:21
3	U 409.014†	304.3	-411.3	-33.340 µg/L	-33.340 ppb	07:47:00
3	V 292.402†	4795.1	5154.6	60.391 µg/L	60.391 ppb	07:47:21
3	Zn 213.857†	22048.6	22592.2	595.24 µg/L	595.24 ppb	07:47:00

Mean Data: 1201977916|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1934353.9	95.655	%	0.2928				0.31%
Sc RADIAL	114595.9	98.3	%	0.63				0.64%
Y 371.029	1196357.3	95.043	%	0.3149				0.33%
Ag 328.068†	-553.7	-2.4080	µg/L	0.42425	-2.4080	ppb	0.42425	17.62%
Al 396.153Radial†	57339.1	28489	µg/L	185.7	28489	ppb	185.7	0.65%
As 188.979†	55.6	41.445	µg/L	5.0811	41.445	ppb	5.0811	12.26%
B 249.677†	989.2	33.942	µg/L	0.3810	33.942	ppb	0.3810	1.12%
Ba 233.527†	14015.6	359.61	µg/L	2.225	359.61	ppb	2.225	0.62%
Be 313.107†	2563.4	1.0816	µg/L	0.06559	1.0816	ppb	0.06559	6.06%
Ca 317.933Radial†	1006362.2	389380	µg/L	1248.6	389380	ppb	1248.6	0.32%
Cd 226.502†	157.7	1.9839	µg/L	0.16271	1.9839	ppb	0.16271	8.20%
Co 228.616†	241.6	8.7797	µg/L	0.11886	8.7797	ppb	0.11886	1.35%
Cr 267.716†	2017.2	42.440	µg/L	0.1509	42.440	ppb	0.1509	0.36%
Cu 324.752†	13864.1	102.28	µg/L	0.823	102.28	ppb	0.823	0.80%
Fe 238.204 Radial†	4471.5	28437	µg/L	99.8	28437	ppb	99.8	0.35%
K 766.490 Radial†	3018.7	1544.9	µg/L	28.70	1544.9	ppb	28.70	1.86%
Mg 279.077 IEC†	2054.9	12645	µg/L	40.0	12645	ppb	40.0	0.32%
Mn 257.610†	204211.2	655.62	µg/L	4.391	655.62	ppb	4.391	0.67%
Mo 202.031†	188.7	23.158	µg/L	0.1204	23.158	ppb	0.1204	0.52%
Na 589.592 Radial†	2077.7	520.30	µg/L	5.889	520.30	ppb	5.889	1.13%

Ni 231.604†	188.7	10.321	µg/L	0.7371	10.321	ppb	0.7371	7.14%
P 214.914†	387.8	746.16	µg/L	7.512	746.16	ppb	7.512	1.01%
Pb 220.353†	472.5	124.19	µg/L	0.474	124.19	ppb	0.474	0.38%
S 181.975 Axial†	1410.3	6899.2	µg/L	66.35	6899.2	ppb	66.35	0.96%
Sb 206.836†	61.2	28.400	µg/L	5.7832	28.400	ppb	5.7832	20.36%
Se 196.026†	-58.5	-5.7885	µg/L	7.94704	-5.7885	ppb	7.94704	137.29%
SiO2†	498932.6	91620	µg/L	416.5	91620	ppb	416.5	0.45%
Si 251.611†	572342.1	42307	µg/L	193.2	42307	ppb	193.2	0.46%
Sn 189.927†	-213.1	-17.507	µg/L	1.2701	-17.507	ppb	1.2701	7.25%
Sr 421.552†	111403.0	559.91	µg/L	2.712	559.91	ppb	2.712	0.48%
Ti 334.940†	619507.1	1389.3	µg/L	4.36	1389.3	ppb	4.36	0.31%
Tl 190.801†	47.3	26.561	µg/L	7.1034	26.561	ppb	7.1034	26.74%
U 409.014†	-332.2	-26.210	µg/L	6.4483	-26.210	ppb	6.4483	24.60%
V 292.402†	5142.5	60.272	µg/L	0.2931	60.272	ppb	0.2931	0.49%
Zn 213.857†	22519.3	593.30	µg/L	3.134	593.30	ppb	3.134	0.53%

Sequence No.: 5
Sample ID: 1201977918|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 305
Date Collected: 12/10/2009 07:47:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977918|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112593.9	112593.9	96.5	%			07:48:04
1	Al 396.153Radial†	171952.5	177991.1	88415	µg/L	88415	ppb	07:48:04
1	Ca 317.933Radial†	2742557.8	2840424.6	1099000	µg/L	1099000	ppb	07:48:04
1	Fe 238.204 Radial†	13710.4	14186.6	90236	µg/L	90236	ppb	07:48:10
1	K 766.490 Radial†	16752.3	16670.1	8531.6	µg/L	8531.6	ppb	07:48:10
1	Mg 279.077 IEC†	6574.0	6794.2	41828	µg/L	41828	ppb	07:48:10
1	Na 589.592 Radial†	24582.7	26097.8	6535.5	µg/L	6535.5	ppb	07:48:04
1	Sr 421.552†	420077.3	435193.1	2187.3	µg/L	2187.3	ppb	07:48:04
1	Sc 361.383	1875733.3	1875733.3	92.756	%			07:48:48
1	Y 371.029	1160855.3	1160855.3	92.223	%			07:48:48
1	Ag 328.068†	51832.4	55869.9	521.13	µg/L	521.13	ppb	07:48:54
1	As 188.979†	371.6	398.5	554.75	µg/L	554.75	ppb	07:49:14
1	B 249.677†	13859.3	14803.9	613.41	µg/L	613.41	ppb	07:48:54
1	Ba 233.527†	48690.3	52570.9	1349.8	µg/L	1349.8	ppb	07:48:54
1	Be 313.107†	751257.8	806413.4	502.93	µg/L	502.93	ppb	07:48:48
1	Cd 226.502†	16277.3	17647.4	463.58	µg/L	463.58	ppb	07:48:54
1	Co 228.616†	9134.2	9914.3	470.85	µg/L	470.85	ppb	07:49:14
1	Cr 267.716†	25790.7	27904.7	586.82	µg/L	586.82	ppb	07:48:54
1	Cu 324.752†	114644.7	119328.4	847.10	µg/L	847.10	ppb	07:48:54
1	Mn 257.610†	577011.3	622275.8	1998.3	µg/L	1998.3	ppb	07:48:48
1	Mo 202.031†	4354.7	4698.5	552.35	µg/L	552.35	ppb	07:49:14
1	Ni 231.604†	8469.3	8855.2	484.48	µg/L	484.48	ppb	07:49:14
1	P 214.914†	1496.6	1412.6	2685.7	µg/L	2685.7	ppb	07:49:14
1	Pb 220.353†	3055.5	3237.9	843.43	µg/L	843.43	ppb	07:49:14
1	S 181.975 Axial†	4847.9	5204.4	25462	µg/L	25462	ppb	07:49:14
1	Sb 206.836†	599.7	625.4	522.64	µg/L	522.64	ppb	07:49:14
1	Se 196.026†	301.2	314.9	601.60	µg/L	601.60	ppb	07:49:14
1	SiO2†	1260503.8	1356194.8	249040	µg/L	249040	ppb	07:48:48
1	Si 251.611†	1436831.9	1548719.9	114420	µg/L	114420	ppb	07:48:48
1	Sn 189.927†	662.0	691.3	614.92	µg/L	614.92	ppb	07:49:14
1	Ti 334.940†	1853970.9	1997987.2	4489.5	µg/L	4489.5	ppb	07:48:48
1	Tl 190.801†	300.9	344.8	401.79	µg/L	401.79	ppb	07:49:14
1	U 409.014†	5662.3	5374.0	496.45	µg/L	496.45	ppb	07:48:54
1	V 292.402†	56266.5	60787.5	695.77	µg/L	695.77	ppb	07:48:54
1	Zn 213.857†	74424.8	79710.6	2098.2	µg/L	2098.2	ppb	07:48:54
2	Sc RADIAL	112939.1	112939.1	96.8	%			07:48:17
2	Al 396.153Radial†	174720.5	180304.9	89565	µg/L	89565	ppb	07:48:17
2	Ca 317.933Radial†	2782495.0	2872981.1	1111600	µg/L	1111600	ppb	07:48:17
2	Fe 238.204 Radial†	13753.1	14187.3	90240	µg/L	90240	ppb	07:48:22
2	K 766.490 Radial†	16834.4	16701.9	8547.8	µg/L	8547.8	ppb	07:48:22
2	Mg 279.077 IEC†	6617.6	6818.3	41977	µg/L	41977	ppb	07:48:22
2	Na 589.592 Radial†	25012.9	26464.2	6627.3	µg/L	6627.3	ppb	07:48:17
2	Sr 421.552†	426609.6	440608.5	2214.5	µg/L	2214.5	ppb	07:48:17
2	Sc 361.383	1874888.9	1874888.9	92.714	%			07:49:22
2	Y 371.029	1162995.2	1162995.2	92.393	%			07:49:22
2	Ag 328.068†	51924.7	55994.7	522.27	µg/L	522.27	ppb	07:49:28
2	As 188.979†	354.6	380.3	519.81	µg/L	519.81	ppb	07:49:48
2	B 249.677†	13887.1	14840.6	615.00	µg/L	615.00	ppb	07:49:28
2	Ba 233.527†	48702.2	52607.4	1350.8	µg/L	1350.8	ppb	07:49:28
2	Be 313.107†	750406.6	805860.0	502.58	µg/L	502.58	ppb	07:49:22
2	Cd 226.502†	16229.7	17604.0	462.42	µg/L	462.42	ppb	07:49:28
2	Co 228.616†	9032.0	9808.5	465.71	µg/L	465.71	ppb	07:49:48
2	Cr 267.716†	25777.8	27903.3	586.79	µg/L	586.79	ppb	07:49:28
2	Cu 324.752†	114957.4	119721.4	849.82	µg/L	849.82	ppb	07:49:28
2	Mn 257.610†	575883.2	621339.2	1995.3	µg/L	1995.3	ppb	07:49:22
2	Mo 202.031†	4290.3	4631.1	544.47	µg/L	544.47	ppb	07:49:48
2	Ni 231.604†	8333.3	8712.6	476.68	µg/L	476.68	ppb	07:49:48
2	P 214.914†	1481.5	1397.0	2654.3	µg/L	2654.3	ppb	07:49:48
2	Pb 220.353†	3018.3	3199.2	833.50	µg/L	833.50	ppb	07:49:48

2	S 181.975 Axial†	4802.9	5158.2	25236 µg/L	25236 ppb	07:49:48
2	Sb 206.836†	594.5	620.1	516.29 µg/L	516.29 ppb	07:49:48
2	Se 196.026†	292.0	305.1	590.78 µg/L	590.78 ppb	07:49:48
2	SiO2†	1269239.3	1366228.8	250880 µg/L	250880 ppb	07:49:22
2	Si 251.611†	1446509.3	1559855.4	115240 µg/L	115240 ppb	07:49:22
2	Sn 189.927†	648.4	676.9	610.36 µg/L	610.36 ppb	07:49:48
2	Ti 334.940†	1853130.7	1997981.2	4488.7 µg/L	4488.7 ppb	07:49:22
2	Tl 190.801†	290.2	333.4	382.37 µg/L	382.37 ppb	07:49:48
2	U 409.014†	5766.3	5489.0	507.17 µg/L	507.17 ppb	07:49:28
2	V 292.402†	56279.2	60828.6	696.19 µg/L	696.19 ppb	07:49:28
2	Zn 213.857†	74406.3	79726.7	2098.7 µg/L	2098.7 ppb	07:49:28
3	Sc RADIAL	112538.0	112538.0	96.5 %		07:48:29
3	Al 396.153Radial†	174992.4	181229.9	90025 µg/L	90025 ppb	07:48:29
3	Ca 317.933Radial†	2783631.6	2884400.2	1116000 µg/L	1116000 ppb	07:48:29
3	Fe 238.204 Radial†	13677.1	14159.1	90061 µg/L	90061 ppb	07:48:34
3	K 766.490 Radial†	16853.2	16783.3	8589.5 µg/L	8589.5 ppb	07:48:34
3	Mg 279.077 IEC†	6623.0	6848.3	42163 µg/L	42163 ppb	07:48:34
3	Na 589.592 Radial†	24995.8	26538.4	6645.9 µg/L	6645.9 ppb	07:48:29
3	Sr 421.552†	426913.2	442493.3	2224.0 µg/L	2224.0 ppb	07:48:29
3	Sc 361.383	1868511.2	1868511.2	92.399 %		07:49:56
3	Y 371.029	1157092.7	1157092.7	91.924 %		07:49:56
3	Ag 328.068†	51711.8	55955.4	521.89 µg/L	521.89 ppb	07:50:02
3	As 188.979†	356.6	383.7	525.49 µg/L	525.49 ppb	07:50:22
3	B 249.677†	13833.8	14834.0	614.77 µg/L	614.77 ppb	07:50:02
3	Ba 233.527†	48436.9	52499.6	1348.0 µg/L	1348.0 ppb	07:50:02
3	Be 313.107†	751046.2	809314.9	504.74 µg/L	504.74 ppb	07:49:56
3	Cd 226.502†	16114.0	17538.6	460.69 µg/L	460.69 ppb	07:50:02
3	Co 228.616†	9038.6	9848.8	467.61 µg/L	467.61 ppb	07:50:22
3	Cr 267.716†	25733.8	27950.6	587.78 µg/L	587.78 ppb	07:50:02
3	Cu 324.752†	114450.9	119596.4	848.92 µg/L	848.92 ppb	07:50:02
3	Mn 257.610†	576719.7	624364.8	2004.9 µg/L	2004.9 ppb	07:49:56
3	Mo 202.031†	4299.3	4656.7	547.46 µg/L	547.46 ppb	07:50:22
3	Ni 231.604†	8353.6	8765.2	479.55 µg/L	479.55 ppb	07:50:22
3	P 214.914†	1481.9	1402.9	2666.5 µg/L	2666.5 ppb	07:50:22
3	Pb 220.353†	3007.4	3198.5	833.37 µg/L	833.37 ppb	07:50:22
3	S 181.975 Axial†	4799.3	5172.0	25304 µg/L	25304 ppb	07:50:22
3	Sb 206.836†	593.9	621.6	517.38 µg/L	517.38 ppb	07:50:22
3	Se 196.026†	293.3	307.5	594.35 µg/L	594.35 ppb	07:50:22
3	SiO2†	1309895.2	1414902.0	259820 µg/L	259820 ppb	07:49:56
3	Si 251.611†	1491879.8	1614283.6	119270 µg/L	119270 ppb	07:49:56
3	Sn 189.927†	640.4	670.6	608.13 µg/L	608.13 ppb	07:50:22
3	Ti 334.940†	1857813.2	2009871.2	4515.6 µg/L	4515.6 ppb	07:49:56
3	Tl 190.801†	293.3	337.8	388.73 µg/L	388.73 ppb	07:50:22
3	U 409.014†	5743.4	5485.4	506.99 µg/L	506.99 ppb	07:50:02
3	V 292.402†	56014.0	60748.7	695.30 µg/L	695.30 ppb	07:50:02
3	Zn 213.857†	74176.1	79751.5	2099.4 µg/L	2099.4 ppb	07:50:02

Mean Data: 1201977918|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1873044.5	92.623	%	0.1953				0.21%
Sc RADIAL	112690.3	96.6	%	0.19				0.19%
Y 371.029	1160314.4	92.180	%	0.2374				0.26%
Ag 328.068†	55940.0	521.76	µg/L	0.581	521.76	ppb	0.581	0.11%
Al 396.153Radial†	179842.0	89335	µg/L	829.0	89335	ppb	829.0	0.93%
As 188.979†	387.5	533.35	µg/L	18.750	533.35	ppb	18.750	3.52%
B 249.677†	14826.1	614.39	µg/L	0.859	614.39	ppb	0.859	0.14%
Ba 233.527†	52559.3	1349.5	µg/L	1.41	1349.5	ppb	1.41	0.10%
Be 313.107†	807196.1	503.42	µg/L	1.155	503.42	ppb	1.155	0.23%
Ca 317.933Radial†	2865935.3	1108900	µg/L	8829.0	1108900	ppb	8829.0	0.80%
Cd 226.502†	17596.7	462.23	µg/L	1.451	462.23	ppb	1.451	0.31%
Co 228.616†	9857.2	468.06	µg/L	2.594	468.06	ppb	2.594	0.55%
Cr 267.716†	27919.5	587.13	µg/L	0.564	587.13	ppb	0.564	0.10%
Cu 324.752†	119548.7	848.61	µg/L	1.389	848.61	ppb	1.389	0.16%
Fe 238.204 Radial†	14177.7	90179	µg/L	102.1	90179	ppb	102.1	0.11%
K 766.490 Radial†	16718.5	8556.3	µg/L	29.88	8556.3	ppb	29.88	0.35%
Mg 279.077 IEC†	6820.3	41989	µg/L	167.4	41989	ppb	167.4	0.40%
Mn 257.610†	622659.9	1999.5	µg/L	4.93	1999.5	ppb	4.93	0.25%
Mo 202.031†	4662.1	548.09	µg/L	3.977	548.09	ppb	3.977	0.73%
Na 589.592 Radial†	26366.8	6602.9	µg/L	59.08	6602.9	ppb	59.08	0.89%

Ni 231.604†	8777.6	480.24	µg/L	3.944	480.24	ppb	3.944	0.82%
P 214.914†	1404.2	2668.8	µg/L	15.83	2668.8	ppb	15.83	0.59%
Pb 220.353†	3211.9	836.77	µg/L	5.773	836.77	ppb	5.773	0.69%
S 181.975 Axial†	5178.2	25334	µg/L	116.1	25334	ppb	116.1	0.46%
Sb 206.836†	622.4	518.77	µg/L	3.393	518.77	ppb	3.393	0.65%
Se 196.026†	309.2	595.58	µg/L	5.512	595.58	ppb	5.512	0.93%
SiO2†	1379108.5	253250	µg/L	5766.3	253250	ppb	5766.3	2.28%
Si 251.611†	1574286.3	116310	µg/L	2595.9	116310	ppb	2595.9	2.23%
Sn 189.927†	679.6	611.14	µg/L	3.462	611.14	ppb	3.462	0.57%
Sr 421.552†	439431.6	2208.6	µg/L	19.05	2208.6	ppb	19.05	0.86%
Ti 334.940†	2001946.5	4497.9	µg/L	15.29	4497.9	ppb	15.29	0.34%
Tl 190.801†	338.6	390.96	µg/L	9.904	390.96	ppb	9.904	2.53%
U 409.014†	5449.5	503.54	µg/L	6.139	503.54	ppb	6.139	1.22%
V 292.402†	60788.3	695.75	µg/L	0.446	695.75	ppb	0.446	0.06%
Zn 213.857†	79729.6	2098.8	µg/L	0.56	2098.8	ppb	0.56	0.03%

Sequence No.: 6
Sample ID: 1201977919|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 306
Date Collected: 12/10/2009 07:50:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977919|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113790.5	113790.5	97.6	%			07:51:06
1	Al 396.153Radial†	149703.8	153314.4	76155	µg/L	76155	ppb	07:51:06
1	Ca 317.933Radial†	2370640.0	2429355.7	939970	µg/L	939970	ppb	07:51:06
1	Fe 238.204 Radial†	11082.6	11343.9	72157	µg/L	72157	ppb	07:51:12
1	K 766.490 Radial†	16340.8	16065.9	8222.3	µg/L	8222.3	ppb	07:51:12
1	Mg 279.077 IEC†	5674.6	5800.7	35721	µg/L	35721	ppb	07:51:12
1	Na 589.592 Radial†	24679.6	25929.2	6493.3	µg/L	6493.3	ppb	07:51:06
1	Sr 421.552†	370919.0	380232.7	1911.0	µg/L	1911.0	ppb	07:51:06
1	Sc 361.383	1878738.7	1878738.7	92.905	%			07:51:50
1	Y 371.029	1163101.2	1163101.2	92.401	%			07:51:50
1	Ag 328.068†	51598.1	55528.4	516.31	µg/L	516.31	ppb	07:51:56
1	As 188.979†	345.4	369.6	527.52	µg/L	527.52	ppb	07:52:16
1	B 249.677†	13463.8	14354.2	599.60	µg/L	599.60	ppb	07:51:56
1	Ba 233.527†	46557.4	50191.2	1288.7	µg/L	1288.7	ppb	07:51:56
1	Be 313.107†	743935.9	797236.7	497.41	µg/L	497.41	ppb	07:51:50
1	Cd 226.502†	16115.7	17445.5	459.58	µg/L	459.58	ppb	07:51:56
1	Co 228.616†	8889.7	9635.3	458.55	µg/L	458.55	ppb	07:52:16
1	Cr 267.716†	24592.5	26570.5	558.74	µg/L	558.74	ppb	07:51:56
1	Cu 324.752†	108441.9	112454.2	795.53	µg/L	795.53	ppb	07:51:56
1	Mn 257.610†	509465.7	548576.5	1760.7	µg/L	1760.7	ppb	07:51:50
1	Mo 202.031†	4224.2	4550.5	534.35	µg/L	534.35	ppb	07:52:16
1	Ni 231.604†	8124.3	8469.2	463.36	µg/L	463.36	ppb	07:52:16
1	P 214.914†	1127.9	1013.1	1901.6	µg/L	1901.6	ppb	07:52:16
1	Pb 220.353†	2834.5	2994.8	779.77	µg/L	779.77	ppb	07:52:16
1	S 181.975 Axial†	4426.1	4742.0	23202	µg/L	23202	ppb	07:52:16
1	Sb 206.836†	576.6	599.5	510.15	µg/L	510.15	ppb	07:52:16
1	Se 196.026†	304.6	318.0	573.32	µg/L	573.32	ppb	07:52:16
1	SiO2†	1300676.2	1397261.5	256580	µg/L	256580	ppb	07:51:50
1	Si 251.611†	1481151.9	1593946.8	117790	µg/L	117790	ppb	07:51:50
1	Sn 189.927†	671.6	700.4	581.24	µg/L	581.24	ppb	07:52:16
1	Ti 334.940†	1617193.0	1739928.5	3910.6	µg/L	3910.6	ppb	07:51:50
1	Tl 190.801†	294.2	337.0	408.76	µg/L	408.76	ppb	07:52:16
1	U 409.014†	5652.3	5353.6	494.20	µg/L	494.20	ppb	07:51:56
1	V 292.402†	53095.0	57276.7	654.68	µg/L	654.68	ppb	07:51:56
1	Zn 213.857†	66632.8	71195.1	1874.8	µg/L	1874.8	ppb	07:51:56
2	Sc RADIAL	113965.4	113965.4	97.7	%			07:51:19
2	Al 396.153Radial†	150168.4	153554.4	76275	µg/L	76275	ppb	07:51:19
2	Ca 317.933Radial†	2371324.4	2426327.7	938790	µg/L	938790	ppb	07:51:19
2	Fe 238.204 Radial†	11096.8	11340.9	72138	µg/L	72138	ppb	07:51:24
2	K 766.490 Radial†	16377.6	16077.8	8228.4	µg/L	8228.4	ppb	07:51:24
2	Mg 279.077 IEC†	5708.0	5825.9	35877	µg/L	35877	ppb	07:51:24
2	Na 589.592 Radial†	24753.7	25966.3	6502.6	µg/L	6502.6	ppb	07:51:19
2	Sr 421.552†	371371.7	380112.7	1910.4	µg/L	1910.4	ppb	07:51:19
2	Sc 361.383	1892928.9	1892928.9	93.606	%			07:52:24
2	Y 371.029	1169154.7	1169154.7	92.882	%			07:52:24
2	Ag 328.068†	51491.6	54998.3	511.45	µg/L	511.45	ppb	07:52:30
2	As 188.979†	352.7	374.5	536.64	µg/L	536.64	ppb	07:52:50
2	B 249.677†	13487.0	14270.3	595.97	µg/L	595.97	ppb	07:52:30
2	Ba 233.527†	46580.3	49839.9	1279.7	µg/L	1279.7	ppb	07:52:30
2	Be 313.107†	745164.8	792546.8	494.48	µg/L	494.48	ppb	07:52:24
2	Cd 226.502†	16170.4	17373.9	457.67	µg/L	457.67	ppb	07:52:30
2	Co 228.616†	8929.5	9606.1	457.19	µg/L	457.19	ppb	07:52:50
2	Cr 267.716†	24631.8	26414.0	555.45	µg/L	555.45	ppb	07:52:30
2	Cu 324.752†	108163.2	111281.4	787.39	µg/L	787.39	ppb	07:52:30
2	Mn 257.610†	510335.3	545394.7	1750.5	µg/L	1750.5	ppb	07:52:24
2	Mo 202.031†	4249.4	4543.3	533.51	µg/L	533.51	ppb	07:52:50
2	Ni 231.604†	8144.9	8425.6	460.97	µg/L	460.97	ppb	07:52:50
2	P 214.914†	1128.4	1004.5	1885.2	µg/L	1885.2	ppb	07:52:50
2	Pb 220.353†	2866.9	3006.4	782.82	µg/L	782.82	ppb	07:52:50

2	S 181.975 Axial†	4453.5	4735.5	23170 µg/L	23170 ppb	07:52:50
2	Sb 206.836†	586.9	605.9	516.41 µg/L	516.41 ppb	07:52:50
2	Se 196.026†	298.9	309.5	562.12 µg/L	562.12 ppb	07:52:50
2	SiO2†	1371775.7	1462722.2	268600 µg/L	268600 ppb	07:52:24
2	Si 251.611†	1560068.5	1666302.3	123140 µg/L	123140 ppb	07:52:24
2	Sn 189.927†	670.0	693.4	577.38 µg/L	577.38 ppb	07:52:50
2	Ti 334.940†	1619952.8	1729827.7	3887.6 µg/L	3887.6 ppb	07:52:24
2	Tl 190.801†	299.7	340.5	414.16 µg/L	414.16 ppb	07:52:50
2	U 409.014†	5621.8	5275.3	487.09 µg/L	487.09 ppb	07:52:30
2	V 292.402†	53137.4	56893.6	650.35 µg/L	650.35 ppb	07:52:30
2	Zn 213.857†	66487.3	70502.0	1856.5 µg/L	1856.5 ppb	07:52:30
3	Sc RADIAL	113709.0	113709.0	97.5 %		07:51:31
3	Al 396.153Radial†	150917.5	154669.2	76829 µg/L	76829 ppb	07:51:31
3	Ca 317.933Radial†	2379748.8	2440439.4	944250 µg/L	944250 ppb	07:51:31
3	Fe 238.204 Radial†	11137.1	11407.9	72564 µg/L	72564 ppb	07:51:36
3	K 766.490 Radial†	16389.8	16128.2	8254.2 µg/L	8254.2 ppb	07:51:36
3	Mg 279.077 IEC†	5747.3	5879.5	36207 µg/L	36207 ppb	07:51:36
3	Na 589.592 Radial†	24866.9	26139.5	6546.0 µg/L	6546.0 ppb	07:51:31
3	Sr 421.552†	373255.2	382901.3	1924.5 µg/L	1924.5 ppb	07:51:31
3	Sc 361.383	1889477.8	1889477.8	93.436 %		07:52:58
3	Y 371.029	1169777.7	1169777.7	92.932 %		07:52:58
3	Ag 328.068†	51688.4	55309.3	514.34 µg/L	514.34 ppb	07:53:04
3	As 188.979†	348.8	371.0	529.47 µg/L	529.47 ppb	07:53:24
3	B 249.677†	13510.6	14322.0	598.07 µg/L	598.07 ppb	07:53:04
3	Ba 233.527†	46691.5	50049.9	1285.1 µg/L	1285.1 ppb	07:53:04
3	Be 313.107†	746961.3	795923.5	496.59 µg/L	496.59 ppb	07:52:58
3	Cd 226.502†	16186.2	17422.3	458.91 µg/L	458.91 ppb	07:53:04
3	Co 228.616†	8911.5	9604.2	457.07 µg/L	457.07 ppb	07:53:24
3	Cr 267.716†	24644.5	26475.7	556.75 µg/L	556.75 ppb	07:53:04
3	Cu 324.752†	108660.0	112024.1	792.63 µg/L	792.63 ppb	07:53:04
3	Mn 257.610†	511054.4	547160.1	1756.2 µg/L	1756.2 ppb	07:52:58
3	Mo 202.031†	4231.6	4532.6	532.27 µg/L	532.27 ppb	07:53:24
3	Ni 231.604†	8116.0	8410.6	460.15 µg/L	460.15 ppb	07:53:24
3	P 214.914†	1135.7	1014.6	1904.7 µg/L	1904.7 ppb	07:53:24
3	Pb 220.353†	2841.9	2985.3	777.38 µg/L	777.38 ppb	07:53:24
3	S 181.975 Axial†	4431.7	4720.9	23099 µg/L	23099 ppb	07:53:24
3	Sb 206.836†	589.0	609.3	519.24 µg/L	519.24 ppb	07:53:24
3	Se 196.026†	292.5	303.2	555.09 µg/L	555.09 ppb	07:53:24
3	SiO2†	1298216.1	1386671.3	254640 µg/L	254640 ppb	07:52:58
3	Si 251.611†	1476974.9	1580415.0	116790 µg/L	116790 ppb	07:52:58
3	Sn 189.927†	670.1	694.8	579.42 µg/L	579.42 ppb	07:53:24
3	Ti 334.940†	1621458.9	1734600.6	3898.2 µg/L	3898.2 ppb	07:52:58
3	Tl 190.801†	295.4	336.5	407.21 µg/L	407.21 ppb	07:53:24
3	U 409.014†	5511.3	5168.1	477.41 µg/L	477.41 ppb	07:53:04
3	V 292.402†	53241.3	57108.6	652.78 µg/L	652.78 ppb	07:53:04
3	Zn 213.857†	66833.4	71002.1	1869.7 µg/L	1869.7 ppb	07:53:04

Mean Data: 1201977919|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1887048.5	93.316	%	0.3660				0.39%
Sc RADIAL	113821.6	97.6	%	0.11				0.12%
Y 371.029	1167344.5	92.739	%	0.2930				0.32%
Ag 328.068†	55278.7	514.03	µg/L	2.446	514.03	ppb	2.446	0.48%
Al 396.153Radial†	153846.0	76419	µg/L	359.3	76419	ppb	359.3	0.47%
As 188.979†	371.7	531.21	µg/L	4.804	531.21	ppb	4.804	0.90%
B 249.677†	14315.5	597.88	µg/L	1.823	597.88	ppb	1.823	0.30%
Ba 233.527†	50027.0	1284.5	µg/L	4.54	1284.5	ppb	4.54	0.35%
Be 313.107†	795235.6	496.16	µg/L	1.510	496.16	ppb	1.510	0.30%
Ca 317.933Radial†	2432040.9	941000	µg/L	2874.5	941000	ppb	2874.5	0.31%
Cd 226.502†	17413.9	458.72	µg/L	0.971	458.72	ppb	0.971	0.21%
Co 228.616†	9615.2	457.60	µg/L	0.824	457.60	ppb	0.824	0.18%
Cr 267.716†	26486.8	556.98	µg/L	1.658	556.98	ppb	1.658	0.30%
Cu 324.752†	111919.9	791.85	µg/L	4.125	791.85	ppb	4.125	0.52%
Fe 238.204 Radial†	11364.2	72286	µg/L	240.7	72286	ppb	240.7	0.33%
K 766.490 Radial†	16090.6	8235.0	µg/L	16.92	8235.0	ppb	16.92	0.21%
Mg 279.077 IEC†	5835.4	35935	µg/L	248.1	35935	ppb	248.1	0.69%
Mn 257.610†	547043.7	1755.8	µg/L	5.09	1755.8	ppb	5.09	0.29%
Mo 202.031†	4542.1	533.38	µg/L	1.043	533.38	ppb	1.043	0.20%
Na 589.592 Radial†	26011.7	6514.0	µg/L	28.11	6514.0	ppb	28.11	0.43%

Ni 231.604†	8435.1	461.49	µg/L	1.665	461.49	ppb	1.665	0.36%
P 214.914†	1010.8	1897.2	µg/L	10.46	1897.2	ppb	10.46	0.55%
Pb 220.353†	2995.5	779.99	µg/L	2.722	779.99	ppb	2.722	0.35%
S 181.975 Axial†	4732.8	23157	µg/L	53.0	23157	ppb	53.0	0.23%
Sb 206.836†	604.9	515.27	µg/L	4.650	515.27	ppb	4.650	0.90%
Se 196.026†	310.2	563.51	µg/L	9.198	563.51	ppb	9.198	1.63%
SiO2†	1415551.6	259940	µg/L	7564.3	259940	ppb	7564.3	2.91%
Si 251.611†	1613554.7	119240	µg/L	3417.7	119240	ppb	3417.7	2.87%
Sn 189.927†	696.2	579.35	µg/L	1.931	579.35	ppb	1.931	0.33%
Sr 421.552†	381082.2	1915.3	µg/L	7.92	1915.3	ppb	7.92	0.41%
Ti 334.940†	1734785.6	3898.8	µg/L	11.48	3898.8	ppb	11.48	0.29%
Tl 190.801†	338.0	410.04	µg/L	3.645	410.04	ppb	3.645	0.89%
U 409.014†	5265.7	486.23	µg/L	8.428	486.23	ppb	8.428	1.73%
V 292.402†	57093.0	652.60	µg/L	2.170	652.60	ppb	2.170	0.33%
Zn 213.857†	70899.7	1867.0	µg/L	9.46	1867.0	ppb	9.46	0.51%

Sequence No.: 7
Sample ID: 1201977917|930799|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 307
Date Collected: 12/10/2009 07:53:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977917|930799|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116190.9	116190.9	99.6	%			07:54:06
1	Al 396.153Radial†	33425.4	33428.0	16609	µg/L	16609	ppb	07:54:06
1	Ca 317.933Radial†	579463.8	581234.3	224890	µg/L	224890	ppb	07:54:06
1	Fe 238.204 Radial†	2817.5	2812.9	17889	µg/L	17889	ppb	07:54:27
1	K 766.490 Radial†	2260.0	1586.1	811.72	µg/L	811.72	ppb	07:54:27
1	Mg 279.077 IEC†	1226.0	1215.1	7476.3	µg/L	7476.3	ppb	07:54:27
1	Na 589.592 Radial†	1028.4	1666.4	417.31	µg/L	417.31	ppb	07:54:27
1	Sr 421.552†	70118.5	70445.0	354.05	µg/L	354.05	ppb	07:54:06
1	Sc 361.383	1986322.1	1986322.1	98.225	%			07:55:30
1	Y 371.029	1233388.4	1233388.4	97.985	%			07:55:30
1	Ag 328.068†	-248.2	-263.1	-0.7343	µg/L	-0.7343	ppb	07:55:36
1	As 188.979†	38.7	37.2	32.952	µg/L	32.952	ppb	07:55:56
1	B 249.677†	744.0	619.6	21.237	µg/L	21.237	ppb	07:55:36
1	Ba 233.527†	6523.1	6719.1	172.41	µg/L	172.41	ppb	07:55:36
1	Be 313.107†	4921.1	1494.2	0.6372	µg/L	0.6372	ppb	07:55:36
1	Cd 226.502†	16.5	115.8	1.6975	µg/L	1.6975	ppb	07:55:56
1	Co 228.616†	54.5	122.1	4.2460	µg/L	4.2460	ppb	07:55:56
1	Cr 267.716†	803.8	918.1	19.341	µg/L	19.341	ppb	07:55:56
1	Cu 324.752†	11800.0	7743.5	57.555	µg/L	57.555	ppb	07:55:36
1	Mn 257.610†	93139.8	95024.6	305.66	µg/L	305.66	ppb	07:55:36
1	Mo 202.031†	88.4	93.7	11.650	µg/L	11.650	ppb	07:55:56
1	Ni 231.604†	375.8	107.0	5.8560	µg/L	5.8560	ppb	07:55:56
1	P 214.914†	370.5	176.3	332.45	µg/L	332.45	ppb	07:55:56
1	Pb 220.353†	324.5	274.1	72.016	µg/L	72.016	ppb	07:55:56
1	S 181.975 Axial†	827.3	820.1	4011.6	µg/L	4011.6	ppb	07:55:56
1	Sb 206.836†	67.4	47.5	28.280	µg/L	28.280	ppb	07:55:56
1	Se 196.026†	-42.0	-52.6	-26.427	µg/L	-26.427	ppb	07:55:56
1	SiO2†	332649.8	335910.9	61684	µg/L	61684	ppb	07:55:30
1	Si 251.611†	378948.8	385472.8	28500	µg/L	28500	ppb	07:55:30
1	Sn 189.927†	-159.7	-185.0	-41.624	µg/L	-41.624	ppb	07:55:56
1	Ti 334.940†	347607.3	353115.7	791.72	µg/L	791.72	ppb	07:55:30
1	Tl 190.801†	22.6	43.4	39.624	µg/L	39.624	ppb	07:55:56
1	U 409.014†	643.7	-75.1	-4.8222	µg/L	-4.8222	ppb	07:55:36
1	V 292.402†	3096.6	3279.4	38.414	µg/L	38.414	ppb	07:55:36
1	Zn 213.857†	13589.4	13308.4	350.52	µg/L	350.52	ppb	07:55:36
2	Sc RADIAL	115193.5	115193.5	98.8	%			07:54:32
2	Al 396.153Radial†	33369.4	33661.8	16725	µg/L	16725	ppb	07:54:32
2	Ca 317.933Radial†	579815.8	586626.7	226980	µg/L	226980	ppb	07:54:32
2	Fe 238.204 Radial†	2822.6	2842.6	18078	µg/L	18078	ppb	07:54:53
2	K 766.490 Radial†	2205.0	1550.0	793.27	µg/L	793.27	ppb	07:54:53
2	Mg 279.077 IEC†	1230.6	1230.5	7571.0	µg/L	7571.0	ppb	07:54:53
2	Na 589.592 Radial†	1007.6	1654.3	414.27	µg/L	414.27	ppb	07:54:53
2	Sr 421.552†	70112.3	71048.1	357.09	µg/L	357.09	ppb	07:54:32
2	Sc 361.383	1974432.6	1974432.6	97.637	%			07:56:03
2	Y 371.029	1222534.3	1222534.3	97.123	%			07:56:03
2	Ag 328.068†	-287.6	-305.0	-1.0995	µg/L	-1.0995	ppb	07:56:09
2	As 188.979†	34.0	32.6	24.252	µg/L	24.252	ppb	07:56:29
2	B 249.677†	751.7	632.0	21.714	µg/L	21.714	ppb	07:56:09
2	Ba 233.527†	6511.6	6747.3	173.14	µg/L	173.14	ppb	07:56:09
2	Be 313.107†	4892.7	1495.2	0.6389	µg/L	0.6389	ppb	07:56:09
2	Cd 226.502†	21.1	120.6	1.8108	µg/L	1.8108	ppb	07:56:29
2	Co 228.616†	62.9	131.1	4.6824	µg/L	4.6824	ppb	07:56:29
2	Cr 267.716†	802.9	922.2	19.427	µg/L	19.427	ppb	07:56:29
2	Cu 324.752†	11713.9	7727.7	57.486	µg/L	57.486	ppb	07:56:09
2	Mn 257.610†	92907.3	95357.4	306.75	µg/L	306.75	ppb	07:56:09
2	Mo 202.031†	80.2	85.9	10.740	µg/L	10.740	ppb	07:56:29
2	Ni 231.604†	375.6	109.1	5.9701	µg/L	5.9701	ppb	07:56:29
2	P 214.914†	369.3	177.4	334.50	µg/L	334.50	ppb	07:56:29
2	Pb 220.353†	315.8	267.2	70.248	µg/L	70.248	ppb	07:56:29

2	S 181.975 Axial†	832.0	830.0	4060.2 µg/L	4060.2 ppb	07:56:29
2	Sb 206.836†	61.4	41.8	22.460 µg/L	22.460 ppb	07:56:29
2	Se 196.026†	-41.0	-51.9	-25.098 µg/L	-25.098 ppb	07:56:29
2	SiO2†	329713.5	334942.9	61506 µg/L	61506 ppb	07:56:03
2	Si 251.611†	375509.3	384273.2	28412 µg/L	28412 ppb	07:56:03
2	Sn 189.927†	-157.1	-183.3	-40.248 µg/L	-40.248 ppb	07:56:29
2	Ti 334.940†	344269.3	351827.9	788.67 µg/L	788.67 ppb	07:56:03
2	Tl 190.801†	13.6	34.3	25.327 µg/L	25.327 ppb	07:56:29
2	U 409.014†	660.9	-53.6	-2.8540 µg/L	-2.8540 ppb	07:56:09
2	V 292.402†	3099.8	3301.5	38.675 µg/L	38.675 ppb	07:56:09
2	Zn 213.857†	13565.7	13367.4	352.06 µg/L	352.06 ppb	07:56:09
3	Sc RADIAL	116380.6	116380.6	99.8 %		07:54:58
3	Al 396.153Radial†	33216.3	33163.8	16477 µg/L	16477 ppb	07:54:58
3	Ca 317.933Radial†	578833.9	579654.7	224280 µg/L	224280 ppb	07:54:58
3	Fe 238.204 Radial†	2816.7	2807.6	17855 µg/L	17855 ppb	07:55:19
3	K 766.490 Radial†	2219.5	1541.7	789.05 µg/L	789.05 ppb	07:55:19
3	Mg 279.077 IEC†	1222.9	1210.1	7445.3 µg/L	7445.3 ppb	07:55:19
3	Na 589.592 Radial†	1011.9	1648.2	412.75 µg/L	412.75 ppb	07:55:19
3	Sr 421.552†	69865.5	70076.7	352.20 µg/L	352.20 ppb	07:54:58
3	Sc 361.383	1986880.3	1986880.3	98.252 %		07:56:36
3	Y 371.029	1231022.5	1231022.5	97.797 %		07:56:36
3	Ag 328.068†	-217.1	-231.4	-0.4426 µg/L	-0.4426 ppb	07:56:42
3	As 188.979†	37.8	36.2	31.252 µg/L	31.252 ppb	07:57:02
3	B 249.677†	699.2	573.8	19.262 µg/L	19.262 ppb	07:56:42
3	Ba 233.527†	6577.7	6772.7	173.79 µg/L	173.79 ppb	07:56:42
3	Be 313.107†	4797.6	1367.1	0.5589 µg/L	0.5589 ppb	07:56:42
3	Cd 226.502†	-1.2	97.8	1.2234 µg/L	1.2234 ppb	07:57:02
3	Co 228.616†	54.7	122.3	4.2649 µg/L	4.2649 ppb	07:57:02
3	Cr 267.716†	808.4	922.5	19.436 µg/L	19.436 ppb	07:57:02
3	Cu 324.752†	11741.7	7680.8	57.113 µg/L	57.113 ppb	07:56:42
3	Mn 257.610†	93216.2	95075.7	305.82 µg/L	305.82 ppb	07:56:42
3	Mo 202.031†	96.5	101.9	12.607 µg/L	12.607 ppb	07:57:02
3	Ni 231.604†	370.7	101.7	5.5652 µg/L	5.5652 ppb	07:57:02
3	P 214.914†	372.9	178.7	337.26 µg/L	337.26 ppb	07:57:02
3	Pb 220.353†	313.5	262.8	69.101 µg/L	69.101 ppb	07:57:02
3	S 181.975 Axial†	822.4	814.8	3985.9 µg/L	3985.9 ppb	07:57:02
3	Sb 206.836†	56.7	36.6	17.660 µg/L	17.660 ppb	07:57:02
3	Se 196.026†	-32.8	-43.3	-14.626 µg/L	-14.626 ppb	07:57:02
3	SiO2†	331497.3	334642.7	61451 µg/L	61451 ppb	07:56:36
3	Si 251.611†	378076.6	384476.8	28427 µg/L	28427 ppb	07:56:36
3	Sn 189.927†	-164.2	-189.5	-44.065 µg/L	-44.065 ppb	07:57:02
3	Ti 334.940†	346318.7	351704.7	788.54 µg/L	788.54 ppb	07:56:36
3	Tl 190.801†	23.6	44.4	41.269 µg/L	41.269 ppb	07:57:02
3	U 409.014†	692.5	-25.7	-0.3484 µg/L	-0.3484 ppb	07:56:42
3	V 292.402†	3167.0	3350.0	39.220 µg/L	39.220 ppb	07:56:42
3	Zn 213.857†	13618.9	13334.6	351.22 µg/L	351.22 ppb	07:56:42

Mean Data: 1201977917|930799|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1982545.0	98.038	%	0.3477				0.35%
Sc RADIAL	115921.7	99.4	%	0.55				0.55%
Y 371.029	1228981.7	97.635	%	0.4534				0.46%
Ag 328.068†	-266.5	-0.7588	µg/L	0.32915	-0.7588	ppb	0.32915	43.38%
Al 396.153Radial†	33417.9	16604	µg/L	123.8	16604	ppb	123.8	0.75%
As 188.979†	35.3	29.485	µg/L	4.6110	29.485	ppb	4.6110	15.64%
B 249.677†	608.5	20.738	µg/L	1.2998	20.738	ppb	1.2998	6.27%
Ba 233.527†	6746.4	173.11	µg/L	0.689	173.11	ppb	0.689	0.40%
Be 313.107†	1452.2	0.6117	µg/L	0.04573	0.6117	ppb	0.04573	7.48%
Ca 317.933Radial†	582505.3	225380	µg/L	1414.4	225380	ppb	1414.4	0.63%
Cd 226.502†	111.4	1.5772	µg/L	0.31162	1.5772	ppb	0.31162	19.76%
Co 228.616†	125.2	4.3978	µg/L	0.24668	4.3978	ppb	0.24668	5.61%
Cr 267.716†	920.9	19.401	µg/L	0.0523	19.401	ppb	0.0523	0.27%
Cu 324.752†	7717.3	57.384	µg/L	0.2379	57.384	ppb	0.2379	0.41%
Fe 238.204 Radial†	2821.0	17941	µg/L	119.9	17941	ppb	119.9	0.67%
K 766.490 Radial†	1559.3	798.01	µg/L	12.059	798.01	ppb	12.059	1.51%
Mg 279.077 IEC†	1218.6	7497.5	µg/L	65.52	7497.5	ppb	65.52	0.87%
Mn 257.610†	95152.6	306.08	µg/L	0.587	306.08	ppb	0.587	0.19%
Mo 202.031†	93.8	11.666	µg/L	0.9334	11.666	ppb	0.9334	8.00%
Na 589.592 Radial†	1656.3	414.77	µg/L	2.324	414.77	ppb	2.324	0.56%

Ni 231.604†	106.0	5.7971	µg/L	0.20878	5.7971	ppb	0.20878	3.60%
P 214.914†	177.4	334.74	µg/L	2.411	334.74	ppb	2.411	0.72%
Pb 220.353†	268.0	70.455	µg/L	1.4685	70.455	ppb	1.4685	2.08%
S 181.975 Axial†	821.6	4019.2	µg/L	37.72	4019.2	ppb	37.72	0.94%
Sb 206.836†	42.0	22.800	µg/L	5.3183	22.800	ppb	5.3183	23.33%
Se 196.026†	-49.3	-22.050	µg/L	6.4642	-22.050	ppb	6.4642	29.32%
SiO2†	335165.5	61547	µg/L	121.7	61547	ppb	121.7	0.20%
Si 251.611†	384740.9	28446	µg/L	47.4	28446	ppb	47.4	0.17%
Sn 189.927†	-185.9	-41.979	µg/L	1.9335	-41.979	ppb	1.9335	4.61%
Sr 421.552†	70523.3	354.45	µg/L	2.465	354.45	ppb	2.465	0.70%
Ti 334.940†	352216.1	789.65	µg/L	1.800	789.65	ppb	1.800	0.23%
Tl 190.801†	40.7	35.407	µg/L	8.7681	35.407	ppb	8.7681	24.76%
U 409.014†	-51.4	-2.6749	µg/L	2.24226	-2.6749	ppb	2.24226	83.83%
V 292.402†	3310.3	38.770	µg/L	0.4114	38.770	ppb	0.4114	1.06%
Zn 213.857†	13336.8	351.26	µg/L	0.771	351.26	ppb	0.771	0.22%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 08:04:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115401.2	115401.2	98.9	%			08:05:08
1	Al 396.153Radial†	10471.1	10459.2	5177.4	µg/L	5177.4	ppb	08:05:08
1	Ca 317.933Radial†	13799.6	13533.6	5236.4	µg/L	5236.4	ppb	08:05:28
1	Fe 238.204 Radial†	807.1	800.6	5107.7	µg/L	5107.7	ppb	08:05:28
1	K 766.490 Radial†	10514.4	9943.7	5089.1	µg/L	5089.1	ppb	08:05:08
1	Mg 279.077 IEC†	845.4	839.0	5185.0	µg/L	5185.0	ppb	08:05:28
1	Na 589.592 Radial†	40160.4	41221.6	10323	µg/L	10323	ppb	08:05:08
1	Sr 421.552†	98300.6	99408.5	499.62	µg/L	499.62	ppb	08:05:08
1	Sc 361.383	2016316.7	2016316.7	99.708	%			08:06:31
1	Y 371.029	1259420.4	1259420.4	100.05	%			08:06:31
1	Ag 328.068†	55557.7	55710.0	511.65	µg/L	511.65	ppb	08:06:37
1	As 188.979†	280.8	279.4	506.21	µg/L	506.21	ppb	08:06:57
1	B 249.677†	11487.0	11382.8	491.86	µg/L	491.86	ppb	08:06:37
1	Ba 233.527†	19175.7	19309.9	496.32	µg/L	496.32	ppb	08:06:37
1	Be 313.107†	797192.9	796012.5	497.92	µg/L	497.92	ppb	08:06:31
1	Cd 226.502†	18589.9	18743.3	499.36	µg/L	499.36	ppb	08:06:37
1	Co 228.616†	10216.2	10312.7	498.45	µg/L	498.45	ppb	08:06:37
1	Cr 267.716†	23361.2	23529.4	494.62	µg/L	494.62	ppb	08:06:37
1	Cu 324.752†	75319.3	71270.2	495.46	µg/L	495.46	ppb	08:06:37
1	Mn 257.610†	152705.7	153354.4	490.30	µg/L	490.30	ppb	08:06:37
1	Mo 202.031†	4330.0	4346.4	507.87	µg/L	507.87	ppb	08:06:57
1	Ni 231.604†	9357.6	9109.5	498.39	µg/L	498.39	ppb	08:06:37
1	P 214.914†	1421.2	1224.4	2419.7	µg/L	2419.7	ppb	08:06:57
1	Pb 220.353†	2001.6	1951.2	505.05	µg/L	505.05	ppb	08:06:57
1	S 181.975 Axial†	238.9	217.5	1063.2	µg/L	1063.2	ppb	08:06:57
1	Sb 206.836†	545.3	525.8	513.18	µg/L	513.18	ppb	08:06:57
1	Se 196.026†	410.1	401.5	515.21	µg/L	515.21	ppb	08:06:57
1	SiO2†	32841.6	30186.4	5543.2	µg/L	5543.2	ppb	08:06:37
1	Si 251.611†	35214.7	34992.6	2540.6	µg/L	2540.6	ppb	08:06:37
1	Sn 189.927†	1032.4	1013.1	521.54	µg/L	521.54	ppb	08:06:57
1	Ti 334.940†	224312.7	224195.4	510.40	µg/L	510.40	ppb	08:06:31
1	Tl 190.801†	305.8	327.0	504.59	µg/L	504.59	ppb	08:06:57
1	U 409.014†	6127.9	5415.4	490.18	µg/L	490.18	ppb	08:06:37
1	V 292.402†	43682.4	43937.1	498.99	µg/L	498.99	ppb	08:06:37
1	Zn 213.857†	19333.5	18863.5	495.98	µg/L	495.98	ppb	08:06:37
2	Sc RADIAL	116297.5	116297.5	99.7	%			08:05:34
2	Al 396.153Radial†	10375.1	10281.4	5089.2	µg/L	5089.2	ppb	08:05:34
2	Ca 317.933Radial†	13895.5	13522.3	5232.0	µg/L	5232.0	ppb	08:05:54
2	Fe 238.204 Radial†	809.5	796.6	5082.6	µg/L	5082.6	ppb	08:05:54
2	K 766.490 Radial†	10470.7	9818.1	5024.8	µg/L	5024.8	ppb	08:05:34
2	Mg 279.077 IEC†	842.8	829.8	5128.2	µg/L	5128.2	ppb	08:05:54
2	Na 589.592 Radial†	39951.1	40699.0	10192	µg/L	10192	ppb	08:05:34
2	Sr 421.552†	97993.8	98335.2	494.23	µg/L	494.23	ppb	08:05:34
2	Sc 361.383	2024666.6	2024666.6	100.12	%			08:07:04
2	Y 371.029	1263207.3	1263207.3	100.35	%			08:07:04
2	Ag 328.068†	55674.3	55596.7	510.61	µg/L	510.61	ppb	08:07:10
2	As 188.979†	278.5	275.9	499.89	µg/L	499.89	ppb	08:07:30
2	B 249.677†	11514.5	11362.8	491.01	µg/L	491.01	ppb	08:07:10
2	Ba 233.527†	19242.9	19297.7	496.00	µg/L	496.00	ppb	08:07:10
2	Be 313.107†	802510.6	798026.4	499.18	µg/L	499.18	ppb	08:07:04
2	Cd 226.502†	18587.5	18664.1	497.25	µg/L	497.25	ppb	08:07:10
2	Co 228.616†	10250.9	10305.2	498.07	µg/L	498.07	ppb	08:07:10
2	Cr 267.716†	23416.5	23488.0	493.75	µg/L	493.75	ppb	08:07:10
2	Cu 324.752†	75457.4	71096.6	494.25	µg/L	494.25	ppb	08:07:10
2	Mn 257.610†	153009.2	153026.0	489.25	µg/L	489.25	ppb	08:07:10
2	Mo 202.031†	4321.3	4319.7	504.76	µg/L	504.76	ppb	08:07:30
2	Ni 231.604†	9358.4	9071.6	496.32	µg/L	496.32	ppb	08:07:10
2	P 214.914†	1417.3	1214.7	2400.2	µg/L	2400.2	ppb	08:07:30
2	Pb 220.353†	1979.6	1920.9	497.21	µg/L	497.21	ppb	08:07:30

2	S 181.975 Axial†	238.3	215.8	1055.2 µg/L	1055.2 ppb	08:07:30
2	Sb 206.836†	535.6	513.8	501.45 µg/L	501.45 ppb	08:07:30
2	Se 196.026†	409.7	399.4	512.56 µg/L	512.56 ppb	08:07:30
2	SiO2†	32787.6	29996.7	5508.3 µg/L	5508.3 ppb	08:07:10
2	Si 251.611†	35155.3	34787.7	2525.6 µg/L	2525.6 ppb	08:07:10
2	Sn 189.927†	1030.1	1006.5	518.16 µg/L	518.16 ppb	08:07:30
2	Ti 334.940†	225319.1	224272.8	510.58 µg/L	510.58 ppb	08:07:04
2	Tl 190.801†	306.2	326.2	503.34 µg/L	503.34 ppb	08:07:30
2	U 409.014†	6119.3	5381.4	487.11 µg/L	487.11 ppb	08:07:10
2	V 292.402†	43821.8	43895.7	498.50 µg/L	498.50 ppb	08:07:10
2	Zn 213.857†	19430.1	18880.0	496.44 µg/L	496.44 ppb	08:07:10
3	Sc RADIAL	114799.5	114799.5	98.4 %		08:06:00
3	Al 396.153Radial†	10412.3	10454.9	5175.6 µg/L	5175.6 ppb	08:06:00
3	Ca 317.933Radial†	13500.5	13302.8	5147.1 µg/L	5147.1 ppb	08:06:20
3	Fe 238.204 Radial†	797.0	794.5	5069.1 µg/L	5069.1 ppb	08:06:20
3	K 766.490 Radial†	10534.5	10019.9	5128.1 µg/L	5128.1 ppb	08:06:00
3	Mg 279.077 IEC†	834.8	832.6	5145.7 µg/L	5145.7 ppb	08:06:20
3	Na 589.592 Radial†	39859.5	41128.7	10300 µg/L	10300 ppb	08:06:00
3	Sr 421.552†	97728.2	99347.6	499.32 µg/L	499.32 ppb	08:06:00
3	Sc 361.383	2020951.7	2020951.7	99.937 %		08:07:37
3	Y 371.029	1258212.6	1258212.6	99.957 %		08:07:37
3	Ag 328.068†	55437.6	55462.1	509.38 µg/L	509.38 ppb	08:07:43
3	As 188.979†	274.3	272.3	493.24 µg/L	493.24 ppb	08:08:03
3	B 249.677†	11539.3	11408.7	493.00 µg/L	493.00 ppb	08:07:43
3	Ba 233.527†	19174.6	19264.7	495.16 µg/L	495.16 ppb	08:07:43
3	Be 313.107†	801802.9	798791.7	499.66 µg/L	499.66 ppb	08:07:37
3	Cd 226.502†	18554.8	18665.4	497.28 µg/L	497.28 ppb	08:07:43
3	Co 228.616†	10229.2	10302.3	497.93 µg/L	497.93 ppb	08:07:43
3	Cr 267.716†	23383.7	23498.3	493.96 µg/L	493.96 ppb	08:07:43
3	Cu 324.752†	75189.0	70966.6	493.34 µg/L	493.34 ppb	08:07:43
3	Mn 257.610†	152741.1	153038.5	489.29 µg/L	489.29 ppb	08:07:43
3	Mo 202.031†	4279.0	4285.4	500.75 µg/L	500.75 ppb	08:08:03
3	Ni 231.604†	9337.1	9067.4	496.09 µg/L	496.09 ppb	08:07:43
3	P 214.914†	1416.6	1216.6	2404.0 µg/L	2404.0 ppb	08:08:03
3	Pb 220.353†	1980.6	1925.6	498.41 µg/L	498.41 ppb	08:08:03
3	S 181.975 Axial†	240.9	218.9	1070.1 µg/L	1070.1 ppb	08:08:03
3	Sb 206.836†	536.4	515.6	503.24 µg/L	503.24 ppb	08:08:03
3	Se 196.026†	415.3	405.7	520.55 µg/L	520.55 ppb	08:08:03
3	SiO2†	32701.3	29970.5	5503.5 µg/L	5503.5 ppb	08:07:43
3	Si 251.611†	35249.0	34946.0	2537.5 µg/L	2537.5 ppb	08:07:43
3	Sn 189.927†	1017.9	996.2	512.86 µg/L	512.86 ppb	08:08:03
3	Ti 334.940†	225035.5	224402.8	510.88 µg/L	510.88 ppb	08:07:37
3	Tl 190.801†	313.3	333.8	515.05 µg/L	515.05 ppb	08:08:03
3	U 409.014†	6015.6	5288.9	478.72 µg/L	478.72 ppb	08:07:43
3	V 292.402†	43693.7	43847.9	497.92 µg/L	497.92 ppb	08:07:43
3	Zn 213.857†	19367.2	18852.8	495.72 µg/L	495.72 ppb	08:07:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020645.0	99.922	%	0.2069				0.21%
Sc RADIAL	115499.4	99.0	%	0.65				0.65%
Y 371.029	1260280.1	100.12	%	0.207				0.21%
Ag 328.068†	55589.6	510.55	µg/L	1.137	510.55	ppb	1.137	0.22%
QC value within limits for Ag 328.068 Recovery = 102.11%								
Al 396.153Radial†	10398.5	5147.4	µg/L	50.43	5147.4	ppb	50.43	0.98%
QC value within limits for Al 396.153Radial Recovery = 102.95%								
As 188.979†	275.9	499.78	µg/L	6.484	499.78	ppb	6.484	1.30%
QC value within limits for As 188.979 Recovery = 99.96%								
B 249.677†	11384.8	491.96	µg/L	1.001	491.96	ppb	1.001	0.20%
QC value within limits for B 249.677 Recovery = 98.39%								
Ba 233.527†	19290.8	495.82	µg/L	0.601	495.82	ppb	0.601	0.12%
QC value within limits for Ba 233.527 Recovery = 99.16%								
Be 313.107†	797610.2	498.92	µg/L	0.898	498.92	ppb	0.898	0.18%
QC value within limits for Be 313.107 Recovery = 99.78%								
Ca 317.933Radial†	13452.9	5205.2	µg/L	50.33	5205.2	ppb	50.33	0.97%
QC value within limits for Ca 317.933Radial Recovery = 104.10%								
Cd 226.502†	18690.9	497.96	µg/L	1.211	497.96	ppb	1.211	0.24%
QC value within limits for Cd 226.502 Recovery = 99.59%								
Co 228.616†	10306.7	498.15	µg/L	0.268	498.15	ppb	0.268	0.05%

```
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            23505.2      494.11 µg/L        0.453      494.11 ppb          0.453   0.09%
   QC value within limits for Cr 267.716  Recovery = 98.82%
Cu 324.752†            71111.1      494.35 µg/L        1.061      494.35 ppb          1.061   0.21%
   QC value within limits for Cu 324.752  Recovery = 98.87%
Fe 238.204 Radial†       797.2      5086.4 µg/L        19.60      5086.4 ppb          19.60   0.39%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.73%
K 766.490 Radial†       9927.2      5080.6 µg/L        52.16      5080.6 ppb          52.16   1.03%
   QC value within limits for K 766.490 Radial  Recovery = 101.61%
Mg 279.077 IEC†          833.8      5153.0 µg/L        29.08      5153.0 ppb          29.08   0.56%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.06%
Mn 257.610†           153139.6      489.61 µg/L        0.596      489.61 ppb          0.596   0.12%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†             4317.2      504.46 µg/L        3.570      504.46 ppb          3.570   0.71%
   QC value within limits for Mo 202.031  Recovery = 100.89%
Na 589.592 Radial†     41016.4       10272 µg/L         69.8       10272 ppb           69.8   0.68%
   QC value within limits for Na 589.592 Radial  Recovery = 102.72%
Ni 231.604†             9082.8      496.93 µg/L        1.268      496.93 ppb          1.268   0.26%
   QC value within limits for Ni 231.604  Recovery = 99.39%
P 214.914†              1218.6      2408.0 µg/L        10.36      2408.0 ppb          10.36   0.43%
   QC value within limits for P 214.914  Recovery = 96.32%
Pb 220.353†             1932.6      500.22 µg/L        4.221      500.22 ppb          4.221   0.84%
   QC value within limits for Pb 220.353  Recovery = 100.04%
S 181.975 Axial†         217.4      1062.8 µg/L         7.47      1062.8 ppb           7.47   0.70%
   QC value within limits for S 181.975 Axial  Recovery = 106.28%
Sb 206.836†              518.4      505.95 µg/L        6.316      505.95 ppb          6.316   1.25%
   QC value within limits for Sb 206.836  Recovery = 101.19%
Se 196.026†              402.2      516.11 µg/L        4.071      516.11 ppb          4.071   0.79%
   QC value within limits for Se 196.026  Recovery = 103.22%
SiO2†                  30051.2      5518.3 µg/L        21.64      5518.3 ppb          21.64   0.39%
   QC value within limits for SiO2  Recovery = 103.19%
Si 251.611†            34908.8      2534.6 µg/L         7.91      2534.6 ppb           7.91   0.31%
   QC value within limits for Si 251.611  Recovery = 101.38%
Sn 189.927†             1005.2      517.52 µg/L        4.375      517.52 ppb          4.375   0.85%
   QC value within limits for Sn 189.927  Recovery = 103.50%
Sr 421.552†            99030.4      497.72 µg/L        3.030      497.72 ppb          3.030   0.61%
   QC value within limits for Sr 421.552  Recovery = 99.54%
Ti 334.940†           224290.3      510.62 µg/L        0.241      510.62 ppb          0.241   0.05%
   QC value within limits for Ti 334.940  Recovery = 102.12%
Tl 190.801†              329.0      507.66 µg/L        6.431      507.66 ppb          6.431   1.27%
   QC value within limits for Tl 190.801  Recovery = 101.53%
U 409.014†              5361.9      485.34 µg/L        5.931      485.34 ppb          5.931   1.22%
   QC value within limits for U 409.014  Recovery = 97.07%
V 292.402†             43893.6      498.47 µg/L        0.538      498.47 ppb          0.538   0.11%
   QC value within limits for V 292.402  Recovery = 99.69%
Zn 213.857†            18865.4      496.05 µg/L        0.363      496.05 ppb          0.363   0.07%
   QC value within limits for Zn 213.857  Recovery = 99.21%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 08:08:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114023.9	114023.9	97.8	%			08:08:45
1	Al 396.153Radial†	179.0	59.8	29.678	µg/L	29.678	ppb	08:08:45
1	Ca 317.933Radial†	565.2	165.4	63.981	µg/L	63.981	ppb	08:09:06
1	Fe 238.204 Radial†	21.1	6.4	40.927	µg/L	40.927	ppb	08:09:06
1	K 766.490 Radial†	752.6	87.3	44.669	µg/L	44.669	ppb	08:08:45
1	Mg 279.077 IEC†	16.8	1.7	10.474	µg/L	10.474	ppb	08:09:06
1	Na 589.592 Radial†	-492.9	130.0	32.543	µg/L	32.543	ppb	08:08:45
1	Sr 421.552†	3.3	65.7	0.3302	µg/L	0.3302	ppb	08:08:45
1	Sc 361.383	2014246.2	2014246.2	99.606	%			08:10:08
1	Y 371.029	1257444.9	1257444.9	99.896	%			08:10:08
1	Ag 328.068†	162.9	153.1	1.3991	µg/L	1.3991	ppb	08:10:13
1	As 188.979†	2.3	0.1	0.2255	µg/L	0.2255	ppb	08:10:34
1	B 249.677†	191.1	54.0	2.3300	µg/L	2.3300	ppb	08:10:34
1	Ba 233.527†	-60.2	17.6	0.4520	µg/L	0.4520	ppb	08:10:34
1	Be 313.107†	3602.1	100.5	0.0623	µg/L	0.0623	ppb	08:10:13
1	Cd 226.502†	-98.4	0.2	0.0034	µg/L	0.0034	ppb	08:10:34
1	Co 228.616†	-69.4	-3.0	-0.1450	µg/L	-0.1450	ppb	08:10:34
1	Cr 267.716†	-110.1	-10.8	-0.2262	µg/L	-0.2262	ppb	08:10:13
1	Cu 324.752†	4181.6	-71.6	-0.4882	µg/L	-0.4882	ppb	08:10:13
1	Mn 257.610†	-1.4	199.9	0.6436	µg/L	0.6436	ppb	08:10:34
1	Mo 202.031†	5.5	9.2	1.0762	µg/L	1.0762	ppb	08:10:34
1	Ni 231.604†	302.6	28.3	1.5457	µg/L	1.5457	ppb	08:10:34
1	P 214.914†	189.6	-10.5	-21.295	µg/L	-21.295	ppb	08:10:34
1	Pb 220.353†	48.5	-7.6	-1.9486	µg/L	-1.9486	ppb	08:10:34
1	S 181.975 Axial†	32.1	10.1	49.496	µg/L	49.496	ppb	08:10:34
1	Sb 206.836†	19.5	-1.6	-1.5188	µg/L	-1.5188	ppb	08:10:34
1	Se 196.026†	7.7	-2.1	-2.6718	µg/L	-2.6718	ppb	08:10:34
1	SiO2†	3177.8	439.0	80.623	µg/L	80.623	ppb	08:10:13
1	Si 251.611†	938.3	616.8	45.611	µg/L	45.611	ppb	08:10:34
1	Sn 189.927†	19.3	-3.1	-1.5521	µg/L	-1.5521	ppb	08:10:34
1	Ti 334.940†	1475.3	706.8	1.6063	µg/L	1.6063	ppb	08:10:13
1	Tl 190.801†	-17.5	2.8	4.2649	µg/L	4.2649	ppb	08:10:34
1	U 409.014†	735.8	8.3	0.7457	µg/L	0.7457	ppb	08:10:13
1	V 292.402†	-125.7	0.5	0.0179	µg/L	0.0179	ppb	08:10:13
1	Zn 213.857†	587.9	63.6	1.6745	µg/L	1.6745	ppb	08:10:34
2	Sc RADIAL	114135.7	114135.7	97.9	%			08:09:11
2	Al 396.153Radial†	180.7	61.3	30.436	µg/L	30.436	ppb	08:09:11
2	Ca 317.933Radial†	678.8	280.8	108.66	µg/L	108.66	ppb	08:09:31
2	Fe 238.204 Radial†	21.9	7.2	46.042	µg/L	46.042	ppb	08:09:31
2	K 766.490 Radial†	742.9	76.7	39.234	µg/L	39.234	ppb	08:09:11
2	Mg 279.077 IEC†	13.5	-1.7	-10.340	µg/L	-10.340	ppb	08:09:31
2	Na 589.592 Radial†	-493.5	129.8	32.502	µg/L	32.502	ppb	08:09:11
2	Sr 421.552†	-36.6	24.9	0.1253	µg/L	0.1253	ppb	08:09:11
2	Sc 361.383	2008809.2	2008809.2	99.337	%			08:10:40
2	Y 371.029	1254538.4	1254538.4	99.666	%			08:10:40
2	Ag 328.068†	122.9	113.3	1.0350	µg/L	1.0350	ppb	08:10:45
2	As 188.979†	0.4	-1.8	-3.3755	µg/L	-3.3755	ppb	08:11:06
2	B 249.677†	184.0	47.4	2.0391	µg/L	2.0391	ppb	08:11:06
2	Ba 233.527†	-61.7	16.0	0.4096	µg/L	0.4096	ppb	08:11:06
2	Be 313.107†	3528.1	35.8	0.0220	µg/L	0.0220	ppb	08:10:45
2	Cd 226.502†	-99.6	-1.3	-0.0447	µg/L	-0.0447	ppb	08:11:06
2	Co 228.616†	-61.3	5.0	0.2411	µg/L	0.2411	ppb	08:11:06
2	Cr 267.716†	-115.3	-16.2	-0.3412	µg/L	-0.3412	ppb	08:10:45
2	Cu 324.752†	4093.3	-149.1	-1.0245	µg/L	-1.0245	ppb	08:10:45
2	Mn 257.610†	-58.5	142.5	0.4606	µg/L	0.4606	ppb	08:11:06
2	Mo 202.031†	6.6	10.3	1.2075	µg/L	1.2075	ppb	08:11:06
2	Ni 231.604†	301.7	28.1	1.5379	µg/L	1.5379	ppb	08:11:06
2	P 214.914†	188.0	-11.7	-23.618	µg/L	-23.618	ppb	08:11:06
2	Pb 220.353†	45.3	-10.6	-2.7317	µg/L	-2.7317	ppb	08:11:06

2	S 181.975 Axial†	30.4	8.4	41.150 µg/L	41.150 ppb	08:11:06
2	Sb 206.836†	20.5	-0.4	-0.4397 µg/L	-0.4397 ppb	08:11:06
2	Se 196.026†	14.0	4.2	5.4601 µg/L	5.4601 ppb	08:11:06
2	SiO2†	3223.4	493.5	90.629 µg/L	90.629 ppb	08:10:45
2	Si 251.611†	1095.4	777.5	57.577 µg/L	57.577 ppb	08:11:06
2	Sn 189.927†	16.4	-5.9	-3.0034 µg/L	-3.0034 ppb	08:11:06
2	Ti 334.940†	1311.3	545.6	1.2368 µg/L	1.2368 ppb	08:10:45
2	Tl 190.801†	-21.5	-1.3	-2.0056 µg/L	-2.0056 ppb	08:11:06
2	U 409.014†	602.2	-124.3	-11.273 µg/L	-11.273 ppb	08:10:45
2	V 292.402†	-142.0	-16.2	-0.1888 µg/L	-0.1888 ppb	08:10:45
2	Zn 213.857†	572.2	49.3	1.2965 µg/L	1.2965 ppb	08:11:06
3	Sc RADIAL	113888.1	113888.1	97.7 %		08:09:37
3	Al 396.153Radial†	142.6	22.7	11.290 µg/L	11.290 ppb	08:09:37
3	Ca 317.933Radial†	675.5	279.0	107.95 µg/L	107.95 ppb	08:09:57
3	Fe 238.204 Radial†	19.9	5.2	33.335 µg/L	33.335 ppb	08:09:57
3	K 766.490 Radial†	779.0	115.2	58.969 µg/L	58.969 ppb	08:09:37
3	Mg 279.077 IEC†	11.2	-4.0	-24.655 µg/L	-24.655 ppb	08:09:57
3	Na 589.592 Radial†	-516.9	104.7	26.226 µg/L	26.226 ppb	08:09:37
3	Sr 421.552†	-66.5	-5.8	-0.0290 µg/L	-0.0290 ppb	08:09:37
3	Sc 361.383	2030726.8	2030726.8	100.42 %		08:11:12
3	Y 371.029	1267162.5	1267162.5	100.67 %		08:11:12
3	Ag 328.068†	98.3	87.5	0.8017 µg/L	0.8017 ppb	08:11:18
3	As 188.979†	3.7	1.4	2.5864 µg/L	2.5864 ppb	08:11:38
3	B 249.677†	183.4	44.8	1.9325 µg/L	1.9325 ppb	08:11:38
3	Ba 233.527†	-54.8	23.5	0.6024 µg/L	0.6024 ppb	08:11:38
3	Be 313.107†	3533.2	2.6	0.0011 µg/L	0.0011 ppb	08:11:18
3	Cd 226.502†	-85.7	13.6	0.3623 µg/L	0.3623 ppb	08:11:38
3	Co 228.616†	-70.9	-4.0	-0.1936 µg/L	-0.1936 ppb	08:11:38
3	Cr 267.716†	-124.0	-23.7	-0.4963 µg/L	-0.4963 ppb	08:11:18
3	Cu 324.752†	4161.9	-125.2	-0.8616 µg/L	-0.8616 ppb	08:11:18
3	Mn 257.610†	44.9	246.1	0.7898 µg/L	0.7898 ppb	08:11:38
3	Mo 202.031†	-0.7	3.0	0.3465 µg/L	0.3465 ppb	08:11:38
3	Ni 231.604†	305.1	28.3	1.5475 µg/L	1.5475 ppb	08:11:38
3	P 214.914†	190.8	-10.9	-21.884 µg/L	-21.884 ppb	08:11:38
3	Pb 220.353†	41.4	-15.1	-3.8944 µg/L	-3.8944 ppb	08:11:38
3	S 181.975 Axial†	33.1	10.8	52.741 µg/L	52.741 ppb	08:11:38
3	Sb 206.836†	18.3	-2.9	-2.8644 µg/L	-2.8644 ppb	08:11:38
3	Se 196.026†	10.2	0.3	0.4111 µg/L	0.4111 ppb	08:11:38
3	SiO2†	3815.0	1047.7	192.39 µg/L	192.39 ppb	08:11:18
3	Si 251.611†	4722.1	4377.1	323.82 µg/L	323.82 ppb	08:11:38
Saturated within auto integration window (code 4)						
3	Sn 189.927†	23.9	1.4	0.7418 µg/L	0.7418 ppb	08:11:38
3	Ti 334.940†	1346.0	565.9	1.2831 µg/L	1.2831 ppb	08:11:18
3	Tl 190.801†	-17.4	3.0	4.6315 µg/L	4.6315 ppb	08:11:38
3	U 409.014†	736.7	3.2	0.2857 µg/L	0.2857 ppb	08:11:18
3	V 292.402†	-111.4	15.8	0.1833 µg/L	0.1833 ppb	08:11:18
3	Zn 213.857†	585.2	56.1	1.4780 µg/L	1.4780 ppb	08:11:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017927.4	99.788	%	0.5644				0.57%
Sc RADIAL	114015.9	97.8	%	0.11				0.11%
Y 371.029	1259715.3	100.08	%	0.525				0.52%
Ag 328.068†	118.0	1.0786	µg/L	0.30110	1.0786	ppb	0.30110	27.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	48.0	23.801	µg/L	10.8420	23.801	ppb	10.8420	45.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.1879	µg/L	3.00240	-0.1879	ppb	3.00240	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	48.7	2.1005	µg/L	0.20575	2.1005	ppb	0.20575	9.79%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.0	0.4880	µg/L	0.10131	0.4880	ppb	0.10131	20.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	46.3	0.0285	µg/L	0.03111	0.0285	ppb	0.03111	109.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	241.7	93.532	µg/L	25.5948	93.532	ppb	25.5948	27.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.2	0.1070	µg/L	0.22244	0.1070	ppb	0.22244	207.89%
QC value within limits for Cd 226.502 Recovery = Not calculated								

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Co 228.616†                -0.7     -0.0325 µg/L       0.23819     -0.0325 ppb        0.23819 733.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -16.9     -0.3545 µg/L       0.13554     -0.3545 ppb        0.13554  38.23%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -115.3     -0.7914 µg/L       0.27494     -0.7914 ppb        0.27494  34.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          6.3      40.101 µg/L        6.3936      40.101 ppb         6.3936  15.94%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.1      47.624 µg/L       10.1940      47.624 ppb        10.1940  21.41%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.3      -8.1739 µg/L      17.66460     -8.1739 ppb       17.66460 216.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               196.2       0.6313 µg/L       0.16494      0.6313 ppb        0.16494  26.13%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.5       0.8767 µg/L       0.46388      0.8767 ppb        0.46388  52.91%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        121.5      30.424 µg/L        3.6355      30.424 ppb         3.6355  11.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                28.2       1.5437 µg/L       0.00513      1.5437 ppb        0.00513   0.33%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -11.0     -22.266 µg/L        1.2074     -22.266 ppb         1.2074   5.42%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.1      -2.8582 µg/L       0.97906      -2.8582 ppb        0.97906  34.25%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            9.8      47.796 µg/L        5.9794      47.796 ppb         5.9794  12.51%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -1.6      -1.6076 µg/L       1.21479      -1.6076 ppb        1.21479  75.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.8       1.0665 µg/L       4.10537       1.0665 ppb        4.10537 384.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     660.1     121.21 µg/L         61.840     121.21 ppb         61.840  51.02%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              1923.8     142.34 µg/L        157.283     142.34 ppb        157.283 110.50%
   Saturated within auto integration window (code 4)
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.5      -1.2712 µg/L       1.88836      -1.2712 ppb        1.88836 148.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                28.3       0.1422 µg/L       0.18016       0.1422 ppb        0.18016 126.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               606.1       1.3754 µg/L       0.20131       1.3754 ppb        0.20131  14.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.5       2.2969 µg/L       3.73058       2.2969 ppb        3.73058 162.42%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -37.6      -3.4138 µg/L       6.80994      -3.4138 ppb        6.80994 199.48%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  0.0       0.0041 µg/L       0.18641       0.0041 ppb        0.18641 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                56.4       1.4830 µg/L       0.18907       1.4830 ppb        0.18907  12.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 14
Sample ID: 241336001|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 312
Date Collected: 12/10/2009 08:19:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241336001|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115137.1	115137.1	98.7	%			08:19:42
1	Al 396.153Radial†	30341.6	30611.4	15209	µg/L	15209	ppb	08:19:42
1	Ca 317.933Radial†	9586.9	9298.3	3597.7	µg/L	3597.7	ppb	08:20:02
1	Fe 238.204 Radial†	11029.4	11157.1	70954	µg/L	70954	ppb	08:20:02
1	K 766.490 Radial†	5994.6	5389.8	2758.4	µg/L	2758.4	ppb	08:19:42
1	Mg 279.077 IEC†	427.0	417.1	2470.6	µg/L	2470.6	ppb	08:20:02
1	Na 589.592 Radial†	4590.6	5284.2	1323.3	µg/L	1323.3	ppb	08:19:42
1	Sr 421.552†	6624.5	6772.6	34.039	µg/L	34.039	ppb	08:19:42
1	Sc 361.383	2027466.8	2027466.8	100.26	%			08:21:07
1	Y 371.029	1366529.1	1366529.1	108.56	%			08:21:07
1	Ag 328.068†	-475.5	-484.7	1.3634	µg/L	1.3634	ppb	08:21:12
1	As 188.979†	6.8	4.6	7.3485	µg/L	7.3485	ppb	08:21:33
1	B 249.677†	1033.0	892.5	16.378	µg/L	16.378	ppb	08:21:12
1	Ba 233.527†	6624.1	6685.0	171.52	µg/L	171.52	ppb	08:21:12
1	Be 313.107†	14225.9	10673.2	5.3235	µg/L	5.3235	ppb	08:21:12
1	Cd 226.502†	171.7	270.3	1.6781	µg/L	1.6781	ppb	08:21:12
1	Co 228.616†	210.8	277.0	5.7640	µg/L	5.7640	ppb	08:21:33
1	Cr 267.716†	4117.2	4206.3	88.278	µg/L	88.278	ppb	08:21:12
1	Cu 324.752†	4751.8	469.7	18.499	µg/L	18.499	ppb	08:21:12
1	Mn 257.610†	986314.7	983965.4	3150.7	µg/L	3150.7	ppb	08:21:07
1	Mo 202.031†	98.5	101.9	14.688	µg/L	14.688	ppb	08:21:33
1	Ni 231.604†	1095.9	817.5	44.726	µg/L	44.726	ppb	08:21:33
1	P 214.914†	510.1	307.9	543.34	µg/L	543.34	ppb	08:21:33
1	Pb 220.353†	185.1	128.3	33.709	µg/L	33.709	ppb	08:21:33
1	S 181.975 Axial†	41.0	18.7	80.655	µg/L	80.655	ppb	08:21:33
1	Sb 206.836†	12.2	-9.0	4.0909	µg/L	4.0909	ppb	08:21:33
1	Se 196.026†	-20.1	-29.9	10.901	µg/L	10.901	ppb	08:21:33
1	SiO2†	82027.7	79064.2	14519	µg/L	14519	ppb	08:21:12
1	Si 251.611†	91803.1	91240.5	6619.1	µg/L	6619.1	ppb	08:21:12
1	Sn 189.927†	6.6	-15.9	1.4974	µg/L	1.4974	ppb	08:21:33
1	Ti 334.940†	1611879.0	1606936.1	3660.3	µg/L	3660.3	ppb	08:21:07
1	Tl 190.801†	-44.4	-23.9	1.8446	µg/L	1.8446	ppb	08:21:33
1	U 409.014†	-287.8	-1017.5	-105.42	µg/L	-105.42	ppb	08:21:07
1	V 292.402†	2264.7	2385.6	32.558	µg/L	32.558	ppb	08:21:12
1	Zn 213.857†	15640.8	15073.7	391.66	µg/L	391.66	ppb	08:21:12
2	Sc RADIAL	116964.3	116964.3	100	%			08:20:08
2	Al 396.153Radial†	30505.9	30295.1	15052	µg/L	15052	ppb	08:20:08
2	Ca 317.933Radial†	9664.2	9223.7	3568.8	µg/L	3568.8	ppb	08:20:28
2	Fe 238.204 Radial†	11056.6	11009.7	70017	µg/L	70017	ppb	08:20:28
2	K 766.490 Radial†	5982.7	5283.0	2703.8	µg/L	2703.8	ppb	08:20:08
2	Mg 279.077 IEC†	425.1	408.4	2418.8	µg/L	2418.8	ppb	08:20:28
2	Na 589.592 Radial†	4641.8	5262.6	1317.9	µg/L	1317.9	ppb	08:20:08
2	Sr 421.552†	6723.1	6766.1	34.006	µg/L	34.006	ppb	08:20:08
2	Sc 361.383	2035271.4	2035271.4	100.65	%			08:21:40
2	Y 371.029	1372700.4	1372700.4	109.05	%			08:21:40
2	Ag 328.068†	-524.7	-531.8	0.8603	µg/L	0.8603	ppb	08:21:46
2	As 188.979†	10.0	7.8	13.328	µg/L	13.328	ppb	08:22:07
2	B 249.677†	1033.8	889.3	16.535	µg/L	16.535	ppb	08:21:46
2	Ba 233.527†	6616.9	6652.5	170.69	µg/L	170.69	ppb	08:21:46
2	Be 313.107†	14143.3	10536.8	5.2299	µg/L	5.2299	ppb	08:21:46
2	Cd 226.502†	153.1	251.1	1.2425	µg/L	1.2425	ppb	08:21:46
2	Co 228.616†	212.8	278.1	5.7757	µg/L	5.7757	ppb	08:22:07
2	Cr 267.716†	4133.7	4207.0	88.292	µg/L	88.292	ppb	08:21:46
2	Cu 324.752†	4879.5	578.5	19.052	µg/L	19.052	ppb	08:21:46
2	Mn 257.610†	996255.4	990069.9	3170.1	µg/L	3170.1	ppb	08:21:40
2	Mo 202.031†	107.2	110.2	15.627	µg/L	15.627	ppb	08:22:07
2	Ni 231.604†	1098.8	816.2	44.658	µg/L	44.658	ppb	08:22:07
2	P 214.914†	503.4	299.2	526.75	µg/L	526.75	ppb	08:22:07
2	Pb 220.353†	186.0	128.5	33.758	µg/L	33.758	ppb	08:22:07

2	S 181.975 Axial†	40.4	18.0	77.521	µg/L	77.521 ppb	08:22:07
2	Sb 206.836†	19.9	-1.3	11.689	µg/L	11.689 ppb	08:22:07
2	Se 196.026†	-20.6	-30.3	9.7924	µg/L	9.7924 ppb	08:22:07
2	SiO2†	82097.7	78820.0	14474	µg/L	14474 ppb	08:21:46
2	Si 251.611†	91947.4	91032.8	6603.1	µg/L	6603.1 ppb	08:21:46
2	Sn 189.927†	-3.1	-25.5	-3.5744	µg/L	-3.5744 ppb	08:22:07
2	Ti 334.940†	1628024.1	1616812.7	3682.8	µg/L	3682.8 ppb	08:21:40
2	Tl 190.801†	-43.8	-23.2	3.2206	µg/L	3.2206 ppb	08:22:07
2	U 409.014†	-244.9	-973.8	-101.28	µg/L	-101.28 ppb	08:21:40
2	V 292.402†	2270.6	2382.8	32.463	µg/L	32.463 ppb	08:21:46
2	Zn 213.857†	15627.1	15000.3	389.82	µg/L	389.82 ppb	08:21:46
3	Sc RADIAL	115446.8	115446.8	99.0	%		08:20:34
3	Al 396.153Radial†	30665.5	30856.1	15331	µg/L	15331 ppb	08:20:34
3	Ca 317.933Radial†	9570.6	9255.8	3581.3	µg/L	3581.3 ppb	08:20:54
3	Fe 238.204 Radial†	11067.7	11165.9	71010	µg/L	71010 ppb	08:20:54
3	K 766.490 Radial†	5996.3	5375.2	2751.0	µg/L	2751.0 ppb	08:20:34
3	Mg 279.077 IEC†	420.3	409.2	2421.7	µg/L	2421.7 ppb	08:20:54
3	Na 589.592 Radial†	4627.0	5308.5	1329.4	µg/L	1329.4 ppb	08:20:34
3	Sr 421.552†	6679.0	6809.7	34.225	µg/L	34.225 ppb	08:20:34
3	Sc 361.383	2038214.0	2038214.0	100.79	%		08:22:14
3	Y 371.029	1374580.3	1374580.3	109.20	%		08:22:14
3	Ag 328.068†	-527.8	-534.1	0.9140	µg/L	0.9140 ppb	08:22:20
3	As 188.979†	8.4	6.1	10.157	µg/L	10.157 ppb	08:22:40
3	B 249.677†	1057.0	910.9	17.158	µg/L	17.158 ppb	08:22:20
3	Ba 233.527†	6681.3	6706.9	172.08	µg/L	172.08 ppb	08:22:20
3	Be 313.107†	14255.4	10627.7	5.2876	µg/L	5.2876 ppb	08:22:20
3	Cd 226.502†	142.9	240.8	0.8912	µg/L	0.8912 ppb	08:22:20
3	Co 228.616†	204.2	269.2	5.3485	µg/L	5.3485 ppb	08:22:40
3	Cr 267.716†	4219.9	4286.6	89.960	µg/L	89.960 ppb	08:22:20
3	Cu 324.752†	4784.2	476.9	18.561	µg/L	18.561 ppb	08:22:20
3	Mn 257.610†	997604.9	989979.8	3169.9	µg/L	3169.9 ppb	08:22:14
3	Mo 202.031†	100.8	103.7	14.898	µg/L	14.898 ppb	08:22:40
3	Ni 231.604†	1094.9	810.7	44.358	µg/L	44.358 ppb	08:22:40
3	P 214.914†	505.7	300.8	529.00	µg/L	529.00 ppb	08:22:40
3	Pb 220.353†	180.4	122.7	32.261	µg/L	32.261 ppb	08:22:40
3	S 181.975 Axial†	36.6	14.2	58.627	µg/L	58.627 ppb	08:22:40
3	Sb 206.836†	15.5	-5.8	7.3006	µg/L	7.3006 ppb	08:22:40
3	Se 196.026†	-21.9	-31.6	8.8221	µg/L	8.8221 ppb	08:22:40
3	SiO2†	82846.1	79444.8	14589	µg/L	14589 ppb	08:22:20
3	Si 251.611†	92786.2	91733.1	6655.0	µg/L	6655.0 ppb	08:22:20
3	Sn 189.927†	-1.1	-23.5	-2.4191	µg/L	-2.4191 ppb	08:22:40
3	Ti 334.940†	1629327.4	1615770.5	3680.4	µg/L	3680.4 ppb	08:22:14
3	Tl 190.801†	-45.0	-24.3	1.4166	µg/L	1.4166 ppb	08:22:40
3	U 409.014†	-251.0	-979.5	-101.98	µg/L	-101.98 ppb	08:22:14
3	V 292.402†	2230.2	2339.4	32.049	µg/L	32.049 ppb	08:22:20
3	Zn 213.857†	15758.8	15108.5	392.58	µg/L	392.58 ppb	08:22:20

Mean Data: 241336001|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2033650.7	100.57	%	0.275				0.27%
Sc RADIAL	115849.4	99.3	%	0.84				0.84%
Y 371.029	1371270.0	108.94	%	0.335				0.31%
Ag 328.068†	-516.9	1.0459	µg/L	0.27628	1.0459	ppb	0.27628	26.42%
Al 396.153Radial†	30587.5	15197	µg/L	139.8	15197	ppb	139.8	0.92%
As 188.979†	6.1	10.278	µg/L	2.9914	10.278	ppb	2.9914	29.11%
B 249.677†	897.5	16.690	µg/L	0.4124	16.690	ppb	0.4124	2.47%
Ba 233.527†	6681.5	171.43	µg/L	0.701	171.43	ppb	0.701	0.41%
Be 313.107†	10612.6	5.2803	µg/L	0.04726	5.2803	ppb	0.04726	0.90%
Ca 317.933Radial†	9259.3	3582.6	µg/L	14.47	3582.6	ppb	14.47	0.40%
Cd 226.502†	254.0	1.2706	µg/L	0.39422	1.2706	ppb	0.39422	31.03%
Co 228.616†	274.8	5.6294	µg/L	0.24331	5.6294	ppb	0.24331	4.32%
Cr 267.716†	4233.3	88.843	µg/L	0.9670	88.843	ppb	0.9670	1.09%
Cu 324.752†	508.4	18.704	µg/L	0.3029	18.704	ppb	0.3029	1.62%
Fe 238.204 Radial†	11110.9	70660	µg/L	558.0	70660	ppb	558.0	0.79%
K 766.490 Radial†	5349.4	2737.7	µg/L	29.64	2737.7	ppb	29.64	1.08%
Mg 279.077 IEC†	411.6	2437.0	µg/L	29.08	2437.0	ppb	29.08	1.19%
Mn 257.610†	988005.0	3163.6	µg/L	11.14	3163.6	ppb	11.14	0.35%
Mo 202.031†	105.3	15.071	µg/L	0.4928	15.071	ppb	0.4928	3.27%
Na 589.592 Radial†	5285.1	1323.5	µg/L	5.75	1323.5	ppb	5.75	0.43%

Ni 231.604†	814.8	44.581	µg/L	0.1958	44.581	ppb	0.1958	0.44%
P 214.914†	302.6	533.03	µg/L	8.999	533.03	ppb	8.999	1.69%
Pb 220.353†	126.5	33.243	µg/L	0.8504	33.243	ppb	0.8504	2.56%
S 181.975 Axial†	17.0	72.267	µg/L	11.9167	72.267	ppb	11.9167	16.49%
Sb 206.836†	-5.4	7.6935	µg/L	3.81423	7.6935	ppb	3.81423	49.58%
Se 196.026†	-30.6	9.8386	µg/L	1.04038	9.8386	ppb	1.04038	10.57%
SiO2†	79109.6	14527	µg/L	57.8	14527	ppb	57.8	0.40%
Si 251.611†	91335.4	6625.7	µg/L	26.56	6625.7	ppb	26.56	0.40%
Sn 189.927†	-21.6	-1.4987	µg/L	2.65823	-1.4987	ppb	2.65823	177.37%
Sr 421.552†	6782.8	34.090	µg/L	0.1182	34.090	ppb	0.1182	0.35%
Ti 334.940†	1613173.1	3674.5	µg/L	12.36	3674.5	ppb	12.36	0.34%
Tl 190.801†	-23.8	2.1606	µg/L	0.94262	2.1606	ppb	0.94262	43.63%
U 409.014†	-990.3	-102.89	µg/L	2.215	-102.89	ppb	2.215	2.15%
V 292.402†	2369.3	32.357	µg/L	0.2703	32.357	ppb	0.2703	0.84%
Zn 213.857†	15060.8	391.35	µg/L	1.407	391.35	ppb	1.407	0.36%

Sequence No.: 15
Sample ID: 241336002|930799|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 313
Date Collected: 12/10/2009 08:22:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241336002|930799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117415.8	117415.8	101	%			08:23:22
1	Al 396.153Radial†	29607.6	29285.8	14550	µg/L	14550	ppb	08:23:22
1	Ca 317.933Radial†	23403.8	22834.1	8835.0	µg/L	8835.0	ppb	08:23:22
1	Fe 238.204 Radial†	11605.8	11512.8	73216	µg/L	73216	ppb	08:23:42
1	K 766.490 Radial†	6006.7	5283.9	2704.3	µg/L	2704.3	ppb	08:23:22
1	Mg 279.077 IEC†	629.2	609.6	3655.9	µg/L	3655.9	ppb	08:23:42
1	Na 589.592 Radial†	4452.3	5056.6	1266.3	µg/L	1266.3	ppb	08:23:22
1	Sr 421.552†	114624.2	113918.1	572.55	µg/L	572.55	ppb	08:23:22
1	Sc 361.383	2029963.8	2029963.8	100.38	%			08:24:47
1	Y 371.029	1346309.8	1346309.8	106.96	%			08:24:47
1	Ag 328.068†	-159.6	-169.4	4.5347	µg/L	4.5347	ppb	08:24:52
1	As 188.979†	4.5	2.3	0.7657	µg/L	0.7657	ppb	08:25:13
1	B 249.677†	1000.9	859.2	14.225	µg/L	14.225	ppb	08:24:52
1	Ba 233.527†	11781.2	11814.3	303.12	µg/L	303.12	ppb	08:24:52
1	Be 313.107†	11763.5	8202.8	3.9474	µg/L	3.9474	ppb	08:24:52
1	Cd 226.502†	187.9	286.1	1.9681	µg/L	1.9681	ppb	08:25:13
1	Co 228.616†	259.3	325.0	9.0460	µg/L	9.0460	ppb	08:25:13
1	Cr 267.716†	6706.9	6781.2	142.32	µg/L	142.32	ppb	08:24:52
1	Cu 324.752†	7644.3	3345.4	38.932	µg/L	38.932	ppb	08:24:52
1	Mn 257.610†	847879.6	844848.0	2706.8	µg/L	2706.8	ppb	08:24:47
1	Mo 202.031†	106.1	109.4	15.655	µg/L	15.655	ppb	08:25:13
1	Ni 231.604†	1581.1	1299.5	71.101	µg/L	71.101	ppb	08:25:13
1	P 214.914†	703.8	500.2	926.18	µg/L	926.18	ppb	08:25:13
1	Pb 220.353†	477.7	419.6	108.86	µg/L	108.86	ppb	08:25:13
1	S 181.975 Axial†	101.7	79.1	376.01	µg/L	376.01	ppb	08:25:13
1	Sb 206.836†	15.4	-5.7	4.8240	µg/L	4.8240	ppb	08:25:13
1	Se 196.026†	-23.6	-33.4	8.3276	µg/L	8.3276	ppb	08:25:13
1	SiO2†	75134.3	72096.4	13239	µg/L	13239	ppb	08:24:52
1	Si 251.611†	83809.4	83164.6	6038.4	µg/L	6038.4	ppb	08:24:52
1	Sn 189.927†	-13.4	-35.8	-7.0293	µg/L	-7.0293	ppb	08:25:13
1	Ti 334.940†	1411793.4	1405635.9	3201.4	µg/L	3201.4	ppb	08:24:47
1	Tl 190.801†	-44.2	-23.6	-3.6615	µg/L	-3.6615	ppb	08:25:13
1	U 409.014†	-74.7	-804.9	-86.442	µg/L	-86.442	ppb	08:24:47
1	V 292.402†	3803.9	3916.2	49.997	µg/L	49.997	ppb	08:24:52
1	Zn 213.857†	15676.3	15089.9	391.65	µg/L	391.65	ppb	08:24:52
2	Sc RADIAL	117676.3	117676.3	101	%			08:23:48
2	Al 396.153Radial†	30049.1	29658.3	14735	µg/L	14735	ppb	08:23:48
2	Ca 317.933Radial†	23718.1	23094.2	8935.6	µg/L	8935.6	ppb	08:23:48
2	Fe 238.204 Radial†	11685.0	11565.8	73553	µg/L	73553	ppb	08:24:08
2	K 766.490 Radial†	6130.4	5393.3	2760.2	µg/L	2760.2	ppb	08:23:48
2	Mg 279.077 IEC†	642.4	621.2	3727.3	µg/L	3727.3	ppb	08:24:08
2	Na 589.592 Radial†	4471.0	5065.3	1268.5	µg/L	1268.5	ppb	08:23:48
2	Sr 421.552†	116442.2	115467.8	580.34	µg/L	580.34	ppb	08:23:48
2	Sc 361.383	2029024.0	2029024.0	100.34	%			08:25:20
2	Y 371.029	1346564.9	1346564.9	106.98	%			08:25:20
2	Ag 328.068†	-184.8	-194.5	4.3378	µg/L	4.3378	ppb	08:25:26
2	As 188.979†	9.0	6.7	8.8451	µg/L	8.8451	ppb	08:25:46
2	B 249.677†	1010.6	869.3	14.557	µg/L	14.557	ppb	08:25:26
2	Ba 233.527†	11863.4	11901.7	305.36	µg/L	305.36	ppb	08:25:26
2	Be 313.107†	11777.6	8222.3	3.9549	µg/L	3.9549	ppb	08:25:26
2	Cd 226.502†	194.7	293.0	2.1241	µg/L	2.1241	ppb	08:25:46
2	Co 228.616†	253.1	318.9	8.7253	µg/L	8.7253	ppb	08:25:46
2	Cr 267.716†	6765.5	6842.6	143.61	µg/L	143.61	ppb	08:25:26
2	Cu 324.752†	7640.1	3344.8	39.000	µg/L	39.000	ppb	08:25:26
2	Mn 257.610†	852228.7	849573.8	2721.9	µg/L	2721.9	ppb	08:25:20
2	Mo 202.031†	111.5	114.8	16.294	µg/L	16.294	ppb	08:25:46
2	Ni 231.604†	1573.0	1292.2	70.698	µg/L	70.698	ppb	08:25:46
2	P 214.914†	706.4	503.1	931.80	µg/L	931.80	ppb	08:25:46
2	Pb 220.353†	467.3	409.5	106.26	µg/L	106.26	ppb	08:25:46

2	S 181.975 Axial†	106.0	83.5	397.15 µg/L	397.15 ppb	08:25:46
2	Sb 206.836†	20.8	-0.3	10.111 µg/L	10.111 ppb	08:25:46
2	Se 196.026†	-25.9	-35.7	5.5341 µg/L	5.5341 ppb	08:25:46
2	SiO2†	76490.5	73482.8	13494 µg/L	13494 ppb	08:25:26
2	Si 251.611†	85390.1	84778.7	6157.4 µg/L	6157.4 ppb	08:25:26
2	Sn 189.927†	-13.5	-35.9	-7.0163 µg/L	-7.0163 ppb	08:25:46
2	Ti 334.940†	1416805.9	1411283.1	3214.3 µg/L	3214.3 ppb	08:25:20
2	Tl 190.801†	-39.8	-19.3	3.2085 µg/L	3.2085 ppb	08:25:46
2	U 409.014†	-91.6	-821.7	-88.026 µg/L	-88.026 ppb	08:25:20
2	V 292.402†	3881.5	3995.2	50.915 µg/L	50.915 ppb	08:25:26
2	Zn 213.857†	15750.0	15170.6	393.75 µg/L	393.75 ppb	08:25:26
3	Sc RADIAL	116783.4	116783.4	100 %		08:24:14
3	Al 396.153Radial†	29986.3	29823.3	14817 µg/L	14817 ppb	08:24:14
3	Ca 317.933Radial†	23512.6	23068.7	8925.7 µg/L	8925.7 ppb	08:24:14
3	Fe 238.204 Radial†	11669.4	11638.7	74017 µg/L	74017 ppb	08:24:34
3	K 766.490 Radial†	6088.5	5397.9	2762.6 µg/L	2762.6 ppb	08:24:14
3	Mg 279.077 IEC†	639.5	623.2	3739.0 µg/L	3739.0 ppb	08:24:34
3	Na 589.592 Radial†	4457.9	5086.1	1273.7 µg/L	1273.7 ppb	08:24:14
3	Sr 421.552†	115747.2	115656.2	581.28 µg/L	581.28 ppb	08:24:14
3	Sc 361.383	2021520.3	2021520.3	99.965 %		08:25:54
3	Y 371.029	1342110.1	1342110.1	106.62 %		08:25:54
3	Ag 328.068†	-180.4	-190.8	4.4043 µg/L	4.4043 ppb	08:25:59
3	As 188.979†	9.7	7.5	10.101 µg/L	10.101 ppb	08:26:20
3	B 249.677†	976.5	839.0	13.098 µg/L	13.098 ppb	08:25:59
3	Ba 233.527†	11735.7	11817.9	303.21 µg/L	303.21 ppb	08:25:59
3	Be 313.107†	11644.2	8132.3	3.9081 µg/L	3.9081 ppb	08:25:59
3	Cd 226.502†	203.6	302.7	2.3515 µg/L	2.3515 ppb	08:26:20
3	Co 228.616†	254.6	321.4	8.8967 µg/L	8.8967 ppb	08:26:20
3	Cr 267.716†	6681.3	6783.4	142.36 µg/L	142.36 ppb	08:25:59
3	Cu 324.752†	7633.3	3366.2	39.248 µg/L	39.248 ppb	08:25:59
3	Mn 257.610†	841200.9	841695.0	2696.8 µg/L	2696.8 ppb	08:25:54
3	Mo 202.031†	108.0	111.7	15.952 µg/L	15.952 ppb	08:26:20
3	Ni 231.604†	1573.0	1298.0	71.017 µg/L	71.017 ppb	08:26:20
3	P 214.914†	712.1	511.4	948.02 µg/L	948.02 ppb	08:26:20
3	Pb 220.353†	466.0	409.9	106.36 µg/L	106.36 ppb	08:26:20
3	S 181.975 Axial†	99.6	77.5	367.90 µg/L	367.90 ppb	08:26:20
3	Sb 206.836†	20.0	-1.1	9.3179 µg/L	9.3179 ppb	08:26:20
3	Se 196.026†	-23.7	-33.6	8.5598 µg/L	8.5598 ppb	08:26:20
3	SiO2†	75242.8	72517.6	13317 µg/L	13317 ppb	08:25:59
3	Si 251.611†	84069.7	83773.8	6083.9 µg/L	6083.9 ppb	08:25:59
3	Sn 189.927†	-13.0	-35.4	-6.6990 µg/L	-6.6990 ppb	08:26:20
3	Ti 334.940†	1400336.4	1400049.2	3188.7 µg/L	3188.7 ppb	08:25:54
3	Tl 190.801†	-43.7	-23.3	-3.2721 µg/L	-3.2721 ppb	08:26:20
3	U 409.014†	16.4	-714.1	-78.351 µg/L	-78.351 ppb	08:25:54
3	V 292.402†	3816.4	3944.5	50.396 µg/L	50.396 ppb	08:25:59
3	Zn 213.857†	15614.7	15093.5	391.66 µg/L	391.66 ppb	08:25:59

Mean Data: 241336002|930799|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026836.0	100.23	%	0.229				0.23%
Sc RADIAL	117291.8	101	%	0.4				0.39%
Y 371.029	1344994.9	106.85	%	0.199				0.19%
Ag 328.068†	-184.9	4.4256	µg/L	0.10016	4.4256	ppb	0.10016	2.26%
Al 396.153Radial†	29589.1	14701	µg/L	136.8	14701	ppb	136.8	0.93%
As 188.979†	5.5	6.5706	µg/L	5.06624	6.5706	ppb	5.06624	77.10%
B 249.677†	855.8	13.960	µg/L	0.7650	13.960	ppb	0.7650	5.48%
Ba 233.527†	11844.6	303.89	µg/L	1.269	303.89	ppb	1.269	0.42%
Be 313.107†	8185.8	3.9368	µg/L	0.02515	3.9368	ppb	0.02515	0.64%
Ca 317.933Radial†	22999.0	8898.8	µg/L	55.46	8898.8	ppb	55.46	0.62%
Cd 226.502†	294.0	2.1479	µg/L	0.19282	2.1479	ppb	0.19282	8.98%
Co 228.616†	321.8	8.8893	µg/L	0.16050	8.8893	ppb	0.16050	1.81%
Cr 267.716†	6802.4	142.76	µg/L	0.732	142.76	ppb	0.732	0.51%
Cu 324.752†	3352.1	39.060	µg/L	0.1666	39.060	ppb	0.1666	0.43%
Fe 238.204 Radial†	11572.5	73596	µg/L	402.0	73596	ppb	402.0	0.55%
K 766.490 Radial†	5358.4	2742.4	µg/L	33.01	2742.4	ppb	33.01	1.20%
Mg 279.077 IEC†	618.0	3707.4	µg/L	44.99	3707.4	ppb	44.99	1.21%
Mn 257.610†	845372.2	2708.5	µg/L	12.64	2708.5	ppb	12.64	0.47%
Mo 202.031†	111.9	15.967	µg/L	0.3202	15.967	ppb	0.3202	2.01%
Na 589.592 Radial†	5069.3	1269.5	µg/L	3.80	1269.5	ppb	3.80	0.30%

Ni 231.604†	1296.6	70.939 µg/L	0.2125	70.939 ppb	0.2125	0.30%
P 214.914†	504.9	935.34 µg/L	11.343	935.34 ppb	11.343	1.21%
Pb 220.353†	413.0	107.16 µg/L	1.477	107.16 ppb	1.477	1.38%
S 181.975 Axial†	80.0	380.35 µg/L	15.101	380.35 ppb	15.101	3.97%
Sb 206.836†	-2.4	8.0844 µg/L	2.85135	8.0844 ppb	2.85135	35.27%
Se 196.026†	-34.2	7.4738 µg/L	1.68389	7.4738 ppb	1.68389	22.53%
SiO2†	72698.9	13350 µg/L	130.5	13350 ppb	130.5	0.98%
Si 251.611†	83905.7	6093.2 µg/L	60.02	6093.2 ppb	60.02	0.99%
Sn 189.927†	-35.7	-6.9149 µg/L	0.18705	-6.9149 ppb	0.18705	2.71%
Sr 421.552†	115014.0	578.06 µg/L	4.794	578.06 ppb	4.794	0.83%
Ti 334.940†	1405656.1	3201.5 µg/L	12.79	3201.5 ppb	12.79	0.40%
Tl 190.801†	-22.1	-1.2417 µg/L	3.85888	-1.2417 ppb	3.85888	310.77%
U 409.014†	-780.2	-84.273 µg/L	5.1892	-84.273 ppb	5.1892	6.16%
V 292.402†	3952.0	50.436 µg/L	0.4607	50.436 ppb	0.4607	0.91%
Zn 213.857†	15118.0	392.35 µg/L	1.212	392.35 ppb	1.212	0.31%

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 08:41:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115906.5	115906.5	99.4	%			08:41:43
1	Al 396.153Radial†	10451.4	10393.2	5144.6	µg/L	5144.6	ppb	08:41:43
1	Ca 317.933Radial†	13347.9	13018.3	5037.0	µg/L	5037.0	ppb	08:42:04
1	Fe 238.204 Radial†	804.5	794.3	5067.9	µg/L	5067.9	ppb	08:42:04
1	K 766.490 Radial†	10471.8	9854.6	5043.5	µg/L	5043.5	ppb	08:41:43
1	Mg 279.077 IEC†	838.6	828.4	5119.9	µg/L	5119.9	ppb	08:42:04
1	Na 589.592 Radial†	40180.5	41065.0	10284	µg/L	10284	ppb	08:41:43
1	Sr 421.552†	98277.9	98952.6	497.33	µg/L	497.33	ppb	08:41:43
1	Sc 361.383	2014614.8	2014614.8	99.624	%			08:43:08
1	Y 371.029	1258875.0	1258875.0	100.01	%			08:43:08
1	Ag 328.068†	55513.0	55712.3	511.66	µg/L	511.66	ppb	08:43:13
1	As 188.979†	269.4	268.2	485.95	µg/L	485.95	ppb	08:43:34
1	B 249.677†	11444.7	11350.1	490.46	µg/L	490.46	ppb	08:43:13
1	Ba 233.527†	19068.9	19218.9	493.98	µg/L	493.98	ppb	08:43:13
1	Be 313.107†	793345.7	792826.2	495.92	µg/L	495.92	ppb	08:43:08
1	Cd 226.502†	18473.1	18641.9	496.65	µg/L	496.65	ppb	08:43:13
1	Co 228.616†	10175.8	10280.9	496.91	µg/L	496.91	ppb	08:43:13
1	Cr 267.716†	23195.2	23382.6	491.53	µg/L	491.53	ppb	08:43:13
1	Cu 324.752†	75103.8	71117.7	494.39	µg/L	494.39	ppb	08:43:13
1	Mn 257.610†	153931.9	154714.6	494.64	µg/L	494.64	ppb	08:43:08
1	Mo 202.031†	4341.3	4361.3	509.62	µg/L	509.62	ppb	08:43:34
1	Ni 231.604†	9278.1	9037.6	494.46	µg/L	494.46	ppb	08:43:13
1	P 214.914†	1425.7	1230.2	2431.5	µg/L	2431.5	ppb	08:43:34
1	Pb 220.353†	1982.3	1933.5	500.48	µg/L	500.48	ppb	08:43:34
1	S 181.975 Axial†	236.1	214.9	1050.6	µg/L	1050.6	ppb	08:43:34
1	Sb 206.836†	542.3	523.3	510.72	µg/L	510.72	ppb	08:43:34
1	Se 196.026†	408.2	399.8	513.10	µg/L	513.10	ppb	08:43:34
1	SiO2†	32208.2	29578.5	5431.5	µg/L	5431.5	ppb	08:43:13
1	Si 251.611†	34579.9	34385.2	2495.6	µg/L	2495.6	ppb	08:43:13
1	Sn 189.927†	1034.0	1015.5	522.73	µg/L	522.73	ppb	08:43:34
1	Ti 334.940†	223962.5	224033.9	510.05	µg/L	510.05	ppb	08:43:08
1	Tl 190.801†	311.8	333.3	514.33	µg/L	514.33	ppb	08:43:34
1	U 409.014†	6095.2	5387.8	487.68	µg/L	487.68	ppb	08:43:13
1	V 292.402†	43500.3	43791.3	497.36	µg/L	497.36	ppb	08:43:13
1	Zn 213.857†	19289.7	18835.9	495.28	µg/L	495.28	ppb	08:43:13
2	Sc RADIAL	116043.1	116043.1	99.5	%			08:42:09
2	Al 396.153Radial†	10532.7	10462.6	5179.2	µg/L	5179.2	ppb	08:42:09
2	Ca 317.933Radial†	13307.4	12961.8	5015.2	µg/L	5015.2	ppb	08:42:30
2	Fe 238.204 Radial†	806.1	795.0	5072.1	µg/L	5072.1	ppb	08:42:30
2	K 766.490 Radial†	10523.7	9894.4	5063.8	µg/L	5063.8	ppb	08:42:09
2	Mg 279.077 IEC†	841.3	830.1	5130.2	µg/L	5130.2	ppb	08:42:30
2	Na 589.592 Radial†	40403.3	41241.3	10328	µg/L	10328	ppb	08:42:09
2	Sr 421.552†	98769.0	99329.7	499.23	µg/L	499.23	ppb	08:42:09
2	Sc 361.383	2030014.8	2030014.8	100.39	%			08:43:41
2	Y 371.029	1265623.8	1265623.8	100.55	%			08:43:41
2	Ag 328.068†	55696.2	55472.0	509.45	µg/L	509.45	ppb	08:43:47
2	As 188.979†	278.2	274.9	498.04	µg/L	498.04	ppb	08:44:07
2	B 249.677†	11545.9	11363.7	491.05	µg/L	491.05	ppb	08:43:47
2	Ba 233.527†	19146.4	19151.0	492.23	µg/L	492.23	ppb	08:43:47
2	Be 313.107†	803081.5	796483.4	498.21	µg/L	498.21	ppb	08:43:41
2	Cd 226.502†	18566.2	18593.9	495.38	µg/L	495.38	ppb	08:43:47
2	Co 228.616†	10224.1	10251.6	495.48	µg/L	495.48	ppb	08:43:47
2	Cr 267.716†	23313.9	23324.2	490.30	µg/L	490.30	ppb	08:43:47
2	Cu 324.752†	75507.8	70948.2	493.21	µg/L	493.21	ppb	08:43:47
2	Mn 257.610†	155905.8	155508.8	497.18	µg/L	497.18	ppb	08:43:41
2	Mo 202.031†	4329.7	4316.8	504.41	µg/L	504.41	ppb	08:44:07
2	Ni 231.604†	9318.9	9007.6	492.82	µg/L	492.82	ppb	08:43:47
2	P 214.914†	1421.8	1215.5	2401.8	µg/L	2401.8	ppb	08:44:07
2	Pb 220.353†	1992.7	1928.8	499.26	µg/L	499.26	ppb	08:44:07

2	S 181.975 Axial†	245.5	222.4	1087.4 µg/L	1087.4 ppb	08:44:07
2	Sb 206.836†	545.7	522.5	509.98 µg/L	509.98 ppb	08:44:07
2	Se 196.026†	411.9	400.4	513.84 µg/L	513.84 ppb	08:44:07
2	SiO2†	32221.9	29346.9	5389.0 µg/L	5389.0 ppb	08:43:47
2	Si 251.611†	34622.9	34164.8	2479.5 µg/L	2479.5 ppb	08:43:47
2	Sn 189.927†	1029.7	1003.3	516.49 µg/L	516.49 ppb	08:44:07
2	Ti 334.940†	226842.6	225197.6	512.70 µg/L	512.70 ppb	08:43:41
2	Tl 190.801†	313.3	332.5	513.05 µg/L	513.05 ppb	08:44:07
2	U 409.014†	6155.9	5401.8	488.95 µg/L	488.95 ppb	08:43:47
2	V 292.402†	43643.9	43603.1	495.21 µg/L	495.21 ppb	08:43:47
2	Zn 213.857†	19354.1	18753.2	493.10 µg/L	493.10 ppb	08:43:47
3	Sc RADIAL	115981.2	115981.2	99.4 %		08:42:35
3	Al 396.153Radial†	10397.9	10332.7	5115.1 µg/L	5115.1 ppb	08:42:35
3	Ca 317.933Radial†	13422.6	13084.8	5062.8 µg/L	5062.8 ppb	08:42:56
3	Fe 238.204 Radial†	807.0	796.3	5080.9 µg/L	5080.9 ppb	08:42:56
3	K 766.490 Radial†	10504.5	9880.6	5056.8 µg/L	5056.8 ppb	08:42:35
3	Mg 279.077 IEC†	845.4	834.7	5158.2 µg/L	5158.2 ppb	08:42:56
3	Na 589.592 Radial†	40016.3	40873.8	10236 µg/L	10236 ppb	08:42:35
3	Sr 421.552†	97581.3	98188.4	493.49 µg/L	493.49 ppb	08:42:35
3	Sc 361.383	2038620.0	2038620.0	100.81 %		08:44:14
3	Y 371.029	1269563.4	1269563.4	100.86 %		08:44:14
3	Ag 328.068†	56244.1	55781.3	512.30 µg/L	512.30 ppb	08:44:20
3	As 188.979†	271.9	267.5	484.56 µg/L	484.56 ppb	08:44:40
3	B 249.677†	11665.2	11433.6	494.07 µg/L	494.07 ppb	08:44:20
3	Ba 233.527†	19369.1	19291.4	495.84 µg/L	495.84 ppb	08:44:20
3	Be 313.107†	795352.3	785439.5	491.30 µg/L	491.30 ppb	08:44:14
3	Cd 226.502†	18796.9	18744.7	499.39 µg/L	499.39 ppb	08:44:20
3	Co 228.616†	10360.8	10344.1	499.94 µg/L	499.94 ppb	08:44:20
3	Cr 267.716†	23639.8	23549.5	495.04 µg/L	495.04 ppb	08:44:20
3	Cu 324.752†	76274.3	71391.1	496.29 µg/L	496.29 ppb	08:44:20
3	Mn 257.610†	154367.7	153327.5	490.21 µg/L	490.21 ppb	08:44:14
3	Mo 202.031†	4259.0	4228.4	494.09 µg/L	494.09 ppb	08:44:40
3	Ni 231.604†	9434.0	9082.5	496.92 µg/L	496.92 ppb	08:44:20
3	P 214.914†	1399.0	1186.9	2343.3 µg/L	2343.3 ppb	08:44:40
3	Pb 220.353†	1959.3	1887.3	488.49 µg/L	488.49 ppb	08:44:40
3	S 181.975 Axial†	239.5	215.4	1053.3 µg/L	1053.3 ppb	08:44:40
3	Sb 206.836†	534.1	508.7	496.48 µg/L	496.48 ppb	08:44:40
3	Se 196.026†	402.7	389.6	500.06 µg/L	500.06 ppb	08:44:40
3	SiO2†	32613.5	29599.9	5435.5 µg/L	5435.5 ppb	08:44:20
3	Si 251.611†	35014.5	34407.7	2498.5 µg/L	2498.5 ppb	08:44:20
3	Sn 189.927†	1004.3	973.8	501.40 µg/L	501.40 ppb	08:44:40
3	Ti 334.940†	224706.5	222124.8	505.70 µg/L	505.70 ppb	08:44:14
3	Tl 190.801†	306.3	324.2	500.25 µg/L	500.25 ppb	08:44:40
3	U 409.014†	6199.0	5418.6	490.48 µg/L	490.48 ppb	08:44:20
3	V 292.402†	44204.5	43975.8	499.33 µg/L	499.33 ppb	08:44:20
3	Zn 213.857†	19621.9	18937.5	497.95 µg/L	497.95 ppb	08:44:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027749.9	100.27	%	0.601				0.60%
Sc RADIAL	115976.9	99.4	%	0.06				0.06%
Y 371.029	1264687.4	100.47	%	0.429				0.43%
Ag 328.068†	55655.2	511.14	µg/L	1.494	511.14	ppb	1.494	0.29%
QC value within limits for Ag 328.068 Recovery = 102.23%								
Al 396.153Radial†	10396.2	5146.3	µg/L	32.11	5146.3	ppb	32.11	0.62%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	270.2	489.52	µg/L	7.413	489.52	ppb	7.413	1.51%
QC value within limits for As 188.979 Recovery = 97.90%								
B 249.677†	11382.4	491.86	µg/L	1.940	491.86	ppb	1.940	0.39%
QC value within limits for B 249.677 Recovery = 98.37%								
Ba 233.527†	19220.4	494.02	µg/L	1.805	494.02	ppb	1.805	0.37%
QC value within limits for Ba 233.527 Recovery = 98.80%								
Be 313.107†	791583.1	495.15	µg/L	3.519	495.15	ppb	3.519	0.71%
QC value within limits for Be 313.107 Recovery = 99.03%								
Ca 317.933Radial†	13021.6	5038.3	µg/L	23.82	5038.3	ppb	23.82	0.47%
QC value within limits for Ca 317.933Radial Recovery = 100.77%								
Cd 226.502†	18660.2	497.14	µg/L	2.053	497.14	ppb	2.053	0.41%
QC value within limits for Cd 226.502 Recovery = 99.43%								
Co 228.616†	10292.2	497.44	µg/L	2.278	497.44	ppb	2.278	0.46%

```
   QC value within limits for Co 228.616  Recovery = 99.49%
Cr 267.716†            23418.8      492.29 µg/L         2.456      492.29 ppb          2.456   0.50%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†            71152.3      494.63 µg/L         1.551      494.63 ppb          1.551   0.31%
   QC value within limits for Cu 324.752  Recovery = 98.93%
Fe 238.204 Radial†       795.2      5073.6 µg/L          6.62      5073.6 ppb           6.62   0.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.47%
K 766.490 Radial†       9876.5      5054.7 µg/L         10.34      5054.7 ppb          10.34   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 101.09%
Mg 279.077 IEC†          831.1      5136.1 µg/L         19.82      5136.1 ppb          19.82   0.39%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.72%
Mn 257.610†           154517.0      494.01 µg/L         3.524      494.01 ppb          3.524   0.71%
   QC value within limits for Mn 257.610  Recovery = 98.80%
Mo 202.031†             4302.2      502.71 µg/L         7.904      502.71 ppb          7.904   1.57%
   QC value within limits for Mo 202.031  Recovery = 100.54%
Na 589.592 Radial†     41060.0       10282 µg/L          46.0       10282 ppb           46.0   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 102.82%
Ni 231.604†             9042.6      494.73 µg/L         2.064      494.73 ppb          2.064   0.42%
   QC value within limits for Ni 231.604  Recovery = 98.95%
P 214.914†              1210.8      2392.2 µg/L         44.88      2392.2 ppb          44.88   1.88%
   QC value within limits for P 214.914  Recovery = 95.69%
Pb 220.353†             1916.5      496.07 µg/L         6.600      496.07 ppb          6.600   1.33%
   QC value within limits for Pb 220.353  Recovery = 99.21%
S 181.975 Axial†         217.6      1063.7 µg/L         20.51      1063.7 ppb          20.51   1.93%
   QC value within limits for S 181.975 Axial  Recovery = 106.37%
Sb 206.836†              518.2      505.73 µg/L         8.019      505.73 ppb          8.019   1.59%
   QC value within limits for Sb 206.836  Recovery = 101.15%
Se 196.026†              396.6      509.00 µg/L         7.750      509.00 ppb          7.750   1.52%
   QC value within limits for Se 196.026  Recovery = 101.80%
SiO2†                   29508.4      5418.7 µg/L         25.76      5418.7 ppb          25.76   0.48%
   QC value within limits for SiO2  Recovery = 101.33%
Si 251.611†             34319.3      2491.2 µg/L         10.23      2491.2 ppb          10.23   0.41%
   QC value within limits for Si 251.611  Recovery = 99.65%
Sn 189.927†              997.5      513.54 µg/L        10.970      513.54 ppb         10.970   2.14%
   QC value within limits for Sn 189.927  Recovery = 102.71%
Sr 421.552†             98823.5      496.68 µg/L         2.923      496.68 ppb          2.923   0.59%
   QC value within limits for Sr 421.552  Recovery = 99.34%
Ti 334.940†            223785.4      509.48 µg/L         3.535      509.48 ppb          3.535   0.69%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†              330.0      509.21 µg/L         7.786      509.21 ppb          7.786   1.53%
   QC value within limits for Tl 190.801  Recovery = 101.84%
U 409.014†              5402.7      489.04 µg/L         1.402      489.04 ppb          1.402   0.29%
   QC value within limits for U 409.014  Recovery = 97.81%
V 292.402†              43790.1      497.30 µg/L         2.062      497.30 ppb          2.062   0.41%
   QC value within limits for V 292.402  Recovery = 99.46%
Zn 213.857†             18842.2      495.44 µg/L         2.433      495.44 ppb          2.433   0.49%
   QC value within limits for Zn 213.857  Recovery = 99.09%
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 08:44:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114652.2	114652.2	98.3	%			08:45:22
1	Al 396.153Radial†	164.5	44.0	21.845	µg/L	21.845	ppb	08:45:22
1	Ca 317.933Radial†	483.4	79.0	30.557	µg/L	30.557	ppb	08:45:42
1	Fe 238.204 Radial†	24.5	9.8	62.085	µg/L	62.085	ppb	08:45:42
1	K 766.490 Radial†	801.0	132.3	67.711	µg/L	67.711	ppb	08:45:22
1	Mg 279.077 IEC†	8.4	-6.9	-42.781	µg/L	-42.781	ppb	08:45:42
1	Na 589.592 Radial†	-516.0	109.2	27.355	µg/L	27.355	ppb	08:45:22
1	Sr 421.552†	-55.3	6.1	0.0306	µg/L	0.0306	ppb	08:45:22
1	Sc 361.383	2035715.8	2035715.8	100.67	%			08:46:44
1	Y 371.029	1271585.5	1271585.5	101.02	%			08:46:44
1	Ag 328.068†	139.2	127.8	1.1724	µg/L	1.1724	ppb	08:46:50
1	As 188.979†	3.2	0.9	1.6561	µg/L	1.6561	ppb	08:47:10
1	B 249.677†	173.6	34.6	1.4798	µg/L	1.4798	ppb	08:47:10
1	Ba 233.527†	-64.3	14.2	0.3653	µg/L	0.3653	ppb	08:47:10
1	Be 313.107†	3588.4	48.7	0.0298	µg/L	0.0298	ppb	08:46:50
1	Cd 226.502†	-102.9	-3.2	-0.0970	µg/L	-0.0970	ppb	08:47:10
1	Co 228.616†	-74.6	-7.5	-0.3630	µg/L	-0.3630	ppb	08:47:10
1	Cr 267.716†	-145.8	-45.1	-0.9444	µg/L	-0.9444	ppb	08:46:50
1	Cu 324.752†	4126.8	-170.3	-1.1683	µg/L	-1.1683	ppb	08:46:50
1	Mn 257.610†	-49.2	152.5	0.4946	µg/L	0.4946	ppb	08:47:10
1	Mo 202.031†	3.2	6.8	0.8006	µg/L	0.8006	ppb	08:47:10
1	Ni 231.604†	299.1	21.6	1.1815	µg/L	1.1815	ppb	08:47:10
1	P 214.914†	186.0	-16.1	-32.433	µg/L	-32.433	ppb	08:47:10
1	Pb 220.353†	49.8	-6.8	-1.7381	µg/L	-1.7381	ppb	08:47:10
1	S 181.975 Axial†	31.3	9.0	43.859	µg/L	43.859	ppb	08:47:10
1	Sb 206.836†	19.8	-1.5	-1.4360	µg/L	-1.4360	ppb	08:47:10
1	Se 196.026†	5.2	-4.7	-5.9689	µg/L	-5.9689	ppb	08:47:10
1	SiO2†	2877.1	106.6	19.580	µg/L	19.580	ppb	08:46:50
1	Si 251.611†	559.6	230.7	16.966	µg/L	16.966	ppb	08:47:10
1	Sn 189.927†	22.5	-0.1	-0.0344	µg/L	-0.0344	ppb	08:47:10
1	Ti 334.940†	1596.3	811.3	1.8465	µg/L	1.8465	ppb	08:46:50
1	Tl 190.801†	-20.6	-0.1	-0.1110	µg/L	-0.1110	ppb	08:47:10
1	U 409.014†	611.1	-123.4	-11.200	µg/L	-11.200	ppb	08:46:50
1	V 292.402†	-101.0	26.4	0.2900	µg/L	0.2900	ppb	08:46:50
1	Zn 213.857†	565.3	34.9	0.9146	µg/L	0.9146	ppb	08:47:10
2	Sc RADIAL	114296.2	114296.2	98.0	%			08:45:48
2	Al 396.153Radial†	173.8	54.1	26.823	µg/L	26.823	ppb	08:45:48
2	Ca 317.933Radial†	480.7	77.7	30.076	µg/L	30.076	ppb	08:46:08
2	Fe 238.204 Radial†	23.2	8.5	53.769	µg/L	53.769	ppb	08:46:08
2	K 766.490 Radial†	702.2	34.0	17.413	µg/L	17.413	ppb	08:45:48
2	Mg 279.077 IEC†	13.0	-2.2	-13.350	µg/L	-13.350	ppb	08:46:08
2	Na 589.592 Radial†	-563.2	59.4	14.882	µg/L	14.882	ppb	08:45:48
2	Sr 421.552†	-40.8	20.7	0.1040	µg/L	0.1040	ppb	08:45:48
2	Sc 361.383	2020871.5	2020871.5	99.933	%			08:47:16
2	Y 371.029	1262102.8	1262102.8	100.27	%			08:47:16
2	Ag 328.068†	109.2	98.8	0.9032	µg/L	0.9032	ppb	08:47:22
2	As 188.979†	-1.5	-3.7	-6.7694	µg/L	-6.7694	ppb	08:47:42
2	B 249.677†	186.8	49.0	2.1094	µg/L	2.1094	ppb	08:47:42
2	Ba 233.527†	-65.0	13.0	0.3323	µg/L	0.3323	ppb	08:47:42
2	Be 313.107†	3577.4	64.0	0.0395	µg/L	0.0395	ppb	08:47:22
2	Cd 226.502†	-91.9	7.0	0.1766	µg/L	0.1766	ppb	08:47:42
2	Co 228.616†	-75.7	-9.1	-0.4406	µg/L	-0.4406	ppb	08:47:42
2	Cr 267.716†	-110.9	-11.2	-0.2359	µg/L	-0.2359	ppb	08:47:22
2	Cu 324.752†	4103.7	-163.3	-1.1215	µg/L	-1.1215	ppb	08:47:22
2	Mn 257.610†	-103.6	97.6	0.3185	µg/L	0.3185	ppb	08:47:42
2	Mo 202.031†	4.2	7.8	0.9176	µg/L	0.9176	ppb	08:47:42
2	Ni 231.604†	298.5	23.2	1.2676	µg/L	1.2676	ppb	08:47:42
2	P 214.914†	186.0	-14.8	-29.720	µg/L	-29.720	ppb	08:47:42
2	Pb 220.353†	45.3	-10.9	-2.8073	µg/L	-2.8073	ppb	08:47:42

2	S 181.975 Axial†	30.4	8.2	40.334	µg/L	40.334 ppb	08:47:42
2	Sb 206.836†	21.9	0.8	0.7777	µg/L	0.7777 ppb	08:47:42
2	Se 196.026†	13.1	3.2	4.1724	µg/L	4.1724 ppb	08:47:42
2	SiO2†	2820.0	70.5	12.941	µg/L	12.941 ppb	08:47:22
2	Si 251.611†	544.2	219.4	16.163	µg/L	16.163 ppb	08:47:42
2	Sn 189.927†	22.3	-0.1	-0.0548	µg/L	-0.0548 ppb	08:47:42
2	Ti 334.940†	1429.9	656.4	1.4936	µg/L	1.4936 ppb	08:47:22
2	Tl 190.801†	-17.9	2.5	3.8272	µg/L	3.8272 ppb	08:47:42
2	U 409.014†	624.1	-105.9	-9.6129	µg/L	-9.6129 ppb	08:47:22
2	V 292.402†	-152.5	-25.9	-0.2962	µg/L	-0.2962 ppb	08:47:22
2	Zn 213.857†	564.8	38.5	1.0114	µg/L	1.0114 ppb	08:47:42
3	Sc RADIAL	114076.9	114076.9	97.8	%		08:46:14
3	Al 396.153Radial†	160.2	40.5	20.102	µg/L	20.102 ppb	08:46:14
3	Ca 317.933Radial†	440.9	38.0	14.718	µg/L	14.718 ppb	08:46:34
3	Fe 238.204 Radial†	20.2	5.5	35.030	µg/L	35.030 ppb	08:46:34
3	K 766.490 Radial†	788.2	123.4	63.146	µg/L	63.146 ppb	08:46:14
3	Mg 279.077 IEC†	11.1	-4.1	-25.206	µg/L	-25.206 ppb	08:46:34
3	Na 589.592 Radial†	-494.2	128.8	32.258	µg/L	32.258 ppb	08:46:14
3	Sr 421.552†	-30.6	31.0	0.1560	µg/L	0.1560 ppb	08:46:14
3	Sc 361.383	2019338.6	2019338.6	99.857	%		08:47:48
3	Y 371.029	1260383.4	1260383.4	100.13	%		08:47:48
3	Ag 328.068†	121.8	111.6	1.0199	µg/L	1.0199 ppb	08:47:54
3	As 188.979†	1.0	-1.2	-2.2338	µg/L	-2.2338 ppb	08:48:14
3	B 249.677†	158.0	20.4	0.8737	µg/L	0.8737 ppb	08:48:14
3	Ba 233.527†	-60.3	17.7	0.4536	µg/L	0.4536 ppb	08:48:14
3	Be 313.107†	3502.1	-8.8	-0.0061	µg/L	-0.0061 ppb	08:47:54
3	Cd 226.502†	-95.9	3.0	0.0759	µg/L	0.0759 ppb	08:48:14
3	Co 228.616†	-70.1	-3.5	-0.1736	µg/L	-0.1736 ppb	08:48:14
3	Cr 267.716†	-127.5	-27.8	-0.5840	µg/L	-0.5840 ppb	08:47:54
3	Cu 324.752†	4071.1	-192.9	-1.3302	µg/L	-1.3302 ppb	08:47:54
3	Mn 257.610†	28.4	229.7	0.7379	µg/L	0.7379 ppb	08:48:14
3	Mo 202.031†	1.2	4.8	0.5668	µg/L	0.5668 ppb	08:48:14
3	Ni 231.604†	310.7	35.6	1.9481	µg/L	1.9481 ppb	08:48:14
3	P 214.914†	188.3	-12.3	-24.748	µg/L	-24.748 ppb	08:48:14
3	Pb 220.353†	42.5	-13.7	-3.5421	µg/L	-3.5421 ppb	08:48:14
3	S 181.975 Axial†	29.2	7.1	34.573	µg/L	34.573 ppb	08:48:14
3	Sb 206.836†	22.9	1.9	1.8186	µg/L	1.8186 ppb	08:48:14
3	Se 196.026†	12.9	3.0	3.9287	µg/L	3.9287 ppb	08:48:14
3	SiO2†	2830.4	83.0	15.250	µg/L	15.250 ppb	08:47:54
3	Si 251.611†	616.8	292.5	21.487	µg/L	21.487 ppb	08:48:14
3	Sn 189.927†	25.7	3.3	1.6886	µg/L	1.6886 ppb	08:48:14
3	Ti 334.940†	1489.9	717.6	1.6338	µg/L	1.6338 ppb	08:47:54
3	Tl 190.801†	-18.9	1.4	2.1541	µg/L	2.1541 ppb	08:48:14
3	U 409.014†	689.5	-40.0	-3.6301	µg/L	-3.6301 ppb	08:47:54
3	V 292.402†	-126.9	-0.4	-0.0032	µg/L	-0.0032 ppb	08:47:54
3	Zn 213.857†	564.8	38.9	1.0207	µg/L	1.0207 ppb	08:48:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025308.6	100.15	%	0.447				0.45%
Sc RADIAL	114341.8	98.0	%	0.25				0.25%
Y 371.029	1264690.6	100.47	%	0.479				0.48%
Ag 328.068†	112.7	1.0318	µg/L	0.13497	1.0318	ppb	0.13497	13.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	46.2	22.923	µg/L	3.4881	22.923	ppb	3.4881	15.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-2.4490	µg/L	4.21682	-2.4490	ppb	4.21682	172.18%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	34.7	1.4876	µg/L	0.61788	1.4876	ppb	0.61788	41.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.0	0.3838	µg/L	0.06272	0.3838	ppb	0.06272	16.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	34.6	0.0211	µg/L	0.02400	0.0211	ppb	0.02400	113.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	64.9	25.117	µg/L	9.0094	25.117	ppb	9.0094	35.87%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.3	0.0518	µg/L	0.13840	0.0518	ppb	0.13840	267.04%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-6.7	-0.3257	µg/L	0.13734	-0.3257	ppb	0.13734	42.16%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -28.0     -0.5881 µg/L       0.35426     -0.5881 ppb        0.35426  60.23%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -175.5     -1.2066 µg/L       0.10951     -1.2066 ppb        0.10951   9.08%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         7.9      50.295 µg/L       13.8578      50.295 ppb        13.8578  27.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         96.6      49.423 µg/L       27.8154      49.423 ppb        27.8154  56.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.4     -27.112 µg/L       14.8079     -27.112 ppb        14.8079  54.62%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              159.9      0.5170 µg/L       0.21063      0.5170 ppb        0.21063  40.74%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.5      0.7617 µg/L       0.17861      0.7617 ppb        0.17861  23.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        99.2      24.832 µg/L        8.9587      24.832 ppb         8.9587  36.08%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               26.8      1.4657 µg/L       0.41997      1.4657 ppb        0.41997  28.65%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -14.4     -28.967 µg/L        3.8974     -28.967 ppb         3.8974  13.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -10.5     -2.6958 µg/L       0.90716     -2.6958 ppb        0.90716  33.65%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.1      39.588 µg/L        4.6874      39.588 ppb         4.6874  11.84%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.4      0.3868 µg/L       1.66216      0.3868 ppb        1.66216 429.76%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.5      0.7107 µg/L       5.78602      0.7107 ppb        5.78602 814.13%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     86.7      15.924 µg/L        3.3704      15.924 ppb         3.3704  21.17%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              247.5      18.205 µg/L        2.8702      18.205 ppb         2.8702  15.77%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.0      0.5331 µg/L       1.00076      0.5331 ppb        1.00076 187.72%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               19.3      0.0969 µg/L       0.06300      0.0969 ppb        0.06300  65.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              728.5      1.6580 µg/L       0.17765      1.6580 ppb        0.17765  10.71%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.3      1.9568 µg/L       1.97649      1.9568 ppb        1.97649 101.01%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -89.8     -8.1475 µg/L       3.99181     -8.1475 ppb        3.99181  48.99%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 0.1     -0.0031 µg/L       0.29307     -0.0031 ppb        0.29307 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               37.5      0.9822 µg/L       0.05876      0.9822 ppb        0.05876   5.98%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 121409

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

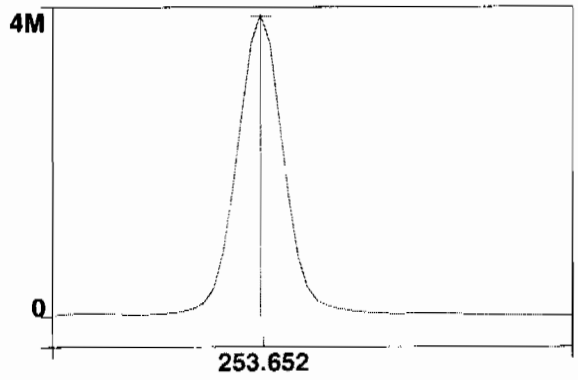

Intensity: 3589377.5 cps
Conc:

1

==========

Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00] ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00] ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00] ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00] ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00] ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00] ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00] ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00] ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00] ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00] ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00] ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00] ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00] ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00] ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00] ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00] ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00] ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00] ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00] ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00] ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00] ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00] ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00] ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00] ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00] ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00] ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00] ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00] ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00] ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00] ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43 %	09:04:58
2	Sc Radial	4907.6	4907.6	100.0 %	09:03:36
2	Y 371.029	887859.3	887859.3	100.38 %	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74 %	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00] ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00] ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00] ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00] ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00] ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00] ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00] ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00] ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00] ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00] ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00] ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00] ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00] ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00] ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00] ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00] ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00] ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00] ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00] ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00] ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00] ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00] ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00] ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00] ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00] ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00] ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00] ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00] ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00] ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00] ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00] ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00] ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260 %	09:05:29
3	Sc Radial	4823.8	4823.8	98.2 %	09:04:01
3	Y 371.029	877949.7	877949.7	99.263 %	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13 %	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000] ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000] ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000] ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000] ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000] ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000] ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000] ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000] ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000] ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000] ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000] ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000] ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000] ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695] ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821 %	09:25:33
3	Sc Radial	4816.7	4816.7	98.1 %	09:24:00
3	Y 371.029	868750.7	868750.7	98.223 %	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34 %	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000] ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000] ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000] ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000] ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000] ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000] ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000] ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000] ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000] ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000] ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000] ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000] ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000] ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000] ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000] ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000] ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000] ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000] ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000] ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000] ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000] ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000] ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000] ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000] ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000] ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000] ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000] ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000] ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000] ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000] ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000] ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695] ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7	ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22	ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3	ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80	ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2	ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9	ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52	ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75	ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38	ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56	ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50	ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65	ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16	ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453	ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293	%		09:38:03
3	Sc Radial	4901.3	4901.3	99.8	%		09:36:44
3	Y 371.029	861618.1	861618.1	97.417	%		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79	%		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44	ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6	ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49	ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04	ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71	ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45	ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3	ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32	ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52	ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91	ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13	ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4	ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2	ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8	ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16	ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72	ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3	ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30	ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6	ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68	ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4	ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17	ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8	ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3	ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45	ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46	ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68	ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65	ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14	ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35	ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97	ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560	ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

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Ca 317.933Radial†       2844.7      5036.6 ug/L        62.48      5036.6 ppb        62.48   1.24%
   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†            58712.0       511.84 ug/L        0.548      511.84 ppb        0.548   0.11%
   QC value within limits for Cd 226.502  Recovery = 102.37%
Co 228.616†            31299.0       515.85 ug/L        4.347      515.85 ppb        4.347   0.84%
   QC value within limits for Co 228.616  Recovery = 103.17%
Cr 267.716†            55808.3       502.22 ug/L        0.664      502.22 ppb        0.664   0.13%
   QC value within limits for Cr 267.716  Recovery = 100.44%
Cu 324.752†           194870.1       520.66 ug/L        0.629      520.66 ppb        0.629   0.12%
   QC value within limits for Cu 324.752  Recovery = 104.13%
Fe 238.204 Radial†       417.6      5064.8 ug/L        94.14      5064.8 ppb        94.14   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.30%
K 766.490 Radial†      13749.0      2500.5 ug/L         7.68      2500.5 ppb         7.68   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.02%
Mg 279.077 IEC†          117.5      5266.4 ug/L        91.10      5266.4 ppb        91.10   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†           554773.8       525.75 ug/L        0.407      525.75 ppb        0.407   0.08%
   QC value within limits for Mn 257.610  Recovery = 105.15%
Mo 202.031†            10431.0       553.90 ug/L        4.052      553.90 ppb        4.052   0.73%
   QC value greater than the upper limit for Mo 202.031  Recovery = 110.78%
Na 589.592 Radial†      8728.4      2448.3 ug/L        22.68      2448.3 ppb        22.68   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 97.93%
Ni 231.604†            26132.9       511.71 ug/L        4.139      511.71 ppb        4.139   0.81%
   QC value within limits for Ni 231.604  Recovery = 102.34%
P 214.914†              5812.7      2521.9 ug/L        18.35      2521.9 ppb        18.35   0.73%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†             5504.1       518.39 ug/L        2.831      518.39 ppb        2.831   0.55%
   QC value within limits for Pb 220.353  Recovery = 103.68%
S 181.975 Axial†        2375.5      2558.4 ug/L        15.13      2558.4 ppb        15.13   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†             1947.3       522.68 ug/L        3.231      522.68 ppb        3.231   0.62%
   QC value within limits for Sb 206.836  Recovery = 104.54%
Se 196.026†             5969.5      2664.5 ug/L        20.95      2664.5 ppb        20.95   0.79%
   QC value within limits for Se 196.026  Recovery = 106.58%
Si 251.611†           193620.3      4905.1 ug/L         2.68      4905.1 ppb         2.68   0.05%
   QC value within limits for Si 251.611  Recovery = 98.10%
Sn 189.927†             4161.1       550.94 ug/L        4.468      550.94 ppb        4.468   0.81%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.19%
Sr 421.552†           100372.3       526.55 ug/L        0.859      526.55 ppb        0.859   0.16%
   QC value within limits for Sr 421.552  Recovery = 105.31%
Ti 334.940†           367149.6       506.26 ug/L        0.490      506.26 ppb        0.490   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.25%
Tl 190.801†             2251.7       547.80 ug/L        5.406      547.80 ppb        5.406   0.99%
   QC value within limits for Tl 190.801  Recovery = 109.56%
U 409.014†             19450.3       501.27 ug/L        1.183      501.27 ppb        1.183   0.24%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†             90935.8       528.06 ug/L        0.368      528.06 ppb        0.368   0.07%
   QC value within limits for V 292.402  Recovery = 105.61%
Zn 213.857†            71271.1       519.16 ug/L        0.195      519.16 ppb        0.195   0.04%
   QC value within limits for Zn 213.857  Recovery = 103.83%
SiO2†                 194471.8        10543 ug/L         82.7       10543 ppb         82.7   0.78%
   QC value within limits for SiO2  Recovery = 98.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573	ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874	ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858	ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828	ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035	ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137	ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619	ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177	ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430	ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693	ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067	ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993	ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191	ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448	ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62	%		09:45:16
3	Sc Radial	4809.8	4809.8	98.0	%		09:43:49
3	Y 371.029	891134.4	891134.4	100.75	%		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29	%		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441	ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723	ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610	ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180	ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992	ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472	ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457	ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343	ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153	ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058	ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762	ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825	ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115	ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478	ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335	ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760	ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264	ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146	ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869	ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168	ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676	ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895	ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168	ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177	ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090	ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625	ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335	ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911	ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862	ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122	ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761	ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033	ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %		09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %		09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

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Ca 317.933Radial†        114.9      203.44 ug/L        5.843      203.44 ppb        5.843   2.87%
   QC value within limits for Ca 317.933Radial  Recovery = 101.72%
Cd 226.502†              583.9      5.0878 ug/L      0.03067      5.0878 ppb      0.03067   0.60%
   QC value within limits for Cd 226.502  Recovery = 101.76%
Co 228.616†              304.8      5.0359 ug/L      0.08115      5.0359 ppb      0.08115   1.61%
   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†              568.2      5.0983 ug/L      0.10423      5.0983 ppb      0.10423   2.04%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†             3983.8      10.643 ug/L       0.4808      10.643 ppb       0.4808   4.52%
   QC value within limits for Cu 324.752  Recovery = 106.43%
Fe 238.204 Radial†         6.6      79.730 ug/L      29.0033      79.730 ppb      29.0033  36.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 79.73%
K 766.490 Radial†        889.4      161.88 ug/L       26.810      161.88 ppb       26.810  16.56%
   QC value within limits for K 766.490 Radial  Recovery = 107.92%
Mg 279.077 IEC†            7.3      326.69 ug/L       36.025      326.69 ppb       36.025  11.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.90%
Mn 257.610†            11132.0      10.543 ug/L       0.1659      10.543 ppb       0.1659   1.57%
   QC value within limits for Mn 257.610  Recovery = 105.43%
Mo 202.031†              195.8      10.395 ug/L       0.7057      10.395 ppb       0.7057   6.79%
   QC value within limits for Mo 202.031  Recovery = 103.95%
Na 589.592 Radial†      1041.2      292.04 ug/L       11.429      292.04 ppb       11.429   3.91%
   QC value within limits for Na 589.592 Radial  Recovery = 97.35%
Ni 231.604†              277.1      5.4266 ug/L      0.08048      5.4266 ppb      0.08048   1.48%
   QC value within limits for Ni 231.604  Recovery = 108.53%
P 214.914†               338.0      149.63 ug/L        3.816      149.63 ppb        3.816   2.55%
   QC value within limits for P 214.914  Recovery = 99.75%
Pb 220.353†               96.3      9.0961 ug/L      1.14169      9.0961 ppb      1.14169  12.55%
   QC value within limits for Pb 220.353  Recovery = 90.96%
S 181.975 Axial†          89.5      96.357 ug/L       7.4396      96.357 ppb       7.4396   7.72%
   QC value within limits for S 181.975 Axial  Recovery = 96.36%
Sb 206.836†               43.7      11.807 ug/L       0.5867      11.807 ppb       0.5867   4.97%
   QC value within limits for Sb 206.836  Recovery = 118.07%
Se 196.026†               65.7      29.405 ug/L       2.6665      29.405 ppb       2.6665   9.07%
   QC value within limits for Se 196.026  Recovery = 98.02%
Si 251.611†             4059.5      102.83 ug/L        1.217      102.83 ppb        1.217   1.18%
   QC value within limits for Si 251.611  Recovery = 102.83%
Sn 189.927†               80.0      10.600 ug/L       0.2084      10.600 ppb       0.2084   1.97%
   QC value within limits for Sn 189.927  Recovery = 106.00%
Sr 421.552†              936.7      4.9127 ug/L      0.04891      4.9127 ppb      0.04891   1.00%
   QC value within limits for Sr 421.552  Recovery = 98.25%
Ti 334.940†             3574.6      4.9172 ug/L      0.11528      4.9172 ppb      0.11528   2.34%
   QC value within limits for Ti 334.940  Recovery = 98.34%
Tl 190.801†               82.0      19.906 ug/L       0.6555      19.906 ppb       0.6555   3.29%
   QC value within limits for Tl 190.801  Recovery = 99.53%
U 409.014†              1925.7      49.768 ug/L       2.3685      49.768 ppb       2.3685   4.76%
   QC value within limits for U 409.014  Recovery = 99.54%
V 292.402†               835.7      5.0170 ug/L      0.03359      5.0170 ppb      0.03359   0.67%
   QC value within limits for V 292.402  Recovery = 100.34%
Zn 213.857†             1408.8      10.286 ug/L       0.1748      10.286 ppb       0.1748   1.70%
   QC value within limits for Zn 213.857  Recovery = 102.86%
SiO2†                   4025.3      218.19 ug/L        1.897      218.19 ppb        1.897   0.87%
   QC value within limits for SiO2  Recovery = 102.44%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125 ug/L	38.125 ppb		09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358 ug/L	-5.1358 ppb		09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332 ug/L	-38.332 ppb		09:58:22
2	Sb 206.836†	100.8	82.3	9.3716 ug/L	9.3716 ppb		09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926 ug/L	-13.926 ppb		09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720 ug/L	-0.3720 ppb		09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740 ug/L	-7.8740 ppb		09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396 ug/L	-0.8396 ppb		09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397 ug/L	-1.2397 ppb		09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291 ug/L	-1.2291 ppb		09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433 ug/L	4.0433 ppb		09:58:02
2	V 292.402†	973.0	2736.8	-1.3413 ug/L	-1.3413 ppb		09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610 ug/L	-6.7610 ppb		09:58:22
2	SiO2†	563.7	54.6	4.0770 ug/L	4.0770 ppb		09:58:58
3	Sc 361.383	921569.7	921569.7	88.657 %			09:58:28
3	Sc Radial	4452.3	4452.3	90.7 %			09:57:29
3	Y 371.029	763138.6	763138.6	86.282 %			09:58:28
3	Y RADIAL	5097.1	5097.1	90.26 %			09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167 ug/L	-0.7167 ppb		09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860 ug/L	516860 ppb		09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512 ug/L	-1.7512 ppb		09:58:48
3	B 249.677†	512.9	1044.6	-4.8439 ug/L	-4.8439 ppb		09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675 ug/L	1.9675 ppb		09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922 ug/L	-0.3922 ppb		09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820 ug/L	476820 ppb		09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732 ug/L	-0.5732 ppb		09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789 ug/L	-1.3789 ppb		09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279 ug/L	1.7279 ppb		09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638 ug/L	0.7638 ppb		09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310 ug/L	185310 ppb		09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175 ug/L	-13.175 ppb		09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750 ug/L	494750 ppb		09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540 ug/L	7.7540 ppb		09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843 ug/L	-4.5843 ppb		09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311 ug/L	28.311 ppb		09:57:29
3	Ni 231.604†	303.5	210.5	4.1227 ug/L	4.1227 ppb		09:58:48
3	P 214.914†	216.4	-21.0	16.915 ug/L	16.915 ppb		09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746 ug/L	0.0746 ppb		09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932 ug/L	-28.932 ppb		09:58:48
3	Sb 206.836†	82.8	58.7	3.1176 ug/L	3.1176 ppb		09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896 ug/L	18.896 ppb		09:58:48
3	Si 251.611†	477.9	-18.6	0.0226 ug/L	0.0226 ppb		09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013 ug/L	-4.3013 ppb		09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829 ug/L	-0.4829 ppb		09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545 ug/L	-0.0545 ppb		09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683 ug/L	-1.3683 ppb		09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715 ug/L	5.9715 ppb		09:58:28
3	V 292.402†	887.1	2609.2	-2.2573 ug/L	-2.2573 ppb		09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528 ug/L	-7.8528 ppb		09:58:48
3	SiO2†	429.1	-115.0	-5.1768 ug/L	-5.1768 ppb		09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

Ca 317.933Radial†	272506.6	482480 ug/L	5269.3	482480 ppb	5269.3	1.09%
QC value within limits for Ca 317.933Radial Recovery = 96.50%						
Cd 226.502†	56301.0	472.81 ug/L	3.758	472.81 ppb	3.758	0.79%
QC value within limits for Cd 226.502 Recovery = 94.56%						
Co 228.616†	28228.3	462.55 ug/L	3.948	462.55 ppb	3.948	0.85%
QC value within limits for Co 228.616 Recovery = 92.51%						
Cr 267.716†	53154.8	481.60 ug/L	2.521	481.60 ppb	2.521	0.52%
QC value within limits for Cr 267.716 Recovery = 96.32%						
Cu 324.752†	211552.8	574.38 ug/L	6.835	574.38 ppb	6.835	1.19%
QC value within limits for Cu 324.752 Recovery = 114.88%						
Fe 238.204 Radial†	15285.8	184820 ug/L	1613.6	184820 ppb	1613.6	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 92.41%						
K 766.490 Radial†	30276.9	5529.3 ug/L	61.46	5529.3 ppb	61.46	1.11%
QC value within limits for K 766.490 Radial Recovery = 110.59%						
Mg 279.077 IEC†	11072.2	495270 ug/L	3223.1	495270 ppb	3223.1	0.65%
QC value within limits for Mg 279.077 IEC Recovery = 99.05%						
Mn 257.610†	519055.3	500.72 ug/L	5.664	500.72 ppb	5.664	1.13%
QC value within limits for Mn 257.610 Recovery = 100.14%						
Mo 202.031†	9037.2	492.69 ug/L	3.967	492.69 ppb	3.967	0.81%
QC value within limits for Mo 202.031 Recovery = 98.54%						
Na 589.592 Radial†	18579.3	5211.5 ug/L	48.18	5211.5 ppb	48.18	0.92%
QC value within limits for Na 589.592 Radial Recovery = 104.23%						
Ni 231.604†	23602.9	462.17 ug/L	3.523	462.17 ppb	3.523	0.76%
QC value within limits for Ni 231.604 Recovery = 92.43%						
P 214.914†	5752.3	2520.4 ug/L	39.08	2520.4 ppb	39.08	1.55%
QC value within limits for P 214.914 Recovery = 100.81%						
Pb 220.353†	3920.0	473.36 ug/L	5.165	473.36 ppb	5.165	1.09%
QC value within limits for Pb 220.353 Recovery = 94.67%						
S 181.975 Axial†	2522.0	2612.1 ug/L	33.01	2612.1 ppb	33.01	1.26%
QC value within limits for S 181.975 Axial Recovery = 104.49%						
Sb 206.836†	2110.6	551.22 ug/L	2.592	551.22 ppb	2.592	0.47%
QC value within limits for Sb 206.836 Recovery = 110.24%						
Se 196.026†	4382.9	2608.9 ug/L	24.27	2608.9 ppb	24.27	0.93%
QC value within limits for Se 196.026 Recovery = 104.36%						
Si 251.611†	211822.2	5368.0 ug/L	59.89	5368.0 ppb	59.89	1.12%
QC value within limits for Si 251.611 Recovery = 107.36%						
Sn 189.927†	3306.5	490.18 ug/L	5.219	490.18 ppb	5.219	1.06%
QC value within limits for Sn 189.927 Recovery = 98.04%						
Sr 421.552†	95213.6	495.06 ug/L	5.584	495.06 ppb	5.584	1.13%
QC value within limits for Sr 421.552 Recovery = 99.01%						
Ti 334.940†	354526.5	513.76 ug/L	5.094	513.76 ppb	5.094	0.99%
QC value within limits for Ti 334.940 Recovery = 102.75%						
Tl 190.801†	1932.2	484.94 ug/L	3.312	484.94 ppb	3.312	0.68%
QC value within limits for Tl 190.801 Recovery = 96.99%						
U 409.014†	20126.5	496.18 ug/L	5.005	496.18 ppb	5.005	1.01%
QC value within limits for U 409.014 Recovery = 99.24%						
V 292.402†	91259.0	512.63 ug/L	5.805	512.63 ppb	5.805	1.13%
QC value within limits for V 292.402 Recovery = 102.53%						
Zn 213.857†	71647.8	488.25 ug/L	4.200	488.25 ppb	4.200	0.86%
QC value within limits for Zn 213.857 Recovery = 97.65%						
SiO2†	212042.7	11499 ug/L	145.5	11499 ppb	145.5	1.27%
QC value within limits for SiO2 Recovery = 107.52%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756	ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667	ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135	ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848	ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093	ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797	ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198	ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818	ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763	ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182	ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618	ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359	ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817	ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239	ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303	%		10:09:54
3	Sc Radial	4249.7	4249.7	86.6	%		10:08:52
3	Y 371.029	725964.8	725964.8	82.079	%		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68	%		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798	ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190	ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643	ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484	ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540	ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451	ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510	ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493	ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166	ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306	ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824	ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920	ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523	ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000	ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543	ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915	ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130	ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607	ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07	ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769	ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606	ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498	ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648	ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634	ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188	ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173	ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661	ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929	ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598	ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512	ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635	ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674	ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731	ug/L	14731 ppb	10:16:40
2	Pb 220.353†	248482.1	260348.9	24447	ug/L	24447 ppb	10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788	ug/L	51788 ppb	10:16:40
2	Sb 206.836†	38447.2	40237.0	10413	ug/L	10413 ppb	10:16:40
2	Se 196.026†	22029.2	23096.0	10261	ug/L	10261 ppb	10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861	ug/L	47861 ppb	10:16:35
2	Sn 189.927†	75436.2	79020.2	10451	ug/L	10451 ppb	10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6	ug/L	9440.6 ppb	10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9	ug/L	9887.9 ppb	10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4	ug/L	9993.4 ppb	10:16:40
2	U 409.014†	-1890.4	793.9	-25.762	ug/L	-25.762 ppb	10:16:40
2	V 292.402†	1672052.7	1753005.2	10154	ug/L	10154 ppb	10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064	ug/L	14064 ppb	10:16:35
2	SiO2†	1854816.0	1942233.7	104910	ug/L	104910 ppb	10:17:14
3	Sc 361.383	988641.8	988641.8	95.109	%		10:16:54
3	Sc Radial	4729.3	4729.3	96.3	%		10:15:38
3	Y 371.029	819320.7	819320.7	92.634	%		10:16:54
3	Y RADIAL	5365.7	5365.7	95.02	%		10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602	ug/L	3.2602 ppb	10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512	ug/L	89.512 ppb	10:15:38
3	As 188.979†	30234.5	31825.9	10000	ug/L	10000 ppb	10:17:00
3	B 249.677†	253820.4	267339.4	5029.4	ug/L	5029.4 ppb	10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711	ug/L	13711 ppb	10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8	ug/L	2949.8 ppb	10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255	ug/L	41.255 ppb	10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7	ug/L	9764.7 ppb	10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6	ug/L	9048.6 ppb	10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049	ug/L	24049 ppb	10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842	ug/L	20842 ppb	10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040	ug/L	-4.8040 ppb	10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920	ug/L	288920 ppb	10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120	ug/L	67.120 ppb	10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3	ug/L	9608.3 ppb	10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1	ug/L	9732.1 ppb	10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49	ug/L	158.49 ppb	10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0	ug/L	9890.0 ppb	10:16:54
3	P 214.914†	38530.7	40247.0	14805	ug/L	14805 ppb	10:17:00
3	Pb 220.353†	247695.8	260509.3	24462	ug/L	24462 ppb	10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768	ug/L	51768 ppb	10:17:00
3	Sb 206.836†	38484.3	40428.7	10462	ug/L	10462 ppb	10:17:00
3	Se 196.026†	22001.3	23154.1	10287	ug/L	10287 ppb	10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957	ug/L	47957 ppb	10:16:54
3	Sn 189.927†	75099.1	78965.5	10444	ug/L	10444 ppb	10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4	ug/L	9338.4 ppb	10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1	ug/L	9968.1 ppb	10:16:48
3	Tl 190.801†	39204.4	41264.8	10043	ug/L	10043 ppb	10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525	ug/L	-16.525 ppb	10:17:00
3	V 292.402†	1668512.3	1755925.1	10171	ug/L	10171 ppb	10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095	ug/L	14095 ppb	10:16:54
3	SiO2†	1844505.7	1938761.5	104720	ug/L	104720 ppb	10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

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   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb         20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L         28.6       24016 ppb         28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L         68.9       20784 ppb         68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L      12.73507      7.1483 ppb      12.73507 178.15%
K 766.490 Radial†   1604818.8      292410 ug/L       3446.4      292410 ppb        3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†         -5.2     -33.655 ug/L      97.1262     -33.655 ppb       97.1262 288.59%
Mn 257.610†        10099618.1      9563.8 ug/L        44.75      9563.8 ppb         44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb          5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb        0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb         11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb         37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb         16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb         14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb         35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb         21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb         48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb          3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb        113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb         40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb         24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb       5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb          8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb         18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb       1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

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Ca 317.933Radial†        2842.6      5033.0 ug/L        38.86      5033.0 ppb        38.86   0.77%
   QC value within limits for Ca 317.933Radial  Recovery = 100.66%
Cd 226.502†             57296.6      499.49 ug/L        1.604      499.49 ppb        1.604   0.32%
   QC value within limits for Cd 226.502  Recovery = 99.90%
Co 228.616†             29764.2      490.44 ug/L        1.510      490.44 ppb        1.510   0.31%
   QC value within limits for Co 228.616  Recovery = 98.09%
Cr 267.716†             55373.5      498.28 ug/L        1.039      498.28 ppb        1.039   0.21%
   QC value within limits for Cr 267.716  Recovery = 99.66%
Cu 324.752†            186833.2      499.20 ug/L        1.013      499.20 ppb        1.013   0.20%
   QC value within limits for Cu 324.752  Recovery = 99.84%
Fe 238.204 Radial†        413.6      5016.3 ug/L        43.97      5016.3 ppb        43.97   0.88%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.33%
K 766.490 Radial†       27646.2      5030.3 ug/L        29.10      5030.3 ppb        29.10   0.58%
   QC value within limits for K 766.490 Radial  Recovery = 100.61%
Mg 279.077 IEC†           115.0      5152.7 ug/L        45.64      5152.7 ppb        45.64   0.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.05%
Mn 257.610†            527884.4      500.28 ug/L        0.793      500.28 ppb        0.793   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.06%
Mo 202.031†             9375.3      497.87 ug/L        2.477      497.87 ppb        2.477   0.50%
   QC value within limits for Mo 202.031  Recovery = 99.57%
Na 589.592 Radial†      34004.4      9538.2 ug/L        12.76      9538.2 ppb        12.76   0.13%
   QC value within limits for Na 589.592 Radial  Recovery = 95.38%
Ni 231.604†             25164.0      492.74 ug/L        1.916      492.74 ppb        1.916   0.39%
   QC value within limits for Ni 231.604  Recovery = 98.55%
P 214.914†               5537.8      2401.6 ug/L         5.33      2401.6 ppb         5.33   0.22%
   QC value within limits for P 214.914  Recovery = 96.06%
Pb 220.353†              5333.7      502.25 ug/L        2.030      502.25 ppb        2.030   0.40%
   QC value within limits for Pb 220.353  Recovery = 100.45%
S 181.975 Axial†          914.8      984.56 ug/L       14.228      984.56 ppb       14.228   1.45%
   QC value within limits for S 181.975 Axial  Recovery = 98.46%
Sb 206.836†              1878.1      502.30 ug/L        0.614      502.30 ppb        0.614   0.12%
   QC value within limits for Sb 206.836  Recovery = 100.46%
Se 196.026†              1126.1      518.56 ug/L        3.244      518.56 ppb        3.244   0.63%
   QC value within limits for Se 196.026  Recovery = 103.71%
Si 251.611†             97340.7      2460.2 ug/L         4.93      2460.2 ppb         4.93   0.20%
   QC value within limits for Si 251.611  Recovery = 98.41%
Sn 189.927†              3741.6      495.45 ug/L        2.400      495.45 ppb        2.400   0.48%
   QC value within limits for Sn 189.927  Recovery = 99.09%
Sr 421.552†             93386.6      489.90 ug/L        1.389      489.90 ppb        1.389   0.28%
   QC value within limits for Sr 421.552  Recovery = 97.98%
Ti 334.940†            359415.4      495.61 ug/L        0.472      495.61 ppb        0.472   0.10%
   QC value within limits for Ti 334.940  Recovery = 99.12%
Tl 190.801†              2062.9      502.10 ug/L        2.272      502.10 ppb        2.272   0.45%
   QC value within limits for Tl 190.801  Recovery = 100.42%
U 409.014†              18512.1      477.03 ug/L        1.407      477.03 ppb        1.407   0.29%
   QC value within limits for U 409.014  Recovery = 95.41%
V 292.402†              86553.8      502.14 ug/L        0.660      502.14 ppb        0.660   0.13%
   QC value within limits for V 292.402  Recovery = 100.43%
Zn 213.857†             67981.0      495.14 ug/L        0.700      495.14 ppb        0.700   0.14%
   QC value within limits for Zn 213.857  Recovery = 99.03%
SiO2†                   97459.5      5271.0 ug/L        21.25      5271.0 ppb        21.25   0.40%
   QC value within limits for SiO2  Recovery = 98.57%
All analyte(s) passed QC.
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Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142	ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204	ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748	ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236	ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607	ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238	ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416	ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924	ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677	ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894	ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750	ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873	ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359	ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940	ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70	%		10:46:30
3	Sc Radial	4898.4	4898.4	99.8	%		10:45:03
3	Y 371.029	891482.0	891482.0	100.79	%		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70	%		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626	ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479	ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415	ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651	ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466	ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383	ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758	ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172	ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063	ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401	ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056	ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671	ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339	ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75	ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452	ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415	ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775	ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537	ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081	ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238	ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446	ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873	ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933	ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715	ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116	ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563	ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284	ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025	ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651	ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454	ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553	ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424	ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5     -1.5484 ug/L       2.77737     -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2     -4.5703 ug/L       5.15146     -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2      3.7743 ug/L       1.87844      3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.9597 ug/L       2.16197     -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2      1.5615 ug/L       0.21151      1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5      1.5214 ug/L       0.96781      1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5     -0.0343 ug/L       0.07167     -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1     -0.0500 ug/L       0.01994     -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446      0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -175.7     -4.5411 ug/L       3.27969     -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -22.7     -0.1300 ug/L       0.15236     -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217      0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3      2.3658 ug/L       1.17872      2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753	ug/L	-8.3753	ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374	ug/L	0.9374	ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728	ug/L	17.728	ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640	ug/L	1.8640	ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03	ug/L	183.03	ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144	ug/L	-36.144	ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244	ug/L	-0.8244	ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527	ug/L	0.3527	ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635	ug/L	-0.1635	ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719	ug/L	-3.3719	ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309	ug/L	4.2309	ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606	ug/L	-6.7606	ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455	ug/L	-0.4455	ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451	ug/L	-81.451	ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220	%			10:53:23
3	Sc Radial	4812.6	4812.6	98.0	%			10:52:05
3	Y 371.029	862360.3	862360.3	97.500	%			10:53:23
3	Y RADIAL	5507.3	5507.3	97.52	%			10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149	ug/L	-2.3149	ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070	ug/L	-4.1070	ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627	ug/L	-11.627	ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198	ug/L	1.4198	ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813	ug/L	-0.0813	ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080	ug/L	0.0080	ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437	ug/L	21.437	ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926	ug/L	-0.8926	ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116	ug/L	0.0116	ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157	ug/L	0.1157	ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678	ug/L	-5.1678	ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140	ug/L	382140	ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864	ug/L	62.864	ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088	ug/L	-8.8088	ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260	ug/L	-6.2260	ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035	ug/L	0.0035	ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218	ug/L	10.218	ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003	ug/L	2.5003	ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049	ug/L	-17.049	ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633	ug/L	0.8633	ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577	ug/L	16.577	ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703	ug/L	1.2703	ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98	ug/L	187.98	ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230	ug/L	-36.230	ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851	ug/L	0.0851	ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075	ug/L	0.5075	ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587	ug/L	-0.1587	ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379	ug/L	-1.5379	ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506	ug/L	6.4506	ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115	ug/L	-7.3115	ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488	ug/L	-0.5488	ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404	ug/L	-87.404	ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774	13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122	678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903	2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898	87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095	54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575	16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955	33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103	38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019	16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134	87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174	2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643	0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699	166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835	18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037	6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860	37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671	54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332	7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455	68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899	5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8	ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07	ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86	ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37	ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66	ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8	ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84	ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95	ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61	ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62	ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09	ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56	ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99	ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0	ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71	%		11:00:17
3	Sc Radial	4925.8	4925.8	100	%		10:58:53
3	Y 371.029	877905.3	877905.3	99.258	%		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84	%		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35	ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8	ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79	ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35	ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61	ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82	ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2	ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62	ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69	ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61	ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06	ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7	ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2	ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0	ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71	ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33	ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1	ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55	ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1	ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20	ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00	ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56	ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51	ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1	ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74	ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39	ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24	ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29	ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34	ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66	ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31	ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1	ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

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Ca 317.933Radial†        2795.2      4949.0 ug/L        61.06      4949.0 ppb        61.06   1.23%
   QC value within limits for Ca 317.933Radial  Recovery = 98.98%
Cd 226.502†             57300.2      499.53 ug/L        1.852      499.53 ppb        1.852   0.37%
   QC value within limits for Cd 226.502  Recovery = 99.91%
Co 228.616†             29608.9      487.87 ug/L        1.689      487.87 ppb        1.689   0.35%
   QC value within limits for Co 228.616  Recovery = 97.57%
Cr 267.716†             55297.6      497.60 ug/L        1.743      497.60 ppb        1.743   0.35%
   QC value within limits for Cr 267.716  Recovery = 99.52%
Cu 324.752†            186009.6      496.99 ug/L        1.464      496.99 ppb        1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 99.40%
Fe 238.204 Radial†        405.0      4912.1 ug/L        80.46      4912.1 ppb        80.46   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.24%
K 766.490 Radial†       27016.4      4915.6 ug/L        26.56      4915.6 ppb        26.56   0.54%
   QC value within limits for K 766.490 Radial  Recovery = 98.31%
Mg 279.077 IEC†           111.4      4989.5 ug/L        96.39      4989.5 ppb        96.39   1.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.79%
Mn 257.610†            527731.1      500.13 ug/L        1.476      500.13 ppb        1.476   0.30%
   QC value within limits for Mn 257.610  Recovery = 100.03%
Mo 202.031†              9298.8      493.81 ug/L        2.195      493.81 ppb        2.195   0.44%
   QC value within limits for Mo 202.031  Recovery = 98.76%
Na 589.592 Radial†      33372.8      9361.1 ug/L        50.41      9361.1 ppb        50.41   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†             25005.0      489.63 ug/L        1.726      489.63 ppb        1.726   0.35%
   QC value within limits for Ni 231.604  Recovery = 97.93%
P 214.914†               5502.4      2386.1 ug/L        11.15      2386.1 ppb        11.15   0.47%
   QC value within limits for P 214.914  Recovery = 95.45%
Pb 220.353†              5299.9      499.06 ug/L        1.860      499.06 ppb        1.860   0.37%
   QC value within limits for Pb 220.353  Recovery = 99.81%
S 181.975 Axial†          903.8      972.73 ug/L        4.706      972.73 ppb        4.706   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 97.27%
Sb 206.836†              1847.1      494.01 ug/L        3.403      494.01 ppb        3.403   0.69%
   QC value within limits for Sb 206.836  Recovery = 98.80%
Se 196.026†              1106.9      509.66 ug/L        6.212      509.66 ppb        6.212   1.22%
   QC value within limits for Se 196.026  Recovery = 101.93%
Si 251.611†             97204.8      2456.9 ug/L         7.70      2456.9 ppb         7.70   0.31%
   QC value within limits for Si 251.611  Recovery = 98.28%
Sn 189.927†              3719.5      492.52 ug/L        2.434      492.52 ppb        2.434   0.49%
   QC value within limits for Sn 189.927  Recovery = 98.50%
Sr 421.552†             92292.4      484.16 ug/L        1.112      484.16 ppb        1.112   0.23%
   QC value within limits for Sr 421.552  Recovery = 96.83%
Ti 334.940†            358750.6      494.69 ug/L        1.509      494.69 ppb        1.509   0.31%
   QC value within limits for Ti 334.940  Recovery = 98.94%
Tl 190.801†              2050.0      498.98 ug/L        1.719      498.98 ppb        1.719   0.34%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†              18423.6      474.75 ug/L        1.188      474.75 ppb        1.188   0.25%
   QC value within limits for U 409.014  Recovery = 94.95%
V 292.402†              86361.9      501.00 ug/L        1.491      501.00 ppb        1.491   0.30%
   QC value within limits for V 292.402  Recovery = 100.20%
Zn 213.857†             67835.2      494.11 ug/L        1.146      494.11 ppb        1.146   0.23%
   QC value within limits for Zn 213.857  Recovery = 98.82%
SiO2†                   96661.6      5227.9 ug/L        22.02      5227.9 ppb        22.02   0.42%
   QC value within limits for SiO2  Recovery = 97.76%
All analyte(s) passed QC.
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Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951	ug/L	0.9951 ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458	ug/L	1.7458 ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298	ug/L	-2.7298 ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989	ug/L	2.8989 ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951	ug/L	-3.2951 ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309	ug/L	0.5309 ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661	ug/L	1.2661 ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167	ug/L	-0.1167 ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867	ug/L	-0.0867 ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171	ug/L	-1.7171 ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062	ug/L	0.7062 ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749	ug/L	-0.3749 ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912	ug/L	0.1912 ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073	ug/L	2.4073 ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43	%		11:07:13
3	Sc Radial	4909.9	4909.9	100	%		11:05:46
3	Y 371.029	889449.2	889449.2	100.56	%		11:07:13
3	Y RADIAL	5657.3	5657.3	100.2	%		11:05:46
3	Ag 328.068†	489.6	13.4	0.0605	ug/L	0.0605 ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350	ug/L	22.350 ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242	ug/L	0.7242 ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618	ug/L	7.2618 ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758	ug/L	0.0758 ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242	ug/L	0.0242 ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990	ug/L	3.8990 ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798	ug/L	0.1798 ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058	ug/L	0.0058 ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718	ug/L	0.1718 ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108	ug/L	-0.2108 ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976	ug/L	16.976 ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709	ug/L	25.709 ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52	ug/L	-176.52 ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313	ug/L	0.0313 ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939	ug/L	0.1939 ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755	ug/L	1.0755 ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707	ug/L	-0.0707 ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232	ug/L	0.5232 ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380	ug/L	0.5380 ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618	ug/L	-7.9618 ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903	ug/L	2.2903 ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492	ug/L	0.3492 ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962	ug/L	0.5962 ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103	ug/L	2.2103 ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222	ug/L	-0.0222 ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947	ug/L	-0.0947 ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125	ug/L	-2.2125 ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983	ug/L	-2.0983 ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210	ug/L	0.0210 ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153	ug/L	0.3153 ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484	ug/L	1.7484 ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5 ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62 ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4 ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79 ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50 ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7 ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14 ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22 ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73 ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06 ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23 ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73 ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1 ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2 %		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86 %		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9 ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9 ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0 ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6 ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3 ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8 ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49 ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849 %		12:17:52
3	Y 371.029	872084.7	872084.7	98.600 %		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61 ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35 ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70 ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37 ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30 ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46 ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38 ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43 ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62 ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50 ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54 ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00 ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1 ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64 ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0 ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03 ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64 ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1 ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18 ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49 ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93 ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25 ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98 ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35 ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4 ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L         3.149      507.31 ppb          3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L         3.818      500.79 ppb          3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L         3.018      504.61 ppb          3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L         2.623      506.08 ppb          2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L        45.45      5082.5 ppb         45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L        68.50      4957.3 ppb         68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L        11.74      5217.9 ppb         11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L         3.320      507.64 ppb          3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L         3.216      507.25 ppb          3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L       135.46      9625.8 ppb        135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L         3.555      502.09 ppb          3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L        11.55      2454.7 ppb         11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L         3.072      511.03 ppb          3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L         2.21      1000.2 ppb          2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L         3.960      508.48 ppb          3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L         3.225      525.79 ppb          3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L        14.63      2500.7 ppb         14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L         3.651      502.21 ppb          3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L         6.861      494.05 ppb          6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L         2.661      502.89 ppb          2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L         2.825      511.74 ppb          2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L         2.617      485.15 ppb          2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L         2.757      508.62 ppb          2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L         3.269      502.43 ppb          3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L        57.67      5346.1 ppb         57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -23.990 ug/L       73.3513     -23.990 ppb        73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time: 11/30/2009 06:07:59**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/4/2009 12:48:33**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L        53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L        85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L       105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L        48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†            9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L       151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L        43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L        52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L        47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750	ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466	ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347	ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960	ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216	ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014	ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740	ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164	ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635	ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594	ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408	ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073	ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106	ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8	%		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0	%		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013	ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244	ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453	ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928	ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436	ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845	ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165	ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628	%		12:59:35
3	Y 371.029	880903.4	880903.4	99.597	%		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441	ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565	ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068	ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624	ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288	ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633	ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888	ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060	ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141	ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162	ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630	ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537	ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106	ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791	ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859	ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539	ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160	ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207	ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458	ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330	ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739	ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096	ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533	ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302	ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247	ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8     34.227 ug/L       24.6248     34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
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Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758 ug/L	7.6758 ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119 ug/L	2.2119 ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324 ug/L	-7.1324 ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069 ug/L	3.1069 ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363 ug/L	-1.9363 ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149 ug/L	1.8149 ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313 ug/L	0.4313 ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017 ug/L	0.1017 ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009 ug/L	-1.3009 ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491 ug/L	-1.7491 ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527 ug/L	0.3527 ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144 ug/L	0.3144 ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249 ug/L	3.2249 ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0 %		14:06:39
3	Y RADIAL	5653.4	5653.4	100.1 %		14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078 ug/L	9.0078 ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238 ug/L	25.238 ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557 ug/L	-11.557 ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614 ug/L	26.614 ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277 ug/L	-67.277 ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433 ug/L	13.433 ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743 ug/L	-0.0743 ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53 %		14:08:07
3	Y 371.029	887847.1	887847.1	100.38 %		14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092 ug/L	-0.0092 ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368 ug/L	0.7368 ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077 ug/L	3.0077 ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964 ug/L	0.0964 ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077 ug/L	-0.0077 ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791 ug/L	0.1791 ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226 ug/L	-0.0226 ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834 ug/L	0.0834 ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251 ug/L	0.3251 ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064 ug/L	0.0064 ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662 ug/L	-0.0662 ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191 ug/L	-0.1191 ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622 ug/L	-4.6622 ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536 ug/L	-1.2536 ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407 ug/L	-6.9407 ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302 ug/L	2.5302 ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220 ug/L	-5.9220 ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899 ug/L	2.1899 ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576 ug/L	-0.1576 ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379 ug/L	0.0379 ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674 ug/L	-2.8674 ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636 ug/L	2.5636 ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930 ug/L	-0.1930 ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247 ug/L	0.2247 ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671 ug/L	4.2671 ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       141.0      25.699 ug/L        9.7077      25.699 ppb        9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.9     -40.386 ug/L       44.6154     -40.386 ppb       44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       56.4      15.809 ug/L       12.6890      15.809 ppb       12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb         59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb         14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb        179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb         10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb         13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L         5.14      2504.1 ppb           5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb         40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237 ug/L	8.7237 ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503 ug/L	-0.7503 ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231 ug/L	-7.3231 ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716 ug/L	4.0716 ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231 ug/L	-1.9231 ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718 ug/L	1.4718 ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274 ug/L	1.5274 ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146 ug/L	-0.1146 ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667 ug/L	-0.1667 ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992 ug/L	-4.3992 ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848 ug/L	-0.0848 ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817 ug/L	0.1817 ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213 ug/L	3.4213 ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101 %		15:02:30
3	Y RADIAL	5692.8	5692.8	100.8 %		15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650 ug/L	-1.9650 ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501 ug/L	16.501 ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962 ug/L	-12.962 ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364 ug/L	13.364 ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663 ug/L	48.663 ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078 ug/L	36.078 ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131 ug/L	-0.1131 ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06 %		15:03:57
3	Y 371.029	884765.2	884765.2	100.03 %		15:03:57
3	Ag 328.068†	546.5	72.1	0.2822 ug/L	0.2822 ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412 ug/L	1.2412 ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362 ug/L	0.7362 ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116 ug/L	-0.0116 ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116 ug/L	0.0116 ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212 ug/L	0.0212 ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510 ug/L	0.2510 ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157 ug/L	0.3157 ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543 ug/L	0.3543 ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154 ug/L	0.0154 ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656 ug/L	-0.0656 ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330 ug/L	-0.1330 ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179 ug/L	1.9179 ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499 ug/L	-1.5499 ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618 ug/L	-1.6618 ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470 ug/L	1.9470 ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666 ug/L	-1.0666 ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213 ug/L	1.7213 ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060 ug/L	-0.0060 ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030 ug/L	0.0030 ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751 ug/L	1.5751 ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249 ug/L	-2.0249 ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440 ug/L	-0.2440 ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181 ug/L	0.3181 ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869 ug/L	1.9869 ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3     -15.423 ug/L        6.5866     -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2      20.428 ug/L       19.9912      20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      29.809 ug/L       20.4595      29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2      32.884 ug/L        2.9232      32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb	15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb	15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb	15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb	15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb	15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb	15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb	15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb	15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb	15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb	15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb	15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb	15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb	15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %		15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %		15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb	15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb	15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb	15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb	15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb	15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb	15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb	15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %		15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %		15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb	15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb	15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb	15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb	15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb	15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb	15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb	15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb	15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb	15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb	15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb	15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb	15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb	15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb	15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb	15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb	15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb	15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb	15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb	15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb	15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb	15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb	15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb	15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb	15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb	15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†          58665.2      511.43 ug/L        2.287      511.43 ppb        2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†          30581.9      503.91 ug/L        1.146      503.91 ppb        1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†          56488.1      508.31 ug/L        1.662      508.31 ppb        1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†         191314.5      511.16 ug/L        2.326      511.16 ppb        2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†     414.5      5027.1 ug/L       25.16      5027.1 ppb       25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†    27146.9      4939.1 ug/L       44.05      4939.1 ppb       44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†        114.4      5126.5 ug/L       81.91      5126.5 ppb       81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†         540739.3      512.46 ug/L        2.081      512.46 ppb        2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†           9560.8      507.72 ug/L        1.419      507.72 ppb        1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†   35011.3      9820.7 ug/L       66.05      9820.7 ppb       66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†          25720.3      503.63 ug/L        1.302      503.63 ppb        1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†            5712.9      2478.2 ug/L       10.07      2478.2 ppb       10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†           5447.6      512.95 ug/L        0.126      512.95 ppb        0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†       931.9      1003.1 ug/L        2.77      1003.1 ppb         2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†           1927.7      515.53 ug/L        3.500      515.53 ppb        3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†           1146.0      527.42 ug/L        2.058      527.42 ppb        2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†          99676.8      2519.4 ug/L        9.97      2519.4 ppb        9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†           3826.9      506.74 ug/L        1.147      506.74 ppb        1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†          95148.6      499.14 ug/L        3.343      499.14 ppb        3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†         368437.3      508.04 ug/L        2.319      508.04 ppb        2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†           2089.1      508.52 ug/L        1.578      508.52 ppb        1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†           19147.0      493.42 ug/L        2.387      493.42 ppb        2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†           88415.5      512.95 ug/L        2.377      512.95 ppb        2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†          69584.6      506.84 ug/L        1.824      506.84 ppb        1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                99456.8      5379.2 ug/L       37.27      5379.2 ppb       37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
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Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120 ug/L	2.5120 ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279 ug/L	-1.9279 ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495 ug/L	-0.1495 ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770 ug/L	1.6770 ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989 ug/L	-2.4989 ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415 ug/L	1.7415 ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240 ug/L	2.0240 ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840 ug/L	0.0840 ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260 ug/L	-1.7260 ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950 ug/L	0.4950 ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658 ug/L	0.1658 ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793 ug/L	0.3793 ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045 ug/L	1.4045 ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9 %		15:58:24
3	Y RADIAL	5536.8	5536.8	98.05 %		15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014 ug/L	-2.7014 ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137 ug/L	10.137 ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928 ug/L	-19.928 ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858 ug/L	37.858 ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734 ug/L	69.734 ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211 ug/L	45.211 ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220 ug/L	-0.2220 ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773 %		15:59:52
3	Y 371.029	882258.7	882258.7	99.750 %		15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838 ug/L	-0.2838 ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697 ug/L	0.9697 ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790 ug/L	1.1790 ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208 ug/L	0.0208 ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339 ug/L	0.0339 ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026 ug/L	0.1026 ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501 ug/L	-0.2501 ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010 ug/L	0.1010 ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474 ug/L	0.1474 ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012 ug/L	0.0012 ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361 ug/L	0.1361 ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230 ug/L	0.2230 ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402 ug/L	3.5402 ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038 ug/L	1.3038 ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872 ug/L	-2.2872 ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858 ug/L	5.1858 ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930 ug/L	-1.6930 ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103 ug/L	1.3103 ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187 ug/L	1.9187 ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536 ug/L	0.0536 ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928 ug/L	-0.6928 ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296 ug/L	1.2296 ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732 ug/L	-0.2732 ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459 ug/L	0.3459 ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862 ug/L	3.4862 ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7    -20.252 ug/L       10.1579    -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0001 ug/L       0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1199 ug/L       0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7      0.1902 ug/L       0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      4.1321 ug/L       1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4     -0.1226 ug/L       1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0     -0.0008 ug/L       2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      2.4728 ug/L       2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1     -2.3223 ug/L       0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0      1.3081 ug/L       0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.3975 ug/L       0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5     -0.0971 ug/L       0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5      0.0132 ug/L       0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -0.5672 ug/L       1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9      0.7761 ug/L       0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4     -0.0073 ug/L       0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0      0.3381 ug/L       0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6      2.8325 ug/L       1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0 ug/L	2467.0 ppb	17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00 ug/L	510.00 ppb	17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08 ug/L	988.08 ppb	17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65 ug/L	511.65 ppb	17:02:35
2	Se 196.026†	1101.6	1134.9	522.91 ug/L	522.91 ppb	17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9 ug/L	2523.9 ppb	17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00 ug/L	505.00 ppb	17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34 ug/L	508.34 ppb	17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32 ug/L	505.32 ppb	17:02:35
2	U 409.014†	16132.6	19081.4	491.71 ug/L	491.71 ppb	17:02:15
2	V 292.402†	85992.6	88533.4	513.61 ug/L	513.61 ppb	17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27 ug/L	506.27 ppb	17:02:15
2	SiO2†	99096.4	99571.7	5385.4 ug/L	5385.4 ppb	17:03:13
3	Sc Radial	4783.8	4783.8	97.4 %		17:01:19
3	Y RADIAL	5474.3	5474.3	96.94 %		17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1 ug/L	5154.1 ppb	17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7 ug/L	5093.7 ppb	17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5 ug/L	5010.5 ppb	17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8 ug/L	5005.8 ppb	17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6 ug/L	5244.6 ppb	17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6 ug/L	9733.6 ppb	17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13 ug/L	501.13 ppb	17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474 %		17:02:43
3	Y 371.029	860032.6	860032.6	97.237 %		17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06 ug/L	509.06 ppb	17:02:43
3	As 188.979†	1574.3	1635.3	513.94 ug/L	513.94 ppb	17:03:03
3	B 249.677†	25888.6	26755.8	503.69 ug/L	503.69 ppb	17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18 ug/L	511.18 ppb	17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43 ug/L	511.43 ppb	17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37 ug/L	511.37 ppb	17:02:43
3	Co 228.616†	30331.0	30887.2	508.95 ug/L	508.95 ppb	17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88 ug/L	509.88 ppb	17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19 ug/L	511.19 ppb	17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05 ug/L	512.05 ppb	17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93 ug/L	513.93 ppb	17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25 ug/L	508.25 ppb	17:03:03
3	P 214.914†	5929.5	5756.2	2497.7 ug/L	2497.7 ppb	17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78 ug/L	517.78 ppb	17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4 ug/L	1006.4 ppb	17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71 ug/L	516.71 ppb	17:03:03
3	Se 196.026†	1126.1	1164.9	535.77 ug/L	535.77 ppb	17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5 ug/L	2520.5 ppb	17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39 ug/L	512.39 ppb	17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94 ug/L	507.94 ppb	17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85 ug/L	515.85 ppb	17:03:03
3	U 409.014†	16138.4	19162.4	493.81 ug/L	493.81 ppb	17:02:43
3	V 292.402†	85723.1	88659.8	514.45 ug/L	514.45 ppb	17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31 ug/L	506.31 ppb	17:02:43
3	SiO2†	99466.9	100408.9	5430.6 ug/L	5430.6 ppb	17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L         1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L         3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L         0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L         0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L         62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L         18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L         10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L         0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L         3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L         43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L         2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L         15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L         4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L         13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L         3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L         6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L          3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L         3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L         1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L         0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L         5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L         2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L         0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L         1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L         22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
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Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628 ug/L	-2.1628 ppb	17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982 ug/L	1.3982 ppb	17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236 ug/L	2.6236 ppb	17:09:34
2	Sb 206.836†	49.9	15.7	4.1740 ug/L	4.1740 ppb	17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105 ug/L	-1.6105 ppb	17:09:34
2	Si 251.611†	628.2	76.8	1.9315 ug/L	1.9315 ppb	17:09:34
2	Sn 189.927†	5.3	9.7	1.2851 ug/L	1.2851 ppb	17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699 ug/L	0.0699 ppb	17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234 ug/L	-0.2234 ppb	17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719 ug/L	-3.0719 ppb	17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052 ug/L	-0.4052 ppb	17:09:14
2	Zn 213.857†	959.6	83.5	0.6171 ug/L	0.6171 ppb	17:09:34
2	SiO2†	603.8	10.7	0.5423 ug/L	0.5423 ppb	17:10:14
3	Sc Radial	4823.8	4823.8	98.3 %		17:08:12
3	Y RADIAL	5537.0	5537.0	98.05 %		17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834 ug/L	11.834 ppb	17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300 ug/L	10.300 ppb	17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132 ug/L	-18.132 ppb	17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822 ug/L	13.822 ppb	17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369 ug/L	60.369 ppb	17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232 ug/L	30.232 ppb	17:08:12
3	Sr 421.552†	12.6	20.3	0.1063 ug/L	0.1063 ppb	17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05 %		17:09:39
3	Y 371.029	885792.9	885792.9	100.15 %		17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296 ug/L	-0.3296 ppb	17:09:44
3	As 188.979†	-34.7	1.9	0.5789 ug/L	0.5789 ppb	17:10:04
3	B 249.677†	-424.2	42.1	0.7986 ug/L	0.7986 ppb	17:10:04
3	Ba 233.527†	12.8	12.8	0.0818 ug/L	0.0818 ppb	17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557 ug/L	0.0557 ppb	17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147 ug/L	0.1147 ppb	17:10:04
3	Co 228.616†	-81.4	5.0	0.0830 ug/L	0.0830 ppb	17:10:04
3	Cr 267.716†	106.9	19.1	0.1704 ug/L	0.1704 ppb	17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477 ug/L	0.1477 ppb	17:09:44
3	Mn 257.610†	610.1	33.1	0.0284 ug/L	0.0284 ppb	17:10:04
3	Mo 202.031†	31.4	2.1	0.1121 ug/L	0.1121 ppb	17:10:04
3	Ni 231.604†	133.0	1.0	0.0189 ug/L	0.0189 ppb	17:10:04
3	P 214.914†	272.4	7.2	3.2450 ug/L	3.2450 ppb	17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314 ug/L	0.1314 ppb	17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316 ug/L	-0.9316 ppb	17:10:04
3	Sb 206.836†	35.8	1.1	0.3268 ug/L	0.3268 ppb	17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605 ug/L	-2.1605 ppb	17:10:04
3	Si 251.611†	612.6	54.6	1.3742 ug/L	1.3742 ppb	17:10:04
3	Sn 189.927†	12.1	16.5	2.1777 ug/L	2.1777 ppb	17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180 ug/L	-0.0180 ppb	17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673 ug/L	-1.9673 ppb	17:10:04
3	U 409.014†	-2701.8	73.4	1.9008 ug/L	1.9008 ppb	17:09:39
3	V 292.402†	-1606.8	2.4	0.0234 ug/L	0.0234 ppb	17:09:44
3	Zn 213.857†	941.9	55.9	0.4102 ug/L	0.4102 ppb	17:10:04
3	SiO2†	646.1	46.8	2.5143 ug/L	2.5143 ppb	17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         115.7      21.072 ug/L        7.6270      21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.0     -42.772 ug/L       91.5125     -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        125.9      35.327 ug/L        6.6209      35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 18:01:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4830.0	4830.0	98.4	%			18:03:34
1	Y RADIAL	5529.5	5529.5	97.92	%			18:03:34
1	Al 396.153Radial†	7608.5	7777.9	5114.3	ug/L	5114.3	ppb	18:03:34
1	Ca 317.933Radial†	2838.8	2867.8	5077.6	ug/L	5077.6	ppb	18:03:54
1	Fe 238.204 Radial†	423.3	419.3	5084.9	ug/L	5084.9	ppb	18:03:54
1	K 766.490 Radial†	29286.1	27199.9	4948.8	ug/L	4948.8	ppb	18:03:34
1	Mg 279.077 IEC†	113.0	112.4	5035.0	ug/L	5035.0	ppb	18:03:54
1	Na 589.592 Radial†	33434.5	35266.2	9892.2	ug/L	9892.2	ppb	18:03:34
1	Sr 421.552†	94452.4	96018.5	503.71	ug/L	503.71	ppb	18:03:34
1	Sc 361.383	1035614.3	1035614.3	99.628	%			18:04:53
1	Y 371.029	868981.8	868981.8	98.249	%			18:04:53
1	Ag 328.068†	126389.0	126387.2	504.08	ug/L	504.08	ppb	18:04:53
1	As 188.979†	1566.5	1609.0	505.73	ug/L	505.73	ppb	18:05:13
1	B 249.677†	25789.7	26352.1	496.08	ug/L	496.08	ppb	18:04:53
1	Ba 233.527†	78461.3	78754.5	507.26	ug/L	507.26	ppb	18:04:53
1	Be 313.107†	1611683.8	1622579.0	506.90	ug/L	506.90	ppb	18:04:53
1	Cd 226.502†	57528.7	57979.3	505.44	ug/L	505.44	ppb	18:04:53
1	Co 228.616†	30048.6	30247.1	498.39	ug/L	498.39	ppb	18:05:13
1	Cr 267.716†	55897.5	56018.6	504.09	ug/L	504.09	ppb	18:04:53
1	Cu 324.752†	197518.4	189318.8	505.84	ug/L	505.84	ppb	18:04:53
1	Mn 257.610†	534062.2	535480.8	507.48	ug/L	507.48	ppb	18:04:53
1	Mo 202.031†	9485.8	9492.0	504.07	ug/L	504.07	ppb	18:05:13
1	Ni 231.604†	25499.9	25463.2	498.60	ug/L	498.60	ppb	18:05:13
1	P 214.914†	5884.7	5641.6	2447.0	ug/L	2447.0	ppb	18:05:13
1	Pb 220.353†	5298.3	5393.7	507.89	ug/L	507.89	ppb	18:05:13
1	S 181.975 Axial†	974.6	918.2	988.21	ug/L	988.21	ppb	18:05:13
1	Sb 206.836†	1936.0	1908.6	510.46	ug/L	510.46	ppb	18:05:13
1	Se 196.026†	1104.7	1130.2	520.64	ug/L	520.64	ppb	18:05:13
1	Si 251.611†	99034.8	98847.1	2498.4	ug/L	2498.4	ppb	18:04:53
1	Sn 189.927†	3777.7	3796.2	502.67	ug/L	502.67	ppb	18:05:13
1	Ti 334.940†	362106.9	364720.2	502.92	ug/L	502.92	ppb	18:04:53
1	Tl 190.801†	2016.9	2068.7	503.55	ug/L	503.55	ppb	18:05:13
1	U 409.014†	15956.3	18789.9	484.19	ug/L	484.19	ppb	18:04:53
1	V 292.402†	85828.1	87757.3	509.11	ug/L	509.11	ppb	18:04:53
1	Zn 213.857†	69570.7	68945.1	502.18	ug/L	502.18	ppb	18:04:53
1	SiO2†	99394.4	99166.7	5363.6	ug/L	5363.6	ppb	18:06:13
2	Sc Radial	4837.6	4837.6	98.5	%			18:03:59
2	Y RADIAL	5523.5	5523.5	97.81	%			18:03:59
2	Al 396.153Radial†	7635.5	7793.2	5124.5	ug/L	5124.5	ppb	18:03:59
2	Ca 317.933Radial†	2827.0	2851.3	5048.3	ug/L	5048.3	ppb	18:04:19
2	Fe 238.204 Radial†	425.3	420.7	5101.5	ug/L	5101.5	ppb	18:04:19
2	K 766.490 Radial†	29236.2	27102.5	4931.0	ug/L	4931.0	ppb	18:03:59
2	Mg 279.077 IEC†	116.1	115.4	5167.3	ug/L	5167.3	ppb	18:04:19
2	Na 589.592 Radial†	33358.2	35135.5	9855.5	ug/L	9855.5	ppb	18:03:59
2	Sr 421.552†	94046.6	95456.0	500.76	ug/L	500.76	ppb	18:03:59
2	Sc 361.383	1035808.6	1035808.6	99.646	%			18:05:20
2	Y 371.029	867528.3	867528.3	98.085	%			18:05:20
2	Ag 328.068†	126769.6	126745.3	505.50	ug/L	505.50	ppb	18:05:20
2	As 188.979†	1557.5	1599.7	502.84	ug/L	502.84	ppb	18:05:41
2	B 249.677†	25701.8	26259.1	494.32	ug/L	494.32	ppb	18:05:20
2	Ba 233.527†	78605.2	78884.1	508.09	ug/L	508.09	ppb	18:05:20
2	Be 313.107†	1608110.3	1618689.4	505.69	ug/L	505.69	ppb	18:05:20
2	Cd 226.502†	57666.3	58106.5	506.55	ug/L	506.55	ppb	18:05:20
2	Co 228.616†	29927.7	30120.2	496.29	ug/L	496.29	ppb	18:05:41
2	Cr 267.716†	55912.4	56023.0	504.13	ug/L	504.13	ppb	18:05:20
2	Cu 324.752†	197921.4	189686.1	506.82	ug/L	506.82	ppb	18:05:20
2	Mn 257.610†	534944.8	536266.0	508.23	ug/L	508.23	ppb	18:05:20
2	Mo 202.031†	9432.8	9437.1	501.16	ug/L	501.16	ppb	18:05:41
2	Ni 231.604†	25444.8	25403.1	497.42	ug/L	497.42	ppb	18:05:41

2	P 214.914†	5862.9	5618.6	2436.5 ug/L	2436.5 ppb	18:05:41
2	Pb 220.353†	5283.8	5378.1	506.42 ug/L	506.42 ppb	18:05:41
2	S 181.975 Axial†	962.8	906.1	975.23 ug/L	975.23 ppb	18:05:41
2	Sb 206.836†	1917.4	1889.5	505.30 ug/L	505.30 ppb	18:05:41
2	Se 196.026†	1087.0	1112.2	512.72 ug/L	512.72 ppb	18:05:41
2	Si 251.611†	99182.7	98977.0	2501.8 ug/L	2501.8 ppb	18:05:20
2	Sn 189.927†	3754.3	3771.9	499.47 ug/L	499.47 ppb	18:05:41
2	Ti 334.940†	362842.0	365389.7	503.84 ug/L	503.84 ppb	18:05:20
2	Tl 190.801†	1992.7	2044.0	497.59 ug/L	497.59 ppb	18:05:41
2	U 409.014†	15978.8	18809.5	484.69 ug/L	484.69 ppb	18:05:20
2	V 292.402†	85852.5	87765.6	509.12 ug/L	509.12 ppb	18:05:20
2	Zn 213.857†	69526.6	68887.7	501.76 ug/L	501.76 ppb	18:05:20
2	SiO2†	99499.1	99253.0	5368.4 ug/L	5368.4 ppb	18:06:19
3	Sc Radial	4799.2	4799.2	97.7 %		18:04:24
3	Y RADIAL	5498.6	5498.6	97.37 %		18:04:24
3	Al 396.153Radial†	7619.7	7839.0	5154.6 ug/L	5154.6 ppb	18:04:24
3	Ca 317.933Radial†	2853.2	2901.0	5136.3 ug/L	5136.3 ppb	18:04:44
3	Fe 238.204 Radial†	431.9	430.9	5225.2 ug/L	5225.2 ppb	18:04:44
3	K 766.490 Radial†	29093.2	27193.5	4947.7 ug/L	4947.7 ppb	18:04:24
3	Mg 279.077 IEC†	119.0	119.2	5339.1 ug/L	5339.1 ppb	18:04:44
3	Na 589.592 Radial†	32907.5	34945.0	9802.1 ug/L	9802.1 ppb	18:04:24
3	Sr 421.552†	93251.9	95406.2	500.50 ug/L	500.50 ppb	18:04:24
3	Sc 361.383	1038206.6	1038206.6	99.877 %		18:05:48
3	Y 371.029	871182.2	871182.2	98.498 %		18:05:48
3	Ag 328.068†	126926.4	126608.4	504.99 ug/L	504.99 ppb	18:05:48
3	As 188.979†	1576.5	1615.1	507.65 ug/L	507.65 ppb	18:06:08
3	B 249.677†	25829.6	26327.4	495.59 ug/L	495.59 ppb	18:05:48
3	Ba 233.527†	78220.4	78316.7	504.45 ug/L	504.45 ppb	18:05:48
3	Be 313.107†	1610405.9	1617260.4	505.24 ug/L	505.24 ppb	18:05:48
3	Cd 226.502†	57420.6	57726.9	503.22 ug/L	503.22 ppb	18:05:48
3	Co 228.616†	30208.3	30331.8	499.79 ug/L	499.79 ppb	18:06:08
3	Cr 267.716†	55861.2	55842.1	502.50 ug/L	502.50 ppb	18:05:48
3	Cu 324.752†	198284.6	189591.0	506.57 ug/L	506.57 ppb	18:05:48
3	Mn 257.610†	533597.1	533676.7	505.78 ug/L	505.78 ppb	18:05:48
3	Mo 202.031†	9542.9	9525.4	505.86 ug/L	505.86 ppb	18:06:08
3	Ni 231.604†	25662.7	25562.4	500.54 ug/L	500.54 ppb	18:06:08
3	P 214.914†	5892.8	5635.0	2443.9 ug/L	2443.9 ppb	18:06:08
3	Pb 220.353†	5325.7	5407.8	509.22 ug/L	509.22 ppb	18:06:08
3	S 181.975 Axial†	987.2	928.3	999.15 ug/L	999.15 ppb	18:06:08
3	Sb 206.836†	1957.6	1925.3	514.98 ug/L	514.98 ppb	18:06:08
3	Se 196.026†	1116.3	1139.0	525.06 ug/L	525.06 ppb	18:06:08
3	Si 251.611†	98993.5	98557.6	2491.0 ug/L	2491.0 ppb	18:05:48
3	Sn 189.927†	3799.2	3808.2	504.27 ug/L	504.27 ppb	18:06:08
3	Ti 334.940†	362935.3	364642.1	502.82 ug/L	502.82 ppb	18:05:48
3	Tl 190.801†	2018.1	2064.8	502.60 ug/L	502.60 ppb	18:06:08
3	U 409.014†	16280.7	19074.7	491.53 ug/L	491.53 ppb	18:05:48
3	V 292.402†	85865.0	87579.2	508.12 ug/L	508.12 ppb	18:05:48
3	Zn 213.857†	69400.3	68600.1	499.61 ug/L	499.61 ppb	18:05:48
3	SiO2†	98935.3	98458.0	5325.0 ug/L	5325.0 ppb	18:06:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036543.2	99.717	%	0.1389				0.14%
Sc Radial	4822.3	98.2	%	0.41				0.42%
Y 371.029	869230.8	98.277	%	0.2080				0.21%
Y RADIAL	5517.2	97.70	%	0.290				0.30%
Ag 328.068†	126580.3	504.86	ug/L	0.722	504.86	ppb	0.722	0.14%
QC value within limits for Ag 328.068 Recovery = 100.97%								
Al 396.153Radial†	7803.3	5131.1	ug/L	20.93	5131.1	ppb	20.93	0.41%
QC value within limits for Al 396.153Radial Recovery = 102.62%								
As 188.979†	1607.9	505.41	ug/L	2.420	505.41	ppb	2.420	0.48%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	26312.9	495.33	ug/L	0.906	495.33	ppb	0.906	0.18%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	78651.7	506.60	ug/L	1.909	506.60	ppb	1.909	0.38%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1619509.6	505.94	ug/L	0.858	505.94	ppb	0.858	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	2873.4	5087.4	ug/L	44.83	5087.4	ppb	44.83	0.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.75%
Cd 226.502†            57937.6      505.07 ug/L         1.691      505.07 ppb          1.691   0.33%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†            30233.1      498.16 ug/L         1.760      498.16 ppb          1.760   0.35%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            55961.2      503.57 ug/L         0.928      503.57 ppb          0.928   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.71%
Cu 324.752†           189532.0      506.41 ug/L         0.510      506.41 ppb          0.510   0.10%
   QC value within limits for Cu 324.752  Recovery = 101.28%
Fe 238.204 Radial†       423.6      5137.2 ug/L        76.66      5137.2 ppb         76.66   1.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27165.3      4942.5 ug/L         9.94      4942.5 ppb          9.94   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          115.6      5180.4 ug/L       152.48      5180.4 ppb        152.48   2.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.61%
Mn 257.610†           535141.2      507.16 ug/L         1.252      507.16 ppb          1.252   0.25%
   QC value within limits for Mn 257.610  Recovery = 101.43%
Mo 202.031†             9484.8      503.70 ug/L         2.371      503.70 ppb          2.371   0.47%
   QC value within limits for Mo 202.031  Recovery = 100.74%
Na 589.592 Radial†     35115.6      9849.9 ug/L        45.31      9849.9 ppb         45.31   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†            25476.2      498.85 ug/L         1.575      498.85 ppb          1.575   0.32%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              5631.7      2442.5 ug/L         5.37      2442.5 ppb          5.37   0.22%
   QC value within limits for P 214.914  Recovery = 97.70%
Pb 220.353†             5393.2      507.84 ug/L         1.401      507.84 ppb          1.401   0.28%
   QC value within limits for Pb 220.353  Recovery = 101.57%
S 181.975 Axial†         917.5      987.53 ug/L        11.972      987.53 ppb         11.972   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 98.75%
Sb 206.836†             1907.8      510.25 ug/L         4.840      510.25 ppb          4.840   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.05%
Se 196.026†             1127.2      519.48 ug/L         6.252      519.48 ppb          6.252   1.20%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            98793.9      2497.0 ug/L         5.50      2497.0 ppb          5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 99.88%
Sn 189.927†             3792.1      502.14 ug/L         2.448      502.14 ppb          2.448   0.49%
   QC value within limits for Sn 189.927  Recovery = 100.43%
Sr 421.552†            95626.9      501.65 ug/L         1.784      501.65 ppb          1.784   0.36%
   QC value within limits for Sr 421.552  Recovery = 100.33%
Ti 334.940†           364917.3      503.19 ug/L         0.566      503.19 ppb          0.566   0.11%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†             2059.2      501.25 ug/L         3.199      501.25 ppb          3.199   0.64%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†             18891.3      486.80 ug/L         4.105      486.80 ppb          4.105   0.84%
   QC value within limits for U 409.014  Recovery = 97.36%
V 292.402†             87700.7      508.78 ug/L         0.576      508.78 ppb          0.576   0.11%
   QC value within limits for V 292.402  Recovery = 101.76%
Zn 213.857†            68811.0      501.18 ug/L         1.379      501.18 ppb          1.379   0.28%
   QC value within limits for Zn 213.857  Recovery = 100.24%
SiO2†                  98959.2      5352.4 ug/L        23.80      5352.4 ppb         23.80   0.44%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
```

Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 18:08:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4766.6	4766.6	97.1	%			18:10:25
1	Y RADIAL	5473.3	5473.3	96.92	%			18:10:25
1	Al 396.153Radial†	-20.4	22.8	15.038	ug/L	15.038	ppb	18:10:25
1	Ca 317.933Radial†	22.5	5.3	9.4050	ug/L	9.4050	ppb	18:10:45
1	Fe 238.204 Radial†	8.0	-2.8	-33.253	ug/L	-33.253	ppb	18:10:45
1	K 766.490 Radial†	2545.0	51.9	9.4686	ug/L	9.4686	ppb	18:10:25
1	Mg 279.077 IEC†	4.0	1.6	72.341	ug/L	72.341	ppb	18:10:45
1	Na 589.592 Radial†	-1272.2	-30.5	-8.5443	ug/L	-8.5443	ppb	18:10:25
1	Sr 421.552†	-32.1	-25.7	-0.1348	ug/L	-0.1348	ppb	18:10:25
1	Sc 361.383	1034609.2	1034609.2	99.531	%			18:11:42
1	Y 371.029	881696.7	881696.7	99.687	%			18:11:42
1	Ag 328.068†	446.5	-25.5	-0.1118	ug/L	-0.1118	ppb	18:11:47
1	As 188.979†	-33.8	2.6	0.8128	ug/L	0.8128	ppb	18:12:07
1	B 249.677†	-454.8	9.1	0.1770	ug/L	0.1770	ppb	18:12:07
1	Ba 233.527†	-2.6	-2.6	-0.0192	ug/L	-0.0192	ppb	18:12:07
1	Be 313.107†	-4791.6	59.7	0.0187	ug/L	0.0187	ppb	18:11:47
1	Cd 226.502†	-228.8	5.7	0.0536	ug/L	0.0536	ppb	18:12:07
1	Co 228.616†	-84.4	1.6	0.0263	ug/L	0.0263	ppb	18:12:07
1	Cr 267.716†	106.0	18.8	0.1679	ug/L	0.1679	ppb	18:12:07
1	Cu 324.752†	8941.8	46.4	0.1223	ug/L	0.1223	ppb	18:11:47
1	Mn 257.610†	570.8	-3.2	-0.0077	ug/L	-0.0077	ppb	18:12:07
1	Mo 202.031†	29.9	0.8	0.0391	ug/L	0.0391	ppb	18:12:07
1	Ni 231.604†	151.8	20.6	0.4030	ug/L	0.4030	ppb	18:12:07
1	P 214.914†	248.4	-15.6	-6.9397	ug/L	-6.9397	ppb	18:12:07
1	Pb 220.353†	-71.0	4.3	0.4060	ug/L	0.4060	ppb	18:12:07
1	S 181.975 Axial†	60.8	0.9	1.0132	ug/L	1.0132	ppb	18:12:07
1	Sb 206.836†	49.6	15.2	4.0184	ug/L	4.0184	ppb	18:12:07
1	Se 196.026†	-29.1	-7.9	-3.6032	ug/L	-3.6032	ppb	18:12:07
1	Si 251.611†	580.7	25.8	0.6494	ug/L	0.6494	ppb	18:12:07
1	Sn 189.927†	0.4	4.7	0.6278	ug/L	0.6278	ppb	18:12:07
1	Ti 334.940†	-1230.3	24.3	0.0350	ug/L	0.0350	ppb	18:11:47
1	Tl 190.801†	-42.1	1.9	0.4708	ug/L	0.4708	ppb	18:12:07
1	U 409.014†	-2850.8	-90.3	-2.3302	ug/L	-2.3302	ppb	18:11:42
1	V 292.402†	-1689.4	-88.8	-0.5058	ug/L	-0.5058	ppb	18:11:47
1	Zn 213.857†	887.3	5.9	0.0415	ug/L	0.0415	ppb	18:12:07
1	SiO2†	594.9	-1.3	-0.0849	ug/L	-0.0849	ppb	18:13:13
2	Sc Radial	4831.6	4831.6	98.4	%			18:10:50
2	Y RADIAL	5539.0	5539.0	98.08	%			18:10:50
2	Al 396.153Radial†	-19.9	23.6	15.571	ug/L	15.571	ppb	18:10:50
2	Ca 317.933Radial†	20.6	3.1	5.4395	ug/L	5.4395	ppb	18:11:10
2	Fe 238.204 Radial†	12.0	1.2	14.105	ug/L	14.105	ppb	18:11:10
2	K 766.490 Radial†	2640.1	113.3	20.647	ug/L	20.647	ppb	18:10:50
2	Mg 279.077 IEC†	6.5	4.1	183.27	ug/L	183.27	ppb	18:11:10
2	Na 589.592 Radial†	-1259.8	-0.2	-0.0693	ug/L	-0.0693	ppb	18:10:50
2	Sr 421.552†	-7.2	0.1	0.0004	ug/L	0.0004	ppb	18:10:50
2	Sc 361.383	1027067.1	1027067.1	98.806	%			18:12:12
2	Y 371.029	874594.2	874594.2	98.884	%			18:12:12
2	Ag 328.068†	449.8	-18.9	-0.0704	ug/L	-0.0704	ppb	18:12:17
2	As 188.979†	-40.3	-4.2	-1.3039	ug/L	-1.3039	ppb	18:12:37
2	B 249.677†	-427.8	33.1	0.6230	ug/L	0.6230	ppb	18:12:37
2	Ba 233.527†	-2.6	-2.6	-0.0166	ug/L	-0.0166	ppb	18:12:37
2	Be 313.107†	-4776.7	39.5	0.0122	ug/L	0.0122	ppb	18:12:17
2	Cd 226.502†	-219.3	13.7	0.1183	ug/L	0.1183	ppb	18:12:37
2	Co 228.616†	-75.9	9.5	0.1565	ug/L	0.1565	ppb	18:12:37
2	Cr 267.716†	97.6	11.0	0.0989	ug/L	0.0989	ppb	18:12:37
2	Cu 324.752†	8954.3	125.1	0.3347	ug/L	0.3347	ppb	18:12:17
2	Mn 257.610†	567.3	-2.6	-0.0044	ug/L	-0.0044	ppb	18:12:37
2	Mo 202.031†	27.2	-1.7	-0.0888	ug/L	-0.0888	ppb	18:12:37
2	Ni 231.604†	137.1	6.8	0.1336	ug/L	0.1336	ppb	18:12:37

2	P 214.914†	289.4	27.8	12.395	ug/L	12.395 ppb	18:12:37
2	Pb 220.353†	-86.1	-11.5	-1.0822	ug/L	-1.0822 ppb	18:12:37
2	S 181.975 Axial†	51.7	-7.8	-8.3923	ug/L	-8.3923 ppb	18:12:37
2	Sb 206.836†	34.7	0.5	0.1412	ug/L	0.1412 ppb	18:12:37
2	Se 196.026†	-20.9	0.2	0.1369	ug/L	0.1369 ppb	18:12:37
2	Si 251.611†	575.3	24.6	0.6161	ug/L	0.6161 ppb	18:12:37
2	Sn 189.927†	3.8	8.2	1.0891	ug/L	1.0891 ppb	18:12:37
2	Ti 334.940†	-1271.1	-26.0	-0.0353	ug/L	-0.0353 ppb	18:12:17
2	Tl 190.801†	-40.7	3.1	0.7471	ug/L	0.7471 ppb	18:12:37
2	U 409.014†	-2766.3	-25.8	-0.6692	ug/L	-0.6692 ppb	18:12:12
2	V 292.402†	-1617.8	-28.8	-0.1657	ug/L	-0.1657 ppb	18:12:17
2	Zn 213.857†	888.8	14.0	0.0937	ug/L	0.0937 ppb	18:12:37
2	SiO2†	620.8	29.3	1.5731	ug/L	1.5731 ppb	18:13:18
3	Sc Radial	4720.5	4720.5	96.1	%		18:11:15
3	Y RADIAL	5456.3	5456.3	96.62	%		18:11:15
3	Al 396.153Radial†	-34.8	7.6	5.0192	ug/L	5.0192 ppb	18:11:15
3	Ca 317.933Radial†	12.2	-5.1	-9.1137	ug/L	-9.1137 ppb	18:11:35
3	Fe 238.204 Radial†	9.7	-0.9	-10.769	ug/L	-10.769 ppb	18:11:35
3	K 766.490 Radial†	2595.0	129.5	23.622	ug/L	23.622 ppb	18:11:15
3	Mg 279.077 IEC†	2.1	-0.3	-11.938	ug/L	-11.938 ppb	18:11:35
3	Na 589.592 Radial†	-1312.6	-85.3	-23.919	ug/L	-23.919 ppb	18:11:15
3	Sr 421.552†	1.0	8.4	0.0443	ug/L	0.0443 ppb	18:11:15
3	Sc 361.383	1017127.6	1017127.6	97.849	%		18:12:42
3	Y 371.029	865924.7	865924.7	97.903	%		18:12:42
3	Ag 328.068†	366.4	-99.6	-0.4011	ug/L	-0.4011 ppb	18:12:47
3	As 188.979†	-29.3	6.6	2.0560	ug/L	2.0560 ppb	18:13:07
3	B 249.677†	-440.2	16.3	0.3089	ug/L	0.3089 ppb	18:13:07
3	Ba 233.527†	9.3	9.5	0.0592	ug/L	0.0592 ppb	18:13:07
3	Be 313.107†	-4801.3	-32.9	-0.0104	ug/L	-0.0104 ppb	18:12:47
3	Cd 226.502†	-236.4	-5.9	-0.0502	ug/L	-0.0502 ppb	18:13:07
3	Co 228.616†	-91.6	-7.3	-0.1196	ug/L	-0.1196 ppb	18:13:07
3	Cr 267.716†	114.8	29.6	0.2642	ug/L	0.2642 ppb	18:13:07
3	Cu 324.752†	8925.1	183.8	0.4903	ug/L	0.4903 ppb	18:12:47
3	Mn 257.610†	576.7	12.7	0.0111	ug/L	0.0111 ppb	18:13:07
3	Mo 202.031†	31.1	2.6	0.1363	ug/L	0.1363 ppb	18:13:07
3	Ni 231.604†	141.1	12.2	0.2399	ug/L	0.2399 ppb	18:13:07
3	P 214.914†	272.2	13.1	5.7950	ug/L	5.7950 ppb	18:13:07
3	Pb 220.353†	-73.4	0.5	0.0523	ug/L	0.0523 ppb	18:13:07
3	S 181.975 Axial†	54.0	-4.9	-5.2941	ug/L	-5.2941 ppb	18:13:07
3	Sb 206.836†	34.2	0.3	0.1003	ug/L	0.1003 ppb	18:13:07
3	Se 196.026†	-20.9	0.0	-0.0283	ug/L	-0.0283 ppb	18:13:07
3	Si 251.611†	567.7	22.6	0.5592	ug/L	0.5592 ppb	18:13:07
3	Sn 189.927†	3.6	8.0	1.0610	ug/L	1.0610 ppb	18:13:07
3	Ti 334.940†	-1272.2	-39.7	-0.0555	ug/L	-0.0555 ppb	18:12:47
3	Tl 190.801†	-39.6	3.8	0.9126	ug/L	0.9126 ppb	18:13:07
3	U 409.014†	-2696.8	17.9	0.4644	ug/L	0.4644 ppb	18:12:42
3	V 292.402†	-1683.0	-111.5	-0.6339	ug/L	-0.6339 ppb	18:12:47
3	Zn 213.857†	892.5	26.6	0.1945	ug/L	0.1945 ppb	18:13:07
3	SiO2†	608.0	22.3	1.1842	ug/L	1.1842 ppb	18:13:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026268.0	98.729	%	0.8435				0.85%
Sc Radial	4772.9	97.2	%	1.14				1.17%
Y 371.029	874071.9	98.825	%	0.8931				0.90%
Y RADIAL	5489.5	97.21	%	0.774				0.80%
Ag 328.068†	-48.0	-0.1945	ug/L	0.18018	-0.1945	ppb	0.18018	92.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.0	11.876	ug/L	5.9441	11.876	ppb	5.9441	50.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	0.5216	ug/L	1.69881	0.5216	ppb	1.69881	325.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.5	0.3696	ug/L	0.22913	0.3696	ppb	0.22913	61.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0078	ug/L	0.04452	0.0078	ppb	0.04452	572.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.1	0.0069	ug/L	0.01526	0.0069	ppb	0.01526	222.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	1.9103	ug/L	9.75075	1.9103	ppb	9.75075	510.44%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.5      0.0406 ug/L       0.08501      0.0406 ppb        0.08501 209.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.3      0.0211 ug/L       0.13814      0.0211 ppb        0.13814 655.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.8      0.1770 ug/L       0.08304      0.1770 ppb        0.08304  46.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               118.4      0.3158 ug/L       0.18470      0.3158 ppb        0.18470  58.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -9.9724 ug/L      23.68902     -9.9724 ppb       23.68902 237.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          98.3      17.912 ug/L        7.4622      17.912 ppb         7.4622  41.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.8      81.225 ug/L       97.9077      81.225 ppb        97.9077 120.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0003 ug/L       0.01006     -0.0003 ppb        0.01006 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0289 ug/L       0.11291      0.0289 ppb        0.11291 390.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -38.7     -10.844 ug/L      12.0902     -10.844 ppb       12.0902 111.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.2      0.2588 ug/L       0.13570      0.2588 ppb        0.13570  52.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7502 ug/L       9.82845      3.7502 ppb        9.82845 262.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.3     -0.2079 ug/L       0.77747     -0.2079 ppb        0.77747 373.89%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.9     -4.2244 ug/L       4.79313     -4.2244 ppb        4.79313 113.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.3      1.4200 ug/L       2.25041      1.4200 ppb        2.25041 158.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.5     -1.1649 ug/L       2.11326     -1.1649 ppb        2.11326 181.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.3      0.6082 ug/L       0.04564      0.6082 ppb        0.04564   7.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.0      0.9260 ug/L       0.25857      0.9260 ppb        0.25857  27.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.7     -0.0300 ug/L       0.09336     -0.0300 ppb        0.09336 310.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.8     -0.0186 ug/L       0.04751     -0.0186 ppb        0.04751 255.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      0.7102 ug/L       0.22320      0.7102 ppb        0.22320  31.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.7     -0.8450 ug/L       1.40556     -0.8450 ppb        1.40556 166.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -76.4     -0.4351 ug/L       0.24200     -0.4351 ppb        0.24200  55.62%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                15.5      0.1099 ug/L       0.07776      0.1099 ppb        0.07776  70.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      16.8      0.8908 ug/L       0.86705      0.8908 ppb        0.86705  97.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 19:19:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4734.3	4734.3	96.4	%			19:21:09
1	Y RADIAL	5406.0	5406.0	95.73	%			19:21:09
1	Al 396.153Radial†	7520.0	7842.3	5156.8	ug/L	5156.8	ppb	19:21:09
1	Ca 317.933Radial†	2824.2	2911.0	5154.0	ug/L	5154.0	ppb	19:21:29
1	Fe 238.204 Radial†	417.6	422.1	5118.6	ug/L	5118.6	ppb	19:21:29
1	K 766.490 Radial†	28948.3	27451.3	4994.6	ug/L	4994.6	ppb	19:21:09
1	Mg 279.077 IEC†	112.6	114.3	5118.6	ug/L	5118.6	ppb	19:21:29
1	Na 589.592 Radial†	32433.3	34914.9	9793.6	ug/L	9793.6	ppb	19:21:09
1	Sr 421.552†	92081.5	95500.4	500.99	ug/L	500.99	ppb	19:21:09
1	Sc 361.383	1033401.4	1033401.4	99.415	%			19:22:28
1	Y 371.029	865851.8	865851.8	97.895	%			19:22:28
1	Ag 328.068†	127285.7	127560.8	508.74	ug/L	508.74	ppb	19:22:28
1	As 188.979†	1572.9	1618.7	508.81	ug/L	508.81	ppb	19:22:48
1	B 249.677†	26054.4	26673.9	502.15	ug/L	502.15	ppb	19:22:28
1	Ba 233.527†	79037.3	79502.5	512.07	ug/L	512.07	ppb	19:22:28
1	Be 313.107†	1617567.7	1631961.8	509.83	ug/L	509.83	ppb	19:22:28
1	Cd 226.502†	58065.0	58642.4	511.22	ug/L	511.22	ppb	19:22:28
1	Co 228.616†	30149.0	30412.8	501.11	ug/L	501.11	ppb	19:22:48
1	Cr 267.716†	56148.9	56391.5	507.44	ug/L	507.44	ppb	19:22:28
1	Cu 324.752†	198503.5	190734.3	509.62	ug/L	509.62	ppb	19:22:28
1	Mn 257.610†	537564.0	540151.2	511.91	ug/L	511.91	ppb	19:22:28
1	Mo 202.031†	9476.2	9502.7	504.65	ug/L	504.65	ppb	19:22:48
1	Ni 231.604†	25566.4	25584.9	500.98	ug/L	500.98	ppb	19:22:48
1	P 214.914†	5881.3	5650.8	2450.5	ug/L	2450.5	ppb	19:22:48
1	Pb 220.353†	5299.7	5406.5	509.10	ug/L	509.10	ppb	19:22:48
1	S 181.975 Axial†	975.7	921.3	991.62	ug/L	991.62	ppb	19:22:48
1	Sb 206.836†	1937.8	1914.6	511.96	ug/L	511.96	ppb	19:22:48
1	Se 196.026†	1106.3	1134.2	522.52	ug/L	522.52	ppb	19:22:48
1	Si 251.611†	99946.8	99977.3	2527.1	ug/L	2527.1	ppb	19:22:28
1	Sn 189.927†	3766.0	3792.5	502.20	ug/L	502.20	ppb	19:22:48
1	Ti 334.940†	364631.3	368037.8	507.50	ug/L	507.50	ppb	19:22:28
1	Tl 190.801†	2033.0	2089.2	508.54	ug/L	508.54	ppb	19:22:48
1	U 409.014†	16208.7	19078.1	491.63	ug/L	491.63	ppb	19:22:28
1	V 292.402†	86101.1	88216.4	511.75	ug/L	511.75	ppb	19:22:28
1	Zn 213.857†	69834.6	69360.0	505.20	ug/L	505.20	ppb	19:22:28
1	SiO2†	99520.5	99507.2	5382.1	ug/L	5382.1	ppb	19:23:48
2	Sc Radial	4785.5	4785.5	97.5	%			19:21:34
2	Y RADIAL	5470.8	5470.8	96.88	%			19:21:34
2	Al 396.153Radial†	7596.8	7837.7	5153.6	ug/L	5153.6	ppb	19:21:34
2	Ca 317.933Radial†	2796.5	2851.2	5048.2	ug/L	5048.2	ppb	19:21:54
2	Fe 238.204 Radial†	417.0	416.8	5055.5	ug/L	5055.5	ppb	19:21:54
2	K 766.490 Radial†	29186.6	27374.5	4980.7	ug/L	4980.7	ppb	19:21:34
2	Mg 279.077 IEC†	113.5	114.0	5106.5	ug/L	5106.5	ppb	19:21:54
2	Na 589.592 Radial†	32666.5	34794.2	9759.8	ug/L	9759.8	ppb	19:21:34
2	Sr 421.552†	93027.7	95449.3	500.72	ug/L	500.72	ppb	19:21:34
2	Sc 361.383	1026012.3	1026012.3	98.704	%			19:22:55
2	Y 371.029	860635.0	860635.0	97.305	%			19:22:55
2	Ag 328.068†	126120.5	127302.4	507.70	ug/L	507.70	ppb	19:22:55
2	As 188.979†	1582.1	1639.5	515.25	ug/L	515.25	ppb	19:23:15
2	B 249.677†	25839.3	26644.7	501.60	ug/L	501.60	ppb	19:22:55
2	Ba 233.527†	77930.9	78954.2	508.54	ug/L	508.54	ppb	19:22:55
2	Be 313.107†	1600999.0	1626893.3	508.25	ug/L	508.25	ppb	19:22:55
2	Cd 226.502†	57183.2	58169.6	507.10	ug/L	507.10	ppb	19:22:55
2	Co 228.616†	30107.6	30589.2	504.04	ug/L	504.04	ppb	19:23:15
2	Cr 267.716†	55469.2	56109.7	504.91	ug/L	504.91	ppb	19:22:55
2	Cu 324.752†	196925.1	190573.2	509.19	ug/L	509.19	ppb	19:22:55
2	Mn 257.610†	531288.3	537687.2	509.57	ug/L	509.57	ppb	19:22:55
2	Mo 202.031†	9505.9	9601.4	509.88	ug/L	509.88	ppb	19:23:15
2	Ni 231.604†	25542.1	25745.5	504.13	ug/L	504.13	ppb	19:23:15

2	P 214.914†	5874.3	5686.3	2466.5	ug/L	2466.5 ppb	19:23:15
2	Pb 220.353†	5291.5	5436.6	511.94	ug/L	511.94 ppb	19:23:15
2	S 181.975 Axial†	980.6	933.4	1004.6	ug/L	1004.6 ppb	19:23:15
2	Sb 206.836†	1940.2	1931.0	516.49	ug/L	516.49 ppb	19:23:15
2	Se 196.026†	1107.9	1143.8	526.56	ug/L	526.56 ppb	19:23:15
2	Si 251.611†	98767.5	99506.6	2515.0	ug/L	2515.0 ppb	19:22:55
2	Sn 189.927†	3748.6	3802.2	503.46	ug/L	503.46 ppb	19:23:15
2	Ti 334.940†	361053.9	367054.8	506.14	ug/L	506.14 ppb	19:22:55
2	Tl 190.801†	2027.9	2098.8	510.82	ug/L	510.82 ppb	19:23:15
2	U 409.014†	16079.4	19064.5	491.29	ug/L	491.29 ppb	19:22:55
2	V 292.402†	85328.7	88057.5	510.93	ug/L	510.93 ppb	19:22:55
2	Zn 213.857†	69041.3	69062.2	503.00	ug/L	503.00 ppb	19:22:55
2	SiO2†	99115.1	99817.4	5398.7	ug/L	5398.7 ppb	19:23:53
3	Sc Radial	4799.7	4799.7	97.8	%		19:21:59
3	Y RADIAL	5465.7	5465.7	96.79	%		19:21:59
3	Al 396.153Radial†	7583.0	7800.6	5129.2	ug/L	5129.2 ppb	19:21:59
3	Ca 317.933Radial†	2825.1	2872.0	5084.9	ug/L	5084.9 ppb	19:22:19
3	Fe 238.204 Radial†	417.4	415.9	5044.6	ug/L	5044.6 ppb	19:22:19
3	K 766.490 Radial†	29293.9	27395.8	4984.4	ug/L	4984.4 ppb	19:21:59
3	Mg 279.077 IEC†	115.6	115.8	5186.8	ug/L	5186.8 ppb	19:22:19
3	Na 589.592 Radial†	32936.4	34971.3	9809.4	ug/L	9809.4 ppb	19:21:59
3	Sr 421.552†	93348.6	95495.6	500.96	ug/L	500.96 ppb	19:21:59
3	Sc 361.383	1029039.8	1029039.8	98.995	%		19:23:23
3	Y 371.029	861082.3	861082.3	97.356	%		19:23:23
3	Ag 328.068†	127149.9	127966.3	510.33	ug/L	510.33 ppb	19:23:23
3	As 188.979†	1573.5	1626.0	511.09	ug/L	511.09 ppb	19:23:43
3	B 249.677†	26080.1	26810.8	504.74	ug/L	504.74 ppb	19:23:23
3	Ba 233.527†	78942.9	79744.1	513.62	ug/L	513.62 ppb	19:23:23
3	Be 313.107†	1613383.4	1634631.2	510.67	ug/L	510.67 ppb	19:23:23
3	Cd 226.502†	57882.5	58705.6	511.78	ug/L	511.78 ppb	19:23:23
3	Co 228.616†	30053.5	30444.9	501.64	ug/L	501.64 ppb	19:23:43
3	Cr 267.716†	56141.1	56623.1	509.52	ug/L	509.52 ppb	19:23:23
3	Cu 324.752†	198524.5	191601.8	511.93	ug/L	511.93 ppb	19:23:23
3	Mn 257.610†	537675.2	542555.3	514.18	ug/L	514.18 ppb	19:23:23
3	Mo 202.031†	9456.1	9522.9	505.71	ug/L	505.71 ppb	19:23:43
3	Ni 231.604†	25447.2	25573.5	500.76	ug/L	500.76 ppb	19:23:43
3	P 214.914†	5869.1	5663.6	2455.9	ug/L	2455.9 ppb	19:23:43
3	Pb 220.353†	5261.2	5390.2	507.57	ug/L	507.57 ppb	19:23:43
3	S 181.975 Axial†	980.3	930.1	1001.1	ug/L	1001.1 ppb	19:23:43
3	Sb 206.836†	1917.3	1902.2	508.63	ug/L	508.63 ppb	19:23:43
3	Se 196.026†	1106.5	1139.1	524.44	ug/L	524.44 ppb	19:23:43
3	Si 251.611†	99912.6	100369.0	2537.0	ug/L	2537.0 ppb	19:23:23
3	Sn 189.927†	3745.3	3787.6	501.55	ug/L	501.55 ppb	19:23:43
3	Ti 334.940†	364672.1	369633.5	509.69	ug/L	509.69 ppb	19:23:23
3	Tl 190.801†	2011.5	2076.2	505.42	ug/L	505.42 ppb	19:23:43
3	U 409.014†	16224.5	19163.1	493.83	ug/L	493.83 ppb	19:23:23
3	V 292.402†	85974.8	88455.8	513.15	ug/L	513.15 ppb	19:23:23
3	Zn 213.857†	69723.6	69545.6	506.57	ug/L	506.57 ppb	19:23:23
3	SiO2†	99840.5	100254.7	5422.7	ug/L	5422.7 ppb	19:23:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1029484.5	99.038	%	0.3573				0.36%
Sc Radial	4773.2	97.2	%	0.70				0.72%
Y 371.029	862523.0	97.519	%	0.3269				0.34%
Y RADIAL	5447.5	96.46	%	0.638				0.66%
Ag 328.068†	127609.8	508.92	ug/L	1.327	508.92	ppb	1.327	0.26%
QC value within limits for Ag 328.068 Recovery = 101.78%								
Al 396.153Radial†	7826.9	5146.5	ug/L	15.11	5146.5	ppb	15.11	0.29%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	1628.1	511.72	ug/L	3.263	511.72	ppb	3.263	0.64%
QC value within limits for As 188.979 Recovery = 102.34%								
B 249.677†	26709.8	502.83	ug/L	1.681	502.83	ppb	1.681	0.33%
QC value within limits for B 249.677 Recovery = 100.57%								
Ba 233.527†	79400.2	511.41	ug/L	2.603	511.41	ppb	2.603	0.51%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1631162.1	509.58	ug/L	1.229	509.58	ppb	1.229	0.24%
QC value within limits for Be 313.107 Recovery = 101.92%								
Ca 317.933Radial†	2878.1	5095.7	ug/L	53.75	5095.7	ppb	53.75	1.05%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.91%
Cd 226.502†            58505.9      510.03 ug/L         2.552      510.03 ppb          2.552   0.50%
   QC value within limits for Cd 226.502  Recovery = 102.01%
Co 228.616†            30482.3      502.26 ug/L         1.557      502.26 ppb          1.557   0.31%
   QC value within limits for Co 228.616  Recovery = 100.45%
Cr 267.716†            56374.8      507.29 ug/L         2.312      507.29 ppb          2.312   0.46%
   QC value within limits for Cr 267.716  Recovery = 101.46%
Cu 324.752†           190969.7      510.25 ug/L         1.476      510.25 ppb          1.476   0.29%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5072.9 ug/L        39.96      5072.9 ppb         39.96   0.79%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27407.2      4986.6 ug/L         7.20      4986.6 ppb          7.20   0.14%
   QC value within limits for K 766.490 Radial  Recovery = 99.73%
Mg 279.077 IEC†          114.7      5137.3 ug/L        43.26      5137.3 ppb         43.26   0.84%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.75%
Mn 257.610†           540131.2      511.88 ug/L         2.304      511.88 ppb          2.304   0.45%
   QC value within limits for Mn 257.610  Recovery = 102.38%
Mo 202.031†             9542.3      506.74 ug/L         2.766      506.74 ppb          2.766   0.55%
   QC value within limits for Mo 202.031  Recovery = 101.35%
Na 589.592 Radial†     34893.5      9787.6 ug/L        25.38      9787.6 ppb         25.38   0.26%
   QC value within limits for Na 589.592 Radial  Recovery = 97.88%
Ni 231.604†            25634.6      501.95 ug/L         1.883      501.95 ppb          1.883   0.38%
   QC value within limits for Ni 231.604  Recovery = 100.39%
P 214.914†              5666.9      2457.7 ug/L         8.16      2457.7 ppb          8.16   0.33%
   QC value within limits for P 214.914  Recovery = 98.31%
Pb 220.353†             5411.1      509.54 ug/L         2.216      509.54 ppb          2.216   0.43%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         928.3      999.11 ug/L         6.718      999.11 ppb          6.718   0.67%
   QC value within limits for S 181.975 Axial  Recovery = 99.91%
Sb 206.836†             1915.9      512.36 ug/L         3.943      512.36 ppb          3.943   0.77%
   QC value within limits for Sb 206.836  Recovery = 102.47%
Se 196.026†             1139.0      524.51 ug/L         2.021      524.51 ppb          2.021   0.39%
   QC value within limits for Se 196.026  Recovery = 104.90%
Si 251.611†            99951.0      2526.4 ug/L        11.01      2526.4 ppb         11.01   0.44%
   QC value within limits for Si 251.611  Recovery = 101.05%
Sn 189.927†             3794.1      502.40 ug/L         0.975      502.40 ppb          0.975   0.19%
   QC value within limits for Sn 189.927  Recovery = 100.48%
Sr 421.552†            95481.8      500.89 ug/L         0.147      500.89 ppb          0.147   0.03%
   QC value within limits for Sr 421.552  Recovery = 100.18%
Ti 334.940†           368242.1      507.78 ug/L         1.794      507.78 ppb          1.794   0.35%
   QC value within limits for Ti 334.940  Recovery = 101.56%
Tl 190.801†             2088.1      508.26 ug/L         2.710      508.26 ppb          2.710   0.53%
   QC value within limits for Tl 190.801  Recovery = 101.65%
U 409.014†             19101.9      492.25 ug/L         1.381      492.25 ppb          1.381   0.28%
   QC value within limits for U 409.014  Recovery = 98.45%
V 292.402†             88243.3      511.95 ug/L         1.124      511.95 ppb          1.124   0.22%
   QC value within limits for V 292.402  Recovery = 102.39%
Zn 213.857†            69322.6      504.92 ug/L         1.801      504.92 ppb          1.801   0.36%
   QC value within limits for Zn 213.857  Recovery = 100.98%
SiO2†                  99859.8      5401.2 ug/L        20.41      5401.2 ppb         20.41   0.38%
   QC value within limits for SiO2  Recovery = 101.00%
All analyte(s) passed QC.
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Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 19:26:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4859.6	4859.6	99.0	%			19:28:00
1	Y RADIAL	5593.3	5593.3	99.05	%			19:28:00
1	Al 396.153Radial†	-40.8	2.6	1.7303	ug/L	1.7303	ppb	19:28:00
1	Ca 317.933Radial†	22.6	5.0	8.9356	ug/L	8.9356	ppb	19:28:20
1	Fe 238.204 Radial†	9.0	-1.9	-22.856	ug/L	-22.856	ppb	19:28:20
1	K 766.490 Radial†	2744.6	203.5	37.066	ug/L	37.066	ppb	19:28:00
1	Mg 279.077 IEC†	3.4	0.9	40.419	ug/L	40.419	ppb	19:28:20
1	Na 589.592 Radial†	-1155.6	112.5	31.546	ug/L	31.546	ppb	19:28:00
1	Sr 421.552†	-48.7	-41.8	-0.2194	ug/L	-0.2194	ppb	19:28:00
1	Sc 361.383	1021125.3	1021125.3	98.234	%			19:29:17
1	Y 371.029	867915.2	867915.2	98.129	%			19:29:17
1	Ag 328.068†	462.9	-2.9	-0.0206	ug/L	-0.0206	ppb	19:29:22
1	As 188.979†	-36.9	-1.0	-0.3161	ug/L	-0.3161	ppb	19:29:42
1	B 249.677†	-320.6	139.7	2.6438	ug/L	2.6438	ppb	19:29:42
1	Ba 233.527†	5.5	5.6	0.0351	ug/L	0.0351	ppb	19:29:42
1	Be 313.107†	-4888.0	-101.9	-0.0321	ug/L	-0.0321	ppb	19:29:22
1	Cd 226.502†	-223.3	8.3	0.0746	ug/L	0.0746	ppb	19:29:42
1	Co 228.616†	-87.7	-3.0	-0.0486	ug/L	-0.0486	ppb	19:29:42
1	Cr 267.716†	99.2	13.2	0.1175	ug/L	0.1175	ppb	19:29:42
1	Cu 324.752†	8965.9	189.6	0.5051	ug/L	0.5051	ppb	19:29:22
1	Mn 257.610†	613.2	47.6	0.0420	ug/L	0.0420	ppb	19:29:42
1	Mo 202.031†	25.5	-3.3	-0.1741	ug/L	-0.1741	ppb	19:29:42
1	Ni 231.604†	116.0	-13.9	-0.2714	ug/L	-0.2714	ppb	19:29:42
1	P 214.914†	270.6	10.3	4.5763	ug/L	4.5763	ppb	19:29:42
1	Pb 220.353†	-67.8	6.5	0.6136	ug/L	0.6136	ppb	19:29:42
1	S 181.975 Axial†	58.0	-1.1	-1.1385	ug/L	-1.1385	ppb	19:29:42
1	Sb 206.836†	45.4	11.6	3.0650	ug/L	3.0650	ppb	19:29:42
1	Se 196.026†	-20.7	0.3	0.0561	ug/L	0.0561	ppb	19:29:42
1	Si 251.611†	693.1	147.9	3.7429	ug/L	3.7429	ppb	19:29:42
1	Sn 189.927†	4.9	9.3	1.2360	ug/L	1.2360	ppb	19:29:42
1	Ti 334.940†	-1354.4	-118.3	-0.1636	ug/L	-0.1636	ppb	19:29:22
1	Tl 190.801†	-38.9	4.6	1.1230	ug/L	1.1230	ppb	19:29:42
1	U 409.014†	-2649.8	76.5	1.9812	ug/L	1.9812	ppb	19:29:17
1	V 292.402†	-1586.9	-6.9	-0.0336	ug/L	-0.0336	ppb	19:29:22
1	Zn 213.857†	891.7	22.2	0.1648	ug/L	0.1648	ppb	19:29:42
1	SiO2†	691.8	105.2	5.6857	ug/L	5.6857	ppb	19:30:48
2	Sc Radial	4973.2	4973.2	101	%			19:28:25
2	Y RADIAL	5719.4	5719.4	101.3	%			19:28:25
2	Al 396.153Radial†	-19.7	24.3	16.050	ug/L	16.050	ppb	19:28:25
2	Ca 317.933Radial†	18.3	0.2	0.4419	ug/L	0.4419	ppb	19:28:45
2	Fe 238.204 Radial†	9.5	-1.6	-19.945	ug/L	-19.945	ppb	19:28:45
2	K 766.490 Radial†	2626.7	23.6	4.2865	ug/L	4.2865	ppb	19:28:25
2	Mg 279.077 IEC†	1.9	-0.6	-28.589	ug/L	-28.589	ppb	19:28:45
2	Na 589.592 Radial†	-1152.3	142.3	39.923	ug/L	39.923	ppb	19:28:25
2	Sr 421.552†	-30.3	-22.5	-0.1180	ug/L	-0.1180	ppb	19:28:25
2	Sc 361.383	1022927.5	1022927.5	98.407	%			19:29:47
2	Y 371.029	869879.4	869879.4	98.351	%			19:29:47
2	Ag 328.068†	404.4	-63.1	-0.2583	ug/L	-0.2583	ppb	19:29:52
2	As 188.979†	-30.4	5.7	1.7705	ug/L	1.7705	ppb	19:30:12
2	B 249.677†	-344.7	115.9	2.1918	ug/L	2.1918	ppb	19:30:12
2	Ba 233.527†	-1.2	-1.2	-0.0093	ug/L	-0.0093	ppb	19:30:12
2	Be 313.107†	-4878.6	-83.7	-0.0263	ug/L	-0.0263	ppb	19:29:52
2	Cd 226.502†	-258.3	-26.8	-0.2320	ug/L	-0.2320	ppb	19:30:12
2	Co 228.616†	-78.4	6.6	0.1096	ug/L	0.1096	ppb	19:30:12
2	Cr 267.716†	110.6	24.6	0.2201	ug/L	0.2201	ppb	19:30:12
2	Cu 324.752†	8839.3	44.9	0.1188	ug/L	0.1188	ppb	19:29:52
2	Mn 257.610†	617.9	51.2	0.0470	ug/L	0.0470	ppb	19:30:12
2	Mo 202.031†	27.5	-1.3	-0.0686	ug/L	-0.0686	ppb	19:30:12
2	Ni 231.604†	127.6	-2.3	-0.0455	ug/L	-0.0455	ppb	19:30:12

2	P 214.914†	262.7	1.9	0.8608 ug/L	0.8608 ppb	19:30:12
2	Pb 220.353†	-89.8	-15.7	-1.4658 ug/L	-1.4658 ppb	19:30:12
2	S 181.975 Axial†	60.3	1.2	1.3132 ug/L	1.3132 ppb	19:30:12
2	Sb 206.836†	51.4	17.6	4.6687 ug/L	4.6687 ppb	19:30:12
2	Se 196.026†	-24.0	-3.0	-1.3881 ug/L	-1.3881 ppb	19:30:12
2	Si 251.611†	694.1	147.7	3.7462 ug/L	3.7462 ppb	19:30:12
2	Sn 189.927†	8.2	12.7	1.6790 ug/L	1.6790 ppb	19:30:12
2	Ti 334.940†	-1312.1	-72.9	-0.1008 ug/L	-0.1008 ppb	19:29:52
2	Tl 190.801†	-38.6	5.0	1.2170 ug/L	1.2170 ppb	19:30:12
2	U 409.014†	-2709.4	20.7	0.5367 ug/L	0.5367 ppb	19:29:47
2	V 292.402†	-1645.6	-63.8	-0.3625 ug/L	-0.3625 ppb	19:29:52
2	Zn 213.857†	909.3	38.5	0.2858 ug/L	0.2858 ppb	19:30:12
2	SiO2†	681.2	93.2	5.0540 ug/L	5.0540 ppb	19:30:53
3	Sc Radial	4734.5	4734.5	96.4 %		19:28:50
3	Y RADIAL	5469.4	5469.4	96.85 %		19:28:50
3	Al 396.153Radial†	-57.9	-16.2	-10.705 ug/L	-10.705 ppb	19:28:50
3	Ca 317.933Radial†	19.2	2.0	3.6020 ug/L	3.6020 ppb	19:29:10
3	Fe 238.204 Radial†	12.9	2.4	28.804 ug/L	28.804 ppb	19:29:10
3	K 766.490 Radial†	2588.2	114.5	20.867 ug/L	20.867 ppb	19:28:50
3	Mg 279.077 IEC†	2.7	0.3	12.846 ug/L	12.846 ppb	19:29:10
3	Na 589.592 Radial†	-1173.4	63.2	17.714 ug/L	17.714 ppb	19:28:50
3	Sr 421.552†	-25.4	-18.9	-0.0992 ug/L	-0.0992 ppb	19:28:50
3	Sc 361.383	1032249.4	1032249.4	99.304 %		19:30:17
3	Y 371.029	877796.3	877796.3	99.246 %		19:30:17
3	Ag 328.068†	478.9	8.2	0.0429 ug/L	0.0429 ppb	19:30:22
3	As 188.979†	-33.0	3.3	1.0373 ug/L	1.0373 ppb	19:30:42
3	B 249.677†	-362.9	100.7	1.8983 ug/L	1.8983 ppb	19:30:42
3	Ba 233.527†	-11.7	-11.8	-0.0748 ug/L	-0.0748 ppb	19:30:42
3	Be 313.107†	-4885.3	-45.6	-0.0143 ug/L	-0.0143 ppb	19:30:22
3	Cd 226.502†	-235.2	-1.2	-0.0134 ug/L	-0.0134 ppb	19:30:42
3	Co 228.616†	-70.9	14.9	0.2453 ug/L	0.2453 ppb	19:30:42
3	Cr 267.716†	101.8	14.7	0.1334 ug/L	0.1334 ppb	19:30:42
3	Cu 324.752†	8905.9	30.8	0.0836 ug/L	0.0836 ppb	19:30:22
3	Mn 257.610†	593.8	21.3	0.0228 ug/L	0.0228 ppb	19:30:42
3	Mo 202.031†	28.5	-0.6	-0.0281 ug/L	-0.0281 ppb	19:30:42
3	Ni 231.604†	124.5	-6.6	-0.1289 ug/L	-0.1289 ppb	19:30:42
3	P 214.914†	276.2	13.0	5.7884 ug/L	5.7884 ppb	19:30:42
3	Pb 220.353†	-85.6	-10.6	-1.0028 ug/L	-1.0028 ppb	19:30:42
3	S 181.975 Axial†	60.9	1.2	1.2949 ug/L	1.2949 ppb	19:30:42
3	Sb 206.836†	42.7	8.3	2.1980 ug/L	2.1980 ppb	19:30:42
3	Se 196.026†	-29.7	-8.5	-3.6795 ug/L	-3.6795 ppb	19:30:42
3	Si 251.611†	830.1	278.2	7.0587 ug/L	7.0587 ppb	19:30:42
3	Sn 189.927†	-1.8	2.5	0.3286 ug/L	0.3286 ppb	19:30:42
3	Ti 334.940†	-1281.0	-29.6	-0.0398 ug/L	-0.0398 ppb	19:30:22
3	Tl 190.801†	-33.4	10.7	2.5775 ug/L	2.5775 ppb	19:30:42
3	U 409.014†	-2829.9	-75.8	-1.9637 ug/L	-1.9637 ppb	19:30:17
3	V 292.402†	-1608.9	-11.6	-0.0750 ug/L	-0.0750 ppb	19:30:22
3	Zn 213.857†	917.9	38.8	0.2827 ug/L	0.2827 ppb	19:30:42
3	SiO2†	710.3	116.2	6.3012 ug/L	6.3012 ppb	19:30:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025434.0	98.648	%	0.5744				0.58%
Sc Radial	4855.8	98.9	%	2.43				2.46%
Y 371.029	871863.7	98.575	%	0.5914				0.60%
Y RADIAL	5594.0	99.06	%	2.214				2.23%
Ag 328.068†	-19.3	-0.0786	ug/L	0.15877	-0.0786	ppb	0.15877	201.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.6	2.3583	ug/L	13.38841	2.3583	ppb	13.38841	567.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.7	0.8305	ug/L	1.05856	0.8305	ppb	1.05856	127.45%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	118.8	2.2446	ug/L	0.37555	2.2446	ppb	0.37555	16.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.5	-0.0163	ug/L	0.05531	-0.0163	ppb	0.05531	339.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-77.1	-0.0242	ug/L	0.00907	-0.0242	ppb	0.00907	37.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.4	4.3265	ug/L	4.29295	4.3265	ppb	4.29295	99.22%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -6.6     -0.0569 ug/L       0.15788     -0.0569 ppb        0.15788 277.35%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.2      0.1021 ug/L       0.14708      0.1021 ppb        0.14708 144.04%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.5      0.1570 ug/L       0.05521      0.1570 ppb        0.05521  35.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                88.4      0.2359 ug/L       0.23386      0.2359 ppb        0.23386  99.15%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.4     -4.6659 ug/L      29.02191     -4.6659 ppb       29.02191 622.01%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         113.9      20.740 ug/L       16.3900      20.740 ppb        16.3900  79.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      8.2252 ug/L      34.73562      8.2252 ppb       34.73562 422.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.0      0.0373 ug/L       0.01278      0.0373 ppb        0.01278  34.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.7     -0.0903 ug/L       0.07539     -0.0903 ppb        0.07539  83.53%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        106.0      29.728 ug/L       11.2159      29.728 ppb        11.2159  37.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.6     -0.1486 ug/L       0.11427     -0.1486 ppb        0.11427  76.90%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7418 ug/L       2.56760      3.7418 ppb        2.56760  68.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.6     -0.6183 ug/L       1.09168     -0.6183 ppb        1.09168 176.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.4899 ug/L       1.41023      0.4899 ppb        1.41023 287.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.5      3.3106 ug/L       1.25350      3.3106 ppb        1.25350  37.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.7     -1.6705 ug/L       1.88373     -1.6705 ppb        1.88373 112.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               191.3      4.8493 ug/L       1.91339      4.8493 ppb        1.91339  39.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.2      1.0812 ug/L       0.68841      1.0812 ppb        0.68841  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -27.7     -0.1455 ug/L       0.06465     -0.1455 ppb        0.06465  44.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -73.6     -0.1014 ug/L       0.06191     -0.1014 ppb        0.06191  61.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.8      1.6392 ug/L       0.81398      1.6392 ppb        0.81398  49.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  7.1      0.1847 ug/L       1.99587      0.1847 ppb        1.99587 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -27.4     -0.1570 ug/L       0.17915     -0.1570 ppb        0.17915 114.08%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                33.2      0.2444 ug/L       0.06898      0.2444 ppb        0.06898  28.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     104.9      5.6803 ug/L       0.62364      5.6803 ppb        0.62364  10.98%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 67
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 20:30:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4702.0	4702.0	95.8	%			20:31:55
1	Y RADIAL	5377.3	5377.3	95.22	%			20:31:55
1	Al 396.153Radial†	7431.8	7803.8	5131.4	ug/L	5131.4	ppb	20:31:55
1	Ca 317.933Radial†	2829.4	2936.5	5199.2	ug/L	5199.2	ppb	20:32:15
1	Fe 238.204 Radial†	424.4	432.2	5240.9	ug/L	5240.9	ppb	20:32:15
1	K 766.490 Radial†	28853.9	27558.8	5014.1	ug/L	5014.1	ppb	20:31:55
1	Mg 279.077 IEC†	115.4	118.0	5286.1	ug/L	5286.1	ppb	20:32:15
1	Na 589.592 Radial†	32504.2	35219.8	9879.1	ug/L	9879.1	ppb	20:31:55
1	Sr 421.552†	91622.1	95676.2	501.91	ug/L	501.91	ppb	20:31:55
1	Sc 361.383	1027536.7	1027536.7	98.851	%			20:33:14
1	Y 371.029	860937.1	860937.1	97.340	%			20:33:14
1	Ag 328.068†	126985.9	127988.2	510.48	ug/L	510.48	ppb	20:33:14
1	As 188.979†	1559.9	1614.7	507.59	ug/L	507.59	ppb	20:33:34
1	B 249.677†	25901.3	26668.5	502.03	ug/L	502.03	ppb	20:33:14
1	Ba 233.527†	78653.3	79567.8	512.50	ug/L	512.50	ppb	20:33:14
1	Be 313.107†	1610870.8	1634473.5	510.62	ug/L	510.62	ppb	20:33:14
1	Cd 226.502†	57778.0	58685.4	511.58	ug/L	511.58	ppb	20:33:14
1	Co 228.616†	30035.1	30470.6	502.06	ug/L	502.06	ppb	20:33:34
1	Cr 267.716†	55939.4	56502.0	508.44	ug/L	508.44	ppb	20:33:14
1	Cu 324.752†	198760.0	192133.4	513.36	ug/L	513.36	ppb	20:33:14
1	Mn 257.610†	537058.6	542726.0	514.36	ug/L	514.36	ppb	20:33:14
1	Mo 202.031†	9428.1	9508.5	504.96	ug/L	504.96	ppb	20:33:34
1	Ni 231.604†	25429.0	25592.7	501.13	ug/L	501.13	ppb	20:33:34
1	P 214.914†	5864.0	5667.0	2457.0	ug/L	2457.0	ppb	20:33:34
1	Pb 220.353†	5274.2	5411.0	509.51	ug/L	509.51	ppb	20:33:34
1	S 181.975 Axial†	964.8	915.9	985.74	ug/L	985.74	ppb	20:33:34
1	Sb 206.836†	1912.4	1900.0	508.03	ug/L	508.03	ppb	20:33:34
1	Se 196.026†	1108.8	1143.1	526.92	ug/L	526.92	ppb	20:33:34
1	Si 251.611†	99572.9	100172.9	2532.0	ug/L	2532.0	ppb	20:33:14
1	Sn 189.927†	3725.2	3772.9	499.61	ug/L	499.61	ppb	20:33:34
1	Ti 334.940†	364552.3	370051.2	510.28	ug/L	510.28	ppb	20:33:14
1	Tl 190.801†	2006.9	2074.5	505.00	ug/L	505.00	ppb	20:33:34
1	U 409.014†	16191.2	19153.4	493.56	ug/L	493.56	ppb	20:33:14
1	V 292.402†	86005.3	88613.8	514.02	ug/L	514.02	ppb	20:33:14
1	Zn 213.857†	69770.4	69696.0	507.65	ug/L	507.65	ppb	20:33:14
1	SiO2†	98276.4	98819.9	5344.7	ug/L	5344.7	ppb	20:34:35
2	Sc Radial	4785.6	4785.6	97.5	%			20:32:20
2	Y RADIAL	5467.4	5467.4	96.82	%			20:32:20
2	Al 396.153Radial†	7580.1	7820.5	5142.2	ug/L	5142.2	ppb	20:32:20
2	Ca 317.933Radial†	2839.7	2895.5	5126.5	ug/L	5126.5	ppb	20:32:40
2	Fe 238.204 Radial†	427.8	427.9	5189.6	ug/L	5189.6	ppb	20:32:40
2	K 766.490 Radial†	29213.9	27402.2	4985.6	ug/L	4985.6	ppb	20:32:20
2	Mg 279.077 IEC†	113.7	114.1	5112.2	ug/L	5112.2	ppb	20:32:40
2	Na 589.592 Radial†	32954.8	35089.6	9842.6	ug/L	9842.6	ppb	20:32:20
2	Sr 421.552†	93125.5	95548.5	501.24	ug/L	501.24	ppb	20:32:20
2	Sc 361.383	1026644.8	1026644.8	98.765	%			20:33:42
2	Y 371.029	859634.7	859634.7	97.192	%			20:33:42
2	Ag 328.068†	126641.1	127750.7	509.52	ug/L	509.52	ppb	20:33:42
2	As 188.979†	1566.1	1622.3	509.93	ug/L	509.93	ppb	20:34:02
2	B 249.677†	25929.8	26720.2	503.00	ug/L	503.00	ppb	20:33:42
2	Ba 233.527†	78497.2	79478.9	511.92	ug/L	511.92	ppb	20:33:42
2	Be 313.107†	1606450.2	1631413.4	509.66	ug/L	509.66	ppb	20:33:42
2	Cd 226.502†	57791.5	58749.8	512.15	ug/L	512.15	ppb	20:33:42
2	Co 228.616†	30272.6	30737.5	506.47	ug/L	506.47	ppb	20:34:02
2	Cr 267.716†	55859.6	56470.3	508.15	ug/L	508.15	ppb	20:33:42
2	Cu 324.752†	197635.0	191169.0	510.78	ug/L	510.78	ppb	20:33:42
2	Mn 257.610†	535808.2	541932.0	513.60	ug/L	513.60	ppb	20:33:42
2	Mo 202.031†	9531.1	9621.0	510.93	ug/L	510.93	ppb	20:34:02
2	Ni 231.604†	25651.1	25840.0	505.97	ug/L	505.97	ppb	20:34:02

2	P 214.914†	5929.5	5738.6	2489.6 ug/L	2489.6 ppb	20:34:02
2	Pb 220.353†	5318.5	5460.6	514.18 ug/L	514.18 ppb	20:34:02
2	S 181.975 Axial†	981.4	933.5	1004.8 ug/L	1004.8 ppb	20:34:02
2	Sb 206.836†	1941.8	1931.5	516.59 ug/L	516.59 ppb	20:34:02
2	Se 196.026†	1121.2	1156.6	532.71 ug/L	532.71 ppb	20:34:02
2	Si 251.611†	99220.3	99903.5	2525.1 ug/L	2525.1 ppb	20:33:42
2	Sn 189.927†	3770.5	3822.0	506.10 ug/L	506.10 ppb	20:34:02
2	Ti 334.940†	363645.0	369453.0	509.45 ug/L	509.45 ppb	20:33:42
2	Tl 190.801†	2036.5	2106.2	512.65 ug/L	512.65 ppb	20:34:02
2	U 409.014†	16111.0	19086.4	491.83 ug/L	491.83 ppb	20:33:42
2	V 292.402†	85677.7	88357.7	512.64 ug/L	512.64 ppb	20:33:42
2	Zn 213.857†	69552.8	69537.0	506.46 ug/L	506.46 ppb	20:33:42
2	SiO2†	98637.1	99271.6	5369.0 ug/L	5369.0 ppb	20:34:40
3	Sc Radial	4803.0	4803.0	97.8 %		20:32:45
3	Y RADIAL	5492.6	5492.6	97.26 %		20:32:45
3	Al 396.153Radial†	7555.9	7767.6	5107.2 ug/L	5107.2 ppb	20:32:45
3	Ca 317.933Radial†	2839.4	2884.6	5107.4 ug/L	5107.4 ppb	20:33:05
3	Fe 238.204 Radial†	421.7	420.1	5095.0 ug/L	5095.0 ppb	20:33:05
3	K 766.490 Radial†	29167.5	27246.0	4957.2 ug/L	4957.2 ppb	20:32:45
3	Mg 279.077 IEC†	115.1	115.1	5157.4 ug/L	5157.4 ppb	20:33:05
3	Na 589.592 Radial†	32894.9	34905.7	9791.0 ug/L	9791.0 ppb	20:32:45
3	Sr 421.552†	93186.1	95263.8	499.75 ug/L	499.75 ppb	20:32:45
3	Sc 361.383	1019479.4	1019479.4	98.076 %		20:34:09
3	Y 371.029	854951.8	854951.8	96.663 %		20:34:09
3	Ag 328.068†	125810.9	127805.5	509.71 ug/L	509.71 ppb	20:34:09
3	As 188.979†	1564.7	1632.0	512.94 ug/L	512.94 ppb	20:34:29
3	B 249.677†	25680.2	26650.2	501.69 ug/L	501.69 ppb	20:34:09
3	Ba 233.527†	77943.4	79472.8	511.88 ug/L	511.88 ppb	20:34:09
3	Be 313.107†	1597867.7	1634094.7	510.50 ug/L	510.50 ppb	20:34:09
3	Cd 226.502†	57340.4	58701.2	511.74 ug/L	511.74 ppb	20:34:09
3	Co 228.616†	30063.8	30740.1	506.51 ug/L	506.51 ppb	20:34:29
3	Cr 267.716†	55561.3	56563.7	508.99 ug/L	508.99 ppb	20:34:09
3	Cu 324.752†	196076.0	190985.9	510.29 ug/L	510.29 ppb	20:34:09
3	Mn 257.610†	531811.3	541669.7	513.34 ug/L	513.34 ppb	20:34:09
3	Mo 202.031†	9455.5	9611.8	510.43 ug/L	510.43 ppb	20:34:29
3	Ni 231.604†	25501.1	25869.5	506.55 ug/L	506.55 ppb	20:34:29
3	P 214.914†	5870.0	5720.0	2481.4 ug/L	2481.4 ppb	20:34:29
3	Pb 220.353†	5276.6	5455.7	513.72 ug/L	513.72 ppb	20:34:29
3	S 181.975 Axial†	963.3	922.1	992.48 ug/L	992.48 ppb	20:34:29
3	Sb 206.836†	1929.1	1932.3	516.76 ug/L	516.76 ppb	20:34:29
3	Se 196.026†	1093.6	1136.4	523.45 ug/L	523.45 ppb	20:34:29
3	Si 251.611†	98515.1	99890.5	2524.8 ug/L	2524.8 ppb	20:34:09
3	Sn 189.927†	3733.3	3810.9	504.63 ug/L	504.63 ppb	20:34:29
3	Ti 334.940†	360954.1	369297.1	509.23 ug/L	509.23 ppb	20:34:09
3	Tl 190.801†	2032.2	2116.3	515.09 ug/L	515.09 ppb	20:34:29
3	U 409.014†	16100.6	19190.5	494.53 ug/L	494.53 ppb	20:34:09
3	V 292.402†	85203.8	88484.2	513.38 ug/L	513.38 ppb	20:34:09
3	Zn 213.857†	68958.9	69426.4	505.65 ug/L	505.65 ppb	20:34:09
3	SiO2†	99215.7	100563.5	5439.3 ug/L	5439.3 ppb	20:34:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024553.6	98.564	%	0.4249				0.43%
Sc Radial	4763.5	97.0	%	1.10				1.13%
Y 371.029	858507.8	97.065	%	0.3559				0.37%
Y RADIAL	5445.8	96.43	%	1.074				1.11%
Ag 328.068†	127848.1	509.91	ug/L	0.509	509.91	ppb	0.509	0.10%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 396.153Radial†	7797.3	5126.9	ug/L	17.89	5126.9	ppb	17.89	0.35%
QC value within limits for Al 396.153Radial Recovery = 102.54%								
As 188.979†	1623.0	510.16	ug/L	2.681	510.16	ppb	2.681	0.53%
QC value within limits for As 188.979 Recovery = 102.03%								
B 249.677†	26679.6	502.24	ug/L	0.680	502.24	ppb	0.680	0.14%
QC value within limits for B 249.677 Recovery = 100.45%								
Ba 233.527†	79506.5	512.10	ug/L	0.345	512.10	ppb	0.345	0.07%
QC value within limits for Ba 233.527 Recovery = 102.42%								
Be 313.107†	1633327.2	510.26	ug/L	0.521	510.26	ppb	0.521	0.10%
QC value within limits for Be 313.107 Recovery = 102.05%								
Ca 317.933Radial†	2905.5	5144.4	ug/L	48.43	5144.4	ppb	48.43	0.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.89%
Cd 226.502†            58712.1      511.82 ug/L         0.295      511.82 ppb          0.295   0.06%
   QC value within limits for Cd 226.502  Recovery = 102.36%
Co 228.616†            30649.4      505.02 ug/L         2.561      505.02 ppb          2.561   0.51%
   QC value within limits for Co 228.616  Recovery = 101.00%
Cr 267.716†            56512.0      508.53 ug/L         0.426      508.53 ppb          0.426   0.08%
   QC value within limits for Cr 267.716  Recovery = 101.71%
Cu 324.752†           191429.4      511.48 ug/L         1.650      511.48 ppb          1.650   0.32%
   QC value within limits for Cu 324.752  Recovery = 102.30%
Fe 238.204 Radial†       426.7      5175.2 ug/L        74.03      5175.2 ppb          74.03   1.43%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.50%
K 766.490 Radial†      27402.3      4985.6 ug/L        28.46      4985.6 ppb          28.46   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 99.71%
Mg 279.077 IEC†          115.8      5185.2 ug/L        90.21      5185.2 ppb          90.21   1.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.70%
Mn 257.610†           542109.3      513.77 ug/L         0.526      513.77 ppb          0.526   0.10%
   QC value within limits for Mn 257.610  Recovery = 102.75%
Mo 202.031†             9580.4      508.77 ug/L         3.312      508.77 ppb          3.312   0.65%
   QC value within limits for Mo 202.031  Recovery = 101.75%
Na 589.592 Radial†     35071.7      9837.6 ug/L        44.26      9837.6 ppb          44.26   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 98.38%
Ni 231.604†            25767.4      504.55 ug/L         2.976      504.55 ppb          2.976   0.59%
   QC value within limits for Ni 231.604  Recovery = 100.91%
P 214.914†              5708.5      2476.0 ug/L        16.93      2476.0 ppb          16.93   0.68%
   QC value within limits for P 214.914  Recovery = 99.04%
Pb 220.353†             5442.4      512.47 ug/L         2.575      512.47 ppb          2.575   0.50%
   QC value within limits for Pb 220.353  Recovery = 102.49%
S 181.975 Axial†         923.8      994.32 ug/L         9.641      994.32 ppb          9.641   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 99.43%
Sb 206.836†             1921.3      513.79 ug/L         4.990      513.79 ppb          4.990   0.97%
   QC value within limits for Sb 206.836  Recovery = 102.76%
Se 196.026†             1145.4      527.69 ug/L         4.679      527.69 ppb          4.679   0.89%
   QC value within limits for Se 196.026  Recovery = 105.54%
Si 251.611†            99989.0      2527.3 ug/L          4.11      2527.3 ppb           4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.09%
Sn 189.927†             3801.9      503.45 ug/L         3.403      503.45 ppb          3.403   0.68%
   QC value within limits for Sn 189.927  Recovery = 100.69%
Sr 421.552†            95496.2      500.97 ug/L         1.107      500.97 ppb          1.107   0.22%
   QC value within limits for Sr 421.552  Recovery = 100.19%
Ti 334.940†           369600.4      509.65 ug/L         0.552      509.65 ppb          0.552   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.93%
Tl 190.801†             2099.0      510.91 ug/L         5.263      510.91 ppb          5.263   1.03%
   QC value within limits for Tl 190.801  Recovery = 102.18%
U 409.014†             19143.5      493.31 ug/L         1.368      493.31 ppb          1.368   0.28%
   QC value within limits for U 409.014  Recovery = 98.66%
V 292.402†             88485.2      513.34 ug/L         0.690      513.34 ppb          0.690   0.13%
   QC value within limits for V 292.402  Recovery = 102.67%
Zn 213.857†            69553.1      506.59 ug/L         1.003      506.59 ppb          1.003   0.20%
   QC value within limits for Zn 213.857  Recovery = 101.32%
SiO2†                  99551.7      5384.3 ug/L        49.11      5384.3 ppb          49.11   0.91%
   QC value within limits for SiO2  Recovery = 100.69%
All analyte(s) passed QC.
```

Sequence No.: 68
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 20:36:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4812.6	4812.6	98.0	%			20:38:46
1	Y RADIAL	5523.3	5523.3	97.81	%			20:38:46
1	Al 396.153Radial†	-20.7	22.6	14.921	ug/L	14.921	ppb	20:38:46
1	Ca 317.933Radial†	20.2	2.8	4.9844	ug/L	4.9844	ppb	20:39:06
1	Fe 238.204 Radial†	10.6	-0.2	-2.6844	ug/L	-2.6844	ppb	20:39:06
1	K 766.490 Radial†	2567.1	49.4	8.9866	ug/L	8.9866	ppb	20:38:46
1	Mg 279.077 IEC†	5.1	2.7	121.07	ug/L	121.07	ppb	20:39:06
1	Na 589.592 Radial†	-1148.9	107.9	30.257	ug/L	30.257	ppb	20:38:46
1	Sr 421.552†	-2.9	4.5	0.0234	ug/L	0.0234	ppb	20:38:46
1	Sc 361.383	1040681.4	1040681.4	100.12	%			20:40:03
1	Y 371.029	885157.6	885157.6	100.08	%			20:40:03
1	Ag 328.068†	490.2	15.5	0.0601	ug/L	0.0601	ppb	20:40:08
1	As 188.979†	-47.5	-10.8	-3.3792	ug/L	-3.3792	ppb	20:40:28
1	B 249.677†	-388.8	77.8	1.4702	ug/L	1.4702	ppb	20:40:28
1	Ba 233.527†	-1.4	-1.4	-0.0090	ug/L	-0.0090	ppb	20:40:28
1	Be 313.107†	-4852.4	27.1	0.0086	ug/L	0.0086	ppb	20:40:08
1	Cd 226.502†	-231.1	4.8	0.0417	ug/L	0.0417	ppb	20:40:28
1	Co 228.616†	-85.6	0.8	0.0147	ug/L	0.0147	ppb	20:40:28
1	Cr 267.716†	85.6	-2.3	-0.0210	ug/L	-0.0210	ppb	20:40:28
1	Cu 324.752†	9023.5	75.6	0.2018	ug/L	0.2018	ppb	20:40:08
1	Mn 257.610†	623.8	46.4	0.0414	ug/L	0.0414	ppb	20:40:28
1	Mo 202.031†	40.9	11.6	0.6171	ug/L	0.6171	ppb	20:40:28
1	Ni 231.604†	114.0	-18.1	-0.3537	ug/L	-0.3537	ppb	20:40:28
1	P 214.914†	268.4	3.0	1.3352	ug/L	1.3352	ppb	20:40:28
1	Pb 220.353†	-75.6	0.1	0.0122	ug/L	0.0122	ppb	20:40:28
1	S 181.975 Axial†	52.7	-7.5	-8.0489	ug/L	-8.0489	ppb	20:40:28
1	Sb 206.836†	47.9	13.2	3.5146	ug/L	3.5146	ppb	20:40:28
1	Se 196.026†	-22.8	-1.4	-0.6463	ug/L	-0.6463	ppb	20:40:28
1	Si 251.611†	636.7	78.4	1.9742	ug/L	1.9742	ppb	20:40:28
1	Sn 189.927†	1.2	5.5	0.7321	ug/L	0.7321	ppb	20:40:28
1	Ti 334.940†	-1223.5	38.3	0.0529	ug/L	0.0529	ppb	20:40:08
1	Tl 190.801†	-49.2	-4.9	-1.1792	ug/L	-1.1792	ppb	20:40:28
1	U 409.014†	-2752.4	24.7	0.6391	ug/L	0.6391	ppb	20:40:03
1	V 292.402†	-1612.2	-1.8	0.0029	ug/L	0.0029	ppb	20:40:08
1	Zn 213.857†	878.7	-7.9	-0.0601	ug/L	-0.0601	ppb	20:40:28
1	SiO2†	640.5	40.7	2.1761	ug/L	2.1761	ppb	20:41:34
2	Sc Radial	4826.9	4826.9	98.3	%			20:39:11
2	Y RADIAL	5564.4	5564.4	98.53	%			20:39:11
2	Al 396.153Radial†	-23.3	20.1	13.261	ug/L	13.261	ppb	20:39:11
2	Ca 317.933Radial†	14.8	-2.8	-4.9687	ug/L	-4.9687	ppb	20:39:31
2	Fe 238.204 Radial†	10.1	-0.8	-9.2048	ug/L	-9.2048	ppb	20:39:31
2	K 766.490 Radial†	2555.3	29.6	5.3974	ug/L	5.3974	ppb	20:39:11
2	Mg 279.077 IEC†	1.6	-0.8	-37.045	ug/L	-37.045	ppb	20:39:31
2	Na 589.592 Radial†	-1190.6	68.9	19.327	ug/L	19.327	ppb	20:39:11
2	Sr 421.552†	-10.4	-3.1	-0.0165	ug/L	-0.0165	ppb	20:39:11
2	Sc 361.383	1027744.7	1027744.7	98.871	%			20:40:33
2	Y 371.029	873701.1	873701.1	98.783	%			20:40:33
2	Ag 328.068†	474.1	5.4	0.0186	ug/L	0.0186	ppb	20:40:38
2	As 188.979†	-34.2	2.0	0.6224	ug/L	0.6224	ppb	20:40:58
2	B 249.677†	-406.4	55.0	1.0412	ug/L	1.0412	ppb	20:40:58
2	Ba 233.527†	-8.3	-8.3	-0.0545	ug/L	-0.0545	ppb	20:40:58
2	Be 313.107†	-4885.4	-67.2	-0.0213	ug/L	-0.0213	ppb	20:40:38
2	Cd 226.502†	-238.0	-5.0	-0.0430	ug/L	-0.0430	ppb	20:40:58
2	Co 228.616†	-84.6	0.8	0.0139	ug/L	0.0139	ppb	20:40:58
2	Cr 267.716†	97.8	11.1	0.0997	ug/L	0.0997	ppb	20:40:58
2	Cu 324.752†	8932.2	96.7	0.2577	ug/L	0.2577	ppb	20:40:38
2	Mn 257.610†	614.8	45.1	0.0425	ug/L	0.0425	ppb	20:40:58
2	Mo 202.031†	36.7	7.8	0.4150	ug/L	0.4150	ppb	20:40:58
2	Ni 231.604†	129.9	-0.5	-0.0106	ug/L	-0.0106	ppb	20:40:58

2	P 214.914†	298.1	36.4	16.259	ug/L	16.259 ppb	20:40:58
2	Pb 220.353†	-83.9	-9.3	-0.8664	ug/L	-0.8664 ppb	20:40:58
2	S 181.975 Axial†	50.6	-9.0	-9.6579	ug/L	-9.6579 ppb	20:40:58
2	Sb 206.836†	35.5	1.2	0.3502	ug/L	0.3502 ppb	20:40:58
2	Se 196.026†	-35.8	-14.8	-6.6064	ug/L	-6.6064 ppb	20:40:58
2	Si 251.611†	629.3	78.9	1.9907	ug/L	1.9907 ppb	20:40:58
2	Sn 189.927†	4.1	8.5	1.1255	ug/L	1.1255 ppb	20:40:58
2	Ti 334.940†	-1360.7	-115.8	-0.1595	ug/L	-0.1595 ppb	20:40:38
2	Tl 190.801†	-47.7	-4.0	-0.9589	ug/L	-0.9589 ppb	20:40:58
2	U 409.014†	-2795.5	-53.4	-1.3802	ug/L	-1.3802 ppb	20:40:33
2	V 292.402†	-1640.2	-50.5	-0.2849	ug/L	-0.2849 ppb	20:40:38
2	Zn 213.857†	880.9	5.4	0.0419	ug/L	0.0419 ppb	20:40:58
2	SiO2†	642.6	50.9	2.7392	ug/L	2.7392 ppb	20:41:39
3	Sc Radial	4828.7	4828.7	98.4	%		20:39:36
3	Y RADIAL	5560.2	5560.2	98.46	%		20:39:36
3	Al 396.153Radial†	-29.5	13.8	9.0944	ug/L	9.0944 ppb	20:39:36
3	Ca 317.933Radial†	20.4	3.0	5.2305	ug/L	5.2305 ppb	20:39:56
3	Fe 238.204 Radial†	10.4	-0.4	-4.9292	ug/L	-4.9292 ppb	20:39:56
3	K 766.490 Radial†	2650.6	125.6	22.878	ug/L	22.878 ppb	20:39:36
3	Mg 279.077 IEC†	3.7	1.3	58.592	ug/L	58.592 ppb	20:39:56
3	Na 589.592 Radial†	-1156.4	104.1	29.209	ug/L	29.209 ppb	20:39:36
3	Sr 421.552†	11.2	18.8	0.0987	ug/L	0.0987 ppb	20:39:36
3	Sc 361.383	1029854.8	1029854.8	99.074	%		20:41:03
3	Y 371.029	874784.5	874784.5	98.905	%		20:41:03
3	Ag 328.068†	442.4	-27.5	-0.1088	ug/L	-0.1088 ppb	20:41:09
3	As 188.979†	-42.0	-5.8	-1.7955	ug/L	-1.7955 ppb	20:41:29
3	B 249.677†	-424.6	37.5	0.7097	ug/L	0.7097 ppb	20:41:29
3	Ba 233.527†	-5.0	-5.1	-0.0322	ug/L	-0.0322 ppb	20:41:29
3	Be 313.107†	-4858.6	-30.1	-0.0093	ug/L	-0.0093 ppb	20:41:09
3	Cd 226.502†	-233.7	-0.3	-0.0018	ug/L	-0.0018 ppb	20:41:29
3	Co 228.616†	-93.7	-8.2	-0.1348	ug/L	-0.1348 ppb	20:41:29
3	Cr 267.716†	124.9	38.3	0.3450	ug/L	0.3450 ppb	20:41:29
3	Cu 324.752†	8892.5	38.2	0.1017	ug/L	0.1017 ppb	20:41:09
3	Mn 257.610†	601.3	30.2	0.0270	ug/L	0.0270 ppb	20:41:29
3	Mo 202.031†	37.6	8.7	0.4599	ug/L	0.4599 ppb	20:41:29
3	Ni 231.604†	146.3	15.7	0.3079	ug/L	0.3079 ppb	20:41:29
3	P 214.914†	290.5	28.1	12.563	ug/L	12.563 ppb	20:41:29
3	Pb 220.353†	-61.3	13.7	1.2877	ug/L	1.2877 ppb	20:41:29
3	S 181.975 Axial†	57.8	-1.7	-1.8852	ug/L	-1.8852 ppb	20:41:29
3	Sb 206.836†	40.5	6.2	1.6719	ug/L	1.6719 ppb	20:41:29
3	Se 196.026†	-21.1	0.1	0.0088	ug/L	0.0088 ppb	20:41:29
3	Si 251.611†	621.1	69.3	1.7388	ug/L	1.7388 ppb	20:41:29
3	Sn 189.927†	8.5	12.9	1.7113	ug/L	1.7113 ppb	20:41:29
3	Ti 334.940†	-1217.0	32.0	0.0449	ug/L	0.0449 ppb	20:41:09
3	Tl 190.801†	-54.6	-10.9	-2.6257	ug/L	-2.6257 ppb	20:41:29
3	U 409.014†	-2796.2	-48.3	-1.2499	ug/L	-1.2499 ppb	20:41:03
3	V 292.402†	-1562.1	31.8	0.1879	ug/L	0.1879 ppb	20:41:09
3	Zn 213.857†	895.5	18.4	0.1312	ug/L	0.1312 ppb	20:41:29
3	SiO2†	678.0	85.3	4.5910	ug/L	4.5910 ppb	20:41:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1032760.3	99.353	%	0.6677				0.67%
Sc Radial	4822.8	98.2	%	0.18				0.18%
Y 371.029	877881.1	99.255	%	0.7151				0.72%
Y RADIAL	5549.3	98.27	%	0.401				0.41%
Ag 328.068†	-2.2	-0.0100	ug/L	0.08805	-0.0100	ppb	0.08805	877.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.8	12.426	ug/L	3.0019	12.426	ppb	3.0019	24.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.9	-1.5174	ug/L	2.01527	-1.5174	ppb	2.01527	132.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.8	1.0737	ug/L	0.38131	1.0737	ppb	0.38131	35.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.9	-0.0319	ug/L	0.02279	-0.0319	ppb	0.02279	71.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-23.4	-0.0073	ug/L	0.01501	-0.0073	ppb	0.01501	204.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	1.7487	ug/L	5.81876	1.7487	ppb	5.81876	332.75%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -0.2     -0.0010 ug/L       0.04236     -0.0010 ppb        0.04236 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.2     -0.0354 ug/L       0.08607     -0.0354 ppb        0.08607 243.13%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                15.7      0.1412 ug/L       0.18654      0.1412 ppb        0.18654 132.08%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                70.2      0.1871 ug/L       0.07906      0.1871 ppb        0.07906  42.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -5.6061 ug/L       3.31252     -5.6061 ppb        3.31252  59.09%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          68.2      12.421 ug/L        9.2325      12.421 ppb         9.2325  74.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.1      47.540 ug/L       79.6362      47.540 ppb        79.6362 167.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.6      0.0370 ug/L       0.00864      0.0370 ppb        0.00864  23.36%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.4      0.4973 ug/L       0.10610      0.4973 ppb        0.10610  21.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         93.6      26.264 ug/L        6.0309      26.264 ppb         6.0309  22.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.0     -0.0188 ug/L       0.33087     -0.0188 ppb        0.33087 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 22.5      10.052 ug/L        7.7722      10.052 ppb         7.7722  77.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.5      0.1445 ug/L       1.08312      0.1445 ppb        1.08312 749.59%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -6.1     -6.5307 ug/L       4.10270     -6.5307 ppb        4.10270  62.82%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.9      1.8456 ug/L       1.58934      1.8456 ppb        1.58934  86.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.4     -2.4146 ug/L       3.64495     -2.4146 ppb        3.64495 150.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                75.5      1.9012 ug/L       0.14094      1.9012 ppb        0.14094   7.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.0      1.1896 ug/L       0.49272      1.1896 ppb        0.49272  41.42%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 6.7      0.0352 ug/L       0.05850      0.0352 ppb        0.05850 166.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.2     -0.0206 ug/L       0.12036     -0.0206 ppb        0.12036 585.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -6.6     -1.5879 ug/L       0.90543     -1.5879 ppb        0.90543  57.02%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -25.7     -0.6637 ug/L       1.13010     -0.6637 ppb        1.13010 170.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -6.8     -0.0314 ug/L       0.23824     -0.0314 ppb        0.23824 759.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 5.3      0.0377 ug/L       0.09572      0.0377 ppb        0.09572 254.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      59.0      3.1688 ug/L       1.26346      3.1688 ppb        1.26346  39.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 77
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 21:40:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4890.1	4890.1	99.6	%			21:42:34
1	Y RADIAL	5623.9	5623.9	99.59	%			21:42:34
1	Al 396.153Radial†	7665.8	7740.4	5089.3	ug/L	5089.3	ppb	21:42:34
1	Ca 317.933Radial†	2790.7	2784.1	4929.3	ug/L	4929.3	ppb	21:42:54
1	Fe 238.204 Radial†	419.1	409.8	4970.8	ug/L	4970.8	ppb	21:42:54
1	K 766.490 Radial†	29440.3	26988.8	4910.3	ug/L	4910.3	ppb	21:42:34
1	Mg 279.077 IEC†	112.4	110.3	4943.1	ug/L	4943.1	ppb	21:42:54
1	Na 589.592 Radial†	33401.2	34815.1	9765.6	ug/L	9765.6	ppb	21:42:34
1	Sr 421.552†	94490.9	94877.2	497.72	ug/L	497.72	ppb	21:42:34
1	Sc 361.383	1022148.7	1022148.7	98.332	%			21:43:54
1	Y 371.029	857288.2	857288.2	96.927	%			21:43:54
1	Ag 328.068†	126449.9	128120.3	510.92	ug/L	510.92	ppb	21:43:54
1	As 188.979†	1554.7	1617.7	508.48	ug/L	508.48	ppb	21:44:14
1	B 249.677†	25682.4	26584.0	500.46	ug/L	500.46	ppb	21:43:54
1	Ba 233.527†	78064.2	79388.1	511.33	ug/L	511.33	ppb	21:43:54
1	Be 313.107†	1605119.3	1637214.5	511.47	ug/L	511.47	ppb	21:43:54
1	Cd 226.502†	57460.6	58670.7	511.48	ug/L	511.48	ppb	21:43:54
1	Co 228.616†	29953.6	30547.9	503.35	ug/L	503.35	ppb	21:44:14
1	Cr 267.716†	55656.2	56512.3	508.53	ug/L	508.53	ppb	21:43:54
1	Cu 324.752†	197442.3	191853.2	512.60	ug/L	512.60	ppb	21:43:54
1	Mn 257.610†	532950.9	541412.6	513.09	ug/L	513.09	ppb	21:43:54
1	Mo 202.031†	9454.1	9585.2	509.01	ug/L	509.01	ppb	21:44:14
1	Ni 231.604†	25461.0	25760.9	504.43	ug/L	504.43	ppb	21:44:14
1	P 214.914†	5871.1	5705.5	2474.6	ug/L	2474.6	ppb	21:44:14
1	Pb 220.353†	5273.3	5438.3	512.09	ug/L	512.09	ppb	21:44:14
1	S 181.975 Axial†	963.6	919.9	990.04	ug/L	990.04	ppb	21:44:14
1	Sb 206.836†	1918.1	1916.0	512.42	ug/L	512.42	ppb	21:44:14
1	Se 196.026†	1085.7	1125.5	518.17	ug/L	518.17	ppb	21:44:14
1	Si 251.611†	99190.9	100315.4	2535.6	ug/L	2535.6	ppb	21:43:54
1	Sn 189.927†	3737.8	3805.5	503.90	ug/L	503.90	ppb	21:44:14
1	Ti 334.940†	361901.3	369299.2	509.22	ug/L	509.22	ppb	21:43:54
1	Tl 190.801†	2002.0	2080.2	506.36	ug/L	506.36	ppb	21:44:14
1	U 409.014†	16098.1	19145.1	493.38	ug/L	493.38	ppb	21:43:54
1	V 292.402†	85422.5	88479.7	513.34	ug/L	513.34	ppb	21:43:54
1	Zn 213.857†	69272.5	69561.7	506.68	ug/L	506.68	ppb	21:43:54
1	SiO2†	99897.5	100992.6	5462.7	ug/L	5462.7	ppb	21:45:14
2	Sc Radial	4765.6	4765.6	97.1	%			21:43:00
2	Y RADIAL	5427.4	5427.4	96.11	%			21:43:00
2	Al 396.153Radial†	7485.7	7755.9	5099.5	ug/L	5099.5	ppb	21:43:00
2	Ca 317.933Radial†	2824.8	2892.4	5121.1	ug/L	5121.1	ppb	21:43:20
2	Fe 238.204 Radial†	425.1	427.0	5178.2	ug/L	5178.2	ppb	21:43:20
2	K 766.490 Radial†	28845.6	27148.6	4939.4	ug/L	4939.4	ppb	21:43:00
2	Mg 279.077 IEC†	119.3	120.4	5392.1	ug/L	5392.1	ppb	21:43:20
2	Na 589.592 Radial†	32528.1	34792.0	9759.1	ug/L	9759.1	ppb	21:43:00
2	Sr 421.552†	91997.4	94787.7	497.25	ug/L	497.25	ppb	21:43:00
2	Sc 361.383	1020467.1	1020467.1	98.171	%			21:44:21
2	Y 371.029	857323.5	857323.5	96.931	%			21:44:21
2	Ag 328.068†	126179.2	128056.4	510.74	ug/L	510.74	ppb	21:44:21
2	As 188.979†	1571.5	1637.4	514.66	ug/L	514.66	ppb	21:44:41
2	B 249.677†	25622.6	26566.2	500.09	ug/L	500.09	ppb	21:44:21
2	Ba 233.527†	77898.1	79349.7	511.09	ug/L	511.09	ppb	21:44:21
2	Be 313.107†	1603707.5	1638466.3	511.86	ug/L	511.86	ppb	21:44:21
2	Cd 226.502†	57368.7	58673.4	511.49	ug/L	511.49	ppb	21:44:21
2	Co 228.616†	30031.3	30677.3	505.48	ug/L	505.48	ppb	21:44:41
2	Cr 267.716†	55637.5	56586.5	509.20	ug/L	509.20	ppb	21:44:21
2	Cu 324.752†	196554.4	191279.7	511.08	ug/L	511.08	ppb	21:44:21
2	Mn 257.610†	531554.1	540882.9	512.60	ug/L	512.60	ppb	21:44:21
2	Mo 202.031†	9476.6	9624.0	511.09	ug/L	511.09	ppb	21:44:41
2	Ni 231.604†	25515.7	25859.2	506.35	ug/L	506.35	ppb	21:44:41

2	P 214.914†	5884.1	5728.6	2485.0	ug/L	2485.0 ppb	21:44:41
2	Pb 220.353†	5312.4	5486.9	516.65	ug/L	516.65 ppb	21:44:41
2	S 181.975 Axial†	972.0	930.0	1000.9	ug/L	1000.9 ppb	21:44:41
2	Sb 206.836†	1912.0	1913.0	511.65	ug/L	511.65 ppb	21:44:41
2	Se 196.026†	1112.6	1154.7	531.83	ug/L	531.83 ppb	21:44:41
2	Si 251.611†	98859.6	100144.2	2531.2	ug/L	2531.2 ppb	21:44:21
2	Sn 189.927†	3730.3	3804.2	503.74	ug/L	503.74 ppb	21:44:41
2	Ti 334.940†	361448.2	369444.2	509.44	ug/L	509.44 ppb	21:44:21
2	Tl 190.801†	2029.1	2111.1	513.84	ug/L	513.84 ppb	21:44:41
2	U 409.014†	15945.8	19016.9	490.03	ug/L	490.03 ppb	21:44:21
2	V 292.402†	85399.1	88599.0	514.03	ug/L	514.03 ppb	21:44:21
2	Zn 213.857†	69184.0	69587.6	506.82	ug/L	506.82 ppb	21:44:21
2	SiO2†	98500.4	99736.9	5394.3	ug/L	5394.3 ppb	21:45:19
3	Sc Radial	4812.4	4812.4	98.0	%		21:43:25
3	Y RADIAL	5504.8	5504.8	97.48	%		21:43:25
3	Al 396.153Radial†	7617.7	7815.5	5138.9	ug/L	5138.9 ppb	21:43:25
3	Ca 317.933Radial†	2787.1	2825.7	5002.9	ug/L	5002.9 ppb	21:43:45
3	Fe 238.204 Radial†	414.7	412.1	4998.8	ug/L	4998.8 ppb	21:43:45
3	K 766.490 Radial†	29333.1	27356.9	4977.3	ug/L	4977.3 ppb	21:43:25
3	Mg 279.077 IEC†	111.3	111.1	4976.6	ug/L	4976.6 ppb	21:43:45
3	Na 589.592 Radial†	33369.1	35324.0	9908.4	ug/L	9908.4 ppb	21:43:25
3	Sr 421.552†	94268.0	96182.1	504.57	ug/L	504.57 ppb	21:43:25
3	Sc 361.383	1021109.7	1021109.7	98.232	%		21:44:48
3	Y 371.029	856254.7	856254.7	96.810	%		21:44:48
3	Ag 328.068†	126137.4	127933.0	510.19	ug/L	510.19 ppb	21:44:48
3	As 188.979†	1558.4	1623.0	510.15	ug/L	510.15 ppb	21:45:09
3	B 249.677†	25675.0	26603.0	500.82	ug/L	500.82 ppb	21:44:48
3	Ba 233.527†	78080.4	79485.3	511.96	ug/L	511.96 ppb	21:44:48
3	Be 313.107†	1599607.4	1633264.3	510.24	ug/L	510.24 ppb	21:44:48
3	Cd 226.502†	57353.5	58621.2	511.05	ug/L	511.05 ppb	21:44:48
3	Co 228.616†	30025.6	30652.1	505.07	ug/L	505.07 ppb	21:45:09
3	Cr 267.716†	55545.8	56457.5	508.03	ug/L	508.03 ppb	21:44:48
3	Cu 324.752†	197040.1	191648.1	512.05	ug/L	512.05 ppb	21:44:48
3	Mn 257.610†	532363.3	541365.8	513.05	ug/L	513.05 ppb	21:44:48
3	Mo 202.031†	9466.7	9607.8	510.21	ug/L	510.21 ppb	21:45:09
3	Ni 231.604†	25449.1	25775.1	504.70	ug/L	504.70 ppb	21:45:09
3	P 214.914†	5864.4	5704.8	2474.4	ug/L	2474.4 ppb	21:45:09
3	Pb 220.353†	5291.7	5462.5	514.37	ug/L	514.37 ppb	21:45:09
3	S 181.975 Axial†	975.2	932.6	1003.8	ug/L	1003.8 ppb	21:45:09
3	Sb 206.836†	1921.5	1921.5	513.90	ug/L	513.90 ppb	21:45:09
3	Se 196.026†	1089.8	1130.8	520.59	ug/L	520.59 ppb	21:45:09
3	Si 251.611†	99112.5	100338.3	2536.1	ug/L	2536.1 ppb	21:44:48
3	Sn 189.927†	3733.7	3805.2	503.86	ug/L	503.86 ppb	21:45:09
3	Ti 334.940†	361617.6	369385.0	509.35	ug/L	509.35 ppb	21:44:48
3	Tl 190.801†	2021.6	2102.3	511.70	ug/L	511.70 ppb	21:45:09
3	U 409.014†	16093.5	19157.0	493.68	ug/L	493.68 ppb	21:44:48
3	V 292.402†	85298.0	88441.4	513.14	ug/L	513.14 ppb	21:44:48
3	Zn 213.857†	69230.4	69590.6	506.89	ug/L	506.89 ppb	21:44:48
3	SiO2†	98371.3	99542.4	5383.8	ug/L	5383.8 ppb	21:45:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021241.9	98.245	%	0.0816				0.08%
Sc Radial	4822.7	98.2	%	1.28				1.30%
Y 371.029	856955.5	96.889	%	0.0686				0.07%
Y RADIAL	5518.7	97.73	%	1.752				1.79%
Ag 328.068†	128036.6	510.62	ug/L	0.383	510.62	ppb	0.383	0.07%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7770.6	5109.2	ug/L	26.19	5109.2	ppb	26.19	0.51%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	1626.1	511.10	ug/L	3.194	511.10	ppb	3.194	0.62%
QC value within limits for As 188.979 Recovery = 102.22%								
B 249.677†	26584.4	500.46	ug/L	0.361	500.46	ppb	0.361	0.07%
QC value within limits for B 249.677 Recovery = 100.09%								
Ba 233.527†	79407.7	511.46	ug/L	0.446	511.46	ppb	0.446	0.09%
QC value within limits for Ba 233.527 Recovery = 102.29%								
Be 313.107†	1636315.1	511.19	ug/L	0.847	511.19	ppb	0.847	0.17%
QC value within limits for Be 313.107 Recovery = 102.24%								
Ca 317.933Radial†	2834.1	5017.8	ug/L	96.77	5017.8	ppb	96.77	1.93%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58655.1      511.34 ug/L        0.252      511.34 ppb         0.252   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.27%
Co 228.616†            30625.8      504.63 ug/L        1.131      504.63 ppb         1.131   0.22%
   QC value within limits for Co 228.616  Recovery = 100.93%
Cr 267.716†            56518.8      508.59 ug/L        0.585      508.59 ppb         0.585   0.11%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191593.7      511.91 ug/L        0.770      511.91 ppb         0.770   0.15%
   QC value within limits for Cu 324.752  Recovery = 102.38%
Fe 238.204 Radial†       416.3      5049.2 ug/L       112.52      5049.2 ppb        112.52   2.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.98%
K 766.490 Radial†      27164.8      4942.4 ug/L        33.60      4942.4 ppb         33.60   0.68%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          113.9      5103.9 ug/L       250.10      5103.9 ppb        250.10   4.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.08%
Mn 257.610†           541220.4      512.91 ug/L        0.271      512.91 ppb         0.271   0.05%
   QC value within limits for Mn 257.610  Recovery = 102.58%
Mo 202.031†             9605.7      510.10 ug/L        1.040      510.10 ppb         1.040   0.20%
   QC value within limits for Mo 202.031  Recovery = 102.02%
Na 589.592 Radial†     34977.0      9811.0 ug/L        84.35      9811.0 ppb         84.35   0.86%
   QC value within limits for Na 589.592 Radial  Recovery = 98.11%
Ni 231.604†            25798.4      505.16 ug/L        1.041      505.16 ppb         1.041   0.21%
   QC value within limits for Ni 231.604  Recovery = 101.03%
P 214.914†              5713.0      2478.0 ug/L         6.08      2478.0 ppb          6.08   0.25%
   QC value within limits for P 214.914  Recovery = 99.12%
Pb 220.353†             5462.6      514.37 ug/L        2.277      514.37 ppb         2.277   0.44%
   QC value within limits for Pb 220.353  Recovery = 102.87%
S 181.975 Axial†         927.5      998.25 ug/L        7.249      998.25 ppb         7.249   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 99.82%
Sb 206.836†             1916.8      512.66 ug/L        1.139      512.66 ppb         1.139   0.22%
   QC value within limits for Sb 206.836  Recovery = 102.53%
Se 196.026†             1137.0      523.53 ug/L        7.291      523.53 ppb         7.291   1.39%
   QC value within limits for Se 196.026  Recovery = 104.71%
Si 251.611†           100266.0      2534.3 ug/L         2.71      2534.3 ppb          2.71   0.11%
   QC value within limits for Si 251.611  Recovery = 101.37%
Sn 189.927†             3805.0      503.83 ug/L        0.082      503.83 ppb         0.082   0.02%
   QC value within limits for Sn 189.927  Recovery = 100.77%
Sr 421.552†            95282.3      499.85 ug/L        4.095      499.85 ppb         4.095   0.82%
   QC value within limits for Sr 421.552  Recovery = 99.97%
Ti 334.940†           369376.1      509.34 ug/L        0.106      509.34 ppb         0.106   0.02%
   QC value within limits for Ti 334.940  Recovery = 101.87%
Tl 190.801†             2097.9      510.63 ug/L        3.852      510.63 ppb         3.852   0.75%
   QC value within limits for Tl 190.801  Recovery = 102.13%
U 409.014†             19106.3      492.36 ug/L        2.023      492.36 ppb         2.023   0.41%
   QC value within limits for U 409.014  Recovery = 98.47%
V 292.402†             88506.7      513.50 ug/L        0.466      513.50 ppb         0.466   0.09%
   QC value within limits for V 292.402  Recovery = 102.70%
Zn 213.857†            69580.0      506.80 ug/L        0.106      506.80 ppb         0.106   0.02%
   QC value within limits for Zn 213.857  Recovery = 101.36%
SiO2†                 100090.6      5413.6 ug/L        42.84      5413.6 ppb         42.84   0.79%
   QC value within limits for SiO2  Recovery = 101.24%
All analyte(s) passed QC.
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Sequence No.: 78
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 21:47:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5040.1	5040.1	103	%			21:49:26
1	Y RADIAL	5787.6	5787.6	102.5	%			21:49:26
1	Al 396.153Radial†	-21.8	22.6	14.879	ug/L	14.879	ppb	21:49:26
1	Ca 317.933Radial†	19.4	1.1	1.9413	ug/L	1.9413	ppb	21:49:46
1	Fe 238.204 Radial†	9.2	-2.1	-25.139	ug/L	-25.139	ppb	21:49:46
1	K 766.490 Radial†	2572.3	-63.7	-11.628	ug/L	-11.628	ppb	21:49:26
1	Mg 279.077 IEC†	5.2	2.5	113.89	ug/L	113.89	ppb	21:49:46
1	Na 589.592 Radial†	-1229.6	82.2	23.052	ug/L	23.052	ppb	21:49:26
1	Sr 421.552†	6.3	13.6	0.0713	ug/L	0.0713	ppb	21:49:26
1	Sc 361.383	1022554.3	1022554.3	98.371	%			21:50:43
1	Y 371.029	869982.1	869982.1	98.362	%			21:50:43
1	Ag 328.068†	423.0	-44.0	-0.1825	ug/L	-0.1825	ppb	21:50:48
1	As 188.979†	-36.4	-0.4	-0.1243	ug/L	-0.1243	ppb	21:51:08
1	B 249.677†	-421.5	37.7	0.7157	ug/L	0.7157	ppb	21:51:08
1	Ba 233.527†	3.9	3.9	0.0243	ug/L	0.0243	ppb	21:51:08
1	Be 313.107†	-4890.7	-97.8	-0.0306	ug/L	-0.0306	ppb	21:50:48
1	Cd 226.502†	-227.2	4.7	0.0433	ug/L	0.0433	ppb	21:51:08
1	Co 228.616†	-103.0	-18.4	-0.3017	ug/L	-0.3017	ppb	21:51:08
1	Cr 267.716†	110.5	24.6	0.2202	ug/L	0.2202	ppb	21:51:08
1	Cu 324.752†	8928.6	138.9	0.3698	ug/L	0.3698	ppb	21:50:48
1	Mn 257.610†	606.5	39.9	0.0331	ug/L	0.0331	ppb	21:51:08
1	Mo 202.031†	37.4	8.7	0.4619	ug/L	0.4619	ppb	21:51:08
1	Ni 231.604†	107.3	-22.8	-0.4470	ug/L	-0.4470	ppb	21:51:08
1	P 214.914†	274.6	14.0	6.2571	ug/L	6.2571	ppb	21:51:08
1	Pb 220.353†	-80.1	-5.9	-0.5461	ug/L	-0.5461	ppb	21:51:08
1	S 181.975 Axial†	61.4	2.3	2.5171	ug/L	2.5171	ppb	21:51:08
1	Sb 206.836†	39.3	5.3	1.4134	ug/L	1.4134	ppb	21:51:08
1	Se 196.026†	-24.6	-3.7	-1.7129	ug/L	-1.7129	ppb	21:51:08
1	Si 251.611†	646.6	99.6	2.5235	ug/L	2.5235	ppb	21:51:08
1	Sn 189.927†	2.5	6.9	0.9141	ug/L	0.9141	ppb	21:51:08
1	Ti 334.940†	-1285.7	-46.6	-0.0640	ug/L	-0.0640	ppb	21:50:48
1	Tl 190.801†	-49.4	-6.0	-1.4524	ug/L	-1.4524	ppb	21:51:08
1	U 409.014†	-2742.7	-14.1	-0.3621	ug/L	-0.3621	ppb	21:50:43
1	V 292.402†	-1590.1	-7.9	-0.0330	ug/L	-0.0330	ppb	21:50:48
1	Zn 213.857†	912.1	41.6	0.3066	ug/L	0.3066	ppb	21:51:08
1	SiO2†	713.3	126.1	6.8394	ug/L	6.8394	ppb	21:52:14
2	Sc Radial	4780.7	4780.7	97.4	%			21:49:51
2	Y RADIAL	5465.2	5465.2	96.78	%			21:49:51
2	Al 396.153Radial†	-65.1	-23.1	-15.291	ug/L	-15.291	ppb	21:49:51
2	Ca 317.933Radial†	18.3	0.9	1.6184	ug/L	1.6184	ppb	21:50:11
2	Fe 238.204 Radial†	12.2	1.5	18.657	ug/L	18.657	ppb	21:50:11
2	K 766.490 Radial†	2589.3	89.6	16.327	ug/L	16.327	ppb	21:49:51
2	Mg 279.077 IEC†	1.6	-0.9	-40.434	ug/L	-40.434	ppb	21:50:11
2	Na 589.592 Radial†	-1197.6	50.1	14.044	ug/L	14.044	ppb	21:49:51
2	Sr 421.552†	-31.6	-25.1	-0.1315	ug/L	-0.1315	ppb	21:49:51
2	Sc 361.383	1030244.0	1030244.0	99.111	%			21:51:13
2	Y 371.029	876739.0	876739.0	99.126	%			21:51:13
2	Ag 328.068†	344.0	-127.0	-0.5001	ug/L	-0.5001	ppb	21:51:18
2	As 188.979†	-28.7	7.7	2.3958	ug/L	2.3958	ppb	21:51:38
2	B 249.677†	-466.9	-5.0	-0.0974	ug/L	-0.0974	ppb	21:51:38
2	Ba 233.527†	-1.3	-1.3	-0.0087	ug/L	-0.0087	ppb	21:51:38
2	Be 313.107†	-4823.4	7.3	0.0023	ug/L	0.0023	ppb	21:51:18
2	Cd 226.502†	-241.9	-8.4	-0.0746	ug/L	-0.0746	ppb	21:51:38
2	Co 228.616†	-74.4	11.2	0.1861	ug/L	0.1861	ppb	21:51:38
2	Cr 267.716†	92.2	5.3	0.0466	ug/L	0.0466	ppb	21:51:38
2	Cu 324.752†	8841.2	-17.0	-0.0446	ug/L	-0.0446	ppb	21:51:18
2	Mn 257.610†	621.8	50.7	0.0507	ug/L	0.0507	ppb	21:51:38
2	Mo 202.031†	41.4	12.5	0.6650	ug/L	0.6650	ppb	21:51:38
2	Ni 231.604†	151.6	21.1	0.4123	ug/L	0.4123	ppb	21:51:38

2	P 214.914†	285.1	22.5	10.085 ug/L	10.085 ppb	21:51:38
2	Pb 220.353†	-78.4	-3.6	-0.3399 ug/L	-0.3399 ppb	21:51:38
2	S 181.975 Axial†	60.3	0.7	0.7490 ug/L	0.7490 ppb	21:51:38
2	Sb 206.836†	49.6	15.4	4.0872 ug/L	4.0872 ppb	21:51:38
2	Se 196.026†	-27.2	-6.0	-2.6014 ug/L	-2.6014 ppb	21:51:38
2	Si 251.611†	664.9	113.2	2.8554 ug/L	2.8554 ppb	21:51:38
2	Sn 189.927†	4.5	8.9	1.1761 ug/L	1.1761 ppb	21:51:38
2	Ti 334.940†	-1220.8	28.7	0.0395 ug/L	0.0395 ppb	21:51:18
2	Tl 190.801†	-50.5	-6.6	-1.6073 ug/L	-1.6073 ppb	21:51:38
2	U 409.014†	-2733.6	15.9	0.4089 ug/L	0.4089 ppb	21:51:13
2	V 292.402†	-1696.8	-103.5	-0.5860 ug/L	-0.5860 ppb	21:51:18
2	Zn 213.857†	905.4	27.9	0.2022 ug/L	0.2022 ppb	21:51:38
2	SiO2†	685.1	92.2	4.9640 ug/L	4.9640 ppb	21:52:19
3	Sc Radial	4788.6	4788.6	97.5 %		21:50:16
3	Y RADIAL	5467.5	5467.5	96.82 %		21:50:16
3	Al 396.153Radial†	-36.4	6.4	4.2310 ug/L	4.2310 ppb	21:50:16
3	Ca 317.933Radial†	17.4	-0.0	-0.0388 ug/L	-0.0388 ppb	21:50:36
3	Fe 238.204 Radial†	11.4	0.7	8.1139 ug/L	8.1139 ppb	21:50:36
3	K 766.490 Radial†	2680.4	178.8	32.565 ug/L	32.565 ppb	21:50:16
3	Mg 279.077 IEC†	5.7	3.4	150.15 ug/L	150.15 ppb	21:50:36
3	Na 589.592 Radial†	-1132.3	119.0	33.377 ug/L	33.377 ppb	21:50:16
3	Sr 421.552†	1.2	8.7	0.0455 ug/L	0.0455 ppb	21:50:16
3	Sc 361.383	1026701.1	1026701.1	98.770 %		21:51:43
3	Y 371.029	872343.9	872343.9	98.629 %		21:51:43
3	Ag 328.068†	397.4	-71.7	-0.2845 ug/L	-0.2845 ppb	21:51:48
3	As 188.979†	-39.7	-3.6	-1.1085 ug/L	-1.1085 ppb	21:52:08
3	B 249.677†	-435.9	24.8	0.4672 ug/L	0.4672 ppb	21:52:08
3	Ba 233.527†	-8.3	-8.4	-0.0542 ug/L	-0.0542 ppb	21:52:08
3	Be 313.107†	-4848.9	-35.3	-0.0111 ug/L	-0.0111 ppb	21:51:48
3	Cd 226.502†	-222.3	10.6	0.0913 ug/L	0.0913 ppb	21:52:08
3	Co 228.616†	-93.9	-8.8	-0.1438 ug/L	-0.1438 ppb	21:52:08
3	Cr 267.716†	102.3	15.8	0.1406 ug/L	0.1406 ppb	21:52:08
3	Cu 324.752†	8943.6	117.5	0.3142 ug/L	0.3142 ppb	21:51:48
3	Mn 257.610†	596.0	26.8	0.0234 ug/L	0.0234 ppb	21:52:08
3	Mo 202.031†	36.7	7.9	0.4215 ug/L	0.4215 ppb	21:52:08
3	Ni 231.604†	105.8	-24.8	-0.4865 ug/L	-0.4865 ppb	21:52:08
3	P 214.914†	272.3	10.6	4.7081 ug/L	4.7081 ppb	21:52:08
3	Pb 220.353†	-82.0	-7.5	-0.7002 ug/L	-0.7002 ppb	21:52:08
3	S 181.975 Axial†	56.1	-3.3	-3.5446 ug/L	-3.5446 ppb	21:52:08
3	Sb 206.836†	43.6	9.6	2.5399 ug/L	2.5399 ppb	21:52:08
3	Se 196.026†	-33.2	-12.2	-5.3898 ug/L	-5.3898 ppb	21:52:08
3	Si 251.611†	651.9	102.4	2.5795 ug/L	2.5795 ppb	21:52:08
3	Sn 189.927†	3.0	7.3	0.9696 ug/L	0.9696 ppb	21:52:08
3	Ti 334.940†	-1272.6	-28.0	-0.0394 ug/L	-0.0394 ppb	21:51:48
3	Tl 190.801†	-53.0	-9.4	-2.2674 ug/L	-2.2674 ppb	21:52:08
3	U 409.014†	-2674.4	66.3	1.7135 ug/L	1.7135 ppb	21:51:43
3	V 292.402†	-1650.3	-62.3	-0.3451 ug/L	-0.3451 ppb	21:51:48
3	Zn 213.857†	906.9	32.6	0.2365 ug/L	0.2365 ppb	21:52:08
3	SiO2†	687.8	97.4	5.2451 ug/L	5.2451 ppb	21:52:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026499.8	98.751	%	0.3703				0.37%
Sc Radial	4869.8	99.2	%	3.00				3.03%
Y 371.029	873021.7	98.706	%	0.3877				0.39%
Y RADIAL	5573.4	98.69	%	3.284				3.33%
Ag 328.068†	-80.9	-0.3224	ug/L	0.16218	-0.3224	ppb	0.16218	50.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.0	1.2729	ug/L	15.30100	1.2729	ppb	15.30100	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	0.3877	ug/L	1.80737	0.3877	ppb	1.80737	466.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.1	0.3618	ug/L	0.41666	0.3618	ppb	0.41666	115.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0129	ug/L	0.03943	-0.0129	ppb	0.03943	306.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-41.9	-0.0131	ug/L	0.01657	-0.0131	ppb	0.01657	126.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.7	1.1736	ug/L	1.06233	1.1736	ppb	1.06233	90.52%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 2.3      0.0200 ug/L       0.08538      0.0200 ppb        0.08538 427.65%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.0865 ug/L       0.24890     -0.0865 ppb        0.24890 287.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                15.2      0.1358 ug/L       0.08694      0.1358 ppb        0.08694  64.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                79.8      0.2131 ug/L       0.22489      0.2131 ppb        0.22489 105.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.5441 ug/L      22.85815      0.5441 ppb       22.85815 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          68.2      12.422 ug/L       22.3536      12.422 ppb        22.3536 179.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.7      74.535 ug/L      101.2033      74.535 ppb       101.2033 135.78%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                39.1      0.0357 ug/L       0.01383      0.0357 ppb        0.01383  38.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.7      0.5162 ug/L       0.13051      0.5162 ppb        0.13051  25.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         83.7      23.491 ug/L        9.6740      23.491 ppb         9.6740  41.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -8.9     -0.1737 ug/L       0.50791     -0.1737 ppb        0.50791 292.40%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.7      7.0166 ug/L       2.76756      7.0166 ppb        2.76756  39.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -5.6     -0.5287 ug/L       0.18076     -0.5287 ppb        0.18076  34.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.1     -0.0928 ug/L       3.11728     -0.0928 ppb        3.11728 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                10.1      2.6802 ug/L       1.34240      2.6802 ppb        1.34240  50.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.3     -3.2347 ug/L       1.91851     -3.2347 ppb        1.91851  59.31%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.1      2.6528 ug/L       0.17767      2.6528 ppb        0.17767   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.7      1.0199 ug/L       0.13804      1.0199 ppb        0.13804  13.53%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.9     -0.0049 ug/L       0.11036     -0.0049 ppb        0.11036 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.3     -0.0213 ug/L       0.05410     -0.0213 ppb        0.05410 254.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -7.3     -1.7757 ug/L       0.43279     -1.7757 ppb        0.43279  24.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 22.7      0.5867 ug/L       1.04917      0.5867 ppb        1.04917 178.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -57.9     -0.3214 ug/L       0.27724     -0.3214 ppb        0.27724  86.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                34.0      0.2484 ug/L       0.05318      0.2484 ppb        0.05318  21.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     105.2      5.6828 ug/L       1.01143      5.6828 ppb        1.01143  17.80%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 23:14:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4714.7	4714.7	96.0	%			23:15:56
1	Y RADIAL	5400.3	5400.3	95.63	%			23:15:56
1	Al 396.153Radial†	7509.6	7863.9	5171.0	ug/L	5171.0	ppb	23:15:56
1	Ca 317.933Radial†	2790.4	2887.9	5113.2	ug/L	5113.2	ppb	23:16:16
1	Fe 238.204 Radial†	410.7	416.7	5053.8	ug/L	5053.8	ppb	23:16:16
1	K 766.490 Radial†	28936.2	27563.4	5015.0	ug/L	5015.0	ppb	23:15:56
1	Mg 279.077 IEC†	112.0	114.1	5112.4	ug/L	5112.4	ppb	23:16:16
1	Na 589.592 Radial†	32821.6	35458.9	9946.2	ug/L	9946.2	ppb	23:15:56
1	Sr 421.552†	92586.5	96423.0	505.83	ug/L	505.83	ppb	23:15:56
1	Sc 361.383	1017505.4	1017505.4	97.886	%			23:17:16
1	Y 371.029	854009.4	854009.4	96.556	%			23:17:16
1	Ag 328.068†	125397.8	127632.4	509.01	ug/L	509.01	ppb	23:17:16
1	As 188.979†	1550.0	1620.1	509.24	ug/L	509.24	ppb	23:17:36
1	B 249.677†	25388.6	26403.1	497.03	ug/L	497.03	ppb	23:17:16
1	Ba 233.527†	77356.9	79027.9	509.02	ug/L	509.02	ppb	23:17:16
1	Be 313.107†	1585415.9	1624534.7	507.52	ug/L	507.52	ppb	23:17:16
1	Cd 226.502†	56729.9	58190.9	507.29	ug/L	507.29	ppb	23:17:16
1	Co 228.616†	29804.8	30534.9	503.13	ug/L	503.13	ppb	23:17:36
1	Cr 267.716†	55236.9	56342.3	507.00	ug/L	507.00	ppb	23:17:16
1	Cu 324.752†	195572.8	190859.6	509.95	ug/L	509.95	ppb	23:17:16
1	Mn 257.610†	528787.2	539632.3	511.41	ug/L	511.41	ppb	23:17:16
1	Mo 202.031†	9376.8	9550.1	507.15	ug/L	507.15	ppb	23:17:36
1	Ni 231.604†	25212.9	25625.6	501.78	ug/L	501.78	ppb	23:17:36
1	P 214.914†	5821.7	5682.3	2464.6	ug/L	2464.6	ppb	23:17:36
1	Pb 220.353†	5232.7	5421.3	510.50	ug/L	510.50	ppb	23:17:36
1	S 181.975 Axial†	966.0	926.8	997.47	ug/L	997.47	ppb	23:17:36
1	Sb 206.836†	1917.3	1924.1	514.51	ug/L	514.51	ppb	23:17:36
1	Se 196.026†	1094.7	1139.7	524.74	ug/L	524.74	ppb	23:17:36
1	Si 251.611†	98033.7	99593.5	2517.3	ug/L	2517.3	ppb	23:17:16
1	Sn 189.927†	3704.6	3788.9	501.72	ug/L	501.72	ppb	23:17:36
1	Ti 334.940†	359437.1	368461.3	508.08	ug/L	508.08	ppb	23:17:16
1	Tl 190.801†	1999.1	2086.6	507.89	ug/L	507.89	ppb	23:17:36
1	U 409.014†	16020.8	19140.8	493.26	ug/L	493.26	ppb	23:17:16
1	V 292.402†	84856.9	88298.3	512.27	ug/L	512.27	ppb	23:17:16
1	Zn 213.857†	68408.6	69000.6	502.56	ug/L	502.56	ppb	23:17:16
1	SiO2†	97937.3	99453.7	5379.1	ug/L	5379.1	ppb	23:18:36
2	Sc Radial	4693.4	4693.4	95.6	%			23:16:22
2	Y RADIAL	5372.6	5372.6	95.14	%			23:16:22
2	Al 396.153Radial†	7426.4	7812.5	5137.0	ug/L	5137.0	ppb	23:16:22
2	Ca 317.933Radial†	2765.6	2875.2	5090.7	ug/L	5090.7	ppb	23:16:42
2	Fe 238.204 Radial†	408.7	416.5	5051.8	ug/L	5051.8	ppb	23:16:42
2	K 766.490 Radial†	28682.5	27434.9	4991.6	ug/L	4991.6	ppb	23:16:22
2	Mg 279.077 IEC†	110.2	112.8	5053.5	ug/L	5053.5	ppb	23:16:42
2	Na 589.592 Radial†	32168.8	34931.3	9798.2	ug/L	9798.2	ppb	23:16:22
2	Sr 421.552†	91350.1	95567.6	501.34	ug/L	501.34	ppb	23:16:22
2	Sc 361.383	1017546.5	1017546.5	97.890	%			23:17:43
2	Y 371.029	853335.7	853335.7	96.480	%			23:17:43
2	Ag 328.068†	125443.7	127674.0	509.17	ug/L	509.17	ppb	23:17:43
2	As 188.979†	1549.8	1619.8	509.14	ug/L	509.14	ppb	23:18:03
2	B 249.677†	25451.0	26465.8	498.22	ug/L	498.22	ppb	23:17:43
2	Ba 233.527†	77553.5	79225.5	510.29	ug/L	510.29	ppb	23:17:43
2	Be 313.107†	1585661.2	1624719.8	507.58	ug/L	507.58	ppb	23:17:43
2	Cd 226.502†	56912.5	58375.1	508.90	ug/L	508.90	ppb	23:17:43
2	Co 228.616†	29868.0	30598.2	504.17	ug/L	504.17	ppb	23:18:03
2	Cr 267.716†	55200.9	56303.2	506.64	ug/L	506.64	ppb	23:17:43
2	Cu 324.752†	195984.2	191271.9	511.05	ug/L	511.05	ppb	23:17:43
2	Mn 257.610†	529531.6	540370.9	512.11	ug/L	512.11	ppb	23:17:43
2	Mo 202.031†	9388.3	9561.5	507.76	ug/L	507.76	ppb	23:18:03
2	Ni 231.604†	25250.9	25663.4	502.52	ug/L	502.52	ppb	23:18:03

2	P 214.914†	5824.6	5685.0	2465.7 ug/L	2465.7 ppb	23:18:03
2	Pb 220.353†	5245.7	5434.3	511.72 ug/L	511.72 ppb	23:18:03
2	S 181.975 Axial†	973.1	933.9	1005.2 ug/L	1005.2 ppb	23:18:03
2	Sb 206.836†	1933.9	1941.0	519.07 ug/L	519.07 ppb	23:18:03
2	Se 196.026†	1094.7	1139.7	524.72 ug/L	524.72 ppb	23:18:03
2	Si 251.611†	98139.4	99697.5	2519.9 ug/L	2519.9 ppb	23:17:43
2	Sn 189.927†	3740.9	3825.9	506.60 ug/L	506.60 ppb	23:18:03
2	Ti 334.940†	360172.5	369197.8	509.09 ug/L	509.09 ppb	23:17:43
2	Tl 190.801†	1998.4	2085.7	507.70 ug/L	507.70 ppb	23:18:03
2	U 409.014†	16275.1	19400.0	499.96 ug/L	499.96 ppb	23:17:43
2	V 292.402†	84923.8	88363.1	512.66 ug/L	512.66 ppb	23:17:43
2	Zn 213.857†	68522.3	69114.0	503.39 ug/L	503.39 ppb	23:17:43
2	SiO2†	98851.1	100383.1	5429.5 ug/L	5429.5 ppb	23:18:41
3	Sc Radial	4677.3	4677.3	95.3 %		23:16:47
3	Y RADIAL	5333.1	5333.1	94.44 %		23:16:47
3	Al 396.153Radial†	7346.1	7754.9	5099.0 ug/L	5099.0 ppb	23:16:47
3	Ca 317.933Radial†	2770.2	2890.0	5116.9 ug/L	5116.9 ppb	23:17:07
3	Fe 238.204 Radial†	412.2	421.7	5113.9 ug/L	5113.9 ppb	23:17:07
3	K 766.490 Radial†	28487.4	27333.3	4973.1 ug/L	4973.1 ppb	23:16:47
3	Mg 279.077 IEC†	114.7	117.9	5283.2 ug/L	5283.2 ppb	23:17:07
3	Na 589.592 Radial†	32021.9	34893.0	9787.5 ug/L	9787.5 ppb	23:16:47
3	Sr 421.552†	90635.2	95146.1	499.13 ug/L	499.13 ppb	23:16:47
3	Sc 361.383	1017820.0	1017820.0	97.916 %		23:18:10
3	Y 371.029	852862.6	852862.6	96.427 %		23:18:10
3	Ag 328.068†	125601.8	127801.1	509.70 ug/L	509.70 ppb	23:18:10
3	As 188.979†	1539.9	1609.3	505.87 ug/L	505.87 ppb	23:18:31
3	B 249.677†	25599.7	26610.6	500.95 ug/L	500.95 ppb	23:18:10
3	Ba 233.527†	77742.2	79397.0	511.39 ug/L	511.39 ppb	23:18:10
3	Be 313.107†	1585449.3	1624068.1	507.37 ug/L	507.37 ppb	23:18:10
3	Cd 226.502†	57090.7	58541.4	510.34 ug/L	510.34 ppb	23:18:10
3	Co 228.616†	29866.0	30588.0	504.00 ug/L	504.00 ppb	23:18:31
3	Cr 267.716†	55247.6	56335.8	506.94 ug/L	506.94 ppb	23:18:10
3	Cu 324.752†	195576.6	190801.8	509.80 ug/L	509.80 ppb	23:18:10
3	Mn 257.610†	530410.5	541123.1	512.83 ug/L	512.83 ppb	23:18:10
3	Mo 202.031†	9367.5	9537.7	506.50 ug/L	506.50 ppb	23:18:31
3	Ni 231.604†	25262.4	25668.1	502.61 ug/L	502.61 ppb	23:18:31
3	P 214.914†	5819.9	5678.7	2463.0 ug/L	2463.0 ppb	23:18:31
3	Pb 220.353†	5224.5	5411.2	509.53 ug/L	509.53 ppb	23:18:31
3	S 181.975 Axial†	979.3	940.1	1011.8 ug/L	1011.8 ppb	23:18:31
3	Sb 206.836†	1916.7	1922.8	514.22 ug/L	514.22 ppb	23:18:31
3	Se 196.026†	1092.7	1137.4	523.93 ug/L	523.93 ppb	23:18:31
3	Si 251.611†	98151.4	99682.8	2519.6 ug/L	2519.6 ppb	23:18:10
3	Sn 189.927†	3724.7	3808.3	504.29 ug/L	504.29 ppb	23:18:31
3	Ti 334.940†	360231.9	369159.5	509.04 ug/L	509.04 ppb	23:18:10
3	Tl 190.801†	2003.3	2090.2	508.78 ug/L	508.78 ppb	23:18:31
3	U 409.014†	15900.2	19012.6	489.94 ug/L	489.94 ppb	23:18:10
3	V 292.402†	84932.2	88348.5	512.54 ug/L	512.54 ppb	23:18:10
3	Zn 213.857†	68684.2	69260.5	504.46 ug/L	504.46 ppb	23:18:10
3	SiO2†	97977.4	99463.8	5379.6 ug/L	5379.6 ppb	23:18:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1017624.0	97.897	%	0.0165				0.02%
Sc Radial	4695.1	95.6	%	0.38				0.40%
Y 371.029	853402.5	96.488	%	0.0652				0.07%
Y RADIAL	5368.7	95.07	%	0.598				0.63%
Ag 328.068†	127702.5	509.29	ug/L	0.362	509.29	ppb	0.362	0.07%
QC value within limits for Ag 328.068 Recovery = 101.86%								
Al 396.153Radial†	7810.4	5135.7	ug/L	35.99	5135.7	ppb	35.99	0.70%
QC value within limits for Al 396.153Radial Recovery = 102.71%								
As 188.979†	1616.4	508.08	ug/L	1.916	508.08	ppb	1.916	0.38%
QC value within limits for As 188.979 Recovery = 101.62%								
B 249.677†	26493.2	498.73	ug/L	2.007	498.73	ppb	2.007	0.40%
QC value within limits for B 249.677 Recovery = 99.75%								
Ba 233.527†	79216.8	510.23	ug/L	1.188	510.23	ppb	1.188	0.23%
QC value within limits for Ba 233.527 Recovery = 102.05%								
Be 313.107†	1624440.9	507.49	ug/L	0.104	507.49	ppb	0.104	0.02%
QC value within limits for Be 313.107 Recovery = 101.50%								
Ca 317.933Radial†	2884.4	5106.9	ug/L	14.16	5106.9	ppb	14.16	0.28%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.14%
Cd 226.502†            58369.2      508.84 ug/L         1.526      508.84 ppb          1.526   0.30%
   QC value within limits for Cd 226.502  Recovery = 101.77%
Co 228.616†            30573.7      503.77 ug/L         0.559      503.77 ppb          0.559   0.11%
   QC value within limits for Co 228.616  Recovery = 100.75%
Cr 267.716†            56327.1      506.86 ug/L         0.190      506.86 ppb          0.190   0.04%
   QC value within limits for Cr 267.716  Recovery = 101.37%
Cu 324.752†           190977.8      510.27 ug/L         0.684      510.27 ppb          0.684   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5073.2 ug/L        35.32      5073.2 ppb         35.32   0.70%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27443.9      4993.2 ug/L        20.99      4993.2 ppb         20.99   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 99.86%
Mg 279.077 IEC†          115.0      5149.7 ug/L       119.29      5149.7 ppb        119.29   2.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.99%
Mn 257.610†           540375.4      512.12 ug/L         0.707      512.12 ppb          0.707   0.14%
   QC value within limits for Mn 257.610  Recovery = 102.42%
Mo 202.031†             9549.7      507.14 ug/L         0.630      507.14 ppb          0.630   0.12%
   QC value within limits for Mo 202.031  Recovery = 101.43%
Na 589.592 Radial†     35094.4      9844.0 ug/L        88.71      9844.0 ppb         88.71   0.90%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25652.4      502.30 ug/L         0.456      502.30 ppb          0.456   0.09%
   QC value within limits for Ni 231.604  Recovery = 100.46%
P 214.914†              5682.0      2464.4 ug/L         1.38      2464.4 ppb          1.38   0.06%
   QC value within limits for P 214.914  Recovery = 98.58%
Pb 220.353†             5422.3      510.58 ug/L         1.096      510.58 ppb          1.096   0.21%
   QC value within limits for Pb 220.353  Recovery = 102.12%
S 181.975 Axial†         933.6      1004.8 ug/L         7.18      1004.8 ppb          7.18   0.71%
   QC value within limits for S 181.975 Axial  Recovery = 100.48%
Sb 206.836†             1929.3      515.93 ug/L         2.720      515.93 ppb          2.720   0.53%
   QC value within limits for Sb 206.836  Recovery = 103.19%
Se 196.026†             1138.9      524.46 ug/L         0.464      524.46 ppb          0.464   0.09%
   QC value within limits for Se 196.026  Recovery = 104.89%
Si 251.611†            99657.9      2518.9 ug/L         1.43      2518.9 ppb          1.43   0.06%
   QC value within limits for Si 251.611  Recovery = 100.76%
Sn 189.927†             3807.7      504.21 ug/L         2.441      504.21 ppb          2.441   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.84%
Sr 421.552†            95712.2      502.10 ug/L         3.413      502.10 ppb          3.413   0.68%
   QC value within limits for Sr 421.552  Recovery = 100.42%
Ti 334.940†           368939.6      508.74 ug/L         0.571      508.74 ppb          0.571   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.75%
Tl 190.801†             2087.5      508.12 ug/L         0.578      508.12 ppb          0.578   0.11%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             19184.5      494.38 ug/L         5.106      494.38 ppb          5.106   1.03%
   QC value within limits for U 409.014  Recovery = 98.88%
V 292.402†             88336.6      512.49 ug/L         0.199      512.49 ppb          0.199   0.04%
   QC value within limits for V 292.402  Recovery = 102.50%
Zn 213.857†            69125.0      503.47 ug/L         0.949      503.47 ppb          0.949   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.69%
SiO2†                  99766.9      5396.1 ug/L        28.97      5396.1 ppb         28.97   0.54%
   QC value within limits for SiO2  Recovery = 100.91%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: PQL
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 12/4/2009 23:20:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4801.8	4801.8	97.8	%			23:22:48
1	Y RADIAL	5499.8	5499.8	97.39	%			23:22:48
1	Al 396.153Radial†	270.5	320.3	211.10	ug/L	211.10	ppb	23:22:48
1	Ca 317.933Radial†	131.3	116.4	206.03	ug/L	206.03	ppb	23:23:08
1	Fe 238.204 Radial†	20.1	9.5	115.14	ug/L	115.14	ppb	23:23:08
1	K 766.490 Radial†	3379.3	885.8	161.20	ug/L	161.20	ppb	23:22:48
1	Mg 279.077 IEC†	5.2	2.8	124.00	ug/L	124.00	ppb	23:23:08
1	Na 589.592 Radial†	-68.3	1210.1	339.44	ug/L	339.44	ppb	23:22:48
1	Sr 421.552†	928.6	956.8	5.0181	ug/L	5.0181	ppb	23:22:48
1	Sc 361.383	1023931.8	1023931.8	98.504	%			23:24:05
1	Y 371.029	871465.8	871465.8	98.530	%			23:24:05
1	Ag 328.068†	1661.9	1213.1	4.8160	ug/L	4.8160	ppb	23:24:10
1	As 188.979†	52.0	89.4	27.879	ug/L	27.879	ppb	23:24:30
1	B 249.677†	2129.5	2628.0	49.637	ug/L	49.637	ppb	23:24:10
1	Ba 233.527†	781.8	793.7	5.1145	ug/L	5.1145	ppb	23:24:30
1	Be 313.107†	10804.8	15842.9	4.9496	ug/L	4.9496	ppb	23:24:10
1	Cd 226.502†	336.6	577.4	5.0270	ug/L	5.0270	ppb	23:24:30
1	Co 228.616†	207.2	296.7	4.9008	ug/L	4.9008	ppb	23:24:30
1	Cr 267.716†	658.1	580.4	5.2076	ug/L	5.2076	ppb	23:24:30
1	Cu 324.752†	12741.3	3997.3	10.681	ug/L	10.681	ppb	23:24:10
1	Mn 257.610†	11629.9	11229.9	10.643	ug/L	10.643	ppb	23:24:10
1	Mo 202.031†	216.8	190.8	10.135	ug/L	10.135	ppb	23:24:30
1	Ni 231.604†	402.3	276.4	5.4134	ug/L	5.4134	ppb	23:24:30
1	P 214.914†	605.9	349.9	154.96	ug/L	154.96	ppb	23:24:30
1	Pb 220.353†	32.3	108.3	10.223	ug/L	10.223	ppb	23:24:30
1	S 181.975 Axial†	151.9	94.2	101.40	ug/L	101.40	ppb	23:24:30
1	Sb 206.836†	84.6	51.2	13.806	ug/L	13.806	ppb	23:24:30
1	Se 196.026†	39.0	61.0	27.463	ug/L	27.463	ppb	23:24:30
1	Si 251.611†	4564.1	4075.8	103.24	ug/L	103.24	ppb	23:24:10
1	Sn 189.927†	85.6	91.2	12.083	ug/L	12.083	ppb	23:24:30
1	Ti 334.940†	2376.2	3672.8	5.0511	ug/L	5.0511	ppb	23:24:10
1	Tl 190.801†	32.2	76.9	18.678	ug/L	18.678	ppb	23:24:30
1	U 409.014†	-698.3	2065.1	53.367	ug/L	53.367	ppb	23:24:05
1	V 292.402†	-731.4	866.0	5.1837	ug/L	5.1837	ppb	23:24:10
1	Zn 213.857†	2234.6	1383.0	10.100	ug/L	10.100	ppb	23:24:30
1	SiO2†	4486.3	3955.4	214.39	ug/L	214.39	ppb	23:25:36
2	Sc Radial	4744.2	4744.2	96.6	%			23:23:14
2	Y RADIAL	5463.2	5463.2	96.74	%			23:23:14
2	Al 396.153Radial†	267.8	321.0	211.52	ug/L	211.52	ppb	23:23:14
2	Ca 317.933Radial†	129.5	116.1	205.64	ug/L	205.64	ppb	23:23:34
2	Fe 238.204 Radial†	17.0	6.6	80.295	ug/L	80.295	ppb	23:23:34
2	K 766.490 Radial†	3455.4	1006.4	183.19	ug/L	183.19	ppb	23:23:14
2	Mg 279.077 IEC†	7.5	5.3	235.23	ug/L	235.23	ppb	23:23:34
2	Na 589.592 Radial†	-62.1	1215.7	340.99	ug/L	340.99	ppb	23:23:14
2	Sr 421.552†	907.6	946.7	4.9647	ug/L	4.9647	ppb	23:23:14
2	Sc 361.383	1030987.4	1030987.4	99.183	%			23:24:36
2	Y 371.029	877089.0	877089.0	99.166	%			23:24:36
2	Ag 328.068†	1678.5	1218.3	4.8247	ug/L	4.8247	ppb	23:24:41
2	As 188.979†	58.8	95.9	29.900	ug/L	29.900	ppb	23:25:01
2	B 249.677†	2110.4	2593.8	48.997	ug/L	48.997	ppb	23:24:41
2	Ba 233.527†	784.1	790.5	5.0923	ug/L	5.0923	ppb	23:25:01
2	Be 313.107†	10954.8	15919.0	4.9732	ug/L	4.9732	ppb	23:24:41
2	Cd 226.502†	356.1	594.7	5.1813	ug/L	5.1813	ppb	23:25:01
2	Co 228.616†	196.6	284.6	4.7014	ug/L	4.7014	ppb	23:25:01
2	Cr 267.716†	644.4	561.9	5.0411	ug/L	5.0411	ppb	23:25:01
2	Cu 324.752†	12830.8	3999.1	10.684	ug/L	10.684	ppb	23:24:41
2	Mn 257.610†	11652.0	11171.4	10.582	ug/L	10.582	ppb	23:24:41
2	Mo 202.031†	213.6	186.1	9.8810	ug/L	9.8810	ppb	23:25:01
2	Ni 231.604†	392.4	263.7	5.1633	ug/L	5.1633	ppb	23:25:01

2	P 214.914†	594.8	334.6	148.10 ug/L	148.10 ppb	23:25:01
2	Pb 220.353†	50.6	126.5	11.935 ug/L	11.935 ppb	23:25:01
2	S 181.975 Axial†	148.5	89.6	96.533 ug/L	96.533 ppb	23:25:01
2	Sb 206.836†	88.4	54.5	14.620 ug/L	14.620 ppb	23:25:01
2	Se 196.026†	36.5	58.2	26.109 ug/L	26.109 ppb	23:25:01
2	Si 251.611†	4523.6	4003.2	101.40 ug/L	101.40 ppb	23:24:41
2	Sn 189.927†	68.8	73.7	9.7759 ug/L	9.7759 ppb	23:25:01
2	Ti 334.940†	2335.4	3615.1	4.9717 ug/L	4.9717 ppb	23:24:41
2	Tl 190.801†	36.6	81.1	19.693 ug/L	19.693 ppb	23:25:01
2	U 409.014†	-709.8	2058.3	53.196 ug/L	53.196 ppb	23:24:36
2	V 292.402†	-772.1	830.1	4.9819 ug/L	4.9819 ppb	23:24:41
2	Zn 213.857†	2255.4	1388.4	10.141 ug/L	10.141 ppb	23:25:01
2	SiO2†	4532.3	3970.6	215.23 ug/L	215.23 ppb	23:25:41
3	Sc Radial	4849.7	4849.7	98.8 %		23:23:39
3	Y RADIAL	5571.3	5571.3	98.66 %		23:23:39
3	Al 396.153Radial†	281.1	328.3	216.34 ug/L	216.34 ppb	23:23:39
3	Ca 317.933Radial†	134.9	118.7	210.17 ug/L	210.17 ppb	23:23:59
3	Fe 238.204 Radial†	21.1	10.3	125.08 ug/L	125.08 ppb	23:23:59
3	K 766.490 Radial†	3411.6	884.4	160.94 ug/L	160.94 ppb	23:23:39
3	Mg 279.077 IEC†	9.9	7.5	335.60 ug/L	335.60 ppb	23:23:59
3	Na 589.592 Radial†	-36.1	1243.4	348.78 ug/L	348.78 ppb	23:23:39
3	Sr 421.552†	917.9	936.7	4.9123 ug/L	4.9123 ppb	23:23:39
3	Sc 361.383	1021503.5	1021503.5	98.270 %		23:25:06
3	Y 371.029	868276.8	868276.8	98.169 %		23:25:06
3	Ag 328.068†	1705.9	1261.9	5.0129 ug/L	5.0129 ppb	23:25:11
3	As 188.979†	38.9	76.2	23.756 ug/L	23.756 ppb	23:25:31
3	B 249.677†	2201.6	2706.4	51.117 ug/L	51.117 ppb	23:25:11
3	Ba 233.527†	766.6	780.1	5.0267 ug/L	5.0267 ppb	23:25:31
3	Be 313.107†	10958.3	16025.2	5.0064 ug/L	5.0064 ppb	23:25:11
3	Cd 226.502†	335.2	576.7	5.0206 ug/L	5.0206 ppb	23:25:31
3	Co 228.616†	223.3	313.6	5.1806 ug/L	5.1806 ppb	23:25:31
3	Cr 267.716†	653.0	576.7	5.1751 ug/L	5.1751 ppb	23:25:31
3	Cu 324.752†	12833.0	4121.4	11.013 ug/L	11.013 ppb	23:25:11
3	Mn 257.610†	11731.4	11361.2	10.765 ug/L	10.765 ppb	23:25:11
3	Mo 202.031†	224.0	198.7	10.554 ug/L	10.554 ppb	23:25:31
3	Ni 231.604†	399.0	274.0	5.3662 ug/L	5.3662 ppb	23:25:31
3	P 214.914†	595.7	341.1	150.91 ug/L	150.91 ppb	23:25:31
3	Pb 220.353†	7.8	83.5	7.8955 ug/L	7.8955 ppb	23:25:31
3	S 181.975 Axial†	145.6	88.1	94.834 ug/L	94.834 ppb	23:25:31
3	Sb 206.836†	93.6	60.6	16.266 ug/L	16.266 ppb	23:25:31
3	Se 196.026†	42.8	64.9	29.231 ug/L	29.231 ppb	23:25:31
3	Si 251.611†	4592.6	4115.8	104.26 ug/L	104.26 ppb	23:25:11
3	Sn 189.927†	77.3	83.0	11.003 ug/L	11.003 ppb	23:25:31
3	Ti 334.940†	2339.1	3640.7	5.0081 ug/L	5.0081 ppb	23:25:11
3	Tl 190.801†	44.6	89.7	21.755 ug/L	21.755 ppb	23:25:31
3	U 409.014†	-784.6	1975.6	51.051 ug/L	51.051 ppb	23:25:06
3	V 292.402†	-802.4	791.9	4.7645 ug/L	4.7645 ppb	23:25:11
3	Zn 213.857†	2251.2	1405.2	10.255 ug/L	10.255 ppb	23:25:31
3	SiO2†	4519.1	3999.6	216.79 ug/L	216.79 ppb	23:25:46

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025474.2	98.652	%	0.4739				0.48%
Sc Radial	4798.6	97.7	%	1.08				1.10%
Y 371.029	872277.2	98.622	%	0.5045				0.51%
Y RADIAL	5511.4	97.60	%	0.974				1.00%
Ag 328.068†	1231.1	4.8845	ug/L	0.11126	4.8845	ppb	0.11126	2.28%
QC value within limits for Ag 328.068 Recovery = 97.69%								
Al 396.153Radial†	323.2	212.99	ug/L	2.915	212.99	ppb	2.915	1.37%
QC value within limits for Al 396.153Radial Recovery = 106.49%								
As 188.979†	87.2	27.178	ug/L	3.1313	27.178	ppb	3.1313	11.52%
QC value within limits for As 188.979 Recovery = 90.59%								
B 249.677†	2642.7	49.917	ug/L	1.0875	49.917	ppb	1.0875	2.18%
QC value within limits for B 249.677 Recovery = 99.83%								
Ba 233.527†	788.1	5.0778	ug/L	0.04568	5.0778	ppb	0.04568	0.90%
QC value within limits for Ba 233.527 Recovery = 101.56%								
Be 313.107†	15929.0	4.9764	ug/L	0.02851	4.9764	ppb	0.02851	0.57%
QC value within limits for Be 313.107 Recovery = 99.53%								
Ca 317.933Radial†	117.1	207.28	ug/L	2.511	207.28	ppb	2.511	1.21%

```
   QC value within limits for Ca 317.933Radial  Recovery = 103.64%
Cd 226.502†              582.9      5.0763 ug/L       0.09099      5.0763 ppb        0.09099   1.79%
   QC value within limits for Cd 226.502  Recovery = 101.53%
Co 228.616†              298.3      4.9276 ug/L       0.24071      4.9276 ppb        0.24071   4.88%
   QC value within limits for Co 228.616  Recovery = 98.55%
Cr 267.716†              573.0      5.1413 ug/L       0.08828      5.1413 ppb        0.08828   1.72%
   QC value within limits for Cr 267.716  Recovery = 102.83%
Cu 324.752†             4039.3      10.792 ug/L        0.1908      10.792 ppb         0.1908   1.77%
   QC value within limits for Cu 324.752  Recovery = 107.92%
Fe 238.204 Radial†         8.8      106.84 ug/L        23.519      106.84 ppb         23.519  22.01%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.84%
K 766.490 Radial†        925.5      168.44 ug/L        12.773      168.44 ppb         12.773   7.58%
   QC value within limits for K 766.490 Radial  Recovery = 112.29%
Mg 279.077 IEC†            5.2      231.61 ug/L       105.846      231.61 ppb        105.846  45.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 77.20%
Mn 257.610†            11254.1      10.663 ug/L        0.0928      10.663 ppb         0.0928   0.87%
   QC value within limits for Mn 257.610  Recovery = 106.63%
Mo 202.031†              191.9      10.190 ug/L        0.3397      10.190 ppb         0.3397   3.33%
   QC value within limits for Mo 202.031  Recovery = 101.90%
Na 589.592 Radial†      1223.1      343.07 ug/L         5.006      343.07 ppb          5.006   1.46%
   QC value within limits for Na 589.592 Radial  Recovery = 114.36%
Ni 231.604†              271.4      5.3143 ug/L       0.13286      5.3143 ppb        0.13286   2.50%
   QC value within limits for Ni 231.604  Recovery = 106.29%
P 214.914†               341.9      151.33 ug/L         3.451      151.33 ppb          3.451   2.28%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              106.1      10.018 ug/L        2.0275      10.018 ppb         2.0275  20.24%
   QC value within limits for Pb 220.353  Recovery = 100.18%
S 181.975 Axial†          90.6      97.588 ug/L        3.4066      97.588 ppb         3.4066   3.49%
   QC value within limits for S 181.975 Axial  Recovery = 97.59%
Sb 206.836†               55.4      14.897 ug/L        1.2535      14.897 ppb         1.2535   8.41%
   QC value greater than the upper limit for Sb 206.836  Recovery = 148.97%
Se 196.026†               61.4      27.601 ug/L        1.5654      27.601 ppb         1.5654   5.67%
   QC value within limits for Se 196.026  Recovery = 92.00%
Si 251.611†             4064.9      102.97 ug/L         1.446      102.97 ppb          1.446   1.40%
   QC value within limits for Si 251.611  Recovery = 102.97%
Sn 189.927†               82.6      10.954 ug/L        1.1545      10.954 ppb         1.1545  10.54%
   QC value within limits for Sn 189.927  Recovery = 109.54%
Sr 421.552†              946.7      4.9650 ug/L       0.05292      4.9650 ppb        0.05292   1.07%
   QC value within limits for Sr 421.552  Recovery = 99.30%
Ti 334.940†             3642.8      5.0103 ug/L       0.03975      5.0103 ppb        0.03975   0.79%
   QC value within limits for Ti 334.940  Recovery = 100.21%
Tl 190.801†               82.6      20.042 ug/L        1.5683      20.042 ppb         1.5683   7.83%
   QC value within limits for Tl 190.801  Recovery = 100.21%
U 409.014†              2033.0      52.538 ug/L        1.2906      52.538 ppb         1.2906   2.46%
   QC value within limits for U 409.014  Recovery = 105.08%
V 292.402†               829.3      4.9767 ug/L       0.20963      4.9767 ppb        0.20963   4.21%
   QC value within limits for V 292.402  Recovery = 99.53%
Zn 213.857†             1392.2      10.165 ug/L        0.0804      10.165 ppb         0.0804   0.79%
   QC value within limits for Zn 213.857  Recovery = 101.65%
SiO2†                   3975.2      215.47 ug/L         1.216      215.47 ppb          1.216   0.56%
   QC value within limits for SiO2  Recovery = 101.16%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 23:27:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4871.5	4871.5	99.2	%			23:29:49
1	Y RADIAL	5607.3	5607.3	99.29	%			23:29:49
1	Al 396.153Radial†	-52.1	-8.7	-5.7846	ug/L	-5.7846	ppb	23:29:49
1	Ca 317.933Radial†	22.9	5.2	9.2806	ug/L	9.2806	ppb	23:30:09
1	Fe 238.204 Radial†	9.8	-1.2	-13.977	ug/L	-13.977	ppb	23:30:09
1	K 766.490 Radial†	2510.6	-39.2	-7.1844	ug/L	-7.1844	ppb	23:29:49
1	Mg 279.077 IEC†	5.7	3.3	146.35	ug/L	146.35	ppb	23:30:09
1	Na 589.592 Radial†	-1046.6	225.2	63.160	ug/L	63.160	ppb	23:29:49
1	Sr 421.552†	2.2	9.7	0.0506	ug/L	0.0506	ppb	23:29:49
1	Sc 361.383	1013672.5	1013672.5	97.517	%			23:31:05
1	Y 371.029	862264.0	862264.0	97.490	%			23:31:05
1	Ag 328.068†	396.0	-68.0	-0.2713	ug/L	-0.2713	ppb	23:31:10
1	As 188.979†	-44.3	-8.8	-2.7519	ug/L	-2.7519	ppb	23:31:30
1	B 249.677†	-513.5	-60.5	-1.1410	ug/L	-1.1410	ppb	23:31:30
1	Ba 233.527†	-16.6	-17.0	-0.1105	ug/L	-0.1105	ppb	23:31:30
1	Be 313.107†	-4862.2	-112.1	-0.0351	ug/L	-0.0351	ppb	23:31:10
1	Cd 226.502†	-218.8	11.3	0.0998	ug/L	0.0998	ppb	23:31:30
1	Co 228.616†	-93.2	-9.3	-0.1511	ug/L	-0.1511	ppb	23:31:30
1	Cr 267.716†	105.4	20.3	0.1833	ug/L	0.1833	ppb	23:31:30
1	Cu 324.752†	8978.5	269.7	0.7194	ug/L	0.7194	ppb	23:31:10
1	Mn 257.610†	691.6	132.5	0.1213	ug/L	0.1213	ppb	23:31:30
1	Mo 202.031†	35.8	7.5	0.3978	ug/L	0.3978	ppb	23:31:30
1	Ni 231.604†	131.4	2.8	0.0542	ug/L	0.0542	ppb	23:31:30
1	P 214.914†	284.5	26.6	11.832	ug/L	11.832	ppb	23:31:30
1	Pb 220.353†	-90.8	-17.5	-1.6454	ug/L	-1.6454	ppb	23:31:30
1	S 181.975 Axial†	59.1	0.5	0.5268	ug/L	0.5268	ppb	23:31:30
1	Sb 206.836†	41.8	8.2	2.2020	ug/L	2.2020	ppb	23:31:30
1	Se 196.026†	-27.4	-6.8	-3.0462	ug/L	-3.0462	ppb	23:31:30
1	Si 251.611†	580.1	37.2	0.9342	ug/L	0.9342	ppb	23:31:30
1	Sn 189.927†	10.6	15.2	2.0176	ug/L	2.0176	ppb	23:31:30
1	Ti 334.940†	-1290.1	-62.5	-0.0839	ug/L	-0.0839	ppb	23:31:10
1	Tl 190.801†	-46.0	-2.9	-0.6933	ug/L	-0.6933	ppb	23:31:30
1	U 409.014†	-2869.4	-168.4	-4.3534	ug/L	-4.3534	ppb	23:31:05
1	V 292.402†	-1604.7	-37.0	-0.2094	ug/L	-0.2094	ppb	23:31:10
1	Zn 213.857†	935.4	73.7	0.5363	ug/L	0.5363	ppb	23:31:30
1	SiO2†	628.3	45.3	2.4370	ug/L	2.4370	ppb	23:32:36
2	Sc Radial	4835.2	4835.2	98.5	%			23:30:14
2	Y RADIAL	5566.2	5566.2	98.57	%			23:30:14
2	Al 396.153Radial†	-22.1	21.3	14.087	ug/L	14.087	ppb	23:30:14
2	Ca 317.933Radial†	27.4	9.9	17.604	ug/L	17.604	ppb	23:30:34
2	Fe 238.204 Radial†	10.0	-0.8	-9.9083	ug/L	-9.9083	ppb	23:30:34
2	K 766.490 Radial†	2641.1	112.3	20.436	ug/L	20.436	ppb	23:30:14
2	Mg 279.077 IEC†	-0.8	-3.4	-150.32	ug/L	-150.32	ppb	23:30:34
2	Na 589.592 Radial†	-1027.3	236.8	66.427	ug/L	66.427	ppb	23:30:14
2	Sr 421.552†	-33.9	-27.0	-0.1421	ug/L	-0.1421	ppb	23:30:14
2	Sc 361.383	1020698.7	1020698.7	98.193	%			23:31:36
2	Y 371.029	869465.6	869465.6	98.304	%			23:31:36
2	Ag 328.068†	360.6	-106.8	-0.4282	ug/L	-0.4282	ppb	23:31:41
2	As 188.979†	-42.0	-6.2	-1.9339	ug/L	-1.9339	ppb	23:32:01
2	B 249.677†	-513.0	-56.4	-1.0641	ug/L	-1.0641	ppb	23:32:01
2	Ba 233.527†	-2.7	-2.7	-0.0180	ug/L	-0.0180	ppb	23:32:01
2	Be 313.107†	-4926.8	-143.5	-0.0448	ug/L	-0.0448	ppb	23:31:41
2	Cd 226.502†	-240.7	-9.5	-0.0820	ug/L	-0.0820	ppb	23:32:01
2	Co 228.616†	-86.0	-1.3	-0.0218	ug/L	-0.0218	ppb	23:32:01
2	Cr 267.716†	106.7	20.9	0.1868	ug/L	0.1868	ppb	23:32:01
2	Cu 324.752†	9044.3	273.3	0.7293	ug/L	0.7293	ppb	23:31:41
2	Mn 257.610†	677.5	113.3	0.1091	ug/L	0.1091	ppb	23:32:01
2	Mo 202.031†	20.0	-8.9	-0.4705	ug/L	-0.4705	ppb	23:32:01
2	Ni 231.604†	131.2	1.7	0.0338	ug/L	0.0338	ppb	23:32:01

2	P 214.914†	283.0	23.1	10.248	ug/L	10.248 ppb	23:32:01
2	Pb 220.353†	-91.0	-17.1	-1.6020	ug/L	-1.6020 ppb	23:32:01
2	S 181.975 Axial†	57.0	-2.1	-2.2662	ug/L	-2.2662 ppb	23:32:01
2	Sb 206.836†	48.1	14.3	3.7867	ug/L	3.7867 ppb	23:32:01
2	Se 196.026†	-24.6	-3.7	-1.6569	ug/L	-1.6569 ppb	23:32:01
2	Si 251.611†	614.5	68.2	1.7289	ug/L	1.7289 ppb	23:32:01
2	Sn 189.927†	7.5	12.0	1.5919	ug/L	1.5919 ppb	23:32:01
2	Ti 334.940†	-1245.4	-7.9	-0.0103	ug/L	-0.0103 ppb	23:31:41
2	Tl 190.801†	-55.4	-12.1	-2.9308	ug/L	-2.9308 ppb	23:32:01
2	U 409.014†	-2693.7	30.7	0.7943	ug/L	0.7943 ppb	23:31:36
2	V 292.402†	-1612.5	-33.7	-0.1999	ug/L	-0.1999 ppb	23:31:41
2	Zn 213.857†	922.1	53.5	0.3982	ug/L	0.3982 ppb	23:32:01
2	SiO2†	669.2	82.5	4.4753	ug/L	4.4753 ppb	23:32:41
3	Sc Radial	4748.4	4748.4	96.7	%		23:30:39
3	Y RADIAL	5479.6	5479.6	97.03	%		23:30:39
3	Al 396.153Radial†	-33.9	8.7	5.7621	ug/L	5.7621 ppb	23:30:39
3	Ca 317.933Radial†	28.1	11.2	19.840	ug/L	19.840 ppb	23:30:59
3	Fe 238.204 Radial†	8.8	-1.9	-23.358	ug/L	-23.358 ppb	23:30:59
3	K 766.490 Radial†	2558.4	75.8	13.787	ug/L	13.787 ppb	23:30:39
3	Mg 279.077 IEC†	3.9	1.6	70.670	ug/L	70.670 ppb	23:30:59
3	Na 589.592 Radial†	-1075.4	168.0	47.119	ug/L	47.119 ppb	23:30:39
3	Sr 421.552†	14.0	21.9	0.1146	ug/L	0.1146 ppb	23:30:39
3	Sc 361.383	1015576.5	1015576.5	97.700	%		23:32:06
3	Y 371.029	863771.4	863771.4	97.660	%		23:32:06
3	Ag 328.068†	380.9	-84.2	-0.3412	ug/L	-0.3412 ppb	23:32:11
3	As 188.979†	-32.5	3.3	1.0392	ug/L	1.0392 ppb	23:32:31
3	B 249.677†	-537.6	-84.2	-1.5884	ug/L	-1.5884 ppb	23:32:31
3	Ba 233.527†	4.0	4.1	0.0246	ug/L	0.0246 ppb	23:32:31
3	Be 313.107†	-4876.0	-116.8	-0.0365	ug/L	-0.0365 ppb	23:32:11
3	Cd 226.502†	-224.9	5.4	0.0498	ug/L	0.0498 ppb	23:32:31
3	Co 228.616†	-81.1	3.3	0.0540	ug/L	0.0540 ppb	23:32:31
3	Cr 267.716†	76.1	-9.9	-0.0895	ug/L	-0.0895 ppb	23:32:31
3	Cu 324.752†	8939.7	212.7	0.5668	ug/L	0.5668 ppb	23:32:11
3	Mn 257.610†	692.6	132.2	0.1215	ug/L	0.1215 ppb	23:32:31
3	Mo 202.031†	25.7	-2.9	-0.1571	ug/L	-0.1571 ppb	23:32:31
3	Ni 231.604†	129.4	0.5	0.0103	ug/L	0.0103 ppb	23:32:31
3	P 214.914†	279.4	20.8	9.2607	ug/L	9.2607 ppb	23:32:31
3	Pb 220.353†	-94.3	-21.0	-1.9687	ug/L	-1.9687 ppb	23:32:31
3	S 181.975 Axial†	60.9	2.2	2.3676	ug/L	2.3676 ppb	23:32:31
3	Sb 206.836†	47.9	14.4	3.7978	ug/L	3.7978 ppb	23:32:31
3	Se 196.026†	-31.5	-10.8	-4.8785	ug/L	-4.8785 ppb	23:32:31
3	Si 251.611†	605.5	62.1	1.5733	ug/L	1.5733 ppb	23:32:31
3	Sn 189.927†	2.5	6.9	0.9119	ug/L	0.9119 ppb	23:32:31
3	Ti 334.940†	-1255.0	-24.1	-0.0314	ug/L	-0.0314 ppb	23:32:11
3	Tl 190.801†	-58.6	-15.8	-3.8131	ug/L	-3.8131 ppb	23:32:31
3	U 409.014†	-2781.8	-73.3	-1.8919	ug/L	-1.8919 ppb	23:32:06
3	V 292.402†	-1624.8	-54.5	-0.3128	ug/L	-0.3128 ppb	23:32:11
3	Zn 213.857†	931.6	68.0	0.4988	ug/L	0.4988 ppb	23:32:31
3	SiO2†	633.2	49.1	2.6561	ug/L	2.6561 ppb	23:32:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1016649.2	97.803	%	0.3496				0.36%
Sc Radial	4818.3	98.1	%	1.29				1.31%
Y 371.029	865167.0	97.818	%	0.4294				0.44%
Y RADIAL	5551.0	98.30	%	1.154				1.17%
Ag 328.068†	-86.3	-0.3469	ug/L	0.07860	-0.3469	ppb	0.07860	22.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.1	4.6881	ug/L	9.97909	4.6881	ppb	9.97909	212.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.9	-1.2155	ug/L	1.99504	-1.2155	ppb	1.99504	164.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-67.0	-1.2645	ug/L	0.28313	-1.2645	ppb	0.28313	22.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0346	ug/L	0.06907	-0.0346	ppb	0.06907	199.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-124.1	-0.0388	ug/L	0.00523	-0.0388	ppb	0.00523	13.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.8	15.575	ug/L	5.5643	15.575	ppb	5.5643	35.73%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                2.4      0.0225 ug/L       0.09392      0.0225 ppb        0.09392 417.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -2.4     -0.0396 ug/L       0.10367     -0.0396 ppb        0.10367 261.60%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               10.4      0.0935 ug/L       0.15853      0.0935 ppb        0.15853 169.54%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              251.9      0.6718 ug/L       0.09112      0.6718 ppb        0.09112  13.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.3     -15.748 ug/L        6.8974     -15.748 ppb         6.8974  43.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         49.6      9.0129 ug/L      14.41589      9.0129 ppb       14.41589 159.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.5      22.236 ug/L      154.1510      22.236 ppb       154.1510 693.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              126.0      0.1173 ug/L       0.00712      0.1173 ppb        0.00712   6.06%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.4     -0.0766 ug/L       0.43970     -0.0766 ppb        0.43970 574.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       210.0      58.902 ug/L       10.3344      58.902 ppb        10.3344  17.55%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                1.7      0.0328 ug/L       0.02200      0.0328 ppb        0.02200  67.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                23.5      10.447 ug/L        1.2973      10.447 ppb         1.2973  12.42%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -18.5     -1.7387 ug/L       0.20035     -1.7387 ppb        0.20035  11.52%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.2094 ug/L       2.33316      0.2094 ppb        2.33316 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               12.3      3.2622 ug/L       0.91815      3.2622 ppb        0.91815  28.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -7.1     -3.1939 ug/L       1.61586     -3.1939 ppb        1.61586  50.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.9      1.4121 ug/L       0.42116      1.4121 ppb        0.42116  29.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.4      1.5071 ug/L       0.55775      1.5071 ppb        0.55775  37.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                1.5      0.0077 ug/L       0.13358      0.0077 ppb        0.13358 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -31.5     -0.0419 ug/L       0.03787     -0.0419 ppb        0.03787  90.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -10.3     -2.4791 ug/L       1.60823     -2.4791 ppb        1.60823  64.87%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -70.3     -1.8170 ug/L       2.57465     -1.8170 ppb        2.57465 141.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -41.7     -0.2407 ug/L       0.06263     -0.2407 ppb        0.06263  26.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               65.1      0.4778 ug/L       0.07141      0.4778 ppb        0.07141  14.95%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     58.9      3.1895 ug/L       1.11895      3.1895 ppb        1.11895  35.08%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: 1201977915|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 12/4/2009 23:34:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977915|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4882.3	4882.3	99.4	%			23:36:49
1	Y RADIAL	5615.0	5615.0	99.43	%			23:36:49
1	Al 396.153Radial†	-7.7	36.0	23.772	ug/L	23.772	ppb	23:36:49
1	Ca 317.933Radial†	62.5	45.0	79.616	ug/L	79.616	ppb	23:37:09
1	Fe 238.204 Radial†	16.1	5.2	62.731	ug/L	62.731	ppb	23:37:09
1	K 766.490 Radial†	2570.9	15.8	2.8350	ug/L	2.8350	ppb	23:36:49
1	Mg 279.077 IEC†	0.4	-2.1	-94.686	ug/L	-94.686	ppb	23:37:09
1	Na 589.592 Radial†	-1044.6	229.5	64.363	ug/L	64.363	ppb	23:36:49
1	Sr 421.552†	-8.1	-0.7	-0.0045	ug/L	-0.0045	ppb	23:36:49
1	Sc 361.383	1027601.9	1027601.9	98.857	%			23:38:06
1	Y 371.029	874714.0	874714.0	98.897	%			23:38:06
1	Ag 328.068†	371.1	-98.7	-0.3749	ug/L	-0.3749	ppb	23:38:11
1	As 188.979†	-42.5	-6.4	-1.9771	ug/L	-1.9771	ppb	23:38:31
1	B 249.677†	-503.0	-42.7	-0.8151	ug/L	-0.8151	ppb	23:38:31
1	Ba 233.527†	107.7	108.9	0.7014	ug/L	0.7014	ppb	23:38:31
1	Be 313.107†	-4840.0	-22.1	-0.0057	ug/L	-0.0057	ppb	23:38:11
1	Cd 226.502†	-218.4	14.8	0.1226	ug/L	0.1226	ppb	23:38:31
1	Co 228.616†	-84.5	0.8	0.0123	ug/L	0.0123	ppb	23:38:31
1	Cr 267.716†	138.2	52.0	0.4676	ug/L	0.4676	ppb	23:38:31
1	Cu 324.752†	8981.6	147.9	0.3982	ug/L	0.3982	ppb	23:38:11
1	Mn 257.610†	1626.7	1068.8	1.0201	ug/L	1.0201	ppb	23:38:11
1	Mo 202.031†	33.2	4.3	0.2344	ug/L	0.2344	ppb	23:38:31
1	Ni 231.604†	145.8	15.6	0.3048	ug/L	0.3048	ppb	23:38:31
1	P 214.914†	284.0	22.2	9.8370	ug/L	9.8370	ppb	23:38:31
1	Pb 220.353†	-64.6	10.2	0.9580	ug/L	0.9580	ppb	23:38:31
1	S 181.975 Axial†	66.1	6.8	7.2729	ug/L	7.2729	ppb	23:38:31
1	Sb 206.836†	44.5	10.3	2.7431	ug/L	2.7431	ppb	23:38:31
1	Se 196.026†	-22.8	-1.6	-0.4966	ug/L	-0.4966	ppb	23:38:31
1	Si 251.611†	1550.4	1010.7	25.658	ug/L	25.658	ppb	23:38:31
1	Sn 189.927†	7.5	11.9	1.5806	ug/L	1.5806	ppb	23:38:31
1	Ti 334.940†	-820.4	430.6	0.5973	ug/L	0.5973	ppb	23:38:11
1	Tl 190.801†	-46.5	-2.7	-0.6532	ug/L	-0.6532	ppb	23:38:31
1	U 409.014†	-2688.0	54.9	1.4094	ug/L	1.4094	ppb	23:38:06
1	V 292.402†	-1647.7	-58.2	-0.3399	ug/L	-0.3399	ppb	23:38:11
1	Zn 213.857†	1096.2	223.3	1.6359	ug/L	1.6359	ppb	23:38:31
1	SiO2†	1620.8	1040.5	56.531	ug/L	56.531	ppb	23:39:37
2	Sc Radial	4888.6	4888.6	99.6	%			23:37:14
2	Y RADIAL	5631.2	5631.2	99.72	%			23:37:14
2	Al 396.153Radial†	-10.9	32.8	21.687	ug/L	21.687	ppb	23:37:14
2	Ca 317.933Radial†	67.3	49.7	88.036	ug/L	88.036	ppb	23:37:34
2	Fe 238.204 Radial†	14.1	3.2	38.144	ug/L	38.144	ppb	23:37:34
2	K 766.490 Radial†	2415.2	-143.9	-26.287	ug/L	-26.287	ppb	23:37:14
2	Mg 279.077 IEC†	4.5	2.0	90.655	ug/L	90.655	ppb	23:37:34
2	Na 589.592 Radial†	-961.3	314.5	88.210	ug/L	88.210	ppb	23:37:14
2	Sr 421.552†	8.3	15.7	0.0818	ug/L	0.0818	ppb	23:37:14
2	Sc 361.383	1043207.5	1043207.5	100.36	%			23:38:36
2	Y 371.029	886608.6	886608.6	100.24	%			23:38:36
2	Ag 328.068†	335.8	-139.5	-0.5449	ug/L	-0.5449	ppb	23:38:41
2	As 188.979†	-34.5	2.2	0.7110	ug/L	0.7110	ppb	23:39:01
2	B 249.677†	-520.1	-52.2	-0.9907	ug/L	-0.9907	ppb	23:39:01
2	Ba 233.527†	114.6	114.3	0.7346	ug/L	0.7346	ppb	23:39:01
2	Be 313.107†	-4875.7	15.7	0.0060	ug/L	0.0060	ppb	23:38:41
2	Cd 226.502†	-230.6	5.9	0.0476	ug/L	0.0476	ppb	23:39:01
2	Co 228.616†	-99.0	-12.4	-0.2067	ug/L	-0.2067	ppb	23:39:01
2	Cr 267.716†	148.8	60.5	0.5432	ug/L	0.5432	ppb	23:39:01
2	Cu 324.752†	9044.1	74.4	0.2005	ug/L	0.2005	ppb	23:38:41
2	Mn 257.610†	1582.6	1000.3	0.9493	ug/L	0.9493	ppb	23:38:41
2	Mo 202.031†	20.0	-9.3	-0.4917	ug/L	-0.4917	ppb	23:39:01
2	Ni 231.604†	153.0	20.5	0.4014	ug/L	0.4014	ppb	23:39:01

2	P 214.914†	281.7	15.6	6.9283	ug/L	6.9283 ppb	23:39:01
2	Pb 220.353†	-92.8	-16.9	-1.5859	ug/L	-1.5859 ppb	23:39:01
2	S 181.975 Axial†	64.8	4.5	4.7929	ug/L	4.7929 ppb	23:39:01
2	Sb 206.836†	51.5	16.7	4.3713	ug/L	4.3713 ppb	23:39:01
2	Se 196.026†	-30.2	-8.7	-3.7080	ug/L	-3.7080 ppb	23:39:01
2	Si 251.611†	1572.4	1009.1	25.644	ug/L	25.644 ppb	23:39:01
2	Sn 189.927†	-1.3	3.0	0.4127	ug/L	0.4127 ppb	23:39:01
2	Ti 334.940†	-855.8	407.7	0.5661	ug/L	0.5661 ppb	23:38:41
2	Tl 190.801†	-42.3	2.1	0.5143	ug/L	0.5143 ppb	23:39:01
2	U 409.014†	-2725.2	58.5	1.5069	ug/L	1.5069 ppb	23:38:36
2	V 292.402†	-1687.9	-73.4	-0.4288	ug/L	-0.4288 ppb	23:38:41
2	Zn 213.857†	1088.0	198.6	1.4497	ug/L	1.4497 ppb	23:39:01
2	SiO2†	1594.7	990.0	53.843	ug/L	53.843 ppb	23:39:42
3	Sc Radial	4894.7	4894.7	99.7	%		23:37:39
3	Y RADIAL	5621.1	5621.1	99.54	%		23:37:39
3	Al 396.153Radial†	-24.1	19.6	12.966	ug/L	12.966 ppb	23:37:39
3	Ca 317.933Radial†	67.3	49.7	87.951	ug/L	87.951 ppb	23:37:59
3	Fe 238.204 Radial†	14.0	3.1	36.899	ug/L	36.899 ppb	23:37:59
3	K 766.490 Radial†	2621.8	60.3	10.941	ug/L	10.941 ppb	23:37:39
3	Mg 279.077 IEC†	-0.1	-2.6	-116.21	ug/L	-116.21 ppb	23:37:59
3	Na 589.592 Radial†	-986.5	290.4	81.462	ug/L	81.462 ppb	23:37:39
3	Sr 421.552†	34.0	41.5	0.2169	ug/L	0.2169 ppb	23:37:39
3	Sc 361.383	1039454.8	1039454.8	99.997	%		23:39:07
3	Y 371.029	881791.9	881791.9	99.697	%		23:39:07
3	Ag 328.068†	396.8	-77.3	-0.2962	ug/L	-0.2962 ppb	23:39:12
3	As 188.979†	-35.9	0.7	0.2284	ug/L	0.2284 ppb	23:39:32
3	B 249.677†	-544.2	-78.1	-1.4816	ug/L	-1.4816 ppb	23:39:32
3	Ba 233.527†	111.7	111.8	0.7193	ug/L	0.7193 ppb	23:39:32
3	Be 313.107†	-4926.8	-53.0	-0.0157	ug/L	-0.0157 ppb	23:39:12
3	Cd 226.502†	-221.1	14.6	0.1236	ug/L	0.1236 ppb	23:39:32
3	Co 228.616†	-87.3	-1.0	-0.0186	ug/L	-0.0186 ppb	23:39:32
3	Cr 267.716†	139.7	51.9	0.4670	ug/L	0.4670 ppb	23:39:32
3	Cu 324.752†	9014.5	77.3	0.2083	ug/L	0.2083 ppb	23:39:12
3	Mn 257.610†	1564.1	987.5	0.9410	ug/L	0.9410 ppb	23:39:12
3	Mo 202.031†	23.4	-5.9	-0.3089	ug/L	-0.3089 ppb	23:39:32
3	Ni 231.604†	143.8	11.9	0.2323	ug/L	0.2323 ppb	23:39:32
3	P 214.914†	276.8	11.7	5.2114	ug/L	5.2114 ppb	23:39:32
3	Pb 220.353†	-84.5	-9.0	-0.8425	ug/L	-0.8425 ppb	23:39:32
3	S 181.975 Axial†	57.0	-3.1	-3.3464	ug/L	-3.3464 ppb	23:39:32
3	Sb 206.836†	39.7	5.1	1.3560	ug/L	1.3560 ppb	23:39:32
3	Se 196.026†	-19.3	2.0	1.0379	ug/L	1.0379 ppb	23:39:32
3	Si 251.611†	1548.7	991.1	25.166	ug/L	25.166 ppb	23:39:32
3	Sn 189.927†	12.8	17.1	2.2768	ug/L	2.2768 ppb	23:39:32
3	Ti 334.940†	-946.5	313.9	0.4373	ug/L	0.4373 ppb	23:39:12
3	Tl 190.801†	-48.4	-4.1	-0.9917	ug/L	-0.9917 ppb	23:39:32
3	U 409.014†	-2761.2	12.7	0.3222	ug/L	0.3222 ppb	23:39:07
3	V 292.402†	-1611.3	-2.8	-0.0287	ug/L	-0.0287 ppb	23:39:12
3	Zn 213.857†	1083.8	198.3	1.4556	ug/L	1.4556 ppb	23:39:32
3	SiO2†	1625.6	1026.6	55.786	ug/L	55.786 ppb	23:39:47

Mean Data: 1201977915|925187|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036754.7	99.737	%	0.7836				0.79%
Sc Radial	4888.5	99.6	%	0.13				0.13%
Y 371.029	881038.2	99.612	%	0.6765				0.68%
Y RADIAL	5622.4	99.56	%	0.145				0.15%
Ag 328.068†	-105.1	-0.4053	ug/L	0.12709	-0.4053	ppb	0.12709	31.36%
Al 396.153Radial†	29.5	19.475	ug/L	5.7324	19.475	ppb	5.7324	29.43%
As 188.979†	-1.2	-0.3459	ug/L	1.43309	-0.3459	ppb	1.43309	414.30%
B 249.677†	-57.7	-1.0958	ug/L	0.34544	-1.0958	ppb	0.34544	31.52%
Ba 233.527†	111.7	0.7184	ug/L	0.01658	0.7184	ppb	0.01658	2.31%
Be 313.107†	-19.8	-0.0051	ug/L	0.01085	-0.0051	ppb	0.01085	211.28%
Ca 317.933Radial†	48.1	85.201	ug/L	4.8370	85.201	ppb	4.8370	5.68%
Cd 226.502†	11.7	0.0979	ug/L	0.04358	0.0979	ppb	0.04358	44.50%
Co 228.616†	-4.2	-0.0710	ug/L	0.11852	-0.0710	ppb	0.11852	166.91%
Cr 267.716†	54.8	0.4926	ug/L	0.04385	0.4926	ppb	0.04385	8.90%
Cu 324.752†	99.9	0.2690	ug/L	0.11199	0.2690	ppb	0.11199	41.63%
Fe 238.204 Radial†	3.8	45.924	ug/L	14.5681	45.924	ppb	14.5681	31.72%
K 766.490 Radial†	-22.6	-4.1703	ug/L	19.57797	-4.1703	ppb	19.57797	469.46%

Mg 279.077 IEC†	-0.9	-40.080	ug/L	113.7309	-40.080	ppb	113.7309 283.76%
Mn 257.610†	1018.9	0.9701	ug/L	0.04349	0.9701	ppb	0.04349 4.48%
Mo 202.031†	-3.6	-0.1887	ug/L	0.37763	-0.1887	ppb	0.37763 200.09%
Na 589.592 Radial†	278.1	78.012	ug/L	12.2924	78.012	ppb	12.2924 15.76%
Ni 231.604†	16.0	0.3128	ug/L	0.08486	0.3128	ppb	0.08486 27.13%
P 214.914†	16.5	7.3255	ug/L	2.33825	7.3255	ppb	2.33825 31.92%
Pb 220.353†	-5.2	-0.4901	ug/L	1.30803	-0.4901	ppb	1.30803 266.86%
S 181.975 Axial†	2.7	2.9065	ug/L	5.55529	2.9065	ppb	5.55529 191.13%
Sb 206.836†	10.7	2.8235	ug/L	1.50925	2.8235	ppb	1.50925 53.45%
Se 196.026†	-2.8	-1.0555	ug/L	2.42185	-1.0555	ppb	2.42185 229.44%
Si 251.611†	1003.6	25.489	ug/L	0.2801	25.489	ppb	0.2801 1.10%
Sn 189.927†	10.7	1.4234	ug/L	0.94195	1.4234	ppb	0.94195 66.18%
Sr 421.552†	18.8	0.0981	ug/L	0.11158	0.0981	ppb	0.11158 113.78%
Ti 334.940†	384.1	0.5336	ug/L	0.08483	0.5336	ppb	0.08483 15.90%
Tl 190.801†	-1.6	-0.3769	ug/L	0.79008	-0.3769	ppb	0.79008 209.65%
U 409.014†	42.0	1.0795	ug/L	0.65766	1.0795	ppb	0.65766 60.92%
V 292.402†	-44.8	-0.2658	ug/L	0.21009	-0.2658	ppb	0.21009 79.04%
Zn 213.857†	206.7	1.5138	ug/L	0.10580	1.5138	ppb	0.10580 6.99%
SiO2†	1019.1	55.387	ug/L	1.3879	55.387	ppb	1.3879 2.51%

Sequence No.: 15
Sample ID: 1201977920|925187|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 12/4/2009 23:41:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977920|925187|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4828.0	4828.0	98.3	%			23:44:12
1	Y RADIAL	5876.7	5876.7	104.1	%			23:44:12
1	Al 396.153Radial†	65740.3	66896.8	44155	ug/L	44155	ppb	23:43:52
1	Ca 317.933Radial†	10572.6	10733.7	19004	ug/L	19004	ppb	23:43:52
1	Fe 238.204 Radial†	9192.3	9336.9	112900	ug/L	112900	ppb	23:43:52
1	K 766.490 Radial†	68367.0	66954.6	12186	ug/L	12186	ppb	23:43:52
1	Mg 279.077 IEC†	347.9	351.3	15631	ug/L	15631	ppb	23:44:12
1	Na 589.592 Radial†	8784.3	10212.9	2864.7	ug/L	2864.7	ppb	23:43:52
1	Sr 421.552†	154544.9	157167.9	824.40	ug/L	824.40	ppb	23:43:52
1	Sc 361.383	1037404.5	1037404.5	99.800	%			23:45:11
1	Y 371.029	934150.4	934150.4	105.62	%			23:45:11
1	Ag 328.068†	160388.3	160235.6	674.18	ug/L	674.18	ppb	23:45:11
1	As 188.979†	4070.6	4115.3	1317.4	ug/L	1317.4	ppb	23:45:31
1	B 249.677†	37297.1	37837.9	699.03	ug/L	699.03	ppb	23:45:11
1	Ba 233.527†	371258.6	372002.6	2395.9	ug/L	2395.9	ppb	23:45:11
1	Be 313.107†	1442745.2	1450510.2	456.56	ug/L	456.56	ppb	23:45:11
1	Cd 226.502†	68117.4	68489.6	586.33	ug/L	586.33	ppb	23:45:11
1	Co 228.616†	25700.6	25838.5	421.31	ug/L	421.31	ppb	23:45:31
1	Cr 267.716†	46798.2	46804.2	424.01	ug/L	424.01	ppb	23:45:11
1	Cu 324.752†	207369.5	198847.5	536.78	ug/L	536.78	ppb	23:45:11
1	Mn 257.610†	2049592.7	2053123.2	1955.2	ug/L	1955.2	ppb	23:45:11
1	Mo 202.031†	7813.1	7799.6	421.91	ug/L	421.91	ppb	23:45:31
1	Ni 231.604†	26480.8	26401.9	517.04	ug/L	517.04	ppb	23:45:31
1	P 214.914†	9178.0	8931.3	3841.2	ug/L	3841.2	ppb	23:45:31
1	Pb 220.353†	8868.2	8961.5	842.48	ug/L	842.48	ppb	23:45:31
1	S 181.975 Axial†	1038.1	980.1	1047.3	ug/L	1047.3	ppb	23:45:31
1	Sb 206.836†	1827.1	1796.2	478.28	ug/L	478.28	ppb	23:45:31
1	Se 196.026†	1374.5	1398.7	1030.6	ug/L	1030.6	ppb	23:45:31
1	Si 251.611†	404584.5	404837.6	10269	ug/L	10269	ppb	23:45:11
1	Sn 189.927†	4036.7	4049.2	539.05	ug/L	539.05	ppb	23:45:31
1	Ti 334.940†	1580997.8	1585426.5	2187.7	ug/L	2187.7	ppb	23:45:11
1	Tl 190.801†	4109.7	4162.2	1031.9	ug/L	1031.9	ppb	23:45:31
1	U 409.014†	-9046.7	-6290.8	-177.66	ug/L	-177.66	ppb	23:45:11
1	V 292.402†	142438.4	144332.4	812.46	ug/L	812.46	ppb	23:45:11
1	Zn 213.857†	142480.8	141880.8	1027.3	ug/L	1027.3	ppb	23:45:11
1	SiO2†	405090.3	405303.1	22000	ug/L	22000	ppb	23:46:32
2	Sc Radial	4822.4	4822.4	98.2	%			23:44:37
2	Y RADIAL	5870.3	5870.3	104.0	%			23:44:37
2	Al 396.153Radial†	66072.0	67312.3	44430	ug/L	44430	ppb	23:44:17
2	Ca 317.933Radial†	10569.2	10742.8	19021	ug/L	19021	ppb	23:44:17
2	Fe 238.204 Radial†	9248.9	9405.4	113730	ug/L	113730	ppb	23:44:17
2	K 766.490 Radial†	68707.0	67381.8	12264	ug/L	12264	ppb	23:44:17
2	Mg 279.077 IEC†	352.9	356.7	15874	ug/L	15874	ppb	23:44:37
2	Na 589.592 Radial†	9000.3	10443.3	2929.3	ug/L	2929.3	ppb	23:44:17
2	Sr 421.552†	155834.0	158663.7	832.24	ug/L	832.24	ppb	23:44:17
2	Sc 361.383	1034430.1	1034430.1	99.514	%			23:45:39
2	Y 371.029	930864.4	930864.4	105.25	%			23:45:39
2	Ag 328.068†	159893.1	160200.1	674.31	ug/L	674.31	ppb	23:45:39
2	As 188.979†	4060.7	4117.1	1318.1	ug/L	1318.1	ppb	23:45:59
2	B 249.677†	37304.5	37952.8	701.08	ug/L	701.08	ppb	23:45:39
2	Ba 233.527†	370961.4	372773.7	2400.9	ug/L	2400.9	ppb	23:45:39
2	Be 313.107†	1439781.8	1451689.3	456.93	ug/L	456.93	ppb	23:45:39
2	Cd 226.502†	67985.0	68552.8	586.80	ug/L	586.80	ppb	23:45:39
2	Co 228.616†	25777.0	25989.2	423.78	ug/L	423.78	ppb	23:45:59
2	Cr 267.716†	46824.1	46965.0	425.48	ug/L	425.48	ppb	23:45:39
2	Cu 324.752†	207140.1	199214.5	537.81	ug/L	537.81	ppb	23:45:39
2	Mn 257.610†	2048149.8	2057578.6	1959.5	ug/L	1959.5	ppb	23:45:39
2	Mo 202.031†	7821.6	7830.6	423.61	ug/L	423.61	ppb	23:45:59
2	Ni 231.604†	26538.5	26536.2	519.67	ug/L	519.67	ppb	23:45:59

2	P 214.914†	9213.9	8993.8	3868.5	ug/L	3868.5 ppb	23:45:59
2	Pb 220.353†	8910.8	9029.9	848.89	ug/L	848.89 ppb	23:45:59
2	S 181.975 Axial†	1053.8	998.8	1067.4	ug/L	1067.4 ppb	23:45:59
2	Sb 206.836†	1817.3	1791.6	477.12	ug/L	477.12 ppb	23:45:59
2	Se 196.026†	1388.3	1416.5	1041.5	ug/L	1041.5 ppb	23:45:59
2	Si 251.611†	404438.8	405856.9	10294	ug/L	10294 ppb	23:45:39
2	Sn 189.927†	4048.9	4073.0	542.21	ug/L	542.21 ppb	23:45:59
2	Ti 334.940†	1578840.2	1587813.5	2190.9	ug/L	2190.9 ppb	23:45:39
2	Tl 190.801†	4111.6	4176.0	1035.3	ug/L	1035.3 ppb	23:45:59
2	U 409.014†	-9132.0	-6402.6	-180.66	ug/L	-180.66 ppb	23:45:39
2	V 292.402†	142241.7	144545.1	813.57	ug/L	813.57 ppb	23:45:39
2	Zn 213.857†	142519.5	142330.1	1030.5	ug/L	1030.5 ppb	23:45:39
2	SiO2†	407210.0	408600.2	22179	ug/L	22179 ppb	23:46:37
3	Sc Radial	4836.5	4836.5	98.5	%		23:45:02
3	Y RADIAL	5879.1	5879.1	104.1	%		23:45:02
3	Al 396.153Radial†	66632.9	67684.7	44676	ug/L	44676 ppb	23:44:42
3	Ca 317.933Radial†	10645.0	10788.2	19101	ug/L	19101 ppb	23:44:42
3	Fe 238.204 Radial†	9300.8	9430.5	114030	ug/L	114030 ppb	23:44:42
3	K 766.490 Radial†	68548.9	67016.4	12198	ug/L	12198 ppb	23:44:42
3	Mg 279.077 IEC†	351.4	354.2	15759	ug/L	15759 ppb	23:45:02
3	Na 589.592 Radial†	8805.1	10218.2	2866.2	ug/L	2866.2 ppb	23:44:42
3	Sr 421.552†	156287.0	158658.8	832.22	ug/L	832.22 ppb	23:44:42
3	Sc 361.383	1041068.9	1041068.9	100.15	%		23:46:06
3	Y 371.029	935758.1	935758.1	105.80	%		23:46:06
3	Ag 328.068†	160724.5	160005.6	673.62	ug/L	673.62 ppb	23:46:06
3	As 188.979†	4070.5	4100.9	1313.1	ug/L	1313.1 ppb	23:46:26
3	B 249.677†	37306.4	37715.6	696.56	ug/L	696.56 ppb	23:46:06
3	Ba 233.527†	372494.1	371926.8	2395.4	ug/L	2395.4 ppb	23:46:06
3	Be 313.107†	1444480.8	1447154.8	455.51	ug/L	455.51 ppb	23:46:06
3	Cd 226.502†	68203.8	68335.5	584.87	ug/L	584.87 ppb	23:46:06
3	Co 228.616†	25800.1	25847.2	421.43	ug/L	421.43 ppb	23:46:26
3	Cr 267.716†	47031.7	46872.3	424.64	ug/L	424.64 ppb	23:46:06
3	Cu 324.752†	208081.7	198827.3	536.79	ug/L	536.79 ppb	23:46:06
3	Mn 257.610†	2055836.7	2052129.0	1954.3	ug/L	1954.3 ppb	23:46:06
3	Mo 202.031†	7829.3	7788.1	421.38	ug/L	421.38 ppb	23:46:26
3	Ni 231.604†	26523.1	26350.8	516.04	ug/L	516.04 ppb	23:46:26
3	P 214.914†	9181.6	8902.5	3827.6	ug/L	3827.6 ppb	23:46:26
3	Pb 220.353†	8910.0	8972.0	843.49	ug/L	843.49 ppb	23:46:26
3	S 181.975 Axial†	1040.2	978.6	1045.5	ug/L	1045.5 ppb	23:46:26
3	Sb 206.836†	1815.7	1778.3	473.50	ug/L	473.50 ppb	23:46:26
3	Se 196.026†	1359.2	1378.5	1025.7	ug/L	1025.7 ppb	23:46:26
3	Si 251.611†	405818.8	404643.1	10264	ug/L	10264 ppb	23:46:06
3	Sn 189.927†	4031.9	4030.1	536.55	ug/L	536.55 ppb	23:46:26
3	Ti 334.940†	1586633.9	1585477.9	2187.7	ug/L	2187.7 ppb	23:46:06
3	Tl 190.801†	4126.0	4164.0	1032.3	ug/L	1032.3 ppb	23:46:26
3	U 409.014†	-9074.6	-6286.8	-177.70	ug/L	-177.70 ppb	23:46:06
3	V 292.402†	142690.5	144081.7	810.85	ug/L	810.85 ppb	23:46:06
3	Zn 213.857†	143067.6	141964.1	1027.8	ug/L	1027.8 ppb	23:46:06
3	SiO2†	404916.9	403701.2	21913	ug/L	21913 ppb	23:46:43

Mean Data: 1201977920|925187|2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037634.5	99.822	%	0.3199				0.32%
Sc Radial	4829.0	98.4	%	0.15				0.15%
Y 371.029	933591.0	105.55	%	0.282				0.27%
Y RADIAL	5875.4	104.0	%	0.08				0.08%
Ag 328.068†	160147.1	674.04	ug/L	0.366	674.04	ppb	0.366	0.05%
Al 396.153Radial†	67297.9	44420	ug/L	260.3	44420	ppb	260.3	0.59%
As 188.979†	4111.1	1316.2	ug/L	2.73	1316.2	ppb	2.73	0.21%
B 249.677†	37835.5	698.89	ug/L	2.261	698.89	ppb	2.261	0.32%
Ba 233.527†	372234.4	2397.4	ug/L	3.02	2397.4	ppb	3.02	0.13%
Be 313.107†	1449784.8	456.33	ug/L	0.736	456.33	ppb	0.736	0.16%
Ca 317.933Radial†	10754.9	19042	ug/L	51.7	19042	ppb	51.7	0.27%
Cd 226.502†	68459.3	586.00	ug/L	1.005	586.00	ppb	1.005	0.17%
Co 228.616†	25891.6	422.17	ug/L	1.391	422.17	ppb	1.391	0.33%
Cr 267.716†	46880.5	424.71	ug/L	0.733	424.71	ppb	0.733	0.17%
Cu 324.752†	198963.1	537.13	ug/L	0.589	537.13	ppb	0.589	0.11%
Fe 238.204 Radial†	9390.9	113550	ug/L	585.5	113550	ppb	585.5	0.52%
K 766.490 Radial†	67117.6	12216	ug/L	42.0	12216	ppb	42.0	0.34%

Mg 279.077 IEC†	354.1	15754	ug/L	121.5	15754	ppb	121.5	0.77%
Mn 257.610†	2054276.9	1956.3	ug/L	2.75	1956.3	ppb	2.75	0.14%
Mo 202.031†	7806.1	422.30	ug/L	1.166	422.30	ppb	1.166	0.28%
Na 589.592 Radial†	10291.5	2886.8	ug/L	36.89	2886.8	ppb	36.89	1.28%
Ni 231.604†	26429.7	517.58	ug/L	1.876	517.58	ppb	1.876	0.36%
P 214.914†	8942.5	3845.7	ug/L	20.84	3845.7	ppb	20.84	0.54%
Pb 220.353†	8987.8	844.95	ug/L	3.449	844.95	ppb	3.449	0.41%
S 181.975 Axial†	985.8	1053.4	ug/L	12.16	1053.4	ppb	12.16	1.15%
Sb 206.836†	1788.7	476.30	ug/L	2.495	476.30	ppb	2.495	0.52%
Se 196.026†	1397.9	1032.6	ug/L	8.06	1032.6	ppb	8.06	0.78%
Si 251.611†	405112.6	10276	ug/L	16.5	10276	ppb	16.5	0.16%
Sn 189.927†	4050.8	539.27	ug/L	2.840	539.27	ppb	2.840	0.53%
Sr 421.552†	158163.5	829.62	ug/L	4.523	829.62	ppb	4.523	0.55%
Ti 334.940†	1586239.3	2188.8	ug/L	1.88	2188.8	ppb	1.88	0.09%
Tl 190.801†	4167.4	1033.2	ug/L	1.83	1033.2	ppb	1.83	0.18%
U 409.014†	-6326.8	-178.67	ug/L	1.720	-178.67	ppb	1.720	0.96%
V 292.402†	144319.7	812.29	ug/L	1.370	812.29	ppb	1.370	0.17%
Zn 213.857†	142058.3	1028.6	ug/L	1.72	1028.6	ppb	1.72	0.17%
SiO2†	405868.1	22031	ug/L	135.7	22031	ppb	135.7	0.62%

Sequence No.: 20
Sample ID: 1201977916|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 12/5/2009 00:16:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977916|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4590.5	4590.5	93.5	%			00:19:13
1	Y RADIAL	5824.9	5824.9	103.1	%			00:19:13
1	Al 396.153Radial†	100428.0	107455.4	70953	ug/L	70953	ppb	00:18:53
1	Ca 317.933Radial†	358445.9	383353.8	678740	ug/L	678740	ppb	00:18:53
1	Fe 238.204 Radial†	12344.1	13191.5	159490	ug/L	159490	ppb	00:19:13
1	K 766.490 Radial†	42637.7	43033.2	7731.9	ug/L	7731.9	ppb	00:18:53
1	Mg 279.077 IEC†	1328.6	1418.5	63333	ug/L	63333	ppb	00:19:13
1	Na 589.592 Radial†	12018.1	14133.8	3964.5	ug/L	3964.5	ppb	00:18:53
1	Sr 421.552†	271621.5	290517.0	1517.9	ug/L	1517.9	ppb	00:18:53
1	Sc 361.383	950241.8	950241.8	91.415	%			00:20:12
1	Y 371.029	882132.0	882132.0	99.736	%			00:20:12
1	Ag 328.068†	-9483.5	-10848.2	-1.0063	ug/L	-1.0063	ppb	00:20:17
1	As 188.979†	14.5	52.4	100.38	ug/L	100.38	ppb	00:20:37
1	B 249.677†	10412.0	11855.9	202.61	ug/L	202.61	ppb	00:20:17
1	Ba 233.527†	1467932.3	1605792.7	10323	ug/L	10323	ppb	00:20:12
1	Be 313.107†	-42484.1	-41600.1	0.6602	ug/L	0.6602	ppb	00:20:17
1	Cd 226.502†	1543.3	1923.9	4.4826	ug/L	4.4826	ppb	00:20:37
1	Co 228.616†	6355.0	7038.1	102.81	ug/L	102.81	ppb	00:20:37
1	Cr 267.716†	217937.7	238317.5	2144.4	ug/L	2144.4	ppb	00:20:17
1	Cu 324.752†	5850312.1	6390804.7	17075	ug/L	17075	ppb	00:20:12
1	Mn 257.610†	3895949.1	4261259.2	4049.9	ug/L	4049.9	ppb	00:20:12
1	Mo 202.031†	753.0	794.5	53.475	ug/L	53.475	ppb	00:20:37
1	Ni 231.604†	264982.4	289736.2	5676.9	ug/L	5676.9	ppb	00:20:17
1	P 214.914†	13747.7	14773.7	3766.0	ug/L	3766.0	ppb	00:20:17
1	Pb 220.353†	3756.6	4185.0	382.47	ug/L	382.47	ppb	00:20:37
1	S 181.975 Axial†	10979.7	11950.7	12862	ug/L	12862	ppb	00:20:37
1	Sb 206.836†	406.3	409.8	38.606	ug/L	38.606	ppb	00:20:37
1	Se 196.026†	-1071.0	-1150.2	69.263	ug/L	69.263	ppb	00:20:37
1	Si 251.611†	1283937.0	1403959.9	35652	ug/L	35652	ppb	00:20:12
1	Sn 189.927†	-70.6	-72.9	62.980	ug/L	62.980	ppb	00:20:37
1	Ti 334.940†	4595107.5	5027915.9	6969.6	ug/L	6969.6	ppb	00:20:12
1	Tl 190.801†	-337.7	-325.1	-1.0457	ug/L	-1.0457	ppb	00:20:37
1	U 409.014†	-5337.6	-3064.9	-103.44	ug/L	-103.44	ppb	00:20:17
1	V 292.402†	43812.4	49535.5	252.71	ug/L	252.71	ppb	00:20:17
1	Zn 213.857†	213939.3	233145.7	1639.1	ug/L	1639.1	ppb	00:20:17
1	SiO2†	1279322.6	1398870.7	76021	ug/L	76021	ppb	00:21:49
2	Sc Radial	4556.5	4556.5	92.8	%			00:19:38
2	Y RADIAL	5797.3	5797.3	102.7	%			00:19:38
2	Al 396.153Radial†	100005.4	107800.5	71181	ug/L	71181	ppb	00:19:18
2	Ca 317.933Radial†	357275.1	384949.2	681560	ug/L	681560	ppb	00:19:18
2	Fe 238.204 Radial†	12342.6	13288.2	160660	ug/L	160660	ppb	00:19:38
2	K 766.490 Radial†	42417.1	43135.3	7750.3	ug/L	7750.3	ppb	00:19:18
2	Mg 279.077 IEC†	1323.5	1423.5	63558	ug/L	63558	ppb	00:19:38
2	Na 589.592 Radial†	11848.1	14046.4	3940.0	ug/L	3940.0	ppb	00:19:18
2	Sr 421.552†	269709.9	290622.3	1518.4	ug/L	1518.4	ppb	00:19:18
2	Sc 361.383	939611.1	939611.1	90.392	%			00:20:45
2	Y 371.029	870922.9	870922.9	98.469	%			00:20:45
2	Ag 328.068†	-9610.7	-11106.3	-1.6775	ug/L	-1.6775	ppb	00:20:50
2	As 188.979†	15.9	54.2	101.06	ug/L	101.06	ppb	00:21:10
2	B 249.677†	10374.5	11943.3	204.10	ug/L	204.10	ppb	00:20:50
2	Ba 233.527†	1450855.5	1605068.5	10318	ug/L	10318	ppb	00:20:45
2	Be 313.107†	-42407.3	-42040.9	0.5108	ug/L	0.5108	ppb	00:20:50
2	Cd 226.502†	1513.8	1910.3	4.2888	ug/L	4.2888	ppb	00:21:10
2	Co 228.616†	6384.7	7149.7	104.64	ug/L	104.64	ppb	00:21:10
2	Cr 267.716†	217830.6	240896.2	2167.6	ug/L	2167.6	ppb	00:20:50
2	Cu 324.752†	5773489.1	6378221.9	17041	ug/L	17041	ppb	00:20:45
2	Mn 257.610†	3851792.9	4260627.4	4049.4	ug/L	4049.4	ppb	00:20:45
2	Mo 202.031†	760.2	811.8	54.477	ug/L	54.477	ppb	00:21:10
2	Ni 231.604†	265017.5	293054.6	5741.9	ug/L	5741.9	ppb	00:20:50

2	P 214.914†	13784.2	14984.2	3864.7	ug/L	3864.7 ppb	00:20:50
2	Pb 220.353†	3795.5	4274.5	390.86	ug/L	390.86 ppb	00:21:10
2	S 181.975 Axial†	10998.6	12107.5	13031	ug/L	13031 ppb	00:21:10
2	Sb 206.836†	399.8	407.7	37.531	ug/L	37.531 ppb	00:21:10
2	Se 196.026†	-1067.2	-1159.2	69.527	ug/L	69.527 ppb	00:21:10
2	Si 251.611†	1269121.4	1403460.0	35640	ug/L	35640 ppb	00:20:45
2	Sn 189.927†	-76.2	-79.9	62.361	ug/L	62.361 ppb	00:21:10
2	Ti 334.940†	4539718.2	5023510.1	6963.6	ug/L	6963.6 ppb	00:20:45
2	Tl 190.801†	-340.5	-332.4	-2.8682	ug/L	-2.8682 ppb	00:21:10
2	U 409.014†	-5601.9	-3423.4	-112.90	ug/L	-112.90 ppb	00:20:50
2	V 292.402†	43855.3	50125.2	255.91	ug/L	255.91 ppb	00:20:50
2	Zn 213.857†	214429.7	236336.1	1662.1	ug/L	1662.1 ppb	00:20:50
2	SiO2†	1276544.8	1411631.0	76715	ug/L	76715 ppb	00:21:55
3	Sc Radial	4558.6	4558.6	92.8	%		00:20:03
3	Y RADIAL	5783.0	5783.0	102.4	%		00:20:03
3	Al 396.153Radial†	100284.8	108053.4	71348	ug/L	71348 ppb	00:19:43
3	Ca 317.933Radial†	357545.7	385069.0	681780	ug/L	681780 ppb	00:19:43
3	Fe 238.204 Radial†	12339.8	13279.4	160550	ug/L	160550 ppb	00:20:03
3	K 766.490 Radial†	42392.8	43088.7	7742.0	ug/L	7742.0 ppb	00:19:43
3	Mg 279.077 IEC†	1327.3	1427.1	63717	ug/L	63717 ppb	00:20:03
3	Na 589.592 Radial†	11866.9	14060.9	3944.1	ug/L	3944.1 ppb	00:19:43
3	Sr 421.552†	269818.0	290609.1	1518.3	ug/L	1518.3 ppb	00:19:43
3	Sc 361.383	947624.1	947624.1	91.163	%		00:21:17
3	Y 371.029	878882.9	878882.9	99.369	%		00:21:17
3	Ag 328.068†	-9448.6	-10838.5	-0.6707	ug/L	-0.6707 ppb	00:21:23
3	As 188.979†	13.5	51.5	100.15	ug/L	100.15 ppb	00:21:43
3	B 249.677†	10338.0	11806.3	201.53	ug/L	201.53 ppb	00:21:23
3	Ba 233.527†	1458980.8	1600409.3	10288	ug/L	10288 ppb	00:21:17
3	Be 313.107†	-42514.8	-41762.1	0.5910	ug/L	0.5910 ppb	00:21:23
3	Cd 226.502†	1518.7	1901.6	4.1685	ug/L	4.1685 ppb	00:21:43
3	Co 228.616†	6295.0	6991.5	102.04	ug/L	102.04 ppb	00:21:43
3	Cr 267.716†	216731.6	237653.0	2138.5	ug/L	2138.5 ppb	00:21:23
3	Cu 324.752†	5820891.2	6376210.3	17036	ug/L	17036 ppb	00:21:17
3	Mn 257.610†	3874540.4	4249547.9	4038.9	ug/L	4038.9 ppb	00:21:17
3	Mo 202.031†	748.3	791.6	53.397	ug/L	53.397 ppb	00:21:43
3	Ni 231.604†	263293.7	288684.5	5656.3	ug/L	5656.3 ppb	00:21:23
3	P 214.914†	13533.4	14580.2	3684.9	ug/L	3684.9 ppb	00:21:23
3	Pb 220.353†	3764.5	4204.9	384.38	ug/L	384.38 ppb	00:21:43
3	S 181.975 Axial†	10834.6	11824.8	12726	ug/L	12726 ppb	00:21:43
3	Sb 206.836†	374.5	376.2	29.877	ug/L	29.877 ppb	00:21:43
3	Se 196.026†	-1066.4	-1148.4	73.939	ug/L	73.939 ppb	00:21:43
3	Si 251.611†	1278234.7	1401584.6	35592	ug/L	35592 ppb	00:21:17
3	Sn 189.927†	-92.4	-97.0	60.123	ug/L	60.123 ppb	00:21:43
3	Ti 334.940†	4576154.0	5021010.5	6960.2	ug/L	6960.2 ppb	00:21:17
3	Tl 190.801†	-318.1	-304.6	3.7886	ug/L	3.7886 ppb	00:21:43
3	U 409.014†	-5521.5	-3282.7	-109.20	ug/L	-109.20 ppb	00:21:23
3	V 292.402†	43650.6	49490.5	252.30	ug/L	252.30 ppb	00:21:23
3	Zn 213.857†	212321.5	232017.6	1630.9	ug/L	1630.9 ppb	00:21:23
3	SiO2†	1285364.7	1409364.3	76592	ug/L	76592 ppb	00:22:01

Mean Data: 1201977916|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	945825.7	90.990	%	0.5328				0.59%
Sc Radial	4568.5	93.1	%	0.39				0.42%
Y 371.029	877312.6	99.191	%	0.6520				0.66%
Y RADIAL	5801.7	102.7	%	0.38				0.37%
Ag 328.068†	-10931.0	-1.1182	ug/L	0.51264	-1.1182	ppb	0.51264	45.85%
Al 396.153Radial†	107769.8	71160	ug/L	198.2	71160	ppb	198.2	0.28%
As 188.979†	52.7	100.53	ug/L	0.472	100.53	ppb	0.472	0.47%
B 249.677†	11868.5	202.75	ug/L	1.290	202.75	ppb	1.290	0.64%
Ba 233.527†	1603756.8	10310	ug/L	18.8	10310	ppb	18.8	0.18%
Be 313.107†	-41801.0	0.5873	ug/L	0.07476	0.5873	ppb	0.07476	12.73%
Ca 317.933Radial†	384457.3	680690	ug/L	1695.4	680690	ppb	1695.4	0.25%
Cd 226.502†	1912.0	4.3133	ug/L	0.15849	4.3133	ppb	0.15849	3.67%
Co 228.616†	7059.8	103.16	ug/L	1.335	103.16	ppb	1.335	1.29%
Cr 267.716†	238955.6	2150.2	ug/L	15.40	2150.2	ppb	15.40	0.72%
Cu 324.752†	6381745.6	17051	ug/L	21.1	17051	ppb	21.1	0.12%
Fe 238.204 Radial†	13253.0	160230	ug/L	646.6	160230	ppb	646.6	0.40%
K 766.490 Radial†	43085.7	7741.4	ug/L	9.21	7741.4	ppb	9.21	0.12%

Mg 279.077 IEC†	1423.0	63536	ug/L	193.0	63536	ppb	193.0	0.30%
Mn 257.610†	4257144.8	4046.1	ug/L	6.21	4046.1	ppb	6.21	0.15%
Mo 202.031†	799.3	53.783	ug/L	0.6023	53.783	ppb	0.6023	1.12%
Na 589.592 Radial†	14080.4	3949.5	ug/L	13.14	3949.5	ppb	13.14	0.33%
Ni 231.604†	290491.8	5691.7	ug/L	44.69	5691.7	ppb	44.69	0.79%
P 214.914†	14779.3	3771.9	ug/L	90.02	3771.9	ppb	90.02	2.39%
Pb 220.353†	4221.5	385.90	ug/L	4.397	385.90	ppb	4.397	1.14%
S 181.975 Axial†	11961.0	12873	ug/L	152.6	12873	ppb	152.6	1.19%
Sb 206.836†	397.9	35.338	ug/L	4.7596	35.338	ppb	4.7596	13.47%
Se 196.026†	-1152.6	70.910	ug/L	2.6267	70.910	ppb	2.6267	3.70%
Si 251.611†	1403001.5	35628	ug/L	31.8	35628	ppb	31.8	0.09%
Sn 189.927†	-83.3	61.821	ug/L	1.5032	61.821	ppb	1.5032	2.43%
Sr 421.552†	290582.8	1518.2	ug/L	0.29	1518.2	ppb	0.29	0.02%
Ti 334.940†	5024145.5	6964.5	ug/L	4.74	6964.5	ppb	4.74	0.07%
Tl 190.801†	-320.7	-0.0418	ug/L	3.44005	-0.0418	ppb	3.44005	>999.9%
U 409.014†	-3257.0	-108.51	ug/L	4.768	-108.51	ppb	4.768	4.39%
V 292.402†	49717.1	253.64	ug/L	1.975	253.64	ppb	1.975	0.78%
Zn 213.857†	233833.1	1644.0	ug/L	16.16	1644.0	ppb	16.16	0.98%
SiO2†	1406622.0	76443	ug/L	370.0	76443	ppb	370.0	0.48%

Sequence No.: 21
Sample ID: 1201977918|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 12/5/2009 00:24:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977918|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4464.8	4464.8	90.9	%			00:26:25
1	Y RADIAL	5460.2	5460.2	96.69	%			00:26:25
1	Al 396.153Radial†	106279.3	116914.3	77178	ug/L	77178	ppb	00:26:05
1	Ca 317.933Radial†	407525.2	448119.1	793410	ug/L	793410	ppb	00:26:05
1	Fe 238.204 Radial†	7801.4	8567.8	103600	ug/L	103600	ppb	00:26:25
1	K 766.490 Radial†	70476.6	74930.5	13556	ug/L	13556	ppb	00:26:05
1	Mg 279.077 IEC†	923.9	1013.5	45271	ug/L	45271	ppb	00:26:25
1	Na 589.592 Radial†	25706.7	29548.5	8288.3	ug/L	8288.3	ppb	00:26:05
1	Sr 421.552†	344657.0	379011.0	1981.1	ug/L	1981.1	ppb	00:26:05
1	Sc 361.383	953097.7	953097.7	91.690	%			00:27:24
1	Y 371.029	846374.6	846374.6	95.693	%			00:27:24
1	Ag 328.068†	120887.9	131370.7	544.56	ug/L	544.56	ppb	00:27:24
1	As 188.979†	1636.9	1821.8	621.32	ug/L	621.32	ppb	00:27:29
1	B 249.677†	41748.5	45998.5	854.27	ug/L	854.27	ppb	00:27:24
1	Ba 233.527†	1549111.5	1689518.0	10859	ug/L	10859	ppb	00:27:24
1	Be 313.107†	1497817.9	1638449.3	519.84	ug/L	519.84	ppb	00:27:24
1	Cd 226.502†	50662.8	55490.4	474.06	ug/L	474.06	ppb	00:27:29
1	Co 228.616†	28312.1	30964.6	504.78	ug/L	504.78	ppb	00:27:29
1	Cr 267.716†	76896.7	83778.6	755.65	ug/L	755.65	ppb	00:27:24
1	Cu 324.752†	2100185.7	2281602.4	6098.3	ug/L	6098.3	ppb	00:27:24
1	Mn 257.610†	2059669.6	2245774.8	2136.1	ug/L	2136.1	ppb	00:27:24
1	Mo 202.031†	9228.0	10035.2	539.89	ug/L	539.89	ppb	00:27:29
1	Ni 231.604†	35927.4	39051.8	764.84	ug/L	764.84	ppb	00:27:29
1	P 214.914†	6526.6	6853.0	2037.9	ug/L	2037.9	ppb	00:27:29
1	Pb 220.353†	9097.1	9997.2	943.83	ug/L	943.83	ppb	00:27:29
1	S 181.975 Axial†	16967.4	18445.2	19858	ug/L	19858	ppb	00:27:29
1	Sb 206.836†	1852.4	1985.6	514.73	ug/L	514.73	ppb	00:27:29
1	Se 196.026†	414.8	473.8	587.11	ug/L	587.11	ppb	00:27:29
1	Si 251.611†	1128821.6	1230576.8	31237	ug/L	31237	ppb	00:27:24
1	Sn 189.927†	3637.7	3971.7	609.07	ug/L	609.07	ppb	00:27:29
1	Ti 334.940†	3038225.0	3314860.5	4613.0	ug/L	4613.0	ppb	00:27:24
1	Tl 190.801†	1652.8	1846.9	492.03	ug/L	492.03	ppb	00:27:29
1	U 409.014†	13146.9	17112.5	427.94	ug/L	427.94	ppb	00:27:24
1	V 292.402†	115004.2	127036.4	715.64	ug/L	715.64	ppb	00:27:24
1	Zn 213.857†	325015.8	353588.6	2574.6	ug/L	2574.6	ppb	00:27:24
1	SiO2†	1118034.0	1218770.1	66206	ug/L	66206	ppb	00:28:00
2	Sc Radial	4503.0	4503.0	91.7	%			00:26:50
2	Y RADIAL	5486.6	5486.6	97.16	%			00:26:50
2	Al 396.153Radial†	105592.8	115172.8	76028	ug/L	76028	ppb	00:26:30
2	Ca 317.933Radial†	404471.8	440982.4	780770	ug/L	780770	ppb	00:26:30
2	Fe 238.204 Radial†	7846.9	8544.6	103320	ug/L	103320	ppb	00:26:50
2	K 766.490 Radial†	69703.8	73429.3	13284	ug/L	13284	ppb	00:26:30
2	Mg 279.077 IEC†	925.3	1006.4	44951	ug/L	44951	ppb	00:26:50
2	Na 589.592 Radial†	25424.3	29000.3	8134.6	ug/L	8134.6	ppb	00:26:30
2	Sr 421.552†	341814.4	372691.6	1948.1	ug/L	1948.1	ppb	00:26:30
2	Sc 361.383	946745.0	946745.0	91.078	%			00:27:37
2	Y 371.029	840575.1	840575.1	95.037	%			00:27:37
2	Ag 328.068†	120295.2	131604.7	545.58	ug/L	545.58	ppb	00:27:37
2	As 188.979†	1629.5	1825.7	622.57	ug/L	622.57	ppb	00:27:42
2	B 249.677†	41310.5	45823.1	850.99	ug/L	850.99	ppb	00:27:37
2	Ba 233.527†	1540875.1	1691811.5	10874	ug/L	10874	ppb	00:27:37
2	Be 313.107†	1489136.4	1639878.6	520.31	ug/L	520.31	ppb	00:27:37
2	Cd 226.502†	50394.0	55566.0	474.74	ug/L	474.74	ppb	00:27:42
2	Co 228.616†	28190.9	31038.6	505.99	ug/L	505.99	ppb	00:27:42
2	Cr 267.716†	76366.4	83759.1	755.47	ug/L	755.47	ppb	00:27:37
2	Cu 324.752†	2093116.5	2289210.1	6118.6	ug/L	6118.6	ppb	00:27:37
2	Mn 257.610†	2049338.6	2249504.8	2139.6	ug/L	2139.6	ppb	00:27:37
2	Mo 202.031†	9166.1	10034.8	539.85	ug/L	539.85	ppb	00:27:42
2	Ni 231.604†	35803.2	39178.3	767.32	ug/L	767.32	ppb	00:27:42

2	P 214.914†	6475.7	6844.9	2030.8	ug/L	2030.8	ppb	00:27:42
2	Pb 220.353†	9064.2	10027.7	946.44	ug/L	946.44	ppb	00:27:42
2	S 181.975 Axial†	16834.3	18423.2	19834	ug/L	19834	ppb	00:27:42
2	Sb 206.836†	1891.1	2041.7	529.43	ug/L	529.43	ppb	00:27:42
2	Se 196.026†	431.3	494.9	595.44	ug/L	595.44	ppb	00:27:42
2	Si 251.611†	1122746.6	1232167.6	31278	ug/L	31278	ppb	00:27:37
2	Sn 189.927†	3575.6	3930.2	602.27	ug/L	602.27	ppb	00:27:42
2	Ti 334.940†	3024348.6	3321859.1	4622.0	ug/L	4622.0	ppb	00:27:37
2	Tl 190.801†	1629.1	1832.9	488.72	ug/L	488.72	ppb	00:27:42
2	U 409.014†	13089.6	17145.8	428.84	ug/L	428.84	ppb	00:27:37
2	V 292.402†	114300.5	127105.3	716.06	ug/L	716.06	ppb	00:27:37
2	Zn 213.857†	323290.3	354072.7	2578.2	ug/L	2578.2	ppb	00:27:37
2	SiO2†	1118390.8	1227343.7	66673	ug/L	66673	ppb	00:28:06
3	Sc Radial	4466.9	4466.9	91.0	%			00:27:16
3	Y RADIAL	5438.7	5438.7	96.31	%			00:27:16
3	Al 396.153Radial†	107270.4	117947.4	77860	ug/L	77860	ppb	00:26:56
3	Ca 317.933Radial†	410977.9	451698.2	799750	ug/L	799750	ppb	00:26:56
3	Fe 238.204 Radial†	7814.0	8577.6	103720	ug/L	103720	ppb	00:27:16
3	K 766.490 Radial†	70941.9	75404.5	13642	ug/L	13642	ppb	00:26:56
3	Mg 279.077 IEC†	917.3	1005.7	44922	ug/L	44922	ppb	00:27:16
3	Na 589.592 Radial†	25785.8	29621.8	8308.9	ug/L	8308.9	ppb	00:26:56
3	Sr 421.552†	346893.0	381286.1	1993.0	ug/L	1993.0	ppb	00:26:56
3	Sc 361.383	946581.0	946581.0	91.063	%			00:27:49
3	Y 371.029	840367.3	840367.3	95.014	%			00:27:49
3	Ag 328.068†	119955.3	131254.3	544.04	ug/L	544.04	ppb	00:27:49
3	As 188.979†	1659.3	1858.8	632.87	ug/L	632.87	ppb	00:27:54
3	B 249.677†	41235.6	45748.8	849.52	ug/L	849.52	ppb	00:27:49
3	Ba 233.527†	1538320.5	1689299.3	10858	ug/L	10858	ppb	00:27:49
3	Be 313.107†	1487353.6	1638204.1	519.77	ug/L	519.77	ppb	00:27:49
3	Cd 226.502†	50772.6	55991.4	478.42	ug/L	478.42	ppb	00:27:54
3	Co 228.616†	28439.3	31316.8	510.59	ug/L	510.59	ppb	00:27:54
3	Cr 267.716†	76398.3	83808.7	755.93	ug/L	755.93	ppb	00:27:49
3	Cu 324.752†	2087345.3	2283270.7	6102.8	ug/L	6102.8	ppb	00:27:49
3	Mn 257.610†	2045047.6	2245182.5	2135.6	ug/L	2135.6	ppb	00:27:49
3	Mo 202.031†	9256.2	10135.4	545.21	ug/L	545.21	ppb	00:27:54
3	Ni 231.604†	36192.1	39612.2	775.82	ug/L	775.82	ppb	00:27:54
3	P 214.914†	6470.5	6840.5	2031.9	ug/L	2031.9	ppb	00:27:54
3	Pb 220.353†	9082.3	10049.2	948.87	ug/L	948.87	ppb	00:27:54
3	S 181.975 Axial†	17034.3	18646.1	20074	ug/L	20074	ppb	00:27:54
3	Sb 206.836†	1879.4	2029.3	526.46	ug/L	526.46	ppb	00:27:54
3	Se 196.026†	471.0	538.6	616.24	ug/L	616.24	ppb	00:27:54
3	Si 251.611†	1120643.4	1230071.5	31224	ug/L	31224	ppb	00:27:49
3	Sn 189.927†	3668.9	4033.3	617.88	ug/L	617.88	ppb	00:27:54
3	Ti 334.940†	3019060.3	3316627.1	4615.8	ug/L	4615.8	ppb	00:27:49
3	Tl 190.801†	1645.8	1851.6	493.19	ug/L	493.19	ppb	00:27:54
3	U 409.014†	12938.6	16982.5	424.56	ug/L	424.56	ppb	00:27:49
3	V 292.402†	114126.6	126936.1	715.11	ug/L	715.11	ppb	00:27:49
3	Zn 213.857†	322490.9	353256.3	2572.1	ug/L	2572.1	ppb	00:27:49
3	SiO2†	1113930.5	1222658.3	66417	ug/L	66417	ppb	00:28:12

Mean Data: 1201977918|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	948807.9	91.277	%	0.3575				0.39%
Sc Radial	4478.3	91.2	%	0.44				0.48%
Y 371.029	842439.0	95.248	%	0.3855				0.40%
Y RADIAL	5461.8	96.72	%	0.425				0.44%
Ag 328.068†	131409.9	544.73	ug/L	0.784	544.73	ppb	0.784	0.14%
Al 396.153Radial†	116678.1	77022	ug/L	925.8	77022	ppb	925.8	1.20%
As 188.979†	1835.4	625.59	ug/L	6.339	625.59	ppb	6.339	1.01%
B 249.677†	45856.8	851.59	ug/L	2.432	851.59	ppb	2.432	0.29%
Ba 233.527†	1690209.6	10864	ug/L	8.9	10864	ppb	8.9	0.08%
Be 313.107†	1638844.0	519.97	ug/L	0.291	519.97	ppb	0.291	0.06%
Ca 317.933Radial†	446933.2	791310	ug/L	9659.0	791310	ppb	9659.0	1.22%
Cd 226.502†	55682.6	475.74	ug/L	2.346	475.74	ppb	2.346	0.49%
Co 228.616†	31106.7	507.12	ug/L	3.064	507.12	ppb	3.064	0.60%
Cr 267.716†	83782.1	755.68	ug/L	0.228	755.68	ppb	0.228	0.03%
Cu 324.752†	2284694.4	6106.6	ug/L	10.67	6106.6	ppb	10.67	0.17%
Fe 238.204 Radial†	8563.3	103550	ug/L	204.9	103550	ppb	204.9	0.20%
K 766.490 Radial†	74588.1	13494	ug/L	187.0	13494	ppb	187.0	1.39%

Mg 279.077 IEC†	1008.5	45048	ug/L	193.7	45048	ppb	193.7	0.43%
Mn 257.610†	2246820.7	2137.1	ug/L	2.20	2137.1	ppb	2.20	0.10%
Mo 202.031†	10068.5	541.65	ug/L	3.087	541.65	ppb	3.087	0.57%
Na 589.592 Radial†	29390.2	8243.9	ug/L	95.26	8243.9	ppb	95.26	1.16%
Ni 231.604†	39280.8	769.33	ug/L	5.757	769.33	ppb	5.757	0.75%
P 214.914†	6846.1	2033.5	ug/L	3.85	2033.5	ppb	3.85	0.19%
Pb 220.353†	10024.7	946.38	ug/L	2.518	946.38	ppb	2.518	0.27%
S 181.975 Axial†	18504.8	19922	ug/L	132.2	19922	ppb	132.2	0.66%
Sb 206.836†	2018.9	523.54	ug/L	7.774	523.54	ppb	7.774	1.48%
Se 196.026†	502.4	599.60	ug/L	15.002	599.60	ppb	15.002	2.50%
Si 251.611†	1230938.6	31246	ug/L	27.9	31246	ppb	27.9	0.09%
Sn 189.927†	3978.4	609.74	ug/L	7.827	609.74	ppb	7.827	1.28%
Sr 421.552†	377662.9	1974.1	ug/L	23.27	1974.1	ppb	23.27	1.18%
Ti 334.940†	3317782.2	4616.9	ug/L	4.61	4616.9	ppb	4.61	0.10%
Tl 190.801†	1843.8	491.31	ug/L	2.321	491.31	ppb	2.321	0.47%
U 409.014†	17080.2	427.12	ug/L	2.254	427.12	ppb	2.254	0.53%
V 292.402†	127025.9	715.61	ug/L	0.478	715.61	ppb	0.478	0.07%
Zn 213.857†	353639.2	2575.0	ug/L	3.05	2575.0	ppb	3.05	0.12%
SiO2†	1222924.0	66432	ug/L	233.5	66432	ppb	233.5	0.35%

Sequence No.: 22
Sample ID: 1201977919|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 12/5/2009 00:30:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977919|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4260.3	4260.3	86.8	%			00:32:37
1	Y RADIAL	5277.4	5277.4	93.45	%			00:32:37
1	Al 396.153Radial†	123547.7	142425.5	94023	ug/L	94023	ppb	00:32:17
1	Ca 317.933Radial†	495371.9	570870.0	1010700	ug/L	1010700	ppb	00:32:17
1	Fe 238.204 Radial†	7803.8	8982.5	108620	ug/L	108620	ppb	00:32:37
1	K 766.490 Radial†	72184.9	80619.4	14570	ug/L	14570	ppb	00:32:17
1	Mg 279.077 IEC†	1082.2	1244.7	55611	ug/L	55611	ppb	00:32:37
1	Na 589.592 Radial†	27569.4	33052.2	9271.1	ug/L	9271.1	ppb	00:32:17
1	Sr 421.552†	444331.2	512073.8	2677.2	ug/L	2677.2	ppb	00:32:17
1	Sc 361.383	938642.8	938642.8	90.299	%			00:33:36
1	Y 371.029	843534.4	843534.4	95.372	%			00:33:36
1	Ag 328.068†	120774.0	133275.0	550.53	ug/L	550.53	ppb	00:33:36
1	As 188.979†	1713.5	1934.2	655.86	ug/L	655.86	ppb	00:33:41
1	B 249.677†	35263.9	39518.5	731.12	ug/L	731.12	ppb	00:33:36
1	Ba 233.527†	1101335.7	1219654.8	7841.0	ug/L	7841.0	ppb	00:33:36
1	Be 313.107†	1475833.1	1639259.3	519.80	ug/L	519.80	ppb	00:33:36
1	Cd 226.502†	49997.6	55604.6	474.54	ug/L	474.54	ppb	00:33:41
1	Co 228.616†	28356.6	31489.3	512.37	ug/L	512.37	ppb	00:33:41
1	Cr 267.716†	67800.4	74996.6	676.85	ug/L	676.85	ppb	00:33:36
1	Cu 324.752†	392890.7	426162.4	1143.6	ug/L	1143.6	ppb	00:33:36
1	Mn 257.610†	2106646.8	2332392.1	2218.4	ug/L	2218.4	ppb	00:33:36
1	Mo 202.031†	9267.3	10233.7	550.78	ug/L	550.78	ppb	00:33:41
1	Ni 231.604†	34555.8	38136.2	746.90	ug/L	746.90	ppb	00:33:41
1	P 214.914†	5484.8	5808.9	2367.1	ug/L	2367.1	ppb	00:33:41
1	Pb 220.353†	8922.5	9956.6	947.28	ug/L	947.28	ppb	00:33:41
1	S 181.975 Axial†	19800.5	21867.6	23542	ug/L	23542	ppb	00:33:41
1	Sb 206.836†	1751.7	1905.3	495.44	ug/L	495.44	ppb	00:33:41
1	Se 196.026†	440.8	509.5	620.99	ug/L	620.99	ppb	00:33:41
1	Si 251.611†	1024704.1	1134232.8	28790	ug/L	28790	ppb	00:33:36
1	Sn 189.927†	3468.3	3845.2	614.98	ug/L	614.98	ppb	00:33:41
1	Ti 334.940†	2894671.7	3206913.5	4475.5	ug/L	4475.5	ppb	00:33:36
1	Tl 190.801†	1604.2	1820.8	485.49	ug/L	485.49	ppb	00:33:41
1	U 409.014†	11000.5	14956.3	371.72	ug/L	371.72	ppb	00:33:36
1	V 292.402†	111872.6	125499.8	706.55	ug/L	706.55	ppb	00:33:36
1	Zn 213.857†	318148.6	351442.5	2564.1	ug/L	2564.1	ppb	00:33:36
1	SiO2†	1030194.2	1140271.4	61939	ug/L	61939	ppb	00:34:12
2	Sc Radial	4462.1	4462.1	90.9	%			00:33:02
2	Y RADIAL	5516.0	5516.0	97.68	%			00:33:02
2	Al 396.153Radial†	121144.0	133340.3	88024	ug/L	88024	ppb	00:32:42
2	Ca 317.933Radial†	486710.9	535517.2	948150	ug/L	948150	ppb	00:32:42
2	Fe 238.204 Radial†	7677.1	8436.2	102010	ug/L	102010	ppb	00:33:02
2	K 766.490 Radial†	70994.6	75546.8	13652	ug/L	13652	ppb	00:32:42
2	Mg 279.077 IEC†	1066.5	1171.0	52320	ug/L	52320	ppb	00:33:02
2	Na 589.592 Radial†	26945.5	30928.4	8675.4	ug/L	8675.4	ppb	00:32:42
2	Sr 421.552†	435746.3	479465.3	2506.7	ug/L	2506.7	ppb	00:32:42
2	Sc 361.383	942195.1	942195.1	90.641	%			00:33:49
2	Y 371.029	846148.9	846148.9	95.668	%			00:33:49
2	Ag 328.068†	121615.3	133698.9	551.03	ug/L	551.03	ppb	00:33:49
2	As 188.979†	1753.8	1971.5	666.55	ug/L	666.55	ppb	00:33:54
2	B 249.677†	35567.9	39706.7	735.54	ug/L	735.54	ppb	00:33:49
2	Ba 233.527†	1109026.1	1223540.9	7865.7	ug/L	7865.7	ppb	00:33:49
2	Be 313.107†	1485399.5	1643651.5	521.20	ug/L	521.20	ppb	00:33:49
2	Cd 226.502†	50581.9	56040.5	479.01	ug/L	479.01	ppb	00:33:54
2	Co 228.616†	28698.2	31747.9	516.71	ug/L	516.71	ppb	00:33:54
2	Cr 267.716†	68209.6	75165.0	678.25	ug/L	678.25	ppb	00:33:49
2	Cu 324.752†	396073.6	428033.5	1148.3	ug/L	1148.3	ppb	00:33:49
2	Mn 257.610†	2122061.3	2340602.5	2225.6	ug/L	2225.6	ppb	00:33:49
2	Mo 202.031†	9303.0	10234.4	550.35	ug/L	550.35	ppb	00:33:54
2	Ni 231.604†	35033.6	38519.2	754.40	ug/L	754.40	ppb	00:33:54

2	P 214.914†	5594.2	5906.7	2413.3 ug/L	2413.3 ppb	00:33:54
2	Pb 220.353†	9068.1	10080.0	958.06 ug/L	958.06 ppb	00:33:54
2	S 181.975 Axial†	20151.0	22171.7	23870 ug/L	23870 ppb	00:33:54
2	Sb 206.836†	1786.8	1936.7	503.67 ug/L	503.67 ppb	00:33:54
2	Se 196.026†	434.0	500.2	592.93 ug/L	592.93 ppb	00:33:54
2	Si 251.611†	1032098.9	1138112.7	28889 ug/L	28889 ppb	00:33:49
2	Sn 189.927†	3470.4	3833.1	606.79 ug/L	606.79 ppb	00:33:54
2	Ti 334.940†	2913703.3	3215824.3	4484.5 ug/L	4484.5 ppb	00:33:49
2	Tl 190.801†	1636.8	1850.0	492.52 ug/L	492.52 ppb	00:33:54
2	U 409.014†	11077.0	14994.7	373.54 ug/L	373.54 ppb	00:33:49
2	V 292.402†	112518.5	125745.4	708.88 ug/L	708.88 ppb	00:33:49
2	Zn 213.857†	320361.3	352555.3	2572.9 ug/L	2572.9 ppb	00:33:49
2	SiO2†	1029626.2	1135343.4	61672 ug/L	61672 ppb	00:34:18
3	Sc Radial	4501.3	4501.3	91.7 %		00:33:27
3	Y RADIAL	5535.9	5535.9	98.03 %		00:33:27
3	Al 396.153Radial†	118793.2	129616.0	85564 ug/L	85564 ppb	00:33:07
3	Ca 317.933Radial†	479215.8	522681.0	925420 ug/L	925420 ppb	00:33:07
3	Fe 238.204 Radial†	7698.5	8386.1	101400 ug/L	101400 ppb	00:33:27
3	K 766.490 Radial†	69798.4	73562.2	13292 ug/L	13292 ppb	00:33:07
3	Mg 279.077 IEC†	1067.4	1161.7	51904 ug/L	51904 ppb	00:33:27
3	Na 589.592 Radial†	26394.5	30069.4	8434.5 ug/L	8434.5 ppb	00:33:07
3	Sr 421.552†	426782.2	465514.9	2433.7 ug/L	2433.7 ppb	00:33:07
3	Sc 361.383	932249.4	932249.4	89.684 %		00:34:01
3	Y 371.029	837104.1	837104.1	94.645 %		00:34:01
3	Ag 328.068†	120056.3	133391.9	549.95 ug/L	549.95 ppb	00:34:01
3	As 188.979†	1739.3	1976.0	667.84 ug/L	667.84 ppb	00:34:06
3	B 249.677†	35173.7	39685.8	735.22 ug/L	735.22 ppb	00:34:01
3	Ba 233.527†	1095660.5	1221691.2	7853.8 ug/L	7853.8 ppb	00:34:01
3	Be 313.107†	1464536.0	1637871.3	519.39 ug/L	519.39 ppb	00:34:01
3	Cd 226.502†	50076.3	56072.1	479.34 ug/L	479.34 ppb	00:34:06
3	Co 228.616†	28402.3	31755.7	516.86 ug/L	516.86 ppb	00:34:06
3	Cr 267.716†	67310.4	74965.1	676.44 ug/L	676.44 ppb	00:34:01
3	Cu 324.752†	391304.0	427377.1	1146.5 ug/L	1146.5 ppb	00:34:01
3	Mn 257.610†	2096751.9	2337358.5	2222.5 ug/L	2222.5 ppb	00:34:01
3	Mo 202.031†	9267.2	10304.0	553.99 ug/L	553.99 ppb	00:34:06
3	Ni 231.604†	34586.1	38432.5	752.70 ug/L	752.70 ppb	00:34:06
3	P 214.914†	5543.2	5915.7	2417.4 ug/L	2417.4 ppb	00:34:06
3	Pb 220.353†	8961.7	10068.1	956.44 ug/L	956.44 ppb	00:34:06
3	S 181.975 Axial†	19856.6	22080.6	23773 ug/L	23773 ppb	00:34:06
3	Sb 206.836†	1784.0	1954.5	508.66 ug/L	508.66 ppb	00:34:06
3	Se 196.026†	472.7	548.4	612.14 ug/L	612.14 ppb	00:34:06
3	Si 251.611†	1020161.2	1136949.7	28859 ug/L	28859 ppb	00:34:01
3	Sn 189.927†	3470.2	3873.7	609.79 ug/L	609.79 ppb	00:34:06
3	Ti 334.940†	2881808.7	3214555.3	4481.6 ug/L	4481.6 ppb	00:34:01
3	Tl 190.801†	1609.3	1838.7	489.68 ug/L	489.68 ppb	00:34:06
3	U 409.014†	11010.6	15051.0	375.07 ug/L	375.07 ppb	00:34:01
3	V 292.402†	111151.8	125545.8	707.88 ug/L	707.88 ppb	00:34:01
3	Zn 213.857†	316441.1	351954.8	2568.6 ug/L	2568.6 ppb	00:34:01
3	SiO2†	1033339.1	1151602.0	62556 ug/L	62556 ppb	00:34:24

Mean Data: 1201977919|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	937695.8	90.208	%	0.4849				0.54%
Sc Radial	4407.9	89.8	%	2.63				2.93%
Y 371.029	842262.4	95.228	%	0.5263				0.55%
Y RADIAL	5443.1	96.39	%	2.547				2.64%
Ag 328.068†	133455.3	550.50	ug/L	0.542	550.50	ppb	0.542	0.10%
Al 396.153Radial†	135127.3	89204	ug/L	4350.9	89204	ppb	4350.9	4.88%
As 188.979†	1960.5	663.42	ug/L	6.575	663.42	ppb	6.575	0.99%
B 249.677†	39637.0	733.96	ug/L	2.467	733.96	ppb	2.467	0.34%
Ba 233.527†	1221629.0	7853.5	ug/L	12.36	7853.5	ppb	12.36	0.16%
Be 313.107†	1640260.7	520.13	ug/L	0.946	520.13	ppb	0.946	0.18%
Ca 317.933Radial†	543022.7	961440	ug/L	44185.1	961440	ppb	44185.1	4.60%
Cd 226.502†	55905.7	477.63	ug/L	2.681	477.63	ppb	2.681	0.56%
Co 228.616†	31664.3	515.31	ug/L	2.547	515.31	ppb	2.547	0.49%
Cr 267.716†	75042.2	677.18	ug/L	0.948	677.18	ppb	0.948	0.14%
Cu 324.752†	427191.0	1146.1	ug/L	2.35	1146.1	ppb	2.35	0.21%
Fe 238.204 Radial†	8601.6	104010	ug/L	3999.6	104010	ppb	3999.6	3.85%
K 766.490 Radial†	76576.2	13838	ug/L	659.1	13838	ppb	659.1	4.76%

Mg 279.077 IEC†	1192.5	53278	ug/L	2030.7	53278	ppb	2030.7	3.81%
Mn 257.610†	2336784.4	2222.2	ug/L	3.60	2222.2	ppb	3.60	0.16%
Mo 202.031†	10257.3	551.71	ug/L	1.993	551.71	ppb	1.993	0.36%
Na 589.592 Radial†	31350.0	8793.7	ug/L	430.68	8793.7	ppb	430.68	4.90%
Ni 231.604†	38362.6	751.33	ug/L	3.933	751.33	ppb	3.933	0.52%
P 214.914†	5877.1	2399.3	ug/L	27.91	2399.3	ppb	27.91	1.16%
Pb 220.353†	10034.9	953.93	ug/L	5.811	953.93	ppb	5.811	0.61%
S 181.975 Axial†	22040.0	23728	ug/L	168.9	23728	ppb	168.9	0.71%
Sb 206.836†	1932.2	502.59	ug/L	6.675	502.59	ppb	6.675	1.33%
Se 196.026†	519.4	608.69	ug/L	14.345	608.69	ppb	14.345	2.36%
Si 251.611†	1136431.8	28846	ug/L	50.7	28846	ppb	50.7	0.18%
Sn 189.927†	3850.7	610.52	ug/L	4.144	610.52	ppb	4.144	0.68%
Sr 421.552†	485684.7	2539.2	ug/L	124.95	2539.2	ppb	124.95	4.92%
Ti 334.940†	3212431.0	4480.6	ug/L	4.60	4480.6	ppb	4.60	0.10%
Tl 190.801†	1836.5	489.23	ug/L	3.536	489.23	ppb	3.536	0.72%
U 409.014†	15000.7	373.44	ug/L	1.681	373.44	ppb	1.681	0.45%
V 292.402†	125597.0	707.77	ug/L	1.166	707.77	ppb	1.166	0.16%
Zn 213.857†	351984.2	2568.6	ug/L	4.43	2568.6	ppb	4.43	0.17%
SiO2†	1142405.6	62055	ug/L	453.2	62055	ppb	453.2	0.73%

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 00:36:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4724.2	4724.2	96.2	%			00:38:27
1	Y RADIAL	5387.3	5387.3	95.40	%			00:38:27
1	Al 396.153Radial†	7249.2	7577.7	4982.0	ug/L	4982.0	ppb	00:38:27
1	Ca 317.933Radial†	2821.6	2914.5	5160.3	ug/L	5160.3	ppb	00:38:47
1	Fe 238.204 Radial†	426.6	432.4	5243.1	ug/L	5243.1	ppb	00:38:47
1	K 766.490 Radial†	29528.4	28118.4	5115.8	ug/L	5115.8	ppb	00:38:27
1	Mg 279.077 IEC†	112.5	114.5	5127.0	ug/L	5127.0	ppb	00:38:47
1	Na 589.592 Radial†	34706.3	37349.1	10476	ug/L	10476	ppb	00:38:27
1	Sr 421.552†	92671.3	96317.7	505.28	ug/L	505.28	ppb	00:38:27
1	Sc 361.383	1022442.0	1022442.0	98.361	%			00:39:46
1	Y 371.029	856449.7	856449.7	96.832	%			00:39:46
1	Ag 328.068†	126514.0	128148.6	511.11	ug/L	511.11	ppb	00:39:46
1	As 188.979†	1537.9	1600.1	503.06	ug/L	503.06	ppb	00:40:06
1	B 249.677†	26015.4	26915.1	506.69	ug/L	506.69	ppb	00:39:46
1	Ba 233.527†	78278.0	79582.7	512.59	ug/L	512.59	ppb	00:39:46
1	Be 313.107†	1597600.9	1629102.6	508.95	ug/L	508.95	ppb	00:39:46
1	Cd 226.502†	57507.6	58701.7	511.73	ug/L	511.73	ppb	00:39:46
1	Co 228.616†	29880.2	30464.6	501.96	ug/L	501.96	ppb	00:40:06
1	Cr 267.716†	55698.3	56538.9	508.77	ug/L	508.77	ppb	00:39:46
1	Cu 324.752†	197695.8	192053.4	513.15	ug/L	513.15	ppb	00:39:46
1	Mn 257.610†	533851.9	542173.1	513.84	ug/L	513.84	ppb	00:39:46
1	Mo 202.031†	9394.8	9522.1	505.68	ug/L	505.68	ppb	00:40:06
1	Ni 231.604†	25313.7	25603.7	501.35	ug/L	501.35	ppb	00:40:06
1	P 214.914†	5844.6	5676.9	2461.5	ug/L	2461.5	ppb	00:40:06
1	Pb 220.353†	5250.1	5413.2	509.68	ug/L	509.68	ppb	00:40:06
1	S 181.975 Axial†	982.4	938.7	1010.3	ug/L	1010.3	ppb	00:40:06
1	Sb 206.836†	1921.6	1919.0	513.10	ug/L	513.10	ppb	00:40:06
1	Se 196.026†	1112.7	1152.7	531.17	ug/L	531.17	ppb	00:40:06
1	Si 251.611†	99140.4	100235.2	2533.6	ug/L	2533.6	ppb	00:39:46
1	Sn 189.927†	3723.6	3790.0	501.86	ug/L	501.86	ppb	00:40:06
1	Ti 334.940†	362915.1	370224.4	510.51	ug/L	510.51	ppb	00:39:46
1	Tl 190.801†	2016.8	2094.6	509.88	ug/L	509.88	ppb	00:40:06
1	U 409.014†	16241.7	19286.4	496.99	ug/L	496.99	ppb	00:39:46
1	V 292.402†	85409.3	88441.4	513.04	ug/L	513.04	ppb	00:39:46
1	Zn 213.857†	69340.0	69610.2	507.02	ug/L	507.02	ppb	00:39:46
1	SiO2†	97449.4	98474.6	5325.8	ug/L	5325.8	ppb	00:41:06
2	Sc Radial	4697.0	4697.0	95.7	%			00:38:52
2	Y RADIAL	5379.3	5379.3	95.26	%			00:38:52
2	Al 396.153Radial†	7258.8	7631.3	5017.4	ug/L	5017.4	ppb	00:38:52
2	Ca 317.933Radial†	2830.0	2940.3	5205.9	ug/L	5205.9	ppb	00:39:12
2	Fe 238.204 Radial†	431.9	440.5	5341.7	ug/L	5341.7	ppb	00:39:12
2	K 766.490 Radial†	29376.2	28136.9	5119.2	ug/L	5119.2	ppb	00:38:52
2	Mg 279.077 IEC†	112.0	114.6	5133.9	ug/L	5133.9	ppb	00:39:12
2	Na 589.592 Radial†	34567.4	37412.6	10494	ug/L	10494	ppb	00:38:52
2	Sr 421.552†	92372.6	96562.9	506.56	ug/L	506.56	ppb	00:38:52
2	Sc 361.383	1018914.9	1018914.9	98.021	%			00:40:13
2	Y 371.029	853792.7	853792.7	96.532	%			00:40:13
2	Ag 328.068†	126054.5	128125.0	511.06	ug/L	511.06	ppb	00:40:13
2	As 188.979†	1550.5	1618.4	508.75	ug/L	508.75	ppb	00:40:33
2	B 249.677†	26055.6	27047.7	509.17	ug/L	509.17	ppb	00:40:13
2	Ba 233.527†	77935.8	79509.1	512.13	ug/L	512.13	ppb	00:40:13
2	Be 313.107†	1592539.8	1629561.7	509.09	ug/L	509.09	ppb	00:40:13
2	Cd 226.502†	57262.3	58653.8	511.30	ug/L	511.30	ppb	00:40:13
2	Co 228.616†	29949.4	30640.3	504.86	ug/L	504.86	ppb	00:40:33
2	Cr 267.716†	55485.9	56518.2	508.58	ug/L	508.58	ppb	00:40:13
2	Cu 324.752†	197135.2	192177.2	513.48	ug/L	513.48	ppb	00:40:13
2	Mn 257.610†	531491.5	541643.9	513.34	ug/L	513.34	ppb	00:40:13
2	Mo 202.031†	9394.4	9554.8	507.43	ug/L	507.43	ppb	00:40:33
2	Ni 231.604†	25328.0	25707.4	503.38	ug/L	503.38	ppb	00:40:33

2	P 214.914†	5849.1	5702.0	2472.6 ug/L	2472.6 ppb	00:40:33
2	Pb 220.353†	5248.9	5430.4	511.30 ug/L	511.30 ppb	00:40:33
2	S 181.975 Axial†	985.1	944.9	1017.0 ug/L	1017.0 ppb	00:40:33
2	Sb 206.836†	1931.0	1935.4	517.52 ug/L	517.52 ppb	00:40:33
2	Se 196.026†	1113.2	1157.1	533.49 ug/L	533.49 ppb	00:40:33
2	Si 251.611†	98867.7	100305.8	2535.3 ug/L	2535.3 ppb	00:40:13
2	Sn 189.927†	3735.6	3815.3	505.22 ug/L	505.22 ppb	00:40:33
2	Ti 334.940†	361572.2	370131.5	510.39 ug/L	510.39 ppb	00:40:13
2	Tl 190.801†	2006.8	2091.5	509.11 ug/L	509.11 ppb	00:40:33
2	U 409.014†	16168.5	19268.8	496.53 ug/L	496.53 ppb	00:40:13
2	V 292.402†	85315.0	88645.7	514.22 ug/L	514.22 ppb	00:40:13
2	Zn 213.857†	69007.1	69514.6	506.30 ug/L	506.30 ppb	00:40:13
2	SiO2†	98365.7	99752.3	5395.2 ug/L	5395.2 ppb	00:41:11
3	Sc Radial	4739.6	4739.6	96.5 %		00:39:17
3	Y RADIAL	5396.1	5396.1	95.55 %		00:39:17
3	Al 396.153Radial†	7294.9	7600.5	4996.8 ug/L	4996.8 ppb	00:39:17
3	Ca 317.933Radial†	2856.0	2940.6	5206.5 ug/L	5206.5 ppb	00:39:37
3	Fe 238.204 Radial†	433.9	438.5	5317.8 ug/L	5317.8 ppb	00:39:37
3	K 766.490 Radial†	29539.7	28030.4	5099.8 ug/L	5099.8 ppb	00:39:17
3	Mg 279.077 IEC†	116.7	118.4	5304.7 ug/L	5304.7 ppb	00:39:37
3	Na 589.592 Radial†	34691.3	37216.3	10439 ug/L	10439 ppb	00:39:17
3	Sr 421.552†	92705.4	96039.9	503.82 ug/L	503.82 ppb	00:39:17
3	Sc 361.383	1014054.8	1014054.8	97.554 %		00:40:41
3	Y 371.029	850716.7	850716.7	96.184 %		00:40:41
3	Ag 328.068†	125109.0	127772.2	509.65 ug/L	509.65 ppb	00:40:41
3	As 188.979†	1565.7	1641.6	515.95 ug/L	515.95 ppb	00:41:01
3	B 249.677†	25823.6	26937.3	507.08 ug/L	507.08 ppb	00:40:41
3	Ba 233.527†	77508.1	79451.7	511.76 ug/L	511.76 ppb	00:40:41
3	Be 313.107†	1583424.5	1628004.6	508.60 ug/L	508.60 ppb	00:40:41
3	Cd 226.502†	57046.4	58712.6	511.82 ug/L	511.82 ppb	00:40:41
3	Co 228.616†	30057.3	30897.3	509.11 ug/L	509.11 ppb	00:41:01
3	Cr 267.716†	55205.2	56501.8	508.44 ug/L	508.44 ppb	00:40:41
3	Cu 324.752†	195462.7	191426.6	511.48 ug/L	511.48 ppb	00:40:41
3	Mn 257.610†	528161.9	540829.5	512.57 ug/L	512.57 ppb	00:40:41
3	Mo 202.031†	9437.8	9645.2	512.22 ug/L	512.22 ppb	00:41:01
3	Ni 231.604†	25432.0	25937.8	507.89 ug/L	507.89 ppb	00:41:01
3	P 214.914†	5888.8	5771.3	2504.0 ug/L	2504.0 ppb	00:41:01
3	Pb 220.353†	5299.8	5508.3	518.62 ug/L	518.62 ppb	00:41:01
3	S 181.975 Axial†	987.2	951.9	1024.6 ug/L	1024.6 ppb	00:41:01
3	Sb 206.836†	1940.8	1954.9	522.86 ug/L	522.86 ppb	00:41:01
3	Se 196.026†	1100.8	1149.8	530.20 ug/L	530.20 ppb	00:41:01
3	Si 251.611†	98099.0	100001.3	2527.5 ug/L	2527.5 ppb	00:40:41
3	Sn 189.927†	3752.1	3850.5	509.88 ug/L	509.88 ppb	00:41:01
3	Ti 334.940†	358864.3	369123.7	509.00 ug/L	509.00 ppb	00:40:41
3	Tl 190.801†	2019.8	2114.7	514.68 ug/L	514.68 ppb	00:41:01
3	U 409.014†	15957.1	19131.2	492.97 ug/L	492.97 ppb	00:40:41
3	V 292.402†	84864.2	88600.8	514.04 ug/L	514.04 ppb	00:40:41
3	Zn 213.857†	68662.3	69498.5	506.15 ug/L	506.15 ppb	00:40:41
3	SiO2†	97968.1	99825.7	5399.0 ug/L	5399.0 ppb	00:41:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1018470.6	97.979	%	0.4051				0.41%
Sc Radial	4720.3	96.1	%	0.44				0.46%
Y 371.029	853653.0	96.516	%	0.3244				0.34%
Y RADIAL	5387.6	95.40	%	0.149				0.16%
Ag 328.068†	128015.3	510.61	ug/L	0.828	510.61	ppb	0.828	0.16%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7603.2	4998.7	ug/L	17.74	4998.7	ppb	17.74	0.35%
QC value within limits for Al 396.153Radial Recovery = 99.97%								
As 188.979†	1620.0	509.25	ug/L	6.463	509.25	ppb	6.463	1.27%
QC value within limits for As 188.979 Recovery = 101.85%								
B 249.677†	26966.7	507.65	ug/L	1.336	507.65	ppb	1.336	0.26%
QC value within limits for B 249.677 Recovery = 101.53%								
Ba 233.527†	79514.5	512.16	ug/L	0.419	512.16	ppb	0.419	0.08%
QC value within limits for Ba 233.527 Recovery = 102.43%								
Be 313.107†	1628889.7	508.88	ug/L	0.251	508.88	ppb	0.251	0.05%
QC value within limits for Be 313.107 Recovery = 101.78%								
Ca 317.933Radial†	2931.8	5190.9	ug/L	26.50	5190.9	ppb	26.50	0.51%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.82%
Cd 226.502†            58689.4      511.61 ug/L         0.276      511.61 ppb          0.276   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.32%
Co 228.616†            30667.4      505.31 ug/L         3.595      505.31 ppb          3.595   0.71%
   QC value within limits for Co 228.616  Recovery = 101.06%
Cr 267.716†            56519.6      508.60 ug/L         0.165      508.60 ppb          0.165   0.03%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191885.7      512.70 ug/L         1.074      512.70 ppb          1.074   0.21%
   QC value within limits for Cu 324.752  Recovery = 102.54%
Fe 238.204 Radial†       437.1      5300.9 ug/L        51.45      5300.9 ppb         51.45   0.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.02%
K 766.490 Radial†      28095.2      5111.6 ug/L        10.35      5111.6 ppb         10.35   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 102.23%
Mg 279.077 IEC†          115.8      5188.5 ug/L       100.69      5188.5 ppb        100.69   1.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.77%
Mn 257.610†           541548.8      513.25 ug/L         0.639      513.25 ppb          0.639   0.12%
   QC value within limits for Mn 257.610  Recovery = 102.65%
Mo 202.031†             9574.1      508.44 ug/L         3.386      508.44 ppb          3.386   0.67%
   QC value within limits for Mo 202.031  Recovery = 101.69%
Na 589.592 Radial†     37326.0       10470 ug/L        28.1        10470 ppb         28.1   0.27%
   QC value within limits for Na 589.592 Radial  Recovery = 104.70%
Ni 231.604†            25749.6      504.21 ug/L         3.349      504.21 ppb          3.349   0.66%
   QC value within limits for Ni 231.604  Recovery = 100.84%
P 214.914†              5716.8      2479.4 ug/L        22.07      2479.4 ppb         22.07   0.89%
   QC value within limits for P 214.914  Recovery = 99.18%
Pb 220.353†             5450.6      513.20 ug/L         4.761      513.20 ppb          4.761   0.93%
   QC value within limits for Pb 220.353  Recovery = 102.64%
S 181.975 Axial†         945.1      1017.3 ug/L         7.12      1017.3 ppb          7.12   0.70%
   QC value within limits for S 181.975 Axial  Recovery = 101.73%
Sb 206.836†             1936.4      517.83 ug/L         4.883      517.83 ppb          4.883   0.94%
   QC value within limits for Sb 206.836  Recovery = 103.57%
Se 196.026†             1153.2      531.62 ug/L         1.691      531.62 ppb          1.691   0.32%
   QC value within limits for Se 196.026  Recovery = 106.32%
Si 251.611†           100180.8      2532.1 ug/L         4.11      2532.1 ppb          4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.28%
Sn 189.927†             3818.6      505.65 ug/L         4.024      505.65 ppb          4.024   0.80%
   QC value within limits for Sn 189.927  Recovery = 101.13%
Sr 421.552†            96306.8      505.22 ug/L         1.373      505.22 ppb          1.373   0.27%
   QC value within limits for Sr 421.552  Recovery = 101.04%
Ti 334.940†           369826.6      509.96 ug/L         0.840      509.96 ppb          0.840   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.99%
Tl 190.801†             2100.3      511.22 ug/L         3.017      511.22 ppb          3.017   0.59%
   QC value within limits for Tl 190.801  Recovery = 102.24%
U 409.014†             19228.8      495.50 ug/L         2.199      495.50 ppb          2.199   0.44%
   QC value within limits for U 409.014  Recovery = 99.10%
V 292.402†             88562.6      513.77 ug/L         0.634      513.77 ppb          0.634   0.12%
   QC value within limits for V 292.402  Recovery = 102.75%
Zn 213.857†            69541.1      506.49 ug/L         0.468      506.49 ppb          0.468   0.09%
   QC value within limits for Zn 213.857  Recovery = 101.30%
SiO2†                  99350.9      5373.3 ug/L        41.18      5373.3 ppb         41.18   0.77%
   QC value within limits for SiO2  Recovery = 100.48%
All analyte(s) passed QC.
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Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 00:43:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4521.7	4521.7	92.1	%			00:45:18
1	Y RADIAL	5191.1	5191.1	91.92	%			00:45:18
1	Al 396.153Radial†	-5.4	37.9	25.009	ug/L	25.009	ppb	00:45:18
1	Ca 317.933Radial†	54.7	41.5	73.564	ug/L	73.564	ppb	00:45:38
1	Fe 238.204 Radial†	11.0	0.9	11.351	ug/L	11.351	ppb	00:45:38
1	K 766.490 Radial†	3177.9	881.1	160.57	ug/L	160.57	ppb	00:45:18
1	Mg 279.077 IEC†	3.2	1.0	43.808	ug/L	43.808	ppb	00:45:38
1	Na 589.592 Radial†	-1030.4	161.2	45.214	ug/L	45.214	ppb	00:45:18
1	Sr 421.552†	2.1	9.7	0.0501	ug/L	0.0501	ppb	00:45:18
1	Sc 361.383	1050972.6	1050972.6	101.11	%			00:46:35
1	Y 371.029	892918.2	892918.2	100.96	%			00:46:35
1	Ag 328.068†	361.4	-116.6	-0.4594	ug/L	-0.4594	ppb	00:46:40
1	As 188.979†	-31.6	5.4	1.6699	ug/L	1.6699	ppb	00:47:00
1	B 249.677†	-219.7	248.8	4.7003	ug/L	4.7003	ppb	00:47:00
1	Ba 233.527†	52.6	52.0	0.3350	ug/L	0.3350	ppb	00:47:00
1	Be 313.107†	-4864.3	62.8	0.0199	ug/L	0.0199	ppb	00:46:40
1	Cd 226.502†	-217.5	20.5	0.1775	ug/L	0.1775	ppb	00:47:00
1	Co 228.616†	-90.2	-2.9	-0.0477	ug/L	-0.0477	ppb	00:47:00
1	Cr 267.716†	132.7	43.5	0.3910	ug/L	0.3910	ppb	00:47:00
1	Cu 324.752†	9084.0	47.2	0.1265	ug/L	0.1265	ppb	00:46:40
1	Mn 257.610†	753.9	168.9	0.1603	ug/L	0.1603	ppb	00:47:00
1	Mo 202.031†	34.3	4.6	0.2472	ug/L	0.2472	ppb	00:47:00
1	Ni 231.604†	134.4	1.0	0.0198	ug/L	0.0198	ppb	00:47:00
1	P 214.914†	285.8	17.6	7.8873	ug/L	7.8873	ppb	00:47:00
1	Pb 220.353†	-78.9	-2.4	-0.2247	ug/L	-0.2247	ppb	00:47:00
1	S 181.975 Axial†	65.8	5.0	5.3960	ug/L	5.3960	ppb	00:47:00
1	Sb 206.836†	44.0	8.9	2.3854	ug/L	2.3854	ppb	00:47:00
1	Se 196.026†	-23.7	-2.1	-0.8829	ug/L	-0.8829	ppb	00:47:00
1	Si 251.611†	659.4	94.5	2.3346	ug/L	2.3346	ppb	00:47:00
1	Sn 189.927†	16.6	20.8	2.7581	ug/L	2.7581	ppb	00:47:00
1	Ti 334.940†	-1162.7	110.4	0.1558	ug/L	0.1558	ppb	00:46:40
1	Tl 190.801†	-49.4	-4.6	-1.0998	ug/L	-1.0998	ppb	00:47:00
1	U 409.014†	-2785.1	19.3	0.4972	ug/L	0.4972	ppb	00:46:35
1	V 292.402†	-1602.5	23.6	0.1383	ug/L	0.1383	ppb	00:46:40
1	Zn 213.857†	1007.1	110.6	0.8096	ug/L	0.8096	ppb	00:47:00
1	SiO2†	683.6	77.1	4.0425	ug/L	4.0425	ppb	00:48:06
2	Sc Radial	4647.0	4647.0	94.6	%			00:45:43
2	Y RADIAL	5327.0	5327.0	94.33	%			00:45:43
2	Al 396.153Radial†	-18.8	24.0	15.793	ug/L	15.793	ppb	00:45:43
2	Ca 317.933Radial†	53.0	38.1	67.531	ug/L	67.531	ppb	00:46:03
2	Fe 238.204 Radial†	9.4	-1.0	-12.306	ug/L	-12.306	ppb	00:46:03
2	K 766.490 Radial†	3194.5	805.6	146.80	ug/L	146.80	ppb	00:45:43
2	Mg 279.077 IEC†	2.7	0.3	14.785	ug/L	14.785	ppb	00:46:03
2	Na 589.592 Radial†	-1082.3	136.4	38.274	ug/L	38.274	ppb	00:45:43
2	Sr 421.552†	21.5	30.1	0.1573	ug/L	0.1573	ppb	00:45:43
2	Sc 361.383	1018433.6	1018433.6	97.975	%			00:47:05
2	Y 371.029	866004.9	866004.9	97.913	%			00:47:05
2	Ag 328.068†	386.3	-79.7	-0.3217	ug/L	-0.3217	ppb	00:47:10
2	As 188.979†	-29.6	6.4	1.9970	ug/L	1.9970	ppb	00:47:30
2	B 249.677†	-226.3	235.1	4.4446	ug/L	4.4446	ppb	00:47:30
2	Ba 233.527†	63.7	65.0	0.4175	ug/L	0.4175	ppb	00:47:30
2	Be 313.107†	-4837.8	-63.9	-0.0198	ug/L	-0.0198	ppb	00:47:10
2	Cd 226.502†	-220.8	10.3	0.0907	ug/L	0.0907	ppb	00:47:30
2	Co 228.616†	-94.2	-9.8	-0.1603	ug/L	-0.1603	ppb	00:47:30
2	Cr 267.716†	111.1	25.6	0.2293	ug/L	0.2293	ppb	00:47:30
2	Cu 324.752†	8998.6	247.1	0.6594	ug/L	0.6594	ppb	00:47:10
2	Mn 257.610†	772.9	212.2	0.1994	ug/L	0.1994	ppb	00:47:30
2	Mo 202.031†	40.5	12.1	0.6427	ug/L	0.6427	ppb	00:47:30
2	Ni 231.604†	129.9	0.7	0.0129	ug/L	0.0129	ppb	00:47:30

2	P 214.914†	279.2	19.8	8.7896	ug/L	8.7896 ppb	00:47:30
2	Pb 220.353†	-67.9	6.2	0.5917	ug/L	0.5917 ppb	00:47:30
2	S 181.975 Axial†	68.7	10.0	10.778	ug/L	10.778 ppb	00:47:30
2	Sb 206.836†	41.1	7.3	1.9597	ug/L	1.9597 ppb	00:47:30
2	Se 196.026†	-17.8	3.2	1.3932	ug/L	1.3932 ppb	00:47:30
2	Si 251.611†	653.7	109.5	2.7176	ug/L	2.7176 ppb	00:47:30
2	Sn 189.927†	5.7	10.1	1.3438	ug/L	1.3438 ppb	00:47:30
2	Ti 334.940†	-1180.8	55.2	0.0792	ug/L	0.0792 ppb	00:47:10
2	Tl 190.801†	-40.3	3.1	0.7634	ug/L	0.7634 ppb	00:47:30
2	U 409.014†	-2681.6	36.9	0.9562	ug/L	0.9562 ppb	00:47:05
2	V 292.402†	-1569.4	6.7	0.0514	ug/L	0.0514 ppb	00:47:10
2	Zn 213.857†	1024.5	160.1	1.1763	ug/L	1.1763 ppb	00:47:30
2	SiO2†	683.9	99.0	5.2392	ug/L	5.2392 ppb	00:48:11
3	Sc Radial	4821.8	4821.8	98.2	%		00:46:08
3	Y RADIAL	5518.4	5518.4	97.72	%		00:46:08
3	Al 396.153Radial†	-23.3	20.0	13.226	ug/L	13.226 ppb	00:46:08
3	Ca 317.933Radial†	57.3	40.5	71.703	ug/L	71.703 ppb	00:46:28
3	Fe 238.204 Radial†	10.5	-0.3	-3.7245	ug/L	-3.7245 ppb	00:46:28
3	K 766.490 Radial†	3087.2	573.9	104.56	ug/L	104.56 ppb	00:46:08
3	Mg 279.077 IEC†	2.0	-0.5	-20.834	ug/L	-20.834 ppb	00:46:28
3	Na 589.592 Radial†	-956.0	306.5	85.983	ug/L	85.983 ppb	00:46:08
3	Sr 421.552†	35.6	43.6	0.2282	ug/L	0.2282 ppb	00:46:08
3	Sc 361.383	995395.5	995395.5	95.759	%		00:47:35
3	Y 371.029	847159.0	847159.0	95.782	%		00:47:35
3	Ag 328.068†	467.6	14.2	0.0541	ug/L	0.0541 ppb	00:47:40
3	As 188.979†	-42.5	-7.7	-2.4165	ug/L	-2.4165 ppb	00:48:00
3	B 249.677†	-206.8	250.1	4.7272	ug/L	4.7272 ppb	00:48:00
3	Ba 233.527†	67.0	70.0	0.4475	ug/L	0.4475 ppb	00:48:00
3	Be 313.107†	-4854.6	-195.7	-0.0612	ug/L	-0.0612 ppb	00:47:40
3	Cd 226.502†	-214.8	11.4	0.0996	ug/L	0.0996 ppb	00:48:00
3	Co 228.616†	-85.5	-3.0	-0.0490	ug/L	-0.0490 ppb	00:48:00
3	Cr 267.716†	124.6	42.3	0.3799	ug/L	0.3799 ppb	00:48:00
3	Cu 324.752†	9014.1	475.9	1.2706	ug/L	1.2706 ppb	00:47:40
3	Mn 257.610†	774.6	232.2	0.2199	ug/L	0.2199 ppb	00:48:00
3	Mo 202.031†	29.3	1.4	0.0742	ug/L	0.0742 ppb	00:48:00
3	Ni 231.604†	130.9	4.8	0.0934	ug/L	0.0934 ppb	00:48:00
3	P 214.914†	294.4	42.4	18.763	ug/L	18.763 ppb	00:48:00
3	Pb 220.353†	-84.5	-12.7	-1.1900	ug/L	-1.1900 ppb	00:48:00
3	S 181.975 Axial†	68.1	11.0	11.882	ug/L	11.882 ppb	00:48:00
3	Sb 206.836†	42.7	10.0	2.6294	ug/L	2.6294 ppb	00:48:00
3	Se 196.026†	-21.3	-0.9	-0.4117	ug/L	-0.4117 ppb	00:48:00
3	Si 251.611†	666.8	138.7	3.4851	ug/L	3.4851 ppb	00:48:00
3	Sn 189.927†	1.0	5.4	0.7209	ug/L	0.7209 ppb	00:48:00
3	Ti 334.940†	-1270.4	-66.2	-0.0861	ug/L	-0.0861 ppb	00:47:40
3	Tl 190.801†	-40.7	1.7	0.4199	ug/L	0.4199 ppb	00:48:00
3	U 409.014†	-2795.2	-145.1	-3.7507	ug/L	-3.7507 ppb	00:47:35
3	V 292.402†	-1677.5	-143.3	-0.8267	ug/L	-0.8267 ppb	00:47:40
3	Zn 213.857†	1013.0	172.3	1.2652	ug/L	1.2652 ppb	00:48:00
3	SiO2†	700.2	132.2	7.0999	ug/L	7.0999 ppb	00:48:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021600.6	98.280	%	2.6863				2.73%
Sc Radial	4663.5	95.0	%	3.07				3.23%
Y 371.029	868694.0	98.217	%	2.6002				2.65%
Y RADIAL	5345.5	94.66	%	2.911				3.08%
Ag 328.068†	-60.7	-0.2423	ug/L	0.26579	-0.2423	ppb	0.26579	109.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.3	18.009	ug/L	6.1963	18.009	ppb	6.1963	34.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4168	ug/L	2.45921	0.4168	ppb	2.45921	590.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	244.7	4.6240	ug/L	0.15595	4.6240	ppb	0.15595	3.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	62.3	0.4000	ug/L	0.05826	0.4000	ppb	0.05826	14.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-65.6	-0.0204	ug/L	0.04054	-0.0204	ppb	0.04054	199.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	40.1	70.932	ug/L	3.0895	70.932	ppb	3.0895	4.36%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              14.0      0.1226 ug/L       0.04776      0.1226 ppb        0.04776  38.95%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -5.3     -0.0857 ug/L       0.06462     -0.0857 ppb        0.06462  75.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              37.1      0.3334 ug/L       0.09031      0.3334 ppb        0.09031  27.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             256.7      0.6855 ug/L       0.57248      0.6855 ppb        0.57248  83.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.1     -1.5600 ug/L      11.97601     -1.5600 ppb       11.97601 767.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        753.6      137.31 ug/L        29.186      137.31 ppb         29.186  21.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.3      12.587 ug/L       32.3769      12.587 ppb        32.3769 257.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             204.4      0.1932 ug/L       0.03029      0.1932 ppb        0.03029  15.68%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.1      0.3214 ug/L       0.29141      0.3214 ppb        0.29141  90.68%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       201.4      56.490 ug/L       25.7761      56.490 ppb        25.7761  45.63%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               2.1      0.0420 ug/L       0.04461      0.0420 ppb        0.04461 106.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               26.6      11.813 ug/L        6.0357      11.813 ppb         6.0357  51.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -3.0     -0.2743 ug/L       0.89188     -0.2743 ppb        0.89188 325.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          8.7      9.3521 ug/L       3.47029      9.3521 ppb        3.47029  37.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.7      2.3248 ug/L       0.33890      2.3248 ppb        0.33890  14.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.1      0.0329 ug/L       1.20138      0.0329 ppb        1.20138 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             114.3      2.8458 ug/L       0.58587      2.8458 ppb        0.58587  20.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              12.1      1.6076 ug/L       1.04389      1.6076 ppb        1.04389  64.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              27.8      0.1452 ug/L       0.08967      0.1452 ppb        0.08967  61.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              33.1      0.0496 ug/L       0.12363      0.0496 ppb        0.12363 249.14%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.1      0.0278 ug/L       0.99153      0.0278 ppb        0.99153 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -29.6     -0.7657 ug/L       2.59518     -0.7657 ppb        2.59518 338.91%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -37.7     -0.2123 ug/L       0.53382     -0.2123 ppb        0.53382 251.43%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             147.7      1.0837 ug/L       0.24149      1.0837 ppb        0.24149  22.28%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   102.8      5.4605 ug/L       1.54071      5.4605 ppb        1.54071  28.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: 1201977917|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 12/5/2009 00:50:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977917|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4627.2	4627.2	94.2	%			00:52:19
1	Y RADIAL	5322.6	5322.6	94.25	%			00:52:19
1	Al 396.153Radial†	21122.0	22455.5	14827	ug/L	14827	ppb	00:52:19
1	Ca 317.933Radial†	104285.1	110635.2	195880	ug/L	195880	ppb	00:52:19
1	Fe 238.204 Radial†	1666.1	1756.8	21241	ug/L	21241	ppb	00:52:39
1	K 766.490 Radial†	9224.7	7218.5	1292.0	ug/L	1292.0	ppb	00:52:19
1	Mg 279.077 IEC†	189.7	198.8	8876.5	ug/L	8876.5	ppb	00:52:39
1	Na 589.592 Radial†	538.0	1850.8	519.16	ug/L	519.16	ppb	00:52:19
1	Sr 421.552†	46585.4	49437.4	257.55	ug/L	257.55	ppb	00:52:19
1	Sc 361.383	967648.0	967648.0	93.089	%			00:53:36
1	Y 371.029	816426.4	816426.4	92.307	%			00:53:36
1	Ag 328.068†	-669.3	-1193.0	-0.6434	ug/L	-0.6434	ppb	00:53:36
1	As 188.979†	14.4	52.1	26.835	ug/L	26.835	ppb	00:53:56
1	B 249.677†	4492.5	5292.1	97.163	ug/L	97.163	ppb	00:53:36
1	Ba 233.527†	268443.6	288372.1	1853.5	ug/L	1853.5	ppb	00:53:36
1	Be 313.107†	-9229.7	-5041.0	0.1583	ug/L	0.1583	ppb	00:53:36
1	Cd 226.502†	37.7	276.2	0.6628	ug/L	0.6628	ppb	00:53:56
1	Co 228.616†	622.2	754.7	11.098	ug/L	11.098	ppb	00:53:56
1	Cr 267.716†	2431.2	2523.9	23.142	ug/L	23.142	ppb	00:53:56
1	Cu 324.752†	585079.7	619576.8	1655.7	ug/L	1655.7	ppb	00:53:36
1	Mn 257.610†	386300.6	414401.8	394.37	ug/L	394.37	ppb	00:53:36
1	Mo 202.031†	144.9	126.4	8.2149	ug/L	8.2149	ppb	00:53:56
1	Ni 231.604†	28047.6	29997.9	587.76	ug/L	587.76	ppb	00:53:36
1	P 214.914†	1577.4	1429.4	361.40	ug/L	361.40	ppb	00:53:56
1	Pb 220.353†	992.1	1141.3	107.45	ug/L	107.45	ppb	00:53:56
1	S 181.975 Axial†	3255.2	3436.8	3699.8	ug/L	3699.8	ppb	00:53:56
1	Sb 206.836†	71.0	41.7	7.6521	ug/L	7.6521	ppb	00:53:56
1	Se 196.026†	-143.9	-133.2	18.039	ug/L	18.039	ppb	00:53:56
1	Si 251.611†	370287.6	397219.0	10088	ug/L	10088	ppb	00:53:36
1	Sn 189.927†	-235.6	-248.7	-12.270	ug/L	-12.270	ppb	00:53:56
1	Ti 334.940†	592877.9	638151.9	890.40	ug/L	890.40	ppb	00:53:36
1	Tl 190.801†	-112.6	-76.7	-9.2527	ug/L	-9.2527	ppb	00:53:56
1	U 409.014†	-2863.7	-302.3	-10.533	ug/L	-10.533	ppb	00:53:36
1	V 292.402†	6322.3	8400.2	44.160	ug/L	44.160	ppb	00:53:36
1	Zn 213.857†	56900.7	60239.3	434.59	ug/L	434.59	ppb	00:53:36
1	SiO2†	368537.9	395298.1	21483	ug/L	21483	ppb	00:54:54
2	Sc Radial	4611.5	4611.5	93.9	%			00:52:44
2	Y RADIAL	5340.8	5340.8	94.57	%			00:52:44
2	Al 396.153Radial†	21290.1	22710.6	14996	ug/L	14996	ppb	00:52:44
2	Ca 317.933Radial†	104919.0	111685.6	197740	ug/L	197740	ppb	00:52:44
2	Fe 238.204 Radial†	1664.1	1760.7	21288	ug/L	21288	ppb	00:53:04
2	K 766.490 Radial†	9214.6	7241.0	1295.9	ug/L	1295.9	ppb	00:52:44
2	Mg 279.077 IEC†	191.6	201.5	8996.5	ug/L	8996.5	ppb	00:53:04
2	Na 589.592 Radial†	569.7	1886.5	529.17	ug/L	529.17	ppb	00:52:44
2	Sr 421.552†	46862.8	49900.5	259.97	ug/L	259.97	ppb	00:52:44
2	Sc 361.383	977749.1	977749.1	94.061	%			00:54:02
2	Y 371.029	825470.0	825470.0	93.330	%			00:54:02
2	Ag 328.068†	-631.6	-1145.5	-0.4674	ug/L	-0.4674	ppb	00:54:02
2	As 188.979†	-2.2	34.3	21.303	ug/L	21.303	ppb	00:54:22
2	B 249.677†	4572.5	5327.3	97.824	ug/L	97.824	ppb	00:54:02
2	Ba 233.527†	270882.0	287985.3	1851.0	ug/L	1851.0	ppb	00:54:02
2	Be 313.107†	-9246.2	-4956.0	0.1850	ug/L	0.1850	ppb	00:54:02
2	Cd 226.502†	33.5	271.2	0.6138	ug/L	0.6138	ppb	00:54:22
2	Co 228.616†	627.3	753.2	11.072	ug/L	11.072	ppb	00:54:22
2	Cr 267.716†	2433.2	2499.1	22.920	ug/L	22.920	ppb	00:54:22
2	Cu 324.752†	591805.4	620234.0	1657.4	ug/L	1657.4	ppb	00:54:02
2	Mn 257.610†	389429.9	413441.5	393.46	ug/L	393.46	ppb	00:54:02
2	Mo 202.031†	156.9	137.5	8.8093	ug/L	8.8093	ppb	00:54:22
2	Ni 231.604†	28242.9	29894.2	585.73	ug/L	585.73	ppb	00:54:02

2	P 214.914†	1576.2	1410.6	352.78	ug/L	352.78 ppb	00:54:22
2	Pb 220.353†	991.0	1129.2	106.34	ug/L	106.34 ppb	00:54:22
2	S 181.975 Axial†	3252.3	3397.5	3657.5	ug/L	3657.5 ppb	00:54:22
2	Sb 206.836†	88.0	59.0	12.268	ug/L	12.268 ppb	00:54:22
2	Se 196.026†	-152.7	-141.0	14.754	ug/L	14.754 ppb	00:54:22
2	Si 251.611†	373356.9	396372.8	10066	ug/L	10066 ppb	00:54:02
2	Sn 189.927†	-222.1	-231.7	-9.8330	ug/L	-9.8330 ppb	00:54:22
2	Ti 334.940†	599122.6	638211.2	890.58	ug/L	890.58 ppb	00:54:02
2	Tl 190.801†	-105.5	-67.9	-7.1321	ug/L	-7.1321 ppb	00:54:22
2	U 409.014†	-2952.0	-364.4	-12.142	ug/L	-12.142 ppb	00:54:02
2	V 292.402†	6330.1	8338.3	43.807	ug/L	43.807 ppb	00:54:02
2	Zn 213.857†	57407.9	60147.0	433.91	ug/L	433.91 ppb	00:54:02
2	SiO2†	370717.5	393525.3	21387	ug/L	21387 ppb	00:54:59
3	Sc Radial	4573.1	4573.1	93.1	%		00:53:09
3	Y RADIAL	5230.9	5230.9	92.63	%		00:53:09
3	Al 396.153Radial†	20938.7	22524.0	14873	ug/L	14873 ppb	00:53:09
3	Ca 317.933Radial†	103386.3	110979.5	196490	ug/L	196490 ppb	00:53:09
3	Fe 238.204 Radial†	1671.5	1783.6	21564	ug/L	21564 ppb	00:53:29
3	K 766.490 Radial†	9115.5	7217.1	1291.7	ug/L	1291.7 ppb	00:53:09
3	Mg 279.077 IEC†	189.3	200.7	8961.9	ug/L	8961.9 ppb	00:53:29
3	Na 589.592 Radial†	534.5	1853.8	519.99	ug/L	519.99 ppb	00:53:09
3	Sr 421.552†	46023.3	49418.8	257.45	ug/L	257.45 ppb	00:53:09
3	Sc 361.383	975183.0	975183.0	93.814	%		00:54:28
3	Y 371.029	824648.1	824648.1	93.237	%		00:54:28
3	Ag 328.068†	-695.1	-1215.0	-0.6332	ug/L	-0.6332 ppb	00:54:28
3	As 188.979†	4.3	41.2	23.497	ug/L	23.497 ppb	00:54:48
3	B 249.677†	4519.3	5283.4	96.955	ug/L	96.955 ppb	00:54:28
3	Ba 233.527†	269989.9	287792.2	1849.8	ug/L	1849.8 ppb	00:54:28
3	Be 313.107†	-9307.1	-5046.9	0.1554	ug/L	0.1554 ppb	00:54:28
3	Cd 226.502†	29.4	267.0	0.5481	ug/L	0.5481 ppb	00:54:48
3	Co 228.616†	638.2	766.6	11.290	ug/L	11.290 ppb	00:54:48
3	Cr 267.716†	2423.7	2495.7	22.895	ug/L	22.895 ppb	00:54:48
3	Cu 324.752†	589170.7	619081.2	1654.4	ug/L	1654.4 ppb	00:54:28
3	Mn 257.610†	388309.1	413336.3	393.39	ug/L	393.39 ppb	00:54:28
3	Mo 202.031†	157.5	138.6	8.8851	ug/L	8.8851 ppb	00:54:48
3	Ni 231.604†	28122.1	29844.4	584.75	ug/L	584.75 ppb	00:54:28
3	P 214.914†	1575.5	1414.3	354.63	ug/L	354.63 ppb	00:54:48
3	Pb 220.353†	1001.6	1143.2	107.61	ug/L	107.61 ppb	00:54:48
3	S 181.975 Axial†	3248.7	3402.8	3663.2	ug/L	3663.2 ppb	00:54:48
3	Sb 206.836†	92.2	63.7	13.494	ug/L	13.494 ppb	00:54:48
3	Se 196.026†	-165.4	-155.0	9.5565	ug/L	9.5565 ppb	00:54:48
3	Si 251.611†	372607.3	396618.2	10072	ug/L	10072 ppb	00:54:28
3	Sn 189.927†	-232.8	-243.8	-11.553	ug/L	-11.553 ppb	00:54:48
3	Ti 334.940†	597132.2	637765.7	889.90	ug/L	889.90 ppb	00:54:28
3	Tl 190.801†	-90.3	-52.0	-3.3008	ug/L	-3.3008 ppb	00:54:48
3	U 409.014†	-2960.5	-381.8	-12.627	ug/L	-12.627 ppb	00:54:28
3	V 292.402†	6428.3	8460.7	44.465	ug/L	44.465 ppb	00:54:28
3	Zn 213.857†	57225.3	60113.0	433.65	ug/L	433.65 ppb	00:54:28
3	SiO2†	371172.2	395047.1	21470	ug/L	21470 ppb	00:55:05

Mean Data: 1201977917|925187|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	973526.7	93.655	%	0.5051				0.54%
Sc Radial	4603.9	93.8	%	0.57				0.60%
Y 371.029	822181.5	92.958	%	0.5654				0.61%
Y RADIAL	5298.1	93.82	%	1.043				1.11%
Ag 328.068†	-1184.5	-0.5813	ug/L	0.09882	-0.5813	ppb	0.09882	17.00%
Al 396.153Radial†	22563.4	14899	ug/L	87.2	14899	ppb	87.2	0.59%
As 188.979†	42.5	23.878	ug/L	2.7855	23.878	ppb	2.7855	11.67%
B 249.677†	5300.9	97.314	ug/L	0.4534	97.314	ppb	0.4534	0.47%
Ba 233.527†	288049.9	1851.4	ug/L	1.89	1851.4	ppb	1.89	0.10%
Be 313.107†	-5014.6	0.1662	ug/L	0.01628	0.1662	ppb	0.01628	9.79%
Ca 317.933Radial†	111100.1	196710	ug/L	948.1	196710	ppb	948.1	0.48%
Cd 226.502†	271.5	0.6082	ug/L	0.05758	0.6082	ppb	0.05758	9.47%
Co 228.616†	758.2	11.153	ug/L	0.1189	11.153	ppb	0.1189	1.07%
Cr 267.716†	2506.2	22.986	ug/L	0.1359	22.986	ppb	0.1359	0.59%
Cu 324.752†	619630.7	1655.8	ug/L	1.54	1655.8	ppb	1.54	0.09%
Fe 238.204 Radial†	1767.1	21364	ug/L	174.9	21364	ppb	174.9	0.82%
K 766.490 Radial†	7225.5	1293.2	ug/L	2.35	1293.2	ppb	2.35	0.18%

Mg 279.077 IEC†	200.3	8945.0	ug/L	61.76	8945.0	ppb	61.76	0.69%
Mn 257.610†	413726.5	393.74	ug/L	0.545	393.74	ppb	0.545	0.14%
Mo 202.031†	134.2	8.6364	ug/L	0.36704	8.6364	ppb	0.36704	4.25%
Na 589.592 Radial†	1863.7	522.77	ug/L	5.553	522.77	ppb	5.553	1.06%
Ni 231.604†	29912.2	586.08	ug/L	1.534	586.08	ppb	1.534	0.26%
P 214.914†	1418.1	356.27	ug/L	4.536	356.27	ppb	4.536	1.27%
Pb 220.353†	1137.9	107.13	ug/L	0.690	107.13	ppb	0.690	0.64%
S 181.975 Axial†	3412.4	3673.5	ug/L	22.95	3673.5	ppb	22.95	0.62%
Sb 206.836†	54.8	11.138	ug/L	3.0805	11.138	ppb	3.0805	27.66%
Se 196.026†	-143.0	14.117	ug/L	4.2772	14.117	ppb	4.2772	30.30%
Si 251.611†	396736.7	10075	ug/L	11.1	10075	ppb	11.1	0.11%
Sn 189.927†	-241.4	-11.219	ug/L	1.2526	-11.219	ppb	1.2526	11.16%
Sr 421.552†	49585.6	258.32	ug/L	1.424	258.32	ppb	1.424	0.55%
Ti 334.940†	638042.9	890.29	ug/L	0.352	890.29	ppb	0.352	0.04%
Tl 190.801†	-65.5	-6.5619	ug/L	3.01665	-6.5619	ppb	3.01665	45.97%
U 409.014†	-349.5	-11.767	ug/L	1.0963	-11.767	ppb	1.0963	9.32%
V 292.402†	8399.7	44.144	ug/L	0.3295	44.144	ppb	0.3295	0.75%
Zn 213.857†	60166.4	434.05	ug/L	0.485	434.05	ppb	0.485	0.11%
SiO2†	394623.5	21447	ug/L	52.2	21447	ppb	52.2	0.24%

Sequence No.: 27
Sample ID: 241336001|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 12/5/2009 01:04:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241336001|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4784.3	4784.3	97.4	%			01:06:18
1	Y RADIAL	7651.3	7651.3	135.5	%			01:06:18
1	Al 396.153Radial†	28960.7	29763.4	19653	ug/L	19653	ppb	01:06:18
1	Ca 317.933Radial†	2103.5	2140.8	3790.3	ug/L	3790.3	ppb	01:06:38
1	Fe 238.204 Radial†	6204.7	6356.3	76849	ug/L	76849	ppb	01:06:18
1	K 766.490 Radial†	19583.8	17527.5	3159.5	ug/L	3159.5	ppb	01:06:18
1	Mg 279.077 IEC†	76.1	75.6	3316.0	ug/L	3316.0	ppb	01:06:38
1	Na 589.592 Radial†	3643.9	5019.3	1407.9	ug/L	1407.9	ppb	01:06:18
1	Sr 421.552†	5893.3	6055.2	31.733	ug/L	31.733	ppb	01:06:18
1	Sc 361.383	1034636.8	1034636.8	99.534	%			01:07:36
1	Y 371.029	1216150.0	1216150.0	137.50	%			01:07:36
1	Ag 328.068†	-5278.5	-5777.3	2.0018	ug/L	2.0018	ppb	01:07:42
1	As 188.979†	-110.2	-74.1	25.983	ug/L	25.983	ppb	01:08:02
1	B 249.677†	411.0	879.0	6.3797	ug/L	6.3797	ppb	01:07:42
1	Ba 233.527†	25581.1	25700.9	168.08	ug/L	168.08	ppb	01:07:42
1	Be 313.107†	-28410.8	-23670.0	1.3359	ug/L	1.3359	ppb	01:07:42
1	Cd 226.502†	667.5	906.3	0.2447	ug/L	0.2447	ppb	01:08:02
1	Co 228.616†	824.4	914.6	4.6092	ug/L	4.6092	ppb	01:08:02
1	Cr 267.716†	8721.8	8674.9	79.513	ug/L	79.513	ppb	01:07:42
1	Cu 324.752†	15649.7	6785.5	22.041	ug/L	22.041	ppb	01:07:42
1	Mn 257.610†	3303304.0	3318201.2	3149.8	ug/L	3149.8	ppb	01:07:36
1	Mo 202.031†	215.3	187.0	15.377	ug/L	15.377	ppb	01:08:02
1	Ni 231.604†	2063.8	1941.5	38.031	ug/L	38.031	ppb	01:08:02
1	P 214.914†	1800.8	1544.2	632.57	ug/L	632.57	ppb	01:08:02
1	Pb 220.353†	289.8	366.7	32.536	ug/L	32.536	ppb	01:08:02
1	S 181.975 Axial†	111.2	51.6	51.772	ug/L	51.772	ppb	01:08:02
1	Sb 206.836†	78.8	44.6	-1.1051	ug/L	-1.1051	ppb	01:08:02
1	Se 196.026†	-471.2	-452.0	78.768	ug/L	78.768	ppb	01:08:02
1	Si 251.611†	427600.5	429045.9	10895	ug/L	10895	ppb	01:07:36
1	Sn 189.927†	39.5	44.1	7.2597	ug/L	7.2597	ppb	01:08:02
1	Ti 334.940†	3198797.3	3215042.1	4434.7	ug/L	4434.7	ppb	01:07:36
1	Tl 190.801†	-273.9	-230.9	-3.0554	ug/L	-3.0554	ppb	01:08:02
1	U 409.014†	-15644.5	-12943.8	-344.47	ug/L	-344.47	ppb	01:07:36
1	V 292.402†	7915.8	9561.4	37.700	ug/L	37.700	ppb	01:07:42
1	Zn 213.857†	60008.8	59404.3	428.80	ug/L	428.80	ppb	01:07:42
1	SiO2†	428155.1	429561.7	23344	ug/L	23344	ppb	01:09:11
2	Sc Radial	4826.9	4826.9	98.3	%			01:06:43
2	Y RADIAL	7714.0	7714.0	136.6	%			01:06:43
2	Al 396.153Radial†	29252.1	29797.8	19676	ug/L	19676	ppb	01:06:43
2	Ca 317.933Radial†	2085.9	2103.8	3724.9	ug/L	3724.9	ppb	01:07:03
2	Fe 238.204 Radial†	6271.6	6368.2	76993	ug/L	76993	ppb	01:06:43
2	K 766.490 Radial†	19445.0	17209.1	3101.6	ug/L	3101.6	ppb	01:06:43
2	Mg 279.077 IEC†	74.2	72.9	3197.6	ug/L	3197.6	ppb	01:07:03
2	Na 589.592 Radial†	3731.8	5075.8	1423.8	ug/L	1423.8	ppb	01:06:43
2	Sr 421.552†	5971.8	6081.7	31.873	ug/L	31.873	ppb	01:06:43
2	Sc 361.383	1036802.1	1036802.1	99.742	%			01:08:08
2	Y 371.029	1219805.2	1219805.2	137.91	%			01:08:08
2	Ag 328.068†	-5243.9	-5731.5	2.2305	ug/L	2.2305	ppb	01:08:14
2	As 188.979†	-105.6	-69.2	27.483	ug/L	27.483	ppb	01:08:34
2	B 249.677†	418.5	885.7	6.4856	ug/L	6.4856	ppb	01:08:14
2	Ba 233.527†	25605.6	25671.8	167.90	ug/L	167.90	ppb	01:08:14
2	Be 313.107†	-28803.6	-24004.1	1.2214	ug/L	1.2214	ppb	01:08:14
2	Cd 226.502†	702.0	939.5	0.5202	ug/L	0.5202	ppb	01:08:34
2	Co 228.616†	841.8	930.3	4.8759	ug/L	4.8759	ppb	01:08:34
2	Cr 267.716†	8698.7	8633.4	79.143	ug/L	79.143	ppb	01:08:14
2	Cu 324.752†	15911.6	7015.2	22.662	ug/L	22.662	ppb	01:08:14
2	Mn 257.610†	3301312.1	3309273.0	3141.3	ug/L	3141.3	ppb	01:08:08
2	Mo 202.031†	203.3	174.6	14.725	ug/L	14.725	ppb	01:08:34
2	Ni 231.604†	2096.3	1969.8	38.586	ug/L	38.586	ppb	01:08:34

2	P 214.914†	1803.3	1542.9	631.80	ug/L	631.80 ppb	01:08:34
2	Pb 220.353†	311.3	387.6	34.492	ug/L	34.492 ppb	01:08:34
2	S 181.975 Axial†	94.7	34.8	33.640	ug/L	33.640 ppb	01:08:34
2	Sb 206.836†	78.8	44.3	-1.1524	ug/L	-1.1524 ppb	01:08:34
2	Se 196.026†	-482.9	-462.7	74.541	ug/L	74.541 ppb	01:08:34
2	Si 251.611†	427759.0	428307.6	10876	ug/L	10876 ppb	01:08:08
2	Sn 189.927†	44.9	49.4	7.9541	ug/L	7.9541 ppb	01:08:34
2	Ti 334.940†	3201671.0	3211211.3	4429.5	ug/L	4429.5 ppb	01:08:08
2	Tl 190.801†	-295.0	-251.5	-8.1346	ug/L	-8.1346 ppb	01:08:34
2	U 409.014†	-15855.9	-13123.0	-349.12	ug/L	-349.12 ppb	01:08:08
2	V 292.402†	7788.0	9416.7	36.834	ug/L	36.834 ppb	01:08:14
2	Zn 213.857†	59911.8	59181.1	427.15	ug/L	427.15 ppb	01:08:14
2	SiO2†	427401.3	427907.6	23254	ug/L	23254 ppb	01:09:17
3	Sc Radial	4867.8	4867.8	99.1	%		01:07:08
3	Y RADIAL	7748.5	7748.5	137.2	%		01:07:08
3	Al 396.153Radial†	29411.1	29708.2	19616	ug/L	19616 ppb	01:07:08
3	Ca 317.933Radial†	2074.2	2074.2	3672.4	ug/L	3672.4 ppb	01:07:28
3	Fe 238.204 Radial†	6292.5	6335.7	76600	ug/L	76600 ppb	01:07:08
3	K 766.490 Radial†	19579.5	17178.6	3096.2	ug/L	3096.2 ppb	01:07:08
3	Mg 279.077 IEC†	72.2	70.4	3083.4	ug/L	3083.4 ppb	01:07:28
3	Na 589.592 Radial†	3649.1	4960.5	1391.4	ug/L	1391.4 ppb	01:07:08
3	Sr 421.552†	5982.8	6041.8	31.664	ug/L	31.664 ppb	01:07:08
3	Sc 361.383	1029295.7	1029295.7	99.020	%		01:08:40
3	Y 371.029	1210687.2	1210687.2	136.88	%		01:08:40
3	Ag 328.068†	-5271.0	-5797.3	1.8468	ug/L	1.8468 ppb	01:08:46
3	As 188.979†	-106.3	-70.7	26.890	ug/L	26.890 ppb	01:09:06
3	B 249.677†	378.6	848.4	5.8344	ug/L	5.8344 ppb	01:08:46
3	Ba 233.527†	25896.3	26152.6	170.98	ug/L	170.98 ppb	01:08:46
3	Be 313.107†	-29261.8	-24677.5	0.9958	ug/L	0.9958 ppb	01:08:46
3	Cd 226.502†	666.7	909.0	0.2936	ug/L	0.2936 ppb	01:09:06
3	Co 228.616†	812.9	907.3	4.5232	ug/L	4.5232 ppb	01:09:06
3	Cr 267.716†	8758.2	8757.1	80.248	ug/L	80.248 ppb	01:08:46
3	Cu 324.752†	15927.9	7148.1	22.996	ug/L	22.996 ppb	01:08:46
3	Mn 257.610†	3270585.5	3302380.2	3134.8	ug/L	3134.8 ppb	01:08:40
3	Mo 202.031†	226.3	199.3	16.009	ug/L	16.009 ppb	01:09:06
3	Ni 231.604†	2081.2	1969.9	38.588	ug/L	38.588 ppb	01:09:06
3	P 214.914†	1805.5	1558.2	638.91	ug/L	638.91 ppb	01:09:06
3	Pb 220.353†	298.8	377.3	33.547	ug/L	33.547 ppb	01:09:06
3	S 181.975 Axial†	99.9	40.8	40.118	ug/L	40.118 ppb	01:09:06
3	Sb 206.836†	77.2	43.4	-1.3880	ug/L	-1.3880 ppb	01:09:06
3	Se 196.026†	-472.3	-455.6	76.306	ug/L	76.306 ppb	01:09:06
3	Si 251.611†	424067.7	427707.4	10861	ug/L	10861 ppb	01:08:40
3	Sn 189.927†	42.2	47.0	7.6310	ug/L	7.6310 ppb	01:09:06
3	Ti 334.940†	3172783.0	3205446.7	4421.5	ug/L	4421.5 ppb	01:08:40
3	Tl 190.801†	-265.8	-224.1	-1.6127	ug/L	-1.6127 ppb	01:09:06
3	U 409.014†	-15575.6	-12955.8	-344.75	ug/L	-344.75 ppb	01:08:40
3	V 292.402†	7944.4	9631.6	38.157	ug/L	38.157 ppb	01:08:46
3	Zn 213.857†	60633.7	60348.3	435.76	ug/L	435.76 ppb	01:08:46
3	SiO2†	428127.1	431765.6	23464	ug/L	23464 ppb	01:09:22

Mean Data: 241336001|925187|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033578.2	99.432	%	0.3717				0.37%
Sc Radial	4826.3	98.3	%	0.85				0.86%
Y 371.029	1215547.5	137.43	%	0.519				0.38%
Y RADIAL	7704.6	136.4	%	0.87				0.64%
Ag 328.068†	-5768.7	2.0264	ug/L	0.19307	2.0264	ppb	0.19307	9.53%
Al 396.153Radial†	29756.4	19648	ug/L	29.9	19648	ppb	29.9	0.15%
As 188.979†	-71.4	26.785	ug/L	0.7552	26.785	ppb	0.7552	2.82%
B 249.677†	871.0	6.2332	ug/L	0.34946	6.2332	ppb	0.34946	5.61%
Ba 233.527†	25841.8	168.99	ug/L	1.726	168.99	ppb	1.726	1.02%
Be 313.107†	-24117.2	1.1844	ug/L	0.17306	1.1844	ppb	0.17306	14.61%
Ca 317.933Radial†	2106.3	3729.2	ug/L	59.07	3729.2	ppb	59.07	1.58%
Cd 226.502†	918.2	0.3528	ug/L	0.14701	0.3528	ppb	0.14701	41.67%
Co 228.616†	917.4	4.6694	ug/L	0.18391	4.6694	ppb	0.18391	3.94%
Cr 267.716†	8688.4	79.634	ug/L	0.5625	79.634	ppb	0.5625	0.71%
Cu 324.752†	6982.9	22.566	ug/L	0.4849	22.566	ppb	0.4849	2.15%
Fe 238.204 Radial†	6353.4	76814	ug/L	198.9	76814	ppb	198.9	0.26%
K 766.490 Radial†	17305.1	3119.1	ug/L	35.12	3119.1	ppb	35.12	1.13%

Mg 279.077 IEC†	73.0	3199.0	ug/L	116.31	3199.0	ppb	116.31	3.64%
Mn 257.610†	3309951.5	3141.9	ug/L	7.52	3141.9	ppb	7.52	0.24%
Mo 202.031†	187.0	15.370	ug/L	0.6419	15.370	ppb	0.6419	4.18%
Na 589.592 Radial†	5018.5	1407.7	ug/L	16.17	1407.7	ppb	16.17	1.15%
Ni 231.604†	1960.4	38.402	ug/L	0.3208	38.402	ppb	0.3208	0.84%
P 214.914†	1548.4	634.43	ug/L	3.900	634.43	ppb	3.900	0.61%
Pb 220.353†	377.2	33.525	ug/L	0.9784	33.525	ppb	0.9784	2.92%
S 181.975 Axial†	42.4	41.843	ug/L	9.1884	41.843	ppb	9.1884	21.96%
Sb 206.836†	44.1	-1.2151	ug/L	0.15155	-1.2151	ppb	0.15155	12.47%
Se 196.026†	-456.8	76.538	ug/L	2.1228	76.538	ppb	2.1228	2.77%
Si 251.611†	428353.6	10877	ug/L	17.0	10877	ppb	17.0	0.16%
Sn 189.927†	46.8	7.6149	ug/L	0.34746	7.6149	ppb	0.34746	4.56%
Sr 421.552†	6059.5	31.756	ug/L	0.1065	31.756	ppb	0.1065	0.34%
Ti 334.940†	3210566.7	4428.6	ug/L	6.67	4428.6	ppb	6.67	0.15%
Tl 190.801†	-235.5	-4.2675	ug/L	3.42577	-4.2675	ppb	3.42577	80.27%
U 409.014†	-13007.5	-346.11	ug/L	2.607	-346.11	ppb	2.607	0.75%
V 292.402†	9536.6	37.564	ug/L	0.6719	37.564	ppb	0.6719	1.79%
Zn 213.857†	59644.6	430.57	ug/L	4.573	430.57	ppb	4.573	1.06%
SiO2†	429744.9	23354	ug/L	105.2	23354	ppb	105.2	0.45%

Sequence No.: 28
Sample ID: 241336002|925187|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 12/5/2009 01:11:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241336002|925187|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4756.9	4756.9	96.9	%			01:13:27
1	Y RADIAL	7226.0	7226.0	128.0	%			01:13:27
1	Al 396.153Radial†	25469.9	26331.8	17387	ug/L	17387	ppb	01:13:27
1	Ca 317.933Radial†	4630.0	4760.8	8429.2	ug/L	8429.2	ppb	01:13:27
1	Fe 238.204 Radial†	7989.4	8235.1	99564	ug/L	99564	ppb	01:13:27
1	K 766.490 Radial†	19083.5	17126.9	3082.2	ug/L	3082.2	ppb	01:13:27
1	Mg 279.077 IEC†	103.2	104.0	4568.7	ug/L	4568.7	ppb	01:13:47
1	Na 589.592 Radial†	3165.1	4546.7	1275.4	ug/L	1275.4	ppb	01:13:27
1	Sr 421.552†	105931.9	109342.1	573.58	ug/L	573.58	ppb	01:13:27
1	Sc 361.383	1027926.6	1027926.6	98.888	%			01:14:45
1	Y 371.029	1151885.9	1151885.9	130.23	%			01:14:45
1	Ag 328.068†	-6076.5	-6618.9	5.9426	ug/L	5.9426	ppb	01:14:50
1	As 188.979†	-140.0	-105.0	25.675	ug/L	25.675	ppb	01:15:10
1	B 249.677†	617.0	1090.1	7.3384	ug/L	7.3384	ppb	01:14:50
1	Ba 233.527†	48638.2	49185.1	319.86	ug/L	319.86	ppb	01:14:50
1	Be 313.107†	-35885.1	-31414.6	0.2712	ug/L	0.2712	ppb	01:14:50
1	Cd 226.502†	967.8	1214.3	0.6861	ug/L	0.6861	ppb	01:15:10
1	Co 228.616†	1199.2	1299.0	9.2035	ug/L	9.2035	ppb	01:15:10
1	Cr 267.716†	18154.5	18270.9	166.18	ug/L	166.18	ppb	01:14:50
1	Cu 324.752†	23736.7	15066.1	45.313	ug/L	45.313	ppb	01:14:50
1	Mn 257.610†	3647063.6	3687490.2	3501.7	ug/L	3501.7	ppb	01:14:45
1	Mo 202.031†	303.5	277.7	21.799	ug/L	21.799	ppb	01:15:10
1	Ni 231.604†	4057.9	3971.6	77.804	ug/L	77.804	ppb	01:15:10
1	P 214.914†	2279.4	2039.9	831.61	ug/L	831.61	ppb	01:15:10
1	Pb 220.353†	1168.8	1257.5	113.78	ug/L	113.78	ppb	01:15:10
1	S 181.975 Axial†	367.4	311.5	332.15	ug/L	332.15	ppb	01:15:10
1	Sb 206.836†	96.2	62.6	0.1642	ug/L	0.1642	ppb	01:15:10
1	Se 196.026†	-608.8	-594.2	98.340	ug/L	98.340	ppb	01:15:10
1	Si 251.611†	343697.2	347003.7	8811.4	ug/L	8811.4	ppb	01:14:50
1	Sn 189.927†	-4.1	0.2	2.2401	ug/L	2.2401	ppb	01:15:10
1	Ti 334.940†	3670459.1	3712985.8	5121.7	ug/L	5121.7	ppb	01:14:45
1	Tl 190.801†	-321.2	-280.5	-7.9053	ug/L	-7.9053	ppb	01:15:10
1	U 409.014†	-15141.9	-12538.1	-337.01	ug/L	-337.01	ppb	01:14:45
1	V 292.402†	13355.3	15113.9	65.358	ug/L	65.358	ppb	01:14:50
1	Zn 213.857†	72841.4	72774.7	524.56	ug/L	524.56	ppb	01:14:50
1	SiO2†	350753.3	354097.7	19242	ug/L	19242	ppb	01:16:19
2	Sc Radial	4779.3	4779.3	97.3	%			01:13:52
2	Y RADIAL	7324.6	7324.6	129.7	%			01:13:52
2	Al 396.153Radial†	25628.7	26371.7	17413	ug/L	17413	ppb	01:13:52
2	Ca 317.933Radial†	4679.3	4789.1	8479.2	ug/L	8479.2	ppb	01:13:52
2	Fe 238.204 Radial†	8052.7	8261.4	99882	ug/L	99882	ppb	01:13:52
2	K 766.490 Radial†	19030.9	16980.6	3055.6	ug/L	3055.6	ppb	01:13:52
2	Mg 279.077 IEC†	105.8	106.2	4668.3	ug/L	4668.3	ppb	01:14:12
2	Na 589.592 Radial†	3159.5	4525.7	1269.4	ug/L	1269.4	ppb	01:13:52
2	Sr 421.552†	106435.6	109346.7	573.60	ug/L	573.60	ppb	01:13:52
2	Sc 361.383	1032949.7	1032949.7	99.371	%			01:15:17
2	Y 371.029	1159708.2	1159708.2	131.12	%			01:15:17
2	Ag 328.068†	-6039.0	-6551.3	6.3126	ug/L	6.3126	ppb	01:15:22
2	As 188.979†	-137.5	-101.8	26.644	ug/L	26.644	ppb	01:15:42
2	B 249.677†	419.8	888.5	3.4883	ug/L	3.4883	ppb	01:15:22
2	Ba 233.527†	48825.1	49133.9	319.55	ug/L	319.55	ppb	01:15:22
2	Be 313.107†	-36521.0	-31878.1	0.1055	ug/L	0.1055	ppb	01:15:22
2	Cd 226.502†	976.6	1218.5	0.6898	ug/L	0.6898	ppb	01:15:42
2	Co 228.616†	1178.7	1272.5	8.7839	ug/L	8.7839	ppb	01:15:42
2	Cr 267.716†	18283.8	18311.7	166.55	ug/L	166.55	ppb	01:15:22
2	Cu 324.752†	23699.3	14911.7	44.917	ug/L	44.917	ppb	01:15:22
2	Mn 257.610†	3658503.7	3681068.1	3495.7	ug/L	3495.7	ppb	01:15:17
2	Mo 202.031†	301.7	274.4	21.648	ug/L	21.648	ppb	01:15:42
2	Ni 231.604†	4041.1	3934.7	77.082	ug/L	77.082	ppb	01:15:42

2	P 214.914†	2294.7	2044.1	833.33	ug/L	833.33 ppb	01:15:42
2	Pb 220.353†	1154.9	1237.8	111.91	ug/L	111.91 ppb	01:15:42
2	S 181.975 Axial†	368.0	310.3	330.85	ug/L	330.85 ppb	01:15:42
2	Sb 206.836†	119.4	85.5	6.2480	ug/L	6.2480 ppb	01:15:42
2	Se 196.026†	-607.3	-589.7	101.49	ug/L	101.49 ppb	01:15:42
2	Si 251.611†	345332.5	346959.2	8810.3	ug/L	8810.3 ppb	01:15:22
2	Sn 189.927†	4.1	8.4	3.3425	ug/L	3.3425 ppb	01:15:42
2	Ti 334.940†	3680643.9	3705185.5	5111.0	ug/L	5111.0 ppb	01:15:17
2	Tl 190.801†	-304.6	-262.3	-3.6107	ug/L	-3.6107 ppb	01:15:42
2	U 409.014†	-15214.6	-12536.9	-337.01	ug/L	-337.01 ppb	01:15:17
2	V 292.402†	13483.6	15177.4	65.685	ug/L	65.685 ppb	01:15:22
2	Zn 213.857†	73172.7	72749.9	524.35	ug/L	524.35 ppb	01:15:22
2	SiO2†	350366.6	351983.8	19127	ug/L	19127 ppb	01:16:24
3	Sc Radial	4851.2	4851.2	98.8	%		01:14:17
3	Y RADIAL	7350.0	7350.0	130.2	%		01:14:17
3	Al 396.153Radial†	25864.2	26219.9	17313	ug/L	17313 ppb	01:14:17
3	Ca 317.933Radial†	4717.6	4756.6	8421.8	ug/L	8421.8 ppb	01:14:17
3	Fe 238.204 Radial†	8087.0	8173.5	98819	ug/L	98819 ppb	01:14:17
3	K 766.490 Radial†	19102.9	16763.8	3016.0	ug/L	3016.0 ppb	01:14:17
3	Mg 279.077 IEC†	107.3	106.1	4661.8	ug/L	4661.8 ppb	01:14:37
3	Na 589.592 Radial†	3326.9	4646.9	1303.5	ug/L	1303.5 ppb	01:14:17
3	Sr 421.552†	107691.5	108997.6	571.77	ug/L	571.77 ppb	01:14:17
3	Sc 361.383	1027783.3	1027783.3	98.874	%		01:15:48
3	Y 371.029	1155414.7	1155414.7	130.63	%		01:15:48
3	Ag 328.068†	-6152.1	-6696.2	5.3909	ug/L	5.3909 ppb	01:15:54
3	As 188.979†	-154.5	-119.7	20.880	ug/L	20.880 ppb	01:16:14
3	B 249.677†	456.6	927.9	4.3727	ug/L	4.3727 ppb	01:15:54
3	Ba 233.527†	49086.6	49645.4	322.79	ug/L	322.79 ppb	01:15:54
3	Be 313.107†	-37166.2	-32715.4	-0.1592	ug/L	-0.1592 ppb	01:15:54
3	Cd 226.502†	979.5	1226.3	0.8657	ug/L	0.8657 ppb	01:16:14
3	Co 228.616†	1216.5	1316.7	9.5336	ug/L	9.5336 ppb	01:16:14
3	Cr 267.716†	18355.5	18476.7	168.01	ug/L	168.01 ppb	01:15:54
3	Cu 324.752†	23813.1	15146.7	45.491	ug/L	45.491 ppb	01:15:54
3	Mn 257.610†	3638662.4	3679507.6	3494.1	ug/L	3494.1 ppb	01:15:48
3	Mo 202.031†	312.0	286.3	22.201	ug/L	22.201 ppb	01:16:14
3	Ni 231.604†	4088.3	4002.9	78.417	ug/L	78.417 ppb	01:16:14
3	P 214.914†	2308.8	2070.0	845.64	ug/L	845.64 ppb	01:16:14
3	Pb 220.353†	1206.0	1295.3	117.37	ug/L	117.37 ppb	01:16:14
3	S 181.975 Axial†	372.2	316.3	337.38	ug/L	337.38 ppb	01:16:14
3	Sb 206.836†	88.9	55.3	-1.7446	ug/L	-1.7446 ppb	01:16:14
3	Se 196.026†	-611.9	-597.5	94.195	ug/L	94.195 ppb	01:16:14
3	Si 251.611†	346883.4	350274.6	8894.5	ug/L	8894.5 ppb	01:15:54
3	Sn 189.927†	4.3	8.6	3.3480	ug/L	3.3480 ppb	01:16:14
3	Ti 334.940†	3660915.7	3703851.4	5109.1	ug/L	5109.1 ppb	01:15:48
3	Tl 190.801†	-298.7	-257.8	-2.5511	ug/L	-2.5511 ppb	01:16:14
3	U 409.014†	-14752.5	-12146.5	-326.79	ug/L	-326.79 ppb	01:15:48
3	V 292.402†	13360.7	15121.3	65.555	ug/L	65.555 ppb	01:15:54
3	Zn 213.857†	73533.8	73485.4	529.84	ug/L	529.84 ppb	01:15:54
3	SiO2†	351967.8	355375.5	19312	ug/L	19312 ppb	01:16:30

Mean Data: 241336002|925187|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1029553.2	99.045	%	0.2831				0.29%
Sc Radial	4795.8	97.7	%	1.00				1.03%
Y 371.029	1155669.6	130.66	%	0.443				0.34%
Y RADIAL	7300.2	129.3	%	1.16				0.90%
Ag 328.068†	-6622.1	5.8820	ug/L	0.46385	5.8820	ppb	0.46385	7.89%
Al 396.153Radial†	26307.8	17371	ug/L	52.0	17371	ppb	52.0	0.30%
As 188.979†	-108.8	24.400	ug/L	3.0861	24.400	ppb	3.0861	12.65%
B 249.677†	968.8	5.0665	ug/L	2.01660	5.0665	ppb	2.01660	39.80%
Ba 233.527†	49321.5	320.74	ug/L	1.790	320.74	ppb	1.790	0.56%
Be 313.107†	-32002.7	0.0725	ug/L	0.21706	0.0725	ppb	0.21706	299.39%
Ca 317.933Radial†	4768.8	8443.4	ug/L	31.24	8443.4	ppb	31.24	0.37%
Cd 226.502†	1219.7	0.7472	ug/L	0.10263	0.7472	ppb	0.10263	13.73%
Co 228.616†	1296.0	9.1737	ug/L	0.37573	9.1737	ppb	0.37573	4.10%
Cr 267.716†	18353.1	166.92	ug/L	0.969	166.92	ppb	0.969	0.58%
Cu 324.752†	15041.5	45.240	ug/L	0.2936	45.240	ppb	0.2936	0.65%
Fe 238.204 Radial†	8223.3	99422	ug/L	545.5	99422	ppb	545.5	0.55%
K 766.490 Radial†	16957.1	3051.2	ug/L	33.28	3051.2	ppb	33.28	1.09%

Mg 279.077 IEC†	105.4	4632.9	ug/L	55.72	4632.9	ppb	55.72	1.20%
Mn 257.610†	3682688.6	3497.1	ug/L	4.03	3497.1	ppb	4.03	0.12%
Mo 202.031†	279.5	21.883	ug/L	0.2860	21.883	ppb	0.2860	1.31%
Na 589.592 Radial†	4573.1	1282.8	ug/L	18.18	1282.8	ppb	18.18	1.42%
Ni 231.604†	3969.7	77.768	ug/L	0.6680	77.768	ppb	0.6680	0.86%
P 214.914†	2051.3	836.86	ug/L	7.650	836.86	ppb	7.650	0.91%
Pb 220.353†	1263.5	114.35	ug/L	2.776	114.35	ppb	2.776	2.43%
S 181.975 Axial†	312.7	333.46	ug/L	3.456	333.46	ppb	3.456	1.04%
Sb 206.836†	67.8	1.5558	ug/L	4.17406	1.5558	ppb	4.17406	268.28%
Se 196.026†	-593.8	98.009	ug/L	3.6598	98.009	ppb	3.6598	3.73%
Si 251.611†	348079.1	8838.7	ug/L	48.29	8838.7	ppb	48.29	0.55%
Sn 189.927†	5.8	2.9768	ug/L	0.63808	2.9768	ppb	0.63808	21.43%
Sr 421.552†	109228.8	572.98	ug/L	1.050	572.98	ppb	1.050	0.18%
Ti 334.940†	3707340.9	5114.0	ug/L	6.81	5114.0	ppb	6.81	0.13%
Tl 190.801†	-266.9	-4.6891	ug/L	2.83530	-4.6891	ppb	2.83530	60.47%
U 409.014†	-12407.2	-333.60	ug/L	5.901	-333.60	ppb	5.901	1.77%
V 292.402†	15137.6	65.533	ug/L	0.1644	65.533	ppb	0.1644	0.25%
Zn 213.857†	73003.3	526.25	ug/L	3.114	526.25	ppb	3.114	0.59%
SiO2†	353819.0	19227	ug/L	93.1	19227	ppb	93.1	0.48%

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 01:47:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4299.3	4299.3	87.6	%			01:49:11
1	Y RADIAL	4894.4	4894.4	86.67	%			01:49:11
1	Al 396.153Radial†	7477.1	8582.5	5645.2	ug/L	5645.2	ppb	01:49:11
1	Ca 317.933Radial†	2804.8	3185.2	5639.4	ug/L	5639.4	ppb	01:49:31
1	Fe 238.204 Radial†	423.4	472.6	5729.4	ug/L	5729.4	ppb	01:49:31
1	K 766.490 Radial†	29126.4	30692.4	5584.7	ug/L	5584.7	ppb	01:49:11
1	Mg 279.077 IEC†	116.5	130.6	5847.8	ug/L	5847.8	ppb	01:49:31
1	Na 589.592 Radial†	34383.3	40545.3	11373	ug/L	11373	ppb	01:49:11
1	Sr 421.552†	93422.8	106695.0	559.72	ug/L	559.72	ppb	01:49:11
1	Sc 361.383	1012171.3	1012171.3	97.373	%			01:50:30
1	Y 371.029	849502.2	849502.2	96.047	%			01:50:30
1	Ag 328.068†	125286.8	128193.4	511.44	ug/L	511.44	ppb	01:50:30
1	As 188.979†	1554.8	1633.4	513.48	ug/L	513.48	ppb	01:50:50
1	B 249.677†	25408.1	26559.8	499.89	ug/L	499.89	ppb	01:50:30
1	Ba 233.527†	77302.3	79388.3	511.36	ug/L	511.36	ppb	01:50:30
1	Be 313.107†	1582466.1	1630040.8	509.24	ug/L	509.24	ppb	01:50:30
1	Cd 226.502†	56989.2	58762.6	512.21	ug/L	512.21	ppb	01:50:30
1	Co 228.616†	30027.3	30923.9	509.54	ug/L	509.54	ppb	01:50:50
1	Cr 267.716†	55013.9	56410.6	507.62	ug/L	507.62	ppb	01:50:30
1	Cu 324.752†	195092.1	191418.9	511.48	ug/L	511.48	ppb	01:50:30
1	Mn 257.610†	527540.9	541199.2	512.95	ug/L	512.95	ppb	01:50:30
1	Mo 202.031†	9434.7	9660.1	513.04	ug/L	513.04	ppb	01:50:50
1	Ni 231.604†	25403.3	25956.9	508.26	ug/L	508.26	ppb	01:50:50
1	P 214.914†	5894.0	5787.9	2511.3	ug/L	2511.3	ppb	01:50:50
1	Pb 220.353†	5261.6	5479.2	516.00	ug/L	516.00	ppb	01:50:50
1	S 181.975 Axial†	977.0	943.3	1015.2	ug/L	1015.2	ppb	01:50:50
1	Sb 206.836†	1924.8	1942.1	519.44	ug/L	519.44	ppb	01:50:50
1	Se 196.026†	1115.1	1166.6	539.11	ug/L	539.11	ppb	01:50:50
1	Si 251.611†	98040.2	100128.0	2530.5	ug/L	2530.5	ppb	01:50:30
1	Sn 189.927†	3720.3	3825.0	506.56	ug/L	506.56	ppb	01:50:50
1	Ti 334.940†	358657.4	369595.8	509.67	ug/L	509.67	ppb	01:50:30
1	Tl 190.801†	2010.5	2109.0	513.33	ug/L	513.33	ppb	01:50:50
1	U 409.014†	16019.7	19225.9	495.37	ug/L	495.37	ppb	01:50:30
1	V 292.402†	84695.3	88589.2	513.94	ug/L	513.94	ppb	01:50:30
1	Zn 213.857†	68453.4	69414.9	505.47	ug/L	505.47	ppb	01:50:30
1	SiO2†	97533.4	99566.2	5384.5	ug/L	5384.5	ppb	01:51:50
2	Sc Radial	4803.9	4803.9	97.8	%			01:49:36
2	Y RADIAL	5500.3	5500.3	97.40	%			01:49:36
2	Al 396.153Radial†	7416.3	7623.5	5012.1	ug/L	5012.1	ppb	01:49:36
2	Ca 317.933Radial†	2803.4	2847.3	5041.2	ug/L	5041.2	ppb	01:49:56
2	Fe 238.204 Radial†	421.7	420.0	5093.8	ug/L	5093.8	ppb	01:49:56
2	K 766.490 Radial†	29115.7	27187.7	4946.4	ug/L	4946.4	ppb	01:49:36
2	Mg 279.077 IEC†	115.7	115.8	5187.2	ug/L	5187.2	ppb	01:49:56
2	Na 589.592 Radial†	34198.5	36232.0	10163	ug/L	10163	ppb	01:49:36
2	Sr 421.552†	92976.3	95032.4	498.54	ug/L	498.54	ppb	01:49:36
2	Sc 361.383	1019716.1	1019716.1	98.098	%			01:50:57
2	Y 371.029	854661.7	854661.7	96.630	%			01:50:57
2	Ag 328.068†	125935.2	127902.4	510.09	ug/L	510.09	ppb	01:50:57
2	As 188.979†	1566.4	1633.3	513.37	ug/L	513.37	ppb	01:51:18
2	B 249.677†	25543.0	26504.3	498.93	ug/L	498.93	ppb	01:50:57
2	Ba 233.527†	77916.8	79427.3	511.59	ug/L	511.59	ppb	01:50:57
2	Be 313.107†	1591692.7	1627421.7	508.42	ug/L	508.42	ppb	01:50:57
2	Cd 226.502†	57336.1	58683.2	511.58	ug/L	511.58	ppb	01:50:57
2	Co 228.616†	30081.1	30750.6	506.69	ug/L	506.69	ppb	01:51:18
2	Cr 267.716†	55495.7	56483.7	508.27	ug/L	508.27	ppb	01:50:57
2	Cu 324.752†	196283.9	191151.4	510.73	ug/L	510.73	ppb	01:50:57
2	Mn 257.610†	531306.5	541029.2	512.74	ug/L	512.74	ppb	01:50:57
2	Mo 202.031†	9441.1	9594.9	509.54	ug/L	509.54	ppb	01:51:18
2	Ni 231.604†	25470.5	25832.3	505.83	ug/L	505.83	ppb	01:51:18

2	P 214.914†	5875.2	5723.9	2483.1 ug/L	2483.1 ppb	01:51:18
2	Pb 220.353†	5305.6	5484.0	516.35 ug/L	516.35 ppb	01:51:18
2	S 181.975 Axial†	979.0	937.9	1009.5 ug/L	1009.5 ppb	01:51:18
2	Sb 206.836†	1941.0	1944.0	519.89 ug/L	519.89 ppb	01:51:18
2	Se 196.026†	1112.7	1155.6	531.94 ug/L	531.94 ppb	01:51:18
2	Si 251.611†	98770.7	100127.8	2530.8 ug/L	2530.8 ppb	01:50:57
2	Sn 189.927†	3759.7	3836.9	508.06 ug/L	508.06 ppb	01:51:18
2	Ti 334.940†	360907.6	369164.3	509.04 ug/L	509.04 ppb	01:50:57
2	Tl 190.801†	2030.8	2114.4	514.63 ug/L	514.63 ppb	01:51:18
2	U 409.014†	16204.4	19292.5	497.17 ug/L	497.17 ppb	01:50:57
2	V 292.402†	85148.9	88408.0	512.93 ug/L	512.93 ppb	01:50:57
2	Zn 213.857†	69026.4	69478.9	506.04 ug/L	506.04 ppb	01:50:57
2	SiO2†	98416.0	99724.8	5393.7 ug/L	5393.7 ppb	01:51:56
3	Sc Radial	4653.9	4653.9	94.8 %		01:50:01
3	Y RADIAL	5285.5	5285.5	93.60 %		01:50:01
3	Al 396.153Radial†	7374.8	7824.0	5144.9 ug/L	5144.9 ppb	01:50:01
3	Ca 317.933Radial†	2775.7	2910.5	5153.0 ug/L	5153.0 ppb	01:50:21
3	Fe 238.204 Radial†	420.1	432.2	5240.5 ug/L	5240.5 ppb	01:50:21
3	K 766.490 Radial†	28686.0	27693.4	5038.5 ug/L	5038.5 ppb	01:50:01
3	Mg 279.077 IEC†	113.3	117.0	5241.8 ug/L	5241.8 ppb	01:50:21
3	Na 589.592 Radial†	33614.3	36742.0	10306 ug/L	10306 ppb	01:50:01
3	Sr 421.552†	91948.8	97010.7	508.91 ug/L	508.91 ppb	01:50:01
3	Sc 361.383	1026292.2	1026292.2	98.731 %		01:51:25
3	Y 371.029	859974.2	859974.2	97.231 %		01:51:25
3	Ag 328.068†	126896.0	128053.0	510.73 ug/L	510.73 ppb	01:51:25
3	As 188.979†	1550.3	1606.9	505.15 ug/L	505.15 ppb	01:51:45
3	B 249.677†	25960.1	26759.9	503.77 ug/L	503.77 ppb	01:51:25
3	Ba 233.527†	78365.6	79372.9	511.24 ug/L	511.24 ppb	01:51:25
3	Be 313.107†	1601191.8	1626646.3	508.18 ug/L	508.18 ppb	01:51:25
3	Cd 226.502†	57747.8	58725.7	511.93 ug/L	511.93 ppb	01:51:25
3	Co 228.616†	29723.5	30191.9	497.46 ug/L	497.46 ppb	01:51:45
3	Cr 267.716†	55821.4	56451.1	507.98 ug/L	507.98 ppb	01:51:25
3	Cu 324.752†	198006.8	191614.3	511.98 ug/L	511.98 ppb	01:51:25
3	Mn 257.610†	534643.9	540939.1	512.66 ug/L	512.66 ppb	01:51:25
3	Mo 202.031†	9319.7	9410.2	499.75 ug/L	499.75 ppb	01:51:45
3	Ni 231.604†	25146.3	25337.5	496.14 ug/L	496.14 ppb	01:51:45
3	P 214.914†	5813.5	5623.1	2437.6 ug/L	2437.6 ppb	01:51:45
3	Pb 220.353†	5214.3	5356.9	504.41 ug/L	504.41 ppb	01:51:45
3	S 181.975 Axial†	962.4	914.7	984.49 ug/L	984.49 ppb	01:51:45
3	Sb 206.836†	1911.6	1901.6	508.30 ug/L	508.30 ppb	01:51:45
3	Se 196.026†	1101.0	1136.5	523.98 ug/L	523.98 ppb	01:51:45
3	Si 251.611†	99331.7	100050.8	2529.0 ug/L	2529.0 ppb	01:51:25
3	Sn 189.927†	3699.0	3750.9	496.69 ug/L	496.69 ppb	01:51:45
3	Ti 334.940†	363362.3	369293.1	509.23 ug/L	509.23 ppb	01:51:25
3	Tl 190.801†	1992.9	2062.8	502.19 ug/L	502.19 ppb	01:51:45
3	U 409.014†	16432.7	19417.9	500.39 ug/L	500.39 ppb	01:51:25
3	V 292.402†	85649.8	88359.2	512.50 ug/L	512.50 ppb	01:51:25
3	Zn 213.857†	69536.9	69545.1	506.57 ug/L	506.57 ppb	01:51:25
3	SiO2†	99250.6	99927.3	5405.1 ug/L	5405.1 ppb	01:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1019393.2	98.067	%	0.6798				0.69%
Sc Radial	4585.7	93.4	%	5.28				5.65%
Y 371.029	854712.7	96.636	%	0.5920				0.61%
Y RADIAL	5226.7	92.55	%	5.439				5.88%
Ag 328.068†	128049.6	510.76	ug/L	0.677	510.76	ppb	0.677	0.13%
QC value within limits for Ag 328.068 Recovery = 102.15%								
Al 396.153Radial†	8010.0	5267.4	ug/L	333.86	5267.4	ppb	333.86	6.34%
QC value within limits for Al 396.153Radial Recovery = 105.35%								
As 188.979†	1624.5	510.67	ug/L	4.776	510.67	ppb	4.776	0.94%
QC value within limits for As 188.979 Recovery = 102.13%								
B 249.677†	26608.0	500.86	ug/L	2.560	500.86	ppb	2.560	0.51%
QC value within limits for B 249.677 Recovery = 100.17%								
Ba 233.527†	79396.2	511.40	ug/L	0.175	511.40	ppb	0.175	0.03%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1628036.3	508.61	ug/L	0.555	508.61	ppb	0.555	0.11%
QC value within limits for Be 313.107 Recovery = 101.72%								
Ca 317.933Radial†	2981.0	5277.9	ug/L	318.04	5277.9	ppb	318.04	6.03%

QC value within limits for Ca 317.933Radial Recovery = 105.56%

Cd 226.502†	58723.8	511.91 ug/L	0.316	511.91 ppb	0.316	0.06%
QC value within limits for Cd 226.502 Recovery = 102.38%						
Co 228.616†	30622.1	504.56 ug/L	6.316	504.56 ppb	6.316	1.25%
QC value within limits for Co 228.616 Recovery = 100.91%						
Cr 267.716†	56448.5	507.96 ug/L	0.322	507.96 ppb	0.322	0.06%
QC value within limits for Cr 267.716 Recovery = 101.59%						
Cu 324.752†	191394.9	511.40 ug/L	0.626	511.40 ppb	0.626	0.12%
QC value within limits for Cu 324.752 Recovery = 102.28%						
Fe 238.204 Radial†	441.6	5354.6 ug/L	332.82	5354.6 ppb	332.82	6.22%
QC value within limits for Fe 238.204 Radial Recovery = 107.09%						
K 766.490 Radial†	28524.5	5189.8 ug/L	345.01	5189.8 ppb	345.01	6.65%
QC value within limits for K 766.490 Radial Recovery = 103.80%						
Mg 279.077 IEC†	121.1	5425.6 ug/L	366.67	5425.6 ppb	366.67	6.76%
QC value within limits for Mg 279.077 IEC Recovery = 108.51%						
Mn 257.610†	541055.9	512.78 ug/L	0.148	512.78 ppb	0.148	0.03%
QC value within limits for Mn 257.610 Recovery = 102.56%						
Mo 202.031†	9555.1	507.44 ug/L	6.890	507.44 ppb	6.890	1.36%
QC value within limits for Mo 202.031 Recovery = 101.49%						
Na 589.592 Radial†	37839.8	10614 ug/L	661.1	10614 ppb	661.1	6.23%
QC value within limits for Na 589.592 Radial Recovery = 106.14%						
Ni 231.604†	25708.9	503.41 ug/L	6.415	503.41 ppb	6.415	1.27%
QC value within limits for Ni 231.604 Recovery = 100.68%						
P 214.914†	5711.6	2477.3 ug/L	37.20	2477.3 ppb	37.20	1.50%
QC value within limits for P 214.914 Recovery = 99.09%						
Pb 220.353†	5440.0	512.26 ug/L	6.794	512.26 ppb	6.794	1.33%
QC value within limits for Pb 220.353 Recovery = 102.45%						
S 181.975 Axial†	932.0	1003.1 ug/L	16.32	1003.1 ppb	16.32	1.63%
QC value within limits for S 181.975 Axial Recovery = 100.31%						
Sb 206.836†	1929.2	515.88 ug/L	6.569	515.88 ppb	6.569	1.27%
QC value within limits for Sb 206.836 Recovery = 103.18%						
Se 196.026†	1152.9	531.67 ug/L	7.571	531.67 ppb	7.571	1.42%
QC value within limits for Se 196.026 Recovery = 106.33%						
Si 251.611†	100102.2	2530.1 ug/L	0.96	2530.1 ppb	0.96	0.04%
QC value within limits for Si 251.611 Recovery = 101.20%						
Sn 189.927†	3804.3	503.77 ug/L	6.174	503.77 ppb	6.174	1.23%
QC value within limits for Sn 189.927 Recovery = 100.75%						
Sr 421.552†	99579.4	522.39 ug/L	32.741	522.39 ppb	32.741	6.27%
QC value within limits for Sr 421.552 Recovery = 104.48%						
Ti 334.940†	369351.0	509.31 ug/L	0.323	509.31 ppb	0.323	0.06%
QC value within limits for Ti 334.940 Recovery = 101.86%						
Tl 190.801†	2095.4	510.05 ug/L	6.834	510.05 ppb	6.834	1.34%
QC value within limits for Tl 190.801 Recovery = 102.01%						
U 409.014†	19312.1	497.65 ug/L	2.545	497.65 ppb	2.545	0.51%
QC value within limits for U 409.014 Recovery = 99.53%						
V 292.402†	88452.2	513.12 ug/L	0.736	513.12 ppb	0.736	0.14%
QC value within limits for V 292.402 Recovery = 102.62%						
Zn 213.857†	69479.6	506.03 ug/L	0.550	506.03 ppb	0.550	0.11%
QC value within limits for Zn 213.857 Recovery = 101.21%						
SiO2†	99739.4	5394.4 ug/L	10.32	5394.4 ppb	10.32	0.19%
QC value within limits for SiO2 Recovery = 100.88%						

All analyte(s) passed QC.

Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 01:54:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4684.7	4684.7	95.4	%			01:56:02
1	Y RADIAL	5376.2	5376.2	95.20	%			01:56:02
1	Al 396.153Radial†	-33.0	9.2	6.0923	ug/L	6.0923	ppb	01:56:02
1	Ca 317.933Radial†	27.5	10.9	19.356	ug/L	19.356	ppb	01:56:22
1	Fe 238.204 Radial†	9.3	-1.2	-15.086	ug/L	-15.086	ppb	01:56:22
1	K 766.490 Radial†	2611.2	167.1	30.437	ug/L	30.437	ppb	01:56:02
1	Mg 279.077 IEC†	3.0	0.7	30.807	ug/L	30.807	ppb	01:56:22
1	Na 589.592 Radial†	-1139.2	86.0	24.124	ug/L	24.124	ppb	01:56:02
1	Sr 421.552†	-24.6	-18.4	-0.0967	ug/L	-0.0967	ppb	01:56:02
1	Sc 361.383	1013939.4	1013939.4	97.543	%			01:57:19
1	Y 371.029	863202.3	863202.3	97.596	%			01:57:19
1	Ag 328.068†	488.6	26.9	0.1039	ug/L	0.1039	ppb	01:57:24
1	As 188.979†	-31.8	4.0	1.2379	ug/L	1.2379	ppb	01:57:44
1	B 249.677†	-365.6	91.3	1.7277	ug/L	1.7277	ppb	01:57:24
1	Ba 233.527†	8.8	9.1	0.0584	ug/L	0.0584	ppb	01:57:44
1	Be 313.107†	-4811.4	-58.7	-0.0184	ug/L	-0.0184	ppb	01:57:24
1	Cd 226.502†	-233.7	-3.9	-0.0328	ug/L	-0.0328	ppb	01:57:44
1	Co 228.616†	-104.6	-20.9	-0.3443	ug/L	-0.3443	ppb	01:57:44
1	Cr 267.716†	86.2	0.5	0.0056	ug/L	0.0056	ppb	01:57:44
1	Cu 324.752†	9039.6	329.9	0.8802	ug/L	0.8802	ppb	01:57:24
1	Mn 257.610†	676.1	116.5	0.1082	ug/L	0.1082	ppb	01:57:44
1	Mo 202.031†	28.7	0.2	0.0084	ug/L	0.0084	ppb	01:57:44
1	Ni 231.604†	126.0	-2.8	-0.0537	ug/L	-0.0537	ppb	01:57:44
1	P 214.914†	276.9	18.8	8.2734	ug/L	8.2734	ppb	01:57:44
1	Pb 220.353†	-52.2	22.0	2.0705	ug/L	2.0705	ppb	01:57:44
1	S 181.975 Axial†	58.5	-0.1	-0.1531	ug/L	-0.1531	ppb	01:57:44
1	Sb 206.836†	44.0	10.5	2.7760	ug/L	2.7760	ppb	01:57:44
1	Se 196.026†	-32.5	-11.9	-5.3425	ug/L	-5.3425	ppb	01:57:44
1	Si 251.611†	648.3	107.0	2.7074	ug/L	2.7074	ppb	01:57:44
1	Sn 189.927†	-3.4	0.9	0.1154	ug/L	0.1154	ppb	01:57:44
1	Ti 334.940†	-1263.1	-34.5	-0.0459	ug/L	-0.0459	ppb	01:57:24
1	Tl 190.801†	-55.5	-12.6	-3.0554	ug/L	-3.0554	ppb	01:57:44
1	U 409.014†	-2764.2	-59.9	-1.5458	ug/L	-1.5458	ppb	01:57:19
1	V 292.402†	-1522.6	47.6	0.2726	ug/L	0.2726	ppb	01:57:24
1	Zn 213.857†	958.3	96.9	0.7119	ug/L	0.7119	ppb	01:57:44
1	SiO2†	660.0	77.6	4.1938	ug/L	4.1938	ppb	01:58:50
2	Sc Radial	4711.8	4711.8	96.0	%			01:56:27
2	Y RADIAL	5341.3	5341.3	94.58	%			01:56:27
2	Al 396.153Radial†	-50.5	-8.8	-5.8553	ug/L	-5.8553	ppb	01:56:27
2	Ca 317.933Radial†	35.7	19.3	34.231	ug/L	34.231	ppb	01:56:47
2	Fe 238.204 Radial†	12.8	2.4	28.467	ug/L	28.467	ppb	01:56:47
2	K 766.490 Radial†	2724.4	269.3	49.073	ug/L	49.073	ppb	01:56:27
2	Mg 279.077 IEC†	1.2	-1.3	-57.256	ug/L	-57.256	ppb	01:56:47
2	Na 589.592 Radial†	-1160.9	70.3	19.712	ug/L	19.712	ppb	01:56:27
2	Sr 421.552†	-45.9	-40.4	-0.2123	ug/L	-0.2123	ppb	01:56:27
2	Sc 361.383	1035025.5	1035025.5	99.571	%			01:57:49
2	Y 371.029	879839.7	879839.7	99.477	%			01:57:49
2	Ag 328.068†	348.9	-123.6	-0.4830	ug/L	-0.4830	ppb	01:57:54
2	As 188.979†	-35.8	0.7	0.2088	ug/L	0.2088	ppb	01:58:14
2	B 249.677†	-347.3	117.3	2.2117	ug/L	2.2117	ppb	01:57:54
2	Ba 233.527†	26.1	26.2	0.1691	ug/L	0.1691	ppb	01:58:14
2	Be 313.107†	-4859.6	-6.6	-0.0020	ug/L	-0.0020	ppb	01:57:54
2	Cd 226.502†	-242.4	-7.8	-0.0707	ug/L	-0.0707	ppb	01:58:14
2	Co 228.616†	-74.7	11.3	0.1871	ug/L	0.1871	ppb	01:58:14
2	Cr 267.716†	112.9	25.6	0.2302	ug/L	0.2302	ppb	01:58:14
2	Cu 324.752†	8971.2	72.3	0.1946	ug/L	0.1946	ppb	01:57:54
2	Mn 257.610†	700.1	126.5	0.1236	ug/L	0.1236	ppb	01:58:14
2	Mo 202.031†	34.8	5.7	0.3045	ug/L	0.3045	ppb	01:58:14
2	Ni 231.604†	128.8	-2.6	-0.0513	ug/L	-0.0513	ppb	01:58:14

2	P 214.914†	276.7	12.8	5.6620	ug/L	5.6620 ppb	01:58:14
2	Pb 220.353†	-76.9	-1.7	-0.1641	ug/L	-0.1641 ppb	01:58:14
2	S 181.975 Axial†	54.3	-5.5	-5.9676	ug/L	-5.9676 ppb	01:58:14
2	Sb 206.836†	49.6	15.2	4.0138	ug/L	4.0138 ppb	01:58:14
2	Se 196.026†	-23.0	-1.7	-0.6625	ug/L	-0.6625 ppb	01:58:14
2	Si 251.611†	625.9	71.0	1.7803	ug/L	1.7803 ppb	01:58:14
2	Sn 189.927†	-2.0	2.3	0.3133	ug/L	0.3133 ppb	01:58:14
2	Ti 334.940†	-1240.2	14.9	0.0219	ug/L	0.0219 ppb	01:57:54
2	Tl 190.801†	-48.5	-4.4	-1.0752	ug/L	-1.0752 ppb	01:58:14
2	U 409.014†	-2735.4	26.8	0.6878	ug/L	0.6878 ppb	01:57:49
2	V 292.402†	-1644.0	-42.6	-0.2439	ug/L	-0.2439 ppb	01:57:54
2	Zn 213.857†	954.7	73.3	0.5378	ug/L	0.5378 ppb	01:58:14
2	SiO2†	633.2	36.9	1.9538	ug/L	1.9538 ppb	01:58:55
3	Sc Radial	4760.6	4760.6	97.0	%		01:56:52
3	Y RADIAL	5428.0	5428.0	96.12	%		01:56:52
3	Al 396.153Radial†	-11.5	31.9	21.063	ug/L	21.063 ppb	01:56:52
3	Ca 317.933Radial†	26.6	9.6	17.052	ug/L	17.052 ppb	01:57:12
3	Fe 238.204 Radial†	11.9	1.3	15.259	ug/L	15.259 ppb	01:57:12
3	K 766.490 Radial†	2736.4	252.6	46.017	ug/L	46.017 ppb	01:56:52
3	Mg 279.077 IEC†	1.9	-0.5	-24.024	ug/L	-24.024 ppb	01:57:12
3	Na 589.592 Radial†	-1099.6	145.9	40.924	ug/L	40.924 ppb	01:56:52
3	Sr 421.552†	11.9	19.6	0.1029	ug/L	0.1029 ppb	01:56:52
3	Sc 361.383	1016726.7	1016726.7	97.811	%		01:58:19
3	Y 371.029	863841.9	863841.9	97.668	%		01:58:19
3	Ag 328.068†	512.1	49.5	0.2013	ug/L	0.2013 ppb	01:58:25
3	As 188.979†	-40.7	-5.0	-1.5457	ug/L	-1.5457 ppb	01:58:45
3	B 249.677†	-398.0	59.2	1.1169	ug/L	1.1169 ppb	01:58:25
3	Ba 233.527†	31.6	32.3	0.2081	ug/L	0.2081 ppb	01:58:45
3	Be 313.107†	-4826.9	-61.0	-0.0189	ug/L	-0.0189 ppb	01:58:25
3	Cd 226.502†	-219.6	11.1	0.0952	ug/L	0.0952 ppb	01:58:45
3	Co 228.616†	-93.4	-9.2	-0.1519	ug/L	-0.1519 ppb	01:58:45
3	Cr 267.716†	108.1	22.7	0.2046	ug/L	0.2046 ppb	01:58:45
3	Cu 324.752†	8950.2	213.0	0.5697	ug/L	0.5697 ppb	01:58:25
3	Mn 257.610†	675.2	113.6	0.1095	ug/L	0.1095 ppb	01:58:45
3	Mo 202.031†	24.0	-4.8	-0.2510	ug/L	-0.2510 ppb	01:58:45
3	Ni 231.604†	120.5	-8.7	-0.1708	ug/L	-0.1708 ppb	01:58:45
3	P 214.914†	283.8	25.0	11.102	ug/L	11.102 ppb	01:58:45
3	Pb 220.353†	-58.8	15.5	1.4561	ug/L	1.4561 ppb	01:58:45
3	S 181.975 Axial†	63.9	5.2	5.5995	ug/L	5.5995 ppb	01:58:45
3	Sb 206.836†	42.3	8.6	2.2753	ug/L	2.2753 ppb	01:58:45
3	Se 196.026†	-29.2	-8.5	-3.7225	ug/L	-3.7225 ppb	01:58:45
3	Si 251.611†	646.3	103.2	2.6076	ug/L	2.6076 ppb	01:58:45
3	Sn 189.927†	-0.4	3.9	0.5167	ug/L	0.5167 ppb	01:58:45
3	Ti 334.940†	-1206.0	27.4	0.0389	ug/L	0.0389 ppb	01:58:25
3	Tl 190.801†	-37.9	5.5	1.3441	ug/L	1.3441 ppb	01:58:45
3	U 409.014†	-2736.9	-24.2	-0.6275	ug/L	-0.6275 ppb	01:58:19
3	V 292.402†	-1578.7	-5.6	-0.0396	ug/L	-0.0396 ppb	01:58:25
3	Zn 213.857†	960.4	96.4	0.7080	ug/L	0.7080 ppb	01:58:45
3	SiO2†	663.0	78.8	4.2533	ug/L	4.2533 ppb	01:59:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021897.2	98.308	%	1.1019				1.12%
Sc Radial	4719.0	96.1	%	0.78				0.81%
Y 371.029	868961.3	98.247	%	1.0658				1.08%
Y RADIAL	5381.9	95.30	%	0.772				0.81%
Ag 328.068†	-15.7	-0.0593	ug/L	0.37021	-0.0593	ppb	0.37021	624.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.8	7.1000	ug/L	13.48742	7.1000	ppb	13.48742	189.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0330	ug/L	1.40746	-0.0330	ppb	1.40746	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	89.2	1.6855	ug/L	0.54862	1.6855	ppb	0.54862	32.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.5	0.1452	ug/L	0.07767	0.1452	ppb	0.07767	53.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-42.1	-0.0131	ug/L	0.00961	-0.0131	ppb	0.00961	73.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.3	23.546	ug/L	9.3245	23.546	ppb	9.3245	39.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -0.2     -0.0028 ug/L       0.08689     -0.0028 ppb        0.08689 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.3     -0.1030 ug/L       0.26902     -0.1030 ppb        0.26902 261.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.3      0.1468 ug/L       0.12293      0.1468 ppb        0.12293  83.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               205.1      0.5481 ug/L       0.34331      0.5481 ppb        0.34331  62.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.8      9.5465 ug/L      22.33121      9.5465 ppb       22.33121 233.92%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         229.7     41.843 ug/L        9.9945     41.843 ppb         9.9945  23.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4    -16.824 ug/L       44.4707    -16.824 ppb        44.4707 264.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               118.8      0.1138 ug/L       0.00855      0.1138 ppb        0.00855   7.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.4      0.0206 ug/L       0.27798      0.0206 ppb        0.27798 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        100.7     28.254 ug/L       11.1925     28.254 ppb        11.1925  39.61%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.7     -0.0919 ug/L       0.06830     -0.0919 ppb        0.06830  74.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 18.9      8.3457 ug/L       2.72050      8.3457 ppb        2.72050  32.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.9      1.1208 ug/L       1.15443      1.1208 ppb        1.15443 103.00%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.1738 ug/L       5.78356     -0.1738 ppb        5.78356 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                11.5      3.0217 ug/L       0.89490      3.0217 ppb        0.89490  29.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.4     -3.2425 ug/L       2.37661     -3.2425 ppb        2.37661  73.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                93.7      2.3651 ug/L       0.50890      2.3651 ppb        0.50890  21.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.4      0.3151 ug/L       0.20064      0.3151 ppb        0.20064  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -13.1     -0.0687 ug/L       0.15945     -0.0687 ppb        0.15945 232.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 2.6      0.0050 ug/L       0.04488      0.0050 ppb        0.04488 901.20%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.8     -0.9288 ug/L       2.20340     -0.9288 ppb        2.20340 237.22%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -19.1     -0.4952 ug/L       1.12265     -0.4952 ppb        1.12265 226.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -0.2     -0.0036 ug/L       0.26014     -0.0036 ppb        0.26014 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                88.9      0.6526 ug/L       0.09938      0.6526 ppb        0.09938  15.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      64.4      3.4669 ug/L       1.31078      3.4669 ppb        1.31078  37.81%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120909
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120909A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/9/2009 10:30:28**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/9/2009 08:10:12**
Analyst: **Data Type: Reprocessed on 12/9/2009 10:32:11**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	881145.1	881145.1	99.568	%	08:13:21
1	Sc Radial	5712.8	5712.8	101	%	08:12:05
1	Y 371.029	737967.2	737967.2	99.447	%	08:13:21
1	Y RADIAL	6224.1	6224.1	101.1	%	08:12:05
1	Ag 328.068†	293.6	294.9	[0.00]	ug/L	08:13:21

1	Al 396.153Radial†	-21.8	-21.6	[0.00]	ug/L	08:12:25
1	As 188.979†	-24.7	-24.8	[0.00]	ug/L	08:13:41
1	B 249.677†	-515.2	-517.4	[0.00]	ug/L	08:13:41
1	Ba 233.527†	-17.3	-17.4	[0.00]	ug/L	08:13:41
1	Be 313.107†	-5302.3	-5325.3	[0.00]	ug/L	08:13:21
1	Ca 317.933Radial†	15.6	15.5	[0.00]	ug/L	08:12:25
1	Cd 226.502†	-183.7	-184.5	[0.00]	ug/L	08:13:41
1	Co 228.616†	-69.8	-70.1	[0.00]	ug/L	08:13:41
1	Cr 267.716†	96.3	96.7	[0.00]	ug/L	08:13:41
1	Cu 324.752†	6732.9	6762.1	[0.00]	ug/L	08:13:21
1	Fe 238.204 Radial†	5.2	5.2	[0.00]	ug/L	08:12:25
1	K 766.490 Radial†	2115.2	2096.9	[0.00]	ug/L	08:12:05
1	Mg 279.077 IEC†	1.5	1.5	[0.00]	ug/L	08:12:25
1	Mn 257.610†	417.4	419.2	[0.00]	ug/L	08:13:41
1	Mo 202.031†	22.7	22.8	[0.00]	ug/L	08:13:41
1	Na 589.592 Radial†	-635.2	-629.7	[0.00]	ug/L	08:12:05
1	Ni 231.604†	79.5	79.9	[0.00]	ug/L	08:13:41
1	P 214.914†	222.8	223.8	[0.00]	ug/L	08:13:41
1	Pb 220.353†	-47.1	-47.3	[0.00]	ug/L	08:13:41
1	S 181.975 Axial†	45.8	46.0	[0.00]	ug/L	08:13:41
1	Sb 206.836†	23.0	23.1	[0.00]	ug/L	08:13:41
1	Se 196.026†	-26.5	-26.6	[0.00]	ug/L	08:13:41
1	Si 251.611†	570.2	572.6	[0.00]	ug/L	08:13:41
1	Sn 189.927†	2.0	2.0	[0.00]	ug/L	08:13:41
1	Sr 421.552†	-3.7	-3.7	[0.00]	ug/L	08:12:05
1	Ti 334.940†	-960.4	-964.5	[0.00]	ug/L	08:13:21
1	Tl 190.801†	-39.2	-39.4	[0.00]	ug/L	08:13:41
1	U 409.014†	-1974.7	-1983.3	[0.00]	ug/L	08:13:21
1	V 292.402†	-1254.3	-1259.7	[0.00]	ug/L	08:13:21
1	Zn 213.857†	800.9	804.4	[0.00]	ug/L	08:13:41
1	SiO2†	475.1	477.1	[0.00]	ug/L	08:14:52
2	Sc 361.383	888195.9	888195.9	100.36	%	08:13:47
2	Sc Radial	5655.8	5655.8	99.9	%	08:12:30
2	Y 371.029	745171.0	745171.0	100.42	%	08:13:47
2	Y RADIAL	6147.2	6147.2	99.81	%	08:12:30
2	Ag 328.068†	168.6	168.0	[0.00]	ug/L	08:13:47
2	Al 396.153Radial†	-15.8	-15.8	[0.00]	ug/L	08:12:50
2	As 188.979†	-29.1	-29.0	[0.00]	ug/L	08:14:07
2	B 249.677†	-536.1	-534.2	[0.00]	ug/L	08:14:07
2	Ba 233.527†	-13.6	-13.5	[0.00]	ug/L	08:14:07
2	Be 313.107†	-5391.5	-5371.9	[0.00]	ug/L	08:13:47
2	Ca 317.933Radial†	16.6	16.6	[0.00]	ug/L	08:12:50
2	Cd 226.502†	-185.1	-184.4	[0.00]	ug/L	08:14:07
2	Co 228.616†	-74.7	-74.4	[0.00]	ug/L	08:14:07
2	Cr 267.716†	74.6	74.4	[0.00]	ug/L	08:14:07
2	Cu 324.752†	6764.2	6739.7	[0.00]	ug/L	08:13:47
2	Fe 238.204 Radial†	7.2	7.2	[0.00]	ug/L	08:12:50
2	K 766.490 Radial†	2143.7	2146.5	[0.00]	ug/L	08:12:30
2	Mg 279.077 IEC†	0.4	0.4	[0.00]	ug/L	08:12:50
2	Mn 257.610†	398.6	397.1	[0.00]	ug/L	08:14:07
2	Mo 202.031†	21.1	21.0	[0.00]	ug/L	08:14:07
2	Na 589.592 Radial†	-615.4	-616.2	[0.00]	ug/L	08:12:30
2	Ni 231.604†	68.6	68.3	[0.00]	ug/L	08:14:07
2	P 214.914†	215.1	214.3	[0.00]	ug/L	08:14:07
2	Pb 220.353†	-48.8	-48.6	[0.00]	ug/L	08:14:07
2	S 181.975 Axial†	38.9	38.8	[0.00]	ug/L	08:14:07
2	Sb 206.836†	30.5	30.4	[0.00]	ug/L	08:14:07
2	Se 196.026†	-20.3	-20.2	[0.00]	ug/L	08:14:07
2	Si 251.611†	478.0	476.3	[0.00]	ug/L	08:14:07
2	Sn 189.927†	1.5	1.5	[0.00]	ug/L	08:14:07
2	Sr 421.552†	12.4	12.4	[0.00]	ug/L	08:12:30
2	Ti 334.940†	-938.2	-934.8	[0.00]	ug/L	08:13:47
2	Tl 190.801†	-37.7	-37.6	[0.00]	ug/L	08:14:07
2	U 409.014†	-1867.0	-1860.2	[0.00]	ug/L	08:13:47
2	V 292.402†	-1298.6	-1293.9	[0.00]	ug/L	08:13:47
2	Zn 213.857†	816.9	813.9	[0.00]	ug/L	08:14:07
2	SiO2†	492.0	490.3	[0.00]	ug/L	08:15:12
3	Sc 361.383	885576.2	885576.2	100.07	%	08:14:12
3	Sc Radial	5621.4	5621.4	99.3	%	08:12:55
3	Y 371.029	743077.5	743077.5	100.14	%	08:14:12
3	Y RADIAL	6104.9	6104.9	99.13	%	08:12:55

3	Ag 328.068†	220.0	219.8	[0.00]	ug/L	08:14:12
3	Al 396.153Radial†	-23.4	-23.6	[0.00]	ug/L	08:13:15
3	As 188.979†	-33.8	-33.8	[0.00]	ug/L	08:14:32
3	B 249.677†	-520.3	-520.0	[0.00]	ug/L	08:14:32
3	Ba 233.527†	-5.2	-5.2	[0.00]	ug/L	08:14:32
3	Be 313.107†	-5267.1	-5263.5	[0.00]	ug/L	08:14:12
3	Ca 317.933Radial†	20.8	21.0	[0.00]	ug/L	08:13:15
3	Cd 226.502†	-194.8	-194.6	[0.00]	ug/L	08:14:32
3	Co 228.616†	-70.8	-70.7	[0.00]	ug/L	08:14:32
3	Cr 267.716†	89.9	89.8	[0.00]	ug/L	08:14:32
3	Cu 324.752†	6808.8	6804.1	[0.00]	ug/L	08:14:12
3	Fe 238.204 Radial†	5.7	5.7	[0.00]	ug/L	08:13:15
3	K 766.490 Radial†	2250.7	2267.5	[0.00]	ug/L	08:12:55
3	Mg 279.077 IEC†	3.3	3.3	[0.00]	ug/L	08:13:15
3	Mn 257.610†	394.2	393.9	[0.00]	ug/L	08:14:32
3	Mo 202.031†	16.3	16.2	[0.00]	ug/L	08:14:32
3	Na 589.592 Radial†	-597.5	-602.0	[0.00]	ug/L	08:12:55
3	Ni 231.604†	62.2	62.2	[0.00]	ug/L	08:14:32
3	P 214.914†	221.9	221.8	[0.00]	ug/L	08:14:32
3	Pb 220.353†	-61.8	-61.7	[0.00]	ug/L	08:14:32
3	S 181.975 Axial†	39.6	39.6	[0.00]	ug/L	08:14:32
3	Sb 206.836†	35.3	35.3	[0.00]	ug/L	08:14:32
3	Se 196.026†	-23.5	-23.5	[0.00]	ug/L	08:14:32
3	Si 251.611†	475.5	475.1	[0.00]	ug/L	08:14:32
3	Sn 189.927†	9.4	9.4	[0.00]	ug/L	08:14:32
3	Sr 421.552†	1.5	1.5	[0.00]	ug/L	08:12:55
3	Ti 334.940†	-996.4	-995.7	[0.00]	ug/L	08:14:12
3	Tl 190.801†	-33.6	-33.6	[0.00]	ug/L	08:14:32
3	U 409.014†	-2044.4	-2043.0	[0.00]	ug/L	08:14:12
3	V 292.402†	-1336.8	-1335.8	[0.00]	ug/L	08:14:12
3	Zn 213.857†	804.0	803.5	[0.00]	ug/L	08:14:32
3	SiO2†	499.4	499.1	[0.00]	ug/L	08:15:32

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	884972.4	3563.94	0.40%	100.00	%
Sc Radial	5663.3	46.19	0.82%	100	%
Y 371.029	742071.9	3705.68	0.50%	100.00	%
Y RADIAL	6158.7	60.42	0.98%	100.0	%
Ag 328.068†	227.6	63.78	28.02%	[0.00]	ug/L
Al 396.153Radial†	-20.3	4.06	19.97%	[0.00]	ug/L
As 188.979†	-29.2	4.46	15.27%	[0.00]	ug/L
B 249.677†	-523.9	9.03	1.72%	[0.00]	ug/L
Ba 233.527†	-12.0	6.24	51.89%	[0.00]	ug/L
Be 313.107†	-5320.2	54.40	1.02%	[0.00]	ug/L
Ca 317.933Radial†	17.7	2.91	16.44%	[0.00]	ug/L
Cd 226.502†	-187.8	5.89	3.14%	[0.00]	ug/L
Co 228.616†	-71.7	2.34	3.26%	[0.00]	ug/L
Cr 267.716†	87.0	11.43	13.15%	[0.00]	ug/L
Cu 324.752†	6768.6	32.71	0.48%	[0.00]	ug/L
Fe 238.204 Radial†	6.0	1.02	16.96%	[0.00]	ug/L
K 766.490 Radial†	2170.3	87.73	4.04%	[0.00]	ug/L
Mg 279.077 IEC†	1.8	1.48	84.32%	[0.00]	ug/L
Mn 257.610†	403.4	13.77	3.41%	[0.00]	ug/L
Mo 202.031†	20.0	3.37	16.86%	[0.00]	ug/L
Na 589.592 Radial†	-616.0	13.86	2.25%	[0.00]	ug/L
Ni 231.604†	70.1	8.98	12.80%	[0.00]	ug/L
P 214.914†	220.0	5.00	2.27%	[0.00]	ug/L
Pb 220.353†	-52.5	7.99	15.21%	[0.00]	ug/L
S 181.975 Axial†	41.5	3.95	9.53%	[0.00]	ug/L
Sb 206.836†	29.6	6.13	20.71%	[0.00]	ug/L
Se 196.026†	-23.4	3.18	13.58%	[0.00]	ug/L
Si 251.611†	508.0	55.98	11.02%	[0.00]	ug/L
Sn 189.927†	4.3	4.41	103.33%	[0.00]	ug/L
Sr 421.552†	3.4	8.23	240.79%	[0.00]	ug/L
Ti 334.940†	-965.0	30.47	3.16%	[0.00]	ug/L
Tl 190.801†	-36.9	2.97	8.05%	[0.00]	ug/L
U 409.014†	-1962.2	93.24	4.75%	[0.00]	ug/L
V 292.402†	-1296.5	38.13	2.94%	[0.00]	ug/L

Zn 213.857†	807.3	5.79	0.72%	[0.00] ug/L
SiO2†	488.8	11.06	2.26%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/9/2009 08:17:43
Data Type: Reprocessed on 12/9/2009 10:32:13

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	915606.8	915606.8	103.46	%	08:20:07
1	Sc Radial	5337.0	5337.0	94.2	%	08:19:41
1	Y 371.029	763081.0	763081.0	102.83	%	08:20:07
1	Y RADIAL	5831.6	5831.6	94.69	%	08:19:41
1	Ag 328.068†	22161.7	21192.6	[100]	ug/L	08:20:12
1	As 188.979†	207.1	229.4	[100]	ug/L	08:20:32
1	B 249.677†	4002.0	4392.0	[100]	ug/L	08:20:12
1	Ba 233.527†	13564.0	13122.2	[100]	ug/L	08:20:12
1	Be 313.107†	254917.7	251708.9	[100]	ug/L	08:20:07
1	Cd 226.502†	9233.5	9112.4	[100]	ug/L	08:20:12
1	Co 228.616†	4967.8	4873.4	[100]	ug/L	08:20:32
1	Cr 267.716†	9596.1	9188.1	[100]	ug/L	08:20:12
1	Cu 324.752†	41626.8	33465.4	[100]	ug/L	08:20:12
1	K 766.490 Radial†	7987.7	6305.9	[1000]	ug/L	08:19:36
1	Mn 257.610†	95038.4	91455.2	[100]	ug/L	08:20:12
1	Mo 202.031†	1541.1	1469.5	[100]	ug/L	08:20:32
1	Ni 231.604†	4194.9	3984.4	[100]	ug/L	08:20:32
1	P 214.914†	1036.1	781.5	[500]	ug/L	08:20:32
1	Pb 220.353†	813.8	839.1	[100]	ug/L	08:20:32
1	S 181.975 Axial†	170.2	123.1	[200]	ug/L	08:20:32
1	Sb 206.836†	331.0	290.3	[100]	ug/L	08:20:32
1	Se 196.026†	135.3	154.3	[100]	ug/L	08:20:32
1	Si 251.611†	16988.8	15912.3	[500]	ug/L	08:20:12
1	Sn 189.927†	583.2	559.5	[100]	ug/L	08:20:32
1	Sr 421.552†	15114.5	16035.4	[100]	ug/L	08:19:41
1	Ti 334.940†	62021.0	60910.9	[100]	ug/L	08:20:12
1	Tl 190.801†	314.9	341.2	[100]	ug/L	08:20:32
1	U 409.014†	1340.0	3257.4	[100]	ug/L	08:20:12
1	V 292.402†	13721.3	14558.7	[100]	ug/L	08:20:12
1	Zn 213.857†	12043.1	10832.9	[100]	ug/L	08:20:12
1	SiO2†	16434.1	15395.5	[1069.5]	ug/L	08:21:39
2	Sc 361.383	900223.3	900223.3	101.72	%	08:20:38
2	Sc Radial	5743.1	5743.1	101	%	08:19:51
2	Y 371.029	750252.5	750252.5	101.10	%	08:20:38
2	Y RADIAL	6209.4	6209.4	100.8	%	08:19:51
2	Ag 328.068†	21711.3	21115.9	[100]	ug/L	08:20:43
2	As 188.979†	208.5	234.1	[100]	ug/L	08:21:03
2	B 249.677†	3895.0	4352.9	[100]	ug/L	08:20:43
2	Ba 233.527†	13261.4	13048.8	[100]	ug/L	08:20:43
2	Be 313.107†	258852.8	259787.7	[100]	ug/L	08:20:38
2	Cd 226.502†	9026.6	9061.5	[100]	ug/L	08:20:43
2	Co 228.616†	4991.7	4978.9	[100]	ug/L	08:21:03
2	Cr 267.716†	9375.7	9129.9	[100]	ug/L	08:20:43
2	Cu 324.752†	40530.5	33075.2	[100]	ug/L	08:20:43
2	K 766.490 Radial†	7752.9	5474.8	[1000]	ug/L	08:19:46
2	Mn 257.610†	92417.4	90448.3	[100]	ug/L	08:20:43
2	Mo 202.031†	1544.4	1498.2	[100]	ug/L	08:21:03
2	Ni 231.604†	4238.1	4096.2	[100]	ug/L	08:21:03
2	P 214.914†	1039.7	802.2	[500]	ug/L	08:21:03
2	Pb 220.353†	799.1	838.1	[100]	ug/L	08:21:03
2	S 181.975 Axial†	168.2	123.9	[200]	ug/L	08:21:03
2	Sb 206.836†	333.8	298.5	[100]	ug/L	08:21:03
2	Se 196.026†	139.2	160.3	[100]	ug/L	08:21:03
2	Si 251.611†	16401.5	15615.6	[500]	ug/L	08:20:43
2	Sn 189.927†	584.1	569.9	[100]	ug/L	08:21:03
2	Sr 421.552†	15040.1	14827.7	[100]	ug/L	08:19:51
2	Ti 334.940†	60191.0	60136.4	[100]	ug/L	08:20:43
2	Tl 190.801†	300.7	332.5	[100]	ug/L	08:21:03

2	U 409.014†	1180.4	3122.6	[100]	ug/L	08:20:43
2	V 292.402†	13324.1	14394.9	[100]	ug/L	08:20:43
2	Zn 213.857†	11685.5	10680.3	[100]	ug/L	08:20:43
2	SiO2†	16279.4	15514.8	[1069.5]	ug/L	08:21:44
3	Sc 361.383	895201.6	895201.6	101.16	%	08:21:08
3	Sc Radial	5702.1	5702.1	101	%	08:20:01
3	Y 371.029	746415.6	746415.6	100.59	%	08:21:08
3	Y RADIAL	6190.6	6190.6	100.5	%	08:20:01
3	Ag 328.068†	21753.4	21277.2	[100]	ug/L	08:21:13
3	As 188.979†	221.0	247.7	[100]	ug/L	08:21:33
3	B 249.677†	3919.0	4398.1	[100]	ug/L	08:21:13
3	Ba 233.527†	13184.2	13045.6	[100]	ug/L	08:21:13
3	Be 313.107†	258647.0	261011.7	[100]	ug/L	08:21:08
3	Cd 226.502†	8997.0	9082.1	[100]	ug/L	08:21:13
3	Co 228.616†	4993.3	5008.0	[100]	ug/L	08:21:33
3	Cr 267.716†	9391.6	9197.3	[100]	ug/L	08:21:13
3	Cu 324.752†	41071.5	33833.6	[100]	ug/L	08:21:13
3	K 766.490 Radial†	7638.8	5416.6	[1000]	ug/L	08:19:56
3	Mn 257.610†	92630.0	91168.1	[100]	ug/L	08:21:13
3	Mo 202.031†	1533.1	1495.6	[100]	ug/L	08:21:33
3	Ni 231.604†	4215.0	4096.7	[100]	ug/L	08:21:33
3	P 214.914†	1041.5	809.6	[500]	ug/L	08:21:33
3	Pb 220.353†	791.9	835.3	[100]	ug/L	08:21:33
3	S 181.975 Axial†	165.1	121.7	[200]	ug/L	08:21:33
3	Sb 206.836†	327.5	294.1	[100]	ug/L	08:21:33
3	Se 196.026†	134.7	156.6	[100]	ug/L	08:21:33
3	Si 251.611†	16478.1	15781.8	[500]	ug/L	08:21:13
3	Sn 189.927†	578.0	567.1	[100]	ug/L	08:21:33
3	Sr 421.552†	15083.5	14977.5	[100]	ug/L	08:20:01
3	Ti 334.940†	60410.1	60684.9	[100]	ug/L	08:21:13
3	Tl 190.801†	315.9	349.1	[100]	ug/L	08:21:33
3	U 409.014†	1408.7	3354.8	[100]	ug/L	08:21:13
3	V 292.402†	13290.3	14434.9	[100]	ug/L	08:21:13
3	Zn 213.857†	11746.4	10804.9	[100]	ug/L	08:21:13
3	SiO2†	16488.6	15811.4	[1069.5]	ug/L	08:21:49

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	903677.2	10632.00	1.18%	102.11	%
Sc Radial	5594.1	223.60	4.00%	98.8	%
Y 371.029	753249.7	8727.64	1.16%	101.51	%
Y RADIAL	6077.2	212.91	3.50%	98.68	%
Ag 328.068†	21195.2	80.70	0.38%	[100]	ug/L
As 188.979†	237.1	9.48	4.00%	[100]	ug/L
B 249.677†	4381.0	24.52	0.56%	[100]	ug/L
Ba 233.527†	13072.2	43.32	0.33%	[100]	ug/L
Be 313.107†	257502.8	5054.82	1.96%	[100]	ug/L
Cd 226.502†	9085.3	25.57	0.28%	[100]	ug/L
Co 228.616†	4953.4	70.84	1.43%	[100]	ug/L
Cr 267.716†	9171.8	36.54	0.40%	[100]	ug/L
Cu 324.752†	33458.1	379.24	1.13%	[100]	ug/L
K 766.490 Radial†	5732.4	497.48	8.68%	[1000]	ug/L
Mn 257.610†	91023.9	518.69	0.57%	[100]	ug/L
Mo 202.031†	1487.8	15.86	1.07%	[100]	ug/L
Ni 231.604†	4059.1	64.66	1.59%	[100]	ug/L
P 214.914†	797.8	14.56	1.82%	[500]	ug/L
Pb 220.353†	837.5	1.95	0.23%	[100]	ug/L
S 181.975 Axial†	122.9	1.09	0.89%	[200]	ug/L
Sb 206.836†	294.3	4.09	1.39%	[100]	ug/L
Se 196.026†	157.1	3.06	1.95%	[100]	ug/L
Si 251.611†	15769.9	148.71	0.94%	[500]	ug/L
Sn 189.927†	565.5	5.41	0.96%	[100]	ug/L
Sr 421.552†	15280.2	658.29	4.31%	[100]	ug/L
Ti 334.940†	60577.4	398.30	0.66%	[100]	ug/L
Tl 190.801†	340.9	8.33	2.44%	[100]	ug/L
U 409.014†	3244.9	116.62	3.59%	[100]	ug/L
V 292.402†	14462.8	85.40	0.59%	[100]	ug/L
Zn 213.857†	10772.7	81.22	0.75%	[100]	ug/L
SiO2†	15573.9	214.18	1.38%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2009 08:23:59
Data Type: Reprocessed on 12/9/2009 10:32:18

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	904434.8	904434.8	102.20	%	08:27:09
1	Sc Radial	5397.2	5397.2	95.3	%	08:25:51
1	Y 371.029	745813.4	745813.4	100.50	%	08:27:09
1	Y RADIAL	5821.5	5821.5	94.52	%	08:25:51
1	Ag 328.068†	110747.4	108136.6	[500]	ug/L	08:27:14
1	Al 396.153Radial†	6353.8	6687.4	[5000]	ug/L	08:25:51
1	As 188.979†	1184.6	1188.3	[500]	ug/L	08:27:34
1	B 249.677†	22269.5	22314.1	[500]	ug/L	08:27:14
1	Ba 233.527†	65708.8	64306.9	[500]	ug/L	08:27:14
1	Be 313.107†	1322017.1	1298889.0	[500]	ug/L	08:27:09
1	Ca 317.933Radial†	3266.8	3410.2	[5000]	ug/L	08:26:12
1	Cd 226.502†	45906.7	45106.7	[500]	ug/L	08:27:14
1	Co 228.616†	25668.9	25188.3	[500]	ug/L	08:27:14
1	Cr 267.716†	46222.9	45141.3	[500]	ug/L	08:27:14
1	Cu 324.752†	177131.3	166550.9	[500]	ug/L	08:27:14
1	K 766.490 Radial†	28650.1	27892.3	[5000]	ug/L	08:25:51
1	Mg 279.077 IEC†	135.5	140.4	[5000]	ug/L	08:26:12
1	Mn 257.610†	455958.3	445743.2	[500]	ug/L	08:27:09
1	Mo 202.031†	7796.0	7608.2	[500]	ug/L	08:27:34
1	Ni 231.604†	21161.1	20635.6	[500]	ug/L	08:27:14
1	P 214.914†	4385.5	4071.2	[2500]	ug/L	08:27:34
1	Pb 220.353†	4210.4	4172.3	[500]	ug/L	08:27:34
1	S 181.975 Axial†	737.8	680.4	[1000]	ug/L	08:27:34
1	Sb 206.836†	1594.1	1530.2	[500]	ug/L	08:27:34
1	Se 196.026†	815.7	821.6	[500]	ug/L	08:27:34
1	Si 251.611†	82827.2	80536.9	[2500]	ug/L	08:27:14
1	Sn 189.927†	3011.7	2942.6	[500]	ug/L	08:27:34
1	Sr 421.552†	73249.6	76857.5	[500]	ug/L	08:25:51
1	Ti 334.940†	312876.3	307108.6	[500]	ug/L	08:27:14
1	Tl 190.801†	1706.2	1706.3	[500]	ug/L	08:27:34
1	U 409.014†	15802.6	17424.7	[500]	ug/L	08:27:14
1	V 292.402†	72068.0	71813.7	[500]	ug/L	08:27:14
1	Zn 213.857†	56449.9	54427.9	[500]	ug/L	08:27:14
1	SiO2†	82752.8	80483.2	[5347.5]	ug/L	08:28:41
2	Sc 361.383	891526.1	891526.1	100.74	%	08:27:40
2	Sc Radial	5732.8	5732.8	101	%	08:26:17
2	Y 371.029	734672.0	734672.0	99.003	%	08:27:40
2	Y RADIAL	6169.8	6169.8	100.2	%	08:26:17
2	Ag 328.068†	108767.6	107740.4	[500]	ug/L	08:27:45
2	Al 396.153Radial†	6574.1	6514.8	[5000]	ug/L	08:26:17
2	As 188.979†	1189.1	1209.5	[500]	ug/L	08:28:05
2	B 249.677†	21903.5	22266.3	[500]	ug/L	08:27:45
2	Ba 233.527†	64546.4	64083.9	[500]	ug/L	08:27:45
2	Be 313.107†	1325989.4	1321562.2	[500]	ug/L	08:27:40
2	Ca 317.933Radial†	3244.1	3187.1	[5000]	ug/L	08:26:37
2	Cd 226.502†	45217.0	45072.4	[500]	ug/L	08:27:45
2	Co 228.616†	25322.9	25208.5	[500]	ug/L	08:27:45
2	Cr 267.716†	45599.0	45176.8	[500]	ug/L	08:27:45
2	Cu 324.752†	173851.2	165804.6	[500]	ug/L	08:27:45
2	K 766.490 Radial†	29550.8	27022.3	[5000]	ug/L	08:26:17
2	Mg 279.077 IEC†	136.9	133.4	[5000]	ug/L	08:26:37
2	Mn 257.610†	457085.2	453321.7	[500]	ug/L	08:27:40
2	Mo 202.031†	7806.1	7728.8	[500]	ug/L	08:28:05
2	Ni 231.604†	20894.9	20671.1	[500]	ug/L	08:27:45
2	P 214.914†	4394.4	4142.2	[2500]	ug/L	08:28:05
2	Pb 220.353†	4208.4	4230.0	[500]	ug/L	08:28:05
2	S 181.975 Axial†	739.1	692.2	[1000]	ug/L	08:28:05
2	Sb 206.836†	1589.3	1548.1	[500]	ug/L	08:28:05

2	Se 196.026†	818.1	835.5	[500]	ug/L	08:28:05
2	Si 251.611†	81408.0	80301.6	[2500]	ug/L	08:27:45
2	Sn 189.927†	3012.0	2985.6	[500]	ug/L	08:28:05
2	Sr 421.552†	75683.5	74762.5	[500]	ug/L	08:26:17
2	Ti 334.940†	307362.6	306068.2	[500]	ug/L	08:27:45
2	Tl 190.801†	1709.1	1733.4	[500]	ug/L	08:28:05
2	U 409.014†	15520.9	17369.0	[500]	ug/L	08:27:45
2	V 292.402†	71037.8	71812.1	[500]	ug/L	08:27:45
2	Zn 213.857†	55598.1	54382.2	[500]	ug/L	08:27:45
2	SiO2†	83026.8	81927.6	[5347.5]	ug/L	08:28:47
3	Sc 361.383	899136.3	899136.3	101.60	%	08:28:11
3	Sc Radial	5706.9	5706.9	101	%	08:26:42
3	Y 371.029	741948.7	741948.7	99.983	%	08:28:11
3	Y RADIAL	6177.1	6177.1	100.3	%	08:26:42
3	Ag 328.068†	109406.8	107455.7	[500]	ug/L	08:28:16
3	Al 396.153Radial†	6511.0	6481.7	[5000]	ug/L	08:26:42
3	As 188.979†	1195.7	1206.1	[500]	ug/L	08:28:36
3	B 249.677†	22048.7	22225.2	[500]	ug/L	08:28:16
3	Ba 233.527†	65054.9	64042.1	[500]	ug/L	08:28:16
3	Be 313.107†	1337323.5	1321577.1	[500]	ug/L	08:28:11
3	Ca 317.933Radial†	3245.6	3203.1	[5000]	ug/L	08:27:02
3	Cd 226.502†	45520.2	44991.0	[500]	ug/L	08:28:16
3	Co 228.616†	25427.5	25098.7	[500]	ug/L	08:28:16
3	Cr 267.716†	45999.4	45187.8	[500]	ug/L	08:28:16
3	Cu 324.752†	174872.4	165349.0	[500]	ug/L	08:28:16
3	K 766.490 Radial†	29635.6	27239.3	[5000]	ug/L	08:26:42
3	Mg 279.077 IEC†	137.9	135.1	[5000]	ug/L	08:27:02
3	Mn 257.610†	459261.8	451623.7	[500]	ug/L	08:28:11
3	Mo 202.031†	7805.6	7662.7	[500]	ug/L	08:28:36
3	Ni 231.604†	21024.4	20623.1	[500]	ug/L	08:28:16
3	P 214.914†	4384.9	4095.8	[2500]	ug/L	08:28:36
3	Pb 220.353†	4201.2	4187.5	[500]	ug/L	08:28:36
3	S 181.975 Axial†	733.3	680.3	[1000]	ug/L	08:28:36
3	Sb 206.836†	1586.5	1531.9	[500]	ug/L	08:28:36
3	Se 196.026†	808.2	819.0	[500]	ug/L	08:28:36
3	Si 251.611†	81886.6	80088.6	[2500]	ug/L	08:28:16
3	Sn 189.927†	3013.3	2961.6	[500]	ug/L	08:28:36
3	Sr 421.552†	75338.5	74760.6	[500]	ug/L	08:26:42
3	Ti 334.940†	309552.3	305641.0	[500]	ug/L	08:28:16
3	Tl 190.801†	1699.9	1710.0	[500]	ug/L	08:28:36
3	U 409.014†	15597.8	17314.3	[500]	ug/L	08:28:16
3	V 292.402†	71536.7	71706.3	[500]	ug/L	08:28:16
3	Zn 213.857†	55938.2	54249.7	[500]	ug/L	08:28:16
3	SiO2†	82872.9	81078.6	[5347.5]	ug/L	08:28:52

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	898365.7	6488.79	0.72%	101.51	%
Sc Radial	5612.3	186.71	3.33%	99.1	%
Y 371.029	740811.3	5657.11	0.76%	99.830	%
Y RADIAL	6056.1	203.26	3.36%	98.33	%
Ag 328.068†	107777.6	341.95	0.32%	[500]	ug/L
Al 396.153Radial†	6561.3	110.45	1.68%	[5000]	ug/L
As 188.979†	1201.3	11.39	0.95%	[500]	ug/L
B 249.677†	22268.6	44.51	0.20%	[500]	ug/L
Ba 233.527†	64144.3	142.34	0.22%	[500]	ug/L
Be 313.107†	1314009.5	13094.70	1.00%	[500]	ug/L
Ca 317.933Radial†	3266.8	124.44	3.81%	[5000]	ug/L
Cd 226.502†	45056.7	59.44	0.13%	[500]	ug/L
Co 228.616†	25165.2	58.44	0.23%	[500]	ug/L
Cr 267.716†	45168.6	24.29	0.05%	[500]	ug/L
Cu 324.752†	165901.5	606.79	0.37%	[500]	ug/L
K 766.490 Radial†	27384.6	452.85	1.65%	[5000]	ug/L
Mg 279.077 IEC†	136.3	3.65	2.68%	[5000]	ug/L
Mn 257.610†	450229.5	3976.95	0.88%	[500]	ug/L
Mo 202.031†	7666.6	60.36	0.79%	[500]	ug/L
Ni 231.604†	20643.3	24.94	0.12%	[500]	ug/L
P 214.914†	4103.1	36.05	0.88%	[2500]	ug/L
Pb 220.353†	4196.6	29.89	0.71%	[500]	ug/L

S 181.975 Axial†	684.3	6.82	1.00%	[1000]	ug/L
Sb 206.836†	1536.7	9.88	0.64%	[500]	ug/L
Se 196.026†	825.4	8.91	1.08%	[500]	ug/L
Si 251.611†	80309.0	224.22	0.28%	[2500]	ug/L
Sn 189.927†	2963.3	21.57	0.73%	[500]	ug/L
Sr 421.552†	75460.2	1210.12	1.60%	[500]	ug/L
Ti 334.940†	306272.6	754.85	0.25%	[500]	ug/L
Tl 190.801†	1716.6	14.68	0.86%	[500]	ug/L
U 409.014†	17369.3	55.20	0.32%	[500]	ug/L
V 292.402†	71777.4	61.55	0.09%	[500]	ug/L
Zn 213.857†	54353.3	92.53	0.17%	[500]	ug/L
SiO2†	81163.1	725.88	0.89%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/9/2009 08:31:02
Data Type: Reprocessed on 12/9/2009 10:32:19
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	850251.5	850251.5	96.077	%	08:34:18
1	Sc Radial	5533.5	5533.5	97.7	%	08:32:55
1	Y 371.029	701415.8	701415.8	94.521	%	08:34:18
1	Y RADIAL	6014.0	6014.0	97.65	%	08:32:55
1	Ag 328.068†	212503.6	220953.8	[1000]	ug/L	08:34:18
1	Al 396.153Radial†	13115.4	13443.4	[10000]	ug/L	08:32:55
1	As 188.979†	2381.3	2507.8	[1000]	ug/L	08:34:39
1	B 249.677†	44947.2	47306.5	[1000]	ug/L	08:34:18
1	Ba 233.527†	130054.0	135377.0	[1000]	ug/L	08:34:18
1	Be 313.107†	2668005.7	2782276.6	[1000]	ug/L	08:34:13
1	Ca 317.933Radial†	6484.0	6618.4	[10000]	ug/L	08:32:55
1	Cd 226.502†	90844.2	94741.8	[1000]	ug/L	08:34:18
1	Co 228.616†	50910.3	53061.1	[1000]	ug/L	08:34:18
1	Cr 267.716†	91753.4	95413.3	[1000]	ug/L	08:34:18
1	Cu 324.752†	346853.3	354248.8	[1000]	ug/L	08:34:18
1	Fe 238.204 Radial†	961.1	977.6	[10000]	ug/L	08:33:15
1	K 766.490 Radial†	56384.8	55537.2	[10000]	ug/L	08:32:55
1	Mg 279.077 IEC†	266.6	271.1	[10000]	ug/L	08:33:15
1	Mn 257.610†	915289.7	952263.1	[1000]	ug/L	08:34:13
1	Mo 202.031†	15078.9	15674.7	[1000]	ug/L	08:34:39
1	Na 589.592 Radial†	23620.3	24790.4	[10000]	ug/L	08:32:55
1	Ni 231.604†	41597.5	43226.0	[1000]	ug/L	08:34:18
1	P 214.914†	8503.1	8630.4	[5000]	ug/L	08:34:39
1	Pb 220.353†	8383.2	8778.1	[1000]	ug/L	08:34:39
1	S 181.975 Axial†	1377.9	1392.6	[2000]	ug/L	08:34:39
1	Sb 206.836†	3049.5	3144.4	[1000]	ug/L	08:34:39
1	Se 196.026†	1618.5	1708.1	[1000]	ug/L	08:34:39
1	Si 251.611†	161724.8	167820.9	[5000]	ug/L	08:34:18
1	Sn 189.927†	5789.0	6021.1	[1000]	ug/L	08:34:39
1	Sr 421.552†	144955.4	148352.3	[1000]	ug/L	08:32:55
1	Ti 334.940†	607181.7	632941.6	[1000]	ug/L	08:34:18
1	Tl 190.801†	3388.0	3563.2	[1000]	ug/L	08:34:39
1	U 409.014†	33553.3	36885.7	[1000]	ug/L	08:34:18
1	V 292.402†	145285.4	152514.7	[1000]	ug/L	08:34:18
1	Zn 213.857†	110499.0	114204.0	[1000]	ug/L	08:34:18
1	SiO2†	160588.3	166657.3	[10695]	ug/L	08:35:47
2	Sc 361.383	876826.0	876826.0	99.079	%	08:34:50
2	Sc Radial	5769.1	5769.1	102	%	08:33:20
2	Y 371.029	725945.2	725945.2	97.827	%	08:34:50
2	Y RADIAL	6233.8	6233.8	101.2	%	08:33:20
2	Ag 328.068†	211821.3	213561.7	[1000]	ug/L	08:34:50
2	Al 396.153Radial†	13223.3	13001.2	[10000]	ug/L	08:33:20
2	As 188.979†	2383.7	2435.1	[1000]	ug/L	08:35:10
2	B 249.677†	44853.4	45794.0	[1000]	ug/L	08:34:50
2	Ba 233.527†	129340.2	130553.9	[1000]	ug/L	08:34:50
2	Be 313.107†	2640831.9	2670687.5	[1000]	ug/L	08:34:44
2	Ca 317.933Radial†	6545.8	6408.1	[10000]	ug/L	08:33:20
2	Cd 226.502†	90370.0	91397.4	[1000]	ug/L	08:34:50
2	Co 228.616†	50520.5	51061.6	[1000]	ug/L	08:34:50
2	Cr 267.716†	91349.0	92110.7	[1000]	ug/L	08:34:50
2	Cu 324.752†	345284.8	341724.1	[1000]	ug/L	08:34:50
2	Fe 238.204 Radial†	965.7	942.0	[10000]	ug/L	08:33:40
2	K 766.490 Radial†	56969.8	53754.9	[10000]	ug/L	08:33:20
2	Mg 279.077 IEC†	263.9	257.3	[10000]	ug/L	08:33:40
2	Mn 257.610†	904052.2	912048.1	[1000]	ug/L	08:34:44
2	Mo 202.031†	15064.1	15184.0	[1000]	ug/L	08:35:10
2	Na 589.592 Radial†	23815.7	23995.0	[10000]	ug/L	08:33:20
2	Ni 231.604†	41490.8	41806.2	[1000]	ug/L	08:34:50

2	P 214.914†	8521.8	8381.0	[5000]	ug/L	08:35:10
2	Pb 220.353†	8346.4	8476.5	[1000]	ug/L	08:35:10
2	S 181.975 Axial†	1382.2	1353.5	[2000]	ug/L	08:35:10
2	Sb 206.836†	3047.9	3046.6	[1000]	ug/L	08:35:10
2	Se 196.026†	1624.6	1663.1	[1000]	ug/L	08:35:10
2	Si 251.611†	160771.4	161757.0	[5000]	ug/L	08:34:50
2	Sn 189.927†	5776.1	5825.5	[1000]	ug/L	08:35:10
2	Sr 421.552†	146272.8	143587.4	[1000]	ug/L	08:33:20
2	Ti 334.940†	604367.5	610947.6	[1000]	ug/L	08:34:50
2	Tl 190.801†	3400.0	3468.4	[1000]	ug/L	08:35:10
2	U 409.014†	33305.7	35577.3	[1000]	ug/L	08:34:50
2	V 292.402†	144462.0	147100.6	[1000]	ug/L	08:34:50
2	Zn 213.857†	109920.3	110134.2	[1000]	ug/L	08:34:50
2	SiO2†	160175.3	161174.6	[10695]	ug/L	08:35:52
3	Sc 361.383	872930.7	872930.7	98.639	%	08:35:21
3	Sc Radial	5474.2	5474.2	96.7	%	08:33:46
3	Y 371.029	721425.0	721425.0	97.218	%	08:35:21
3	Y RADIAL	5944.1	5944.1	96.52	%	08:33:46
3	Ag 328.068†	212333.5	215034.9	[1000]	ug/L	08:35:21
3	Al 396.153Radial†	13175.8	13651.4	[10000]	ug/L	08:33:46
3	As 188.979†	2386.3	2448.5	[1000]	ug/L	08:35:42
3	B 249.677†	45175.6	46322.6	[1000]	ug/L	08:35:21
3	Ba 233.527†	129824.3	131627.2	[1000]	ug/L	08:35:21
3	Be 313.107†	2629626.7	2671221.4	[1000]	ug/L	08:35:16
3	Ca 317.933Radial†	6502.5	6709.5	[10000]	ug/L	08:33:46
3	Cd 226.502†	90539.7	91976.5	[1000]	ug/L	08:35:21
3	Co 228.616†	50628.1	51398.3	[1000]	ug/L	08:35:21
3	Cr 267.716†	91620.2	92797.1	[1000]	ug/L	08:35:21
3	Cu 324.752†	346849.9	344865.9	[1000]	ug/L	08:35:21
3	Fe 238.204 Radial†	967.0	994.4	[10000]	ug/L	08:34:06
3	K 766.490 Radial†	56413.8	56193.0	[10000]	ug/L	08:33:46
3	Mg 279.077 IEC†	268.9	276.4	[10000]	ug/L	08:34:06
3	Mn 257.610†	899357.4	911360.2	[1000]	ug/L	08:35:16
3	Mo 202.031†	15037.0	15224.5	[1000]	ug/L	08:35:42
3	Na 589.592 Radial†	23657.5	25090.9	[10000]	ug/L	08:33:46
3	Ni 231.604†	41585.6	42089.2	[1000]	ug/L	08:35:21
3	P 214.914†	8511.2	8408.6	[5000]	ug/L	08:35:42
3	Pb 220.353†	8367.1	8535.0	[1000]	ug/L	08:35:42
3	S 181.975 Axial†	1383.1	1360.7	[2000]	ug/L	08:35:42
3	Sb 206.836†	3050.9	3063.4	[1000]	ug/L	08:35:42
3	Se 196.026†	1636.4	1682.4	[1000]	ug/L	08:35:42
3	Si 251.611†	161444.9	163163.9	[5000]	ug/L	08:35:21
3	Sn 189.927†	5806.5	5882.4	[1000]	ug/L	08:35:42
3	Sr 421.552†	145221.8	150236.7	[1000]	ug/L	08:33:46
3	Ti 334.940†	606384.0	615713.8	[1000]	ug/L	08:35:21
3	Tl 190.801†	3395.9	3479.6	[1000]	ug/L	08:35:42
3	U 409.014†	33383.6	35806.3	[1000]	ug/L	08:35:21
3	V 292.402†	145043.8	148341.1	[1000]	ug/L	08:35:21
3	Zn 213.857†	110326.9	111041.6	[1000]	ug/L	08:35:21
3	SiO2†	161376.9	163114.2	[10695]	ug/L	08:35:58

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	866669.4	14351.09	1.66%	97.932	%
Sc Radial	5592.3	156.00	2.79%	98.7	%
Y 371.029	716262.0	13054.32	1.82%	96.522	%
Y RADIAL	6064.0	151.18	2.49%	98.46	%
Ag 328.068†	216516.8	3912.52	1.81%	[1000]	ug/L
Al 396.153Radial†	13365.3	332.06	2.48%	[10000]	ug/L
As 188.979†	2463.8	38.69	1.57%	[1000]	ug/L
B 249.677†	46474.4	767.60	1.65%	[1000]	ug/L
Ba 233.527†	132519.3	2532.28	1.91%	[1000]	ug/L
Be 313.107†	2708061.8	64272.46	2.37%	[1000]	ug/L
Ca 317.933Radial†	6578.7	154.56	2.35%	[10000]	ug/L
Cd 226.502†	92705.2	1787.31	1.93%	[1000]	ug/L
Co 228.616†	51840.3	1070.50	2.06%	[1000]	ug/L
Cr 267.716†	93440.4	1742.72	1.87%	[1000]	ug/L
Cu 324.752†	346946.3	6516.33	1.88%	[1000]	ug/L
Fe 238.204 Radial†	971.3	26.76	2.76%	[10000]	ug/L

K 766.490 Radial†	55161.7	1261.67	2.29%	[10000]	ug/L
Mg 279.077 IEC†	268.3	9.87	3.68%	[10000]	ug/L
Mn 257.610†	925223.8	23419.23	2.53%	[1000]	ug/L
Mo 202.031†	15361.1	272.34	1.77%	[1000]	ug/L
Na 589.592 Radial†	24625.4	566.30	2.30%	[10000]	ug/L
Ni 231.604†	42373.8	751.50	1.77%	[1000]	ug/L
P 214.914†	8473.3	136.72	1.61%	[5000]	ug/L
Pb 220.353†	8596.5	159.94	1.86%	[1000]	ug/L
S 181.975 Axial†	1369.0	20.82	1.52%	[2000]	ug/L
Sb 206.836†	3084.8	52.28	1.69%	[1000]	ug/L
Se 196.026†	1684.6	22.56	1.34%	[1000]	ug/L
Si 251.611†	164247.3	3173.79	1.93%	[5000]	ug/L
Sn 189.927†	5909.7	100.64	1.70%	[1000]	ug/L
Sr 421.552†	147392.1	3427.10	2.33%	[1000]	ug/L
Ti 334.940†	619867.7	11570.45	1.87%	[1000]	ug/L
Tl 190.801†	3503.7	51.77	1.48%	[1000]	ug/L
U 409.014†	36089.8	698.72	1.94%	[1000]	ug/L
V 292.402†	149318.8	2836.39	1.90%	[1000]	ug/L
Zn 213.857†	111793.3	2136.49	1.91%	[1000]	ug/L
SiO2†	163648.7	2780.16	1.70%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/9/2009 08:38:08
Data Type: Reprocessed on 12/9/2009 10:32:20
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860444.2	860444.2	97.228	%	08:41:19
1	Sc Radial	5563.2	5563.2	98.2	%	08:40:22
1	Y 371.029	705763.8	705763.8	95.107	%	08:41:19
1	Y RADIAL	5976.4	5976.4	97.04	%	08:40:22
1	Al 396.153Radial†	64915.4	66104.8	[50000]	ug/L	08:40:02
1	Ca 317.933Radial†	31391.5	31939.2	[50000]	ug/L	08:40:02
1	Fe 238.204 Radial†	1937.0	1965.8	[20000]	ug/L	08:40:22
1	Mg 279.077 IEC†	1300.4	1322.0	[50000]	ug/L	08:40:22
1	Na 589.592 Radial†	51369.4	52910.5	[20000]	ug/L	08:40:02
2	Sc 361.383	865149.4	865149.4	97.760	%	08:41:24
2	Sc Radial	5442.2	5442.2	96.1	%	08:40:47
2	Y 371.029	708522.0	708522.0	95.479	%	08:41:24
2	Y RADIAL	5843.9	5843.9	94.89	%	08:40:47
2	Al 396.153Radial†	65821.3	68516.6	[50000]	ug/L	08:40:27
2	Ca 317.933Radial†	31762.2	33035.3	[50000]	ug/L	08:40:27
2	Fe 238.204 Radial†	1937.0	2009.7	[20000]	ug/L	08:40:47
2	Mg 279.077 IEC†	1297.3	1348.3	[50000]	ug/L	08:40:47
2	Na 589.592 Radial†	52102.0	54835.3	[20000]	ug/L	08:40:27
3	Sc 361.383	870309.3	870309.3	98.343	%	08:41:30
3	Sc Radial	5484.6	5484.6	96.8	%	08:41:12
3	Y 371.029	713259.8	713259.8	96.117	%	08:41:30
3	Y RADIAL	5873.4	5873.4	95.37	%	08:41:12
3	Al 396.153Radial†	66266.7	68446.0	[50000]	ug/L	08:40:52
3	Ca 317.933Radial†	32068.2	33095.3	[50000]	ug/L	08:40:52
3	Fe 238.204 Radial†	1958.1	2015.8	[20000]	ug/L	08:41:12
3	Mg 279.077 IEC†	1316.2	1357.3	[50000]	ug/L	08:41:12
3	Na 589.592 Radial†	52525.2	54852.4	[20000]	ug/L	08:40:52

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	865300.9	4934.29	0.57%	97.777	%
Sc Radial	5496.7	61.38	1.12%	97.1	%
Y 371.029	709181.8	3791.32	0.53%	95.568	%
Y RADIAL	5897.9	69.54	1.18%	95.77	%
Al 396.153Radial†	67689.1	1372.53	2.03%	[50000]	ug/L
Ca 317.933Radial†	32689.9	650.87	1.99%	[50000]	ug/L
Fe 238.204 Radial†	1997.1	27.27	1.37%	[20000]	ug/L
Mg 279.077 IEC†	1342.5	18.31	1.36%	[50000]	ug/L
Na 589.592 Radial†	54199.4	1116.28	2.06%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	216.3	0.00000	0.999997	
Al 396.153Radial	3	Lin Thru 0	0.0	1.353	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	2.451	0.00000	0.999946	
B 249.677	3	Lin Thru 0	0.0	46.07	0.00000	0.999850	
Ba 233.527	3	Lin Thru 0	0.0	131.7	0.00000	0.999918	
Be 313.107	3	Lin Thru 0	0.0	2691	0.00000	0.999922	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6539	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	92.18	0.00000	0.999936	
Co 228.616	3	Lin Thru 0	0.0	51.52	0.00000	0.999926	
Cr 267.716	3	Lin Thru 0	0.0	92.81	0.00000	0.999911	
Cu 324.752	3	Lin Thru 0	0.0	343.8	0.00000	0.999843	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0993	0.00000	0.999940	

K 766.490 Radial	3	Lin Thru 0	0.0	5.510	0.00000	0.999989
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0269	0.00000	0.999999
Mn 257.610	3	Lin Thru 0	0.0	920.2	0.00000	0.999942
Mo 202.031	3	Lin Thru 0	0.0	15.35	0.00000	0.999996
Na 589.592 Radia	2	Lin Thru 0	0.0	2.660	0.00000	0.999309
Ni 231.604	3	Lin Thru 0	0.0	42.14	0.00000	0.999942
P 214.914	3	Lin Thru 0	0.0	1.683	0.00000	0.999909
Pb 220.353	3	Lin Thru 0	0.0	8.554	0.00000	0.999953
S 181.975 Axial	3	Lin Thru 0	0.0	0.6839	0.00000	0.999959
Sb 206.836	3	Lin Thru 0	0.0	3.081	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	1.677	0.00000	0.999952
Si 251.611	3	Lin Thru 0	0.0	32.70	0.00000	0.999956
Sn 189.927	3	Lin Thru 0	0.0	5.911	0.00000	0.999992
Sr 421.552	3	Lin Thru 0	0.0	148.1	0.00000	0.999951
Ti 334.940	3	Lin Thru 0	0.0	618.3	0.00000	0.999987
Tl 190.801	3	Lin Thru 0	0.0	3.489	0.00000	0.999965
U 409.014	3	Lin Thru 0	0.0	35.79	0.00000	0.999852
V 292.402	3	Lin Thru 0	0.0	148.1	0.00000	0.999878
Zn 213.857	3	Lin Thru 0	0.0	111.1	0.00000	0.999935
SiO2	3	Lin Thru 0	0.0	15.27	0.00000	0.999986

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/9/2009 08:43:41
Data Type: Reprocessed on 12/9/2009 10:32:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899143.1	899143.1	101.60	%			08:46:51
1	Sc Radial	5755.3	5755.3	102	%			08:45:34
1	Y 371.029	745083.4	745083.4	100.41	%			08:46:51
1	Y RADIAL	6211.5	6211.5	100.9	%			08:45:34
1	Ag 328.068†	56632.9	55512.7	259.75	ug/L	259.75	ppb	08:46:51
1	Al 396.153Radial†	6818.1	6729.6	4951.6	ug/L	4951.6	ppb	08:45:34
1	As 188.979†	1135.6	1146.9	472.32	ug/L	472.32	ppb	08:47:11
1	B 249.677†	23247.5	23405.0	506.12	ug/L	506.12	ppb	08:46:51
1	Ba 233.527†	67271.4	66223.2	504.28	ug/L	504.28	ppb	08:46:51
1	Be 313.107†	695042.6	689408.8	257.18	ug/L	257.18	ppb	08:46:51
1	Ca 317.933Radial†	3308.0	3237.5	4950.6	ug/L	4950.6	ppb	08:45:54
1	Cd 226.502†	45903.3	45367.7	492.00	ug/L	492.00	ppb	08:46:51
1	Co 228.616†	25866.2	25530.3	495.84	ug/L	495.84	ppb	08:47:11
1	Cr 267.716†	45516.9	44712.6	482.58	ug/L	482.58	ppb	08:46:51
1	Cu 324.752†	180623.3	171008.0	497.60	ug/L	497.60	ppb	08:46:51
1	Fe 238.204 Radial†	515.8	501.5	5065.9	ug/L	5065.9	ppb	08:45:54
1	K 766.490 Radial†	16132.4	13704.5	2482.0	ug/L	2482.0	ppb	08:45:34
1	Mg 279.077 IEC†	147.3	143.2	5338.3	ug/L	5338.3	ppb	08:45:54
1	Mn 257.610†	473453.9	465588.7	506.37	ug/L	506.37	ppb	08:46:51
1	Mo 202.031†	8477.5	8323.9	542.58	ug/L	542.58	ppb	08:47:11
1	Na 589.592 Radial†	5744.7	6268.9	2356.3	ug/L	2356.3	ppb	08:45:34
1	Ni 231.604†	21194.2	20790.0	492.99	ug/L	492.99	ppb	08:47:11
1	P 214.914†	4454.0	4163.9	2399.0	ug/L	2399.0	ppb	08:47:11
1	Pb 220.353†	4241.1	4226.8	495.74	ug/L	495.74	ppb	08:47:11
1	S 181.975 Axial†	1765.6	1696.3	2479.4	ug/L	2479.4	ppb	08:47:11
1	Sb 206.836†	1591.5	1536.8	508.08	ug/L	508.08	ppb	08:47:11
1	Se 196.026†	4216.6	4173.6	2506.7	ug/L	2506.7	ppb	08:47:11
1	Si 251.611†	158477.4	155471.8	4743.2	ug/L	4743.2	ppb	08:46:51
1	Sn 189.927†	3253.6	3198.1	541.63	ug/L	541.63	ppb	08:47:11
1	Sr 421.552†	80003.9	78722.8	531.38	ug/L	531.38	ppb	08:45:34
1	Ti 334.940†	317575.3	313535.2	506.97	ug/L	506.97	ppb	08:46:51
1	Tl 190.801†	1811.6	1819.9	524.93	ug/L	524.93	ppb	08:47:11
1	U 409.014†	15263.7	16985.4	472.98	ug/L	472.98	ppb	08:46:51
1	V 292.402†	74003.4	74133.6	507.71	ug/L	507.71	ppb	08:46:51
1	Zn 213.857†	57517.5	55803.7	497.65	ug/L	497.65	ppb	08:46:51
1	SiO2†	158528.2	155540.9	10159	ug/L	10159	ppb	08:48:09
2	Sc 361.383	900929.8	900929.8	101.80	%			08:47:17
2	Sc Radial	5526.2	5526.2	97.6	%			08:45:59
2	Y 371.029	747790.7	747790.7	100.77	%			08:47:17
2	Y RADIAL	5987.0	5987.0	97.21	%			08:45:59
2	Ag 328.068†	56755.1	55522.2	259.83	ug/L	259.83	ppb	08:47:17
2	Al 396.153Radial†	6648.7	6834.0	5028.9	ug/L	5028.9	ppb	08:45:59
2	As 188.979†	1138.7	1147.8	472.69	ug/L	472.69	ppb	08:47:38
2	B 249.677†	23267.4	23379.2	505.54	ug/L	505.54	ppb	08:47:17
2	Ba 233.527†	67420.8	66238.6	504.40	ug/L	504.40	ppb	08:47:17
2	Be 313.107†	696988.5	689963.5	257.38	ug/L	257.38	ppb	08:47:17
2	Ca 317.933Radial†	3262.6	3325.9	5085.8	ug/L	5085.8	ppb	08:46:19
2	Cd 226.502†	45961.1	45334.9	491.63	ug/L	491.63	ppb	08:47:17
2	Co 228.616†	25875.1	25488.6	495.02	ug/L	495.02	ppb	08:47:38
2	Cr 267.716†	45637.8	44742.5	482.90	ug/L	482.90	ppb	08:47:17
2	Cu 324.752†	181032.7	171057.5	497.75	ug/L	497.75	ppb	08:47:17
2	Fe 238.204 Radial†	507.2	513.7	5188.5	ug/L	5188.5	ppb	08:46:19
2	K 766.490 Radial†	15882.2	14106.0	2554.8	ug/L	2554.8	ppb	08:45:59
2	Mg 279.077 IEC†	144.7	146.5	5463.2	ug/L	5463.2	ppb	08:46:19
2	Mn 257.610†	473926.8	465129.1	505.88	ug/L	505.88	ppb	08:47:17
2	Mo 202.031†	8455.1	8285.4	540.07	ug/L	540.07	ppb	08:47:38
2	Na 589.592 Radial†	5656.1	6412.4	2410.3	ug/L	2410.3	ppb	08:45:59
2	Ni 231.604†	21190.5	20745.1	491.93	ug/L	491.93	ppb	08:47:38

2	P 214.914†	4449.0	4150.2	2390.7	ug/L	2390.7 ppb	08:47:38
2	Pb 220.353†	4244.7	4222.1	495.20	ug/L	495.20 ppb	08:47:38
2	S 181.975 Axial†	1768.7	1695.9	2478.8	ug/L	2478.8 ppb	08:47:38
2	Sb 206.836†	1584.1	1526.4	504.59	ug/L	504.59 ppb	08:47:38
2	Se 196.026†	4230.6	4179.1	2510.4	ug/L	2510.4 ppb	08:47:38
2	Si 251.611†	158592.9	155275.9	4737.3	ug/L	4737.3 ppb	08:47:17
2	Sn 189.927†	3239.3	3177.6	538.18	ug/L	538.18 ppb	08:47:38
2	Sr 421.552†	77858.2	79787.0	538.56	ug/L	538.56 ppb	08:45:59
2	Ti 334.940†	318127.1	313457.4	506.85	ug/L	506.85 ppb	08:47:17
2	Tl 190.801†	1807.6	1812.4	522.78	ug/L	522.78 ppb	08:47:38
2	U 409.014†	15446.1	17134.7	477.14	ug/L	477.14 ppb	08:47:17
2	V 292.402†	74257.6	74238.8	508.38	ug/L	508.38 ppb	08:47:17
2	Zn 213.857†	57541.4	55714.9	496.85	ug/L	496.85 ppb	08:47:17
2	SiO2†	160259.5	156932.1	10251	ug/L	10251 ppb	08:48:14
3	Sc 361.383	892907.1	892907.1	100.90	%		08:47:44
3	Sc Radial	5572.6	5572.6	98.4	%		08:46:24
3	Y 371.029	740826.1	740826.1	99.832	%		08:47:44
3	Y RADIAL	6045.8	6045.8	98.17	%		08:46:24
3	Ag 328.068†	56455.6	55726.3	260.76	ug/L	260.76 ppb	08:47:44
3	Al 396.153Radial†	6733.8	6863.8	5050.6	ug/L	5050.6 ppb	08:46:24
3	As 188.979†	1138.0	1157.1	476.47	ug/L	476.47 ppb	08:48:04
3	B 249.677†	23201.0	23518.7	508.56	ug/L	508.56 ppb	08:47:44
3	Ba 233.527†	67082.8	66498.7	506.38	ug/L	506.38 ppb	08:47:44
3	Be 313.107†	692991.5	692153.6	258.20	ug/L	258.20 ppb	08:47:44
3	Ca 317.933Radial†	3266.2	3301.7	5048.9	ug/L	5048.9 ppb	08:46:44
3	Cd 226.502†	45892.6	45672.6	495.30	ug/L	495.30 ppb	08:47:44
3	Co 228.616†	26031.4	25871.8	502.48	ug/L	502.48 ppb	08:48:04
3	Cr 267.716†	45399.9	44909.5	484.71	ug/L	484.71 ppb	08:47:44
3	Cu 324.752†	179963.6	171595.7	499.31	ug/L	499.31 ppb	08:47:44
3	Fe 238.204 Radial†	503.9	506.1	5111.6	ug/L	5111.6 ppb	08:46:44
3	K 766.490 Radial†	16069.5	14161.0	2564.8	ug/L	2564.8 ppb	08:46:24
3	Mg 279.077 IEC†	140.9	141.4	5273.9	ug/L	5273.9 ppb	08:46:44
3	Mn 257.610†	471754.2	467158.6	508.09	ug/L	508.09 ppb	08:47:44
3	Mo 202.031†	8505.1	8409.6	548.16	ug/L	548.16 ppb	08:48:04
3	Na 589.592 Radial†	5701.6	6410.4	2409.5	ug/L	2409.5 ppb	08:46:24
3	Ni 231.604†	21331.0	21071.3	499.66	ug/L	499.66 ppb	08:48:04
3	P 214.914†	4494.3	4234.4	2440.7	ug/L	2440.7 ppb	08:48:04
3	Pb 220.353†	4273.3	4287.9	502.92	ug/L	502.92 ppb	08:48:04
3	S 181.975 Axial†	1777.7	1720.4	2514.6	ug/L	2514.6 ppb	08:48:04
3	Sb 206.836†	1606.7	1562.8	516.70	ug/L	516.70 ppb	08:48:04
3	Se 196.026†	4269.7	4255.2	2555.6	ug/L	2555.6 ppb	08:48:04
3	Si 251.611†	158021.7	156109.4	4762.6	ug/L	4762.6 ppb	08:47:44
3	Sn 189.927†	3261.6	3228.3	546.75	ug/L	546.75 ppb	08:48:04
3	Sr 421.552†	78802.8	80082.9	540.56	ug/L	540.56 ppb	08:46:24
3	Ti 334.940†	316188.4	314343.7	508.28	ug/L	508.28 ppb	08:47:44
3	Tl 190.801†	1831.5	1852.0	534.12	ug/L	534.12 ppb	08:48:04
3	U 409.014†	15219.2	17046.2	474.67	ug/L	474.67 ppb	08:47:44
3	V 292.402†	73844.6	74484.8	510.15	ug/L	510.15 ppb	08:47:44
3	Zn 213.857†	57412.5	56095.0	500.23	ug/L	500.23 ppb	08:47:44
3	SiO2†	157396.8	155509.3	10157	ug/L	10157 ppb	08:48:20

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897660.0	101.43	%	0.476				0.47%
Sc Radial	5618.0	99.2	%	2.14				2.16%
Y 371.029	744566.7	100.34	%	0.473				0.47%
Y RADIAL	6081.4	98.74	%	1.890				1.91%
Ag 328.068†	55587.1	260.12	ug/L	0.561	260.12	ppb	0.561	0.22%
QC value within limits for Ag 328.068 Recovery = 104.05%								
Al 396.153Radial†	6809.1	5010.4	ug/L	52.04	5010.4	ppb	52.04	1.04%
QC value within limits for Al 396.153Radial Recovery = 100.21%								
As 188.979†	1150.6	473.82	ug/L	2.297	473.82	ppb	2.297	0.48%
QC value within limits for As 188.979 Recovery = 94.76%								
B 249.677†	23434.3	506.74	ug/L	1.604	506.74	ppb	1.604	0.32%
QC value within limits for B 249.677 Recovery = 101.35%								
Ba 233.527†	66320.2	505.02	ug/L	1.178	505.02	ppb	1.178	0.23%
QC value within limits for Ba 233.527 Recovery = 101.00%								
Be 313.107†	690508.6	257.58	ug/L	0.541	257.58	ppb	0.541	0.21%
QC value within limits for Be 313.107 Recovery = 103.03%								

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Ca 317.933Radial†       3288.3      5028.4 ug/L        69.89      5028.4 ppb        69.89   1.39%
   QC value within limits for Ca 317.933Radial  Recovery = 100.57%
Cd 226.502†            45458.4      492.98 ug/L        2.025      492.98 ppb        2.025   0.41%
   QC value within limits for Cd 226.502  Recovery = 98.60%
Co 228.616†            25630.2      497.78 ug/L        4.090      497.78 ppb        4.090   0.82%
   QC value within limits for Co 228.616  Recovery = 99.56%
Cr 267.716†            44788.2      483.40 ug/L        1.145      483.40 ppb        1.145   0.24%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†           171220.4      498.22 ug/L        0.948      498.22 ppb        0.948   0.19%
   QC value within limits for Cu 324.752  Recovery = 99.64%
Fe 238.204 Radial†       507.1      5122.0 ug/L        62.00      5122.0 ppb        62.00   1.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.44%
K 766.490 Radial†      13990.5      2533.9 ug/L        45.22      2533.9 ppb        45.22   1.78%
   QC value within limits for K 766.490 Radial  Recovery = 101.36%
Mg 279.077 IEC†          143.7      5358.5 ug/L        96.24      5358.5 ppb        96.24   1.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.17%
Mn 257.610†           465958.8      506.78 ug/L        1.156      506.78 ppb        1.156   0.23%
   QC value within limits for Mn 257.610  Recovery = 101.36%
Mo 202.031†             8339.6      543.60 ug/L        4.138      543.60 ppb        4.138   0.76%
   QC value within limits for Mo 202.031  Recovery = 108.72%
Na 589.592 Radial†      6363.9      2392.0 ug/L        30.94      2392.0 ppb        30.94   1.29%
   QC value within limits for Na 589.592 Radial  Recovery = 95.68%
Ni 231.604†            20868.8      494.86 ug/L        4.193      494.86 ppb        4.193   0.85%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4182.8      2410.2 ug/L        26.77      2410.2 ppb        26.77   1.11%
   QC value within limits for P 214.914  Recovery = 96.41%
Pb 220.353†             4245.6      497.95 ug/L        4.310      497.95 ppb        4.310   0.87%
   QC value within limits for Pb 220.353  Recovery = 99.59%
S 181.975 Axial†        1704.2      2490.9 ug/L        20.51      2490.9 ppb        20.51   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 99.64%
Sb 206.836†             1542.0      509.79 ug/L        6.233      509.79 ppb        6.233   1.22%
   QC value within limits for Sb 206.836  Recovery = 101.96%
Se 196.026†             4202.7      2524.2 ug/L        27.20      2524.2 ppb        27.20   1.08%
   QC value within limits for Se 196.026  Recovery = 100.97%
Si 251.611†           155619.0      4747.7 ug/L        13.24      4747.7 ppb        13.24   0.28%
   QC value within limits for Si 251.611  Recovery = 94.95%
Sn 189.927†             3201.3      542.19 ug/L        4.315      542.19 ppb        4.315   0.80%
   QC value within limits for Sn 189.927  Recovery = 108.44%
Sr 421.552†            79530.9      536.83 ug/L        4.828      536.83 ppb        4.828   0.90%
   QC value within limits for Sr 421.552  Recovery = 107.37%
Ti 334.940†           313778.8      507.37 ug/L        0.794      507.37 ppb        0.794   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.47%
Tl 190.801†             1828.1      527.28 ug/L        6.020      527.28 ppb        6.020   1.14%
   QC value within limits for Tl 190.801  Recovery = 105.46%
U 409.014†             17055.4      474.93 ug/L        2.090      474.93 ppb        2.090   0.44%
   QC value within limits for U 409.014  Recovery = 94.99%
V 292.402†             74285.7      508.75 ug/L        1.263      508.75 ppb        1.263   0.25%
   QC value within limits for V 292.402  Recovery = 101.75%
Zn 213.857†            55871.2      498.24 ug/L        1.766      498.24 ppb        1.766   0.35%
   QC value within limits for Zn 213.857  Recovery = 99.65%
SiO2†                 155994.1       10189 ug/L         53.3       10189 ppb         53.3   0.52%
   QC value within limits for SiO2  Recovery = 95.27%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/9/2009 08:50:30
Data Type: Reprocessed on 12/9/2009 10:32:22

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885039.3	885039.3	100.01	%			08:53:40
1	Sc Radial	6007.8	6007.8	106	%			08:52:23
1	Y 371.029	743826.3	743826.3	100.24	%			08:53:40
1	Y RADIAL	6510.4	6510.4	105.7	%			08:52:23
1	Ag 328.068†	220.0	-7.6	-0.0265	ug/L	-0.0265	ppb	08:53:40
1	Al 396.153Radial†	-24.9	-3.1	-2.2915	ug/L	-2.2915	ppb	08:52:43
1	As 188.979†	-24.6	4.6	1.8821	ug/L	1.8821	ppb	08:54:00
1	B 249.677†	-224.5	299.4	6.4983	ug/L	6.4983	ppb	08:54:00
1	Ba 233.527†	-23.4	-11.4	-0.0848	ug/L	-0.0848	ppb	08:54:00
1	Be 313.107†	-5243.3	77.4	0.0283	ug/L	0.0283	ppb	08:53:40
1	Ca 317.933Radial†	18.8	0.0	0.0108	ug/L	0.0108	ppb	08:52:43
1	Cd 226.502†	-163.5	24.3	0.2632	ug/L	0.2632	ppb	08:54:00
1	Co 228.616†	-75.4	-3.6	-0.0698	ug/L	-0.0698	ppb	08:54:00
1	Cr 267.716†	75.3	-11.7	-0.1233	ug/L	-0.1233	ppb	08:54:00
1	Cu 324.752†	6855.2	86.1	0.2507	ug/L	0.2507	ppb	08:53:40
1	Fe 238.204 Radial†	7.2	0.7	7.2006	ug/L	7.2006	ppb	08:52:43
1	K 766.490 Radial†	2180.9	-114.5	-20.779	ug/L	-20.779	ppb	08:52:23
1	Mg 279.077 IEC†	1.3	-0.6	-21.220	ug/L	-21.220	ppb	08:52:43
1	Mn 257.610†	412.7	9.3	0.0112	ug/L	0.0112	ppb	08:54:00
1	Mo 202.031†	20.4	0.4	0.0294	ug/L	0.0294	ppb	08:54:00
1	Na 589.592 Radial†	-632.0	20.2	7.6089	ug/L	7.6089	ppb	08:52:23
1	Ni 231.604†	83.6	13.5	0.3200	ug/L	0.3200	ppb	08:54:00
1	P 214.914†	206.1	-13.9	-8.3010	ug/L	-8.3010	ppb	08:54:00
1	Pb 220.353†	-33.4	19.2	2.2424	ug/L	2.2424	ppb	08:54:00
1	S 181.975 Axial†	38.2	-3.3	-4.7613	ug/L	-4.7613	ppb	08:54:00
1	Sb 206.836†	34.3	4.7	1.5120	ug/L	1.5120	ppb	08:54:00
1	Se 196.026†	-29.9	-6.5	-3.8251	ug/L	-3.8251	ppb	08:54:00
1	Si 251.611†	459.2	-48.9	-1.4872	ug/L	-1.4872	ppb	08:54:00
1	Sn 189.927†	0.8	-3.4	-0.5799	ug/L	-0.5799	ppb	08:54:00
1	Sr 421.552†	17.2	12.8	0.0865	ug/L	0.0865	ppb	08:52:23
1	Ti 334.940†	-1119.0	-153.9	-0.2468	ug/L	-0.2468	ppb	08:53:40
1	Tl 190.801†	-22.7	14.2	4.0585	ug/L	4.0585	ppb	08:54:00
1	U 409.014†	-2134.0	-171.6	-4.7958	ug/L	-4.7958	ppb	08:53:40
1	V 292.402†	-1205.4	91.1	0.6051	ug/L	0.6051	ppb	08:53:40
1	Zn 213.857†	940.6	133.2	1.1963	ug/L	1.1963	ppb	08:54:00
1	SiO2†	476.1	-12.8	-0.8192	ug/L	-0.8192	ppb	08:54:56
2	Sc 361.383	884186.2	884186.2	99.911	%			08:54:05
2	Sc Radial	5598.7	5598.7	98.9	%			08:52:48
2	Y 371.029	743197.1	743197.1	100.15	%			08:54:05
2	Y RADIAL	6093.1	6093.1	98.93	%			08:52:48
2	Ag 328.068†	347.5	120.3	0.5593	ug/L	0.5593	ppb	08:54:05
2	Al 396.153Radial†	-26.2	-6.2	-4.5398	ug/L	-4.5398	ppb	08:53:08
2	As 188.979†	-18.3	10.9	4.4392	ug/L	4.4392	ppb	08:54:25
2	B 249.677†	-211.2	312.4	6.7796	ug/L	6.7796	ppb	08:54:25
2	Ba 233.527†	-17.8	-5.7	-0.0442	ug/L	-0.0442	ppb	08:54:25
2	Be 313.107†	-5176.8	138.8	0.0514	ug/L	0.0514	ppb	08:54:05
2	Ca 317.933Radial†	19.1	1.6	2.4285	ug/L	2.4285	ppb	08:53:08
2	Cd 226.502†	-164.7	23.0	0.2483	ug/L	0.2483	ppb	08:54:25
2	Co 228.616†	-69.8	1.9	0.0363	ug/L	0.0363	ppb	08:54:25
2	Cr 267.716†	71.7	-15.2	-0.1644	ug/L	-0.1644	ppb	08:54:25
2	Cu 324.752†	6794.8	32.2	0.0945	ug/L	0.0945	ppb	08:54:05
2	Fe 238.204 Radial†	7.5	1.5	15.338	ug/L	15.338	ppb	08:53:08
2	K 766.490 Radial†	2238.8	94.3	17.130	ug/L	17.130	ppb	08:52:48
2	Mg 279.077 IEC†	1.1	-0.7	-25.524	ug/L	-25.524	ppb	08:53:08
2	Mn 257.610†	412.1	9.0	0.0118	ug/L	0.0118	ppb	08:54:25
2	Mo 202.031†	17.1	-2.8	-0.1835	ug/L	-0.1835	ppb	08:54:25
2	Na 589.592 Radial†	-665.5	-57.2	-21.494	ug/L	-21.494	ppb	08:52:48
2	Ni 231.604†	83.6	13.5	0.3209	ug/L	0.3209	ppb	08:54:25

2	P 214.914†	199.9	-19.9	-11.852	ug/L	-11.852 ppb	08:54:25
2	Pb 220.353†	-52.6	-0.1	-0.0194	ug/L	-0.0194 ppb	08:54:25
2	S 181.975 Axial†	41.9	0.5	0.7238	ug/L	0.7238 ppb	08:54:25
2	Sb 206.836†	32.0	2.4	0.8056	ug/L	0.8056 ppb	08:54:25
2	Se 196.026†	-26.3	-2.9	-1.6864	ug/L	-1.6864 ppb	08:54:25
2	Si 251.611†	483.1	-24.5	-0.7548	ug/L	-0.7548 ppb	08:54:25
2	Sn 189.927†	8.1	3.8	0.6470	ug/L	0.6470 ppb	08:54:25
2	Sr 421.552†	9.6	6.3	0.0423	ug/L	0.0423 ppb	08:52:48
2	Ti 334.940†	-1018.8	-54.7	-0.0879	ug/L	-0.0879 ppb	08:54:05
2	Tl 190.801†	-32.8	4.0	1.1521	ug/L	1.1521 ppb	08:54:25
2	U 409.014†	-1984.7	-24.2	-0.6790	ug/L	-0.6790 ppb	08:54:05
2	V 292.402†	-1373.3	-78.1	-0.5337	ug/L	-0.5337 ppb	08:54:05
2	Zn 213.857†	924.7	118.3	1.0616	ug/L	1.0616 ppb	08:54:25
2	SiO2†	497.5	9.1	0.5882	ug/L	0.5882 ppb	08:55:01
3	Sc 361.383	880642.4	880642.4	99.511	%		08:54:30
3	Sc Radial	5554.9	5554.9	98.1	%		08:53:13
3	Y 371.029	740637.9	740637.9	99.807	%		08:54:30
3	Y RADIAL	6040.2	6040.2	98.08	%		08:53:13
3	Ag 328.068†	199.9	-26.6	-0.1242	ug/L	-0.1242 ppb	08:54:30
3	Al 396.153Radial†	-25.2	-5.3	-3.9345	ug/L	-3.9345 ppb	08:53:33
3	As 188.979†	-18.3	10.8	4.4225	ug/L	4.4225 ppb	08:54:51
3	B 249.677†	-202.0	320.9	6.9648	ug/L	6.9648 ppb	08:54:51
3	Ba 233.527†	-10.4	1.6	0.0114	ug/L	0.0114 ppb	08:54:51
3	Be 313.107†	-5210.3	84.4	0.0315	ug/L	0.0315 ppb	08:54:30
3	Ca 317.933Radial†	17.7	0.3	0.4667	ug/L	0.4667 ppb	08:53:33
3	Cd 226.502†	-163.1	24.0	0.2605	ug/L	0.2605 ppb	08:54:51
3	Co 228.616†	-66.1	5.4	0.1030	ug/L	0.1030 ppb	08:54:51
3	Cr 267.716†	75.8	-10.8	-0.1169	ug/L	-0.1169 ppb	08:54:51
3	Cu 324.752†	6867.1	132.2	0.3845	ug/L	0.3845 ppb	08:54:30
3	Fe 238.204 Radial†	5.8	-0.1	-1.1921	ug/L	-1.1921 ppb	08:53:33
3	K 766.490 Radial†	2207.8	80.7	14.635	ug/L	14.635 ppb	08:53:13
3	Mg 279.077 IEC†	2.1	0.3	12.561	ug/L	12.561 ppb	08:53:33
3	Mn 257.610†	406.6	5.2	0.0053	ug/L	0.0053 ppb	08:54:51
3	Mo 202.031†	13.2	-6.8	-0.4408	ug/L	-0.4408 ppb	08:54:51
3	Na 589.592 Radial†	-602.7	1.5	0.5493	ug/L	0.5493 ppb	08:53:13
3	Ni 231.604†	83.5	13.8	0.3265	ug/L	0.3265 ppb	08:54:51
3	P 214.914†	195.4	-23.6	-14.059	ug/L	-14.059 ppb	08:54:51
3	Pb 220.353†	-65.5	-13.3	-1.5534	ug/L	-1.5534 ppb	08:54:51
3	S 181.975 Axial†	44.3	3.1	4.4794	ug/L	4.4794 ppb	08:54:51
3	Sb 206.836†	38.2	8.8	2.8570	ug/L	2.8570 ppb	08:54:51
3	Se 196.026†	-24.4	-1.0	-0.6240	ug/L	-0.6240 ppb	08:54:51
3	Si 251.611†	485.7	-19.9	-0.6080	ug/L	-0.6080 ppb	08:54:51
3	Sn 189.927†	6.6	2.4	0.4063	ug/L	0.4063 ppb	08:54:51
3	Sr 421.552†	15.9	12.8	0.0863	ug/L	0.0863 ppb	08:53:13
3	Ti 334.940†	-921.1	39.4	0.0639	ug/L	0.0639 ppb	08:54:30
3	Tl 190.801†	-27.3	9.4	2.6959	ug/L	2.6959 ppb	08:54:51
3	U 409.014†	-1968.7	-16.2	-0.4536	ug/L	-0.4536 ppb	08:54:30
3	V 292.402†	-1329.2	-39.3	-0.2718	ug/L	-0.2718 ppb	08:54:30
3	Zn 213.857†	928.1	125.4	1.1255	ug/L	1.1255 ppb	08:54:51
3	SiO2†	478.8	-7.7	-0.5018	ug/L	-0.5018 ppb	08:55:06

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883289.3	99.810	%	0.2635				0.26%
Sc Radial	5720.5	101	%	4.4				4.37%
Y 371.029	742553.8	100.06	%	0.228				0.23%
Y RADIAL	6214.6	100.9	%	4.18				4.14%
Ag 328.068†	28.7	0.1362	ug/L	0.36969	0.1362	ppb	0.36969	271.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.9	-3.5886	ug/L	1.16340	-3.5886	ppb	1.16340	32.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.5813	ug/L	1.47158	3.5813	ppb	1.47158	41.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	310.9	6.7476	ug/L	0.23493	6.7476	ppb	0.23493	3.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0392	ug/L	0.04829	-0.0392	ppb	0.04829	123.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	100.2	0.0370	ug/L	0.01254	0.0370	ppb	0.01254	33.84%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          0.6      0.9687 ug/L       1.28460      0.9687 ppb        1.28460 132.62%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               23.8      0.2573 ug/L       0.00793      0.2573 ppb        0.00793   3.08%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.2      0.0232 ug/L       0.08712      0.0232 ppb        0.08712 376.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -12.6     -0.1349 ug/L       0.02582     -0.1349 ppb        0.02582  19.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               83.5      0.2432 ug/L       0.14514      0.2432 ppb        0.14514  59.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      7.1156 ug/L       8.26554      7.1156 ppb        8.26554 116.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         20.2      3.6621 ug/L      21.20314      3.6621 ppb       21.20314 578.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3    -11.394 ug/L       20.8573    -11.394 ppb        20.8573 183.05%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                7.8      0.0094 ug/L       0.00359      0.0094 ppb        0.00359  38.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -3.1     -0.1983 ug/L       0.23544     -0.1983 ppb        0.23544 118.74%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -11.8     -4.4452 ug/L      15.18056     -4.4452 ppb       15.18056 341.51%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               13.6      0.3225 ug/L       0.00351      0.3225 ppb        0.00351   1.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -19.1    -11.404 ug/L        2.9048    -11.404 ppb         2.9048  25.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.9      0.2232 ug/L       1.90946      0.2232 ppb        1.90946 855.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.1      0.1473 ug/L       4.64729      0.1473 ppb        4.64729 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                5.3      1.7249 ug/L       1.04211      1.7249 ppb        1.04211  60.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.5     -2.0452 ug/L       1.63044     -2.0452 ppb        1.63044  79.72%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.1     -0.9500 ug/L       0.47099     -0.9500 ppb        0.47099  49.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.9      0.1578 ug/L       0.65011      0.1578 ppb        0.65011 412.03%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.6      0.0717 ug/L       0.02547      0.0717 ppb        0.02547  35.50%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -56.4     -0.0903 ug/L       0.15535     -0.0903 ppb        0.15535 172.11%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                9.2      2.6355 ug/L       1.45412      2.6355 ppb        1.45412  55.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -70.7     -1.9761 ug/L       2.44454     -1.9761 ppb        2.44454 123.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -8.7     -0.0668 ug/L       0.59642     -0.0668 ppb        0.59642 892.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              125.6      1.1278 ug/L       0.06737      1.1278 ppb        0.06737   5.97%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -3.8     -0.2443 ug/L       0.73817     -0.2443 ppb        0.73817 302.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/9/2009 08:57:17
Data Type: Reprocessed on 12/9/2009 10:32:23

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896476.4	896476.4	101.30	%			09:00:27
1	Sc Radial	5639.9	5639.9	99.6	%			08:59:10
1	Y 371.029	751861.8	751861.8	101.32	%			09:00:27
1	Y RADIAL	6141.4	6141.4	99.72	%			08:59:10
1	Ag 328.068†	1439.7	1193.6	5.5275	ug/L	5.5275	ppb	09:00:27
1	Al 396.153Radial†	258.9	280.3	206.82	ug/L	206.82	ppb	08:59:10
1	As 188.979†	43.4	72.1	29.441	ug/L	29.441	ppb	09:00:47
1	B 249.677†	1840.1	2340.3	50.773	ug/L	50.773	ppb	09:00:27
1	Ba 233.527†	636.6	640.5	4.8797	ug/L	4.8797	ppb	09:00:47
1	Be 313.107†	7816.4	13036.3	4.8572	ug/L	4.8572	ppb	09:00:27
1	Ca 317.933Radial†	148.1	131.0	200.36	ug/L	200.36	ppb	08:59:30
1	Cd 226.502†	296.0	480.1	5.2002	ug/L	5.2002	ppb	09:00:47
1	Co 228.616†	183.3	252.7	4.9146	ug/L	4.9146	ppb	09:00:47
1	Cr 267.716†	516.6	423.0	4.5517	ug/L	4.5517	ppb	09:00:47
1	Cu 324.752†	10374.0	3472.2	10.104	ug/L	10.104	ppb	09:00:27
1	Fe 238.204 Radial†	17.3	11.4	114.69	ug/L	114.69	ppb	08:59:30
1	K 766.490 Radial†	2975.0	817.0	148.06	ug/L	148.06	ppb	08:59:10
1	Mg 279.077 IEC†	11.4	9.7	362.42	ug/L	362.42	ppb	08:59:30
1	Mn 257.610†	9934.1	9403.2	10.223	ug/L	10.223	ppb	09:00:27
1	Mo 202.031†	170.3	148.1	9.6541	ug/L	9.6541	ppb	09:00:47
1	Na 589.592 Radial†	174.3	790.9	297.29	ug/L	297.29	ppb	08:59:10
1	Ni 231.604†	301.4	227.5	5.3940	ug/L	5.3940	ppb	09:00:47
1	P 214.914†	459.7	233.8	137.40	ug/L	137.40	ppb	09:00:47
1	Pb 220.353†	28.5	80.6	9.4798	ug/L	9.4798	ppb	09:00:47
1	S 181.975 Axial†	109.5	66.6	97.367	ug/L	97.367	ppb	09:00:47
1	Sb 206.836†	59.8	29.5	9.8092	ug/L	9.8092	ppb	09:00:47
1	Se 196.026†	26.7	49.8	30.127	ug/L	30.127	ppb	09:00:47
1	Si 251.611†	3572.6	3018.7	92.084	ug/L	92.084	ppb	09:00:47
1	Sn 189.927†	59.2	54.2	9.1911	ug/L	9.1911	ppb	09:00:47
1	Sr 421.552†	742.0	741.7	5.0050	ug/L	5.0050	ppb	08:59:10
1	Ti 334.940†	3181.4	4105.6	6.6263	ug/L	6.6263	ppb	09:00:27
1	Tl 190.801†	30.0	66.5	19.130	ug/L	19.130	ppb	09:00:47
1	U 409.014†	-119.8	1844.0	51.494	ug/L	51.494	ppb	09:00:27
1	V 292.402†	-576.7	727.2	5.1283	ug/L	5.1283	ppb	09:00:27
1	Zn 213.857†	1760.6	930.7	8.3039	ug/L	8.3039	ppb	09:00:47
1	SiO2†	3702.5	3166.1	206.79	ug/L	206.79	ppb	09:01:43
2	Sc 361.383	889696.1	889696.1	100.53	%			09:00:52
2	Sc Radial	5497.7	5497.7	97.1	%			08:59:35
2	Y 371.029	748074.5	748074.5	100.81	%			09:00:52
2	Y RADIAL	6002.9	6002.9	97.47	%			08:59:35
2	Ag 328.068†	1455.6	1220.3	5.6550	ug/L	5.6550	ppb	09:00:52
2	Al 396.153Radial†	248.9	276.7	204.18	ug/L	204.18	ppb	08:59:35
2	As 188.979†	44.9	73.9	30.185	ug/L	30.185	ppb	09:01:12
2	B 249.677†	1849.6	2363.6	51.275	ug/L	51.275	ppb	09:00:52
2	Ba 233.527†	663.8	672.3	5.1222	ug/L	5.1222	ppb	09:01:12
2	Be 313.107†	7969.5	13247.4	4.9325	ug/L	4.9325	ppb	09:00:52
2	Ca 317.933Radial†	145.2	131.9	201.65	ug/L	201.65	ppb	08:59:55
2	Cd 226.502†	261.6	448.1	4.8505	ug/L	4.8505	ppb	09:01:12
2	Co 228.616†	183.3	254.1	4.9439	ug/L	4.9439	ppb	09:01:12
2	Cr 267.716†	517.0	427.3	4.5977	ug/L	4.5977	ppb	09:01:12
2	Cu 324.752†	10333.8	3510.3	10.216	ug/L	10.216	ppb	09:00:52
2	Fe 238.204 Radial†	19.2	13.7	138.17	ug/L	138.17	ppb	08:59:55
2	K 766.490 Radial†	2995.5	915.5	165.94	ug/L	165.94	ppb	08:59:35
2	Mg 279.077 IEC†	13.0	11.6	433.28	ug/L	433.28	ppb	08:59:55
2	Mn 257.610†	9913.7	9457.7	10.284	ug/L	10.284	ppb	09:00:52
2	Mo 202.031†	163.1	142.2	9.2742	ug/L	9.2742	ppb	09:01:12
2	Na 589.592 Radial†	94.1	712.9	267.96	ug/L	267.96	ppb	08:59:35
2	Ni 231.604†	294.4	222.8	5.2825	ug/L	5.2825	ppb	09:01:12

2	P 214.914†	452.6	230.2	135.23 ug/L	135.23 ppb	09:01:12
2	Pb 220.353†	38.2	90.5	10.632 ug/L	10.632 ppb	09:01:12
2	S 181.975 Axial†	106.4	64.4	94.079 ug/L	94.079 ppb	09:01:12
2	Sb 206.836†	59.8	29.8	9.9548 ug/L	9.9548 ppb	09:01:12
2	Se 196.026†	20.7	44.0	26.718 ug/L	26.718 ppb	09:01:12
2	Si 251.611†	3576.5	3049.5	93.021 ug/L	93.021 ppb	09:01:12
2	Sn 189.927†	67.2	62.5	10.603 ug/L	10.603 ppb	09:01:12
2	Sr 421.552†	704.7	722.5	4.8754 ug/L	4.8754 ppb	08:59:35
2	Ti 334.940†	2138.6	3092.3	4.9858 ug/L	4.9858 ppb	09:00:52
2	Tl 190.801†	33.8	70.5	20.262 ug/L	20.262 ppb	09:01:12
2	U 409.014†	5.4	1967.6	54.945 ug/L	54.945 ppb	09:00:52
2	V 292.402†	-579.5	720.1	5.0813 ug/L	5.0813 ppb	09:00:52
2	Zn 213.857†	1770.3	953.6	8.5058 ug/L	8.5058 ppb	09:01:12
2	SiO2†	3692.8	3184.3	207.98 ug/L	207.98 ppb	09:01:48
3	Sc 361.383	911746.6	911746.6	103.03 %		09:01:18
3	Sc Radial	5691.2	5691.2	100 %		09:00:00
3	Y 371.029	767276.2	767276.2	103.40 %		09:01:18
3	Y RADIAL	6175.4	6175.4	100.3 %		09:00:00
3	Ag 328.068†	1410.1	1141.1	5.2890 ug/L	5.2890 ppb	09:01:18
3	Al 396.153Radial†	235.7	254.9	188.05 ug/L	188.05 ppb	09:00:00
3	As 188.979†	36.4	64.5	26.352 ug/L	26.352 ppb	09:01:38
3	B 249.677†	1919.5	2386.9	51.782 ug/L	51.782 ppb	09:01:18
3	Ba 233.527†	656.1	648.9	4.9443 ug/L	4.9443 ppb	09:01:38
3	Be 313.107†	7943.6	13030.6	4.8515 ug/L	4.8515 ppb	09:01:18
3	Ca 317.933Radial†	151.4	132.9	203.27 ug/L	203.27 ppb	09:00:20
3	Cd 226.502†	277.2	456.9	4.9462 ug/L	4.9462 ppb	09:01:38
3	Co 228.616†	183.2	249.6	4.8573 ug/L	4.8573 ppb	09:01:38
3	Cr 267.716†	522.0	419.7	4.5162 ug/L	4.5162 ppb	09:01:38
3	Cu 324.752†	10328.2	3256.2	9.4770 ug/L	9.4770 ppb	09:01:18
3	Fe 238.204 Radial†	19.6	13.5	135.71 ug/L	135.71 ppb	09:00:20
3	K 766.490 Radial†	3044.5	859.3	155.74 ug/L	155.74 ppb	09:00:00
3	Mg 279.077 IEC†	8.5	6.7	250.23 ug/L	250.23 ppb	09:00:20
3	Mn 257.610†	9907.6	9213.2	10.021 ug/L	10.021 ppb	09:01:18
3	Mo 202.031†	165.5	140.7	9.1734 ug/L	9.1734 ppb	09:01:38
3	Na 589.592 Radial†	122.1	737.5	277.19 ug/L	277.19 ppb	09:00:00
3	Ni 231.604†	288.7	210.1	4.9830 ug/L	4.9830 ppb	09:01:38
3	P 214.914†	457.7	224.3	131.83 ug/L	131.83 ppb	09:01:38
3	Pb 220.353†	43.7	94.9	11.145 ug/L	11.145 ppb	09:01:38
3	S 181.975 Axial†	115.0	70.1	102.50 ug/L	102.50 ppb	09:01:38
3	Sb 206.836†	64.7	33.2	11.050 ug/L	11.050 ppb	09:01:38
3	Se 196.026†	30.6	53.1	32.145 ug/L	32.145 ppb	09:01:38
3	Si 251.611†	3564.3	2951.6	90.034 ug/L	90.034 ppb	09:01:38
3	Sn 189.927†	65.4	59.2	10.032 ug/L	10.032 ppb	09:01:38
3	Sr 421.552†	738.1	731.0	4.9331 ug/L	4.9331 ppb	09:00:00
3	Ti 334.940†	2081.2	2985.1	4.8129 ug/L	4.8129 ppb	09:01:18
3	Tl 190.801†	28.3	64.3	18.493 ug/L	18.493 ppb	09:01:38
3	U 409.014†	-9.5	1953.0	54.537 ug/L	54.537 ppb	09:01:18
3	V 292.402†	-574.5	738.8	5.2022 ug/L	5.2022 ppb	09:01:18
3	Zn 213.857†	1772.2	912.9	8.1486 ug/L	8.1486 ppb	09:01:38
3	SiO2†	3724.3	3126.1	204.18 ug/L	204.18 ppb	09:01:53

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899306.4	101.62	%	1.276				1.26%
Sc Radial	5609.6	99.1	%	1.77				1.79%
Y 371.029	755737.5	101.84	%	1.371				1.35%
Y RADIAL	6106.6	99.15	%	1.484				1.50%
Ag 328.068†	1185.0	5.4905	ug/L	0.18581	5.4905	ppb	0.18581	3.38%
QC value within limits for Ag 328.068 Recovery = 109.81%								
Al 396.153Radial†	270.7	199.68	ug/L	10.163	199.68	ppb	10.163	5.09%
QC value within limits for Al 396.153Radial Recovery = 99.84%								
As 188.979†	70.2	28.659	ug/L	2.0326	28.659	ppb	2.0326	7.09%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2363.6	51.277	ug/L	0.5046	51.277	ppb	0.5046	0.98%
QC value within limits for B 249.677 Recovery = 102.55%								
Ba 233.527†	653.9	4.9821	ug/L	0.12557	4.9821	ppb	0.12557	2.52%
QC value within limits for Ba 233.527 Recovery = 99.64%								
Be 313.107†	13104.8	4.8804	ug/L	0.04516	4.8804	ppb	0.04516	0.93%
QC value within limits for Be 313.107 Recovery = 97.61%								

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Ca 317.933Radial†        131.9      201.76 ug/L        1.457      201.76 ppb        1.457   0.72%
   QC value within limits for Ca 317.933Radial  Recovery = 100.88%
Cd 226.502†              461.7      4.9990 ug/L      0.18071      4.9990 ppb      0.18071   3.61%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†              252.1      4.9053 ug/L      0.04406      4.9053 ppb      0.04406   0.90%
   QC value within limits for Co 228.616  Recovery = 98.11%
Cr 267.716†              423.4      4.5552 ug/L      0.04086      4.5552 ppb      0.04086   0.90%
   QC value within limits for Cr 267.716  Recovery = 91.10%
Cu 324.752†             3412.9      9.9323 ug/L      0.39829      9.9323 ppb      0.39829   4.01%
   QC value within limits for Cu 324.752  Recovery = 99.32%
Fe 238.204 Radial†        12.8      129.52 ug/L       12.901      129.52 ppb       12.901   9.96%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.52%
K 766.490 Radial†        863.9      156.58 ug/L        8.970      156.58 ppb        8.970   5.73%
   QC value within limits for K 766.490 Radial  Recovery = 104.39%
Mg 279.077 IEC†           9.4      348.64 ug/L       92.297      348.64 ppb       92.297  26.47%
   QC value within limits for Mg 279.077 IEC  Recovery = 116.21%
Mn 257.610†             9358.0      10.176 ug/L       0.1375      10.176 ppb       0.1375   1.35%
   QC value within limits for Mn 257.610  Recovery = 101.76%
Mo 202.031†              143.7      9.3672 ug/L      0.25349      9.3672 ppb      0.25349   2.71%
   QC value within limits for Mo 202.031  Recovery = 93.67%
Na 589.592 Radial†       747.1      280.82 ug/L       14.998      280.82 ppb       14.998   5.34%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†              220.1      5.2199 ug/L      0.21252      5.2199 ppb      0.21252   4.07%
   QC value within limits for Ni 231.604  Recovery = 104.40%
P 214.914†               229.4      134.82 ug/L        2.807      134.82 ppb        2.807   2.08%
   QC value within limits for P 214.914  Recovery = 89.88%
Pb 220.353†               88.7      10.419 ug/L       0.8528      10.419 ppb       0.8528   8.19%
   QC value within limits for Pb 220.353  Recovery = 104.19%
S 181.975 Axial†          67.0      97.983 ug/L       4.2452      97.983 ppb       4.2452   4.33%
   QC value within limits for S 181.975 Axial  Recovery = 97.98%
Sb 206.836†               30.8      10.271 ug/L       0.6785      10.271 ppb       0.6785   6.61%
   QC value within limits for Sb 206.836  Recovery = 102.71%
Se 196.026†               49.0      29.663 ug/L       2.7433      29.663 ppb       2.7433   9.25%
   QC value within limits for Se 196.026  Recovery = 98.88%
Si 251.611†             3006.6      91.713 ug/L       1.5276      91.713 ppb       1.5276   1.67%
   QC value within limits for Si 251.611  Recovery = 91.71%
Sn 189.927†               58.6      9.9422 ug/L      0.71035      9.9422 ppb      0.71035   7.14%
   QC value within limits for Sn 189.927  Recovery = 99.42%
Sr 421.552†              731.7      4.9378 ug/L      0.06490      4.9378 ppb      0.06490   1.31%
   QC value within limits for Sr 421.552  Recovery = 98.76%
Ti 334.940†             3394.3      5.4750 ug/L      1.00080      5.4750 ppb      1.00080  18.28%
   QC value within limits for Ti 334.940  Recovery = 109.50%
Tl 190.801†               67.1      19.295 ug/L       0.8963      19.295 ppb       0.8963   4.65%
   QC value within limits for Tl 190.801  Recovery = 96.47%
U 409.014†              1921.5      53.659 ug/L       1.8853      53.659 ppb       1.8853   3.51%
   QC value within limits for U 409.014  Recovery = 107.32%
V 292.402†               728.7      5.1373 ug/L      0.06097      5.1373 ppb      0.06097   1.19%
   QC value within limits for V 292.402  Recovery = 102.75%
Zn 213.857†              932.4      8.3194 ug/L      0.17911      8.3194 ppb      0.17911   2.15%
   QC value within limits for Zn 213.857  Recovery = 83.19%
SiO2†                   3158.9      206.32 ug/L        1.943      206.32 ppb        1.943   0.94%
   QC value within limits for SiO2  Recovery = 96.86%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/9/2009 09:04:05
Data Type: Reprocessed on 12/9/2009 10:32:24

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	766943.3	766943.3	86.663	%			09:06:31
1	Sc Radial	5161.3	5161.3	91.1	%			09:06:04
1	Y 371.029	627463.9	627463.9	84.556	%			09:06:31
1	Y RADIAL	5628.8	5628.8	91.40	%			09:06:04
1	Ag 328.068†	-9591.5	-11295.2	0.4346	ug/L	0.4346	ppb	09:06:31
1	Al 396.153Radial†	635373.7	697200.9	515400	ug/L	515400	ppb	09:05:59
1	As 188.979†	-79.1	-62.1	3.3536	ug/L	3.3536	ppb	09:06:51
1	B 249.677†	563.8	1174.4	0.6643	ug/L	0.6643	ppb	09:06:31
1	Ba 233.527†	-440.7	-496.5	3.2085	ug/L	3.2085	ppb	09:06:51
1	Be 313.107†	-5691.8	-1247.5	-0.5174	ug/L	-0.5174	ppb	09:06:31
1	Ca 317.933Radial†	282566.8	310036.2	474100	ug/L	474100	ppb	09:05:59
1	Cd 226.502†	1440.2	1849.6	1.3590	ug/L	1.3590	ppb	09:06:51
1	Co 228.616†	-29.5	37.7	-1.9298	ug/L	-1.9298	ppb	09:06:51
1	Cr 267.716†	-117.5	-222.5	0.9709	ug/L	0.9709	ppb	09:06:51
1	Cu 324.752†	4309.8	-1795.6	4.3244	ug/L	4.3244	ppb	09:06:31
1	Fe 238.204 Radial†	16943.3	18585.4	187140	ug/L	187140	ppb	09:06:04
1	K 766.490 Radial†	2130.7	167.7	46.717	ug/L	46.717	ppb	09:06:04
1	Mg 279.077 IEC†	11941.9	13101.8	487730	ug/L	487730	ppb	09:06:04
1	Mn 257.610†	575.1	260.2	9.8617	ug/L	9.8617	ppb	09:06:31
1	Mo 202.031†	-243.6	-301.0	-6.3338	ug/L	-6.3338	ppb	09:06:51
1	Na 589.592 Radial†	-477.6	91.9	34.544	ug/L	34.544	ppb	09:06:04
1	Ni 231.604†	200.7	161.4	3.8298	ug/L	3.8298	ppb	09:06:51
1	P 214.914†	155.6	-40.4	-0.3493	ug/L	-0.3493	ppb	09:06:51
1	Pb 220.353†	-752.7	-816.0	4.8633	ug/L	4.8633	ppb	09:06:51
1	S 181.975 Axial†	82.4	53.6	-22.981	ug/L	-22.981	ppb	09:06:51
1	Sb 206.836†	51.5	29.8	-2.8372	ug/L	-2.8372	ppb	09:06:51
1	Se 196.026†	-952.6	-1075.7	6.8174	ug/L	6.8174	ppb	09:06:51
1	Si 251.611†	456.2	18.4	1.1083	ug/L	1.1083	ppb	09:06:51
1	Sn 189.927†	-350.0	-408.2	-17.045	ug/L	-17.045	ppb	09:06:51
1	Sr 421.552†	523.9	571.5	-0.5365	ug/L	-0.5365	ppb	09:06:04
1	Ti 334.940†	-15509.4	-16931.2	-2.6642	ug/L	-2.6642	ppb	09:06:31
1	Tl 190.801†	-86.9	-63.4	-4.3006	ug/L	-4.3006	ppb	09:06:51
1	U 409.014†	-890.5	934.7	2.5732	ug/L	2.5732	ppb	09:06:31
1	V 292.402†	1061.3	2521.1	-0.6421	ug/L	-0.6421	ppb	09:06:51
1	Zn 213.857†	3253.7	2947.1	-8.0725	ug/L	-8.0725	ppb	09:06:51
1	SiO2†	664.6	278.1	19.399	ug/L	19.399	ppb	09:07:47
2	Sc 361.383	764245.3	764245.3	86.358	%			09:06:56
2	Sc Radial	5162.4	5162.4	91.2	%			09:06:14
2	Y 371.029	624372.6	624372.6	84.139	%			09:06:56
2	Y RADIAL	5563.1	5563.1	90.33	%			09:06:14
2	Ag 328.068†	-9701.4	-11461.5	-0.6081	ug/L	-0.6081	ppb	09:06:56
2	Al 396.153Radial†	630403.1	691597.3	511260	ug/L	511260	ppb	09:06:09
2	As 188.979†	-96.0	-81.9	-4.8844	ug/L	-4.8844	ppb	09:07:16
2	B 249.677†	717.6	1354.8	4.7079	ug/L	4.7079	ppb	09:06:56
2	Ba 233.527†	-465.6	-527.1	2.9406	ug/L	2.9406	ppb	09:07:16
2	Be 313.107†	-5728.6	-1313.3	-0.5410	ug/L	-0.5410	ppb	09:06:56
2	Ca 317.933Radial†	281090.2	308349.3	471520	ug/L	471520	ppb	09:06:09
2	Cd 226.502†	1414.8	1826.2	1.2008	ug/L	1.2008	ppb	09:07:16
2	Co 228.616†	-0.8	70.8	-1.2709	ug/L	-1.2709	ppb	09:07:16
2	Cr 267.716†	-87.2	-188.0	1.3244	ug/L	1.3244	ppb	09:07:16
2	Cu 324.752†	4253.3	-1843.4	4.1359	ug/L	4.1359	ppb	09:06:56
2	Fe 238.204 Radial†	16859.4	18489.4	186180	ug/L	186180	ppb	09:06:14
2	K 766.490 Radial†	2153.5	192.2	50.834	ug/L	50.834	ppb	09:06:14
2	Mg 279.077 IEC†	11966.3	13125.7	488620	ug/L	488620	ppb	09:06:14
2	Mn 257.610†	536.7	218.0	9.7029	ug/L	9.7029	ppb	09:06:56
2	Mo 202.031†	-225.5	-281.1	-5.1062	ug/L	-5.1062	ppb	09:07:16
2	Na 589.592 Radial†	-525.6	39.4	14.807	ug/L	14.807	ppb	09:06:14
2	Ni 231.604†	191.8	152.0	3.6067	ug/L	3.6067	ppb	09:07:16

2	P 214.914†	186.0	-4.6	20.288 ug/L	20.288 ppb	09:07:16
2	Pb 220.353†	-733.3	-796.5	6.2948 ug/L	6.2948 ppb	09:07:16
2	S 181.975 Axial†	77.0	47.7	-30.838 ug/L	-30.838 ppb	09:07:16
2	Sb 206.836†	58.0	37.6	-0.2059 ug/L	-0.2059 ppb	09:07:16
2	Se 196.026†	-961.5	-1089.9	-5.1919 ug/L	-5.1919 ppb	09:07:16
2	Si 251.611†	472.5	39.1	1.7195 ug/L	1.7195 ppb	09:07:16
2	Sn 189.927†	-351.8	-411.6	-17.908 ug/L	-17.908 ppb	09:07:16
2	Sr 421.552†	511.6	557.9	-0.6046 ug/L	-0.6046 ppb	09:06:14
2	Ti 334.940†	-15217.0	-16655.7	-2.3559 ug/L	-2.3559 ppb	09:06:56
2	Tl 190.801†	-74.8	-49.7	-0.5025 ug/L	-0.5025 ppb	09:07:16
2	U 409.014†	-703.0	1148.1	8.6579 ug/L	8.6579 ppb	09:06:56
2	V 292.402†	1097.2	2567.0	-0.1353 ug/L	-0.1353 ppb	09:07:16
2	Zn 213.857†	3249.4	2955.4	-7.9349 ug/L	-7.9349 ppb	09:07:16
2	SiO2†	433.3	13.0	1.9883 ug/L	1.9883 ppb	09:07:52
3	Sc 361.383	767298.0	767298.0	86.703 %		09:07:21
3	Sc Radial	5118.2	5118.2	90.4 %		09:06:24
3	Y 371.029	626529.7	626529.7	84.430 %		09:07:21
3	Y RADIAL	5591.8	5591.8	90.79 %		09:06:24
3	Ag 328.068†	-9719.7	-11437.9	-0.3226 ug/L	-0.3226 ppb	09:07:21
3	Al 396.153Radial†	621881.8	688142.3	508710 ug/L	508710 ppb	09:06:19
3	As 188.979†	-91.9	-76.8	-2.7216 ug/L	-2.7216 ppb	09:07:42
3	B 249.677†	642.6	1265.1	2.6882 ug/L	2.6882 ppb	09:07:21
3	Ba 233.527†	-467.0	-526.6	2.9636 ug/L	2.9636 ppb	09:07:42
3	Be 313.107†	-5860.9	-1439.5	-0.5875 ug/L	-0.5875 ppb	09:07:21
3	Ca 317.933Radial†	278239.3	307858.4	470770 ug/L	470770 ppb	09:06:19
3	Cd 226.502†	1473.5	1887.3	1.8105 ug/L	1.8105 ppb	09:07:42
3	Co 228.616†	4.0	76.4	-1.1731 ug/L	-1.1731 ppb	09:07:42
3	Cr 267.716†	-115.6	-220.3	0.9845 ug/L	0.9845 ppb	09:07:42
3	Cu 324.752†	4378.8	-1718.3	4.5270 ug/L	4.5270 ppb	09:07:21
3	Fe 238.204 Radial†	16762.7	18542.2	186710 ug/L	186710 ppb	09:06:24
3	K 766.490 Radial†	2256.8	326.9	74.991 ug/L	74.991 ppb	09:06:24
3	Mg 279.077 IEC†	11908.3	13175.0	490450 ug/L	490450 ppb	09:06:24
3	Mn 257.610†	624.1	316.4	9.8287 ug/L	9.8287 ppb	09:07:21
3	Mo 202.031†	-233.3	-289.1	-5.5891 ug/L	-5.5891 ppb	09:07:42
3	Na 589.592 Radial†	-457.6	109.6	41.195 ug/L	41.195 ppb	09:06:24
3	Ni 231.604†	176.2	133.1	3.1573 ug/L	3.1573 ppb	09:07:42
3	P 214.914†	175.4	-17.7	11.206 ug/L	11.206 ppb	09:07:42
3	Pb 220.353†	-744.4	-806.0	4.5657 ug/L	4.5657 ppb	09:07:42
3	S 181.975 Axial†	70.1	39.4	-42.497 ug/L	-42.497 ppb	09:07:42
3	Sb 206.836†	64.3	44.5	2.1615 ug/L	2.1615 ppb	09:07:42
3	Se 196.026†	-961.9	-1086.0	-1.6214 ug/L	-1.6214 ppb	09:07:42
3	Si 251.611†	441.3	1.0	0.5480 ug/L	0.5480 ppb	09:07:42
3	Sn 189.927†	-341.3	-397.9	-15.662 ug/L	-15.662 ppb	09:07:42
3	Sr 421.552†	510.7	561.7	-0.5719 ug/L	-0.5719 ppb	09:06:24
3	Ti 334.940†	-15170.6	-16532.2	-2.1967 ug/L	-2.1967 ppb	09:07:21
3	Tl 190.801†	-68.0	-41.5	1.7765 ug/L	1.7765 ppb	09:07:42
3	U 409.014†	-596.4	1274.3	12.118 ug/L	12.118 ppb	09:07:21
3	V 292.402†	1085.2	2548.1	-0.3030 ug/L	-0.3030 ppb	09:07:42
3	Zn 213.857†	3243.0	2933.1	-8.2463 ug/L	-8.2463 ppb	09:07:42
3	SiO2†	432.8	10.4	1.8063 ug/L	1.8063 ppb	09:07:57

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	766162.2	86.575	%	0.1887				0.22%
Sc Radial	5147.3	90.9	%	0.45				0.49%
Y 371.029	626122.1	84.375	%	0.2136				0.25%
Y RADIAL	5594.6	90.84	%	0.535				0.59%
Ag 328.068†	-11398.2	-0.1654	ug/L	0.53884	-0.1654	ppb	0.53884	325.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	692313.5	511790	ug/L	3379.6	511790	ppb	3379.6	0.66%
QC value within limits for Al 396.153Radial Recovery = 102.36%								
As 188.979†	-73.6	-1.4174	ug/L	4.27106	-1.4174	ppb	4.27106	301.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1264.8	2.6868	ug/L	2.02176	2.6868	ppb	2.02176	75.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-516.7	3.0375	ug/L	0.14849	3.0375	ppb	0.14849	4.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1333.4	-0.5486	ug/L	0.03565	-0.5486	ppb	0.03565	6.50%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     308747.9      472130 ug/L        1746.8      472130 ppb        1746.8   0.37%
   QC value within limits for Ca 317.933Radial  Recovery = 94.43%
Cd 226.502†             1854.4      1.4568 ug/L       0.31637      1.4568 ppb       0.31637  21.72%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.6     -1.4580 ug/L       0.41157     -1.4580 ppb       0.41157  28.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -210.2      1.0933 ug/L       0.20027      1.0933 ppb       0.20027  18.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -1785.8      4.3291 ug/L       0.19559      4.3291 ppb       0.19559   4.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     18539.0      186680 ug/L         484.3      186680 ppb         484.3   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.34%
K 766.490 Radial†        228.9      57.514 ug/L       15.2747      57.514 ppb       15.2747  26.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        13134.2      488940 ug/L        1388.6      488940 ppb        1388.6   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.79%
Mn 257.610†              264.9      9.7978 ug/L       0.08380      9.7978 ppb       0.08380   0.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -290.4     -5.6764 ug/L       0.61843     -5.6764 ppb       0.61843  10.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        80.3      30.182 ug/L       13.7241      30.182 ppb       13.7241  45.47%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              148.9      3.5313 ug/L       0.34251      3.5313 ppb       0.34251   9.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -20.9      10.382 ug/L       10.3435      10.382 ppb       10.3435  99.63%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -806.2      5.2413 ug/L       0.92442      5.2413 ppb       0.92442  17.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          46.9     -32.105 ug/L        9.8196     -32.105 ppb        9.8196  30.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               37.3     -0.2938 ug/L       2.50051     -0.2938 ppb       2.50051 851.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1083.9      0.0013 ug/L       6.16695      0.0013 ppb       6.16695 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               19.5      1.1253 ug/L       0.58594      1.1253 ppb       0.58594  52.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -405.9     -16.872 ug/L        1.1328     -16.872 ppb        1.1328   6.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              563.7     -0.5710 ug/L       0.03408     -0.5710 ppb       0.03408   5.97%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16706.4     -2.4056 ug/L       0.23766     -2.4056 ppb       0.23766   9.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -51.6     -1.0089 ug/L       3.07003     -1.0089 ppb       3.07003 304.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1119.1      7.7830 ug/L       4.83222      7.7830 ppb       4.83222  62.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2545.4     -0.3602 ug/L       0.25817     -0.3602 ppb       0.25817  71.68%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             2945.2     -8.0845 ug/L       0.15604     -8.0845 ppb       0.15604   1.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    100.5      7.7312 ug/L      10.10504      7.7312 ppb      10.10504 130.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/9/2009 09:10:08
Data Type: Reprocessed on 12/9/2009 10:32:25
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	780445.9	780445.9	88.189	%			09:12:34
1	Sc Radial	5114.4	5114.4	90.3	%			09:12:06
1	Y 371.029	635832.4	635832.4	85.683	%			09:12:34
1	Y RADIAL	5537.7	5537.7	89.92	%			09:12:06
1	Ag 328.068†	41866.3	47245.9	273.54	ug/L	273.54	ppb	09:12:34
1	Al 396.153Radial†	630325.8	698004.9	515980	ug/L	515980	ppb	09:12:01
1	As 188.979†	991.3	1153.3	503.46	ug/L	503.46	ppb	09:12:54
1	B 249.677†	21231.0	24598.3	507.60	ug/L	507.60	ppb	09:12:34
1	Ba 233.527†	55815.1	63302.6	488.99	ug/L	488.99	ppb	09:12:34
1	Be 313.107†	562241.9	642864.2	239.85	ug/L	239.85	ppb	09:12:34
1	Ca 317.933Radial†	282747.7	313080.0	478750	ug/L	478750	ppb	09:12:01
1	Cd 226.502†	39025.0	44439.6	463.38	ug/L	463.38	ppb	09:12:34
1	Co 228.616†	19801.1	22524.9	434.70	ug/L	434.70	ppb	09:12:54
1	Cr 267.716†	38642.3	43730.8	475.32	ug/L	475.32	ppb	09:12:34
1	Cu 324.752†	170780.1	186884.3	553.22	ug/L	553.22	ppb	09:12:34
1	Fe 238.204 Radial†	17064.7	18890.4	190230	ug/L	190230	ppb	09:12:06
1	K 766.490 Radial†	29740.0	30762.0	5592.1	ug/L	5592.1	ppb	09:12:01
1	Mg 279.077 IEC†	11973.4	13256.8	493510	ug/L	493510	ppb	09:12:06
1	Mn 257.610†	384453.9	435541.1	483.09	ug/L	483.09	ppb	09:12:34
1	Mo 202.031†	6369.3	7202.4	482.65	ug/L	482.65	ppb	09:12:54
1	Na 589.592 Radial†	13215.3	15249.8	5731.9	ug/L	5731.9	ppb	09:12:06
1	Ni 231.604†	16373.4	18496.2	438.60	ug/L	438.60	ppb	09:12:54
1	P 214.914†	3863.7	4161.2	2412.2	ug/L	2412.2	ppb	09:12:54
1	Pb 220.353†	2656.6	3064.9	459.19	ug/L	459.19	ppb	09:12:54
1	S 181.975 Axial†	1676.8	1859.9	2618.2	ug/L	2618.2	ppb	09:12:54
1	Sb 206.836†	1446.8	1611.0	517.85	ug/L	517.85	ppb	09:12:54
1	Se 196.026†	2709.8	3096.2	2505.7	ug/L	2505.7	ppb	09:12:54
1	Si 251.611†	150356.9	169986.4	5187.8	ug/L	5187.8	ppb	09:12:34
1	Sn 189.927†	2207.7	2499.1	475.32	ug/L	475.32	ppb	09:12:54
1	Sr 421.552†	71827.2	79533.6	532.46	ug/L	532.46	ppb	09:12:01
1	Ti 334.940†	267261.3	304021.1	516.29	ug/L	516.29	ppb	09:12:34
1	Tl 190.801†	1322.9	1537.0	457.80	ug/L	457.80	ppb	09:12:54
1	U 409.014†	14007.6	17845.8	473.75	ug/L	473.75	ppb	09:12:34
1	V 292.402†	65551.7	75627.6	499.67	ug/L	499.67	ppb	09:12:34
1	Zn 213.857†	51418.0	57497.2	478.79	ug/L	478.79	ppb	09:12:34
1	SiO2†	149270.3	168773.5	11027	ug/L	11027	ppb	09:13:52
2	Sc 361.383	775696.5	775696.5	87.652	%			09:13:00
2	Sc Radial	5138.5	5138.5	90.7	%			09:12:16
2	Y 371.029	633790.1	633790.1	85.408	%			09:13:00
2	Y RADIAL	5552.8	5552.8	90.16	%			09:12:16
2	Ag 328.068†	41631.8	47269.1	273.46	ug/L	273.46	ppb	09:13:00
2	Al 396.153Radial†	635086.3	699975.6	517430	ug/L	517430	ppb	09:12:11
2	As 188.979†	986.8	1155.0	504.07	ug/L	504.07	ppb	09:13:20
2	B 249.677†	21119.8	24618.9	508.12	ug/L	508.12	ppb	09:13:00
2	Ba 233.527†	55464.4	63290.0	488.87	ug/L	488.87	ppb	09:13:00
2	Be 313.107†	558868.7	642919.3	239.87	ug/L	239.87	ppb	09:13:00
2	Ca 317.933Radial†	284423.5	313457.4	479330	ug/L	479330	ppb	09:12:11
2	Cd 226.502†	38722.8	44365.7	462.64	ug/L	462.64	ppb	09:13:00
2	Co 228.616†	19762.0	22617.7	436.52	ug/L	436.52	ppb	09:13:20
2	Cr 267.716†	38399.3	43721.8	475.22	ug/L	475.22	ppb	09:13:00
2	Cu 324.752†	169147.6	186207.5	551.22	ug/L	551.22	ppb	09:13:00
2	Fe 238.204 Radial†	17094.8	18834.9	189670	ug/L	189670	ppb	09:12:16
2	K 766.490 Radial†	29861.5	30741.4	5588.5	ug/L	5588.5	ppb	09:12:11
2	Mg 279.077 IEC†	12022.3	13248.6	493200	ug/L	493200	ppb	09:12:16
2	Mn 257.610†	381195.7	434493.1	481.90	ug/L	481.90	ppb	09:13:00
2	Mo 202.031†	6387.5	7267.4	486.84	ug/L	486.84	ppb	09:13:20
2	Na 589.592 Radial†	13168.6	15129.7	5686.8	ug/L	5686.8	ppb	09:12:16
2	Ni 231.604†	16304.0	18530.7	439.42	ug/L	439.42	ppb	09:13:20

2	P 214.914†	3843.7	4165.2	2415.9 ug/L	2415.9 ppb		09:13:20
2	Pb 220.353†	2660.5	3087.9	462.25 ug/L	462.25 ppb		09:13:20
2	S 181.975 Axial†	1648.1	1838.8	2587.0 ug/L	2587.0 ppb		09:13:20
2	Sb 206.836†	1446.5	1620.6	521.00 ug/L	521.00 ppb		09:13:20
2	Se 196.026†	2712.6	3118.2	2517.3 ug/L	2517.3 ppb		09:13:20
2	Si 251.611†	149037.3	169524.8	5173.6 ug/L	5173.6 ppb		09:13:00
2	Sn 189.927†	2190.0	2494.2	474.55 ug/L	474.55 ppb		09:13:20
2	Sr 421.552†	72301.3	79682.9	533.46 ug/L	533.46 ppb		09:12:11
2	Ti 334.940†	264911.8	303196.2	514.99 ug/L	514.99 ppb		09:13:00
2	Tl 190.801†	1308.5	1529.7	455.73 ug/L	455.73 ppb		09:13:20
2	U 409.014†	13749.8	17649.0	468.32 ug/L	468.32 ppb		09:13:00
2	V 292.402†	65041.7	75500.9	498.94 ug/L	498.94 ppb		09:13:00
2	Zn 213.857†	50996.0	57372.8	477.73 ug/L	477.73 ppb		09:13:00
2	SiO2†	149212.3	169743.7	11091 ug/L	11091 ppb		09:13:57
3	Sc 361.383	781218.8	781218.8	88.276 %			09:13:26
3	Sc Radial	5178.3	5178.3	91.4 %			09:12:27
3	Y 371.029	637300.9	637300.9	85.881 %			09:13:26
3	Y RADIAL	5577.3	5577.3	90.56 %			09:12:27
3	Ag 328.068†	41948.8	47292.5	273.33 ug/L	273.33 ppb		09:13:26
3	Al 396.153Radial†	637978.3	697749.6	515790 ug/L	515790 ppb		09:12:22
3	As 188.979†	975.4	1134.2	495.43 ug/L	495.43 ppb		09:13:46
3	B 249.677†	21255.5	24602.4	507.87 ug/L	507.87 ppb		09:13:26
3	Ba 233.527†	55834.0	63261.3	488.62 ug/L	488.62 ppb		09:13:26
3	Be 313.107†	563317.0	643451.4	240.06 ug/L	240.06 ppb		09:13:26
3	Ca 317.933Radial†	285215.9	311910.6	476960 ug/L	476960 ppb		09:12:22
3	Cd 226.502†	39066.4	44442.6	463.55 ug/L	463.55 ppb		09:13:26
3	Co 228.616†	19878.9	22590.7	436.01 ug/L	436.01 ppb		09:13:46
3	Cr 267.716†	38681.8	43732.2	475.31 ug/L	475.31 ppb		09:13:26
3	Cu 324.752†	170015.5	185826.6	550.07 ug/L	550.07 ppb		09:13:26
3	Fe 238.204 Radial†	17150.0	18750.2	188820 ug/L	188820 ppb		09:12:27
3	K 766.490 Radial†	30111.2	30761.1	5592.1 ug/L	5592.1 ppb		09:12:22
3	Mg 279.077 IEC†	12021.1	13145.2	489350 ug/L	489350 ppb		09:12:27
3	Mn 257.610†	383873.4	434452.2	481.85 ug/L	481.85 ppb		09:13:26
3	Mo 202.031†	6399.7	7229.7	484.33 ug/L	484.33 ppb		09:13:46
3	Na 589.592 Radial†	13269.8	15128.5	5686.4 ug/L	5686.4 ppb		09:12:27
3	Ni 231.604†	16386.9	18493.1	438.53 ug/L	438.53 ppb		09:13:46
3	P 214.914†	3884.9	4180.9	2425.5 ug/L	2425.5 ppb		09:13:46
3	Pb 220.353†	2672.5	3080.0	461.03 ug/L	461.03 ppb		09:13:46
3	S 181.975 Axial†	1677.0	1858.3	2615.7 ug/L	2615.7 ppb		09:13:46
3	Sb 206.836†	1483.5	1650.9	530.81 ug/L	530.81 ppb		09:13:46
3	Se 196.026†	2703.6	3086.2	2495.4 ug/L	2495.4 ppb		09:13:46
3	Si 251.611†	150003.2	169417.1	5170.4 ug/L	5170.4 ppb		09:13:26
3	Sn 189.927†	2201.7	2489.9	473.55 ug/L	473.55 ppb		09:13:46
3	Sr 421.552†	72639.7	79439.4	531.84 ug/L	531.84 ppb		09:12:22
3	Ti 334.940†	266461.0	302814.7	514.25 ug/L	514.25 ppb		09:13:26
3	Tl 190.801†	1325.4	1538.3	458.16 ug/L	458.16 ppb		09:13:46
3	U 409.014†	13866.4	17670.2	469.02 ug/L	469.02 ppb		09:13:26
3	V 292.402†	65552.9	75555.5	499.32 ug/L	499.32 ppb		09:13:26
3	Zn 213.857†	51255.7	57255.7	476.90 ug/L	476.90 ppb		09:13:26
3	SiO2†	149513.2	168881.2	11034 ug/L	11034 ppb		09:14:02

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	779120.4	88.039	%	0.3379				0.38%
Sc Radial	5143.7	90.8	%	0.57				0.63%
Y 371.029	635641.1	85.658	%	0.2376				0.28%
Y RADIAL	5555.9	90.21	%	0.324				0.36%
Ag 328.068†	47269.2	273.45	ug/L	0.104	273.45	ppb	0.104	0.04%
QC value within limits for Ag 328.068 Recovery = 109.38%								
Al 396.153Radial†	698576.7	516400	ug/L	900.4	516400	ppb	900.4	0.17%
QC value within limits for Al 396.153Radial Recovery = 103.28%								
As 188.979†	1147.5	500.99	ug/L	4.823	500.99	ppb	4.823	0.96%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	24606.5	507.87	ug/L	0.258	507.87	ppb	0.258	0.05%
QC value within limits for B 249.677 Recovery = 101.57%								
Ba 233.527†	63284.6	488.82	ug/L	0.187	488.82	ppb	0.187	0.04%
QC value within limits for Ba 233.527 Recovery = 97.76%								
Be 313.107†	643078.3	239.93	ug/L	0.119	239.93	ppb	0.119	0.05%
QC value within limits for Be 313.107 Recovery = 95.97%								

Ca 317.933Radial†	312816.0	478350 ug/L	1233.3	478350 ppb	1233.3	0.26%
QC value within limits for Ca 317.933Radial Recovery = 95.67%						
Cd 226.502†	44416.0	463.19 ug/L	0.488	463.19 ppb	0.488	0.11%
QC value within limits for Cd 226.502 Recovery = 92.64%						
Co 228.616†	22577.8	435.74 ug/L	0.940	435.74 ppb	0.940	0.22%
QC value within limits for Co 228.616 Recovery = 87.15%						
Cr 267.716†	43728.2	475.28 ug/L	0.059	475.28 ppb	0.059	0.01%
QC value within limits for Cr 267.716 Recovery = 95.06%						
Cu 324.752†	186306.1	551.50 ug/L	1.593	551.50 ppb	1.593	0.29%
QC value within limits for Cu 324.752 Recovery = 110.30%						
Fe 238.204 Radial†	18825.2	189570 ug/L	710.8	189570 ppb	710.8	0.37%
QC value within limits for Fe 238.204 Radial Recovery = 94.79%						
K 766.490 Radial†	30754.8	5590.9 ug/L	2.08	5590.9 ppb	2.08	0.04%
QC value within limits for K 766.490 Radial Recovery = 111.82%						
Mg 279.077 IEC†	13216.9	492020 ug/L	2315.9	492020 ppb	2315.9	0.47%
QC value within limits for Mg 279.077 IEC Recovery = 98.40%						
Mn 257.610†	434828.8	482.28 ug/L	0.704	482.28 ppb	0.704	0.15%
QC value within limits for Mn 257.610 Recovery = 96.46%						
Mo 202.031†	7233.1	484.61 ug/L	2.110	484.61 ppb	2.110	0.44%
QC value within limits for Mo 202.031 Recovery = 96.92%						
Na 589.592 Radial†	15169.3	5701.7 ug/L	26.18	5701.7 ppb	26.18	0.46%
QC value within limits for Na 589.592 Radial Recovery = 114.03%						
Ni 231.604†	18506.6	438.85 ug/L	0.495	438.85 ppb	0.495	0.11%
QC value within limits for Ni 231.604 Recovery = 87.77%						
P 214.914†	4169.1	2417.9 ug/L	6.84	2417.9 ppb	6.84	0.28%
QC value within limits for P 214.914 Recovery = 96.71%						
Pb 220.353†	3077.6	460.82 ug/L	1.542	460.82 ppb	1.542	0.33%
QC value within limits for Pb 220.353 Recovery = 92.16%						
S 181.975 Axial†	1852.3	2607.0 ug/L	17.35	2607.0 ppb	17.35	0.67%
QC value within limits for S 181.975 Axial Recovery = 104.28%						
Sb 206.836†	1627.5	523.22 ug/L	6.758	523.22 ppb	6.758	1.29%
QC value within limits for Sb 206.836 Recovery = 104.64%						
Se 196.026†	3100.2	2506.1 ug/L	11.00	2506.1 ppb	11.00	0.44%
QC value within limits for Se 196.026 Recovery = 100.24%						
Si 251.611†	169642.8	5177.3 ug/L	9.27	5177.3 ppb	9.27	0.18%
QC value within limits for Si 251.611 Recovery = 103.55%						
Sn 189.927†	2494.4	474.47 ug/L	0.883	474.47 ppb	0.883	0.19%
QC value within limits for Sn 189.927 Recovery = 94.89%						
Sr 421.552†	79552.0	532.59 ug/L	0.818	532.59 ppb	0.818	0.15%
QC value within limits for Sr 421.552 Recovery = 106.52%						
Ti 334.940†	303344.0	515.18 ug/L	1.034	515.18 ppb	1.034	0.20%
QC value within limits for Ti 334.940 Recovery = 103.04%						
Tl 190.801†	1535.0	457.23 ug/L	1.309	457.23 ppb	1.309	0.29%
QC value within limits for Tl 190.801 Recovery = 91.45%						
U 409.014†	17721.7	470.36 ug/L	2.954	470.36 ppb	2.954	0.63%
QC value within limits for U 409.014 Recovery = 94.07%						
V 292.402†	75561.3	499.31 ug/L	0.363	499.31 ppb	0.363	0.07%
QC value within limits for V 292.402 Recovery = 99.86%						
Zn 213.857†	57375.3	477.80 ug/L	0.948	477.80 ppb	0.948	0.20%
QC value within limits for Zn 213.857 Recovery = 95.56%						
SiO2†	169132.8	11051 ug/L	34.7	11051 ppb	34.7	0.31%
QC value within limits for SiO2 Recovery = 103.33%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/9/2009 09:16:12
Data Type: Reprocessed on 12/9/2009 10:32:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	763793.8	763793.8	86.307	%			09:18:38
1	Sc Radial	5036.5	5036.5	88.9	%			09:18:10
1	Y 371.029	625631.0	625631.0	84.309	%			09:18:38
1	Y RADIAL	5462.4	5462.4	88.69	%			09:18:10
1	Ag 328.068†	-22623.6	-26440.5	-2.4851	ug/L	-2.4851	ppb	09:18:38
1	Al 396.153Radial†	612350.3	688582.2	509030	ug/L	509030	ppb	09:18:05
1	As 188.979†	-205.0	-208.4	-17.747	ug/L	-17.747	ppb	09:18:58
1	B 249.677†	1673.4	2462.8	-4.4154	ug/L	-4.4154	ppb	09:18:38
1	Ba 233.527†	-1280.7	-1471.9	5.0617	ug/L	5.0617	ppb	09:18:58
1	Be 313.107†	-12272.9	-8899.8	-3.3362	ug/L	-3.3362	ppb	09:18:38
1	Ca 317.933Radial†	272811.8	306747.5	469070	ug/L	469070	ppb	09:18:05
1	Cd 226.502†	3628.2	4391.6	4.0431	ug/L	4.0431	ppb	09:18:58
1	Co 228.616†	214.5	320.3	-0.0771	ug/L	-0.0771	ppb	09:18:58
1	Cr 267.716†	32.6	-49.2	2.6890	ug/L	2.6890	ppb	09:18:58
1	Cu 324.752†	1614.1	-4898.5	8.0026	ug/L	8.0026	ppb	09:18:38
1	Fe 238.204 Radial†	38525.8	43314.6	436150	ug/L	436150	ppb	09:18:10
1	K 766.490 Radial†	4725.2	3143.0	369.49	ug/L	369.49	ppb	09:18:10
1	Mg 279.077 IEC†	11576.1	13015.1	484290	ug/L	484290	ppb	09:18:10
1	Mn 257.610†	-23673.7	-27833.0	4.2239	ug/L	4.2239	ppb	09:18:38
1	Mo 202.031†	-506.0	-606.3	-8.5555	ug/L	-8.5555	ppb	09:18:58
1	Na 589.592 Radial†	1209136.0	1360237.8	511270	ug/L	511270	ppb	09:18:05
1	Ni 231.604†	266.7	238.8	5.6635	ug/L	5.6635	ppb	09:18:58
1	P 214.914†	534.1	398.9	59.048	ug/L	59.048	ppb	09:18:58
1	Pb 220.353†	-498.0	-524.4	17.040	ug/L	17.040	ppb	09:18:58
1	S 181.975 Axial†	105.9	81.2	18.595	ug/L	18.595	ppb	09:18:58
1	Sb 206.836†	53.7	32.6	1.7192	ug/L	1.7192	ppb	09:18:58
1	Se 196.026†	-2237.2	-2568.7	-122.29	ug/L	-122.29	ppb	09:18:58
1	Si 251.611†	-528.9	-1120.9	-33.552	ug/L	-33.552	ppb	09:18:58
1	Sn 189.927†	-375.4	-439.2	-19.491	ug/L	-19.491	ppb	09:18:58
1	Sr 421.552†	749.4	839.2	1.3173	ug/L	1.3173	ppb	09:18:10
1	Ti 334.940†	-8730.6	-9150.7	3.3150	ug/L	3.3150	ppb	09:18:38
1	Tl 190.801†	-114.2	-95.4	-13.795	ug/L	-13.795	ppb	09:18:58
1	U 409.014†	442887.7	515115.6	14337	ug/L	14337	ppb	09:18:38
1	V 292.402†	2549.7	4250.6	0.6803	ug/L	0.6803	ppb	09:18:58
1	Zn 213.857†	6483.0	6704.3	2.0653	ug/L	2.0653	ppb	09:18:58
1	SiO2†	-535.5	-1109.3	-71.070	ug/L	-71.070	ppb	09:19:55
2	Sc 361.383	752540.0	752540.0	85.035	%			09:19:04
2	Sc Radial	5004.3	5004.3	88.4	%			09:18:21
2	Y 371.029	616389.8	616389.8	83.063	%			09:19:04
2	Y RADIAL	5509.4	5509.4	89.46	%			09:18:21
2	Ag 328.068†	-22360.4	-26523.0	-1.9431	ug/L	-1.9431	ppb	09:19:04
2	Al 396.153Radial†	625834.9	708278.4	523590	ug/L	523590	ppb	09:18:16
2	As 188.979†	-193.6	-198.5	-13.190	ug/L	-13.190	ppb	09:19:24
2	B 249.677†	1627.5	2437.7	-5.4032	ug/L	-5.4032	ppb	09:19:04
2	Ba 233.527†	-1330.7	-1552.9	4.5717	ug/L	4.5717	ppb	09:19:24
2	Be 313.107†	-12185.2	-9009.3	-3.3768	ug/L	-3.3768	ppb	09:19:04
2	Ca 317.933Radial†	278076.2	314681.4	481200	ug/L	481200	ppb	09:18:16
2	Cd 226.502†	3667.6	4500.9	4.8957	ug/L	4.8957	ppb	09:19:24
2	Co 228.616†	229.0	341.0	0.2719	ug/L	0.2719	ppb	09:19:24
2	Cr 267.716†	78.5	5.3	3.3505	ug/L	3.3505	ppb	09:19:24
2	Cu 324.752†	1555.8	-4939.1	8.0547	ug/L	8.0547	ppb	09:19:04
2	Fe 238.204 Radial†	38572.1	43646.1	439490	ug/L	439490	ppb	09:18:21
2	K 766.490 Radial†	4818.1	3282.4	389.26	ug/L	389.26	ppb	09:18:21
2	Mg 279.077 IEC†	11577.0	13099.9	487440	ug/L	487440	ppb	09:18:21
2	Mn 257.610†	-23155.3	-27633.6	4.7147	ug/L	4.7147	ppb	09:19:04
2	Mo 202.031†	-517.7	-628.8	-9.7851	ug/L	-9.7851	ppb	09:19:24
2	Na 589.592 Radial†	1234729.5	1397960.7	525450	ug/L	525450	ppb	09:18:16
2	Ni 231.604†	301.7	284.7	6.7502	ug/L	6.7502	ppb	09:19:24

2	P 214.914†	553.7	431.2	80.461 ug/L	80.461 ppb	09:19:24
2	Pb 220.353†	-497.8	-532.9	19.042 ug/L	19.042 ppb	09:19:24
2	S 181.975 Axial†	92.1	66.8	-5.3200 ug/L	-5.3200 ppb	09:19:24
2	Sb 206.836†	69.9	52.6	7.7971 ug/L	7.7971 ppb	09:19:24
2	Se 196.026†	-2285.9	-2664.7	-167.18 ug/L	-167.18 ppb	09:19:24
2	Si 251.611†	-502.7	-1099.1	-32.867 ug/L	-32.867 ppb	09:19:24
2	Sn 189.927†	-376.2	-446.7	-19.443 ug/L	-19.443 ppb	09:19:24
2	Sr 421.552†	750.5	845.9	1.2503 ug/L	1.2503 ppb	09:18:21
2	Ti 334.940†	-8569.2	-9112.2	4.0286 ug/L	4.0286 ppb	09:19:04
2	Tl 190.801†	-95.5	-75.4	-7.6618 ug/L	-7.6618 ppb	09:19:24
2	U 409.014†	435064.2	513589.1	14294 ug/L	14294 ppb	09:19:04
2	V 292.402†	2602.1	4356.5	0.8542 ug/L	0.8542 ppb	09:19:24
2	Zn 213.857†	6474.1	6806.1	2.5476 ug/L	2.5476 ppb	09:19:24
2	SiO2†	-591.2	-1184.1	-75.918 ug/L	-75.918 ppb	09:20:00
3	Sc 361.383	757512.2	757512.2	85.597 %		09:19:30
3	Sc Radial	5109.7	5109.7	90.2 %		09:18:31
3	Y 371.029	619781.3	619781.3	83.520 %		09:19:30
3	Y RADIAL	5556.0	5556.0	90.21 %		09:18:31
3	Ag 328.068†	-22684.0	-26728.4	-3.9162 ug/L	-3.9162 ppb	09:19:30
3	Al 396.153Radial†	610370.7	676525.8	500120 ug/L	500120 ppb	09:18:26
3	As 188.979†	-196.5	-200.3	-14.576 ug/L	-14.576 ppb	09:19:50
3	B 249.677†	1758.4	2578.2	-1.8195 ug/L	-1.8195 ppb	09:19:30
3	Ba 233.527†	-1312.5	-1521.3	4.6611 ug/L	4.6611 ppb	09:19:50
3	Be 313.107†	-12269.1	-9013.3	-3.3776 ug/L	-3.3776 ppb	09:19:30
3	Ca 317.933Radial†	271617.6	301030.2	460330 ug/L	460330 ppb	09:18:26
3	Cd 226.502†	3616.2	4412.5	4.3385 ug/L	4.3385 ppb	09:19:50
3	Co 228.616†	213.7	321.4	-0.0448 ug/L	-0.0448 ppb	09:19:50
3	Cr 267.716†	61.5	-15.1	3.0404 ug/L	3.0404 ppb	09:19:50
3	Cu 324.752†	1610.8	-4886.8	8.0014 ug/L	8.0014 ppb	09:19:30
3	Fe 238.204 Radial†	39023.8	43246.1	435460 ug/L	435460 ppb	09:18:31
3	K 766.490 Radial†	4896.4	3256.6	394.83 ug/L	394.83 ppb	09:18:31
3	Mg 279.077 IEC†	11676.6	12940.1	481490 ug/L	481490 ppb	09:18:31
3	Mn 257.610†	-23282.4	-27603.3	4.4568 ug/L	4.4568 ppb	09:19:30
3	Mo 202.031†	-489.2	-591.5	-7.6426 ug/L	-7.6426 ppb	09:19:50
3	Na 589.592 Radial†	1199637.3	1330236.1	500000 ug/L	500000 ppb	09:18:26
3	Ni 231.604†	292.0	271.0	6.4257 ug/L	6.4257 ppb	09:19:50
3	P 214.914†	573.8	450.4	87.128 ug/L	87.128 ppb	09:19:50
3	Pb 220.353†	-520.3	-555.3	11.493 ug/L	11.493 ppb	09:19:50
3	S 181.975 Axial†	97.8	72.8	8.0967 ug/L	8.0967 ppb	09:19:50
3	Sb 206.836†	51.4	30.5	1.2334 ug/L	1.2334 ppb	09:19:50
3	Se 196.026†	-2285.5	-2646.7	-172.18 ug/L	-172.18 ppb	09:19:50
3	Si 251.611†	-506.1	-1099.2	-32.905 ug/L	-32.905 ppb	09:19:50
3	Sn 189.927†	-387.2	-456.6	-23.362 ug/L	-23.362 ppb	09:19:50
3	Sr 421.552†	747.3	824.9	1.3016 ug/L	1.3016 ppb	09:18:31
3	Ti 334.940†	-8457.1	-8915.0	3.2352 ug/L	3.2352 ppb	09:19:30
3	Tl 190.801†	-105.6	-86.5	-11.468 ug/L	-11.468 ppb	09:19:50
3	U 409.014†	439572.3	515497.6	14347 ug/L	14347 ppb	09:19:30
3	V 292.402†	2550.6	4276.3	0.9291 ug/L	0.9291 ppb	09:19:50
3	Zn 213.857†	6453.4	6732.0	2.4709 ug/L	2.4709 ppb	09:19:50
3	SiO2†	-475.8	-1044.7	-66.870 ug/L	-66.870 ppb	09:20:05

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757948.7	85.647	%	0.6373				0.74%
Sc Radial	5050.2	89.2	%	0.95				1.07%
Y 371.029	620600.7	83.631	%	0.6300				0.75%
Y RADIAL	5509.3	89.46	%	0.760				0.85%
Ag 328.068†	-26564.0	-2.7814	ug/L	1.01938	-2.7814	ppb	1.01938	36.65%
Al 396.153Radial†	691128.8	510920	ug/L	11849.2	510920	ppb	11849.2	2.32%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	-202.4	-15.171	ug/L	2.3361	-15.171	ppb	2.3361	15.40%
B 249.677†	2492.9	-3.8794	ug/L	1.85099	-3.8794	ppb	1.85099	47.71%
Ba 233.527†	-1515.3	4.7648	ug/L	0.26096	4.7648	ppb	0.26096	5.48%
Be 313.107†	-8974.1	-3.3635	ug/L	0.02368	-3.3635	ppb	0.02368	0.70%
Ca 317.933Radial†	307486.4	470200	ug/L	10483.3	470200	ppb	10483.3	2.23%
QC value within limits for Ca 317.933Radial Recovery = 94.04%								
Cd 226.502†	4435.0	4.4258	ug/L	0.43292	4.4258	ppb	0.43292	9.78%
Co 228.616†	327.6	0.0500	ug/L	0.19286	0.0500	ppb	0.19286	385.54%
Cr 267.716†	-19.7	3.0266	ug/L	0.33097	3.0266	ppb	0.33097	10.94%

Cu 324.752†	-4908.1	8.0196	ug/L	0.03044	8.0196	ppb	0.03044	0.38%
Fe 238.204 Radial†	43402.3	437030	ug/L	2153.8	437030	ppb	2153.8	0.49%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.41%								
K 766.490 Radial†	3227.4	384.53	ug/L	13.318	384.53	ppb	13.318	3.46%
Mg 279.077 IEC†	13018.4	484410	ug/L	2976.0	484410	ppb	2976.0	0.61%
QC value within limits for Mg 279.077 IEC Recovery = 96.88%								
Mn 257.610†	-27690.0	4.4652	ug/L	0.24550	4.4652	ppb	0.24550	5.50%
Mo 202.031†	-608.9	-8.6611	ug/L	1.07513	-8.6611	ppb	1.07513	12.41%
Na 589.592 Radial†	1362811.5	512240	ug/L	12755.4	512240	ppb	12755.4	2.49%
QC value within limits for Na 589.592 Radial Recovery = 102.45%								
Ni 231.604†	264.8	6.2798	ug/L	0.55785	6.2798	ppb	0.55785	8.88%
P 214.914†	426.8	75.545	ug/L	14.6710	75.545	ppb	14.6710	19.42%
Pb 220.353†	-537.5	15.858	ug/L	3.9109	15.858	ppb	3.9109	24.66%
S 181.975 Axial†	73.6	7.1239	ug/L	11.98708	7.1239	ppb	11.98708	168.27%
Sb 206.836†	38.6	3.5832	ug/L	3.65740	3.5832	ppb	3.65740	102.07%
Se 196.026†	-2626.7	-153.88	ug/L	27.475	-153.88	ppb	27.475	17.85%
Si 251.611†	-1106.4	-33.108	ug/L	0.3852	-33.108	ppb	0.3852	1.16%
Sn 189.927†	-447.5	-20.765	ug/L	2.2491	-20.765	ppb	2.2491	10.83%
Sr 421.552†	836.7	1.2897	ug/L	0.03506	1.2897	ppb	0.03506	2.72%
Ti 334.940†	-9059.3	3.5263	ug/L	0.43690	3.5263	ppb	0.43690	12.39%
Tl 190.801†	-85.8	-10.975	ug/L	3.0965	-10.975	ppb	3.0965	28.21%
U 409.014†	514734.1	14326	ug/L	28.5	14326	ppb	28.5	0.20%
QC value within limits for U 409.014 Recovery = 95.51%								
V 292.402†	4294.5	0.8212	ug/L	0.12765	0.8212	ppb	0.12765	15.54%
Zn 213.857†	6747.4	2.3613	ug/L	0.25918	2.3613	ppb	0.25918	10.98%
SiO2†	-1112.7	-71.286	ug/L	4.5278	-71.286	ppb	4.5278	6.35%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/9/2009 09:22:15
Data Type: Reprocessed on 12/9/2009 10:32:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	867325.0	867325.0	98.006	%			09:25:50
1	Sc Radial	5544.9	5544.9	97.9	%			09:24:13
1	Y 371.029	706892.5	706892.5	95.259	%			09:25:50
1	Y RADIAL	5940.1	5940.1	96.45	%			09:24:13
1	Ag 328.068†	-7523.4	-7904.0	2.0207	ug/L	2.0207	ppb	09:25:55
1	Al 396.153Radial†	617.2	650.7	63.318	ug/L	63.318	ppb	09:24:13
1	As 188.979†	23642.1	24152.3	9938.6	ug/L	9938.6	ppb	09:25:55
1	B 249.677†	221355.9	226383.6	4890.5	ug/L	4890.5	ppb	09:25:50
1	Ba 233.527†	1360252.9	1387941.8	10564	ug/L	10564	ppb	09:25:50
1	Be 313.107†	7468179.0	7625453.3	2853.3	ug/L	2853.3	ppb	09:25:44
1	Ca 317.933Radial†	35.6	18.7	28.537	ug/L	28.537	ppb	09:24:33
1	Cd 226.502†	862126.7	879856.2	9551.6	ug/L	9551.6	ppb	09:25:50
1	Co 228.616†	468823.1	478433.9	9286.0	ug/L	9286.0	ppb	09:25:55
1	Cr 267.716†	2142447.0	2185952.1	23570	ug/L	23570	ppb	09:25:50
1	Cu 324.752†	6705690.7	6835361.9	19879	ug/L	19879	ppb	09:25:44
1	Fe 238.204 Radial†	-18.8	-25.2	38.706	ug/L	38.706	ppb	09:24:33
1	K 766.490 Radial†	1602148.0	1634203.9	296500	ug/L	296500	ppb	09:24:08
1	Mg 279.077 IEC†	-4.4	-6.3	-36.702	ug/L	-36.702	ppb	09:24:33
1	Mn 257.610†	8321385.3	8490296.0	9226.6	ug/L	9226.6	ppb	09:25:44
1	Mo 202.031†	146819.2	149786.6	9757.0	ug/L	9757.0	ppb	09:25:55
1	Na 589.592 Radial†	139.1	758.0	284.91	ug/L	284.91	ppb	09:24:13
1	Ni 231.604†	397646.3	405667.1	9619.8	ug/L	9619.8	ppb	09:25:50
1	P 214.914†	30925.9	31335.2	15572	ug/L	15572	ppb	09:25:55
1	Pb 220.353†	196436.0	200485.4	23445	ug/L	23445	ppb	09:25:55
1	S 181.975 Axial†	34416.4	35075.2	51288	ug/L	51288	ppb	09:25:55
1	Sb 206.836†	31654.7	32269.2	10288	ug/L	10288	ppb	09:25:55
1	Se 196.026†	16507.2	16866.5	10088	ug/L	10088	ppb	09:25:55
1	Si 251.611†	1523978.6	1554478.8	47244	ug/L	47244	ppb	09:25:50
1	Sn 189.927†	60430.6	61655.9	10431	ug/L	10431	ppb	09:25:55
1	Sr 421.552†	1415036.5	1445262.1	9756.4	ug/L	9756.4	ppb	09:24:08
1	Ti 334.940†	6077176.8	6201793.4	10022	ug/L	10022	ppb	09:25:44
1	Tl 190.801†	32675.7	33377.4	9627.5	ug/L	9627.5	ppb	09:25:55
1	U 409.014†	-795.6	1150.4	-13.323	ug/L	-13.323	ppb	09:25:55
1	V 292.402†	1427957.0	1458307.9	9963.5	ug/L	9963.5	ppb	09:25:50
1	Zn 213.857†	1517160.0	1547222.2	13835	ug/L	13835	ppb	09:25:50
1	SiO2†	1518071.3	1548470.5	100740	ug/L	100740	ppb	09:26:43
2	Sc 361.383	866044.1	866044.1	97.861	%			09:26:10
2	Sc Radial	5569.9	5569.9	98.3	%			09:24:43
2	Y 371.029	704578.8	704578.8	94.948	%			09:26:10
2	Y RADIAL	5950.7	5950.7	96.62	%			09:24:43
2	Ag 328.068†	-7530.9	-7923.0	1.9331	ug/L	1.9331	ppb	09:26:15
2	Al 396.153Radial†	574.7	604.7	29.417	ug/L	29.417	ppb	09:24:43
2	As 188.979†	23599.4	24144.4	9935.1	ug/L	9935.1	ppb	09:26:15
2	B 249.677†	221672.2	227040.9	4904.8	ug/L	4904.8	ppb	09:26:10
2	Ba 233.527†	1358565.2	1388270.0	10566	ug/L	10566	ppb	09:26:10
2	Be 313.107†	7440005.0	7607934.0	2846.7	ug/L	2846.7	ppb	09:26:03
2	Ca 317.933Radial†	35.7	18.6	28.494	ug/L	28.494	ppb	09:25:03
2	Cd 226.502†	861453.4	880469.2	9558.2	ug/L	9558.2	ppb	09:26:10
2	Co 228.616†	467836.6	478133.4	9280.2	ug/L	9280.2	ppb	09:26:15
2	Cr 267.716†	2141059.7	2187767.7	23590	ug/L	23590	ppb	09:26:10
2	Cu 324.752†	6671124.4	6810159.8	19806	ug/L	19806	ppb	09:26:03
2	Fe 238.204 Radial†	-21.3	-27.7	13.481	ug/L	13.481	ppb	09:25:03
2	K 766.490 Radial†	1625834.8	1650946.0	299540	ug/L	299540	ppb	09:24:38
2	Mg 279.077 IEC†	-6.2	-8.0	-101.98	ug/L	-101.98	ppb	09:25:03
2	Mn 257.610†	8299437.9	8480427.1	9215.9	ug/L	9215.9	ppb	09:26:03
2	Mo 202.031†	146563.2	149746.4	9754.4	ug/L	9754.4	ppb	09:26:15
2	Na 589.592 Radial†	99.2	716.9	269.45	ug/L	269.45	ppb	09:24:43
2	Ni 231.604†	397468.1	406085.0	9629.7	ug/L	9629.7	ppb	09:26:10

2	P 214.914†	30769.9	31222.4	15517	ug/L	15517 ppb	09:26:15
2	Pb 220.353†	196381.4	200726.0	23473	ug/L	23473 ppb	09:26:15
2	S 181.975 Axial†	34262.7	34970.1	51134	ug/L	51134 ppb	09:26:15
2	Sb 206.836†	31620.7	32282.2	10292	ug/L	10292 ppb	09:26:15
2	Se 196.026†	16474.4	16857.9	10083	ug/L	10083 ppb	09:26:15
2	Si 251.611†	1522772.8	1555546.5	47275	ug/L	47275 ppb	09:26:10
2	Sn 189.927†	60510.9	61829.2	10460	ug/L	10460 ppb	09:26:15
2	Sr 421.552†	1435353.3	1459435.2	9852.1	ug/L	9852.1 ppb	09:24:38
2	Ti 334.940†	6049605.8	6182791.1	9991.3	ug/L	9991.3 ppb	09:26:03
2	Tl 190.801†	32590.6	33339.8	9616.4	ug/L	9616.4 ppb	09:26:15
2	U 409.014†	-893.2	1049.4	-16.178	ug/L	-16.178 ppb	09:26:15
2	V 292.402†	1426061.1	1458525.5	9965.0	ug/L	9965.0 ppb	09:26:10
2	Zn 213.857†	1516284.3	1548616.9	13848	ug/L	13848 ppb	09:26:10
2	SiO2†	1536175.4	1569261.2	102100	ug/L	102100 ppb	09:26:50
3	Sc 361.383	866098.1	866098.1	97.867	%		09:26:30
3	Sc Radial	5547.1	5547.1	97.9	%		09:25:14
3	Y 371.029	705507.1	705507.1	95.073	%		09:26:30
3	Y RADIAL	5954.2	5954.2	96.68	%		09:25:14
3	Ag 328.068†	-7546.1	-7938.1	1.8621	ug/L	1.8621 ppb	09:26:35
3	Al 396.153Radial†	588.4	621.1	37.989	ug/L	37.989 ppb	09:25:14
3	As 188.979†	23907.2	24457.4	10062	ug/L	10062 ppb	09:26:35
3	B 249.677†	221004.5	226344.6	4889.4	ug/L	4889.4 ppb	09:26:30
3	Ba 233.527†	1357439.2	1387033.0	10557	ug/L	10557 ppb	09:26:30
3	Be 313.107†	7354407.1	7519996.7	2813.8	ug/L	2813.8 ppb	09:26:23
3	Ca 317.933Radial†	37.2	20.2	30.949	ug/L	30.949 ppb	09:25:34
3	Cd 226.502†	860569.2	879510.8	9547.8	ug/L	9547.8 ppb	09:26:30
3	Co 228.616†	471689.0	482040.0	9356.4	ug/L	9356.4 ppb	09:26:35
3	Cr 267.716†	2140617.3	2187179.2	23583	ug/L	23583 ppb	09:26:30
3	Cu 324.752†	6579330.7	6715940.7	19532	ug/L	19532 ppb	09:26:23
3	Fe 238.204 Radial†	-18.9	-25.3	40.404	ug/L	40.404 ppb	09:25:34
3	K 766.490 Radial†	1595804.6	1627059.5	295210	ug/L	295210 ppb	09:25:09
3	Mg 279.077 IEC†	-4.4	-6.2	-31.546	ug/L	-31.546 ppb	09:25:34
3	Mn 257.610†	8223078.7	8401875.0	9130.6	ug/L	9130.6 ppb	09:26:23
3	Mo 202.031†	147803.6	151004.6	9836.3	ug/L	9836.3 ppb	09:26:35
3	Na 589.592 Radial†	-8.0	607.8	228.46	ug/L	228.46 ppb	09:25:14
3	Ni 231.604†	396993.2	405574.5	9617.6	ug/L	9617.6 ppb	09:26:30
3	P 214.914†	31020.1	31476.1	15713	ug/L	15713 ppb	09:26:35
3	Pb 220.353†	197558.6	201916.4	23613	ug/L	23613 ppb	09:26:35
3	S 181.975 Axial†	34609.5	35322.2	51649	ug/L	51649 ppb	09:26:35
3	Sb 206.836†	31916.8	32582.7	10393	ug/L	10393 ppb	09:26:35
3	Se 196.026†	16623.9	17009.7	10174	ug/L	10174 ppb	09:26:35
3	Si 251.611†	1520420.3	1553045.8	47199	ug/L	47199 ppb	09:26:30
3	Sn 189.927†	60867.3	62189.5	10521	ug/L	10521 ppb	09:26:35
3	Sr 421.552†	1408462.0	1437959.8	9707.1	ug/L	9707.1 ppb	09:25:09
3	Ti 334.940†	5989689.3	6121183.3	9891.7	ug/L	9891.7 ppb	09:26:23
3	Tl 190.801†	32850.9	33603.6	9690.4	ug/L	9690.4 ppb	09:26:35
3	U 409.014†	-696.7	1250.3	-10.557	ug/L	-10.557 ppb	09:26:35
3	V 292.402†	1425986.3	1458358.3	9965.1	ug/L	9965.1 ppb	09:26:30
3	Zn 213.857†	1513091.8	1545258.2	13818	ug/L	13818 ppb	09:26:30
3	SiO2†	1528564.5	1561386.6	101580	ug/L	101580 ppb	09:26:57

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866489.1	97.911	%	0.0819				0.08%
Sc Radial	5554.0	98.1	%	0.24				0.25%
Y 371.029	705659.5	95.093	%	0.1569				0.17%
Y RADIAL	5948.3	96.58	%	0.120				0.12%
Ag 328.068†	-7921.7	1.9386	ug/L	0.07944	1.9386	ppb	0.07944	4.10%
Al 396.153Radial†	625.5	43.575	ug/L	17.6273	43.575	ppb	17.6273	40.45%
As 188.979†	24251.4	9978.5	ug/L	72.21	9978.5	ppb	72.21	0.72%
QC value within limits for As 188.979 Recovery = 99.78%								
B 249.677†	226589.7	4894.9	ug/L	8.56	4894.9	ppb	8.56	0.17%
QC value within limits for B 249.677 Recovery = 97.90%								
Ba 233.527†	1387748.3	10562	ug/L	4.9	10562	ppb	4.9	0.05%
QC value less than the lower limit for Ba 233.527 Recovery = 70.41%								
Be 313.107†	7584461.4	2837.9	ug/L	21.13	2837.9	ppb	21.13	0.74%
QC value within limits for Be 313.107 Recovery = 94.60%								
Ca 317.933Radial†	19.2	29.327	ug/L	1.4053	29.327	ppb	1.4053	4.79%
Cd 226.502†	879945.4	9552.5	ug/L	5.27	9552.5	ppb	5.27	0.06%

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   QC value within limits for Cd 226.502  Recovery = 95.53%
Co 228.616†          479535.8      9307.5 ug/L        42.45      9307.5 ppb        42.45   0.46%
   QC value within limits for Co 228.616  Recovery = 93.08%
Cr 267.716†         2186966.3       23581 ug/L         10.0       23581 ppb         10.0   0.04%
   QC value within limits for Cr 267.716  Recovery = 94.32%
Cu 324.752†         6787154.2       19739 ug/L        183.1       19739 ppb        183.1   0.93%
   QC value within limits for Cu 324.752  Recovery = 98.70%
Fe 238.204 Radial†      -26.1      30.864 ug/L      15.0776      30.864 ppb      15.0776  48.85%
K 766.490 Radial†   1637403.1      297090 ug/L       2224.5      297090 ppb       2224.5   0.75%
   QC value within limits for K 766.490 Radial  Recovery = 99.03%
Mg 279.077 IEC†         -6.8     -56.741 ug/L      39.2592     -56.741 ppb      39.2592  69.19%
Mn 257.610†         8457532.7      9191.0 ug/L        52.65      9191.0 ppb        52.65   0.57%
   QC value within limits for Mn 257.610  Recovery = 91.91%
Mo 202.031†          150179.2      9782.6 ug/L        46.58      9782.6 ppb        46.58   0.48%
   QC value within limits for Mo 202.031  Recovery = 97.83%
Na 589.592 Radial†      694.2      260.94 ug/L       29.168      260.94 ppb       29.168  11.18%
Ni 231.604†          405775.5      9622.4 ug/L         6.47      9622.4 ppb         6.47   0.07%
   QC value within limits for Ni 231.604  Recovery = 96.22%
P 214.914†            31344.6       15601 ug/L        100.8       15601 ppb        100.8   0.65%
   QC value within limits for P 214.914  Recovery = 104.00%
Pb 220.353†          201042.6       23510 ug/L         89.8       23510 ppb         89.8   0.38%
   QC value within limits for Pb 220.353  Recovery = 94.04%
S 181.975 Axial†      35122.5       51357 ug/L        264.3       51357 ppb        264.3   0.51%
   QC value within limits for S 181.975 Axial  Recovery = 102.71%
Sb 206.836†           32378.0       10324 ug/L         59.5       10324 ppb         59.5   0.58%
   QC value within limits for Sb 206.836  Recovery = 103.24%
Se 196.026†           16911.3       10115 ug/L         51.0       10115 ppb         51.0   0.50%
   QC value within limits for Se 196.026  Recovery = 101.15%
Si 251.611†         1554357.0       47239 ug/L         38.5       47239 ppb         38.5   0.08%
   QC value within limits for Si 251.611  Recovery = 94.48%
Sn 189.927†           61891.5       10471 ug/L         46.1       10471 ppb         46.1   0.44%
   QC value within limits for Sn 189.927  Recovery = 104.71%
Sr 421.552†         1447552.3      9771.8 ug/L        73.71      9771.8 ppb        73.71   0.75%
   QC value within limits for Sr 421.552  Recovery = 97.72%
Ti 334.940†         6168589.3      9968.4 ug/L        68.16      9968.4 ppb        68.16   0.68%
   QC value within limits for Ti 334.940  Recovery = 99.68%
Tl 190.801†           33440.3      9644.8 ug/L        39.90      9644.8 ppb        39.90   0.41%
   QC value within limits for Tl 190.801  Recovery = 96.45%
U 409.014†             1150.0     -13.353 ug/L       2.8107     -13.353 ppb       2.8107  21.05%
V 292.402†          1458397.2      9964.5 ug/L         0.89      9964.5 ppb         0.89   0.01%
   QC value within limits for V 292.402  Recovery = 99.65%
Zn 213.857†         1547032.5       13834 ug/L         15.0       13834 ppb         15.0   0.11%
   QC value within limits for Zn 213.857  Recovery = 92.22%
SiO2†               1559706.1      101470 ug/L        686.1      101470 ppb        686.1   0.68%
   QC value within limits for SiO2  Recovery = 94.84%
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 09:43:20
Data Type: Reprocessed on 12/9/2009 10:32:31

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	910696.2	910696.2	102.91	%			09:46:30
1	Sc Radial	5714.3	5714.3	101	%			09:45:13
1	Y 371.029	751846.8	751846.8	101.32	%			09:46:30
1	Y RADIAL	6150.6	6150.6	99.87	%			09:45:13
1	Ag 328.068†	110405.9	107059.7	497.97	ug/L	497.97	ppb	09:46:35
1	Al 396.153Radial†	6700.1	6660.7	4902.8	ug/L	4902.8	ppb	09:45:13
1	As 188.979†	1210.7	1205.7	496.24	ug/L	496.24	ppb	09:46:55
1	B 249.677†	22934.9	22810.9	493.26	ug/L	493.26	ppb	09:46:35
1	Ba 233.527†	65619.0	63777.5	485.66	ug/L	485.66	ppb	09:46:35
1	Be 313.107†	1335598.1	1303192.5	485.22	ug/L	485.22	ppb	09:46:30
1	Ca 317.933Radial†	3256.0	3209.3	4907.6	ug/L	4907.6	ppb	09:45:33
1	Cd 226.502†	46127.0	45011.9	488.14	ug/L	488.14	ppb	09:46:35
1	Co 228.616†	25714.1	25059.5	486.60	ug/L	486.60	ppb	09:46:35
1	Cr 267.716†	46284.7	44890.4	484.46	ug/L	484.46	ppb	09:46:35
1	Cu 324.752†	176586.6	164830.1	479.63	ug/L	479.63	ppb	09:46:35
1	Fe 238.204 Radial†	501.5	491.0	4958.9	ug/L	4958.9	ppb	09:45:33
1	K 766.490 Radial†	30258.9	27818.9	5040.4	ug/L	5040.4	ppb	09:45:13
1	Mg 279.077 IEC†	139.7	136.7	5096.6	ug/L	5096.6	ppb	09:45:33
1	Mn 257.610†	459115.9	445744.1	484.80	ug/L	484.80	ppb	09:46:30
1	Mo 202.031†	7823.7	7582.7	494.28	ug/L	494.28	ppb	09:46:55
1	Na 589.592 Radial†	25561.1	25949.2	9753.6	ug/L	9753.6	ppb	09:45:13
1	Ni 231.604†	21225.4	20555.8	487.44	ug/L	487.44	ppb	09:46:35
1	P 214.914†	4429.4	4084.3	2354.1	ug/L	2354.1	ppb	09:46:55
1	Pb 220.353†	4206.8	4140.5	485.55	ug/L	485.55	ppb	09:46:55
1	S 181.975 Axial†	740.9	678.5	991.15	ug/L	991.15	ppb	09:46:55
1	Sb 206.836†	1602.1	1527.2	503.04	ug/L	503.04	ppb	09:46:55
1	Se 196.026†	821.5	821.8	507.45	ug/L	507.45	ppb	09:46:55
1	Si 251.611†	82828.4	79980.8	2434.4	ug/L	2434.4	ppb	09:46:35
1	Sn 189.927†	3010.1	2920.9	494.72	ug/L	494.72	ppb	09:46:55
1	Sr 421.552†	75843.1	75163.6	507.35	ug/L	507.35	ppb	09:45:13
1	Ti 334.940†	312104.3	304253.5	491.95	ug/L	491.95	ppb	09:46:35
1	Tl 190.801†	1725.1	1713.3	494.20	ug/L	494.20	ppb	09:46:55
1	U 409.014†	15879.6	17393.2	484.39	ug/L	484.39	ppb	09:46:35
1	V 292.402†	72323.0	71576.6	489.81	ug/L	489.81	ppb	09:46:35
1	Zn 213.857†	56574.5	54169.2	483.02	ug/L	483.02	ppb	09:46:35
1	SiO2†	81869.3	79068.0	5151.9	ug/L	5151.9	ppb	09:48:03
2	Sc 361.383	904058.2	904058.2	102.16	%			09:47:01
2	Sc Radial	5729.4	5729.4	101	%			09:45:38
2	Y 371.029	745786.4	745786.4	100.50	%			09:47:01
2	Y RADIAL	6175.9	6175.9	100.3	%			09:45:38
2	Ag 328.068†	109423.8	106886.2	497.15	ug/L	497.15	ppb	09:47:06
2	Al 396.153Radial†	6614.7	6558.8	4827.5	ug/L	4827.5	ppb	09:45:38
2	As 188.979†	1189.4	1193.5	491.26	ug/L	491.26	ppb	09:47:26
2	B 249.677†	22706.7	22751.2	491.97	ug/L	491.97	ppb	09:47:06
2	Ba 233.527†	64985.0	63625.1	484.50	ug/L	484.50	ppb	09:47:06
2	Be 313.107†	1324099.1	1301465.9	484.58	ug/L	484.58	ppb	09:47:01
2	Ca 317.933Radial†	3240.8	3185.7	4871.5	ug/L	4871.5	ppb	09:45:58
2	Cd 226.502†	45575.0	44800.7	485.86	ug/L	485.86	ppb	09:47:06
2	Co 228.616†	25488.7	25022.3	485.87	ug/L	485.87	ppb	09:47:06
2	Cr 267.716†	45934.6	44877.9	484.32	ug/L	484.32	ppb	09:47:06
2	Cu 324.752†	175131.0	164665.1	479.15	ug/L	479.15	ppb	09:47:06
2	Fe 238.204 Radial†	498.5	486.7	4916.1	ug/L	4916.1	ppb	09:45:58
2	K 766.490 Radial†	30025.1	27508.5	4984.1	ug/L	4984.1	ppb	09:45:38
2	Mg 279.077 IEC†	138.7	135.4	5046.4	ug/L	5046.4	ppb	09:45:58
2	Mn 257.610†	456255.1	446219.6	485.32	ug/L	485.32	ppb	09:47:01
2	Mo 202.031†	7714.2	7531.3	490.93	ug/L	490.93	ppb	09:47:26
2	Na 589.592 Radial†	25179.1	25504.6	9586.5	ug/L	9586.5	ppb	09:45:38
2	Ni 231.604†	21058.3	20543.6	487.15	ug/L	487.15	ppb	09:47:06

2	P 214.914†	4333.4	4021.9	2317.0 ug/L	2317.0 ppb	09:47:26
2	Pb 220.353†	4157.8	4122.6	483.43 ug/L	483.43 ppb	09:47:26
2	S 181.975 Axial†	729.4	672.6	982.47 ug/L	982.47 ppb	09:47:26
2	Sb 206.836†	1582.8	1519.8	500.51 ug/L	500.51 ppb	09:47:26
2	Se 196.026†	810.1	816.4	504.11 ug/L	504.11 ppb	09:47:26
2	Si 251.611†	82145.1	79902.9	2432.1 ug/L	2432.1 ppb	09:47:06
2	Sn 189.927†	2971.9	2904.8	492.01 ug/L	492.01 ppb	09:47:26
2	Sr 421.552†	74820.3	73953.8	499.19 ug/L	499.19 ppb	09:45:38
2	Ti 334.940†	309543.5	303973.7	491.50 ug/L	491.50 ppb	09:47:06
2	Tl 190.801†	1694.9	1695.9	489.24 ug/L	489.24 ppb	09:47:26
2	U 409.014†	15674.2	17305.5	481.94 ug/L	481.94 ppb	09:47:06
2	V 292.402†	71451.9	71239.9	487.49 ug/L	487.49 ppb	09:47:06
2	Zn 213.857†	56121.6	54129.5	482.67 ug/L	482.67 ppb	09:47:06
2	SiO2†	83418.2	81168.3	5289.6 ug/L	5289.6 ppb	09:48:08
3	Sc 361.383	913585.2	913585.2	103.23 %		09:47:32
3	Sc Radial	5645.2	5645.2	99.7 %		09:46:03
3	Y 371.029	753100.0	753100.0	101.49 %		09:47:32
3	Y RADIAL	6103.0	6103.0	99.10 %		09:46:03
3	Ag 328.068†	110300.8	106618.6	495.95 ug/L	495.95 ppb	09:47:37
3	Al 396.153Radial†	6567.5	6609.0	4864.7 ug/L	4864.7 ppb	09:46:03
3	As 188.979†	1201.7	1193.3	491.18 ug/L	491.18 ppb	09:47:57
3	B 249.677†	22946.7	22751.9	491.98 ug/L	491.98 ppb	09:47:37
3	Ba 233.527†	65486.7	63447.7	483.15 ug/L	483.15 ppb	09:47:37
3	Be 313.107†	1327487.0	1291231.3	480.78 ug/L	480.78 ppb	09:47:32
3	Ca 317.933Radial†	3252.9	3245.7	4963.3 ug/L	4963.3 ppb	09:46:23
3	Cd 226.502†	45883.1	44633.9	484.03 ug/L	484.03 ppb	09:47:37
3	Co 228.616†	25566.4	24837.4	482.28 ug/L	482.28 ppb	09:47:37
3	Cr 267.716†	46141.4	44609.3	481.43 ug/L	481.43 ppb	09:47:37
3	Cu 324.752†	176552.5	164254.4	477.96 ug/L	477.96 ppb	09:47:37
3	Fe 238.204 Radial†	504.4	500.0	5050.3 ug/L	5050.3 ppb	09:46:23
3	K 766.490 Radial†	29830.3	27756.1	5029.1 ug/L	5029.1 ppb	09:46:03
3	Mg 279.077 IEC†	139.3	137.9	5142.4 ug/L	5142.4 ppb	09:46:23
3	Mn 257.610†	457214.1	442491.1	481.28 ug/L	481.28 ppb	09:47:32
3	Mo 202.031†	7772.2	7508.8	489.48 ug/L	489.48 ppb	09:47:57
3	Na 589.592 Radial†	24785.3	25481.1	9577.6 ug/L	9577.6 ppb	09:46:03
3	Ni 231.604†	21097.1	20366.2	482.95 ug/L	482.95 ppb	09:47:37
3	P 214.914†	4364.1	4007.4	2308.5 ug/L	2308.5 ppb	09:47:57
3	Pb 220.353†	4174.7	4096.5	480.38 ug/L	480.38 ppb	09:47:57
3	S 181.975 Axial†	735.7	671.1	980.40 ug/L	980.40 ppb	09:47:57
3	Sb 206.836†	1593.5	1514.0	498.62 ug/L	498.62 ppb	09:47:57
3	Se 196.026†	818.4	816.2	504.42 ug/L	504.42 ppb	09:47:57
3	Si 251.611†	82678.8	79581.3	2422.3 ug/L	2422.3 ppb	09:47:37
3	Sn 189.927†	2989.9	2892.0	489.85 ug/L	489.85 ppb	09:47:57
3	Sr 421.552†	74076.5	74311.6	501.60 ug/L	501.60 ppb	09:46:03
3	Ti 334.940†	312067.0	303258.3	490.35 ug/L	490.35 ppb	09:47:37
3	Tl 190.801†	1683.9	1668.0	481.22 ug/L	481.22 ppb	09:47:57
3	U 409.014†	15771.8	17240.0	480.10 ug/L	480.10 ppb	09:47:37
3	V 292.402†	72008.5	71049.8	486.17 ug/L	486.17 ppb	09:47:37
3	Zn 213.857†	56282.4	53712.4	478.93 ug/L	478.93 ppb	09:47:37
3	SiO2†	82661.7	79583.9	5185.9 ug/L	5185.9 ppb	09:48:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	909446.6	102.77	%	0.552				0.54%
Sc Radial	5696.3	101	%	0.8				0.79%
Y 371.029	750244.4	101.10	%	0.527				0.52%
Y RADIAL	6143.2	99.75	%	0.601				0.60%
Ag 328.068†	106854.8	497.02	ug/L	1.016	497.02	ppb	1.016	0.20%
QC value within limits for Ag 328.068 Recovery = 99.40%								
Al 396.153Radial†	6609.5	4865.0	ug/L	37.62	4865.0	ppb	37.62	0.77%
QC value within limits for Al 396.153Radial Recovery = 97.30%								
As 188.979†	1197.5	492.89	ug/L	2.900	492.89	ppb	2.900	0.59%
QC value within limits for As 188.979 Recovery = 98.58%								
B 249.677†	22771.3	492.40	ug/L	0.742	492.40	ppb	0.742	0.15%
QC value within limits for B 249.677 Recovery = 98.48%								
Ba 233.527†	63616.8	484.44	ug/L	1.256	484.44	ppb	1.256	0.26%
QC value within limits for Ba 233.527 Recovery = 96.89%								
Be 313.107†	1298629.9	483.53	ug/L	2.404	483.53	ppb	2.404	0.50%
QC value within limits for Be 313.107 Recovery = 96.71%								

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Ca 317.933Radial†        3213.6      4914.1 ug/L        46.22      4914.1 ppb        46.22   0.94%
   QC value within limits for Ca 317.933Radial  Recovery = 98.28%
Cd 226.502†             44815.5      486.01 ug/L        2.061      486.01 ppb        2.061   0.42%
   QC value within limits for Cd 226.502  Recovery = 97.20%
Co 228.616†             24973.1      484.92 ug/L        2.313      484.92 ppb        2.313   0.48%
   QC value within limits for Co 228.616  Recovery = 96.98%
Cr 267.716†             44792.5      483.40 ug/L        1.712      483.40 ppb        1.712   0.35%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†            164583.2      478.91 ug/L        0.859      478.91 ppb        0.859   0.18%
   QC value within limits for Cu 324.752  Recovery = 95.78%
Fe 238.204 Radial†        492.6      4975.1 ug/L        68.56      4975.1 ppb        68.56   1.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.50%
K 766.490 Radial†       27694.5      5017.9 ug/L        29.77      5017.9 ppb        29.77   0.59%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†           136.7      5095.1 ug/L        48.03      5095.1 ppb        48.03   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.90%
Mn 257.610†            444818.3      483.80 ug/L        2.199      483.80 ppb        2.199   0.45%
   QC value within limits for Mn 257.610  Recovery = 96.76%
Mo 202.031†              7540.9      491.56 ug/L        2.465      491.56 ppb        2.465   0.50%
   QC value within limits for Mo 202.031  Recovery = 98.31%
Na 589.592 Radial†      25645.0      9639.2 ug/L        99.14      9639.2 ppb        99.14   1.03%
   QC value within limits for Na 589.592 Radial  Recovery = 96.39%
Ni 231.604†             20488.5      485.85 ug/L        2.516      485.85 ppb        2.516   0.52%
   QC value within limits for Ni 231.604  Recovery = 97.17%
P 214.914†               4037.9      2326.5 ug/L        24.22      2326.5 ppb        24.22   1.04%
   QC value within limits for P 214.914  Recovery = 93.06%
Pb 220.353†              4119.9      483.12 ug/L        2.601      483.12 ppb        2.601   0.54%
   QC value within limits for Pb 220.353  Recovery = 96.62%
S 181.975 Axial†          674.1      984.67 ug/L        5.702      984.67 ppb        5.702   0.58%
   QC value within limits for S 181.975 Axial  Recovery = 98.47%
Sb 206.836†              1520.3      500.72 ug/L        2.220      500.72 ppb        2.220   0.44%
   QC value within limits for Sb 206.836  Recovery = 100.14%
Se 196.026†               818.1      505.33 ug/L        1.849      505.33 ppb        1.849   0.37%
   QC value within limits for Se 196.026  Recovery = 101.07%
Si 251.611†             79821.7      2429.6 ug/L         6.44      2429.6 ppb         6.44   0.26%
   QC value within limits for Si 251.611  Recovery = 97.19%
Sn 189.927†              2905.9      492.19 ug/L        2.442      492.19 ppb        2.442   0.50%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†             74476.3      502.71 ug/L        4.195      502.71 ppb        4.195   0.83%
   QC value within limits for Sr 421.552  Recovery = 100.54%
Ti 334.940†            303828.5      491.26 ug/L        0.827      491.26 ppb        0.827   0.17%
   QC value within limits for Ti 334.940  Recovery = 98.25%
Tl 190.801†              1692.4      488.22 ug/L        6.552      488.22 ppb        6.552   1.34%
   QC value within limits for Tl 190.801  Recovery = 97.64%
U 409.014†              17312.9      482.14 ug/L        2.150      482.14 ppb        2.150   0.45%
   QC value within limits for U 409.014  Recovery = 96.43%
V 292.402†              71288.8      487.82 ug/L        1.844      487.82 ppb        1.844   0.38%
   QC value within limits for V 292.402  Recovery = 97.56%
Zn 213.857†             54003.7      481.54 ug/L        2.267      481.54 ppb        2.267   0.47%
   QC value within limits for Zn 213.857  Recovery = 96.31%
SiO2†                   79940.1      5209.1 ug/L        71.74      5209.1 ppb        71.74   1.38%
   QC value within limits for SiO2  Recovery = 97.41%
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 09:50:23
Data Type: Reprocessed on 12/9/2009 10:32:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	883487.1	883487.1	99.832	%			09:53:33
1	Sc Radial	5780.6	5780.6	102	%			09:52:16
1	Y 371.029	742503.0	742503.0	100.06	%			09:53:33
1	Y RADIAL	6319.3	6319.3	102.6	%			09:52:16
1	Ag 328.068†	300.6	73.6	0.3412	ug/L	0.3412	ppb	09:53:33
1	Al 396.153Radial†	-15.3	5.4	3.9593	ug/L	3.9593	ppb	09:52:36
1	As 188.979†	-13.6	15.6	6.3379	ug/L	6.3379	ppb	09:53:53
1	B 249.677†	154.7	678.8	14.735	ug/L	14.735	ppb	09:53:53
1	Ba 233.527†	-5.5	6.5	0.0495	ug/L	0.0495	ppb	09:53:53
1	Be 313.107†	-5163.9	147.7	0.0546	ug/L	0.0546	ppb	09:53:33
1	Ca 317.933Radial†	17.0	-1.0	-1.5997	ug/L	-1.5997	ppb	09:52:36
1	Cd 226.502†	-155.4	32.2	0.3494	ug/L	0.3494	ppb	09:53:53
1	Co 228.616†	-70.3	1.3	0.0275	ug/L	0.0275	ppb	09:53:53
1	Cr 267.716†	57.3	-29.6	-0.3184	ug/L	-0.3184	ppb	09:53:53
1	Cu 324.752†	6871.1	114.0	0.3317	ug/L	0.3317	ppb	09:53:33
1	Fe 238.204 Radial†	6.4	0.2	2.0231	ug/L	2.0231	ppb	09:52:36
1	K 766.490 Radial†	2626.6	403.0	73.133	ug/L	73.133	ppb	09:52:16
1	Mg 279.077 IEC†	1.5	-0.3	-9.8264	ug/L	-9.8264	ppb	09:52:36
1	Mn 257.610†	402.6	-0.1	0.0003	ug/L	0.0003	ppb	09:53:53
1	Mo 202.031†	28.5	8.5	0.5556	ug/L	0.5556	ppb	09:53:53
1	Na 589.592 Radial†	-557.2	70.1	26.355	ug/L	26.355	ppb	09:52:16
1	Ni 231.604†	82.1	12.1	0.2868	ug/L	0.2868	ppb	09:53:53
1	P 214.914†	219.8	0.2	0.0528	ug/L	0.0528	ppb	09:53:53
1	Pb 220.353†	-56.5	-4.0	-0.4713	ug/L	-0.4713	ppb	09:53:53
1	S 181.975 Axial†	44.9	3.6	5.1910	ug/L	5.1910	ppb	09:53:53
1	Sb 206.836†	52.1	22.6	7.3665	ug/L	7.3665	ppb	09:53:53
1	Se 196.026†	-22.0	1.4	0.8373	ug/L	0.8373	ppb	09:53:53
1	Si 251.611†	513.2	6.1	0.1511	ug/L	0.1511	ppb	09:53:53
1	Sn 189.927†	6.1	1.8	0.3061	ug/L	0.3061	ppb	09:53:53
1	Sr 421.552†	-10.8	-14.0	-0.0943	ug/L	-0.0943	ppb	09:52:16
1	Ti 334.940†	-1046.4	-83.1	-0.1344	ug/L	-0.1344	ppb	09:53:33
1	Tl 190.801†	-28.5	8.3	2.3736	ug/L	2.3736	ppb	09:53:53
1	U 409.014†	-1960.2	-1.4	-0.0375	ug/L	-0.0375	ppb	09:53:33
1	V 292.402†	-1278.7	15.6	0.1130	ug/L	0.1130	ppb	09:53:33
1	Zn 213.857†	689.1	-117.0	-1.0549	ug/L	-1.0549	ppb	09:53:53
1	SiO2†	552.8	64.9	4.1704	ug/L	4.1704	ppb	09:54:49
2	Sc 361.383	884739.8	884739.8	99.974	%			09:53:58
2	Sc Radial	5764.0	5764.0	102	%			09:52:41
2	Y 371.029	742644.3	742644.3	100.08	%			09:53:58
2	Y RADIAL	6265.5	6265.5	101.7	%			09:52:41
2	Ag 328.068†	300.2	72.7	0.3397	ug/L	0.3397	ppb	09:53:58
2	Al 396.153Radial†	-19.5	1.2	0.8344	ug/L	0.8344	ppb	09:53:01
2	As 188.979†	-13.4	15.8	6.4281	ug/L	6.4281	ppb	09:54:18
2	B 249.677†	129.7	653.5	14.185	ug/L	14.185	ppb	09:54:18
2	Ba 233.527†	-24.2	-12.1	-0.0918	ug/L	-0.0918	ppb	09:54:18
2	Be 313.107†	-5215.7	103.1	0.0380	ug/L	0.0380	ppb	09:53:58
2	Ca 317.933Radial†	14.9	-3.0	-4.6310	ug/L	-4.6310	ppb	09:53:01
2	Cd 226.502†	-148.1	39.7	0.4296	ug/L	0.4296	ppb	09:54:18
2	Co 228.616†	-70.0	1.7	0.0348	ug/L	0.0348	ppb	09:54:18
2	Cr 267.716†	72.1	-14.9	-0.1599	ug/L	-0.1599	ppb	09:54:18
2	Cu 324.752†	6864.6	97.8	0.2849	ug/L	0.2849	ppb	09:53:58
2	Fe 238.204 Radial†	7.2	1.0	10.224	ug/L	10.224	ppb	09:53:01
2	K 766.490 Radial†	2593.8	378.2	68.622	ug/L	68.622	ppb	09:52:41
2	Mg 279.077 IEC†	1.9	0.1	4.5790	ug/L	4.5790	ppb	09:53:01
2	Mn 257.610†	422.1	18.8	0.0213	ug/L	0.0213	ppb	09:54:18
2	Mo 202.031†	31.0	11.0	0.7187	ug/L	0.7187	ppb	09:54:18
2	Na 589.592 Radial†	-535.9	89.4	33.593	ug/L	33.593	ppb	09:52:41
2	Ni 231.604†	84.6	14.5	0.3432	ug/L	0.3432	ppb	09:54:18

2	P 214.914†	222.2	2.3	1.3036 ug/L	1.3036 ppb	09:54:18
2	Pb 220.353†	-48.3	4.3	0.4997 ug/L	0.4997 ppb	09:54:18
2	S 181.975 Axial†	35.4	-6.0	-8.7915 ug/L	-8.7915 ppb	09:54:18
2	Sb 206.836†	49.5	20.0	6.5211 ug/L	6.5211 ppb	09:54:18
2	Se 196.026†	-17.3	6.1	3.6975 ug/L	3.6975 ppb	09:54:18
2	Si 251.611†	503.4	-4.5	-0.1782 ug/L	-0.1782 ppb	09:54:18
2	Sn 189.927†	12.4	8.2	1.3837 ug/L	1.3837 ppb	09:54:18
2	Sr 421.552†	-27.1	-30.1	-0.2029 ug/L	-0.2029 ppb	09:52:41
2	Ti 334.940†	-1080.5	-115.7	-0.1873 ug/L	-0.1873 ppb	09:53:58
2	Tl 190.801†	-32.4	4.4	1.2673 ug/L	1.2673 ppb	09:54:18
2	U 409.014†	-1967.4	-5.7	-0.1603 ug/L	-0.1603 ppb	09:53:58
2	V 292.402†	-1289.8	6.4	0.0517 ug/L	0.0517 ppb	09:53:58
2	Zn 213.857†	701.1	-106.0	-0.9576 ug/L	-0.9576 ppb	09:54:18
2	SiO2†	506.6	17.9	1.0831 ug/L	1.0831 ppb	09:54:54
3	Sc 361.383	887271.0	887271.0	100.26 %		09:54:24
3	Sc Radial	5784.6	5784.6	102 %		09:53:06
3	Y 371.029	744463.2	744463.2	100.32 %		09:54:24
3	Y RADIAL	6304.1	6304.1	102.4 %		09:53:06
3	Ag 328.068†	243.1	14.9	0.0755 ug/L	0.0755 ppb	09:54:24
3	Al 396.153Radial†	-26.2	-5.3	-3.9397 ug/L	-3.9397 ppb	09:53:26
3	As 188.979†	-11.1	18.1	7.3933 ug/L	7.3933 ppb	09:54:44
3	B 249.677†	106.2	629.8	13.670 ug/L	13.670 ppb	09:54:44
3	Ba 233.527†	2.1	14.1	0.1077 ug/L	0.1077 ppb	09:54:44
3	Be 313.107†	-5267.2	66.7	0.0249 ug/L	0.0249 ppb	09:54:24
3	Ca 317.933Radial†	17.9	-0.1	-0.1892 ug/L	-0.1892 ppb	09:53:26
3	Cd 226.502†	-155.1	33.1	0.3583 ug/L	0.3583 ppb	09:54:44
3	Co 228.616†	-67.9	4.0	0.0786 ug/L	0.0786 ppb	09:54:44
3	Cr 267.716†	84.9	-2.3	-0.0233 ug/L	-0.0233 ppb	09:54:44
3	Cu 324.752†	6925.6	139.0	0.4049 ug/L	0.4049 ppb	09:54:24
3	Fe 238.204 Radial†	7.4	1.2	12.352 ug/L	12.352 ppb	09:53:26
3	K 766.490 Radial†	2550.2	326.5	59.239 ug/L	59.239 ppb	09:53:06
3	Mg 279.077 IEC†	-1.3	-3.0	-113.52 ug/L	-113.52 ppb	09:53:26
3	Mn 257.610†	415.8	11.3	0.0157 ug/L	0.0157 ppb	09:54:44
3	Mo 202.031†	24.3	4.3	0.2789 ug/L	0.2789 ppb	09:54:44
3	Na 589.592 Radial†	-562.9	64.9	24.394 ug/L	24.394 ppb	09:53:06
3	Ni 231.604†	89.0	18.7	0.4434 ug/L	0.4434 ppb	09:54:44
3	P 214.914†	222.4	1.9	1.0543 ug/L	1.0543 ppb	09:54:44
3	Pb 220.353†	-60.5	-7.8	-0.9111 ug/L	-0.9111 ppb	09:54:44
3	S 181.975 Axial†	43.6	2.0	2.9267 ug/L	2.9267 ppb	09:54:44
3	Sb 206.836†	45.8	16.1	5.2510 ug/L	5.2510 ppb	09:54:44
3	Se 196.026†	-22.4	1.1	0.6700 ug/L	0.6700 ppb	09:54:44
3	Si 251.611†	494.9	-14.4	-0.4691 ug/L	-0.4691 ppb	09:54:44
3	Sn 189.927†	13.0	8.7	1.4763 ug/L	1.4763 ppb	09:54:44
3	Sr 421.552†	-8.5	-11.8	-0.0795 ug/L	-0.0795 ppb	09:53:06
3	Ti 334.940†	-918.1	49.3	0.0809 ug/L	0.0809 ppb	09:54:24
3	Tl 190.801†	-25.4	11.5	3.2959 ug/L	3.2959 ppb	09:54:44
3	U 409.014†	-2059.3	-91.8	-2.5658 ug/L	-2.5658 ppb	09:54:24
3	V 292.402†	-1282.9	16.9	0.1084 ug/L	0.1084 ppb	09:54:24
3	Zn 213.857†	688.0	-121.0	-1.0895 ug/L	-1.0895 ppb	09:54:44
3	SiO2†	559.7	69.4	4.4787 ug/L	4.4787 ppb	09:54:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885166.0	100.02	%	0.218				0.22%
Sc Radial	5776.4	102	%	0.2				0.19%
Y 371.029	743203.5	100.15	%	0.147				0.15%
Y RADIAL	6296.3	102.2	%	0.45				0.44%
Ag 328.068†	53.7	0.2521	ug/L	0.15298	0.2521	ppb	0.15298	60.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.2847	ug/L	3.97809	0.2847	ppb	3.97809	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	16.5	6.7198	ug/L	0.58506	6.7198	ppb	0.58506	8.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	654.1	14.196	ug/L	0.5326	14.196	ppb	0.5326	3.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.8	0.0218	ug/L	0.10259	0.0218	ppb	0.10259	470.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	105.8	0.0392	ug/L	0.01487	0.0392	ppb	0.01487	37.98%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.4     -2.1400 ug/L       2.26967     -2.1400 ppb        2.26967 106.06%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                35.0      0.3791 ug/L       0.04397      0.3791 ppb        0.04397  11.60%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.3      0.0470 ug/L       0.02766      0.0470 ppb        0.02766  58.90%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -15.6     -0.1672 ug/L       0.14766     -0.1672 ppb        0.14766  88.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               116.9      0.3405 ug/L       0.06050      0.3405 ppb        0.06050  17.77%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.8      8.1998 ug/L       5.45386      8.1998 ppb        5.45386  66.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         369.2     66.998 ug/L        7.0880     66.998 ppb         7.0880  10.58%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.1    -39.588 ug/L       64.4280    -39.588 ppb        64.4280 162.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.0      0.0124 ug/L       0.01089      0.0124 ppb        0.01089  87.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.9      0.5177 ug/L       0.22238      0.5177 ppb        0.22238  42.95%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         74.8     28.114 ug/L        4.8453     28.114 ppb         4.8453  17.23%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.1      0.3578 ug/L       0.07931      0.3578 ppb        0.07931  22.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.4      0.8036 ug/L       0.66205      0.8036 ppb        0.66205  82.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.5     -0.2943 ug/L       0.72189     -0.2943 ppb        0.72189 245.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.2246 ug/L       7.50507     -0.2246 ppb        7.50507 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                19.6      6.3795 ug/L       1.06484      6.3795 ppb        1.06484  16.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.9      1.7349 ug/L       1.70167      1.7349 ppb        1.70167  98.08%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                -4.3     -0.1654 ug/L       0.31028     -0.1654 ppb        0.31028 187.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.2      1.0554 ug/L       0.65051      1.0554 ppb        0.65051  61.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.6     -0.1256 ug/L       0.06737     -0.1256 ppb        0.06737  53.66%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -49.8     -0.0803 ug/L       0.14204     -0.0803 ppb        0.14204 176.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.1      2.3123 ug/L       1.01567      2.3123 ppb        1.01567  43.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.9     -0.9212 ug/L       1.42557     -0.9212 ppb        1.42557 154.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 12.9      0.0910 ug/L       0.03411      0.0910 ppb        0.03411  37.48%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -114.7     -1.0340 ug/L       0.06840     -1.0340 ppb        0.06840   6.61%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      50.7      3.2441 ug/L       1.87777      3.2441 ppb        1.87777  57.88%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/9/2009 09:57:09
Data Type: Reprocessed on 12/9/2009 10:32:33
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	887319.3	887319.3	100.27	%			10:00:20
1	Sc Radial	5605.4	5605.4	99.0	%			09:59:02
1	Y 371.029	738820.1	738820.1	99.562	%			10:00:20
1	Y RADIAL	6070.3	6070.3	98.56	%			09:59:02
1	Ag 328.068†	-25507.1	-25667.2	0.4653	ug/L	0.4653	ppb	10:00:20
1	Al 396.153Radial†	-53.3	-33.5	-23.660	ug/L	-23.660	ppb	09:59:02
1	As 188.979†	-212.3	-182.5	-16.747	ug/L	-16.747	ppb	10:00:40
1	B 249.677†	2542.2	3059.3	16.807	ug/L	16.807	ppb	10:00:20
1	Ba 233.527†	-1747.2	-1730.6	0.8462	ug/L	0.8462	ppb	10:00:20
1	Be 313.107†	-5195.5	138.5	0.0511	ug/L	0.0511	ppb	10:00:20
1	Ca 317.933Radial†	19.0	1.5	2.2325	ug/L	2.2325	ppb	09:59:22
1	Cd 226.502†	3562.1	3740.5	3.2119	ug/L	3.2119	ppb	10:00:20
1	Co 228.616†	213.6	284.8	0.1277	ug/L	0.1277	ppb	10:00:40
1	Cr 267.716†	-567.9	-653.3	-0.2725	ug/L	-0.2725	ppb	10:00:20
1	Cu 324.752†	432.3	-6337.5	0.6363	ug/L	0.6363	ppb	10:00:20
1	Fe 238.204 Radial†	36747.7	37121.7	373790	ug/L	373790	ppb	09:59:02
1	K 766.490 Radial†	2101.5	-47.1	3.7100	ug/L	3.7100	ppb	09:59:02
1	Mg 279.077 IEC†	11.5	9.8	45.122	ug/L	45.122	ppb	09:59:22
1	Mn 257.610†	-36408.4	-36715.6	-2.6309	ug/L	-2.6309	ppb	10:00:20
1	Mo 202.031†	-385.1	-404.1	0.1946	ug/L	0.1946	ppb	10:00:20
1	Na 589.592 Radial†	-562.7	47.4	17.835	ug/L	17.835	ppb	09:59:02
1	Ni 231.604†	177.0	106.4	2.5217	ug/L	2.5217	ppb	10:00:40
1	P 214.914†	725.0	503.2	0.4044	ug/L	0.4044	ppb	10:00:40
1	Pb 220.353†	238.6	290.5	3.2201	ug/L	3.2201	ppb	10:00:40
1	S 181.975 Axial†	47.1	5.5	8.0097	ug/L	8.0097	ppb	10:00:40
1	Sb 206.836†	11.4	-18.2	-0.1644	ug/L	-0.1644	ppb	10:00:40
1	Se 196.026†	-1992.6	-1963.8	-27.011	ug/L	-27.011	ppb	10:00:40
1	Si 251.611†	-727.5	-1233.6	-37.252	ug/L	-37.252	ppb	10:00:20
1	Sn 189.927†	-24.8	-29.0	0.0868	ug/L	0.0868	ppb	10:00:40
1	Sr 421.552†	25.0	21.8	0.1474	ug/L	0.1474	ppb	09:59:02
1	Ti 334.940†	-1084.3	-116.4	-0.2084	ug/L	-0.2084	ppb	10:00:20
1	Tl 190.801†	-47.3	-10.3	-3.3433	ug/L	-3.3433	ppb	10:00:40
1	U 409.014†	-115.4	1847.1	4.5916	ug/L	4.5916	ppb	10:00:20
1	V 292.402†	7058.1	8335.9	-0.8511	ug/L	-0.8511	ppb	10:00:20
1	Zn 213.857†	4904.2	4083.9	1.0474	ug/L	1.0474	ppb	10:00:40
1	SiO2†	-785.5	-1272.2	-82.275	ug/L	-82.275	ppb	10:01:37
2	Sc 361.383	936084.1	936084.1	105.78	%			10:00:46
2	Sc Radial	5571.4	5571.4	98.4	%			09:59:27
2	Y 371.029	777476.7	777476.7	104.77	%			10:00:46
2	Y RADIAL	6035.2	6035.2	97.99	%			09:59:27
2	Ag 328.068†	-24782.0	-23656.4	10.021	ug/L	10.021	ppb	10:00:46
2	Al 396.153Radial†	-49.3	-29.8	-21.007	ug/L	-21.007	ppb	09:59:27
2	As 188.979†	-227.8	-186.2	-18.093	ug/L	-18.093	ppb	10:01:06
2	B 249.677†	2566.3	2950.1	14.324	ug/L	14.324	ppb	10:00:46
2	Ba 233.527†	-1715.2	-1609.5	1.7908	ug/L	1.7908	ppb	10:00:46
2	Be 313.107†	-5181.6	421.5	0.1568	ug/L	0.1568	ppb	10:00:46
2	Ca 317.933Radial†	21.1	3.8	5.7622	ug/L	5.7622	ppb	09:59:47
2	Cd 226.502†	3450.8	3450.2	-0.0229	ug/L	-0.0229	ppb	10:00:46
2	Co 228.616†	217.5	277.4	-0.0230	ug/L	-0.0230	ppb	10:01:06
2	Cr 267.716†	-513.8	-572.7	0.6063	ug/L	0.6063	ppb	10:00:46
2	Cu 324.752†	495.0	-6300.6	0.7868	ug/L	0.7868	ppb	10:00:46
2	Fe 238.204 Radial†	36608.0	37205.9	374640	ug/L	374640	ppb	09:59:27
2	K 766.490 Radial†	2214.3	80.6	26.877	ug/L	26.877	ppb	09:59:27
2	Mg 279.077 IEC†	9.1	7.5	-40.941	ug/L	-40.941	ppb	09:59:47
2	Mn 257.610†	-35425.9	-33895.0	0.5204	ug/L	0.5204	ppb	10:00:46
2	Mo 202.031†	-371.1	-370.9	2.4170	ug/L	2.4170	ppb	10:00:46
2	Na 589.592 Radial†	-555.0	51.8	19.455	ug/L	19.455	ppb	09:59:27
2	Ni 231.604†	160.3	81.4	1.9289	ug/L	1.9289	ppb	10:01:06

2	P 214.914†	709.0	450.3	-31.693	ug/L	-31.693 ppb	10:01:06
2	Pb 220.353†	240.7	280.1	1.9397	ug/L	1.9397 ppb	10:01:06
2	S 181.975 Axial†	62.7	17.8	26.101	ug/L	26.101 ppb	10:01:06
2	Sb 206.836†	16.3	-14.2	1.1751	ug/L	1.1751 ppb	10:01:06
2	Se 196.026†	-1976.4	-1845.0	46.457	ug/L	46.457 ppb	10:01:06
2	Si 251.611†	-694.7	-1164.8	-35.194	ug/L	-35.194 ppb	10:00:46
2	Sn 189.927†	-26.3	-29.1	0.0788	ug/L	0.0788 ppb	10:01:06
2	Sr 421.552†	45.6	42.9	0.2897	ug/L	0.2897 ppb	09:59:27
2	Ti 334.940†	-959.2	58.2	0.0736	ug/L	0.0736 ppb	10:00:46
2	Tl 190.801†	-41.2	-2.1	-0.9645	ug/L	-0.9645 ppb	10:01:06
2	U 409.014†	-108.2	1859.9	4.8410	ug/L	4.8410 ppb	10:00:46
2	V 292.402†	7016.3	7929.6	-3.6938	ug/L	-3.6938 ppb	10:00:46
2	Zn 213.857†	4863.0	3790.2	-1.6697	ug/L	-1.6697 ppb	10:01:06
2	SiO2†	-750.0	-1197.9	-77.508	ug/L	-77.508 ppb	10:01:42
3	Sc 361.383	879120.8	879120.8	99.339	%		10:01:12
3	Sc Radial	5736.5	5736.5	101	%		09:59:52
3	Y 371.029	730593.9	730593.9	98.453	%		10:01:12
3	Y RADIAL	6234.5	6234.5	101.2	%		09:59:52
3	Ag 328.068†	-25461.6	-25858.7	-2.5167	ug/L	-2.5167 ppb	10:01:12
3	Al 396.153Radial†	-33.0	-12.2	-7.9618	ug/L	-7.9618 ppb	09:59:52
3	As 188.979†	-215.8	-188.0	-20.019	ug/L	-20.019 ppb	10:01:32
3	B 249.677†	2628.4	3169.8	20.082	ug/L	20.082 ppb	10:01:12
3	Ba 233.527†	-1639.6	-1638.5	1.3026	ug/L	1.3026 ppb	10:01:12
3	Be 313.107†	-5245.7	39.6	0.0144	ug/L	0.0144 ppb	10:01:12
3	Ca 317.933Radial†	15.5	-2.4	-3.6204	ug/L	-3.6204 ppb	10:00:12
3	Cd 226.502†	3567.6	3779.2	4.2922	ug/L	4.2922 ppb	10:01:12
3	Co 228.616†	217.9	291.1	0.3481	ug/L	0.3481 ppb	10:01:32
3	Cr 267.716†	-576.3	-667.1	-0.5364	ug/L	-0.5364 ppb	10:01:12
3	Cu 324.752†	487.2	-6278.2	0.4716	ug/L	0.4716 ppb	10:01:12
3	Fe 238.204 Radial†	36942.5	36465.4	367180	ug/L	367180 ppb	09:59:52
3	K 766.490 Radial†	2115.6	-81.7	-2.7680	ug/L	-2.7680 ppb	09:59:52
3	Mg 279.077 IEC†	14.4	12.4	147.83	ug/L	147.83 ppb	10:00:12
3	Mn 257.610†	-36324.2	-36969.4	-3.5676	ug/L	-3.5676 ppb	10:01:12
3	Mo 202.031†	-358.8	-381.1	1.2190	ug/L	1.2190 ppb	10:01:12
3	Na 589.592 Radial†	-557.1	65.9	24.782	ug/L	24.782 ppb	09:59:52
3	Ni 231.604†	163.8	94.7	2.2442	ug/L	2.2442 ppb	10:01:32
3	P 214.914†	716.7	501.5	4.6905	ug/L	4.6905 ppb	10:01:32
3	Pb 220.353†	226.2	280.2	2.5693	ug/L	2.5693 ppb	10:01:32
3	S 181.975 Axial†	59.8	18.7	27.371	ug/L	27.371 ppb	10:01:32
3	Sb 206.836†	25.9	-3.6	4.4954	ug/L	4.4954 ppb	10:01:32
3	Se 196.026†	-1979.5	-1969.2	-50.424	ug/L	-50.424 ppb	10:01:32
3	Si 251.611†	-703.8	-1216.5	-36.752	ug/L	-36.752 ppb	10:01:12
3	Sn 189.927†	-31.1	-35.6	-1.1147	ug/L	-1.1147 ppb	10:01:32
3	Sr 421.552†	45.7	41.7	0.2812	ug/L	0.2812 ppb	09:59:52
3	Ti 334.940†	-1068.5	-110.6	-0.1981	ug/L	-0.1981 ppb	10:01:12
3	Tl 190.801†	-58.9	-22.5	-6.8342	ug/L	-6.8342 ppb	10:01:32
3	U 409.014†	-208.2	1752.5	2.7815	ug/L	2.7815 ppb	10:01:12
3	V 292.402†	7139.6	8483.6	1.1693	ug/L	1.1693 ppb	10:01:12
3	Zn 213.857†	4917.4	4142.9	2.2071	ug/L	2.2071 ppb	10:01:32
3	SiO2†	-764.6	-1258.5	-81.423	ug/L	-81.423 ppb	10:01:47

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900841.4	101.79	%	3.480				3.42%
Sc Radial	5637.8	99.5	%	1.54				1.55%
Y 371.029	748963.5	100.93	%	3.373				3.34%
Y RADIAL	6113.4	99.26	%	1.728				1.74%
Ag 328.068†	-25060.8	2.6565	ug/L	6.54972	2.6565	ppb	6.54972	246.56%
Al 396.153Radial†	-25.2	-17.543	ug/L	8.4031	-17.543	ppb	8.4031	47.90%
As 188.979†	-185.6	-18.286	ug/L	1.6449	-18.286	ppb	1.6449	8.99%
B 249.677†	3059.7	17.071	ug/L	2.8882	17.071	ppb	2.8882	16.92%
Ba 233.527†	-1659.5	1.3132	ug/L	0.47241	1.3132	ppb	0.47241	35.97%
Be 313.107†	199.9	0.0741	ug/L	0.07396	0.0741	ppb	0.07396	99.84%
Ca 317.933Radial†	1.0	1.4581	ug/L	4.73901	1.4581	ppb	4.73901	325.02%
Cd 226.502†	3656.7	2.4937	ug/L	2.24541	2.4937	ppb	2.24541	90.04%
Co 228.616†	284.4	0.1509	ug/L	0.18663	0.1509	ppb	0.18663	123.67%
Cr 267.716†	-631.1	-0.0675	ug/L	0.59827	-0.0675	ppb	0.59827	885.82%
Cu 324.752†	-6305.5	0.6316	ug/L	0.15766	0.6316	ppb	0.15766	24.96%
Fe 238.204 Radial†	36931.0	371870	ug/L	4082.4	371870	ppb	4082.4	1.10%

K 766.490 Radial†	-16.1	9.2731	ug/L	15.58594	9.2731	ppb	15.58594 168.08%
Mg 279.077 IEC†	9.9	50.671	ug/L	94.5094	50.671	ppb	94.5094 186.51%
Mn 257.610†	-35860.0	-1.8927	ug/L	2.14164	-1.8927	ppb	2.14164 113.15%
Mo 202.031†	-385.4	1.2769	ug/L	1.11230	1.2769	ppb	1.11230 87.11%
Na 589.592 Radial†	55.0	20.691	ug/L	3.6346	20.691	ppb	3.6346 17.57%
Ni 231.604†	94.2	2.2316	ug/L	0.29660	2.2316	ppb	0.29660 13.29%
P 214.914†	485.0	-8.8661	ug/L	19.88462	-8.8661	ppb	19.88462 224.28%
Pb 220.353†	283.6	2.5764	ug/L	0.64025	2.5764	ppb	0.64025 24.85%
S 181.975 Axial†	14.0	20.494	ug/L	10.8304	20.494	ppb	10.8304 52.85%
Sb 206.836†	-12.0	1.8354	ug/L	2.39901	1.8354	ppb	2.39901 130.71%
Se 196.026†	-1926.0	-10.326	ug/L	50.5497	-10.326	ppb	50.5497 489.54%
Si 251.611†	-1205.0	-36.399	ug/L	1.0735	-36.399	ppb	1.0735 2.95%
Sn 189.927†	-31.2	-0.3163	ug/L	0.69139	-0.3163	ppb	0.69139 218.56%
Sr 421.552†	35.5	0.2394	ug/L	0.07983	0.2394	ppb	0.07983 33.34%
Ti 334.940†	-56.3	-0.1110	ug/L	0.15992	-0.1110	ppb	0.15992 144.10%
Tl 190.801†	-11.6	-3.7140	ug/L	2.95237	-3.7140	ppb	2.95237 79.49%
U 409.014†	1819.9	4.0714	ug/L	1.12397	4.0714	ppb	1.12397 27.61%
V 292.402†	8249.7	-1.1252	ug/L	2.44315	-1.1252	ppb	2.44315 217.13%
Zn 213.857†	4005.7	0.5283	ug/L	1.98985	0.5283	ppb	1.98985 376.67%
SiO2†	-1242.9	-80.402	ug/L	2.5425	-80.402	ppb	2.5425 3.16%

Sequence No.: 18
Sample ID: LR2
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/9/2009 10:03:58
Data Type: Reprocessed on 12/9/2009 10:32:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	911921.9	911921.9	103.05	%			10:07:09
1	Sc Radial	5737.0	5737.0	101	%			10:05:52
1	Y 371.029	765966.6	765966.6	103.22	%			10:07:09
1	Y RADIAL	6214.8	6214.8	100.9	%			10:05:52
1	Ag 328.068†	348.9	111.0	0.5170	ug/L	0.5170	ppb	10:07:14
1	Al 396.153Radial†	-6.8	13.6	10.067	ug/L	10.067	ppb	10:05:52
1	As 188.979†	-9.9	19.6	8.0099	ug/L	8.0099	ppb	10:07:34
1	B 249.677†	-142.2	385.8	8.3865	ug/L	8.3865	ppb	10:07:34
1	Ba 233.527†	1328395.7	1289150.4	9791.1	ug/L	9791.1	ppb	10:07:09
1	Be 313.107†	-5235.7	239.2	0.0888	ug/L	0.0888	ppb	10:07:14
1	Ca 317.933Radial†	35.2	17.1	26.123	ug/L	26.123	ppb	10:06:12
1	Cd 226.502†	-140.8	51.2	0.5561	ug/L	0.5561	ppb	10:07:34
1	Co 228.616†	-316.7	-235.6	-0.1719	ug/L	-0.1719	ppb	10:07:34
1	Cr 267.716†	85.5	-4.0	-0.0417	ug/L	-0.0417	ppb	10:07:34
1	Cu 324.752†	6919.7	-53.4	-0.1555	ug/L	-0.1555	ppb	10:07:14
1	Fe 238.204 Radial†	6.1	-0.0	-0.4234	ug/L	-0.4234	ppb	10:06:12
1	K 766.490 Radial†	2390.1	189.1	34.319	ug/L	34.319	ppb	10:05:52
1	Mg 279.077 IEC†	2.0	0.2	8.1529	ug/L	8.1529	ppb	10:06:12
1	Mn 257.610†	416.2	0.5	0.0003	ug/L	0.0003	ppb	10:07:34
1	Mo 202.031†	22.0	1.4	0.0888	ug/L	0.0888	ppb	10:07:34
1	Na 589.592 Radial†	-579.3	44.1	16.594	ug/L	16.594	ppb	10:05:52
1	Ni 231.604†	99.8	26.8	0.6383	ug/L	0.6383	ppb	10:07:34
1	P 214.914†	210.8	-15.4	-9.0917	ug/L	-9.0917	ppb	10:07:34
1	Pb 220.353†	-53.0	1.2	0.1376	ug/L	0.1376	ppb	10:07:34
1	S 181.975 Axial†	40.5	-2.2	-3.1619	ug/L	-3.1619	ppb	10:07:34
1	Sb 206.836†	37.1	6.4	2.1078	ug/L	2.1078	ppb	10:07:34
1	Se 196.026†	-14.9	9.0	5.3573	ug/L	5.3573	ppb	10:07:34
1	Si 251.611†	471.7	-50.3	-1.5536	ug/L	-1.5536	ppb	10:07:34
1	Sn 189.927†	9.0	4.5	0.7588	ug/L	0.7588	ppb	10:07:34
1	Sr 421.552†	-16.0	-19.3	-0.1302	ug/L	-0.1302	ppb	10:05:52
1	Ti 334.940†	-1043.1	-47.3	-0.0734	ug/L	-0.0734	ppb	10:07:14
1	Tl 190.801†	-28.9	8.8	2.5596	ug/L	2.5596	ppb	10:07:34
1	U 409.014†	-2160.2	-134.2	-3.7479	ug/L	-3.7479	ppb	10:07:09
1	V 292.402†	-1302.4	32.6	0.2144	ug/L	0.2144	ppb	10:07:14
1	Zn 213.857†	828.6	-3.2	-0.0329	ug/L	-0.0329	ppb	10:07:34
1	SiO2†	495.3	-8.2	-0.5689	ug/L	-0.5689	ppb	10:08:40
2	Sc 361.383	906063.3	906063.3	102.38	%			10:07:39
2	Sc Radial	5826.9	5826.9	103	%			10:06:17
2	Y 371.029	760076.9	760076.9	102.43	%			10:07:39
2	Y RADIAL	6340.6	6340.6	103.0	%			10:06:17
2	Ag 328.068†	379.1	142.7	0.6702	ug/L	0.6702	ppb	10:07:44
2	Al 396.153Radial†	-25.1	-4.0	-2.9620	ug/L	-2.9620	ppb	10:06:17
2	As 188.979†	-23.5	6.3	2.5583	ug/L	2.5583	ppb	10:08:04
2	B 249.677†	-151.1	376.3	8.1768	ug/L	8.1768	ppb	10:08:04
2	Ba 233.527†	1330239.4	1299286.8	9868.1	ug/L	9868.1	ppb	10:07:39
2	Be 313.107†	-5299.5	144.1	0.0534	ug/L	0.0534	ppb	10:07:44
2	Ca 317.933Radial†	33.3	14.7	22.471	ug/L	22.471	ppb	10:06:37
2	Cd 226.502†	-159.3	32.2	0.3488	ug/L	0.3488	ppb	10:08:04
2	Co 228.616†	-302.8	-224.0	0.0854	ug/L	0.0854	ppb	10:08:04
2	Cr 267.716†	102.3	13.0	0.1427	ug/L	0.1427	ppb	10:08:04
2	Cu 324.752†	6853.3	-74.8	-0.2171	ug/L	-0.2171	ppb	10:07:44
2	Fe 238.204 Radial†	7.4	1.2	11.833	ug/L	11.833	ppb	10:06:37
2	K 766.490 Radial†	2542.9	301.2	54.660	ug/L	54.660	ppb	10:06:17
2	Mg 279.077 IEC†	3.1	1.2	45.853	ug/L	45.853	ppb	10:06:37
2	Mn 257.610†	424.1	10.8	0.0121	ug/L	0.0121	ppb	10:08:04
2	Mo 202.031†	9.2	-11.0	-0.7181	ug/L	-0.7181	ppb	10:08:04
2	Na 589.592 Radial†	-622.3	11.1	4.1905	ug/L	4.1905	ppb	10:06:17
2	Ni 231.604†	85.2	13.1	0.3137	ug/L	0.3137	ppb	10:08:04

2	P 214.914†	210.4	-14.4	-8.5541	ug/L	-8.5541 ppb	10:08:04
2	Pb 220.353†	-46.3	7.3	0.8501	ug/L	0.8501 ppb	10:08:04
2	S 181.975 Axial†	49.8	7.1	10.427	ug/L	10.427 ppb	10:08:04
2	Sb 206.836†	38.2	7.7	2.4973	ug/L	2.4973 ppb	10:08:04
2	Se 196.026†	-30.7	-6.5	-3.8387	ug/L	-3.8387 ppb	10:08:04
2	Si 251.611†	469.2	-49.7	-1.5269	ug/L	-1.5269 ppb	10:08:04
2	Sn 189.927†	4.9	0.5	0.0935	ug/L	0.0935 ppb	10:08:04
2	Sr 421.552†	-9.2	-12.4	-0.0837	ug/L	-0.0837 ppb	10:06:17
2	Ti 334.940†	-1028.1	-39.1	-0.0590	ug/L	-0.0590 ppb	10:07:44
2	Tl 190.801†	-30.2	7.4	2.1299	ug/L	2.1299 ppb	10:08:04
2	U 409.014†	-2270.8	-255.8	-7.1473	ug/L	-7.1473 ppb	10:07:39
2	V 292.402†	-1291.0	35.5	0.2146	ug/L	0.2146 ppb	10:07:44
2	Zn 213.857†	834.7	8.0	0.0679	ug/L	0.0679 ppb	10:08:04
2	SiO2†	462.7	-36.9	-2.4319	ug/L	-2.4319 ppb	10:08:45
3	Sc 361.383	899417.1	899417.1	101.63	%		10:08:09
3	Sc Radial	5782.9	5782.9	102	%		10:06:42
3	Y 371.029	755364.8	755364.8	101.79	%		10:08:09
3	Y RADIAL	6284.5	6284.5	102.0	%		10:06:42
3	Ag 328.068†	291.0	58.7	0.2871	ug/L	0.2871 ppb	10:08:14
3	Al 396.153Radial†	-11.6	9.0	6.6395	ug/L	6.6395 ppb	10:06:42
3	As 188.979†	-10.5	18.8	7.6829	ug/L	7.6829 ppb	10:08:35
3	B 249.677†	-146.1	380.1	8.2595	ug/L	8.2595 ppb	10:08:35
3	Ba 233.527†	1320540.7	1299344.7	9868.5	ug/L	9868.5 ppb	10:08:09
3	Be 313.107†	-5272.3	132.6	0.0494	ug/L	0.0494 ppb	10:08:14
3	Ca 317.933Radial†	40.4	21.9	33.423	ug/L	33.423 ppb	10:07:02
3	Cd 226.502†	-149.8	40.5	0.4373	ug/L	0.4373 ppb	10:08:35
3	Co 228.616†	-326.9	-249.9	-0.4160	ug/L	-0.4160 ppb	10:08:35
3	Cr 267.716†	88.5	0.1	0.0055	ug/L	0.0055 ppb	10:08:35
3	Cu 324.752†	7060.6	178.6	0.5204	ug/L	0.5204 ppb	10:08:14
3	Fe 238.204 Radial†	8.1	1.9	19.094	ug/L	19.094 ppb	10:07:02
3	K 766.490 Radial†	2495.9	274.0	49.718	ug/L	49.718 ppb	10:06:42
3	Mg 279.077 IEC†	-1.2	-3.0	-110.26	ug/L	-110.26 ppb	10:07:02
3	Mn 257.610†	412.7	2.6	0.0068	ug/L	0.0068 ppb	10:08:35
3	Mo 202.031†	20.1	-0.2	-0.0110	ug/L	-0.0110 ppb	10:08:35
3	Na 589.592 Radial†	-562.9	64.7	24.325	ug/L	24.325 ppb	10:06:42
3	Ni 231.604†	73.0	1.8	0.0447	ug/L	0.0447 ppb	10:08:35
3	P 214.914†	207.6	-15.6	-9.3830	ug/L	-9.3830 ppb	10:08:35
3	Pb 220.353†	-52.0	1.4	0.1642	ug/L	0.1642 ppb	10:08:35
3	S 181.975 Axial†	33.5	-8.5	-12.393	ug/L	-12.393 ppb	10:08:35
3	Sb 206.836†	36.1	5.9	1.9358	ug/L	1.9358 ppb	10:08:35
3	Se 196.026†	-22.6	1.2	0.7890	ug/L	0.7890 ppb	10:08:35
3	Si 251.611†	487.0	-28.9	-0.9015	ug/L	-0.9015 ppb	10:08:35
3	Sn 189.927†	8.9	4.4	0.7546	ug/L	0.7546 ppb	10:08:35
3	Sr 421.552†	-21.7	-24.6	-0.1666	ug/L	-0.1666 ppb	10:06:42
3	Ti 334.940†	-937.1	43.0	0.0759	ug/L	0.0759 ppb	10:08:14
3	Tl 190.801†	-26.7	10.6	3.0509	ug/L	3.0509 ppb	10:08:35
3	U 409.014†	-2375.5	-375.1	-10.483	ug/L	-10.483 ppb	10:08:09
3	V 292.402†	-1273.9	43.1	0.2646	ug/L	0.2646 ppb	10:08:14
3	Zn 213.857†	835.6	14.9	0.1349	ug/L	0.1349 ppb	10:08:35
3	SiO2†	494.1	-2.6	-0.2146	ug/L	-0.2146 ppb	10:08:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905800.7	102.35	%	0.707				0.69%
Sc Radial	5782.3	102	%	0.8				0.78%
Y 371.029	760469.4	102.48	%	0.716				0.70%
Y RADIAL	6280.0	102.0	%	1.02				1.00%
Ag 328.068†	104.1	0.4914	ug/L	0.19283	0.4914	ppb	0.19283	39.24%
Al 396.153Radial†	6.2	4.5814	ug/L	6.75373	4.5814	ppb	6.75373	147.42%
As 188.979†	14.9	6.0837	ug/L	3.05744	6.0837	ppb	3.05744	50.26%
B 249.677†	380.7	8.2742	ug/L	0.10562	8.2742	ppb	0.10562	1.28%
Ba 233.527†	1295927.3	9842.6	ug/L	44.58	9842.6	ppb	44.58	0.45%
Be 313.107†	172.0	0.0639	ug/L	0.02165	0.0639	ppb	0.02165	33.91%
Ca 317.933Radial†	17.9	27.339	ug/L	5.5762	27.339	ppb	5.5762	20.40%
Cd 226.502†	41.3	0.4474	ug/L	0.10399	0.4474	ppb	0.10399	23.24%
Co 228.616†	-236.5	-0.1675	ug/L	0.25071	-0.1675	ppb	0.25071	149.68%
Cr 267.716†	3.0	0.0355	ug/L	0.09578	0.0355	ppb	0.09578	269.54%
Cu 324.752†	16.8	0.0493	ug/L	0.40915	0.0493	ppb	0.40915	830.05%
Fe 238.204 Radial†	1.0	10.168	ug/L	9.8646	10.168	ppb	9.8646	97.02%

K 766.490 Radial†	254.8	46.232	ug/L	10.6088	46.232	ppb	10.6088 22.95%
Mg 279.077 IEC†	-0.5	-18.751	ug/L	81.4590	-18.751	ppb	81.4590 434.43%
Mn 257.610†	4.6	0.0064	ug/L	0.00587	0.0064	ppb	0.00587 91.59%
Mo 202.031†	-3.3	-0.2134	ug/L	0.43988	-0.2134	ppb	0.43988 206.09%
Na 589.592 Radial†	40.0	15.036	ug/L	10.1571	15.036	ppb	10.1571 67.55%
Ni 231.604†	13.9	0.3322	ug/L	0.29722	0.3322	ppb	0.29722 89.47%
P 214.914†	-15.2	-9.0096	ug/L	0.42051	-9.0096	ppb	0.42051 4.67%
Pb 220.353†	3.3	0.3840	ug/L	0.40392	0.3840	ppb	0.40392 105.20%
S 181.975 Axial†	-1.2	-1.7093	ug/L	11.47907	-1.7093	ppb	11.47907 671.58%
Sb 206.836†	6.7	2.1803	ug/L	0.28766	2.1803	ppb	0.28766 13.19%
Se 196.026†	1.2	0.7692	ug/L	4.59805	0.7692	ppb	4.59805 597.76%
Si 251.611†	-43.0	-1.3274	ug/L	0.36903	-1.3274	ppb	0.36903 27.80%
Sn 189.927†	3.1	0.5356	ug/L	0.38286	0.5356	ppb	0.38286 71.48%
Sr 421.552†	-18.8	-0.1269	ug/L	0.04153	-0.1269	ppb	0.04153 32.73%
Ti 334.940†	-14.5	-0.0188	ug/L	0.08237	-0.0188	ppb	0.08237 437.29%
Tl 190.801†	8.9	2.5801	ug/L	0.46085	2.5801	ppb	0.46085 17.86%
U 409.014†	-255.0	-7.1262	ug/L	3.36777	-7.1262	ppb	3.36777 47.26%
V 292.402†	37.0	0.2312	ug/L	0.02892	0.2312	ppb	0.02892 12.51%
Zn 213.857†	6.6	0.0567	ug/L	0.08447	0.0567	ppb	0.08447 149.06%
SiO2†	-15.9	-1.0718	ug/L	1.19115	-1.0718	ppb	1.19115 111.14%

Sequence No.: 19
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 10:11:01
Data Type: Reprocessed on 12/9/2009 10:32:35

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	905387.0	905387.0	102.31	%			10:14:10
1	Sc Radial	5757.4	5757.4	102	%			10:12:53
1	Y 371.029	747390.8	747390.8	100.72	%			10:14:10
1	Y RADIAL	6187.6	6187.6	100.5	%			10:12:53
1	Ag 328.068†	109631.7	106932.1	497.41	ug/L	497.41	ppb	10:14:15
1	Al 396.153Radial†	6657.5	6569.1	4835.1	ug/L	4835.1	ppb	10:12:53
1	As 188.979†	1187.1	1189.5	489.65	ug/L	489.65	ppb	10:14:35
1	B 249.677†	22332.3	22352.6	483.30	ug/L	483.30	ppb	10:14:15
1	Ba 233.527†	65192.2	63734.3	485.33	ug/L	485.33	ppb	10:14:15
1	Be 313.107†	1327773.7	1303155.4	485.21	ug/L	485.21	ppb	10:14:10
1	Ca 317.933Radial†	3278.0	3206.8	4903.7	ug/L	4903.7	ppb	10:13:13
1	Cd 226.502†	45822.7	44977.4	487.76	ug/L	487.76	ppb	10:14:15
1	Co 228.616†	25503.1	24999.8	485.44	ug/L	485.44	ppb	10:14:15
1	Cr 267.716†	46047.7	44922.5	484.81	ug/L	484.81	ppb	10:14:15
1	Cu 324.752†	175594.6	164866.7	479.74	ug/L	479.74	ppb	10:14:15
1	Fe 238.204 Radial†	516.0	501.5	5065.1	ug/L	5065.1	ppb	10:13:13
1	K 766.490 Radial†	29983.5	27323.4	4950.3	ug/L	4950.3	ppb	10:12:53
1	Mg 279.077 IEC†	142.6	138.5	5162.5	ug/L	5162.5	ppb	10:13:13
1	Mn 257.610†	455894.8	445211.9	484.23	ug/L	484.23	ppb	10:14:10
1	Mo 202.031†	7765.2	7570.1	493.47	ug/L	493.47	ppb	10:14:35
1	Na 589.592 Radial†	26492.5	26675.7	10027	ug/L	10027	ppb	10:12:53
1	Ni 231.604†	21105.9	20559.9	487.54	ug/L	487.54	ppb	10:14:15
1	P 214.914†	4367.2	4048.8	2332.9	ug/L	2332.9	ppb	10:14:35
1	Pb 220.353†	4216.4	4173.9	489.42	ug/L	489.42	ppb	10:14:35
1	S 181.975 Axial†	734.7	676.6	988.45	ug/L	988.45	ppb	10:14:35
1	Sb 206.836†	1573.9	1508.8	497.10	ug/L	497.10	ppb	10:14:35
1	Se 196.026†	816.1	821.1	507.39	ug/L	507.39	ppb	10:14:35
1	Si 251.611†	82345.1	79980.4	2434.5	ug/L	2434.5	ppb	10:14:15
1	Sn 189.927†	3008.2	2936.1	497.31	ug/L	497.31	ppb	10:14:35
1	Sr 421.552†	76890.1	75630.6	510.51	ug/L	510.51	ppb	10:12:53
1	Ti 334.940†	310381.6	304348.1	492.10	ug/L	492.10	ppb	10:14:15
1	Tl 190.801†	1701.0	1699.5	490.26	ug/L	490.26	ppb	10:14:35
1	U 409.014†	15621.5	17231.5	479.85	ug/L	479.85	ppb	10:14:15
1	V 292.402†	71824.9	71501.9	489.27	ug/L	489.27	ppb	10:14:15
1	Zn 213.857†	56177.1	54103.1	482.42	ug/L	482.42	ppb	10:14:15
1	SiO2†	83150.8	80787.1	5264.6	ug/L	5264.6	ppb	10:15:43
2	Sc 361.383	900981.4	900981.4	101.81	%			10:14:41
2	Sc Radial	5822.1	5822.1	103	%			10:13:18
2	Y 371.029	741943.7	741943.7	99.983	%			10:14:41
2	Y RADIAL	6300.2	6300.2	102.3	%			10:13:18
2	Ag 328.068†	110964.8	108765.6	505.87	ug/L	505.87	ppb	10:14:46
2	Al 396.153Radial†	6739.5	6576.0	4839.9	ug/L	4839.9	ppb	10:13:18
2	As 188.979†	1198.2	1206.1	496.45	ug/L	496.45	ppb	10:15:06
2	B 249.677†	22648.0	22769.4	492.34	ug/L	492.34	ppb	10:14:46
2	Ba 233.527†	65913.6	64754.4	493.09	ug/L	493.09	ppb	10:14:46
2	Be 313.107†	1335877.3	1317461.1	490.54	ug/L	490.54	ppb	10:14:41
2	Ca 317.933Radial†	3249.3	3142.9	4806.1	ug/L	4806.1	ppb	10:13:38
2	Cd 226.502†	46173.7	45541.1	493.89	ug/L	493.89	ppb	10:14:46
2	Co 228.616†	25838.6	25451.2	494.20	ug/L	494.20	ppb	10:14:46
2	Cr 267.716†	46509.9	45596.5	492.08	ug/L	492.08	ppb	10:14:46
2	Cu 324.752†	177549.4	167626.0	487.76	ug/L	487.76	ppb	10:14:46
2	Fe 238.204 Radial†	508.6	488.7	4936.8	ug/L	4936.8	ppb	10:13:38
2	K 766.490 Radial†	30180.6	27187.0	4925.5	ug/L	4925.5	ppb	10:13:18
2	Mg 279.077 IEC†	141.6	135.9	5067.8	ug/L	5067.8	ppb	10:13:38
2	Mn 257.610†	460073.3	451495.1	491.05	ug/L	491.05	ppb	10:14:41
2	Mo 202.031†	7819.8	7660.9	499.37	ug/L	499.37	ppb	10:15:06
2	Na 589.592 Radial†	26816.2	26700.7	10036	ug/L	10036	ppb	10:13:18
2	Ni 231.604†	21261.3	20813.4	493.55	ug/L	493.55	ppb	10:14:46

2	P 214.914†	4413.6	4115.2	2371.2 ug/L	2371.2 ppb	10:15:06
2	Pb 220.353†	4213.2	4190.9	491.43 ug/L	491.43 ppb	10:15:06
2	S 181.975 Axial†	726.6	672.2	981.93 ug/L	981.93 ppb	10:15:06
2	Sb 206.836†	1593.6	1535.6	505.86 ug/L	505.86 ppb	10:15:06
2	Se 196.026†	819.3	828.2	511.21 ug/L	511.21 ppb	10:15:06
2	Si 251.611†	83107.3	81122.6	2469.3 ug/L	2469.3 ppb	10:14:46
2	Sn 189.927†	3035.2	2977.0	504.20 ug/L	504.20 ppb	10:15:06
2	Sr 421.552†	77983.9	75853.3	512.01 ug/L	512.01 ppb	10:13:18
2	Ti 334.940†	313586.0	308979.1	499.58 ug/L	499.58 ppb	10:14:46
2	Tl 190.801†	1703.9	1710.5	493.45 ug/L	493.45 ppb	10:15:06
2	U 409.014†	15887.9	17567.8	489.25 ug/L	489.25 ppb	10:14:46
2	V 292.402†	72477.5	72486.2	496.02 ug/L	496.02 ppb	10:14:46
2	Zn 213.857†	56772.8	54956.8	490.06 ug/L	490.06 ppb	10:14:46
2	SiO2†	82463.9	80509.8	5246.1 ug/L	5246.1 ppb	10:15:48
3	Sc 361.383	895885.9	895885.9	101.23 %		10:15:12
3	Sc Radial	5571.4	5571.4	98.4 %		10:13:43
3	Y 371.029	738996.2	738996.2	99.586 %		10:15:12
3	Y RADIAL	6031.2	6031.2	97.93 %		10:13:43
3	Ag 328.068†	110847.1	109269.2	508.31 ug/L	508.31 ppb	10:15:17
3	Al 396.153Radial†	6614.1	6743.7	4963.8 ug/L	4963.8 ppb	10:13:43
3	As 188.979†	1205.7	1220.2	502.29 ug/L	502.29 ppb	10:15:37
3	B 249.677†	22742.3	22989.1	497.06 ug/L	497.06 ppb	10:15:17
3	Ba 233.527†	65729.4	64940.7	494.53 ug/L	494.53 ppb	10:15:17
3	Be 313.107†	1330697.2	1319807.1	491.42 ug/L	491.42 ppb	10:15:12
3	Ca 317.933Radial†	3306.3	3343.2	5112.3 ug/L	5112.3 ppb	10:14:03
3	Cd 226.502†	46027.7	45654.8	495.09 ug/L	495.09 ppb	10:15:17
3	Co 228.616†	25740.0	25498.2	495.10 ug/L	495.10 ppb	10:15:17
3	Cr 267.716†	46474.5	45821.4	494.51 ug/L	494.51 ppb	10:15:17
3	Cu 324.752†	178128.2	169189.6	492.32 ug/L	492.32 ppb	10:15:17
3	Fe 238.204 Radial†	519.4	521.9	5271.2 ug/L	5271.2 ppb	10:14:03
3	K 766.490 Radial†	29664.0	27983.4	5070.0 ug/L	5070.0 ppb	10:13:43
3	Mg 279.077 IEC†	138.9	139.5	5199.4 ug/L	5199.4 ppb	10:14:03
3	Mn 257.610†	457963.5	451981.2	491.61 ug/L	491.61 ppb	10:15:12
3	Mo 202.031†	7783.7	7668.9	499.92 ug/L	499.92 ppb	10:15:37
3	Na 589.592 Radial†	25978.9	27023.8	10157 ug/L	10157 ppb	10:13:43
3	Ni 231.604†	21267.2	20938.0	496.50 ug/L	496.50 ppb	10:15:17
3	P 214.914†	4365.7	4092.6	2356.8 ug/L	2356.8 ppb	10:15:37
3	Pb 220.353†	4186.5	4188.0	491.10 ug/L	491.10 ppb	10:15:37
3	S 181.975 Axial†	726.6	676.3	987.95 ug/L	987.95 ppb	10:15:37
3	Sb 206.836†	1579.5	1530.7	504.14 ug/L	504.14 ppb	10:15:37
3	Se 196.026†	828.6	841.9	520.46 ug/L	520.46 ppb	10:15:37
3	Si 251.611†	83053.4	81533.7	2481.8 ug/L	2481.8 ppb	10:15:17
3	Sn 189.927†	2996.8	2956.0	500.69 ug/L	500.69 ppb	10:15:37
3	Sr 421.552†	76276.7	77532.7	523.34 ug/L	523.34 ppb	10:13:43
3	Ti 334.940†	313907.0	311048.1	502.94 ug/L	502.94 ppb	10:15:17
3	Tl 190.801†	1704.9	1721.0	496.49 ug/L	496.49 ppb	10:15:37
3	U 409.014†	15975.5	17743.0	494.10 ug/L	494.10 ppb	10:15:17
3	V 292.402†	72457.4	72871.2	498.59 ug/L	498.59 ppb	10:15:17
3	Zn 213.857†	56687.5	55189.7	492.10 ug/L	492.10 ppb	10:15:17
3	SiO2†	81855.0	80369.1	5236.8 ug/L	5236.8 ppb	10:15:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	900751.4	101.78	%	0.537				0.53%
Sc Radial	5717.0	101	%	2.3				2.28%
Y 371.029	742776.9	100.10	%	0.574				0.57%
Y RADIAL	6173.0	100.2	%	2.19				2.19%
Ag 328.068†	108322.3	503.86	ug/L	5.716	503.86	ppb	5.716	1.13%
QC value within limits for Ag 328.068 Recovery = 100.77%								
Al 396.153Radial†	6629.6	4879.6	ug/L	72.99	4879.6	ppb	72.99	1.50%
QC value within limits for Al 396.153Radial Recovery = 97.59%								
As 188.979†	1205.3	496.13	ug/L	6.327	496.13	ppb	6.327	1.28%
QC value within limits for As 188.979 Recovery = 99.23%								
B 249.677†	22703.7	490.90	ug/L	6.994	490.90	ppb	6.994	1.42%
QC value within limits for B 249.677 Recovery = 98.18%								
Ba 233.527†	64476.5	490.98	ug/L	4.945	490.98	ppb	4.945	1.01%
QC value within limits for Ba 233.527 Recovery = 98.20%								
Be 313.107†	1313474.5	489.06	ug/L	3.360	489.06	ppb	3.360	0.69%
QC value within limits for Be 313.107 Recovery = 97.81%								

Ca 317.933Radial†	3231.0	4940.7 ug/L	156.41	4940.7 ppb	156.41	3.17%
QC value within limits for Ca 317.933Radial Recovery = 98.81%						
Cd 226.502†	45391.1	492.25 ug/L	3.934	492.25 ppb	3.934	0.80%
QC value within limits for Cd 226.502 Recovery = 98.45%						
Co 228.616†	25316.4	491.58 ug/L	5.339	491.58 ppb	5.339	1.09%
QC value within limits for Co 228.616 Recovery = 98.32%						
Cr 267.716†	45446.8	490.46 ug/L	5.048	490.46 ppb	5.048	1.03%
QC value within limits for Cr 267.716 Recovery = 98.09%						
Cu 324.752†	167227.4	486.61 ug/L	6.370	486.61 ppb	6.370	1.31%
QC value within limits for Cu 324.752 Recovery = 97.32%						
Fe 238.204 Radial†	504.1	5091.0 ug/L	168.71	5091.0 ppb	168.71	3.31%
QC value within limits for Fe 238.204 Radial Recovery = 101.82%						
K 766.490 Radial†	27498.0	4982.0 ug/L	77.25	4982.0 ppb	77.25	1.55%
QC value within limits for K 766.490 Radial Recovery = 99.64%						
Mg 279.077 IEC†	138.0	5143.2 ug/L	67.85	5143.2 ppb	67.85	1.32%
QC value within limits for Mg 279.077 IEC Recovery = 102.86%						
Mn 257.610†	449562.8	488.96 ug/L	4.107	488.96 ppb	4.107	0.84%
QC value within limits for Mn 257.610 Recovery = 97.79%						
Mo 202.031†	7633.3	497.59 ug/L	3.578	497.59 ppb	3.578	0.72%
QC value within limits for Mo 202.031 Recovery = 99.52%						
Na 589.592 Radial†	26800.1	10073 ug/L	73.0	10073 ppb	73.0	0.72%
QC value within limits for Na 589.592 Radial Recovery = 100.73%						
Ni 231.604†	20770.4	492.53 ug/L	4.569	492.53 ppb	4.569	0.93%
QC value within limits for Ni 231.604 Recovery = 98.51%						
P 214.914†	4085.5	2353.6 ug/L	19.38	2353.6 ppb	19.38	0.82%
QC value within limits for P 214.914 Recovery = 94.14%						
Pb 220.353†	4184.3	490.65 ug/L	1.076	490.65 ppb	1.076	0.22%
QC value within limits for Pb 220.353 Recovery = 98.13%						
S 181.975 Axial†	675.0	986.11 ug/L	3.629	986.11 ppb	3.629	0.37%
QC value within limits for S 181.975 Axial Recovery = 98.61%						
Sb 206.836†	1525.0	502.37 ug/L	4.643	502.37 ppb	4.643	0.92%
QC value within limits for Sb 206.836 Recovery = 100.47%						
Se 196.026†	830.4	513.02 ug/L	6.716	513.02 ppb	6.716	1.31%
QC value within limits for Se 196.026 Recovery = 102.60%						
Si 251.611†	80878.9	2461.9 ug/L	24.53	2461.9 ppb	24.53	1.00%
QC value within limits for Si 251.611 Recovery = 98.47%						
Sn 189.927†	2956.4	500.73 ug/L	3.450	500.73 ppb	3.450	0.69%
QC value within limits for Sn 189.927 Recovery = 100.15%						
Sr 421.552†	76338.9	515.29 ug/L	7.018	515.29 ppb	7.018	1.36%
QC value within limits for Sr 421.552 Recovery = 103.06%						
Ti 334.940†	308125.1	498.21 ug/L	5.548	498.21 ppb	5.548	1.11%
QC value within limits for Ti 334.940 Recovery = 99.64%						
Tl 190.801†	1710.4	493.40 ug/L	3.111	493.40 ppb	3.111	0.63%
QC value within limits for Tl 190.801 Recovery = 98.68%						
U 409.014†	17514.1	487.74 ug/L	7.244	487.74 ppb	7.244	1.49%
QC value within limits for U 409.014 Recovery = 97.55%						
V 292.402†	72286.4	494.63 ug/L	4.813	494.63 ppb	4.813	0.97%
QC value within limits for V 292.402 Recovery = 98.93%						
Zn 213.857†	54749.9	488.19 ug/L	5.105	488.19 ppb	5.105	1.05%
QC value within limits for Zn 213.857 Recovery = 97.64%						
SiO2†	80555.3	5249.2 ug/L	14.11	5249.2 ppb	14.11	0.27%
QC value within limits for SiO2 Recovery = 98.16%						

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 10:18:03
Data Type: Reprocessed on 12/9/2009 10:32:36

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	934147.0	934147.0	105.56	%			10:21:12
1	Sc Radial	5920.6	5920.6	105	%			10:19:56
1	Y 371.029	791293.4	791293.4	106.63	%			10:21:12
1	Y RADIAL	6437.5	6437.5	104.5	%			10:19:56
1	Ag 328.068†	421.0	171.3	0.7872	ug/L	0.7872	ppb	10:21:12
1	Al 396.153Radial†	-8.6	12.1	8.9030	ug/L	8.9030	ppb	10:19:56
1	As 188.979†	-17.8	12.3	5.0171	ug/L	5.0171	ppb	10:21:32
1	B 249.677†	-62.1	465.0	10.096	ug/L	10.096	ppb	10:21:32
1	Ba 233.527†	-5.4	6.9	0.0531	ug/L	0.0531	ppb	10:21:32
1	Be 313.107†	-5196.0	397.8	0.1478	ug/L	0.1478	ppb	10:21:12
1	Ca 317.933Radial†	19.8	1.3	1.9325	ug/L	1.9325	ppb	10:20:16
1	Cd 226.502†	-166.7	29.9	0.3269	ug/L	0.3269	ppb	10:21:32
1	Co 228.616†	-65.1	10.1	0.1971	ug/L	0.1971	ppb	10:21:32
1	Cr 267.716†	85.1	-6.3	-0.0676	ug/L	-0.0676	ppb	10:21:32
1	Cu 324.752†	6827.0	-301.0	-0.8766	ug/L	-0.8766	ppb	10:21:12
1	Fe 238.204 Radial†	4.2	-2.0	-20.618	ug/L	-20.618	ppb	10:20:16
1	K 766.490 Radial†	2447.9	171.3	31.087	ug/L	31.087	ppb	10:19:56
1	Mg 279.077 IEC†	-1.1	-2.8	-104.47	ug/L	-104.47	ppb	10:20:16
1	Mn 257.610†	388.9	-35.0	-0.0381	ug/L	-0.0381	ppb	10:21:32
1	Mo 202.031†	31.0	9.4	0.6115	ug/L	0.6115	ppb	10:21:32
1	Na 589.592 Radial†	-619.7	23.1	8.6971	ug/L	8.6971	ppb	10:19:56
1	Ni 231.604†	83.9	9.4	0.2220	ug/L	0.2220	ppb	10:21:32
1	P 214.914†	213.0	-18.2	-10.626	ug/L	-10.626	ppb	10:21:32
1	Pb 220.353†	-56.2	-0.7	-0.0787	ug/L	-0.0787	ppb	10:21:32
1	S 181.975 Axial†	46.1	2.2	3.2409	ug/L	3.2409	ppb	10:21:32
1	Sb 206.836†	41.5	9.7	3.1886	ug/L	3.1886	ppb	10:21:32
1	Se 196.026†	-23.4	1.3	0.7164	ug/L	0.7164	ppb	10:21:32
1	Si 251.611†	504.9	-29.7	-0.9326	ug/L	-0.9326	ppb	10:21:32
1	Sn 189.927†	10.0	5.2	0.8852	ug/L	0.8852	ppb	10:21:32
1	Sr 421.552†	21.4	17.0	0.1150	ug/L	0.1150	ppb	10:19:56
1	Ti 334.940†	-1027.4	-8.3	-0.0135	ug/L	-0.0135	ppb	10:21:12
1	Tl 190.801†	-30.7	7.7	2.2179	ug/L	2.2179	ppb	10:21:32
1	U 409.014†	-2052.9	17.4	0.4878	ug/L	0.4878	ppb	10:21:12
1	V 292.402†	-1278.4	85.4	0.5869	ug/L	0.5869	ppb	10:21:12
1	Zn 213.857†	652.4	-189.2	-1.6973	ug/L	-1.6973	ppb	10:21:32
1	SiO2†	464.4	-48.9	-3.2545	ug/L	-3.2545	ppb	10:22:28
2	Sc 361.383	894600.3	894600.3	101.09	%			10:21:38
2	Sc Radial	6090.2	6090.2	108	%			10:20:21
2	Y 371.029	750601.0	750601.0	101.15	%			10:21:38
2	Y RADIAL	6649.1	6649.1	108.0	%			10:20:21
2	Ag 328.068†	333.6	102.4	0.4806	ug/L	0.4806	ppb	10:21:38
2	Al 396.153Radial†	-47.4	-23.7	-17.563	ug/L	-17.563	ppb	10:20:21
2	As 188.979†	-16.3	13.1	5.3524	ug/L	5.3524	ppb	10:21:58
2	B 249.677†	-87.8	437.0	9.4827	ug/L	9.4827	ppb	10:21:58
2	Ba 233.527†	-13.3	-1.1	-0.0074	ug/L	-0.0074	ppb	10:21:58
2	Be 313.107†	-5298.5	78.7	0.0291	ug/L	0.0291	ppb	10:21:38
2	Ca 317.933Radial†	18.5	-0.4	-0.6880	ug/L	-0.6880	ppb	10:20:41
2	Cd 226.502†	-174.3	15.4	0.1653	ug/L	0.1653	ppb	10:21:58
2	Co 228.616†	-58.6	13.7	0.2674	ug/L	0.2674	ppb	10:21:58
2	Cr 267.716†	84.0	-3.9	-0.0414	ug/L	-0.0414	ppb	10:21:58
2	Cu 324.752†	6911.1	68.0	0.1989	ug/L	0.1989	ppb	10:21:38
2	Fe 238.204 Radial†	8.6	2.0	19.673	ug/L	19.673	ppb	10:20:41
2	K 766.490 Radial†	2359.2	23.5	4.2593	ug/L	4.2593	ppb	10:20:21
2	Mg 279.077 IEC†	3.8	1.8	66.983	ug/L	66.983	ppb	10:20:41
2	Mn 257.610†	408.3	0.5	0.0012	ug/L	0.0012	ppb	10:21:58
2	Mo 202.031†	24.5	4.2	0.2770	ug/L	0.2770	ppb	10:21:58
2	Na 589.592 Radial†	-583.6	73.3	27.543	ug/L	27.543	ppb	10:20:21
2	Ni 231.604†	83.0	12.0	0.2853	ug/L	0.2853	ppb	10:21:58

2	P 214.914†	215.2	-7.1	-4.2613	ug/L	-4.2613 ppb	10:21:58
2	Pb 220.353†	-50.5	2.6	0.2953	ug/L	0.2953 ppb	10:21:58
2	S 181.975 Axial†	42.4	0.5	0.6666	ug/L	0.6666 ppb	10:21:58
2	Sb 206.836†	35.2	5.2	1.7253	ug/L	1.7253 ppb	10:21:58
2	Se 196.026†	-25.1	-1.4	-0.7648	ug/L	-0.7648 ppb	10:21:58
2	Si 251.611†	492.4	-20.9	-0.6482	ug/L	-0.6482 ppb	10:21:58
2	Sn 189.927†	10.9	6.5	1.0992	ug/L	1.0992 ppb	10:21:58
2	Sr 421.552†	-9.5	-12.2	-0.0824	ug/L	-0.0824 ppb	10:20:21
2	Ti 334.940†	-1021.5	-45.5	-0.0733	ug/L	-0.0733 ppb	10:21:38
2	Tl 190.801†	-35.6	1.6	0.4669	ug/L	0.4669 ppb	10:21:58
2	U 409.014†	-2010.7	-26.9	-0.7549	ug/L	-0.7549 ppb	10:21:38
2	V 292.402†	-1301.0	9.4	0.0649	ug/L	0.0649 ppb	10:21:38
2	Zn 213.857†	657.5	-156.8	-1.4170	ug/L	-1.4170 ppb	10:21:58
2	SiO2†	509.5	15.2	0.9772	ug/L	0.9772 ppb	10:22:33
3	Sc 361.383	892413.2	892413.2	100.84	%		10:22:03
3	Sc Radial	5597.0	5597.0	98.8	%		10:20:46
3	Y 371.029	750328.3	750328.3	101.11	%		10:22:03
3	Y RADIAL	6124.2	6124.2	99.44	%		10:20:46
3	Ag 328.068†	288.2	58.2	0.2707	ug/L	0.2707 ppb	10:22:03
3	Al 396.153Radial†	1.0	21.4	15.808	ug/L	15.808 ppb	10:20:46
3	As 188.979†	-21.2	8.2	3.3419	ug/L	3.3419 ppb	10:22:23
3	B 249.677†	-79.0	445.5	9.6700	ug/L	9.6700 ppb	10:22:23
3	Ba 233.527†	-12.8	-0.7	-0.0043	ug/L	-0.0043 ppb	10:22:23
3	Be 313.107†	-5201.9	161.7	0.0598	ug/L	0.0598 ppb	10:22:03
3	Ca 317.933Radial†	21.8	4.3	6.6107	ug/L	6.6107 ppb	10:21:06
3	Cd 226.502†	-177.8	11.5	0.1246	ug/L	0.1246 ppb	10:22:23
3	Co 228.616†	-67.9	4.5	0.0856	ug/L	0.0856 ppb	10:22:23
3	Cr 267.716†	69.6	-18.0	-0.1935	ug/L	-0.1935 ppb	10:22:23
3	Cu 324.752†	6854.4	28.6	0.0835	ug/L	0.0835 ppb	10:22:03
3	Fe 238.204 Radial†	6.6	0.7	6.6005	ug/L	6.6005 ppb	10:21:06
3	K 766.490 Radial†	2350.0	207.5	37.659	ug/L	37.659 ppb	10:20:46
3	Mg 279.077 IEC†	-1.0	-2.7	-102.07	ug/L	-102.07 ppb	10:21:06
3	Mn 257.610†	408.3	1.5	0.0041	ug/L	0.0041 ppb	10:22:23
3	Mo 202.031†	13.7	-6.4	-0.4166	ug/L	-0.4166 ppb	10:22:23
3	Na 589.592 Radial†	-598.7	10.2	3.8362	ug/L	3.8362 ppb	10:20:46
3	Ni 231.604†	93.0	22.1	0.5247	ug/L	0.5247 ppb	10:22:23
3	P 214.914†	207.3	-14.4	-8.5749	ug/L	-8.5749 ppb	10:22:23
3	Pb 220.353†	-47.1	5.8	0.6838	ug/L	0.6838 ppb	10:22:23
3	S 181.975 Axial†	38.3	-3.4	-5.0466	ug/L	-5.0466 ppb	10:22:23
3	Sb 206.836†	42.2	12.3	3.9740	ug/L	3.9740 ppb	10:22:23
3	Se 196.026†	-24.1	-0.4	-0.2276	ug/L	-0.2276 ppb	10:22:23
3	Si 251.611†	467.2	-44.7	-1.3716	ug/L	-1.3716 ppb	10:22:23
3	Sn 189.927†	4.2	-0.1	-0.0099	ug/L	-0.0099 ppb	10:22:23
3	Sr 421.552†	-24.6	-28.3	-0.1913	ug/L	-0.1913 ppb	10:20:46
3	Ti 334.940†	-1068.3	-94.4	-0.1530	ug/L	-0.1530 ppb	10:22:03
3	Tl 190.801†	-26.5	10.6	3.0234	ug/L	3.0234 ppb	10:22:23
3	U 409.014†	-1921.0	57.2	1.5988	ug/L	1.5988 ppb	10:22:03
3	V 292.402†	-1275.4	31.7	0.2082	ug/L	0.2082 ppb	10:22:03
3	Zn 213.857†	648.0	-164.7	-1.4826	ug/L	-1.4826 ppb	10:22:23
3	SiO2†	463.4	-29.3	-1.9307	ug/L	-1.9307 ppb	10:22:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907053.5	102.50	%	2.654				2.59%
Sc Radial	5869.3	104	%	4.4				4.27%
Y 371.029	764074.2	102.96	%	3.177				3.09%
Y RADIAL	6403.6	104.0	%	4.29				4.12%
Ag 328.068†	110.6	0.5128	ug/L	0.25976	0.5128	ppb	0.25976	50.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.2	2.3827	ug/L	17.61549	2.3827	ppb	17.61549	739.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	11.2	4.5705	ug/L	1.07713	4.5705	ppb	1.07713	23.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	449.2	9.7496	ug/L	0.31434	9.7496	ppb	0.31434	3.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0138	ug/L	0.03406	0.0138	ppb	0.03406	246.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	212.7	0.0789	ug/L	0.06160	0.0789	ppb	0.06160	78.08%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.7      2.6184 ug/L       3.69740      2.6184 ppb        3.69740 141.21%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               18.9      0.2056 ug/L       0.10702      0.2056 ppb        0.10702  52.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                9.4      0.1834 ug/L       0.09167      0.1834 ppb        0.09167  50.00%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -9.4     -0.1008 ug/L       0.08132     -0.1008 ppb        0.08132  80.64%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -68.1     -0.1981 ug/L       0.59043     -0.1981 ppb        0.59043 298.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.2      1.8854 ug/L      20.55520      1.8854 ppb       20.55520 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        134.1      24.335 ug/L       17.6941      24.335 ppb        17.6941  72.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.2     -46.518 ug/L       98.3017     -46.518 ppb        98.3017 211.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -11.0     -0.0109 ug/L       0.02361     -0.0109 ppb        0.02361 216.20%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.4      0.1573 ug/L       0.52444      0.1573 ppb        0.52444 333.37%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        35.5      13.359 ug/L       12.5220      13.359 ppb        12.5220  93.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.5      0.3440 ug/L       0.15968      0.3440 ppb        0.15968  46.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -13.2     -7.8207 ug/L       3.24871     -7.8207 ppb        3.24871  41.54%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                2.6      0.3001 ug/L       0.38126      0.3001 ppb        0.38126 127.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.3     -0.3797 ug/L       4.24167     -0.3797 ppb        4.24167 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.1      2.9626 ug/L       1.14121      2.9626 ppb        1.14121  38.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.2     -0.0920 ug/L       0.74986     -0.0920 ppb        0.74986 815.09%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.8     -0.9841 ug/L       0.36446     -0.9841 ppb        0.36446  37.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                3.9      0.6582 ug/L       0.58840      0.6582 ppb        0.58840  89.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -7.8     -0.0529 ug/L       0.15525     -0.0529 ppb        0.15525 293.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -49.4     -0.0799 ug/L       0.06999     -0.0799 ppb        0.06999  87.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.6      1.9027 ug/L       1.30704      1.9027 ppb        1.30704  68.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                15.9      0.4439 ug/L       1.17743      0.4439 ppb        1.17743 265.26%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                42.2      0.2866 ug/L       0.26970      0.2866 ppb        0.26970  94.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -170.2     -1.5323 ug/L       0.14659     -1.5323 ppb        0.14659   9.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -21.0     -1.4027 ug/L       2.16473     -1.4027 ppb        2.16473 154.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 11:31:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5695.9	5695.9	101	%			11:33:47
1	Y RADIAL	6145.4	6145.4	99.78	%			11:33:47
1	Al 396.153Radial†	6664.7	6647.0	4892.3	ug/L	4892.3	ppb	11:33:47
1	Ca 317.933Radial†	3296.2	3259.7	4984.6	ug/L	4984.6	ppb	11:34:07
1	Fe 238.204 Radial†	517.4	508.5	5135.3	ug/L	5135.3	ppb	11:34:07
1	K 766.490 Radial†	29981.1	27639.5	5007.4	ug/L	5007.4	ppb	11:33:47
1	Mg 279.077 IEC†	142.9	140.3	5232.1	ug/L	5232.1	ppb	11:34:07
1	Na 589.592 Radial†	27169.3	27630.0	10385	ug/L	10385	ppb	11:33:47
1	Sr 421.552†	78007.2	77558.1	523.52	ug/L	523.52	ppb	11:33:47
1	Sc 361.383	893907.0	893907.0	101.01	%			11:35:04
1	Y 371.029	737277.9	737277.9	99.354	%			11:35:04
1	Ag 328.068†	109313.6	107993.4	502.35	ug/L	502.35	ppb	11:35:10
1	As 188.979†	1185.7	1203.1	495.24	ug/L	495.24	ppb	11:35:30
1	B 249.677†	22124.3	22427.0	484.89	ug/L	484.89	ppb	11:35:10
1	Ba 233.527†	65087.3	64448.8	490.77	ug/L	490.77	ppb	11:35:10
1	Be 313.107†	1332185.1	1324190.2	493.04	ug/L	493.04	ppb	11:35:04
1	Cd 226.502†	45574.4	45306.8	491.33	ug/L	491.33	ppb	11:35:10
1	Co 228.616†	25514.4	25331.1	491.87	ug/L	491.87	ppb	11:35:10
1	Cr 267.716†	45842.2	45297.0	488.85	ug/L	488.85	ppb	11:35:10
1	Cu 324.752†	175181.1	166661.5	484.96	ug/L	484.96	ppb	11:35:10
1	Mn 257.610†	459814.9	454815.6	494.68	ug/L	494.68	ppb	11:35:04
1	Mo 202.031†	7793.8	7695.9	501.67	ug/L	501.67	ppb	11:35:30
1	Ni 231.604†	20991.5	20711.6	491.13	ug/L	491.13	ppb	11:35:10
1	P 214.914†	4398.9	4135.0	2383.3	ug/L	2383.3	ppb	11:35:30
1	Pb 220.353†	4205.1	4215.6	494.32	ug/L	494.32	ppb	11:35:30
1	S 181.975 Axial†	728.6	679.8	993.12	ug/L	993.12	ppb	11:35:30
1	Sb 206.836†	1588.8	1543.3	508.51	ug/L	508.51	ppb	11:35:30
1	Se 196.026†	807.9	823.3	508.92	ug/L	508.92	ppb	11:35:30
1	Si 251.611†	82498.0	81165.4	2470.5	ug/L	2470.5	ppb	11:35:10
1	Sn 189.927†	3017.5	2983.1	505.26	ug/L	505.26	ppb	11:35:30
1	Ti 334.940†	310092.3	307958.0	497.94	ug/L	497.94	ppb	11:35:10
1	Tl 190.801†	1708.2	1728.0	498.49	ug/L	498.49	ppb	11:35:30
1	U 409.014†	15720.7	17525.7	488.06	ug/L	488.06	ppb	11:35:10
1	V 292.402†	71444.1	72026.5	492.93	ug/L	492.93	ppb	11:35:10
1	Zn 213.857†	55861.9	54496.3	485.92	ug/L	485.92	ppb	11:35:10
1	SiO2†	83421.9	82099.3	5350.1	ug/L	5350.1	ppb	11:36:37
2	Sc Radial	5645.1	5645.1	99.7	%			11:34:12
2	Y RADIAL	6072.6	6072.6	98.60	%			11:34:12
2	Al 396.153Radial†	6603.0	6644.6	4890.5	ug/L	4890.5	ppb	11:34:12
2	Ca 317.933Radial†	3295.4	3288.3	5028.4	ug/L	5028.4	ppb	11:34:32
2	Fe 238.204 Radial†	521.6	517.2	5223.6	ug/L	5223.6	ppb	11:34:32
2	K 766.490 Radial†	29684.4	27609.9	5002.1	ug/L	5002.1	ppb	11:34:12
2	Mg 279.077 IEC†	140.2	138.9	5178.6	ug/L	5178.6	ppb	11:34:32
2	Na 589.592 Radial†	26740.4	27442.7	10315	ug/L	10315	ppb	11:34:12
2	Sr 421.552†	76785.3	77029.7	519.95	ug/L	519.95	ppb	11:34:12
2	Sc 361.383	893485.7	893485.7	100.96	%			11:35:35
2	Y 371.029	737607.6	737607.6	99.398	%			11:35:35
2	Ag 328.068†	109180.3	107912.5	502.01	ug/L	502.01	ppb	11:35:41
2	As 188.979†	1189.4	1207.3	496.96	ug/L	496.96	ppb	11:36:01
2	B 249.677†	22102.6	22415.9	484.63	ug/L	484.63	ppb	11:35:41
2	Ba 233.527†	65107.2	64498.9	491.16	ug/L	491.16	ppb	11:35:41
2	Be 313.107†	1333991.5	1326601.3	493.94	ug/L	493.94	ppb	11:35:35
2	Cd 226.502†	45642.6	45395.5	492.28	ug/L	492.28	ppb	11:35:41
2	Co 228.616†	25494.7	25323.5	491.72	ug/L	491.72	ppb	11:35:41
2	Cr 267.716†	45905.3	45380.9	489.75	ug/L	489.75	ppb	11:35:41
2	Cu 324.752†	175196.0	166758.1	485.25	ug/L	485.25	ppb	11:35:41
2	Mn 257.610†	459798.5	455014.1	494.90	ug/L	494.90	ppb	11:35:35
2	Mo 202.031†	7791.3	7697.0	501.75	ug/L	501.75	ppb	11:36:01
2	Ni 231.604†	21003.8	20733.6	491.66	ug/L	491.66	ppb	11:35:41

2	P 214.914†	4392.7	4130.9	2380.7 ug/L	2380.7 ppb	11:36:01
2	Pb 220.353†	4184.1	4196.7	492.11 ug/L	492.11 ppb	11:36:01
2	S 181.975 Axial†	740.8	692.3	1011.3 ug/L	1011.3 ppb	11:36:01
2	Sb 206.836†	1594.0	1549.2	510.40 ug/L	510.40 ppb	11:36:01
2	Se 196.026†	813.9	829.6	512.94 ug/L	512.94 ppb	11:36:01
2	Si 251.611†	82303.5	81011.3	2465.8 ug/L	2465.8 ppb	11:35:41
2	Sn 189.927†	3019.2	2986.2	505.79 ug/L	505.79 ppb	11:36:01
2	Ti 334.940†	310607.0	308612.5	499.00 ug/L	499.00 ppb	11:35:41
2	Tl 190.801†	1693.6	1714.3	494.57 ug/L	494.57 ppb	11:36:01
2	U 409.014†	15612.2	17425.6	485.25 ug/L	485.25 ppb	11:35:41
2	V 292.402†	71468.0	72083.5	493.29 ug/L	493.29 ppb	11:35:41
2	Zn 213.857†	55862.1	54522.6	486.14 ug/L	486.14 ppb	11:35:41
2	SiO2†	82826.4	81548.4	5314.0 ug/L	5314.0 ppb	11:36:42
3	Sc Radial	5667.4	5667.4	100 %		11:34:37
3	Y RADIAL	6109.4	6109.4	99.20 %		11:34:37
3	Al 396.153Radial†	6607.2	6622.8	4874.4 ug/L	4874.4 ppb	11:34:37
3	Ca 317.933Radial†	3285.2	3265.1	4992.9 ug/L	4992.9 ppb	11:34:57
3	Fe 238.204 Radial†	516.6	510.2	5152.9 ug/L	5152.9 ppb	11:34:57
3	K 766.490 Radial†	29831.2	27639.7	5007.5 ug/L	5007.5 ppb	11:34:37
3	Mg 279.077 IEC†	138.7	136.8	5100.4 ug/L	5100.4 ppb	11:34:57
3	Na 589.592 Radial†	26893.4	27490.2	10333 ug/L	10333 ppb	11:34:37
3	Sr 421.552†	77277.3	77218.9	521.23 ug/L	521.23 ppb	11:34:37
3	Sc 361.383	895133.7	895133.7	101.15 %		11:36:06
3	Y 371.029	737987.3	737987.3	99.450 %		11:36:06
3	Ag 328.068†	110156.4	108678.4	505.53 ug/L	505.53 ppb	11:36:12
3	As 188.979†	1177.3	1193.1	491.21 ug/L	491.21 ppb	11:36:32
3	B 249.677†	22347.7	22617.9	489.02 ug/L	489.02 ppb	11:36:12
3	Ba 233.527†	65636.8	64903.7	494.23 ug/L	494.23 ppb	11:36:12
3	Be 313.107†	1334695.5	1324864.6	493.30 ug/L	493.30 ppb	11:36:06
3	Cd 226.502†	46026.0	45691.3	495.50 ug/L	495.50 ppb	11:36:12
3	Co 228.616†	25720.3	25500.1	495.15 ug/L	495.15 ppb	11:36:12
3	Cr 267.716†	46265.4	45653.2	492.69 ug/L	492.69 ppb	11:36:12
3	Cu 324.752†	176742.0	167967.0	488.76 ug/L	488.76 ppb	11:36:12
3	Mn 257.610†	461685.7	456041.4	496.01 ug/L	496.01 ppb	11:36:06
3	Mo 202.031†	7810.7	7702.1	502.07 ug/L	502.07 ppb	11:36:32
3	Ni 231.604†	21167.1	20856.7	494.58 ug/L	494.58 ppb	11:36:12
3	P 214.914†	4397.3	4127.4	2378.2 ug/L	2378.2 ppb	11:36:32
3	Pb 220.353†	4207.8	4212.6	493.97 ug/L	493.97 ppb	11:36:32
3	S 181.975 Axial†	736.8	687.0	1003.5 ug/L	1003.5 ppb	11:36:32
3	Sb 206.836†	1600.3	1552.5	511.39 ug/L	511.39 ppb	11:36:32
3	Se 196.026†	818.2	832.3	514.38 ug/L	514.38 ppb	11:36:32
3	Si 251.611†	83154.0	81702.0	2486.9 ug/L	2486.9 ppb	11:36:12
3	Sn 189.927†	3016.1	2977.6	504.33 ug/L	504.33 ppb	11:36:32
3	Ti 334.940†	312886.1	310299.3	501.73 ug/L	501.73 ppb	11:36:12
3	Tl 190.801†	1695.7	1713.3	494.30 ug/L	494.30 ppb	11:36:32
3	U 409.014†	15822.6	17605.2	490.27 ug/L	490.27 ppb	11:36:12
3	V 292.402†	71977.8	72457.2	495.83 ug/L	495.83 ppb	11:36:12
3	Zn 213.857†	56342.7	54895.9	489.49 ug/L	489.49 ppb	11:36:12
3	SiO2†	82994.6	81563.7	5315.0 ug/L	5315.0 ppb	11:36:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894175.5	101.04	%	0.097				0.10%
Sc Radial	5669.5	100	%	0.4				0.45%
Y 371.029	737624.3	99.401	%	0.0478				0.05%
Y RADIAL	6109.1	99.19	%	0.591				0.60%
Ag 328.068†	108194.8	503.29	ug/L	1.944	503.29	ppb	1.944	0.39%
QC value within limits for Ag 328.068 Recovery = 100.66%								
Al 396.153Radial†	6638.1	4885.7	ug/L	9.84	4885.7	ppb	9.84	0.20%
QC value within limits for Al 396.153Radial Recovery = 97.71%								
As 188.979†	1201.2	494.47	ug/L	2.952	494.47	ppb	2.952	0.60%
QC value within limits for As 188.979 Recovery = 98.89%								
B 249.677†	22486.9	486.18	ug/L	2.462	486.18	ppb	2.462	0.51%
QC value within limits for B 249.677 Recovery = 97.24%								
Ba 233.527†	64617.1	492.05	ug/L	1.898	492.05	ppb	1.898	0.39%
QC value within limits for Ba 233.527 Recovery = 98.41%								
Be 313.107†	1325218.7	493.42	ug/L	0.462	493.42	ppb	0.462	0.09%
QC value within limits for Be 313.107 Recovery = 98.68%								
Ca 317.933Radial†	3271.0	5002.0	ug/L	23.23	5002.0	ppb	23.23	0.46%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.04%
Cd 226.502†            45464.5      493.04 ug/L        2.186      493.04 ppb        2.186   0.44%
   QC value within limits for Cd 226.502  Recovery = 98.61%
Co 228.616†            25384.9      492.91 ug/L        1.935      492.91 ppb        1.935   0.39%
   QC value within limits for Co 228.616  Recovery = 98.58%
Cr 267.716†            45443.7      490.43 ug/L        2.009      490.43 ppb        2.009   0.41%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†           167128.9      486.32 ug/L        2.115      486.32 ppb        2.115   0.43%
   QC value within limits for Cu 324.752  Recovery = 97.26%
Fe 238.204 Radial†       512.0      5170.6 ug/L       46.73      5170.6 ppb       46.73   0.90%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.41%
K 766.490 Radial†      27629.7      5005.7 ug/L        3.09      5005.7 ppb        3.09   0.06%
   QC value within limits for K 766.490 Radial  Recovery = 100.11%
Mg 279.077 IEC†          138.7      5170.4 ug/L       66.21      5170.4 ppb       66.21   1.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.41%
Mn 257.610†           455290.4      495.20 ug/L        0.715      495.20 ppb        0.715   0.14%
   QC value within limits for Mn 257.610  Recovery = 99.04%
Mo 202.031†             7698.3      501.83 ug/L        0.214      501.83 ppb        0.214   0.04%
   QC value within limits for Mo 202.031  Recovery = 100.37%
Na 589.592 Radial†     27521.0       10344 ug/L         36.6       10344 ppb         36.6   0.35%
   QC value within limits for Na 589.592 Radial  Recovery = 103.44%
Ni 231.604†            20767.3      492.46 ug/L        1.855      492.46 ppb        1.855   0.38%
   QC value within limits for Ni 231.604  Recovery = 98.49%
P 214.914†              4131.1      2380.7 ug/L         2.58      2380.7 ppb         2.58   0.11%
   QC value within limits for P 214.914  Recovery = 95.23%
Pb 220.353†             4208.3      493.47 ug/L        1.186      493.47 ppb        1.186   0.24%
   QC value within limits for Pb 220.353  Recovery = 98.69%
S 181.975 Axial†         686.4      1002.7 ug/L         9.13      1002.7 ppb         9.13   0.91%
   QC value within limits for S 181.975 Axial  Recovery = 100.27%
Sb 206.836†             1548.4      510.10 ug/L        1.464      510.10 ppb        1.464   0.29%
   QC value within limits for Sb 206.836  Recovery = 102.02%
Se 196.026†              828.4      512.08 ug/L        2.832      512.08 ppb        2.832   0.55%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†            81292.9      2474.4 ug/L        11.09      2474.4 ppb        11.09   0.45%
   QC value within limits for Si 251.611  Recovery = 98.98%
Sn 189.927†             2982.3      505.13 ug/L        0.735      505.13 ppb        0.735   0.15%
   QC value within limits for Sn 189.927  Recovery = 101.03%
Sr 421.552†            77268.9      521.56 ug/L        1.807      521.56 ppb        1.807   0.35%
   QC value within limits for Sr 421.552  Recovery = 104.31%
Ti 334.940†           308956.6      499.56 ug/L        1.952      499.56 ppb        1.952   0.39%
   QC value within limits for Ti 334.940  Recovery = 99.91%
Tl 190.801†             1718.5      495.78 ug/L        2.343      495.78 ppb        2.343   0.47%
   QC value within limits for Tl 190.801  Recovery = 99.16%
U 409.014†             17518.8      487.86 ug/L        2.516      487.86 ppb        2.516   0.52%
   QC value within limits for U 409.014  Recovery = 97.57%
V 292.402†             72189.1      494.02 ug/L        1.583      494.02 ppb        1.583   0.32%
   QC value within limits for V 292.402  Recovery = 98.80%
Zn 213.857†            54638.2      487.18 ug/L        2.000      487.18 ppb        2.000   0.41%
   QC value within limits for Zn 213.857  Recovery = 97.44%
SiO2†                  81737.1      5326.4 ug/L        20.55      5326.4 ppb        20.55   0.39%
   QC value within limits for SiO2  Recovery = 99.60%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 11:38:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4980.8	4980.8	87.9	%			11:40:50
1	Y RADIAL	5415.5	5415.5	87.93	%			11:40:50
1	Al 396.153Radial†	-23.7	-6.6	-4.8811	ug/L	-4.8811	ppb	11:41:10
1	Ca 317.933Radial†	18.4	3.3	4.9714	ug/L	4.9714	ppb	11:41:10
1	Fe 238.204 Radial†	6.9	1.8	17.809	ug/L	17.809	ppb	11:41:10
1	K 766.490 Radial†	2271.9	412.9	74.951	ug/L	74.951	ppb	11:40:50
1	Mg 279.077 IEC†	1.9	0.4	13.110	ug/L	13.110	ppb	11:41:10
1	Na 589.592 Radial†	-586.9	-51.4	-19.304	ug/L	-19.304	ppb	11:40:50
1	Sr 421.552†	19.5	18.7	0.1262	ug/L	0.1262	ppb	11:40:50
1	Sc 361.383	892845.1	892845.1	100.89	%			11:42:06
1	Y 371.029	748327.2	748327.2	100.84	%			11:42:06
1	Ag 328.068†	313.4	83.0	0.4006	ug/L	0.4006	ppb	11:42:12
1	As 188.979†	-22.7	6.7	2.7447	ug/L	2.7447	ppb	11:42:32
1	B 249.677†	-228.5	297.4	6.4531	ug/L	6.4531	ppb	11:42:32
1	Ba 233.527†	-30.6	-18.3	-0.1377	ug/L	-0.1377	ppb	11:42:32
1	Be 313.107†	-5299.6	67.3	0.0251	ug/L	0.0251	ppb	11:42:12
1	Cd 226.502†	-169.8	19.5	0.2101	ug/L	0.2101	ppb	11:42:32
1	Co 228.616†	-79.2	-6.8	-0.1304	ug/L	-0.1304	ppb	11:42:32
1	Cr 267.716†	68.0	-19.6	-0.2063	ug/L	-0.2063	ppb	11:42:32
1	Cu 324.752†	6819.5	-9.2	-0.0259	ug/L	-0.0259	ppb	11:42:12
1	Mn 257.610†	409.1	2.0	0.0037	ug/L	0.0037	ppb	11:42:32
1	Mo 202.031†	26.4	6.2	0.4021	ug/L	0.4021	ppb	11:42:32
1	Ni 231.604†	95.1	24.1	0.5725	ug/L	0.5725	ppb	11:42:32
1	P 214.914†	215.0	-6.9	-4.0931	ug/L	-4.0931	ppb	11:42:32
1	Pb 220.353†	-48.8	4.2	0.4906	ug/L	0.4906	ppb	11:42:32
1	S 181.975 Axial†	36.2	-5.6	-8.2082	ug/L	-8.2082	ppb	11:42:32
1	Sb 206.836†	24.8	-5.0	-1.6028	ug/L	-1.6028	ppb	11:42:32
1	Se 196.026†	-27.2	-3.5	-2.0278	ug/L	-2.0278	ppb	11:42:32
1	Si 251.611†	773.1	258.2	7.8654	ug/L	7.8654	ppb	11:42:32
1	Sn 189.927†	5.7	1.4	0.2361	ug/L	0.2361	ppb	11:42:32
1	Ti 334.940†	-951.8	21.7	0.0405	ug/L	0.0405	ppb	11:42:12
1	Tl 190.801†	-31.3	5.8	1.6741	ug/L	1.6741	ppb	11:42:32
1	U 409.014†	-2402.2	-418.9	-11.705	ug/L	-11.705	ppb	11:42:12
1	V 292.402†	-1270.3	37.3	0.2327	ug/L	0.2327	ppb	11:42:12
1	Zn 213.857†	655.1	-157.9	-1.4265	ug/L	-1.4265	ppb	11:42:32
1	SiO2†	757.1	261.6	17.055	ug/L	17.055	ppb	11:43:37
2	Sc Radial	5956.2	5956.2	105	%			11:41:15
2	Y RADIAL	6441.8	6441.8	104.6	%			11:41:15
2	Al 396.153Radial†	-14.9	6.2	4.5536	ug/L	4.5536	ppb	11:41:35
2	Ca 317.933Radial†	20.6	1.9	2.9000	ug/L	2.9000	ppb	11:41:35
2	Fe 238.204 Radial†	5.5	-0.8	-8.4169	ug/L	-8.4169	ppb	11:41:35
2	K 766.490 Radial†	2141.6	-134.0	-24.340	ug/L	-24.340	ppb	11:41:15
2	Mg 279.077 IEC†	-0.1	-1.8	-68.060	ug/L	-68.060	ppb	11:41:35
2	Na 589.592 Radial†	-502.9	137.8	51.789	ug/L	51.789	ppb	11:41:15
2	Sr 421.552†	34.2	29.1	0.1965	ug/L	0.1965	ppb	11:41:15
2	Sc 361.383	911727.2	911727.2	103.02	%			11:42:37
2	Y 371.029	763518.3	763518.3	102.89	%			11:42:37
2	Ag 328.068†	294.5	58.3	0.2777	ug/L	0.2777	ppb	11:42:42
2	As 188.979†	-23.9	6.0	2.4491	ug/L	2.4491	ppb	11:43:02
2	B 249.677†	-222.8	307.6	6.6783	ug/L	6.6783	ppb	11:43:02
2	Ba 233.527†	-39.5	-26.3	-0.1994	ug/L	-0.1994	ppb	11:43:02
2	Be 313.107†	-5269.7	205.2	0.0765	ug/L	0.0765	ppb	11:42:42
2	Cd 226.502†	-175.0	17.9	0.1956	ug/L	0.1956	ppb	11:43:02
2	Co 228.616†	-65.8	7.9	0.1542	ug/L	0.1542	ppb	11:43:02
2	Cr 267.716†	81.8	-7.5	-0.0771	ug/L	-0.0771	ppb	11:43:02
2	Cu 324.752†	6913.2	-58.3	-0.1699	ug/L	-0.1699	ppb	11:42:42
2	Mn 257.610†	405.3	-10.0	-0.0104	ug/L	-0.0104	ppb	11:43:02
2	Mo 202.031†	28.5	7.7	0.5000	ug/L	0.5000	ppb	11:43:02
2	Ni 231.604†	84.9	12.3	0.2921	ug/L	0.2921	ppb	11:43:02

2	P 214.914†	226.9	0.3	0.2099 ug/L	0.2099 ppb	11:43:02
2	Pb 220.353†	-55.0	-0.8	-0.0938 ug/L	-0.0938 ppb	11:43:02
2	S 181.975 Axial†	42.2	-0.5	-0.6911 ug/L	-0.6911 ppb	11:43:02
2	Sb 206.836†	35.1	4.5	1.4885 ug/L	1.4885 ppb	11:43:02
2	Se 196.026†	-22.7	1.4	0.8072 ug/L	0.8072 ppb	11:43:02
2	Si 251.611†	729.1	199.7	6.1042 ug/L	6.1042 ppb	11:43:02
2	Sn 189.927†	10.6	6.0	1.0155 ug/L	1.0155 ppb	11:43:02
2	Ti 334.940†	-930.9	61.5	0.1044 ug/L	0.1044 ppb	11:42:42
2	Tl 190.801†	-26.1	11.5	3.3063 ug/L	3.3063 ppb	11:43:02
2	U 409.014†	-2419.3	-386.1	-10.786 ug/L	-10.786 ppb	11:42:42
2	V 292.402†	-1271.6	62.2	0.4057 ug/L	0.4057 ppb	11:42:42
2	Zn 213.857†	667.7	-159.2	-1.4305 ug/L	-1.4305 ppb	11:43:02
2	SiO2†	754.4	243.5	15.935 ug/L	15.935 ppb	11:43:42
3	Sc Radial	5738.2	5738.2	101 %		11:41:40
3	Y RADIAL	6269.4	6269.4	101.8 %		11:41:40
3	Al 396.153Radial†	-8.0	12.4	9.1826 ug/L	9.1826 ppb	11:42:00
3	Ca 317.933Radial†	23.4	5.4	8.3221 ug/L	8.3221 ppb	11:42:00
3	Fe 238.204 Radial†	6.0	-0.1	-0.8655 ug/L	-0.8655 ppb	11:42:00
3	K 766.490 Radial†	2222.6	23.3	4.2106 ug/L	4.2106 ppb	11:41:40
3	Mg 279.077 IEC†	2.2	0.4	15.387 ug/L	15.387 ppb	11:42:00
3	Na 589.592 Radial†	-544.4	78.7	29.563 ug/L	29.563 ppb	11:41:40
3	Sr 421.552†	-0.5	-3.9	-0.0262 ug/L	-0.0262 ppb	11:41:40
3	Sc 361.383	897162.0	897162.0	101.38 %		11:43:07
3	Y 371.029	750910.6	750910.6	101.19 %		11:43:07
3	Ag 328.068†	311.0	79.2	0.3732 ug/L	0.3732 ppb	11:43:12
3	As 188.979†	-18.7	10.8	4.4035 ug/L	4.4035 ppb	11:43:32
3	B 249.677†	-264.9	262.5	5.6981 ug/L	5.6981 ppb	11:43:32
3	Ba 233.527†	-12.5	-0.3	-0.0019 ug/L	-0.0019 ppb	11:43:32
3	Be 313.107†	-5409.8	-16.0	-0.0060 ug/L	-0.0060 ppb	11:43:12
3	Cd 226.502†	-180.7	9.6	0.1043 ug/L	0.1043 ppb	11:43:32
3	Co 228.616†	-63.3	9.3	0.1804 ug/L	0.1804 ppb	11:43:32
3	Cr 267.716†	63.7	-24.2	-0.2575 ug/L	-0.2575 ppb	11:43:32
3	Cu 324.752†	6904.1	41.6	0.1210 ug/L	0.1210 ppb	11:43:12
3	Mn 257.610†	419.6	10.5	0.0110 ug/L	0.0110 ppb	11:43:32
3	Mo 202.031†	21.8	1.5	0.0995 ug/L	0.0995 ppb	11:43:32
3	Ni 231.604†	81.2	10.0	0.2367 ug/L	0.2367 ppb	11:43:32
3	P 214.914†	224.6	1.6	0.9206 ug/L	0.9206 ppb	11:43:32
3	Pb 220.353†	-67.4	-13.9	-1.6279 ug/L	-1.6279 ppb	11:43:32
3	S 181.975 Axial†	34.5	-7.4	-10.864 ug/L	-10.864 ppb	11:43:32
3	Sb 206.836†	31.9	1.9	0.6099 ug/L	0.6099 ppb	11:43:32
3	Se 196.026†	-23.8	-0.1	-0.0373 ug/L	-0.0373 ppb	11:43:32
3	Si 251.611†	733.6	215.6	6.5924 ug/L	6.5924 ppb	11:43:32
3	Sn 189.927†	3.5	-0.8	-0.1333 ug/L	-0.1333 ppb	11:43:32
3	Ti 334.940†	-993.7	-15.2	-0.0206 ug/L	-0.0206 ppb	11:43:12
3	Tl 190.801†	-38.5	-1.1	-0.3256 ug/L	-0.3256 ppb	11:43:32
3	U 409.014†	-2269.8	-276.8	-7.7322 ug/L	-7.7322 ppb	11:43:12
3	V 292.402†	-1277.6	36.2	0.2316 ug/L	0.2316 ppb	11:43:12
3	Zn 213.857†	670.1	-146.3	-1.3183 ug/L	-1.3183 ppb	11:43:32
3	SiO2†	743.2	244.2	15.988 ug/L	15.988 ppb	11:43:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900578.1	101.76	%	1.118				1.10%
Sc Radial	5558.4	98.1	%	9.04				9.21%
Y 371.029	754252.0	101.64	%	1.095				1.08%
Y RADIAL	6042.2	98.11	%	8.923				9.09%
Ag 328.068†	73.5	0.3505	ug/L	0.06450	0.3505	ppb	0.06450	18.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.0	2.9517	ug/L	7.16741	2.9517	ppb	7.16741	242.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.8	3.1991	ug/L	1.05344	3.1991	ppb	1.05344	32.93%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	289.2	6.2765	ug/L	0.51342	6.2765	ppb	0.51342	8.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.0	-0.1130	ug/L	0.10106	-0.1130	ppb	0.10106	89.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	85.5	0.0318	ug/L	0.04164	0.0318	ppb	0.04164	130.74%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3978	ug/L	2.73609	5.3978	ppb	2.73609	50.69%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.7      0.1700 ug/L       0.05739      0.1700 ppb        0.05739  33.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.5      0.0680 ug/L       0.17238      0.0680 ppb        0.17238 253.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.1     -0.1803 ug/L       0.09297     -0.1803 ppb        0.09297  51.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -8.6     -0.0250 ug/L       0.14547     -0.0250 ppb        0.14547 582.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.3      2.8422 ug/L      13.50029      2.8422 ppb       13.50029 475.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         100.7      18.274 ug/L       51.1174      18.274 ppb        51.1174 279.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4     -13.188 ug/L       47.5348     -13.188 ppb        47.5348 360.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 0.8      0.0014 ug/L       0.01091      0.0014 ppb        0.01091 761.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.1      0.3339 ug/L       0.20875      0.3339 ppb        0.20875  62.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         55.0      20.683 ug/L       36.3688      20.683 ppb        36.3688 175.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.5      0.3671 ug/L       0.18004      0.3671 ppb        0.18004  49.04%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.9875 ug/L       2.71287     -0.9875 ppb        2.71287 274.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.5     -0.4104 ug/L       1.09414     -0.4104 ppb        1.09414 266.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.5     -6.5877 ug/L       5.27637     -6.5877 ppb        5.27637  80.09%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.5      0.1652 ug/L       1.59295      0.1652 ppb        1.59295 964.31%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.7     -0.4193 ug/L       1.45559     -0.4193 ppb        1.45559 347.12%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               224.5      6.8540 ug/L       0.90924      6.8540 ppb        0.90924  13.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.2      0.3727 ug/L       0.58646      0.3727 ppb        0.58646 157.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                14.7      0.0989 ug/L       0.11385      0.0989 ppb        0.11385 115.16%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.7      0.0414 ug/L       0.06251      0.0414 ppb        0.06251 150.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.4      1.5516 ug/L       1.81908      1.5516 ppb        1.81908 117.24%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -360.6     -10.074 ug/L        2.0798     -10.074 ppb         2.0798  20.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 45.3      0.2900 ug/L       0.10021      0.2900 ppb        0.10021  34.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -154.5     -1.3918 ug/L       0.06366     -1.3918 ppb        0.06366   4.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    249.8      16.326 ug/L        0.6321      16.326 ppb         0.6321   3.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 15
Sample ID: 1201977916|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 12/9/2009 12:13:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977916|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5496.5	5496.5	97.1	%			12:15:45
1	Y RADIAL	6025.4	6025.4	97.84	%			12:15:45
1	Al 396.153Radial†	19390.3	19999.3	14784	ug/L	14784	ppb	12:15:25
1	Ca 317.933Radial†	93179.8	95990.7	146790	ug/L	146790	ppb	12:15:25
1	Fe 238.204 Radial†	3489.0	3588.8	36138	ug/L	36138	ppb	12:15:45
1	K 766.490 Radial†	10979.5	9142.5	1635.5	ug/L	1635.5	ppb	12:15:25
1	Mg 279.077 IEC†	374.2	383.8	14262	ug/L	14262	ppb	12:15:45
1	Na 589.592 Radial†	1828.4	2499.9	939.63	ug/L	939.63	ppb	12:15:25
1	Sr 421.552†	47526.5	48965.8	329.19	ug/L	329.19	ppb	12:15:25
1	Sc 361.383	864369.7	864369.7	97.672	%			12:16:42
1	Y 371.029	729800.6	729800.6	98.346	%			12:16:42
1	Ag 328.068†	-1560.8	-1825.6	1.1555	ug/L	1.1555	ppb	12:16:42
1	As 188.979†	-16.2	12.6	23.556	ug/L	23.556	ppb	12:17:03
1	B 249.677†	1406.0	1963.3	37.763	ug/L	37.763	ppb	12:16:42
1	Ba 233.527†	276012.2	282603.1	2147.8	ug/L	2147.8	ppb	12:16:42
1	Be 313.107†	-12208.1	-7178.9	0.2745	ug/L	0.2745	ppb	12:16:42
1	Cd 226.502†	156.2	347.7	0.9221	ug/L	0.9221	ppb	12:17:03
1	Co 228.616†	1132.9	1231.6	21.016	ug/L	21.016	ppb	12:17:03
1	Cr 267.716†	39837.4	40700.0	439.28	ug/L	439.28	ppb	12:16:42
1	Cu 324.752†	1076808.7	1095706.3	3188.5	ug/L	3188.5	ppb	12:16:42
1	Mn 257.610†	754474.5	772054.4	842.35	ug/L	842.35	ppb	12:16:42
1	Mo 202.031†	110.0	92.6	8.5955	ug/L	8.5955	ppb	12:17:03
1	Ni 231.604†	48895.1	49990.4	1186.2	ug/L	1186.2	ppb	12:16:42
1	P 214.914†	2632.3	2475.1	934.52	ug/L	934.52	ppb	12:17:03
1	Pb 220.353†	643.7	711.6	81.067	ug/L	81.067	ppb	12:17:03
1	S 181.975 Axial†	1702.0	1701.1	2484.4	ug/L	2484.4	ppb	12:17:03
1	Sb 206.836†	86.6	59.0	3.9950	ug/L	3.9950	ppb	12:17:03
1	Se 196.026†	-191.2	-172.3	10.035	ug/L	10.035	ppb	12:17:03
1	Si 251.611†	250301.3	255759.3	7822.1	ug/L	7822.1	ppb	12:16:42
1	Sn 189.927†	-247.4	-257.6	-27.853	ug/L	-27.853	ppb	12:17:03
1	Ti 334.940†	903027.4	925516.6	1504.4	ug/L	1504.4	ppb	12:16:42
1	Tl 190.801†	-101.0	-66.6	-2.5330	ug/L	-2.5330	ppb	12:17:03
1	U 409.014†	-2681.7	-783.4	-27.281	ug/L	-27.281	ppb	12:16:42
1	V 292.402†	7096.7	8562.3	50.848	ug/L	50.848	ppb	12:16:42
1	Zn 213.857†	38514.6	38625.4	332.18	ug/L	332.18	ppb	12:16:42
1	SiO2†	245297.8	250655.8	16413	ug/L	16413	ppb	12:18:00
2	Sc Radial	5485.0	5485.0	96.9	%			12:16:10
2	Y RADIAL	6014.9	6014.9	97.66	%			12:16:10
2	Al 396.153Radial†	19017.3	19656.1	14530	ug/L	14530	ppb	12:15:50
2	Ca 317.933Radial†	91659.6	94622.4	144690	ug/L	144690	ppb	12:15:50
2	Fe 238.204 Radial†	3498.9	3606.7	36318	ug/L	36318	ppb	12:16:10
2	K 766.490 Radial†	10753.7	8933.1	1597.9	ug/L	1597.9	ppb	12:15:50
2	Mg 279.077 IEC†	369.3	379.6	14104	ug/L	14104	ppb	12:16:10
2	Na 589.592 Radial†	1831.2	2506.7	942.19	ug/L	942.19	ppb	12:15:50
2	Sr 421.552†	46646.4	48159.8	323.77	ug/L	323.77	ppb	12:15:50
2	Sc 361.383	869045.4	869045.4	98.200	%			12:17:08
2	Y 371.029	733916.9	733916.9	98.901	%			12:17:08
2	Ag 328.068†	-1594.6	-1851.4	1.1185	ug/L	1.1185	ppb	12:17:08
2	As 188.979†	-18.3	10.6	22.525	ug/L	22.525	ppb	12:17:29
2	B 249.677†	1368.8	1917.8	36.750	ug/L	36.750	ppb	12:17:08
2	Ba 233.527†	271657.6	276648.3	2102.6	ug/L	2102.6	ppb	12:17:08
2	Be 313.107†	-12187.5	-7090.6	0.2561	ug/L	0.2561	ppb	12:17:08
2	Cd 226.502†	154.6	345.2	0.8621	ug/L	0.8621	ppb	12:17:29
2	Co 228.616†	1133.5	1226.0	20.944	ug/L	20.944	ppb	12:17:29
2	Cr 267.716†	39225.5	39857.4	430.20	ug/L	430.20	ppb	12:17:08
2	Cu 324.752†	1066503.6	1079280.8	3140.7	ug/L	3140.7	ppb	12:17:08
2	Mn 257.610†	743856.6	757085.9	826.11	ug/L	826.11	ppb	12:17:08
2	Mo 202.031†	109.1	91.1	8.5097	ug/L	8.5097	ppb	12:17:29
2	Ni 231.604†	48195.8	49008.9	1162.9	ug/L	1162.9	ppb	12:17:08

2	P 214.914†	2595.5	2423.1	911.09	ug/L	911.09 ppb	12:17:29
2	Pb 220.353†	620.6	684.5	77.862	ug/L	77.862 ppb	12:17:29
2	S 181.975 Axial†	1694.8	1684.4	2460.1	ug/L	2460.1 ppb	12:17:29
2	Sb 206.836†	86.5	58.5	4.1412	ug/L	4.1412 ppb	12:17:29
2	Se 196.026†	-199.7	-179.9	6.0340	ug/L	6.0340 ppb	12:17:29
2	Si 251.611†	246835.5	250851.3	7671.9	ug/L	7671.9 ppb	12:17:08
2	Sn 189.927†	-245.1	-253.8	-27.431	ug/L	-27.431 ppb	12:17:29
2	Ti 334.940†	892080.0	909394.2	1478.2	ug/L	1478.2 ppb	12:17:08
2	Tl 190.801†	-92.4	-57.3	-0.1597	ug/L	-0.1597 ppb	12:17:29
2	U 409.014†	-2582.1	-667.3	-24.042	ug/L	-24.042 ppb	12:17:08
2	V 292.402†	7042.2	8467.7	50.216	ug/L	50.216 ppb	12:17:08
2	Zn 213.857†	38038.9	37928.8	326.11	ug/L	326.11 ppb	12:17:08
2	SiO2†	242924.5	246887.7	16166	ug/L	16166 ppb	12:18:05
3	Sc Radial	5532.4	5532.4	97.7	%		12:16:35
3	Y RADIAL	6055.5	6055.5	98.32	%		12:16:35
3	Al 396.153Radial†	19065.1	19536.8	14442	ug/L	14442 ppb	12:16:15
3	Ca 317.933Radial†	91865.2	94022.1	143780	ug/L	143780 ppb	12:16:15
3	Fe 238.204 Radial†	3497.5	3574.3	35991	ug/L	35991 ppb	12:16:35
3	K 766.490 Radial†	10753.9	8838.2	1580.9	ug/L	1580.9 ppb	12:16:15
3	Mg 279.077 IEC†	369.4	376.4	13986	ug/L	13986 ppb	12:16:35
3	Na 589.592 Radial†	1772.6	2430.5	913.57	ug/L	913.57 ppb	12:16:15
3	Sr 421.552†	46750.7	47854.0	321.71	ug/L	321.71 ppb	12:16:15
3	Sc 361.383	872857.0	872857.0	98.631	%		12:17:34
3	Y 371.029	735741.4	735741.4	99.147	%		12:17:34
3	Ag 328.068†	-1636.5	-1886.8	0.8656	ug/L	0.8656 ppb	12:17:34
3	As 188.979†	-18.2	10.8	22.418	ug/L	22.418 ppb	12:17:55
3	B 249.677†	1372.2	1915.1	36.736	ug/L	36.736 ppb	12:17:34
3	Ba 233.527†	270822.9	274594.0	2087.0	ug/L	2087.0 ppb	12:17:34
3	Be 313.107†	-12069.7	-6917.0	0.2899	ug/L	0.2899 ppb	12:17:34
3	Cd 226.502†	149.3	339.2	0.8227	ug/L	0.8227 ppb	12:17:55
3	Co 228.616†	1127.5	1214.9	20.761	ug/L	20.761 ppb	12:17:55
3	Cr 267.716†	39081.4	39536.8	426.74	ug/L	426.74 ppb	12:17:34
3	Cu 324.752†	1058598.8	1066523.7	3103.6	ug/L	3103.6 ppb	12:17:34
3	Mn 257.610†	740856.3	750736.1	819.18	ug/L	819.18 ppb	12:17:34
3	Mo 202.031†	118.4	100.1	9.0708	ug/L	9.0708 ppb	12:17:55
3	Ni 231.604†	47988.9	48584.9	1152.8	ug/L	1152.8 ppb	12:17:34
3	P 214.914†	2596.1	2412.2	910.76	ug/L	910.76 ppb	12:17:55
3	Pb 220.353†	608.0	669.0	76.084	ug/L	76.084 ppb	12:17:55
3	S 181.975 Axial†	1676.3	1658.1	2421.7	ug/L	2421.7 ppb	12:17:55
3	Sb 206.836†	89.2	60.8	5.0085	ug/L	5.0085 ppb	12:17:55
3	Se 196.026†	-191.5	-170.8	10.479	ug/L	10.479 ppb	12:17:55
3	Si 251.611†	245873.2	248778.0	7608.5	ug/L	7608.5 ppb	12:17:34
3	Sn 189.927†	-251.2	-258.9	-28.392	ug/L	-28.392 ppb	12:17:55
3	Ti 334.940†	886460.5	899729.7	1462.5	ug/L	1462.5 ppb	12:17:34
3	Tl 190.801†	-102.0	-66.6	-2.9936	ug/L	-2.9936 ppb	12:17:55
3	U 409.014†	-2731.0	-806.8	-27.891	ug/L	-27.891 ppb	12:17:34
3	V 292.402†	6990.2	8383.7	49.715	ug/L	49.715 ppb	12:17:34
3	Zn 213.857†	37956.0	37675.6	323.97	ug/L	323.97 ppb	12:17:34
3	SiO2†	244854.6	247764.4	16223	ug/L	16223 ppb	12:18:11

Mean Data: 1201977916|925187|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868757.4	98.168	%	0.4803				0.49%
Sc Radial	5504.6	97.2	%	0.44				0.45%
Y 371.029	733153.0	98.798	%	0.4101				0.42%
Y RADIAL	6031.9	97.94	%	0.342				0.35%
Ag 328.068†	-1854.6	1.0465	ug/L	0.15783	1.0465	ppb	0.15783	15.08%
Al 396.153Radial†	19730.7	14586	ug/L	177.5	14586	ppb	177.5	1.22%
As 188.979†	11.3	22.833	ug/L	0.6283	22.833	ppb	0.6283	2.75%
B 249.677†	1932.1	37.083	ug/L	0.5889	37.083	ppb	0.5889	1.59%
Ba 233.527†	277948.5	2112.5	ug/L	31.60	2112.5	ppb	31.60	1.50%
Be 313.107†	-7062.2	0.2735	ug/L	0.01692	0.2735	ppb	0.01692	6.19%
Ca 317.933Radial†	94878.4	145090	ug/L	1542.8	145090	ppb	1542.8	1.06%
Cd 226.502†	344.1	0.8690	ug/L	0.05007	0.8690	ppb	0.05007	5.76%
Co 228.616†	1224.2	20.907	ug/L	0.1314	20.907	ppb	0.1314	0.63%
Cr 267.716†	40031.4	432.08	ug/L	6.475	432.08	ppb	6.475	1.50%
Cu 324.752†	1080503.6	3144.3	ug/L	42.55	3144.3	ppb	42.55	1.35%
Fe 238.204 Radial†	3589.9	36149	ug/L	163.4	36149	ppb	163.4	0.45%
K 766.490 Radial†	8971.3	1604.8	ug/L	27.96	1604.8	ppb	27.96	1.74%

Mg 279.077 IEC†	379.9	14117	ug/L	138.4	14117	ppb	138.4	0.98%
Mn 257.610†	759958.8	829.21	ug/L	11.896	829.21	ppb	11.896	1.43%
Mo 202.031†	94.6	8.7253	ug/L	0.30226	8.7253	ppb	0.30226	3.46%
Na 589.592 Radial†	2479.0	931.80	ug/L	15.836	931.80	ppb	15.836	1.70%
Ni 231.604†	49194.7	1167.3	ug/L	17.11	1167.3	ppb	17.11	1.47%
P 214.914†	2436.8	918.79	ug/L	13.625	918.79	ppb	13.625	1.48%
Pb 220.353†	688.4	78.338	ug/L	2.5253	78.338	ppb	2.5253	3.22%
S 181.975 Axial†	1681.2	2455.4	ug/L	31.62	2455.4	ppb	31.62	1.29%
Sb 206.836†	59.5	4.3816	ug/L	0.54783	4.3816	ppb	0.54783	12.50%
Se 196.026†	-174.3	8.8492	ug/L	2.44814	8.8492	ppb	2.44814	27.67%
Si 251.611†	251796.2	7700.8	ug/L	109.65	7700.8	ppb	109.65	1.42%
Sn 189.927†	-256.8	-27.892	ug/L	0.4815	-27.892	ppb	0.4815	1.73%
Sr 421.552†	48326.5	324.89	ug/L	3.863	324.89	ppb	3.863	1.19%
Ti 334.940†	911546.8	1481.7	ug/L	21.15	1481.7	ppb	21.15	1.43%
Tl 190.801†	-63.5	-1.8955	ug/L	1.52072	-1.8955	ppb	1.52072	80.23%
U 409.014†	-752.5	-26.405	ug/L	2.0687	-26.405	ppb	2.0687	7.83%
V 292.402†	8471.3	50.260	ug/L	0.5678	50.260	ppb	0.5678	1.13%
Zn 213.857†	38076.6	327.42	ug/L	4.258	327.42	ppb	4.258	1.30%
SiO2†	248436.0	16267	ug/L	129.1	16267	ppb	129.1	0.79%

Sequence No.: 16
Sample ID: 1201977918|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 12/9/2009 12:20:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977918|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5633.4	5633.4	99.5	%			12:22:14
1	Y RADIAL	6139.5	6139.5	99.69	%			12:22:14
1	Al 396.153Radial†	19801.9	19927.5	14727	ug/L	14727	ppb	12:22:14
1	Ca 317.933Radial†	105465.5	106008.3	162100	ug/L	162100	ppb	12:22:14
1	Fe 238.204 Radial†	2122.5	2127.7	21428	ug/L	21428	ppb	12:22:34
1	K 766.490 Radial†	16917.5	14837.1	2672.0	ug/L	2672.0	ppb	12:22:14
1	Mg 279.077 IEC†	250.2	249.7	9284.1	ug/L	9284.1	ppb	12:22:34
1	Na 589.592 Radial†	3934.8	4571.7	1718.4	ug/L	1718.4	ppb	12:22:14
1	Sr 421.552†	61023.8	61344.7	412.61	ug/L	412.61	ppb	12:22:14
1	Sc 361.383	845734.2	845734.2	95.566	%			12:23:31
1	Y 371.029	714414.6	714414.6	96.273	%			12:23:31
1	Ag 328.068†	21541.7	22313.5	108.11	ug/L	108.11	ppb	12:23:31
1	As 188.979†	244.2	284.7	127.38	ug/L	127.38	ppb	12:23:51
1	B 249.677†	6927.4	7772.6	165.61	ug/L	165.61	ppb	12:23:31
1	Ba 233.527†	282826.4	295960.3	2248.9	ug/L	2248.9	ppb	12:23:31
1	Be 313.107†	261760.0	279224.7	105.64	ug/L	105.64	ppb	12:23:31
1	Cd 226.502†	8910.2	9511.4	101.15	ug/L	101.15	ppb	12:23:51
1	Co 228.616†	5157.5	5468.5	105.04	ug/L	105.04	ppb	12:23:51
1	Cr 267.716†	13918.4	14477.2	156.60	ug/L	156.60	ppb	12:23:31
1	Cu 324.752†	385768.9	396898.2	1155.4	ug/L	1155.4	ppb	12:23:31
1	Mn 257.610†	382962.0	400326.3	437.01	ug/L	437.01	ppb	12:23:31
1	Mo 202.031†	1628.4	1684.0	111.21	ug/L	111.21	ppb	12:23:51
1	Ni 231.604†	6606.1	6842.4	162.29	ug/L	162.29	ppb	12:23:51
1	P 214.914†	1297.3	1137.5	479.31	ug/L	479.31	ppb	12:23:51
1	Pb 220.353†	1571.8	1697.3	199.33	ug/L	199.33	ppb	12:23:51
1	S 181.975 Axial†	2638.9	2719.9	3974.2	ug/L	3974.2	ppb	12:23:51
1	Sb 206.836†	335.2	321.2	101.72	ug/L	101.72	ppb	12:23:51
1	Se 196.026†	50.5	76.3	113.56	ug/L	113.56	ppb	12:23:51
1	Si 251.611†	238436.7	248991.0	7612.5	ug/L	7612.5	ppb	12:23:31
1	Sn 189.927†	396.4	410.5	86.569	ug/L	86.569	ppb	12:23:51
1	Ti 334.940†	564382.7	591532.5	965.06	ug/L	965.06	ppb	12:23:31
1	Tl 190.801†	275.7	325.4	102.68	ug/L	102.68	ppb	12:23:51
1	U 409.014†	1274.5	3295.8	89.083	ug/L	89.083	ppb	12:23:31
1	V 292.402†	19730.6	21942.5	145.70	ug/L	145.70	ppb	12:23:31
1	Zn 213.857†	57176.9	59022.4	526.24	ug/L	526.24	ppb	12:23:31
1	SiO2†	239539.2	250163.9	16375	ug/L	16375	ppb	12:24:47
2	Sc Radial	5531.3	5531.3	97.7	%			12:22:39
2	Y RADIAL	6049.4	6049.4	98.23	%			12:22:39
2	Al 396.153Radial†	19604.8	20093.1	14849	ug/L	14849	ppb	12:22:39
2	Ca 317.933Radial†	104122.5	106590.3	162990	ug/L	162990	ppb	12:22:39
2	Fe 238.204 Radial†	2123.0	2167.7	21831	ug/L	21831	ppb	12:22:59
2	K 766.490 Radial†	16714.4	14943.1	2691.2	ug/L	2691.2	ppb	12:22:39
2	Mg 279.077 IEC†	246.4	250.5	9312.7	ug/L	9312.7	ppb	12:22:59
2	Na 589.592 Radial†	3882.5	4591.1	1725.7	ug/L	1725.7	ppb	12:22:39
2	Sr 421.552†	60105.6	61536.9	413.90	ug/L	413.90	ppb	12:22:39
2	Sc 361.383	837348.7	837348.7	94.619	%			12:23:56
2	Y 371.029	704895.9	704895.9	94.990	%			12:23:56
2	Ag 328.068†	21147.9	22123.1	107.34	ug/L	107.34	ppb	12:23:56
2	As 188.979†	249.0	292.4	130.52	ug/L	130.52	ppb	12:24:16
2	B 249.677†	6798.8	7709.4	164.18	ug/L	164.18	ppb	12:23:56
2	Ba 233.527†	279378.5	295280.0	2243.8	ug/L	2243.8	ppb	12:23:56
2	Be 313.107†	257893.1	277880.8	105.13	ug/L	105.13	ppb	12:23:56
2	Cd 226.502†	8904.7	9598.9	102.06	ug/L	102.06	ppb	12:24:16
2	Co 228.616†	5143.5	5507.8	105.81	ug/L	105.81	ppb	12:24:16
2	Cr 267.716†	13814.6	14513.3	156.99	ug/L	156.99	ppb	12:23:56
2	Cu 324.752†	377211.5	391896.6	1140.9	ug/L	1140.9	ppb	12:23:56
2	Mn 257.610†	377334.6	398391.8	434.95	ug/L	434.95	ppb	12:23:56
2	Mo 202.031†	1624.7	1697.1	112.10	ug/L	112.10	ppb	12:24:16
2	Ni 231.604†	6580.0	6884.1	163.28	ug/L	163.28	ppb	12:24:16

2	P 214.914†	1289.1	1142.4	484.29 ug/L	484.29 ppb	12:24:16
2	Pb 220.353†	1581.3	1723.8	202.43 ug/L	202.43 ppb	12:24:16
2	S 181.975 Axial†	2627.6	2735.5	3997.0 ug/L	3997.0 ppb	12:24:16
2	Sb 206.836†	324.1	313.0	99.134 ug/L	99.134 ppb	12:24:16
2	Se 196.026†	46.7	72.8	112.76 ug/L	112.76 ppb	12:24:16
2	Si 251.611†	234444.4	247270.2	7559.9 ug/L	7559.9 ppb	12:23:56
2	Sn 189.927†	408.5	427.5	89.538 ug/L	89.538 ppb	12:24:16
2	Ti 334.940†	555609.3	588174.3	959.68 ug/L	959.68 ppb	12:23:56
2	Tl 190.801†	276.9	329.5	103.80 ug/L	103.80 ppb	12:24:16
2	U 409.014†	1170.1	3198.8	86.323 ug/L	86.323 ppb	12:23:56
2	V 292.402†	19317.0	21712.1	144.10 ug/L	144.10 ppb	12:23:56
2	Zn 213.857†	56321.9	58717.9	523.47 ug/L	523.47 ppb	12:23:56
2	SiO2†	239728.3	252873.9	16552 ug/L	16552 ppb	12:24:53
3	Sc Radial	5545.7	5545.7	97.9 %		12:23:04
3	Y RADIAL	6037.6	6037.6	98.03 %		12:23:04
3	Al 396.153Radial†	19667.9	20105.4	14858 ug/L	14858 ppb	12:23:04
3	Ca 317.933Radial†	104861.0	107067.5	163720 ug/L	163720 ppb	12:23:04
3	Fe 238.204 Radial†	2121.8	2160.8	21761 ug/L	21761 ppb	12:23:24
3	K 766.490 Radial†	16735.2	14919.9	2686.9 ug/L	2686.9 ppb	12:23:04
3	Mg 279.077 IEC†	245.8	249.2	9264.5 ug/L	9264.5 ppb	12:23:24
3	Na 589.592 Radial†	3924.8	4624.0	1738.0 ug/L	1738.0 ppb	12:23:04
3	Sr 421.552†	60603.1	61885.1	416.24 ug/L	416.24 ppb	12:23:04
3	Sc 361.383	850075.7	850075.7	96.057 %		12:24:22
3	Y 371.029	718524.0	718524.0	96.827 %		12:24:22
3	Ag 328.068†	21595.4	22254.3	107.92 ug/L	107.92 ppb	12:24:22
3	As 188.979†	242.0	281.1	125.95 ug/L	125.95 ppb	12:24:42
3	B 249.677†	6942.2	7751.1	165.10 ug/L	165.10 ppb	12:24:22
3	Ba 233.527†	284436.7	296125.2	2250.2 ug/L	2250.2 ppb	12:24:22
3	Be 313.107†	262577.2	278676.6	105.43 ug/L	105.43 ppb	12:24:22
3	Cd 226.502†	8932.7	9487.3	100.85 ug/L	100.85 ppb	12:24:42
3	Co 228.616†	5154.2	5437.5	104.43 ug/L	104.43 ppb	12:24:42
3	Cr 267.716†	14015.7	14504.1	156.90 ug/L	156.90 ppb	12:24:22
3	Cu 324.752†	387275.6	396405.1	1154.0 ug/L	1154.0 ppb	12:24:22
3	Mn 257.610†	384800.2	400193.3	436.90 ug/L	436.90 ppb	12:24:22
3	Mo 202.031†	1613.6	1659.9	109.67 ug/L	109.67 ppb	12:24:42
3	Ni 231.604†	6598.3	6799.0	161.26 ug/L	161.26 ppb	12:24:42
3	P 214.914†	1298.7	1132.0	476.04 ug/L	476.04 ppb	12:24:42
3	Pb 220.353†	1570.7	1687.7	198.21 ug/L	198.21 ppb	12:24:42
3	S 181.975 Axial†	2636.3	2703.0	3949.5 ug/L	3949.5 ppb	12:24:42
3	Sb 206.836†	336.1	320.3	101.40 ug/L	101.40 ppb	12:24:42
3	Se 196.026†	42.8	68.0	109.69 ug/L	109.69 ppb	12:24:42
3	Si 251.611†	239521.9	248846.5	7608.1 ug/L	7608.1 ppb	12:24:22
3	Sn 189.927†	399.1	411.2	86.858 ug/L	86.858 ppb	12:24:42
3	Ti 334.940†	566732.5	590962.6	964.23 ug/L	964.23 ppb	12:24:22
3	Tl 190.801†	266.4	314.1	99.454 ug/L	99.454 ppb	12:24:42
3	U 409.014†	1337.0	3354.1	90.669 ug/L	90.669 ppb	12:24:22
3	V 292.402†	19785.3	21893.9	145.31 ug/L	145.31 ppb	12:24:22
3	Zn 213.857†	57440.0	58990.7	525.93 ug/L	525.93 ppb	12:24:22
3	SiO2†	239668.3	249018.2	16300 ug/L	16300 ppb	12:24:58

Mean Data: 1201977918|925187|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	844386.2	95.414	%	0.7311				0.77%
Sc Radial	5570.1	98.4	%	0.98				0.99%
Y 371.029	712611.5	96.030	%	0.9420				0.98%
Y RADIAL	6075.5	98.65	%	0.905				0.92%
Ag 328.068†	22230.3	107.79	ug/L	0.400	107.79	ppb	0.400	0.37%
Al 396.153Radial†	20042.0	14811	ug/L	73.5	14811	ppb	73.5	0.50%
As 188.979†	286.1	127.95	ug/L	2.341	127.95	ppb	2.341	1.83%
B 249.677†	7744.3	164.96	ug/L	0.724	164.96	ppb	0.724	0.44%
Ba 233.527†	295788.5	2247.6	ug/L	3.40	2247.6	ppb	3.40	0.15%
Be 313.107†	278594.0	105.40	ug/L	0.257	105.40	ppb	0.257	0.24%
Ca 317.933Radial†	106555.4	162940	ug/L	811.1	162940	ppb	811.1	0.50%
Cd 226.502†	9532.5	101.35	ug/L	0.629	101.35	ppb	0.629	0.62%
Co 228.616†	5471.3	105.09	ug/L	0.690	105.09	ppb	0.690	0.66%
Cr 267.716†	14498.2	156.83	ug/L	0.205	156.83	ppb	0.205	0.13%
Cu 324.752†	395066.6	1150.1	ug/L	8.01	1150.1	ppb	8.01	0.70%
Fe 238.204 Radial†	2152.1	21673	ug/L	215.2	21673	ppb	215.2	0.99%
K 766.490 Radial†	14900.0	2683.4	ug/L	10.07	2683.4	ppb	10.07	0.38%

Mg 279.077 IEC†	249.8	9287.1	ug/L	24.23	9287.1	ppb	24.23	0.26%
Mn 257.610†	399637.1	436.29	ug/L	1.160	436.29	ppb	1.160	0.27%
Mo 202.031†	1680.3	110.99	ug/L	1.230	110.99	ppb	1.230	1.11%
Na 589.592 Radial†	4595.6	1727.4	ug/L	9.94	1727.4	ppb	9.94	0.58%
Ni 231.604†	6841.8	162.28	ug/L	1.009	162.28	ppb	1.009	0.62%
P 214.914†	1137.3	479.88	ug/L	4.155	479.88	ppb	4.155	0.87%
Pb 220.353†	1702.9	199.99	ug/L	2.190	199.99	ppb	2.190	1.10%
S 181.975 Axial†	2719.5	3973.6	ug/L	23.76	3973.6	ppb	23.76	0.60%
Sb 206.836†	318.1	100.75	ug/L	1.410	100.75	ppb	1.410	1.40%
Se 196.026†	72.4	112.01	ug/L	2.042	112.01	ppb	2.042	1.82%
Si 251.611†	248369.3	7593.5	ug/L	29.22	7593.5	ppb	29.22	0.38%
Sn 189.927†	416.4	87.655	ug/L	1.6373	87.655	ppb	1.6373	1.87%
Sr 421.552†	61588.9	414.25	ug/L	1.842	414.25	ppb	1.842	0.44%
Ti 334.940†	590223.1	962.99	ug/L	2.897	962.99	ppb	2.897	0.30%
Tl 190.801†	323.0	101.98	ug/L	2.255	101.98	ppb	2.255	2.21%
U 409.014†	3282.9	88.692	ug/L	2.1994	88.692	ppb	2.1994	2.48%
V 292.402†	21849.5	145.04	ug/L	0.835	145.04	ppb	0.835	0.58%
Zn 213.857†	58910.3	525.21	ug/L	1.517	525.21	ppb	1.517	0.29%
SiO2†	250685.3	16409	ug/L	129.6	16409	ppb	129.6	0.79%

Sequence No.: 17
Sample ID: 1201977919|925187|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 12/9/2009 12:27:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977919|925187|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5609.0	5609.0	99.0	%			12:29:01
1	Y RADIAL	6111.8	6111.8	99.24	%			12:29:01
1	Al 396.153Radial†	22634.6	22874.3	16905	ug/L	16905	ppb	12:29:01
1	Ca 317.933Radial†	127469.4	128687.2	196780	ug/L	196780	ppb	12:29:01
1	Fe 238.204 Radial†	2120.6	2135.2	21503	ug/L	21503	ppb	12:29:21
1	K 766.490 Radial†	16863.6	14856.8	2671.9	ug/L	2671.9	ppb	12:29:01
1	Mg 279.077 IEC†	291.1	292.2	10864	ug/L	10864	ppb	12:29:21
1	Na 589.592 Radial†	4248.8	4905.9	1844.0	ug/L	1844.0	ppb	12:29:01
1	Sr 421.552†	78296.9	79052.4	531.83	ug/L	531.83	ppb	12:29:01
1	Sc 361.383	845253.5	845253.5	95.512	%			12:30:18
1	Y 371.029	707031.0	707031.0	95.278	%			12:30:18
1	Ag 328.068†	21602.3	22389.8	107.98	ug/L	107.98	ppb	12:30:18
1	As 188.979†	261.6	303.1	134.61	ug/L	134.61	ppb	12:30:38
1	B 249.677†	5811.9	6608.8	140.33	ug/L	140.33	ppb	12:30:18
1	Ba 233.527†	204982.3	214626.5	1631.2	ug/L	1631.2	ppb	12:30:18
1	Be 313.107†	259952.6	277488.1	104.93	ug/L	104.93	ppb	12:30:18
1	Cd 226.502†	8879.6	9484.7	100.85	ug/L	100.85	ppb	12:30:38
1	Co 228.616†	5214.1	5530.8	106.05	ug/L	106.05	ppb	12:30:38
1	Cr 267.716†	12414.9	12911.3	139.73	ug/L	139.73	ppb	12:30:18
1	Cu 324.752†	76437.8	73261.0	214.16	ug/L	214.16	ppb	12:30:18
1	Mn 257.610†	396955.2	415204.9	453.16	ug/L	453.16	ppb	12:30:18
1	Mo 202.031†	1645.4	1702.7	112.44	ug/L	112.44	ppb	12:30:38
1	Ni 231.604†	6410.7	6641.9	157.53	ug/L	157.53	ppb	12:30:38
1	P 214.914†	1062.8	892.8	485.49	ug/L	485.49	ppb	12:30:38
1	Pb 220.353†	1560.6	1686.4	199.28	ug/L	199.28	ppb	12:30:38
1	S 181.975 Axial†	3108.0	3212.6	4694.2	ug/L	4694.2	ppb	12:30:38
1	Sb 206.836†	310.7	295.7	93.817	ug/L	93.817	ppb	12:30:38
1	Se 196.026†	50.1	75.9	113.88	ug/L	113.88	ppb	12:30:38
1	Si 251.611†	226619.8	236760.7	7238.5	ug/L	7238.5	ppb	12:30:18
1	Sn 189.927†	363.3	376.1	84.348	ug/L	84.348	ppb	12:30:38
1	Ti 334.940†	545534.0	572133.9	935.51	ug/L	935.51	ppb	12:30:18
1	Tl 190.801†	272.7	322.3	101.71	ug/L	101.71	ppb	12:30:38
1	U 409.014†	829.3	2830.4	76.104	ug/L	76.104	ppb	12:30:18
1	V 292.402†	19199.1	21397.7	142.08	ug/L	142.08	ppb	12:30:18
1	Zn 213.857†	56538.2	58387.7	521.63	ug/L	521.63	ppb	12:30:18
1	SiO2†	227206.7	237394.4	15539	ug/L	15539	ppb	12:31:34
2	Sc Radial	5721.2	5721.2	101	%			12:29:26
2	Y RADIAL	6276.0	6276.0	101.9	%			12:29:26
2	Al 396.153Radial†	23072.7	22859.6	16894	ug/L	16894	ppb	12:29:26
2	Ca 317.933Radial†	129737.4	128407.4	196360	ug/L	196360	ppb	12:29:26
2	Fe 238.204 Radial†	2132.4	2104.8	21198	ug/L	21198	ppb	12:29:46
2	K 766.490 Radial†	17098.3	14755.0	2653.5	ug/L	2653.5	ppb	12:29:26
2	Mg 279.077 IEC†	295.4	290.7	10808	ug/L	10808	ppb	12:29:46
2	Na 589.592 Radial†	4405.5	4976.9	1870.7	ug/L	1870.7	ppb	12:29:26
2	Sr 421.552†	79729.7	78919.8	530.94	ug/L	530.94	ppb	12:29:26
2	Sc 361.383	842173.8	842173.8	95.164	%			12:30:43
2	Y 371.029	706573.4	706573.4	95.216	%			12:30:43
2	Ag 328.068†	21498.2	22363.1	107.76	ug/L	107.76	ppb	12:30:43
2	As 188.979†	264.0	306.7	136.00	ug/L	136.00	ppb	12:31:03
2	B 249.677†	5804.1	6622.9	140.68	ug/L	140.68	ppb	12:30:43
2	Ba 233.527†	203409.0	213758.1	1624.6	ug/L	1624.6	ppb	12:30:43
2	Be 313.107†	259227.1	277721.0	105.01	ug/L	105.01	ppb	12:30:43
2	Cd 226.502†	8884.9	9524.2	101.31	ug/L	101.31	ppb	12:31:03
2	Co 228.616†	5206.9	5543.3	106.30	ug/L	106.30	ppb	12:31:03
2	Cr 267.716†	12419.5	12963.7	140.29	ug/L	140.29	ppb	12:30:43
2	Cu 324.752†	75828.8	72913.7	213.14	ug/L	213.14	ppb	12:30:43
2	Mn 257.610†	393909.7	413524.5	451.30	ug/L	451.30	ppb	12:30:43
2	Mo 202.031†	1654.8	1718.9	113.47	ug/L	113.47	ppb	12:31:03
2	Ni 231.604†	6434.6	6691.5	158.71	ug/L	158.71	ppb	12:31:03

2	P 214.914†	1067.7	902.0	491.37	ug/L	491.37 ppb	12:31:03
2	Pb 220.353†	1576.3	1708.9	201.93	ug/L	201.93 ppb	12:31:03
2	S 181.975 Axial†	3125.3	3242.6	4738.1	ug/L	4738.1 ppb	12:31:03
2	Sb 206.836†	304.8	290.7	92.192	ug/L	92.192 ppb	12:31:03
2	Se 196.026†	54.1	80.3	115.58	ug/L	115.58 ppb	12:31:03
2	Si 251.611†	224645.5	235553.7	7201.5	ug/L	7201.5 ppb	12:30:43
2	Sn 189.927†	361.2	375.3	84.167	ug/L	84.167 ppb	12:31:03
2	Ti 334.940†	541800.4	570299.3	932.52	ug/L	932.52 ppb	12:30:43
2	Tl 190.801†	263.7	313.9	99.278	ug/L	99.278 ppb	12:31:03
2	U 409.014†	736.7	2736.3	73.511	ug/L	73.511 ppb	12:30:43
2	V 292.402†	19123.1	21391.4	142.10	ug/L	142.10 ppb	12:30:43
2	Zn 213.857†	56133.2	58178.6	519.77	ug/L	519.77 ppb	12:30:43
2	SiO2†	227612.4	238690.6	15624	ug/L	15624 ppb	12:31:40
3	Sc Radial	5657.1	5657.1	99.9	%		12:29:51
3	Y RADIAL	6186.5	6186.5	100.5	%		12:29:51
3	Al 396.153Radial†	22938.9	22984.4	16986	ug/L	16986 ppb	12:29:51
3	Ca 317.933Radial†	128456.4	128579.7	196620	ug/L	196620 ppb	12:29:51
3	Fe 238.204 Radial†	2108.5	2104.8	21197	ug/L	21197 ppb	12:30:11
3	K 766.490 Radial†	16921.2	14769.5	2656.0	ug/L	2656.0 ppb	12:29:51
3	Mg 279.077 IEC†	287.9	286.4	10651	ug/L	10651 ppb	12:30:11
3	Na 589.592 Radial†	4380.3	5001.1	1879.8	ug/L	1879.8 ppb	12:29:51
3	Sr 421.552†	79131.2	79214.6	532.92	ug/L	532.92 ppb	12:29:51
3	Sc 361.383	855830.3	855830.3	96.707	%		12:31:09
3	Y 371.029	717320.8	717320.8	96.665	%		12:31:09
3	Ag 328.068†	21866.8	22383.8	107.86	ug/L	107.86 ppb	12:31:09
3	As 188.979†	256.8	294.8	131.16	ug/L	131.16 ppb	12:31:29
3	B 249.677†	5933.3	6659.2	141.47	ug/L	141.47 ppb	12:31:09
3	Ba 233.527†	207514.0	214592.1	1630.9	ug/L	1630.9 ppb	12:31:09
3	Be 313.107†	264071.4	278383.7	105.26	ug/L	105.26 ppb	12:31:09
3	Cd 226.502†	8938.4	9430.6	100.29	ug/L	100.29 ppb	12:31:29
3	Co 228.616†	5249.5	5500.0	105.45	ug/L	105.45 ppb	12:31:29
3	Cr 267.716†	12582.5	12924.0	139.86	ug/L	139.86 ppb	12:31:09
3	Cu 324.752†	77162.6	73021.4	213.45	ug/L	213.45 ppb	12:31:09
3	Mn 257.610†	401574.7	414845.4	452.74	ug/L	452.74 ppb	12:31:09
3	Mo 202.031†	1642.5	1678.5	110.84	ug/L	110.84 ppb	12:31:29
3	Ni 231.604†	6442.0	6591.3	156.33	ug/L	156.33 ppb	12:31:29
3	P 214.914†	1071.8	888.4	483.25	ug/L	483.25 ppb	12:31:29
3	Pb 220.353†	1596.7	1703.6	201.33	ug/L	201.33 ppb	12:31:29
3	S 181.975 Axial†	3117.5	3182.2	4649.7	ug/L	4649.7 ppb	12:31:29
3	Sb 206.836†	313.5	294.6	93.418	ug/L	93.418 ppb	12:31:29
3	Se 196.026†	45.0	69.9	109.41	ug/L	109.41 ppb	12:31:29
3	Si 251.611†	228644.3	235922.0	7212.8	ug/L	7212.8 ppb	12:31:09
3	Sn 189.927†	374.0	382.4	85.400	ug/L	85.400 ppb	12:31:29
3	Ti 334.940†	551951.1	571710.8	934.82	ug/L	934.82 ppb	12:31:09
3	Tl 190.801†	275.1	321.3	101.41	ug/L	101.41 ppb	12:31:29
3	U 409.014†	787.4	2776.4	74.634	ug/L	74.634 ppb	12:31:09
3	V 292.402†	19491.4	21451.6	142.47	ug/L	142.47 ppb	12:31:09
3	Zn 213.857†	57174.6	58314.2	521.01	ug/L	521.01 ppb	12:31:09
3	SiO2†	227767.7	235034.7	15384	ug/L	15384 ppb	12:31:45

Mean Data: 1201977919|925187|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	847752.5	95.794	%	0.8094				0.84%
Sc Radial	5662.4	100.0	%	0.99				0.99%
Y 371.029	710308.4	95.720	%	0.8190				0.86%
Y RADIAL	6191.4	100.5	%	1.33				1.33%
Ag 328.068†	22378.9	107.87	ug/L	0.106	107.87	ppb	0.106	0.10%
Al 396.153Radial†	22906.1	16929	ug/L	50.5	16929	ppb	50.5	0.30%
As 188.979†	301.5	133.92	ug/L	2.489	133.92	ppb	2.489	1.86%
B 249.677†	6630.3	140.82	ug/L	0.582	140.82	ppb	0.582	0.41%
Ba 233.527†	214325.6	1628.9	ug/L	3.74	1628.9	ppb	3.74	0.23%
Be 313.107†	277864.3	105.07	ug/L	0.173	105.07	ppb	0.173	0.16%
Ca 317.933Radial†	128558.1	196590	ug/L	215.9	196590	ppb	215.9	0.11%
Cd 226.502†	9479.8	100.82	ug/L	0.509	100.82	ppb	0.509	0.51%
Co 228.616†	5524.7	105.93	ug/L	0.436	105.93	ppb	0.436	0.41%
Cr 267.716†	12933.0	139.96	ug/L	0.293	139.96	ppb	0.293	0.21%
Cu 324.752†	73065.4	213.58	ug/L	0.526	213.58	ppb	0.526	0.25%
Fe 238.204 Radial†	2114.9	21299	ug/L	176.6	21299	ppb	176.6	0.83%
K 766.490 Radial†	14793.8	2660.5	ug/L	9.97	2660.5	ppb	9.97	0.37%

Mg 279.077 IEC†	289.8	10774	ug/L	110.3	10774	ppb	110.3	1.02%
Mn 257.610†	414524.9	452.40	ug/L	0.974	452.40	ppb	0.974	0.22%
Mo 202.031†	1700.0	112.25	ug/L	1.326	112.25	ppb	1.326	1.18%
Na 589.592 Radial†	4961.3	1864.8	ug/L	18.60	1864.8	ppb	18.60	1.00%
Ni 231.604†	6641.5	157.52	ug/L	1.188	157.52	ppb	1.188	0.75%
P 214.914†	894.4	486.70	ug/L	4.191	486.70	ppb	4.191	0.86%
Pb 220.353†	1699.7	200.84	ug/L	1.392	200.84	ppb	1.392	0.69%
S 181.975 Axial†	3212.5	4694.0	ug/L	44.23	4694.0	ppb	44.23	0.94%
Sb 206.836†	293.6	93.142	ug/L	0.8466	93.142	ppb	0.8466	0.91%
Se 196.026†	75.4	112.96	ug/L	3.187	112.96	ppb	3.187	2.82%
Si 251.611†	236078.8	7217.6	ug/L	18.92	7217.6	ppb	18.92	0.26%
Sn 189.927†	377.9	84.639	ug/L	0.6658	84.639	ppb	0.6658	0.79%
Sr 421.552†	79062.3	531.90	ug/L	0.996	531.90	ppb	0.996	0.19%
Ti 334.940†	571381.3	934.28	ug/L	1.564	934.28	ppb	1.564	0.17%
Tl 190.801†	319.2	100.80	ug/L	1.327	100.80	ppb	1.327	1.32%
U 409.014†	2781.0	74.750	ug/L	1.3003	74.750	ppb	1.3003	1.74%
V 292.402†	21413.6	142.22	ug/L	0.215	142.22	ppb	0.215	0.15%
Zn 213.857†	58293.5	520.80	ug/L	0.946	520.80	ppb	0.946	0.18%
SiO2†	237039.9	15516	ug/L	121.3	15516	ppb	121.3	0.78%

Sequence No.: 18
Sample ID: 1201977917|925187|25
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 12/9/2009 12:33:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977917|925187|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5577.8	5577.8	98.5	%			12:35:48
1	Y RADIAL	6065.9	6065.9	98.49	%			12:35:48
1	Al 396.153Radial†	3787.0	3865.4	2857.5	ug/L	2857.5	ppb	12:35:48
1	Ca 317.933Radial†	25385.2	25756.8	39386	ug/L	39386	ppb	12:35:48
1	Fe 238.204 Radial†	431.9	432.5	4355.0	ug/L	4355.0	ppb	12:36:08
1	K 766.490 Radial†	3515.8	1399.4	249.26	ug/L	249.26	ppb	12:35:48
1	Mg 279.077 IEC†	50.8	49.8	1850.4	ug/L	1850.4	ppb	12:36:08
1	Na 589.592 Radial†	-323.0	288.0	108.25	ug/L	108.25	ppb	12:35:48
1	Sr 421.552†	7742.6	7857.9	52.681	ug/L	52.681	ppb	12:35:48
1	Sc 361.383	904790.2	904790.2	102.24	%			12:37:05
1	Y 371.029	752342.8	752342.8	101.38	%			12:37:05
1	Ag 328.068†	33.6	-194.7	-0.0499	ug/L	-0.0499	ppb	12:37:05
1	As 188.979†	-13.9	15.6	8.4564	ug/L	8.4564	ppb	12:37:25
1	B 249.677†	352.0	868.2	18.261	ug/L	18.261	ppb	12:37:25
1	Ba 233.527†	47201.6	46179.8	350.92	ug/L	350.92	ppb	12:37:05
1	Be 313.107†	-6040.6	-588.0	0.1153	ug/L	0.1153	ppb	12:37:05
1	Cd 226.502†	-129.4	61.2	0.3003	ug/L	0.3003	ppb	12:37:25
1	Co 228.616†	50.5	121.1	2.0829	ug/L	2.0829	ppb	12:37:25
1	Cr 267.716†	520.4	422.0	4.6432	ug/L	4.6432	ppb	12:37:25
1	Cu 324.752†	111725.8	102510.0	298.35	ug/L	298.35	ppb	12:37:05
1	Mn 257.610†	70057.3	68119.4	74.427	ug/L	74.427	ppb	12:37:05
1	Mo 202.031†	15.5	-4.8	-0.0064	ug/L	-0.0064	ppb	12:37:25
1	Ni 231.604†	4862.6	4686.0	111.19	ug/L	111.19	ppb	12:37:25
1	P 214.914†	430.0	200.7	68.355	ug/L	68.355	ppb	12:37:25
1	Pb 220.353†	122.2	172.0	20.160	ug/L	20.160	ppb	12:37:25
1	S 181.975 Axial†	498.2	445.8	651.29	ug/L	651.29	ppb	12:37:25
1	Sb 206.836†	40.4	9.9	2.0366	ug/L	2.0366	ppb	12:37:25
1	Se 196.026†	-40.7	-16.4	3.9768	ug/L	3.9768	ppb	12:37:25
1	Si 251.611†	69714.9	67679.9	2070.1	ug/L	2070.1	ppb	12:37:05
1	Sn 189.927†	-206.5	-206.2	-30.743	ug/L	-30.743	ppb	12:37:25
1	Ti 334.940†	106368.1	105003.3	171.88	ug/L	171.88	ppb	12:37:05
1	Tl 190.801†	-56.8	-18.7	-3.5910	ug/L	-3.5910	ppb	12:37:25
1	U 409.014†	-2229.5	-218.5	-6.6623	ug/L	-6.6623	ppb	12:37:05
1	V 292.402†	63.7	1358.8	8.3469	ug/L	8.3469	ppb	12:37:25
1	Zn 213.857†	10089.9	9061.6	79.981	ug/L	79.981	ppb	12:37:25
1	SiO2†	69185.9	67181.7	4399.4	ug/L	4399.4	ppb	12:38:22
2	Sc Radial	5613.7	5613.7	99.1	%			12:36:13
2	Y RADIAL	6070.3	6070.3	98.56	%			12:36:13
2	Al 396.153Radial†	3735.1	3788.4	2800.6	ug/L	2800.6	ppb	12:36:13
2	Ca 317.933Radial†	25026.8	25230.5	38582	ug/L	38582	ppb	12:36:13
2	Fe 238.204 Radial†	428.2	425.9	4289.0	ug/L	4289.0	ppb	12:36:33
2	K 766.490 Radial†	3486.4	1346.9	239.81	ug/L	239.81	ppb	12:36:13
2	Mg 279.077 IEC†	50.5	49.1	1826.5	ug/L	1826.5	ppb	12:36:33
2	Na 589.592 Radial†	-316.0	297.2	111.70	ug/L	111.70	ppb	12:36:13
2	Sr 421.552†	7639.7	7703.9	51.648	ug/L	51.648	ppb	12:36:13
2	Sc 361.383	897872.6	897872.6	101.46	%			12:37:31
2	Y 371.029	747765.0	747765.0	100.77	%			12:37:31
2	Ag 328.068†	4.3	-223.4	-0.1894	ug/L	-0.1894	ppb	12:37:31
2	As 188.979†	-18.5	11.0	6.5682	ug/L	6.5682	ppb	12:37:51
2	B 249.677†	346.6	865.5	18.212	ug/L	18.212	ppb	12:37:51
2	Ba 233.527†	46658.6	46000.3	349.55	ug/L	349.55	ppb	12:37:31
2	Be 313.107†	-6044.3	-637.2	0.0959	ug/L	0.0959	ppb	12:37:31
2	Cd 226.502†	-119.0	70.6	0.4086	ug/L	0.4086	ppb	12:37:51
2	Co 228.616†	59.2	130.1	2.2594	ug/L	2.2594	ppb	12:37:51
2	Cr 267.716†	510.7	416.4	4.5819	ug/L	4.5819	ppb	12:37:51
2	Cu 324.752†	110622.9	102264.9	297.64	ug/L	297.64	ppb	12:37:31
2	Mn 257.610†	69194.4	67796.8	74.071	ug/L	74.071	ppb	12:37:31
2	Mo 202.031†	22.7	2.4	0.4575	ug/L	0.4575	ppb	12:37:51
2	Ni 231.604†	4834.7	4695.1	111.41	ug/L	111.41	ppb	12:37:51

2	P 214.914†	429.8	203.7	70.282 ug/L	70.282 ppb	12:37:51
2	Pb 220.353†	129.1	179.8	21.059 ug/L	21.059 ppb	12:37:51
2	S 181.975 Axial†	496.9	448.3	654.96 ug/L	654.96 ppb	12:37:51
2	Sb 206.836†	34.6	4.5	0.2755 ug/L	0.2755 ppb	12:37:51
2	Se 196.026†	-41.6	-17.6	3.0730 ug/L	3.0730 ppb	12:37:51
2	Si 251.611†	68822.4	67325.6	2059.2 ug/L	2059.2 ppb	12:37:31
2	Sn 189.927†	-212.0	-213.2	-32.007 ug/L	-32.007 ppb	12:37:51
2	Ti 334.940†	105185.4	104639.2	171.25 ug/L	171.25 ppb	12:37:31
2	Tl 190.801†	-56.3	-18.7	-3.5793 ug/L	-3.5793 ppb	12:37:51
2	U 409.014†	-2285.9	-290.9	-8.6748 ug/L	-8.6748 ppb	12:37:31
2	V 292.402†	86.6	1381.9	8.5153 ug/L	8.5153 ppb	12:37:51
2	Zn 213.857†	10053.8	9102.1	80.351 ug/L	80.351 ppb	12:37:51
2	SiO2†	68349.6	66878.8	4379.5 ug/L	4379.5 ppb	12:38:27
3	Sc Radial	5727.7	5727.7	101 %		12:36:38
3	Y RADIAL	6198.3	6198.3	100.6 %		12:36:38
3	Al 396.153Radial†	3815.2	3792.7	2803.7 ug/L	2803.7 ppb	12:36:38
3	Ca 317.933Radial†	25475.5	25171.6	38492 ug/L	38492 ppb	12:36:38
3	Fe 238.204 Radial†	425.8	415.0	4179.1 ug/L	4179.1 ppb	12:36:58
3	K 766.490 Radial†	3454.0	1244.9	221.30 ug/L	221.30 ppb	12:36:38
3	Mg 279.077 IEC†	50.2	47.9	1778.8 ug/L	1778.8 ppb	12:36:58
3	Na 589.592 Radial†	-311.2	308.2	115.86 ug/L	115.86 ppb	12:36:38
3	Sr 421.552†	7743.8	7653.4	51.308 ug/L	51.308 ppb	12:36:38
3	Sc 361.383	898844.3	898844.3	101.57 %		12:37:56
3	Y 371.029	749514.2	749514.2	101.00 %		12:37:56
3	Ag 328.068†	1.5	-226.1	-0.2356 ug/L	-0.2356 ppb	12:37:56
3	As 188.979†	-12.1	17.3	9.1324 ug/L	9.1324 ppb	12:38:16
3	B 249.677†	344.5	863.1	18.173 ug/L	18.173 ppb	12:38:16
3	Ba 233.527†	46571.3	45864.6	348.52 ug/L	348.52 ppb	12:37:56
3	Be 313.107†	-6037.5	-624.0	0.1007 ug/L	0.1007 ppb	12:37:56
3	Cd 226.502†	-119.9	69.8	0.4114 ug/L	0.4114 ppb	12:38:16
3	Co 228.616†	55.4	126.3	2.1883 ug/L	2.1883 ppb	12:38:16
3	Cr 267.716†	514.9	419.9	4.6185 ug/L	4.6185 ppb	12:38:16
3	Cu 324.752†	110787.4	102309.0	297.76 ug/L	297.76 ppb	12:37:56
3	Mn 257.610†	69226.6	67754.9	74.015 ug/L	74.015 ppb	12:37:56
3	Mo 202.031†	25.4	5.0	0.6244 ug/L	0.6244 ppb	12:38:16
3	Ni 231.604†	4840.9	4696.0	111.43 ug/L	111.43 ppb	12:38:16
3	P 214.914†	413.1	186.8	60.346 ug/L	60.346 ppb	12:38:16
3	Pb 220.353†	118.8	169.5	19.870 ug/L	19.870 ppb	12:38:16
3	S 181.975 Axial†	509.4	460.1	672.18 ug/L	672.18 ppb	12:38:16
3	Sb 206.836†	40.6	10.4	2.2367 ug/L	2.2367 ppb	12:38:16
3	Se 196.026†	-31.0	-7.1	8.9946 ug/L	8.9946 ppb	12:38:16
3	Si 251.611†	68919.8	67348.1	2059.9 ug/L	2059.9 ppb	12:37:56
3	Sn 189.927†	-198.1	-199.3	-29.664 ug/L	-29.664 ppb	12:38:16
3	Ti 334.940†	105295.4	104635.4	171.24 ug/L	171.24 ppb	12:37:56
3	Tl 190.801†	-43.2	-5.7	0.1541 ug/L	0.1541 ppb	12:38:16
3	U 409.014†	-2323.1	-325.1	-9.6166 ug/L	-9.6166 ppb	12:37:56
3	V 292.402†	64.1	1359.6	8.3816 ug/L	8.3816 ppb	12:38:16
3	Zn 213.857†	10070.1	9107.4	80.411 ug/L	80.411 ppb	12:38:16
3	SiO2†	69335.6	67776.7	4438.3 ug/L	4438.3 ppb	12:38:32

Mean Data: 1201977917|925187|25

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900502.4	101.75	%	0.423				0.42%
Sc Radial	5639.7	99.6	%	1.38				1.39%
Y 371.029	749874.0	101.05	%	0.311				0.31%
Y RADIAL	6111.5	99.23	%	1.221				1.23%
Ag 328.068†	-214.7	-0.1583	ug/L	0.09668	-0.1583	ppb	0.09668	61.08%
Al 396.153Radial†	3815.5	2820.6	ug/L	32.00	2820.6	ppb	32.00	1.13%
As 188.979†	14.7	8.0523	ug/L	1.32901	8.0523	ppb	1.32901	16.50%
B 249.677†	865.6	18.215	ug/L	0.0439	18.215	ppb	0.0439	0.24%
Ba 233.527†	46014.9	349.66	ug/L	1.204	349.66	ppb	1.204	0.34%
Be 313.107†	-616.4	0.1040	ug/L	0.01010	0.1040	ppb	0.01010	9.72%
Ca 317.933Radial†	25386.3	38820	ug/L	492.7	38820	ppb	492.7	1.27%
Cd 226.502†	67.2	0.3734	ug/L	0.06332	0.3734	ppb	0.06332	16.96%
Co 228.616†	125.8	2.1769	ug/L	0.08883	2.1769	ppb	0.08883	4.08%
Cr 267.716†	419.4	4.6145	ug/L	0.03083	4.6145	ppb	0.03083	0.67%
Cu 324.752†	102361.3	297.92	ug/L	0.383	297.92	ppb	0.383	0.13%
Fe 238.204 Radial†	424.5	4274.4	ug/L	88.87	4274.4	ppb	88.87	2.08%
K 766.490 Radial†	1330.4	236.79	ug/L	14.222	236.79	ppb	14.222	6.01%

Mg 279.077 IEC†	48.9	1818.6	ug/L	36.49	1818.6	ppb	36.49	2.01%
Mn 257.610†	67890.4	74.171	ug/L	0.2237	74.171	ppb	0.2237	0.30%
Mo 202.031†	0.8	0.3585	ug/L	0.32684	0.3585	ppb	0.32684	91.17%
Na 589.592 Radial†	297.8	111.94	ug/L	3.810	111.94	ppb	3.810	3.40%
Ni 231.604†	4692.4	111.34	ug/L	0.132	111.34	ppb	0.132	0.12%
P 214.914†	197.0	66.328	ug/L	5.2692	66.328	ppb	5.2692	7.94%
Pb 220.353†	173.8	20.363	ug/L	0.6201	20.363	ppb	0.6201	3.04%
S 181.975 Axial†	451.4	659.48	ug/L	11.156	659.48	ppb	11.156	1.69%
Sb 206.836†	8.3	1.5162	ug/L	1.07918	1.5162	ppb	1.07918	71.17%
Se 196.026†	-13.7	5.3481	ug/L	3.19012	5.3481	ppb	3.19012	59.65%
Si 251.611†	67451.2	2063.1	ug/L	6.07	2063.1	ppb	6.07	0.29%
Sn 189.927†	-206.2	-30.804	ug/L	1.1728	-30.804	ppb	1.1728	3.81%
Sr 421.552†	7738.4	51.879	ug/L	0.7147	51.879	ppb	0.7147	1.38%
Ti 334.940†	104759.3	171.46	ug/L	0.367	171.46	ppb	0.367	0.21%
Tl 190.801†	-14.4	-2.3387	ug/L	2.15887	-2.3387	ppb	2.15887	92.31%
U 409.014†	-278.2	-8.3179	ug/L	1.50912	-8.3179	ppb	1.50912	18.14%
V 292.402†	1366.8	8.4146	ug/L	0.08895	8.4146	ppb	0.08895	1.06%
Zn 213.857†	9090.4	80.248	ug/L	0.2331	80.248	ppb	0.2331	0.29%
SiO2†	67279.1	4405.7	ug/L	29.91	4405.7	ppb	29.91	0.68%

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 12:40:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5623.4	5623.4	99.3	%			12:42:34
1	Y RADIAL	6077.8	6077.8	98.69	%			12:42:34
1	Al 396.153Radial†	6513.5	6580.2	4843.3	ug/L	4843.3	ppb	12:42:34
1	Ca 317.933Radial†	3257.6	3263.1	4989.8	ug/L	4989.8	ppb	12:42:54
1	Fe 238.204 Radial†	505.2	502.7	5077.6	ug/L	5077.6	ppb	12:42:54
1	K 766.490 Radial†	29555.9	27595.6	4999.8	ug/L	4999.8	ppb	12:42:34
1	Mg 279.077 IEC†	139.8	139.0	5183.2	ug/L	5183.2	ppb	12:42:54
1	Na 589.592 Radial†	25670.0	26468.4	9948.7	ug/L	9948.7	ppb	12:42:34
1	Sr 421.552†	75185.9	75716.8	511.09	ug/L	511.09	ppb	12:42:34
1	Sc 361.383	903498.7	903498.7	102.09	%			12:43:52
1	Y 371.029	744787.9	744787.9	100.37	%			12:43:52
1	Ag 328.068†	110161.8	107675.3	500.85	ug/L	500.85	ppb	12:43:57
1	As 188.979†	1172.3	1177.5	484.78	ug/L	484.78	ppb	12:44:17
1	B 249.677†	22188.6	22257.5	481.22	ug/L	481.22	ppb	12:43:57
1	Ba 233.527†	65645.2	64311.2	489.72	ug/L	489.72	ppb	12:43:57
1	Be 313.107†	1318453.3	1296738.5	482.83	ug/L	482.83	ppb	12:43:52
1	Cd 226.502†	46250.3	45489.8	493.32	ug/L	493.32	ppb	12:43:57
1	Co 228.616†	25747.3	25291.1	491.08	ug/L	491.08	ppb	12:43:57
1	Cr 267.716†	46385.2	45347.1	489.38	ug/L	489.38	ppb	12:43:57
1	Cu 324.752†	175722.3	165350.4	481.15	ug/L	481.15	ppb	12:43:57
1	Mn 257.610†	455771.8	446022.8	485.12	ug/L	485.12	ppb	12:43:52
1	Mo 202.031†	7721.2	7542.9	491.70	ug/L	491.70	ppb	12:44:17
1	Ni 231.604†	21195.8	20691.1	490.65	ug/L	490.65	ppb	12:43:57
1	P 214.914†	4342.3	4033.3	2323.4	ug/L	2323.4	ppb	12:44:17
1	Pb 220.353†	4173.4	4140.3	485.50	ug/L	485.50	ppb	12:44:17
1	S 181.975 Axial†	727.4	671.0	980.23	ug/L	980.23	ppb	12:44:17
1	Sb 206.836†	1584.4	1522.3	501.26	ug/L	501.26	ppb	12:44:17
1	Se 196.026†	802.4	809.4	500.42	ug/L	500.42	ppb	12:44:17
1	Si 251.611†	82681.3	80477.9	2449.7	ug/L	2449.7	ppb	12:43:57
1	Sn 189.927†	2981.0	2915.6	493.83	ug/L	493.83	ppb	12:44:17
1	Ti 334.940†	311817.6	306388.8	495.41	ug/L	495.41	ppb	12:43:57
1	Tl 190.801†	1681.7	1684.0	485.82	ug/L	485.82	ppb	12:44:17
1	U 409.014†	15806.2	17444.3	485.79	ug/L	485.79	ppb	12:43:57
1	V 292.402†	71937.4	71758.8	490.98	ug/L	490.98	ppb	12:43:57
1	Zn 213.857†	56469.8	54504.6	486.00	ug/L	486.00	ppb	12:43:57
1	SiO2†	81805.1	79638.8	5189.4	ug/L	5189.4	ppb	12:45:24
2	Sc Radial	5743.6	5743.6	101	%			12:42:59
2	Y RADIAL	6228.6	6228.6	101.1	%			12:42:59
2	Al 396.153Radial†	6551.0	6479.8	4769.1	ug/L	4769.1	ppb	12:42:59
2	Ca 317.933Radial†	3239.4	3176.4	4857.3	ug/L	4857.3	ppb	12:43:19
2	Fe 238.204 Radial†	501.7	488.6	4935.3	ug/L	4935.3	ppb	12:43:19
2	K 766.490 Radial†	29650.2	27065.4	4903.6	ug/L	4903.6	ppb	12:42:59
2	Mg 279.077 IEC†	140.2	136.5	5089.2	ug/L	5089.2	ppb	12:43:19
2	Na 589.592 Radial†	25780.5	26036.0	9786.2	ug/L	9786.2	ppb	12:42:59
2	Sr 421.552†	75852.1	74788.2	504.82	ug/L	504.82	ppb	12:42:59
2	Sc 361.383	899867.3	899867.3	101.68	%			12:44:23
2	Y 371.029	742925.5	742925.5	100.12	%			12:44:23
2	Ag 328.068†	108320.2	106299.7	494.43	ug/L	494.43	ppb	12:44:28
2	As 188.979†	1173.2	1183.0	486.92	ug/L	486.92	ppb	12:44:48
2	B 249.677†	21762.2	21925.9	474.06	ug/L	474.06	ppb	12:44:28
2	Ba 233.527†	64286.9	63234.8	481.53	ug/L	481.53	ppb	12:44:28
2	Be 313.107†	1313584.3	1297161.7	482.97	ug/L	482.97	ppb	12:44:23
2	Cd 226.502†	45106.5	44547.8	483.11	ug/L	483.11	ppb	12:44:28
2	Co 228.616†	25148.4	24803.9	481.64	ug/L	481.64	ppb	12:44:28
2	Cr 267.716†	45515.5	44675.1	482.13	ug/L	482.13	ppb	12:44:28
2	Cu 324.752†	172526.6	162902.2	474.02	ug/L	474.02	ppb	12:44:28
2	Mn 257.610†	453581.6	445670.3	484.72	ug/L	484.72	ppb	12:44:23
2	Mo 202.031†	7703.1	7555.6	492.52	ug/L	492.52	ppb	12:44:48
2	Ni 231.604†	20757.0	20343.3	482.40	ug/L	482.40	ppb	12:44:28

2	P 214.914†	4336.2	4044.4	2331.2 ug/L	2331.2 ppb	12:44:48
2	Pb 220.353†	4157.5	4141.2	485.61 ug/L	485.61 ppb	12:44:48
2	S 181.975 Axial†	723.3	669.8	978.48 ug/L	978.48 ppb	12:44:48
2	Sb 206.836†	1561.9	1506.4	496.31 ug/L	496.31 ppb	12:44:48
2	Se 196.026†	801.3	811.5	501.24 ug/L	501.24 ppb	12:44:48
2	Si 251.611†	81032.0	79182.8	2410.1 ug/L	2410.1 ppb	12:44:28
2	Sn 189.927†	2973.9	2920.5	494.65 ug/L	494.65 ppb	12:44:48
2	Ti 334.940†	305984.4	301884.6	488.12 ug/L	488.12 ppb	12:44:28
2	Tl 190.801†	1683.0	1692.0	488.10 ug/L	488.10 ppb	12:44:48
2	U 409.014†	15508.3	17213.8	479.38 ug/L	479.38 ppb	12:44:28
2	V 292.402†	70802.1	70926.7	485.40 ug/L	485.40 ppb	12:44:28
2	Zn 213.857†	55316.4	53593.5	477.89 ug/L	477.89 ppb	12:44:28
2	SiO2†	81973.0	80127.4	5221.4 ug/L	5221.4 ppb	12:45:29
3	Sc Radial	5696.3	5696.3	101 %		12:43:24
3	Y RADIAL	6125.3	6125.3	99.46 %		12:43:24
3	Al 396.153Radial†	6521.7	6504.3	4787.1 ug/L	4787.1 ppb	12:43:24
3	Ca 317.933Radial†	3284.9	3248.2	4967.1 ug/L	4967.1 ppb	12:43:44
3	Fe 238.204 Radial†	512.6	503.6	5086.3 ug/L	5086.3 ppb	12:43:44
3	K 766.490 Radial†	29631.7	27289.9	4944.3 ug/L	4944.3 ppb	12:43:24
3	Mg 279.077 IEC†	138.1	135.6	5054.2 ug/L	5054.2 ppb	12:43:44
3	Na 589.592 Radial†	25615.0	26082.7	9803.7 ug/L	9803.7 ppb	12:43:24
3	Sr 421.552†	75260.6	74821.6	505.04 ug/L	505.04 ppb	12:43:24
3	Sc 361.383	894001.1	894001.1	101.02 %		12:44:54
3	Y 371.029	739096.7	739096.7	99.599 %		12:44:54
3	Ag 328.068†	108862.3	107535.3	500.21 ug/L	500.21 ppb	12:44:59
3	As 188.979†	1163.5	1181.0	486.19 ug/L	486.19 ppb	12:45:19
3	B 249.677†	21982.2	22284.0	481.80 ug/L	481.80 ppb	12:44:59
3	Ba 233.527†	64624.5	63983.9	487.24 ug/L	487.24 ppb	12:44:59
3	Be 313.107†	1309109.3	1301208.5	484.49 ug/L	484.49 ppb	12:44:54
3	Cd 226.502†	45419.6	45148.7	489.62 ug/L	489.62 ppb	12:44:59
3	Co 228.616†	25349.0	25164.7	488.64 ug/L	488.64 ppb	12:44:59
3	Cr 267.716†	45712.0	45163.4	487.41 ug/L	487.41 ppb	12:44:59
3	Cu 324.752†	173656.7	165134.3	480.52 ug/L	480.52 ppb	12:44:59
3	Mn 257.610†	450513.2	445559.9	484.62 ug/L	484.62 ppb	12:44:54
3	Mo 202.031†	7706.4	7608.6	495.98 ug/L	495.98 ppb	12:45:19
3	Ni 231.604†	20950.4	20668.7	490.12 ug/L	490.12 ppb	12:44:59
3	P 214.914†	4339.3	4075.5	2348.6 ug/L	2348.6 ppb	12:45:19
3	Pb 220.353†	4118.7	4129.7	484.25 ug/L	484.25 ppb	12:45:19
3	S 181.975 Axial†	730.4	681.6	995.70 ug/L	995.70 ppb	12:45:19
3	Sb 206.836†	1571.6	1526.1	502.70 ug/L	502.70 ppb	12:45:19
3	Se 196.026†	812.2	827.5	511.24 ug/L	511.24 ppb	12:45:19
3	Si 251.611†	81584.8	80252.9	2442.8 ug/L	2442.8 ppb	12:44:59
3	Sn 189.927†	2977.7	2943.3	498.53 ug/L	498.53 ppb	12:45:19
3	Ti 334.940†	308067.8	305921.5	494.65 ug/L	494.65 ppb	12:44:59
3	Tl 190.801†	1678.7	1698.6	489.99 ug/L	489.99 ppb	12:45:19
3	U 409.014†	15681.2	17485.0	486.93 ug/L	486.93 ppb	12:44:59
3	V 292.402†	71263.8	71840.6	491.60 ug/L	491.60 ppb	12:44:59
3	Zn 213.857†	55564.5	54196.1	483.24 ug/L	483.24 ppb	12:44:59
3	SiO2†	82256.0	80936.4	5274.2 ug/L	5274.2 ppb	12:45:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	899122.4	101.60	%	0.542				0.53%
Sc Radial	5687.8	100	%	1.1				1.07%
Y 371.029	742270.0	100.03	%	0.391				0.39%
Y RADIAL	6143.9	99.76	%	1.252				1.25%
Ag 328.068†	107170.1	498.50	ug/L	3.536	498.50	ppb	3.536	0.71%
QC value within limits for Ag 328.068 Recovery = 99.70%								
Al 396.153Radial†	6521.4	4799.8	ug/L	38.72	4799.8	ppb	38.72	0.81%
QC value within limits for Al 396.153Radial Recovery = 96.00%								
As 188.979†	1180.5	485.96	ug/L	1.090	485.96	ppb	1.090	0.22%
QC value within limits for As 188.979 Recovery = 97.19%								
B 249.677†	22155.8	479.03	ug/L	4.309	479.03	ppb	4.309	0.90%
QC value within limits for B 249.677 Recovery = 95.81%								
Ba 233.527†	63843.3	486.16	ug/L	4.201	486.16	ppb	4.201	0.86%
QC value within limits for Ba 233.527 Recovery = 97.23%								
Be 313.107†	1298369.6	483.43	ug/L	0.920	483.43	ppb	0.920	0.19%
QC value within limits for Be 313.107 Recovery = 96.69%								
Ca 317.933Radial†	3229.2	4938.0	ug/L	70.86	4938.0	ppb	70.86	1.43%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.76%
Cd 226.502†            45062.1      488.68 ug/L         5.169      488.68 ppb          5.169   1.06%
   QC value within limits for Cd 226.502  Recovery = 97.74%
Co 228.616†            25086.6      487.12 ug/L         4.898      487.12 ppb          4.898   1.01%
   QC value within limits for Co 228.616  Recovery = 97.42%
Cr 267.716†            45061.9      486.31 ug/L         3.748      486.31 ppb          3.748   0.77%
   QC value within limits for Cr 267.716  Recovery = 97.26%
Cu 324.752†           164462.3      478.56 ug/L         3.946      478.56 ppb          3.946   0.82%
   QC value within limits for Cu 324.752  Recovery = 95.71%
Fe 238.204 Radial†       498.3      5033.0 ug/L         84.79      5033.0 ppb          84.79   1.68%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.66%
K 766.490 Radial†      27317.0      4949.2 ug/L         48.26      4949.2 ppb          48.26   0.98%
   QC value within limits for K 766.490 Radial  Recovery = 98.98%
Mg 279.077 IEC†          137.0      5108.9 ug/L         66.72      5108.9 ppb          66.72   1.31%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.18%
Mn 257.610†           445751.0      484.82 ug/L         0.264      484.82 ppb          0.264   0.05%
   QC value within limits for Mn 257.610  Recovery = 96.96%
Mo 202.031†             7569.0      493.40 ug/L         2.271      493.40 ppb          2.271   0.46%
   QC value within limits for Mo 202.031  Recovery = 98.68%
Na 589.592 Radial†     26195.7      9846.2 ug/L         89.20      9846.2 ppb          89.20   0.91%
   QC value within limits for Na 589.592 Radial  Recovery = 98.46%
Ni 231.604†            20567.7      487.72 ug/L         4.616      487.72 ppb          4.616   0.95%
   QC value within limits for Ni 231.604  Recovery = 97.54%
P 214.914†              4051.1      2334.4 ug/L         12.89      2334.4 ppb          12.89   0.55%
   QC value within limits for P 214.914  Recovery = 93.38%
Pb 220.353†             4137.1      485.12 ug/L         0.754      485.12 ppb          0.754   0.16%
   QC value within limits for Pb 220.353  Recovery = 97.02%
S 181.975 Axial†         674.1      984.80 ug/L         9.475      984.80 ppb          9.475   0.96%
   QC value within limits for S 181.975 Axial  Recovery = 98.48%
Sb 206.836†             1518.3      500.09 ug/L         3.353      500.09 ppb          3.353   0.67%
   QC value within limits for Sb 206.836  Recovery = 100.02%
Se 196.026†              816.1      504.30 ug/L         6.029      504.30 ppb          6.029   1.20%
   QC value within limits for Se 196.026  Recovery = 100.86%
Si 251.611†            79971.2      2434.2 ug/L         21.14      2434.2 ppb          21.14   0.87%
   QC value within limits for Si 251.611  Recovery = 97.37%
Sn 189.927†             2926.4      495.67 ug/L         2.510      495.67 ppb          2.510   0.51%
   QC value within limits for Sn 189.927  Recovery = 99.13%
Sr 421.552†            75108.9      506.98 ug/L         3.555      506.98 ppb          3.555   0.70%
   QC value within limits for Sr 421.552  Recovery = 101.40%
Ti 334.940†           304731.7      492.72 ug/L         4.006      492.72 ppb          4.006   0.81%
   QC value within limits for Ti 334.940  Recovery = 98.54%
Tl 190.801†             1691.5      487.97 ug/L         2.087      487.97 ppb          2.087   0.43%
   QC value within limits for Tl 190.801  Recovery = 97.59%
U 409.014†             17381.0      484.03 ug/L         4.069      484.03 ppb          4.069   0.84%
   QC value within limits for U 409.014  Recovery = 96.81%
V 292.402†             71508.7      489.32 ug/L         3.417      489.32 ppb          3.417   0.70%
   QC value within limits for V 292.402  Recovery = 97.86%
Zn 213.857†            54098.0      482.38 ug/L         4.127      482.38 ppb          4.127   0.86%
   QC value within limits for Zn 213.857  Recovery = 96.48%
SiO2†                  80234.2      5228.4 ug/L         42.83      5228.4 ppb          42.83   0.82%
   QC value within limits for SiO2  Recovery = 97.77%
All analyte(s) passed QC.
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Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 12:47:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5770.6	5770.6	102	%			12:49:37
1	Y RADIAL	6247.3	6247.3	101.4	%			12:49:37
1	Al 396.153Radial†	-15.7	4.9	3.6504	ug/L	3.6504	ppb	12:49:37
1	Ca 317.933Radial†	23.4	5.3	8.0852	ug/L	8.0852	ppb	12:49:57
1	Fe 238.204 Radial†	6.6	0.5	4.9431	ug/L	4.9431	ppb	12:49:57
1	K 766.490 Radial†	2236.1	24.3	4.3858	ug/L	4.3858	ppb	12:49:37
1	Mg 279.077 IEC†	1.1	-0.7	-24.705	ug/L	-24.705	ppb	12:49:57
1	Na 589.592 Radial†	-512.2	113.3	42.580	ug/L	42.580	ppb	12:49:37
1	Sr 421.552†	16.5	12.8	0.0864	ug/L	0.0864	ppb	12:49:37
1	Sc 361.383	903607.9	903607.9	102.11	%			12:50:54
1	Y 371.029	758651.9	758651.9	102.23	%			12:50:54
1	Ag 328.068†	321.7	87.4	0.4137	ug/L	0.4137	ppb	12:50:59
1	As 188.979†	-24.5	5.2	2.1305	ug/L	2.1305	ppb	12:51:19
1	B 249.677†	-324.9	205.7	4.4635	ug/L	4.4635	ppb	12:51:19
1	Ba 233.527†	-23.2	-10.7	-0.0808	ug/L	-0.0808	ppb	12:51:19
1	Be 313.107†	-5275.4	153.6	0.0570	ug/L	0.0570	ppb	12:50:59
1	Cd 226.502†	-176.2	15.3	0.1657	ug/L	0.1657	ppb	12:51:19
1	Co 228.616†	-68.6	4.5	0.0883	ug/L	0.0883	ppb	12:51:19
1	Cr 267.716†	70.1	-18.3	-0.1945	ug/L	-0.1945	ppb	12:51:19
1	Cu 324.752†	6814.2	-95.0	-0.2760	ug/L	-0.2760	ppb	12:50:59
1	Mn 257.610†	426.9	14.7	0.0169	ug/L	0.0169	ppb	12:51:19
1	Mo 202.031†	20.0	-0.5	-0.0291	ug/L	-0.0291	ppb	12:51:19
1	Ni 231.604†	86.7	14.8	0.3514	ug/L	0.3514	ppb	12:51:19
1	P 214.914†	219.6	-4.9	-2.8430	ug/L	-2.8430	ppb	12:51:19
1	Pb 220.353†	-61.0	-7.2	-0.8404	ug/L	-0.8404	ppb	12:51:19
1	S 181.975 Axial†	40.2	-2.1	-3.0921	ug/L	-3.0921	ppb	12:51:19
1	Sb 206.836†	37.3	7.0	2.2897	ug/L	2.2897	ppb	12:51:19
1	Se 196.026†	-22.0	1.9	1.1622	ug/L	1.1622	ppb	12:51:19
1	Si 251.611†	561.6	42.0	1.2796	ug/L	1.2796	ppb	12:51:19
1	Sn 189.927†	14.0	9.4	1.5962	ug/L	1.5962	ppb	12:51:19
1	Ti 334.940†	-1024.8	-38.6	-0.0580	ug/L	-0.0580	ppb	12:50:59
1	Tl 190.801†	-31.1	6.4	1.8306	ug/L	1.8306	ppb	12:51:19
1	U 409.014†	-2328.2	-318.0	-8.8850	ug/L	-8.8850	ppb	12:50:59
1	V 292.402†	-1307.7	15.7	0.0874	ug/L	0.0874	ppb	12:50:59
1	Zn 213.857†	684.0	-137.4	-1.2379	ug/L	-1.2379	ppb	12:51:19
1	SiO2†	583.2	82.3	5.3773	ug/L	5.3773	ppb	12:52:25
2	Sc Radial	5947.3	5947.3	105	%			12:50:02
2	Y RADIAL	6456.8	6456.8	104.8	%			12:50:02
2	Al 396.153Radial†	-32.3	-10.4	-7.7205	ug/L	-7.7205	ppb	12:50:02
2	Ca 317.933Radial†	21.1	2.4	3.6745	ug/L	3.6745	ppb	12:50:22
2	Fe 238.204 Radial†	5.7	-0.6	-5.8945	ug/L	-5.8945	ppb	12:50:22
2	K 766.490 Radial†	2245.8	-31.7	-5.7758	ug/L	-5.7758	ppb	12:50:02
2	Mg 279.077 IEC†	2.1	0.2	9.0627	ug/L	9.0627	ppb	12:50:22
2	Na 589.592 Radial†	-531.3	110.1	41.375	ug/L	41.375	ppb	12:50:02
2	Sr 421.552†	5.6	1.9	0.0129	ug/L	0.0129	ppb	12:50:02
2	Sc 361.383	902742.4	902742.4	102.01	%			12:51:24
2	Y 371.029	759404.3	759404.3	102.34	%			12:51:24
2	Ag 328.068†	346.0	111.6	0.5223	ug/L	0.5223	ppb	12:51:29
2	As 188.979†	-22.2	7.4	3.0285	ug/L	3.0285	ppb	12:51:49
2	B 249.677†	-328.8	201.5	4.3752	ug/L	4.3752	ppb	12:51:49
2	Ba 233.527†	-6.2	5.9	0.0454	ug/L	0.0454	ppb	12:51:49
2	Be 313.107†	-5161.4	260.4	0.0969	ug/L	0.0969	ppb	12:51:29
2	Cd 226.502†	-172.2	19.1	0.2077	ug/L	0.2077	ppb	12:51:49
2	Co 228.616†	-66.0	7.1	0.1369	ug/L	0.1369	ppb	12:51:49
2	Cr 267.716†	85.3	-3.3	-0.0325	ug/L	-0.0325	ppb	12:51:49
2	Cu 324.752†	6839.0	-64.3	-0.1872	ug/L	-0.1872	ppb	12:51:29
2	Mn 257.610†	425.1	13.3	0.0137	ug/L	0.0137	ppb	12:51:49
2	Mo 202.031†	18.8	-1.6	-0.1019	ug/L	-0.1019	ppb	12:51:49
2	Ni 231.604†	86.9	15.1	0.3580	ug/L	0.3580	ppb	12:51:49

2	P 214.914†	218.3	-6.0	-3.5159 ug/L	-3.5159 ppb	12:51:49
2	Pb 220.353†	-63.2	-9.4	-1.1028 ug/L	-1.1028 ppb	12:51:49
2	S 181.975 Axial†	40.0	-2.2	-3.2455 ug/L	-3.2455 ppb	12:51:49
2	Sb 206.836†	34.5	4.2	1.3767 ug/L	1.3767 ppb	12:51:49
2	Se 196.026†	-13.2	10.5	6.2668 ug/L	6.2668 ppb	12:51:49
2	Si 251.611†	566.4	47.3	1.4461 ug/L	1.4461 ppb	12:51:49
2	Sn 189.927†	11.1	6.6	1.1238 ug/L	1.1238 ppb	12:51:49
2	Ti 334.940†	-936.3	47.1	0.0803 ug/L	0.0803 ppb	12:51:29
2	Tl 190.801†	-38.3	-0.7	-0.1910 ug/L	-0.1910 ppb	12:51:49
2	U 409.014†	-2322.0	-314.1	-8.7753 ug/L	-8.7753 ppb	12:51:29
2	V 292.402†	-1290.0	31.9	0.1978 ug/L	0.1978 ppb	12:51:29
2	Zn 213.857†	693.4	-127.5	-1.1490 ug/L	-1.1490 ppb	12:51:49
2	SiO2†	559.2	59.3	3.8854 ug/L	3.8854 ppb	12:52:30
3	Sc Radial	5936.1	5936.1	105 %		12:50:27
3	Y RADIAL	6451.1	6451.1	104.7 %		12:50:27
3	Al 396.153Radial†	-39.5	-17.4	-12.855 ug/L	-12.855 ppb	12:50:27
3	Ca 317.933Radial†	21.6	2.9	4.4388 ug/L	4.4388 ppb	12:50:47
3	Fe 238.204 Radial†	4.8	-1.5	-14.777 ug/L	-14.777 ppb	12:50:47
3	K 766.490 Radial†	2169.1	-100.9	-18.336 ug/L	-18.336 ppb	12:50:27
3	Mg 279.077 IEC†	3.5	1.6	58.379 ug/L	58.379 ppb	12:50:47
3	Na 589.592 Radial†	-498.0	140.9	52.948 ug/L	52.948 ppb	12:50:27
3	Sr 421.552†	43.1	37.7	0.2543 ug/L	0.2543 ppb	12:50:27
3	Sc 361.383	902267.9	902267.9	101.95 %		12:51:54
3	Y 371.029	757493.1	757493.1	102.08 %		12:51:54
3	Ag 328.068†	288.3	55.2	0.2557 ug/L	0.2557 ppb	12:51:59
3	As 188.979†	-22.2	7.4	3.0155 ug/L	3.0155 ppb	12:52:19
3	B 249.677†	-300.9	228.8	4.9675 ug/L	4.9675 ppb	12:52:19
3	Ba 233.527†	-19.3	-6.9	-0.0538 ug/L	-0.0538 ppb	12:52:19
3	Be 313.107†	-5234.1	186.5	0.0693 ug/L	0.0693 ppb	12:51:59
3	Cd 226.502†	-166.1	24.9	0.2716 ug/L	0.2716 ppb	12:52:19
3	Co 228.616†	-72.5	0.6	0.0123 ug/L	0.0123 ppb	12:52:19
3	Cr 267.716†	72.3	-16.0	-0.1713 ug/L	-0.1713 ppb	12:52:19
3	Cu 324.752†	6853.0	-47.0	-0.1374 ug/L	-0.1374 ppb	12:51:59
3	Mn 257.610†	425.2	13.6	0.0122 ug/L	0.0122 ppb	12:52:19
3	Mo 202.031†	17.3	-3.0	-0.1965 ug/L	-0.1965 ppb	12:52:19
3	Ni 231.604†	86.4	14.7	0.3477 ug/L	0.3477 ppb	12:52:19
3	P 214.914†	211.9	-12.2	-7.1623 ug/L	-7.1623 ppb	12:52:19
3	Pb 220.353†	-72.3	-18.4	-2.1486 ug/L	-2.1486 ppb	12:52:19
3	S 181.975 Axial†	48.2	5.8	8.5533 ug/L	8.5533 ppb	12:52:19
3	Sb 206.836†	33.2	3.0	1.0038 ug/L	1.0038 ppb	12:52:19
3	Se 196.026†	-20.5	3.4	1.9682 ug/L	1.9682 ppb	12:52:19
3	Si 251.611†	587.3	68.0	2.0842 ug/L	2.0842 ppb	12:52:19
3	Sn 189.927†	16.3	11.7	1.9755 ug/L	1.9755 ppb	12:52:19
3	Ti 334.940†	-975.1	8.7	0.0175 ug/L	0.0175 ppb	12:51:59
3	Tl 190.801†	-24.9	12.4	3.5624 ug/L	3.5624 ppb	12:52:19
3	U 409.014†	-2261.6	-256.1	-7.1533 ug/L	-7.1533 ppb	12:51:59
3	V 292.402†	-1357.5	-35.0	-0.2495 ug/L	-0.2495 ppb	12:51:59
3	Zn 213.857†	671.3	-148.8	-1.3417 ug/L	-1.3417 ppb	12:52:19
3	SiO2†	591.0	90.8	5.9537 ug/L	5.9537 ppb	12:52:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902872.8	102.02	%	0.077				0.08%
Sc Radial	5884.7	104	%	1.7				1.68%
Y 371.029	758516.4	102.22	%	0.130				0.13%
Y RADIAL	6385.1	103.7	%	1.94				1.87%
Ag 328.068†	84.7	0.3973	ug/L	0.13403	0.3973	ppb	0.13403	33.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.6	-5.6417	ug/L	8.44680	-5.6417	ppb	8.44680	149.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.7	2.7248	ug/L	0.51476	2.7248	ppb	0.51476	18.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	212.0	4.6021	ug/L	0.31951	4.6021	ppb	0.31951	6.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.9	-0.0297	ug/L	0.06646	-0.0297	ppb	0.06646	223.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	200.2	0.0744	ug/L	0.02046	0.0744	ppb	0.02046	27.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3995	ug/L	2.35706	5.3995	ppb	2.35706	43.65%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                19.7      0.2150 ug/L       0.05331      0.2150 ppb        0.05331  24.79%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 4.1      0.0792 ug/L       0.06278      0.0792 ppb        0.06278  79.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.6     -0.1327 ug/L       0.08759     -0.1327 ppb        0.08759  65.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -68.7     -0.2002 ug/L       0.07021     -0.2002 ppb        0.07021  35.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -5.2429 ug/L       9.87632     -5.2429 ppb        9.87632 188.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -36.1     -6.5755 ug/L      11.38212     -6.5755 ppb       11.38212 173.10%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.4      14.246 ug/L      41.7838      14.246 ppb        41.7838 293.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                13.9      0.0143 ug/L       0.00241      0.0143 ppb        0.00241  16.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.7     -0.1092 ug/L       0.08390     -0.1092 ppb        0.08390  76.87%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        121.4      45.635 ug/L        6.3625      45.635 ppb         6.3625  13.94%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.9      0.3524 ug/L       0.00521      0.3524 ppb        0.00521   1.48%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.7     -4.5071 ug/L       2.32395     -4.5071 ppb        2.32395  51.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.7     -1.3639 ug/L       0.69208     -1.3639 ppb        0.69208  50.74%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.7386 ug/L       6.76817      0.7386 ppb        6.76817 916.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.7      1.5567 ug/L       0.66160      1.5567 ppb        0.66160  42.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.3      3.1324 ug/L       2.74421      3.1324 ppb        2.74421  87.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.4      1.6033 ug/L       0.42469      1.6033 ppb        0.42469  26.49%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.2      1.5652 ug/L       0.42666      1.5652 ppb        0.42666  27.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                17.5      0.1179 ug/L       0.12372      0.1179 ppb        0.12372 104.96%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 5.7      0.0133 ug/L       0.06926      0.0133 ppb        0.06926 522.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.1      1.7340 ug/L       1.87860      1.7340 ppb        1.87860 108.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -296.1     -8.2712 ug/L       0.96965     -8.2712 ppb        0.96965  11.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 4.2      0.0119 ug/L       0.23303      0.0119 ppb        0.23303 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -137.9     -1.2429 ug/L       0.09644     -1.2429 ppb        0.09644   7.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      77.5      5.0721 ug/L       1.06739      5.0721 ppb        1.06739  21.04%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, December 07, 2009 18:08:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1416
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5792.2	5792.174	47.680	0.8
	Mg	24.0	51312.8	51312.793	311.105	0.6
	Co	58.9	104991.6	104991.633	1073.307	1.0
	Rh	102.9	197321.7	197321.652	1275.464	0.6
	In	114.9	283136.0	283136.040	2435.359	0.9
	Pb	208.0	190760.9	190760.913	2085.603	1.1
⌈>	Ba	137.9	277644.2	277644.185	2333.519	0.8
⌊	Ba++	69.0	5120.7	0.018	0.000	2.2
⌈>	Ce	139.9	334832.9	334832.867	2459.124	0.7
⌊	CeO	155.9	8352.1	0.025	0.001	3.4
	Bkgd	220.0	16.5	16.500	3.984	24.1

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	6.3	5990.9
Co	59	11	6.3	98720.9
In	115	11	6.8	285928.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	593	2060	0.634
Be	9.0	9.0	2044	2070	0.662
Mg	24.0	24.0	5697	2080	0.650
Mg	25.0	25.0	5925	2075	0.626
Mg	26.0	25.9	6179	2070	0.686
Co	58.9	58.9	14188	2110	0.635
Rh	102.9	102.9	24873	2160	0.647
In	114.9	114.9	27787	2180	0.640
Ce	139.9	139.9	33871	2195	0.670
Pb	206.0	206.0	49948	2290	0.634
Pb	207.0	207.0	50159	2260	0.625
Pb	208.0	208.0	50451	2280	0.667
U	238.1	238.0	57722	2285	0.696

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 07, 2009 18:44:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Blank.407

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		124	
	Be	9		ug/L		30	
	B	11		ug/L		1317	
	Na	23		ug/L		81570	
	Mg	24		ug/L		7669	
	Al	27		ug/L		16344	
	P	31		ug/L		9693	
	K	39		ug/L		576399	
	Ca	43		ug/L		383	
>	Sc	45		ug/L		902978	
	Ti	47		ug/L		469	
	V	51		ug/L		13835	
	Cr	52		ug/L		-3560	
	Cr	53		ug/L		121270	
	Mn	55		ug/L		1514	
	Fe	57		ug/L		6199	
	Co	59		ug/L		463	
	Ni	60		ug/L		187	
	Cu	63		ug/L		413	
	Cu	65		ug/L		198	
	Zn	66		ug/L		515	
	Zn	67		ug/L		16509	
	Zn	68		ug/L		1985	
>	Ge	74		ug/L		611690	
	As	75		ug/L		-203	
	Se	77		ug/L		6879	
	Se	82		ug/L		3	
	Kr	83		ug/L		135	
	Sr	88		ug/L		805	
	Y	89		ug/L		73	
	Mo	98		ug/L		280	
	Ag	107		ug/L		175	
	Cd	111		ug/L		112	
	Cd	114		ug/L		240	
>	In	115		ug/L		404760	
	Sn	120		ug/L		898	
	Sb	121		ug/L		4520	
	Sb	123		ug/L		3469	
	Ba	135		ug/L		120	
	Ba	137		ug/L		211	
	Ho	165		ug/L		57	
>	Lu	175		ug/L		580054	
	Tl	205		ug/L		1551	
	Pb	208		ug/L		2761	
	Bi	209		ug/L		251	
	Th	232		ug/L		4231	
	U	238		ug/L		1858	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Simple Linear	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 07, 2009 18:50:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Standard 1.408

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.398	24406	0.027
	Be	9	10.000	ug/L	2.254	5009	0.005
	B	11	20.000	ug/L	2.139	12130	0.012
	Na	23	1000.000	ug/L	9.116	4755930	5.146
	Mg	24	1000.000	ug/L	6.493	3534839	3.886
	Al	27	1000.000	ug/L	8.662	5391158	5.922
	P	31	1000.000	ug/L	0.337	316288	0.338
	K	39	1000.000	ug/L	7.157	7269145	7.367
	Ca	43	1000.000	ug/L	2.128	16808	0.018
>	Sc	45		ug/L		907809	907808.781
	Ti	47	10.000	ug/L	1.357	8462	0.009
	V	51	10.000	ug/L	1.152	103745	0.099
	Cr	52	10.000	ug/L	1.135	68524	0.079
	Cr	53		ug/L		121029	-0.001
	Mn	55	10.000	ug/L	1.181	119780	0.130
	Fe	57	1000.000	ug/L	1.380	246721	0.265
	Co	59	10.000	ug/L	0.692	90660	0.099
	Ni	60	10.000	ug/L	3.550	19182	0.021
	Cu	63		ug/L		47391	0.052
	Cu	65	10.000	ug/L	1.632	23480	0.026
	Zn	66	10.000	ug/L	1.585	16602	0.027
	Zn	67		ug/L		18016	0.003
	Zn	68		ug/L		13534	0.019
>	Ge	74		ug/L		596910	596910.249
	As	75	10.000	ug/L	5.091	15203	0.026
	Se	77		ug/L		7558	0.001
	Se	82	10.000	ug/L	1.674	1718	0.003
	Kr	83		ug/L		120	-0.000
	Sr	88	10.000	ug/L	0.668	205437	0.515
	Y	89		ug/L		86	0.000
	Mo	98	10.000	ug/L	0.991	44917	0.112
	Ag	107	10.000	ug/L	2.259	81387	0.204
	Cd	111	10.000	ug/L	2.028	19545	0.049
	Cd	114		ug/L		47092	0.118
>	In	115		ug/L		397240	397239.843
	Sn	120	10.000	ug/L	0.347	85405	0.213
	Sb	121	10.000	ug/L	12.493	58453	0.136
	Sb	123		ug/L		45937	0.107
	Ba	135		ug/L		21853	0.038
	Ba	137	10.000	ug/L	2.533	39161	0.067
	Ho	165		ug/L		62	0.000
>	Lu	175		ug/L		578181	578180.577
	Tl	205	10.000	ug/L	1.204	220598	0.379
	Pb	208	10.000	ug/L	1.710	338082	0.580
	Bi	209		ug/L		294	0.000
	Th	232	10.000	ug/L	2.032	374902	0.641
	U	238	10.000	ug/L	1.355	404290	0.696

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, December 07, 2009 18:56:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Standard 2.409

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.013**	**ug/L**	3.605	241793	0.271
	Be	9	**100.003**	**ug/L**	5.510	49083	0.055
	B	11	**200.041**	**ug/L**	2.824	109731	0.122
	Na	23	**10011.816**	**ug/L**	5.938	52183069	58.430
	Mg	24	**9993.297**	**ug/L**	8.064	32420546	36.393
	Al	27	**10001.101**	**ug/L**	8.835	53339305	59.881
	P	31	**9992.869**	**ug/L**	6.451	2815843	3.150
	K	39	**10004.421**	**ug/L**	9.164	69335755	77.108
	Ca	43	**9996.642**	**ug/L**	5.887	156331	0.175
>	Sc	45		**ug/L**		893043	893042.642
	Ti	47	**99.995**	**ug/L**	5.296	78515	0.088
	V	51	**99.945**	**ug/L**	6.492	848974	0.938
	Cr	52	**99.931**	**ug/L**	6.094	657970	0.742
	Cr	53		**ug/L**		179458	0.067
	Mn	55	**99.915**	**ug/L**	6.436	1070643	1.200
	Fe	57	**9980.581**	**ug/L**	6.751	1978558	2.214
	Co	59	**99.902**	**ug/L**	5.863	805773	0.904
	Ni	60	**99.950**	**ug/L**	7.475	177580	0.199
	Cu	63		**ug/L**		428507	0.480
	Cu	65	**99.937**	**ug/L**	5.379	215045	0.241
	Zn	66	**99.959**	**ug/L**	1.550	149894	0.259
	Zn	67		**ug/L**		38824	0.040
	Zn	68		**ug/L**		109992	0.187
>	Ge	74		**ug/L**		576751	576751.422
	As	75	**100.029**	**ug/L**	2.031	153013	0.266
	Se	77		**ug/L**		17694	0.019
	Se	82	**99.972**	**ug/L**	1.947	16122	0.028
	Kr	83		**ug/L**		156	0.000
	Sr	88	**99.881**	**ug/L**	0.867	1735691	4.597
	Y	89		**ug/L**		238	0.000
	Mo	98	**99.999**	**ug/L**	0.799	424109	1.123
	Ag	107	**99.936**	**ug/L**	1.873	724997	1.920
	Cd	111	**99.999**	**ug/L**	2.294	184679	0.489
	Cd	114		**ug/L**		434397	1.150
>	In	115		**ug/L**		377424	377423.660
	Sn	120	**99.967**	**ug/L**	1.166	777661	2.058
	Sb	121	**100.097**	**ug/L**	7.224	573288	1.508
	Sb	123		**ug/L**		457049	1.202
	Ba	135		**ug/L**		209550	0.372
	Ba	137	**99.963**	**ug/L**	2.316	366242	0.650
	Ho	165		**ug/L**		69	0.000
>	Lu	175		**ug/L**		563643	563642.867
	Tl	205	**99.807**	**ug/L**	0.967	1788243	3.170
	Pb	208	**99.887**	**ug/L**	2.307	2937612	5.208
	Bi	209		**ug/L**		474	0.000
	Th	232	**99.937**	**ug/L**	2.835	3402063	6.029
	U	238	**99.886**	**ug/L**	2.827	3519623	6.243

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, December 07, 2009 19:02:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 1.410

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.409**	**ug/L**	3.393	121024	0.134
	Be	9	**50.483**	**ug/L**	4.185	25121	0.028
	B	11	**103.059**	**ug/L**	4.074	57856	0.063
	Na	23	**4503.360**	**ug/L**	12.795	23814219	26.282
	Mg	24	**5204.267**	**ug/L**	3.542	17125225	18.953
	Al	27	**5102.167**	**ug/L**	9.052	27614354	30.549
	P	31	**4807.701**	**ug/L**	4.201	1378074	1.515
	K	39	**4732.465**	**ug/L**	11.040	33492695	36.475
	Ca	43	**4814.025**	**ug/L**	3.739	76496	0.084
>	Sc	45		**ug/L**		903987	903987.017
	Ti	47	**50.177**	**ug/L**	3.267	40159	0.044
	V	51	**50.820**	**ug/L**	3.498	444417	0.477
	Cr	52	**51.868**	**ug/L**	2.100	344611	0.385
	Cr	53		**ug/L**		142062	0.023
	Mn	55	**52.217**	**ug/L**	4.322	567804	0.627
	Fe	57	**5242.341**	**ug/L**	4.093	1056383	1.163
	Co	59	**50.530**	**ug/L**	2.962	413341	0.457
	Ni	60	**50.535**	**ug/L**	4.018	91125	0.101
	Cu	63		**ug/L**		225386	0.249
	Cu	65	**51.655**	**ug/L**	6.018	112650	0.125
	Zn	66	**51.347**	**ug/L**	1.326	76213	0.133
	Zn	67		**ug/L**		26238	0.019
	Zn	68		**ug/L**		56915	0.097
>	Ge	74		**ug/L**		569085	569084.603
	As	75	**47.854**	**ug/L**	2.164	72137	0.127
	Se	77		**ug/L**		11811	0.010
	Se	82	**50.396**	**ug/L**	2.125	8022	0.014
	Kr	83		**ug/L**		125	-0.000
	Sr	88	**51.972**	**ug/L**	0.505	916136	2.392
	Y	89		**ug/L**		104	0.000
	Mo	98	**49.365**	**ug/L**	1.337	212402	0.554
	Ag	107	**50.781**	**ug/L**	0.597	373607	0.976
	Cd	111	**50.070**	**ug/L**	2.088	93803	0.245
	Cd	114		**ug/L**		221964	0.579
>	In	115		**ug/L**		382693	382692.516
	Sn	120	**51.048**	**ug/L**	1.539	403032	1.051
	Sb	121	**52.378**	**ug/L**	5.787	306310	0.789
	Sb	123		**ug/L**		241836	0.623
	Ba	135		**ug/L**		105304	0.185
	Ba	137	**49.715**	**ug/L**	1.892	183505	0.323
	Ho	165		**ug/L**		111	0.000
>	Lu	175		**ug/L**		567427	567426.985
	Tl	205	**52.290**	**ug/L**	0.383	943990	1.661
	Pb	208	**53.848**	**ug/L**	0.258	1595833	2.808
	Bi	209		**ug/L**		338	0.000
	Th	232	**49.640**	**ug/L**	1.478	1703558	2.995
	U	238	**50.317**	**ug/L**	0.188	1786291	3.145

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.819				
	Be	9	100.965				
	B	11	103.059				
	Na	23	90.067				
	Mg	24	104.085				
	Al	27	101.033				
	P	31	96.154				
	K	39	94.649				
	Ca	43	96.281				
>	Sc	45		100.1			
	Ti	47	100.354				
	V	51	101.641				
	Cr	52	103.735				
	Cr	53					
	Mn	55	104.433				
	Fe	57	104.847				
	Co	59	101.060				
	Ni	60	101.070				
	Cu	63					
	Cu	65	103.311				
	Zn	66	102.694				
	Zn	67					
	Zn	68					
>	Ge	74		93.0			
	As	75	95.708				
	Se	77					
	Se	82	100.792				
	Kr	83					
	Sr	88	103.945				
	Y	89					
	Mo	98	98.729				
	Ag	107	101.562				
	Cd	111	100.140				
	Cd	114					
>	In	115		94.5			
	Sn	120	102.095				
	Sb	121	104.757				
	Sb	123					
	Ba	135					
	Ba	137	99.430				
	Ho	165					
>	Lu	175		97.8			
	Tl	205	104.580				
	Pb	208	107.695				
	Bi	209					
	Th	232	99.281				
	U	238	100.635				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, December 07, 2009 19:08:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 2.411

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.021	ug/L	22.766	72	-0.000
	Be	9	-0.024	ug/L	3.883	18	-0.000
	B	11	4.839	ug/L	12.092	4003	0.003
	Na	23	-0.959	ug/L	205.386	77211	-0.006
	Mg	24	-0.441	ug/L	251.178	6335	-0.002
	Al	27	-0.402	ug/L	144.318	14341	-0.002
	P	31	0.186	ug/L	1133.152	9820	0.000
	K	39	-6.872	ug/L	30.691	532757	-0.053
	Ca	43	0.566	ug/L	110.134	395	0.000
>	Sc	45		ug/L		910393	910393.046
	Ti	47	0.037	ug/L	119.119	502	0.000
	V	51	-0.180	ug/L	252.832	12339	-0.002
	Cr	52	0.231	ug/L	19.689	-2021	0.002
	Cr	53		ug/L		104787	-0.019
	Mn	55	-0.026	ug/L	7.317	1240	-0.000
	Fe	57	-1.141	ug/L	70.330	6019	-0.000
	Co	59	-0.028	ug/L	5.287	239	-0.000
	Ni	60	-0.028	ug/L	30.622	138	-0.000
	Cu	63		ug/L		266	-0.000
	Cu	65	0.025	ug/L	297.234	257	0.000
	Zn	66	0.001	ug/L	195.090	492	0.000
	Zn	67		ug/L		14574	-0.002
	Zn	68		ug/L		1660	-0.000
>	Ge	74		ug/L		582985	582984.972
	As	75	0.145	ug/L	81.815	31	0.000
	Se	77		ug/L		5873	-0.001
	Se	82	0.064	ug/L	135.093	14	0.000
	Kr	83		ug/L		110	-0.000
	Sr	88	-0.017	ug/L	7.196	463	-0.001
	Y	89		ug/L		54	-0.000
	Mo	98	0.080	ug/L	30.655	611	0.001
	Ag	107	-0.006	ug/L	16.054	124	-0.000
	Cd	111	-0.022	ug/L	21.473	64	-0.000
	Cd	114		ug/L		112	-0.000
>	In	115		ug/L		383418	383418.112
	Sn	120	0.400	ug/L	15.033	4012	0.008
	Sb	121	1.757	ug/L	26.205	14442	0.026
	Sb	123		ug/L		11284	0.021
	Ba	135		ug/L		59	-0.000
	Ba	137	-0.024	ug/L	10.451	118	-0.000
	Ho	165		ug/L		60	0.000
>	Lu	175		ug/L		569036	569035.875
	Tl	205	0.284	ug/L	26.659	6647	0.009
	Pb	208	-0.030	ug/L	4.445	1822	-0.002
	Bi	209		ug/L		242	-0.000
	Th	232	0.600	ug/L	25.550	24732	0.036
	U	238	-0.008	ug/L	74.487	1526	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, December 07, 2009 19:14:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 3.412

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.852**	ug/L	6.882	26644	0.029
	Be	9	**0.511**	ug/L	1.866	285	0.000
	B	11	**17.182**	ug/L	5.450	10739	0.010
	Na	23	**224.963**	ug/L	19.255	1265519	1.313
	Mg	24	**13.441**	ug/L	19.368	51761	0.049
	Al	27	**28.720**	ug/L	19.569	170690	0.172
	P	31	**54.903**	ug/L	3.344	25349	0.017
	K	39	**274.594**	ug/L	9.303	2494967	2.116
	Ca	43	**209.245**	ug/L	3.427	3692	0.004
>	Sc	45		ug/L		904549	904548.592
	Ti	47	**8.615**	ug/L	5.547	7278	0.008
	V	51	**10.968**	ug/L	8.294	106653	0.103
	Cr	52	**11.095**	ug/L	6.332	70787	0.082
	Cr	53		ug/L		117936	-0.004
	Mn	55	**5.891**	ug/L	8.054	65289	0.071
	Fe	57	**122.573**	ug/L	9.188	30709	0.027
	Co	59	**1.090**	ug/L	7.497	9352	0.010
	Ni	60	**2.260**	ug/L	8.556	4249	0.005
	Cu	63		ug/L		5309	0.005
	Cu	65	**1.126**	ug/L	7.700	2648	0.003
	Zn	66	**11.161**	ug/L	0.961	17338	0.029
	Zn	67		ug/L		17595	0.003
	Zn	68		ug/L		13897	0.021
>	Ge	74		ug/L		582432	582432.039
	As	75	**5.398**	ug/L	5.165	8154	0.014
	Se	77		ug/L		6652	0.000
	Se	82	**5.591**	ug/L	0.825	914	0.002
	Kr	83		ug/L		110	-0.000
	Sr	88	**12.149**	ug/L	1.721	217297	0.559
	Y	89		ug/L		56	-0.000
	Mo	98	**0.519**	ug/L	3.223	2525	0.006
	Ag	107	**1.071**	ug/L	1.192	8134	0.021
	Cd	111	**1.032**	ug/L	1.221	2061	0.005
	Cd	114		ug/L		4886	0.012
>	In	115		ug/L		387268	387268.142
	Sn	120	**5.624**	ug/L	3.712	45689	0.116
	Sb	121	**3.022**	ug/L	12.353	21938	0.046
	Sb	123		ug/L		17090	0.036
	Ba	135		ug/L		4508	0.008
	Ba	137	**2.103**	ug/L	1.180	7917	0.014
	Ho	165		ug/L		52	-0.000
>	Lu	175		ug/L		564374	564374.499
	Tl	205	**1.311**	ug/L	0.833	25007	0.042
	Pb	208	**2.340**	ug/L	0.490	71544	0.122
	Bi	209		ug/L		255	0.000
	Th	232	**1.361**	ug/L	2.691	50435	0.082
	U	238	**0.218**	ug/L	1.894	9484	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	108.515				
	Be	9	102.158				
	B	11	114.547				
	Na	23	89.985				
	Mg	24	89.609				
	Al	27	95.735				
	P	31	109.806				
	K	39	91.531				
	Ca	43	104.623				
>	Sc	45		100.2			
	Ti	47	86.153				
	V	51	109.682				
	Cr	52	110.948				
	Cr	53					
	Mn	55	117.812				
	Fe	57	122.573				
	Co	59	108.969				
	Ni	60	113.021				
	Cu	63					
	Cu	65	112.644				
	Zn	66	111.613				
	Zn	67					
	Zn	68					
>	Ge	74		95.2			
	As	75	107.965				
	Se	77					
	Se	82	111.820				
	Kr	83					
	Sr	88	121.489				
	Y	89					
	Mo	98	103.833				
	Ag	107	107.057				
	Cd	111	103.154				
	Cd	114					
>	In	115		95.7			
	Sn	120	112.474				
	Sb	121	100.736				
	Sb	123					
	Ba	135					
	Ba	137	105.137				
	Ho	165					
>	Lu	175		97.3			
	Tl	205	131.080				
	Pb	208	116.998				
	Bi	209					
	Th	232	136.051				
	U	238	108.796				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Tl	205	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, December 07, 2009 19:21:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 4.413

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.080**	ug/L	17.930	298	0.000
	Be	9	**0.025**	ug/L	112.931	39	0.000
	B	11	**1.695**	ug/L	8.994	2097	0.001
	Na	23	**88980.310**	ug/L	1.831	436984404	519.299
	Mg	24	**99784.255**	ug/L	10.993	304924521	363.390
	Al	27	**91241.219**	ug/L	4.432	459560986	546.306
	P	31	**93522.650**	ug/L	3.355	24798896	29.479
	K	39	**S**	ug/L	S	S	S
	Ca	43	**91885.049**	ug/L	3.288	1353141	1.609
>	Sc	45		ug/L		841830	841829.984
	Ti	47	**1431.743**	ug/L	4.056	1054556	1.254
	V	51	**0.119**	ug/L	266.528	13784	0.001
	Cr	52	**3.375**	ug/L	6.176	17747	0.025
	Cr	53		ug/L		89027	-0.029
	Mn	55	**6.388**	ug/L	4.462	65907	0.077
	Fe	57	**117003.499**	ug/L	5.145	21821222	25.957
	Co	59	**0.294**	ug/L	3.897	2671	0.003
	Ni	60	**2.961**	ug/L	6.332	5131	0.006
	Cu	63		ug/L		16798	0.020
	Cu	65	**5.042**	ug/L	6.354	10404	0.012
	Zn	66	**4.146**	ug/L	2.994	6316	0.011
	Zn	67		ug/L		12880	-0.003
	Zn	68		ug/L		2698	0.002
>	Ge	74		ug/L		545037	545037.017
	As	75	**0.495**	ug/L	58.734	537	0.001
	Se	77		ug/L		8106	0.004
	Se	82	**-1.208**	ug/L	27.640	-181	-0.000
	Kr	83		ug/L		411	0.001
	Sr	88	**1.295**	ug/L	2.281	22120	0.060
	Y	89		ug/L		619	0.002
	Mo	98	**2036.681**	ug/L	1.342	8217892	22.872
	Ag	107	**0.058**	ug/L	18.590	557	0.001
	Cd	111	**0.513**	ug/L	41.143	1002	0.003
	Cd	114		ug/L		13035	0.036
>	In	115		ug/L		359288	359287.680
	Sn	120	**0.278**	ug/L	3.277	2852	0.006
	Sb	121	**0.261**	ug/L	63.143	5425	0.004
	Sb	123		ug/L		4294	0.003
	Ba	135		ug/L		1415	0.003
	Ba	137	**0.675**	ug/L	1.501	2429	0.004
	Ho	165		ug/L		1339	0.003
>	Lu	175		ug/L		511061	511061.218
	Tl	205	**0.048**	ug/L	13.133	2151	0.002
	Pb	208	**0.153**	ug/L	4.352	6517	0.008
	Bi	209		ug/L		1261	0.002
	Th	232	**0.662**	ug/L	30.052	24192	0.040
	U	238	**-0.036**	ug/L	1.536	503	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	88.980				
	Mg	24	99.784				
	Al	27	91.241				
	P	31	93.523				
	K	39	S				
	Ca	43	91.885				
>	Sc	45		93.2			
	Ti	47	71.587				
	V	51					
	Cr	52	91.209				
	Cr	53					
	Mn	55	110.137				
	Fe	57	117.003				
	Co	59	117.785				
	Ni	60	109.666				
	Cu	63					
	Cu	65	173.874				
	Zn	66	115.176				
	Zn	67					
	Zn	68					
>	Ge	74		89.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	107.889				
	Y	89					
	Mo	98	101.834				
	Ag	107					
	Cd	111	128.191				
	Cd	114					
>	In	115		88.8			
	Sn	120					
	Sb	121	260.796				
	Sb	123					
	Ba	135					
	Ba	137	100.801				
	Ho	165					
>	Lu	175		88.1			
	Tl	205					
	Pb	208	76.655				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	K	39	ICSA is out of limits
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, December 07, 2009 19:27:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 5.414

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.481**	**ug/L**	1.667	44061	0.053
	Be	9	**18.822**	**ug/L**	3.289	8652	0.010
	B	11	**17.996**	**ug/L**	0.636	10318	0.011
	Na	23	**81051.634**	**ug/L**	4.461	394040731	473.026
	Mg	24	**92465.824**	**ug/L**	3.890	280359173	336.738
	Al	27	**88280.228**	**ug/L**	9.853	439940260	528.577
	P	31	**89596.358**	**ug/L**	1.417	23523938	28.241
	K	39	**S**	**ug/L**	S	S	S
	Ca	43	**88393.989**	**ug/L**	1.293	1288888	1.547
>	Sc	45		**ug/L**		832723	832722.801
	Ti	47	**1389.267**	**ug/L**	3.137	1013307	1.217
	V	51	**22.252**	**ug/L**	4.857	186543	0.209
	Cr	52	**24.466**	**ug/L**	1.659	148051	0.182
	Cr	53		**ug/L**		98594	-0.016
	Mn	55	**28.256**	**ug/L**	2.252	283942	0.339
	Fe	57	**116070.500**	**ug/L**	1.846	21449881	25.750
	Co	59	**21.027**	**ug/L**	1.539	158822	0.190
	Ni	60	**22.344**	**ug/L**	2.366	37245	0.045
	Cu	63		**ug/L**		91923	0.110
	Cu	65	**23.472**	**ug/L**	3.457	47317	0.057
	Zn	66	**22.846**	**ug/L**	1.889	31860	0.059
	Zn	67		**ug/L**		16361	0.004
	Zn	68		**ug/L**		21681	0.038
>	Ge	74		**ug/L**		530589	530589.261
	As	75	**20.490**	**ug/L**	3.656	28702	0.054
	Se	77		**ug/L**		10203	0.008
	Se	82	**19.392**	**ug/L**	2.187	2880	0.005
	Kr	83		**ug/L**		395	0.001
	Sr	88	**25.459**	**ug/L**	1.407	410640	1.172
	Y	89		**ug/L**		596	0.002
	Mo	98	**2056.818**	**ug/L**	0.636	8080639	23.098
	Ag	107	**19.186**	**ug/L**	0.629	129138	0.369
	Cd	111	**20.022**	**ug/L**	0.433	34352	0.098
	Cd	114		**ug/L**		93010	0.265
>	In	115		**ug/L**		349842	349841.603
	Sn	120	**21.095**	**ug/L**	2.450	152696	0.434
	Sb	121	**23.884**	**ug/L**	2.700	129751	0.360
	Sb	123		**ug/L**		102817	0.285
	Ba	135		**ug/L**		41584	0.081
	Ba	137	**21.889**	**ug/L**	1.048	72883	0.142
	Ho	165		**ug/L**		1335	0.003
>	Lu	175		**ug/L**		511126	511125.579
	Tl	205	**22.471**	**ug/L**	0.642	366194	0.714
	Pb	208	**22.456**	**ug/L**	0.370	600899	1.171
	Bi	209		**ug/L**		1657	0.003
	Th	232	**23.139**	**ug/L**	0.747	717273	1.396
	U	238	**23.989**	**ug/L**	0.722	767973	1.499

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.407				
	Be	9	94.110				
	B	11	89.978				
	Na	23	81.052				
	Mg	24	92.466				
	Al	27	88.280				
	P	31	89.596				
	K	39	S				
	Ca	43	88.394				
>	Sc	45		92.2			
	Ti	47	69.463				
	V	51	111.261				
	Cr	52	103.233				
	Cr	53					
	Mn	55	109.518				
	Fe	57	116.071				
	Co	59	103.838				
	Ni	60	98.431				
	Cu	63					
	Cu	65	102.496				
	Zn	66	96.806				
	Zn	67					
	Zn	68					
>	Ge	74		86.7			
	As	75	102.449				
	Se	77					
	Se	82	96.960				
	Kr	83					
	Sr	88	120.091				
	Y	89					
	Mo	98	102.841				
	Ag	107	95.930				
	Cd	111	98.146				
	Cd	114					
>	In	115		86.4			
	Sn	120	105.474				
	Sb	121	118.823				
	Sb	123					
	Ba	135					
	Ba	137	105.900				
	Ho	165					
>	Lu	175		88.1			
	Tl	205	112.357				
	Pb	208	111.168				
	Bi	209					
	Th	232	115.697				
	U	238	119.947				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	K	39	ICSAB is out of limits
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	Sr	88	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 19:33:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.415

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.665**	**ug/L**	1.435	112383	0.137
	Be	9	**51.284**	**ug/L**	1.924	23111	0.028
	B	11	**95.626**	**ug/L**	3.978	48697	0.058
	Na	23	**4616.800**	**ug/L**	7.213	22122498	26.944
	Mg	24	**4765.577**	**ug/L**	8.496	14192915	17.355
	Al	27	**5099.131**	**ug/L**	10.028	24998257	30.531
	P	31	**4725.764**	**ug/L**	1.768	1227087	1.490
	K	39	**4579.072**	**ug/L**	7.118	29379557	35.293
	Ca	43	**4770.542**	**ug/L**	0.957	68656	0.084
>	Sc	45		**ug/L**		817972	817971.909
	Ti	47	**52.987**	**ug/L**	3.352	38371	0.046
	V	51	**51.316**	**ug/L**	3.420	406174	0.481
	Cr	52	**52.185**	**ug/L**	1.726	313847	0.388
	Cr	53		**ug/L**		128229	0.022
	Mn	55	**52.786**	**ug/L**	2.732	519809	0.634
	Fe	57	**5400.767**	**ug/L**	1.813	985506	1.198
	Co	59	**51.404**	**ug/L**	2.198	380704	0.465
	Ni	60	**50.587**	**ug/L**	2.379	82611	0.101
	Cu	63		**ug/L**		208431	0.254
	Cu	65	**52.572**	**ug/L**	2.872	103878	0.127
	Zn	66	**50.535**	**ug/L**	1.469	71169	0.131
	Zn	67		**ug/L**		23834	0.017
	Zn	68		**ug/L**		53014	0.095
>	Ge	74		**ug/L**		539981	539981.323
	As	75	**47.336**	**ug/L**	1.625	67698	0.126
	Se	77		**ug/L**		11004	0.009
	Se	82	**50.915**	**ug/L**	1.783	7689	0.014
	Kr	83		**ug/L**		124	0.000
	Sr	88	**52.020**	**ug/L**	0.816	866320	2.394
	Y	89		**ug/L**		105	0.000
	Mo	98	**50.328**	**ug/L**	1.151	204592	0.565
	Ag	107	**51.026**	**ug/L**	1.065	354680	0.981
	Cd	111	**50.148**	**ug/L**	0.600	88770	0.245
	Cd	114		**ug/L**		209630	0.579
>	In	115		**ug/L**		361557	361557.232
	Sn	120	**51.093**	**ug/L**	1.488	381133	1.052
	Sb	121	**51.418**	**ug/L**	9.885	284007	0.775
	Sb	123		**ug/L**		223999	0.611
	Ba	135		**ug/L**		100845	0.181
	Ba	137	**49.504**	**ug/L**	0.658	179458	0.322
	Ho	165		**ug/L**		108	0.000
>	Lu	175		**ug/L**		557270	557269.916
	Tl	205	**52.929**	**ug/L**	1.607	938294	1.681
	Pb	208	**55.119**	**ug/L**	1.234	1604158	2.874
	Bi	209		**ug/L**		376	0.000
	Th	232	**51.835**	**ug/L**	2.694	1746484	3.127
	U	238	**53.044**	**ug/L**	2.273	1848975	3.315

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	101.331				
	Be	9	102.567				
	B	11	95.626				
	Na	23	92.336				
	Mg	24	95.312				
	Al	27	100.973				
	P	31	94.515				
	K	39	91.581				
	Ca	43	95.411				
>	Sc	45		90.6			
	Ti	47	105.973				
	V	51	102.633				
	Cr	52	104.370				
	Cr	53					
	Mn	55	105.571				
	Fe	57	108.015				
	Co	59	102.808				
	Ni	60	101.174				
	Cu	63					
	Cu	65	105.144				
	Zn	66	101.071				
	Zn	67					
	Zn	68					
>	Ge	74		88.3			
	As	75	94.671				
	Se	77					
	Se	82	101.829				
	Kr	83					
	Sr	88	104.041				
	Y	89					
	Mo	98	100.656				
	Ag	107	102.052				
	Cd	111	100.297				
	Cd	114					
>	In	115		89.3			
	Sn	120	102.186				
	Sb	121	102.837				
	Sb	123					
	Ba	135					
	Ba	137	99.009				
	Ho	165					
>	Lu	175		96.1			
	Tl	205	105.857				
	Pb	208	110.237				
	Bi	209					
	Th	232	103.671				
	U	238	106.088				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Pb	208	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 19:39:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.416

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.016**	ug/L	25.106	77	-0.000
	Be	9	**-0.021**	ug/L	13.948	18	-0.000
	B	11	**2.878**	ug/L	16.162	2656	0.002
	Na	23	**-0.245**	ug/L	1255.575	73526	-0.001
	Mg	24	**-0.678**	ug/L	45.586	5001	-0.002
	Al	27	**-0.339**	ug/L	124.257	13340	-0.002
	P	31	**-0.770**	ug/L	393.065	8684	-0.000
	K	39	**-9.173**	ug/L	16.610	470283	-0.071
	Ca	43	**1.465**	ug/L	91.122	373	0.000
>	Sc	45		ug/L		828733	828733.326
	Ti	47	**0.987**	ug/L	11.014	1146	0.001
	V	51	**-0.599**	ug/L	29.611	8056	-0.006
	Cr	52	**0.162**	ug/L	5.525	-2270	0.001
	Cr	53		ug/L		97590	-0.016
	Mn	55	**-0.025**	ug/L	18.292	1145	-0.000
	Fe	57	**1.903**	ug/L	49.257	6037	0.000
	Co	59	**-0.027**	ug/L	1.790	219	-0.000
	Ni	60	**-0.016**	ug/L	39.983	146	-0.000
	Cu	63		ug/L		268	-0.000
	Cu	65	**-0.017**	ug/L	50.632	147	-0.000
	Zn	66	**0.012**	ug/L	58.718	463	0.000
	Zn	67		ug/L		12716	-0.003
	Zn	68		ug/L		1434	-0.001
>	Ge	74		ug/L		530585	530585.325
	As	75	**-0.024**	ug/L	731.908	-212	-0.000
	Se	77		ug/L		5394	-0.001
	Se	82	**-0.023**	ug/L	269.283	-0	-0.000
	Kr	83		ug/L		121	0.000
	Sr	88	**-0.020**	ug/L	2.873	390	-0.001
	Y	89		ug/L		57	-0.000
	Mo	98	**0.229**	ug/L	12.608	1192	0.003
	Ag	107	**-0.005**	ug/L	45.578	122	-0.000
	Cd	111	**-0.022**	ug/L	22.738	61	-0.000
	Cd	114		ug/L		114	-0.000
>	In	115		ug/L		364785	364784.690
	Sn	120	**0.298**	ug/L	14.528	3045	0.006
	Sb	121	**0.843**	ug/L	41.171	8712	0.013
	Sb	123		ug/L		6872	0.010
	Ba	135		ug/L		58	-0.000
	Ba	137	**-0.027**	ug/L	6.495	104	-0.000
	Ho	165		ug/L		58	0.000
>	Lu	175		ug/L		561097	561096.627
	Tl	205	**0.299**	ug/L	23.862	6820	0.009
	Pb	208	**-0.029**	ug/L	2.681	1818	-0.002
	Bi	209		ug/L		254	0.000
	Th	232	**0.395**	ug/L	31.799	17435	0.024
	U	238	**-0.014**	ug/L	26.300	1290	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Monday, December 07, 2009 19:45:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 10.417

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**841.969**	ug/L	3.596	1891651	2.281
	Be	9	**909.593**	ug/L	4.158	415091	0.501
	B	11	**1.106**	ug/L	11.838	1767	0.001
	Na	23	**40881.296**	ug/L	1.090	198061424	238.588
	Mg	24	**48020.483**	ug/L	2.394	145106938	174.879
	Al	27	**44098.314**	ug/L	3.775	219316106	264.038
	P	31	**22411.963**	ug/L	2.168	5869188	7.064
	K	39	**44753.786**	ug/L	1.290	286744477	344.937
	Ca	43	**45823.813**	ug/L	3.382	665664	0.802
>	Sc	45		ug/L		829984	829983.531
	Ti	47	**44.268**	ug/L	6.259	32564	0.039
	V	51	**956.301**	ug/L	1.098	7457289	8.971
	Cr	52	**922.640**	ug/L	1.906	5683170	6.854
	Cr	53		ug/L		772653	0.798
	Mn	55	**921.261**	ug/L	2.868	9177850	11.064
	Fe	57	**56870.355**	ug/L	1.054	10477409	12.616
	Co	59	**897.667**	ug/L	1.459	6737417	8.120
	Ni	60	**830.655**	ug/L	3.473	1372851	1.655
	Cu	63		ug/L		3473167	4.188
	Cu	65	**793.794**	ug/L	3.503	1587934	1.915
	Zn	66	**2386.035**	ug/L	2.090	3223378	6.184
	Zn	67		ug/L		505976	0.944
	Zn	68		ug/L		2099050	4.021
>	Ge	74		ug/L		521185	521184.562
	As	75	**855.553**	ug/L	1.547	1183924	2.272
	Se	77		ug/L		60140	0.104
	Se	82	**490.483**	ug/L	1.196	71481	0.137
	Kr	83		ug/L		242	0.000
	Sr	88	**1076.196**	ug/L	2.219	16487189	49.530
	Y	89		ug/L		526	0.001
	Mo	98	**1100.201**	ug/L	3.207	4112338	12.355
	Ag	107	**235.747**	ug/L	1.793	1508235	4.530
	Cd	111	**878.056**	ug/L	1.973	1429455	4.294
	Cd	114		ug/L		3693066	11.096
>	In	115		ug/L		332948	332948.399
	Sn	120	**996.341**	ug/L	4.722	6826876	20.514
	Sb	121	**239.497**	ug/L	12.968	1203087	3.608
	Sb	123		ug/L		965830	2.897
	Ba	135		ug/L		1672656	3.158
	Ba	137	**955.100**	ug/L	1.736	3288113	6.206
	Ho	165		ug/L		427	0.001
>	Lu	175		ug/L		529780	529779.962
	Tl	205	**492.208**	ug/L	2.142	8282626	15.635
	Pb	208	**4752.476**	ug/L	1.366	131264706	247.797
	Bi	209		ug/L		3725	0.007
	Th	232	**2480.761**	ug/L	2.226	79277626	149.666
	U	238	**5045.837**	ug/L	0.614	167070315	315.366

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	84.197				
	Be	9	90.959				
	B	11					
	Na	23	81.763				
	Mg	24	96.041				
	Al	27	88.197				
	P	31	89.648				
	K	39	89.508				
	Ca	43	91.648				
>	Sc	45		91.9			
	Ti	47					
	V	51	95.630				
	Cr	52	92.264				
	Cr	53					
	Mn	55	92.126				
	Fe	57	113.741				
	Co	59	89.767				
	Ni	60	83.065				
	Cu	63					
	Cu	65	79.379				
	Zn	66	95.441				
	Zn	67					
	Zn	68					
>	Ge	74		85.2			
	As	75	85.555				
	Se	77					
	Se	82	98.097				
	Kr	83					
	Sr	88	107.620				
	Y	89					
	Mo	98	110.020				
	Ag	107	94.299				
	Cd	111	87.806				
	Cd	114					
>	In	115		82.3			
	Sn	120	99.634				
	Sb	121	95.799				
	Sb	123					
	Ba	135					
	Ba	137	95.510				
	Ho	165					
>	Lu	175		91.3			
	Tl	205	98.442				
	Pb	208	95.050				
	Bi	209					
	Th	232	99.230				
	U	238	100.917				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Li	7	LRS is out of limits (+/- 10%)
QC Std 10	Na	23	LRS is out of limits (+/- 10%)
QC Std 10	Al	27	LRS is out of limits (+/- 10%)
QC Std 10	P	31	LRS is out of limits (+/- 10%)
QC Std 10	K	39	LRS is out of limits (+/- 10%)
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)

QC Std 10	Ni	60LRS is out of limits (+/- 10%)
QC Std 10	Cu	65LRS is out of limits (+/- 10%)
QC Std 10	As	75LRS is out of limits (+/- 10%)
QC Std 10	Mo	98LRS is out of limits (+/- 10%)
QC Std 10	Cd	111LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Monday, December 07, 2009 19:51:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 11.418

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.556**	**ug/L**	5.753	117413	0.129
	Be	9	**48.717**	**ug/L**	6.428	24433	0.027
	B	11	**91.639**	**ug/L**	6.983	52000	0.056
	Na	23	**4201.458**	**ug/L**	8.827	22382763	24.520
	Mg	24	**4876.230**	**ug/L**	3.599	16185726	17.758
	Al	27	**4635.165**	**ug/L**	5.500	25288935	27.753
	P	31	**4531.011**	**ug/L**	4.541	1310418	1.428
	K	39	**4428.916**	**ug/L**	13.117	31583024	34.136
	Ca	43	**4563.416**	**ug/L**	3.527	73166	0.080
>	Sc	45		**ug/L**		912022	912021.869
	Ti	47	**46.929**	**ug/L**	6.370	37876	0.041
	V	51	**47.771**	**ug/L**	4.095	422152	0.448
	Cr	52	**49.128**	**ug/L**	3.700	328893	0.365
	Cr	53		**ug/L**		136998	0.016
	Mn	55	**50.192**	**ug/L**	6.911	550079	0.603
	Fe	57	**5063.854**	**ug/L**	6.217	1028753	1.123
	Co	59	**47.600**	**ug/L**	3.443	392777	0.431
	Ni	60	**47.137**	**ug/L**	5.625	85702	0.094
	Cu	63		**ug/L**		215580	0.236
	Cu	65	**49.651**	**ug/L**	5.435	109235	0.120
	Zn	66	**51.203**	**ug/L**	2.471	73739	0.133
	Zn	67		**ug/L**		25881	0.020
	Zn	68		**ug/L**		54785	0.096
>	Ge	74		**ug/L**		552298	552297.758
	As	75	**48.433**	**ug/L**	1.461	70845	0.129
	Se	77		**ug/L**		11290	0.009
	Se	82	**50.734**	**ug/L**	1.712	7836	0.014
	Kr	83		**ug/L**		137	0.000
	Sr	88	**53.040**	**ug/L**	1.421	893010	2.441
	Y	89		**ug/L**		100	0.000
	Mo	98	**50.335**	**ug/L**	2.120	206860	0.565
	Ag	107	**51.387**	**ug/L**	1.587	361116	0.988
	Cd	111	**49.999**	**ug/L**	1.246	89477	0.245
	Cd	114		**ug/L**		212689	0.581
>	In	115		**ug/L**		365537	365536.667
	Sn	120	**56.917**	**ug/L**	0.531	429171	1.172
	Sb	121	**58.265**	**ug/L**	5.229	324817	0.878
	Sb	123		**ug/L**		256912	0.694
	Ba	135		**ug/L**		102619	0.186
	Ba	137	**50.200**	**ug/L**	2.494	180174	0.326
	Ho	165		**ug/L**		120	0.000
>	Lu	175		**ug/L**		551968	551968.228
	Tl	205	**53.887**	**ug/L**	3.489	945765	1.712
	Pb	208	**54.879**	**ug/L**	2.191	1581518	2.861
	Bi	209		**ug/L**		343	0.000
	Th	232	**54.760**	**ug/L**	0.895	1827371	3.304
	U	238	**52.171**	**ug/L**	2.229	1800950	3.261

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	95.112				
	Be	9	97.433				
	B	11	91.639				
	Na	23	84.029				
	Mg	24	97.525				
	Al	27	91.785				
	P	31	90.620				
	K	39	88.578				
	Ca	43	91.268				
>	Sc	45		101.0			
	Ti	47	93.858				
	V	51	95.542				
	Cr	52	98.256				
	Cr	53					
	Mn	55	100.384				
	Fe	57	101.277				
	Co	59	95.200				
	Ni	60	94.274				
	Cu	63					
	Cu	65	99.302				
	Zn	66	102.406				
	Zn	67					
	Zn	68					
>	Ge	74		90.3			
	As	75	96.866				
	Se	77					
	Se	82	101.468				
	Kr	83					
	Sr	88	106.080				
	Y	89					
	Mo	98	100.670				
	Ag	107	102.775				
	Cd	111	99.997				
	Cd	114					
>	In	115		90.3			
	Sn	120	113.835				
	Sb	121	116.530				
	Sb	123					
	Ba	135					
	Ba	137	100.399				
	Ho	165					
>	Lu	175		95.2			
	Tl	205	107.774				
	Pb	208	109.758				
	Bi	209					
	Th	232	109.521				
	U	238	104.341				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Na	23	CCV is out of limits (+/- 10%)
QC Std 11	K	39	CCV is out of limits (+/- 10%)
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Monday, December 07, 2009 19:57:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 12.419

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.003	ug/L	155.139	128	0.000
	Be	9	-0.011	ug/L	56.429	24	-0.000
	B	11	2.420	ug/L	15.529	2585	0.001
	Na	23	-1.317	ug/L	21.682	72852	-0.008
	Mg	24	-0.040	ug/L	4116.192	7336	-0.000
	Al	27	-0.815	ug/L	31.302	11671	-0.005
	P	31	-3.027	ug/L	13.397	8622	-0.001
	K	39	-7.537	ug/L	108.545	512466	-0.058
	Ca	43	-2.081	ug/L	39.221	341	-0.000
>	Sc	45		ug/L		881715	881714.567
	Ti	47	0.168	ug/L	24.472	587	0.000
	V	51	-0.409	ug/L	122.403	10061	-0.004
	Cr	52	0.228	ug/L	14.709	-1985	0.002
	Cr	53		ug/L		98820	-0.022
	Mn	55	-0.016	ug/L	17.631	1310	-0.000
	Fe	57	-1.018	ug/L	94.563	5853	-0.000
	Co	59	0.004	ug/L	53.611	487	0.000
	Ni	60	-0.010	ug/L	47.643	165	-0.000
	Cu	63		ug/L		419	0.000
	Cu	65	0.010	ug/L	38.680	214	0.000
	Zn	66	0.024	ug/L	44.267	495	0.000
	Zn	67		ug/L		13569	-0.002
	Zn	68		ug/L		1586	-0.000
>	Ge	74		ug/L		547704	547703.968
	As	75	0.332	ug/L	66.433	303	0.001
	Se	77		ug/L		5370	-0.001
	Se	82	-0.071	ug/L	43.222	-8	-0.000
	Kr	83		ug/L		127	0.000
	Sr	88	-0.012	ug/L	3.953	529	-0.001
	Y	89		ug/L		56	-0.000
	Mo	98	0.238	ug/L	14.164	1238	0.003
	Ag	107	-0.001	ug/L	61.469	151	-0.000
	Cd	111	-0.014	ug/L	45.945	76	-0.000
	Cd	114		ug/L		148	-0.000
>	In	115		ug/L		368196	368196.150
	Sn	120	1.871	ug/L	7.949	15009	0.039
	Sb	121	2.692	ug/L	19.124	19058	0.041
	Sb	123		ug/L		15089	0.032
	Ba	135		ug/L		93	-0.000
	Ba	137	-0.015	ug/L	32.605	146	-0.000
	Ho	165		ug/L		55	0.000
>	Lu	175		ug/L		552194	552194.094
	Tl	205	0.418	ug/L	17.927	8820	0.013
	Pb	208	0.011	ug/L	25.862	2940	0.001
	Bi	209		ug/L		232	-0.000
	Th	232	1.059	ug/L	13.373	39324	0.064
	U	238	0.093	ug/L	13.903	4979	0.006

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Th	232	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977921
Sample Date/Time: Monday, December 07, 2009 20:03:48
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977921.420

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.026**	**ug/L**	11.989	62	-0.000
	Be	9	**-0.028**	**ug/L**	28.910	17	-0.000
	B	11	**0.547**	**ug/L**	31.724	1660	0.000
	Na	23	**15.981**	**ug/L**	20.397	170350	0.093
	Mg	24	**1.342**	**ug/L**	154.855	12340	0.005
	Al	27	**0.834**	**ug/L**	170.995	21351	0.005
	P	31	**19.464**	**ug/L**	6.300	15648	0.006
	K	39	**-11.076**	**ug/L**	64.850	512755	-0.085
	Ca	43	**15.432**	**ug/L**	15.416	643	0.000
>	Sc	45		**ug/L**		927883	927883.208
	Ti	47	**0.360**	**ug/L**	11.203	774	0.000
	V	51	**-0.425**	**ug/L**	26.777	10519	-0.004
	Cr	52	**0.743**	**ug/L**	3.599	1467	0.006
	Cr	53		**ug/L**		81534	-0.046
	Mn	55	**0.171**	**ug/L**	7.774	3455	0.002
	Fe	57	**5.708**	**ug/L**	35.779	7539	0.001
	Co	59	**-0.023**	**ug/L**	19.807	281	-0.000
	Ni	60	**0.029**	**ug/L**	68.463	246	0.000
	Cu	63		**ug/L**		790	0.000
	Cu	65	**0.093**	**ug/L**	1.202	411	0.000
	Zn	66	**0.999**	**ug/L**	2.342	1924	0.003
	Zn	67		**ug/L**		11512	-0.006
	Zn	68		**ug/L**		2416	0.001
>	Ge	74		**ug/L**		560831	560831.326
	As	75	**0.270**	**ug/L**	57.138	215	0.001
	Se	77		**ug/L**		4248	-0.004
	Se	82	**-0.096**	**ug/L**	34.856	-12	-0.000
	Kr	83		**ug/L**		126	0.000
	Sr	88	**0.004**	**ug/L**	106.403	816	0.000
	Y	89		**ug/L**		89	0.000
	Mo	98	**0.102**	**ug/L**	19.529	695	0.001
	Ag	107	**-0.011**	**ug/L**	17.853	86	-0.000
	Cd	111	**-0.024**	**ug/L**	18.963	60	-0.000
	Cd	114		**ug/L**		73	-0.000
>	In	115		**ug/L**		378712	378711.921
	Sn	120	**0.784**	**ug/L**	1.379	6952	0.016
	Sb	121	**1.095**	**ug/L**	19.603	10476	0.016
	Sb	123		**ug/L**		8328	0.013
	Ba	135		**ug/L**		327	0.000
	Ba	137	**0.097**	**ug/L**	3.701	579	0.001
	Ho	165		**ug/L**		64	0.000
>	Lu	175		**ug/L**		583937	583937.066
	Tl	205	**0.173**	**ug/L**	13.384	4779	0.006
	Pb	208	**-0.028**	**ug/L**	7.145	1923	-0.001
	Bi	209		**ug/L**		337	0.000
	Th	232	**0.876**	**ug/L**	17.268	35126	0.053
	U	238	**0.018**	**ug/L**	50.361	2514	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Monday, December 07, 2009 20:16:01
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|40|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977926.422

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1.917**	ug/L	1.221	4809	0.005
	Be	9	**22.841**	ug/L	1.733	11369	0.013
	B	11	**35.195**	ug/L	0.490	20603	0.021
	Na	23	**183.449**	ug/L	2.693	1047396	1.071
	Mg	24	**777.516**	ug/L	1.569	2561866	2.832
	Al	27	**2024.297**	ug/L	8.001	10943550	12.120
	P	31	**187.147**	ug/L	3.558	62883	0.059
	K	39	**574.155**	ug/L	10.899	4569898	4.425
	Ca	43	**966.333**	ug/L	2.243	15640	0.017
>	Sc	45		ug/L		902084	902083.758
	Ti	47	**51.056**	ug/L	1.578	40795	0.045
	V	51	**32.102**	ug/L	1.653	285439	0.301
	Cr	52	**17.974**	ug/L	1.610	116882	0.134
	Cr	53		ug/L		106526	-0.016
	Mn	55	**92.153**	ug/L	1.851	999772	1.107
	Fe	57	**2814.946**	ug/L	1.080	569509	0.624
	Co	59	**22.064**	ug/L	1.305	180485	0.200
	Ni	60	**26.707**	ug/L	1.530	48191	0.053
	Cu	63		ug/L		110929	0.123
	Cu	65	**25.815**	ug/L	0.996	56369	0.062
	Zn	66	**55.973**	ug/L	2.033	78531	0.145
	Zn	67		ug/L		25910	0.021
	Zn	68		ug/L		60346	0.109
>	Ge	74		ug/L		538216	538215.515
	As	75	**67.878**	ug/L	1.076	96844	0.180
	Se	77		ug/L		10449	0.008
	Se	82	**47.718**	ug/L	1.851	7184	0.013
	Kr	83		ug/L		188	0.000
	Sr	88	**47.083**	ug/L	2.004	791727	2.167
	Y	89		ug/L		73559	0.201
	Mo	98	**21.440**	ug/L	2.314	88139	0.241
	Ag	107	**4.050**	ug/L	1.249	28571	0.078
	Cd	111	**32.910**	ug/L	1.310	58853	0.161
	Cd	114		ug/L		142287	0.389
>	In	115		ug/L		365076	365076.399
	Sn	120	**13.898**	ug/L	2.011	105264	0.286
	Sb	121	**6.163**	ug/L	2.424	37968	0.093
	Sb	123		ug/L		29506	0.072
	Ba	135		ug/L		256762	0.464
	Ba	137	**122.210**	ug/L	1.179	439624	0.794
	Ho	165		ug/L		4870	0.009
>	Lu	175		ug/L		553376	553375.549
	Tl	205	**59.113**	ug/L	1.870	1040468	1.878
	Pb	208	**48.810**	ug/L	0.266	1410959	2.545
	Bi	209		ug/L		2652	0.004
	Th	232	**3.415**	ug/L	0.695	118031	0.206
	U	238	**0.428**	ug/L	1.937	16560	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, December 07, 2009 20:40:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.426

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.217**	ug/L	1.301	117108	0.125
	Be	9	**47.900**	ug/L	1.852	24658	0.026
	B	11	**88.266**	ug/L	3.172	51450	0.054
	Na	23	**4306.988**	ug/L	7.437	23553954	25.136
	Mg	24	**4660.350**	ug/L	3.128	15859913	16.972
	Al	27	**4549.244**	ug/L	10.456	25434273	27.239
	P	31	**4518.218**	ug/L	2.207	1340287	1.424
	K	39	**4038.563**	ug/L	1.711	29673353	31.127
	Ca	43	**4537.138**	ug/L	0.708	74602	0.079
>	Sc	45		ug/L		934335	934334.976
	Ti	47	**47.097**	ug/L	2.943	39006	0.041
	V	51	**48.212**	ug/L	5.615	436575	0.452
	Cr	52	**48.861**	ug/L	2.258	335365	0.363
	Cr	53		ug/L		131917	0.007
	Mn	55	**49.903**	ug/L	3.324	561303	0.599
	Fe	57	**5014.840**	ug/L	3.737	1045526	1.113
	Co	59	**48.051**	ug/L	3.070	406431	0.435
	Ni	60	**47.527**	ug/L	2.845	88650	0.095
	Cu	63		ug/L		218154	0.233
	Cu	65	**48.150**	ug/L	2.754	108679	0.116
	Zn	66	**50.688**	ug/L	0.687	74569	0.131
	Zn	67		ug/L		24105	0.016
	Zn	68		ug/L		56014	0.096
>	Ge	74		ug/L		563995	563994.615
	As	75	**47.931**	ug/L	1.158	71610	0.127
	Se	77		ug/L		11205	0.009
	Se	82	**50.060**	ug/L	1.082	7897	0.014
	Kr	83		ug/L		135	0.000
	Sr	88	**53.070**	ug/L	1.627	896186	2.442
	Y	89		ug/L		195	0.000
	Mo	98	**50.401**	ug/L	1.341	207773	0.566
	Ag	107	**51.685**	ug/L	1.912	364288	0.993
	Cd	111	**50.570**	ug/L	1.378	90789	0.247
	Cd	114		ug/L		214454	0.584
>	In	115		ug/L		366665	366665.326
	Sn	120	**50.181**	ug/L	2.754	379702	1.033
	Sb	121	**51.363**	ug/L	7.930	287605	0.774
	Sb	123		ug/L		226609	0.610
	Ba	135		ug/L		102033	0.184
	Ba	137	**50.075**	ug/L	1.425	180487	0.325
	Ho	165		ug/L		103	0.000
>	Lu	175		ug/L		554165	554164.764
	Tl	205	**52.322**	ug/L	1.345	922333	1.662
	Pb	208	**53.755**	ug/L	1.602	1555579	2.803
	Bi	209		ug/L		458	0.000
	Th	232	**49.900**	ug/L	2.538	1671875	3.011
	U	238	**50.462**	ug/L	2.340	1749064	3.154

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	92.435				
	Be	9	95.801				
	B	11	88.266				
	Na	23	86.140				
	Mg	24	93.207				
	Al	27	90.084				
	P	31	90.364				
	K	39	80.771				
	Ca	43	90.743				
>	Sc	45		103.5			
	Ti	47	94.194				
	V	51	96.423				
	Cr	52	97.722				
	Cr	53					
	Mn	55	99.805				
	Fe	57	100.297				
	Co	59	96.103				
	Ni	60	95.053				
	Cu	63					
	Cu	65	96.299				
	Zn	66	101.375				
	Zn	67					
	Zn	68					
>	Ge	74		92.2			
	As	75	95.863				
	Se	77					
	Se	82	100.119				
	Kr	83					
	Sr	88	106.139				
	Y	89					
	Mo	98	100.802				
	Ag	107	103.370				
	Cd	111	101.140				
	Cd	114					
>	In	115		90.6			
	Sn	120	100.362				
	Sb	121	102.726				
	Sb	123					
	Ba	135					
	Ba	137	100.151				
	Ho	165					
>	Lu	175		95.5			
	Tl	205	104.643				
	Pb	208	107.510				
	Bi	209					
	Th	232	99.800				
	U	238	100.923				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	B	11	CCV is out of limits (+/- 10%)
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Monday, December 07, 2009 20:46:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.427

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.011**	ug/L	9.816	96	-0.000
	Be	9	**-0.028**	ug/L	8.066	16	-0.000
	B	11	**2.119**	ug/L	26.092	2432	0.001
	Na	23	**-3.089**	ug/L	25.191	64144	-0.018
	Mg	24	**-0.397**	ug/L	503.714	6336	-0.001
	Al	27	**-0.829**	ug/L	49.708	11672	-0.005
	P	31	**-3.616**	ug/L	67.236	8504	-0.001
	K	39	**-7.022**	ug/L	49.305	518604	-0.054
	Ca	43	**-2.919**	ug/L	4.017	331	-0.000
>	Sc	45		ug/L		887191	887190.566
	Ti	47	**0.171**	ug/L	14.724	593	0.000
	V	51	**-0.701**	ug/L	64.677	7719	-0.007
	Cr	52	**0.346**	ug/L	8.546	-1219	0.003
	Cr	53		ug/L		94226	-0.028
	Mn	55	**0.029**	ug/L	7.397	1791	0.000
	Fe	57	**-1.026**	ug/L	144.420	5885	-0.000
	Co	59	**-0.020**	ug/L	11.767	290	-0.000
	Ni	60	**-0.008**	ug/L	52.841	170	-0.000
	Cu	63		ug/L		278	-0.000
	Cu	65	**-0.020**	ug/L	30.237	153	-0.000
	Zn	66	**-0.024**	ug/L	85.586	427	-0.000
	Zn	67		ug/L		12204	-0.005
	Zn	68		ug/L		1425	-0.001
>	Ge	74		ug/L		549043	549043.079
	As	75	**0.030**	ug/L	508.333	-139	0.000
	Se	77		ug/L		5405	-0.001
	Se	82	**-0.186**	ug/L	3.784	-25	-0.000
	Kr	83		ug/L		132	0.000
	Sr	88	**-0.018**	ug/L	2.371	422	-0.001
	Y	89		ug/L		86	0.000
	Mo	98	**0.060**	ug/L	35.967	496	0.001
	Ag	107	**-0.004**	ug/L	24.620	129	-0.000
	Cd	111	**-0.023**	ug/L	10.938	59	-0.000
	Cd	114		ug/L		98	-0.000
>	In	115		ug/L		362892	362892.354
	Sn	120	**0.373**	ug/L	13.558	3595	0.008
	Sb	121	**0.920**	ug/L	42.129	9080	0.014
	Sb	123		ug/L		7081	0.011
	Ba	135		ug/L		79	-0.000
	Ba	137	**-0.020**	ug/L	26.818	127	-0.000
	Ho	165		ug/L		65	0.000
>	Lu	175		ug/L		547880	547879.809
	Tl	205	**0.262**	ug/L	17.819	6033	0.008
	Pb	208	**-0.034**	ug/L	3.059	1640	-0.002
	Bi	209		ug/L		317	0.000
	Th	232	**0.418**	ug/L	23.428	17819	0.025
	U	238	**-0.008**	ug/L	21.293	1471	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977922
Sample Date/Time: Monday, December 07, 2009 20:58:58
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977922.429

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**26.087**	ug/L	3.959	72857	0.071
	Be	9	**1.606**	ug/L	5.613	944	0.001
	B	11	**168.472**	ug/L	2.135	106835	0.102
	Na	23	**669.903**	ug/L	6.020	4119502	3.910
	Mg	24	**17177.329**	ug/L	1.586	64412627	62.556
	Al	27	**32886.720**	ug/L	1.017	202747494	196.909
	P	31	**649.761**	ug/L	2.848	221834	0.205
	K	39	**3565.291**	ug/L	3.373	28938864	27.479
	Ca	43	**295705.405**	ug/L	1.646	5328333	5.177
>	Sc	45		ug/L		1029406	1029406.445
	Ti	47	**1009.311**	ug/L	2.534	910068	0.884
	V	51	**71.729**	ug/L	0.717	708348	0.673
	Cr	52	**38.650**	ug/L	1.451	291447	0.287
	Cr	53		ug/L		93073	-0.044
	Mn	55	**914.129**	ug/L	3.130	11298822	10.979
	Fe	57	**41997.553**	ug/L	1.492	9596638	9.317
	Co	59	**16.914**	ug/L	0.701	158014	0.153
	Ni	60	**23.065**	ug/L	2.473	47525	0.046
	Cu	63		ug/L		468866	0.455
	Cu	65	**98.219**	ug/L	4.070	243965	0.237
	Zn	66	**706.075**	ug/L	1.362	959883	1.830
	Zn	67		ug/L		234145	0.420
	Zn	68		ug/L		915959	1.744
>	Ge	74		ug/L		524301	524300.878
	As	75	**41.073**	ug/L	1.745	57021	0.109
	Se	77		ug/L		10589	0.009
	Se	82	**-1.074**	ug/L	18.487	-154	-0.000
	Kr	83		ug/L		439	0.001
	Sr	88	**690.221**	ug/L	0.773	11329753	31.766
	Y	89		ug/L		871719	2.445
	Mo	98	**16.895**	ug/L	1.127	67912	0.190
	Ag	107	**0.544**	ug/L	2.052	3883	0.010
	Cd	111	**3.327**	ug/L	1.274	5902	0.016
	Cd	114		ug/L		7704	0.021
>	In	115		ug/L		356664	356663.618
	Sn	120	**6.165**	ug/L	1.768	46057	0.127
	Sb	121	**4.653**	ug/L	2.296	28975	0.070
	Sb	123		ug/L		22871	0.056
	Ba	135		ug/L		20410990	39.493
	Ba	137	**10376.214**	ug/L	0.307	34845991	67.422
	Ho	165		ug/L		54218	0.105
>	Lu	175		ug/L		516829	516828.930
	Tl	205	**0.329**	ug/L	1.311	6787	0.010
	Pb	208	**194.343**	ug/L	1.227	5239462	10.133
	Bi	209		ug/L		14540	0.028
	Th	232	**18.081**	ug/L	2.302	567549	1.091
	U	238	**8.008**	ug/L	0.579	260322	0.500

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		114.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ca 43 Upper, S, EE	Ca	43	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977924
Sample Date/Time: Monday, December 07, 2009 21:05:04
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977924.430

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.857**	**ug/L**	1.992	147093	0.130
	Be	9	**19.701**	**ug/L**	1.861	12326	0.011
	B	11	**213.896**	**ug/L**	1.760	148927	0.130
	Na	23	**2431.001**	**ug/L**	4.635	16187243	14.188
	Mg	24	**15083.839**	**ug/L**	2.273	62270300	54.932
	Al	27	**31986.219**	**ug/L**	4.585	217136025	191.517
	P	31	**1358.204**	**ug/L**	2.215	497403	0.428
	K	39	**4591.266**	**ug/L**	3.844	40837584	35.387
	Ca	43	**246564.857**	**ug/L**	0.757	4892471	4.316
>	Sc	45		**ug/L**		1133392	1133391.976
	Ti	47	**1008.874**	**ug/L**	1.021	1001849	0.883
	V	51	**87.800**	**ug/L**	1.344	950811	0.824
	Cr	52	**60.381**	**ug/L**	0.709	503922	0.449
	Cr	53		**ug/L**		119050	-0.029
	Mn	55	**909.215**	**ug/L**	3.678	12376996	10.920
	Fe	57	**40453.523**	**ug/L**	2.904	10178488	8.974
	Co	59	**34.969**	**ug/L**	1.688	359083	0.316
	Ni	60	**40.699**	**ug/L**	1.551	92160	0.081
	Cu	63		**ug/L**		503200	0.444
	Cu	65	**95.482**	**ug/L**	1.284	261263	0.230
	Zn	66	**713.053**	**ug/L**	0.946	1004100	1.848
	Zn	67		**ug/L**		256403	0.445
	Zn	68		**ug/L**		994977	1.829
>	Ge	74		**ug/L**		543083	543082.659
	As	75	**77.135**	**ug/L**	1.661	111073	0.205
	Se	77		**ug/L**		11079	0.009
	Se	82	**7.862**	**ug/L**	0.396	1197	0.002
	Kr	83		**ug/L**		452	0.001
	Sr	88	**579.474**	**ug/L**	1.417	9715292	26.669
	Y	89		**ug/L**		929765	2.552
	Mo	98	**43.954**	**ug/L**	2.056	180057	0.494
	Ag	107	**25.253**	**ug/L**	1.032	176925	0.485
	Cd	111	**9.261**	**ug/L**	1.724	16598	0.045
	Cd	114		**ug/L**		31188	0.085
>	In	115		**ug/L**		364244	364243.814
	Sn	120	**50.513**	**ug/L**	0.723	379626	1.040
	Sb	121	**62.159**	**ug/L**	2.199	345134	0.936
	Sb	123		**ug/L**		272814	0.740
	Ba	135		**ug/L**		24386443	46.202
	Ba	137	**12191.830**	**ug/L**	0.881	41814240	79.220
	Ho	165		**ug/L**		59723	0.113
>	Lu	175		**ug/L**		527826	527826.000
	Tl	205	**55.726**	**ug/L**	0.931	935698	1.770
	Pb	208	**275.013**	**ug/L**	1.889	7571063	14.339
	Bi	209		**ug/L**		14595	0.027
	Th	232	**43.855**	**ug/L**	1.152	1400371	2.646
	U	238	**35.629**	**ug/L**	0.601	1177065	2.227

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		125.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
B 11 Upper, S, EEE B	11	Sample is out of limits (over linear range)
Ca 43 Upper, S, EEE Ca	43	Sample is out of limits (over linear range)
Sc 45 Int Std for sam Sc	45	
Ti 47 Upper, S, EEE Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977925
Sample Date/Time: Monday, December 07, 2009 21:11:12
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977925.431

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.848**	**ug/L**	0.858	140466	0.122
	Be	9	**19.186**	**ug/L**	0.979	12232	0.011
	B	11	**286.081**	**ug/L**	3.856	202327	0.174
	Na	23	**1423.584**	**ug/L**	6.751	9705026	8.308
	Mg	24	**16948.078**	**ug/L**	3.726	71268073	61.721
	Al	27	**33338.313**	**ug/L**	2.580	230507186	199.613
	P	31	**1457.209**	**ug/L**	0.722	542830	0.459
	K	39	**4044.804**	**ug/L**	5.034	36724446	31.175
	Ca	43	**301399.289**	**ug/L**	2.431	6092105	5.276
>	Sc	45		**ug/L**		1154811	1154810.627
	Ti	47	**1075.853**	**ug/L**	0.552	1088554	0.942
	V	51	**85.705**	**ug/L**	4.126	945764	0.804
	Cr	52	**61.407**	**ug/L**	2.199	522131	0.456
	Cr	53		**ug/L**		122102	-0.029
	Mn	55	**920.534**	**ug/L**	1.112	12768446	11.056
	Fe	57	**39002.909**	**ug/L**	2.771	9997434	8.653
	Co	59	**35.367**	**ug/L**	1.758	369984	0.320
	Ni	60	**42.608**	**ug/L**	2.397	98268	0.085
	Cu	63		**ug/L**		584113	0.505
	Cu	65	**108.799**	**ug/L**	1.702	303261	0.262
	Zn	66	**855.520**	**ug/L**	0.806	1207152	2.217
	Zn	67		**ug/L**		283237	0.493
	Zn	68		**ug/L**		1121219	2.057
>	Ge	74		**ug/L**		544215	544214.609
	As	75	**83.389**	**ug/L**	1.101	120344	0.221
	Se	77		**ug/L**		12668	0.012
	Se	82	**7.624**	**ug/L**	4.345	1163	0.002
	Kr	83		**ug/L**		495	0.001
	Sr	88	**636.882**	**ug/L**	1.215	10596762	29.311
	Y	89		**ug/L**		796882	2.204
	Mo	98	**49.336**	**ug/L**	1.772	200530	0.554
	Ag	107	**25.610**	**ug/L**	0.963	178069	0.492
	Cd	111	**8.921**	**ug/L**	2.126	15872	0.044
	Cd	114		**ug/L**		29370	0.081
>	In	115		**ug/L**		361525	361525.359
	Sn	120	**37.060**	**ug/L**	2.003	276626	0.763
	Sb	121	**62.755**	**ug/L**	2.004	345744	0.945
	Sb	123		**ug/L**		274217	0.750
	Ba	135		**ug/L**		21997462	42.925
	Ba	137	**11155.123**	**ug/L**	1.256	37143835	72.484
	Ho	165		**ug/L**		49131	0.096
>	Lu	175		**ug/L**		512446	512445.692
	Tl	205	**56.347**	**ug/L**	1.541	918489	1.790
	Pb	208	**291.064**	**ug/L**	0.342	7779516	15.176
	Bi	209		**ug/L**		19136	0.037
	Th	232	**41.907**	**ug/L**	1.466	1299282	2.528
	U	238	**35.865**	**ug/L**	0.315	1150334	2.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		127.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		88.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
B 11 Upper, S, EEE	B	11	Sample is out of limits (over linear range)
Ca 43 Upper, S, EEE	Ca	43	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201977923
Sample Date/Time: Monday, December 07, 2009 21:17:19
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925189|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201977923.432

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**6.083**	ug/L	1.390	16952	0.016
	Be	9	**0.390**	ug/L	5.913	253	0.000
	B	11	**48.680**	ug/L	1.742	31669	0.030
	Na	23	**358.233**	ug/L	15.658	2219298	2.091
	Mg	24	**3065.733**	ug/L	5.372	11390038	11.165
	Al	27	**7513.828**	ug/L	1.751	45927031	44.989
	P	31	**146.779**	ug/L	3.534	58134	0.046
	K	39	**747.535**	ug/L	2.826	6527770	5.762
	Ca	43	**47707.854**	ug/L	1.290	852446	0.835
>	Sc	45		ug/L		1020360	1020360.248
	Ti	47	**194.505**	ug/L	4.981	174185	0.170
	V	51	**15.266**	ug/L	3.904	161647	0.143
	Cr	52	**8.775**	ug/L	3.354	62453	0.065
	Cr	53		ug/L		88752	-0.047
	Mn	55	**191.576**	ug/L	4.875	2347314	2.301
	Fe	57	**7526.607**	ug/L	3.689	1709618	1.670
	Co	59	**3.480**	ug/L	3.788	32618	0.031
	Ni	60	**5.062**	ug/L	4.307	10496	0.010
	Cu	63		ug/L		85410	0.083
	Cu	65	**17.699**	ug/L	2.957	43761	0.043
	Zn	66	**160.672**	ug/L	0.614	234900	0.416
	Zn	67		ug/L		69107	0.096
	Zn	68		ug/L		243798	0.430
>	Ge	74		ug/L		562939	562939.251
	As	75	**6.750**	ug/L	1.475	9905	0.018
	Se	77		ug/L		6450	0.000
	Se	82	**-0.106**	ug/L	153.511	-13	-0.000
	Kr	83		ug/L		161	0.000
	Sr	88	**95.181**	ug/L	2.022	1635288	4.381
	Y	89		ug/L		208991	0.560
	Mo	98	**2.636**	ug/L	2.179	11306	0.030
	Ag	107	**0.094**	ug/L	6.860	834	0.002
	Cd	111	**0.890**	ug/L	2.690	1727	0.004
	Cd	114		ug/L		2918	0.007
>	In	115		ug/L		373190	373190.462
	Sn	120	**1.330**	ug/L	2.843	11049	0.027
	Sb	121	**0.607**	ug/L	4.736	7582	0.009
	Sb	123		ug/L		5971	0.007
	Ba	135		ug/L		5873470	10.614
	Ba	137	**2770.537**	ug/L	1.454	9961359	18.002
	Ho	165		ug/L		12956	0.023
>	Lu	175		ug/L		553420	553420.403
	Tl	205	**0.145**	ug/L	7.530	4026	0.005
	Pb	208	**41.592**	ug/L	2.024	1202496	2.169
	Bi	209		ug/L		3593	0.006
	Th	232	**4.013**	ug/L	4.453	137965	0.242
	U	238	**1.599**	ug/L	2.923	57049	0.100

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		113.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE Ti	47	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, December 07, 2009 21:29:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.434

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.392**	**ug/L**	1.563	125970	0.126
	Be	9	**46.876**	**ug/L**	0.681	25865	0.026
	B	11	**92.118**	**ug/L**	0.224	57496	0.056
	Na	23	**3974.311**	**ug/L**	14.558	23293689	23.195
	Mg	24	**4645.775**	**ug/L**	2.925	16946698	16.919
	Al	27	**4415.028**	**ug/L**	21.476	26451644	26.435
	P	31	**4365.104**	**ug/L**	2.806	1388127	1.376
	K	39	**4048.987**	**ug/L**	9.527	31876819	31.207
	Ca	43	**4470.916**	**ug/L**	1.666	78782	0.078
>	Sc	45		**ug/L**		1001249	1001248.885
	Ti	47	**46.106**	**ug/L**	0.773	40944	0.040
	V	51	**45.637**	**ug/L**	3.344	443926	0.428
	Cr	52	**46.273**	**ug/L**	2.230	340190	0.344
	Cr	53		**ug/L**		131237	-0.003
	Mn	55	**47.213**	**ug/L**	1.385	569394	0.567
	Fe	57	**4762.890**	**ug/L**	0.608	1064853	1.057
	Co	59	**45.478**	**ug/L**	2.211	412398	0.411
	Ni	60	**45.153**	**ug/L**	1.920	90290	0.090
	Cu	63		**ug/L**		225865	0.225
	Cu	65	**46.324**	**ug/L**	2.263	112080	0.112
	Zn	66	**51.850**	**ug/L**	1.964	77005	0.134
	Zn	67		**ug/L**		25125	0.017
	Zn	68		**ug/L**		56826	0.097
>	Ge	74		**ug/L**		569494	569493.635
	As	75	**47.390**	**ug/L**	1.825	71483	0.126
	Se	77		**ug/L**		11209	0.008
	Se	82	**50.588**	**ug/L**	2.362	8057	0.014
	Kr	83		**ug/L**		130	0.000
	Sr	88	**52.846**	**ug/L**	2.171	904323	2.432
	Y	89		**ug/L**		158	0.000
	Mo	98	**49.452**	**ug/L**	2.966	206567	0.555
	Ag	107	**51.085**	**ug/L**	2.344	364877	0.982
	Cd	111	**49.557**	**ug/L**	1.339	90152	0.242
	Cd	114		**ug/L**		215649	0.580
>	In	115		**ug/L**		371604	371604.103
	Sn	120	**51.295**	**ug/L**	1.722	393213	1.056
	Sb	121	**50.473**	**ug/L**	6.613	286599	0.760
	Sb	123		**ug/L**		227635	0.604
	Ba	135		**ug/L**		103961	0.187
	Ba	137	**50.568**	**ug/L**	0.260	182847	0.329
	Ho	165		**ug/L**		119	0.000
>	Lu	175		**ug/L**		555849	555848.983
	Tl	205	**52.575**	**ug/L**	0.350	929773	1.670
	Pb	208	**54.039**	**ug/L**	1.100	1568748	2.818
	Bi	209		**ug/L**		439	0.000
	Th	232	**50.139**	**ug/L**	0.981	1685534	3.025
	U	238	**51.050**	**ug/L**	0.665	1775247	3.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	92.784				
	Be	9	93.751				
	B	11	92.118				
	Na	23	79.486				
	Mg	24	92.916				
	Al	27	87.426				
	P	31	87.302				
	K	39	80.980				
	Ca	43	89.418				
>	Sc	45		110.9			
	Ti	47	92.211				
	V	51	91.274				
	Cr	52	92.545				
	Cr	53					
	Mn	55	94.426				
	Fe	57	95.258				
	Co	59	90.957				
	Ni	60	90.307				
	Cu	63					
	Cu	65	92.648				
	Zn	66	103.700				
	Zn	67					
	Zn	68					
>	Ge	74		93.1			
	As	75	94.781				
	Se	77					
	Se	82	101.176				
	Kr	83					
	Sr	88	105.691				
	Y	89					
	Mo	98	98.903				
	Ag	107	102.169				
	Cd	111	99.115				
	Cd	114					
>	In	115		91.8			
	Sn	120	102.590				
	Sb	121	100.947				
	Sb	123					
	Ba	135					
	Ba	137	101.137				
	Ho	165					
>	Lu	175		95.8			
	Tl	205	105.151				
	Pb	208	108.078				
	Bi	209					
	Th	232	100.278				
	U	238	102.100				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	Al	27	CCV is out of limits (+/- 10%)
QC Std 8	P	31	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
QC Std 8	Ca	43	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Monday, December 07, 2009 21:35:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.435

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.003**	ug/L	123.833	130	-0.000
	Be	9	**-0.024**	ug/L	25.768	21	-0.000
	B	11	**4.643**	ug/L	12.833	4346	0.003
	Na	23	**-3.762**	ug/L	5.810	69502	-0.022
	Mg	24	**-0.254**	ug/L	255.746	7669	-0.001
	Al	27	**0.332**	ug/L	224.202	20348	0.002
	P	31	**-4.627**	ug/L	20.930	9429	-0.001
	K	39	**-11.727**	ug/L	88.055	555344	-0.090
	Ca	43	**-4.013**	ug/L	52.245	359	-0.000
>	Sc	45		ug/L		1016356	1016355.527
	Ti	47	**0.086**	ug/L	55.000	603	0.000
	V	51	**-0.670**	ug/L	52.311	9174	-0.006
	Cr	52	**0.209**	ug/L	16.120	-2428	0.002
	Cr	53		ug/L		98920	-0.037
	Mn	55	**0.006**	ug/L	79.745	1771	0.000
	Fe	57	**-0.544**	ug/L	118.619	6852	-0.000
	Co	59	**-0.024**	ug/L	6.126	296	-0.000
	Ni	60	**-0.023**	ug/L	25.720	165	-0.000
	Cu	63		ug/L		255	-0.000
	Cu	65	**-0.025**	ug/L	2.474	161	-0.000
	Zn	66	**-0.022**	ug/L	134.524	451	-0.000
	Zn	67		ug/L		13668	-0.003
	Zn	68		ug/L		1608	-0.000
>	Ge	74		ug/L		575644	575644.063
	As	75	**0.054**	ug/L	537.816	-113	0.000
	Se	77		ug/L		5633	-0.001
	Se	82	**-0.121**	ug/L	36.939	-16	-0.000
	Kr	83		ug/L		127	-0.000
	Sr	88	**-0.012**	ug/L	13.072	548	-0.001
	Y	89		ug/L		62	-0.000
	Mo	98	**0.050**	ug/L	37.031	476	0.001
	Ag	107	**-0.005**	ug/L	17.978	131	-0.000
	Cd	111	**-0.016**	ug/L	22.228	76	-0.000
	Cd	114		ug/L		103	-0.000
>	In	115		ug/L		379963	379962.931
	Sn	120	**0.317**	ug/L	15.520	3324	0.007
	Sb	121	**0.821**	ug/L	49.485	8923	0.012
	Sb	123		ug/L		6941	0.010
	Ba	135		ug/L		545	0.001
	Ba	137	**0.207**	ug/L	2.691	953	0.001
	Ho	165		ug/L		58	0.000
>	Lu	175		ug/L		558231	558231.249
	Tl	205	**0.216**	ug/L	17.777	5312	0.007
	Pb	208	**-0.037**	ug/L	6.161	1588	-0.002
	Bi	209		ug/L		312	0.000
	Th	232	**0.372**	ug/L	24.501	16594	0.022
	U	238	**-0.010**	ug/L	5.385	1434	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		112.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241336001
Sample Date/Time: Monday, December 07, 2009 21:41:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241336001.436

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**12.640**	ug/L	1.515	41119	0.034
	Be	9	**1.947**	ug/L	1.745	1322	0.001
	B	11	**3.369**	ug/L	1.366	4192	0.002
	Na	23	**609.039**	ug/L	4.773	4357400	3.554
	Mg	24	**1403.159**	ug/L	5.513	6119021	5.110
	Al	27	**8949.828**	ug/L	8.586	64094369	53.587
	P	31	**385.439**	ug/L	1.722	158129	0.121
	K	39	**1316.220**	ug/L	1.658	12894871	10.145
	Ca	43	**1844.674**	ug/L	3.803	39116	0.032
>	Sc	45		ug/L		1196017	1196016.565
	Ti	47	**690.287**	ug/L	1.606	723514	0.604
	V	51	**12.939**	ug/L	1.200	163493	0.121
	Cr	52	**20.739**	ug/L	1.462	179546	0.154
	Cr	53		ug/L		98545	-0.052
	Mn	55	**1210.368**	ug/L	1.874	17386132	14.536
	Fe	57	**26267.311**	ug/L	2.778	6976247	5.827
	Co	59	**2.433**	ug/L	1.625	26931	0.022
	Ni	60	**10.094**	ug/L	3.257	24298	0.020
	Cu	63		ug/L		48784	0.040
	Cu	65	**8.759**	ug/L	0.897	25533	0.021
	Zn	66	**141.029**	ug/L	1.104	215883	0.366
	Zn	67		ug/L		45402	0.050
	Zn	68		ug/L		158365	0.266
>	Ge	74		ug/L		589256	589256.465
	As	75	**3.579**	ug/L	12.295	5406	0.010
	Se	77		ug/L		4482	-0.004
	Se	82	**0.633**	ug/L	24.384	108	0.000
	Kr	83		ug/L		345	0.000
	Sr	88	**21.686**	ug/L	1.514	394767	0.998
	Y	89		ug/L		2241545	5.678
	Mo	98	**5.024**	ug/L	0.046	22548	0.056
	Ag	107	**0.839**	ug/L	2.395	6538	0.016
	Cd	111	**1.384**	ug/L	5.276	2781	0.007
	Cd	114		ug/L		790	0.001
>	In	115		ug/L		394790	394790.075
	Sn	120	**3.660**	ug/L	2.001	30619	0.075
	Sb	121	**0.025**	ug/L	222.617	4556	0.000
	Sb	123		ug/L		3617	0.001
	Ba	135		ug/L		217291	0.356
	Ba	137	**96.536**	ug/L	3.434	382482	0.627
	Ho	165		ug/L		148724	0.244
>	Lu	175		ug/L		609667	609666.945
	Tl	205	**0.190**	ug/L	6.576	5315	0.006
	Pb	208	**12.695**	ug/L	2.875	406300	0.662
	Bi	209		ug/L		12187	0.020
	Th	232	**21.532**	ug/L	3.050	796154	1.299
	U	238	**1.877**	ug/L	2.576	73468	0.117

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		132.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sarrSc	45	
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241336002
Sample Date/Time: Monday, December 07, 2009 21:48:03
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241336002.437

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**14.468**	**ug/L**	2.279	46420	0.039
	Be	9	**1.377**	**ug/L**	3.110	934	0.001
	B	11	**6.643**	**ug/L**	2.516	6482	0.004
	Na	23	**1678.181**	**ug/L**	4.373	11659044	9.794
	Mg	24	**2185.987**	**ug/L**	4.308	9401691	7.961
	Al	27	**7634.217**	**ug/L**	8.455	53920660	45.710
	P	31	**482.152**	**ug/L**	3.677	191937	0.152
	K	39	**1424.986**	**ug/L**	2.653	13709695	10.983
	Ca	43	**8371.653**	**ug/L**	3.029	173384	0.147
>	Sc	45		**ug/L**		1179942	1179941.777
	Ti	47	**638.893**	**ug/L**	0.664	660733	0.559
	V	51	**16.893**	**ug/L**	3.799	205020	0.158
	Cr	52	**30.200**	**ug/L**	1.214	260043	0.224
	Cr	53		**ug/L**		102434	-0.047
	Mn	55	**987.696**	**ug/L**	0.917	13997635	11.862
	Fe	57	**27625.388**	**ug/L**	1.794	7238707	6.129
	Co	59	**3.468**	**ug/L**	0.460	37623	0.031
	Ni	60	**15.216**	**ug/L**	2.867	36017	0.030
	Cu	63		**ug/L**		97856	0.082
	Cu	65	**17.513**	**ug/L**	1.110	50103	0.042
	Zn	66	**146.877**	**ug/L**	2.216	224503	0.381
	Zn	67		**ug/L**		46378	0.052
	Zn	68		**ug/L**		167163	0.281
>	Ge	74		**ug/L**		588572	588571.832
	As	75	**3.761**	**ug/L**	0.888	5685	0.010
	Se	77		**ug/L**		4319	-0.004
	Se	82	**0.554**	**ug/L**	34.014	95	0.000
	Kr	83		**ug/L**		320	0.000
	Sr	88	**385.431**	**ug/L**	0.806	6887363	17.739
	Y	89		**ug/L**		1780370	4.586
	Mo	98	**6.050**	**ug/L**	1.243	26644	0.068
	Ag	107	**2.705**	**ug/L**	0.723	20347	0.052
	Cd	111	**1.352**	**ug/L**	2.720	2675	0.007
	Cd	114		**ug/L**		1515	0.003
>	In	115		**ug/L**		388235	388235.238
	Sn	120	**4.016**	**ug/L**	2.113	32958	0.083
	Sb	121	**-0.235**	**ug/L**	15.376	2962	-0.004
	Sb	123		**ug/L**		2374	-0.002
	Ba	135		**ug/L**		381766	0.635
	Ba	137	**167.422**	**ug/L**	1.043	654152	1.088
	Ho	165		**ug/L**		122255	0.203
>	Lu	175		**ug/L**		601124	601123.828
	Tl	205	**0.188**	**ug/L**	5.931	5190	0.006
	Pb	208	**51.009**	**ug/L**	1.849	1601348	2.660
	Bi	209		**ug/L**		21746	0.036
	Th	232	**20.347**	**ug/L**	0.963	742322	1.228
	U	238	**2.250**	**ug/L**	1.369	86459	0.141

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		130.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sarrSc	45	
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 22:18:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.442

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**43.416**	**ug/L**	2.606	132188	0.118
	Be	9	**44.810**	**ug/L**	2.959	27719	0.025
	B	11	**85.063**	**ug/L**	0.865	59672	0.052
	Na	23	**3930.825**	**ug/L**	9.165	25896336	22.941
	Mg	24	**4817.102**	**ug/L**	6.075	19709407	17.543
	Al	27	**4515.970**	**ug/L**	1.694	30375789	27.039
	P	31	**4437.249**	**ug/L**	3.557	1581795	1.399
	K	39	**4382.111**	**ug/L**	3.819	38634118	33.775
	Ca	43	**4425.171**	**ug/L**	2.969	87425	0.077
>	Sc	45		**ug/L**		1122920	1122920.241
	Ti	47	**45.805**	**ug/L**	3.568	45604	0.040
	V	51	**45.876**	**ug/L**	2.768	500276	0.430
	Cr	52	**46.867**	**ug/L**	3.992	386305	0.348
	Cr	53		**ug/L**		143441	-0.006
	Mn	55	**46.734**	**ug/L**	2.923	631870	0.561
	Fe	57	**4624.282**	**ug/L**	1.184	1159577	1.026
	Co	59	**44.507**	**ug/L**	1.960	452524	0.403
	Ni	60	**44.633**	**ug/L**	3.865	100050	0.089
	Cu	63		**ug/L**		244345	0.217
	Cu	65	**45.188**	**ug/L**	3.678	122574	0.109
	Zn	66	**51.765**	**ug/L**	1.505	82826	0.134
	Zn	67		**ug/L**		26554	0.016
	Zn	68		**ug/L**		62117	0.098
>	Ge	74		**ug/L**		613535	613534.788
	As	75	**48.752**	**ug/L**	1.329	79231	0.129
	Se	77		**ug/L**		12275	0.009
	Se	82	**50.289**	**ug/L**	1.315	8629	0.014
	Kr	83		**ug/L**		122	-0.000
	Sr	88	**53.945**	**ug/L**	1.938	970616	2.483
	Y	89		**ug/L**		237	0.000
	Mo	98	**50.639**	**ug/L**	1.292	222405	0.569
	Ag	107	**51.456**	**ug/L**	1.500	386430	0.989
	Cd	111	**50.351**	**ug/L**	1.097	96295	0.246
	Cd	114		**ug/L**		227808	0.583
>	In	115		**ug/L**		390632	390631.890
	Sn	120	**49.863**	**ug/L**	3.457	401881	1.027
	Sb	121	**50.973**	**ug/L**	7.444	304279	0.768
	Sb	123		**ug/L**		239992	0.606
	Ba	135		**ug/L**		108232	0.198
	Ba	137	**52.833**	**ug/L**	1.927	187373	0.343
	Ho	165		**ug/L**		123	0.000
>	Lu	175		**ug/L**		545312	545312.471
	Tl	205	**52.703**	**ug/L**	0.342	914330	1.674
	Pb	208	**54.071**	**ug/L**	1.049	1539873	2.819
	Bi	209		**ug/L**		427	0.000
	Th	232	**49.510**	**ug/L**	1.670	1632629	2.987
	U	238	**49.785**	**ug/L**	2.381	1698286	3.112

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9998
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	86.832				
	Be	9	89.620				
	B	11	85.063				
	Na	23	78.617				
	Mg	24	96.342				
	Al	27	89.425				
	P	31	88.745				
	K	39	87.642				
	Ca	43	88.503				
>	Sc	45		124.4			
	Ti	47	91.611				
	V	51	91.752				
	Cr	52	93.733				
	Cr	53					
	Mn	55	93.468				
	Fe	57	92.486				
	Co	59	89.013				
	Ni	60	89.265				
	Cu	63					
	Cu	65	90.376				
	Zn	66	103.531				
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75	97.503				
	Se	77					
	Se	82	100.579				
	Kr	83					
	Sr	88	107.891				
	Y	89					
	Mo	98	101.278				
	Ag	107	102.911				
	Cd	111	100.702				
	Cd	114					
>	In	115		96.5			
	Sn	120	99.726				
	Sb	121	101.947				
	Sb	123					
	Ba	135					
	Ba	137	105.665				
	Ho	165					
>	Lu	175		94.0			
	Tl	205	105.406				
	Pb	208	108.143				
	Bi	209					
	Th	232	99.021				
	U	238	99.571				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)
QC Std 6	P	31	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Std 6	Ca	43CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45
QC Std 6	Co	59CCV is out of limits (+/- 10%)
QC Std 6	Ni	60CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 22:24:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.443

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.009	ug/L	57.345	123	-0.000
	Be	9	-0.032	ug/L	17.145	18	-0.000
	B	11	1.967	ug/L	23.599	2917	0.001
	Na	23	-0.264	ug/L	958.458	97673	-0.002
	Mg	24	-0.666	ug/L	42.239	6668	-0.002
	Al	27	-0.487	ug/L	21.976	16676	-0.003
	P	31	-3.080	ug/L	7.686	10727	-0.001
	K	39	-17.198	ug/L	13.058	555604	-0.133
	Ca	43	-3.757	ug/L	25.552	393	-0.000
>	Sc	45		ug/L		1098701	1098701.334
	Ti	47	0.110	ug/L	12.782	676	0.000
	V	51	-0.663	ug/L	31.820	9982	-0.006
	Cr	52	0.412	ug/L	6.142	-968	0.003
	Cr	53		ug/L		103607	-0.040
	Mn	55	0.016	ug/L	20.803	2050	0.000
	Fe	57	-0.474	ug/L	153.490	7427	-0.000
	Co	59	-0.029	ug/L	7.495	276	-0.000
	Ni	60	-0.024	ug/L	39.293	175	-0.000
	Cu	63		ug/L		294	-0.000
	Cu	65	-0.038	ug/L	4.175	140	-0.000
	Zn	66	-0.048	ug/L	46.402	437	-0.000
	Zn	67		ug/L		13942	-0.004
	Zn	68		ug/L		1612	-0.001
>	Ge	74		ug/L		608567	608566.512
	As	75	-0.108	ug/L	214.818	-374	-0.000
	Se	77		ug/L		5936	-0.001
	Se	82	-0.127	ug/L	23.213	-18	-0.000
	Kr	83		ug/L		129	-0.000
	Sr	88	-0.014	ug/L	15.707	531	-0.001
	Y	89		ug/L		92	0.000
	Mo	98	0.053	ug/L	43.654	503	0.001
	Ag	107	-0.002	ug/L	82.250	151	-0.000
	Cd	111	-0.027	ug/L	21.499	57	-0.000
	Cd	114		ug/L		106	-0.000
>	In	115		ug/L		390266	390265.631
	Sn	120	0.296	ug/L	17.079	3242	0.006
	Sb	121	0.732	ug/L	54.487	8647	0.011
	Sb	123		ug/L		6781	0.009
	Ba	135		ug/L		182	0.000
	Ba	137	0.033	ug/L	15.404	324	0.000
	Ho	165		ug/L		61	0.000
>	Lu	175		ug/L		557919	557919.228
	Tl	205	0.197	ug/L	23.564	4993	0.006
	Pb	208	-0.039	ug/L	4.787	1535	-0.002
	Bi	209		ug/L		310	0.000
	Th	232	0.343	ug/L	26.998	15627	0.021
	U	238	-0.013	ug/L	20.161	1350	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		121.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 08:37:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\Blank.546

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		78	
	Be	9		ug/L		18	
>	Sc	45		ug/L		1015394	
	Ni	60		ug/L		172	
>	Lu	175		ug/L		527344	
	Tl	205		ug/L		5176	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 08:39:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\Standard 1.547

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**10.000**	**ug/L**	1.722	27048	0.027
|	Be	9	**10.000**	**ug/L**	0.778	5381	0.005
|>	Sc	45		**ug/L**		1007992	1007991.603
⌊	Ni	60	**10.000**	**ug/L**	0.853	17645	0.017
⌈>	Lu	175		**ug/L**		527120	527119.650
⌊	Tl	205	**10.000**	**ug/L**	2.738	200925	0.371

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 08:42:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\Standard 2.548

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.993**	**ug/L**	3.325	270157	0.266
	Be	9	**99.980**	**ug/L**	1.345	53037	0.052
>	Sc	45		**ug/L**		1016281	1016280.857
	Ni	60	**99.955**	**ug/L**	1.526	168643	0.166
>	Lu	175		**ug/L**		512839	512839.146
	Tl	205	**99.846**	**ug/L**	1.123	1653341	3.214

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 08:44:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 1.549

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.356**	**ug/L**	1.316	136822	0.134
	Be	9	**51.800**	**ug/L**	0.517	27633	0.027
>	Sc	45		**ug/L**		1021634	1021633.508
	Ni	60	**50.874**	**ug/L**	3.797	86350	0.084
>	Lu	175		**ug/L**		516637	516637.055
	Tl	205	**51.387**	**ug/L**	1.412	859665	1.654

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.712				
	Be	9	103.600				
>	Sc	45		100.6			
	Ni	60	101.747				
>	Lu	175		98.0			
	Tl	205	102.774				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 08:46:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 2.550

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.000	ug/L	633.910	77	-0.000
	Be	9	0.004	ug/L	72.017	20	0.000
>	Sc	45		ug/L		1013668	1013667.932
	Ni	60	-0.002	ug/L	884.362	169	-0.000
>	Lu	175		ug/L		521415	521415.042
	Tl	205	0.509	ug/L	1.482	13656	0.016

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		99.8			
	Ni	60					
>	Lu	175		98.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 08:49:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 3.551

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.587**	**ug/L**	1.671	28542	0.028
	Be	9	**0.517**	**ug/L**	2.933	291	0.000
>	Sc	45		**ug/L**		1011561	1011560.857
	Ni	60	**2.118**	**ug/L**	1.948	3724	0.004
>	Lu	175		**ug/L**		526935	526935.377
	Tl	205	**1.279**	**ug/L**	2.626	26866	0.041

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	105.875				
	Be	9	103.479				
>	Sc	45		99.6			
	Ni	60	105.881				
>	Lu	175		99.9			
	Tl	205	127.900				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 08:51:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 4.552

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.064**	**ug/L**	7.916	245	0.000
	Be	9	**0.048**	**ug/L**	23.154	42	0.000
>	Sc	45		**ug/L**		996101	996100.942
	Ni	60	**3.124**	**ug/L**	2.325	5328	0.005
>	Lu	175		**ug/L**		460563	460563.368
	Tl	205	**0.011**	**ug/L**	117.047	4676	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		98.1			
	Ni	60	115.699				
>	Lu	175		87.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 08:54:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 5.553

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.348**	**ug/L**	3.098	51726	0.054
	Be	9	**19.175**	**ug/L**	1.236	9575	0.010
>	Sc	45		**ug/L**		955368	955367.619
	Ni	60	**22.935**	**ug/L**	2.960	36488	0.038
>	Lu	175		**ug/L**		459751	459751.145
	Tl	205	**20.777**	**ug/L**	2.754	311981	0.669

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.738				
	Be	9	95.877				
>	Sc	45		94.1			
	Ni	60	101.036				
>	Lu	175		87.2			
	Tl	205	103.887				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 08:56:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.554

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.606**	**ug/L**	1.873	130170	0.132
	Be	9	**51.257**	**ug/L**	0.597	26412	0.027
>	Sc	45		**ug/L**		986823	986822.658
	Ni	60	**51.389**	**ug/L**	2.041	84252	0.085
>	Lu	175		**ug/L**		523995	523995.340
	Tl	205	**49.491**	**ug/L**	1.450	839781	1.593

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	99.211				
	Be	9	102.513				
>	Sc	45		97.2			
	Ni	60	102.779				
>	Lu	175		99.4			
	Tl	205	98.982				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 08:58:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.555

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.004**	**ug/L**	73.426	89	0.000
	Be	9	**0.012**	**ug/L**	125.198	24	0.000
>	Sc	45		**ug/L**		1003588	1003587.760
	Ni	60	**-0.007**	**ug/L**	104.267	158	-0.000
>	Lu	175		**ug/L**		521547	521547.139
	Tl	205	**0.525**	**ug/L**	2.178	13938	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		98.8			
	Ni	60					
>	Lu	175		98.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977921
Sample Date/Time: Tuesday, December 08, 2009 09:01:10
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977921.556

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**-0.011**	**ug/L**	35.882	50	-0.000
|	Be	9	**-0.003**	**ug/L**	75.277	17	-0.000
|>	Sc	45		**ug/L**		1052235	1052234.511
⌊	Ni	60	**0.030**	**ug/L**	13.160	230	0.000
⌈>	Lu	175		**ug/L**		531743	531743.251
⌊	Tl	205	**0.224**	**ug/L**	7.775	9049	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		103.6			
	Ni	60					
>	Lu	175		100.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Tuesday, December 08, 2009 09:03:31
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|20|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977926.557

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.982**	**ug/L**	2.782	10923	0.011
	Be	9	**48.713**	**ug/L**	1.135	26066	0.025
>	Sc	45		**ug/L**		1024804	1024804.057
	Ni	60	**57.118**	**ug/L**	1.963	97229	0.095
>	Lu	175		**ug/L**		523851	523851.123
	Tl	205	**102.785**	**ug/L**	1.444	1738193	3.309

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		100.9			
	Ni	60					
>	Lu	175		99.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Tuesday, December 08, 2009 09:05:53
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|40|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977926.558

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.050**	**ug/L**	2.562	5502	0.005
	Be	9	**24.626**	**ug/L**	1.187	12813	0.013
>	Sc	45		**ug/L**		995828	995827.798
	Ni	60	**29.000**	**ug/L**	2.072	48061	0.048
>	Lu	175		**ug/L**		523520	523519.600
	Tl	205	**55.822**	**ug/L**	1.153	945886	1.797

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		98.1			
	Ni	60					
>	Lu	175		99.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 09:15:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.562

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.809**	**ug/L**	0.342	136509	0.135
	Be	9	**51.830**	**ug/L**	1.534	27341	0.027
>	Sc	45		**ug/L**		1010200	1010199.820
	Ni	60	**51.673**	**ug/L**	1.770	86739	0.086
>	Lu	175		**ug/L**		518602	518602.225
	Tl	205	**49.679**	**ug/L**	2.124	834310	1.599

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	101.619				
	Be	9	103.660				
>	Sc	45		99.5			
	Ni	60	103.346				
>	Lu	175		98.3			
	Tl	205	99.359				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 09:17:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.563

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.005**	**ug/L**	87.569	91	0.000
	Be	9	**0.009**	**ug/L**	17.342	22	0.000
>	Sc	45		**ug/L**		1008200	1008200.273
	Ni	60	**-0.006**	**ug/L**	163.270	161	-0.000
>	Lu	175		**ug/L**		522837	522836.924
	Tl	205	**0.402**	**ug/L**	1.864	11898	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		99.3			
	Ni	60					
>	Lu	175		99.1			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977922
Sample Date/Time: Tuesday, December 08, 2009 09:22:36
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977922.565

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**28.460**	**ug/L**	3.823	81248	0.076
	Be	9	**1.851**	**ug/L**	1.986	1055	0.001
>	Sc	45		**ug/L**		1073184	1073184.472
	Ni	60	**26.827**	**ug/L**	0.941	47929	0.044
>	Lu	175		**ug/L**		470590	470590.056
	Tl	205	**0.280**	**ug/L**	7.979	8854	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		105.7			
	Ni	60					
>	Lu	175		89.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977924
Sample Date/Time: Tuesday, December 08, 2009 09:24:58
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977924.566

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.978**	**ug/L**	1.356	164036	0.143
	Be	9	**22.701**	**ug/L**	0.550	13557	0.012
>	Sc	45		**ug/L**		1142730	1142729.960
	Ni	60	**47.315**	**ug/L**	1.389	89864	0.078
>	Lu	175		**ug/L**		470905	470904.960
	Tl	205	**55.742**	**ug/L**	0.357	849572	1.794

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		112.5			
	Ni	60					
>	Lu	175		89.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977925
Sample Date/Time: Tuesday, December 08, 2009 09:27:20
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977925.567

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.409**	**ug/L**	1.973	156780	0.137
	Be	9	**22.394**	**ug/L**	2.404	13420	0.012
>	Sc	45		**ug/L**		1146805	1146805.310
	Ni	60	**49.603**	**ug/L**	0.696	94532	0.082
>	Lu	175		**ug/L**		456409	456409.489
	Tl	205	**56.671**	**ug/L**	0.705	837040	1.824

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		112.9			
	Ni	60					
>	Lu	175		86.5			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977923
Sample Date/Time: Tuesday, December 08, 2009 09:29:43
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925189|10|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\1201977923.568

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**6.818**	**ug/L**	2.531	18796	0.018
|	Be	9	**0.482**	**ug/L**	6.710	278	0.000
|>	Sc	45		**ug/L**		1032899	1032899.076
⌊	Ni	60	**5.911**	**ug/L**	2.492	10300	0.010
⌈>	Lu	175		**ug/L**		505475	505475.015
⌊	Tl	205	**0.260**	**ug/L**	7.692	9198	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		101.7			
	Ni	60					
>	Lu	175		95.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241336001
Sample Date/Time: Tuesday, December 08, 2009 09:34:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\241336001.570

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**14.258**	**ug/L**	3.429	43545	0.038
	Be	9	**2.283**	**ug/L**	3.535	1386	0.001
>	Sc	45		**ug/L**		1147282	1147281.962
	Ni	60	**11.748**	**ug/L**	1.167	22547	0.019
>	Lu	175		**ug/L**		564607	564607.323
	Tl	205	**0.058**	**ug/L**	19.270	6593	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		113.0			
	Ni	60					
>	Lu	175		107.1			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 09:36:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.571

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**50.708**	**ug/L**	3.248	137210	0.135
|	Be	9	**52.627**	**ug/L**	1.075	27962	0.027
|>	Sc	45		**ug/L**		1017598	1017597.501
⌊	Ni	60	**50.960**	**ug/L**	1.932	86156	0.085
⌈>	Lu	175		**ug/L**		503454	503453.591
⌊	Tl	205	**50.281**	**ug/L**	1.931	819669	1.619

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	101.417				
	Be	9	105.255				
>	Sc	45		100.2			
	Ni	60	101.920				
>	Lu	175		95.5			
	Tl	205	100.563				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 09:39:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.572

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.004**	**ug/L**	102.479	90	0.000
	Be	9	**0.001**	**ug/L**	616.041	18	0.000
>	Sc	45		**ug/L**		1018391	1018390.731
	Ni	60	**-0.007**	**ug/L**	44.500	160	-0.000
>	Lu	175		**ug/L**		510256	510255.998
	Tl	205	**0.311**	**ug/L**	1.600	10121	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		100.3			
	Ni	60					
>	Lu	175		96.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241336002
Sample Date/Time: Tuesday, December 08, 2009 09:41:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\241336002.573

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**15.852**	**ug/L**	2.885	47742	0.042
	Be	9	**1.668**	**ug/L**	2.497	1005	0.001
>	Sc	45		**ug/L**		1131268	1131267.889
	Ni	60	**17.671**	**ug/L**	2.394	33341	0.029
>	Lu	175		**ug/L**		544730	544730.010
	Tl	205	**0.216**	**ug/L**	6.374	9130	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		111.4			
	Ni	60					
>	Lu	175		103.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 09:53:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.578

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.181**	**ug/L**	5.106	140600	0.133
	Be	9	**51.476**	**ug/L**	2.773	28328	0.027
>	Sc	45		**ug/L**		1054345	1054345.320
	Ni	60	**50.922**	**ug/L**	2.467	89196	0.084
>	Lu	175		**ug/L**		509131	509131.464
	Tl	205	**49.200**	**ug/L**	1.052	811311	1.584

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.361				
	Be	9	102.952				
>	Sc	45		103.8			
	Ni	60	101.845				
>	Lu	175		96.5			
	Tl	205	98.401				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 09:56:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.579

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.007**	**ug/L**	63.894	99	0.000
	Be	9	**0.003**	**ug/L**	122.581	20	0.000
>	Sc	45		**ug/L**		1046206	1046206.189
	Ni	60	**-0.007**	**ug/L**	160.262	165	-0.000
>	Lu	175		**ug/L**		511422	511421.768
	Tl	205	**0.253**	**ug/L**	6.194	9180	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		103.0			
	Ni	60					
>	Lu	175		97.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 08, 2009 12:14:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1420
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	7284.7	7284.658	173.033	2.4
	Mg	24.0	60061.7	60061.712	2059.059	3.4
	Co	58.9	158942.6	158942.583	1686.378	1.1
	Rh	102.9	311119.2	311119.217	1716.347	0.6
	In	114.9	405143.7	405143.712	1793.513	0.4
	Pb	208.0	250960.4	250960.382	2944.999	1.2
⌈>	Ba	137.9	382380.2	382380.208	5414.019	1.4
⌊	Ba++	69.0	8329.3	0.022	0.000	1.4
⌈>	Ce	139.9	466717.1	466717.070	5925.086	1.3
⌊	CeO	155.9	12652.4	0.027	0.000	1.6
	Bkgd	220.0	22.6	22.600	3.209	14.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.8	7387.6
Co	59	15	6.8	162601.5
In	115	15	7.5	393283.0

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2060	0.660
Be	9.0	9.0	2042	2070	0.677
Mg	24.0	24.0	5679	2080	0.685
Mg	25.0	25.0	5919	2075	0.643
Mg	26.0	26.0	6187	2070	0.701
Co	58.9	58.9	14182	2110	0.663
Rh	102.9	102.9	24876	2160	0.666
In	114.9	114.9	27790	2180	0.661
Ce	139.9	139.9	33862	2195	0.685
Pb	206.0	206.0	49948	2290	0.674
Pb	207.0	207.0	50147	2260	0.631
Pb	208.0	208.0	50451	2280	0.677
U	238.1	238.1	57727	2285	0.720

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, December 09, 2009 08:53:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Blank.361

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		555897	
⌊	Tl	205		ug/L		4295	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, December 09, 2009 08:56:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.362

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		551394	551394.225
⌊	Tl	205	10.000	ug/L	0.949	221530	0.394

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, December 09, 2009 08:59:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.363

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		555311	555311.357
⌊	Tl	205	99.826	ug/L	0.462	1864209	3.349

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, December 09, 2009 09:01:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.364

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		559606	559605.828
⌊	Tl	205	50.051	ug/L	0.325	944079	1.679

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.7			
⌊	Tl	205	100.103				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, December 09, 2009 09:04:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.365

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		557702	557701.974
⌊	Tl	205	0.298	ug/L	8.159	9889	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.3			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, December 09, 2009 09:06:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.366

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		554608	554607.767
	Tl	205	1.203	ug/L	0.831	26669	0.040

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.8			
	Tl	205	120.292				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, December 09, 2009 09:09:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.367

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		506620	506619.896
⌊	Tl	205	-0.048	ug/L	9.069	3094	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		91.1			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, December 09, 2009 09:12:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.368

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		506707	506706.852
⌊	Tl	205	21.083	ug/L	2.070	362313	0.707

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		91.2			
⌊	Tl	205	105.417				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 09, 2009 09:14:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.369

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		547665	547665.458
⌊	Tl	205	**49.562**	**ug/L**	0.940	914975	1.663

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.5			
⌊	Tl	205	99.124				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 09, 2009 09:17:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.370

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		542941	542941.119
	Tl	205	0.230	ug/L	4.425	8391	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.7			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977921
Sample Date/Time: Wednesday, December 09, 2009 09:20:19
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977921.371

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		547123	547123.232
⌊	Tl	205	0.015	ug/L	12.125	4494	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977926
Sample Date/Time: Wednesday, December 09, 2009 09:23:00
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925189|40|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977926.372

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		528153	528152.880
⌊	Tl	205	56.684	ug/L	1.610	1008384	1.902

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		95.0			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 09:33:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.376

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		508766	508766.404
	Tl	205	50.803	ug/L	1.414	871097	1.705

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		91.5			
	Tl	205	101.606				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 09:36:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.377

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		511973	511973.387
⌊	Tl	205	**0.228**	ug/L	18.273	7876	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		92.1			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977922
Sample Date/Time: Wednesday, December 09, 2009 09:41:56
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977922.379

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		509251	509251.021
⌊	Tl	205	0.225	ug/L	2.523	7776	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		91.6			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977924
Sample Date/Time: Wednesday, December 09, 2009 09:44:37
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977924.380

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		511509	511509.285
	Tl	205	59.125	ug/L	0.647	1018665	1.984

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		92.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977925
Sample Date/Time: Wednesday, December 09, 2009 09:47:19
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977925.381

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		486247	486247.325
⌊	Tl	205	61.491	ug/L	1.079	1006929	2.063

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		87.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977923
Sample Date/Time: Wednesday, December 09, 2009 09:50:01
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925189|10|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201977923.382

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		542102	542101.639
⌊	Tl	205	0.370	ug/L	2.709	10919	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 09:52:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.383

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		542279	542279.197
	Tl	205	51.255	ug/L	2.067	936399	1.720

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		97.6			
	Tl	205	102.509				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 09:55:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.384

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		546159	546159.266
	Tl	205	0.254	ug/L	6.427	8874	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241336001
Sample Date/Time: Wednesday, December 09, 2009 10:00:50
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241336001.386

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		596517	596517.393
⌊	Tl	205	0.076	ug/L	12.745	6132	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		107.3			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241336002
Sample Date/Time: Wednesday, December 09, 2009 10:03:34
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925189|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241336002.387

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		588133	588132.790
	Tl	205	0.083	ug/L	6.665	6187	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		105.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 10:17:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.392

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		500812	500811.536
	Tl	205	52.421	ug/L	2.682	884385	1.759

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		90.1			
	Tl	205	104.842				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 10:19:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.393

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		515865	515864.930
	Tl	205	0.130	ug/L	2.662	6236	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		92.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/03/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120309S1.SIF Results Data Set Name: 120309S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/03/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0050	0.0050	09:39:10	No
2			0.0048	0.0048	09:39:45	No
Mean:			0.0049			
SD :			0.0002			
%RSD:			3.3559			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/03/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0019	0.0068	09:41:07	No
2			0.0018	0.0067	09:41:42	No
Mean:			0.0018			
SD :			0.0001			
%RSD:			4.3825			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00919
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/03/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0044	0.0093	09:43:05	No
2			0.0044	0.0093	09:43:40	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.8225			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99978 Slope: 0.00877
Intercept : 0.00003

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/03/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0170	0.0219	09:45:05	No
2			0.0171	0.0220	09:45:40	No
Mean:			0.0171			
SD :			0.0000			
%RSD:			0.1087			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99996 Slope: 0.00849
Intercept : 0.00009

==========

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/03/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0422	0.0471	09:47:05	No
2			0.0431	0.0480	09:47:40	No
Mean:			0.0426			
SD :			0.0006			
%RSD:			1.4797			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99999 Slope: 0.00851
Intercept : 0.00008

==========

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/03/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0859	0.0908	09:49:06	No
2			0.0865	0.0914	09:49:40	No
Mean:			0.0862			
SD :			0.0004			
%RSD:			0.5037			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00861
Intercept : -0.00003

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0049	---	----	----	----
S0.2	0.0018	0.200	0.217	0.0001	4.4
S0.5	0.0044	0.500	0.514	0.0000	0.8
S2.0	0.0171	2.000	1.985	0.0000	0.1
S5.0	0.0426	5.000	4.956	0.0006	1.5
S10	0.0862	10.000	10.02	0.0004	0.5
Calib Blank	0.0049	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00861 Intercept: 0.0000

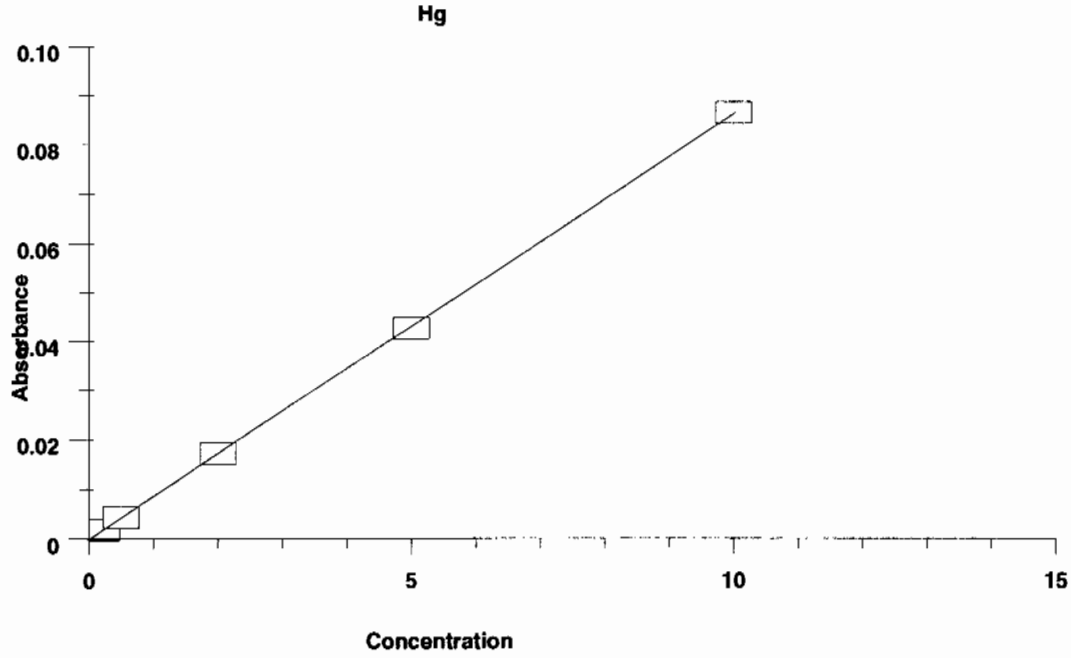

==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/03/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.010	5.010	0.0431	0.0480	09:51:08	No
2	5.003	5.003	0.0430	0.0479	09:51:43	No
Mean:	5.006	5.006	0.0431			
SD :	0.0051	0.0051	0.0000			
%RSD:	0.1	0.1	0.1012			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/03/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	0.0048	09:53:05	No
2	-0.043	-0.043	-0.0004	0.0045	09:53:40	No
Mean:	-0.027	-0.027	-0.0003			
SD :	0.0234	0.0234	0.0002			
%RSD:	88.1	88.1	77.6941			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/03/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.196	0.196	0.0017	0.0065	09:55:04	No
2	0.192	0.192	0.0016	0.0065	09:55:39	No
Mean:	0.194	0.194	0.0016			
SD :	0.0026	0.0026	0.0000			
%RSD:	1.4	1.4	1.3886			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.919	4.919	0.0423	0.0472	09:57:04	No
2	4.947	4.947	0.0425	0.0474	09:57:39	No
Mean:	4.933	4.933	0.0424			
SD :	0.0195	0.0195	0.0002			
%RSD:	0.4	0.4	0.3953			

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0008	0.0041	09:59:07	No
2	-0.092	-0.092	-0.0008	0.0041	09:59:42	No
Mean:	-0.093	-0.093	-0.0008			
SD :	0.0005	0.0005	0.0000			
%RSD:	0.6	0.6	0.5646			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/03/2009
Sample ID: 1201984311|i||928031|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.086	-0.086	-0.0008	0.0041	10:01:08	No
2	-0.088	-0.088	-0.0008	0.0041	10:01:43	No
Mean:	-0.087	-0.087	-0.0008			
SD :	0.0016	0.0016	0.0000			
%RSD:	1.8	1.8	1.7124			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/03/2009
Sample ID: 1201984312|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.352	3.352	0.0288	0.0337	10:03:08	No
2	3.314	3.314	0.0285	0.0334	10:03:43	No
Mean:	3.333	3.333	0.0287			
SD :	0.0270	0.0270	0.0002			
%RSD:	0.8	0.8	0.8107			

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/03/2009
Sample ID: 241905001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.374	0.374	0.0032	0.0081	10:05:10	No
2	0.314	0.314	0.0027	0.0076	10:05:45	No
Mean:	0.344	0.344	0.0029			
SD :	0.0425	0.0425	0.0004			
%RSD:	12.3	12.3	12.4771			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/03/2009
Sample ID: 241909001|i|||

%RSD: 0.6 0.6 0.6312

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/03/2009
Sample ID: 1201984315|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.145	-0.145	-0.0013	0.0036	10:19:00	No
2	-0.145	-0.145	-0.0013	0.0036	10:19:34	No
Mean:	-0.145	-0.145	-0.0013			
SD :	0.0002	0.0002	0.0000			
%RSD:	0.1	0.1	0.1265			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.051	5.051	0.0434	0.0483	10:20:58	No
2	5.071	5.071	0.0436	0.0485	10:21:33	No
Mean:	5.061	5.061	0.0435			
SD :	0.0145	0.0145	0.0001			
%RSD:	0.3	0.3	0.2869			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.105	-0.105	-0.0009	0.0040	10:23:01	No
2	-0.109	-0.109	-0.0010	0.0039	10:23:36	No
Mean:	-0.107	-0.107	-0.0010			
SD :	0.0029	0.0029	0.0000			
%RSD:	2.7	2.7	2.6002			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/03/2009
Sample ID: 241913002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.120	0.120	0.0010	0.0059	10:25:01	No
2	0.080	0.080	0.0007	0.0055	10:25:36	No
Mean:	0.100	0.100	0.0008			
SD :	0.0282	0.0282	0.0002			
%RSD:	28.1	28.1	29.1664			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/03/2009
Sample ID: 1201977144|i||924854|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0008	0.0041	10:27:00	No
2	-0.079	-0.079	-0.0007	0.0042	10:27:36	No
Mean:	-0.084	-0.084	-0.0008			
SD :	0.0067	0.0067	0.0001			
%RSD:	8.0	8.0	7.6499			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/03/2009
Sample ID: 1201977145|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.893	3.893	0.0335	0.0384	10:29:00	No
2	3.888	3.888	0.0334	0.0383	10:29:35	No
Mean:	3.890	3.890	0.0335			
SD :	0.0039	0.0039	0.0000			
%RSD:						

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 12/03/2009
Sample ID: 241301001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0005	0.0044	10:30:59	No
2	-0.066	-0.066	-0.0006	0.0043	10:31:34	No
Mean:	-0.058	-0.058	-0.0005			
SD :	0.0108	0.0108	0.0001			
%RSD:	18.4	18.4	17.3659			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 12/03/2009
Sample ID: 241322001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.055	-0.055	-0.0005	0.0044	10:32:59	No
2	-0.046	-0.046	-0.0004	0.0045	10:33:33	No
Mean:	-0.051	-0.051	-0.0005			
SD :	0.0064	0.0064	0.0001			
%RSD:	12.5	12.5	11.6839			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 12/03/2009
Sample ID: 241322002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.127	0.127	0.0011	0.0059	10:34:58	No
2	0.120	0.120	0.0010	0.0059	10:35:33	No
Mean:	0.124	0.124	0.0010			
SD :	0.0046	0.0046	0.0000			
%RSD:	3.8	3.8	3.8653			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 12/03/2009
Sample ID: 241322003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.194	0.194	0.0016	0.0065	10:36:59	No
2	0.189	0.189	0.0016	0.0065	10:37:34	No
Mean:	0.192	0.192	0.0016			
SD :	0.0031	0.0031	0.0000			
%RSD:	1.6	1.6	1.6557			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 12/03/2009
Sample ID: 241322004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.081	0.081	0.0007	0.0056	10:39:00	No
2	0.089	0.089	0.0007	0.0056	10:39:34	No
Mean:	0.085	0.085	0.0007			
SD :	0.0055	0.0055	0.0000			

```
%RSD:        6.5        6.5    6.7332

==========================================================================================
Element: Hg    Seq. No.: 32       AS Loc.: 30   Date: 12/03/2009
Sample ID: 241322005|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.210     0.210    0.0018     0.0067   10:41:01  No
 2        0.194     0.194    0.0016     0.0065   10:41:36  No
Mean:     0.202     0.202    0.0017
SD  :    0.0108    0.0108    0.0001
%RSD:       5.4       5.4    5.4663

==========================================================================================
Element: Hg    Seq. No.: 33       AS Loc.: 31   Date: 12/03/2009
Sample ID: 241322006|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.206     0.206    0.0017     0.0066   10:43:02  No
 2        0.181     0.181    0.0015     0.0064   10:43:37  No
Mean:     0.194     0.194    0.0016
SD  :    0.0179    0.0179    0.0002
%RSD:       9.2       9.2    9.3873

==========================================================================================
Element: Hg    Seq. No.: 34       AS Loc.: 7    Date: 12/03/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.199     5.199    0.0447     0.0496   10:45:04  No
 2        5.200     5.200    0.0447     0.0496   10:45:39  No
Mean:     5.200     5.200    0.0447
SD  :    0.0006    0.0006    0.0000
%RSD:
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 35       AS Loc.: 8    Date: 12/03/2009
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.130    -0.130   -0.0012     0.0037   10:47:06  No
 2       -0.104    -0.104   -0.0009     0.0040   10:47:41  No
Mean:    -0.117    -0.117   -0.0010
SD  :    0.0186    0.0186    0.0002
%RSD:      15.9      15.9   15.4300
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 36       AS Loc.: 32   Date: 12/03/2009
Sample ID: 241322007|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.148     0.148    0.0012     0.0061   10:49:05  No
 2        0.120     0.120    0.0010     0.0059   10:49:39  No
Mean:     0.134     0.134    0.0011
SD  :    0.0197    0.0197    0.0002
%RSD:      14.6      14.6   15.0443

==========================================================================================
Element: Hg    Seq. No.: 37       AS Loc.: 33   Date: 12/03/2009
Sample ID: 241322008|i|||
```

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.066	0.066	0.0005	0.0054	10:50:59	No
2	0.052	0.052	0.0004	0.0053	10:51:34	No
Mean:	0.059	0.059	0.0005			
SD :	0.0097	0.0097	0.0001			
%RSD:	16.4	16.4	17.4890			

Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 12/03/2009
Sample ID: 241322009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.165	0.165	0.0014	0.0063	10:52:55	No
2	0.150	0.150	0.0013	0.0061	10:53:30	No
Mean:	0.158	0.158	0.0013			
SD :	0.0105	0.0105	0.0001			
%RSD:	6.6	6.6	6.8004			

Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 12/03/2009
Sample ID: 241322010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.052	0.052	0.0004	0.0053	10:54:52	No
2	0.048	0.048	0.0004	0.0053	10:55:27	No
Mean:	0.050	0.050	0.0004			
SD :	0.0030	0.0030	0.0000			
%RSD:	5.9	5.9	6.3811			

Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 12/03/2009
Sample ID: 241322011|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.032	-0.032	-0.0003	0.0046	10:56:49	No
2	-0.051	-0.051	-0.0005	0.0044	10:57:24	No
Mean:	-0.042	-0.042	-0.0004			
SD :	0.0135	0.0135	0.0001			
%RSD:	32.3	32.3	29.7342			

Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 12/03/2009
Sample ID: 241322012|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.099	0.099	0.0008	0.0057	10:58:46	No
2	0.084	0.084	0.0007	0.0056	10:59:21	No
Mean:	0.092	0.092	0.0008			
SD :	0.0102	0.0102	0.0001			
%RSD:	11.1	11.1	11.5738			

Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 12/03/2009
Sample ID: 241336001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.088	0.088	0.0007	0.0056	11:00:44	No
2	0.069	0.069	0.0006	0.0055	11:01:19	No
Mean:	0.079	0.079	0.0006			
SD :	0.0135	0.0135	0.0001			

%RSD: 17.1 17.1 17.8719

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/03/2009
Sample ID: 1201977146|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0009	0.0058	11:02:42	No
2	0.106	0.106	0.0009	0.0058	11:03:18	No
Mean:	0.109	0.109	0.0009			
SD :	0.0043	0.0043	0.0000			
%RSD:	4.0	4.0	4.1049			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/03/2009
Sample ID: 1201977147|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.306	2.306	0.0198	0.0247	11:04:42	No
2	2.257	2.257	0.0194	0.0243	11:05:17	No
Mean:	2.281	2.281	0.0196			
SD :	0.0351	0.0351	0.0003			
%RSD:	1.5	1.5	1.5398			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/03/2009
Sample ID: 1201977149|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.277	2.277	0.0196	0.0245	11:06:41	No
2	2.279	2.279	0.0196	0.0245	11:07:16	No
Mean:	2.278	2.278	0.0196			
SD :	0.0018	0.0018	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.327	5.327	0.0458	0.0507	11:08:41	No
2	5.335	5.335	0.0459	0.0508	11:09:15	No
Mean:	5.331	5.331	0.0458			
SD :	0.0058	0.0058	0.0001			
%RSD:	0.1	0.1	0.1092			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.125	-0.125	-0.0011	0.0038	11:10:43	No
2	-0.119	-0.119	-0.0011	0.0038	11:11:17	No
Mean:	-0.122	-0.122	-0.0011			
SD :	0.0044	0.0044	0.0000			
%RSD:	3.6	3.6	3.4749			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/03/2009
Sample ID: 1201977148|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.155	-0.155	-0.0014	0.0035	11:12:43	No
2	-0.174	-0.174	-0.0015	0.0034	11:13:18	No
Mean:	-0.164	-0.164	-0.0014			
SD :	0.0133	0.0133	0.0001			
%RSD:	8.1	8.1	7.9467			

Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 12/03/2009
Sample ID: 241336002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0022	0.0071	11:14:42	No
2	0.225	0.225	0.0019	0.0068	11:15:18	No
Mean:	0.241	0.241	0.0020			
SD :	0.0237	0.0237	0.0002			
%RSD:	9.8	9.8	9.9558			

Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 12/03/2009
Sample ID: 1201981567|i||926805|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.079	-0.079	-0.0007	0.0042	11:16:44	No
2	-0.109	-0.109	-0.0010	0.0039	11:17:19	No
Mean:	-0.094	-0.094	-0.0008			
SD :	0.0212	0.0212	0.0002			
%RSD:	22.5	22.5	21.7114			

Element: Hg Seq. No.: 51 AS Loc.: 45 Date: 12/03/2009
Sample ID: 1201981568|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.150	2.150	0.0185	0.0234	11:18:45	No
2	2.133	2.133	0.0183	0.0232	11:19:20	No
Mean:	2.142	2.142	0.0184			
SD :	0.0122	0.0122	0.0001			
%RSD:	0.6	0.6	0.5696			

Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 12/03/2009
Sample ID: 241081001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.304	-0.304	-0.0026	0.0022	11:20:46	No
2	-0.310	-0.310	-0.0027	0.0022	11:21:21	No
Mean:	-0.307	-0.307	-0.0027			
SD :	0.0037	0.0037	0.0000			
%RSD:	1.2	1.2	1.1939			

Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 12/03/2009
Sample ID: 1201981569|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.363	-0.363	-0.0032	0.0017	11:22:48	No
2	-0.374	-0.374	-0.0032	0.0016	11:23:23	No
Mean:	-0.368	-0.368	-0.0032			
SD :	0.0077	0.0077	0.0001			

%RSD: 2.1 2.1 2.0689

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/03/2009
Sample ID: 1201981570|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.195	0.195	0.0016	0.0065	11:24:47	No
2	0.184	0.184	0.0016	0.0064	11:25:21	No
Mean:	0.189	0.189	0.0016			
SD :	0.0078	0.0078	0.0001			
%RSD:	4.1	4.1	4.2199			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/03/2009
Sample ID: 1201981572|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.567	0.567	0.0048	0.0097	11:26:42	No
2	0.565	0.565	0.0048	0.0097	11:27:16	No
Mean:	0.566	0.566	0.0048			
SD :	0.0014	0.0014	0.0000			
%RSD:	0.2	0.2	0.2427			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/03/2009
Sample ID: 1201981571|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.287	-0.287	-0.0025	0.0024	11:28:37	No
2	-0.303	-0.303	-0.0026	0.0022	11:29:11	No
Mean:	-0.295	-0.295	-0.0026			
SD :	0.0109	0.0109	0.0001			
%RSD:	3.7	3.7	3.6474			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/03/2009
Sample ID: 241081002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.245	-0.245	-0.0021	0.0027	11:30:32	No
2	-0.243	-0.243	-0.0021	0.0028	11:31:06	No
Mean:	-0.244	-0.244	-0.0021			
SD :	0.0016	0.0016	0.0000			
%RSD:	0.7	0.7	0.6451			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.328	5.328	0.0458	0.0507	11:32:30	No
2	5.275	5.275	0.0454	0.0503	11:33:05	No
Mean:	5.301	5.301	0.0456			
SD :	0.0374	0.0374	0.0003			
%RSD:	0.7	0.7	0.7065			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0008	0.0041	11:34:33	No
2	-0.064	-0.064	-0.0006	0.0043	11:35:08	No
Mean:	-0.076	-0.076	-0.0007			
SD :	0.0160	0.0160	0.0001			
%RSD:	21.1	21.1	20.1811			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/03/2009
Sample ID: 241081003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.232	-0.232	-0.0020	0.0029	11:36:34	No
2	-0.256	-0.256	-0.0022	0.0027	11:37:09	No
Mean:	-0.244	-0.244	-0.0021			
SD :	0.0167	0.0167	0.0001			
%RSD:	6.9	6.9	6.7660			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/03/2009
Sample ID: 241081004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.296	-0.296	-0.0026	0.0023	11:38:31	No
2	-0.308	-0.308	-0.0027	0.0022	11:39:05	No
Mean:	-0.302	-0.302	-0.0026			
SD :	0.0082	0.0082	0.0001			
%RSD:	2.7	2.7	2.6874			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/03/2009
Sample ID: 241081005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.322	-0.322	-0.0028	0.0021	11:40:28	No
2	-0.329	-0.329	-0.0029	0.0020	11:41:03	No
Mean:	-0.325	-0.325	-0.0028			
SD :	0.0055	0.0055	0.0000			
%RSD:	1.7	1.7	1.6800			

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/03/2009
Sample ID: 241081006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.198	-0.198	-0.0017	0.0032	11:42:26	No
2	-0.192	-0.192	-0.0017	0.0032	11:43:01	No
Mean:	-0.195	-0.195	-0.0017			
SD :	0.0040	0.0040	0.0000			
%RSD:	2.0	2.0	2.0111			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/03/2009
Sample ID: 241081007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.301	-0.301	-0.0026	0.0023	11:44:25	No
2	-0.305	-0.305	-0.0027	0.0022	11:44:59	No
Mean:	-0.303	-0.303	-0.0026			
SD :	0.0032	0.0032	0.0000			

Miscellaneous

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925186

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977920	UI652380	.51	g
MS	1201977918	UI091124-01	.25	mL
MS	1201977918	UI091124-06	.25	mL
MSD	1201977919	UI091124-01	.25	mL
MSD	1201977919	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977915		SW846 3050B	24-NOV-2009 09:57	0.505 g	50 mL	99.0099	SOIL
LCS	1201977920		SW846 3050B	24-NOV-2009 09:57	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241180001		SW846 3050B	24-NOV-2009 09:57	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241180002		SW846 3050B	24-NOV-2009 09:57	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241180003		SW846 3050B	24-NOV-2009 09:57	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241190001		SW846 3050B	24-NOV-2009 09:57	0.503 g	50 mL	99.40358	SOIL
DUP	1201977916	241190001	SW846 3050B	24-NOV-2009 09:57	0.521 g	50 mL	95.96929	SOIL
SDILT	1201977917	241190001	SW846 3050B	24-NOV-2009 09:57	0.503 g	50 mL	99.40358	SOIL
MS	1201977918	241190001	SW846 3050B	24-NOV-2009 09:57	0.503 g	50 mL	99.40358	SOIL
MSD	1201977919	241190001	SW846 3050B	24-NOV-2009 09:57	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241301001		SW846 3050B	24-NOV-2009 09:57	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241336001		SW846 3050B	24-NOV-2009 09:57	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241336002		SW846 3050B	24-NOV-2009 09:57	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241417001		SW846 3050B	24-NOV-2009 09:57	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241417002		SW846 3050B	24-NOV-2009 09:57	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241425001		SW846 3050B	24-NOV-2009 09:57	0.5 g	50 mL	100	SOIL
SAMPLE	241425002		SW846 3050B	24-NOV-2009 09:57	0.501 g	50 mL	99.8004	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments The QC sample is grey concrete chunks.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925188

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977926	UI647733-01	.511	g
MS	1201977924	UI091015-A	.5	mL
MS	1201977924	UI091015-B	.5	mL
MSD	1201977925	UI091015-A	.5	mL
MSD	1201977925	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977921		SW846 3050B	05-DEC-2009 10:00	0.503 g	50 mL	99.40358	SOIL
LCS	1201977926		SW846 3050B	05-DEC-2009 10:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241180001		SW846 3050B	05-DEC-2009 10:00	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241180002		SW846 3050B	05-DEC-2009 10:00	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241180003		SW846 3050B	05-DEC-2009 10:00	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241190001		SW846 3050B	05-DEC-2009 10:00	0.502 g	50 mL	99.60159	SOIL
DUP	1201977922	241190001	SW846 3050B	05-DEC-2009 10:00	0.511 g	50 mL	97.84736	SOIL
SDILT	1201977923	241190001	SW846 3050B	05-DEC-2009 10:00	0.502 g	50 mL	99.60159	SOIL
MS	1201977924	241190001	SW846 3050B	05-DEC-2009 10:00	0.521 g	50 mL	95.96929	SOIL
MSD	1201977925	241190001	SW846 3050B	05-DEC-2009 10:00	0.552 g	50 mL	90.57971	SOIL
SAMPLE	241301001		SW846 3050B	05-DEC-2009 10:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241336001		SW846 3050B	05-DEC-2009 10:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241336002		SW846 3050B	05-DEC-2009 10:00	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241417001		SW846 3050B	05-DEC-2009 10:00	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241417002		SW846 3050B	05-DEC-2009 10:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241425001		SW846 3050B	05-DEC-2009 10:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241425002		SW846 3050B	05-DEC-2009 10:00	0.508 g	50 mL	98.4252	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments The QC sample is grey concrete chunks.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 930798

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201990788	UI062540-I	.505	g
MS	1201977918	UI091119-01	.25	mL
MS	1201977918	UI091119-06	.25	mL
MSD	1201977919	UI091119-01	.25	mL
MSD	1201977919	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201990787		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL
LCS	1201990788		SW846 3050B	09-DEC-2009 18:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241180001		SW846 3050B	09-DEC-2009 18:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241180002		SW846 3050B	09-DEC-2009 18:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241180003		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241190001		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL
DUP	1201977916	241190001	SW846 3050B	09-DEC-2009 18:00	0.5 g	50 mL	100	SOIL
SDILT	1201977917	241190001	SW846 3050B	09-DEC-2009 18:00	0.52 g	50 mL	96.15385	SOIL
MS	1201977918	241190001	SW846 3050B	09-DEC-2009 18:00	0.503 g	50 mL	99.40358	SOIL
MSD	1201977919	241190001	SW846 3050B	09-DEC-2009 18:00	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241301001		SW846 3050B	09-DEC-2009 18:00	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241336001		SW846 3050B	09-DEC-2009 18:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241336002		SW846 3050B	09-DEC-2009 18:00	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241417001		SW846 3050B	09-DEC-2009 18:00	0.5 g	50 mL	100	SOIL
SAMPLE	241417002		SW846 3050B	09-DEC-2009 18:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241425001		SW846 3050B	09-DEC-2009 18:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241425002		SW846 3050B	09-DEC-2009 18:00	0.504 g	50 mL	99.20635	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238341	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments. sample#241180001 is a gray solid rocky material.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 924853

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977145	UI031809A	.202	g
MS	1201977147	WHG091202-14	.3	mL
MSD	1201977149	WHG091202-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977144		SW846 7471A Prep	02-DEC-2009 12:45	0.561 g	30 mL	53.47594	SOIL
LCS	1201977145		SW846 7471A Prep	02-DEC-2009 12:45	0.202 g	30 mL	148.51485	SOIL
SAMPLE	241301001		SW846 7471A Prep	02-DEC-2009 12:45	0.578 g	30 mL	51.90311	SOIL
SAMPLE	241322001		SW846 7471A Prep	02-DEC-2009 12:45	0.548 g	30 mL	54.74453	SOIL
SAMPLE	241322002		SW846 7471A Prep	02-DEC-2009 12:45	0.534 g	30 mL	56.17978	SOIL
SAMPLE	241322003		SW846 7471A Prep	02-DEC-2009 12:45	0.515 g	30 mL	58.25243	SOIL
SAMPLE	241322004		SW846 7471A Prep	02-DEC-2009 12:45	0.518 g	30 mL	57.91506	SOIL
SAMPLE	241322005		SW846 7471A Prep	02-DEC-2009 12:45	0.505 g	30 mL	59.40594	SOIL
SAMPLE	241322006		SW846 7471A Prep	02-DEC-2009 12:45	0.533 g	30 mL	56.28518	SOIL
SAMPLE	241322007		SW846 7471A Prep	02-DEC-2009 12:45	0.6 g	30 mL	50	SOIL
SAMPLE	241322008		SW846 7471A Prep	02-DEC-2009 12:45	0.515 g	30 mL	58.25243	SOIL
SAMPLE	241322009		SW846 7471A Prep	02-DEC-2009 12:45	0.522 g	30 mL	57.47126	SOIL
SAMPLE	241322010		SW846 7471A Prep	02-DEC-2009 12:45	0.54 g	30 mL	55.55556	SOIL
SAMPLE	241322011		SW846 7471A Prep	02-DEC-2009 12:45	0.553 g	30 mL	54.24955	SOIL
SAMPLE	241322012		SW846 7471A Prep	02-DEC-2009 12:45	0.505 g	30 mL	59.40594	SOIL
SAMPLE	241336001		SW846 7471A Prep	02-DEC-2009 12:45	0.509 g	30 mL	58.9391	SOIL
DUP	1201977146	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.529 g	30 mL	56.71078	SOIL
MS	1201977147	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.526 g	30 mL	57.03422	SOIL
MSD	1201977149	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.51 g	30 mL	58.82353	SOIL
SDILT	1201977148	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.509 g	30 mL	58.9391	SOIL
SAMPLE	241336002		SW846 7471A Prep	02-DEC-2009 12:45	0.537 g	30 mL	55.86592	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091202-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091202-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091202-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091202-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091202-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091202-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments Sample 241336001 is a brown soil.
Digestion Start Date: 02-DEC-09 12:45
Digestion End Date: 02-DEC-09 13:15

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925189	See Below		

Potentially affected work order(s)(SDG): 241180(10-520),241190(10-500),241301(10-532),241336(10-546),241417(10-575),241425(10-579)

Application Issues:

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201977922DUP 2. Failed Recovery for MSD/PSD: QC 1201977925MSD	The sample and sample duplicate % RPD failed outside the control limits for As due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. The matrix spike duplicate recovery failed outside of the control limits for Li due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Elizabeth Janssen 12-DEC-09

Data Validator/Group Leader:

Paul Boyd 13-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925187	See Below		

Potentially affected work order(s)(SDG): 241180(10-520),241190(10-500),241301(10-532),241336(10-546),241417(10-575),241425(10-579)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:

1. Failed Recovery for MS/PS:

   QC 1201977918MS

2. Failed RPD for DUP:

   QC 1201977916DUP

3. Failed RPD for MS/MSD, or PS/PSD:

   QC 1201977919MSD

4. Failed Recovery for MSD/PSD:

   QC 1201977919MSD

NRG Disposition:

1. The matrix spike recovery failed outside of the control limits for boron,chromium,manganese and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The sample and sample duplicate % RPD failed outside the control limits for antimony,boron,chromium,cobalt,copper,iron,lead,magnesium, manganese,sodium,titanium,zinc,calcium and potassium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

3.The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for barium and copper due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

4. The matrix spike duplicate recovery failed outside of the control limits for boron,manganese,sodium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 12-DEC-09

Data Validator/Group Leader:

Jamie Johnson 12-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
930799	See Below		

Potentially affected work order(s)(SDG): 241180(10-520),241190(10-500),241301(10-532),241336(10-546),241417(10-575),241425(10-579)

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201977916DUP	1. The sample and sample duplicate % RPD failed outside the control limits for aluminum and silicon due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 12-DEC-09

Data Validator/Group Leader:

Jamie Johnson 12-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si

Standard Logbook

Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Carnello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI

Standard Logbook

Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Standard Logbook

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091202-01 **Opened:** 02-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 02-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 03-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091202-02 **Opened:** 02-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 03-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091202-07 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091202-08 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091202-09 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091202-10 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG091202-11 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091202-12 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091202-14 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091209-42 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091209-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091209-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091209-43 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091209-44 **Opened:** 09-DEC-09 **Balance Id :** 216

Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667

Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193

Employee: Helen Camello

Supplier: o2si

Description: Trace ICP Calibration Standard 1.0ppm

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091209-45 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091209-46 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091209-47 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091210-43 **Opened:** 10-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 11-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WMS091207-04 **Opened:** 07-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 07-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091207-04A **Opened:** 07-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091207-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091207-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091207-05 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091207-07 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 07-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-08 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-70 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091208-04 **Opened:** 08-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091208-04A **Opened:** 08-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091208-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091208-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091208-05 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091208-06 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 08-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091208-07 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 08-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091208-08 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 08-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Standard Logbook

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238341 **Opened:** 04-DEC-09 **Lot Number :** H44032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546-1

Sample Analysis

Sample ID	**Client ID**
241337001	RE03-10-5530
241337002	RE03-10-5527
1201978326	Method Blank (MB) **ICP**
1201978327	Laboratory Control Sample (LCS)
1201978330	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978328	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978329	241325001(RE03-10-6088S) Matrix Spike (MS)
1201978333	Method Blank (MB) **ICP-MS**
1201978334	Laboratory Control Sample (LCS)
1201978337	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978335	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978336	241325001(RE03-10-6088S) Matrix Spike (MS)
1201977150	Method Blank (MB) **CVAA**
1201977151	Laboratory Control Sample (LCS)
1201977154	241420001(RE03-10-3933L) Serial Dilution (SD)
1201977152	241420001(RE03-10-3933D) Sample Duplicate (DUP)
1201977153	241420001(RE03-10-3933S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	925377, 925379 and 924857
Prep Batch :	925376, 925378 and 924856
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The laboratory control sample (LCS) results met the acceptance requirements for all analytes, with the exception of mercury. However, the sample in this SDG did not contain mercury above the RDL, therefore the implied high bias did not adversely affect the results.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241325001 and 241420001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: 762537. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristin Parson **Date:** 12/14/09

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241337001 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-5530 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:33	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:27	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 16:51	120409A-1	925377
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 16:51	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 16:51	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:42	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 16:51	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:14	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:38	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:51	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 16:51	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-546-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241337002 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-5527 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:36	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:28	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-47-3	Chromium	3.29	ug/L	J	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 17:12	120409A-1	925377
7439-89-6	Iron	45.1	ug/L	J	30	100	100	1	P	HSC	12/04/09 17:12	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 17:12	120409A-1	925377
7439-96-5	Manganese	3.88	ug/L	J	1	5	5	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:48	112509W1-7	924857
7440-02-0	Nickel	1.84	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 17:12	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-21-3	Silicon	78.5	ug/L	J	25	100	100	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-23-5	Sodium	239	ug/L	J	100	300	300	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 08:20	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:40	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 17:12	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 17:12	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.1	ug/L	5	ug/L	101.9	90.0 – 110.0	AV	25–NOV–09 07:57	112509W1–7
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Nickel	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Selenium	2660	ug/L	2500	ug/L	106.6	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Silicon	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–1
	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Lead	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Lithium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Manganese	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Thallium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	05–DEC–09 02:48	091204–5
	Beryllium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	05–DEC–09 19:59	091205–6
	Uranium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	06–DEC–09 01:58	091205–2
	Antimony	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	06–DEC–09 06:55	091205–4
CCV01										
	Mercury	4.94	ug/L	5	ug/L	98.9	80.0 – 120.0	AV	25–NOV–09 08:02	112509W1–7

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Boron	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Selenium	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Titanium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:35	120409A–1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05–DEC–09 03:18	091204–5
	Lead	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	05–DEC–09 03:18	091204–5
	Lithium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	05–DEC–09 03:18	091204–5
	Manganese	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	05–DEC–09 03:18	091204–5
	Thallium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	05–DEC–09 03:18	091204–5
	Beryllium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	05–DEC–09 20:08	091205–6
	Uranium	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	06–DEC–09 02:10	091205–2
	Antimony	45.1	ug/L	50	ug/L	90.3	90.0 – 110.0	MS	06–DEC–09 07:07	091205–4
CCV02										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	25–NOV–09 08:25	112509W1–7
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Boron	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Nickel	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Selenium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Cadmium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	05-DEC-09 03:37	091204-5
	Lead	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	05-DEC-09 03:37	091204-5
	Lithium	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	05-DEC-09 03:37	091204-5
	Manganese	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	05-DEC-09 03:37	091204-5
	Thallium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	05-DEC-09 03:37	091204-5
	Beryllium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	05-DEC-09 20:23	091205-6
	Uranium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	06-DEC-09 02:33	091205-2
	Antimony	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	06-DEC-09 07:28	091205-4
CCV03										
	Mercury	5.15	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	25-NOV-09 08:48	112509W1-7
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Arsenic	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Nickel	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Selenium	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Cadmium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	05–DEC–09 04:38	091204–5
	Lead	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	05–DEC–09 04:38	091204–5
	Lithium	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	05–DEC–09 04:38	091204–5
	Manganese	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	05–DEC–09 04:38	091204–5
	Thallium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	05–DEC–09 04:38	091204–5
	Beryllium	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	05–DEC–09 20:40	091205–6
	Uranium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	06–DEC–09 02:58	091205–2
	Antimony	51.9	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	06–DEC–09 07:53	091205–4
CCV04										
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 – 120.0	AV	25–NOV–09 09:12	112509W1–7
	Aluminum	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	04–DEC–09 12:48	120409A–1
	Arsenic	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 12:48	120409A–1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:48	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Selenium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lead	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lithium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Manganese	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Thallium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
CCV05										
	Mercury	5.14	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	25-NOV-09 09:35	112509W1-7
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Selenium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Cadmium	49.8	ug/L	50	ug/L	99.7	90.0 – 110:0	MS	05-DEC-09 06:23	091204-5
	Lead	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
	Lithium	54.8	ug/L	50	ug/L	109.5	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
	Manganese	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05-DEC-09 06:23	091204-5
CCV06										
	Mercury	5.33	ug/L	5	ug/L	106.5	80.0 – 120.0	AV	25-NOV-09 09:58	112509W1-7
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Boron	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1
	Nickel	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Selenium	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silicon	2500	ug/L	2500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Cadmium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Lead	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Lithium	55.2	ug/L	50	ug/L	110.3	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Manganese	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
	Thallium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05–DEC–09 07:06	091204–5
CCV07										
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 – 120.0	AV	25–NOV–09 10:21	112509W1–7
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Boron	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Copper	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Nickel	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Selenium	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silicon	2520	ug/L	2500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546--1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	04-DEC-09 15:48	120409A-1
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-DEC-09 15:48	120409A-1
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 15:48	120409A-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 15:48	120409A-1
	Cadmium	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Lead	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Lithium	53.3	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Manganese	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Thallium	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
CCV08										
	Mercury	5.19	ug/L	5	ug/L	103.8	80.0 – 120.0	AV	25-NOV-09 10:44	112509W1-7
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Arsenic	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Chromium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Nickel	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Selenium	528	ug/L	500	ug/L	105.7	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Silicon	2520	ug/L	2500	ug/L	101	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-546-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Lead	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Lithium	54.9	ug/L	50	ug/L	109.9	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Manganese	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
	Thallium	47.1	ug/L	50	ug/L	94.2	90.0 – 110.0	MS	05-DEC-09 09:10	091204-5
CCV09										
	Mercury	5.19	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	25-NOV-09 11:08	112509W1-7
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Arsenic	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Boron	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Nickel	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Selenium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 18:01	120409A-1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.206	ug/L	.2	ug/L	103	70.0 – 130.0	AV	25–NOV–09 08:00	112509W1–7
	Lead	2.3	ug/L	2	ug/L	115.2	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Manganese	5.72	ug/L	5	ug/L	114.5	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Cadmium	1.11	ug/L	1	ug/L	111.3	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Lithium	11.4	ug/L	10	ug/L	114.1	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Thallium	1.2	ug/L	1	ug/L	119.6	70.0 – 130.0	MS	05–DEC–09 03:00	091204–5
	Beryllium	.573	ug/L	.5	ug/L	114.6	70.0 – 130.0	MS	05–DEC–09 20:03	091205–6
	Uranium	.218	ug/L	.2	ug/L	109	70.0 – 130.0	MS	06–DEC–09 02:03	091205–2
	Antimony	3	ug/L	3	ug/L	100.1	70.0 – 130.0	MS	06–DEC–09 07:00	091205–4
PQL01										
	Selenium	29.4	ug/L	30	ug/L	98	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Potassium	162	ug/L	150	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Nickel	5.43	ug/L	5	ug/L	108.5	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Aluminum	206	ug/L	200	ug/L	103	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Calcium	203	ug/L	200	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Arsenic	29.2	ug/L	30	ug/L	97.5	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Barium	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Chromium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Silicon	103	ug/L	100	ug/L	102.8	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 07:58	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 09:41	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 09:41	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 09:41	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 09:41	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 09:41	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 09:41	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 09:41	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 09:41	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 02:54	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:01	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 02:00	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 06:57	091205–4
CCB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 08:04	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 10:42	120409A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-546-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 10:42	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 10:42	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 10:42	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Potassium	101.63	+/-150	J	50.0	150	LIQ	P	04-DEC-09 10:42	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 10:42	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 10:42	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 10:42	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 03:24	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 03:24	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 03:24	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 03:24	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 03:24	091204-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	05-DEC-09 20:09	091205-6
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	06-DEC-09 02:13	091205-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	06-DEC-09 07:09	091205-4
CCB02										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 08:27	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 11:03	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-546-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 11:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 11:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 11:03	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 11:03	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 11:03	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 11:03	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	05-DEC-09 20:25	091205-6
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	06-DEC-09 02:35	091205-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	06-DEC-09 07:31	091205-4
CCB03										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 08:50	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 12:20	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 12:20	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–546–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 12:20	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 04:44	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:42	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 03:01	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 07:55	091205–4
CCB04										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 09:13	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-546-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 12:55	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
CCB05										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 09:37	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 14:03	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 14:03	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-546-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 14:03	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 06:29	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 06:29	091204-5
CCB06										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 10:00	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 14:59	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 14:59	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 14:59	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 14:59	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 14:59	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 14:59	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 14:59	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-546-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 14:59	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 07:12	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 07:12	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 07:12	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 07:12	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 07:12	091204-5
CCB07	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 10:23	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 15:55	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 15:55	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 15:55	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 15:55	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 15:55	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 15:55	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 15:55	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 08:08	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 08:08	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 08:08	091204-5

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 08:08	091204–5
	Thallium	0.523	+/–1	J	0.3	1.0	LIQ	MS	05–DEC–09 08:08	091204–5
CCB08										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 10:46	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 17:05	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 17:05	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 17:05	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 17:05	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 17:05	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 17:05	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 17:05	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 09:16	091204–5
	Thallium	0.735	+/–1	J	0.3	1.0	LIQ	MS	05–DEC–09 09:16	091204–5
CCB09										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 11:09	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 18:08	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–546–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 18:08	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 18:08	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 18:08	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 18:08	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 18:08	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 18:08	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 18:08	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 18:08	120409A–1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-546-1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201977150								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1201978326								
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30.0	U	P	5	30
	Barium	1	ug/L	+/-5.0	U	P	1	5
	Boron	15	ug/L	+/-50.0	U	P	15	50
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5.0	U	P	1	5
	Cobalt	1	ug/L	+/-5.0	U	P	1	5
	Copper	3	ug/L	+/-10.0	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5.0	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30.0	U	P	5	30
	Silicon	25	ug/L	+/-100	U	P	25	100
	Silver	1	ug/L	+/-5.0	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Titanium	1	ug/L	+/-5.0	U	P	1	5
	Vanadium	1	ug/L	+/-5.0	U	P	1	5
	Zinc	3.3	ug/L	+/-10.0	U	P	3.3	10
1201978333								
	Antimony	1	ug/L	+/-3.0	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Lead	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Lithium	2	ug/L	+/-10.0	U	MS	2	10
	Manganese	1	ug/L	+/-5.0	U	MS	1	5
	Thallium	0.3	ug/L	+/-1.0	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
	Cadmium	0.11	ug/L	+/-1.0	U	MS	0.11	1

METALS
-4-
Interference Check Sample

SDG No: 10-546-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Arsenic	-0.564	ug/L					04-DEC-09 09:55	120409A-1
	Barium	1.92	ug/L					04-DEC-09 09:55	120409A-1
	Boron	-5.89	ug/L					04-DEC-09 09:55	120409A-1
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Chromium	1.28	ug/L					04-DEC-09 09:55	120409A-1
	Cobalt	-1.39	ug/L					04-DEC-09 09:55	120409A-1
	Copper	1.06	ug/L					04-DEC-09 09:55	120409A-1
	Iron	184000	ug/L	200000	ug/L	92	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Nickel	3.73	ug/L					04-DEC-09 09:55	120409A-1
	Potassium	-19.7	ug/L					04-DEC-09 09:55	120409A-1
	Selenium	-0.0013	ug/L					04-DEC-09 09:55	120409A-1
	Silicon	0.455	ug/L					04-DEC-09 09:55	120409A-1
	Silver	-1.58	ug/L					04-DEC-09 09:55	120409A-1
	Sodium	24.7	ug/L					04-DEC-09 09:55	120409A-1
	Titanium	-0.536	ug/L					04-DEC-09 09:55	120409A-1
	Vanadium	-1.65	ug/L					04-DEC-09 09:55	120409A-1
	Zinc	-7.1	ug/L					04-DEC-09 09:55	120409A-1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Arsenic	512	ug/L	500	ug/L	102	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Barium	505	ug/L	500	ug/L	101	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Boron	519	ug/L	500	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Chromium	482	ug/L	500	ug/L	96.3	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Copper	574	ug/L	500	ug/L	115	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 – 120.0	04-DEC-09 10:01	120409A-1

METALS
–4–
Interference Check Sample

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Nickel	462	ug/L	500	ug/L	92.4	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Potassium	5530	ug/L	5000	ug/L	111	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Selenium	2610	ug/L	2500	ug/L	104	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Silicon	5370	ug/L	5000	ug/L	107	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Silver	274	ug/L	250	ug/L	110	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Sodium	5210	ug/L	5000	ug/L	104	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Titanium	514	ug/L	500	ug/L	103	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Vanadium	513	ug/L	500	ug/L	103	80.0 – 120.0	04–DEC–09 10:01	120409A–1
	Zinc	488	ug/L	500	ug/L	97.7	80.0 – 120.0	04–DEC–09 10:01	120409A–1

METALS
–4–
Interference Check Sample

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	–0.012	ug/L					06–DEC–09 02:05	091205–2
ICSAB01									
	Uranium	21.8	ug/L	20	ug/L	109	80.0 – 120.0	06–DEC–09 02:08	091205–2

METALS
-4-
Interference Check Sample

SDG No: 10-546-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.157	ug/L					06-DEC-09 07:02	091205-4
ICSAB01									
	Antimony	22.4	ug/L	20.1	ug/L	111	80.0 - 120.0	06-DEC-09 07:04	091205-4

METALS
-4-
Interference Check Sample

SDG No: 10-546-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Cadmium	0.546	ug/L					05-DEC-09 03:06	091204-5
	Lead	0.294	ug/L					05-DEC-09 03:06	091204-5
	Lithium	0.133	ug/L					05-DEC-09 03:06	091204-5
	Manganese	6.12	ug/L					05-DEC-09 03:06	091204-5
	Thallium	0.046	ug/L					05-DEC-09 03:06	091204-5
ICSAB01									
	Cadmium	20.4	ug/L	20.4	ug/L	100	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Lead	21.5	ug/L	20.5	ug/L	105	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Lithium	20.3	ug/L	20	ug/L	102	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Manganese	27.6	ug/L	25.8	ug/L	107	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Thallium	21.4	ug/L	20	ug/L	107	80.0 - 120.0	05-DEC-09 03:12	091204-5

METALS
–4–
Interference Check Sample

SDG No: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.079	ug/L					05–DEC–09 20:04	091205–6
ICSAB01									
	Beryllium	21.3	ug/L	20	ug/L	106	80.0 – 120.0	05–DEC–09 20:06	091205–6

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-546-1 **Client ID** RE03-10-3933S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241420001 **Spike ID:** 1201977153

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.13		0.066	U	2	106		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–546–1 **Client ID** RE03–10–6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978329

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5270		68	U	5000	105		P
Arsenic	ug/L	75–125	515		5	U	500	103		P
Barium	ug/L	75–125	534		1	U	500	107		P
Boron	ug/L	75–125	513		15	U	500	102		P
Calcium	ug/L	75–125	5180		50	U	5000	103		P
Chromium	ug/L	75–125	521		1	U	500	104		P
Cobalt	ug/L	75–125	508		1	U	500	102		P
Copper	ug/L	75–125	532		3	U	500	106		P
Iron	ug/L	75–125	5240		30	U	5000	105		P
Magnesium	ug/L	75–125	5350		85	U	5000	107		P
Nickel	ug/L	75–125	517		1.5	U	500	103		P
Potassium	ug/L	75–125	5100		50	U	5000	102		P
Selenium	ug/L	75–125	519		5	U	500	104		P
Silicon	ug/L	75–125	5170		25	U	5000	103		P
Silver	ug/L	75–125	519		1	U	500	104		P
Sodium	ug/L	75–125	5160		100	U	5000	102		P
Titanium	ug/L	75–125	527		1	U	500	105		P
Vanadium	ug/L	75–125	533		1	U	500	107		P
Zinc	ug/L	75–125	511		9.12	J	500	100		P

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-546-1 **Client ID** RE03-10-6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978336

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Thallium	ug/L	75-125	96.5		0.49	J	100	96		MS
Uranium	ug/L	75-125	56.7		0.05	U	50	113		MS
Antimony	ug/L	75-125	233		1	U	200	116		MS
Beryllium	ug/L	75-125	47.7		0.1	U	50	95.5		MS
Cadmium	ug/L	75-125	10.9		0.11	U	10	109		MS
Lead	ug/L	75-125	43.6		0.5	U	40	109		MS
Lithium	ug/L	75-125	53.8		2	U	50	108		MS
Manganese	ug/L	75-125	51.7		1	U	50	103		MS

Metals
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Duplicate Sample Summary

SDG No.: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–3933D

Sample ID: 241420001 **Duplicate ID:** 1201977152 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–6088D

Sample ID: 241325001 **Duplicate ID:** 1201978328 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Boron	ug/L		15	U	15	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L		50	U	50	U			P
Selenium	ug/L		5	U	5	U			P
Silicon	ug/L		25	U	25	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L		100	U	100	U			P
Titanium	ug/L		1	U	1	U			P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		9.12	J	3.3	U	200		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–546–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–6088D

Sample ID: 241325001 **Duplicate ID:** 1201978335 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Lithium	ug/L		2	U	2	U			MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.49	J	0.3	U	200		MS
Uranium	ug/L		0.05	U	0.05	U			MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-546-1

Contract: LANL01004

Aqueous LCS Source:GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977151								
	Mercury	ug/L	2	2.48		124	80-120	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-546-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978327								
	Arsenic	ug/L	500	519		104	80-120	P
	Barium	ug/L	500	535		107	80-120	P
	Boron	ug/L	500	514		103	80-120	P
	Calcium	ug/L	5000	5280		106	80-120	P
	Chromium	ug/L	500	519		104	80-120	P
	Cobalt	ug/L	500	510		102	80-120	P
	Copper	ug/L	500	529		106	80-120	P
	Iron	ug/L	5000	5280		106	80-120	P
	Magnesium	ug/L	5000	5300		106	80-120	P
	Nickel	ug/L	500	516		103	80-120	P
	Potassium	ug/L	5000	5140		103	80-120	P
	Selenium	ug/L	500	519		104	80-120	P
	Silicon	ug/L	5000	5150		103	80-120	P
	Silver	ug/L	500	520		104	80-120	P
	Aluminum	ug/L	5000	5310		106	80-120	P
	Sodium	ug/L	5000	5200		104	80-120	P
	Titanium	ug/L	500	525		105	80-120	P
	Vanadium	ug/L	500	530		106	80-120	P
	Zinc	ug/L	500	510		102	80-120	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–546–1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978334								
	Thallium	ug/L	50	49.7		99.5	80–120	MS
	Uranium	ug/L	50	58.9		118	80–120	MS
	Antimony	ug/L	50	57.4		115	80–120	MS
	Beryllium	ug/L	50	50.6		101	80–120	MS
	Cadmium	ug/L	50	52.9		106	80–120	MS
	Lead	ug/L	50	53.4		107	80–120	MS
	Lithium	ug/L	50	52.5		105	80–120	MS
	Manganese	ug/L	50	51.1		102	80–120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-546-1 **Client ID** RE03-10-3933L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241420001 **Serial Dilution ID:** 1201977154

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-546-1 **Client ID** RE03-10-6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978330

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Boron	15	U	75	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silicon	25	U	125	U				P
Silver	1	U	5	U				P
Sodium	100	U	500	U				P
Titanium	1	U	5	U				P
Vanadium	1	U	5	U				P
Zinc	9.12	J	16.5	U	100			P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–546–1 **Client ID** RE03–10–6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978337

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Lithium	2	U	10	U				MS
Manganese	1	U	5	U				MS
Thallium	.49	J	6.35		1200			MS
Uranium	.05	U	.25	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-546-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925376						
1201978326	MB for batch 925376	MB	W	22-NOV-09	50mL	50mL	
1201978327	LCS for batch 925376	LCS	W	22-NOV-09	50mL	50mL	
1201978329	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978328	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241337001	RE03-10-5530	SAMPLE	W	22-NOV-09	50mL	50mL	
241337002	RE03-10-5527	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-546-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925378						
1201978333	MB for batch 925378	MB	W	22-NOV-09	50mL	50mL	
1201978334	LCS for batch 925378	LCS	W	22-NOV-09	50mL	50mL	
1201978336	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978335	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241337001	RE03-10-5530	SAMPLE	W	22-NOV-09	50mL	50mL	
241337002	RE03-10-5527	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-546-1 **Method Type**: AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	924856						
1201977150	MB for batch 924856	MB	W	24-NOV-09	20mL	20mL	
1201977151	LCS for batch 924856	LCS	W	24-NOV-09	20mL	20mL	
1201977153	RE03-10-3933S	MS	W	24-NOV-09	20mL	20mL	
1201977152	RE03-10-3933D	DUP	W	24-NOV-09	20mL	20mL	
241337001	RE03-10-5530	SAMPLE	W	24-NOV-09	20mL	20mL	
241337002	RE03-10-5527	SAMPLE	W	24-NOV-09	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–546–1
Method MS
Data File: 091204–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:29							X						X	X		X								X				
S10	1	02:36							X						X	X		X								X				
S100	1	02:42							X						X	X		X								X				
ICV01	1	02:48							X						X	X		X								X				
ICB01	1	02:54							X						X	X		X								X				
CRDL01	1	03:00							X						X	X		X								X				
ICSA01	1	03:06							X						X	X		X								X				
ICSAB01	1	03:12							X						X	X		X								X				
CCV01	1	03:18							X						X	X		X								X				
CCB01	1	03:24							X						X	X		X								X				
LR01	1	03:31							X						X	X		X								X				
CCV02	1	03:37							X						X	X		X								X				
CCB02	1	03:43							X						X	X		X								X				
ZZZZZZ	2	03:49																												
ZZZZZZ	20	03:55																												
ZZZZZZ	40	04:01																												
ZZZZZZ	2	04:07																												
ZZZZZZ	2	04:14																												
ZZZZZZ	2	04:20																												
ZZZZZZ	2	04:26																												
ZZZZZZ	10	04:32																												
CCV03	1	04:38							X						X	X		X								X				
CCB03	1	04:44							X						X	X		X								X				
ZZZZZZ	2	04:50																												
ZZZZZZ	2	04:57																												
ZZZZZZ	2	05:03																												
ZZZZZZ	2	05:09																												
ZZZZZZ	2	05:15																												
ZZZZZZ	2	05:21																												
ZZZZZZ	2	05:27																												
CCV04	1	05:34							X						X	X		X								X				
CCB04	1	05:40							X						X	X		X								X				
ZZZZZZ	2	05:46																												
ZZZZZZ	2	05:52																												
ZZZZZZ	2	05:58																												
ZZZZZZ	2	06:04																												
ZZZZZZ	2	06:11																												
ZZZZZZ	2	06:17																												
CCV05	1	06:23							X						X	X		X								X				
CCB05	1	06:29							X						X	X		X								X				

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	2	06:35																										
ZZZZZZ	2	06:41																										
ZZZZZZ	2	06:48																										
ZZZZZZ	2	06:54																										
ZZZZZZ	2	07:00																										
CCV06	1	07:06						X					X	X		X								X				
CCB06	1	07:12						X					X	X		X								X				
1201978333	1	07:18						X					X	X		X								X				
1201978334	1	07:24						X					X	X		X								X				
ZZZZZZ	1	07:31																										
1201978335	1	07:37						X					X	X		X								X				
1201978336	1	07:43						X					X	X		X								X				
1201978337	5	07:49						X					X	X		X								X				
ZZZZZZ	1	07:55																										
CCV07	1	08:02						X					X	X		X								X				
CCB07	1	08:08						X					X	X		X								X				
241337001	1	08:14						X					X	X		X								X				
241337002	1	08:20						X					X	X		X								X				
ZZZZZZ	1	08:26																										
ZZZZZZ	1	08:32																										
ZZZZZZ	1	08:39																										
ZZZZZZ	1	08:45																										
ZZZZZZ	1	08:51																										
ZZZZZZ	1	08:57																										
ZZZZZZ	10	09:03																										
CCV08	1	09:10						X					X	X		X								X				
CCB08	1	09:16						X					X	X		X								X				

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05-DEC-09 **End Date:** 06-DEC-09

Client Sdg: 10-546-1
Method MS
Data File: 091205-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:54					X																							
S10	1	19:56					X																							
S100	1	19:58					X																							
ICV01	1	19:59					X																							
ICB01	1	20:01					X																							
CRDL01	1	20:03					X																							
ICSA01	1	20:04					X																							
ICSAB01	1	20:06					X																							
CCV01	1	20:08					X																							
CCB01	1	20:09					X																							
1201978333	1	20:11					X																							
1201978334	1	20:13					X																							
ZZZZZZ	1	20:14																												
1201978335	1	20:16					X																							
1201978336	1	20:18					X																							
1201978337	5	20:20					X																							
ZZZZZZ	1	20:21																												
CCV02	1	20:23					X																							
CCB02	1	20:25					X																							
241337001	1	20:27					X																							
241337002	1	20:28					X																							
ZZZZZZ	1	20:30																												
ZZZZZZ	1	20:32																												
ZZZZZZ	1	20:33																												
ZZZZZZ	1	20:35																												
ZZZZZZ	1	20:37																												
ZZZZZZ	1	20:39																												
CCV03	1	20:40					X																							
CCB03	1	20:42					X																							

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 04–DEC–09

Client Sdg: 10–546–1
Method P
Data File: 120409A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S0.1	1	09:08			X	X		X			X	X	X							X	X	X	X	X			X		X	X
S0.5	1	09:14	X		X	X		X		X	X	X	X				X			X	X	X	X	X			X		X	X
SCAL	1	09:21	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S10	1	09:28	X							X				X			X								X					
ICV01	1	09:34	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICB01	1	09:41	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
PQL01	1	09:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSA01	1	09:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSAB01	1	10:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR01	1	10:06	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR02	1	10:12	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB01	1	10:42	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR03	1	10:49	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV02	1	10:56	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB02	1	11:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB03	1	12:20	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV04	1	12:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB04	1	12:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	14:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
ZZZZZZ	1	14:45																												
CCV06	1	14:52	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB06	1	14:59	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	15:06																												
ZZZZZZ	1	15:13																												
ZZZZZZ	5	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB07	1	15:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978326	1	16:02	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978327	1	16:09	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:16																												
1201978328	1	16:23	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978329	1	16:30	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978330	5	16:37	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:44																												
241337001	1	16:51	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV08	1	16:58	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB08	1	17:05	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241337002	1	17:12	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	17:19																												
ZZZZZZ	1	17:26																												
ZZZZZZ	1	17:33																												
ZZZZZZ	1	17:40																												
ZZZZZZ	1	17:47																												
ZZZZZZ	1	17:54																												
CCV09	1	18:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB09	1	18:08	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 25–NOV–09 **End Date:** 25–NOV–09

Client Sdg: 10–546–1
Method AV
Data File: 112509W1–7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:45																	X											
S0.2	1	07:47																	X											
S0.5	1	07:49																	X											
S2.0	1	07:51																	X											
S5.0	1	07:53																	X											
S10.0	1	07:55																	X											
ICV01	1	07:57																	X											
ICB01	1	07:58																	X											
CRDL01	1	08:00																	X											
CCV01	1	08:02																	X											
CCB01	1	08:04																	X											
ZZZZZZ	1	08:06																												
ZZZZZZ	1	08:08																												
ZZZZZZ	1	08:10																												
ZZZZZZ	1	08:12																												
ZZZZZZ	1	08:14																												
ZZZZZZ	1	08:16																												
ZZZZZZ	1	08:18																												
ZZZZZZ	1	08:20																												
ZZZZZZ	1	08:22																												
ZZZZZZ	5	08:23																												
CCV02	1	08:25																	X											
CCB02	1	08:27																	X											
ZZZZZZ	1	08:29																												
ZZZZZZ	1	08:31																												
ZZZZZZ	1	08:33																												
ZZZZZZ	1	08:35																												
ZZZZZZ	1	08:37																												
ZZZZZZ	1	08:39																												
ZZZZZZ	1	08:41																												
ZZZZZZ	1	08:43																												
ZZZZZZ	5	08:45																												
ZZZZZZ	1	08:47																												
CCV03	1	08:48																	X											
CCB03	1	08:50																	X											
ZZZZZZ	1	08:52																												
ZZZZZZ	1	08:54																												
ZZZZZZ	1	08:56																												
ZZZZZZ	1	08:58																												
ZZZZZZ	1	09:00																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	09:02																										
ZZZZZZ	1	09:04																										
ZZZZZZ	5	09:06																										
ZZZZZZ	1	09:08																										
ZZZZZZ	1	09:10																										
CCV04	1	09:12															X											
CCB04	1	09:13															X											
ZZZZZZ	1	09:15																										
ZZZZZZ	1	09:17																										
ZZZZZZ	1	09:19																										
ZZZZZZ	1	09:21																										
ZZZZZZ	1	09:23																										
ZZZZZZ	1	09:25																										
ZZZZZZ	1	09:27																										
ZZZZZZ	5	09:29																										
ZZZZZZ	1	09:31																										
ZZZZZZ	1	09:33																										
CCV05	1	09:35															X											
CCB05	1	09:37															X											
ZZZZZZ	1	09:39																										
ZZZZZZ	1	09:40																										
ZZZZZZ	1	09:42																										
ZZZZZZ	1	09:44																										
ZZZZZZ	1	09:46																										
ZZZZZZ	1	09:48																										
ZZZZZZ	1	09:50																										
ZZZZZZ	1	09:52																										
ZZZZZZ	1	09:54																										
ZZZZZZ	1	09:56																										
CCV06	1	09:58															X											
CCB06	1	10:00															X											
ZZZZZZ	1	10:02																										
ZZZZZZ	1	10:04																										
ZZZZZZ	1	10:06																										
ZZZZZZ	1	10:07																										
ZZZZZZ	1	10:09																										
ZZZZZZ	5	10:11																										
ZZZZZZ	1	10:13																										
ZZZZZZ	1	10:15																										
ZZZZZZ	1	10:17																										

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	10:19																												
CCV07	1	10:21																	X											
CCB07	1	10:23																	X											
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
1201977150	1	10:35																	X											
1201977151	1	10:37																	X											
ZZZZZZ	1	10:38																												
ZZZZZZ	1	10:40																												
241337001	1	10:42																	X											
CCV08	1	10:44																	X											
CCB08	1	10:46																	X											
241337002	1	10:48																	X											
ZZZZZZ	1	10:50																												
1201977152	1	10:52																	X											
1201977153	1	10:54																	X											
1201977154	5	10:56																	X											
ZZZZZZ	1	10:58																												
ZZZZZZ	1	11:00																												
ZZZZZZ	1	11:02																												
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:06																												
CCV09	1	11:08																	X											
CCB09	1	11:09																	X											

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–546–1
Method MS
Data File: 091205–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	01:51																										X		
S10	1	01:53																										X		
S100	1	01:55																										X		
ICV01	1	01:58																										X		
ICB01	1	02:00																										X		
CRDL01	1	02:03																										X		
ICSA01	1	02:05																										X		
ICSAB01	1	02:08																										X		
CCV01	1	02:10																										X		
CCB01	1	02:13																										X		
1201978333	1	02:15																										X		
1201978334	1	02:18																										X		
ZZZZZZ	1	02:20																												
1201978335	1	02:23																										X		
1201978336	1	02:25																										X		
1201978337	5	02:28																										X		
ZZZZZZ	1	02:30																												
CCV02	1	02:33																										X		
CCB02	1	02:35																										X		
241337001	1	02:38																										X		
241337002	1	02:40																										X		
ZZZZZZ	1	02:43																												
ZZZZZZ	1	02:46																												
ZZZZZZ	1	02:48																												
ZZZZZZ	1	02:51																												
ZZZZZZ	1	02:53																												
ZZZZZZ	1	02:56																												
CCV03	1	02:58																										X		
CCB03	1	03:01																										X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–546–1
Method MS
Data File: 091205–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:48		X																										
S10	1	06:50		X																										
S100	1	06:53		X																										
ICV01	1	06:55		X																										
ICB01	1	06:57		X																										
CRDL01	1	07:00		X																										
ICSA01	1	07:02		X																										
ICSAB01	1	07:04		X																										
CCV01	1	07:07		X																										
CCB01	1	07:09		X																										
1201978333	1	07:11		X																										
1201978334	1	07:14		X																										
ZZZZZZ	1	07:16																												
1201978335	1	07:19		X																										
1201978336	1	07:21		X																										
1201978337	5	07:24		X																										
ZZZZZZ	1	07:26																												
CCV02	1	07:28		X																										
CCB02	1	07:31		X																										
241337001	1	07:33		X																										
241337002	1	07:36		X																										
ZZZZZZ	1	07:38																												
ZZZZZZ	1	07:41																												
ZZZZZZ	1	07:43																												
ZZZZZZ	1	07:45																												
ZZZZZZ	1	07:48																												
ZZZZZZ	1	07:50																												
CCV03	1	07:53		X																										
CCB03	1	07:55		X																										

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-546-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–546–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-546-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	15.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silicon	251.611	25.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-546-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-546-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-546-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-546-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-546-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-546-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–546–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–546–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

Raw Data

Method: Hg_ReAlign
Result: 121109

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

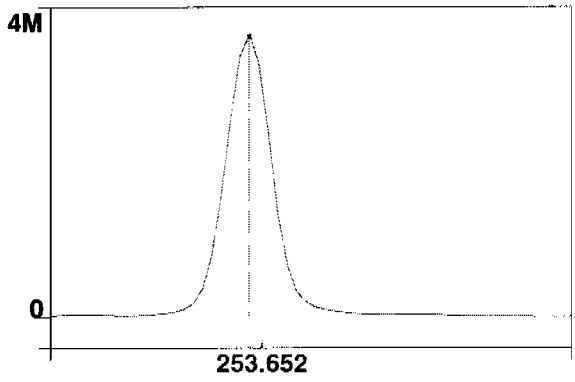

Intensity: 3630000.1 cps
Conc:

1

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00]	ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00]	ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00]	ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00]	ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00]	ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00]	ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00]	ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00]	ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00]	ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00]	ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00]	ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00]	ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00]	ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00]	ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00]	ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00]	ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00]	ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00]	ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00]	ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00]	ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00]	ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00]	ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00]	ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00]	ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00]	ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00]	ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00]	ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00]	ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00]	ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00]	ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43	%	09:04:58
2	Sc Radial	4907.6	4907.6	100.0	%	09:03:36
2	Y 371.029	887859.3	887859.3	100.38	%	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74	%	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00]	ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00]	ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00]	ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00]	ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00]	ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00]	ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00]	ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00]	ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00]	ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00]	ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00]	ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00]	ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00]	ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00]	ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00]	ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00]	ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00]	ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00]	ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00]	ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00]	ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00]	ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00]	ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00]	ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00]	ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00]	ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00]	ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00]	ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00]	ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00]	ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00]	ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00]	ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260	%	09:05:29
3	Sc Radial	4823.8	4823.8	98.2	%	09:04:01
3	Y 371.029	877949.7	877949.7	99.263	%	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13	%	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7	ug/L	2501.7	ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22	ug/L	515.22	ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3	ug/L	2542.3	ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80	ug/L	519.80	ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2	ug/L	2642.2	ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9	ug/L	4905.9	ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52	ug/L	546.52	ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75	ug/L	525.75	ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38	ug/L	506.38	ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56	ug/L	541.56	ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50	ug/L	502.50	ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65	ug/L	527.65	ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16	ug/L	519.16	ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453	ug/L	10453	ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293	%			09:38:03
3	Sc Radial	4901.3	4901.3	99.8	%			09:36:44
3	Y 371.029	861618.1	861618.1	97.417	%			09:38:03
3	Y RADIAL	5579.0	5579.0	98.79	%			09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44	ug/L	265.44	ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6	ug/L	5223.6	ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49	ug/L	500.49	ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04	ug/L	527.04	ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71	ug/L	524.71	ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45	ug/L	267.45	ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3	ug/L	5043.3	ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32	ug/L	512.32	ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52	ug/L	519.52	ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91	ug/L	502.91	ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13	ug/L	521.13	ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4	ug/L	5043.4	ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2	ug/L	2509.2	ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8	ug/L	5243.8	ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16	ug/L	526.16	ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72	ug/L	557.72	ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3	ug/L	2445.3	ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30	ug/L	515.30	ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6	ug/L	2537.6	ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68	ug/L	520.68	ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4	ug/L	2572.4	ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17	ug/L	526.17	ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8	ug/L	2683.8	ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3	ug/L	4907.3	ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45	ug/L	555.45	ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46	ug/L	527.46	ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68	ug/L	506.68	ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65	ug/L	550.65	ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14	ug/L	500.14	ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35	ug/L	528.35	ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97	ug/L	518.97	ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560	ug/L	10560	ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

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Ca 317.933Radial†       2844.7      5036.6 ug/L        62.48      5036.6 ppb        62.48   1.24%
   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†            58712.0      511.84 ug/L        0.548      511.84 ppb        0.548   0.11%
   QC value within limits for Cd 226.502  Recovery = 102.37%
Co 228.616†            31299.0      515.85 ug/L        4.347      515.85 ppb        4.347   0.84%
   QC value within limits for Co 228.616  Recovery = 103.17%
Cr 267.716†            55808.3      502.22 ug/L        0.664      502.22 ppb        0.664   0.13%
   QC value within limits for Cr 267.716  Recovery = 100.44%
Cu 324.752†           194870.1      520.66 ug/L        0.629      520.66 ppb        0.629   0.12%
   QC value within limits for Cu 324.752  Recovery = 104.13%
Fe 238.204 Radial†       417.6      5064.8 ug/L        94.14      5064.8 ppb        94.14   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.30%
K 766.490 Radial†      13749.0      2500.5 ug/L         7.68      2500.5 ppb         7.68   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.02%
Mg 279.077 IEC†          117.5      5266.4 ug/L        91.10      5266.4 ppb        91.10   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†           554773.8      525.75 ug/L        0.407      525.75 ppb        0.407   0.08%
   QC value within limits for Mn 257.610  Recovery = 105.15%
Mo 202.031†            10431.0      553.90 ug/L        4.052      553.90 ppb        4.052   0.73%
   QC value greater than the upper limit for Mo 202.031  Recovery = 110.78%
Na 589.592 Radial†      8728.4      2448.3 ug/L        22.68      2448.3 ppb        22.68   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 97.93%
Ni 231.604†            26132.9      511.71 ug/L        4.139      511.71 ppb        4.139   0.81%
   QC value within limits for Ni 231.604  Recovery = 102.34%
P 214.914†              5812.7      2521.9 ug/L        18.35      2521.9 ppb        18.35   0.73%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†             5504.1      518.39 ug/L        2.831      518.39 ppb        2.831   0.55%
   QC value within limits for Pb 220.353  Recovery = 103.68%
S 181.975 Axial†        2375.5      2558.4 ug/L        15.13      2558.4 ppb        15.13   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†             1947.3      522.68 ug/L        3.231      522.68 ppb        3.231   0.62%
   QC value within limits for Sb 206.836  Recovery = 104.54%
Se 196.026†             5969.5      2664.5 ug/L        20.95      2664.5 ppb        20.95   0.79%
   QC value within limits for Se 196.026  Recovery = 106.58%
Si 251.611†           193620.3      4905.1 ug/L         2.68      4905.1 ppb         2.68   0.05%
   QC value within limits for Si 251.611  Recovery = 98.10%
Sn 189.927†             4161.1      550.94 ug/L        4.468      550.94 ppb        4.468   0.81%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.19%
Sr 421.552†           100372.3      526.55 ug/L        0.859      526.55 ppb        0.859   0.16%
   QC value within limits for Sr 421.552  Recovery = 105.31%
Ti 334.940†           367149.6      506.26 ug/L        0.490      506.26 ppb        0.490   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.25%
Tl 190.801†             2251.7      547.80 ug/L        5.406      547.80 ppb        5.406   0.99%
   QC value within limits for Tl 190.801  Recovery = 109.56%
U 409.014†             19450.3      501.27 ug/L        1.183      501.27 ppb        1.183   0.24%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†             90935.8      528.06 ug/L        0.368      528.06 ppb        0.368   0.07%
   QC value within limits for V 292.402  Recovery = 105.61%
Zn 213.857†            71271.1      519.16 ug/L        0.195      519.16 ppb        0.195   0.04%
   QC value within limits for Zn 213.857  Recovery = 103.83%
SiO2†                 194471.8       10543 ug/L         82.7       10543 ppb         82.7   0.78%
   QC value within limits for SiO2  Recovery = 98.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573	ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874	ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858	ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828	ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035	ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137	ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619	ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177	ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430	ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693	ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067	ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993	ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191	ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448	ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62	%		09:45:16
3	Sc Radial	4809.8	4809.8	98.0	%		09:43:49
3	Y 371.029	891134.4	891134.4	100.75	%		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29	%		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441	ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723	ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610	ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180	ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992	ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472	ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457	ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343	ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153	ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058	ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762	ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825	ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115	ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478	ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335	ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760	ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264	ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146	ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869	ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168	ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676	ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895	ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168	ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177	ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090	ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625	ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335	ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911	ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862	ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122	ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761	ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033	ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %		09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %		09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

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Ca 317.933Radial†        114.9      203.44 ug/L        5.843      203.44 ppb        5.843   2.87%
   QC value within limits for Ca 317.933Radial  Recovery = 101.72%
Cd 226.502†              583.9      5.0878 ug/L      0.03067      5.0878 ppb      0.03067   0.60%
   QC value within limits for Cd 226.502  Recovery = 101.76%
Co 228.616†              304.8      5.0359 ug/L      0.08115      5.0359 ppb      0.08115   1.61%
   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†              568.2      5.0983 ug/L      0.10423      5.0983 ppb      0.10423   2.04%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†             3983.8      10.643 ug/L       0.4808      10.643 ppb       0.4808   4.52%
   QC value within limits for Cu 324.752  Recovery = 106.43%
Fe 238.204 Radial†         6.6      79.730 ug/L      29.0033      79.730 ppb      29.0033  36.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 79.73%
K 766.490 Radial†        889.4      161.88 ug/L       26.810      161.88 ppb       26.810  16.56%
   QC value within limits for K 766.490 Radial  Recovery = 107.92%
Mg 279.077 IEC†            7.3      326.69 ug/L       36.025      326.69 ppb       36.025  11.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.90%
Mn 257.610†            11132.0      10.543 ug/L       0.1659      10.543 ppb       0.1659   1.57%
   QC value within limits for Mn 257.610  Recovery = 105.43%
Mo 202.031†              195.8      10.395 ug/L       0.7057      10.395 ppb       0.7057   6.79%
   QC value within limits for Mo 202.031  Recovery = 103.95%
Na 589.592 Radial†      1041.2      292.04 ug/L       11.429      292.04 ppb       11.429   3.91%
   QC value within limits for Na 589.592 Radial  Recovery = 97.35%
Ni 231.604†              277.1      5.4266 ug/L      0.08048      5.4266 ppb      0.08048   1.48%
   QC value within limits for Ni 231.604  Recovery = 108.53%
P 214.914†               338.0      149.63 ug/L        3.816      149.63 ppb        3.816   2.55%
   QC value within limits for P 214.914  Recovery = 99.75%
Pb 220.353†               96.3      9.0961 ug/L      1.14169      9.0961 ppb      1.14169  12.55%
   QC value within limits for Pb 220.353  Recovery = 90.96%
S 181.975 Axial†          89.5      96.357 ug/L       7.4396      96.357 ppb       7.4396   7.72%
   QC value within limits for S 181.975 Axial  Recovery = 96.36%
Sb 206.836†               43.7      11.807 ug/L       0.5867      11.807 ppb       0.5867   4.97%
   QC value within limits for Sb 206.836  Recovery = 118.07%
Se 196.026†               65.7      29.405 ug/L       2.6665      29.405 ppb       2.6665   9.07%
   QC value within limits for Se 196.026  Recovery = 98.02%
Si 251.611†             4059.5      102.83 ug/L        1.217      102.83 ppb        1.217   1.18%
   QC value within limits for Si 251.611  Recovery = 102.83%
Sn 189.927†               80.0      10.600 ug/L       0.2084      10.600 ppb       0.2084   1.97%
   QC value within limits for Sn 189.927  Recovery = 106.00%
Sr 421.552†              936.7      4.9127 ug/L      0.04891      4.9127 ppb      0.04891   1.00%
   QC value within limits for Sr 421.552  Recovery = 98.25%
Ti 334.940†             3574.6      4.9172 ug/L      0.11528      4.9172 ppb      0.11528   2.34%
   QC value within limits for Ti 334.940  Recovery = 98.34%
Tl 190.801†               82.0      19.906 ug/L       0.6555      19.906 ppb       0.6555   3.29%
   QC value within limits for Tl 190.801  Recovery = 99.53%
U 409.014†              1925.7      49.768 ug/L       2.3685      49.768 ppb       2.3685   4.76%
   QC value within limits for U 409.014  Recovery = 99.54%
V 292.402†               835.7      5.0170 ug/L      0.03359      5.0170 ppb      0.03359   0.67%
   QC value within limits for V 292.402  Recovery = 100.34%
Zn 213.857†             1408.8      10.286 ug/L       0.1748      10.286 ppb       0.1748   1.70%
   QC value within limits for Zn 213.857  Recovery = 102.86%
SiO2†                   4025.3      218.19 ug/L        1.897      218.19 ppb        1.897   0.87%
   QC value within limits for SiO2  Recovery = 102.44%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125 ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358 ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332 ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716 ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926 ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720 ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740 ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396 ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397 ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291 ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433 ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413 ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610 ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770 ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657 %		09:58:28
3	Sc Radial	4452.3	4452.3	90.7 %		09:57:29
3	Y 371.029	763138.6	763138.6	86.282 %		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26 %		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167 ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860 ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512 ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439 ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675 ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922 ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820 ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732 ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789 ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279 ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638 ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310 ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175 ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750 ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540 ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843 ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311 ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227 ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915 ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746 ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932 ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176 ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896 ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226 ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013 ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829 ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545 ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683 ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715 ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573 ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528 ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768 ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb		10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb		10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb		10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb		10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb		10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb		10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb		10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb		10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb		10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb		10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb		10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb		10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb		10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb		10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %			10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %			10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %			10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %			10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb		10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb		10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb		10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb		10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb		10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb		10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb		10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb		10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb		10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb		10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb		10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb		10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb		10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb		10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb		10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb		10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb		10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb		10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb		10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb		10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb		10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb		10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb		10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb		10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb		10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb		10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb		10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb		10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb		10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb		10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb		10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb		10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

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Ca 317.933Radial†     272506.6      482480 ug/L        5269.3      482480 ppb         5269.3   1.09%
   QC value within limits for Ca 317.933Radial  Recovery = 96.50%
Cd 226.502†            56301.0      472.81 ug/L         3.758      472.81 ppb          3.758   0.79%
   QC value within limits for Cd 226.502  Recovery = 94.56%
Co 228.616†            28228.3      462.55 ug/L         3.948      462.55 ppb          3.948   0.85%
   QC value within limits for Co 228.616  Recovery = 92.51%
Cr 267.716†            53154.8      481.60 ug/L         2.521      481.60 ppb          2.521   0.52%
   QC value within limits for Cr 267.716  Recovery = 96.32%
Cu 324.752†           211552.8      574.38 ug/L         6.835      574.38 ppb          6.835   1.19%
   QC value within limits for Cu 324.752  Recovery = 114.88%
Fe 238.204 Radial†     15285.8      184820 ug/L        1613.6      184820 ppb         1613.6   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.41%
K 766.490 Radial†      30276.9      5529.3 ug/L         61.46      5529.3 ppb          61.46   1.11%
   QC value within limits for K 766.490 Radial  Recovery = 110.59%
Mg 279.077 IEC†        11072.2      495270 ug/L        3223.1      495270 ppb         3223.1   0.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.05%
Mn 257.610†           519055.3      500.72 ug/L         5.664      500.72 ppb          5.664   1.13%
   QC value within limits for Mn 257.610  Recovery = 100.14%
Mo 202.031†             9037.2      492.69 ug/L         3.967      492.69 ppb          3.967   0.81%
   QC value within limits for Mo 202.031  Recovery = 98.54%
Na 589.592 Radial†     18579.3      5211.5 ug/L         48.18      5211.5 ppb          48.18   0.92%
   QC value within limits for Na 589.592 Radial  Recovery = 104.23%
Ni 231.604†            23602.9      462.17 ug/L         3.523      462.17 ppb          3.523   0.76%
   QC value within limits for Ni 231.604  Recovery = 92.43%
P 214.914†              5752.3      2520.4 ug/L         39.08      2520.4 ppb          39.08   1.55%
   QC value within limits for P 214.914  Recovery = 100.81%
Pb 220.353†             3920.0      473.36 ug/L         5.165      473.36 ppb          5.165   1.09%
   QC value within limits for Pb 220.353  Recovery = 94.67%
S 181.975 Axial†        2522.0      2612.1 ug/L         33.01      2612.1 ppb          33.01   1.26%
   QC value within limits for S 181.975 Axial  Recovery = 104.49%
Sb 206.836†             2110.6      551.22 ug/L         2.592      551.22 ppb          2.592   0.47%
   QC value within limits for Sb 206.836  Recovery = 110.24%
Se 196.026†             4382.9      2608.9 ug/L         24.27      2608.9 ppb          24.27   0.93%
   QC value within limits for Se 196.026  Recovery = 104.36%
Si 251.611†           211822.2      5368.0 ug/L         59.89      5368.0 ppb          59.89   1.12%
   QC value within limits for Si 251.611  Recovery = 107.36%
Sn 189.927†             3306.5      490.18 ug/L         5.219      490.18 ppb          5.219   1.06%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            95213.6      495.06 ug/L         5.584      495.06 ppb          5.584   1.13%
   QC value within limits for Sr 421.552  Recovery = 99.01%
Ti 334.940†           354526.5      513.76 ug/L         5.094      513.76 ppb          5.094   0.99%
   QC value within limits for Ti 334.940  Recovery = 102.75%
Tl 190.801†             1932.2      484.94 ug/L         3.312      484.94 ppb          3.312   0.68%
   QC value within limits for Tl 190.801  Recovery = 96.99%
U 409.014†             20126.5      496.18 ug/L         5.005      496.18 ppb          5.005   1.01%
   QC value within limits for U 409.014  Recovery = 99.24%
V 292.402†             91259.0      512.63 ug/L         5.805      512.63 ppb          5.805   1.13%
   QC value within limits for V 292.402  Recovery = 102.53%
Zn 213.857†            71647.8      488.25 ug/L         4.200      488.25 ppb          4.200   0.86%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                 212042.7       11499 ug/L         145.5       11499 ppb          145.5   1.27%
   QC value within limits for SiO2  Recovery = 107.52%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756	ug/L	74.756	ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667	ug/L	10.667	ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135	ug/L	-10.135	ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848	ug/L	7.2848	ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093	ug/L	-53.093	ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797	ug/L	-31.797	ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198	ug/L	-7.2198	ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818	ug/L	0.8818	ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763	ug/L	5.0763	ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182	ug/L	-9.7182	ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618	ug/L	14618	ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359	ug/L	-2.7359	ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817	ug/L	-0.7817	ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239	ug/L	-73.239	ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303	%			10:09:54
3	Sc Radial	4249.7	4249.7	86.6	%			10:08:52
3	Y 371.029	725964.8	725964.8	82.079	%			10:09:54
3	Y RADIAL	4895.1	4895.1	86.68	%			10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798	ug/L	-8.2798	ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190	ug/L	531190	ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643	ug/L	-14.643	ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484	ug/L	-17.484	ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540	ug/L	0.6540	ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451	ug/L	-3.1451	ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510	ug/L	476510	ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493	ug/L	1.3493	ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166	ug/L	-0.2166	ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306	ug/L	2.5306	ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824	ug/L	3.4824	ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920	ug/L	430920	ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523	ug/L	-28.523	ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000	ug/L	485000	ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543	ug/L	-1.5543	ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915	ug/L	-7.5915	ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130	ug/L	481130	ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607	ug/L	5.5607	ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07	ug/L	101.07	ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769	ug/L	8.0769	ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606	ug/L	19.606	ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498	ug/L	9.7498	ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648	ug/L	-78.648	ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634	ug/L	-33.634	ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188	ug/L	-12.188	ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173	ug/L	0.7173	ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661	ug/L	5.2661	ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929	ug/L	-10.929	ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598	ug/L	14598	ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512	ug/L	-2.4512	ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635	ug/L	0.2635	ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674	ug/L	-76.674	ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731	ug/L	14731 ppb	10:16:40
2	Pb 220.353†	248482.1	260348.9	24447	ug/L	24447 ppb	10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788	ug/L	51788 ppb	10:16:40
2	Sb 206.836†	38447.2	40237.0	10413	ug/L	10413 ppb	10:16:40
2	Se 196.026†	22029.2	23096.0	10261	ug/L	10261 ppb	10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861	ug/L	47861 ppb	10:16:35
2	Sn 189.927†	75436.2	79020.2	10451	ug/L	10451 ppb	10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6	ug/L	9440.6 ppb	10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9	ug/L	9887.9 ppb	10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4	ug/L	9993.4 ppb	10:16:40
2	U 409.014†	-1890.4	793.9	-25.762	ug/L	-25.762 ppb	10:16:40
2	V 292.402†	1672052.7	1753005.2	10154	ug/L	10154 ppb	10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064	ug/L	14064 ppb	10:16:35
2	SiO2†	1854816.0	1942233.7	104910	ug/L	104910 ppb	10:17:14
3	Sc 361.383	988641.8	988641.8	95.109	%		10:16:54
3	Sc Radial	4729.3	4729.3	96.3	%		10:15:38
3	Y 371.029	819320.7	819320.7	92.634	%		10:16:54
3	Y RADIAL	5365.7	5365.7	95.02	%		10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602	ug/L	3.2602 ppb	10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512	ug/L	89.512 ppb	10:15:38
3	As 188.979†	30234.5	31825.9	10000	ug/L	10000 ppb	10:17:00
3	B 249.677†	253820.4	267339.4	5029.4	ug/L	5029.4 ppb	10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711	ug/L	13711 ppb	10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8	ug/L	2949.8 ppb	10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255	ug/L	41.255 ppb	10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7	ug/L	9764.7 ppb	10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6	ug/L	9048.6 ppb	10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049	ug/L	24049 ppb	10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842	ug/L	20842 ppb	10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040	ug/L	-4.8040 ppb	10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920	ug/L	288920 ppb	10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120	ug/L	67.120 ppb	10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3	ug/L	9608.3 ppb	10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1	ug/L	9732.1 ppb	10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49	ug/L	158.49 ppb	10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0	ug/L	9890.0 ppb	10:16:54
3	P 214.914†	38530.7	40247.0	14805	ug/L	14805 ppb	10:17:00
3	Pb 220.353†	247695.8	260509.3	24462	ug/L	24462 ppb	10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768	ug/L	51768 ppb	10:17:00
3	Sb 206.836†	38484.3	40428.7	10462	ug/L	10462 ppb	10:17:00
3	Se 196.026†	22001.3	23154.1	10287	ug/L	10287 ppb	10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957	ug/L	47957 ppb	10:16:54
3	Sn 189.927†	75099.1	78965.5	10444	ug/L	10444 ppb	10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4	ug/L	9338.4 ppb	10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1	ug/L	9968.1 ppb	10:16:48
3	Tl 190.801†	39204.4	41264.8	10043	ug/L	10043 ppb	10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525	ug/L	-16.525 ppb	10:17:00
3	V 292.402†	1668512.3	1755925.1	10171	ug/L	10171 ppb	10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095	ug/L	14095 ppb	10:16:54
3	SiO2†	1844505.7	1938761.5	104720	ug/L	104720 ppb	10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

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   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb         20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L        28.6       24016 ppb          28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L        68.9       20784 ppb          68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L     12.73507      7.1483 ppb     12.73507 178.15%
K 766.490 Radial†   1604818.8      292410 ug/L      3446.4      292410 ppb       3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†          -5.2     -33.655 ug/L     97.1262     -33.655 ppb      97.1262 288.59%
Mn 257.610†        10099618.1      9563.8 ug/L        44.75      9563.8 ppb         44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb          5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb         0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb         11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb          37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb          16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb          14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb          35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb          21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb          48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb           3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb        113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb         40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb          24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb       5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb          8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb          18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb       1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

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Ca 317.933Radial†        2842.6      5033.0 ug/L        38.86      5033.0 ppb        38.86   0.77%
   QC value within limits for Ca 317.933Radial  Recovery = 100.66%
Cd 226.502†             57296.6      499.49 ug/L        1.604      499.49 ppb        1.604   0.32%
   QC value within limits for Cd 226.502  Recovery = 99.90%
Co 228.616†             29764.2      490.44 ug/L        1.510      490.44 ppb        1.510   0.31%
   QC value within limits for Co 228.616  Recovery = 98.09%
Cr 267.716†             55373.5      498.28 ug/L        1.039      498.28 ppb        1.039   0.21%
   QC value within limits for Cr 267.716  Recovery = 99.66%
Cu 324.752†            186833.2      499.20 ug/L        1.013      499.20 ppb        1.013   0.20%
   QC value within limits for Cu 324.752  Recovery = 99.84%
Fe 238.204 Radial†        413.6      5016.3 ug/L        43.97      5016.3 ppb        43.97   0.88%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.33%
K 766.490 Radial†       27646.2      5030.3 ug/L        29.10      5030.3 ppb        29.10   0.58%
   QC value within limits for K 766.490 Radial  Recovery = 100.61%
Mg 279.077 IEC†           115.0      5152.7 ug/L        45.64      5152.7 ppb        45.64   0.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.05%
Mn 257.610†            527884.4      500.28 ug/L        0.793      500.28 ppb        0.793   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.06%
Mo 202.031†             9375.3      497.87 ug/L        2.477      497.87 ppb        2.477   0.50%
   QC value within limits for Mo 202.031  Recovery = 99.57%
Na 589.592 Radial†      34004.4      9538.2 ug/L        12.76      9538.2 ppb        12.76   0.13%
   QC value within limits for Na 589.592 Radial  Recovery = 95.38%
Ni 231.604†             25164.0      492.74 ug/L        1.916      492.74 ppb        1.916   0.39%
   QC value within limits for Ni 231.604  Recovery = 98.55%
P 214.914†              5537.8      2401.6 ug/L         5.33      2401.6 ppb         5.33   0.22%
   QC value within limits for P 214.914  Recovery = 96.06%
Pb 220.353†             5333.7      502.25 ug/L        2.030      502.25 ppb        2.030   0.40%
   QC value within limits for Pb 220.353  Recovery = 100.45%
S 181.975 Axial†         914.8      984.56 ug/L       14.228      984.56 ppb       14.228   1.45%
   QC value within limits for S 181.975 Axial  Recovery = 98.46%
Sb 206.836†             1878.1      502.30 ug/L        0.614      502.30 ppb        0.614   0.12%
   QC value within limits for Sb 206.836  Recovery = 100.46%
Se 196.026†             1126.1      518.56 ug/L        3.244      518.56 ppb        3.244   0.63%
   QC value within limits for Se 196.026  Recovery = 103.71%
Si 251.611†             97340.7      2460.2 ug/L         4.93      2460.2 ppb         4.93   0.20%
   QC value within limits for Si 251.611  Recovery = 98.41%
Sn 189.927†             3741.6      495.45 ug/L        2.400      495.45 ppb        2.400   0.48%
   QC value within limits for Sn 189.927  Recovery = 99.09%
Sr 421.552†             93386.6      489.90 ug/L        1.389      489.90 ppb        1.389   0.28%
   QC value within limits for Sr 421.552  Recovery = 97.98%
Ti 334.940†            359415.4      495.61 ug/L        0.472      495.61 ppb        0.472   0.10%
   QC value within limits for Ti 334.940  Recovery = 99.12%
Tl 190.801†             2062.9      502.10 ug/L        2.272      502.10 ppb        2.272   0.45%
   QC value within limits for Tl 190.801  Recovery = 100.42%
U 409.014†              18512.1      477.03 ug/L        1.407      477.03 ppb        1.407   0.29%
   QC value within limits for U 409.014  Recovery = 95.41%
V 292.402†              86553.8      502.14 ug/L        0.660      502.14 ppb        0.660   0.13%
   QC value within limits for V 292.402  Recovery = 100.43%
Zn 213.857†             67981.0      495.14 ug/L        0.700      495.14 ppb        0.700   0.14%
   QC value within limits for Zn 213.857  Recovery = 99.03%
SiO2†                   97459.5      5271.0 ug/L        21.25      5271.0 ppb        21.25   0.40%
   QC value within limits for SiO2  Recovery = 98.57%
All analyte(s) passed QC.
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Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142	ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204	ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748	ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236	ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607	ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238	ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416	ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924	ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677	ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894	ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750	ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873	ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359	ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940	ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70	%		10:46:30
3	Sc Radial	4898.4	4898.4	99.8	%		10:45:03
3	Y 371.029	891482.0	891482.0	100.79	%		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70	%		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626	ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479	ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415	ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651	ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466	ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383	ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758	ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172	ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063	ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401	ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056	ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671	ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339	ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75	ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452	ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415	ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775	ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537	ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081	ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238	ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446	ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873	ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933	ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715	ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116	ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563	ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284	ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025	ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651	ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454	ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553	ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424	ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5     -1.5484 ug/L       2.77737     -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2     -4.5703 ug/L       5.15146     -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2      3.7743 ug/L       1.87844      3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.9597 ug/L       2.16197     -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2      1.5615 ug/L       0.21151      1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5      1.5214 ug/L       0.96781      1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5     -0.0343 ug/L       0.07167     -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1     -0.0500 ug/L       0.01994     -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446      0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -175.7     -4.5411 ug/L       3.27969     -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -22.7     -0.1300 ug/L       0.15236     -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217      0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3      2.3658 ug/L       1.17872      2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753	ug/L	-8.3753 ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374	ug/L	0.9374 ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728	ug/L	17.728 ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640	ug/L	1.8640 ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03	ug/L	183.03 ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144	ug/L	-36.144 ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244	ug/L	-0.8244 ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527	ug/L	0.3527 ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635	ug/L	-0.1635 ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719	ug/L	-3.3719 ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309	ug/L	4.2309 ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606	ug/L	-6.7606 ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455	ug/L	-0.4455 ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451	ug/L	-81.451 ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220	%		10:53:23
3	Sc Radial	4812.6	4812.6	98.0	%		10:52:05
3	Y 371.029	862360.3	862360.3	97.500	%		10:53:23
3	Y RADIAL	5507.3	5507.3	97.52	%		10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149	ug/L	-2.3149 ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070	ug/L	-4.1070 ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627	ug/L	-11.627 ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198	ug/L	1.4198 ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813	ug/L	-0.0813 ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080	ug/L	0.0080 ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437	ug/L	21.437 ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926	ug/L	-0.8926 ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116	ug/L	0.0116 ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157	ug/L	0.1157 ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678	ug/L	-5.1678 ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140	ug/L	382140 ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864	ug/L	62.864 ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088	ug/L	-8.8088 ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260	ug/L	-6.2260 ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035	ug/L	0.0035 ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218	ug/L	10.218 ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003	ug/L	2.5003 ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049	ug/L	-17.049 ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633	ug/L	0.8633 ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577	ug/L	16.577 ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703	ug/L	1.2703 ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98	ug/L	187.98 ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230	ug/L	-36.230 ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851	ug/L	0.0851 ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075	ug/L	0.5075 ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587	ug/L	-0.1587 ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379	ug/L	-1.5379 ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506	ug/L	6.4506 ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115	ug/L	-7.3115 ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488	ug/L	-0.5488 ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404	ug/L	-87.404 ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774	13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122	678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903	2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898	87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095	54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575	16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955	33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103	38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019	16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134	87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174	2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643	0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699	166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835	18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037	6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860	37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671	54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332	7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455	68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899	5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8 ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07 ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86 ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37 ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66 ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8 ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84 ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95 ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61 ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62 ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09 ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56 ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99 ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0 ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71 %		11:00:17
3	Sc Radial	4925.8	4925.8	100 %		10:58:53
3	Y 371.029	877905.3	877905.3	99.258 %		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84 %		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35 ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8 ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79 ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35 ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61 ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82 ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2 ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62 ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69 ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61 ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06 ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7 ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2 ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0 ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71 ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33 ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1 ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55 ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1 ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20 ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00 ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56 ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51 ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1 ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74 ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39 ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24 ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29 ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34 ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66 ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31 ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1 ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

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Ca 317.933Radial†        2795.2      4949.0 ug/L         61.06      4949.0 ppb          61.06   1.23%
   QC value within limits for Ca 317.933Radial  Recovery = 98.98%
Cd 226.502†             57300.2      499.53 ug/L         1.852      499.53 ppb          1.852   0.37%
   QC value within limits for Cd 226.502  Recovery = 99.91%
Co 228.616†             29608.9      487.87 ug/L         1.689      487.87 ppb          1.689   0.35%
   QC value within limits for Co 228.616  Recovery = 97.57%
Cr 267.716†             55297.6      497.60 ug/L         1.743      497.60 ppb          1.743   0.35%
   QC value within limits for Cr 267.716  Recovery = 99.52%
Cu 324.752†            186009.6      496.99 ug/L         1.464      496.99 ppb          1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 99.40%
Fe 238.204 Radial†        405.0      4912.1 ug/L         80.46      4912.1 ppb          80.46   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.24%
K 766.490 Radial†       27016.4      4915.6 ug/L         26.56      4915.6 ppb          26.56   0.54%
   QC value within limits for K 766.490 Radial  Recovery = 98.31%
Mg 279.077 IEC†           111.4      4989.5 ug/L         96.39      4989.5 ppb          96.39   1.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.79%
Mn 257.610†            527731.1      500.13 ug/L         1.476      500.13 ppb          1.476   0.30%
   QC value within limits for Mn 257.610  Recovery = 100.03%
Mo 202.031†             9298.8      493.81 ug/L         2.195      493.81 ppb          2.195   0.44%
   QC value within limits for Mo 202.031  Recovery = 98.76%
Na 589.592 Radial†      33372.8      9361.1 ug/L         50.41      9361.1 ppb          50.41   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†             25005.0      489.63 ug/L         1.726      489.63 ppb          1.726   0.35%
   QC value within limits for Ni 231.604  Recovery = 97.93%
P 214.914†              5502.4      2386.1 ug/L         11.15      2386.1 ppb          11.15   0.47%
   QC value within limits for P 214.914  Recovery = 95.45%
Pb 220.353†             5299.9      499.06 ug/L         1.860      499.06 ppb          1.860   0.37%
   QC value within limits for Pb 220.353  Recovery = 99.81%
S 181.975 Axial†         903.8      972.73 ug/L         4.706      972.73 ppb          4.706   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 97.27%
Sb 206.836†             1847.1      494.01 ug/L         3.403      494.01 ppb          3.403   0.69%
   QC value within limits for Sb 206.836  Recovery = 98.80%
Se 196.026†             1106.9      509.66 ug/L         6.212      509.66 ppb          6.212   1.22%
   QC value within limits for Se 196.026  Recovery = 101.93%
Si 251.611†             97204.8      2456.9 ug/L          7.70      2456.9 ppb           7.70   0.31%
   QC value within limits for Si 251.611  Recovery = 98.28%
Sn 189.927†             3719.5      492.52 ug/L         2.434      492.52 ppb          2.434   0.49%
   QC value within limits for Sn 189.927  Recovery = 98.50%
Sr 421.552†            92292.4      484.16 ug/L         1.112      484.16 ppb          1.112   0.23%
   QC value within limits for Sr 421.552  Recovery = 96.83%
Ti 334.940†           358750.6      494.69 ug/L         1.509      494.69 ppb          1.509   0.31%
   QC value within limits for Ti 334.940  Recovery = 98.94%
Tl 190.801†             2050.0      498.98 ug/L         1.719      498.98 ppb          1.719   0.34%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†             18423.6      474.75 ug/L         1.188      474.75 ppb          1.188   0.25%
   QC value within limits for U 409.014  Recovery = 94.95%
V 292.402†             86361.9      501.00 ug/L         1.491      501.00 ppb          1.491   0.30%
   QC value within limits for V 292.402  Recovery = 100.20%
Zn 213.857†            67835.2      494.11 ug/L         1.146      494.11 ppb          1.146   0.23%
   QC value within limits for Zn 213.857  Recovery = 98.82%
SiO2†                  96661.6      5227.9 ug/L         22.02      5227.9 ppb          22.02   0.42%
   QC value within limits for SiO2  Recovery = 97.76%
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951	ug/L	0.9951 ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458	ug/L	1.7458 ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298	ug/L	-2.7298 ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989	ug/L	2.8989 ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951	ug/L	-3.2951 ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309	ug/L	0.5309 ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661	ug/L	1.2661 ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167	ug/L	-0.1167 ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867	ug/L	-0.0867 ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171	ug/L	-1.7171 ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062	ug/L	0.7062 ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749	ug/L	-0.3749 ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912	ug/L	0.1912 ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073	ug/L	2.4073 ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43	%		11:07:13
3	Sc Radial	4909.9	4909.9	100	%		11:05:46
3	Y 371.029	889449.2	889449.2	100.56	%		11:07:13
3	Y RADIAL	5657.3	5657.3	100.2	%		11:05:46
3	Ag 328.068†	489.6	13.4	0.0605	ug/L	0.0605 ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350	ug/L	22.350 ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242	ug/L	0.7242 ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618	ug/L	7.2618 ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758	ug/L	0.0758 ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242	ug/L	0.0242 ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990	ug/L	3.8990 ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798	ug/L	0.1798 ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058	ug/L	0.0058 ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718	ug/L	0.1718 ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108	ug/L	-0.2108 ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976	ug/L	16.976 ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709	ug/L	25.709 ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52	ug/L	-176.52 ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313	ug/L	0.0313 ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939	ug/L	0.1939 ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755	ug/L	1.0755 ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707	ug/L	-0.0707 ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232	ug/L	0.5232 ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380	ug/L	0.5380 ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618	ug/L	-7.9618 ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903	ug/L	2.2903 ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492	ug/L	0.3492 ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962	ug/L	0.5962 ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103	ug/L	2.2103 ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222	ug/L	-0.0222 ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947	ug/L	-0.0947 ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125	ug/L	-2.2125 ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983	ug/L	-2.0983 ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210	ug/L	0.0210 ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153	ug/L	0.3153 ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484	ug/L	1.7484 ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5 ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62 ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4 ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79 ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50 ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7 ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14 ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22 ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73 ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06 ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23 ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73 ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1 ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2 %		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86 %		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9 ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9 ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0 ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6 ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3 ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8 ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49 ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849 %		12:17:52
3	Y 371.029	872084.7	872084.7	98.600 %		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61 ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35 ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70 ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37 ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30 ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46 ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38 ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43 ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62 ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50 ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54 ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00 ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1 ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64 ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0 ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03 ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64 ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1 ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18 ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49 ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93 ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25 ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98 ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35 ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4 ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L         3.149      507.31 ppb          3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L         3.818      500.79 ppb          3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L         3.018      504.61 ppb          3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L         2.623      506.08 ppb          2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L        45.45      5082.5 ppb         45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L        68.50      4957.3 ppb         68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L        11.74      5217.9 ppb         11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L         3.320      507.64 ppb          3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L         3.216      507.25 ppb          3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L       135.46      9625.8 ppb        135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L         3.555      502.09 ppb          3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L        11.55      2454.7 ppb         11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L         3.072      511.03 ppb          3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L         2.21      1000.2 ppb          2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L         3.960      508.48 ppb          3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L         3.225      525.79 ppb          3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L        14.63      2500.7 ppb         14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L         3.651      502.21 ppb          3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L         6.861      494.05 ppb          6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L         2.661      502.89 ppb          2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L         2.825      511.74 ppb          2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L         2.617      485.15 ppb          2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L         2.757      508.62 ppb          2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L         3.269      502.43 ppb          3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L        57.67      5346.1 ppb         57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -23.990 ug/L       73.3513     -23.990 ppb        73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time:** 11/30/2009 06:07:59
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601**Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/4/2009 12:48:33
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L         53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L         85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L        105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L         48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†            9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L        151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L         43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L         52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L         47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750	ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466	ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347	ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960	ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216	ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014	ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740	ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164	ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635	ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594	ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408	ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073	ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106	ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8	%		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0	%		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013	ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244	ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453	ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928	ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436	ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845	ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165	ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628	%		12:59:35
3	Y 371.029	880903.4	880903.4	99.597	%		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441	ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565	ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068	ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624	ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288	ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633	ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888	ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060	ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141	ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162	ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630	ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537	ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106	ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791	ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859	ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539	ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160	ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207	ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458	ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330	ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739	ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096	ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533	ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302	ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247	ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8      34.227 ug/L       24.6248      34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4	ug/L	2436.4	ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61	ug/L	508.61	ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03	ug/L	989.03	ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56	ug/L	506.56	ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41	ug/L	521.41	ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7	ug/L	2493.7	ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70	ug/L	501.70	ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34	ug/L	502.34	ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75	ug/L	504.75	ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45	ug/L	487.45	ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80	ug/L	506.80	ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49	ug/L	501.49	ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3	ug/L	5319.3	ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9	%			13:59:47
3	Y RADIAL	5578.4	5578.4	98.78	%			13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4	ug/L	5071.4	ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5	ug/L	5021.5	ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8	ug/L	5064.8	ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3	ug/L	4935.3	ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9	ug/L	5205.9	ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6	ug/L	9862.6	ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30	ug/L	498.30	ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512	%			14:01:11
3	Y 371.029	866902.9	866902.9	98.014	%			14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50	ug/L	503.50	ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67	ug/L	506.67	ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41	ug/L	499.41	ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96	ug/L	506.96	ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75	ug/L	505.75	ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86	ug/L	504.86	ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29	ug/L	500.29	ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12	ug/L	503.12	ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57	ug/L	506.57	ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84	ug/L	507.84	ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48	ug/L	504.48	ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02	ug/L	500.02	ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4	ug/L	2453.4	ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30	ug/L	510.30	ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24	ug/L	996.24	ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17	ug/L	511.17	ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65	ug/L	523.65	ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5	ug/L	2497.5	ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36	ug/L	502.36	ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22	ug/L	503.22	ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10	ug/L	507.10	ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03	ug/L	483.03	ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14	ug/L	508.14	ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67	ug/L	501.67	ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5	ug/L	5359.5	ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758	ug/L	7.6758 ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119	ug/L	2.2119 ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324	ug/L	-7.1324 ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069	ug/L	3.1069 ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363	ug/L	-1.9363 ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149	ug/L	1.8149 ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313	ug/L	0.4313 ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017	ug/L	0.1017 ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009	ug/L	-1.3009 ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491	ug/L	-1.7491 ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527	ug/L	0.3527 ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144	ug/L	0.3144 ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249	ug/L	3.2249 ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0	%		14:06:39
3	Y RADIAL	5653.4	5653.4	100.1	%		14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078	ug/L	9.0078 ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238	ug/L	25.238 ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557	ug/L	-11.557 ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614	ug/L	26.614 ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277	ug/L	-67.277 ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433	ug/L	13.433 ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743	ug/L	-0.0743 ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53	%		14:08:07
3	Y 371.029	887847.1	887847.1	100.38	%		14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092	ug/L	-0.0092 ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368	ug/L	0.7368 ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077	ug/L	3.0077 ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964	ug/L	0.0964 ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077	ug/L	-0.0077 ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791	ug/L	0.1791 ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226	ug/L	-0.0226 ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834	ug/L	0.0834 ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251	ug/L	0.3251 ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064	ug/L	0.0064 ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662	ug/L	-0.0662 ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191	ug/L	-0.1191 ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622	ug/L	-4.6622 ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536	ug/L	-1.2536 ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407	ug/L	-6.9407 ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302	ug/L	2.5302 ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220	ug/L	-5.9220 ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899	ug/L	2.1899 ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576	ug/L	-0.1576 ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379	ug/L	0.0379 ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674	ug/L	-2.8674 ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636	ug/L	2.5636 ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930	ug/L	-0.1930 ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247	ug/L	0.2247 ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671	ug/L	4.2671 ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       141.0      25.699 ug/L        9.7077      25.699 ppb         9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.9     -40.386 ug/L       44.6154     -40.386 ppb        44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       56.4      15.809 ug/L       12.6890      15.809 ppb        12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb         59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb         14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb        179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb         10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb         13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L         5.14      2504.1 ppb          5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb         40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
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Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237	ug/L	8.7237	ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503	ug/L	-0.7503	ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231	ug/L	-7.3231	ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716	ug/L	4.0716	ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231	ug/L	-1.9231	ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718	ug/L	1.4718	ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274	ug/L	1.5274	ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146	ug/L	-0.1146	ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667	ug/L	-0.1667	ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992	ug/L	-4.3992	ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848	ug/L	-0.0848	ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817	ug/L	0.1817	ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213	ug/L	3.4213	ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101	%			15:02:30
3	Y RADIAL	5692.8	5692.8	100.8	%			15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650	ug/L	-1.9650	ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501	ug/L	16.501	ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962	ug/L	-12.962	ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364	ug/L	13.364	ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663	ug/L	48.663	ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078	ug/L	36.078	ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131	ug/L	-0.1131	ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06	%			15:03:57
3	Y 371.029	884765.2	884765.2	100.03	%			15:03:57
3	Ag 328.068†	546.5	72.1	0.2822	ug/L	0.2822	ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412	ug/L	1.2412	ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362	ug/L	0.7362	ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116	ug/L	-0.0116	ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116	ug/L	0.0116	ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212	ug/L	0.0212	ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510	ug/L	0.2510	ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157	ug/L	0.3157	ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543	ug/L	0.3543	ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154	ug/L	0.0154	ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656	ug/L	-0.0656	ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330	ug/L	-0.1330	ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179	ug/L	1.9179	ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499	ug/L	-1.5499	ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618	ug/L	-1.6618	ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470	ug/L	1.9470	ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666	ug/L	-1.0666	ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213	ug/L	1.7213	ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060	ug/L	-0.0060	ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030	ug/L	0.0030	ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751	ug/L	1.5751	ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249	ug/L	-2.0249	ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440	ug/L	-0.2440	ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181	ug/L	0.3181	ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869	ug/L	1.9869	ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3     -15.423 ug/L        6.5866     -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2      20.428 ug/L       19.9912      20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      29.809 ug/L       20.4595      29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2      32.884 ug/L        2.9232      32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3      -1.3421 ug/L      0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0      -3.2808 ug/L      3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4      -2.0075 ug/L      0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1      -0.0530 ug/L      0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9      -0.0365 ug/L      0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5      -3.2686 ug/L      1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4      -0.0340 ug/L      0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb		15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb		15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb		15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb		15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb		15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb		15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb		15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb		15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb		15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb		15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb		15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb		15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb		15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %			15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %			15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb		15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb		15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb		15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb		15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb		15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb		15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb		15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %			15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %			15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb		15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb		15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb		15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb		15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb		15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb		15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb		15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb		15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb		15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb		15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb		15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb		15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb		15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb		15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb		15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb		15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb		15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb		15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb		15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb		15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb		15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb		15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb		15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb		15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb		15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L         2.287      511.43 ppb          2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L         1.146      503.91 ppb          1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L         1.662      508.31 ppb          1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L         2.326      511.16 ppb          2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L        25.16      5027.1 ppb         25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L        44.05      4939.1 ppb         44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L        81.91      5126.5 ppb         81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L         2.081      512.46 ppb          2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L         1.419      507.72 ppb          1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L        66.05      9820.7 ppb         66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L         1.302      503.63 ppb          1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L        10.07      2478.2 ppb         10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L         0.126      512.95 ppb          0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L         2.77      1003.1 ppb          2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L         3.500      515.53 ppb          3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L         2.058      527.42 ppb          2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L         9.97      2519.4 ppb          9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L         1.147      506.74 ppb          1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L         3.343      499.14 ppb          3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L         2.319      508.04 ppb          2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L         1.578      508.52 ppb          1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L         2.387      493.42 ppb          2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L         2.377      512.95 ppb          2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L         1.824      506.84 ppb          1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L        37.27      5379.2 ppb         37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120 ug/L	2.5120 ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279 ug/L	-1.9279 ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495 ug/L	-0.1495 ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770 ug/L	1.6770 ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989 ug/L	-2.4989 ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415 ug/L	1.7415 ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240 ug/L	2.0240 ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840 ug/L	0.0840 ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260 ug/L	-1.7260 ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950 ug/L	0.4950 ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658 ug/L	0.1658 ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793 ug/L	0.3793 ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045 ug/L	1.4045 ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9 %		15:58:24
3	Y RADIAL	5536.8	5536.8	98.05 %		15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014 ug/L	-2.7014 ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137 ug/L	10.137 ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928 ug/L	-19.928 ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858 ug/L	37.858 ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734 ug/L	69.734 ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211 ug/L	45.211 ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220 ug/L	-0.2220 ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773 %		15:59:52
3	Y 371.029	882258.7	882258.7	99.750 %		15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838 ug/L	-0.2838 ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697 ug/L	0.9697 ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790 ug/L	1.1790 ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208 ug/L	0.0208 ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339 ug/L	0.0339 ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026 ug/L	0.1026 ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501 ug/L	-0.2501 ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010 ug/L	0.1010 ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474 ug/L	0.1474 ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012 ug/L	0.0012 ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361 ug/L	0.1361 ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230 ug/L	0.2230 ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402 ug/L	3.5402 ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038 ug/L	1.3038 ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872 ug/L	-2.2872 ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858 ug/L	5.1858 ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930 ug/L	-1.6930 ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103 ug/L	1.3103 ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187 ug/L	1.9187 ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536 ug/L	0.0536 ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928 ug/L	-0.6928 ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296 ug/L	1.2296 ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732 ug/L	-0.2732 ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459 ug/L	0.3459 ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862 ug/L	3.4862 ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -20.252 ug/L       10.1579     -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3      -0.0001 ug/L      0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3       0.1199 ug/L      0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7       0.1902 ug/L      0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2       4.1321 ug/L      1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4      -0.1226 ug/L      1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0      -0.0008 ug/L      2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3       2.4728 ug/L      2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1      -2.3223 ug/L      0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0       1.3081 ug/L      0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6       1.3975 ug/L      0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5      -0.0971 ug/L      0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5       0.0132 ug/L      0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3      -0.5672 ug/L      1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9       0.7761 ug/L      0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4      -0.0073 ug/L      0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0       0.3381 ug/L      0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6       2.8325 ug/L      1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 29
Sample ID: 1201978326|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 16:02:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978326|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4932.6	4932.6	100	%			16:04:35
1	Y RADIAL	5701.0	5701.0	101.0	%			16:04:35
1	Al 396.153Radial†	-28.2	15.7	10.406	ug/L	10.406	ppb	16:04:35
1	Ca 317.933Radial†	22.5	4.6	8.0674	ug/L	8.0674	ppb	16:04:55
1	Fe 238.204 Radial†	10.8	-0.3	-3.4536	ug/L	-3.4536	ppb	16:04:55
1	K 766.490 Radial†	2630.1	48.4	8.8026	ug/L	8.8026	ppb	16:04:35
1	Mg 279.077 IEC†	3.4	0.9	39.158	ug/L	39.158	ppb	16:04:55
1	Na 589.592 Radial†	-1152.5	132.8	37.244	ug/L	37.244	ppb	16:04:35
1	Sr 421.552†	4.1	11.5	0.0602	ug/L	0.0602	ppb	16:04:35
1	Sc 361.383	1047796.0	1047796.0	100.80	%			16:05:52
1	Y 371.029	890128.2	890128.2	100.64	%			16:05:52
1	Ag 328.068†	470.6	-7.2	-0.0322	ug/L	-0.0322	ppb	16:05:57
1	As 188.979†	-45.4	-8.4	-2.6125	ug/L	-2.6125	ppb	16:06:17
1	B 249.677†	-465.2	4.6	0.0868	ug/L	0.0868	ppb	16:06:17
1	Ba 233.527†	33.4	33.2	0.2130	ug/L	0.2130	ppb	16:06:17
1	Be 313.107†	-4907.8	5.1	0.0022	ug/L	0.0022	ppb	16:05:57
1	Cd 226.502†	-245.2	-7.6	-0.0657	ug/L	-0.0657	ppb	16:06:17
1	Co 228.616†	-85.7	1.3	0.0199	ug/L	0.0199	ppb	16:06:17
1	Cr 267.716†	99.7	11.1	0.0987	ug/L	0.0987	ppb	16:06:17
1	Cu 324.752†	9071.5	62.0	0.1655	ug/L	0.1655	ppb	16:05:57
1	Mn 257.610†	701.4	119.2	0.1118	ug/L	0.1118	ppb	16:06:17
1	Mo 202.031†	24.4	-5.0	-0.2655	ug/L	-0.2655	ppb	16:06:17
1	Ni 231.604†	152.3	19.2	0.3755	ug/L	0.3755	ppb	16:06:17
1	P 214.914†	287.8	20.4	9.1377	ug/L	9.1377	ppb	16:06:17
1	Pb 220.353†	-83.3	-7.0	-0.6596	ug/L	-0.6596	ppb	16:06:17
1	S 181.975 Axial†	54.2	-6.4	-6.8784	ug/L	-6.8784	ppb	16:06:17
1	Sb 206.836†	50.2	15.2	4.0336	ug/L	4.0336	ppb	16:06:17
1	Se 196.026†	-19.6	1.9	0.8388	ug/L	0.8388	ppb	16:06:17
1	Si 251.611†	842.9	278.6	7.0704	ug/L	7.0704	ppb	16:06:17
1	Sn 189.927†	11.3	15.5	2.0556	ug/L	2.0556	ppb	16:06:17
1	Ti 334.940†	-1063.2	205.7	0.2829	ug/L	0.2829	ppb	16:05:57
1	Tl 190.801†	-47.9	-3.2	-0.7814	ug/L	-0.7814	ppb	16:06:17
1	U 409.014†	-2690.0	105.4	2.7241	ug/L	2.7241	ppb	16:05:52
1	V 292.402†	-1632.0	-10.5	-0.0575	ug/L	-0.0575	ppb	16:05:57
1	Zn 213.857†	1197.6	302.5	2.2192	ug/L	2.2192	ppb	16:06:17
1	SiO2†	871.6	265.6	14.426	ug/L	14.426	ppb	16:07:23
2	Sc Radial	4922.9	4922.9	100	%			16:05:00
2	Y RADIAL	5665.1	5665.1	100.3	%			16:05:00
2	Al 396.153Radial†	-44.3	-0.4	-0.2733	ug/L	-0.2733	ppb	16:05:00
2	Ca 317.933Radial†	19.5	1.6	2.8673	ug/L	2.8673	ppb	16:05:20
2	Fe 238.204 Radial†	10.8	-0.2	-2.4500	ug/L	-2.4500	ppb	16:05:20
2	K 766.490 Radial†	2568.4	-7.9	-1.4645	ug/L	-1.4645	ppb	16:05:00
2	Mg 279.077 IEC†	3.0	0.5	23.514	ug/L	23.514	ppb	16:05:20
2	Na 589.592 Radial†	-1173.1	110.0	30.847	ug/L	30.847	ppb	16:05:00
2	Sr 421.552†	-1.2	6.2	0.0326	ug/L	0.0326	ppb	16:05:00
2	Sc 361.383	1045732.5	1045732.5	100.60	%			16:06:22
2	Y 371.029	888127.7	888127.7	100.41	%			16:06:22
2	Ag 328.068†	411.6	-64.9	-0.2604	ug/L	-0.2604	ppb	16:06:27
2	As 188.979†	-33.8	3.0	0.9431	ug/L	0.9431	ppb	16:06:47
2	B 249.677†	-464.8	4.1	0.0771	ug/L	0.0771	ppb	16:06:47
2	Ba 233.527†	9.7	9.7	0.0619	ug/L	0.0619	ppb	16:06:47
2	Be 313.107†	-4970.4	-66.8	-0.0202	ug/L	-0.0202	ppb	16:06:27
2	Cd 226.502†	-238.1	-1.0	-0.0083	ug/L	-0.0083	ppb	16:06:47
2	Co 228.616†	-82.8	4.0	0.0642	ug/L	0.0642	ppb	16:06:47
2	Cr 267.716†	150.6	61.9	0.5551	ug/L	0.5551	ppb	16:06:47
2	Cu 324.752†	9047.6	56.1	0.1496	ug/L	0.1496	ppb	16:06:27
2	Mn 257.610†	695.9	115.1	0.1083	ug/L	0.1083	ppb	16:06:47
2	Mo 202.031†	22.4	-7.0	-0.3715	ug/L	-0.3715	ppb	16:06:47
2	Ni 231.604†	141.5	8.8	0.1717	ug/L	0.1717	ppb	16:06:47

2	P 214.914†	298.8	31.9	14.259 ug/L	14.259 ppb	16:06:47
2	Pb 220.353†	-91.7	-15.5	-1.4603 ug/L	-1.4603 ppb	16:06:47
2	S 181.975 Axial†	56.1	-4.4	-4.7179 ug/L	-4.7179 ppb	16:06:47
2	Sb 206.836†	62.0	27.0	7.1139 ug/L	7.1139 ppb	16:06:47
2	Se 196.026†	-25.3	-3.7	-1.6687 ug/L	-1.6687 ppb	16:06:47
2	Si 251.611†	833.7	271.1	6.8868 ug/L	6.8868 ppb	16:06:47
2	Sn 189.927†	9.2	13.5	1.7797 ug/L	1.7797 ppb	16:06:47
2	Ti 334.940†	-1036.3	230.3	0.3164 ug/L	0.3164 ppb	16:06:27
2	Tl 190.801†	-48.5	-4.0	-0.9635 ug/L	-0.9635 ppb	16:06:47
2	U 409.014†	-2683.6	106.4	2.7500 ug/L	2.7500 ppb	16:06:22
2	V 292.402†	-1620.0	-1.8	-0.0100 ug/L	-0.0100 ppb	16:06:27
2	Zn 213.857†	1174.4	281.8	2.0687 ug/L	2.0687 ppb	16:06:47
2	SiO2†	829.9	225.9	12.283 ug/L	12.283 ppb	16:07:28
3	Sc Radial	4880.5	4880.5	99.4 %		16:05:25
3	Y RADIAL	5628.3	5628.3	99.67 %		16:05:25
3	Al 396.153Radial†	-54.2	-10.8	-7.0720 ug/L	-7.0720 ppb	16:05:25
3	Ca 317.933Radial†	25.5	7.8	13.789 ug/L	13.789 ppb	16:05:45
3	Fe 238.204 Radial†	11.9	0.9	11.439 ug/L	11.439 ppb	16:05:45
3	K 766.490 Radial†	2528.4	-26.0	-4.7596 ug/L	-4.7596 ppb	16:05:25
3	Mg 279.077 IEC†	3.8	1.3	58.615 ug/L	58.615 ppb	16:05:45
3	Na 589.592 Radial†	-1099.0	174.4	48.923 ug/L	48.923 ppb	16:05:25
3	Sr 421.552†	-12.5	-5.2	-0.0274 ug/L	-0.0274 ppb	16:05:25
3	Sc 361.383	1052110.0	1052110.0	101.21 %		16:06:53
3	Y 371.029	894573.2	894573.2	101.14 %		16:06:53
3	Ag 328.068†	477.4	-2.4	-0.0078 ug/L	-0.0078 ppb	16:06:58
3	As 188.979†	-40.0	-2.9	-0.9061 ug/L	-0.9061 ppb	16:07:18
3	B 249.677†	-462.1	9.5	0.1785 ug/L	0.1785 ppb	16:07:18
3	Ba 233.527†	19.2	19.0	0.1226 ug/L	0.1226 ppb	16:07:18
3	Be 313.107†	-4864.4	67.9	0.0218 ug/L	0.0218 ppb	16:06:58
3	Cd 226.502†	-235.8	2.6	0.0219 ug/L	0.0219 ppb	16:07:18
3	Co 228.616†	-84.9	2.4	0.0368 ug/L	0.0368 ppb	16:07:18
3	Cr 267.716†	131.5	42.1	0.3779 ug/L	0.3779 ppb	16:07:18
3	Cu 324.752†	9038.5	-7.4	-0.0193 ug/L	-0.0193 ppb	16:06:58
3	Mn 257.610†	703.9	118.8	0.1125 ug/L	0.1125 ppb	16:07:18
3	Mo 202.031†	15.2	-14.2	-0.7520 ug/L	-0.7520 ppb	16:07:18
3	Ni 231.604†	134.1	0.6	0.0112 ug/L	0.0112 ppb	16:07:18
3	P 214.914†	282.0	13.5	6.0665 ug/L	6.0665 ppb	16:07:18
3	Pb 220.353†	-81.6	-5.1	-0.4804 ug/L	-0.4804 ppb	16:07:18
3	S 181.975 Axial†	62.9	2.1	2.2393 ug/L	2.2393 ppb	16:07:18
3	Sb 206.836†	61.1	25.7	6.8028 ug/L	6.8028 ppb	16:07:18
3	Se 196.026†	-16.2	5.4	2.4187 ug/L	2.4187 ppb	16:07:18
3	Si 251.611†	849.1	281.3	7.1499 ug/L	7.1499 ppb	16:07:18
3	Sn 189.927†	16.7	20.8	2.7541 ug/L	2.7541 ppb	16:07:18
3	Ti 334.940†	-1053.5	219.6	0.3025 ug/L	0.3025 ppb	16:06:58
3	Tl 190.801†	-36.3	8.4	2.0381 ug/L	2.0381 ppb	16:07:18
3	U 409.014†	-2722.0	84.7	2.1866 ug/L	2.1866 ppb	16:06:53
3	V 292.402†	-1627.7	0.3	-0.0055 ug/L	-0.0055 ppb	16:06:58
3	Zn 213.857†	1207.3	307.2	2.2544 ug/L	2.2544 ppb	16:07:18
3	SiO2†	828.4	219.4	11.939 ug/L	11.939 ppb	16:07:33

Mean Data: 1201978326|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048546.1	100.87	%	0.313				0.31%
Sc Radial	4912.0	100	%	0.6				0.56%
Y 371.029	890943.0	100.73	%	0.373				0.37%
Y RADIAL	5664.8	100.3	%	0.64				0.64%
Ag 328.068†	-24.8	-0.1001	ug/L	0.13934	-0.1001	ppb	0.13934	139.15%
Al 396.153Radial†	1.5	1.0203	ug/L	8.81059	1.0203	ppb	8.81059	863.51%
As 188.979†	-2.8	-0.8585	ug/L	1.77824	-0.8585	ppb	1.77824	207.13%
B 249.677†	6.1	0.1141	ug/L	0.05597	0.1141	ppb	0.05597	49.05%
Ba 233.527†	20.6	0.1325	ug/L	0.07601	0.1325	ppb	0.07601	57.37%
Be 313.107†	2.1	0.0012	ug/L	0.02100	0.0012	ppb	0.02100	>999.9%
Ca 317.933Radial†	4.7	8.2412	ug/L	5.46291	8.2412	ppb	5.46291	66.29%
Cd 226.502†	-2.0	-0.0174	ug/L	0.04451	-0.0174	ppb	0.04451	256.23%
Co 228.616†	2.6	0.0403	ug/L	0.02233	0.0403	ppb	0.02233	55.42%
Cr 267.716†	38.4	0.3439	ug/L	0.23006	0.3439	ppb	0.23006	66.90%
Cu 324.752†	36.9	0.0986	ug/L	0.10239	0.0986	ppb	0.10239	103.84%
Fe 238.204 Radial†	0.2	1.8453	ug/L	8.32389	1.8453	ppb	8.32389	451.10%
K 766.490 Radial†	4.8	0.8595	ug/L	7.07346	0.8595	ppb	7.07346	822.99%

Mg 279.077 IEC†	0.9	40.429	ug/L	17.5850	40.429	ppb	17.5850 43.50%
Mn 257.610†	117.7	0.1109	ug/L	0.00225	0.1109	ppb	0.00225 2.03%
Mo 202.031†	-8.7	-0.4630	ug/L	0.25584	-0.4630	ppb	0.25584 55.26%
Na 589.592 Radial†	139.1	39.005	ug/L	9.1656	39.005	ppb	9.1656 23.50%
Ni 231.604†	9.5	0.1861	ug/L	0.18257	0.1861	ppb	0.18257 98.11%
P 214.914†	21.9	9.8210	ug/L	4.13868	9.8210	ppb	4.13868 42.14%
Pb 220.353†	-9.2	-0.8668	ug/L	0.52173	-0.8668	ppb	0.52173 60.19%
S 181.975 Axial†	-2.9	-3.1190	ug/L	4.76449	-3.1190	ppb	4.76449 152.76%
Sb 206.836†	22.6	5.9834	ug/L	1.69577	5.9834	ppb	1.69577 28.34%
Se 196.026†	1.2	0.5296	ug/L	2.06114	0.5296	ppb	2.06114 389.18%
Si 251.611†	277.0	7.0357	ug/L	0.13492	7.0357	ppb	0.13492 1.92%
Sn 189.927†	16.6	2.1965	ug/L	0.50223	2.1965	ppb	0.50223 22.87%
Sr 421.552†	4.2	0.0218	ug/L	0.04480	0.0218	ppb	0.04480 205.23%
Ti 334.940†	218.5	0.3006	ug/L	0.01686	0.3006	ppb	0.01686 5.61%
Tl 190.801†	0.4	0.0977	ug/L	1.68287	0.0977	ppb	1.68287 >999.9%
U 409.014†	98.8	2.5536	ug/L	0.31806	2.5536	ppb	0.31806 12.46%
V 292.402†	-4.0	-0.0243	ug/L	0.02883	-0.0243	ppb	0.02883 118.46%
Zn 213.857†	297.2	2.1808	ug/L	0.09862	2.1808	ppb	0.09862 4.52%
SiO2†	237.0	12.883	ug/L	1.3476	12.883	ppb	1.3476 10.46%

Sequence No.: 30
Sample ID: 1201978327|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 12/4/2009 16:09:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978327|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4958.9	4958.9	101	%			16:11:38
1	Y RADIAL	5669.9	5669.9	100.4	%			16:11:38
1	Al 396.153Radial†	8113.0	8076.3	5311.1	ug/L	5311.1	ppb	16:11:38
1	Ca 317.933Radial†	3022.8	2975.0	5267.3	ug/L	5267.3	ppb	16:11:58
1	Fe 238.204 Radial†	449.9	434.4	5267.9	ug/L	5267.9	ppb	16:11:58
1	K 766.490 Radial†	31238.0	28358.5	5161.7	ug/L	5161.7	ppb	16:11:38
1	Mg 279.077 IEC†	123.0	119.3	5343.4	ug/L	5343.4	ppb	16:11:58
1	Na 589.592 Radial†	17471.8	18578.4	5211.2	ug/L	5211.2	ppb	16:11:38
1	Sr 421.552†	101178.1	100181.7	525.55	ug/L	525.55	ppb	16:11:38
1	Sc 361.383	1050652.2	1050652.2	101.07	%			16:12:57
1	Y 371.029	879674.3	879674.3	99.458	%			16:12:57
1	Ag 328.068†	132265.3	130385.2	520.02	ug/L	520.02	ppb	16:12:57
1	As 188.979†	1620.6	1640.0	515.61	ug/L	515.61	ppb	16:13:17
1	B 249.677†	27101.4	27279.4	513.56	ug/L	513.56	ppb	16:12:57
1	Ba 233.527†	84009.8	83116.8	535.34	ug/L	535.34	ppb	16:12:57
1	Be 313.107†	1679850.3	1666866.9	520.75	ug/L	520.75	ppb	16:12:57
1	Cd 226.502†	59978.0	59576.1	519.36	ug/L	519.36	ppb	16:12:57
1	Co 228.616†	31004.2	30760.9	506.83	ug/L	506.83	ppb	16:13:17
1	Cr 267.716†	58436.2	57727.2	519.46	ug/L	519.46	ppb	16:12:57
1	Cu 324.752†	209196.2	198034.9	529.12	ug/L	529.12	ppb	16:12:57
1	Mn 257.610†	566653.9	560053.5	530.77	ug/L	530.77	ppb	16:12:57
1	Mo 202.031†	9717.9	9585.4	509.04	ug/L	509.04	ppb	16:13:17
1	Ni 231.604†	26636.3	26221.2	513.44	ug/L	513.44	ppb	16:13:17
1	P 214.914†	1593.6	1311.6	506.78	ug/L	506.78	ppb	16:13:17
1	Pb 220.353†	5528.1	5544.9	522.11	ug/L	522.11	ppb	16:13:17
1	S 181.975 Axial†	4891.6	4779.5	5148.4	ug/L	5148.4	ppb	16:13:17
1	Sb 206.836†	2085.9	2029.1	542.45	ug/L	542.45	ppb	16:13:17
1	Se 196.026†	1103.9	1113.6	513.95	ug/L	513.95	ppb	16:13:17
1	Si 251.611†	206012.2	203264.6	5150.0	ug/L	5150.0	ppb	16:12:57
1	Sn 189.927†	4058.0	4019.2	532.19	ug/L	532.19	ppb	16:13:17
1	Ti 334.940†	383578.9	380761.7	525.03	ug/L	525.03	ppb	16:12:57
1	Tl 190.801†	2102.4	2124.3	517.21	ug/L	517.21	ppb	16:13:17
1	U 409.014†	18070.3	20652.2	532.28	ug/L	532.28	ppb	16:12:57
1	V 292.402†	90867.9	91510.5	530.71	ug/L	530.71	ppb	16:12:57
1	Zn 213.857†	71715.8	70067.8	510.28	ug/L	510.28	ppb	16:12:57
1	SiO2†	206309.8	203517.6	11035	ug/L	11035	ppb	16:14:18
2	Sc Radial	4963.2	4963.2	101	%			16:12:03
2	Y RADIAL	5655.3	5655.3	100.1	%			16:12:03
2	Al 396.153Radial†	8080.8	8037.5	5285.3	ug/L	5285.3	ppb	16:12:03
2	Ca 317.933Radial†	2994.5	2944.4	5213.1	ug/L	5213.1	ppb	16:12:23
2	Fe 238.204 Radial†	447.3	431.5	5232.9	ug/L	5232.9	ppb	16:12:23
2	K 766.490 Radial†	30944.8	28041.7	5104.0	ug/L	5104.0	ppb	16:12:03
2	Mg 279.077 IEC†	119.6	115.8	5189.1	ug/L	5189.1	ppb	16:12:23
2	Na 589.592 Radial†	17434.6	18526.6	5196.7	ug/L	5196.7	ppb	16:12:03
2	Sr 421.552†	100365.2	99290.5	520.87	ug/L	520.87	ppb	16:12:03
2	Sc 361.383	1045640.0	1045640.0	100.59	%			16:13:24
2	Y 371.029	876102.0	876102.0	99.054	%			16:13:24
2	Ag 328.068†	131586.0	130337.2	519.82	ug/L	519.82	ppb	16:13:24
2	As 188.979†	1635.5	1662.5	522.59	ug/L	522.59	ppb	16:13:45
2	B 249.677†	26997.6	27304.7	514.03	ug/L	514.03	ppb	16:13:24
2	Ba 233.527†	83542.1	83050.2	534.91	ug/L	534.91	ppb	16:13:24
2	Be 313.107†	1672613.6	1667639.4	520.99	ug/L	520.99	ppb	16:13:24
2	Cd 226.502†	59555.6	59440.5	518.18	ug/L	518.18	ppb	16:13:24
2	Co 228.616†	31088.2	30991.5	510.64	ug/L	510.64	ppb	16:13:45
2	Cr 267.716†	58139.2	57709.1	519.30	ug/L	519.30	ppb	16:13:24
2	Cu 324.752†	208437.3	198272.5	529.76	ug/L	529.76	ppb	16:13:24
2	Mn 257.610†	563467.5	559573.2	530.31	ug/L	530.31	ppb	16:13:24
2	Mo 202.031†	9765.4	9678.6	513.99	ug/L	513.99	ppb	16:13:45
2	Ni 231.604†	26665.8	26376.8	516.49	ug/L	516.49	ppb	16:13:45

2	P 214.914†	1603.2	1328.6	514.37	ug/L	514.37 ppb	16:13:45
2	Pb 220.353†	5546.0	5588.9	526.25	ug/L	526.25 ppb	16:13:45
2	S 181.975 Axial†	4888.7	4799.8	5170.3	ug/L	5170.3 ppb	16:13:45
2	Sb 206.836†	2089.5	2042.5	546.17	ug/L	546.17 ppb	16:13:45
2	Se 196.026†	1106.1	1121.0	517.11	ug/L	517.11 ppb	16:13:45
2	Si 251.611†	205001.7	203237.0	5149.2	ug/L	5149.2 ppb	16:13:24
2	Sn 189.927†	4063.4	4043.8	535.45	ug/L	535.45 ppb	16:13:45
2	Ti 334.940†	381741.4	380754.2	525.02	ug/L	525.02 ppb	16:13:24
2	Tl 190.801†	2126.4	2158.1	525.37	ug/L	525.37 ppb	16:13:45
2	U 409.014†	17926.3	20594.7	530.80	ug/L	530.80 ppb	16:13:24
2	V 292.402†	90378.3	91454.7	530.46	ug/L	530.46 ppb	16:13:24
2	Zn 213.857†	71330.6	70025.1	509.95	ug/L	509.95 ppb	16:13:24
2	SiO2†	206080.2	204267.8	11075	ug/L	11075 ppb	16:14:23
3	Sc Radial	4914.8	4914.8	100	%		16:12:28
3	Y RADIAL	5625.1	5625.1	99.61	%		16:12:28
3	Al 396.153Radial†	8063.4	8098.9	5325.8	ug/L	5325.8 ppb	16:12:28
3	Ca 317.933Radial†	3041.7	3020.7	5348.3	ug/L	5348.3 ppb	16:12:48
3	Fe 238.204 Radial†	452.2	440.8	5345.2	ug/L	5345.2 ppb	16:12:48
3	K 766.490 Radial†	30932.4	28331.0	5156.8	ug/L	5156.8 ppb	16:12:28
3	Mg 279.077 IEC†	122.5	119.9	5370.1	ug/L	5370.1 ppb	16:12:48
3	Na 589.592 Radial†	17300.1	18562.2	5206.7	ug/L	5206.7 ppb	16:12:28
3	Sr 421.552†	99856.3	99760.7	523.34	ug/L	523.34 ppb	16:12:28
3	Sc 361.383	1051624.1	1051624.1	101.17	%		16:13:52
3	Y 371.029	882020.4	882020.4	99.723	%		16:13:52
3	Ag 328.068†	132258.1	130257.2	519.54	ug/L	519.54 ppb	16:13:52
3	As 188.979†	1636.9	1654.6	520.16	ug/L	520.16 ppb	16:14:12
3	B 249.677†	27226.7	27378.4	515.40	ug/L	515.40 ppb	16:13:52
3	Ba 233.527†	84017.1	83047.2	534.89	ug/L	534.89 ppb	16:13:52
3	Be 313.107†	1682549.8	1667999.2	521.10	ug/L	521.10 ppb	16:13:52
3	Cd 226.502†	59890.8	59435.0	518.12	ug/L	518.12 ppb	16:13:52
3	Co 228.616†	31439.2	31162.6	513.46	ug/L	513.46 ppb	16:14:12
3	Cr 267.716†	58446.0	57683.5	519.07	ug/L	519.07 ppb	16:13:52
3	Cu 324.752†	209521.8	198165.4	529.48	ug/L	529.48 ppb	16:13:52
3	Mn 257.610†	565740.6	558632.6	529.43	ug/L	529.43 ppb	16:13:52
3	Mo 202.031†	9864.9	9721.8	516.29	ug/L	516.29 ppb	16:14:12
3	Ni 231.604†	26968.8	26525.5	519.40	ug/L	519.40 ppb	16:14:12
3	P 214.914†	1624.7	1340.8	519.84	ug/L	519.84 ppb	16:14:12
3	Pb 220.353†	5608.9	5619.7	529.15	ug/L	529.15 ppb	16:14:12
3	S 181.975 Axial†	4949.8	4832.6	5205.5	ug/L	5205.5 ppb	16:14:12
3	Sb 206.836†	2101.2	2042.3	546.21	ug/L	546.21 ppb	16:14:12
3	Se 196.026†	1130.6	1138.9	525.48	ug/L	525.48 ppb	16:14:12
3	Si 251.611†	205851.2	202917.1	5141.0	ug/L	5141.0 ppb	16:13:52
3	Sn 189.927†	4109.2	4066.1	538.41	ug/L	538.41 ppb	16:14:12
3	Ti 334.940†	383544.0	380376.6	524.50	ug/L	524.50 ppb	16:13:52
3	Tl 190.801†	2140.4	2160.0	525.79	ug/L	525.79 ppb	16:14:12
3	U 409.014†	18073.3	20638.6	531.92	ug/L	531.92 ppb	16:13:52
3	V 292.402†	90832.3	91392.2	530.13	ug/L	530.13 ppb	16:13:52
3	Zn 213.857†	71564.1	69852.3	508.65	ug/L	508.65 ppb	16:13:52
3	SiO2†	206714.7	203729.2	11046	ug/L	11046 ppb	16:14:28

Mean Data: 1201978327|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049305.4	100.94	%	0.309				0.31%
Sc Radial	4945.6	101	%	0.5				0.54%
Y 371.029	879265.6	99.412	%	0.3370				0.34%
Y RADIAL	5650.1	100.1	%	0.40				0.40%
Ag 328.068†	130326.5	519.80	ug/L	0.245	519.80	ppb	0.245	0.05%
Al 396.153Radial†	8070.9	5307.4	ug/L	20.48	5307.4	ppb	20.48	0.39%
As 188.979†	1652.4	519.45	ug/L	3.545	519.45	ppb	3.545	0.68%
B 249.677†	27320.8	514.33	ug/L	0.958	514.33	ppb	0.958	0.19%
Ba 233.527†	83071.4	535.04	ug/L	0.253	535.04	ppb	0.253	0.05%
Be 313.107†	1667501.8	520.95	ug/L	0.180	520.95	ppb	0.180	0.03%
Ca 317.933Radial†	2980.0	5276.3	ug/L	68.03	5276.3	ppb	68.03	1.29%
Cd 226.502†	59483.9	518.55	ug/L	0.696	518.55	ppb	0.696	0.13%
Co 228.616†	30971.7	510.31	ug/L	3.329	510.31	ppb	3.329	0.65%
Cr 267.716†	57706.6	519.28	ug/L	0.197	519.28	ppb	0.197	0.04%
Cu 324.752†	198157.6	529.45	ug/L	0.317	529.45	ppb	0.317	0.06%
Fe 238.204 Radial†	435.6	5282.0	ug/L	57.45	5282.0	ppb	57.45	1.09%
K 766.490 Radial†	28243.7	5140.9	ug/L	31.98	5140.9	ppb	31.98	0.62%

Mg 279.077 IEC†	118.3	5300.9	ug/L	97.74	5300.9	ppb	97.74	1.84%
Mn 257.610†	559419.8	530.17	ug/L	0.680	530.17	ppb	0.680	0.13%
Mo 202.031†	9661.9	513.11	ug/L	3.701	513.11	ppb	3.701	0.72%
Na 589.592 Radial†	18555.8	5204.9	ug/L	7.43	5204.9	ppb	7.43	0.14%
Ni 231.604†	26374.5	516.45	ug/L	2.979	516.45	ppb	2.979	0.58%
P 214.914†	1327.0	513.66	ug/L	6.563	513.66	ppb	6.563	1.28%
Pb 220.353†	5584.5	525.83	ug/L	3.537	525.83	ppb	3.537	0.67%
S 181.975 Axial†	4804.0	5174.7	ug/L	28.85	5174.7	ppb	28.85	0.56%
Sb 206.836†	2038.0	544.94	ug/L	2.158	544.94	ppb	2.158	0.40%
Se 196.026†	1124.5	518.85	ug/L	5.955	518.85	ppb	5.955	1.15%
Si 251.611†	203139.6	5146.7	ug/L	4.97	5146.7	ppb	4.97	0.10%
Sn 189.927†	4043.0	535.35	ug/L	3.108	535.35	ppb	3.108	0.58%
Sr 421.552†	99744.3	523.25	ug/L	2.339	523.25	ppb	2.339	0.45%
Ti 334.940†	380630.8	524.85	ug/L	0.301	524.85	ppb	0.301	0.06%
Tl 190.801†	2147.5	522.79	ug/L	4.838	522.79	ppb	4.838	0.93%
U 409.014†	20628.5	531.67	ug/L	0.773	531.67	ppb	0.773	0.15%
V 292.402†	91452.4	530.43	ug/L	0.294	530.43	ppb	0.294	0.06%
Zn 213.857†	69981.7	509.63	ug/L	0.863	509.63	ppb	0.863	0.17%
SiO2†	203838.2	11052	ug/L	21.0	11052	ppb	21.0	0.19%

Sequence No.: 32
Sample ID: 1201978328|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 12/4/2009 16:23:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978328|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4948.8	4948.8	101	%			16:25:32
1	Y RADIAL	5689.1	5689.1	100.7	%			16:25:32
1	Al 396.153Radial†	-43.8	0.3	0.2043	ug/L	0.2043	ppb	16:25:32
1	Ca 317.933Radial†	23.6	5.6	9.8315	ug/L	9.8315	ppb	16:25:52
1	Fe 238.204 Radial†	12.6	1.5	17.696	ug/L	17.696	ppb	16:25:52
1	K 766.490 Radial†	2581.7	-8.2	-1.5491	ug/L	-1.5491	ppb	16:25:32
1	Mg 279.077 IEC†	5.7	3.1	139.57	ug/L	139.57	ppb	16:25:52
1	Na 589.592 Radial†	-1111.9	176.8	49.599	ug/L	49.599	ppb	16:25:32
1	Sr 421.552†	21.2	28.4	0.1489	ug/L	0.1489	ppb	16:25:32
1	Sc 361.383	1061054.4	1061054.4	102.08	%			16:26:48
1	Y 371.029	900097.4	900097.4	101.77	%			16:26:48
1	Ag 328.068†	495.2	11.1	0.0469	ug/L	0.0469	ppb	16:26:53
1	As 188.979†	-36.4	0.9	0.2997	ug/L	0.2997	ppb	16:27:14
1	B 249.677†	-491.0	-14.9	-0.2843	ug/L	-0.2843	ppb	16:27:14
1	Ba 233.527†	3.3	3.2	0.0216	ug/L	0.0216	ppb	16:27:14
1	Be 313.107†	-4910.6	63.1	0.0205	ug/L	0.0205	ppb	16:26:53
1	Cd 226.502†	-227.8	12.4	0.1065	ug/L	0.1065	ppb	16:27:14
1	Co 228.616†	-84.8	3.2	0.0506	ug/L	0.0506	ppb	16:27:14
1	Cr 267.716†	141.5	50.9	0.4565	ug/L	0.4565	ppb	16:27:14
1	Cu 324.752†	9070.6	-51.3	-0.1360	ug/L	-0.1360	ppb	16:26:53
1	Mn 257.610†	3120.7	2480.5	2.3481	ug/L	2.3481	ppb	16:26:53
1	Mo 202.031†	24.0	-5.7	-0.3034	ug/L	-0.3034	ppb	16:27:14
1	Ni 231.604†	129.3	-5.2	-0.1023	ug/L	-0.1023	ppb	16:27:14
1	P 214.914†	276.6	5.9	2.6490	ug/L	2.6490	ppb	16:27:14
1	Pb 220.353†	-82.4	-5.2	-0.4874	ug/L	-0.4874	ppb	16:27:14
1	S 181.975 Axial†	51.9	-9.3	-9.9671	ug/L	-9.9671	ppb	16:27:14
1	Sb 206.836†	49.3	13.6	3.5927	ug/L	3.5927	ppb	16:27:14
1	Se 196.026†	-18.1	3.7	1.6896	ug/L	1.6896	ppb	16:27:14
1	Si 251.611†	1109.6	529.4	13.448	ug/L	13.448	ppb	16:27:14
1	Sn 189.927†	3.2	7.5	0.9932	ug/L	0.9932	ppb	16:27:14
1	Ti 334.940†	-996.5	284.2	0.3909	ug/L	0.3909	ppb	16:26:53
1	Tl 190.801†	-42.3	2.8	0.7035	ug/L	0.7035	ppb	16:27:14
1	U 409.014†	-2705.8	123.2	3.1828	ug/L	3.1828	ppb	16:26:48
1	V 292.402†	-1627.2	14.4	0.0844	ug/L	0.0844	ppb	16:26:53
1	Zn 213.857†	1036.1	129.4	0.9454	ug/L	0.9454	ppb	16:27:14
1	SiO2†	1177.3	554.3	30.133	ug/L	30.133	ppb	16:28:20
2	Sc Radial	5027.2	5027.2	102	%			16:25:57
2	Y RADIAL	5771.3	5771.3	102.2	%			16:25:57
2	Al 396.153Radial†	-27.9	16.6	10.921	ug/L	10.921	ppb	16:25:57
2	Ca 317.933Radial†	30.5	12.0	21.199	ug/L	21.199	ppb	16:26:17
2	Fe 238.204 Radial†	11.3	0.1	1.0451	ug/L	1.0451	ppb	16:26:17
2	K 766.490 Radial†	2506.0	-122.0	-22.288	ug/L	-22.288	ppb	16:25:57
2	Mg 279.077 IEC†	3.0	0.4	20.081	ug/L	20.081	ppb	16:26:17
2	Na 589.592 Radial†	-1140.9	165.7	46.469	ug/L	46.469	ppb	16:25:57
2	Sr 421.552†	29.2	35.9	0.1881	ug/L	0.1881	ppb	16:25:57
2	Sc 361.383	1057285.3	1057285.3	101.71	%			16:27:19
2	Y 371.029	897680.4	897680.4	101.49	%			16:27:19
2	Ag 328.068†	541.1	57.9	0.2287	ug/L	0.2287	ppb	16:27:24
2	As 188.979†	-41.2	-3.9	-1.2033	ug/L	-1.2033	ppb	16:27:44
2	B 249.677†	-498.8	-24.3	-0.4589	ug/L	-0.4589	ppb	16:27:44
2	Ba 233.527†	3.7	3.7	0.0241	ug/L	0.0241	ppb	16:27:44
2	Be 313.107†	-4893.1	63.2	0.0204	ug/L	0.0204	ppb	16:27:24
2	Cd 226.502†	-227.8	11.7	0.1017	ug/L	0.1017	ppb	16:27:44
2	Co 228.616†	-84.5	3.2	0.0528	ug/L	0.0528	ppb	16:27:44
2	Cr 267.716†	130.8	40.8	0.3666	ug/L	0.3666	ppb	16:27:44
2	Cu 324.752†	8992.4	-96.5	-0.2577	ug/L	-0.2577	ppb	16:27:24
2	Mn 257.610†	3172.4	2542.3	2.4071	ug/L	2.4071	ppb	16:27:24
2	Mo 202.031†	37.8	7.9	0.4219	ug/L	0.4219	ppb	16:27:44
2	Ni 231.604†	148.9	14.4	0.2830	ug/L	0.2830	ppb	16:27:44

2	P 214.914†	293.7	23.6	10.636	ug/L	10.636 ppb	16:27:44
2	Pb 220.353†	-77.9	-1.0	-0.0932	ug/L	-0.0932 ppb	16:27:44
2	S 181.975 Axial†	64.1	2.9	3.1341	ug/L	3.1341 ppb	16:27:44
2	Sb 206.836†	57.7	22.1	5.8439	ug/L	5.8439 ppb	16:27:44
2	Se 196.026†	-19.5	2.2	0.9744	ug/L	0.9744 ppb	16:27:44
2	Si 251.611†	1120.5	544.0	13.811	ug/L	13.811 ppb	16:27:44
2	Sn 189.927†	5.8	10.1	1.3318	ug/L	1.3318 ppb	16:27:44
2	Ti 334.940†	-1008.6	268.8	0.3709	ug/L	0.3709 ppb	16:27:24
2	Tl 190.801†	-52.0	-6.8	-1.6369	ug/L	-1.6369 ppb	16:27:44
2	U 409.014†	-2749.2	71.0	1.8354	ug/L	1.8354 ppb	16:27:19
2	V 292.402†	-1602.8	32.7	0.1966	ug/L	0.1966 ppb	16:27:24
2	Zn 213.857†	1048.6	145.4	1.0658	ug/L	1.0658 ppb	16:27:44
2	SiO2†	1160.5	541.9	29.446	ug/L	29.446 ppb	16:28:25
3	Sc Radial	4996.7	4996.7	102	%		16:26:22
3	Y RADIAL	5739.5	5739.5	101.6	%		16:26:22
3	Al 396.153Radial†	-49.7	-5.1	-3.3500	ug/L	-3.3500 ppb	16:26:22
3	Ca 317.933Radial†	31.4	13.1	23.131	ug/L	23.131 ppb	16:26:42
3	Fe 238.204 Radial†	12.5	1.3	15.775	ug/L	15.775 ppb	16:26:42
3	K 766.490 Radial†	2650.6	35.0	6.3180	ug/L	6.3180 ppb	16:26:22
3	Mg 279.077 IEC†	2.8	0.3	12.304	ug/L	12.304 ppb	16:26:42
3	Na 589.592 Radial†	-1144.9	155.0	43.467	ug/L	43.467 ppb	16:26:22
3	Sr 421.552†	35.1	41.9	0.2197	ug/L	0.2197 ppb	16:26:22
3	Sc 361.383	1051991.8	1051991.8	101.20	%		16:27:49
3	Y 371.029	894184.1	894184.1	101.10	%		16:27:49
3	Ag 328.068†	459.0	-20.5	-0.0795	ug/L	-0.0795 ppb	16:27:54
3	As 188.979†	-45.5	-8.3	-2.5901	ug/L	-2.5901 ppb	16:28:14
3	B 249.677†	-493.9	-22.0	-0.4173	ug/L	-0.4173 ppb	16:28:14
3	Ba 233.527†	18.9	18.7	0.1204	ug/L	0.1204 ppb	16:28:14
3	Be 313.107†	-4954.2	-21.4	-0.0059	ug/L	-0.0059 ppb	16:27:54
3	Cd 226.502†	-258.6	-19.9	-0.1748	ug/L	-0.1748 ppb	16:28:14
3	Co 228.616†	-80.4	6.9	0.1117	ug/L	0.1117 ppb	16:28:14
3	Cr 267.716†	134.7	45.3	0.4061	ug/L	0.4061 ppb	16:28:14
3	Cu 324.752†	9031.2	-13.7	-0.0357	ug/L	-0.0357 ppb	16:27:54
3	Mn 257.610†	3241.8	2626.6	2.4886	ug/L	2.4886 ppb	16:27:54
3	Mo 202.031†	25.7	-3.8	-0.2014	ug/L	-0.2014 ppb	16:28:14
3	Ni 231.604†	150.2	16.5	0.3233	ug/L	0.3233 ppb	16:28:14
3	P 214.914†	279.5	11.1	4.9720	ug/L	4.9720 ppb	16:28:14
3	Pb 220.353†	-81.8	-5.3	-0.5011	ug/L	-0.5011 ppb	16:28:14
3	S 181.975 Axial†	63.7	2.8	3.0579	ug/L	3.0579 ppb	16:28:14
3	Sb 206.836†	43.3	8.2	2.1557	ug/L	2.1557 ppb	16:28:14
3	Se 196.026†	-29.1	-7.4	-3.2137	ug/L	-3.2137 ppb	16:28:14
3	Si 251.611†	1140.6	569.4	14.461	ug/L	14.461 ppb	16:28:14
3	Sn 189.927†	0.9	5.3	0.6987	ug/L	0.6987 ppb	16:28:14
3	Ti 334.940†	-984.9	287.2	0.3963	ug/L	0.3963 ppb	16:27:54
3	Tl 190.801†	-48.3	-3.5	-0.8221	ug/L	-0.8221 ppb	16:28:14
3	U 409.014†	-2724.1	82.3	2.1252	ug/L	2.1252 ppb	16:27:49
3	V 292.402†	-1677.7	-49.3	-0.2835	ug/L	-0.2835 ppb	16:27:54
3	Zn 213.857†	1046.0	148.0	1.0835	ug/L	1.0835 ppb	16:28:14
3	SiO2†	2257.1	1631.3	88.657	ug/L	88.657 ppb	16:28:30

Mean Data: 1201978328|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1056777.2	101.66	%	0.438				0.43%
Sc Radial	4990.9	102	%	0.8				0.79%
Y 371.029	897320.7	101.45	%	0.336				0.33%
Y RADIAL	5733.3	101.5	%	0.73				0.72%
Ag 328.068†	16.2	0.0654	ug/L	0.15495	0.0654	ppb	0.15495	237.01%
Al 396.153Radial†	3.9	2.5918	ug/L	7.42912	2.5918	ppb	7.42912	286.63%
As 188.979†	-3.8	-1.1646	ug/L	1.44530	-1.1646	ppb	1.44530	124.11%
B 249.677†	-20.4	-0.3868	ug/L	0.09116	-0.3868	ppb	0.09116	23.57%
Ba 233.527†	8.6	0.0554	ug/L	0.05632	0.0554	ppb	0.05632	101.70%
Be 313.107†	35.0	0.0117	ug/L	0.01521	0.0117	ppb	0.01521	130.34%
Ca 317.933Radial†	10.2	18.054	ug/L	7.1861	18.054	ppb	7.1861	39.80%
Cd 226.502†	1.4	0.0111	ug/L	0.16107	0.0111	ppb	0.16107	>999.9%
Co 228.616†	4.4	0.0717	ug/L	0.03463	0.0717	ppb	0.03463	48.29%
Cr 267.716†	45.7	0.4097	ug/L	0.04503	0.4097	ppb	0.04503	10.99%
Cu 324.752†	-53.8	-0.1431	ug/L	0.11118	-0.1431	ppb	0.11118	77.70%
Fe 238.204 Radial†	1.0	11.505	ug/L	9.1094	11.505	ppb	9.1094	79.18%
K 766.490 Radial†	-31.8	-5.8397	ug/L	14.77781	-5.8397	ppb	14.77781	253.06%

Mg 279.077 IEC†	1.3	57.318	ug/L	71.3369	57.318	ppb	71.3369 124.46%
Mn 257.610†	2549.8	2.4146	ug/L	0.07055	2.4146	ppb	0.07055 2.92%
Mo 202.031†	-0.5	-0.0277	ug/L	0.39266	-0.0277	ppb	0.39266 >999.9%
Na 589.592 Radial†	165.8	46.512	ug/L	3.0663	46.512	ppb	3.0663 6.59%
Ni 231.604†	8.6	0.1680	ug/L	0.23491	0.1680	ppb	0.23491 139.83%
P 214.914†	13.5	6.0858	ug/L	4.10843	6.0858	ppb	4.10843 67.51%
Pb 220.353†	-3.8	-0.3606	ug/L	0.23167	-0.3606	ppb	0.23167 64.25%
S 181.975 Axial†	-1.2	-1.2584	ug/L	7.54206	-1.2584	ppb	7.54206 599.34%
Sb 206.836†	14.6	3.8641	ug/L	1.85902	3.8641	ppb	1.85902 48.11%
Se 196.026†	-0.5	-0.1832	ug/L	2.64869	-0.1832	ppb	2.64869 >999.9%
Si 251.611†	547.6	13.907	ug/L	0.5133	13.907	ppb	0.5133 3.69%
Sn 189.927†	7.6	1.0079	ug/L	0.31682	1.0079	ppb	0.31682 31.43%
Sr 421.552†	35.4	0.1856	ug/L	0.03546	0.1856	ppb	0.03546 19.11%
Ti 334.940†	280.1	0.3860	ug/L	0.01335	0.3860	ppb	0.01335 3.46%
Tl 190.801†	-2.5	-0.5852	ug/L	1.18804	-0.5852	ppb	1.18804 203.03%
U 409.014†	92.2	2.3811	ug/L	0.70923	2.3811	ppb	0.70923 29.79%
V 292.402†	-0.7	-0.0008	ug/L	0.25111	-0.0008	ppb	0.25111 >999.9%
Zn 213.857†	140.9	1.0316	ug/L	0.07514	1.0316	ppb	0.07514 7.28%
SiO2†	909.2	49.412	ug/L	33.9890	49.412	ppb	33.9890 68.79%

Sequence No.: 33
Sample ID: 1201978329|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/4/2009 16:30:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978329|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5008.2	5008.2	102	%			16:32:33
1	Y RADIAL	5680.8	5680.8	100.6	%			16:32:33
1	Al 396.153Radial†	8081.3	7966.2	5238.1	ug/L	5238.1	ppb	16:32:33
1	Ca 317.933Radial†	2981.7	2905.2	5143.8	ug/L	5143.8	ppb	16:32:53
1	Fe 238.204 Radial†	449.9	430.0	5215.1	ug/L	5215.1	ppb	16:32:53
1	K 766.490 Radial†	31041.5	27861.5	5071.2	ug/L	5071.2	ppb	16:32:33
1	Mg 279.077 IEC†	122.3	117.4	5259.8	ug/L	5259.8	ppb	16:32:53
1	Na 589.592 Radial†	17360.2	18298.8	5132.8	ug/L	5132.8	ppb	16:32:33
1	Sr 421.552†	100638.6	98666.9	517.60	ug/L	517.60	ppb	16:32:33
1	Sc 361.383	1046617.3	1046617.3	100.69	%			16:33:52
1	Y 371.029	876052.0	876052.0	99.048	%			16:33:52
1	Ag 328.068†	131428.1	130058.3	518.72	ug/L	518.72	ppb	16:33:52
1	As 188.979†	1624.6	1650.1	518.76	ug/L	518.76	ppb	16:34:12
1	B 249.677†	26944.4	27226.9	512.56	ug/L	512.56	ppb	16:33:52
1	Ba 233.527†	83633.9	83063.9	535.00	ug/L	535.00	ppb	16:33:52
1	Be 313.107†	1667156.9	1660667.3	518.82	ug/L	518.82	ppb	16:33:52
1	Cd 226.502†	59533.6	59363.5	517.51	ug/L	517.51	ppb	16:33:52
1	Co 228.616†	31106.7	30981.0	510.47	ug/L	510.47	ppb	16:34:12
1	Cr 267.716†	58467.2	57980.9	521.75	ug/L	521.75	ppb	16:33:52
1	Cu 324.752†	209336.2	198971.8	531.62	ug/L	531.62	ppb	16:33:52
1	Mn 257.610†	565692.9	561260.4	531.90	ug/L	531.90	ppb	16:33:52
1	Mo 202.031†	9822.2	9726.1	516.50	ug/L	516.50	ppb	16:34:12
1	Ni 231.604†	26806.7	26492.0	518.75	ug/L	518.75	ppb	16:34:12
1	P 214.914†	1610.2	1334.1	516.57	ug/L	516.57	ppb	16:34:12
1	Pb 220.353†	5554.0	5591.7	526.50	ug/L	526.50	ppb	16:34:12
1	S 181.975 Axial†	4924.9	4831.2	5204.1	ug/L	5204.1	ppb	16:34:12
1	Sb 206.836†	2097.5	2048.5	547.81	ug/L	547.81	ppb	16:34:12
1	Se 196.026†	1126.7	1140.4	525.67	ug/L	525.67	ppb	16:34:12
1	Si 251.611†	206056.6	204094.4	5170.9	ug/L	5170.9	ppb	16:33:52
1	Sn 189.927†	4094.4	4070.8	539.00	ug/L	539.00	ppb	16:34:12
1	Ti 334.940†	383148.6	381797.5	526.45	ug/L	526.45	ppb	16:33:52
1	Tl 190.801†	2114.9	2144.8	522.15	ug/L	522.15	ppb	16:34:12
1	U 409.014†	17989.8	20641.2	532.00	ug/L	532.00	ppb	16:33:52
1	V 292.402†	90934.8	91923.5	533.18	ug/L	533.18	ppb	16:33:52
1	Zn 213.857†	71475.4	70102.7	510.51	ug/L	510.51	ppb	16:33:52
1	SiO2†	209406.5	207380.1	11244	ug/L	11244	ppb	16:35:12
2	Sc Radial	4964.3	4964.3	101	%			16:32:58
2	Y RADIAL	5653.8	5653.8	100.1	%			16:32:58
2	Al 396.153Radial†	8042.2	7997.5	5258.9	ug/L	5258.9	ppb	16:32:58
2	Ca 317.933Radial†	2982.8	2932.2	5191.5	ug/L	5191.5	ppb	16:33:18
2	Fe 238.204 Radial†	450.9	434.9	5274.2	ug/L	5274.2	ppb	16:33:18
2	K 766.490 Radial†	30939.6	28029.8	5101.9	ug/L	5101.9	ppb	16:32:58
2	Mg 279.077 IEC†	125.9	122.0	5464.4	ug/L	5464.4	ppb	16:33:18
2	Na 589.592 Radial†	17289.1	18378.9	5155.3	ug/L	5155.3	ppb	16:32:58
2	Sr 421.552†	100182.3	99087.7	519.81	ug/L	519.81	ppb	16:32:58
2	Sc 361.383	1048828.2	1048828.2	100.90	%			16:34:19
2	Y 371.029	879039.3	879039.3	99.386	%			16:34:19
2	Ag 328.068†	131959.3	130309.5	519.73	ug/L	519.73	ppb	16:34:19
2	As 188.979†	1608.6	1630.8	512.76	ug/L	512.76	ppb	16:34:39
2	B 249.677†	27082.9	27307.7	514.09	ug/L	514.09	ppb	16:34:19
2	Ba 233.527†	83768.5	83022.2	534.73	ug/L	534.73	ppb	16:34:19
2	Be 313.107†	1671718.8	1661698.1	519.14	ug/L	519.14	ppb	16:34:19
2	Cd 226.502†	59784.9	59487.9	518.59	ug/L	518.59	ppb	16:34:19
2	Co 228.616†	31041.0	30850.7	508.31	ug/L	508.31	ppb	16:34:39
2	Cr 267.716†	58576.4	57966.7	521.62	ug/L	521.62	ppb	16:34:19
2	Cu 324.752†	210269.6	199458.6	532.93	ug/L	532.93	ppb	16:34:19
2	Mn 257.610†	567207.7	561577.3	532.21	ug/L	532.21	ppb	16:34:19
2	Mo 202.031†	9806.8	9690.2	514.60	ug/L	514.60	ppb	16:34:39
2	Ni 231.604†	26777.4	26406.8	517.08	ug/L	517.08	ppb	16:34:39

2	P 214.914†	1589.6	1310.3	505.64	ug/L	505.64 ppb	16:34:39
2	Pb 220.353†	5524.8	5551.1	522.69	ug/L	522.69 ppb	16:34:39
2	S 181.975 Axial†	4889.8	4786.1	5155.5	ug/L	5155.5 ppb	16:34:39
2	Sb 206.836†	2083.0	2029.8	542.79	ug/L	542.79 ppb	16:34:39
2	Se 196.026†	1102.4	1114.0	514.16	ug/L	514.16 ppb	16:34:39
2	Si 251.611†	206514.0	204116.4	5171.5	ug/L	5171.5 ppb	16:34:19
2	Sn 189.927†	4084.1	4052.1	536.53	ug/L	536.53 ppb	16:34:39
2	Ti 334.940†	384627.7	382461.2	527.37	ug/L	527.37 ppb	16:34:19
2	Tl 190.801†	2122.2	2147.6	522.84	ug/L	522.84 ppb	16:34:39
2	U 409.014†	18118.0	20730.5	534.30	ug/L	534.30 ppb	16:34:19
2	V 292.402†	91078.7	91875.7	532.88	ug/L	532.88 ppb	16:34:19
2	Zn 213.857†	71725.7	70201.1	511.23	ug/L	511.23 ppb	16:34:19
2	SiO2†	205788.1	203355.5	11026	ug/L	11026 ppb	16:35:18
3	Sc Radial	4951.9	4951.9	101	%		16:33:23
3	Y RADIAL	5645.1	5645.1	99.96	%		16:33:23
3	Al 396.153Radial†	8095.8	8070.7	5307.3	ug/L	5307.3 ppb	16:33:23
3	Ca 317.933Radial†	2982.8	2939.6	5204.6	ug/L	5204.6 ppb	16:33:43
3	Fe 238.204 Radial†	446.0	431.2	5229.5	ug/L	5229.5 ppb	16:33:43
3	K 766.490 Radial†	30946.0	28113.1	5117.0	ug/L	5117.0 ppb	16:33:23
3	Mg 279.077 IEC†	122.7	119.2	5337.4	ug/L	5337.4 ppb	16:33:43
3	Na 589.592 Radial†	17339.1	18471.4	5181.2	ug/L	5181.2 ppb	16:33:23
3	Sr 421.552†	100380.7	99533.5	522.15	ug/L	522.15 ppb	16:33:23
3	Sc 361.383	1049768.6	1049768.6	100.99	%		16:34:47
3	Y 371.029	880675.4	880675.4	99.571	%		16:34:47
3	Ag 328.068†	131636.5	129872.8	517.99	ug/L	517.99 ppb	16:34:47
3	As 188.979†	1614.7	1635.4	514.19	ug/L	514.19 ppb	16:35:07
3	B 249.677†	27083.3	27284.1	513.65	ug/L	513.65 ppb	16:34:47
3	Ba 233.527†	83678.8	82859.0	533.68	ug/L	533.68 ppb	16:34:47
3	Be 313.107†	1675494.3	1663952.4	519.84	ug/L	519.84 ppb	16:34:47
3	Cd 226.502†	59601.0	59252.7	516.54	ug/L	516.54 ppb	16:34:47
3	Co 228.616†	30954.0	30737.0	506.44	ug/L	506.44 ppb	16:35:07
3	Cr 267.716†	58547.9	57886.5	520.90	ug/L	520.90 ppb	16:34:47
3	Cu 324.752†	210297.3	199299.4	532.50	ug/L	532.50 ppb	16:34:47
3	Mn 257.610†	566805.3	560675.2	531.35	ug/L	531.35 ppb	16:34:47
3	Mo 202.031†	9775.1	9650.1	512.47	ug/L	512.47 ppb	16:35:07
3	Ni 231.604†	26699.0	26305.5	515.10	ug/L	515.10 ppb	16:35:07
3	P 214.914†	1596.3	1315.6	508.10	ug/L	508.10 ppb	16:35:07
3	Pb 220.353†	5516.1	5537.6	521.43	ug/L	521.43 ppb	16:35:07
3	S 181.975 Axial†	4874.1	4766.2	5134.1	ug/L	5134.1 ppb	16:35:07
3	Sb 206.836†	2094.9	2039.7	545.36	ug/L	545.36 ppb	16:35:07
3	Se 196.026†	1111.7	1122.2	517.65	ug/L	517.65 ppb	16:35:07
3	Si 251.611†	206327.9	203748.7	5162.2	ug/L	5162.2 ppb	16:34:47
3	Sn 189.927†	4078.5	4042.9	535.32	ug/L	535.32 ppb	16:35:07
3	Ti 334.940†	384623.3	382115.4	526.89	ug/L	526.89 ppb	16:34:47
3	Tl 190.801†	2112.7	2136.3	520.13	ug/L	520.13 ppb	16:35:07
3	U 409.014†	18127.3	20723.7	534.13	ug/L	534.13 ppb	16:34:47
3	V 292.402†	91179.5	91894.7	532.97	ug/L	532.97 ppb	16:34:47
3	Zn 213.857†	71660.1	70072.5	510.30	ug/L	510.30 ppb	16:34:47
3	SiO2†	206766.5	204141.7	11068	ug/L	11068 ppb	16:35:23

Mean Data: 1201978329|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048404.7	100.86	%	0.156				0.15%
Sc Radial	4974.8	101	%	0.6				0.59%
Y 371.029	878588.9	99.335	%	0.2651				0.27%
Y RADIAL	5659.9	100.2	%	0.33				0.33%
Ag 328.068†	130080.2	518.82	ug/L	0.876	518.82	ppb	0.876	0.17%
Al 396.153Radial†	8011.5	5268.1	ug/L	35.50	5268.1	ppb	35.50	0.67%
As 188.979†	1638.8	515.24	ug/L	3.134	515.24	ppb	3.134	0.61%
B 249.677†	27272.9	513.43	ug/L	0.786	513.43	ppb	0.786	0.15%
Ba 233.527†	82981.7	534.47	ug/L	0.696	534.47	ppb	0.696	0.13%
Be 313.107†	1662105.9	519.27	ug/L	0.524	519.27	ppb	0.524	0.10%
Ca 317.933Radial†	2925.7	5180.0	ug/L	32.02	5180.0	ppb	32.02	0.62%
Cd 226.502†	59368.0	517.55	ug/L	1.024	517.55	ppb	1.024	0.20%
Co 228.616†	30856.2	508.40	ug/L	2.017	508.40	ppb	2.017	0.40%
Cr 267.716†	57944.7	521.42	ug/L	0.458	521.42	ppb	0.458	0.09%
Cu 324.752†	199243.3	532.35	ug/L	0.664	532.35	ppb	0.664	0.12%
Fe 238.204 Radial†	432.1	5239.6	ug/L	30.80	5239.6	ppb	30.80	0.59%
K 766.490 Radial†	28001.5	5096.7	ug/L	23.34	5096.7	ppb	23.34	0.46%

Mg 279.077 IEC†	119.5	5353.9	ug/L	103.27	5353.9	ppb	103.27	1.93%
Mn 257.610†	561171.0	531.82	ug/L	0.434	531.82	ppb	0.434	0.08%
Mo 202.031†	9688.8	514.53	ug/L	2.017	514.53	ppb	2.017	0.39%
Na 589.592 Radial†	18383.1	5156.4	ug/L	24.23	5156.4	ppb	24.23	0.47%
Ni 231.604†	26401.4	516.98	ug/L	1.829	516.98	ppb	1.829	0.35%
P 214.914†	1320.0	510.10	ug/L	5.737	510.10	ppb	5.737	1.12%
Pb 220.353†	5560.1	523.54	ug/L	2.640	523.54	ppb	2.640	0.50%
S 181.975 Axial†	4794.5	5164.6	ug/L	35.89	5164.6	ppb	35.89	0.69%
Sb 206.836†	2039.4	545.32	ug/L	2.510	545.32	ppb	2.510	0.46%
Se 196.026†	1125.5	519.16	ug/L	5.904	519.16	ppb	5.904	1.14%
Si 251.611†	203986.5	5168.2	ug/L	5.21	5168.2	ppb	5.21	0.10%
Sn 189.927†	4055.2	536.95	ug/L	1.877	536.95	ppb	1.877	0.35%
Sr 421.552†	99096.1	519.85	ug/L	2.273	519.85	ppb	2.273	0.44%
Ti 334.940†	382124.7	526.91	ug/L	0.459	526.91	ppb	0.459	0.09%
Tl 190.801†	2142.9	521.71	ug/L	1.413	521.71	ppb	1.413	0.27%
U 409.014†	20698.5	533.48	ug/L	1.283	533.48	ppb	1.283	0.24%
V 292.402†	91898.0	533.01	ug/L	0.156	533.01	ppb	0.156	0.03%
Zn 213.857†	70125.4	510.68	ug/L	0.485	510.68	ppb	0.485	0.09%
SiO2†	204959.1	11113	ug/L	115.9	11113	ppb	115.9	1.04%

Sequence No.: 34
Sample ID: 1201978330|925377|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/4/2009 16:37:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978330|925377|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4846.6	4846.6	98.7	%			16:39:26
1	Y RADIAL	5589.9	5589.9	98.99	%			16:39:26
1	Al 396.153Radial†	-22.3	21.2	14.008	ug/L	14.008	ppb	16:39:26
1	Ca 317.933Radial†	19.2	1.6	2.8537	ug/L	2.8537	ppb	16:39:46
1	Fe 238.204 Radial†	12.8	2.0	24.335	ug/L	24.335	ppb	16:39:46
1	K 766.490 Radial†	2652.4	117.4	21.402	ug/L	21.402	ppb	16:39:26
1	Mg 279.077 IEC†	1.2	-1.3	-58.635	ug/L	-58.635	ppb	16:39:46
1	Na 589.592 Radial†	-1206.5	57.8	16.205	ug/L	16.205	ppb	16:39:26
1	Sr 421.552†	-23.5	-16.4	-0.0860	ug/L	-0.0860	ppb	16:39:26
1	Sc 361.383	1028230.0	1028230.0	98.917	%			16:40:42
1	Y 371.029	872841.8	872841.8	98.686	%			16:40:42
1	Ag 328.068†	426.6	-42.8	-0.1581	ug/L	-0.1581	ppb	16:40:48
1	As 188.979†	-39.9	-3.8	-1.1745	ug/L	-1.1745	ppb	16:41:08
1	B 249.677†	-388.3	73.5	1.3863	ug/L	1.3863	ppb	16:41:08
1	Ba 233.527†	-5.9	-6.0	-0.0378	ug/L	-0.0378	ppb	16:41:08
1	Be 313.107†	-4930.2	-110.2	-0.0340	ug/L	-0.0340	ppb	16:40:48
1	Cd 226.502†	-218.8	14.5	0.1239	ug/L	0.1239	ppb	16:41:08
1	Co 228.616†	-92.5	-7.2	-0.1180	ug/L	-0.1180	ppb	16:41:08
1	Cr 267.716†	116.4	29.9	0.2707	ug/L	0.2707	ppb	16:41:08
1	Cu 324.752†	9019.7	180.9	0.4843	ug/L	0.4843	ppb	16:40:48
1	Mn 257.610†	622.0	52.1	0.0528	ug/L	0.0528	ppb	16:41:08
1	Mo 202.031†	36.9	8.0	0.4289	ug/L	0.4289	ppb	16:41:08
1	Ni 231.604†	127.6	-2.9	-0.0566	ug/L	-0.0566	ppb	16:41:08
1	P 214.914†	286.1	24.1	10.695	ug/L	10.695	ppb	16:41:08
1	Pb 220.353†	-61.2	13.7	1.2909	ug/L	1.2909	ppb	16:41:08
1	S 181.975 Axial†	56.8	-2.6	-2.8489	ug/L	-2.8489	ppb	16:41:08
1	Sb 206.836†	39.7	5.5	1.4711	ug/L	1.4711	ppb	16:41:08
1	Se 196.026†	-26.6	-5.5	-2.3643	ug/L	-2.3643	ppb	16:41:08
1	Si 251.611†	691.0	140.9	3.5606	ug/L	3.5606	ppb	16:41:08
1	Sn 189.927†	6.5	10.9	1.4397	ug/L	1.4397	ppb	16:41:08
1	Ti 334.940†	-1117.1	131.2	0.1832	ug/L	0.1832	ppb	16:40:48
1	Tl 190.801†	-51.5	-7.9	-1.8965	ug/L	-1.8965	ppb	16:41:08
1	U 409.014†	-2935.2	-193.4	-5.0029	ug/L	-5.0029	ppb	16:40:42
1	V 292.402†	-1617.3	-26.5	-0.1607	ug/L	-0.1607	ppb	16:40:48
1	Zn 213.857†	952.4	77.3	0.5673	ug/L	0.5673	ppb	16:41:08
1	SiO2†	728.6	137.5	7.4320	ug/L	7.4320	ppb	16:42:14
2	Sc Radial	4930.9	4930.9	100	%			16:39:51
2	Y RADIAL	5661.0	5661.0	100.2	%			16:39:51
2	Al 396.153Radial†	-16.1	27.8	18.353	ug/L	18.353	ppb	16:39:51
2	Ca 317.933Radial†	23.3	5.4	9.4787	ug/L	9.4787	ppb	16:40:11
2	Fe 238.204 Radial†	8.2	-2.8	-34.265	ug/L	-34.265	ppb	16:40:11
2	K 766.490 Radial†	2594.4	13.8	2.4919	ug/L	2.4919	ppb	16:39:51
2	Mg 279.077 IEC†	2.4	-0.1	-4.9919	ug/L	-4.9919	ppb	16:40:11
2	Na 589.592 Radial†	-1160.8	124.1	34.820	ug/L	34.820	ppb	16:39:51
2	Sr 421.552†	-27.7	-20.2	-0.1058	ug/L	-0.1058	ppb	16:39:51
2	Sc 361.383	1050220.0	1050220.0	101.03	%			16:41:13
2	Y 371.029	890516.9	890516.9	100.68	%			16:41:13
2	Ag 328.068†	400.4	-77.7	-0.3198	ug/L	-0.3198	ppb	16:41:18
2	As 188.979†	-41.5	-4.5	-1.4023	ug/L	-1.4023	ppb	16:41:38
2	B 249.677†	-420.8	49.6	0.9424	ug/L	0.9424	ppb	16:41:38
2	Ba 233.527†	9.3	9.3	0.0580	ug/L	0.0580	ppb	16:41:38
2	Be 313.107†	-4881.4	42.4	0.0134	ug/L	0.0134	ppb	16:41:18
2	Cd 226.502†	-230.3	7.7	0.0702	ug/L	0.0702	ppb	16:41:38
2	Co 228.616†	-90.2	-3.0	-0.0490	ug/L	-0.0490	ppb	16:41:38
2	Cr 267.716†	105.2	16.4	0.1462	ug/L	0.1462	ppb	16:41:38
2	Cu 324.752†	8877.3	-151.0	-0.4050	ug/L	-0.4050	ppb	16:41:18
2	Mn 257.610†	625.4	42.4	0.0368	ug/L	0.0368	ppb	16:41:38
2	Mo 202.031†	31.1	1.5	0.0781	ug/L	0.0781	ppb	16:41:38
2	Ni 231.604†	129.4	-3.9	-0.0760	ug/L	-0.0760	ppb	16:41:38

2	P 214.914†	275.3	7.4	3.3965	ug/L	3.3965 ppb	16:41:38
2	Pb 220.353†	-75.4	0.9	0.0924	ug/L	0.0924 ppb	16:41:38
2	S 181.975 Axial†	53.3	-7.4	-7.9256	ug/L	-7.9256 ppb	16:41:38
2	Sb 206.836†	30.5	-4.5	-1.1699	ug/L	-1.1699 ppb	16:41:38
2	Se 196.026†	-16.4	5.2	2.1600	ug/L	2.1600 ppb	16:41:38
2	Si 251.611†	733.1	168.0	4.2623	ug/L	4.2623 ppb	16:41:38
2	Sn 189.927†	-1.2	3.1	0.4142	ug/L	0.4142 ppb	16:41:38
2	Ti 334.940†	-1195.6	77.1	0.1067	ug/L	0.1067 ppb	16:41:18
2	Tl 190.801†	-43.9	0.8	0.2024	ug/L	0.2024 ppb	16:41:38
2	U 409.014†	-2799.8	2.8	0.0771	ug/L	0.0771 ppb	16:41:13
2	V 292.402†	-1649.3	-23.9	-0.1306	ug/L	-0.1306 ppb	16:41:18
2	Zn 213.857†	945.9	50.7	0.3770	ug/L	0.3770 ppb	16:41:38
2	SiO2†	753.9	147.2	7.9901	ug/L	7.9901 ppb	16:42:19
3	Sc Radial	4870.2	4870.2	99.2	%		16:40:16
3	Y RADIAL	5605.3	5605.3	99.26	%		16:40:16
3	Al 396.153Radial†	-42.0	1.5	0.9971	ug/L	0.9971 ppb	16:40:16
3	Ca 317.933Radial†	22.6	4.9	8.7091	ug/L	8.7091 ppb	16:40:36
3	Fe 238.204 Radial†	9.5	-1.4	-16.794	ug/L	-16.794 ppb	16:40:36
3	K 766.490 Radial†	2644.7	96.6	17.592	ug/L	17.592 ppb	16:40:16
3	Mg 279.077 IEC†	6.3	3.8	171.40	ug/L	171.40 ppb	16:40:36
3	Na 589.592 Radial†	-1154.3	116.3	32.612	ug/L	32.612 ppb	16:40:16
3	Sr 421.552†	-51.0	-44.0	-0.2308	ug/L	-0.2308 ppb	16:40:16
3	Sc 361.383	1040755.4	1040755.4	100.12	%		16:41:43
3	Y 371.029	884432.9	884432.9	99.996	%		16:41:43
3	Ag 328.068†	473.7	-1.0	-0.0113	ug/L	-0.0113 ppb	16:41:48
3	As 188.979†	-38.5	-1.9	-0.5903	ug/L	-0.5903 ppb	16:42:08
3	B 249.677†	-441.2	25.4	0.4826	ug/L	0.4826 ppb	16:42:08
3	Ba 233.527†	-12.6	-12.6	-0.0809	ug/L	-0.0809 ppb	16:42:08
3	Be 313.107†	-4808.8	71.0	0.0223	ug/L	0.0223 ppb	16:41:48
3	Cd 226.502†	-247.4	-11.5	-0.0984	ug/L	-0.0984 ppb	16:42:08
3	Co 228.616†	-72.9	13.5	0.2223	ug/L	0.2223 ppb	16:42:08
3	Cr 267.716†	103.8	15.9	0.1417	ug/L	0.1417 ppb	16:42:08
3	Cu 324.752†	8963.3	14.9	0.0389	ug/L	0.0389 ppb	16:41:48
3	Mn 257.610†	616.2	38.7	0.0318	ug/L	0.0318 ppb	16:42:08
3	Mo 202.031†	24.2	-5.0	-0.2688	ug/L	-0.2688 ppb	16:42:08
3	Ni 231.604†	130.3	-1.8	-0.0350	ug/L	-0.0350 ppb	16:42:08
3	P 214.914†	268.5	3.0	1.3911	ug/L	1.3911 ppb	16:42:08
3	Pb 220.353†	-64.2	11.5	1.0773	ug/L	1.0773 ppb	16:42:08
3	S 181.975 Axial†	61.6	1.4	1.5125	ug/L	1.5125 ppb	16:42:08
3	Sb 206.836†	38.6	3.9	1.0492	ug/L	1.0492 ppb	16:42:08
3	Se 196.026†	-9.2	12.2	5.3446	ug/L	5.3446 ppb	16:42:08
3	Si 251.611†	702.4	143.9	3.6481	ug/L	3.6481 ppb	16:42:08
3	Sn 189.927†	7.6	11.9	1.5797	ug/L	1.5797 ppb	16:42:08
3	Ti 334.940†	-1204.9	57.1	0.0775	ug/L	0.0775 ppb	16:41:48
3	Tl 190.801†	-37.6	6.7	1.6179	ug/L	1.6179 ppb	16:42:08
3	U 409.014†	-2635.6	141.6	3.6619	ug/L	3.6619 ppb	16:41:43
3	V 292.402†	-1555.1	55.3	0.3262	ug/L	0.3262 ppb	16:41:48
3	Zn 213.857†	936.3	49.6	0.3601	ug/L	0.3601 ppb	16:42:08
3	SiO2†	729.1	129.2	7.0056	ug/L	7.0056 ppb	16:42:24

Mean Data: 1201978330|925377|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1039735.1	100.02	%	1.061				1.06%
Sc Radial	4882.6	99.4	%	0.89				0.89%
Y 371.029	882597.2	99.788	%	1.0152				1.02%
Y RADIAL	5618.7	99.50	%	0.662				0.67%
Ag 328.068†	-40.5	-0.1631	ug/L	0.15432	-0.1631	ppb	0.15432	94.64%
Al 396.153Radial†	16.8	11.119	ug/L	9.0313	11.119	ppb	9.0313	81.22%
As 188.979†	-3.4	-1.0557	ug/L	0.41884	-1.0557	ppb	0.41884	39.68%
B 249.677†	49.5	0.9371	ug/L	0.45186	0.9371	ppb	0.45186	48.22%
Ba 233.527†	-3.1	-0.0202	ug/L	0.07108	-0.0202	ppb	0.07108	351.58%
Be 313.107†	1.1	0.0006	ug/L	0.03027	0.0006	ppb	0.03027	>999.9%
Ca 317.933Radial†	4.0	7.0139	ug/L	3.62329	7.0139	ppb	3.62329	51.66%
Cd 226.502†	3.6	0.0319	ug/L	0.11599	0.0319	ppb	0.11599	363.86%
Co 228.616†	1.1	0.0184	ug/L	0.17988	0.0184	ppb	0.17988	976.55%
Cr 267.716†	20.7	0.1862	ug/L	0.07317	0.1862	ppb	0.07317	39.30%
Cu 324.752†	14.9	0.0394	ug/L	0.44463	0.0394	ppb	0.44463	>999.9%
Fe 238.204 Radial†	-0.7	-8.9079	ug/L	30.08502	-8.9079	ppb	30.08502	337.73%
K 766.490 Radial†	75.9	13.829	ug/L	10.0010	13.829	ppb	10.0010	72.32%

Mg 279.077 IEC†	0.8	35.925	ug/L	120.3538	35.925	ppb	120.3538 335.01%
Mn 257.610†	44.4	0.0405	ug/L	0.01100	0.0405	ppb	0.01100 27.17%
Mo 202.031†	1.5	0.0794	ug/L	0.34888	0.0794	ppb	0.34888 439.47%
Na 589.592 Radial†	99.4	27.879	ug/L	10.1700	27.879	ppb	10.1700 36.48%
Ni 231.604†	-2.9	-0.0559	ug/L	0.02049	-0.0559	ppb	0.02049 36.68%
P 214.914†	11.5	5.1609	ug/L	4.89650	5.1609	ppb	4.89650 94.88%
Pb 220.353†	8.7	0.8202	ug/L	0.63926	0.8202	ppb	0.63926 77.94%
S 181.975 Axial†	-2.9	-3.0873	ug/L	4.72358	-3.0873	ppb	4.72358 153.00%
Sb 206.836†	1.6	0.4501	ug/L	1.41878	0.4501	ppb	1.41878 315.20%
Se 196.026†	3.9	1.7134	ug/L	3.87381	1.7134	ppb	3.87381 226.09%
Si 251.611†	150.9	3.8237	ug/L	0.38238	3.8237	ppb	0.38238 10.00%
Sn 189.927†	8.6	1.1445	ug/L	0.63631	1.1445	ppb	0.63631 55.60%
Sr 421.552†	-26.8	-0.1409	ug/L	0.07847	-0.1409	ppb	0.07847 55.70%
Ti 334.940†	88.4	0.1224	ug/L	0.05457	0.1224	ppb	0.05457 44.57%
Tl 190.801†	-0.1	-0.0254	ug/L	1.76825	-0.0254	ppb	1.76825 >999.9%
U 409.014†	-16.3	-0.4213	ug/L	4.35384	-0.4213	ppb	4.35384 >999.9%
V 292.402†	1.6	0.0116	ug/L	0.27286	0.0116	ppb	0.27286 >999.9%
Zn 213.857†	59.2	0.4348	ug/L	0.11505	0.4348	ppb	0.11505 26.46%
SiO2†	137.9	7.4759	ug/L	0.49372	7.4759	ppb	0.49372 6.60%

Sequence No.: 36
Sample ID: 241337001|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 12/4/2009 16:51:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241337001|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4842.0	4842.0	98.6	%			16:53:27
1	Y RADIAL	5583.0	5583.0	98.86	%			16:53:27
1	Al 396.153Radial†	-29.1	14.3	9.4493	ug/L	9.4493	ppb	16:53:27
1	Ca 317.933Radial†	21.8	4.2	7.5164	ug/L	7.5164	ppb	16:53:47
1	Fe 238.204 Radial†	9.9	-1.0	-12.068	ug/L	-12.068	ppb	16:53:47
1	K 766.490 Radial†	2542.9	9.0	1.6169	ug/L	1.6169	ppb	16:53:27
1	Mg 279.077 IEC†	-0.8	-3.3	-149.88	ug/L	-149.88	ppb	16:53:47
1	Na 589.592 Radial†	-1083.4	181.4	50.893	ug/L	50.893	ppb	16:53:27
1	Sr 421.552†	-45.7	-38.9	-0.2042	ug/L	-0.2042	ppb	16:53:27
1	Sc 361.383	1058238.6	1058238.6	101.80	%			16:54:44
1	Y 371.029	897301.6	897301.6	101.45	%			16:54:44
1	Ag 328.068†	395.8	-85.3	-0.3430	ug/L	-0.3430	ppb	16:54:49
1	As 188.979†	-34.2	3.0	0.9460	ug/L	0.9460	ppb	16:55:09
1	B 249.677†	-534.4	-58.8	-1.1094	ug/L	-1.1094	ppb	16:55:09
1	Ba 233.527†	-10.9	-10.7	-0.0683	ug/L	-0.0683	ppb	16:55:09
1	Be 313.107†	-5026.0	-63.0	-0.0189	ug/L	-0.0189	ppb	16:54:49
1	Cd 226.502†	-233.8	6.0	0.0535	ug/L	0.0535	ppb	16:55:09
1	Co 228.616†	-92.6	-4.6	-0.0771	ug/L	-0.0771	ppb	16:55:09
1	Cr 267.716†	111.1	21.4	0.1915	ug/L	0.1915	ppb	16:55:09
1	Cu 324.752†	9035.7	-61.9	-0.1659	ug/L	-0.1659	ppb	16:54:49
1	Mn 257.610†	665.1	76.6	0.0741	ug/L	0.0741	ppb	16:55:09
1	Mo 202.031†	27.1	-2.6	-0.1401	ug/L	-0.1401	ppb	16:55:09
1	Ni 231.604†	146.3	11.8	0.2309	ug/L	0.2309	ppb	16:55:09
1	P 214.914†	279.6	9.5	4.2958	ug/L	4.2958	ppb	16:55:09
1	Pb 220.353†	-76.1	0.8	0.0775	ug/L	0.0775	ppb	16:55:09
1	S 181.975 Axial†	60.5	-0.7	-0.7717	ug/L	-0.7717	ppb	16:55:09
1	Sb 206.836†	59.8	24.1	6.3507	ug/L	6.3507	ppb	16:55:09
1	Se 196.026†	-17.5	4.2	1.7954	ug/L	1.7954	ppb	16:55:09
1	Si 251.611†	1098.9	521.8	13.252	ug/L	13.252	ppb	16:55:09
1	Sn 189.927†	-1.8	2.6	0.3390	ug/L	0.3390	ppb	16:55:09
1	Ti 334.940†	-1015.0	263.5	0.3626	ug/L	0.3626	ppb	16:54:49
1	Tl 190.801†	-51.2	-6.1	-1.4609	ug/L	-1.4609	ppb	16:55:09
1	U 409.014†	-2722.6	99.6	2.5757	ug/L	2.5757	ppb	16:54:44
1	V 292.402†	-1577.3	59.1	0.3395	ug/L	0.3395	ppb	16:54:49
1	Zn 213.857†	1070.5	166.0	1.2245	ug/L	1.2245	ppb	16:55:09
1	SiO2†	1159.8	540.2	29.362	ug/L	29.362	ppb	16:56:15
2	Sc Radial	4919.4	4919.4	100	%			16:53:52
2	Y RADIAL	5654.7	5654.7	100.1	%			16:53:52
2	Al 396.153Radial†	-30.3	13.6	8.9711	ug/L	8.9711	ppb	16:53:52
2	Ca 317.933Radial†	19.9	2.0	3.6086	ug/L	3.6086	ppb	16:54:13
2	Fe 238.204 Radial†	11.1	0.1	1.0591	ug/L	1.0591	ppb	16:54:13
2	K 766.490 Radial†	2561.5	-13.0	-2.3948	ug/L	-2.3948	ppb	16:53:52
2	Mg 279.077 IEC†	2.7	0.2	9.4373	ug/L	9.4373	ppb	16:54:13
2	Na 589.592 Radial†	-1135.1	147.1	41.253	ug/L	41.253	ppb	16:53:52
2	Sr 421.552†	-33.3	-25.8	-0.1354	ug/L	-0.1354	ppb	16:53:52
2	Sc 361.383	1051252.3	1051252.3	101.13	%			16:55:14
2	Y 371.029	892200.0	892200.0	100.87	%			16:55:14
2	Ag 328.068†	438.5	-40.4	-0.1607	ug/L	-0.1607	ppb	16:55:20
2	As 188.979†	-46.5	-9.4	-2.9333	ug/L	-2.9333	ppb	16:55:40
2	B 249.677†	-497.1	-25.4	-0.4813	ug/L	-0.4813	ppb	16:55:40
2	Ba 233.527†	6.1	6.0	0.0396	ug/L	0.0396	ppb	16:55:40
2	Be 313.107†	-4924.9	4.1	0.0019	ug/L	0.0019	ppb	16:55:20
2	Cd 226.502†	-240.4	-2.1	-0.0184	ug/L	-0.0184	ppb	16:55:40
2	Co 228.616†	-76.0	11.2	0.1834	ug/L	0.1834	ppb	16:55:40
2	Cr 267.716†	113.0	24.0	0.2153	ug/L	0.2153	ppb	16:55:40
2	Cu 324.752†	8945.7	-91.9	-0.2455	ug/L	-0.2455	ppb	16:55:20
2	Mn 257.610†	656.7	72.6	0.0687	ug/L	0.0687	ppb	16:55:40
2	Mo 202.031†	30.8	1.2	0.0637	ug/L	0.0637	ppb	16:55:40
2	Ni 231.604†	126.0	-7.3	-0.1433	ug/L	-0.1433	ppb	16:55:40

2	P 214.914†	293.9	25.5	11.457 ug/L	11.457 ppb	16:55:40
2	Pb 220.353†	-70.1	6.3	0.5891 ug/L	0.5891 ppb	16:55:40
2	S 181.975 Axial†	57.8	-2.9	-3.1757 ug/L	-3.1757 ppb	16:55:40
2	Sb 206.836†	42.8	7.7	2.0537 ug/L	2.0537 ppb	16:55:40
2	Se 196.026†	-28.0	-6.3	-2.7804 ug/L	-2.7804 ppb	16:55:40
2	Si 251.611†	1136.6	566.2	14.375 ug/L	14.375 ppb	16:55:40
2	Sn 189.927†	6.6	10.8	1.4344 ug/L	1.4344 ppb	16:55:40
2	Ti 334.940†	-1047.3	224.9	0.3092 ug/L	0.3092 ppb	16:55:20
2	Tl 190.801†	-58.7	-13.8	-3.3360 ug/L	-3.3360 ppb	16:55:40
2	U 409.014†	-2708.4	95.9	2.4776 ug/L	2.4776 ppb	16:55:14
2	V 292.402†	-1560.1	65.9	0.3826 ug/L	0.3826 ppb	16:55:20
2	Zn 213.857†	1077.8	180.2	1.3250 ug/L	1.3250 ppb	16:55:40
2	SiO2†	1172.6	560.4	30.449 ug/L	30.449 ppb	16:56:20
3	Sc Radial	4895.7	4895.7	99.7 %		16:54:18
3	Y RADIAL	5628.3	5628.3	99.67 %		16:54:18
3	Al 396.153Radial†	-27.7	16.1	10.596 ug/L	10.596 ppb	16:54:18
3	Ca 317.933Radial†	17.2	-0.6	-1.0812 ug/L	-1.0812 ppb	16:54:38
3	Fe 238.204 Radial†	11.0	0.0	0.2230 ug/L	0.2230 ppb	16:54:38
3	K 766.490 Radial†	2479.4	-83.0	-15.146 ug/L	-15.146 ppb	16:54:18
3	Mg 279.077 IEC†	2.0	-0.5	-23.053 ug/L	-23.053 ppb	16:54:38
3	Na 589.592 Radial†	-1072.9	204.0	57.221 ug/L	57.221 ppb	16:54:18
3	Sr 421.552†	0.7	8.1	0.0427 ug/L	0.0427 ppb	16:54:18
3	Sc 361.383	1052237.2	1052237.2	101.23 %		16:55:45
3	Y 371.029	893939.1	893939.1	101.07 %		16:55:45
3	Ag 328.068†	441.8	-37.6	-0.1477 ug/L	-0.1477 ppb	16:55:50
3	As 188.979†	-32.2	4.7	1.4815 ug/L	1.4815 ppb	16:56:10
3	B 249.677†	-537.8	-65.2	-1.2323 ug/L	-1.2323 ppb	16:56:10
3	Ba 233.527†	5.6	5.5	0.0356 ug/L	0.0356 ppb	16:56:10
3	Be 313.107†	-4945.3	-11.4	-0.0029 ug/L	-0.0029 ppb	16:55:50
3	Cd 226.502†	-248.5	-9.9	-0.0862 ug/L	-0.0862 ppb	16:56:10
3	Co 228.616†	-82.8	4.5	0.0733 ug/L	0.0733 ppb	16:56:10
3	Cr 267.716†	113.9	24.7	0.2225 ug/L	0.2225 ppb	16:56:10
3	Cu 324.752†	9076.0	28.5	0.0762 ug/L	0.0762 ppb	16:55:50
3	Mn 257.610†	664.4	79.7	0.0759 ug/L	0.0759 ppb	16:56:10
3	Mo 202.031†	31.3	1.7	0.0913 ug/L	0.0913 ppb	16:56:10
3	Ni 231.604†	134.4	0.8	0.0166 ug/L	0.0166 ppb	16:56:10
3	P 214.914†	293.3	24.6	11.024 ug/L	11.024 ppb	16:56:10
3	Pb 220.353†	-70.1	6.3	0.5936 ug/L	0.5936 ppb	16:56:10
3	S 181.975 Axial†	63.9	3.0	3.2110 ug/L	3.2110 ppb	16:56:10
3	Sb 206.836†	44.1	8.9	2.3669 ug/L	2.3669 ppb	16:56:10
3	Se 196.026†	-15.7	5.9	2.6146 ug/L	2.6146 ppb	16:56:10
3	Si 251.611†	1121.8	550.6	13.984 ug/L	13.984 ppb	16:56:10
3	Sn 189.927†	1.1	5.4	0.7189 ug/L	0.7189 ppb	16:56:10
3	Ti 334.940†	-1014.0	258.8	0.3572 ug/L	0.3572 ppb	16:55:50
3	Tl 190.801†	-53.1	-8.2	-1.9903 ug/L	-1.9903 ppb	16:56:10
3	U 409.014†	-2845.4	-36.9	-0.9550 ug/L	-0.9550 ppb	16:55:45
3	V 292.402†	-1610.5	17.6	0.0989 ug/L	0.0989 ppb	16:55:50
3	Zn 213.857†	1083.1	184.4	1.3557 ug/L	1.3557 ppb	16:56:10
3	SiO2†	1123.8	511.1	27.782 ug/L	27.782 ppb	16:56:25

Mean Data: 241337001|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1053909.4	101.39	%	0.364				0.36%
Sc Radial	4885.7	99.5	%	0.81				0.81%
Y 371.029	894480.2	101.13	%	0.293				0.29%
Y RADIAL	5622.0	99.55	%	0.642				0.64%
Ag 328.068†	-54.5	-0.2171	ug/L	0.10918	-0.2171	ppb	0.10918	50.28%
Al 396.153Radial†	14.6	9.6720	ug/L	0.83484	9.6720	ppb	0.83484	8.63%
As 188.979†	-0.6	-0.1686	ug/L	2.40920	-0.1686	ppb	2.40920	>999.9%
B 249.677†	-49.8	-0.9410	ug/L	0.40283	-0.9410	ppb	0.40283	42.81%
Ba 233.527†	0.3	0.0023	ug/L	0.06121	0.0023	ppb	0.06121	>999.9%
Be 313.107†	-23.4	-0.0066	ug/L	0.01091	-0.0066	ppb	0.01091	164.71%
Ca 317.933Radial†	1.9	3.3479	ug/L	4.30469	3.3479	ppb	4.30469	128.58%
Cd 226.502†	-2.0	-0.0170	ug/L	0.06987	-0.0170	ppb	0.06987	410.85%
Co 228.616†	3.7	0.0599	ug/L	0.13078	0.0599	ppb	0.13078	218.51%
Cr 267.716†	23.4	0.2098	ug/L	0.01622	0.2098	ppb	0.01622	7.73%
Cu 324.752†	-41.8	-0.1117	ug/L	0.16752	-0.1117	ppb	0.16752	149.93%
Fe 238.204 Radial†	-0.3	-3.5953	ug/L	7.34946	-3.5953	ppb	7.34946	204.42%
K 766.490 Radial†	-29.0	-5.3078	ug/L	8.75267	-5.3078	ppb	8.75267	164.90%

Mg 279.077 IEC†	-1.2	-54.500	ug/L	84.1873	-54.500	ppb	84.1873 154.47%
Mn 257.610†	76.3	0.0729	ug/L	0.00374	0.0729	ppb	0.00374 5.13%
Mo 202.031†	0.1	0.0050	ug/L	0.12638	0.0050	ppb	0.12638 >999.9%
Na 589.592 Radial†	177.5	49.789	ug/L	8.0410	49.789	ppb	8.0410 16.15%
Ni 231.604†	1.8	0.0347	ug/L	0.18774	0.0347	ppb	0.18774 540.34%
P 214.914†	19.9	8.9257	ug/L	4.01548	8.9257	ppb	4.01548 44.99%
Pb 220.353†	4.4	0.4201	ug/L	0.29667	0.4201	ppb	0.29667 70.62%
S 181.975 Axial†	-0.2	-0.2455	ug/L	3.22569	-0.2455	ppb	3.22569 >999.9%
Sb 206.836†	13.6	3.5904	ug/L	2.39557	3.5904	ppb	2.39557 66.72%
Se 196.026†	1.3	0.5432	ug/L	2.90734	0.5432	ppb	2.90734 535.21%
Si 251.611†	546.2	13.870	ug/L	0.5701	13.870	ppb	0.5701 4.11%
Sn 189.927†	6.3	0.8308	ug/L	0.55623	0.8308	ppb	0.55623 66.95%
Sr 421.552†	-18.9	-0.0990	ug/L	0.12743	-0.0990	ppb	0.12743 128.77%
Ti 334.940†	249.0	0.3430	ug/L	0.02941	0.3430	ppb	0.02941 8.58%
Tl 190.801†	-9.4	-2.2624	ug/L	0.96671	-2.2624	ppb	0.96671 42.73%
U 409.014†	52.8	1.3661	ug/L	2.01074	1.3661	ppb	2.01074 147.19%
V 292.402†	47.5	0.2737	ug/L	0.15289	0.2737	ppb	0.15289 55.86%
Zn 213.857†	176.9	1.3017	ug/L	0.06862	1.3017	ppb	0.06862 5.27%
SiO2†	537.2	29.197	ug/L	1.3410	29.197	ppb	1.3410 4.59%

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0 ug/L	2467.0 ppb	17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00 ug/L	510.00 ppb	17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08 ug/L	988.08 ppb	17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65 ug/L	511.65 ppb	17:02:35
2	Se 196.026†	1101.6	1134.9	522.91 ug/L	522.91 ppb	17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9 ug/L	2523.9 ppb	17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00 ug/L	505.00 ppb	17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34 ug/L	508.34 ppb	17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32 ug/L	505.32 ppb	17:02:35
2	U 409.014†	16132.6	19081.4	491.71 ug/L	491.71 ppb	17:02:15
2	V 292.402†	85992.6	88533.4	513.61 ug/L	513.61 ppb	17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27 ug/L	506.27 ppb	17:02:15
2	SiO2†	99096.4	99571.7	5385.4 ug/L	5385.4 ppb	17:03:13
3	Sc Radial	4783.8	4783.8	97.4 %		17:01:19
3	Y RADIAL	5474.3	5474.3	96.94 %		17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1 ug/L	5154.1 ppb	17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7 ug/L	5093.7 ppb	17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5 ug/L	5010.5 ppb	17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8 ug/L	5005.8 ppb	17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6 ug/L	5244.6 ppb	17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6 ug/L	9733.6 ppb	17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13 ug/L	501.13 ppb	17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474 %		17:02:43
3	Y 371.029	860032.6	860032.6	97.237 %		17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06 ug/L	509.06 ppb	17:02:43
3	As 188.979†	1574.3	1635.3	513.94 ug/L	513.94 ppb	17:03:03
3	B 249.677†	25888.6	26755.8	503.69 ug/L	503.69 ppb	17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18 ug/L	511.18 ppb	17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43 ug/L	511.43 ppb	17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37 ug/L	511.37 ppb	17:02:43
3	Co 228.616†	30331.0	30887.2	508.95 ug/L	508.95 ppb	17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88 ug/L	509.88 ppb	17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19 ug/L	511.19 ppb	17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05 ug/L	512.05 ppb	17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93 ug/L	513.93 ppb	17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25 ug/L	508.25 ppb	17:03:03
3	P 214.914†	5929.5	5756.2	2497.7 ug/L	2497.7 ppb	17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78 ug/L	517.78 ppb	17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4 ug/L	1006.4 ppb	17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71 ug/L	516.71 ppb	17:03:03
3	Se 196.026†	1126.1	1164.9	535.77 ug/L	535.77 ppb	17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5 ug/L	2520.5 ppb	17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39 ug/L	512.39 ppb	17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94 ug/L	507.94 ppb	17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85 ug/L	515.85 ppb	17:03:03
3	U 409.014†	16138.4	19162.4	493.81 ug/L	493.81 ppb	17:02:43
3	V 292.402†	85723.1	88659.8	514.45 ug/L	514.45 ppb	17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31 ug/L	506.31 ppb	17:02:43
3	SiO2†	99466.9	100408.9	5430.6 ug/L	5430.6 ppb	17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

```
   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L         1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L         3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L         0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L         0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L         62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L         18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L         10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L         0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L         3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L         43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L         2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L         15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L         4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L         13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L         3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L         6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L          3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L         3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L         1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L         0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L         5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L         2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L         0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L         1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L         22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
```

Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628	ug/L	-2.1628	ppb	17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982	ug/L	1.3982	ppb	17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236	ug/L	2.6236	ppb	17:09:34
2	Sb 206.836†	49.9	15.7	4.1740	ug/L	4.1740	ppb	17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105	ug/L	-1.6105	ppb	17:09:34
2	Si 251.611†	628.2	76.8	1.9315	ug/L	1.9315	ppb	17:09:34
2	Sn 189.927†	5.3	9.7	1.2851	ug/L	1.2851	ppb	17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699	ug/L	0.0699	ppb	17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234	ug/L	-0.2234	ppb	17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719	ug/L	-3.0719	ppb	17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052	ug/L	-0.4052	ppb	17:09:14
2	Zn 213.857†	959.6	83.5	0.6171	ug/L	0.6171	ppb	17:09:34
2	SiO2†	603.8	10.7	0.5423	ug/L	0.5423	ppb	17:10:14
3	Sc Radial	4823.8	4823.8	98.3	%			17:08:12
3	Y RADIAL	5537.0	5537.0	98.05	%			17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834	ug/L	11.834	ppb	17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300	ug/L	10.300	ppb	17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132	ug/L	-18.132	ppb	17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822	ug/L	13.822	ppb	17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369	ug/L	60.369	ppb	17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232	ug/L	30.232	ppb	17:08:12
3	Sr 421.552†	12.6	20.3	0.1063	ug/L	0.1063	ppb	17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05	%			17:09:39
3	Y 371.029	885792.9	885792.9	100.15	%			17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296	ug/L	-0.3296	ppb	17:09:44
3	As 188.979†	-34.7	1.9	0.5789	ug/L	0.5789	ppb	17:10:04
3	B 249.677†	-424.2	42.1	0.7986	ug/L	0.7986	ppb	17:10:04
3	Ba 233.527†	12.8	12.8	0.0818	ug/L	0.0818	ppb	17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557	ug/L	0.0557	ppb	17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147	ug/L	0.1147	ppb	17:10:04
3	Co 228.616†	-81.4	5.0	0.0830	ug/L	0.0830	ppb	17:10:04
3	Cr 267.716†	106.9	19.1	0.1704	ug/L	0.1704	ppb	17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477	ug/L	0.1477	ppb	17:09:44
3	Mn 257.610†	610.1	33.1	0.0284	ug/L	0.0284	ppb	17:10:04
3	Mo 202.031†	31.4	2.1	0.1121	ug/L	0.1121	ppb	17:10:04
3	Ni 231.604†	133.0	1.0	0.0189	ug/L	0.0189	ppb	17:10:04
3	P 214.914†	272.4	7.2	3.2450	ug/L	3.2450	ppb	17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314	ug/L	0.1314	ppb	17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316	ug/L	-0.9316	ppb	17:10:04
3	Sb 206.836†	35.8	1.1	0.3268	ug/L	0.3268	ppb	17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605	ug/L	-2.1605	ppb	17:10:04
3	Si 251.611†	612.6	54.6	1.3742	ug/L	1.3742	ppb	17:10:04
3	Sn 189.927†	12.1	16.5	2.1777	ug/L	2.1777	ppb	17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180	ug/L	-0.0180	ppb	17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673	ug/L	-1.9673	ppb	17:10:04
3	U 409.014†	-2701.8	73.4	1.9008	ug/L	1.9008	ppb	17:09:39
3	V 292.402†	-1606.8	2.4	0.0234	ug/L	0.0234	ppb	17:09:44
3	Zn 213.857†	941.9	55.9	0.4102	ug/L	0.4102	ppb	17:10:04
3	SiO2†	646.1	46.8	2.5143	ug/L	2.5143	ppb	17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         115.7      21.072 ug/L        7.6270      21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.0     -42.772 ug/L       91.5125     -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        125.9      35.327 ug/L        6.6209      35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 39
Sample ID: 241337002|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 12/4/2009 17:12:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241337002|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4939.1	4939.1	101	%			17:14:23
1	Y RADIAL	5651.7	5651.7	100.1	%			17:14:23
1	Al 396.153Radial†	8.6	52.3	34.515	ug/L	34.515	ppb	17:14:23
1	Ca 317.933Radial†	32.9	14.8	26.286	ug/L	26.286	ppb	17:14:43
1	Fe 238.204 Radial†	15.5	4.4	53.174	ug/L	53.174	ppb	17:14:43
1	K 766.490 Radial†	2690.4	104.9	18.975	ug/L	18.975	ppb	17:14:23
1	Mg 279.077 IEC†	0.4	-2.1	-94.003	ug/L	-94.003	ppb	17:14:43
1	Na 589.592 Radial†	-417.3	865.1	242.67	ug/L	242.67	ppb	17:14:23
1	Sr 421.552†	88.1	95.0	0.4982	ug/L	0.4982	ppb	17:14:23
1	Sc 361.383	1055549.1	1055549.1	101.55	%			17:15:39
1	Y 371.029	895984.4	895984.4	101.30	%			17:15:39
1	Ag 328.068†	407.4	-72.9	-0.2762	ug/L	-0.2762	ppb	17:15:44
1	As 188.979†	-42.7	-5.5	-1.6823	ug/L	-1.6823	ppb	17:16:04
1	B 249.677†	-412.4	59.9	1.1250	ug/L	1.1250	ppb	17:16:04
1	Ba 233.527†	154.1	151.7	0.9771	ug/L	0.9771	ppb	17:16:04
1	Be 313.107†	-4962.2	-12.7	-0.0024	ug/L	-0.0024	ppb	17:15:44
1	Cd 226.502†	-236.0	3.2	0.0241	ug/L	0.0241	ppb	17:16:04
1	Co 228.616†	-72.6	14.9	0.2427	ug/L	0.2427	ppb	17:16:04
1	Cr 267.716†	449.5	354.8	3.1875	ug/L	3.1875	ppb	17:16:04
1	Cu 324.752†	9187.3	110.0	0.2964	ug/L	0.2964	ppb	17:15:44
1	Mn 257.610†	4618.2	3971.2	3.7676	ug/L	3.7676	ppb	17:15:44
1	Mo 202.031†	38.7	8.8	0.4722	ug/L	0.4722	ppb	17:16:04
1	Ni 231.604†	235.6	100.0	1.9601	ug/L	1.9601	ppb	17:16:04
1	P 214.914†	283.6	14.1	6.2664	ug/L	6.2664	ppb	17:16:04
1	Pb 220.353†	-84.7	-7.9	-0.7336	ug/L	-0.7336	ppb	17:16:04
1	S 181.975 Axial†	63.2	2.1	2.2709	ug/L	2.2709	ppb	17:16:04
1	Sb 206.836†	54.9	19.4	5.0636	ug/L	5.0636	ppb	17:16:04
1	Se 196.026†	-23.5	-1.8	-0.5909	ug/L	-0.5909	ppb	17:16:04
1	Si 251.611†	3716.8	3102.6	78.778	ug/L	78.778	ppb	17:15:44
1	Sn 189.927†	5.1	9.3	1.2367	ug/L	1.2367	ppb	17:16:04
1	Ti 334.940†	-682.9	588.0	0.8091	ug/L	0.8091	ppb	17:15:44
1	Tl 190.801†	-67.1	-21.8	-5.2451	ug/L	-5.2451	ppb	17:16:04
1	U 409.014†	-2624.7	189.2	4.8797	ug/L	4.8797	ppb	17:15:39
1	V 292.402†	-1616.1	17.0	0.1011	ug/L	0.1011	ppb	17:15:44
1	Zn 213.857†	1070.2	168.4	1.2226	ug/L	1.2226	ppb	17:16:04
1	SiO2†	3698.2	3042.9	165.34	ug/L	165.34	ppb	17:17:10
2	Sc Radial	4987.8	4987.8	102	%			17:14:48
2	Y RADIAL	5710.7	5710.7	101.1	%			17:14:48
2	Al 396.153Radial†	10.2	53.9	35.534	ug/L	35.534	ppb	17:14:48
2	Ca 317.933Radial†	35.1	16.7	29.555	ug/L	29.555	ppb	17:15:08
2	Fe 238.204 Radial†	14.9	3.6	44.026	ug/L	44.026	ppb	17:15:08
2	K 766.490 Radial†	2646.2	35.2	6.2723	ug/L	6.2723	ppb	17:14:48
2	Mg 279.077 IEC†	5.8	3.2	142.00	ug/L	142.00	ppb	17:15:08
2	Na 589.592 Radial†	-441.3	845.5	237.18	ug/L	237.18	ppb	17:14:48
2	Sr 421.552†	107.5	113.2	0.5937	ug/L	0.5937	ppb	17:14:48
2	Sc 361.383	1044366.4	1044366.4	100.47	%			17:16:10
2	Y 371.029	886837.5	886837.5	100.27	%			17:16:10
2	Ag 328.068†	421.0	-55.0	-0.2059	ug/L	-0.2059	ppb	17:16:15
2	As 188.979†	-48.1	-11.2	-3.4890	ug/L	-3.4890	ppb	17:16:35
2	B 249.677†	-471.0	-2.7	-0.0572	ug/L	-0.0572	ppb	17:16:35
2	Ba 233.527†	130.3	129.8	0.8347	ug/L	0.8347	ppb	17:16:35
2	Be 313.107†	-4891.1	5.7	0.0036	ug/L	0.0036	ppb	17:16:15
2	Cd 226.502†	-241.5	-4.7	-0.0445	ug/L	-0.0445	ppb	17:16:35
2	Co 228.616†	-76.9	9.8	0.1596	ug/L	0.1596	ppb	17:16:35
2	Cr 267.716†	450.1	360.2	3.2364	ug/L	3.2364	ppb	17:16:35
2	Cu 324.752†	9175.5	195.1	0.5233	ug/L	0.5233	ppb	17:16:15
2	Mn 257.610†	4617.3	4019.0	3.8075	ug/L	3.8075	ppb	17:16:15
2	Mo 202.031†	40.3	10.9	0.5805	ug/L	0.5805	ppb	17:16:35
2	Ni 231.604†	214.6	81.7	1.6003	ug/L	1.6003	ppb	17:16:35

2	P 214.914†	285.2	18.8	8.3073	ug/L	8.3073 ppb	17:16:35
2	Pb 220.353†	-56.5	19.3	1.8185	ug/L	1.8185 ppb	17:16:35
2	S 181.975 Axial†	70.9	10.4	11.237	ug/L	11.237 ppb	17:16:35
2	Sb 206.836†	43.0	8.2	2.0961	ug/L	2.0961 ppb	17:16:35
2	Se 196.026†	-14.3	7.1	3.3086	ug/L	3.3086 ppb	17:16:35
2	Si 251.611†	3679.1	3104.3	78.825	ug/L	78.825 ppb	17:16:15
2	Sn 189.927†	-2.1	2.2	0.3000	ug/L	0.3000 ppb	17:16:35
2	Ti 334.940†	-609.1	654.1	0.9023	ug/L	0.9023 ppb	17:16:15
2	Tl 190.801†	-52.9	-8.4	-2.0128	ug/L	-2.0128 ppb	17:16:35
2	U 409.014†	-2757.1	29.8	0.7587	ug/L	0.7587 ppb	17:16:10
2	V 292.402†	-1651.7	-35.5	-0.1992	ug/L	-0.1992 ppb	17:16:15
2	Zn 213.857†	1062.7	172.2	1.2452	ug/L	1.2452 ppb	17:16:35
2	SiO2†	3676.7	3060.5	166.31	ug/L	166.31 ppb	17:17:16
3	Sc Radial	5076.2	5076.2	103	%		17:15:13
3	Y RADIAL	5838.0	5838.0	103.4	%		17:15:13
3	Al 396.153Radial†	19.9	63.0	41.604	ug/L	41.604 ppb	17:15:13
3	Ca 317.933Radial†	35.2	16.2	28.711	ug/L	28.711 ppb	17:15:33
3	Fe 238.204 Radial†	14.6	3.2	38.116	ug/L	38.116 ppb	17:15:33
3	K 766.490 Radial†	2727.7	68.7	12.372	ug/L	12.372 ppb	17:15:13
3	Mg 279.077 IEC†	1.2	-1.3	-57.992	ug/L	-57.992 ppb	17:15:33
3	Na 589.592 Radial†	-444.0	850.5	238.57	ug/L	238.57 ppb	17:15:13
3	Sr 421.552†	130.0	133.2	0.6985	ug/L	0.6985 ppb	17:15:13
3	Sc 361.383	1040268.4	1040268.4	100.08	%		17:16:40
3	Y 371.029	884097.6	884097.6	99.958	%		17:16:40
3	Ag 328.068†	389.8	-84.5	-0.3237	ug/L	-0.3237 ppb	17:16:45
3	As 188.979†	-39.2	-2.6	-0.7807	ug/L	-0.7807 ppb	17:17:05
3	B 249.677†	-455.5	10.9	0.2015	ug/L	0.2015 ppb	17:17:05
3	Ba 233.527†	137.2	137.1	0.8822	ug/L	0.8822 ppb	17:17:05
3	Be 313.107†	-4921.0	-43.3	-0.0118	ug/L	-0.0118 ppb	17:16:45
3	Cd 226.502†	-240.5	-4.7	-0.0434	ug/L	-0.0434 ppb	17:17:05
3	Co 228.616†	-84.3	2.1	0.0312	ug/L	0.0312 ppb	17:17:05
3	Cr 267.716†	470.8	382.7	3.4388	ug/L	3.4388 ppb	17:17:05
3	Cu 324.752†	9127.1	182.7	0.4898	ug/L	0.4898 ppb	17:16:45
3	Mn 257.610†	4569.5	3989.4	3.7826	ug/L	3.7826 ppb	17:16:45
3	Mo 202.031†	29.1	-0.1	-0.0034	ug/L	-0.0034 ppb	17:17:05
3	Ni 231.604†	231.8	99.7	1.9535	ug/L	1.9535 ppb	17:17:05
3	P 214.914†	274.6	9.3	4.0623	ug/L	4.0623 ppb	17:17:05
3	Pb 220.353†	-65.1	10.5	0.9878	ug/L	0.9878 ppb	17:17:05
3	S 181.975 Axial†	63.4	3.2	3.4870	ug/L	3.4870 ppb	17:17:05
3	Sb 206.836†	53.1	18.4	4.7710	ug/L	4.7710 ppb	17:17:05
3	Se 196.026†	-27.3	-5.9	-2.4795	ug/L	-2.4795 ppb	17:17:05
3	Si 251.611†	3631.6	3071.2	77.995	ug/L	77.995 ppb	17:16:45
3	Sn 189.927†	-4.7	-0.4	-0.0437	ug/L	-0.0437 ppb	17:17:05
3	Ti 334.940†	-622.9	638.0	0.8801	ug/L	0.8801 ppb	17:16:45
3	Tl 190.801†	-53.7	-9.4	-2.2420	ug/L	-2.2420 ppb	17:17:05
3	U 409.014†	-2759.0	17.1	0.4300	ug/L	0.4300 ppb	17:16:40
3	V 292.402†	-1605.2	4.5	0.0171	ug/L	0.0171 ppb	17:16:45
3	Zn 213.857†	1069.5	183.2	1.3312	ug/L	1.3312 ppb	17:17:05
3	SiO2†	3661.3	3059.5	166.27	ug/L	166.27 ppb	17:17:21

Mean Data: 241337002|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1046728.0	100.70	%	0.761				0.76%
Sc Radial	5001.1	102	%	1.4				1.39%
Y 371.029	888973.2	100.51	%	0.704				0.70%
Y RADIAL	5733.5	101.5	%	1.69				1.66%
Ag 328.068†	-70.8	-0.2686	ug/L	0.05924	-0.2686	ppb	0.05924	22.05%
Al 396.153Radial†	56.4	37.218	ug/L	3.8324	37.218	ppb	3.8324	10.30%
As 188.979†	-6.4	-1.9840	ug/L	1.37914	-1.9840	ppb	1.37914	69.51%
B 249.677†	22.7	0.4231	ug/L	0.62145	0.4231	ppb	0.62145	146.88%
Ba 233.527†	139.5	0.8980	ug/L	0.07248	0.8980	ppb	0.07248	8.07%
Be 313.107†	-16.8	-0.0035	ug/L	0.00774	-0.0035	ppb	0.00774	218.95%
Ca 317.933Radial†	15.9	28.184	ug/L	1.6974	28.184	ppb	1.6974	6.02%
Cd 226.502†	-2.1	-0.0213	ug/L	0.03925	-0.0213	ppb	0.03925	184.56%
Co 228.616†	8.9	0.1445	ug/L	0.10651	0.1445	ppb	0.10651	73.71%
Cr 267.716†	365.9	3.2876	ug/L	0.13324	3.2876	ppb	0.13324	4.05%
Cu 324.752†	162.6	0.4365	ug/L	0.12248	0.4365	ppb	0.12248	28.06%
Fe 238.204 Radial†	3.7	45.105	ug/L	7.5871	45.105	ppb	7.5871	16.82%
K 766.490 Radial†	69.6	12.539	ug/L	6.3528	12.539	ppb	6.3528	50.66%

Mg 279.077 IEC†	-0.1	-3.3306	ug/L	127.14471	-3.3306	ppb	127.14471	>999.9%
Mn 257.610†	3993.2	3.7859	ug/L	0.02017	3.7859	ppb	0.02017	0.53%
Mo 202.031†	6.5	0.3498	ug/L	0.31064	0.3498	ppb	0.31064	88.81%
Na 589.592 Radial†	853.7	239.47	ug/L	2.859	239.47	ppb	2.859	1.19%
Ni 231.604†	93.8	1.8379	ug/L	0.20586	1.8379	ppb	0.20586	11.20%
P 214.914†	14.1	6.2120	ug/L	2.12302	6.2120	ppb	2.12302	34.18%
Pb 220.353†	7.3	0.6909	ug/L	1.30166	0.6909	ppb	1.30166	188.40%
S 181.975 Axial†	5.3	5.6649	ug/L	4.86342	5.6649	ppb	4.86342	85.85%
Sb 206.836†	15.3	3.9769	ug/L	1.63537	3.9769	ppb	1.63537	41.12%
Se 196.026†	-0.2	0.0794	ug/L	2.95169	0.0794	ppb	2.95169	>999.9%
Si 251.611†	3092.7	78.533	ug/L	0.4663	78.533	ppb	0.4663	0.59%
Sn 189.927†	3.7	0.4977	ug/L	0.66266	0.4977	ppb	0.66266	133.15%
Sr 421.552†	113.8	0.5968	ug/L	0.10017	0.5968	ppb	0.10017	16.79%
Ti 334.940†	626.7	0.8638	ug/L	0.04869	0.8638	ppb	0.04869	5.64%
Tl 190.801†	-13.2	-3.1666	ug/L	1.80364	-3.1666	ppb	1.80364	56.96%
U 409.014†	78.7	2.0228	ug/L	2.47960	2.0228	ppb	2.47960	122.58%
V 292.402†	-4.7	-0.0270	ug/L	0.15494	-0.0270	ppb	0.15494	573.50%
Zn 213.857†	174.6	1.2664	ug/L	0.05730	1.2664	ppb	0.05730	4.52%
SiO2†	3054.3	165.97	ug/L	0.549	165.97	ppb	0.549	0.33%

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 18:01:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4830.0	4830.0	98.4	%			18:03:34
1	Y RADIAL	5529.5	5529.5	97.92	%			18:03:34
1	Al 396.153Radial†	7608.5	7777.9	5114.3	ug/L	5114.3	ppb	18:03:34
1	Ca 317.933Radial†	2838.8	2867.8	5077.6	ug/L	5077.6	ppb	18:03:54
1	Fe 238.204 Radial†	423.3	419.3	5084.9	ug/L	5084.9	ppb	18:03:54
1	K 766.490 Radial†	29286.1	27199.9	4948.8	ug/L	4948.8	ppb	18:03:34
1	Mg 279.077 IEC†	113.0	112.4	5035.0	ug/L	5035.0	ppb	18:03:54
1	Na 589.592 Radial†	33434.5	35266.2	9892.2	ug/L	9892.2	ppb	18:03:34
1	Sr 421.552†	94452.4	96018.5	503.71	ug/L	503.71	ppb	18:03:34
1	Sc 361.383	1035614.3	1035614.3	99.628	%			18:04:53
1	Y 371.029	868981.8	868981.8	98.249	%			18:04:53
1	Ag 328.068†	126389.0	126387.2	504.08	ug/L	504.08	ppb	18:04:53
1	As 188.979†	1566.5	1609.0	505.73	ug/L	505.73	ppb	18:05:13
1	B 249.677†	25789.7	26352.1	496.08	ug/L	496.08	ppb	18:04:53
1	Ba 233.527†	78461.3	78754.5	507.26	ug/L	507.26	ppb	18:04:53
1	Be 313.107†	1611683.8	1622579.0	506.90	ug/L	506.90	ppb	18:04:53
1	Cd 226.502†	57528.7	57979.3	505.44	ug/L	505.44	ppb	18:04:53
1	Co 228.616†	30048.6	30247.1	498.39	ug/L	498.39	ppb	18:05:13
1	Cr 267.716†	55897.5	56018.6	504.09	ug/L	504.09	ppb	18:04:53
1	Cu 324.752†	197518.4	189318.8	505.84	ug/L	505.84	ppb	18:04:53
1	Mn 257.610†	534062.2	535480.8	507.48	ug/L	507.48	ppb	18:04:53
1	Mo 202.031†	9485.8	9492.0	504.07	ug/L	504.07	ppb	18:05:13
1	Ni 231.604†	25499.9	25463.2	498.60	ug/L	498.60	ppb	18:05:13
1	P 214.914†	5884.7	5641.6	2447.0	ug/L	2447.0	ppb	18:05:13
1	Pb 220.353†	5298.3	5393.7	507.89	ug/L	507.89	ppb	18:05:13
1	S 181.975 Axial†	974.6	918.2	988.21	ug/L	988.21	ppb	18:05:13
1	Sb 206.836†	1936.0	1908.6	510.46	ug/L	510.46	ppb	18:05:13
1	Se 196.026†	1104.7	1130.2	520.64	ug/L	520.64	ppb	18:05:13
1	Si 251.611†	99034.8	98847.1	2498.4	ug/L	2498.4	ppb	18:04:53
1	Sn 189.927†	3777.7	3796.2	502.67	ug/L	502.67	ppb	18:05:13
1	Ti 334.940†	362106.9	364720.2	502.92	ug/L	502.92	ppb	18:04:53
1	Tl 190.801†	2016.9	2068.7	503.55	ug/L	503.55	ppb	18:05:13
1	U 409.014†	15956.3	18789.9	484.19	ug/L	484.19	ppb	18:04:53
1	V 292.402†	85828.1	87757.3	509.11	ug/L	509.11	ppb	18:04:53
1	Zn 213.857†	69570.7	68945.1	502.18	ug/L	502.18	ppb	18:04:53
1	SiO2†	99394.4	99166.7	5363.6	ug/L	5363.6	ppb	18:06:13
2	Sc Radial	4837.6	4837.6	98.5	%			18:03:59
2	Y RADIAL	5523.5	5523.5	97.81	%			18:03:59
2	Al 396.153Radial†	7635.5	7793.2	5124.5	ug/L	5124.5	ppb	18:03:59
2	Ca 317.933Radial†	2827.0	2851.3	5048.3	ug/L	5048.3	ppb	18:04:19
2	Fe 238.204 Radial†	425.3	420.7	5101.5	ug/L	5101.5	ppb	18:04:19
2	K 766.490 Radial†	29236.2	27102.5	4931.0	ug/L	4931.0	ppb	18:03:59
2	Mg 279.077 IEC†	116.1	115.4	5167.3	ug/L	5167.3	ppb	18:04:19
2	Na 589.592 Radial†	33358.2	35135.5	9855.5	ug/L	9855.5	ppb	18:03:59
2	Sr 421.552†	94046.6	95456.0	500.76	ug/L	500.76	ppb	18:03:59
2	Sc 361.383	1035808.6	1035808.6	99.646	%			18:05:20
2	Y 371.029	867528.3	867528.3	98.085	%			18:05:20
2	Ag 328.068†	126769.6	126745.3	505.50	ug/L	505.50	ppb	18:05:20
2	As 188.979†	1557.5	1599.7	502.84	ug/L	502.84	ppb	18:05:41
2	B 249.677†	25701.8	26259.1	494.32	ug/L	494.32	ppb	18:05:20
2	Ba 233.527†	78605.2	78884.1	508.09	ug/L	508.09	ppb	18:05:20
2	Be 313.107†	1608110.3	1618689.4	505.69	ug/L	505.69	ppb	18:05:20
2	Cd 226.502†	57666.3	58106.5	506.55	ug/L	506.55	ppb	18:05:20
2	Co 228.616†	29927.7	30120.2	496.29	ug/L	496.29	ppb	18:05:41
2	Cr 267.716†	55912.4	56023.0	504.13	ug/L	504.13	ppb	18:05:20
2	Cu 324.752†	197921.4	189686.1	506.82	ug/L	506.82	ppb	18:05:20
2	Mn 257.610†	534944.8	536266.0	508.23	ug/L	508.23	ppb	18:05:20
2	Mo 202.031†	9432.8	9437.1	501.16	ug/L	501.16	ppb	18:05:41
2	Ni 231.604†	25444.8	25403.1	497.42	ug/L	497.42	ppb	18:05:41

2	P 214.914†	5862.9	5618.6	2436.5 ug/L	2436.5 ppb	18:05:41
2	Pb 220.353†	5283.8	5378.1	506.42 ug/L	506.42 ppb	18:05:41
2	S 181.975 Axial†	962.8	906.1	975.23 ug/L	975.23 ppb	18:05:41
2	Sb 206.836†	1917.4	1889.5	505.30 ug/L	505.30 ppb	18:05:41
2	Se 196.026†	1087.0	1112.2	512.72 ug/L	512.72 ppb	18:05:41
2	Si 251.611†	99182.7	98977.0	2501.8 ug/L	2501.8 ppb	18:05:20
2	Sn 189.927†	3754.3	3771.9	499.47 ug/L	499.47 ppb	18:05:41
2	Ti 334.940†	362842.0	365389.7	503.84 ug/L	503.84 ppb	18:05:20
2	Tl 190.801†	1992.7	2044.0	497.59 ug/L	497.59 ppb	18:05:41
2	U 409.014†	15978.8	18809.5	484.69 ug/L	484.69 ppb	18:05:20
2	V 292.402†	85852.5	87765.6	509.12 ug/L	509.12 ppb	18:05:20
2	Zn 213.857†	69526.6	68887.7	501.76 ug/L	501.76 ppb	18:05:20
2	SiO2†	99499.1	99253.0	5368.4 ug/L	5368.4 ppb	18:06:19
3	Sc Radial	4799.2	4799.2	97.7 %		18:04:24
3	Y RADIAL	5498.6	5498.6	97.37 %		18:04:24
3	Al 396.153Radial†	7619.7	7839.0	5154.6 ug/L	5154.6 ppb	18:04:24
3	Ca 317.933Radial†	2853.2	2901.0	5136.3 ug/L	5136.3 ppb	18:04:44
3	Fe 238.204 Radial†	431.9	430.9	5225.2 ug/L	5225.2 ppb	18:04:44
3	K 766.490 Radial†	29093.2	27193.5	4947.7 ug/L	4947.7 ppb	18:04:24
3	Mg 279.077 IEC†	119.0	119.2	5339.1 ug/L	5339.1 ppb	18:04:44
3	Na 589.592 Radial†	32907.5	34945.0	9802.1 ug/L	9802.1 ppb	18:04:24
3	Sr 421.552†	93251.9	95406.2	500.50 ug/L	500.50 ppb	18:04:24
3	Sc 361.383	1038206.6	1038206.6	99.877 %		18:05:48
3	Y 371.029	871182.2	871182.2	98.498 %		18:05:48
3	Ag 328.068†	126926.4	126608.4	504.99 ug/L	504.99 ppb	18:05:48
3	As 188.979†	1576.5	1615.1	507.65 ug/L	507.65 ppb	18:06:08
3	B 249.677†	25829.6	26327.4	495.59 ug/L	495.59 ppb	18:05:48
3	Ba 233.527†	78220.4	78316.7	504.45 ug/L	504.45 ppb	18:05:48
3	Be 313.107†	1610405.9	1617260.4	505.24 ug/L	505.24 ppb	18:05:48
3	Cd 226.502†	57420.6	57726.9	503.22 ug/L	503.22 ppb	18:05:48
3	Co 228.616†	30208.3	30331.8	499.79 ug/L	499.79 ppb	18:06:08
3	Cr 267.716†	55861.2	55842.1	502.50 ug/L	502.50 ppb	18:05:48
3	Cu 324.752†	198284.6	189591.0	506.57 ug/L	506.57 ppb	18:05:48
3	Mn 257.610†	533597.1	533676.7	505.78 ug/L	505.78 ppb	18:05:48
3	Mo 202.031†	9542.9	9525.4	505.86 ug/L	505.86 ppb	18:06:08
3	Ni 231.604†	25662.7	25562.4	500.54 ug/L	500.54 ppb	18:06:08
3	P 214.914†	5892.8	5635.0	2443.9 ug/L	2443.9 ppb	18:06:08
3	Pb 220.353†	5325.7	5407.8	509.22 ug/L	509.22 ppb	18:06:08
3	S 181.975 Axial†	987.2	928.3	999.15 ug/L	999.15 ppb	18:06:08
3	Sb 206.836†	1957.6	1925.3	514.98 ug/L	514.98 ppb	18:06:08
3	Se 196.026†	1116.3	1139.0	525.06 ug/L	525.06 ppb	18:06:08
3	Si 251.611†	98993.5	98557.6	2491.0 ug/L	2491.0 ppb	18:05:48
3	Sn 189.927†	3799.2	3808.2	504.27 ug/L	504.27 ppb	18:06:08
3	Ti 334.940†	362935.3	364642.1	502.82 ug/L	502.82 ppb	18:05:48
3	Tl 190.801†	2018.1	2064.8	502.60 ug/L	502.60 ppb	18:06:08
3	U 409.014†	16280.7	19074.7	491.53 ug/L	491.53 ppb	18:05:48
3	V 292.402†	85865.0	87579.2	508.12 ug/L	508.12 ppb	18:05:48
3	Zn 213.857†	69400.3	68600.1	499.61 ug/L	499.61 ppb	18:05:48
3	SiO2†	98935.3	98458.0	5325.0 ug/L	5325.0 ppb	18:06:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036543.2	99.717	%	0.1389				0.14%
Sc Radial	4822.3	98.2	%	0.41				0.42%
Y 371.029	869230.8	98.277	%	0.2080				0.21%
Y RADIAL	5517.2	97.70	%	0.290				0.30%
Ag 328.068†	126580.3	504.86	ug/L	0.722	504.86	ppb	0.722	0.14%
QC value within limits for Ag 328.068 Recovery = 100.97%								
Al 396.153Radial†	7803.3	5131.1	ug/L	20.93	5131.1	ppb	20.93	0.41%
QC value within limits for Al 396.153Radial Recovery = 102.62%								
As 188.979†	1607.9	505.41	ug/L	2.420	505.41	ppb	2.420	0.48%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	26312.9	495.33	ug/L	0.906	495.33	ppb	0.906	0.18%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	78651.7	506.60	ug/L	1.909	506.60	ppb	1.909	0.38%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1619509.6	505.94	ug/L	0.858	505.94	ppb	0.858	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	2873.4	5087.4	ug/L	44.83	5087.4	ppb	44.83	0.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.75%
Cd 226.502†            57937.6      505.07 ug/L         1.691      505.07 ppb          1.691   0.33%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†            30233.1      498.16 ug/L         1.760      498.16 ppb          1.760   0.35%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            55961.2      503.57 ug/L         0.928      503.57 ppb          0.928   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.71%
Cu 324.752†           189532.0      506.41 ug/L         0.510      506.41 ppb          0.510   0.10%
   QC value within limits for Cu 324.752  Recovery = 101.28%
Fe 238.204 Radial†       423.6      5137.2 ug/L        76.66      5137.2 ppb         76.66   1.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27165.3      4942.5 ug/L         9.94      4942.5 ppb          9.94   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          115.6      5180.4 ug/L       152.48      5180.4 ppb        152.48   2.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.61%
Mn 257.610†           535141.2      507.16 ug/L         1.252      507.16 ppb          1.252   0.25%
   QC value within limits for Mn 257.610  Recovery = 101.43%
Mo 202.031†             9484.8      503.70 ug/L         2.371      503.70 ppb          2.371   0.47%
   QC value within limits for Mo 202.031  Recovery = 100.74%
Na 589.592 Radial†     35115.6      9849.9 ug/L        45.31      9849.9 ppb         45.31   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†            25476.2      498.85 ug/L         1.575      498.85 ppb          1.575   0.32%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              5631.7      2442.5 ug/L         5.37      2442.5 ppb          5.37   0.22%
   QC value within limits for P 214.914  Recovery = 97.70%
Pb 220.353†             5393.2      507.84 ug/L         1.401      507.84 ppb          1.401   0.28%
   QC value within limits for Pb 220.353  Recovery = 101.57%
S 181.975 Axial†         917.5      987.53 ug/L        11.972      987.53 ppb         11.972   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 98.75%
Sb 206.836†             1907.8      510.25 ug/L         4.840      510.25 ppb          4.840   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.05%
Se 196.026†             1127.2      519.48 ug/L         6.252      519.48 ppb          6.252   1.20%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            98793.9      2497.0 ug/L         5.50      2497.0 ppb          5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 99.88%
Sn 189.927†             3792.1      502.14 ug/L         2.448      502.14 ppb          2.448   0.49%
   QC value within limits for Sn 189.927  Recovery = 100.43%
Sr 421.552†            95626.9      501.65 ug/L         1.784      501.65 ppb          1.784   0.36%
   QC value within limits for Sr 421.552  Recovery = 100.33%
Ti 334.940†           364917.3      503.19 ug/L         0.566      503.19 ppb          0.566   0.11%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†             2059.2      501.25 ug/L         3.199      501.25 ppb          3.199   0.64%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†             18891.3      486.80 ug/L         4.105      486.80 ppb          4.105   0.84%
   QC value within limits for U 409.014  Recovery = 97.36%
V 292.402†             87700.7      508.78 ug/L         0.576      508.78 ppb          0.576   0.11%
   QC value within limits for V 292.402  Recovery = 101.76%
Zn 213.857†            68811.0      501.18 ug/L         1.379      501.18 ppb          1.379   0.28%
   QC value within limits for Zn 213.857  Recovery = 100.24%
SiO2†                  98959.2      5352.4 ug/L        23.80      5352.4 ppb         23.80   0.44%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
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Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 18:08:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4766.6	4766.6	97.1	%			18:10:25
1	Y RADIAL	5473.3	5473.3	96.92	%			18:10:25
1	Al 396.153Radial†	-20.4	22.8	15.038	ug/L	15.038	ppb	18:10:25
1	Ca 317.933Radial†	22.5	5.3	9.4050	ug/L	9.4050	ppb	18:10:45
1	Fe 238.204 Radial†	8.0	-2.8	-33.253	ug/L	-33.253	ppb	18:10:45
1	K 766.490 Radial†	2545.0	51.9	9.4686	ug/L	9.4686	ppb	18:10:25
1	Mg 279.077 IEC†	4.0	1.6	72.341	ug/L	72.341	ppb	18:10:45
1	Na 589.592 Radial†	-1272.2	-30.5	-8.5443	ug/L	-8.5443	ppb	18:10:25
1	Sr 421.552†	-32.1	-25.7	-0.1348	ug/L	-0.1348	ppb	18:10:25
1	Sc 361.383	1034609.2	1034609.2	99.531	%			18:11:42
1	Y 371.029	881696.7	881696.7	99.687	%			18:11:42
1	Ag 328.068†	446.5	-25.5	-0.1118	ug/L	-0.1118	ppb	18:11:47
1	As 188.979†	-33.8	2.6	0.8128	ug/L	0.8128	ppb	18:12:07
1	B 249.677†	-454.8	9.1	0.1770	ug/L	0.1770	ppb	18:12:07
1	Ba 233.527†	-2.6	-2.6	-0.0192	ug/L	-0.0192	ppb	18:12:07
1	Be 313.107†	-4791.6	59.7	0.0187	ug/L	0.0187	ppb	18:11:47
1	Cd 226.502†	-228.8	5.7	0.0536	ug/L	0.0536	ppb	18:12:07
1	Co 228.616†	-84.4	1.6	0.0263	ug/L	0.0263	ppb	18:12:07
1	Cr 267.716†	106.0	18.8	0.1679	ug/L	0.1679	ppb	18:12:07
1	Cu 324.752†	8941.8	46.4	0.1223	ug/L	0.1223	ppb	18:11:47
1	Mn 257.610†	570.8	-3.2	-0.0077	ug/L	-0.0077	ppb	18:12:07
1	Mo 202.031†	29.9	0.8	0.0391	ug/L	0.0391	ppb	18:12:07
1	Ni 231.604†	151.8	20.6	0.4030	ug/L	0.4030	ppb	18:12:07
1	P 214.914†	248.4	-15.6	-6.9397	ug/L	-6.9397	ppb	18:12:07
1	Pb 220.353†	-71.0	4.3	0.4060	ug/L	0.4060	ppb	18:12:07
1	S 181.975 Axial†	60.8	0.9	1.0132	ug/L	1.0132	ppb	18:12:07
1	Sb 206.836†	49.6	15.2	4.0184	ug/L	4.0184	ppb	18:12:07
1	Se 196.026†	-29.1	-7.9	-3.6032	ug/L	-3.6032	ppb	18:12:07
1	Si 251.611†	580.7	25.8	0.6494	ug/L	0.6494	ppb	18:12:07
1	Sn 189.927†	0.4	4.7	0.6278	ug/L	0.6278	ppb	18:12:07
1	Ti 334.940†	-1230.3	24.3	0.0350	ug/L	0.0350	ppb	18:11:47
1	Tl 190.801†	-42.1	1.9	0.4708	ug/L	0.4708	ppb	18:12:07
1	U 409.014†	-2850.8	-90.3	-2.3302	ug/L	-2.3302	ppb	18:11:42
1	V 292.402†	-1689.4	-88.8	-0.5058	ug/L	-0.5058	ppb	18:11:47
1	Zn 213.857†	887.3	5.9	0.0415	ug/L	0.0415	ppb	18:12:07
1	SiO2†	594.9	-1.3	-0.0849	ug/L	-0.0849	ppb	18:13:13
2	Sc Radial	4831.6	4831.6	98.4	%			18:10:50
2	Y RADIAL	5539.0	5539.0	98.08	%			18:10:50
2	Al 396.153Radial†	-19.9	23.6	15.571	ug/L	15.571	ppb	18:10:50
2	Ca 317.933Radial†	20.6	3.1	5.4395	ug/L	5.4395	ppb	18:11:10
2	Fe 238.204 Radial†	12.0	1.2	14.105	ug/L	14.105	ppb	18:11:10
2	K 766.490 Radial†	2640.1	113.3	20.647	ug/L	20.647	ppb	18:10:50
2	Mg 279.077 IEC†	6.5	4.1	183.27	ug/L	183.27	ppb	18:11:10
2	Na 589.592 Radial†	-1259.8	-0.2	-0.0693	ug/L	-0.0693	ppb	18:10:50
2	Sr 421.552†	-7.2	0.1	0.0004	ug/L	0.0004	ppb	18:10:50
2	Sc 361.383	1027067.1	1027067.1	98.806	%			18:12:12
2	Y 371.029	874594.2	874594.2	98.884	%			18:12:12
2	Ag 328.068†	449.8	-18.9	-0.0704	ug/L	-0.0704	ppb	18:12:17
2	As 188.979†	-40.3	-4.2	-1.3039	ug/L	-1.3039	ppb	18:12:37
2	B 249.677†	-427.8	33.1	0.6230	ug/L	0.6230	ppb	18:12:37
2	Ba 233.527†	-2.6	-2.6	-0.0166	ug/L	-0.0166	ppb	18:12:37
2	Be 313.107†	-4776.7	39.5	0.0122	ug/L	0.0122	ppb	18:12:17
2	Cd 226.502†	-219.3	13.7	0.1183	ug/L	0.1183	ppb	18:12:37
2	Co 228.616†	-75.9	9.5	0.1565	ug/L	0.1565	ppb	18:12:37
2	Cr 267.716†	97.6	11.0	0.0989	ug/L	0.0989	ppb	18:12:37
2	Cu 324.752†	8954.3	125.1	0.3347	ug/L	0.3347	ppb	18:12:17
2	Mn 257.610†	567.3	-2.6	-0.0044	ug/L	-0.0044	ppb	18:12:37
2	Mo 202.031†	27.2	-1.7	-0.0888	ug/L	-0.0888	ppb	18:12:37
2	Ni 231.604†	137.1	6.8	0.1336	ug/L	0.1336	ppb	18:12:37

2	P 214.914†	289.4	27.8	12.395	ug/L	12.395 ppb	18:12:37
2	Pb 220.353†	-86.1	-11.5	-1.0822	ug/L	-1.0822 ppb	18:12:37
2	S 181.975 Axial†	51.7	-7.8	-8.3923	ug/L	-8.3923 ppb	18:12:37
2	Sb 206.836†	34.7	0.5	0.1412	ug/L	0.1412 ppb	18:12:37
2	Se 196.026†	-20.9	0.2	0.1369	ug/L	0.1369 ppb	18:12:37
2	Si 251.611†	575.3	24.6	0.6161	ug/L	0.6161 ppb	18:12:37
2	Sn 189.927†	3.8	8.2	1.0891	ug/L	1.0891 ppb	18:12:37
2	Ti 334.940†	-1271.1	-26.0	-0.0353	ug/L	-0.0353 ppb	18:12:17
2	Tl 190.801†	-40.7	3.1	0.7471	ug/L	0.7471 ppb	18:12:37
2	U 409.014†	-2766.3	-25.8	-0.6692	ug/L	-0.6692 ppb	18:12:12
2	V 292.402†	-1617.8	-28.8	-0.1657	ug/L	-0.1657 ppb	18:12:17
2	Zn 213.857†	888.8	14.0	0.0937	ug/L	0.0937 ppb	18:12:37
2	SiO2†	620.8	29.3	1.5731	ug/L	1.5731 ppb	18:13:18
3	Sc Radial	4720.5	4720.5	96.1	%		18:11:15
3	Y RADIAL	5456.3	5456.3	96.62	%		18:11:15
3	Al 396.153Radial†	-34.8	7.6	5.0192	ug/L	5.0192 ppb	18:11:15
3	Ca 317.933Radial†	12.2	-5.1	-9.1137	ug/L	-9.1137 ppb	18:11:35
3	Fe 238.204 Radial†	9.7	-0.9	-10.769	ug/L	-10.769 ppb	18:11:35
3	K 766.490 Radial†	2595.0	129.5	23.622	ug/L	23.622 ppb	18:11:15
3	Mg 279.077 IEC†	2.1	-0.3	-11.938	ug/L	-11.938 ppb	18:11:35
3	Na 589.592 Radial†	-1312.6	-85.3	-23.919	ug/L	-23.919 ppb	18:11:15
3	Sr 421.552†	1.0	8.4	0.0443	ug/L	0.0443 ppb	18:11:15
3	Sc 361.383	1017127.6	1017127.6	97.849	%		18:12:42
3	Y 371.029	865924.7	865924.7	97.903	%		18:12:42
3	Ag 328.068†	366.4	-99.6	-0.4011	ug/L	-0.4011 ppb	18:12:47
3	As 188.979†	-29.3	6.6	2.0560	ug/L	2.0560 ppb	18:13:07
3	B 249.677†	-440.2	16.3	0.3089	ug/L	0.3089 ppb	18:13:07
3	Ba 233.527†	9.3	9.5	0.0592	ug/L	0.0592 ppb	18:13:07
3	Be 313.107†	-4801.3	-32.9	-0.0104	ug/L	-0.0104 ppb	18:12:47
3	Cd 226.502†	-236.4	-5.9	-0.0502	ug/L	-0.0502 ppb	18:13:07
3	Co 228.616†	-91.6	-7.3	-0.1196	ug/L	-0.1196 ppb	18:13:07
3	Cr 267.716†	114.8	29.6	0.2642	ug/L	0.2642 ppb	18:13:07
3	Cu 324.752†	8925.1	183.8	0.4903	ug/L	0.4903 ppb	18:12:47
3	Mn 257.610†	576.7	12.7	0.0111	ug/L	0.0111 ppb	18:13:07
3	Mo 202.031†	31.1	2.6	0.1363	ug/L	0.1363 ppb	18:13:07
3	Ni 231.604†	141.1	12.2	0.2399	ug/L	0.2399 ppb	18:13:07
3	P 214.914†	272.2	13.1	5.7950	ug/L	5.7950 ppb	18:13:07
3	Pb 220.353†	-73.4	0.5	0.0523	ug/L	0.0523 ppb	18:13:07
3	S 181.975 Axial†	54.0	-4.9	-5.2941	ug/L	-5.2941 ppb	18:13:07
3	Sb 206.836†	34.2	0.3	0.1003	ug/L	0.1003 ppb	18:13:07
3	Se 196.026†	-20.9	0.0	-0.0283	ug/L	-0.0283 ppb	18:13:07
3	Si 251.611†	567.7	22.6	0.5592	ug/L	0.5592 ppb	18:13:07
3	Sn 189.927†	3.6	8.0	1.0610	ug/L	1.0610 ppb	18:13:07
3	Ti 334.940†	-1272.2	-39.7	-0.0555	ug/L	-0.0555 ppb	18:12:47
3	Tl 190.801†	-39.6	3.8	0.9126	ug/L	0.9126 ppb	18:13:07
3	U 409.014†	-2696.8	17.9	0.4644	ug/L	0.4644 ppb	18:12:42
3	V 292.402†	-1683.0	-111.5	-0.6339	ug/L	-0.6339 ppb	18:12:47
3	Zn 213.857†	892.5	26.6	0.1945	ug/L	0.1945 ppb	18:13:07
3	SiO2†	608.0	22.3	1.1842	ug/L	1.1842 ppb	18:13:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026268.0	98.729	%	0.8435				0.85%
Sc Radial	4772.9	97.2	%	1.14				1.17%
Y 371.029	874071.9	98.825	%	0.8931				0.90%
Y RADIAL	5489.5	97.21	%	0.774				0.80%
Ag 328.068†	-48.0	-0.1945	ug/L	0.18018	-0.1945	ppb	0.18018	92.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.0	11.876	ug/L	5.9441	11.876	ppb	5.9441	50.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	0.5216	ug/L	1.69881	0.5216	ppb	1.69881	325.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.5	0.3696	ug/L	0.22913	0.3696	ppb	0.22913	61.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0078	ug/L	0.04452	0.0078	ppb	0.04452	572.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.1	0.0069	ug/L	0.01526	0.0069	ppb	0.01526	222.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	1.9103	ug/L	9.75075	1.9103	ppb	9.75075	510.44%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.5      0.0406 ug/L       0.08501      0.0406 ppb        0.08501 209.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.3      0.0211 ug/L       0.13814      0.0211 ppb        0.13814 655.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.8      0.1770 ug/L       0.08304      0.1770 ppb        0.08304  46.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               118.4      0.3158 ug/L       0.18470      0.3158 ppb        0.18470  58.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -9.9724 ug/L      23.68902     -9.9724 ppb       23.68902 237.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          98.3      17.912 ug/L        7.4622      17.912 ppb         7.4622  41.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.8      81.225 ug/L       97.9077      81.225 ppb        97.9077 120.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0003 ug/L       0.01006     -0.0003 ppb        0.01006 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0289 ug/L       0.11291      0.0289 ppb        0.11291 390.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -38.7     -10.844 ug/L       12.0902     -10.844 ppb       12.0902 111.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.2      0.2588 ug/L       0.13570      0.2588 ppb        0.13570  52.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7502 ug/L       9.82845      3.7502 ppb        9.82845 262.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.3     -0.2079 ug/L       0.77747     -0.2079 ppb        0.77747 373.89%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.9     -4.2244 ug/L       4.79313     -4.2244 ppb        4.79313 113.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.3      1.4200 ug/L       2.25041      1.4200 ppb        2.25041 158.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.5     -1.1649 ug/L       2.11326     -1.1649 ppb        2.11326 181.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.3      0.6082 ug/L       0.04564      0.6082 ppb        0.04564   7.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.0      0.9260 ug/L       0.25857      0.9260 ppb        0.25857  27.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.7     -0.0300 ug/L       0.09336     -0.0300 ppb        0.09336 310.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.8     -0.0186 ug/L       0.04751     -0.0186 ppb        0.04751 255.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      0.7102 ug/L       0.22320      0.7102 ppb        0.22320  31.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.7     -0.8450 ug/L       1.40556     -0.8450 ppb        1.40556 166.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -76.4     -0.4351 ug/L       0.24200     -0.4351 ppb        0.24200  55.62%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                15.5      0.1099 ug/L       0.07776      0.1099 ppb        0.07776  70.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      16.8      0.8908 ug/L       0.86705      0.8908 ppb        0.86705  97.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 14:45:06
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.293
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1083.0	1083.041	31.331	2.9
	Mg	24.0	17160.1	17160.100	83.179	0.5
	Co	58.9	41851.8	41851.817	233.658	0.6
	Rh	102.9	69668.7	69668.682	726.654	1.0
	In	114.9	88317.6	88317.573	728.115	0.8
	Pb	208.0	54128.4	54128.357	444.880	0.8
⌈>	Ba	137.9	76857.7	76857.668	361.085	0.5
⌊	Ba++	69.0	1192.0	0.016	0.000	2.2
⌈>	Ce	139.9	92145.2	92145.232	645.220	0.7
⌊	CeO	155.9	1941.5	0.021	0.000	1.3
	Bkgd	220.0	4.6	4.600	1.710	37.2

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.0	649.7
Co	59	15	7.0	23678.9
In	115	15	8.3	56319.1

ICPMS #4 TUNING REPORT

File Name: 091205.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	604	2060	0.678
Be	9.0	9.0	2044	2055	0.677
Mg	24.0	24.0	5675	2085	0.609
Mg	25.0	25.0	5949	2080	0.649
Mg	26.0	26.0	6152	2095	0.653
Co	58.9	58.9	14166	2120	0.711
Rh	102.9	102.9	24871	2220	0.689
In	114.9	114.9	27780	2255	0.676
Ce	139.9	139.9	33857	2300	0.664
Pb	206.0	206.0	49925	2460	0.687
Pb	207.0	207.0	50113	2380	0.647
Pb	208.0	208.0	50436	2490	0.665
U	238.1	238.0	57686	2480	0.669

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 01:51:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Blank.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94881	
|	Sb	121		ug/L		206	
⌊	Sb	123		ug/L		168	
⌈>	Lu	175		ug/L		124843	
⌊	U	238		ug/L		274	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 01:53:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		93794	93794.222
|	Sb	121	10.000	ug/L	1.806	14981	0.158
⌊	Sb	123		ug/L		11540	0.121
⌈>	Lu	175		ug/L		124991	124991.001
⌊	U	238	10.000	ug/L	1.907	105780	0.844

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 01:55:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97726	97726.327
|	Sb	121	100.045	ug/L	2.339	161443	1.650
⌊	Sb	123		ug/L		123252	1.259
⌈>	Lu	175		ug/L		131325	131324.849
⌊	U	238	99.969	ug/L	1.560	1075405	8.186

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 01:58:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101548	101548.169
|	Sb	121	47.532	ug/L	3.319	79808	0.784
⌊	Sb	123		ug/L		60743	0.596
⌈>	Lu	175		ug/L		131776	131776.014
⌊	U	238	52.464	ug/L	0.204	566416	4.296

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.0			
|	Sb	121	95.063				
⌊	Sb	123					
⌈>	Lu	175		105.6			
⌊	U	238	104.928				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 02:00:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99963	99963.314
|	Sb	121	**0.646**	ug/L	2.928	1282	0.011
⌊	Sb	123		ug/L		1016	0.008
⌈>	Lu	175		ug/L		129577	129576.659
⌊	U	238	**0.007**	ug/L	20.004	363	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		105.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		103.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 02:03:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99922	99922.127
|	Sb	121	**3.019**	ug/L	2.978	5191	0.050
⌊	Sb	123		ug/L		4004	0.038
⌈>	Lu	175		ug/L		130370	130370.500
⌊	U	238	**0.218**	ug/L	0.590	2617	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		105.3			
|	Sb	121	100.629				
⌊	Sb	123					
⌈>	Lu	175		104.4			
⌊	U	238	109.180				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 02:05:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96099	96098.868
|	Sb	121	**0.275**	ug/L	5.749	645	0.005
⌊	Sb	123		ug/L		499	0.003
⌈>	Lu	175		ug/L		136251	136251.066
⌊	U	238	**-0.012**	ug/L	5.267	161	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.3			
|	Sb	121	275.478				
⌊	Sb	123					
⌈>	Lu	175		109.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 02:08:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		95824	95823.967
|	Sb	121	**22.746**	ug/L	1.165	36149	0.375
⌊	Sb	123		ug/L		27696	0.287
⌈>	Lu	175		ug/L		134971	134970.625
⌊	U	238	**21.753**	ug/L	0.441	240717	1.781

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.0			
|	Sb	121	113.163				
⌊	Sb	123					
⌈>	Lu	175		108.1			
⌊	U	238	108.764				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:10:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.667

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		105255	105255.407
|	Sb	121	**46.271**	ug/L	3.521	80528	0.763
⌊	Sb	123		ug/L		61839	0.586
⌈>	Lu	175		ug/L		137607	137607.309
⌊	U	238	**52.272**	ug/L	0.865	589321	4.280

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.9			
|	Sb	121	92.543				
⌊	Sb	123					
⌈>	Lu	175		110.2			
⌊	U	238	104.544				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:13:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.668

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103341	103341.175
|	Sb	121	0.466	ug/L	1.179	1019	0.008
⌊	Sb	123		ug/L		786	0.006
⌈>	Lu	175		ug/L		134147	134146.585
⌊	U	238	0.007	ug/L	53.173	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.9			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 02:15:39
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.669

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98677	98677.061
|	Sb	121	0.297	ug/L	11.519	697	0.005
⌊	Sb	123		ug/L		532	0.004
⌈>	Lu	175		ug/L		134491	134490.586
⌊	U	238	-0.019	ug/L	6.656	81	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		104.0			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 02:18:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.670

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94240	94239.748
|	Sb	121	60.514	ug/L	4.873	94098	0.998
⌊	Sb	123		ug/L		71790	0.761
⌈>	Lu	175		ug/L		131309	131309.045
⌊	U	238	58.935	ug/L	4.695	633198	4.826

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.3			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		105.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 02:23:17
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.672

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97907	97907.017
|	Sb	121	0.053	ug/L	29.941	298	0.001
⌊	Sb	123		ug/L		221	0.000
⌈>	Lu	175		ug/L		134933	134932.994
⌊	U	238	-0.021	ug/L	3.566	68	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		103.2			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		108.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 02:25:49
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.673

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97276	97275.842
|	Sb	121	**230.692**	ug/L	1.853	370180	3.804
⌊	Sb	123		ug/L		285040	2.929
⌈>	Lu	175		ug/L		138254	138254.229
⌊	U	238	**56.663**	ug/L	0.828	641847	4.640

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		102.5			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		110.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 02:28:20
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.674

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102303	102302.909
|	Sb	121	**0.116**	ug/L	8.019	418	0.002
⌊	Sb	123		ug/L		342	0.002
⌈>	Lu	175		ug/L		133000	132999.932
⌊	U	238	**-0.011**	ug/L	8.371	173	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		106.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:33:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104645	104645.062
|	Sb	121	**44.663**	ug/L	3.625	77290	0.736
⌊	Sb	123		ug/L		58955	0.562
⌈>	Lu	175		ug/L		135843	135843.408
⌊	U	238	**52.000**	ug/L	1.107	578638	4.258

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.3			
|	Sb	121	89.325				
⌊	Sb	123					
⌈>	Lu	175		108.8			
⌊	U	238	103.999				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:35:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.677

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102840	102840.323
|	Sb	121	**0.475**	ug/L	4.081	1029	0.008
⌊	Sb	123		ug/L		832	0.006
⌈>	Lu	175		ug/L		134766	134766.026
⌊	U	238	**0.007**	ug/L	27.530	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241337001
Sample Date/Time: Sunday, December 06, 2009 02:38:21
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241337001.678

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99110	99109.644
|	Sb	121	0.256	ug/L	5.693	634	0.004
⌊	Sb	123		ug/L		500	0.003
⌈>	Lu	175		ug/L		133048	133047.753
⌊	U	238	-0.019	ug/L	1.095	87	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		104.5			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		106.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241337002
Sample Date/Time: Sunday, December 06, 2009 02:40:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241337002.679

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97109	97108.614
|	Sb	121	0.065	ug/L	8.008	315	0.001
⌊	Sb	123		ug/L		237	0.001
⌈>	Lu	175		ug/L		133137	133137.343
⌊	U	238	-0.019	ug/L	1.929	82	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		102.3			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		106.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:58:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.686

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103529	103529.259
|	Sb	121	**44.137**	ug/L	2.888	75555	0.728
⌊	Sb	123		ug/L		57698	0.556
⌈>	Lu	175		ug/L		134829	134828.672
⌊	U	238	**52.172**	ug/L	1.163	576272	4.272

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		109.1			
|	Sb	121	88.274				
⌊	Sb	123					
⌈>	Lu	175		108.0			
⌊	U	238	104.345				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 03:01:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.687

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102555	102554.905
|	Sb	121	0.469	ug/L	4.748	1016	0.008
⌊	Sb	123		ug/L		811	0.006
⌈>	Lu	175		ug/L		132021	132021.280
⌊	U	238	0.008	ug/L	9.369	378	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.1			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		105.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 06:48:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Blank.698

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		103990	
Sb	121		ug/L		387	
Sb	123		ug/L		284	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115					
Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 06:50:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.699

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		104439	104438.648
Sb	121	10.000	ug/L	3.353	15696	0.147
Sb	123		ug/L		12228	0.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115					
Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 06:53:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.700

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		102809	102808.739
Sb	121	100.057	ug/L	1.734	160268	1.555
Sb	123		ug/L		122687	1.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115					
Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 06:55:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.701

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104936	104936.382
|	Sb	121	47.429	ug/L	2.427	77727	0.737
⌊	Sb	123		ug/L		59633	0.566

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		100.9			
|	Sb	121	94.858				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 06:57:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103664	103664.345
|	Sb	121	**0.577**	ug/L	6.610	1314	0.009
⌊	Sb	123		ug/L		1011	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.7			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 07:00:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.703

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		103667	103667.137
	Sb	121	3.003	ug/L	2.855	5223	0.047
	Sb	123		ug/L		4048	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		99.7			
	Sb	121	100.103				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 07:02:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.704

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96888	96888.062
|	Sb	121	0.157	ug/L	17.849	596	0.002
⌊	Sb	123		ug/L		456	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		93.2			
|	Sb	121	156.604				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 07:04:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.705

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		97262	97261.862
	Sb	121	22.379	ug/L	2.910	34184	0.348
	Sb	123		ug/L		26455	0.269

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		93.5			
	Sb	121	111.337				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:07:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.706

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		104423	104422.693
	Sb	121	**45.130**	ug/L	0.662	73637	0.702
	Sb	123		ug/L		56804	0.541

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		100.4			
	Sb	121	90.261				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:09:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.707

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103475	103475.010
|	Sb	121	0.373	ug/L	6.997	985	0.006
⌊	Sb	123		ug/L		765	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.5			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 07:11:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		99218	99217.948
	Sb	121	0.232	ug/L	1.796	727	0.004
	Sb	123		ug/L		547	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		95.4			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 07:14:23
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98264	98264.209
|	Sb	121	57.361	ug/L	4.434	87916	0.892
⌊	Sb	123		ug/L		66805	0.677

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		94.5			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 07:19:16
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.711

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98799	98799.490
|	Sb	121	-0.050	ug/L	7.222	290	-0.001
⌊	Sb	123		ug/L		239	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.0			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 07:21:42
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.712

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98020	98019.587
|	Sb	121	232.616	ug/L	5.328	354564	3.616
⌊	Sb	123		ug/L		273620	2.790

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		94.3			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 07:24:06
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.713

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101812	101811.784
|	Sb	121	0.073	ug/L	16.762	494	0.001
⌊	Sb	123		ug/L		385	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		97.9			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:28:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.715

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		102894	102894.081
	Sb	121	52.491	ug/L	4.276	84269	0.816
	Sb	123		ug/L		63858	0.618

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		98.9			
	Sb	121	104.981				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:31:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.716

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103848	103848.492
|	Sb	121	0.180	ug/L	15.753	676	0.003
⌊	Sb	123		ug/L		524	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.9			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241337001
Sample Date/Time: Sunday, December 06, 2009 07:33:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241337001.717

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99718	99717.840
|	Sb	121	0.060	ug/L	12.044	464	0.001
⌊	Sb	123		ug/L		336	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.9			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241337002
Sample Date/Time: Sunday, December 06, 2009 07:36:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241337002.718

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98508	98507.983
|	Sb	121	-0.064	ug/L	28.332	268	-0.001
⌊	Sb	123		ug/L		219	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		94.7			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:53:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.725

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		100744	100743.848
|	Sb	121	51.860	ug/L	4.854	81554	0.806
⌊	Sb	123		ug/L		62632	0.619

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		96.9			
|	Sb	121	103.720				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:55:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.726

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		101982	101982.020
	Sb	121	**0.146**	ug/L	15.157	610	0.002
	Sb	123		ug/L		466	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		98.1			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, December 04, 2009 17:10:05
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1393
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3656.5	3656.468	46.959	1.3
	Mg	24.0	33148.4	33148.415	197.622	0.6
	Co	58.9	77411.2	77411.206	1133.042	1.5
	Rh	102.9	141123.3	141123.253	984.846	0.7
	In	114.9	192067.3	192067.328	2730.625	1.4
	Pb	208.0	142811.1	142811.081	483.021	0.3
⌈>	Ba	137.9	191898.6	191898.598	1606.226	0.8
⌊	Ba++	69.0	3033.7	0.016	0.000	1.1
⌈>	Ce	139.9	239168.6	239168.575	2249.215	0.9
⌊	CeO	155.9	4645.9	0.019	0.000	1.3
	Bkgd	220.0	17.2	17.200	2.280	13.3

Current Optimization File Data

Current Value	Description
0.82	Nebulizer Gas Flow
6.25	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	5.8	3946.9
Co	59	9	6.0	76591.8
In	115	9	6.5	198967.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2060	0.592
Be	9.0	9.0	2066	2070	0.631
Mg	24.0	24.0	5699	2070	0.696
Mg	25.0	25.0	5915	2075	0.626
Mg	26.0	26.0	6201	2070	0.658
Co	58.9	59.0	14190	2095	0.653
Rh	102.9	102.9	24874	2160	0.628
In	114.9	114.9	27788	2180	0.627
Ce	139.9	139.9	33872	2195	0.644
Pb	206.0	206.0	49948	2290	0.613
Pb	207.0	207.0	50159	2260	0.606
Pb	208.0	208.0	50451	2280	0.640
U	238.1	238.1	57732	2295	0.653

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 02:29:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Blank.654

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		83	
	Be	9		ug/L		12	
	B	11		ug/L		565	
	Na	23		ug/L		7002	
	Mg	24		ug/L		3000	
	Al	27		ug/L		8003	
	P	31		ug/L		3471	
	K	39		ug/L		457208	
	Ca	43		ug/L		213	
>	Sc	45		ug/L		325296	
	Ti	47		ug/L		307	
	V	51		ug/L		5688	
	Cr	52		ug/L		-1171	
	Cr	53		ug/L		67764	
	Mn	55		ug/L		1013	
	Fe	57		ug/L		6366	
	Co	59		ug/L		113	
	Ni	60		ug/L		81	
	Cu	63		ug/L		175	
	Cu	65		ug/L		94	
	Zn	66		ug/L		258	
	Zn	67		ug/L		6067	
	Zn	68		ug/L		747	
>	Ge	74		ug/L		367892	
	As	75		ug/L		147	
	Se	77		ug/L		3492	
	Se	82		ug/L		-11	
	Kr	83		ug/L		110	
	Sr	88		ug/L		189	
	Y	89		ug/L		59	
	Mo	98		ug/L		110	
	Ag	107		ug/L		55	
	Cd	111		ug/L		24	
	Cd	114		ug/L		54	
>	In	115		ug/L		223674	
	Sn	120		ug/L		439	
	Sb	121		ug/L		548	
	Sb	123		ug/L		448	
	Ba	135		ug/L		38	
	Ba	137		ug/L		61	
	Ho	165		ug/L		40	
>	Lu	175		ug/L		367322	
	Tl	205		ug/L		712	
	Pb	208		ug/L		984	
	Bi	209		ug/L		376	
	Th	232		ug/L		1896	
	U	238		ug/L		408	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 02:36:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 1.655

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.268	15542	0.048
	Be	9	10.000	ug/L	0.927	3331	0.010
	B	11	20.000	ug/L	4.411	6183	0.017
	Na	23	1000.000	ug/L	2.304	2871399	8.893
	Mg	24	1000.000	ug/L	0.121	1863055	5.774
	Al	27	1000.000	ug/L	7.415	2926472	9.062
	P	31	1000.000	ug/L	3.205	182352	0.555
	K	39	1000.000	ug/L	11.422	4958549	13.998
	Ca	43	1000.000	ug/L	1.960	9893	0.030
>	Sc	45		ug/L		322144	322144.200
	Ti	47	10.000	ug/L	1.104	5000	0.015
	V	51	10.000	ug/L	8.230	62190	0.176
	Cr	52	10.000	ug/L	0.249	43558	0.139
	Cr	53		ug/L		79619	0.039
	Mn	55	10.000	ug/L	0.164	78434	0.240
	Fe	57	1000.000	ug/L	1.712	164717	0.492
	Co	59	10.000	ug/L	2.061	58983	0.183
	Ni	60	10.000	ug/L	2.986	12462	0.038
	Cu	63		ug/L		30558	0.094
	Cu	65	10.000	ug/L	1.703	14838	0.046
	Zn	66	10.000	ug/L	2.419	10687	0.028
	Zn	67		ug/L		8046	0.005
	Zn	68		ug/L		8364	0.021
>	Ge	74		ug/L		367660	367660.467
	As	75	10.000	ug/L	0.994	10809	0.029
	Se	77		ug/L		4931	0.004
	Se	82	10.000	ug/L	4.356	1088	0.003
	Kr	83		ug/L		106	-0.000
	Sr	88	10.000	ug/L	0.458	124702	0.559
	Y	89		ug/L		63	0.000
	Mo	98	10.000	ug/L	0.600	28839	0.129
	Ag	107	10.000	ug/L	0.886	49442	0.222
	Cd	111	10.000	ug/L	0.816	12165	0.055
	Cd	114		ug/L		28717	0.129
>	In	115		ug/L		222563	222563.256
	Sn	120	10.000	ug/L	4.055	49744	0.222
	Sb	121	10.000	ug/L	11.691	35653	0.158
	Sb	123		ug/L		28005	0.124
	Ba	135		ug/L		13512	0.037
	Ba	137	10.000	ug/L	0.828	24071	0.066
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		364712	364711.741
	Tl	205	10.000	ug/L	1.179	153881	0.420
	Pb	208	10.000	ug/L	1.449	235761	0.644
	Bi	209		ug/L		384	0.000
	Th	232	10.000	ug/L	1.876	272227	0.741
	U	238	10.000	ug/L	1.851	300336	0.822

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 02:42:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 2.656

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.980**	ug/L	0.704	156240	0.470
	Be	9	**99.961**	ug/L	0.979	32944	0.099
	B	11	**200.020**	ug/L	3.536	59127	0.176
	Na	23	**10006.696**	ug/L	2.940	31684406	95.373
	Mg	24	**10011.906**	ug/L	5.136	21789350	65.623
	Al	27	**10002.905**	ug/L	10.624	30963959	93.355
	P	31	**9989.801**	ug/L	1.904	1675066	5.035
	K	39	**9997.962**	ug/L	7.215	45973459	137.155
	Ca	43	**9997.517**	ug/L	3.951	97522	0.293
>	Sc	45		ug/L		332045	332045.124
	Ti	47	**100.007**	ug/L	2.350	49067	0.147
	V	51	**99.984**	ug/L	3.276	579381	1.728
	Cr	52	**99.982**	ug/L	2.030	451432	1.364
	Cr	53		ug/L		145292	0.229
	Mn	55	**99.966**	ug/L	1.870	772327	2.323
	Fe	57	**9988.172**	ug/L	4.279	1464426	4.393
	Co	59	**99.957**	ug/L	0.728	581507	1.751
	Ni	60	**99.981**	ug/L	0.989	125275	0.377
	Cu	63		ug/L		299907	0.903
	Cu	65	**99.971**	ug/L	2.592	147706	0.445
	Zn	66	**99.987**	ug/L	1.708	104895	0.280
	Zn	67		ug/L		24828	0.050
	Zn	68		ug/L		76488	0.203
>	Ge	74		ug/L		373529	373528.738
	As	75	**100.010**	ug/L	0.969	109601	0.293
	Se	77		ug/L		13814	0.027
	Se	82	**99.964**	ug/L	1.181	10769	0.029
	Kr	83		ug/L		138	0.000
	Sr	88	**99.942**	ug/L	0.937	1178005	5.282
	Y	89		ug/L		156	0.000
	Mo	98	**99.993**	ug/L	2.875	285749	1.281
	Ag	107	**99.956**	ug/L	1.702	473704	2.124
	Cd	111	**99.976**	ug/L	1.185	118713	0.532
	Cd	114		ug/L		279353	1.253
>	In	115		ug/L		222981	222980.818
	Sn	120	**99.993**	ug/L	1.690	490793	2.199
	Sb	121	**100.112**	ug/L	9.451	396906	1.779
	Sb	123		ug/L		312221	1.399
	Ba	135		ug/L		133607	0.375
	Ba	137	**99.998**	ug/L	0.628	234019	0.657
	Ho	165		ug/L		53	0.000
>	Lu	175		ug/L		356006	356005.501
	Tl	205	**99.865**	ug/L	1.271	1316358	3.696
	Pb	208	**99.921**	ug/L	0.369	2123639	5.963
	Bi	209		ug/L		521	0.000
	Th	232	**99.954**	ug/L	1.354	2524233	7.085
	U	238	**99.877**	ug/L	2.285	2604978	7.316

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 02:48:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 1.657

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.754**	**ug/L**	1.871	81520	0.243
	Be	9	**52.697**	**ug/L**	3.657	17497	0.052
	B	11	**109.542**	**ug/L**	3.920	32884	0.097
	Na	23	**4602.047**	**ug/L**	2.954	14687911	43.862
	Mg	24	**4978.796**	**ug/L**	2.172	10917581	32.633
	Al	27	**4758.204**	**ug/L**	3.854	14862464	44.407
	P	31	**5275.789**	**ug/L**	1.572	893070	2.659
	K	39	**4730.387**	**ug/L**	10.830	22204413	64.893
	Ca	43	**5059.015**	**ug/L**	0.813	49855	0.148
>	Sc	45		**ug/L**		334573	334573.295
	Ti	47	**50.275**	**ug/L**	4.388	24999	0.074
	V	51	**51.547**	**ug/L**	1.584	303857	0.891
	Cr	52	**51.730**	**ug/L**	3.000	234714	0.705
	Cr	53		**ug/L**		112569	0.128
	Mn	55	**51.930**	**ug/L**	3.638	404616	1.207
	Fe	57	**5181.134**	**ug/L**	0.099	768921	2.279
	Co	59	**49.440**	**ug/L**	2.075	289817	0.866
	Ni	60	**50.089**	**ug/L**	0.920	63283	0.189
	Cu	63		**ug/L**		157248	0.470
	Cu	65	**51.541**	**ug/L**	2.414	76765	0.229
	Zn	66	**51.172**	**ug/L**	0.975	53884	0.143
	Zn	67		**ug/L**		16218	0.027
	Zn	68		**ug/L**		39964	0.105
>	Ge	74		**ug/L**		374072	374071.882
	As	75	**47.863**	**ug/L**	3.253	52598	0.140
	Se	77		**ug/L**		9276	0.015
	Se	82	**49.996**	**ug/L**	1.532	5389	0.014
	Kr	83		**ug/L**		129	0.000
	Sr	88	**51.089**	**ug/L**	1.916	599434	2.700
	Y	89		**ug/L**		107	0.000
	Mo	98	**50.405**	**ug/L**	3.850	143408	0.646
	Ag	107	**50.413**	**ug/L**	1.470	237837	1.071
	Cd	111	**50.386**	**ug/L**	2.430	59555	0.268
	Cd	114		**ug/L**		141968	0.639
>	In	115		**ug/L**		221956	221955.880
	Sn	120	**51.024**	**ug/L**	3.316	249445	1.122
	Sb	121	**48.038**	**ug/L**	11.255	189857	0.854
	Sb	123		**ug/L**		148988	0.670
	Ba	135		**ug/L**		67472	0.186
	Ba	137	**49.832**	**ug/L**	2.258	118635	0.327
	Ho	165		**ug/L**		81	0.000
>	Lu	175		**ug/L**		362133	362133.114
	Tl	205	**51.019**	**ug/L**	1.264	684350	1.888
	Pb	208	**52.132**	**ug/L**	1.299	1127496	3.111
	Bi	209		**ug/L**		421	0.000
	Th	232	**50.374**	**ug/L**	2.626	1294845	3.571
	U	238	**52.866**	**ug/L**	1.221	1402577	3.872

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	103.509				
	Be	9	105.394				
	B	11	109.542				
	Na	23	92.041				
	Mg	24	99.576				
	Al	27	94.222				
	P	31	105.516				
	K	39	94.608				
	Ca	43	101.180				
>	Sc	45		102.9			
	Ti	47	100.551				
	V	51	103.094				
	Cr	52	103.461				
	Cr	53					
	Mn	55	103.859				
	Fe	57	103.623				
	Co	59	98.879				
	Ni	60	100.178				
	Cu	63					
	Cu	65	103.083				
	Zn	66	102.345				
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75	95.725				
	Se	77					
	Se	82	99.991				
	Kr	83					
	Sr	88	102.179				
	Y	89					
	Mo	98	100.809				
	Ag	107	100.826				
	Cd	111	100.772				
	Cd	114					
>	In	115		99.2			
	Sn	120	102.048				
	Sb	121	96.075				
	Sb	123					
	Ba	135					
	Ba	137	99.663				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	102.038				
	Pb	208	104.263				
	Bi	209					
	Th	232	100.747				
	U	238	105.731				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 02:54:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 2.658

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.040**	ug/L	30.669	143	0.000
	Be	9	**0.026**	ug/L	6.323	20	0.000
	B	11	**5.314**	ug/L	12.145	2075	0.005
	Na	23	**2.832**	ug/L	53.845	15676	0.027
	Mg	24	**3.017**	ug/L	34.751	9336	0.020
	Al	27	**2.320**	ug/L	66.584	15008	0.022
	P	31	**4.079**	ug/L	25.449	4108	0.002
	K	39	**2.526**	ug/L	154.623	464775	0.035
	Ca	43	**3.164**	ug/L	69.386	242	0.000
>	Sc	45		ug/L		322887	322886.661
	Ti	47	**0.013**	ug/L	216.146	311	0.000
	V	51	**0.258**	ug/L	166.985	7071	0.004
	Cr	52	**0.066**	ug/L	188.033	-879	0.001
	Cr	53		ug/L		67393	0.000
	Mn	55	**0.007**	ug/L	122.333	1059	0.000
	Fe	57	**4.316**	ug/L	9.005	6932	0.002
	Co	59	**0.022**	ug/L	26.589	237	0.000
	Ni	60	**0.013**	ug/L	110.042	96	0.000
	Cu	63		ug/L		245	0.000
	Cu	65	**0.027**	ug/L	18.534	133	0.000
	Zn	66	**0.045**	ug/L	46.386	303	0.000
	Zn	67		ug/L		5908	-0.000
	Zn	68		ug/L		772	0.000
>	Ge	74		ug/L		366642	366641.550
	As	75	**0.023**	ug/L	543.824	171	0.000
	Se	77		ug/L		3691	0.001
	Se	82	**-0.112**	ug/L	125.363	-23	-0.000
	Kr	83		ug/L		114	0.000
	Sr	88	**0.015**	ug/L	47.178	366	0.001
	Y	89		ug/L		43	-0.000
	Mo	98	**0.122**	ug/L	24.449	459	0.002
	Ag	107	**0.018**	ug/L	52.088	142	0.000
	Cd	111	**0.016**	ug/L	42.009	43	0.000
	Cd	114		ug/L		91	0.000
>	In	115		ug/L		223944	223944.208
	Sn	120	**0.512**	ug/L	12.937	2964	0.011
	Sb	121	**1.427**	ug/L	17.965	6227	0.025
	Sb	123		ug/L		4924	0.020
	Ba	135		ug/L		60	0.000
	Ba	137	**0.014**	ug/L	29.189	95	0.000
	Ho	165		ug/L		45	0.000
>	Lu	175		ug/L		368839	368839.171
	Tl	205	**0.159**	ug/L	21.683	2880	0.006
	Pb	208	**0.021**	ug/L	20.418	1446	0.001
	Bi	209		ug/L		372	-0.000
	Th	232	**0.322**	ug/L	13.552	10321	0.023
	U	238	**0.031**	ug/L	26.660	1247	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		99.3			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		99.7			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		100.1			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		100.4			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 03:00:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 3.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.411**	ug/L	1.528	17552	0.054
	Be	9	**0.577**	ug/L	7.263	198	0.001
	B	11	**19.046**	ug/L	0.638	6032	0.017
	Na	23	**244.917**	ug/L	4.909	767110	2.334
	Mg	24	**16.048**	ug/L	41.204	37052	0.105
	Al	27	**35.032**	ug/L	22.710	114132	0.327
	P	31	**67.507**	ug/L	1.242	14546	0.034
	K	39	**270.704**	ug/L	2.625	1666197	3.714
	Ca	43	**223.743**	ug/L	0.846	2349	0.007
>	Sc	45		ug/L		325470	325469.703
	Ti	47	**9.230**	ug/L	0.659	4718	0.014
	V	51	**11.156**	ug/L	3.134	68473	0.193
	Cr	52	**11.116**	ug/L	3.279	48147	0.152
	Cr	53		ug/L		91452	0.073
	Mn	55	**5.723**	ug/L	0.910	44304	0.133
	Fe	57	**118.097**	ug/L	4.311	23275	0.052
	Co	59	**1.104**	ug/L	2.631	6408	0.019
	Ni	60	**2.183**	ug/L	1.528	2761	0.008
	Cu	63		ug/L		3563	0.010
	Cu	65	**1.144**	ug/L	2.964	1750	0.005
	Zn	66	**10.934**	ug/L	1.179	11539	0.031
	Zn	67		ug/L		9355	0.009
	Zn	68		ug/L		8951	0.022
>	Ge	74		ug/L		368286	368286.456
	As	75	**5.201**	ug/L	6.037	5759	0.015
	Se	77		ug/L		5651	0.006
	Se	82	**5.408**	ug/L	4.211	564	0.002
	Kr	83		ug/L		106	-0.000
	Sr	88	**11.419**	ug/L	0.805	135019	0.604
	Y	89		ug/L		49	-0.000
	Mo	98	**0.552**	ug/L	1.856	1690	0.007
	Ag	107	**1.046**	ug/L	1.917	5021	0.022
	Cd	111	**1.113**	ug/L	2.266	1348	0.006
	Cd	114		ug/L		3061	0.013
>	In	115		ug/L		223405	223405.298
	Sn	120	**5.656**	ug/L	1.025	28228	0.124
	Sb	121	**3.626**	ug/L	6.710	14937	0.064
	Sb	123		ug/L		11721	0.050
	Ba	135		ug/L		2907	0.008
	Ba	137	**2.127**	ug/L	2.383	5138	0.014
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		363271	363271.336
	Tl	205	**1.196**	ug/L	3.137	16779	0.044
	Pb	208	**2.304**	ug/L	0.713	50921	0.137
	Bi	209		ug/L		331	-0.000
	Th	232	**1.387**	ug/L	2.932	37591	0.098
	U	238	**0.254**	ug/L	0.539	7174	0.019

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	114.107				
	Be	9	115.481				
	B	11	126.974				
	Na	23	97.967				
	Mg	24	106.988				
	Al	27	116.775				
	P	31	135.015				
	K	39	90.235				
	Ca	43	111.871				
>	Sc	45		100.1			
	Ti	47	92.299				
	V	51	111.558				
	Cr	52	111.162				
	Cr	53					
	Mn	55	114.459				
	Fe	57	118.097				
	Co	59	110.421				
	Ni	60	109.174				
	Cu	63					
	Cu	65	114.420				
	Zn	66	109.339				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75	104.012				
	Se	77					
	Se	82	108.157				
	Kr	83					
	Sr	88	114.185				
	Y	89					
	Mo	98	110.406				
	Ag	107	104.600				
	Cd	111	111.251				
	Cd	114					
>	In	115		99.9			
	Sn	120	113.113				
	Sb	121	120.876				
	Sb	123					
	Ba	135					
	Ba	137	106.332				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	119.589				
	Pb	208	115.210				
	Bi	209					
	Th	232	138.716				
	U	238	127.215				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	P	31	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 03:06:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 4.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.133**	**ug/L**	14.153	292	0.001
	Be	9	**0.113**	**ug/L**	20.921	49	0.000
	B	11	**1.915**	**ug/L**	17.624	1134	0.002
	Na	23	**91260.194**	**ug/L**	3.361	287994573	869.794
	Mg	24	**100461.732**	**ug/L**	3.250	218065300	658.473
	Al	27	**93009.750**	**ug/L**	5.819	287171837	868.037
	P	31	**95325.534**	**ug/L**	1.753	15906388	48.048
	K	39	**92215.233**	**ug/L**	2.892	419158827	1265.037
	Ca	43	**93932.565**	**ug/L**	0.771	912162	2.755
>	Sc	45		**ug/L**		331040	331040.369
	Ti	47	**1477.981**	**ug/L**	1.342	718635	2.170
	V	51	**0.472**	**ug/L**	68.934	8469	0.008
	Cr	52	**3.074**	**ug/L**	7.610	12673	0.042
	Cr	53		**ug/L**		68952	-0.000
	Mn	55	**6.121**	**ug/L**	0.917	48129	0.142
	Fe	57	**102215.553**	**ug/L**	1.374	14885439	44.953
	Co	59	**0.281**	**ug/L**	1.957	1745	0.005
	Ni	60	**2.754**	**ug/L**	3.278	3521	0.010
	Cu	63		**ug/L**		11685	0.035
	Cu	65	**4.604**	**ug/L**	1.479	6873	0.020
	Zn	66	**3.428**	**ug/L**	0.594	3788	0.010
	Zn	67		**ug/L**		7368	0.004
	Zn	68		**ug/L**		1695	0.003
>	Ge	74		**ug/L**		367679	367679.141
	As	75	**-0.007**	**ug/L**	7431.206	138	-0.000
	Se	77		**ug/L**		5679	0.006
	Se	82	**-0.917**	**ug/L**	20.413	-108	-0.000
	Kr	83		**ug/L**		280	0.000
	Sr	88	**1.292**	**ug/L**	2.333	14842	0.068
	Y	89		**ug/L**		411	0.002
	Mo	98	**2147.326**	**ug/L**	3.297	5906088	27.516
	Ag	107	**0.081**	**ug/L**	14.652	421	0.002
	Cd	111	**0.546**	**ug/L**	24.541	647	0.003
	Cd	114		**ug/L**		6856	0.032
>	In	115		**ug/L**		214699	214699.337
	Sn	120	**0.426**	**ug/L**	4.235	2433	0.009
	Sb	121	**0.384**	**ug/L**	16.642	1990	0.007
	Sb	123		**ug/L**		1617	0.006
	Ba	135		**ug/L**		978	0.003
	Ba	137	**0.712**	**ug/L**	3.113	1649	0.005
	Ho	165		**ug/L**		901	0.003
>	Lu	175		**ug/L**		340404	340404.446
	Tl	205	**0.046**	**ug/L**	20.645	1244	0.002
	Pb	208	**0.294**	**ug/L**	1.368	6874	0.018
	Bi	209		**ug/L**		965	0.002
	Th	232	**0.786**	**ug/L**	33.527	20691	0.056
	U	238	**0.112**	**ug/L**	3.389	3183	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	91.260				
	Mg	24	100.462				
	Al	27	93.010				
	P	31	95.326				
	K	39	92.215				
	Ca	43	93.933				
>	Sc	45		101.8			
	Ti	47	73.899				
	V	51					
	Cr	52	83.076				
	Cr	53					
	Mn	55	105.531				
	Fe	57	102.216				
	Co	59	112.408				
	Ni	60	102.016				
	Cu	63					
	Cu	65	158.753				
	Zn	66	95.211				
	Zn	67					
	Zn	68					
>	Ge	74		99.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	107.674				
	Y	89					
	Mo	98	107.366				
	Ag	107					
	Cd	111	136.404				
	Cd	114					
>	In	115		96.0			
	Sn	120					
	Sb	121	383.649				
	Sb	123					
	Ba	135					
	Ba	137	106.311				
	Ho	165					
>	Lu	175		92.7			
	Tl	205					
	Pb	208	146.765				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 03:12:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 5.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.317**	**ug/L**	3.364	31107	0.096
	Be	9	**19.234**	**ug/L**	2.507	6207	0.019
	B	11	**19.438**	**ug/L**	4.152	6129	0.017
	Na	23	**99073.516**	**ug/L**	2.909	306838457	944.262
	Mg	24	**99557.273**	**ug/L**	5.522	212018111	652.545
	Al	27	**97347.246**	**ug/L**	3.062	295101632	908.518
	P	31	**97263.889**	**ug/L**	4.180	15913691	49.025
	K	39	**95834.052**	**ug/L**	3.850	427720686	1314.681
	Ca	43	**94651.729**	**ug/L**	1.177	901545	2.776
>	Sc	45		**ug/L**		324774	324773.835
	Ti	47	**1483.017**	**ug/L**	2.999	707138	2.178
	V	51	**22.137**	**ug/L**	5.218	129828	0.383
	Cr	52	**24.375**	**ug/L**	5.139	106693	0.332
	Cr	53		**ug/L**		79180	0.036
	Mn	55	**27.581**	**ug/L**	2.597	209115	0.641
	Fe	57	**104028.057**	**ug/L**	3.311	14856281	45.751
	Co	59	**20.901**	**ug/L**	4.184	118938	0.366
	Ni	60	**22.341**	**ug/L**	3.932	27425	0.084
	Cu	63		**ug/L**		68141	0.209
	Cu	65	**23.987**	**ug/L**	1.450	34734	0.107
	Zn	66	**22.497**	**ug/L**	2.661	23239	0.063
	Zn	67		**ug/L**		10617	0.013
	Zn	68		**ug/L**		15807	0.041
>	Ge	74		**ug/L**		364770	364770.358
	As	75	**20.757**	**ug/L**	3.324	22334	0.061
	Se	77		**ug/L**		7124	0.010
	Se	82	**19.872**	**ug/L**	1.839	2082	0.006
	Kr	83		**ug/L**		272	0.000
	Sr	88	**24.222**	**ug/L**	0.723	277534	1.280
	Y	89		**ug/L**		411	0.002
	Mo	98	**2114.437**	**ug/L**	2.469	5868610	27.094
	Ag	107	**19.515**	**ug/L**	1.933	89895	0.415
	Cd	111	**20.422**	**ug/L**	3.892	23573	0.109
	Cd	114		**ug/L**		62939	0.290
>	In	115		**ug/L**		216625	216624.562
	Sn	120	**21.335**	**ug/L**	1.907	102070	0.469
	Sb	121	**23.795**	**ug/L**	3.631	92110	0.423
	Sb	123		**ug/L**		72711	0.334
	Ba	135		**ug/L**		28466	0.083
	Ba	137	**21.907**	**ug/L**	2.821	49653	0.144
	Ho	165		**ug/L**		942	0.003
>	Lu	175		**ug/L**		344588	344587.864
	Tl	205	**21.387**	**ug/L**	2.823	273330	0.791
	Pb	208	**21.492**	**ug/L**	2.381	442728	1.282
	Bi	209		**ug/L**		1322	0.003
	Th	232	**22.551**	**ug/L**	2.588	552478	1.599
	U	238	**23.826**	**ug/L**	1.602	601675	1.745

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.584				
	Be	9	96.172				
	B	11	97.188				
	Na	23	99.074				
	Mg	24	99.557				
	Al	27	97.347				
	P	31	97.264				
	K	39	95.834				
	Ca	43	94.652				
>	Sc	45		99.8			
	Ti	47	74.151				
	V	51	110.683				
	Cr	52	102.849				
	Cr	53					
	Mn	55	106.905				
	Fe	57	104.028				
	Co	59	103.213				
	Ni	60	98.416				
	Cu	63					
	Cu	65	104.745				
	Zn	66	95.326				
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75	103.787				
	Se	77					
	Se	82	99.362				
	Kr	83					
	Sr	88	114.255				
	Y	89					
	Mo	98	105.722				
	Ag	107	97.573				
	Cd	111	100.108				
	Cd	114					
>	In	115		96.8			
	Sn	120	106.675				
	Sb	121	118.384				
	Sb	123					
	Ba	135					
	Ba	137	105.985				
	Ho	165					
>	Lu	175		93.8			
	Tl	205	106.933				
	Pb	208	106.394				
	Bi	209					
	Th	232	112.757				
	U	238	119.129				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 03:18:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.494**	**ug/L**	1.475	76824	0.242
	Be	9	**52.602**	**ug/L**	1.232	16550	0.052
	B	11	**101.515**	**ug/L**	2.435	28913	0.090
	Na	23	**4945.476**	**ug/L**	4.582	14935445	47.135
	Mg	24	**5121.495**	**ug/L**	1.922	10642709	33.569
	Al	27	**5030.481**	**ug/L**	5.042	14894915	46.948
	P	31	**5320.040**	**ug/L**	2.105	853081	2.682
	K	39	**4897.029**	**ug/L**	11.192	21739095	67.179
	Ca	43	**5067.031**	**ug/L**	2.885	47277	0.149
>	Sc	45		**ug/L**		316880	316879.709
	Ti	47	**54.881**	**ug/L**	0.833	25832	0.081
	V	51	**52.971**	**ug/L**	3.490	295517	0.916
	Cr	52	**52.559**	**ug/L**	2.303	225926	0.717
	Cr	53		**ug/L**		106918	0.129
	Mn	55	**52.667**	**ug/L**	1.091	388822	1.224
	Fe	57	**5350.264**	**ug/L**	2.101	751603	2.353
	Co	59	**50.209**	**ug/L**	1.694	278766	0.880
	Ni	60	**50.819**	**ug/L**	0.999	60805	0.192
	Cu	63		**ug/L**		149098	0.470
	Cu	65	**51.728**	**ug/L**	0.743	72990	0.230
	Zn	66	**50.620**	**ug/L**	2.959	51955	0.142
	Zn	67		**ug/L**		15315	0.026
	Zn	68		**ug/L**		38309	0.103
>	Ge	74		**ug/L**		364622	364621.590
	As	75	**46.755**	**ug/L**	0.945	50100	0.137
	Se	77		**ug/L**		9049	0.015
	Se	82	**50.789**	**ug/L**	1.729	5336	0.015
	Kr	83		**ug/L**		100	-0.000
	Sr	88	**49.973**	**ug/L**	1.263	585667	2.641
	Y	89		**ug/L**		111	0.000
	Mo	98	**49.883**	**ug/L**	2.153	141774	0.639
	Ag	107	**50.353**	**ug/L**	1.063	237302	1.070
	Cd	111	**50.612**	**ug/L**	1.832	59753	0.269
	Cd	114		**ug/L**		140960	0.636
>	In	115		**ug/L**		221686	221685.874
	Sn	120	**49.763**	**ug/L**	2.159	243020	1.095
	Sb	121	**46.864**	**ug/L**	12.040	184895	0.833
	Sb	123		**ug/L**		147008	0.662
	Ba	135		**ug/L**		67344	0.185
	Ba	137	**49.462**	**ug/L**	1.848	118185	0.325
	Ho	165		**ug/L**		76	0.000
>	Lu	175		**ug/L**		363415	363415.120
	Tl	205	**51.231**	**ug/L**	1.287	689658	1.896
	Pb	208	**52.410**	**ug/L**	0.685	1137510	3.127
	Bi	209		**ug/L**		380	0.000
	Th	232	**50.296**	**ug/L**	0.506	1297506	3.565
	U	238	**52.593**	**ug/L**	1.504	1400414	3.852

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.987				
	Be	9	105.204				
	B	11	101.515				
	Na	23	98.910				
	Mg	24	102.430				
	Al	27	99.613				
	P	31	106.401				
	K	39	97.941				
	Ca	43	101.341				
>	Sc	45			97.4		
	Ti	47	109.762				
	V	51	105.942				
	Cr	52	105.119				
	Cr	53					
	Mn	55	105.333				
	Fe	57	107.005				
	Co	59	100.419				
	Ni	60	101.638				
	Cu	63					
	Cu	65	103.457				
	Zn	66	101.240				
	Zn	67					
	Zn	68					
>	Ge	74			99.1		
	As	75	93.510				
	Se	77					
	Se	82	101.577				
	Kr	83					
	Sr	88	99.947				
	Y	89					
	Mo	98	99.766				
	Ag	107	100.707				
	Cd	111	101.225				
	Cd	114					
>	In	115			99.1		
	Sn	120	99.526				
	Sb	121	93.728				
	Sb	123					
	Ba	135					
	Ba	137	98.924				
	Ho	165					
>	Lu	175			98.9		
	Tl	205	102.462				
	Pb	208	104.821				
	Bi	209					
	Th	232	100.592				
	U	238	105.187				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 03:24:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.022**	ug/L	13.690	111	0.000
	Be	9	**0.034**	ug/L	62.996	22	0.000
	B	11	**3.237**	ug/L	15.543	1420	0.003
	Na	23	**4.991**	ug/L	18.503	21349	0.048
	Mg	24	**4.170**	ug/L	76.122	11339	0.027
	Al	27	**2.916**	ug/L	42.035	16009	0.027
	P	31	**8.263**	ug/L	13.037	4587	0.004
	K	39	**20.166**	ug/L	34.334	519974	0.277
	Ca	43	**8.140**	ug/L	23.358	277	0.000
>	Sc	45		ug/L		309216	309215.594
	Ti	47	**1.062**	ug/L	6.669	774	0.002
	V	51	**0.160**	ug/L	179.355	6263	0.003
	Cr	52	**-0.137**	ug/L	67.510	-1692	-0.002
	Cr	53		ug/L		66434	0.006
	Mn	55	**-0.006**	ug/L	149.171	919	-0.000
	Fe	57	**9.839**	ug/L	4.340	7389	0.004
	Co	59	**0.016**	ug/L	18.081	193	0.000
	Ni	60	**0.019**	ug/L	36.518	100	0.000
	Cu	63		ug/L		219	0.000
	Cu	65	**0.028**	ug/L	26.941	127	0.000
	Zn	66	**0.038**	ug/L	18.968	290	0.000
	Zn	67		ug/L		5847	-0.000
	Zn	68		ug/L		758	0.000
>	Ge	74		ug/L		359437	359437.203
	As	75	**-0.013**	ug/L	2600.637	130	-0.000
	Se	77		ug/L		3779	0.001
	Se	82	**0.001**	ug/L	15902.475	-11	0.000
	Kr	83		ug/L		101	-0.000
	Sr	88	**0.011**	ug/L	42.023	312	0.001
	Y	89		ug/L		43	-0.000
	Mo	98	**0.312**	ug/L	15.361	985	0.004
	Ag	107	**0.014**	ug/L	52.884	117	0.000
	Cd	111	**0.022**	ug/L	30.796	50	0.000
	Cd	114		ug/L		91	0.000
>	In	115		ug/L		219100	219100.424
	Sn	120	**0.408**	ug/L	10.406	2401	0.009
	Sb	121	**1.078**	ug/L	19.874	4739	0.019
	Sb	123		ug/L		3744	0.015
	Ba	135		ug/L		57	0.000
	Ba	137	**0.012**	ug/L	13.306	90	0.000
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		372286	372286.021
	Tl	205	**0.155**	ug/L	25.073	2853	0.006
	Pb	208	**0.018**	ug/L	32.192	1395	0.001
	Bi	209		ug/L		325	-0.000
	Th	232	**0.218**	ug/L	16.886	7670	0.015
	U	238	**0.026**	ug/L	24.830	1117	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Saturday, December 05, 2009 03:31:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 10.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**939.329**	ug/L	1.435	1352503	4.419
	Be	9	**954.770**	ug/L	3.872	289915	0.947
	B	11	**1.277**	ug/L	10.583	876	0.001
	Na	23	**45361.556**	ug/L	10.553	132240704	432.338
	Mg	24	**50831.691**	ug/L	8.514	101885972	333.175
	Al	27	**46812.174**	ug/L	8.484	133673676	436.886
	P	31	**24705.045**	ug/L	5.970	3812517	12.452
	K	39	**45977.597**	ug/L	7.344	193386333	630.735
	Ca	43	**48648.703**	ug/L	2.229	436815	1.427
>	Sc	45		ug/L		306128	306127.946
	Ti	47	**41.466**	ug/L	4.428	18921	0.061
	V	51	**1014.760**	ug/L	5.544	5371038	17.539
	Cr	52	**1006.360**	ug/L	5.710	4197108	13.724
	Cr	53		ug/L		548118	1.583
	Mn	55	**973.610**	ug/L	4.661	6923815	22.629
	Fe	57	**52320.330**	ug/L	5.538	7044387	23.010
	Co	59	**958.254**	ug/L	5.712	5134913	16.787
	Ni	60	**892.271**	ug/L	1.615	1029972	3.365
	Cu	63		ug/L		2653237	8.668
	Cu	65	**870.883**	ug/L	3.082	1185360	3.873
	Zn	66	**1978.436**	ug/L	1.943	1933522	5.542
	Zn	67		ug/L		358473	1.011
	Zn	68		ug/L		1490911	4.272
>	Ge	74		ug/L		348856	348855.810
	As	75	**879.135**	ug/L	2.456	898633	2.576
	Se	77		ug/L		41384	0.109
	Se	82	**490.934**	ug/L	1.206	49435	0.142
	Kr	83		ug/L		170	0.000
	Sr	88	**1053.959**	ug/L	4.960	11442443	55.708
	Y	89		ug/L		359	0.001
	Mo	98	**1125.540**	ug/L	4.030	2963250	14.423
	Ag	107	**243.655**	ug/L	3.473	1063928	5.179
	Cd	111	**924.588**	ug/L	0.950	1011612	4.923
	Cd	114		ug/L		2628242	12.791
>	In	115		ug/L		205493	205492.547
	Sn	120	**1054.640**	ug/L	3.536	4766031	23.197
	Sb	121	**227.169**	ug/L	15.925	829420	4.037
	Sb	123		ug/L		662613	3.225
	Ba	135		ug/L		1177832	3.361
	Ba	137	**828.898**	ug/L	2.739	1909272	5.448
	Ho	165		ug/L		294	0.001
>	Lu	175		ug/L		350570	350569.865
	Tl	205	**489.283**	ug/L	2.690	6346450	18.107
	Pb	208	**4923.827**	ug/L	2.596	102978605	293.817
	Bi	209		ug/L		2898	0.007
	Th	232	**2519.921**	ug/L	3.264	62599943	178.623
	U	238	**5241.764**	ug/L	2.995	134559502	383.954

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	93.933				
	Be	9	95.477				
	B	11					
	Na	23	90.723				
	Mg	24	101.663				
	Al	27	93.624				
	P	31	98.820				
	K	39	91.955				
	Ca	43	97.297				
>	Sc	45		94.1			
	Ti	47					
	V	51	101.476				
	Cr	52	100.636				
	Cr	53					
	Mn	55	97.361				
	Fe	57	104.641				
	Co	59	95.825				
	Ni	60	89.227				
	Cu	63					
	Cu	65	87.088				
	Zn	66	79.137				
	Zn	67					
	Zn	68					
>	Ge	74		94.8			
	As	75	87.913				
	Se	77					
	Se	82	98.187				
	Kr	83					
	Sr	88	105.396				
	Y	89					
	Mo	98	112.554				
	Ag	107	97.462				
	Cd	111	92.459				
	Cd	114					
>	In	115		91.9			
	Sn	120	105.464				
	Sb	121	90.868				
	Sb	123					
	Ba	135					
	Ba	137	82.890				
	Ho	165					
>	Lu	175		95.4			
	Tl	205	97.857				
	Pb	208	98.477				
	Bi	209					
	Th	232	100.797				
	U	238	104.835				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Saturday, December 05, 2009 03:37:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 11.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.653**	**ug/L**	3.012	79823	0.248
	Be	9	**53.503**	**ug/L**	3.175	17102	0.053
	B	11	**103.696**	**ug/L**	4.014	29993	0.091
	Na	23	**4884.243**	**ug/L**	1.219	14997980	46.551
	Mg	24	**5447.889**	**ug/L**	4.082	11498821	35.708
	Al	27	**5132.455**	**ug/L**	10.084	15408228	47.900
	P	31	**5461.456**	**ug/L**	2.871	889829	2.753
	K	39	**4565.749**	**ug/L**	2.784	20622330	62.634
	Ca	43	**5159.513**	**ug/L**	1.591	48941	0.151
>	Sc	45		**ug/L**		322104	322104.480
	Ti	47	**52.244**	**ug/L**	3.454	24999	0.077
	V	51	**53.576**	**ug/L**	4.504	303658	0.926
	Cr	52	**52.869**	**ug/L**	3.491	230980	0.721
	Cr	53		**ug/L**		108298	0.128
	Mn	55	**53.716**	**ug/L**	2.410	402972	1.248
	Fe	57	**5405.725**	**ug/L**	3.413	771590	2.377
	Co	59	**51.009**	**ug/L**	2.294	287857	0.894
	Ni	60	**50.991**	**ug/L**	2.336	62000	0.192
	Cu	63		**ug/L**		154728	0.480
	Cu	65	**52.764**	**ug/L**	2.153	75655	0.235
	Zn	66	**52.240**	**ug/L**	2.584	54255	0.146
	Zn	67		**ug/L**		16628	0.029
	Zn	68		**ug/L**		40051	0.107
>	Ge	74		**ug/L**		369038	369038.162
	As	75	**48.738**	**ug/L**	1.537	52839	0.143
	Se	77		**ug/L**		8749	0.014
	Se	82	**50.840**	**ug/L**	1.260	5405	0.015
	Kr	83		**ug/L**		114	0.000
	Sr	88	**51.453**	**ug/L**	1.274	602065	2.720
	Y	89		**ug/L**		101	0.000
	Mo	98	**51.247**	**ug/L**	0.387	145456	0.657
	Ag	107	**51.580**	**ug/L**	1.779	242651	1.096
	Cd	111	**52.035**	**ug/L**	0.643	61346	0.277
	Cd	114		**ug/L**		144853	0.654
>	In	115		**ug/L**		221331	221330.607
	Sn	120	**60.262**	**ug/L**	2.190	293836	1.325
	Sb	121	**53.667**	**ug/L**	6.738	211474	0.954
	Sb	123		**ug/L**		168000	0.758
	Ba	135		**ug/L**		68486	0.187
	Ba	137	**49.838**	**ug/L**	1.072	119671	0.328
	Ho	165		**ug/L**		80	0.000
>	Lu	175		**ug/L**		365175	365175.476
	Tl	205	**51.474**	**ug/L**	0.723	696296	1.905
	Pb	208	**53.947**	**ug/L**	0.905	1176558	3.219
	Bi	209		**ug/L**		347	-0.000
	Th	232	**55.162**	**ug/L**	1.308	1429815	3.910
	U	238	**53.765**	**ug/L**	0.978	1438529	3.938

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.307				
	Be	9	107.007				
	B	11	103.696				
	Na	23	97.685				
	Mg	24	108.958				
	Al	27	101.633				
	P	31	109.229				
	K	39	91.315				
	Ca	43	103.190				
>	Sc	45		99.0			
	Ti	47	104.488				
	V	51	107.153				
	Cr	52	105.738				
	Cr	53					
	Mn	55	107.431				
	Fe	57	108.114				
	Co	59	102.017				
	Ni	60	101.981				
	Cu	63					
	Cu	65	105.528				
	Zn	66	104.479				
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75	97.476				
	Se	77					
	Se	82	101.680				
	Kr	83					
	Sr	88	102.907				
	Y	89					
	Mo	98	102.495				
	Ag	107	103.160				
	Cd	111	104.070				
	Cd	114					
>	In	115		99.0			
	Sn	120	120.523				
	Sb	121	107.334				
	Sb	123					
	Ba	135					
	Ba	137	99.675				
	Ho	165					
>	Lu	175		99.4			
	Tl	205	102.947				
	Pb	208	107.893				
	Bi	209					
	Th	232	110.323				
	U	238	107.530				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Saturday, December 05, 2009 03:43:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 12.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.153**	**ug/L**	7.571	307	0.001
	Be	9	**0.073**	**ug/L**	15.887	34	0.000
	B	11	**3.163**	**ug/L**	17.669	1424	0.003
	Na	23	**6.167**	**ug/L**	39.723	25357	0.059
	Mg	24	**4.108**	**ug/L**	20.018	11338	0.027
	Al	27	**2.590**	**ug/L**	23.286	15342	0.024
	P	31	**7.508**	**ug/L**	13.284	4542	0.004
	K	39	**10.052**	**ug/L**	18.490	484759	0.138
	Ca	43	**6.999**	**ug/L**	17.215	271	0.000
>	Sc	45		**ug/L**		314096	314095.650
	Ti	47	**0.173**	**ug/L**	6.221	377	0.000
	V	51	**0.242**	**ug/L**	105.715	6783	0.004
	Cr	52	**-0.072**	**ug/L**	64.549	-1442	-0.001
	Cr	53		**ug/L**		66165	0.002
	Mn	55	**0.035**	**ug/L**	45.916	1232	0.001
	Fe	57	**4.208**	**ug/L**	8.909	6728	0.002
	Co	59	**0.062**	**ug/L**	20.896	451	0.001
	Ni	60	**0.065**	**ug/L**	21.719	155	0.000
	Cu	63		**ug/L**		371	0.001
	Cu	65	**0.083**	**ug/L**	26.235	207	0.000
	Zn	66	**0.157**	**ug/L**	19.964	415	0.000
	Zn	67		**ug/L**		6279	0.001
	Zn	68		**ug/L**		924	0.001
>	Ge	74		**ug/L**		364366	364365.801
	As	75	**0.054**	**ug/L**	282.304	205	0.000
	Se	77		**ug/L**		3504	0.000
	Se	82	**0.022**	**ug/L**	641.535	-9	0.000
	Kr	83		**ug/L**		105	-0.000
	Sr	88	**0.049**	**ug/L**	23.904	763	0.003
	Y	89		**ug/L**		47	-0.000
	Mo	98	**0.359**	**ug/L**	11.203	1132	0.005
	Ag	107	**0.064**	**ug/L**	22.653	357	0.001
	Cd	111	**0.053**	**ug/L**	41.196	87	0.000
	Cd	114		**ug/L**		196	0.001
>	In	115		**ug/L**		222678	222678.180
	Sn	120	**2.415**	**ug/L**	7.302	12266	0.053
	Sb	121	**2.130**	**ug/L**	13.300	8975	0.038
	Sb	123		**ug/L**		7138	0.030
	Ba	135		**ug/L**		98	0.000
	Ba	137	**0.053**	**ug/L**	19.840	189	0.000
	Ho	165		**ug/L**		39	-0.000
>	Lu	175		**ug/L**		366395	366395.215
	Tl	205	**0.244**	**ug/L**	17.652	4022	0.009
	Pb	208	**0.226**	**ug/L**	24.890	5941	0.014
	Bi	209		**ug/L**		294	-0.000
	Th	232	**0.824**	**ug/L**	4.329	23305	0.058
	U	238	**0.304**	**ug/L**	15.992	8568	0.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 04:38:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.675

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.850**	**ug/L**	1.999	68742	0.249
	Be	9	**56.200**	**ug/L**	1.543	15415	0.056
	B	11	**107.689**	**ug/L**	4.076	26715	0.095
	Na	23	**4869.724**	**ug/L**	7.435	12824889	46.413
	Mg	24	**5021.295**	**ug/L**	5.303	9093689	32.912
	Al	27	**4817.219**	**ug/L**	0.836	12425704	44.958
	P	31	**5241.512**	**ug/L**	0.721	732748	2.642
	K	39	**4627.687**	**ug/L**	2.497	17926392	63.484
	Ca	43	**4942.719**	**ug/L**	2.302	40219	0.145
>	Sc	45		**ug/L**		276241	276241.453
	Ti	47	**49.518**	**ug/L**	2.905	20349	0.073
	V	51	**51.637**	**ug/L**	3.461	251408	0.892
	Cr	52	**52.169**	**ug/L**	2.699	195519	0.711
	Cr	53		**ug/L**		89339	0.115
	Mn	55	**52.294**	**ug/L**	1.047	336598	1.215
	Fe	57	**5334.610**	**ug/L**	1.840	653553	2.346
	Co	59	**49.480**	**ug/L**	1.457	239544	0.867
	Ni	60	**49.869**	**ug/L**	0.979	52019	0.188
	Cu	63		**ug/L**		129521	0.468
	Cu	65	**51.664**	**ug/L**	2.072	63553	0.230
	Zn	66	**49.017**	**ug/L**	3.326	44712	0.137
	Zn	67		**ug/L**		12831	0.023
	Zn	68		**ug/L**		33421	0.101
>	Ge	74		**ug/L**		324100	324100.463
	As	75	**46.373**	**ug/L**	2.220	44147	0.136
	Se	77		**ug/L**		7394	0.013
	Se	82	**49.035**	**ug/L**	2.877	4576	0.014
	Kr	83		**ug/L**		115	0.000
	Sr	88	**48.162**	**ug/L**	1.971	516562	2.546
	Y	89		**ug/L**		190	0.001
	Mo	98	**47.939**	**ug/L**	1.518	124700	0.614
	Ag	107	**49.879**	**ug/L**	2.551	215097	1.060
	Cd	111	**49.816**	**ug/L**	0.806	53824	0.265
	Cd	114		**ug/L**		128662	0.634
>	In	115		**ug/L**		202844	202843.635
	Sn	120	**49.959**	**ug/L**	1.832	223298	1.099
	Sb	121	**46.314**	**ug/L**	9.947	167462	0.823
	Sb	123		**ug/L**		132949	0.653
	Ba	135		**ug/L**		61565	0.171
	Ba	137	**45.705**	**ug/L**	0.190	108417	0.300
	Ho	165		**ug/L**		91	0.000
>	Lu	175		**ug/L**		360743	360743.002
	Tl	205	**50.008**	**ug/L**	0.374	668276	1.851
	Pb	208	**51.424**	**ug/L**	1.219	1107878	3.069
	Bi	209		**ug/L**		417	0.000
	Th	232	**50.118**	**ug/L**	1.302	1283480	3.553
	U	238	**53.114**	**ug/L**	2.487	1403737	3.891

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.701				
	Be	9	112.399				
	B	11	107.689				
	Na	23	97.394				
	Mg	24	100.426				
	Al	27	95.390				
	P	31	104.830				
	K	39	92.554				
	Ca	43	98.854				
>	Sc	45		84.9			
	Ti	47	99.036				
	V	51	103.275				
	Cr	52	104.337				
	Cr	53					
	Mn	55	104.588				
	Fe	57	106.692				
	Co	59	98.960				
	Ni	60	99.737				
	Cu	63					
	Cu	65	103.328				
	Zn	66	98.034				
	Zn	67					
	Zn	68					
>	Ge	74		88.1			
	As	75	92.746				
	Se	77					
	Se	82	98.070				
	Kr	83					
	Sr	88	96.324				
	Y	89					
	Mo	98	95.878				
	Ag	107	99.757				
	Cd	111	99.633				
	Cd	114					
>	In	115		90.7			
	Sn	120	99.917				
	Sb	121	92.627				
	Sb	123					
	Ba	135					
	Ba	137	91.411				
	Ho	165					
>	Lu	175		98.2			
	Tl	205	100.015				
	Pb	208	102.848				
	Bi	209					
	Th	232	100.237				
	U	238	106.228				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 04:44:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.048**	**ug/L**	5.628	135	0.000
	Be	9	**0.044**	**ug/L**	21.979	22	0.000
	B	11	**3.394**	**ug/L**	16.213	1324	0.003
	Na	23	**1.014**	**ug/L**	100.846	8669	0.010
	Mg	24	**-0.120**	**ug/L**	549.825	2334	-0.001
	Al	27	**1.070**	**ug/L**	17.342	9670	0.010
	P	31	**4.174**	**ug/L**	37.874	3566	0.002
	K	39	**16.585**	**ug/L**	51.399	457253	0.228
	Ca	43	**4.590**	**ug/L**	59.187	221	0.000
>	Sc	45		**ug/L**		279579	279579.140
	Ti	47	**0.134**	**ug/L**	59.967	319	0.000
	V	51	**0.250**	**ug/L**	23.475	6099	0.004
	Cr	52	**-0.038**	**ug/L**	169.419	-1157	-0.001
	Cr	53		**ug/L**		56733	-0.006
	Mn	55	**0.030**	**ug/L**	9.083	1064	0.001
	Fe	57	**5.253**	**ug/L**	20.816	6115	0.002
	Co	59	**0.013**	**ug/L**	23.099	163	0.000
	Ni	60	**0.030**	**ug/L**	5.695	101	0.000
	Cu	63		**ug/L**		189	0.000
	Cu	65	**0.014**	**ug/L**	10.528	98	0.000
	Zn	66	**-0.010**	**ug/L**	166.663	223	-0.000
	Zn	67		**ug/L**		4898	-0.002
	Zn	68		**ug/L**		605	-0.000
>	Ge	74		**ug/L**		332786	332786.420
	As	75	**0.109**	**ug/L**	304.216	240	0.000
	Se	77		**ug/L**		3021	-0.000
	Se	82	**-0.175**	**ug/L**	103.504	-27	-0.000
	Kr	83		**ug/L**		101	0.000
	Sr	88	**0.010**	**ug/L**	14.257	285	0.001
	Y	89		**ug/L**		65	0.000
	Mo	98	**0.104**	**ug/L**	26.890	380	0.001
	Ag	107	**0.014**	**ug/L**	13.749	111	0.000
	Cd	111	**0.018**	**ug/L**	31.640	43	0.000
	Cd	114		**ug/L**		82	0.000
>	In	115		**ug/L**		208746	208745.770
	Sn	120	**0.473**	**ug/L**	14.260	2580	0.010
	Sb	121	**1.206**	**ug/L**	18.865	4981	0.021
	Sb	123		**ug/L**		4022	0.017
	Ba	135		**ug/L**		48	0.000
	Ba	137	**0.006**	**ug/L**	66.946	77	0.000
	Ho	165		**ug/L**		45	0.000
>	Lu	175		**ug/L**		368604	368603.926
	Tl	205	**0.130**	**ug/L**	19.964	2493	0.005
	Pb	208	**0.017**	**ug/L**	11.052	1354	0.001
	Bi	209		**ug/L**		332	-0.000
	Th	232	**0.252**	**ug/L**	12.191	8491	0.018
	U	238	**0.027**	**ug/L**	21.121	1152	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		85.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 05:34:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.684

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.696**	ug/L	1.490	71287	0.243
	Be	9	**53.305**	ug/L	2.182	15498	0.053
	B	11	**102.608**	ug/L	1.636	27007	0.090
	Na	23	**4903.533**	ug/L	0.506	13692562	46.735
	Mg	24	**6002.867**	ug/L	2.176	11524591	39.346
	Al	27	**4862.918**	ug/L	4.870	13298926	45.384
	P	31	**5283.363**	ug/L	1.151	782978	2.663
	K	39	**4829.137**	ug/L	1.557	19810931	66.248
	Ca	43	**5018.657**	ug/L	1.455	43295	0.147
>	Sc	45		ug/L		292854	292853.693
	Ti	47	**50.562**	ug/L	0.909	22018	0.074
	V	51	**53.533**	ug/L	3.087	276055	0.925
	Cr	52	**53.214**	ug/L	3.170	211455	0.726
	Cr	53		ug/L		92412	0.107
	Mn	55	**53.277**	ug/L	1.250	363516	1.238
	Fe	57	**5450.161**	ug/L	0.915	707638	2.397
	Co	59	**52.132**	ug/L	1.315	267560	0.913
	Ni	60	**52.374**	ug/L	0.941	57916	0.198
	Cu	63		ug/L		141140	0.481
	Cu	65	**53.192**	ug/L	1.184	69375	0.237
	Zn	66	**50.327**	ug/L	1.388	49311	0.141
	Zn	67		ug/L		13344	0.022
	Zn	68		ug/L		36293	0.102
>	Ge	74		ug/L		348053	348052.722
	As	75	**46.394**	ug/L	0.595	47448	0.136
	Se	77		ug/L		7951	0.013
	Se	82	**50.222**	ug/L	2.905	5036	0.015
	Kr	83		ug/L		110	0.000
	Sr	88	**49.273**	ug/L	1.290	557786	2.604
	Y	89		ug/L		316	0.001
	Mo	98	**49.220**	ug/L	1.560	135146	0.631
	Ag	107	**50.184**	ug/L	1.780	228412	1.067
	Cd	111	**50.603**	ug/L	1.337	57709	0.269
	Cd	114		ug/L		135299	0.632
>	In	115		ug/L		214117	214116.913
	Sn	120	**50.030**	ug/L	1.713	236013	1.100
	Sb	121	**46.558**	ug/L	10.132	177710	0.827
	Sb	123		ug/L		141215	0.657
	Ba	135		ug/L		65597	0.178
	Ba	137	**47.784**	ug/L	1.843	115546	0.314
	Ho	165		ug/L		102	0.000
>	Lu	175		ug/L		367804	367803.711
	Tl	205	**50.301**	ug/L	1.232	685286	1.861
	Pb	208	**52.250**	ug/L	1.960	1147506	3.118
	Bi	209		ug/L		367	-0.000
	Th	232	**50.158**	ug/L	2.573	1309378	3.555
	U	238	**52.913**	ug/L	1.852	1425887	3.876

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	103.392				
	Be	9	106.610				
	B	11	102.608				
	Na	23	98.071				
	Mg	24	120.057				
	Al	27	96.295				
	P	31	105.667				
	K	39	96.583				
	Ca	43	100.373				
>	Sc	45		90.0			
	Ti	47	101.125				
	V	51	107.067				
	Cr	52	106.429				
	Cr	53					
	Mn	55	106.554				
	Fe	57	109.003				
	Co	59	104.265				
	Ni	60	104.748				
	Cu	63					
	Cu	65	106.384				
	Zn	66	100.654				
	Zn	67					
	Zn	68					
>	Ge	74		94.6			
	As	75	92.787				
	Se	77					
	Se	82	100.445				
	Kr	83					
	Sr	88	98.545				
	Y	89					
	Mo	98	98.441				
	Ag	107	100.369				
	Cd	111	101.205				
	Cd	114					
>	In	115		95.7			
	Sn	120	100.061				
	Sb	121	93.117				
	Sb	123					
	Ba	135					
	Ba	137	95.569				
	Ho	165					
>	Lu	175		100.1			
	Tl	205	100.603				
	Pb	208	104.499				
	Bi	209					
	Th	232	100.317				
	U	238	105.825				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 05:40:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.685

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.029**	**ug/L**	44.690	113	0.000
	Be	9	**0.041**	**ug/L**	45.890	22	0.000
	B	11	**2.657**	**ug/L**	22.350	1178	0.002
	Na	23	**2.212**	**ug/L**	77.112	12339	0.021
	Mg	24	**0.359**	**ug/L**	92.092	3334	0.002
	Al	27	**0.454**	**ug/L**	329.332	8336	0.004
	P	31	**3.821**	**ug/L**	18.252	3634	0.002
	K	39	**0.206**	**ug/L**	4680.265	406053	0.003
	Ca	43	**6.446**	**ug/L**	55.421	244	0.000
>	Sc	45		**ug/L**		288410	288409.997
	Ti	47	**0.223**	**ug/L**	24.477	367	0.000
	V	51	**0.158**	**ug/L**	183.019	5843	0.003
	Cr	52	**0.077**	**ug/L**	220.020	-741	0.001
	Cr	53		**ug/L**		56675	-0.012
	Mn	55	**0.090**	**ug/L**	18.231	1502	0.002
	Fe	57	**5.220**	**ug/L**	24.247	6307	0.002
	Co	59	**0.017**	**ug/L**	26.559	187	0.000
	Ni	60	**0.020**	**ug/L**	36.139	93	0.000
	Cu	63		**ug/L**		233	0.000
	Cu	65	**0.024**	**ug/L**	42.124	115	0.000
	Zn	66	**-0.039**	**ug/L**	26.672	204	-0.000
	Zn	67		**ug/L**		4786	-0.003
	Zn	68		**ug/L**		575	-0.000
>	Ge	74		**ug/L**		345254	345253.604
	As	75	**0.106**	**ug/L**	67.301	245	0.000
	Se	77		**ug/L**		3020	-0.001
	Se	82	**0.028**	**ug/L**	426.250	-8	0.000
	Kr	83		**ug/L**		97	-0.000
	Sr	88	**0.011**	**ug/L**	24.874	312	0.001
	Y	89		**ug/L**		84	0.000
	Mo	98	**0.093**	**ug/L**	28.653	365	0.001
	Ag	107	**0.015**	**ug/L**	31.500	123	0.000
	Cd	111	**0.016**	**ug/L**	24.637	42	0.000
	Cd	114		**ug/L**		84	0.000
>	In	115		**ug/L**		216744	216743.639
	Sn	120	**0.389**	**ug/L**	16.579	2282	0.009
	Sb	121	**1.082**	**ug/L**	20.808	4695	0.019
	Sb	123		**ug/L**		3600	0.015
	Ba	135		**ug/L**		54	0.000
	Ba	137	**0.013**	**ug/L**	5.579	92	0.000
	Ho	165		**ug/L**		39	-0.000
>	Lu	175		**ug/L**		370019	370018.765
	Tl	205	**0.111**	**ug/L**	30.588	2237	0.004
	Pb	208	**0.021**	**ug/L**	27.601	1452	0.001
	Bi	209		**ug/L**		325	-0.000
	Th	232	**0.235**	**ug/L**	17.350	8064	0.017
	U	238	**0.025**	**ug/L**	33.856	1094	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 06:23:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.692

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.764**	ug/L	1.305	66893	0.258
	Be	9	**57.929**	ug/L	1.753	14916	0.057
	B	11	**108.525**	ug/L	1.125	25272	0.096
	Na	23	**5222.250**	ug/L	3.523	12910874	49.773
	Mg	24	**4888.939**	ug/L	2.309	8314885	32.044
	Al	27	**4827.205**	ug/L	11.045	11688186	45.051
	P	31	**5251.882**	ug/L	2.836	689278	2.647
	K	39	**4375.393**	ug/L	1.045	15931339	60.023
	Ca	43	**4931.862**	ug/L	0.753	37684	0.145
>	Sc	45		ug/L		259380	259379.985
	Ti	47	**49.740**	ug/L	2.618	19182	0.073
	V	51	**51.265**	ug/L	1.990	234316	0.886
	Cr	52	**50.965**	ug/L	1.484	179325	0.695
	Cr	53		ug/L		80036	0.100
	Mn	55	**52.484**	ug/L	1.532	317149	1.220
	Fe	57	**5398.651**	ug/L	2.426	620749	2.374
	Co	59	**50.193**	ug/L	1.805	228120	0.879
	Ni	60	**49.900**	ug/L	2.957	48866	0.188
	Cu	63		ug/L		121025	0.466
	Cu	65	**50.416**	ug/L	0.996	58242	0.224
	Zn	66	**49.656**	ug/L	2.267	42333	0.139
	Zn	67		ug/L		11802	0.022
	Zn	68		ug/L		30818	0.100
>	Ge	74		ug/L		302922	302921.955
	As	75	**45.643**	ug/L	1.049	40624	0.134
	Se	77		ug/L		6454	0.012
	Se	82	**50.322**	ug/L	2.740	4392	0.015
	Kr	83		ug/L		91	0.000
	Sr	88	**48.212**	ug/L	1.327	487151	2.548
	Y	89		ug/L		250	0.001
	Mo	98	**47.973**	ug/L	0.493	117583	0.615
	Ag	107	**49.158**	ug/L	1.331	199711	1.045
	Cd	111	**49.832**	ug/L	1.358	50726	0.265
	Cd	114		ug/L		119820	0.627
>	In	115		ug/L		191133	191133.325
	Sn	120	**50.705**	ug/L	0.713	213520	1.115
	Sb	121	**46.766**	ug/L	10.039	159502	0.831
	Sb	123		ug/L		126470	0.659
	Ba	135		ug/L		58608	0.166
	Ba	137	**44.657**	ug/L	2.069	103837	0.293
	Ho	165		ug/L		85	0.000
>	Lu	175		ug/L		353658	353658.350
	Tl	205	**50.607**	ug/L	1.386	662935	1.873
	Pb	208	**52.083**	ug/L	2.358	1099876	3.108
	Bi	209		ug/L		317	-0.000
	Th	232	**50.493**	ug/L	1.469	1267573	3.579
	U	238	**53.831**	ug/L	2.139	1394705	3.943

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	109.529				
	Be	9	115.857				
	B	11	108.525				
	Na	23	104.445				
	Mg	24	97.779				
	Al	27	95.588				
	P	31	105.038				
	K	39	87.508				
	Ca	43	98.637				
>	Sc	45		79.7			
	Ti	47	99.479				
	V	51	102.530				
	Cr	52	101.929				
	Cr	53					
	Mn	55	104.968				
	Fe	57	107.973				
	Co	59	100.385				
	Ni	60	99.800				
	Cu	63					
	Cu	65	100.832				
	Zn	66	99.312				
	Zn	67					
	Zn	68					
>	Ge	74		82.3			
	As	75	91.286				
	Se	77					
	Se	82	100.643				
	Kr	83					
	Sr	88	96.424				
	Y	89					
	Mo	98	95.946				
	Ag	107	98.315				
	Cd	111	99.664				
	Cd	114					
>	In	115		85.5			
	Sn	120	101.411				
	Sb	121	93.532				
	Sb	123					
	Ba	135					
	Ba	137	89.314				
	Ho	165					
>	Lu	175		96.3			
	Tl	205	101.214				
	Pb	208	104.166				
	Bi	209					
	Th	232	100.987				
	U	238	107.663				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 8	Ba	137	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 06:29:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.693

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	ug/L	15.535	100	0.000
	Be	9	**0.041**	ug/L	43.779	20	0.000
	B	11	**2.753**	ug/L	26.393	1098	0.002
	Na	23	**4.242**	ug/L	38.678	16343	0.040
	Mg	24	**0.920**	ug/L	168.385	4001	0.006
	Al	27	**1.276**	ug/L	139.491	9670	0.012
	P	31	**7.261**	ug/L	38.555	3781	0.004
	K	39	**8.894**	ug/L	116.746	403666	0.122
	Ca	43	**1.594**	ug/L	227.833	185	0.000
>	Sc	45		ug/L		264028	264027.913
	Ti	47	**0.262**	ug/L	21.057	351	0.000
	V	51	**-0.100**	ug/L	435.334	4139	-0.002
	Cr	52	**-0.104**	ug/L	72.478	-1325	-0.001
	Cr	53		ug/L		51233	-0.014
	Mn	55	**0.126**	ug/L	11.095	1595	0.003
	Fe	57	**4.274**	ug/L	32.692	5663	0.002
	Co	59	**0.019**	ug/L	6.544	179	0.000
	Ni	60	**0.015**	ug/L	106.152	81	0.000
	Cu	63		ug/L		247	0.000
	Cu	65	**0.018**	ug/L	12.694	98	0.000
	Zn	66	**-0.027**	ug/L	67.595	195	-0.000
	Zn	67		ug/L		4570	-0.002
	Zn	68		ug/L		616	-0.000
>	Ge	74		ug/L		311952	311951.776
	As	75	**-0.143**	ug/L	71.276	-7	-0.000
	Se	77		ug/L		2400	-0.002
	Se	82	**-0.137**	ug/L	119.966	-21	-0.000
	Kr	83		ug/L		93	0.000
	Sr	88	**0.011**	ug/L	25.483	280	0.001
	Y	89		ug/L		83	0.000
	Mo	98	**0.098**	ug/L	35.184	345	0.001
	Ag	107	**0.015**	ug/L	14.087	112	0.000
	Cd	111	**0.016**	ug/L	5.995	39	0.000
	Cd	114		ug/L		74	0.000
>	In	115		ug/L		197686	197685.845
	Sn	120	**0.394**	ug/L	14.690	2102	0.009
	Sb	121	**1.149**	ug/L	21.160	4524	0.020
	Sb	123		ug/L		3613	0.016
	Ba	135		ug/L		53	0.000
	Ba	137	**0.011**	ug/L	38.304	85	0.000
	Ho	165		ug/L		42	0.000
>	Lu	175		ug/L		357093	357092.754
	Tl	205	**0.110**	ug/L	33.828	2148	0.004
	Pb	208	**0.024**	ug/L	9.125	1475	0.001
	Bi	209		ug/L		277	-0.000
	Th	232	**0.259**	ug/L	17.994	8414	0.018
	U	238	**0.028**	ug/L	16.514	1123	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		81.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 07:06:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.699

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.149**	**ug/L**	1.620	68555	0.259
	Be	9	**57.821**	**ug/L**	2.854	15155	0.057
	B	11	**109.310**	**ug/L**	2.660	25907	0.096
	Na	23	**4906.560**	**ug/L**	7.329	12340242	46.764
	Mg	24	**5266.264**	**ug/L**	13.438	9116596	34.518
	Al	27	**5235.395**	**ug/L**	2.083	12912466	48.861
	P	31	**5327.683**	**ug/L**	0.288	711930	2.685
	K	39	**4481.359**	**ug/L**	5.684	16617684	61.477
	Ca	43	**5070.137**	**ug/L**	2.275	39449	0.149
>	Sc	45		**ug/L**		264055	264054.803
	Ti	47	**51.309**	**ug/L**	4.556	20133	0.075
	V	51	**52.670**	**ug/L**	3.730	244860	0.910
	Cr	52	**53.032**	**ug/L**	3.197	189935	0.723
	Cr	53		**ug/L**		81214	0.099
	Mn	55	**53.774**	**ug/L**	3.959	330780	1.250
	Fe	57	**5398.743**	**ug/L**	2.474	631997	2.374
	Co	59	**51.052**	**ug/L**	1.939	236179	0.894
	Ni	60	**50.803**	**ug/L**	0.758	50663	0.192
	Cu	63		**ug/L**		127160	0.481
	Cu	65	**52.573**	**ug/L**	2.581	61807	0.234
	Zn	66	**49.910**	**ug/L**	1.582	43747	0.140
	Zn	67		**ug/L**		12111	0.022
	Zn	68		**ug/L**		32502	0.102
>	Ge	74		**ug/L**		311314	311314.455
	As	75	**47.404**	**ug/L**	0.787	43366	0.139
	Se	77		**ug/L**		6464	0.011
	Se	82	**50.942**	**ug/L**	0.913	4569	0.015
	Kr	83		**ug/L**		110	0.000
	Sr	88	**48.827**	**ug/L**	0.747	502847	2.581
	Y	89		**ug/L**		299	0.001
	Mo	98	**48.344**	**ug/L**	1.029	120744	0.619
	Ag	107	**49.946**	**ug/L**	1.491	206811	1.062
	Cd	111	**50.570**	**ug/L**	0.584	52464	0.269
	Cd	114		**ug/L**		124100	0.637
>	In	115		**ug/L**		194771	194770.825
	Sn	120	**51.456**	**ug/L**	1.806	220793	1.132
	Sb	121	**47.443**	**ug/L**	11.499	164727	0.843
	Sb	123		**ug/L**		130663	0.669
	Ba	135		**ug/L**		60386	0.171
	Ba	137	**45.880**	**ug/L**	0.929	106348	0.302
	Ho	165		**ug/L**		103	0.000
>	Lu	175		**ug/L**		352530	352530.376
	Tl	205	**51.765**	**ug/L**	1.396	675918	1.916
	Pb	208	**52.577**	**ug/L**	0.533	1106925	3.137
	Bi	209		**ug/L**		341	-0.000
	Th	232	**51.192**	**ug/L**	3.103	1280750	3.629
	U	238	**53.918**	**ug/L**	1.377	1392522	3.949

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.298				
	Be	9	115.643				
	B	11	109.310				
	Na	23	98.131				
	Mg	24	105.325				
	Al	27	103.671				
	P	31	106.554				
	K	39	89.627				
	Ca	43	101.403				
>	Sc	45		81.2			
	Ti	47	102.617				
	V	51	105.340				
	Cr	52	106.064				
	Cr	53					
	Mn	55	107.548				
	Fe	57	107.975				
	Co	59	102.105				
	Ni	60	101.606				
	Cu	63					
	Cu	65	105.146				
	Zn	66	99.820				
	Zn	67					
	Zn	68					
>	Ge	74		84.6			
	As	75	94.808				
	Se	77					
	Se	82	101.884				
	Kr	83					
	Sr	88	97.654				
	Y	89					
	Mo	98	96.688				
	Ag	107	99.893				
	Cd	111	101.140				
	Cd	114					
>	In	115		87.1			
	Sn	120	102.912				
	Sb	121	94.885				
	Sb	123					
	Ba	135					
	Ba	137	91.760				
	Ho	165					
>	Lu	175		96.0			
	Tl	205	103.530				
	Pb	208	105.154				
	Bi	209					
	Th	232	102.384				
	U	238	107.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	CCV is out of limits (+/- 10%)
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 07:12:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.700

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.023**	ug/L	30.318	100	0.000
	Be	9	**0.020**	ug/L	61.049	15	0.000
	B	11	**2.674**	ug/L	23.866	1126	0.002
	Na	23	**3.090**	ug/L	46.022	14007	0.029
	Mg	24	**0.256**	ug/L	5.076	3000	0.002
	Al	27	**-0.170**	ug/L	347.673	6335	-0.002
	P	31	**5.820**	ug/L	13.237	3743	0.003
	K	39	**12.703**	ug/L	66.968	434528	0.174
	Ca	43	**1.353**	ug/L	323.516	191	0.000
>	Sc	45		ug/L		275154	275154.062
	Ti	47	**0.266**	ug/L	29.793	367	0.000
	V	51	**-0.135**	ug/L	166.461	4171	-0.002
	Cr	52	**-0.052**	ug/L	76.021	-1185	-0.001
	Cr	53		ug/L		52244	-0.018
	Mn	55	**0.087**	ug/L	12.775	1413	0.002
	Fe	57	**3.432**	ug/L	14.992	5800	0.002
	Co	59	**0.014**	ug/L	40.615	164	0.000
	Ni	60	**0.015**	ug/L	69.744	84	0.000
	Cu	63		ug/L		247	0.000
	Cu	65	**0.015**	ug/L	28.098	98	0.000
	Zn	66	**-0.017**	ug/L	35.618	211	-0.000
	Zn	67		ug/L		4681	-0.002
	Zn	68		ug/L		595	-0.000
>	Ge	74		ug/L		322731	322731.006
	As	75	**-0.159**	ug/L	111.724	-22	-0.000
	Se	77		ug/L		2600	-0.001
	Se	82	**-0.005**	ug/L	1841.843	-10	-0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	**0.012**	ug/L	34.372	297	0.001
	Y	89		ug/L		75	0.000
	Mo	98	**0.096**	ug/L	30.109	350	0.001
	Ag	107	**0.013**	ug/L	41.846	106	0.000
	Cd	111	**0.030**	ug/L	12.815	54	0.000
	Cd	114		ug/L		86	0.000
>	In	115		ug/L		203252	203252.473
	Sn	120	**0.391**	ug/L	14.389	2148	0.009
	Sb	121	**1.125**	ug/L	22.148	4566	0.020
	Sb	123		ug/L		3598	0.016
	Ba	135		ug/L		57	0.000
	Ba	137	**0.007**	ug/L	87.275	75	0.000
	Ho	165		ug/L		38	-0.000
>	Lu	175		ug/L		360284	360283.717
	Tl	205	**0.115**	ug/L	31.082	2232	0.004
	Pb	208	**0.025**	ug/L	14.324	1499	0.001
	Bi	209		ug/L		275	-0.000
	Th	232	**0.247**	ug/L	16.506	8169	0.018
	U	238	**0.025**	ug/L	23.317	1063	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		84.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 07:18:48
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978333.701

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.076**	**ug/L**	13.263	186	0.000
	Be	9	**0.015**	**ug/L**	164.326	15	0.000
	B	11	**1.179**	**ug/L**	10.398	840	0.001
	Na	23	**3.765**	**ug/L**	36.521	17344	0.036
	Mg	24	**-0.903**	**ug/L**	1.374	1000	-0.006
	Al	27	**-1.346**	**ug/L**	38.308	3667	-0.013
	P	31	**3.451**	**ug/L**	51.913	3754	0.002
	K	39	**9.770**	**ug/L**	35.450	466161	0.134
	Ca	43	**21.676**	**ug/L**	9.353	391	0.001
>	Sc	45		**ug/L**		302722	302721.671
	Ti	47	**0.674**	**ug/L**	5.493	586	0.001
	V	51	**-2.438**	**ug/L**	84.274	-7546	-0.042
	Cr	52	**-1.450**	**ug/L**	14.710	-7065	-0.020
	Cr	53		**ug/L**		222197	0.527
	Mn	55	**0.196**	**ug/L**	3.898	2319	0.005
	Fe	57	**3.328**	**ug/L**	54.979	6365	0.001
	Co	59	**0.001**	**ug/L**	243.566	109	0.000
	Ni	60	**0.024**	**ug/L**	48.510	102	0.000
	Cu	63		**ug/L**		283	0.000
	Cu	65	**0.028**	**ug/L**	41.735	125	0.000
	Zn	66	**0.993**	**ug/L**	7.224	1137	0.003
	Zn	67		**ug/L**		30480	0.077
	Zn	68		**ug/L**		2685	0.006
>	Ge	74		**ug/L**		326630	326629.610
	As	75	**-0.222**	**ug/L**	186.772	-81	-0.001
	Se	77		**ug/L**		15105	0.037
	Se	82	**0.103**	**ug/L**	164.798	-0	0.000
	Kr	83		**ug/L**		81	-0.000
	Sr	88	**0.014**	**ug/L**	4.687	314	0.001
	Y	89		**ug/L**		58	0.000
	Mo	98	**0.003**	**ug/L**	67.762	103	0.000
	Ag	107	**0.002**	**ug/L**	52.475	59	0.000
	Cd	111	**0.012**	**ug/L**	93.401	34	0.000
	Cd	114		**ug/L**		22	-0.000
>	In	115		**ug/L**		197388	197387.639
	Sn	120	**1.246**	**ug/L**	26.841	5800	0.027
	Sb	121	**0.536**	**ug/L**	31.358	2365	0.010
	Sb	123		**ug/L**		1827	0.007
	Ba	135		**ug/L**		36	0.000
	Ba	137	**-0.001**	**ug/L**	153.767	52	-0.000
	Ho	165		**ug/L**		41	0.000
>	Lu	175		**ug/L**		332931	332931.155
	Tl	205	**0.006**	**ug/L**	88.321	722	0.000
	Pb	208	**-0.010**	**ug/L**	25.396	688	-0.001
	Bi	209		**ug/L**		320	-0.000
	Th	232	**0.289**	**ug/L**	21.629	8539	0.020
	U	238	**-0.007**	**ug/L**	18.225	201	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			88.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			88.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			90.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 07:24:59
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978334.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.474**	ug/L	3.162	74411	0.247
	Be	9	**56.061**	ug/L	2.016	16768	0.056
	B	11	**111.074**	ug/L	3.758	30024	0.098
	Na	23	**1925.567**	ug/L	10.301	5526532	18.352
	Mg	24	**2107.333**	ug/L	5.817	4160306	13.812
	Al	27	**1903.180**	ug/L	7.131	5354381	17.762
	P	31	**2165.864**	ug/L	3.879	331920	1.092
	K	39	**2108.461**	ug/L	12.656	9149323	28.925
	Ca	43	**2094.955**	ug/L	2.510	18704	0.061
>	Sc	45		ug/L		301309	301308.535
	Ti	47	**46.342**	ug/L	2.914	20778	0.068
	V	51	**46.689**	ug/L	5.039	248251	0.807
	Cr	52	**47.962**	ug/L	4.193	195858	0.654
	Cr	53		ug/L		265005	0.672
	Mn	55	**51.145**	ug/L	3.601	358878	1.189
	Fe	57	**2138.970**	ug/L	3.653	289170	0.941
	Co	59	**49.887**	ug/L	3.980	263244	0.874
	Ni	60	**51.082**	ug/L	4.304	58077	0.193
	Cu	63		ug/L		137053	0.455
	Cu	65	**49.625**	ug/L	4.325	66540	0.221
	Zn	66	**53.981**	ug/L	3.127	48708	0.151
	Zn	67		ug/L		42557	0.116
	Zn	68		ug/L		36914	0.113
>	Ge	74		ug/L		320725	320725.138
	As	75	**49.095**	ug/L	2.983	46248	0.144
	Se	77		ug/L		19317	0.051
	Se	82	**54.433**	ug/L	2.005	5032	0.016
	Kr	83		ug/L		106	0.000
	Sr	88	**53.598**	ug/L	1.729	537157	2.833
	Y	89		ug/L		306	0.001
	Mo	98	**50.341**	ug/L	1.578	122403	0.645
	Ag	107	**52.552**	ug/L	2.363	211748	1.117
	Cd	111	**52.862**	ug/L	1.165	53377	0.281
	Cd	114		ug/L		127478	0.672
>	In	115		ug/L		189582	189581.558
	Sn	120	**55.127**	ug/L	1.519	230245	1.213
	Sb	121	**60.838**	ug/L	0.683	205394	1.081
	Sb	123		ug/L		162601	0.856
	Ba	135		ug/L		59727	0.179
	Ba	137	**47.639**	ug/L	2.297	104322	0.313
	Ho	165		ug/L		75	0.000
>	Lu	175		ug/L		333082	333081.650
	Tl	205	**49.737**	ug/L	0.550	613733	1.841
	Pb	208	**53.406**	ug/L	1.363	1062256	3.187
	Bi	209		ug/L		880264	2.642
	Th	232	**52.488**	ug/L	0.140	1240960	3.721
	U	238	**56.093**	ug/L	2.189	1368663	4.109

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			92.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			87.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			84.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			90.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 07:37:19
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978335.704

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.069**	ug/L	9.101	173	0.000
	Be	9	**0.010**	ug/L	56.584	14	0.000
	B	11	**1.350**	ug/L	13.214	871	0.001
	Na	23	**5.759**	ug/L	51.495	22686	0.055
	Mg	24	**-0.728**	ug/L	80.710	1333	-0.005
	Al	27	**0.124**	ug/L	171.089	7669	0.001
	P	31	**11.971**	ug/L	10.798	4974	0.006
	K	39	**14.797**	ug/L	18.999	478898	0.203
	Ca	43	**26.350**	ug/L	5.463	425	0.001
>	Sc	45		ug/L		297730	297730.141
	Ti	47	**0.518**	ug/L	11.417	508	0.001
	V	51	**-3.360**	ug/L	41.851	-12024	-0.058
	Cr	52	**-1.675**	ug/L	7.990	-7871	-0.023
	Cr	53		ug/L		246505	0.620
	Mn	55	**0.216**	ug/L	1.474	2424	0.005
	Fe	57	**5.615**	ug/L	21.587	6562	0.002
	Co	59	**-0.004**	ug/L	13.434	84	-0.000
	Ni	60	**0.034**	ug/L	29.228	112	0.000
	Cu	63		ug/L		380	0.001
	Cu	65	**0.083**	ug/L	12.918	196	0.000
	Zn	66	**1.040**	ug/L	4.247	1130	0.003
	Zn	67		ug/L		36507	0.100
	Zn	68		ug/L		2998	0.008
>	Ge	74		ug/L		312562	312561.671
	As	75	**-0.398**	ug/L	59.578	-241	-0.001
	Se	77		ug/L		15683	0.041
	Se	82	**-0.068**	ug/L	15.756	-15	-0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	**0.018**	ug/L	21.766	342	0.001
	Y	89		ug/L		47	-0.000
	Mo	98	**-0.004**	ug/L	54.280	83	-0.000
	Ag	107	**0.009**	ug/L	9.158	82	0.000
	Cd	111	**-0.004**	ug/L	204.056	17	-0.000
	Cd	114		ug/L		31	-0.000
>	In	115		ug/L		191581	191581.401
	Sn	120	**0.281**	ug/L	5.906	1558	0.006
	Sb	121	**0.107**	ug/L	20.901	833	0.002
	Sb	123		ug/L		647	0.001
	Ba	135		ug/L		74	0.000
	Ba	137	**0.027**	ug/L	21.823	113	0.000
	Ho	165		ug/L		44	0.000
>	Lu	175		ug/L		332090	332090.331
	Tl	205	**0.163**	ug/L	7.474	2647	0.006
	Pb	208	**0.026**	ug/L	11.067	1403	0.002
	Bi	209		ug/L		237	-0.000
	Th	232	**0.267**	ug/L	20.239	7989	0.019
	U	238	**-0.010**	ug/L	1.368	130	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 07:43:29
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978336.705

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.826**	**ug/L**	1.329	75150	0.253
	Be	9	**56.678**	**ug/L**	1.865	16686	0.056
	B	11	**116.608**	**ug/L**	4.909	30994	0.103
	Na	23	**2050.666**	**ug/L**	5.051	5802728	19.545
	Mg	24	**2031.353**	**ug/L**	4.667	3951288	13.314
	Al	27	**1963.631**	**ug/L**	5.634	5442883	18.326
	P	31	**2113.617**	**ug/L**	0.350	319061	1.065
	K	39	**1834.666**	**ug/L**	9.096	7875514	25.169
	Ca	43	**2091.185**	**ug/L**	4.741	18373	0.061
>	Sc	45		**ug/L**		296524	296524.133
	Ti	47	**46.891**	**ug/L**	2.244	20692	0.069
	V	51	**45.784**	**ug/L**	4.016	239752	0.791
	Cr	52	**50.085**	**ug/L**	2.275	201424	0.683
	Cr	53		**ug/L**		273515	0.714
	Mn	55	**51.725**	**ug/L**	1.348	357367	1.202
	Fe	57	**2213.557**	**ug/L**	2.416	294424	0.974
	Co	59	**50.179**	**ug/L**	2.036	260713	0.879
	Ni	60	**50.825**	**ug/L**	1.450	56903	0.192
	Cu	63		**ug/L**		135466	0.456
	Cu	65	**49.478**	**ug/L**	1.094	65341	0.220
	Zn	66	**53.193**	**ug/L**	2.232	46714	0.149
	Zn	67		**ug/L**		45180	0.128
	Zn	68		**ug/L**		35314	0.111
>	Ge	74		**ug/L**		312049	312048.794
	As	75	**77.830**	**ug/L**	3.717	71274	0.228
	Se	77		**ug/L**		17244	0.046
	Se	82	**20.603**	**ug/L**	2.149	1847	0.006
	Kr	83		**ug/L**		113	0.000
	Sr	88	**54.495**	**ug/L**	0.852	544589	2.880
	Y	89		**ug/L**		85	0.000
	Mo	98	**50.668**	**ug/L**	2.361	122797	0.649
	Ag	107	**52.827**	**ug/L**	1.717	212261	1.123
	Cd	111	**10.927**	**ug/L**	1.695	11018	0.058
	Cd	114		**ug/L**		25001	0.132
>	In	115		**ug/L**		189021	189021.386
	Sn	120	**55.844**	**ug/L**	1.668	232521	1.228
	Sb	121	**235.133**	**ug/L**	0.868	790160	4.178
	Sb	123		**ug/L**		639056	3.379
	Ba	135		**ug/L**		60386	0.180
	Ba	137	**48.137**	**ug/L**	2.744	106038	0.316
	Ho	165		**ug/L**		240	0.001
>	Lu	175		**ug/L**		335064	335063.825
	Tl	205	**96.512**	**ug/L**	0.770	1197287	3.572
	Pb	208	**43.612**	**ug/L**	0.743	872841	2.602
	Bi	209		**ug/L**		495	0.000
	Th	232	**55.066**	**ug/L**	0.733	1309533	3.903
	U	238	**57.627**	**ug/L**	2.013	1414520	4.221

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 07:49:41
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978337.706

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	**ug/L**	75.472	87	0.000
	Be	9	**0.030**	**ug/L**	78.276	18	0.000
	B	11	**3.012**	**ug/L**	17.136	1183	0.003
	Na	23	**2.186**	**ug/L**	63.165	11338	0.021
	Mg	24	**-1.034**	**ug/L**	31.220	667	-0.007
	Al	27	**-1.309**	**ug/L**	16.609	3334	-0.012
	P	31	**5.214**	**ug/L**	9.524	3578	0.003
	K	39	**11.539**	**ug/L**	28.981	420781	0.158
	Ca	43	**17.241**	**ug/L**	13.964	313	0.001
>	Sc	45		**ug/L**		269039	269038.703
	Ti	47	**0.258**	**ug/L**	8.504	356	0.000
	V	51	**0.112**	**ug/L**	600.727	5185	0.002
	Cr	52	**-0.743**	**ug/L**	5.523	-3698	-0.010
	Cr	53		**ug/L**		104933	0.182
	Mn	55	**0.062**	**ug/L**	7.989	1226	0.001
	Fe	57	**0.739**	**ug/L**	297.514	5348	0.000
	Co	59	**0.002**	**ug/L**	211.496	102	0.000
	Ni	60	**0.018**	**ug/L**	66.933	85	0.000
	Cu	63		**ug/L**		388	0.001
	Cu	65	**0.088**	**ug/L**	14.728	183	0.000
	Zn	66	**0.429**	**ug/L**	11.110	589	0.001
	Zn	67		**ug/L**		10754	0.018
	Zn	68		**ug/L**		1381	0.002
>	Ge	74		**ug/L**		309597	309596.511
	As	75	**0.224**	**ug/L**	154.882	325	0.001
	Se	77		**ug/L**		5548	0.008
	Se	82	**-0.168**	**ug/L**	153.703	-24	-0.000
	Kr	83		**ug/L**		99	0.000
	Sr	88	**0.006**	**ug/L**	16.143	229	0.000
	Y	89		**ug/L**		49	-0.000
	Mo	98	**0.032**	**ug/L**	24.990	176	0.000
	Ag	107	**0.004**	**ug/L**	38.739	63	0.000
	Cd	111	**0.001**	**ug/L**	483.564	23	0.000
	Cd	114		**ug/L**		41	-0.000
>	In	115		**ug/L**		195783	195783.457
	Sn	120	**0.293**	**ug/L**	1.896	1645	0.006
	Sb	121	**0.658**	**ug/L**	15.029	2774	0.012
	Sb	123		**ug/L**		2185	0.009
	Ba	135		**ug/L**		71	0.000
	Ba	137	**0.022**	**ug/L**	25.138	108	0.000
	Ho	165		**ug/L**		47	0.000
>	Lu	175		**ug/L**		351452	351451.990
	Tl	205	**1.267**	**ug/L**	23.890	17137	0.047
	Pb	208	**0.013**	**ug/L**	7.298	1224	0.001
	Bi	209		**ug/L**		288	-0.000
	Th	232	**0.210**	**ug/L**	16.907	7040	0.015
	U	238	**0.003**	**ug/L**	14.631	479	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			82.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			84.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			87.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 08:02:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.249**	**ug/L**	0.829	68705	0.250
	Be	9	**56.325**	**ug/L**	1.034	15323	0.056
	B	11	**105.974**	**ug/L**	2.611	26081	0.093
	Na	23	**5113.312**	**ug/L**	5.666	13356436	48.735
	Mg	24	**5227.783**	**ug/L**	1.615	9391468	34.265
	Al	27	**5147.637**	**ug/L**	2.947	13172073	48.042
	P	31	**5238.448**	**ug/L**	0.988	726386	2.640
	K	39	**4422.767**	**ug/L**	4.189	17013205	60.673
	Ca	43	**4920.187**	**ug/L**	1.171	39718	0.144
>	Sc	45		**ug/L**		274010	274009.674
	Ti	47	**49.100**	**ug/L**	2.577	20011	0.072
	V	51	**51.034**	**ug/L**	3.178	246450	0.882
	Cr	52	**50.565**	**ug/L**	4.764	187932	0.690
	Cr	53		**ug/L**		110660	0.195
	Mn	55	**52.352**	**ug/L**	3.091	334215	1.217
	Fe	57	**5243.039**	**ug/L**	2.542	637115	2.306
	Co	59	**49.376**	**ug/L**	3.405	237083	0.865
	Ni	60	**49.730**	**ug/L**	1.204	51457	0.188
	Cu	63		**ug/L**		127977	0.466
	Cu	65	**51.580**	**ug/L**	1.650	62937	0.229
	Zn	66	**49.626**	**ug/L**	1.898	44784	0.139
	Zn	67		**ug/L**		15634	0.032
	Zn	68		**ug/L**		33492	0.102
>	Ge	74		**ug/L**		320532	320532.294
	As	75	**46.148**	**ug/L**	3.519	43471	0.135
	Se	77		**ug/L**		7906	0.015
	Se	82	**50.277**	**ug/L**	2.704	4643	0.015
	Kr	83		**ug/L**		98	0.000
	Sr	88	**49.254**	**ug/L**	0.313	516792	2.603
	Y	89		**ug/L**		163	0.001
	Mo	98	**48.149**	**ug/L**	1.785	122513	0.617
	Ag	107	**49.779**	**ug/L**	2.535	209970	1.058
	Cd	111	**50.744**	**ug/L**	2.887	53620	0.270
	Cd	114		**ug/L**		126834	0.639
>	In	115		**ug/L**		198436	198435.927
	Sn	120	**49.928**	**ug/L**	2.977	218248	1.098
	Sb	121	**46.236**	**ug/L**	10.067	163636	0.822
	Sb	123		**ug/L**		130797	0.657
	Ba	135		**ug/L**		60641	0.171
	Ba	137	**45.839**	**ug/L**	1.338	106559	0.301
	Ho	165		**ug/L**		88	0.000
>	Lu	175		**ug/L**		353540	353539.945
	Tl	205	**50.163**	**ug/L**	2.971	656857	1.856
	Pb	208	**52.146**	**ug/L**	0.638	1101016	3.112
	Bi	209		**ug/L**		327	-0.000
	Th	232	**49.480**	**ug/L**	2.526	1241625	3.507
	U	238	**53.968**	**ug/L**	1.569	1397845	3.953

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	106.499				
	Be	9	112.650				
	B	11	105.974				
	Na	23	102.266				
	Mg	24	104.556				
	Al	27	101.933				
	P	31	104.769				
	K	39	88.455				
	Ca	43	98.404				
>	Sc	45		84.2			
	Ti	47	98.200				
	V	51	102.067				
	Cr	52	101.131				
	Cr	53					
	Mn	55	104.705				
	Fe	57	104.861				
	Co	59	98.752				
	Ni	60	99.459				
	Cu	63					
	Cu	65	103.160				
	Zn	66	99.251				
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75	92.297				
	Se	77					
	Se	82	100.555				
	Kr	83					
	Sr	88	98.509				
	Y	89					
	Mo	98	96.298				
	Ag	107	99.557				
	Cd	111	101.489				
	Cd	114					
>	In	115		88.7			
	Sn	120	99.856				
	Sb	121	92.472				
	Sb	123					
	Ba	135					
	Ba	137	91.677				
	Ho	165					
>	Lu	175		96.2			
	Tl	205	100.327				
	Pb	208	104.293				
	Bi	209					
	Th	232	98.961				
	U	238	107.936				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 08:08:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	**ug/L**	44.018	81	0.000
	Be	9	**0.034**	**ug/L**	76.649	19	0.000
	B	11	**3.193**	**ug/L**	18.494	1214	0.003
	Na	23	**1.547**	**ug/L**	81.007	9670	0.015
	Mg	24	**1.061**	**ug/L**	185.551	4334	0.007
	Al	27	**0.723**	**ug/L**	92.807	8336	0.007
	P	31	**5.062**	**ug/L**	23.750	3525	0.003
	K	39	**12.990**	**ug/L**	49.749	421811	0.178
	Ca	43	**5.886**	**ug/L**	39.322	221	0.000
>	Sc	45		**ug/L**		266467	266467.294
	Ti	47	**0.092**	**ug/L**	62.201	287	0.000
	V	51	**0.195**	**ug/L**	212.424	5575	0.003
	Cr	52	**-0.275**	**ug/L**	22.904	-1959	-0.004
	Cr	53		**ug/L**		67198	0.044
	Mn	55	**0.017**	**ug/L**	2.424	935	0.000
	Fe	57	**5.339**	**ug/L**	9.158	5840	0.002
	Co	59	**0.011**	**ug/L**	10.492	146	0.000
	Ni	60	**0.018**	**ug/L**	46.382	84	0.000
	Cu	63		**ug/L**		187	0.000
	Cu	65	**0.009**	**ug/L**	22.584	88	0.000
	Zn	66	**0.085**	**ug/L**	36.840	299	0.000
	Zn	67		**ug/L**		6142	0.003
	Zn	68		**ug/L**		809	0.001
>	Ge	74		**ug/L**		319019	319019.264
	As	75	**0.020**	**ug/L**	342.803	147	0.000
	Se	77		**ug/L**		3181	0.000
	Se	82	**-0.026**	**ug/L**	414.347	-12	-0.000
	Kr	83		**ug/L**		93	-0.000
	Sr	88	**0.007**	**ug/L**	8.563	241	0.000
	Y	89		**ug/L**		44	-0.000
	Mo	98	**0.109**	**ug/L**	29.189	382	0.001
	Ag	107	**0.012**	**ug/L**	23.916	102	0.000
	Cd	111	**0.018**	**ug/L**	37.546	41	0.000
	Cd	114		**ug/L**		69	0.000
>	In	115		**ug/L**		201770	201770.025
	Sn	120	**0.392**	**ug/L**	18.681	2137	0.009
	Sb	121	**1.257**	**ug/L**	22.869	5002	0.022
	Sb	123		**ug/L**		3911	0.017
	Ba	135		**ug/L**		46	0.000
	Ba	137	**0.000**	**ug/L**	1660.599	59	0.000
	Ho	165		**ug/L**		39	0.000
>	Lu	175		**ug/L**		351683	351682.748
	Tl	205	**0.523**	**ug/L**	17.405	7477	0.019
	Pb	208	**0.018**	**ug/L**	12.624	1330	0.001
	Bi	209		**ug/L**		266	-0.000
	Th	232	**0.485**	**ug/L**	13.683	13899	0.034
	U	238	**0.025**	**ug/L**	20.325	1046	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			81.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			86.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241337001
Sample Date/Time: Saturday, December 05, 2009 08:14:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241337001.710

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.033**	ug/L	12.967	124	0.000
	Be	9	**0.018**	ug/L	41.681	16	0.000
	B	11	**1.531**	ug/L	12.219	935	0.001
	Na	23	**2.477**	ug/L	69.220	13674	0.024
	Mg	24	**-0.903**	ug/L	55.963	1000	-0.006
	Al	27	**3.029**	ug/L	82.539	16010	0.028
	P	31	**12.408**	ug/L	8.578	5129	0.006
	K	39	**14.961**	ug/L	20.063	488206	0.205
	Ca	43	**25.864**	ug/L	10.274	429	0.001
>	Sc	45		ug/L		303081	303080.973
	Ti	47	**0.458**	ug/L	17.284	490	0.001
	V	51	**-2.755**	ug/L	32.956	-9137	-0.048
	Cr	52	**-1.103**	ug/L	18.684	-5650	-0.015
	Cr	53		ug/L		218843	0.514
	Mn	55	**0.172**	ug/L	6.840	2158	0.004
	Fe	57	**10.569**	ug/L	8.128	7340	0.005
	Co	59	**-0.005**	ug/L	33.065	82	-0.000
	Ni	60	**0.040**	ug/L	15.083	121	0.000
	Cu	63		ug/L		405	0.001
	Cu	65	**0.080**	ug/L	7.646	195	0.000
	Zn	66	**1.056**	ug/L	2.485	1179	0.003
	Zn	67		ug/L		27895	0.070
	Zn	68		ug/L		2641	0.006
>	Ge	74		ug/L		322457	322456.588
	As	75	**-0.387**	ug/L	134.033	-237	-0.001
	Se	77		ug/L		14502	0.035
	Se	82	**0.008**	ug/L	347.418	-9	0.000
	Kr	83		ug/L		95	-0.000
	Sr	88	**0.014**	ug/L	17.593	314	0.001
	Y	89		ug/L		62	0.000
	Mo	98	**0.006**	ug/L	26.104	111	0.000
	Ag	107	**0.013**	ug/L	8.618	104	0.000
	Cd	111	**0.013**	ug/L	74.730	35	0.000
	Cd	114		ug/L		35	-0.000
>	In	115		ug/L		195154	195153.755
	Sn	120	**0.583**	ug/L	36.263	2892	0.013
	Sb	121	**0.550**	ug/L	30.332	2389	0.010
	Sb	123		ug/L		1909	0.008
	Ba	135		ug/L		49	0.000
	Ba	137	**0.008**	ug/L	70.533	72	0.000
	Ho	165		ug/L		44	0.000
>	Lu	175		ug/L		337004	337004.168
	Tl	205	**0.203**	ug/L	13.385	3181	0.008
	Pb	208	**0.028**	ug/L	2.883	1458	0.002
	Bi	209		ug/L		228	-0.000
	Th	232	**0.619**	ug/L	29.804	16463	0.044
	U	238	**-0.006**	ug/L	18.325	231	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241337002
Sample Date/Time: Saturday, December 05, 2009 08:20:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241337002.711

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.073**	**ug/L**	9.796	177	0.000
	Be	9	**0.016**	**ug/L**	45.276	15	0.000
	B	11	**0.629**	**ug/L**	24.005	676	0.001
	Na	23	**212.696**	**ug/L**	13.192	603606	2.027
	Mg	24	**3.419**	**ug/L**	37.393	9337	0.022
	Al	27	**28.134**	**ug/L**	19.769	84588	0.263
	P	31	**12.281**	**ug/L**	25.079	4970	0.006
	K	39	**36.683**	**ug/L**	29.297	562924	0.503
	Ca	43	**52.572**	**ug/L**	3.052	648	0.002
>	Sc	45		**ug/L**		294843	294842.948
	Ti	47	**1.031**	**ug/L**	6.147	725	0.002
	V	51	**-1.181**	**ug/L**	26.179	-858	-0.020
	Cr	52	**2.468**	**ug/L**	12.446	8858	0.034
	Cr	53		**ug/L**		226873	0.561
	Mn	55	**3.876**	**ug/L**	1.071	27475	0.090
	Fe	57	**68.592**	**ug/L**	1.987	14664	0.030
	Co	59	**0.061**	**ug/L**	4.903	417	0.001
	Ni	60	**1.966**	**ug/L**	0.751	2260	0.007
	Cu	63		**ug/L**		1022	0.003
	Cu	65	**0.324**	**ug/L**	1.824	510	0.001
	Zn	66	**1.375**	**ug/L**	7.493	1438	0.004
	Zn	67		**ug/L**		29212	0.076
	Zn	68		**ug/L**		2961	0.007
>	Ge	74		**ug/L**		316201	316201.142
	As	75	**-0.201**	**ug/L**	252.445	-67	-0.001
	Se	77		**ug/L**		14309	0.036
	Se	82	**-0.033**	**ug/L**	263.620	-12	-0.000
	Kr	83		**ug/L**		96	0.000
	Sr	88	**0.782**	**ug/L**	1.891	8025	0.041
	Y	89		**ug/L**		1516	0.008
	Mo	98	**0.141**	**ug/L**	6.838	436	0.002
	Ag	107	**0.011**	**ug/L**	18.811	91	0.000
	Cd	111	**0.010**	**ug/L**	72.872	31	0.000
	Cd	114		**ug/L**		37	-0.000
>	In	115		**ug/L**		190310	190310.123
	Sn	120	**0.172**	**ug/L**	1.389	1094	0.004
	Sb	121	**0.140**	**ug/L**	13.771	939	0.002
	Sb	123		**ug/L**		729	0.002
	Ba	135		**ug/L**		502	0.001
	Ba	137	**0.373**	**ug/L**	3.772	881	0.002
	Ho	165		**ug/L**		144	0.000
>	Lu	175		**ug/L**		336570	336570.177
	Tl	205	**0.099**	**ug/L**	2.713	1890	0.004
	Pb	208	**0.117**	**ug/L**	0.547	3247	0.007
	Bi	209		**ug/L**		232	-0.000
	Th	232	**0.270**	**ug/L**	17.848	8179	0.019
	U	238	**-0.006**	**ug/L**	8.571	228	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			85.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			85.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			91.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 09:10:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.719

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.925**	ug/L	2.862	69681	0.258
	Be	9	**57.176**	ug/L	4.121	15292	0.057
	B	11	**107.126**	ug/L	3.241	25920	0.094
	Na	23	**5011.631**	ug/L	1.930	12882212	47.765
	Mg	24	**5259.759**	ug/L	4.387	9288391	34.475
	Al	27	**4914.337**	ug/L	8.831	12354903	45.864
	P	31	**5380.620**	ug/L	1.737	733709	2.712
	K	39	**4396.917**	ug/L	1.242	16640950	60.318
	Ca	43	**5075.773**	ug/L	1.548	40299	0.149
>	Sc	45		ug/L		269555	269555.443
	Ti	47	**50.539**	ug/L	2.706	20251	0.074
	V	51	**53.718**	ug/L	2.489	254879	0.928
	Cr	52	**52.821**	ug/L	2.262	193126	0.720
	Cr	53		ug/L		105323	0.183
	Mn	55	**53.655**	ug/L	3.287	336800	1.247
	Fe	57	**5411.348**	ug/L	3.229	646423	2.380
	Co	59	**51.384**	ug/L	3.280	242602	0.900
	Ni	60	**51.792**	ug/L	1.061	52709	0.195
	Cu	63		ug/L		128655	0.477
	Cu	65	**53.011**	ug/L	4.729	63585	0.236
	Zn	66	**50.566**	ug/L	1.359	45104	0.142
	Zn	67		ug/L		14785	0.030
	Zn	68		ug/L		33507	0.104
>	Ge	74		ug/L		316855	316854.836
	As	75	**47.700**	ug/L	2.204	44410	0.140
	Se	77		ug/L		7851	0.015
	Se	82	**51.201**	ug/L	1.757	4674	0.015
	Kr	83		ug/L		99	0.000
	Sr	88	**49.193**	ug/L	1.878	519603	2.600
	Y	89		ug/L		162	0.001
	Mo	98	**49.016**	ug/L	0.618	125561	0.628
	Ag	107	**50.128**	ug/L	0.412	212876	1.065
	Cd	111	**50.318**	ug/L	0.571	53540	0.268
	Cd	114		ug/L		126488	0.633
>	In	115		ug/L		199761	199760.505
	Sn	120	**49.910**	ug/L	1.102	219684	1.098
	Sb	121	**47.154**	ug/L	9.955	167924	0.838
	Sb	123		ug/L		133000	0.664
	Ba	135		ug/L		61011	0.176
	Ba	137	**47.092**	ug/L	2.051	107049	0.309
	Ho	165		ug/L		84	0.000
>	Lu	175		ug/L		345804	345804.222
	Tl	205	**47.089**	ug/L	3.332	603036	1.743
	Pb	208	**53.511**	ug/L	1.605	1104883	3.193
	Bi	209		ug/L		267	-0.000
	Th	232	**51.732**	ug/L	3.460	1269337	3.667
	U	238	**54.525**	ug/L	3.313	1380898	3.994

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	109.850				
|	Be	9	114.352				
|	B	11	107.126				
|	Na	23	100.233				
|	Mg	24	105.195				
|	Al	27	97.314				
|	P	31	107.612				
|	K	39	87.938				
|	Ca	43	101.515				
|>	Sc	45		82.9			
|	Ti	47	101.078				
|	V	51	107.436				
|	Cr	52	105.642				
|	Cr	53					
|	Mn	55	107.309				
|	Fe	57	108.227				
|	Co	59	102.768				
|	Ni	60	103.585				
|	Cu	63					
⌊	Cu	65	106.021				
⌈	Zn	66	101.132				
|	Zn	67					
|	Zn	68					
|>	Ge	74		86.1			
|	As	75	95.401				
|	Se	77					
|	Se	82	102.401				
⌊	Kr	83					
⌈	Sr	88	98.385				
|	Y	89					
|	Mo	98	98.032				
|	Ag	107	100.257				
|	Cd	111	100.636				
|	Cd	114					
|>	In	115		89.3			
|	Sn	120	99.821				
|	Sb	121	94.309				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	94.184				
|	Ho	165					
|>	Lu	175		94.1			
|	Tl	205	94.179				
|	Pb	208	107.022				
|	Bi	209					
|	Th	232	103.464				
⌊	U	238	109.050				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 09:16:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.720

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.000**	**ug/L**	2116.398	70	0.000
	Be	9	**0.022**	**ug/L**	81.337	16	0.000
	B	11	**2.246**	**ug/L**	22.111	1010	0.002
	Na	23	**2.378**	**ug/L**	14.749	12005	0.023
	Mg	24	**0.460**	**ug/L**	251.864	3334	0.003
	Al	27	**-0.135**	**ug/L**	459.321	6335	-0.001
	P	31	**3.492**	**ug/L**	39.071	3375	0.002
	K	39	**14.687**	**ug/L**	102.816	436297	0.201
	Ca	43	**3.429**	**ug/L**	81.571	205	0.000
>	Sc	45		**ug/L**		271572	271571.780
	Ti	47	**0.131**	**ug/L**	52.100	309	0.000
	V	51	**0.015**	**ug/L**	2772.675	4812	0.000
	Cr	52	**-0.142**	**ug/L**	69.544	-1506	-0.002
	Cr	53		**ug/L**		65365	0.032
	Mn	55	**0.001**	**ug/L**	209.247	853	0.000
	Fe	57	**3.331**	**ug/L**	7.139	5712	0.001
	Co	59	**0.006**	**ug/L**	58.721	121	0.000
	Ni	60	**0.024**	**ug/L**	31.081	93	0.000
	Cu	63		**ug/L**		176	0.000
	Cu	65	**0.010**	**ug/L**	28.364	90	0.000
	Zn	66	**0.196**	**ug/L**	12.543	407	0.001
	Zn	67		**ug/L**		6106	0.002
	Zn	68		**ug/L**		816	0.000
>	Ge	74		**ug/L**		325870	325869.827
	As	75	**0.216**	**ug/L**	36.958	337	0.001
	Se	77		**ug/L**		3190	0.000
	Se	82	**-0.186**	**ug/L**	60.039	-27	-0.000
	Kr	83		**ug/L**		110	0.000
	Sr	88	**0.005**	**ug/L**	34.700	222	0.000
	Y	89		**ug/L**		46	-0.000
	Mo	98	**0.108**	**ug/L**	18.790	381	0.001
	Ag	107	**0.007**	**ug/L**	31.586	81	0.000
	Cd	111	**0.013**	**ug/L**	45.021	36	0.000
	Cd	114		**ug/L**		79	0.000
>	In	115		**ug/L**		203584	203583.894
	Sn	120	**0.367**	**ug/L**	18.181	2037	0.008
	Sb	121	**1.198**	**ug/L**	22.608	4822	0.021
	Sb	123		**ug/L**		3869	0.017
	Ba	135		**ug/L**		42	0.000
	Ba	137	**0.001**	**ug/L**	649.837	60	0.000
	Ho	165		**ug/L**		41	0.000
>	Lu	175		**ug/L**		356257	356256.772
	Tl	205	**0.735**	**ug/L**	11.085	10387	0.027
	Pb	208	**0.034**	**ug/L**	7.436	1668	0.002
	Bi	209		**ug/L**		157	-0.001
	Th	232	**0.348**	**ug/L**	8.559	10626	0.025
	U	238	**0.022**	**ug/L**	7.120	962	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		83.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 11:20:22
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1404
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6084.1	6084.096	126.122	2.1
	Mg	24.0	37933.7	37933.699	246.062	0.6
	Co	58.9	131465.5	131465.545	391.169	0.3
	Rh	102.9	287728.9	287728.860	2520.918	0.9
	In	114.9	384046.5	384046.542	2719.920	0.7
	Pb	208.0	227115.9	227115.942	904.488	0.4
⌈>	Ba	137.9	372943.0	372943.011	2197.849	0.6
⌊	Ba++	69.0	6670.6	0.018	0.000	0.7
⌈>	Ce	139.9	452582.0	452582.036	2432.404	0.5
⌊	CeO	155.9	10781.5	0.024	0.001	2.4
	Bkgd	220.0	29.1	29.100	2.485	8.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	7.0	5548.1
Co	59	9	7.0	144363.8
In	115	9	7.3	374732.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	604	2060	0.615
Be	9.0	9.1	2061	2070	0.655
Mg	24.0	24.0	5671	2080	0.651
Mg	25.0	25.0	5923	2075	0.623
Mg	26.0	26.0	6187	2070	0.695
Co	58.9	58.9	14186	2110	0.657
Rh	102.9	102.9	24872	2160	0.653
In	114.9	114.9	27786	2180	0.652
Ce	139.9	139.9	33870	2195	0.677
Pb	206.0	206.0	49948	2290	0.663
Pb	207.0	207.0	50159	2260	0.626
Pb	208.0	208.0	50451	2280	0.672
U	238.1	238.0	57718	2285	0.714

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 19:54:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Blank.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9		ug/L		26	
⌊>	Sc	45		ug/L		451819	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 19:56:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 1.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	10.000	ug/L	1.504	4291	0.010
⌊>	Sc	45		ug/L		448236	448236.284

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 19:58:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 2.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	99.950	ug/L	1.387	41554	0.091
⌊>	Sc	45		ug/L		458207	458206.717

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 19:59:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 1.204

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.550**	**ug/L**	2.261	21535	0.047
⌊>	Sc	45		**ug/L**		460155	460154.758

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	103.100				
⌊>	Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 20:01:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 2.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.007	ug/L	87.518	30	0.000
⌊>	Sc	45		ug/L		468270	468269.954

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 20:03:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 3.206

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.573**	**ug/L**	13.614	270	0.001
⌊>	Sc	45		**ug/L**		468826	468826.477

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	114.555				
⌊>	Sc	45		103.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 20:04:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 4.207

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.079	ug/L	26.149	60	0.000
⌊>	Sc	45		ug/L		458641	458641.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 20:06:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 5.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	21.293	ug/L	2.059	8369	0.019
⌊>	Sc	45		ug/L		432165	432164.506

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	106.466				
⌊>	Sc	45		95.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 20:08:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**52.874**	**ug/L**	4.235	21543	0.048
⌊>	Sc	45		**ug/L**		449096	449096.234

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	105.748				
⌊>	Sc	45		99.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 20:09:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.210

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.019	ug/L	39.713	35	0.000
Sc	45		ug/L		460215	460215.149

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		101.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 20:11:27
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978333.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.003	ug/L	279.819	26	-0.000
⌊>	Sc	45		ug/L		468278	468278.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 20:13:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978334.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	50.558	ug/L	1.108	21913	0.046
⌊>	Sc	45		ug/L		477347	477346.608

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		105.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 20:16:38
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978335.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.016	ug/L	56.833	22	-0.000
⌊>	Sc	45		ug/L		495941	495941.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		109.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 20:18:22
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978336.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	47.743	ug/L	2.253	21693	0.043
⌊>	Sc	45		ug/L		500478	500478.200

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		110.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 20:20:07
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978337.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.022	ug/L	50.979	36	0.000
⌊>	Sc	45		ug/L		459820	459820.282

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 20:23:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 8.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	49.475	ug/L	2.143	21229	0.045
⌊>	Sc	45		ug/L		472626	472625.711

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	98.949				
⌊>	Sc	45		104.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 20:25:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 9.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.026	ug/L	41.795	38	0.000
⌊>	Sc	45		ug/L		463752	463751.924

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241337001
Sample Date/Time: Saturday, December 05, 2009 20:27:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241337001.220

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.000	ug/L	12051.690	28	0.000
Sc	45		ug/L		483503	483502.804

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		107.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241337002
Sample Date/Time: Saturday, December 05, 2009 20:28:45
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241337002.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.005	ug/L	126.857	26	-0.000
⌊>	Sc	45		ug/L		482288	482287.545

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		106.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 20:40:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.228

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**49.048**	**ug/L**	1.726	21635	0.044
⌊>	Sc	45		**ug/L**		485814	485813.776

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	98.096				
⌊>	Sc	45		107.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 20:42:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.020	ug/L	5.543	35	0.000
⌊>	Sc	45		ug/L		459706	459705.881

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\112509W1.SIF
Batch ID:
Results Data Set: 112509W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: WATER **Method Last Saved: 10/28/2009 09:43:18**
Method Description: 7470A, 245.2, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 11/25/2009 07:43:51**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	07:44:53	Yes
2		[0.00]	0.0000	-0.0012	0.0000	07:45:28	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0001				
%RSD:		0.00	79.37				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 11/25/2009 07:45:47**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0022	0.0098	0.0023	07:46:47	Yes
2		[0.2]	0.0021	0.0090	0.0022	07:47:22	Yes
Mean:		[0.2]	0.0022				
SD:		0.0	0.0001				
%RSD:		0.0	2.65				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01093 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 11/25/2009 07:47:41**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0055	0.0237	0.0055	07:48:42	Yes
2		[0.5]	0.0054	0.0235	0.0055	07:49:18	Yes
Mean:		[0.5]	0.0054				
SD:		0.0	0.0000				
%RSD:		0.0	0.63				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999997 Slope: 0.01087 Intercept: 0.00000

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 11/25/2009 07:49:37**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0221	0.0989	0.0222	07:50:39	Yes
2		[2.0]	0.0218	0.0966	0.0219	07:51:13	Yes
Mean:		[2.0]	0.0219				
SD:		0.0	0.0002				
%RSD:		0.0	0.98				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999997 Slope: 0.01098 Intercept: -0.00002

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 11/25/2009 07:51:33**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0544	0.2419	0.0545	07:52:35	Yes
2		[5.0]	0.0541	0.2417	0.0542	07:53:10	Yes
Mean:		[5.0]	0.0543				
SD:		0.0	0.0003				
%RSD:		0.0	0.47				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999989 Slope: 0.01086 Intercept: 0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 11/25/2009 07:53:31**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1094	0.4861	0.1095	07:54:31	Yes
2		[10.0]	0.1082	0.4828	0.1083	07:55:06	Yes
Mean:		[10.0]	0.1088				
SD:		0.0	0.0008				
%RSD:		0.0	0.75				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999997 Slope: 0.01088 Intercept: 0.00002

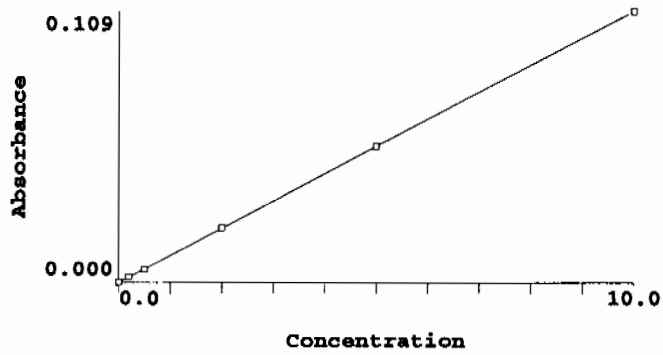

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.002	0.00	79.4
S0.2	0.0022	0.2	0.199	0.00	2.6
S0.5	0.0054	0.5	0.498	0.00	0.6
S2.0	0.0219	2.0	2.015	0.00	1.0

S5.0	0.0543	5.0	4.987	0.00	0.5
S10.0	0.1088	10.0	10.004	0.00	0.8

Correlation Coef.: 0.999997 Slope: 0.01088 Intercept: 0.00002

==========

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 11/25/2009 07:55:25**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.095	5.095	0.0554	0.2474	0.0555	07:56:26	Yes
2	5.098	5.098	0.0555	0.2472	0.0555	07:57:00	Yes
Mean:	5.096	5.096	0.0554				
SD:	0.002	0.002	0.0000				
%RSD:	0.045	0.045	0.04				

QC value within limits for Hg 253.7 Recovery = 101.92%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 11/25/2009 07:57:20**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	-0.0005	0.0002	07:58:21	Yes
2	0.001	0.001	0.0000	-0.0003	0.0001	07:58:56	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	94.87	94.87	62.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 11/25/2009 07:59:16**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.202	0.202	0.0022	0.0098	0.0023	08:00:17	Yes
2	0.209	0.209	0.0023	0.0107	0.0024	08:00:52	Yes
Mean:	0.206	0.206	0.0023				
SD:	0.005	0.005	0.0001				
%RSD:	2.487	2.487	2.46				

QC value within limits for Hg 253.7 Recovery = 102.90%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 08:01:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.971	4.971	0.0541	0.2417	0.0542	08:02:13	Yes
2	4.915	4.915	0.0535	0.2403	0.0536	08:02:48	Yes
Mean:	4.943	4.943	0.0538				
SD:	0.040	0.040	0.0004				
%RSD:	0.800	0.800	0.80				

QC value within limits for Hg 253.7 Recovery = 98.86%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 11/25/2009 08:03:08
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	-0.0001	0.0001	08:04:08	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	08:04:43	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	139.3	139.3	46.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201975633|924182|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 11/25/2009 08:05:03
Data Type: Original

Replicate Data: 1201975633|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0003	0.0001	08:06:04	Yes
2	0.005	0.005	0.0001	0.0007	0.0002	08:06:39	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	35.89	35.89	22.80				

Sequence No.: 13
Sample ID: 1201975634|924182|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 11/25/2009 08:06:59
Data Type: Original

Replicate Data: 1201975634|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.004	2.004	0.0218	0.0979	0.0219	08:08:01	Yes
2	1.969	1.969	0.0214	0.0960	0.0215	08:08:36	Yes
Mean:	1.986	1.986	0.0216				
SD:	0.025	0.025	0.0003				
%RSD:	1.251	1.251	1.25				

Sequence No.: 14
Sample ID: 241023001|924182|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 11/25/2009 08:08:57
Data Type: Original

Replicate Data: 241023001|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0004	0.0001	08:09:57	Yes
2	0.006	0.006	0.0001	0.0006	0.0002	08:10:32	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.007	0.007	0.0001				
%RSD:	397.9	397.9	171.58				

Sequence No.: 15
Sample ID: 241023002|924182|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 11/25/2009 08:10:51
Data Type: Original

Replicate Data: 241023002|924182|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1201975636|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.066	2.066	0.0225	0.1030	0.0226	08:21:25	Yes
2	2.062	2.062	0.0224	0.1024	0.0225	08:22:00	Yes
Mean:	2.064	2.064	0.0225				
SD:	0.003	0.003	0.0000				
%RSD:	0.147	0.147	0.15				

Sequence No.: 21 Autosampler Location: 21
Sample ID: 1201975637|924182|5 Date Collected: 11/25/2009 08:22:19
Analyst: JXL1 Data Type: Original

Replicate Data: 1201975637|924182|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	-0.0000	0.0001	08:23:21	Yes
2	0.002	0.002	0.0000	0.0003	0.0001	08:23:55	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	440.4	440.4	69.93				

Sequence No.: 22 Autosampler Location: 7
Sample ID: CCV Date Collected: 11/25/2009 08:24:15
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.059	5.059	0.0550	0.2479	0.0551	08:25:15	Yes
2	5.059	5.059	0.0550	0.2474	0.0551	08:25:50	Yes
Mean:	5.059	5.059	0.0550				
SD:	0.000	0.000	0.0000				
%RSD:	0.001	0.001	0.00				

QC value within limits for Hg 253.7 Recovery = 101.18%
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 08:26:09
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0003	0.0001	08:27:10	Yes
2	0.001	0.001	0.0000	0.0002	0.0001	08:27:45	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.88	11.88	4.76				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 Autosampler Location: 22
Sample ID: 241100002|924182|1 Date Collected: 11/25/2009 08:28:04
Analyst: JXL1 Data Type: Original

Replicate Data: 241100002|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0009	0.0002	08:29:05	Yes
2	0.000	0.000	0.0000	0.0001	0.0001	08:29:40	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	-0.0003	0.0000	08:38:45	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0001	08:39:20	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	43.78	43.78	90.87				

Sequence No.: 30
Sample ID: 1201975651|924188|1
Analyst: JXL1
Autosampler Location: 28
Date Collected: 11/25/2009 08:39:40
Data Type: Original

Replicate Data: 1201975651|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0002	0.0001	08:40:40	Yes
2	0.001	0.001	0.0000	-0.0001	0.0001	08:41:15	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	501.1	501.1	177.48				

Sequence No.: 31
Sample ID: 1201975652|924188|1
Analyst: JXL1
Autosampler Location: 29
Date Collected: 11/25/2009 08:41:34
Data Type: Original

Replicate Data: 1201975652|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.133	2.133	0.0232	0.1045	0.0233	08:42:35	Yes
2	2.123	2.123	0.0231	0.1029	0.0232	08:43:10	Yes
Mean:	2.128	2.128	0.0232				
SD:	0.007	0.007	0.0001				
%RSD:	0.330	0.330	0.33				

Sequence No.: 32
Sample ID: 1201975653|924188|5
Analyst: JXL1
Autosampler Location: 30
Date Collected: 11/25/2009 08:43:29
Data Type: Original

Replicate Data: 1201975653|924188|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	08:44:30	Yes
2	0.000	0.000	0.0000	0.0002	0.0001	08:45:04	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	189.6	189.6	57.77				

Sequence No.: 33
Sample ID: 241113002|924188|1
Analyst: JXL1
Autosampler Location: 31
Date Collected: 11/25/2009 08:45:23
Data Type: Original

Replicate Data: 241113002|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0001	0.0001	08:46:24	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	08:47:00	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	110.4	110.4	28.08				

Sequence No.: 34
Sample ID: CCV
Autosampler Location: 7
Date Collected: 11/25/2009 08:47:19

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.185	5.185	0.0564	0.2539	0.0565	08:48:19	Yes
2	5.121	5.121	0.0557	0.2508	0.0558	08:48:54	Yes
Mean:	5.153	5.153	0.0561				
SD:	0.045	0.045	0.0005				
%RSD:	0.870	0.870	0.87				

QC value within limits for Hg 253.7 Recovery = 103.06%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 08:49:13
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0007	0.0002	08:50:14	Yes
2	0.006	0.006	0.0001	0.0010	0.0002	08:50:49	Yes
Mean:	0.006	0.006	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	5.555	5.555	4.04				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 241113003|924188|1 Date Collected: 11/25/2009 08:51:08
Analyst: JXL1 Data Type: Original

Replicate Data: 241113003|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0009	0.0001	08:52:09	Yes
2	0.005	0.005	0.0001	0.0009	0.0002	08:52:44	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	8.282	8.282	5.65				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 241113004|924188|1 Date Collected: 11/25/2009 08:53:03
Analyst: JXL1 Data Type: Original

Replicate Data: 241113004|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	08:54:04	Yes
2	0.002	0.002	0.0001	0.0004	0.0001	08:54:39	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	9.874	9.874	5.09				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1201980105|926110|1 Date Collected: 11/25/2009 08:54:59
Analyst: JXL1 Data Type: Original

Replicate Data: 1201980105|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0005	0.0001	08:56:00	Yes

Replicate Data: 1201980109|926110|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0007	0.0002	09:05:41	Yes
2	0.006	0.006	0.0001	0.0006	0.0002	09:06:16	Yes
Mean:	0.007	0.007	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	15.16	15.16	11.56				

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 241679002|926110|1 **Date Collected: 11/25/2009 09:06:36**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241679002|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0001	0.0008	0.0002	09:07:37	Yes
2	0.011	0.011	0.0001	0.0010	0.0002	09:08:12	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	13.90	13.90	11.50				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 241679003|926110|1 **Date Collected: 11/25/2009 09:08:31**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241679003|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0004	0.0001	09:09:32	Yes
2	0.001	0.001	0.0000	0.0003	0.0001	09:10:07	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.63	11.63	3.80				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 09:10:26**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.175	5.175	0.0563	0.2548	0.0564	09:11:27	Yes
2	5.142	5.142	0.0559	0.2518	0.0560	09:12:01	Yes
Mean:	5.158	5.158	0.0561				
SD:	0.024	0.024	0.0003				
%RSD:	0.459	0.459	0.46				

QC value within limits for Hg 253.7 Recovery = 103.17%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 09:12:20**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0002	0.0001	09:13:21	Yes
2	0.004	0.004	0.0001	0.0008	0.0001	09:13:56	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	63.63	63.63	37.18				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 240662013|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0006	0.0001	09:32:41	Yes
2	0.003	0.003	0.0001	0.0006	0.0001	09:33:16	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	5.342	5.342	2.96				

Sequence No.: 58 Autosampler Location: 7
Sample ID: CCV Date Collected: 11/25/2009 09:33:35
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.156	5.156	0.0561	0.2550	0.0562	09:34:36	Yes
2	5.115	5.115	0.0556	0.2512	0.0557	09:35:11	Yes
Mean:	5.135	5.135	0.0559				
SD:	0.029	0.029	0.0003				
%RSD:	0.565	0.565	0.57				

QC value within limits for Hg 253.7 Recovery = 102.70%
All analyte(s) passed QC.

Sequence No.: 59 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 09:35:30
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0007	0.0001	09:36:31	Yes
2	0.002	0.002	0.0001	0.0004	0.0001	09:37:05	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	22.74	22.74	13.18				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 Autosampler Location: 52
Sample ID: 240662014|926084|1 Date Collected: 11/25/2009 09:37:25
Analyst: JXL1 Data Type: Original

Replicate Data: 240662014|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	09:38:26	Yes
2	0.003	0.003	0.0001	0.0005	0.0001	09:39:01	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	35.16	35.16	18.82				

Sequence No.: 61 Autosampler Location: 53
Sample ID: 240662015|926084|1 Date Collected: 11/25/2009 09:39:20
Analyst: JXL1 Data Type: Original

Replicate Data: 240662015|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	09:40:21	Yes
2	0.000	0.000	0.0000	0.0003	0.0001	09:40:56	Yes
Mean:	0.000	0.000	0.0000				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	0.0001	0.0006	0.0001	09:50:01	Yes
2	0.002	0.002	0.0000	0.0005	0.0001	09:50:36	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	6.220	6.220	3.35				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 240662021|926084|1 **Date Collected: 11/25/2009 09:50:56**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 240662021|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0003	0.0001	09:51:57	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	09:52:32	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	87.29	87.29	24.88				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 1201975681|924202|1 **Date Collected: 11/25/2009 09:52:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975681|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	-0.0001	0.0001	09:53:54	Yes
2	-0.001	-0.001	0.0000	0.0003	0.0001	09:54:28	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	77.75	77.75	539.91				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201975682|924202|1 **Date Collected: 11/25/2009 09:54:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975682|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.158	2.158	0.0235	0.1039	0.0236	09:55:50	Yes
2	2.147	2.147	0.0234	0.1040	0.0234	09:56:25	Yes
Mean:	2.152	2.152	0.0234				
SD:	0.008	0.008	0.0001				
%RSD:	0.366	0.366	0.37				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 09:56:46**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.325	5.325	0.0579	0.2583	0.0580	09:57:46	Yes
2	5.328	5.328	0.0580	0.2568	0.0580	09:58:21	Yes
Mean:	5.326	5.326	0.0579				
SD:	0.002	0.002	0.0000				
%RSD:	0.042	0.042	0.04				

QC value within limits for Hg 253.7 Recovery = 106.52%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 11/25/2009 09:58:40
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0005	0.0001	09:59:41	Yes
2	0.002	0.002	0.0000	0.0003	0.0001	10:00:16	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	32.93	32.93	19.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 241181001|924202|1
Analyst: JXL1
Autosampler Location: 62
Date Collected: 11/25/2009 10:00:35
Data Type: Original

Replicate Data: 241181001|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	10:01:36	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:02:11	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	15.93	15.93	6.59				

Sequence No.: 73
Sample ID: 241181002|924202|1
Analyst: JXL1
Autosampler Location: 63
Date Collected: 11/25/2009 10:02:31
Data Type: Original

Replicate Data: 241181002|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0008	0.0001	10:03:32	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:04:07	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	84.39	84.39	47.31				

Sequence No.: 74
Sample ID: 241187001|924202|1
Analyst: JXL1
Autosampler Location: 64
Date Collected: 11/25/2009 10:04:27
Data Type: Original

Replicate Data: 241187001|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0005	0.0001	10:05:28	Yes
2	0.003	0.003	0.0001	0.0008	0.0001	10:06:03	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	103.3	103.3	43.30				

Sequence No.: 75
Sample ID: 1201975683|924202|1
Analyst: JXL1
Autosampler Location: 65
Date Collected: 11/25/2009 10:06:22
Data Type: Original

Replicate Data: 1201975683|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0008	0.0001	10:07:24	Yes
2	0.003	0.003	0.0001	0.0008	0.0001	10:07:58	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0003	0.0001	10:17:05	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0001	10:17:41	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	67.15	67.15	339.04				

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201978915|925614|1 **Date Collected: 11/25/2009 10:18:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978915|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0001	0.0001	10:19:02	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	10:19:38	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	>999.9%	>999.9%	74.32				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 10:19:58**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.062	5.062	0.0551	0.2465	0.0552	10:20:58	Yes
2	5.120	5.120	0.0557	0.2483	0.0558	10:21:33	Yes
Mean:	5.091	5.091	0.0554				
SD:	0.041	0.041	0.0004				
%RSD:	0.801	0.801	0.80				

QC value within limits for Hg 253.7 Recovery = 101.83%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 10:21:52**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0005	0.0001	10:22:53	Yes
2	0.004	0.004	0.0001	0.0006	0.0001	10:23:27	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	11.13	11.13	7.31				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201978916|925614|1 **Date Collected: 11/25/2009 10:23:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978916|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.156	2.156	0.0235	0.1050	0.0236	10:24:48	Yes
2	2.157	2.157	0.0235	0.1044	0.0236	10:25:24	Yes
Mean:	2.156	2.156	0.0235				
SD:	0.000	0.000	0.0000				
%RSD:	0.012	0.012	0.01				

Sequence No.: 85
Sample ID: 241606001|925614|1
Analyst: JXL1
Autosampler Location: 73
Date Collected: 11/25/2009 10:25:44
Data Type: Original

Replicate Data: 241606001|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	10:26:46	Yes
2	0.003	0.003	0.0001	0.0005	0.0001	10:27:21	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	16.67	16.67	9.23				

Sequence No.: 86
Sample ID: 1201978917|925614|1
Analyst: JXL1
Autosampler Location: 74
Date Collected: 11/25/2009 10:27:41
Data Type: Original

Replicate Data: 1201978917|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0001	0.0001	10:28:43	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	10:29:17	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.33	11.33	4.94				

Sequence No.: 87
Sample ID: 1201978918|925614|1
Analyst: JXL1
Autosampler Location: 75
Date Collected: 11/25/2009 10:29:37
Data Type: Original

Replicate Data: 1201978918|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.268	2.268	0.0247	0.1098	0.0248	10:30:39	Yes
2	2.264	2.264	0.0246	0.1091	0.0247	10:31:14	Yes
Mean:	2.266	2.266	0.0247				
SD:	0.003	0.003	0.0000				
%RSD:	0.132	0.132	0.13				

Sequence No.: 88
Sample ID: 1201978923|925614|5
Analyst: JXL1
Autosampler Location: 76
Date Collected: 11/25/2009 10:31:34
Data Type: Original

Replicate Data: 1201978923|925614|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0007	0.0002	10:32:35	Yes
2	0.003	0.003	0.0001	0.0003	0.0001	10:33:10	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	32.84	32.84	22.27				

Sequence No.: 89
Sample ID: 1201977150|924857|1
Analyst: JXL1
Autosampler Location: 77
Date Collected: 11/25/2009 10:33:30
Data Type: Original

Replicate Data: 1201977150|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0006	0.0002	10:34:32	Yes

2	0.003	0.003	0.0001	0.0006	0.0001	10:35:07	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	22.06	22.06	14.18				

==========

Sequence No.: 90 **Autosampler Location: 78**
Sample ID: 1201977151|924857|1 **Date Collected: 11/25/2009 10:35:27**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977151|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.485	2.485	0.0271	0.1189	0.0271	10:36:28	Yes
2	2.477	2.477	0.0270	0.1182	0.0270	10:37:03	Yes
Mean:	2.481	2.481	0.0270				
SD:	0.006	0.006	0.0001				
%RSD:	0.237	0.237	0.24				

==========

Sequence No.: 91 **Autosampler Location: 79**
Sample ID: 241325001|924857|1 **Date Collected: 11/25/2009 10:37:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241325001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0004	0.0001	10:38:25	Yes
2	0.003	0.003	0.0001	0.0006	0.0001	10:38:59	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	6.270	6.270	3.75				

==========

Sequence No.: 92 **Autosampler Location: 80**
Sample ID: 241325002|924857|1 **Date Collected: 11/25/2009 10:39:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241325002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0006	0.0001	10:40:21	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:40:56	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	24.41	24.41	10.34				

==========

Sequence No.: 93 **Autosampler Location: 81**
Sample ID: 241337001|924857|1 **Date Collected: 11/25/2009 10:41:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241337001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	10:42:17	Yes
2	0.003	0.003	0.0001	0.0004	0.0001	10:42:52	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	88.77	88.77	40.99				

==========

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 10:43:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.197	5.197	0.0565	0.2547	0.0566	10:44:12	Yes
2	5.185	5.185	0.0564	0.2530	0.0565	10:44:47	Yes
Mean:	5.191	5.191	0.0565				
SD:	0.009	0.009	0.0001				
%RSD:	0.167	0.167	0.17				

QC value within limits for Hg 253.7 Recovery = 103.81%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 10:45:06**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	-0.0000	0.0001	10:46:07	Yes
2	0.001	0.001	0.0000	0.0001	0.0001	10:46:42	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	21.36	21.36	5.58				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 241337002|924857|1 **Date Collected: 11/25/2009 10:47:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241337002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0001	0.0001	10:48:03	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	10:48:38	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	429.1	429.1	60.58				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 241420001|924857|1 **Date Collected: 11/25/2009 10:48:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241420001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0004	0.0001	10:49:59	Yes
2	0.003	0.003	0.0001	0.0007	0.0001	10:50:34	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	69.81	69.81	32.63				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 1201977152|924857|1 **Date Collected: 11/25/2009 10:50:54**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977152|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0006	0.0001	10:51:55	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	10:52:30	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				

%RSD:	14.51	14.51	7.82

==========

Sequence No.: 99
Sample ID: 1201977153|924857|1
Analyst: JXL1

Autosampler Location: 85
Date Collected: 11/25/2009 10:52:51
Data Type: Original

Replicate Data: 1201977153|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.116	2.116	0.0230	0.1043	0.0231	10:53:52	Yes
2	2.134	2.134	0.0232	0.1045	0.0233	10:54:27	Yes
Mean:	2.125	2.125	0.0231				
SD:	0.013	0.013	0.0001				
%RSD:	0.603	0.603	0.60				

==========

Sequence No.: 100
Sample ID: 1201977154|924857|5
Analyst: JXL1

Autosampler Location: 86
Date Collected: 11/25/2009 10:54:48
Data Type: Original

Replicate Data: 1201977154|924857|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0005	0.0001	10:55:49	Yes
2	0.004	0.004	0.0001	0.0006	0.0001	10:56:24	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	24.95	24.95	14.79				

==========

Sequence No.: 101
Sample ID: 241420002|924857|1
Analyst: JXL1

Autosampler Location: 87
Date Collected: 11/25/2009 10:56:44
Data Type: Original

Replicate Data: 241420002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0008	0.0002	10:57:46	Yes
2	0.005	0.005	0.0001	0.0008	0.0002	10:58:21	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	12.03	12.03	8.35				

==========

Sequence No.: 102
Sample ID: 241420003|924857|1
Analyst: JXL1

Autosampler Location: 88
Date Collected: 11/25/2009 10:58:41
Data Type: Original

Replicate Data: 241420003|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	10:59:42	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	11:00:17	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	80.81	80.81	30.60				

==========

Sequence No.: 103
Sample ID: 241420004|924857|1
Analyst: JXL1

Autosampler Location: 89
Date Collected: 11/25/2009 11:00:37
Data Type: Original

Replicate Data: 241420004|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.001	-0.001	0.0000	0.0002	0.0001	11:01:39	Yes
2	0.001	0.001	0.0000	0.0002	0.0001	11:02:14	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	>999.9%	>999.9%	46.29				

==========

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 1201978859|925586|1 **Date Collected: 11/25/2009 11:02:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978859|925586|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	11:03:36	Yes
2	0.003	0.003	0.0001	0.0004	0.0001	11:04:11	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	68.64	68.64	31.44				

==========

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 1201978860|925586|1 **Date Collected: 11/25/2009 11:04:31**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978860|925586|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.182	2.182	0.0238	0.1068	0.0238	11:05:32	Yes
2	2.176	2.176	0.0237	0.1064	0.0238	11:06:07	Yes
Mean:	2.179	2.179	0.0237				
SD:	0.004	0.004	0.0000				
%RSD:	0.188	0.188	0.19				

==========

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 11:06:27**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.191	5.191	0.0565	0.2553	0.0566	11:07:28	Yes
2	5.183	5.183	0.0564	0.2535	0.0565	11:08:03	Yes
Mean:	5.187	5.187	0.0564				
SD:	0.006	0.006	0.0001				
%RSD:	0.110	0.110	0.11				

QC value within limits for Hg 253.7 Recovery = 103.75%
All analyte(s) passed QC.

==========

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 11:08:22**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	11:09:22	Yes
2	0.005	0.005	0.0001	0.0006	0.0002	11:09:57	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	56.28	56.28	35.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 924856

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977151	WHG091124-13	.2	mL
MS	1201977153	WHG091124-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977150		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
LCS	1201977151		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241325001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241325002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241337001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241337002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
DUP	1201977152	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
MS	1201977153	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SDILT	1201977154	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420003		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420004		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1191649-C	1.5 mL	5% Potassium Persulfate
1214179-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091124-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091124-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091124-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091124-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091124-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091124-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 24-NOV-09 12:40
Digestion End Date: 24-NOV-09 14:40

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925376

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978327	UI091119-01	.25	mL
LCS	1201978327	UI091119-06	.25	mL
MS	1201978329	UI091119-01	.25	mL
MS	1201978329	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978326		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
LCS	1201978327		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
DUP	1201978328	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
MS	1201978329	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SDILT	1201978330	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925378

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978334	UI091119-A00	.5	mL
LCS	1201978334	UI091119-B	.5	mL
MS	1201978336	UI090930-A	.5	mL
MS	1201978336	UI090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978333		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
LCS	1201978334		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
DUP	1201978335	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
MS	1201978336	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SDILT	1201978337	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments.

NCR Report No.: 762537
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
25-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7470A	Liquid	LANL
Batch ID:	**Sample Numbers:**		
924857	See Below		

Potentially affected work order(s)(SDG): 241325(10-544-1),241337(10-546-1),241420(10-577-1)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for LCS/LCSD: QC 1201977151LCS	1. The above noted analytes recovered slightly high in the laboratory control sample (LCS), however, the sample in this SDG did not contain those analytes above the RDL, therefore the implied high bias did not adversely affect the results.

Originator's Name:

Eric Lawson 25-NOV-09

Data Validator/Group Leader:

Jason Loy 30-NOV-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID:	UI090701-09	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #1	**Received:**	01-JUL-09	**Catalog Number :**	160044-09-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016477
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Master Soln #1				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID:	UI090701-10	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #2	**Received:**	01-JUL-09	**Catalog Number :**	160044-08-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016476
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Soln #2				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID:	UI090701-40	**Opened:**	01-JUL-09	**Amount :**	500 mL
Name:	TRACE ICP Stock PQL St	**Received:**	30-JUN-09	**Catalog Number :**	160543-01-03
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016475
Employee:	Helen Carnello			**Solvent :**	+/-0.5%in2%HNO3+TrHF
Supplier:	02si				
Description:	TRACE ICP Stock PQL Standard				
Comments:	None				

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Carnello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091119-A00 **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091119-B **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091124-01 **Opened:** 24-NOV-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 24-NOV-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 25-NOV-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091124-02 **Opened:** 24-NOV-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 25-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091124-01 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG091124-02 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091124-03 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091124-04 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG091124-05 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG091124-06 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091124-13 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Carnello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091204-04 **Opened:** 04-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 04-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091204-04A **Opened:** 04-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091204-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091204-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091204-05 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091204-06 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 04-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091204-07 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 04-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-08
Name: ICPMS ICSAB
Type: Working
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Opened: 04-DEC-09
Received: 04-DEC-09
Expires: 05-DEC-09

Balance Id : 40245216
Pipet Id : 1758088
Solvent : 2%HNO3/1%HCl - 1235248

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-70 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091205-04 **Opened:** 05-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 05-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091205-04A **Opened:** 05-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091205-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091205-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091205-05 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091205-06 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 05-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091205-07 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 05-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091205-08 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 05-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1116812 **Opened:** 29-APR-09 **Lot Number :** E45475
Name: B-K2S2O8S-MER **Received:** 29-APR-09
Type: Reagent/Solvent **Expires:** 29-APR-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1191649-C **Opened:** 17-SEP-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 17-SEP-09
Type: Reagent/Solvent **Expires:** 17-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1116812	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID

Comments: None

Serial ID: 1214179-C **Opened:** 03-NOV-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 03-NOV-09
Type: Reagent/Solvent **Expires:** 03-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL

Standard Logbook

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546

Method/Analysis Information

Product: pH

Analytical Batch: 924497 **Method:** SW846 9045C/9045D

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201976367	241322001(RE03-09-13618) Sample Duplicate (DUP)
1201976369	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 17.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Electrode analysis was performed on a PerpHecT LogR pH/ISE.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 241322001 (RE03-09-13618).

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
The following samples from this sample group were received by the lab outside of the method specified holding time: 1201976367 (RE03-09-13618), 241336001 (RE03-09-13770) and 241336002 (RE03-10-5897).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	924475	**Method:**	SW846 9012A
Prep Batch :	924474	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201976322	Method Blank (MB)
1201976323	241322004(RE03-09-13619) Sample Duplicate (DUP)
1201976324	241322005(RE03-09-13624) Sample Duplicate (DUP)
1201976325	241322004(RE03-09-13619) Matrix Spike (MS)
1201976326	241322005(RE03-09-13624) Matrix Spike (MS)
1201976327	241322004(RE03-09-13619) Matrix Spike Duplicate (MSD)
1201976328	241322005(RE03-09-13624) Matrix Spike Duplicate (MSD)
1201976329	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241322004 (RE03-09-13619) and 241322005 (RE03-09-13624).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable. 1201976326 (RE03-09-13624) and 1201976328 (RE03-09-13624).

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201976323 (RE03-09-13619).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201976329 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 762014 1201976326 (RE03-09-13624), 1201976328 (RE03-09-13624), 241336001 (RE03-09-13770) and 241336002 (RE03-10-5897).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Method/Analysis Information

Product:	**Ion Chromatography**		
Analytical Batch:	924715	**Method:**	EPA 300.0
Prep Batch :	924713	**Method:**	EPA 300.0 PREP

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201976799	Method Blank (MB)
1201976804	Laboratory Control Sample (LCS)
1201984518	241336002(RE03-10-5897) Sample Duplicate (DUP)
1201984519	241322011(RE03-10-6084) Sample Duplicate (DUP)
1201984520	241336002(RE03-10-5897) Matrix Spike (MS)
1201984521	241322011(RE03-10-6084) Matrix Spike (MS)
1201984522	241336002(RE03-10-5897) Matrix Spike Duplicate (MSD)
1201984523	241322011(RE03-10-6084) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 17.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241322011 (RE03-10-6084) and 241336002 (RE03-10-5897).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery falls outside of the GEL acceptance limits but within the client specified limits. 1201984520 (RE03-10-5897) and 1201984521 (RE03-10-6084).

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery falls outside of the GEL acceptance limits but within the client specified limits. 1201984522 (RE03-10-5897) and 1201984523 (RE03-10-6084).

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 768832 1201984520 (RE03-10-5897), 1201984521

(RE03-10-6084), 1201984522 (RE03-10-5897) and 1201984523 (RE03-10-6084).

Manual Integrations
The following samples from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1201976804 (LCS), 1201984520 (RE03-10-5897), 1201984521 (RE03-10-6084), 1201984522 (RE03-10-5897) and 1201984523 (RE03-10-6084).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 14Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-546 GEL Work Order: 241336

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-546

Client Sample ID:	RE03-09-13770	Project:	LANL01004
Sample ID:	241336001	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	9.99%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.7C	H	8.36	0.010	0.100	SU	1	TXT1	11/19/09	1532	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	75.5	278	ug/kg	1	AXC2	11/23/09	1530	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.299	0.996	mg/kg	1	VH1	12/09/09	1439	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-546

Client Sample ID: RE03-10-5897
Sample ID: 241336002
Matrix: R
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client
Moisture: 6.97%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.7C	H	8.55	0.010	0.100	SU	1	TXT1	11/19/09	1534	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	70.3	258	ug/kg	1	AXC2	11/23/09	1530	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.317	1.06	mg/kg	1	VH1	12/09/09	1505	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 14, 2009
Page 1 of 3

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241336

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Electrode Analysis											
Batch 924497											
QC1201976367 241322001 DUP											
pH		H	7.29	H	7.31	SU	0.274		(0%-10%)	TXT1	11/19/09 14:57
QC1201976369 LCS											
pH	7.00				6.95	SU		99.3	(95%-105%)		11/19/09 14:30
Flow Injection Analysis											
Batch 924475											
QC1201976323 241322004 DUP											
Cyanide, Total			-3.6		-49.6	ug/kg	173 ^		(+/-257)	AXC2	11/23/09 15:13
QC1201976324 241322005 DUP											
Cyanide, Total			1540		1460	ug/kg	5.29 ^		(+/-311)		11/23/09 15:17
QC1201976329 LCS											
Cyanide, Total	67900				64300	ug/kg		94.6	(46%-145%)		11/23/09 15:12
QC1201976322 MB											
Cyanide, Total					-96.5	ug/kg					11/23/09 15:11
QC1201976325 241322004 MS											
Cyanide, Total	5740		-3.6		4940	ug/kg		86.1	(50%-130%)		11/23/09 15:14
QC1201976326 241322005 MS											
Cyanide, Total	5570		1540		6020	ug/kg		80.4	(50%-130%)		11/23/09 15:18
QC1201976327 241322004 MSD											
Cyanide, Total	5850		-3.6		5190	ug/kg	4.84	88.6	(0%-30%)		11/23/09 15:15
QC1201976328 241322005 MSD											
Cyanide, Total	6220		1540		9020	ug/kg	39.8*	120	(0%-30%)		11/23/09 15:19
Ion Chromatography											
Batch 924715											
QC1201984518 241336002 DUP											
Nitrate-N		U	ND	U	ND	mg/kg	N/A			VH1	12/09/09 15:31
QC1201984519 241322011 DUP											
Nitrate-N			1.38		1.36	mg/kg	1.83 ^		(+/-0.999)		12/09/09 12:55
QC1201976804 LCS											
Nitrate-N	50.0				53.0	mg/kg		106	(90%-110%)		12/09/09 06:49
QC1201976799 MB											
Nitrate-N				U	1.00	mg/kg					12/09/09 06:23
QC1201984520 241336002 MS											
Nitrate-N	52.7	U	ND		62.4	mg/kg		118*	(90%-110%)		12/09/09 16:50
QC1201984521 241322011 MS											
Nitrate-N	49.6		1.38		60.7	mg/kg		119*	(90%-110%)		12/09/09 13:21
QC1201984522 241336002 MSD											
Nitrate-N	52.1	U	ND		61.7	mg/kg	1.14	119*	(0%-20%)		12/09/09 17:16
QC1201984523 241322011 MSD											
Nitrate-N	50.2		1.38		59.6	mg/kg	1.75	116*	(0%-20%)		12/09/09 13:47

Notes:
RER is calculated at the 95% confidence level (2-sigma).

QC Summary

Workorder: 241336

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

QC Summary

Workorder: 241336

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 14-DEC-2009 15:35

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-546

Flow Injection Analysis
Method: SW846 9012A Concentration Units:ug/L
Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**23-NOV-2009 13:51:02**	**OM_11-23-2009_13-43-07**	**146**	**150**	**97**	**(90%-110%)**	**Yes**
CCV	23-NOV-2009 15:07:34	OM_11-23-2009_13-43-07	102	100	102	(90%-110%)	Yes
CCV	23-NOV-2009 15:20:06	OM_11-23-2009_13-43-07	105	100	105	(90%-110%)	Yes
CCV	23-NOV-2009 15:32:38	OM_11-23-2009_13-43-07	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-NOV-2009 13:52:52**	**OM_11-23-2009_13-43-07**	**0.99**	**5**	**Yes**
CCB	23-NOV-2009 15:09:25	OM_11-23-2009_13-43-07	-0.0136	5	Yes
CCB	23-NOV-2009 15:21:55	OM_11-23-2009_13-43-07	0.299	5	Yes
CCB	23-NOV-2009 15:34:28	OM_11-23-2009_13-43-07	0.197	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 14-DEC-2009 15:35

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-546**

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex ICS-3000 Ion Chromatograph

Parmname: Nitrate-N

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**08-DEC-2009 19:05:00**	**091208**	**5.195**	**5**	**104**	**(90%-110%)**	**Yes**
CCV	09-DEC-2009 05:31:00	091208	5.2603	5	105	(90%-110%)	Yes
CCV	09-DEC-2009 10:44:00	091208	7.9396	7.5	106	(90%-110%)	Yes
CCV	09-DEC-2009 15:57:00	091208	5.1618	5	103	(90%-110%)	Yes
CCV	09-DEC-2009 17:42:00	091208	7.9121	7.5	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**08-DEC-2009 19:31:00**	**091208**	**0**	**0.1**	**Yes**
CCB	09-DEC-2009 05:57:00	091208	0	0.1	Yes
CCB	09-DEC-2009 11:10:00	091208	0	0.1	Yes
CCB	09-DEC-2009 16:23:00	091208	0	0.1	Yes
CCB	09-DEC-2009 18:08:00	091208	0	0.1	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 924474

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201976329	URF1200957-01	.25	g
MS	1201976325	URF1184831-02	.025	mL
MS	1201976326	URF1184831-02	.025	mL
MSD	1201976327	URF1184831-02	.025	mL
MSD	1201976328	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201976322		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
LCS	1201976329		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241322004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1201976323	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.57 g	25 mL	43.85965	SOIL
MS	1201976325	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1201976327	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241322005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201976324	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
MS	1201976326	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.58 g	25 mL	43.10345	SOIL
MSD	1201976328	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322006		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322007		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322008		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322009		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322010		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241322011		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322012		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241336001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241336002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241351001		SW846 9010C Distillation	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOLID
SAMPLE	241358001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.511 g	25 mL	48.92368	MISC SOLID
SAMPLE	241417001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241417002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241419001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241419002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419003		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241419004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091120-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/23/2009 13:43:53	OM_11-23-2009_13-43-07
150 ppb		1	axc2	11/23/2009 13:44:44	OM_11-23-2009_13-43-07
100 ppb		1	axc2	11/23/2009 13:45:37	OM_11-23-2009_13-43-07
50 ppb		1	axc2	11/23/2009 13:46:30	OM_11-23-2009_13-43-07
10 ppb		1	axc2	11/23/2009 13:47:23	OM_11-23-2009_13-43-07
CRDL 5.0 ppb		1	axc2	11/23/2009 13:48:17	OM_11-23-2009_13-43-07
ICAL-00		1	axc2	11/23/2009 13:49:11	OM_11-23-2009_13-43-07
ICV		1	axc2	11/23/2009 13:51:02	OM_11-23-2009_13-43-07
ICB		1	axc2	11/23/2009 13:52:52	OM_11-23-2009_13-43-07
CRDL		1	axc2	11/23/2009 13:54:42	OM_11-23-2009_13-43-07
1201977264	924911	1	axc2	11/23/2009 13:56:32	OM_11-23-2009_13-43-07
1201977271	924911	25	axc2	11/23/2009 13:57:25	OM_11-23-2009_13-43-07
240999001	924911	1	axc2	11/23/2009 13:58:18	OM_11-23-2009_13-43-07
1201977265	924911	1	axc2	11/23/2009 13:59:11	OM_11-23-2009_13-43-07
1201977267	924911	1	axc2	11/23/2009 14:00:04	OM_11-23-2009_13-43-07
1201977269	924911	1	axc2	11/23/2009 14:00:57	OM_11-23-2009_13-43-07
241414003	924911	1	axc2	11/23/2009 14:01:50	OM_11-23-2009_13-43-07
1201977266	924911	1	axc2	11/23/2009 14:02:42	OM_11-23-2009_13-43-07
1201977268	924911	1	axc2	11/23/2009 14:03:34	OM_11-23-2009_13-43-07
1201977270	924911	1	axc2	11/23/2009 14:04:27	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:05:20	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:07:09	OM_11-23-2009_13-43-07
241414004	924911	1	axc2	11/23/2009 14:08:57	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:09:49	OM_11-23-2009_13-43-07
1201974823	923850	25	axc2	11/23/2009 14:10:42	OM_11-23-2009_13-43-07
241029014	923850	1	axc2	11/23/2009 14:11:33	OM_11-23-2009_13-43-07
1201974817	923850	1	axc2	11/23/2009 14:12:25	OM_11-23-2009_13-43-07
1201974819	923850	1	axc2	11/23/2009 14:13:19	OM_11-23-2009_13-43-07
1201974821*	923850	1	axc2	11/23/2009 14:14:12	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:15:04	OM_11-23-2009_13-43-07
241105010	923850	1	axc2	11/23/2009 14:15:57	OM_11-23-2009_13-43-07
241105011	923850	1	axc2	11/23/2009 14:16:51	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:17:43	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:19:34	OM_11-23-2009_13-43-07
1201974816	923850	1	axc2	11/23/2009 14:21:21	OM_11-23-2009_13-43-07
1201974821	923850	1	axc2	11/23/2009 14:22:15	OM_11-23-2009_13-43-07
241105012	923850	1	axc2	11/23/2009 14:23:09	OM_11-23-2009_13-43-07
241106001	923850	1	axc2	11/23/2009 14:24:01	OM_11-23-2009_13-43-07
241106002	923850	1	axc2	11/23/2009 14:24:54	OM_11-23-2009_13-43-07
241178001	923850	1	axc2	11/23/2009 14:25:47	OM_11-23-2009_13-43-07
241178002*	923850	1	axc2	11/23/2009 14:26:40	OM_11-23-2009_13-43-07
241178003	923850	1	axc2	11/23/2009 14:27:32	OM_11-23-2009_13-43-07
241178004	923850	1	axc2	11/23/2009 14:28:24	OM_11-23-2009_13-43-07
241178005	923850	1	axc2	11/23/2009 14:29:17	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:30:10	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:31:59	OM_11-23-2009_13-43-07
241178002	923850	1	axc2	11/23/2009 14:33:48	OM_11-23-2009_13-43-07
241178006	923850	1	axc2	11/23/2009 14:34:40	OM_11-23-2009_13-43-07
241178007	923850	1	axc2	11/23/2009 14:35:31	OM_11-23-2009_13-43-07
241178008	923850	1	axc2	11/23/2009 14:36:24	OM_11-23-2009_13-43-07
241178009	923850	1	axc2	11/23/2009 14:37:18	OM_11-23-2009_13-43-07
241227001	923850	1	axc2	11/23/2009 14:38:11	OM_11-23-2009_13-43-07
1201974818	923850	1	axc2	11/23/2009 14:39:05	OM_11-23-2009_13-43-07
1201974820	923850	1	axc2	11/23/2009 14:39:59	OM_11-23-2009_13-43-07
1201974822	923850	1	axc2	11/23/2009 14:40:52	OM_11-23-2009_13-43-07
241227002	923850	1	axc2	11/23/2009 14:41:45	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:42:37	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:44:27	OM_11-23-2009_13-43-07

241227007	923850	1	axc2	11/23/2009	14:46:17	OM_11-23-2009_13-43-07
241227008	923850	1	axc2	11/23/2009	14:47:10	OM_11-23-2009_13-43-07
241227009	923850	1	axc2	11/23/2009	14:48:03	OM_11-23-2009_13-43-07
1201972404	922839	1	axc2	11/23/2009	14:48:55	OM_11-23-2009_13-43-07
1201972411*	922839	25	axc2	11/23/2009	14:49:47	OM_11-23-2009_13-43-07
241044009	922839	1	axc2	11/23/2009	14:50:40	OM_11-23-2009_13-43-07
1201972405	922839	1	axc2	11/23/2009	14:51:32	OM_11-23-2009_13-43-07
1201972407	922839	1	axc2	11/23/2009	14:52:24	OM_11-23-2009_13-43-07
1201972409	922839	1	axc2	11/23/2009	14:53:16	OM_11-23-2009_13-43-07
241044010	922839	1	axc2	11/23/2009	14:54:10	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	14:55:02	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	14:56:52	OM_11-23-2009_13-43-07
1201972406	922839	1	axc2	11/23/2009	14:58:43	OM_11-23-2009_13-43-07
1201972408	922839	1	axc2	11/23/2009	14:59:37	OM_11-23-2009_13-43-07
1201972410	922839	1	axc2	11/23/2009	15:00:31	OM_11-23-2009_13-43-07
1201972411	922839	1	axc2	11/23/2009	15:01:23	OM_11-23-2009_13-43-07
241044011	922839	1	axc2	11/23/2009	15:02:17	OM_11-23-2009_13-43-07
241044012	922839	1	axc2	11/23/2009	15:03:10	OM_11-23-2009_13-43-07
241044013	922839	1	axc2	11/23/2009	15:04:03	OM_11-23-2009_13-43-07
241044014	922839	1	axc2	11/23/2009	15:04:56	OM_11-23-2009_13-43-07
241044015	922839	1	axc2	11/23/2009	15:05:49	OM_11-23-2009_13-43-07
241044016	922839	1	axc2	11/23/2009	15:06:42	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:07:34	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:09:25	OM_11-23-2009_13-43-07
1201976322	924475	1	axc2	11/23/2009	15:11:16	OM_11-23-2009_13-43-07
1201976329	924475	25	axc2	11/23/2009	15:12:08	OM_11-23-2009_13-43-07
241322004	924475	1	axc2	11/23/2009	15:13:01	OM_11-23-2009_13-43-07
1201976323	924475	1	axc2	11/23/2009	15:13:53	OM_11-23-2009_13-43-07
1201976325	924475	1	axc2	11/23/2009	15:14:46	OM_11-23-2009_13-43-07
1201976327	924475	1	axc2	11/23/2009	15:15:39	OM_11-23-2009_13-43-07
241322005	924475	1	axc2	11/23/2009	15:16:31	OM_11-23-2009_13-43-07
1201976324	924475	1	axc2	11/23/2009	15:17:24	OM_11-23-2009_13-43-07
1201976326	924475	1	axc2	11/23/2009	15:18:19	OM_11-23-2009_13-43-07
1201976328	924475	1	axc2	11/23/2009	15:19:13	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:20:06	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:21:55	OM_11-23-2009_13-43-07
241322006	924475	1	axc2	11/23/2009	15:23:45	OM_11-23-2009_13-43-07
241322007	924475	1	axc2	11/23/2009	15:24:40	OM_11-23-2009_13-43-07
241322008	924475	1	axc2	11/23/2009	15:25:33	OM_11-23-2009_13-43-07
241322009	924475	1	axc2	11/23/2009	15:26:27	OM_11-23-2009_13-43-07
241322010	924475	1	axc2	11/23/2009	15:27:20	OM_11-23-2009_13-43-07
241322011	924475	1	axc2	11/23/2009	15:28:14	OM_11-23-2009_13-43-07
241322012	924475	1	axc2	11/23/2009	15:29:07	OM_11-23-2009_13-43-07
241336001	924475	1	axc2	11/23/2009	15:30:00	OM_11-23-2009_13-43-07
241336002	924475	1	axc2	11/23/2009	15:30:53	OM_11-23-2009_13-43-07
241351001	924475	1	axc2	11/23/2009	15:31:46	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:32:38	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:34:28	OM_11-23-2009_13-43-07
241358001	924475	1	axc2	11/23/2009	15:36:17	OM_11-23-2009_13-43-07
241417001	924475	1	axc2	11/23/2009	15:37:10	OM_11-23-2009_13-43-07
241417002	924475	1	axc2	11/23/2009	15:38:02	OM_11-23-2009_13-43-07
241419001	924475	1	axc2	11/23/2009	15:38:57	OM_11-23-2009_13-43-07
241419002	924475	1	axc2	11/23/2009	15:39:51	OM_11-23-2009_13-43-07
241419003	924475	1	axc2	11/23/2009	15:40:45	OM_11-23-2009_13-43-07
241419004	924475	1	axc2	11/23/2009	15:41:39	OM_11-23-2009_13-43-07
241419005	924475	1	axc2	11/23/2009	15:42:34	OM_11-23-2009_13-43-07
1201976319	924469	1	axc2	11/23/2009	15:43:28	OM_11-23-2009_13-43-07
1201976321	924469	1	axc2	11/23/2009	15:44:22	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:45:15	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:47:06	OM_11-23-2009_13-43-07

241351001	924469	1	axc2	11/23/2009	15:48:58	OM_11-23-2009_13-43-07
241358001	924469	1	axc2	11/23/2009	15:49:51	OM_11-23-2009_13-43-07
1201976320	924469	1	axc2	11/23/2009	15:50:44	OM_11-23-2009_13-43-07
1201977272	924915	1	axc2	11/23/2009	15:51:37	OM_11-23-2009_13-43-07
1201977274	924915	1	axc2	11/23/2009	15:52:31	OM_11-23-2009_13-43-07
241372013	924915	1	axc2	11/23/2009	15:53:24	OM_11-23-2009_13-43-07
1201977273	924915	1	axc2	11/23/2009	15:54:17	OM_11-23-2009_13-43-07
1201974883*	923869	1	axc2	11/23/2009	15:55:10	OM_11-23-2009_13-43-07
1201974885	923869	250	axc2	11/23/2009	15:56:05	OM_11-23-2009_13-43-07
241243008	923869	1	axc2	11/23/2009	15:56:59	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:57:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:59:42	OM_11-23-2009_13-43-07
1201974884	923869	1	axc2	11/23/2009	16:01:33	OM_11-23-2009_13-43-07
241305001	923869	1	axc2	11/23/2009	16:02:27	OM_11-23-2009_13-43-07
241310001	923869	1	axc2	11/23/2009	16:03:21	OM_11-23-2009_13-43-07
1201974883	923869	1	axc2	11/23/2009	16:04:14	OM_11-23-2009_13-43-07
241372013	924915	25	axc2	11/23/2009	16:05:07	OM_11-23-2009_13-43-07
1201977273	924915	25	axc2	11/23/2009	16:06:00	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	16:06:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	16:08:43	OM_11-23-2009_13-43-07

Author: axc2 Date : 11/23/2009

Original Run Filename: OM_11-23-2009_13-43-07.OMN created 11/23/2009 13:43:07
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-23-2009_13-43-07.OMN last modified 11/23/2009 16:09:47
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091123-01	1	S1	200	7.32	11/23/2009@13:43:53			200 ppb
WCN091123-02	1	S2	150	5.67	11/23/2009@13:44:44			150 ppb
WCN091123-03	1	S3	100	3.86	11/23/2009@13:45:37			100 ppb
WCN091123-04	1	S4	50.0	2.03	11/23/2009@13:46:30			50 ppb
WCN091123-05	1	S5	10.0	0.478	11/23/2009@13:47:23			10 ppb
WCN091123-06	1	S6	5.00	0.278	11/23/2009@13:48:17			CRDL 5.0 ppb
WCN091123-08	1	S7	0.00	0.0410	11/23/2009@13:49:11			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99962 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091123-07	1	S8	146	5.46	11/23/2009@13:51:02			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091123-08	1	S7	0.990	0.157	11/23/2009@13:52:52			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.990 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.990 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091123-06	1	S6	3.65	0.254	11/23/2009@13:54:42			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.65 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.65 > 2.50					
		Message	Pass					
		Action	None					
1201977264|924911|MB	1	1	-1.60	0.0619	11/23/2009@13:56:32			
1201977271||LCS	1	2	47.2	1.85	11/23/2009@13:57:25			
240999001	1	3	1.47	0.174	11/23/2009@13:58:18			
1201977265||DUP	1	4	-0.419	0.105	11/23/2009@13:59:11			
1201977267||MS	1	5	96.0	3.63	11/23/2009@14:00:04			
1201977269||MSD	1	6	100	3.79	11/23/2009@14:00:57			
241414003	1	7	0.930	0.154	11/23/2009@14:01:50			
1201977266||DUP	1	8	-1.21	0.0761	11/23/2009@14:02:42			
1201977268||MS	1	9	97.9	3.70	11/23/2009@14:03:34			
1201977270||MSD	1	10	100	3.79	11/23/2009@14:04:27			
WCN091123-03	1	S3	102	3.84	11/23/2009@14:05:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.820	0.0904	11/23/2009@14:07:09			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.820 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.820 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241414004	1	11	-1.68	0.0592	11/23/2009@14:08:57			
1201974816|923850|MB	1	12	329	12.2	11/23/2009@14:09:49			
1201974823||LCS	1	13	32.8	1.32	11/23/2009@14:10:42		25.00	
241029014	1	14	-0.305	0.109	11/23/2009@14:11:33			
1201974817||DUP	1	15	-0.427	0.105	11/23/2009@14:12:25			
1201974819||MS	1	16	87.8	3.33	11/23/2009@14:13:19			
1201974821||MSD	1	17	1.31e+3	48.0	11/23/2009@14:14:12			
1201974816|923850|MB	1	12	37.3	1.49	11/23/2009@14:15:04			
241105010	1	18	1.27	0.167	11/23/2009@14:15:57			
241105011	1	19	4.57	0.288	11/23/2009@14:16:51			
WCN091123-03	1	S3	98.7	3.73	11/23/2009@14:17:43			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.283	0.131	11/23/2009@14:19:34			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.283 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.283 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974816|923850|MB	1	12	-0.327	0.108	11/23/2009@14:21:21			
1201974821||MSD	1	17	86.6	3.29	11/23/2009@14:22:15			
241105012	1	20	7.92	0.410	11/23/2009@14:23:09			
241106001	1	21	3.76	0.258	11/23/2009@14:24:01			
241106002	1	22	3.78	0.259	11/23/2009@14:24:54			
241178001	1	23	1.84	0.188	11/23/2009@14:25:47			
241178002	1	24	11.2	0.532	11/23/2009@14:26:40			
241178003	1	25	0.189	0.127	11/23/2009@14:27:32			
241178004	1	26	1.98	0.193	11/23/2009@14:28:24			
241178005	1	27	0.997	0.157	11/23/2009@14:29:17			
WCN091123-03	1	S3	100	3.78	11/23/2009@14:30:10			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.825	0.0902	11/23/2009@14:31:59			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	-0.825 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.825 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241178002	1	24	5.73	0.330	11/23/2009@14:33:48			
241178006	1	28	5.86	0.335	11/23/2009@14:34:40			
241178007	1	29	-0.190	0.113	11/23/2009@14:35:31			
241178008	1	30	-1.36	0.0706	11/23/2009@14:36:24			
241178009	1	31	1.84	0.188	11/23/2009@14:37:18			
241227001	1	32	-0.273	0.110	11/23/2009@14:38:11			
1201974818||DUP	1	33	-0.588	0.0989	11/23/2009@14:39:05			
1201974820||MS	1	34	75.0	2.86	11/23/2009@14:39:59			
1201974822||MSD	1	35	94.3	3.57	11/23/2009@14:40:52			
241227002	1	36	2.66	0.218	11/23/2009@14:41:45			
WCN091123-03	1	S3	103	3.90	11/23/2009@14:42:37			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.0197	0.121	11/23/2009@14:44:27			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.0197 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.0197 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241227007	1	37	-0.734	0.0936	11/23/2009@14:46:17			
241227008	1	38	-0.129	0.116	11/23/2009@14:47:10			
241227009	1	39	-1.21	0.0763	11/23/2009@14:48:03			
1201972404|922839|MB	1	40	-1.55	0.0639	11/23/2009@14:48:55			
1201972411||LCS	1	41	6.31	0.351	11/23/2009@14:49:47		25.00	
241044009	1	42	1.63	0.180	11/23/2009@14:50:40			
1201972405||DUP	1	43	3.10	0.234	11/23/2009@14:51:32			
1201972407||MS	1	44	96.7	3.66	11/23/2009@14:52:24			
1201972409||MSD	1	45	57.8	2.23	11/23/2009@14:53:16			
241044010	1	46	35.5	1.42	11/23/2009@14:54:10			
WCN091123-03	1	S3	103	3.89	11/23/2009@14:55:02			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.383	0.134	11/23/2009@14:56:52			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.383 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.383 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1201972406||DUP	1	47	104	3.93	11/23/2009@14:58:43			
1201972408||MS	1	48	83.1	3.16	11/23/2009@14:59:37			
1201972410||MSD	1	49	124	4.64	11/23/2009@15:00:31			
1201972411||LCS	1	41	30.2	1.22	11/23/2009@15:01:23		25.00	
241044011	1	50	1.28	0.167	11/23/2009@15:02:17			
241044012	1	51	130	4.88	11/23/2009@15:03:10			
241044013	1	52	84.2	3.20	11/23/2009@15:04:03			
241044014	1	53	43.9	1.73	11/23/2009@15:04:56			
241044015	1	54	3.47	0.247	11/23/2009@15:05:49			
241044016	1	55	1.61	0.179	11/23/2009@15:06:42			
WCN091123-03	1	S3	102	3.84	11/23/2009@15:07:34			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	-0.0136	0.120	11/23/2009@15:09:25			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.0136 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.0136 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1201976322|924475|MB	1	68	-1.93	0.0498	11/23/2009@15:11:16			
1201976329||LCS	1	69	25.7	1.06	11/23/2009@15:12:08		25.00	
241322004	1	70	-0.0665	0.118	11/23/2009@15:13:01			
1201976323||DUP	1	71	-0.966	0.0851	11/23/2009@15:13:53			
1201976325||MS	1	72	86.1	3.27	11/23/2009@15:14:46			
1201976327||MSD	1	73	88.6	3.36	11/23/2009@15:15:39			
241322005	1	74	24.3	1.01	11/23/2009@15:16:31			
1201976324||DUP	1	75	23.5	0.978	11/23/2009@15:17:24			
1201976326||MS	1	76	108	4.06	11/23/2009@15:18:19			
1201976328||MSD	1	77	145	5.43	11/23/2009@15:19:13			
WCN091123-03	1	S3	105	3.97	11/23/2009@15:20:06			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		5.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		5.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	0.299	0.131	11/23/2009@15:21:55			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		0.299 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.299 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241322006	1	78	-1.16	0.0778	11/23/2009@15:23:45			
241322007	1	79	20.1	0.856	11/23/2009@15:24:40			
241322008	1	80	-0.573	0.0995	11/23/2009@15:25:33			
241322009	1	81	31.1	1.26	11/23/2009@15:26:27			
241322010	1	82	5.38	0.317	11/23/2009@15:27:20			
241322011	1	83	-0.970	0.0849	11/23/2009@15:28:14			
241322012	1	84	-1.30	0.0730	11/23/2009@15:29:07			
241336001	1	85	-0.872	0.0885	11/23/2009@15:30:00			

241336002	1	86	-1.18	0.0773	11/23/2009@15:30:53			
241351001	1	87	-0.356	0.107	11/23/2009@15:31:46			
WCN091123-03	1	S3	101	3.80	11/23/2009@15:32:38			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.197	0.128	11/23/2009@15:34:28			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.197 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.197 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241358001	1	88	-0.601	0.0984	11/23/2009@15:36:17			
241417001	1	89	10.7	0.512	11/23/2009@15:37:10			
241417002	1	90	-0.304	0.109	11/23/2009@15:38:02			
241419001	1	91	-1.19	0.0767	11/23/2009@15:38:57			
241419002	1	92	-0.704	0.0946	11/23/2009@15:39:51			
241419003	1	93	-1.52	0.0648	11/23/2009@15:40:45			
241419004	1	94	-1.69	0.0587	11/23/2009@15:41:39			
241419005	1	95	-0.486	0.103	11/23/2009@15:42:34			
1201976319|924469|MB	1	96	-1.53	0.0643	11/23/2009@15:43:28			
1201976321||LCS	1	97	-1.96	0.0489	11/23/2009@15:44:22			
WCN091123-03	1	S3	100	3.78	11/23/2009@15:45:15			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.667	0.0960	11/23/2009@15:47:06			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.667 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.667 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241351001	1	98	7.19	0.383	11/23/2009@15:48:58			
241358001	1	99	1.09	0.160	11/23/2009@15:49:51			
1201976320||DUP	1	100	2.18	0.200	11/23/2009@15:50:44			
1201977272|924915|MB	1	101	-1.40	0.0691	11/23/2009@15:51:37			
1201977274||LCS	1	102	-1.86	0.0525	11/23/2009@15:52:31			
241372013	1	103	1.47e+3	53.8	11/23/2009@15:53:24			
1201977273||DUP	1	104	1.37e+3	50.2	11/23/2009@15:54:17			
1201974883|923869|MB	1	105	37.0	1.47	11/23/2009@15:55:10			
1201974885||LCS	1	106	77.3	2.94	11/23/2009@15:56:05			
241243008	1	107	2.12	0.198	11/23/2009@15:56:59			
WCN091123-03	1	S3	103	3.88	11/23/2009@15:57:52			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					

DQM Test: < - Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.854	0.152	11/23/2009@15:59:42			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.854 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.854 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974884||DUP	1	108	-2.22	0.0393	11/23/2009@16:01:33			
241305001	1	109	-1.40	0.0694	11/23/2009@16:02:27			
241310001	1	110	-0.820	0.0904	11/23/2009@16:03:21			
1201974883|923869|MB	1	105	-0.331	0.108	11/23/2009@16:04:14			
241372013|924915|	1	103	98.6	3.73	11/23/2009@16:05:07		25.00	
1201977273||DUP	1	104	70.4	2.70	11/23/2009@16:06:00		25.00	
WCN091123-03	1	S3	102	3.86	11/23/2009@16:06:52			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	1.27	0.167	11/23/2009@16:08:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.27 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.27 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_11-23-2009_13-43-07.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2

Date : 11/23/2009

Channel 1: Current View

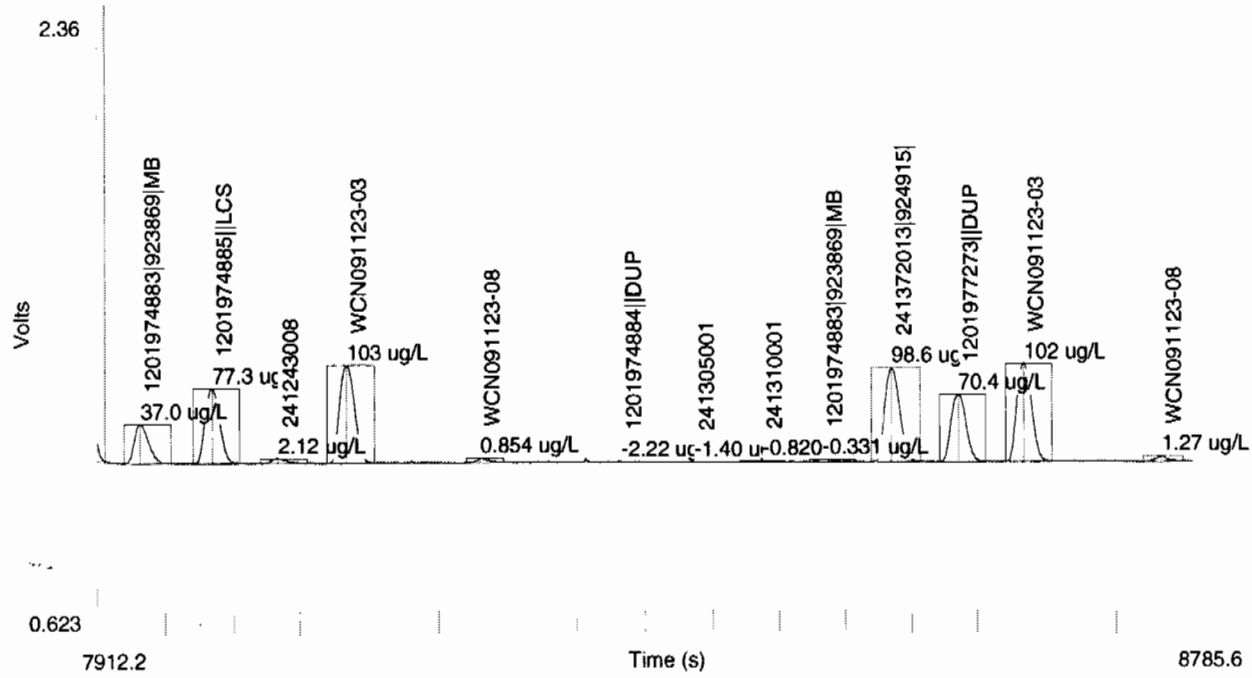

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.32	0.539	1.5	11/23/2009	13:44:56
2	150	1	5.67	0.419	-1.2	11/23/2009	13:45:48
3	100	1	3.86	0.284	-2.2	11/23/2009	13:46:40
4	50.0	1	2.03	0.148	-3.9	11/23/2009	13:47:33
5	10.0	1	0.478	0.0334	2.0	11/23/2009	13:48:26
6	5.00	1	0.278	0.0178	8.7	11/23/2009	13:49:20
7	0.00	1	0.0410	0.00186		11/23/2009	13:50:14

Figure 1: TCYANIDE

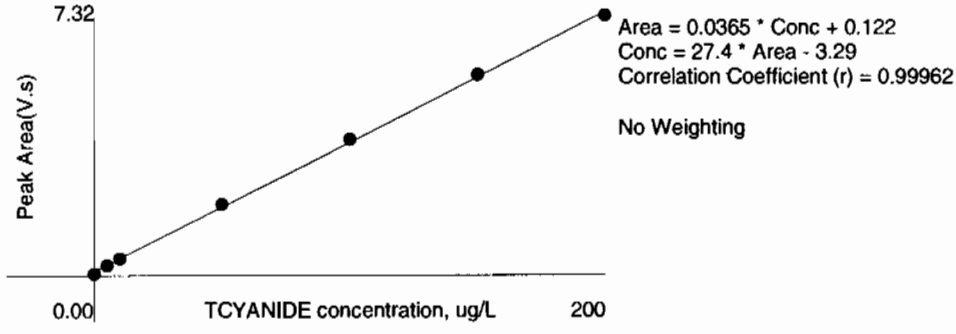

Ion Chromatography

Prep LogBook

Analyst: VH1 Verified by:_____

Batch: 924713

Lab SOP: GL-GC-E-086 REV# 17

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201976804	UIC091123SPK	.8	mL
MS	1201984520	UIC091123SPK	.8	mL
MS	1201984521	UIC091123SPK	.8	mL
MSD	1201984522	UIC091123SPK	.8	mL
MSD	1201984523	UIC091123SPK	.8	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201976799		EPA 300.0 PREP	08-DEC-2009 17:22	4 g	40 mL	10	SOIL
LCS	1201976804		EPA 300.0 PREP	08-DEC-2009 17:22	4 g	40 mL	10	SOIL
SAMPLE	241322001		EPA 300.0 PREP	08-DEC-2009 17:22	4 g	40 mL	10	SOIL
SAMPLE	241322002		EPA 300.0 PREP	08-DEC-2009 17:22	4.15 g	40 mL	9.63855	SOIL
SAMPLE	241322003		EPA 300.0 PREP	08-DEC-2009 17:22	4.59 g	40 mL	8.7146	SOIL
SAMPLE	241322004		EPA 300.0 PREP	08-DEC-2009 17:22	4.58 g	40 mL	8.73362	SOIL
SAMPLE	241322005		EPA 300.0 PREP	08-DEC-2009 17:22	4.52 g	40 mL	8.84956	SOIL
SAMPLE	241322006		EPA 300.0 PREP	08-DEC-2009 17:22	4.48 g	40 mL	8.92857	SOIL
SAMPLE	241322007		EPA 300.0 PREP	08-DEC-2009 17:22	4.21 g	40 mL	9.50119	SOIL
SAMPLE	241322008		EPA 300.0 PREP	08-DEC-2009 17:22	4.21 g	40 mL	9.50119	SOIL
SAMPLE	241322009		EPA 300.0 PREP	08-DEC-2009 17:22	4.34 g	40 mL	9.21659	SOIL
SAMPLE	241322010		EPA 300.0 PREP	08-DEC-2009 17:22	4.78 g	40 mL	8.3682	SOIL
SAMPLE	241322011		EPA 300.0 PREP	08-DEC-2009 17:22	4.57 g	40 mL	8.75274	SOIL
DUP	1201984519	241322011	EPA 300.0 PREP	08-DEC-2009 17:22	4.59 g	40 mL	8.7146	SOIL
MS	1201984521	241322011	EPA 300.0 PREP	08-DEC-2009 17:22	4.62 g	40 mL	8.65801	SOIL
MSD	1201984523	241322011	EPA 300.0 PREP	08-DEC-2009 17:22	4.57 g	40 mL	8.75274	SOIL
SAMPLE	241322012		EPA 300.0 PREP	08-DEC-2009 17:22	4.18 g	40 mL	9.56938	SOIL
SAMPLE	241336001		EPA 300.0 PREP	08-DEC-2009 17:22	4.46 g	40 mL	8.96861	SOIL
SAMPLE	241336002		EPA 300.0 PREP	08-DEC-2009 17:22	4.07 g	40 mL	9.82801	SOIL
DUP	1201984518	241336002	EPA 300.0 PREP	08-DEC-2009 17:22	4.1 g	40 mL	9.7561	SOIL
MS	1201984520	241336002	EPA 300.0 PREP	08-DEC-2009 17:22	4.08 g	40 mL	9.80392	SOIL
MSD	1201984522	241336002	EPA 300.0 PREP	08-DEC-2009 17:22	4.13 g	40 mL	9.68523	SOIL

Comments

This is runlog for Sequence 091211.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
ICAL-07	12/04/09 17:49		1	091211	VH1
ICAL-06	12/04/09 18:15		1	091211	VH1
ICAL-05	12/04/09 18:41		1	091211	VH1
ICAL-04	12/04/09 19:07		1	091211	VH1
ICAL-03	12/04/09 19:34		1	091211	VH1
ICAL-02	12/04/09 20:00		1	091211	VH1
ICAL-01	12/04/09 20:26		1	091211	VH1

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

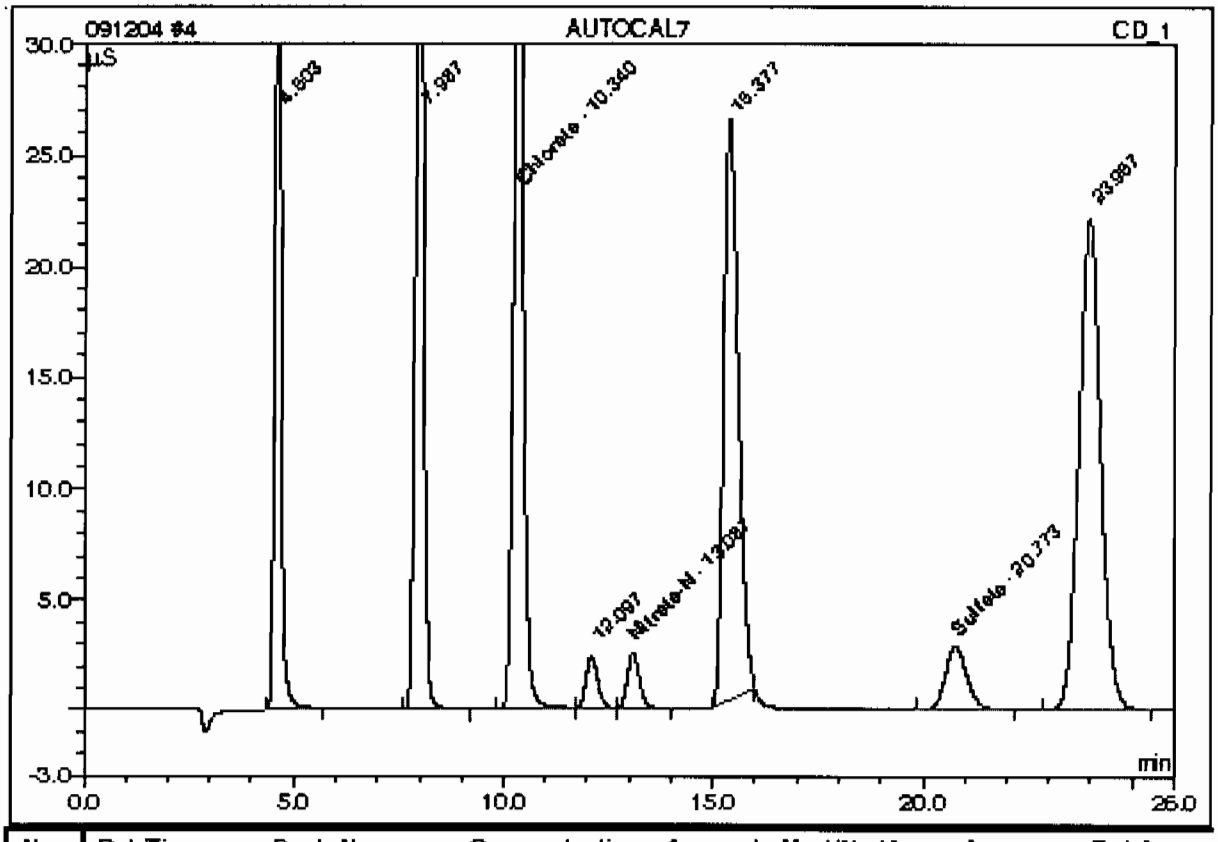

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	10.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	20.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	10.0000	n.a.	n.a.	n.a.	n.a.
3	10.34	Chlorate	5.0000	5.0000		10.04178	18.48
n.a.	n.a.	Bromide	5.0000	n.a.	n.a.	n.a.	n.a.
5	13.09	Nitrate-N	10.0000	10.0000		0.85988	1.58
n.a.	n.a.	O-Phosphate-P	5.0000	n.a.	n.a.	n.a.	n.a.
7	20.77	Sulfate	40.0000	40.0000		1.71920	3.16
Total:				55.0000	0.000	12.621	23.22

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

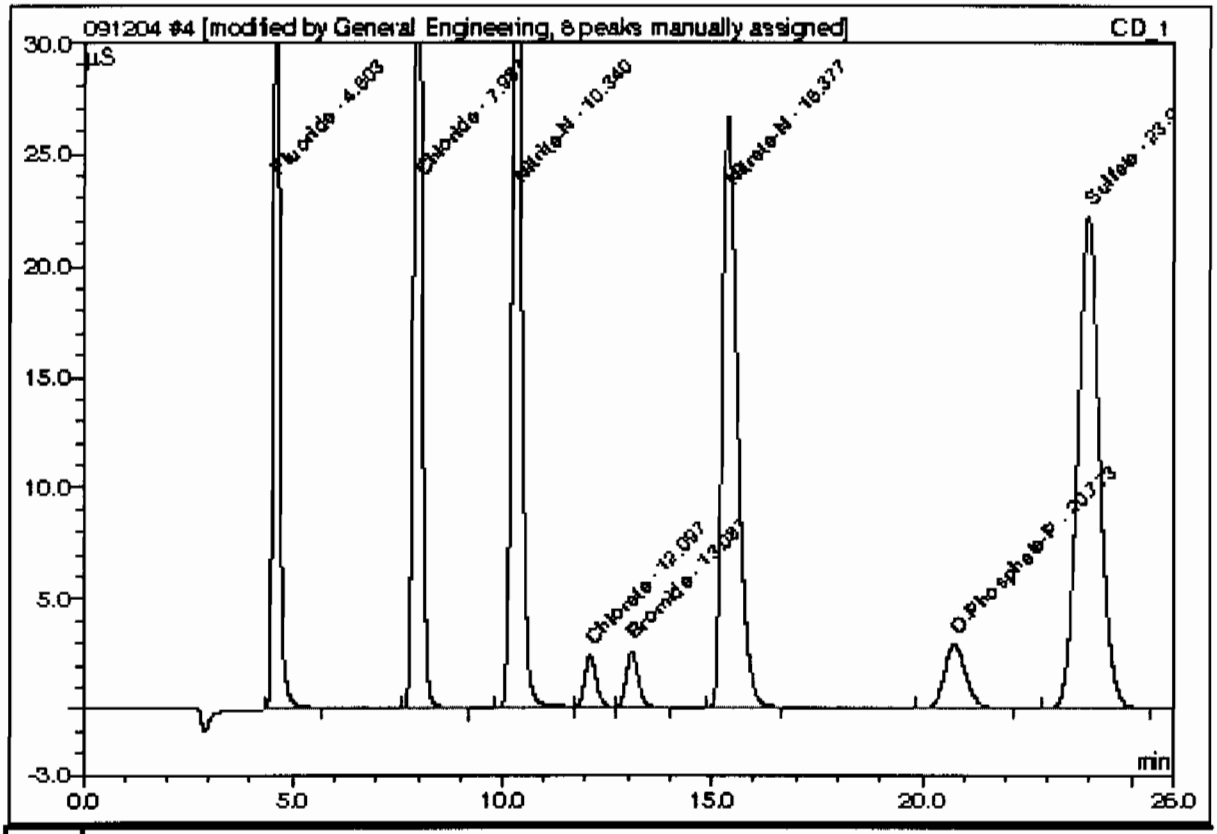

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	10.0000	10.0775		6.86020	12.49
2	7.99	Chloride	20.0000	20.4028		9.96643	18.14
3	10.34	Nitrite-N	10.0000	10.0965		10.04178	18.28
4	12.10	Chlorate	5.0000	5.0660		0.79061	1.44
5	13.09	Bromide	5.0000	5.0440		0.85988	1.56
6	15.38	Nitrate-N	10.0000	10.1668		11.30060	20.57
7	20.77	O-Phosphate-P	5.0000	5.0563		1.71920	3.13
8	23.97	Sulfate	40.0000	40.5844		13.40847	24.40
Total:				106.4944	0.000	54.947	100.00

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

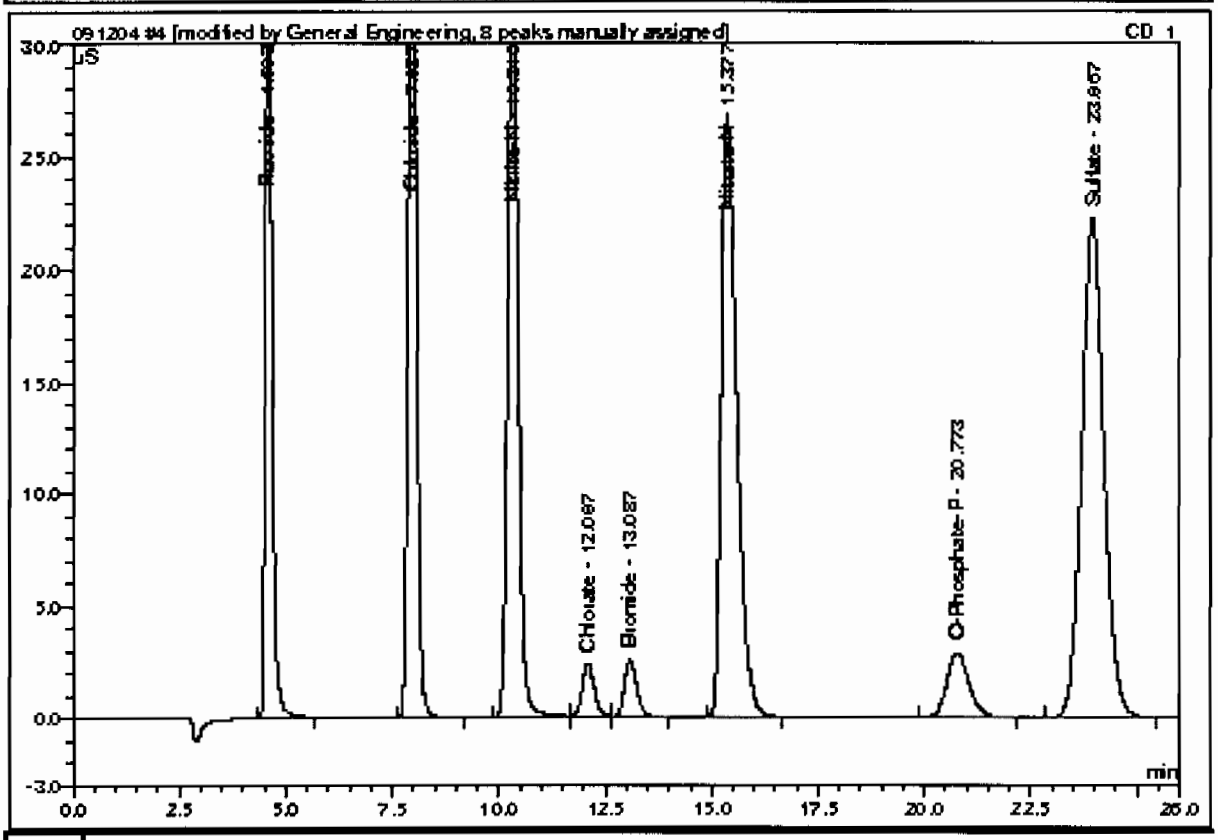

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	10.0000	10.0000		6.86020	12.49
2	7.99	Chloride	20.0000	20.0000		9.96643	18.14
3	10.34	Nitrite-N	10.0000	10.0000		10.04178	18.28
4	12.10	Chlorate	5.0000	-1.2236		0.79061	1.44
5	13.09	Bromide	5.0000	5.0000		0.85988	1.56
6	15.38	Nitrate-N	10.0000	10.0000		11.30060	20.57
7	20.77	O-Phosphate-P	5.0000	5.0000		1.71920	3.13
8	23.97	Sulfate	40.0000	40.0000		13.40847	24.40
Total:				98.7764	0.000	54.947	100.00

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

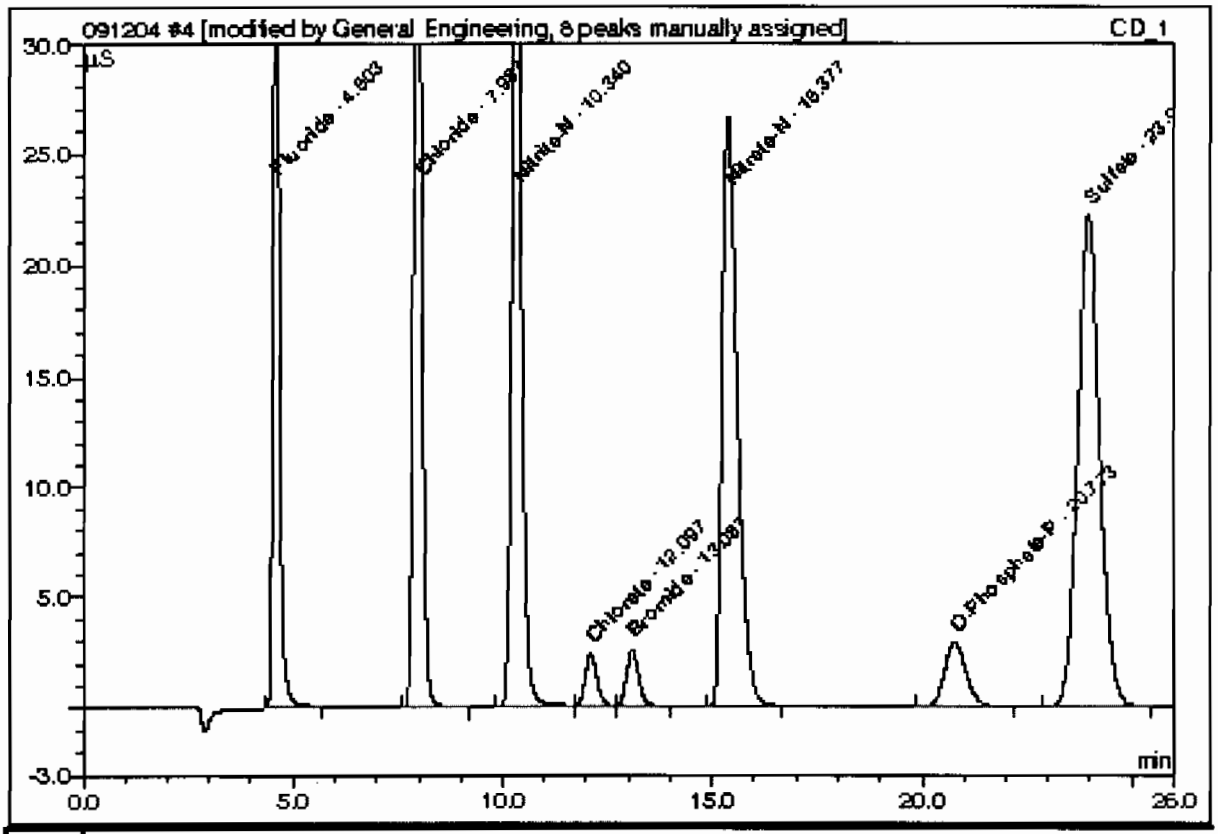

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	10.0000	10.0775		6.86020	12.49
2	7.99	Chloride	20.0000	20.4028		9.96643	18.14
3	10.34	Nitrite-N	10.0000	10.0965		10.04178	18.28
4	12.10	Chlorate	5.0000	5.0660		0.79061	1.44
5	13.09	Bromide	5.0000	5.0440		0.85988	1.56
6	15.38	Nitrate-N	10.0000	10.1668		11.30060	20.57
7	20.77	O-Phosphate-P	5.0000	5.0563		1.71920	3.13
8	23.97	Sulfate	40.0000	40.5844		13.40847	24.40
Total:				106.4944	0.000	54.947	100.00

5 AUTOCAL6

Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

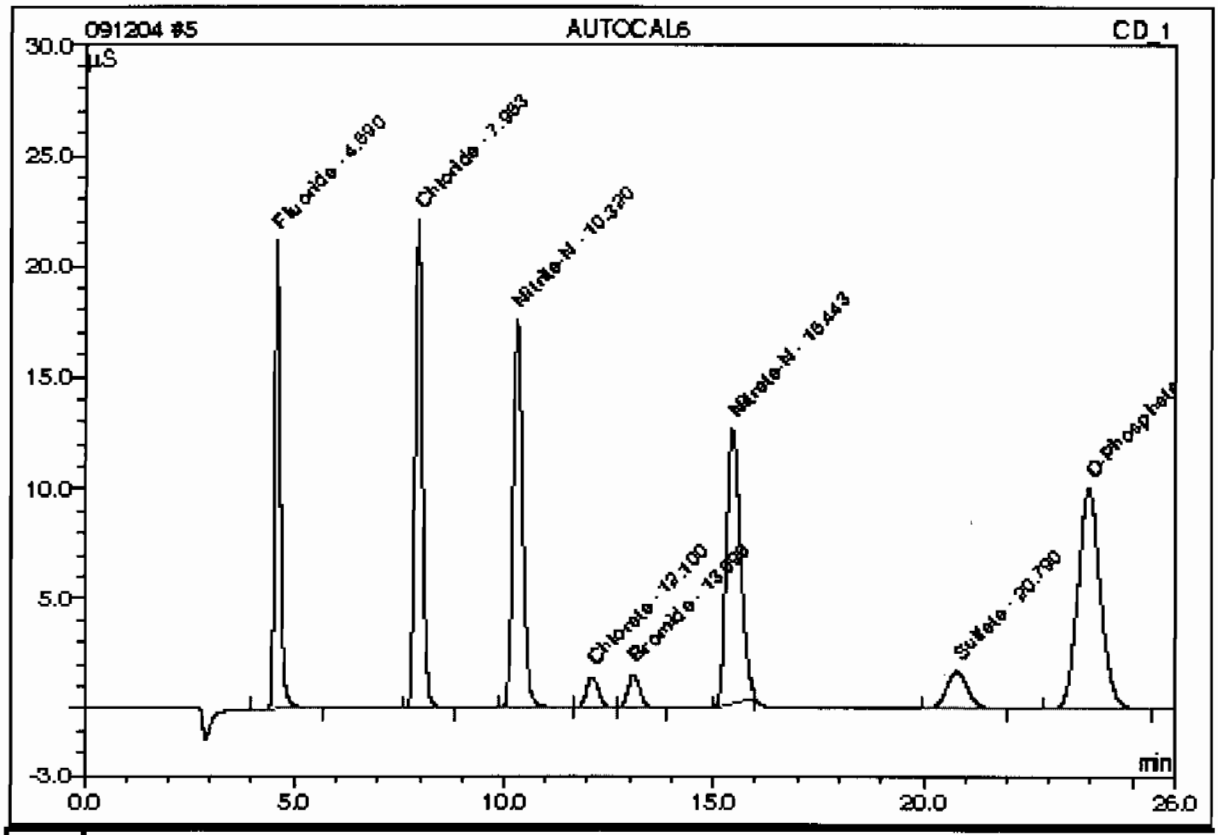

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	5.0000	4.8612		3.28723	12.87
2	7.96	Chloride	10.0000	9.3238		4.47774	17.53
3	10.32	Nitrite-N	5.0000	4.8233		4.75475	18.62
4	12.10	Chlorate	3.0000	2.9460		0.46190	1.81
5	13.09	Bromide	3.0000	2.9624		0.50611	1.98
6	15.44	Nitrate-N	5.0000	4.5398		4.87029	19.07
7	20.79	Sulfate	20.0000	8.6531		0.99882	3.91
8	23.94	O-Phosphate-P	3.0000	10.0660		6.17944	24.20
Total:				48.1776	0.000	25.536	100.00

5 AUTOCAL6

Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

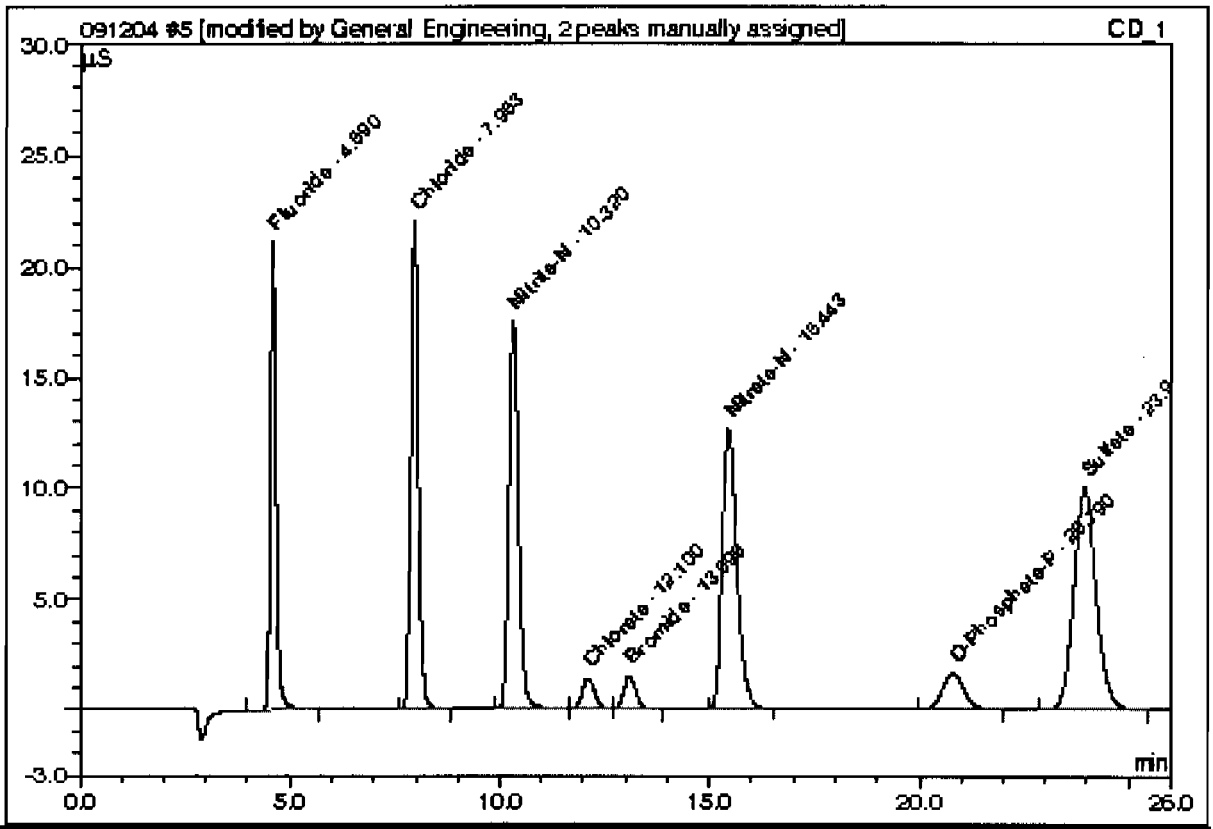

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	5.0000	4.8471		3.28723	12.74
2	7.96	Chloride	10.0000	9.2049		4.47774	17.35
3	10.32	Nitrite-N	5.0000	4.8180		4.75475	18.43
4	12.10	Chlorate	3.0000	2.9823		0.46190	1.79
5	13.09	Bromide	3.0000	2.9858		0.50611	1.96
6	15.44	Nitrate-N	5.0000	4.6775		5.13598	19.91
7	20.79	O-Phosphate-P	3.0000	2.9694		0.99882	3.87
8	23.94	Sulfate	20.0000	18.8564		6.17944	23.95
Total:				51.3412	0.000	25.802	100.00

5 AUTOCAL6

Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

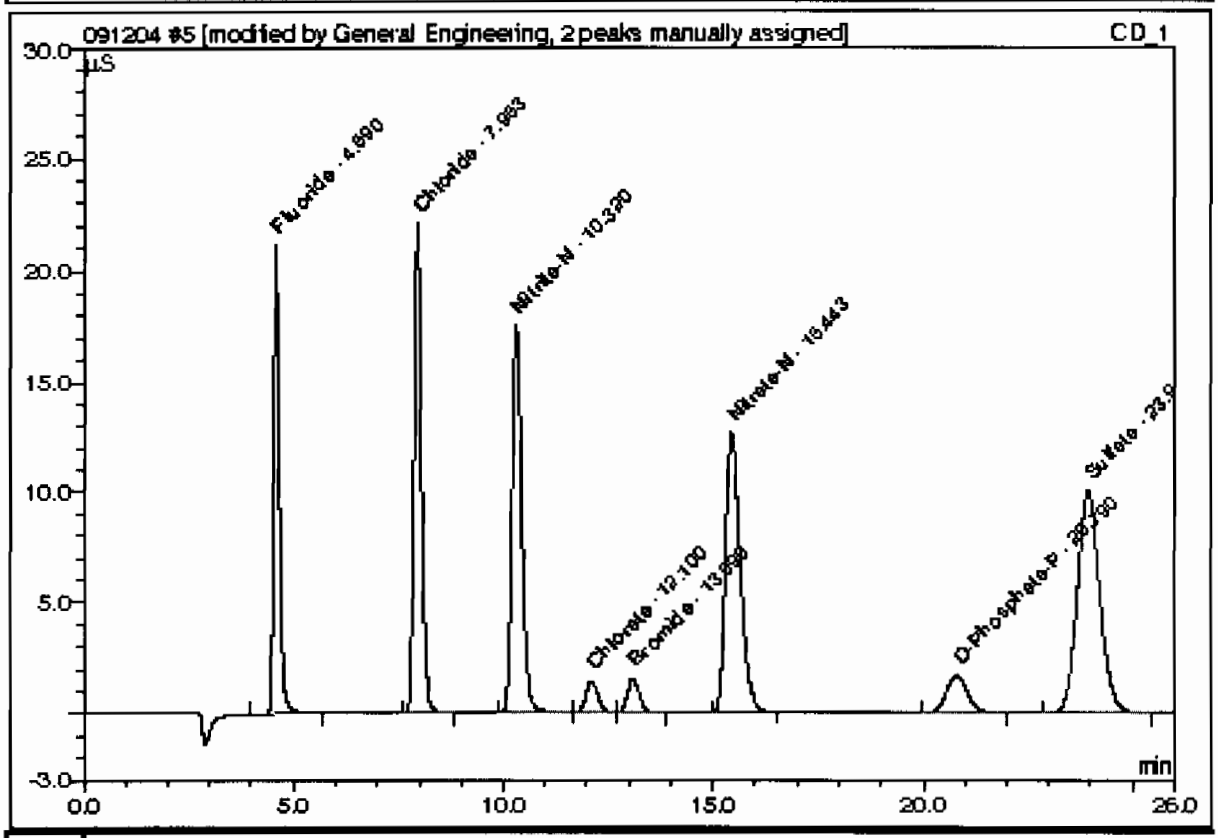

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	5.0000	4.8471		3.28723	12.74
2	7.96	Chloride	10.0000	9.2049		4.47774	17.35
3	10.32	Nitrite-N	5.0000	4.8180		4.75475	18.43
4	12.10	Chlorate	3.0000	2.9823		0.46190	1.79
5	13.09	Bromide	3.0000	2.9858		0.50611	1.96
6	15.44	Nitrate-N	5.0000	4.6775		5.13598	19.91
7	20.79	O-Phosphate-P	3.0000	2.9694		0.99882	3.87
8	23.94	Sulfate	20.0000	18.8564		6.17944	23.95
Total:				51.3412	0.000	25.802	100.00

6 AUTOCAL5

Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:41	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

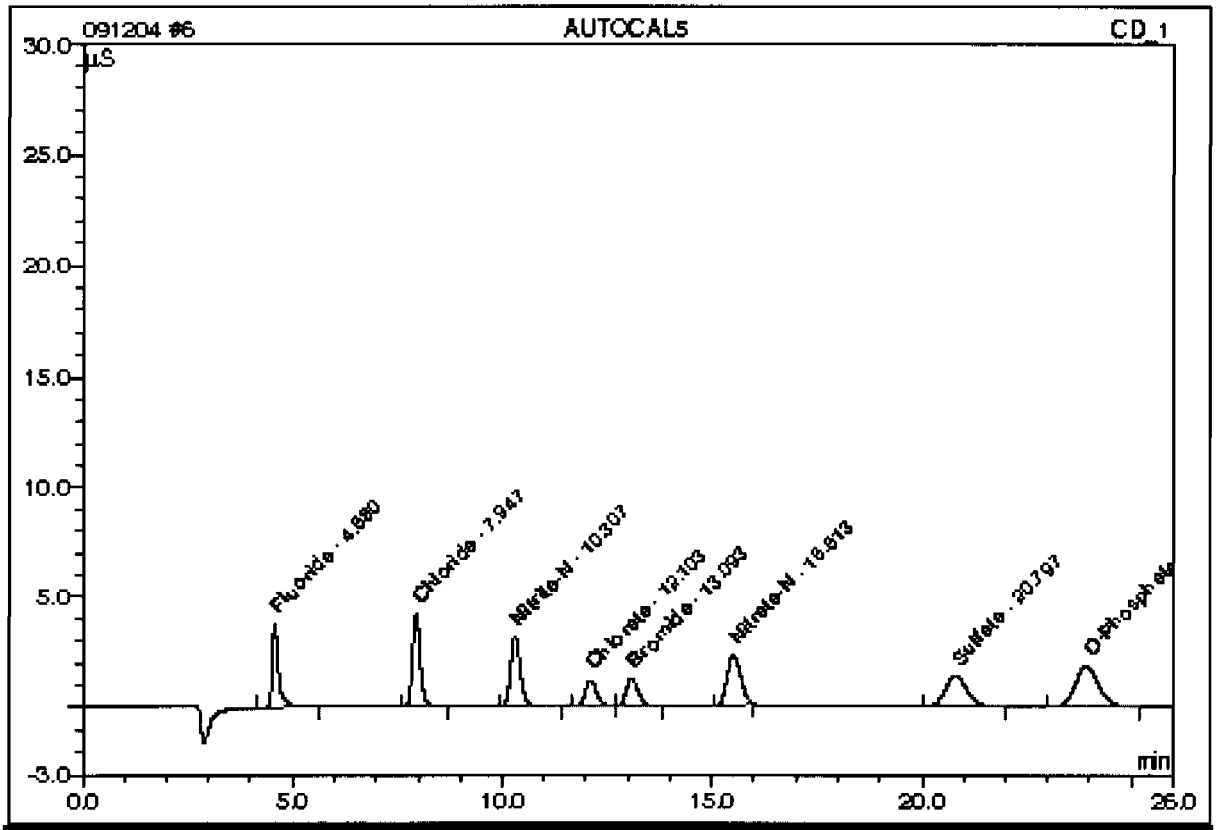

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	1.0000	1.0104		0.85024	10.75
2	7.95	Chloride	2.0000	2.0706		0.88618	14.66
3	10.31	Nitrite-N	1.0000	0.9709		0.86711	14.34
4	12.10	Chlorate	2.5000	2.3966		0.36939	6.11
5	13.09	Bromide	2.5000	2.4349		0.41178	6.81
6	15.51	Nitrate-N	1.0000	0.9546		0.87343	14.45
7	20.80	Sulfate	4.0000	3.3775		0.81659	13.51
8	23.93	O-Phosphate-P	2.5000	3.2109		1.17144	19.37
Total:				16.4266	0.000	6.046	100.00

6 AUTOCAL5

Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:41	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

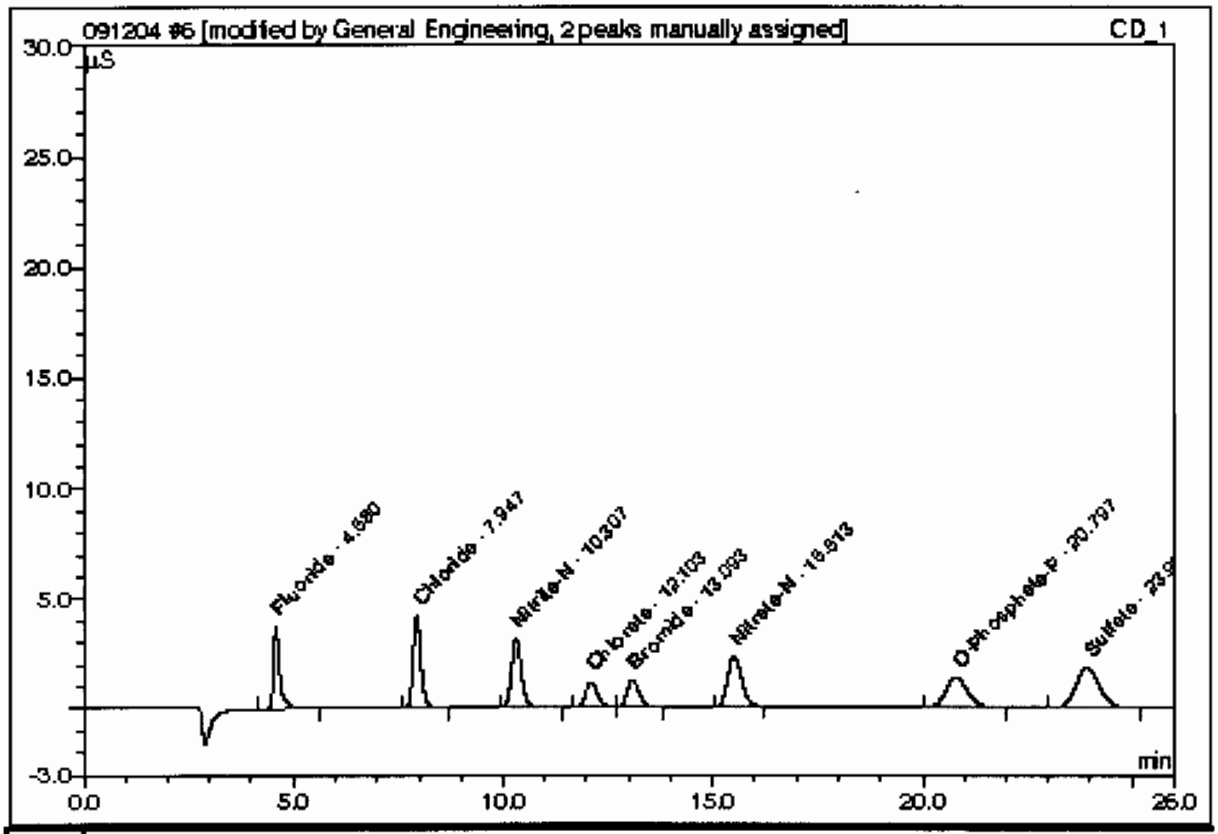

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	1.0000	0.9868		0.65024	10.66
2	7.95	Chloride	2.0000	1.8775		0.88618	14.53
3	10.31	Nitrite-N	1.0000	0.9366		0.86711	14.22
4	12.10	Chlorate	2.5000	2.3958		0.36939	6.06
5	13.09	Bromide	2.5000	2.4369		0.41178	6.75
6	15.51	Nitrate-N	1.0000	0.9290		0.92628	15.19
7	20.80	O-Phosphate-P	2.5000	2.4415		0.81659	13.39
8	23.93	Sulfate	4.0000	3.8040		1.17144	19.21
Total:				15.8080	0.000	6.099	100.00

6 AUTOCAL5

Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:41	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

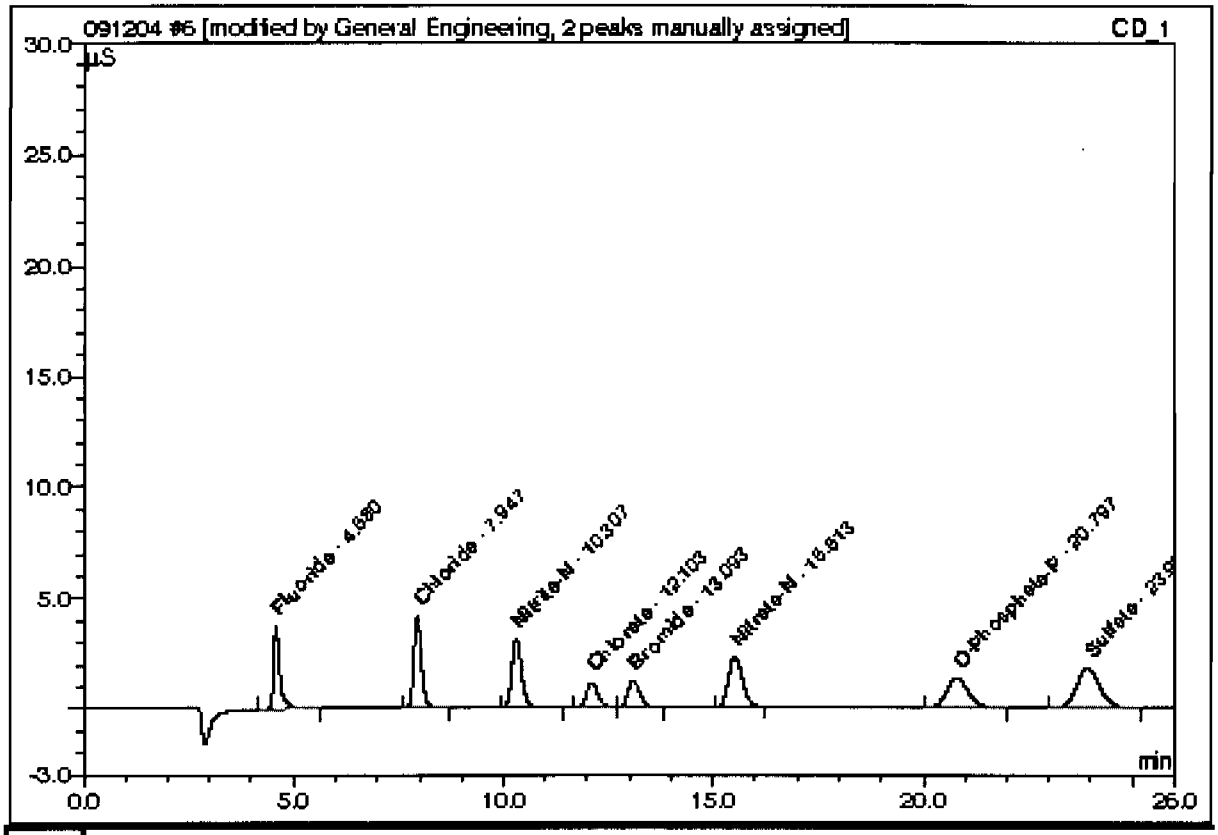

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	1.0000	0.9868		0.65024	10.66
2	7.95	Chloride	2.0000	1.8775		0.88618	14.53
3	10.31	Nitrite-N	1.0000	0.9366		0.86711	14.22
4	12.10	Chlorate	2.5000	2.3958		0.36939	6.06
5	13.09	Bromide	2.5000	2.4369		0.41178	6.75
6	15.51	Nitrate-N	1.0000	0.9290		0.92628	15.19
7	20.80	O-Phosphate-P	2.5000	2.4415		0.81659	13.39
8	23.93	Sulfate	4.0000	3.8040		1.17144	19.21
Total:				15.8080	0.000	6.099	100.00

7 AUTOCAL4

Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 19:07	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

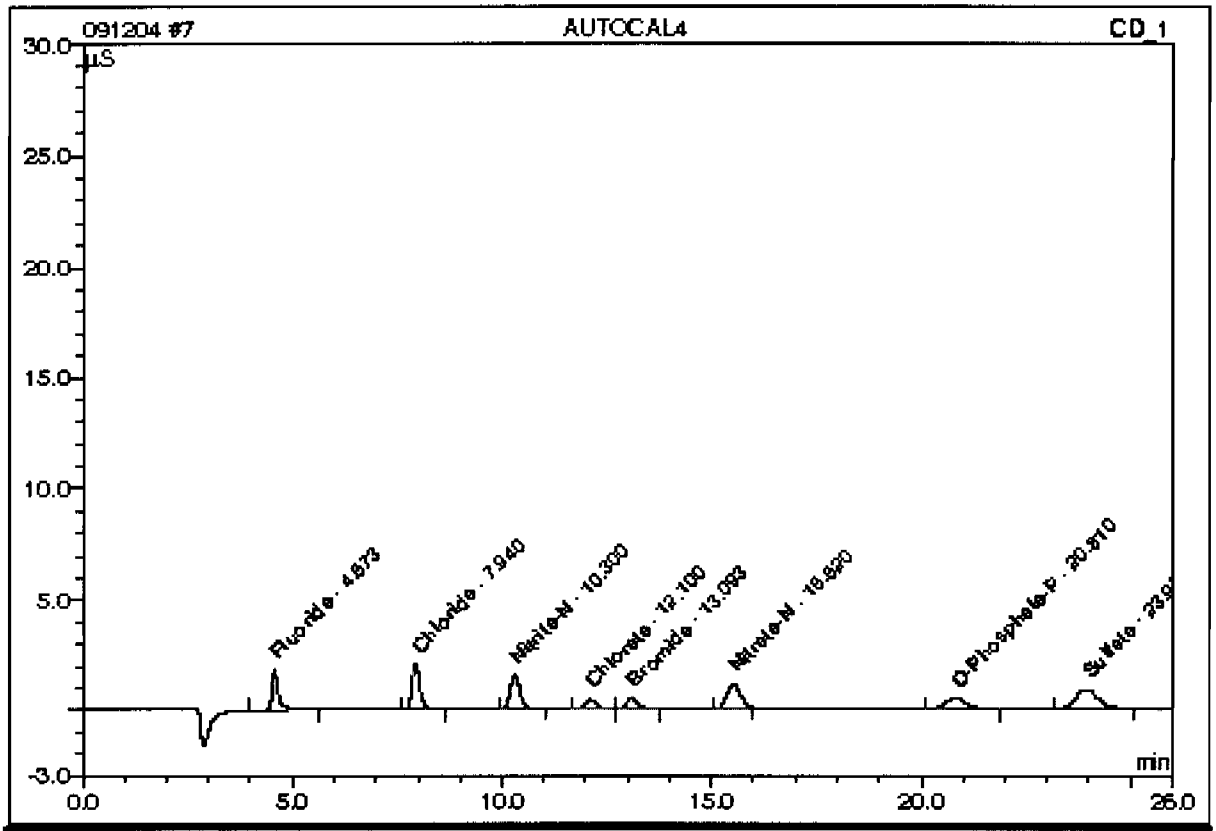

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.5000	0.5116		0.32563	11.63
2	7.94	Chloride	1.0000	0.9842		0.44832	16.01
3	10.30	Nitrite-N	0.5000	0.4927		0.42244	15.08
4	12.10	Chlorate	1.0000	0.9770		0.14557	5.20
5	13.09	Bromide	1.0000	0.9768		0.16083	5.74
6	15.52	Nitrate-N	0.5000	0.4871		0.43005	15.36
7	20.81	O-Phosphate-P	1.0000	0.9627		0.30614	10.93
8	23.93	Sulfate	2.0000	1.9710		0.56158	20.05
Total:				7.3629	0.000	2.801	100.00

8 AUTOCAL3

Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 19:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

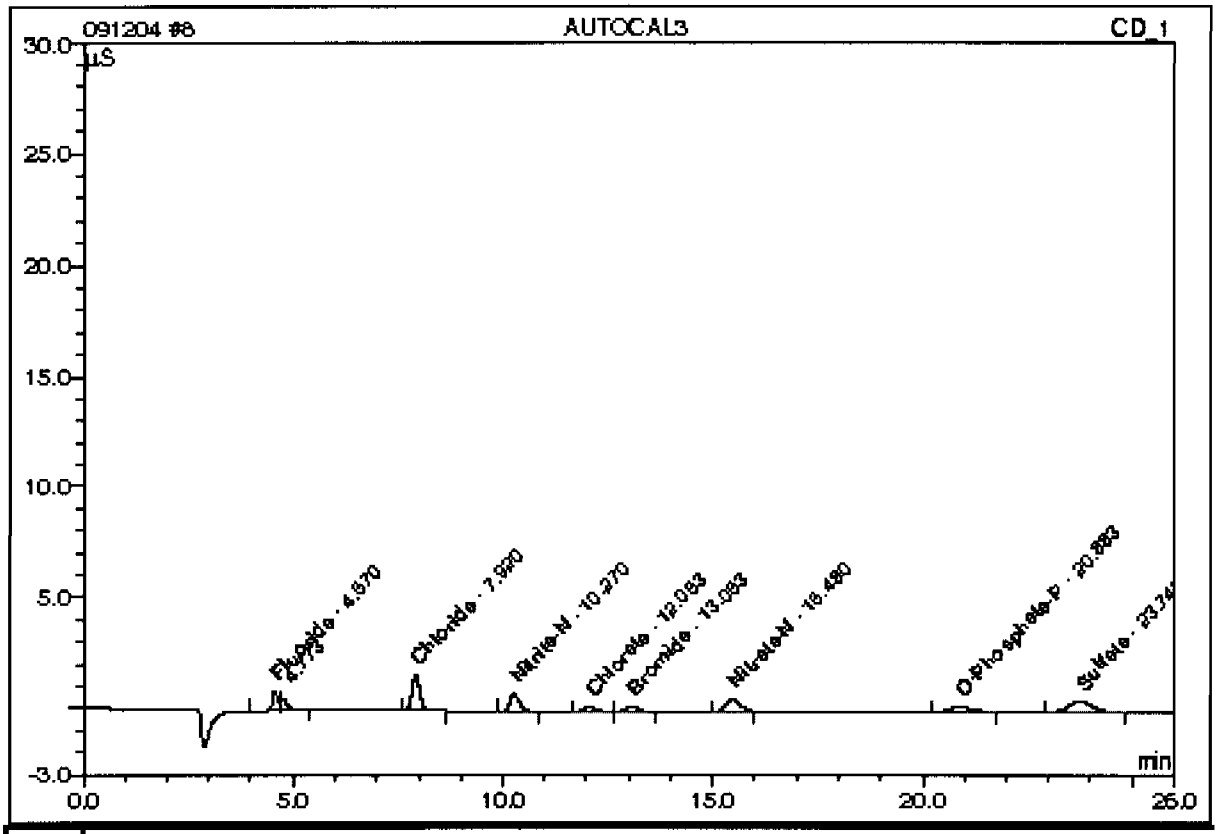

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.2500	0.2303		0.13351	8.29
3	7.92	Chloride	0.5000	0.7629		0.33988	21.10
4	10.27	Nitrite-N	0.2500	0.2772		0.20664	12.83
5	12.06	Chlorate	0.5000	0.5055		0.07119	4.42
6	13.05	Bromide	0.5000	0.5012		0.07908	4.91
7	15.48	Nitrate-N	0.2500	0.3025		0.22271	13.82
8	20.88	O-Phosphate-P	0.5000	0.4831		0.14059	8.73
9	23.74	Sulfate	1.0000	1.2327		0.31595	19.61
Total:				4.2954	0.000	1.510	93.69

9 AUTOCAL2

Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:00	Analyst:	VH1
Run Time (min):	11.91	Column:	AS23-002588;GLGCE086;300;9056

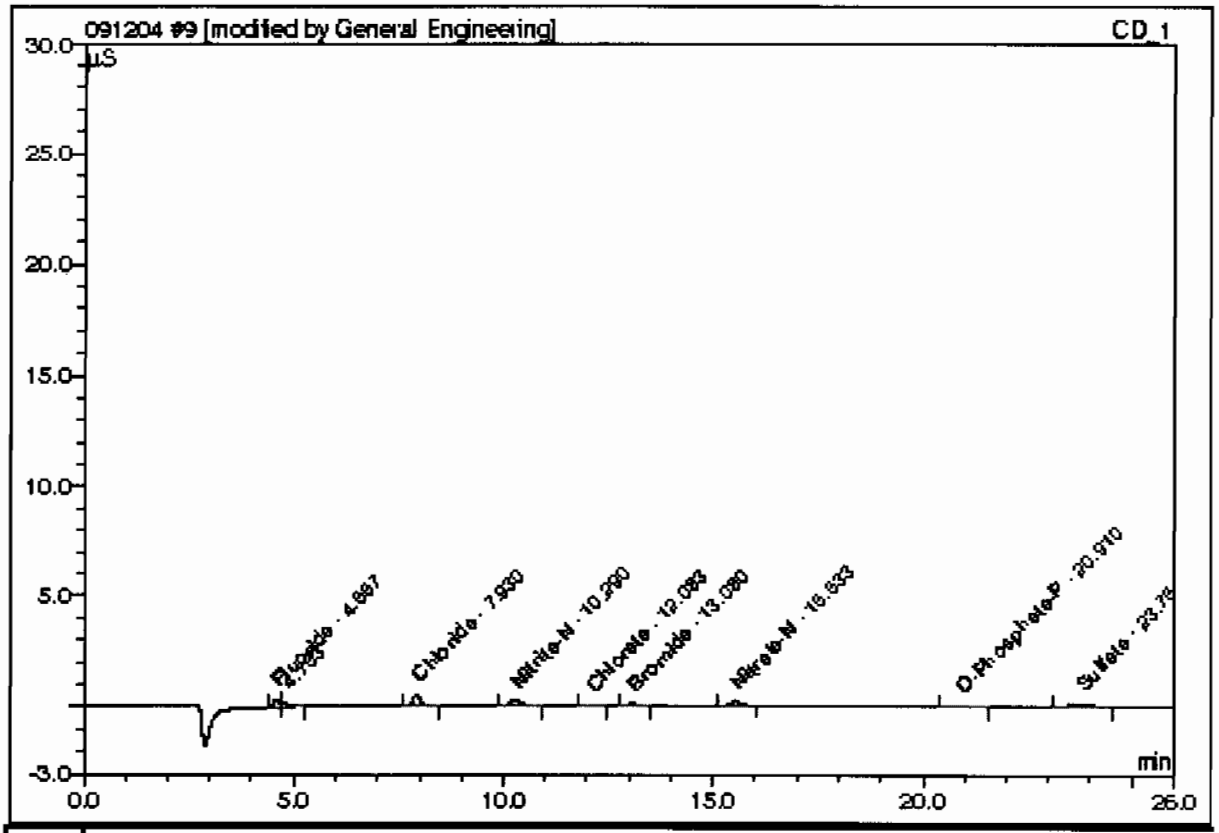

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.1000	0.1178	*	0.05666	9.21
3	7.93	Chloride	0.2000	0.3219		0.12373	20.11
4	10.29	Nitrite-N	0.1000	0.1582		0.08742	14.21
5	12.08	Chlorate	0.2000	0.2193	*	0.02606	4.24
6	13.08	Bromide	0.2000	0.2142	*	0.02977	4.84
7	15.53	Nitrate-N	0.1000	0.1829	*	0.08841	14.37
8	20.91	O-Phosphate-P	0.2000	0.2113	*	0.04679	7.60
9	23.75	Sulfate	0.4000	0.6686	*	0.12826	20.85
Total:				2.0943	0.000	0.587	95.42

9 AUTOCAL2

Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:00	Analyst:	VH1
Run Time (min):	11.91	Column:	AS23-002588;GLGCE086;300;9056

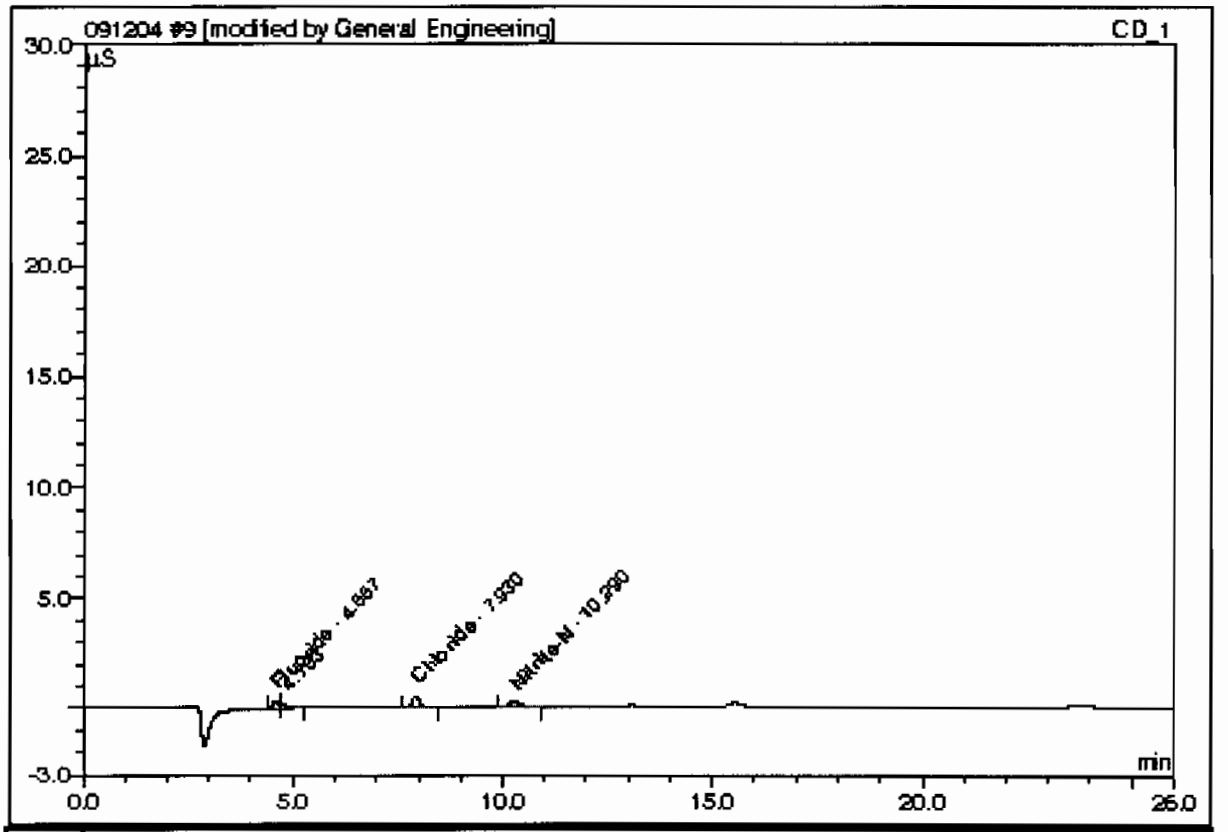

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.1000	0.1269	*	0.05666	19.14
3	7.93	Chloride	0.2000	0.3376		0.12373	41.80
4	10.29	Nitrite-N	0.1000	0.1582		0.08742	29.53
n.a.	n.a.	Chlorate	0.2000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.2000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.1000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.2000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.4000	n.a.	n.a.	n.a.	n.a.
Total:				0.6228	0.000	0.268	90.47

9 AUTOCAL2

Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:00	Analyst:	VH1
Run Time (min):	11.91	Column:	AS23-002588;GLGCE086;300;9056

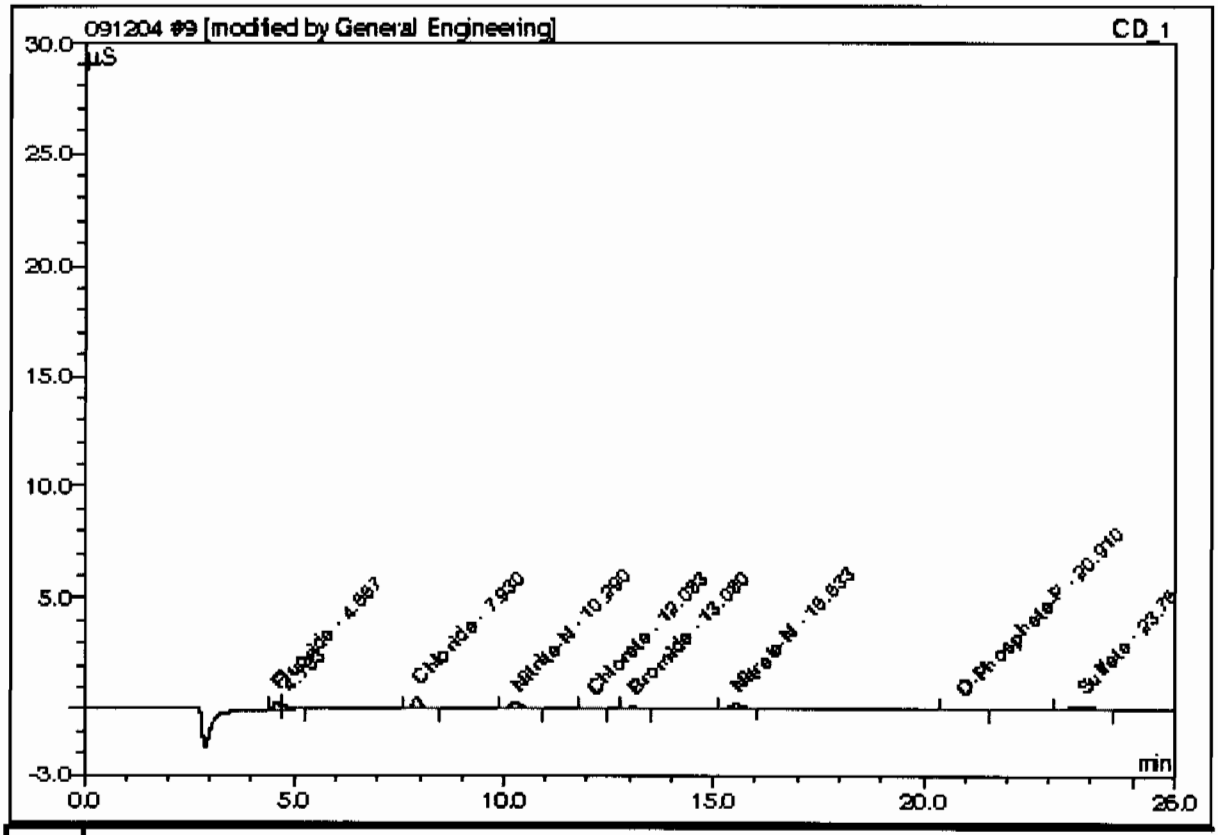

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.1000	0.1178	*	0.05666	9.21
3	7.93	Chloride	0.2000	0.3219		0.12373	20.11
4	10.29	Nitrite-N	0.1000	0.1582		0.08742	14.21
5	12.08	Chlorate	0.2000	0.2193	*	0.02606	4.24
6	13.08	Bromide	0.2000	0.2142	*	0.02977	4.84
7	15.53	Nitrate-N	0.1000	0.1829	*	0.08841	14.37
8	20.91	O-Phosphate-P	0.2000	0.2113	*	0.04679	7.60
9	23.75	Sulfate	0.4000	0.6686	*	0.12826	20.85
Total:				2.0943	0.000	0.587	95.42

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	*Analyst:*	VH1
Run Time (min):	16.92	Column:	AS23-002398; GL GCE086;300;9056

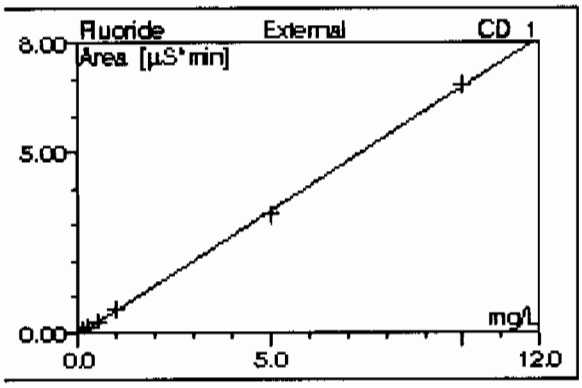

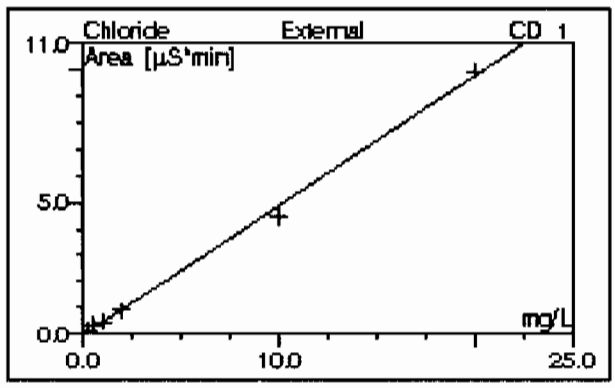

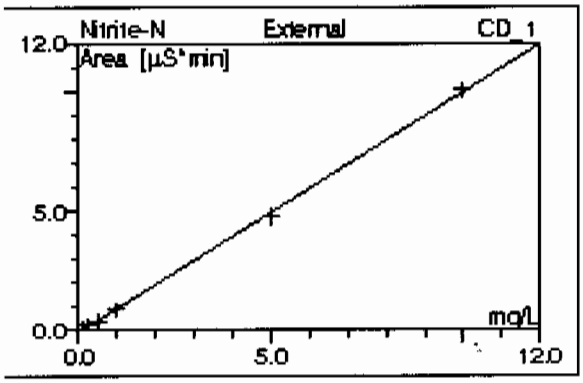

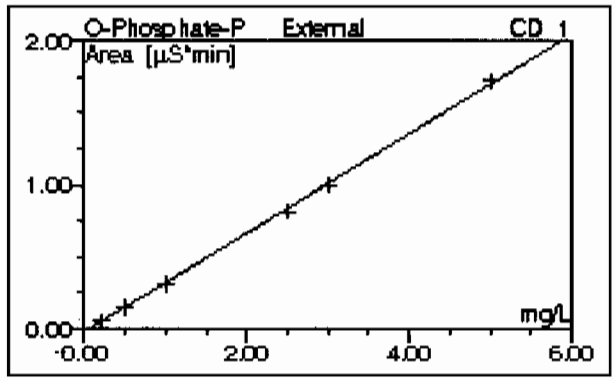

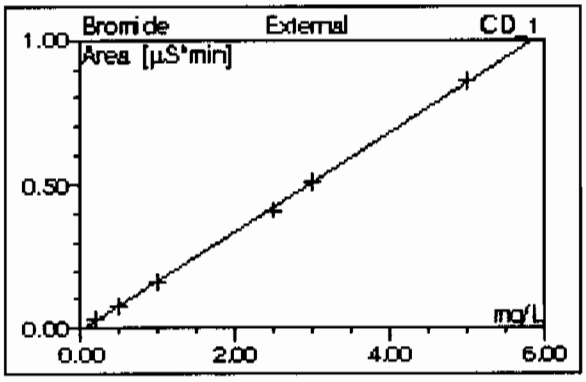

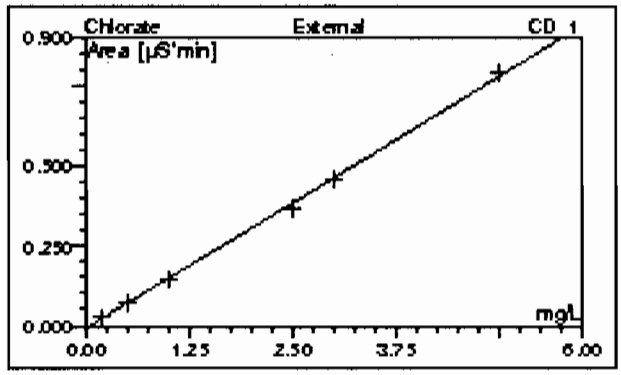

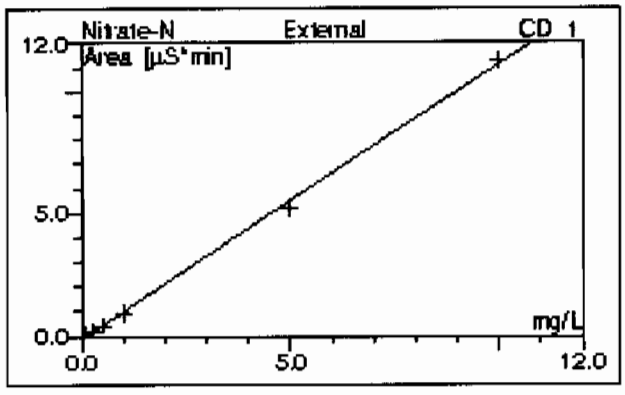

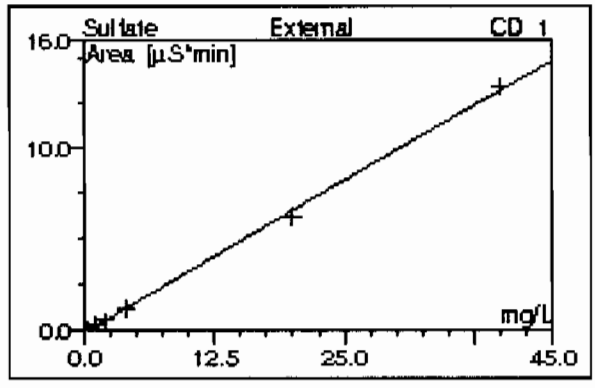

No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
1	4.57	Fluoride	0LOff	99.9624	-0.0238	0.6831	0.0000
2	7.92	Chloride	0LOff	99.7390	-0.0341	0.4902	0.0000
n.a.	n.a.	Nitrite-N	0LOff	99.9363	-0.0710	1.0016	0.0000
n.a.	n.a.	Chlorate	0LOff	99.9030	-0.0085	0.1577	0.0000
n.a.	n.a.	Bromide	0LOff	99.9594	-0.0071	0.1719	0.0000
n.a.	n.a.	Nitrate-N	0LOff	99.8161	-0.1170	1.1230	0.0000
n.a.	n.a.	O-Phosphate-P	0LOff	99.9452	-0.0262	0.3452	0.0000
n.a.	n.a.	Sulfate	0LOff	99.8573	-0.0942	0.3327	0.0000
Average:				99.8898	-0.0477	0.5382	0.0000

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	Analyst:	VH1
Run Time (min):	16.92	Column:	AS23-002588;GLGCE086;300;9056

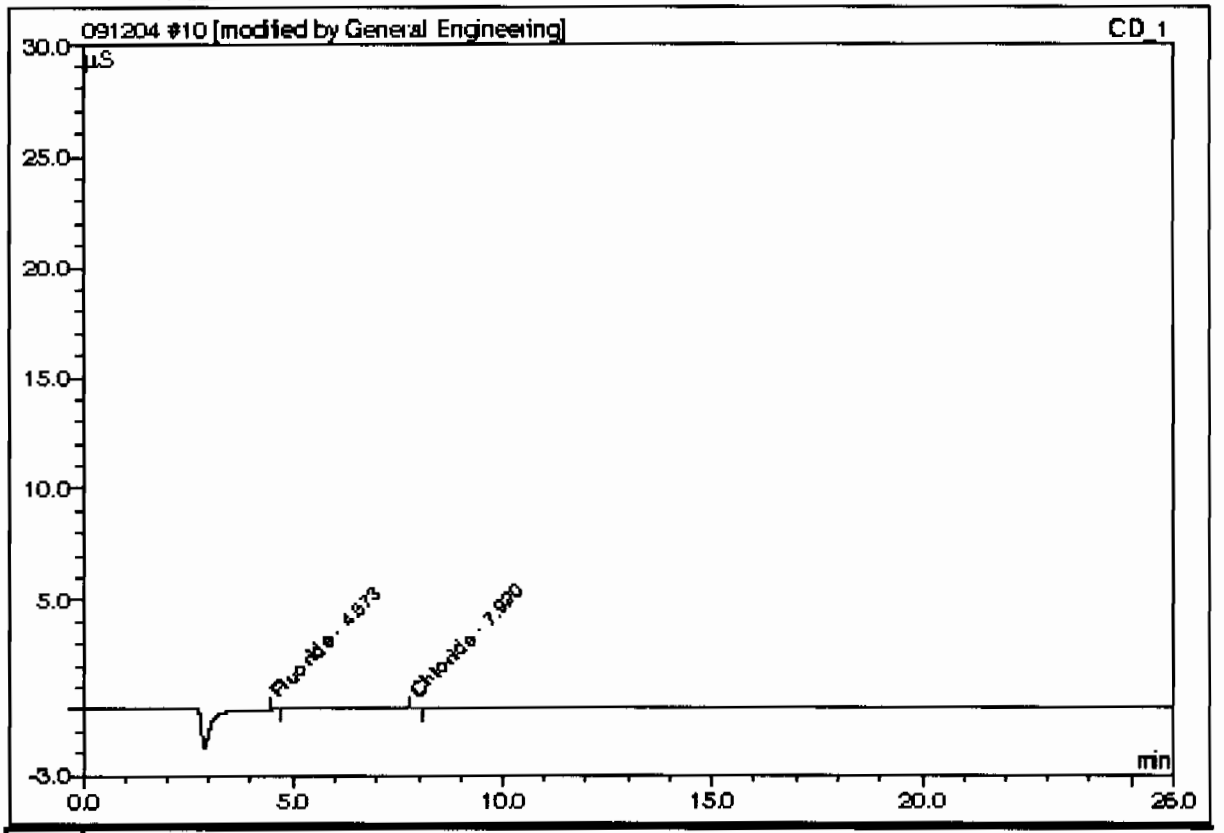

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.0000	0.0440	`	0.00619	65.14
2	7.92	Chloride	0.0000	0.0763	`	0.00331	34.86
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.1202	0.000	0.010	100.00

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	Analyst:	VH1
Run Time (min):	16.92	Column:	AS23-002588;GLGCE086;300;9056

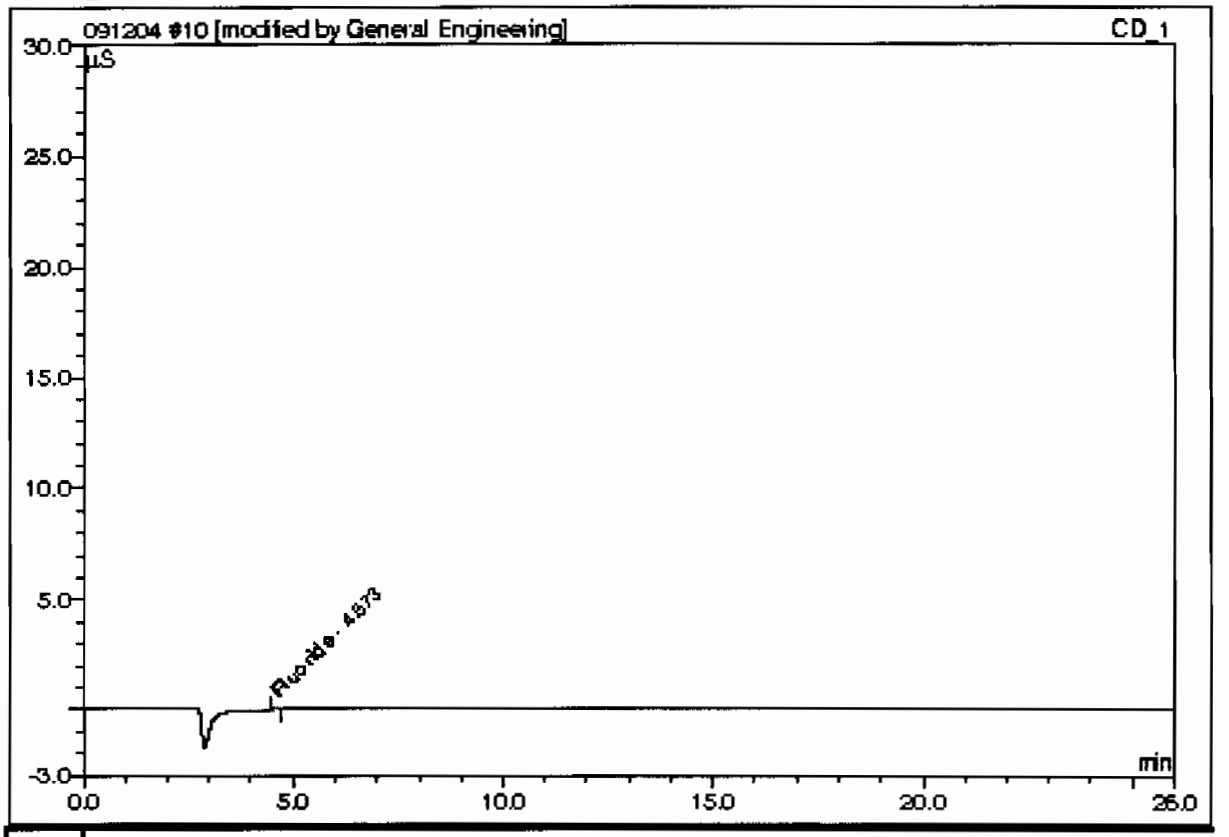

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.0000	0.0440	*	0.00619	100.00
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0440	0.000	0.006	100.00

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	Analyst:	VH1
Run Time (min):	16.92	Column:	AS23-002588;GLGCE086;300;9056

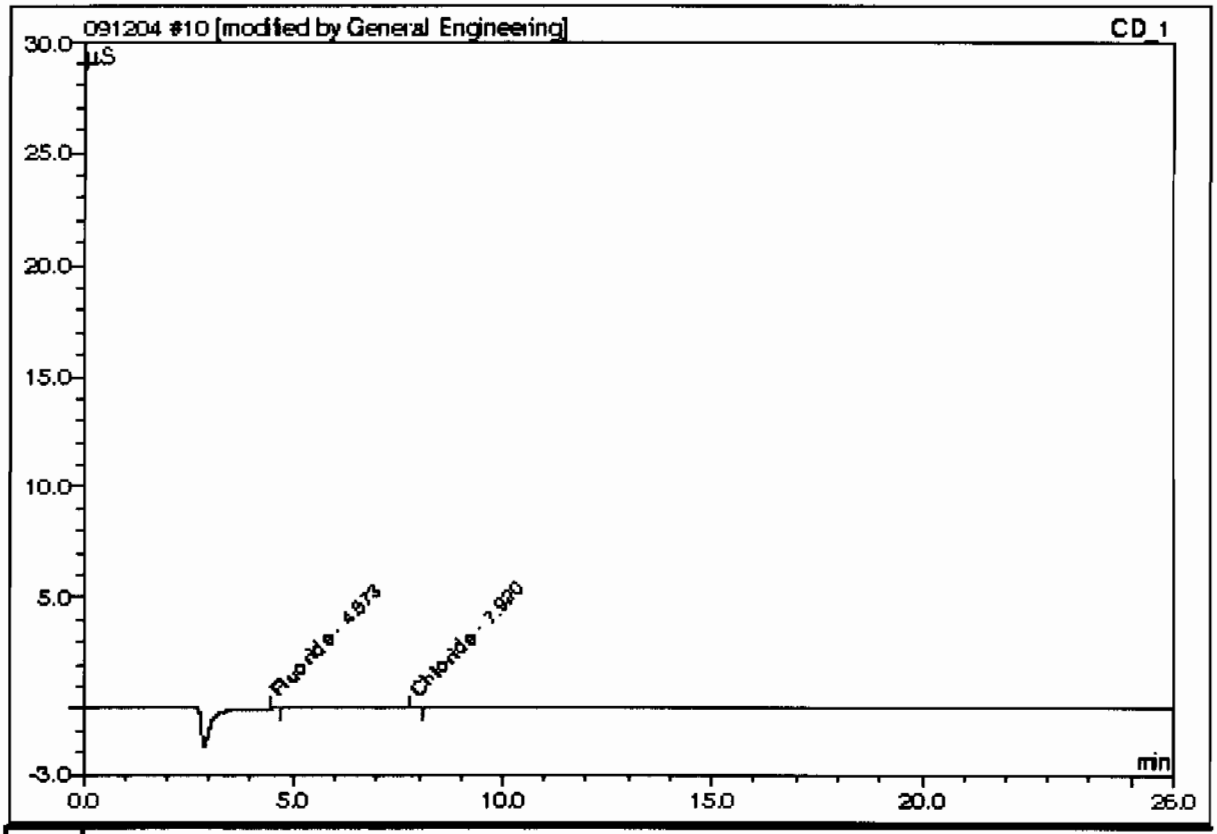

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.0000	0.0440	*	0.00619	65.14
2	7.92	Chloride	0.0000	0.0763	*	0.00331	34.86
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.1202	0.000	0.010	100.00

This is runlog for Sequence 091204.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	12/04/09 16:31		1	091204	VH1
BLK	12/04/09 16:57		1	091204	VH1
BLK	12/04/09 17:23		1	091204	VH1
ICAL-07	12/04/09 17:49		1	091204	VH1
ICAL-06	12/04/09 18:15		1	091204	VH1
ICAL-05	12/04/09 18:41		1	091204	VH1
ICAL-04	12/04/09 19:07		1	091204	VH1
ICAL-03	12/04/09 19:34		1	091204	VH1
ICAL-02	12/04/09 20:00		1	091204	VH1
ICAL-01	12/04/09 20:26		1	091204	VH1
ICV	12/04/09 20:52		1	091204	VH1
ICB	12/04/09 21:18		1	091204	VH1
1201987564	12/04/09 21:44	929381	1	091204	VH1
1201987567	12/04/09 22:10	929381	1	091204	VH1
242097001	12/04/09 22:36	929381	1	091204	VH1
242097002	12/04/09 23:02	929381	1	091204	VH1
1201987565	12/04/09 23:28	929381	1	091204	VH1
1201987566	12/04/09 23:54	929381	1	091204	VH1

11 WIC091204-02ICV

Sample Name:	WIC091204-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

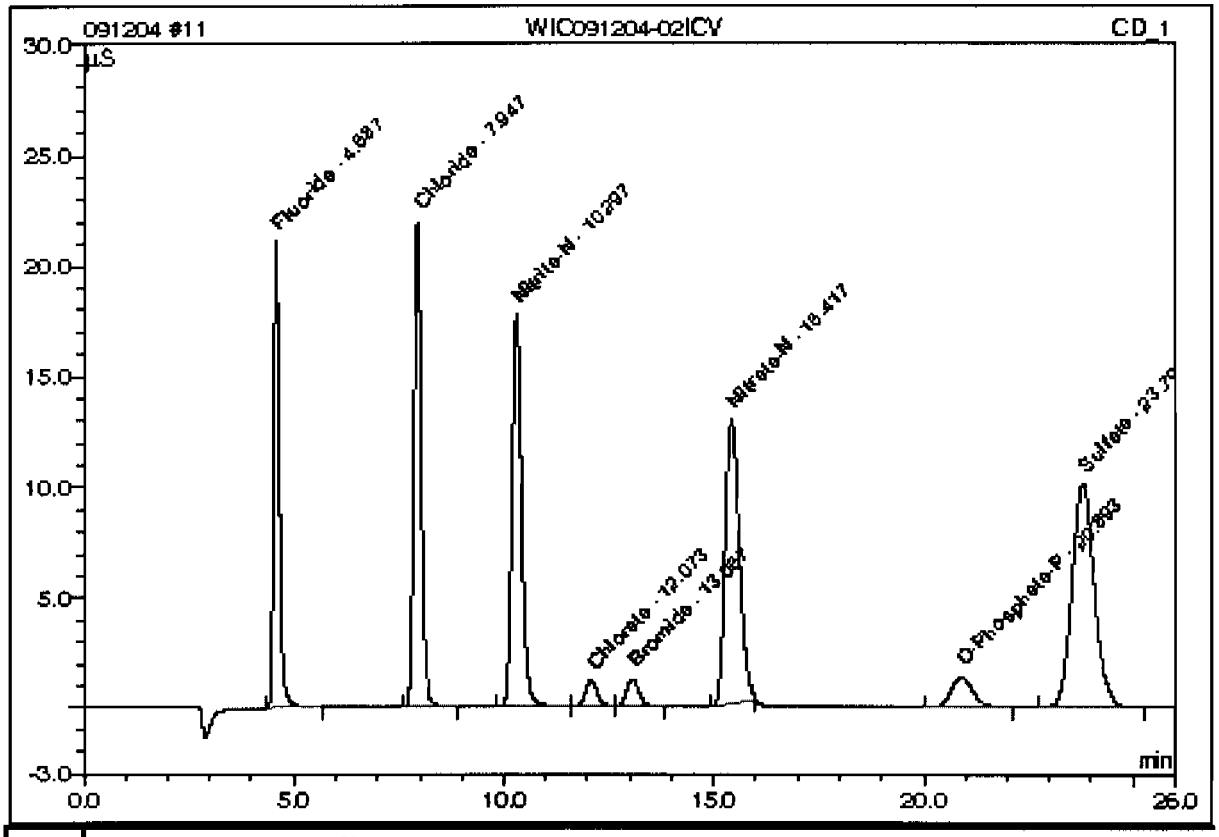

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	4.9043		3.32633	12.99
2	7.95	Chloride	n.a.	9.2547		4.50217	17.58
3	10.30	Nitrite-N	n.a.	4.8882		4.82510	18.84
4	12.07	Chlorate	n.a.	2.5539		0.39433	1.54
5	13.06	Bromide	n.a.	2.5442		0.43021	1.68
6	15.42	Nitrate-N	n.a.	4.5957		5.04412	19.70
7	20.89	O-Phosphate-P	n.a.	2.4911		0.83373	3.26
8	23.79	Sulfate	n.a.	19.0819		6.25447	24.42
Total:				50.3140	0.000	25.610	100.00

11 WIC091204-02ICV

Sample Name:	WIC091204-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

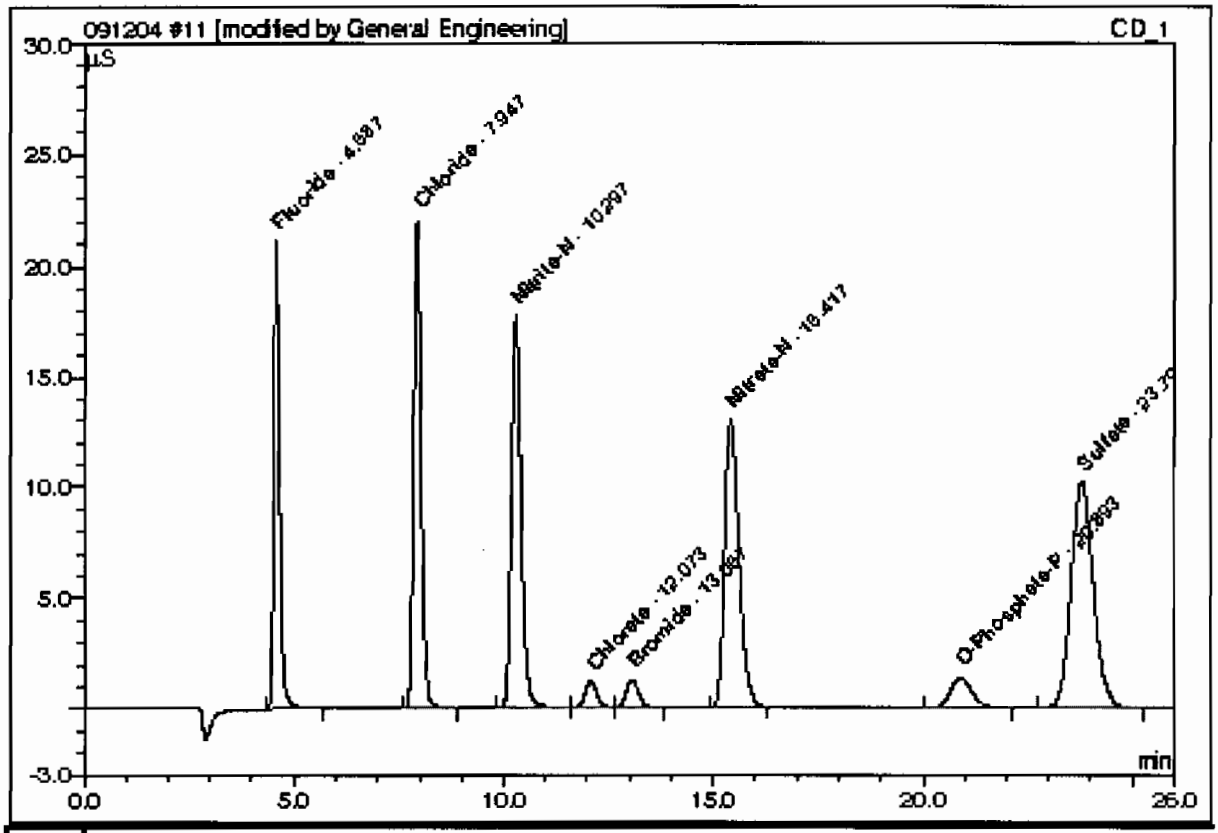

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	4.9043		3.32633	12.90
2	7.95	Chloride	n.a.	9.2547		4.50217	17.47
3	10.30	Nitrite-N	n.a.	4.8882		4.82510	18.72
4	12.07	Chlorate	n.a.	2.5539		0.39433	1.53
5	13.06	Bromide	n.a.	2.5442		0.43021	1.67
6	15.42	Nitrate-N	n.a.	4.7447		5.21143	20.22
7	20.89	O-Phosphate-P	n.a.	2.4911		0.83373	3.23
8	23.79	Sulfate	n.a.	19.0819		6.25447	24.26
Total:				50.4630	0.000	25.778	100.00

11 WIC091204-02ICV

Sample Name:	WIC091204-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

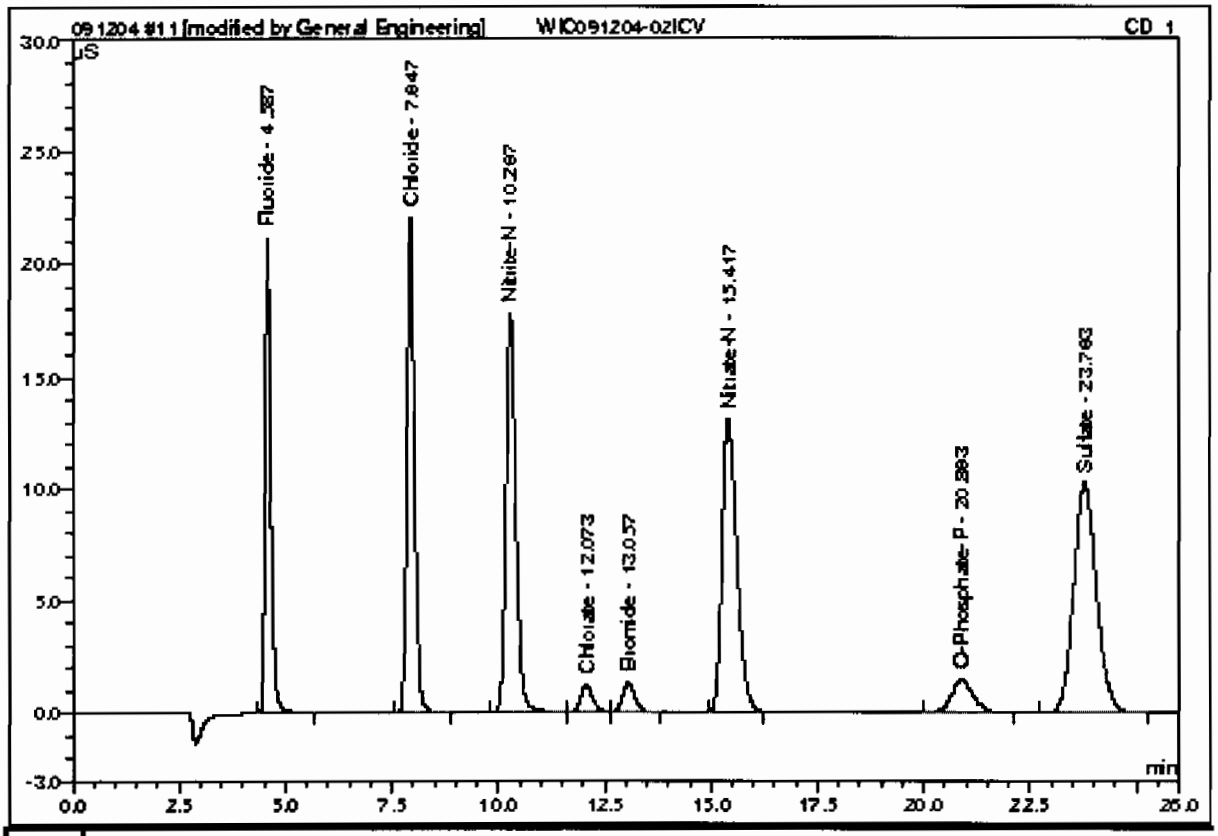

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	4.9043		3.32633	12.90
2	7.95	Chloride	n.a.	9.2547		4.50217	17.47
3	10.30	Nitrite-N	n.a.	4.8882		4.82510	18.72
4	12.07	Chlorate	n.a.	2.5539		0.39433	1.53
5	13.06	Bromide	n.a.	2.5442		0.43021	1.67
6	15.42	Nitrate-N	n.a.	4.7447		5.21143	20.22
7	20.89	O-Phosphate-P	n.a.	2.4911		0.83373	3.23
8	23.79	Sulfate	n.a.	19.0819		6.25447	24.26
Total:				50.4630	0.000	25.778	100.00

12 ICB

Sample Name:	ICB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 21:18	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

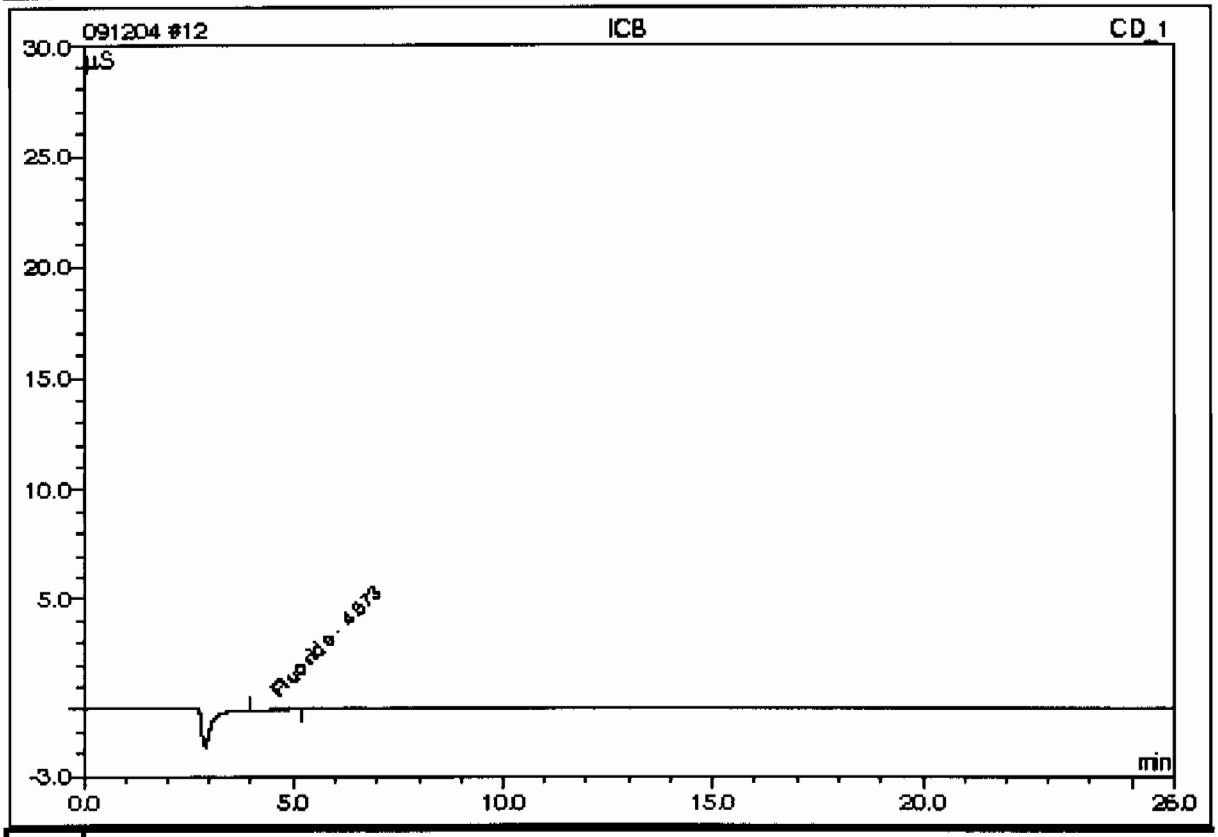

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.0579		0.01570	100.00
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0579	0.000	0.016	100.00

This is runlog for Sequence 091208.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	12/08/09 17:47		1	091208	VH1
BLK	12/08/09 18:13		1	091208	VH1
BLK	12/08/09 18:39		1	091208	VH1
ICV	12/08/09 19:05		1	091208	VH1
ICB	12/08/09 19:31		1	091208	VH1
1201990630	12/08/09 19:57	930716	1	091208	VH1
1201990633	12/08/09 20:23	930716	1	091208	VH1
242482002	12/08/09 20:49	930716	1	091208	VH1
1201990631	12/08/09 21:15	930716	1	091208	VH1
1201990632	12/08/09 21:41	930716	1	091208	VH1
242482003	12/08/09 22:07	930716	1	091208	VH1
242482002	12/08/09 22:34	930716	10	091208	VH1
1201990631	12/08/09 23:00	930716	10	091208	VH1
1201990632	12/08/09 23:26	930716	10	091208	VH1
242482003	12/08/09 23:52	930716	10	091208	VH1

11 WIC091208-02ICV

Sample Name:	WIC091208-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/8/2009 19:05	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

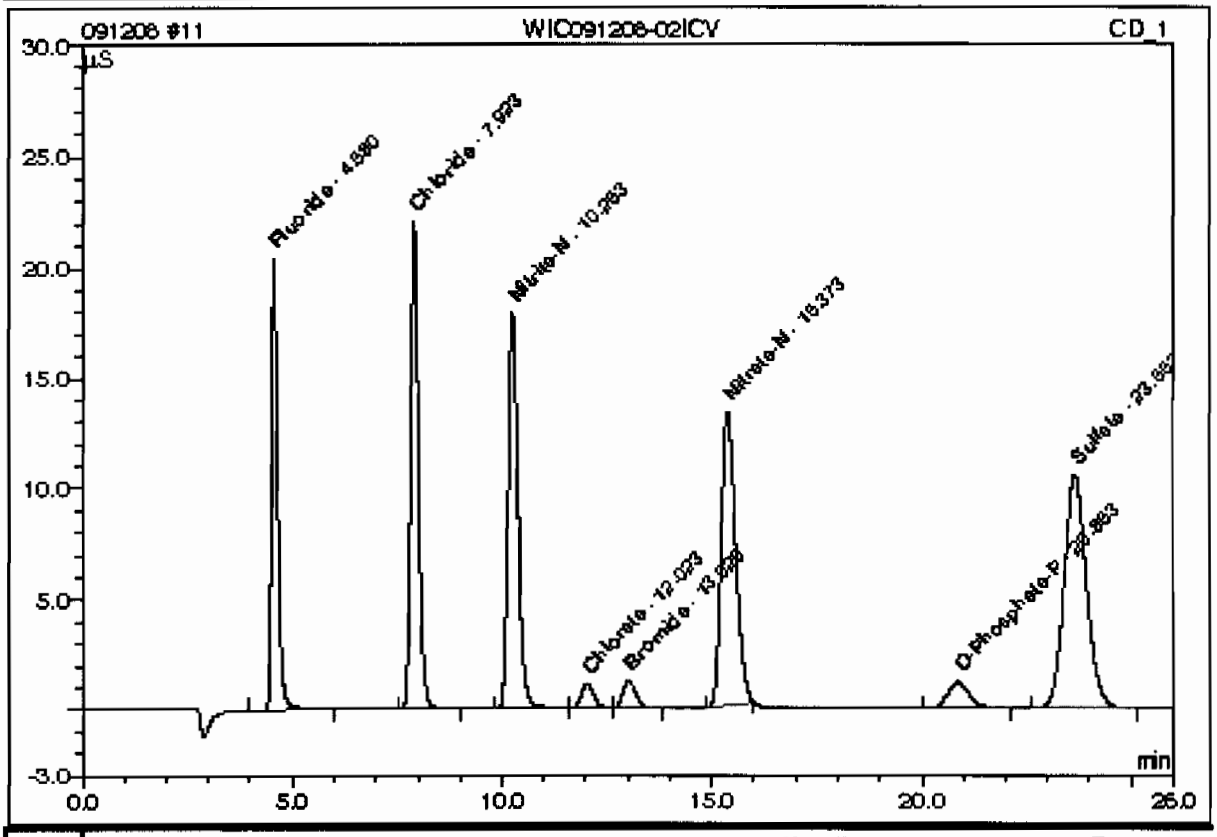

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.0656		3.43664	13.03
2	7.92	Chloride	n.a.	9.5805		4.65901	17.67
3	10.26	Nitrite-N	n.a.	5.0390		4.97610	18.87
4	12.02	Chlorate	n.a.	2.4682		0.38108	1.45
5	13.02	Bromide	n.a.	2.5666		0.43439	1.65
6	15.37	Nitrate-N	n.a.	5.0764		5.29250	20.07
7	20.85	O-Phosphate-P	n.a.	2.1236		0.70737	2.68
8	23.65	Sulfate	n.a.	19.7557		6.47919	24.57
Total:				51.6757	0.000	26.366	100.00

11 WIC091208-02ICV

Sample Name:	WIC091208-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/8/2009 19:05	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

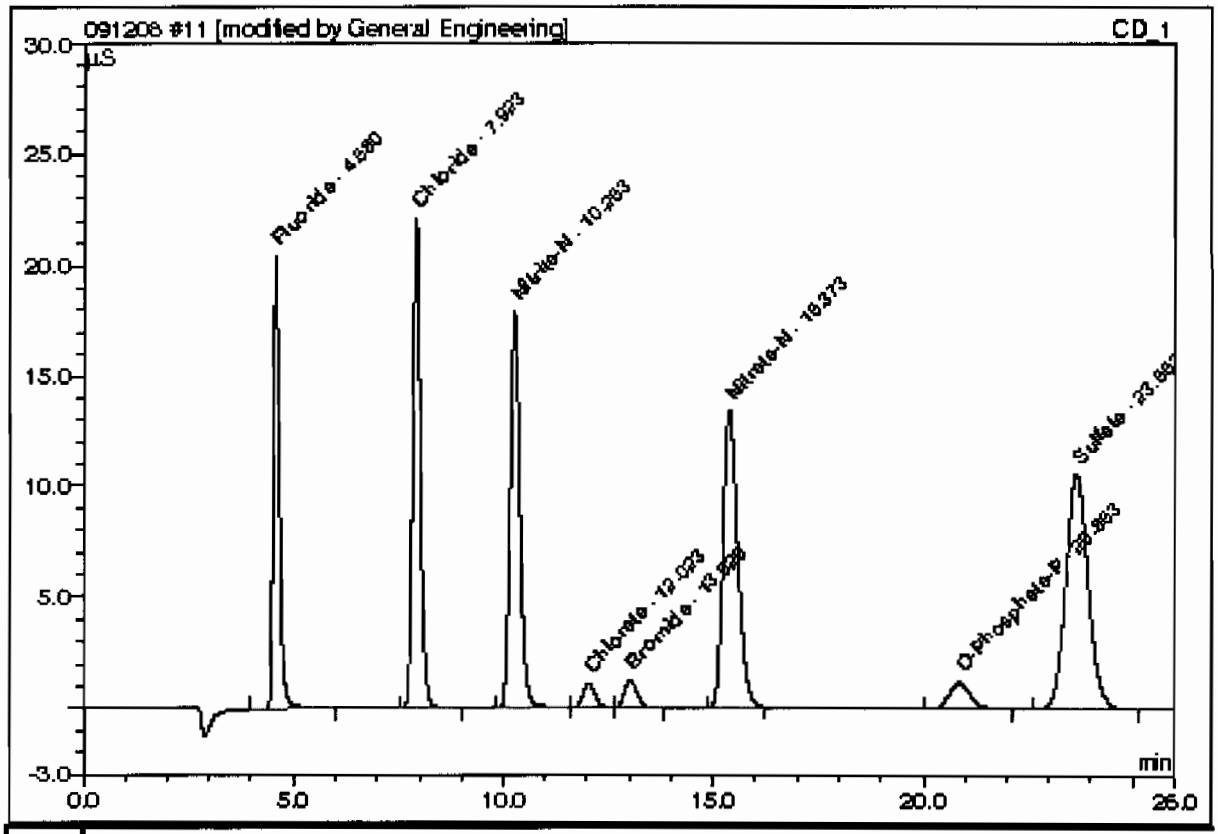

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.0656		3.43664	12.97
2	7.92	Chloride	n.a.	9.5805		4.65901	17.59
3	10.26	Nitrite-N	n.a.	5.0390		4.97610	18.78
4	12.02	Chlorate	n.a.	2.4682		0.38108	1.44
5	13.02	Bromide	n.a.	2.5666		0.43439	1.64
6	15.37	Nitrate-N	n.a.	5.1950		5.41851	20.45
7	20.85	O-Phosphate-P	n.a.	2.1236		0.70737	2.67
8	23.65	Sulfate	n.a.	19.7557		6.47919	24.46
Total:				51.7942	0.000	26.492	100.00

12 ICB

Sample Name:	ICB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/8/2009 19:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

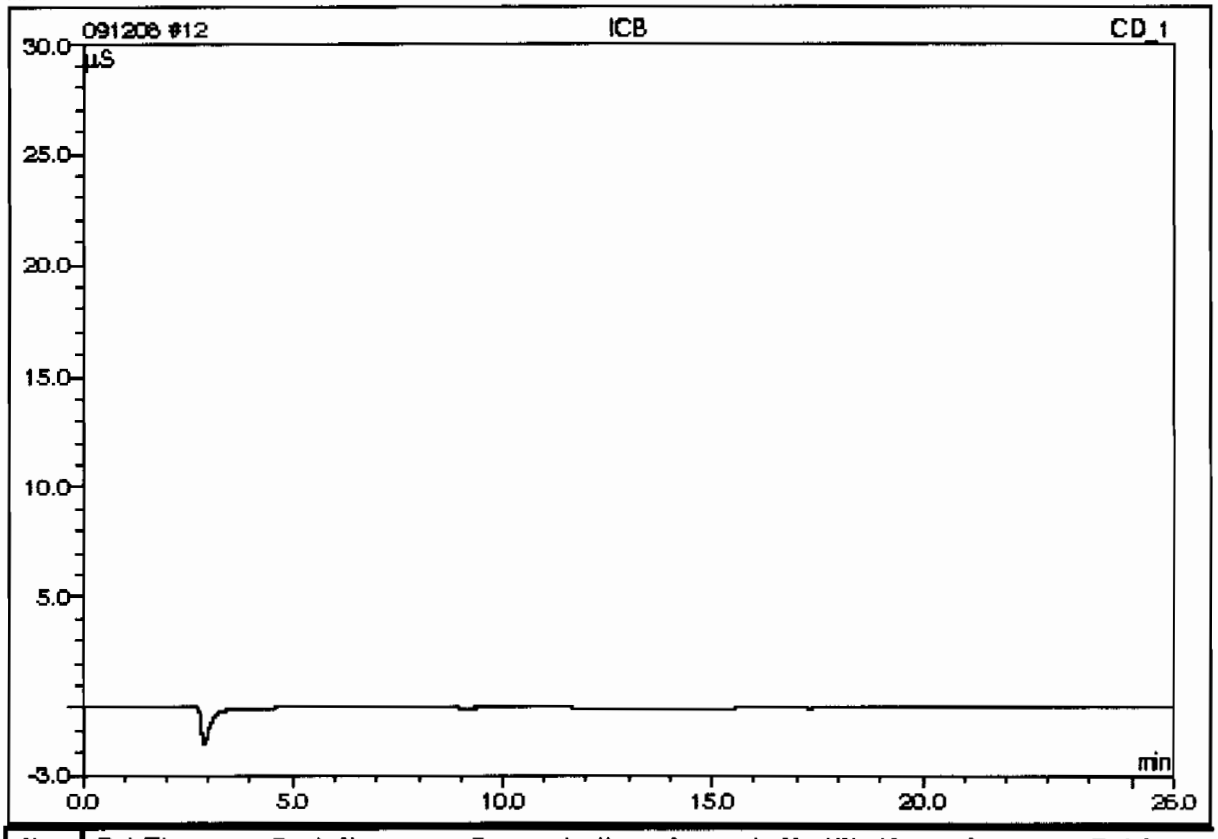

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 091208.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
CVH	12/09/09 00:18		1	091208	VH1
CCB	12/09/09 00:44		1	091208	VH1
1201990650	12/09/09 01:10	930722	1	091208	VH1
1201990653	12/09/09 01:36	930722	1	091208	VH1
242486001	12/09/09 02:02	930722	1	091208	VH1
1201990651	12/09/09 02:28	930722	1	091208	VH1
1201990652	12/09/09 02:54	930722	1	091208	VH1
242486002	12/09/09 03:21	930722	1	091208	VH1
242486003	12/09/09 03:47	930722	1	091208	VH1
242486004	12/09/09 04:13	930722	1	091208	VH1
242486005	12/09/09 04:39	930722	1	091208	VH1
242486006	12/09/09 05:05	930722	1	091208	VH1
CCV	12/09/09 05:31		1	091208	VH1
CCB	12/09/09 05:57		1	091208	VH1
1201976799	12/09/09 06:23	924715	1	091208	VH1
1201976804	12/09/09 06:49	924715	1	091208	VH1
241322001	12/09/09 07:15	924715	1	091208	VH1
241322002	12/09/09 07:42	924715	1	091208	VH1
241322003	12/09/09 08:08	924715	1	091208	VH1
241322004	12/09/09 08:34	924715	1	091208	VH1
241322005	12/09/09 09:00	924715	1	091208	VH1
241322006	12/09/09 09:26	924715	1	091208	VH1
241322007	12/09/09 09:52	924715	1	091208	VH1
241322008	12/09/09 10:18	924715	1	091208	VH1
CVH	12/09/09 10:44		1	091208	VH1
CCB	12/09/09 11:10		1	091208	VH1
241322009	12/09/09 11:36	924715	1	091208	VH1
241322010	12/09/09 12:02	924715	1	091208	VH1

241322011	12/09/09 12:29	924715	1	091208	VH1
1201984519	12/09/09 12:55	924715	1	091208	VH1
1201984521	12/09/09 13:21	924715	1	091208	VH1
1201984523	12/09/09 13:47	924715	1	091208	VH1
241322012	12/09/09 14:13	924715	1	091208	VH1
241336001	12/09/09 14:39	924715	1	091208	VH1
241336002	12/09/09 15:05	924715	1	091208	VH1
1201984518	12/09/09 15:31	924715	1	091208	VH1
CCV	12/09/09 15:57		1	091208	VH1
CCB	12/09/09 16:23		1	091208	VH1
1201984520	12/09/09 16:50	924715	1	091208	VH1
1201984522	12/09/09 17:16	924715	1	091208	VH1
CVH	12/09/09 17:42		1	091208	VH1
CCB	12/09/09 18:08		1	091208	VH1

35 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 5:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

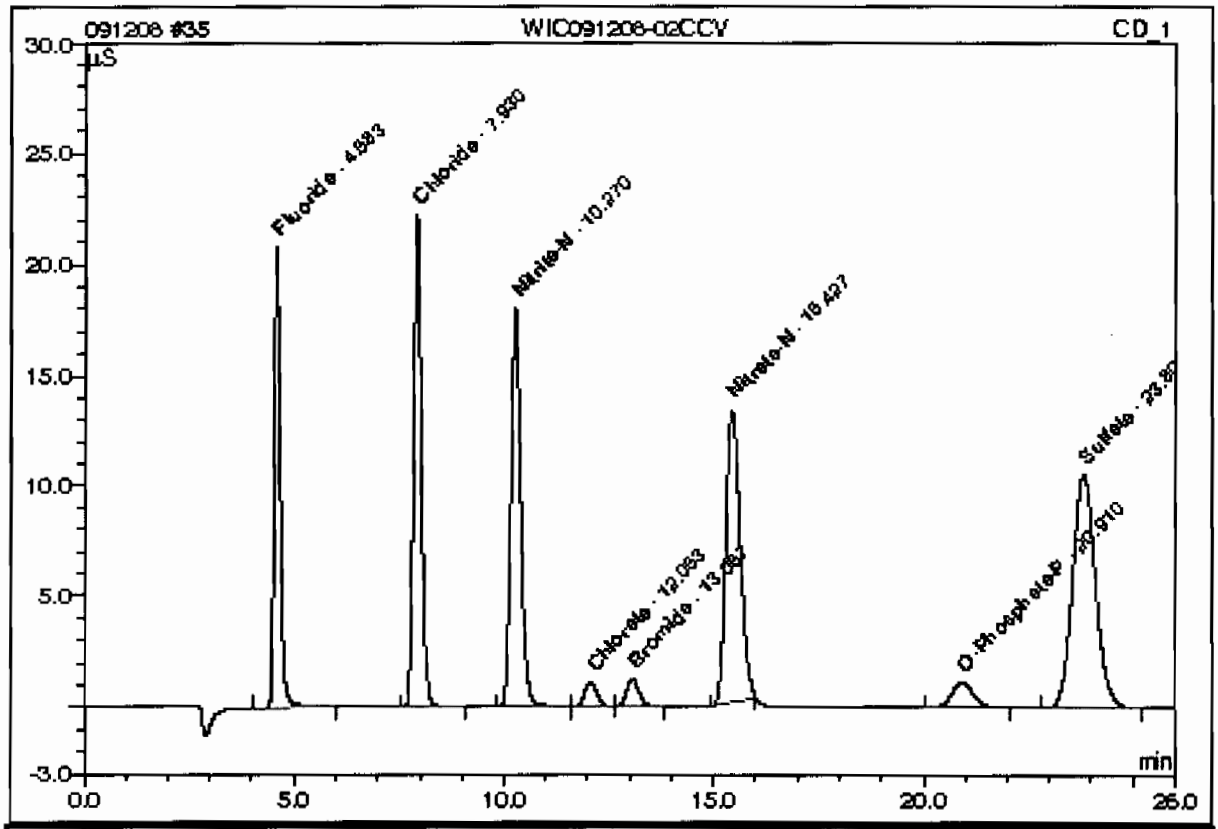

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.1021		3.46157	13.10
2	7.93	Chloride	n.a.	9.5996		4.66836	17.67
3	10.27	Nitrite-N	n.a.	5.0430		4.98010	18.85
4	12.05	Chlorate	n.a.	2.4437		0.37722	1.43
5	13.06	Bromide	n.a.	2.5710		0.43515	1.65
6	15.43	Nitrate-N	n.a.	5.0216		5.23420	19.81
7	20.91	O-Phosphate-P	n.a.	2.0944		0.69728	2.64
8	23.81	Sulfate	n.a.	20.0254		6.56892	24.86
Total:				51.9008	0.000	26.423	100.00

35 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 5:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

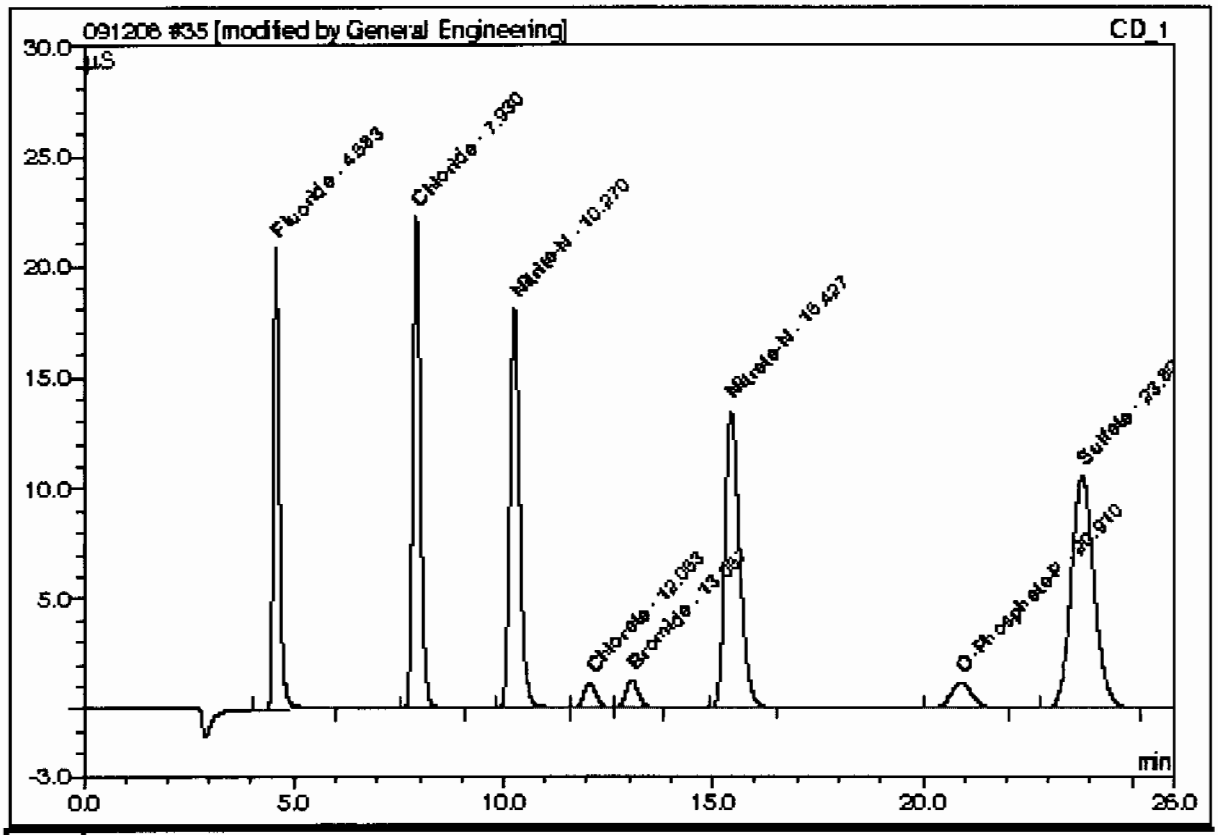

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.1021		3.46157	12.98
2	7.93	Chloride	n.a.	9.5996		4.66836	17.50
3	10.27	Nitrite-N	n.a.	5.0430		4.98010	18.67
4	12.05	Chlorate	n.a.	2.4437		0.37722	1.41
5	13.06	Bromide	n.a.	2.5710		0.43515	1.63
6	15.43	Nitrate-N	n.a.	5.2603		5.48788	20.57
7	20.91	O-Phosphate-P	n.a.	2.0944		0.69728	2.61
8	23.81	Sulfate	n.a.	20.0254		6.56892	24.62
Total:				52.1394	0.000	26.676	100.00

36 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 5:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

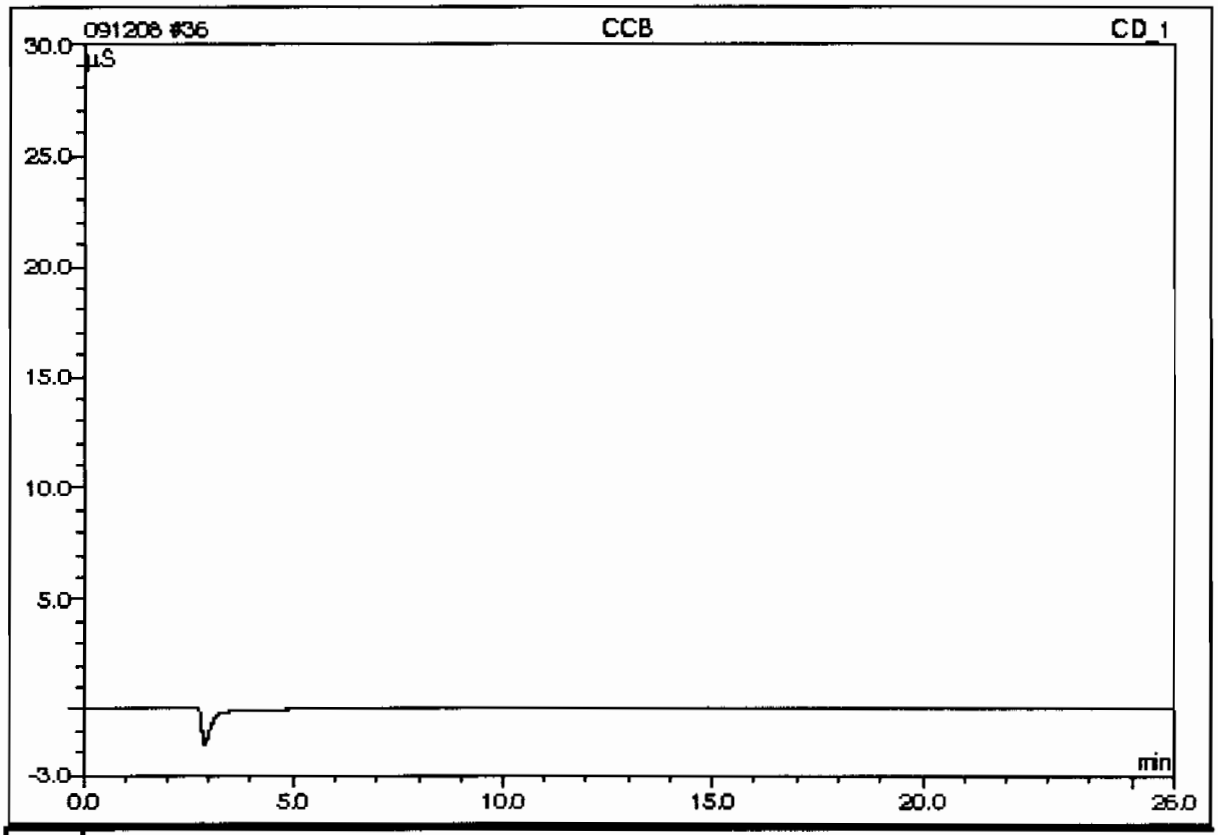

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

37 1201976799/924715/1/1/MB

Sample Name:	1201976799/924715/1/1/MB	*Injection Volume:*	50.0
Vial Number:	47	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 6:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

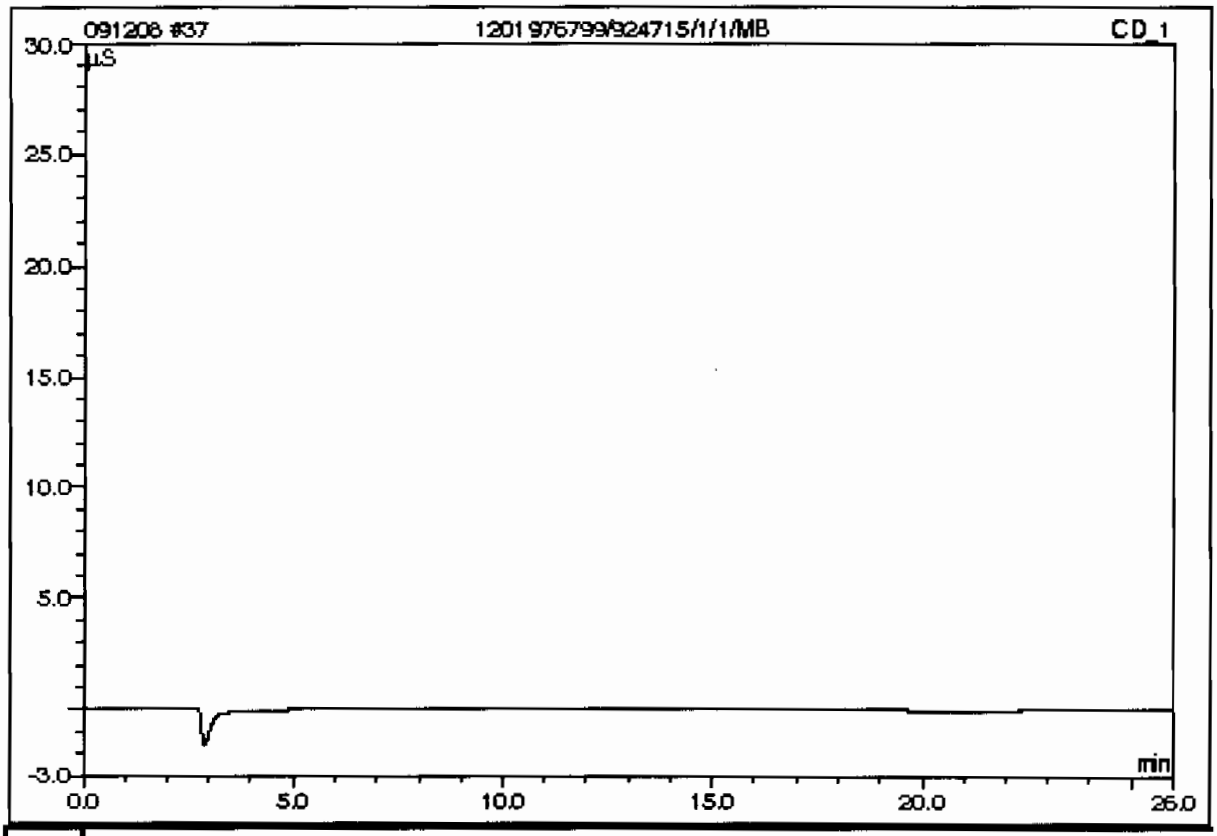

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

38 1201976804/924715/1/1/LCS

Sample Name:	1201976804/924715/1/1/LCS	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 6:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

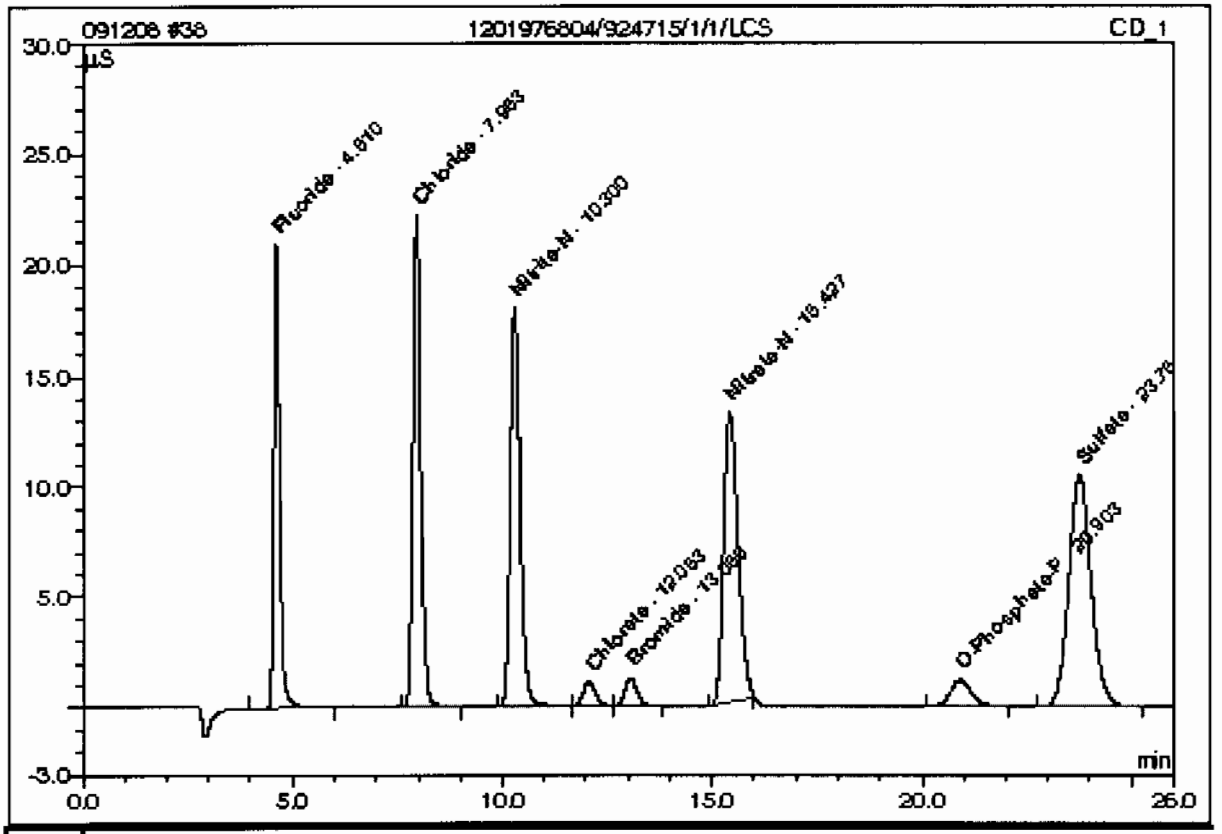

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.61	Fluoride	n.a.	5.1206		3.47418	13.15
2	7.96	Chloride	n.a.	9.6084		4.67271	17.69
3	10.30	Nitrite-N	n.a.	5.0490		4.98616	18.87
4	12.06	Chlorate	n.a.	2.4445		0.37735	1.43
5	13.05	Bromide	n.a.	2.5675		0.43454	1.64
6	15.43	Nitrate-N	n.a.	5.0646		5.27990	19.99
7	20.90	O-Phosphate-P	n.a.	2.0825		0.69321	2.62
8	23.75	Sulfate	n.a.	19.8159		6.49922	24.60
Total:				51.7530	0.000	26.417	100.00

38 1201976804/924715/1/1/LCS

Sample Name:	1201976804/924715/1/1/LCS	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 6:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

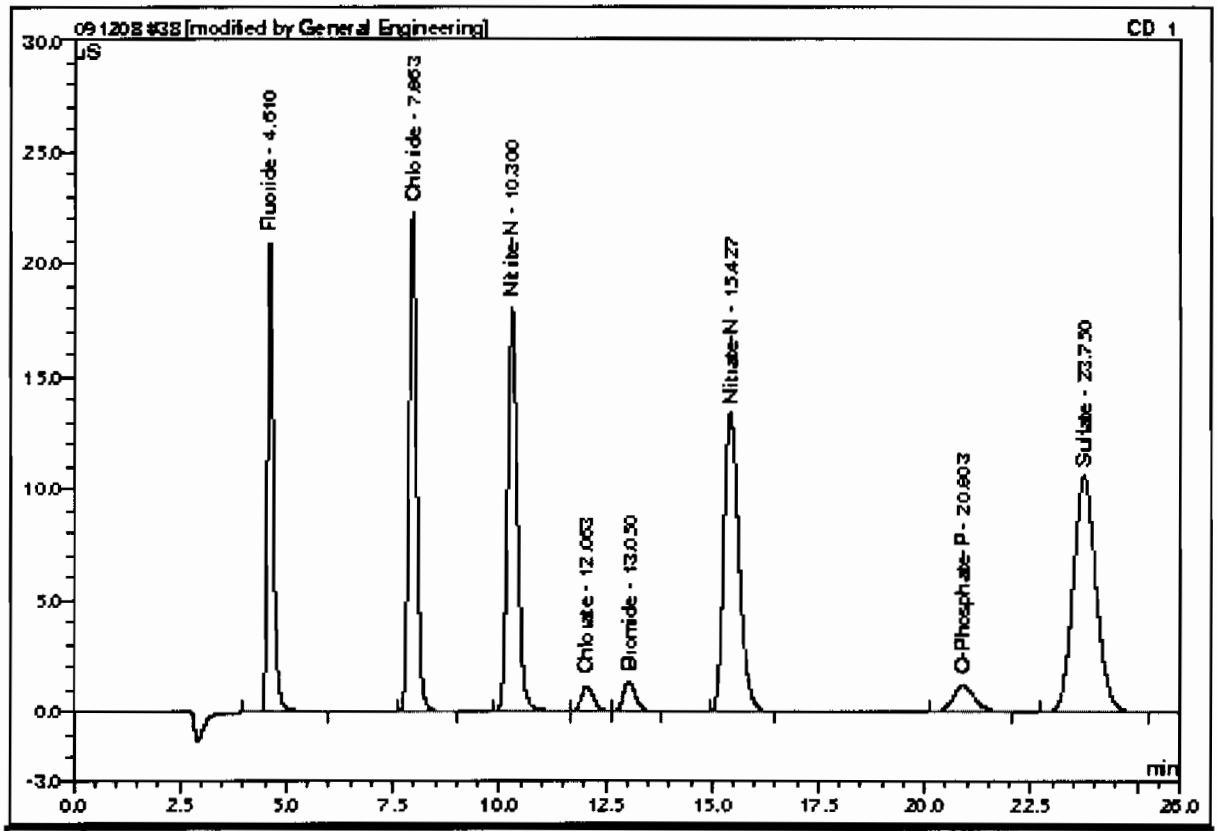

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.61	Fluoride	n.a.	5.1206		3.47418	13.03
2	7.96	Chloride	n.a.	9.6084		4.67271	17.52
3	10.30	Nitrite-N	n.a.	5.0490		4.98616	18.70
4	12.06	Chlorate	n.a.	2.4445		0.37735	1.42
5	13.05	Bromide	n.a.	2.5675		0.43454	1.63
6	15.43	Nitrate-N	n.a.	5.2979		5.52787	20.73
7	20.90	O-Phosphate-P	n.a.	2.0825		0.69321	2.60
8	23.75	Sulfate	n.a.	19.8159		6.49922	24.37
Total:				51.9863	0.000	26.665	100.00

47 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 10:44	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

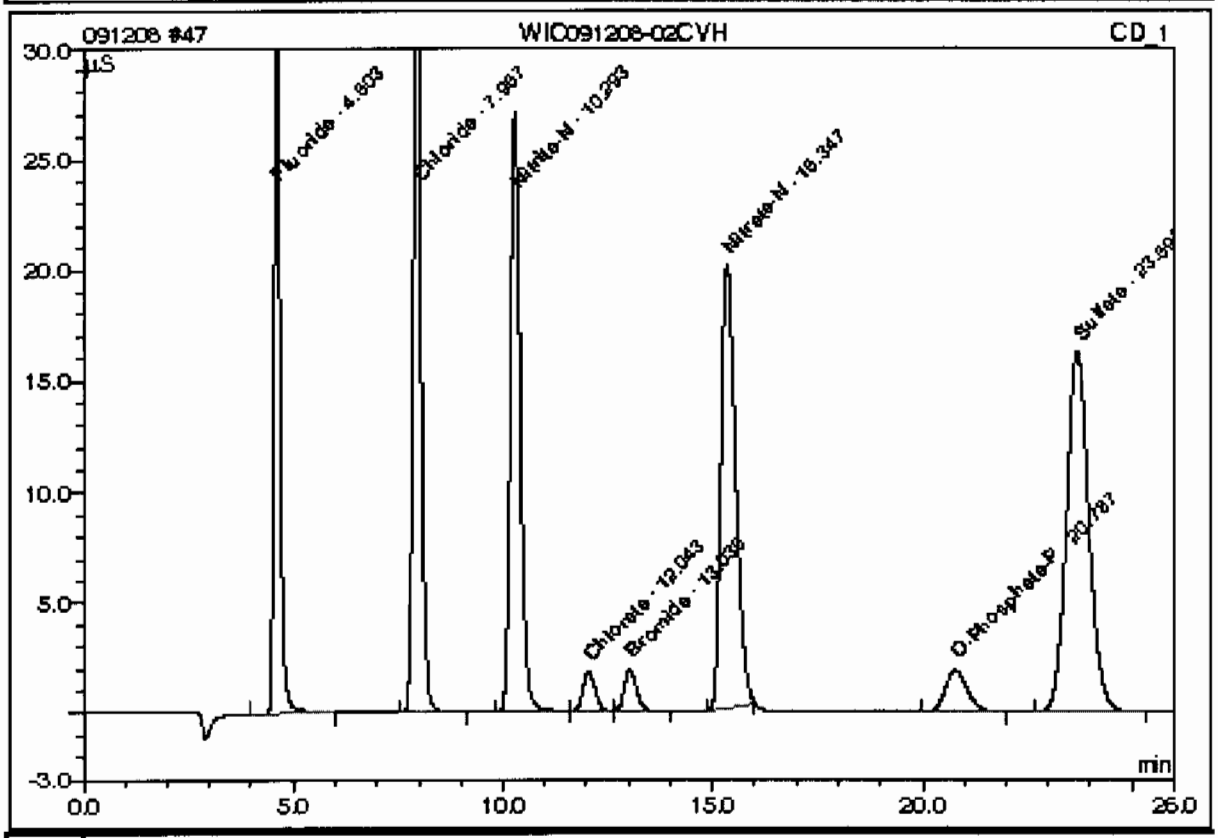

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	7.6604		5.20926	12.89
2	7.96	Chloride	n.a.	14.8760		7.25737	17.96
3	10.29	Nitrite-N	n.a.	7.5896		7.53090	18.63
4	12.04	Chlorate	n.a.	3.8376		0.59679	1.48
5	13.03	Bromide	n.a.	3.8386		0.65263	1.61
6	15.35	Nitrate-N	n.a.	7.7463		8.13053	20.12
7	20.79	O-Phosphate-P	n.a.	3.3136		1.11773	2.77
8	23.69	Sulfate	n.a.	30.1008		9.92057	24.55
Total:				78.9630	0.000	40.416	100.00

47 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 10:44	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

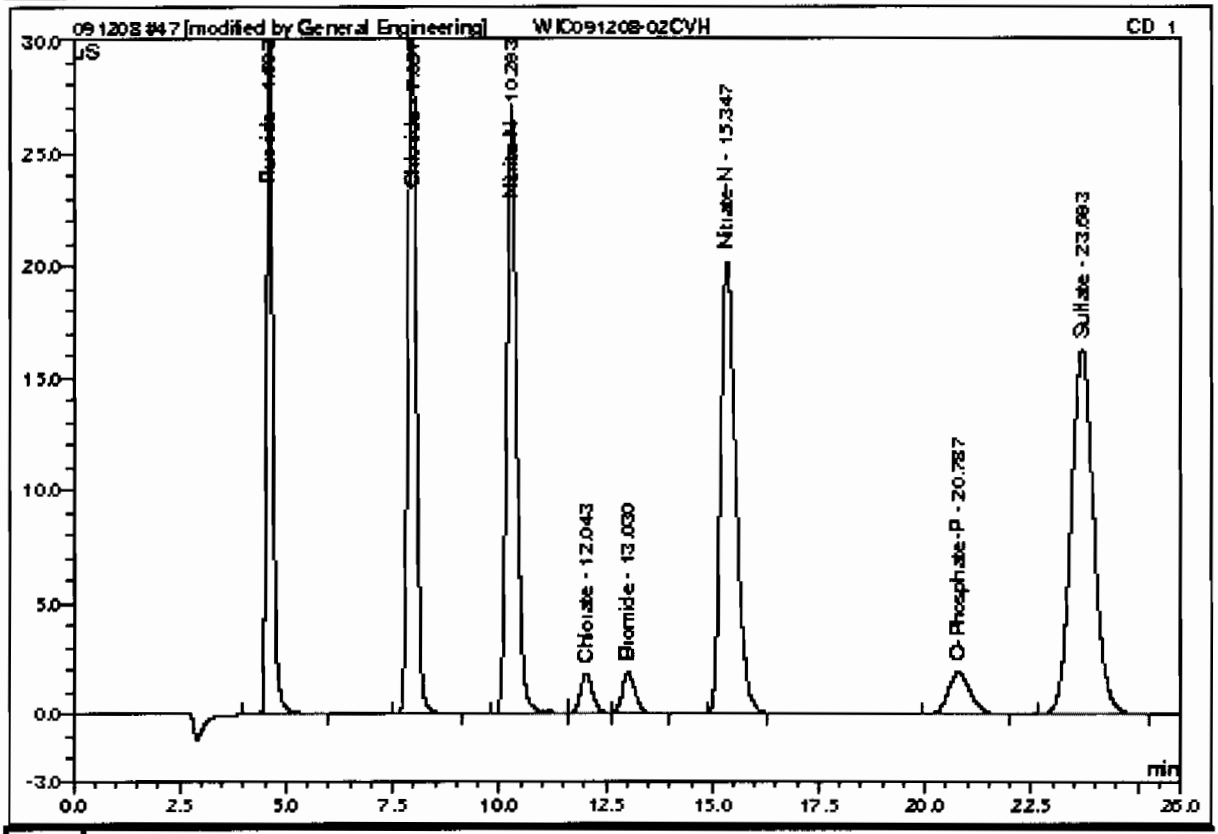

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	7.6604		5.20926	12.82
2	7.96	Chloride	n.a.	14.8760		7.25737	17.87
3	10.29	Nitrite-N	n.a.	7.5896		7.53090	18.54
4	12.04	Chlorate	n.a.	3.8376		0.59679	1.47
5	13.03	Bromide	n.a.	3.8386		0.65263	1.61
6	15.35	Nitrate-N	n.a.	7.9396		8.33594	20.52
7	20.79	O-Phosphate-P	n.a.	3.3136		1.11773	2.75
8	23.69	Sulfate	n.a.	30.1008		9.92057	24.42
Total:				79.1563	0.000	40.621	100.00

48 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 11:10	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

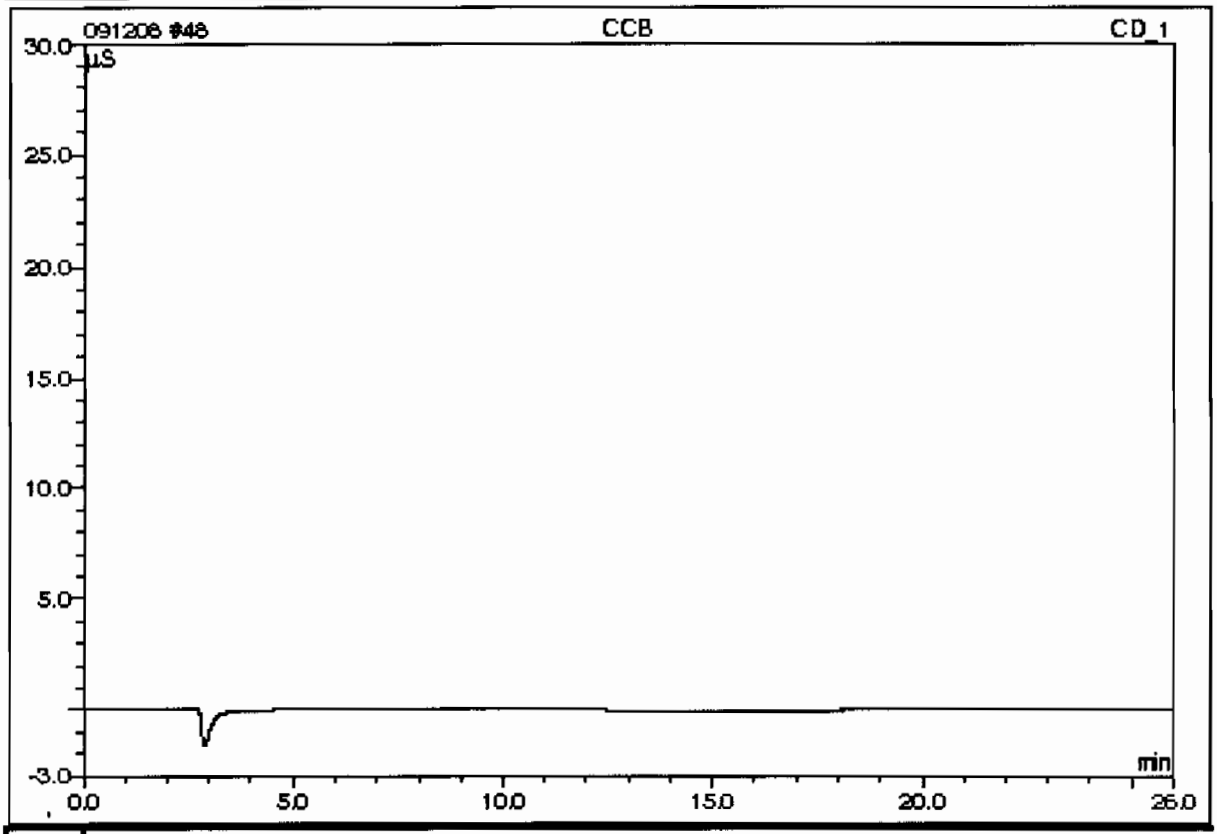

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

51 241322011/924715/1/1/

Sample Name:	241322011/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 12:29	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

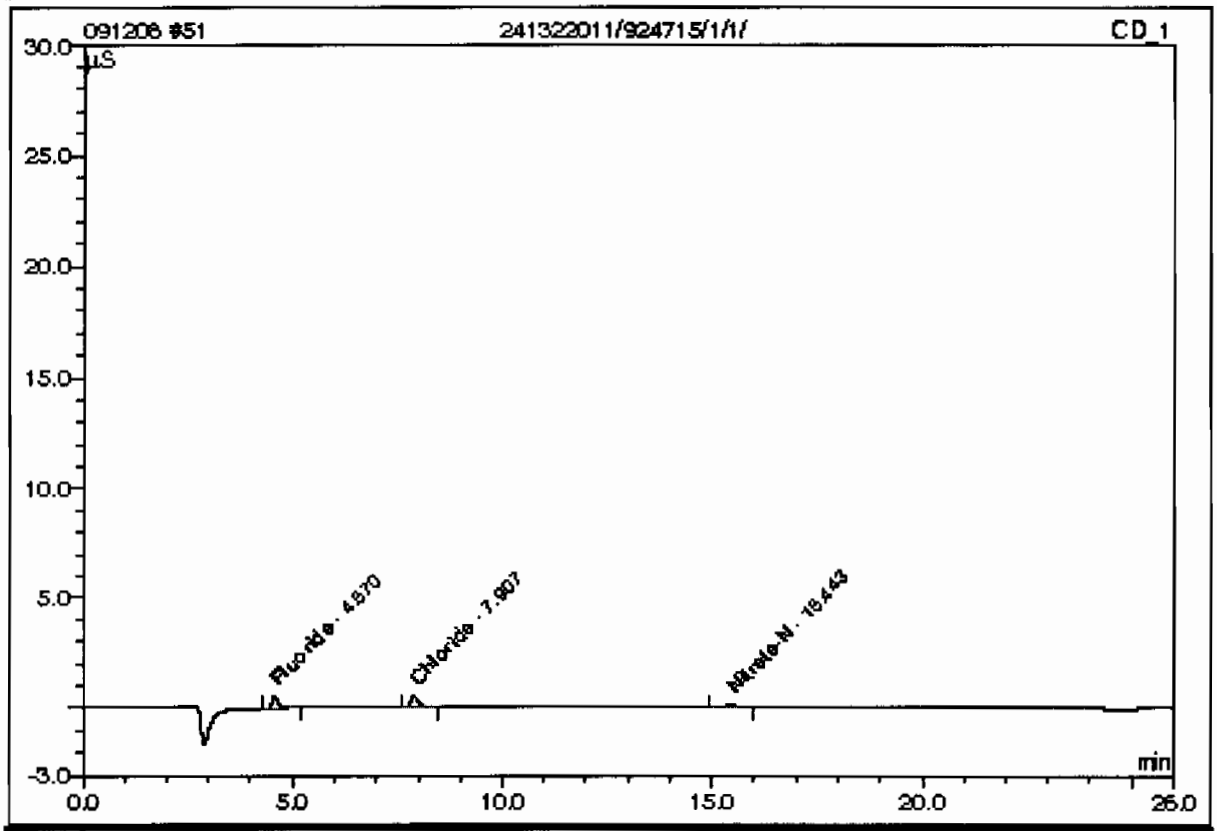

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1805		0.09948	39.52
2	7.91	Chloride	n.a.	0.3085		0.10946	43.49
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	15.44	Nitrate-N	n.a.	0.1377		0.04277	16.99
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.6268	0.000	0.252	100.00

52 1201984519/924715/1/1/DUP

Sample Name:	1201984519/924715/1/1/DUP	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 12:55	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

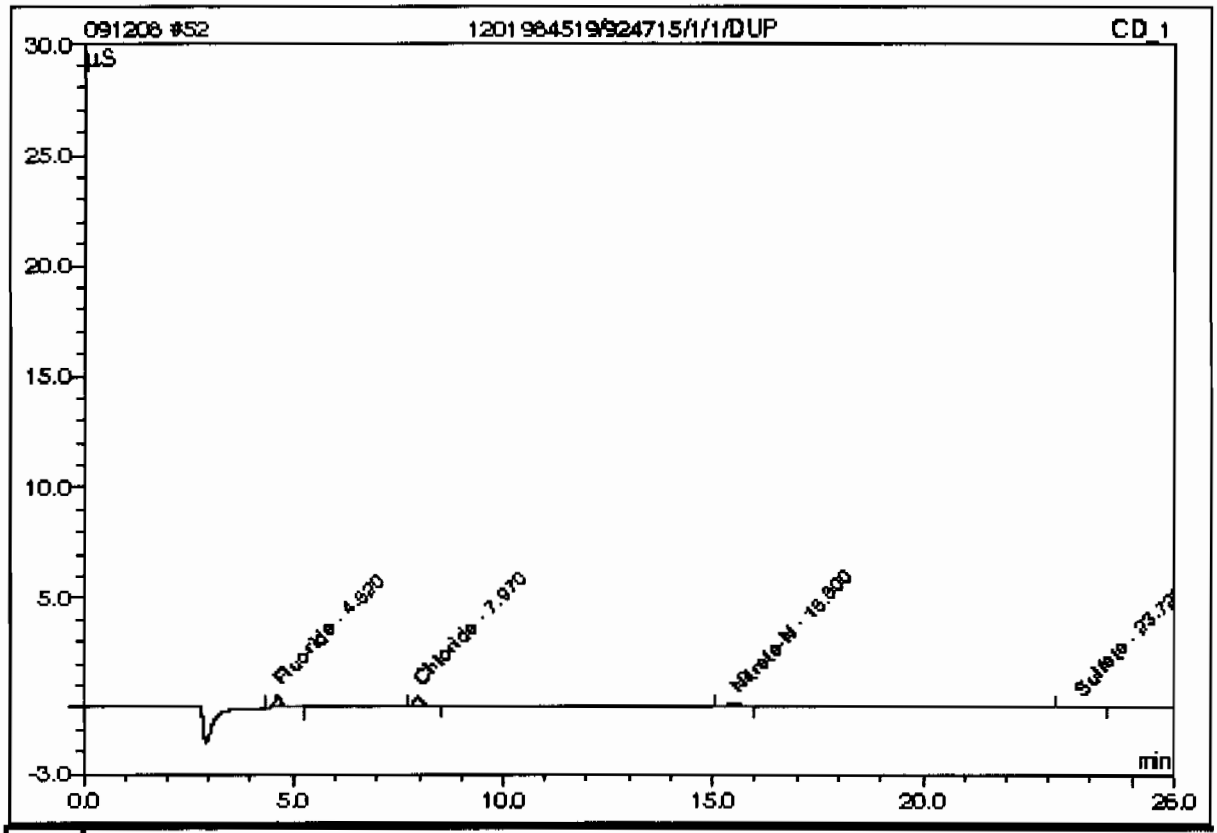

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.62	Fluoride	n.a.	0.1751		0.09580	37.38
2	7.97	Chloride	n.a.	0.2891		0.09994	39.00
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	15.50	Nitrate-N	n.a.	0.1358		0.04076	15.91
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	23.72	Sulfate	n.a.	0.3380		0.01976	7.71
Total:				0.9381	0.000	0.256	100.00

53 1201984521/924715/1/1/MS

Sample Name:	1201984521/924715/1/1/MS	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:21	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

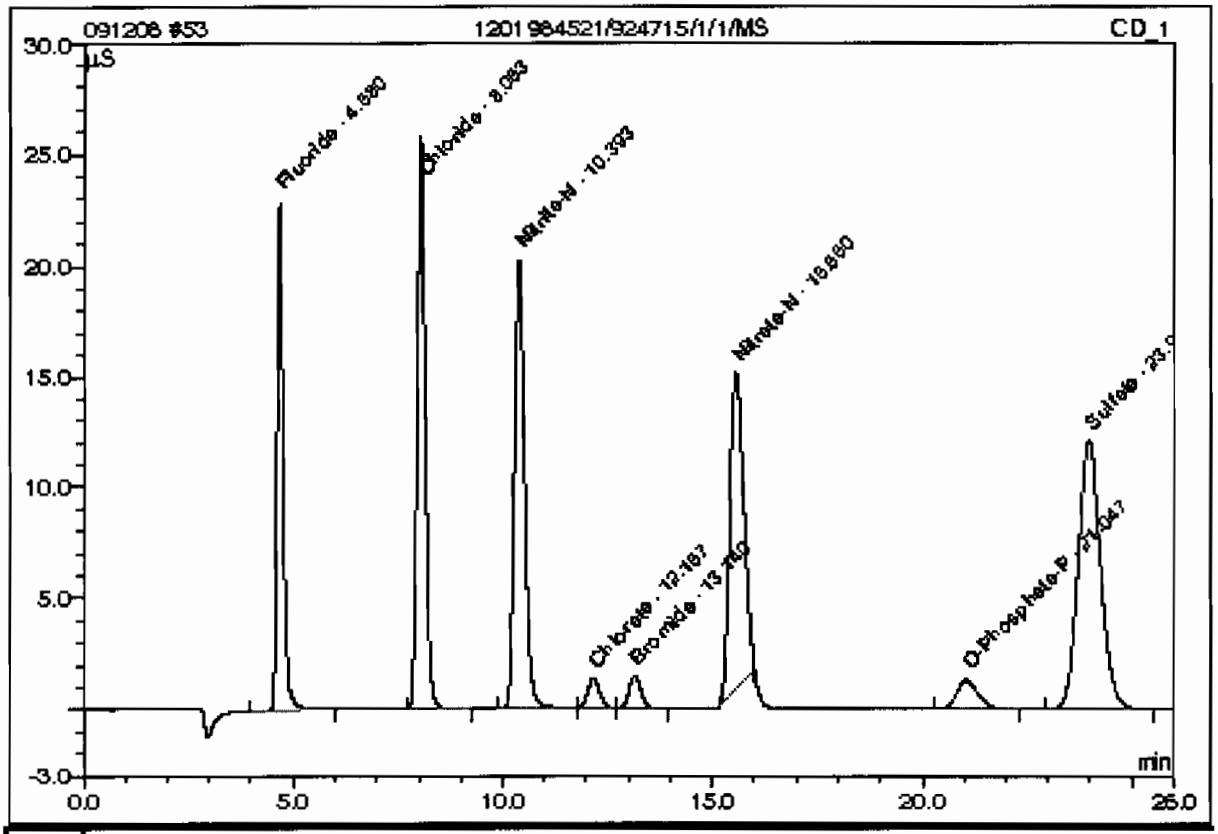

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.68	Fluoride	n.a.	5.7478		3.90265	13.17
2	8.05	Chloride	n.a.	11.1800		5.44383	18.37
3	10.39	Nitrite-N	n.a.	5.7080		5.64623	19.06
4	12.16	Chlorate	n.a.	3.0425		0.47155	1.59
5	13.14	Bromide	n.a.	3.0268		0.51335	1.73
6	15.56	Nitrate-N	n.a.	5.2290		5.45464	18.41
7	21.05	O-Phosphate-P	n.a.	2.3185		0.77458	2.61
8	23.97	Sulfate	n.a.	22.5853		7.42048	25.05
Total:				58.8379	0.000	29.627	100.00

53 1201984521/924715/1/1/MS

Sample Name:	1201984521/924715/1/1/MS	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:21	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

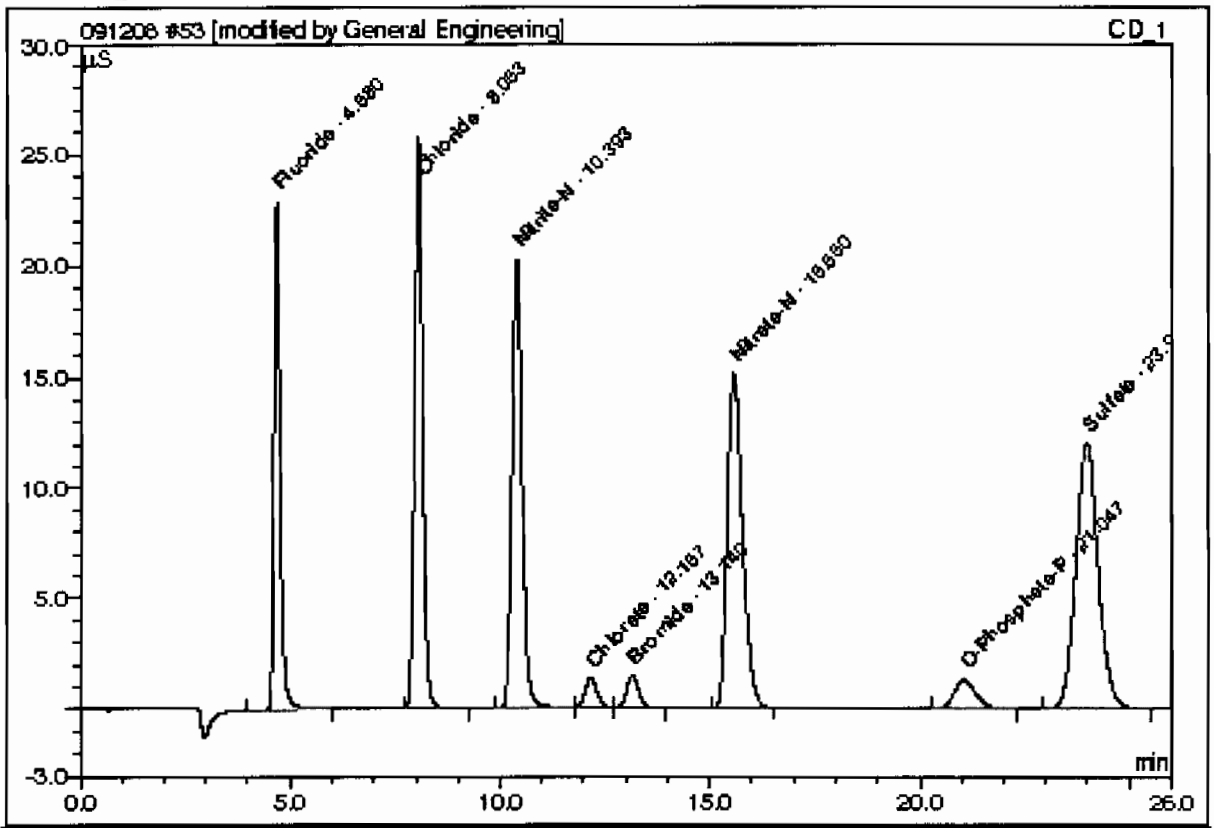

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.68	Fluoride	n.a.	5.7478		3.90265	12.77
2	8.05	Chloride	n.a.	11.1800		5.44383	17.81
3	10.39	Nitrite-N	n.a.	5.7080		5.64623	18.47
4	12.16	Chlorate	n.a.	3.0425		0.47155	1.54
5	13.14	Bromide	n.a.	3.0268		0.51335	1.68
6	15.56	Nitrate-N	n.a.	6.1095		6.39061	20.91
7	21.05	O-Phosphate-P	n.a.	2.3185		0.77458	2.53
8	23.97	Sulfate	n.a.	22.5853		7.42048	24.28
Total:				59.7184	0.000	30.563	100.00

54 1201984523/924715/1/1/MSD

Sample Name:	1201984523/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:47	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

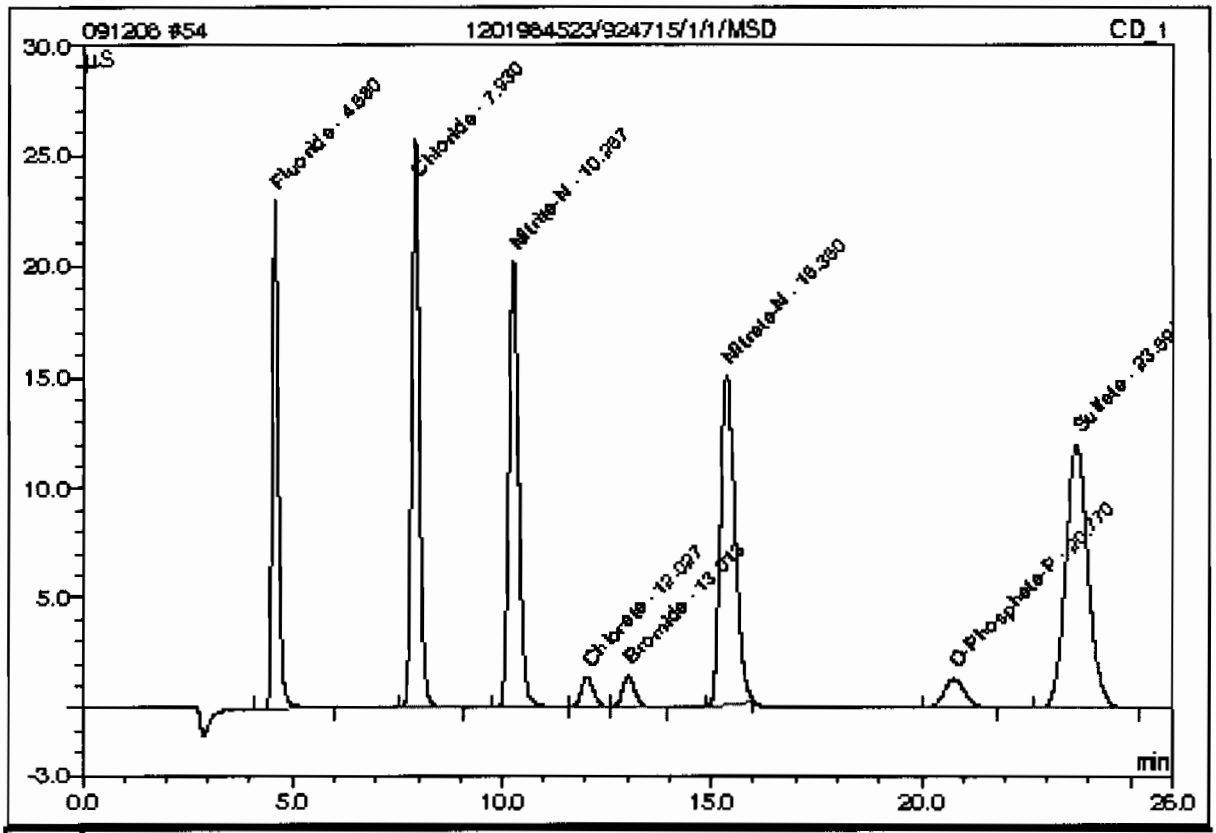

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.6654		3.84637	12.78
2	7.93	Chloride	n.a.	11.1337		5.42110	18.02
3	10.27	Nitrite-N	n.a.	5.6813		5.61946	18.68
4	12.03	Chlorate	n.a.	2.9641		0.45919	1.53
5	13.01	Bromide	n.a.	2.9436		0.49907	1.66
6	15.35	Nitrate-N	n.a.	5.7989		6.06047	20.14
7	20.77	O-Phosphate-P	n.a.	2.3127		0.77259	2.57
8	23.70	Sulfate	n.a.	22.5555		7.41058	24.63
Total:				59.0552	0.000	30.089	100.00

54 1201984523/924715/1/1/MSD

Sample Name:	1201984523/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:47	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

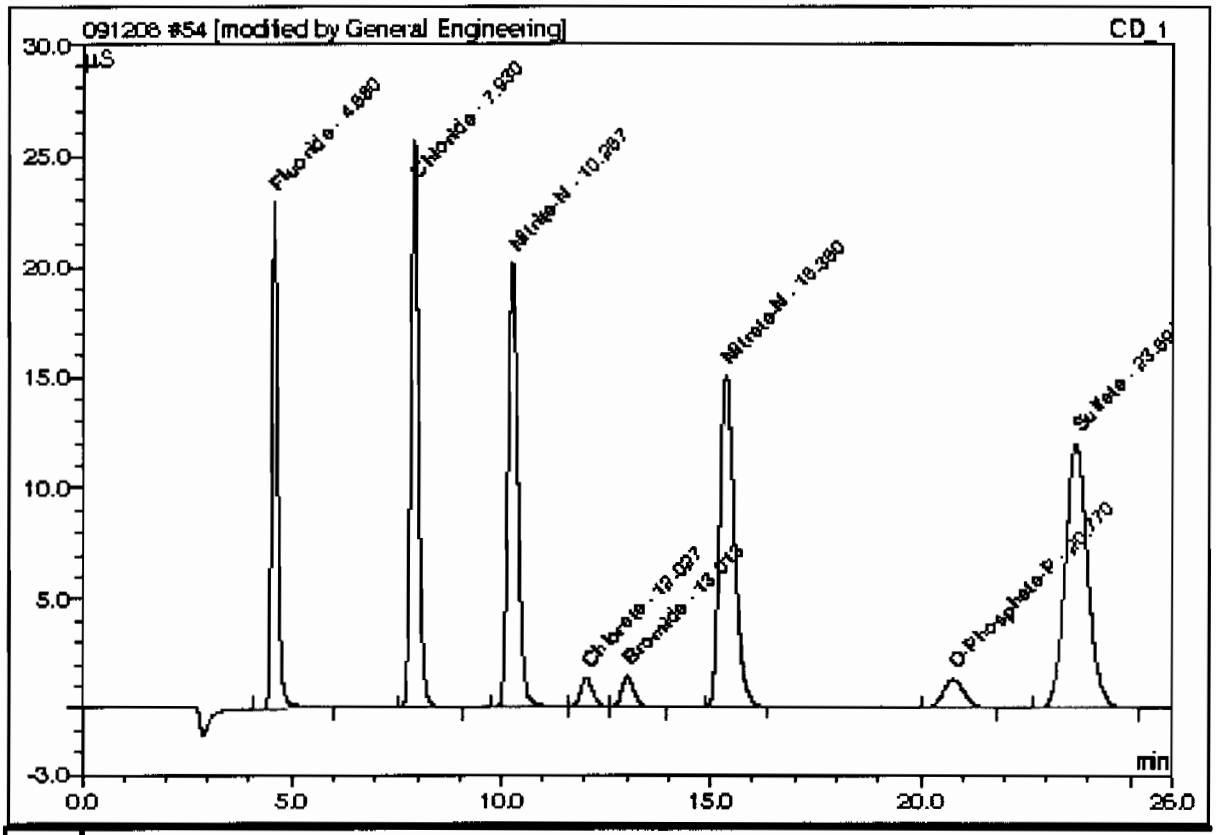

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.6654		3.84637	12.72
2	7.93	Chloride	n.a.	11.1337		5.42110	17.93
3	10.27	Nitrite-N	n.a.	5.6813		5.61946	18.58
4	12.03	Chlorate	n.a.	2.9641		0.45919	1.52
5	13.01	Bromide	n.a.	2.9436		0.49907	1.65
6	15.35	Nitrate-N	n.a.	5.9384		6.20878	20.53
7	20.77	O-Phosphate-P	n.a.	2.3127		0.77259	2.56
8	23.70	Sulfate	n.a.	22.5555		7.41058	24.51
Total:				59.1947	0.000	30.237	100.00

56 241336001/924715/1/1/

Sample Name:	241336001/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 14:39	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

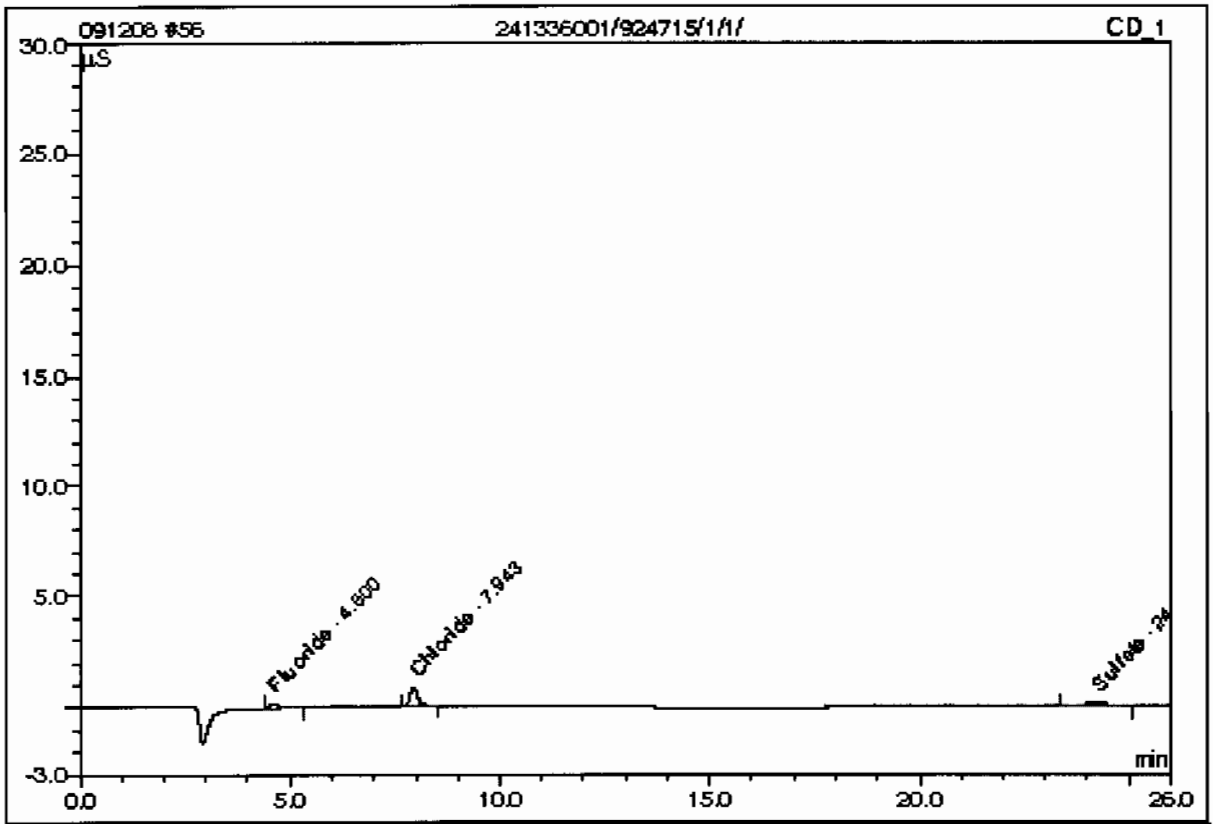

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	0.1005		0.04484	13.88
2	7.94	Chloride	n.a.	0.4710		0.18919	58.54
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	24.22	Sulfate	n.a.	0.5466		0.08915	27.59
Total:				1.1182	0.000	0.323	100.00

57 241336002/924715/1/1/

Sample Name:	241336002/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:05	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

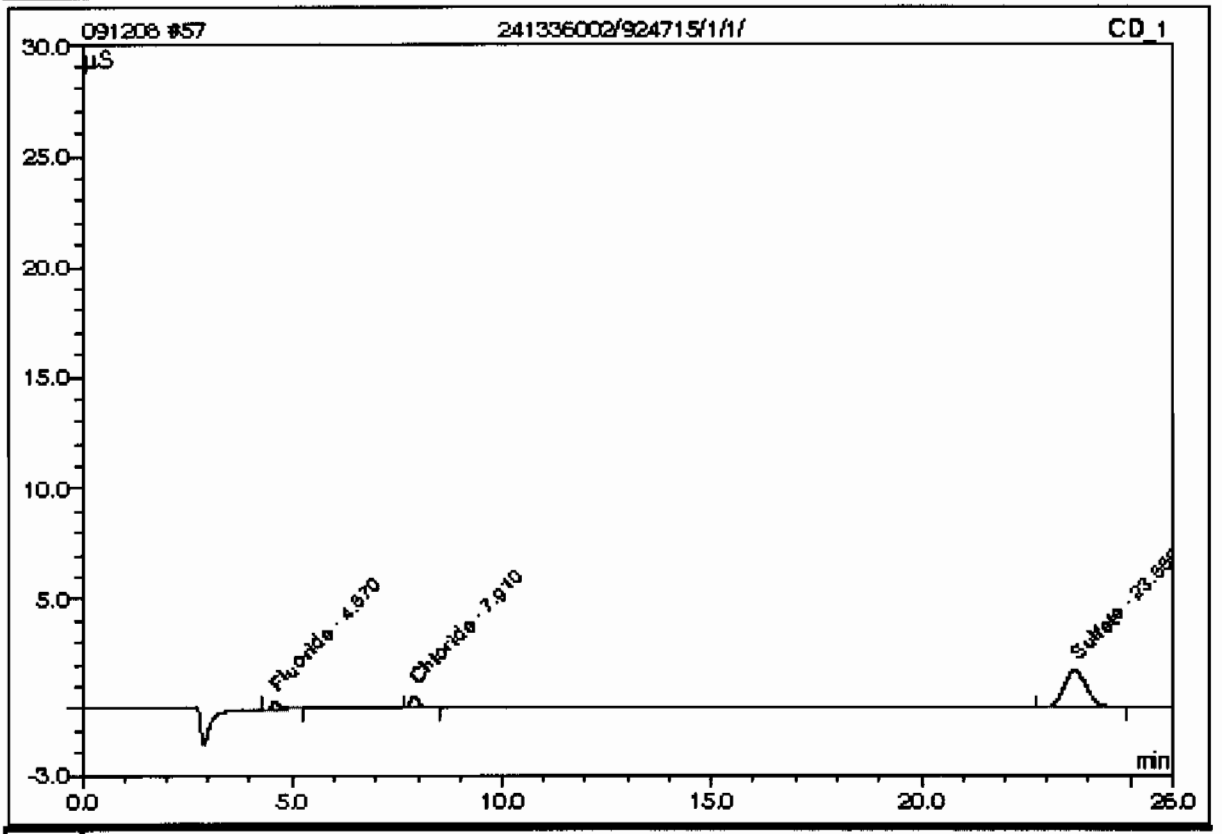

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1256		0.06197	4.89
2	7.91	Chloride	n.a.	0.3486		0.12911	10.18
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.66	Sulfate	n.a.	3.5175		1.07744	84.94
Total:				3.9917	0.000	1.269	100.00

58 1201984518/924715/1/1/DUP

Sample Name:	1201984518/924715/1/1/DUP	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

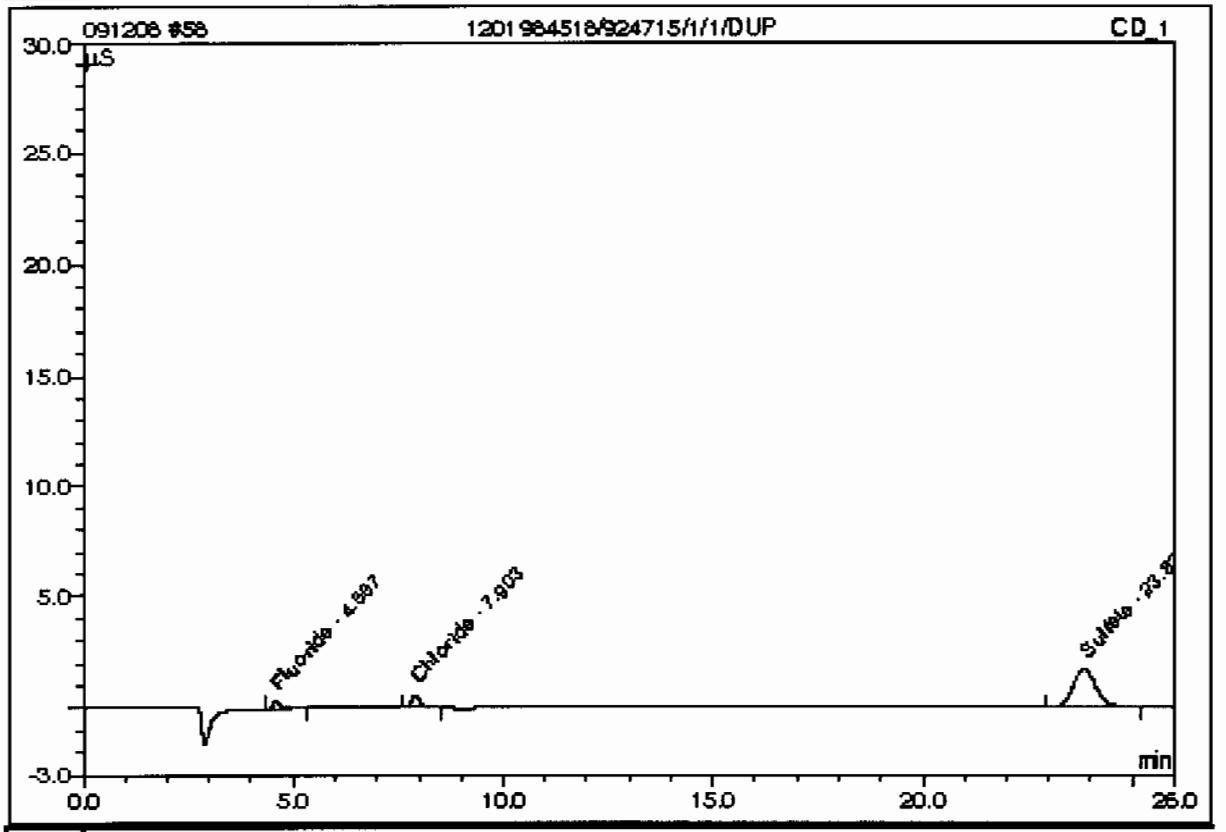

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1264		0.06251	4.91
2	7.90	Chloride	n.a.	0.3494		0.12949	10.18
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.84	Sulfate	n.a.	3.5262		1.08034	84.91
Total:				4.0020	0.000	1.272	100.00

59 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

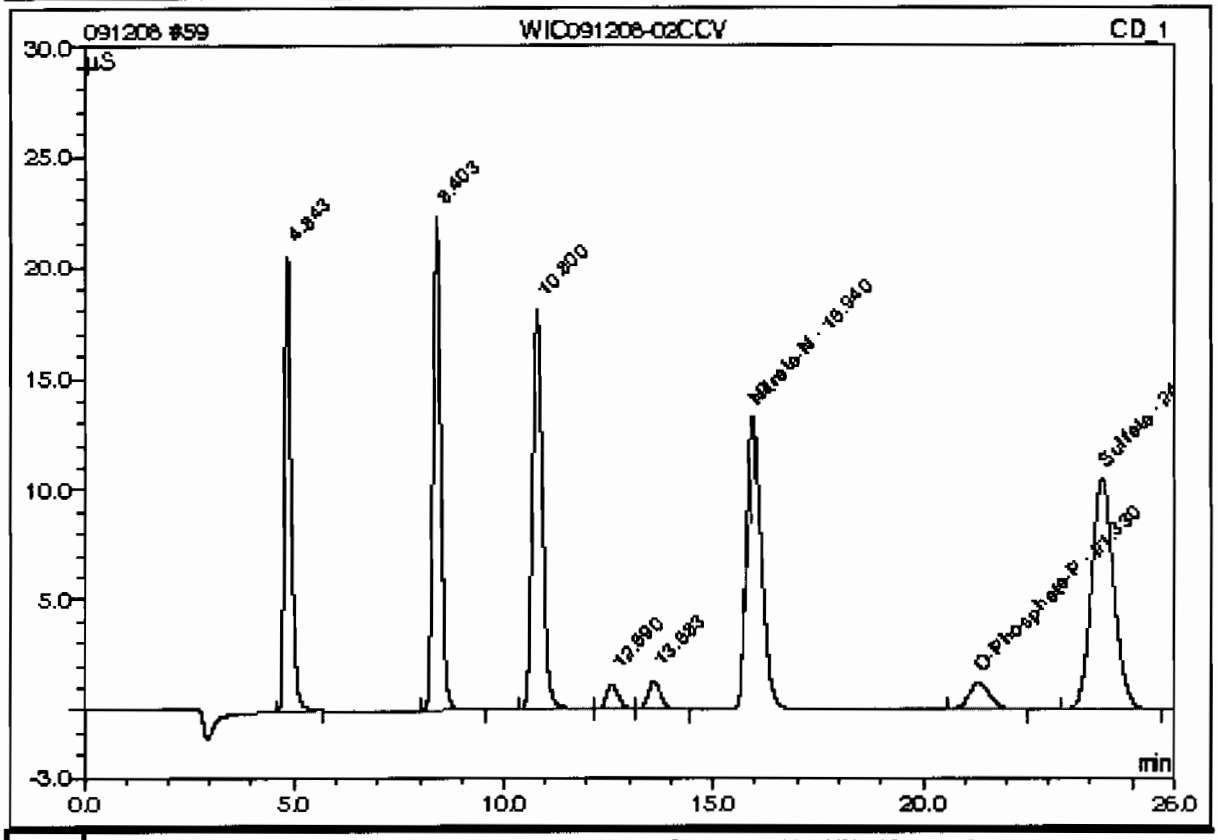

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
6	15.94	Nitrate-N	n.a.	0.7290		0.67132	3.00
7	21.33	O-Phosphate-P	n.a.	2.0944		0.69730	3.12
8	24.28	Sulfate	n.a.	19.7744		6.48540	29.02
Total:				22.5978	0.000	7.854	35.15

59 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

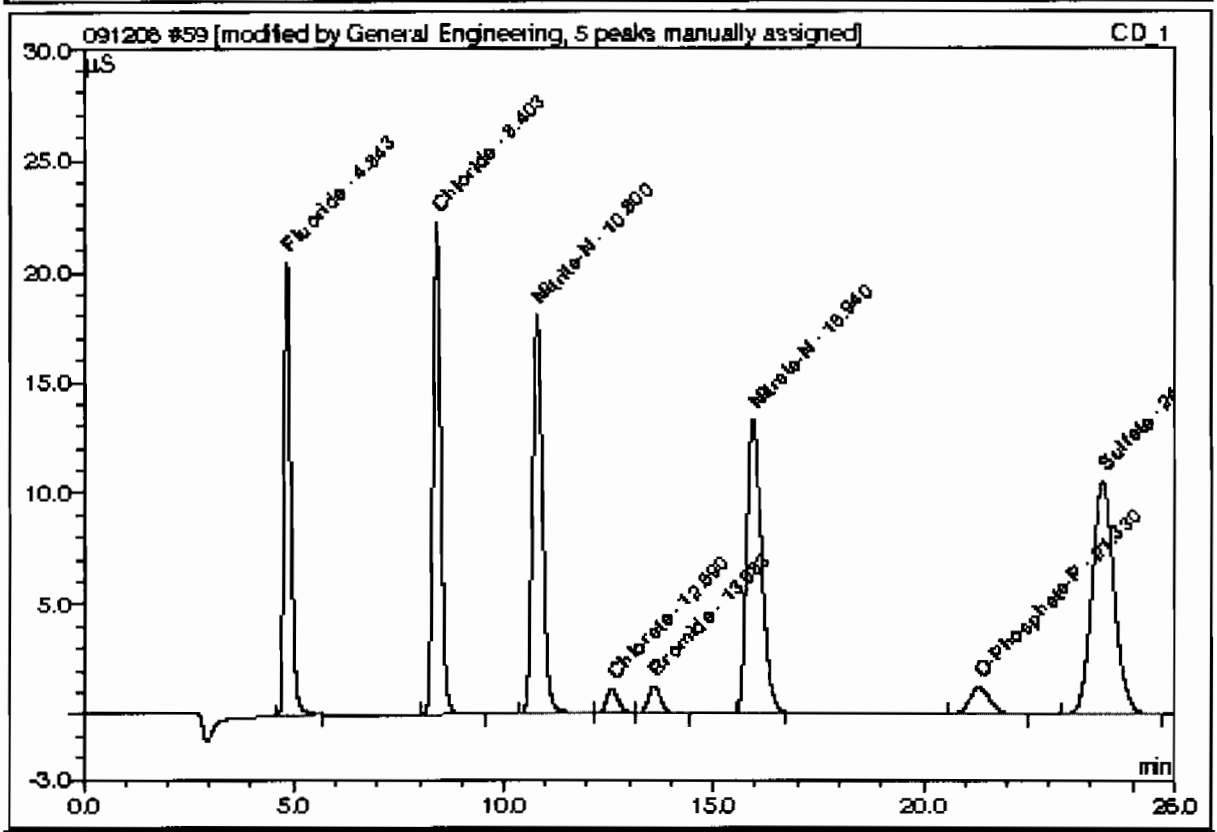

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.84	Fluoride	n.a.	5.5637		3.77689	13.96
2	8.40	Chloride	n.a.	9.9162		4.82374	17.83
3	10.80	Nitrite-N	n.a.	5.1299		5.06721	18.73
4	12.59	Chlorate	n.a.	2.4883		0.38423	1.42
5	13.58	Bromide	n.a.	2.6018		0.44043	1.63
6	15.94	Nitrate-N	n.a.	5.1618		5.38323	19.89
7	21.33	O-Phosphate-P	n.a.	2.0944		0.69730	2.58
8	24.28	Sulfate	n.a.	19.7744		6.48540	23.97
Total:				52.7305	0.000	27.058	100.00

60 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 16:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

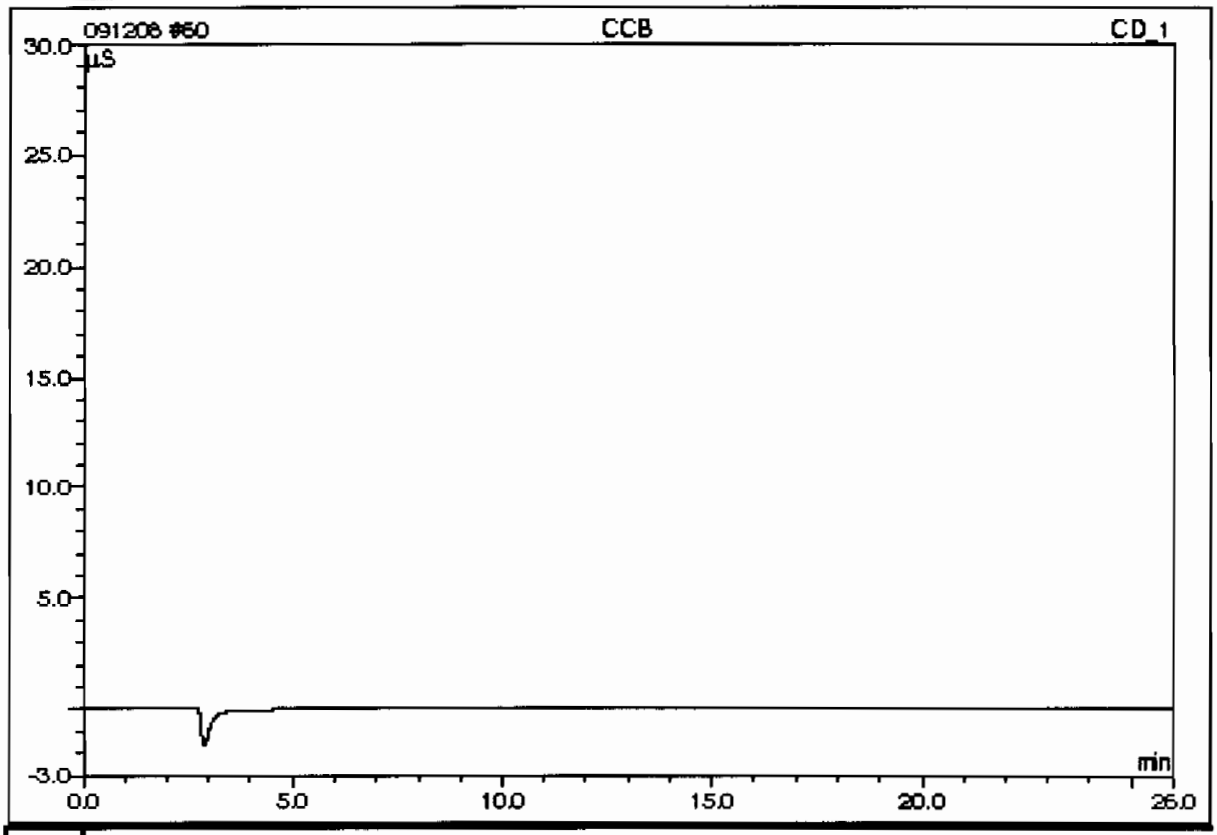

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

61 1201984520/924715/1/1/MS

Sample Name:	1201984520/924715/1/1/MS	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 16:50	Analyst:	VH1
Run Time (min):	24.90	Column:	AS23-002588;GLGCE086;300;9056

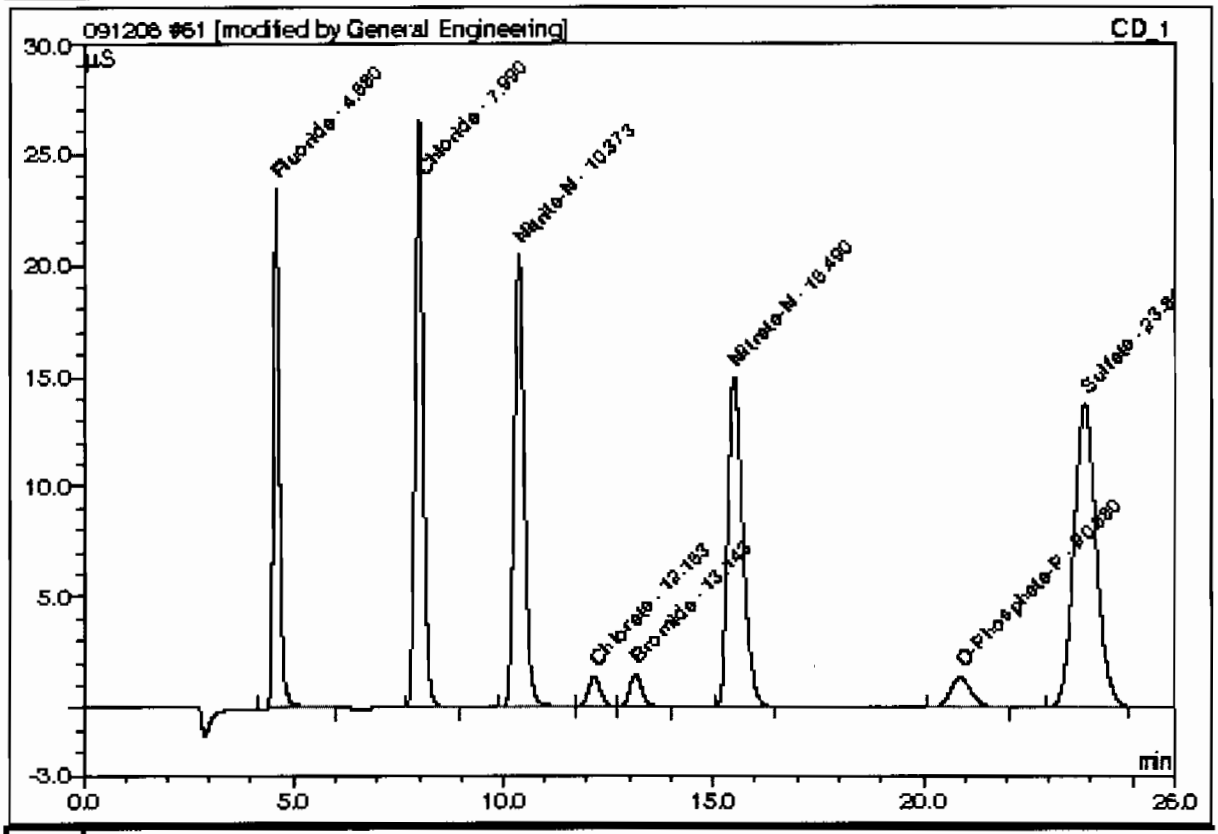

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.7909		3.93213	12.40
2	7.99	Chloride	n.a.	11.7509		5.72397	18.04
3	10.37	Nitrite-N	n.a.	5.8100		5.74840	18.12
4	12.15	Chlorate	n.a.	3.0025		0.46523	1.47
5	13.14	Bromide	n.a.	2.9866		0.50644	1.60
6	15.49	Nitrate-N	n.a.	5.9244		6.19385	19.53
7	20.88	O-Phosphate-P	n.a.	2.3387		0.78154	2.46
8	23.85	Sulfate	n.a.	25.4425		8.37095	26.39
Total:				63.0465	0.000	31.723	100.00

62 1201984522/924715/1/1/MSD

Sample Name:	1201984522/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	51	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

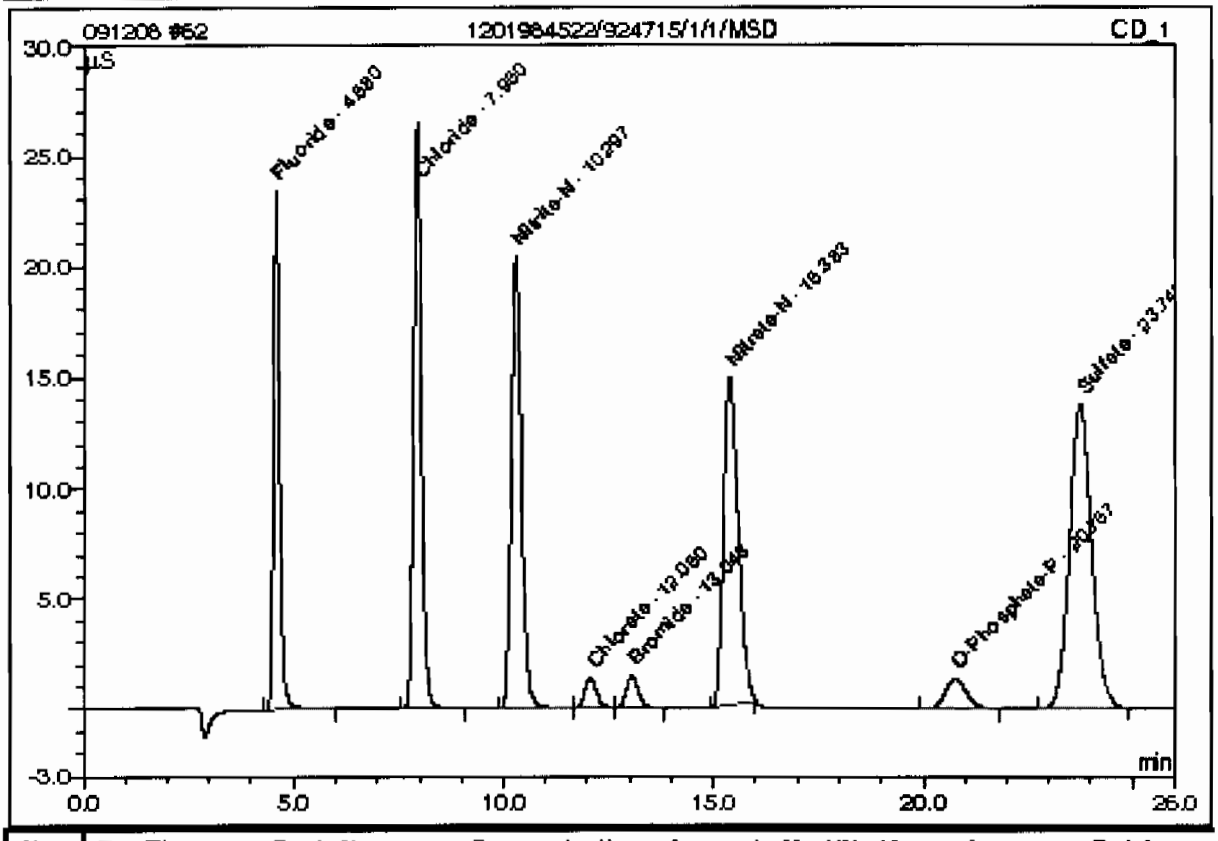

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.8054		3.94204	12.55
2	7.95	Chloride	n.a.	11.5426		5.62177	17.89
3	10.30	Nitrite-N	n.a.	5.7589		5.69715	18.13
4	12.06	Chlorate	n.a.	2.9695		0.46004	1.46
5	13.04	Bromide	n.a.	2.9522		0.50056	1.59
6	15.38	Nitrate-N	n.a.	5.7410		5.99893	19.09
7	20.77	O-Phosphate-P	n.a.	2.3492		0.78516	2.50
8	23.74	Sulfate	n.a.	25.5802		8.41676	26.79
Total:				62.6991	0.000	31.422	100.00

62 1201984522/924715/1/1/MSD

Sample Name:	1201984522/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	51	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

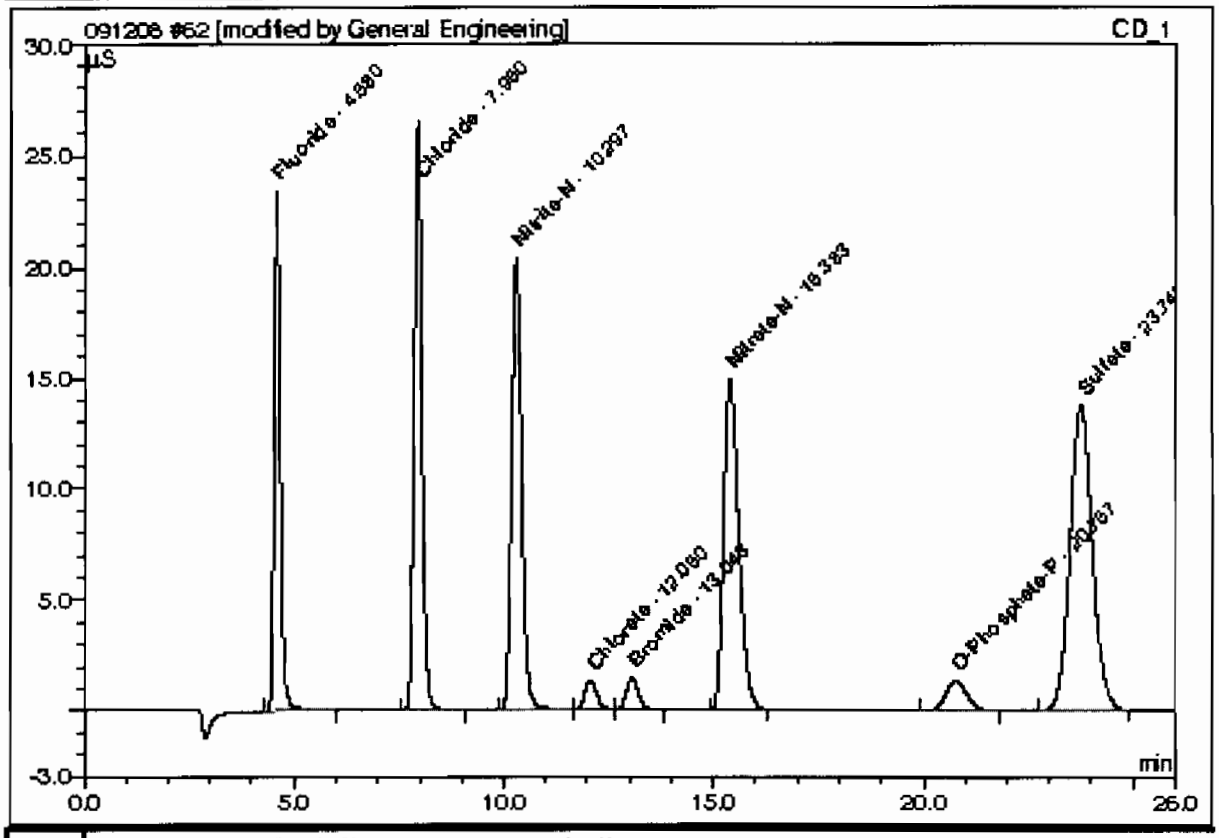

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.8054		3.94204	12.47
2	7.95	Chloride	n.a.	11.5426		5.62177	17.78
3	10.30	Nitrite-N	n.a.	5.7589		5.69715	18.02
4	12.06	Chlorate	n.a.	2.9695		0.46004	1.45
5	13.04	Bromide	n.a.	2.9522		0.50056	1.58
6	15.38	Nitrate-N	n.a.	5.9292		6.19898	19.60
7	20.77	O-Phosphate-P	n.a.	2.3492		0.78516	2.48
8	23.74	Sulfate	n.a.	25.5802		8.41676	26.62
Total:				62.8873	0.000	31.622	100.00

63 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

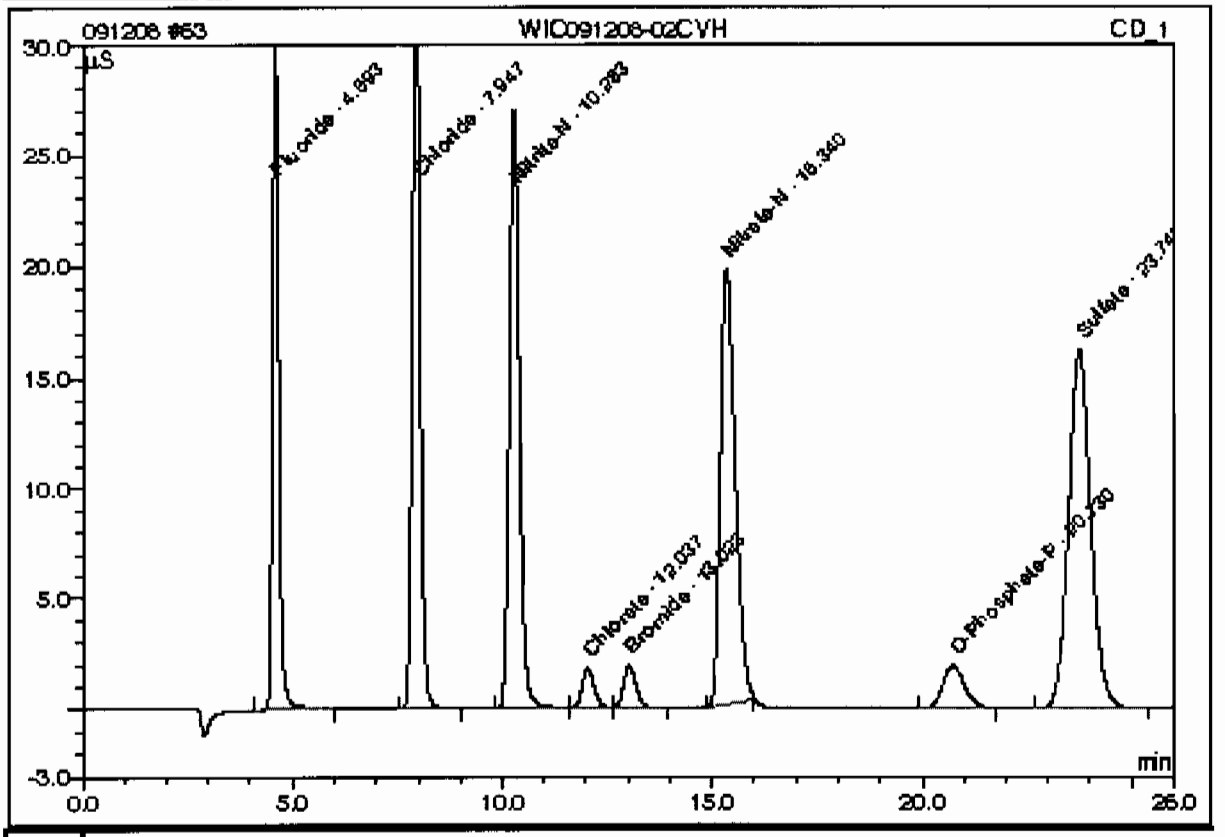

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	7.6578		5.20745	12.88
2	7.95	Chloride	n.a.	14.8592		7.24917	17.93
3	10.28	Nitrite-N	n.a.	7.5948		7.53607	18.64
4	12.04	Chlorate	n.a.	3.8432		0.59766	1.48
5	13.02	Bromide	n.a.	3.8322		0.65152	1.61
6	15.34	Nitrate-N	n.a.	7.7059		8.08754	20.01
7	20.73	O-Phosphate-P	n.a.	3.3825		1.14151	2.82
8	23.74	Sulfate	n.a.	30.1874		9.94936	24.61
Total:				79.0630	0.000	40.420	100.00

63 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

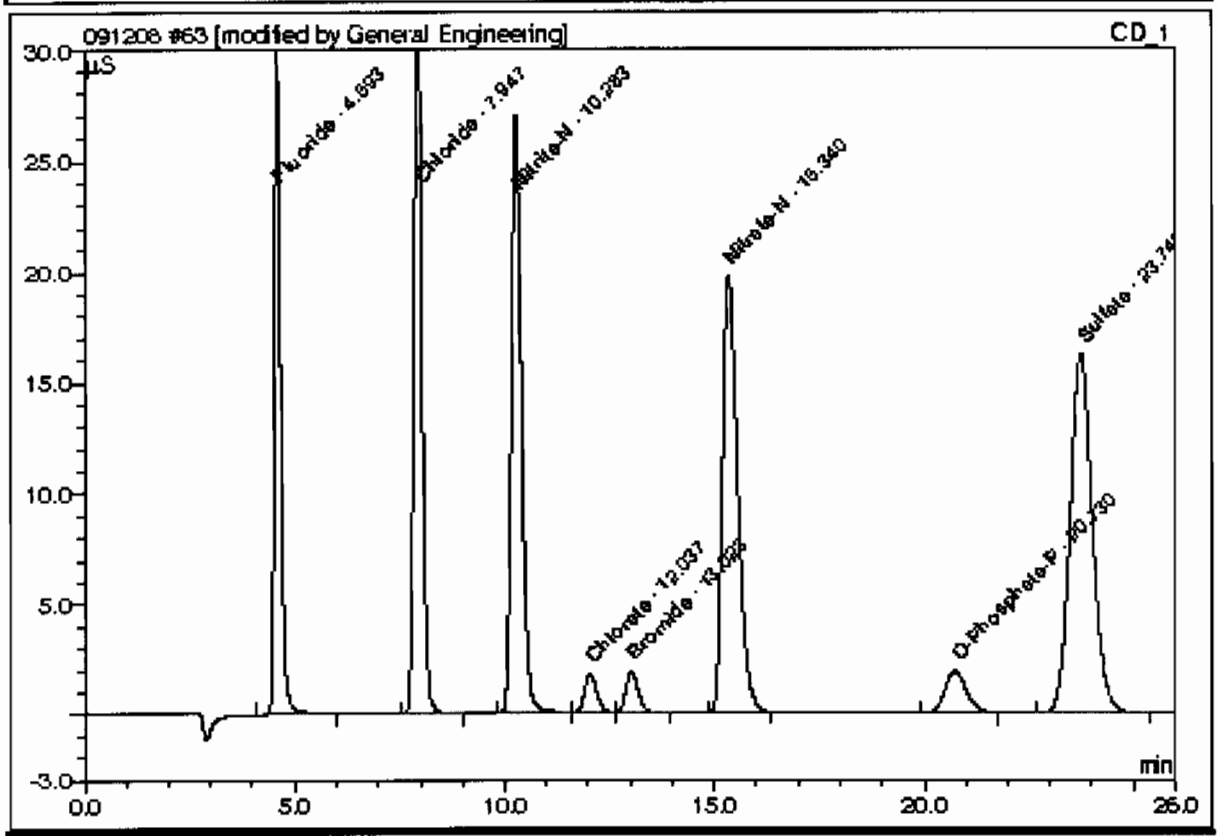

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	7.6578		5.20745	12.81
2	7.95	Chloride	n.a.	14.8592		7.24917	17.84
3	10.28	Nitrite-N	n.a.	7.5948		7.53607	18.54
4	12.04	Chlorate	n.a.	3.8432		0.59766	1.47
5	13.02	Bromide	n.a.	3.8322		0.65152	1.60
6	15.34	Nitrate-N	n.a.	7.9121		8.30671	20.44
7	20.73	O-Phosphate-P	n.a.	3.3825		1.14151	2.81
8	23.74	Sulfate	n.a.	30.1874		9.94936	24.48
Total:				79.2692	0.000	40.639	100.00

64 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 18:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

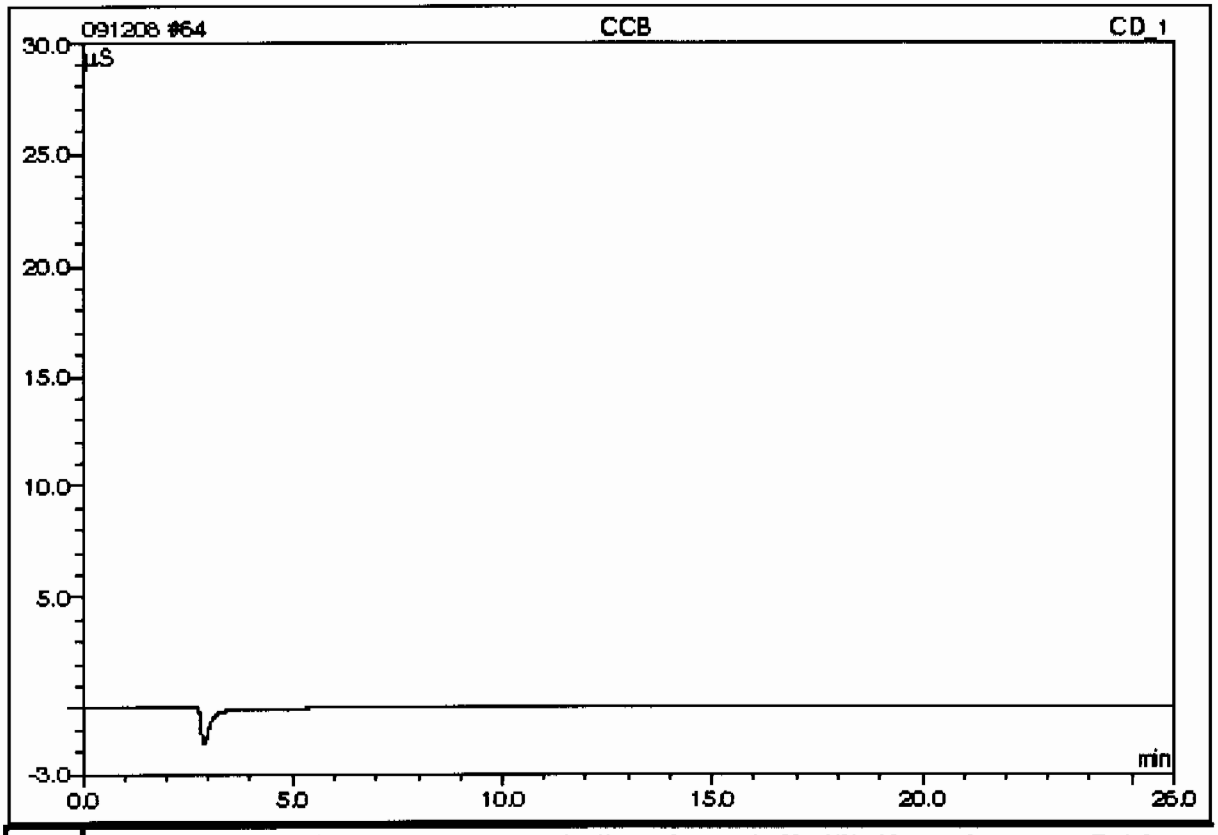

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

pH

pH / Corrosivity LogBook

Analyst: TXT1
Batch: 924497
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045C/9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM090728-PH	PH 7 BUFFER FOR PH
LCS	1201976369	IMM090728-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
1201976369 LCS		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:30	pH	20	20	6.95	20.1'C	7	99.286	
1201976369 LCS		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:30	pH 2	20	20	6.95	20.2'C	7	99.286	
241243008		Sludge	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:32	pH	20	20	7.19	20.9'C			
241243008		Sludge	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:32	pH 2	20	20	7.2	20.9'C			
241305001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:34	pH	5	20	6.74	21.4'C			
241305001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:34	pH 2	5	20	6.73	21.4'C			
241310001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:39	pH	20	20	10.22	21.2'C			
241310001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:39	pH 2	20	20	10.22	21.2'C			
1201976368 DUP	241310001	Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:41	pH	20	20	10.36	21.3'C			1.361
1201976368 DUP	241310001	Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:41	pH 2	20	20	10.37	21.4'C			1.457
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:43	pH	20	20	7	20.3'C	7	100	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:43	pH 2	20	20	7	20.3'C	7	100	
241322001		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:52	pH	20	20	7.29	20.9'C			
241322001		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:52	pH 2	20	20	7.3	20.9'C			
1201976367 DUP	241322001	Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:57	pH	20	20	7.31	21.1'C			.274
1201976367 DUP	241322001	Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:57	pH 2	20	20	7.31	21.1'C			.137
241322002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:58	pH	20	20	6.6	21.1'C			
241322002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:58	pH 2	20	20	6.6	21.1'C			
241322003		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:01	pH	20	20	6.39	20.9'C			
241322003		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:01	pH 2	20	20	6.43	20.9'C			
241322004		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:05	pH	20	20	7.51	21.0'C			
241322004		Soil	19-NOV-2009	19-NOV-2009	19-NOV-09 15:05	pH 2	20	20	7.51	21.1'C			

pH / Corrosivity LogBook

Analyst: TXT1
Batch: 924497
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM090728-PH	PH 7 BUFFER FOR PH
LCS	1201976369	IMM090728-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:08	pH	20	20	7.03	20.2'C	7	100.429	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:08	pH 2	20	20	7.02	20.2'C	7	100.286	
241322005		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:10	pH	20	20	7.35	21.0'C			
241322005		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:10	pH 2	20	20	7.35	21.0'C			
241322006		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:13	pH	20	20	8.67	20.9'C			
241322006		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:13	pH 2	20	20	8.69	20.9'C			
241322007		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:15	pH	20	20	7.68	20.9'C			
241322007		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:15	pH 2	20	20	7.66	20.9'C			
241322008		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:16	pH	20	20	6.71	20.9'C			
241322008		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:16	pH 2	20	20	6.75	20.9'C			
241322009		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:18	pH	20	20	7.37	20.5'C			
241322009		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:18	pH 2	20	20	7.38	20.5'C			
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:20	pH	20	20	7.02	20.1'C	7	100.286	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:20	pH 2	20	20	7.02	20.1'C	7	100.286	
241322010		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:26	pH	20	20	7.88	20.6'C			
241322010		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:26	pH 2	20	20	7.89	20.6'C			
241322011		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:28	pH	20	20	7.36	20.7'C			
241322011		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:28	pH 2	20	20	7.36	20.7'C			
241322012		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:31	pH	20	20	6.75	20.7'C			
241322012		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:31	pH 2	20	20	6.79	20.7'C			
241336001		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:32	pH	20	20	8.36	20.7'C			
241336001		Soil	19-NOV-2009	19-NOV-2009	19-NOV-09 15:32	pH 2	20	20	8.36	20.7'C			

pH / Corrosivity LogBook

Analyst: TXT1
Batch: 924497
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045C/9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM090728-PH	PH 7 BUFFER FOR PH
LCS	1201976369	IMM090728-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
241336002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:34	pH	20	20	8.55	20.7'C			
241336002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:34	pH 2	20	20	8.54	20.7'C			
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:35	pH	20	20	7.03	20.5'C	7	100.429	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:35	pH 2	20	20	7.02	20.5'C	7	100.286	

Calibration Information:
Run Date: 19-NOV-09 14:23
Instrument: PHX742
Analyst: TXT1

	Standard	Observed	Theoretical		C	%Recovery
14:23	IMM091119-PH1	4.01	4	SU	21.6	100.25
14:23	IMM091119-PH-	7.02	7	SU	21.6	100.29
14:23	UPH091119-a	9.99	10	SU	21.6	99.9
14:23	UPH091119-02c-	2.08	2	SU	21.6	104
14:23	091119-a	11.97	12	SU	21.6	99.75
14:23	IMM091119-a	7.01	7	SU	21.6	100.14

Comments:

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
24-NOV-09	Federal	Specifications	Process
Instrument Type: LACHAT Flow Injection Analyzer	**Test / Method:** SW846 9012A	**Matrix Type:** Solid	**Client Code:** CARE, LANL, MECP
Batch ID: 924475	**Sample Numbers:** See Below		

Potentially affected work order(s)(SDG): 241322(10-544),241336(10-546),241351(EUI-7395),241358,241417(10-575),241419(10-577)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for MS/MSD: QC 1201976326MS QC 1201976328MSD	1. The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable.
2. Container scanning event for custody missed: 241322 004, 005, 006, 007, 008, 009, 010, 011, 012 241336 001, 002 241417 001, 002, 241419 001, 002, 003, 004, 005	2. The following samples were not scanned prior to analysis. However samples were in custody of analyst during time of analysis.

Originator's Name:

Ashley Earl 24-NOV-09

Data Validator/Group Leader:

Elzbieta Szulc 24-NOV-09

NCR Report No.: 768832
Revision No.: 3

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
10-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
IC	EPA 300.0	Solid	LANL
Batch ID:	**Sample Numbers:**		
924715	See Below		

Potentially affected work order(s)(SDG): 241322(10-544),241336(10-546)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/MSD: QC 1201984521MS, QC 1201984523MSD QC 1201984520MS, QC 1201984522MSD	1. The MS and MSD recoveries fall outside of the GEL acceptance limits but within the client specified limits.

Originator's Name:

Virginia Wininger 10-DEC-09

Data Validator/Group Leader:

Julia Hamilton 14-DEC-09

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	923864	**Method:**	SW846 9012A
Prep Batch :	923862	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241337001	RE03-10-5530
241337002	RE03-10-5527
1201974863	Method Blank (MB)
1201974864	241181002(RE03-10-5526) Sample Duplicate (DUP)
1201974865	241173002(CAMO-10-3225) Sample Duplicate (DUP)
1201974866	241181002(RE03-10-5526) Matrix Spike (MS)
1201974867	241173002(CAMO-10-3225) Matrix Spike (MS)
1201974868	241181002(RE03-10-5526) Matrix Spike Duplicate (MSD)
1201974869	241173002(CAMO-10-3225) Matrix Spike Duplicate (MSD)
1201974870	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241173002 (CAMO-10-3225) and 241181002 (RE03-10-5526).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201974864 (RE03-10-5526) and 1201974865 (CAMO-10-3225).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Method/Analysis Information

Product: **Nitrate Nitrite by Cadmium Reduction**

Analytical Batch: 925977 **Method:** EPA 353.2

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 353.2:

Sample ID	Client ID
241337001	RE03-10-5530
241337002	RE03-10-5527
1201979828	Method Blank (MB)
1201979829	241337001(RE03-10-5530) Sample Duplicate (DUP)
1201979830	241600003(CAMO-10-3149) Sample Duplicate (DUP)
1201979831	241337001(RE03-10-5530) Post Spike (PS)
1201979832	241600003(CAMO-10-3149) Post Spike (PS)
1201979833	Laboratory Control Sample (LCS)
1201982084	241850001(50FWC-09-2839) Sample Duplicate (DUP)
1201982085	241850001(50FWC-09-2839) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-128 REV# 5.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Nutrient analysis was performed on a Lachat QuickChem FIA+ 8500 Series.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241337001 (RE03-10-5530), 241600003 (CAMO-10-3149) and 241850001 (50FWC-09-2839).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration: 1201982084 (50FWC-09-2839) and 1201982085 (50FWC-09-2839). The following samples in this sample group were diluted due to matrix interference: 1201979829 (RE03-10-5530), 1201979830 (CAMO-10-3149), 1201979831 (RE03-10-5530), 1201979832 (CAMO-10-3149), 241337001 (RE03-10-5530) and 241337002 (RE03-10-5527).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 14Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-546-1 GEL Work Order: 241337

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 30, 2009

Client SDG: 10-546-1

Client Sample ID: RE03-10-5530
Sample ID: 241337001
Matrix: W
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1705	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.050	0.250	mg/L	5	AXH3 11/30/09	0929	925977	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 30, 2009

Client SDG: 10-546-1

Client Sample ID: RE03-10-5527
Sample ID: 241337002
Matrix: W
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1706	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.050	0.250	mg/L	5	AXH3 11/30/09	0933	925977	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: November 30, 2009

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241337

Parmname	NOM		Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Flow Injection Analysis												
Batch 923864												
QC1201974864 241181002 DUP												
Cyanide, Total		U	ND	U	ND	ug/L	N/A				AXC2	11/24/09 16:52
QC1201974865 241173002 DUP												
Cyanide, Total		U	ND	U	ND	ug/L	N/A					11/24/09 16:43
QC1201974870 LCS												
Cyanide, Total	50.0				54.7	ug/L			109	(90%-110%)		11/24/09 16:41
QC1201974863 MB												
Cyanide, Total				U	5.00	ug/L						11/24/09 16:40
QC1201974866 241181002 MS												
Cyanide, Total	100	U	ND		107	ug/L			107	(60%-127%)		11/24/09 16:53
QC1201974867 241173002 MS												
Cyanide, Total	100	U	ND		101	ug/L			101	(60%-127%)		11/24/09 16:44
QC1201974868 241181002 MSD												
Cyanide, Total	100	U	ND		102	ug/L	4.78		102	(0%-20%)		11/24/09 16:54
QC1201974869 241173002 MSD												
Cyanide, Total	100	U	ND		99.6	ug/L	1.40		99.6	(0%-20%)		11/24/09 16:45
Nutrient Analysis												
Batch 925977												
QC1201979829 241337001 DUP												
Nitrogen, Nitrate/Nitrite		U	ND	U	ND	mg/L	N/A				AXH3	11/30/09 09:30
QC1201979830 241600003 DUP												
Nitrogen, Nitrate/Nitrite			0.462		0.439	mg/L	5.11	^		(+/-0.250)		11/30/09 09:35
QC1201982084 241850001 DUP												
Nitrogen, Nitrate/Nitrite			11.2		11.1	mg/L	1.12			(0%-20%)		11/30/09 10:00
QC1201979833 LCS												
Nitrogen, Nitrate/Nitrite	1.00				0.978	mg/L			97.8	(90%-110%)		11/30/09 09:28
QC1201979828 MB												
Nitrogen, Nitrate/Nitrite				J	0.0131	mg/L						11/30/09 09:27
QC1201979831 241337001 PS												
Nitrogen, Nitrate/Nitrite	1.00	U	ND		0.988	mg/L			98	(90%-110%)		11/30/09 09:32
QC1201979832 241600003 PS												
Nitrogen, Nitrate/Nitrite	1.00		0.0924		1.07	mg/L			97.8	(90%-110%)		11/30/09 09:36
QC1201982085 241850001 PS												
Nitrogen, Nitrate/Nitrite	1.00		0.449		1.40	mg/L			95.1	(90%-110%)		11/30/09 10:02

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

QC Summary

Workorder: 241337

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 30-NOV-2009 15:35

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-546-1

Flow Injection Analysis
Method: SW846 9012A Concentration Units:ug/L
Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**24-NOV-2009 13:50:59**	**OM_11-24-2009_13-43-04**	**145**	**150**	**97**	**(90%-110%)**	**Yes**
CCV	24-NOV-2009 16:34:27	OM_11-24-2009_16-32-55	94	100	94	(90%-110%)	Yes
CCV	24-NOV-2009 16:46:55	OM_11-24-2009_16-32-55	91.9	100	92	(90%-110%)	Yes
CCV	24-NOV-2009 16:59:20	OM_11-24-2009_16-32-55	92	100	92	(90%-110%)	Yes
CCV	24-NOV-2009 17:11:53	OM_11-24-2009_16-32-55	92.4	100	92	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**24-NOV-2009 13:52:49**	**OM_11-24-2009_13-43-04**	**1.98**	**5**	**Yes**
CCB	24-NOV-2009 16:36:18	OM_11-24-2009_16-32-55	-0.718	5	Yes
CCB	24-NOV-2009 16:48:45	OM_11-24-2009_16-32-55	0.186	5	Yes
CCB	24-NOV-2009 17:01:10	OM_11-24-2009_16-32-55	0.178	5	Yes
CCB	24-NOV-2009 17:13:43	OM_11-24-2009_16-32-55	-0.0981	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 30-NOV-2009 15:35

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-546-1**

Nutrient Analysis

Method: EPA 353.2 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8500 Series

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**30-NOV-2009 09:17:51**	**OM_11-30-2009_09-07-37**	**0.971**	**1**	**97**	**(90%-110%)**	**Yes**
CCV	30-NOV-2009 09:39:19	OM_11-30-2009_09-07-37	0.965	1	97	(90%-110%)	Yes
CCV	30-NOV-2009 09:56:05	OM_11-30-2009_09-07-37	0.96	1	96	(90%-110%)	Yes
CCV	30-NOV-2009 10:11:33	OM_11-30-2009_09-07-37	0.949	1	95	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**30-NOV-2009 09:20:13**	**OM_11-30-2009_09-07-37**	**0.00012**	**0.05**	**Yes**
CCB	30-NOV-2009 09:41:41	OM_11-30-2009_09-07-37	0.00088	0.05	Yes
CCB	30-NOV-2009 09:58:27	OM_11-30-2009_09-07-37	0.00094	0.05	Yes
CCB	30-NOV-2009 10:13:55	OM_11-30-2009_09-07-37	0.00071	0.05	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 923862

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201974870	URF1184831-02	.0125	mL
MS	1201974866	URF1184831-02	.025	mL
MS	1201974867	URF1184831-02	.025	mL
MSD	1201974868	URF1184831-02	.025	mL
MSD	1201974869	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201974863		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
LCS	1201974870		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241173002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201974865	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
MS	1201974867	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201974869	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241173004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241176002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241181002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
DUP	1201974864	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
MS	1201974866	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
MSD	1201974868	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241218001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	MISC LIQUID
SAMPLE	241308001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241308004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241312002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241312004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241325001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241325002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241337001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241337002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241340001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241372013		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241420001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420003		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420004		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241430001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WASTE WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
090731-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1174846-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1174824-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/24/2009 13:43:49	OM_11-24-2009_13-43-04
150 ppb		1	axc2	11/24/2009 13:44:42	OM_11-24-2009_13-43-04
100 ppb		1	axc2	11/24/2009 13:45:34	OM_11-24-2009_13-43-04
50 ppb		1	axc2	11/24/2009 13:46:27	OM_11-24-2009_13-43-04
10 ppb		1	axc2	11/24/2009 13:47:20	OM_11-24-2009_13-43-04
CRDL 5.0 ppb		1	axc2	11/24/2009 13:48:14	OM_11-24-2009_13-43-04
ICAL-00		1	axc2	11/24/2009 13:49:08	OM_11-24-2009_13-43-04
ICV		1	axc2	11/24/2009 13:50:59	OM_11-24-2009_13-43-04
ICB		1	axc2	11/24/2009 13:52:49	OM_11-24-2009_13-43-04
CRDL		1	axc2	11/24/2009 13:54:39	OM_11-24-2009_13-43-04
1201974838	923855	1	axc2	11/24/2009 13:56:29	OM_11-24-2009_13-43-04
1201974840	923855	1	axc2	11/24/2009 13:57:22	OM_11-24-2009_13-43-04
1201974842	923855	1	axc2	11/24/2009 13:58:15	OM_11-24-2009_13-43-04
241187002	923855	1	axc2	11/24/2009 13:59:09	OM_11-24-2009_13-43-04
241187003	923855	1	axc2	11/24/2009 14:00:02	OM_11-24-2009_13-43-04
241187004	923855	1	axc2	11/24/2009 14:00:55	OM_11-24-2009_13-43-04
241223001	923855	1	axc2	11/24/2009 14:01:48	OM_11-24-2009_13-43-04
1201974839	923855	1	axc2	11/24/2009 14:02:40	OM_11-24-2009_13-43-04
1201974841	923855	1	axc2	11/24/2009 14:03:32	OM_11-24-2009_13-43-04
1201974843	923855	1	axc2	11/24/2009 14:04:25	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:05:17	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:07:08	OM_11-24-2009_13-43-04
241223002	923855	1	axc2	11/24/2009 14:08:55	OM_11-24-2009_13-43-04
241223003	923855	1	axc2	11/24/2009 14:09:47	OM_11-24-2009_13-43-04
241223004	923855	1	axc2	11/24/2009 14:10:40	OM_11-24-2009_13-43-04
241223005	923855	1	axc2	11/24/2009 14:11:34	OM_11-24-2009_13-43-04
241223006	923855	1	axc2	11/24/2009 14:12:28	OM_11-24-2009_13-43-04
241223007	923855	1	axc2	11/24/2009 14:13:22	OM_11-24-2009_13-43-04
241223008	923855	1	axc2	11/24/2009 14:14:15	OM_11-24-2009_13-43-04
241223009	923855	1	axc2	11/24/2009 14:15:08	OM_11-24-2009_13-43-04
241234001	923855	1	axc2	11/24/2009 14:16:02	OM_11-24-2009_13-43-04
241234002	923855	1	axc2	11/24/2009 14:16:55	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:17:48	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:19:38	OM_11-24-2009_13-43-04
241234003	923855	1	axc2	11/24/2009 14:21:27	OM_11-24-2009_13-43-04
241234004	923855	1	axc2	11/24/2009 14:22:20	OM_11-24-2009_13-43-04
241234005	923855	1	axc2	11/24/2009 14:23:13	OM_11-24-2009_13-43-04
241234006	923855	1	axc2	11/24/2009 14:24:05	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:24:58	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:26:48	OM_11-24-2009_13-43-04

Author: axc2 Date : 11/24/2009

Original Run Filename: OM_11-24-2009_13-43-04.OMN created 11/24/2009 13:43:04
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-24-2009_13-43-04.OMN last modified 11/24/2009 14:27:53
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091124-01	1	S1	200	4.18	11/24/2009@13:43:49			200 ppb
WCN091124-02	1	S2	150	3.20	11/24/2009@13:44:42			150 ppb
WCN091124-03	1	S3	100	2.16	11/24/2009@13:45:34			100 ppb
WCN091124-04	1	S4	50.0	1.09	11/24/2009@13:46:27			50 ppb
WCN091124-05	1	S5	10.0	0.307	11/24/2009@13:47:20			10 ppb
WCN091124-06	1	S6	5.00	0.207	11/24/2009@13:48:14			CRDL 5.0 ppb
WCN091124-08	1	S7	0.00	0.0224	11/24/2009@13:49:08			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99979 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091124-07	1	S8	145	3.07	11/24/2009@13:50:59			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-3.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-3.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091124-08	1	S7	1.98	0.116	11/24/2009@13:52:49			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.98 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.98 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091124-06	1	S6	5.07	0.180	11/24/2009@13:54:39			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	5.07 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	5.07 > 2.50					
		Message	Pass					
		Action	None					
1201974838|923855|DUP	1	33	-2.51	0.0229	11/24/2009@13:56:29			
1201974840||MS	1	34	105	2.25	11/24/2009@13:57:22			
1201974842||MSD	1	35	111	2.37	11/24/2009@13:58:15			
241187002	1	36	0.929	0.0940	11/24/2009@13:59:09			
241187003	1	37	-3.63	-1.34e-4	11/24/2009@14:00:02			
241187004	1	38	-3.90	-0.00567	11/24/2009@14:00:55			
241223001	1	39	5.27	0.184	11/24/2009@14:01:48			
1201974839||DUP	1	40	5.12	0.181	11/24/2009@14:02:40			
1201974841||MS	1	41	78.3	1.69	11/24/2009@14:03:32			
1201974843||MSD	1	42	78.5	1.70	11/24/2009@14:04:25			
WCN091124-03	1	S3	100	2.14	11/24/2009@14:05:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.0 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	-0.278	0.0691	11/24/2009@14:07:08			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.278 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.278 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241223002	1	43	-2.44	0.0244	11/24/2009@14:08:55			
241223003	1	44	-2.53	0.0226	11/24/2009@14:09:47			
241223004	1	45	1.66	0.109	11/24/2009@14:10:40			
241223005	1	46	-0.692	0.0605	11/24/2009@14:11:34			
241223006	1	47	2.97	0.136	11/24/2009@14:12:28			
241223007	1	48	-1.72	0.0392	11/24/2009@14:13:22			
241223008	1	49	-1.42	0.0454	11/24/2009@14:14:15			
241223009	1	50	-1.94	0.0347	11/24/2009@14:15:08			
241234001	1	51	13.2	0.348	11/24/2009@14:16:02			
241234002	1	52	15.1	0.387	11/24/2009@14:16:55			
WCN091124-03	1	S3	99.3	2.13	11/24/2009@14:17:48			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.383	0.0827	11/24/2009@14:19:38			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.383 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.383 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241234003	1	53	182	3.84	11/24/2009@14:21:27			
241234004	1	54	126	2.67	11/24/2009@14:22:20			
241234005	1	55	44.2	0.988	11/24/2009@14:23:13			
241234006	1	56	1.64	0.109	11/24/2009@14:24:05			
WCN091124-03	1	S3	101	2.15	11/24/2009@14:24:58			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.634	0.0879	11/24/2009@14:26:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.634 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.634 > -5.00					

Author: axc2 Date : 11/24/2009

Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-24-2009_13-43-04.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

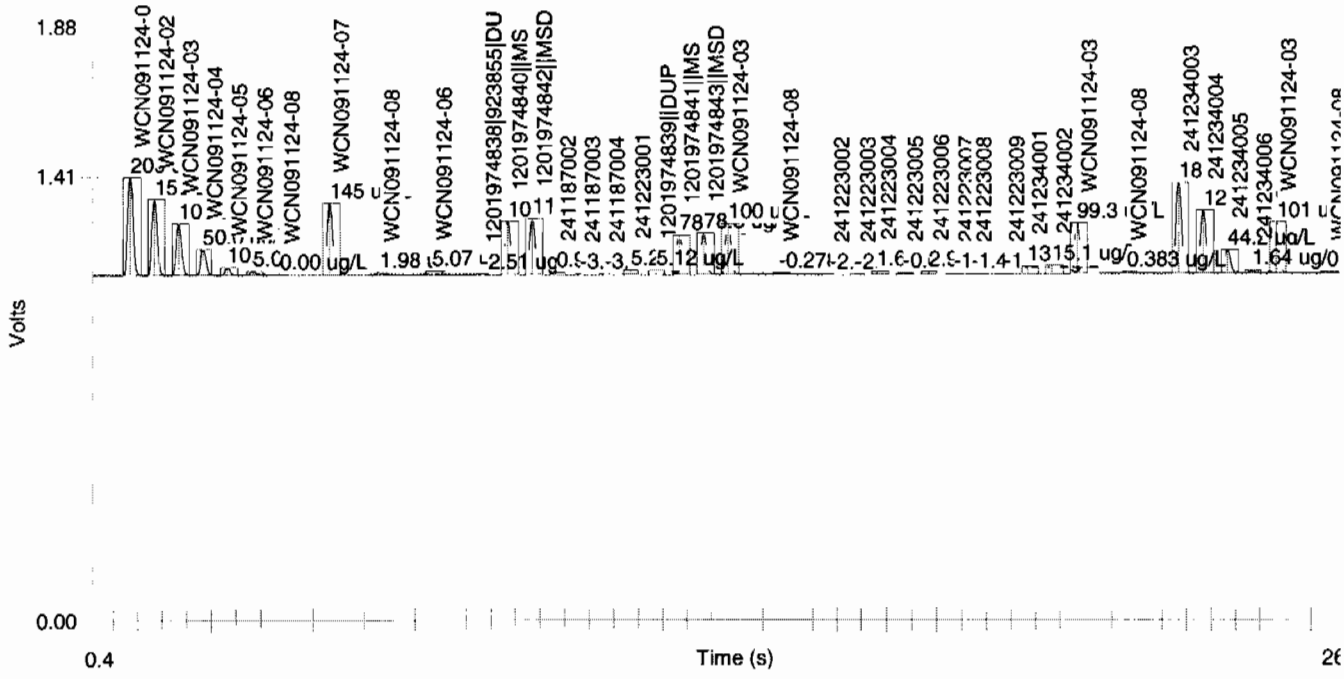

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	4.18	0.310	0.7	11/24/2009	13:44:53
2	150	1	3.20	0.240	-0.9	11/24/2009	13:45:45
3	100	1	2.16	0.161	-0.8	11/24/2009	13:46:37
4	50.0	1	1.09	0.0801	1.7	11/24/2009	13:47:30
5	10.0	1	0.307	0.0241	-8.7	11/24/2009	13:48:23
6	5.00	1	0.207	0.0121	-15.7	11/24/2009	13:49:17
7	0.00	1	0.0224	5.28e-4		11/24/2009	13:50:11

Author: axc2

Date : 11/24/2009

Figure 1: TCYANIDE

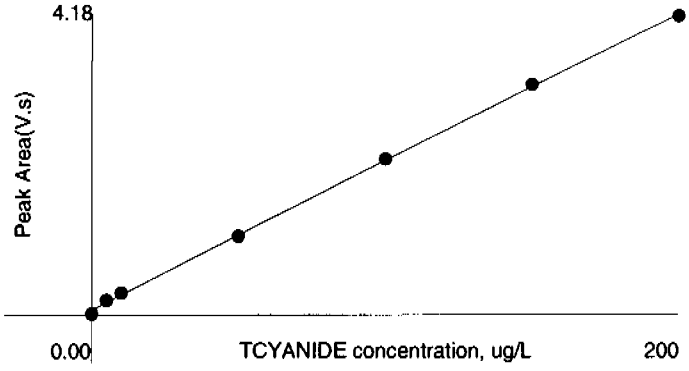

Area = 0.0207 * Conc + 0.0755
Conc = 48.4 * Area - 3.62
Correlation Coefficient (r) = 0.99979

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	11/24/2009 16:34:27	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 16:36:18	OM_11-24-2009_16-32-55
241053004	922839	1	axc2	11/24/2009 16:38:07	OM_11-24-2009_16-32-55
241053009	922839	1	axc2	11/24/2009 16:38:59	OM_11-24-2009_16-32-55
241053011	922839	1	axc2	11/24/2009 16:39:51	OM_11-24-2009_16-32-55
1201974863	923864	1	axc2	11/24/2009 16:40:43	OM_11-24-2009_16-32-55
1201974870	923864	1	axc2	11/24/2009 16:41:35	OM_11-24-2009_16-32-55
241173002	923864	1	axc2	11/24/2009 16:42:29	OM_11-24-2009_16-32-55
1201974865	923864	1	axc2	11/24/2009 16:43:23	OM_11-24-2009_16-32-55
1201974867	923864	1	axc2	11/24/2009 16:44:16	OM_11-24-2009_16-32-55
1201974869	923864	1	axc2	11/24/2009 16:45:10	OM_11-24-2009_16-32-55
241173004	923864	1	axc2	11/24/2009 16:46:03	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 16:46:55	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 16:48:45	OM_11-24-2009_16-32-55
241176002	923864	1	axc2	11/24/2009 16:50:35	OM_11-24-2009_16-32-55
241181002	923864	1	axc2	11/24/2009 16:51:28	OM_11-24-2009_16-32-55
1201974864	923864	1	axc2	11/24/2009 16:52:21	OM_11-24-2009_16-32-55
1201974866	923864	1	axc2	11/24/2009 16:53:13	OM_11-24-2009_16-32-55
1201974868	923864	1	axc2	11/24/2009 16:54:06	OM_11-24-2009_16-32-55
241218001	923864	1	axc2	11/24/2009 16:54:58	OM_11-24-2009_16-32-55
241308001*	923864	1	axc2	11/24/2009 16:55:51	OM_11-24-2009_16-32-55
241308004	923864	1	axc2	11/24/2009 16:56:43	OM_11-24-2009_16-32-55
241312002	923864	1	axc2	11/24/2009 16:57:35	OM_11-24-2009_16-32-55
241312004	923864	1	axc2	11/24/2009 16:58:27	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 16:59:20	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:01:10	OM_11-24-2009_16-32-55
241308001	923864	1	axc2	11/24/2009 17:02:58	OM_11-24-2009_16-32-55
241325001	923864	1	axc2	11/24/2009 17:03:52	OM_11-24-2009_16-32-55
241325002	923864	1	axc2	11/24/2009 17:04:47	OM_11-24-2009_16-32-55
241337001	923864	1	axc2	11/24/2009 17:05:41	OM_11-24-2009_16-32-55
241337002	923864	1	axc2	11/24/2009 17:06:34	OM_11-24-2009_16-32-55
241340001	923864	1	axc2	11/24/2009 17:07:28	OM_11-24-2009_16-32-55
241372013*	923864	1	axc2	11/24/2009 17:08:21	OM_11-24-2009_16-32-55
241420001	923864	1	axc2	11/24/2009 17:09:14	OM_11-24-2009_16-32-55
241420002	923864	1	axc2	11/24/2009 17:10:08	OM_11-24-2009_16-32-55
241420003	923864	1	axc2	11/24/2009 17:11:00	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 17:11:53	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:13:43	OM_11-24-2009_16-32-55
241372013	923864	1	axc2	11/24/2009 17:15:33	OM_11-24-2009_16-32-55
241420004	923864	1	axc2	11/24/2009 17:16:25	OM_11-24-2009_16-32-55
241430001	923864	1	axc2	11/24/2009 17:17:18	OM_11-24-2009_16-32-55
241218001	923864	5	axc2	11/24/2009 17:18:11	OM_11-24-2009_16-32-55
241340001	923864	5	axc2	11/24/2009 17:19:04	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 17:19:56	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:21:47	OM_11-24-2009_16-32-55

Author: axc2

Date : 11/24/2009

Original Run Filename: OM_11-24-2009_16-32-55.OMN created 11/24/2009 16:32:55
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-24-2009_16-32-55.OMN last modified 11/24/2009 17:22:52
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091124-03	1	S3	94.0	2.02	11/24/2009@16:34:27			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	-0.718	0.0600	11/24/2009@16:36:18			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-0.718 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.718 > -5.00					
		Message	CCB Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
241053004|922839|	1	21	110	2.35	11/24/2009@16:38:07			
241053009	1	26	7.48	0.229	11/24/2009@16:38:59			
241053011	1	28	1.23	0.100	11/24/2009@16:39:51			
1201974863|923864|MB	1	29	-1.71	0.0395	11/24/2009@16:40:43			
1201974870||LCS	1	30	54.7	1.21	11/24/2009@16:41:35			
241173002	1	31	-0.479	0.0649	11/24/2009@16:42:29			
1201974865||DUP	1	32	-1.98	0.0339	11/24/2009@16:43:23			
1201974867||MS	1	33	101	2.17	11/24/2009@16:44:16			
1201974869||MSD	1	34	99.6	2.13	11/24/2009@16:45:10			
241173004	1	35	0.314	0.0813	11/24/2009@16:46:03			
WCN091124-03	1	S3	91.9	1.97	11/24/2009@16:46:55			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.186	0.0787	11/24/2009@16:48:45			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.186 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.186 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241176002	1	36	-2.34	0.0265	11/24/2009@16:50:35			
241181002	1	37	-2.73	0.0183	11/24/2009@16:51:28			
1201974864||DUP	1	38	-4.33	-0.0146	11/24/2009@16:52:21			
1201974866||MS	1	39	107	2.29	11/24/2009@16:53:13			
1201974868||MSD	1	40	102	2.19	11/24/2009@16:54:06			

241218001	1	41	436	9.08	11/24/2009@16:54:58			
241308001	1	42	7.18	0.223	11/24/2009@16:55:51			
241308004	1	43	-2.29	0.0276	11/24/2009@16:56:43			
241312002	1	44	-2.28	0.0276	11/24/2009@16:57:35			
241312004	1	45	-3.02	0.0123	11/24/2009@16:58:27			
WCN091124-03	1	S3	92.0	1.98	11/24/2009@16:59:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.178	0.0785	11/24/2009@17:01:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.178 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.178 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241308001	1	42	-2.06	0.0323	11/24/2009@17:02:58			
241325001	1	46	-3.02	0.0123	11/24/2009@17:03:52			
241325002	1	47	-2.38	0.0256	11/24/2009@17:04:47			
241337001	1	48	-2.22	0.0289	11/24/2009@17:05:41			
241337002	1	49	-2.25	0.0283	11/24/2009@17:06:34			
241340001	1	50	318	6.64	11/24/2009@17:07:28			
241372013	1	51	187	3.94	11/24/2009@17:08:21			
241420001	1	52	2.45	0.125	11/24/2009@17:09:14			
241420002	1	53	-1.58	0.0422	11/24/2009@17:10:08			
241420003	1	54	-2.08	0.0318	11/24/2009@17:11:00			
WCN091124-03	1	S3	92.4	1.98	11/24/2009@17:11:53			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-7.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-7.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	-0.0981	0.0728	11/24/2009@17:13:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.0981 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.0981 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241372013	1	51	176	3.72	11/24/2009@17:15:33			
241420004	1	55	3.67	0.151	11/24/2009@17:16:25			
241430001	1	56	1.20	0.0997	11/24/2009@17:17:18			
241218001	1	41	74.8	1.62	11/24/2009@17:18:11		5.00	
241340001	1	50	60.7	1.33	11/24/2009@17:19:04		5.00	
WCN091124-03	1	S3	94.0	2.02	11/24/2009@17:19:56			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-6.0 < 10.0					

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		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.419	0.0835	11/24/2009@17:21:47			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.419 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.419 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_11-24-2009_16-32-55.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

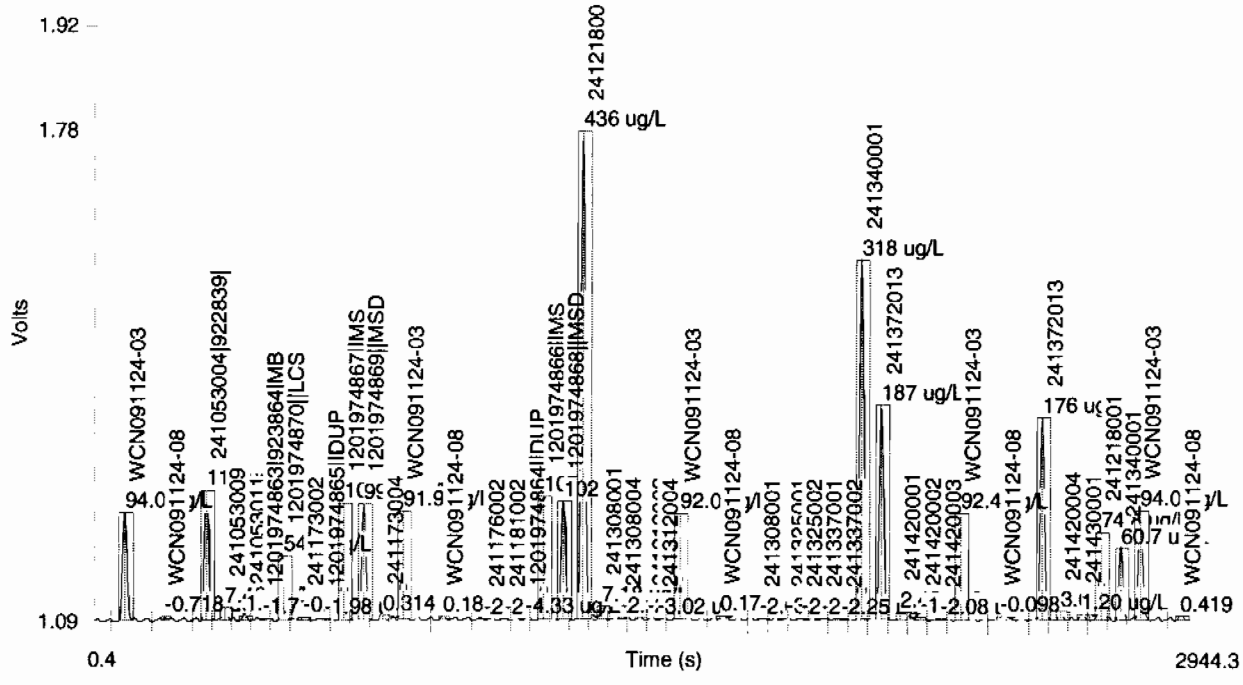

Author: axc2 Date : 11/24/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	4.18	0.310	0.7	11/24/2009	13:44:53
2	150	1	3.20	0.240	-0.9	11/24/2009	13:45:45
3	100	1	2.16	0.161	-0.8	11/24/2009	13:46:37
4	50.0	1	1.09	0.0801	1.7	11/24/2009	13:47:30
5	10.0	1	0.307	0.0241	-8.7	11/24/2009	13:48:23
6	5.00	1	0.207	0.0121	-15.7	11/24/2009	13:49:17
7	0.00	1	0.0224	5.28e-4		11/24/2009	13:50:11

Figure 1: TCYANIDE

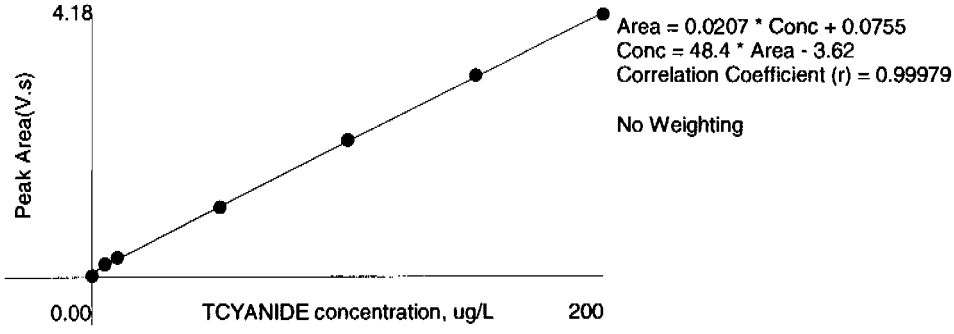

Nitrate Nitrite by Cadmium Reduction

This is runlog lachat3

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
1.5 PPM		1	axh3	11/30/2009 9:09:24	OM_11-30-2009_09-07-37
1.0 PPM		1	axh3	11/30/2009 9:10:36	OM_11-30-2009_09-07-37
0.5 ppm		1	axh3	11/30/2009 9:11:49	OM_11-30-2009_09-07-37
0.1 ppm		1	axh3	11/30/2009 9:13:02	OM_11-30-2009_09-07-37
0.05 ppm		1	axh3	11/30/2009 9:14:15	OM_11-30-2009_09-07-37
ICAL-00		1	axh3	11/30/2009 9:15:29	OM_11-30-2009_09-07-37
1.0 ppm ICV		1	axh3	11/30/2009 9:17:51	OM_11-30-2009_09-07-37
ICB		1	axh3	11/30/2009 9:20:13	OM_11-30-2009_09-07-37
Nitrate 1.0 ppm		1	axh3	11/30/2009 9:22:33	OM_11-30-2009_09-07-37
Nitrite 1.0 ppm		1	axh3	11/30/2009 9:24:53	OM_11-30-2009_09-07-37
1201979828	925977	1	axh3	11/30/2009 9:27:13	OM_11-30-2009_09-07-37
1201979833	925977	1	axh3	11/30/2009 9:28:26	OM_11-30-2009_09-07-37
241337001	925977	5	axh3	11/30/2009 9:29:40	OM_11-30-2009_09-07-37
1201979829	925977	5	axh3	11/30/2009 9:30:52	OM_11-30-2009_09-07-37
1201979831	925977	5	axh3	11/30/2009 9:32:05	OM_11-30-2009_09-07-37
241337002	925977	5	axh3	11/30/2009 9:33:18	OM_11-30-2009_09-07-37
241600003	925977	5	axh3	11/30/2009 9:34:30	OM_11-30-2009_09-07-37
1201979830	925977	5	axh3	11/30/2009 9:35:43	OM_11-30-2009_09-07-37
1201979832	925977	5	axh3	11/30/2009 9:36:55	OM_11-30-2009_09-07-37
241601001	925977	10	axh3	11/30/2009 9:38:07	OM_11-30-2009_09-07-37
1.0 ppm CCV		1	axh3	11/30/2009 9:39:19	OM_11-30-2009_09-07-37
CCB		1	axh3	11/30/2009 9:41:41	OM_11-30-2009_09-07-37
241601003	925977	5	axh3	11/30/2009 9:44:01	OM_11-30-2009_09-07-37
241691001	925977	5	axh3	11/30/2009 9:45:13	OM_11-30-2009_09-07-37
241698001	925977	5	axh3	11/30/2009 9:46:25	OM_11-30-2009_09-07-37
1201980962	925977	5	axh3	11/30/2009 9:47:37	OM_11-30-2009_09-07-37
1201980963	925977	5	axh3	11/30/2009 9:48:48	OM_11-30-2009_09-07-37
241702001	925977	25	axh3	11/30/2009 9:50:01	OM_11-30-2009_09-07-37
241702002	925977	25	axh3	11/30/2009 9:51:14	OM_11-30-2009_09-07-37
241702009	925977	100	axh3	11/30/2009 9:52:28	OM_11-30-2009_09-07-37
241813007	925977	5	axh3	11/30/2009 9:53:40	OM_11-30-2009_09-07-37
241850001	925977	25	axh3	11/30/2009 9:54:53	OM_11-30-2009_09-07-37
1.0 ppm CCV		1	axh3	11/30/2009 9:56:05	OM_11-30-2009_09-07-37
CCB		1	axh3	11/30/2009 9:58:27	OM_11-30-2009_09-07-37
1201982084	925977	25	axh3	11/30/2009 10:00:47	OM_11-30-2009_09-07-37
1201982085	925977	25	axh3	11/30/2009 10:02:00	OM_11-30-2009_09-07-37
1201980978	926531	1	axh3	11/30/2009 10:03:13	OM_11-30-2009_09-07-37
1201980982	926531	1	axh3	11/30/2009 10:04:25	OM_11-30-2009_09-07-37
241686001	926531	5	axh3	11/30/2009 10:05:37	OM_11-30-2009_09-07-37
1201980979	926531	5	axh3	11/30/2009 10:06:49	OM_11-30-2009_09-07-37
1201980980	926531	5	axh3	11/30/2009 10:08:01	OM_11-30-2009_09-07-37
1201980981	926531	5	axh3	11/30/2009 10:09:13	OM_11-30-2009_09-07-37
1.0 ppm CCV		1	axh3	11/30/2009 10:11:33	OM_11-30-2009_09-07-37
CCB		1	axh3	11/30/2009 10:13:55	OM_11-30-2009_09-07-37

Author: lachat

Date : 11/30/2009

Original Run Filename: OM_11-30-2009_09-07-37.OMN created 11/30/2009 09:07:37
Original Run Author's Signature: [lachat]
Current Run Filename: OM_11-30-2009_09-07-37.OMN last modified 11/30/2009 10:15:16
Current Run Author's Signature: [lachat]
Description: EPA 353.2
Cadmium Colum 9056CAJ
LCS nominal 1.0 mg/L

Sample	Rep.	Cup No.	Channel 1 NO3 + NO2 Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR091130-26	1	S9	1.50	18.8	11/30/2009@09:09:24			1.5 PPM
WTR091130-25	1	S10	1.00	12.2	11/30/2009@09:10:36			1.0 PPM
WTR091130-24	1	S11	0.500	6.14	11/30/2009@09:11:49			0.5 ppm
WTR091130-23	1	S12	0.100	1.26	11/30/2009@09:13:02			0.1 ppm
WTR091130-21	1	S13	0.0500	0.651	11/30/2009@09:14:15			0.05 ppm
0.0ppm	1	S15	0.00	-0.0173	11/30/2009@09:15:29			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99989 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR091130-27 ICV	1	S16	0.971	12.1	11/30/2009@09:17:51			1.0 ppm ICV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.971 < 1.10					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.971 > 0.894					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S15	1.24e-4	-0.0272	11/30/2009@09:20:13			ICB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.24e-4 < 0.0500					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.24e-4 > -0.0500					
		Message	ICB Passed					
		Action	Continue					
WTR091130-22	1	S1	0.964	12.0	11/30/2009@09:22:33			Nitrate 1.0 ppm
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.964 < 1.10					
		Message	Nitrate Standard Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.964 > 0.894					
		Message	Nitrate Standard Passed					
		Action	Continue					
WTR091130-28	1	S2	0.963	12.0	11/30/2009@09:24:53			Nitrite 1.0 ppm
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.963 < 1.10					
		Message	Nitrite Standard Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.963 > 0.894					
		Message	Nitrite Standard Passed					
		Action	Continue					
1201979828|925977|MB	1	1	0.0131	0.135	11/30/2009@09:27:13			
1201979833||LCS	1	2	0.978	12.2	11/30/2009@09:28:26			
241337001	1	3	0.00762	0.0662	11/30/2009@09:29:40		5.00	
1201979829||DUP	1	4	0.00679	0.0559	11/30/2009@09:30:52		5.00	
1201979831||PS	1	5	0.988	12.3	11/30/2009@09:32:05		5.00	

241337002	1	6	0.00876	0.0804	11/30/2009@09:33:18		5.00	
241600003	1	7	0.0924	1.12	11/30/2009@09:34:30		5.00	
1201979830||DUP	1	8	0.0878	1.06	11/30/2009@09:35:43		5.00	
1201979832||PS	1	9	1.07	13.3	11/30/2009@09:36:55		5.00	
241601001	1	10	0.536	6.64	11/30/2009@09:38:07		10.00	
WTR091130-25 CCV	1	S10	0.965	12.0	11/30/2009@09:39:19			1.0 ppm CCV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.965 < 1.10					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.965 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	8.83e-4	-0.0177	11/30/2009@09:41:41			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	8.83e-4 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	8.83e-4 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
241601003	1	11	0.267	3.30	11/30/2009@09:44:01		5.00	
241691001	1	12	0.0225	0.251	11/30/2009@09:45:13		5.00	
241698001	1	13	0.0659	0.792	11/30/2009@09:46:25		5.00	
1201980962||DUP	1	14	0.0654	0.786	11/30/2009@09:47:37		5.00	
1201980963||PS	1	15	1.06	13.1	11/30/2009@09:48:48		5.00	
241702001	1	16	0.529	6.56	11/30/2009@09:50:01		25.00	
241702002	1	17	0.520	6.45	11/30/2009@09:51:14		25.00	
241702009	1	18	0.463	5.74	11/30/2009@09:52:28		100.00	
241813007	1	19	0.0686	0.825	11/30/2009@09:53:40		5.00	
241850001	1	20	0.449	5.56	11/30/2009@09:54:53		25.00	
WTR091130-25 CCV	1	S10	0.960	11.9	11/30/2009@09:56:05			1.0 ppm CCV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.960 < 1.10					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.960 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	9.41e-4	-0.0170	11/30/2009@09:58:27			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	9.41e-4 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	9.41e-4 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
1201982084||DUP	1	21	0.444	5.50	11/30/2009@10:00:47		25.00	
1201982085||PS	1	22	1.40	17.4	11/30/2009@10:02:00		25.00	
1201980978|926531|MB	1	23	0.00854	0.0777	11/30/2009@10:03:13			
1201980982||LCS	1	24	0.974	12.1	11/30/2009@10:04:25			
241686001	1	25	0.224	2.77	11/30/2009@10:05:37		5.00	
1201980979||DUP	1	26	0.213	2.62	11/30/2009@10:06:49		5.00	
1201980980||MS	1	27	0.419	5.19	11/30/2009@10:08:01		5.00	
1201980981||MSD	1	28	0.434	5.38	11/30/2009@10:09:13		5.00	
WTR091130-25 CCV	1	S10	0.949	11.8	11/30/2009@10:11:33			1.0 ppm CCV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.949 < 1.10					
		Message	CCV Passed					

Author: lachat

Date : 11/30/2009

		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.949 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	7.12e-4	-0.0198	11/30/2009@10:13:55			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	7.12e-4 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	7.12e-4 > -0.0500					
		Message	CCB Passed					
		Action	Continue					

Channel 1 (NO3 + NO2) : Current View

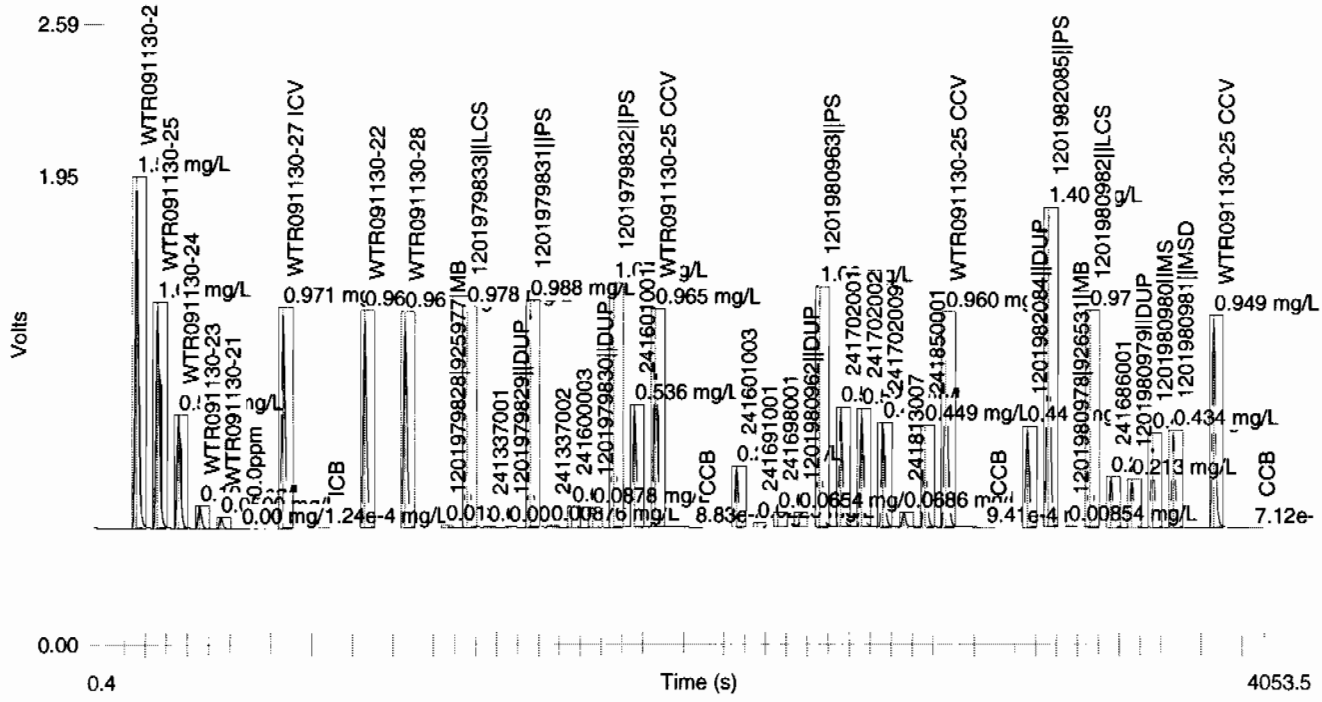

Table 1: NO3 + NO2

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.50	1	18.8	1.47	-0.8	11/30/2009	09:10:44
2	1.00	1	12.2	0.950	1.6	11/30/2009	09:11:56
3	0.500	1	6.14	0.476	0.9	11/30/2009	09:13:08
4	0.100	1	1.26	0.0962	-3.5	11/30/2009	09:14:22
5	0.0500	1	0.651	0.0481	-9.3	11/30/2009	09:15:35
6	0.00	1	-0.0173	-0.00117		11/30/2009	09:16:49

Author: lachat

Date : 11/30/2009

Figure 1: NO3 + NO2

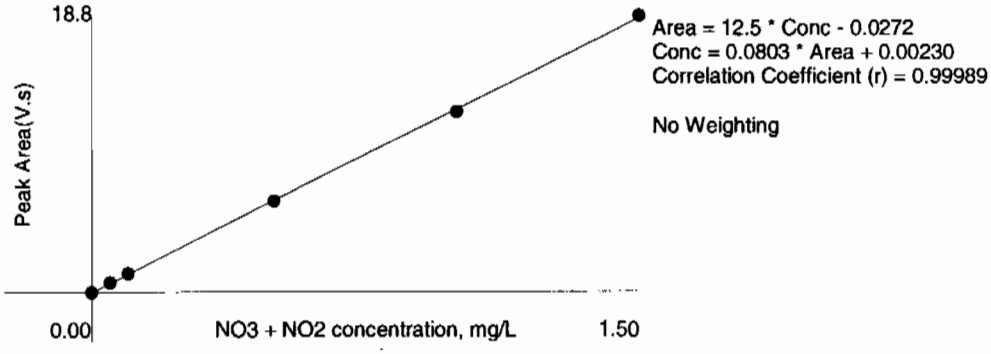

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-546

Method/Analysis Information

Procedure:	**Dry Weight-Percent Moisture**
Analytical Method:	
Analytical Batch Number:	924605

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201976566	241301001(CACH-10-4838) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 9.

Calibration Information:

Quality Control (QC) Information:

Designated QC
The following sample was used for QC: 241301001 (CACH-10-4838). The QC was from LANL work order 241301.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU. Not Applicable.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
Not Applicable. The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**AM241**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	927530
Prep Batch Number:	924595

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201983131	Method Blank (MB)
1201983132	241425001(WST03-10-2131) Sample Duplicate (DUP)
1201983133	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201983131 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241425001 (WST03-10-2131). The QC was from LANL work order 241425.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOPU**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	927531
Prep Batch Number:	924595

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201983134	Method Blank (MB)
1201983135	241425001(WST03-10-2131) Sample Duplicate (DUP)
1201983136	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201983134 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241425001 (WST03-10-2131). The QC was from LANL work order 241425.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**SR90**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	925141
Prep Batch Number:	924595

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201977812	Method Blank (MB)
1201977813	241425001(WST03-10-2131) Sample Duplicate (DUP)
1201977814	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 13.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. The initial Calibration was performed in January 2009.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquots for samples 1201977812 (MB) and 1201977814 (LCS) were changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241425001 (WST03-10-2131). The QC was from LANL work order 241425.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**H3**
Analytical Method:	GL-RAD-A-002
Analytical Batch Number:	927653

Sample ID	Client ID
241336001	RE03-09-13770
241336002	RE03-10-5897
1201983508	Method Blank (MB)
1201983509	241524002(WST03-10-2132) Sample Duplicate (DUP)
1201983510	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 18.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met. The initial Calibration was performed in July 2009.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 241524002 (WST03-10-2132). The QC was from LANL work order 241524.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Sample 1201983508 (MB) was recounted due to a suspected false positive.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: 12/14/09

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-546 GEL Work Order: 241336

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____ 12/14/09

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13770	Project:	LANL01004
Sample ID:	241336001	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	9.99%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00309	0.0322	+/-0.00225	0.050	pCi/g		HAKB	12/10/09	1238	927530	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00252	0.0205	+/-0.00472	0.050	pCi/g		HAKB	12/10/09	1031	927531	3
Plutonium-239/240	U	-0.00126	0.0231	+/-0.00282	0.050	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	0.00915	0.254	+/-0.0714	0.500	pCi/g		JXR1	12/04/09	1232	925141	4
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium	U	15.2	100	+/-29.5	250	pCi/L		KXK2	12/04/09	1639	927653	5

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EPA 905.0 Modified
5	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	73.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	89.8	(50%-105%)
Strontium Carrier	SR90 "Dry Weight Corrected"	73.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13770
Sample ID: 241336001

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d 5-day BOD--The 2:1 depletion requirement was not met for this sample
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-10-5897	Project:	LANL01004
Sample ID:	241336002	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.97%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00597	0.0256	+/-0.00497	0.050	pCi/g		HAKB	12/10/09	1238	927530	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	5.71E-10	0.0195	+/-0.00379	0.050	pCi/g		HAKB	12/10/09	1031	927531	3
Plutonium-239/240	U	0.00479	0.0219	+/-0.0034	0.050	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	-0.116	0.242	+/-0.0616	0.500	pCi/g		JXR1	12/04/09	1232	925141	4
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium	U	-65.7	99.9	+/-27.4	250	pCi/L		KXK2	12/04/09	1841	927653	5

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EPA 905.0 Modified
5	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	86.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	89.5	(50%-105%)
Strontium Carrier	SR90 "Dry Weight Corrected"	78.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-10-5897
Sample ID: 241336002
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d 5-day BOD--The 2:1 depletion requirement was not met for this sample
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 14, 2009

Client : Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241336

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 927530										
QC1201983132 241425001 DUP										
Americium-241	U	-0.00971	U	0.00206	pCi/g	0.698		(0-1)	HAKB	12/10/0912:38
	TPU:	+/-0.00679		+/-0.00164						
	Yield:	89.7		79.8						
QC1201983133 LCS										
Americium-241	33.2			30.6	pCi/g		92.3	(75%-125%)		
	TPU:			+/-2.18						
	Yield:			103						
QC1201983131 MB										
Americium-241			U	-0.00228	pCi/g					
	TPU:			+/-0.00247						
	Yield:			96.4						
Batch 927531										
QC1201983135 241425001 DUP										
Plutonium-238	U	0.0145	U	0.0121	pCi/g	0.115		(0-1)	HAKB	12/10/0910:31
	TPU:	+/-0.00622		+/-0.00431						
	Yield:	96.3		96.9						
Plutonium-239/240	U	0.0109	U	0.0143	pCi/g	0.195		(0-1)		
	TPU:	+/-0.00367		+/-0.00509						
	Yield:	96.3		96.9						
QC1201983136 LCS										
Plutonium-238				7.36	pCi/g			(75%-125%)		
	TPU:			+/-0.597						
	Yield:			64.4						
Plutonium-239/240	41.8			40.0	pCi/g		95.7	(75%-125%)		
	TPU:			+/-2.59						
	Yield:			64.4						
QC1201983134 MB										
Plutonium-238			U	0.00288	pCi/g					12/10/0910:31
	TPU:			+/-0.00911						
	Yield:			96.9						
Plutonium-239/240			U	-0.0072	pCi/g					
	TPU:			+/-0.00478						
	Yield:			96.9						
Rad Gas Flow										
Batch 925141										
QC1201977813 241425001 DUP										
Strontium-90	U	0.0229	U	0.167	pCi/g	0.505		(0-1)	JXR1	12/04/0912:32
	TPU:	+/-0.068		+/-0.0742						
	Yield:	71.7		75.1						
QC1201977814 LCS										
Strontium-90	19.3			18.5	pCi/g		95.6	(75%-125%)		12/04/0912:33
	TPU:			+/-1.98						
	Yield:			88.5						

QC Summary

Workorder: 241336

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 925141										
QC1201977812 MB										
Strontium-90			U	-0.0884	pCi/g					
	TPU:			+/-0.103						
	Yield:			87.4						
Rad Liquid Scintillation										
Batch 927653										
QC1201983509 241524002 DUP										
Tritium	U	-55.7	U	8.43	pCi/L	0.530		(0-1)	KXK2	12/08/0919:40
	TPU:	+/-27.8		+/-32.8						
QC1201983510 LCS										
Tritium	5620			5940	pCi/L		106	(75%-125%)		12/06/0900:01
	TPU:			+/-425						
QC1201983508 MB										
Tritium			U	-9.9	pCi/L					12/08/0918:37
	TPU:			+/-31.3						

Notes:
The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: 241336

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 9

Batch# 927530 Product: Am Date: 12/14/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [illegible] 12/14/09

Secondary Review Performed By: [illegible] 12/14/09

12/5 12/16

1 A N/

√P

Am/Cm Que Sheet

30-NOV-09

Batch #: 927530 | Analyst: HAKB | First Client Due Date: 16-DEC-09 | Internal Due Date05-DEC-09 | Comments:

Tracer(s): Am243/Cm244 | Tracer Code: 445-96-2-SS | Expiration Date: 5/11/10 | Vol: Ø.1

LCS Isotope(s): Am241/Cm244 | LCS Code(s): SRM 0244-B / NA | Expiration Date: 4/30/20 / NA | Vol(s): 0.106g NA

Spike Isotope(s): Am241/Cm244 | Spike Code(s): NA / NA | Expiration Date: NA / NA | Vol(s): NA / NA

Prep Date: 12/2/09 | Initials: HAKB | Pipet ID: 4499063 | Balance ID: 50410272 | Witness: KM 12-2-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g) 1/f)	Am/Cm Det # (12/14/09)
241327001-1	RE03-09-13618	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	1	1	1.264	~~70~~ 227
241327002-1	RE03-09-13622	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	2	2	1.256	71
241327003-1	RE03-09-13620	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	3	3	1.255	72
241327004-1	RE03-09-13619	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	4	4	1.255	73
241327005-1	RE03-09-13624	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	5	5	1.268	74
241327006-1	RE03-09-13623	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	6	6	1.260	76
241327007-1	RE03-09-13626	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	7	7	1.256	77
241327008-1	RE03-09-13621	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	8	8	1.260	79
241327009-1	RE03-09-13627	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	9	9	1.254	80
241327010-1	RE03-09-13625	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	10	10	1.255	83
241327011-1	RE03-10-6084	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	11	11	1.250	84
241327012-1	RE03-10-6085	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	12	12	1.253	85
241336001-1	RE03-09-13770	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	13	13	1.267	86
241336002-1	RE03-10-5897	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	14	14	1.261	87
241425001-1	WST03-10-2131	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	15	15	1.260	88
241425002-1	WST03-10-2130	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	16	16	1.251	89
1201983131-1	MB for batch 927530	MB		.05 pCi/g	SOIL	QC ACCOUNT		17	17	1.0	90
1201983132-1	WST03-10-2131(241425001DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	17-NOV-09	18	18	1.263	91
1201983133-1	LCS for batch 927530	LCS		.05 pCi/g	SOIL	QC ACCOUNT		19	19	0.106	92

Choose SOP Used: GL-RAD-A-011, GL-RAD-A-036, GL-RAD-A-045

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: [signature] 12/14/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 927530

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201983132	DUP	Americium-241	1.26 g	0.00206	0.00164	0.0254	-.00180952	pCi/g	NO
1201983133	LCS	Americium-241	0.106 g	30.6	2.18	0.260	-.02150943	pCi/g	NO
1201983131	MB	Americium-241	1.00 g	-0.00228	0.00247	0.0281	-.00228	pCi/g	NO
241327001	RE03-09-13618	Americium-241	1.26 g	0.00607	0.0034	0.0259	-.00180952	pCi/g	NO
241327002	RE03-09-13622	Americium-241	1.26 g	0.00984	0.00605	0.0256	-.00180952	pCi/g	NO
241327003	RE03-09-13620	Americium-241	1.26 g	0.00322	0.00783	0.0249	-.00180952	pCi/g	NO
241327004	RE03-09-13619	Americium-241	1.26 g	0.00186	0.0023	0.0242	-.00180952	pCi/g	NO
241327005	RE03-09-13624	Americium-241	1.27 g	-0.00463	0.00613	0.0279	-.00179528	pCi/g	NO
241327006	RE03-09-13623	Americium-241	1.26 g	-0.000348	0.00207	0.0289	-.00180952	pCi/g	NO
241327007	RE03-09-13626	Americium-241	1.26 g	0.0039	0.00585	0.0282	-.00180952	pCi/g	NO
241327008	RE03-09-13621	Americium-241	1.26 g	-0.00181	0.00287	0.0263	-.00180952	pCi/g	NO
241327009	RE03-09-13627	Americium-241	1.25 g	0.00184	0.00229	0.024	-.001824	pCi/g	NO
241327010	RE03-09-13625	Americium-241	1.26 g	0.00779	0.00596	0.0237	-.00180952	pCi/g	NO
241327011	RE03-10-6084	Americium-241	1.25 g	-0.00183	0.00323	0.022	-.001824	pCi/g	NO
241327012	RE03-10-6085	Americium-241	1.25 g	0.000552	0.00302	0.0234	-.001824	pCi/g	NO
241336001	RE03-09-13770	Americium-241	1.27 g	0.00309	0.00225	0.0322	-.00179528	pCi/g	NO
241336002	RE03-10-5897	Americium-241	1.26 g	0.00597	0.00497	0.0256	-.00180952	pCi/g	NO
241425001	WST03-10-2131	Americium-241	1.26 g	-0.00971	0.00679	0.026	-.00180952	pCi/g	YES
241425002	WST03-10-2130	Americium-241	1.25 g	0.00373	0.0041	0.0274	-.001824	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241336001_AM SAMPLE QTY: 1.267 G
DETECTOR NUMBER :78198 AVERAGE %EFFICIENCY :29.5330 % YIELD : 73.883	COUNT DATE:10-DEC-2009 12:38:58 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.15489 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B086.CNF;1001 BKG DATE : 6-DEC-2009 EFF FILE : W086.CNF;279 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	5.000	5.000	0.000	4.8778	100.0000	8.17E-03	3.69E-03	1.85E-02	4.14E-02	3.65E-03
CM-5/6	5386.000	5.000	5.000	0.000	19.8796	86.09000	9.46E-03	4.27E-03	8.75E-02	1.80E-01	4.23E-03
AM-241	5479.150	3.000	1.895	0.000	3.6563	99.94000	3.09E-03	2.25E-03	1.39E-02	3.22E-02	2.24E-03
CM-242	6102.000	2.000	1.000	1.000	3.7846	100.0000	1.81E-03	3.14E-03	1.43E-02	3.31E-02	3.14E-03
AM243	5270.000	642.000	635.000	7.000	2.6458	99.78000	1.04E+00	7.79E-02	1.01E-02	2.45E-02	4.16E-02
CM-247	4946.000	8.000	2.000	6.000	18.5713	79.30000	4.11E-03	7.69E-03	8.88E-02	1.83E-01	7.69E-03
CM-248	5078.600	10.000	9.000	1.000	26.3889	91.00000	1.61E-02	6.03E-03	1.10E-01	2.25E-01	5.94E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

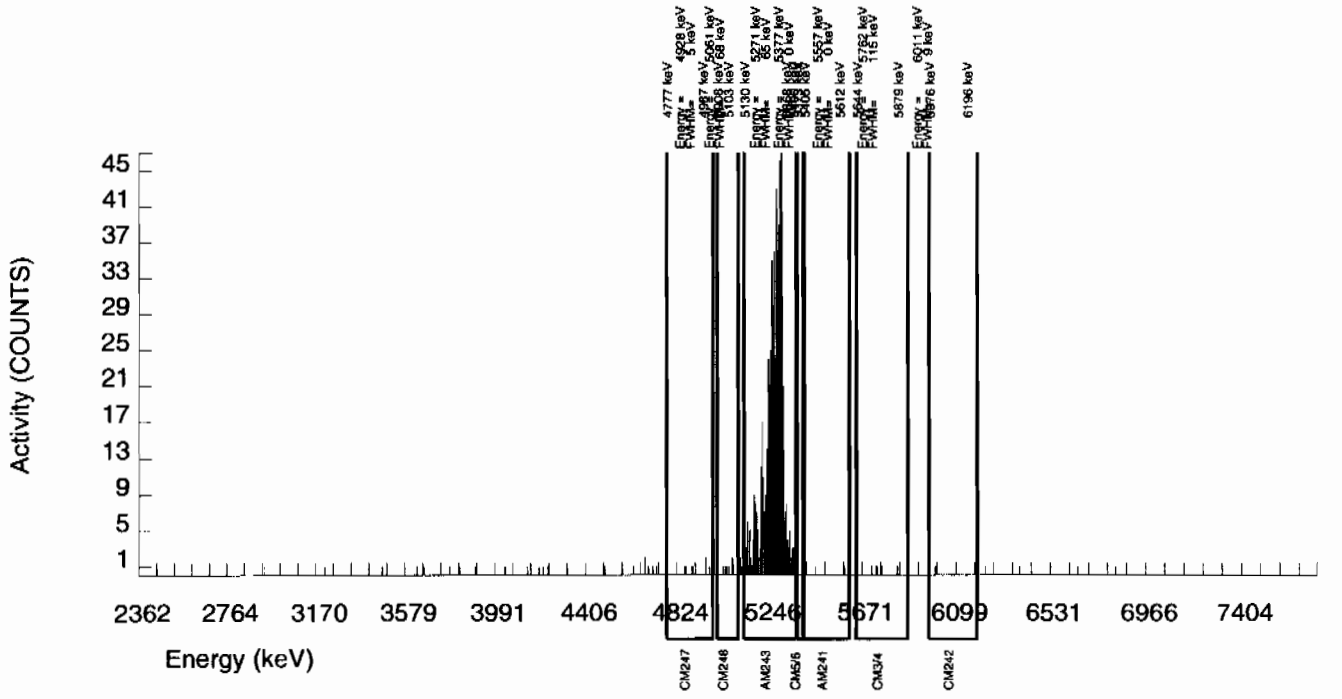

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241336002_AM SAMPLE QTY: 1.261 G
DETECTOR NUMBER :78199 AVERAGE %EFFICIENCY :31.9208 % YIELD : 86.333	COUNT DATE:10-DEC-2009 12:38:58 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.51802 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B087.CNF;1008 BKG DATE : 6-DEC-2009 EFF FILE : W087.CNF;272 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	6.000	5.000	1.000	4.8778	100.0000	6.50E-03	3.46E-03	1.47E-02	3.29E-02	3.44E-03
CM-5/6	5386.000	3.000	2.000	1.000	19.8796	86.09000	3.01E-03	3.02E-03	6.96E-02	1.43E-01	3.01E-03
AM-241	5479.150	11.000	4.604	5.000	3.6563	99.94000	5.97E-03	4.97E-03	1.10E-02	2.56E-02	4.96E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	7.20E-03	3.25E-03	1.14E-02	2.63E-02	3.22E-03
AM243	5270.000	811.000	802.000	9.000	3.0000	99.78000	1.04E+00	7.35E-02	9.07E-03	2.17E-02	3.72E-02
CM-247	4946.000	7.000	-4.000	11.000	18.5713	79.30000	-6.54E-03	6.94E-03	7.06E-02	1.46E-01	6.93E-03
CM-248	5078.600	9.000	4.000	5.000	26.3889	91.00000	5.70E-03	5.34E-03	8.74E-02	1.79E-01	5.33E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

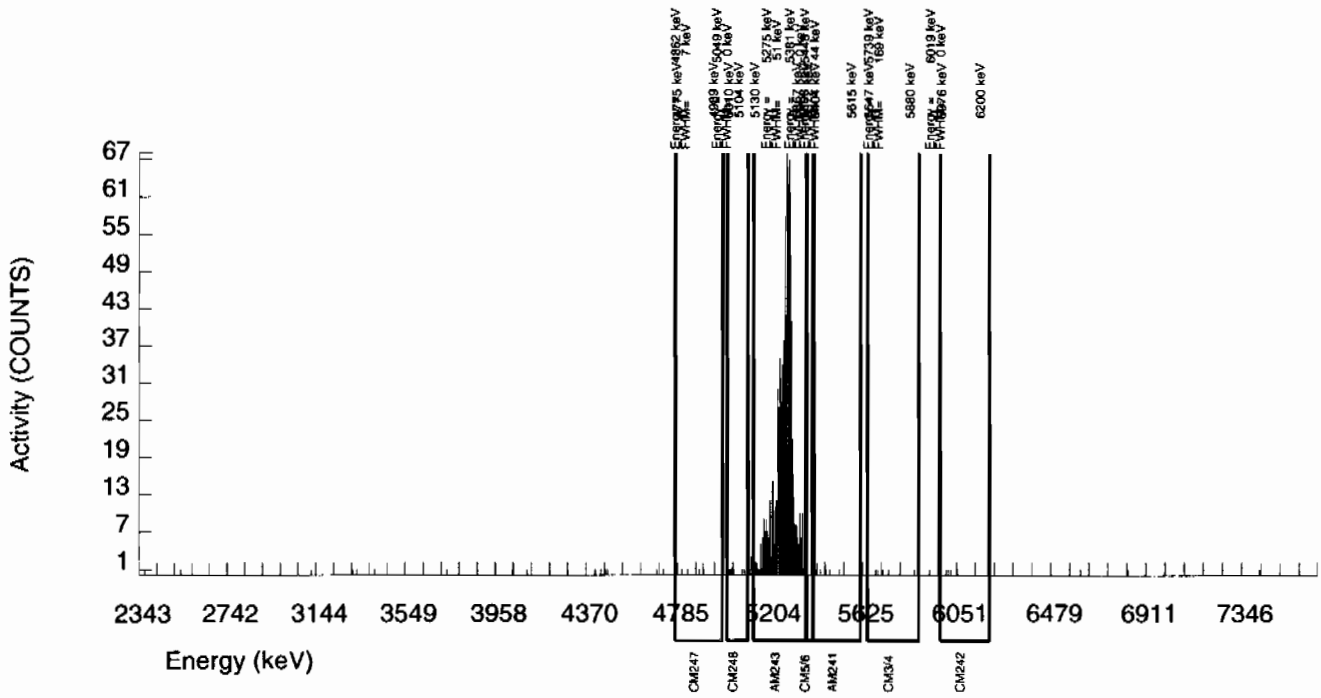

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 17-NOV-2009 00:00:00	SAMPLE ID : S0241425001_AM SAMPLE QTY: 1.260 G
DETECTOR NUMBER :33452 AVERAGE %EFFICIENCY :30.2890 % YIELD : 89.737	COUNT DATE:10-DEC-2009 12:38:58 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.61728 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B088.CNF;996 BKG DATE : 6-DEC-2009 EFF FILE : W088.CNF;282 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	10.000	2.000	8.000	4.8778	100.0000	2.64E-03	5.60E-03	1.49E-02	3.34E-02	5.59E-03
CM-5/6	5386.000	14.000	11.000	3.000	19.8796	86.09000	1.68E-02	6.38E-03	7.07E-02	1.45E-01	6.30E-03
AM-241	5479.150	11.000	-7.377	17.000	3.6563	99.94000	-9.71E-03	6.79E-03	1.12E-02	2.60E-02	6.79E-03
CM-242	6102.000	1.000	-5.000	6.000	3.7846	100.0000	-7.28E-03	3.85E-03	1.16E-02	2.67E-02	3.85E-03
AM243	5270.000	799.000	791.000	8.000	2.8284	99.78000	1.04E+00	7.38E-02	8.67E-03	2.09E-02	3.74E-02
CM-247	4946.000	5.000	-2.000	7.000	18.5713	79.30000	-3.32E-03	5.75E-03	7.17E-02	1.48E-01	5.75E-03
CM-248	5078.600	15.000	14.000	1.000	26.3889	91.00000	2.02E-02	5.91E-03	8.87E-02	1.81E-01	5.78E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

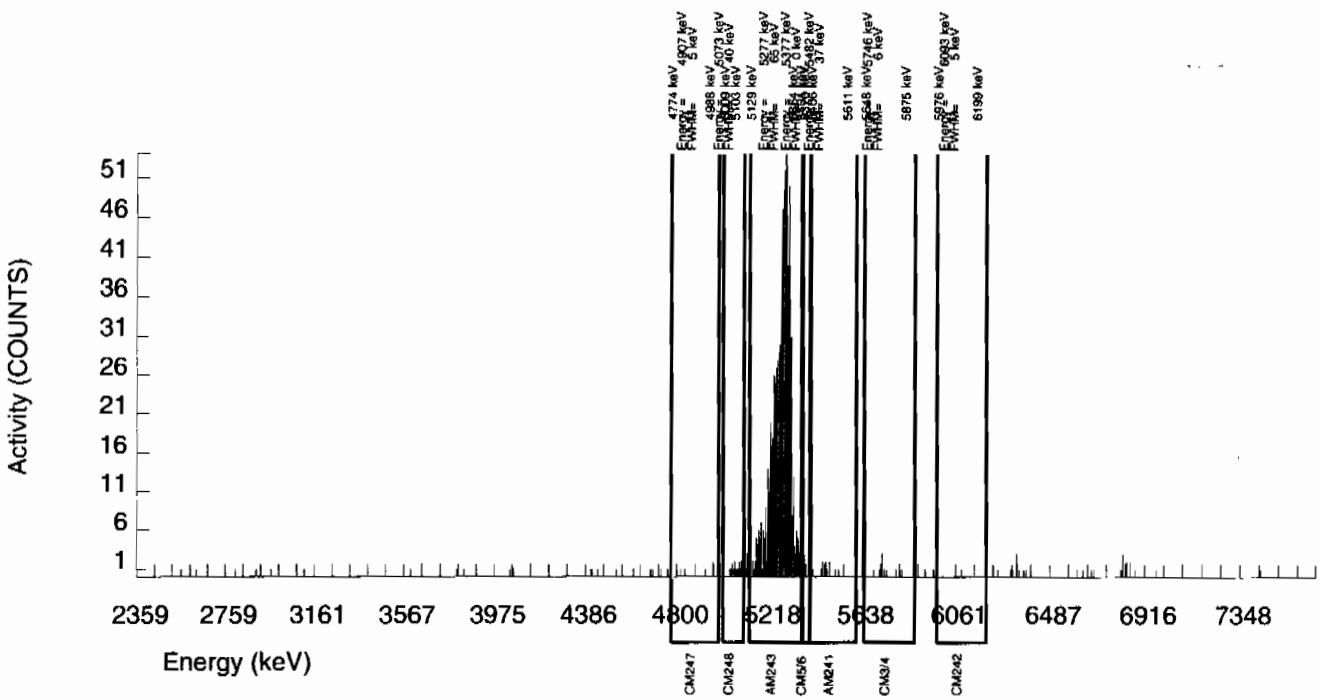

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 2-DEC-2009 00:00:00.	SAMPLE ID : S1201983131_AM SAMPLE QTY: 1.000 G
DETECTOR NUMBER :78263 AVERAGE %EFFICIENCY :32.7658 % YIELD : 96.377	COUNT DATE:10-DEC-2009 12:38:59 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B090.CNF;703
PCI/G : 3.316E+01	PCI/G : 3.316E+01	NOMINAL : 2.91661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.81094 dpm	EFF FILE : W090.CNF;197
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	3.000	1.000	4.8778	100.0000	4.28E-03	3.20E-03	1.62E-02	3.62E-02	3.19E-03
CM-5/6	5386.000	1.000	1.000	0.000	19.8796	86.09000	1.66E-03	1.66E-03	7.66E-02	1.58E-01	1.66E-03
AM-241	5479.150	2.000	-1.600	2.000	3.6563	99.94000	-2.28E-03	2.47E-03	1.21E-02	2.81E-02	2.47E-03
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	1.48E-03	1.48E-03	1.26E-02	2.90E-02	1.48E-03
AM243	5270.000	921.000	919.000	2.000	1.4142	99.78000	1.31E+00	9.12E-02	4.70E-03	1.33E-02	4.34E-02
CM-247	4946.000	19.000	12.000	7.000	18.5713	79.30000	2.16E-02	9.27E-03	7.77E-02	1.60E-01	9.17E-03
CM-248	5078.600	35.000	33.000	2.000	26.3889	91.00000	5.17E-02	1.00E-02	9.62E-02	1.97E-01	9.53E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

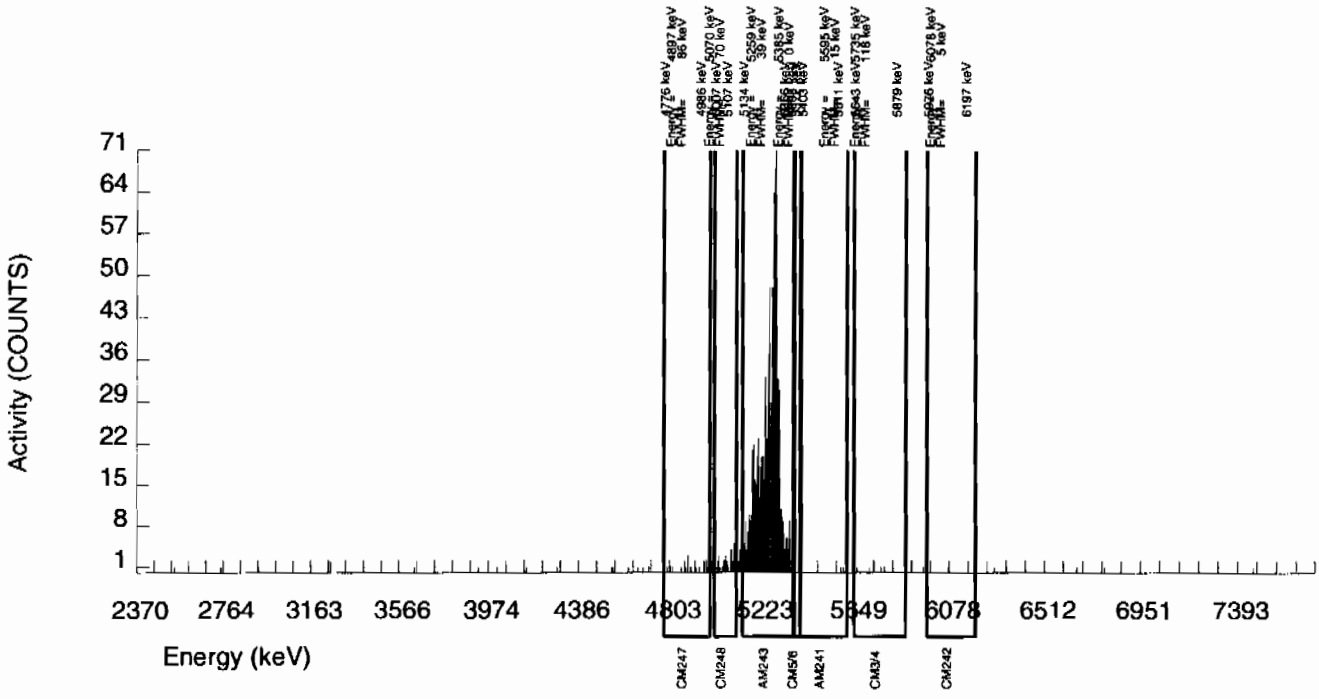

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 17-NOV-2009 00:00:00	SAMPLE ID : S1201983132_AM SAMPLE QTY: 1.263 G
DETECTOR NUMBER :78259 AVERAGE %EFFICIENCY :34.6765 % YIELD : 79.770	COUNT DATE:10-DEC-2009 12:38:59 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.32658 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B091.CNF;701 BKG DATE : 6-DEC-2009 EFF FILE : W091.CNF;188 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	3.000	3.000	0.000	4.8778	100.0000	3.88E-03	2.25E-03	1.46E-02	3.28E-02	2.24E-03
CM-5/6	5386.000	4.000	4.000	0.000	19.8796	86.09000	5.99E-03	3.02E-03	6.93E-02	1.43E-01	3.00E-03
AM-241	5479.150	3.000	1.599	0.000	3.6563	99.94000	2.06E-03	1.64E-03	1.10E-02	2.54E-02	1.63E-03
CM-242	6102.000	4.000	4.000	0.000	3.7846	100.0000	5.71E-03	2.88E-03	1.14E-02	2.62E-02	2.85E-03
AM243	5270.000	807.000	805.000	2.000	1.4142	99.78000	1.04E+00	7.45E-02	4.25E-03	1.20E-02	3.68E-02
CM-247	4946.000	17.000	15.000	2.000	18.5713	79.30000	2.44E-02	7.25E-03	7.02E-02	1.45E-01	7.09E-03
CM-248	5078.600	43.000	43.000	0.000	26.3889	91.00000	6.09E-02	1.00E-02	8.70E-02	1.78E-01	9.29E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

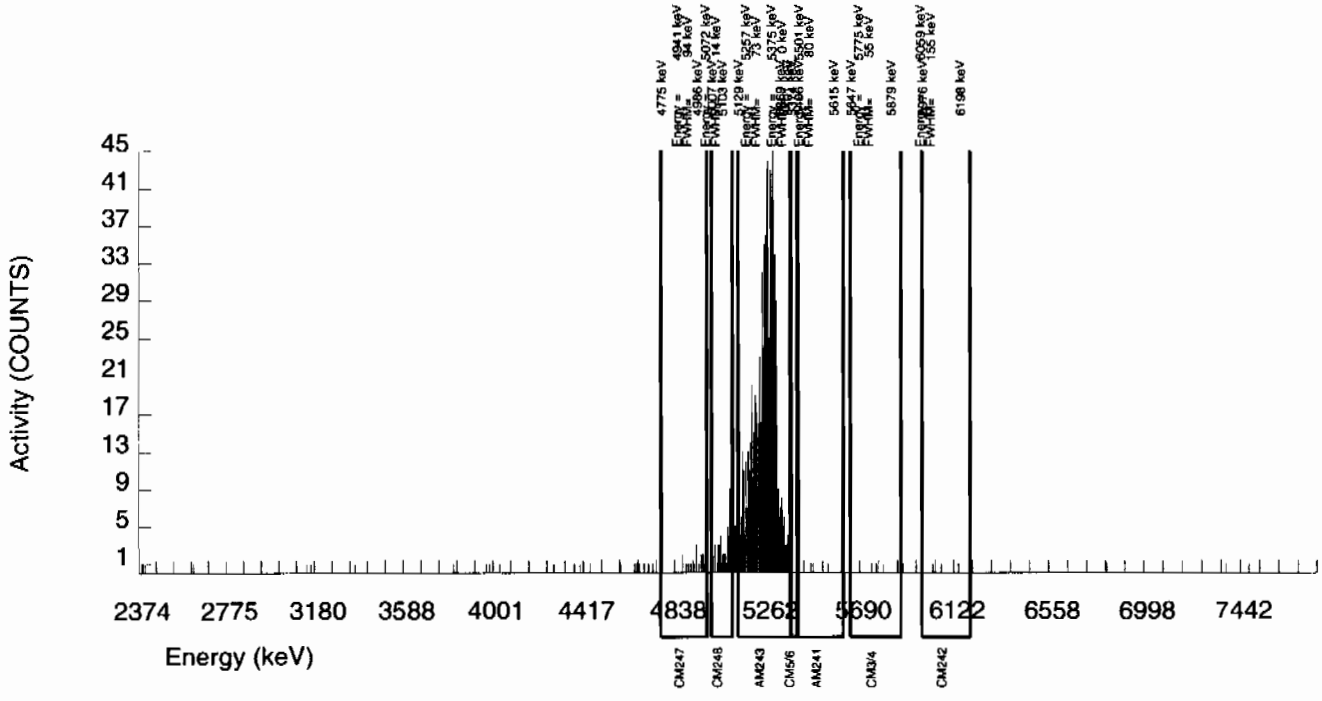

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 2-DEC-2009 00:00:00.	SAMPLE ID : S1201983133_AM SAMPLE QTY: 0.106 G
DETECTOR NUMBER :79457 AVERAGE %EFFICIENCY :31.2136 % YIELD : 103.151	COUNT DATE:10-DEC-2009 12:38:59 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91661 dpm RESULTS : 3.00852 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B092.CNF;704 BKG DATE : 6-DEC-2009 EFF FILE : W092.CNF;231 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	10.000	9.000	1.000	4.8778	100.0000	1.19E-01	4.46E-02	1.50E-01	3.35E-01	4.38E-02
CM-5/6	5386.000	101.000	101.000	0.000	19.8796	86.09000	1.55E+00	1.87E-01	7.09E-01	1.46E+00	1.54E-01
AM-241	5479.150	2321.000	2318.369	1.000	3.6563	99.94000	3.06E+01	2.18E+00	1.12E-01	2.60E-01	6.36E-01
CM-242	6102.000	6.000	6.000	0.000	3.7846	100.0000	8.22E-02	3.40E-02	1.16E-01	2.68E-01	3.36E-02
AM243	5270.000	940.000	937.000	3.000	1.7321	99.78000	1.24E+01	9.36E-01	5.33E-02	1.42E-01	4.06E-01
CM-247	4946.000	9.000	-1.000	10.000	18.5713	79.30000	-1.66E-02	7.26E-02	7.19E-01	1.48E+00	7.25E-02
CM-248	5078.600	17.000	11.000	6.000	26.3889	91.00000	1.60E-01	7.04E-02	8.90E-01	1.82E+00	6.96E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

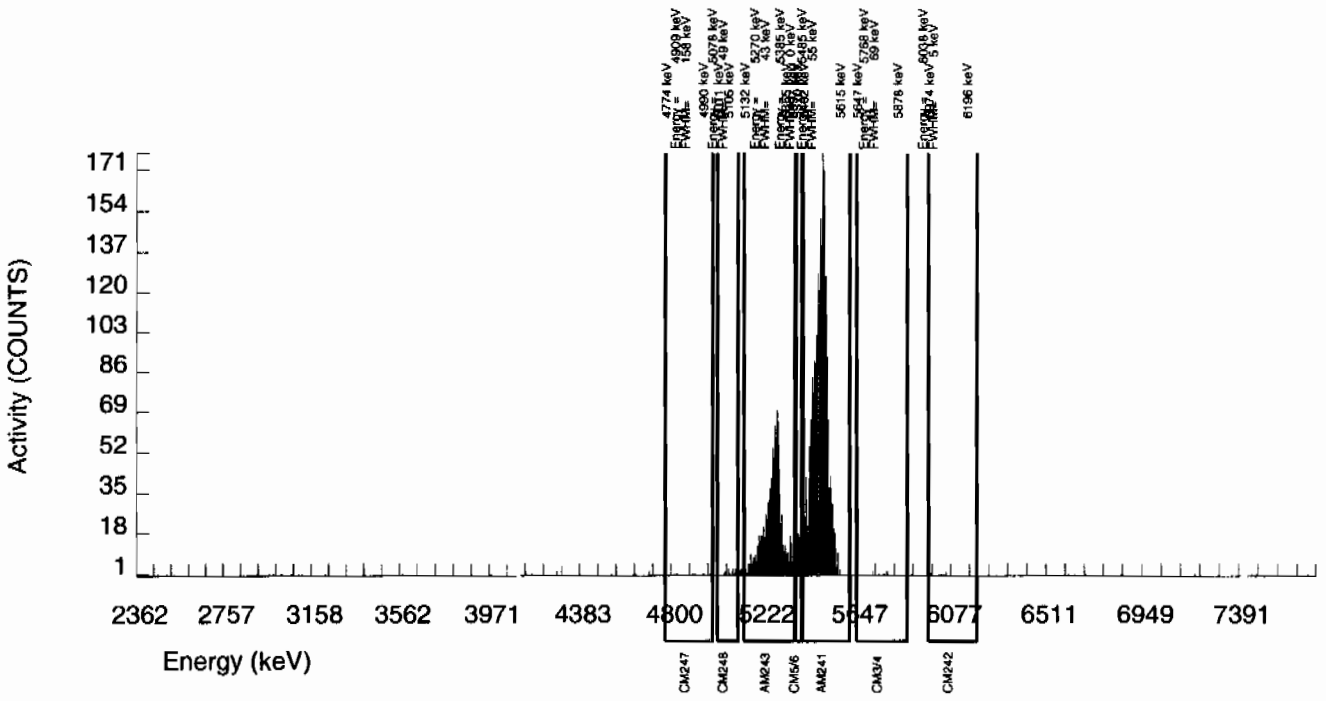

Radiochemistry Batch Checklist, Rev 9

Batch# 927531 Product: Pu Date: 12/11/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analyses.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Denise Green 12/11/09

Secondary Review Performed By: Jack M C 12/11/09

12/14

✓ P

Plutonium Que Sheet

30-NOV-09

Batch #: 927531 Analyst: HAKB First Client Due Date:16-DEC-09 Internal Due Date:05-DEC-09

Tracer Isotope(s): Pu-242/Pu-238 Tracer Code: 1373-A Expiration Date: 10/27/10 Vol: 0.1

LCS Isotope(s): Pu-239/Pu-238 LCS Code: SLM 0244-B Expiration Date: 4/30/20 Vol: 0.106 g

Spike Isotope(s): Pu-239/Pu-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/2/09 Initials: HAKB Pipet ID: 4497063 Balance ID: 5041027Z Witness: KM 12-7-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/f)	Pu Det #
241327001-1	RE03-09-13618	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	1	1	1.264	7
241327002-1	RE03-09-13622	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	2	2	1.256	8
241327003-1	RE03-09-13620	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	3	3	1.255	9
241327004-1	RE03-09-13619	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	4	4	1.255	10
241327005-1	RE03-09-13624	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	5	5	1.268	11
241327006-1	RE03-09-13623	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	6	6	1.260	12
241327007-1	RE03-09-13626	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	7	7	1.256	19
241327008-1	RE03-09-13621	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	8	8	1.260	20
241327009-1	RE03-09-13627	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	9	9	1.254	21
241327010-1	RE03-09-13625	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	10	10	1.255	23
241327011-1	RE03-10-6084	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	11	11	1.250	24
241327012-1	RE03-10-6085	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	12	12	1.253	25
241336001-1	RE03-09-13770	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	13	13	1.267	26
241336002-1	RE03-10-5897	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	14	14	1.261	27
241425001-1	WST03-10-2131	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	15	15	1.261	28
241425002-1	WST03-10-2130	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	16	16	1.251	29
1201983134-1	MB for batch 927531	MB		.05 pCi/g	SOIL	QC ACCOUNT		17	17	1.0	30
1201983135-1	WST03-10-2131(241425001DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	17-NOV-09	18	18	1.263	31
1201983136-1	LCS for batch 927531	LCS		.05 pCi/g	SOIL	QC ACCOUNT		19	19	0.106	33

Choose SOP Used: GL-RAD-A-011
~~GL-RAD-A-045~~
GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: DS 12/11/09

GEL Laboratories LLC, , Radiochemistry Division

Blank Correction Report

Batch ID 927531

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201983135	DUP	Plutonium-238	1.26 g	0.0121	0.00431	0.0179	.002285714	pCi/g	NO
		Plutonium-239/240	1.26 g	0.0143	0.00509	0.0201	-.00571429	pCi/g	NO
1201983136	LCS	Plutonium-238	0.106 g	7.36	0.597	0.339	.027169811	pCi/g	NO
		Plutonium-239/240	0.106 g	40.0	2.59	0.381	-.06792453	pCi/g	NO
1201983134	MB	Plutonium-238	1.00 g	0.00288	0.00911	0.0234	.00288	pCi/g	YES
		Plutonium-239/240	1.00 g	-0.0072	0.00478	0.0264	-.0072	pCi/g	NO
241327001	RE03-09-13618	Plutonium-238	1.26 g	0.00295	0.0104	0.0239	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00589	0.00552	0.0269	-.00571429	pCi/g	NO
241327002	RE03-09-13622	Plutonium-238	1.26 g	-0.00122	0.0061	0.0198	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.0061	0.00405	0.0223	-.00571429	pCi/g	NO
241327003	RE03-09-13620	Plutonium-238	1.26 g	-0.00482	0.00817	0.0196	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00964	0.0042	0.022	-.00571429	pCi/g	NO
241327004	RE03-09-13619	Plutonium-238	1.26 g	0.00749	0.00729	0.0203	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	-0.00125	0.00279	0.0228	-.00571429	pCi/g	NO
241327005	RE03-09-13624	Plutonium-238	1.27 g	0.00629	0.00766	0.0204	.002267717	pCi/g	YES
		Plutonium-239/240	1.27 g	0.00503	0.00591	0.023	-.00566929	pCi/g	NO
241327006	RE03-09-13623	Plutonium-238	1.26 g	0.00	0.00854	0.0225	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00415	0.00537	0.0253	-.00571429	pCi/g	NO
241327007	RE03-09-13626	Plutonium-238	1.26 g	-0.00127	0.00524	0.0206	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00381	0.00221	0.0232	-.00571429	pCi/g	NO
241327008	RE03-09-13621	Plutonium-238	1.26 g	-0.00649	0.00699	0.0211	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.0013	0.0043	0.0237	-.00571429	pCi/g	NO
241327009	RE03-09-13627	Plutonium-238	1.25 g	-0.00246	0.00887	0.020	.002304	pCi/g	YES
		Plutonium-239/240	1.25 g	0.00492	0.00522	0.0225	-.00576	pCi/g	NO
241327010	RE03-09-13625	Plutonium-238	1.26 g	-2.17E-09	0.00737	0.0185	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	-0.00455	0.00455	0.0208	-.00571429	pCi/g	NO
241327011	RE03-10-6084	Plutonium-238	1.25 g	-0.00238	0.00653	0.0193	.002304	pCi/g	YES
		Plutonium-239/240	1.25 g	-0.00119	0.00357	0.0218	-.00576	pCi/g	NO
241327012	RE03-10-6085	Plutonium-238	1.25 g	-0.00389	0.00869	0.021	.002304	pCi/g	YES
		Plutonium-239/240	1.25 g	0.0104	0.00413	0.0237	-.00576	pCi/g	NO
241336001	RE03-09-13770	Plutonium-238	1.27 g	0.00252	0.00472	0.0205	.002267717	pCi/g	YES
		Plutonium-239/240	1.27 g	-0.00126	0.00282	0.0231	-.00566929	pCi/g	NO
241336002	RE03-10-5897	Plutonium-238	1.26 g	5.71E-10	0.00379	0.0195	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00479	0.0034	0.0219	-.00571429	pCi/g	NO
241425001	WST03-10-2131	Plutonium-238	1.26 g	0.0145	0.00622	0.0197	.002285714	pCi/g	NO
		Plutonium-239/240	1.26 g	0.0109	0.00367	0.0221	-.00571429	pCi/g	NO
241425002	WST03-10-2130	Plutonium-238	1.25 g	0.0134	0.00854	0.0197	.002304	pCi/g	NO
		Plutonium-239/240	1.25 g	5.79E-10	0.00421	0.0222	-.00576	pCi/g	NO

12/11/04

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241336001_PU SAMPLE QTY: 1.267 G
DETECTOR NUMBER :78204 AVERAGE %EFFICIENCY :31.4322 % YIELD : 89.847	COUNT DATE:10-DEC-2009 10:31:22 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.79228 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B026.CNF;1091 BKG DATE : 9-DEC-2009 EFF FILE : W026.CNF;298 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2.000	-1.000	3.000	3.3488	99.90000	-1.26E-03	2.82E-03	9.82E-03	2.30E-02	2.82E-03
PU-236	5749.000	25.000	0.000	25.000	2.0294	100.0000	2.44E-09	9.05E-03	5.94E-03	1.53E-02	9.05E-03
PU-238	5499.000	8.000	2.000	6.000	2.9082	99.90000	2.52E-03	4.72E-03	8.53E-03	2.05E-02	4.72E-03
PU242	4890.000	1194.000	1192.000	2.000	1.4142	100.0000	1.50E+00	8.83E-02	4.14E-03	1.17E-02	4.35E-02
PU-244	4589.000	9.000	7.000	2.000	6.8218	99.90000	8.82E-03	4.20E-03	2.00E-02	4.34E-02	4.18E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

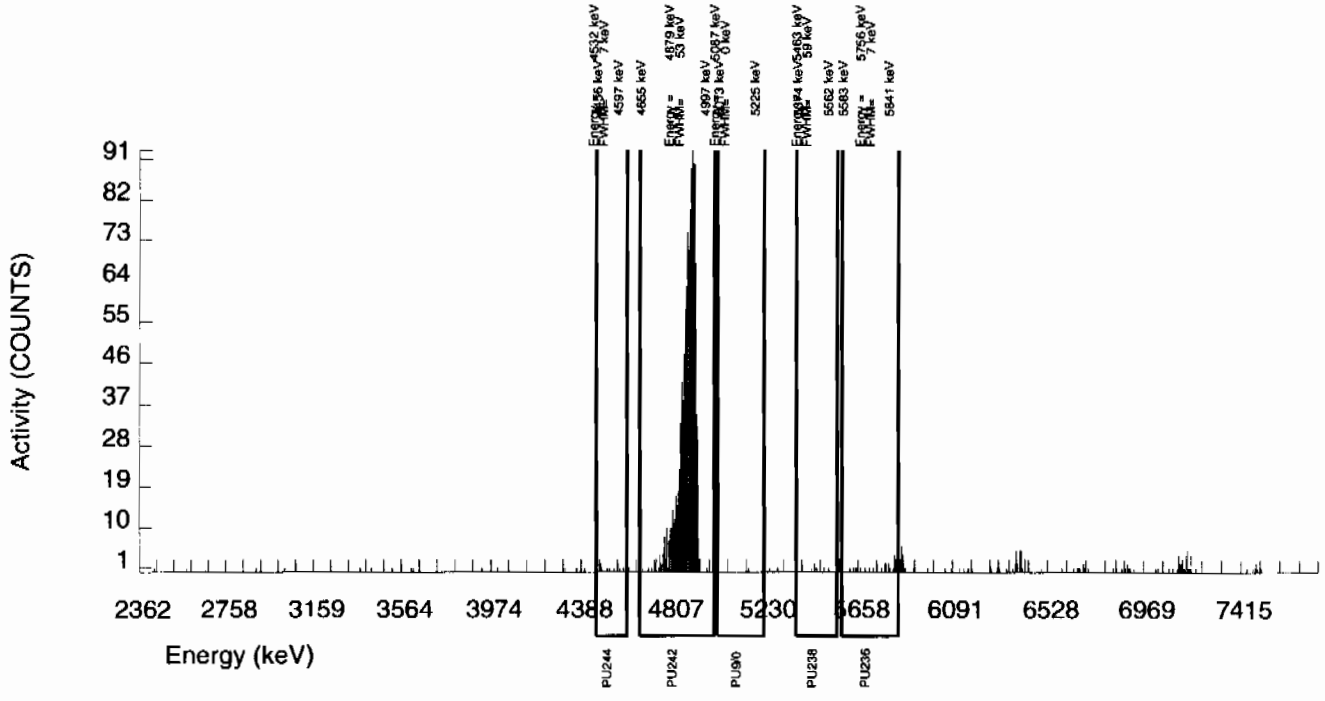

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241336002_PU SAMPLE QTY: 1.261 G
DETECTOR NUMBER :42484 AVERAGE %EFFICIENCY :33.3660 % YIELD : 89.468	COUNT DATE:10-DEC-2009 10:31:22 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.77629 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B027.CNF;1097 BKG DATE : 9-DEC-2009 EFF FILE : W027.CNF;325 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	6.000	4.000	2.000	3.3488	99.90000	4.79E-03	3.40E-03	9.33E-03	2.19E-02	3.39E-03
PU-236	5749.000	36.000	0.000	36.000	2.0294	100.0000	4.64E-09	1.03E-02	5.65E-03	1.45E-02	1.03E-02
PU-238	5499.000	5.000	0.000	5.000	2.9082	99.90000	5.71E-10	3.79E-03	8.10E-03	1.95E-02	3.79E-03
PU242	4890.000	1267.000	1260.000	7.000	2.6458	100.0000	1.51E+00	8.77E-02	7.37E-03	1.80E-02	4.27E-02
PU-244	4589.000	3.000	-1.000	4.000	6.8218	99.90000	-1.20E-03	3.17E-03	1.90E-02	4.13E-02	3.17E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

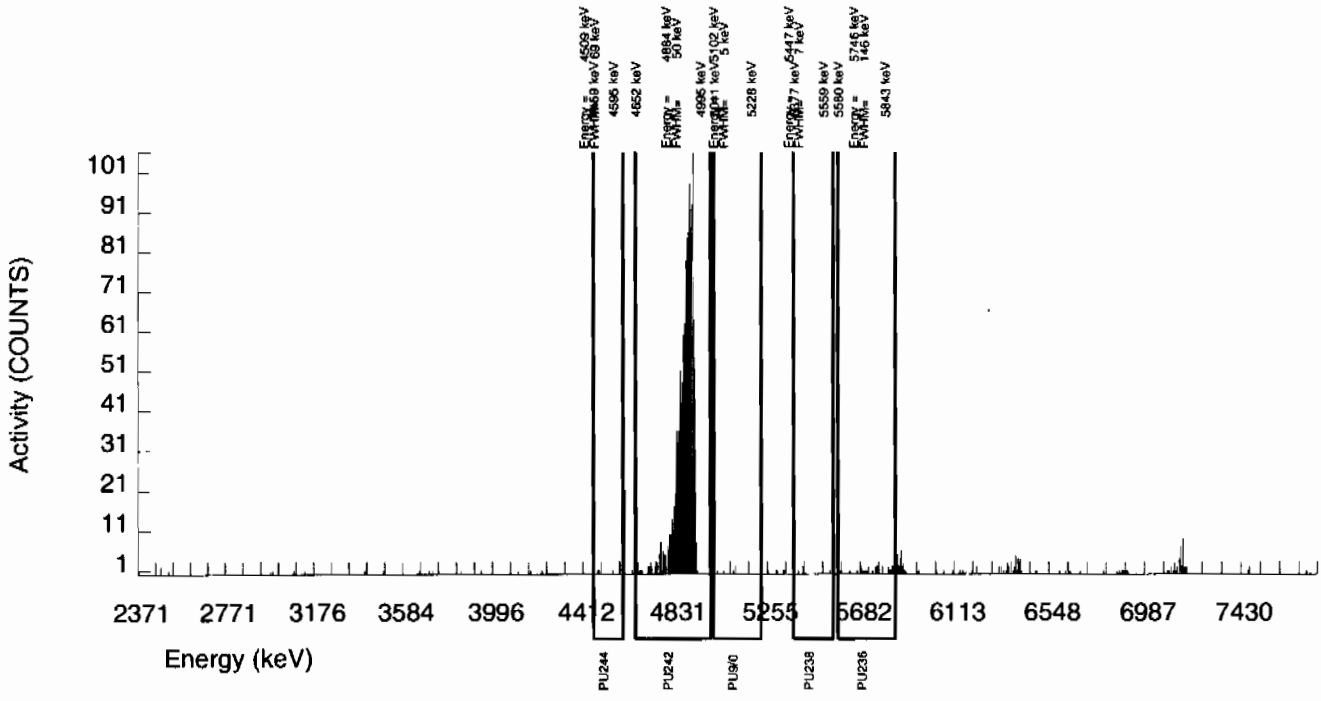

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 17-NOV-2009 00:00:00	SAMPLE ID : S0241425001_PU SAMPLE QTY: 1.261 G
DETECTOR NUMBER :78792 AVERAGE %EFFICIENCY :30.6909 % YIELD : 96.263	COUNT DATE:10-DEC-2009 10:31:22 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 4.06309 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B028.CNF;1101 BKG DATE : 9-DEC-2009 EFF FILE : W028.CNF;317 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	9.000	0.000	3.3488	99.90000	1.09E-02	3.67E-03	9.43E-03	2.21E-02	3.63E-03
PU-236	5749.000	29.000	-2.000	31.000	2.0294	100.0000	-2.46E-03	9.51E-03	5.71E-03	1.47E-02	9.51E-03
PU-238	5499.000	19.000	12.000	7.000	2.9082	99.90000	1.45E-02	6.22E-03	8.19E-03	1.97E-02	6.17E-03
PU242	4890.000	1255.000	1247.000	8.000	2.8284	100.0000	1.51E+00	8.80E-02	7.96E-03	1.92E-02	4.30E-02
PU-244	4589.000	5.000	3.000	2.000	6.8218	99.90000	3.63E-03	3.21E-03	1.92E-02	4.17E-02	3.20E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

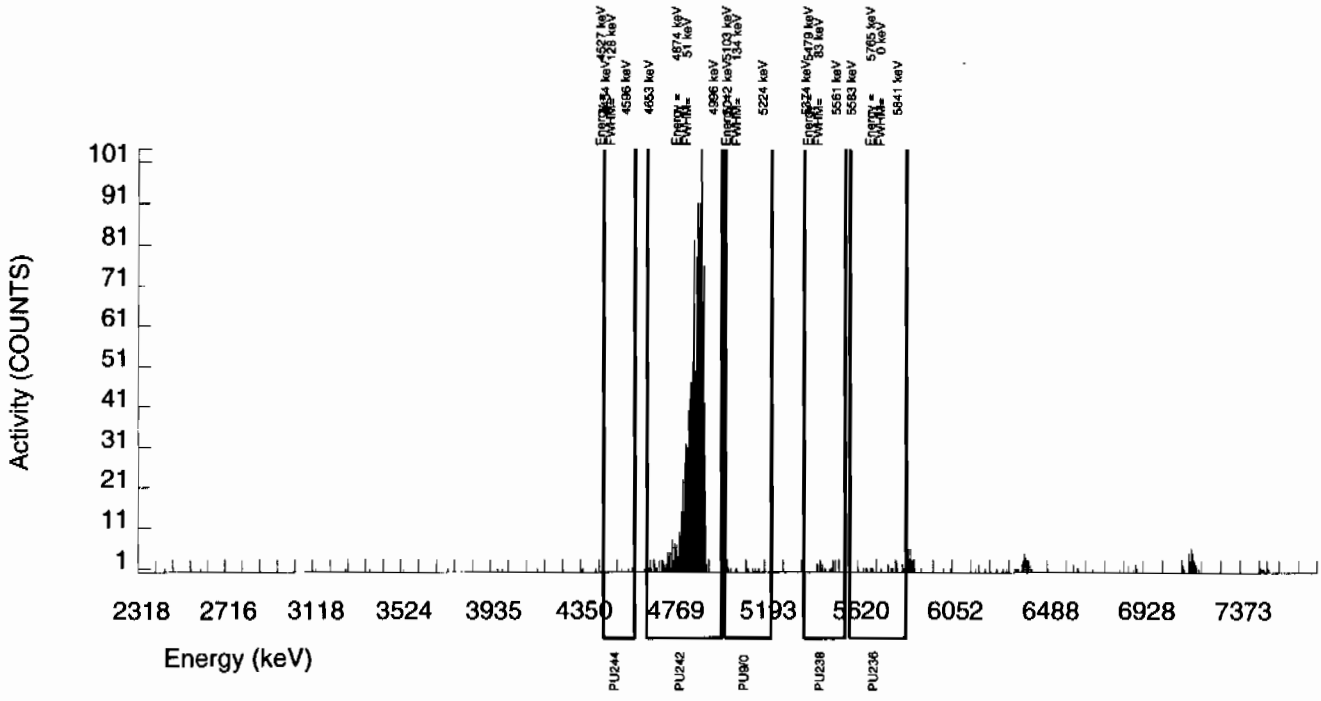

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 2-DEC-2009 00:00:00.	SAMPLE ID : S1201983134_PU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :33447 AVERAGE %EFFICIENCY :32.3059 % YIELD : 96.878	COUNT DATE:10-DEC-2009 10:31:22 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 4.08903 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B030.CNF;1089 BKG DATE : 9-DEC-2009 EFF FILE : W030.CNF;301 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	-5.000	8.000	3.3488	99.90000	-7.20E-03	4.78E-03	1.12E-02	2.64E-02	4.78E-03
PU-236	5749.000	39.000	0.000	39.000	2.0294	100.0000	5.52E-09	1.28E-02	6.80E-03	1.75E-02	1.28E-02
PU-238	5499.000	21.000	2.000	19.000	2.9082	99.90000	2.88E-03	9.11E-03	9.75E-03	2.34E-02	9.11E-03
PU242	4890.000	1329.000	1321.000	8.000	2.8284	100.0000	1.90E+00	1.10E-01	9.47E-03	2.28E-02	5.26E-02
PU-244	4589.000	10.000	7.000	3.000	6.8218	99.90000	1.01E-02	5.22E-03	2.29E-02	4.96E-02	5.19E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

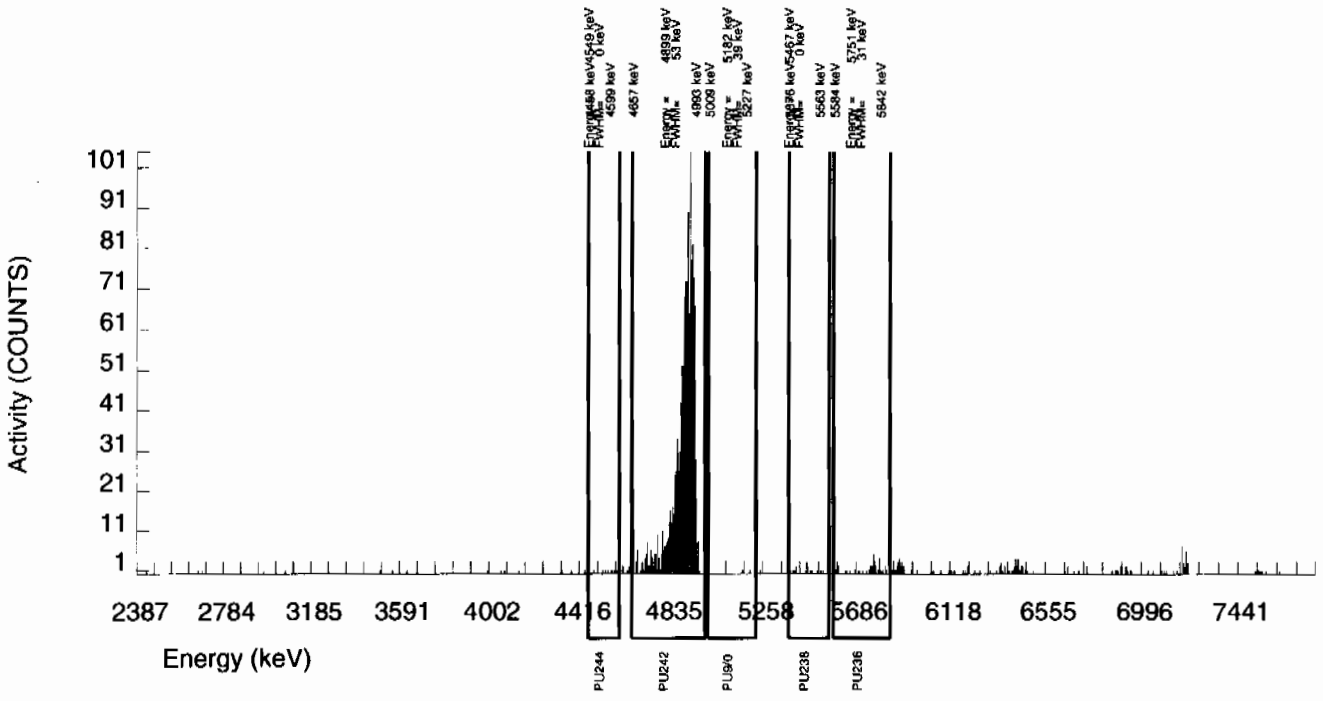

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 17-NOV-2009 00:00:00	SAMPLE ID : S1201983135_PU SAMPLE QTY: 1.263 G
DETECTOR NUMBER :79988 AVERAGE %EFFICIENCY :33.4677 % YIELD : 96.913	COUNT DATE:10-DEC-2009 10:31:23 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 4.09051 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B031.CNF;1087 BKG DATE : 9-DEC-2009 EFF FILE : W031.CNF;341 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	17.000	13.000	4.000	3.3488	99.90000	1.43E-02	5.09E-03	8.58E-03	2.01E-02	5.04E-03
PU-236	5749.000	32.000	-2.000	34.000	2.0294	100.0000	-2.23E-03	9.08E-03	5.19E-03	1.34E-02	9.08E-03
PU-238	5499.000	13.000	11.000	2.000	2.9082	99.90000	1.21E-02	4.30E-03	7.45E-03	1.79E-02	4.27E-03
PU242	4890.000	1377.000	1369.000	8.000	2.8284	100.0000	1.51E+00	8.33E-02	7.24E-03	1.75E-02	4.09E-02
PU-244	4589.000	8.000	4.000	4.000	6.8218	99.90000	4.40E-03	3.82E-03	1.75E-02	3.79E-02	3.81E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

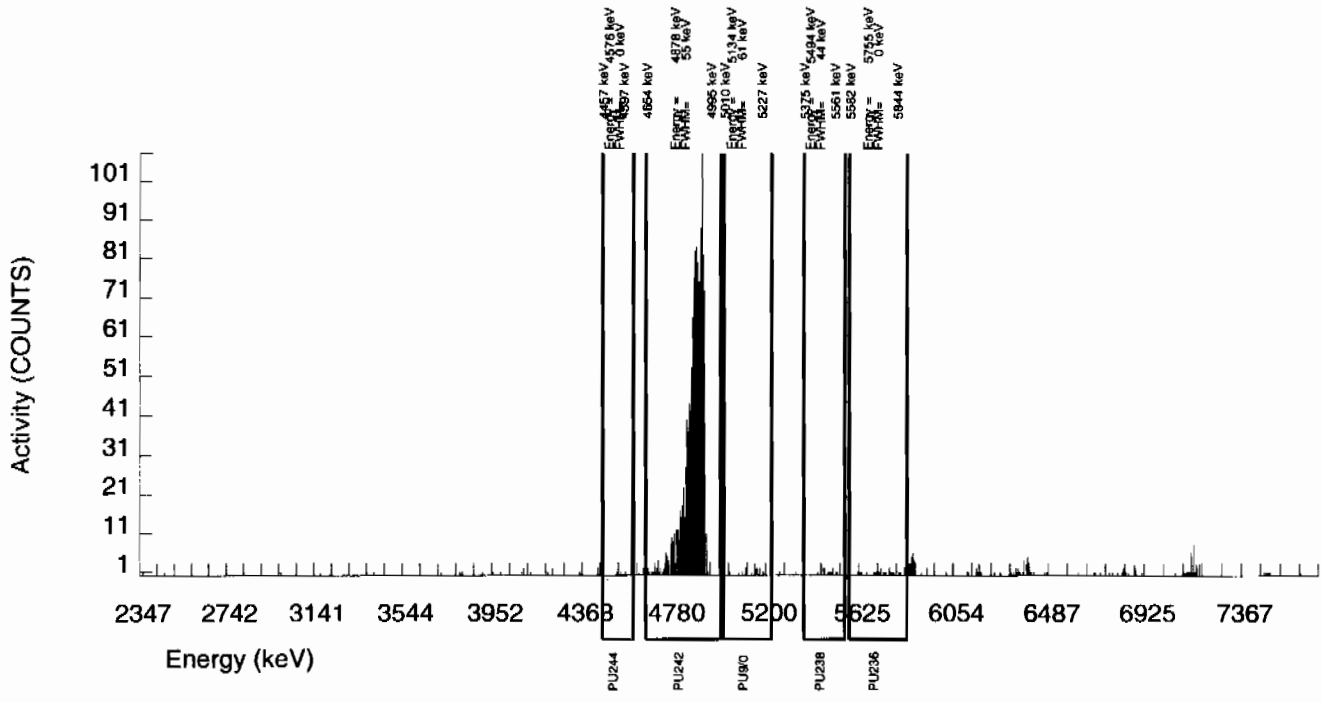

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 2-DEC-2009 00:00:00.	SAMPLE ID : S1201983136_PU SAMPLE QTY: 0.106 G
DETECTOR NUMBER :78785 AVERAGE %EFFICIENCY :31.6999 % YIELD : 64.350	COUNT DATE:10-DEC-2009 10:31:23 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 2.71609 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B033.CNF;1086 BKG DATE : 9-DEC-2009 EFF FILE : W033.CNF;326 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	1918.000	1917.000	1.000	3.3488	99.90000	4.00E+01	2.59E+00	1.62E-01	3.81E-01	9.13E-01
PU-236	5749.000	27.000	-11.000	38.000	2.0294	100.0000	-2.30E-01	1.69E-01	9.84E-02	2.53E-01	1.69E-01
PU-238	5499.000	357.000	353.000	4.000	2.9082	99.90000	7.36E+00	5.97E-01	1.41E-01	3.39E-01	3.96E-01
PU242	4890.000	861.000	861.000	0.000	0.0000	100.0000	1.79E+01	1.25E+00	0.00E+00	5.65E-02	6.11E-01
PU-244	4589.000	5.000	5.000	0.000	6.8218	99.90000	1.04E-01	4.71E-02	3.31E-01	7.18E-01	4.66E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

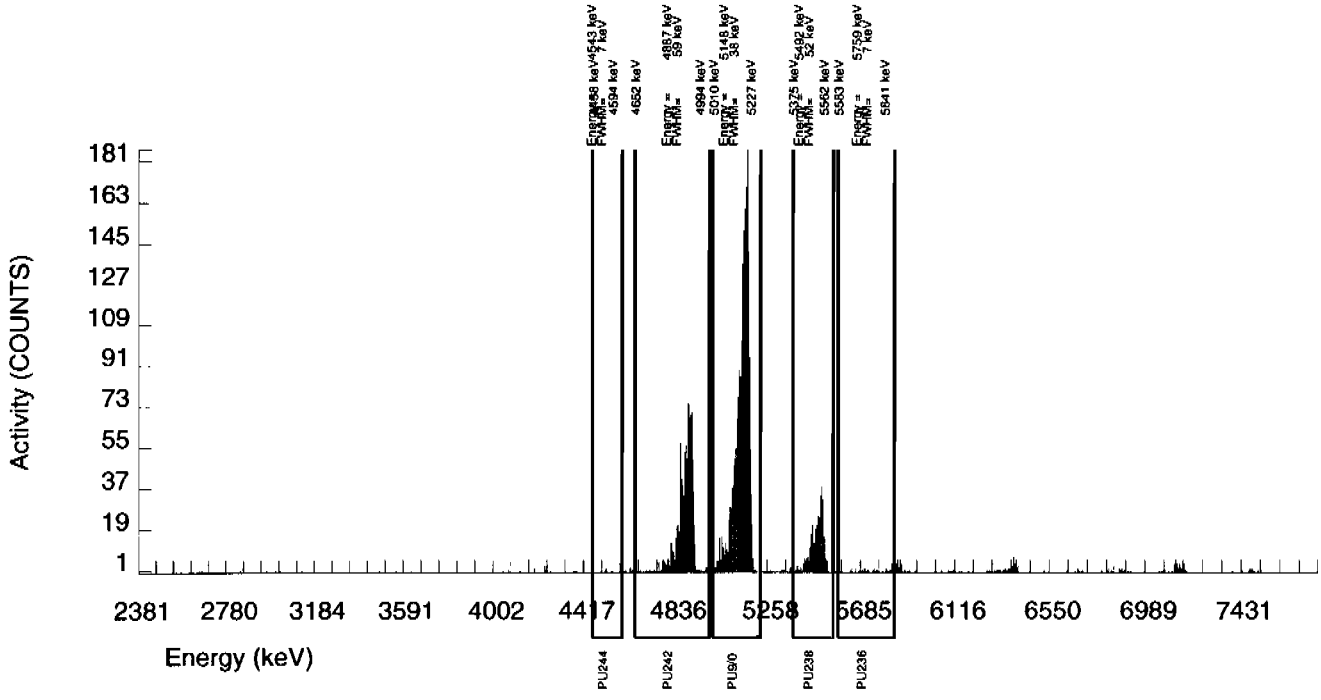

Radiochemistry Batch Checklist, Rev 9

Batch# 925141 Product: Sr 90 Date: 12-04-09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)		✓	NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			NA
Batch non-conformances second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature]

Secondary Review Performed By: [signature]

LANL 12-16-09

Strontium 90 Que Sheet

11/20/09

Batch #: 925141 Analyst: JXR1 First Client Due Date: 12/16/2009 Internal Due Date: 12/05/2009 Comments

Sr-90 Spike Code: ~~Expiration Date: Vol:~~ Sr Sep. Date/time: 12-2-09 / 0939

Sr-90 LCS Code: 1067-C Expiration Date: 6-17-10 Vol: 0.1

Sr Carrier Code: 1194590 Exp Date: 3-19-10 Vol: 0.5 Sdt Wt: 8.93

Prep Date: ~~11-23-09~~ 11-30-09 Initials: JLR JLR 11-30-09 Pipet ID: 1795419 Balance #: 19350208 Analytical Scale #: 38110047 Witness: 11/30/09

Sample ID	Client Description	Type	RDL	Collection Date	Matrix	Client	Rad	Pos. #	Wet/Dry Aliquot (mL) or (g)	Det # 1 & 2	Initial Sr wt (g)	Final Sr wt (g)	Net Sr wt (mg)
241336001-1	RE03-09-13770	SAMPLE	.5 pCi/g	NOV-16-09 12:00 PM	SOIL	LANL010		1	2.033	F1	0.0250	0.0316	6.6
241336002-1	RE03-10-5897	SAMPLE	.5 pCi/g	NOV-16-09 12:00 PM	SOIL	LANL010		2	2.071	G1	0.0259	0.0329	7.0
241425001-1	WST03-10-2131	SAMPLE	.5 pCi/g	NOV-17-09 12:00 PM	SOIL	LANL010		3	2.014	G2	0.0257	0.0321	6.4
241425002-1	WST03-10-2130	SAMPLE	.5 pCi/g	NOV-17-09 12:00 PM	SOIL	LANL010		4	2.020	G3	0.0250	0.0318	6.8
1201977812-1	MB for batch 925141	MB	.5 pCi/g		SOIL	QC ACCOUNT		5	* ~~2.071~~	G4	0.0256	0.0334	7.8
1201977813-1	WST03-10-2131(241425001DUP)	DUP	.5 pCi/g	NOV-17-09 12:00 PM	SOIL	QC ACCOUNT		6	2.030	H1	0.0256	0.0323	6.7
1201977814-1	LCS for batch 925141	LCS	.5 pCi/g		SOIL	QC ACCOUNT		7	* ~~2.071~~	H2	0.0259	0.0338	7.9

*1.00 @ 12-04-09

12/7/09

dailies ✓ wts ✓

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One) Data Reviewed By: 12-04-09

Blank Correction Report

Batch ID 925141

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201977813	DUP	Strontium-90	2.03 g	0.167	0.0742	0.230	-.04354680	pCi/g	NO
1201977814	LCS	Strontium-90	1.00 g	18.5	1.98	0.373	-.0884	pCi/g	NO
1201977812	MB	Strontium-90	1.00 g	-0.0884	0.103	0.391	-.0884	pCi/g	NO
241336001	RE03-09-13770	Strontium-90	2.03 g	0.00915	0.0714	0.254	-.04354680	pCi/g	NO
241336002	RE03-10-5897	Strontium-90	2.07 g	-0.116	0.0616	0.242	-.04270531	pCi/g	NO
241425001	WST03-10-2131	Strontium-90	2.01 g	0.0229	0.068	0.241	-.04398010	pCi/g	NO
241425002	WST03-10-2130	Strontium-90	2.02 g	-0.0204	0.0646	0.235	-.04376238	pCi/g	NO

S925141

Strontium-90 Solid

Filename : SR90.XLS
File type : Excel
Version # : 1.2.9

Spike S/N : N/A
Spike Exp Date : N/A
Spike Activity (dpm/ml): N/A
Spike Volume Added: N/A

Batch : 925141
Analyst : JXR1
Prep Date : 11/30/2009

LCS S/N : 1067-C
LCS Exp Date : 6/17/2010
LCS Activity (dpm/ml): 429.44
LCS Volume Added: 0.10

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Sr-90 Abundance : 1
Method Uncertainty : 0.1005

Procedure Code : GFC90SRS
Parmname : Strontium-90
Required MDC : 0.5 pCi/G
Halflife of Sr-90 : 28.90 years
Halflife of Y-90 : 64.053 hours

Geometry: Tuffryn Filter

Carrier S/N : 1194590
Carrier Exp Date : 3/19/2010
Carrier Volume Added: 0.50
Carrier Weight (mg/ml): 17.85
Carrier Weight StDev.: 0.06

Sample Characteristics					Carrier Calculations				
Pos.	Sample ID	Sample Aliquot G	Sample Aliquot StDev. G	Sample Date/Time	Carrier Weight (mg) (Standard)	Net Weight (mg) (Sample)	Net Weight StDev. (mg)	Carrier Aliquot (mL)	Carrier Aliquot StDev. (mL)
1	241336001.1	2.0330	3.4306E-03	11/16/2009 12:00	17.85	6.60	0.035897	0.5	0.002564
2	241336002.1	2.0710	3.4345E-03	11/16/2009 12:00	17.85	7.00	0.037416	0.5	0.002564
3	241425001.1	2.0140	3.4286E-03	11/17/2009 12:00	17.85	6.40	0.034837	0.5	0.002564
4	241425002.1	2.0200	3.4292E-03	11/17/2009 12:00	17.85	6.80	0.036556	0.5	0.002564
5	1201977812.1	1.0000	3.3233E-03	11/30/2009 0:00	17.85	7.80	0.040854	0.5	0.002564
6	1201977813.1	2.0300	3.4303E-03	11/17/2009 12:00	17.85	6.70	0.036127	0.5	0.002564
7	1201977814.1	1.0000	3.3233E-03	11/30/2009 0:00	17.85	7.90	0.041284	0.5	0.002564

Count Raw Data

Pos.	Detector ID	Counting Time (min.)	Gross Counts Alpha	Gross Counts Beta	Gross Beta CPM	Count Start Date/Time	Strontium Separation Date/Time	Yttrium Ingrowth	Sr-90 Decay	Calculated Sample Recovery %	Sample Recovery Error %
1	F1	60	5	95	1.582	12/4/2009 12:32	12/2/2009 9:39	0.427	0.999	73.95%	0.98%
2	G1	60	14	77	1.278	12/4/2009 12:32	12/2/2009 9:39	0.427	0.999	78.43%	0.97%
3	G2	60	7	83	1.380	12/4/2009 12:33	12/2/2009 9:39	0.427	0.999	71.71%	0.98%
4	G3	60	2	86	1.432	12/4/2009 12:33	12/2/2009 9:39	0.427	0.999	76.19%	0.98%
5	G4	60	7	68	1.131	12/4/2009 12:33	12/2/2009 9:39	0.427	1.000	87.39%	0.96%
6	H1	60	4	99	1.647	12/4/2009 12:32	12/2/2009 9:39	0.427	0.999	75.07%	0.98%
7	H2	60	7	1646	27.431	12/4/2009 12:33	12/2/2009 9:39	0.427	1.000	88.52%	0.96%

Calibration Data

Pos.	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm) Sr-90	Detector Efficiency (cpm/dpm) Y-90	Detector Efficiency Error (cpm/dpm)	Alpha X-Talk	Weekly Bkg CPM	Weekly Bkg Count Time (min.)
1	LB4100	1/12/2009	1/31/2010	0.4661	0.5985	0.01646	0.01596	1.560	500
2	LB4100	1/12/2009	1/31/2010	0.4519	0.5918	0.01162	0.02378	1.572	500
3	LB4100	1/12/2009	1/31/2010	0.4813	0.5975	0.01093	0.02766	1.326	500
4	LB4100	1/12/2009	1/31/2010	0.4853	0.6053	0.01200	0.03516	1.484	500
5	LB4100	1/12/2009	1/31/2010	0.4746	0.6008	0.01264	0.02297	1.256	500
6	LB4100	1/12/2009	1/31/2010	0.4579	0.5908	0.02167	0.03789	1.248	500
7	LB4100	1/12/2009	1/31/2010	0.4676	0.5997	0.01656	0.02233	1.140	500

S925141

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDC for 1201977813.1

Results Pos.	Decision Level pCi/G	Critical Level pCi/G	Required MDC pCi/G	MDC pCi/G	Sample Act. Conc. pCi/G	Sample Act. Error pCi/G	Net Count Rate CPM	Net Count Rate Error CPM	1 SIGMA Counting Uncertainty pCi/G	1 SIGMA Total Prop. Uncertainty pCi/G	Sample QC	Sample Type	RPD	RER	Nominal pCi/G	Recovery
1	0.1653	0.1167	0.5	0.2542	**9.149E-03**	7.8041	0.0220	0.1717	0.0714	0.0714		SAMPLE				
2	0.1573	0.1111	0.5	0.2418	**-0.1160**	0.5316	-0.2942	0.1563	0.0616	0.0616		SAMPLE				
3	0.1555	0.1098	0.5	0.2407	**0.0228**	2.9603	0.0541	0.1602	0.0679	0.0680		SAMPLE				
4	0.1528	0.1079	0.5	0.2355	**-0.0204**	3.1603	-0.0518	0.1638	0.0646	0.0646		SAMPLE				
5	0.2516	0.1777	0.5	0.3906	**-0.0884**	1.1660	-0.1253	0.1461	0.1031	0.1031		MB				
6	0.1482	0.1047	0.5	0.2301	**0.1665**	0.4339	0.3995	0.1731	0.0721	0.0742	241425001.1	DUP	0.0%	0.5047		
7	0.2392	0.1688	0.5	0.3729	**18.4990**	0.0323	26.2907	0.6778	0.4769	1.9766		LCS			19.3441	95.6%

Sheet6

SampleID	Instr	Time (min.)	Alpha Counts	Beta Counts	Count Start Time	Count End Time	Machine
241336001	F1	60	5	95	12/4/2009 12:32	12/4/2009 13:32	LB4100
241336002	G1	60	14	77	12/4/2009 12:32	12/4/2009 13:32	LB4100
241425001	G2	60	7	83	12/4/2009 12:33	12/4/2009 13:33	LB4100
241425002	G3	60	2	86	12/4/2009 12:33	12/4/2009 13:33	LB4100
1201977812	G4	60	7	68	12/4/2009 12:33	12/4/2009 13:33	LB4100
1201977813	H1	60	4	99	12/4/2009 12:32	12/4/2009 13:32	LB4100
1201977814	H2	60	7	1646	12/4/2009 12:33	12/4/2009 13:33	LB4100

Radiochemistry Batch Checklist, Rev 9

Batch# 927063 Product: H3 Date: 12/10/2009

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)			N/A
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Nancy Marie Hunt

Secondary Review Performed By: [illegible] 12/10/09

LAM 12/11/2009

Tritium Que Sheet

120 Orange / 03-DEC-09

Batch #: 927653 **Analyst:** KXK2 **First Client Due Date** 11-DEC-09 **Internal Due Date:** 27-NOV-09

Spike Isotope: Hydrogen-3 **Spike Code:** _____ **Expiration Date:** _____ **Vol:** ____

LCS Isotope: Hydrogen-3 **LCS Code:** 0134-K **Expiration Date:** 3/27/10 **Vol:** 0.1

Prep Date: 12/2/09 **Initials:** KXK **Pipet ID:** 29709168 **Witness:** Am 12/3/09

Sample ID	Client Samp ID	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Total Moisture KXK 12/2/09 Dist Vol (mL)
241301001-1	CACH-10-4838	SAMPLE		.25 pCi/mL	SOIL	LANL010	16-NOV-09	10	5	1		570.70	517.62	53.08
241336001-1	RE03-09-13770	SAMPLE		.25 pCi/mL	SOIL	LANL010	16-NOV-09	10	6	2		447.32	403.04	44.28
241336002-1	RE03-10-5897	SAMPLE		.25 pCi/mL	SOIL	LANL010	16-NOV-09	10	7	3		693.91	646.03	47.88
241425001-1	WST03-10-2131	SAMPLE		.25 pCi/mL	SOIL	LANL010	17-NOV-09	10	8	4		525.14	483.65	41.49
241425002-1	WST03-10-2130	SAMPLE		.25 pCi/mL	SOIL	LANL010	17-NOV-09	10	9	5		541.26	488.22	53.04
241518001-1	CALA-10-4848	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	10	6		740.51	714.59	25.92
241518002-1	CABG-10-4888	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	11	7		510.68	321.73	188.95
241518003-1	CABG-10-4889	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	~~12~~ 42	8	KXK 12/3/09	630.35	442.51	187.84
241518004-1	CABG-10-4886	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	13 ~~43~~	9		674.01	494.72	179.29
241518005-1	CABG-10-4890	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	14	10		556.77	325.15	231.62
241518006-1	CABG-10-4887	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	~~15~~ 44	11		635.35	343.09	292.26
241524002-1	WST03-10-2132	SAMPLE		.25 pCi/mL	SOIL	LANL010	18-NOV-09	10	16	12		630.64	591.54	39.10
241909001-1	WST49-10-6924	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	5	17	13		482.63	469.60	13.03
241909002-1	WST49-10-6923	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	5	~~18~~ 46	14		591.15	584.65	6.50
1201983508-1	MB for batch 927653	MB		.25 pCi/mL	SOIL	QC ACCOUNT		10	~~19~~ 44	15		20.00	0	20.00
1201983509-1	WST03-10-2132(241524002DUP)	DUP		.25 pCi/mL	SOIL	QC ACCOUNT	18-NOV-09	10	~~20~~ 44	12		630.64	591.54	39.10
1201983510-1	LCS for batch 927653	LCS		.25 pCi/mL	SOIL	QC ACCOUNT		10	21	16		20.00		20.00

17

Bkg Rack #: 4

KXK 12/3/2009

Comments: _____

Instrument Used (circle as appropriate): *LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4040127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299, Purple 7069123, Silver 7060656*

ORANGE

GEL Laboratories LLC, Radiochemistry Division

Bkg prepared with dead water? Yes/No

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly vial; Ecoscint Ultra (10 mL sample/13 mL Ecoscint Ultra)*

Data Reviewed By: [signature]

DATE	12/1/2009	INITIALS	KXK2		BATCH NUMBER	927653

Sample #	Sample Wet (g)	% Moisture of Sample (Balance Interface using % Moisture Batch)	Total Moisture in Sample (mL)	Sample Dry (g)	mLs aliquoted into LSC vial	Collection Tube Number
241301001	570.70	0.093	53.08	517.62	10	23
241336001	447.32	0.099	44.28	403.04	10	914
241336002	693.91	0.069	47.88	646.03	10	902
241425001	525.14	0.079	41.49	483.65	10	10
241425002	541.26	0.098	53.04	488.22	10	8
241518001	740.51	0.035	25.92	714.59	10	912
241518002	510.68	0.370	188.95	321.73	10	OVEN
241518003	630.35	0.298	187.84	442.51	10	OVEN
241518004	674.01	0.266	179.29	494.72	10	OVEN
241518005	556.77	0.416	231.62	325.15	10	OVEN
241518006	635.35	0.460	292.26	343.09	10	OVEN
241524002	630.64	0.062	39.10	591.54	10	801
241909001	482.63	0.027	13.03	469.60	5	49
241909002	591.15	0.011	6.50	584.65	5	532
MB			0.00	0.00	10	1
LCS			0.00	0.00	10	2

T927653R2

Tritium Solid

Filename :	H3VAC.XLS	Spike S/N :	N/A	LCS S/N :	0134-K
File type :	Excel	Spike Exp Date :	N/A	LCS Exp Date :	3/27/2010
Version # :	1.2.5	Spike Activity (dpm/ml):	N/A	LCS Activity (dpm/ml):	2495.34
		Spike Volume Added:	N/A	LCS Volume Added:	0.10
Batch :	927653				
Analyst :	KXK2				
Prep Date :	12/2/2009				

					Procedure Code :	LSC_VH3S	
H-3 Abundance :	1	Pipet, 0.1 ml Stdev : +/-	0.000701	ml	Parmname :	Tritium	
Method Uncertainty :	0.0691	Pipet, 0.5 ml Stdev : +/-	0.002564	ml	Required MDC :	250	pCi/L
Geometry:	10mL DW/13mL Ecoscint Ultra	Pipet, 1.0 ml Stdev : +/-	0.005480	ml	Halflife of Tritium :	12.28	years
		Pipet, 5.0 ml Stdev : +/-	0.025729	ml			

Sample Characteristics

Pos.	Sample ID	Wet Sample Weight (g)	Total Moisture L	Sample Aliquot in Vial L	Sample Aliquot Stdev. L	Dry Sample Weight (g)	% Moisture of Sample	Rig number	Sample Date/Time
1	241301001.1	570.70	0.0531	0.0100	2.5729E-05	517.62	9.30%	1	11/16/2009 12:00
2	241336001.1	447.32	0.0443	0.0100	2.5729E-05	403.04	9.90%	2	11/16/2009 12:00
3	241336002.1	693.91	0.0479	0.0100	2.5729E-05	646.03	6.90%	3	11/16/2009 12:00
4	241425001.1	525.14	0.0415	0.0100	2.5729E-05	483.65	7.90%	4	11/17/2009 12:00
5	241425002.1	541.26	0.0530	0.0100	2.5729E-05	488.22	9.80%	5	11/17/2009 12:00
6	241518001.1	740.51	0.0259	0.0100	2.5729E-05	714.59	3.50%	6	11/18/2009 12:00
7	241518002.1	510.68	0.1890	0.0100	2.5729E-05	321.73	37.00%	7	11/18/2009 12:00
8	241518003.1	630.35	0.1878	0.0100	2.5729E-05	442.51	29.80%	8	11/18/2009 12:00
9	241518004.1	674.01	0.1793	0.0100	2.5729E-05	494.72	26.60%	9	11/18/2009 12:00
10	241518005.1	556.77	0.2316	0.0100	2.5729E-05	325.15	41.60%	10	11/18/2009 12:00
11	241518006.1	635.35	0.2923	0.0100	2.5729E-05	343.09	46.00%	11	11/18/2009 12:00
12	241524002.1	630.64	0.0391	0.0100	2.5729E-05	591.54	6.20%	12	11/18/2009 12:00
13	241909001.1	482.63	0.0130	0.0050	2.5729E-05	469.60	2.70%	13	11/24/2009 12:00
14	241909002.1	591.15	0.0065	0.0050	2.5729E-05	584.65	1.10%	14	11/24/2009 12:00
15	1201983508.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	15	12/2/2009 0:00
16	1201983509.1	630.64	0.0391	0.0100	2.5729E-05	591.54	6.20%	12	11/18/2009 12:00
17	1201983510.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	16	12/2/2009 0:00

T927653R2

Count raw Data					Background				Calibration Data					Backgrounds	
Pos.	Rack Position #	Counting Time (min.)	Quench#	Gross cpm	cpm	Count Time (min.)	Count Start Date/Time	Sample Decay	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Efficiency Error (cpm/dpm)	Rack Position #	Count Start Date/Time
1	5	120.03	761	1.8	1.79	120	12/4/2009 14:36	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2727	0.00792	4	12/4/2009 12:34
2	6	120.03	757.94	1.88	1.79	120	12/4/2009 16:39	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2677	0.00792	4	12/4/2009 12:34
3	7	120.03	758.32	1.4	1.79	120	12/4/2009 18:41	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2683	0.00792	4	12/4/2009 12:34
4	8	120.03	752.87	1.55	1.79	120	12/4/2009 20:44	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2593	0.00792	4	12/4/2009 12:34
5	9	120.03	763.19	1.38	1.79	120	12/4/2009 22:46	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2762	0.00792	4	12/4/2009 12:34
6	10	120.03	762.82	1.38	1.79	120	12/5/2009 0:49	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2757	0.00792	4	12/4/2009 12:34
7	11	120.03	759.29	1.35	1.79	120	12/5/2009 4:07	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2699	0.00792	4	12/4/2009 12:34
8	42	60.0297	759.54	1	1.33	90	12/8/2009 13:57	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2703	0.00792	41	12/8/2009 12:25
9	43	60.0297	760.05	0.85	1.33	90	12/8/2009 15:00	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2712	0.00792	41	12/8/2009 12:25
10	14	120.03	761.62	10.38	1.79	120	12/5/2009 10:14	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2737	0.00792	4	12/4/2009 12:34
11	44	60.0297	760.29	1.1	1.33	90	12/8/2009 16:02	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2716	0.00792	41	12/8/2009 12:25
12	16	120.03	757.93	1.46	1.79	120	12/5/2009 15:50	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2677	0.00792	4	12/4/2009 12:34
13	17	120.03	757.61	1.42	1.79	120	12/5/2009 17:52	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2672	0.00792	4	12/4/2009 12:34
14	45	90.0297	760.85	1.01	1.33	90	12/8/2009 17:05	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2725	0.00792	41	12/8/2009 12:25
15	46	60.013	761.33	1.27	1.33	90	12/8/2009 18:37	0.999	LSCORANGE	7/23/2009	7/31/2010	0.2732	0.00792	41	12/8/2009 12:25
16	47	60.0297	758.11	1.38	1.33	90	12/8/2009 19:40	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2680	0.00792	41	12/8/2009 12:25
17	21	120.03	759.16	37.35	1.79	120	12/6/2009 0:01	0.999	LSCORANGE	7/23/2009	7/31/2010	0.2697	0.00792	4	12/4/2009 12:34

T927653R2

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDC for 1201983509.1

Results

Pos.	Decision Level pCi/L	Critical Level pCi/L	Required MDC pCi/L	MDC pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error pCi/L	Net Count Rate CPM	Net Count Rate Error CPM	1 SIGMA Counting Uncertainty pCi/L	1 SIGMA Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
1	66.6523	47.0571	250	98.2541	**1.8564**	17.294	0.010	0.173	28.6460	28.6463		SAMPLE				
2	67.8954	47.9348	250	100.0867	**15.1855**	1.943	0.090	0.175	29.5037	29.5226		SAMPLE				
3	67.7388	47.8242	250	99.8558	**-65.6522**	0.418	-0.390	0.163	27.4432	27.4434		SAMPLE				
4	70.0797	49.4769	250	103.3066	**-41.7975**	0.695	-0.240	0.167	29.0515	29.0516		SAMPLE				
5	65.7920	46.4497	250	96.9860	**-67.0354**	0.396	-0.410	0.163	26.5709	26.5710		SAMPLE				
6	65.9249	46.5435	250	97.1818	**-67.1707**	0.396	-0.410	0.163	26.6245	26.6247		SAMPLE				
7	67.3242	47.5315	250	99.2446	**-73.6158**	0.368	-0.440	0.162	27.0607	27.0609		SAMPLE				
8	74.8389	52.8369	250	114.0269	**-55.1574**	0.537	-0.330	0.177	29.6327	29.6334		SAMPLE				
9	74.6102	52.6754	250	113.6784	**-79.9838**	0.354	-0.480	0.170	28.3435	28.3442		SAMPLE				
10	66.3955	46.8758	250	97.8756	**1417.3560**	0.038	8.590	0.318	52.5396	111.6263		SAMPLE				
11	74.5034	52.6000	250	113.5157	**-38.2707**	0.791	-0.230	0.182	30.2715	30.2721		SAMPLE				
12	67.8887	47.9300	250	100.0768	**-55.6748**	0.499	-0.330	0.165	27.7614	27.7616		SAMPLE				
13	135.9199	95.9606	250	200.3636	**-124.9775**	0.442	-0.370	0.164	55.2380	55.2384		SAMPLE				
14	132.7154	93.6982	250	198.4385	**-106.0394**	0.504	-0.320	0.161	53.4235	53.4241		SAMPLE				
15	73.8962	52.1714	250	112.5922	**-9.9015**	3.159	-0.060	0.190	31.2829	31.2835		MB				
16	75.4944	53.2997	250	115.0256	**8.4304**	3.886	0.050	0.194	32.7644	32.7696	241524002.1	DUP	0.0%	0.5295		
17	67.2454	47.4758	250	99.1284	**5942.5265**	0.018	35.560	0.571	95.4279	424.7410		LCS			5620.1427	105.7%

REGISTRY

TUE 8 DEC 2009 12:23

*** DIRECTORY PATH :S:\LSC\O\DA\927653A3 ***

PARAMETER GROUP: 8
ID: H-3 (2)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	41	BKG	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	42	241518003	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	43	241518004	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	44	241518006	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	45	241909002	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	46	1201983508	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	47	1201983509	60:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q014101N.001	8 DEC 2009 13:56					
41	BKG	90:01.780	762.31	1.33	2.68	6.91
Q024201N.001	8 DEC 2009 14:58					
42	241518003	60:01.780	759.54	1.00	2.28	7.00
Q034301N.001	8 DEC 2009 16:01					
43	241518004	60:01.780	760.05	.85	2.08	6.27
Q044401N.001	8 DEC 2009 17:03					
44	241518006	60:01.780	760.29	1.10	2.72	7.26

Q054501N.001 8 DEC 2009 18:36						
45	241909002	90:01.780	760.85	1.01	2.42	7.13
Q064601N.001 8 DEC 2009 19:38						
46	1201983508	60:00.780	761.33	1.27	2.57	6.99
Q074701N.001 8 DEC 2009 20:41						
47	1201983509	60:01.779	758.11	1.38	2.96	7.97

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ014101N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls

ID:	H-3 (2)
Comments:	ORANGE

Sample, Rack-Pos, Time:	1, BKG, 90.02966:
Quench:	762.31
Start, End, X-Axis	50-175

Channel Counts

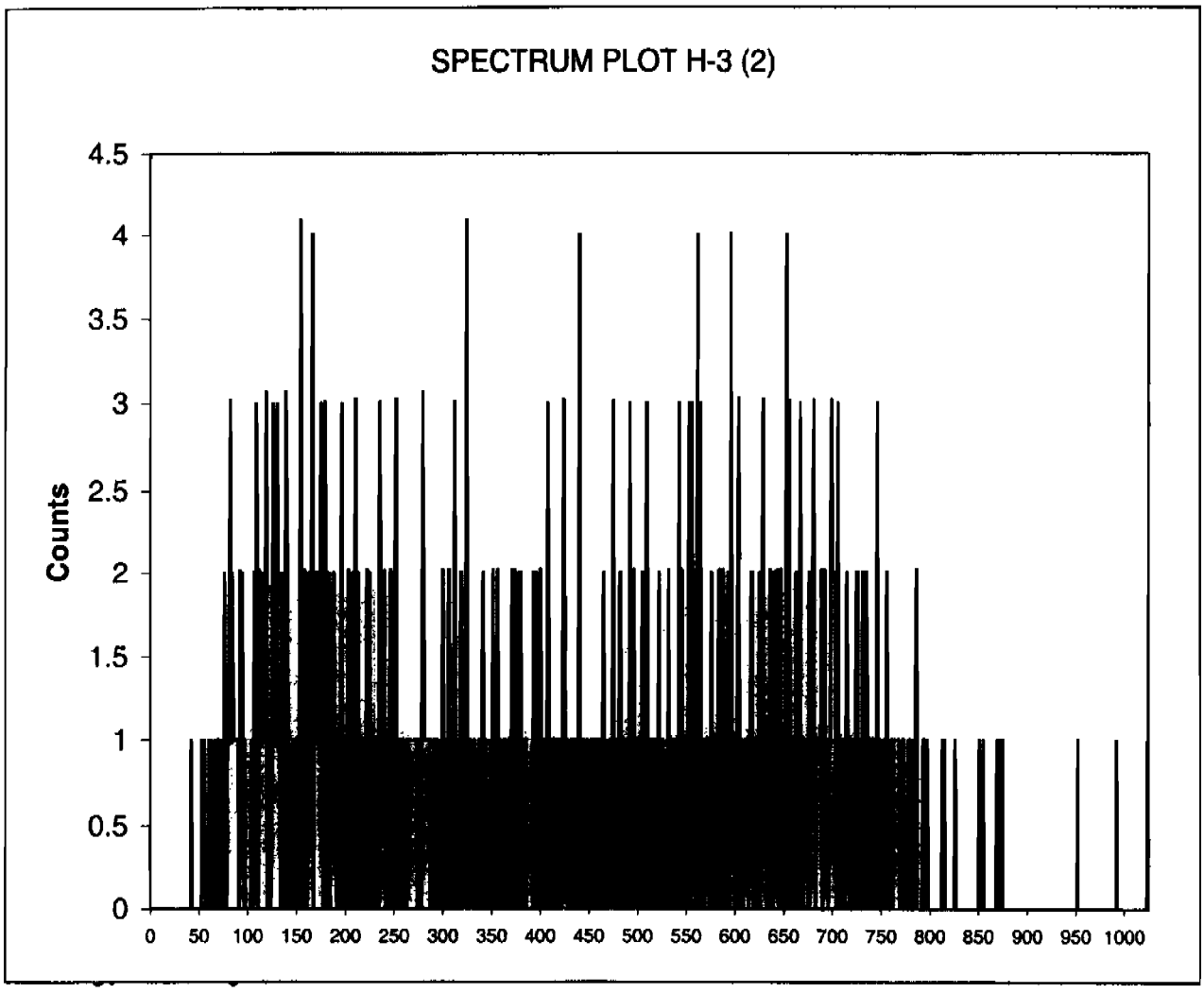

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ024201N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241518003, 60.02967:
Quench:	759.54
Start, End, X-Axis	50-175

Channel Counts

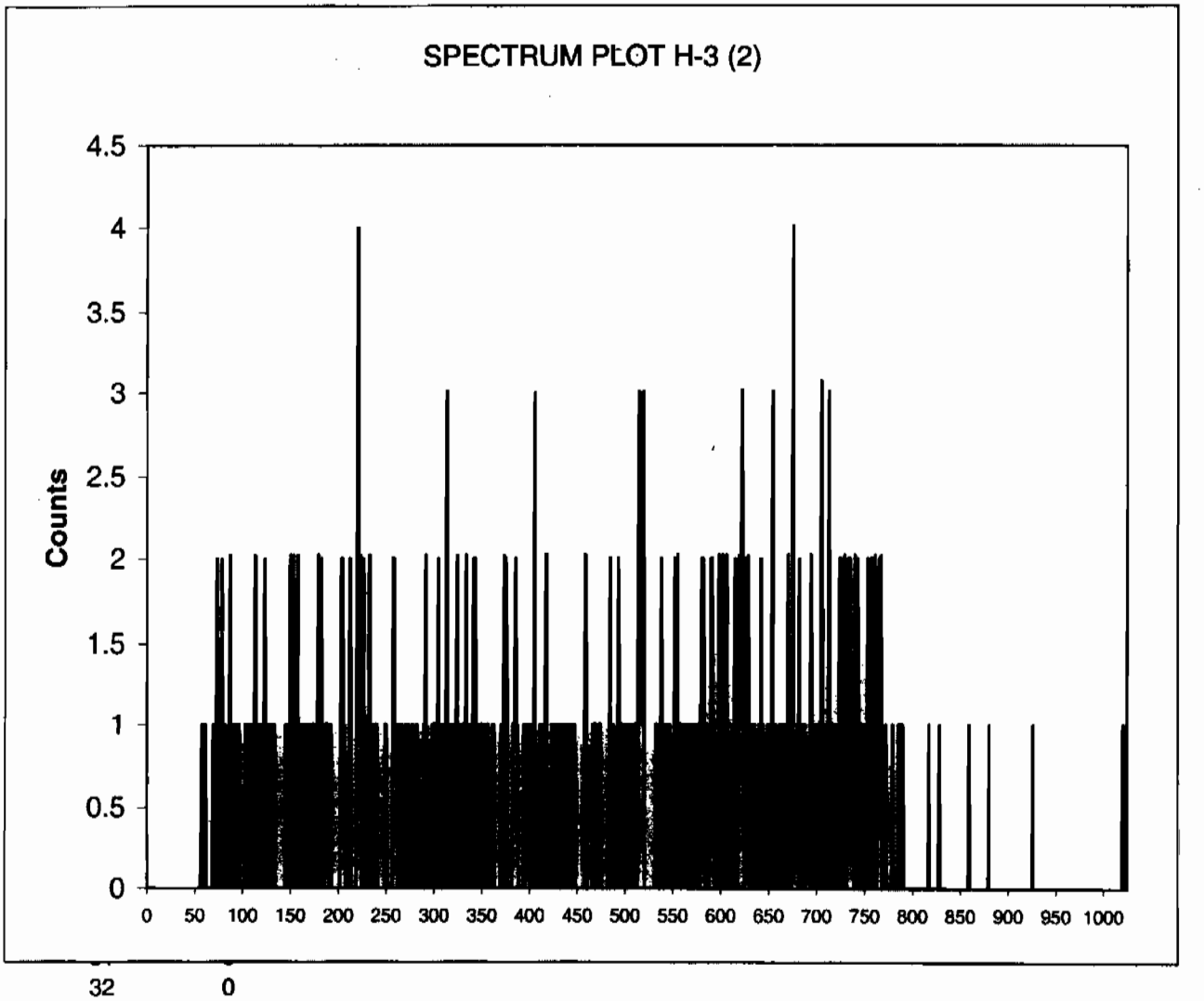

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ034301N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241518004, 60.02967:
Quench:	760.05
Start, End, X-Axis	50-175

Channel Counts

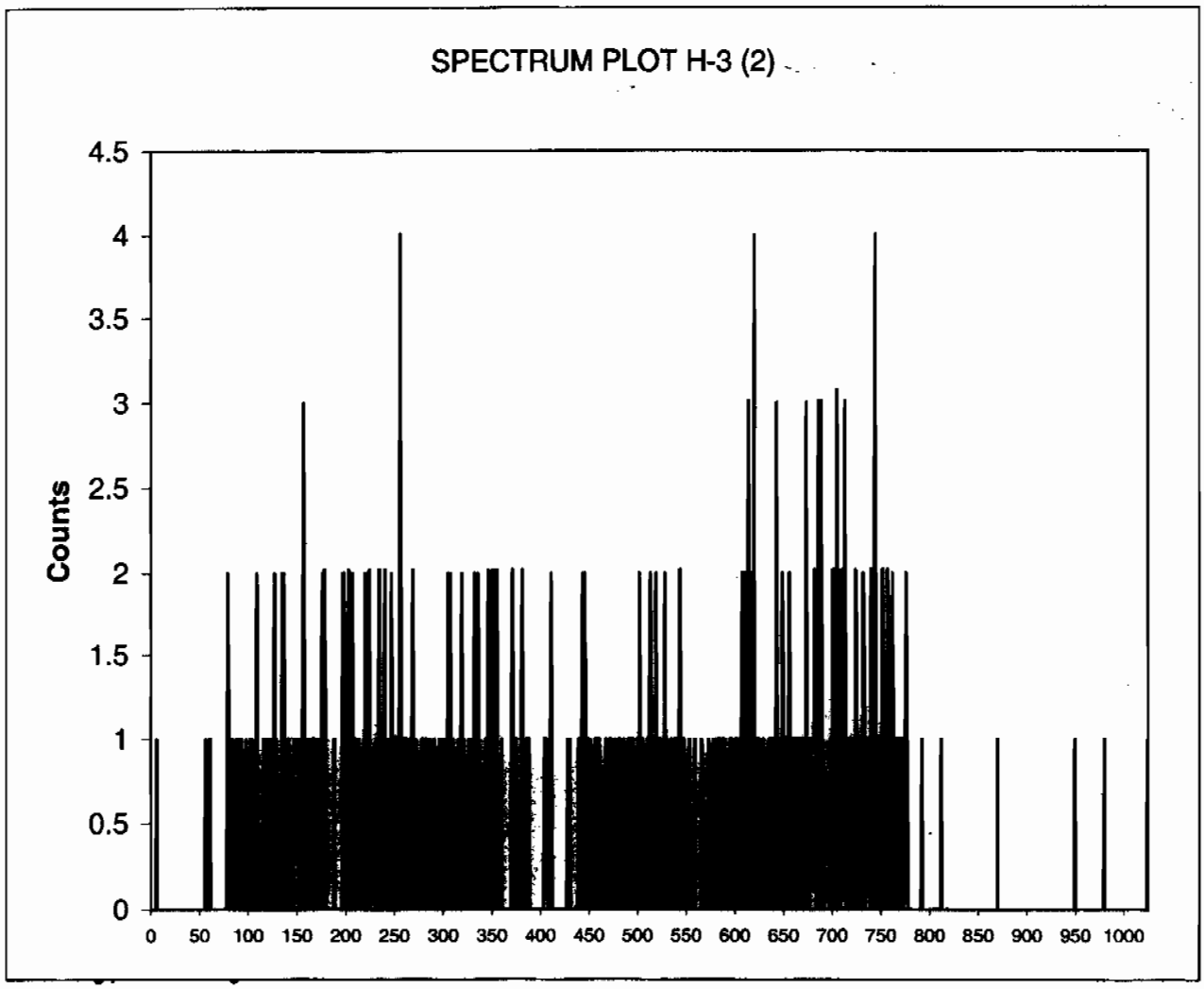

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ044401N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241518006, 60.02967:
Quench:	760.29
Start, End, X-Axis	50-175

Channel Counts

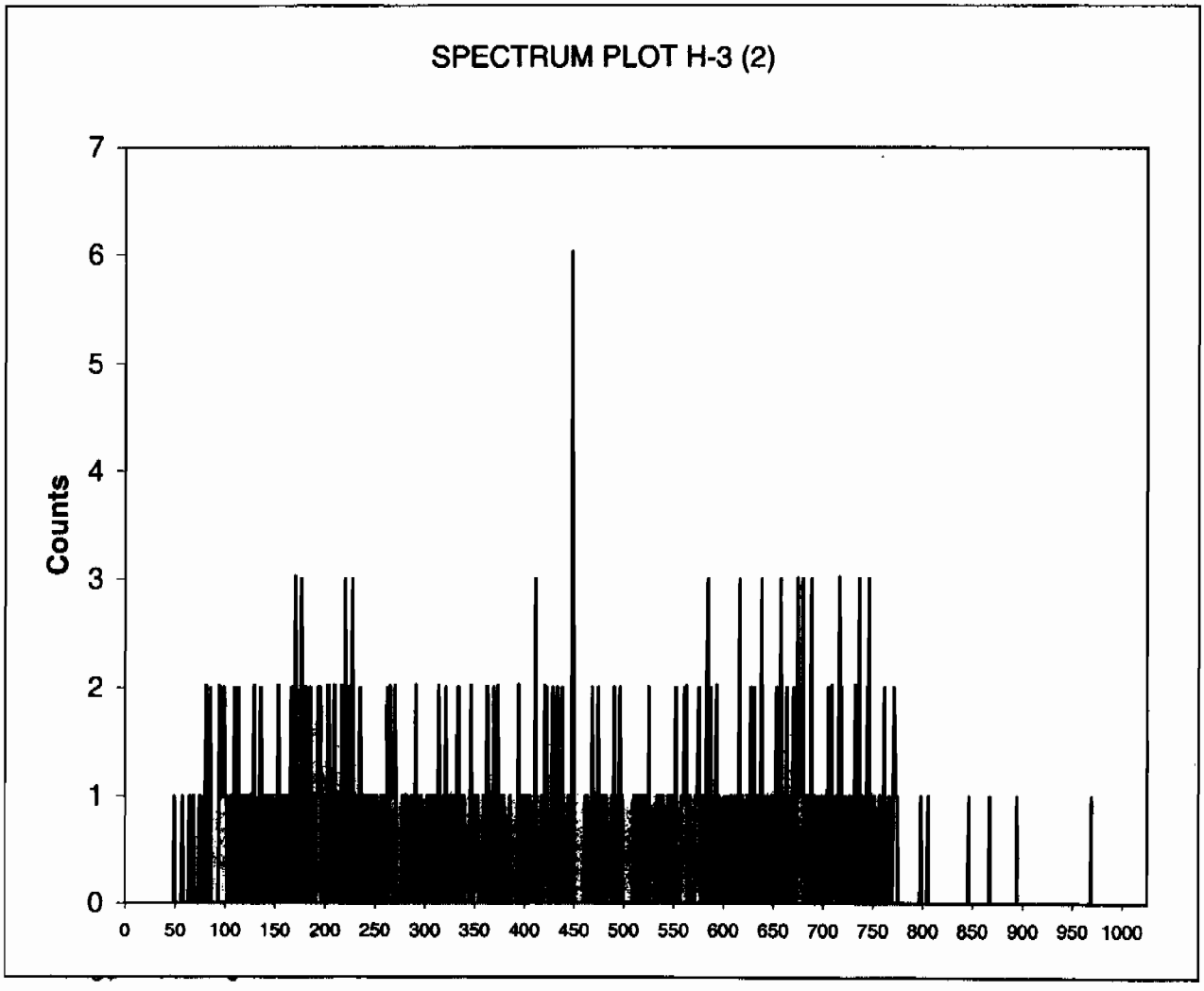

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ054501N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	5, 241909002, 90.02966:
Quench:	760.85
Start, End, X-Axis	50-175

Channel Counts

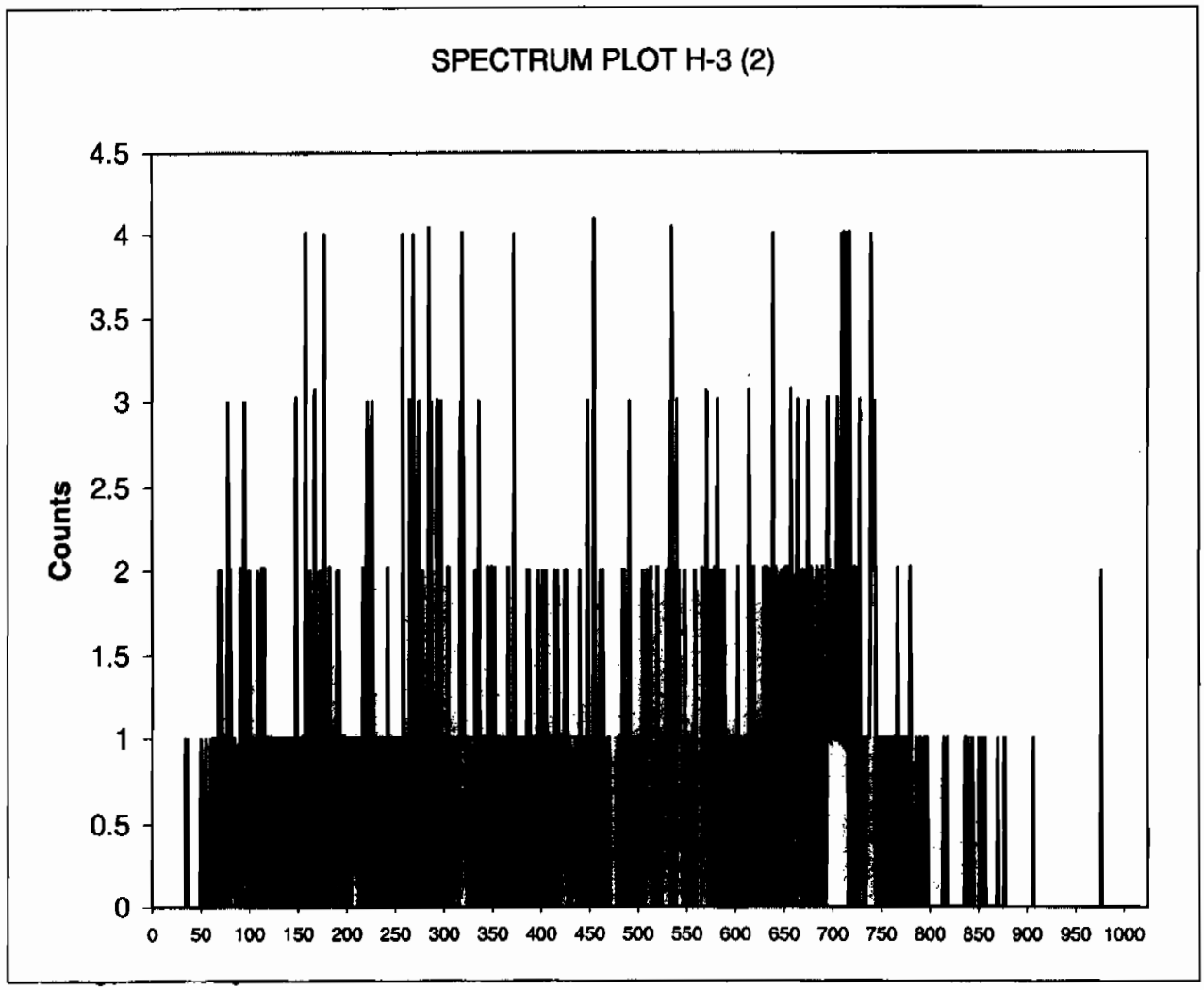

32	0
33	0
34	1
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ064601N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	6, 1201983508, 60.013:
Quench:	761.33
Start, End, X-Axis	50-175

Channel Counts

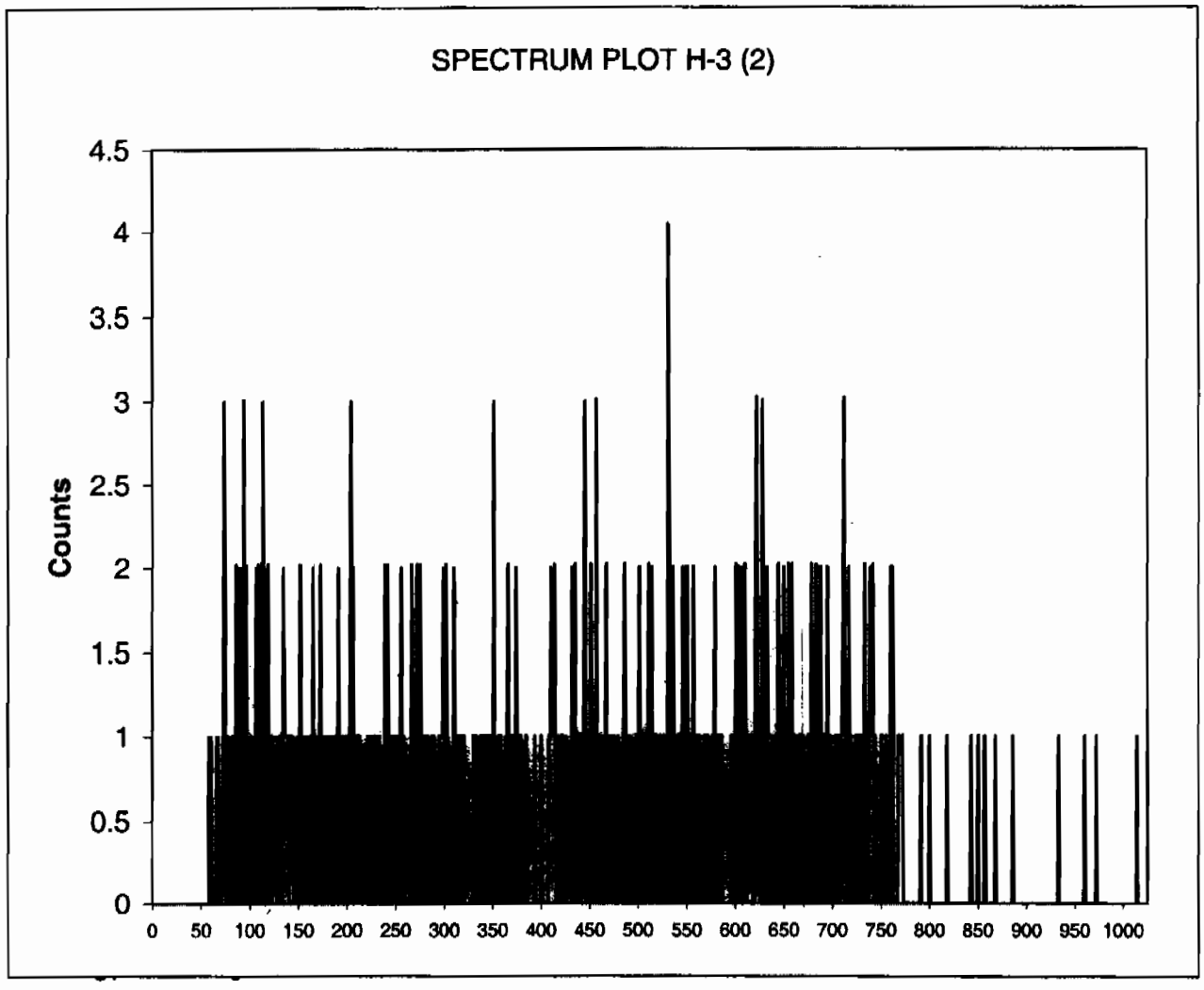

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	TUE 8 DEC 2009 12:23
FileName:	s:\lsc\files\orange\927653A3\SQ074701N.001.xls
File Info:	s:\lsc\files\orange\927653A3\U927653A3.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	7, 1201983509, 60.02965:
Quench:	758.11
Start, End, X-Axis	50-175

Channel Counts

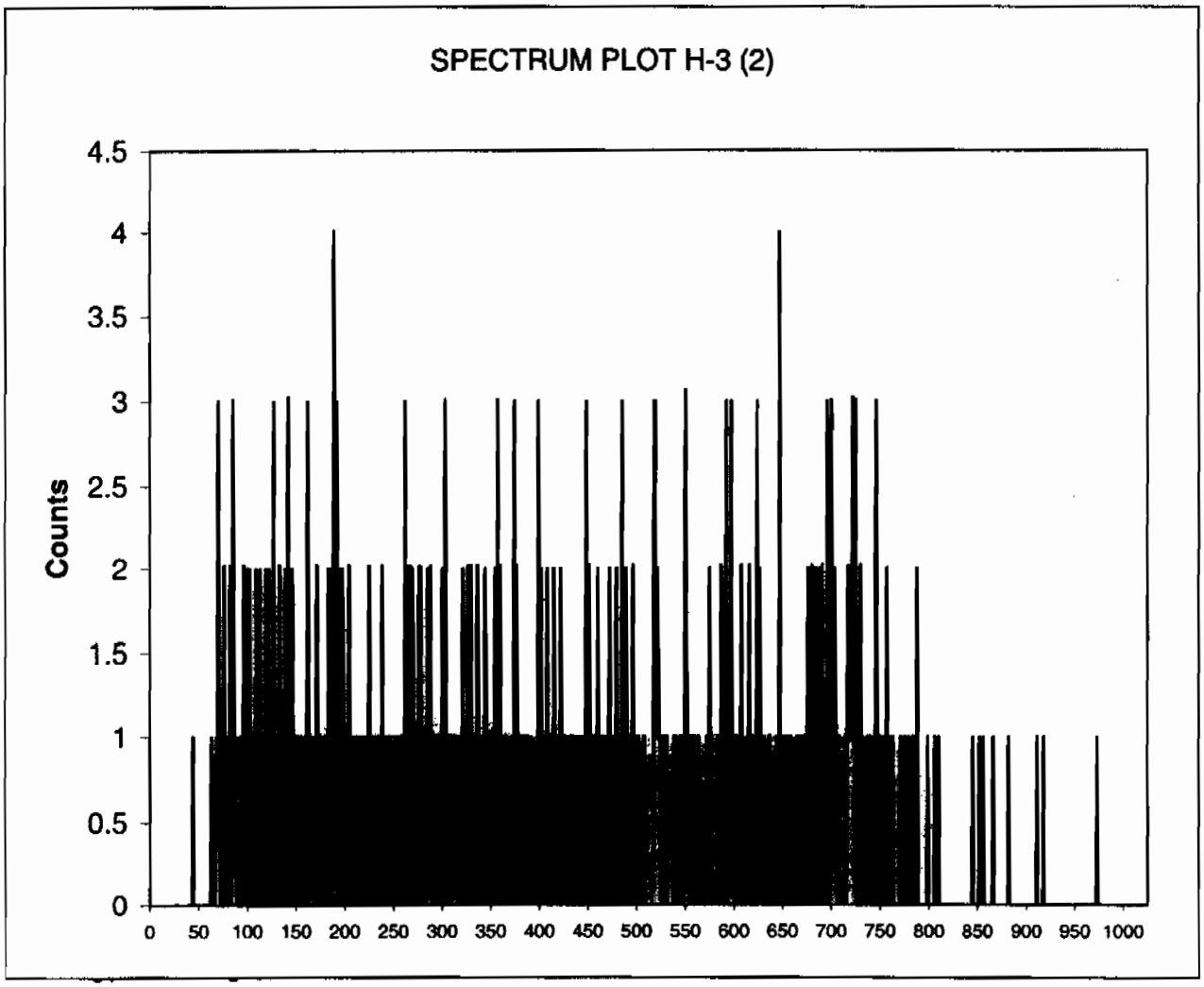

32	0
33	0
34	0
35	0

REGISTRY

FRI 4 DEC 2009 12:32

*** DIRECTORY PATH :S:\LSC\O\DA\927653A0 ***

PARAMETER GROUP: 8
ID: H-3 (1)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	4	BKG	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	5	241301001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	6	241336001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	7	241336002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	8	241425001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	9	241425002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	10	241518001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q010401N.001 4 DEC 2009 14:35						
4	BKG	120:01.780	766.24	1.79	3.06	8.09
Q020501N.001 4 DEC 2009 16:37						
5	241301001	120:01.780	761.00	1.80	3.07	8.07
Q030601N.001 4 DEC 2009 18:40						
6	241336001	120:01.780	757.94	1.88	3.18	7.79
Q040701N.001 4 DEC 2009 20:42						
7	241336002	120:01.780	758.32	1.40	2.76	7.63

```
Q050801N.001  4 DEC 2009 22:45
   8        241425001   120:01.780  752.87       1.55       3.01       7.58
Q060901N.001  5 DEC 2009  0:47
   9        241425002   120:01.773  763.19       1.38       2.73       7.47
Q071001N.001  5 DEC 2009  2:50
  10        241518001   120:01.773  762.82       1.38       2.68       6.85
```

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ010401N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, BKG, 120.0297:
Quench:	766.24
Start, End, X-Axis	50-175

Channel Counts

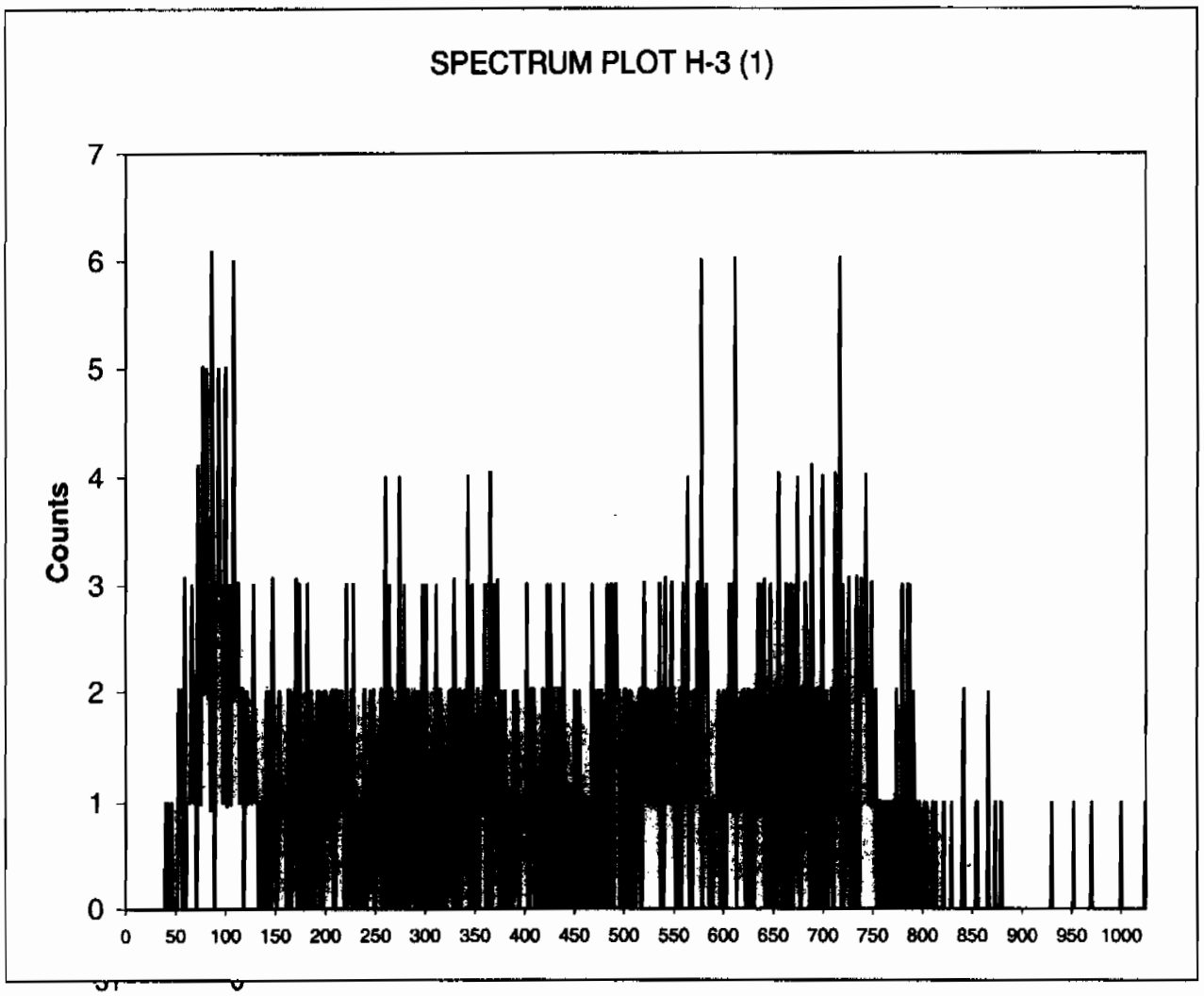

31	0
32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ020501N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241301001, 120.0297:
Quench:	761
Start, End, X-Axis	50-175

Channel Counts

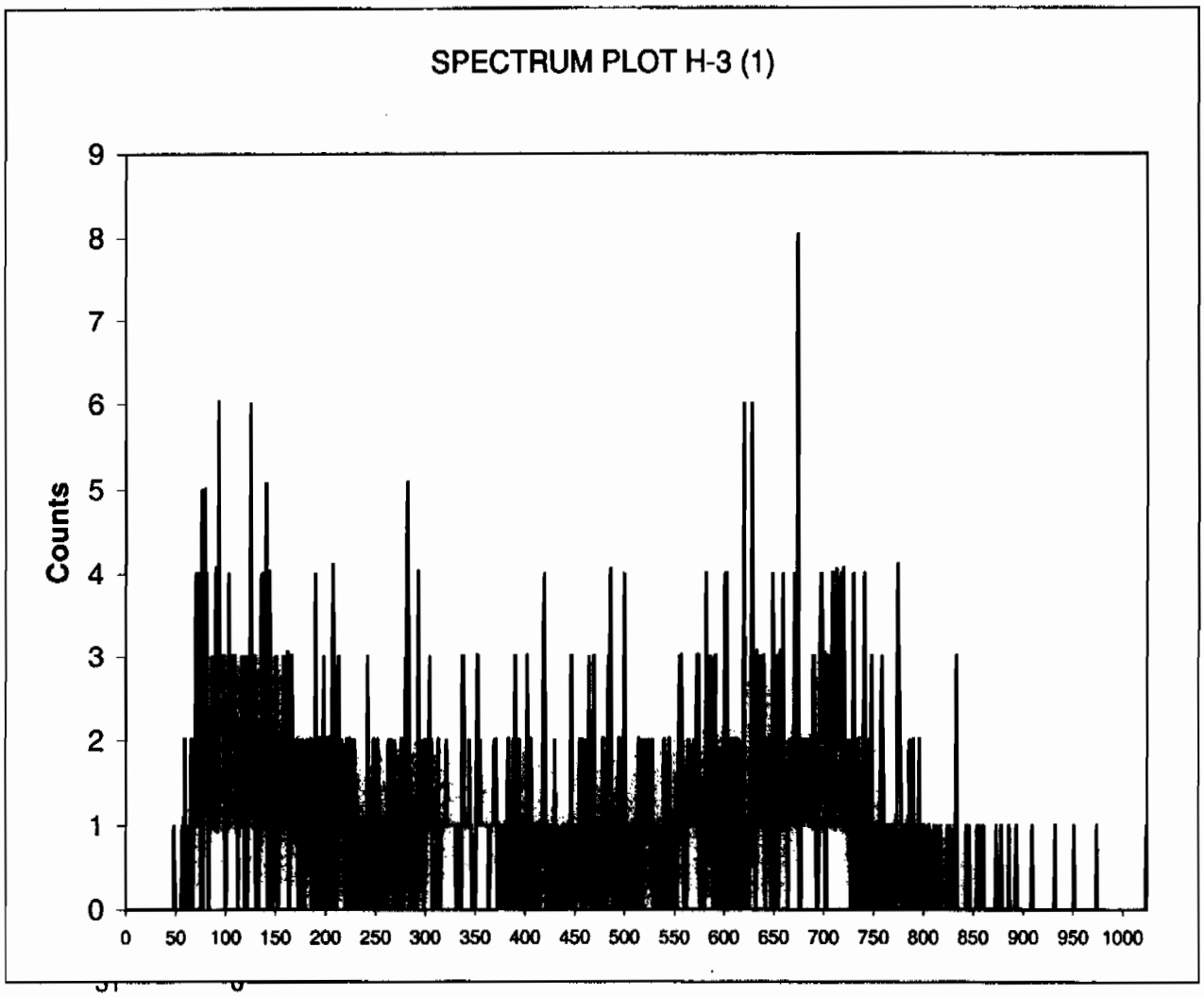

31	0
32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ030601N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241336001, 120.0297:
Quench:	757.94
Start, End, X-Axis	50-175

Channel Counts

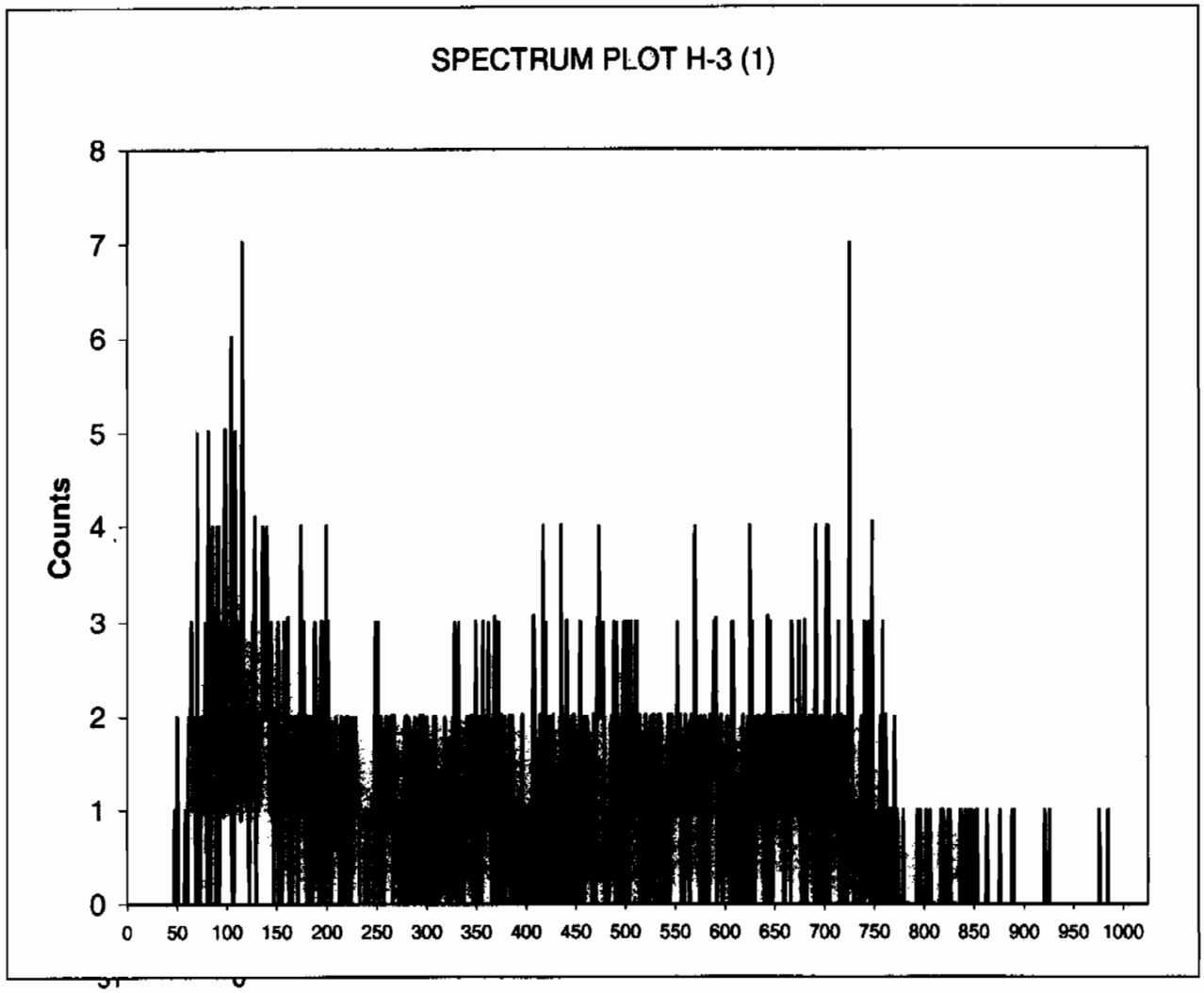

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ040701N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241336002, 120.0297:
Quench:	758.32
Start, End, X-Axis	50-175

Channel Counts

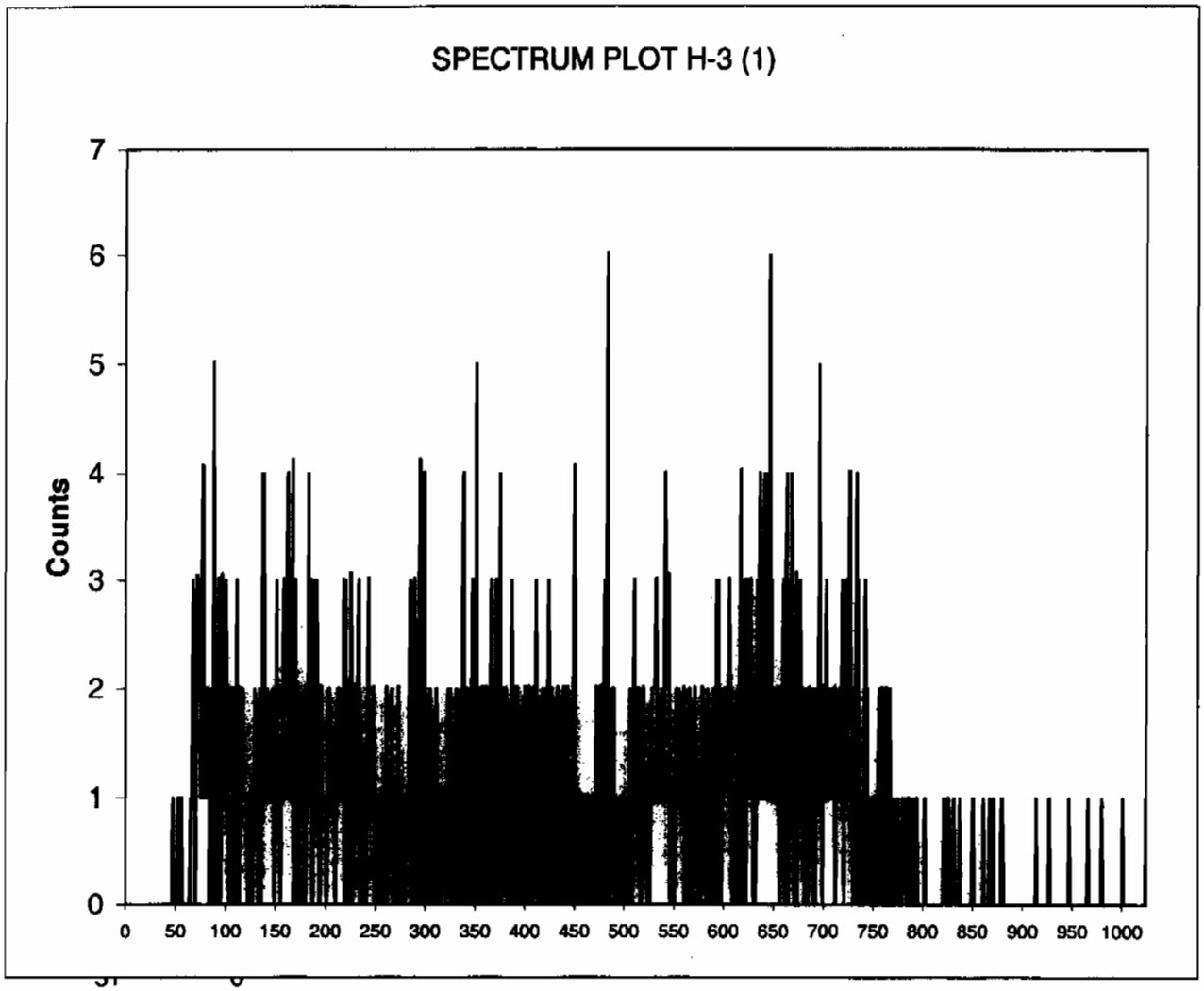

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ050801N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	5, 241425001, 120.0297:
Quench:	752.87
Start, End, X-Axis	50-175

Channel Counts

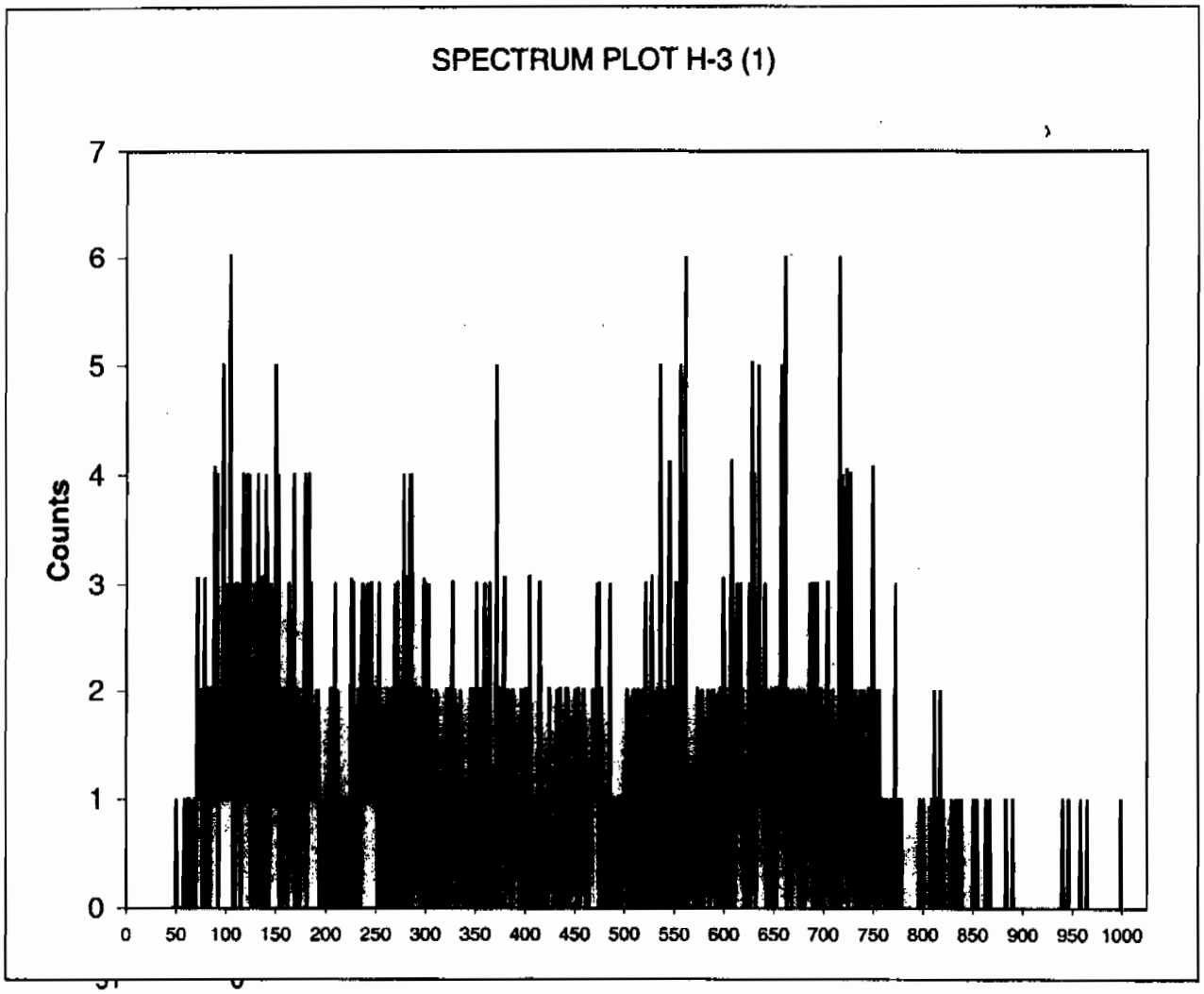

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ060901N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls
ID:	H-3 (1)
Comments:	ORANGE
Sample, Rack-Pos, Time:	6, 241425002, 120.0295:
Quench:	763.19
Start, End, X-Axis	50-175

Channel Counts

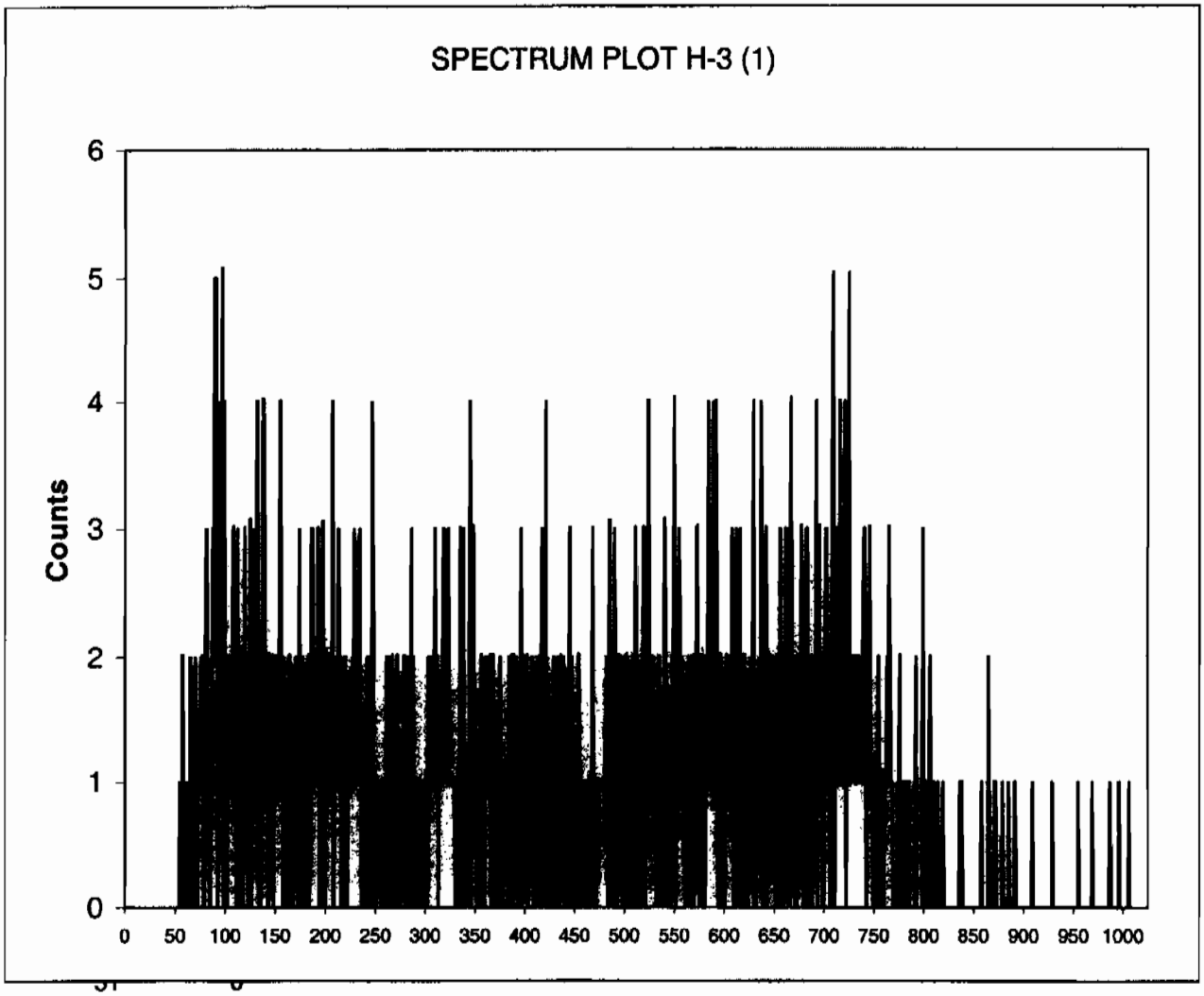

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	FRI 4 DEC 2009 12:32
FileName:	s:\lsc\files\orange\927653A0\SQ071001N.001.xls
File Info:	s:\lsc\files\orange\927653A0\U927653A0.xls

ID:	H-3 (1)
Comments:	ORANGE

Sample, Rack-Pos, Time:	7, 241518001, 120.0295:
Quench:	762.82
Start, End, X-Axis	50-175

Channel Counts

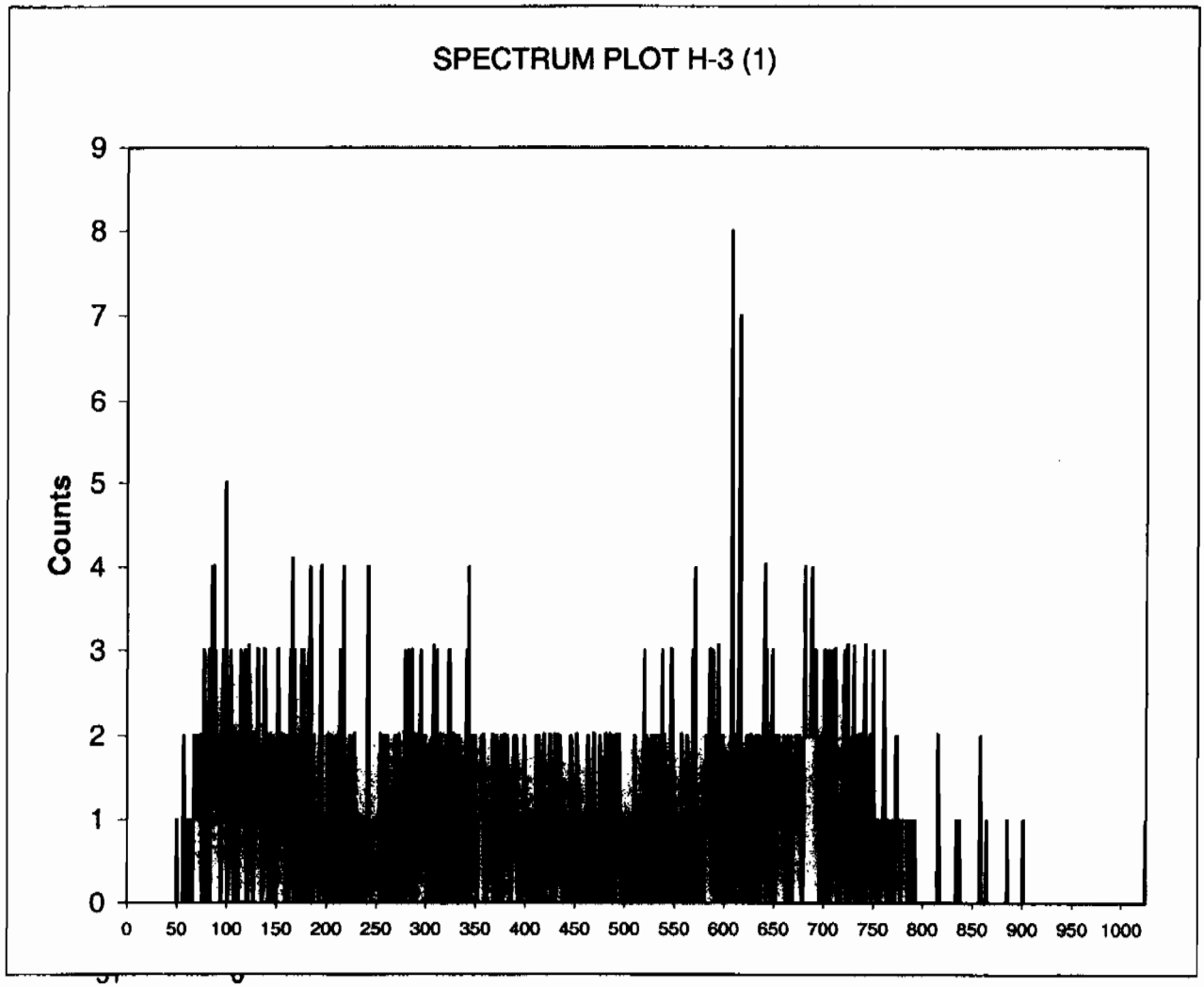

32	0
33	0
34	0
35	0

REGISTRY

SAT 5 DEC 2009 4:05

*** DIRECTORY PATH :S:\LSC\O\DA\927653A1 ***

PARAMETER GROUP: 8
ID: H-3 (2)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	11	241518002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	12	241518003	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	13	241518004	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	14	241518005	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	15	241518006	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	16	241524002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	17	241909001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
8	18	241909002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
9	19	1201983508	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
10	20	1201983509	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
11	21	1201983510	15:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q011101N.001 5 DEC 2009 6:08						
11	241518002	120:01.780	759.29	1.35	2.65	7.25
Q021201N.001 5 DEC 2009 8:10						
12	241518003	120:01.780	763.21	1.15	2.49	7.22

REGISTRY

~~Q031301N.001~~	~~5 DEC 2009 10:13~~						
~~13~~	~~241518004~~	~~120:01.780~~	~~763.10~~	~~1.04~~	~~2.24~~	~~7.05~~	
Q041401N.001	5 DEC 2009 12:15						
14	241518005	120:01.780	761.62	10.38	12.46	17.37	
~~Q051501N.001~~	~~5 DEC 2009 14:18~~						
~~15~~	~~241518006~~	~~120:01.780~~	~~761.61~~	~~1.30~~	~~2.90~~	~~7.39~~	
Q061601N.001	5 DEC 2009 14:32						
16	241524002	10:55.773	756.20	1.68	3.27	8.42	

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927653A1\SQ011101N.001.xls
File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, 241518002, 120.0297:
Quench:	759.29
Start, End, X-Axis	50-175

Channel Counts

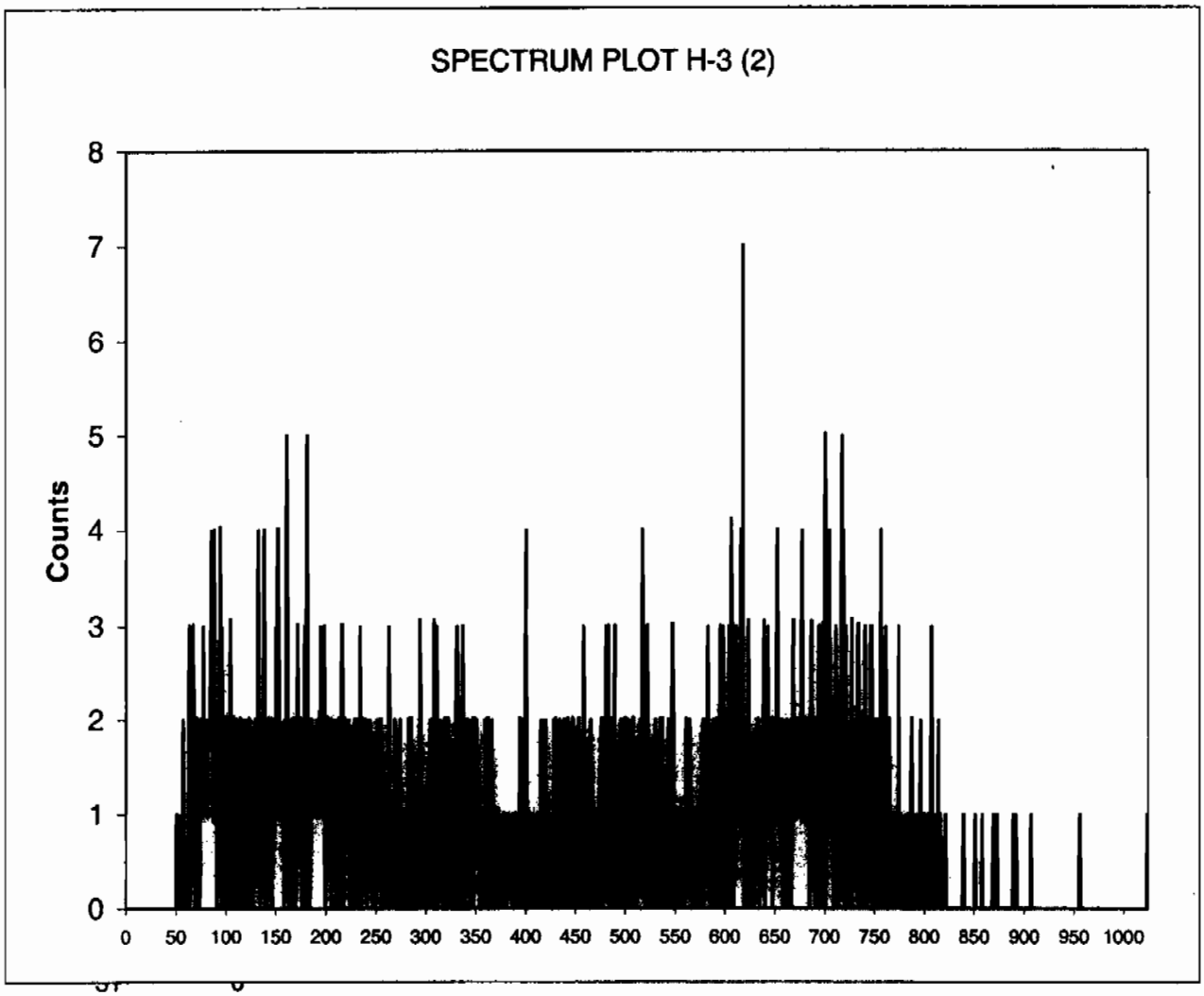

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927653A1\SQ041401N.001.xls
File Info:	s:\lsc\files\orange\927653A1\U927653A1.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241518005, 120.0297:
Quench:	761.62
Start, End, X-Axis	50-175

Channel Counts

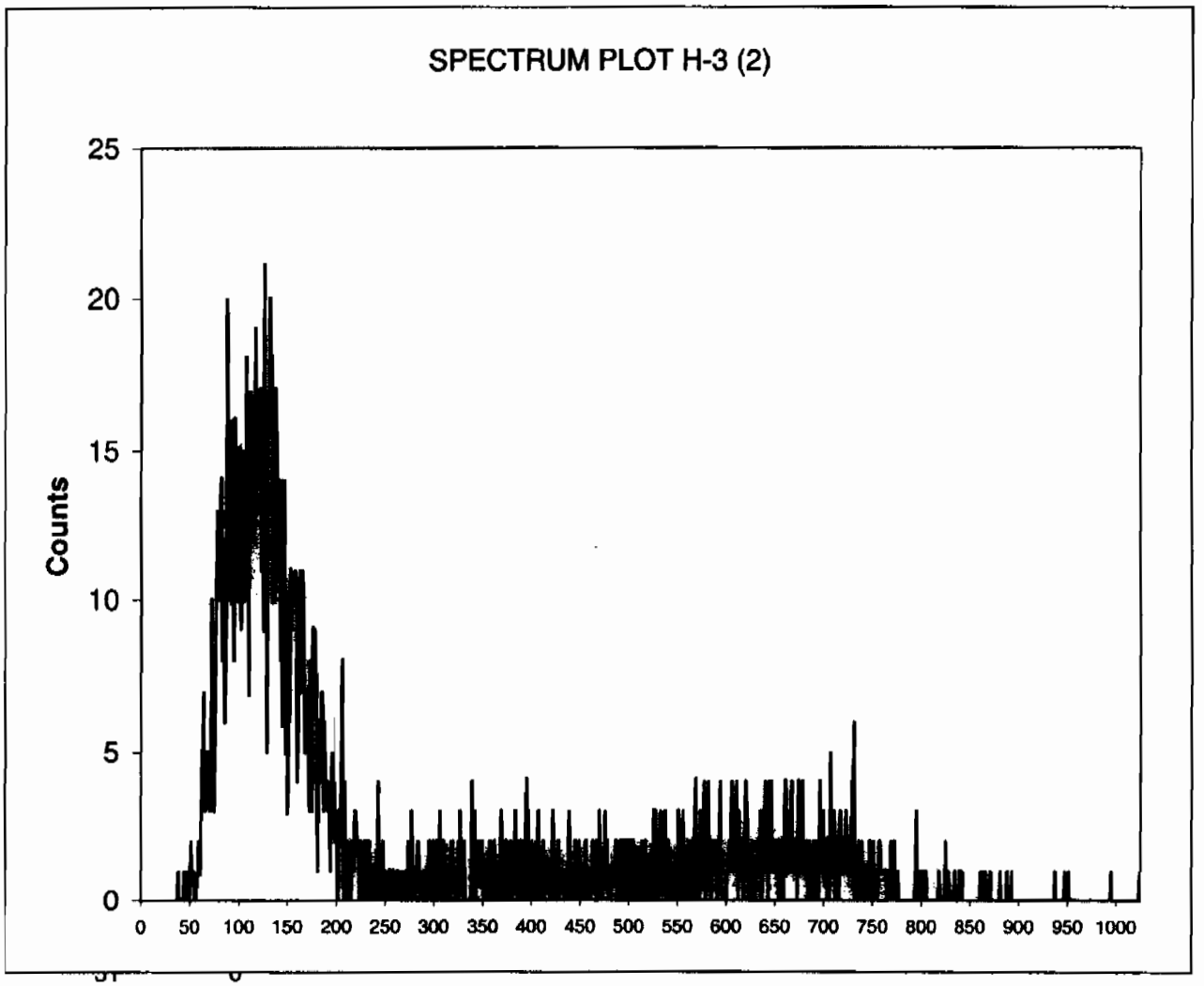

32	0
33	0
34	0
35	0

REGISTRY

SAT 5 DEC 2009 15:48

*** DIRECTORY PATH :S:\LSC\O\DA\927653A2 ***

PARAMETER GROUP: 8
ID: H-3 (2)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	16	241524002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	17	241909001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	18	241909002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	19	1201983508	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	21	1201983509	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	22	1201983510	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q011601N.001 5 DEC 2009 17:51						
16	241524002	120:01.780	757.93	1.46	2.90	7.64
Q021701N.001 5 DEC 2009 19:53						
17	241909001	120:01.780	757.61	1.42	2.92	7.74
Q031801N.001 5 DEC 2009 21:56						
18	241909002	120:01.780	760.13	1.20	2.63	7.81
Q041901N.001 5 DEC 2009 23:58						
19	1201983508	120:01.780	757.59	1.13	2.35	6.71
Q052101N.001 6 DEC 2009 2:02						

REGISTRY

LCS 21 1201983509 120:01.780 759.16 37.35 41.38 45.63

~~Q062201N.001 6 DEC 2009 4:04~~

~~22 1201983510 120:01.773 758.62 1.20 2.67 7.77~~

Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
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File Info:	s:\lsc\files\orange\927653A2\U927653A2.xls
ID:	H-3 (2)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, 241524002, 120.0297:
Quench:	757.93
Start, End, X-Axis	50-175

Channel Counts

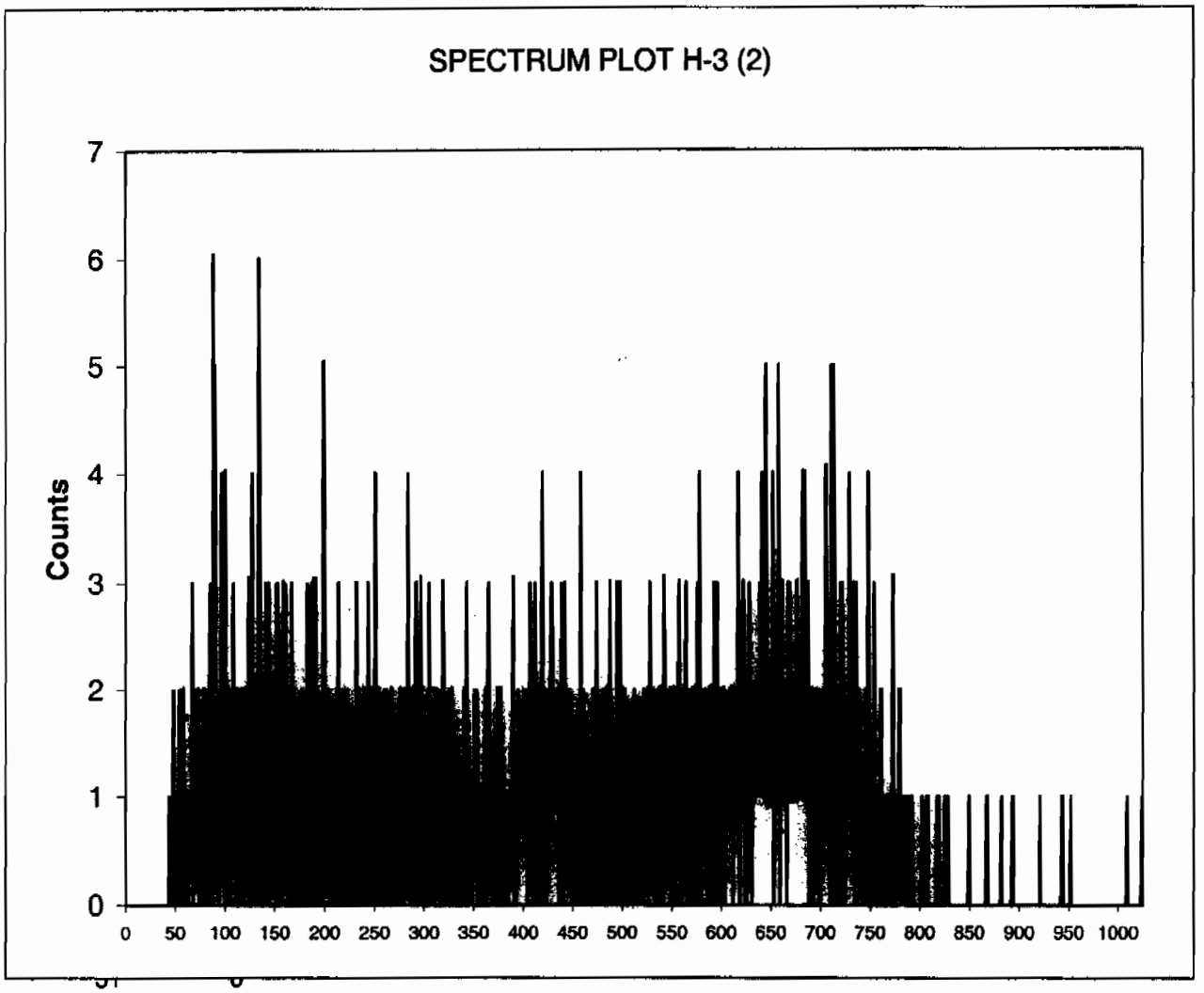

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Instrument Type:	Quantulus
Data Capture Date:	SAT 5 DEC 2009 15:48
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ID:	H-3 (2)
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Sample, Rack-Pos, Time:	2, 241909001, 120.0297:
Quench:	757.61
Start, End, X-Axis	50-175

Channel Counts

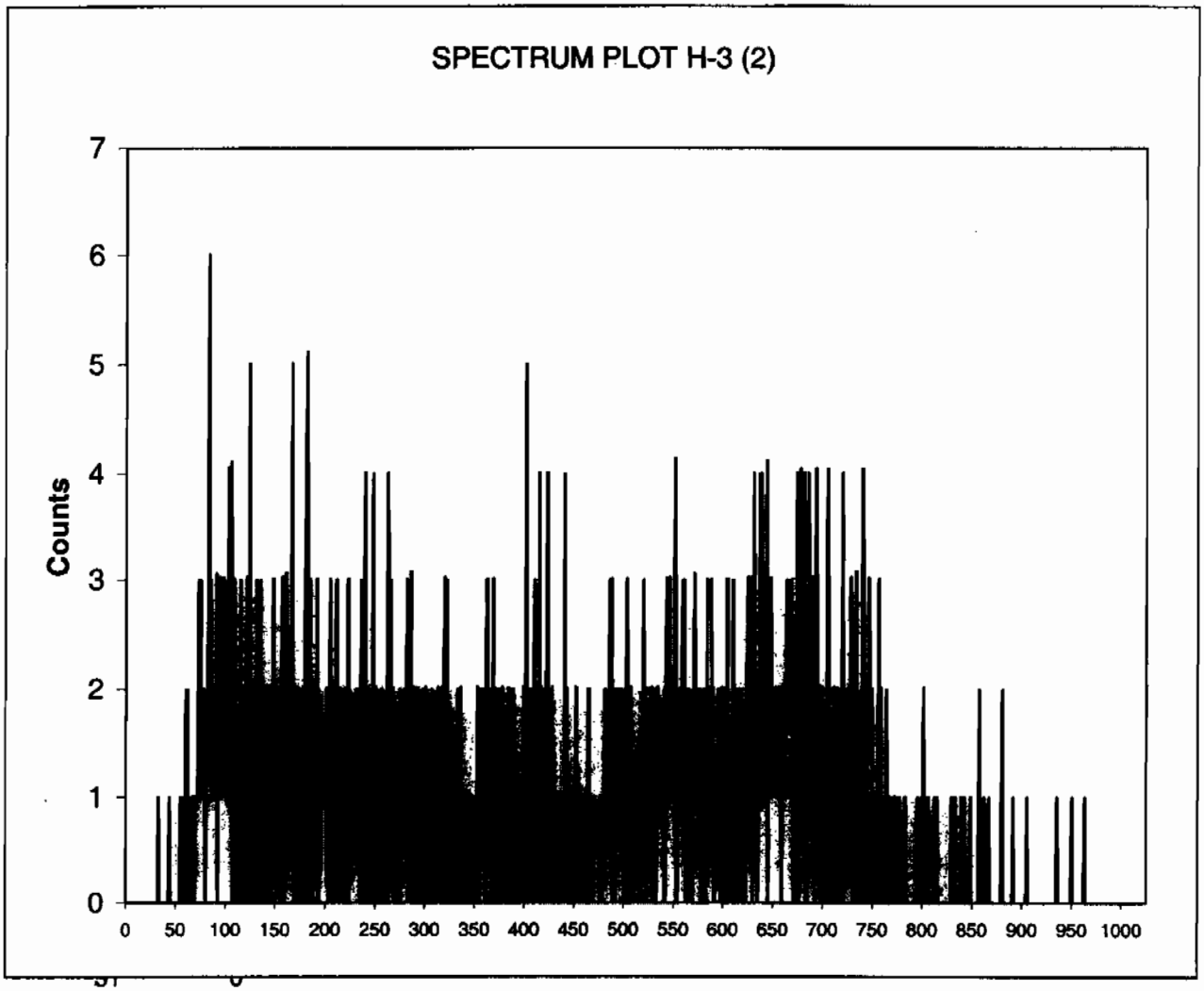

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ID:	H-3 (2)
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Sample, Rack-Pos, Time:	3, 241909002, 120.0297:
Quench:	760.13
Start, End, X-Axis	50-175

Channel Counts

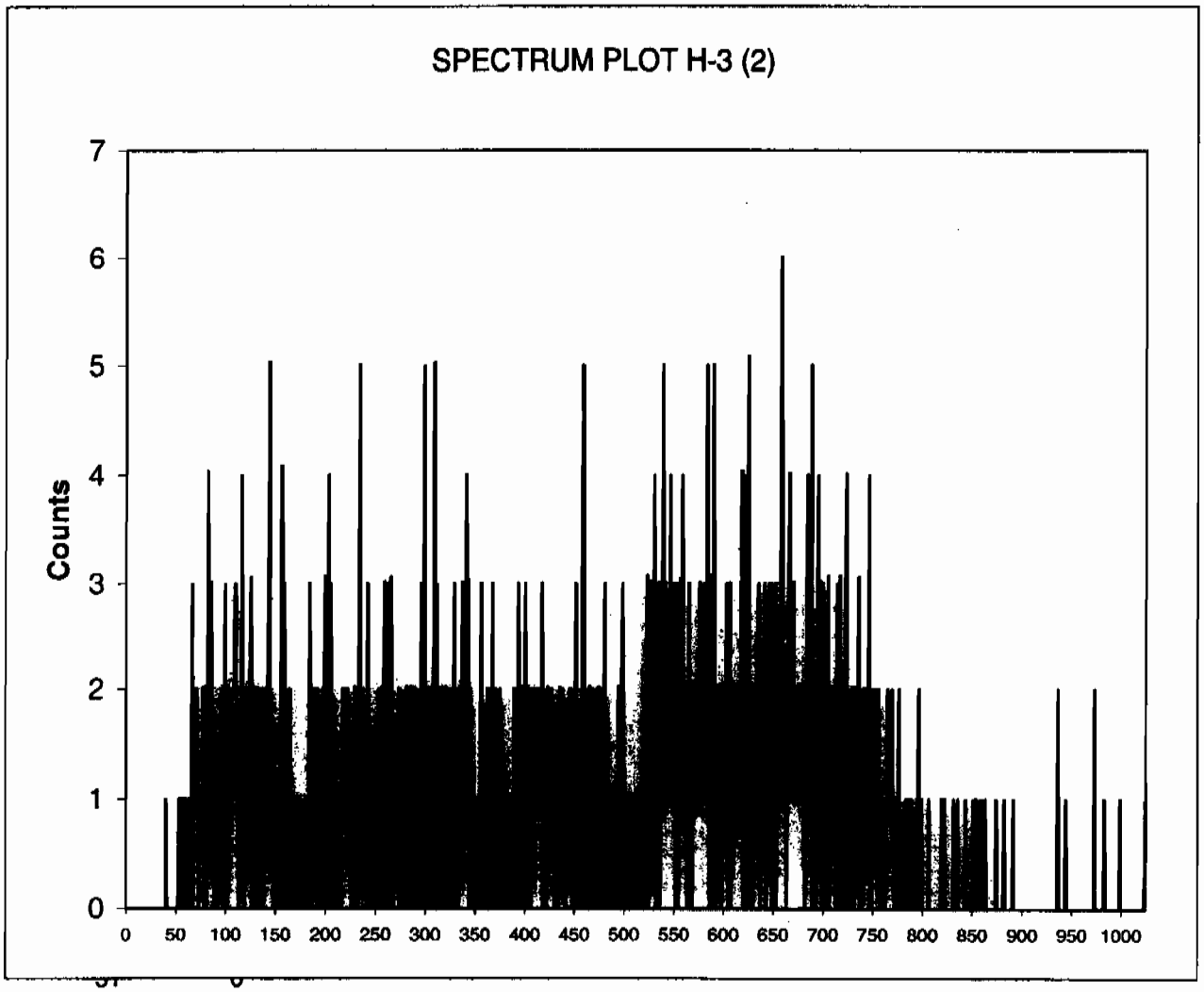

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ID:	H-3 (2)
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Sample, Rack-Pos, Time:	4, 1201983508, 120.0297:
Quench:	757.59
Start, End, X-Axis	50-175

Channel Counts

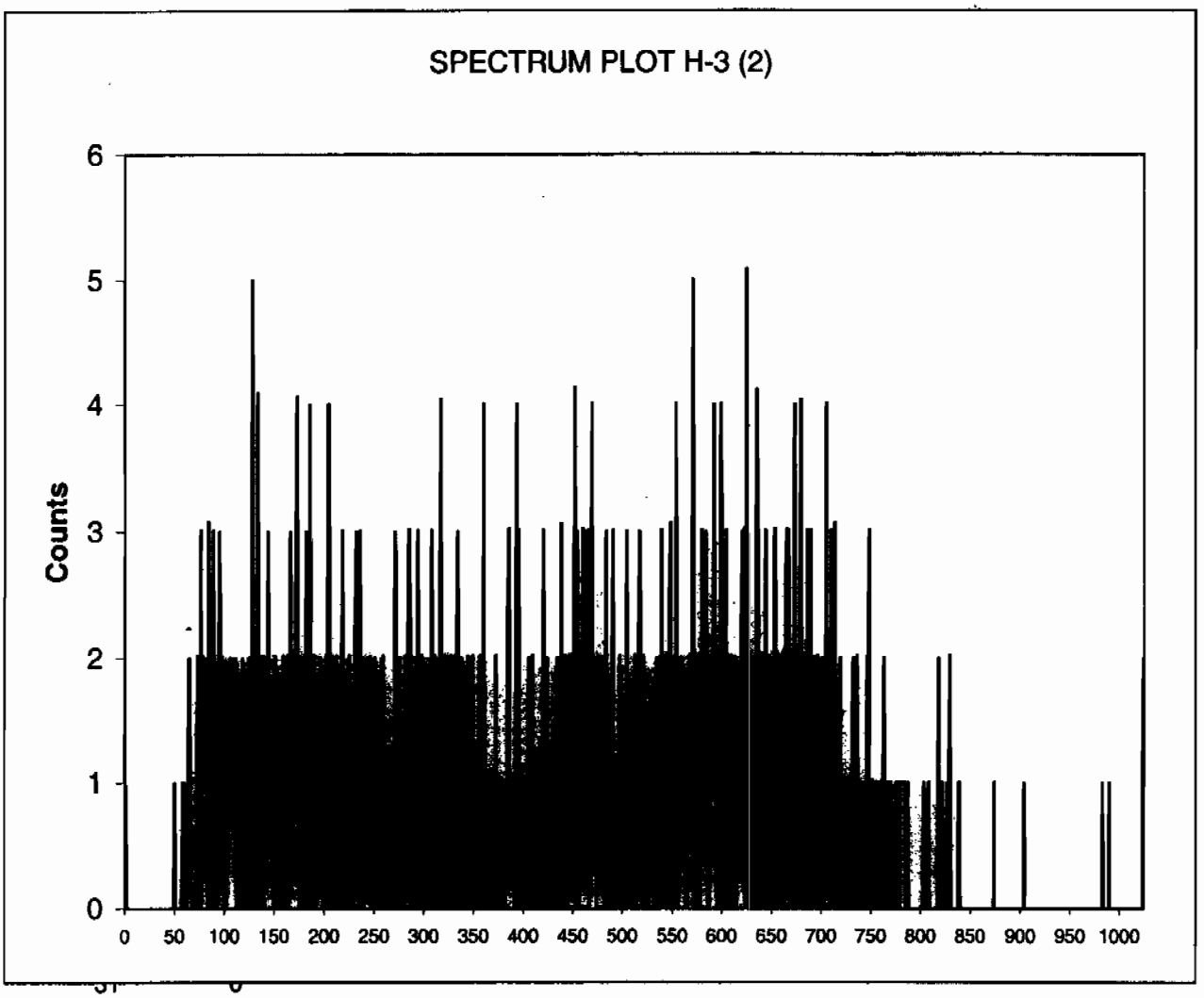

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Instrument Type:	Quantulus
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ID:	H-3 (2)
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Quench:	759.16
Start, End, X-Axis	50-175

Channel Counts

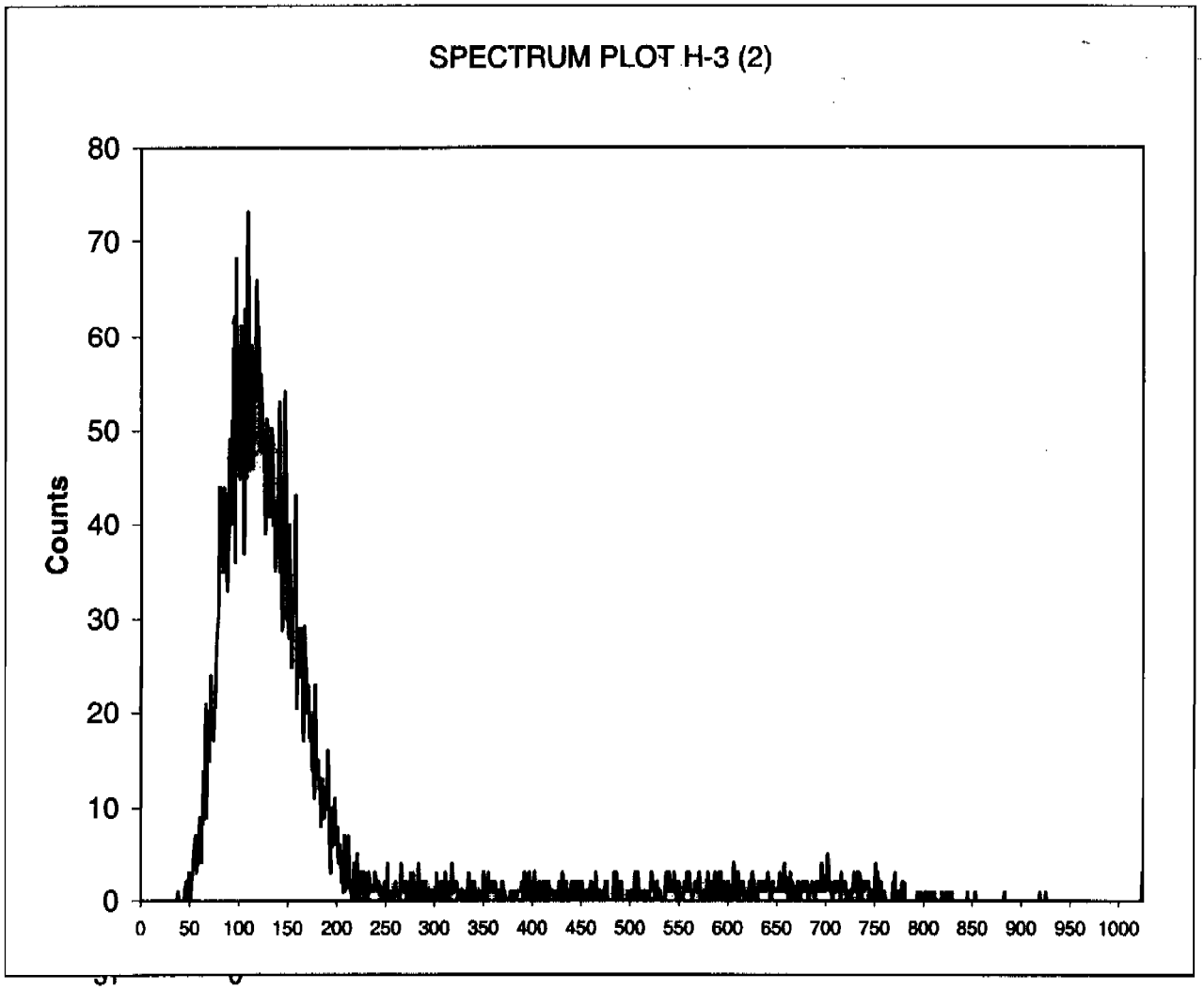

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ID:	H-3 (2)
Comments:	ORANGE

Sample, Rack-Pos, Time:	6, 1201983510, 120.0295:
Quench:	758.62
Start, End, X-Axis	50-175

Channel Counts

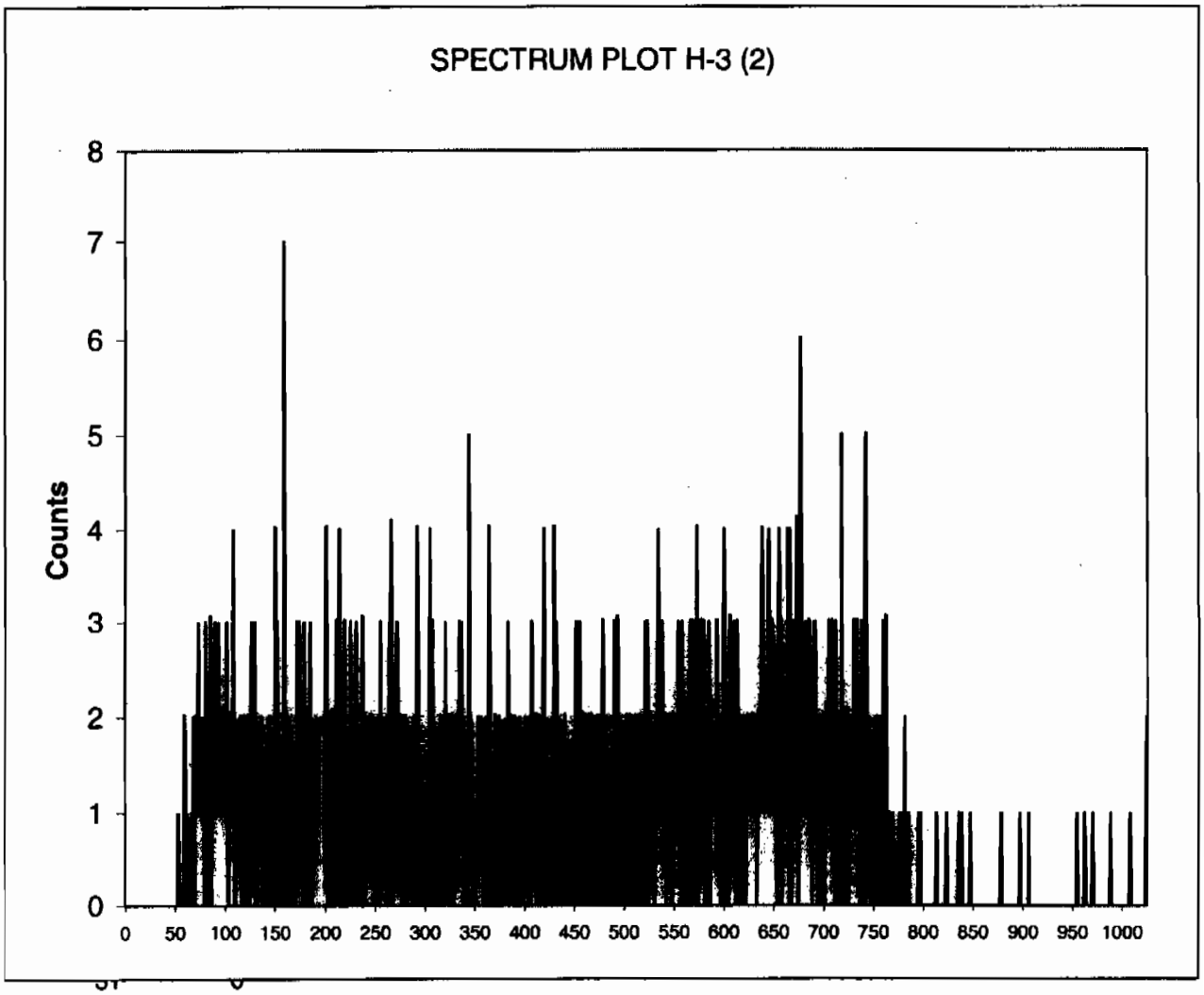

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BACKGROUND AND EFFICIENCY DATA

Generated 12/04/2009

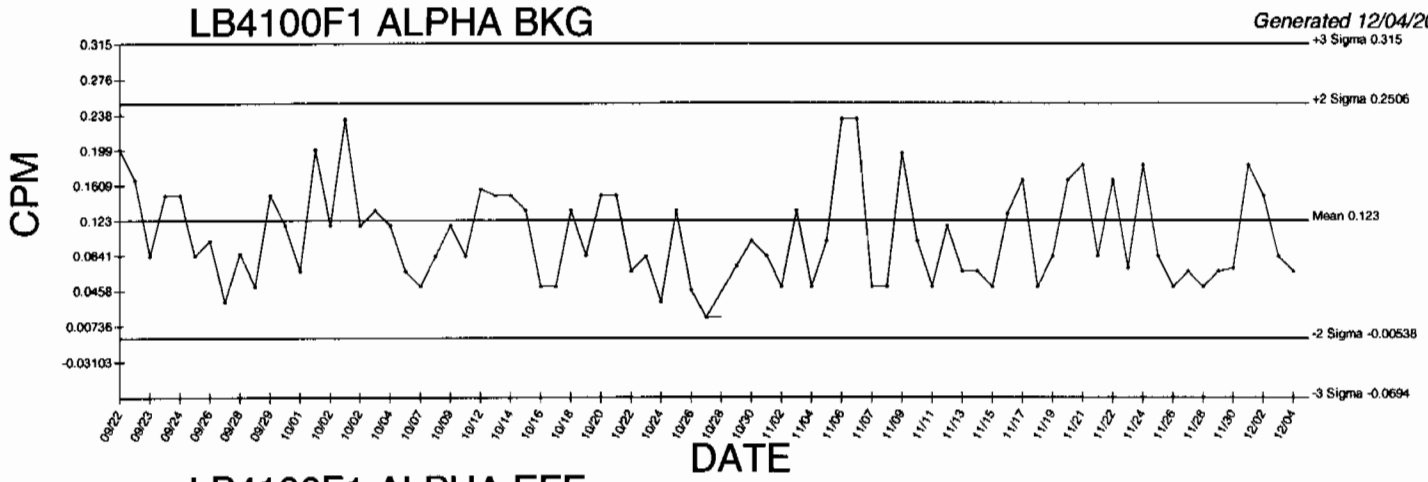

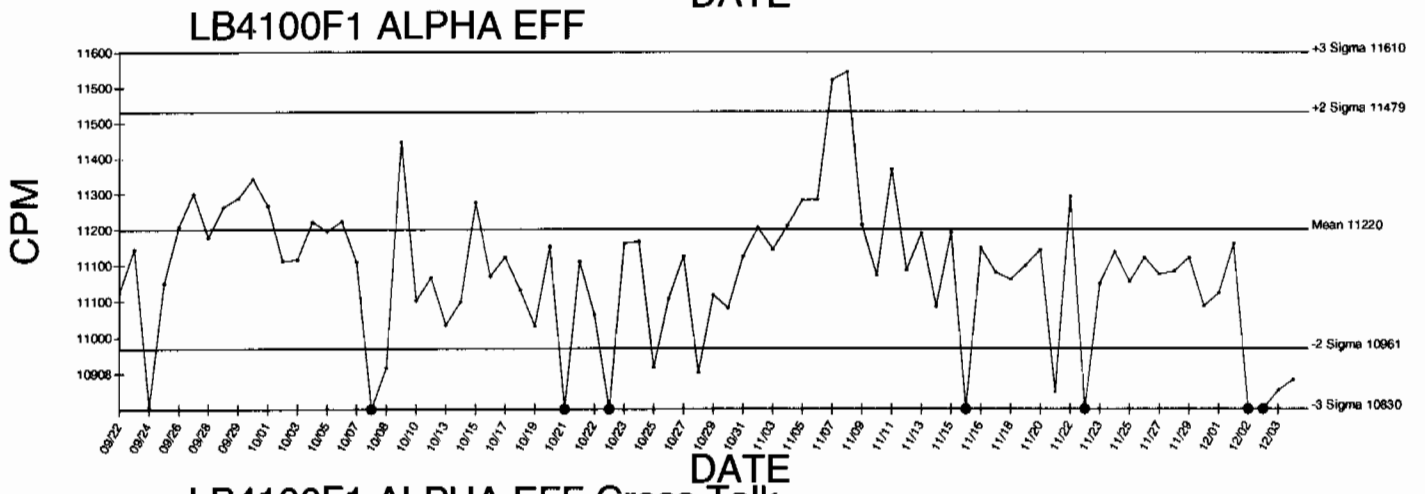

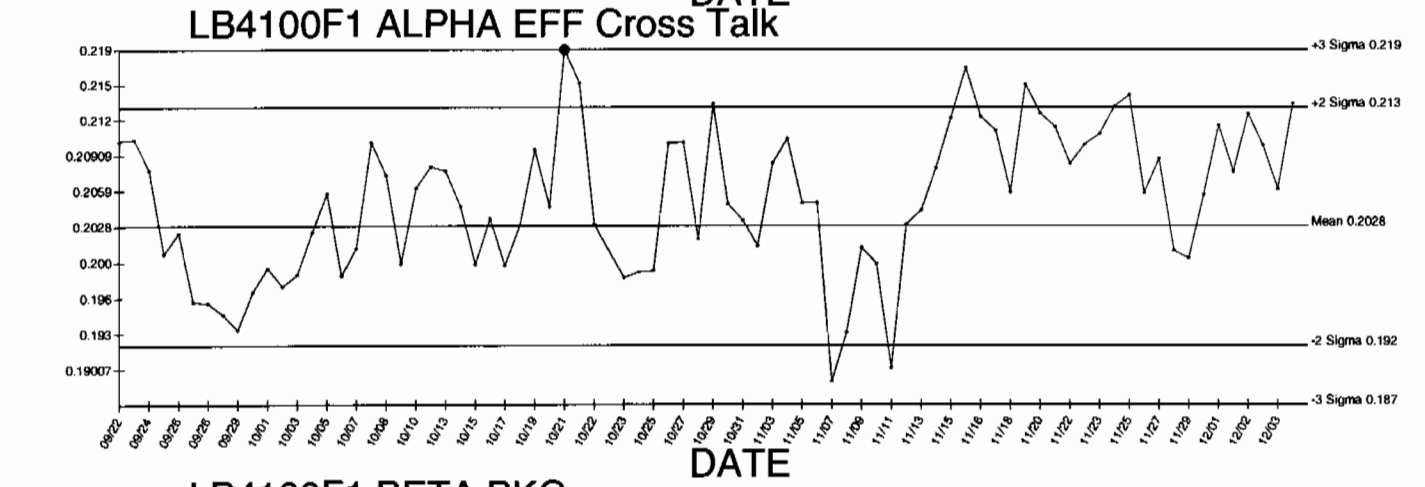

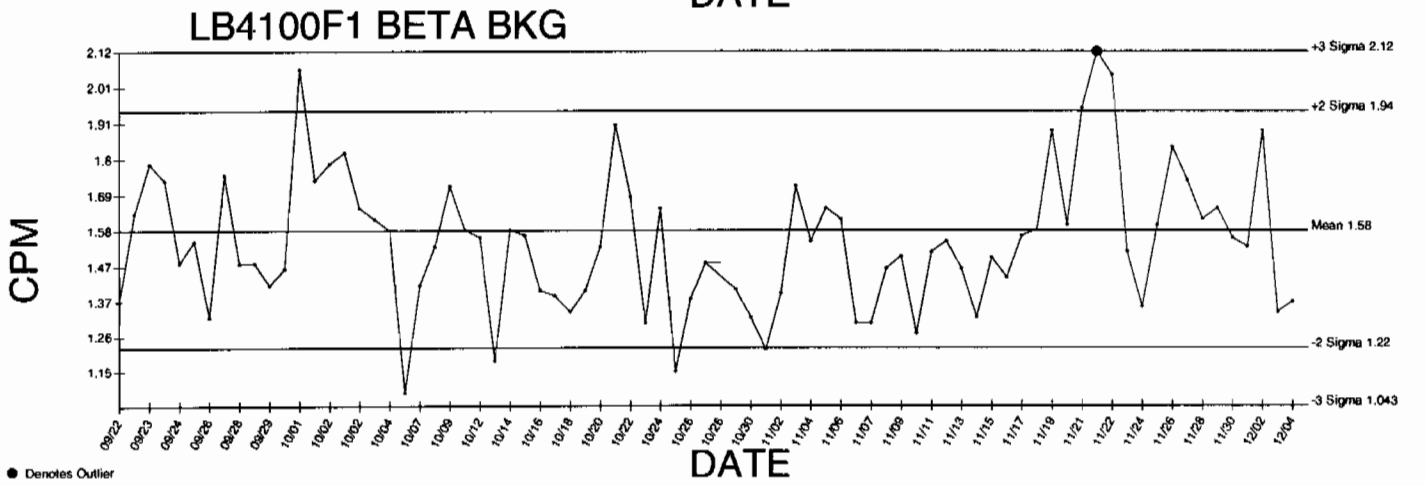

● Denotes Outlier

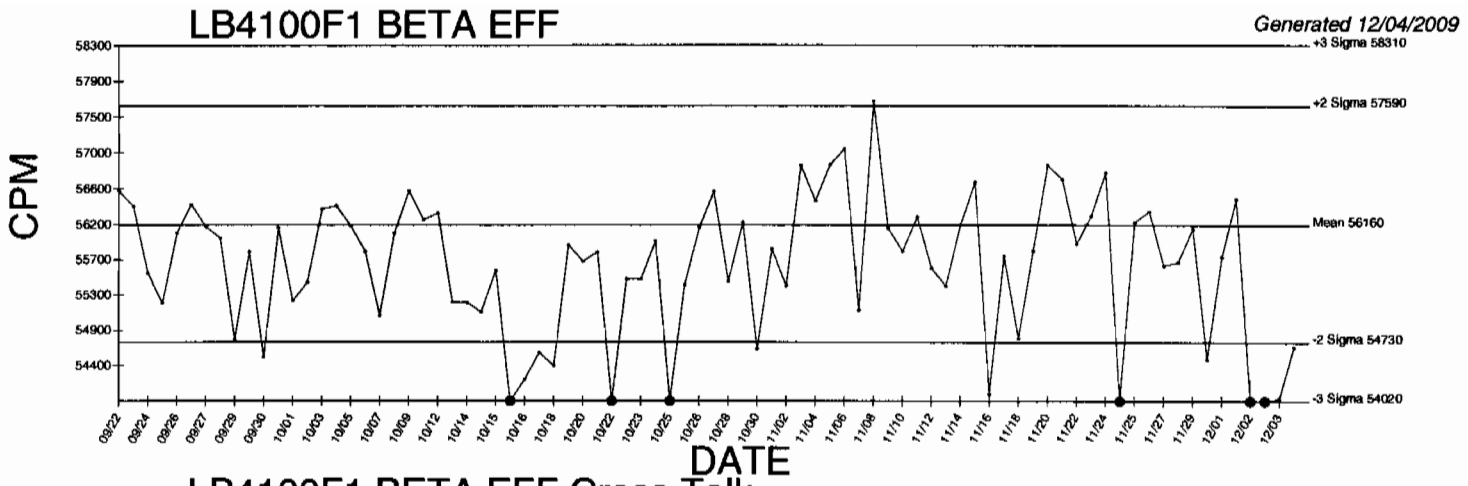

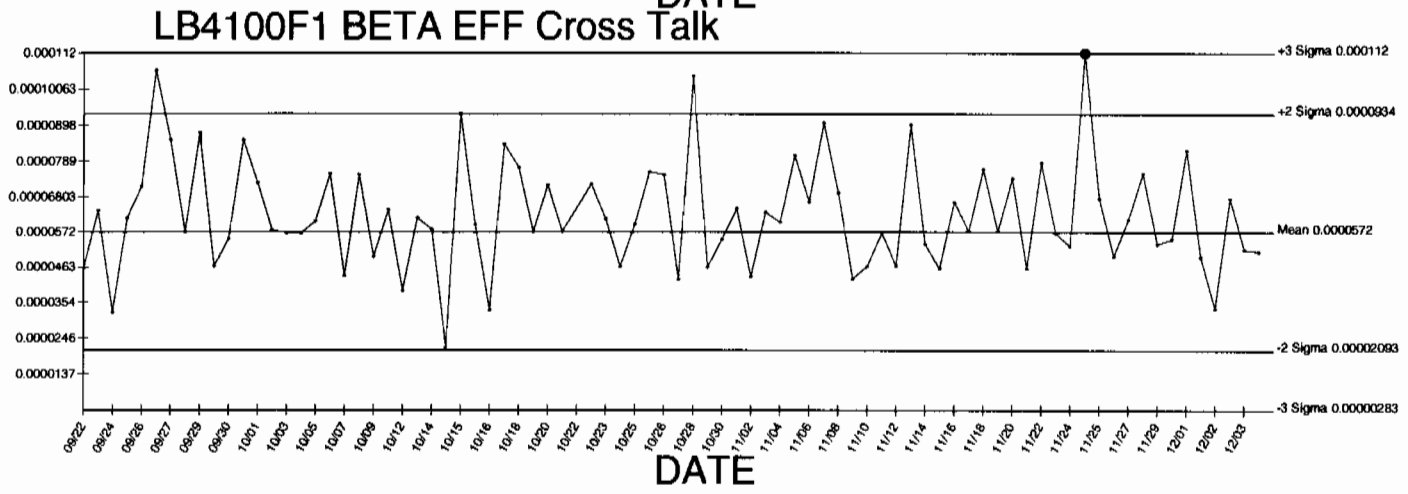

● Denotes Outlier

LB4100G1 ALPHA BKG

Generated 12/04/2009

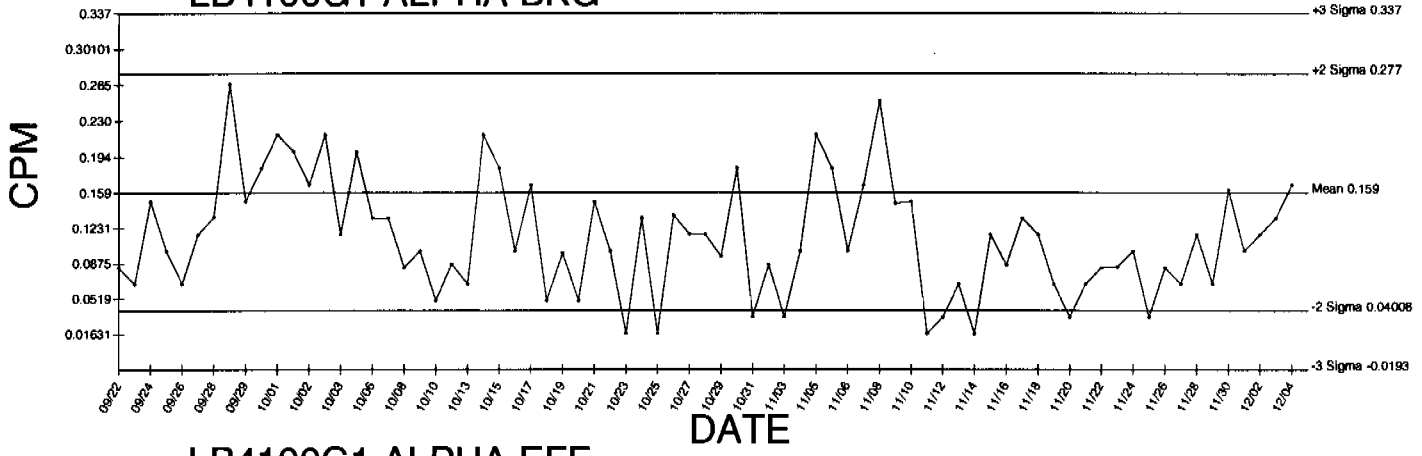

LB4100G1 ALPHA EFF

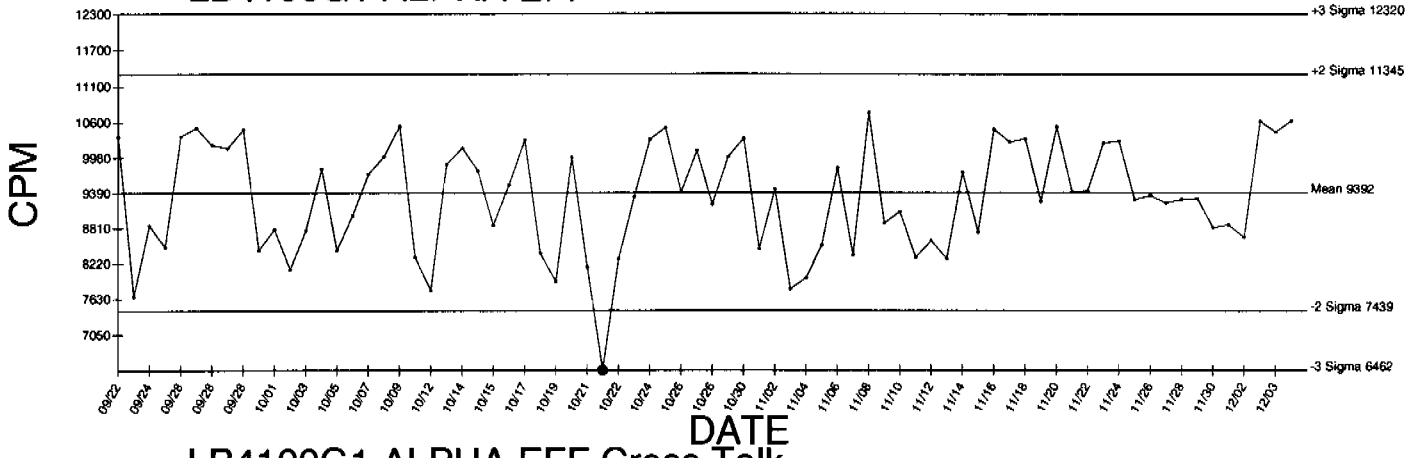

LB4100G1 ALPHA EFF Cross Talk

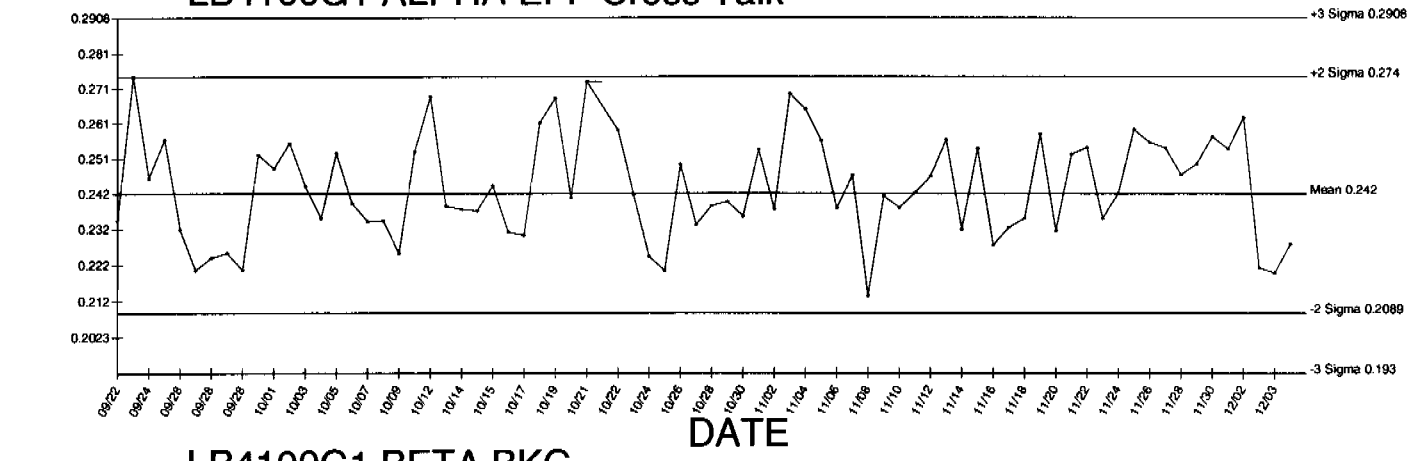

LB4100G1 BETA BKG

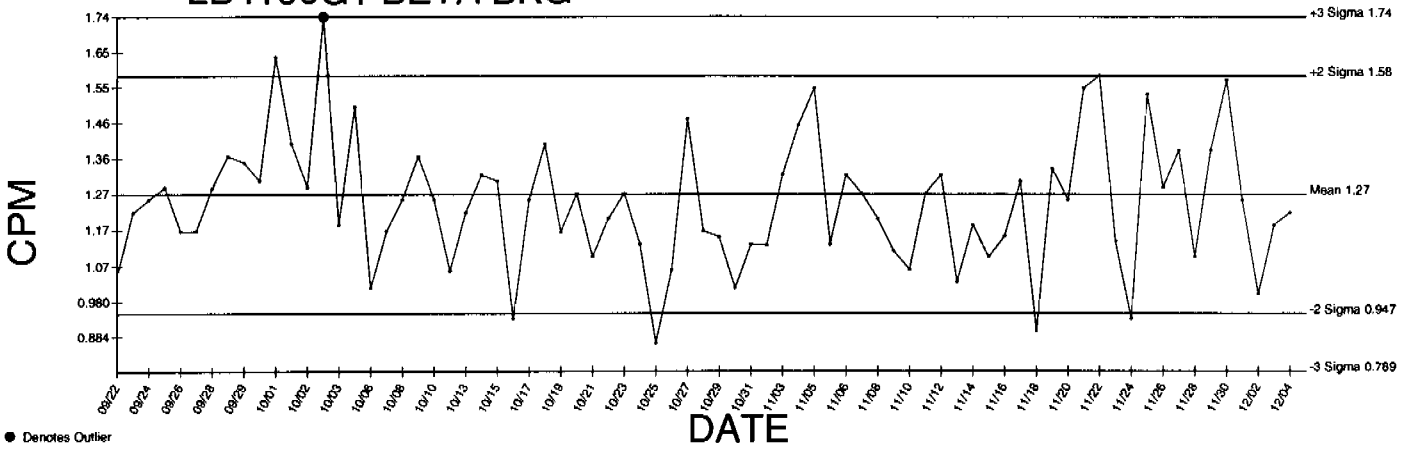

● Denotes Outlier

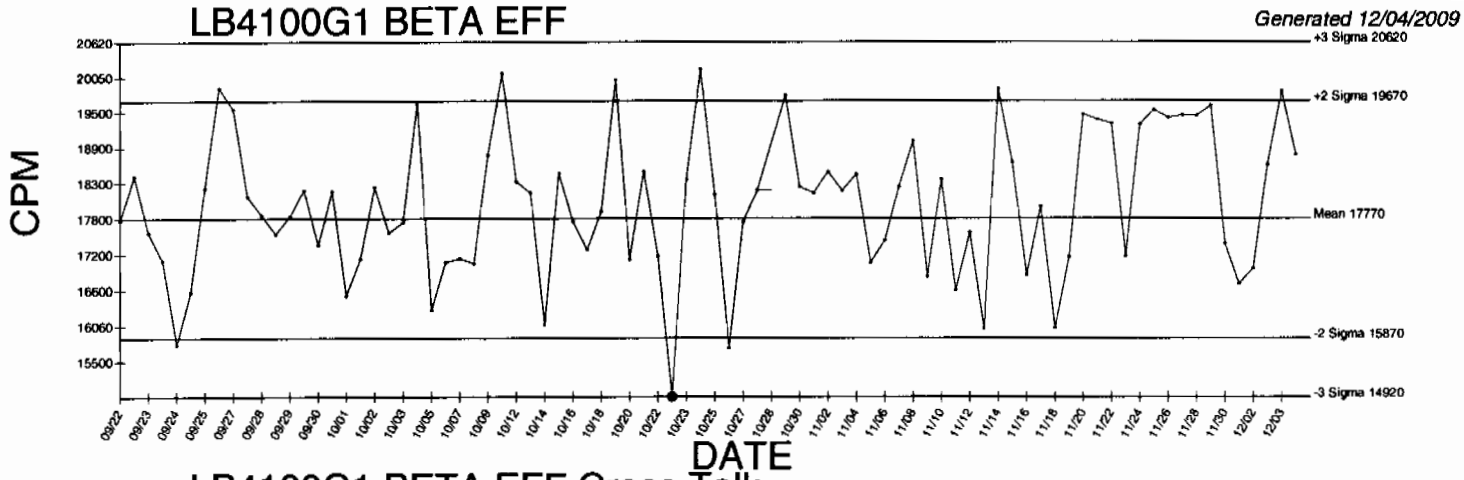

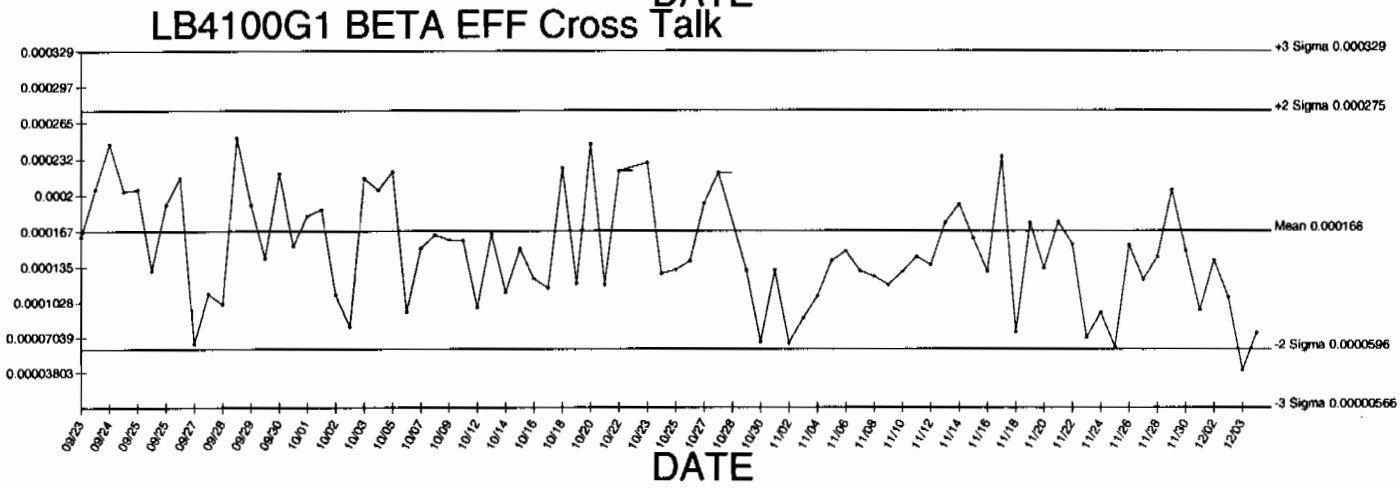

● Denotes Outlier

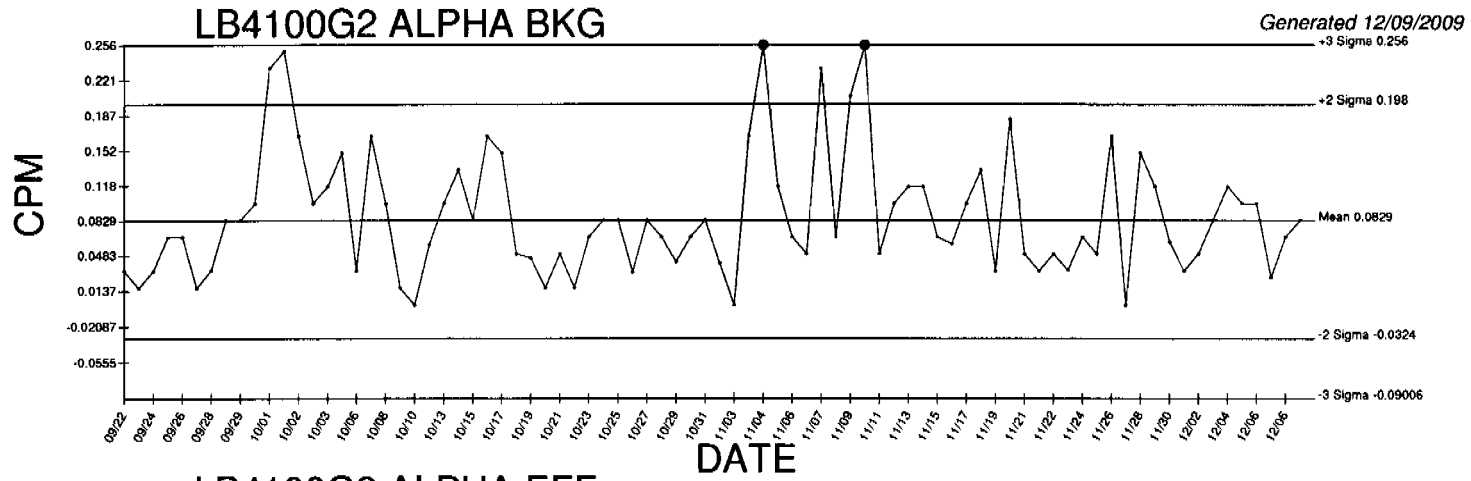
LB4100G2 ALPHA BKG
Generated 12/09/2009
CPM
DATE
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-2 Sigma -0.0324
-3 Sigma -0.09006

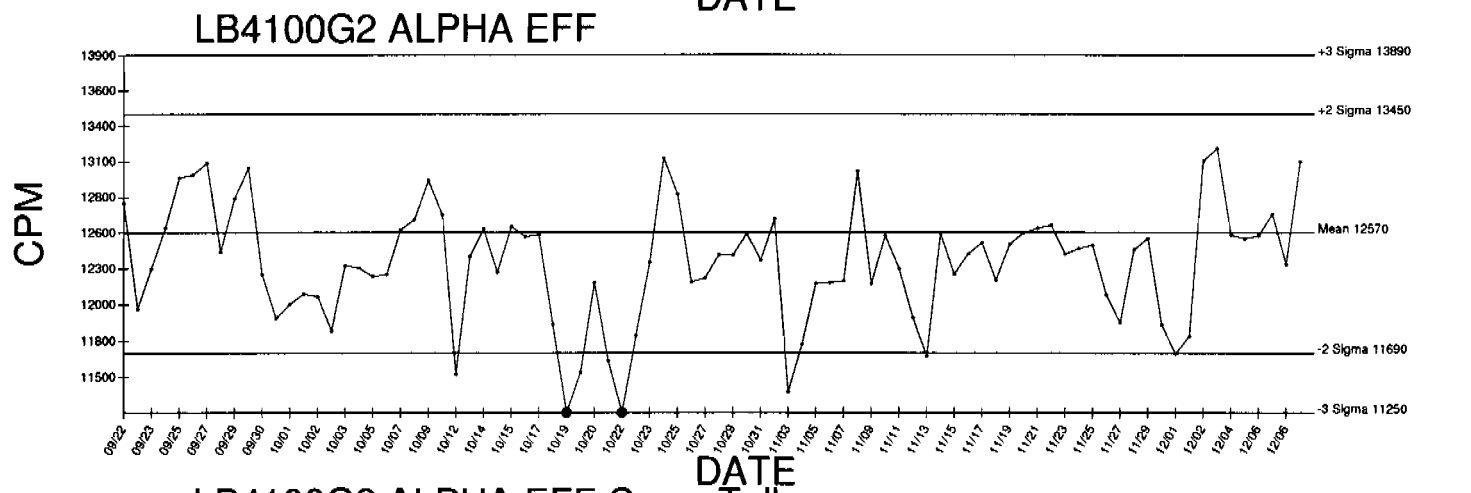
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CPM
DATE
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Mean 12570
-2 Sigma 11690
-3 Sigma 11250

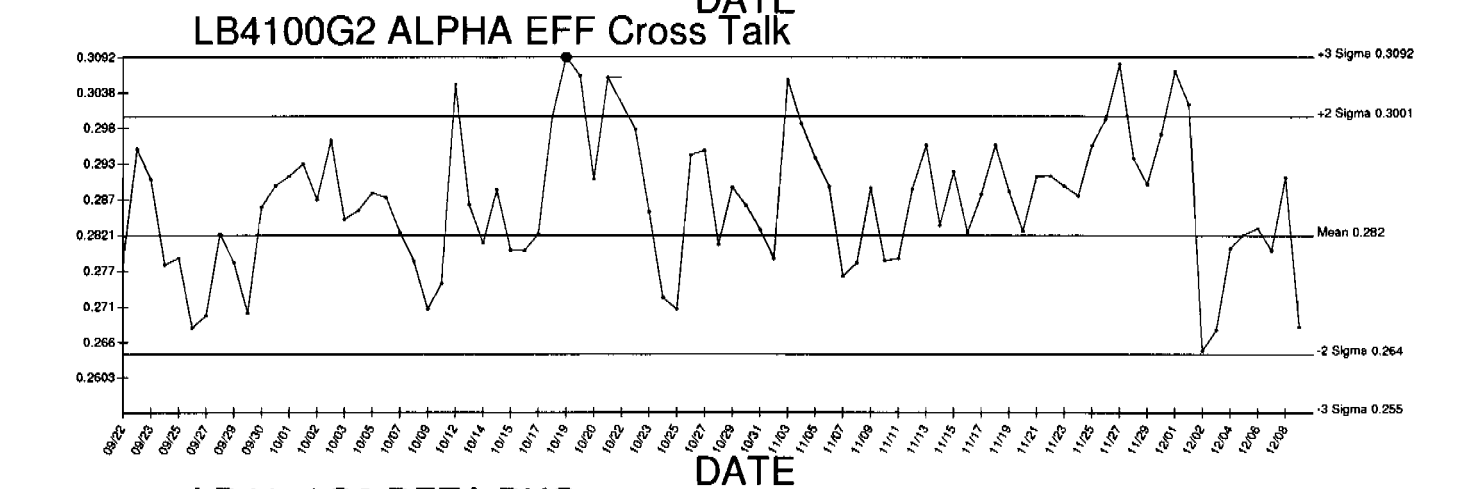
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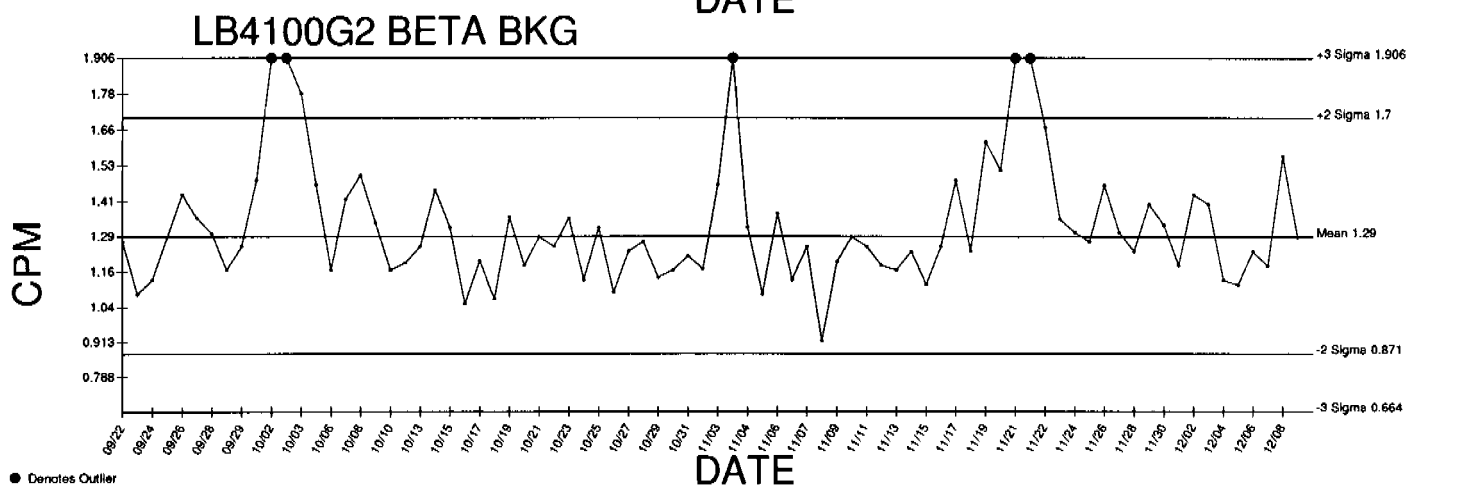
LB4100G2 BETA BKG
CPM
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● Denotes Outlier

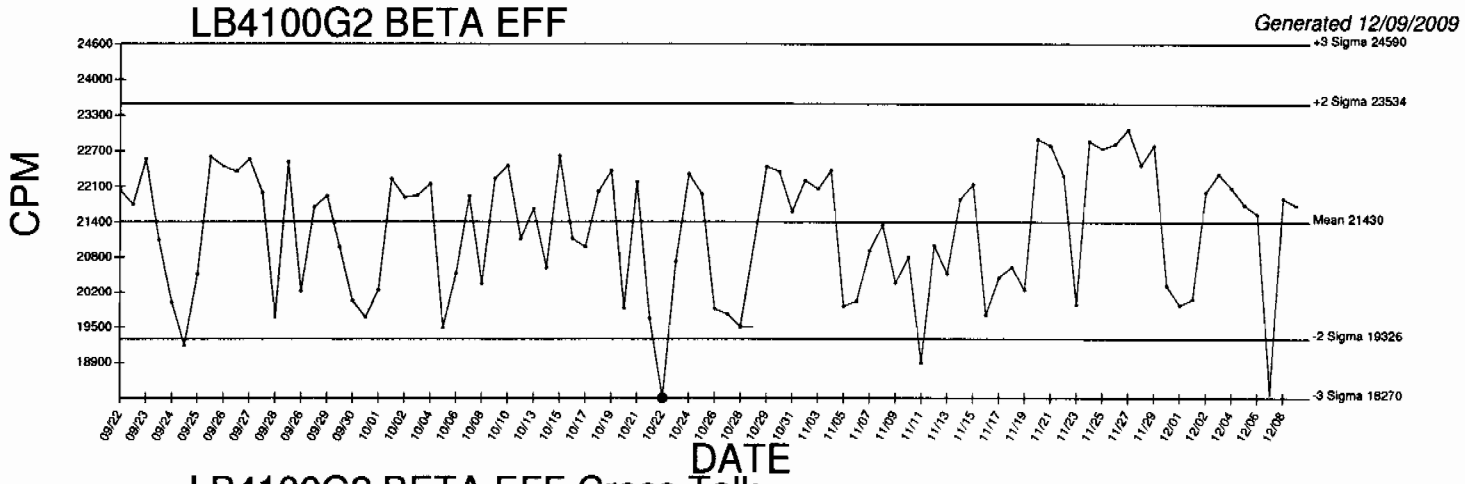

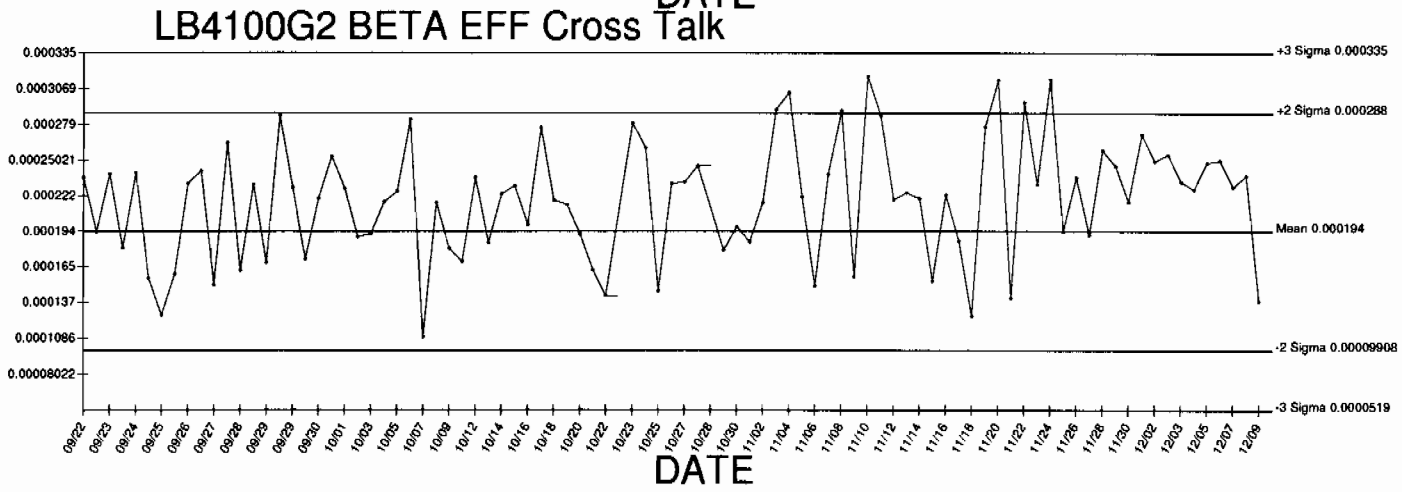

● Denotes Outlier

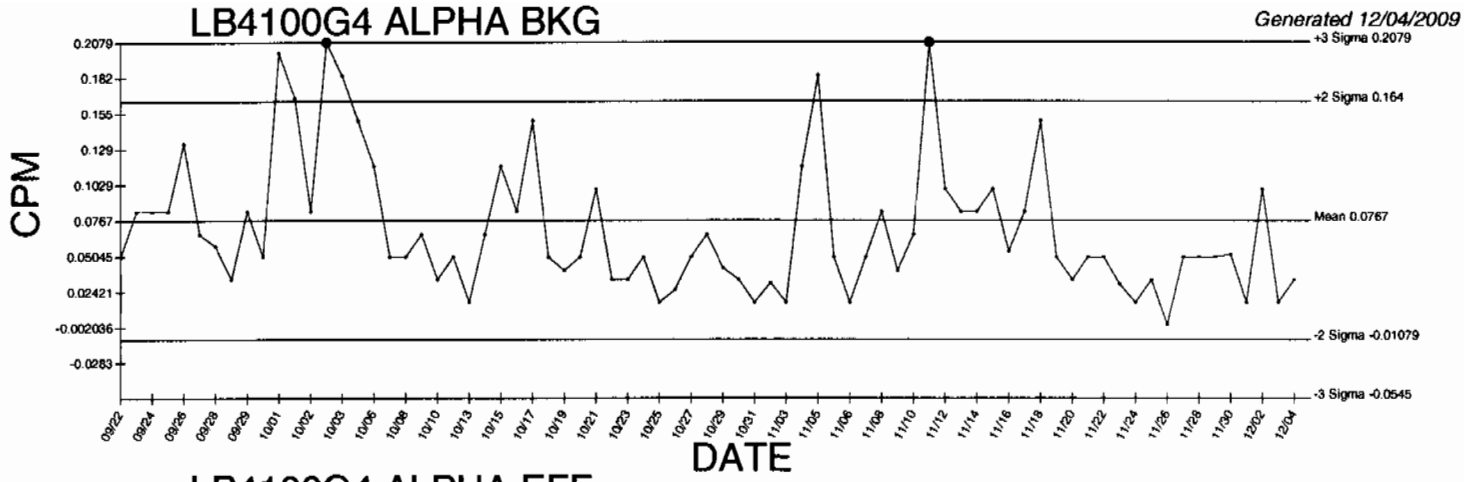
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Generated 12/04/2009
CPM
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Mean 0.0767
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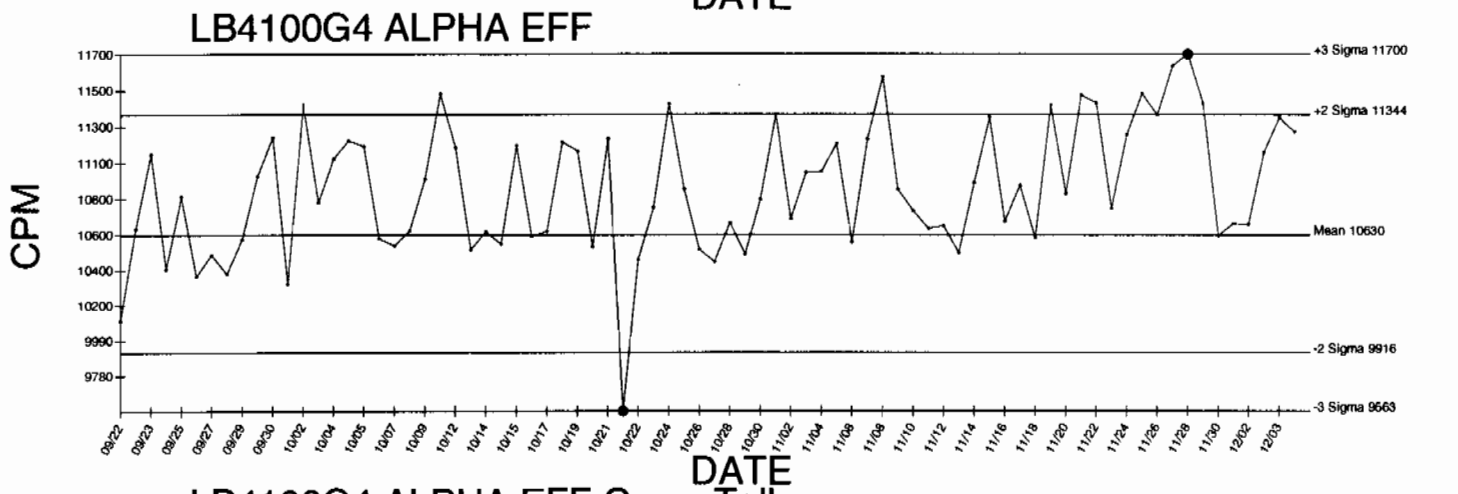
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CPM
DATE
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Mean 10630
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-3 Sigma 9563

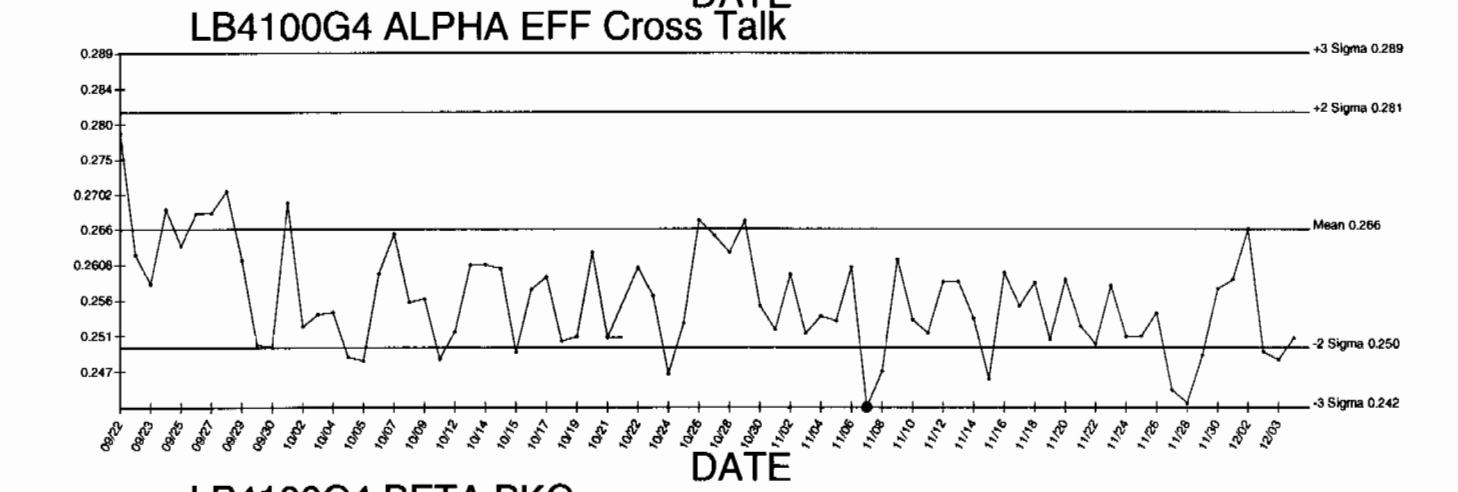
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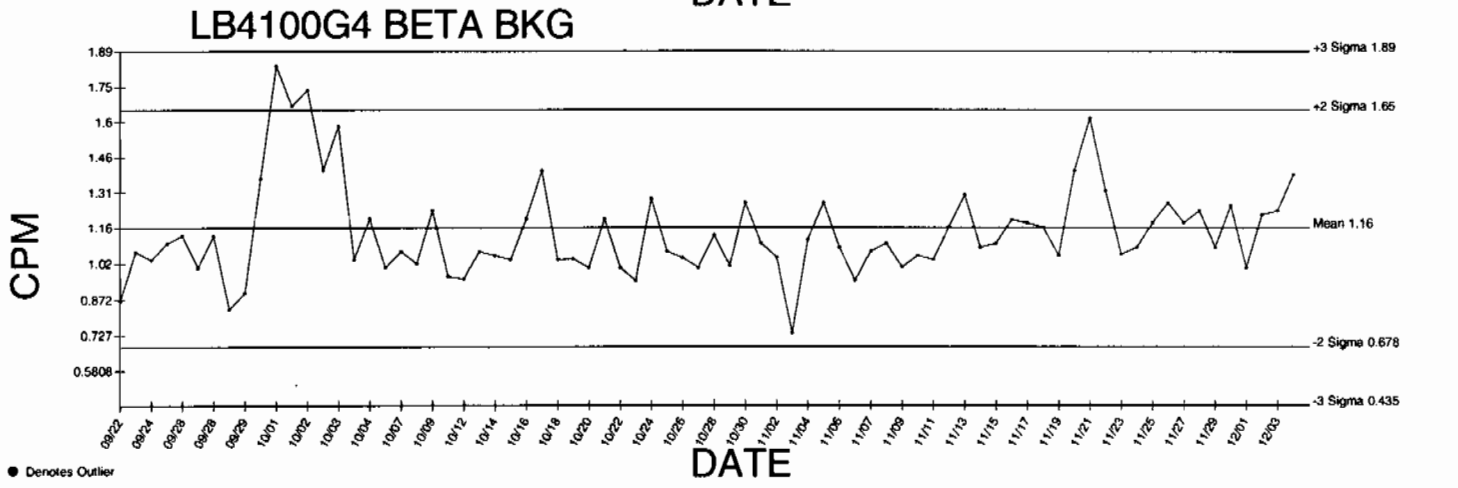
LB4100G4 BETA BKG
CPM
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● Denotes Outlier

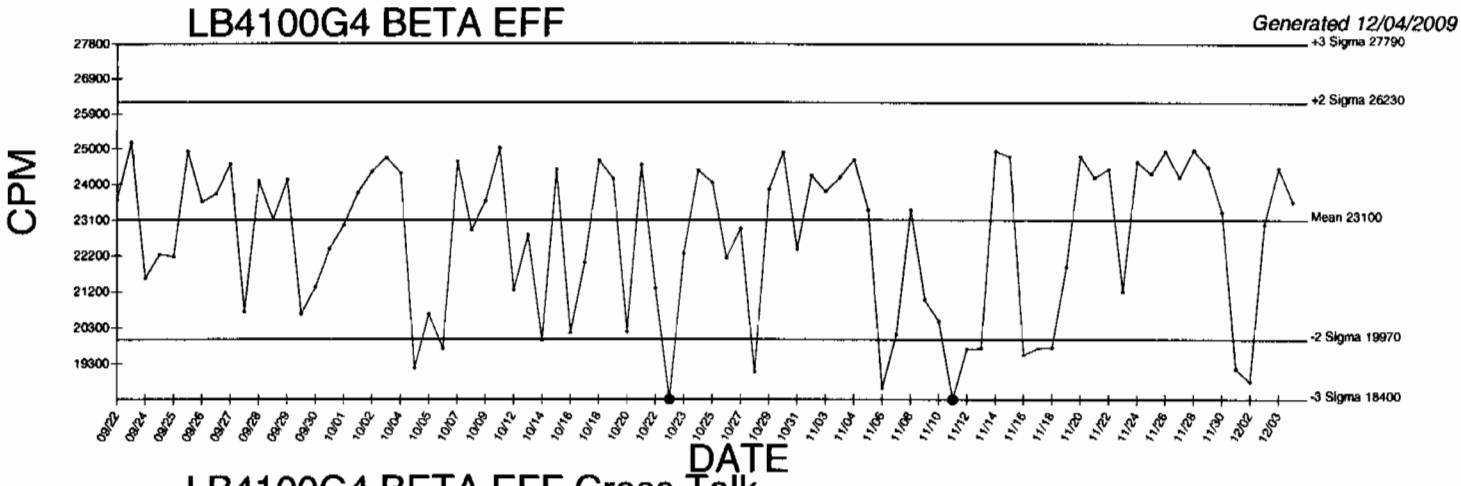

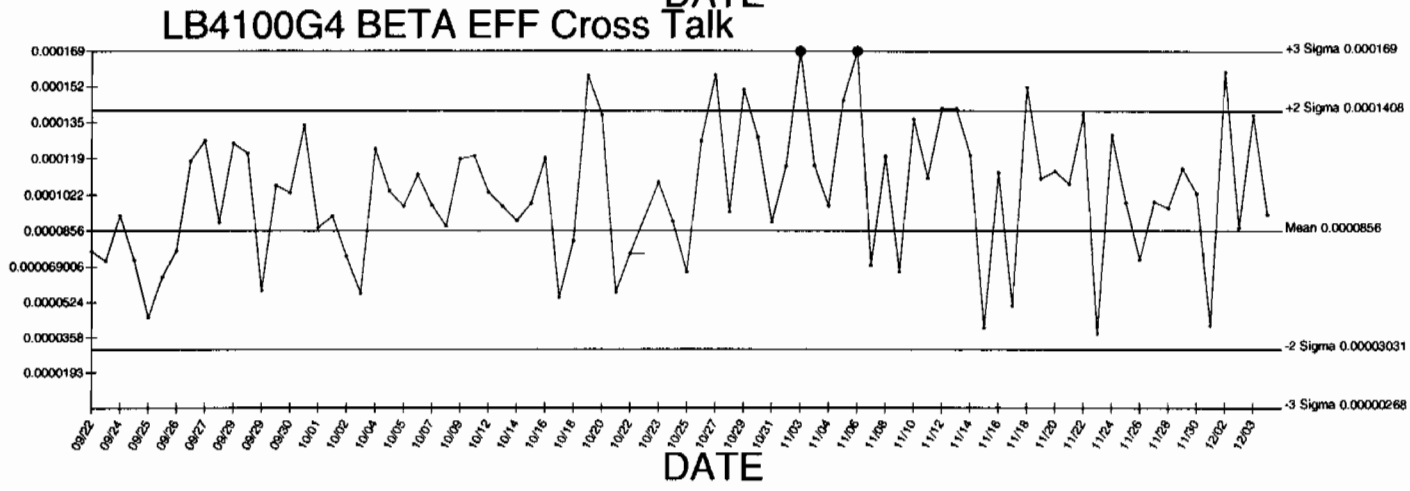

● Denotes Outlier

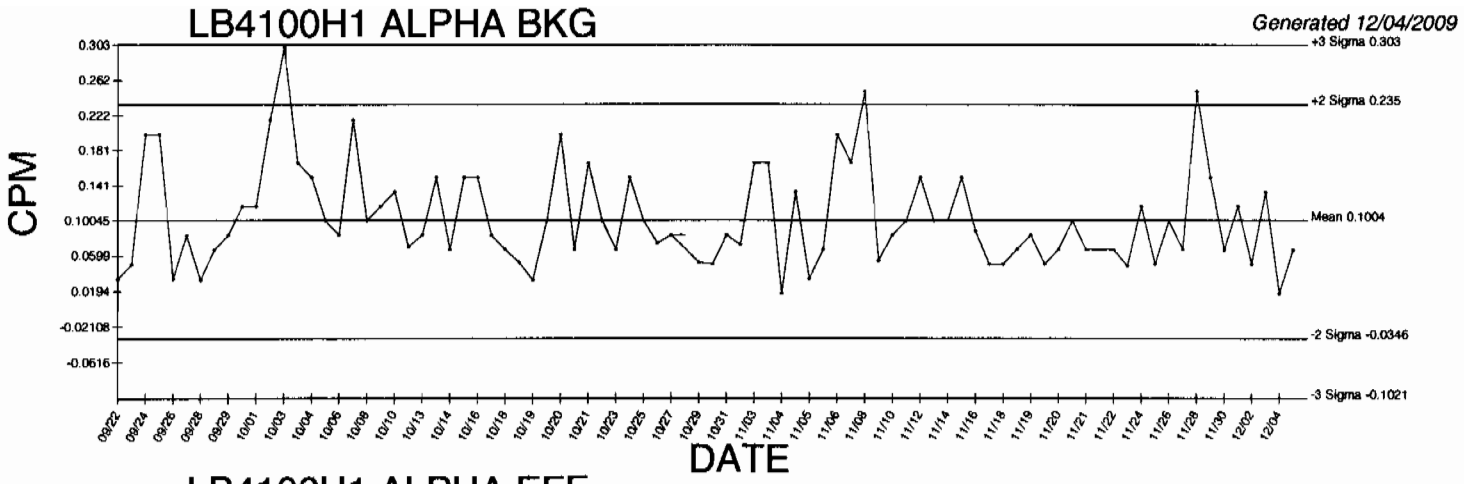
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Generated 12/04/2009
CPM
DATE
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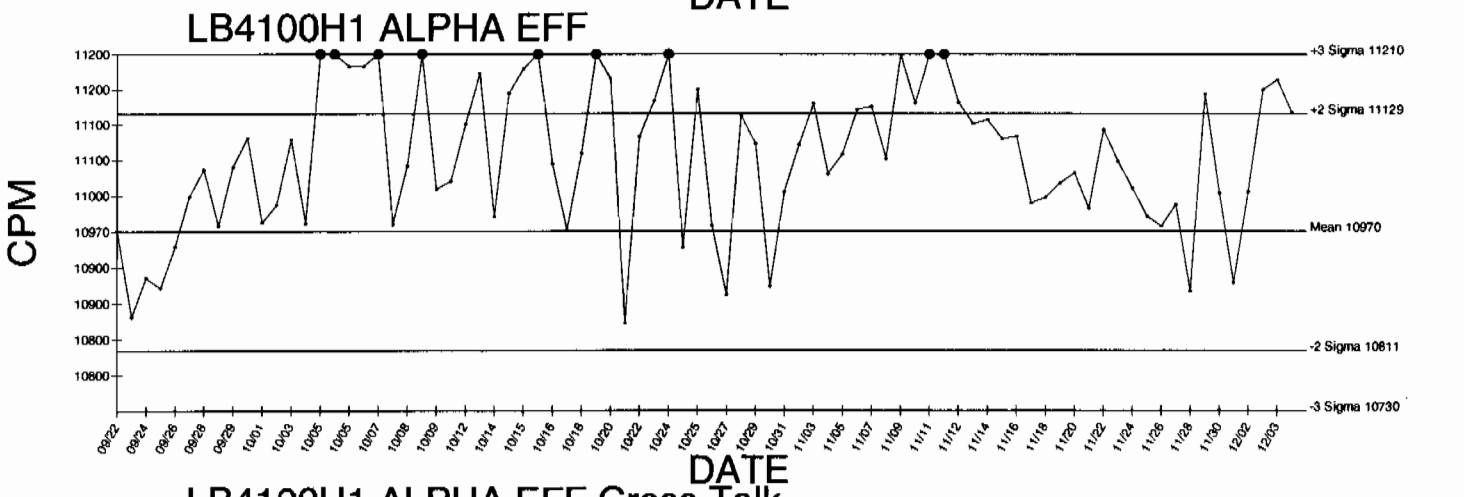
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CPM
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Mean 10970
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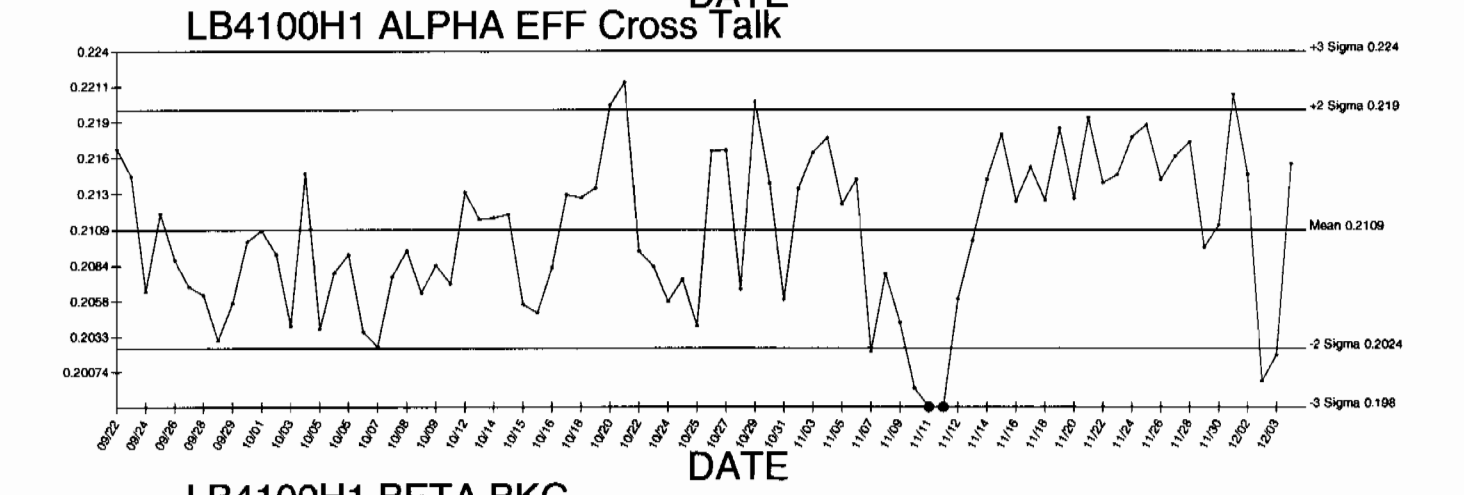
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+2 Sigma 0.219
Mean 0.2109
-2 Sigma 0.2024
-3 Sigma 0.198

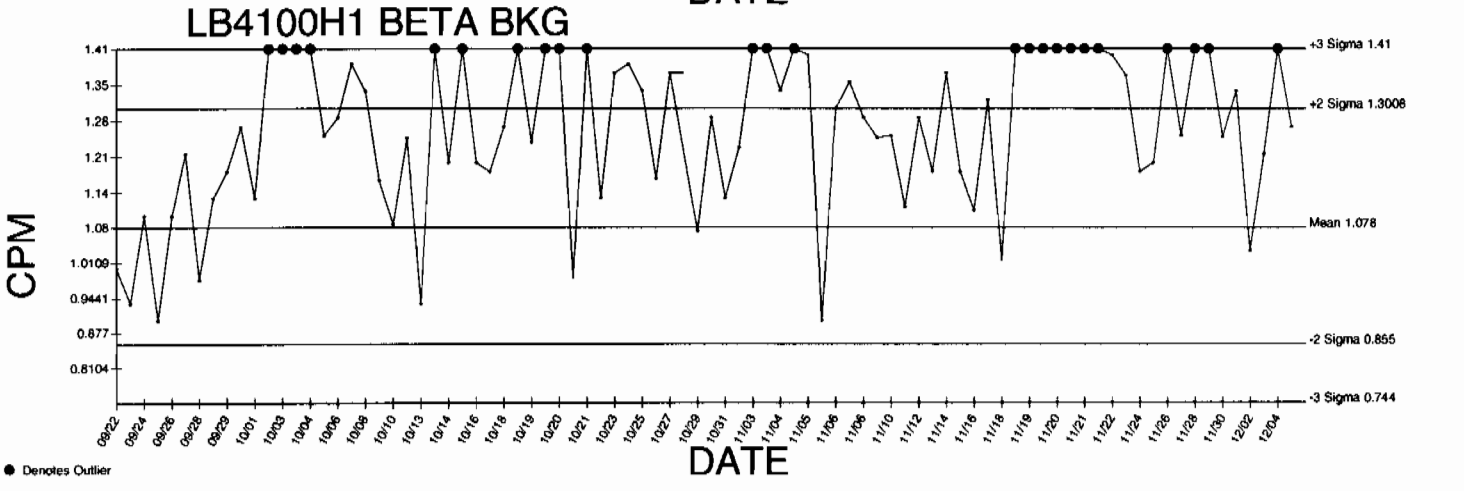
LB4100H1 BETA BKG
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● Denotes Outlier

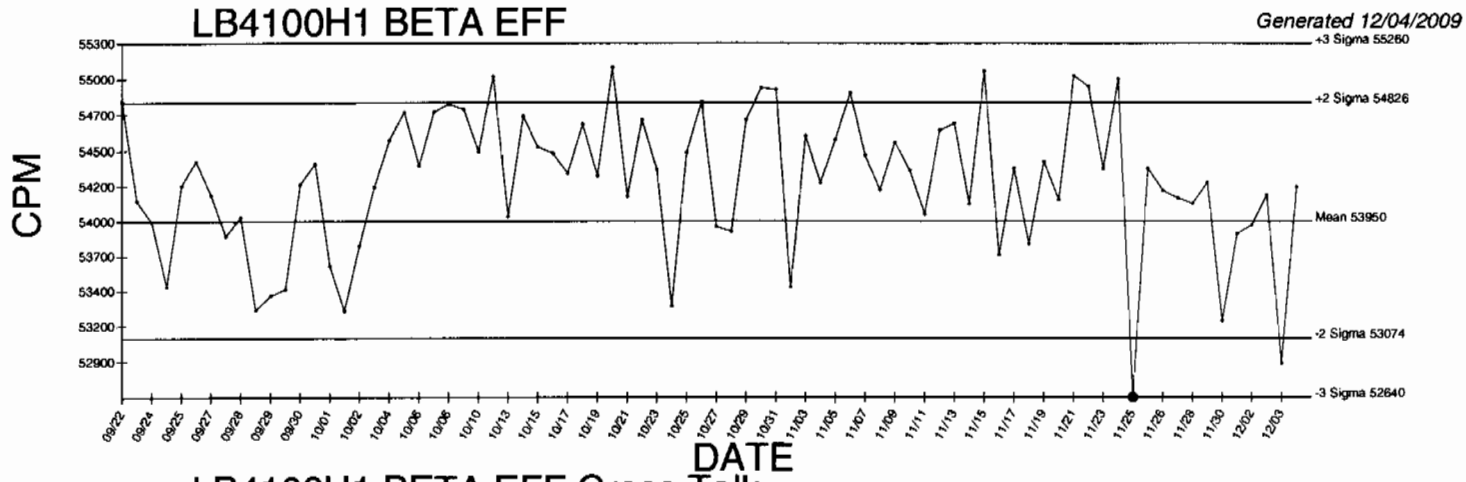

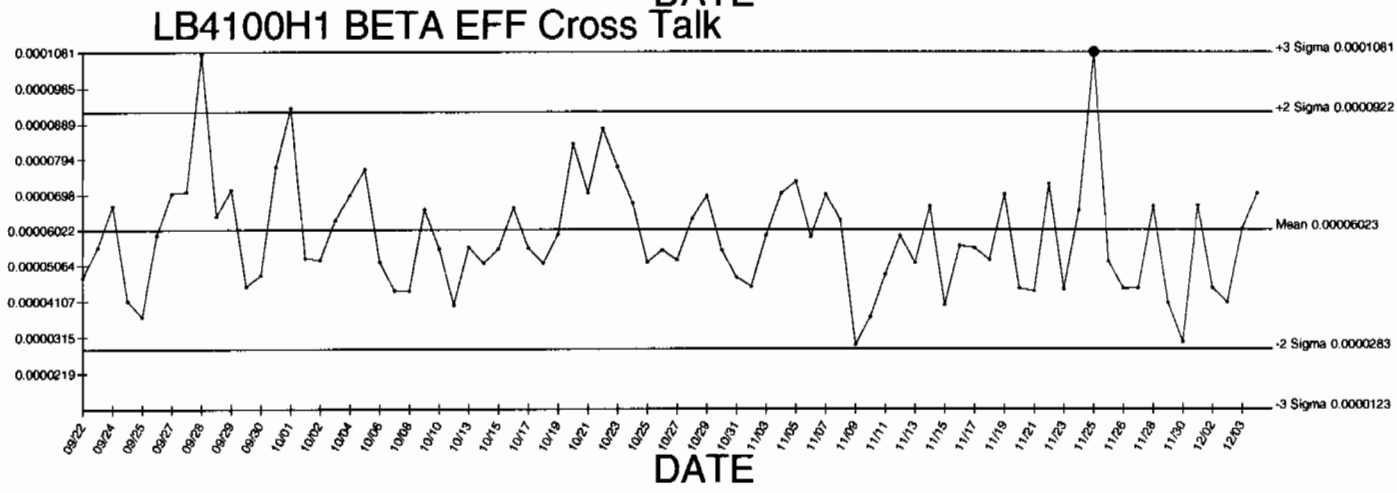

● Denotes Outlier

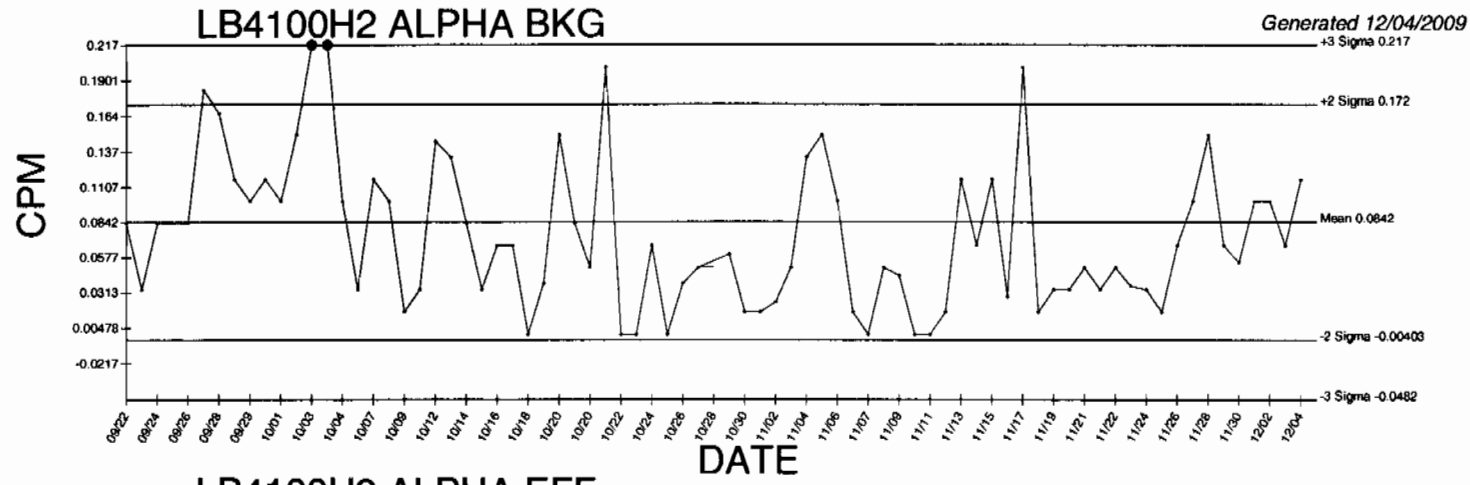
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Generated 12/04/2009
CPM
DATE
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-3 Sigma -0.0482

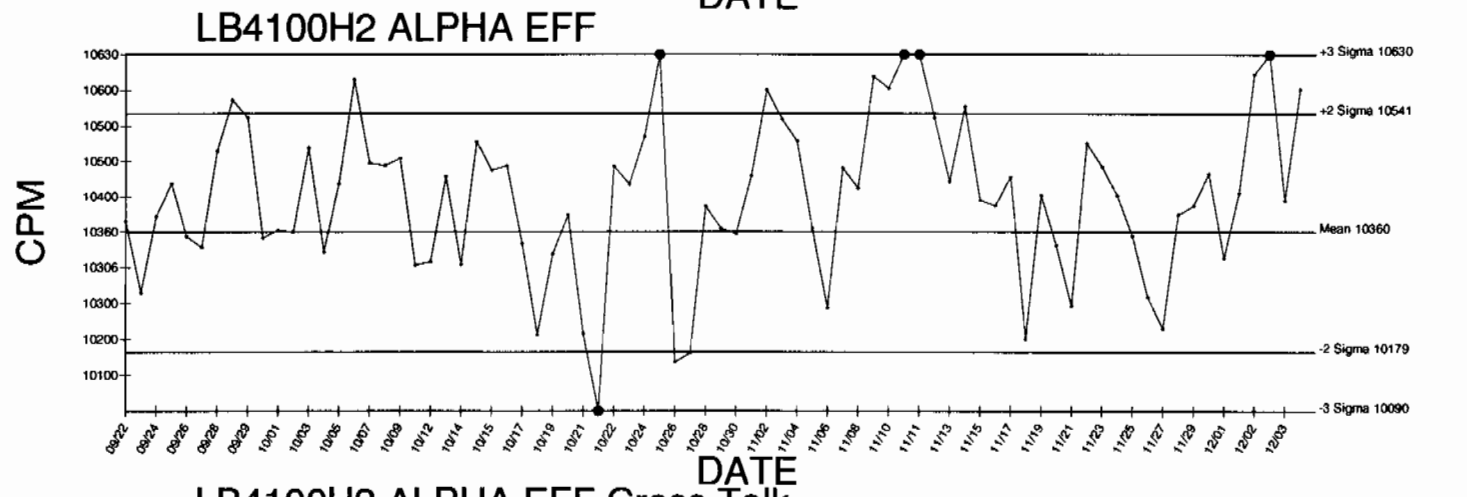
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CPM
DATE
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Mean 10360
-2 Sigma 10179
-3 Sigma 10090

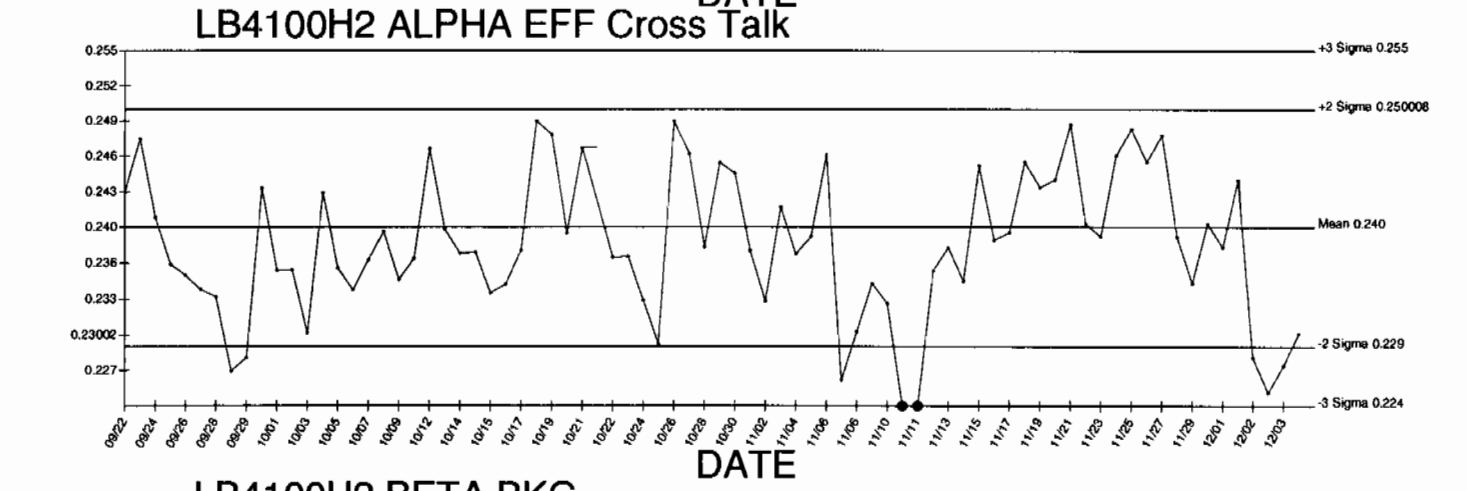
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Mean 0.240
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-3 Sigma 0.224

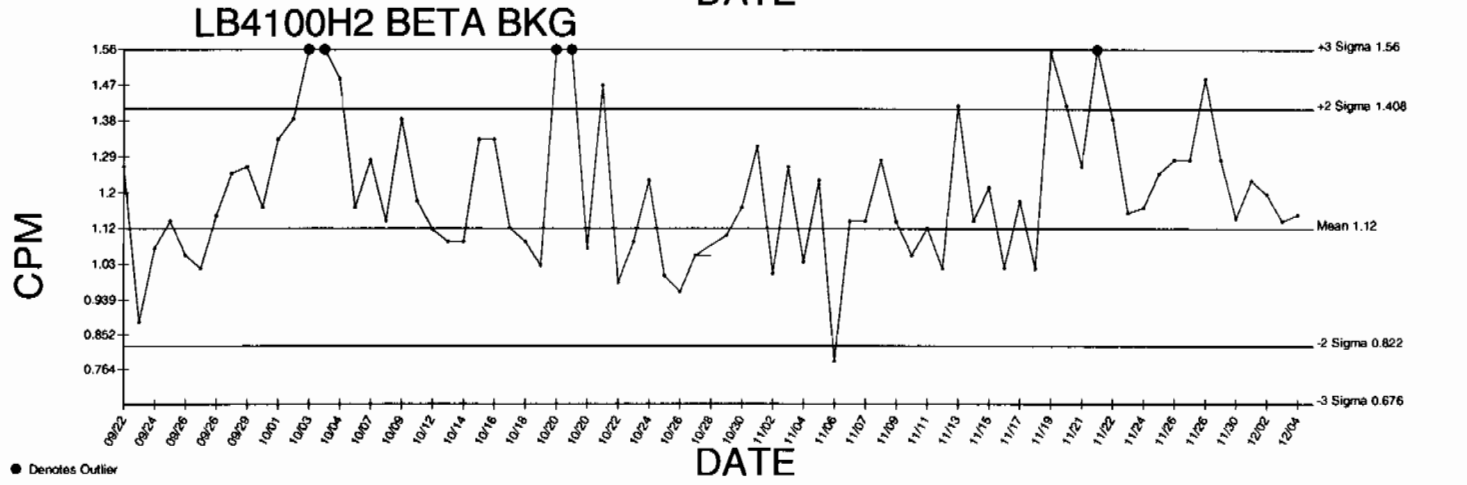
LB4100H2 BETA BKG
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Mean 1.12
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-3 Sigma 0.676
● Denotes Outlier

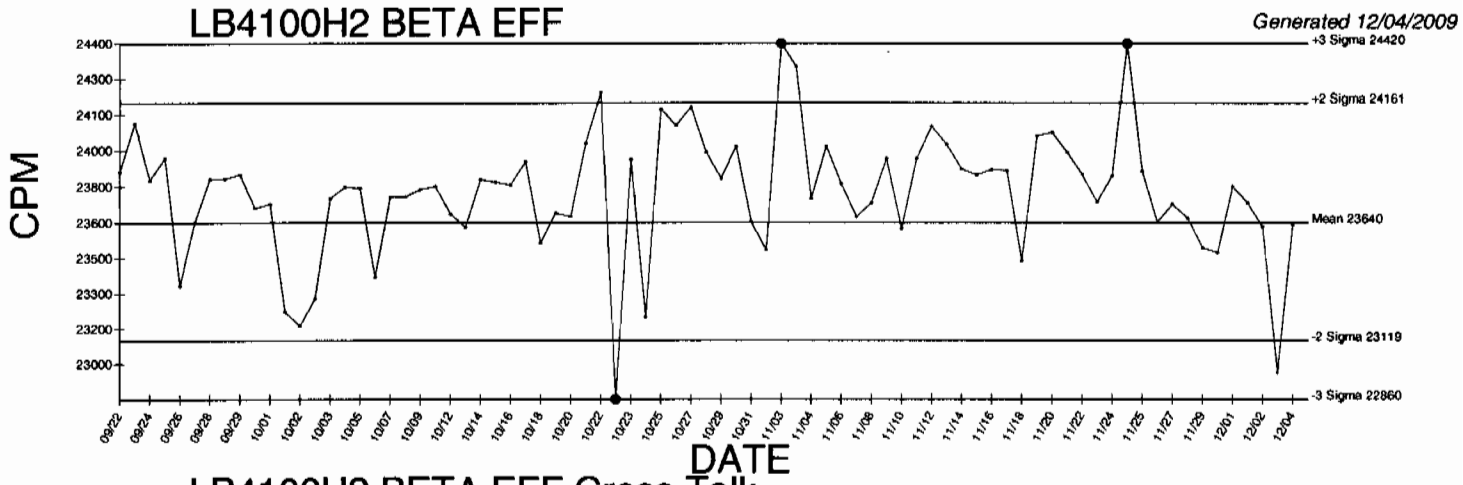

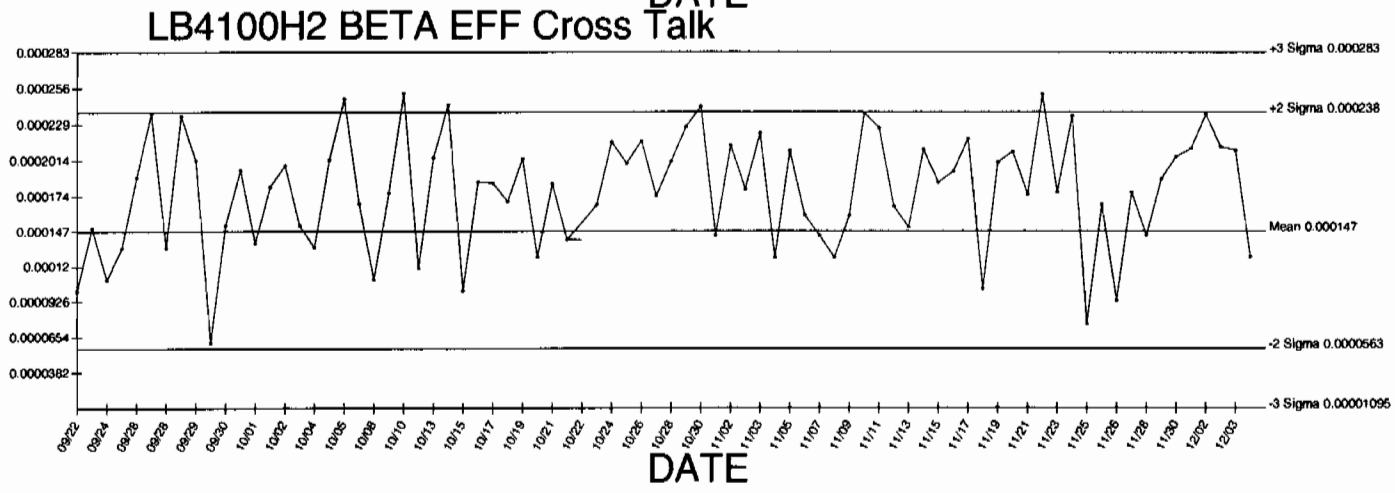

● Denotes Outlier

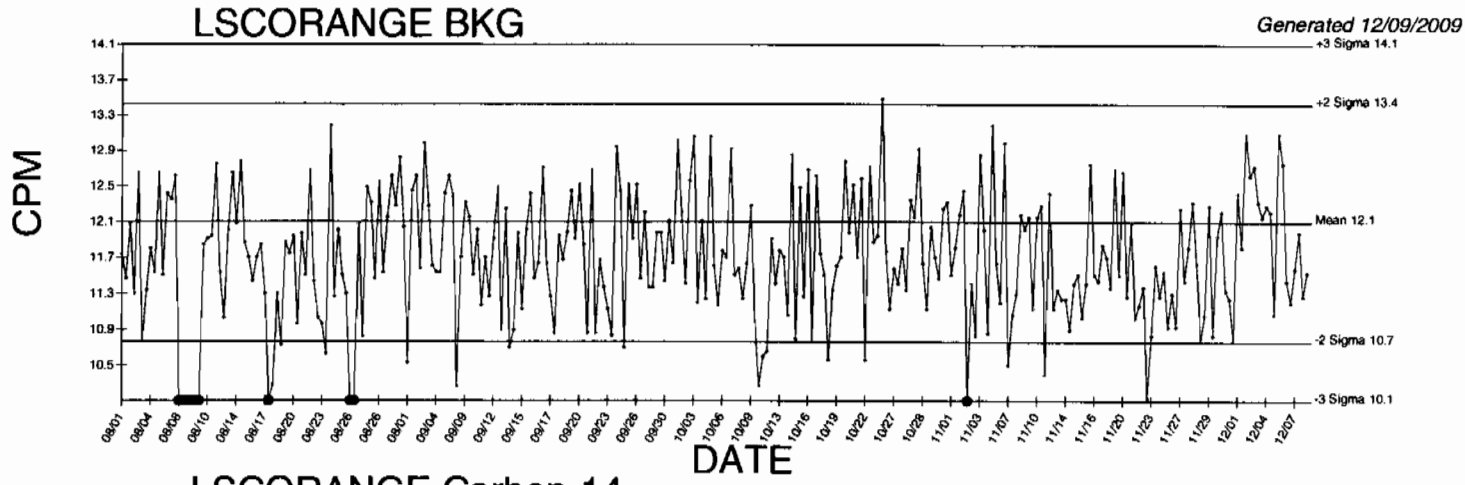

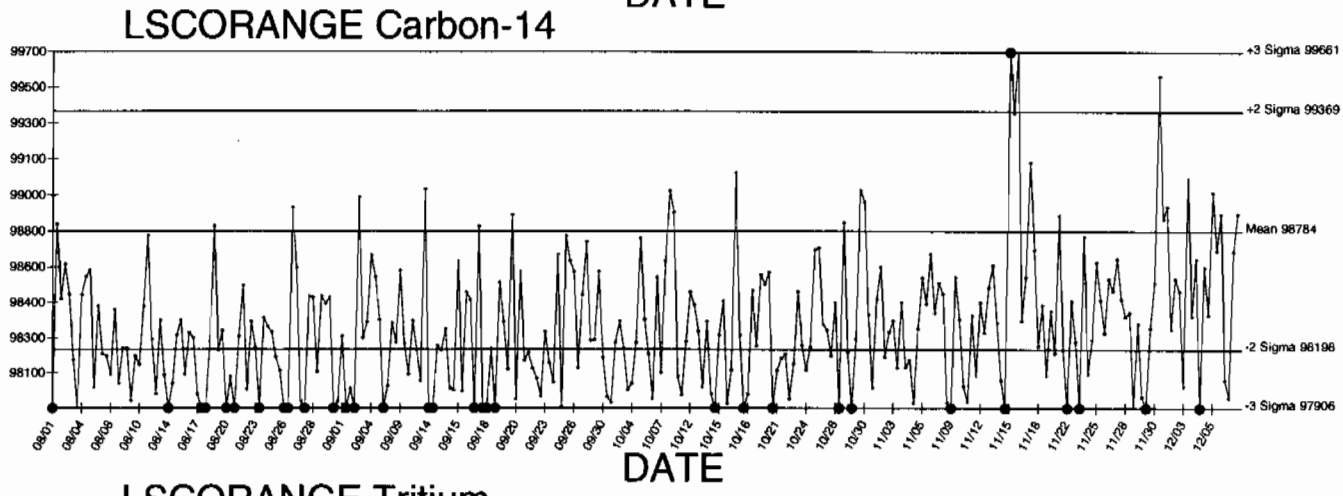

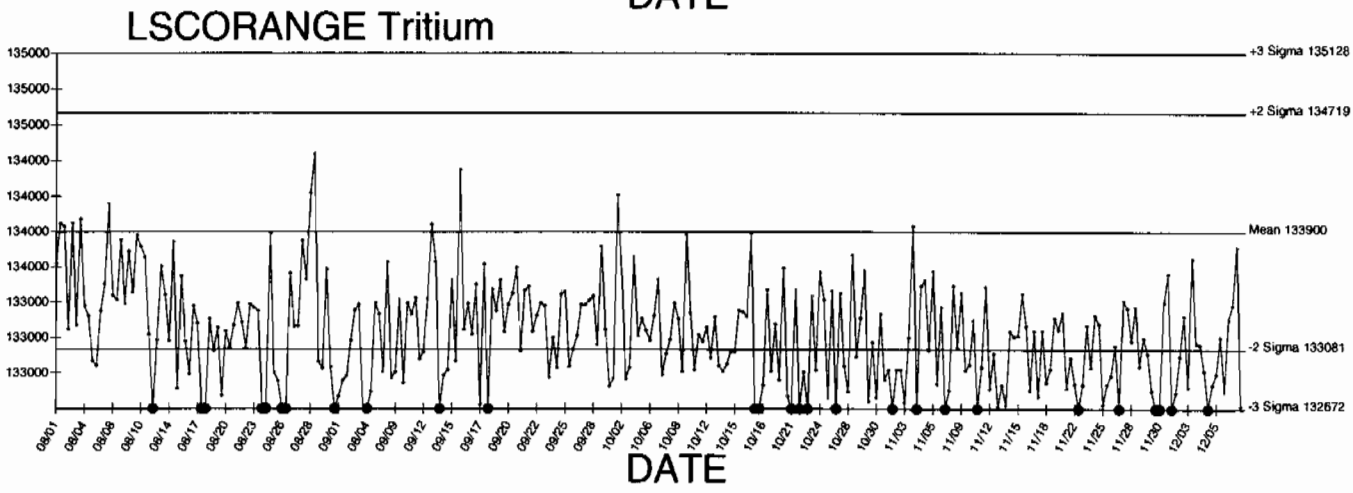

● Denotes Outlier

QA filename : DKA100:[ENV_ALPHA.QA.W]W026.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.307728 through 0.327728

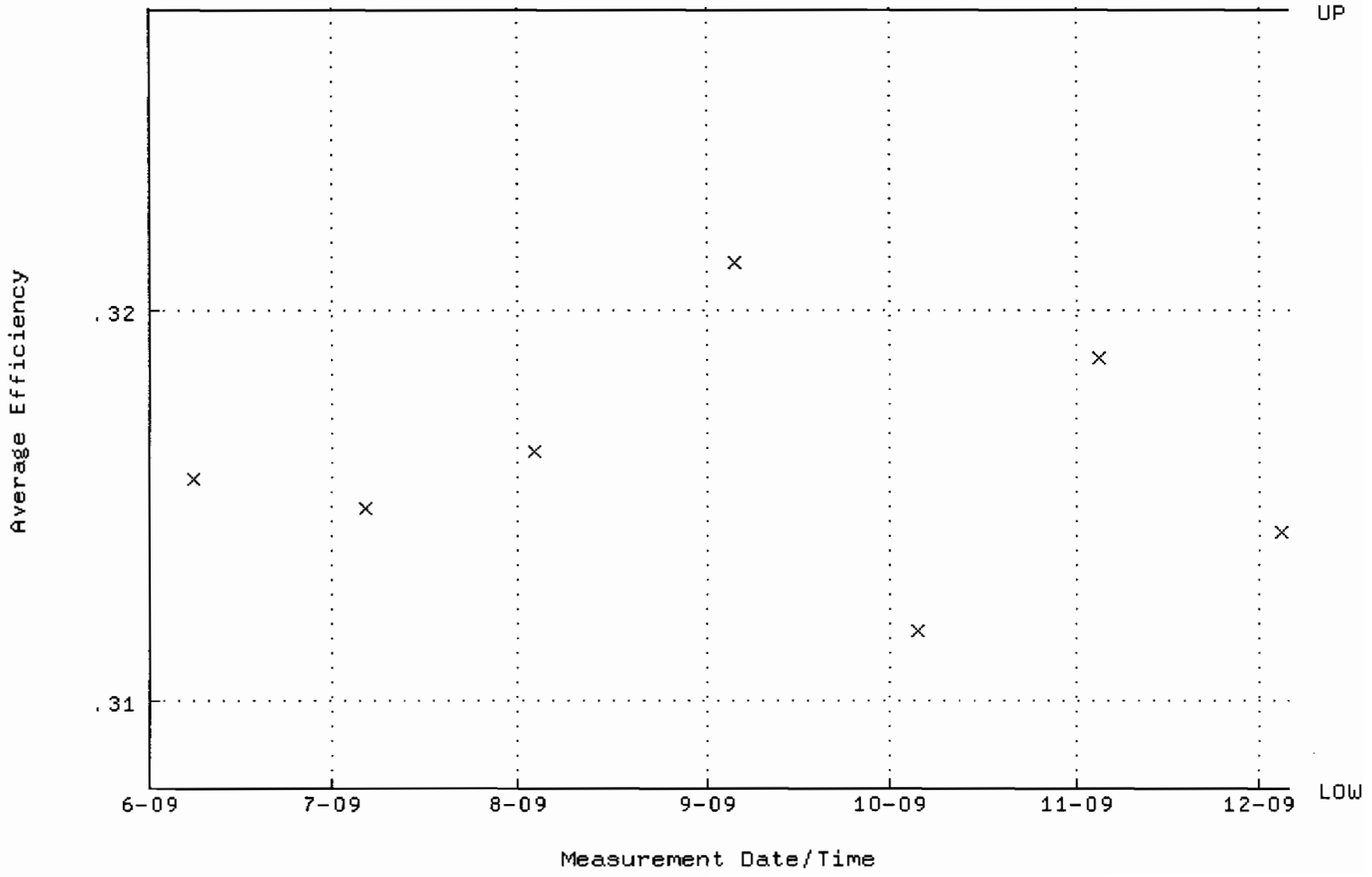

QA filename : DKA100:[ENV_ALPHA.QA.W]W026.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 85.8763 through 94.9159

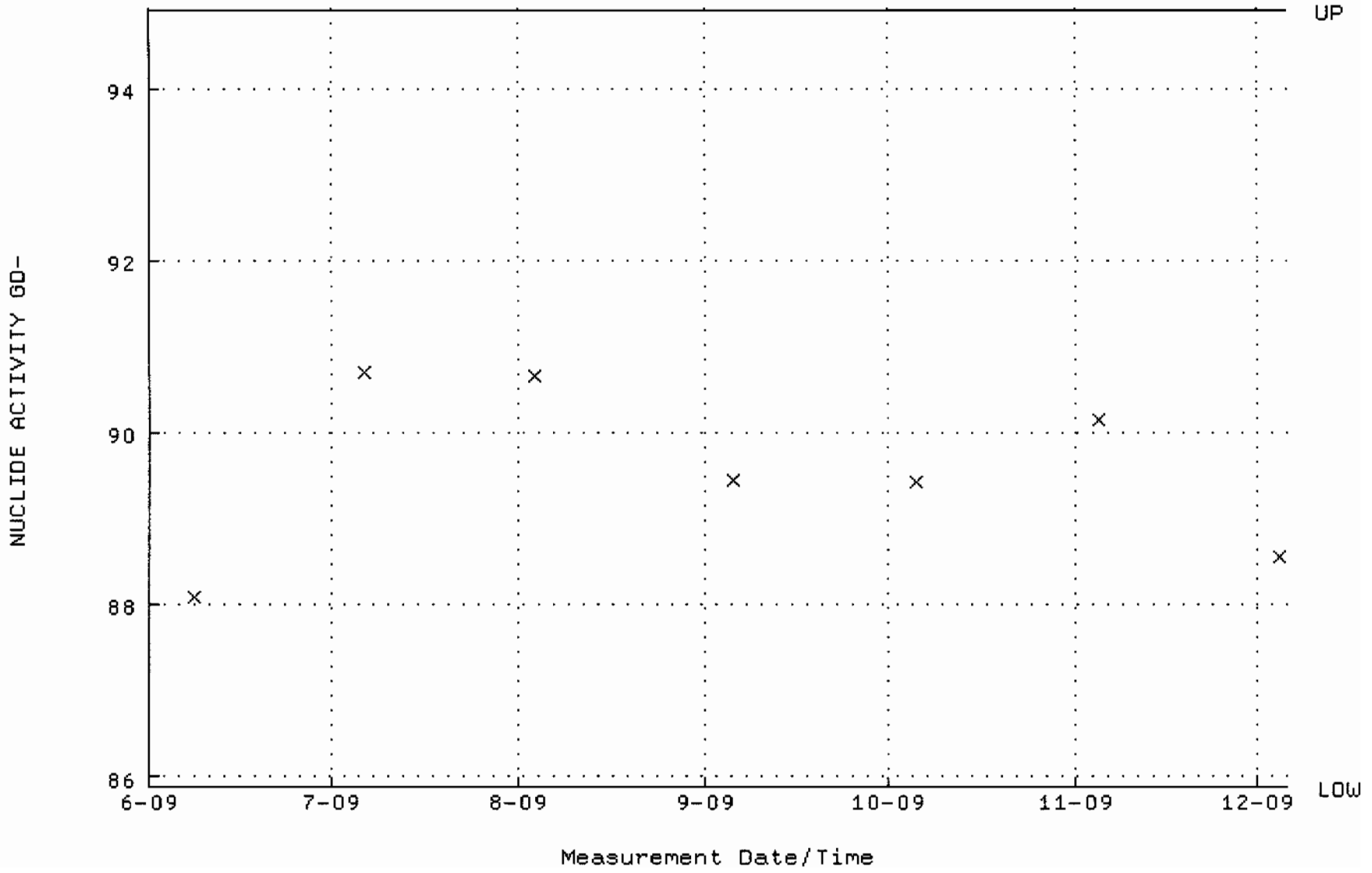

QA filename : DKA100:[ENV_ALPHA.QA.B]B026.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

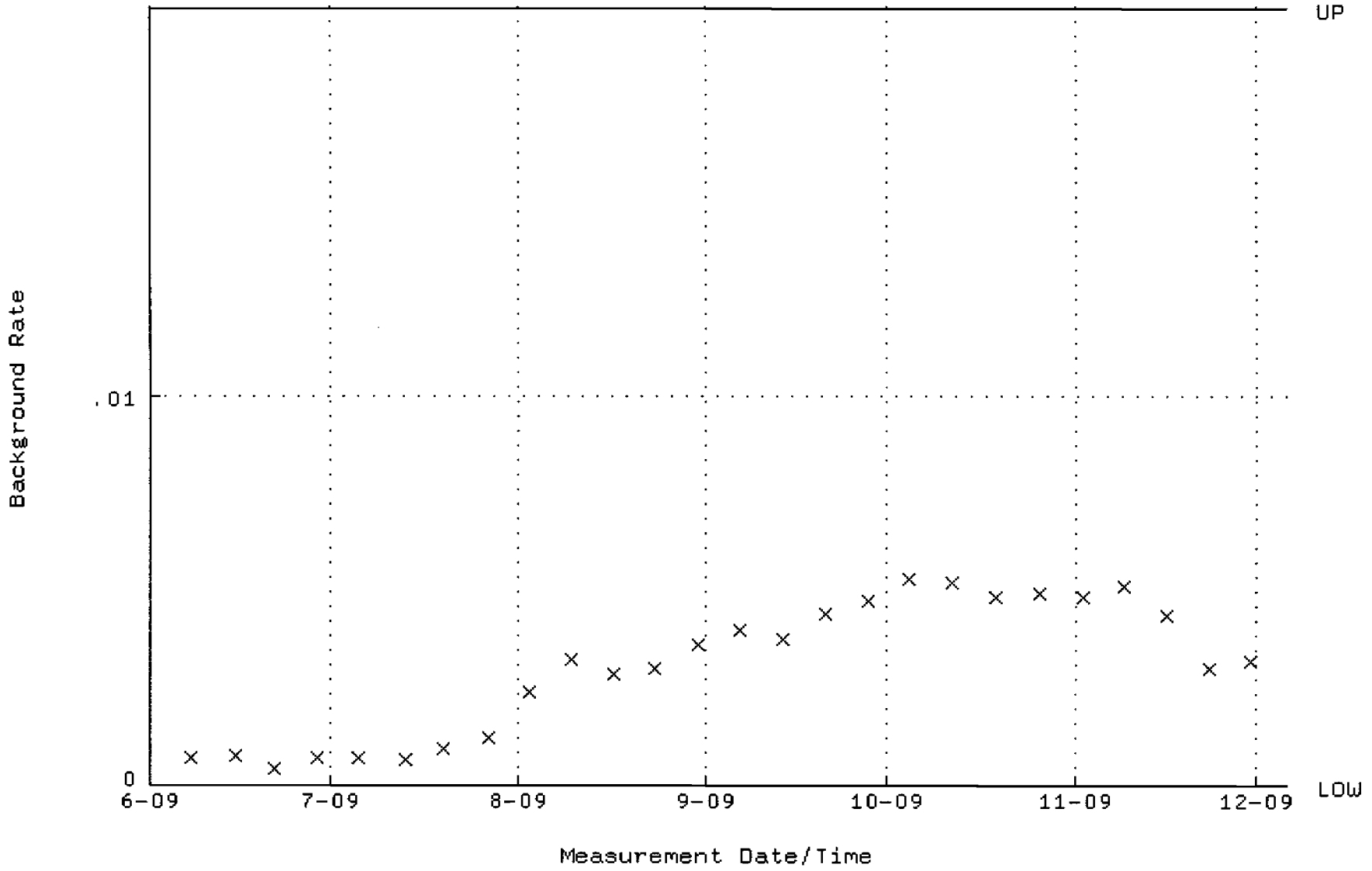

QA filename : DKA100:[ENV_ALPHA.QA.W]W027.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.324980 through 0.344980

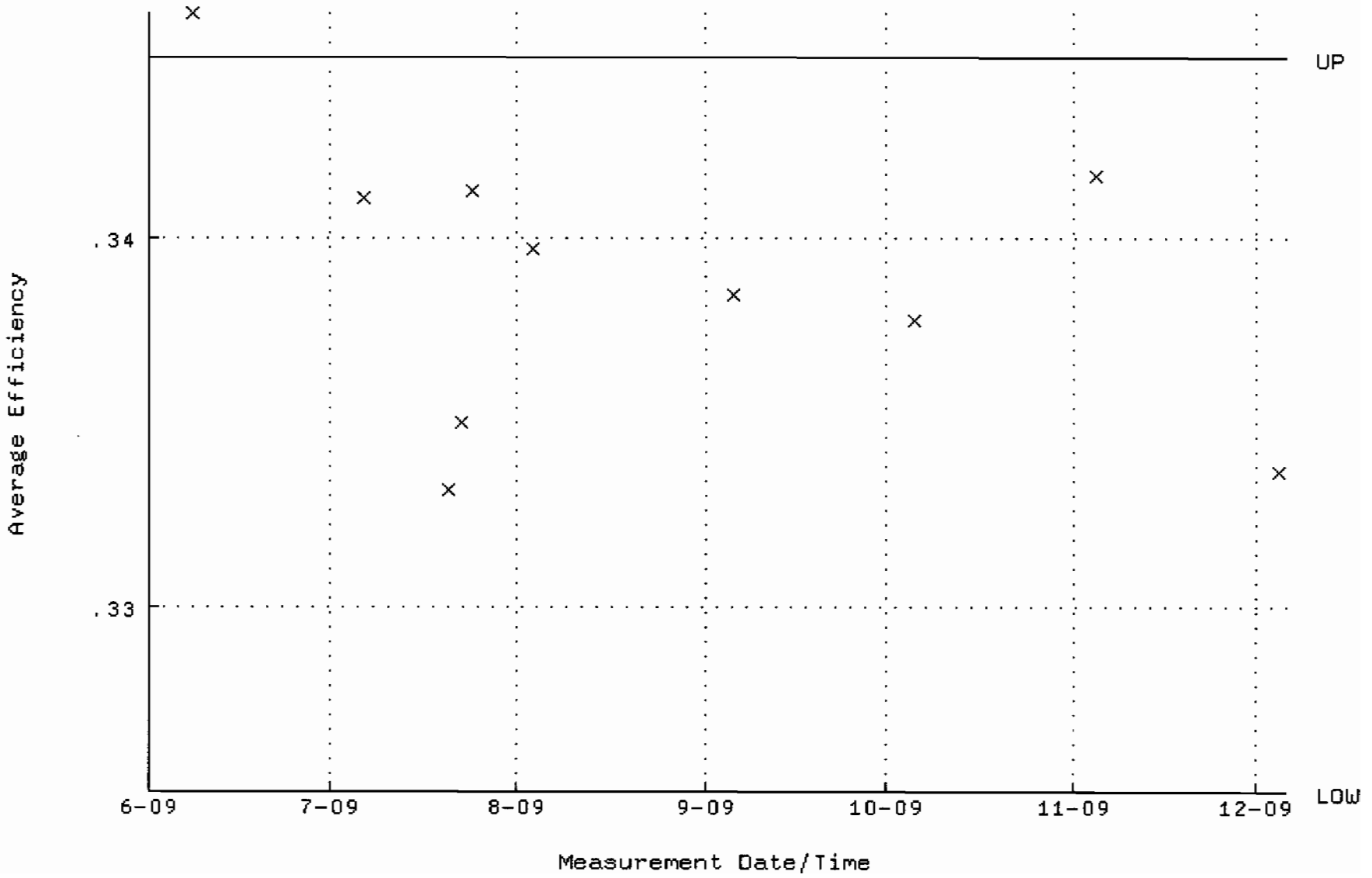

QA filename : DKA100:[ENV_ALPHA.QA.W]W027.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 81.2030 through 89.7506

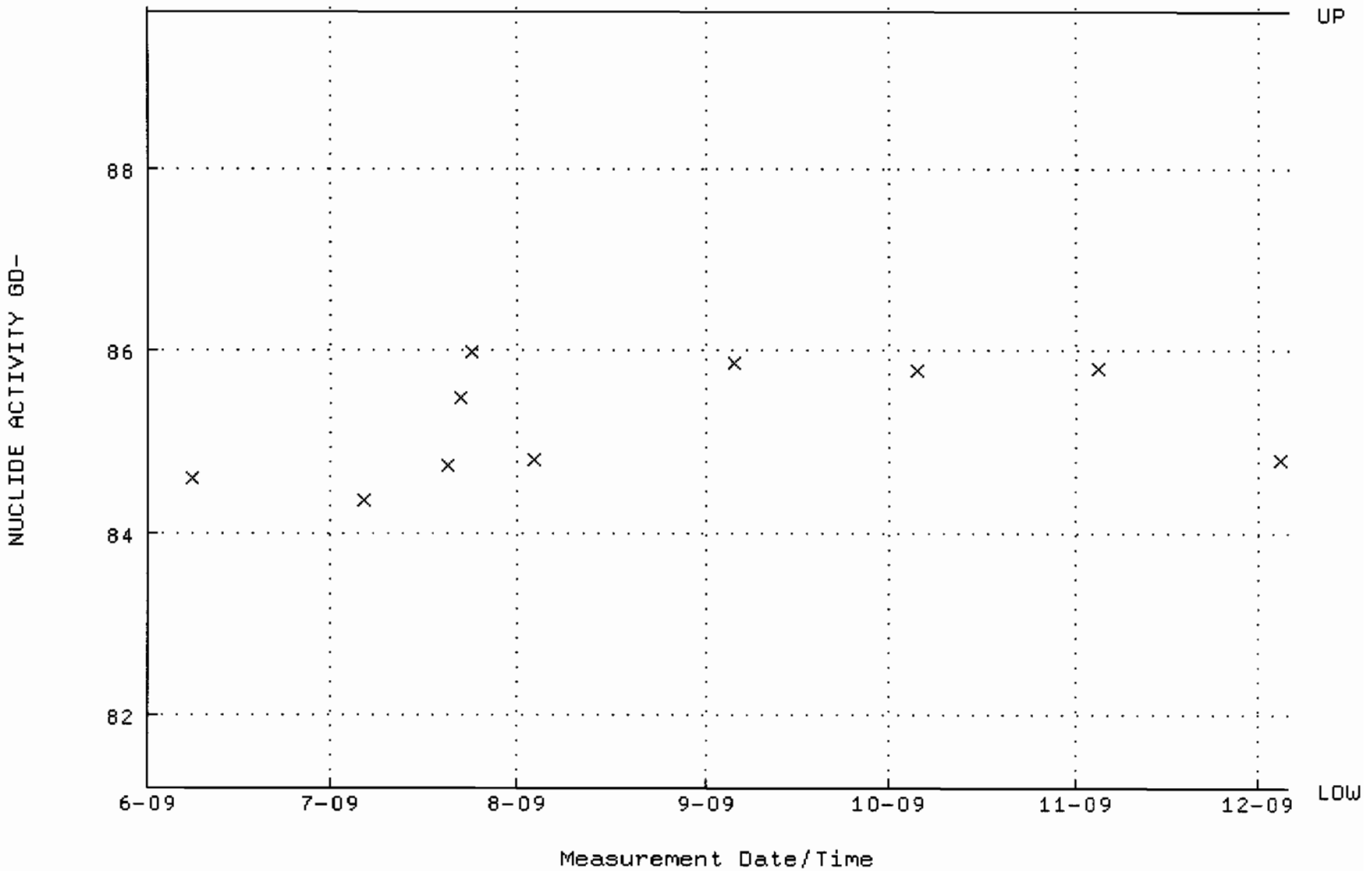

QA filename : DKA100:[ENV_ALPHA.QA.B]B027.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

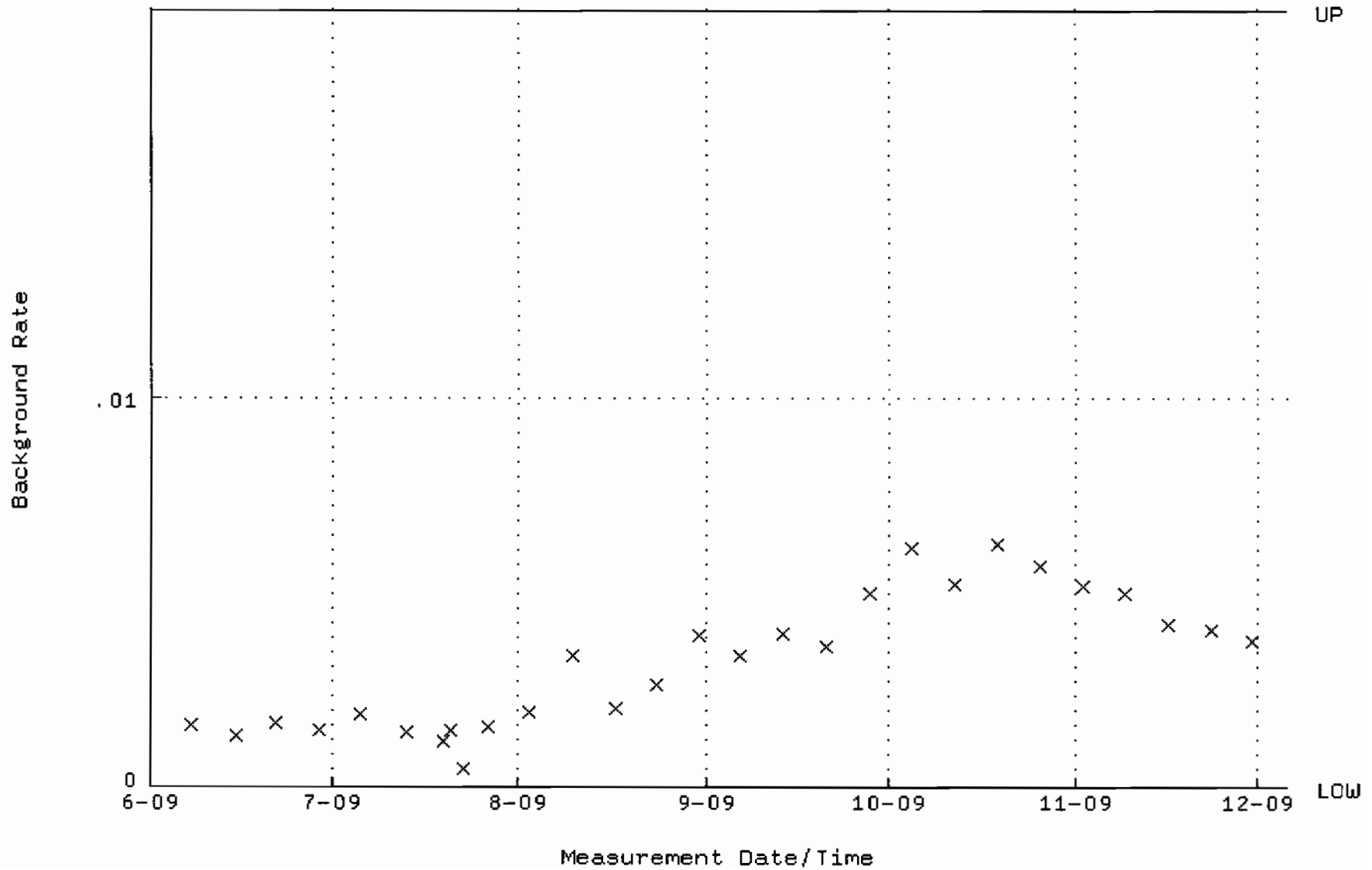

QA filename : DKA100:[ENV_ALPHA.QA.W]W028.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.295040 through 0.315040

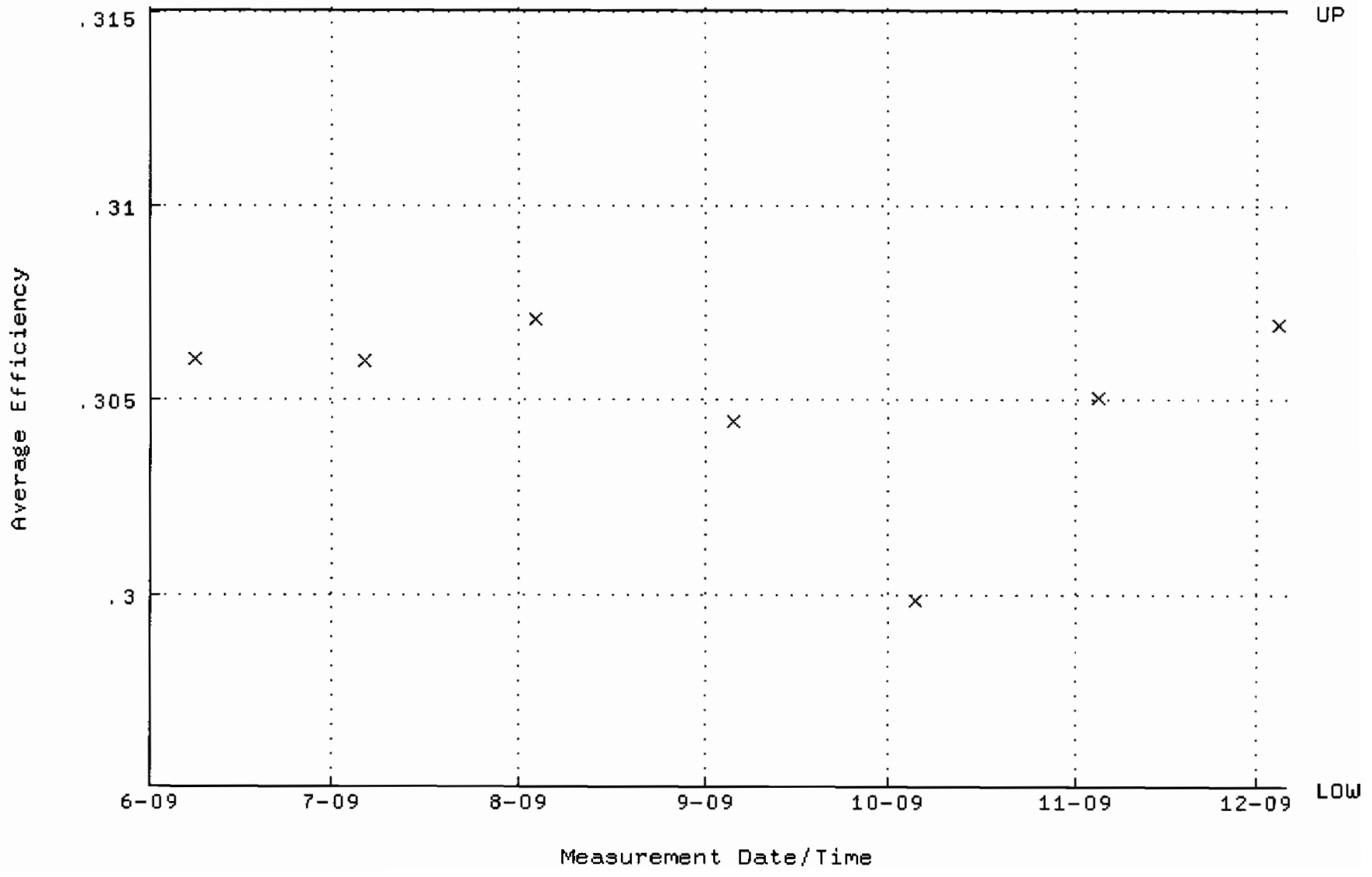

QA filename : DKA100:[ENV_ALPHA.QA.W]W028.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 85.1965 through 94.1645

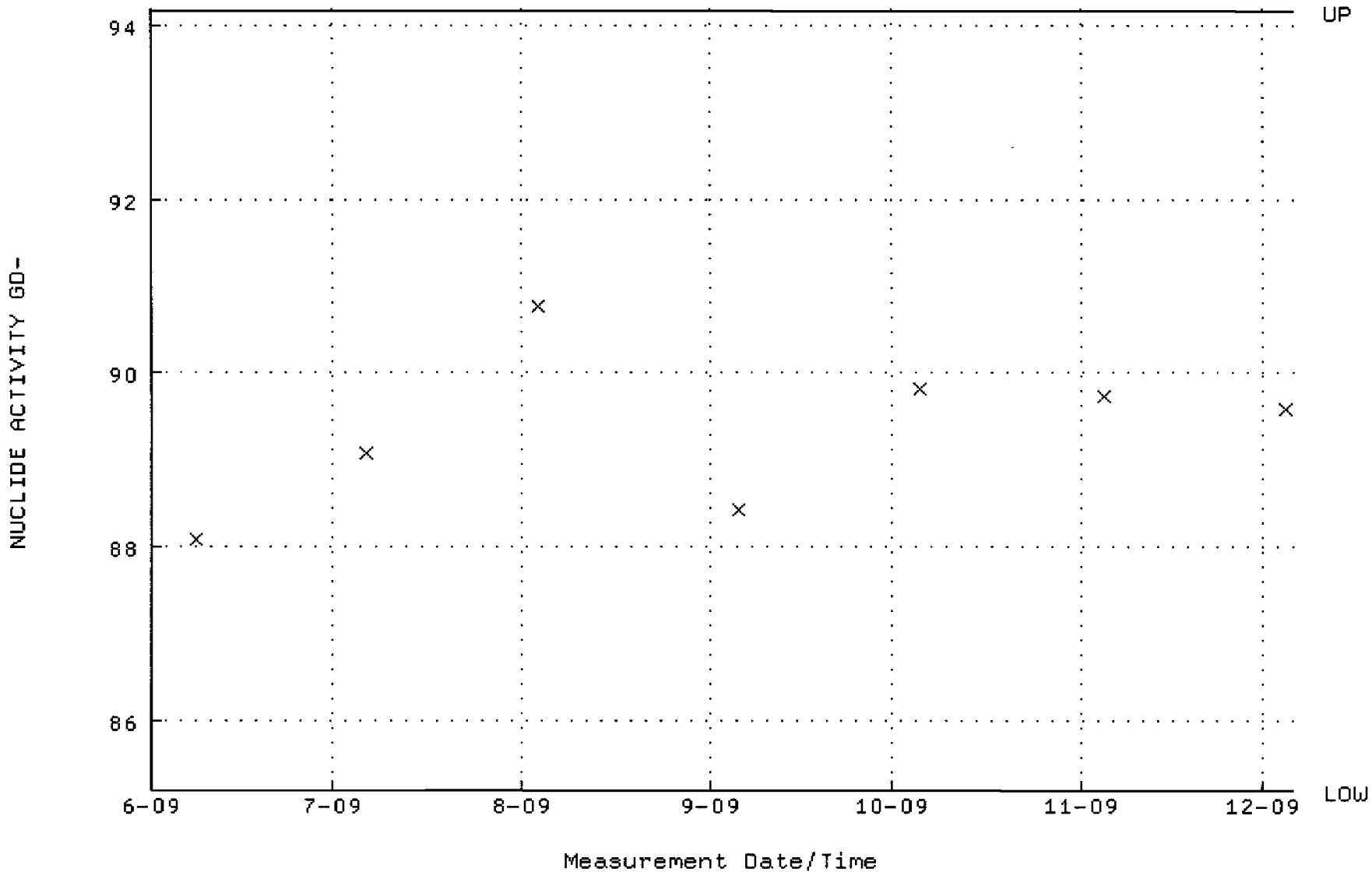

QA filename : DKA100:[ENV_ALPHA.QA.B]B028.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

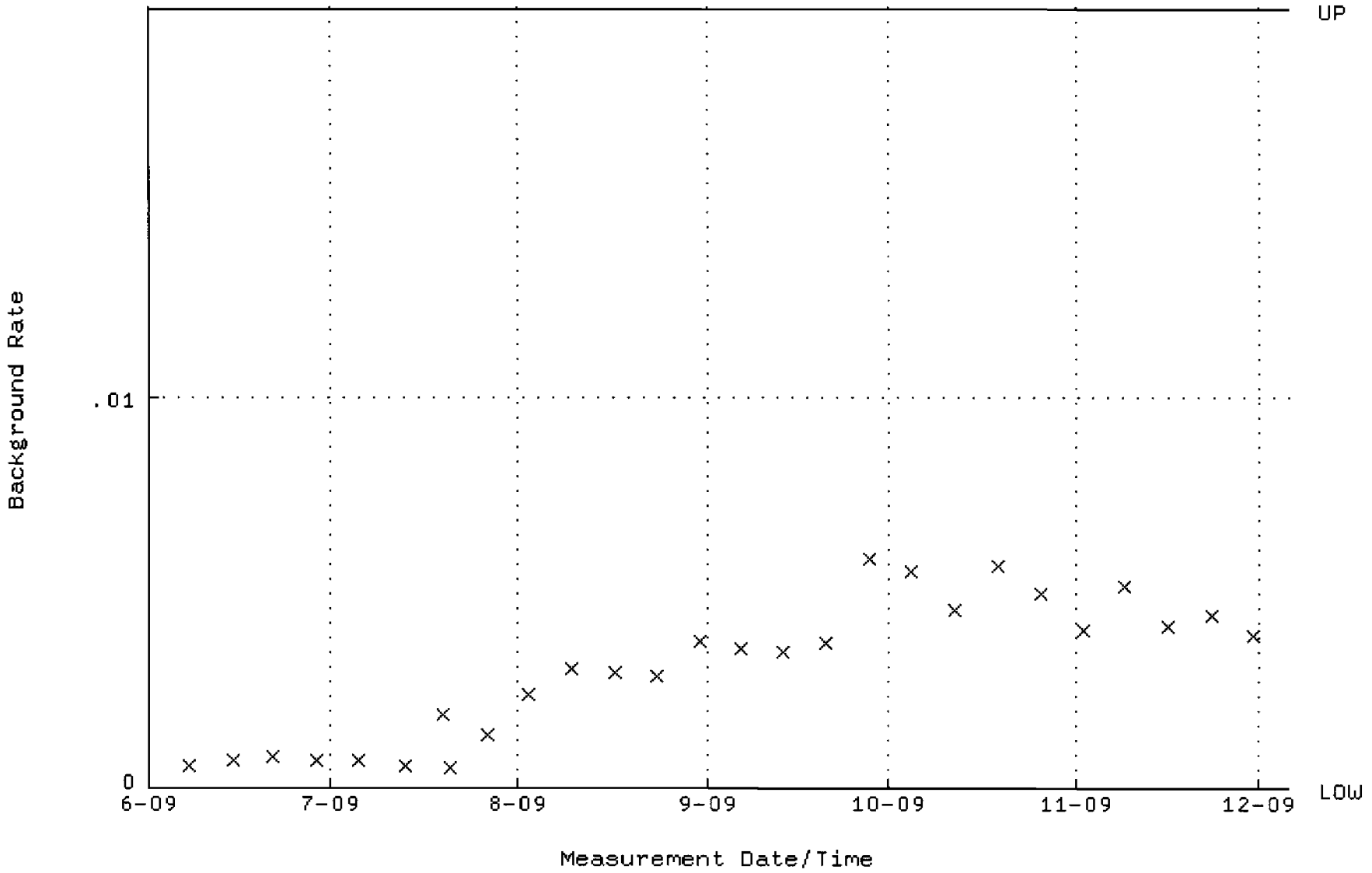

QA filename : DKA100:[ENV_ALPHA.QA.W]W030.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

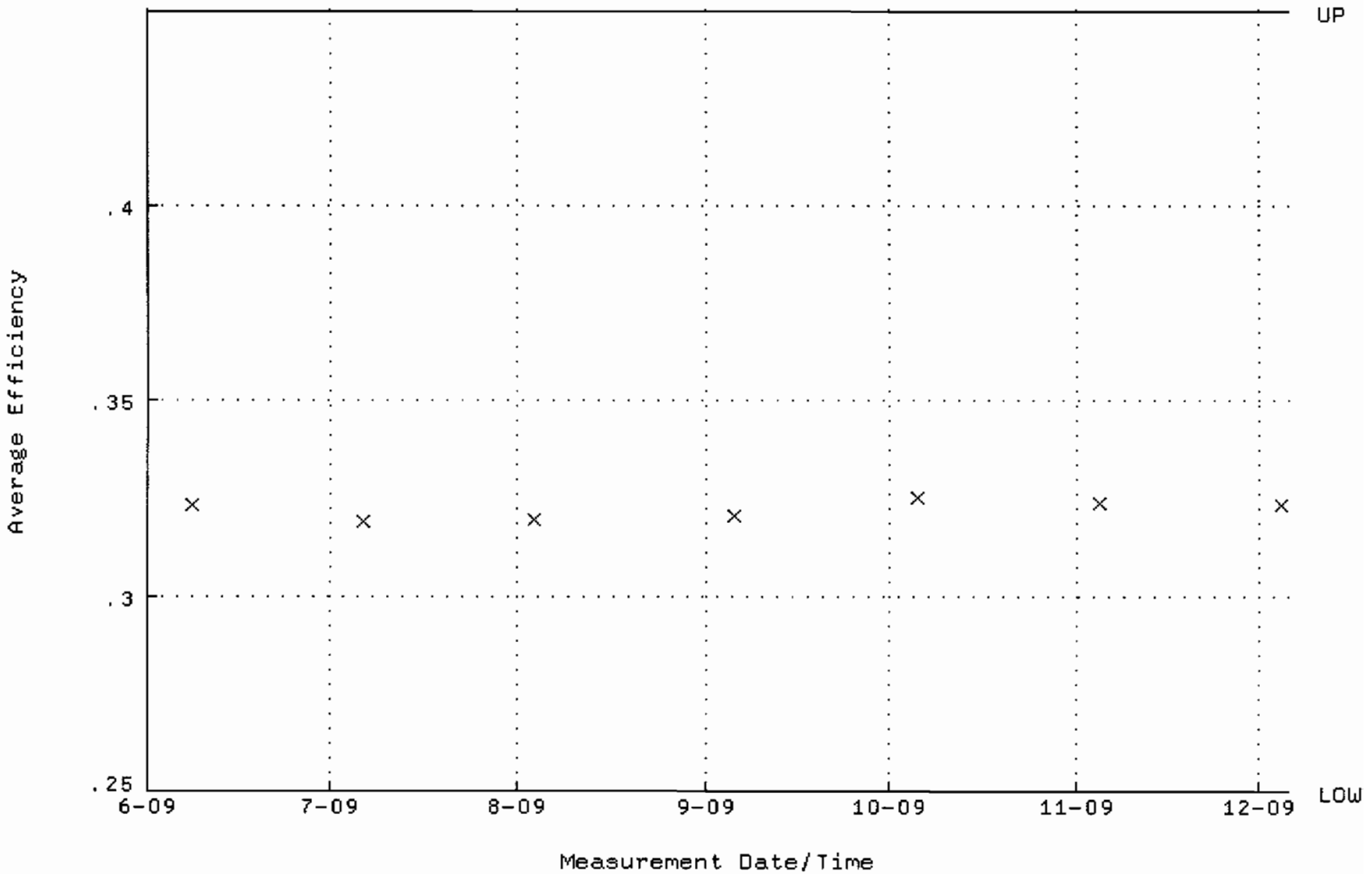

QA filename : DKA100:[ENV_ALPHA.QA.W]W030.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

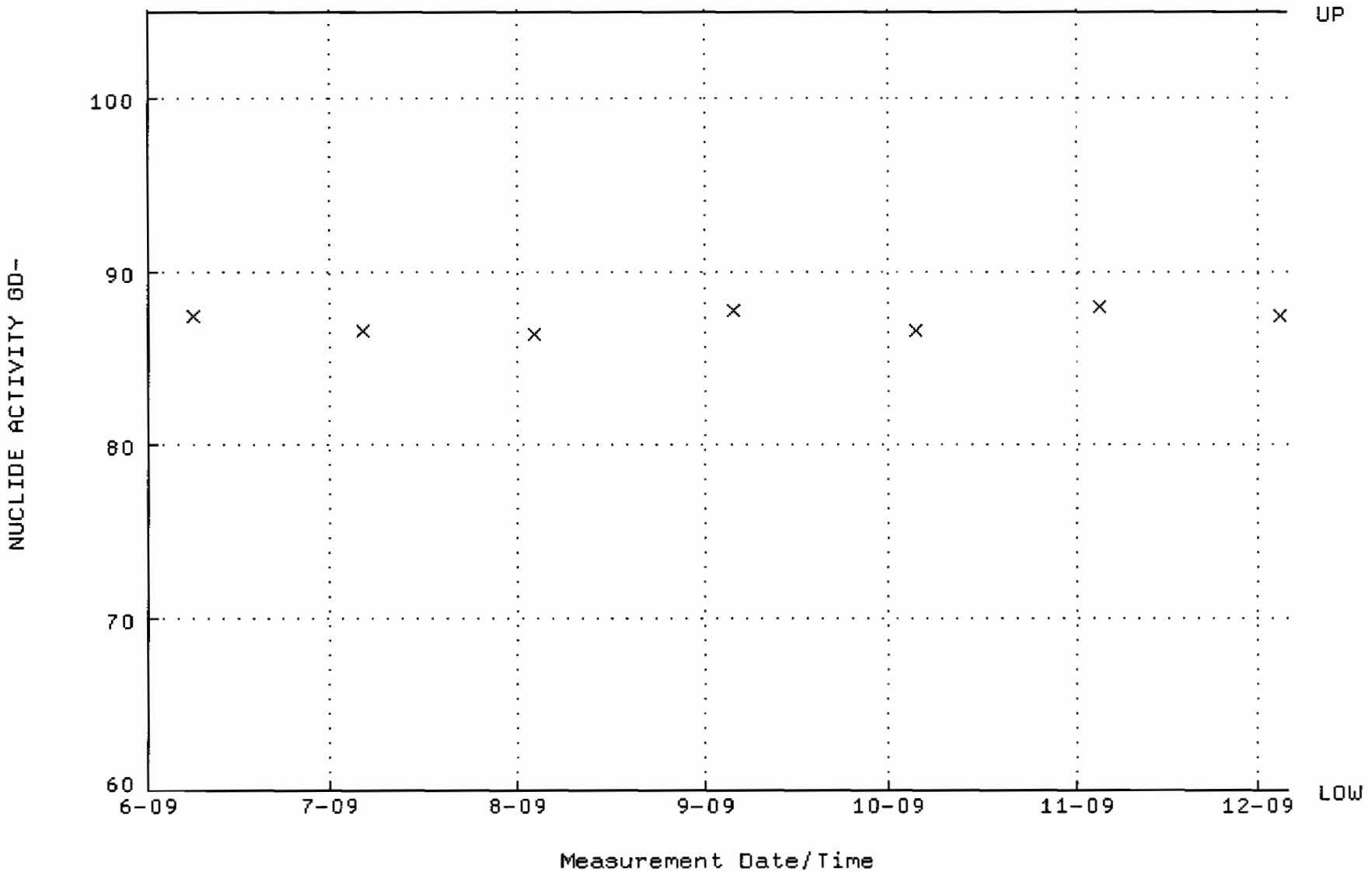

QA filename : DKA100:[ENV_ALPHA.QA.B]B030.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

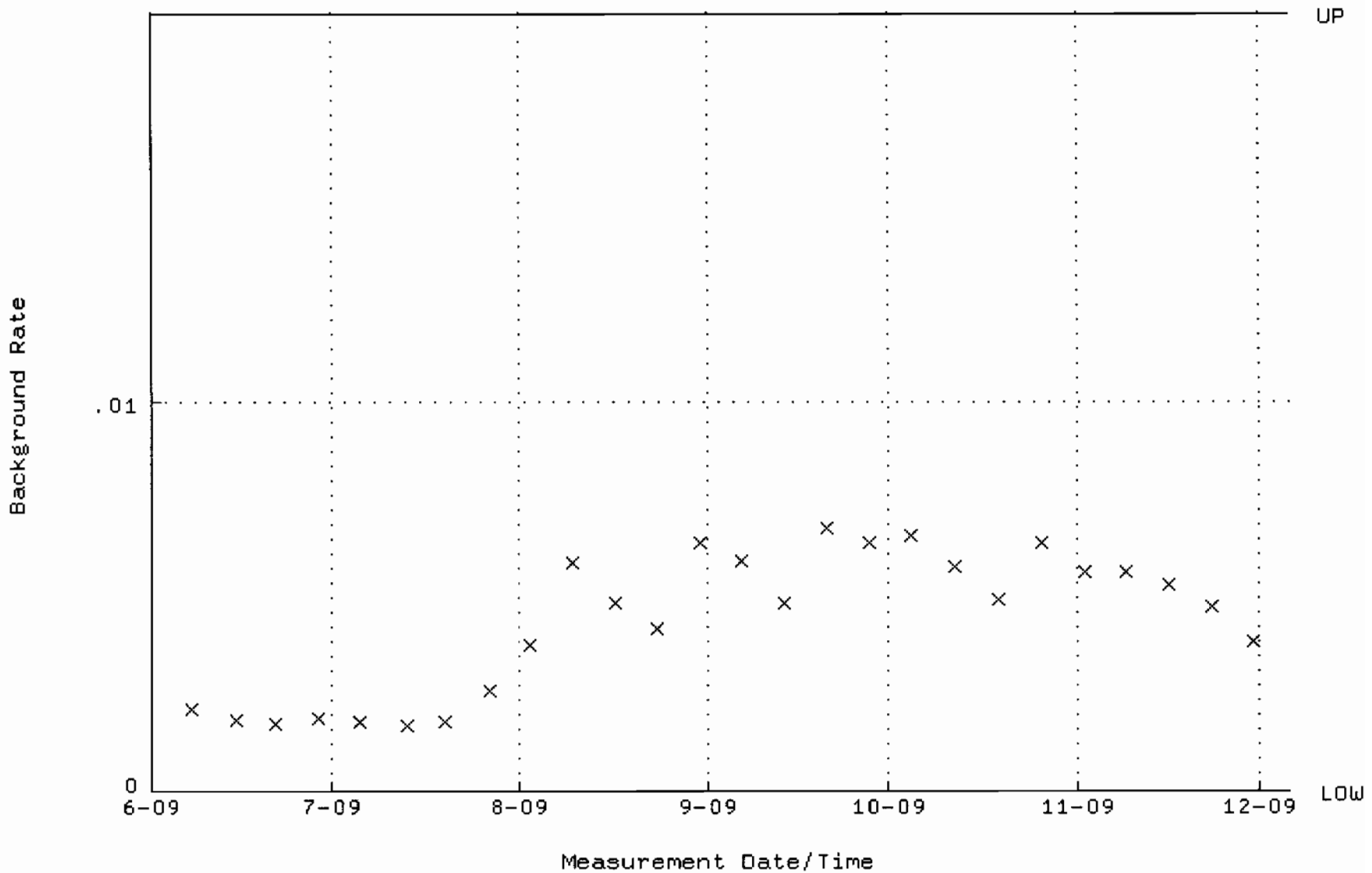

QA filename : DKA100:[ENV_ALPHA.QA.W]W031.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.324029 through 0.364065

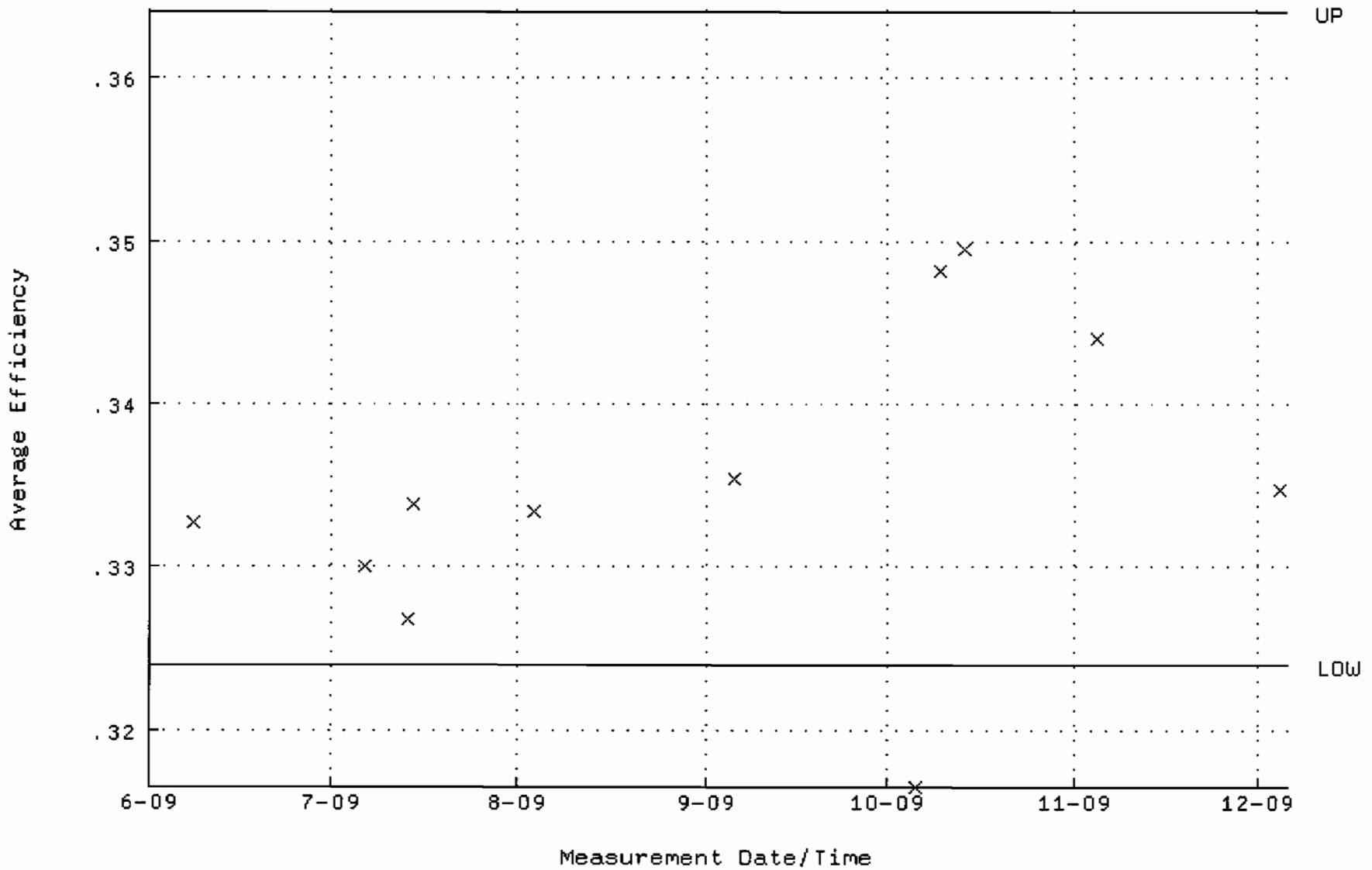

QA filename : DKA100:[ENV_ALPHA.QA.W]W031.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 84.2165 through 88.5165

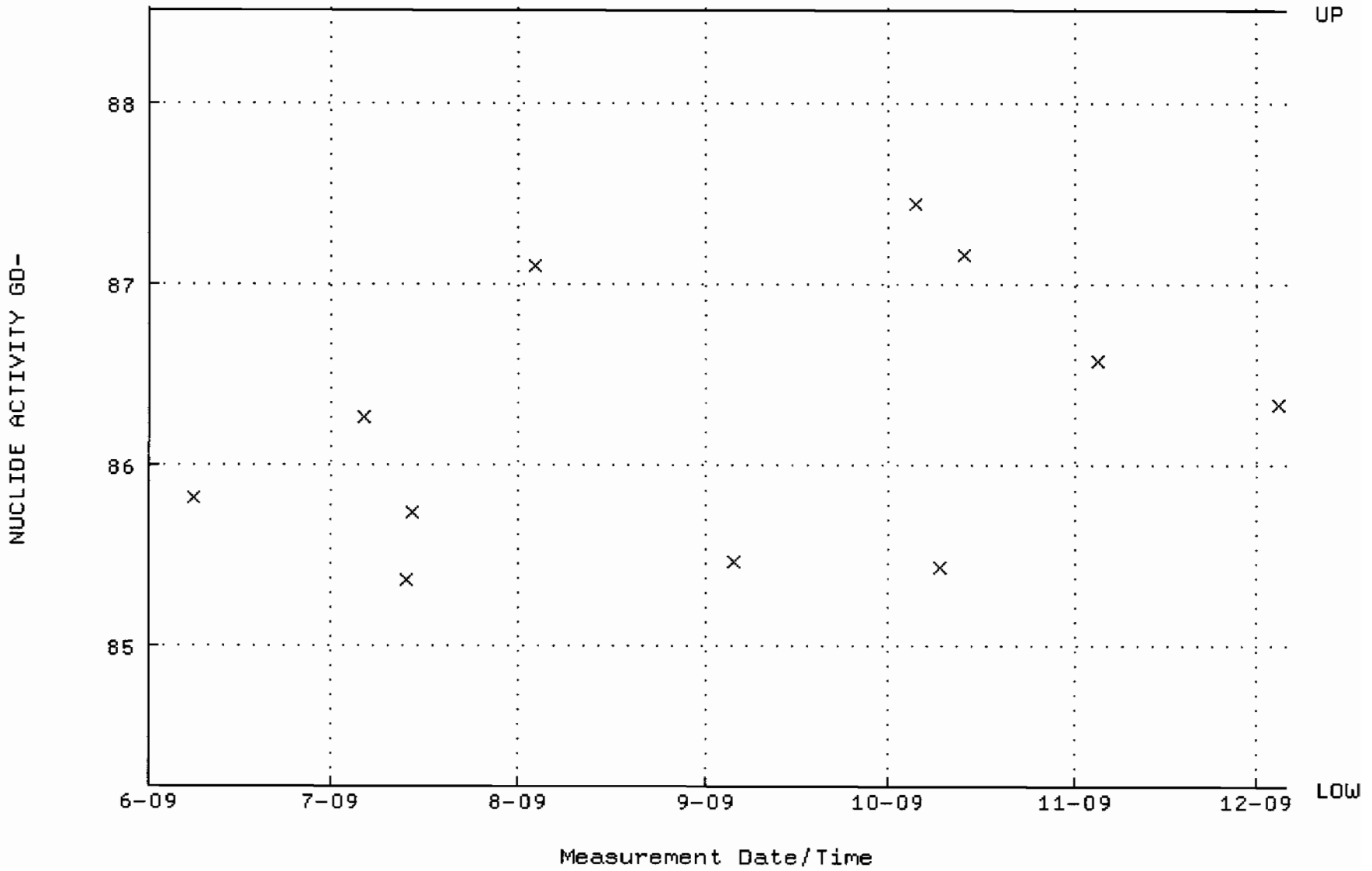

QA filename : DKA100:[ENV_ALPHA.QA.B]B031.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

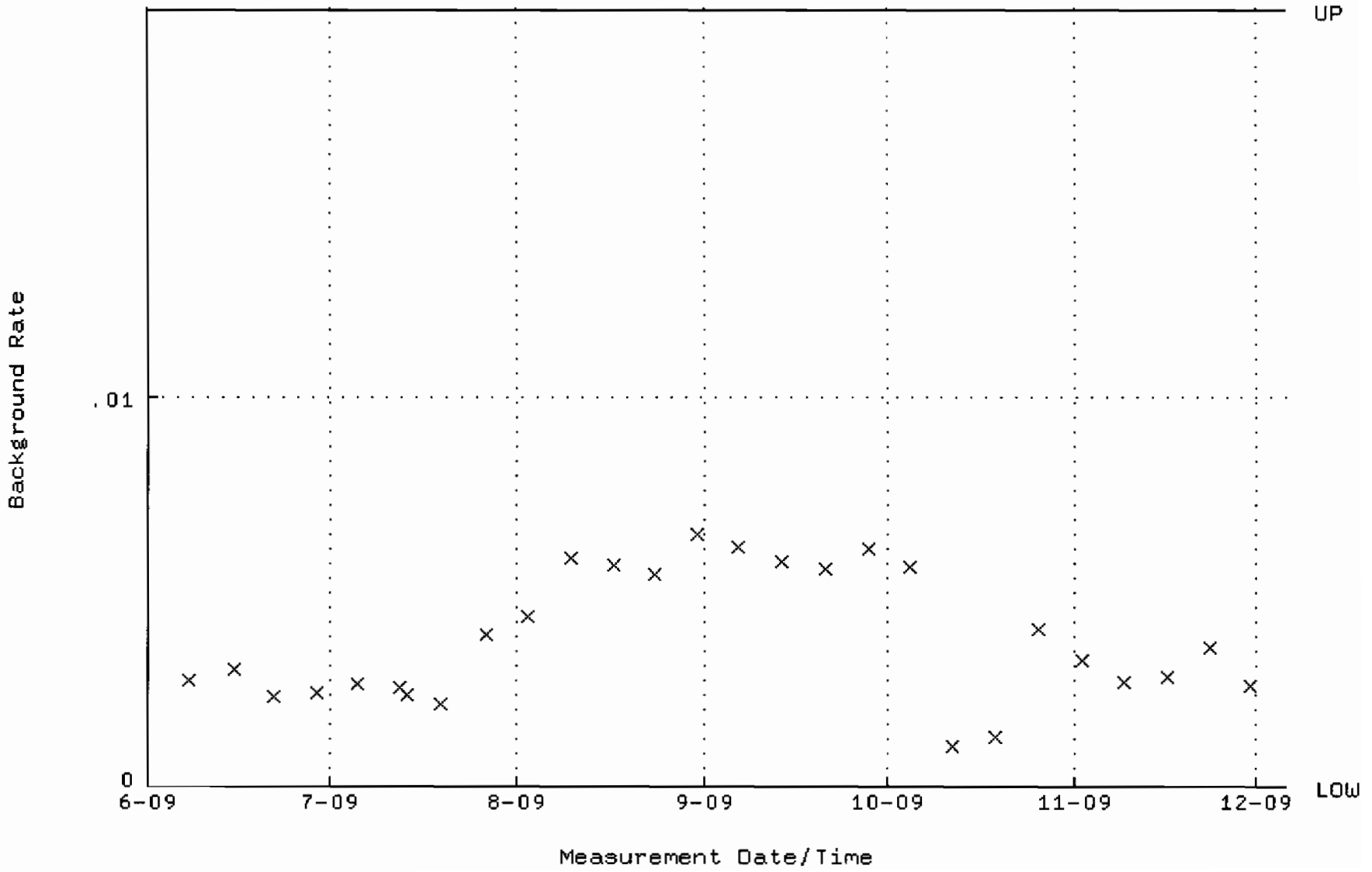

QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.304222 through 0.327748

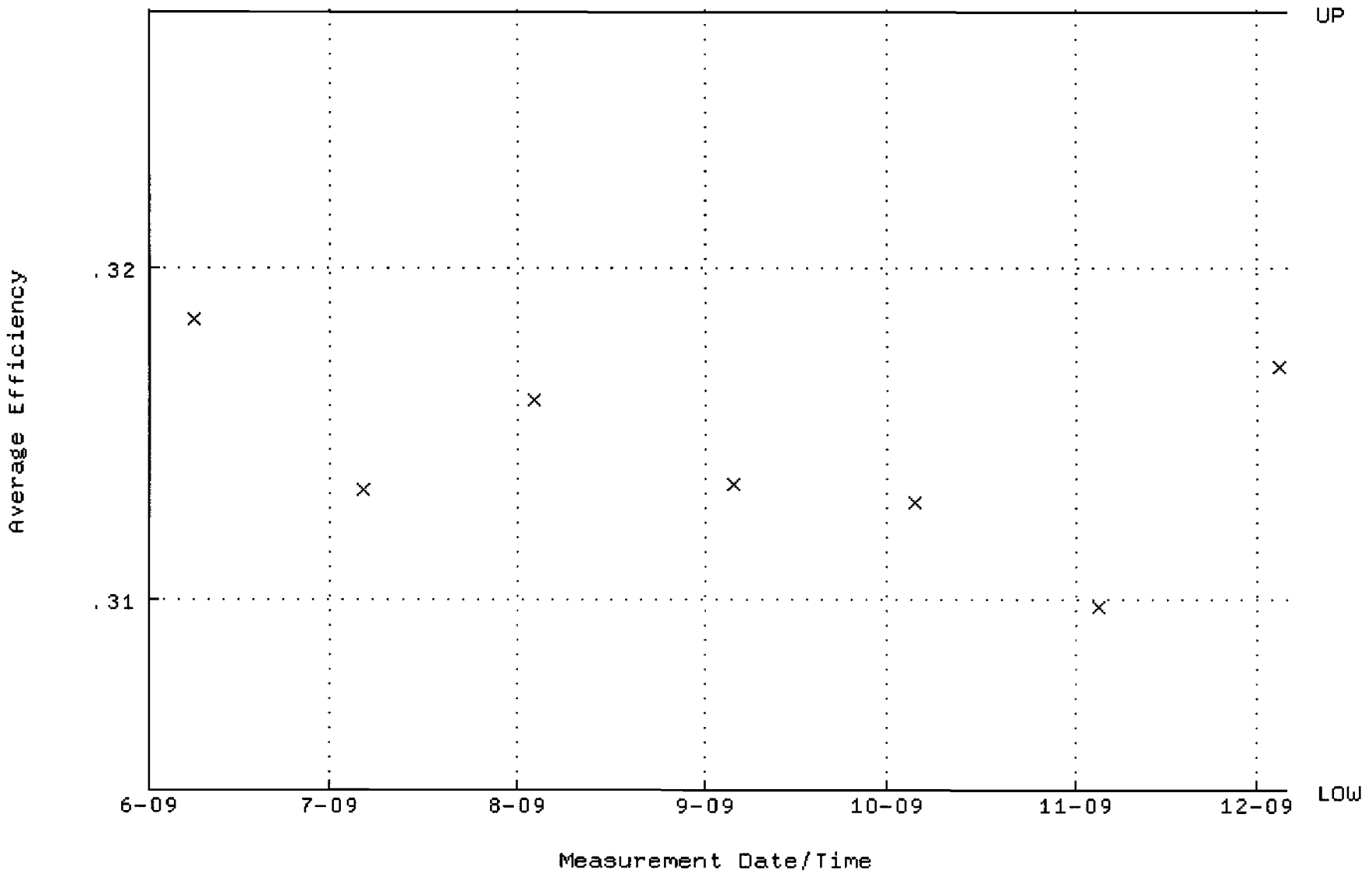

QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 83.9373 through 86.9661

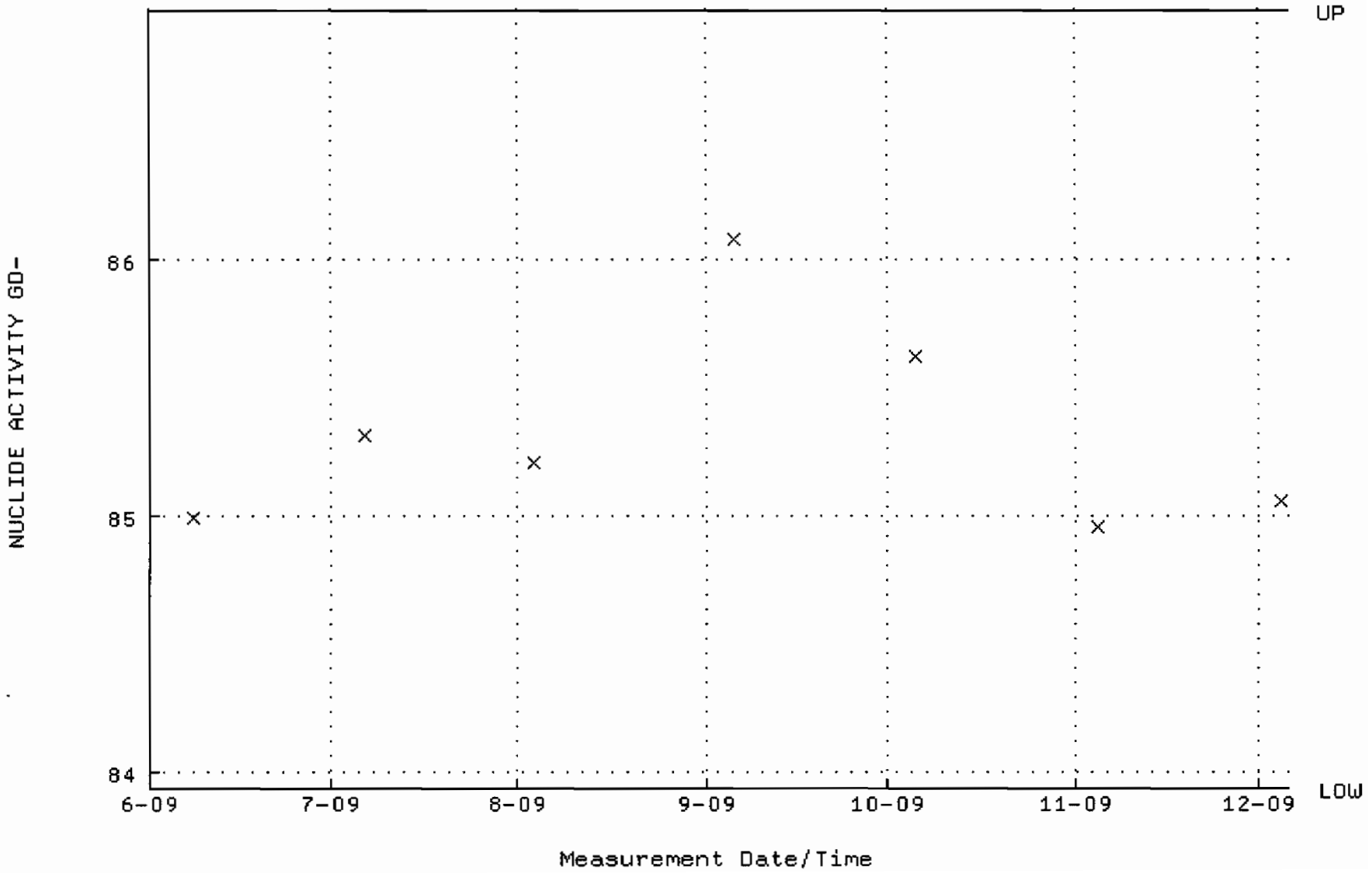

QA filename : DKA100:[ENV_ALPHA.QA.B]B033.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

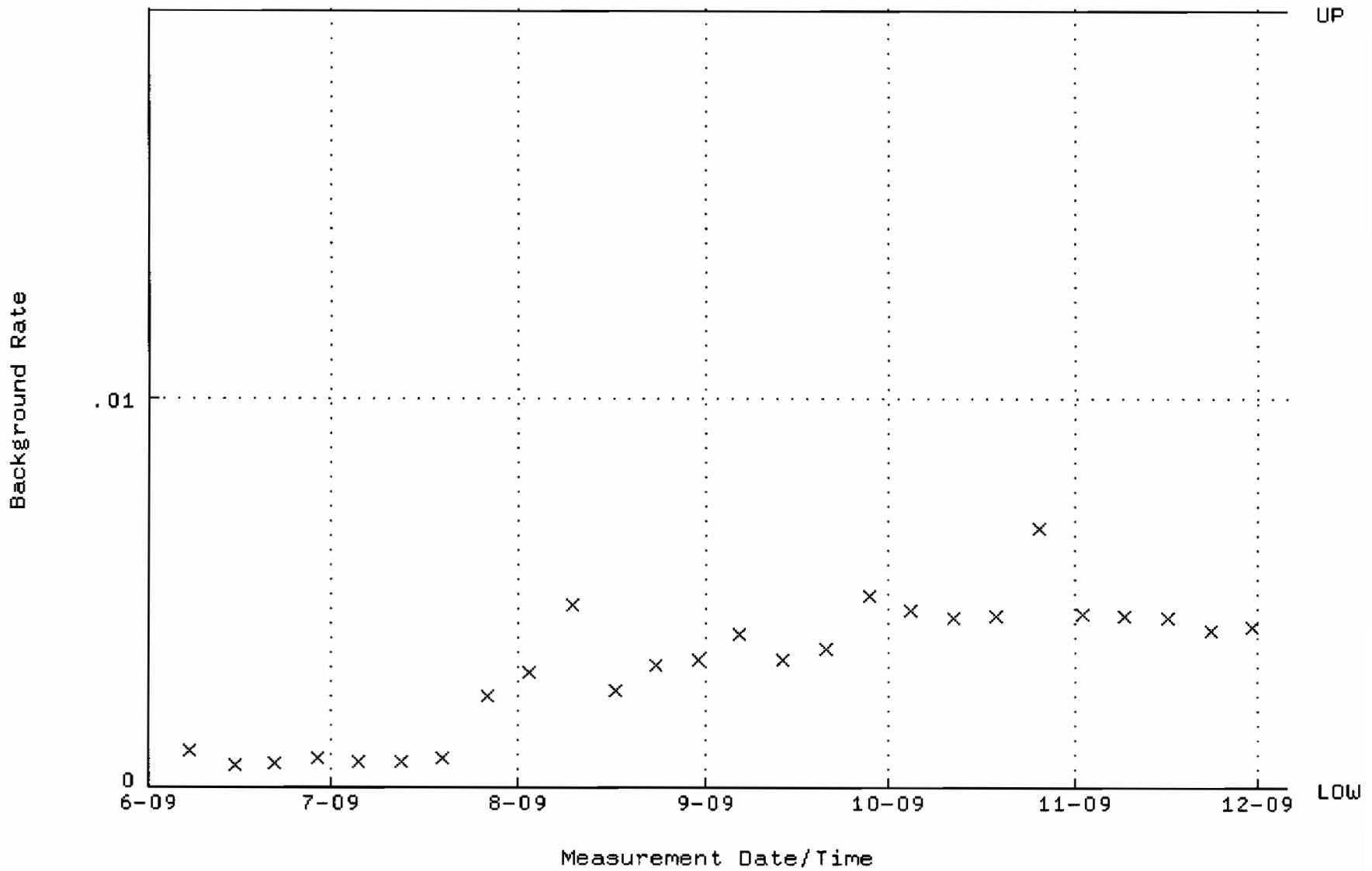

QA filename : DKA100:[ENV_ALPHA.QA.W]W086.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.289508 through 0.309508

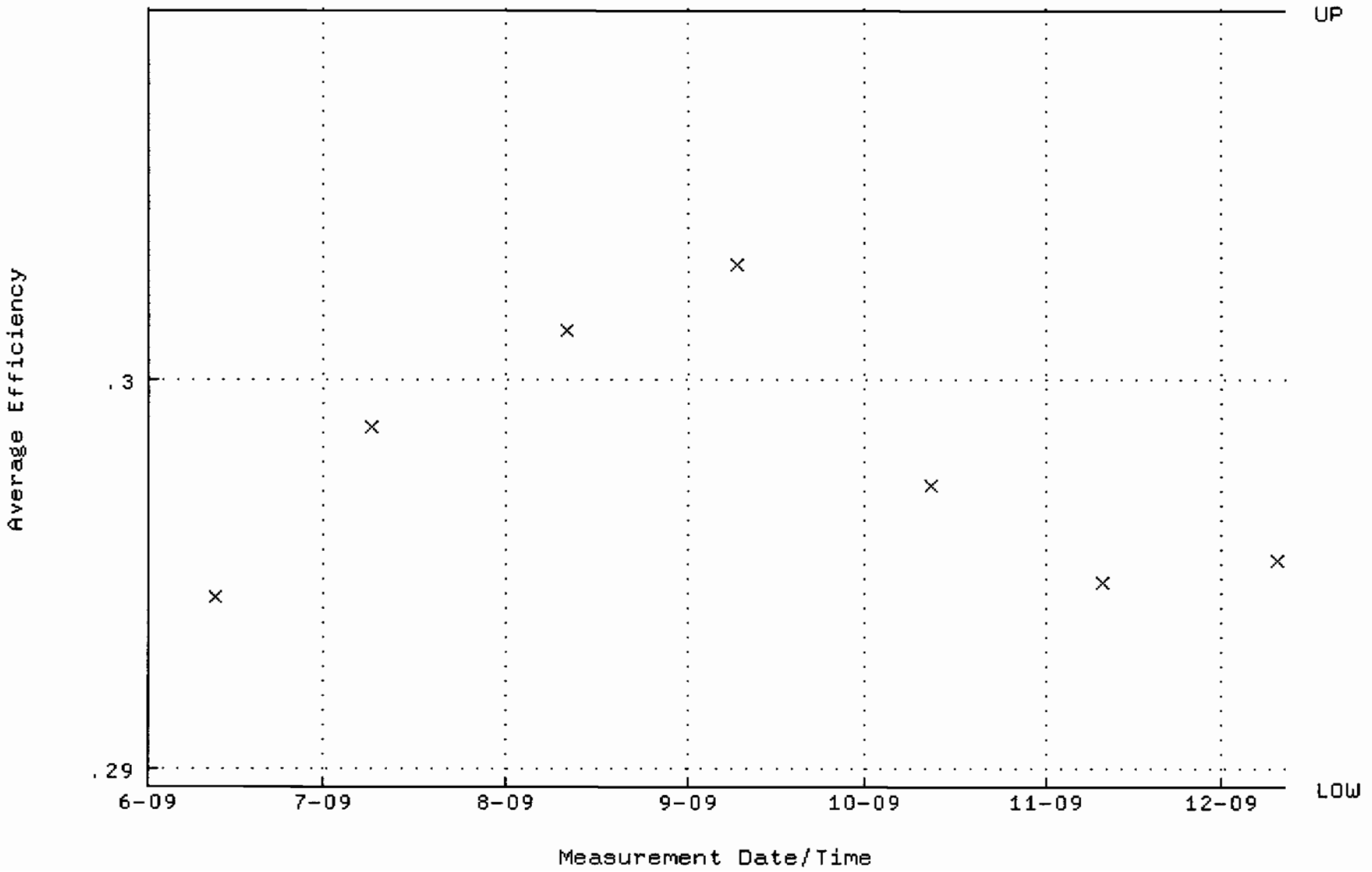

QA filename : DKA100:[ENV_ALPHA.QA.W]W086.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.7898 through 97.0308

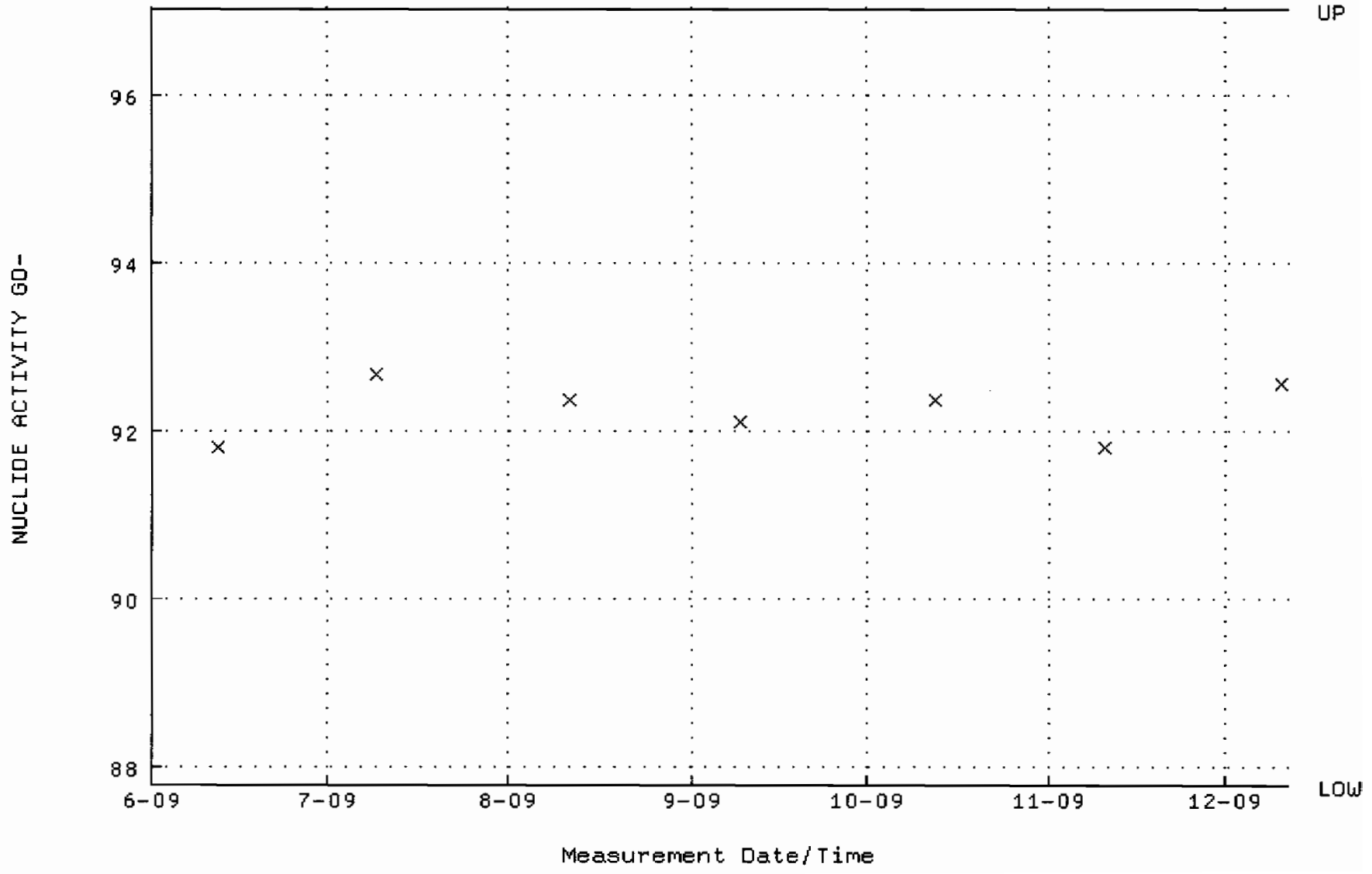

QA filename : DKA100:[ENV_ALPHA.QA.B]B086.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:40 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

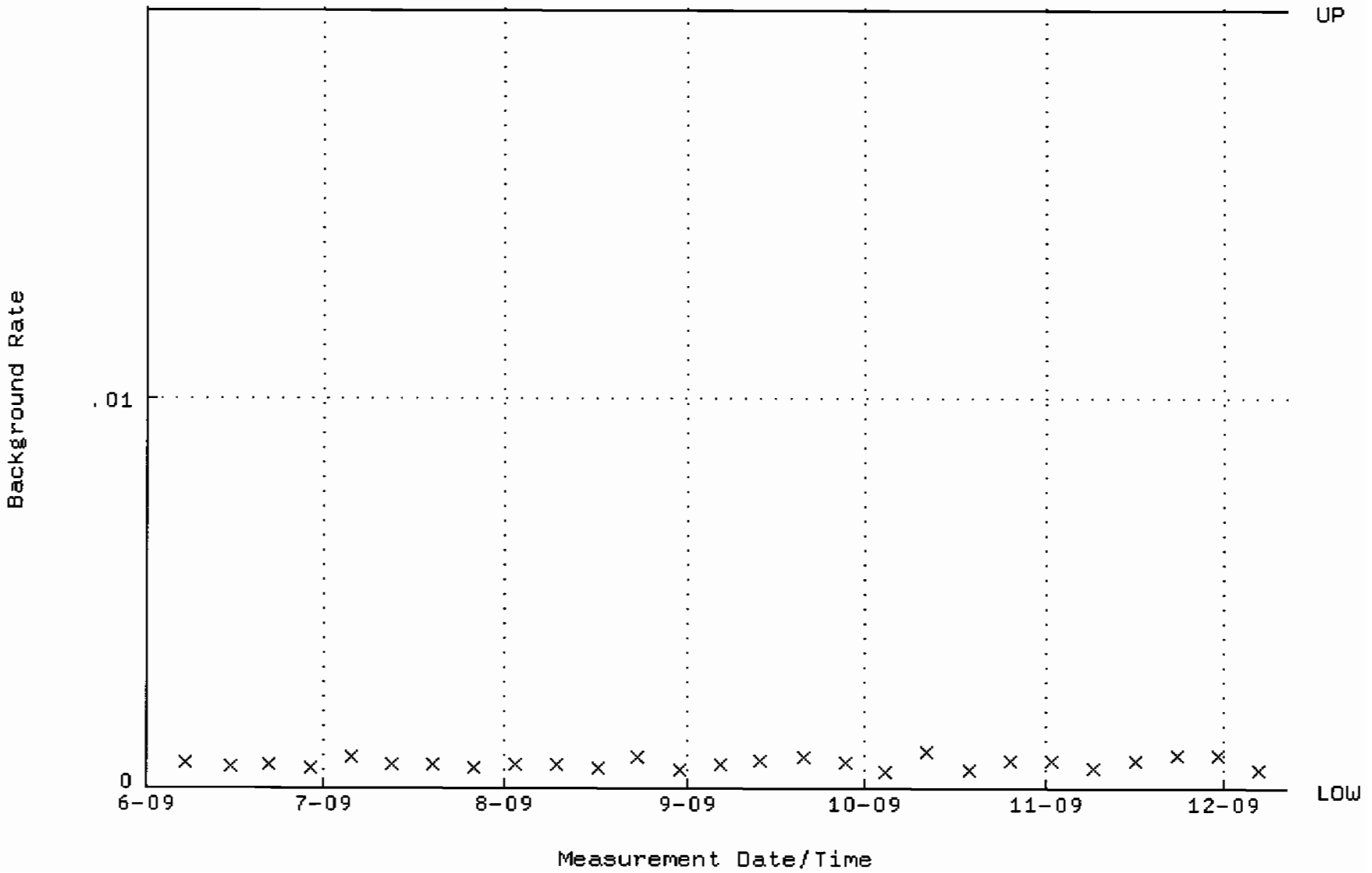

QA filename : DKA100:[ENV_ALPHA.QA.W]W087.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.300530 through 0.320530

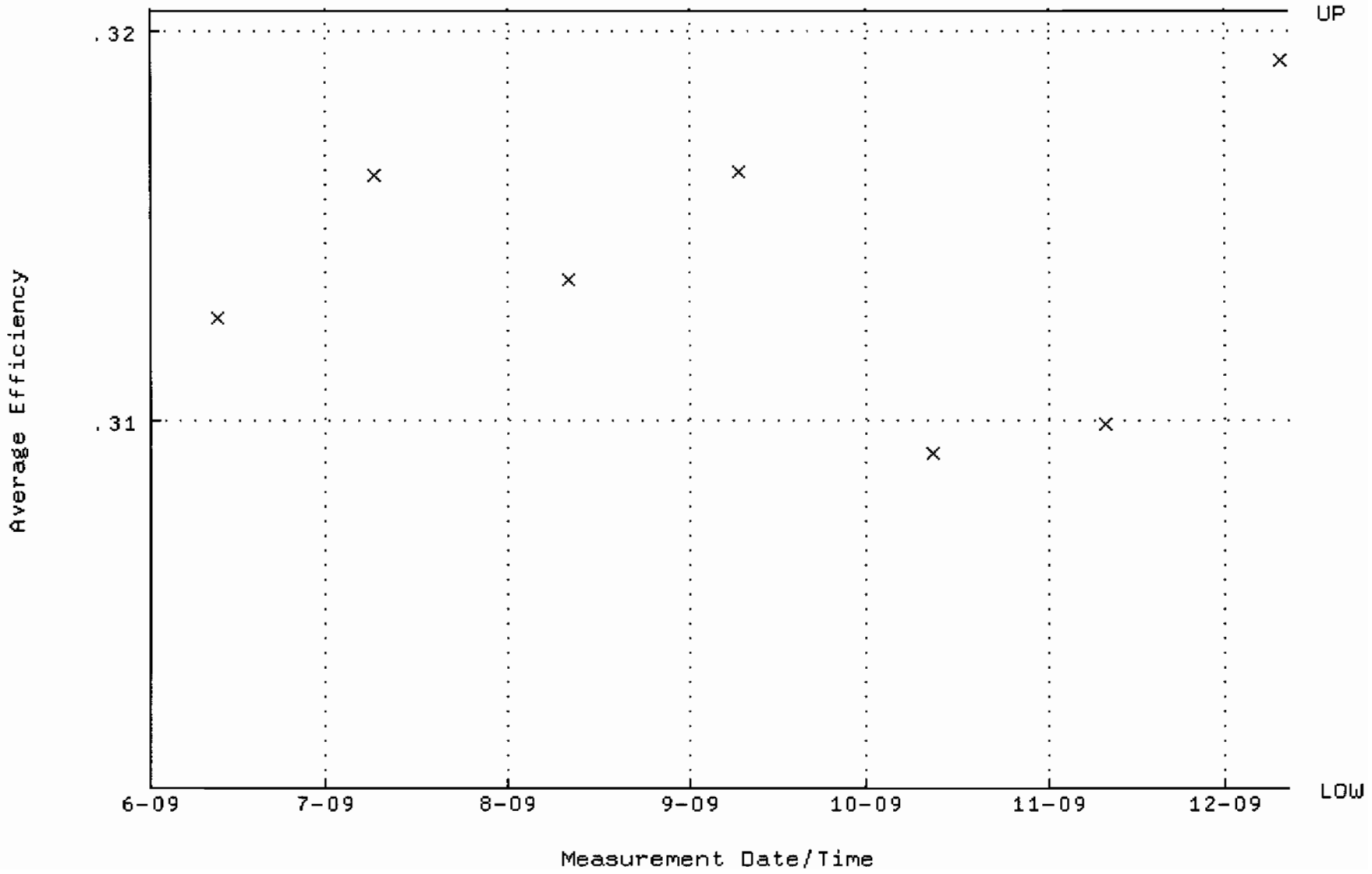

QA filename : DKA100:[ENV_ALPHA.QA.W]W087.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.1845 through 96.3619

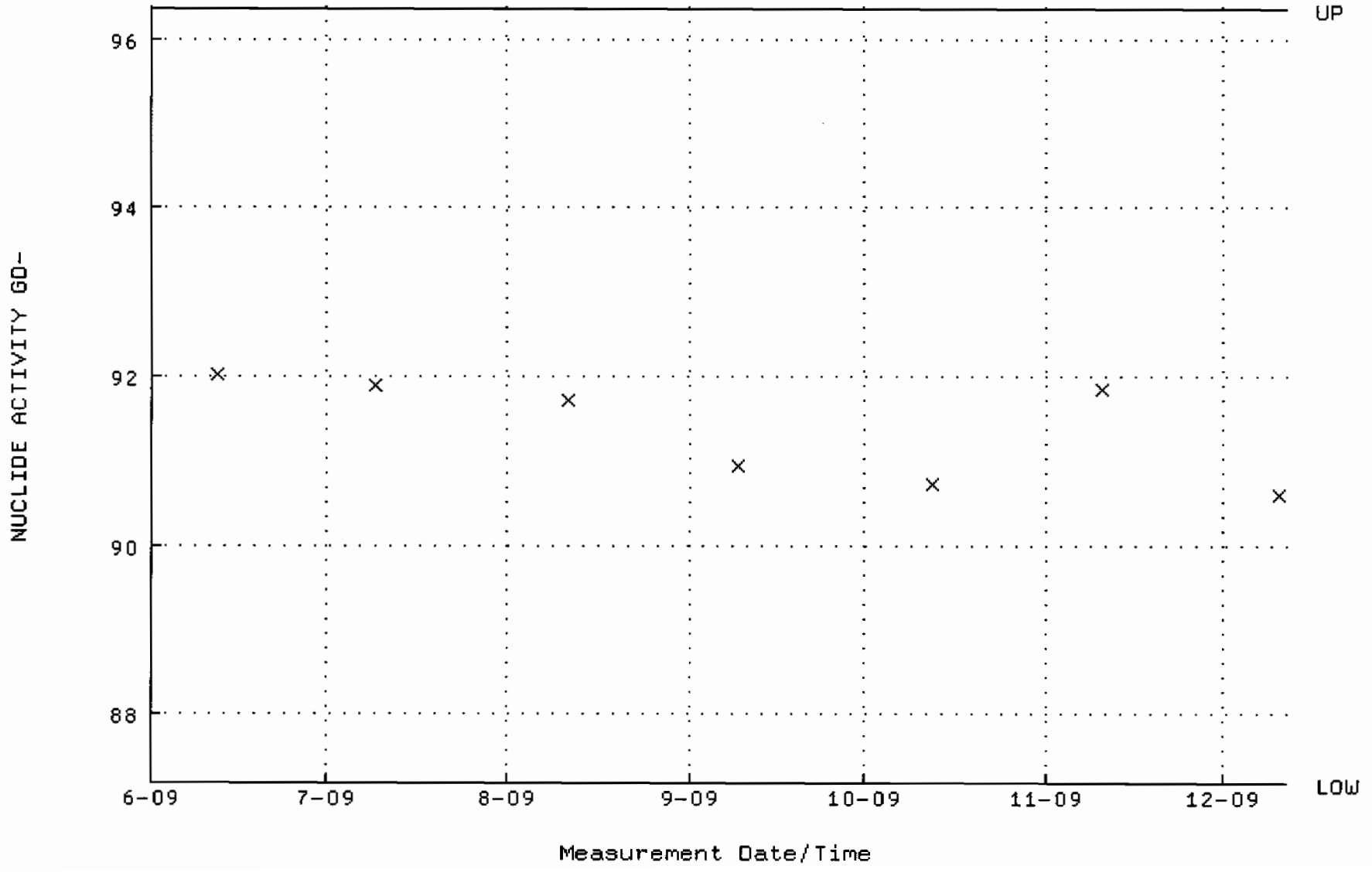

QA filename : DKA100:[ENV_ALPHA.QA.B]B087.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:40 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

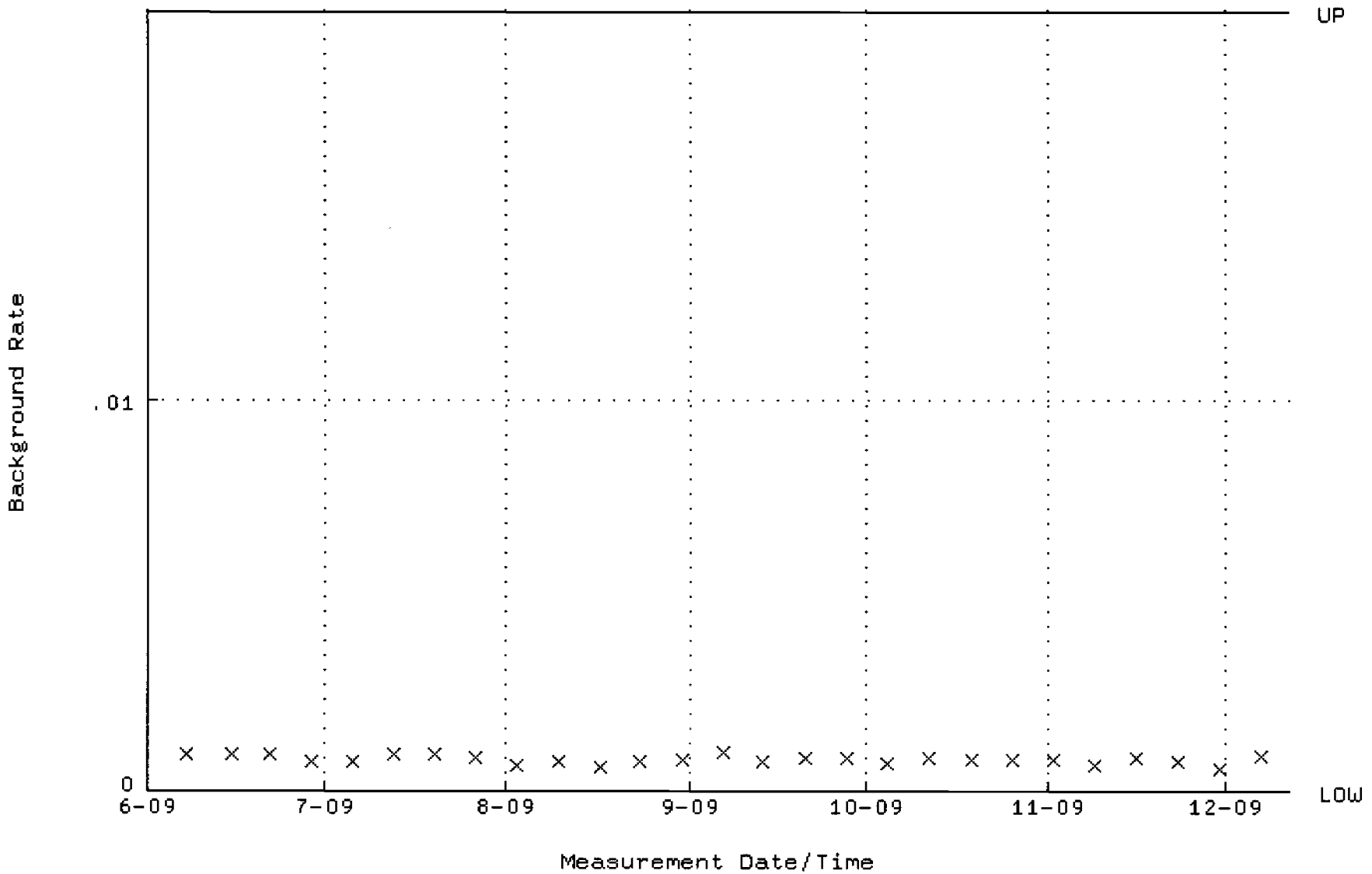

QA filename : DKA100:[ENV_ALPHA.QA.W]W088.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

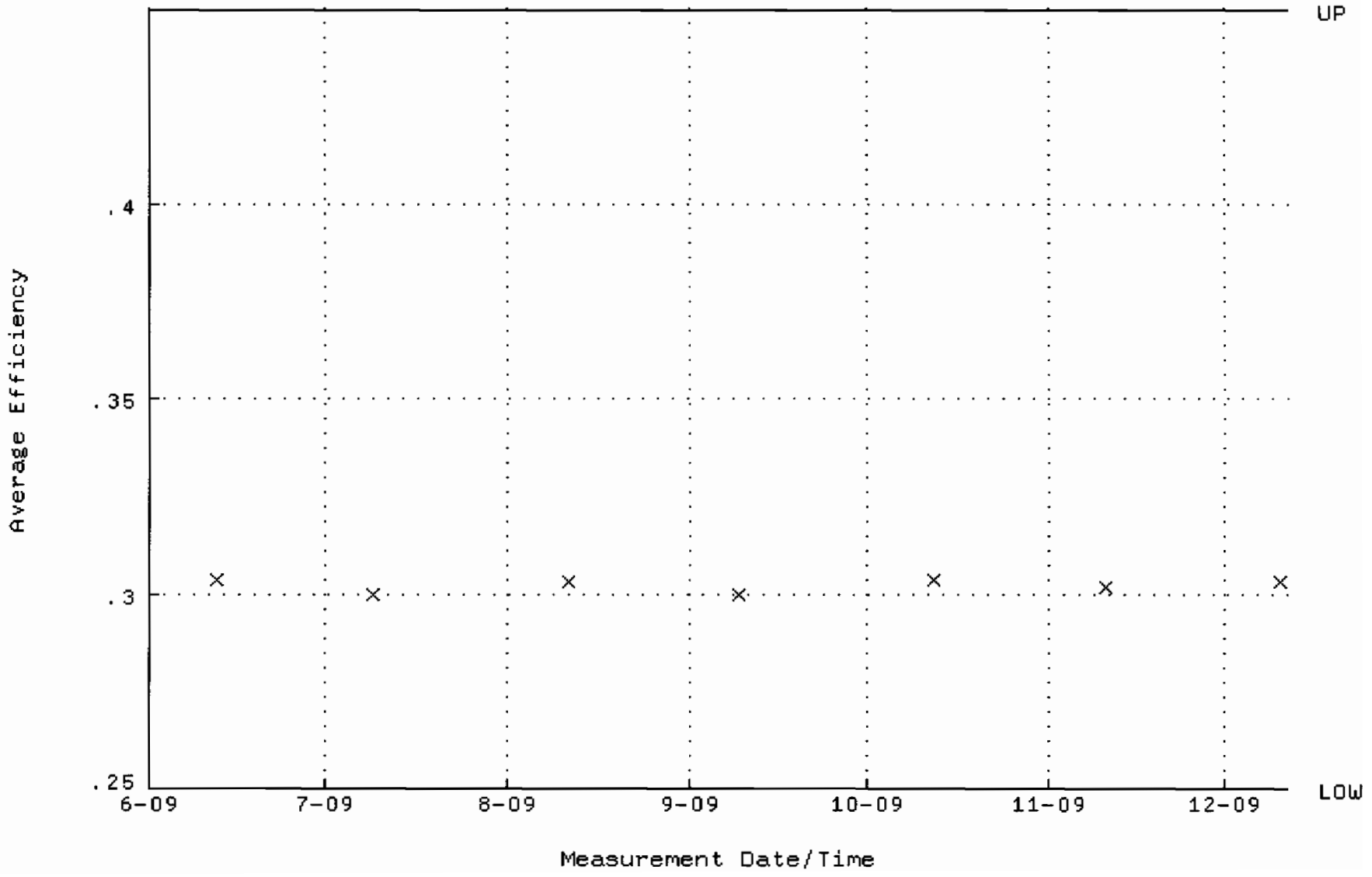

QA filename : DKA100:[ENV_ALPHA.QA.W]W088.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

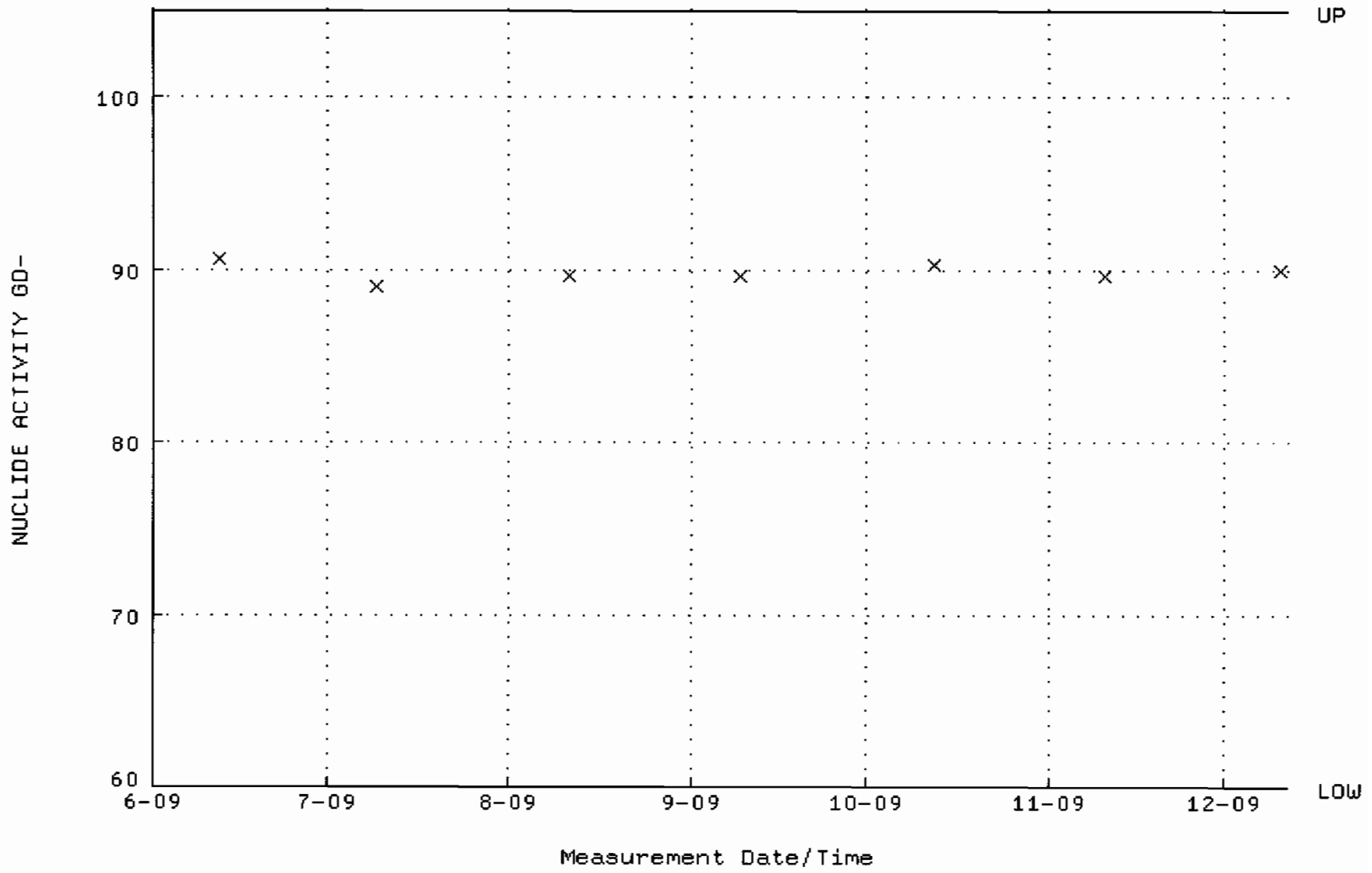

QA filename : DKA100:[ENV_ALPHA.QA.B]B088.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:40 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

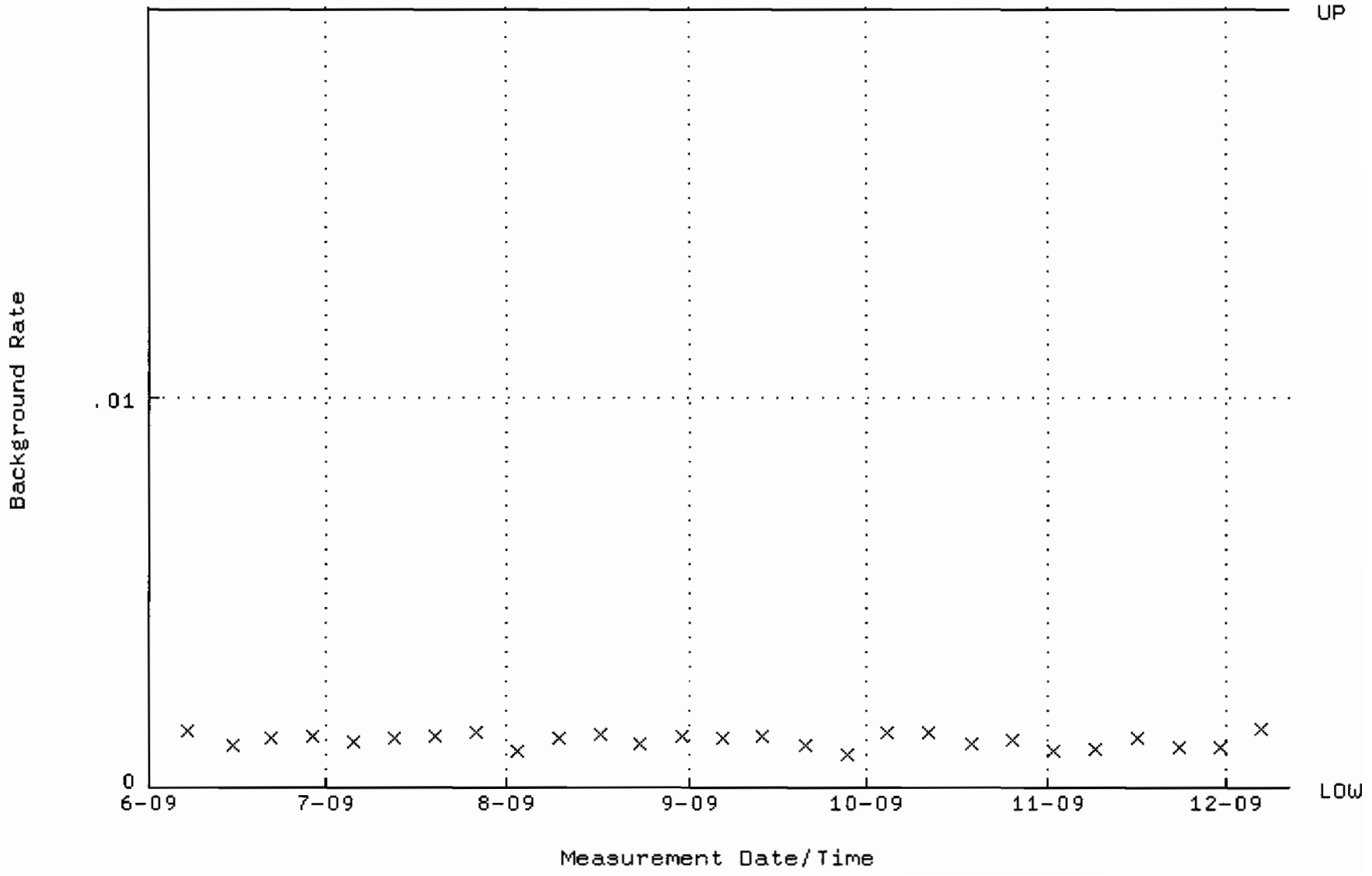

QA filename : DKA100:[ENV_ALPHA.QA.W]W090.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.313529 through 0.333529

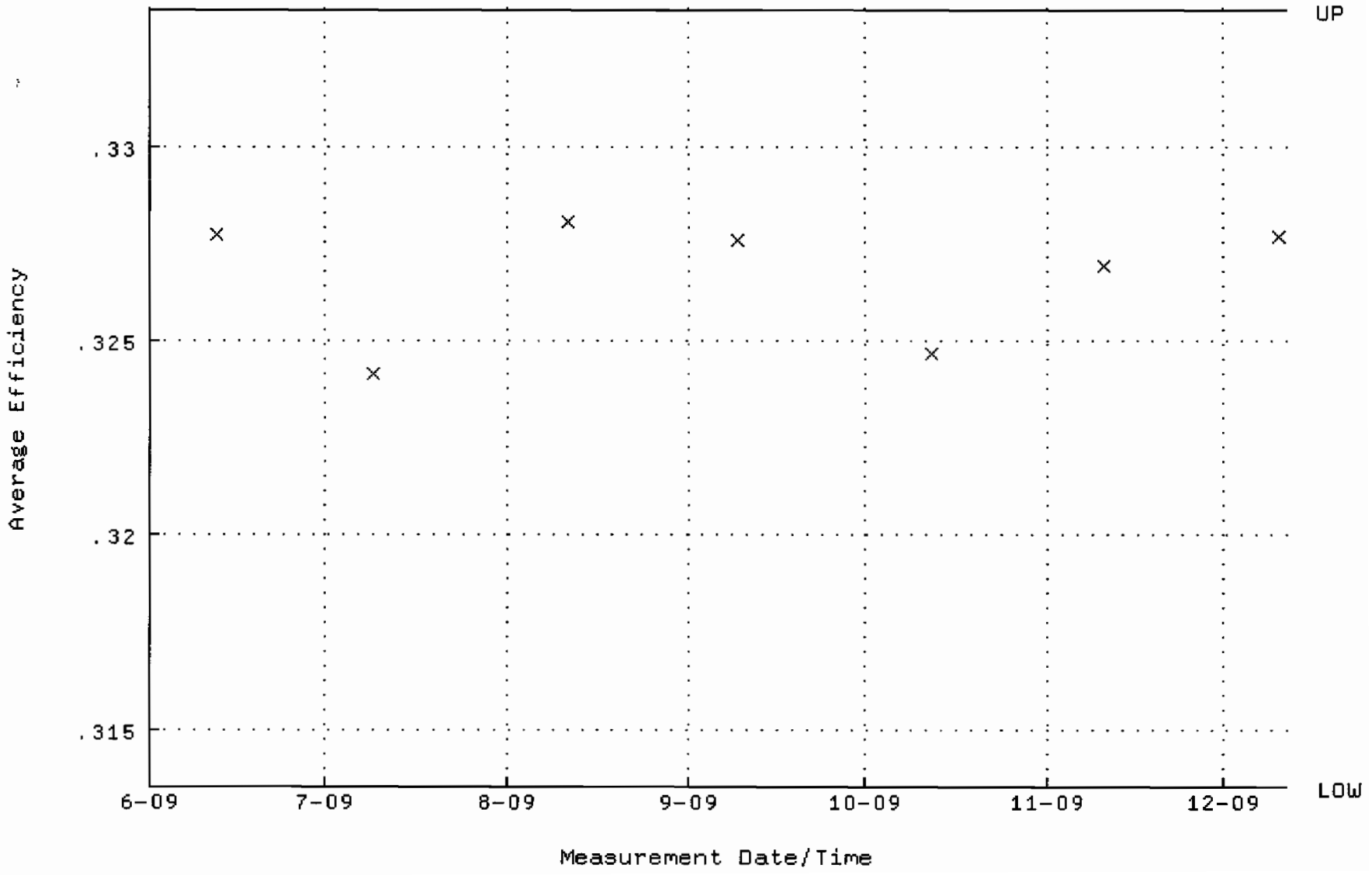

QA filename : DKA100:[ENV_ALPHA.QA.W]W090.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.0139 through 95.0680

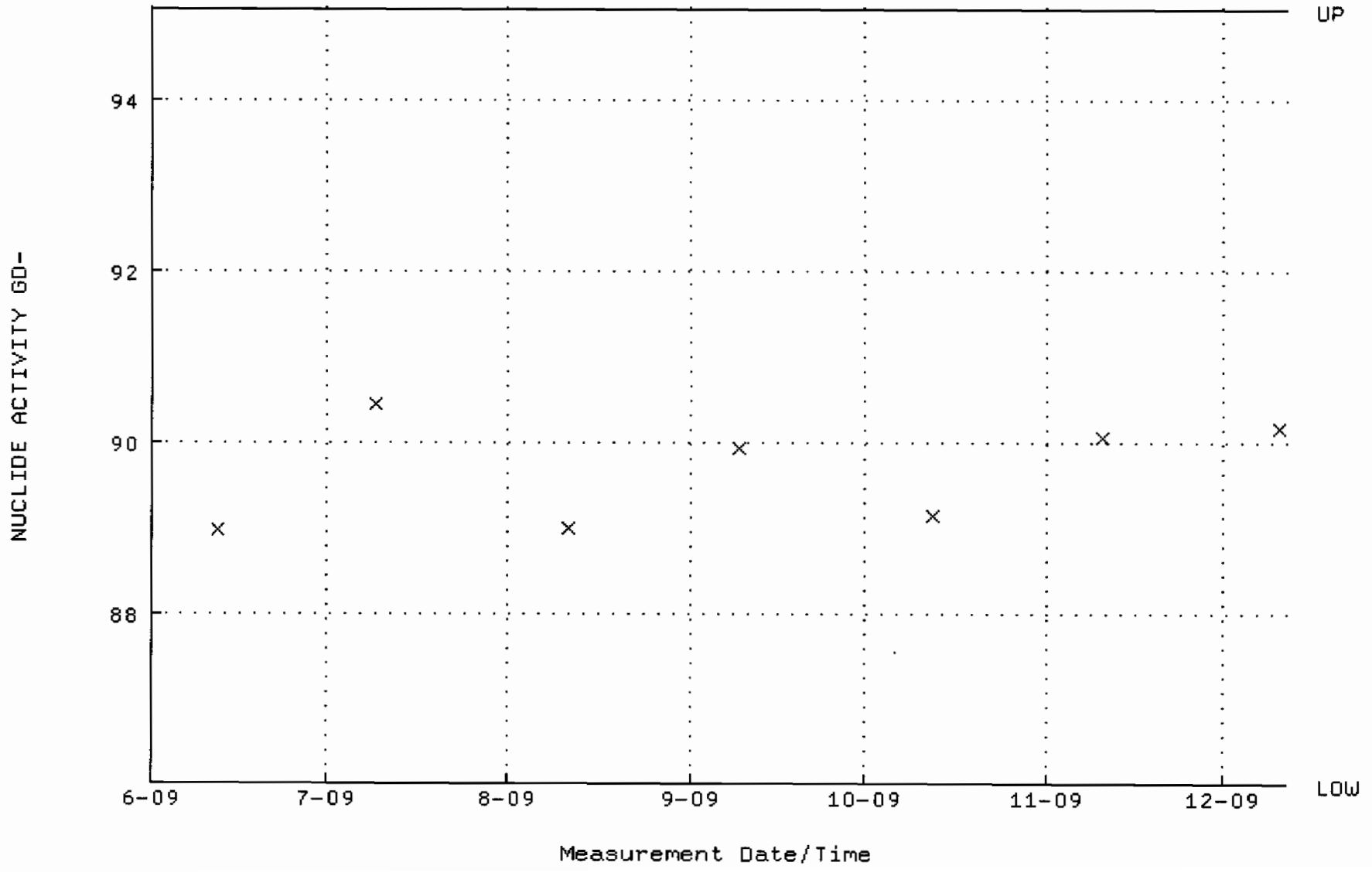

QA filename : DKA100:[ENV_ALPHA.QA.B]B090.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:41 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

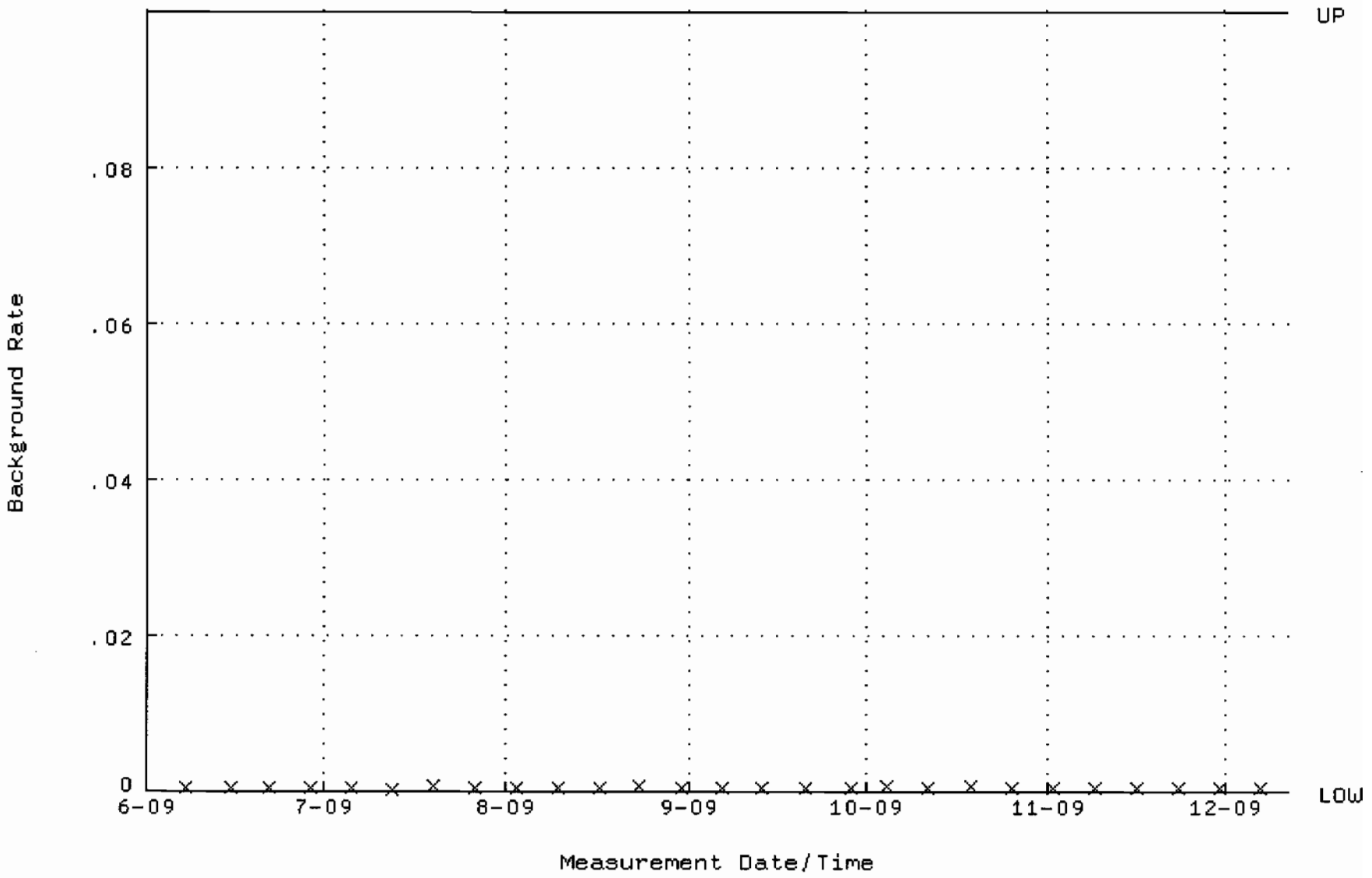

QA filename : DKA100:[ENV_ALPHA.QA.W]W091.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.332648 through 0.359902

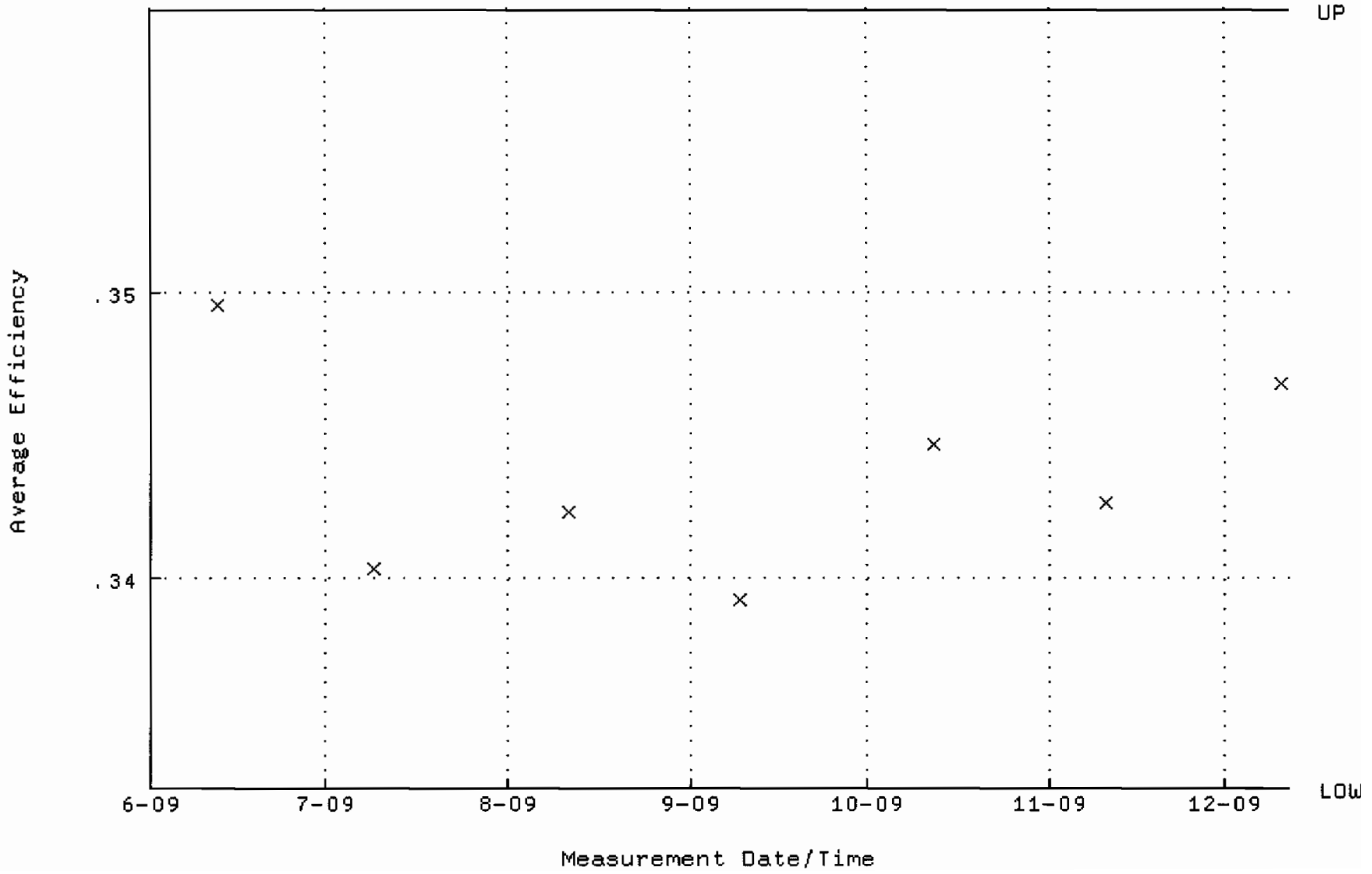

QA filename : DKA100:[ENV_ALPHA.QA.W]W091.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 84.0764 through 86.3518

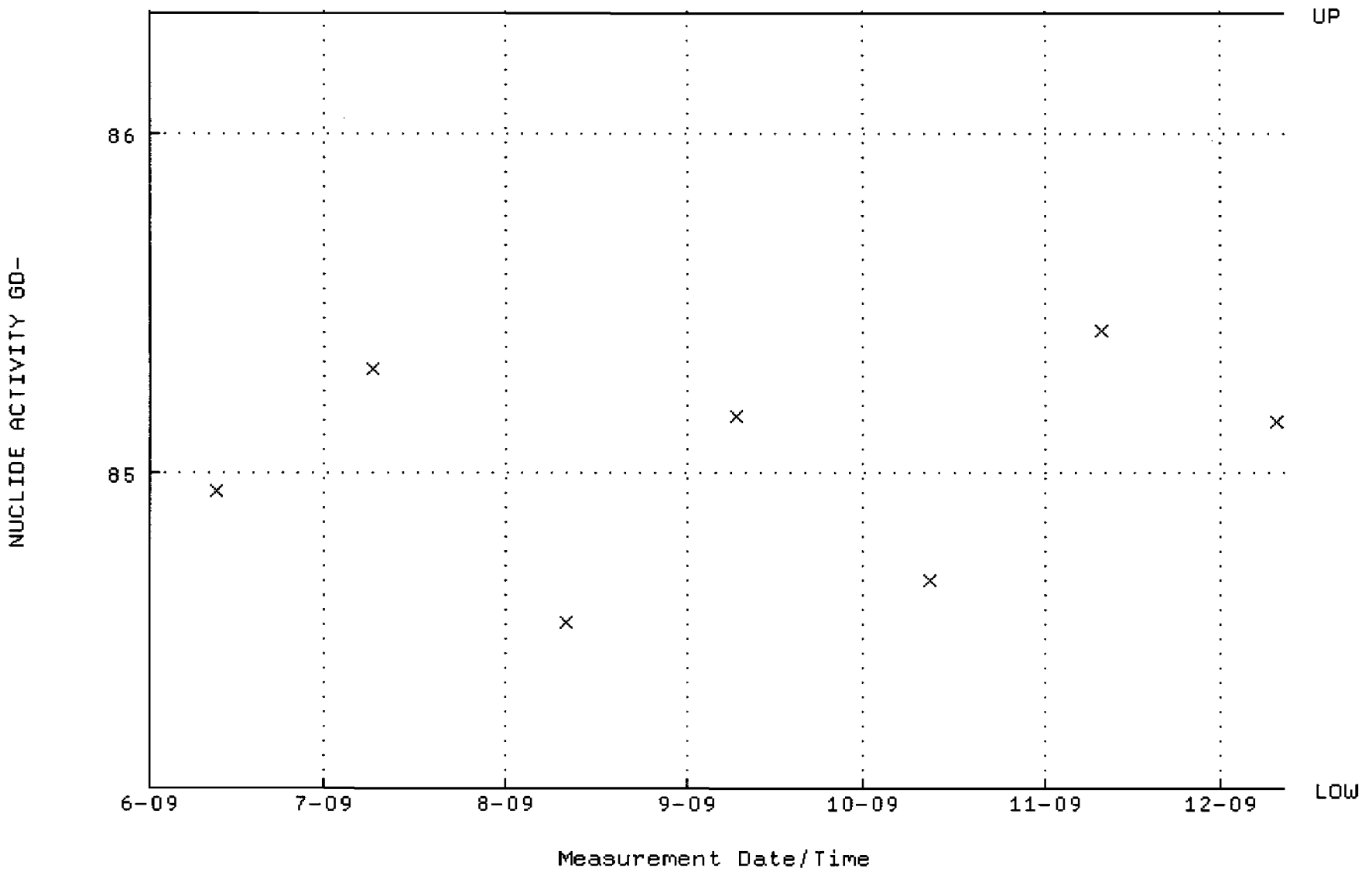

QA filename : DKA100:[ENV_ALPHA.QA.B]B091.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:41 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

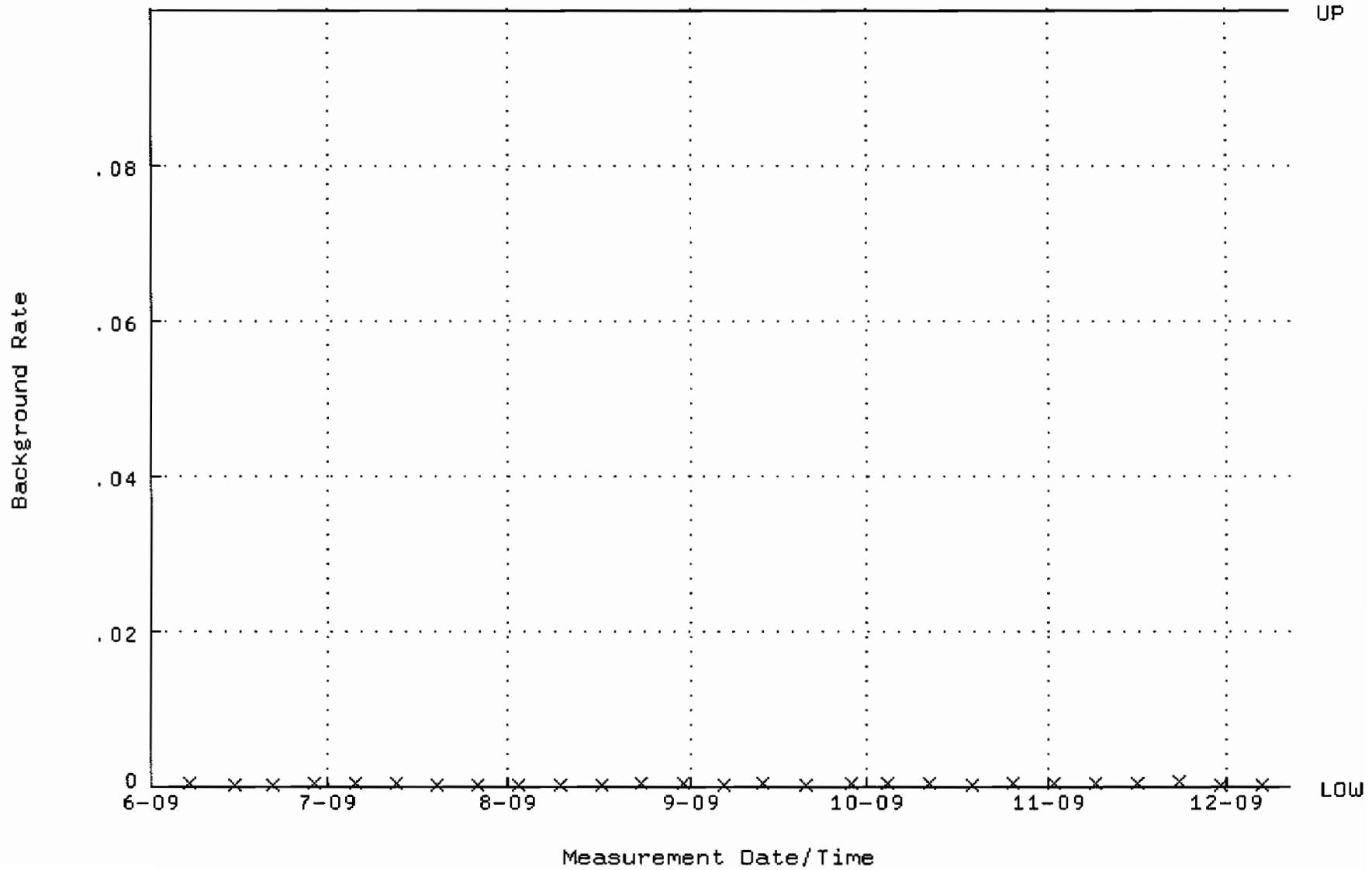

QA filename : DKA100:[ENV_ALPHA.QA.W]W092.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.301529 through 0.329133

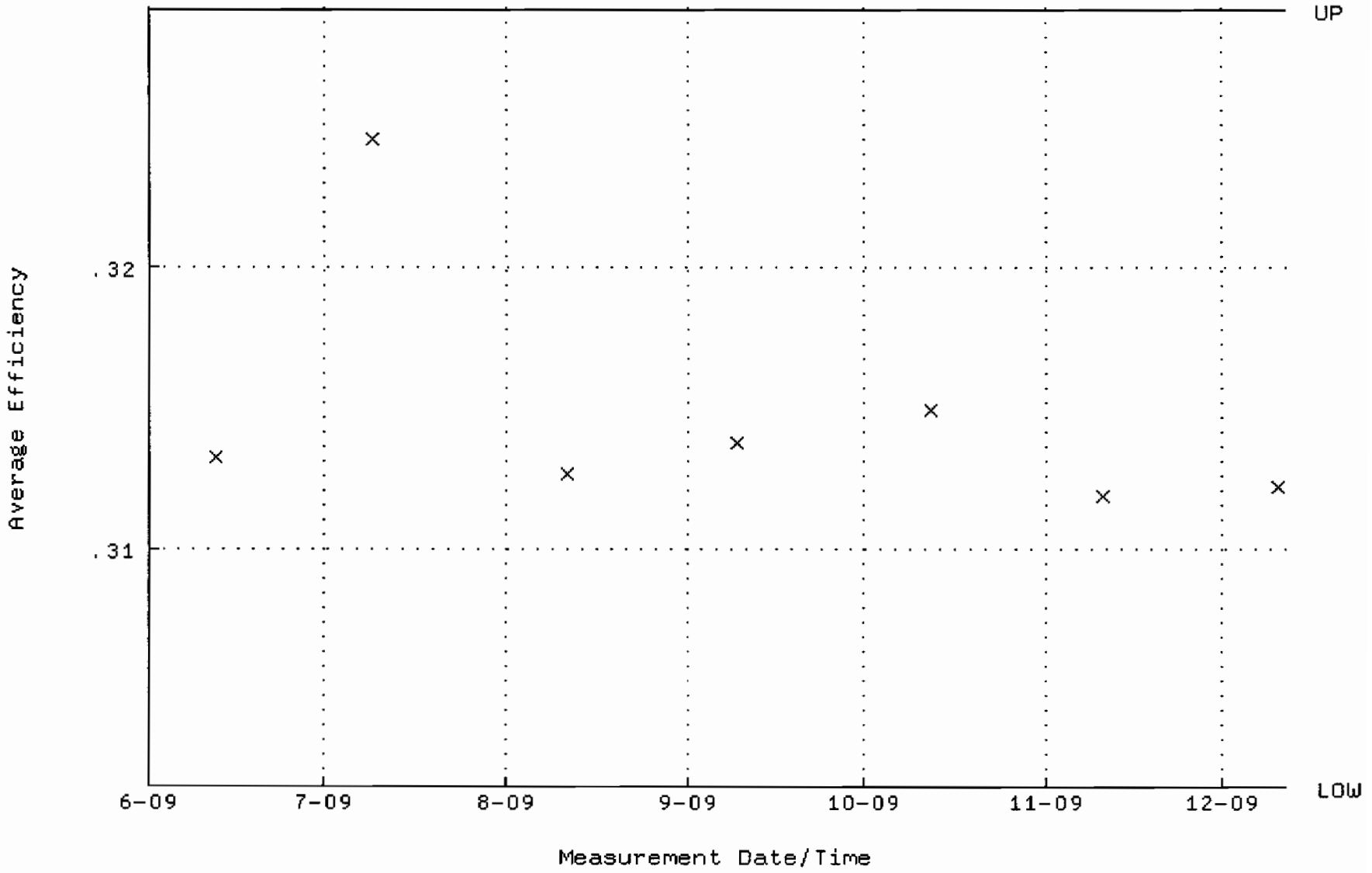

QA filename : DKA100:[ENV_ALPHA.QA.W]W092.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.3140 through 91.8878

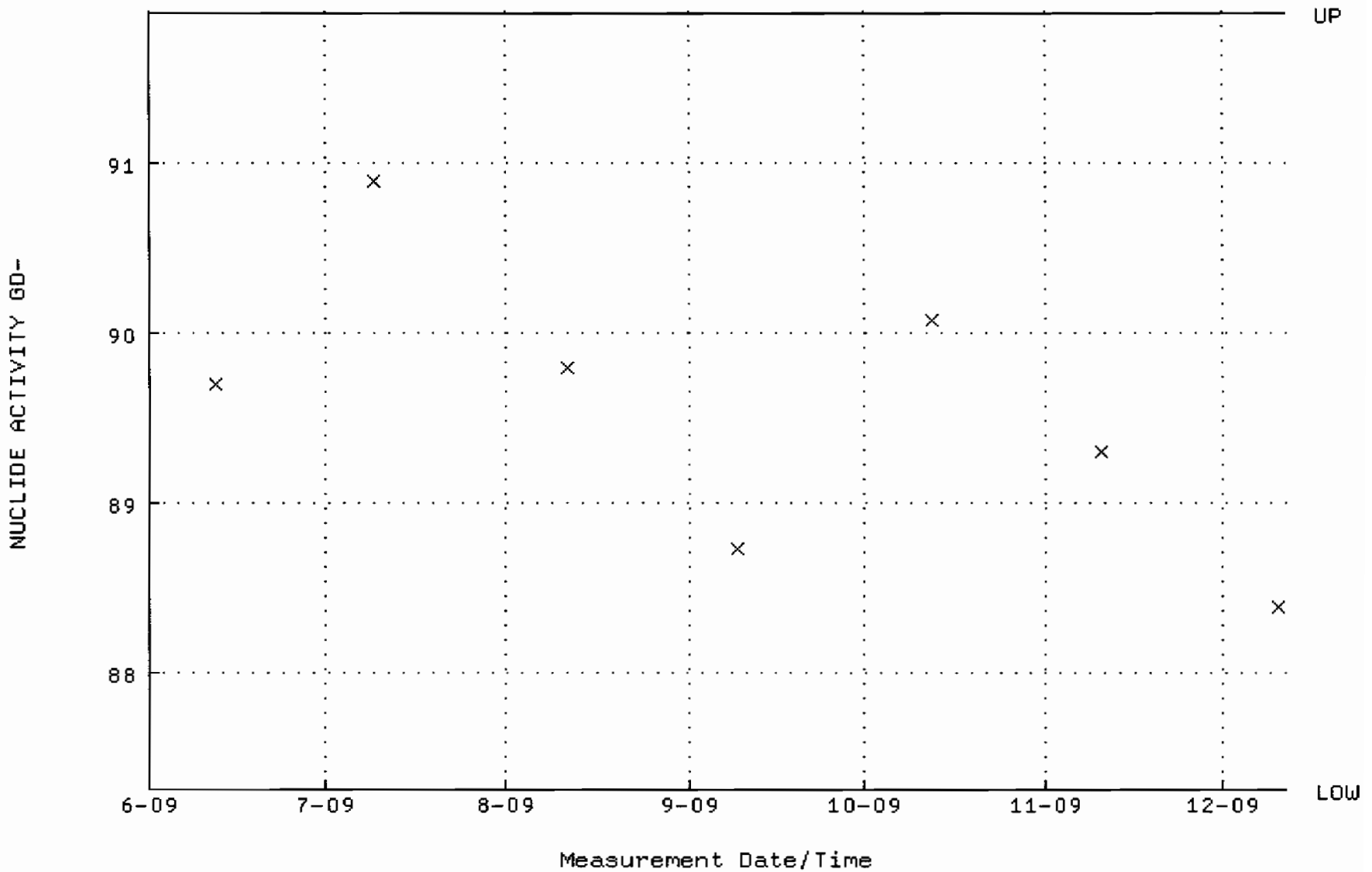

QA filename : DKA100:[ENV_ALPHA.QA.B]B092.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:41 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: -1.00000 through 0.100000

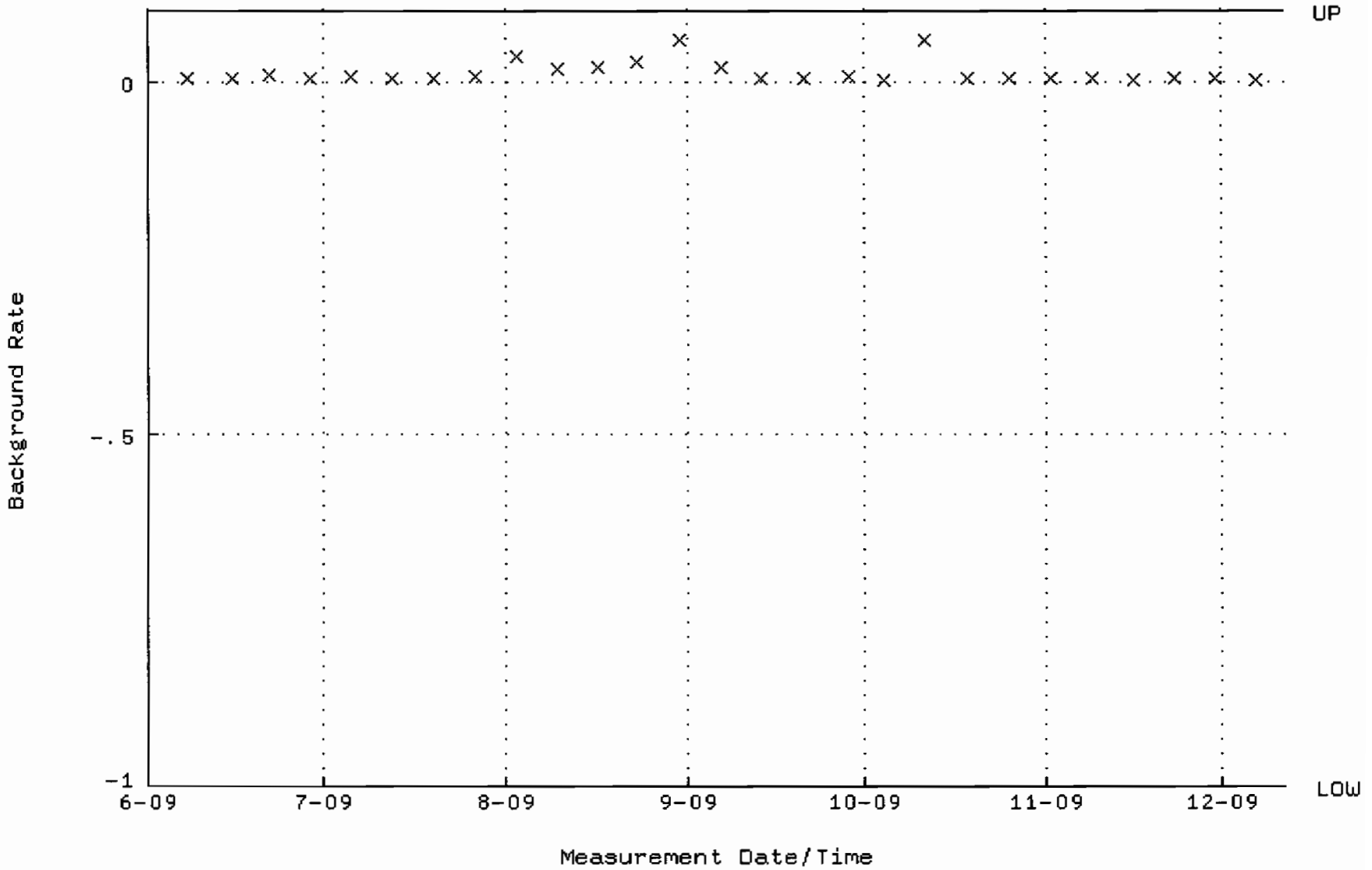

STANDARDS DATA

Amersham International plc
Amersham Laboratories

0134

NAMAS
CALIBRATION
No. 0146

Certificate of Calibration of Standard Tritium Labelled Water

Description

Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY·64

Chemical form: water Batch: 111

Measurement

Reference time: 1200 GMT on 1 March 1996

Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water

which is equivalent to: 13.19 microcuries per gram of water

or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement
This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy

The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than ±2.5%

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99·7% confidence level, and the estimated systematic uncertainties.

Purity

No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data

Half-life of tritium: 12·43 ± 0·11 years

Maximum beta energy of tritium: 18·6 keV

Remarks:

The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = $3{\cdot}7 \times 10^{10}$ becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = $3{\cdot}7 \times 10^4$ Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27·027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved signatory

W. F. Case

RC-5-024-061

W.F. Case

Amersham
The Health Science Group

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Johnson
Carrier Conc:	DI WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Johnson
Prep Date:	02/21/2001
Verification Date:	09/10/2008
Expiration Date:	03/27/2010
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (100 mL) = 985535.5200 dpm/mL
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (1.0004 g/mL) / (100 mL) = 985180.3116 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/25/2006	07/25/2007
12/20/2005	Amanda Fehr	5.5451	1000	0134-I	5462.92 dpm/mL	12/20/2006	12/20/2007
07/11/2007	Daniel Roy	5.5863	1000	0134-J	5503.5128 dpm/ml	07/29/2008	07/29/2009
03/25/2009	Mary Aders	5.4917	1000	0134-K	5410.3147 dpm/ml	03/27/2009	03/27/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for H-3 Standard 0134-K

M. Aders	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
4/9/2009	0134-K N1	1097.2000	54.0000	1043.2000	0.380548	1.0000	2741.3099
	0134-K N2	1073.2000	54.0000	1019.2000	0.380548	1.0000	2678.242955
	0134-K N3	1085.2000	54.0000	1031.2000	0.380548	1.0000	2709.776428
						Average =	2709.776428
Mean Value (Counting) =	2709.776428		**104.954429**	**Pass**			
Stdev =	31.53347278		0.01163693	**Rule 3 (Pass/Fail)**			

Certificate Value =	2581.86	dpm/mL
Lower Limit =	2646.709482	dpm/mL
Upper Limit =	2772.843373	dpm/mL
Rule 1 Pass/Fail	**Fail**	***exception taken due to full recovery of standard**
Two sigma =	63.06694556	dpm/mL
10 % of Mean =	270.9776428	dpm/mL
Rule 2 (Pass/Fail)	**Pass**	

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for H-3 source 0134-K by transferring 0.1 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ecoscint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ecoscint Ultra liquid scintillation cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on Silver for H-3 source standard verification. The H-3 efficiency calibration which was used for verification calculations was performed on 4/9/09 using 0020-A (H-3). Calibration data is recorded in this logbook under H-3 0020. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Mary L. Adams 4/9/09
Amanda L. Fehr 4/9/09

0244-B Characterization

Sample #	Plutonium-239 Result (pCi/g)	Plutonium-238 Result (pCi/g)	Americium-241 Result (pCi/g)
0244-B 1	39.9	7.88	38.4
0244-B 2	44.1	7.97	40.6
0244-B 3	45.8	6.56	31.8
0244-B 4	43.6	7.69	31.5
0244-B 5	43	7.9	40.2
0244-B 6	43.5	7.84	29.4
0244-B 7	41.3	7.67	36
0244-B 8	44.3	6.95	33.2
0244-B 9	42.7	7.2	29.2
0244-B 10	44.9	7.69	30
0244-B 11	41.4	7.22	30.2
0244-B 12	41.3	7.74	36
0244-B 13	39.2	6.65	33.8
0244-B 14	39.6	7.78	31.1
0244-B 15	45.3	8.41	37.3
0244-B 16	38.1	6.74	33.6
0244-B 17	48.5	8.51	30.5
0244-B 18	36.5	7.23	38.6
0244-B 19	35.3	6.98	30.9
0244-B 20	37.4	8.55	31.3
Mean Value	41.79	7.56	33.68
1 sigma	3.418	0.596	3.724
2 sigma	6.835	1.193	7.448
75% Limit	30.75	6.02	24.38
125% Limit	51.25	10.04	40.63
Expected Result	41.0 +/- 3.0	8.03 +/- 0.37	32.5 +/- 1.1
Achieved Results	41.79 +/- 3.418	7.56 +/- .596	33.68 +/- 3.724

REFERENCE DATE 4/14/2000

Amanda L. Fehr 4/30/04
[illegible] 5/1/04

PEM-1

PREPARATION AND CHARACTERIZATION OF THE PERFORMANCE EVALUATION SOIL SAMPLE PEM-1

INTRODUCTION

Rust Geotech (Rust) was contracted by Los Alamos National Laboratory (LANL) to prepare and characterize a soil performance evaluation sample designated PEM-1. This report describes sample preparation, homogeneity assessment, and determination of the concentrations of 28 elements and radioactive isotopes in the sample.

SAMPLE PREPARATION

Rust received nine five-gallon buckets of soil from LANL. The soils were dried overnight in ovens at 103 °C. The large pieces of leaves and sticks were removed and the soils were ground with ceramic-plate grinders to a particle size that passed through a 325 mesh screen. The samples were blended at the proportions specified by LANL for 48 hours in a 3-cubic-foot cross-flow blender. The sample identifications and the amounts used are listed in Table 1.

Table 1. Sample Identifications and Amounts Used to Prepare PEM-1

LANL Sample ID	Amount Used (kg)
AAA 1592	1.7
AAA 2505-1	10.9
AAA 2505-2	12.8
AAA 2750-1	8.4
AAA 2750-2	8.4
AAA 3205	12.6
AAA 8581	4.2
AAB 3417	12.8
AAB 3475	12.6

The blended sample was transferred to three five-gallon plastic containers. While the sample was being transferred, 10 samples were taken at pre-determined time intervals to be used for homogeneity assessment and sample characterization. These samples are believed to be representative of the bulk material.

Attention Nancy Slater At GEL
Not For Log-In

9911627-01 -> 0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 (SMO USE)
Carrier/Waybill No.: [illegible]
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: [signature]
Bill to: Sandia National Laboratories
Supplier Services, Dept. _____
P.O. Box 5800 MS 0154

Location — Tech Area VI
Building N/A — Room N/A

Reference LOV (available at SMO)

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	Lab Sample ID (LAB USE)
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special Instructions Below	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
-												
-												
-												
-												
-												
-												
-												

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab
Turnaround Time ☒Normal ☐Rush Required Report Date

Sample Tracking (SMO USE)
Date Entered (mm/dd/yy)
Entered by
QC Initials

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well characterized rad materials being sent to GEL on behalf of Hank Hinton.
Please list as separate report.

Abnormal Conditions on Receipt (LAB USE)

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	[signature]	DP	Weston / 7577 / 845-0867

1. Relinquished by	[signature]	Org. 7577	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution: 5.3739 g (in a 5 ml Flame Sealed Ampoule)

b. Chemical form: Am(NO3)3 in 2N HNO3

c. Carrier content: None added

d. Density: 1.0651 g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under: 228, 278 keV.

Branching ratio(s) used: 0.108, 0.1420 gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration: ±3.0%

b. Random uncertainty in assay: ±0.4%

c. Random uncertainty in weighing(s): ±0.0%

d. Total uncertainty at the 99% confidence level: ±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Khan
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ **1. STANDARD WIPE TEST**

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **2. SOAK TEST**

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **3. SOAK TEST -- BERYLLIUM WINDOW**

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **4. GAS SOURCE TEST (Radioactive Gas)**

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ **5. OTHER LEAK TEST**

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **6. LEAK TEST NOT APPLICABLE**

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Angela Johnson
Prep Date:	01/05/1994
Verification Date:	05/11/2009
Expiration Date:	05/11/2010
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2005	09/10/2006
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/16/2005	Brenda Burke	.001224	500	445-96-2-DD	5.07144 dpm/mL	08/18/2007	08/18/2008
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
10/13/2005	Brenda Burke	.0017	500	445-96-2-EE	7.0435 dpm/mL	11/15/2005	11/15/2006
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
10/14/2005	Mary Aders	.0141	500	445-96-2-FF	58.4196 dpm/mL	10/14/2005	10/14/2006
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
05/10/2006	Mary Aders	2.0753	1000	445-96-2-GG	4299.227 dpm/mL	09/30/2008	09/30/2009
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
06/07/2006	Mary Aders	.0365	1000	445-96-2-HH	75.614 dpm/mL	06/19/2006	06/19/2007
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
05/11/2006	Brenda Burke	.000009739	100	445-96-2-II	.201761 dpm/mL	07/26/2006	07/26/2007
07/20/1995	Theresa Austin	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
05/01/2007	Daniel Roy	.0352	1000	445-96-2-JJ	72.9209 dpm/ml	04/30/2008	04/30/2009
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
06/12/2007	Julie Strock	.01038	250	445-96-2-KK	22.1496 dpm/mL	05/28/2008	05/28/2009

09/11/1995	Theresa Austin	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Austin	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
11/01/2007	Eric Williamson	.001274	500	445-96-2-MM	5.27945 dpm/mL	04/06/2008	04/06/2010
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/19/2008	Daniel Roy	.0424	1000	445-96-2-NN	87.8366 dpm/ml	04/16/2009	04/16/2010
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/04/2008	Julie Strock	.00001005	100	445-96-2-PP	.20819 dpm/mL	12/29/2008	12/29/2009
01/28/2000	Angela Johnson	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
09/29/2008	Julie Strock	.0025219	250	445-96-2-QQ	20.8977 dpm/mL	09/30/2008	09/29/2009
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/23/2009	Tina Schoneman	.001251	500	445-96-2-RR	4.8075 dpm/mL	04/23/2009	04/23/2010
04/13/2001	Angela Johnson	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
05/08/2009	Mary Aders	.0141	1000	445-96-2-SS	29.2098 dpm/ml	05/11/2009	05/11/2010
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003

07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
06/03/2009	Julie Strock	.00000927	100	445-96-2-TT	.1923 dpm/mL	06/05/2009	06/03/2010
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
06/02/2009	Mary Aders	2.1177	1000	445-96-2-UU	4385.1449 dpm/ml	06/04/2009	06/04/2010
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Johnson	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2006	03/14/2007
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Eric Williamson	.011	1000	445-96-2-Z	22.7877 dpm/mL	04/03/2007	04/03/2008

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Am-243 Standard *445-96-2-SS*

M. Aders	Isotope	Value	Uncertainty
5/15/2009	445-96-2-SS #1	1.360	0.1690
	445-96-2-SS #2	1.370	0.1690
	445-96-2-SS #3	1.290	0.1590

Mean Value (Counting) =	1.340	101.99	**Pass**
Stdev =	0.043588989		**Rule 3 (Pass/Fail)**

Target =	1.314
Lower Limit =	1.252822021
Upper Limit =	1.427177979
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.087177979
10 % of Mean =	0.134
Rule 2 (Pass/Fail)	**Pass**

The analyst prepared three standard verification sources for standard ***445-96-2-SS*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Cm-244*** standard ***0533-O*** and 50 micrograms of neodymium carrier in a disposable centrifuge tube. Each standard was diluted with 4 mL of 2 M HCl and 6 mL of DI Water. Two mL of 48% HF was added to precipitate Nd(and Americium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Am-243 were calculated by comparison to Am-241certified values.

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

Mary Fridean 5/15/09
Robert Bri 007509

1373

National Institute of Standards & Technology
Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

RECEIVED

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 to 7.

12C-S-051-0012

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994 [b]***
Massic activity of the solution [c]	**26.31 $Bq \cdot g^{-1}$**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**
Solution density	**(1.105 ± 0.002) $g \cdot mL^{-1}$ at 20 °C [f]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration ($mol \cdot L^{-1}$)	Mass Fraction ($g \cdot g^{-1}$)
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) $Bq \cdot g^{-1}$ [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three 4πα liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	^{239}Pu + ^{240}Pu <0.000 001 [u]	^{239}Pu + ^{240}Pu 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	^{238}Pu + ^{241}Am <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One µSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (µSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) = |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 $s^{-1} \cdot g^{-1}$ for energies less than 3.1 MeV,
0.03 $s^{-1} \cdot g^{-1}$ for energies between 3.1 and 4.4 MeV, and
0.003 $s^{-1} \cdot g^{-1}$ for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
$5 \times 10\text{-}5$ $s^{-1} \cdot g^{-1}$ for energies between 19 and 39 keV,
$7 \times 10\text{-}5$ $s^{-1} \cdot g^{-1}$ for energies between 49 and 92 keV,
$2 \times 10\text{-}5$ $s^{-1} \cdot g^{-1}$ for energies between 106 and 507 keV,
$1 \times 10\text{-}5$ $s^{-1} \cdot g^{-1}$ for energies between 515 and 1456 keV, and
$5 \times 10\text{-}6$ $s^{-1} \cdot g^{-1}$ for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}·{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

Standard Traceability Log Rad

Source Material Info

Parent Code:	1373
Prepared By:	Mary Aders
Carrier Conc:	0.5M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC-S-051-092

A Solution Material Info

Isotope:	Plutonium-242
Prepared By:	Mary Aders
Prep Date:	10/23/2009
Verification Date:	10/27/2009
Expiration Date:	10/27/2010
Primary Code:	1373-A
Dilution(mL):	200 mL
Mass of Parent(g):	5.3477 g
Density(g/mL):	1.0145
Balance ID:	38110047

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / (Dilution Vol) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (200 mL) = 42.2094 dpm/mL

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (1.0145 g/mL) / (200 mL) = 41.6041 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Pu-242 Standard 1373-*A*

M. Aders	Isotope	Value	Uncertainty
10/27/2009	1373-A	1.970	0.3050
	1373-A	1.900	0.2980
	1373-A	1.950	0.3000

Mean Value (Counting) =	1.940	102.04	**Pass**
Stdev =	0.036055513		**Rule 3 (Pass/Fail)**

Target =	1.90
Lower Limit =	1.867888974
Upper Limit =	2.012111026
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.072111026
10 % of Mean =	0.194
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for standard 1373-A using 0.1 mL for each source. Each standard was combined with 0.1 mL of Pu239 standard 0338-BB and 50 micrograms of neodymium carrier in a disposable centrifuge tube containing 4 mL of 2 M HCl and 6 mL of DI water. Four drops of 25% Hydrazine dihydrochloride were added to each centrifuge tube and swirled. Two mL of 48% HF was added to precipitate neodymium(and plutonium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Pu-242 were calculated by comparison to Pu-239 certified values.

10/29/09
11/02/09

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

1067

74463-278

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Sr-90
ACTIVITY (Bq):	3.835 E4
HALF-LIFE:	28.79 years
CALIBRATION DATE:	February 7, 2007 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	1.7%

Impurities: γ-impurities <0.1%

5.01066 grams 0.1M HCl solution with 30 µg/g Sr carrier.

NOTE: This source also contains Y-90 in secular equilibrium with Sr-90. The Y-90 activity is equal to the Sr-90 activity. Since Sr-90 and Y-90 both decay 100% by beta emission, the total beta emission rate for the source is twice the certified Sr-90 activity. The half-life for Y-90 is 64.08 hours.

P O NUMBER 2739 RD, Item 1

RECEIVED 2/8/07 DR

SOURCE PREPARED BY: M. Dimitrova
M. Dimitrova, Radiochemist

Q A APPROVED: 2-7-07

RC-S-045-108-A

Standard Traceability Log Rad

Source Material Info

Parent Code:	1067
Prepared By:	Daniel Roy
Carrier Conc:	0.1M HCl
Reference Date:	02/07/2007
Ampoule Mass (g):	5.01066 g
Uncertainty:	+/- 1.7 %
LogBook No:	RC-S-045-108

A Solution Material Info

Isotope:	Strontium-90
Prepared By:	Julie Strock
Prep Date:	10/12/2007
Verification Date:	06/17/2009
Expiration Date:	06/23/2010
Primary Code:	1067-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.9657 g
Density(g/mL):	0.9962
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq)) * (conversion dpm to bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (bq)) * (conversion dpm to bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)

(4.9657 g) * (38350 bq) * (60 dpm/bq) / (5.01066 g * 100 mL) = 22803.5343 dpm/mL

(4.9657 g) * (38350 bq) * (60 dpm/bq) / (0.9962 g/mL)/ (5.01066 g * 100 mL) = 22889.8293 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/23/2008	Daniel Roy	20.0611	1000	1067-B	459.1952 dpm/ml	07/23/2008	07/23/2009
06/16/2009	Mary Aders	20.0693	1000	1067-C	459.3829 dpm/mL	06/17/2009	06/17/2010

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Version 1.0 9/18/2000

Verification for Sr-90 Standard 1067-C

6/18/2009	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Vol. Used (mL)	Source DPM/mL
M. Aders	1067-C N1	922.6000	45.1300	877.4700	2.030242	1.0000	432.1997082
	1067-C N2	905.2700	45.1300	860.1400	2.030242	1.0000	423.66378
	1067-C N3	918.2700	45.1300	873.1400	2.030242	1.0000	430.0669575
						Average =	428.6434819
Mean Value (Counting) =	428.6434819		98.7965109	% of known	Pass		
Stdev =	4.442435123		0.01036394				
Certificate Value =	433.865	dpm/mL					
Lower Limit =	419.7586117	dpm/mL					
Upper Limit =	437.5283522	dpm/mL					
Rule 1 Pass/Fail	Pass	Pass	Pass				
Two sigma =	8.884870247						
10 % of Mean =	42.86434819						
Rule 2 (Pass/Fail)	Pass						

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for Sr-90 source 1067-C by transferring 1 mL portions of the standard into glass liquid scintillation vials. Thirteen mL of Ecoscint Ultra liquid scintillation coctail was prepared in a similar fashion using 1 mL of DI water and 13 mL of Ecoscint Ultra liquid scintillation coctail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Green for Sr-90 source standard verification. The Sr-90 efficiency calibration which was used for verification calculations was performed on 6/17/09 using source 0133-A (Sr-90). Calibration data is recorded in this logbook under Sr-90 0133-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.
RAD SOP M-001

6/18/09
6/27/09

STANDARDIZATION OF STRONTIUM CARRIER

DATE: [redacted] EXP. DATE: [redacted]

LOT NUMBER [redacted]

STRONTIUM PRECIPITATES

	1	2	3	4
Weight of carrier added	[redacted]			
Aliquot (5.00 mL)				
Crucible + ppt.	[redacted]			
Crucible				
Wt. of ppt., g	0.0178	0.0179	0.0179	0.0178
mg Sr/mL	17.80	17.90	17.90	17.80
mg Sr/g	17.28	17.72	17.55	17.28

Must weigh carrier added

Jennifer L. Robb
9-24-09

Average	Std. Dev.	
17.85	± 0.06	0.00323446
17.46	± 0.22	0.0124023
mg Sr/ 0.5 mL		**8.93**
mg Sr/g		17.46

0.5% of Mean Value = 0.08925 Pass

A satisfactory standardization is obtained when results give a standard deviation of less than 0.5% of the mean value.

RUNLOGS

Instrument Run Log

Instrument Type: GFPC **Batch ID: 925141**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241336001	SAMPLE	JXR1	LB4100F1	04-DEC-09 12:32	DONE	Tuffryn Filter	12-JAN-09 00:00
241336002	SAMPLE	JXR1	LB4100G1	04-DEC-09 12:32	DONE	Tuffryn Filter	12-JAN-09 00:00
1201977813	DUP	JXR1	LB4100H1	04-DEC-09 12:32	DONE	Tuffryn Filter	12-JAN-09 00:00
241425001	SAMPLE	JXR1	LB4100G2	04-DEC-09 12:33	DONE	Tuffryn Filter	12-JAN-09 00:00
241425002	SAMPLE	JXR1	LB4100G3	04-DEC-09 12:33	DONE	Tuffryn Filter	12-JAN-09 00:00
1201977812	MB	JXR1	LB4100G4	04-DEC-09 12:33	DONE	Tuffryn Filter	12-JAN-09 00:00
1201977814	LCS	JXR1	LB4100H2	04-DEC-09 12:33	DONE	Tuffryn Filter	12-JAN-09 00:00

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 927530**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241327001	SAMPLE	HAKB	1070	10-DEC-09 12:38	DUSE		
241327002	SAMPLE	HAKB	1071	10-DEC-09 12:38	DONE		
241327003	SAMPLE	HAKB	1072	10-DEC-09 12:38	DONE		
241327004	SAMPLE	HAKB	1073	10-DEC-09 12:38	DONE		
241327005	SAMPLE	HAKB	1074	10-DEC-09 12:38	DONE		
241327006	SAMPLE	HAKB	1076	10-DEC-09 12:38	DONE		
241327007	SAMPLE	HAKB	1077	10-DEC-09 12:38	DONE		
241327008	SAMPLE	HAKB	1079	10-DEC-09 12:38	DONE		
241327009	SAMPLE	HAKB	1080	10-DEC-09 12:38	DONE		
241327010	SAMPLE	HAKB	1083	10-DEC-09 12:38	DONE		
241327011	SAMPLE	HAKB	1084	10-DEC-09 12:38	DONE		
241327012	SAMPLE	HAKB	1085	10-DEC-09 12:38	DONE		
241336001	SAMPLE	HAKB	1086	10-DEC-09 12:38	DONE		
241336002	SAMPLE	HAKB	1087	10-DEC-09 12:38	DONE		
241425001	SAMPLE	HAKB	1088	10-DEC-09 12:38	DONE		
241425002	SAMPLE	HAKB	1089	10-DEC-09 12:38	DONE		
1201983131	MB	HAKB	1090	10-DEC-09 12:38	DONE		
1201983132	DUP	HAKB	1091	10-DEC-09 12:38	DONE		
1201983133	LCS	HAKB	1092	10-DEC-09 12:38	DONE		
241327001	SAMPLE	HAKB	1227	11-DEC-09 19:28	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 927531**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241327001	SAMPLE	HAKB	1007	10-DEC-09 10:31	DONE		
241327002	SAMPLE	HAKB	1008	10-DEC-09 10:31	DONE		
241327003	SAMPLE	HAKB	1009	10-DEC-09 10:31	DONE		
241327004	SAMPLE	HAKB	1010	10-DEC-09 10:31	DONE		
241327005	SAMPLE	HAKB	1011	10-DEC-09 10:31	DONE		
241327006	SAMPLE	HAKB	1012	10-DEC-09 10:31	DONE		
241327007	SAMPLE	HAKB	1019	10-DEC-09 10:31	DONE		
241327008	SAMPLE	HAKB	1020	10-DEC-09 10:31	DONE		
241327009	SAMPLE	HAKB	1021	10-DEC-09 10:31	DONE		
241327010	SAMPLE	HAKB	1023	10-DEC-09 10:31	DONE		
241327011	SAMPLE	HAKB	1024	10-DEC-09 10:31	DONE		
241327012	SAMPLE	HAKB	1025	10-DEC-09 10:31	DONE		
241336001	SAMPLE	HAKB	1026	10-DEC-09 10:31	DONE		
241336002	SAMPLE	HAKB	1027	10-DEC-09 10:31	DONE		
241425001	SAMPLE	HAKB	1028	10-DEC-09 10:31	DONE		
241425002	SAMPLE	HAKB	1029	10-DEC-09 10:31	DONE		
1201983134	MB	HAKB	1030	10-DEC-09 10:31	DONE		
1201983135	DUP	HAKB	1031	10-DEC-09 10:31	DONE		
1201983136	LCS	HAKB	1033	10-DEC-09 10:31	DONE		

Instrument Run Log

Instrument Type: LSC **Batch ID: 927653**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241301001	SAMPLE	KXK2	LSCORANGE	04-DEC-09 14:36	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241336001	SAMPLE	KXK2	LSCORANGE	04-DEC-09 16:39	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241336002	SAMPLE	KXK2	LSCORANGE	04-DEC-09 18:41	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241425001	SAMPLE	KXK2	LSCORANGE	04-DEC-09 20:44	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241425002	SAMPLE	KXK2	LSCORANGE	04-DEC-09 22:46	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518001	SAMPLE	KXK2	LSCORANGE	05-DEC-09 00:49	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518002	SAMPLE	KXK2	LSCORANGE	05-DEC-09 04:07	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518005	SAMPLE	KXK2	LSCORANGE	05-DEC-09 10:14	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241524002	SAMPLE	KXK2	LSCORANGE	05-DEC-09 15:50	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241909001	SAMPLE	KXK2	LSCORANGE	05-DEC-09 17:52	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983510	LCS	KXK2	LSCORANGE	06-DEC-09 00:01	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518003	SAMPLE	KXK2	LSCORANGE	08-DEC-09 13:57	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518004	SAMPLE	KXK2	LSCORANGE	08-DEC-09 15:00	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241518006	SAMPLE	KXK2	LSCORANGE	08-DEC-09 16:02	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241909002	SAMPLE	KXK2	LSCORANGE	08-DEC-09 17:05	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983508	MB	KXK2	LSCORANGE	08-DEC-09 18:37	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983509	DUP	KXK2	LSCORANGE	08-DEC-09 19:40	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00

Tuesday, November 17, 2009

REQUEST NUMBER: 10-545

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-545

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	HASL-300:ISOU	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-545

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-545

REQUEST NUMBER: 10-545

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13622	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13620	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13619	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13624	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13623	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13626	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13621	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13627	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13625	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6084	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6085	1	POLY	AM-241+ISOPU+ISOU	None	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/12/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-~~99~~ - Part 1

SAMPLE ID: RE03-09-13618 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608242	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Sandy gravel fill. Dark reddish brown (5 YR 3/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)2-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Background α: 26.7 β: 1776 Samples: MDA>

COLLECTED BY (PRINT) M. Nauck, L. Herne **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11-16-09
(Signature) [illegible]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13619 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	QTB3
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608242	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		
FIELD MATRIX:	~~SR~~ MK/16/09		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: strong brown tuff (7.5 YR 4/6)

SAMPLE COMMENTS: hit tuff @ 1.5 ft.

LOCATION DESC: 014(b)2-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Background α: 26.7 DPM β: 1776 DPM samples: mDA7

COLLECTED BY (PRINT) J. Jordan **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13620 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	all IN
TIME COLLECTED (HH:MM)		1437	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608243	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand, reddish-brn (5YR 4/3), moist, w/ organic material

SAMPLE COMMENTS: tuff @ 1'

LOCATION DESC: 014(b)2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 4 ppm
BACKGROUND
α: 26.7
β: 1776

SAMPLES
<MDA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Shendo	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13621 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	JJS 11-16-09 ~~NA~~ QBT 3	OK
TIME COLLECTED (HH:MM)		1442	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608243		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JJS 11-16-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: tuff (QBT 3), lt. reddish-brn (5YR 6/3), moist, hard

SAMPLE COMMENTS:

LOCATION DESC: 014b2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 2.0ppm Background
alpha: 26.7 < Samples
Beta: 1776

COLLECTED BY (PRINT) M. Nanch, L. Horne **REVIEWED BY (PRINT)** J. Jurado

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Shenda	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13622 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		1520	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608244		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: S: Hy Sand, reddish-brn (5YR 5/3), moist

SAMPLE COMMENTS:

LOCATION DESC: 014(ba)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.5 ppm
Alpha = 26.7
Beta = 1776

Samples LMDA

COLLECTED BY (PRINT) M. Nauch **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Elundo	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13623 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1523	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608244		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: ~~YES / NO~~ / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QBT 3 tuff, reddish-brn (5YR 5/3), moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm background - α: 26.7 DPM β: 1776 DPM

SAMPLES: MOA>

COLLECTED BY (PRINT) M. Nauch **REVIEWED BY (PRINT)** J. Trak

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09 1715	(Printed Name) Sherri Sherwood	11-16-09 1715
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13624 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK ~~NA~~ 11-16-09
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	NA	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608245		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA ~~WATER FLOWING: YES/NO/NA~~ G

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand (dark reddish gray 5YR 4/2) + tuff (QBT3), moist, plant roots

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm. BACKGROUND: Alpha: 26.7 DPM Beta: 1776 DPM SAMPLES: MDA>

COLLECTED BY (PRINT) M. Rauch, D. Pharmer **REVIEWED BY (PRINT)** J. Isa

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rauch (Signature)	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature)	11-16-09 1715
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13625 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	QBT3 Ok
TIME COLLECTED (HH:MM)		1544	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608245		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JLT	11-16-09	EXCAVATED: YES / NO	NA	

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: tuff (QBT3) dk reddish-brn (5YR 3/2), v. moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm BACKGROUND: Alpha = 26.7 DPM Beta — 1776 DPM SAMPLES: mDet?

COLLECTED BY (PRINT) M. Nauch / D. Thomas **REVIEWED BY (PRINT)** J. Tal

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11-16-09
(Signature)	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13626 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		1500	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608246		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, brn (7.5YR 4/3), moist, no odor

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b2) 5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND: Alpha: 26.7 DPM Beta: 1776 DPM SAMPLES: MDA>

COLLECTED BY (PRINT) M. Shemelo, B. Thomas **REVIEWED BY (PRINT)** J. Sinclair

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Ravis	11/16/09	(Printed Name) Sherri Sherwood	11-16-09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13627 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1505	SUB-MEDIA:	OTHER	↓
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	↓
LOCATION ID:	03-608246	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand, reddish-brn (5YR 4/3), v. moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014b2-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0 ppm BACKGROUND Alpha = 26.7 DPM Beta = 1776 DPM SAMPLES: MDA >

COLLECTED BY (PRINT) M. Sherwood / D. Thomas REVIEWED BY (PRINT) J. Fink

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6084 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	SOIL	↓
PRS ID:	03-014(b),03-014 (b2)	03-014 (6)	SAMPLE TECH CODE:	HA	↓
LOCATION ID:	UNK	ok	FIELD QC TYPE:	FD	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13618

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) J. [illegible] REVIEWED BY (PRINT) M. Ramos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Ramos (Signature) [illegible]	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6085 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	QBT 3
TIME COLLECTED (HH:MM)		1442	SUB-MEDIA:	SOIL	
PRS ID:	03-014(b),03-014(b2)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~R~~ JLJ	11-16-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13621

SAMPLE COMMENTS: NA

LOCATION DESC: b2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.0 ppm background
Alpha 26.7 DPM MDA>
Beta 4776 BPM

COLLECTED BY (PRINT) M. Nauch L. Horne REVIEWED BY (PRINT) J. Jusk

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature)	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6088 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1305	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b) 03-014 (b2)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	OK	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC: 03-014(b2) - 1

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) J. Ivola

REVIEWED BY (PRINT) M. Rams ~~M. Snow~~ JLJ 11-16-09

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vaick	11-16-09	(Printed Name) Sheri Sherwood	11-16-09
(Signature)	1715	(Signature) Sheri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6090 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1423	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b), 03-014 (b2)	03-014(b2)	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608242	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** M. Nard

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nard (Signature)	11-16-09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-~~6086~~ 6086 JLS 11-16-09 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	SOIL	
PRS ID:	~~03-014(b)-03-014(b)~~	03-014(a)(1) OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ~~OK~~ ~~NA~~ JLS 11-16-09 COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
~~2~~ 1	JLS 11-16-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of ~~RE03-09-13619~~ RE03-10-5897

SAMPLE COMMENTS: NA

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) M. Reing **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J[illegible]	11-16-09 1715	(Printed Name) Sherri Sherwood	11-16-09 1715
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-~~6087~~ ~~6086~~ 6087 JWS 11-16-09 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	SOIL	
PRS ID:	~~03-014(b)-99-014~~ ~~(a)~~ JWS 11-16-09	03-014(b2) OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES/NO/NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	~~2~~ JWS 11-16-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of ~~RE03-10-5897~~ RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) J. Jordan REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-16-09	(Printed Name) Sherri Sherwood	11-16-09
(Signature)	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-545 VALIDATION DATE: 01/21/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☒ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that all associated QC analyses were performed on LANL samples from other RNs. No sample data were qualified as a result.

Reviewed By: MLD **Level:** I **Date:** 01/21/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 01/21/10

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☐	☒	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☐	☒	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☒	☐	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☒	☐	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☒	☐	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☐	☒	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☐	☐	☒	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13618	Project:	LANL01004
Sample ID:	241327001	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	14.3%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00607	0.0259	+/-0.0034	0.050	pCi/g		HAKB	12/11/09	1928	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00295	0.0239	+/-0.0104	0.050	pCi/g		HAKB	12/10/09	1031	927531	3
Plutonium-239/240	U	0.00589	0.0269	+/-0.00552	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.696	0.116	+/-0.0714	0.100	pCi/g		HAKB	12/04/09	2054	927532	4
Uranium-235/236	U	0.0329	0.0702	+/-0.0127	0.100	pCi/g						
Uranium-238		0.621	0.0638	+/-0.0651	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	71.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	81.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	94.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13622	Project:	LANL01004
Sample ID:	241327002	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.12%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00984	0.0256	+/-0.00605	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00122	0.0198	+/-0.0061	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.0061	0.0223	+/-0.00405	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.848	0.110	+/-0.0814	0.100	pCi/g		HAKB	12/04/09	2054	927532	3
Uranium-235/236		0.0715	0.0667	+/-0.0186	0.100	pCi/g						
Uranium-238		0.954	0.0606	+/-0.0889	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	87.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	97.8	(50%-105%)

Notes:
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- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13620	Project:	LANL01004
Sample ID:	241327003	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.18%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00322	0.0249	+/-0.00783	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00482	0.0196	+/-0.00817	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00964	0.022	+/-0.0042	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.951	0.109	+/-0.0885	0.100	pCi/g		HAKB	12/04/09	2054	927532	3
Uranium-235/236	U	0.0444	0.0663	+/-0.0169	0.100	pCi/g						
Uranium-238		0.916	0.0602	+/-0.086	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	88.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	88.4	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	96.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13619	Project:	LANL01004
Sample ID:	241327004	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	14.6%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00186	0.0242	+/-0.0023	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00749	0.0203	+/-0.00729	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	-0.00125	0.0228	+/-0.00279	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.845	0.104	+/-0.0799	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0423	0.0632	+/-0.0137	0.100	pCi/g						
Uranium-238		0.870	0.0574	+/-0.0817	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	88.6	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	92.0	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	98.6	(50%-105%)

Notes:
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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13624	Project:	LANL01004
Sample ID:	241327005	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	22.7%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00463	0.0279	+/-0.00613	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00629	0.0204	+/-0.00766	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00503	0.023	+/-0.00591	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.701	0.117	+/-0.0723	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236		0.0715	0.0711	+/-0.0191	0.100	pCi/g						
Uranium-238		0.879	0.0647	+/-0.0847	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	79.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	95.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	91.3	(50%-105%)

Notes:
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13623	Project:	LANL01004
Sample ID:	241327006	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	3.64%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000348	0.0289	+/-0.00207	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00	0.0225	+/-0.00854	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00415	0.0253	+/-0.00537	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.836	0.112	+/-0.0805	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0501	0.068	+/-0.0155	0.100	pCi/g						
Uranium-238		0.800	0.0618	+/-0.0782	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	79.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	86.0	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	92.4	(50%-105%)

Notes:
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- C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13626	Project:	LANL01004
Sample ID:	241327007	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	15.5%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.0039	0.0282	+/-0.00585	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00127	0.0206	+/-0.00524	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00381	0.0232	+/-0.00221	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.993	0.122	+/-0.0944	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0347	0.0739	+/-0.0166	0.100	pCi/g						
Uranium-238		0.918	0.0672	+/-0.089	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	76.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	92.0	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	89.3	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

P.S. 1/21/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13621	Project:	LANL01004
Sample ID:	241327008	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	4.64%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00181	0.0263	+/-0.00287	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00649	0.0211	+/-0.00699	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.0013	0.0237	+/-0.0043	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.837	0.115	+/-0.0821	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0513	0.0696	+/-0.0159	0.100	pCi/g						
Uranium-238		0.797	0.0633	+/-0.0801	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	83.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	78.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	94.3	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

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A The TIC is a suspected aldol-condensation product
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BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

P.S. 1/21/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13627	Project:	LANL01004
Sample ID:	241327009	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	7.05%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00184	0.024	+/-0.00229	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00246	0.020	+/-0.00887	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00492	0.0225	+/-0.00522	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.786	0.106	+/-0.0761	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0301	0.0642	+/-0.0131	0.100	pCi/g						
Uranium-238		0.766	0.0584	+/-0.0745	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	88.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	94.7	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	98.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

P.S. 1/21/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13625	Project:	LANL01004
Sample ID:	241327010	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	16.9%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00779	0.0237	+/-0.00596	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-2.17E-09	0.0185	+/-0.00737	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	-0.00455	0.0208	+/-0.00455	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.997	0.0996	+/-0.0901	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0568	0.0606	+/-0.0167	0.100	pCi/g						
Uranium-238		0.939	0.055	+/-0.0859	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	89.1	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	95.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	101	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
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A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

P.S. 1/21/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-10-6084	Project:	LANL01004
Sample ID:	241327011	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	12.8%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00183	0.022	+/-0.00323	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00238	0.0193	+/-0.00653	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	-0.00119	0.0218	+/-0.00357	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.578	0.112	+/-0.0615	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.041	0.068	+/-0.014	0.100	pCi/g						
Uranium-238		0.586	0.0618	+/-0.0621	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	95.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	88.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	92.5	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

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- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

P.S. 1/21/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-10-6085	Project:	LANL01004
Sample ID:	241327012	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	4.43%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.000552	0.0234	+/-0.00302	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00389	0.021	+/-0.00869	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.0104	0.0237	+/-0.00413	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.855	0.115	+/-0.0838	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0282	0.0702	+/-0.0177	0.100	pCi/g						
Uranium-238		0.791	0.0638	+/-0.0791	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	92.5	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	85.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	92.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

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- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

P.S. 1/21/10

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-545

REQUEST NUMBER: 10-545

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241327

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13622	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13620	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13619	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13624	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13623	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13626	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13621	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13627	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13625	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6084	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6085	1	POLY	AM-241+ISOPU+ISOU	None	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/17/09	1700	Patricia Doter-Dent	P. Doter-Dent	11-18-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: Date Time

Printed Name Signature

Remarks:

Tuesday, November 17, 2009

REQUEST NUMBER: 10-545

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-545
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009
TURNAROUND/REPORT DUE: 12/17/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	HASL-300:ISOU	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-545

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 23, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241327
SDG: 10-545

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 18, 2009, and analyzed for Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-545
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241327
SDG: 10-545

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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241327
SDG # : 10-545

November 23, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 18, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. The containers for radiochemistry were received at 15C temperature. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241327001	RE03-09-13618
241327002	RE03-09-13622
241327003	RE03-09-13620
241327004	RE03-09-13619
241327005	RE03-09-13624
241327006	RE03-09-13623
241327007	RE03-09-13626
241327008	RE03-09-13621
241327009	RE03-09-13627
241327010	RE03-09-13625
241327011	RE03-10-6084
241327012	RE03-10-6085

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Valerie Davis

Valerie Davis

Project Manager

List of current GEL Certifications as of 23 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California - NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida - NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois - NELAP	200029
Indiana	C-SC-01
Kansas - NELAP	E-10332
Kentucky	90129
Louisiana - NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey - NELAP	SC002
New Mexico	FL NELAP E87156
New York - NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania - NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas - NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah - NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-545

REQUEST NUMBER: 10-545

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241327

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13622	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13620	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13619	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13624	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13623	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13626	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13621	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13627	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13625	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6084	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6085	1	POLY	AM-241+ISOPU+ISOU	None	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/17/09	1400	Patricia Doner-Dent	P. Doner-Dent	11-18-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 17, 2009

REQUEST NUMBER: 10-545

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-545

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	HASL-300:ISOU	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-545

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-545**
Received By: Patricia Dover-Dent	**Date Received: November 18, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **30 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other (describe) **3-6C** **15C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?			X	Sample ID's affected: **time written on containers, not on COC**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S
7209 7848 9307 3C 7209 7848 9260 15C
7209 7848 9362 3C
7209 7848 9270 4C
7209 7848 9329 4C
7209 7848 9351 5C
7209 7848 9318 5C
7209 7848 9330 6C
7209 7848 9373 15C

PM (or PMA) review: Initials _____ Date 11/19/09

ENE VALDEZ
ALAMOS NATL LAB.
BLDG 1237 DPU 03

ALAMOS, NM 87545
ED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

LERIE DAVIS
NERAL ENGINEERING LAB
140 SAVAGE RD

HARLESTON SC 29407
3)556-8171
F: 6B010AWE6L11570000

3°

FedEx Express

WED - 18NOV A1
PRIORITY OVERNIGHT

K# 7209 7848 9307
201

29407
SC-US
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XX CHSA

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

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FedEx Express

2 of 2
MPS# 0263 7209 7848 9362
Mstr# 7209 7848 9351 0201

WED - 18NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ID: SAFA (505)665-9968
E VALDEZ
AMOS NATL LAB
LDG 1237 DPU 03

AMOS, NM 87545
STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

ERIE DAVIS
ERAL ENGINEERING LAB
0 SAVAGE RD

ARLESTON SC 29407
)556-8171
: 6B010AMR1A015AGWL0

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9 7848 9270
7848 9259 0201

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PRIORITY OVERNIGHT

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SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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MPS# 0263 7209 7848 9329
Mstr# 7209 7848 9318 0201

WED - 18NOV A1
PRIORITY OVERNIGHT

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N ID: SAFA (505)665-9968
NE VALDEZ
LAMOS NATL LAB.
BLDG 1237 DPU 03

LAMOS, NM 87545
D STATES US

SHIP DATE: 17NOV09
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

ERIE DAVIS
NERAL ENGINEERING LAB
0 SAVAGE RD

RLESTON SC 29407
)556-8171
: 6B010AMR2A054196D0

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7209 7848 9351
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WED - 18NOV A1
PRIORITY OVERNIGHT

X CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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1 of 2
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MASTER

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PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156146-434 NAIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: [illegible]
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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PRIORITY OVERNIGHT

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A0224JFT0

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FedEx Express

WED - 18NOV A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9373

XX CHSA

29407
SC-US
CHS

Part # 156145-434 NRIT V3 08-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

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FedEx Express

2 of 3

WED - 18NOV A1
PRIORITY OVERNIGHT

MPS# 0269 7209 7848 9260
Mstr# 7209 7848 9259 0201

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-545

Method/Analysis Information

Product:	**AM241**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	927530
Prep Batch Number:	924592

Sample ID	Client ID
241327001	RE03-09-13618
241327002	RE03-09-13622
241327003	RE03-09-13620
241327004	RE03-09-13619
241327005	RE03-09-13624
241327006	RE03-09-13623
241327007	RE03-09-13626
241327008	RE03-09-13621
241327009	RE03-09-13627
241327010	RE03-09-13625
241327011	RE03-10-6084
241327012	RE03-10-6085
1201983131	Method Blank (MB)
1201983132	241425001(WST03-10-2131) Sample Duplicate (DUP)
1201983133	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly

using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201983131 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241425001 (WST03-10-2131). The QC was from LANL work order 241425.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Sample 241327001 (RE03-09-13618) was given additional clean-up steps and recounted due to poor resolution.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOPU**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	927531
Prep Batch Number:	924592

Sample ID	Client ID
241327001	RE03-09-13618
241327002	RE03-09-13622
241327003	RE03-09-13620
241327004	RE03-09-13619
241327005	RE03-09-13624
241327006	RE03-09-13623
241327007	RE03-09-13626
241327008	RE03-09-13621
241327009	RE03-09-13627
241327010	RE03-09-13625
241327011	RE03-10-6084
241327012	RE03-10-6085
1201983134	Method Blank (MB)
1201983135	241425001(WST03-10-2131) Sample Duplicate (DUP)
1201983136	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201983134 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241425001 (WST03-10-2131). The QC was from LANL work order 241425.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOU**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	927532
Prep Batch Number:	924592

Sample ID	Client ID
241327001	RE03-09-13618
241327002	RE03-09-13622
241327003	RE03-09-13620
241327004	RE03-09-13619
241327005	RE03-09-13624
241327006	RE03-09-13623
241327007	RE03-09-13626
241327008	RE03-09-13621
241327009	RE03-09-13627
241327010	RE03-09-13625
241327011	RE03-10-6084
241327012	RE03-10-6085
1201983137	Method Blank (MB)
1201983138	241425001(WST03-10-2131) Sample Duplicate (DUP)
1201983139	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201983137 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241425001 (WST03-10-2131). The QC was from LANL work order 241425.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: _____ 12/14/09

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-545 GEL Work Order: 241327

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13618	Project:	LANL01004
Sample ID:	241327001	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	14.3%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00607	0.0259	+/-0.0034	0.050	pCi/g		HAKB	12/11/09	1928	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00295	0.0239	+/-0.0104	0.050	pCi/g		HAKB	12/10/09	1031	927531	3
Plutonium-239/240	U	0.00589	0.0269	+/-0.00552	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.696	0.116	+/-0.0714	0.100	pCi/g		HAKB	12/04/09	2054	927532	4
Uranium-235/236	U	0.0329	0.0702	+/-0.0127	0.100	pCi/g						
Uranium-238		0.621	0.0638	+/-0.0651	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	71.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	81.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	94.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13618
Sample ID: 241327001

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13622	Project:	LANL01004
Sample ID:	241327002	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.12%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00984	0.0256	+/-0.00605	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00122	0.0198	+/-0.0061	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.0061	0.0223	+/-0.00405	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.848	0.110	+/-0.0814	0.100	pCi/g		HAKB	12/04/09	2054	927532	3
Uranium-235/236		0.0715	0.0667	+/-0.0186	0.100	pCi/g						
Uranium-238		0.954	0.0606	+/-0.0889	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	87.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	97.8	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13622 Project: LANL01004
Sample ID: 241327002 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13620	Project:	LANL01004
Sample ID:	241327003	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.18%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00322	0.0249	+/-0.00783	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00482	0.0196	+/-0.00817	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00964	0.022	+/-0.0042	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.951	0.109	+/-0.0885	0.100	pCi/g		HAKB	12/04/09	2054	927532	3
Uranium-235/236	U	0.0444	0.0663	+/-0.0169	0.100	pCi/g						
Uranium-238		0.916	0.0602	+/-0.086	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	88.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	88.4	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	96.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13620
Sample ID: 241327003
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13619	Project:	LANL01004
Sample ID:	241327004	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	14.6%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00186	0.0242	+/-0.0023	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00749	0.0203	+/-0.00729	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	-0.00125	0.0228	+/-0.00279	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.845	0.104	+/-0.0799	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0423	0.0632	+/-0.0137	0.100	pCi/g						
Uranium-238		0.870	0.0574	+/-0.0817	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	88.6	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	92.0	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	98.6	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

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- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13619
Sample ID: 241327004
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13624	Project:	LANL01004
Sample ID:	241327005	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	22.7%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00463	0.0279	+/-0.00613	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00629	0.0204	+/-0.00766	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00503	0.023	+/-0.00591	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.701	0.117	+/-0.0723	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236		0.0715	0.0711	+/-0.0191	0.100	pCi/g						
Uranium-238		0.879	0.0647	+/-0.0847	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	79.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	95.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	91.3	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Report Date: December 14, 2009

Client Sample ID: RE03-09-13624
Sample ID: 241327005
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13623	Project:	LANL01004
Sample ID:	241327006	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	3.64%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000348	0.0289	+/-0.00207	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00	0.0225	+/-0.00854	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00415	0.0253	+/-0.00537	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.836	0.112	+/-0.0805	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0501	0.068	+/-0.0155	0.100	pCi/g						
Uranium-238		0.800	0.0618	+/-0.0782	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	79.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	86.0	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	92.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Report Date: December 14, 2009

Client Sample ID: RE03-09-13623
Sample ID: 241327006
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13626
Sample ID: 241327007
Matrix: S
Collect Date: 16-NOV-09
Receive Date: 18-NOV-09
Collector: Client
Moisture: 15.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.0039	0.0282	+/-0.00585	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00127	0.0206	+/-0.00524	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00381	0.0232	+/-0.00221	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.993	0.122	+/-0.0944	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0347	0.0739	+/-0.0166	0.100	pCi/g						
Uranium-238		0.918	0.0672	+/-0.089	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	76.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	92.0	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	89.3	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13626 Project: LANL01004
Sample ID: 241327007 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13621	Project:	LANL01004
Sample ID:	241327008	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	4.64%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00181	0.0263	+/-0.00287	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00649	0.0211	+/-0.00699	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.0013	0.0237	+/-0.0043	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.837	0.115	+/-0.0821	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0513	0.0696	+/-0.0159	0.100	pCi/g						
Uranium-238		0.797	0.0633	+/-0.0801	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	83.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	78.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	94.3	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13621
Sample ID: 241327008
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13627	Project:	LANL01004
Sample ID:	241327009	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	7.05%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00184	0.024	+/-0.00229	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00246	0.020	+/-0.00887	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.00492	0.0225	+/-0.00522	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.786	0.106	+/-0.0761	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0301	0.0642	+/-0.0131	0.100	pCi/g						
Uranium-238		0.766	0.0584	+/-0.0745	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	88.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	94.7	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	98.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

Certificate of Analysis

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Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13627 Project: LANL01004
Sample ID: 241327009 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13625	Project:	LANL01004
Sample ID:	241327010	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	16.9%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00779	0.0237	+/-0.00596	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-2.17E-09	0.0185	+/-0.00737	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	-0.00455	0.0208	+/-0.00455	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.997	0.0996	+/-0.0901	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0568	0.0606	+/-0.0167	0.100	pCi/g						
Uranium-238		0.939	0.055	+/-0.0859	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	89.1	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	95.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	101	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13625 Project: LANL01004
Sample ID: 241327010 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-10-6084	Project:	LANL01004
Sample ID:	241327011	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	12.8%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00183	0.022	+/-0.00323	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00238	0.0193	+/-0.00653	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	-0.00119	0.0218	+/-0.00357	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.578	0.112	+/-0.0615	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.041	0.068	+/-0.014	0.100	pCi/g						
Uranium-238		0.586	0.0618	+/-0.0621	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	95.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	88.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	92.5	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-10-6084 Project: LANL01004
Sample ID: 241327011 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-10-6085	Project:	LANL01004
Sample ID:	241327012	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	4.43%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.000552	0.0234	+/-0.00302	0.050	pCi/g		HAKB	12/10/09	1238	927530	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00389	0.021	+/-0.00869	0.050	pCi/g		HAKB	12/10/09	1031	927531	2
Plutonium-239/240	U	0.0104	0.0237	+/-0.00413	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.855	0.115	+/-0.0838	0.100	pCi/g		HAKB	12/04/09	2055	927532	3
Uranium-235/236	U	0.0282	0.0702	+/-0.0177	0.100	pCi/g						
Uranium-238		0.791	0.0638	+/-0.0791	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	92.5	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	85.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	92.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-10-6085
Sample ID: 241327012
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

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QC Summary

Report Date: December 14, 2009
Page 1 of 3

Client : Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241327

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 927530										
QC1201983132 241425001 DUP										
Americium-241	U	-0.00971	U	0.00206	pCi/g	0.698		(0-1)	HAKB	12/10/0912:38
	TPU:	+/-0.00679		+/-0.00164						
	Yield:	89.7		79.8						
QC1201983133 LCS										
Americium-241	33.2			30.6	pCi/g		92.3	(75%-125%)		
	TPU:			+/-2.18						
	Yield:			103						
QC1201983131 MB										
Americium-241			U	-0.00228	pCi/g					
	TPU:			+/-0.00247						
	Yield:			96.4						
Batch 927531										
QC1201983135 241425001 DUP										
Plutonium-238	U	0.0145	U	0.0121	pCi/g	0.115		(0-1)	HAKB	12/10/0910:31
	TPU:	+/-0.00622		+/-0.00431						
	Yield:	96.3		96.9						
Plutonium-239/240	U	0.0109	U	0.0143	pCi/g	0.195		(0-1)		
	TPU:	+/-0.00367		+/-0.00509						
	Yield:	96.3		96.9						
QC1201983136 LCS										
Plutonium-238				7.36	pCi/g			(75%-125%)		
	TPU:			+/-0.597						
	Yield:			64.4						
Plutonium-239/240	41.8			40.0	pCi/g		95.7	(75%-125%)		
	TPU:			+/-2.59						
	Yield:			64.4						
QC1201983134 MB										
Plutonium-238			U	0.00288	pCi/g					12/10/0910:31
	TPU:			+/-0.00911						
	Yield:			96.9						
Plutonium-239/240			U	-0.0072	pCi/g					
	TPU:			+/-0.00478						
	Yield:			96.9						
Batch 927532										
QC1201983138 241425001 DUP										
Uranium-233/234		0.903		0.851	pCi/g	0.153		(0-1)	HAKB	12/04/0920:55
	TPU:	+/-0.0862		+/-0.0821						
	Yield:	95.4		101						
Uranium-235/236	U	0.0422		0.0756	pCi/g	0.464		(0-1)		
	TPU:	+/-0.0158		+/-0.0201						
	Yield:	95.4		101						
Uranium-238		0.793		0.723	pCi/g	0.236		(0-1)		
	TPU:	+/-0.0782		+/-0.0718						

QC Summary

Workorder: 241327

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 927532										
	Yield:	95.4		101						
QC1201983139 LCS										
Uranium-233/234				5.20	pCi/g			(75%-125%)		12/04/0920:55
	TPU:			+/-0.496						
	Yield:			99.6						
Uranium-235/236			U	0.228	pCi/g			(75%-125%)		
	TPU:			+/-0.0768						
	Yield:			99.6						
Uranium-238	5.75			5.06	pCi/g		87.9	(75%-125%)		
	TPU:			+/-0.481						
	Yield:			99.6						
QC1201983137 MB										
Uranium-233/234			U	-0.0118	pCi/g					12/04/0920:55
	TPU:			+/-0.005						
	Yield:			90.7						
Uranium-235/236			U	0.00467	pCi/g					
	TPU:			+/-0.00332						
	Yield:			90.7						
Uranium-238			U	0.00189	pCi/g					
	TPU:			+/-0.005						
	Yield:			90.7						

Notes:
The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: **241327**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

Y QC Samples were not spiked with this compound

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 9

Batch# 927530 Product: Am Date: 12/14/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria	✓		
Tracer yield is 15-125%. Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples. < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: JoeLMc 12/14/09

Secondary Review Performed By: [signature] 12/14/09

12/5 12/16

1 A N1

Am/Cm Que Sheet

30-NOV-09

Batch #: 927530 | Analyst: HAKB | First Client Due Date: 16-DEC-09 | Internal Due Date05-DEC-09 | Comments:

Tracer(s): Am243/Cm244 | Tracer Code: 445-96-2-SS | Expiration Date: 5/11/10 | Vol: Ø.1

LCS Isotope(s): Am241/Cm244 | LCS Code(s): SRM 0244-B / NA | Expiration Date: 4/30/20 / NA | Vol(s): 0.106g NA

Spike Isotope(s): Am241/Cm244 | Spike Code(s): NA / NA | Expiration Date: NA / NA | Vol(s): NA / NA

Prep Date: 12/2/09 | Initials: HAKB | Pipet ID: 4499063 | Balance ID: 50410272 | Witness: KM 12-2-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g) l / f)	Am/Cm Det # (Sp) 12/14/09
241327001-1	RE03-09-13618	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	1	1	1.264	~~70~~ 277
241327002-1	RE03-09-13622	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	2	2	1.256	71
241327003-1	RE03-09-13620	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	3	3	1.255	72
241327004-1	RE03-09-13619	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	4	4	1.255	73
241327005-1	RE03-09-13624	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	5	5	1.268	74
241327006-1	RE03-09-13623	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	6	6	1.260	76
241327007-1	RE03-09-13626	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	7	7	1.256	77
241327008-1	RE03-09-13621	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	8	8	1.260	79
241327009-1	RE03-09-13627	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	9	9	1.254	80
241327010-1	RE03-09-13625	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	10	10	1.255	83
241327011-1	RE03-10-6084	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	11	11	1.250	84
241327012-1	RE03-10-6085	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	12	12	1.253	85
241336001-1	RE03-09-13770	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	13	13	1.267	86
241336002-1	RE03-10-5897	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	14	14	1.261	87
241425001-1	WST03-10-2131	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	15	15	1.260	88
241425002-1	WST03-10-2130	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	16	16	1.251	89
1201983131-1	MB for batch 927530	MB		.05 pCi/g	SOIL	QC ACCOUNT		17	17	1.0	90
1201983132-1	WST03-10-2131(241425001DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	17-NOV-09	18	18	1.263	91
1201983133-1	LCS for batch 927530	LCS		.05 pCi/g	SOIL	QC ACCOUNT		19	19	0.106	92

Choose SOP Used: GL-RAD-A-011, GL-RAD-A-036, GL-RAD-A-045

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: [illegible] 12/14/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 927530

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201983132	DUP	Americium-241	1.26 g	0.00206	0.00164	0.0254	-.00180952	pCi/g	NO
1201983133	LCS	Americium-241	0.106 g	30.6	2.18	0.260	-.02150943	pCi/g	NO
1201983131	MB	Americium-241	1.00 g	-0.00228	0.00247	0.0281	-.00228	pCi/g	NO
241327001	RE03-09-13618	Americium-241	1.26 g	0.00607	0.0034	0.0259	-.00180952	pCi/g	NO
241327002	RE03-09-13622	Americium-241	1.26 g	0.00984	0.00605	0.0256	-.00180952	pCi/g	NO
241327003	RE03-09-13620	Americium-241	1.26 g	0.00322	0.00783	0.0249	-.00180952	pCi/g	NO
241327004	RE03-09-13619	Americium-241	1.26 g	0.00186	0.0023	0.0242	-.00180952	pCi/g	NO
241327005	RE03-09-13624	Americium-241	1.27 g	-0.00463	0.00613	0.0279	-.00179528	pCi/g	NO
241327006	RE03-09-13623	Americium-241	1.26 g	-0.000348	0.00207	0.0289	-.00180952	pCi/g	NO
241327007	RE03-09-13626	Americium-241	1.26 g	0.0039	0.00585	0.0282	-.00180952	pCi/g	NO
241327008	RE03-09-13621	Americium-241	1.26 g	-0.00181	0.00287	0.0263	-.00180952	pCi/g	NO
241327009	RE03-09-13627	Americium-241	1.25 g	0.00184	0.00229	0.024	-.001824	pCi/g	NO
241327010	RE03-09-13625	Americium-241	1.26 g	0.00779	0.00596	0.0237	-.00180952	pCi/g	NO
241327011	RE03-10-6084	Americium-241	1.25 g	-0.00183	0.00323	0.022	-.001824	pCi/g	NO
241327012	RE03-10-6085	Americium-241	1.25 g	0.000552	0.00302	0.0234	-.001824	pCi/g	NO
241336001	RE03-09-13770	Americium-241	1.27 g	0.00309	0.00225	0.0322	-.00179528	pCi/g	NO
241336002	RE03-10-5897	Americium-241	1.26 g	0.00597	0.00497	0.0256	-.00180952	pCi/g	NO
241425001	WST03-10-2131	Americium-241	1.26 g	-0.00971	0.00679	0.026	-.00180952	pCi/g	YES
241425002	WST03-10-2130	Americium-241	1.25 g	0.00373	0.0041	0.0274	-.001824	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241327001_AM SAMPLE QTY: 1.264 G
DETECTOR NUMBER :79420 AVERAGE %EFFICIENCY :38.2871 % YIELD : 70.991	COUNT DATE:11-DEC-2009 19:28:31 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91663 dpm RESULTS : 2.07054 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B227.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W227.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	6.000	5.000	1.000	4.8778	100.0000	6.57E-03	3.50E-03	1.49E-02	3.33E-02	3.48E-03
CM-5/6	5386.000	1.000	1.000	0.000	19.8796	86.09000	1.52E-03	1.53E-03	7.04E-02	1.45E-01	1.52E-03
AM-241	5479.150	7.000	4.623	1.000	3.6563	99.94000	6.07E-03	3.40E-03	1.12E-02	2.59E-02	3.38E-03
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	1.47E-03	1.47E-03	1.15E-02	2.66E-02	1.47E-03
AM243	5270.000	795.000	791.000	4.000	2.0000	99.78000	1.04E+00	7.32E-02	6.11E-03	1.58E-02	3.71E-02
CM-247	4946.000	42.000	40.000	2.000	18.5713	79.30000	6.61E-02	1.17E-02	7.14E-02	1.47E-01	1.10E-02
CM-248	5078.600	66.000	64.000	2.000	26.3889	91.00000	9.22E-02	1.31E-02	8.85E-02	1.81E-01	1.19E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

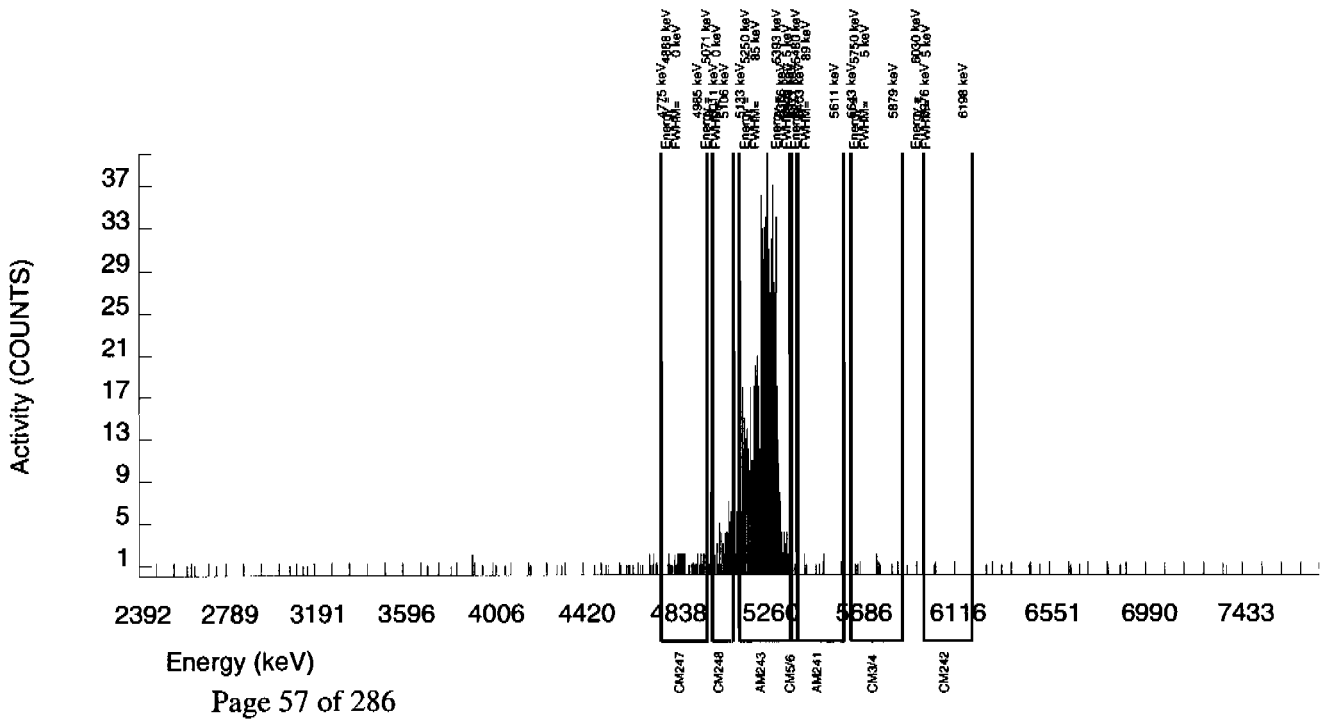

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327002_AM
SAMPLE QTY: 1.256 G

DETECTOR NUMBER :64259
AVERAGE %EFFICIENCY :31.7421
% YIELD : 87.253

COUNT DATE:10-DEC-2009 12:38:56
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B071.CNF;1079
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.54482 dpm	EFF FILE : W071.CNF;282
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	18.000	9.000	9.000	4.8778	100.0000	1.17E-02	6.78E-03	1.47E-02	3.29E-02	6.75E-03
CM-5/6	5386.000	7.000	6.000	1.000	19.8796	86.09000	9.02E-03	4.29E-03	6.96E-02	1.43E-01	4.25E-03
AM-241	5479.150	16.000	7.597	7.000	3.6563	99.94000	9.84E-03	6.05E-03	1.10E-02	2.56E-02	6.02E-03
CM-242	6102.000	6.000	2.000	4.000	3.7846	100.0000	2.88E-03	4.56E-03	1.14E-02	2.63E-02	4.55E-03
AM243	5270.000	815.000	806.000	9.000	3.0000	99.78000	1.05E+00	7.37E-02	9.06E-03	2.16E-02	3.73E-02
CM-247	4946.000	17.000	12.000	5.000	18.5713	79.30000	1.96E-02	7.75E-03	7.05E-02	1.46E-01	7.66E-03
CM-248	5078.600	28.000	24.000	4.000	26.3889	91.00000	3.42E-02	8.31E-03	8.74E-02	1.79E-01	8.05E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

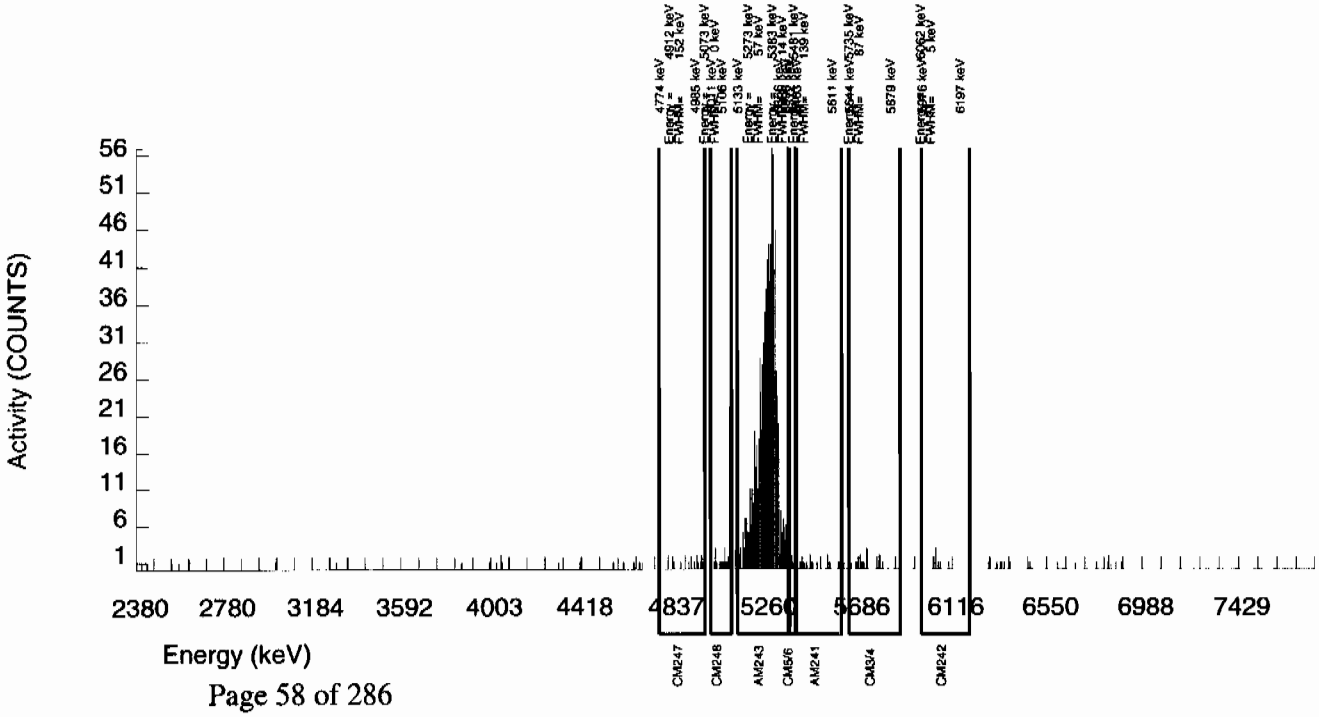

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327003_AM
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :45-149AA3
AVERAGE %EFFICIENCY :32.2571
% YIELD : 88.309

COUNT DATE:10-DEC-2009 12:38:56
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B072.CNF;1077
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.57565 dpm	EFF FILE : W072.CNF;273
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	14.000	0.000	14.000	4.8778	100.0000	-2.41E-09	6.69E-03	1.43E-02	3.20E-02	6.68E-03
CM-5/6	5386.000	5.000	3.000	2.000	19.8796	86.09000	4.39E-03	3.88E-03	6.77E-02	1.39E-01	3.87E-03
AM-241	5479.150	22.000	2.557	18.000	3.6563	99.94000	3.22E-03	7.83E-03	1.07E-02	2.49E-02	7.83E-03
CM-242	6102.000	5.000	2.000	3.000	3.7846	100.0000	2.80E-03	3.97E-03	1.11E-02	2.56E-02	3.96E-03
AM243	5270.000	836.000	829.000	7.000	2.6458	99.78000	1.05E+00	7.31E-02	7.77E-03	1.90E-02	3.67E-02
CM-247	4946.000	8.000	-2.000	10.000	18.5713	79.30000	-3.18E-03	6.74E-03	6.86E-02	1.42E-01	6.74E-03
CM-248	5078.600	16.000	15.000	1.000	26.3889	91.00000	2.08E-02	5.85E-03	8.50E-02	1.74E-01	5.71E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

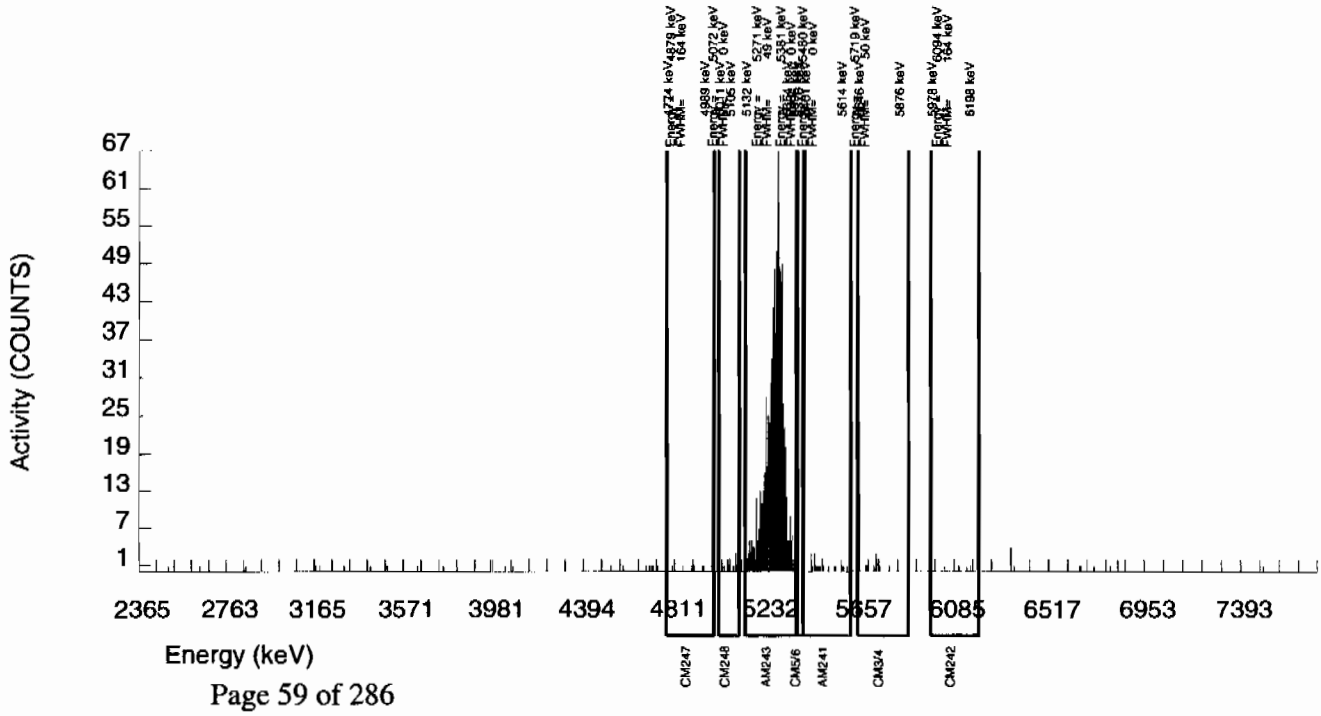

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327004_AM
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :78775
AVERAGE %EFFICIENCY :33.0537
% YIELD : 88.572

COUNT DATE:10-DEC-2009 12:38:56
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B073.CNF;1079
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.58332 dpm	EFF FILE : W073.CNF;281
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	11.000	9.000	2.000	4.8778	100.0000	1.11E-02	4.48E-03	1.39E-02	3.11E-02	4.43E-03
CM-5/6	5386.000	4.000	3.000	1.000	19.8796	86.09000	4.27E-03	3.19E-03	6.59E-02	1.36E-01	3.18E-03
AM-241	5479.150	4.000	1.517	1.000	3.6563	99.94000	1.86E-03	2.30E-03	1.04E-02	2.42E-02	2.30E-03
CM-242	6102.000	2.000	1.000	1.000	3.7846	100.0000	1.36E-03	2.36E-03	1.08E-02	2.49E-02	2.36E-03
AM243	5270.000	856.000	852.000	4.000	2.0000	99.78000	1.05E+00	7.25E-02	5.72E-03	1.48E-02	3.60E-02
CM-247	4946.000	10.000	7.000	3.000	18.5713	79.30000	1.08E-02	5.61E-03	6.68E-02	1.38E-01	5.57E-03
CM-248	5078.600	21.000	20.000	1.000	26.3889	91.00000	2.69E-02	6.52E-03	8.27E-02	1.69E-01	6.32E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

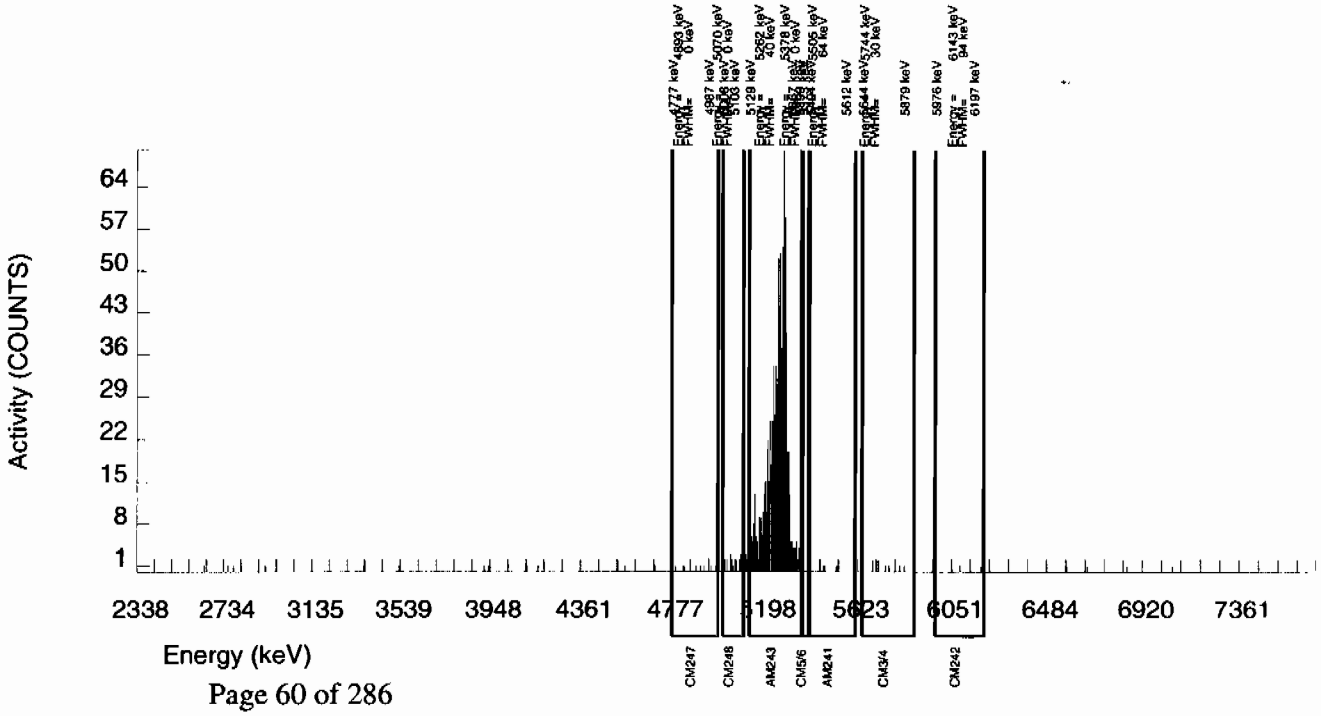

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327005_AM
SAMPLE QTY: 1.268 G

DETECTOR NUMBER :78266
AVERAGE %EFFICIENCY :31.6766
% YIELD : 79.297

COUNT DATE:10-DEC-2009 12:38:56
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B074.CNF;1101
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.31280 dpm	EFF FILE : W074.CNF;328
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	6.000	3.000	3.000	4.8778	100.0000	4.25E-03	4.26E-03	1.60E-02	3.59E-02	4.25E-03
CM-5/6	5386.000	4.000	1.000	3.000	19.8796	86.09000	1.64E-03	4.35E-03	7.60E-02	1.56E-01	4.35E-03
AM-241	5479.150	9.000	-3.272	11.000	3.6563	99.94000	-4.63E-03	6.13E-03	1.20E-02	2.79E-02	6.12E-03
CM-242	6102.000	5.000	4.000	1.000	3.7846	100.0000	6.29E-03	3.87E-03	1.25E-02	2.87E-02	3.85E-03
AM243	5270.000	738.000	731.000	7.000	2.6458	99.78000	1.04E+00	7.48E-02	8.72E-03	2.13E-02	3.87E-02
CM-247	4946.000	13.000	11.000	2.000	18.5713	79.30000	1.96E-02	7.01E-03	7.71E-02	1.59E-01	6.91E-03
CM-248	5078.600	7.000	7.000	0.000	26.3889	91.00000	1.09E-02	4.17E-03	9.54E-02	1.95E-01	4.11E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

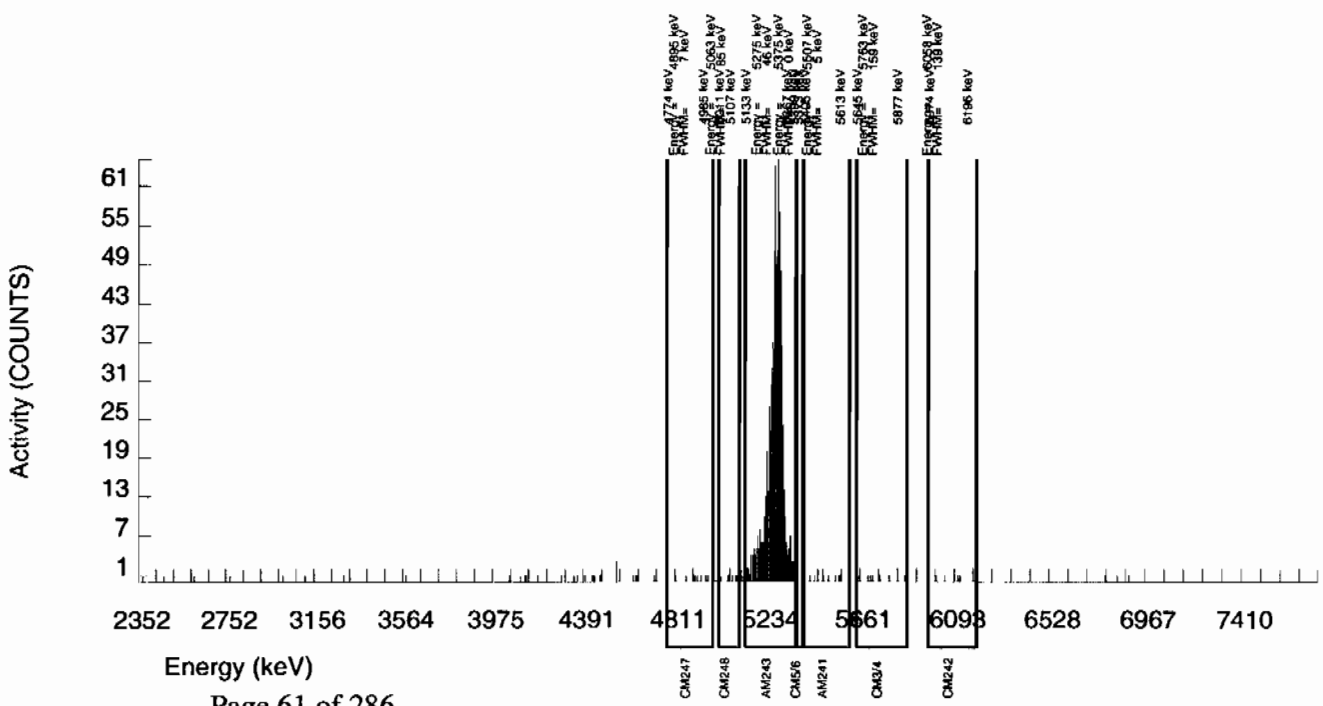

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327006_AM
SAMPLE QTY: 1.260 G

DETECTOR NUMBER :78779
AVERAGE %EFFICIENCY :30.5630
% YIELD : 79.938

COUNT DATE:10-DEC-2009 12:38:56
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B076.CNF;1085
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.33148 dpm	EFF FILE : W076.CNF;291
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	2.000	0.000	4.8778	100.0000	2.93E-03	2.08E-03	1.66E-02	3.72E-02	2.07E-03
CM-5/6	5386.000	9.000	8.000	1.000	19.8796	86.09000	1.36E-02	5.44E-03	7.86E-02	1.62E-01	5.38E-03
AM-241	5479.150	2.000	-0.238	1.000	3.6563	99.94000	-3.48E-04	2.07E-03	1.25E-02	2.89E-02	2.07E-03
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	1.63E-03	1.63E-03	1.29E-02	2.97E-02	1.63E-03
AM243	5270.000	717.000	711.000	6.000	2.4495	99.78000	1.04E+00	7.58E-02	8.36E-03	2.07E-02	3.94E-02
CM-247	4946.000	8.000	3.000	5.000	18.5713	79.30000	5.54E-03	6.66E-03	7.97E-02	1.64E-01	6.65E-03
CM-248	5078.600	10.000	7.000	3.000	26.3889	91.00000	1.13E-02	5.84E-03	9.87E-02	2.02E-01	5.80E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

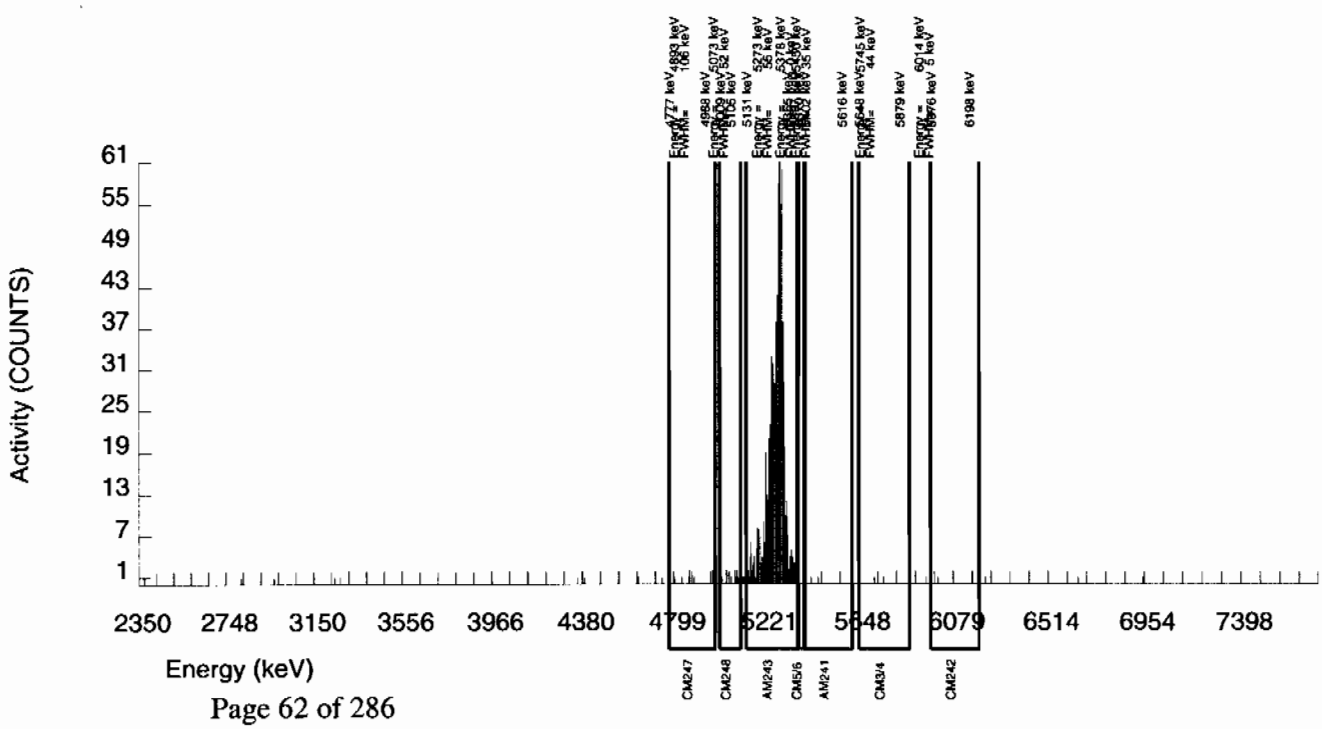

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327007_AM
SAMPLE QTY: 1.256 G

DETECTOR NUMBER :67576
AVERAGE %EFFICIENCY :32.9403
% YIELD : 76.255

COUNT DATE:10-DEC-2009 12:38:57
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B077.CNF;994
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.22407 dpm	EFF FILE : W077.CNF;259
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	10.000	2.000	8.000	4.8778	100.0000	2.86E-03	6.08E-03	1.62E-02	3.63E-02	6.07E-03
CM-5/6	5386.000	7.000	3.000	4.000	19.8796	86.09000	4.98E-03	5.51E-03	7.67E-02	1.58E-01	5.50E-03
AM-241	5479.150	11.000	2.728	7.000	3.6563	99.94000	3.90E-03	5.85E-03	1.22E-02	2.82E-02	5.84E-03
CM-242	6102.000	6.000	5.000	1.000	3.7846	100.0000	7.94E-03	4.23E-03	1.26E-02	2.90E-02	4.20E-03
AM243	5270.000	734.000	731.000	3.000	1.7321	99.78000	1.05E+00	7.53E-02	5.77E-03	1.54E-02	3.88E-02
CM-247	4946.000	18.000	10.000	8.000	18.5713	79.30000	1.80E-02	9.25E-03	7.78E-02	1.60E-01	9.18E-03
CM-248	5078.600	17.000	16.000	1.000	26.3889	91.00000	2.51E-02	6.83E-03	9.63E-02	1.97E-01	6.66E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

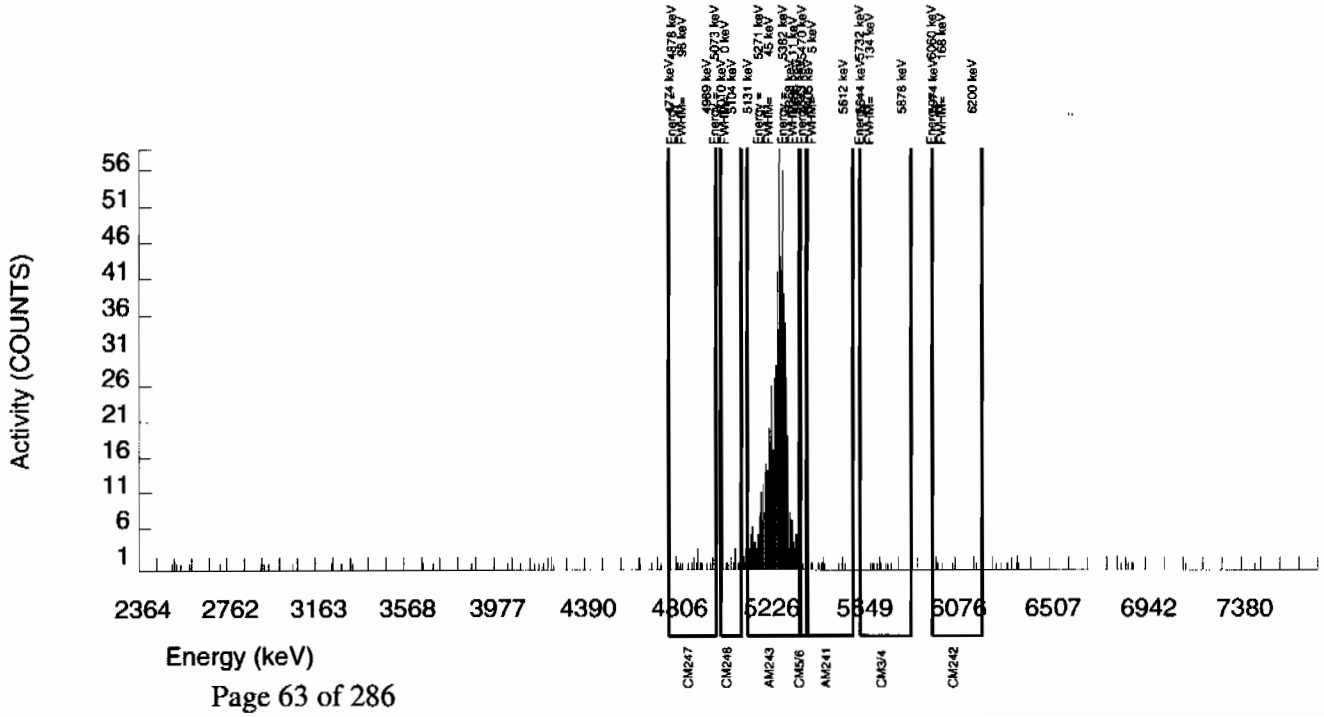

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241327008_AM SAMPLE QTY: 1.260 G
DETECTOR NUMBER :79466 AVERAGE %EFFICIENCY :32.3021 % YIELD : 83.187	COUNT DATE:10-DEC-2009 12:38:57 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B079.CNF;996
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.42625 dpm	EFF FILE : W079.CNF;264
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	11.000	11.000	0.000	4.8778	100.0000	1.47E-02	4.51E-03	1.51E-02	3.38E-02	4.42E-03
CM-5/6	5386.000	2.000	2.000	0.000	19.8796	86.09000	3.09E-03	2.19E-03	7.15E-02	1.47E-01	2.19E-03
AM-241	5479.150	3.000	-1.361	3.000	3.6563	99.94000	-1.81E-03	2.87E-03	1.13E-02	2.63E-02	2.87E-03
CM-242	6102.000	2.000	2.000	0.000	3.7846	100.0000	2.96E-03	2.10E-03	1.17E-02	2.70E-02	2.09E-03
AM243	5270.000	783.000	782.000	1.000	1.0000	99.78000	1.04E+00	7.37E-02	3.10E-03	9.82E-03	3.73E-02
CM-247	4946.000	7.000	2.000	5.000	18.5713	79.30000	3.36E-03	5.82E-03	7.25E-02	1.50E-01	5.81E-03
CM-248	5078.600	16.000	16.000	0.000	26.3889	91.00000	2.34E-02	6.02E-03	8.98E-02	1.83E-01	5.85E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

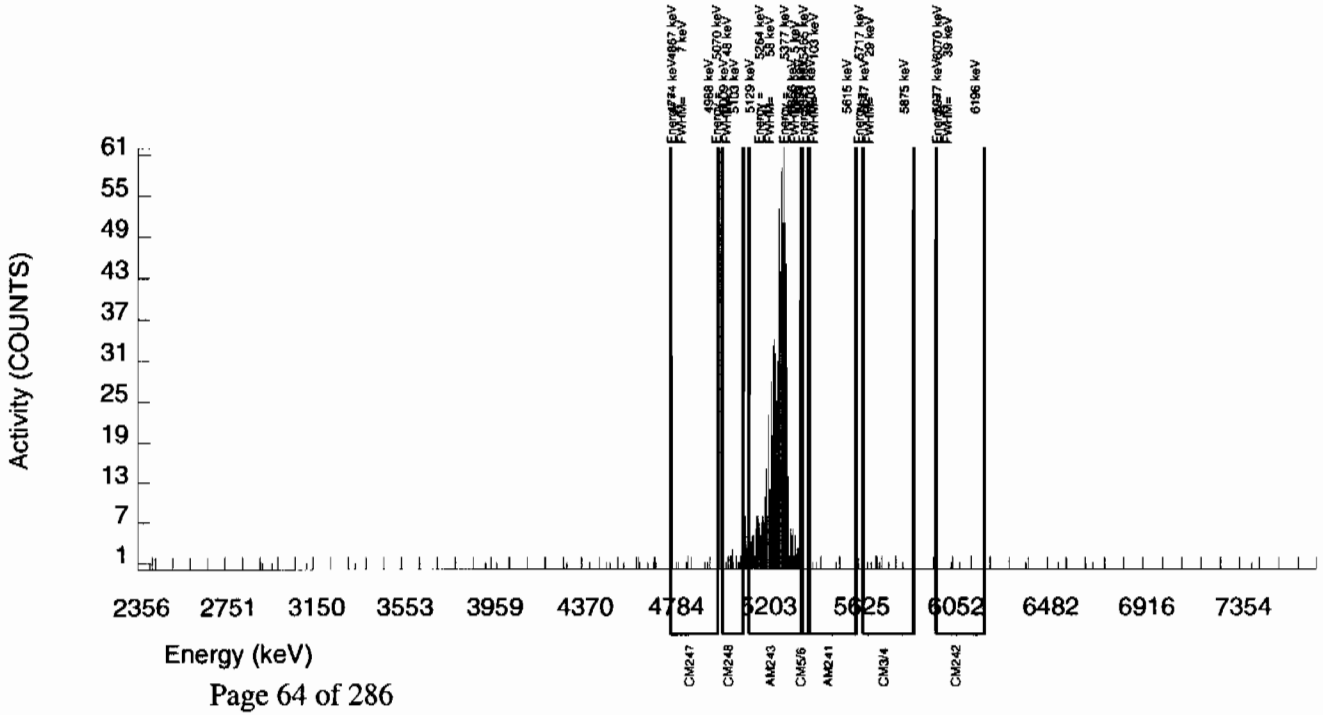

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327009_AM
SAMPLE QTY: 1.254 G

DETECTOR NUMBER :78197
AVERAGE %EFFICIENCY :33.1826
% YIELD : 88.850

COUNT DATE:10-DEC-2009 12:38:57
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B080.CNF;997
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.59141 dpm	EFF FILE : W080.CNF;272
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	-1.000	3.000	4.8778	100.0000	-1.22E-03	2.73E-03	1.38E-02	3.10E-02	2.73E-03
CM-5/6	5386.000	5.000	5.000	0.000	19.8796	86.09000	7.08E-03	3.19E-03	6.55E-02	1.35E-01	3.16E-03
AM-241	5479.150	4.000	1.507	1.000	3.6563	99.94000	1.84E-03	2.29E-03	1.04E-02	2.40E-02	2.28E-03
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	1.35E-03	1.36E-03	1.07E-02	2.48E-02	1.35E-03
AM243	5270.000	861.000	858.000	3.000	1.7321	99.78000	1.05E+00	7.24E-02	4.92E-03	1.31E-02	3.59E-02
CM-247	4946.000	6.000	2.000	4.000	18.5713	79.30000	3.07E-03	4.86E-03	6.64E-02	1.37E-01	4.86E-03
CM-248	5078.600	25.000	25.000	0.000	26.3889	91.00000	3.35E-02	6.99E-03	8.22E-02	1.68E-01	6.69E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

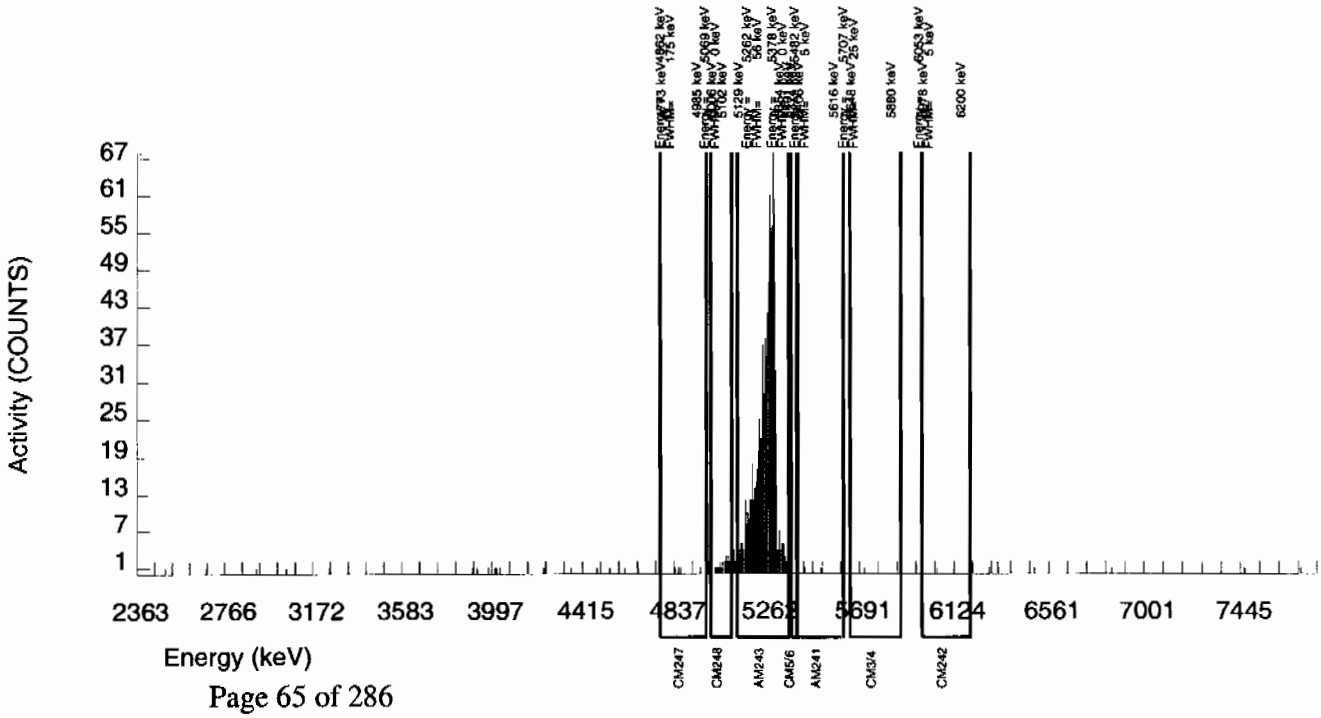

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327010_AM
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :64278
AVERAGE %EFFICIENCY :33.5347
% YIELD : 89.146

COUNT DATE:10-DEC-2009 12:38:58
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B083.CNF;999
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.60006 dpm	EFF FILE : W083.CNF;288
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	8.000	-2.000	10.000	4.8778	100.0000	-2.41E-03	5.11E-03	1.36E-02	3.05E-02	5.11E-03
CM-5/6	5386.000	29.000	27.000	2.000	19.8796	86.09000	3.77E-02	8.09E-03	6.45E-02	1.33E-01	7.76E-03
AM-241	5479.150	17.000	6.486	9.000	3.6563	99.94000	7.79E-03	5.96E-03	1.02E-02	2.37E-02	5.95E-03
CM-242	6102.000	3.000	-2.000	5.000	3.7846	100.0000	-2.67E-03	3.78E-03	1.06E-02	2.44E-02	3.77E-03
AM243	5270.000	876.000	870.000	6.000	2.4495	99.78000	1.05E+00	7.22E-02	6.86E-03	1.70E-02	3.57E-02
CM-247	4946.000	26.000	17.000	9.000	18.5713	79.30000	2.57E-02	9.09E-03	6.54E-02	1.35E-01	8.96E-03
CM-248	5078.600	48.000	47.000	1.000	26.3889	91.00000	6.20E-02	9.96E-03	8.10E-02	1.66E-01	9.24E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

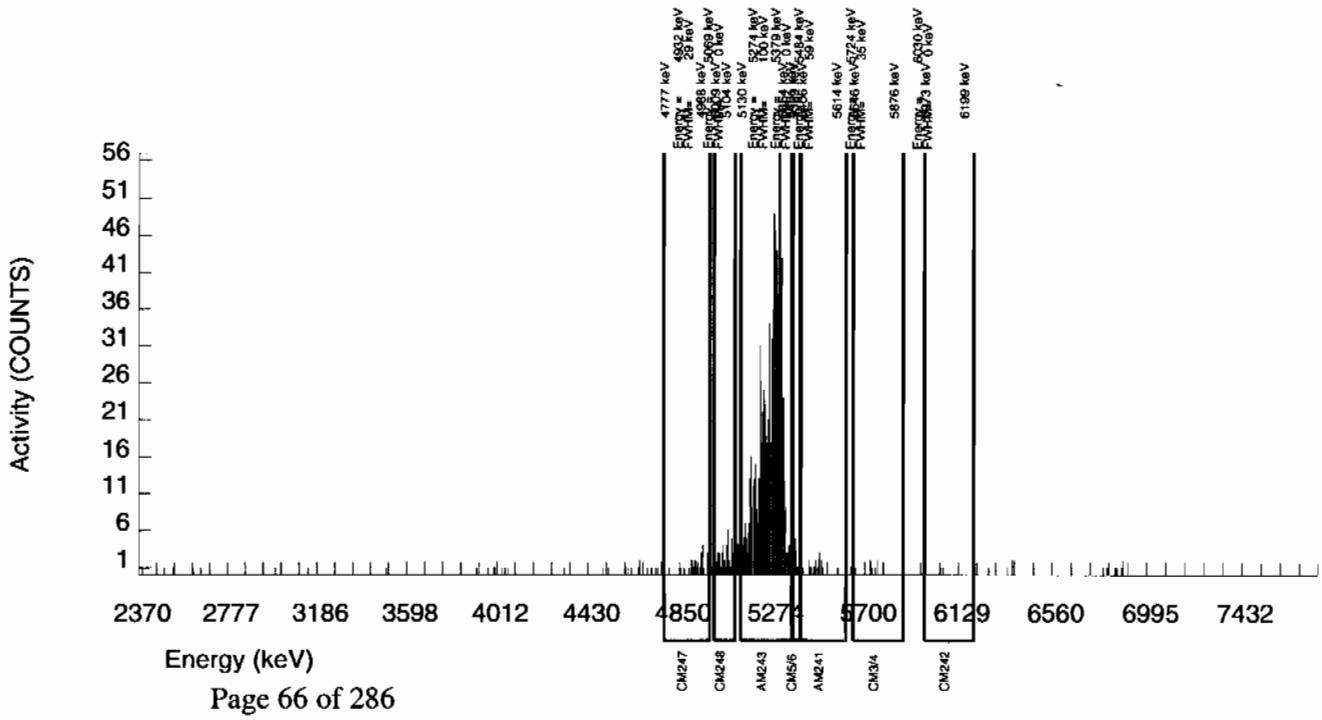

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327011_AM
SAMPLE QTY: 1.250 G

DETECTOR NUMBER :78265
AVERAGE %EFFICIENCY :33.9057
% YIELD : 95.164

COUNT DATE:10-DEC-2009 12:38:58
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B084.CNF;999
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.77556 dpm	EFF FILE : W084.CNF;291
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	8.000	5.000	3.000	4.8778	100.0000	5.60E-03	3.73E-03	1.27E-02	2.84E-02	3.71E-03
CM-5/6	5386.000	13.000	13.000	0.000	19.8796	86.09000	1.69E-02	4.78E-03	6.00E-02	1.24E-01	4.68E-03
AM-241	5479.150	5.000	-1.634	5.000	3.6563	99.94000	-1.83E-03	3.23E-03	9.51E-03	2.20E-02	3.23E-03
CM-242	6102.000	4.000	4.000	0.000	3.7846	100.0000	4.97E-03	2.50E-03	9.83E-03	2.27E-02	2.48E-03
AM243	5270.000	941.000	939.000	2.000	1.4142	99.78000	1.05E+00	7.10E-02	3.68E-03	1.04E-02	3.44E-02
CM-247	4946.000	7.000	2.000	5.000	18.5713	79.30000	2.82E-03	4.88E-03	6.08E-02	1.26E-01	4.88E-03
CM-248	5078.600	18.000	16.000	2.000	26.3889	91.00000	1.96E-02	5.61E-03	7.53E-02	1.54E-01	5.49E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

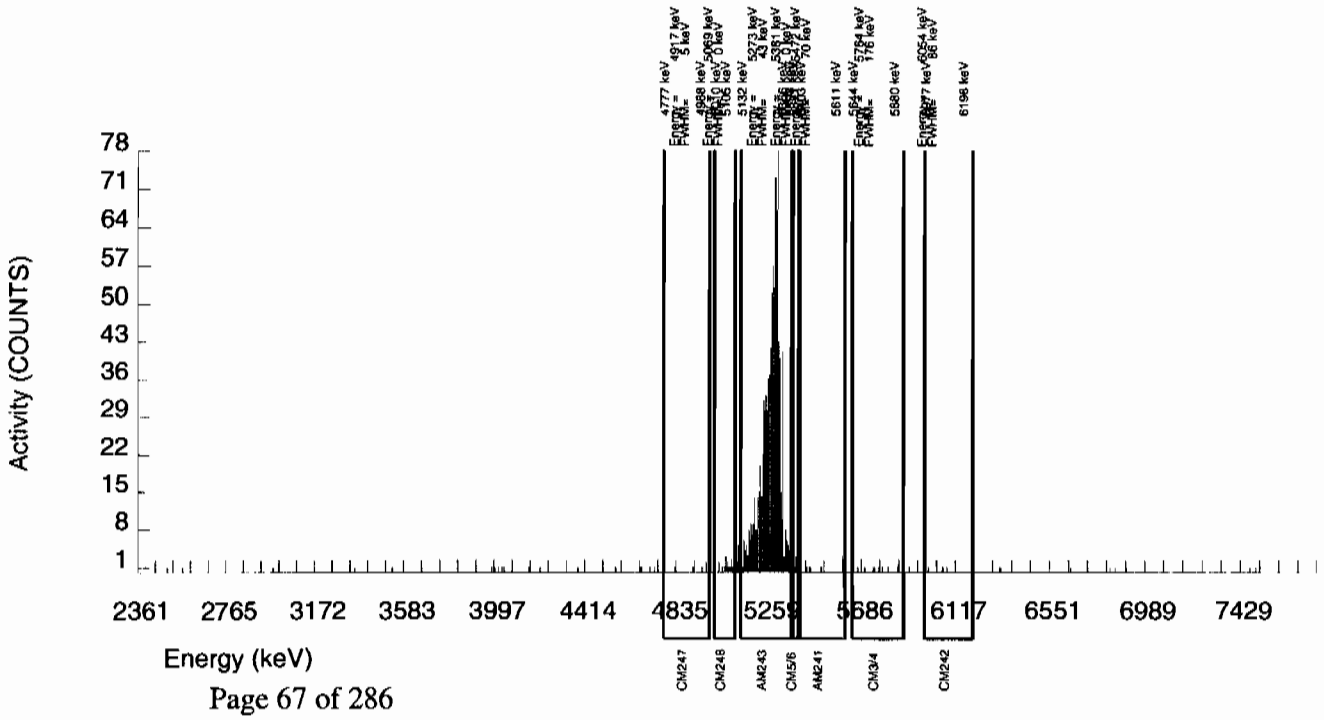

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327012_AM
SAMPLE QTY: 1.253 G

DETECTOR NUMBER :78776
AVERAGE %EFFICIENCY :32.7690
% YIELD : 92.488

COUNT DATE:10-DEC-2009 12:38:58
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B085.CNF;1000
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.69752 dpm	EFF FILE : W085.CNF;298
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	5.000	1.000	4.000	4.8778	100.0000	1.19E-03	3.57E-03	1.35E-02	3.01E-02	3.57E-03
CM-5/6	5386.000	9.000	9.000	0.000	19.8796	86.09000	1.24E-02	4.20E-03	6.37E-02	1.31E-01	4.13E-03
AM-241	5479.150	5.000	0.465	3.000	3.6563	99.94000	5.52E-04	3.02E-03	1.01E-02	2.34E-02	3.02E-03
CM-242	6102.000	5.000	4.000	1.000	3.7846	100.0000	5.27E-03	3.25E-03	1.04E-02	2.41E-02	3.23E-03
AM243	5270.000	887.000	882.000	5.000	2.2361	99.78000	1.05E+00	7.20E-02	6.18E-03	1.56E-02	3.55E-02
CM-247	4946.000	12.000	2.000	10.000	18.5713	79.30000	2.99E-03	7.02E-03	6.46E-02	1.33E-01	7.02E-03
CM-248	5078.600	20.000	20.000	0.000	26.3889	91.00000	2.61E-02	6.03E-03	8.00E-02	1.64E-01	5.83E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

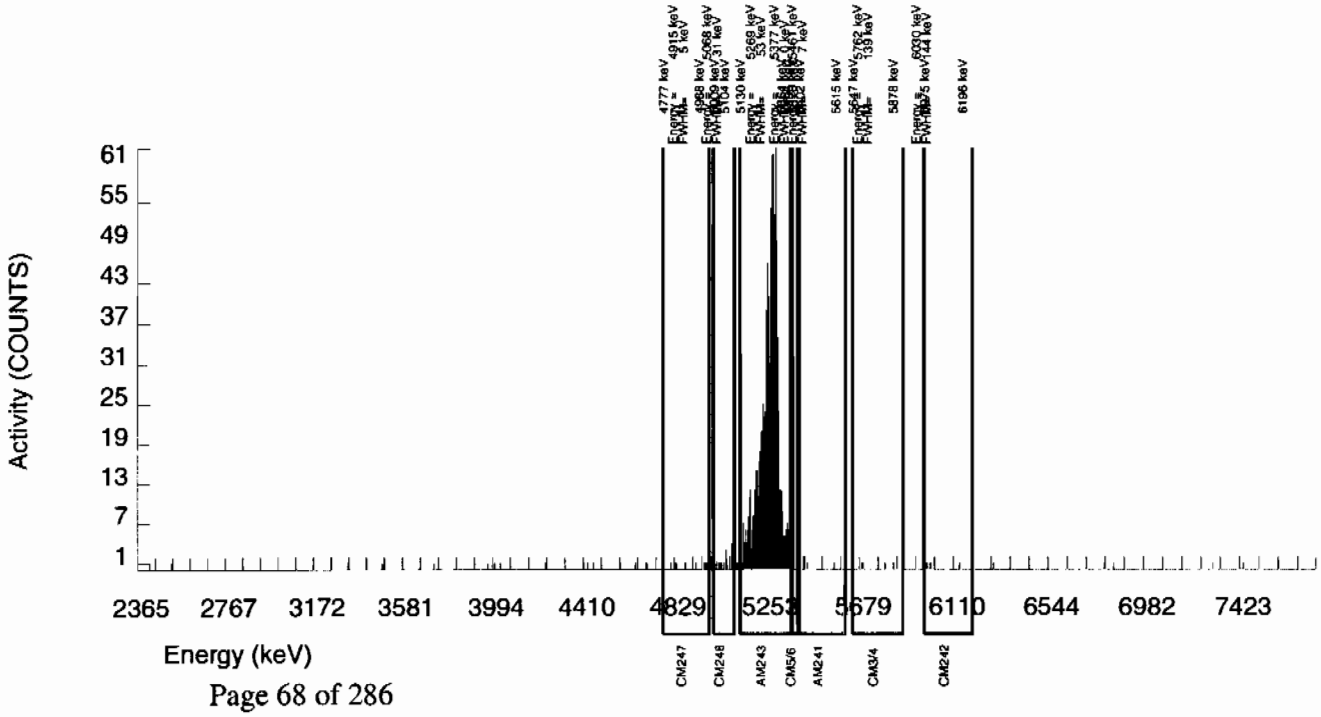

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530 SAMPLE DATE : 17-NOV-2009 00:00:00	SAMPLE ID : S0241425001_AM SAMPLE QTY: 1.260 G
DETECTOR NUMBER :33452 AVERAGE %EFFICIENCY :30.2890 % YIELD : 89.737	COUNT DATE:10-DEC-2009 12:38:58 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.61728 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B088.CNF;996 BKG DATE : 6-DEC-2009 EFF FILE : W088.CNF;282 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	10.000	2.000	8.000	4.8778	100.0000	2.64E-03	5.60E-03	1.49E-02	3.34E-02	5.59E-03
CM-5/6	5386.000	14.000	11.000	3.000	19.8796	86.09000	1.68E-02	6.38E-03	7.07E-02	1.45E-01	6.30E-03
AM-241	5479.150	11.000	-7.377	17.000	3.6563	99.94000	-9.71E-03	6.79E-03	1.12E-02	2.60E-02	6.79E-03
CM-242	6102.000	1.000	-5.000	6.000	3.7846	100.0000	-7.28E-03	3.85E-03	1.16E-02	2.67E-02	3.85E-03
AM243	5270.000	799.000	791.000	8.000	2.8284	99.78000	1.04E+00	7.38E-02	8.67E-03	2.09E-02	3.74E-02
CM-247	4946.000	5.000	-2.000	7.000	18.5713	79.30000	-3.32E-03	5.75E-03	7.17E-02	1.48E-01	5.75E-03
CM-248	5078.600	15.000	14.000	1.000	26.3889	91.00000	2.02E-02	5.91E-03	8.87E-02	1.81E-01	5.78E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

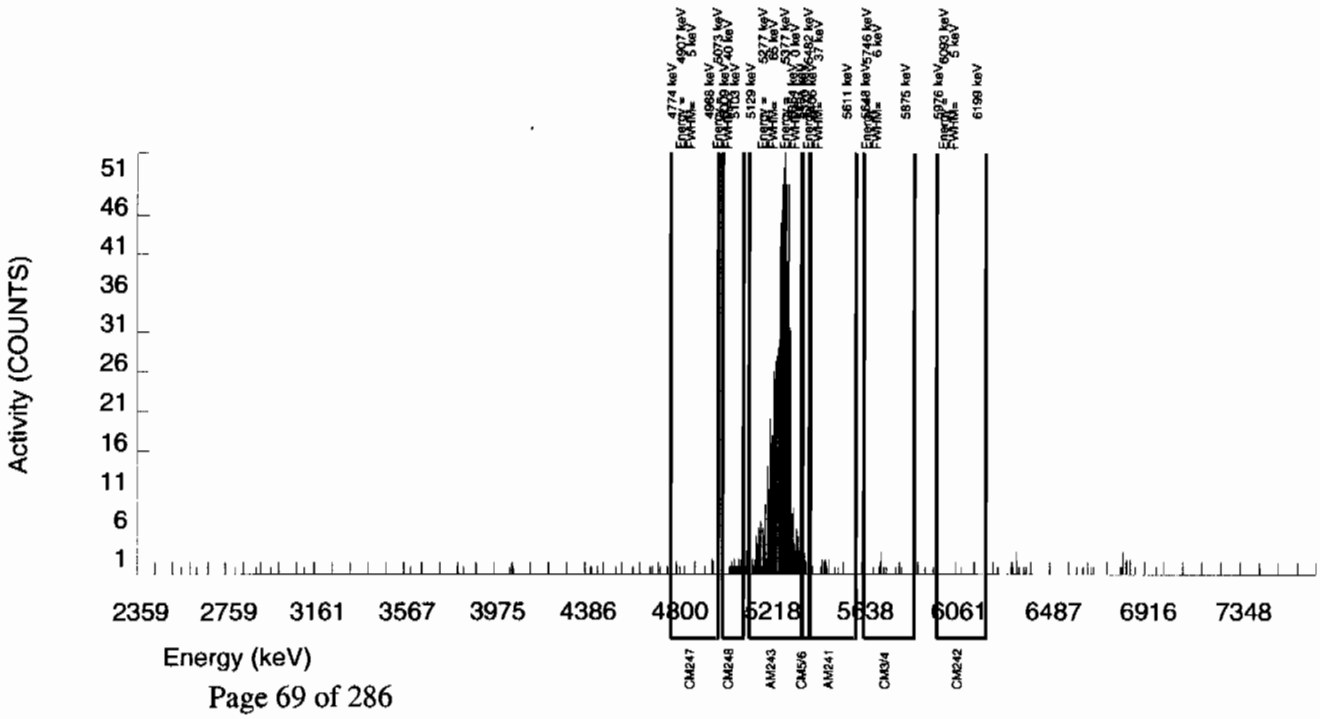

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 2-DEC-2009 00:00:00.

SAMPLE ID : S1201983131_AM
SAMPLE QTY: 1.000 G

DETECTOR NUMBER :78263
AVERAGE %EFFICIENCY :32.7658
% YIELD : 96.377

COUNT DATE:10-DEC-2009 12:38:59
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B090.CNF;703
PCI/G : 3.316E+01	PCI/G : 3.316E+01	NOMINAL : 2.91661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.81094 dpm	EFF FILE : W090.CNF;197
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	3.000	1.000	4.8778	100.0000	4.28E-03	3.20E-03	1.62E-02	3.62E-02	3.19E-03
CM-5/6	5386.000	1.000	1.000	0.000	19.8796	86.09000	1.66E-03	1.66E-03	7.66E-02	1.58E-01	1.66E-03
AM-241	5479.150	2.000	-1.600	2.000	3.6563	99.94000	-2.28E-03	2.47E-03	1.21E-02	2.81E-02	2.47E-03
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	1.48E-03	1.48E-03	1.26E-02	2.90E-02	1.48E-03
AM243	5270.000	921.000	919.000	2.000	1.4142	99.78000	1.31E+00	9.12E-02	4.70E-03	1.33E-02	4.34E-02
CM-247	4946.000	19.000	12.000	7.000	18.5713	79.30000	2.16E-02	9.27E-03	7.77E-02	1.60E-01	9.17E-03
CM-248	5078.600	35.000	33.000	2.000	26.3889	91.00000	5.17E-02	1.00E-02	9.62E-02	1.97E-01	9.53E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

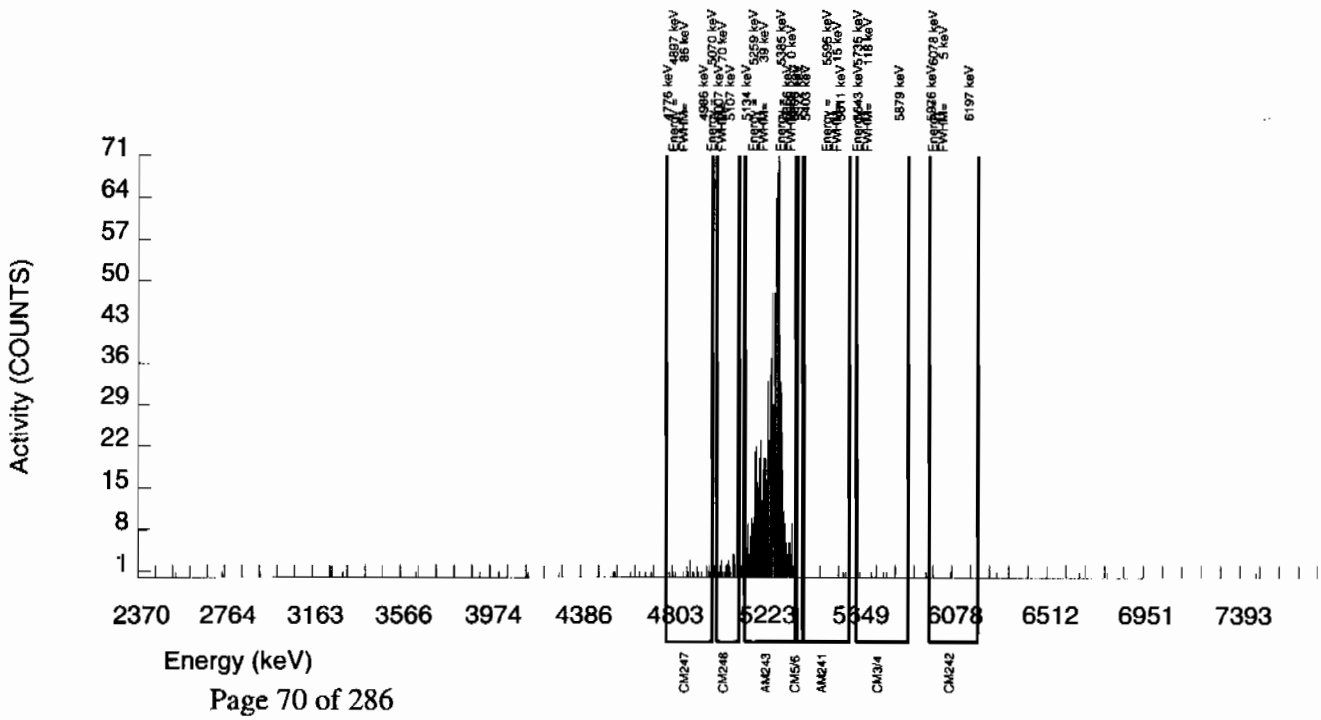

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 17-NOV-2009 00:00:00

SAMPLE ID : S1201983132_AM
SAMPLE QTY: 1.263 G

DETECTOR NUMBER :78259
AVERAGE %EFFICIENCY :34.6765
% YIELD : 79.770

COUNT DATE:10-DEC-2009 12:38:59
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B091.CNF;701
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.32658 dpm	EFF FILE : W091.CNF;188
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	3.000	3.000	0.000	4.8778	100.0000	3.88E-03	2.25E-03	1.46E-02	3.28E-02	2.24E-03
CM-5/6	5386.000	4.000	4.000	0.000	19.8796	86.09000	5.99E-03	3.02E-03	6.93E-02	1.43E-01	3.00E-03
AM-241	5479.150	3.000	1.599	0.000	3.6563	99.94000	2.06E-03	1.64E-03	1.10E-02	2.54E-02	1.63E-03
CM-242	6102.000	4.000	4.000	0.000	3.7846	100.0000	5.71E-03	2.88E-03	1.14E-02	2.62E-02	2.85E-03
AM243	5270.000	807.000	805.000	2.000	1.4142	99.78000	1.04E+00	7.45E-02	4.25E-03	1.20E-02	3.68E-02
CM-247	4946.000	17.000	15.000	2.000	18.5713	79.30000	2.44E-02	7.25E-03	7.02E-02	1.45E-01	7.09E-03
CM-248	5078.600	43.000	43.000	0.000	26.3889	91.00000	6.09E-02	1.00E-02	8.70E-02	1.78E-01	9.29E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

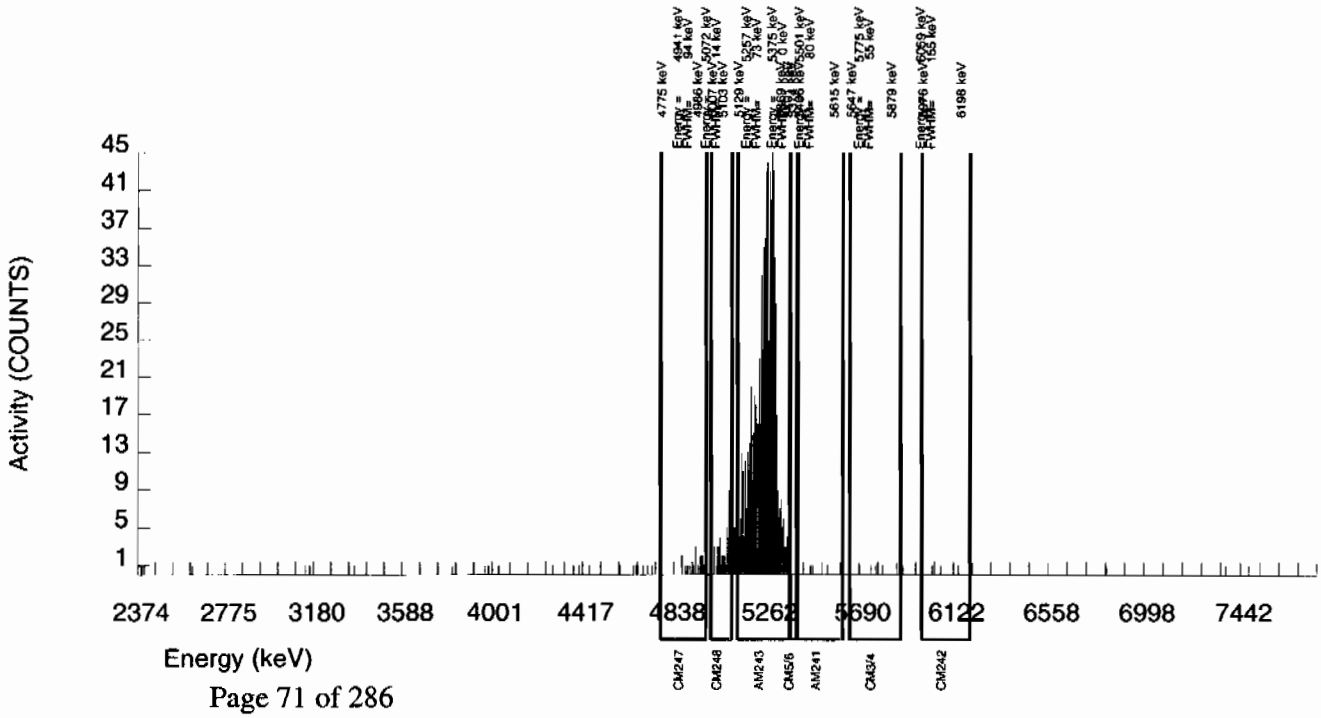

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927530
SAMPLE DATE : 2-DEC-2009 00:00:00.

SAMPLE ID : S1201983133_AM
SAMPLE QTY: 0.106 G

DETECTOR NUMBER :79457
AVERAGE %EFFICIENCY :31.2136
% YIELD : 103.151

COUNT DATE:10-DEC-2009 12:38:59
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B092.CNF;704
PCI/G : 3.316E+01	PCI/G : 3.316E+01	NOMINAL : 2.91661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 3.00852 dpm	EFF FILE : W092.CNF;231
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	10.000	9.000	1.000	4.8778	100.0000	1.19E-01	4.46E-02	1.50E-01	3.35E-01	4.38E-02
CM-5/6	5386.000	101.000	101.000	0.000	19.8796	86.09000	1.55E+00	1.87E-01	7.09E-01	1.46E+00	1.54E-01
AM-241	5479.150	2321.000	2318.369	1.000	3.6563	99.94000	3.06E+01	2.18E+00	1.12E-01	2.60E-01	6.36E-01
CM-242	6102.000	6.000	6.000	0.000	3.7846	100.0000	8.22E-02	3.40E-02	1.16E-01	2.68E-01	3.36E-02
AM243	5270.000	940.000	937.000	3.000	1.7321	99.78000	1.24E+01	9.36E-01	5.33E-02	1.42E-01	4.06E-01
CM-247	4946.000	9.000	-1.000	10.000	18.5713	79.30000	-1.66E-02	7.26E-02	7.19E-01	1.48E+00	7.25E-02
CM-248	5078.600	17.000	11.000	6.000	26.3889	91.00000	1.60E-01	7.04E-02	8.90E-01	1.82E+00	6.96E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

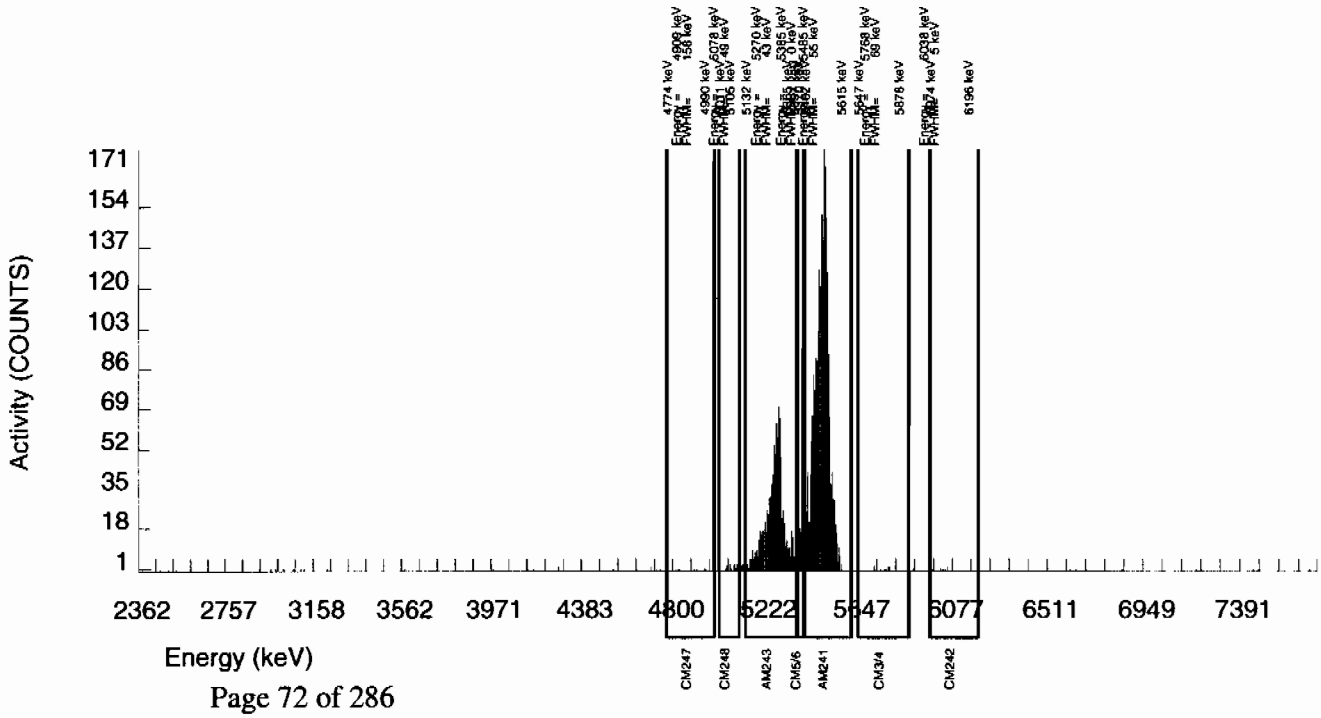

Radiochemistry Batch Checklist, Rev 9

Batch# 927531 Product: Pu Date: 12/11/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analyses.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Denise Green 12/11/09

Secondary Review Performed By: Jack R. 12/11/09

12/14

✓ P

Plutonium Que Sheet

30-NOV-09

Batch #: 927531 Analyst: HAKB First Client Due Date: 16-DEC-09 Internal Due Date: 05-DEC-09

Tracer Isotope(s): Pu-242/Pu-238 Tracer Code: 1373-A Expiration Date: 10/27/10 Vol: 0.1

LCS Isotope(s): Pu-239/Pu-238 LCS Code: SRM 0244-B Expiration Date: 4/30/20 Vol: 0.106 g

Spike Isotope(s): Pu-239/Pu-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/2/09 Initials: HAKB Pipet ID: 4497063 Balance ID: 50410272 Witness: KM 12-7-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g / l / f)	Pu Det #
241327001-1	RE03-09-13618	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	1	1	1.264	7
241327002-1	RE03-09-13622	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	2	2	1.256	8
241327003-1	RE03-09-13620	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	3	3	1.255	9
241327004-1	RE03-09-13619	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	4	4	1.255	10
241327005-1	RE03-09-13624	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	5	5	1.268	11
241327006-1	RE03-09-13623	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	6	6	1.260	12
241327007-1	RE03-09-13626	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	7	7	1.256	19
241327008-1	RE03-09-13621	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	8	8	1.260	20
241327009-1	RE03-09-13627	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	9	9	1.254	21
241327010-1	RE03-09-13625	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	10	10	1.255	23
241327011-1	RE03-10-6084	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	11	11	1.250	24
241327012-1	RE03-10-6085	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	12	12	1.253	25
241336001-1	RE03-09-13770	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	13	13	1.267	26
241336002-1	RE03-10-5897	SAMPLE		.05 pCi/g	SOIL	LANL010	16-NOV-09	14	14	1.261	27
241425001-1	WST03-10-2131	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	15	15	1.261	28
241425002-1	WST03-10-2130	SAMPLE		.05 pCi/g	SOIL	LANL010	17-NOV-09	16	16	1.251	29
1201983134-1	MB for batch 927531	MB		.05 pCi/g	SOIL	QC ACCOUNT		17	17	1.0	30
1201983135-1	WST03-10-2131(241425001DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	17-NOV-09	18	18	1.263	31
1201983136-1	LCS for batch 927531	LCS		.05 pCi/g	SOIL	QC ACCOUNT		19	19	0.106	33

Choose SOP Used: GL-RAD-A-011
~~GL-RAD-A-045~~
GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: DS 12/11/09

Blank Correction Report

Batch ID 927531

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201983135	DUP	Plutonium-238	1.26 g	0.0121	0.00431	0.0179	.002285714	pCi/g	NO
		Plutonium-239/240	1.26 g	0.0143	0.00509	0.0201	-.00571429	pCi/g	NO
1201983136	LCS	Plutonium-238	0.106 g	7.36	0.597	0.339	.027169811	pCi/g	NO
		Plutonium-239/240	0.106 g	40.0	2.59	0.381	-.06792453	pCi/g	NO
1201983134	MB	Plutonium-238	1.00 g	0.00288	0.00911	0.0234	.00288	pCi/g	YES
		Plutonium-239/240	1.00 g	-0.0072	0.00478	0.0264	-.0072	pCi/g	NO
241327001	RE03-09-13618	Plutonium-238	1.26 g	0.00295	0.0104	0.0239	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00589	0.00552	0.0269	-.00571429	pCi/g	NO
241327002	RE03-09-13622	Plutonium-238	1.26 g	-0.00122	0.0061	0.0198	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.0061	0.00405	0.0223	-.00571429	pCi/g	NO
241327003	RE03-09-13620	Plutonium-238	1.26 g	-0.00482	0.00817	0.0196	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00964	0.0042	0.022	-.00571429	pCi/g	NO
241327004	RE03-09-13619	Plutonium-238	1.26 g	0.00749	0.00729	0.0203	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	-0.00125	0.00279	0.0228	-.00571429	pCi/g	NO
241327005	RE03-09-13624	Plutonium-238	1.27 g	0.00629	0.00766	0.0204	.002267717	pCi/g	YES
		Plutonium-239/240	1.27 g	0.00503	0.00591	0.023	-.00566929	pCi/g	NO
241327006	RE03-09-13623	Plutonium-238	1.26 g	0.00	0.00854	0.0225	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00415	0.00537	0.0253	-.00571429	pCi/g	NO
241327007	RE03-09-13626	Plutonium-238	1.26 g	-0.00127	0.00524	0.0206	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00381	0.00221	0.0232	-.00571429	pCi/g	NO
241327008	RE03-09-13621	Plutonium-238	1.26 g	-0.00649	0.00699	0.0211	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.0013	0.0043	0.0237	-.00571429	pCi/g	NO
241327009	RE03-09-13627	Plutonium-238	1.25 g	-0.00246	0.00887	0.020	.002304	pCi/g	YES
		Plutonium-239/240	1.25 g	0.00492	0.00522	0.0225	-.00576	pCi/g	NO
241327010	RE03-09-13625	Plutonium-238	1.26 g	-2.17E-09	0.00737	0.0185	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	-0.00455	0.00455	0.0208	-.00571429	pCi/g	NO
241327011	RE03-10-6084	Plutonium-238	1.25 g	-0.00238	0.00653	0.0193	.002304	pCi/g	YES
		Plutonium-239/240	1.25 g	-0.00119	0.00357	0.0218	-.00576	pCi/g	NO
241327012	RE03-10-6085	Plutonium-238	1.25 g	-0.00389	0.00869	0.021	.002304	pCi/g	YES
		Plutonium-239/240	1.25 g	0.0104	0.00413	0.0237	-.00576	pCi/g	NO
241336001	RE03-09-13770	Plutonium-238	1.27 g	0.00252	0.00472	0.0205	.002267717	pCi/g	YES
		Plutonium-239/240	1.27 g	-0.00126	0.00282	0.0231	-.00566929	pCi/g	NO
241336002	RE03-10-5897	Plutonium-238	1.26 g	5.71E-10	0.00379	0.0195	.002285714	pCi/g	YES
		Plutonium-239/240	1.26 g	0.00479	0.0034	0.0219	-.00571429	pCi/g	NO
241425001	WST03-10-2131	Plutonium-238	1.26 g	0.0145	0.00622	0.0197	.002285714	pCi/g	NO
		Plutonium-239/240	1.26 g	0.0109	0.00367	0.0221	-.00571429	pCi/g	NO
241425002	WST03-10-2130	Plutonium-238	1.25 g	0.0134	0.00854	0.0197	.002304	pCi/g	NO
		Plutonium-239/240	1.25 g	5.79E-10	0.00421	0.0222	-.00576	pCi/g	NO

12/11/04

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327001_PU
SAMPLE QTY: 1.264 G

DETECTOR NUMBER :67607
AVERAGE %EFFICIENCY :29.8669
% YIELD : 81.150

COUNT DATE:10-DEC-2009 10:31:19
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B007.CNF;1089
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.42519 dpm	EFF FILE : W007.CNF;308
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	4.000	5.000	3.3488	99.90000	5.89E-03	5.52E-03	1.15E-02	2.69E-02	5.51E-03
PU-236	5749.000	21.000	-1.000	22.000	2.0294	100.0000	-1.49E-03	9.80E-03	6.94E-03	1.79E-02	9.80E-03
PU-238	5499.000	26.000	2.000	24.000	2.9082	99.90000	2.95E-03	1.04E-02	9.96E-03	2.39E-02	1.04E-02
PU242	4890.000	1033.000	1023.000	10.000	3.1623	100.0000	1.50E+00	8.99E-02	1.08E-02	2.56E-02	4.75E-02
PU-244	4589.000	2.000	-2.000	4.000	6.8218	99.90000	-2.94E-03	3.61E-03	2.34E-02	5.07E-02	3.61E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

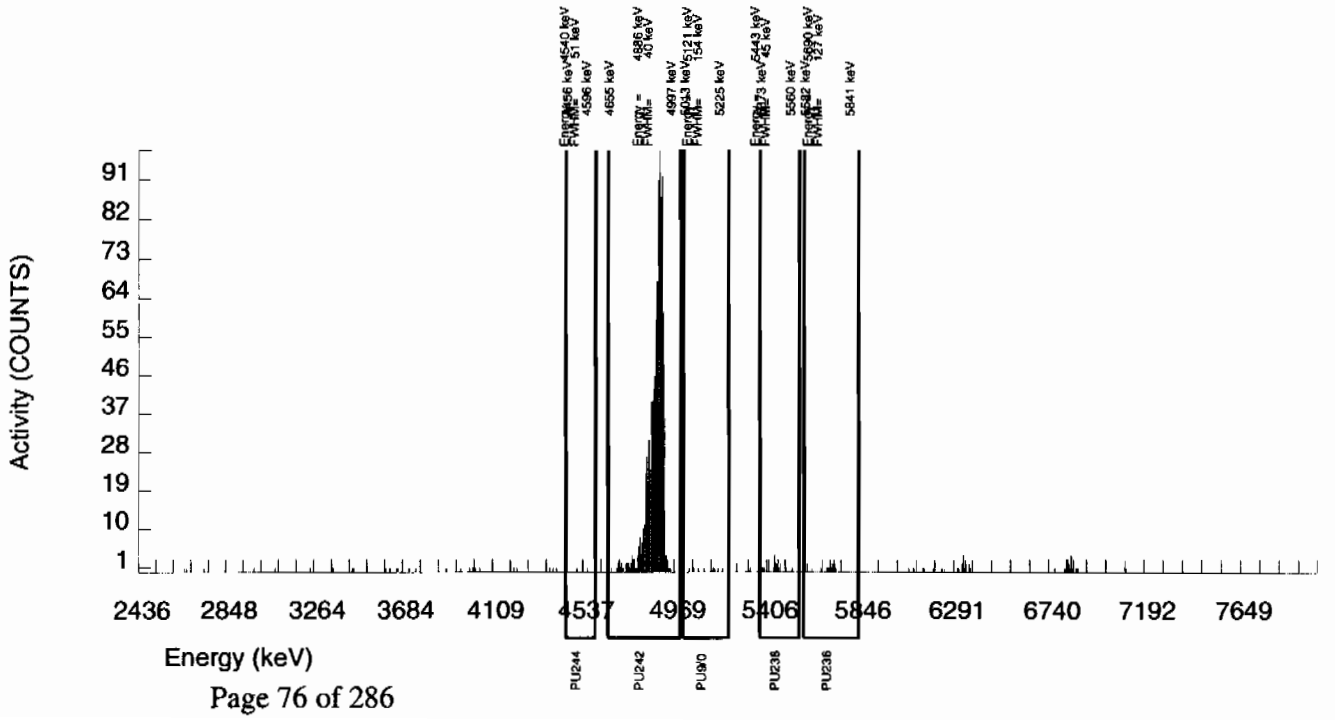

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327002_PU
SAMPLE QTY: 1.256 G

DETECTOR NUMBER :78788
AVERAGE %EFFICIENCY :32.3317
% YIELD : 91.085

COUNT DATE:10-DEC-2009 10:31:19
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B008.CNF;1091
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.84453 dpm	EFF FILE : W008.CNF;339
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	8.000	5.000	3.000	3.3488	99.90000	6.10E-03	4.05E-03	9.50E-03	2.23E-02	4.04E-03
PU-236	5749.000	7.000	-2.000	9.000	2.0294	100.0000	-2.48E-03	4.95E-03	5.75E-03	1.48E-02	4.95E-03
PU-238	5499.000	12.000	-1.000	13.000	2.9082	99.90000	-1.22E-03	6.10E-03	8.25E-03	1.98E-02	6.10E-03
PU242	4890.000	1247.000	1243.000	4.000	2.0000	100.0000	1.51E+00	8.56E-02	5.67E-03	1.46E-02	4.31E-02
PU-244	4589.000	8.000	6.000	2.000	6.8218	99.90000	7.31E-03	3.87E-03	1.93E-02	4.20E-02	3.85E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

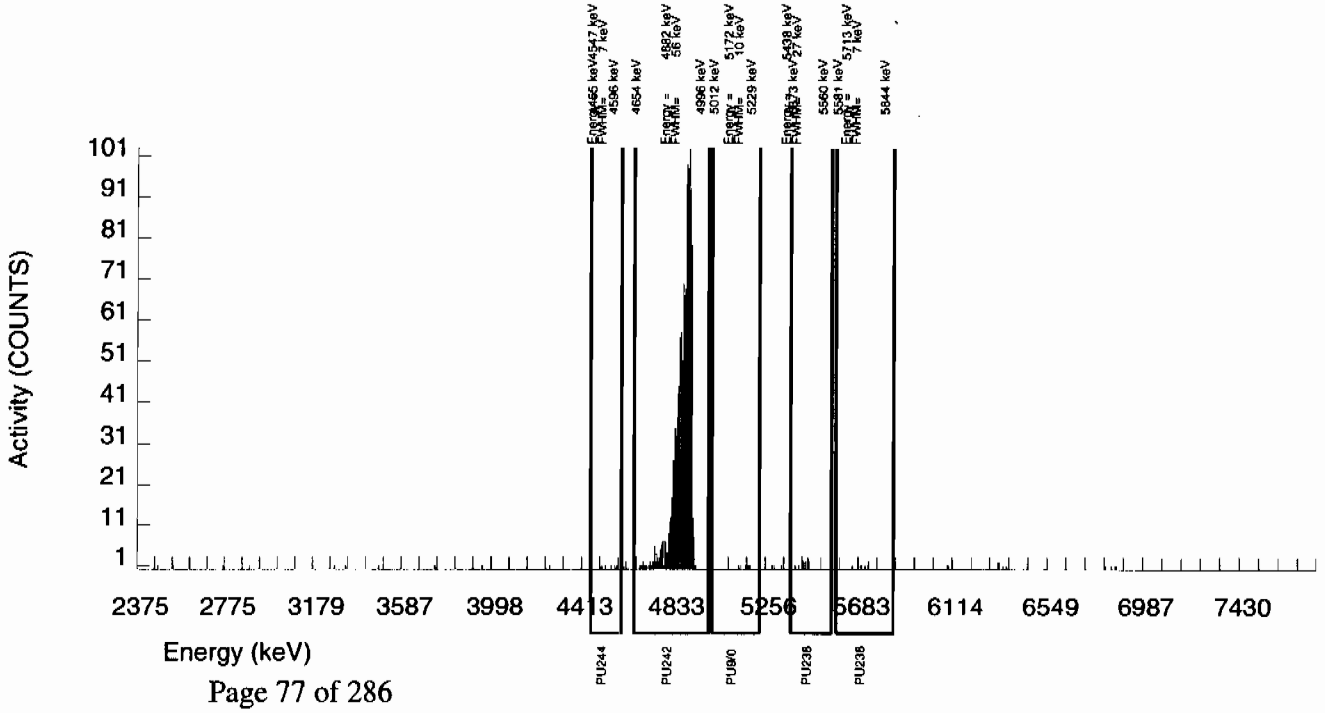

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327003_PU
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :72528
AVERAGE %EFFICIENCY :33.7457
% YIELD : 88.392

COUNT DATE:10-DEC-2009 10:31:19
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B009.CNF;1082
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.73085 dpm	EFF FILE : W009.CNF;303
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	10.000	8.000	2.000	3.3488	99.90000	9.64E-03	4.20E-03	9.38E-03	2.20E-02	4.17E-03
PU-236	5749.000	17.000	-3.000	20.000	2.0294	100.0000	-3.67E-03	7.44E-03	5.68E-03	1.46E-02	7.44E-03
PU-238	5499.000	21.000	-4.000	25.000	2.9082	99.90000	-4.82E-03	8.17E-03	8.15E-03	1.96E-02	8.17E-03
PU242	4890.000	1266.000	1259.000	7.000	2.6458	100.0000	1.51E+00	8.54E-02	7.41E-03	1.81E-02	4.29E-02
PU-244	4589.000	3.000	1.000	2.000	6.8218	99.90000	1.20E-03	2.69E-03	1.91E-02	4.15E-02	2.69E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

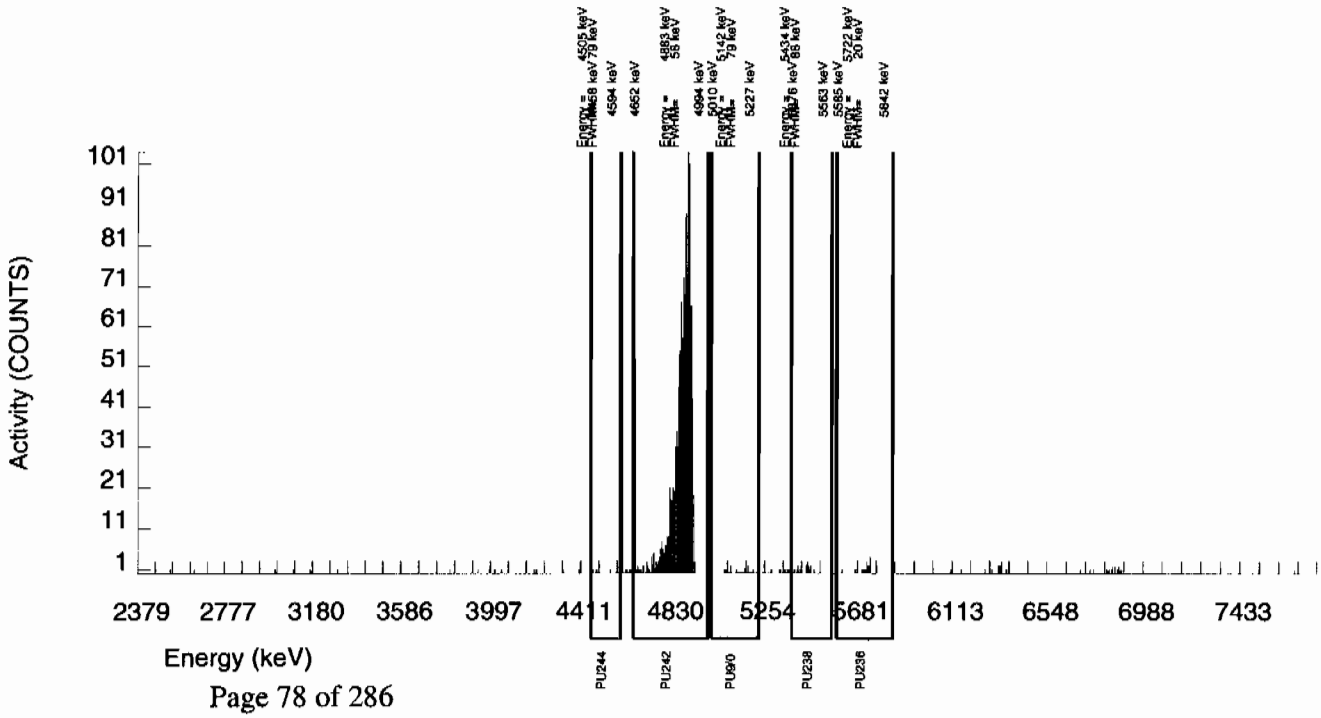

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327004_PU
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :72529
AVERAGE %EFFICIENCY :31.2919
% YIELD : 91.992

COUNT DATE:10-DEC-2009 10:31:19
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B010.CNF;1100
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.88280 dpm	EFF FILE : W010.CNF;331
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2.000	-1.000	3.000	3.3488	99.90000	-1.25E-03	2.79E-03	9.72E-03	2.28E-02	2.79E-03
PU-236	5749.000	13.000	3.000	10.000	2.0294	100.0000	3.80E-03	6.08E-03	5.89E-03	1.52E-02	6.08E-03
PU-238	5499.000	20.000	6.000	14.000	2.9082	99.90000	7.49E-03	7.29E-03	8.44E-03	2.03E-02	7.28E-03
PU242	4890.000	1217.000	1215.000	2.000	1.4142	100.0000	1.51E+00	8.61E-02	4.10E-03	1.16E-02	4.35E-02
PU-244	4589.000	6.000	5.000	1.000	6.8218	99.90000	6.24E-03	3.32E-03	1.98E-02	4.30E-02	3.30E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

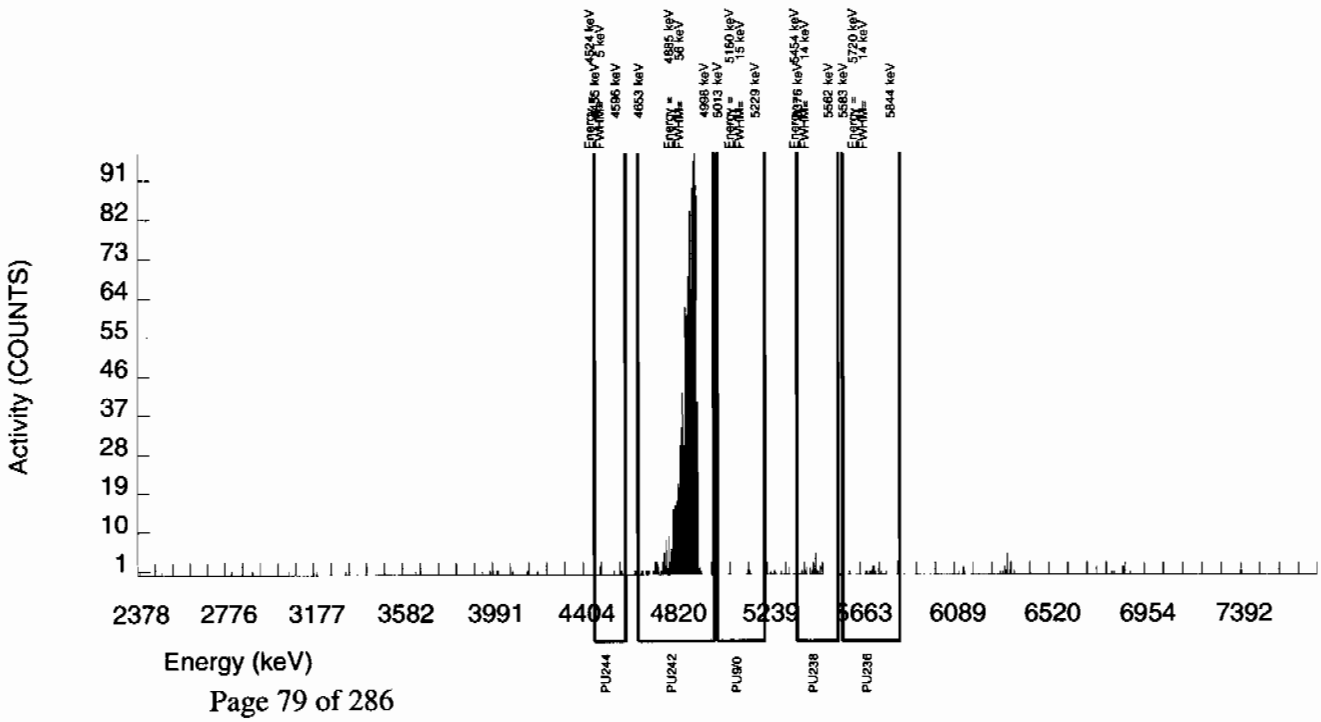

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241327005_PU SAMPLE QTY: 1.268 G
DETECTOR NUMBER :72531 AVERAGE %EFFICIENCY :29.4647 % YIELD : 95.927	COUNT DATE:10-DEC-2009 10:31:19 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B011.CNF;1092
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 4.04891 dpm	EFF FILE : W011.CNF;309
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	13.000	4.000	9.000	3.3488	99.90000	5.03E-03	5.91E-03	9.80E-03	2.30E-02	5.90E-03
PU-236	5749.000	14.000	-6.000	20.000	2.0294	100.0000	-7.67E-03	7.45E-03	5.93E-03	1.53E-02	7.45E-03
PU-238	5499.000	21.000	5.000	16.000	2.9082	99.90000	6.29E-03	7.66E-03	8.51E-03	2.04E-02	7.66E-03
PU242	4890.000	1204.000	1193.000	11.000	3.3166	100.0000	1.50E+00	8.60E-02	9.70E-03	2.28E-02	4.38E-02
PU-244	4589.000	6.000	1.000	5.000	6.8218	99.90000	1.26E-03	4.17E-03	2.00E-02	4.33E-02	4.17E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

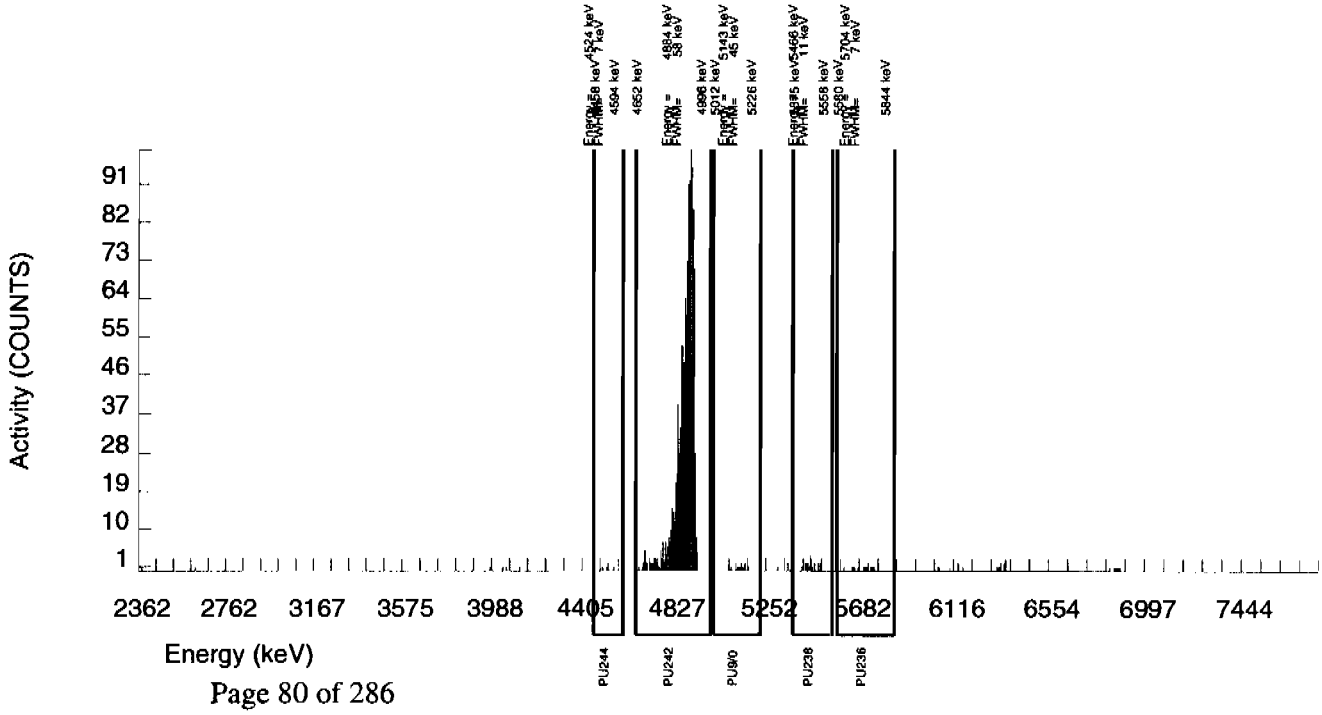

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327006_PU
SAMPLE QTY: 1.260 G

DETECTOR NUMBER :67594
AVERAGE %EFFICIENCY :30.0522
% YIELD : 86.011

COUNT DATE:10-DEC-2009 10:31:19
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B012.CNF;1094
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.63035 dpm	EFF FILE : W012.CNF;310
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	3.000	6.000	3.3488	99.90000	4.15E-03	5.37E-03	1.08E-02	2.53E-02	5.36E-03
PU-236	5749.000	14.000	-8.000	22.000	2.0294	100.0000	-1.12E-02	8.44E-03	6.53E-03	1.68E-02	8.44E-03
PU-238	5499.000	19.000	0.000	19.000	2.9082	99.90000	0.00E+00	8.54E-03	9.37E-03	2.25E-02	8.54E-03
PU242	4890.000	1098.000	1091.000	7.000	2.6458	100.0000	1.51E+00	8.85E-02	8.51E-03	2.08E-02	4.60E-02
PU-244	4589.000	5.000	2.000	3.000	6.8218	99.90000	2.77E-03	3.92E-03	2.20E-02	4.77E-02	3.92E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

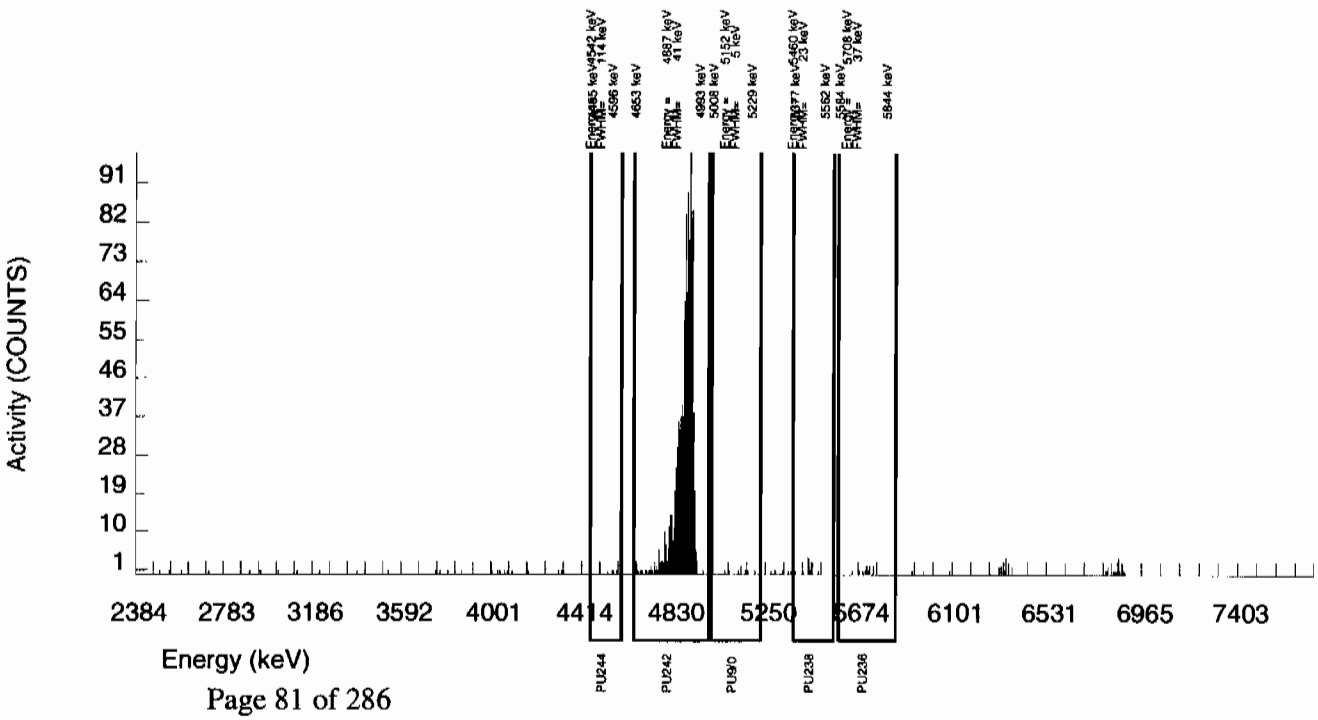

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327007_PU
SAMPLE QTY: 1.256 G

DETECTOR NUMBER :78786
AVERAGE %EFFICIENCY :30.7335
% YIELD : 92.044

COUNT DATE:10-DEC-2009 10:31:21
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B019.CNF;1080
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.88501 dpm	EFF FILE : W019.CNF;303
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	3.000	0.000	3.3488	99.90000	3.81E-03	2.21E-03	9.89E-03	2.32E-02	2.20E-03
PU-236	5749.000	12.000	0.000	12.000	2.0294	100.0000	-2.46E-09	6.31E-03	5.99E-03	1.54E-02	6.31E-03
PU-238	5499.000	8.000	-1.000	9.000	2.9082	99.90000	-1.27E-03	5.24E-03	8.59E-03	2.06E-02	5.24E-03
PU242	4890.000	1198.000	1194.000	4.000	2.0000	100.0000	1.51E+00	8.65E-02	5.90E-03	1.52E-02	4.40E-02
PU-244	4589.000	3.000	2.000	1.000	6.8218	99.90000	2.54E-03	2.54E-03	2.01E-02	4.37E-02	2.54E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

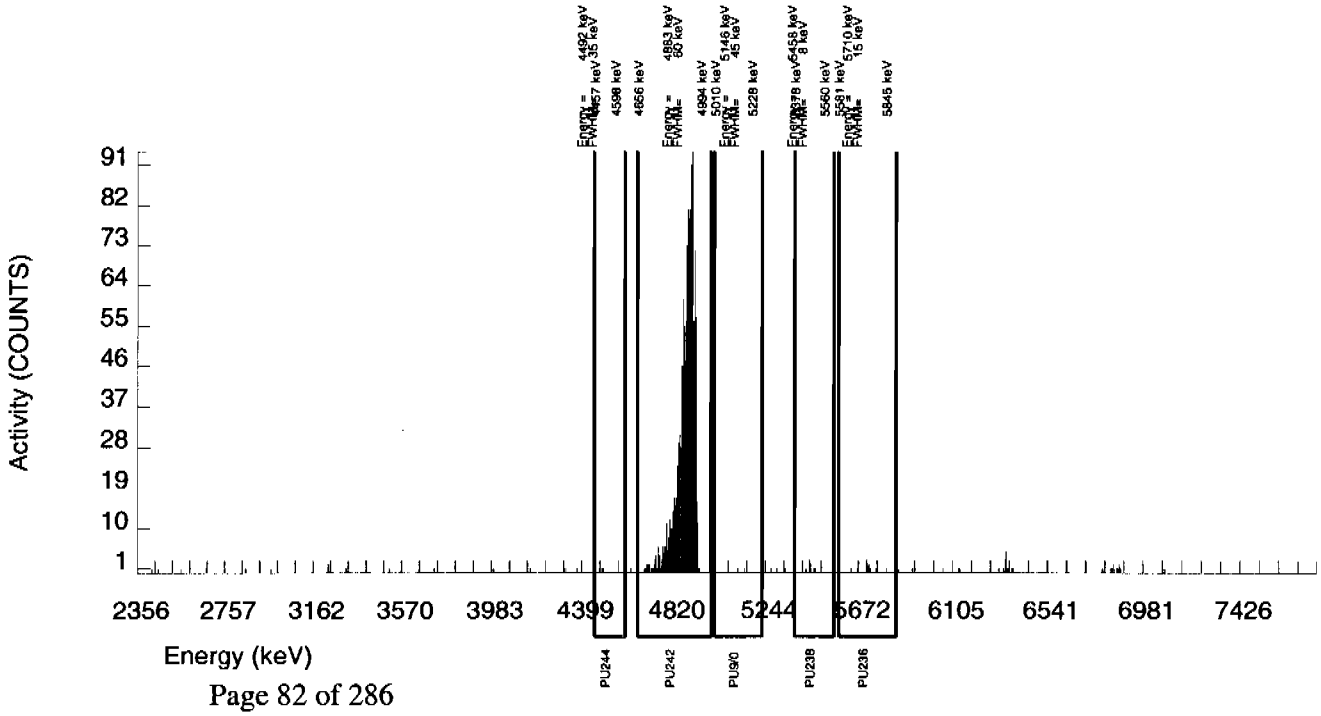

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327008_PU
SAMPLE QTY: 1.260 G

DETECTOR NUMBER :78787
AVERAGE %EFFICIENCY :35.2638
% YIELD : 78.204

COUNT DATE:10-DEC-2009 10:31:21
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B020.CNF;1075
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.30083 dpm	EFF FILE : W020.CNF;316
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	6.000	1.000	5.000	3.3488	99.90000	1.30E-03	4.30E-03	1.01E-02	2.37E-02	4.30E-03
PU-236	5749.000	9.000	-3.000	12.000	2.0294	100.0000	-3.95E-03	6.04E-03	6.12E-03	1.58E-02	6.04E-03
PU-238	5499.000	12.000	-5.000	17.000	2.9082	99.90000	-6.49E-03	6.99E-03	8.78E-03	2.11E-02	6.99E-03
PU242	4890.000	1174.000	1164.000	10.000	3.1623	100.0000	1.51E+00	8.70E-02	9.54E-03	2.26E-02	4.46E-02
PU-244	4589.000	3.000	2.000	1.000	6.8218	99.90000	2.60E-03	2.60E-03	2.06E-02	4.47E-02	2.60E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

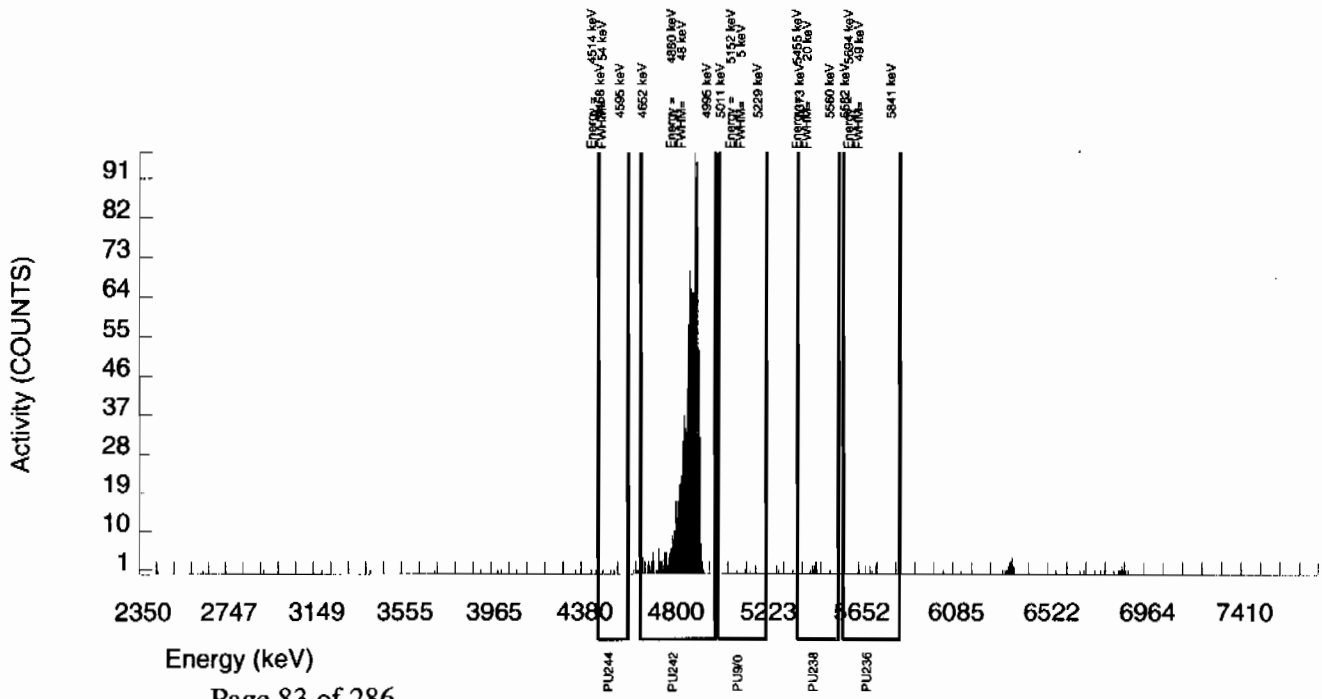

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327009_PU
SAMPLE QTY: 1.254 G

DETECTOR NUMBER :67047
AVERAGE %EFFICIENCY :30.9065
% YIELD : 94.672

COUNT DATE:10-DEC-2009 10:31:21
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B021.CNF;1083
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.99592 dpm	EFF FILE : W021.CNF;324
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	11.000	4.000	7.000	3.3488	99.90000	4.92E-03	5.22E-03	9.57E-03	2.25E-02	5.21E-03
PU-236	5749.000	26.000	5.000	21.000	2.0294	100.0000	6.24E-03	8.56E-03	5.80E-03	1.49E-02	8.56E-03
PU-238	5499.000	25.000	-2.000	27.000	2.9082	99.90000	-2.46E-03	8.87E-03	8.31E-03	2.00E-02	8.87E-03
PU242	4890.000	1242.000	1235.000	7.000	2.6458	100.0000	1.52E+00	8.60E-02	7.56E-03	1.84E-02	4.34E-02
PU-244	4589.000	2.000	0.000	2.000	6.8218	99.90000	-2.93E-10	2.46E-03	1.95E-02	4.23E-02	2.46E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

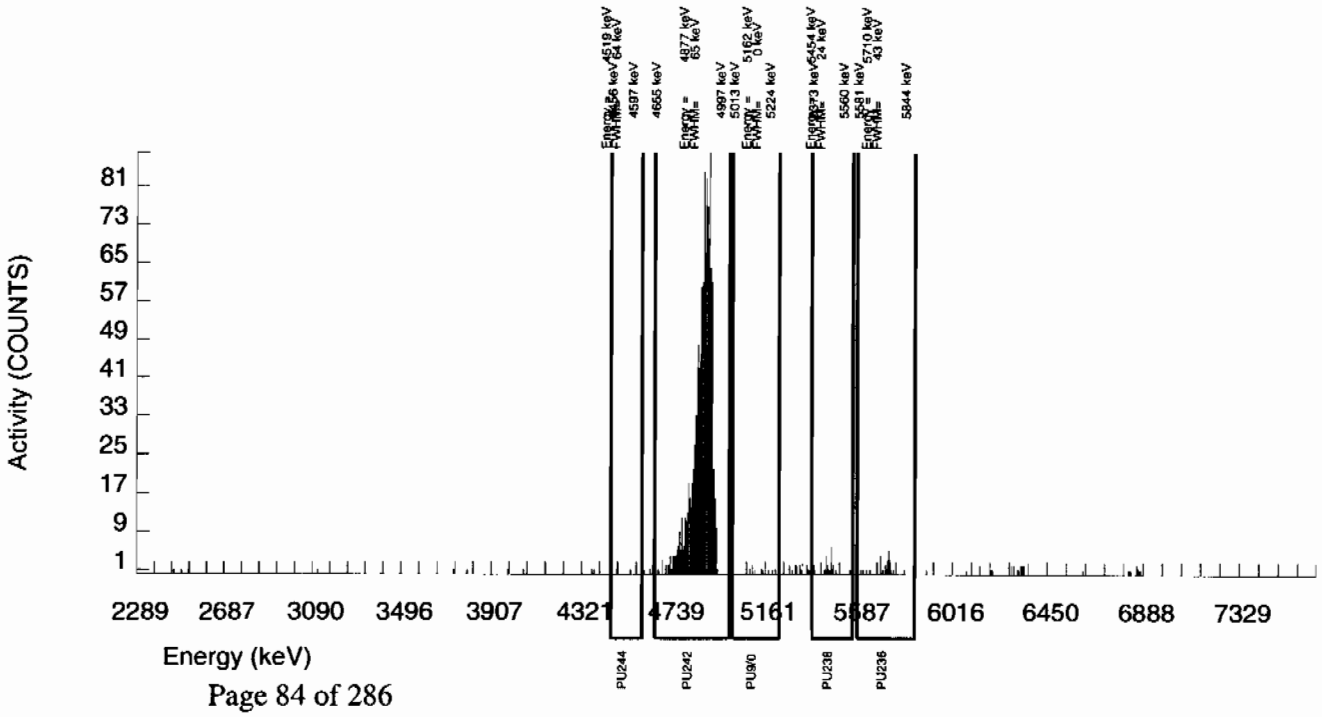

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327010_PU
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :78264
AVERAGE %EFFICIENCY :33.2165
% YIELD : 95.149

COUNT DATE:10-DEC-2009 10:31:21
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B023.CNF;1087
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 4.01608 dpm	EFF FILE : W023.CNF;297
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	6.000	-4.000	10.000	3.3488	99.90000	-4.55E-03	4.55E-03	8.86E-03	2.08E-02	4.55E-03
PU-236	5749.000	12.000	0.000	12.000	2.0294	100.0000	-2.20E-09	5.66E-03	5.36E-03	1.38E-02	5.66E-03
PU-238	5499.000	21.000	0.000	21.000	2.9082	99.90000	-2.17E-09	7.37E-03	7.69E-03	1.85E-02	7.37E-03
PU242	4890.000	1344.000	1334.000	10.000	3.1623	100.0000	1.51E+00	8.43E-02	8.35E-03	1.98E-02	4.18E-02
PU-244	4589.000	5.000	2.000	3.000	6.8218	99.90000	2.27E-03	3.22E-03	1.80E-02	3.92E-02	3.22E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

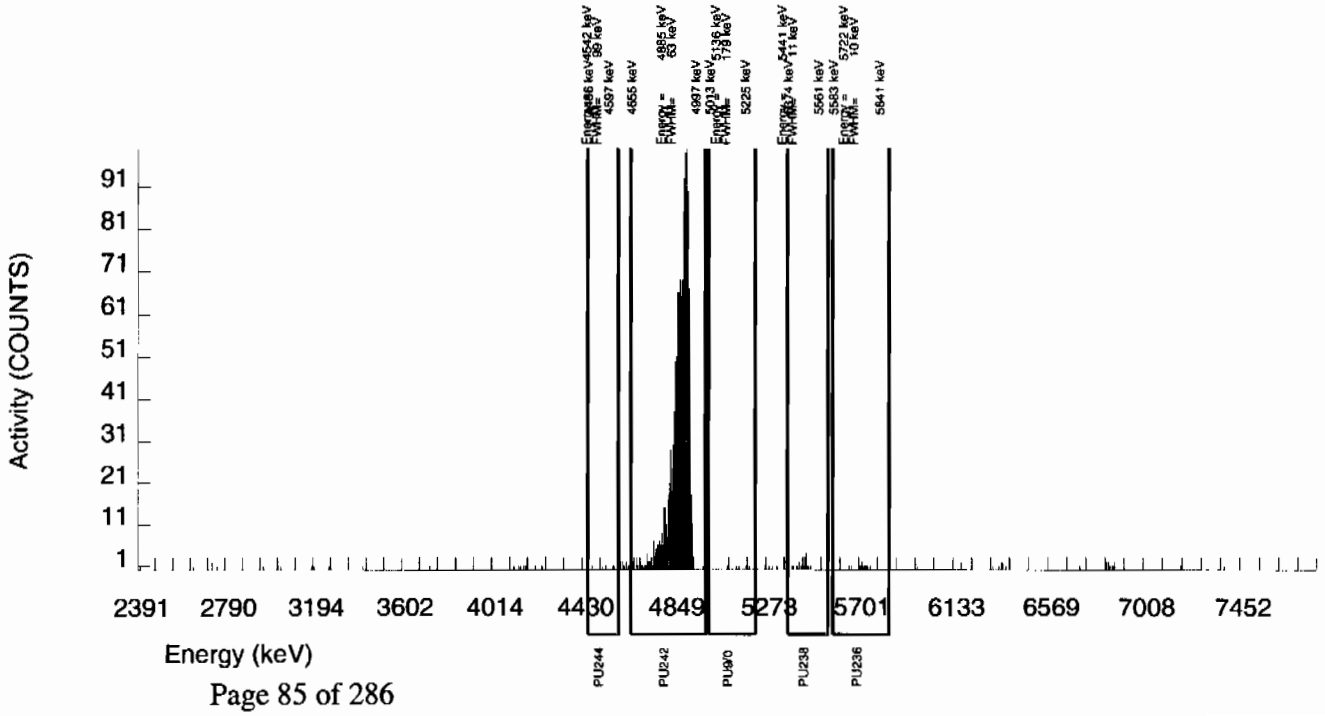

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241327011_PU SAMPLE QTY: 1.250 G
DETECTOR NUMBER :76542 AVERAGE %EFFICIENCY :34.3789 % YIELD : 88.073	COUNT DATE:10-DEC-2009 10:31:21 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B024.CNF;1080
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.71740 dpm	EFF FILE : W024.CNF;297
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	4.000	-1.000	5.000	3.3488	99.90000	-1.19E-03	3.57E-03	9.28E-03	2.18E-02	3.57E-03
PU-236	5749.000	10.000	-3.000	13.000	2.0294	100.0000	-3.63E-03	5.80E-03	5.62E-03	1.45E-02	5.80E-03
PU-238	5499.000	14.000	-2.000	16.000	2.9082	99.90000	-2.38E-03	6.53E-03	8.06E-03	1.93E-02	6.53E-03
PU242	4890.000	1294.000	1278.000	16.000	4.0000	100.0000	1.52E+00	8.57E-02	1.11E-02	2.54E-02	4.31E-02
PU-244	4589.000	7.000	3.000	4.000	6.8218	99.90000	3.57E-03	3.96E-03	1.89E-02	4.10E-02	3.95E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

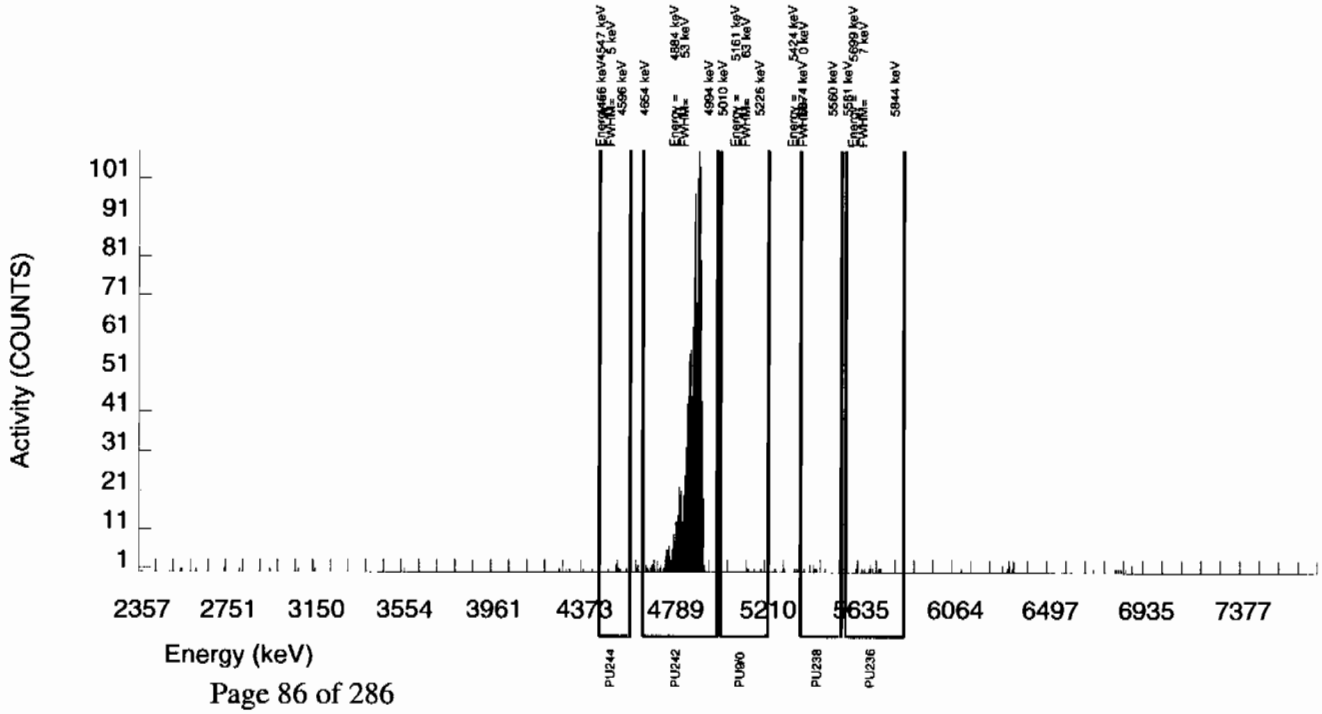

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327012_PU
SAMPLE QTY: 1.253 G

DETECTOR NUMBER :45-149AA5
AVERAGE %EFFICIENCY :32.5832
% YIELD : 85.292

COUNT DATE:10-DEC-2009 10:31:22
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B025.CNF;1090
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.60001 dpm	EFF FILE : W025.CNF;324
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	8.000	1.000	3.3488	99.90000	1.04E-02	4.13E-03	1.01E-02	2.37E-02	4.09E-03
PU-236	5749.000	42.000	-7.000	49.000	2.0294	100.0000	-9.21E-03	1.25E-02	6.11E-03	1.57E-02	1.25E-02
PU-238	5499.000	21.000	-3.000	24.000	2.9082	99.90000	-3.89E-03	8.69E-03	8.76E-03	2.10E-02	8.69E-03
PU242	4890.000	1179.000	1173.000	6.000	2.4495	100.0000	1.52E+00	8.72E-02	7.37E-03	1.82E-02	4.45E-02
PU-244	4589.000	5.000	3.000	2.000	6.8218	99.90000	3.88E-03	3.43E-03	2.05E-02	4.46E-02	3.43E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

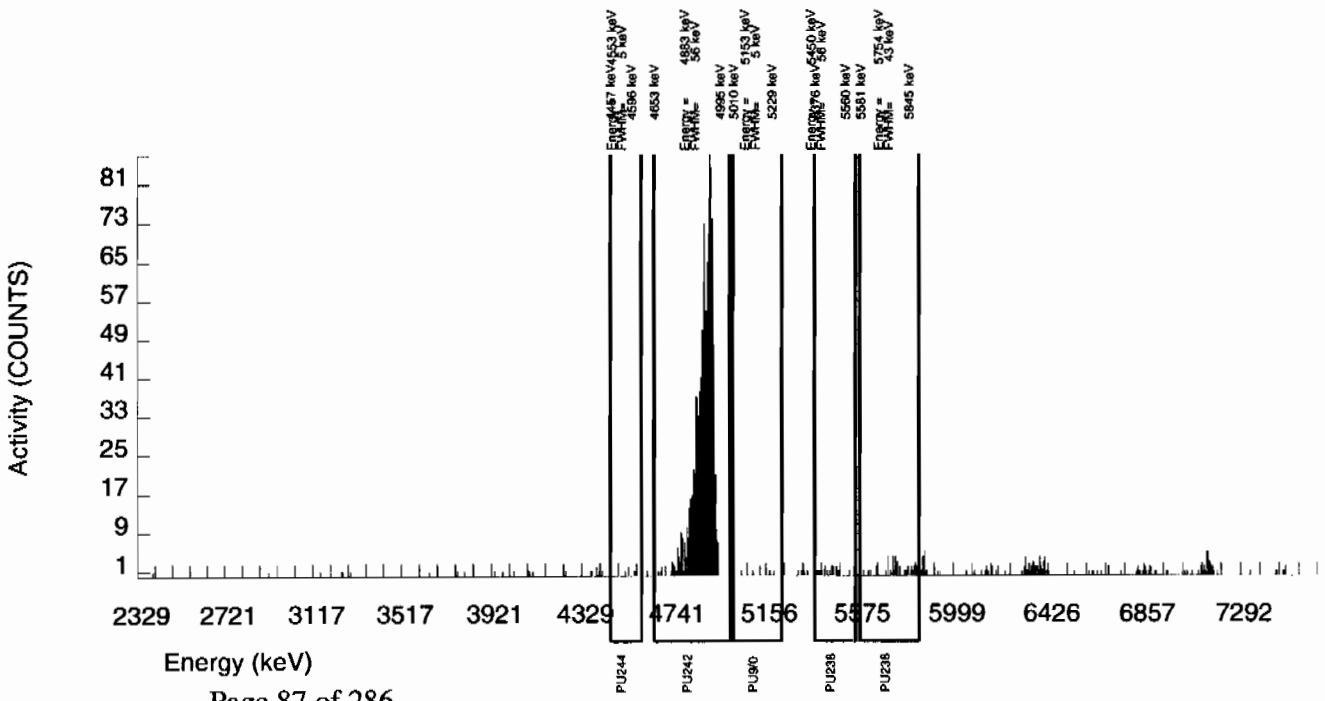

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 17-NOV-2009 00:00:00

SAMPLE ID : S0241425001_PU
SAMPLE QTY: 1.261 G

DETECTOR NUMBER :78792
AVERAGE %EFFICIENCY :30.6909
% YIELD : 96.263

COUNT DATE:10-DEC-2009 10:31:22
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B028.CNF;1101
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 4.06309 dpm	EFF FILE : W028.CNF;317
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	9.000	0.000	3.3488	99.90000	1.09E-02	3.67E-03	9.43E-03	2.21E-02	3.63E-03
PU-236	5749.000	29.000	-2.000	31.000	2.0294	100.0000	-2.46E-03	9.51E-03	5.71E-03	1.47E-02	9.51E-03
PU-238	5499.000	19.000	12.000	7.000	2.9082	99.90000	1.45E-02	6.22E-03	8.19E-03	1.97E-02	6.17E-03
PU242	4890.000	1255.000	1247.000	8.000	2.8284	100.0000	1.51E+00	8.80E-02	7.96E-03	1.92E-02	4.30E-02
PU-244	4589.000	5.000	3.000	2.000	6.8218	99.90000	3.63E-03	3.21E-03	1.92E-02	4.17E-02	3.20E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

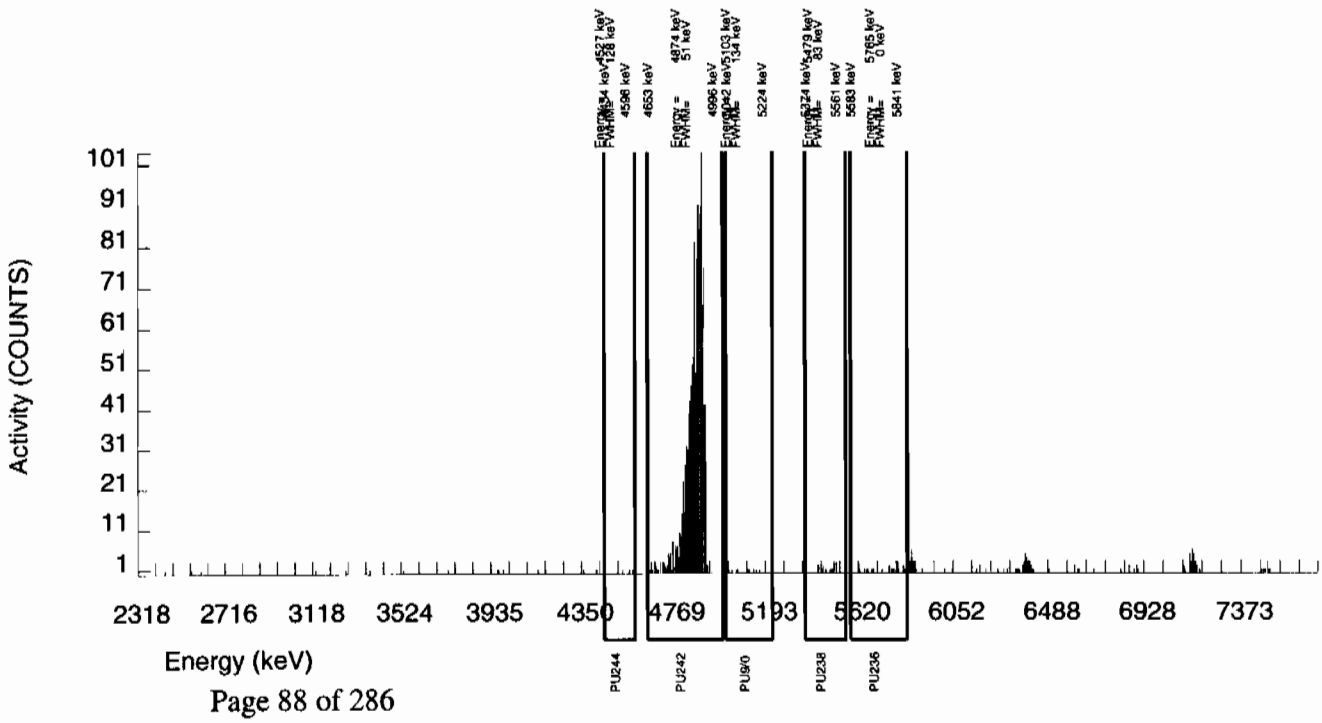

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 2-DEC-2009 00:00:00.

SAMPLE ID : S1201983134_PU
SAMPLE QTY: 1.000 G

DETECTOR NUMBER :33447
AVERAGE %EFFICIENCY :32.3059
% YIELD : 96.878

COUNT DATE:10-DEC-2009 10:31:22
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B030.CNF;1089
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 4.08903 dpm	EFF FILE : W030.CNF;301
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	-5.000	8.000	3.3488	99.90000	-7.20E-03	4.78E-03	1.12E-02	2.64E-02	4.78E-03
PU-236	5749.000	39.000	0.000	39.000	2.0294	100.0000	5.52E-09	1.28E-02	6.80E-03	1.75E-02	1.28E-02
PU-238	5499.000	21.000	2.000	19.000	2.9082	99.90000	2.88E-03	9.11E-03	9.75E-03	2.34E-02	9.11E-03
PU242	4890.000	1329.000	1321.000	8.000	2.8284	100.0000	1.90E+00	1.10E-01	9.47E-03	2.28E-02	5.26E-02
PU-244	4589.000	10.000	7.000	3.000	6.8218	99.90000	1.01E-02	5.22E-03	2.29E-02	4.96E-02	5.19E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

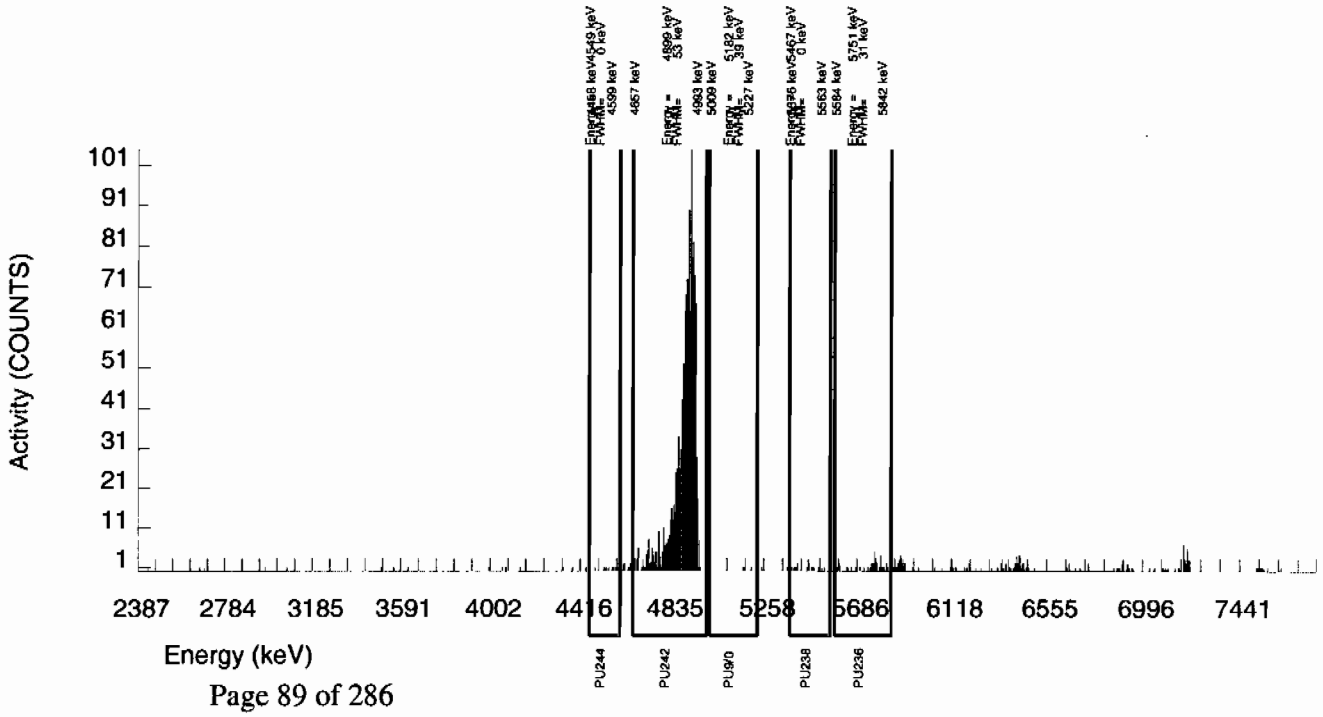

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531
SAMPLE DATE : 17-NOV-2009 00:00:00

SAMPLE ID : S1201983135_PU
SAMPLE QTY: 1.263 G

DETECTOR NUMBER :79988
AVERAGE %EFFICIENCY :33.4677
% YIELD : 96.913

COUNT DATE:10-DEC-2009 10:31:23
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B031.CNF;1087
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 4.09051 dpm	EFF FILE : W031.CNF;341
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	17.000	13.000	4.000	3.3488	99.90000	1.43E-02	5.09E-03	8.58E-03	2.01E-02	5.04E-03
PU-236	5749.000	32.000	-2.000	34.000	2.0294	100.0000	-2.23E-03	9.08E-03	5.19E-03	1.34E-02	9.08E-03
PU-238	5499.000	13.000	11.000	2.000	2.9082	99.90000	1.21E-02	4.30E-03	7.45E-03	1.79E-02	4.27E-03
PU242	4890.000	1377.000	1369.000	8.000	2.8284	100.0000	1.51E+00	8.33E-02	7.24E-03	1.75E-02	4.09E-02
PU-244	4589.000	8.000	4.000	4.000	6.8218	99.90000	4.40E-03	3.82E-03	1.75E-02	3.79E-02	3.81E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

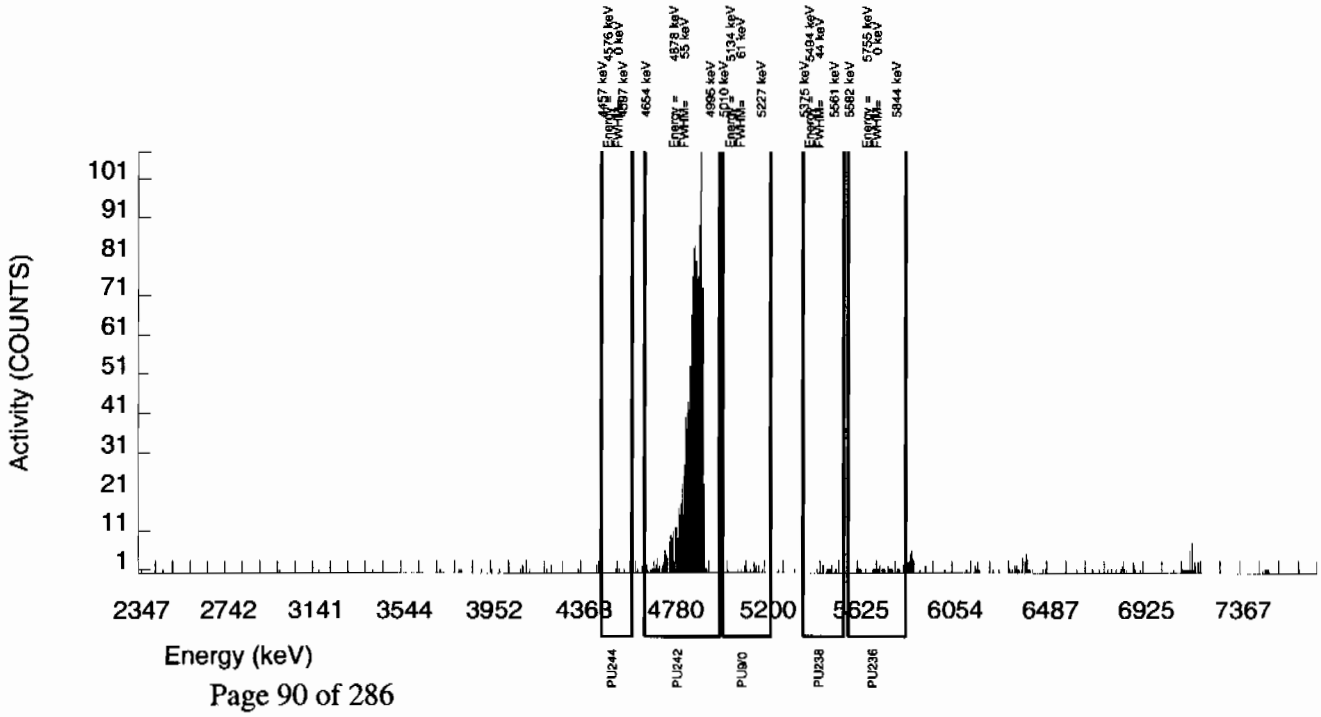

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927531 SAMPLE DATE : 2-DEC-2009 00:00:00.	SAMPLE ID : S1201983136_PU SAMPLE QTY: 0.106 G
DETECTOR NUMBER :78785 AVERAGE %EFFICIENCY :31.6999 % YIELD : 64.350	COUNT DATE:10-DEC-2009 10:31:23 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 2.71609 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B033.CNF;1086 BKG DATE : 9-DEC-2009 EFF FILE : W033.CNF;326 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	1918.000	1917.000	1.000	3.3488	99.90000	4.00E+01	2.59E+00	1.62E-01	3.81E-01	9.13E-01
PU-236	5749.000	27.000	-11.000	38.000	2.0294	100.0000	-2.30E-01	1.69E-01	9.84E-02	2.53E-01	1.69E-01
PU-238	5499.000	357.000	353.000	4.000	2.9082	99.90000	7.36E+00	5.97E-01	1.41E-01	3.39E-01	3.96E-01
PU242	4890.000	861.000	861.000	0.000	0.0000	100.0000	1.79E+01	1.25E+00	0.00E+00	5.65E-02	6.11E-01
PU-244	4589.000	5.000	5.000	0.000	6.8218	99.90000	1.04E-01	4.71E-02	3.31E-01	7.18E-01	4.66E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

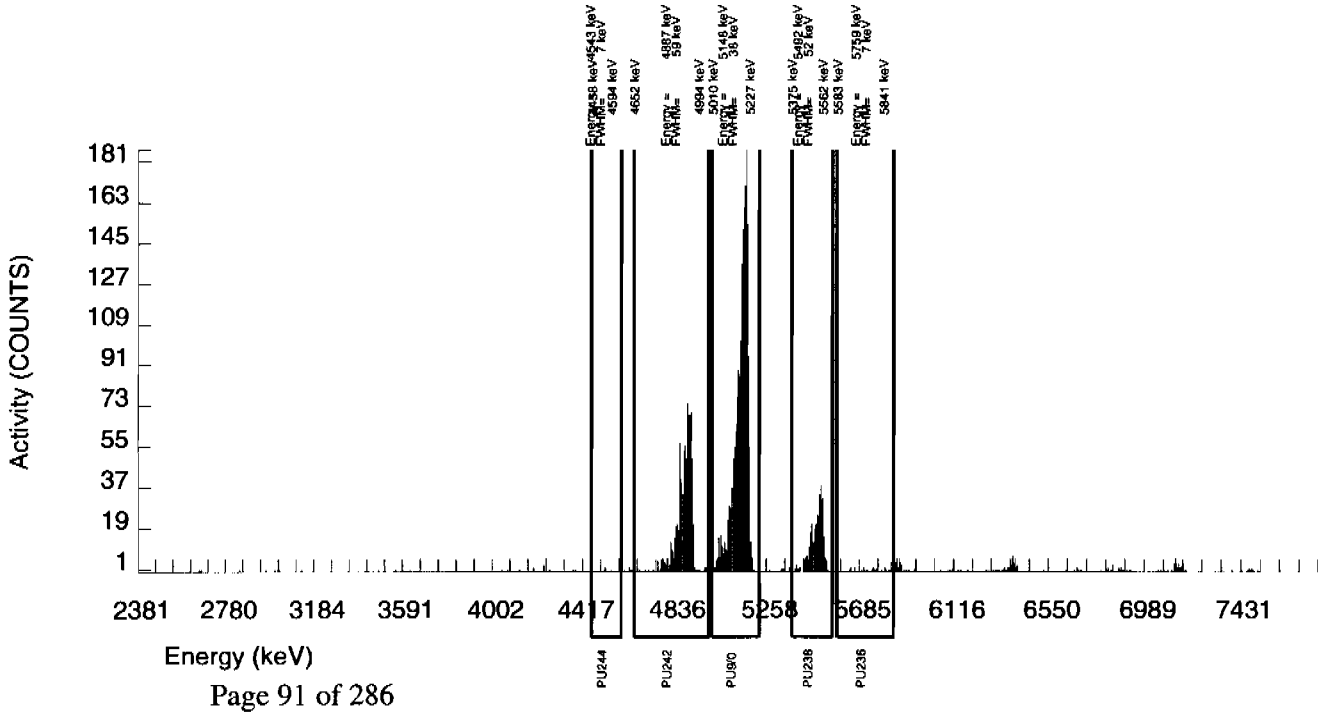

Radiochemistry Batch Checklist, Rev 9

Batch# 927532 Product: U Date: 12/7/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument blg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RBL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed. If applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analyses.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Denise Green 12/7/09

Secondary Review Performed By: JoeL 12/8/09

12/16

Uranium Que Sheet

30-NOV-09

Batch #: 927532 Analyst: HAKB First Client Due Date:16-DEC-09 Internal Due Date:05-DEC-09

Tracer Isotope: U-232/U-236 Tracer Code: 1283-E Expiration Date: 1/15/10 Vol: 0.1

LCS Isotope: U-238 LCS Code: SRM 0244-A Expiration Date: 10/31/20 Vol: 0.1088

Spike Isotope: U-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/2/09 Initials: HAKB Pipet ID: 4497063 Balance ID: 50410272 Witness: KM 12-2-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/f)	U Det #
241327001-1	RE03-09-13618	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	1	1	0.502	113
241327002-1	RE03-09-13622	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	2	2	0.500	114
241327003-1	RE03-09-13620	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	3	3	0.505	115
241327004-1	RE03-09-13619	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	4	4	0.507	116
241327005-1	RE03-09-13624	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	5	5	0.507	117
241327006-1	RE03-09-13623	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	6	6	0.512	118
241327007-1	RE03-09-13626	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	7	7	0.509	121
241327008-1	RE03-09-13621	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	8	8	0.501	122
241327009-1	RE03-09-13627	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	9	9	0.507	123
241327010-1	RE03-09-13625	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	10	10	0.526	124
241327011-1	RE03-10-6084	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	11	11	0.506	125
241327012-1	RE03-10-6085	SAMPLE		.1 pCi/g	SOIL	LANL010	16-NOV-09	12	12	0.508	126
241425001-1	WST03-10-2131	SAMPLE		.1 pCi/g	SOIL	LANL010	17-NOV-09	13	13	0.501	127
241425002-1	WST03-10-2130	SAMPLE		.1 pCi/g	SOIL	LANL010	17-NOV-09	14	14	0.500	128
1201983137-1	MB for batch 927532	MB		.1 pCi/g	SOIL	QC ACCOUNT		15	15	1.0	129
1201983138-1	WST03-10-2131(241425001DUP)	DUP		.1 pCi/g	SOIL	QC ACCOUNT	17-NOV-09	16	16	0.505	130
1201983139-1	LCS for batch 927532	LCS		.1 pCi/g	SOIL	QC ACCOUNT		17	17	0.108	132

Choose SOP used: GL-RAD-A-011
GL-RAD-A-038
GL-RAD-A-045
GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: DS 12/7/09

GEL Laboratories LLC, Radiochemistry Division

12/8/09

Blank Correction Report

Batch ID 927532

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201983138	DUP	Uranium-233/234	0.505 g	0.851	0.0821	0.109	-.02336634	pCi/g	NO
		Uranium-235/236	0.505 g	0.0756	0.0201	0.0663	.009247525	pCi/g	NO
		Uranium-238	0.505 g	0.723	0.0718	0.0603	.003742574	pCi/g	NO
1201983139	LCS	Uranium-233/234	0.108 g	5.20	0.496	0.510	-.10925926	pCi/g	NO
		Uranium-235/236	0.108 g	0.228	0.0768	0.310	.043240741	pCi/g	NO
		Uranium-238	0.108 g	5.06	0.481	0.282	.0175	pCi/g	NO
1201983137	MB	Uranium-233/234	1.00 g	-0.0118	0.005	0.0573	-.0118	pCi/g	NO
		Uranium-235/236	1.00 g	0.00467	0.00332	0.0349	.00467	pCi/g	YES
		Uranium-238	1.00 g	0.00189	0.005	0.0317	.00189	pCi/g	YES
241327001	RE03-09-13618	Uranium-233/234	0.502 g	0.696	0.0714	0.116	-.02350598	pCi/g	NO
		Uranium-235/236	0.502 g	0.0329	0.0127	0.0702	.009302789	pCi/g	YES
		Uranium-238	0.502 g	0.621	0.0651	0.0638	.003764940	pCi/g	NO
241327002	RE03-09-13622	Uranium-233/234	0.500 g	0.848	0.0814	0.110	-.0236	pCi/g	NO
		Uranium-235/236	0.500 g	0.0715	0.0186	0.0667	.00934	pCi/g	NO
		Uranium-238	0.500 g	0.954	0.0889	0.0606	.00378	pCi/g	NO
241327003	RE03-09-13620	Uranium-233/234	0.505 g	0.951	0.0885	0.109	-.02336634	pCi/g	NO
		Uranium-235/236	0.505 g	0.0444	0.0169	0.0663	.009247525	pCi/g	YES
		Uranium-238	0.505 g	0.916	0.086	0.0602	.003742574	pCi/g	NO
241327004	RE03-09-13619	Uranium-233/234	0.507 g	0.845	0.0799	0.104	-.02327416	pCi/g	NO
		Uranium-235/236	0.507 g	0.0423	0.0137	0.0632	.009211045	pCi/g	YES
		Uranium-238	0.507 g	0.870	0.0817	0.0574	.003727811	pCi/g	NO
241327005	RE03-09-13624	Uranium-233/234	0.507 g	0.701	0.0723	0.117	-.02327416	pCi/g	NO
		Uranium-235/236	0.507 g	0.0715	0.0191	0.0711	.009211045	pCi/g	NO
		Uranium-238	0.507 g	0.879	0.0847	0.0647	.003727811	pCi/g	NO
241327006	RE03-09-13623	Uranium-233/234	0.512 g	0.836	0.0805	0.112	-.02304688	pCi/g	NO
		Uranium-235/236	0.512 g	0.0501	0.0155	0.068	.009121094	pCi/g	NO
		Uranium-238	0.512 g	0.800	0.0782	0.0618	.003691406	pCi/g	NO
241327007	RE03-09-13626	Uranium-233/234	0.509 g	0.993	0.0944	0.122	-.02318271	pCi/g	NO
		Uranium-235/236	0.509 g	0.0347	0.0166	0.0739	.009174853	pCi/g	YES
		Uranium-238	0.509 g	0.918	0.089	0.0672	.003713163	pCi/g	NO
241327008	RE03-09-13621	Uranium-233/234	0.501 g	0.837	0.0821	0.115	-.02355289	pCi/g	NO
		Uranium-235/236	0.501 g	0.0513	0.0159	0.0696	.009321357	pCi/g	NO
		Uranium-238	0.501 g	0.797	0.0801	0.0633	.003772455	pCi/g	NO
241327009	RE03-09-13627	Uranium-233/234	0.507 g	0.786	0.0761	0.106	-.02327416	pCi/g	NO
		Uranium-235/236	0.507 g	0.0301	0.0131	0.0642	.009211045	pCi/g	YES
		Uranium-238	0.507 g	0.766	0.0745	0.0584	.003727811	pCi/g	NO
241327010	RE03-09-13625	Uranium-233/234	0.526 g	0.997	0.0901	0.0996	-.02243346	pCi/g	NO
		Uranium-235/236	0.526 g	0.0568	0.0167	0.0606	.008878327	pCi/g	NO
		Uranium-238	0.526 g	0.939	0.0859	0.055	.003593156	pCi/g	NO
241327011	RE03-10-6084	Uranium-233/234	0.506 g	0.578	0.0615	0.112	-.02332016	pCi/g	NO
		Uranium-235/236	0.506 g	0.041	0.014	0.068	.009229249	pCi/g	YES

12/8/09

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241327011	RE03-10-6084	Uranium-238	0.506 g	0.586	0.0621	0.0618	.003735178	pCi/g	NO
241327012	RE03-10-6085	Uranium-233/234	0.508 g	0.855	0.0838	0.115	-.02322835	pCi/g	NO
		Uranium-235/236	0.508 g	0.0282	0.0177	0.0702	.009192913	pCi/g	YES
		Uranium-238	0.508 g	0.791	0.0791	0.0638	.003720472	pCi/g	NO
241425001	WST03-10-2131	Uranium-233/234	0.501 g	0.903	0.0862	0.115	-.02355289	pCi/g	NO
		Uranium-235/236	0.501 g	0.0422	0.0158	0.070	.009321357	pCi/g	YES
		Uranium-238	0.501 g	0.793	0.0782	0.0636	.003772455	pCi/g	NO
241425002	WST03-10-2130	Uranium-233/234	0.500 g	0.652	0.0671	0.110	-.0236	pCi/g	NO
		Uranium-235/236	0.500 g	0.0449	0.0145	0.0669	.00934	pCi/g	YES
		Uranium-238	0.500 g	0.515	0.0571	0.0608	.00378	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241327001_UU SAMPLE QTY: 0.502 G
DETECTOR NUMBER :45-111B4 AVERAGE %EFFICIENCY :25.0861 % YIELD : 93.953	COUNT DATE: 4-DEC-2009 20:54:54 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24690 dpm RESULTS : 4.92964 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B113.CNF;416 BKG DATE : 29-NOV-2009 EFF FILE : W113.CNF;119 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	187.000	182.752	3.000	5.9398	100.0000	6.96E-01	7.14E-02	5.26E-02	1.16E-01	5.23E-02
U232	5302.100	1241.000	1236.000	5.000	2.2361	100.0000	4.71E+00	3.55E-01	1.98E-02	4.99E-02	1.34E-01
U-235	4391.000	7.000	7.000	0.000	2.6249	80.90000	3.29E-02	1.27E-02	2.87E-02	7.02E-02	1.25E-02
U-238	4184.730	163.000	163.000	0.000	3.0201	100.0000	6.21E-01	6.51E-02	2.67E-02	6.38E-02	4.86E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

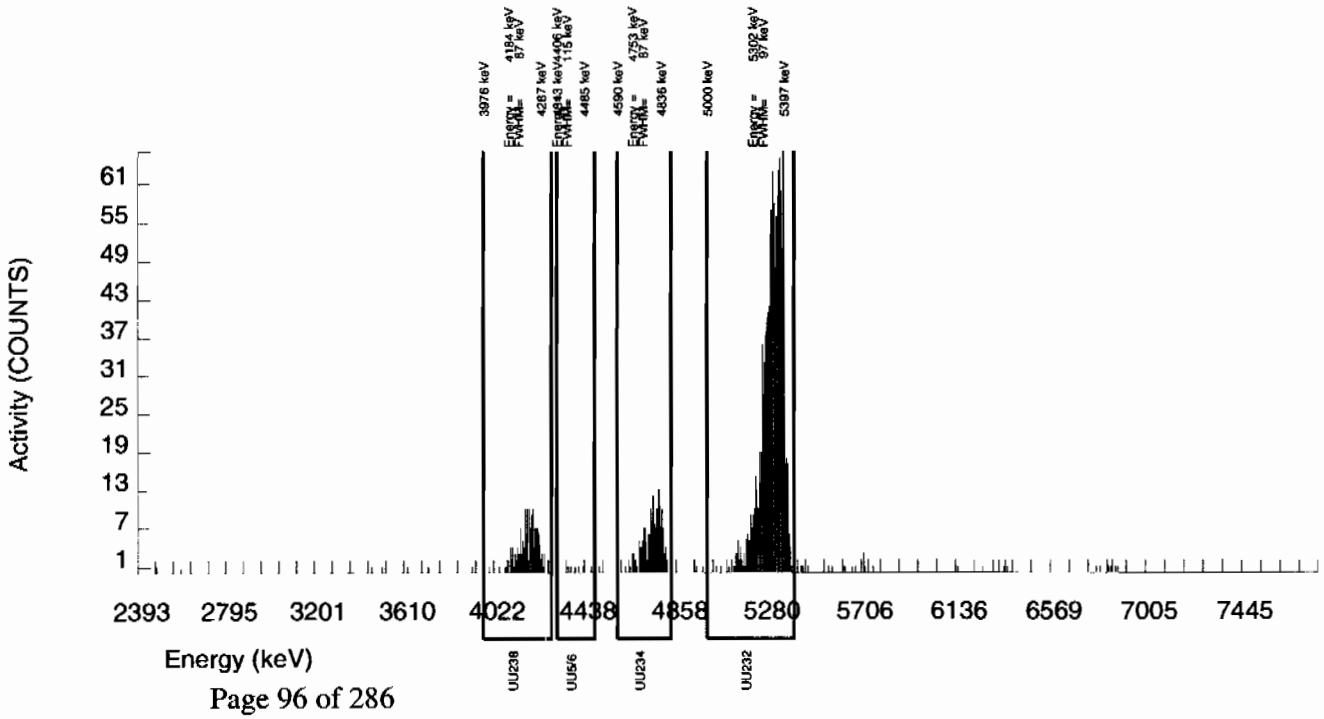

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327002_UU
SAMPLE QTY: 0.500 G

DETECTOR NUMBER :78258
AVERAGE %EFFICIENCY :25.4802
% YIELD : 97.814

COUNT DATE: 4-DEC-2009 20:54:57
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B114.CNF;417
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 5.13219 dpm	EFF FILE : W114.CNF;115
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	239.000	234.680	3.000	5.9398	100.0000	8.48E-01	8.14E-02	4.99E-02	1.10E-01	5.61E-02
U232	5302.100	1312.000	1307.000	5.000	2.2361	100.0000	4.73E+00	3.54E-01	1.88E-02	4.74E-02	1.31E-01
U-235	4391.000	16.000	16.000	0.000	2.6249	80.90000	7.15E-02	1.86E-02	2.73E-02	6.67E-02	1.79E-02
U-238	4184.730	266.000	264.000	2.000	3.0201	100.0000	9.54E-01	8.89E-02	2.54E-02	6.06E-02	5.92E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

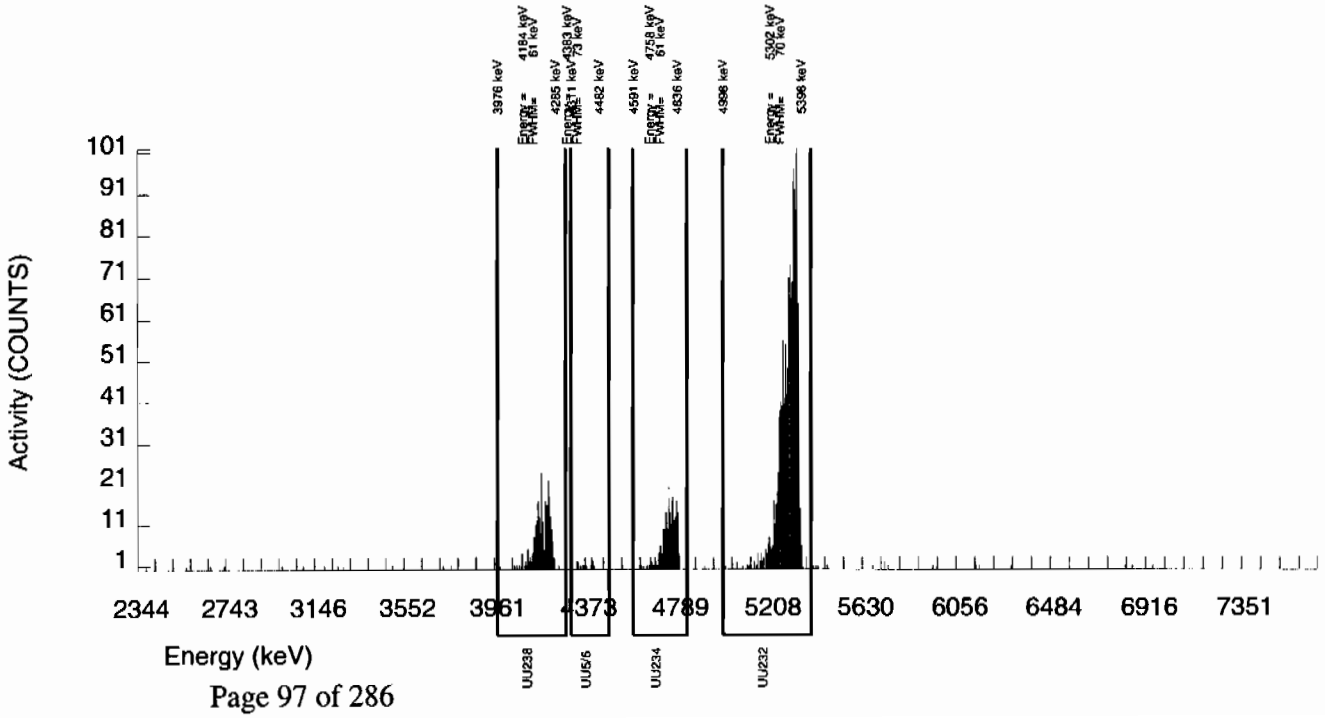

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532 SAMPLE DATE : 16-NOV-2009 00:00:00	SAMPLE ID : S0241327003_UU SAMPLE QTY: 0.505 G
DETECTOR NUMBER :79995 AVERAGE %EFFICIENCY :25.7622 % YIELD : 96.373	COUNT DATE: 4-DEC-2009 20:54:59 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24690 dpm RESULTS : 5.05660 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B115.CNF;424 BKG DATE : 29-NOV-2009 EFF FILE : W115.CNF;143 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	268.000	264.685	2.000	5.9398	100.0000	9.51E-01	8.85E-02	4.96E-02	1.09E-01	5.89E-02
U232	5302.100	1307.000	1302.000	5.000	2.2361	100.0000	4.68E+00	3.50E-01	1.87E-02	4.71E-02	1.30E-01
U-235	4391.000	12.000	10.000	2.000	2.6249	80.90000	4.44E-02	1.69E-02	2.71E-02	6.63E-02	1.66E-02
U-238	4184.730	257.000	255.000	2.000	3.0201	100.0000	9.16E-01	8.60E-02	2.52E-02	6.02E-02	5.78E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

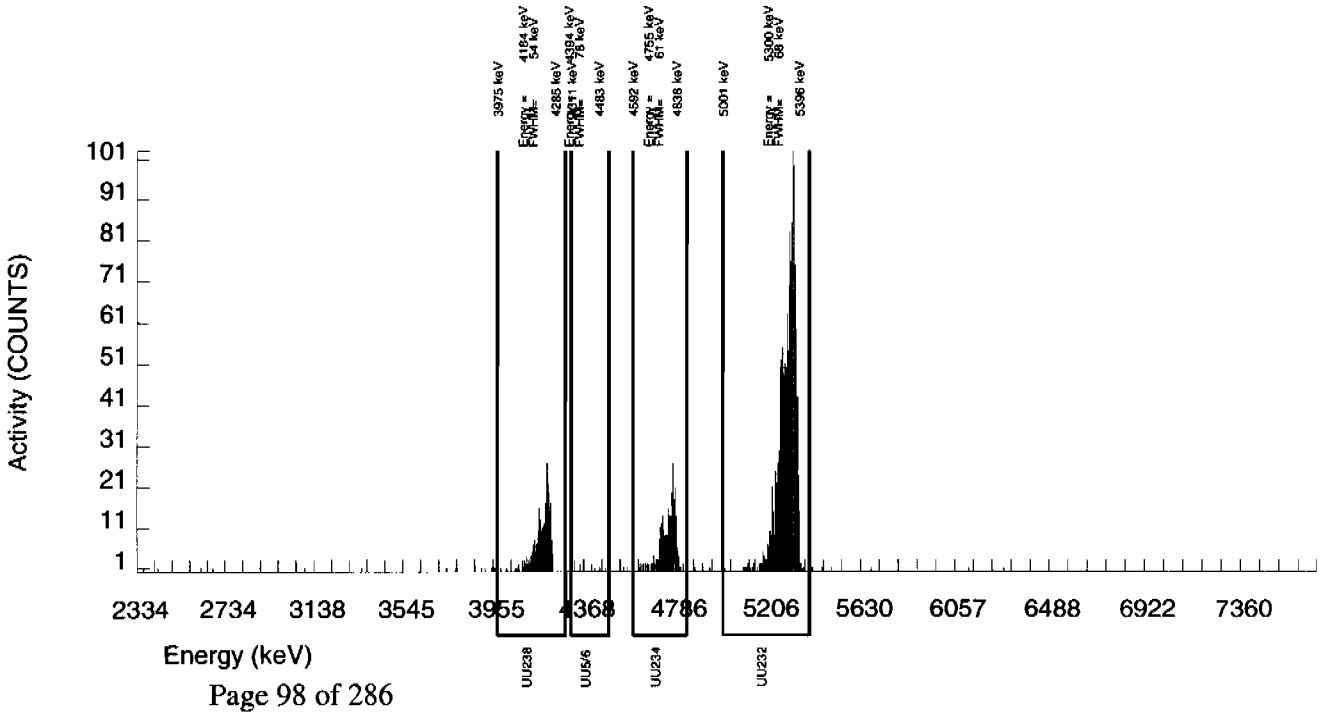

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327004_UU
SAMPLE QTY: 0.507 G

DETECTOR NUMBER :45-132FF2
AVERAGE %EFFICIENCY :26.3089
% YIELD : 98.574

COUNT DATE: 4-DEC-2009 20:55:02
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B116.CNF;411
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 5.17210 dpm	EFF FILE : W116.CNF;103
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	250.000	246.626	2.000	5.9398	100.0000	8.45E-01	7.99E-02	4.73E-02	1.04E-01	5.42E-02
U232	5302.100	1378.000	1360.000	18.000	4.2426	100.0000	4.66E+00	3.48E-01	3.38E-02	7.69E-02	1.28E-01
U-235	4391.000	10.000	10.000	0.000	2.6249	80.90000	4.23E-02	1.37E-02	2.59E-02	6.32E-02	1.34E-02
U-238	4184.730	256.000	254.000	2.000	3.0201	100.0000	8.70E-01	8.17E-02	2.41E-02	5.74E-02	5.50E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

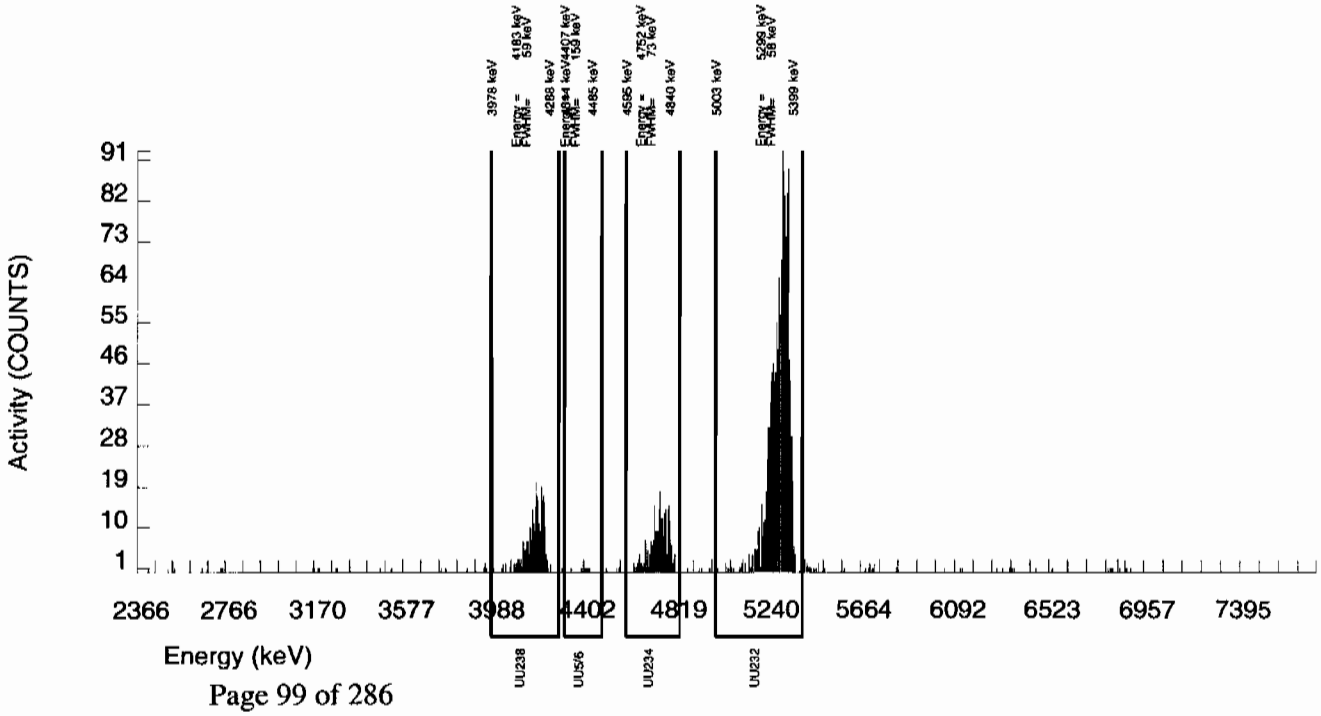

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327005_UU
SAMPLE QTY: 0.507 G

DETECTOR NUMBER :33450
AVERAGE %EFFICIENCY :25.2186
% YIELD : 91.342

COUNT DATE: 4-DEC-2009 20:55:04
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B117.CNF;421
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 4.79264 dpm	EFF FILE : W117.CNF;115
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	187.000	181.780	4.000	5.9398	100.0000	7.01E-01	7.23E-02	5.33E-02	1.17E-01	5.31E-02
U232	5302.100	1217.000	1208.000	9.000	3.0000	100.0000	4.66E+00	3.53E-01	2.69E-02	6.43E-02	1.35E-01
U-235	4391.000	15.000	15.000	0.000	2.6249	80.90000	7.15E-02	1.91E-02	2.91E-02	7.11E-02	1.85E-02
U-238	4184.730	228.000	228.000	0.000	3.0201	100.0000	8.79E-01	8.47E-02	2.71E-02	6.46E-02	5.82E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

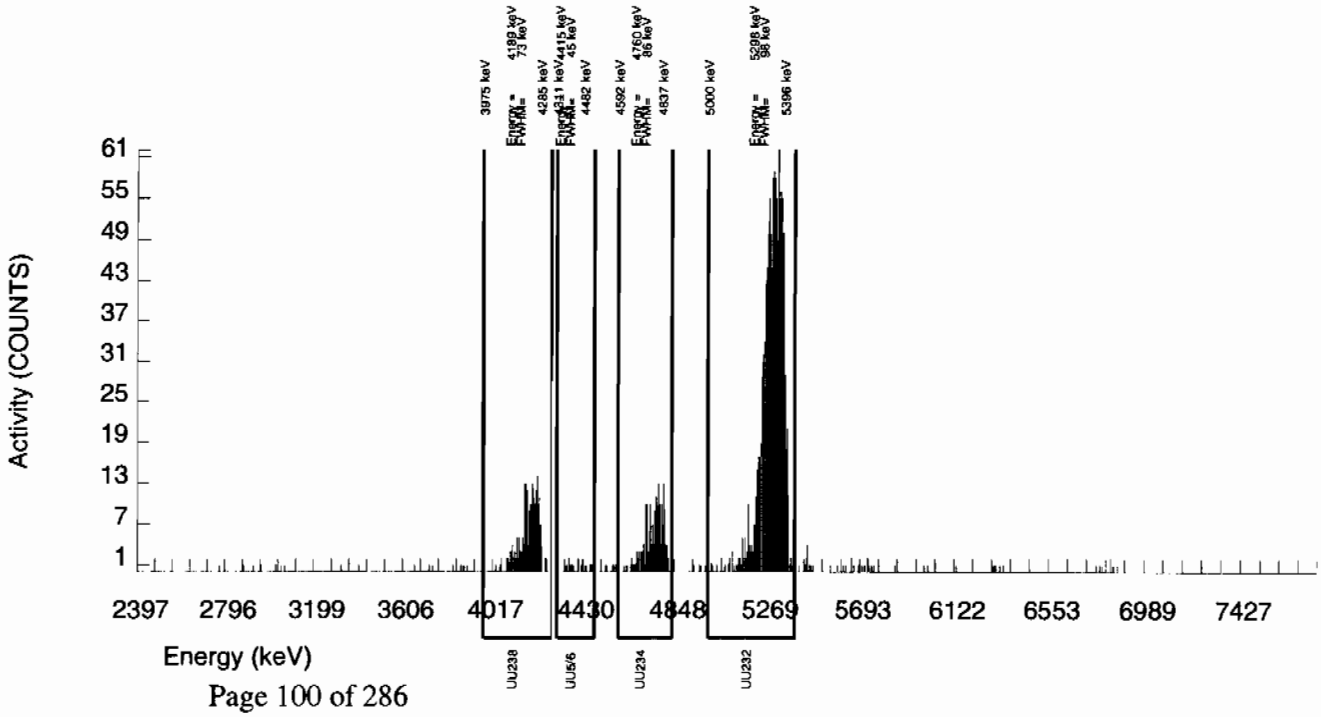

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327006_UU
SAMPLE QTY: 0.512 G

DETECTOR NUMBER :75544
AVERAGE %EFFICIENCY :25.8311
% YIELD : 92.425

COUNT DATE: 4-DEC-2009 20:55:06
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B118.CNF;420
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 4.84944 dpm	EFF FILE : W118.CNF;112
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	228.000	226.735	0.000	5.9398	100.0000	8.36E-01	8.05E-02	5.09E-02	1.12E-01	5.55E-02
U232	5302.100	1263.000	1252.000	11.000	3.3166	100.0000	4.62E+00	3.48E-01	2.84E-02	6.69E-02	1.32E-01
U-235	4391.000	11.000	11.000	0.000	2.6249	80.90000	5.01E-02	1.55E-02	2.78E-02	6.80E-02	1.51E-02
U-238	4184.730	219.000	217.000	2.000	3.0201	100.0000	8.00E-01	7.82E-02	2.59E-02	6.18E-02	5.48E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

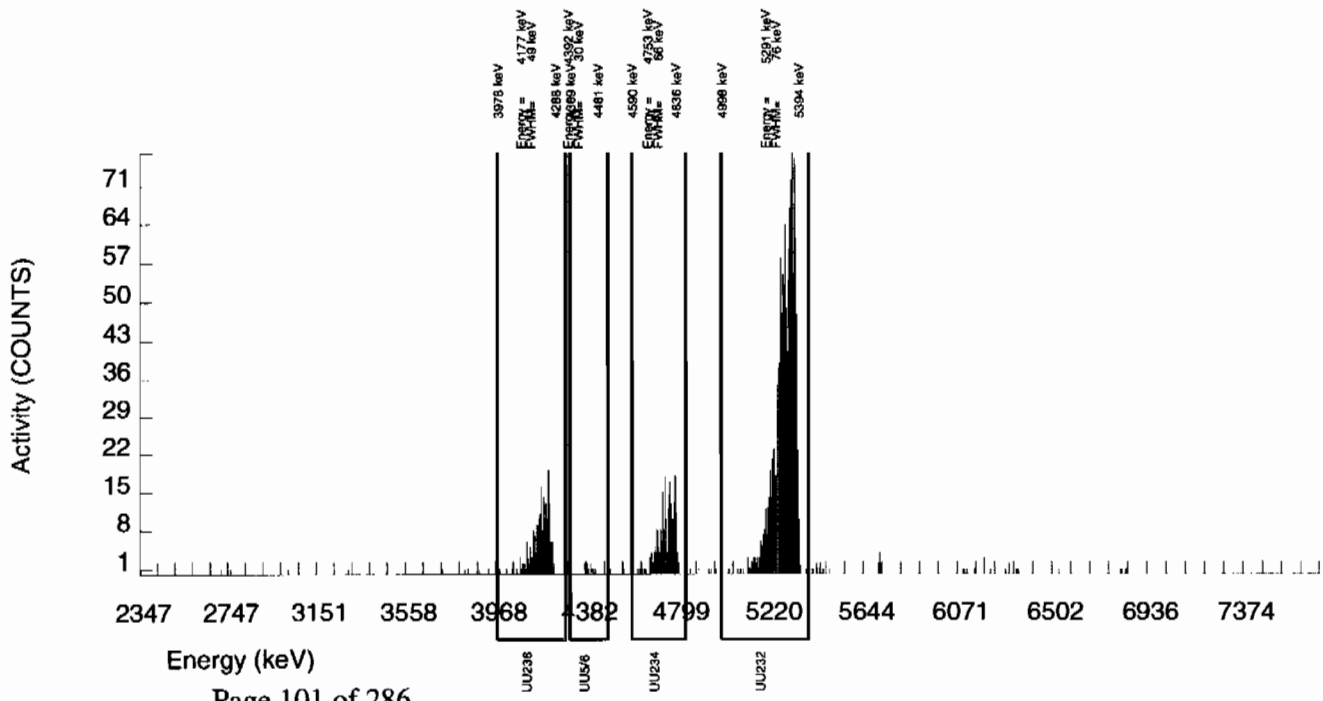

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327007_UU
SAMPLE QTY: 0.509 G

DETECTOR NUMBER :75545
AVERAGE %EFFICIENCY :24.7357
% YIELD : 89.271

COUNT DATE: 4-DEC-2009 20:55:09
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B121.CNF;416
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 4.68397 dpm	EFF FILE : W121.CNF;113
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	251.000	247.830	2.000	5.9398	100.0000	9.93E-01	9.44E-02	5.54E-02	1.22E-01	6.36E-02
U232	5302.100	1161.000	1158.000	3.000	1.7321	100.0000	4.64E+00	3.54E-01	1.61E-02	4.32E-02	1.37E-01
U-235	4391.000	9.000	7.000	2.000	2.6249	80.90000	3.47E-02	1.66E-02	3.03E-02	7.39E-02	1.64E-02
U-238	4184.730	232.000	229.000	3.000	3.0201	100.0000	9.18E-01	8.90E-02	2.82E-02	6.72E-02	6.14E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

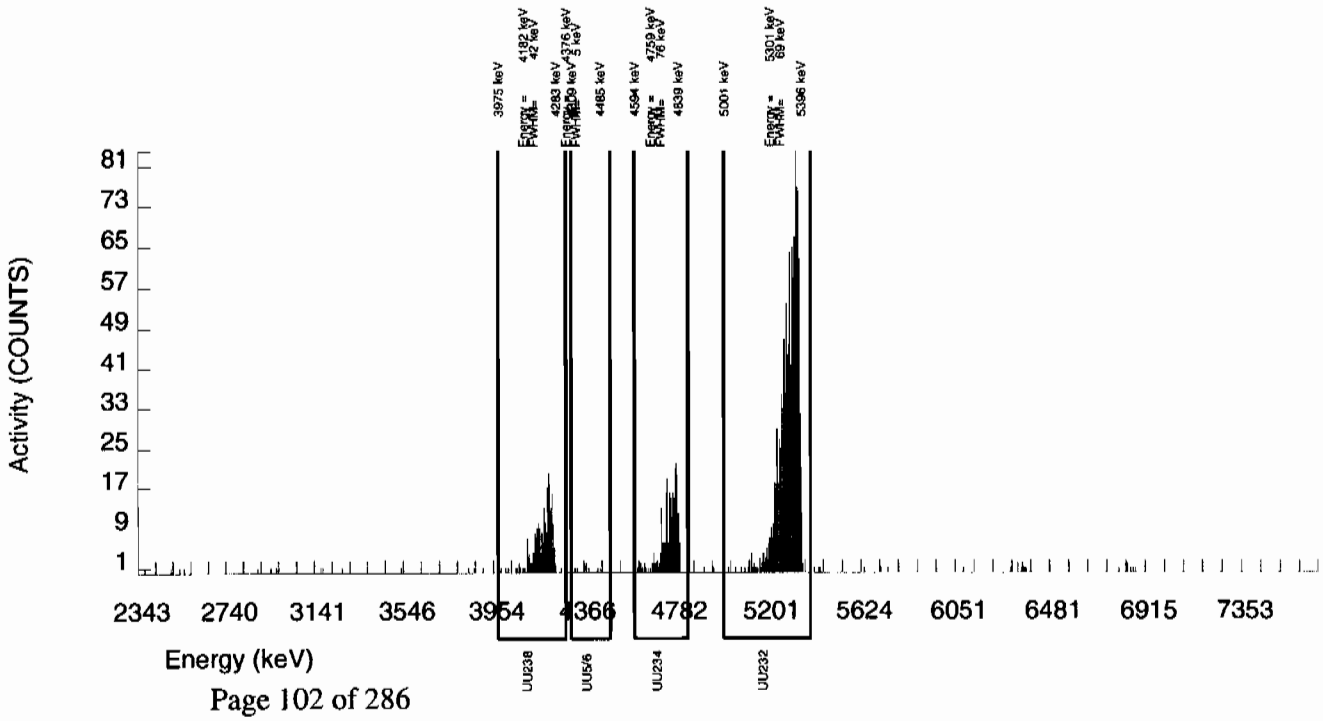

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327008_UU
SAMPLE QTY: 0.501 G

DETECTOR NUMBER :75546
AVERAGE %EFFICIENCY :25.2661
% YIELD : 94.265

COUNT DATE: 4-DEC-2009 20:55:11
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B122.CNF;418
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 4.94601 dpm	EFF FILE : W122.CNF;116
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	229.000	221.739	6.000	5.9398	100.0000	8.37E-01	8.21E-02	5.22E-02	1.15E-01	5.77E-02
U232	5302.100	1256.000	1249.000	7.000	2.6458	100.0000	4.72E+00	3.55E-01	2.32E-02	5.67E-02	1.34E-01
U-235	4391.000	11.000	11.000	0.000	2.6249	80.90000	5.13E-02	1.59E-02	2.85E-02	6.96E-02	1.55E-02
U-238	4184.730	222.000	211.000	11.000	3.0201	100.0000	7.97E-01	8.01E-02	2.65E-02	6.33E-02	5.76E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

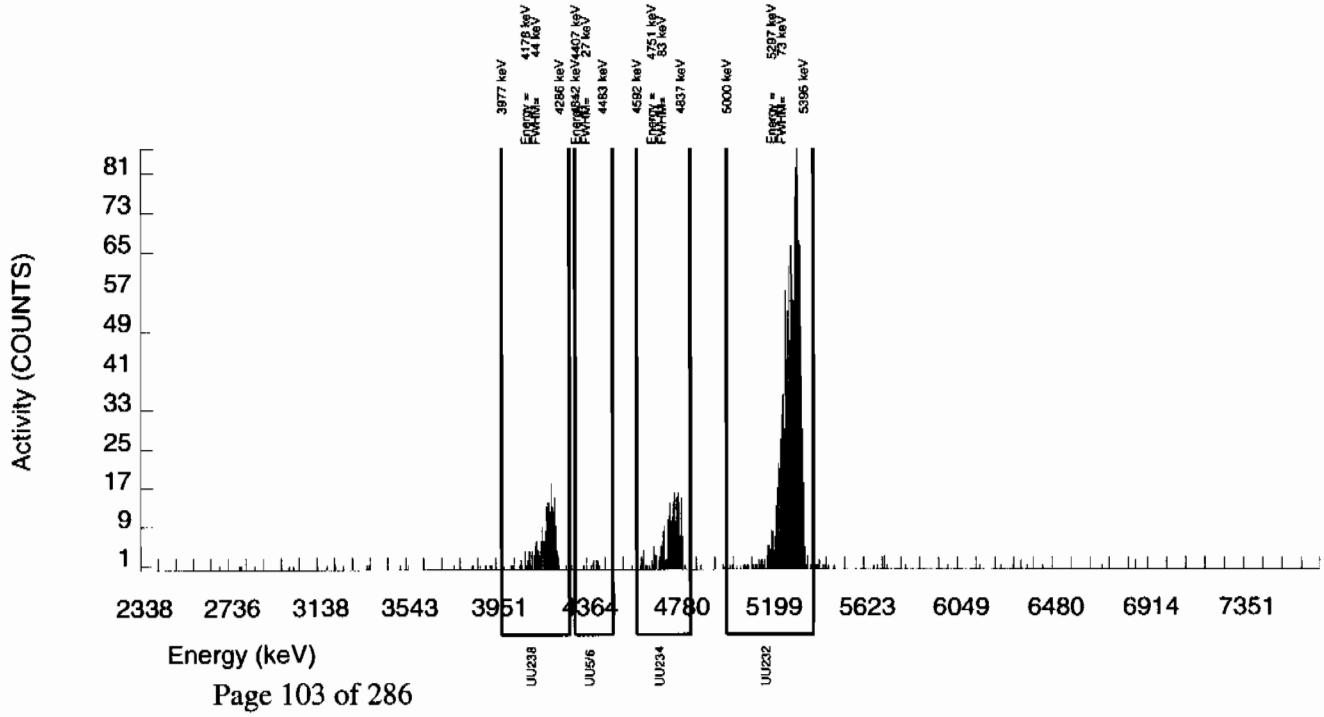

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327009_UU
SAMPLE QTY: 0.507 G

DETECTOR NUMBER :45-142V3
AVERAGE %EFFICIENCY :26.0328
% YIELD : 98.008

COUNT DATE: 4-DEC-2009 20:55:14
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B123.CNF;416
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 5.14240 dpm	EFF FILE : W123.CNF;112
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	230.000	225.649	3.000	5.9398	100.0000	7.86E-01	7.61E-02	4.81E-02	1.06E-01	5.30E-02
U232	5302.100	1356.000	1338.000	18.000	4.2426	100.0000	4.66E+00	3.49E-01	3.44E-02	7.82E-02	1.29E-01
U-235	4391.000	8.000	7.000	1.000	2.6249	80.90000	3.01E-02	1.31E-02	2.63E-02	6.42E-02	1.29E-02
U-238	4184.730	222.000	220.000	2.000	3.0201	100.0000	7.66E-01	7.45E-02	2.45E-02	5.84E-02	5.21E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

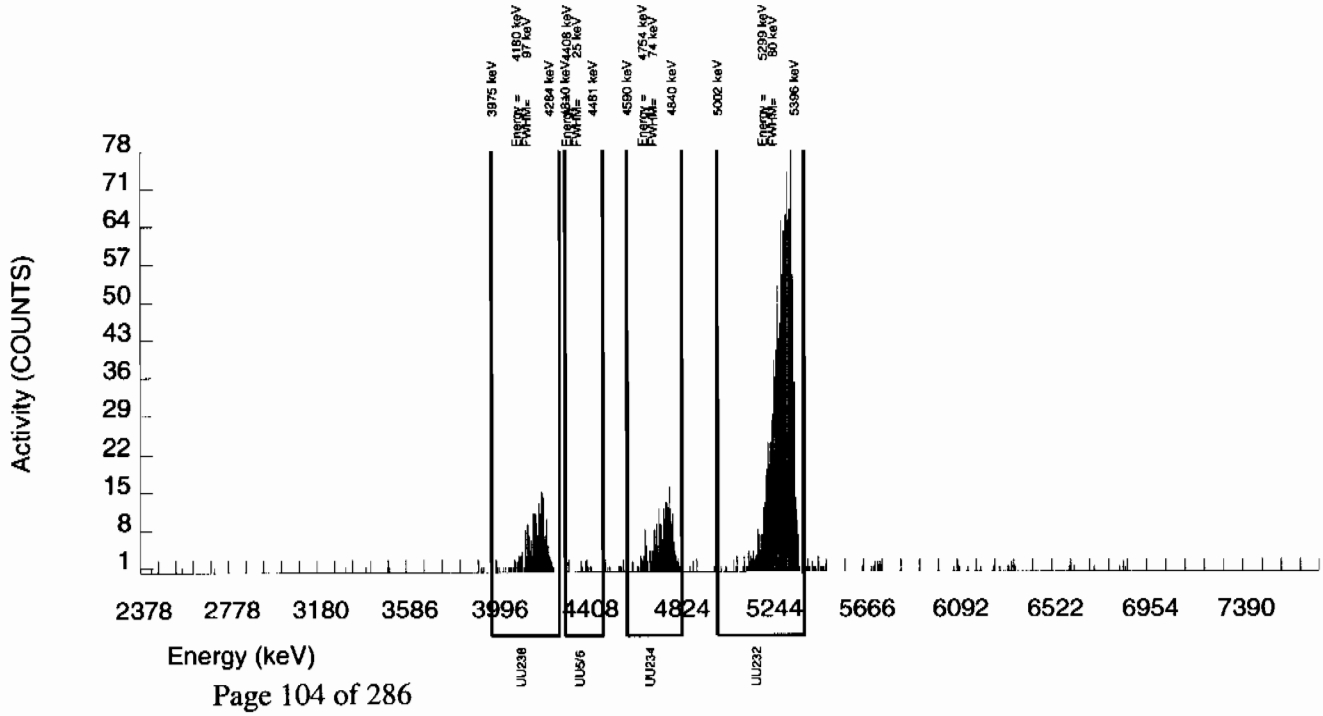

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327010_UU
SAMPLE QTY: 0.526 G

DETECTOR NUMBER :45-142V2
AVERAGE %EFFICIENCY :25.9543
% YIELD : 100.509

COUNT DATE: 4-DEC-2009 20:55:15
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B124.CNF;412
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 5.27359 dpm	EFF FILE : W124.CNF;108
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	309.000	303.618	4.000	5.9398	100.0000	9.97E-01	9.01E-02	4.54E-02	9.96E-02	5.80E-02
U232	5302.100	1375.000	1368.000	7.000	2.6458	100.0000	4.49E+00	3.34E-01	2.02E-02	4.93E-02	1.22E-01
U-235	4391.000	15.000	14.000	1.000	2.6249	80.90000	5.68E-02	1.67E-02	2.48E-02	6.06E-02	1.62E-02
U-238	4184.730	289.000	286.000	3.000	3.0201	100.0000	9.39E-01	8.59E-02	2.31E-02	5.50E-02	5.61E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

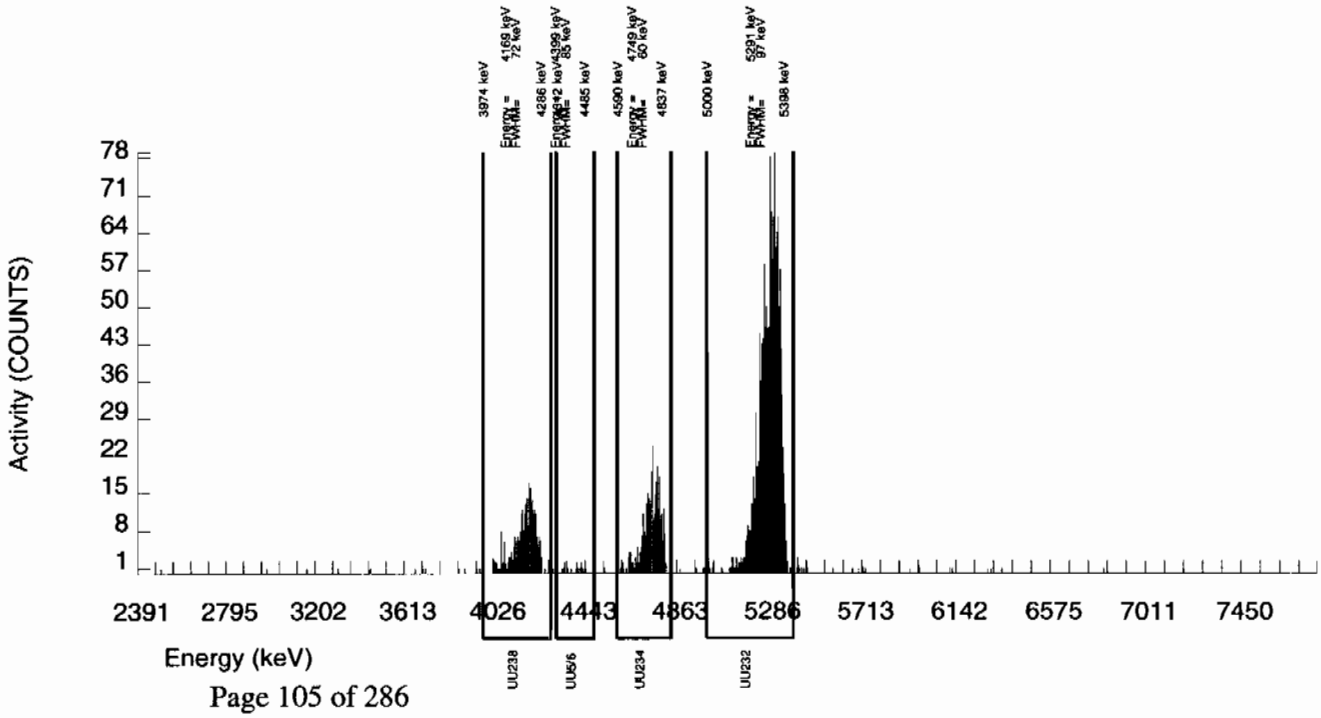

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327011_UU
SAMPLE QTY: 0.506 G

DETECTOR NUMBER :75547
AVERAGE %EFFICIENCY :26.0896
% YIELD : 92.532

COUNT DATE: 4-DEC-2009 20:55:18
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B125.CNF;422
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 4.85507 dpm	EFF FILE : W125.CNF;126
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	159.000	156.721	1.000	5.9398	100.0000	5.78E-01	6.15E-02	5.10E-02	1.12E-01	4.65E-02
U232	5302.100	1269.000	1266.000	3.000	1.7321	100.0000	4.67E+00	3.51E-01	1.49E-02	3.97E-02	1.32E-01
U-235	4391.000	9.000	9.000	0.000	2.6249	80.90000	4.10E-02	1.40E-02	2.78E-02	6.80E-02	1.37E-02
U-238	4184.730	160.000	159.000	1.000	3.0201	100.0000	5.86E-01	6.21E-02	2.59E-02	6.18E-02	4.68E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

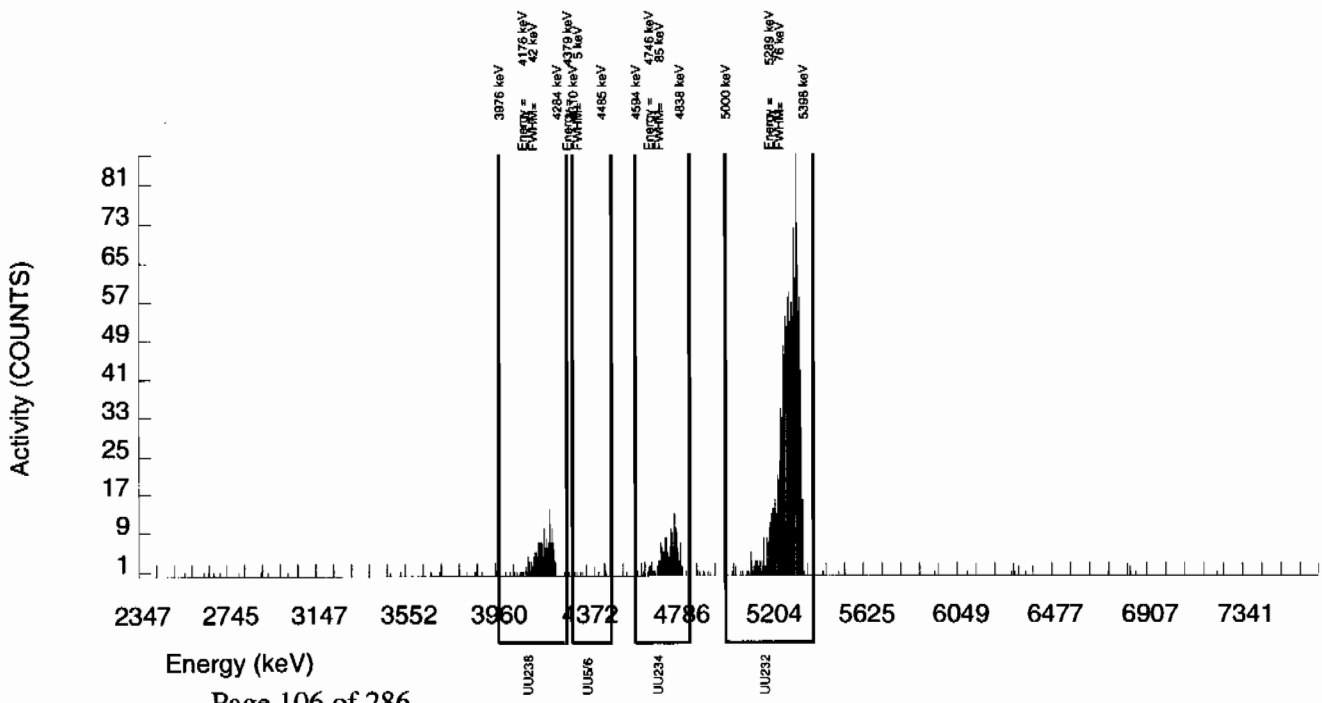

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 16-NOV-2009 00:00:00

SAMPLE ID : S0241327012_UU
SAMPLE QTY: 0.508 G

DETECTOR NUMBER :75548
AVERAGE %EFFICIENCY :25.0901
% YIELD : 92.875

COUNT DATE: 4-DEC-2009 20:55:21
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B126.CNF;421
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24690 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 4.87304 dpm	EFF FILE : W126.CNF;128
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	232.000	224.766	6.000	5.9398	100.0000	8.55E-01	8.38E-02	5.26E-02	1.15E-01	5.86E-02
U232	5302.100	1243.000	1222.000	21.000	4.5826	100.0000	4.65E+00	3.53E-01	4.06E-02	9.14E-02	1.35E-01
U-235	4391.000	10.000	6.000	4.000	2.6249	80.90000	2.82E-02	1.77E-02	2.87E-02	7.02E-02	1.76E-02
U-238	4184.730	214.000	208.000	6.000	3.0201	100.0000	7.91E-01	7.91E-02	2.67E-02	6.38E-02	5.64E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

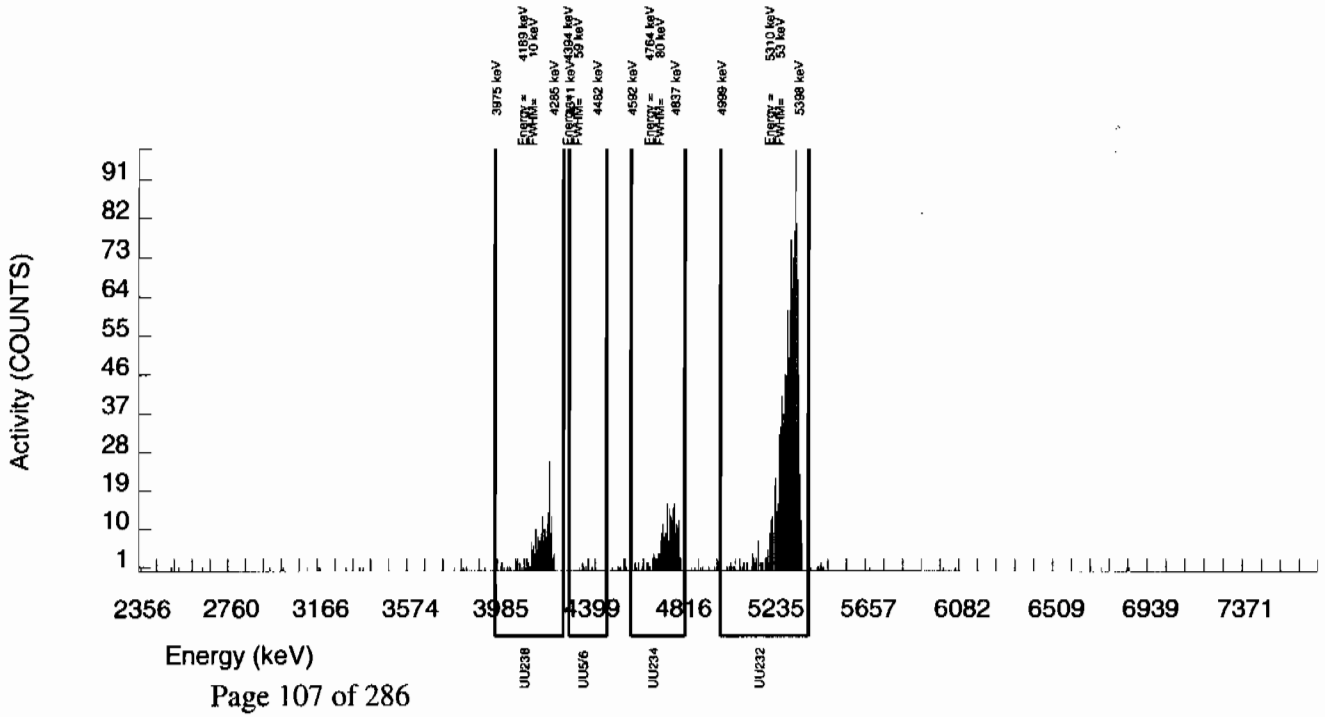

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 17-NOV-2009 00:00:00

SAMPLE ID : S0241425001_UU
SAMPLE QTY: 0.501 G

DETECTOR NUMBER :78770
AVERAGE %EFFICIENCY :24.8133
% YIELD : 95.447

COUNT DATE: 4-DEC-2009 20:55:23
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B127.CNF;425
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24676 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 5.00788 dpm	EFF FILE : W127.CNF;119
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	240.000	237.746	1.000	5.9398	100.0000	9.03E-01	8.62E-02	5.25E-02	1.15E-01	5.88E-02
U232	5302.100	1247.000	1242.000	5.000	2.2361	100.0000	4.72E+00	3.56E-01	1.97E-02	4.98E-02	1.34E-01
U-235	4391.000	10.000	9.000	1.000	2.6249	80.90000	4.22E-02	1.58E-02	2.87E-02	7.00E-02	1.56E-02
U-238	4184.730	210.000	209.000	1.000	3.0201	100.0000	7.93E-01	7.82E-02	2.67E-02	6.36E-02	5.51E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

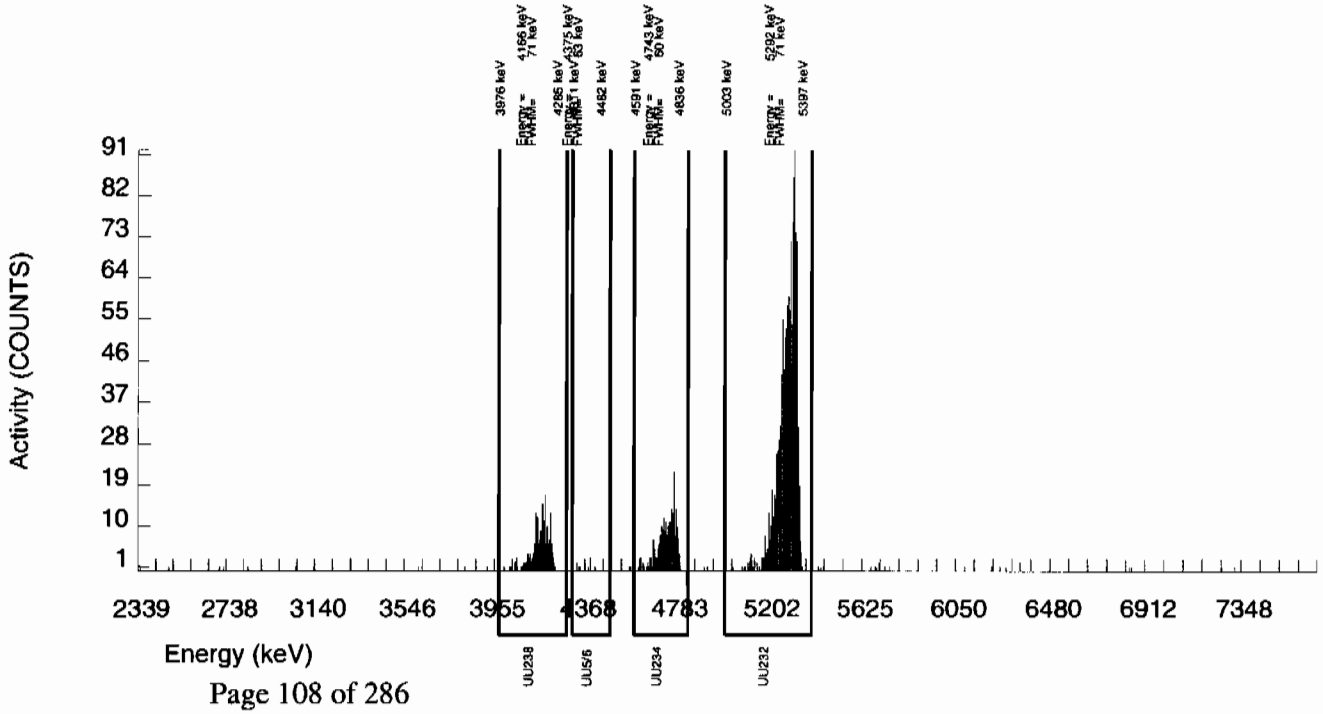

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 2-DEC-2009 00:00:00.

SAMPLE ID : S1201983137_UU
SAMPLE QTY: 1.000 G

DETECTOR NUMBER :76227
AVERAGE %EFFICIENCY :26.2690
% YIELD : 90.739

COUNT DATE: 4-DEC-2009 20:55:29
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B129.CNF;420
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24459 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 4.75888 dpm	EFF FILE : W129.CNF;124
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	1.000	-6.262	6.000	5.9398	100.0000	-1.18E-02	5.00E-03	2.61E-02	5.73E-02	5.00E-03
U232	5302.100	1254.000	1250.000	4.000	2.0000	100.0000	2.36E+00	1.77E-01	8.79E-03	2.27E-02	6.70E-02
U-235	4391.000	2.000	2.000	0.000	2.6249	80.90000	4.67E-03	3.32E-03	1.43E-02	3.49E-02	3.30E-03
U-238	4184.730	4.000	1.000	3.000	3.0201	100.0000	1.89E-03	5.00E-03	1.33E-02	3.17E-02	5.00E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

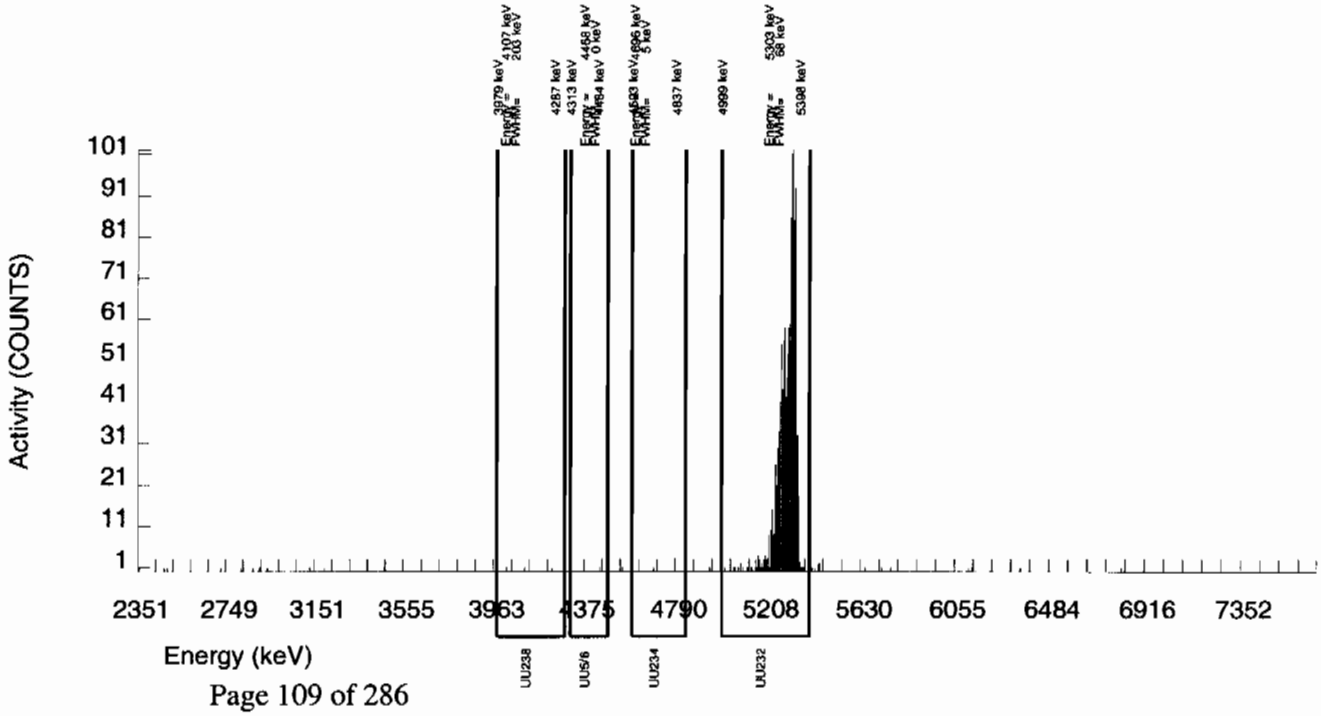

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 17-NOV-2009 00:00:00

SAMPLE ID : S1201983138_UU
SAMPLE QTY: 0.505 G

DETECTOR NUMBER :76228
AVERAGE %EFFICIENCY :24.6777
% YIELD : 100.531

COUNT DATE: 4-DEC-2009 20:55:31
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B130.CNF;420
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24676 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 5.27460 dpm	EFF FILE : W130.CNF;126
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	245.000	236.686	7.000	5.9398	100.0000	8.51E-01	8.21E-02	4.97E-02	1.09E-01	5.69E-02
U232	5302.100	1305.000	1301.000	4.000	2.0000	100.0000	4.68E+00	3.50E-01	1.67E-02	4.32E-02	1.30E-01
U-235	4391.000	18.000	17.000	1.000	2.6249	80.90000	7.56E-02	2.01E-02	2.71E-02	6.63E-02	1.94E-02
U-238	4184.730	202.000	201.000	1.000	3.0201	100.0000	7.23E-01	7.18E-02	2.53E-02	6.03E-02	5.12E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

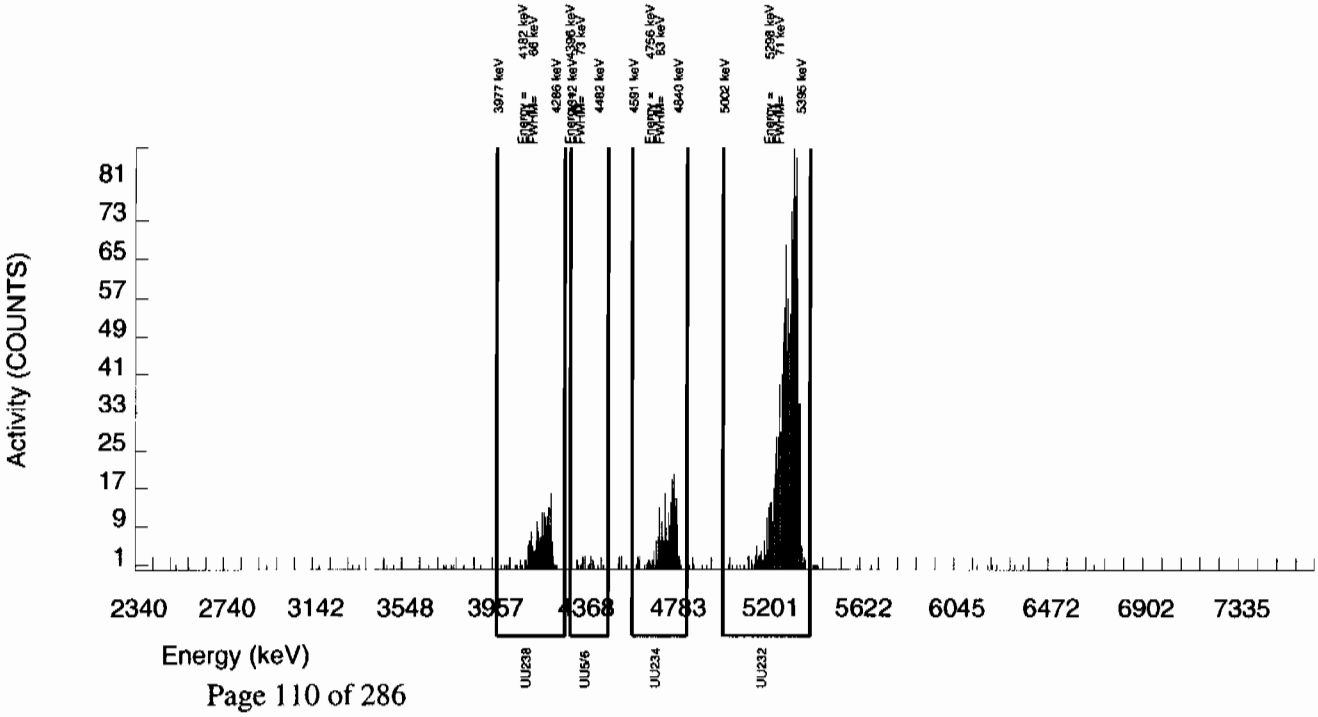

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 927532
SAMPLE DATE : 2-DEC-2009 00:00:00.

SAMPLE ID : S1201983139_UU
SAMPLE QTY: 0.108 G

DETECTOR NUMBER :67579
AVERAGE %EFFICIENCY :24.9186
% YIELD : 99.636

COUNT DATE: 4-DEC-2009 20:55:33
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B132.CNF;412
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24459 dpm	BKG DATE : 29-NOV-2009
		RESULTS : 5.22548 dpm	EFF FILE : W132.CNF;126
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	319.000	309.685	8.000	5.9398	100.0000	5.20E+00	4.96E-01	2.32E-01	5.10E-01	3.03E-01
U232	5302.100	1310.000	1302.000	8.000	2.8284	100.0000	2.19E+01	1.76E+00	1.11E-01	2.67E-01	6.10E-01
U-235	4391.000	12.000	11.000	1.000	2.6249	80.90000	2.28E-01	7.68E-02	1.27E-01	3.10E-01	7.49E-02
U-238	4184.730	303.000	301.000	2.000	3.0201	100.0000	5.06E+00	4.81E-01	1.18E-01	2.82E-01	2.93E-01

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

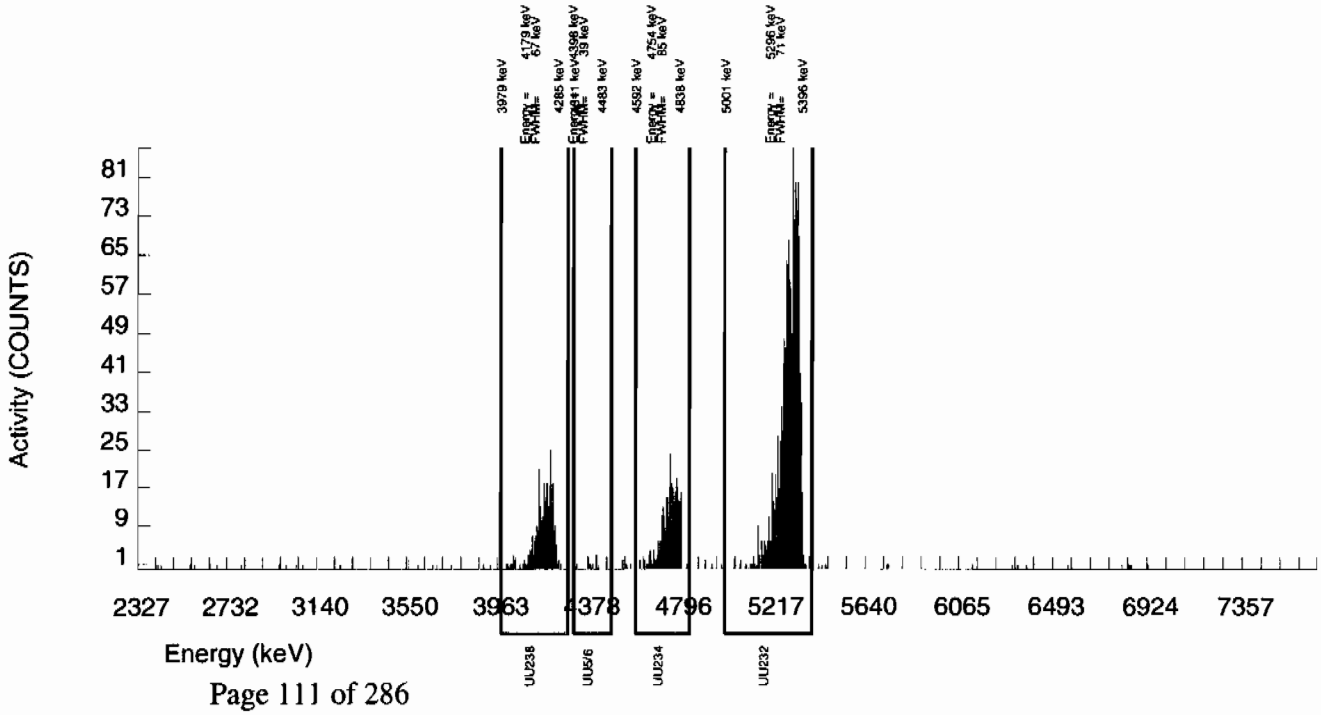

BACKGROUND AND EFFICIENCY DATA

QA filename : DKA100:[ENV_ALPHA.QA.W]W007.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.290108 through 0.310108

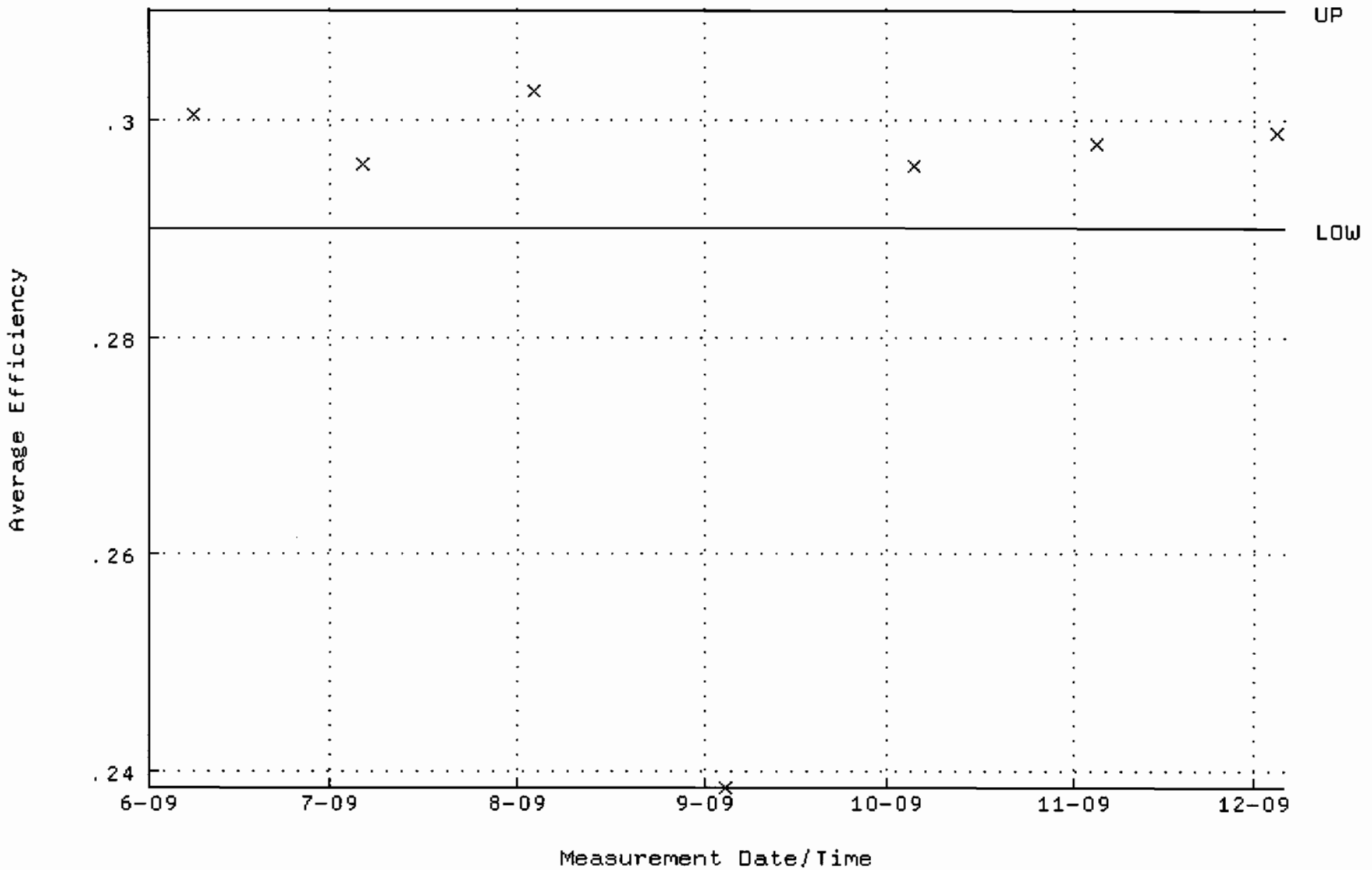

QA filename : DKA100:[ENV_ALPHA.QA.W]W007.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 87.0687 through 96.2339

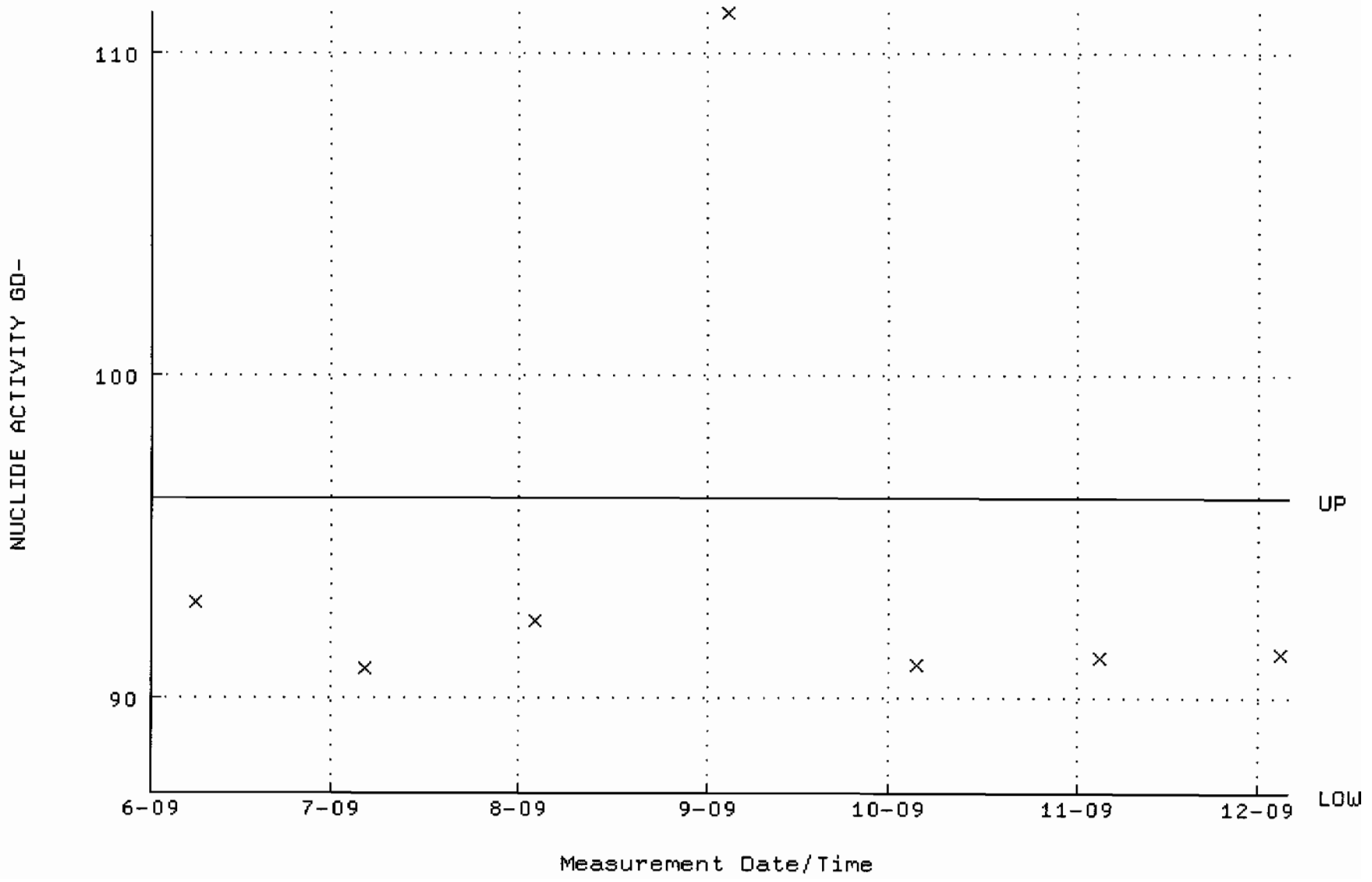

QA filename : DKA100:[ENV_ALPHA.QA.B]B007.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:20 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

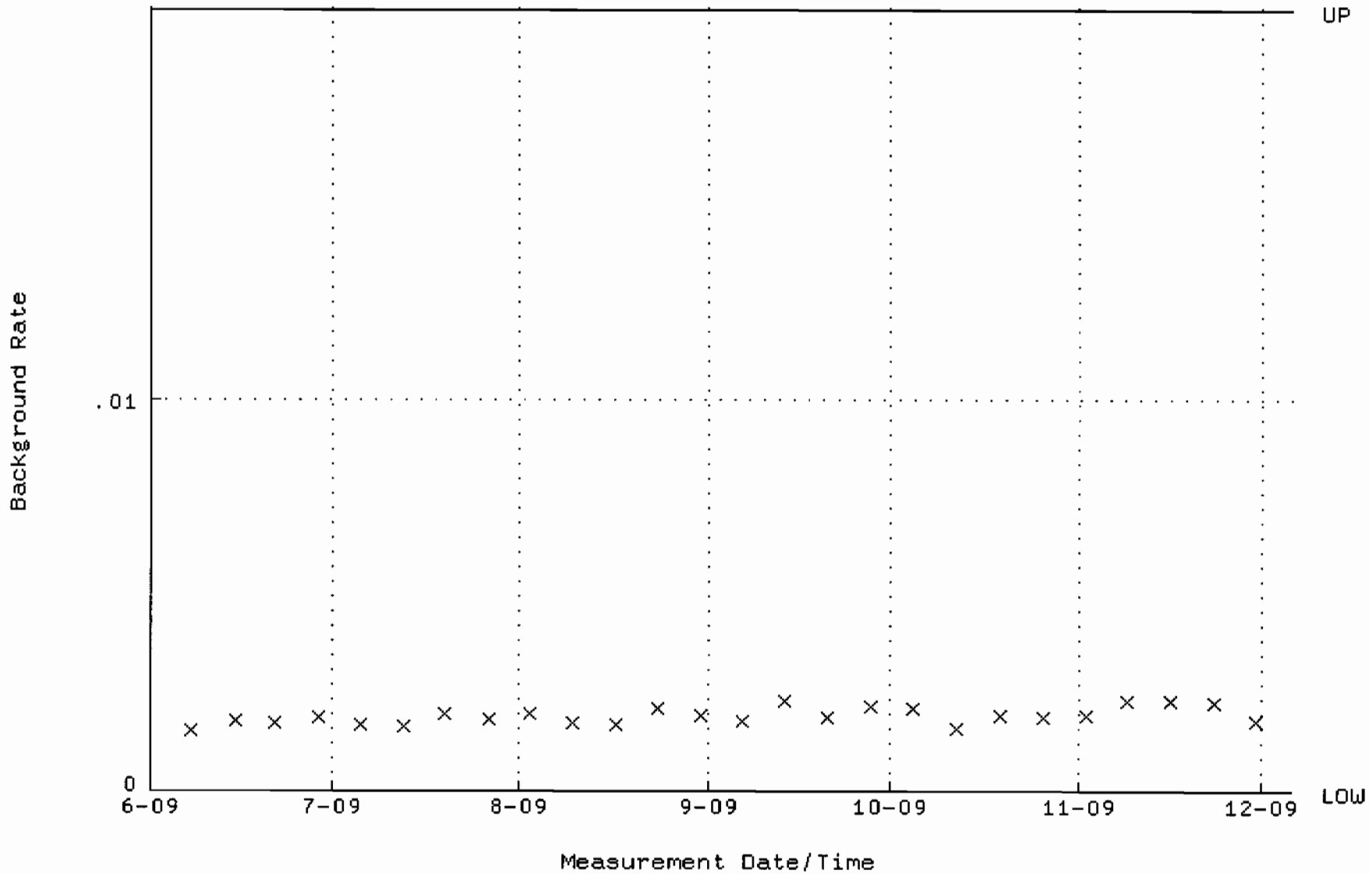

QA filename : DKA100:[ENV_ALPHA.QA.W]W008.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.309318 through 0.329318

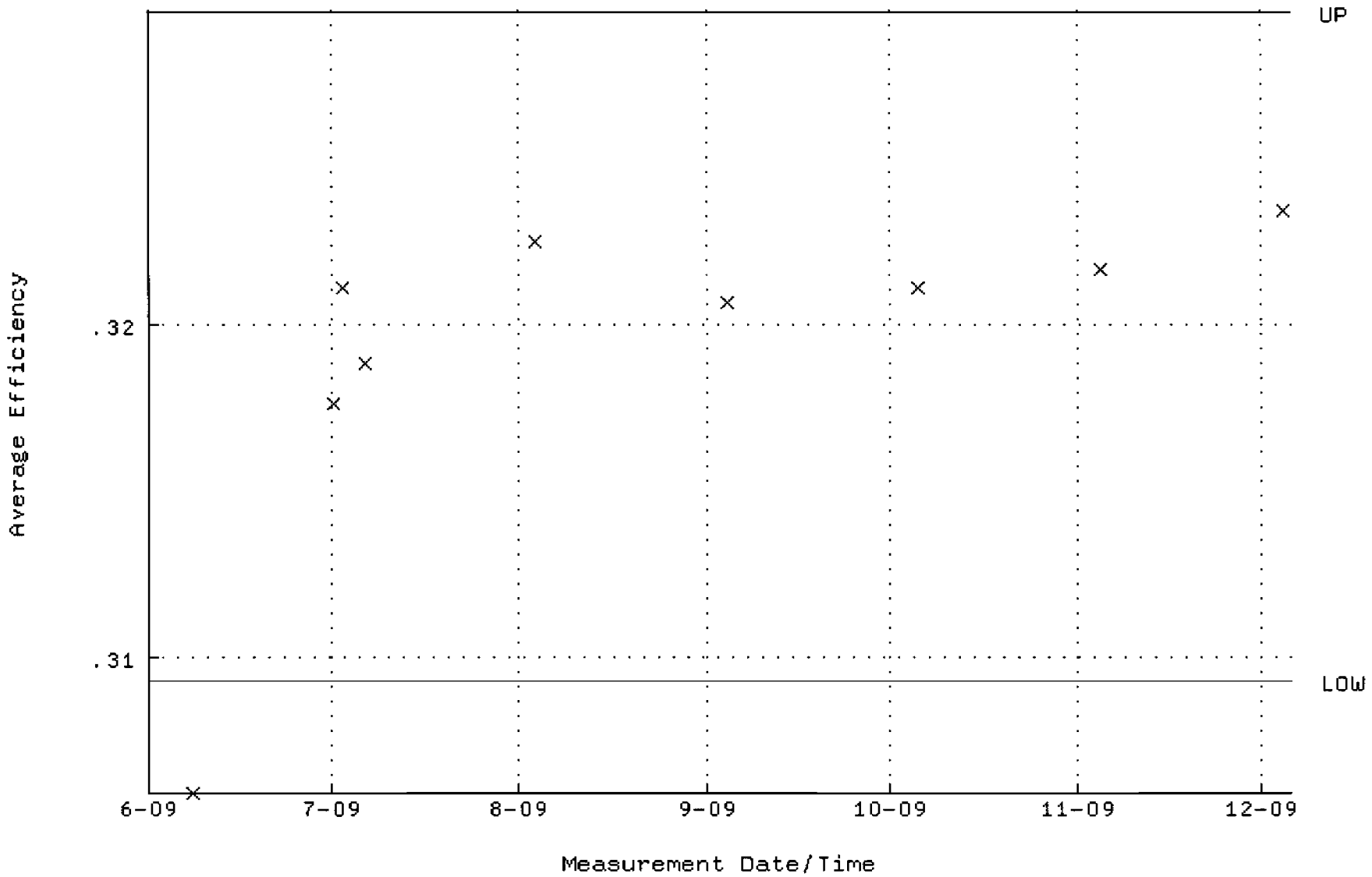

QA filename : DKA100:[ENV_ALPHA.QA.W]W008.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 87.8346 through 97.0804

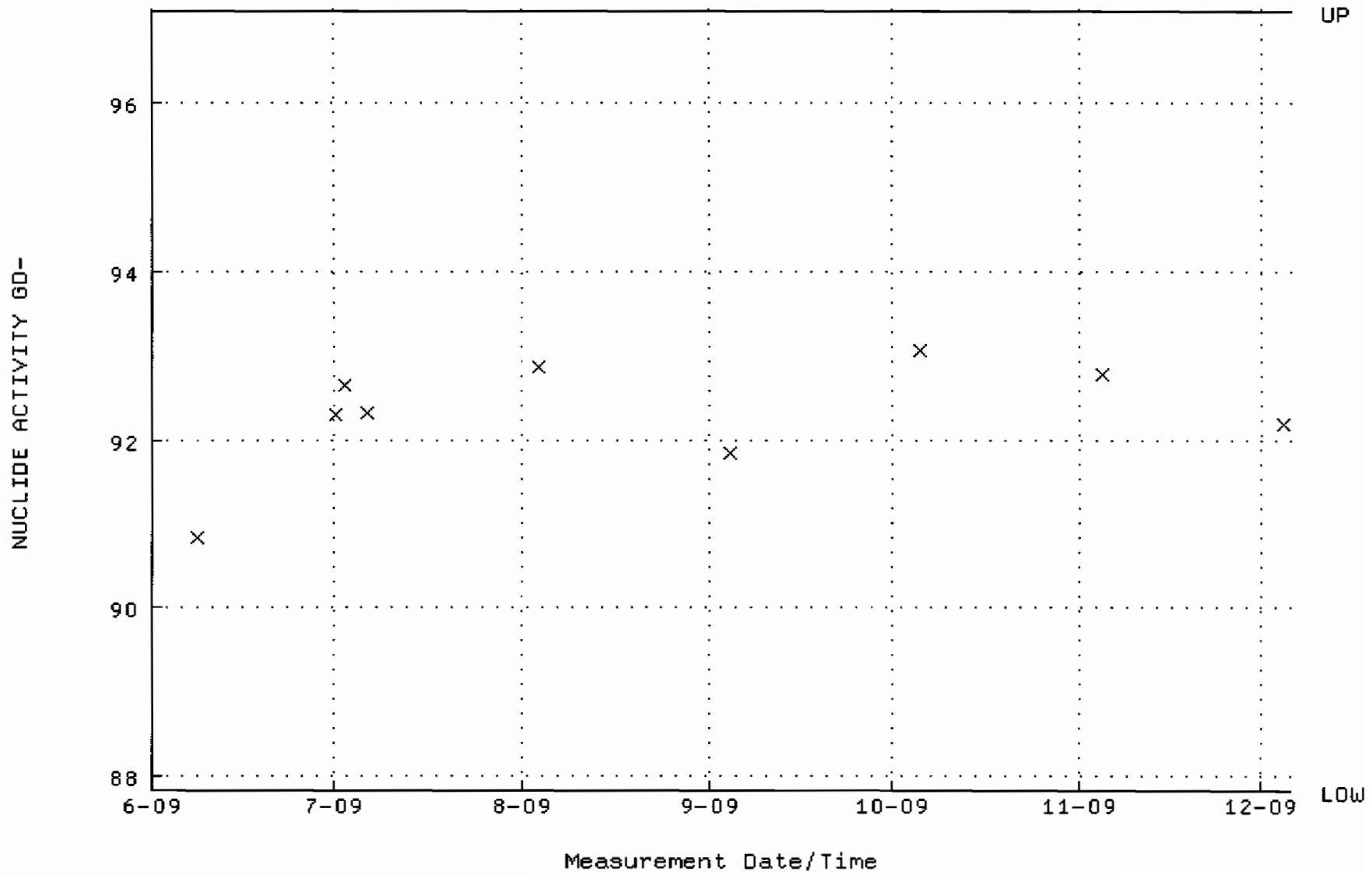

QA filename : DKA100:[ENV_ALPHA.QA.B]B008.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:20 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

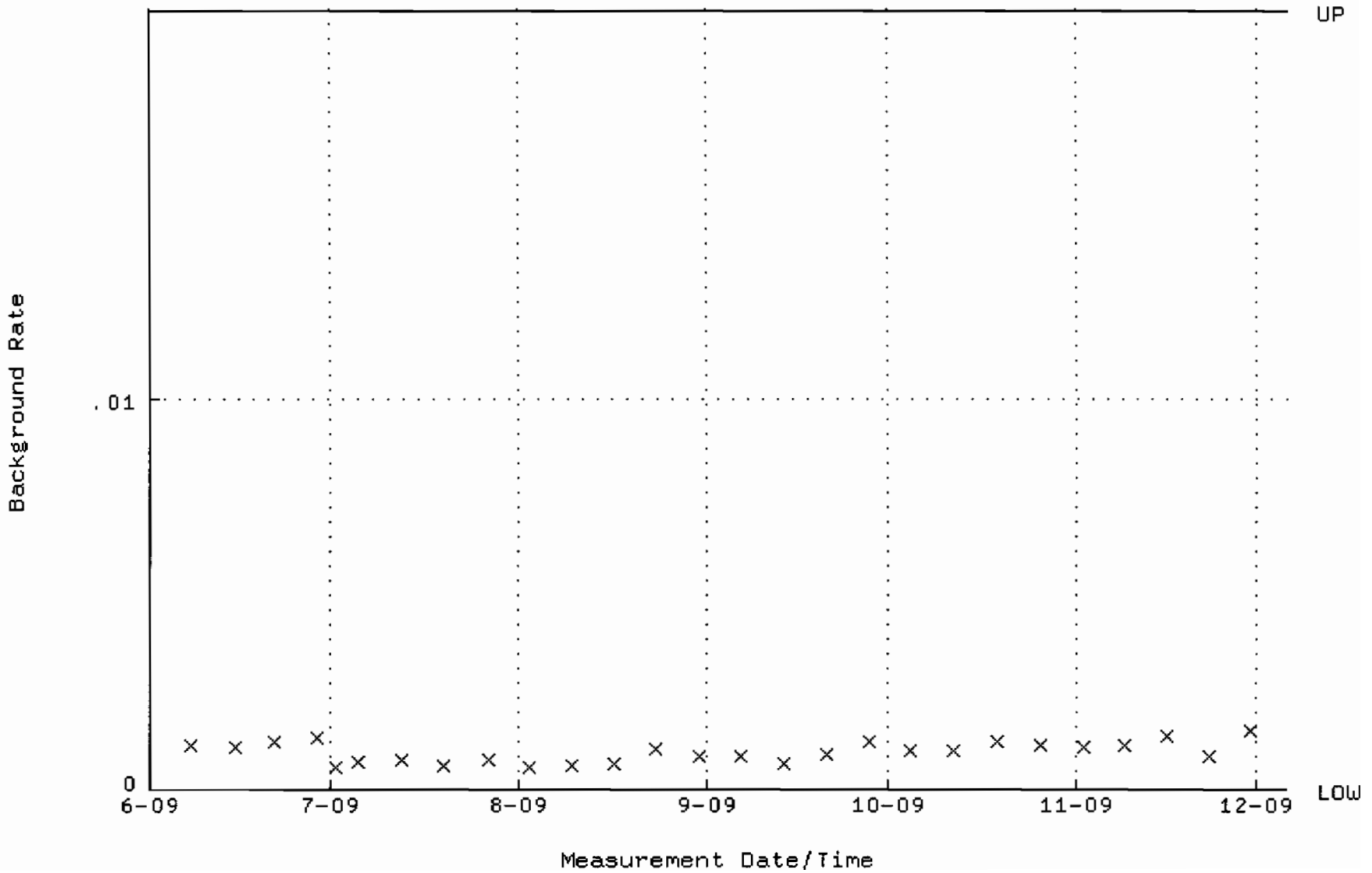

QA filename : DKA100:[ENV_ALPHA.QA.W]W009.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.328261 through 0.348261

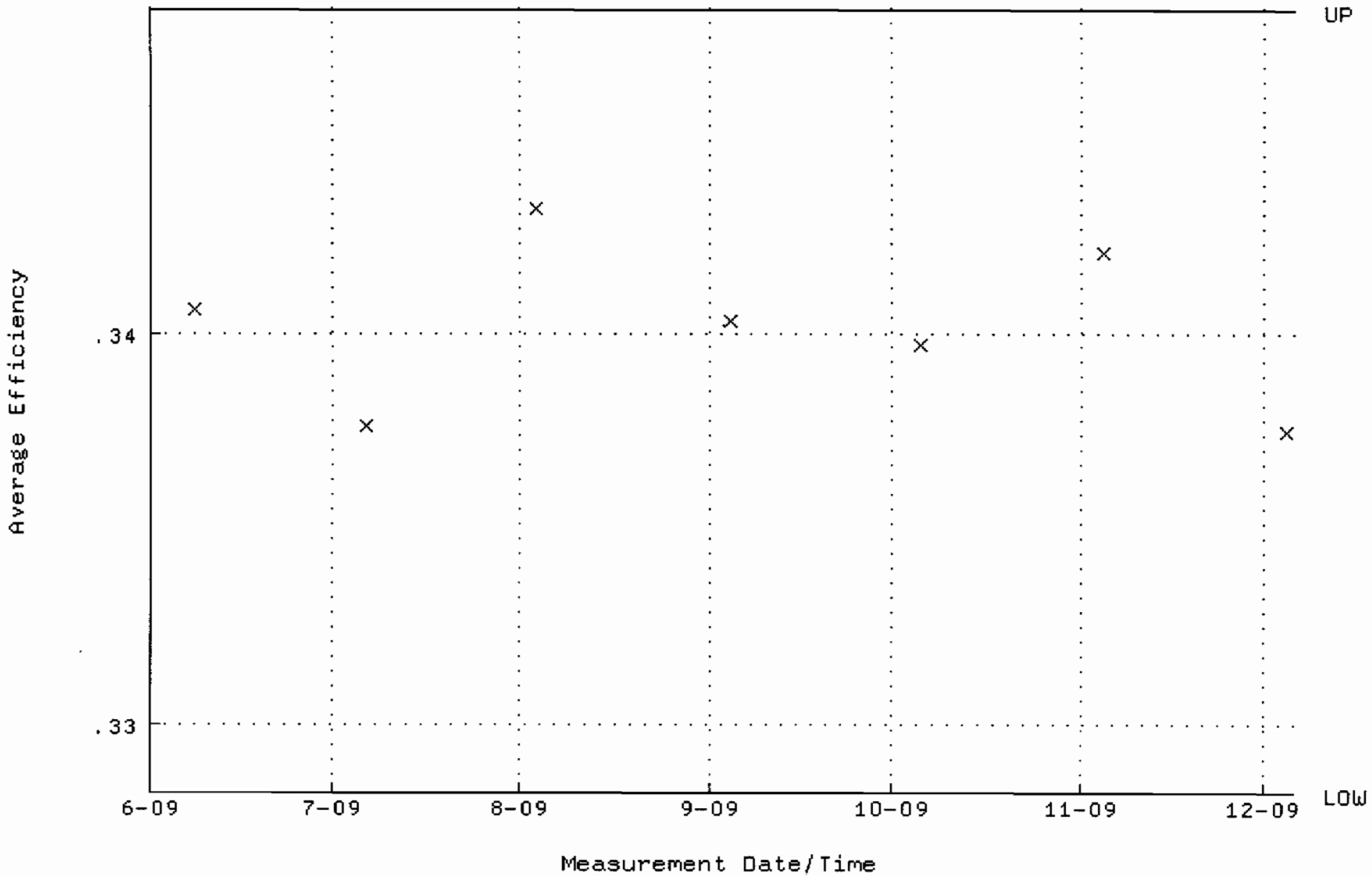

QA filename : DKA100:[ENV_ALPHA.QA.W]W009.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 86.4475 through 95.5473

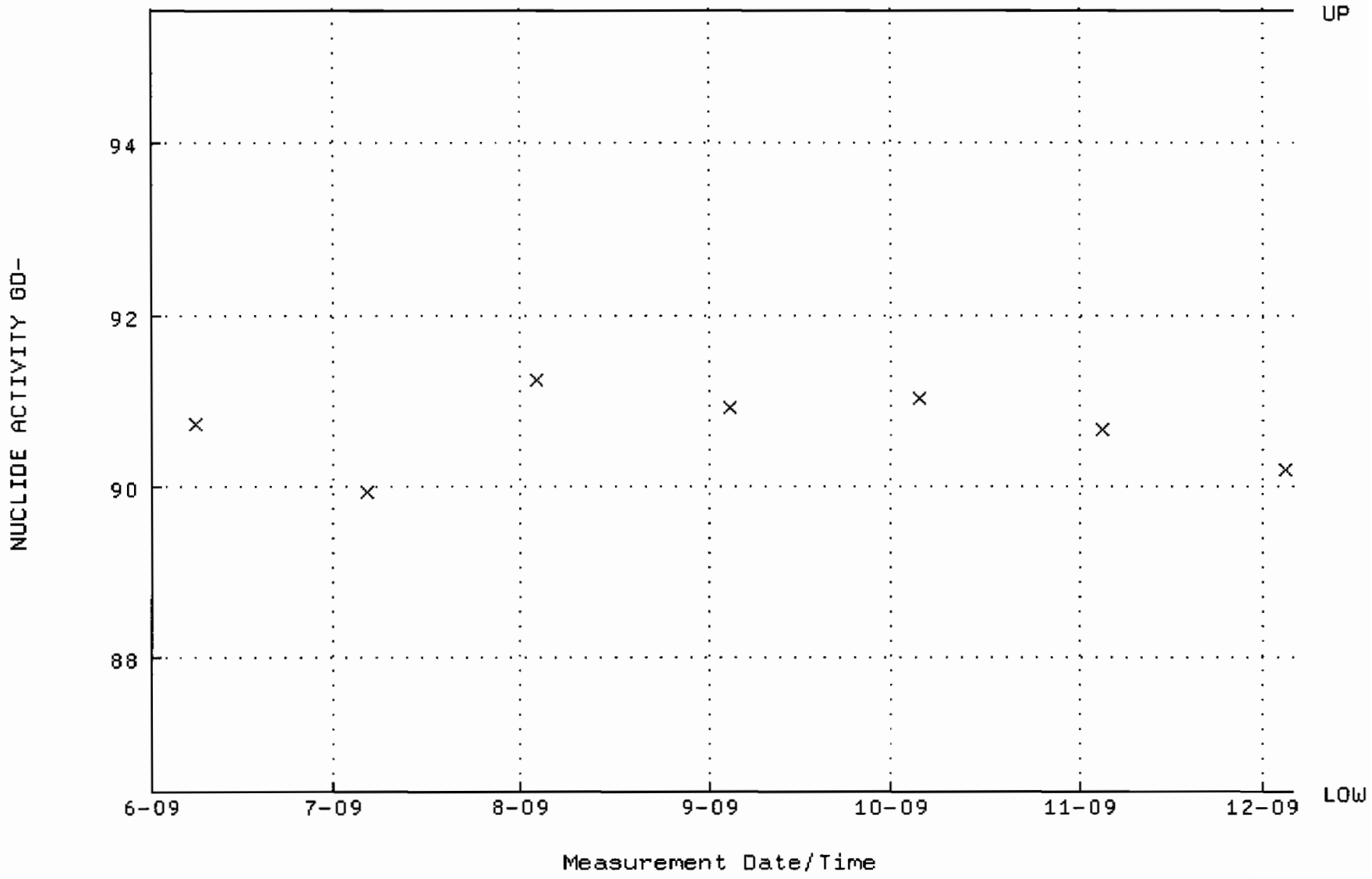

QA filename : DKA100:[ENV_ALPHA.QA.B]B009.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:20 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

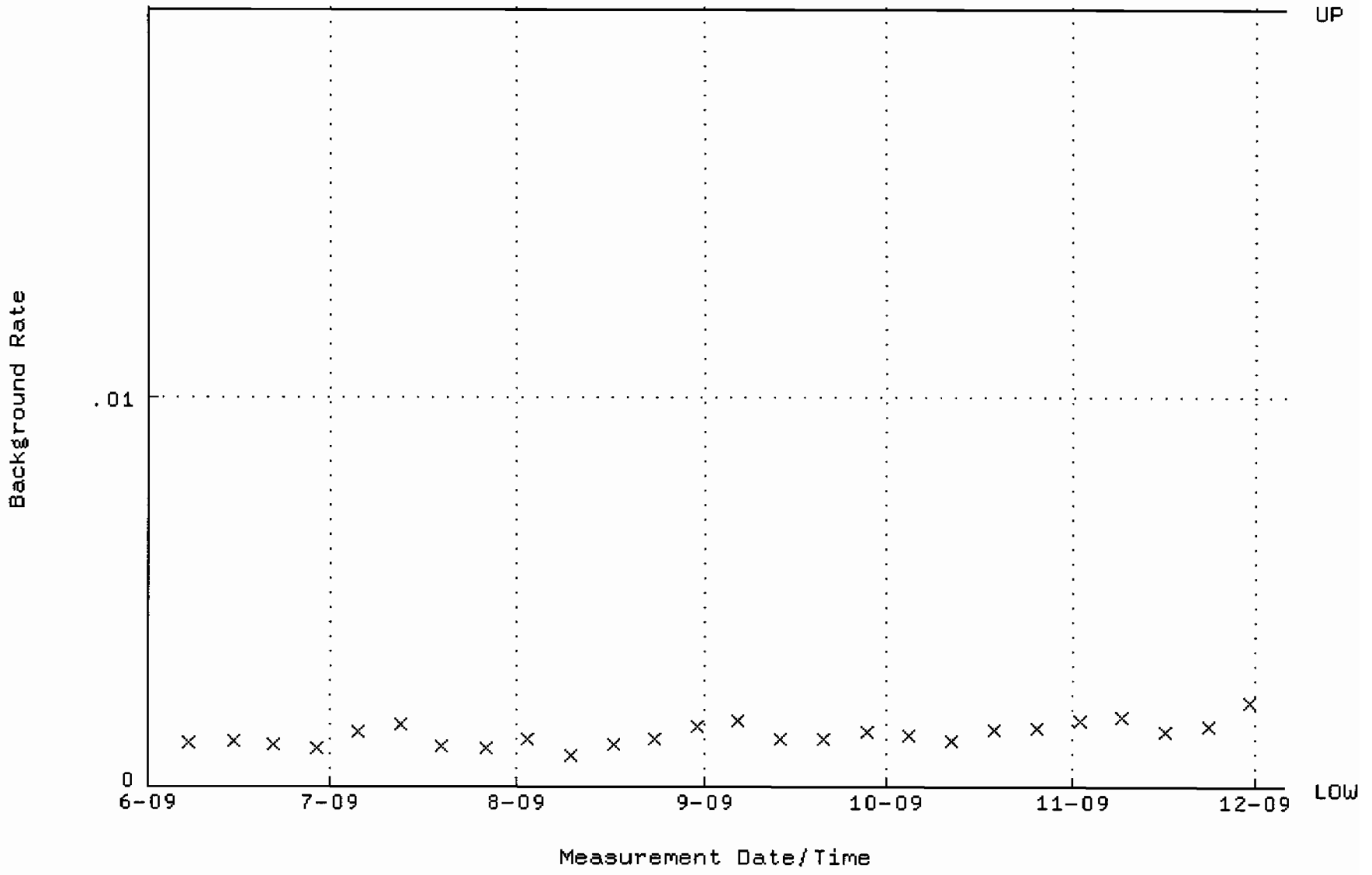

QA filename : DKA100:[ENV_ALPHA.QA.W]W010.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.303169 through 0.323169

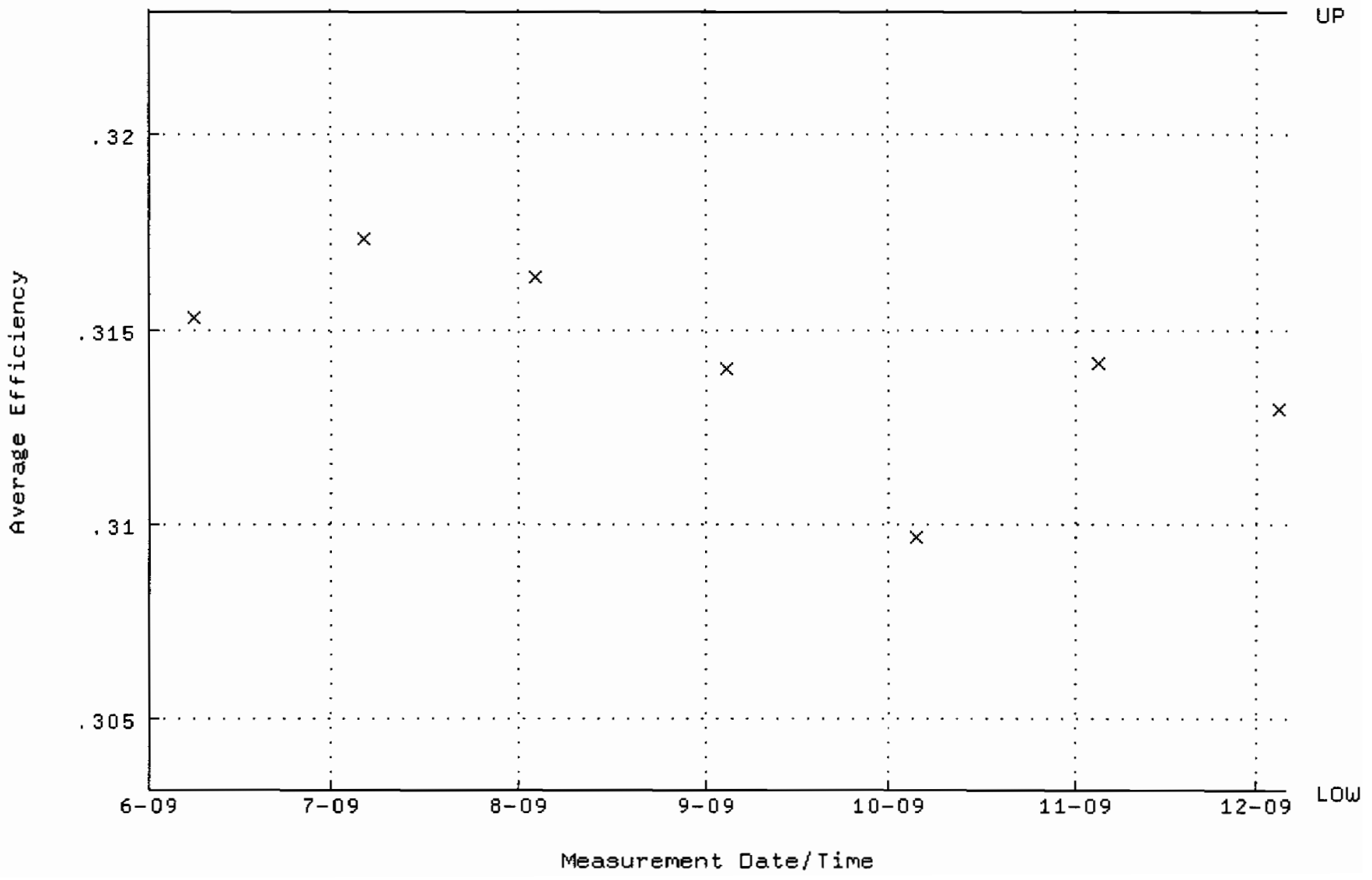

QA filename : DKA100:[ENV_ALPHA.QA.W]W010.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 85.3273 through 94.3091

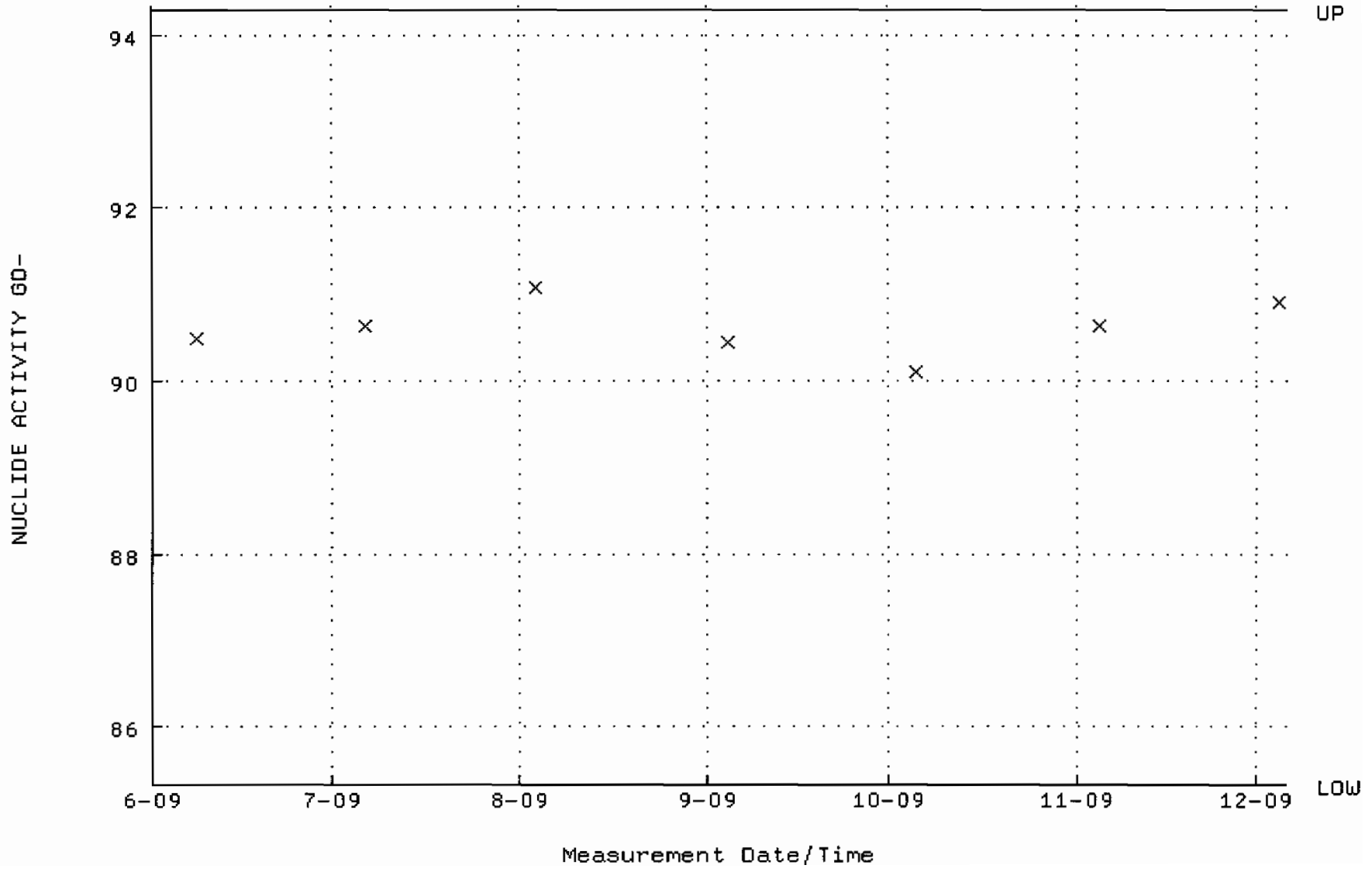

QA filename : DKA100:[ENV_ALPHA.QA.B]B010.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:20 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

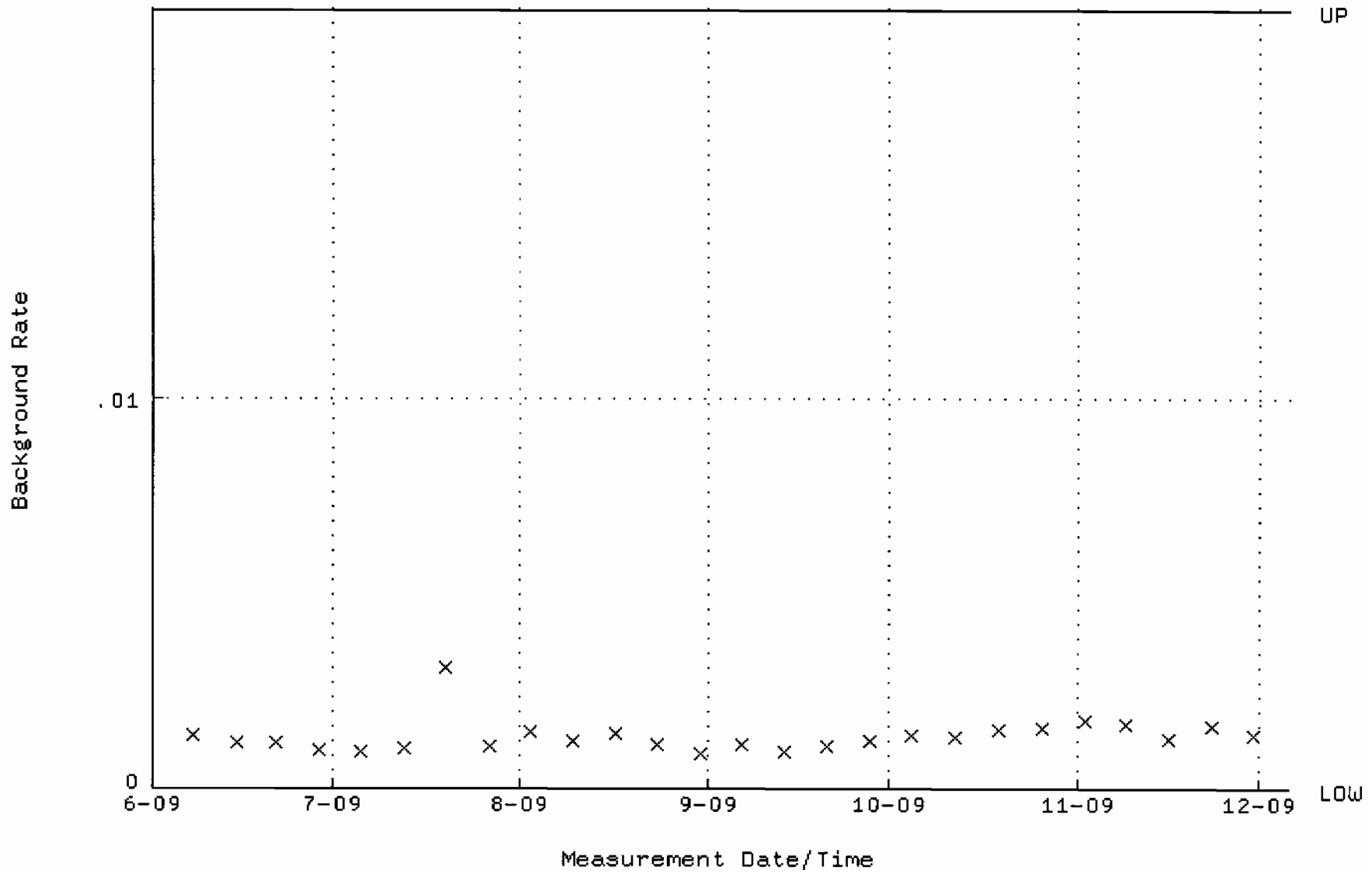

QA filename : DKA100:[ENV_ALPHA.QA.W]W011.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.287129 through 0.307129

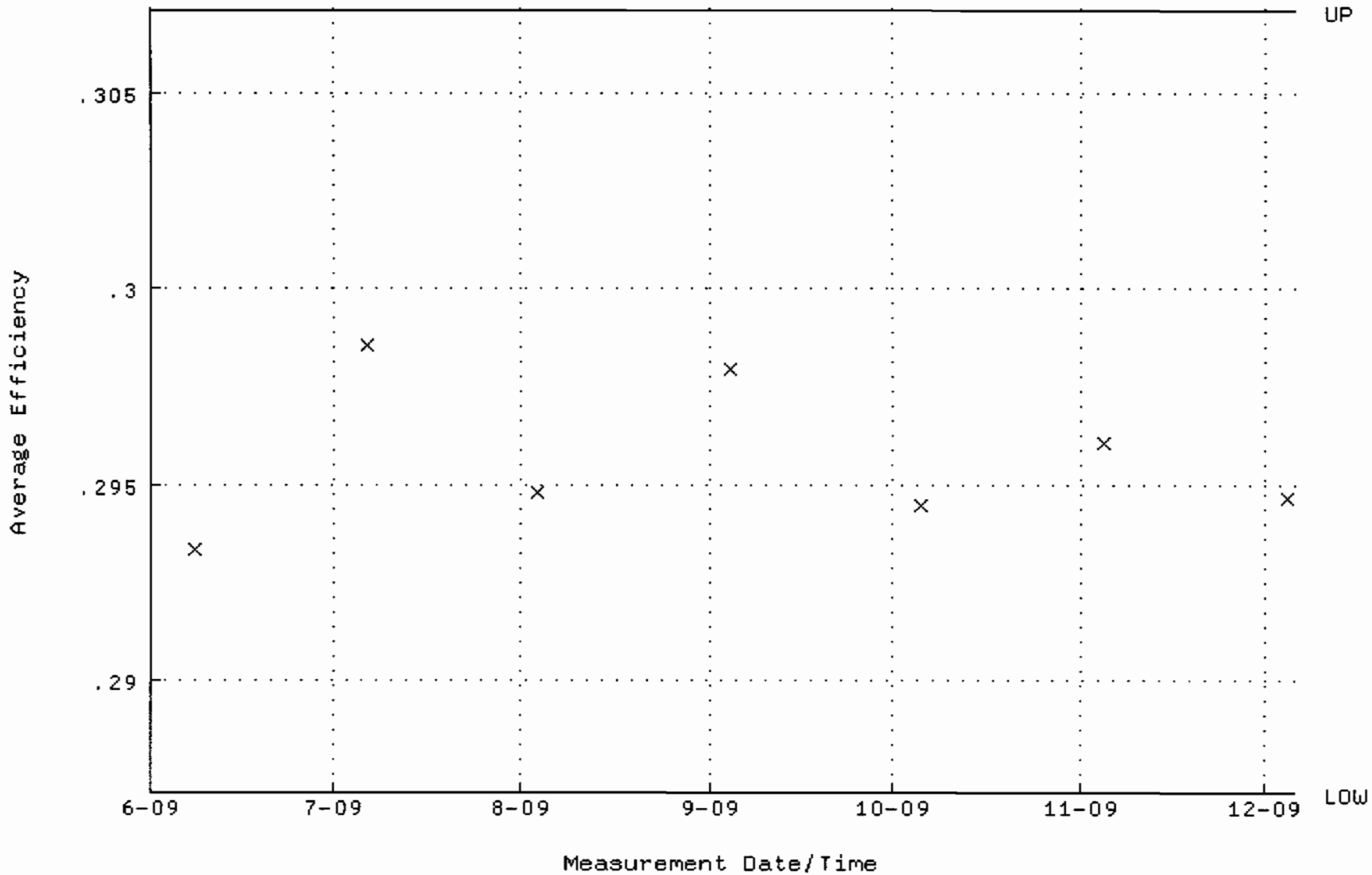

QA filename : DKA100:[ENV_ALPHA.QA.W]W011.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 90.7092 through 100.258

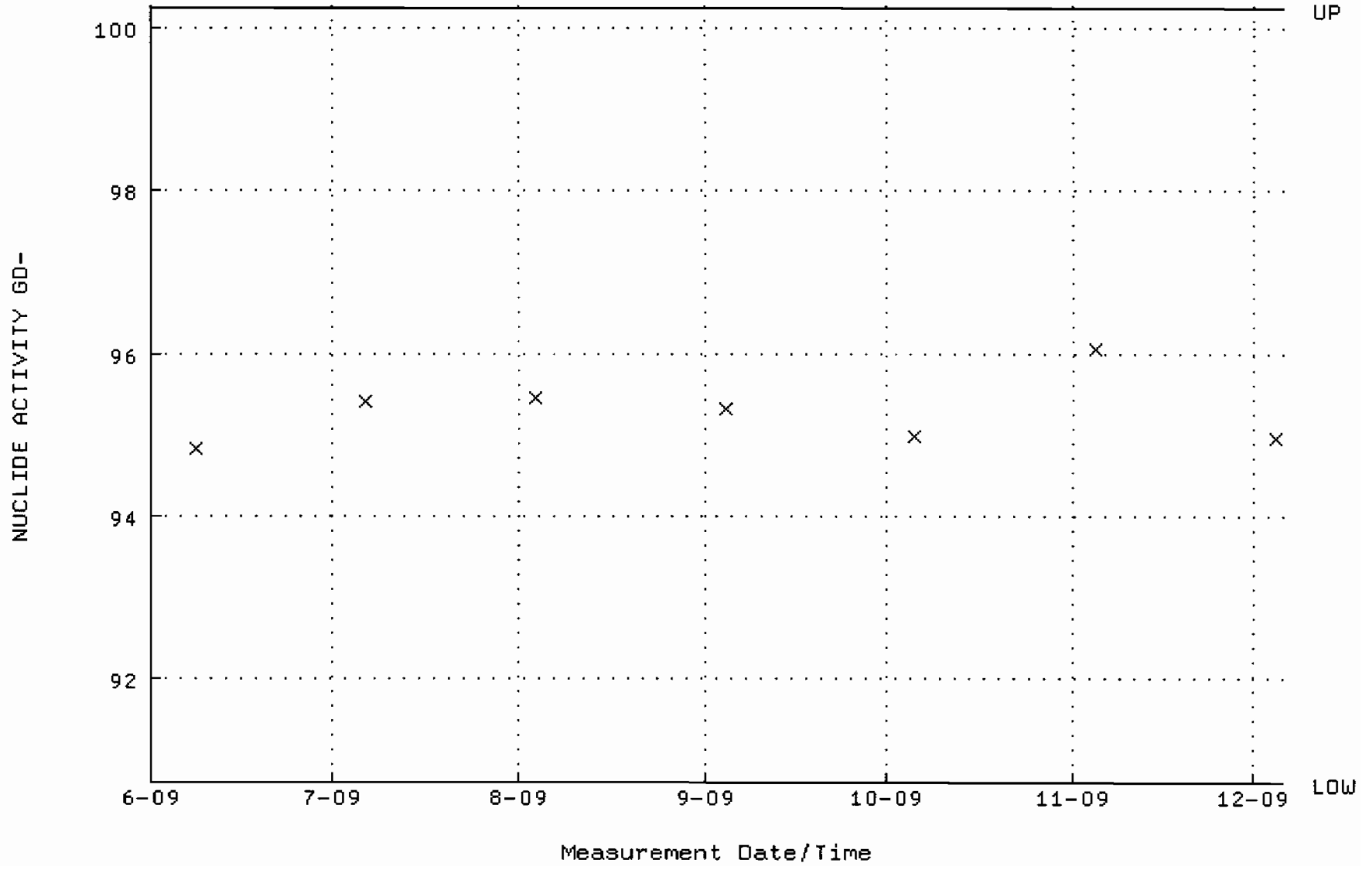

QA filename : DKA100:[ENV_ALPHA.QA.B]B011.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:20 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

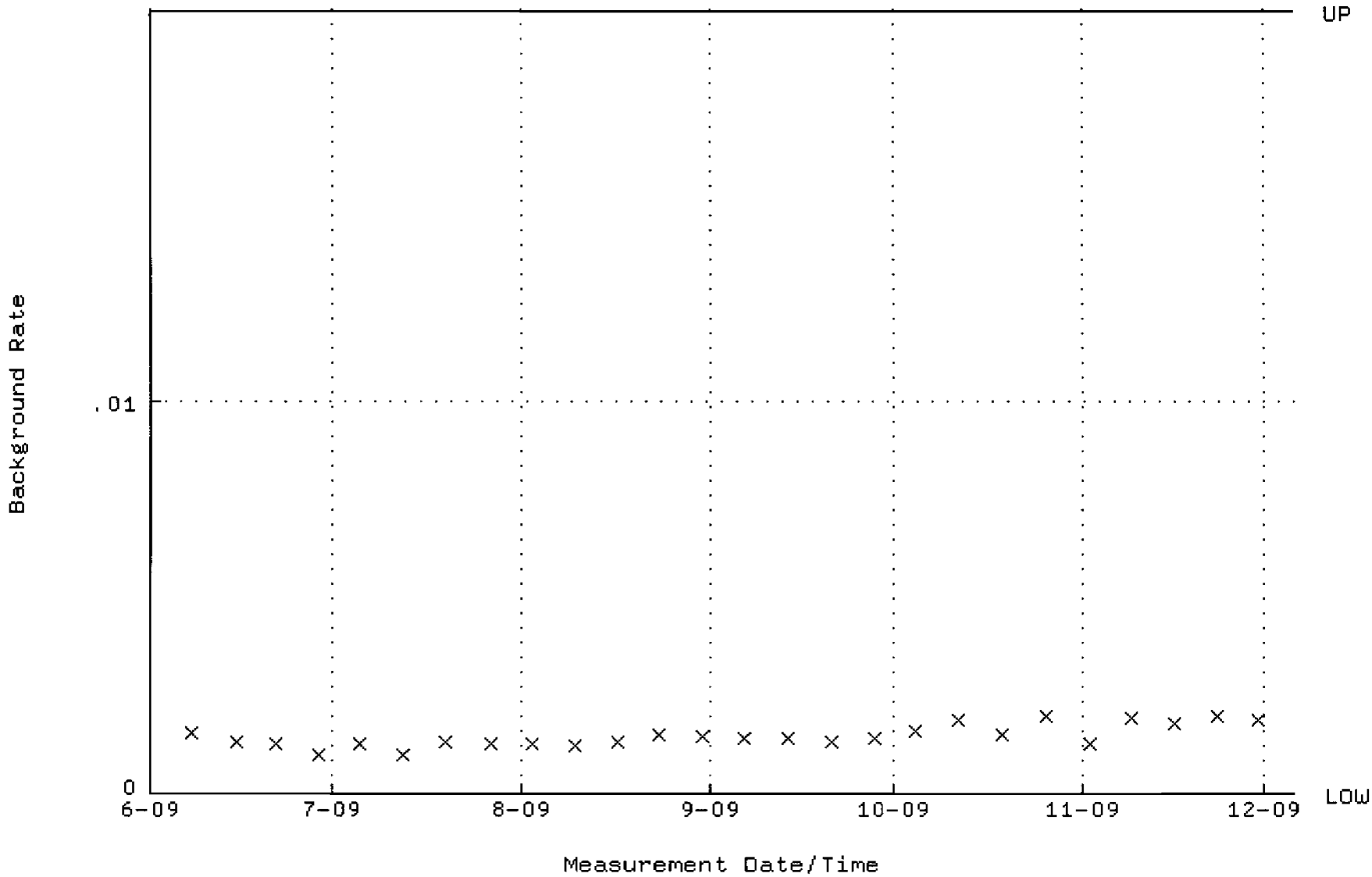

QA filename : DKA100:[ENV_ALPHA.QA.W]W012.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.285730 through 0.305730

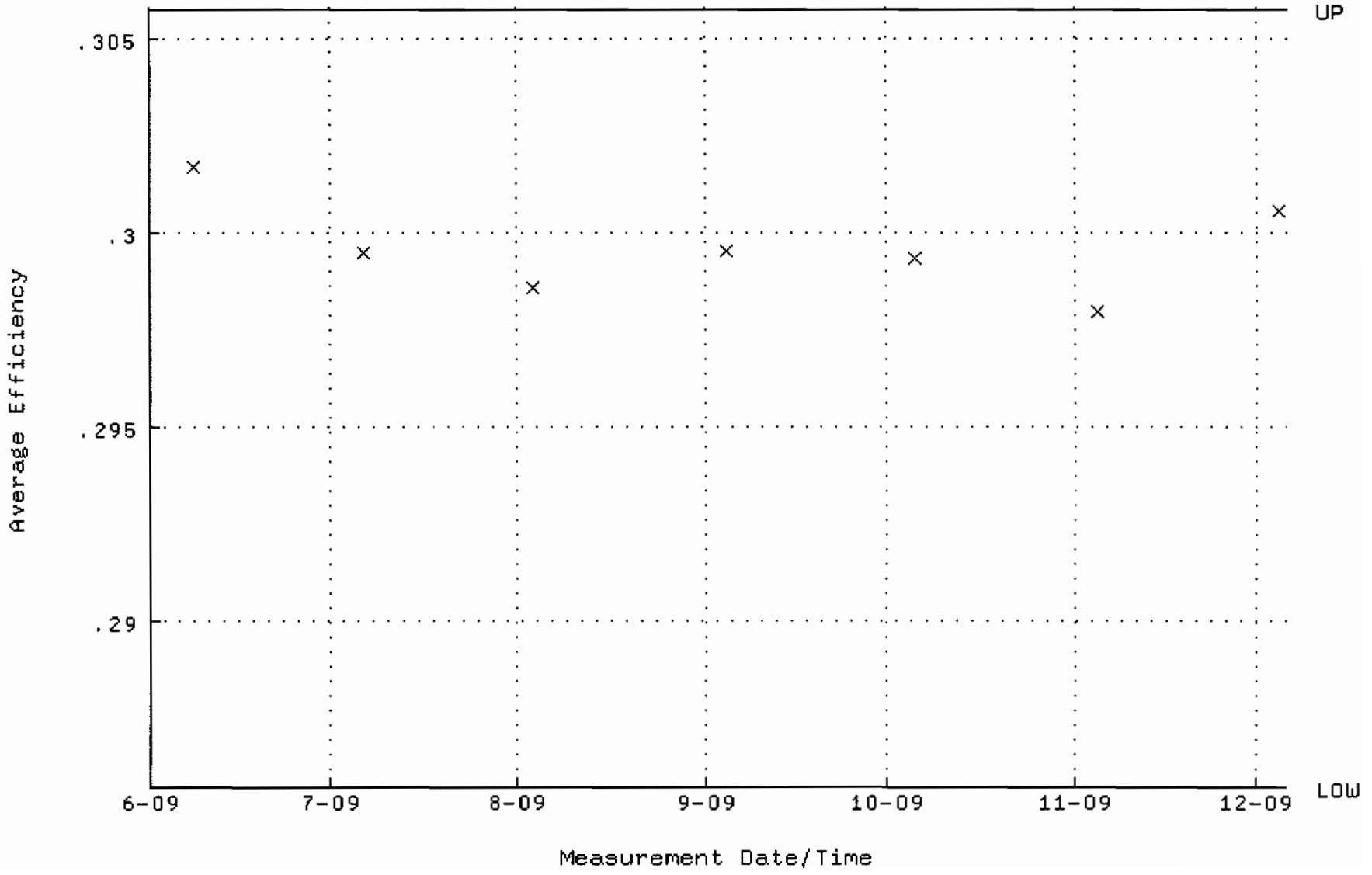

QA filename : DKA100:[ENV_ALPHA.QA.W]W012.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 88.0678 through 97.3382

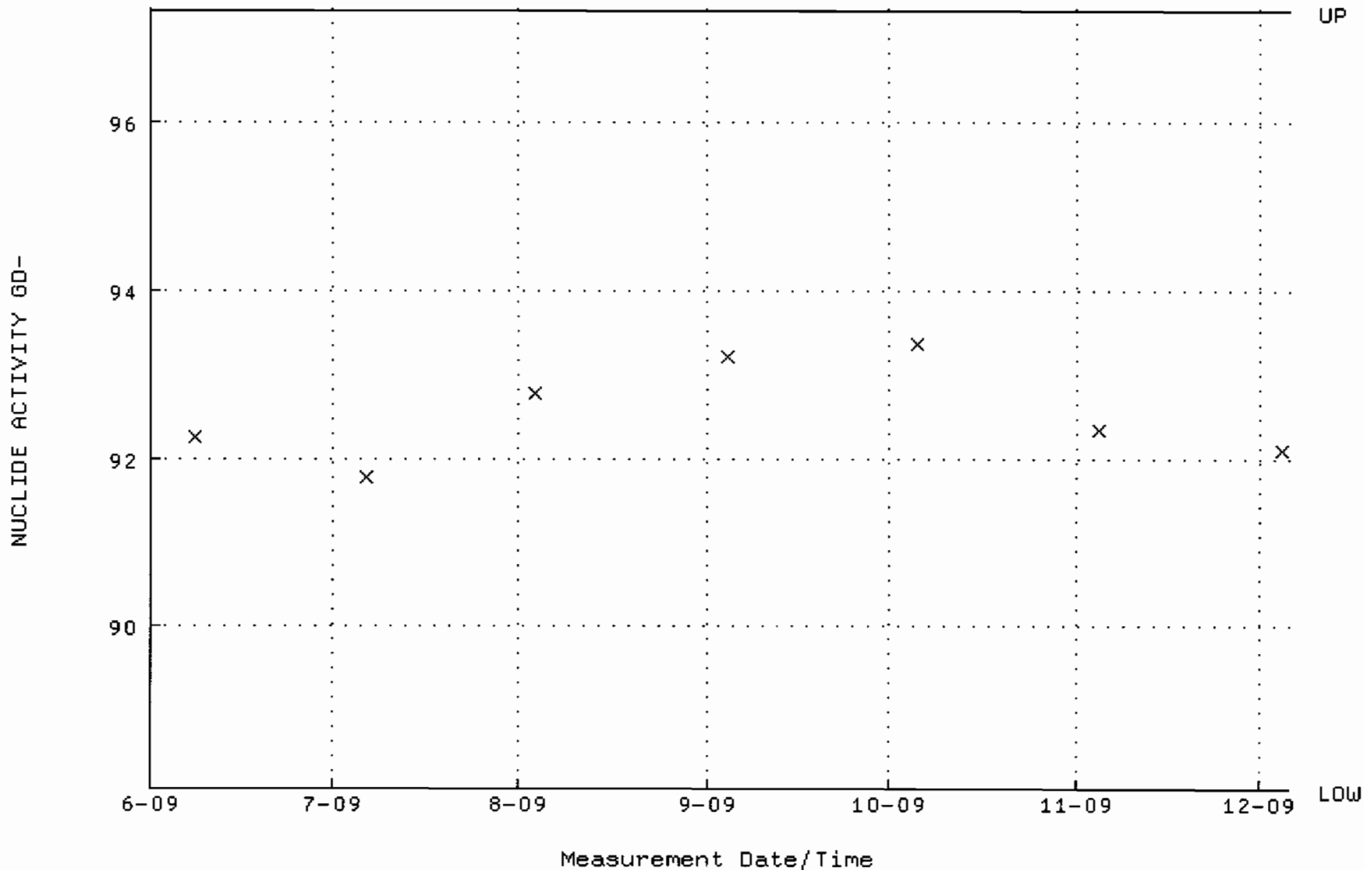

QA filename : DKA100:[ENV_ALPHA.QA.B]B012.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:20 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

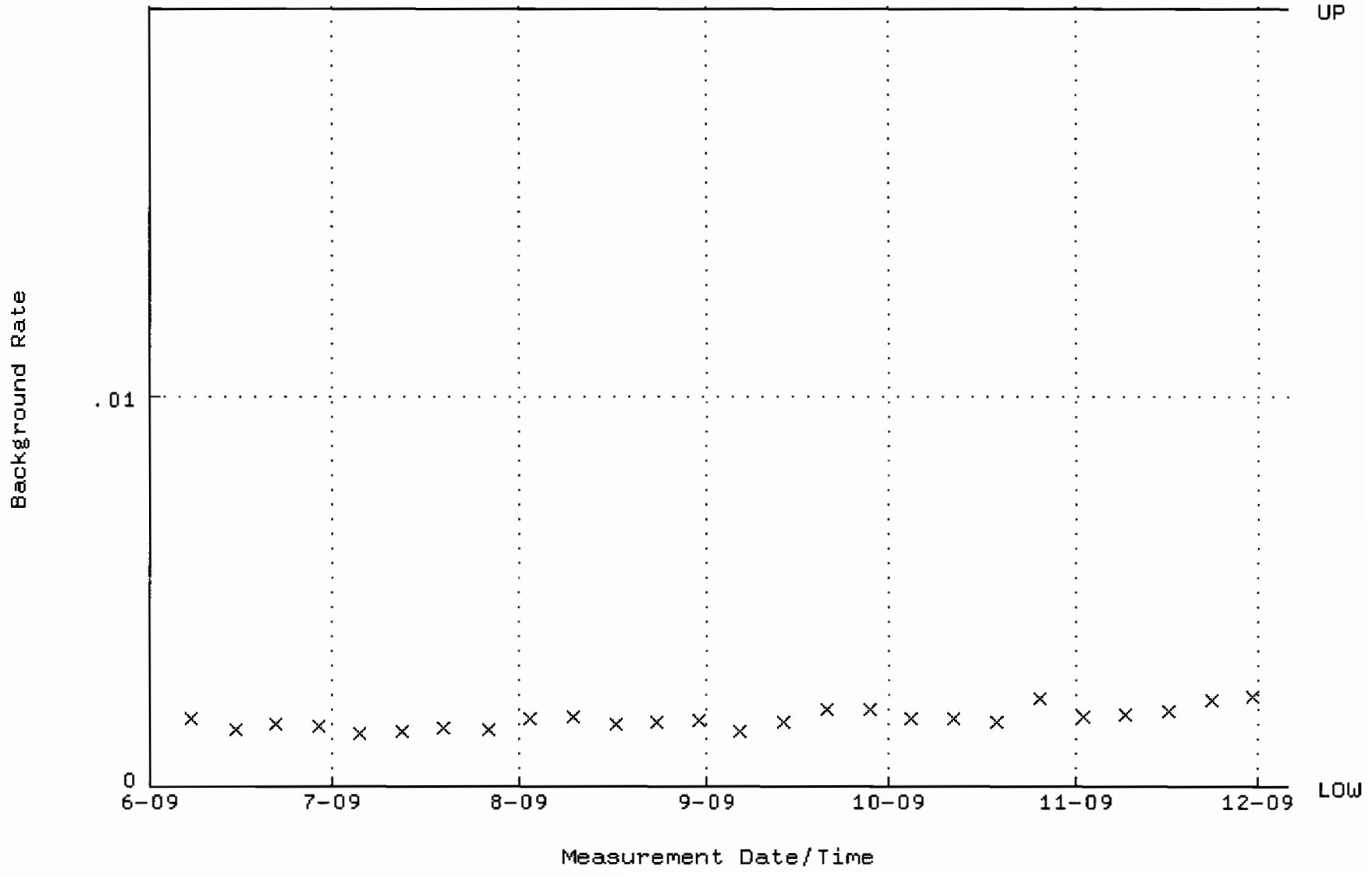

QA filename : DKA100:[ENV_ALPHA.QA.W]W019.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.275780 through 0.309420

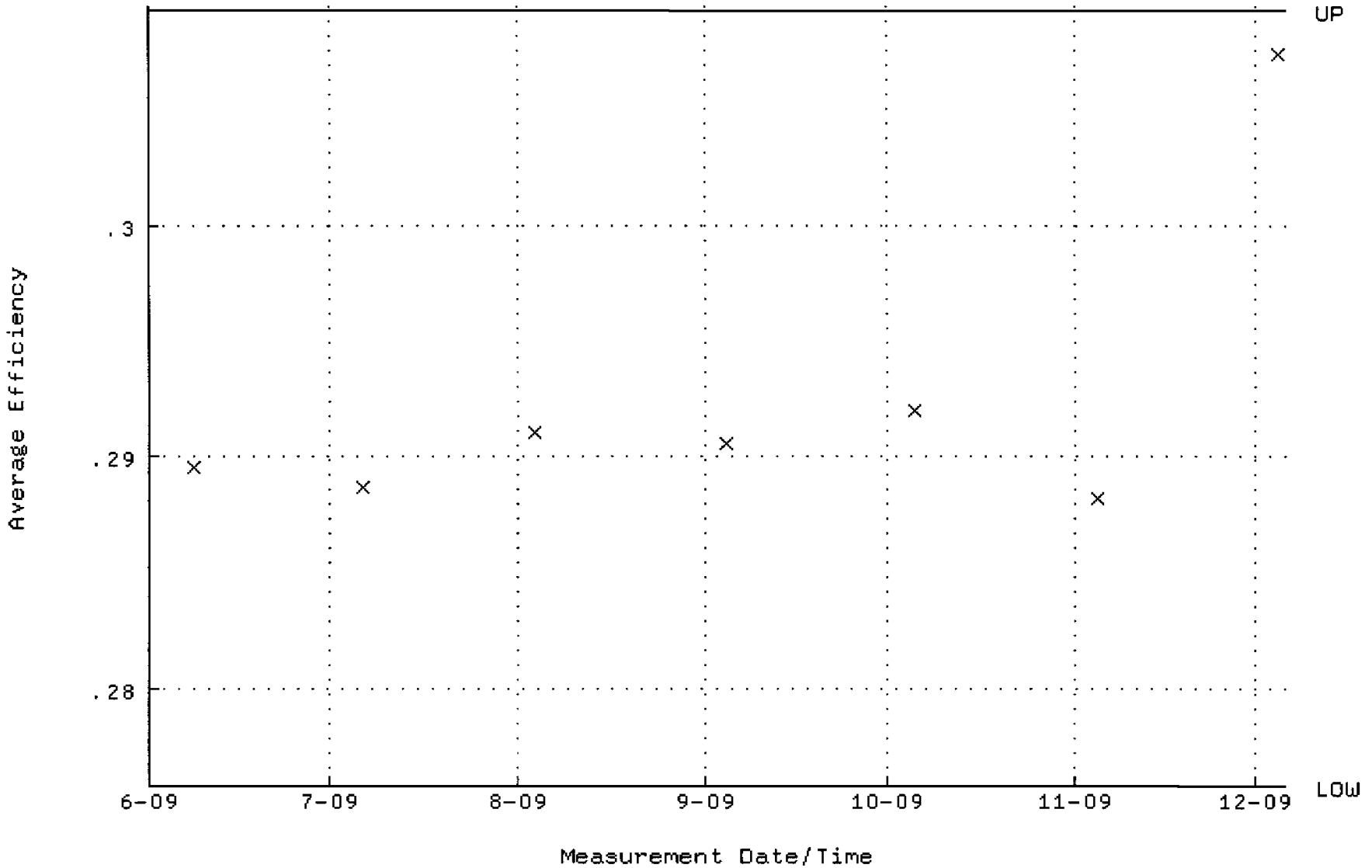

QA filename : DKA100:[ENV_ALPHA.QA.W]W019.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 87.4952 through 91.6516

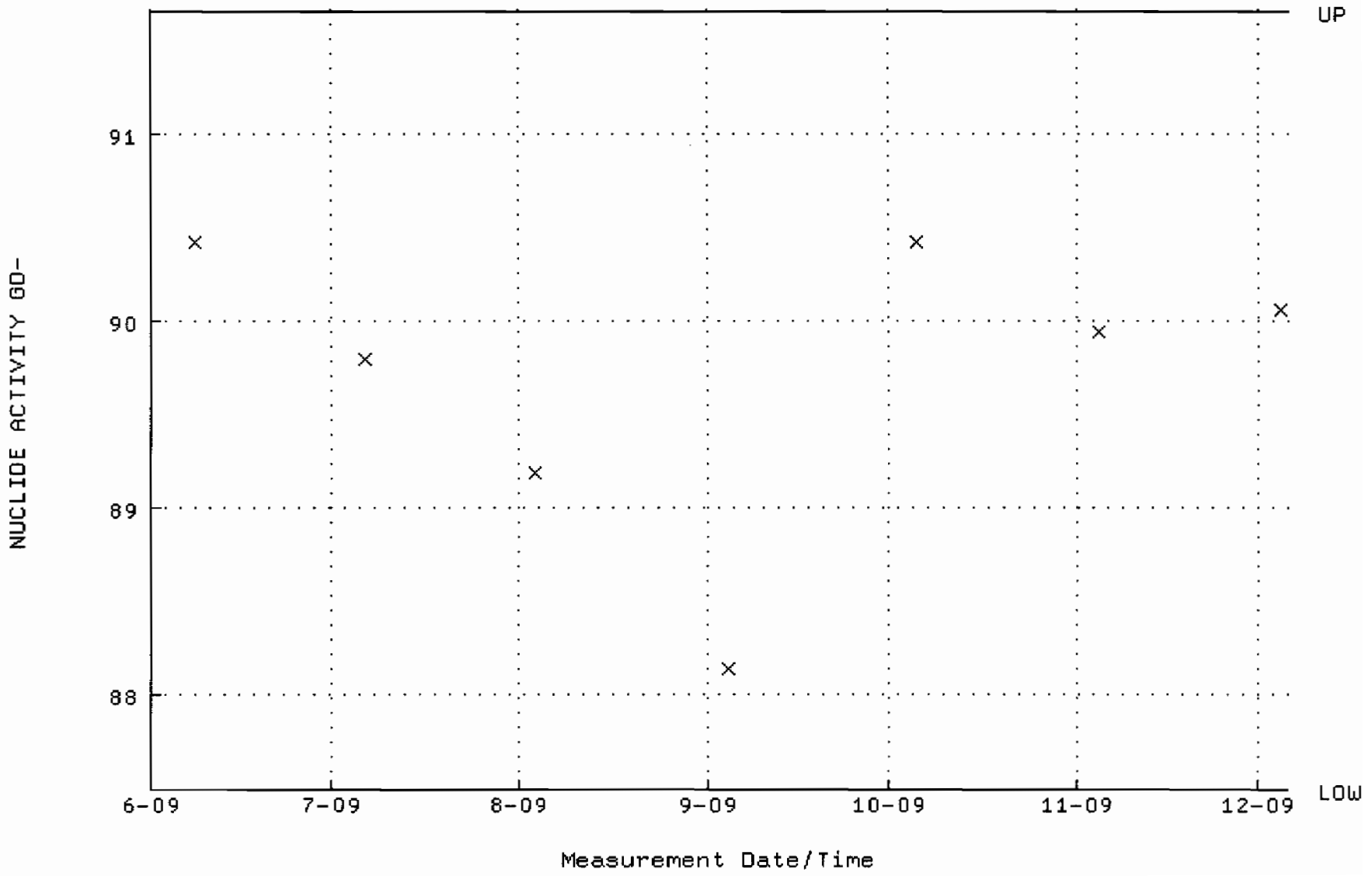

QA filename : DKA100:[ENV_ALPHA.QA.B]B019.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:23 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

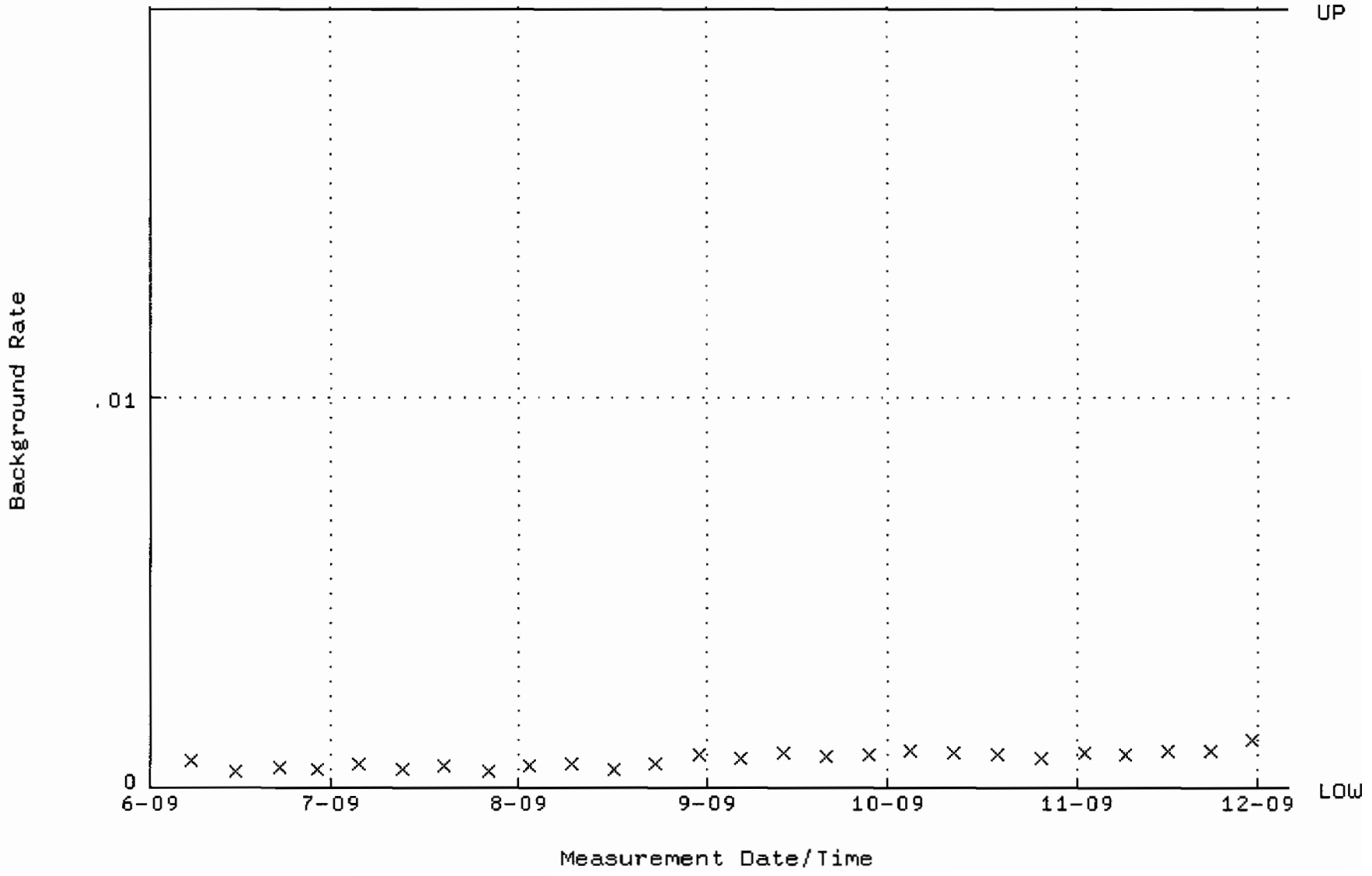

QA filename : DKA100:[ENV_ALPHA.QA.W]W020.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.337708 through 0.357708

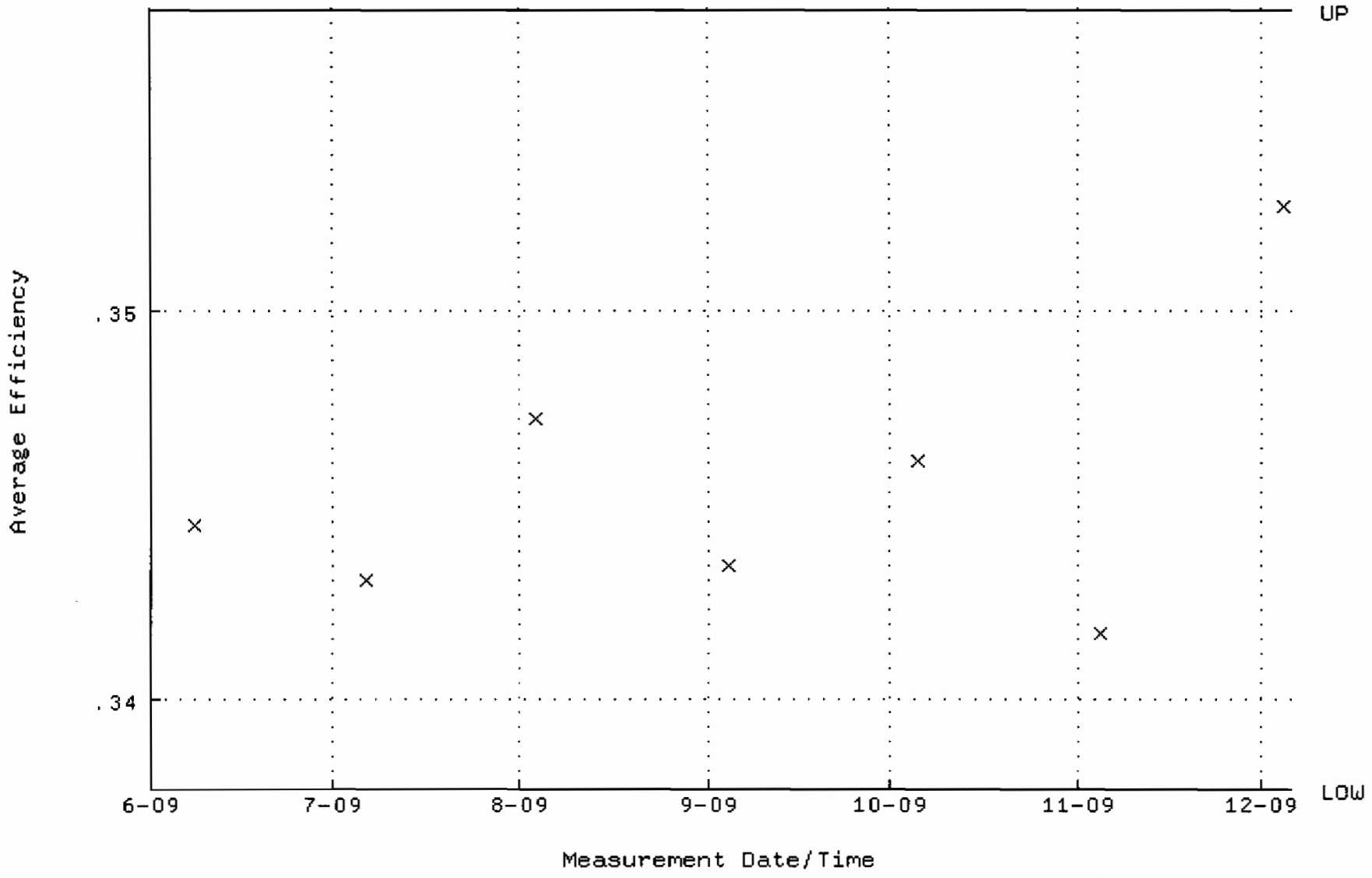

QA filename : DKA100:[ENV_ALPHA.QA.W]W020.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 86.1605 through 95.2301

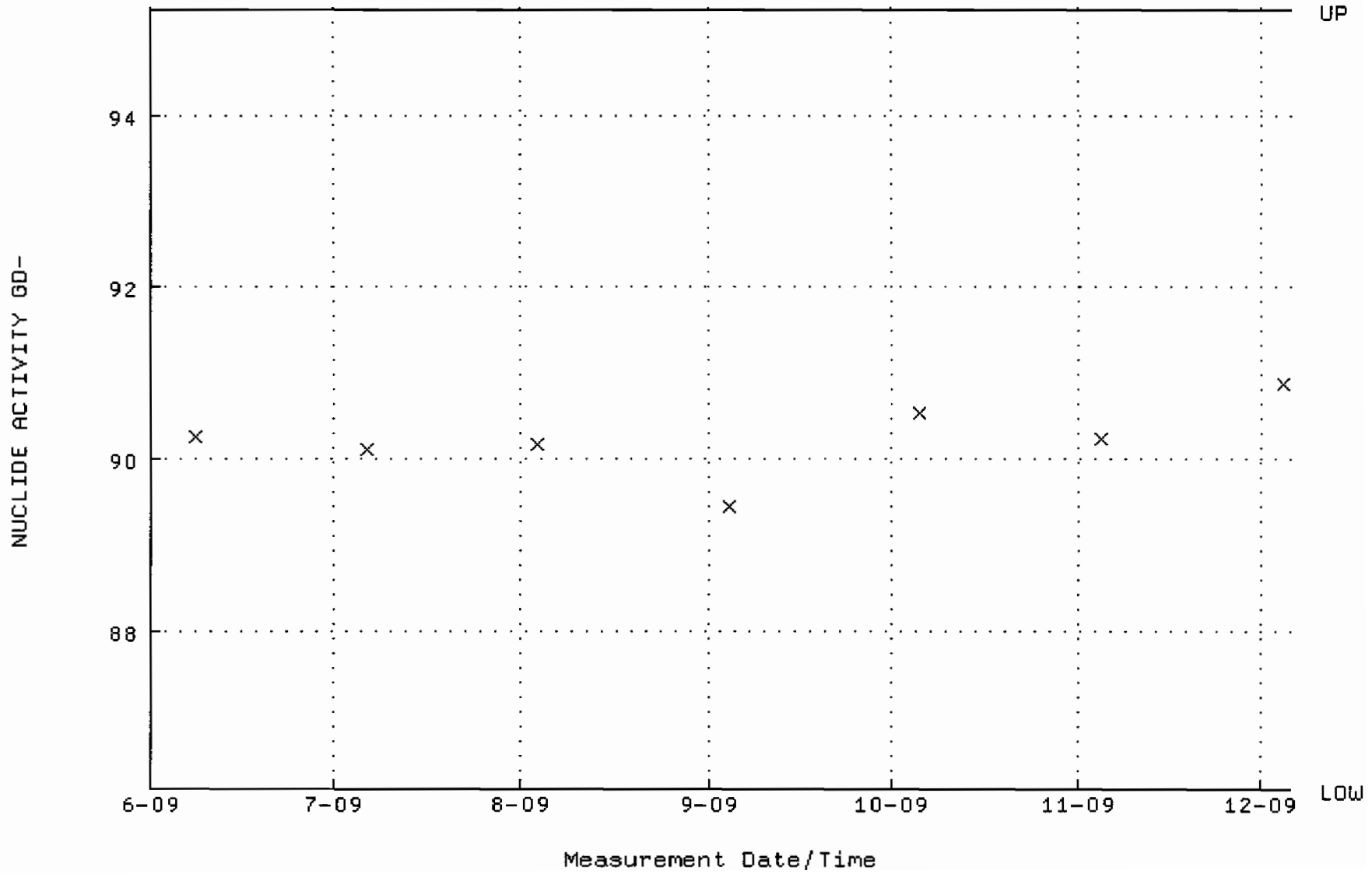

QA filename : DKA100:[ENV_ALPHA.QA.B]B020.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:23 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

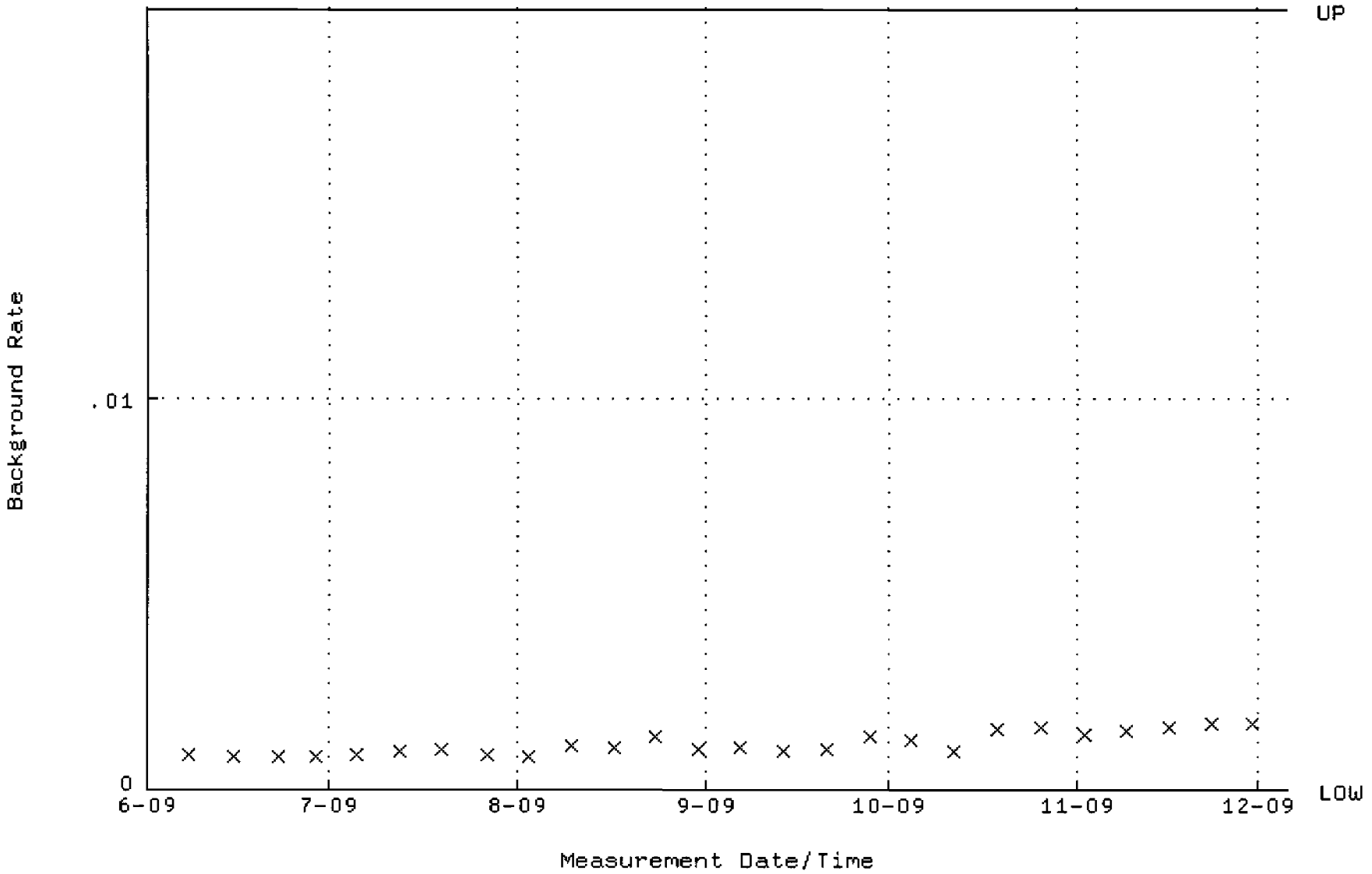

QA filename : DKA100:[ENV_ALPHA.QA.W]W021.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

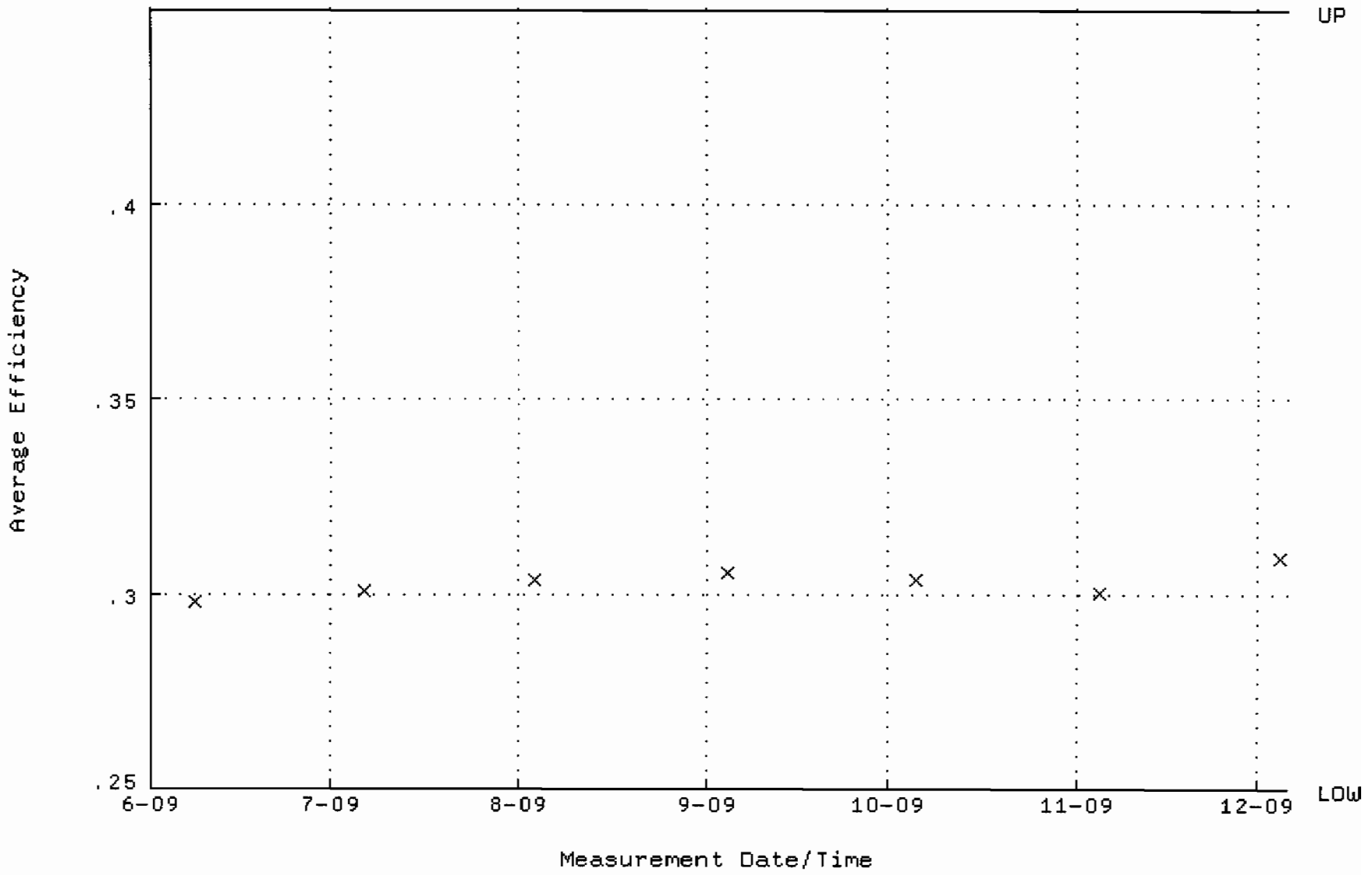

QA filename : DKA100:[ENV_ALPHA.QA.W]W021.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

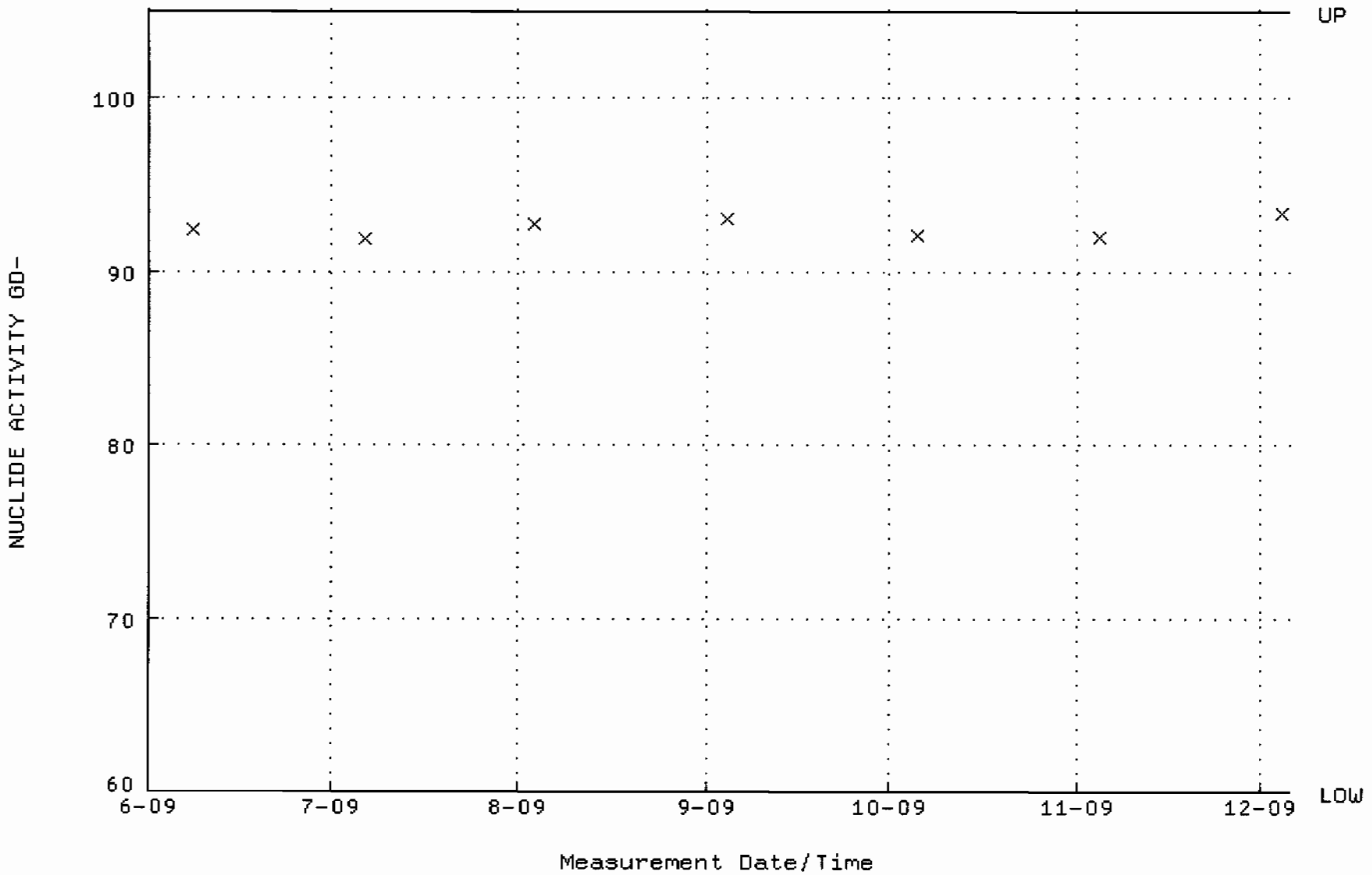

QA filename : DKA100:[ENV_ALPHA.QA.B]B021.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:23 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

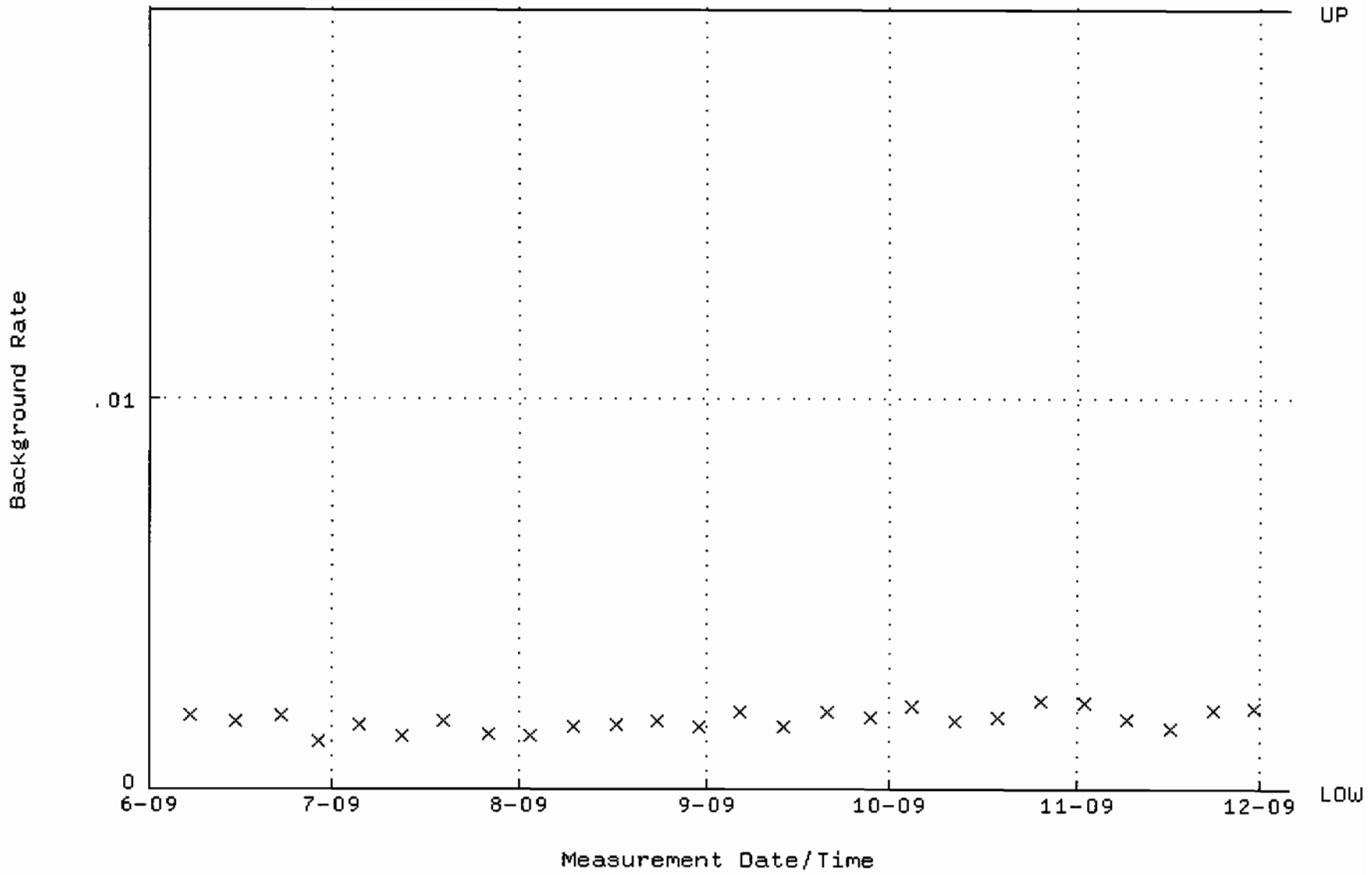

QA filename : DKA100:[ENV_ALPHA.QA.W]W023.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

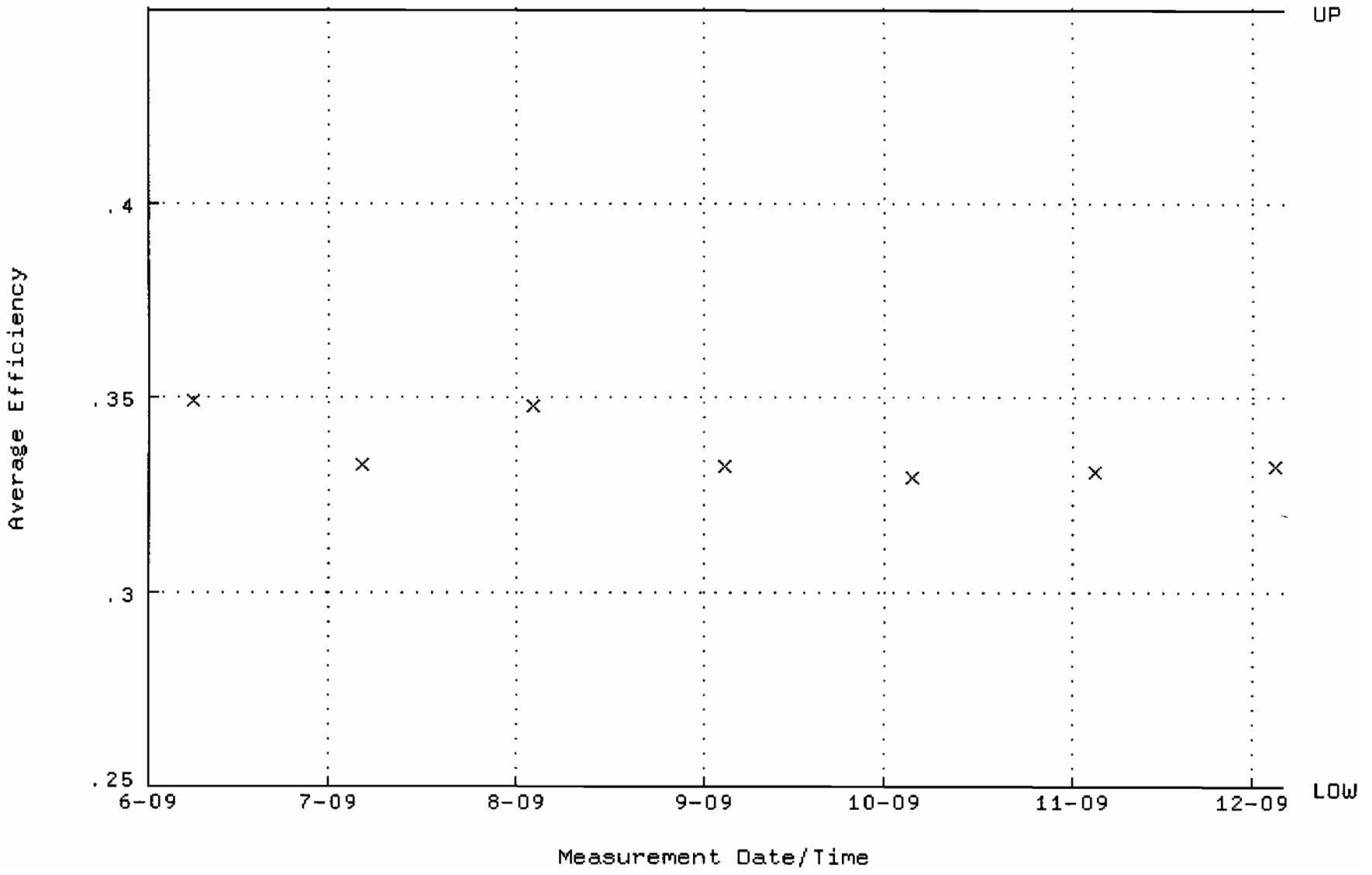

QA filename : DKA100:[ENV_ALPHA.QA.W]W023.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

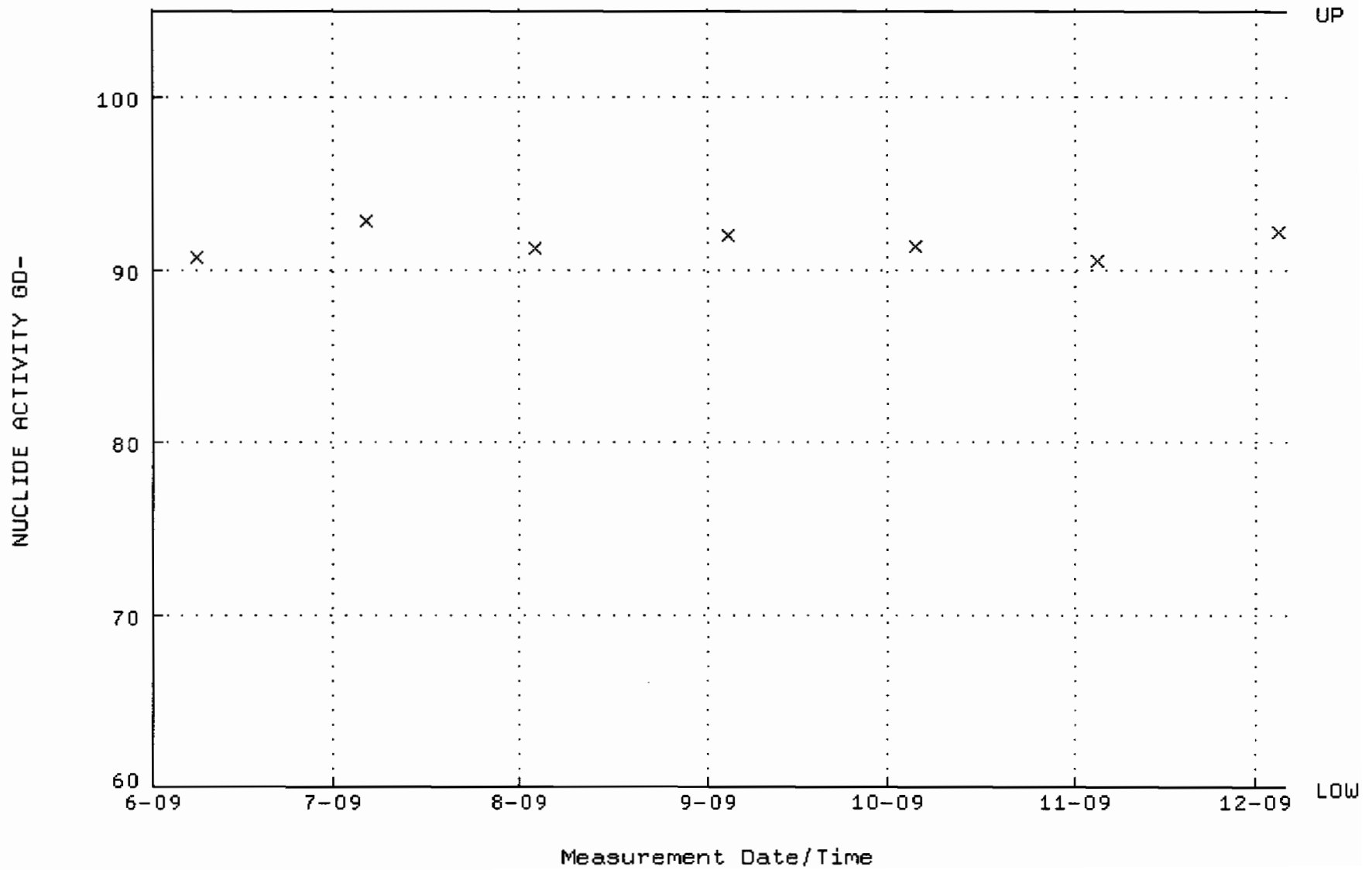

QA filename : DKA100:[ENV_ALPHA.QA.B]B023.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:23 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

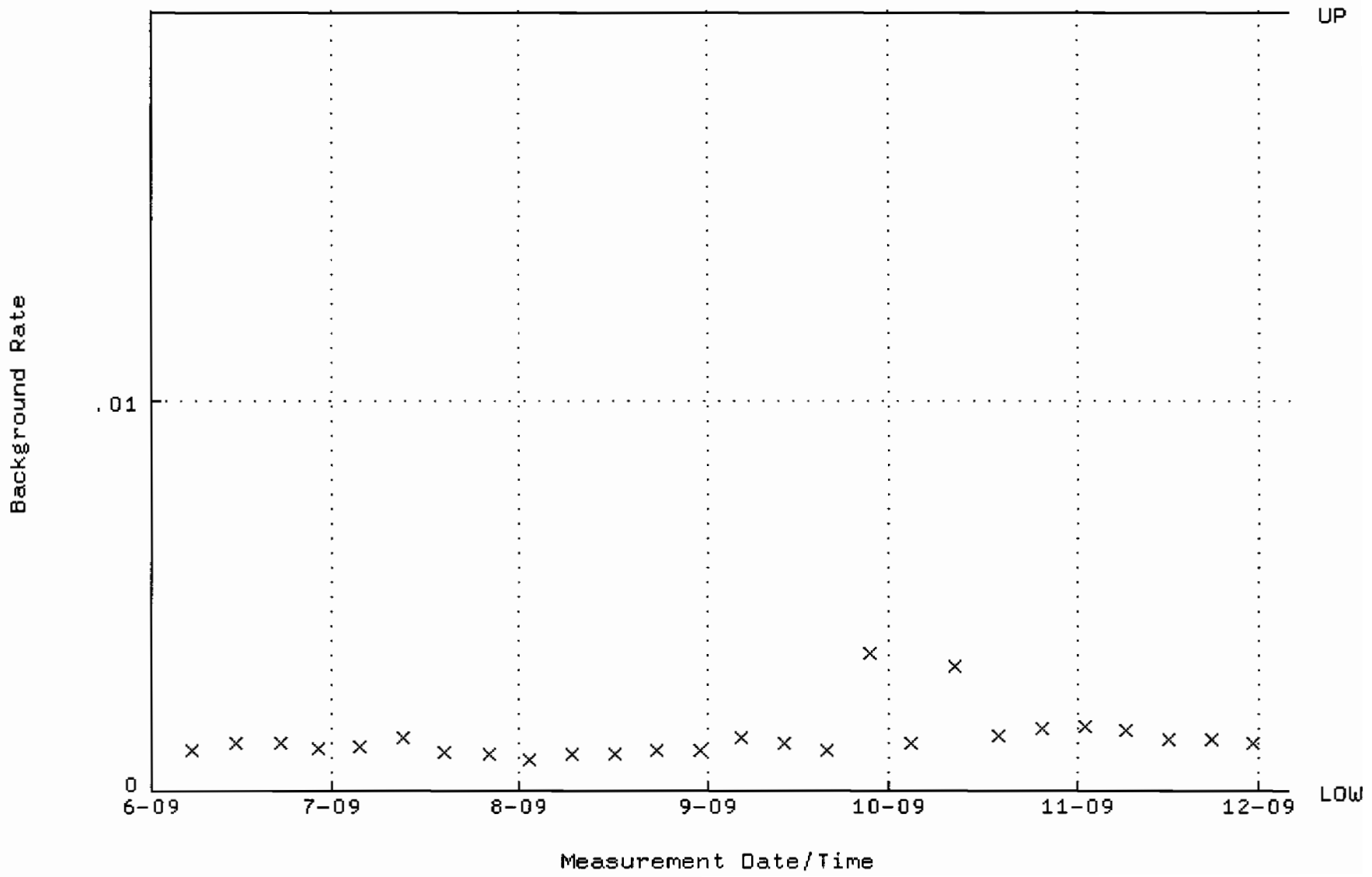

QA filename : DKA100:[ENV_ALPHA.QA.W]W024.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.315820 through 0.352494

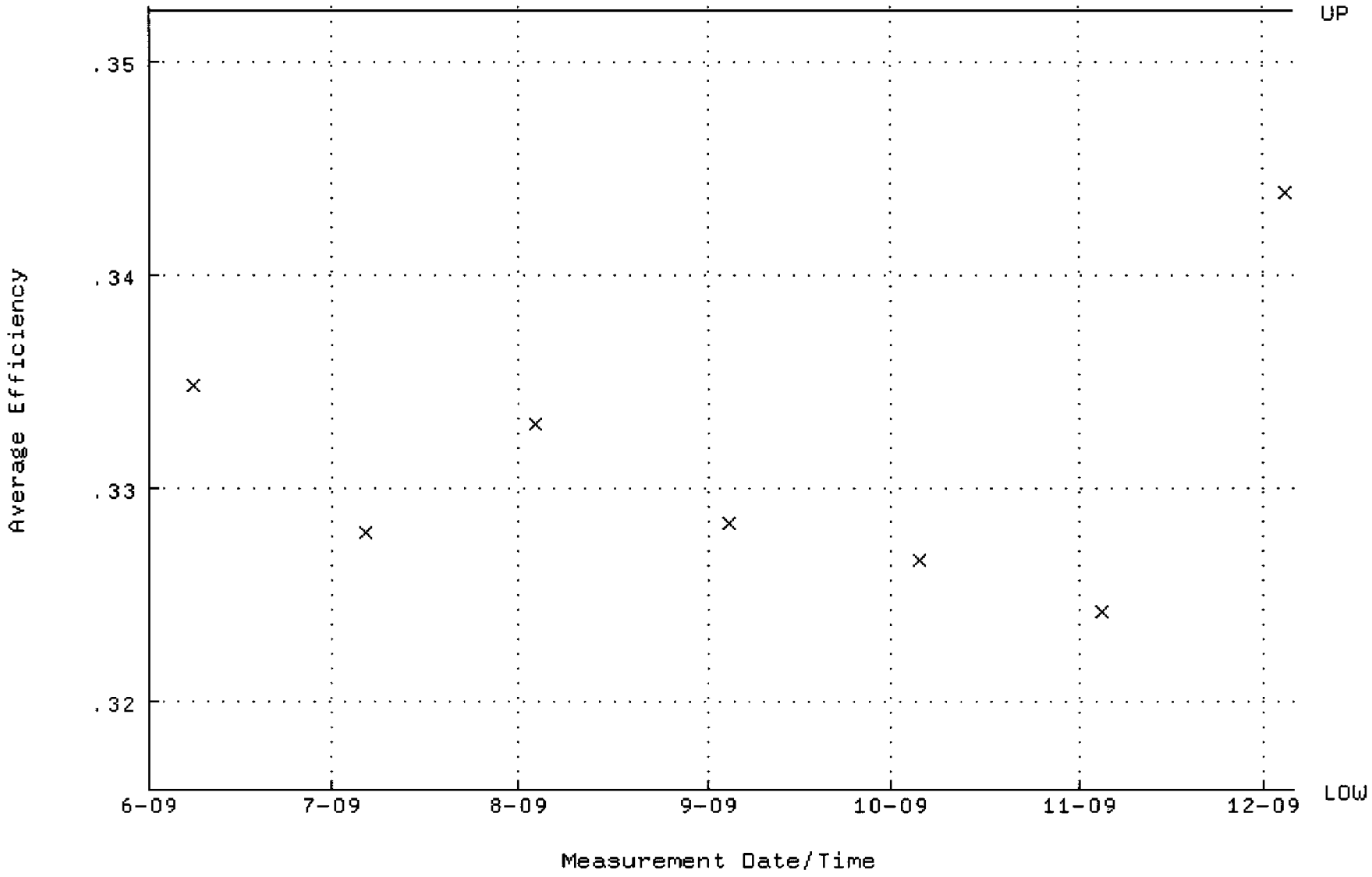

QA filename : DKA100:[ENV_ALPHA.QA.W]W024.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 87.2434 through 91.8289

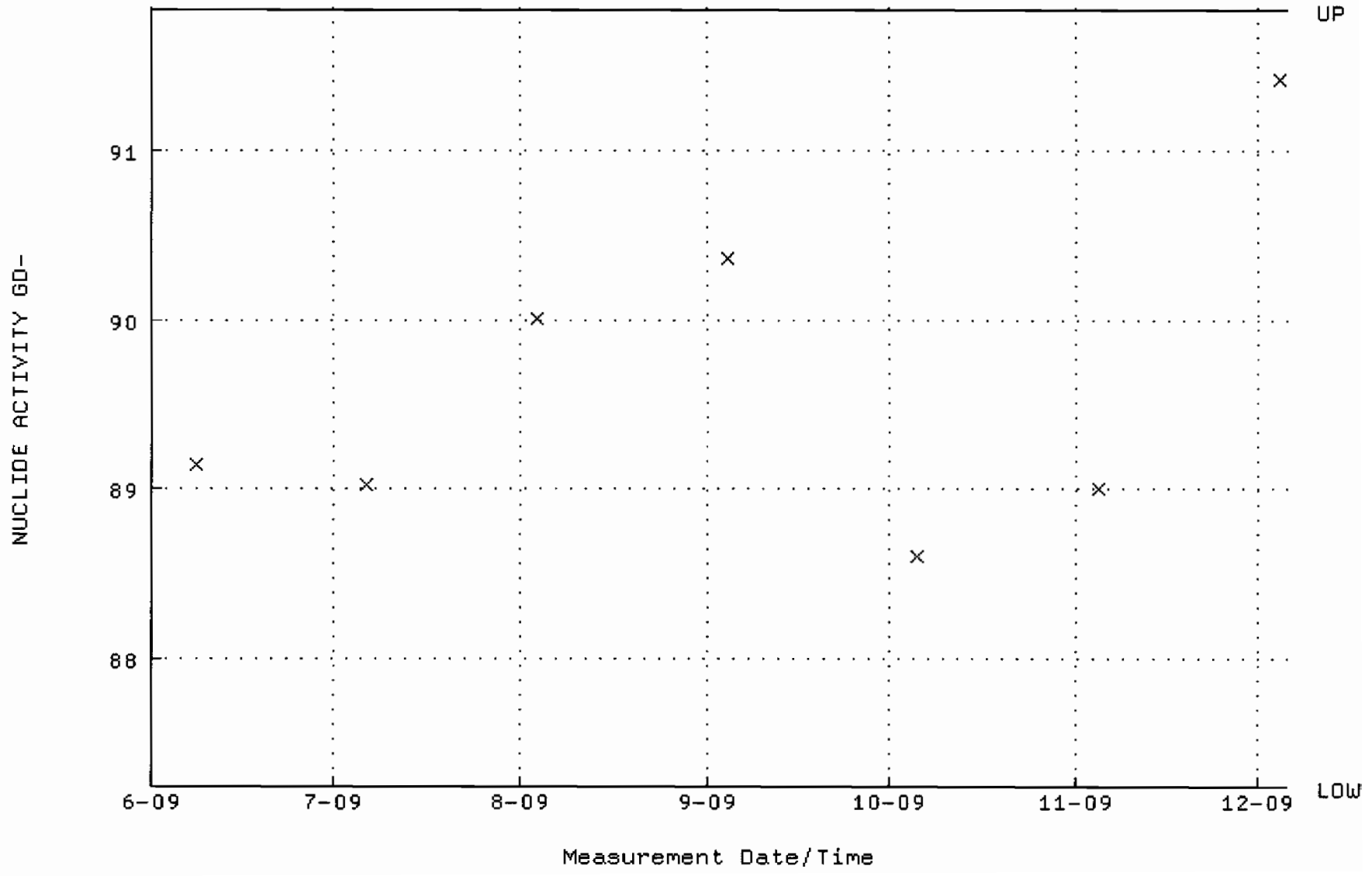

QA filename : DKA100:[ENV_ALPHA.QA.B]B024.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:23 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

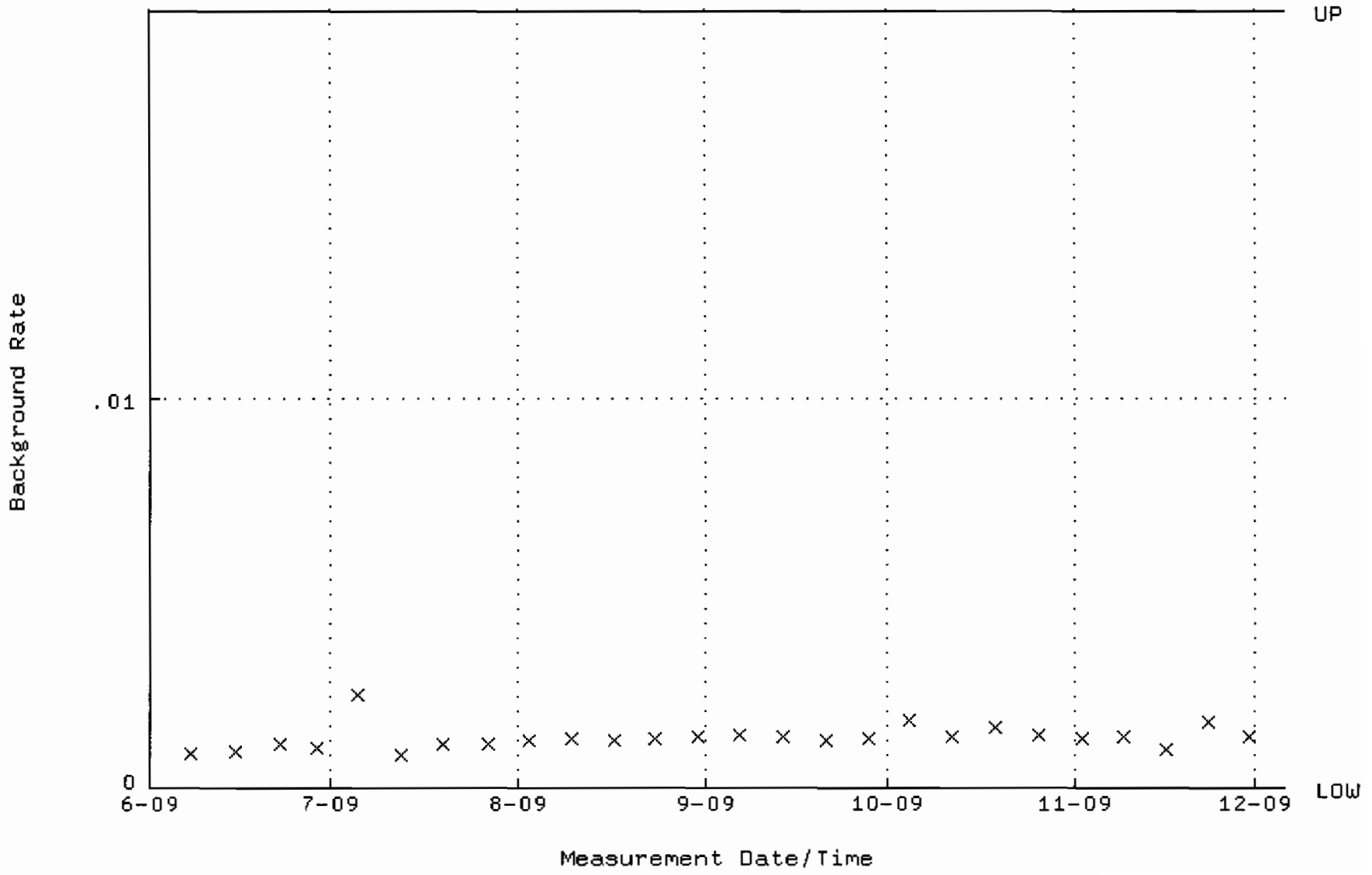

QA filename : DKA100:[ENV_ALPHA.QA.W]W025.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

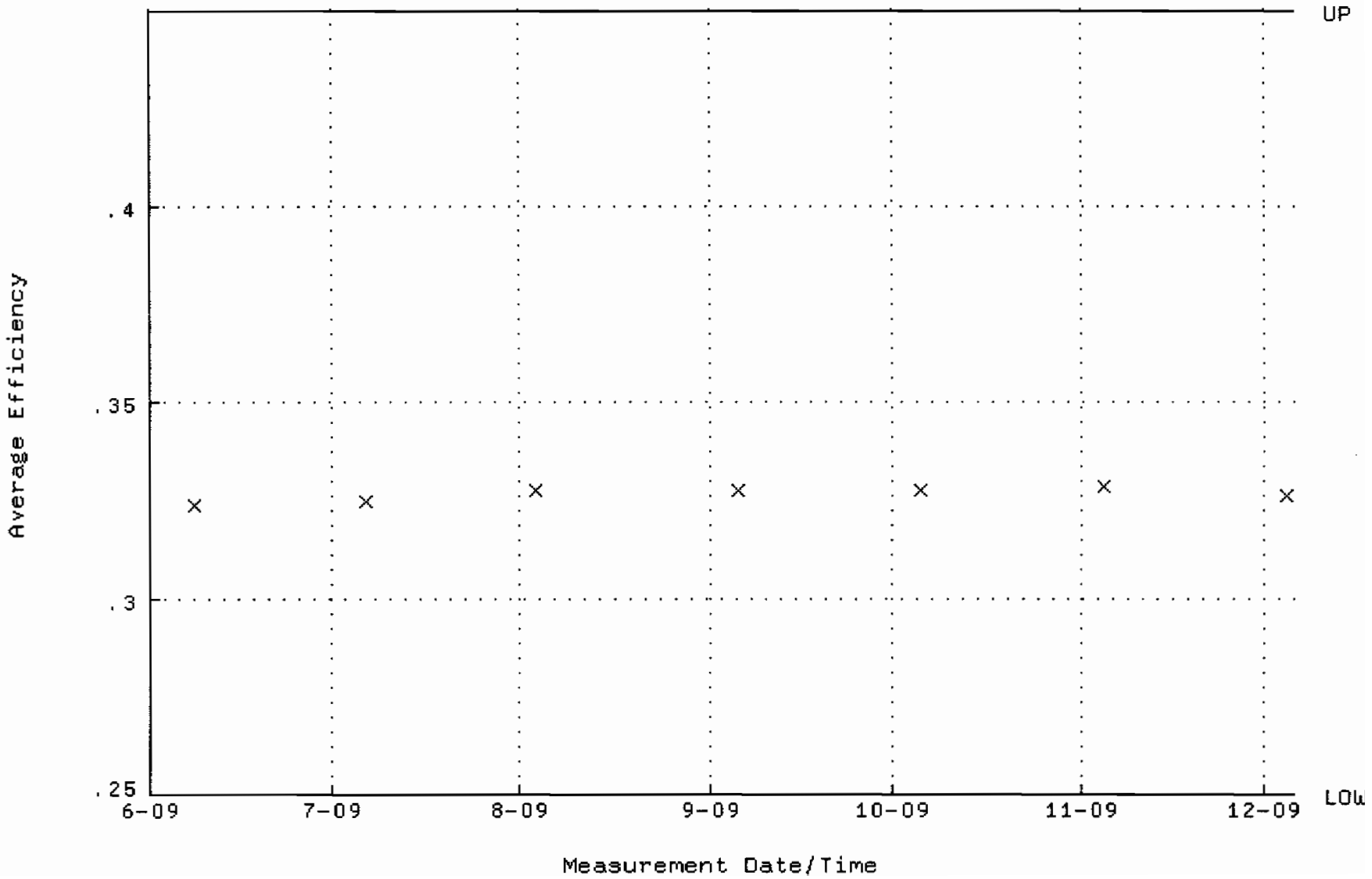

QA filename : DKA100:[ENV_ALPHA.QA.W]W025.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

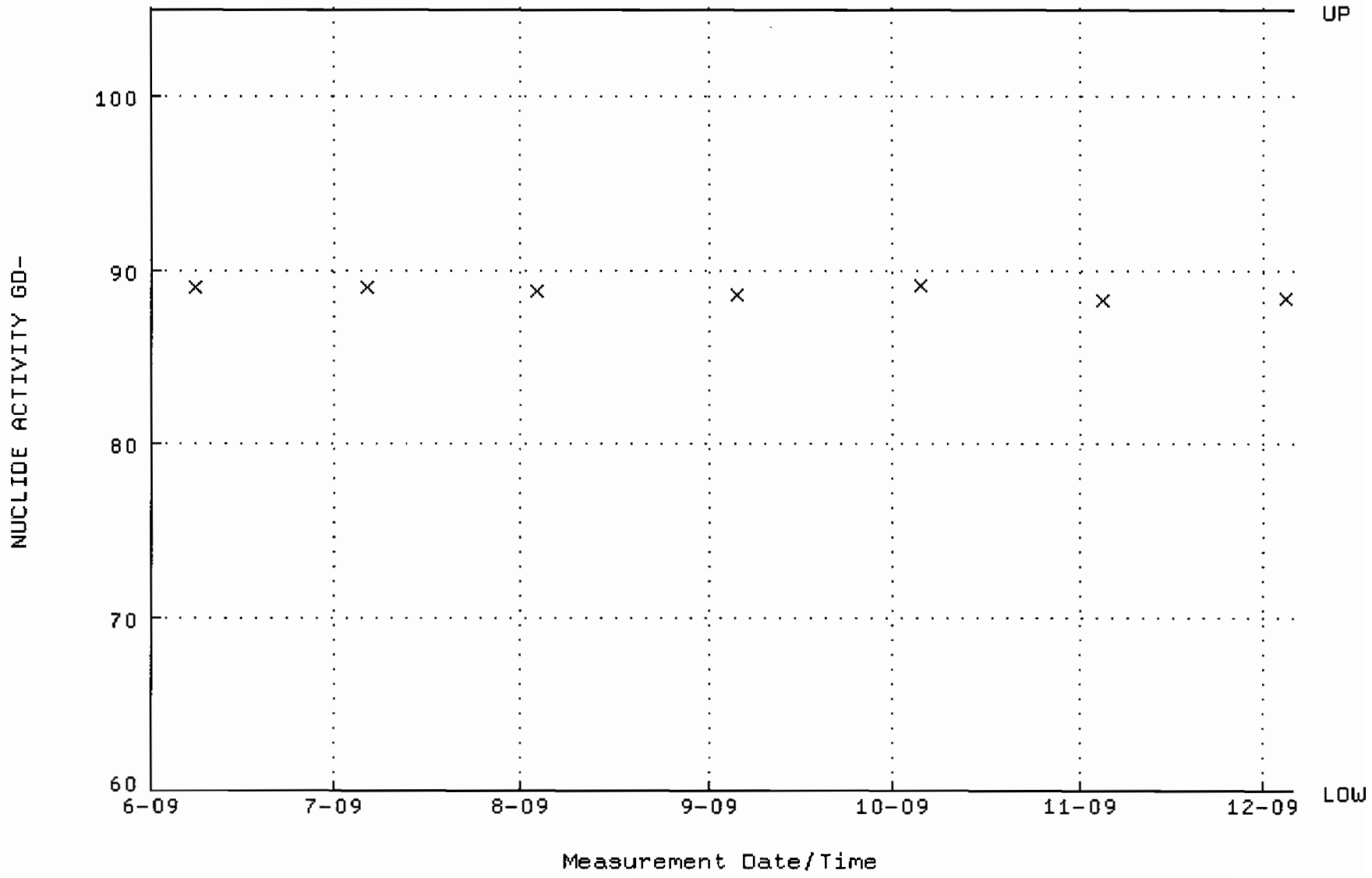

QA filename : DKA100:[ENV_ALPHA.QA.B]B025.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

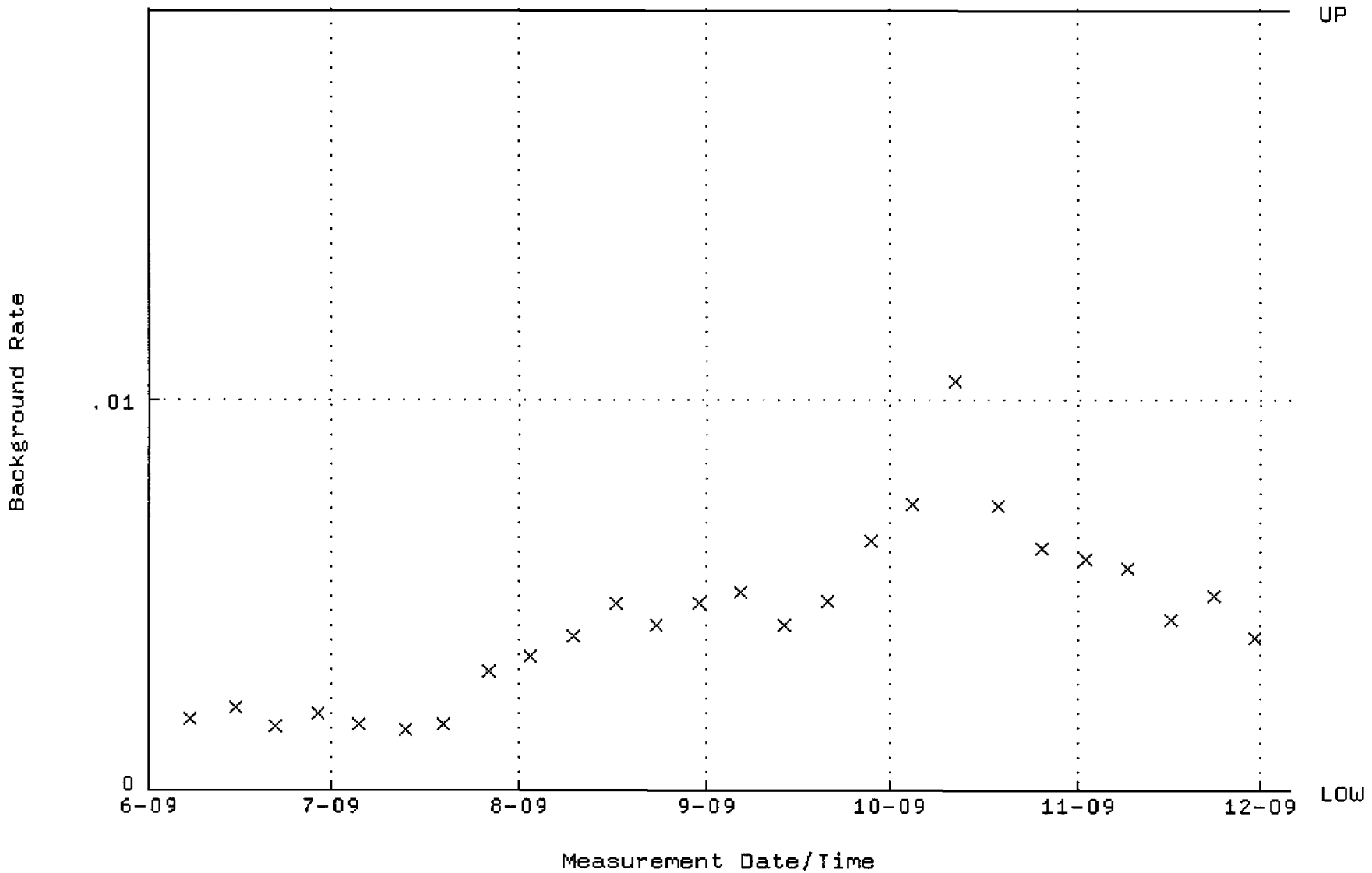

QA filename : DKA100:[ENV_ALPHA.QA.W]W028.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.295040 through 0.315040

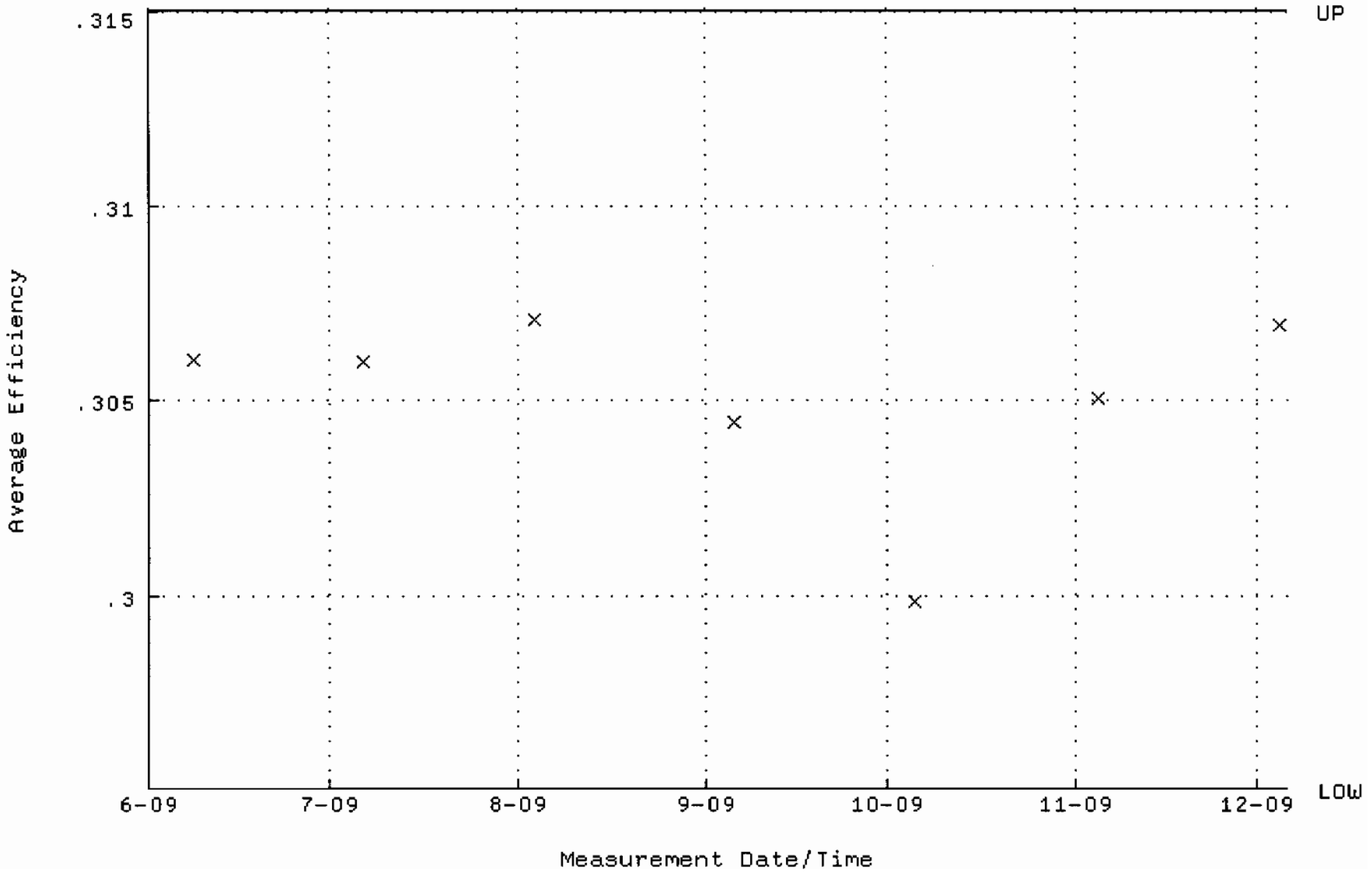

QA filename : DKA100:[ENV_ALPHA.QA.W]W028.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 85.1965 through 94.1645

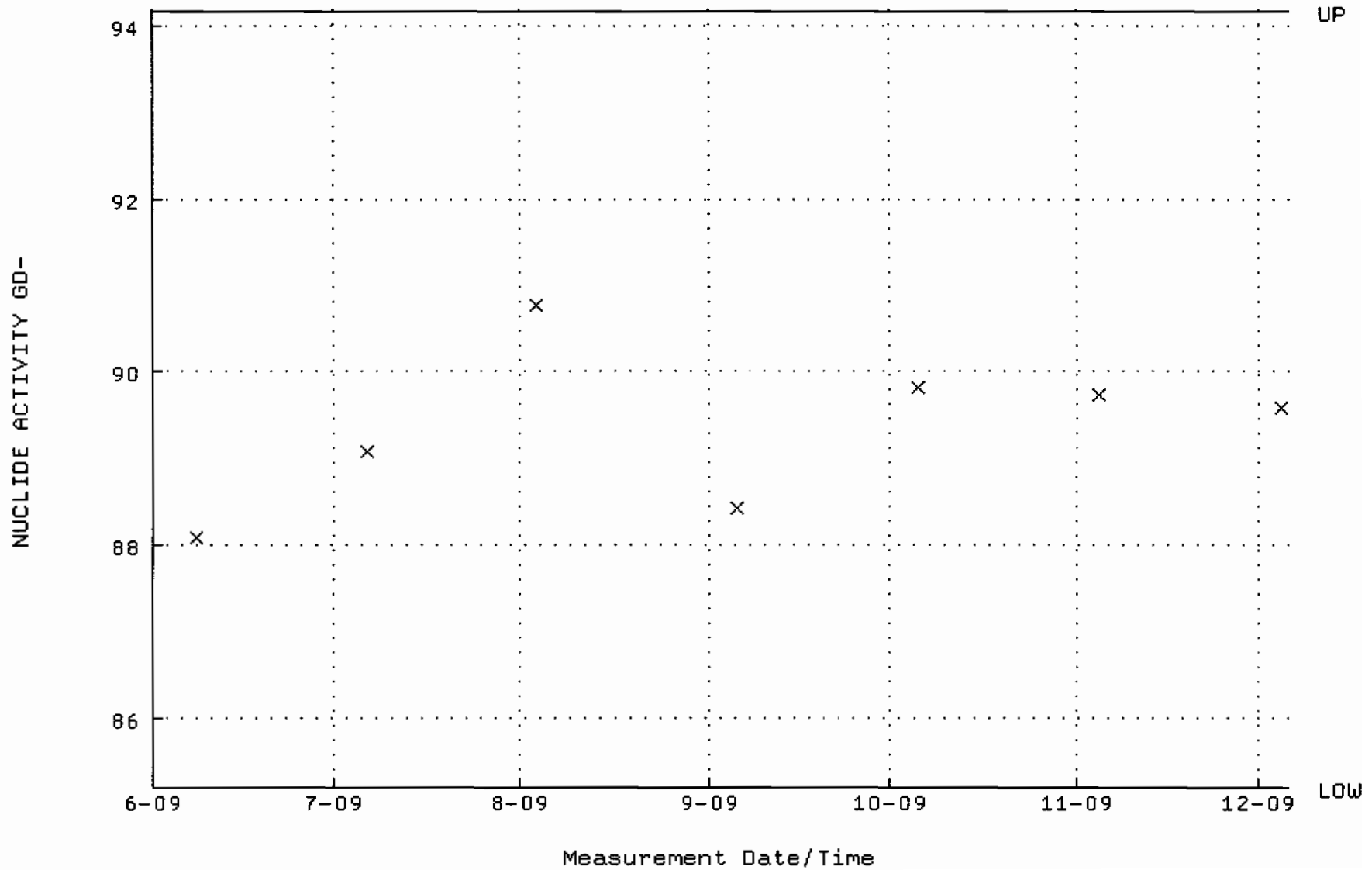

QA filename : DKA100:[ENV_ALPHA.QA.B]B028.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

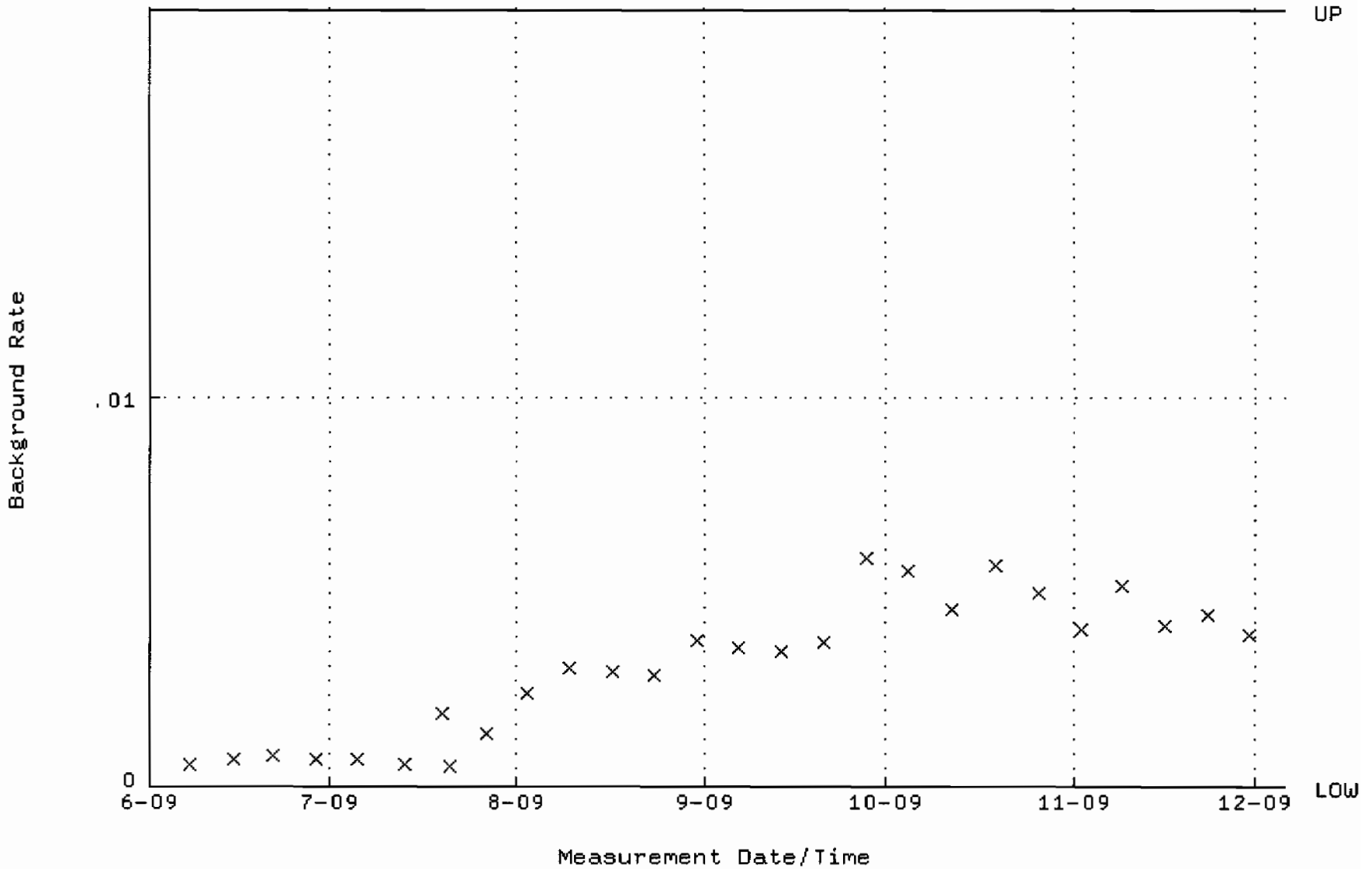

QA filename : DKA100:[ENV_ALPHA.QA.W]W030.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

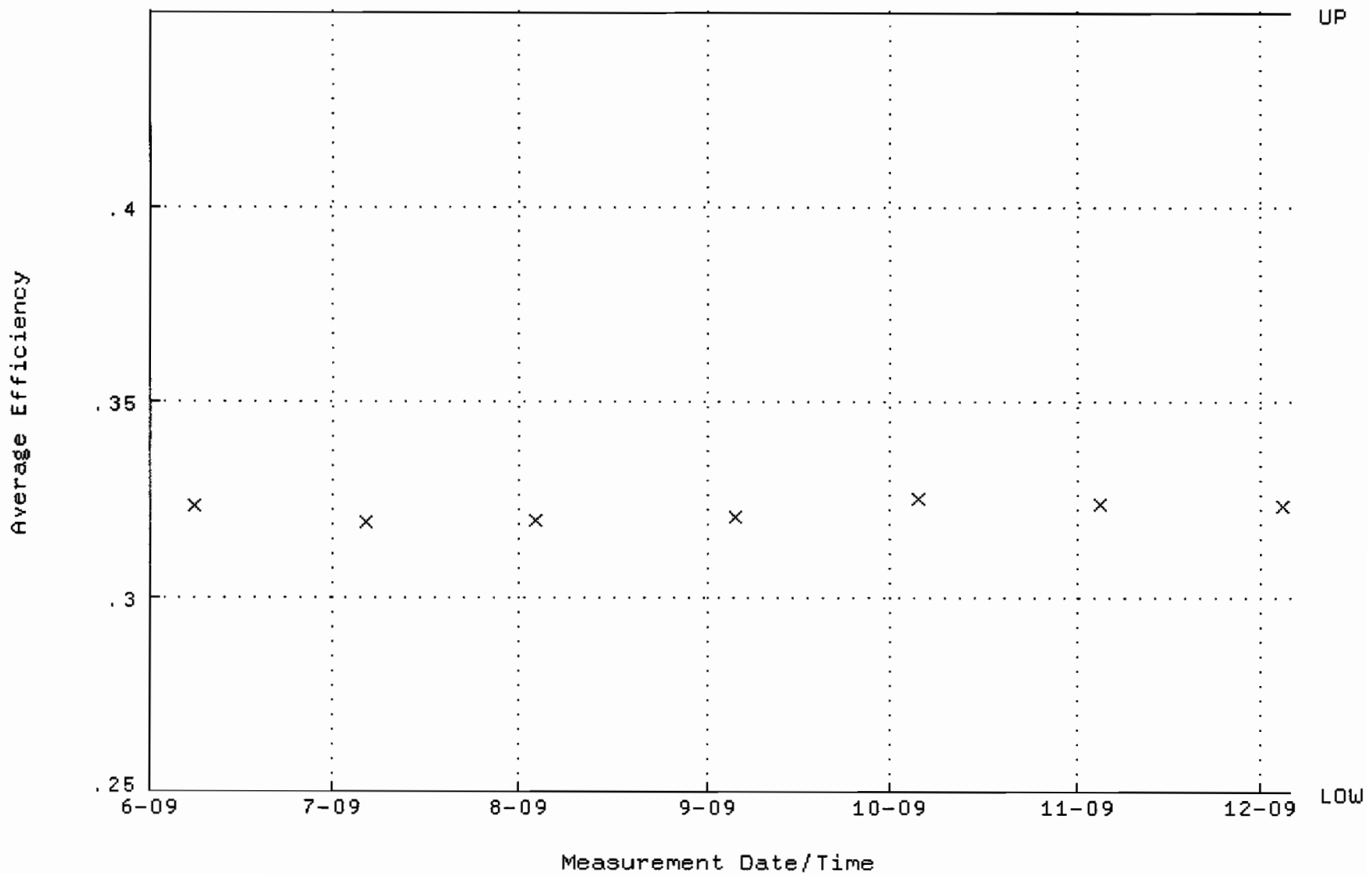

QA filename : DKA100:[ENV_ALPHA.QA.W]W030.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

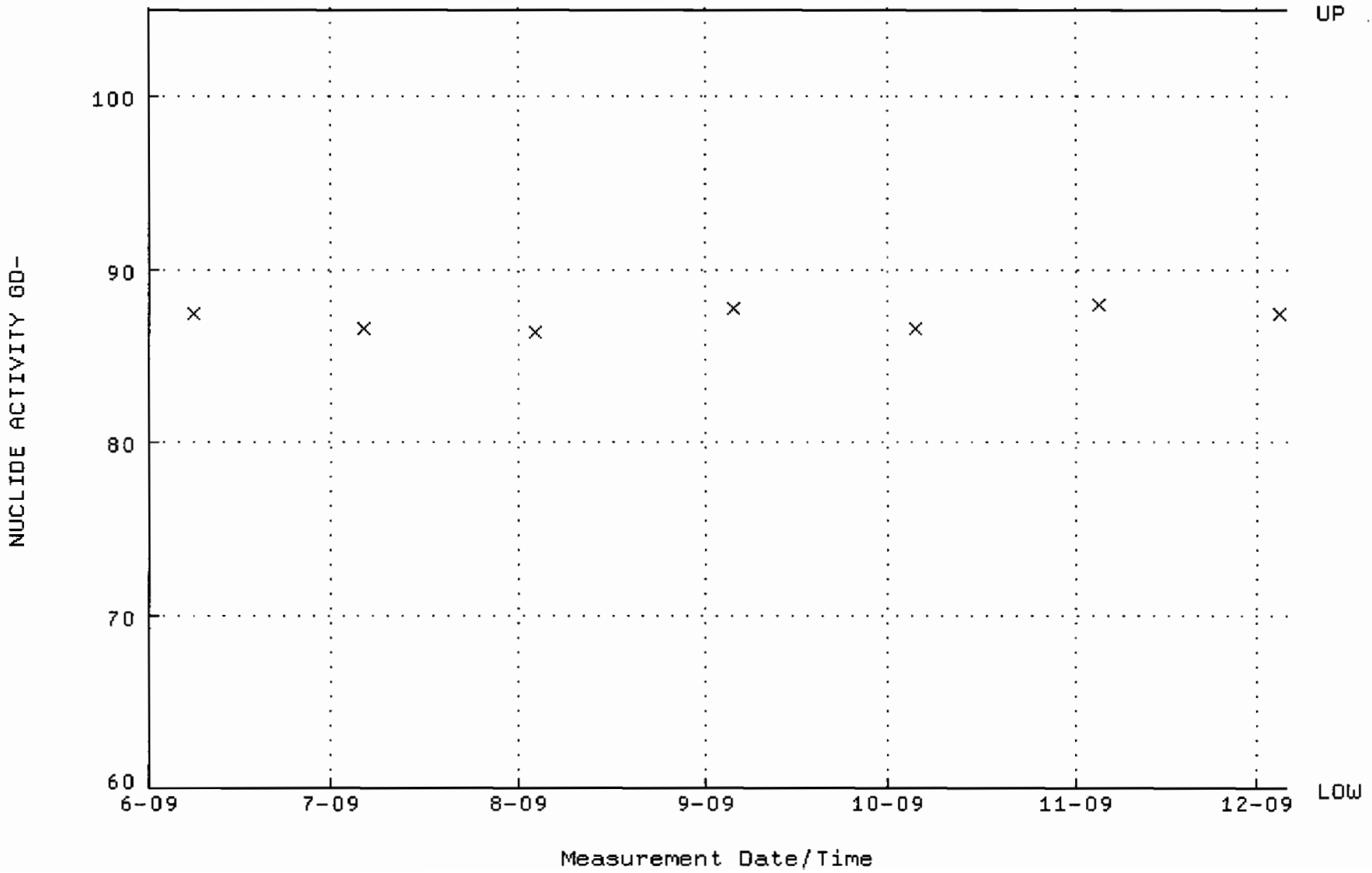

QA filename : DKA100:[ENV_ALPHA.QA.B]B030.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

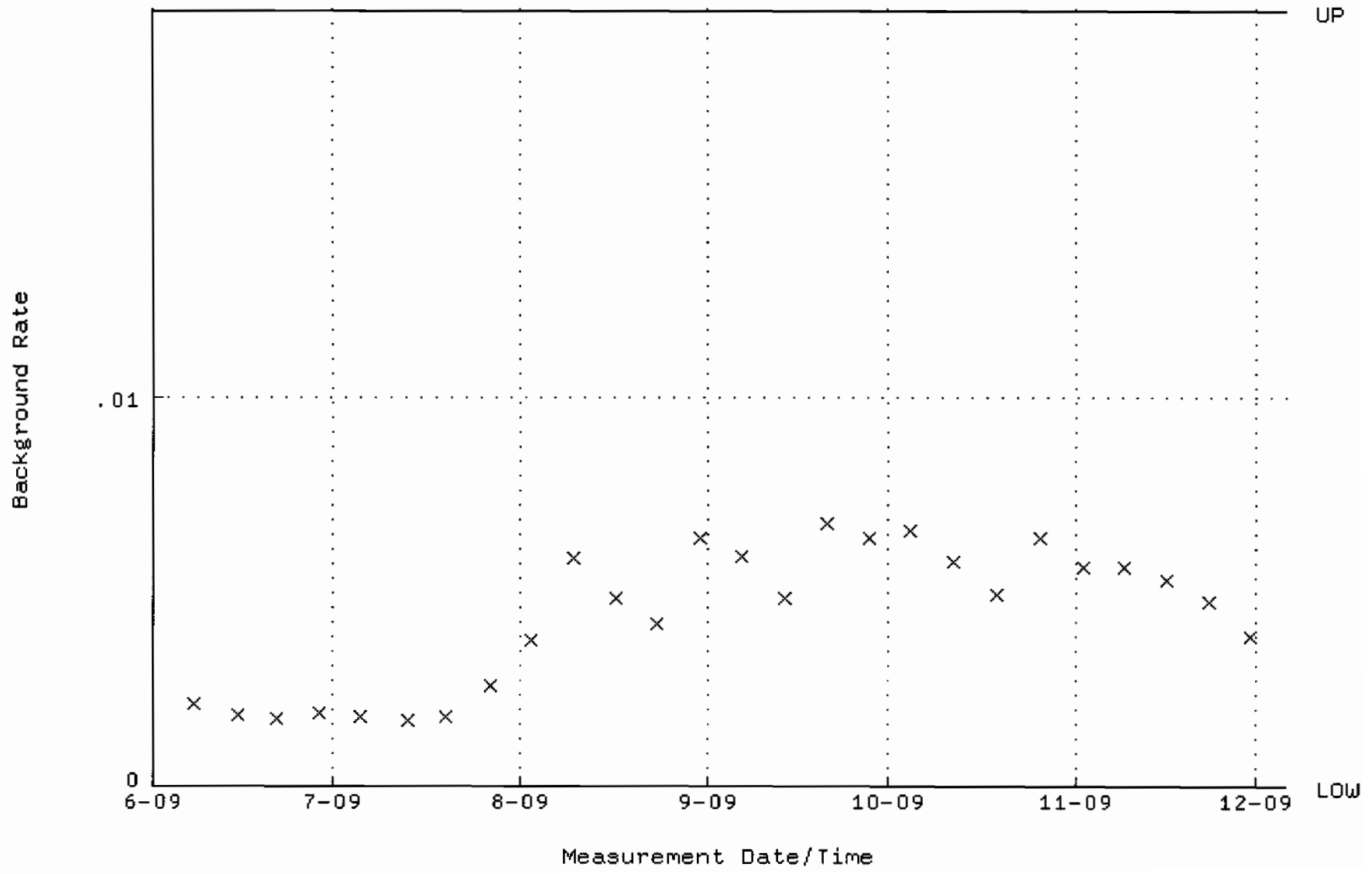

QA filename : DKA100:[ENV_ALPHA.QA.W]W031.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.324029 through 0.364065

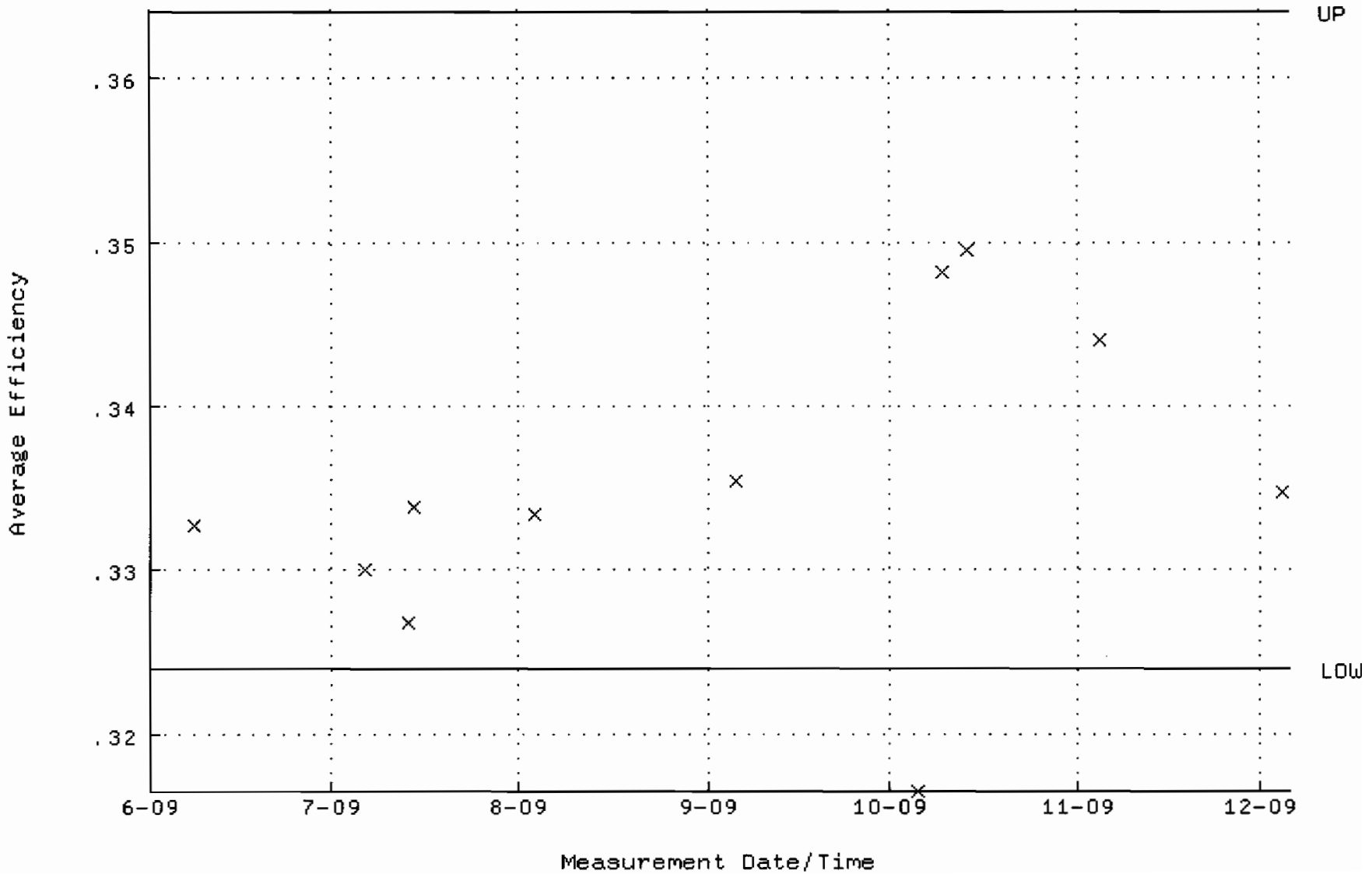

QA filename : DKA100:[ENV_ALPHA.QA.W]W031.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 84.2165 through 88.5165

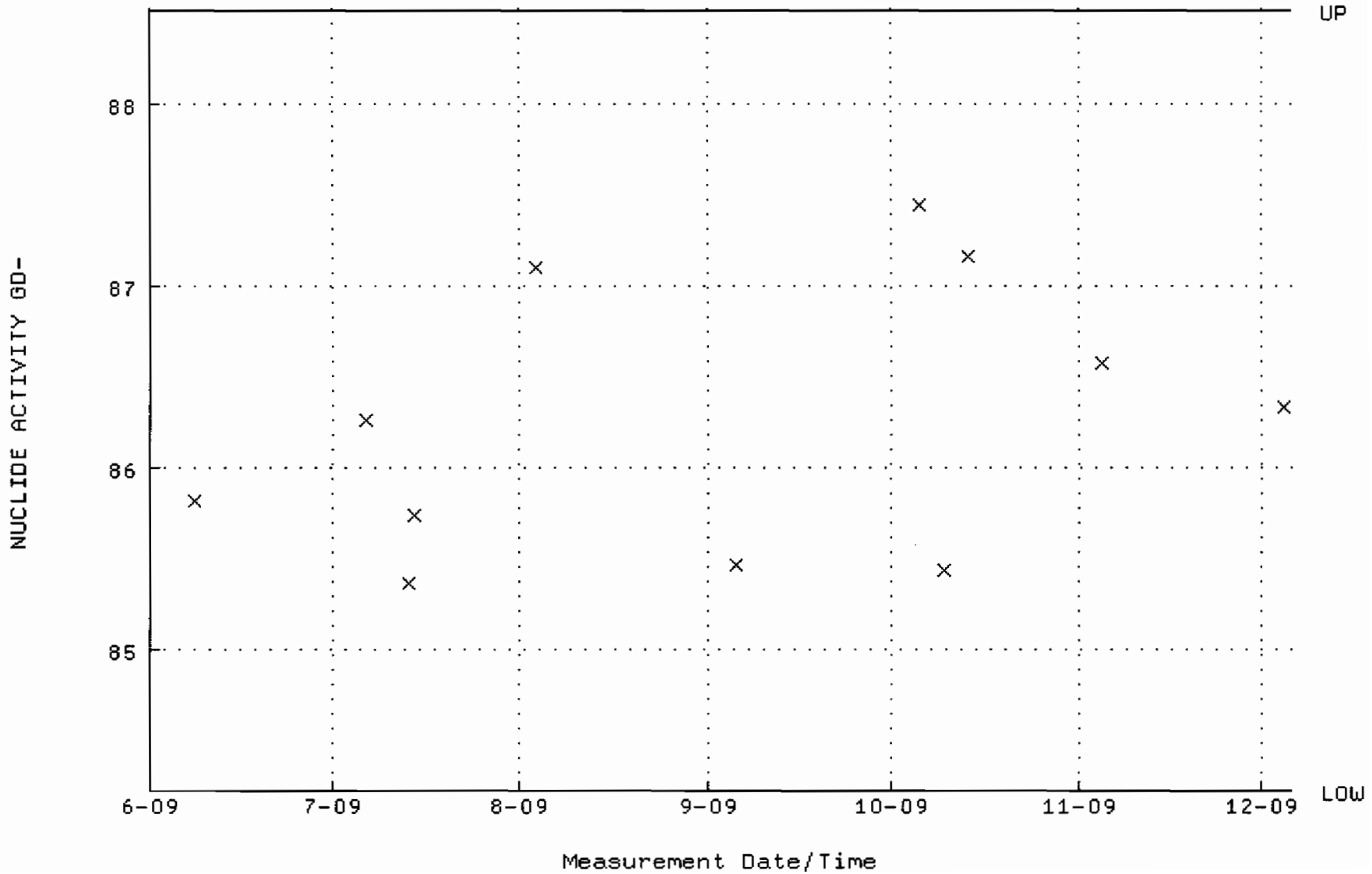

QA filename : DKA100:[ENV_ALPHA.QA.B]B031.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

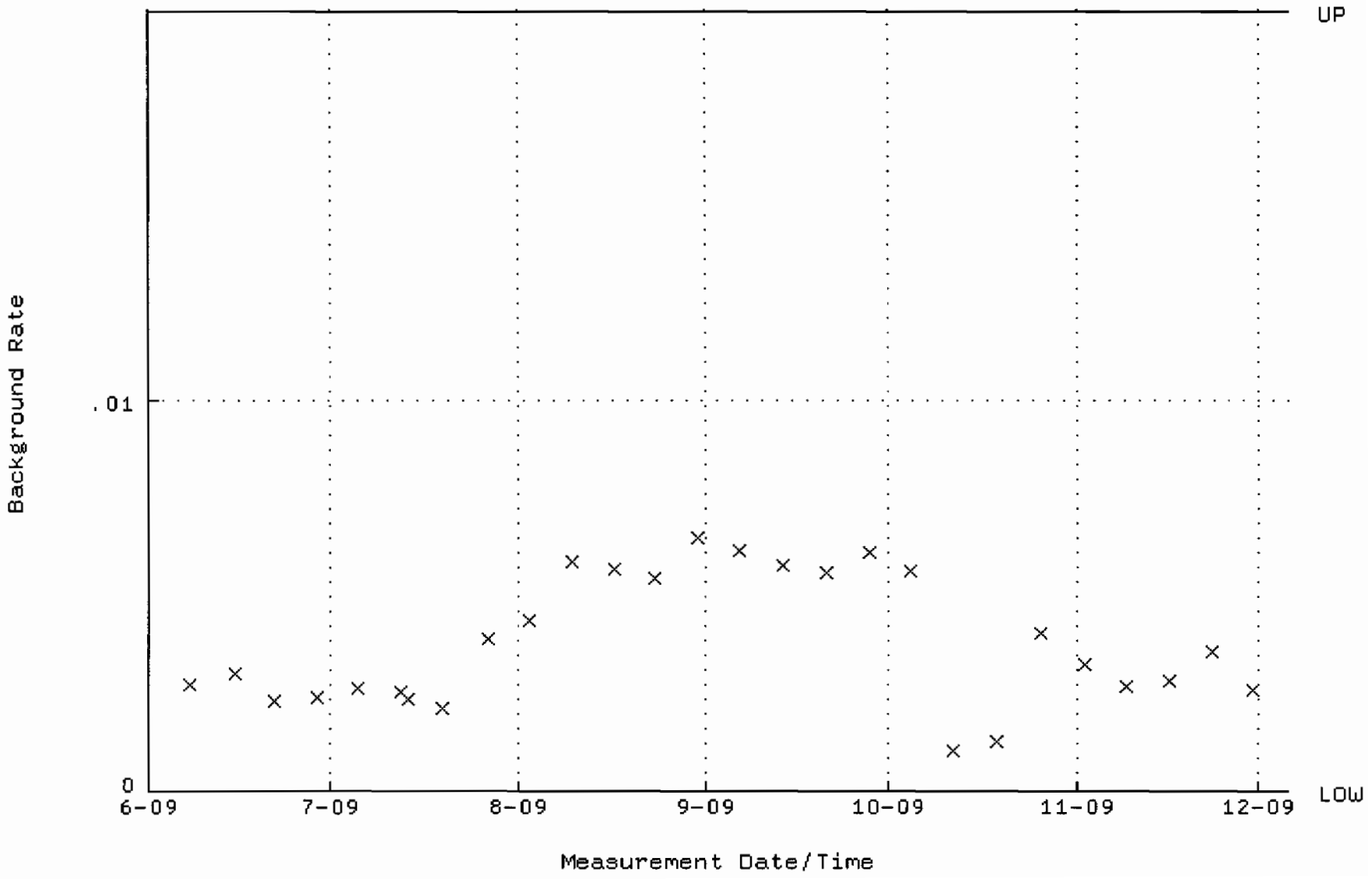

QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.304222 through 0.327748

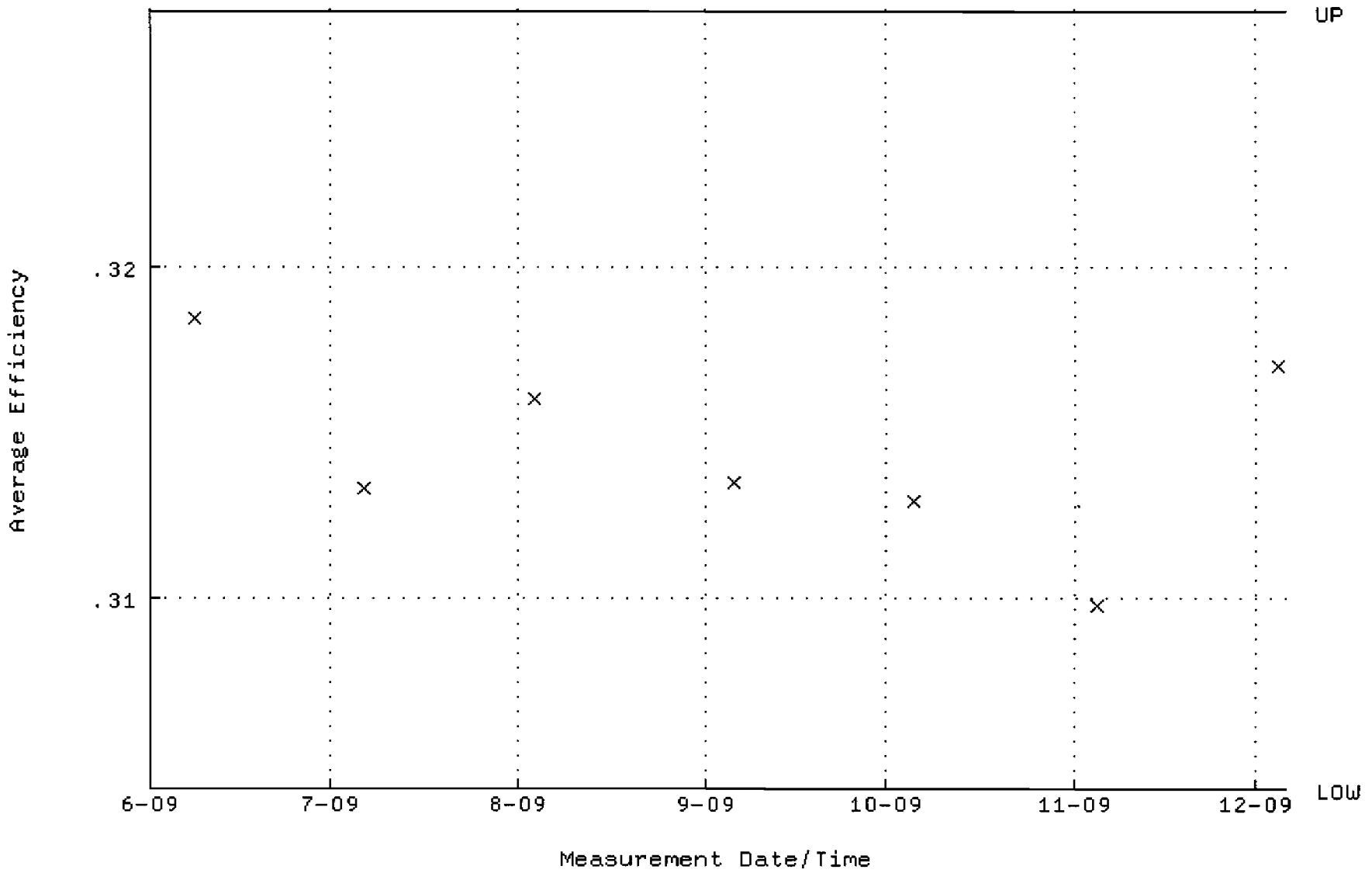

QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 83.9373 through 86.9661

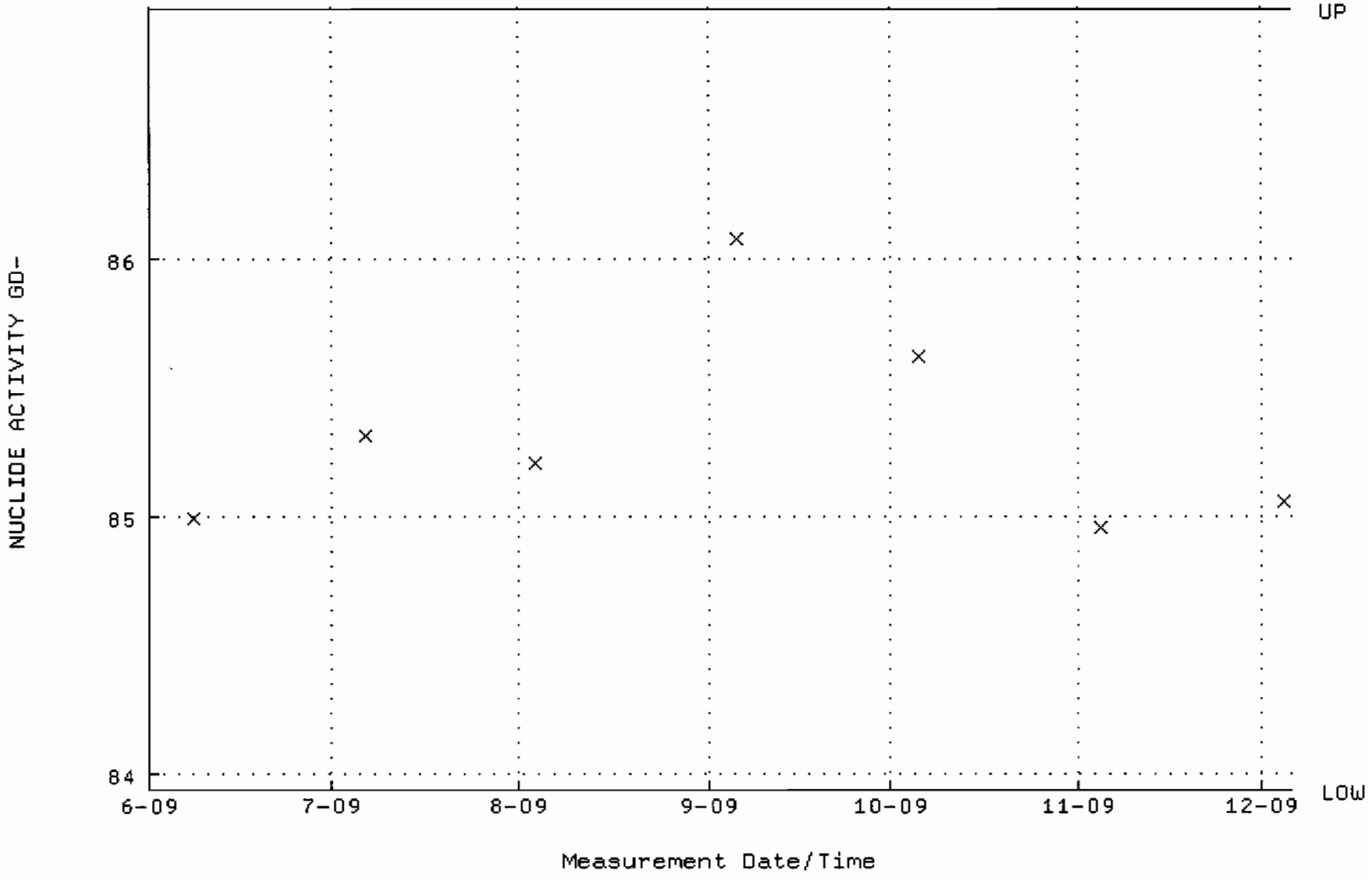

QA filename : DKA100:[ENV_ALPHA.QA.B]B033.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

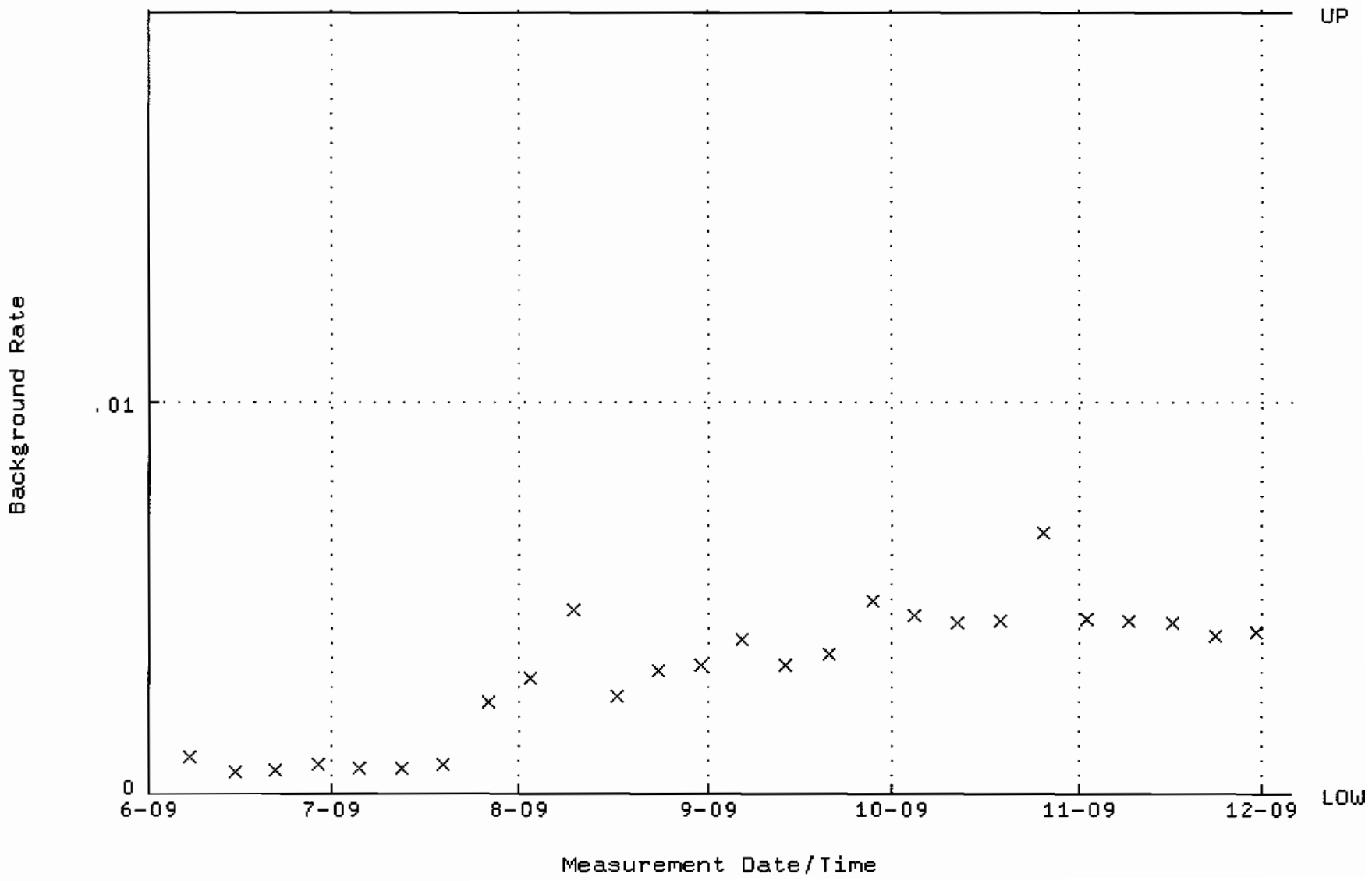

QA filename : DKA100:[ENV_ALPHA.QA.W]W071.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.309161 through 0.329161

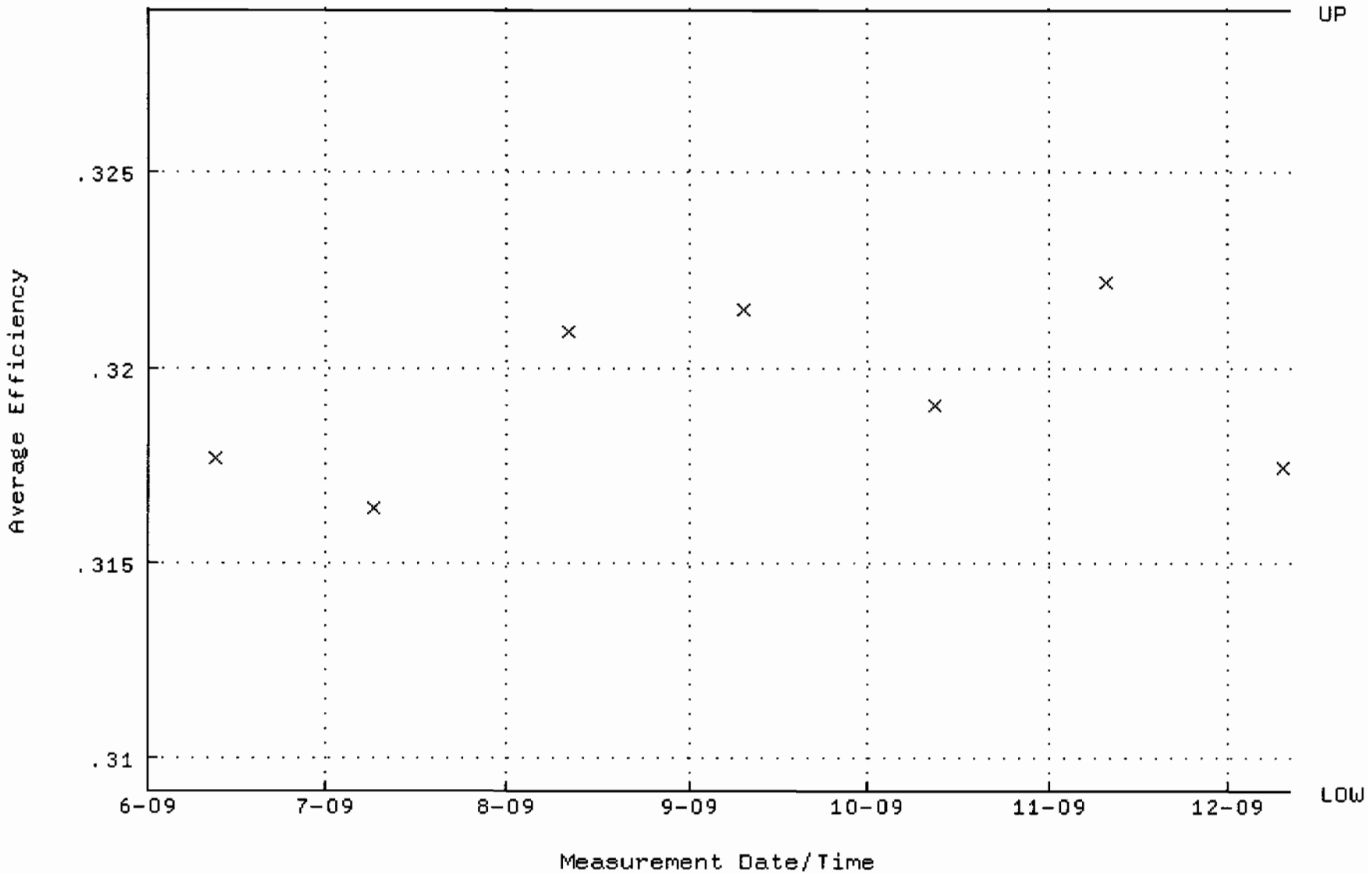

QA filename : DKA100:[ENV_ALPHA.QA.W]W071.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.7769 through 95.9113

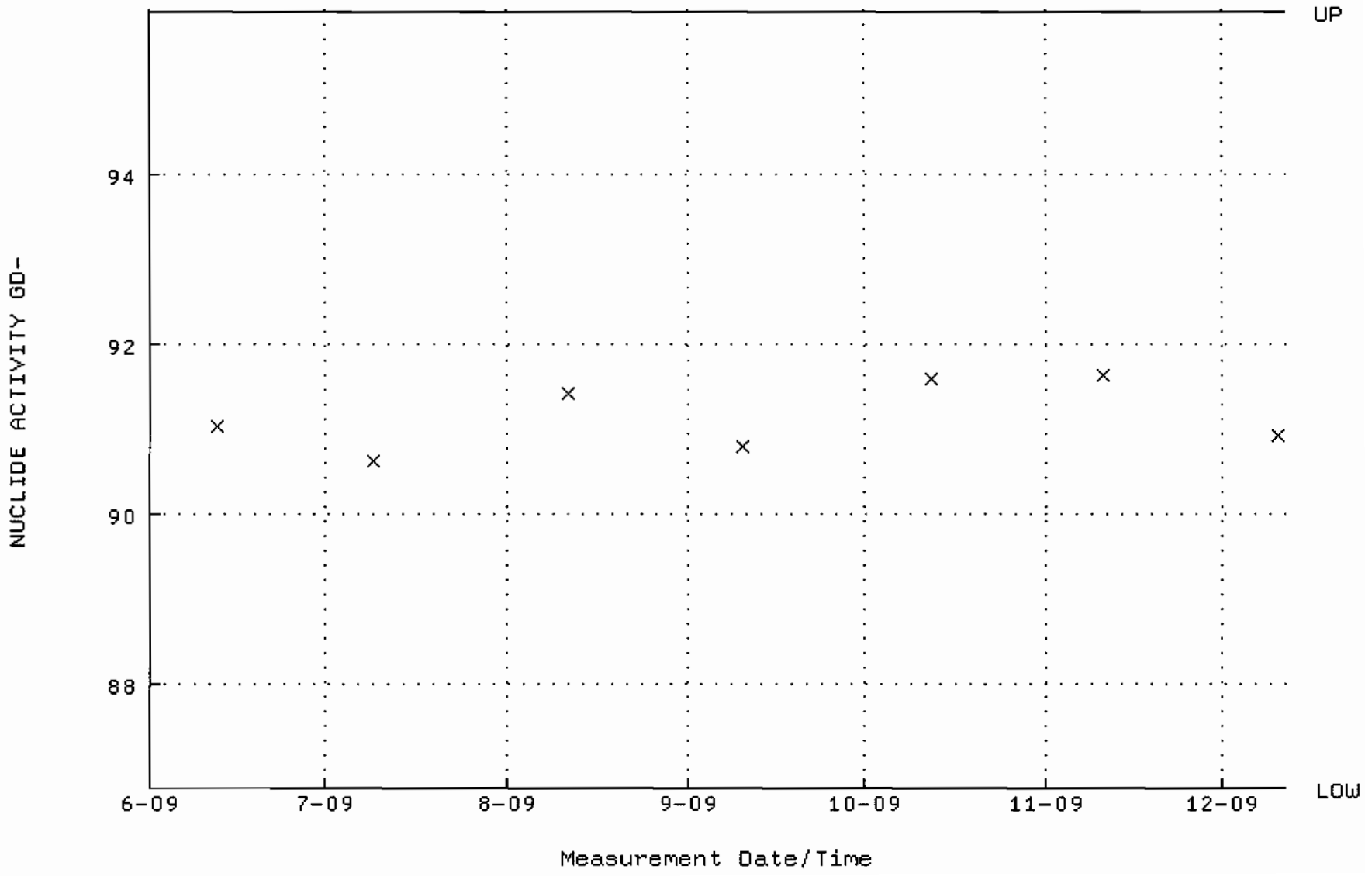

QA filename : DKA100:[ENV_ALPHA.QA.B]B071.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

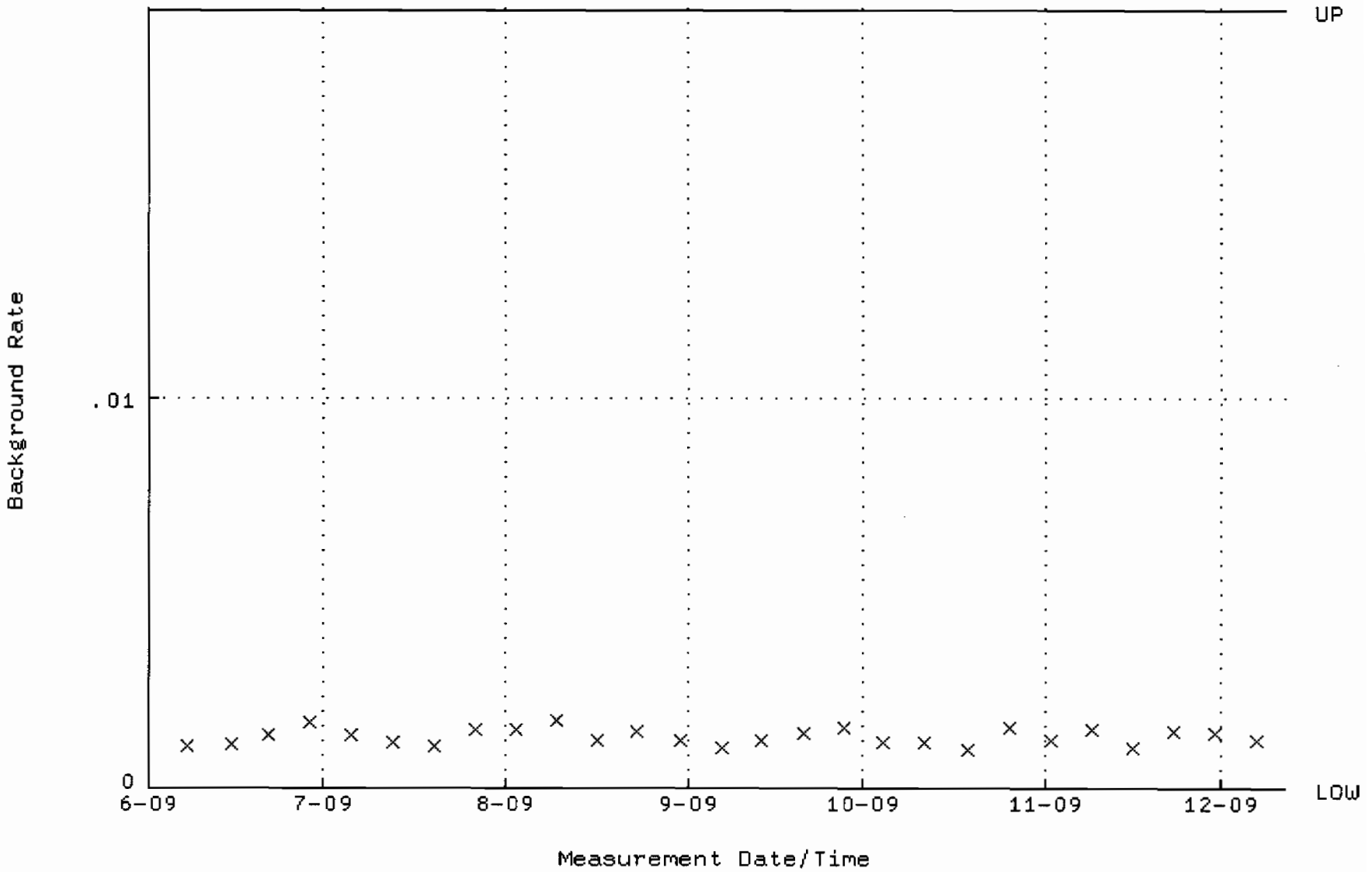

QA filename : DKA100:[ENV_ALPHA.QA.W]W072.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.313761 through 0.333761

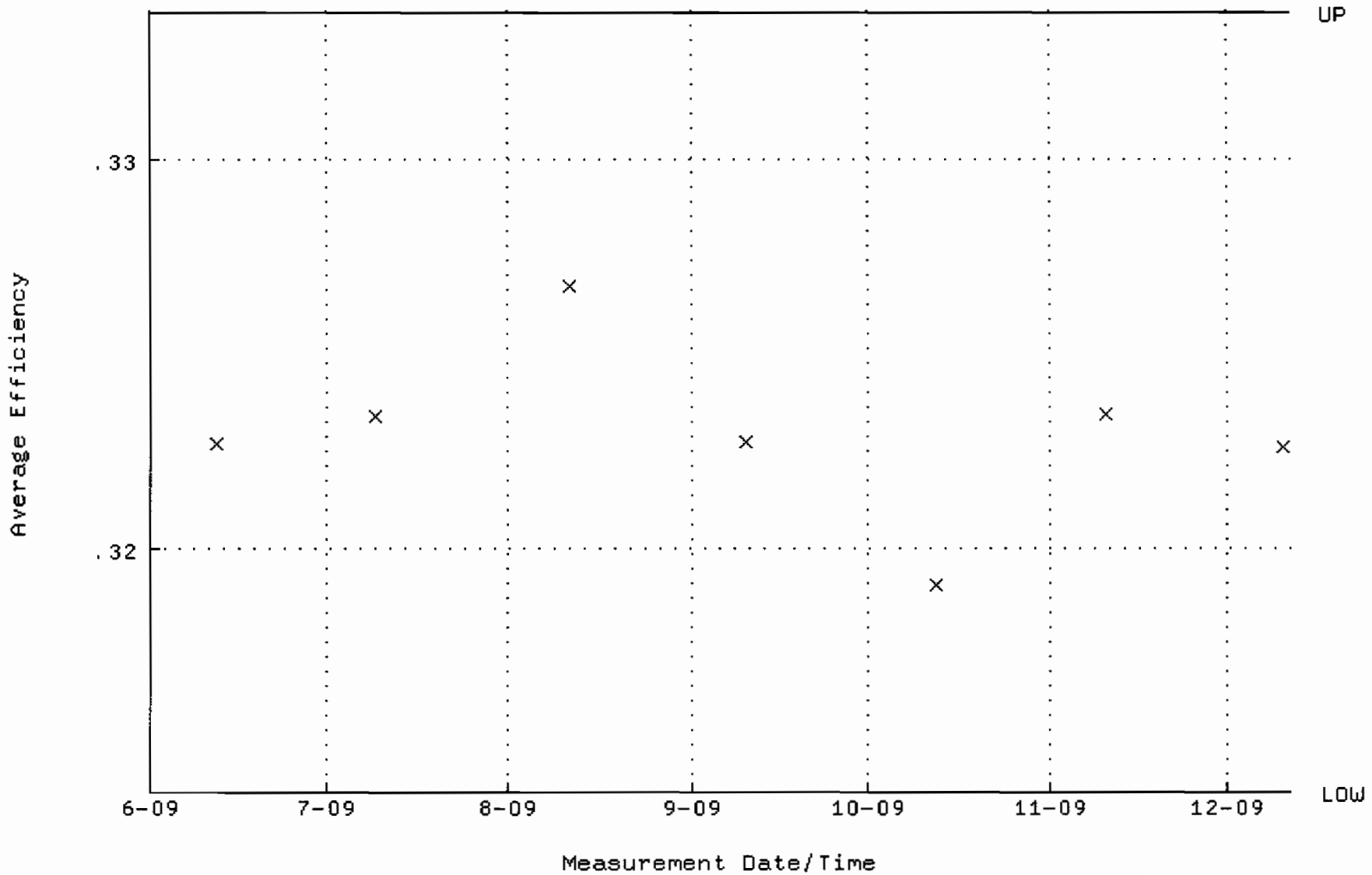

QA filename : DKA100:[ENV_ALPHA.QA.W]W072.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.3348 through 96.5280

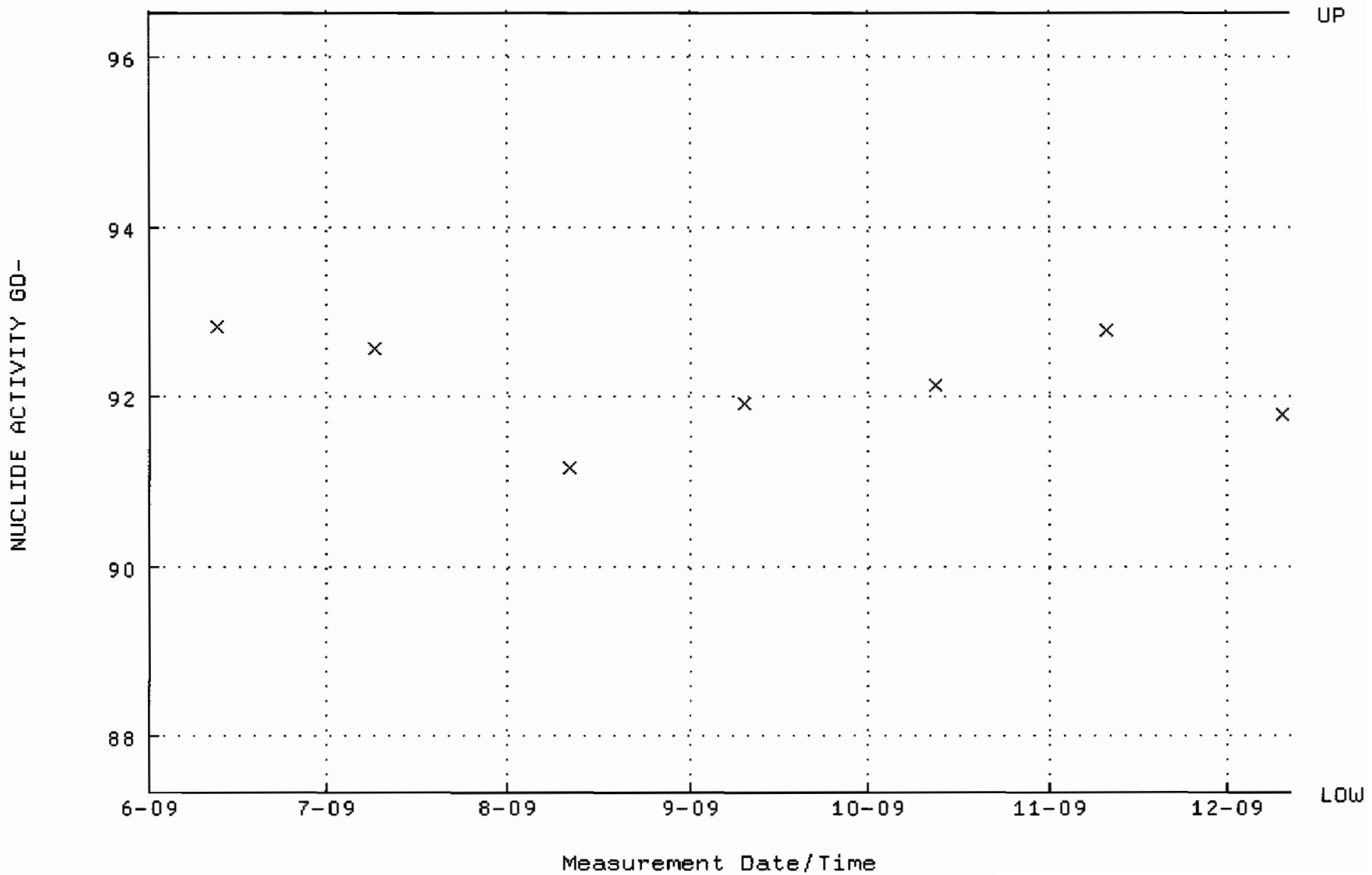

QA filename : DKA100:[ENV_ALPHA.QA.B]B072.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

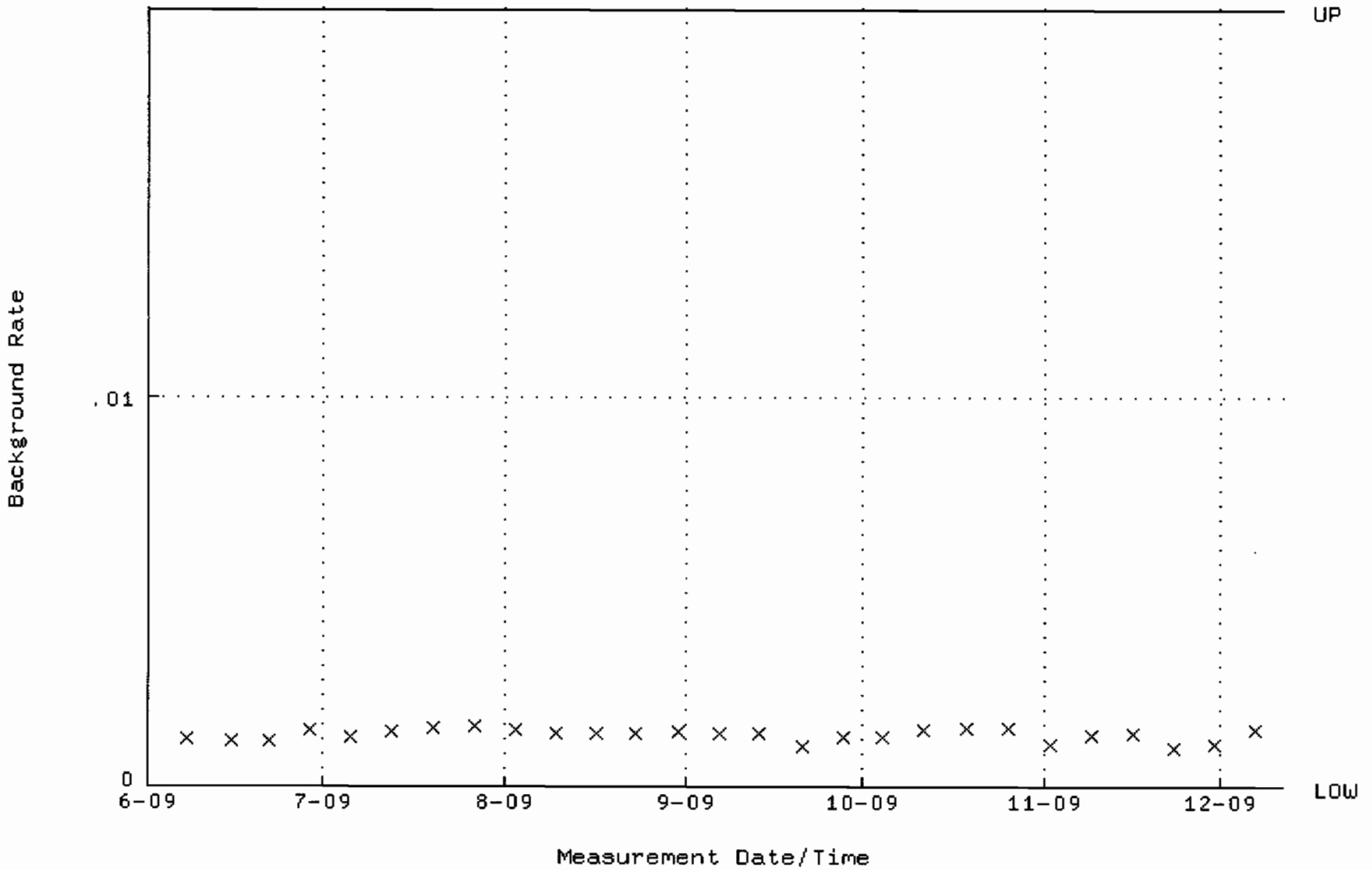

QA filename : DKA100:[ENV_ALPHA.QA.W]W073.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.323184 through 0.343184

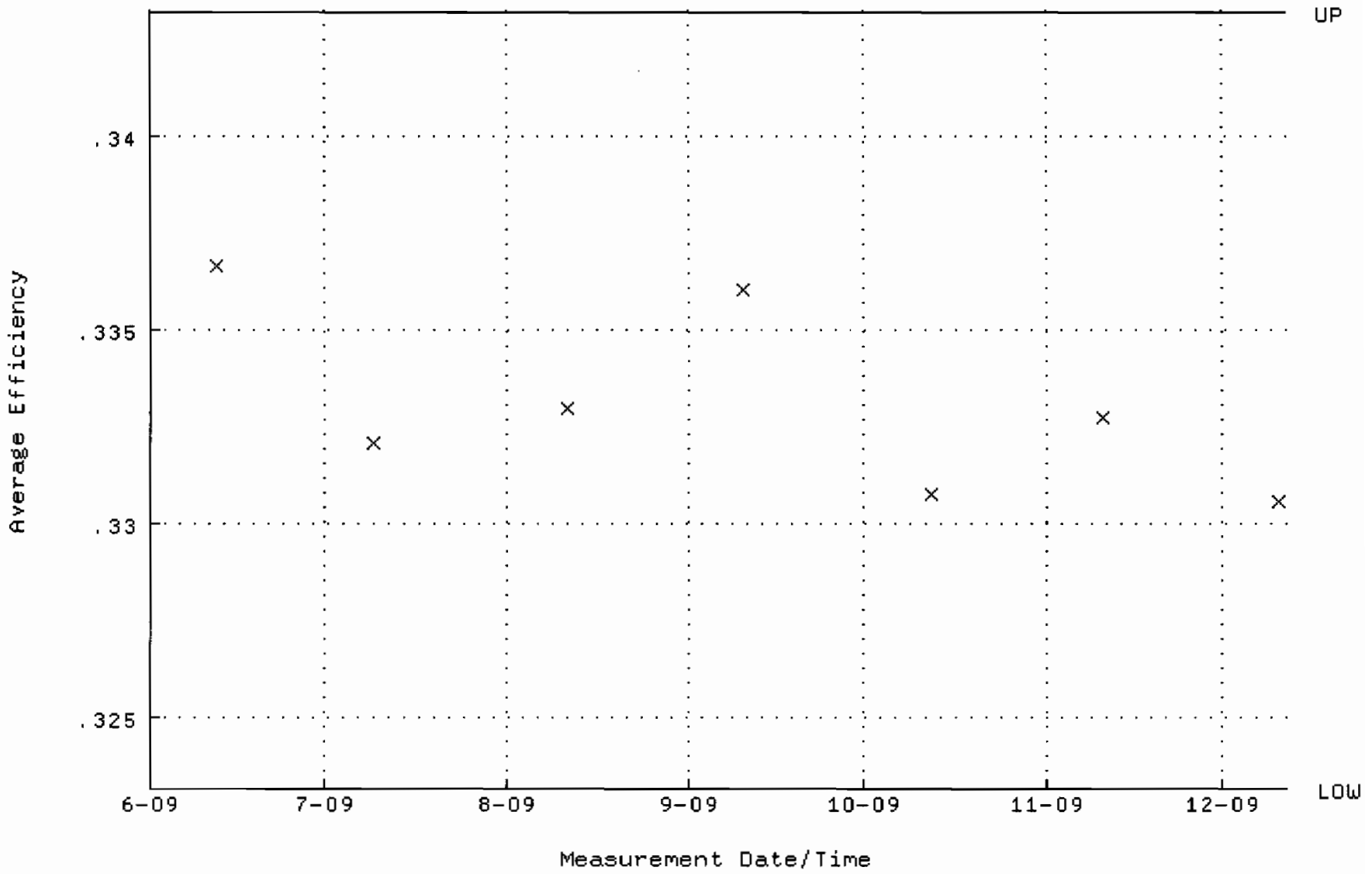

QA filename : DKA100:[ENV_ALPHA.QA.W]W073.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.6734 through 95.7970

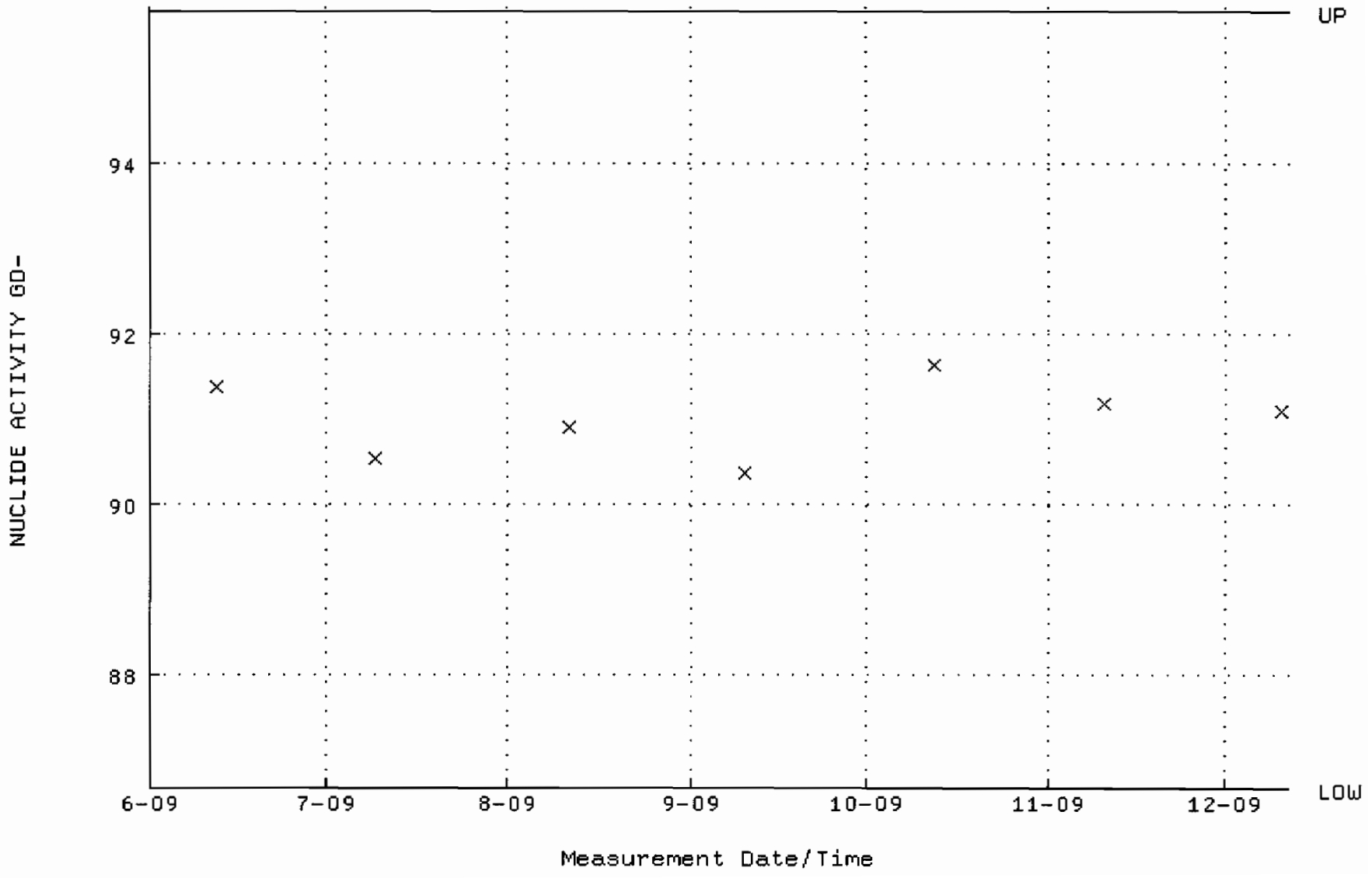

QA filename : DKA100:[ENV_ALPHA.QA.B]B073.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

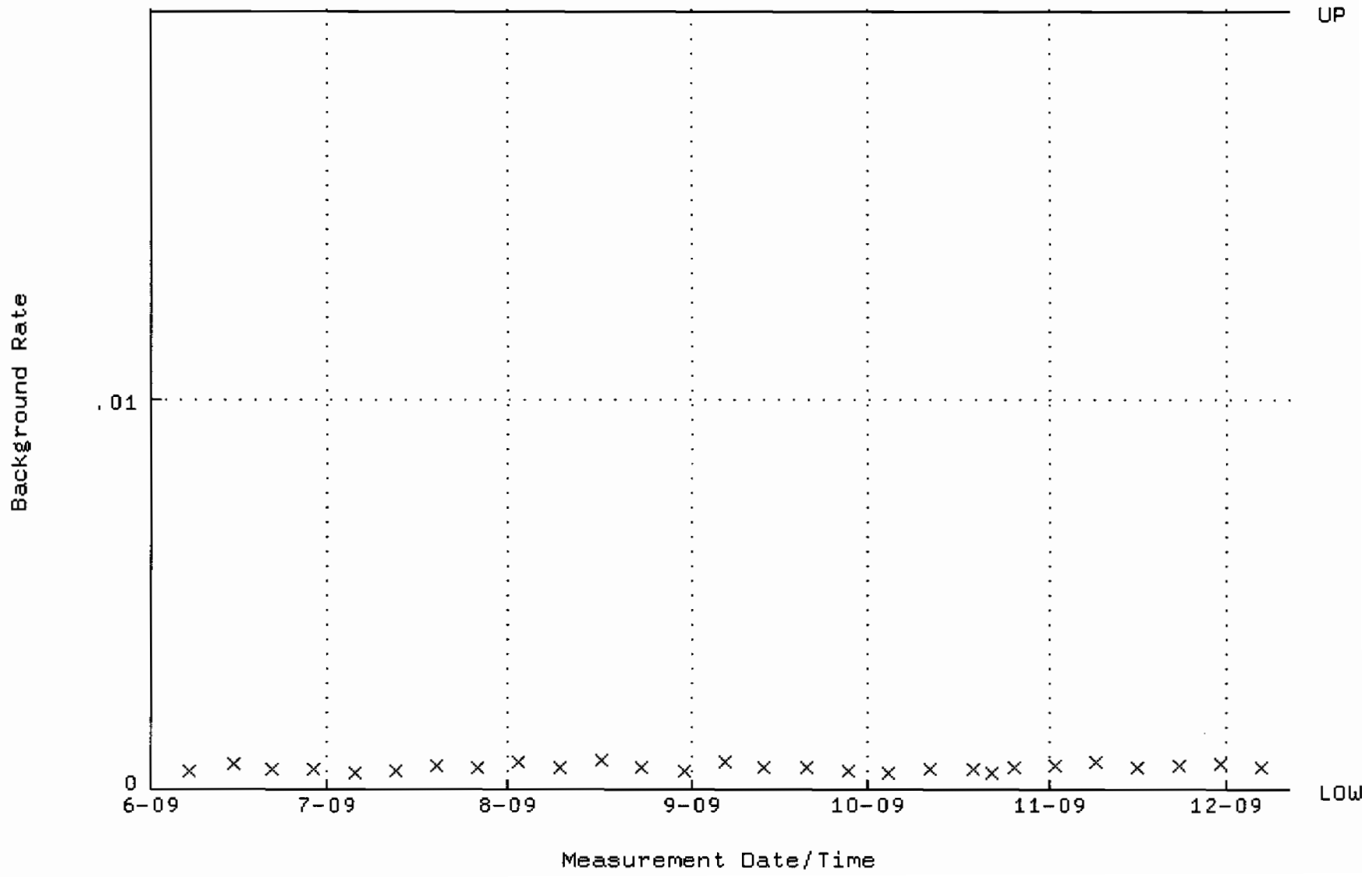

QA filename : DKA100:[ENV_ALPHA.QA.W]W074.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.305830 through 0.325830

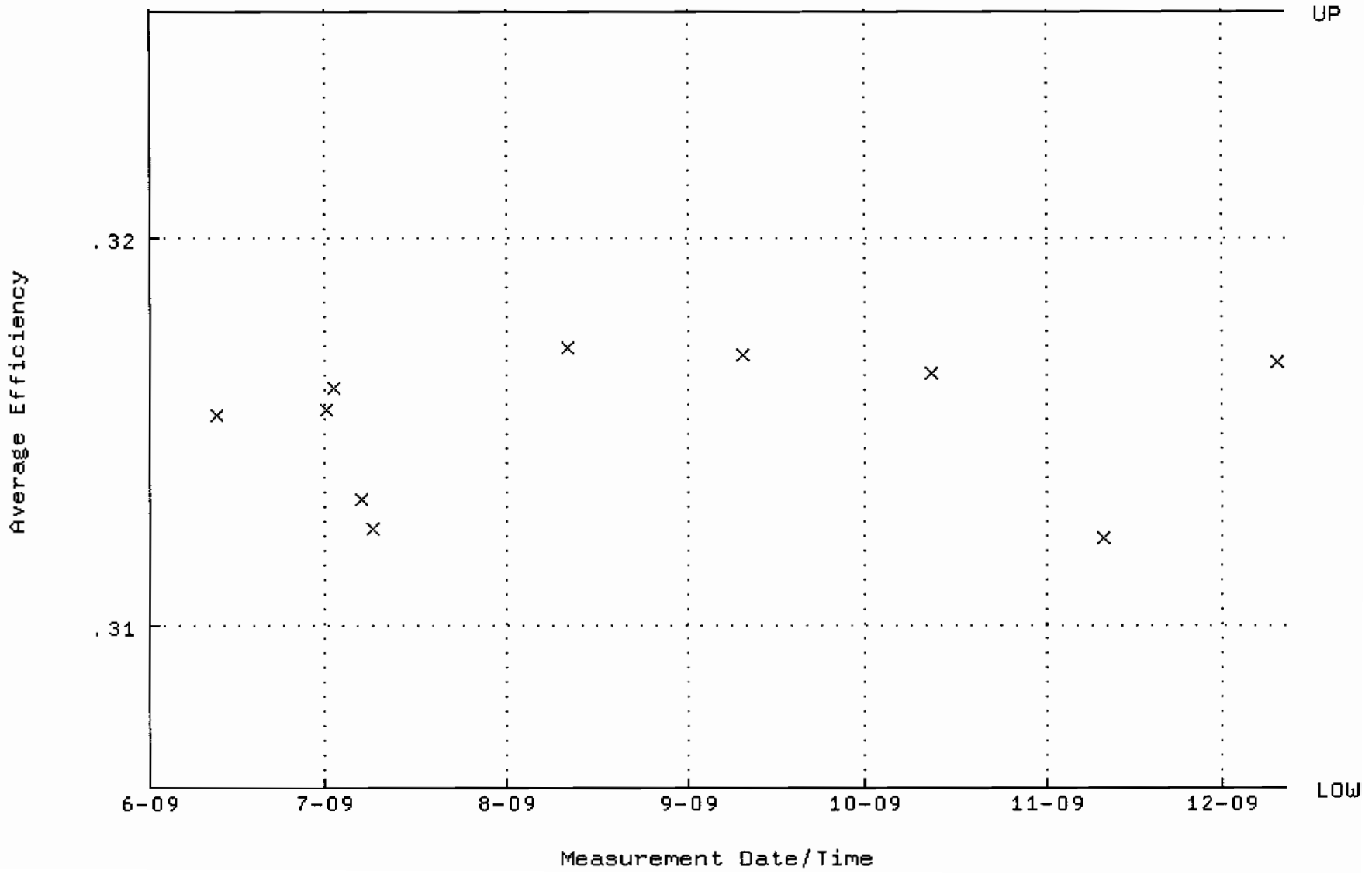

QA filename : DKA100:[ENV_ALPHA.QA.W]W074.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.0289 through 95.0845

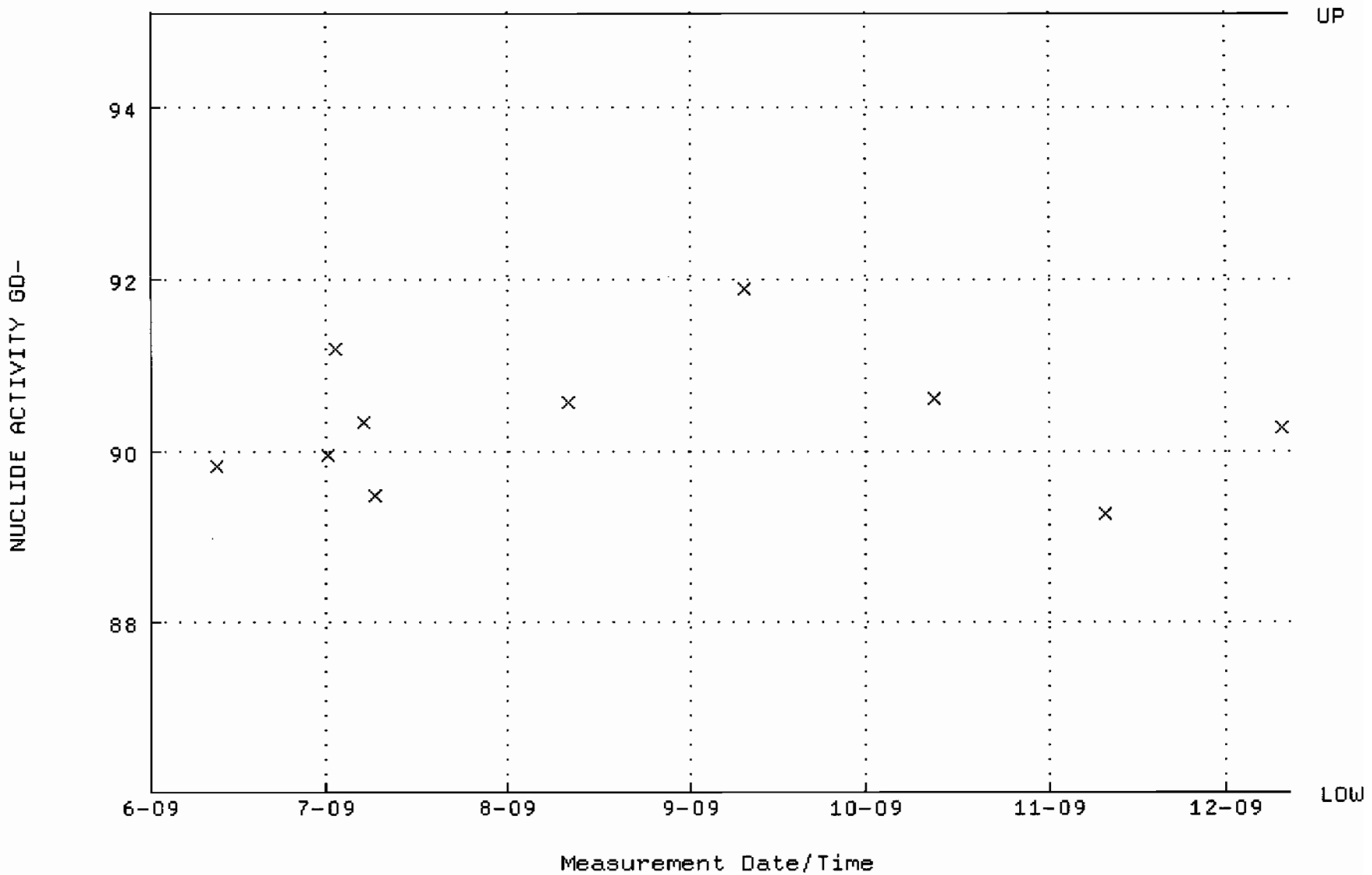

QA filename : DKA100:[ENV_ALPHA.QA.B]B074.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

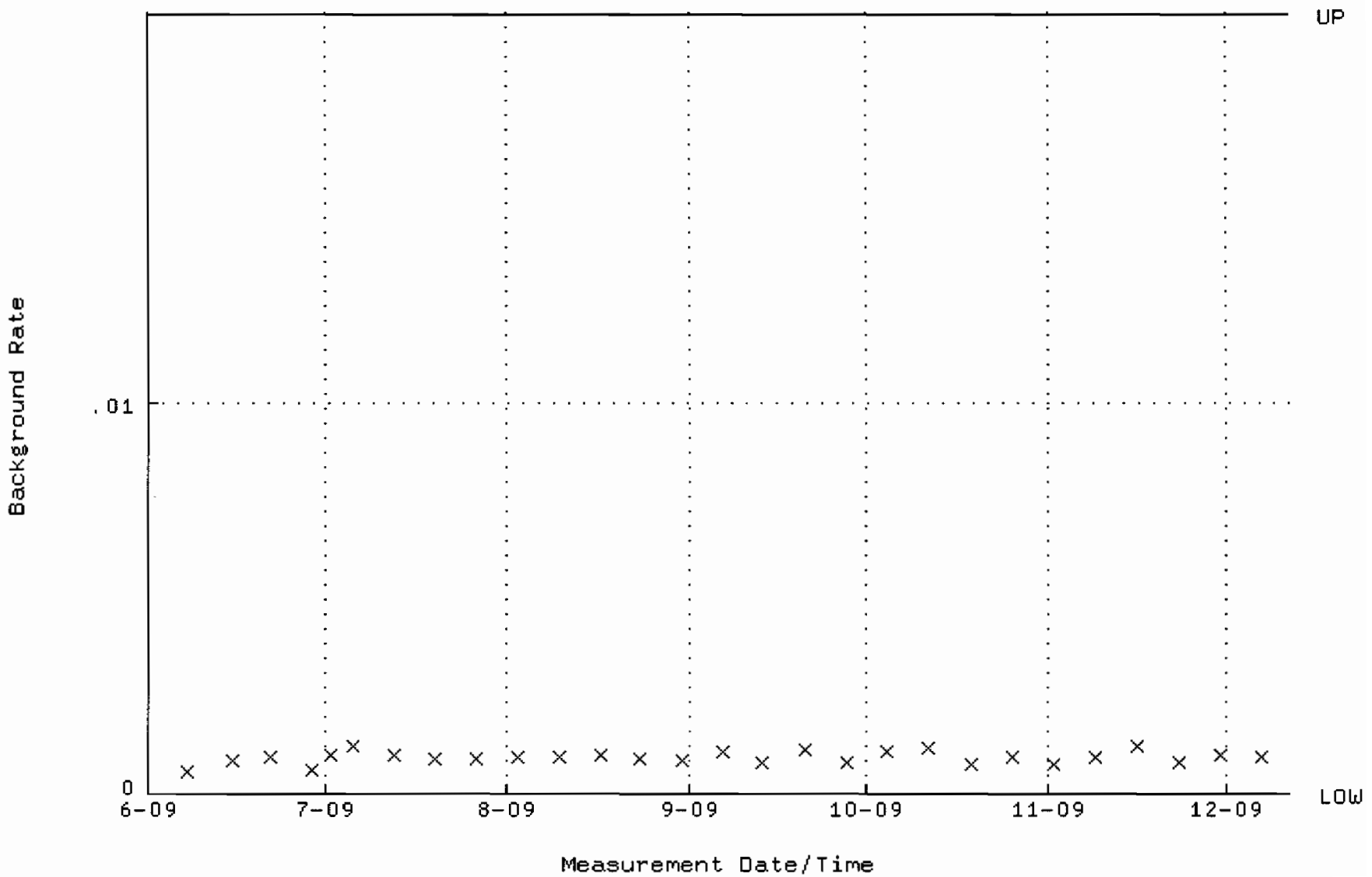

QA filename : DKA100:[ENV_ALPHA.QA.W]W076.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.295613 through 0.315613

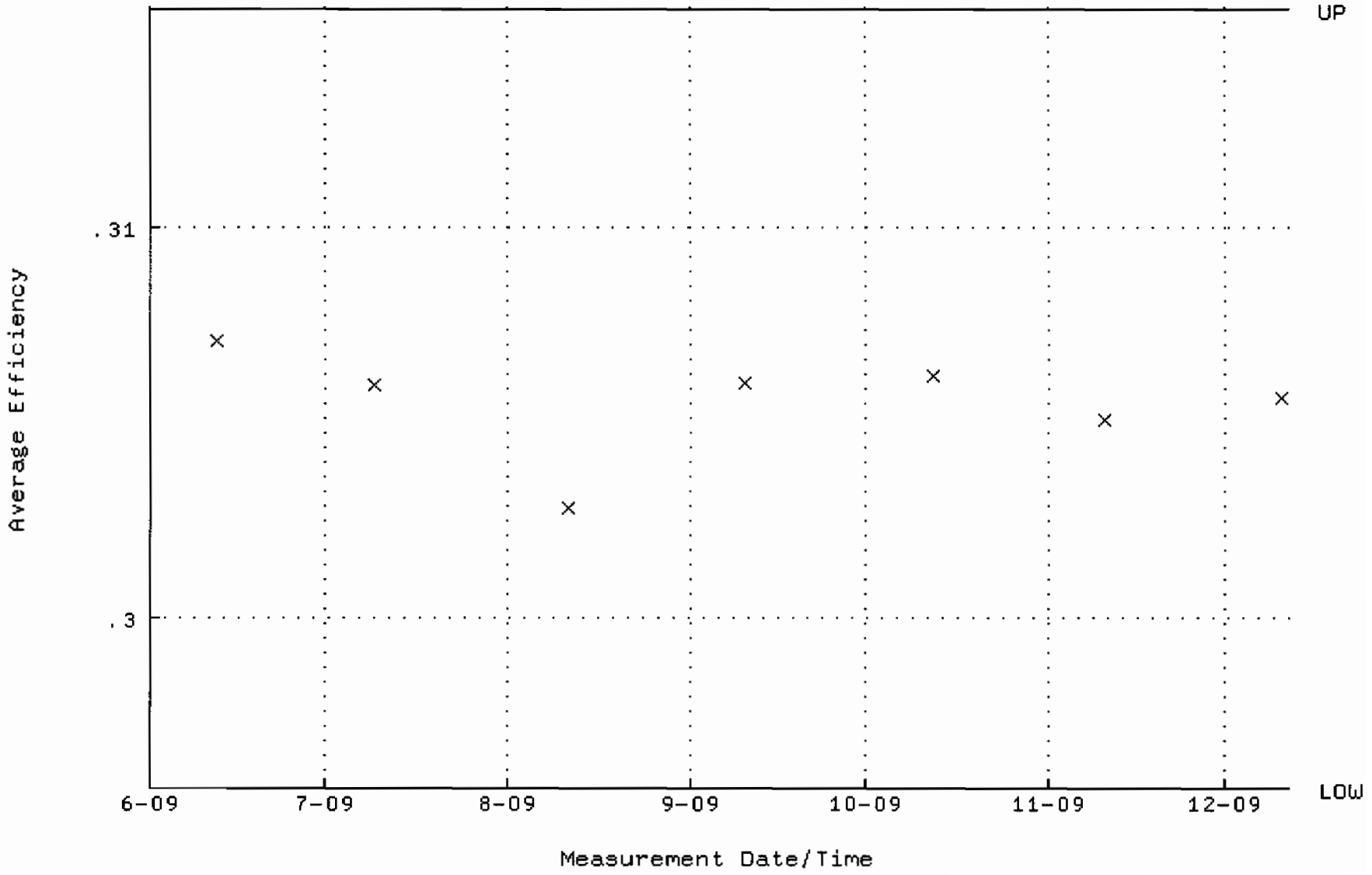

QA filename : DKA100:[ENV_ALPHA.QA.W]W076.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.9031 through 97.1561

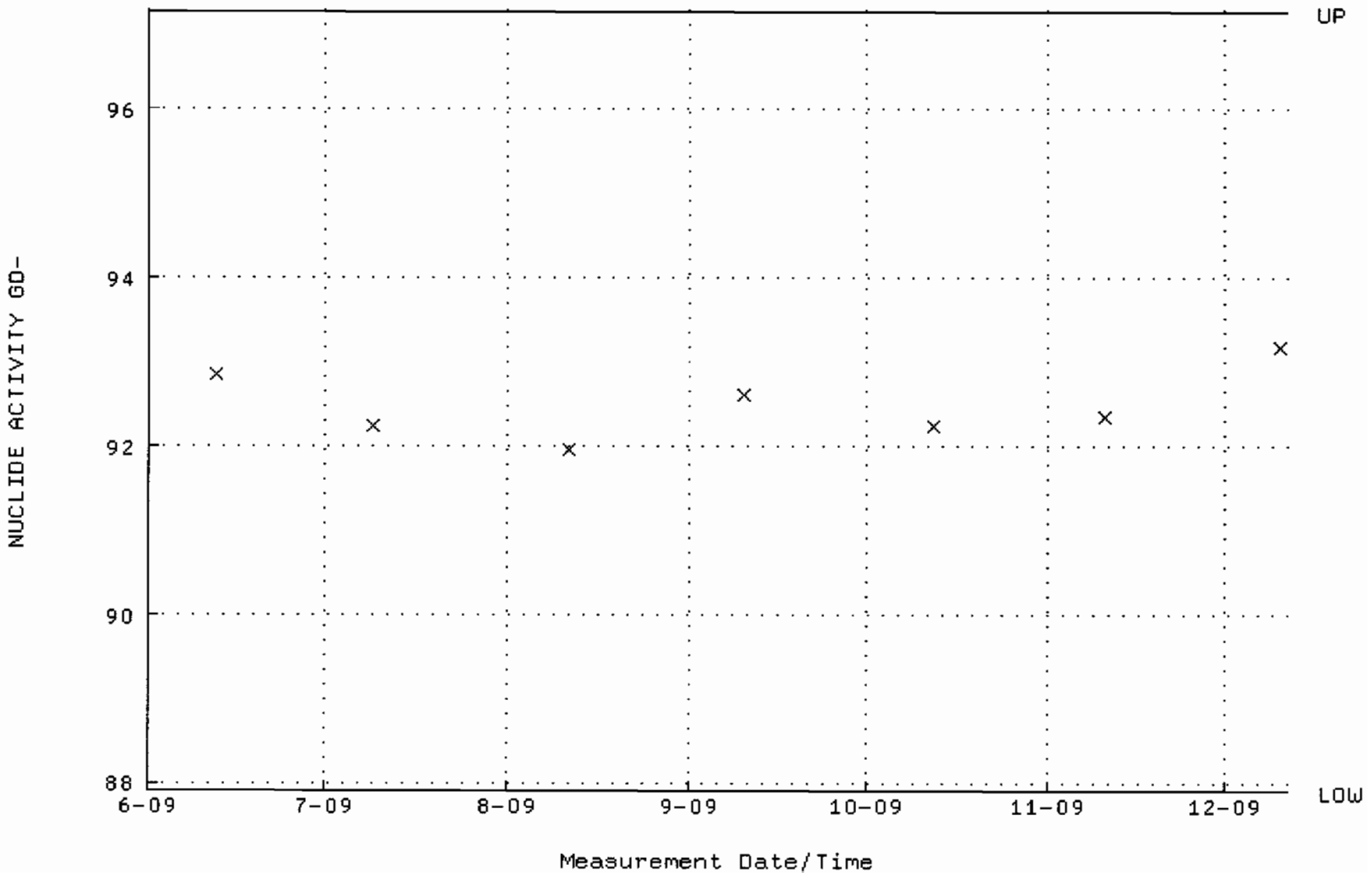

QA filename : DKA100:[ENV_ALPHA.QA.B]B076.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

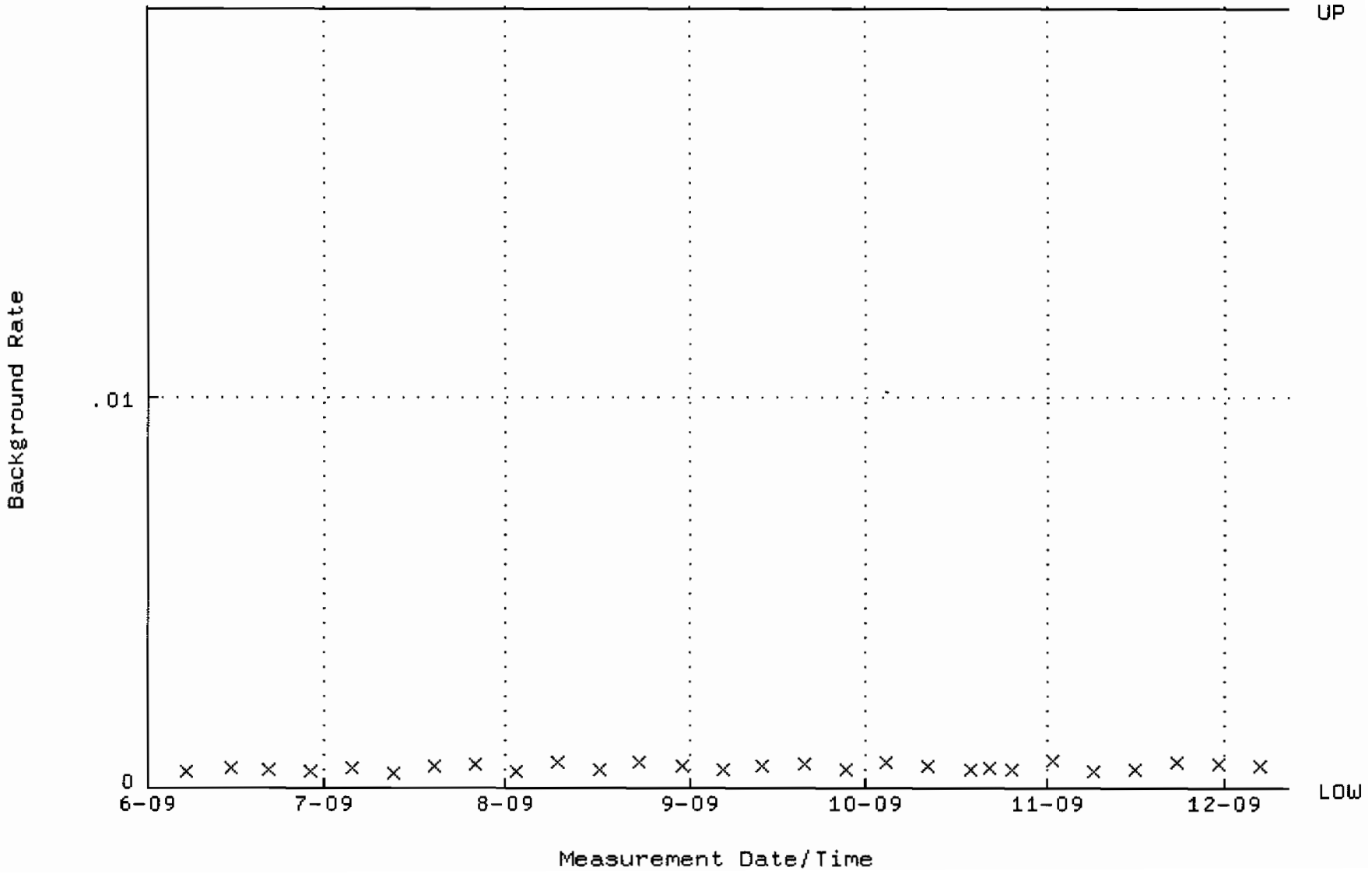

QA filename : DKA100:[ENV_ALPHA.QA.W]W077.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:26 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

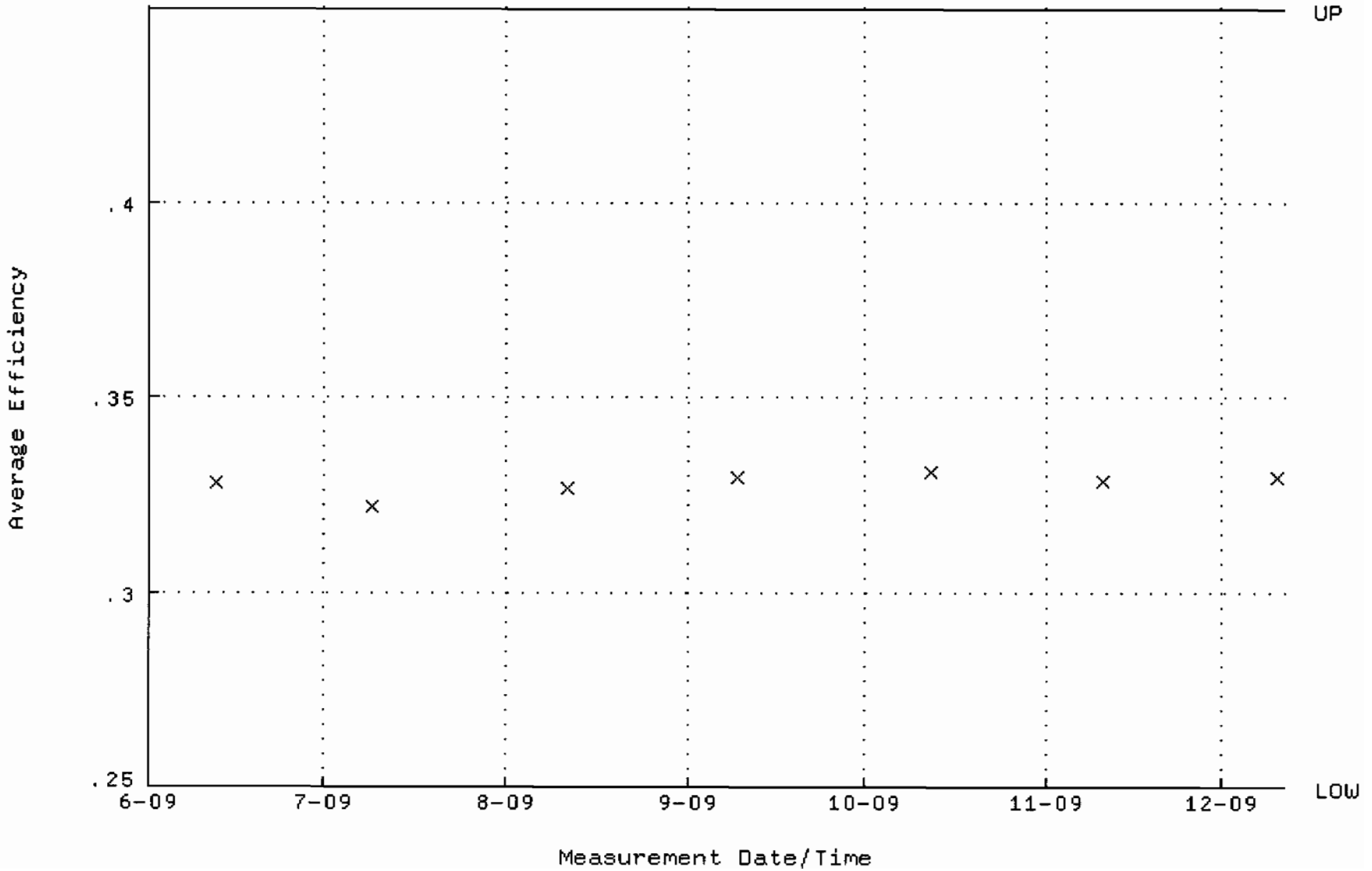

QA filename : DKA100:[ENV_ALPHA.QA.W]W077.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:26 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

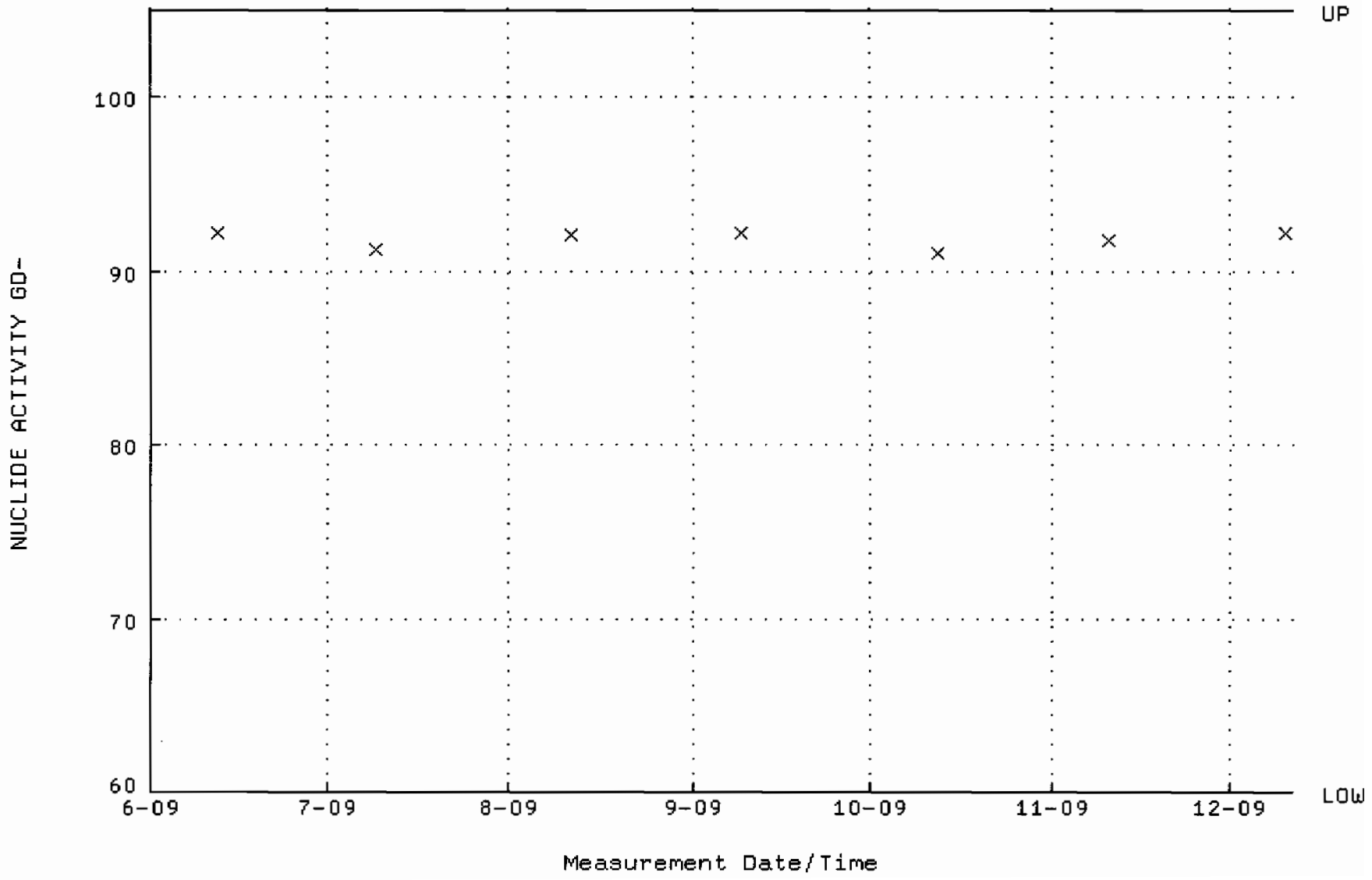

QA filename : DKA100:[ENV_ALPHA.QA.B]B077.QAF;3
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:37 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

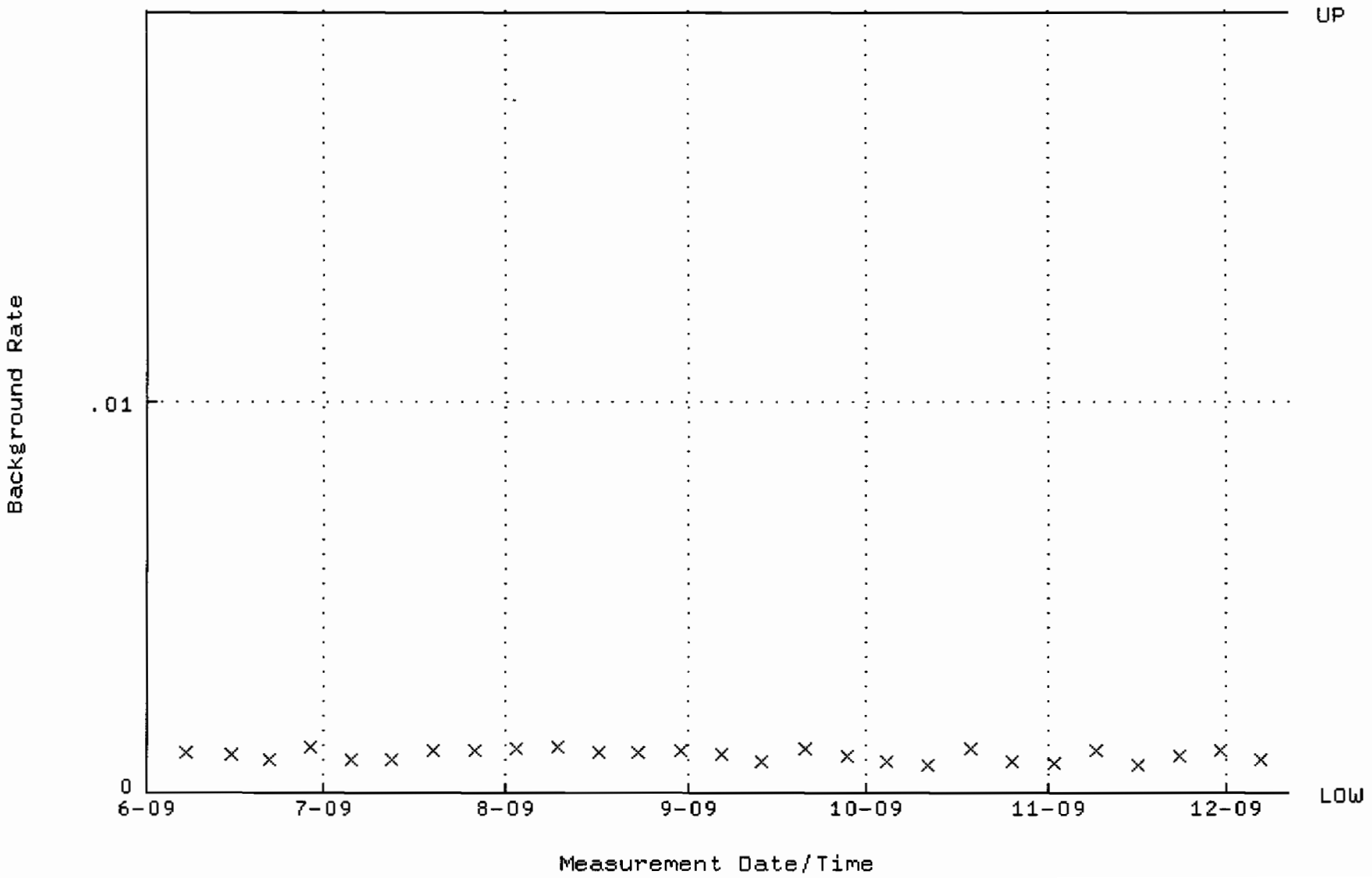

QA filename : DKA100:[ENV_ALPHA.QA.W]W079.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:26 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.316654 through 0.336654

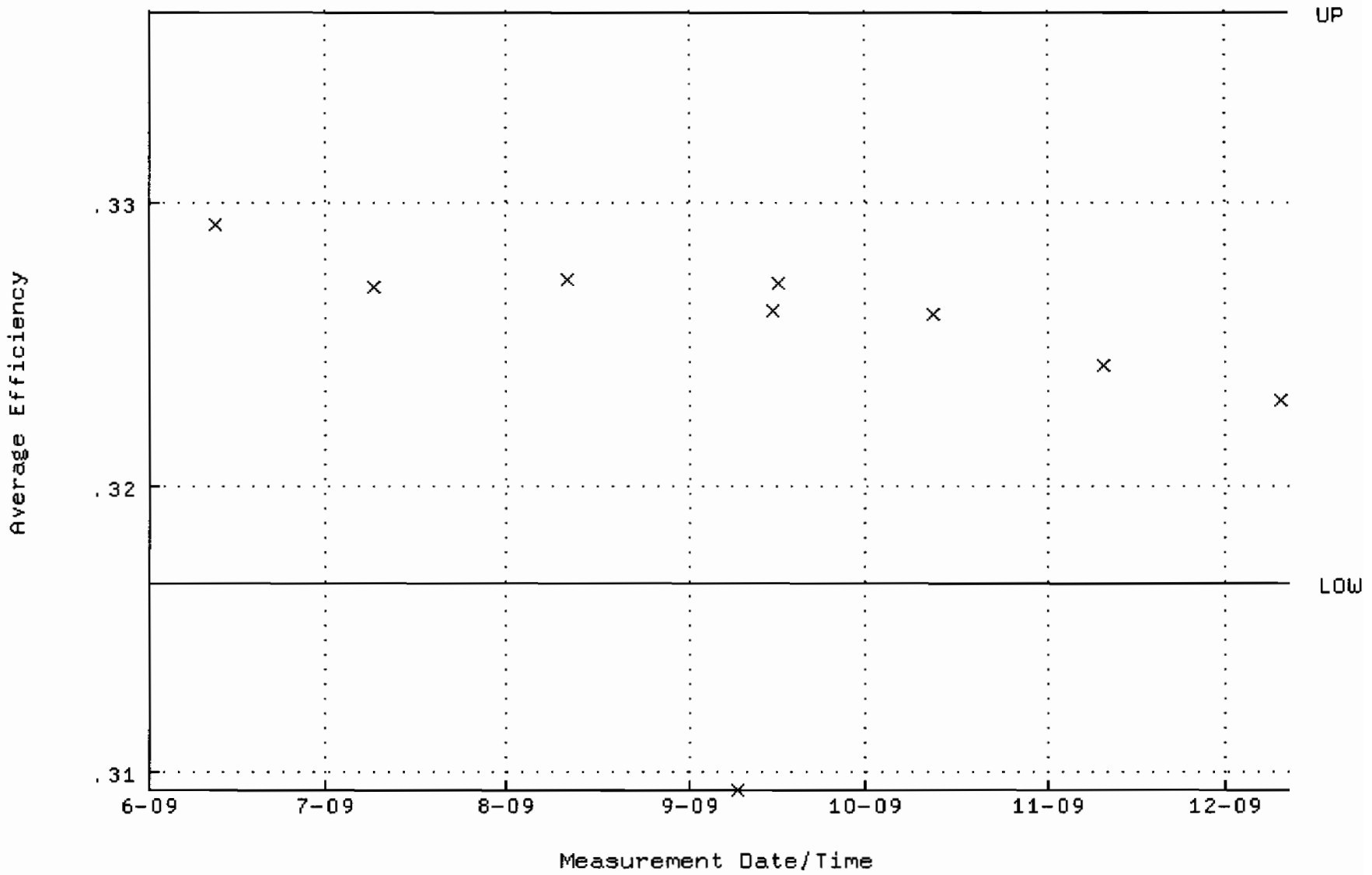

QA filename : DKA100:[ENV_ALPHA.QA.W]W079.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:26 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 85.8913 through 94.9325

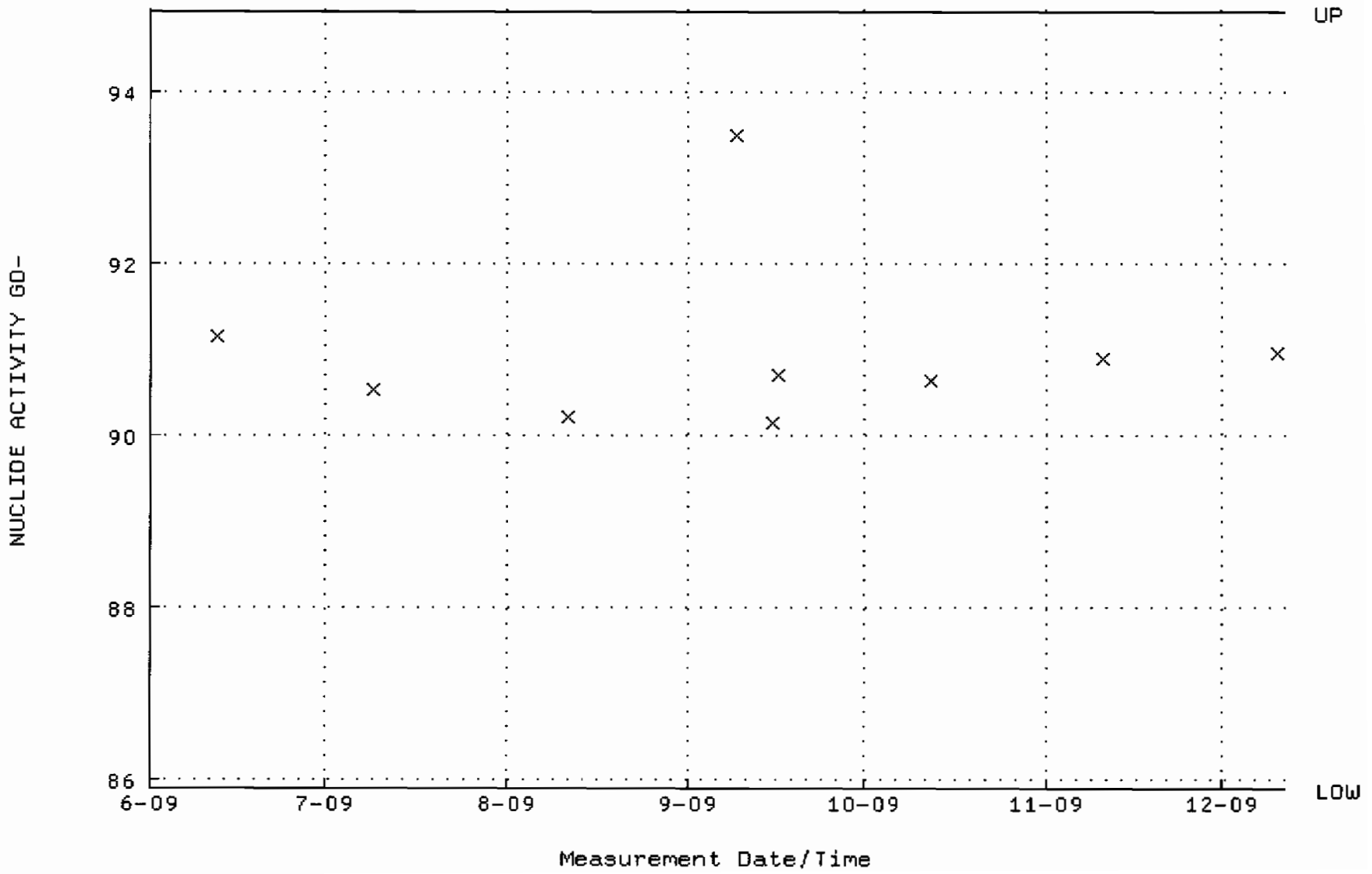

QA filename : DKA100:[ENV_ALPHA.QA.B]B079.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:37 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

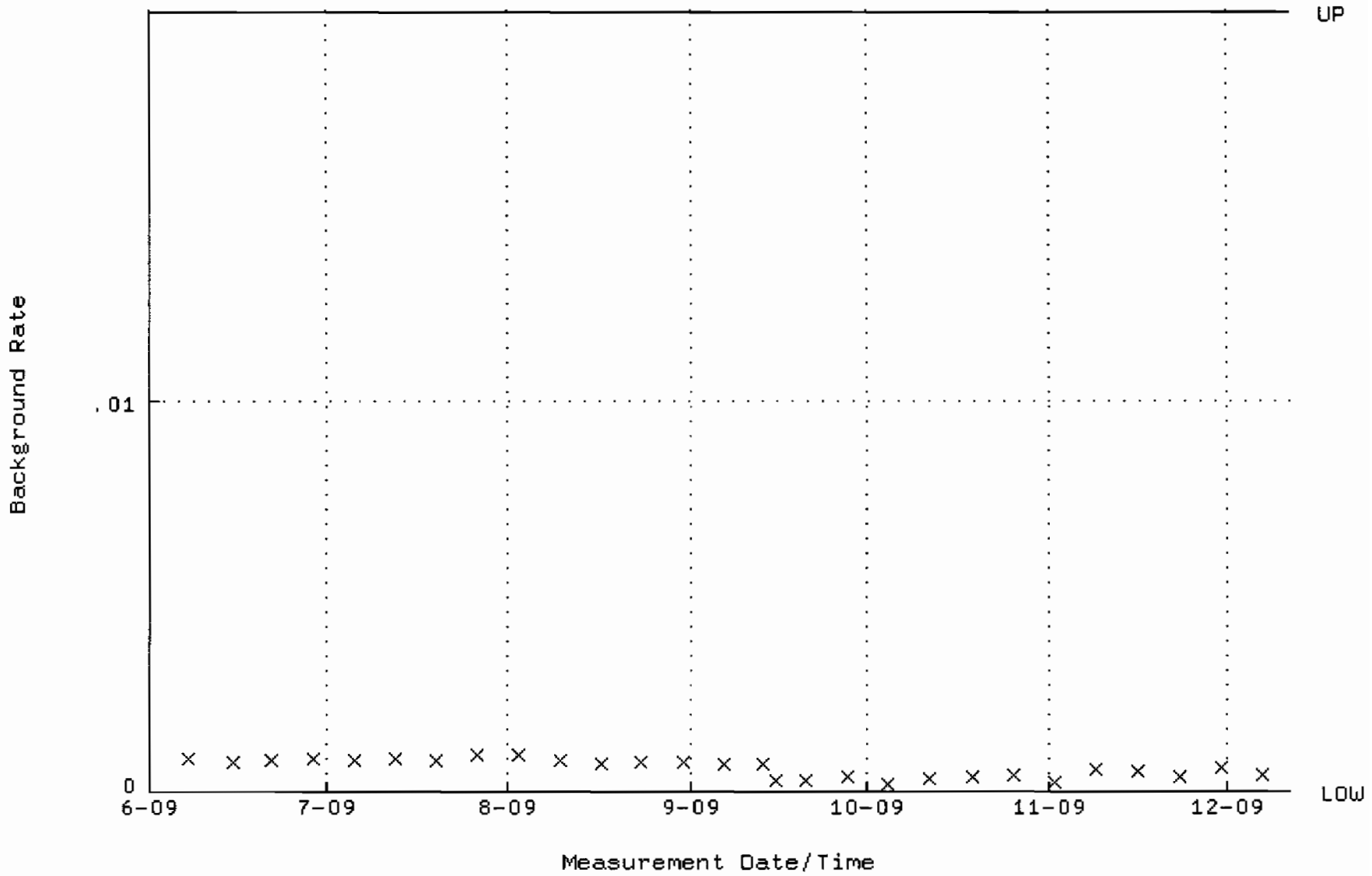

QA filename : DKA100:[ENV_ALPHA.QA.W]W080.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:26 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.324032 through 0.344032

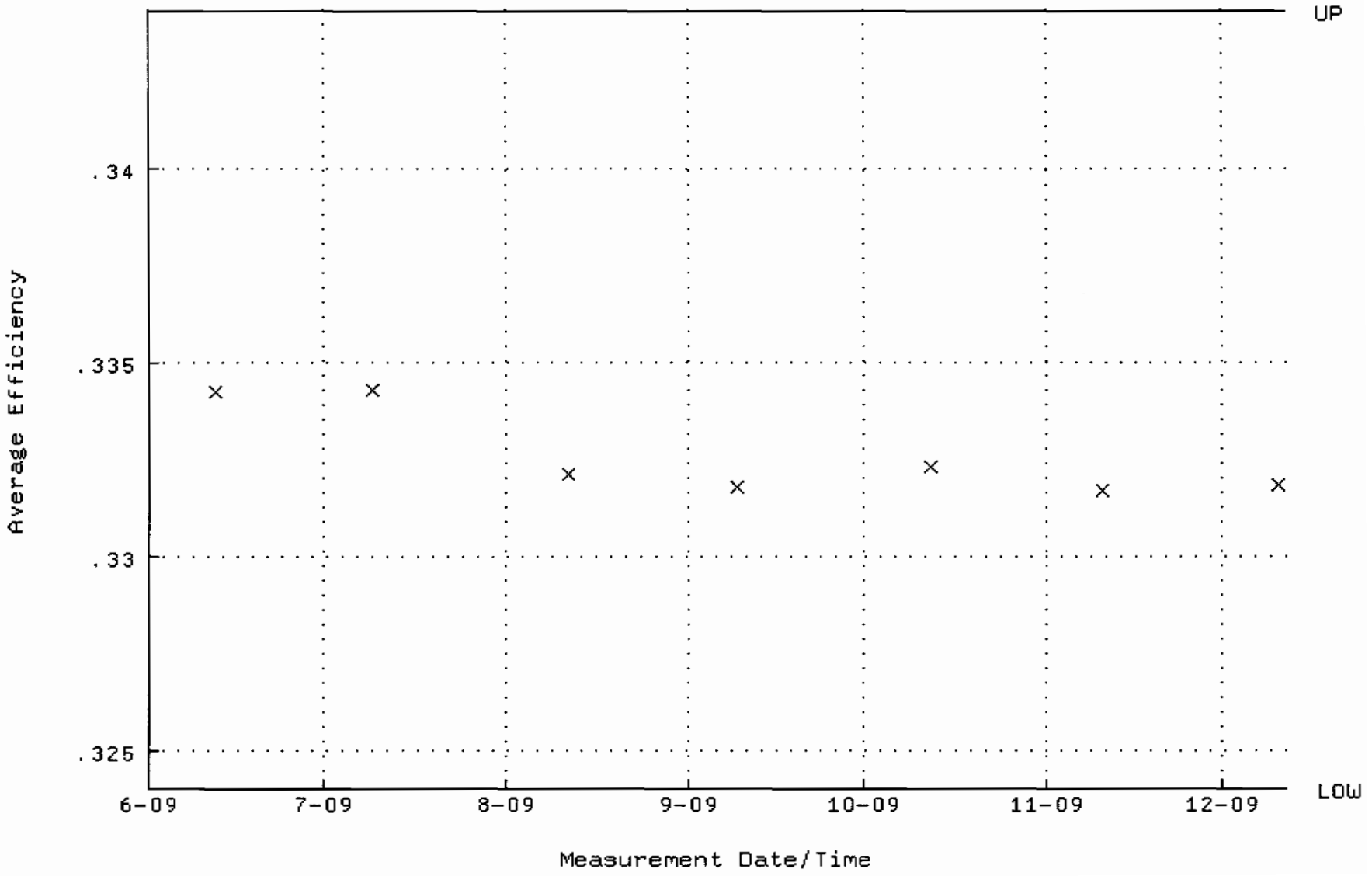

QA filename : DKA100:[ENV_ALPHA.QA.W]W080.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:26 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.5393 through 95.6487

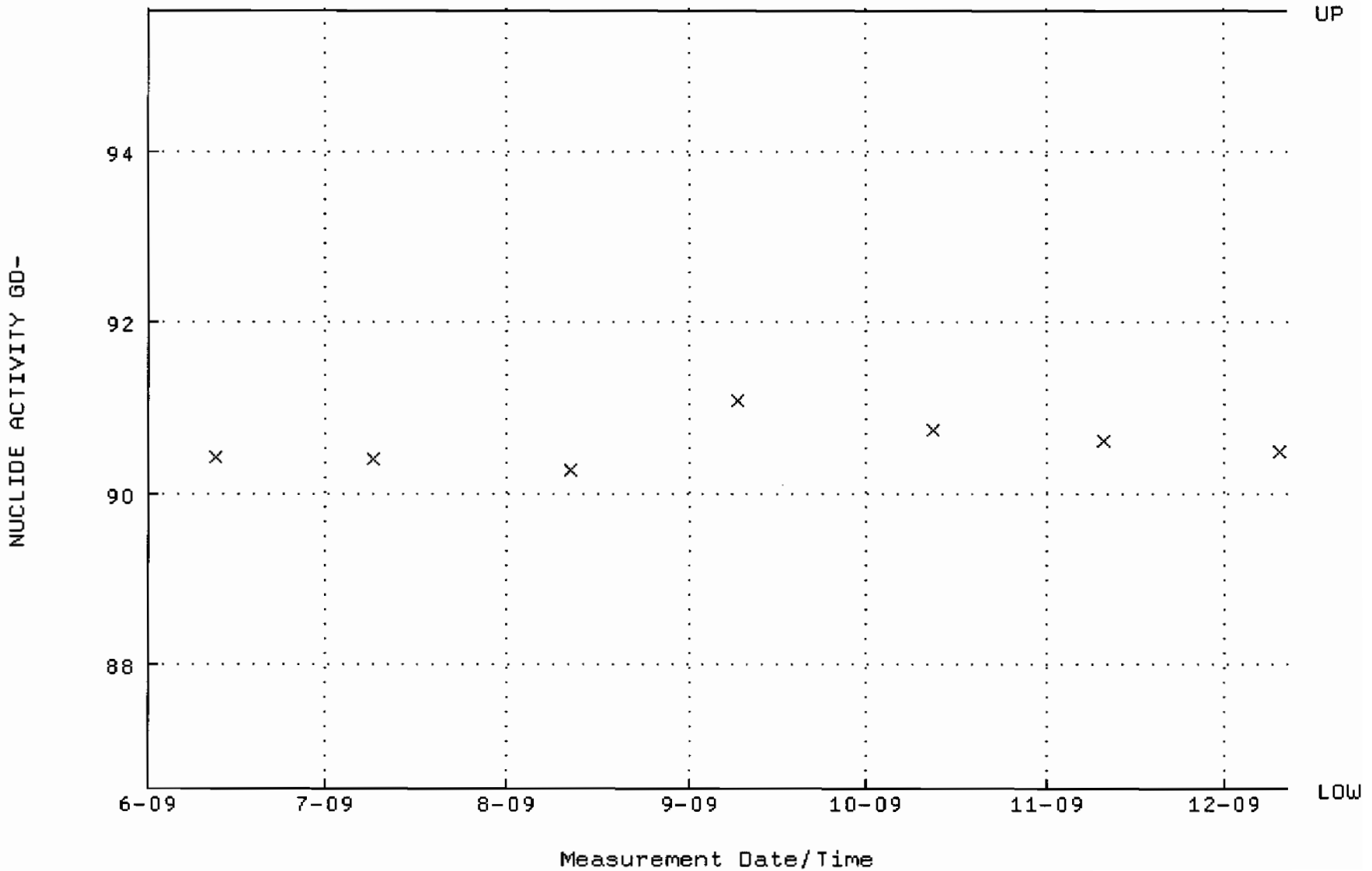

QA filename : DKA100:[ENV_ALPHA.QA.B]B080.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:37 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

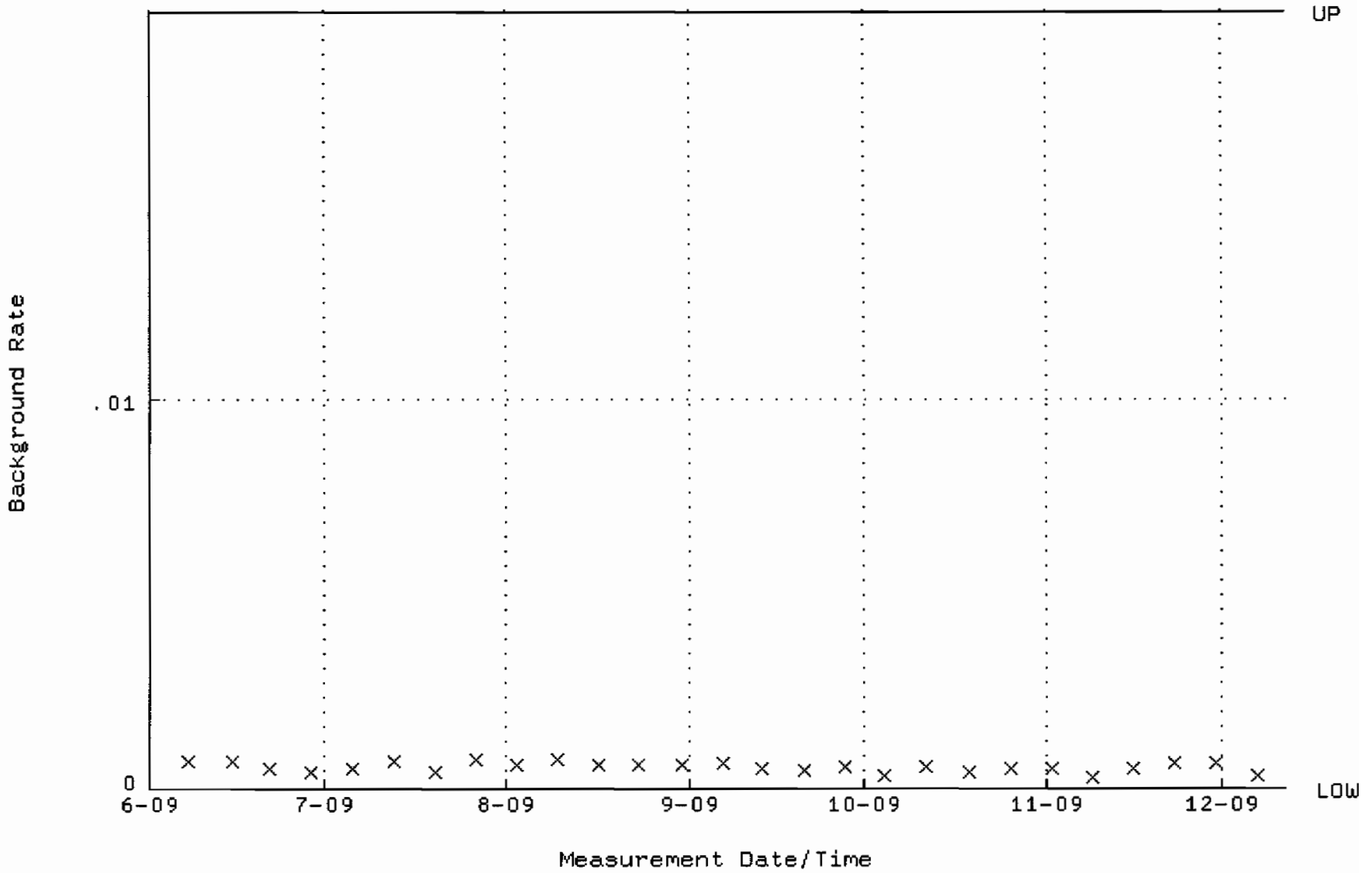

QA filename : DKA100:[ENV_ALPHA.QA.W]W083.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

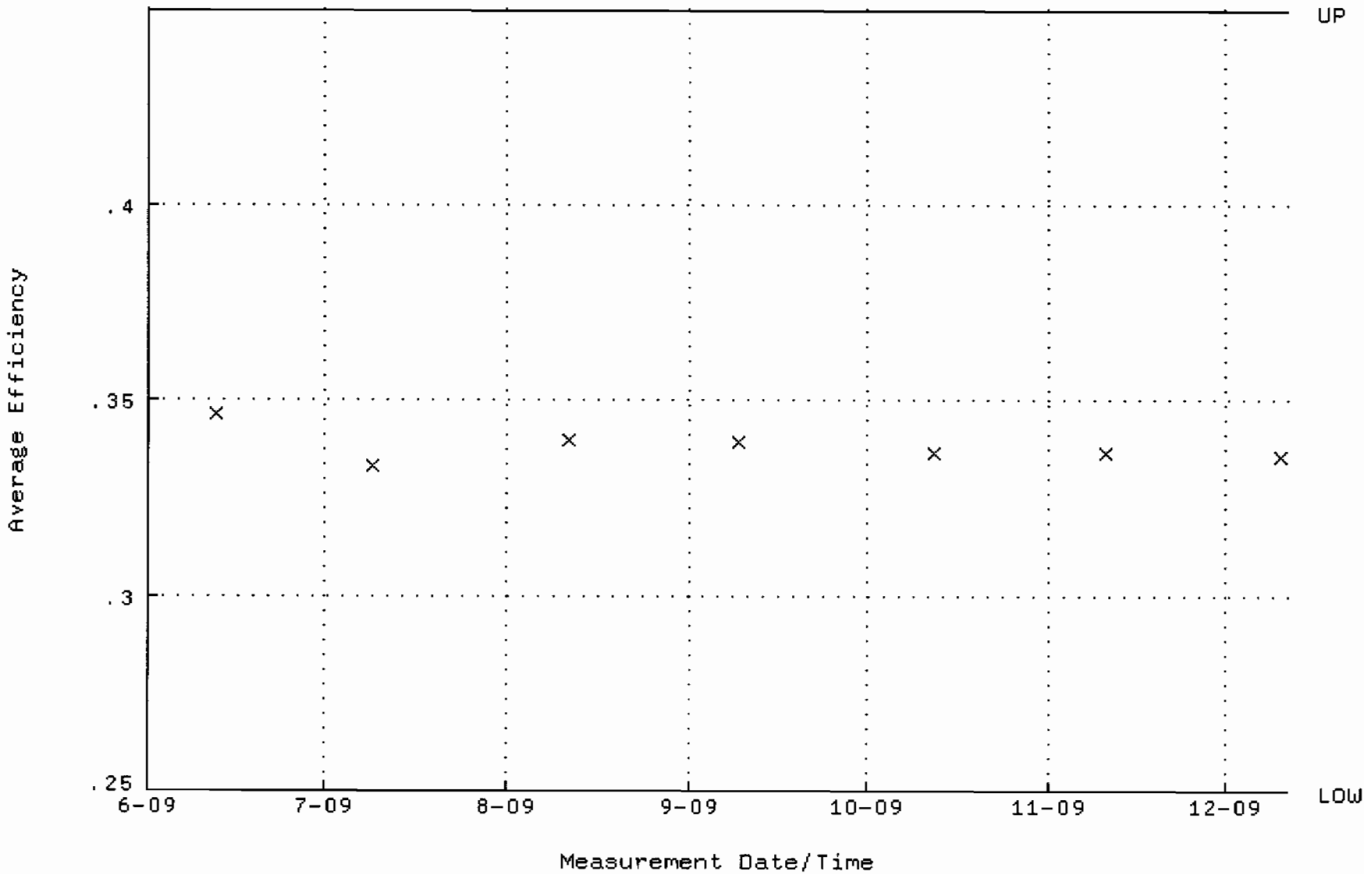

QA filename : DKA100:[ENV_ALPHA.QA.W]W083.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

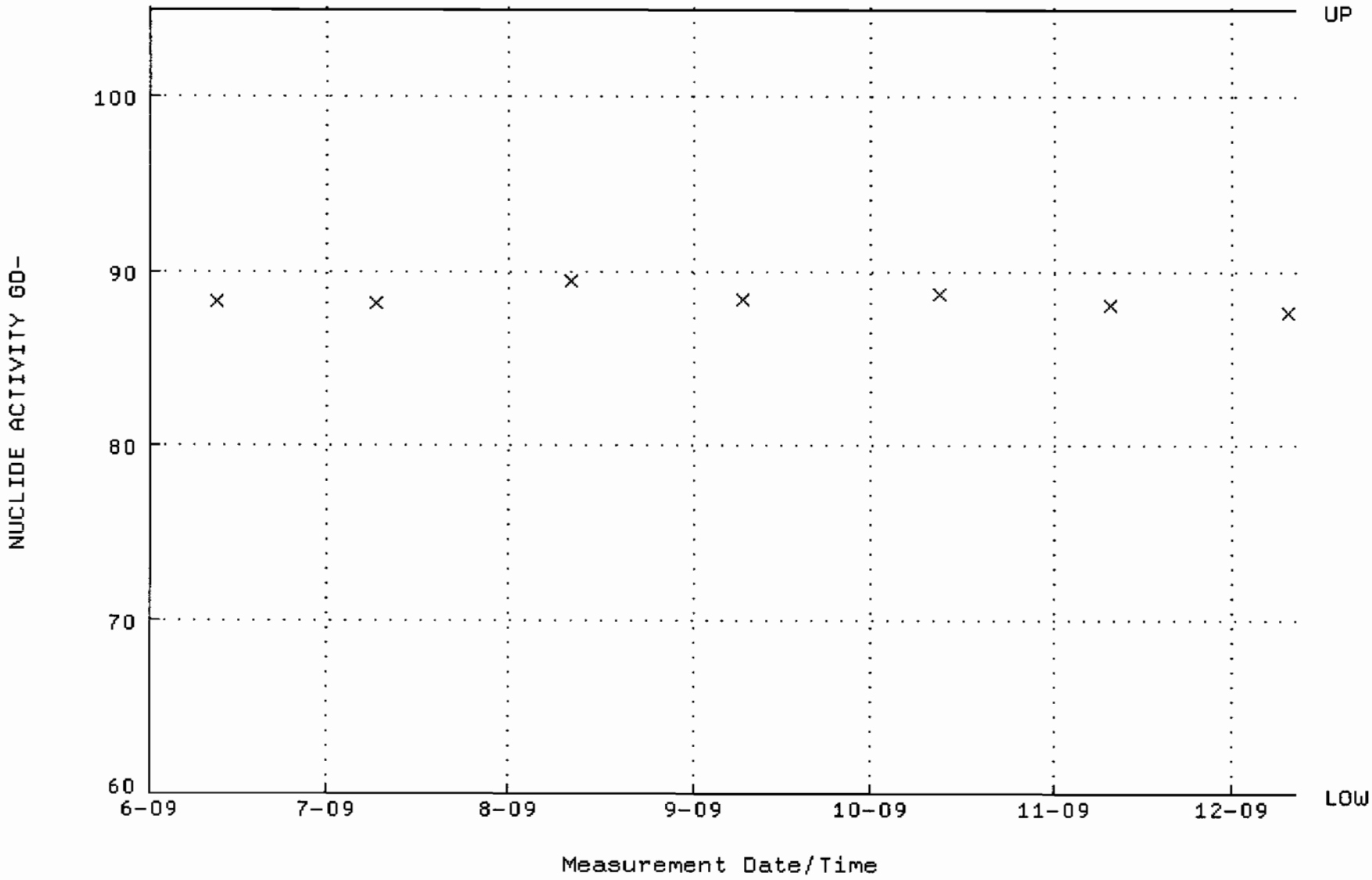

QA filename : DKA100:[ENV_ALPHA.QA.B]B083.QAF;3
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:40 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

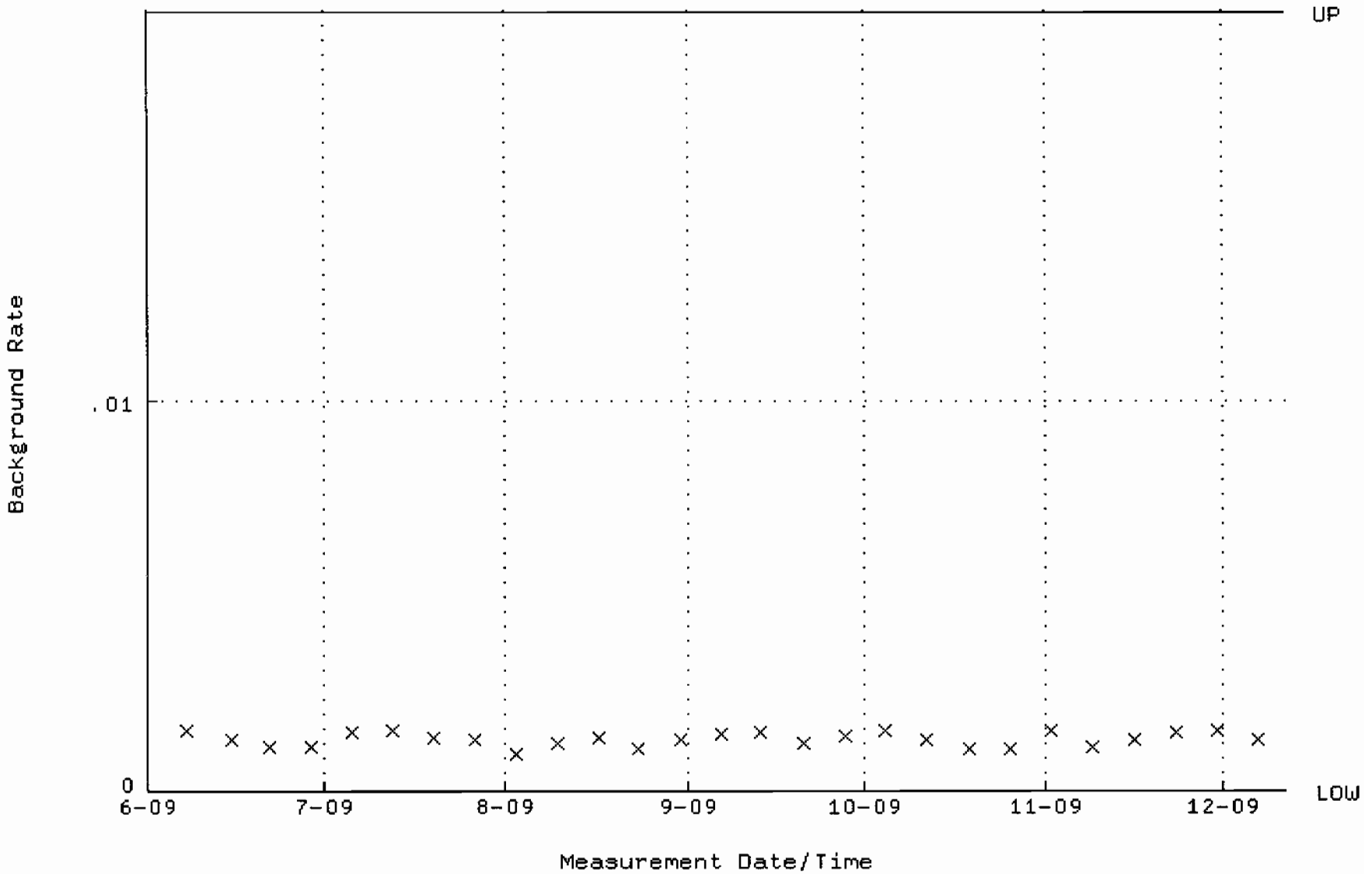

QA filename : DKA100:[ENV_ALPHA.QA.W]W084.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.330740 through 0.350740

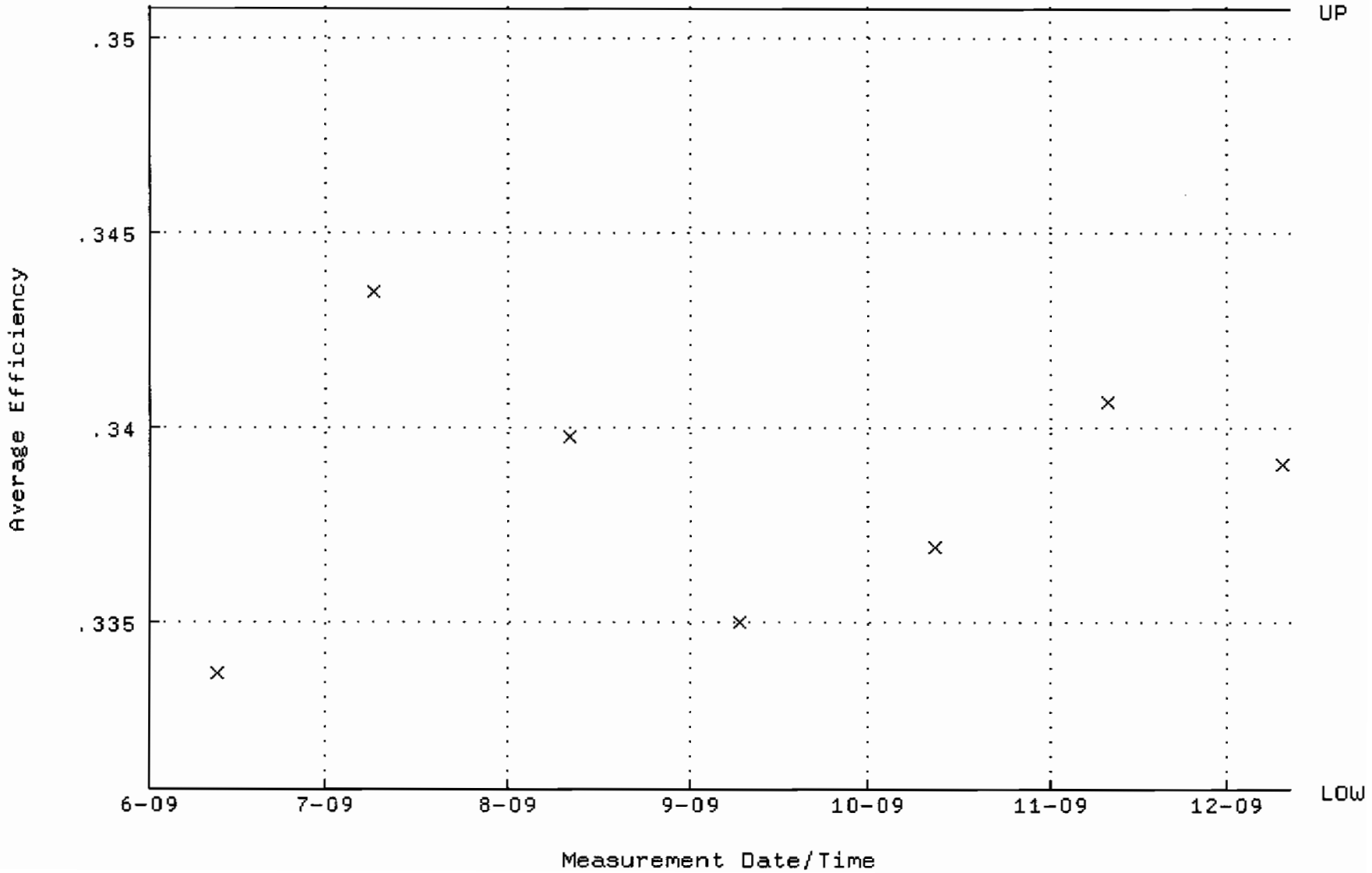

QA filename : DKA100:[ENV_ALPHA.QA.W]W084.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.0569 through 95.1155

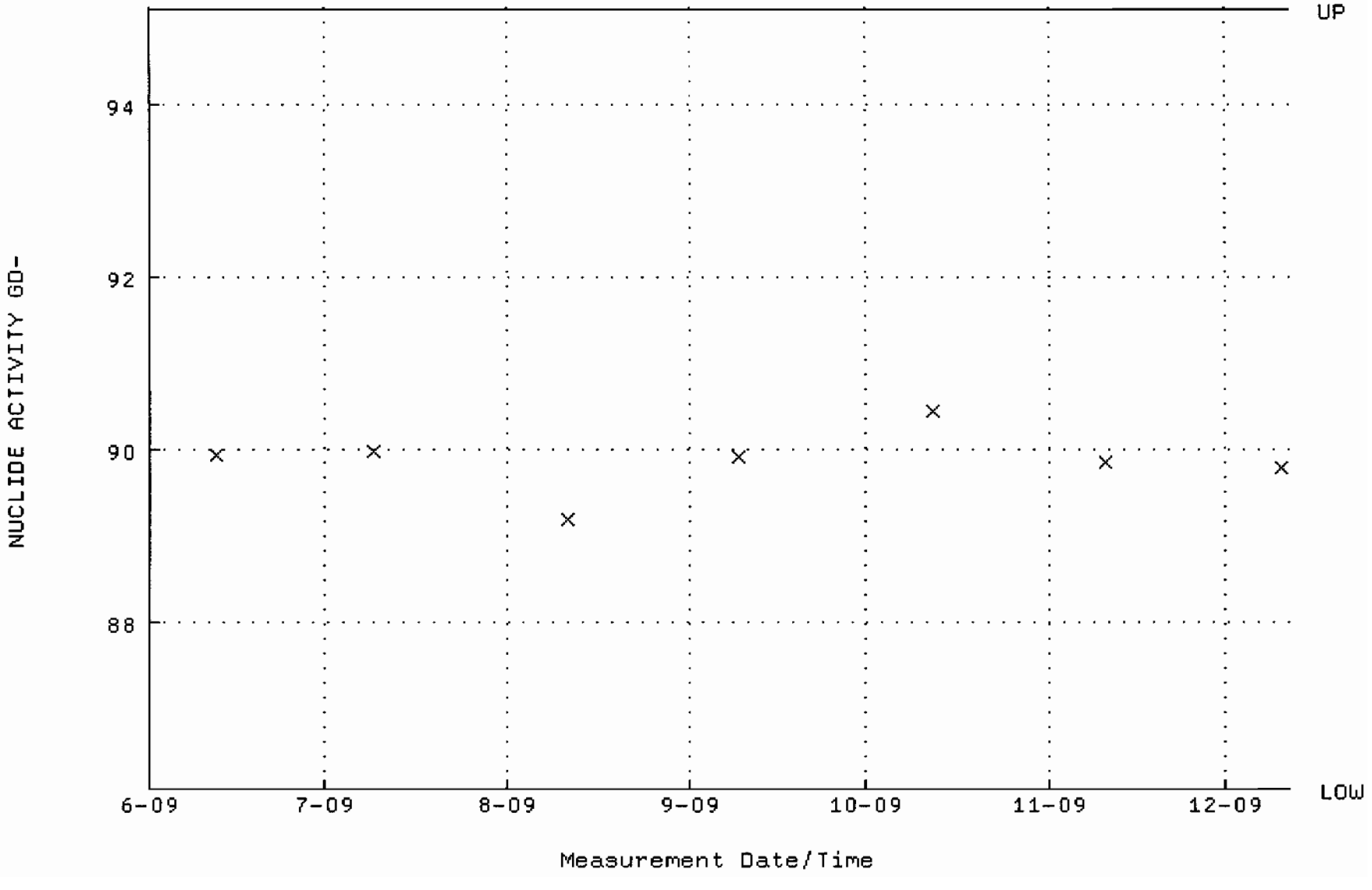

QA filename : DKA100:[ENV_ALPHA.QA.B]B084.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:40 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

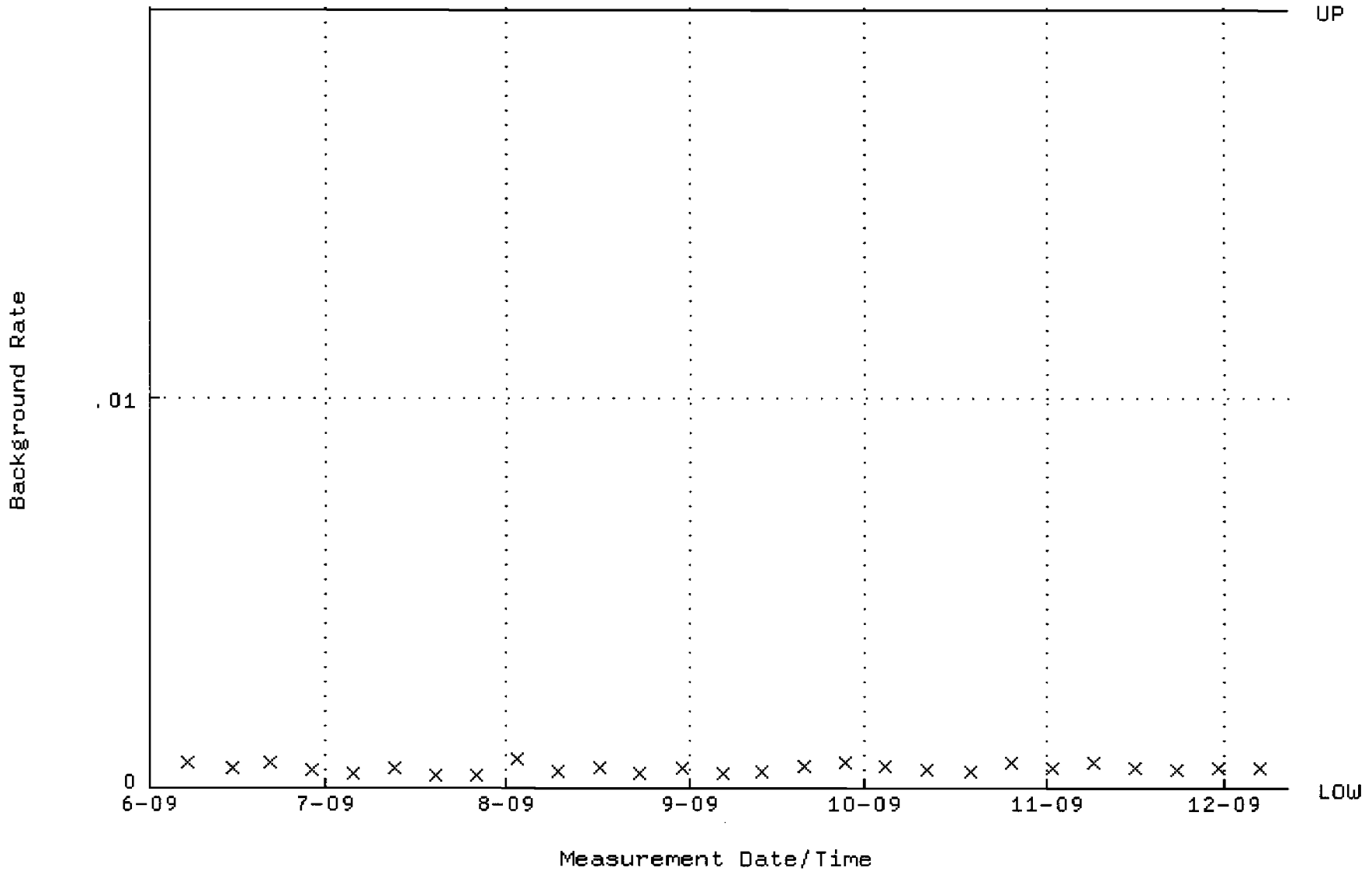

QA filename : DKA100:[ENV_ALPHA.QA.W]W085.QAF;6
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.316564 through 0.336564

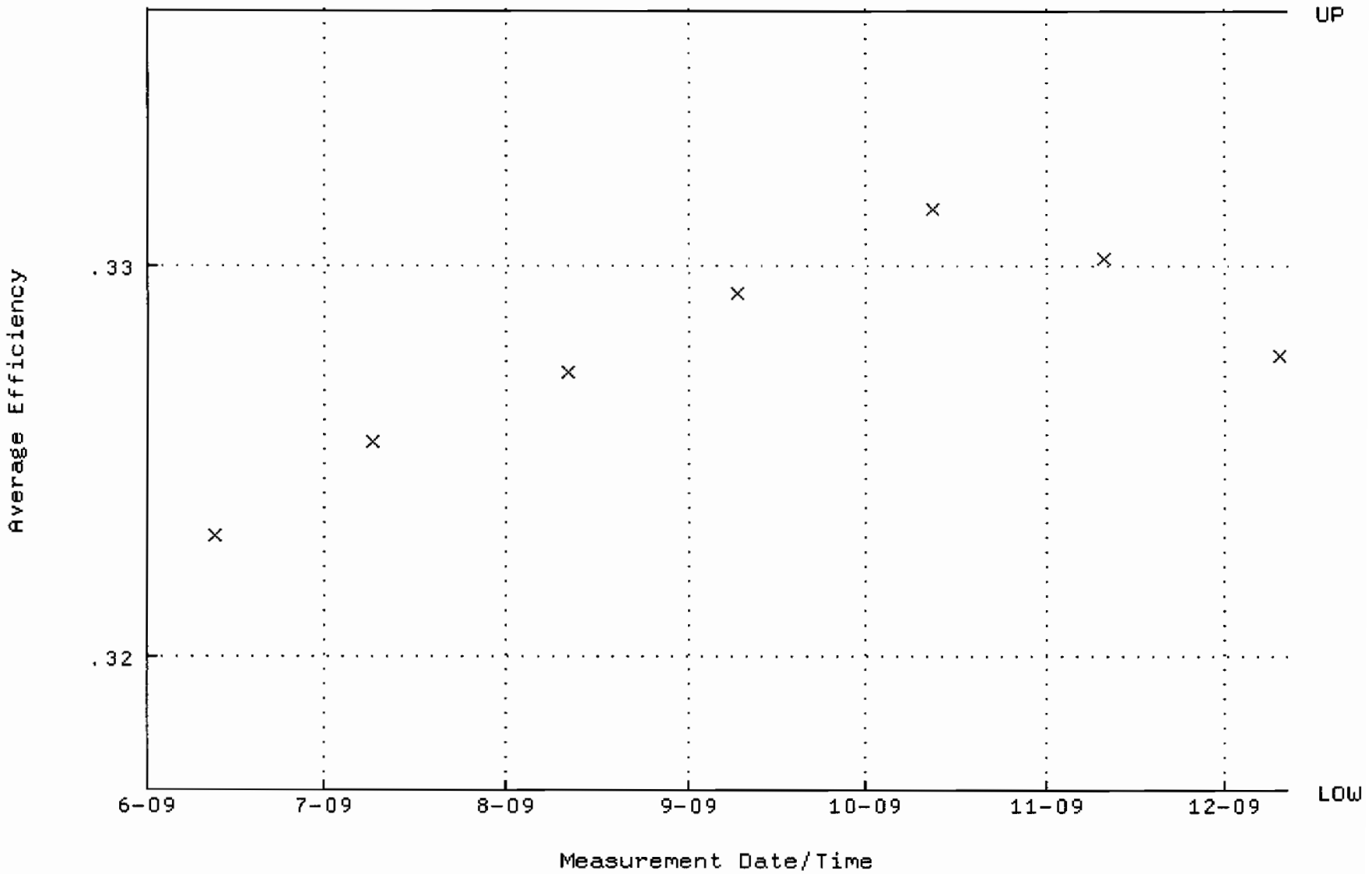

QA filename : DKA100:[ENV_ALPHA.QA.W]W085.QAF;6
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.4508 through 96.6562

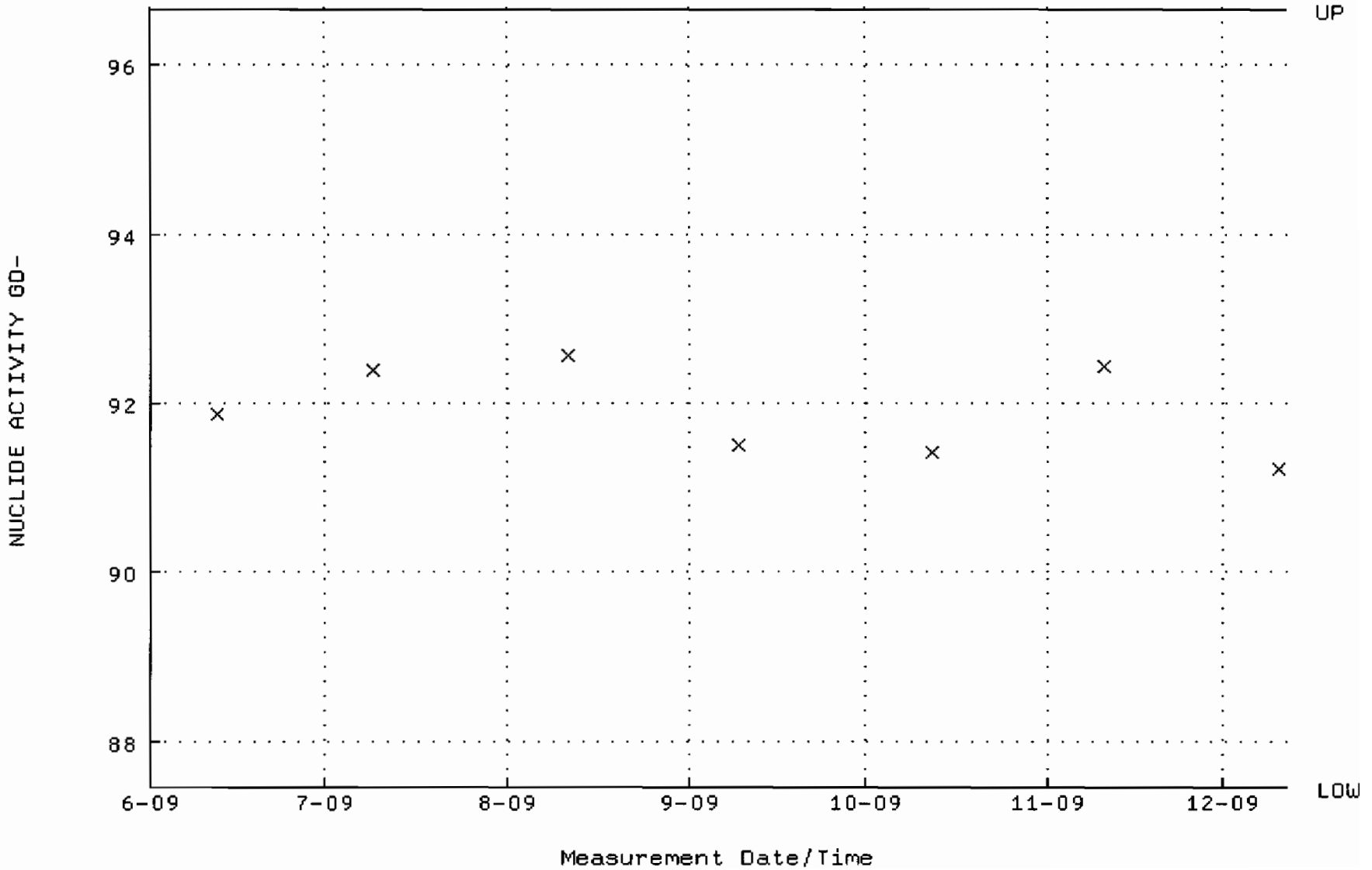

QA filename : DKA100:[ENV_ALPHA.QA.B]B085.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:40 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

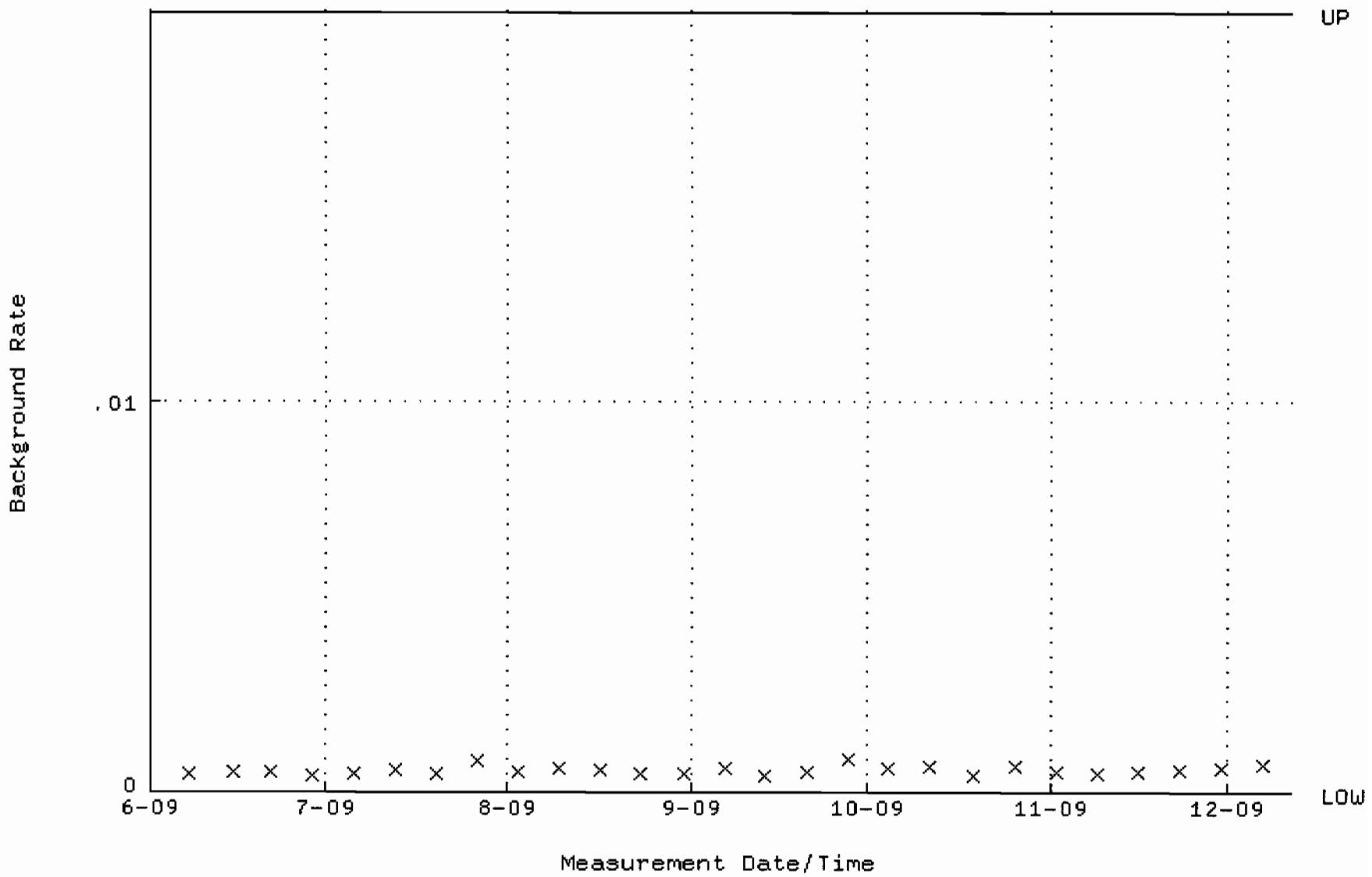

QA filename : DKA100:[ENV_ALPHA.QA.W]W088.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

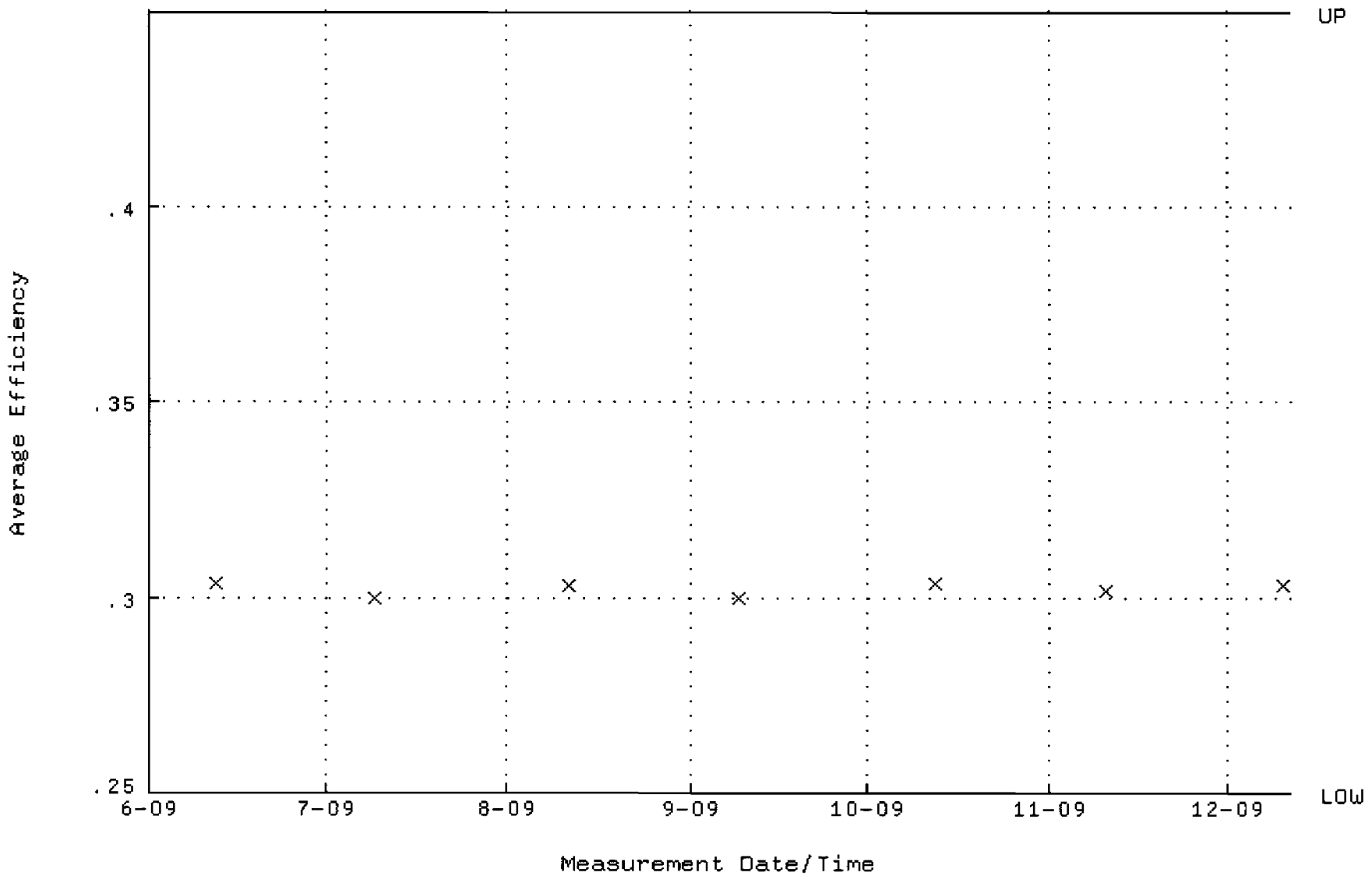

QA filename : DKA100:[ENV_ALPHA.QA.W]W088.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:27 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

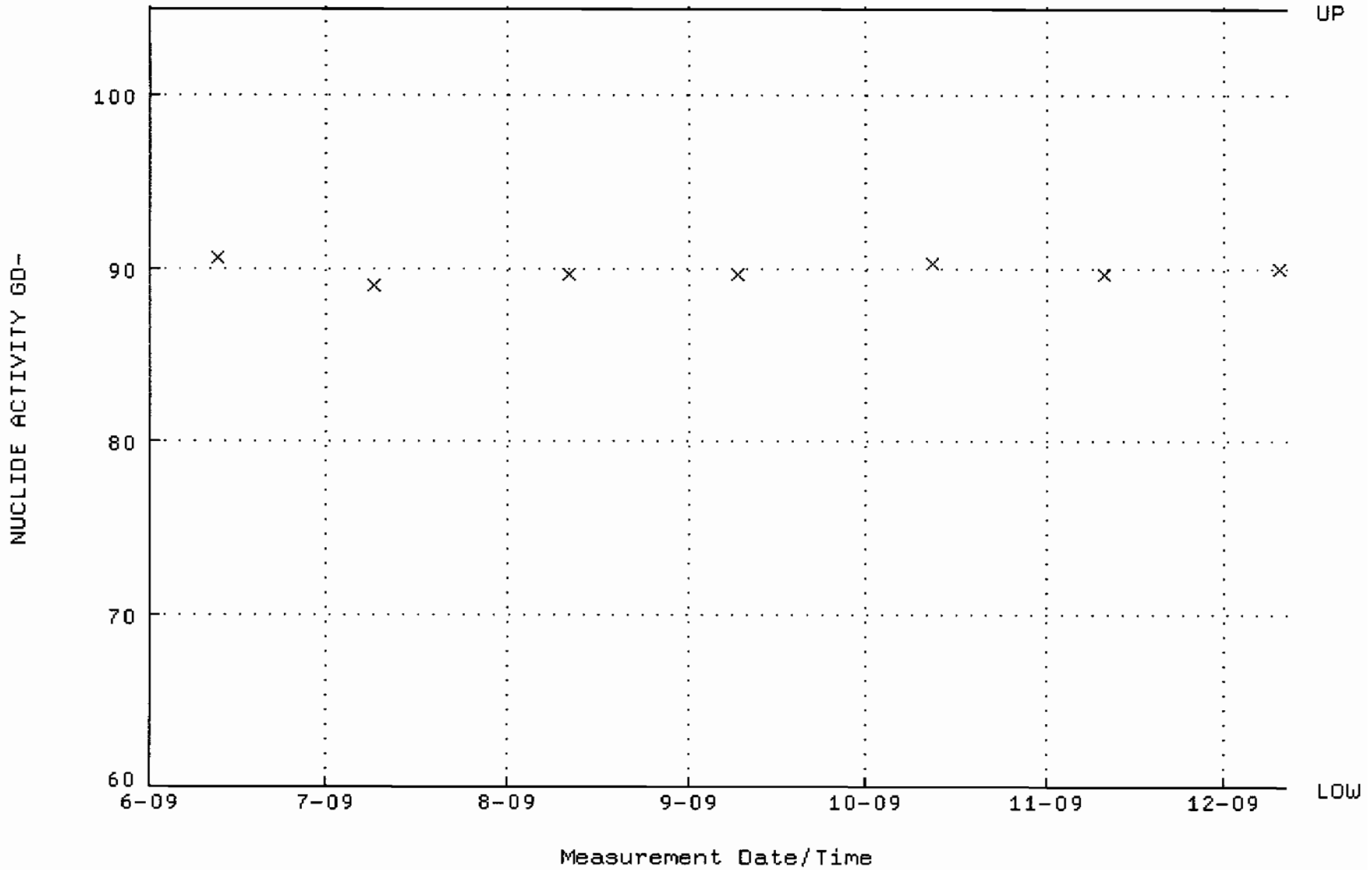

QA filename : DKA100:[ENV_ALPHA.QA.B]B088.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:40 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

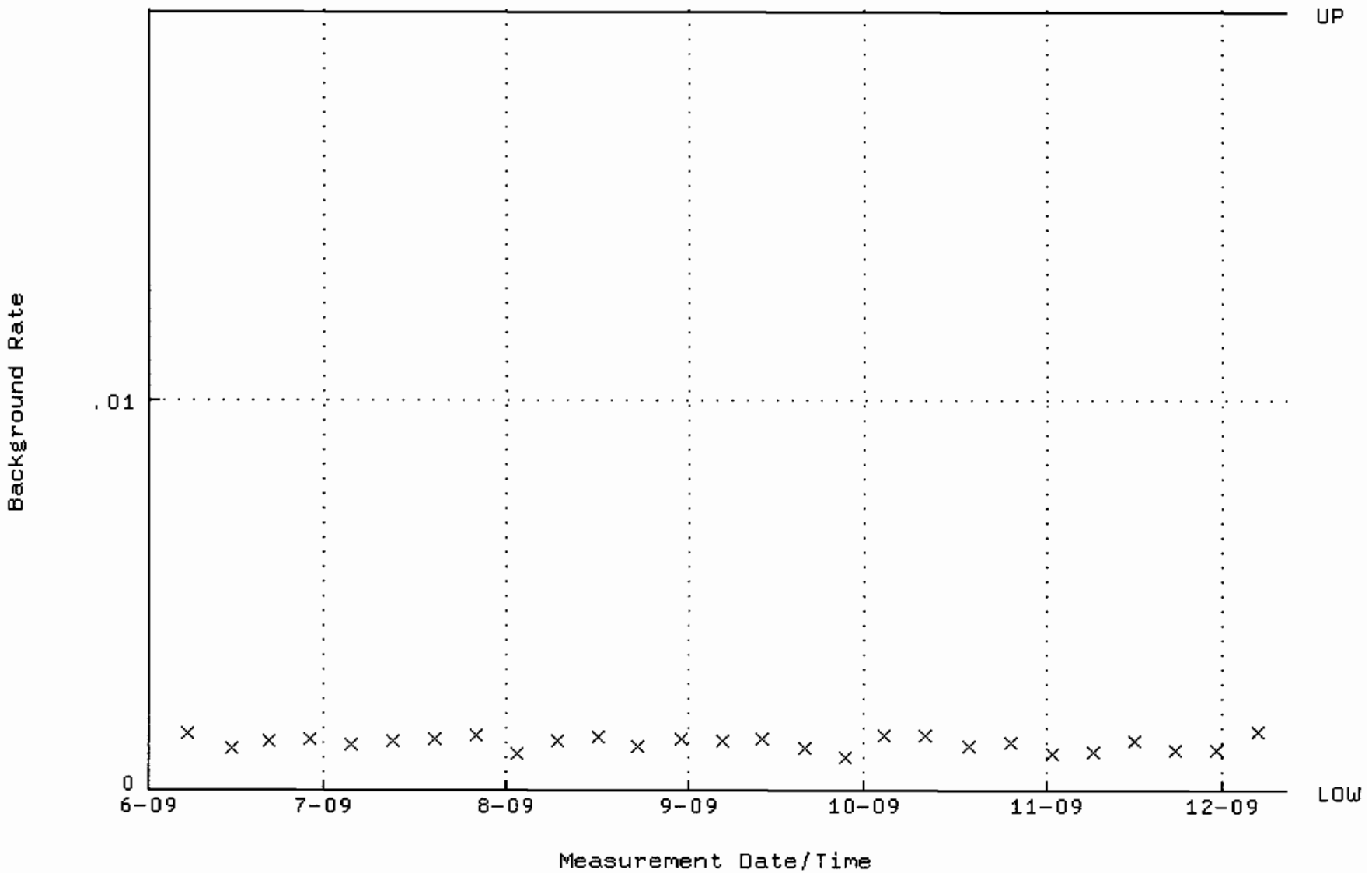

QA filename : DKA100:[ENV_ALPHA.QA.W]W090.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.313529 through 0.333529

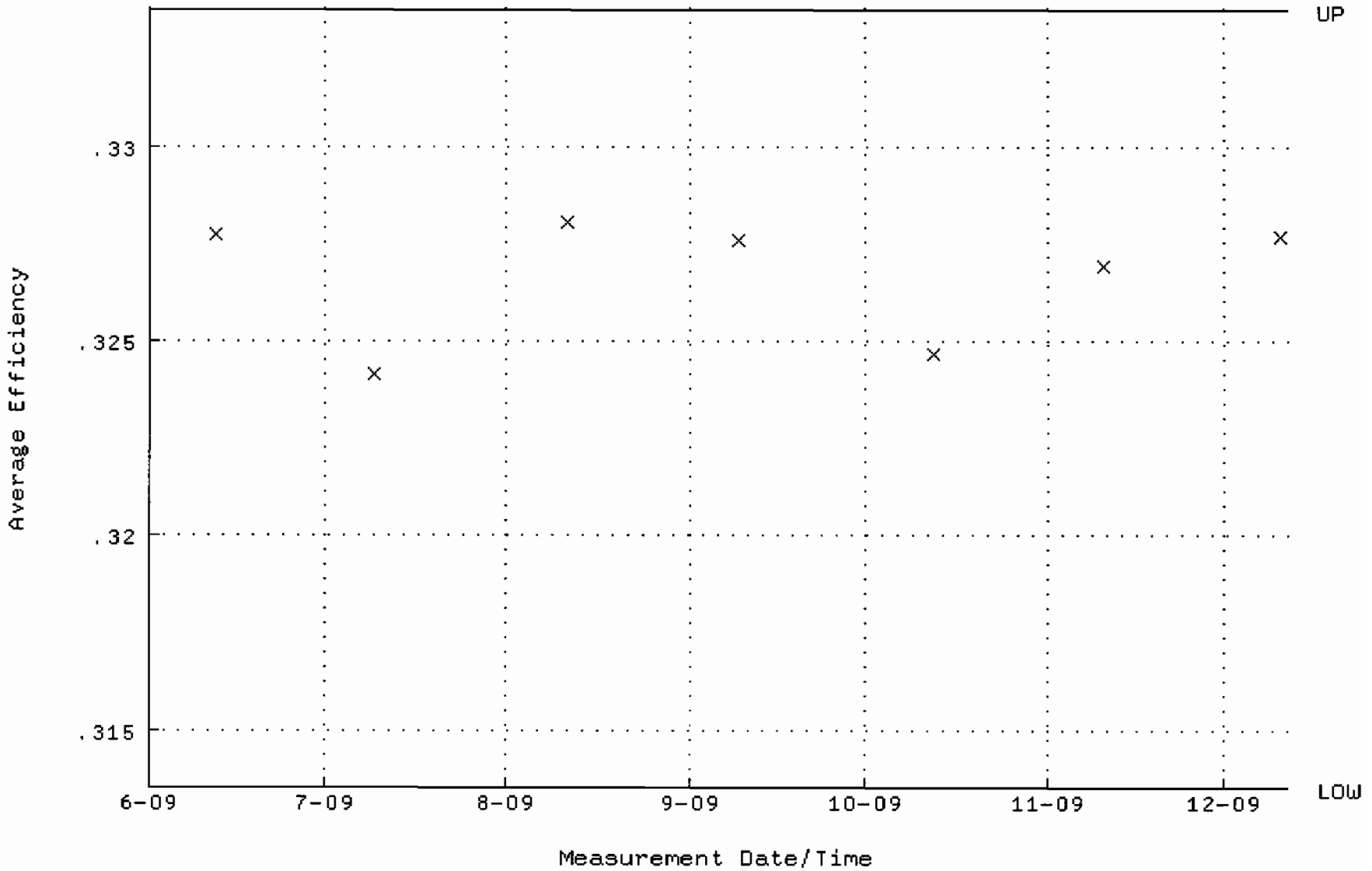

QA filename : DKA100:[ENV_ALPHA.QA.W]W090.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.0139 through 95.0680

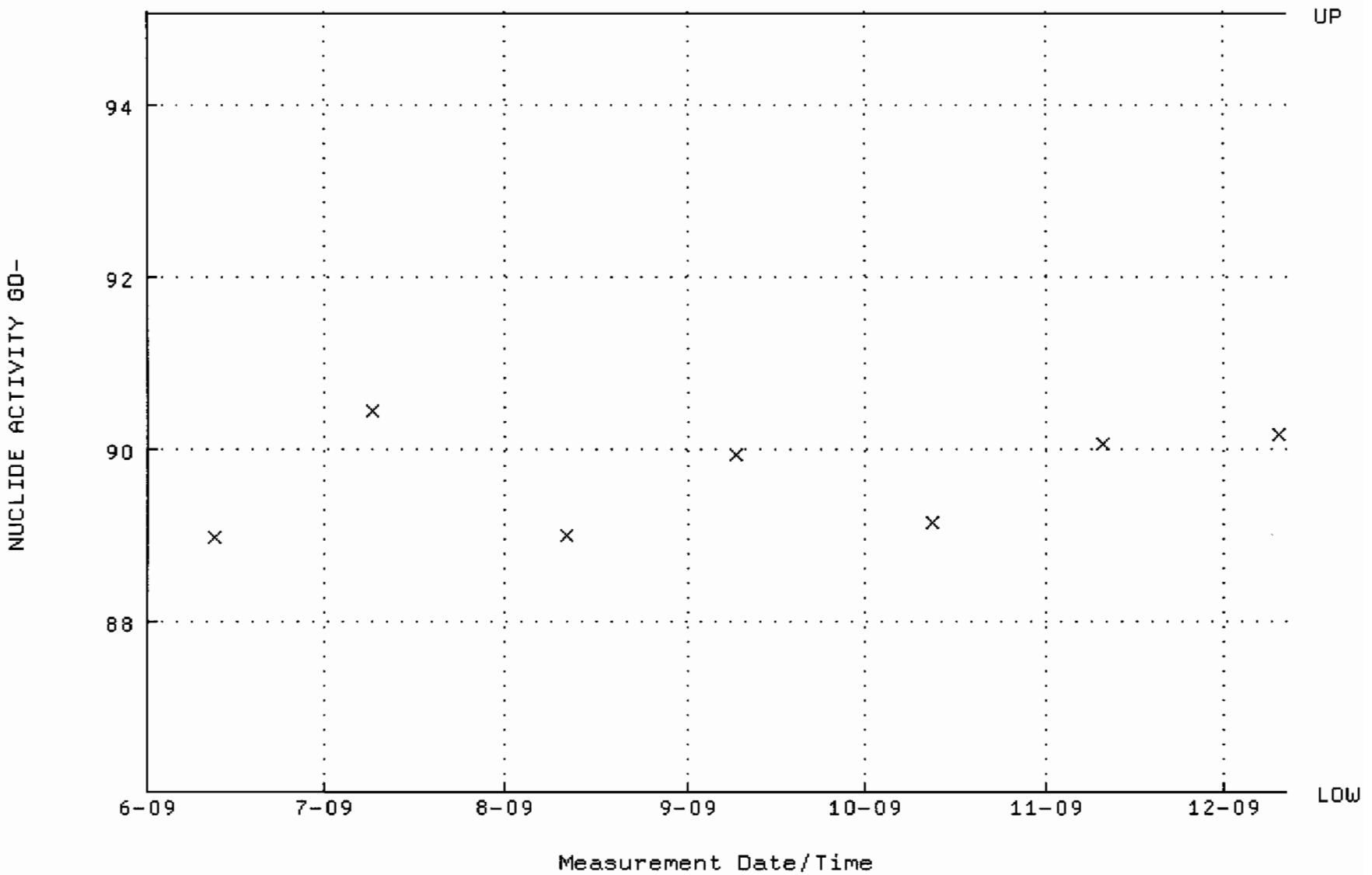

QA filename : DKA100:[ENV_ALPHA.QA.B]B090.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:41 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

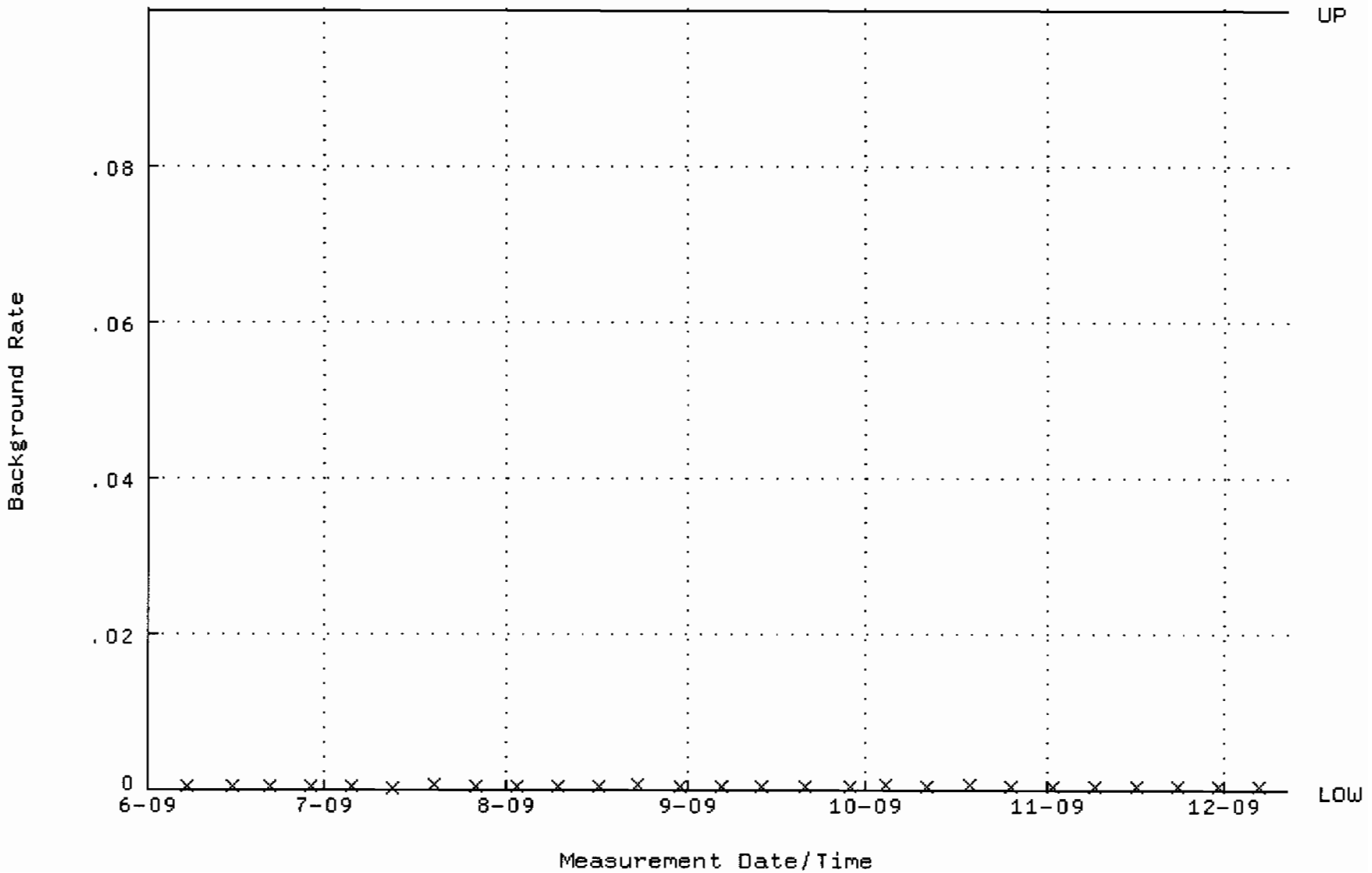

QA filename : DKA100:[ENV_ALPHA.QA.W]W091.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.332648 through 0.359902

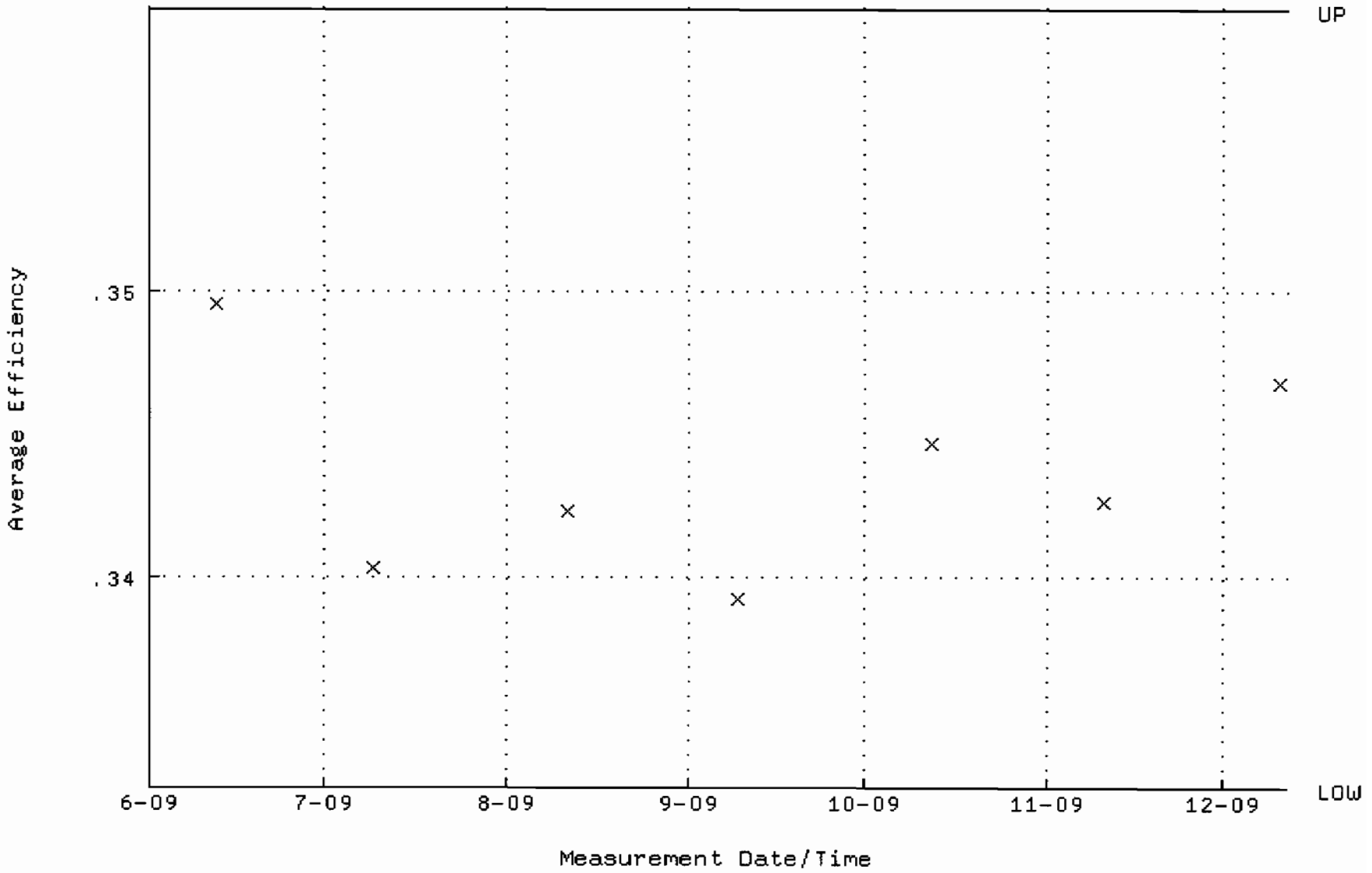

QA filename : DKA100:[ENV_ALPHA.QA.W]W091.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 84.0764 through 86.3518

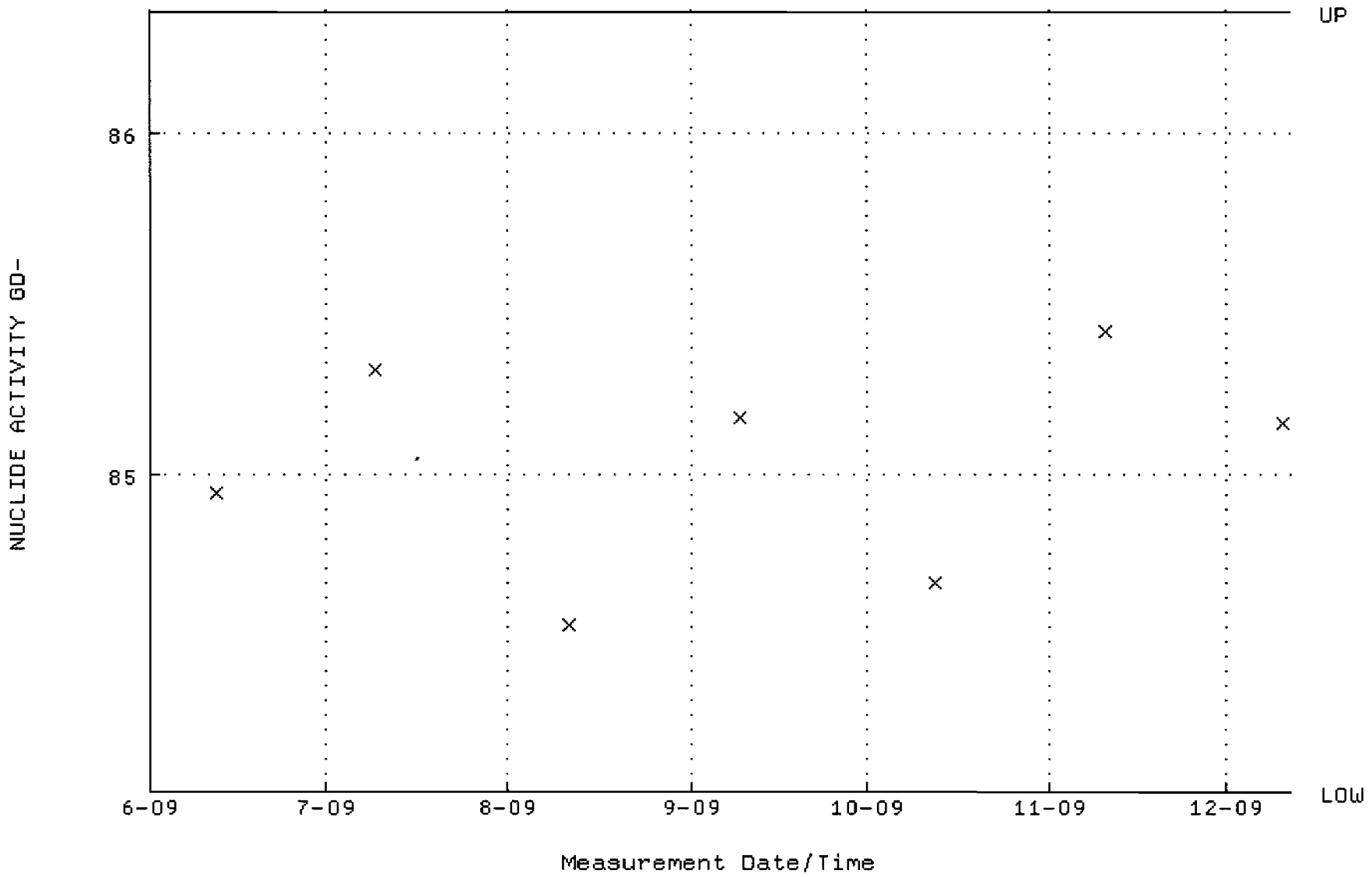

QA filename : DKA100:[ENV_ALPHA.QA.B]B091.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:41 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

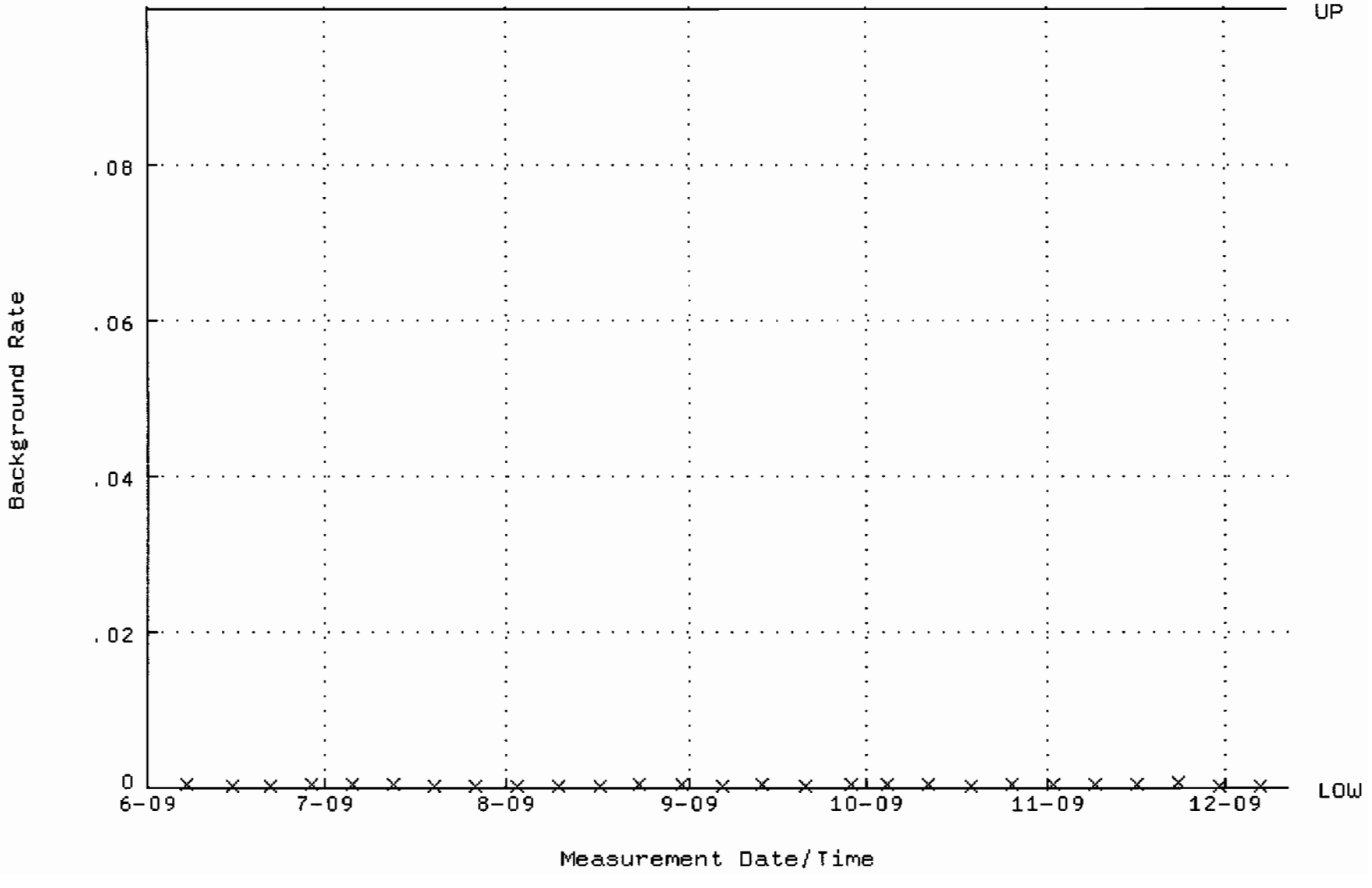

QA filename : DKA100:[ENV_ALPHA.QA.W]W092.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.301529 through 0.329133

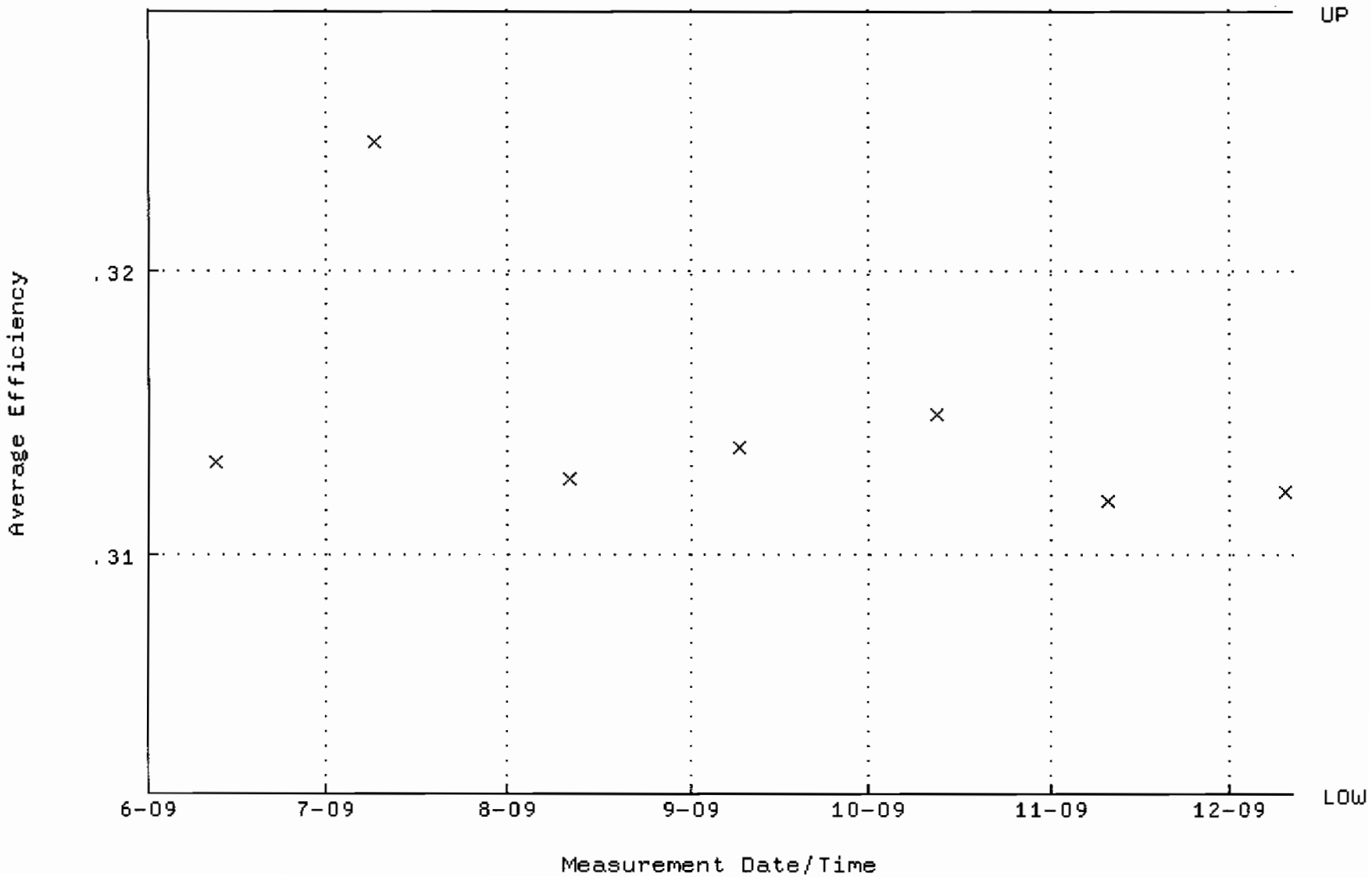

QA filename : DKA100:[ENV_ALPHA.QA.W]W092.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:28 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.3140 through 91.8878

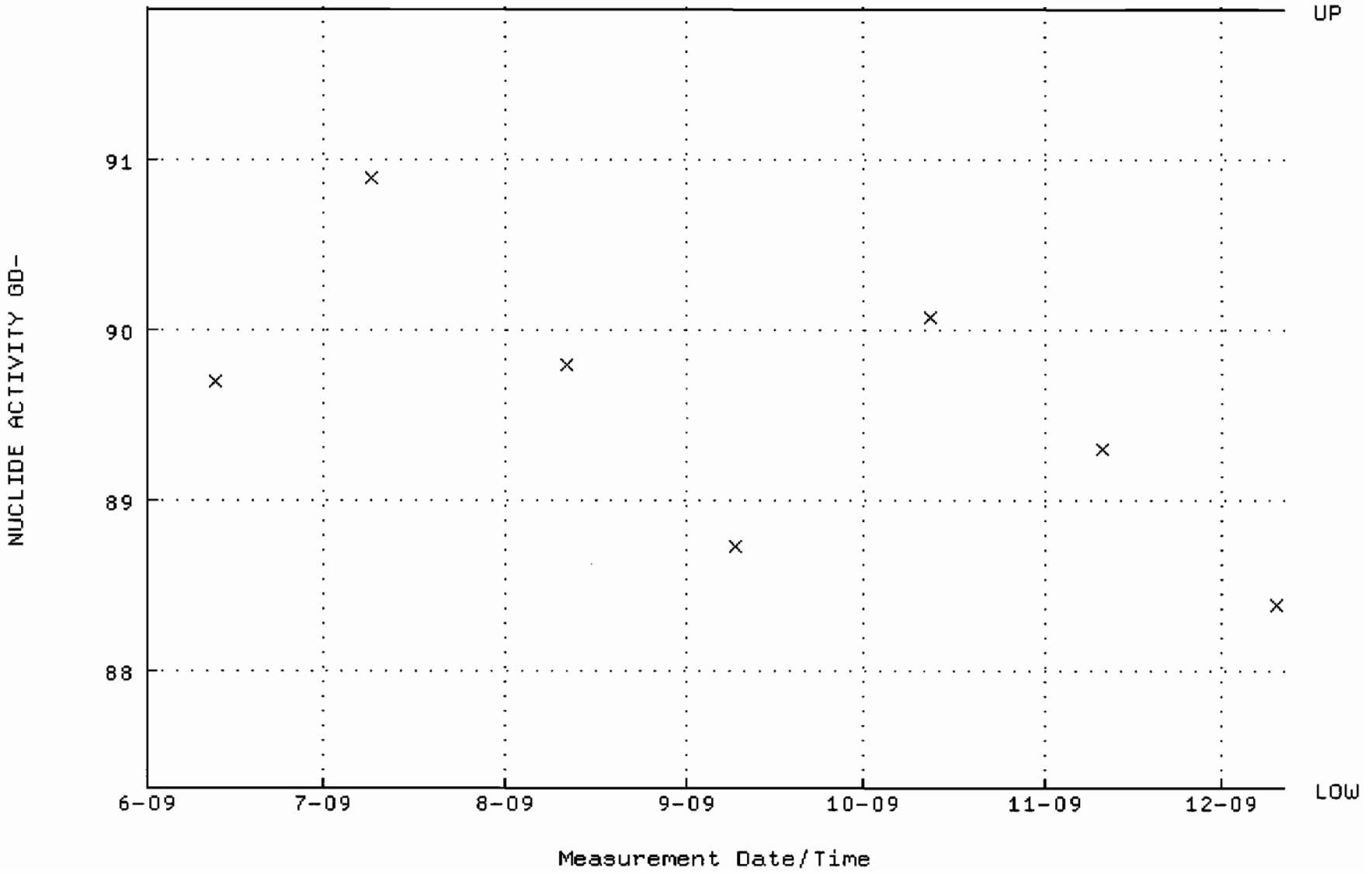

QA filename : DKA100:[ENV_ALPHA.QA.B]B092.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:41 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: -1.00000 through 0.100000

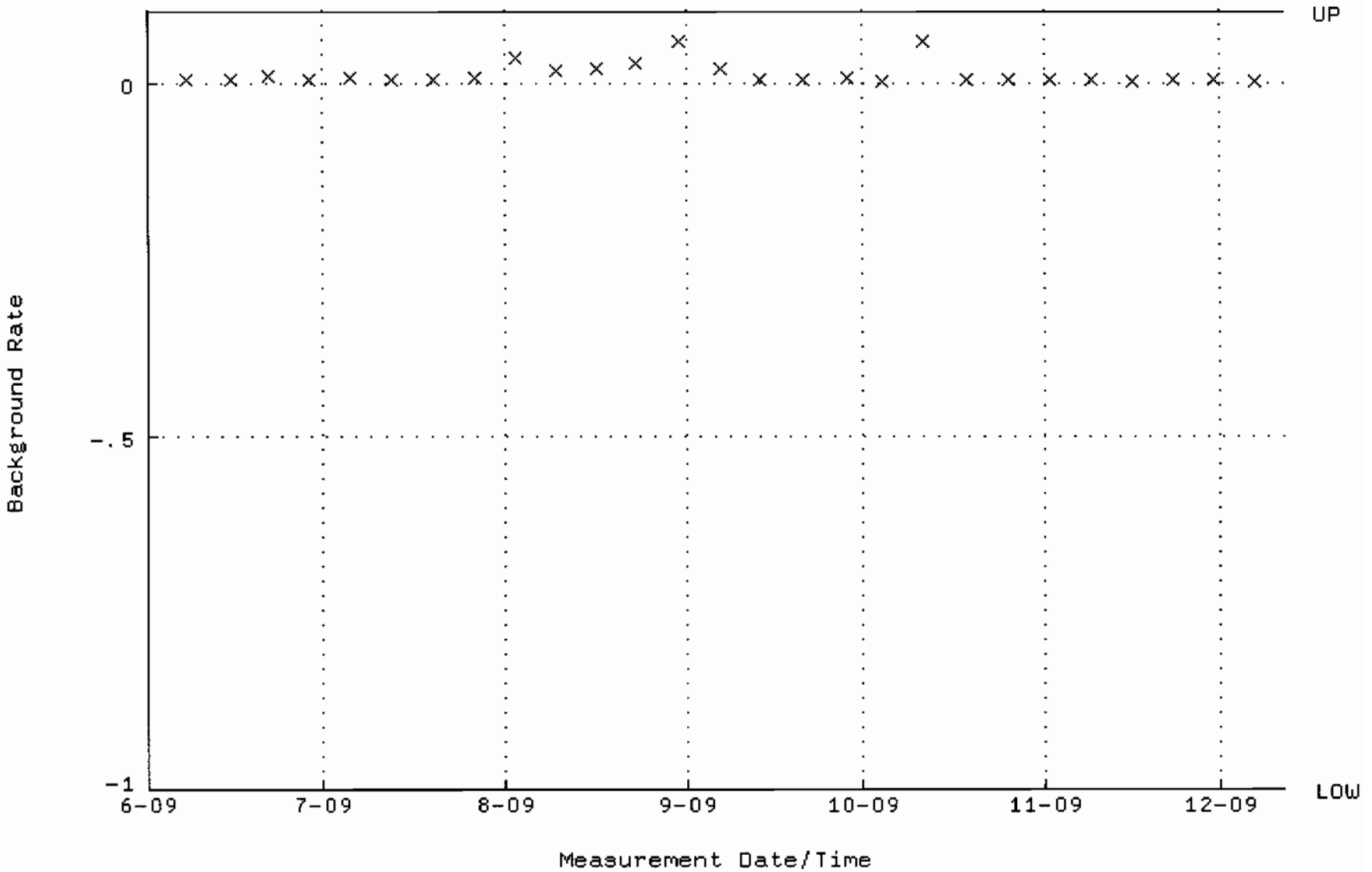

QA filename : DKA100:[ENV_ALPHA.QA.W]W113.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:44:42 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.242598 through 0.262598

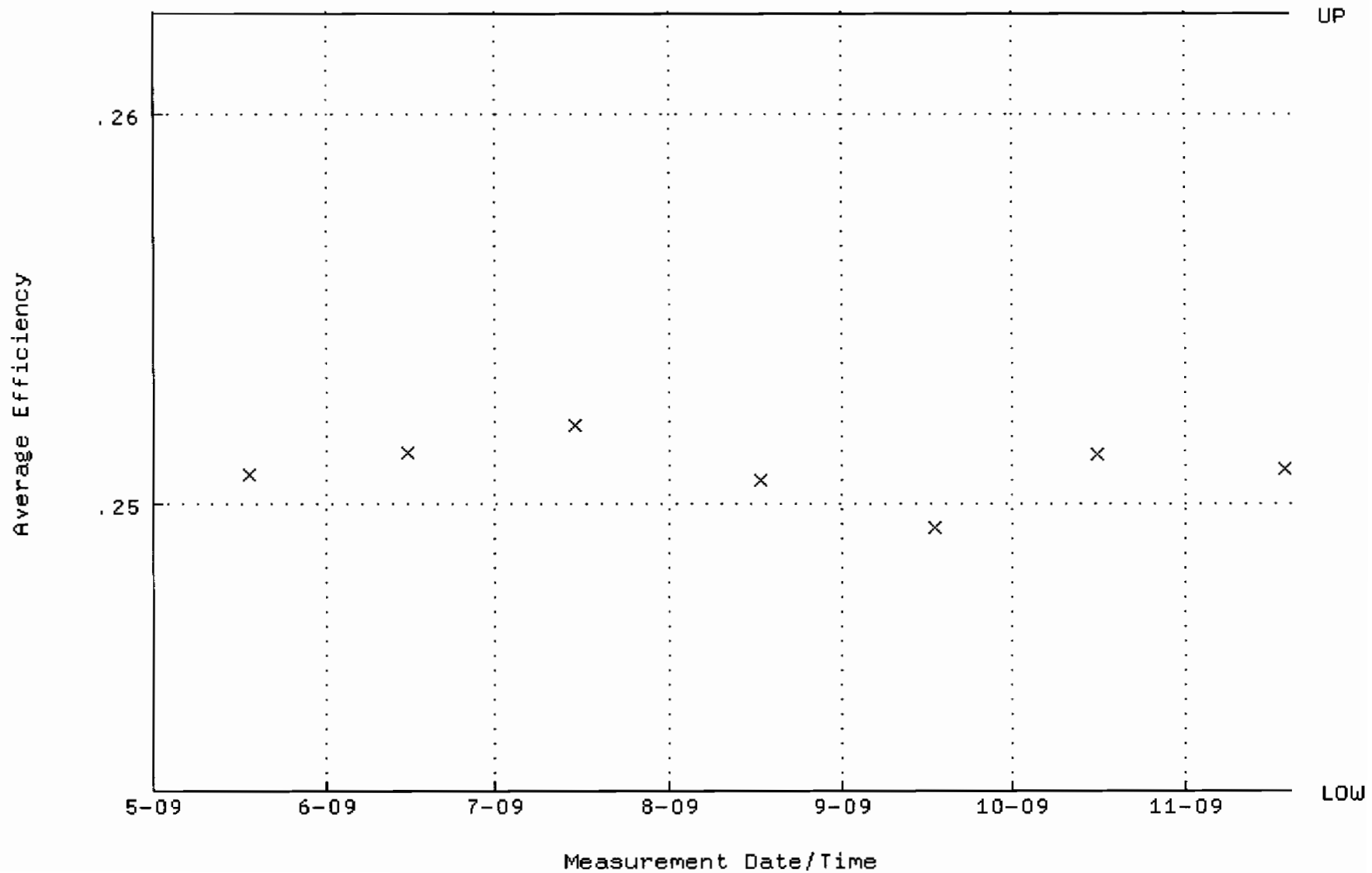

QA filename : DKA100:[ENV_ALPHA.QA.W]W113.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:44:42 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 87.5172 through 96.7296

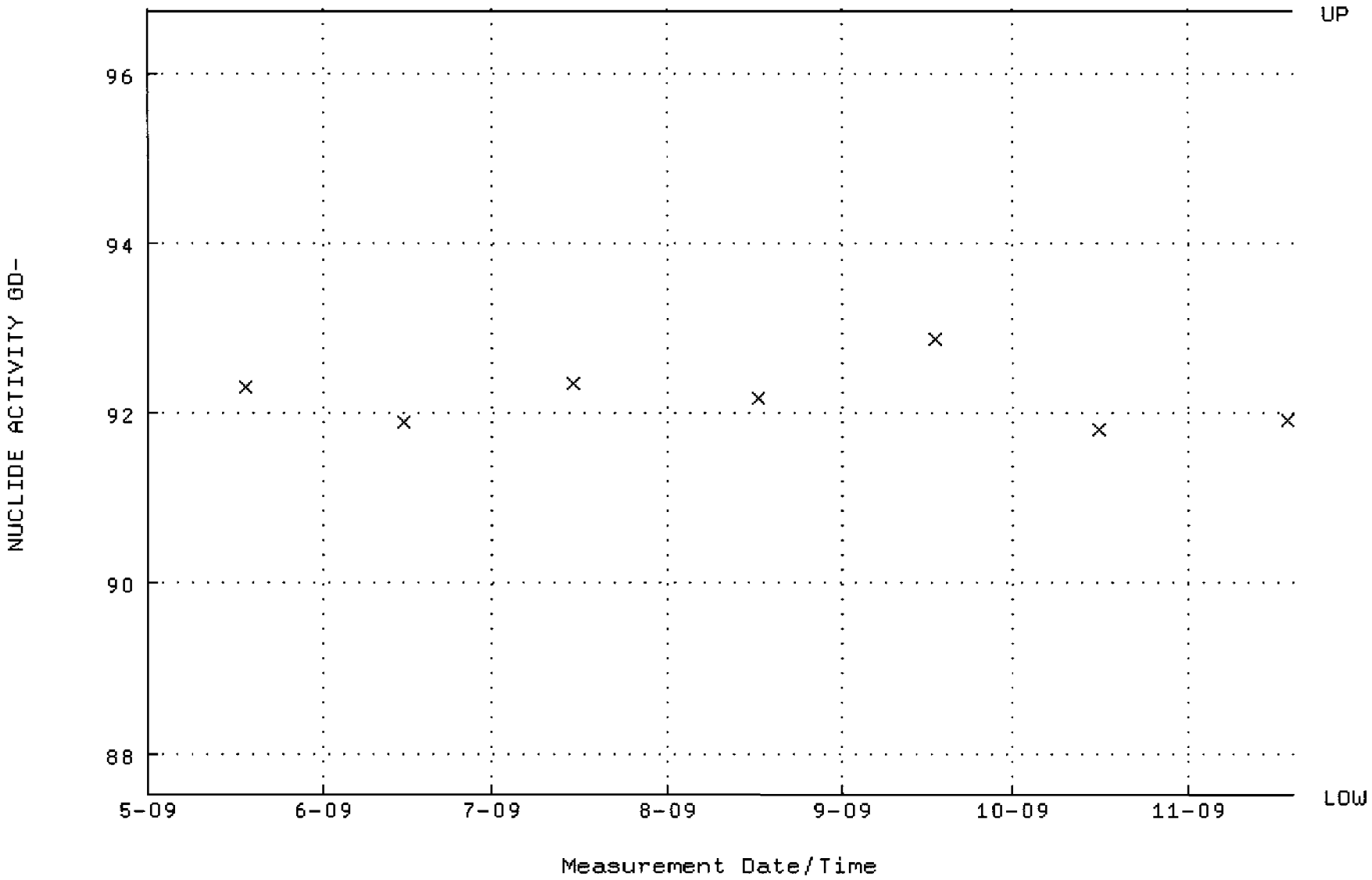

QA filename : DKA100:[ENV_ALPHA.QA.B]B113.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:49:56 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

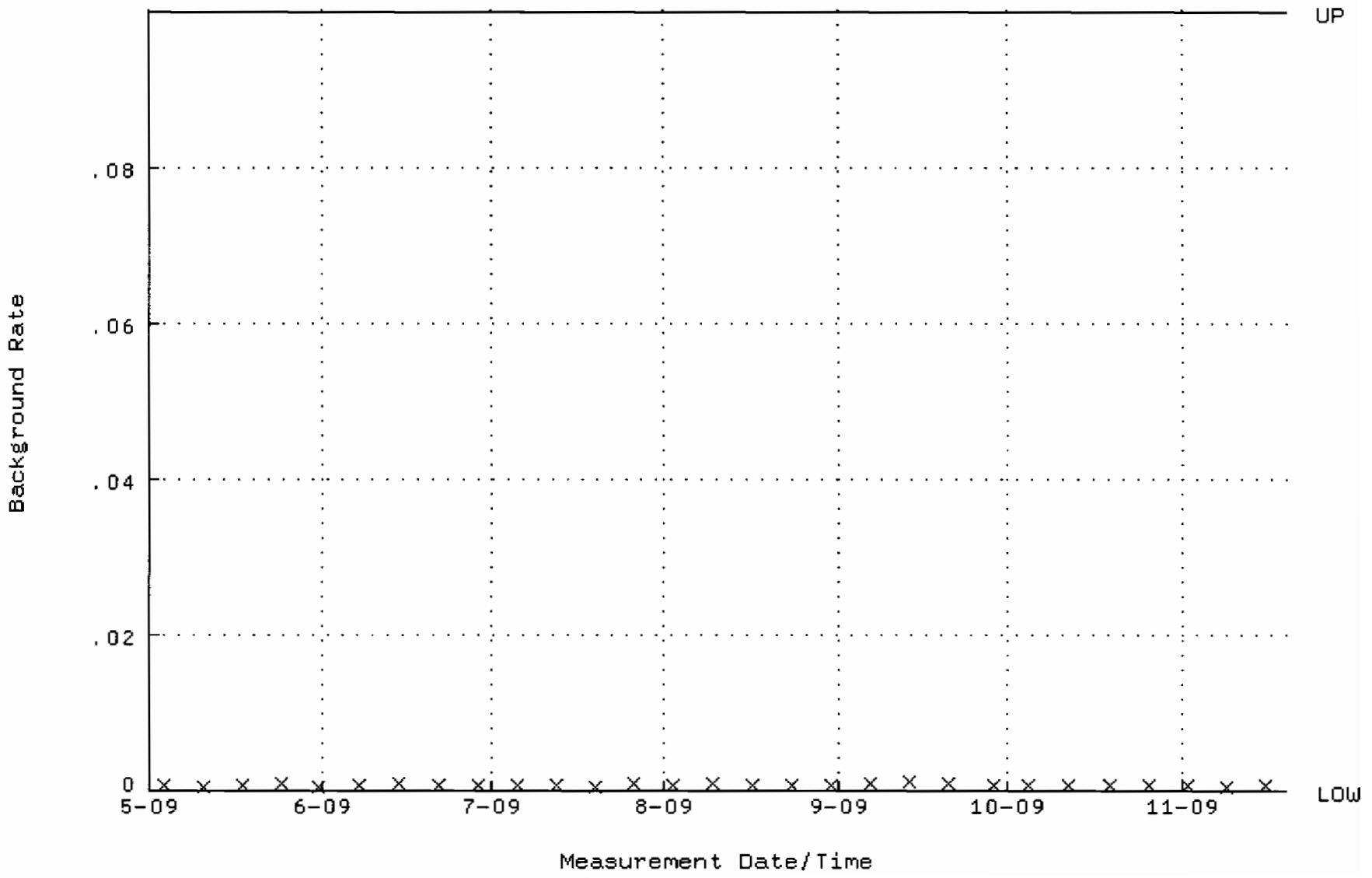

QA filename : DKA100:[ENV_ALPHA.QA.W]W114.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:44:49 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.245499 through 0.265499

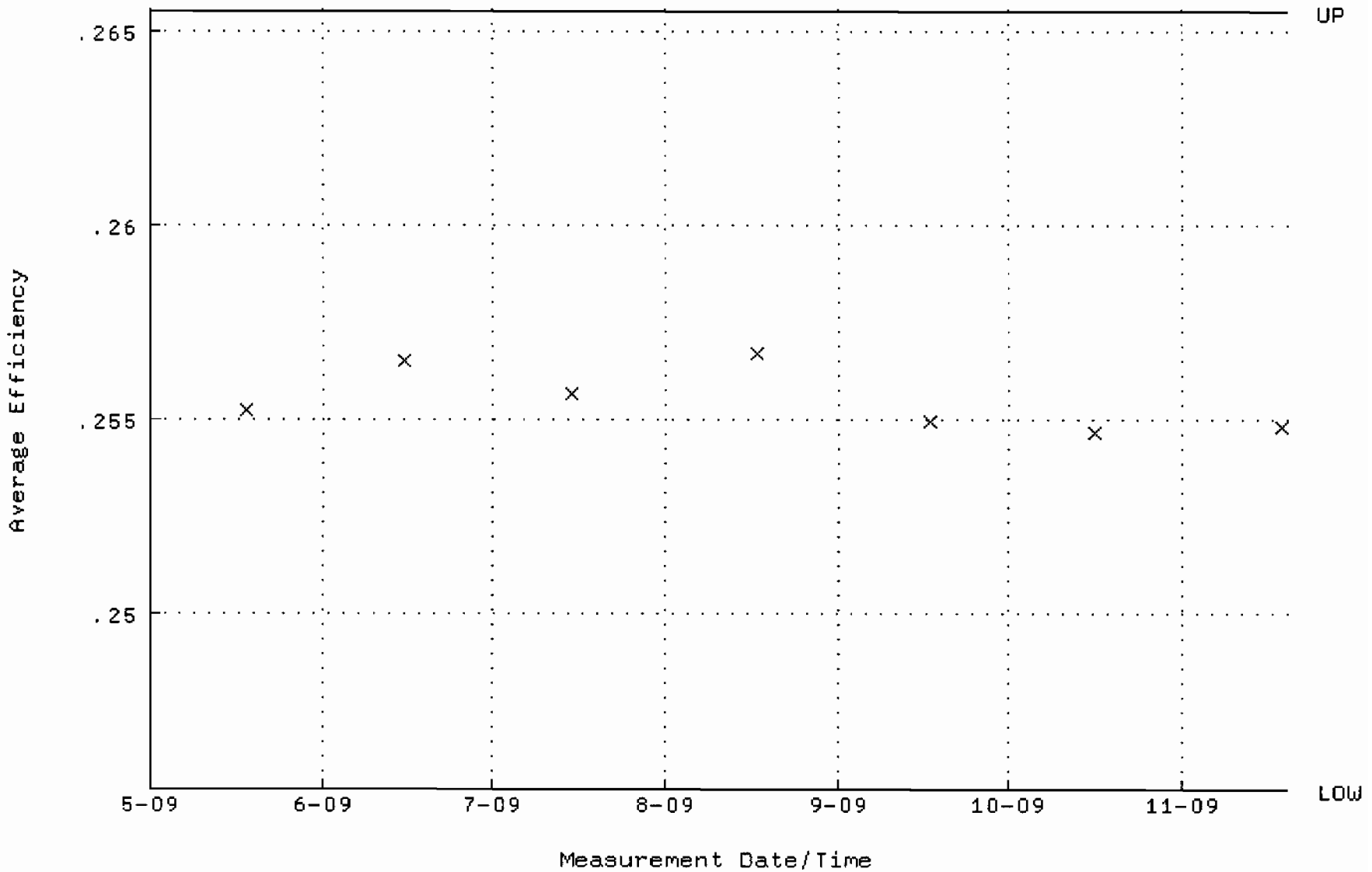

QA filename : DKA100:[ENV_ALPHA.QA.W]W114.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:44:49 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 87.8108 through 97.0540

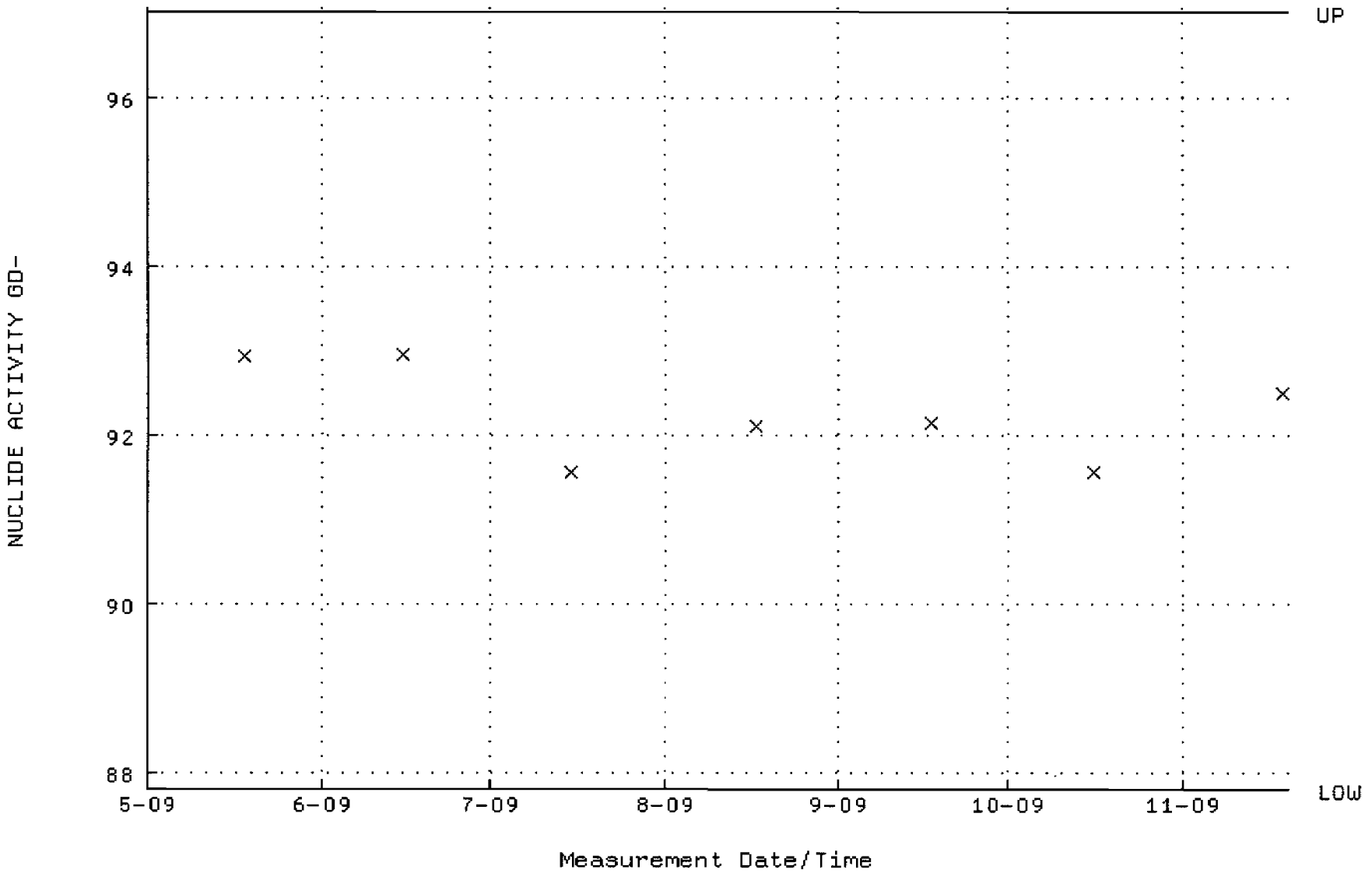

QA filename : DKA100:[ENV_ALPHA.QA.B]B114.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:01 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

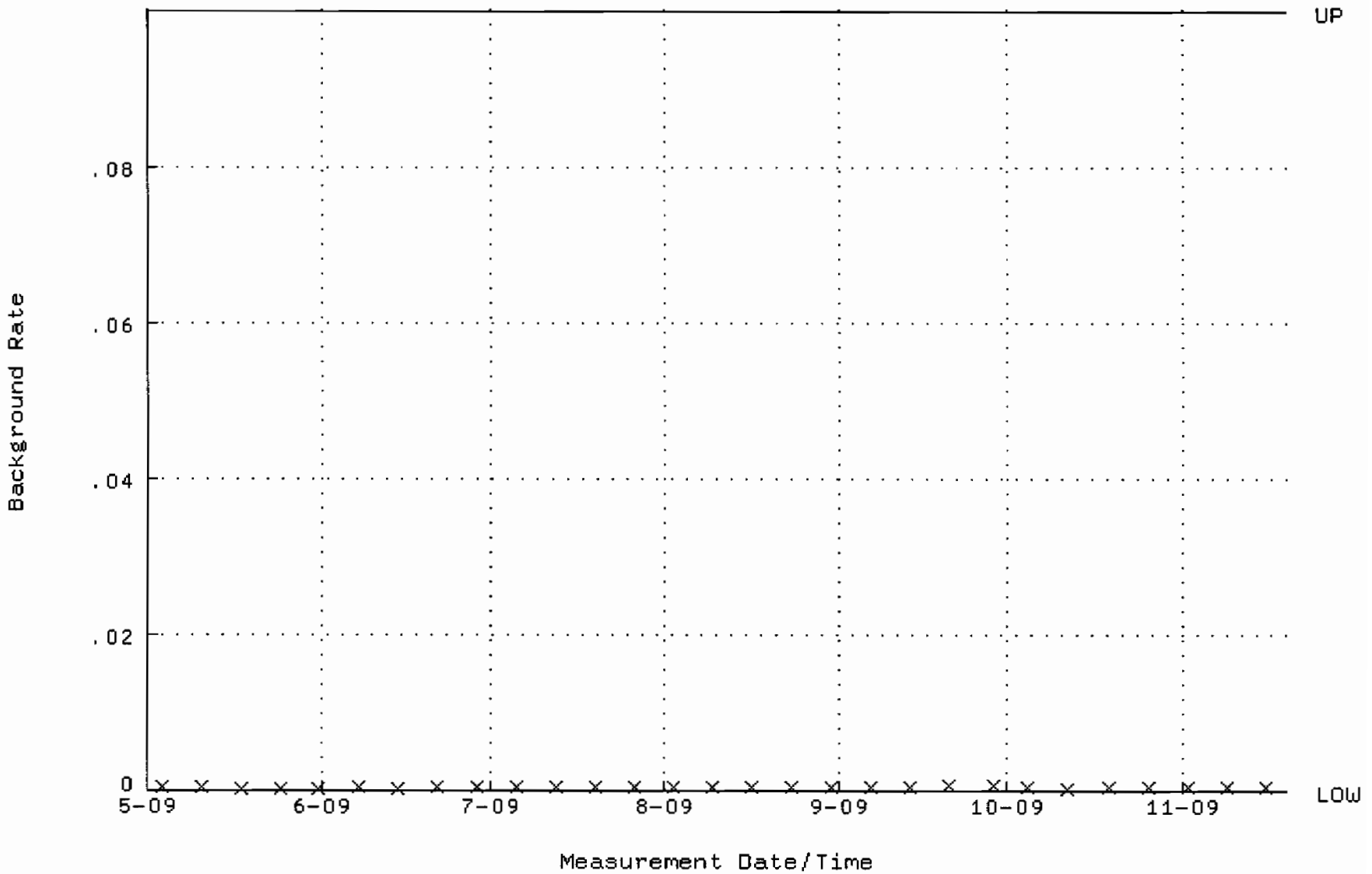

QA filename : DKA100:[ENV_ALPHA.QA.W]W115.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:44:54 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.248404 through 0.268404

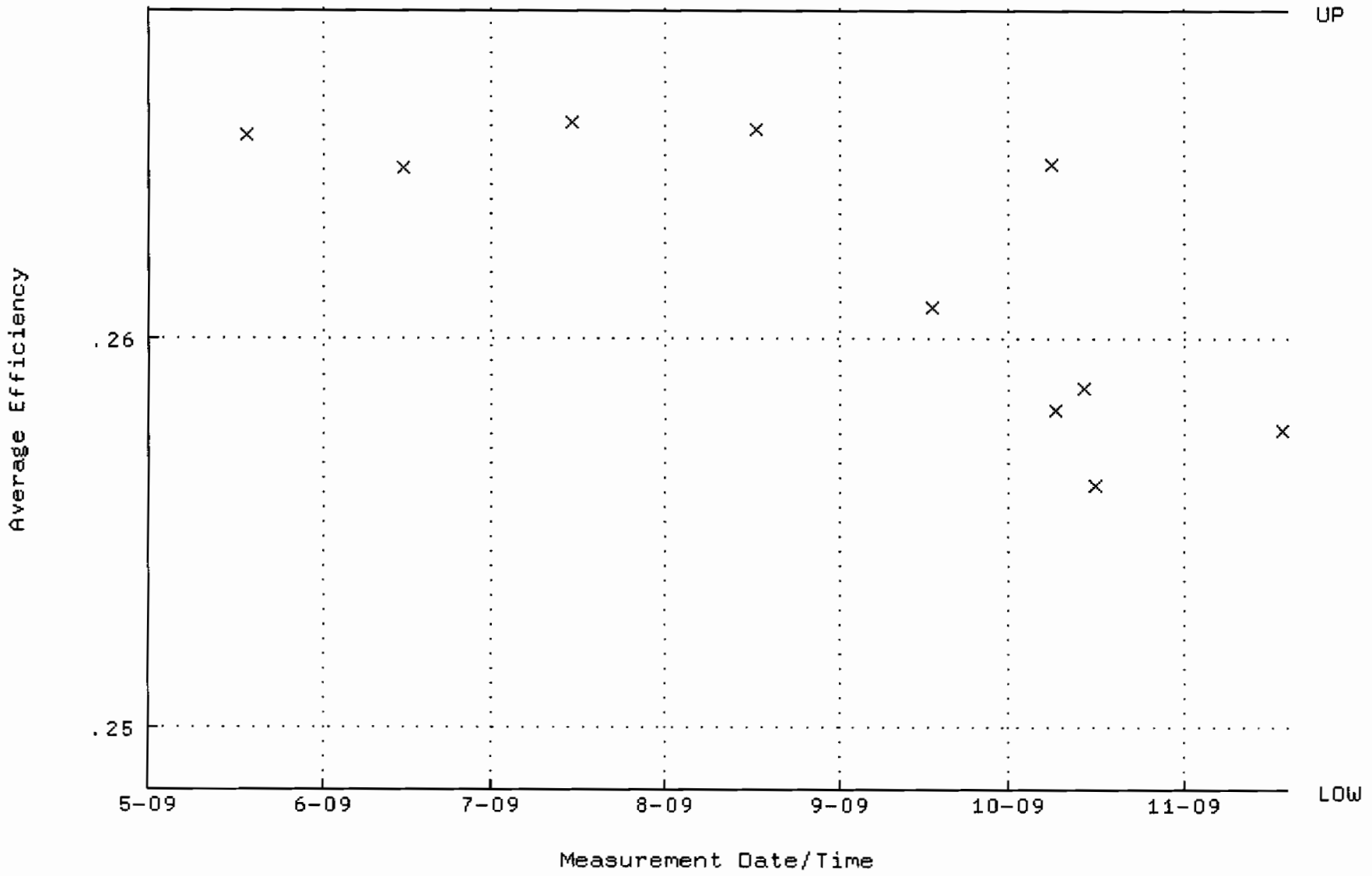

QA filename : DKA100:[ENV_ALPHA.QA.W]W115.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:44:54 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 85.5661 through 94.5731

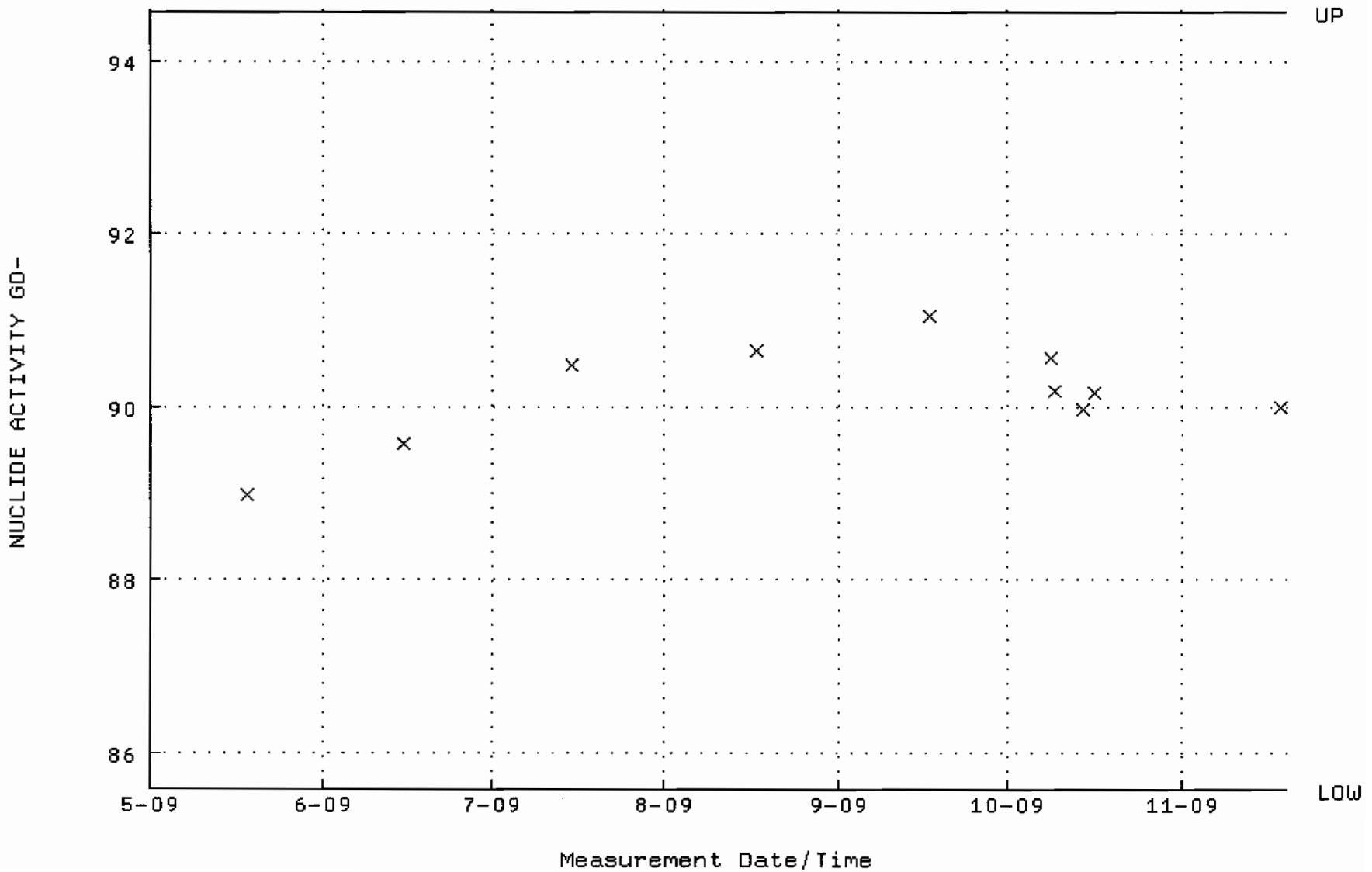

QA filename : DKA100:[ENV_ALPHA.QA.B]B115.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:05 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

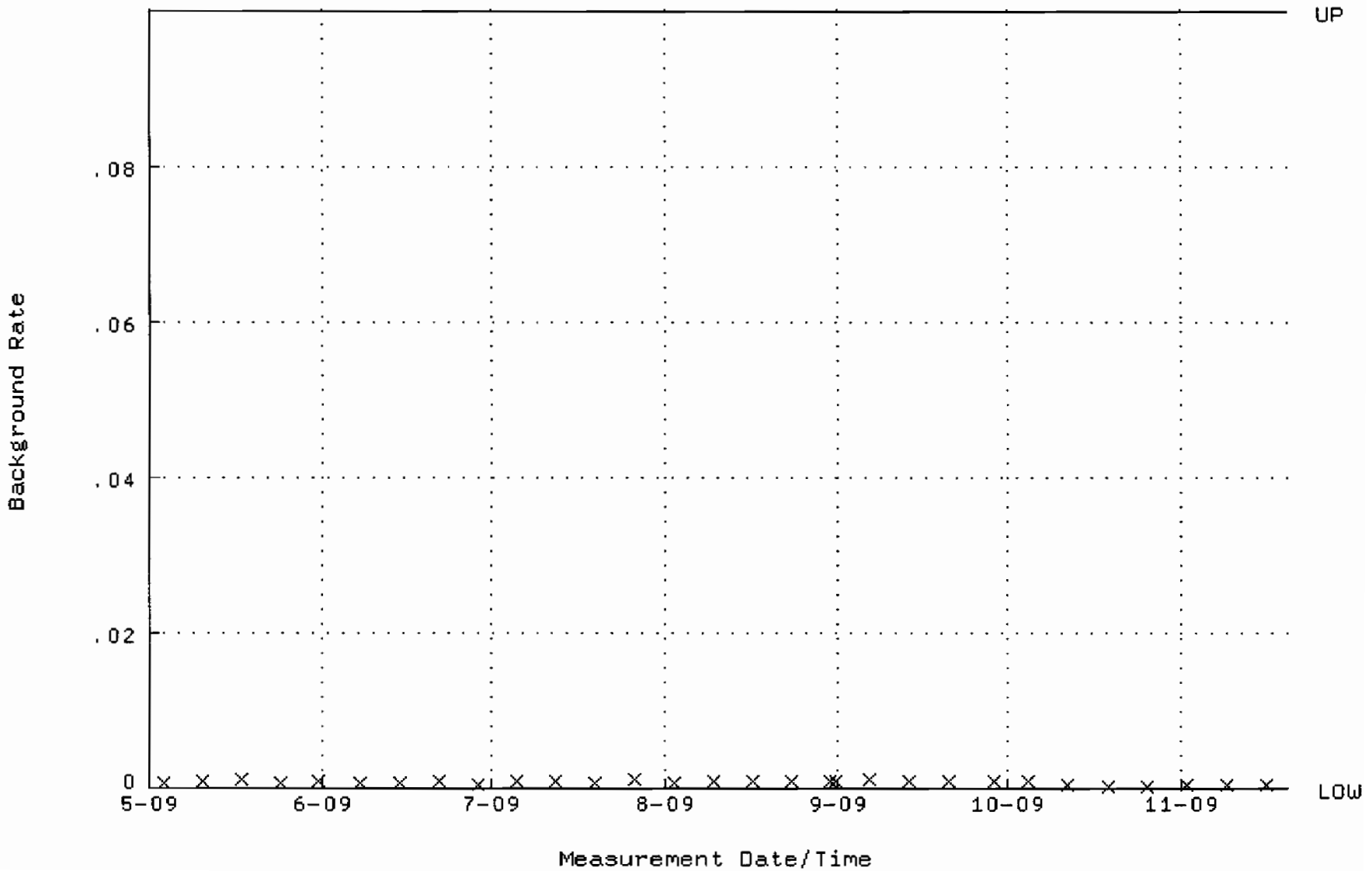

QA filename : DKA100:[ENV_ALPHA.QA.W]W116.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:44:59 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.251950 through 0.271950

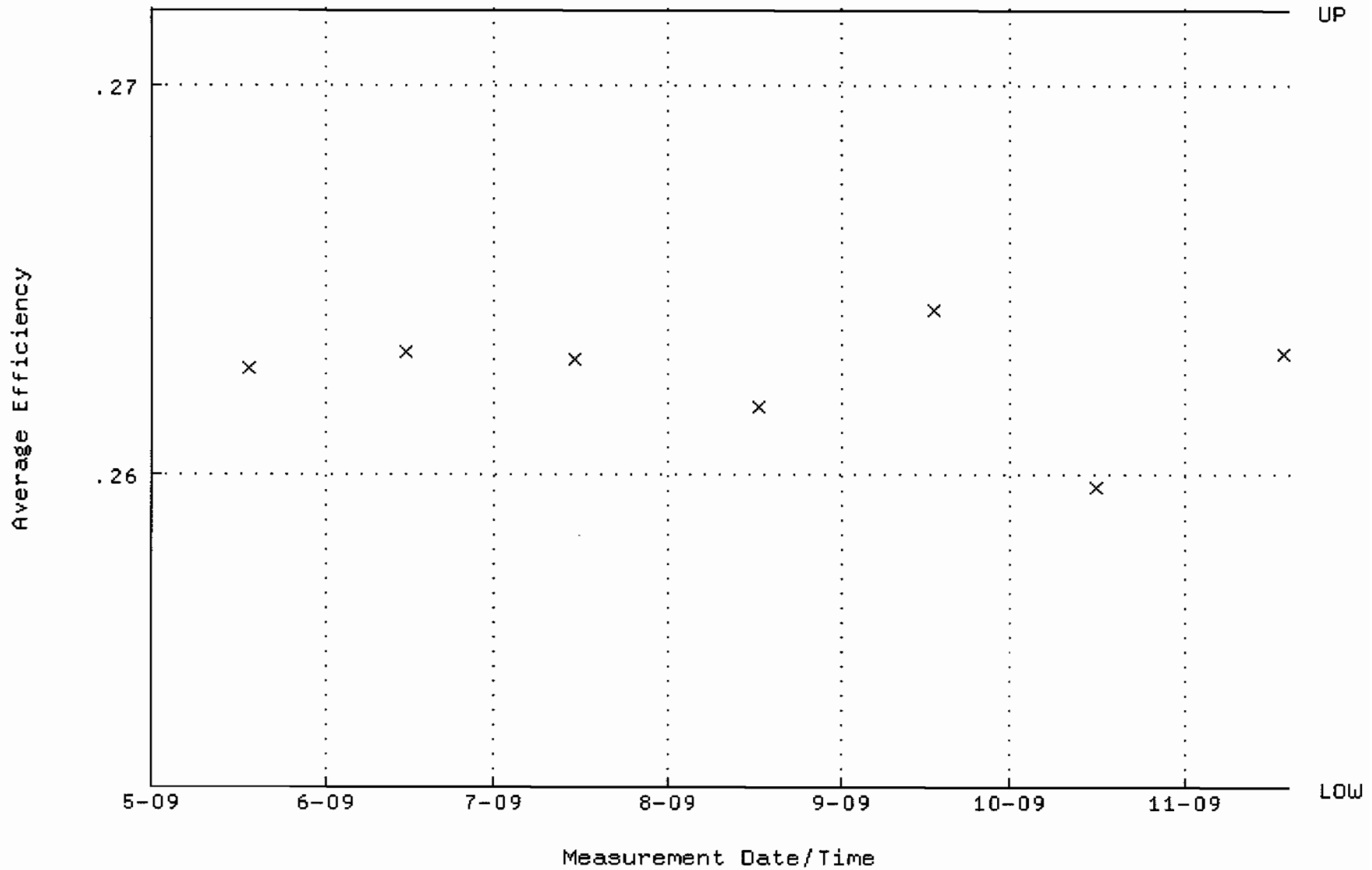

QA filename : DKA100:[ENV_ALPHA.QA.W]W116.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:44:59 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 88.4515 through 97.7621

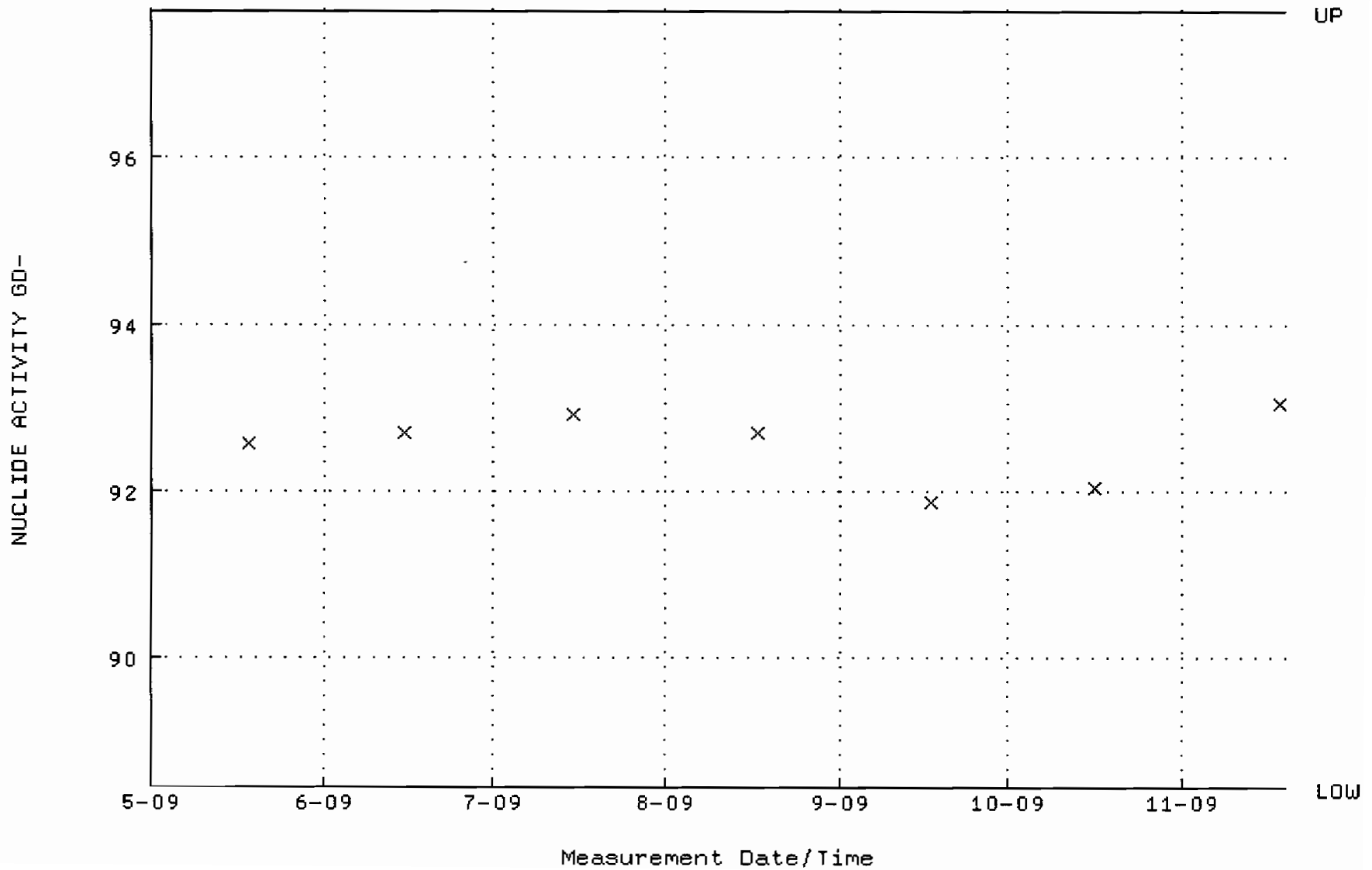

QA filename : DKA100:[ENV_ALPHA.QA.B]B116.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:10 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

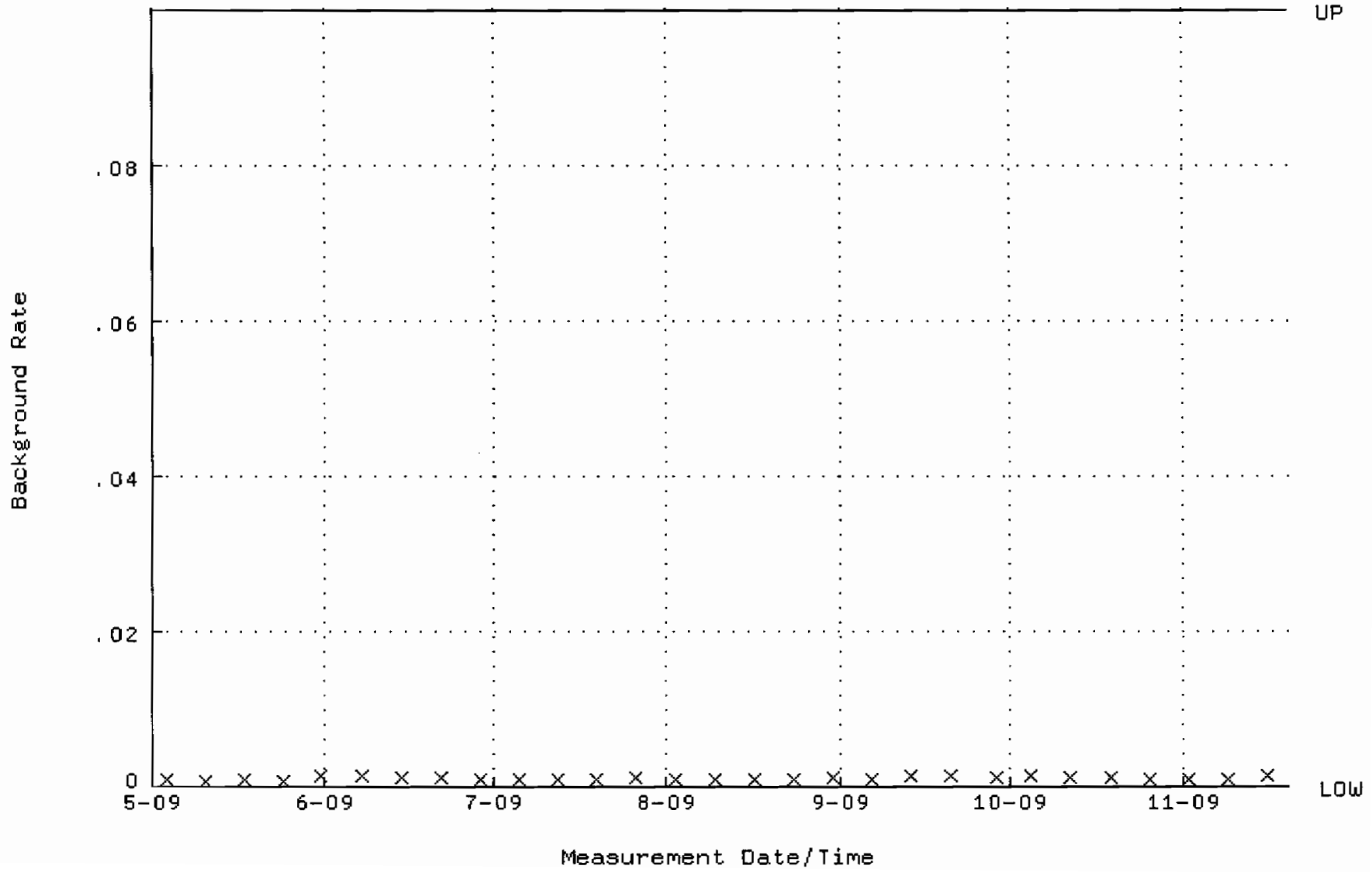

QA filename : DKA100:[ENV_ALPHA.QA.W]W117.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:05 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.242940 through 0.262940

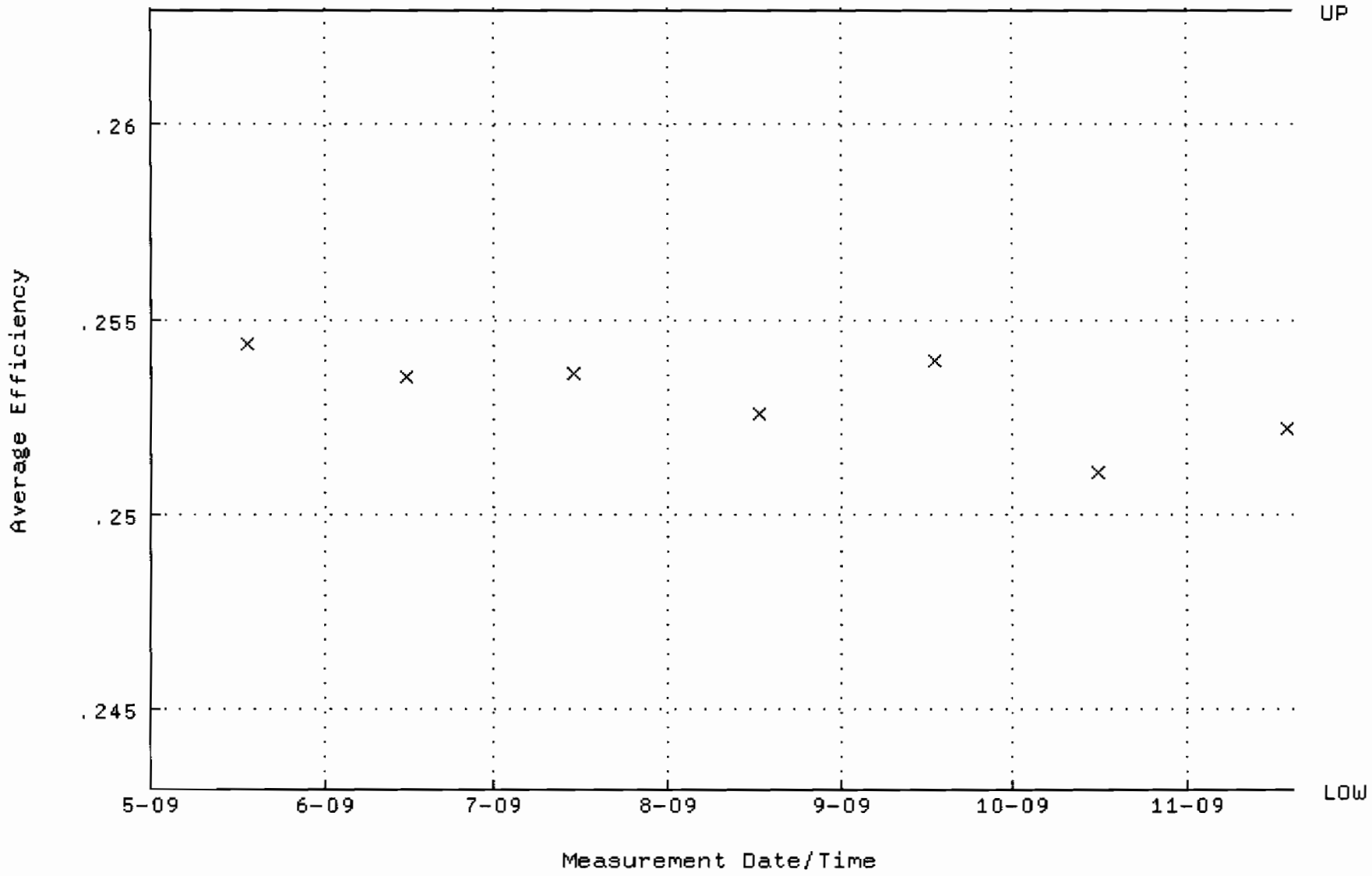

QA filename : DKA100:[ENV_ALPHA.QA.W]W117.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:05 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 85.8693 through 94.9081

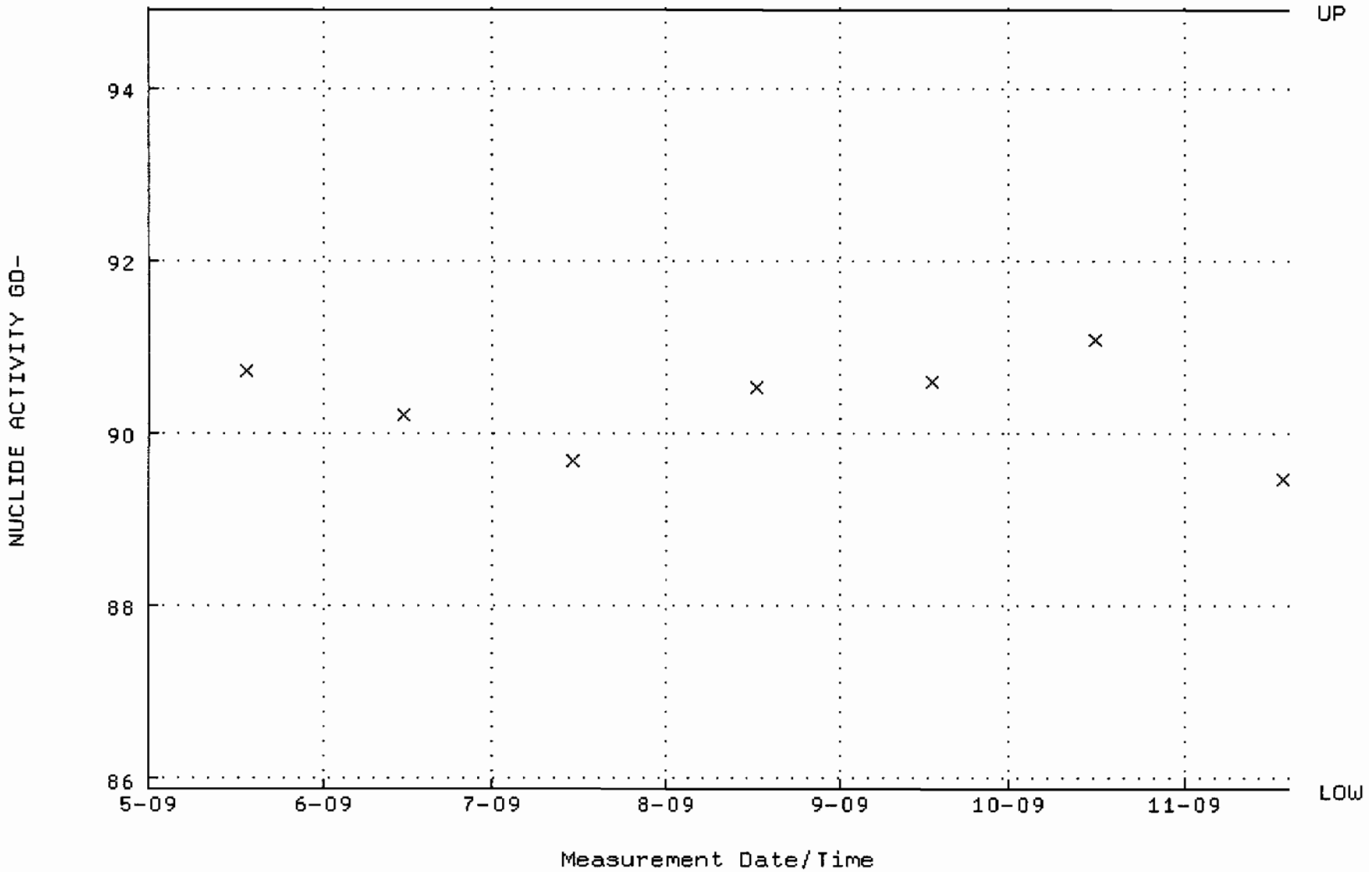

QA filename : DKA100:[ENV_ALPHA.QA.B]B117.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:14 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

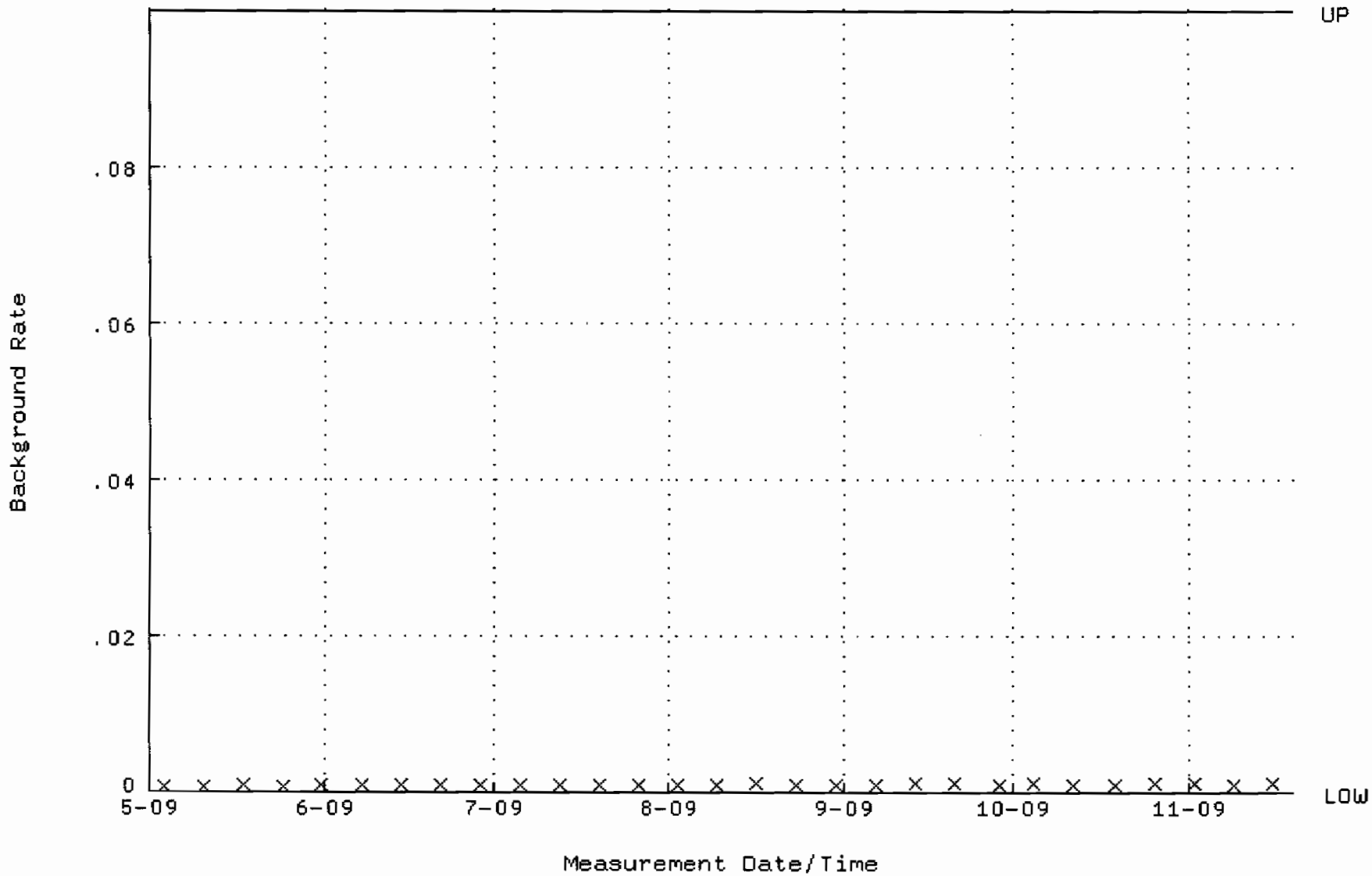

QA filename : DKA100:[ENV_ALPHA.QA.W]W118.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:09 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.250490 through 0.270490

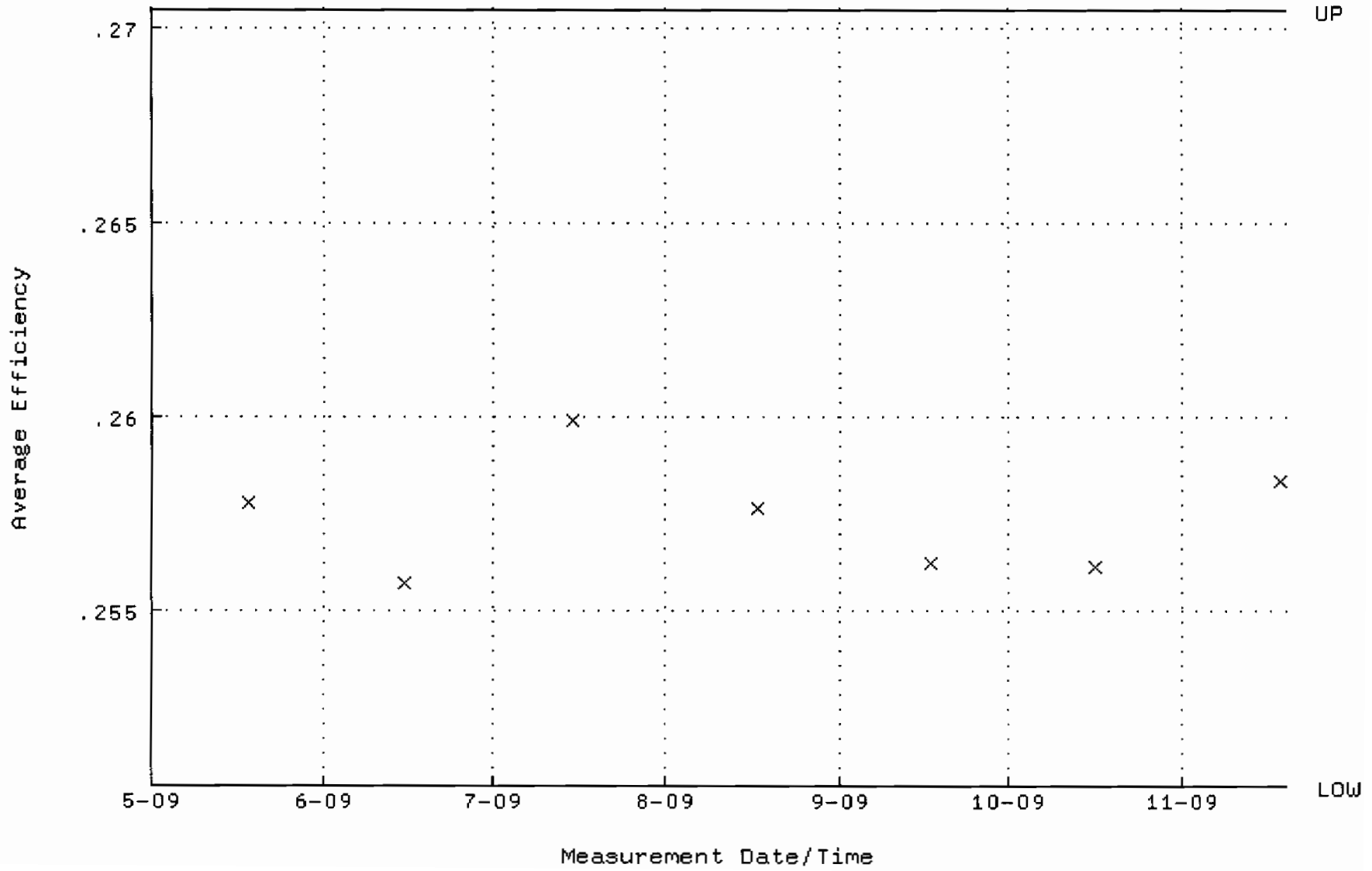

QA filename : DKA100:[ENV_ALPHA.QA.W]W118.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:09 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 87.2440 through 96.4276

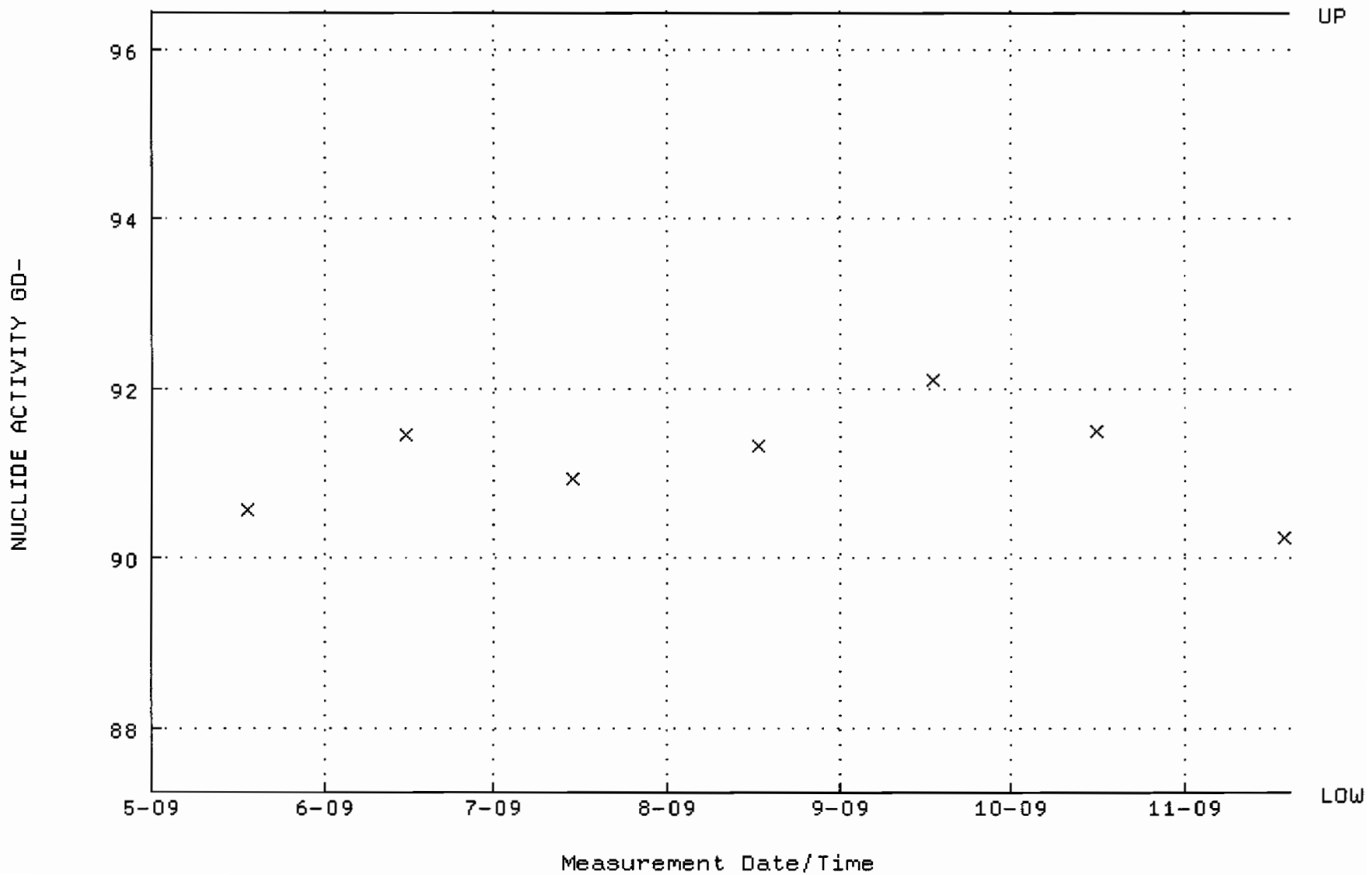

QA filename : DKA100:[ENV_ALPHA.QA.B]B118.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:18 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

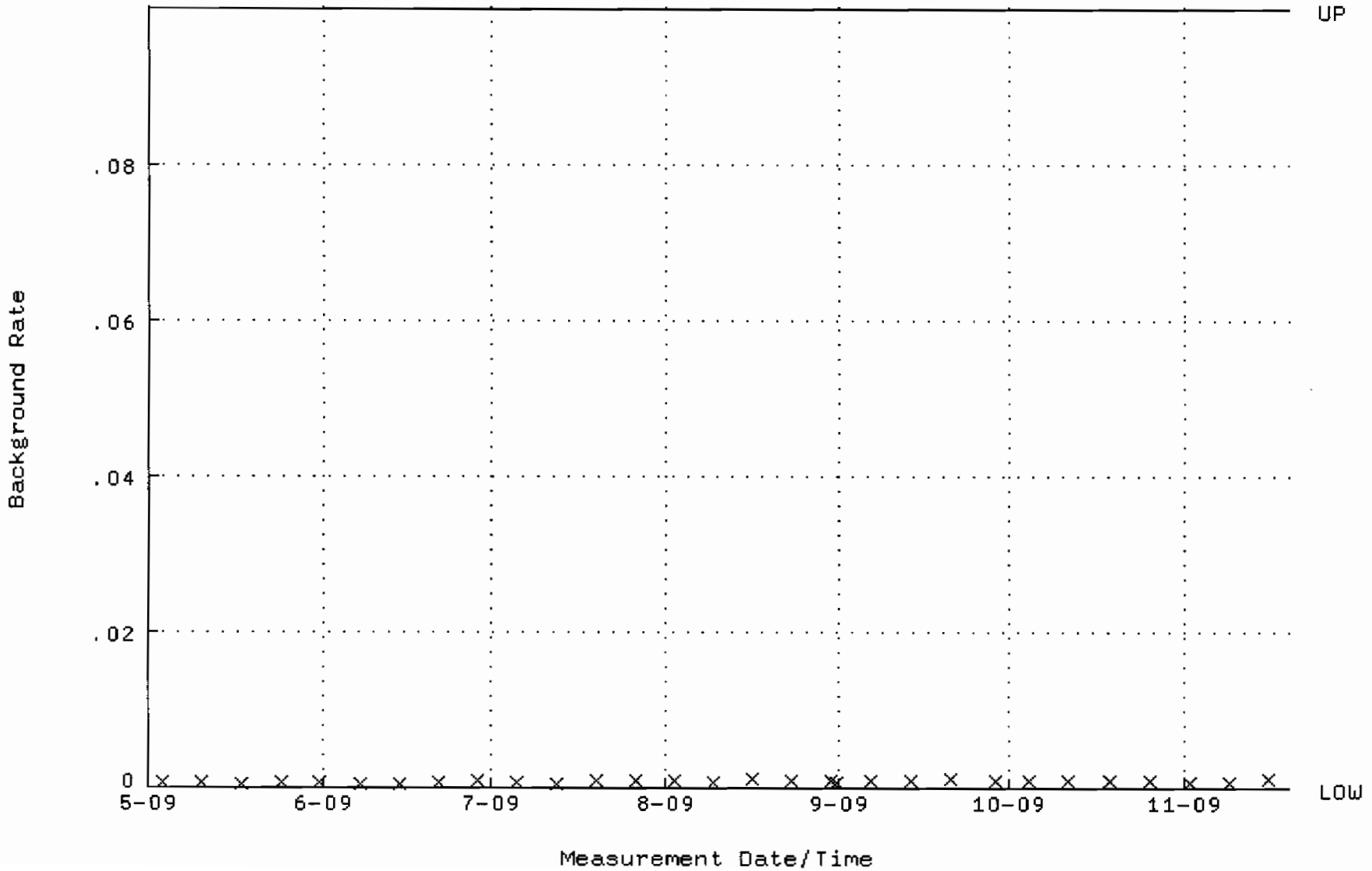

QA filename : DKA100:[ENV_ALPHA.QA.W]W121.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:23 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.237686 through 0.257686

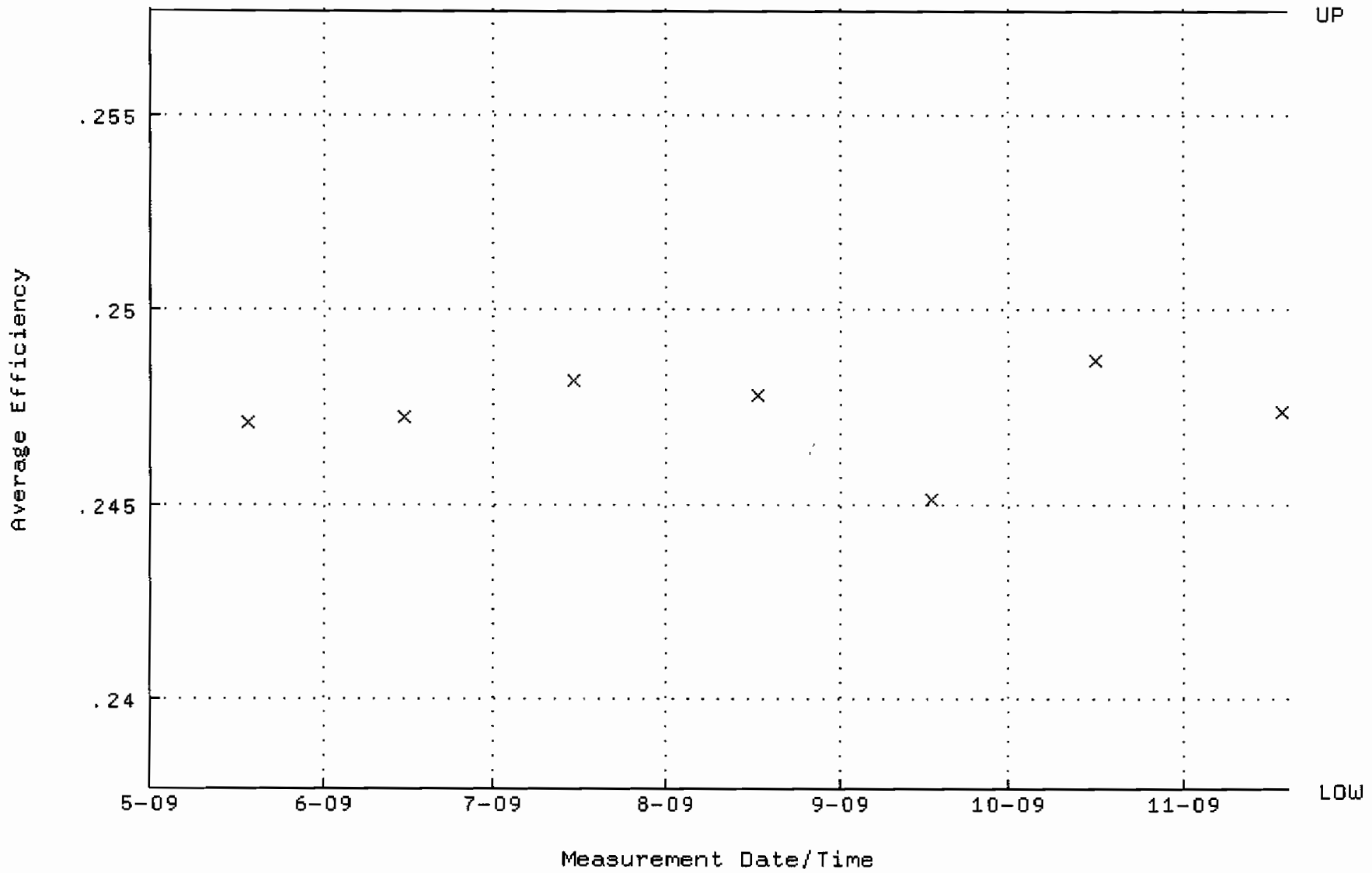

QA filename : DKA100:[ENV_ALPHA.QA.W]W121.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:23 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 89.4263 through 98.8395

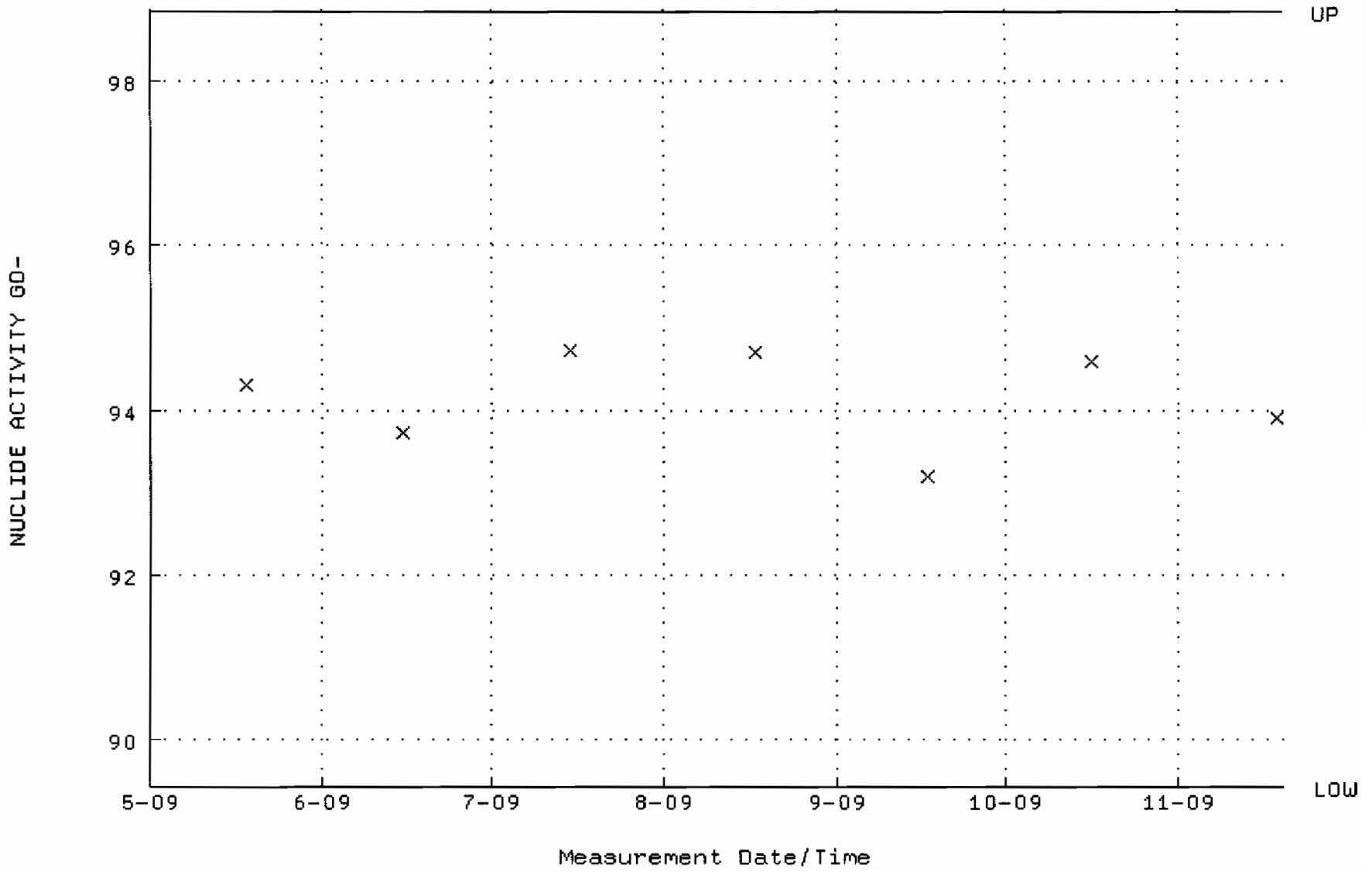

QA filename : DKA100:[ENV_ALPHA.QA.B]B121.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:31 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

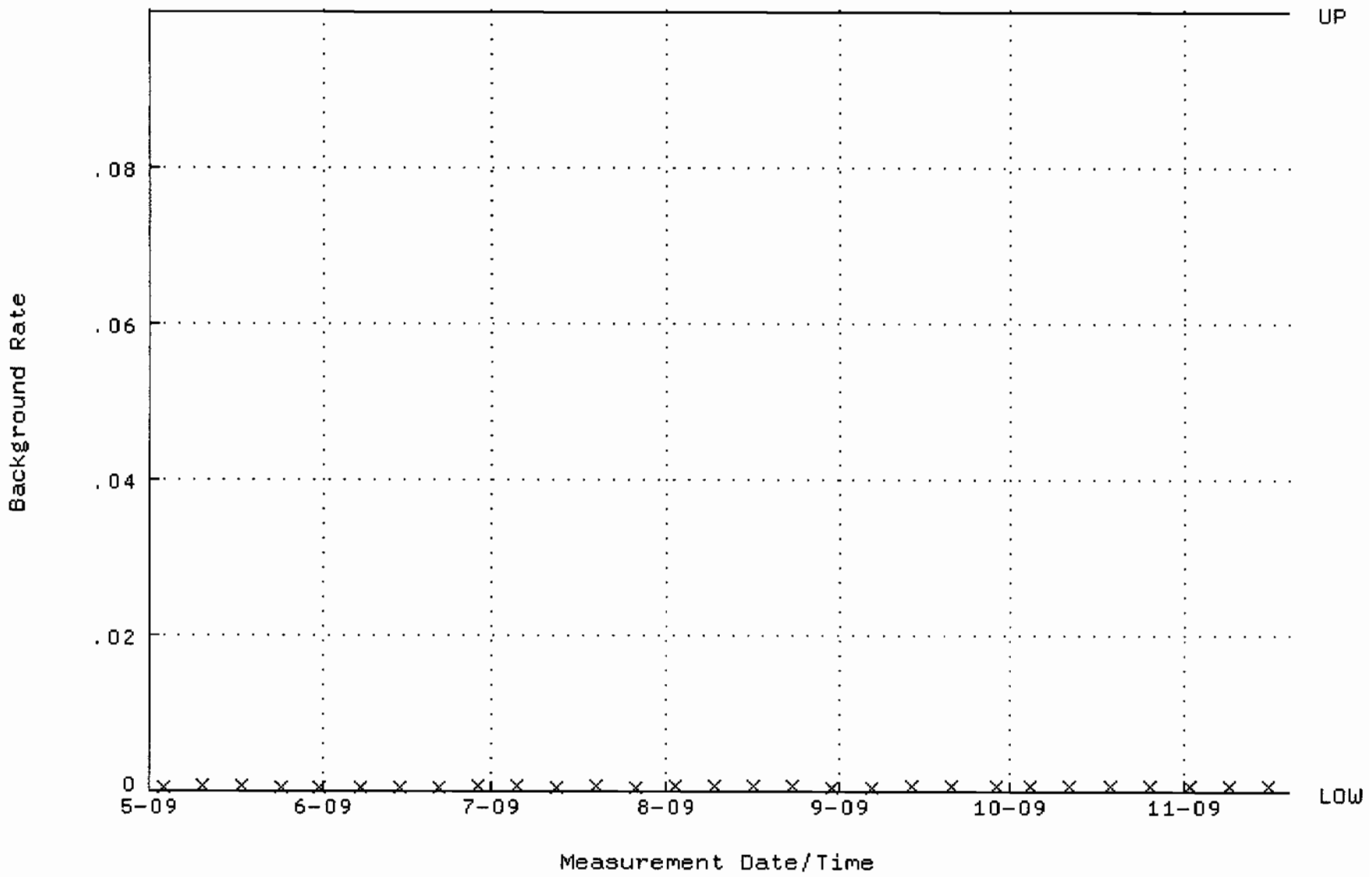

QA filename : DKA100:[ENV_ALPHA.QA.W]W122.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:28 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.242659 through 0.262659

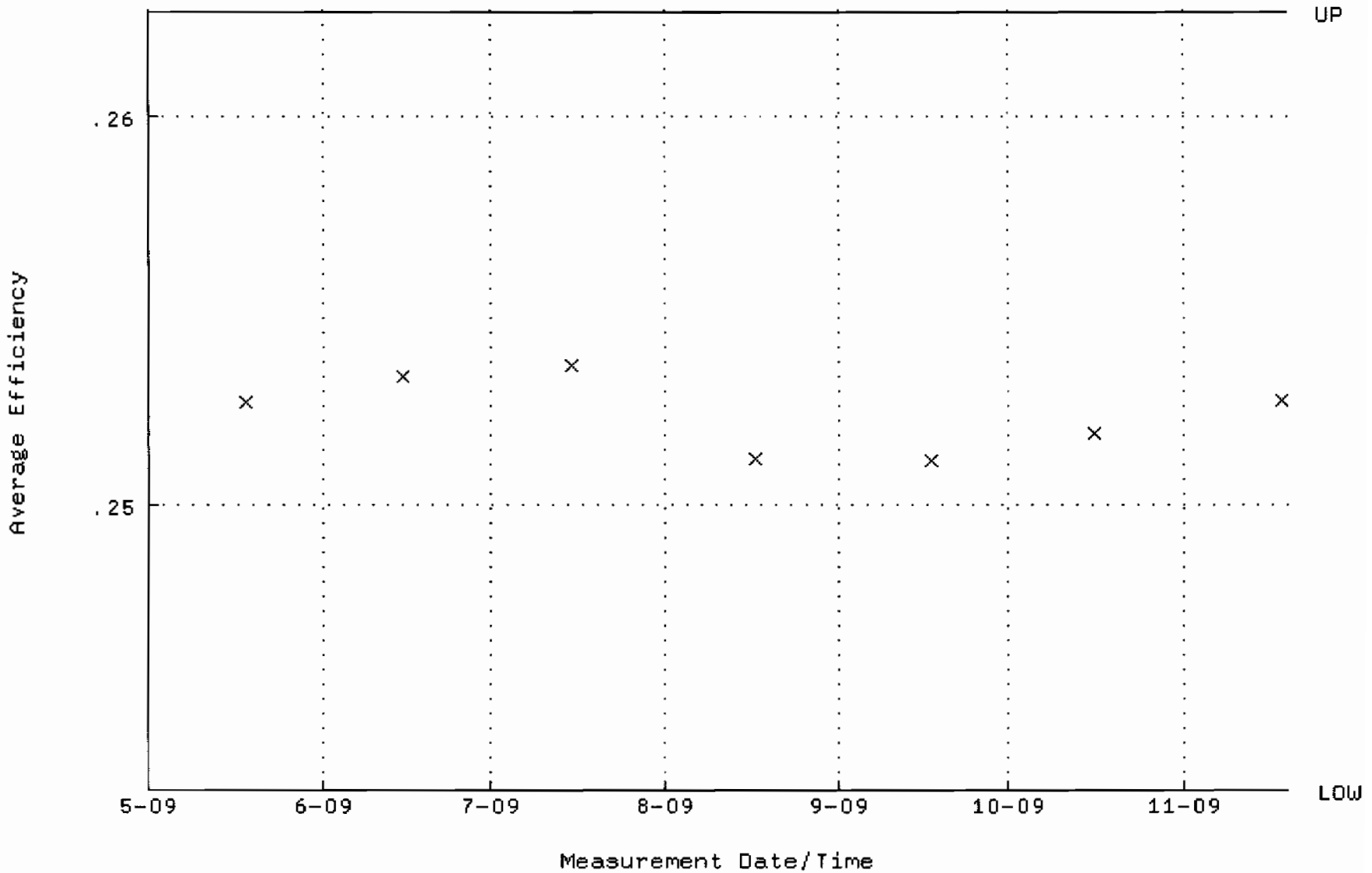

QA filename : DKA100:[ENV_ALPHA.QA.W]W122.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:28 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 90.5949 through 100.131

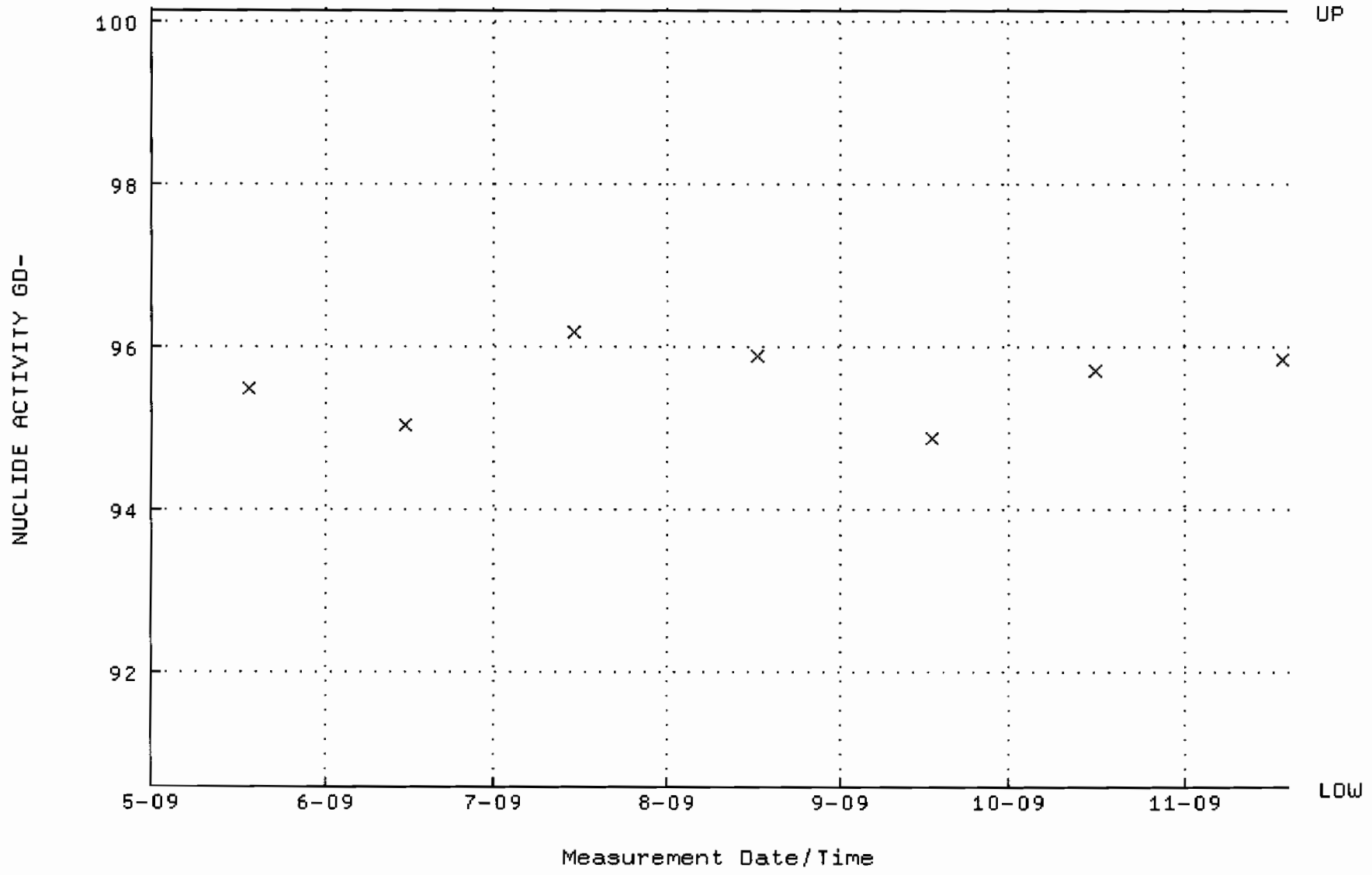

QA filename : DKA100:[ENV_ALPHA.QA.B]B122.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:35 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

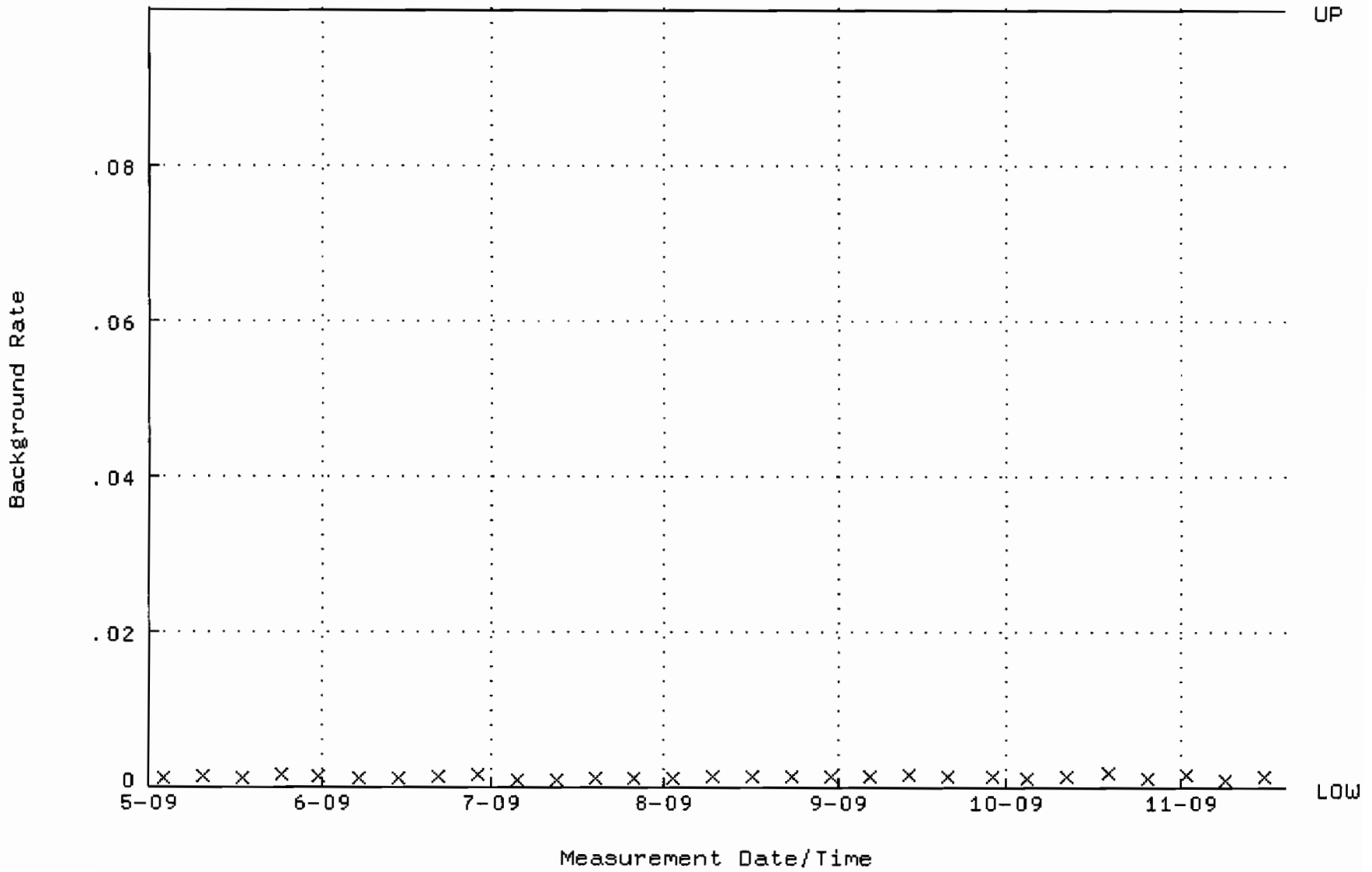

QA filename : DKA100:[ENV_ALPHA.QA.W]W123.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:32 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.249752 through 0.269752

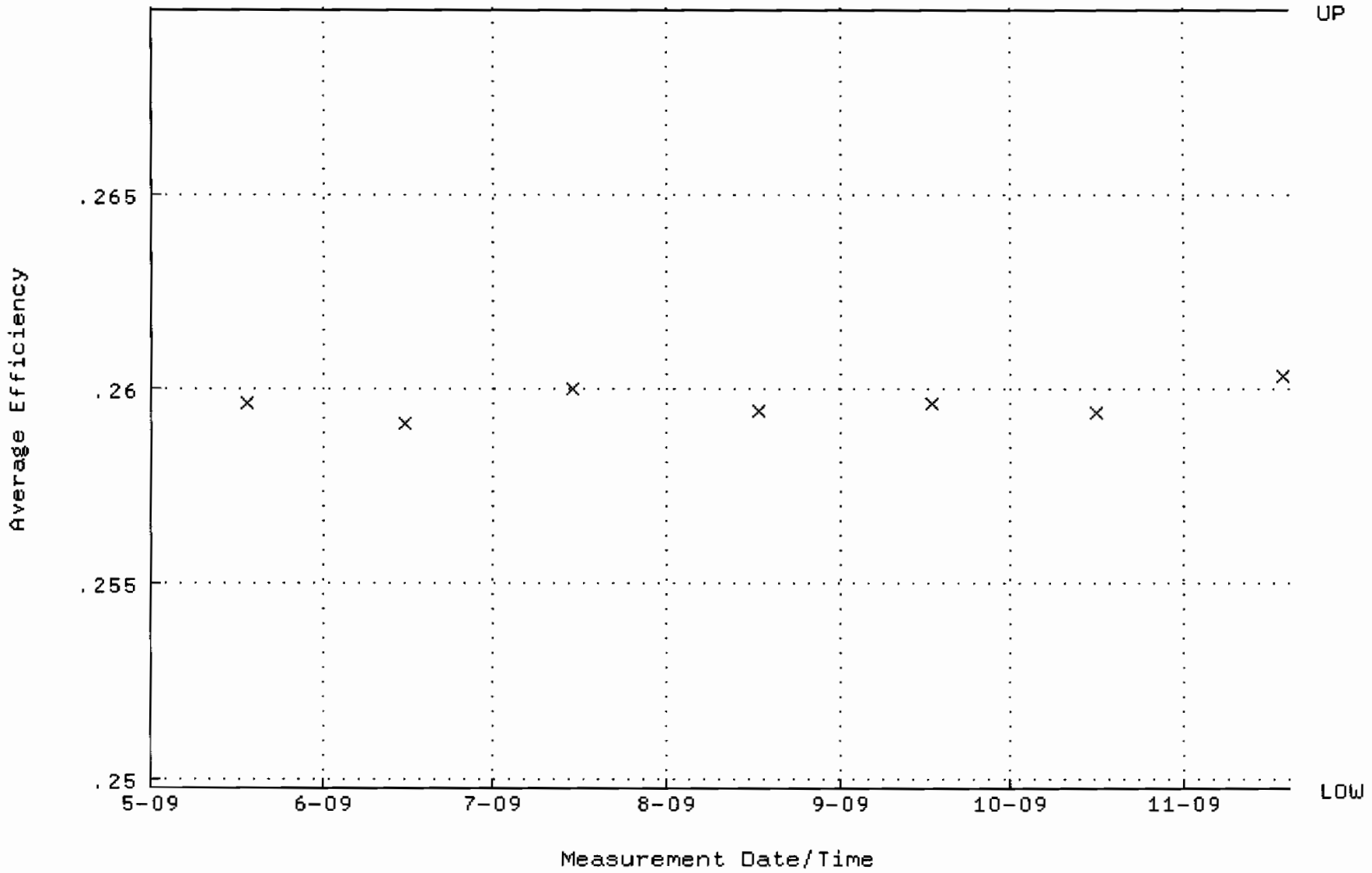

QA filename : DKA100:[ENV_ALPHA.QA.W]W123.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:32 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 86.0496 through 95.1074

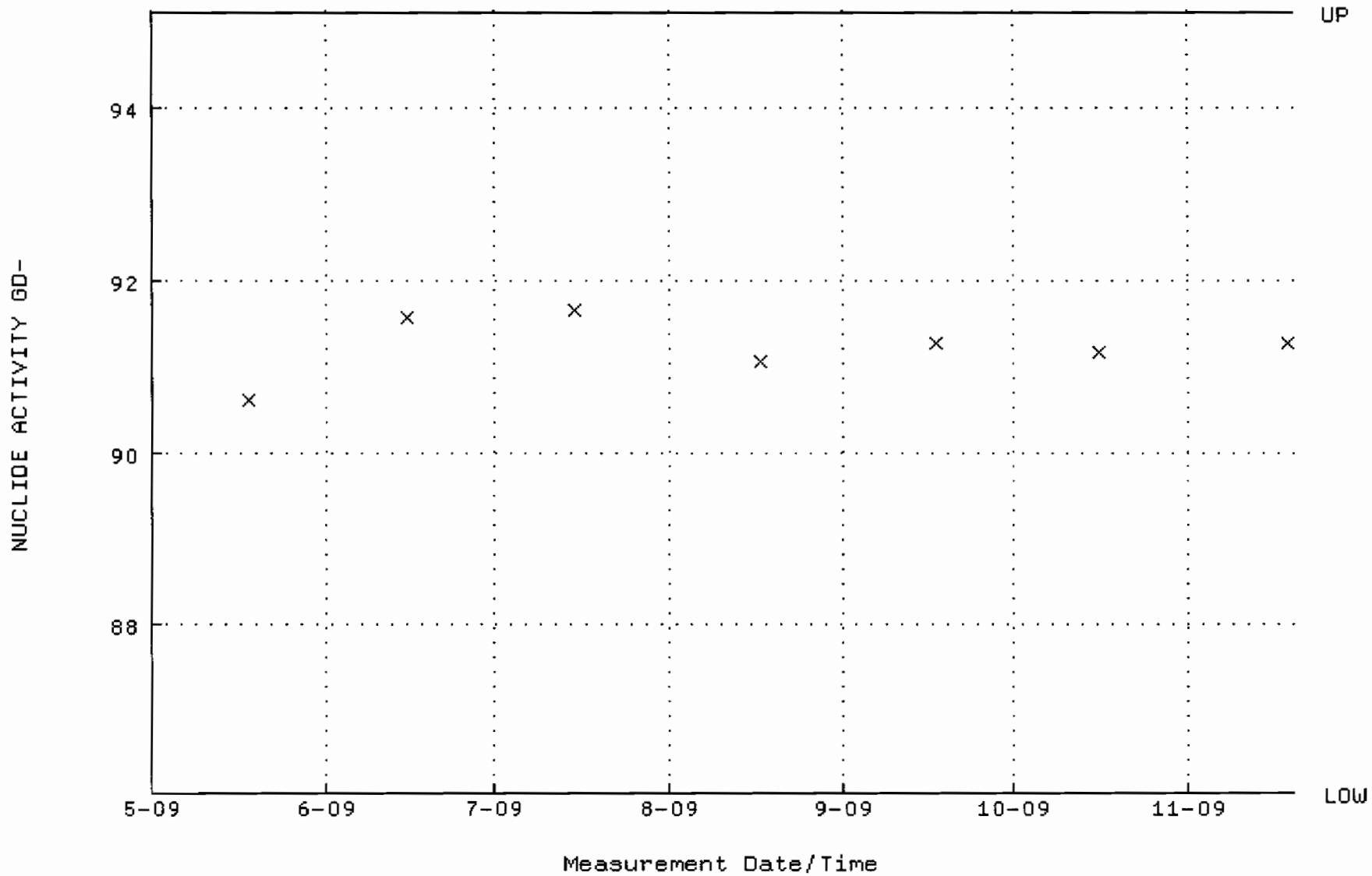

QA filename : DKA100:[ENV_ALPHA.QA.B]B123.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:39 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

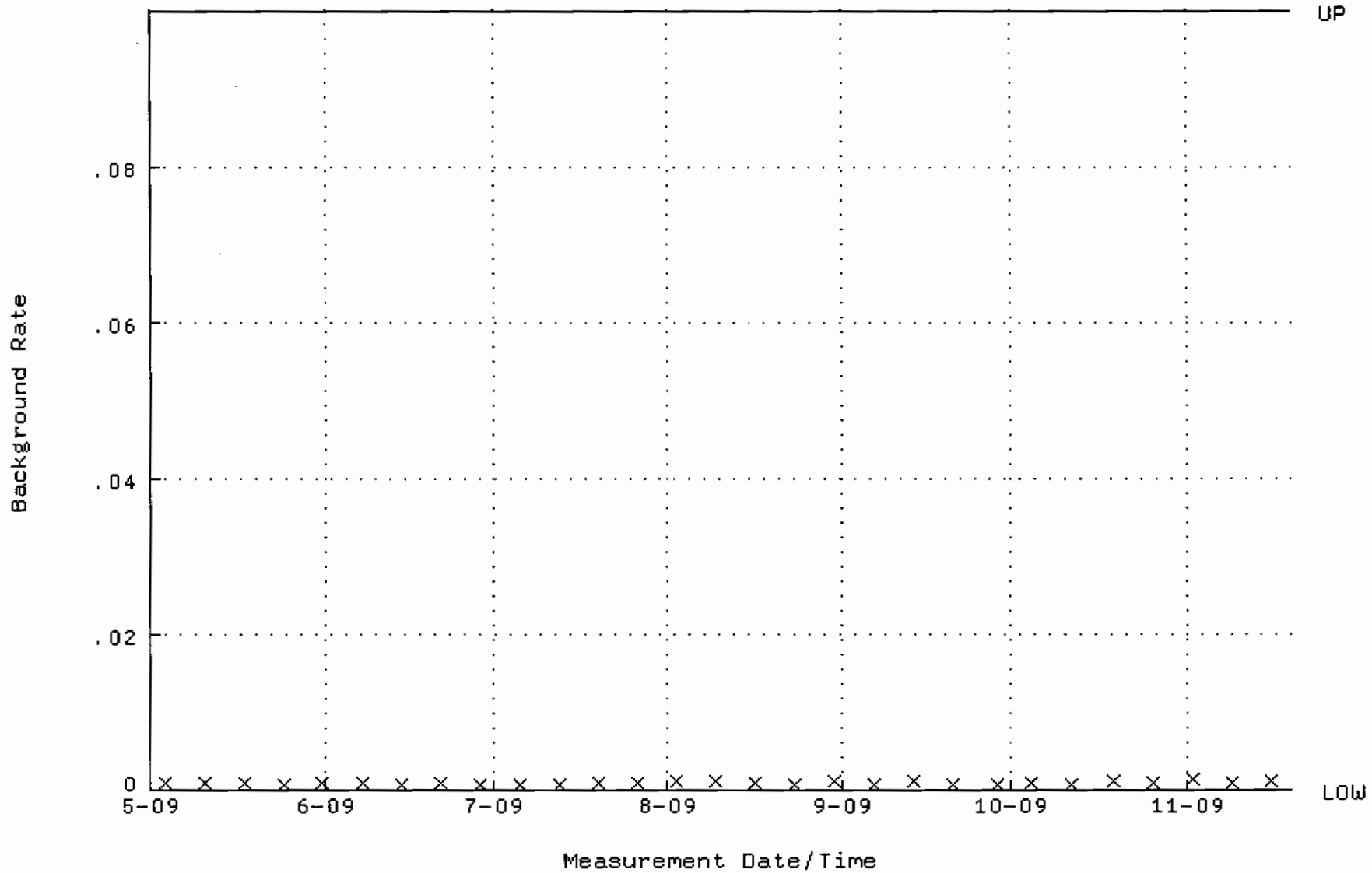

QA filename : DKA100:[ENV_ALPHA.QA.W]W124.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:37 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.251398 through 0.271398

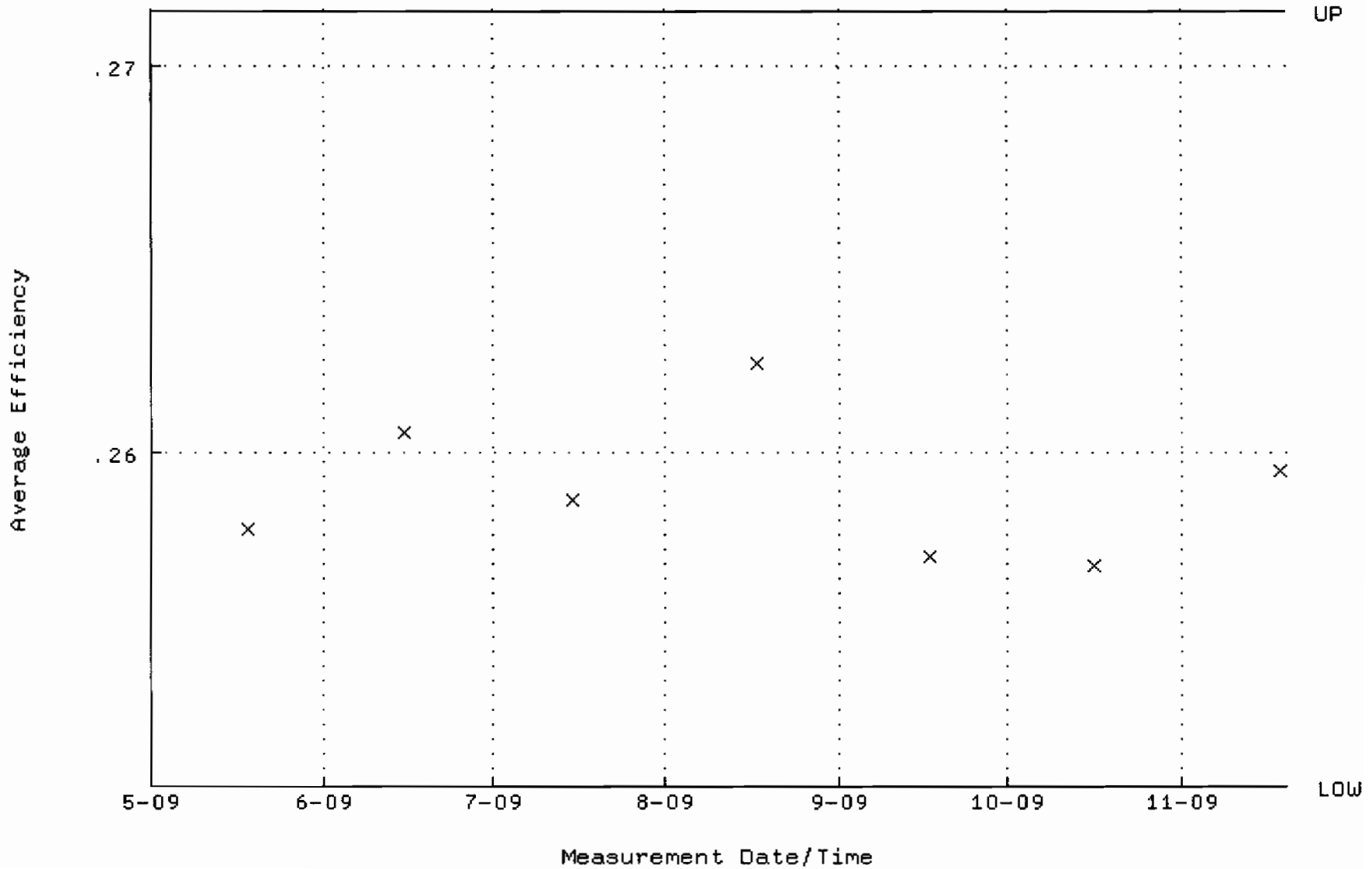

QA filename : DKA100:[ENV_ALPHA.QA.W]W124.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:37 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 86.8862 through 96.0322

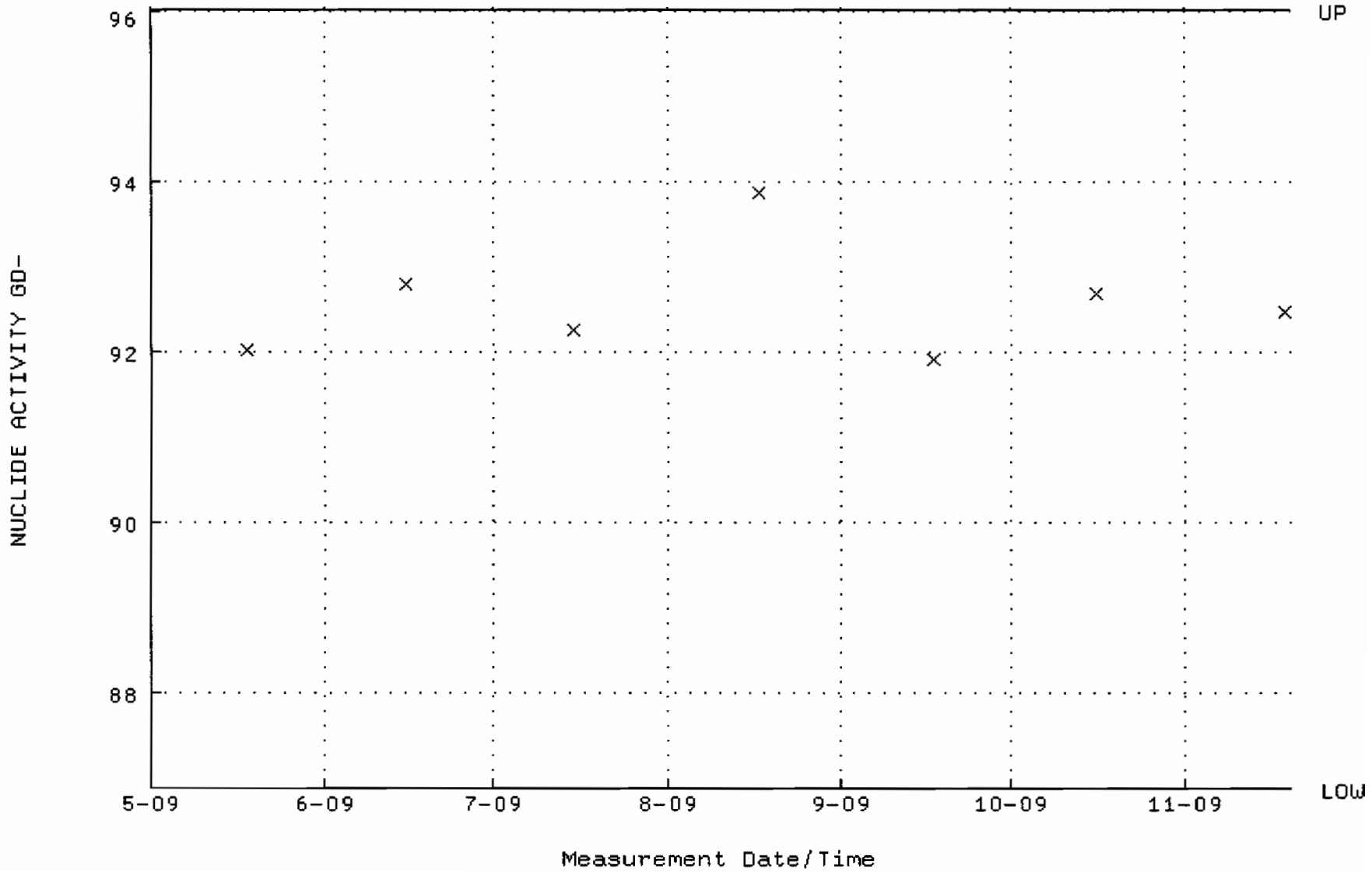

QA filename : DKA100:[ENV_ALPHA.QA.B]B124.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:44 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

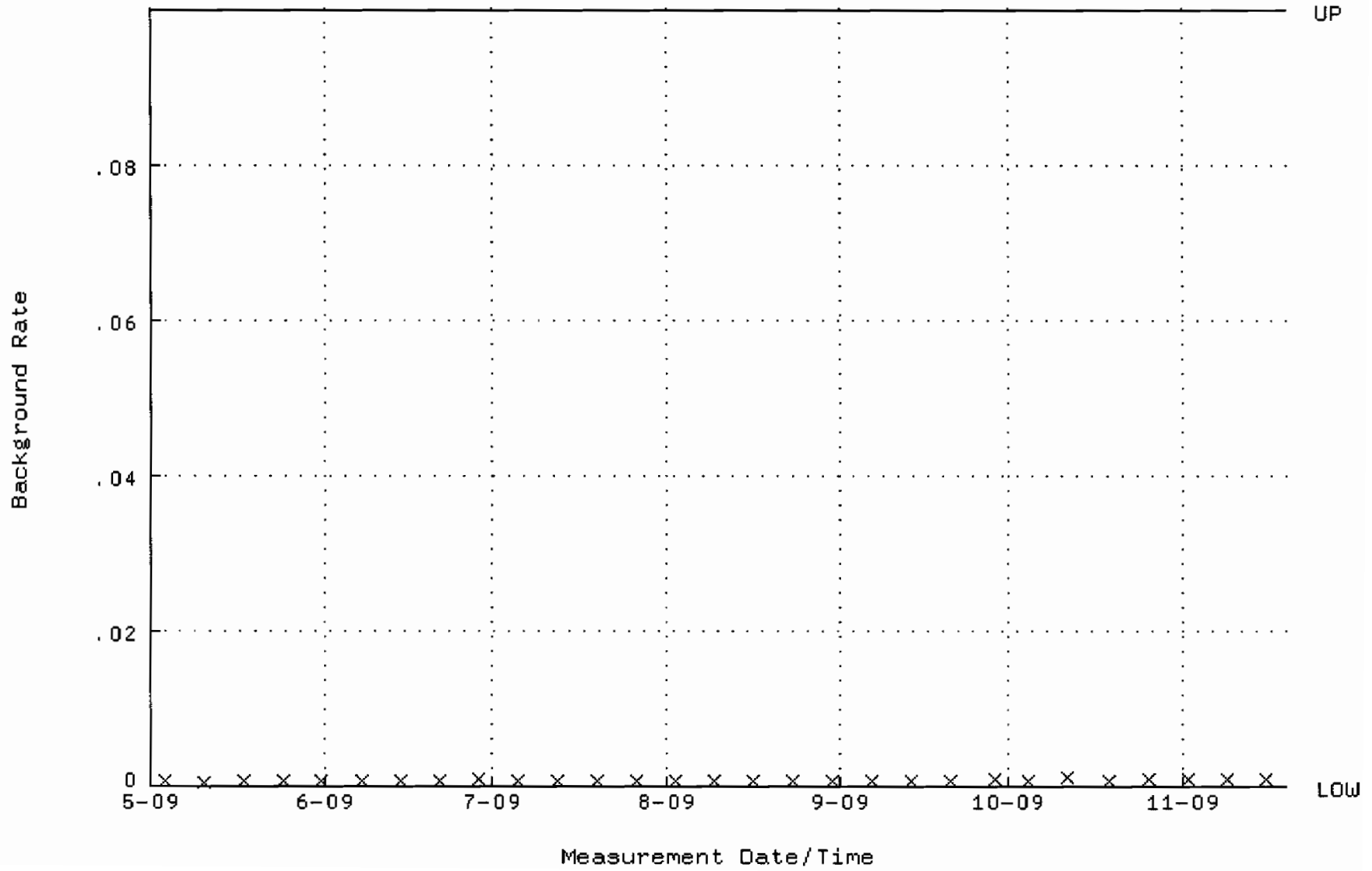

QA filename : DKA100:[ENV_ALPHA.QA.W]W125.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:42 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.247512 through 0.267512

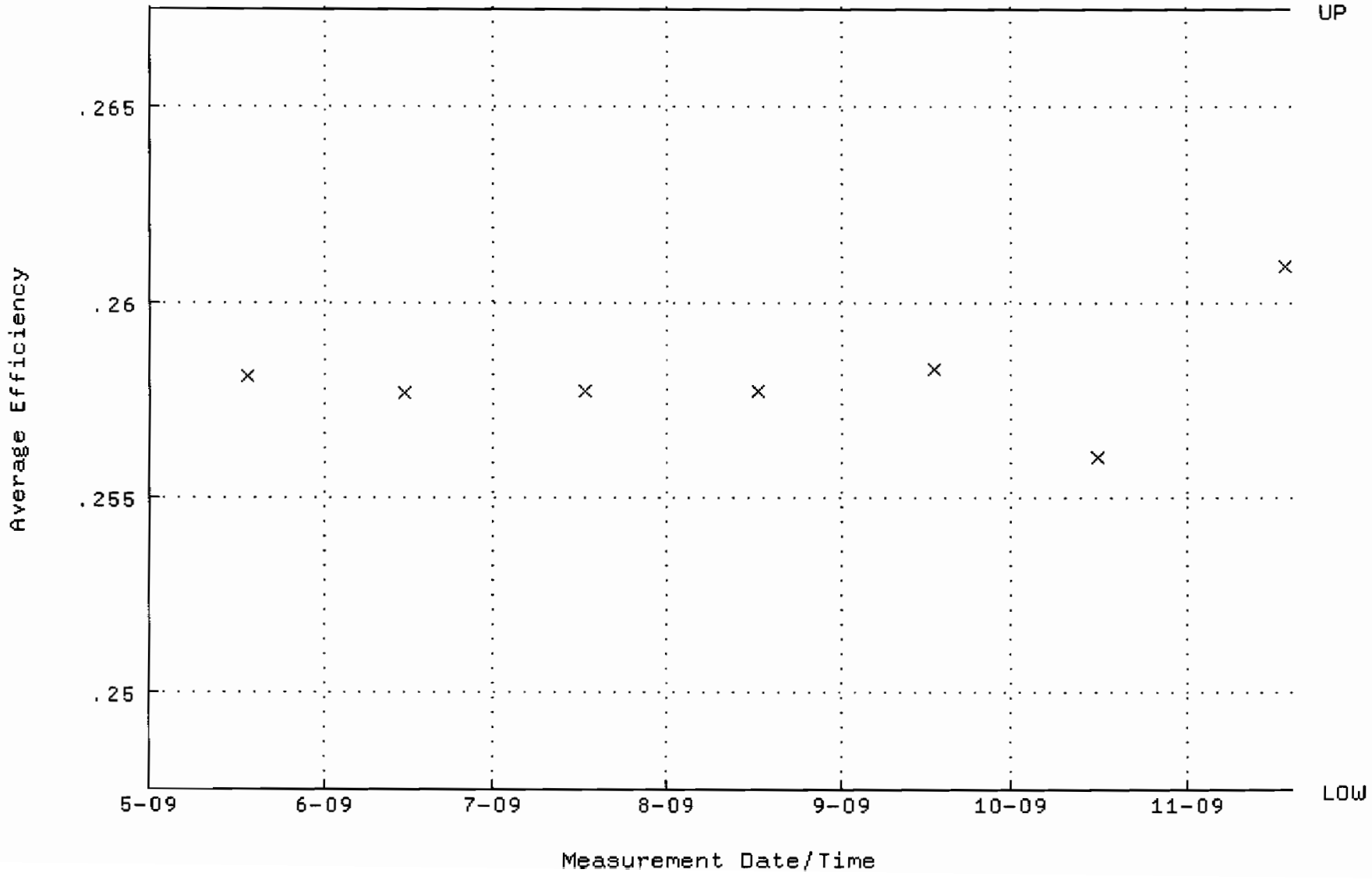

QA filename : DKA100:[ENV_ALPHA.QA.W]W125.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:42 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 87.6956 through 96.9268

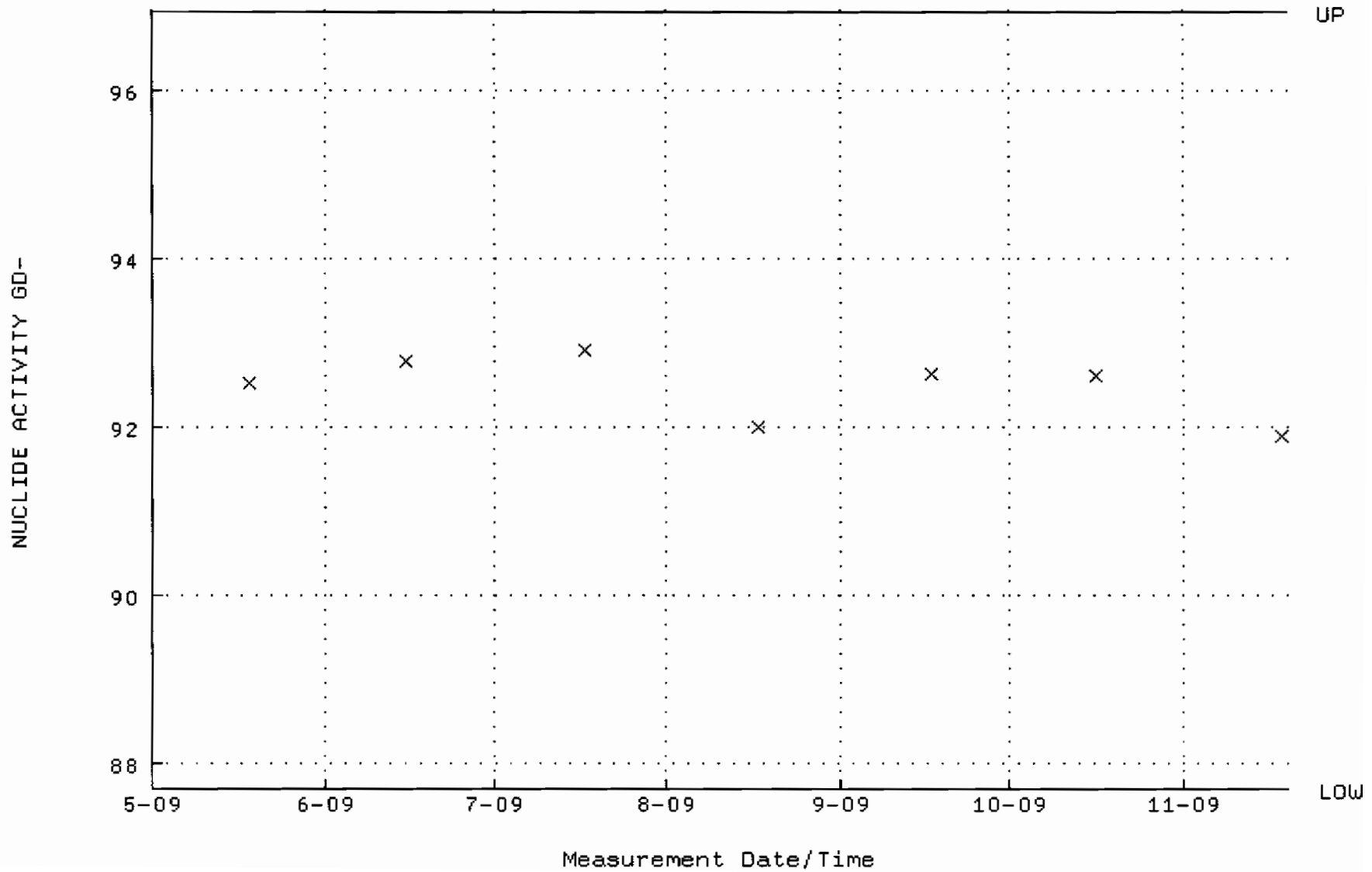

QA filename : DKA100:[ENV_ALPHA.QA.B]B125.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:48 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

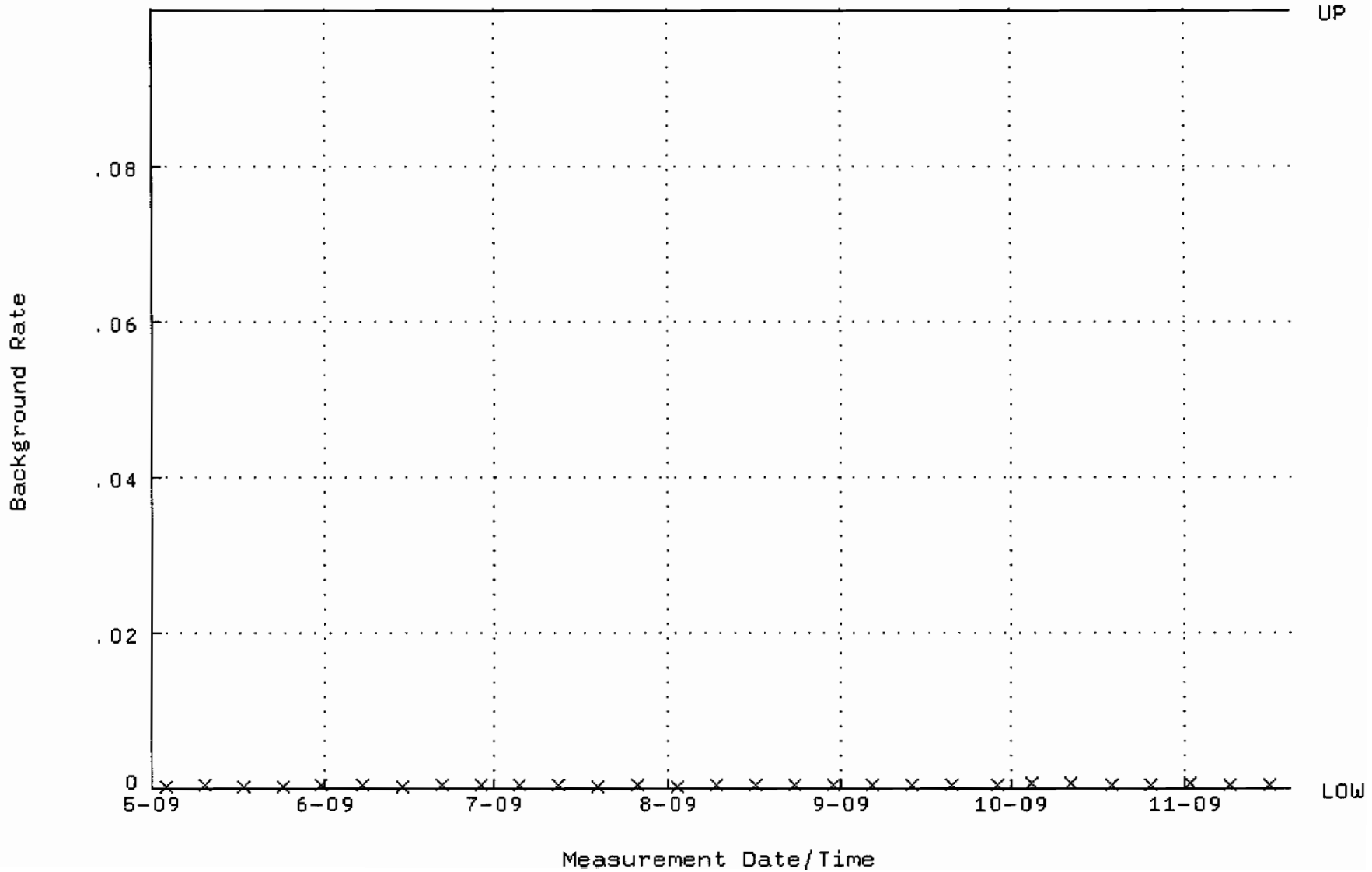

QA filename : DKA100:[ENV_ALPHA.QA.W]W126.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:48 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.243156 through 0.263156

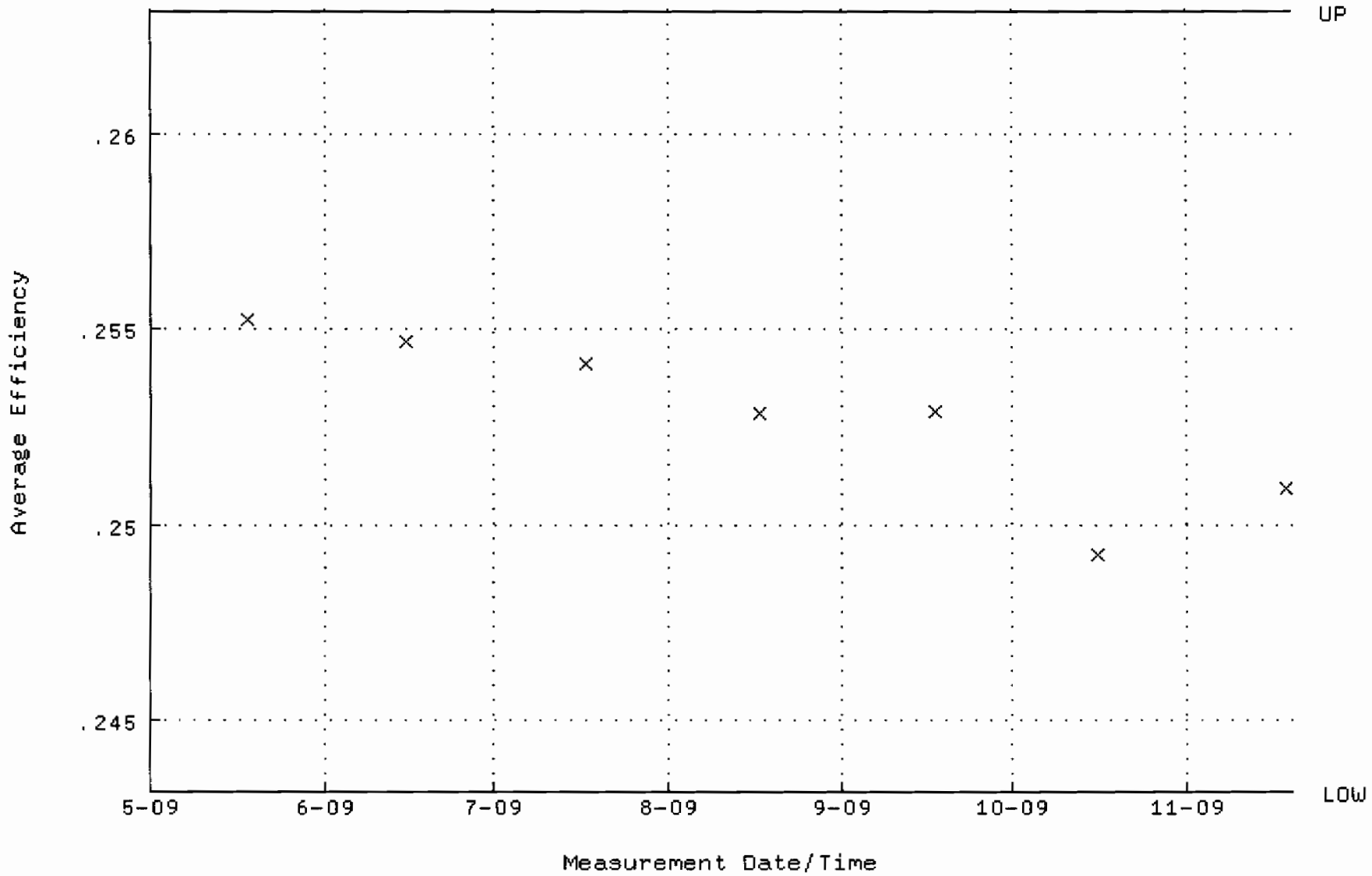

QA filename : DKA100:[ENV_ALPHA.QA.W]W126.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:48 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 85.7449 through 94.7707

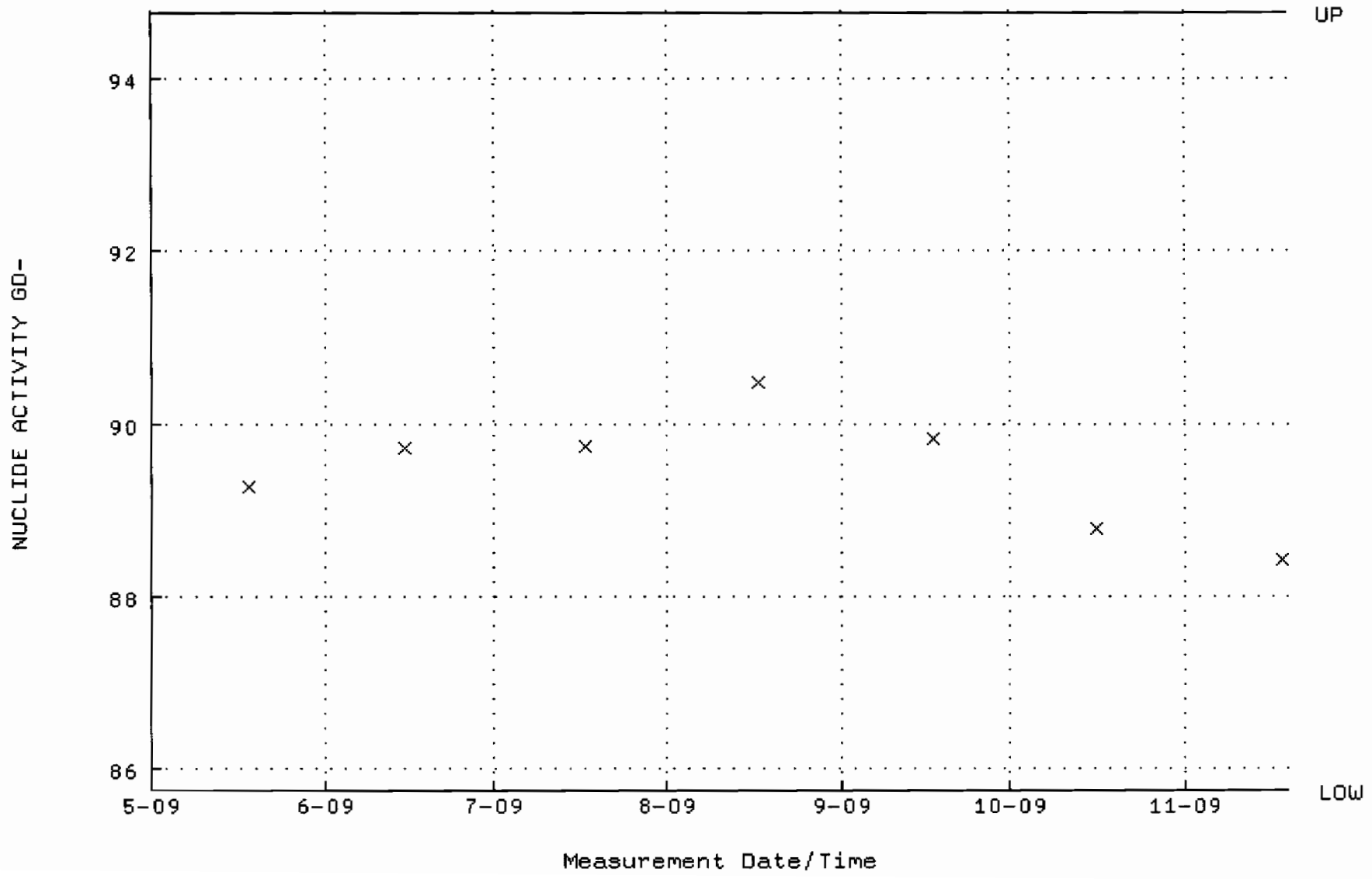

QA filename : DKA100:[ENV_ALPHA.QA.B]B126.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:52 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

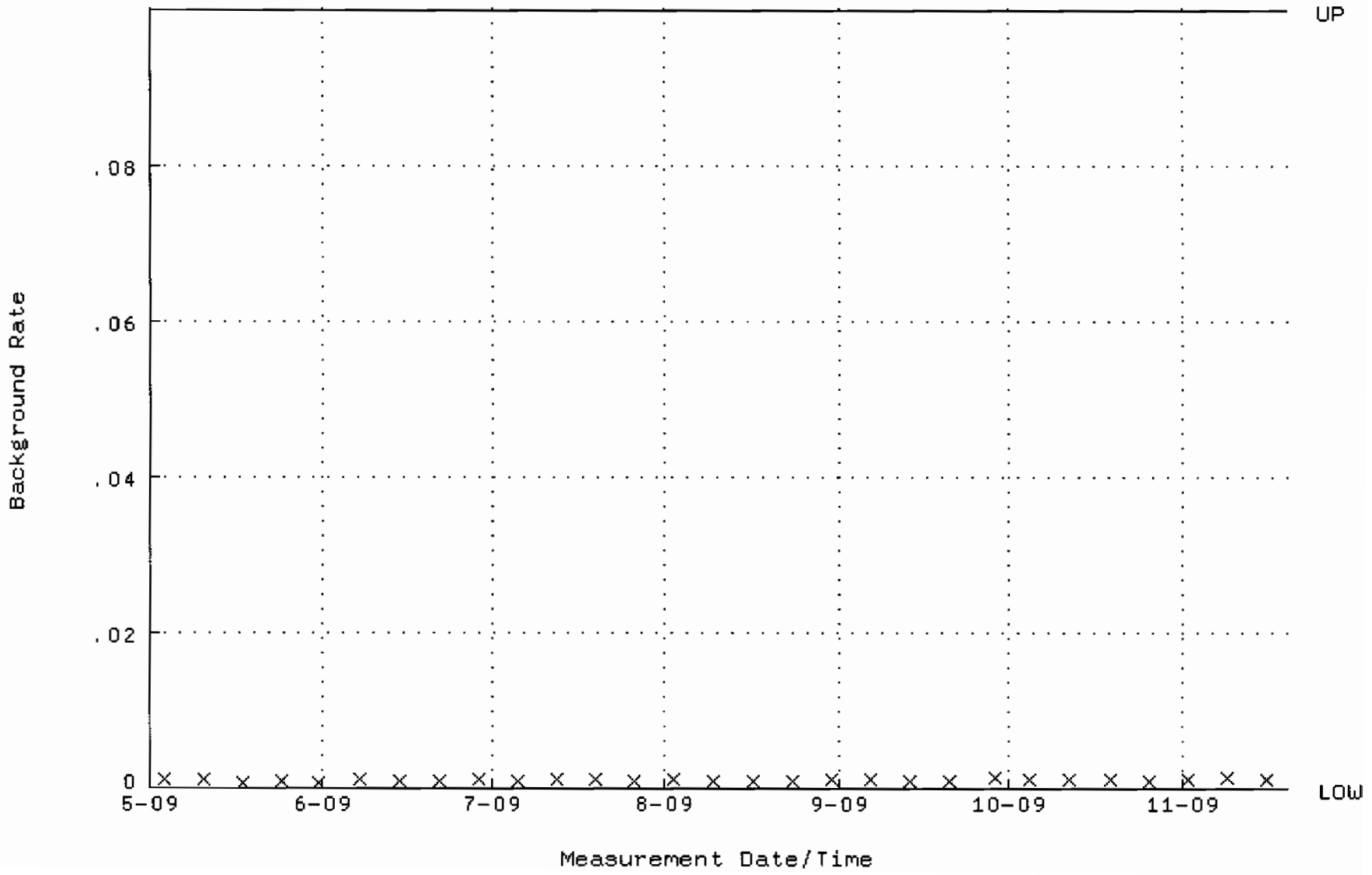

QA filename : DKA100:[ENV_ALPHA.QA.W]W127.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:45:52 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.237773 through 0.257773

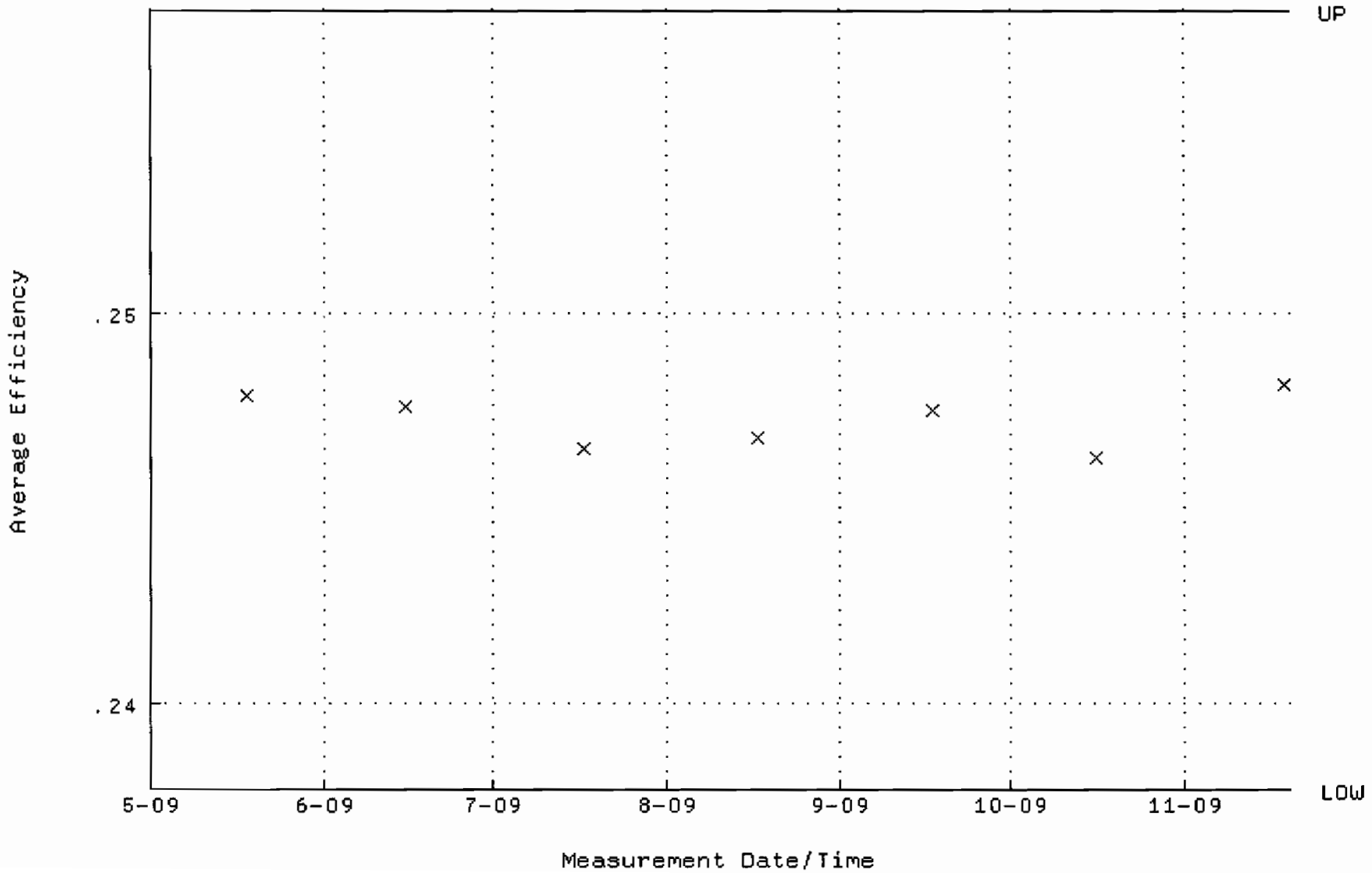

QA filename : DKA100:[ENV_ALPHA.QA.W]W127.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:45:52 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 90.4503 through 99.9713

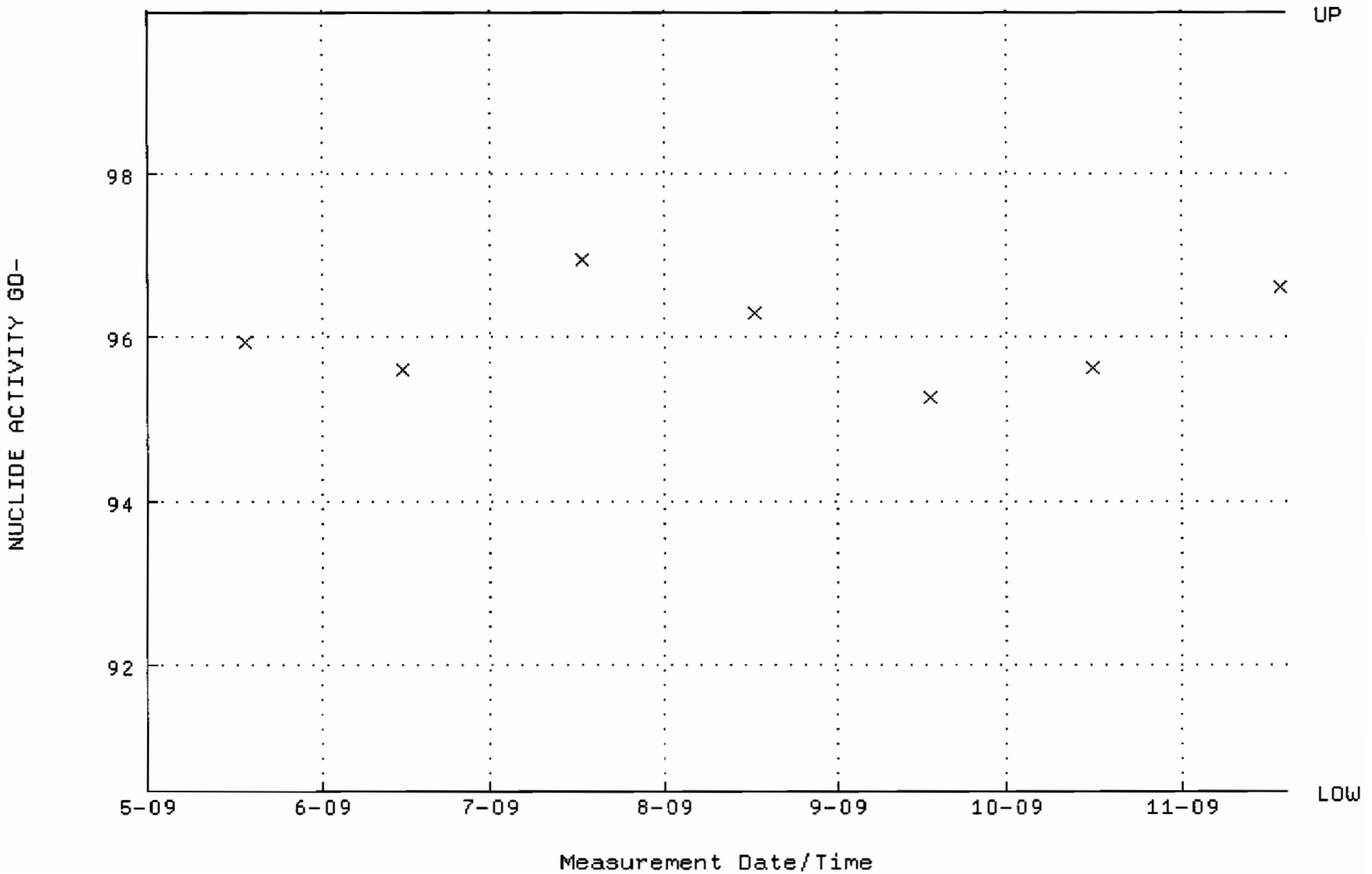

QA filename : DKA100:[ENV_ALPHA.QA.B]B127.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:50:57 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

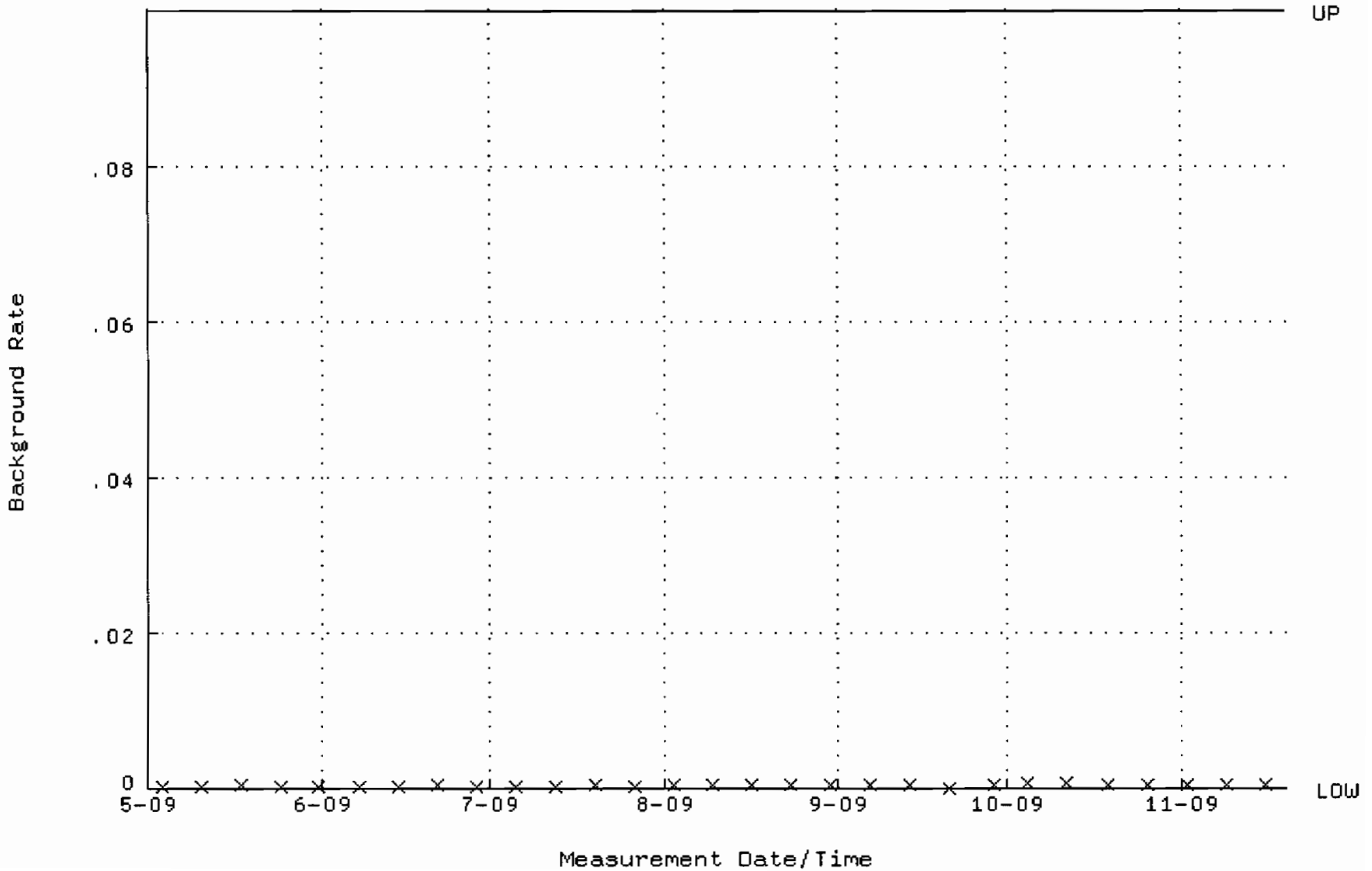

QA filename : DKA100:[ENV_ALPHA.QA.W]W129.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:46:03 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.256741 through 0.276741

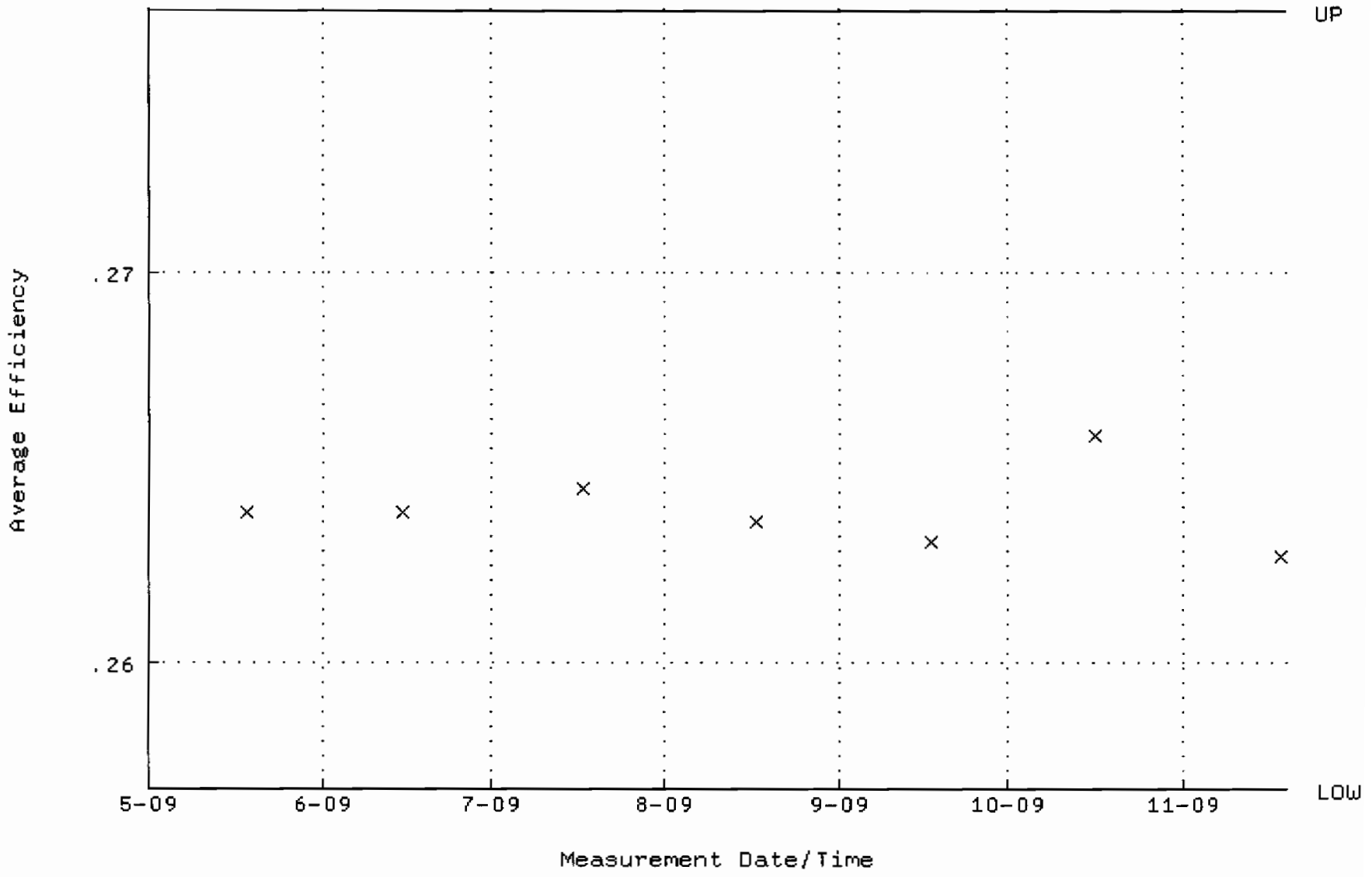

QA filename : DKA100:[ENV_ALPHA.QA.W]W129.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:46:03 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 86.3646 through 95.4556

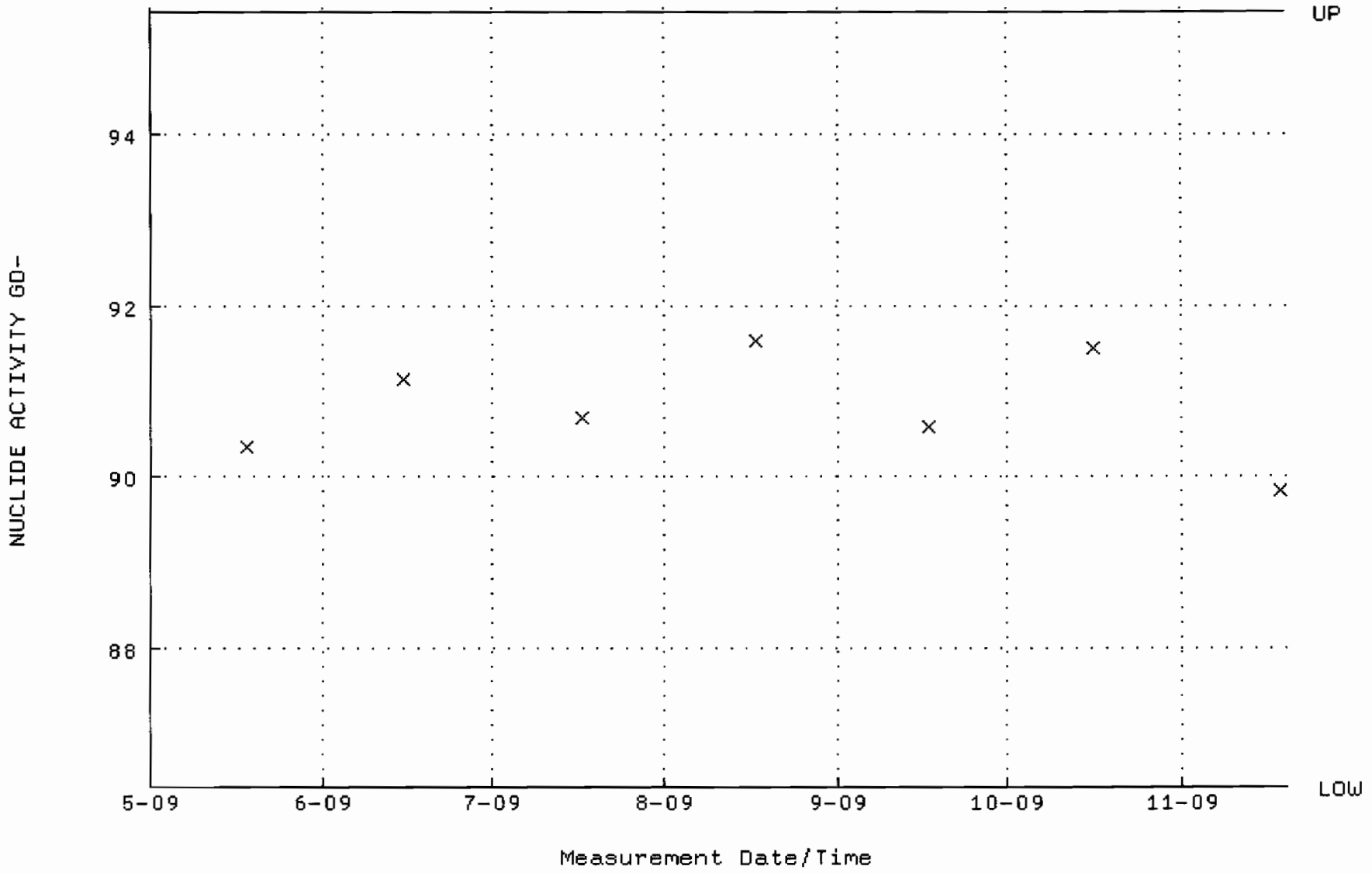

QA filename : DKA100:[ENV_ALPHA.QA.B]B129.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:51:05 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

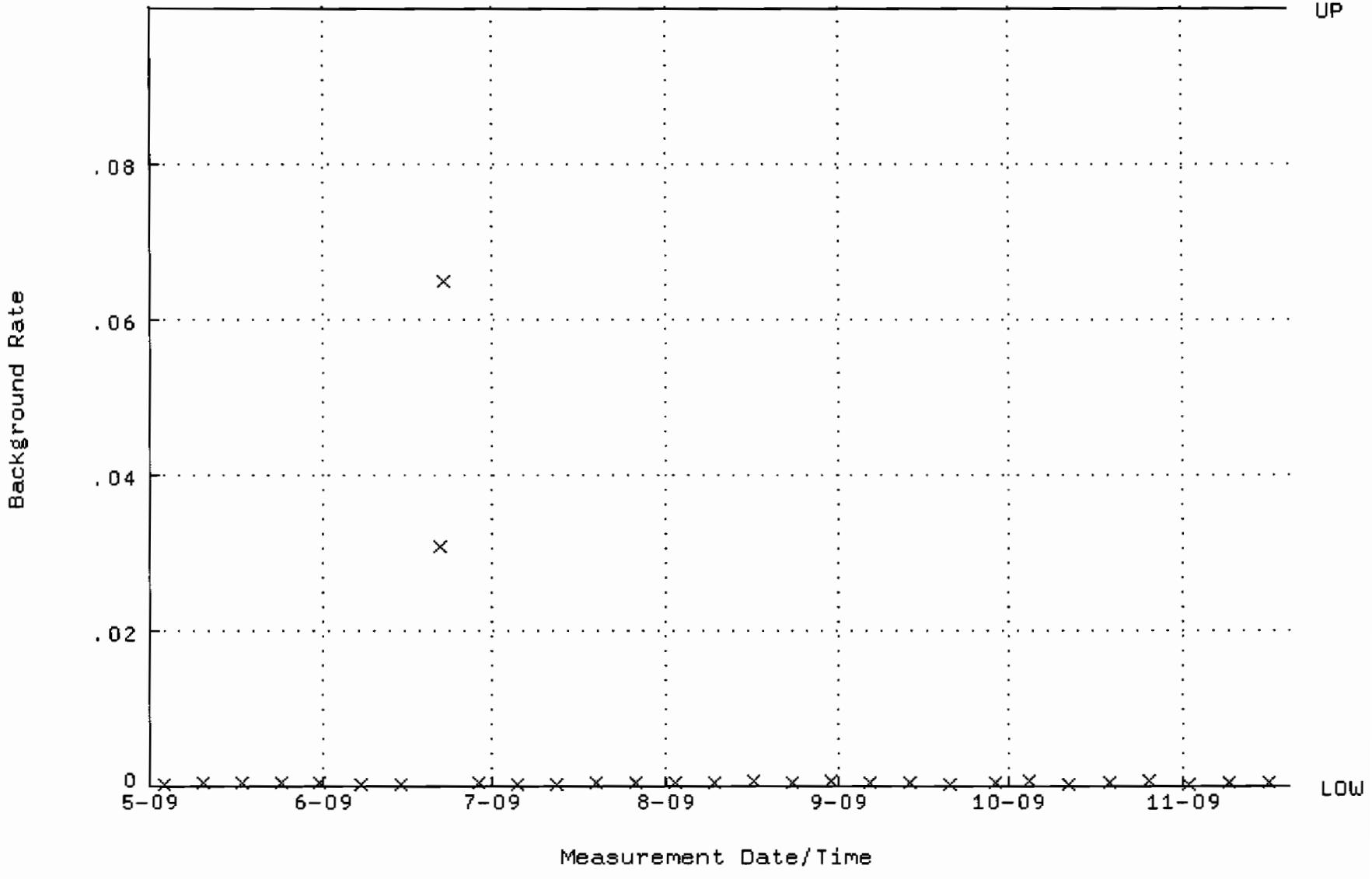

QA filename : DKA100:[ENV_ALPHA.QA.W]W130.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:46:08 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.239131 through 0.259131

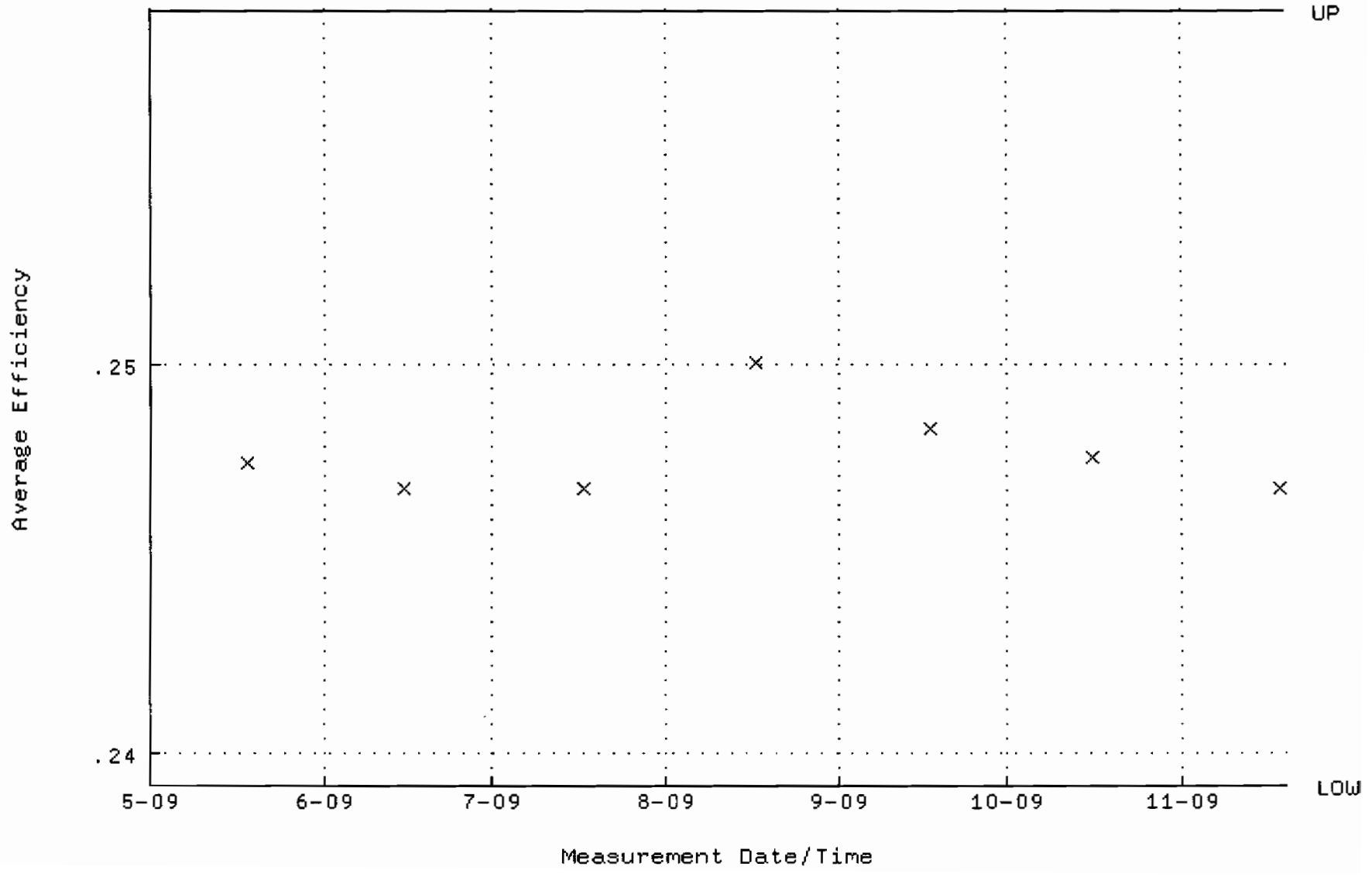

QA filename : DKA100:[ENV_ALPHA.QA.W]W130.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:46:08 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 88.1614 through 97.4416

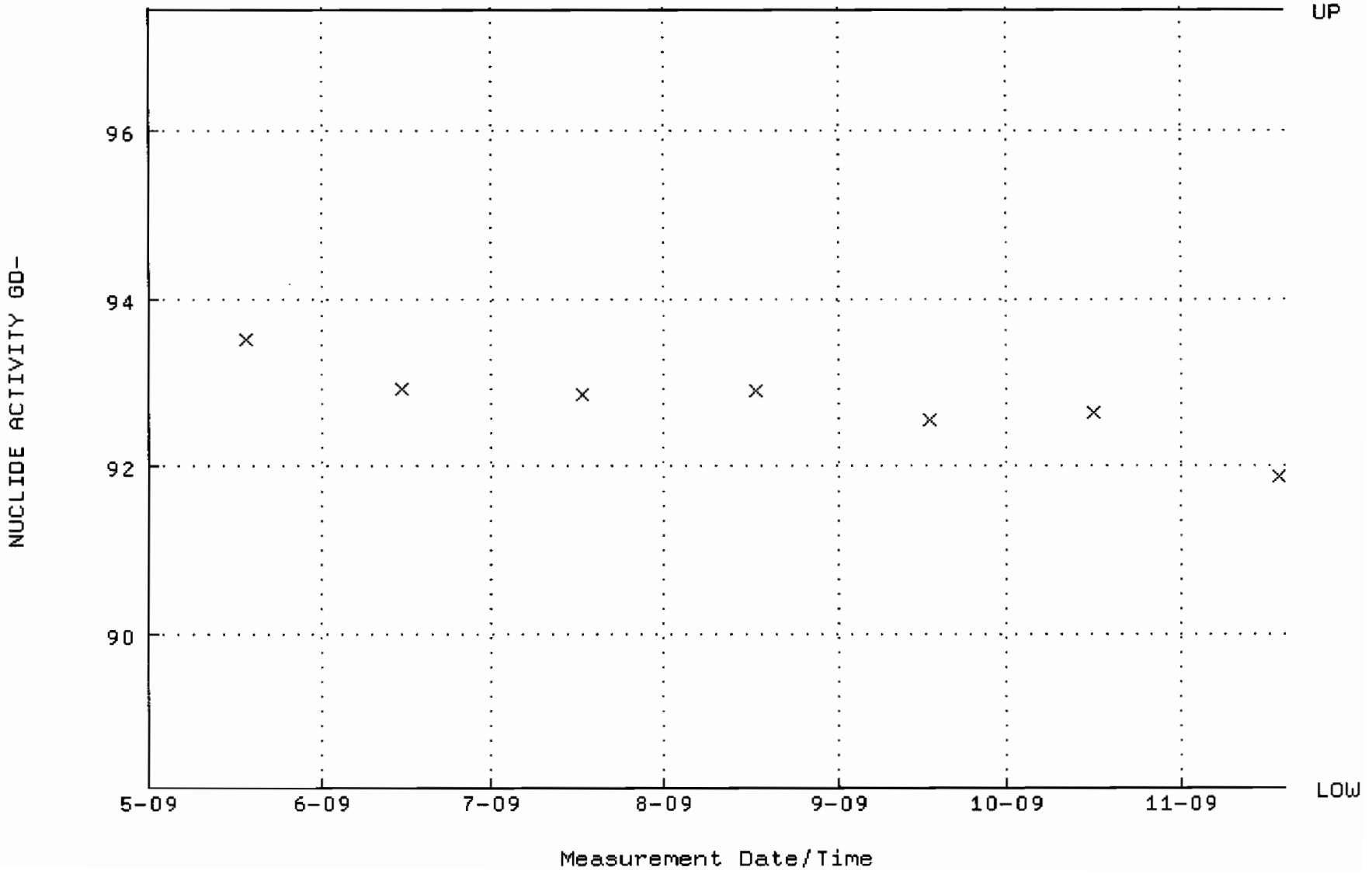

QA filename : DKA100:[ENV_ALPHA.QA.B]B130.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:51:10 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

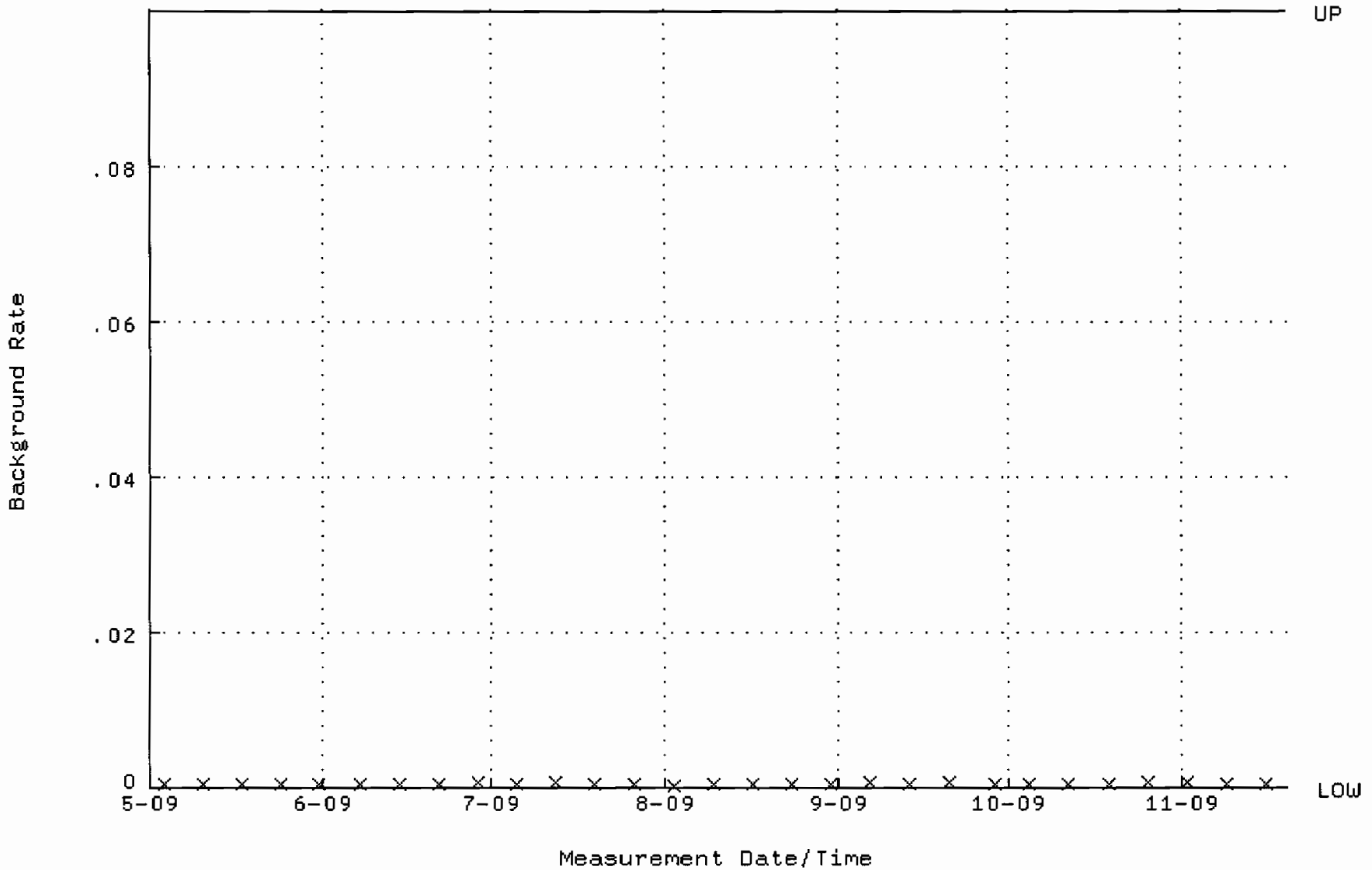

QA filename : DKA100:[ENV_ALPHA.QA.W]W132.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:46:18 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.240573 through 0.260573

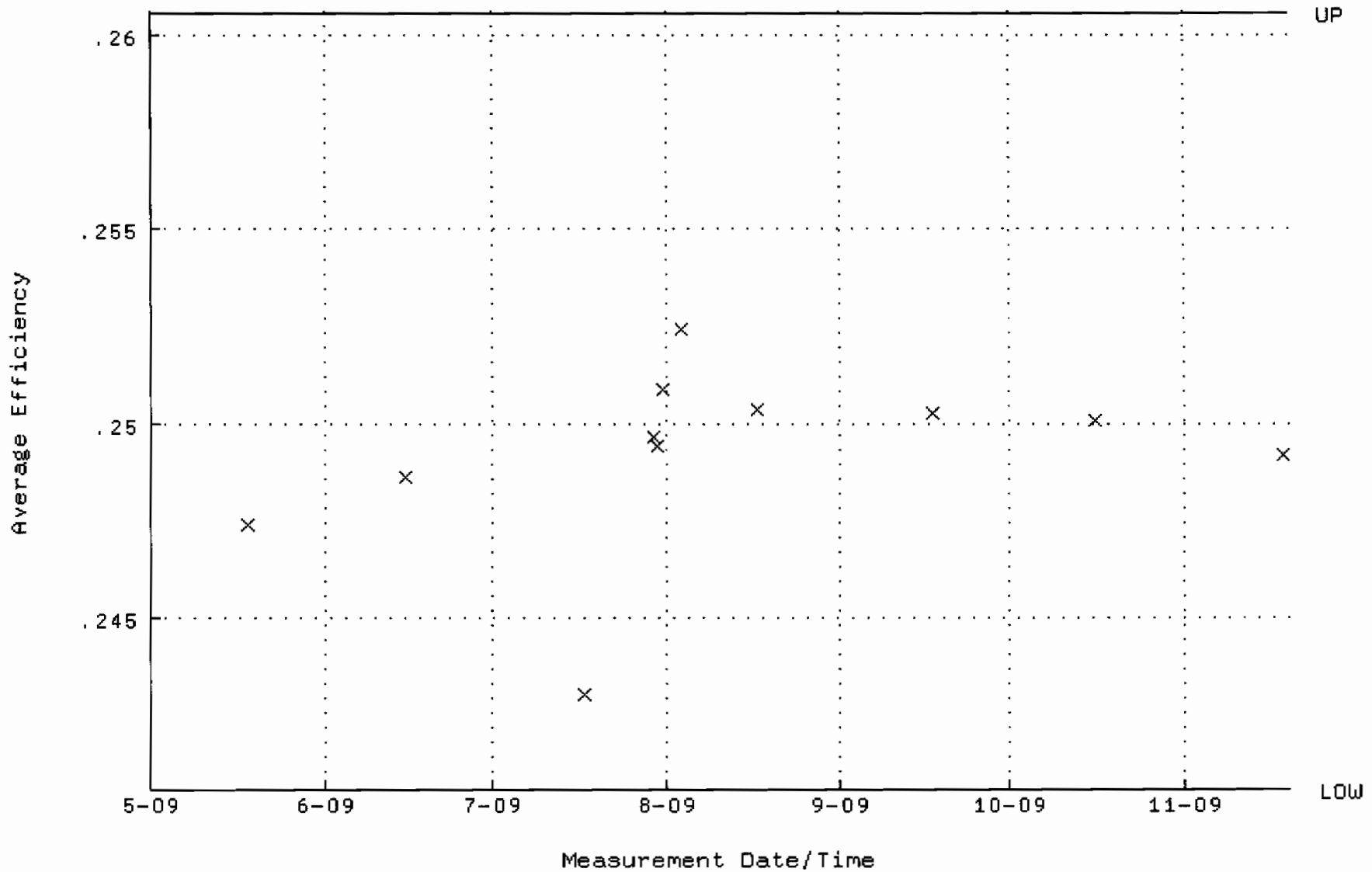

QA filename : DKA100:[ENV_ALPHA.QA.W]W132.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:46:18 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 87.9674 through 97.2272

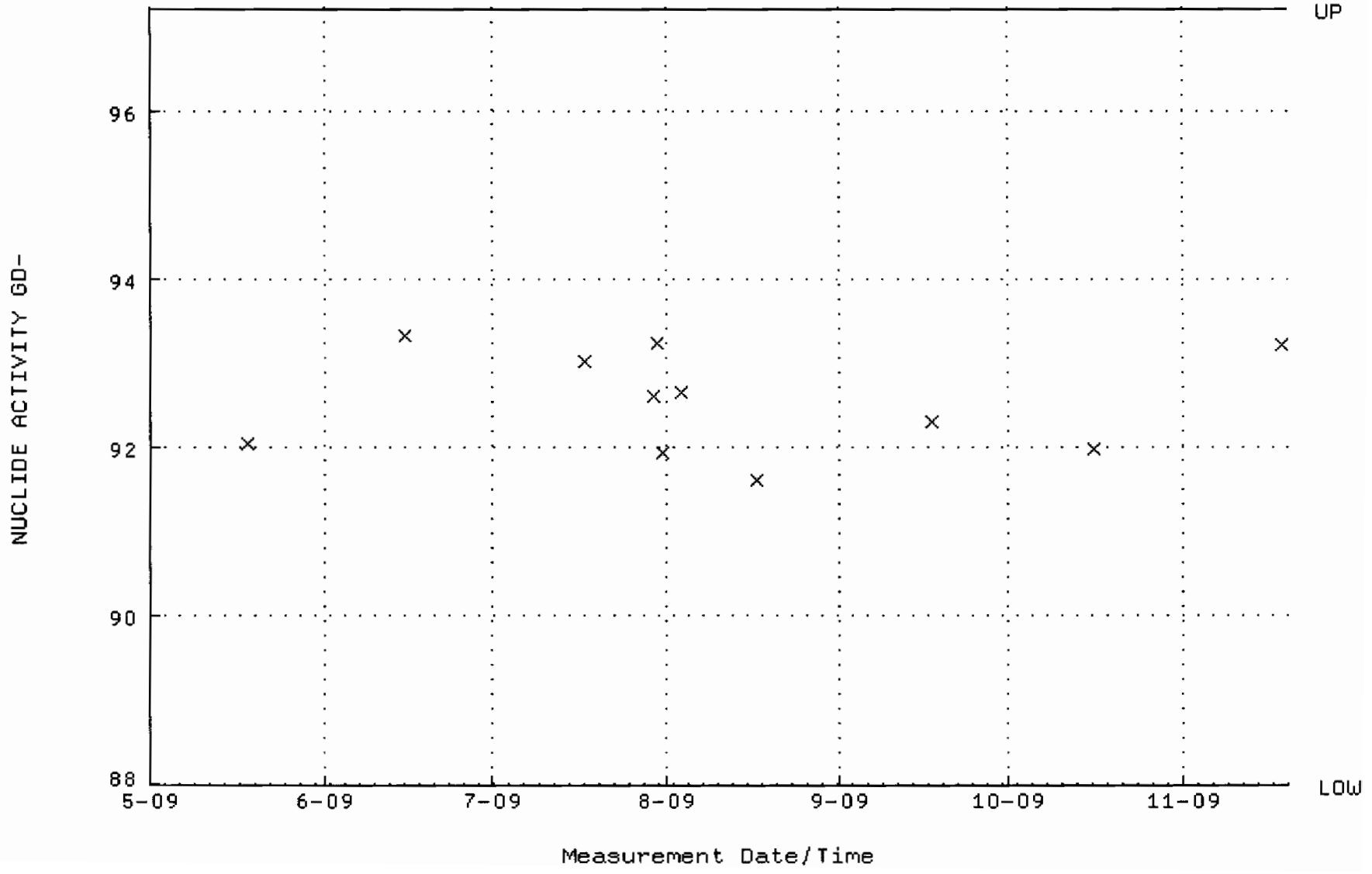

QA filename : DKA100:[ENV_ALPHA.QA.B]B132.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:51:19 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

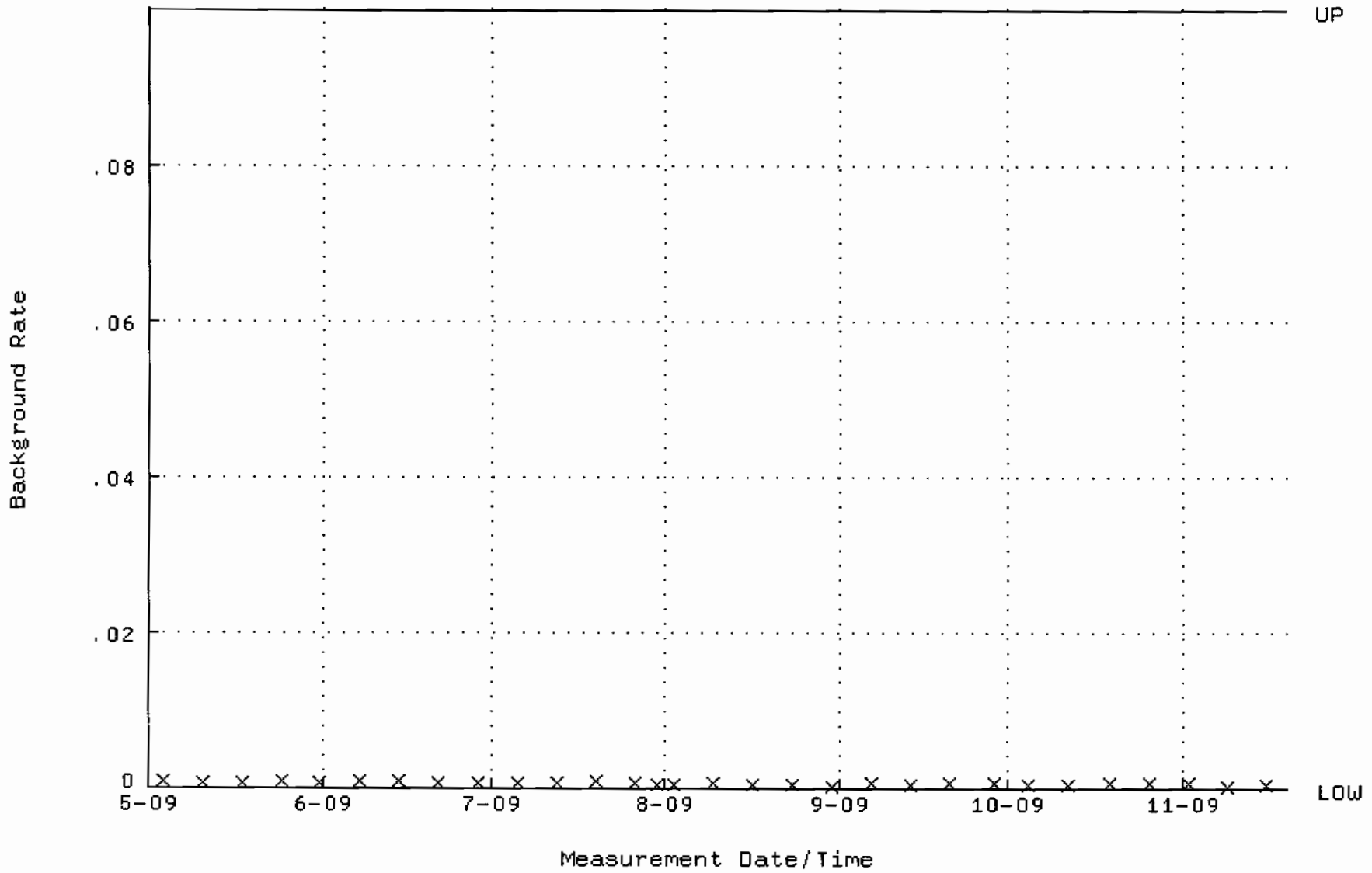

QA filename : DKA100:[ENV_ALPHA.QA.W]W227.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:08 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.375328 through 0.395328

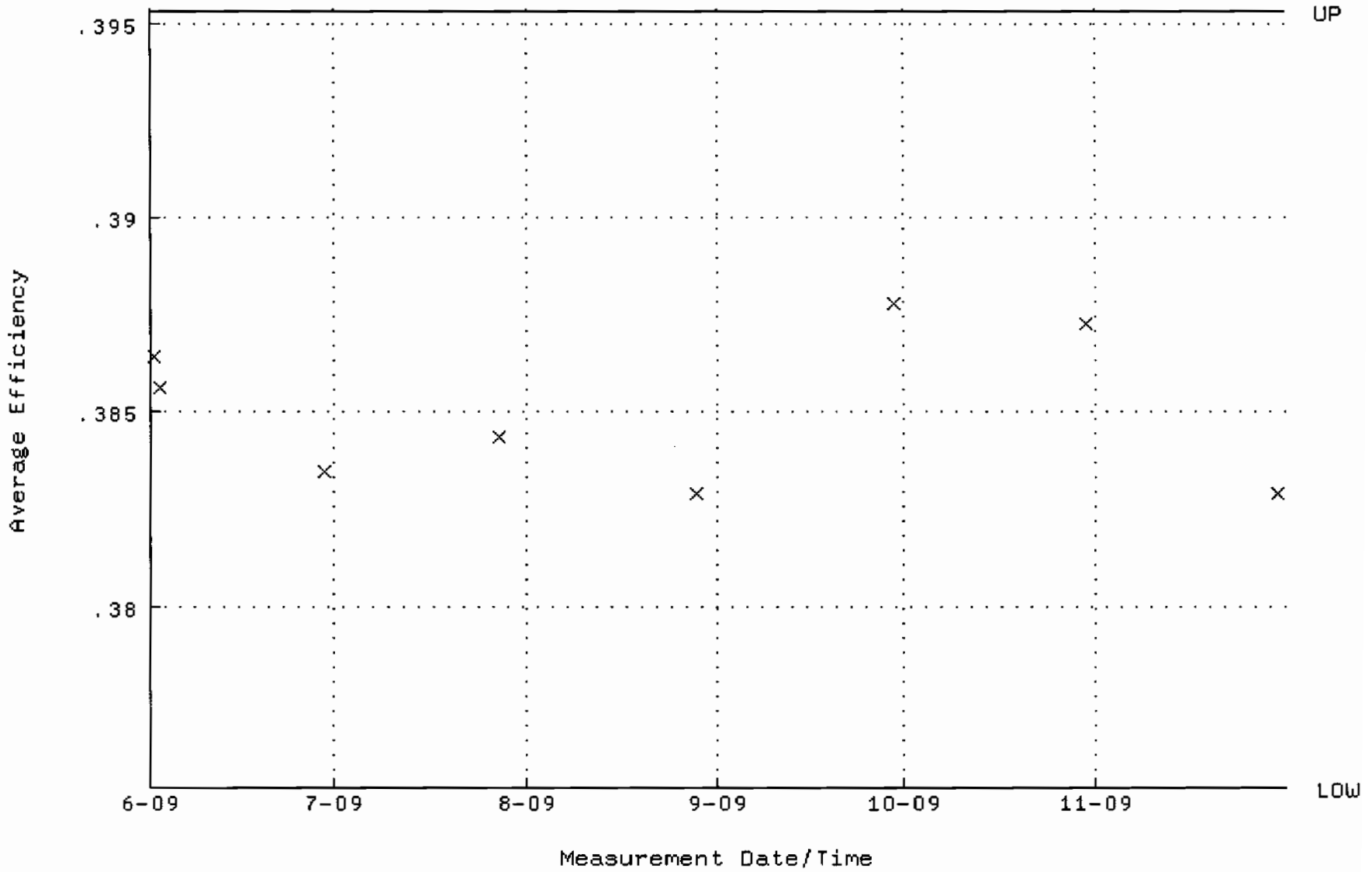

QA filename : DKA100:[ENV_ALPHA.QA.W]W227.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:08 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.8011 through 93.7275

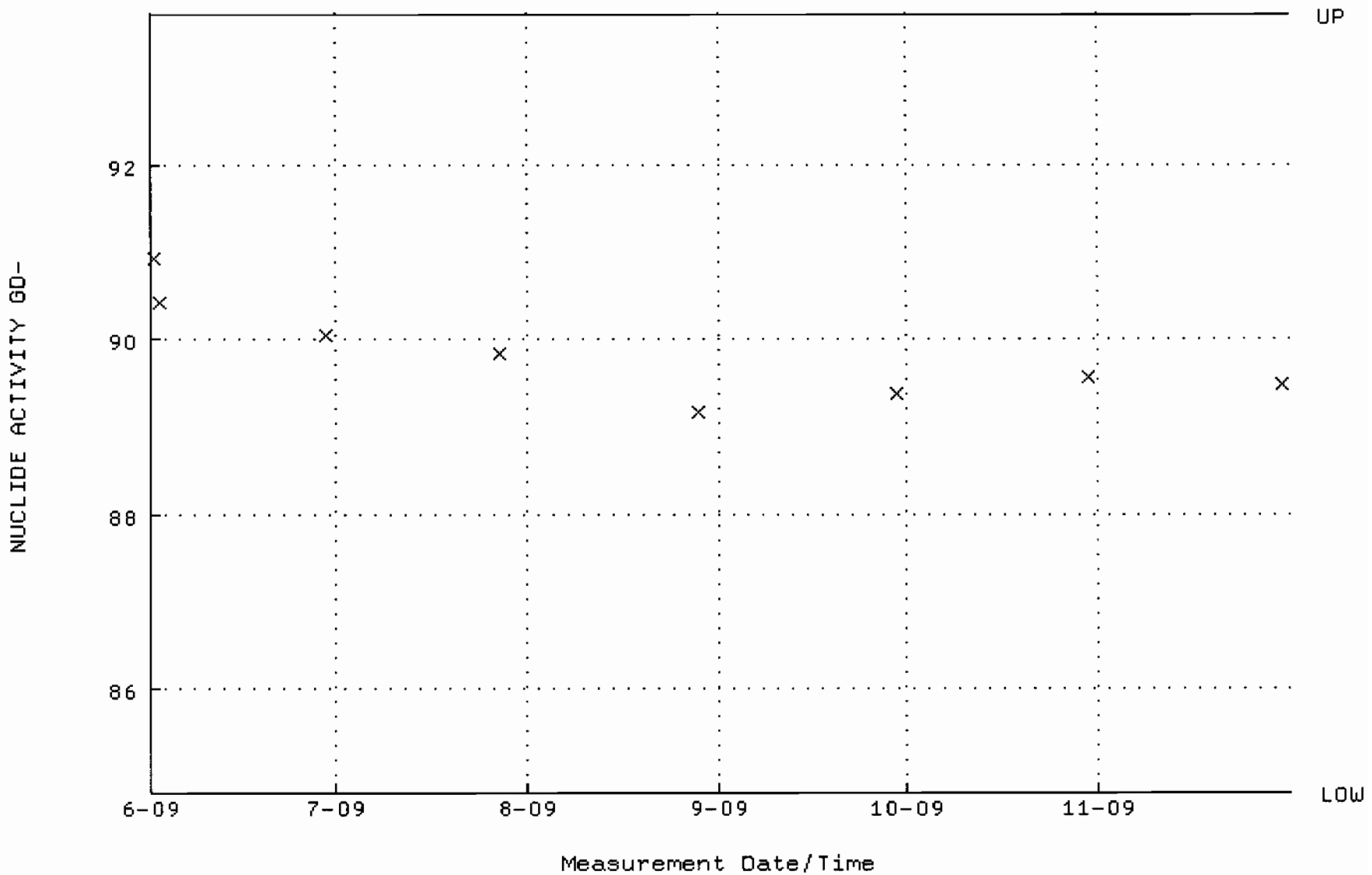

QA filename : DKA100:[ENV_ALPHA.QA.B]B227.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:52 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

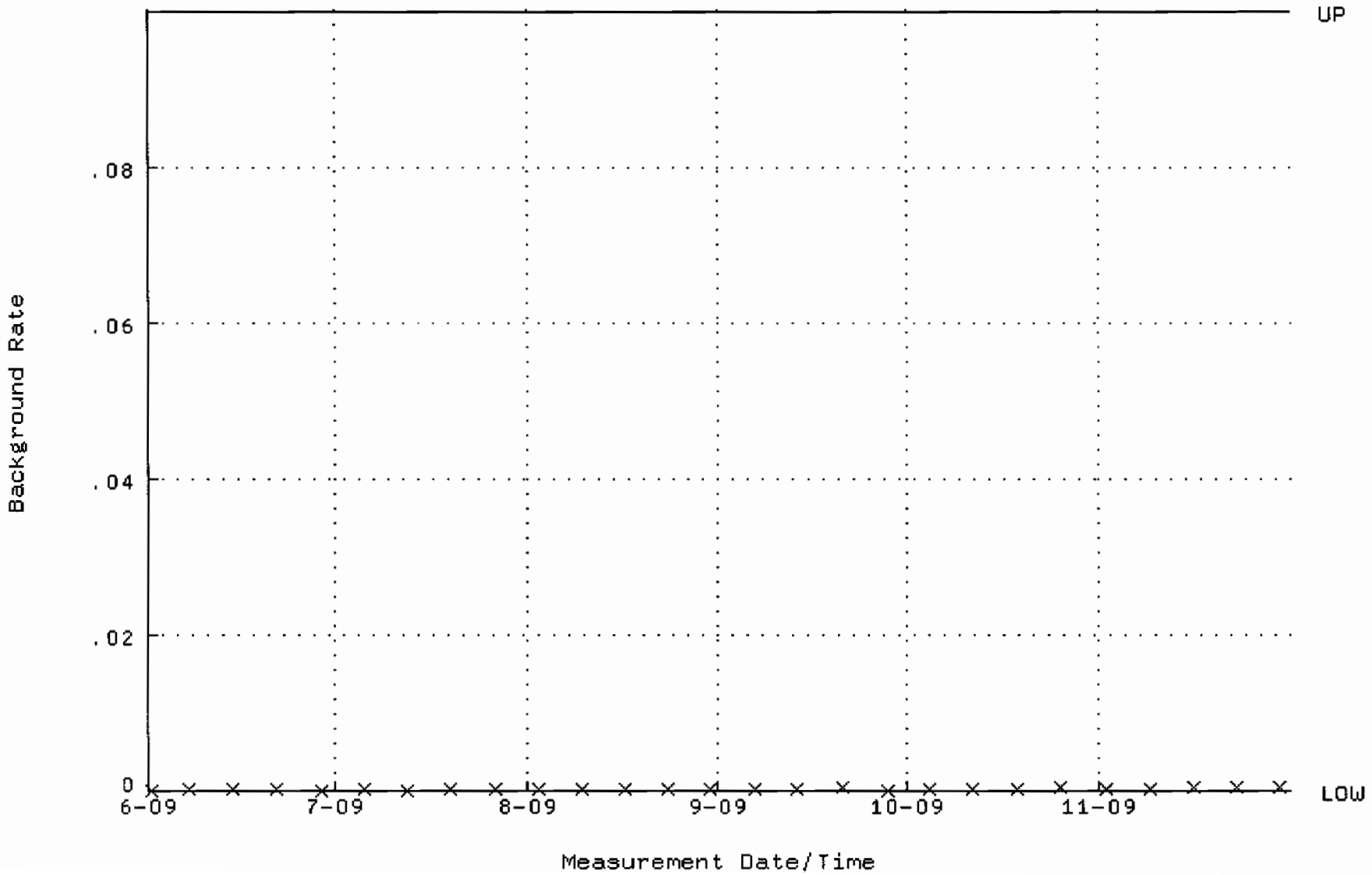

STANDARDS DATA

0244-A Characterization

Sample #	Uranium-233/234 Result (pCi/g)	Uranium-238 Result (pCi/g)	Thorium-230 Result (pCi/g)
0244-A 1	6.59	6.12	25.3
0244-A 2	6.36	6.07	28.5
0244-A 3	5.78	5.53	26.5
0244-A 4	6.48	5.97	25.5
0244-A 5	5.65	5.59	26.2
0244-A 6	6.96	5.78	27.0
0244-A 7	5.95	5.75	24.2
0244-A 8	5.29	5.67	27.2
0244-A 9	5.51	6.05	24.3
0244-A 10	6.37	5.57	25.6
0244-A 11	6.50	5.80	25.8
0244-A 12	6.13	5.42	22.4
0244-A 13	5.49	5.24	24.7
0244-A 14	6.19	5.21	26.9
0244-A 15	6.50	6.27	27.6
0244-A 16	6.50	5.24	24.9
0244-A 17	6.25	6.05	24.7
0244-A 18	6.14	6.00	25.4
0244-A 19	6.19	6.14	26.4
0244-A 20	5.67	5.61	23.2
Mean Value	6.13	5.75	25.62
1 sigma	0.439	0.325	1.493
2 sigma	0.878	0.650	2.986
75% Limit	4.60	4.31	19.22
125% Limit	7.66	7.19	32.03
Expected Result	6.2 +/- 4.0	6.0 +/- 4.0	24.5 +/- 0.6
Achieved Results	6.13 +/- 0.439	5.75 +/- 0.325	25.62 +/- 1.493

REFERENCE DATE 4/14/2000 Scott C Hall 12/1/04

Angela L. Johnson 12/3/04

TRM

Invoice:

5 bottles of TRM-1
10 " " TRM-2 and 3
5 " each of NRM-1 through 6
7 " baghouse dirt

Use 1/4 gm x 10 Samples WITH Together for TRM-2

Table 7. Recommended Concentrations of Tailings Reference Materials (pCi/g)

	TRM-1	TRM-2	TRM-3	TRM-4
U-238	99 ± 6	6.0 ± 4.0	19.6 ± 1.4	44.9 ± 1.6
U-234	105 ± 6	6.2 ± 4.0	19.6 ± 1.9	44.6 ± 1.2
Th-230	471 ± 11	24.5 ± 0.6	58.5 ± 2.1	44.0 ± 1.6
Ra-225	489 ± 17	25.4 ± 0.9	60.3 ± 2.3	42.9 ± 1.2
Pb-210	485 ± 24	22.1 ± 1.2	56.0 ± 2.1	38.9 ± 2.0

Attention Nancy Slater At GEL
Not For Log-In

9911627-01->0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 SMO USE
Carrier/Waybill No.: 7-2-6-4-9-4
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Reference LOV (available at SMO)

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	Lab Sample ID (LAB USE)
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special Instructions Below	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
-												
-												
-												
-												
-												
-												
-												

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking (SMO USE): Date Entered (mm/dd/yy): Entered by:

Turnaround Time ☒Normal ☐Rush Required Report Date: QC Limits:

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well characterized rad materials being sent to GEL on behalf of Hank Mistaer
Please list as separate report.

Abnormal Conditions on Receipt (LAB USE):

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	Douglas E. Perry	DEP	Weston / 7577 / 845-0867

1. Relinquished by	Douglas E. Perry	Org. 7577	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

0244-B Characterization

Sample #	Plutonium-239 Result (pCi/g)	Plutonium-238 Result (pCi/g)	Americium-241 Result (pCi/g)
0244-B 1	39.9	7.88	38.4
0244-B 2	44.1	7.97	40.6
0244-B 3	45.8	6.56	31.8
0244-B 4	43.6	7.69	31.5
0244-B 5	43	7.9	40.2
0244-B 6	43.5	7.84	29.4
0244-B 7	41.3	7.67	36
0244-B 8	44.3	6.95	33.2
0244-B 9	42.7	7.2	29.2
0244-B 10	44.9	7.69	30
0244-B 11	41.4	7.22	30.2
0244-B 12	41.3	7.74	36
0244-B 13	39.2	6.65	33.8
0244-B 14	39.6	7.78	31.1
0244-B 15	45.3	8.41	37.3
0244-B 16	38.1	6.74	33.6
0244-B 17	48.5	8.51	30.5
0244-B 18	36.5	7.23	38.6
0244-B 19	35.3	6.98	30.9
0244-B 20	37.4	8.55	31.3
Mean Value	41.79	7.56	33.68
1 sigma	3.418	0.596	3.724
2 sigma	6.835	1.193	7.448
75% Limit	30.75	6.02	24.38
125% Limit	51.25	10.04	40.63
Expected Result	41.0 +/- 3.0	8.03 +/- 0.37	32.5 +/- 1.1
Achieved Results	41.79 +/- 3.418	7.56 +/- .596	33.68 +/- 3.724

REFERENCE DATA 4/14/2000

Amanda L. Fehr 4/30/04
[illegible] 5/1/04

PEM-1

PREPARATION AND CHARACTERIZATION OF THE PERFORMANCE EVALUATION SOIL SAMPLE PEM-1

INTRODUCTION

Rust Geotech (Rust) was contracted by Los Alamos National Laboratory (LANL) to prepare and characterize a soil performance evaluation sample designated PEM-1. This report describes sample preparation, homogeneity assessment, and determination of the concentrations of 28 elements and radioactive isotopes in the sample.

SAMPLE PREPARATION

Rust received nine five-gallon buckets of soil from LANL. The soils were dried overnight in ovens at 103 °C. The large pieces of leaves and sticks were removed and the soils were ground with ceramic-plate grinders to a particle size that passed through a 325 mesh screen. The samples were blended at the proportions specified by LANL for 48 hours in a 3-cubic-foot cross-flow blender. The sample identifications and the amounts used are listed in Table 1.

Table 1. Sample Identifications and Amounts Used to Prepare PEM-1

LANL Sample ID	Amount Used (kg)
AAA 1592	1.7
AAA 2505-1	10.9
AAA 2505-2	12.8
AAA 2750-1	8.4
AAA 2750-2	8.4
AAA 3205	12.6
AAA 8581	4.2
AAB 3417	12.8
AAB 3475	12.6

The blended sample was transferred to three five-gallon plastic containers. While the sample was being transferred, 10 samples were taken at pre-determined time intervals to be used for homogeneity assessment and sample characterization. These samples are believed to be representative of the bulk material.

Attention Nancy Slater At GEL
Not For Log-In

9911627-01->0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 SMO USE
Carrier/Waybill No.: 1226794
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location Tech Area VI
Building N/A Room N/A

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	LAB USE Lab Sample ID
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Instructions	
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Below	
-												
-												
-												
-												
-												
-												
-												

Reference LOV (available at SMO)

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking SMO USE
Date Entered (mm/dd/yy)
Entered by

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are soil decontamination and materials being sent to GEL on behalf of Hank Hinton
Please list as separate report.

Abnormal Conditions on Receipt LAB USE

Turnaround Time ☒Normal ☐Rush Required Report Date
QC Limits

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry		DEP	Weston / 7577 / 845-0867

1. Relinquished by	Org.	Date	Time	4. Relinquished by	Org.	Date
1. Received by	Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by	Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by	Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by	Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by	Org.	Date	Time	6. Received by	Org.	Date

Original To Accompany Samples, Laboratory Copy (White) | 1st Copy To Accompany Samples, Return to SMO (Blue) | 2nd Copy SMO Suspense Copy (Yellow) | 3rd Copy Field Copy (Pink)

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution: 5.3739 g (in a 5 ml Flame Sealed Ampoule)

b. Chemical form: Am(NO3)3 in 2N HNO3

c. Carrier content: None added

d. Density: 1.0651 g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under: 228, 278 keV.

Branching ratio(s) used: 0.108, 0.1420 gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration: ±3.0%

b. Random uncertainty in assay: ±0.4%

c. Random uncertainty in weighing(s): ±0.0%

d. Total uncertainty at the 99% confidence level: ±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Khan
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-~~004~~ 005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ 1. STANDARD WIPE TEST

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 2. SOAK TEST

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 3. SOAK TEST -- BERYLLIUM WINDOW

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 4. GAS SOURCE TEST (Radioactive Gas)

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ 5. OTHER LEAK TEST

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 6. LEAK TEST NOT APPLICABLE

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Angela Johnson
Prep Date:	01/05/1994
Verification Date:	05/11/2009
Expiration Date:	05/11/2010
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2005	09/10/2006
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/16/2005	Brenda Burke	.001224	500	445-96-2-DD	5.07144 dpm/mL	08/18/2007	08/18/2008
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
10/13/2005	Brenda Burke	.0017	500	445-96-2-EE	7.0435 dpm/mL	11/15/2005	11/15/2006
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
10/14/2005	Mary Aders	.0141	500	445-96-2-FF	58.4196 dpm/mL	10/14/2005	10/14/2006
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
05/10/2006	Mary Aders	2.0753	1000	445-96-2-GG	4299.227 dpm/mL	09/30/2008	09/30/2009
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
06/07/2006	Mary Aders	.0365	1000	445-96-2-HH	75.614 dpm/mL	06/19/2006	06/19/2007
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
05/11/2006	Brenda Burke	.000009739	100	445-96-2-II	.201761 dpm/mL	07/26/2006	07/26/2007
07/20/1995	Theresa Austin	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
05/01/2007	Daniel Roy	.0352	1000	445-96-2-JJ	72.9209 dpm/ml	04/30/2008	04/30/2009
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
06/12/2007	Julie Strock	.01038	250	445-96-2-KK	22.1496 dpm/mL	05/28/2008	05/28/2009

09/11/1995	Theresa Austin	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Austin	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
11/01/2007	Eric Williamson	.001274	500	445-96-2-MM	5.27945 dpm/mL	04/06/2008	04/06/2010
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/19/2008	Daniel Roy	.0424	1000	445-96-2-NN	87.8366 dpm/ml	04/16/2009	04/16/2010
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/04/2008	Julie Strock	.00001005	100	445-96-2-PP	.20819 dpm/mL	12/29/2008	12/29/2009
01/28/2000	Angela Johnson	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
09/29/2008	Julie Strock	.0025219	250	445-96-2-QQ	20.8977 dpm/mL	09/30/2008	09/29/2009
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/23/2009	Tina Schoneman	.001251	500	445-96-2-RR	4.8075 dpm/mL	04/23/2009	04/23/2010
04/13/2001	Angela Johnson	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
05/08/2009	Mary Aders	.0141	1000	445-96-2-SS	29.2098 dpm/ml	05/11/2009	05/11/2010
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003

07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
06/03/2009	Julie Strock	.00000927	100	445-96-2-TT	.1923 dpm/mL	06/05/2009	06/03/2010
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
06/02/2009	Mary Aders	2.1177	1000	445-96-2-UU	4385.1449 dpm/ml	06/04/2009	06/04/2010
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Johnson	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2006	03/14/2007
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Eric Williamson	.011	1000	445-96-2-Z	22.7877 dpm/mL	04/03/2007	04/03/2008

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Am-243 Standard *445-96-2-SS*

M. Aders	Isotope	Value	Uncertainty
5/15/2009	445-96-2-SS #1	1.360	0.1690
	445-96-2-SS #2	1.370	0.1690
	445-96-2-SS #3	1.290	0.1590

Mean Value (Counting) =	1.340	101.99	**Pass**
Stdev =	0.043588989		**Rule 3 (Pass/Fail)**

Target =	1.314
Lower Limit =	1.252822021
Upper Limit =	1.427177979
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.087177979
10 % of Mean =	0.134
Rule 2 (Pass/Fail)	**Pass**

The analyst prepared three standard verification sources for standard ***445-96-2-SS*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Cm-244*** standard ***0533-O*** and 50 micrograms of neodymium carrier in a disposable centrifuge tube. Each standard was diluted with 4 mL of 2 M HCl and 6 mL of DI Water. Two mL of 48% HF was added to precipitate Nd(and Americium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Am-243 were calculated by comparison to Am-241certified values.

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

Mary Gridden 5/15/09
007509

1373

National Institute of Standards & Technology
Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

RECEIVED

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 to 7.

RC - S - 051 - 0912

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994 [b]***
Massic activity of the solution [c]	**26.31 $Bq \cdot g^{-1}$**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**
Solution density	**(1.105 ± 0.002) $g \cdot mL^{-1}$ at 20 °C [f]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration ($mol \cdot L^{-1}$)	Mass Fraction ($g \cdot g^{-1}$)
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) $Bq \cdot g^{-1}$ [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three $4\pi\alpha$ liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	^{239}Pu + ^{240}Pu <0.000 001 [u]	^{239}Pu + ^{240}Pu 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	^{238}Pu + ^{241}Am <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 $s^{-1} \cdot g^{-1}$ for energies less than 3.1 MeV,
0.03 $s^{-1} \cdot g^{-1}$ for energies between 3.1 and 4.4 MeV, and
0.003 $s^{-1} \cdot g^{-1}$ for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 19 and 39 keV,
7×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 49 and 92 keV,
2×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 106 and 507 keV,
1×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 515 and 1456 keV, and
5×10^{-6} $s^{-1} \cdot g^{-1}$ for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y = |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}·{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

Standard Traceability Log Rad

Source Material Info

Parent Code:	1373
Prepared By:	Mary Aders
Carrier Conc:	0.5M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC-S-051-092

A Solution Material Info

Isotope:	Plutonium-242
Prepared By:	Mary Aders
Prep Date:	10/23/2009
Verification Date:	10/27/2009
Expiration Date:	10/27/2010
Primary Code:	1373-A
Dilution(mL):	200 mL
Mass of Parent(g):	5.3477 g
Density(g/mL):	1.0145
Balance ID:	38110047

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / (Dilution Vol) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (200 mL) = 42.2094 dpm/mL

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (1.0145 g/mL) / (200 mL) = 41.6041 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Pu-242 Standard 1373-*A*

M. Aders	Isotope	Value	Uncertainty
10/27/2009	1373-A	1.970	0.3050
	1373-A	1.900	0.2980
	1373-A	1.950	0.3000

Mean Value (Counting) =	1.940	102.04	**Pass**
Stdev =	0.036055513		**Rule 3 (Pass/Fail)**

Target =	1.90
Lower Limit =	1.867888974
Upper Limit =	2.012111026
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.072111026
10 % of Mean =	0.194
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for standard 1373-A using 0.1 mL for each source. Each standard was combined with 0.1 mL of Pu239 standard 0338-BB and 50 micrograms of neodymium carrier in a disposable centrifuge tube containing 4 mL of 2 M HCl and 6 mL of DI water. Four drops of 25% Hydrazine dihydrochloride were added to each centrifuge tube and swirled. Two mL of 48% HF was added to precipitate neodymium(and plutonium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Pu-242 were calculated by comparison to Pu-239 certified values.

10/28/09

11/02/09

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

1283

78747-278

U-232 5 mL Liquid in Flame Sealed Vial

Customer: GEL Laboratories, LLC
P.O. No.: 7319 RD, Item 1

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated using a germanium gamma spectrometer system.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Isotope:	U-232
Activity (Bq):	3.754 E3
Half-Life:	68.9 years
Calibration Date:	December 9, 2008 12:00 EST
Relative Expanded Uncertainty (k=2):	5.0%

Comments:
Impurities: U-233 <0.3%, Am-241 <0.15%
5.20453 grams 1M HNO_3 solution.

Source Prepared By: _____
W. Mao, Radiochemist

QA Approved: _____ Date: 12-11-08
D. M. Montgomery, QA Manager

End of Certificate

RECEIVED 12/15/08
RC-S-05

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1283
Prepared By:	Daniel Roy
Carrier Conc:	1M HNO3
Reference Date:	12/09/2008
Ampoule Mass (g):	5.20453 g
Uncertainty:	+/- 5 %
LogBook No:	RC-S-051-002

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Daniel Roy
Prep Date:	12/16/2008
Verification Date:	12/30/2008
Expiration Date:	12/30/2009
Primary Code:	1283-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.0245 g
Density(g/mL):	1.0285
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (5.20453 g * 100 mL) = 2174.4872 dpm/mL
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (1.0285 g/mL)/ (5.20453 g * 100 mL) = 2114.1700 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/16/2008	Daniel Roy	25.1813	1000	1283-B	53.2375 dpm/ml	12/16/2008	12/16/2009
12/30/2008	Tina Schoneman	2.05	250	1283-C	17.336 dpm/mL	12/30/2008	12/30/2009
12/30/2008	Tina Schoneman	.49	250	1283-D	4.1438 dpm/mL	01/09/2009	01/09/2010
01/14/2009	Mary Aders	25.0528	1000	1283-E	52.9659 dpm/ml	01/15/2009	01/15/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Uranium-232 Standard *1283-E*

Analyst: M. Aders	Serial #	Value		Uncertainty	
Date: 1/14/09	1283-E N1	2.540	pCi/L	0.288	pCi/L
	1283-E N2	2.390	pCi/L	0.272	pCi/L
	1283-E N3	2.450	pCi/L	0.274	pCi/L
Mean Value (Counting) =	2.460	pCi/L		**103.20801**	**Pass**
Stdev =	0.075498344	pCi/L			**Rule 3 (Pass/Fail)**
Target =	2.384	pCi/L			
Lower Limit =	2.309003311	pCi/L			
Upper Limit =	2.610996689	pCi/L			
Rule 1 Pass/Fail	**Pass**				
Two sigma =	0.150996689				
10 % of Mean =	0.246				
Rule 2 (Pass/Fail)	**Pass**				

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for standard **1283-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **1163-E** and was diluted to 10 mL with DI water. 50 micrograms of neodymium carrier and 1ml of Titanium Chloride were added. The solution was allowed to sit for 30 seconds. One mL of 48% HF was then added to precipitate neodymium (and uranium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for U-238 were calculated by comparison to U-232 certified values.

Mary Fridenau 1/19/09
Amanda L. Fuhr 2/9/09

RUNLOGS

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 927530**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241327001	SAMPLE	HAKB	1070	10-DEC-09 12:38	DUSE		
241327002	SAMPLE	HAKB	1071	10-DEC-09 12:38	DONE		
241327003	SAMPLE	HAKB	1072	10-DEC-09 12:38	DONE		
241327004	SAMPLE	HAKB	1073	10-DEC-09 12:38	DONE		
241327005	SAMPLE	HAKB	1074	10-DEC-09 12:38	DONE		
241327006	SAMPLE	HAKB	1076	10-DEC-09 12:38	DONE		
241327007	SAMPLE	HAKB	1077	10-DEC-09 12:38	DONE		
241327008	SAMPLE	HAKB	1079	10-DEC-09 12:38	DONE		
241327009	SAMPLE	HAKB	1080	10-DEC-09 12:38	DONE		
241327010	SAMPLE	HAKB	1083	10-DEC-09 12:38	DONE		
241327011	SAMPLE	HAKB	1084	10-DEC-09 12:38	DONE		
241327012	SAMPLE	HAKB	1085	10-DEC-09 12:38	DONE		
241336001	SAMPLE	HAKB	1086	10-DEC-09 12:38	DONE		
241336002	SAMPLE	HAKB	1087	10-DEC-09 12:38	DONE		
241425001	SAMPLE	HAKB	1088	10-DEC-09 12:38	DONE		
241425002	SAMPLE	HAKB	1089	10-DEC-09 12:38	DONE		
1201983131	MB	HAKB	1090	10-DEC-09 12:38	DONE		
1201983132	DUP	HAKB	1091	10-DEC-09 12:38	DONE		
1201983133	LCS	HAKB	1092	10-DEC-09 12:38	DONE		
241327001	SAMPLE	HAKB	1227	11-DEC-09 19:28	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 927531**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241327001	SAMPLE	HAKB	1007	10-DEC-09 10:31	DONE		
241327002	SAMPLE	HAKB	1008	10-DEC-09 10:31	DONE		
241327003	SAMPLE	HAKB	1009	10-DEC-09 10:31	DONE		
241327004	SAMPLE	HAKB	1010	10-DEC-09 10:31	DONE		
241327005	SAMPLE	HAKB	1011	10-DEC-09 10:31	DONE		
241327006	SAMPLE	HAKB	1012	10-DEC-09 10:31	DONE		
241327007	SAMPLE	HAKB	1019	10-DEC-09 10:31	DONE		
241327008	SAMPLE	HAKB	1020	10-DEC-09 10:31	DONE		
241327009	SAMPLE	HAKB	1021	10-DEC-09 10:31	DONE		
241327010	SAMPLE	HAKB	1023	10-DEC-09 10:31	DONE		
241327011	SAMPLE	HAKB	1024	10-DEC-09 10:31	DONE		
241327012	SAMPLE	HAKB	1025	10-DEC-09 10:31	DONE		
241336001	SAMPLE	HAKB	1026	10-DEC-09 10:31	DONE		
241336002	SAMPLE	HAKB	1027	10-DEC-09 10:31	DONE		
241425001	SAMPLE	HAKB	1028	10-DEC-09 10:31	DONE		
241425002	SAMPLE	HAKB	1029	10-DEC-09 10:31	DONE		
1201983134	MB	HAKB	1030	10-DEC-09 10:31	DONE		
1201983135	DUP	HAKB	1031	10-DEC-09 10:31	DONE		
1201983136	LCS	HAKB	1033	10-DEC-09 10:31	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 927532**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241327001	SAMPLE	HAKB	1113	04-DEC-09 20:54	DONE		
241327002	SAMPLE	HAKB	1114	04-DEC-09 20:54	DONE		
241327003	SAMPLE	HAKB	1115	04-DEC-09 20:54	DONE		
241327004	SAMPLE	HAKB	1116	04-DEC-09 20:55	DONE		
241327005	SAMPLE	HAKB	1117	04-DEC-09 20:55	DONE		
241327006	SAMPLE	HAKB	1118	04-DEC-09 20:55	DONE		
241327007	SAMPLE	HAKB	1121	04-DEC-09 20:55	DONE		
241327008	SAMPLE	HAKB	1122	04-DEC-09 20:55	DONE		
241327009	SAMPLE	HAKB	1123	04-DEC-09 20:55	DONE		
241327010	SAMPLE	HAKB	1124	04-DEC-09 20:55	DONE		
241327011	SAMPLE	HAKB	1125	04-DEC-09 20:55	DONE		
241327012	SAMPLE	HAKB	1126	04-DEC-09 20:55	DONE		
241425001	SAMPLE	HAKB	1127	04-DEC-09 20:55	DONE		
241425002	SAMPLE	HAKB	1128	04-DEC-09 20:55	DONE		
1201983137	MB	HAKB	1129	04-DEC-09 20:55	DONE		
1201983138	DUP	HAKB	1130	04-DEC-09 20:55	DONE		
1201983139	LCS	HAKB	1132	04-DEC-09 20:55	DONE		

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-544

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	EPA:353.2	1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6010B	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13626	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6020	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	[illegible]	S	[illegible]	[illegible]

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REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6850	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:7471A	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	[illegible]	S	[illegible]	[illegible]

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REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	SW-846:9012A	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:9045C	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	

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REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-544

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-544

REQUEST NUMBER: 10-544

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	POLY	METALS-GEL	Ice	S
RE03-09-13618	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13622	1	POLY	METALS-GEL	Ice	S
RE03-09-13622	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13620	1	POLY	METALS-GEL	Ice	S
RE03-09-13620	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13619	1	POLY	METALS-GEL	Ice	S
RE03-09-13619	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13624	1	POLY	METALS-GEL	Ice	S
RE03-09-13624	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13623	1	POLY	METALS-GEL	Ice	S
RE03-09-13623	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13626	1	POLY	METALS-GEL	Ice	S
RE03-09-13626	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13621	1	POLY	METALS-GEL	Ice	S
RE03-09-13621	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13627	1	POLY	METALS-GEL	Ice	S
RE03-09-13627	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13625	1	POLY	METALS-GEL	Ice	S
RE03-09-13625	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-6088	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6088	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE03-10-6088	1	POLY	SW-846:6850	Ice	W
RE03-10-6088	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6090	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6090	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE03-10-6090	1	POLY	SW-846:6850	Ice	W
RE03-10-6090	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6084	1	POLY	METALS-GEL	Ice	S
RE03-10-6084	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-6085	1	POLY	METALS-GEL	Ice	S

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-544

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-10-6085	1	POLY	Perchlorate+CN+N03+pH	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	11/17/09	1400	Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13618 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	alc H
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	DK	SAMPLE TECH CODE:	HA	DK
LOCATION ID:	03-608242	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+NO3+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Sandy gravel fill. Dark reddish brown (5 YR 3/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)2-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Background α: 26.7 β: 1776 Samples: MDA>

COLLECTED BY (PRINT) M. Nauck, L. Herno REVIEWED BY (PRINT) J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09 1715	(Printed Name) Sherri Sherwood	11-16-09 1715
(Signature) [signature]		(Signature) Sherri Sherwood	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13619 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	QTB3
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608242	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0'	SCREEN/PORT DESC:		
FIELD MATRIX:	SR		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Strong brown tuff (7.5 YR 4/6)

SAMPLE COMMENTS: hit tuff @ 1.5 ft.

LOCATION DESC: 014(b)2-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm Background α: 26.7 DPM β: 1776 DPM samples: MDA7

COLLECTED BY (PRINT) J. Jordan REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13620 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	all IN
TIME COLLECTED (HH:MM)		1437	SUB-MEDIA:	OTHER	NA
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608243	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: S: lty sand, reddish-brn (5YR 4/3), moist, w/ organic material

SAMPLE COMMENTS: tuff @ 1'

LOCATION DESC: 014(b)2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 4 ppm SAMPLES
BACKGROUND <MDA
α: 26.7
β: 1776

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Foster

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Shendo	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13621 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	JLS 11-16-09 ~~NA~~ QBT 3	OK
TIME COLLECTED (HH:MM)		1442	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608243		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R JLS 11-16-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: tuff (QBT 3), lt. reddish-brown (5YR 6/3), moist, hard

SAMPLE COMMENTS:

LOCATION DESC: 014b2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 2.0ppm Background
alpha: 26.7 < Samples
Beta: 1776

COLLECTED BY (PRINT) M. Nanch, L. Horne **REVIEWED BY (PRINT)** J. Jul

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) H. Shanks	11/16/09	(Printed Name) Sherri Shenwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Shenwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13622 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1520	SUB-MEDIA:	OTHER	
PRS ID:	03-014(h)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608244		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES/NO/NA~~

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, reddish-brown (5YR 5/3), moist

SAMPLE COMMENTS:

LOCATION DESC: 014(b2)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.5 ppm
Alpha = 26.7
Beta = 1776

Samples < MDA

COLLECTED BY (PRINT) M. Nauch

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Elundo	11/16/09	(Printed Name) Sherri Shenwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Shenwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13623 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1523	SUB-MEDIA:	OTHER	
PRS ID:	03-014(h)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608244		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GBL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QBT 3 tuff, reddish-brn (5YR 5/3), moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014(a)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background -
α: 26.7 DPM
β: 1776 DPM

SAMPLES:
MOA7

COLLECTED BY (PRINT) M. Nauch **REVIEWED BY (PRINT)** J. Irish

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09 1715	(Printed Name) Sherri Sherwood	11-16-09 1715
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13624 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK ~~NA~~ 11-16-09
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	NA	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608245		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA ~~WATER FLOWING: YES/NO/NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand (dark reddish gray 5YR 4/2) + tuff (QBT3), moist, plant roots

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm. BACKGROUND: Alpha: 26.7 DPM Beta: 1776 DPM SAMPLES: MDA>

COLLECTED BY (PRINT) M. Rauch, D. Thomas **REVIEWED BY (PRINT)** J. Isa

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Raen's	11/16/09	(Printed Name) Sherri Sherwood	11-16-09
(Signature)	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13625 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA QBT3	Ok
TIME COLLECTED (HH:MM)		1544	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608245		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~SR~~ JLT 11-16-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: tuff (QBT3) dk reddish-brn (5YR 3/2), v. moist

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm BACKGROUND: Alpha = 26.7 DPM Beta ~ 1976 DPM SAMPLES: MDA 7

COLLECTED BY (PRINT) M. Nauch / D. Thomas REVIEWED BY (PRINT) J. T

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13626 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1500	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608246		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, brn (7.5YR 4/3), moist, no odor

SAMPLE COMMENTS: NA

LOCATION DESC: 014(b2) S

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm BACKGROUND: Alpha: 26.7 DPM Beta: 1776 DPM SAMPLES: MDA>

COLLECTED BY (PRINT) M. Shendo, D. Thomas REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Davis (Signature) [signature]	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-09-13627 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1525	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608246		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand, reddish-brn (5YR 4/3), v. moist

SAMPLE COMMENTS: NA

LOCATION DESC: 01462-S

FIELD SCREENING/MEASUREMENT RESULTS: PTD Background Alpha = 26.7 DPM Beta = 1776 DPM SAMPLES: MDA >

COLLECTED BY (PRINT) M. Shenk / D. Thomas REVIEWED BY (PRINT) J. Jinks

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09 1715	(Printed Name) Sherri Sherwood	11/16/09 1715
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6084 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	SOIL	
PRS ID:	03-014(b),03-014 (b2)	03-014 (b)	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	ok	FIELD QC TYPE:	ED	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13618

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) J. [illegible] REVIEWED BY (PRINT) M. Ramos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Ramos (Signature) [illegible]	11/16/09 1715	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-16-09 1715
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6085 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLI	QBT 3
TIME COLLECTED (HH:MM)		1442	SUB-MEDIA:	SOIL	
PRS ID:	03-014(b) 03-014 (b2)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~SR~~ JLS	11-16-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		METALS-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+NO3+pH	500 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13621

SAMPLE COMMENTS: NA

LOCATION DESC: b2-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.0 ppm background
Alpha 26.7 DPM MDA
Beta 776 DPM

COLLECTED BY (PRINT) M. Nauch L. Horne REVIEWED BY (PRINT) J. Jus

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/16/09	(Printed Name) Sherri Sherwood	11/16/09
(Signature) [signature]	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6088 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1305	SUB-MEDIA:	OTHER	↓
PRS ID:	03-014(b) 03-014 (b2)	OK	SAMPLE TECH CODE:	DC	↓
LOCATION ID:	UNK	OK	FIELD QC TYPE:	FB	↓
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	↓
TOP DEPTH:	0	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	↓	SCREEN/PORT DESC:	-	NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC: 03-014(b2) - 1

FIELD SCREENING/MEASUREMENT RESULTS: NA

M. Rams

COLLECTED BY (PRINT) J. Trolan **REVIEWED BY (PRINT)** ~~M. Snow~~ JLT 11-16-09

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vaick	11-16-09	(Printed Name) Sheri Sherwood	11-16-09
(Signature)	1715	(Signature) Sheri Sherwood	1715
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 **EVENT NAME:** Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-6090 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1423	SUB-MEDIA:	OTHER	
PRS ID:	03-014(b) 03-014 (a)	03-014(b)	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608242	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sheppard

REVIEWED BY (PRINT) M. Nash

RELINQUISHED BY (Printed Name) M. Nash (Signature)	Date/Time 11-16-09 1715	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 11-16-09 1715
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-~~6086~~ 6086 JLS 11-16-09 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLI	OK
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	SOIL	
PRS ID:	~~03-014~~	03-014(a) OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ~~OK~~ ~~NA~~ JLS 11-16-09 COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	~~2~~ JLS 11-16-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of ~~RE-03-09-13649~~

RE03-10-5897

SAMPLE COMMENTS: NA

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) M. Ruiz REVIEWED BY (PRINT) J. Jost

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jost	11-16-09	(Printed Name) Sherri Sherwood	11-16-09
(Signature)	1245	(Signature) Sherri Sherwood	1245
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2271 EVENT NAME: Soil Sampling CU 03-014(a)-99 - Part 1

SAMPLE ID: RE03-10-~~6087~~ 6087 JWS 11-16-09 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-16-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	SOIL	
PRS ID:	~~03-014(b)-99014~~ JWS 11-16-09	03-014(b) OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES/NO/NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~ NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 JWS 11-16-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of ~~RE03-10-6087~~ RE03-09-13619

SAMPLE COMMENTS: NA

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) J. Trujillo REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jaime Trujillo	11-16-09	(Printed Name) Sherri Sherwood	11-16-09
(Signature)	1715	(Signature) Sherri Sherwood	1715
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-544 VALIDATION DATE: 01/20/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: David Schwent ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☒ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses associated with the water samples were performed on a LANL sample from another RN and that the raw data for the parent sample was not included in the data package. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 1/20/10

VALIDATOR'S SIGNATURE: David Schwent DATE: 01/20/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☒	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 **LC/MS/MS Perchlorate Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R. PERC7f
☐	☒	☐	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
☐	☒	☐	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
☐	☒	☐	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
☐	☒	☐	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
☐	☒	☐	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
☐	☒	☐	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
☐	☒	☐	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
☐	☒	☐	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
☐	☒	☐	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
☐	☒	☐	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
☐	☒	☐	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
☐	☐	☒	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
☐	☐	☒	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
☐	☐	☒	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
☐	☐	☒	31. The Interference Check Sample was not within ±20% of the known value.	UJ, PERC16a	J, PERC16a
☐	☐	☒	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
☐	☒	☐	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03–09–13618

Date Received: 18–NOV–09

GEL Job No (SDG): 10–544

GEL Sample ID: 241322001

Date Filtered: 20–NOV–09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.583	2.33	0.583	ug/kg	U	1	20–NOV–09 18:20	per1120018a
	Perchlorate Isotope Ratio						1	20–NOV–09 18:20	per1120018a
14797–73–0	Perchlorate–101	.583	2.33	0.583	ug/kg	U	1	20–NOV–09 18:20	per1120018a
	Perchlorate–O(18)			5.73	ug/kg		1	20–NOV–09 18:20	per1120018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

DJS
01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13622

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322002

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.900	ug/kg	J	1	20-NOV-09 18:41	per1120021a
	Perchlorate Isotope Ratio			3.08			1	20-NOV-09 18:41	per1120021a
14797-73-0	Perchlorate-101	.533	2.13	0.871	ug/kg	J	1	20-NOV-09 18:41	per1120021a
	Perchlorate-O(18)			5.55	ug/kg		1	20-NOV-09 18:41	per1120021a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13620

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322003

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.533	ug/kg	U	1	20-NOV-09 19:09	per1120025a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:09	per1120025a
14797-73-0	Perchlorate-101	.533	2.13	0.533	ug/kg	U	1	20-NOV-09 19:09	per1120025a
	Perchlorate-O(18)			5.41	ug/kg		1	20-NOV-09 19:09	per1120025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13619

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322004

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	20-NOV-09 19:16	per1120026a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:16	per1120026a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	20-NOV-09 19:16	per1120026a
	Perchlorate-O(18)			5.84	ug/kg		1	20-NOV-09 19:16	per1120026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13624

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322005

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	20-NOV-09 19:23	per1120027a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:23	per1120027a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	20-NOV-09 19:23	per1120027a
	Perchlorate-O(18)			6.35	ug/kg		1	20-NOV-09 19:23	per1120027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

DJS
01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13623

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322006

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 96.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.519	2.08	1.73	ug/kg	J	1	20-NOV-09 19:30	per1120028a
	Perchlorate Isotope Ratio			3.06			1	20-NOV-09 19:30	per1120028a
14797-73-0	Perchlorate-101	.519	2.08	1.69	ug/kg	J	1	20-NOV-09 19:30	per1120028a
	Perchlorate-O(18)			5.63	ug/kg		1	20-NOV-09 19:30	per1120028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

DJS
01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13626

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322007

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.592	2.37	0.592	ug/kg	U	1	20-NOV-09 19:37	per1120029a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:37	per1120029a
14797-73-0	Perchlorate-101	.592	2.37	0.592	ug/kg	U	1	20-NOV-09 19:37	per1120029a
	Perchlorate-O(18)			5.74	ug/kg		1	20-NOV-09 19:37	per1120029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

DJS
01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13621

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322008

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 95.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	0.524	ug/kg	U	1	20-NOV-09 19:44	per1120030a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:44	per1120030a
14797-73-0	Perchlorate-101	.524	2.1	0.524	ug/kg	U	1	20-NOV-09 19:44	per1120030a
	Perchlorate-O(18)			5.14	ug/kg		1	20-NOV-09 19:44	per1120030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

DJS
01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13627

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322009

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.538	2.15	0.538	ug/kg	U	1	20-NOV-09 19:51	per1120031a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:51	per1120031a
14797-73-0	Perchlorate-101	.538	2.15	0.538	ug/kg	U	1	20-NOV-09 19:51	per1120031a
	Perchlorate-O(18)			5.50	ug/kg		1	20-NOV-09 19:51	per1120031a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

DJS
01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13625

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322010

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.602	2.41	0.602	ug/kg	U	1	20-NOV-09 19:58	per1120032a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:58	per1120032a
14797-73-0	Perchlorate-101	.602	2.41	0.602	ug/kg	U	1	20-NOV-09 19:58	per1120032a
	Perchlorate-O(18)			6.09	ug/kg		1	20-NOV-09 19:58	per1120032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6084

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322011

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.573	2.29	0.573	ug/kg	U	1	20-NOV-09 20:05	per1120033a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:05	per1120033a
14797-73-0	Perchlorate-101	.573	2.29	0.573	ug/kg	U	1	20-NOV-09 20:05	per1120033a
	Perchlorate-O(18)			5.52	ug/kg		1	20-NOV-09 20:05	per1120033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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01/20/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6085

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322012

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 95.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.523	2.09	0.523	ug/kg	U	1	20-NOV-09 20:12	per1120034a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:12	per1120034a
14797-73-0	Perchlorate-101	.523	2.09	0.523	ug/kg	U	1	20-NOV-09 20:12	per1120034a
	Perchlorate-O(18)			5.05	ug/kg		1	20-NOV-09 20:12	per1120034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6088

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544-1

GEL Sample ID: 241325001

Date Filtered: 24-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 20:51	per1127067a
	Perchlorate Isotope Ratio						1	27-NOV-09 20:51	per1127067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 20:51	per1127067a
	Perchlorate-O(18)			0.461	ug/L		1	27-NOV-09 20:51	per1127067a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6090

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544-1

GEL Sample ID: 241325002

Date Filtered: 24-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 21:00	per1127068a
	Perchlorate Isotope Ratio						1	27-NOV-09 21:00	per1127068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 21:00	per1127068a
	Perchlorate-O(18)			0.466	ug/L		1	27-NOV-09 21:00	per1127068a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-544 VALIDATION DATE: 01/20/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: David Schwent ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☒ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The soil MS %R of Mg was <10%. All associated sample results were qualified R,I6. The soil MS %Rs of Ba, Ca, and K were < the LAL but ≥10%. All associated sample results were detects and, thus, were qualified J-,I6a. The soil %R of Na was > the laboratory UAL. All associated sample results were detects and, thus, were qualified J+,I6b. Also, the soil MS %Rs of Al, Fe, and Mn were outside acceptance limits. However, the parent sample concentrations were >4X the spike concentrations. Based on professional judgment, no sample data were qualified.

2. In the MB associated with the soil samples, Sb, Zn, and Si were detected. All associated Sb sample results were NDs and, thus, were not qualified. All other associated sample results were detects >50X the MB concentrations and, thus, were not qualified, based on professional judgment.

3. In the CCBs associated with the soil samples, U, Sb, and Si were detected. The associated U result of sample RE03-09-13618 was a detect ≤5X the CCB concentration and, thus, was qualified U,I4b. All associated Sb sample results were NDs and, thus, were not qualified. All associated Si sample results were detects >5X the CCB concentration and, thus, were not qualified. In the CCB associated with the water samples, Tl was detected. The associated result of sample -10-6088 was a

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

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detect ≤5X the CCB concentration and, thus, was qualified U,I4b. The other associated sample result was an ND and, thus, was not qualified.

4. In the FR blank, sample -10-6090, associated with all the soil samples, Cr, Al, Ba, Ca, Fe, Mn, Si, Na, and Ti were detected. All associated Cr sample results, except the result of sample -09-13619, were detects ≤5X the FR blank concentration and, thus, were qualified U,I4d. All other associated sample results were detects >5X the FR blank concentrations and, thus, were not qualified.

5. In the FB, sample -10-6088, associated with samples -09-13618, -09-13619, and -10-6084, Zn was detected. All associated sample results were detects >5X the FB concentrations and, thus, were not qualified.

6. The soil duplicate sample RPDs of Cr, Al, Co, Fe, and K were >35% and both the parent and duplicate sample results were ≥5X the PQLs. The associated Cr result of sample -09-13619 and all associated Al, Co, Fe, and K sample results were detects and, thus, were qualified J,I10a. All other associated Cr sample results were qualified NDs and, thus, were qualified UJ,I10a.

7. It should be noted that the matrix QC analyses for the soil and water CVAA batches were performed on LANL samples from other RNs and that the raw data for the parent samples were not included in the data package. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 1/20/10

VALIDATOR'S SIGNATURE: David Schmoll DATE: 01/20/10

Form 5118-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322001 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13618 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	2990000	ug/Kg	*	7820	23000	23000	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-36-0	Antimony		1150	ug/Kg	U	380	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-38-2	Arsenic		0.813	mg/kg	J	0.224	1.12	1.12	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-39-3	Barium	J-,I6a	42200	ug/Kg	*N	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-41-7	Beryllium		0.281	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-42-8	Boron		5750	ug/Kg	U	1150	5750	5750	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-43-9	Cadmium		575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-70-2	Calcium	J-,I6a	890000	ug/Kg	*N	9200	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-47-3	Chromium	U,I4d	3450	ug/Kg	*	173	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-48-4	Cobalt	J,I10a	1730	ug/Kg	*	173	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-50-8	Copper		2220	ug/Kg		345	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-89-6	Iron	J,I10a	9590000	ug/Kg	*	9200	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-92-1	Lead		4020	ug/Kg		288	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-93-2	Lithium		4.79	mg/kg		0.449	2.24	2.24	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7439-95-4	Magnesium	R,I6	1430000	ug/Kg	*N	9780	34500	34500	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-96-5	Manganese		235000	ug/Kg		230	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-97-6	Mercury		12.8	ug/kg	U	4.34	12.8	12.8	1	AV	JXL1	12/03/09 10:33	120309S1-6	924854
7440-02-0	Nickel		1.92	mg/kg	*	0.112	0.449	0.449	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-09-7	Potassium	J-,I6a	689000	ug/Kg	*N	7360	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7782-49-2	Selenium		1.12	mg/kg	U	0.561	1.12	1.12	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-21-3	Silicon		590000	ug/Kg		1710	11400	11400	1	P	HSC	12/10/09 08:55	121009-1	930802
7440-22-4	Silver		238	ug/Kg	J	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-23-5	Sodium	J+,I6b	144000	ug/Kg	*N	8050	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-28-0	Thallium		0.0832	mg/kg	J	0.0673	0.224	0.224	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-32-6	Titanium		220000	ug/Kg	N	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-61-1	Uranium	U,I4b	0.336	mg/kg	*	0.0148	0.0449	0.0449	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-62-2	Vanadium		6050	ug/Kg	*	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-66-6	Zinc		41000	ug/Kg	*	380	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.548	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.507	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.52	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322002 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13622 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.9

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1750000	ug/Kg	*	7190	21100	21100	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-36-0	Antimony		1060	ug/Kg	U	349	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-38-2	Arsenic		0.802	mg/kg	J	0.21	1.05	1.05	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-39-3	Barium	J-,I6a	25200	ug/Kg	*N	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-41-7	Beryllium		0.482	mg/kg		0.021	0.105	0.105	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-42-8	Boron		5280	ug/Kg	U	1060	5280	5280	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-43-9	Cadmium		528	ug/Kg	U	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-70-2	Calcium	J-,I6a	758000	ug/Kg	*N	8450	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-47-3	Chromium	U,I4d	1730	ug/Kg	*	159	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-48-4	Cobalt	J,I10a	493	ug/Kg	J*	159	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-50-8	Copper		2190	ug/Kg		317	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-89-6	Iron	J,I10a	6240000	ug/Kg	*	8450	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-92-1	Lead		13300	ug/Kg		264	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-93-2	Lithium		6.35	mg/kg		0.419	2.1	2.1	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7439-95-4	Magnesium	R,I6	351000	ug/Kg	*N	8980	31700	31700	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-96-5	Manganese		208000	ug/Kg		211	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-97-6	Mercury		7.4	ug/kg	J	4.07	12	12	1	AV	JXL1	12/03/09 10:35	120309S1-6	924854
7440-02-0	Nickel		3.6	mg/kg	*	0.105	0.419	0.419	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-09-7	Potassium	J-,I6a	346000	ug/Kg	*N	6760	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7782-49-2	Selenium		1.05	mg/kg	U	0.524	1.05	1.05	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-21-3	Silicon		712000	ug/Kg		1550	10300	10300	1	P	HSC	12/10/09 09:13	121009-1	930802
7440-22-4	Silver		223	ug/Kg	J	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-23-5	Sodium	J+,I6b	208000	ug/Kg	*N	7400	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-28-0	Thallium		0.0675	mg/kg	J	0.0629	0.21	0.21	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-32-6	Titanium		183000	ug/Kg	N	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-61-1	Uranium		0.521	mg/kg	*	0.0138	0.0419	0.0419	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-62-2	Vanadium		3670	ug/Kg	*	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-66-6	Zinc		30000	ug/Kg	*	349	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.534	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.504	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322003 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13620 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.8

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1980000	ug/Kg	*	7180	21100	21100	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-36-0	Antimony		1060	ug/Kg	U	348	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-38-2	Arsenic		1.05	mg/kg	J	0.213	1.06	1.06	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-39-3	Barium	J-,I6a	24400	ug/Kg	*N	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-41-7	Beryllium		0.380	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-42-8	Boron		5280	ug/Kg	U	1060	5280	5280	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-43-9	Cadmium		528	ug/Kg	U	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-70-2	Calcium	J-,I6a	712000	ug/Kg	*N	8440	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-47-3	Chromium	U,I4d	5350	ug/Kg	*	158	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-48-4	Cobalt	J,I10a	706	ug/Kg	*	158	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-50-8	Copper		2850	ug/Kg		317	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-89-6	Iron	J,I10a	7060000	ug/Kg	*	8440	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-92-1	Lead		37300	ug/Kg		264	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-93-2	Lithium		6.53	mg/kg		0.426	2.13	2.13	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7439-95-4	Magnesium	R,I6	332000	ug/Kg	*N	8970	31700	31700	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-96-5	Manganese		226000	ug/Kg		211	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-97-6	Mercury		11.9	ug/kg	J	4.22	12.4	12.4	1	AV	JXL1	12/03/09 10:37	120309S1-6	924854
7440-02-0	Nickel		2.25	mg/kg	*	0.106	0.426	0.426	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-09-7	Potassium	J-,I6a	378000	ug/Kg	*N	6750	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7782-49-2	Selenium		1.06	mg/kg	U	0.532	1.06	1.06	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-21-3	Silicon		758000	ug/Kg		1600	10700	10700	1	P	HSC	12/10/09 09:17	121009-1	930802
7440-22-4	Silver		270	ug/Kg	J	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-23-5	Sodium	J+,I6b	161000	ug/Kg	*N	7390	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-28-0	Thallium		0.331	mg/kg		0.0638	0.213	0.213	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-32-6	Titanium		256000	ug/Kg	N	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-61-1	Uranium		0.611	mg/kg	*	0.014	0.0426	0.0426	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-62-2	Vanadium		4760	ug/Kg	*	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-66-6	Zinc		36900	ug/Kg	*	348	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.515	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.505	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322004 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13619 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 85

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1610000	ug/Kg	*	7820	23000	23000	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-36-0	Antimony		1150	ug/Kg	U	379	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-38-2	Arsenic		3.61	mg/kg		0.226	1.13	1.13	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-39-3	Barium	J-,I6a	16600	ug/Kg	*N	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-41-7	Beryllium		0.553	mg/kg		0.0226	0.113	0.113	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-42-8	Boron		5750	ug/Kg	U	1150	5750	5750	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-43-9	Cadmium		575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-70-2	Calcium	J-,I6a	472000	ug/Kg	*N	9200	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-47-3	Chromium	J,I10a	14900	ug/Kg	*	172	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-48-4	Cobalt	J,I10a	604	ug/Kg	*	172	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-50-8	Copper		3120	ug/Kg		345	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-89-6	Iron	J,I10a	5860000	ug/Kg	*	9200	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-92-1	Lead		4320	ug/Kg		287	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-93-2	Lithium		4.37	mg/kg		0.452	2.26	2.26	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7439-95-4	Magnesium	R,I6	310000	ug/Kg	*N	9770	34500	34500	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-96-5	Manganese		112000	ug/Kg		230	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-97-6	Mercury		5.78	ug/kg	J	4.61	13.6	13.6	1	AV	JXL1	12/03/09 10:39	120309S1-6	924854
7440-02-0	Nickel		4.5	mg/kg	*	0.113	0.452	0.452	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-09-7	Potassium	J-,I6a	484000	ug/Kg	*N	7360	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7782-49-2	Selenium		1.13	mg/kg	U	0.565	1.13	1.13	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-21-3	Silicon		624000	ug/Kg		1720	11500	11500	1	P	HSC	12/10/09 09:28	121009-1	930802
7440-22-4	Silver		575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-23-5	Sodium	J+,I6b	245000	ug/Kg	*N	8050	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-28-0	Thallium		0.132	mg/kg	J	0.0678	0.226	0.226	2	MS	BAJ	11/27/09 19:11	091127-5	925185
7440-32-6	Titanium		149000	ug/Kg	N	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-61-1	Uranium		0.716	mg/kg	*	0.0149	0.0452	0.0452	2	MS	BAJ	11/27/09 18:27	091127-4	925185
7440-62-2	Vanadium		5100	ug/Kg	*	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-66-6	Zinc		24700	ug/Kg	*	379	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.518	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.518	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322005 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13624 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 77

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	2490000	ug/Kg	*	8760	25800	25800	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-36-0	Antimony		1290	ug/Kg	U	425	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-38-2	Arsenic		0.640	mg/kg	J	0.258	1.29	1.29	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-39-3	Barium	J-,I6a	15900	ug/Kg	*N	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-41-7	Beryllium		0.333	mg/kg		0.0258	0.129	0.129	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-42-8	Boron		6440	ug/Kg	U	1290	6440	6440	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-43-9	Cadmium		644	ug/Kg	U	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-70-2	Calcium	J-,I6a	603000	ug/Kg	*N	10300	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-47-3	Chromium	U,I4d	5300	ug/Kg	*	193	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-48-4	Cobalt	J,I10a	746	ug/Kg	*	193	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-50-8	Copper		4420	ug/Kg		386	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-89-6	Iron	J,I10a	7350000	ug/Kg	*	10300	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-92-1	Lead		12300	ug/Kg		322	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-93-2	Lithium		5.35	mg/kg		0.515	2.58	2.58	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7439-95-4	Magnesium	R,I6	488000	ug/Kg	*N	10900	38600	38600	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-96-5	Manganese		111000	ug/Kg		258	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-97-6	Mercury		15.5	ug/kg		5.22	15.4	15.4	1	AV	JXL1	12/03/09 10:41	120309S1-6	924854
7440-02-0	Nickel		1.96	mg/kg	*	0.129	0.515	0.515	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-09-7	Potassium	J-,I6a	790000	ug/Kg	*N	8240	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7782-49-2	Selenium		1.29	mg/kg	U	0.644	1.29	1.29	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-21-3	Silicon		808000	ug/Kg		1940	12900	12900	1	P	HSC	12/10/09 09:32	121009-1	930802
7440-22-4	Silver		681	ug/Kg		129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-23-5	Sodium	J+,I6b	384000	ug/Kg	*N	9020	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-28-0	Thallium		0.258	mg/kg	U	0.0773	0.258	0.258	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-32-6	Titanium		273000	ug/Kg	N	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-61-1	Uranium		0.582	mg/kg	*	0.017	0.0515	0.0515	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-62-2	Vanadium		5360	ug/Kg	*	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-66-6	Zinc		82400	ug/Kg	*	425	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.505	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.502	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.502	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322006 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13623 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 96.4

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1720000	ug/Kg	*	6920	20300	20300	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-36-0	Antimony		1020	ug/Kg	U	336	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-38-2	Arsenic		0.820	mg/kg	J	0.206	1.03	1.03	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-39-3	Barium	J-,I6a	22300	ug/Kg	*N	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-41-7	Beryllium		0.539	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-42-8	Boron		5090	ug/Kg	U	1020	5090	5090	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-43-9	Cadmium		509	ug/Kg	U	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-70-2	Calcium	J-,I6a	748000	ug/Kg	*N	8140	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-47-3	Chromium	U,I4d	3090	ug/Kg	*	153	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-48-4	Cobalt	J,I10a	460	ug/Kg	J*	153	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-50-8	Copper		4610	ug/Kg		305	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-89-6	Iron	J,I10a	6320000	ug/Kg	*	8140	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-92-1	Lead		8790	ug/Kg		254	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-93-2	Lithium		6.95	mg/kg		0.413	2.06	2.06	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7439-95-4	Magnesium	R,I6	345000	ug/Kg	*N	8650	30500	30500	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-96-5	Manganese		225000	ug/Kg		203	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-97-6	Mercury		11.3	ug/kg	J	3.97	11.7	11.7	1	AV	JXL1	12/03/09 10:43	120309S1-6	924854
7440-02-0	Nickel		1.99	mg/kg	*	0.103	0.413	0.413	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-09-7	Potassium	J-,I6a	333000	ug/Kg	*N	6510	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7782-49-2	Selenium		1.03	mg/kg	U	0.516	1.03	1.03	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-21-3	Silicon		583000	ug/Kg		1490	9940	9940	1	P	HSC	12/10/09 09:35	121009-1	930802
7440-22-4	Silver		198	ug/Kg	J	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-23-5	Sodium	J+,I6b	455000	ug/Kg	*N	7120	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-28-0	Thallium		0.0642	mg/kg	J	0.0619	0.206	0.206	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-32-6	Titanium		196000	ug/Kg	N	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-61-1	Uranium		0.626	mg/kg	*	0.0136	0.0413	0.0413	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-62-2	Vanadium		3820	ug/Kg	*	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-66-6	Zinc		31000	ug/Kg	*	336	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.533	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.51	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322007 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13626 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1810000	ug/Kg	*	8050	23700	23700	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-36-0	Antimony		1180	ug/Kg	U	391	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-38-2	Arsenic		0.755	mg/kg	J	0.23	1.15	1.15	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-39-3	Barium	J-,I6a	14600	ug/Kg	*N	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-41-7	Beryllium		0.405	mg/kg		0.023	0.115	0.115	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-42-8	Boron		5920	ug/Kg	U	1180	5920	5920	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-43-9	Cadmium		592	ug/Kg	U	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-70-2	Calcium	J-,I6a	326000	ug/Kg	*N	9470	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-47-3	Chromium	U,I4d	2600	ug/Kg	*	178	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-48-4	Cobalt	J,I10a	669	ug/Kg	*	178	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-50-8	Copper		2410	ug/Kg		355	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-89-6	Iron	J,I10a	5420000	ug/Kg	*	9470	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-92-1	Lead		6240	ug/Kg		296	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-93-2	Lithium		5.15	mg/kg		0.46	2.3	2.3	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7439-95-4	Magnesium	R,I6	268000	ug/Kg	*N	10100	35500	35500	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-96-5	Manganese		181000	ug/Kg		237	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-97-6	Mercury		7.95	ug/kg	J	4.02	11.8	11.8	1	AV	JXL1	12/03/09 10:49	120309S1-6	924854
7440-02-0	Nickel		1.51	mg/kg	*	0.115	0.46	0.46	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-09-7	Potassium	J-,I6a	471000	ug/Kg	*N	7570	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7782-49-2	Selenium		1.15	mg/kg	U	0.575	1.15	1.15	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-21-3	Silicon		572000	ug/Kg		1690	11300	11300	1	P	HSC	12/10/09 09:39	121009-1	930802
7440-22-4	Silver		477	ug/Kg	J	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-23-5	Sodium	J+,I6b	262000	ug/Kg	*N	8290	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-28-0	Thallium		0.230	mg/kg	U	0.0689	0.23	0.23	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-32-6	Titanium		183000	ug/Kg	N	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-61-1	Uranium		0.397	mg/kg	*	0.0152	0.046	0.046	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-62-2	Vanadium		3730	ug/Kg	*	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-66-6	Zinc		52700	ug/Kg	*	391	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.6	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.515	g	50	mL	11/21/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322008 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13621 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J,I10a	1830000	ug/Kg	*	7060	20800	20800	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-36-0	Antimony	1040	ug/Kg	U	343	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-38-2	Arsenic	1.39	mg/kg		0.2	0.999	0.999	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-39-3	Barium J-,I6a	17700	ug/Kg	*N	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-41-7	Beryllium	0.419	mg/kg		0.02	0.0999	0.0999	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-42-8	Boron	5190	ug/Kg	U	1040	5190	5190	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-43-9	Cadmium	519	ug/Kg	U	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-70-2	Calcium J-,I6a	299000	ug/Kg	*N	8310	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-47-3	Chromium U,I4d	4330	ug/Kg	*	156	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-48-4	Cobalt J,I10a	543	ug/Kg	*	156	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-50-8	Copper	2020	ug/Kg		311	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-89-6	Iron J,I10a	8100000	ug/Kg	*	8310	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-92-1	Lead	15900	ug/Kg		260	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-93-2	Lithium	5.94	mg/kg		0.4	2	2	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7439-95-4	Magnesium R,I6	179000	ug/Kg	*N	8830	31100	31100	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-96-5	Manganese	300000	ug/Kg		208	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-97-6	Mercury	12.2	ug/kg	U	4.15	12.2	12.2	1	AV	JXL1	12/03/09 10:51	120309S1-6	924854
7440-02-0	Nickel	2.27	mg/kg	*	0.0999	0.4	0.4	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-09-7	Potassium J-,I6a	372000	ug/Kg	*N	6650	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7782-49-2	Selenium	0.999	mg/kg	U	0.499	0.999	0.999	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-21-3	Silicon	483000	ug/Kg		1500	9990	9990	1	P	HSC	12/10/09 09:43	121009-1	930802
7440-22-4	Silver	369	ug/Kg	J	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-23-5	Sodium J+,I6b	250000	ug/Kg	*N	7270	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-28-0	Thallium	0.368	mg/kg		0.0599	0.2	0.2	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-32-6	Titanium	353000	ug/Kg	N	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-61-1	Uranium	0.567	mg/kg	*	0.0132	0.04	0.04	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-62-2	Vanadium	4010	ug/Kg	*	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-66-6	Zinc	38600	ug/Kg	*	343	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.515	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.505	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

DJS
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322009 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13627 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	3710000	ug/Kg	*	7320	21500	21500	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-36-0	Antimony		1080	ug/Kg	U	355	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-38-2	Arsenic		0.695	mg/kg	J	0.205	1.02	1.02	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-39-3	Barium	J-,I6a	18000	ug/Kg	*N	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-41-7	Beryllium		0.485	mg/kg		0.0205	0.102	0.102	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-42-8	Boron		5380	ug/Kg	U	1080	5380	5380	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-43-9	Cadmium		538	ug/Kg	U	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-70-2	Calcium	J-,I6a	351000	ug/Kg	*N	8610	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-47-3	Chromium	U,I4d	2440	ug/Kg	*	161	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-48-4	Cobalt	J,I10a	454	ug/Kg	J*	161	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-50-8	Copper		3360	ug/Kg		323	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-89-6	Iron	J,I10a	6160000	ug/Kg	*	8610	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-92-1	Lead		6350	ug/Kg		269	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-93-2	Lithium		7.71	mg/kg		0.41	2.05	2.05	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7439-95-4	Magnesium	R,I6	272000	ug/Kg	*N	9140	32300	32300	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-96-5	Manganese		126000	ug/Kg		215	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-97-6	Mercury		9.75	ug/kg	J	4.2	12.4	12.4	1	AV	JXL1	12/03/09 10:53	120309S1-6	924854
7440-02-0	Nickel		1.96	mg/kg	*	0.102	0.41	0.41	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-09-7	Potassium	J-,I6a	562000	ug/Kg	*N	6890	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7782-49-2	Selenium		1.02	mg/kg	U	0.512	1.02	1.02	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-21-3	Silicon		558000	ug/Kg		1560	10400	10400	1	P	HSC	12/10/09 09:46	121009-1	930802
7440-22-4	Silver		398	ug/Kg	J	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-23-5	Sodium	J+,I6b	345000	ug/Kg	*N	7530	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-28-0	Thallium		0.205	mg/kg	U	0.0615	0.205	0.205	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-32-6	Titanium		177000	ug/Kg	N	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-61-1	Uranium		0.609	mg/kg	*	0.0135	0.041	0.041	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-62-2	Vanadium		4150	ug/Kg	*	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-66-6	Zinc		43700	ug/Kg	*	355	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.522	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

DJS
01/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322010 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13625 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J,I10a	2520000	ug/Kg	*	7850	23100	23100	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-36-0	Antimony	1160	ug/Kg	U	381	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-38-2	Arsenic	0.70	mg/kg	J	0.238	1.19	1.19	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-39-3	Barium J-,I6a	12300	ug/Kg	*N	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-41-7	Beryllium	0.516	mg/kg		0.0238	0.119	0.119	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-42-8	Boron	5780	ug/Kg	U	1160	5780	5780	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-43-9	Cadmium	578	ug/Kg	U	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-70-2	Calcium J-,I6a	169000	ug/Kg	*N	9240	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-47-3	Chromium U,I4d	5390	ug/Kg	*	173	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-48-4	Cobalt J,I10a	351	ug/Kg	J*	173	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-50-8	Copper	1990	ug/Kg		347	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-89-6	Iron J,I10a	6500000	ug/Kg	*	9240	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-92-1	Lead	5710	ug/Kg		289	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-93-2	Lithium	4.5	mg/kg		0.477	2.38	2.38	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7439-95-4	Magnesium R,I6	168000	ug/Kg	*N	9820	34700	34700	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-96-5	Manganese	142000	ug/Kg		231	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-97-6	Mercury	13.4	ug/kg	U	4.55	13.4	13.4	1	AV	JXL1	12/03/09 10:55	120309S1-6	924854
7440-02-0	Nickel	1.54	mg/kg	*	0.119	0.477	0.477	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-09-7	Potassium J-,I6a	580000	ug/Kg	*N	7390	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7782-49-2	Selenium	1.19	mg/kg	U	0.596	1.19	1.19	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-21-3	Silicon	617000	ug/Kg		1760	11800	11800	1	P	HSC	12/10/09 09:50	121009-1	930802
7440-22-4	Silver	193	ug/Kg	J	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-23-5	Sodium J+,I6b	448000	ug/Kg	*N	8090	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-28-0	Thallium	0.238	mg/kg	U	0.0715	0.238	0.238	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-32-6	Titanium	189000	ug/Kg	N	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-61-1	Uranium	0.617	mg/kg	*	0.0157	0.0477	0.0477	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-62-2	Vanadium	3540	ug/Kg	*	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-66-6	Zinc	43400	ug/Kg	*	381	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.54	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.521	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.505	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322011 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6084 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1530000	ug/Kg	*	7780	22900	22900	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-36-0	Antimony		1140	ug/Kg	U	378	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-38-2	Arsenic		0.801	mg/kg	J	0.219	1.1	1.1	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-39-3	Barium	J-,I6a	24400	ug/Kg	*N	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-41-7	Beryllium		0.253	mg/kg		0.0219	0.11	0.11	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-42-8	Boron		5720	ug/Kg	U	1140	5720	5720	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-43-9	Cadmium		572	ug/Kg	U	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-70-2	Calcium	J-,I6a	601000	ug/Kg	*N	9160	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-47-3	Chromium	U,I4d	3320	ug/Kg	*	172	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-48-4	Cobalt	J,I10a	957	ug/Kg	*	172	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-50-8	Copper		2160	ug/Kg		343	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-89-6	Iron	J,I10a	5570000	ug/Kg	*	9160	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-92-1	Lead		5340	ug/Kg		286	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-93-2	Lithium		4.1	mg/kg		0.439	2.19	2.19	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7439-95-4	Magnesium	R,I6	330000	ug/Kg	*N	9730	34300	34300	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-96-5	Manganese		197000	ug/Kg		229	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-97-6	Mercury		12.4	ug/kg	U	4.23	12.4	12.4	1	AV	JXL1	12/03/09 10:57	120309S1-6	924854
7440-02-0	Nickel		1.81	mg/kg	*	0.11	0.439	0.439	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-09-7	Potassium	J-,I6a	401000	ug/Kg	*N	7320	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7782-49-2	Selenium		1.1	mg/kg	U	0.548	1.1	1.1	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-21-3	Silicon		472000	ug/Kg		1670	11100	11100	1	P	HSC	12/10/09 09:54	121009-1	930802
7440-22-4	Silver		572	ug/Kg	U	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-23-5	Sodium	J+,I6b	178000	ug/Kg	*N	8010	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-28-0	Thallium		0.219	mg/kg	U	0.0658	0.219	0.219	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-32-6	Titanium		220000	ug/Kg	N	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-61-1	Uranium		0.302	mg/kg	*	0.0145	0.0439	0.0439	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-62-2	Vanadium		4040	ug/Kg	*	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-66-6	Zinc		36700	ug/Kg	*	378	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.553	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.523	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322012 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6085 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.6

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J,I10a	1790000	ug/Kg	*	6880	20200	20200	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-36-0	Antimony		1010	ug/Kg	U	334	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-38-2	Arsenic		1.34	mg/kg		0.206	1.03	1.03	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-39-3	Barium	J-,I6a	17900	ug/Kg	*N	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-41-7	Beryllium		0.422	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-42-8	Boron		5060	ug/Kg	U	1010	5060	5060	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-43-9	Cadmium		506	ug/Kg	U	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-70-2	Calcium	J-,I6a	298000	ug/Kg	*N	8100	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-47-3	Chromium	U,I4d	4120	ug/Kg	*	152	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-48-4	Cobalt	J,I10a	615	ug/Kg	*	152	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-50-8	Copper		2030	ug/Kg		304	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-89-6	Iron	J,I10a	7790000	ug/Kg	*	8100	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-92-1	Lead		16200	ug/Kg		253	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-93-2	Lithium		6.11	mg/kg		0.411	2.06	2.06	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7439-95-4	Magnesium	R,I6	168000	ug/Kg	*N	8600	30400	30400	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-96-5	Manganese		323000	ug/Kg		202	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-97-6	Mercury		5.69	ug/kg	J	4.23	12.4	12.4	1	AV	JXL1	12/03/09 10:59	120309S1-6	924854
7440-02-0	Nickel		2.25	mg/kg	*	0.103	0.411	0.411	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-09-7	Potassium	J-,I6a	398000	ug/Kg	*N	6480	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7782-49-2	Selenium		1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-21-3	Silicon		482000	ug/Kg		1500	10000	10000	1	P	HSC	12/10/09 09:57	121009-1	930802
7440-22-4	Silver		220	ug/Kg	J	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-23-5	Sodium	J+,I6b	265000	ug/Kg	*N	7080	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-28-0	Thallium		0.365	mg/kg		0.0617	0.206	0.206	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-32-6	Titanium		391000	ug/Kg	N	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-61-1	Uranium		0.582	mg/kg	*	0.0136	0.0411	0.0411	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-62-2	Vanadium		3940	ug/Kg	*	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-66-6	Zinc		40700	ug/Kg	*	334	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.505	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.517	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241325001 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6088 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:16	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:14	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 16:16	120409A-1	925377
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 16:16	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 16:16	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:38	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 16:16	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-28-0	Thallium U,I4b	0.490	ug/L	J	0.3	1	1	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:20	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-66-6	Zinc	9.12	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 16:16	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

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01/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241325002 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6090 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	78.2	ug/L	J	68	200	200	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:26	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-39-3	Barium	2.83	ug/L	J	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:21	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7440-70-2	Calcium	56.5	ug/L	J	50	200	200	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-47-3	Chromium	12.7	ug/L		1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 16:44	120409A-1	925377
7439-89-6	Iron	113	ug/L		30	100	100	1	P	HSC	12/04/09 16:44	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 16:44	120409A-1	925377
7439-96-5	Manganese	6.67	ug/L		1	5	5	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:40	112509W1-7	924857
7440-02-0	Nickel	6.43	ug/L		1.5	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 16:44	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-21-3	Silicon	170	ug/L		25	100	100	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-23-5	Sodium	215	ug/L	J	100	300	300	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7440-32-6	Titanium	1.84	ug/L	J	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:30	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 16:44	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

DJS
01/20/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-544 VALIDATION DATE: 01/20/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: David Schwent ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☒ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the ICB associated with the soil samples, total CN was detected. The associated results of samples RE03-09-13624, -09-13626, -09-13627, and -09-13625 were detects >5X the ICB concentration and, thus, were not qualified. All other associated sample results were NDs and, thus, were not qualified. In the ICB associated with the water samples, total CN was detected. All associated sample results were NDs and, thus, were not qualified.

2. In the FB, sample -10-6088, associated with samples -09-13618, -09-13619, and -10-6084, nitrate/nitrite was detected. The associated results of samples -09-13618 and -10-6084 were detects ≤5X the FB concentration and, thus, were qualified U,I4d. The associated result of sample -09-13619 was an ND and, thus, was not qualified.

3. The soil MS %R of nitrate-N was > the laboratory UAL. All associated nitrate-N sample results were NDs or qualified NDs and, thus, were qualified UJ,I6b.

4. The analysis included multiple matrix QC samples. For the batch, the QC sample most comparable to the matrix of this

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

RN was selected for data validation purposes, and the extraneous QC samples were not evaluated. No sample results were qualified.

Reviewed by: ETM Level: 1 Date: 1/20/10

VALIDATOR'S SIGNATURE: David Schmoll DATE: 01/20/10

Form 5120-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 **General Chemistry Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☒	☐	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13622	Project:	LANL01004
Sample ID:	241322002	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.12%		

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal												
SW9045C pH Federal "As Received"												
pH at Temp 21.1C	H	6.60		0.010	0.100	SU	1	TXT1	11/19/09	1458	924497	1
Flow Injection Analysis Federal												
SW9012A Cyanide, Total Federal "Dry Weight Corrected"												
Cyanide, Total	U	ND		71.0	261	ug/kg	1	AXC2	11/27/09	1127	923861	2
Ion Chromatography Federal												
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"												
Nitrate-N	U	ND	UJ,I6b	0.308	1.03	mg/kg	1	VH1	12/09/09	0742	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1602	923858

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13620	Project:	LANL01004
Sample ID:	241322003	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.18%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.9C	H	6.39		0.010	0.100	SU	1	TXT1 11/19/09	1501	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND		69.7	256	ug/kg	1	AXC2 11/27/09	1133	923861	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6b	0.279	0.929	mg/kg	1	VH1 12/09/09	0808	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1602	923858

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13619	Project:	LANL01004
Sample ID:	241322004	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	14.6%		

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal												
SW9045C pH Federal "As Received"												
pH at Temp 21.0C	H	7.51		0.010	0.100	SU	1	TXT1	11/19/09	1505	924497	1
Flow Injection Analysis Federal												
SW9012A Cyanide, Total Federal "Dry Weight Corrected"												
Cyanide, Total	U	ND		73.7	271	ug/kg	1	AXC2	11/23/09	1513	924475	2
Ion Chromatography Federal												
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"												
Nitrate-N	U	ND	UJ,I6b	0.307	1.02	mg/kg	1	VH1	12/09/09	0834	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13618	Project:	LANL01004
Sample ID:	241322001	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	14.3%		

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal												
SW9045C pH Federal "As Received"												
pH at Temp 20.9C	H	7.29		0.010	0.100	SU	1	TXT1	11/19/09	1452	924497	1
Flow Injection Analysis Federal												
SW9012A Cyanide, Total Federal "Dry Weight Corrected"												
Cyanide, Total	U	ND		69.6	256	ug/kg	1	AXC2	11/27/09	1126	923861	2
Ion Chromatography Federal												
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"												
Nitrate-N		1.74	U,I4d	0.350	1.17	mg/kg	1	VH1	12/09/09	0715	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1602	923858

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13624	Project:	LANL01004
Sample ID:	241322005	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	22.7%		

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal												
SW9045C pH Federal "As Received"												
pH at Temp 21.0C	H	7.35		0.010	0.100	SU	1	TXT1	11/19/09	1510	924497	1
Flow Injection Analysis Federal												
SW9012A Cyanide, Total Federal "Dry Weight Corrected"												
Cyanide, Total		1540		86.2	317	ug/kg	1	AXC2	11/23/09	1516	924475	2
Ion Chromatography Federal												
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"												
Nitrate-N	U	ND	UJ,I6b	0.343	1.14	mg/kg	1	VH1	12/09/09	0900	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13623	Project:	LANL01004
Sample ID:	241322006	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	3.64%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.9C	H	8.67		0.010	0.100	SU	1	TXT1 11/19/09	1513	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND		69.2	254	ug/kg	1	AXC2 11/23/09	1523	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6b	0.278	0.927	mg/kg	1	VH1 12/09/09	0926	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13626	Project:	LANL01004
Sample ID:	241322007	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	15.5%		

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal												
SW9045C pH Federal "As Received"												
pH at Temp 20.9C	H	7.68		0.010	0.100	SU	1	TXT1	11/19/09	1515	924497	1
Flow Injection Analysis Federal												
SW9012A Cyanide, Total Federal "Dry Weight Corrected"												
Cyanide, Total		1170		78.9	290	ug/kg	1	AXC2	11/23/09	1524	924475	2
Ion Chromatography Federal												
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"												
Nitrate-N	U	ND	UJ,I6b	0.337	1.12	mg/kg	1	VH1	12/09/09	0952	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

DJS
01/20/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13621	Project:	LANL01004
Sample ID:	241322008	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	4.64%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.9C	H	6.71		0.010	0.100	SU	1	TXT1 11/19/09	1516	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND		69.9	257	ug/kg	1	AXC2 11/23/09	1525	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6b	0.299	0.996	mg/kg	1	VH1 12/09/09	1018	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13627	Project:	LANL01004
Sample ID:	241322009	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	7.05%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.5C	H	7.37		0.010	0.100	SU	1	TXT1 11/19/09	1518	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total		1610		70.3	259	ug/kg	1	AXC2 11/23/09	1526	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6b	0.297	0.992	mg/kg	1	VH1 12/09/09	1136	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13625	Project:	LANL01004
Sample ID:	241322010	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	16.9%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.6C	H	7.88		0.010	0.100	SU	1	TXT1 11/19/09	1526	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total		289		73.1	269	ug/kg	1	AXC2 11/23/09	1527	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6b	0.302	1.01	mg/kg	1	VH1 12/09/09	1202	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-10-6084	Project:	LANL01004
Sample ID:	241322011	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	12.8%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.7C	H	7.36		0.010	0.100	SU	1	TXT1 11/19/09	1528	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND		75.0	276	ug/kg	1	AXC2 11/23/09	1528	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.38	U,I4d	0.301	1.00	mg/kg	1	VH1 12/09/09	1229	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-10-6085	Project:	LANL01004
Sample ID:	241322012	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	4.43%		

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal												
SW9045C pH Federal "As Received"												
pH at Temp 20.7C	H	6.75		0.010	0.100	SU	1	TXT1	11/19/09	1531	924497	1
Flow Injection Analysis Federal												
SW9012A Cyanide, Total Federal "Dry Weight Corrected"												
Cyanide, Total	U	ND		68.4	252	ug/kg	1	AXC2	11/23/09	1529	924475	2
Ion Chromatography Federal												
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"												
Nitrate-N	U	ND	UJ,I6b	0.300	1.00	mg/kg	1	VH1	12/09/09	1413	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 26, 2009

Client SDG: 10-544-1

Client Sample ID:	RE03-10-6088	Project:	LANL01004
Sample ID:	241325001	Client ID:	LANL010
Matrix:	W		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1703	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	J	0.061	0.050	0.250	mg/L	5	AXH3 11/24/09	1431	924449	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

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GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 26, 2009

Client SDG: 10-544-1

Client Sample ID: RE03-10-6090
Sample ID: 241325002
Matrix: W
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1704	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.050	0.250	mg/L	5	AXH3 11/23/09	1152	924449	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

DJS
01/20/10

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-544

REQUEST NUMBER: 10-544

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241322, 241325 °/-

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	POLY	METALS-GEL	Ice	S
RE03-09-13618	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13622	1	POLY	METALS-GEL	Ice	S
RE03-09-13622	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13620	1	POLY	METALS-GEL	Ice	S
RE03-09-13620	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13619	1	POLY	METALS-GEL	Ice	S
RE03-09-13619	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13624	1	POLY	METALS-GEL	Ice	S
RE03-09-13624	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13623	1	POLY	METALS-GEL	Ice	S
RE03-09-13623	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13626	1	POLY	METALS-GEL	Ice	S
RE03-09-13626	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13621	1	POLY	METALS-GEL	Ice	S
RE03-09-13621	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13627	1	POLY	METALS-GEL	Ice	S
RE03-09-13627	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13625	1	POLY	METALS-GEL	Ice	S
RE03-09-13625	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-6088	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6088	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE03-10-6088	1	POLY	SW-846:6850	Ice	W
RE03-10-6088	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6090	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6090	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE03-10-6090	1	POLY	SW-846:6850	Ice	W
RE03-10-6090	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6084	1	POLY	METALS-GEL	Ice	S
RE03-10-6084	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-6085	1	POLY	METALS-GEL	Ice	S

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-544

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-10-6085	1	POLY	Perchlorate+CN+N03+pH	Ice	S

Relinquished By:	Date	Time	Received By:	Date	Time
Printed Name / Signature	11/17/09	1400	Patricia Dover-Dent / P. Dickert	11-18-09	08:50
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-544
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009
TURNAROUND/REPORT DUE: 12/17/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	EPA:353.2	1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6010B	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13626	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6020	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13626	S	11/16/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6850	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:7471A	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13626	S	11/16/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Tl, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	SW-846:9012A	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:9045C	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-544

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 23, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241322 241325
SDG: 10-544

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 18, 2009, and analyzed for General Chemistry, Metals and Perchlorates by LCMSMS. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-544
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241322 and 241325
SDG: 10-544

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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241322 and 241325
SDG # : 10-544

November 23, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 18, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241322001	RE03-09-13618
241322002	RE03-09-13622
241322003	RE03-09-13620
241322004	RE03-09-13619
241322005	RE03-09-13624
241322006	RE03-09-13623
241322007	RE03-09-13626
241322008	RE03-09-13621
241322009	RE03-09-13627
241322010	RE03-09-13625
241322011	RE03-10-6084
241322012	RE03-10-6085
241325001	RE03-10-6088
241325002	RE03-10-6090

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry, Metals and Perchlorates by LCMSMS.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Valerie Davis

Valerie Davis

Project Manager

List of current GEL Certifications as of 23 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-544

REQUEST NUMBER: 10-544

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241322, 241325 °/-

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13618	1	POLY	METALS-GEL	Ice	S
RE03-09-13618	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13622	1	POLY	METALS-GEL	Ice	S
RE03-09-13622	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13620	1	POLY	METALS-GEL	Ice	S
RE03-09-13620	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13619	1	POLY	METALS-GEL	Ice	S
RE03-09-13619	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13624	1	POLY	METALS-GEL	Ice	S
RE03-09-13624	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13623	1	POLY	METALS-GEL	Ice	S
RE03-09-13623	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13626	1	POLY	METALS-GEL	Ice	S
RE03-09-13626	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13621	1	POLY	METALS-GEL	Ice	S
RE03-09-13621	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13627	1	POLY	METALS-GEL	Ice	S
RE03-09-13627	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-09-13625	1	POLY	METALS-GEL	Ice	S
RE03-09-13625	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-6088	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6088	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE03-10-6088	1	POLY	SW-846:6850	Ice	W
RE03-10-6088	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6090	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6090	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE03-10-6090	1	POLY	SW-846:6850	Ice	W
RE03-10-6090	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6084	1	POLY	METALS-GEL	Ice	S
RE03-10-6084	1	POLY	Perchlorate+CN+N03+pH	Ice	S
RE03-10-6085	1	POLY	METALS-GEL	Ice	S

Tuesday, November 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-544

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-10-6085	1	POLY	Perchlorate+CN+N03+pH	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	11/17/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-18-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-544

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/17/2009

TURNAROUND/REPORT DUE: 12/17/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	EPA:353.2	1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6010B	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13626	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6020	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13626	S	11/16/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:6850	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:7471A	1	RE03-09-13618	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13619	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13620	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13621	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13622	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13623	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13624	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13625	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13626	S	11/16/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE03-09-13627	S	11/16/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
	SW-846:9012A	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	
		1	RE03-10-6085	S	11/16/2009	
		1	RE03-10-6088	W	11/16/2009	
		1	RE03-10-6090	W	11/16/2009	
	SW-846:9045C	1	RE03-09-13618	S	11/16/2009	
		1	RE03-09-13619	S	11/16/2009	
		1	RE03-09-13620	S	11/16/2009	
		1	RE03-09-13621	S	11/16/2009	
		1	RE03-09-13622	S	11/16/2009	
		1	RE03-09-13623	S	11/16/2009	
		1	RE03-09-13624	S	11/16/2009	
		1	RE03-09-13625	S	11/16/2009	
		1	RE03-09-13626	S	11/16/2009	
		1	RE03-09-13627	S	11/16/2009	
		1	RE03-10-6084	S	11/16/2009	

Tuesday, November 17, 2009

REQUEST NUMBER: 10-544

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE03-10-6085	S	11/16/2009	

Final Page of REQUEST NUMBER 10-544

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-544**
Received By: Patricia Dover-Dent	**Date Received: November 18, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **30 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other (describe) **3-6C** **15C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?			X	Sample ID's affected: **time written on containers, not on COC**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S
7209 7848 9307 3C 7209 7848 9260 15C
7209 7848 9362 3C
7209 7848 9270 4C
7209 7848 9329 4C
7209 7848 9351 5C
7209 7848 9318 5C
7209 7848 9330 6C
7209 7848 9373 15C

PM (or PMA) review: Initials _____ Date 11/19/09

ENE VALDEZ
ALAMOS NATL LAB.
BLDG 1237 DPU 03

ALAMOS, NM 87545
TED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

ILERIE DAVIS
ENERAL ENGINEERING LAB
040 SAVAGE RD

HARLESTON SC 29407
43)556-8171
EF: 6B010AWE6L11570000

3°

FedEx Express

RK# 201 7209 7848 9307

WED - 18NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS, NM 87545
UNITED STATES US

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

3°

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MPS# 0263 7209 7848 9362
Mstr# 7209 7848 9351 0201
2 of 2

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PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ID: SAFA (505)665-9968
E VALDEZ
AMOS NATL LAB.
LDG 1237 DPU 03

AMOS, NM 87545
STATES US

SHIP DATE: 17NOV09
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

ERIE DAVIS
ERAL ENGINEERING LAB
0 SAVAGE RD

ARLESTON SC 29407
)556-8171
: 6B010AMR1A015AGWL0

4°

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3 of 3
S# 7209 7848 9270
209 7848 9259 0201

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PRIORITY OVERNIGHT

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4°

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MPS# 0263 7209 7848 9329
Mstr# 7209 7848 9318 0201
2 of 2

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PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

IN ID: SAFA (505)665-9968
ENE VALDEZ
ALAMOS NATL LAB.
BLDG 1237 DPU 03

ALAMOS, NM 87545
ED STATES US

SHIP DATE: 17NOV09
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

LERIE DAVIS
NERAL ENGINEERING LAB
40 SAVAGE RD

5°

ARLESTON SC 29407
)556-8171
: 6B010AMR2A054196D0

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1 of 2
7209 7848 9351
MASTER ##

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PRIORITY OVERNIGHT

29407
SC-US
CHS

X CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17NOV09
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

5°

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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1 of 2
TRK# 0201 7209 7848 9318
MASTER

WED - 18NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: [illegible]
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

6°

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9330

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A0224JFT0

15°

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Part # 156146-434 NRIT 7/3 09-06

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SHIP DATE: 17NOV09
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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-544

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	924759
Prep Batch Number:	924758

Sample Analysis

Sample ID	**Client ID**
241322001	RE03-09-13618
241322002	RE03-09-13622
241322003	RE03-09-13620
241322004	RE03-09-13619
241322005	RE03-09-13624
241322006	RE03-09-13623
241322007	RE03-09-13626
241322008	RE03-09-13621
241322009	RE03-09-13627
241322010	RE03-09-13625
241322011	RE03-10-6084
241322012	RE03-10-6085
1201976896	Interference Check Sample (ICS)
1201976892	Method Blank (MB)

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1201976893	Laboratory Control Sample (LCS)
1201976894	241322001(RE03-09-13618) Matrix Spike (MS)
1201976895	241322001(RE03-09-13618) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241322001 (RE03-09-13618) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

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Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

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Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Heather M Mauer **Date:** 11/27/09

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13618

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322001

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.583	2.33	0.583	ug/kg	U	1	20-NOV-09 18:20	per1120018a
	Perchlorate Isotope Ratio						1	20-NOV-09 18:20	per1120018a
14797-73-0	Perchlorate-101	.583	2.33	0.583	ug/kg	U	1	20-NOV-09 18:20	per1120018a
	Perchlorate-O(18)			5.73	ug/kg		1	20-NOV-09 18:20	per1120018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13622

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322002

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.900	ug/kg	J	1	20-NOV-09 18:41	per1120021a
	Perchlorate Isotope Ratio			3.08			1	20-NOV-09 18:41	per1120021a
14797-73-0	Perchlorate-101	.533	2.13	0.871	ug/kg	J	1	20-NOV-09 18:41	per1120021a
	Perchlorate-O(18)			5.55	ug/kg		1	20-NOV-09 18:41	per1120021a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13620

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322003

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.533	ug/kg	U	1	20-NOV-09 19:09	per1120025a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:09	per1120025a
14797-73-0	Perchlorate-101	.533	2.13	0.533	ug/kg	U	1	20-NOV-09 19:09	per1120025a
	Perchlorate-O(18)			5.41	ug/kg		1	20-NOV-09 19:09	per1120025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13619

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322004

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	20-NOV-09 19:16	per1120026a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:16	per1120026a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	20-NOV-09 19:16	per1120026a
	Perchlorate-O(18)			5.84	ug/kg		1	20-NOV-09 19:16	per1120026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13624

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322005

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	20-NOV-09 19:23	per1120027a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:23	per1120027a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	20-NOV-09 19:23	per1120027a
	Perchlorate-O(18)			6.35	ug/kg		1	20-NOV-09 19:23	per1120027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13623

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322006

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 96.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.519	2.08	1.73	ug/kg	J	1	20-NOV-09 19:30	per1120028a
	Perchlorate Isotope Ratio			3.06			1	20-NOV-09 19:30	per1120028a
14797-73-0	Perchlorate-101	.519	2.08	1.69	ug/kg	J	1	20-NOV-09 19:30	per1120028a
	Perchlorate-O(18)			5.63	ug/kg		1	20-NOV-09 19:30	per1120028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13626

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322007

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.592	2.37	0.592	ug/kg	U	1	20-NOV-09 19:37	per1120029a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:37	per1120029a
14797-73-0	Perchlorate-101	.592	2.37	0.592	ug/kg	U	1	20-NOV-09 19:37	per1120029a
	Perchlorate-O(18)			5.74	ug/kg		1	20-NOV-09 19:37	per1120029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13621

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322008

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 95.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	0.524	ug/kg	U	1	20-NOV-09 19:44	per1120030a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:44	per1120030a
14797-73-0	Perchlorate-101	.524	2.1	0.524	ug/kg	U	1	20-NOV-09 19:44	per1120030a
	Perchlorate-O(18)			5.14	ug/kg		1	20-NOV-09 19:44	per1120030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13627

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322009

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.538	2.15	0.538	ug/kg	U	1	20-NOV-09 19:51	per1120031a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:51	per1120031a
14797-73-0	Perchlorate-101	.538	2.15	0.538	ug/kg	U	1	20-NOV-09 19:51	per1120031a
	Perchlorate-O(18)			5.50	ug/kg		1	20-NOV-09 19:51	per1120031a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13625

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322010

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.602	2.41	0.602	ug/kg	U	1	20-NOV-09 19:58	per1120032a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:58	per1120032a
14797-73-0	Perchlorate-101	.602	2.41	0.602	ug/kg	U	1	20-NOV-09 19:58	per1120032a
	Perchlorate-O(18)			6.09	ug/kg		1	20-NOV-09 19:58	per1120032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6084

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322011

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.573	2.29	0.573	ug/kg	U	1	20-NOV-09 20:05	per1120033a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:05	per1120033a
14797-73-0	Perchlorate-101	.573	2.29	0.573	ug/kg	U	1	20-NOV-09 20:05	per1120033a
	Perchlorate-O(18)			5.52	ug/kg		1	20-NOV-09 20:05	per1120033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6085

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322012

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 95.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.523	2.09	0.523	ug/kg	U	1	20-NOV-09 20:12	per1120034a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:12	per1120034a
14797-73-0	Perchlorate-101	.523	2.09	0.523	ug/kg	U	1	20-NOV-09 20:12	per1120034a
	Perchlorate-O(18)			5.05	ug/kg		1	20-NOV-09 20:12	per1120034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–544

Extract Batch Code: 924758

Date Filtered: 20–NOV–09

Matrix: SOIL

Sample ID: 1201976893

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.98	ug/kg	99.1		–
Perchlorate Isotope Ratio		3.04				–
Perchlorate–101	2.00	1.94	ug/kg	97.2		–
Perchlorate–O(18)		4.74	ug/kg			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–544

Extract Batch Code: 924758

Date Filtered: 20–NOV–09

Matrix: SOIL

Sample ID: 1201976896

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.07	ug/kg	103		70 – 130
Perchlorate Isotope Ratio		2.92				
Perchlorate–101	2.00	2.11	ug/kg	105		70 – 130
Perchlorate–O(18)		4.99	ug/kg			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120014a
Date: 20-Nov-2009
Time: 17:51:54
ID: 1201976896
Vial: 1:3,C

ILAW | 924759 | 50120 | ICS | 11

CWW 11-22-09

Perchlorate

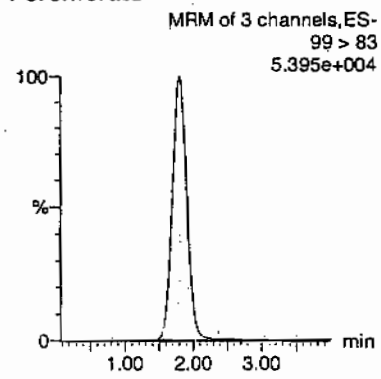

Perchlorate

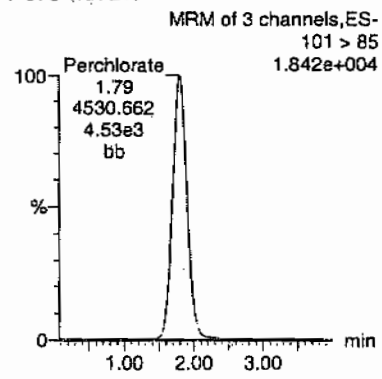

Perchlorate-101

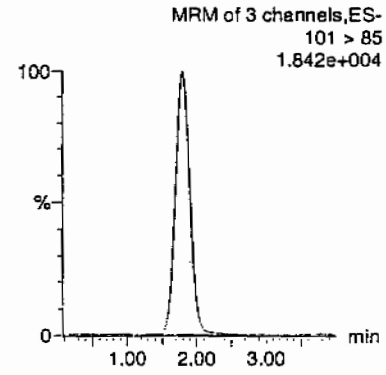

Perchlorate-O(18)

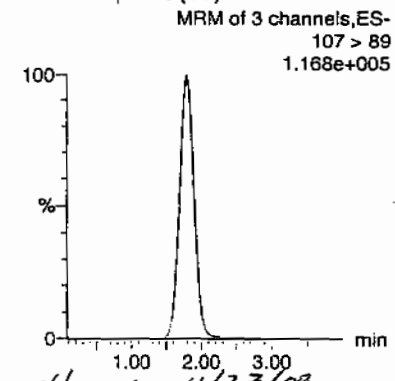

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976896	Perchlorate	99 > 83	1.81	13246.484	13246.484	bb			0.2068	103.41	3.41	1155.4...	2.92
1201976896	Perchlorate-101	101 > 85	1.79	4530.662	4530.662	bb			0.2109	105.46	5.46	1584.0...	
1201976896	Perchlorate-O(18)	107 > 89	1.79	28574.160	28574.160	bb			0.4987	99.75	-0.25	7102.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–544

Extract Batch Code: 924758

Date Extracted: 20–NOV–09

GEL MS/PS ID: 1201976894

Client ID: RE03–09–13618

GEL MSD/PSD ID: 1201976895

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.33	0.0314	ug/kg	2.42	103	2.33	98.4	4.09	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.08		2.98		0		–
Perchlorate–101	2.33	0.0324	ug/kg	2.35	99.2	2.33	98.3	.915	30	75 – 125
Perchlorate–O(18)	0	5.73	ug/kg	5.90		5.77		2.16		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–544

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	20–NOV–09	per1120001a	IPB001
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120001a	IPB001
Perchlorate	0.00	0	NA	20–NOV–09	per1120002a	IPB001
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120002a	IPB001

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112009a.mdb 21 Nov 2009 12:25:39
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112009a.cdb 21 Nov 2009 12:25:49

Name: per1120001a
Date: 20-Nov-2009
Time: 16:20:15
ID: IPB001
Vial: 1:1,A

11-22-09

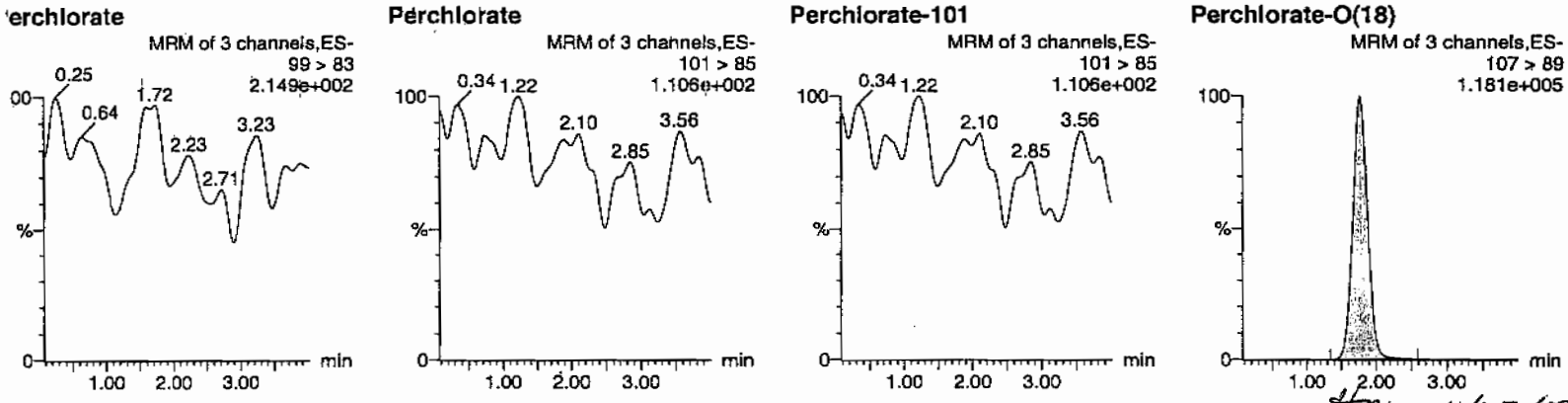

HNM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	1.77	29454.158	29454.158	bb			0.5141	102.82	2.82	35946....	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120002a
Date: 20-Nov-2009
Time: 16:27:28
ID: IPB001
Vial: 1:1,A

ang 11-22-09

Perchlorate

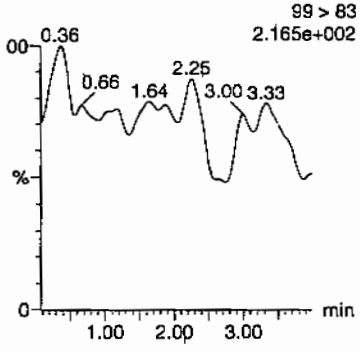

Perchlorate

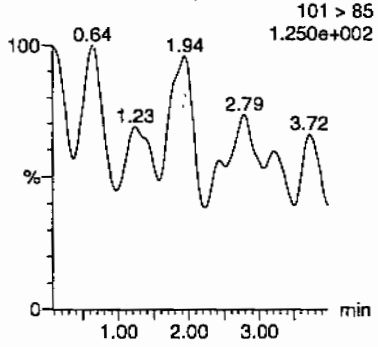

Perchlorate-101

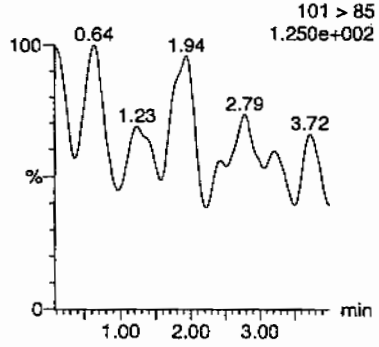

Perchlorate-O(18)

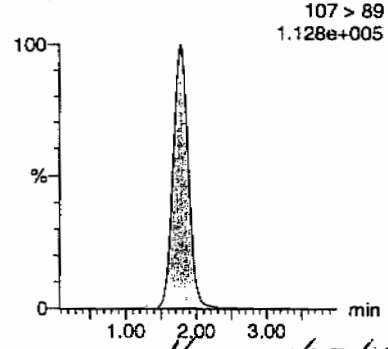

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	1.78	28289.766	28289.766	bb			0.4938	98.75	-1.25	6551.1...	

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–544

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	20–NOV–09	per1120008a	IPB002
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120008a	IPB002
Perchlorate	0.00	0	NA	20–NOV–09	per1120010a	IPB003
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120010a	IPB003
Perchlorate	0.00	0	NA	20–NOV–09	per1120023a	IPB004
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120023a	IPB004
Perchlorate	0.00	0	NA	20–NOV–09	per1120036a	IPB005
Perchlorate–101	0.00	0	NA	20–NOV–09	per1120036a	IPB005

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

ast Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
rinted: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

lame; per1120008a
ate: 20-Nov-2009
ime: 17:09:36
): IPB002
ial: 1:1,A

11-22-09

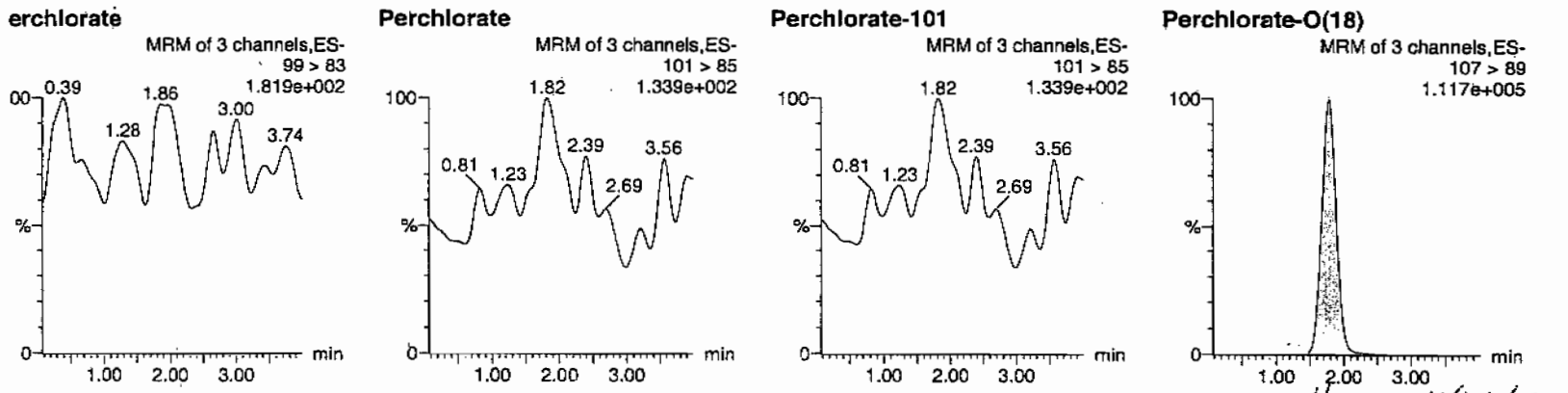

Hmm 11/23/09

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB002	Perchlorate	99 > 83											0.00
PB002	Perchlorate-101	101 > 85											
PB002	Perchlorate-O(18)	107 > 89	1.78	27978.033	27978.033	bb			0.4883	97.67	-2.33	14990....	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120010a
Date: 20-Nov-2009
Time: 17:23:42
ID: IPB003
Vial: 1:1,A

11-23

Perchlorate

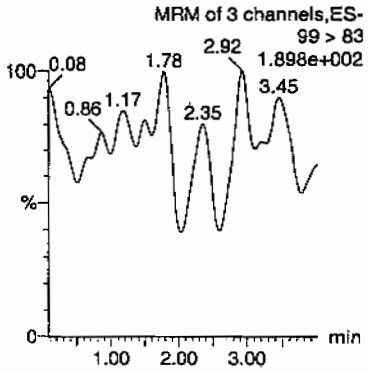

Perchlorate

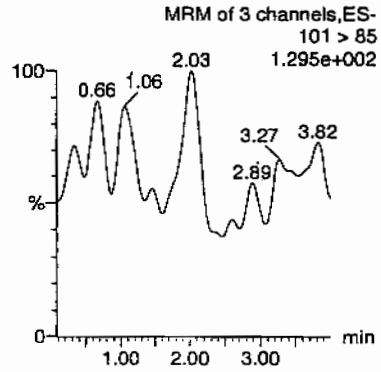

Perchlorate-101

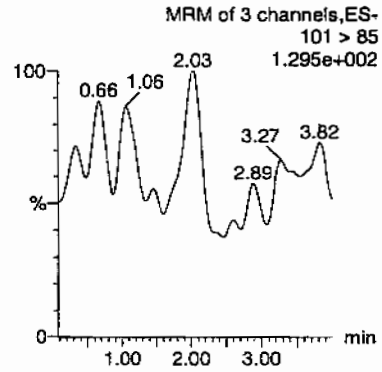

Perchlorate-O(18)

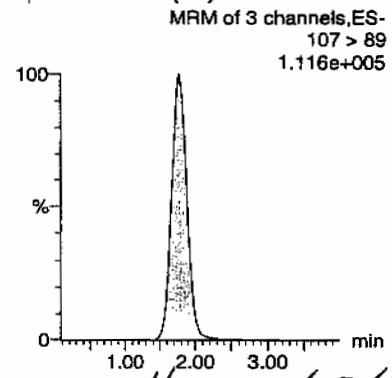

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83											0.00
PB003	Perchlorate-101	101 > 85											
PB003	Perchlorate-O(18)	107 > 89	1.78	28084.123	28084.123	bb			0.4902	98.04	-1.96	8665.5...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120023a
Date: 20-Nov-2009
Time: 18:55:15
ID: IPB004
Vial: 1:1,A

CWW 11-22-09

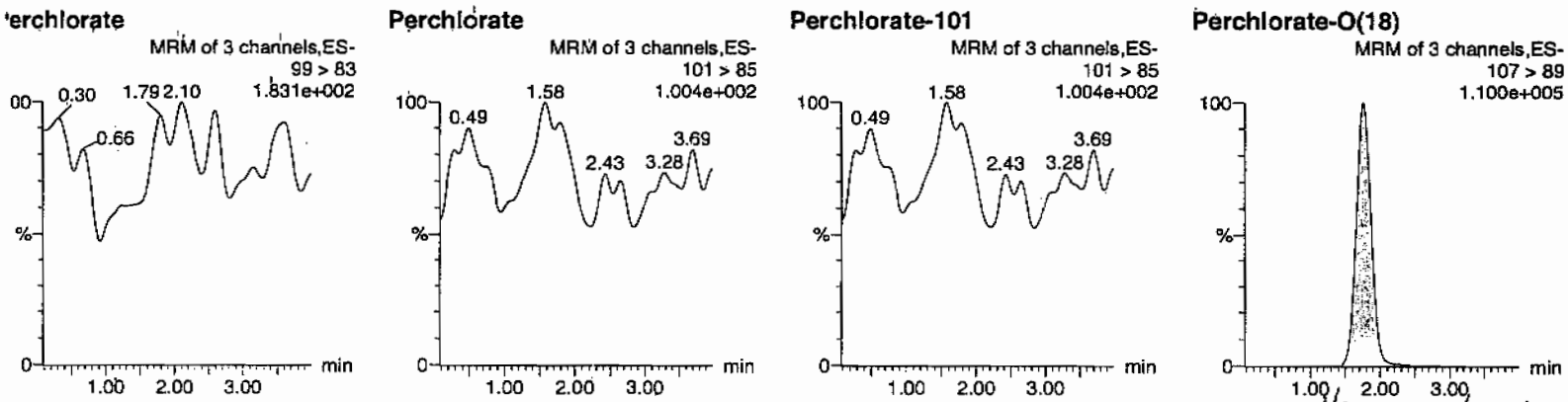

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	1.77	27506.287	27506.287	bb			0.4801	96.02	-3.98	1744.5...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120036a
Date: 20-Nov-2009
Time: 20:26:51
ID: IPB005
Vial: 1:1,A

11-22-09

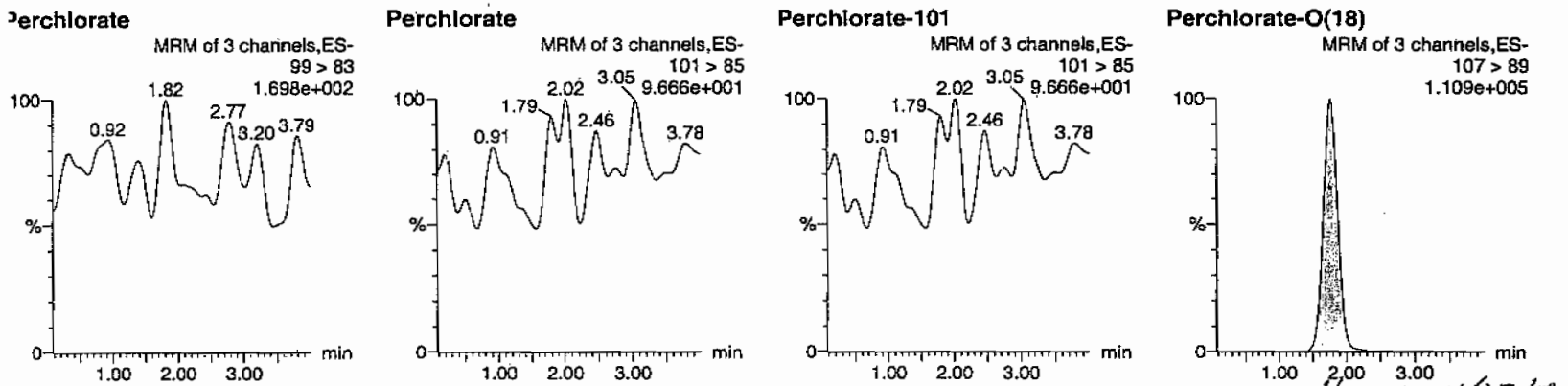

Hmm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB005	Perchlorate	99 > 83											0.00
PB005	Perchlorate-101	101 > 85											
PB005	Perchlorate-O(18)	107 > 89	1.77	27715.293	27715.293	bb			0.4837	96.75	-3.25	3186.6...	

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/RbI (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWW 01-09-08

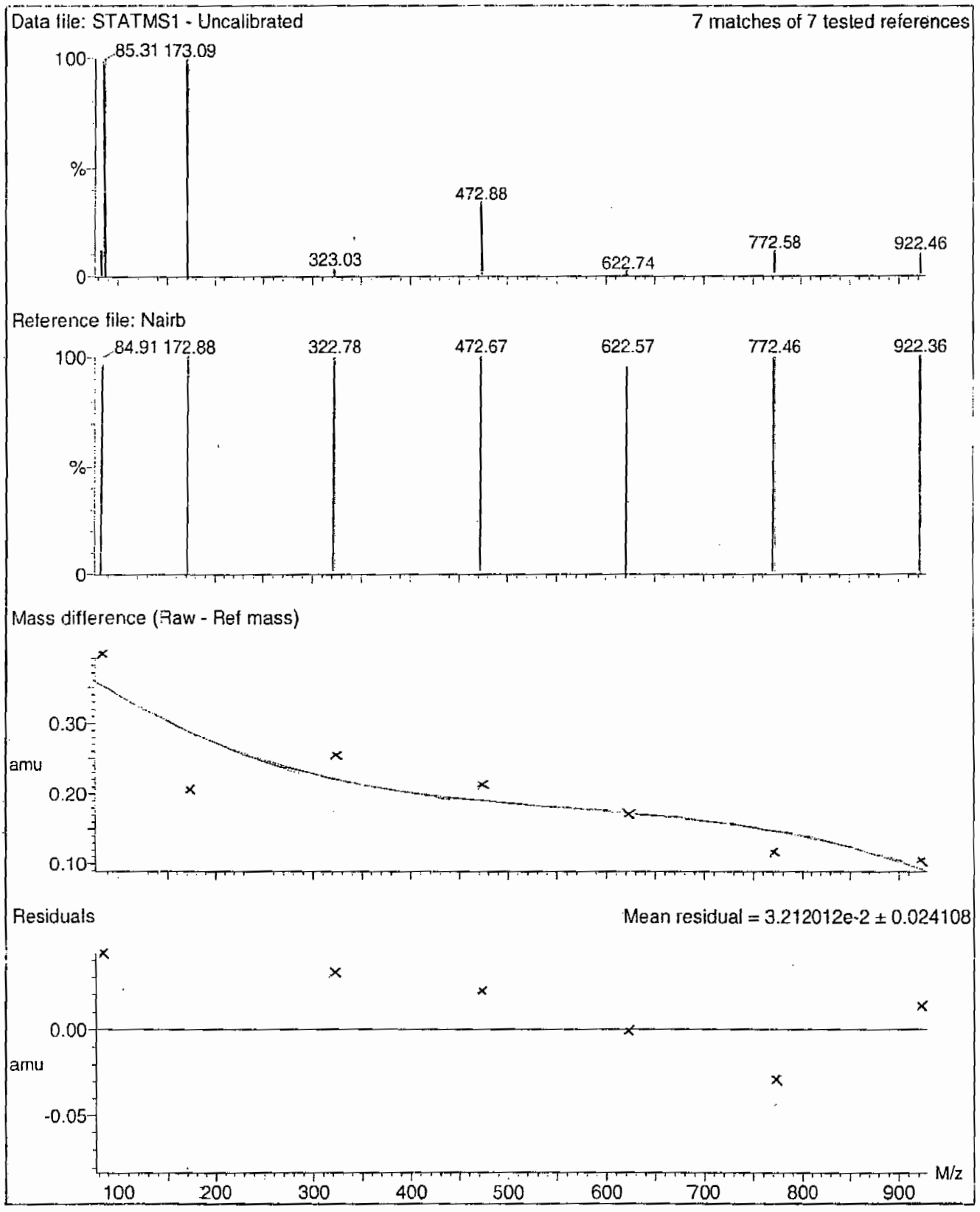

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Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

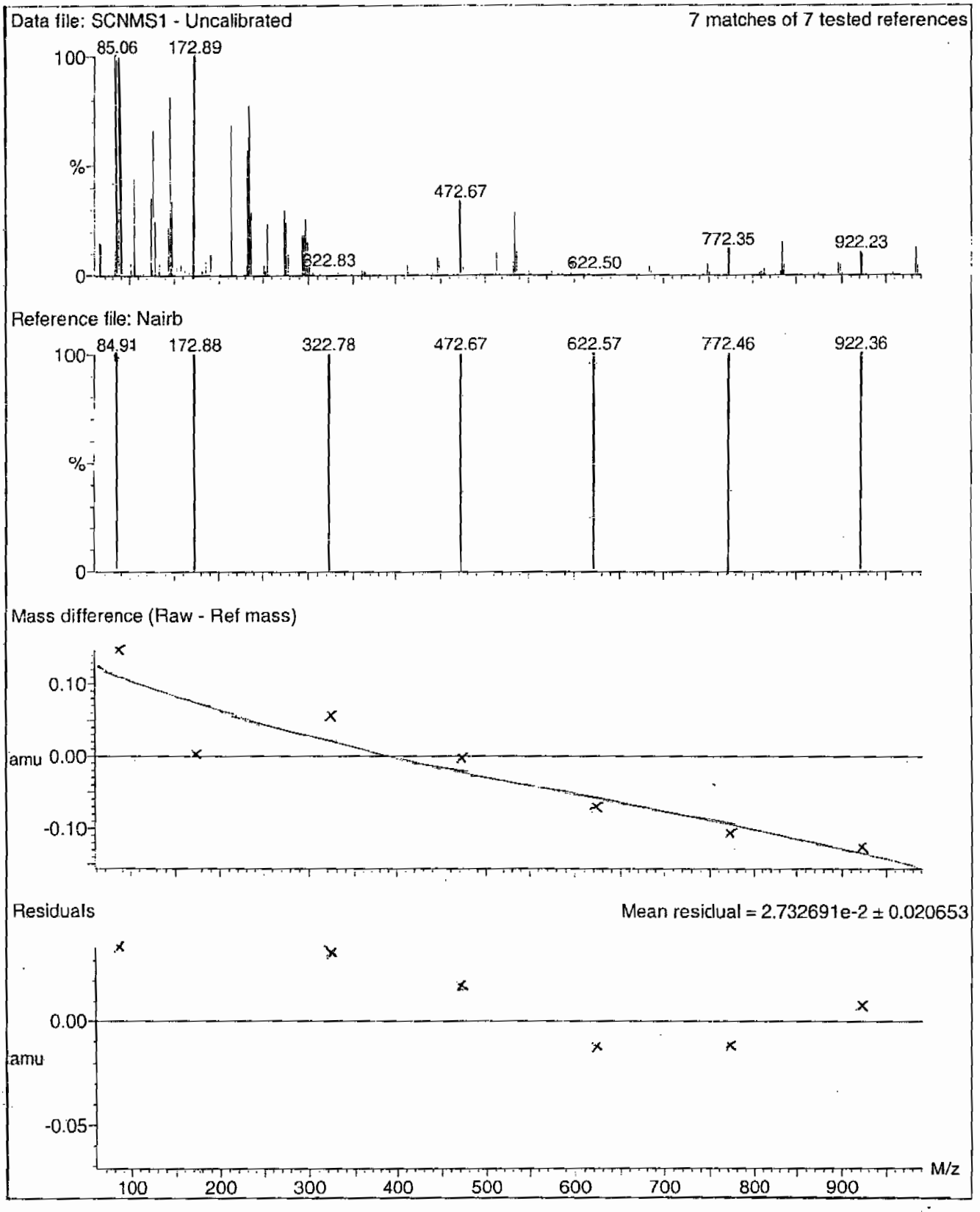

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Calibration Report - MS1 Scan Speed Compensation

Printed: Tue Jan 08 12:21:04 2008

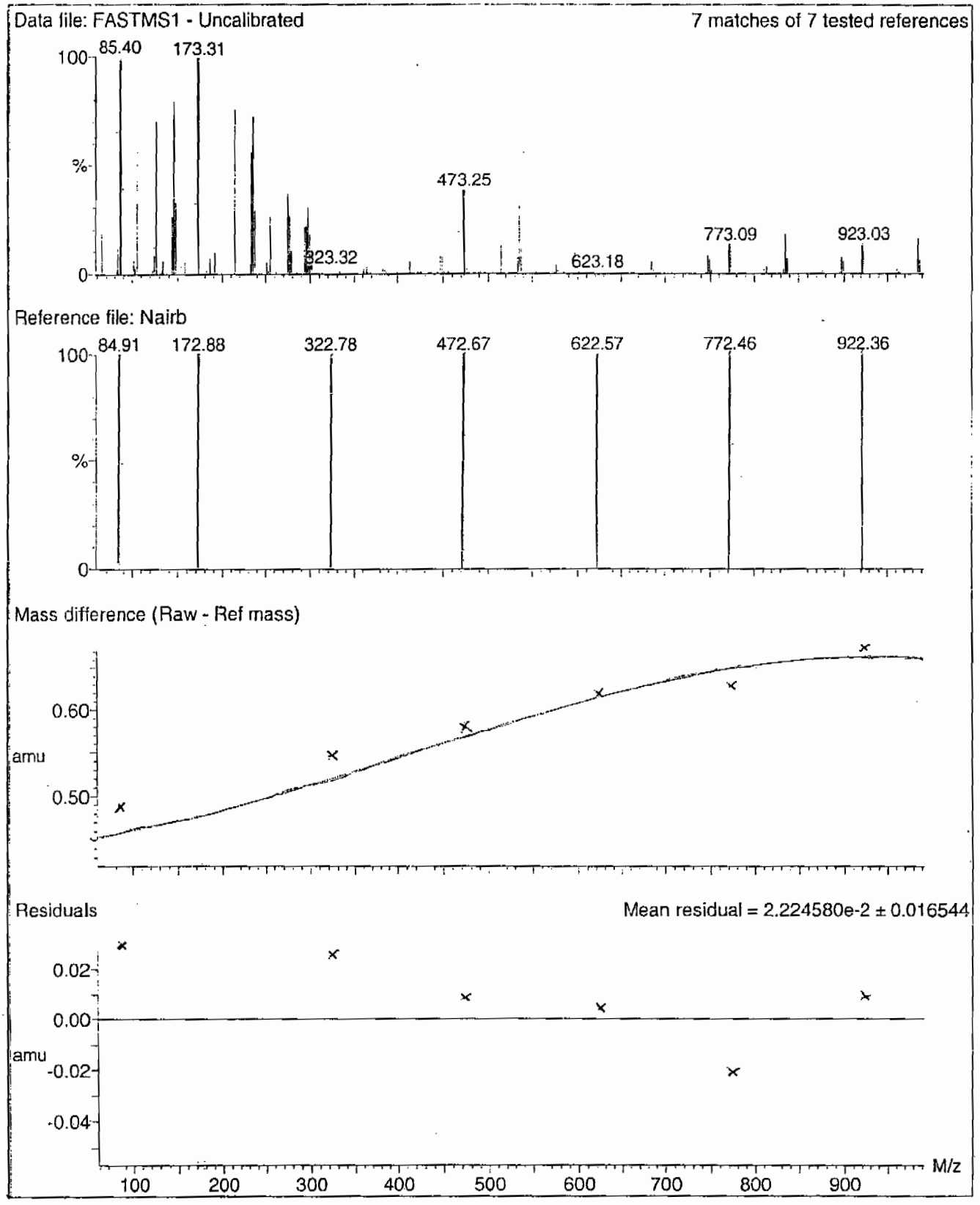

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Calibration Report - MS2 Static

Printed: Tue Jan 08 12:21:59 2008

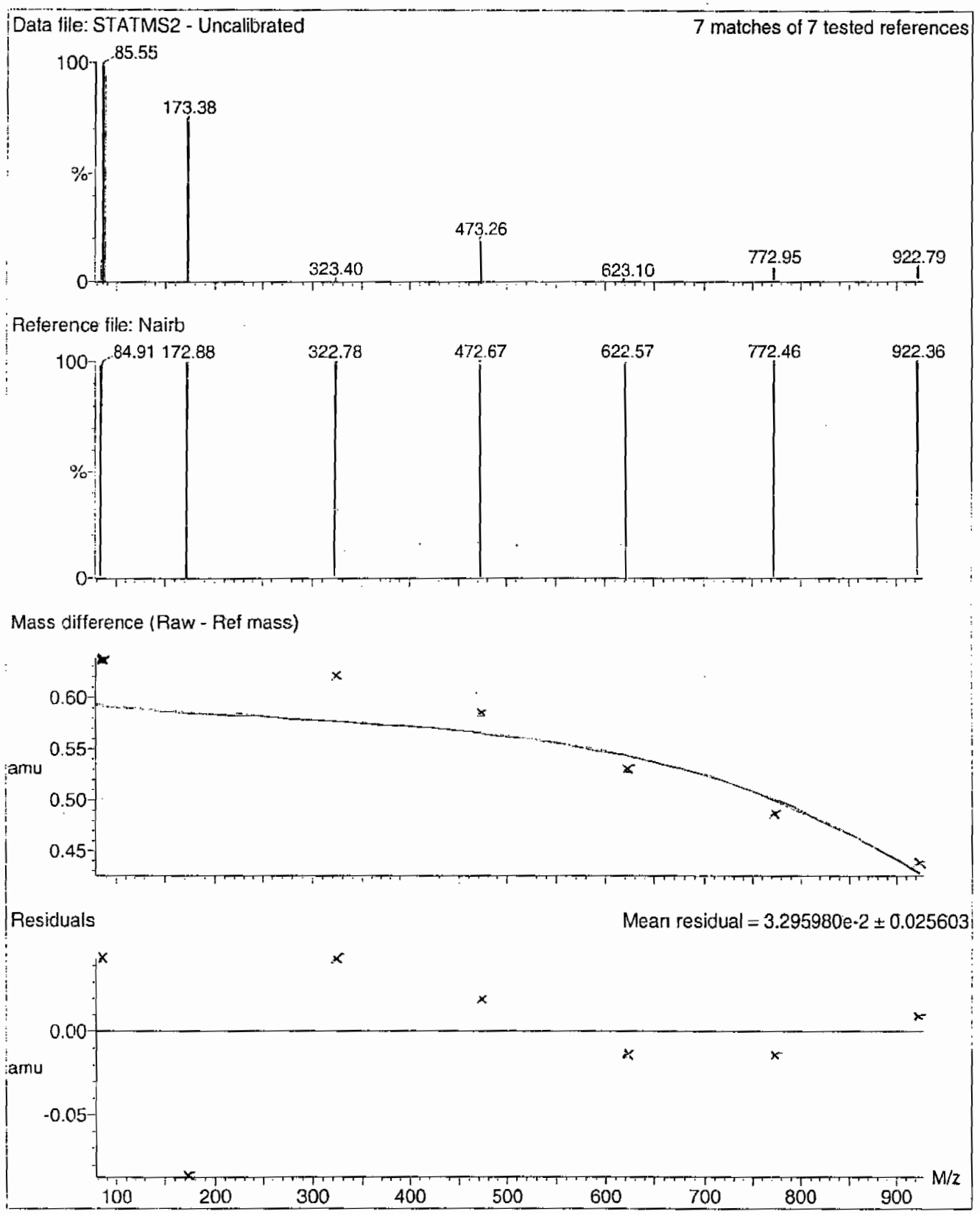

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Calibration Report - MS2 Scanning

Printed: Tue Jan 08 12:22:56 2008

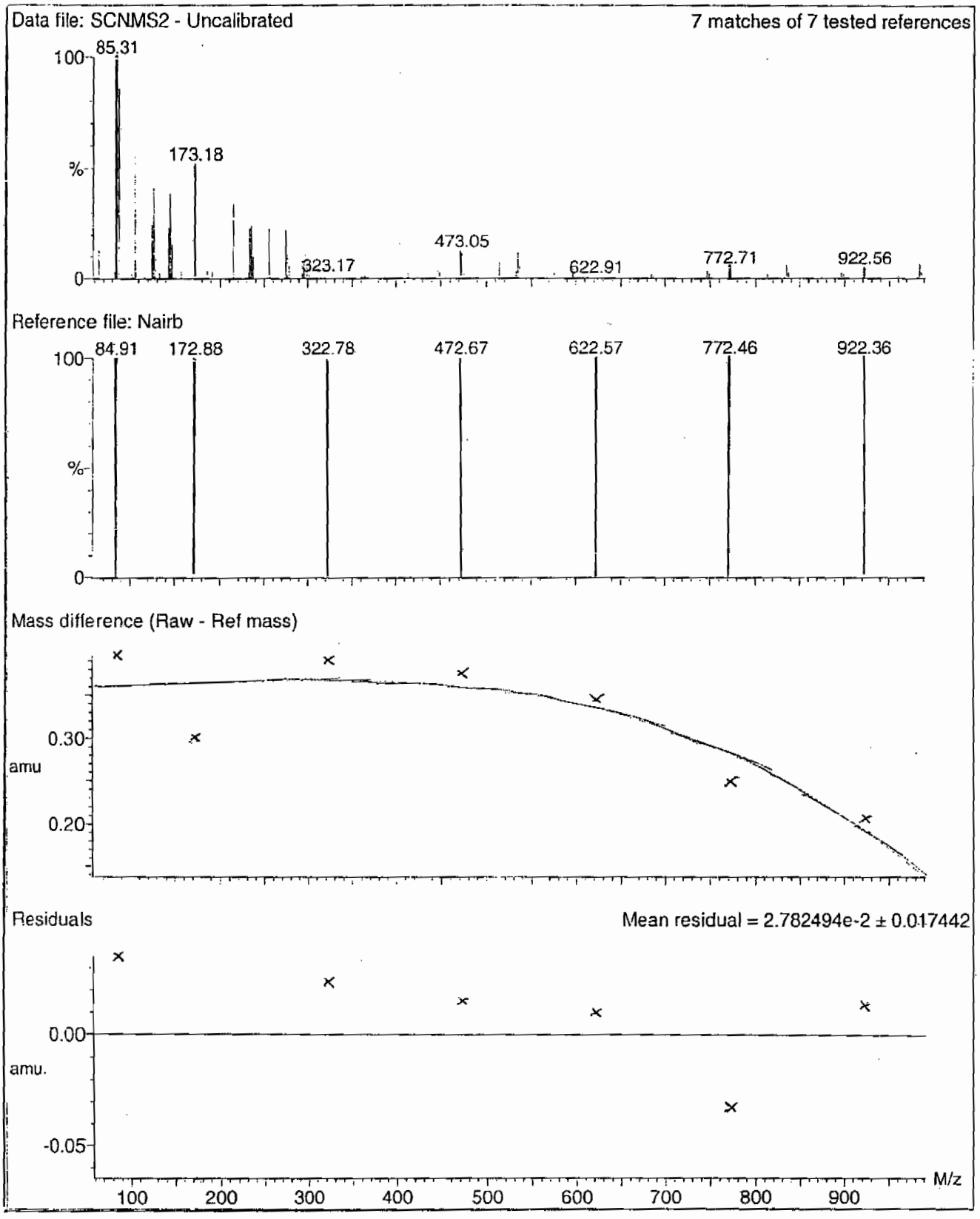

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Calibration Report - MS2 Scan Speed Compensation

Printed: Tue Jan 08 12:23:51 2008

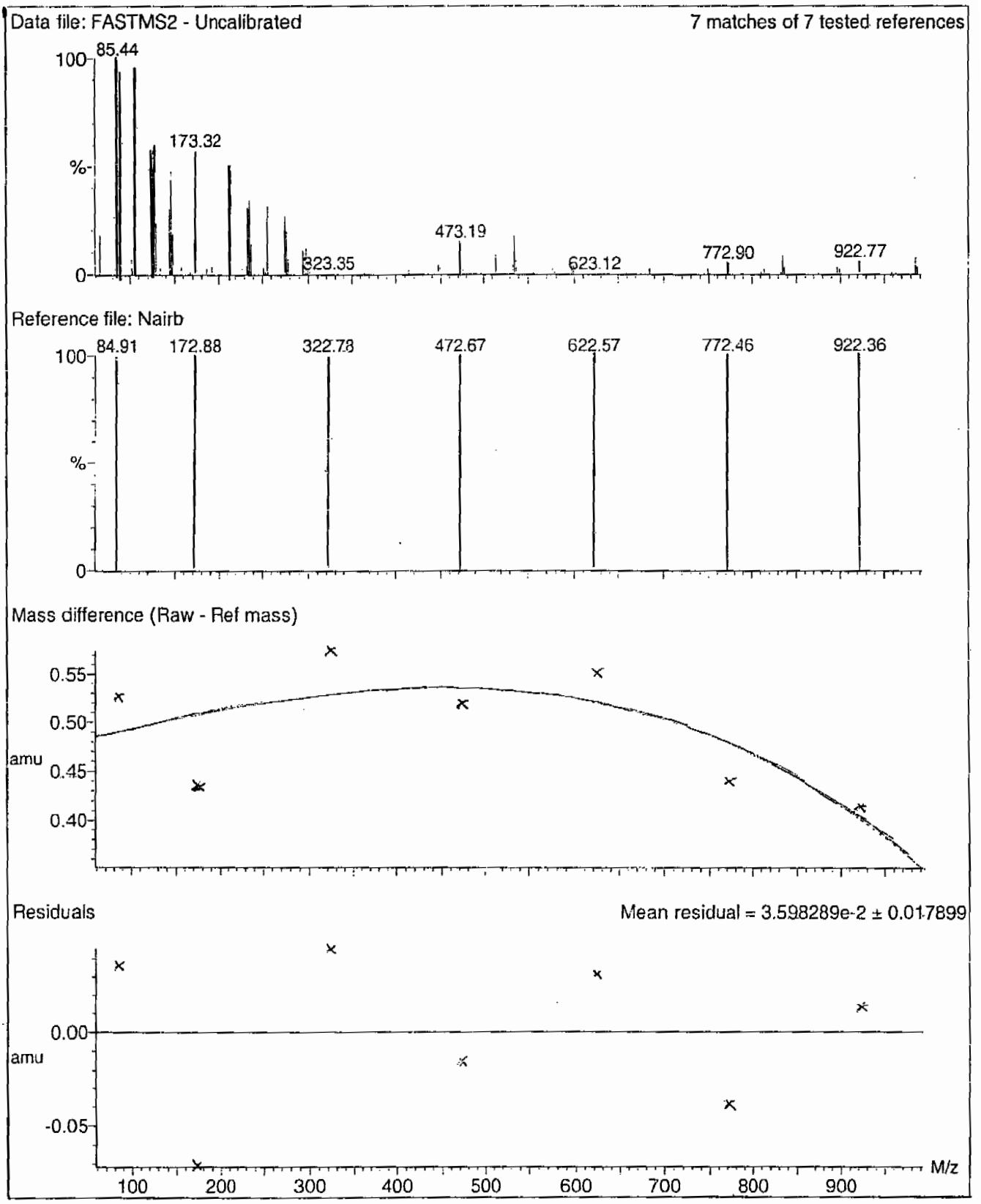

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File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, November 20, 2009 15:21:00 Eastern Standard Time

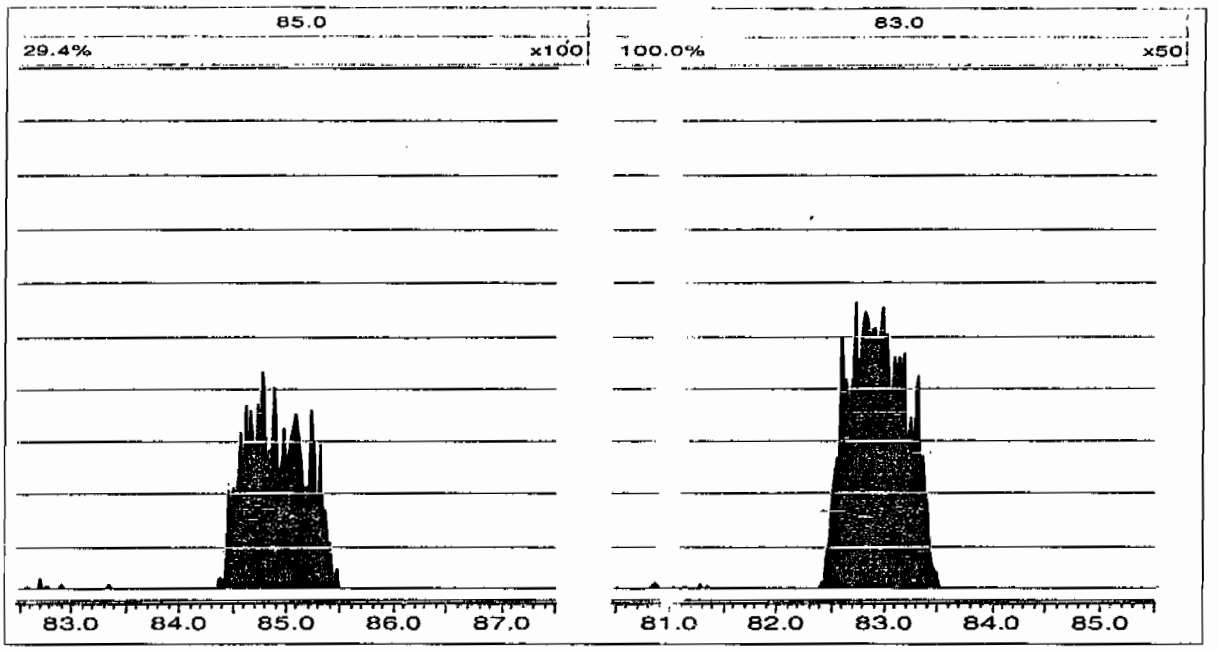

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–544

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1120006a**	**20–NOV–09**	**28311**				
Lower Area Limit			**14155.5**				
Upper Area Limit			**56622**				
1201976892	per1120012a	20–NOV–09 17:37	27838.9	1.77	1.79343	1.013	
1201976893	per1120013a	20–NOV–09 17:44	27138.9	1.77	1.78097	1.006	
1201976896	per1120014a	20–NOV–09 17:51	28574.2	1.79	1.80573	1.009	
241322001	per1120018a	20–NOV–09 18:20	28146.3	1.77	1.76848	.999	
1201976894	per1120019a	20–NOV–09 18:27	28978.9	1.77	1.78095	1.006	
1201976895	per1120020a	20–NOV–09 18:34	28359.3	1.77	1.781	1.006	
241322002	per1120021a	20–NOV–09 18:41	29850.9	1.77	1.781	1.006	
241322003	per1120025a	20–NOV–09 19:09	29080.2	1.77	1.78097	1.006	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-544

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per1120006a**	**20-NOV-09**	**28311**				
Lower Area Limit			**14155.5**				
Upper Area Limit			**56622**				
241322004	per1120026a	20-NOV-09 19:16	28585.5	1.77	1.78097	1.006	
241322005	per1120027a	20-NOV-09 19:23	28129.3	1.77	1.78098	1.006	
241322006	per1120028a	20-NOV-09 19:30	31065.5	1.77	1.78098	1.006	
241322007	per1120029a	20-NOV-09 19:37	27767.3	1.77	1.7685	.999	
241322008	per1120030a	20-NOV-09 19:44	28081.1	1.77	1.78097	1.006	
241322009	per1120031a	20-NOV-09 19:51	29311.9	1.77	1.78095	1.006	
241322010	per1120032a	20-NOV-09 19:58	28986.9	1.77	1.76848	.999	
241322011	per1120033a	20-NOV-09 20:05	27584.9	1.76	1.78097	1.012	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–544

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1120006a**	**20–NOV–09**	**28311**				
Lower Area Limit			**14155.5**				
Upper Area Limit			**56622**				
241322012	per1120034a	20–NOV–09 20:12	27670.5	1.76	1.76848	1.005	

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SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13618

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322001

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.583	2.33	0.583	ug/kg	U	1	20-NOV-09 18:20	per1120018a
	Perchlorate Isotope Ratio						1	20-NOV-09 18:20	per1120018a
14797-73-0	Perchlorate-101	.583	2.33	0.583	ug/kg	U	1	20-NOV-09 18:20	per1120018a
	Perchlorate-O(18)			5.73	ug/kg		1	20-NOV-09 18:20	per1120018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120018a
Date: 20-Nov-2009
Time: 18:20:01
ID: 241322001
Vial: 1:4,A

|LANL|924759|50620|11|

CWW
11-22-09

Perchlorate

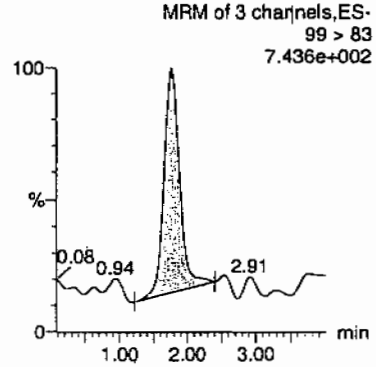

Perchlorate

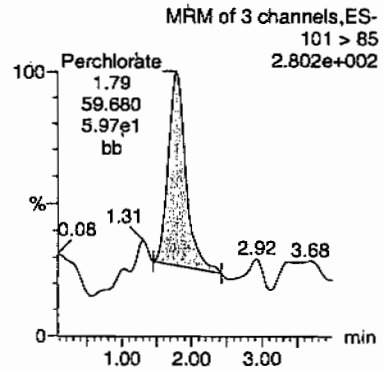

Perchlorate-101

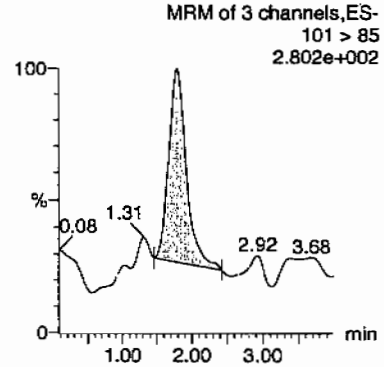

Perchlorate-O(18)

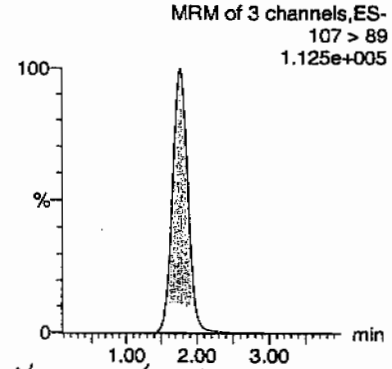

thm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322001	Perchlorate	99 > 83	1.77	172.372	172.372	bb			0.0027			18.638	2.89
241322001	Perchlorate-101	101 > 85	1.79	59.680	59.680	bb			0.0028			25.422	
241322001	Perchlorate-O(18)	107 > 89	1.77	28146.273	28146.273	bb			0.4913	98.25	-1.75	3753.3...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13622

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322002

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.900	ug/kg	J	1	20-NOV-09 18:41	per1120021a
	Perchlorate Isotope Ratio			3.08			1	20-NOV-09 18:41	per1120021a
14797-73-0	Perchlorate-101	.533	2.13	0.871	ug/kg	J	1	20-NOV-09 18:41	per1120021a
	Perchlorate-O(18)			5.55	ug/kg		1	20-NOV-09 18:41	per1120021a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120021a
Date: 20-Nov-2009
Time: 18:41:10
ID: 241322002
Vial: 1:4,D

|LANL|924759|50120|1|

CWW 11-22-09

Perchlorate

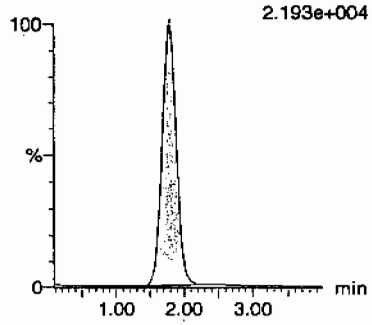

Perchlorate

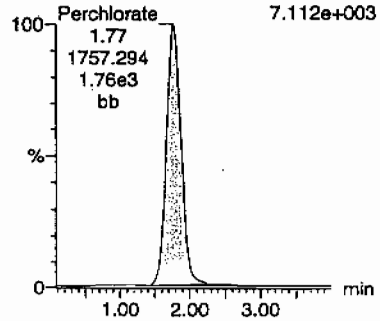

Perchlorate-101

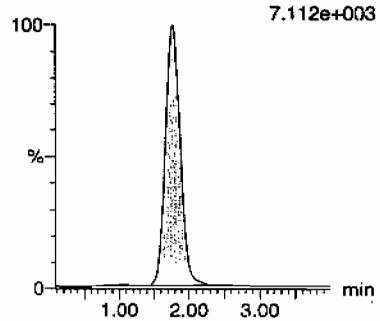

Perchlorate-O(18)

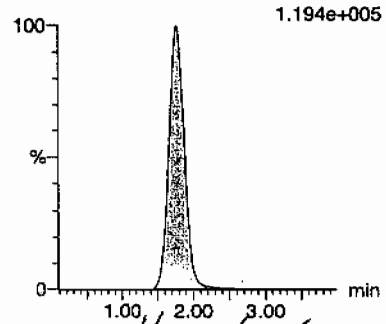

HMN 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322002	Perchlorate	99 > 83	1.78	5410.726	5410.726	bb			0.0845			682.380	3.08
241322002	Perchlorate-101	101 > 85	1.77	1757.294	1757.294	bb			0.0818			1013.1...	
241322002	Perchlorate-O(18)	107 > 89	1.77	29850.889	29850.889	bb			0.5210	104.20	4.20	17112....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13620

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322003

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.533	ug/kg	U	1	20-NOV-09 19:09	per1120025a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:09	per1120025a
14797-73-0	Perchlorate-101	.533	2.13	0.533	ug/kg	U	1	20-NOV-09 19:09	per1120025a
	Perchlorate-O(18)			5.41	ug/kg		1	20-NOV-09 19:09	per1120025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120025a
Date: 20-Nov-2009
Time: 19:09:19
ID: 241322003
Vial: 1:4,E

|LANL|924759|50120|1|

11-22-09

Perchlorate

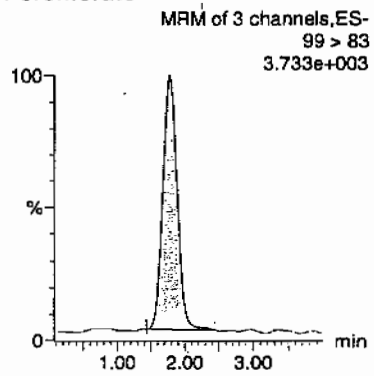

Perchlorate

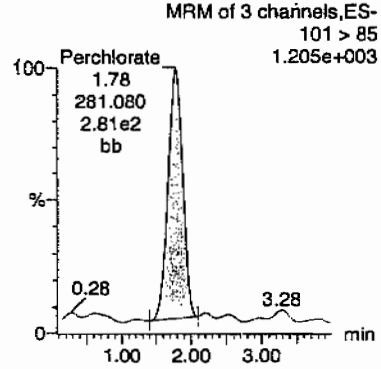

Perchlorate-101

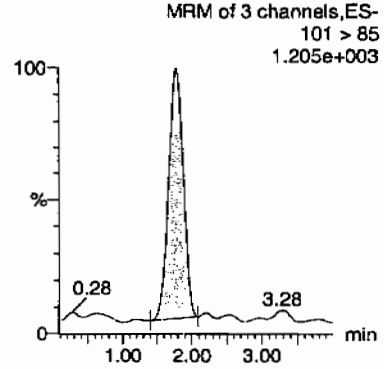

Perchlorate-O(18)

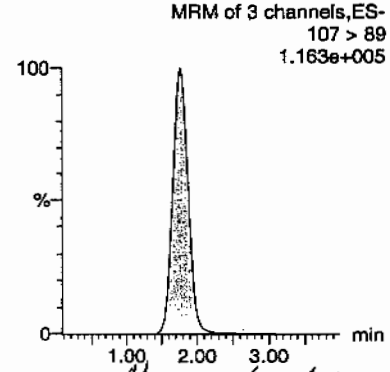

Hmm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322003	Perchlorate	99 > 83	1.78	893.093	893.093	bb			0.0139			109.976	3.18
241322003	Perchlorate-101	101 > 85	1.78	281.080	281.080	bb			0.0131			66.701	
241322003	Perchlorate-O(18)	107 > 89	1.77	29080.207	29080.207	bb			0.5076	101.51	1.51	3874.6...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13619

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322004

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	20-NOV-09 19:16	per1120026a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:16	per1120026a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	20-NOV-09 19:16	per1120026a
	Perchlorate-O(18)			5.84	ug/kg		1	20-NOV-09 19:16	per1120026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120026a
Date: 20-Nov-2009
Time: 19:16:21
ID: 241322004
Vial: 1:4,F

|LANL|924759|5020|1|

CWW 11-22-09

Perchlorate

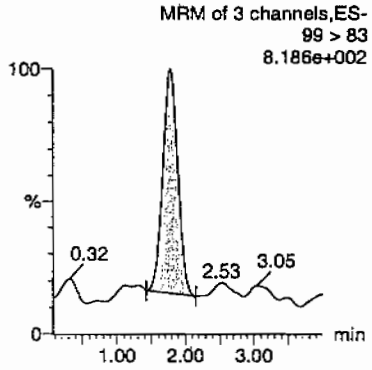

Perchlorate

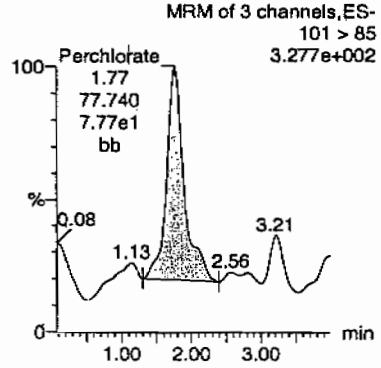

Perchlorate-101

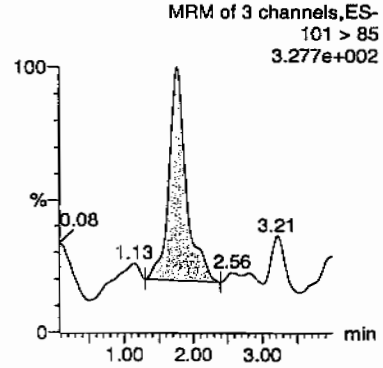

Perchlorate-O(18)

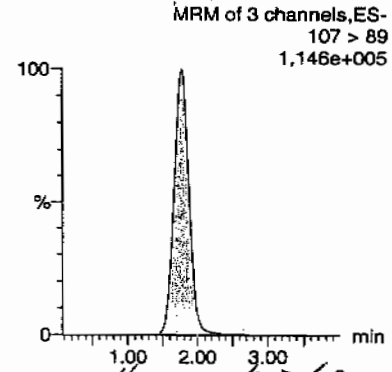

Hmm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322004	Perchlorate	99 > 83	1.78	179.259	179.259	bb			0.0028			35.433	2.31
241322004	Perchlorate-101	101 > 85	1.77	77.740	77.740	bb			0.0036			23.794	
241322004	Perchlorate-O(18)	107 > 89	1.77	28585.549	28585.549	bb			0.4989	99.79	-0.21	11692....	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13624

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322005

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	20-NOV-09 19:23	per1120027a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:23	per1120027a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	20-NOV-09 19:23	per1120027a
	Perchlorate-O(18)			6.35	ug/kg		1	20-NOV-09 19:23	per1120027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120027a
Date: 20-Nov-2009
Time: 19:23:23
ID: 241322005
Vial: 1:5,A

|LANL|924759|SOL20|1|

CWW 11-22-09

Perchlorate

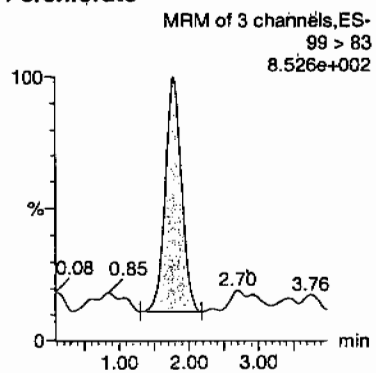

Perchlorate

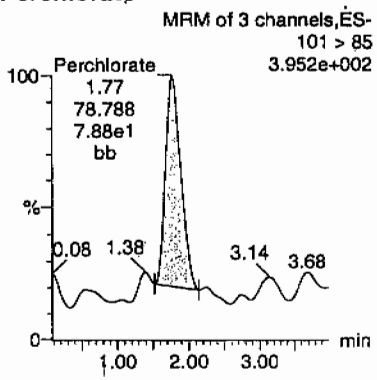

Perchlorate-101

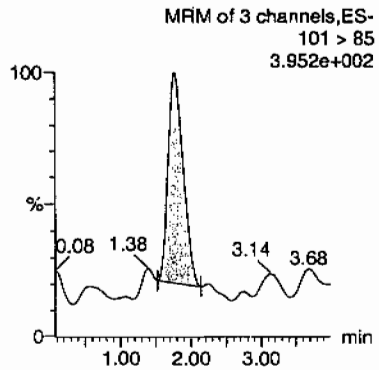

Perchlorate-O(18)

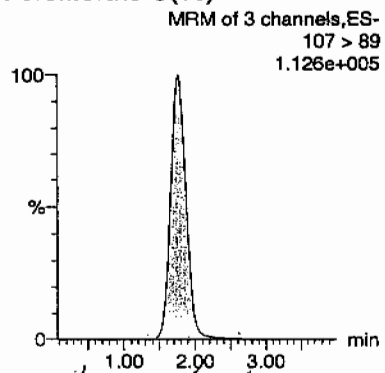

HMW 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322005	Perchlorate	99 > 83	1.78	208.634	208.634	bb			0.0033			39.522	2.65
241322005	Perchlorate-101	101 > 85	1.77	78.788	78.788	bb			0.0037			40.288	
241322005	Perchlorate-O(18)	107 > 89	1.77	28129.299	28129.299	bb			0.4910	98.19	-1.81	8873.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13623

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322006

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 96.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.519	2.08	1.73	ug/kg	J	1	20-NOV-09 19:30	per1120028a
	Perchlorate Isotope Ratio			3.06			1	20-NOV-09 19:30	per1120028a
14797-73-0	Perchlorate-101	.519	2.08	1.69	ug/kg	J	1	20-NOV-09 19:30	per1120028a
	Perchlorate-O(18)			5.63	ug/kg		1	20-NOV-09 19:30	per1120028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120028a
Date: 20-Nov-2009
Time: 19:30:27
ID: 241322006
Vial: 1:5,B

|LANL|924759|SDL20|1|

11-22-09

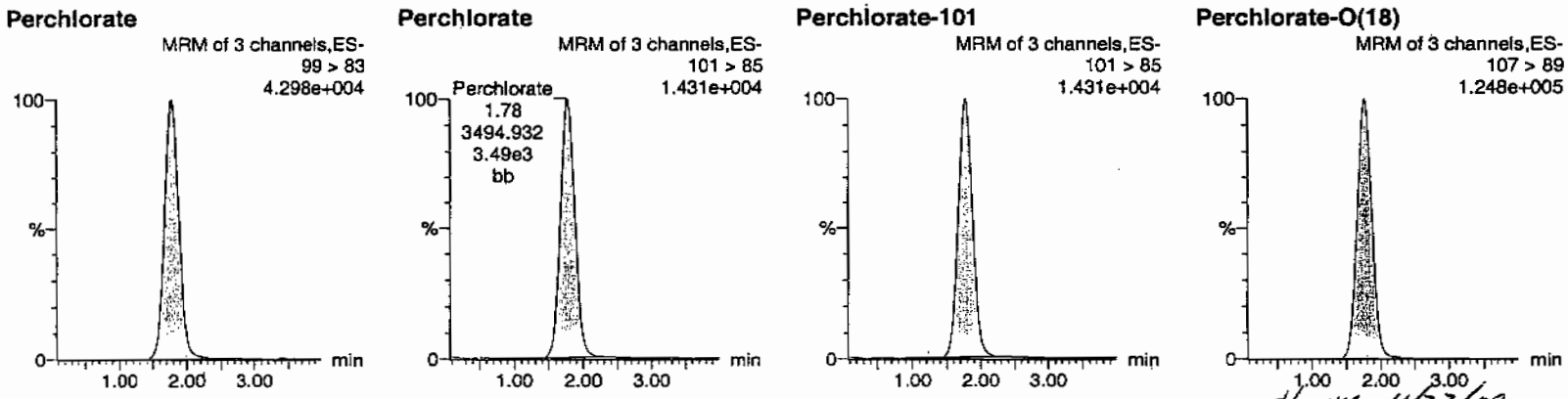

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322006	Perchlorate	99 > 83	1.78	10687.012	10687.012	bb			0.1669			1821.0...	3.06
241322006	Perchlorate-101	101 > 85	1.78	3494.932	3494.932	bb			0.1627			2997.6...	
241322006	Perchlorate-O(18)	107 > 89	1.77	31065.541	31065.541	bb			0.5422	108.44	8.44	11131....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13626

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322007

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.592	2.37	0.592	ug/kg	U	1	20-NOV-09 19:37	per1120029a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:37	per1120029a
14797-73-0	Perchlorate-101	.592	2.37	0.592	ug/kg	U	1	20-NOV-09 19:37	per1120029a
	Perchlorate-O(18)			5.74	ug/kg		1	20-NOV-09 19:37	per1120029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120029a
Date: 20-Nov-2009
Time: 19:37:30
ID: 241322007
Vial: 1:5,C

|LANL|924759|SOLZO|1|

CWW 11-22-09

Perchlorate

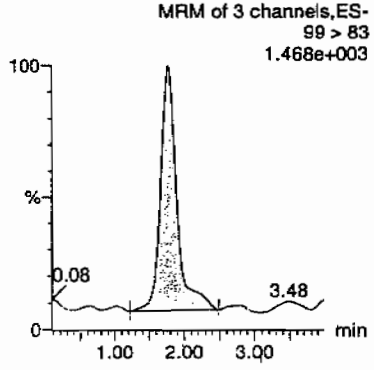

Perchlorate

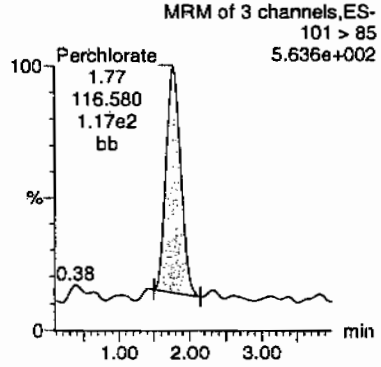

Perchlorate-101

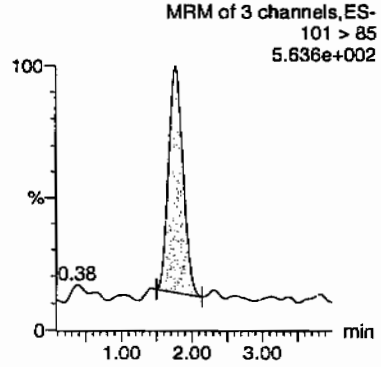

Perchlorate-O(18)

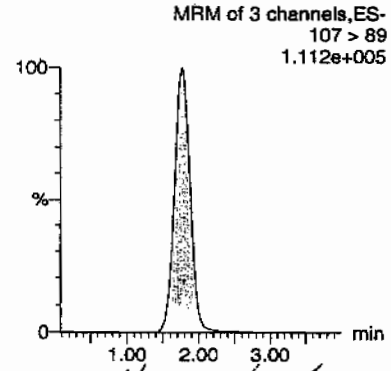

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322007	Perchlorate	99 > 83	1.77	372.039	372.039	bb			0.0058			59.904	3.19
241322007	Perchlorate-101	101 > 85	1.77	116.580	116.580	bb			0.0054			52.176	
241322007	Perchlorate-O(18)	107 > 89	1.77	27767.283	27767.283	bb			0.4847	96.93	-3.07	9142.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13621

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322008

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 95.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	0.524	ug/kg	U	1	20-NOV-09 19:44	per1120030a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:44	per1120030a
14797-73-0	Perchlorate-101	.524	2.1	0.524	ug/kg	U	1	20-NOV-09 19:44	per1120030a
	Perchlorate-O(18)			5.14	ug/kg		1	20-NOV-09 19:44	per1120030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120030a
Date: 20-Nov-2009
Time: 19:44:33
ID: 241322008
Vial: 1:5,D

|LANL|924759|50120|11

CWW 11-22-09

Perchlorate

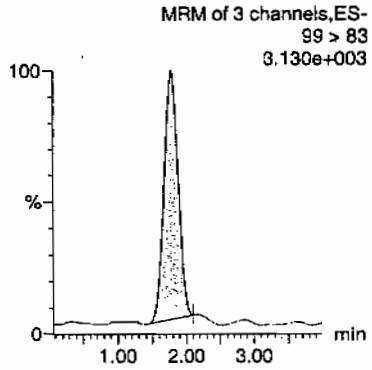

Perchlorate

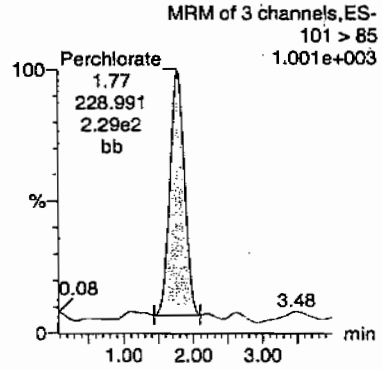

Perchlorate-101

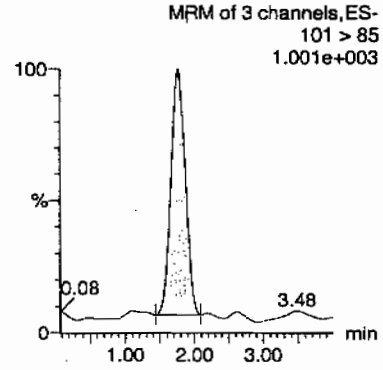

Perchlorate-O(18)

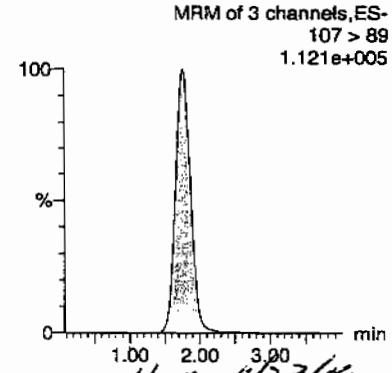

Hmm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322008	Perchlorate	99 > 83	1.78	724.871	724.871	bb			0.0113			343.209	3.17
241322008	Perchlorate-101	101 > 85	1.77	228.991	228.991	bb			0.0107			243.307	
241322008	Perchlorate-O(18)	107 > 89	1.77	28081.088	28081.088	bb			0.4901	98.03	-1.97	15137....	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13627

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322009

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 93

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.538	2.15	0.538	ug/kg	U	1	20-NOV-09 19:51	per1120031a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:51	per1120031a
14797-73-0	Perchlorate-101	.538	2.15	0.538	ug/kg	U	1	20-NOV-09 19:51	per1120031a
	Perchlorate-O(18)			5.50	ug/kg		1	20-NOV-09 19:51	per1120031a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120031a
Date: 20-Nov-2009
Time: 19:51:36
ID: 241322009
Vial: 1:5,E

1LAWL|924759|50L20|1|

CWW 11-22-09

Perchlorate

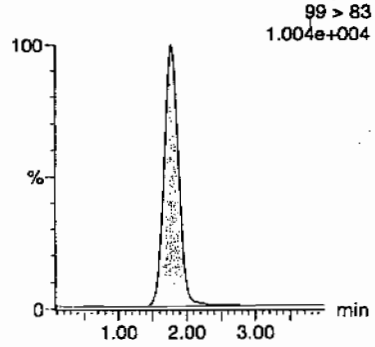

Perchlorate

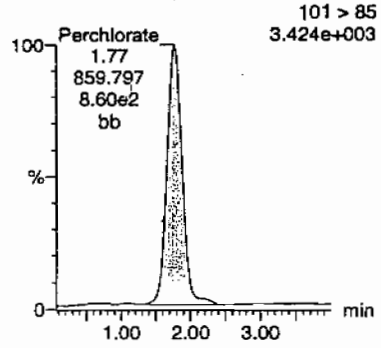

Perchlorate-101

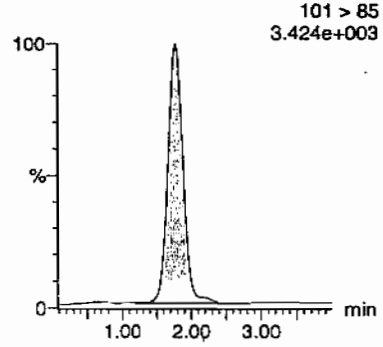

Perchlorate-O(18)

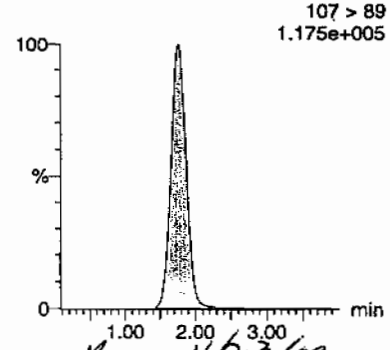

dmc 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322009	Perchlorate	99 > 83	1.78	2494.070	2494.070	bb			0.0389			400.347	2.90
241322009	Perchlorate-101	101 > 85	1.77	859.797	859.797	bb			0.0400			472.394	
241322009	Perchlorate-O(18)	107 > 89	1.77	29311.947	29311.947	bb			0.5116	102.32	2.32	4026.3...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13625

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322010

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.602	2.41	0.602	ug/kg	U	1	20-NOV-09 19:58	per1120032a
	Perchlorate Isotope Ratio						1	20-NOV-09 19:58	per1120032a
14797-73-0	Perchlorate-101	.602	2.41	0.602	ug/kg	U	1	20-NOV-09 19:58	per1120032a
	Perchlorate-O(18)			6.09	ug/kg		1	20-NOV-09 19:58	per1120032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120032a
Date: 20-Nov-2009
Time: 19:58:38
ID: 241322010 |LANL|924759|50620|1|
Vial: 1:5,F

11-22-09

Perchlorate

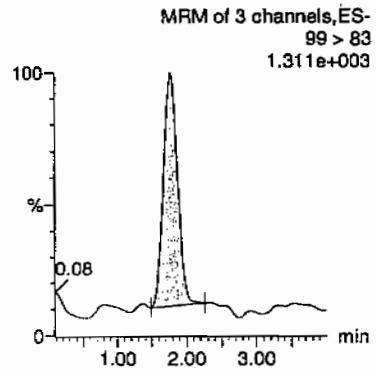

Perchlorate

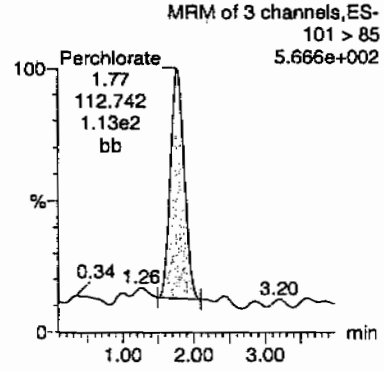

Perchlorate-101

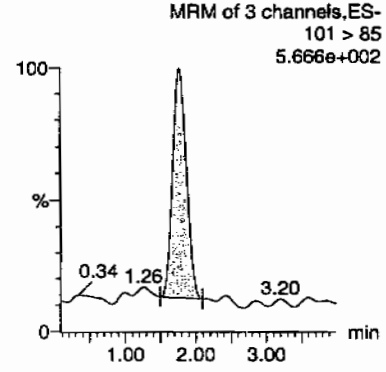

Perchlorate-O(18)

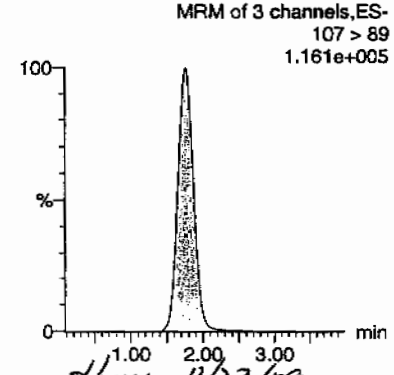

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322010	Perchlorate	99 > 83	1.77	278.433	278.433	bb			0.0043			46.002	2.47
241322010	Perchlorate-101	101 > 85	1.77	112.742	112.742	bb			0.0052			47.731	
241322010	Perchlorate-O(18)	107 > 89	1.77	28986.904	28986.904	bb			0.5059	101.19	1.19	5996.6...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6084

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322011

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.573	2.29	0.573	ug/kg	U	1	20-NOV-09 20:05	per1120033a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:05	per1120033a
14797-73-0	Perchlorate-101	.573	2.29	0.573	ug/kg	U	1	20-NOV-09 20:05	per1120033a
	Perchlorate-O(18)			5.52	ug/kg		1	20-NOV-09 20:05	per1120033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120033a
Date: 20-Nov-2009
Time: 20:05:40
ID: 241322011
Vial: 1:6,A

|LANL|924759|50120|1|

11-22-09

Perchlorate

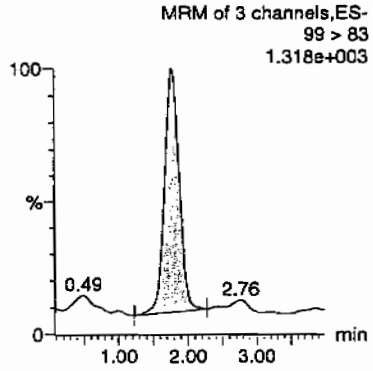

Perchlorate

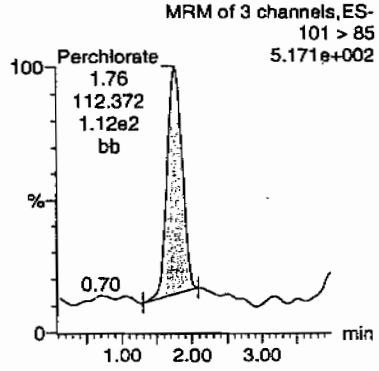

Perchlorate-101

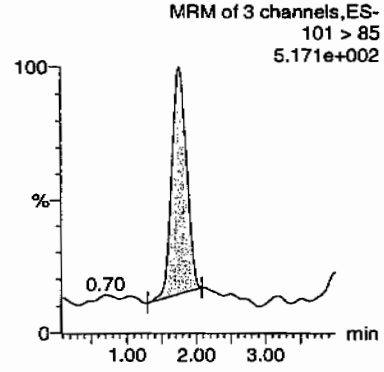

Perchlorate-O(18)

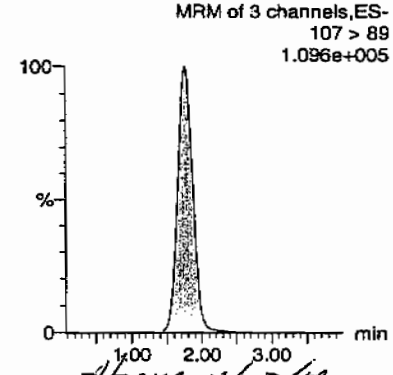

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322011	Perchlorate	99 > 83	1.78	300.410	300.410	bb			0.0047			184.598	2.67
241322011	Perchlorate-101	101 > 85	1.76	112.372	112.372	bb			0.0052			21.578	
241322011	Perchlorate-O(18)	107 > 89	1.76	27584.928	27584.928	bb			0.4815	96.29	-3.71	7726.5...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6085

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 241322012

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 95.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.523	2.09	0.523	ug/kg	U	1	20-NOV-09 20:12	per1120034a
	Perchlorate Isotope Ratio						1	20-NOV-09 20:12	per1120034a
14797-73-0	Perchlorate-101	.523	2.09	0.523	ug/kg	U	1	20-NOV-09 20:12	per1120034a
	Perchlorate-O(18)			5.05	ug/kg		1	20-NOV-09 20:12	per1120034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120034a
Date: 20-Nov-2009
Time: 20:12:44
ID: 241322012
Vial: 1:6,B

|LAWL|924759|50620|1|

CWW 11-22-09

Perchlorate

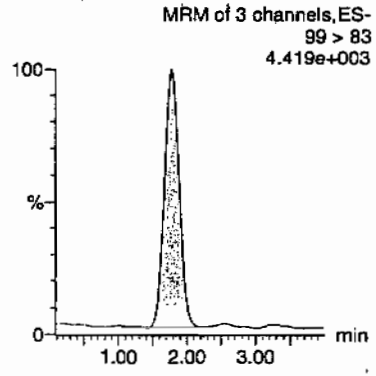

Perchlorate

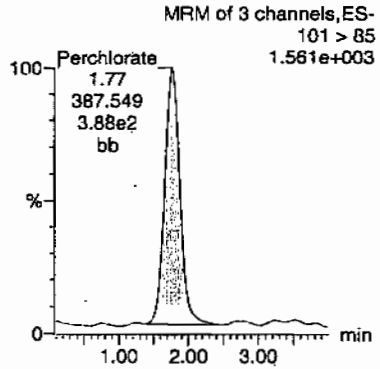

Perchlorate-101

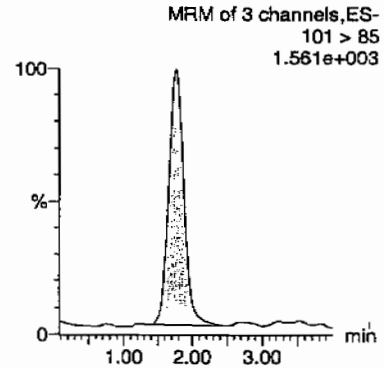

Perchlorate-O(18)

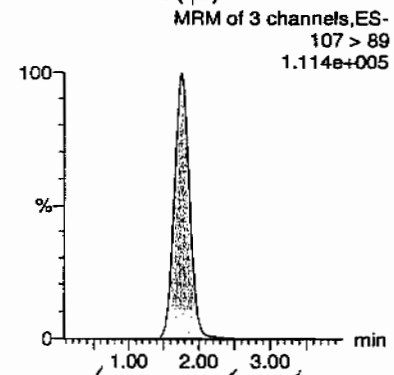

HMK 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241322012	Perchlorate	99 > 83	1.77	1087.146	1087.146	bb			0.0170			320.661	2.81
241322012	Perchlorate-101	101 > 85	1.77	387.549	387.549	bb			0.0180			138.961	
241322012	Perchlorate-O(18)	107 > 89	1.76	27670.537	27670.537	bb			0.4830	96.59	-3.41	11168....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–544

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 20–NOV–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 64050.42

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-544

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 20-NOV-09

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 21480.02

Response Type: External Standard

Curve Type: RF

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Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112009a.mdb 21 Nov 2009 12:25:39
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112009a.cdb 21 Nov 2009 12:25:49

Compound name: Perchlorate
Response Factor: 64050.4
RRF SD: 1386.36, % Relative SD: 2.16449
Response type: External Std, Area
Curve type: RF

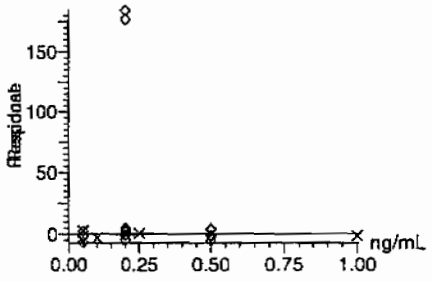

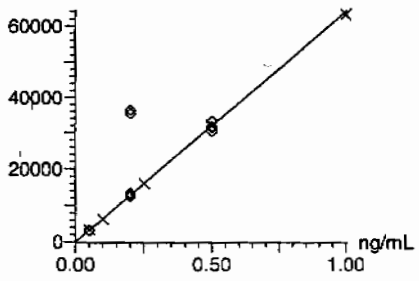

11-22-09

Compound name: Perchlorate-101
Response Factor: 21480
RRF SD: 609.561, % Relative SD: 2.8378
Response type: External Std, Area
Curve type: RF

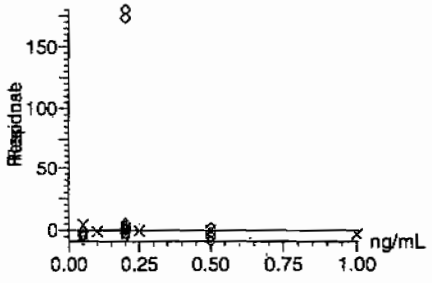

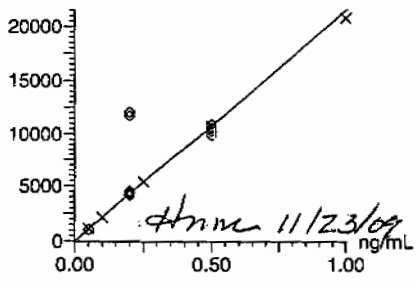

11/23/09

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Quantify Calibration Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 57293.3
RRF SD: 1288.75, % Relative SD: 2.24938
Response type: External Std, Area
Curve type: RF

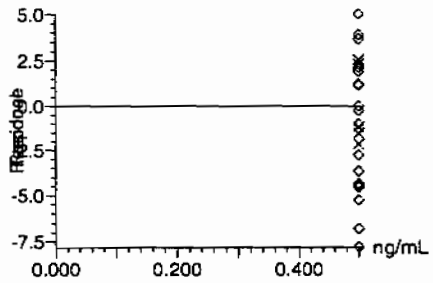

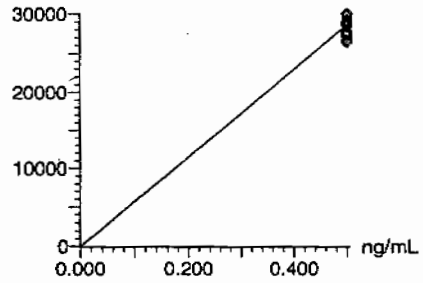

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–544

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.59	20–NOV–09 17:16	per1120009a
Perchlorate Isotope Ratio		3.03		20–NOV–09 17:16	per1120009a
Perchlorate–101	.5	.49	98.01	20–NOV–09 17:16	per1120009a

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
11-21-09

Name: per1120009a
Date: 20-Nov-2009
Time: 17:16:39
ID: WCL091120-06ICV
Vial: 1:2,A

Perchlorate

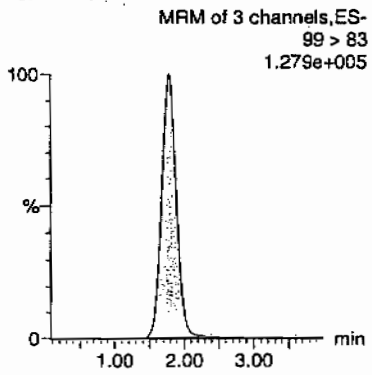

Perchlorate

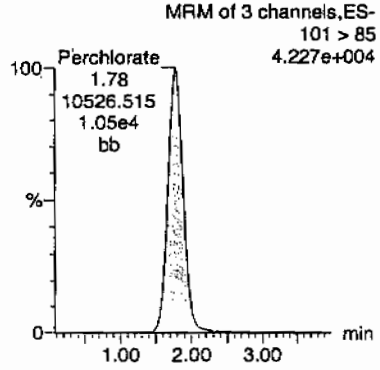

Perchlorate-101

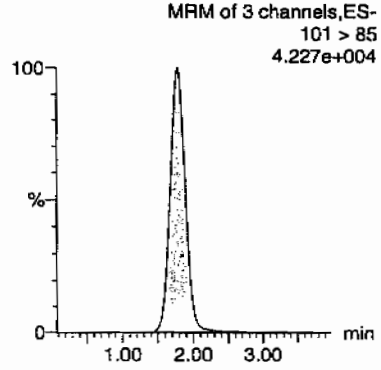

Perchlorate-O(18)

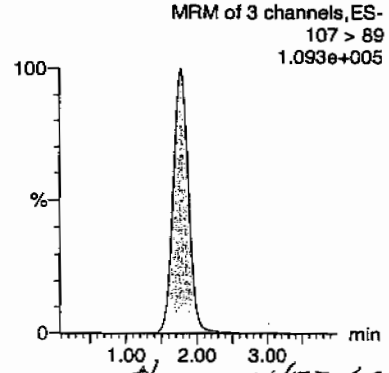

Pm m 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06ICV	Perchlorate	99 > 83	1.78	31893.199	31893.199	bb			0.4979	99.59	-0.41	9158.5...	3.03
WCL091120-06ICV	Perchlorate-101	101 > 85	1.78	10526.515	10526.515	bb			0.4901	98.01	-1.99	1967.4...	
WCL091120-06ICV	Perchlorate-O(18)	107 > 89	1.77	27390.957	27390.957	bb			0.4781	95.62	-4.38	9562.7...	

GEL SOP GL-OA-E-067; Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–544

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	97.87	20–NOV–09 18:48	per1120022a
Perchlorate Isotope Ratio		3.07		20–NOV–09 18:48	per1120022a
Perchlorate–101	.5	.47	94.91	20–NOV–09 18:48	per1120022a
Perchlorate	.5	.49	98.67	20–NOV–09 20:19	per1120035a
Perchlorate Isotope Ratio		3.08		20–NOV–09 20:19	per1120035a
Perchlorate–101	.5	.48	95.57	20–NOV–09 20:19	per1120035a

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
CWW
11-22-09

Name: per1120022a
Date: 20-Nov-2009
Time: 18:48:12
ID: WCL091120-06CCV
Vial: 1:2,A

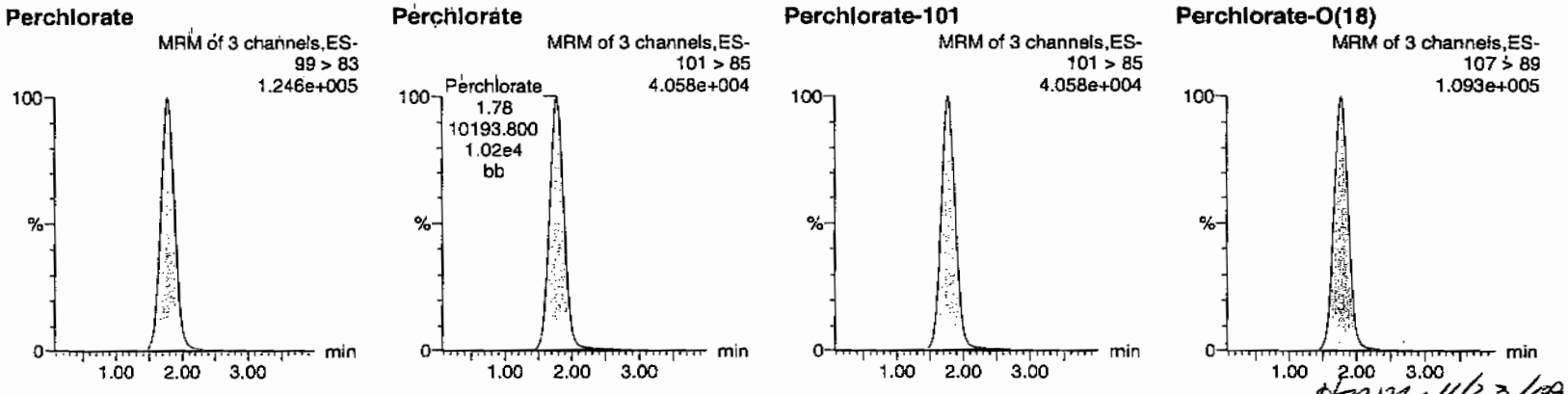

AMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.78	31341.922	31341.922	bb			0.4893	97.87	-2.13	8056.4...	3.07
WCL091120-06CCV	Perchlorate-101	101 > 85	1.78	10193.800	10193.800	bb			0.4746	94.91	-5.09	3510.7...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.77	27360.660	27360.660	bb			0.4776	95.51	-4.49	8210.7...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
aw
11-22-09

Name: per1120035a
Date: 20-Nov-2009
Time: 20:19:48
ID: WCL091120-06CCV
Vial: 1:2,A

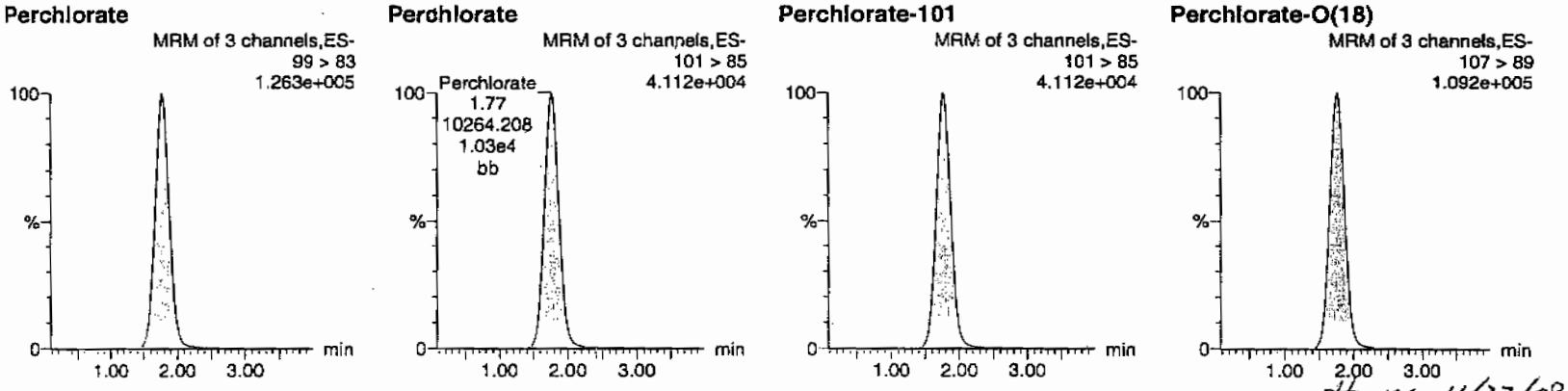

HMM 11/23/09

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.77	31599.609	31599.609	bb			0.4934	98.67	-1.33	4575.6...	3.08
WCL091120-06CCV	Perchlorate-101	101 > 85	1.77	10264.208	10264.208	bb			0.4778	95.57	-4.43	9270.9...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.76	27401.268	27401.268	bb			0.4783	95.65	-4.35	4666.1...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-544

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.91	20-NOV-09 17:30	per1120011a
Perchlorate Isotope Ratio		3.02		20-NOV-09 17:30	per1120011a
Perchlorate-101	.05	.05	96.56	20-NOV-09 17:30	per1120011a
Perchlorate	.05	.05	93.61	20-NOV-09 19:02	per1120024a
Perchlorate Isotope Ratio		3.03		20-NOV-09 19:02	per1120024a
Perchlorate-101	.05	.05	92.25	20-NOV-09 19:02	per1120024a
Perchlorate	.05	.05	98.72	20-NOV-09 20:33	per1120037a
Perchlorate Isotope Ratio		3.04		20-NOV-09 20:33	per1120037a
Perchlorate-101	.05	.05	96.92	20-NOV-09 20:33	per1120037a

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pwd
ana
11-22-09

Name: per1120011a
Date: 20-Nov-2009
Time: 17:30:44
ID: WCL091120-07CRI
Vial: 1:2,B

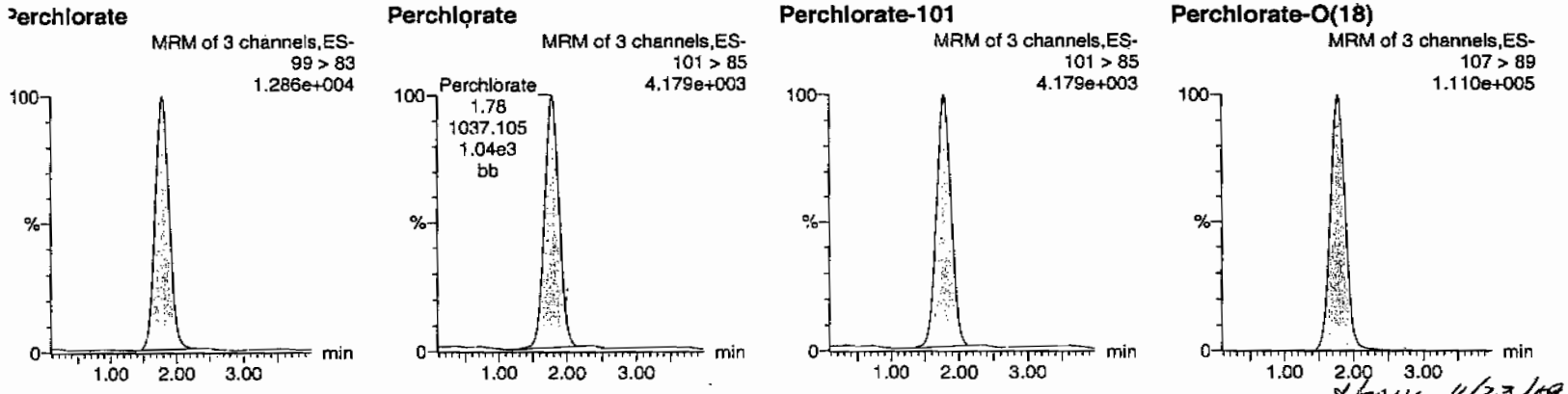

HMW 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.78	3135.594	3135.594	bb			0.0490	97.91	-2.09	468.931	3.02
WCL091120-07CRI	Perchlorate-101	101 > 85	1.78	1037.105	1037.105	bb			0.0483	96.56	-3.44	983.251	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.77	27854.799	27854.799	bb			0.4862	97.24	-2.76	3676.6...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

11-22-09

Name: per1120024a
Date: 20-Nov-2009
Time: 19:02:17
D: WCL091120-07CRI
Vial: 1:2,B

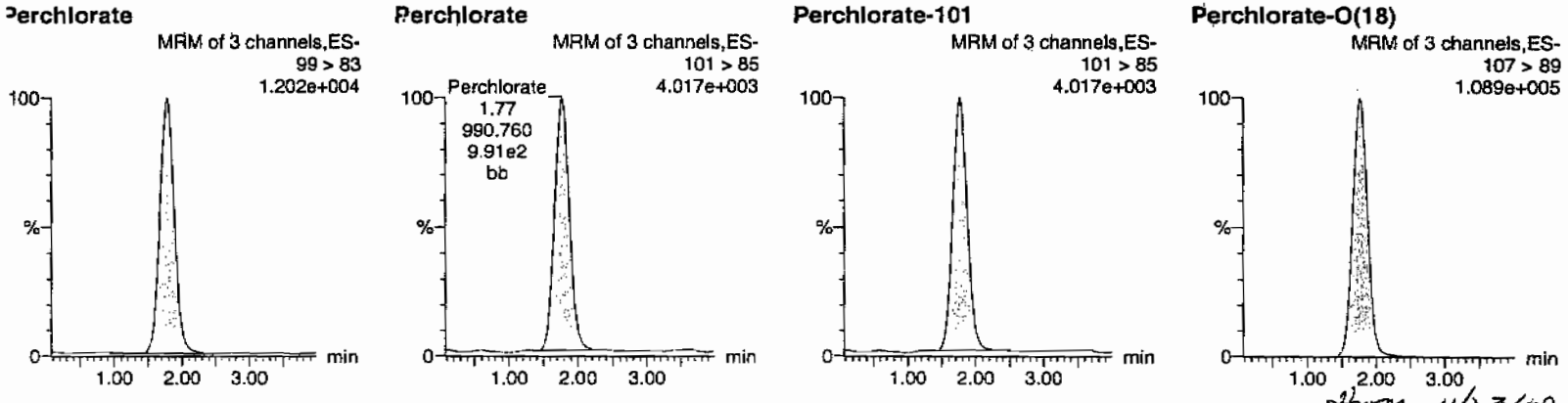

Amm 11/23/09

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.77	2997.856	2997.856	bb			0.0468	93.61	-6.39	613.183	3.03
WCL091120-07CRI	Perchlorate-101	101 > 85	1.77	990.760	990.760	bb			0.0461	92.25	-7.75	487.680	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.77	27410.371	27410.371	bb			0.4784	95.68	-4.32	991.364	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Pass
aw
11-21-09

Name: per1120037a
Date: 20-Nov-2009
Time: 20:33:53
ID: WCL091120-07CRI
Vial: 1:2,B

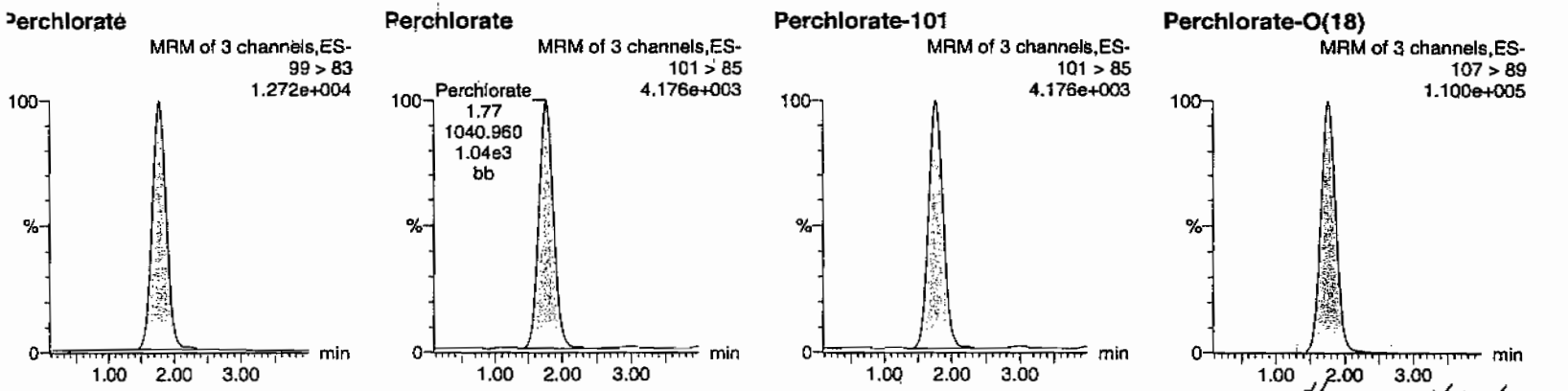

HMM 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.77	3161.534	3161.534	bb			0.0494	98.72	-1.28	1012.3...	3.04
WCL091120-07CRI	Perchlorate-101	101 > 85	1.77	1040.960	1040.960	bb			0.0485	96.92	-3.08	411.517	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.76	27600.906	27600.906	bb			0.4817	96.35	-3.65	8086.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 20–NOV–09

GEL Job No (SDG): 10–544

GEL Sample ID: 1201976892

Date Filtered: 20–NOV–09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.5	2	0.500	ug/kg	U	1	20–NOV–09 17:37	per1120012a
	Perchlorate Isotope Ratio						1	20–NOV–09 17:37	per1120012a
14797–73–0	Perchlorate–101	.5	2	0.500	ug/kg	U	1	20–NOV–09 17:37	per1120012a
	Perchlorate–O(18)			4.86	ug/kg		1	20–NOV–09 17:37	per1120012a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120012a
Date: 20-Nov-2009
Time: 17:37:48
ID: 1201976892
Vial: 1:3,A

|LANL|924759|SOLID|MB|1|

11-22-09

Perchlorate

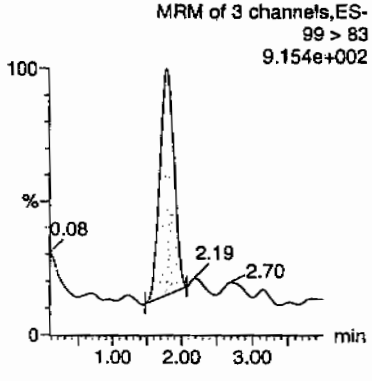

Perchlorate

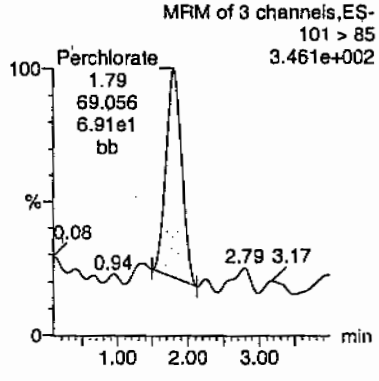

Perchlorate-101

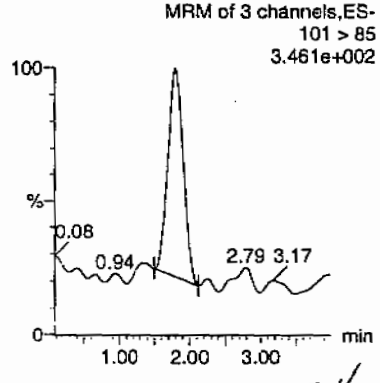

Perchlorate-O(18)

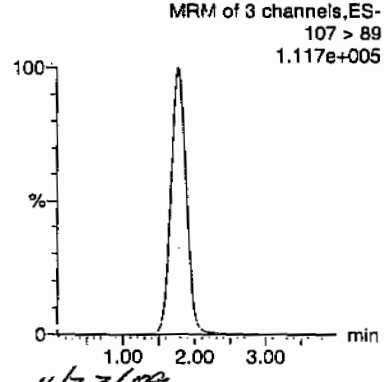

Hone 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976892	Perchlorate	99 > 83	1.79	186.294	186.294	bb			0.0029			67.872	2.70
1201976892	Perchlorate-101	101 > 85	1.79	69.056	69.056	bb			0.0032			15.332	
1201976892	Perchlorate-O(18)	107 > 89	1.77	27838.857	27838.857	bb			0.4859	97.18	-2.82	5111.8...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 20–NOV–09

GEL Job No (SDG): 10–544

GEL Sample ID: 1201976893

Date Filtered: 20–NOV–09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.5	2	1.98	ug/kg	J	1	20–NOV–09 17:44	per1120013a
	Perchlorate Isotope Ratio			3.04			1	20–NOV–09 17:44	per1120013a
14797–73–0	Perchlorate–101	.5	2	1.94	ug/kg	J	1	20–NOV–09 17:44	per1120013a
	Perchlorate–O(18)			4.74	ug/kg		1	20–NOV–09 17:44	per1120013a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120013a
Date: 20-Nov-2009
Time: 17:44:51
ID: 1201976893
Vial: 1:3,B

|LAW|927759|50ZD|LCS|1|

CWW 11-22-09

Perchlorate

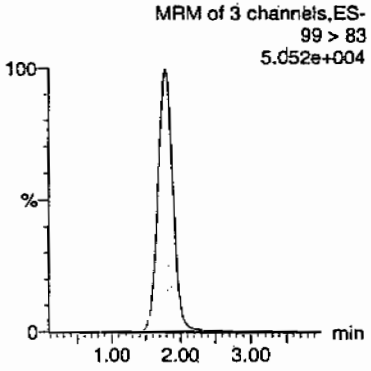

Perchlorate

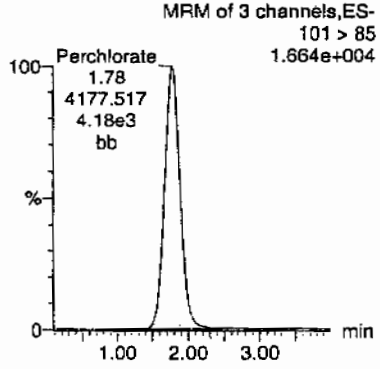

Perchlorate-101

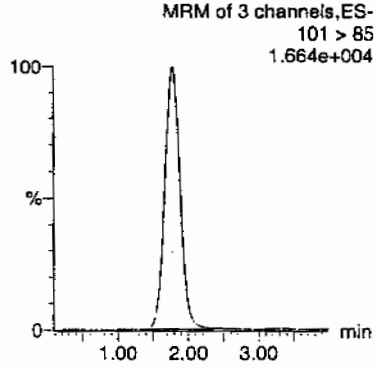

Perchlorate-O(18)

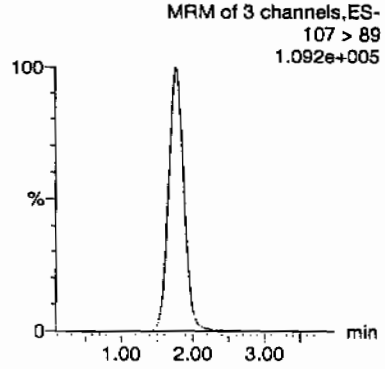

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976893	Perchlorate	99 > 83	1.78	12700.790	12700.790	bb			0.1983	99.15	-0.85	1874.7...	3.04
1201976893	Perchlorate-101	101 > 85	1.78	4177.517	4177.517	bb			0.1945	97.24	-2.76	564.736	
1201976893	Perchlorate-O(18)	107 > 89	1.77	27138.947	27138.947	bb			0.4737	94.74	-5.26	11258....	

$\frac{12700.790}{64050.4} = 0.1983$

HMC 11/23/09

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13618MS

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 1201976894

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.583	2.33	2.42	ug/kg		1	20-NOV-09 18:27	per1120019a
	Perchlorate Isotope Ratio			3.08			1	20-NOV-09 18:27	per1120019a
14797-73-0	Perchlorate-101	.583	2.33	2.35	ug/kg		1	20-NOV-09 18:27	per1120019a
	Perchlorate-O(18)			5.90	ug/kg		1	20-NOV-09 18:27	per1120019a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120019a
Date: 20-Nov-2009
Time: 18:27:04
ID: 1201976894
Vial: 1:4,B

| LANL | 924759 | 50620 | MS | 11

11-22-09

Perchlorate

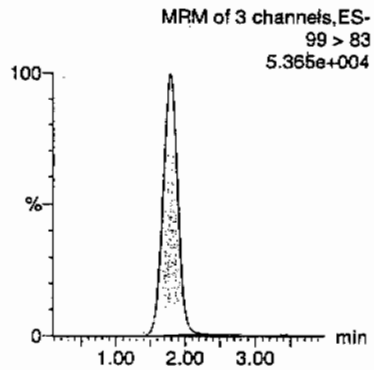

Perchlorate

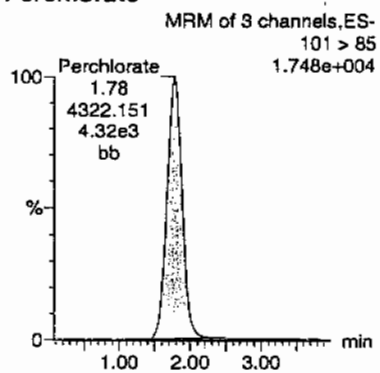

Perchlorate-101

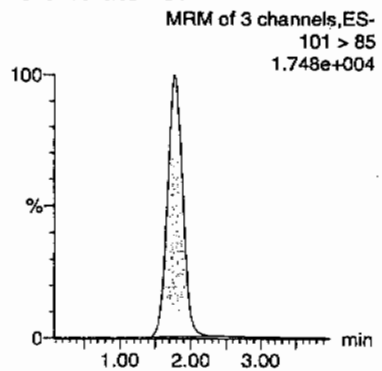

Perchlorate-O(18)

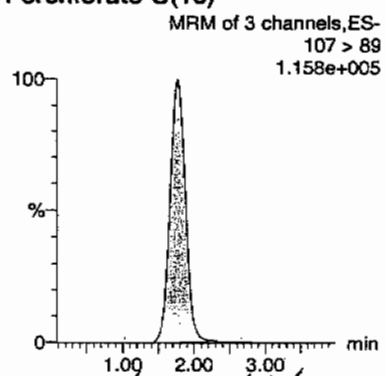

11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976894	Perchlorate	99 > 83	1.78	13304.989	13304.989	bb			0.2077	103.86	3.86	5855.1...	3.08
1201976894	Perchlorate-101	101 > 85	1.78	4322.151	4322.151	bb			0.2012	100.61	0.61	2441.1...	
1201976894	Perchlorate-O(18)	107 > 89	1.77	28978.936	28978.936	bb			0.5058	101.16	1.16	12898....	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 924758

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13618MSD

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544

GEL Sample ID: 1201976895

Date Filtered: 20-NOV-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.583	2.33	2.33	ug/kg	J	1	20-NOV-09 18:34	per1120020a
	Perchlorate Isotope Ratio			2.98			1	20-NOV-09 18:34	per1120020a
14797-73-0	Perchlorate-101	.583	2.33	2.33	ug/kg	J	1	20-NOV-09 18:34	per1120020a
	Perchlorate-O(18)			5.77	ug/kg		1	20-NOV-09 18:34	per1120020a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112009a.qld

Last Altered: Saturday, November 21, 2009 12:25:50 PM Eastern Standard Time
Printed: Saturday, November 21, 2009 12:38:38 PM Eastern Standard Time

Name: per1120020a
Date: 20-Nov-2009
Time: 18:34:07
ID: 1201976895
Vial: 1:4,C

| LANL | 924759 | SOL20 | MSD | 11

11-22-9

Perchlorate

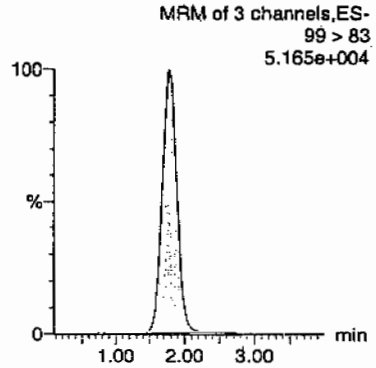

Perchlorate

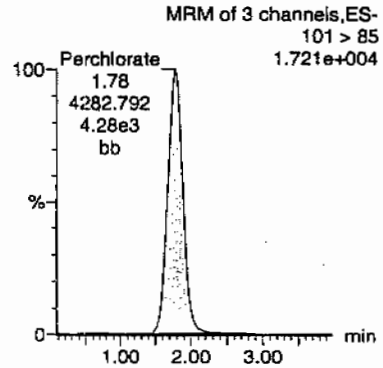

Perchlorate-101

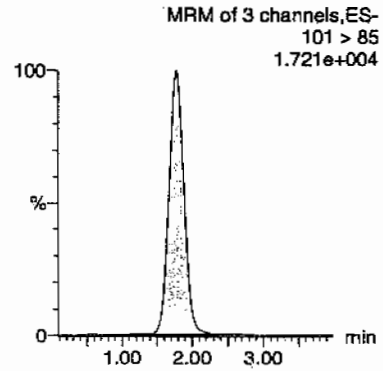

Perchlorate-O(18)

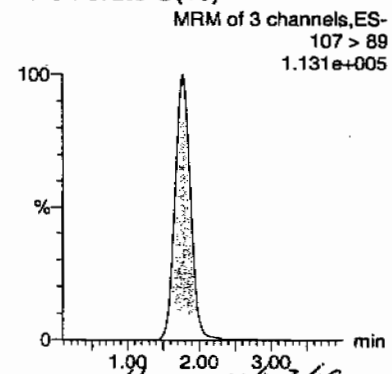

Amm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201976895	Perchlorate	99 > 83	1.78	12772.271	12772.271	bb			0.1994	99.70	-0.30	3294.7...	2.98
1201976895	Perchlorate-101	101 > 85	1.78	4282.792	4282.792	bb			0.1994	99.69	-0.31	1403.2...	
1201976895	Perchlorate-O(18)	107 > 89	1.77	28359.275	28359.275	bb			0.4950	99.00	-1.00	9719.9...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 924758 Verified by: _____

Analyst: Jareth Shirley

Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6

Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201976892 MB	20-NOV-2009 13:35:20	2	20	10
1201976893 LCS	20-NOV-2009 13:35:20	2	20	10
241180001	20-NOV-2009 13:35:20	2	20	10
241180002	20-NOV-2009 13:35:20	2	20	10
241180003	20-NOV-2009 13:35:20	2	20	10
241322001	20-NOV-2009 13:35:20	2	20	10
1201976894 MS (241322001)	20-NOV-2009 13:35:20	2	20	10
1201976895 MSD (241322001)	20-NOV-2009 13:35:20	2	20	10
241322002	20-NOV-2009 13:35:20	2	20	10
241322003	20-NOV-2009 13:35:20	2	20	10
241322004	20-NOV-2009 13:35:20	2	20	10
241322005	20-NOV-2009 13:35:20	2	20	10
241322006	20-NOV-2009 13:35:20	2	20	10
241322007	20-NOV-2009 13:35:20	2	20	10
241322008	20-NOV-2009 13:35:20	2	20	10
241322009	20-NOV-2009 13:35:20	2	20	10
241322010	20-NOV-2009 13:35:20	2	20	10
241322011	20-NOV-2009 13:35:20	2	20	10
241322012	20-NOV-2009 13:35:20	2	20	10
241336001	20-NOV-2009 13:35:20	2	20	10
241336002	20-NOV-2009 13:35:20	2	20	10
1201976896 ICS	20-NOV-2009 13:35:20	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201976896	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL
LCS	1201976893	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL
MS	1201976894	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL
MSD	1201976895	10 ug/L ICV/CCV Second Source	UCL091019-02.1	.4	mL

Comments:

Desalting cartridges used: 090914-1-H & 090817-1-Ba

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 11/20/09
Extr. Injection Volume: 20uL
Sequence Number: per112009a
Initial Calibration Date: 11/20/09

Method: EPA 6850-Modified
Int. Std.: UCL090612-01.2
Mobile Phase Lot#: 1191829, 1197509
Standard-Samp Reagent Lot#:: 1197509

Reviewed BY: [illegible]
Date: 11/23/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091120-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1120001a	IPB001	CWW	11/20/2009 16:20			1		USE	B
per1120002a	IPB001	CWW	11/20/2009 16:27			1		USE	B
per1120003a	WCLICAL-01	CWW	11/20/2009 16:34			1		USE	I
per1120004a	WCLICAL-02	CWW	11/20/2009 16:41			1		USE	I
per1120005a	WCLICAL-03	CWW	11/20/2009 16:48			1		USE	I
per1120006a	WCLICAL-04	CWW	11/20/2009 16:55			1		USE	I
per1120007a	WCLICAL-05	CWW	11/20/2009 17:02			1		USE	I
per1120008a	IPB002	CWW	11/20/2009 17:09			1		USE	B
per1120009a	WCLICV	CWW	11/20/2009 17:16			1		USE	C
per1120010a	IPB003	CWW	11/20/2009 17:23			1		USE	B
per1120011a	WCLCRI	CWW	11/20/2009 17:30			1		USE	C
per1120012a	1201976892	CWW	11/20/2009 17:37	924759	VARIOUS	1	LANL	USE	S
per1120013a	1201976893	CWW	11/20/2009 17:44	924759	VARIOUS	1	LANL	USE	S
per1120014a	1201976896	CWW	11/20/2009 17:51	924759	VARIOUS	1	LANL	USE	S
per1120015a	241180001	CWW	11/20/2009 17:58	924759	10-520	1	LANL	USE	S
per1120016a	241180002	CWW	11/20/2009 18:05	924759	10-520	1	LANL	USE	S
per1120017a	241180003	CWW	11/20/2009 18:12	924759	10-520	1	LANL	USE	S
per1120018a	241322001	CWW	11/20/2009 18:20	924759	10-544	1	LANL	USE	S
per1120019a	1201976894	CWW	11/20/2009 18:27	924759	10-544	1	LANL	USE	S
per1120020a	1201976895	CWW	11/20/2009 18:34	924759	10-544	1	LANL	USE	S
per1120021a	241322002	CWW	11/20/2009 18:41	924759	10-544	1	LANL	USE	S
per1120022a	WCLCCV	CWW	11/20/2009 18:48			1		USE	C
per1120023a	IPB004	CWW	11/20/2009 18:55			1		USE	B
per1120024a	WCLCRI	CWW	11/20/2009 19:02			1		USE	C
per1120025a	241322003	CWW	11/20/2009 19:09	924759	10-544	1	LANL	USE	S
per1120026a	241322004	CWW	11/20/2009 19:16	924759	10-544	1	LANL	USE	S
per1120027a	241322005	CWW	11/20/2009 19:23	924759	10-544	1	LANL	USE	S
per1120028a	241322006	CWW	11/20/2009 19:30	924759	10-544	1	LANL	USE	S
per1120029a	241322007	CWW	11/20/2009 19:37	924759	10-544	1	LANL	USE	S

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per1120030a	241322008	CWW	11/20/2009 19:44	924759	10-544	1	LANL	USE	S
per1120031a	241322009	CWW	11/20/2009 19:51	924759	10-544	1	LANL	USE	S
per1120032a	241322010	CWW	11/20/2009 19:58	924759	10-544	1	LANL	USE	S
per1120033a	241322011	CWW	11/20/2009 20:05	924759	10-544	1	LANL	USE	S
per1120034a	241322012	CWW	11/20/2009 20:12	924759	10-544	1	LANL	USE	S
per1120035a	WCLCCV	CWW	11/20/2009 20:19			1		USE	C
per1120036a	IPB005	CWW	11/20/2009 20:26			1		USE	B
per1120037a	WCLCRI	CWW	11/20/2009 20:33			1		USE	C
per1120038a	241336001	CWW	11/20/2009 20:40	924759	10-546	1	LANL	USE	S
per1120039a	241336002	CWW	11/20/2009 20:48	924759	10-546	1	LANL	USE	S
per1120040a	IPB006	CWW	11/20/2009 20:55			1		USE	B
per1120041a	1201977650	CWW	11/20/2009 21:02	925084	VARIOUS	1	LANL	USE	S
per1120042a	1201977651	CWW	11/20/2009 21:09	925084	VARIOUS	1	LANL	USE	S
per1120043a	1201977659	CWW	11/20/2009 21:16	925084	VARIOUS	1	LANL	USE	S
per1120044a	240744001	CWW	11/20/2009 21:23	925084	10-411	200	LANL	USE	S
per1120045a	240744004	CWW	11/20/2009 21:30	925084	10-411	200	LANL	USE	S
per1120046a	WCLCCV	CWW	11/20/2009 21:37			1		USE	C
per1120047a	IPB007	CWW	11/20/2009 21:44			1		USE	B
per1120048a	WCLCRI	CWW	11/20/2009 21:51			1		USE	C
per1120049a	240744006	CWW	11/20/2009 21:58	925084	10-411	1	LANL	USE	S
per1120050a	1201977652	CWW	11/20/2009 22:05	925084	10-411	1	LANL	USE	S
per1120051a	1201977653	CWW	11/20/2009 22:13	925084	10-411	1	LANL	USE	S
per1120052a	240750002	CWW	11/20/2009 22:20	925084	10-417	4	LANL	USE	S
per1120053a	240811002	CWW	11/20/2009 22:27	925084	10-423	1	LANL	USE	S
per1120054a	240811004	CWW	11/20/2009 22:34	925084	10-423	1	LANL	USE	S
per1120055a	240815001	CWW	11/20/2009 22:41	925084	10-430	10	LANL	USE	S
per1120056a	240867003	CWW	11/20/2009 22:48	925084	10-446	1	LANL	USE	S
per1120057a	240869001	CWW	11/20/2009 22:55	925084	10-447	10	LANL	USE	S
per1120058a	240869004	CWW	11/20/2009 23:02	925084	10-447	20	LANL	USE	S
per1120059a	WCLCCV	CWW	11/20/2009 23:09			1		USE	C
per1120060a	IPB008	CWW	11/20/2009 23:16			1		USE	B
per1120061a	WCLCRI	CWW	11/20/2009 23:23			1		USE	C
per1120062a	241023002	CWW	11/20/2009 23:30	925084	10-452	1	LANL	USE	S
per1120063a	241023004	CWW	11/20/2009 23:37	925084	10-452	1	LANL	USE	S
per1120064a	241100001	CWW	11/20/2009 23:44	925084	10-483	1	LANL	USE	S
per1120065a	241100003	CWW	11/20/2009 23:51	925084	10-483	2	LANL	USE	S
per1120066a	241104001	CWW	11/20/2009 23:58	925084	10-485-1	1	LANL	USE	S

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per1120067a	1201977666	CWW	11/21/2009 0:05	925084	10-485-1	1	LANL	USE	S
per1120068a	1201977667	CWW	11/21/2009 0:13	925084	10-485-1	1	LANL	USE	S
per1120069a	241104002	CWW	11/21/2009 0:20	925084	10-485-1	1	LANL	USE	S
per1120070a	241113002	CWW	11/21/2009 0:27	925084	10-494	1	LANL	USE	S
per1120071a	241113003	CWW	11/21/2009 0:34	925084	10-494	1	LANL	USE	S
per1120072a	WCLCCV	CWW	11/21/2009 0:41			1		USE	C
per1120073a	IPB009	CWW	11/21/2009 0:48			1		USE	B
per1120074a	WCLCRI	CWW	11/21/2009 0:55			1		USE	C

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-544-1

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	924871
Prep Batch Number:	924868

Sample Analysis

Sample ID	Client ID
241325001	RE03-10-6088
241325002	RE03-10-6090
1201977187	Interference Check Sample (ICS)
1201977175	Method Blank (MB)
1201977176	Laboratory Control Sample (LCS)
1201977185	241187001(RE03-10-5534) Matrix Spike (MS)
1201977186	241187001(RE03-10-5534) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

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CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Client sample 241187001 (RE03-10-5534) from SDG 10-521 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

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Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M Maier **Date:** 12/05/09

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6088

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544-1

GEL Sample ID: 241325001

Date Filtered: 24-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 20:51	per1127067a
	Perchlorate Isotope Ratio						1	27-NOV-09 20:51	per1127067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 20:51	per1127067a
	Perchlorate-O(18)			0.461	ug/L		1	27-NOV-09 20:51	per1127067a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6090

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544-1

GEL Sample ID: 241325002

Date Filtered: 24-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 21:00	per1127068a
	Perchlorate Isotope Ratio						1	27-NOV-09 21:00	per1127068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 21:00	per1127068a
	Perchlorate-O(18)			0.466	ug/L		1	27-NOV-09 21:00	per1127068a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-544-1

Extract Batch Code: 924868

Date Filtered: 24-NOV-09

Matrix: SURFACE WATE

Sample ID: 1201977176

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.195	ug/L	97.7		85 – 115
Perchlorate Isotope Ratio		3.12				–
Perchlorate-101	0.200	.185	ug/L	92.6		85 – 115
Perchlorate-O(18)		.478	ug/L			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-544-1

Extract Batch Code: 924868

Date Filtered: 24-NOV-09

Matrix: WATER

Sample ID: 1201977187

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.202	ug/L	101		70 – 130
Perchlorate Isotope Ratio		3.13				
Perchlorate–101	0.200	.191	ug/L	95.5		70 – 130
Perchlorate–O(18)		.487	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127054a
Date: 27-Nov-2009
Time: 19:00:32
ID: 1201977187 | LWL | 924871 | LIQ | ICS | 1 |
Vial: 2:1,C

HMM 11/28/09

Perchlorate

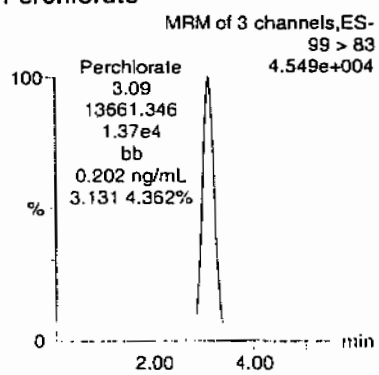

Perchlorate

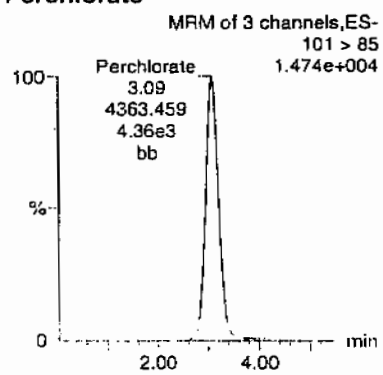

Perchlorate-101

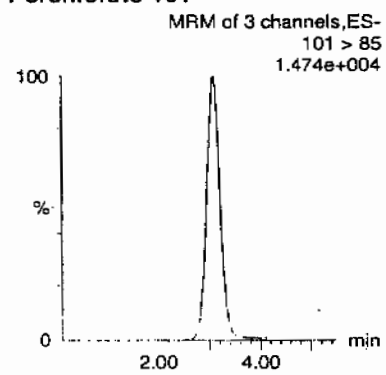

Perchlorate-O(18)

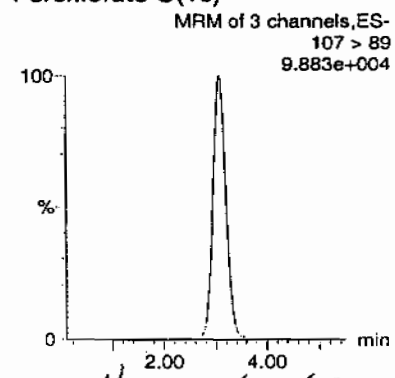

HMM 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201977187	Perchlorate	99 > 83	3.09	13661.346	13661.346	bb			0.2020	100.99	0.99	3765.6...	3.13
1201977187	Perchlorate-101	101 > 85	3.09	4363.459	4363.459	bb			0.1910	95.52	-4.48	672.802	
1201977187	Perchlorate-O(18)	107 > 89	3.07	29405.760	29405.760	bb			0.4866	97.32	-2.68	3136.7...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–544–1

Extract Batch Code: 924868

Date Extracted: 24–NOV–09

GEL MS/PS ID: 1201977185

Client ID: RE03–10–5534

GEL MSD/PSD ID: 1201977186

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	0.200	0.000748	ug/L	0.191	94.9		.181	90.3		4.93		30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.04			3.01			0			–
Perchlorate–101	0.200	0.00	ug/L	0.185	92.7		.179	89.4		3.69		30	75 – 125
Perchlorate–O(18)	0	0.444	ug/L	0.460			.475			3.27			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-544-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	27-NOV-09	per1127001a	IPB001
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127001a	IPB001
Perchlorate	0.00	0	NA	27-NOV-09	per1127002a	IPB001
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127002a	IPB001

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112709a.mdb 27 Nov 2009 12:37:59
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112709a.cdb 28 Nov 2009 09:29:21

Name: per1127001a
Date: 27-Nov-2009
Time: 11:27:26
D: IPB001
Vial: 1:1,A

MM 11/28/09

Perchlorate

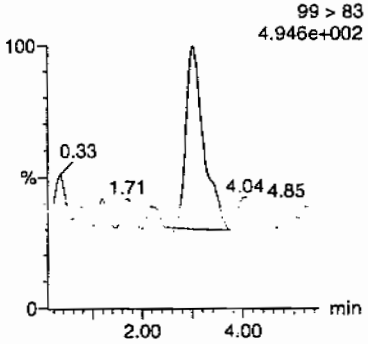

Perchlorate

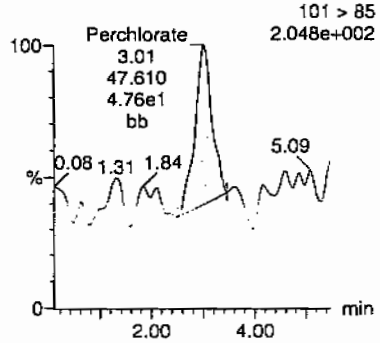

Perchlorate-101

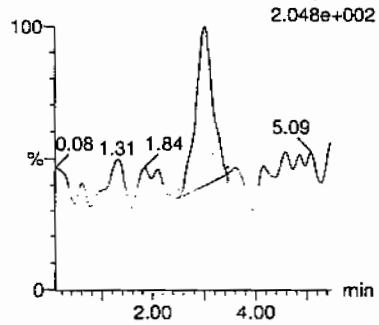

Perchlorate-O(18)

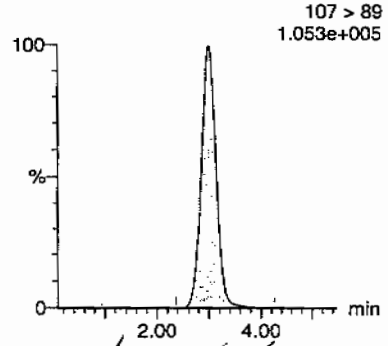

ckm 11/30/09

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83	3.01	142.772	142.772	bb			0.0021			12.725	3.00
PB001	Perchlorate-101	101 > 85	3.01	47.610	47.610	bb			0.0021			10.521	
PB001	Perchlorate-O(18)	107 > 89	3.00	34610.707	34610.707	bb			0.5727	114.54	14.54	2958.7...	

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The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127002a
Date: 27-Nov-2009
Time: 11:35:57
ID: IPB001
Vial: 1:1,A

MM 11/28/09

Perchlorate

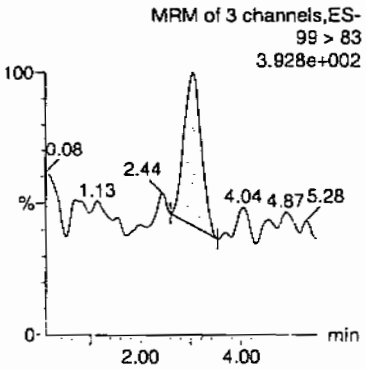

Perchlorate

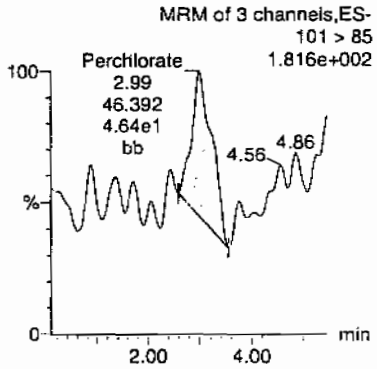

Perchlorate-101

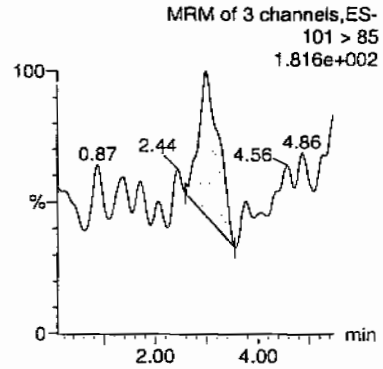

Perchlorate-O(18)

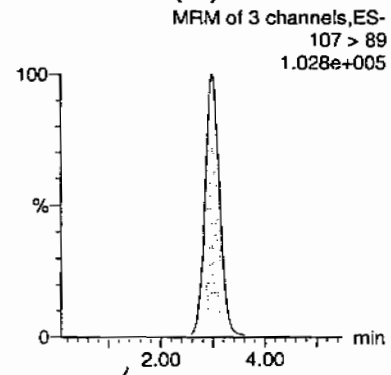

dhm 11/30

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83	3.05	91.043	91.043	bb			0.0013			7.119	1.96
PB001	Perchlorate-101	101 > 85	2.99	46.392	46.392	bb			0.0020			4.431	
PB001	Perchlorate-O(18)	107 > 89	3.00	33834.148	33834.148	bb			0.5599	111.97	11.97	2112.1...	

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–544–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	27–NOV–09	per1127008a	IPB002
Perchlorate–101	0.00	0	NA	27–NOV–09	per1127008a	IPB002
Perchlorate	0.00	0	NA	27–NOV–09	per1127010a	IPB003
Perchlorate–101	0.00	0	NA	27–NOV–09	per1127010a	IPB003
Perchlorate	0.00	0	NA	27–NOV–09	per1127021a	IPB004
Perchlorate–101	0.00	0	NA	27–NOV–09	per1127021a	IPB004
Perchlorate	0.00	0	NA	27–NOV–09	per1127027a	IPB005
Perchlorate–101	0.00	0	NA	27–NOV–09	per1127027a	IPB005
Perchlorate	0.00	0	NA	27–NOV–09	per1127039a	IPB006
Perchlorate–101	0.00	0	NA	27–NOV–09	per1127039a	IPB006
Perchlorate	0.00	0	NA	27–NOV–09	per1127050a	IPB007
Perchlorate–101	0.00	0	NA	27–NOV–09	per1127050a	IPB007
Perchlorate	0.00	0	NA	27–NOV–09	per1127062a	IPB008

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-544-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127062a	IPB008
Perchlorate	0.00	0	NA	27-NOV-09	per1127074a	IPB009
Perchlorate-101	0.00	0	NA	27-NOV-09	per1127074a	IPB009

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127008a
Date: 27-Nov-2009
Time: 12:27:06
ID: IPB002
Vial: 1:1,A

MMT 11/28/09

Perchlorate

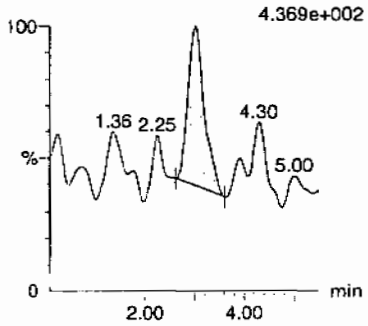

Perchlorate

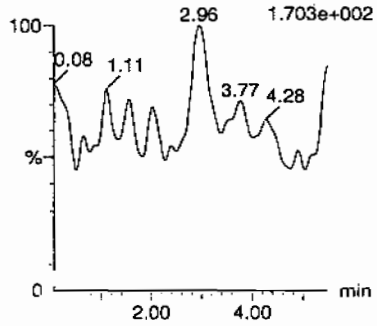

Perchlorate-101

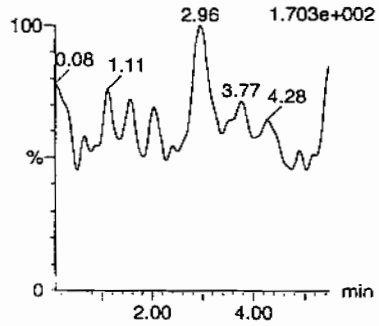

Perchlorate-O(18)

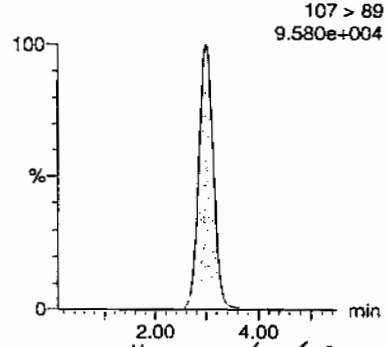

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83	3.02	101.601	101.601	bb			0.0015			8.596	0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	3.00	31692.451	31692.451	bb			0.5244	104.89	4.89	3323.1...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127010a
Date: 27-Nov-2009
Time: 12:44:11
ID: IPB003
Vial: 1:1,A

MAT 11/28/09

Perchlorate

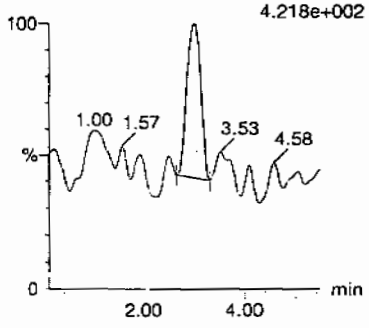

Perchlorate

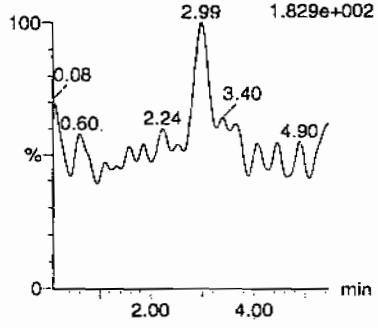

Perchlorate-101

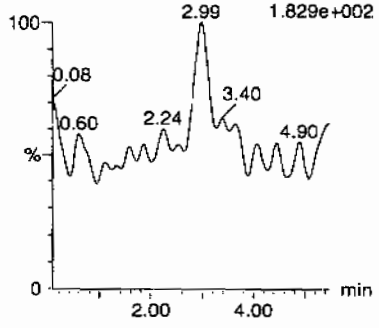

Perchlorate-O(18)

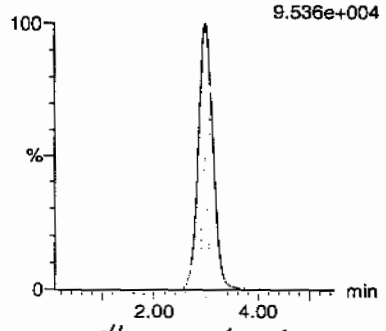

dhme 11/30/09

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83	3.02	79.958	79.958	bb			0.0012			13.832	0.00
PB003	Perchlorate-101	101 > 85											
PB003	Perchlorate-O(18)	107 > 89	2.99	31328.656	31328.656	bb			0.5184	103.68	3.68	11321....	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127021a
Date: 27-Nov-2009
Time: 14:18:12
ID: IPB004
Vial: 1:1,A

MM 11/30/09

Perchlorate

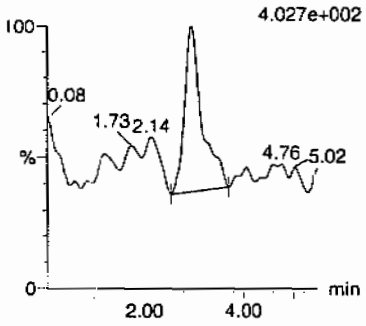

Perchlorate

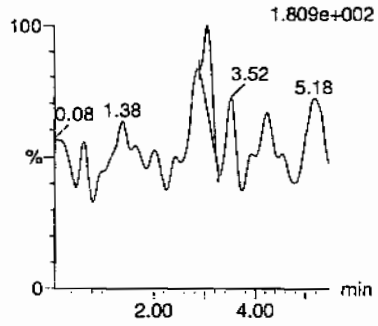

Perchlorate-101

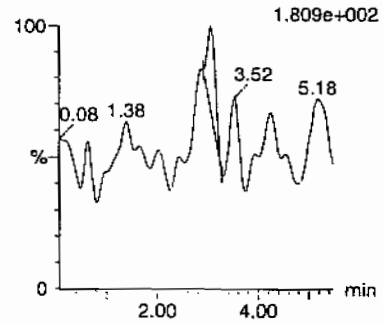

Perchlorate-O(18)

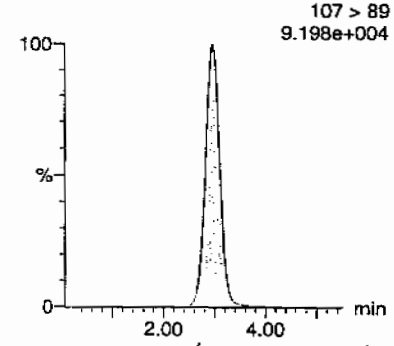

HMM 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate	99 > 83	2.95	105.218	105.218	bb			0.0016			29.068	9.03
PB004	Perchlorate-101	101 > 85	3.06	11.650	11.650	bb			0.0005			7.152	
PB004	Perchlorate-O(18)	107 > 89	2.96	30248.572	30248.572	bb			0.5005	100.11	0.11	5361.9...	

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127027a
Date: 27-Nov-2009
Time: 15:09:28
ID: IPB005
Vial: 1:1,A

MM 11/30/09

Perchlorate

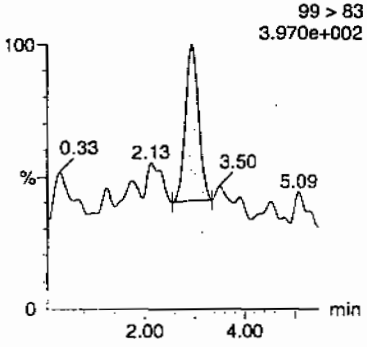

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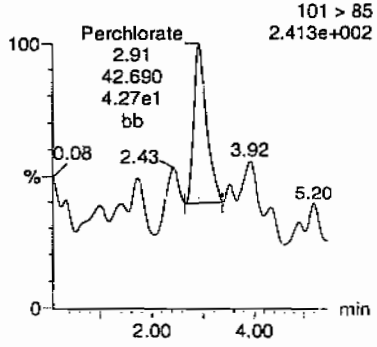

Perchlorate-101

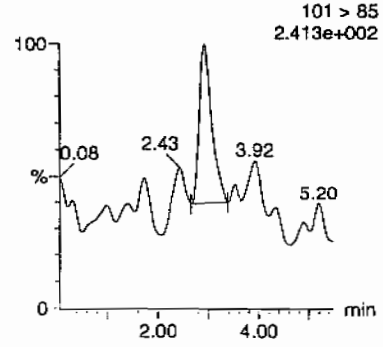

Perchlorate-O(18)

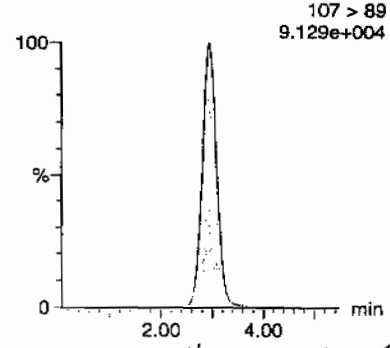

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB005	Perchlorate	99 > 83	2.94	72.538	72.538	bb			0.0011			9.240	1.70
PB005	Perchlorate-101	101 > 85	2.91	42.690	42.690	bb			0.0019			17.488	
PB005	Perchlorate-O(18)	107 > 89	2.95	29974.137	29974.137	bb			0.4960	99.20	-0.80	5218.8...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127039a
Date: 27-Nov-2009
Time: 16:52:07
ID: IPB006
Vial: 1:1,A

MJT 4/18/09

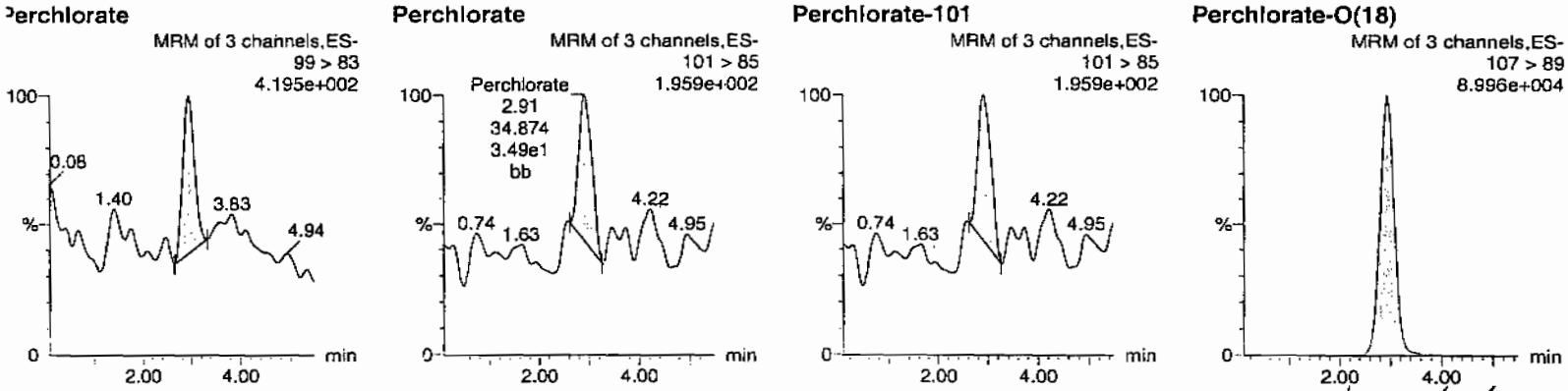

Hmc 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB006	Perchlorate	99 > 83	2.94	73.642	73.642	bb			0.0011			12.971	2.11
PB006	Perchlorate-101	101 > 85	2.91	34.874	34.874	bb			0.0015			8.957	
PB006	Perchlorate-O(18)	107 > 89	2.94	29365.887	29365.887	bb			0.4859	97.19	-2.81	8411.9...	

Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127050a
Date: 27-Nov-2009
Time: 18:26:13
ID: IPB007
Vial: 1:1,A

MMP 11/30/09

Perchlorate

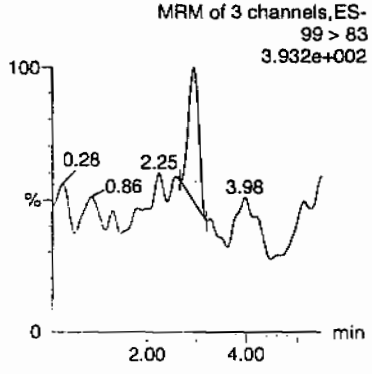

Perchlorate

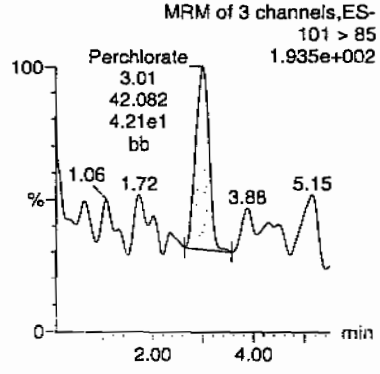

Perchlorate-101

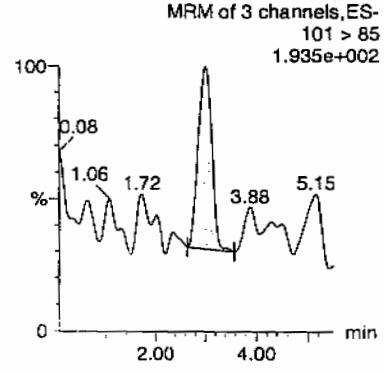

Perchlorate-O(18)

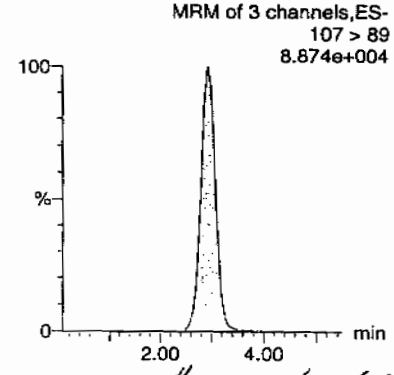

HMM 11/30/09

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB007	Perchlorate	99 > 83	2.96	49.144	49.144	bb			0.0007			6.570	1.17
PB007	Perchlorate-101	101 > 85	3.01	42.082	42.082	bb			0.0018			10.257	
PB007	Perchlorate-O(18)	107 > 89	2.94	28871.285	28871.285	bb			0.4777	95.55	-4.45	8636.8...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127062a
Date: 27-Nov-2009
Time: 20:09:00
ID: IPB008
Vial: 1:1,A

MMT 4/18/09

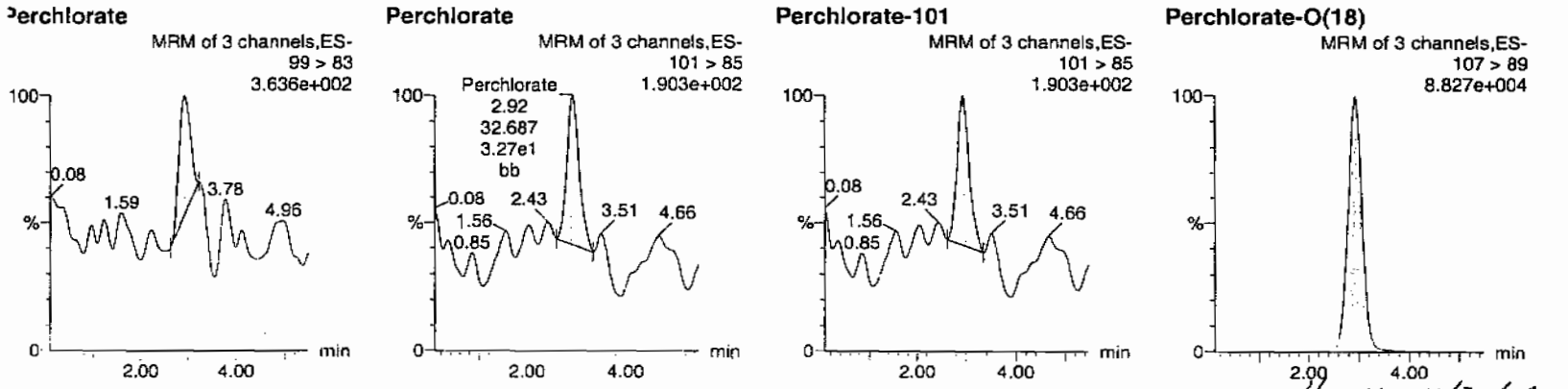

AMK 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB008	Perchlorate	99 > 83	2.92	48.169	48.169	bb			0.0007			8.922	1.47
PB008	Perchlorate-101	101 > 85	2.92	32.687	32.687	bb			0.0014			9.165	
PB008	Perchlorate-O(18)	107 > 89	2.92	28916.324	28916.324	bb			0.4785	95.70	-4.30	4135.7...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127074a
Date: 27-Nov-2009
Time: 21:51:46
ID: IPB009
Vial: 1:1,A

MATT 11/28/09

Perchlorate

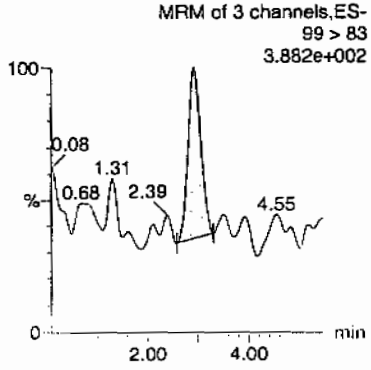

Perchlorate

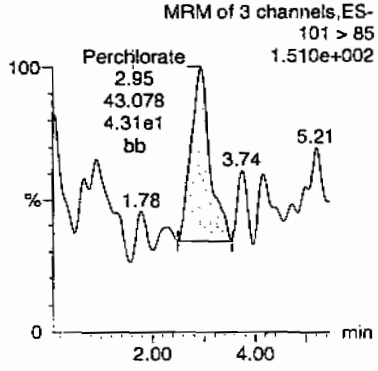

Perchlorate-101

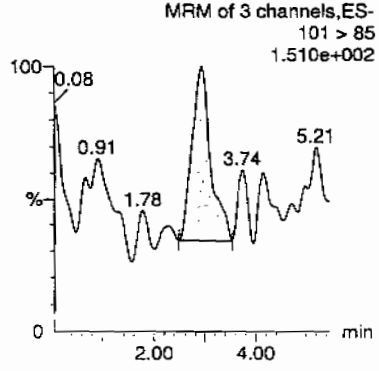

Perchlorate-O(18)

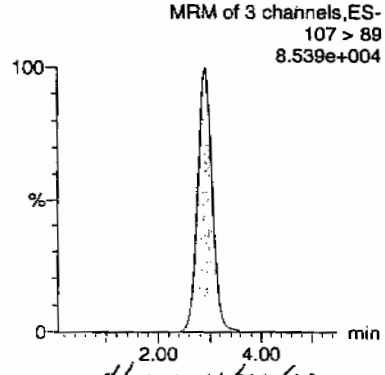

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83	2.94	75.455	75.455	bb			0.0011			9.131	1.75
IPB009	Perchlorate-101	101 > 85	2.95	43.078	43.078	bb			0.0019			8.743	
IPB009	Perchlorate-O(18)	107 > 89	2.91	28120.764	28120.764	bb			0.4653	93.07	-6.93	14720....	

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

POINTS HIGHLIGHTED BY CWJ 01-09-08

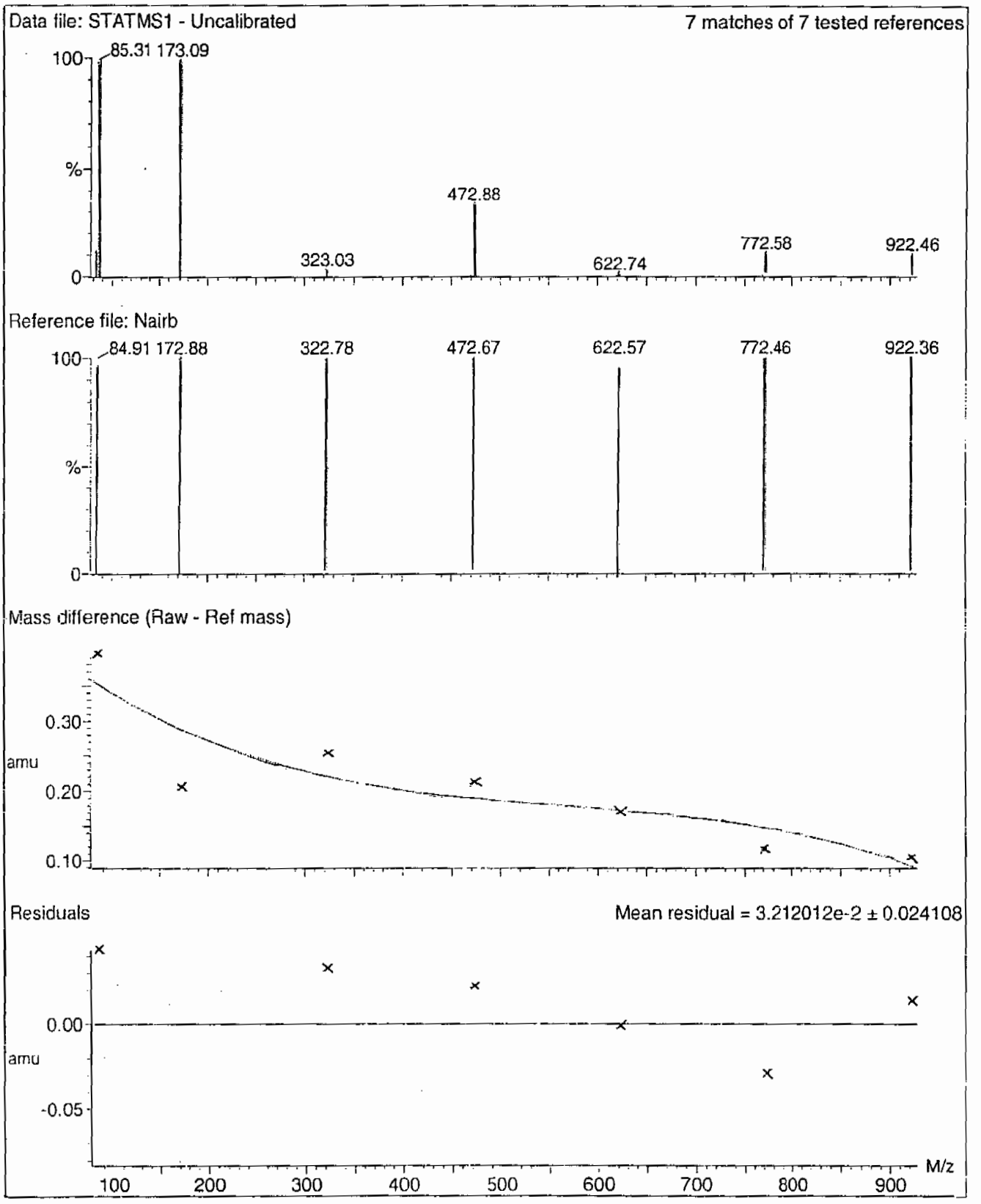

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Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

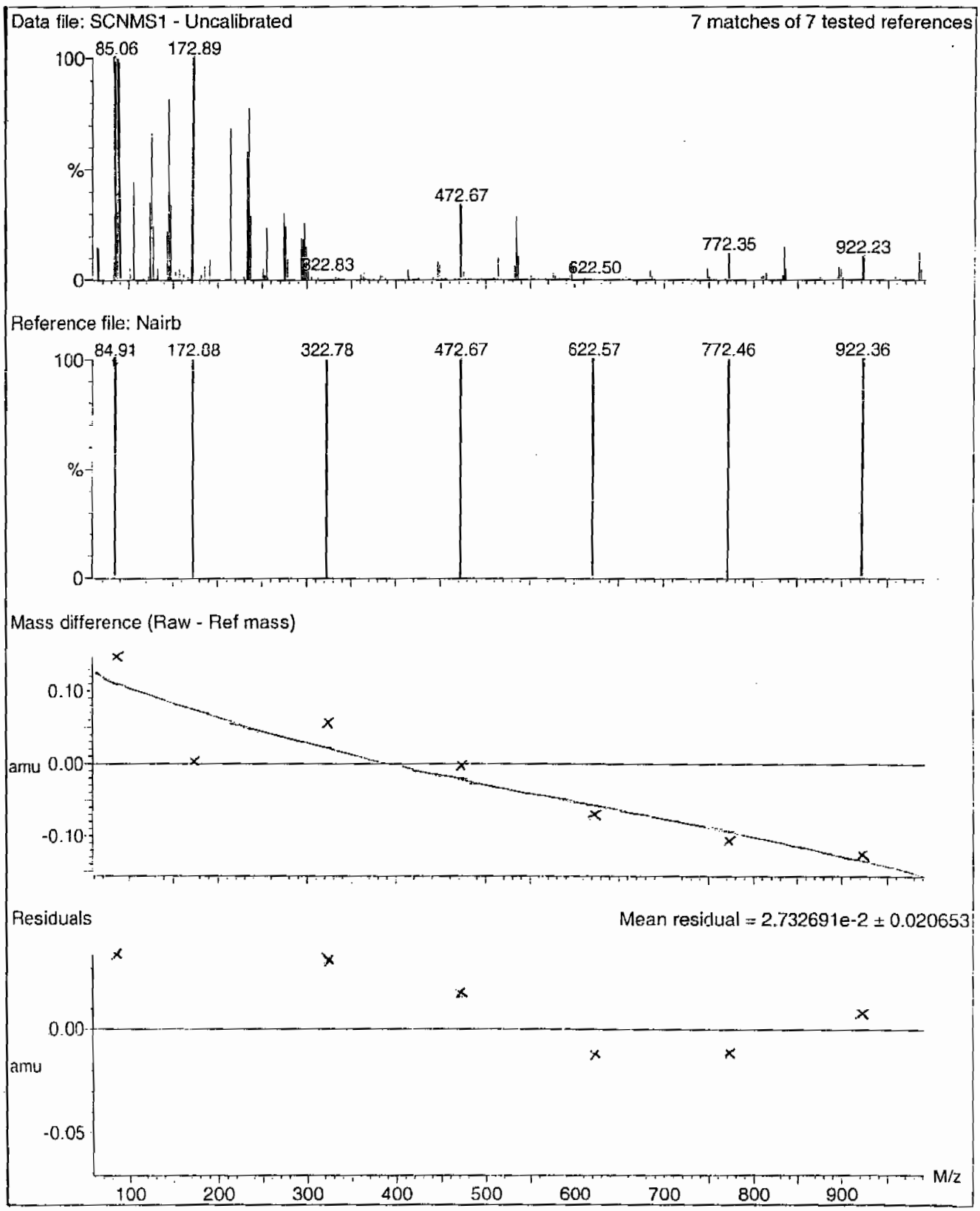

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS1 Scan Speed Compensation

Printed: Tue Jan 08 12:21:04 2008

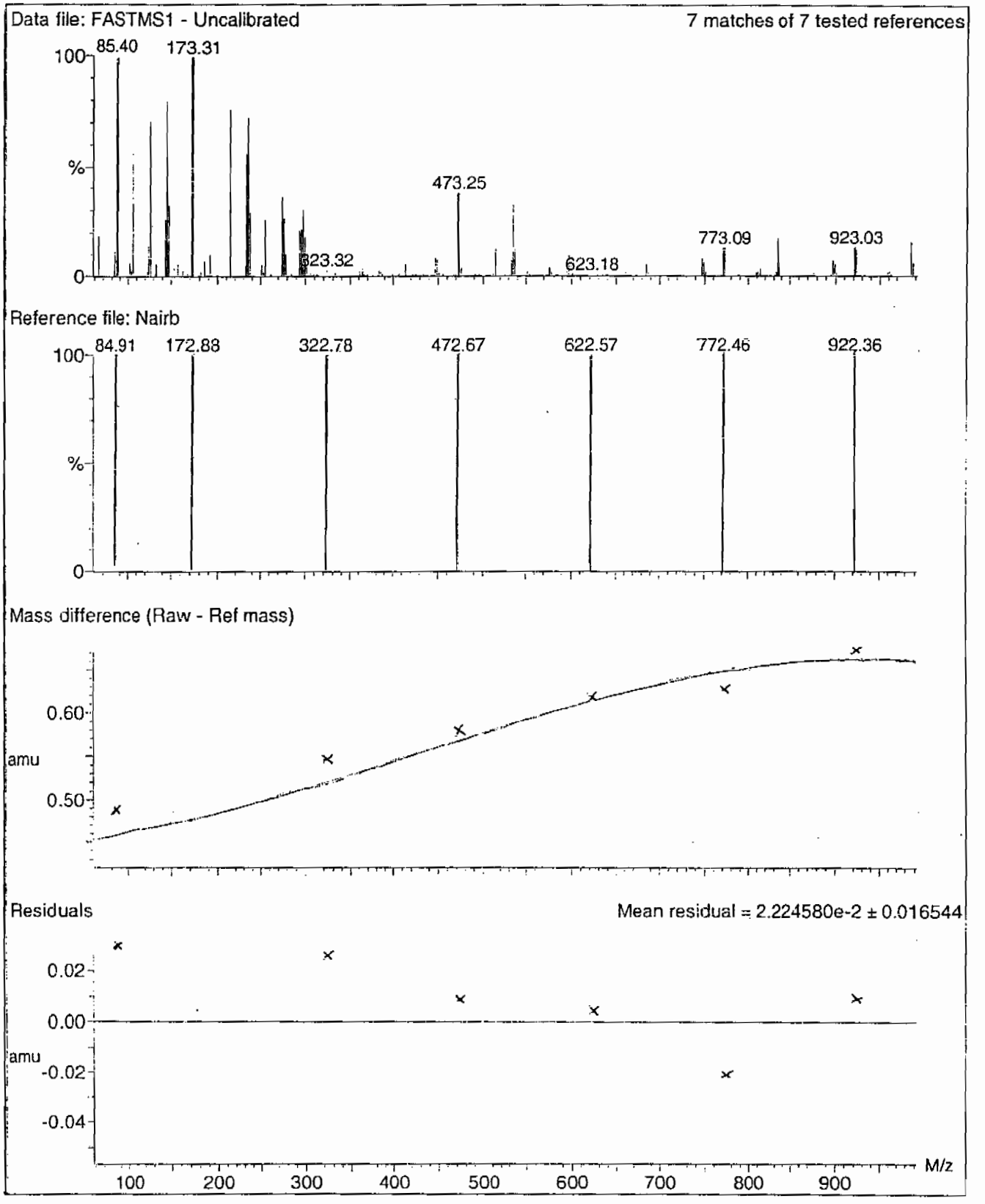

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Static

Printed: Tue Jan 08 12:21:59 2008

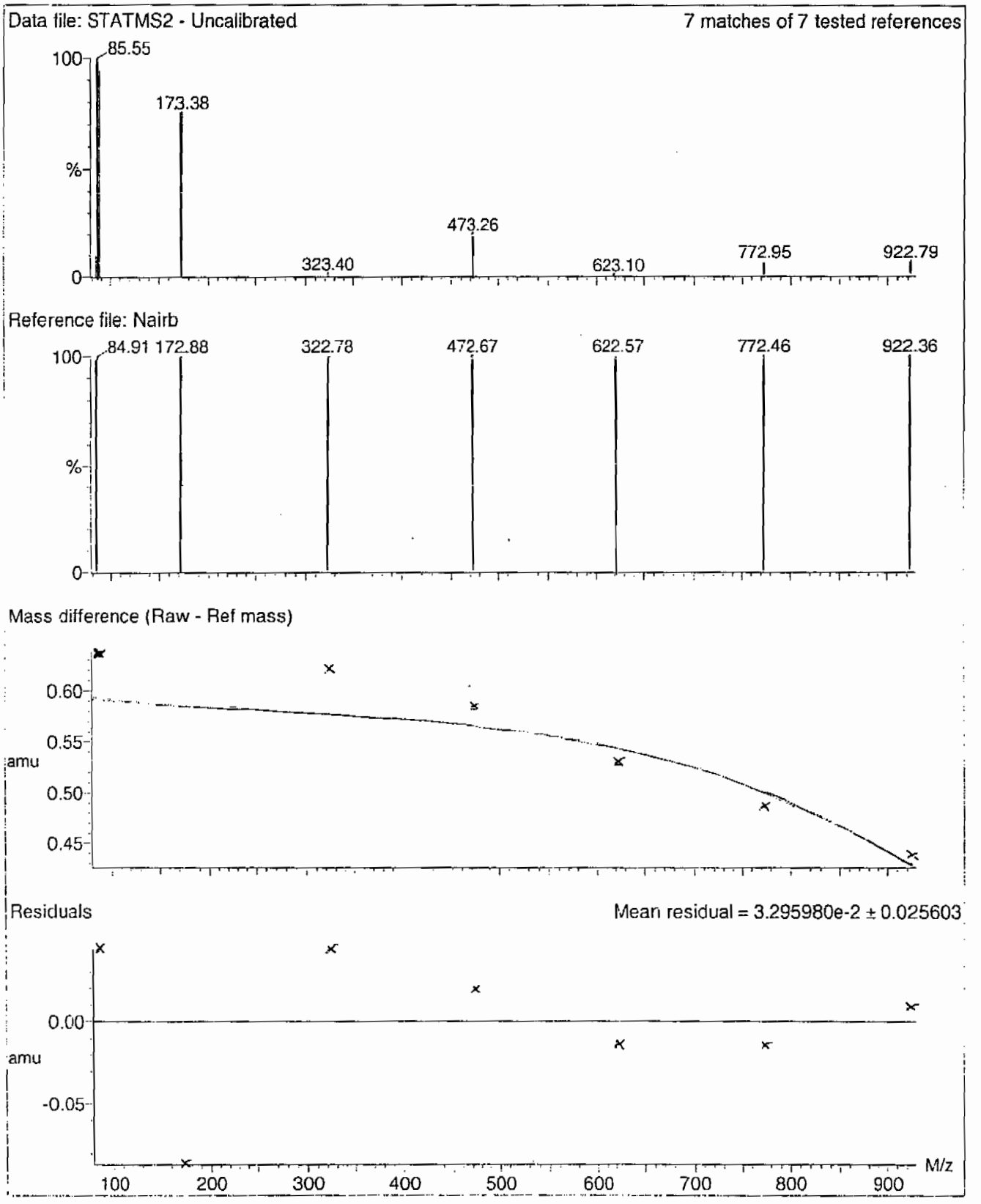

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scanning

Printed: Tue Jan 08 12:22:56 2008

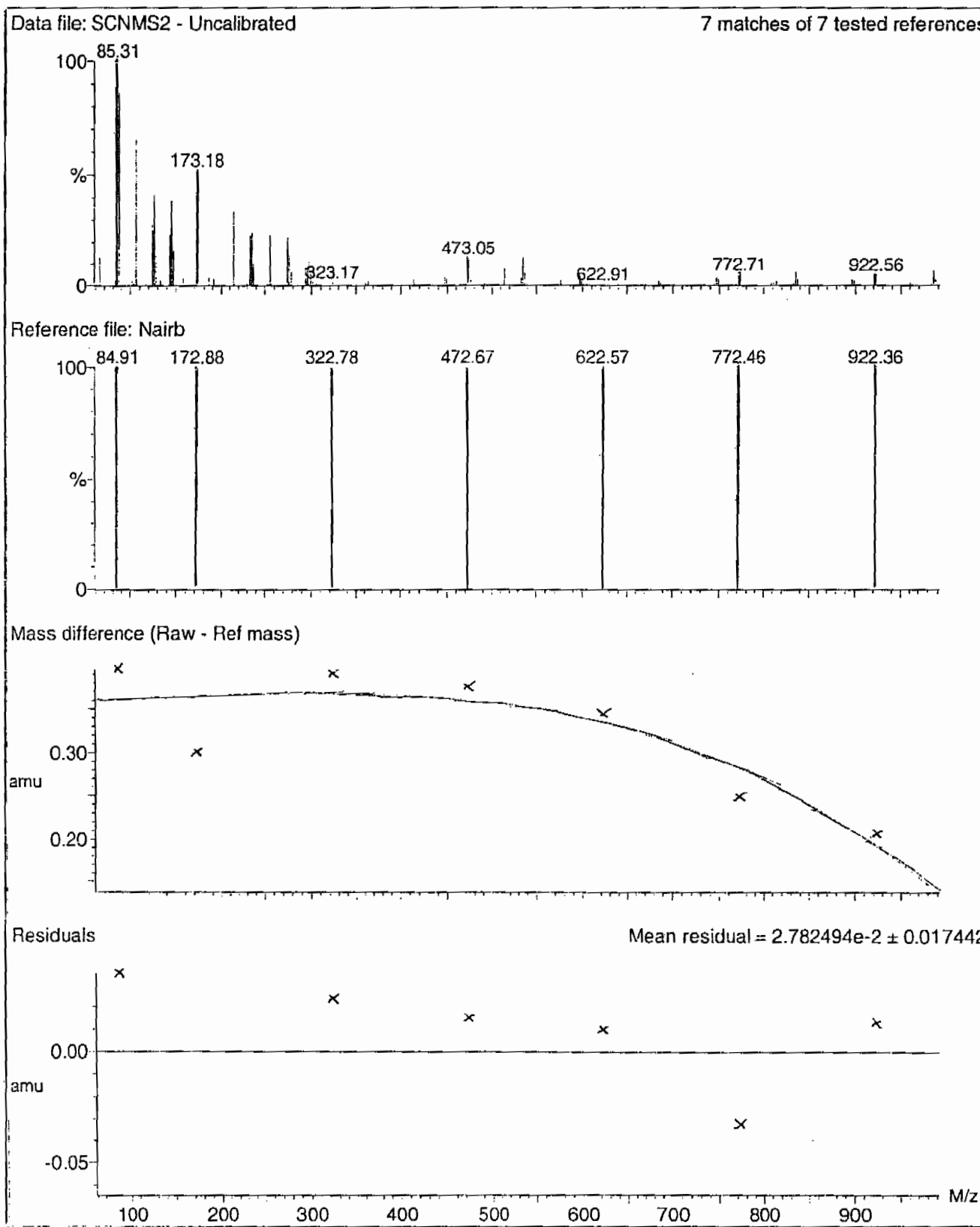

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scan Speed Compensation

Printed: Tue Jan 08 12:23:51 2008

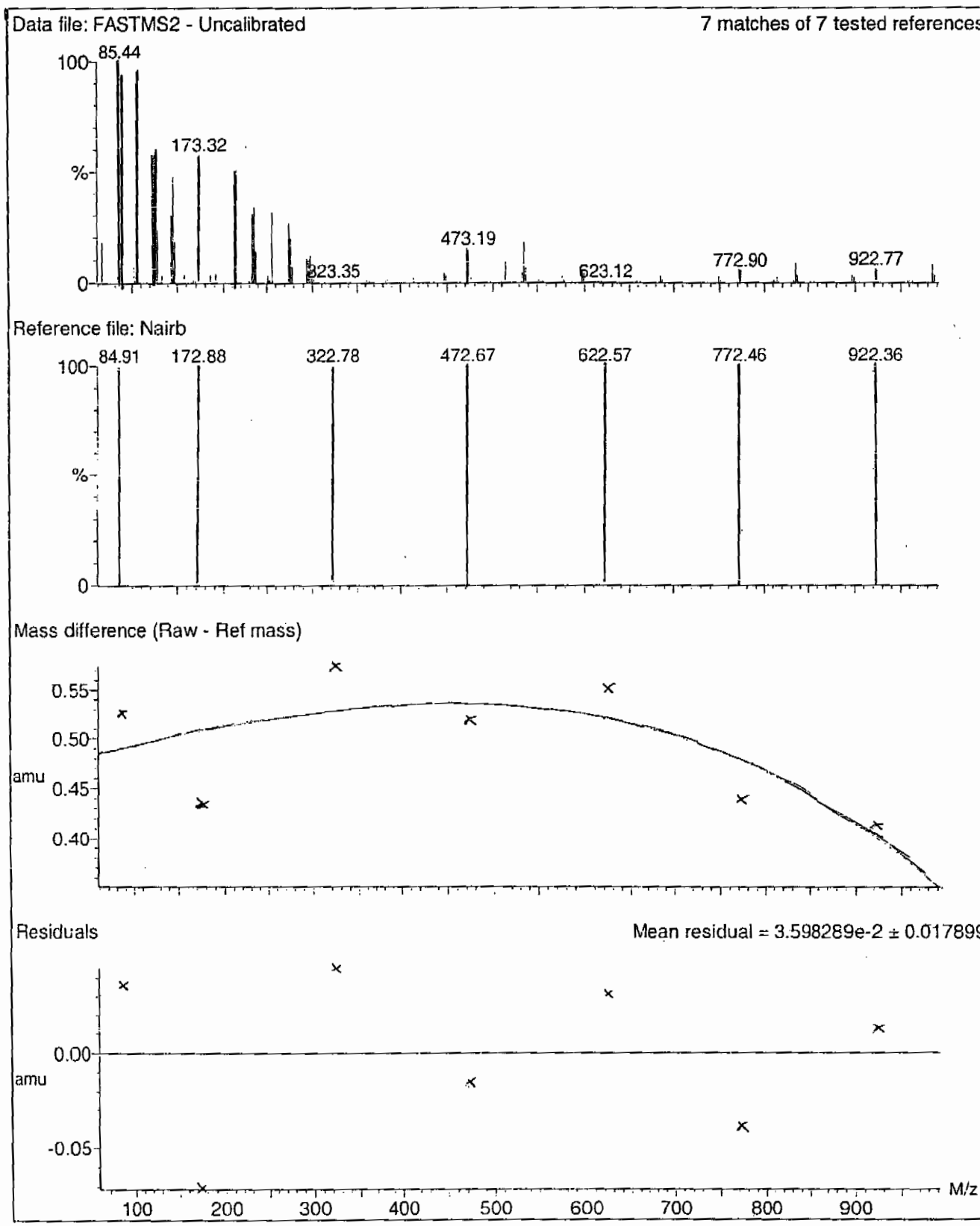

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, November 27, 2009 09:52:02 Eastern Standard Time

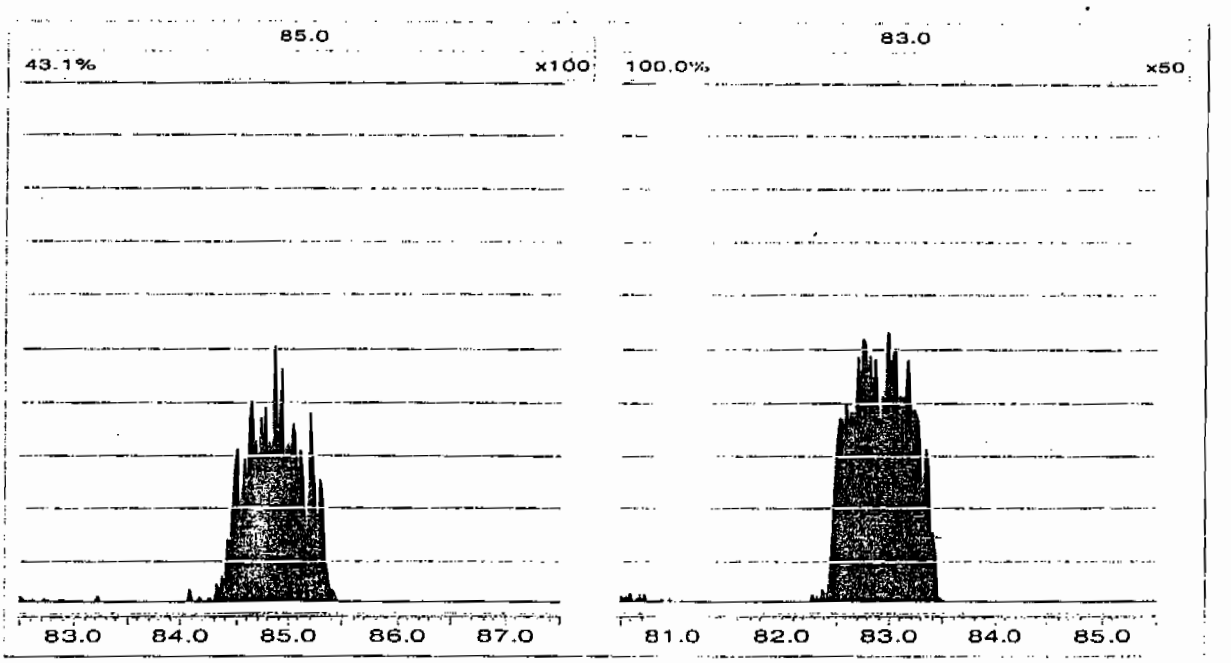

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-544-1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per1127006a**	**27-NOV-09**	**30216.3**				
Lower Area Limit			**15108.15**				
Upper Area Limit			**60432.6**				
1201977175	per1127052a	27-NOV-09 18:43	28771.3	2.94	2.94872	1.003	
1201977176	per1127053a	27-NOV-09 18:52	28893.8	2.94	2.94868	1.003	
1201977187	per1127054a	27-NOV-09 19:00	29405.8	3.07	3.08527	1.005	
241325001	per1127067a	27-NOV-09 20:51	27881.3	2.91			
241325002	per1127068a	27-NOV-09 21:00	28173.2	2.91	2.92377	1.005	

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SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6088

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544-1

GEL Sample ID: 241325001

Date Filtered: 24-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 20:51	per1127067a
	Perchlorate Isotope Ratio						1	27-NOV-09 20:51	per1127067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 20:51	per1127067a
	Perchlorate-O(18)			0.461	ug/L		1	27-NOV-09 20:51	per1127067a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127067a
Date: 27-Nov-2009
Time: 20:51:47
ID: 241325001 | LANC | 924871 | LZQ | 1 |
Vial: 2:3,A

MA 11/28/09

Perchlorate

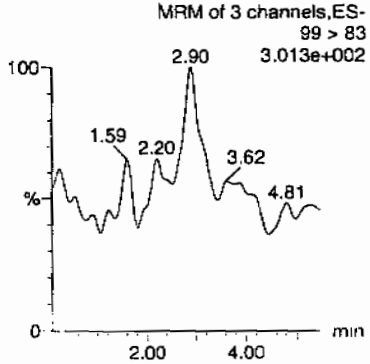

Perchlorate

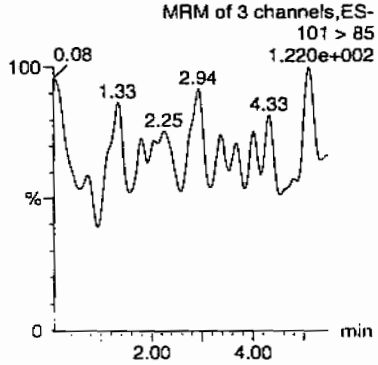

Perchlorate-101

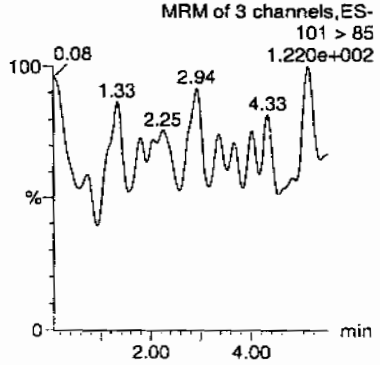

Perchlorate-O(18)

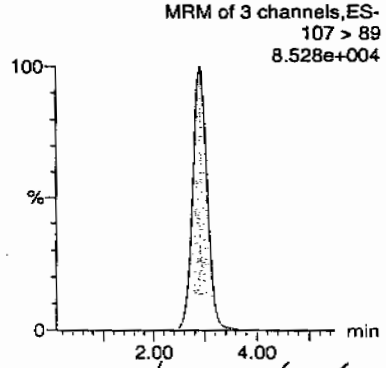

Hnm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241325001	Perchlorate	99 > 83											0.00
241325001	Perchlorate-101	101 > 85											
241325001	Perchlorate-O(18)	107 > 89	2.91	27881.285	27881.285	bb			0.4614	92.27	-7.73	7239.2...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6090

Date Received: 18-NOV-09

GEL Job No (SDG): 10-544-1

GEL Sample ID: 241325002

Date Filtered: 24-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 21:00	per1127068a
	Perchlorate Isotope Ratio						1	27-NOV-09 21:00	per1127068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 21:00	per1127068a
	Perchlorate-O(18)			0.466	ug/L		1	27-NOV-09 21:00	per1127068a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127068a
Date: 27-Nov-2009
Time: 21:00:20
ID: 241325002
Vial: 2;3,B

| LANL | 924871 | LIQ | 1 |

MH 4/28/09

Perchlorate

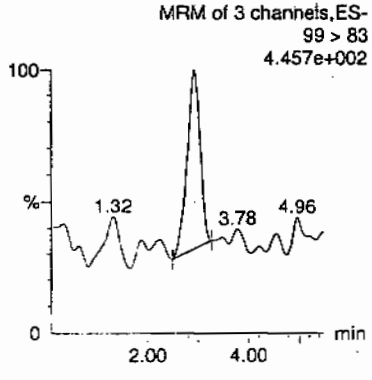

Perchlorate

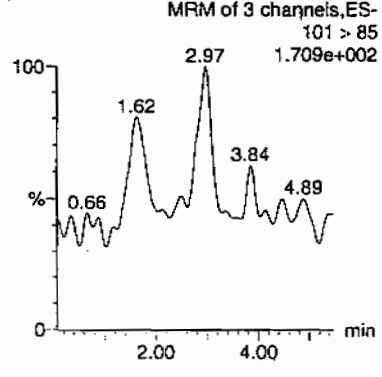

Perchlorate-101

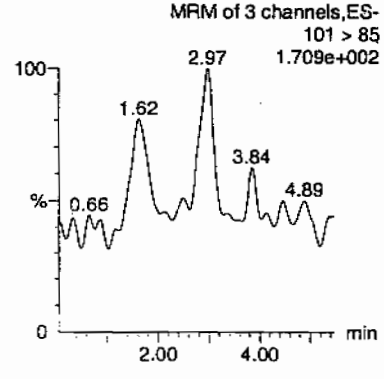

Perchlorate-O(18)

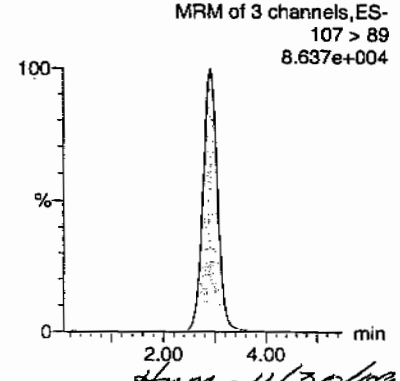

HMM 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241325002	Perchlorate	99 > 83	2.92	93.428	93.428	bb			0.0014			16.814	0.00
241325002	Perchlorate-101	101 > 85											
241325002	Perchlorate-O(18)	107 > 89	2.91	28173.199	28173.199	bb			0.4662	93.24	-6.76	8650.6...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-544-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 27-NOV-09

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 67635.72

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-544-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 27-NOV-09

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 22841.12

Response Type: External Standard

Curve Type: RF

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Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112709a.mdb 27 Nov 2009 12:37:59
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112709a.cdb 28 Nov 2009 09:29:21

Compound name: Perchlorate
Response Factor: 67635.7
RRF SD: 1736.18, % Relative SD: 2.56695
Response type: External Std, Area
Curve type: RF

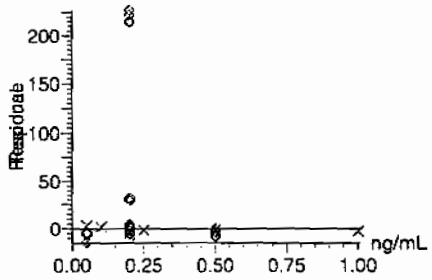

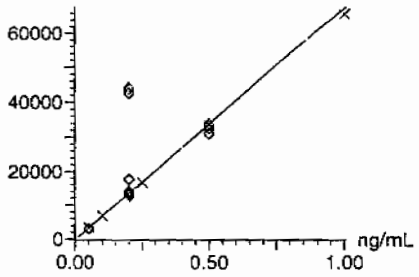

MMT 11/28/09

Compound name: Perchlorate-101
Response Factor: 22841.1
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Response type: External Std, Area
Curve type: RF

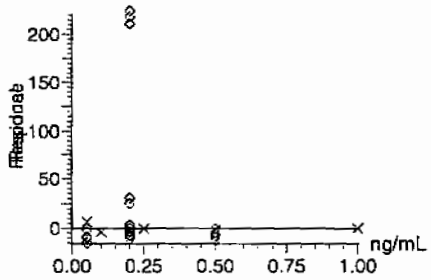

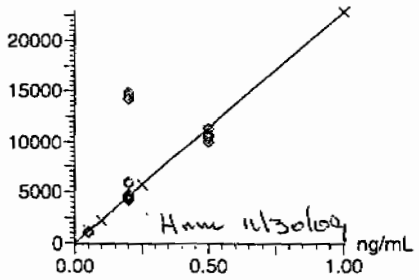

Hmm 11/30/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qid

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 60432.2
RRF SD: 1392.99, % Relative SD: 2.30504
Response type: External Std, Area
Curve type: RF

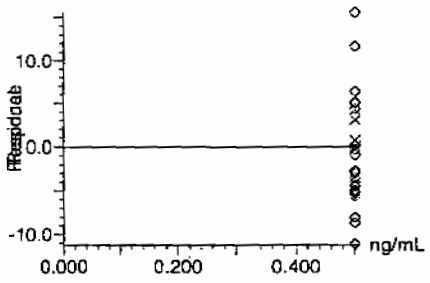

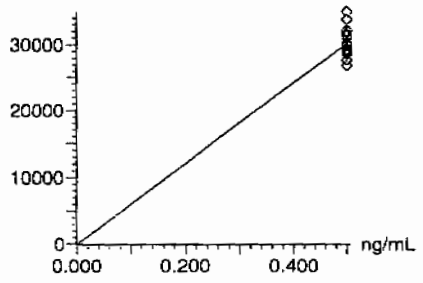

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-544-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.17	27-NOV-09 12:35	per1127009a
Perchlorate Isotope Ratio		2.99		27-NOV-09 12:35	per1127009a
Perchlorate-101	.5	.5	99.21	27-NOV-09 12:35	per1127009a

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127009a
Date: 27-Nov-2009
Time: 12:35:39
ID: WCL091120-06ICV
Vial: 1:2,A

MMT 11/28/09

Perchlorate

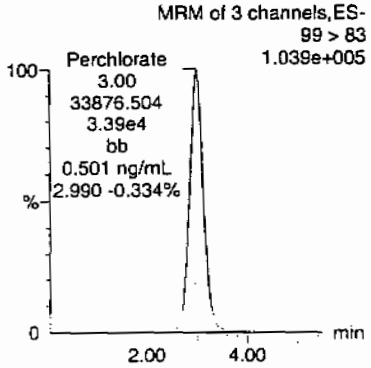

Perchlorate

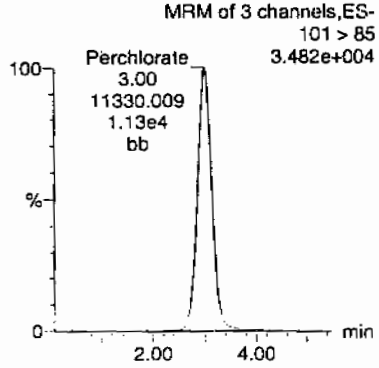

Perchlorate-101

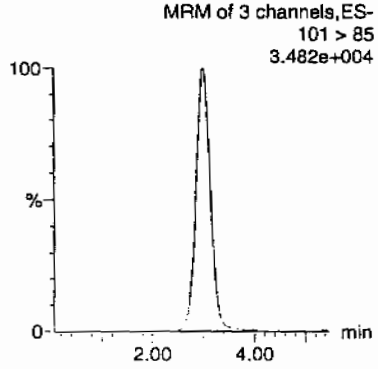

Perchlorate-O(18)

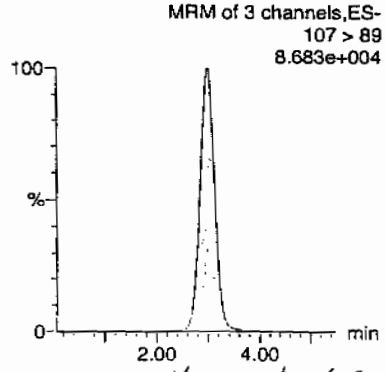

Hmc 11/30/09

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06ICV	Perchlorate	99 > 83	3.00	33876.504	33876.504	bb			0.5009	100.17	0.17	1303.9...	2.99
WCL091120-06ICV	Perchlorate-101	101 > 85	3.00	11330.009	11330.009	bb			0.4960	99.21	-0.79	2787.4...	
WCL091120-06ICV	Perchlorate-O(18)	107 > 89	2.99	28685.504	28685.504	bb			0.4747	94.93	-5.07	7078.1...	

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-544-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.61	27-NOV-09 14:09	per1127020a
Perchlorate Isotope Ratio		3.07		27-NOV-09 14:09	per1127020a
Perchlorate-101	.5	.48	95.07	27-NOV-09 14:09	per1127020a
Perchlorate	.5	.48	96.02	27-NOV-09 15:00	per1127026a
Perchlorate Isotope Ratio		3.07		27-NOV-09 15:00	per1127026a
Perchlorate-101	.5	.46	92.59	27-NOV-09 15:00	per1127026a
Perchlorate	.5	.48	95.99	27-NOV-09 16:43	per1127038a
Perchlorate Isotope Ratio		3.06		27-NOV-09 16:43	per1127038a
Perchlorate-101	.5	.46	92.83	27-NOV-09 16:43	per1127038a
Perchlorate	.5	.48	96.6	27-NOV-09 18:17	per1127049a
Perchlorate Isotope Ratio		3.08		27-NOV-09 18:17	per1127049a
Perchlorate-101	.5	.46	92.79	27-NOV-09 18:17	per1127049a
Perchlorate	.5	.46	92.6	27-NOV-09 20:00	per1127061a

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–544–1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.03		27–NOV–09 20:00	per1127061a
Perchlorate–101	.5	.45	90.64	27–NOV–09 20:00	per1127061a
Perchlorate	.5	.46	91.43	27–NOV–09 21:42	per1127073a
Perchlorate Isotope Ratio		3.09		27–NOV–09 21:42	per1127073a
Perchlorate–101	.5	.44	87.68	27–NOV–09 21:42	per1127073a

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127020a
Date: 27-Nov-2009
Time: 14:09:39
ID: WCL091120-06CCV
Vial: 1:2,A

Perchlorate

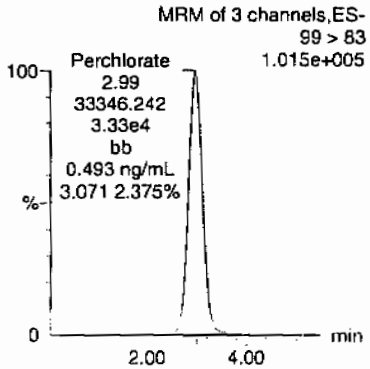

Perchlorate

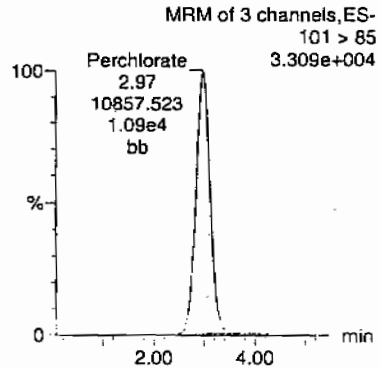

Perchlorate-101

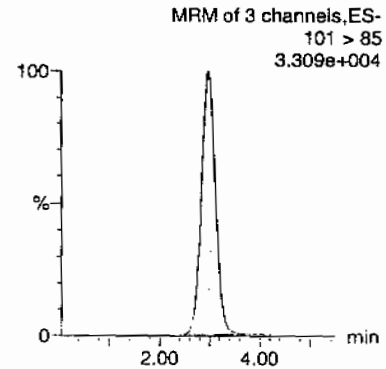

Perchlorate-O(18)

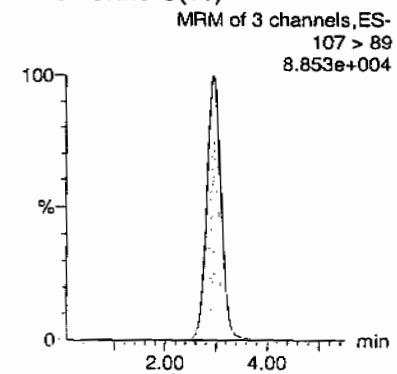

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	2.99	33346.242	33346.242	bb			0.4930	98.61	-1.39	2672.6...	3.07
WCL091120-06CCV	Perchlorate-101	101 > 85	2.97	10857.523	10857.523	bb			0.4753	95.07	-4.93	1375.7...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	2.96	29143.736	29143.736	bb			0.4823	96.45	-3.55	5001.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127026a
Date: 27-Nov-2009
Time: 15:00:56
ID: WCL091120-06CCV
Vial: 1:2,A

MATP 11/28/09

Perchlorate

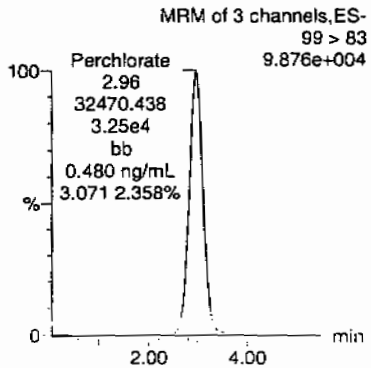

Perchlorate

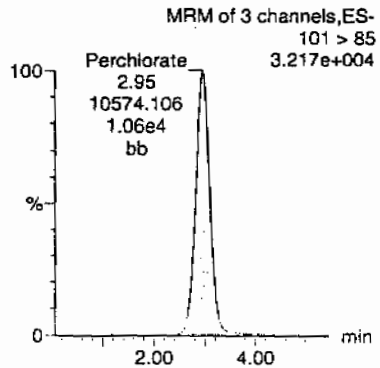

Perchlorate-101

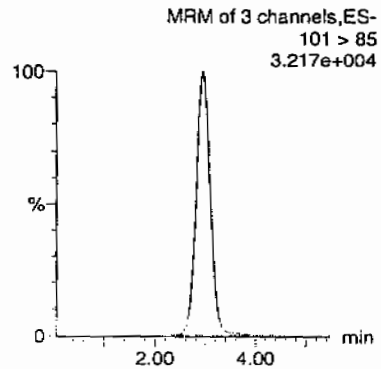

Perchlorate-O(18)

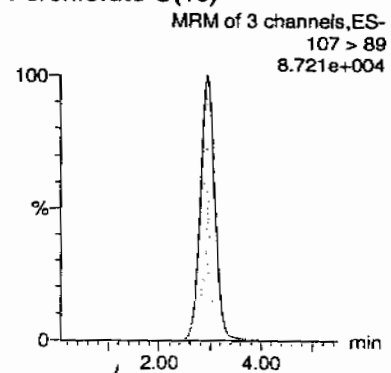

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	2.96	32470.438	32470.438	bb			0.4801	96.02	-3.98	2039.3...	3.07
WCL091120-06CCV	Perchlorate-101	101 > 85	2.95	10574.106	10574.106	bb			0.4629	92.59	-7.41	2214.6...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	2.95	28860.313	28860.313	bb			0.4776	95.51	-4.49	6231.5...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127038a
Date: 27-Nov-2009
Time: 16:43:34
ID: WCL091120-06CCV
Vial: 1:2,A

LMT 11/18/09

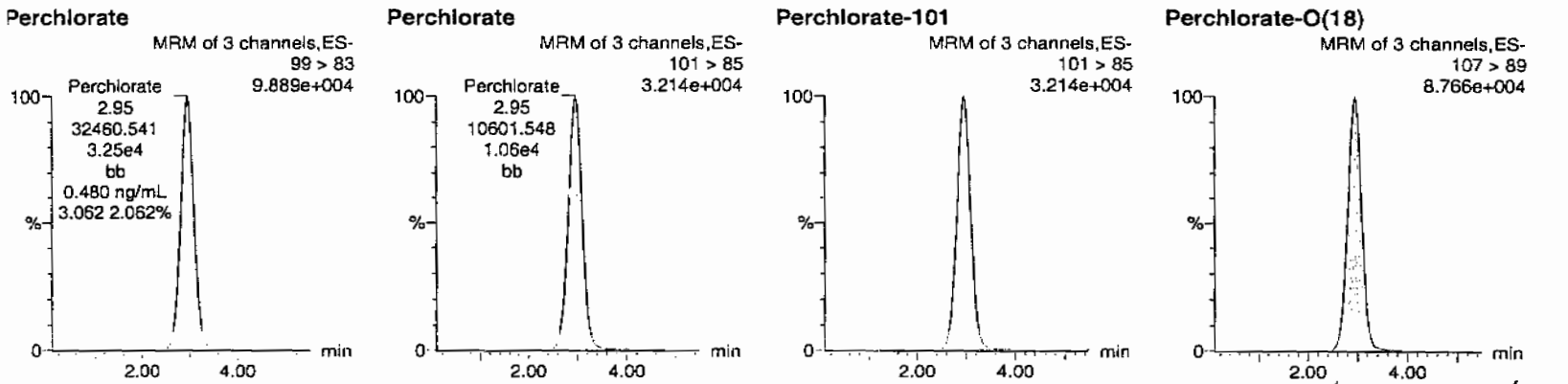

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	2.95	32460.541	32460.541	bb			0.4799	95.99	-4.01	9775.8...	3.06
WCL091120-06CCV	Perchlorate-101	101 > 85	2.95	10601.548	10601.548	bb			0.4641	92.83	-7.17	3863.4...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	2.94	28678.410	28678.410	bb			0.4746	94.91	-5.09	3451.9...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127049a
Date: 27-Nov-2009
Time: 18:17:40
ID: WCL091120-06CCV
Vial: 1:2,A

MMT 11/28/09

Perchlorate

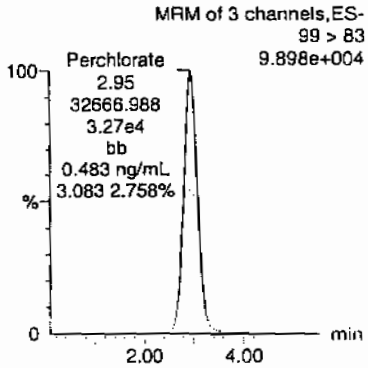

Perchlorate

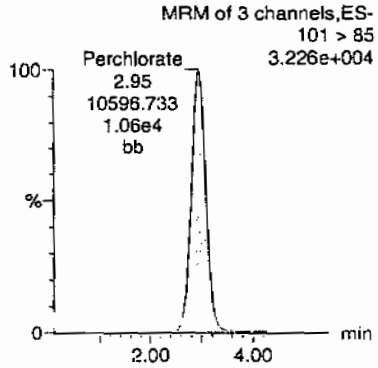

Perchlorate-101

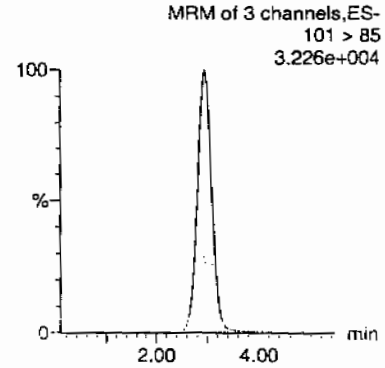

Perchlorate-O(18)

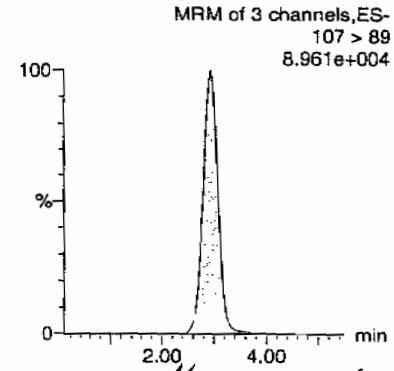

Hm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	2.95	32666.988	32666.988	bb			0.4830	96.60	-3.40	4890.7...	3.08
WCL091120-06CCV	Perchlorate-101	101 > 85	2.95	10596.733	10596.733	bb			0.4639	92.79	-7.21	2647.1...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	2.94	29303.732	29303.732	bb			0.4849	96.98	-3.02	3700.3...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127061a
Date: 27-Nov-2009
Time: 20:00:13
ID: WCL091120-06CCV
Vial: 1:2,A

MM 11/28/09

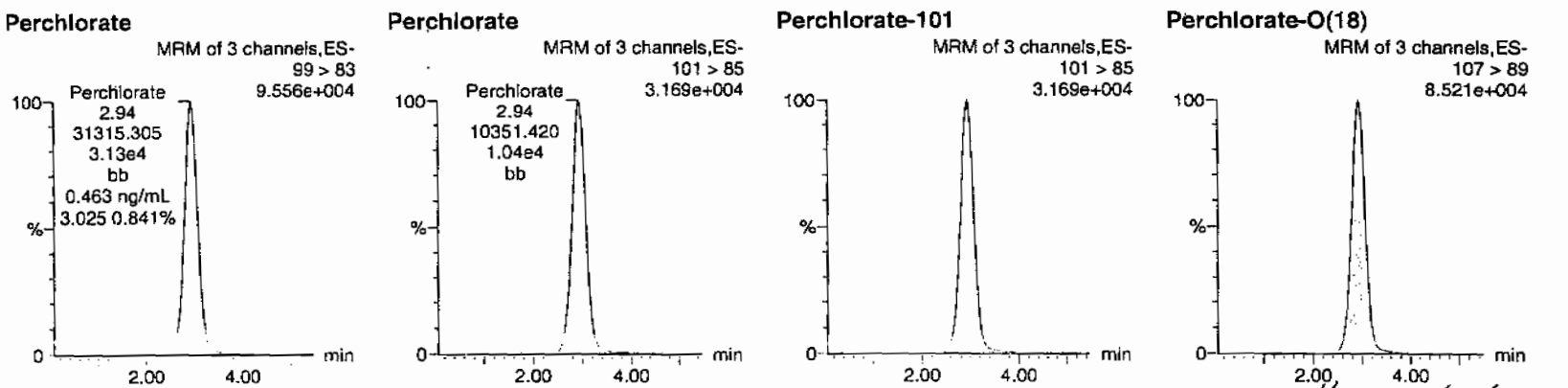

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	2.94	31315.305	31315.305	bb			0.4630	92.60	-7.40	843.550	3.03
WCL091120-06CCV	Perchlorate-101	101 > 85	2.94	10351.420	10351.420	bb			0.4532	90.64	-9.36	2448.9...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	2.92	27773.385	27773.385	bb			0.4596	91.92	-8.08	7610.9...	

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127073a
Date: 27-Nov-2009
Time: 21:42:59
ID: WCL091120-06CCV
Vial: 1:2,A

MMP 11/28/09

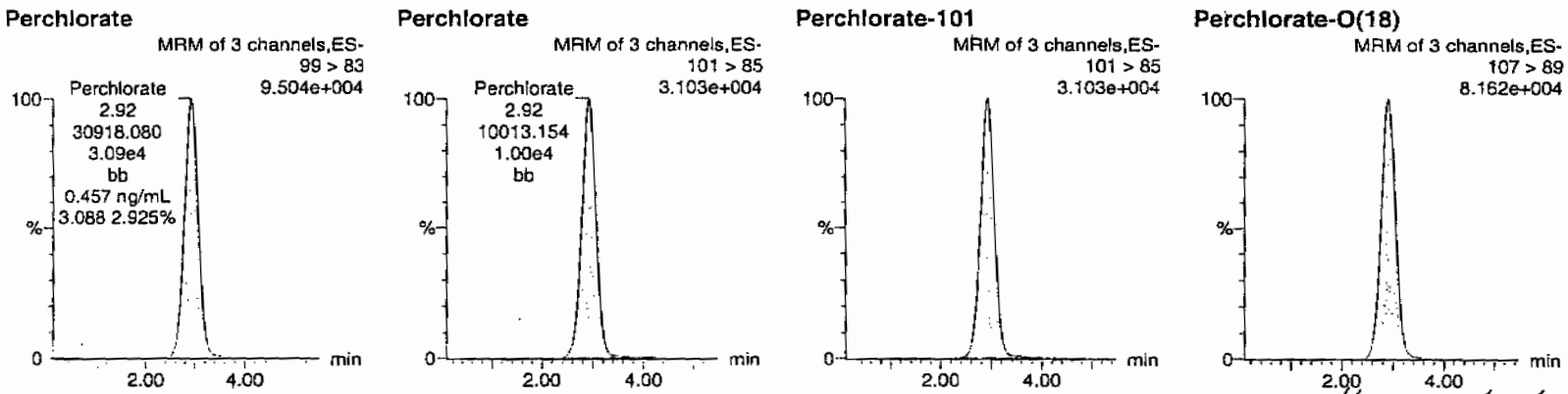

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	2.92	30918.080	30918.080	bb			0.4571	91.43	-8.57	5711.9...	3.09
WCL091120-06CCV	Perchlorate-101	101 > 85	2.92	10013.154	10013.154	bb			0.4384	87.68	-12.32	2139.0...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	2.91	26828.563	26828.563	bb			0.4439	88.79	-11.21	6599.7...	

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–544–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	96.51	27–NOV–09 12:52	per1127011a
Perchlorate Isotope Ratio		2.87		27–NOV–09 12:52	per1127011a
Perchlorate–101	.05	.05	99.49	27–NOV–09 12:52	per1127011a
Perchlorate	.05	.05	95.67	27–NOV–09 14:26	per1127022a
Perchlorate Isotope Ratio		3.33		27–NOV–09 14:26	per1127022a
Perchlorate–101	.05	.04	84.96	27–NOV–09 14:26	per1127022a
Perchlorate	.05	.05	93.94	27–NOV–09 15:18	per1127028a
Perchlorate Isotope Ratio		3.05		27–NOV–09 15:18	per1127028a
Perchlorate–101	.05	.05	91.29	27–NOV–09 15:18	per1127028a
Perchlorate	.05	.05	94.56	27–NOV–09 17:00	per1127040a
Perchlorate Isotope Ratio		2.89		27–NOV–09 17:00	per1127040a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-544-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	96.91	27-NOV-09 17:00	per1127040a
Perchlorate	.05	.05	95.11	27-NOV-09 18:34	per1127051a
Perchlorate Isotope Ratio		3.13		27-NOV-09 18:34	per1127051a
Perchlorate-101	.05	.04	89.9	27-NOV-09 18:34	per1127051a
Perchlorate	.05	.05	91.9	27-NOV-09 20:17	per1127063a
Perchlorate Isotope Ratio		3		27-NOV-09 20:17	per1127063a
Perchlorate-101	.05	.05	90.57	27-NOV-09 20:17	per1127063a
Perchlorate	.05	.04	85.81	27-NOV-09 22:00	per1127075a
Perchlorate Isotope Ratio		2.98		27-NOV-09 22:00	per1127075a
Perchlorate-101	.05	.04	85.39	27-NOV-09 22:00	per1127075a

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127011a
Date: 27-Nov-2009
Time: 12:52:43
ID: WCL091120-07CRI
Vial: 1:2,B

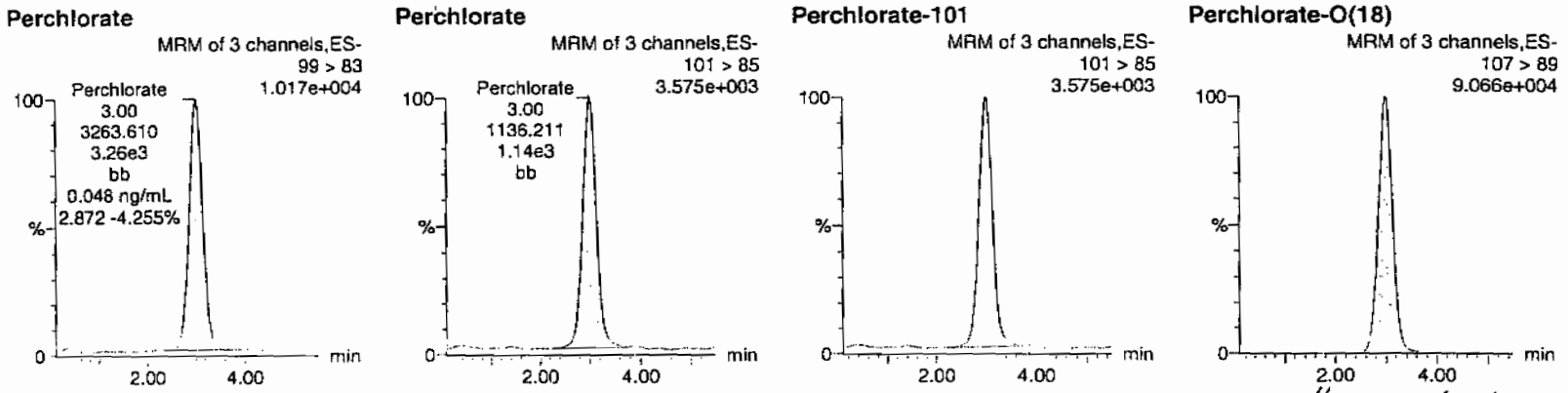

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	3.00	3263.610	3263.610	bb			0.0483	96.51	-3.49	973.019	2.87
WCL091120-07CRI	Perchlorate-101	101 > 85	3.00	1136.211	1136.211	bb			0.0497	99.49	-0.51	162.821	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.99	29936.482	29936.482	bb			0.4954	99.07	-0.93	1367.3...	

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127022a
Date: 27-Nov-2009
Time: 14:26:44
ID: WCL091120-07CRI
Vial: 1:2,B

MMP 11/28/09

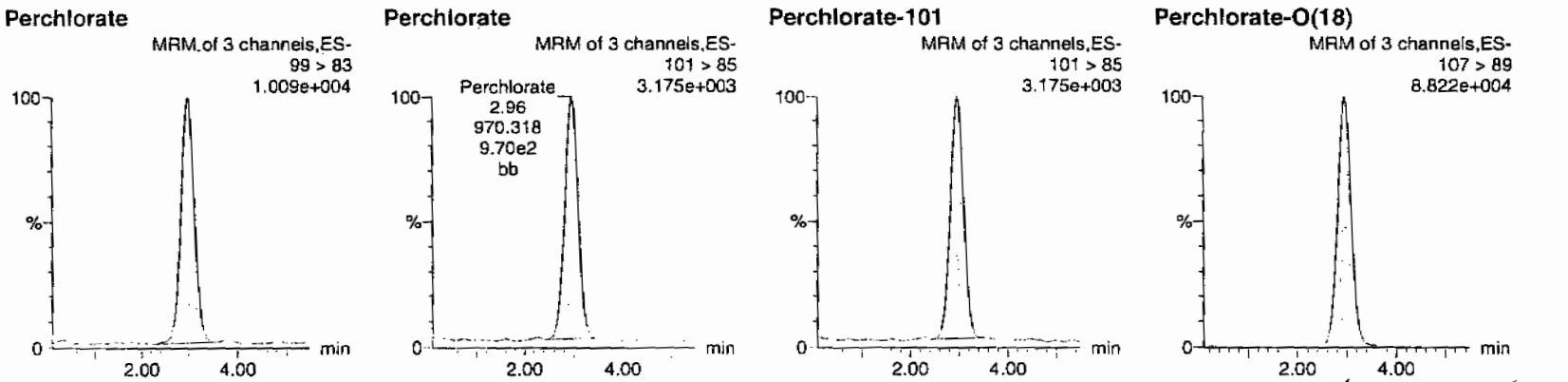

HMM 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	2.97	3235.419	3235.419	bb			0.0478	95.67	-4.33	280.439	3.33
WCL091120-07CRI	Perchlorate-101	101 > 85	2.96	970.318	970.318	bb			0.0425	84.96	-15.04	331.526	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.95	28746.084	28746.084	bb			0.4757	95.14	-4.86	3069.2...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127028a
Date: 27-Nov-2009
Time: 15:18:01
ID: WCL091120-07CRI
Vial: 1:2,B

MM 11/30/09

Perchlorate

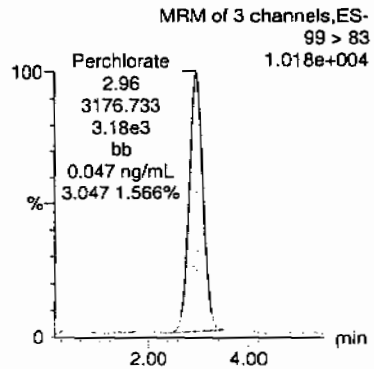

Perchlorate

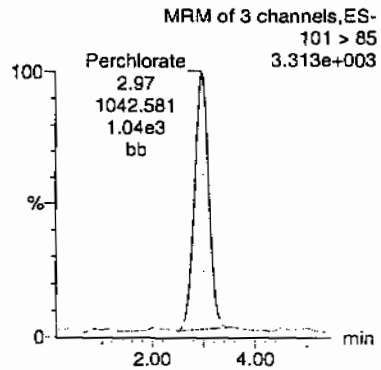

Perchlorate-101

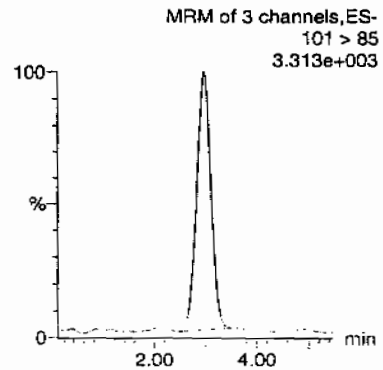

Perchlorate-O(18)

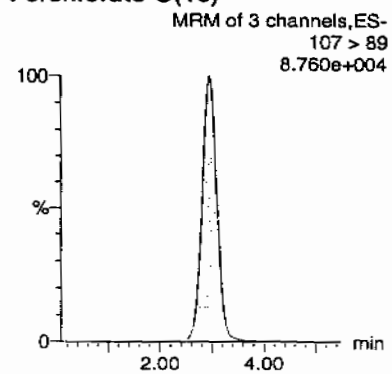

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	2.96	3176.733	3176.733	bb			0.0470	93.94	-6.06	311.753	3.05
WCL091120-07CRI	Perchlorate-101	101 > 85	2.97	1042.581	1042.581	bb			0.0456	91.29	-8.71	191.639	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.95	29016.242	29016.242	bb			0.4801	96.03	-3.97	3841.1...	

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127040a
Date: 27-Nov-2009
Time: 17:00:39
ID: WCL091120-07CRI
Vial: 1:2,B

MATT 11/28/09

Perchlorate

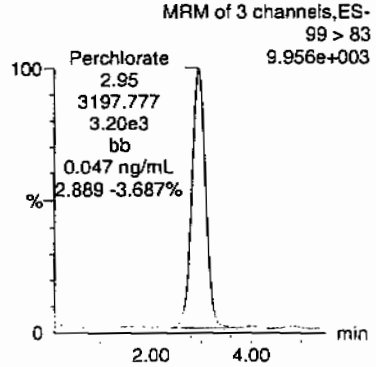

Perchlorate

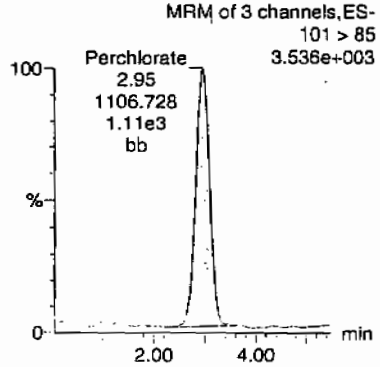

Perchlorate-101

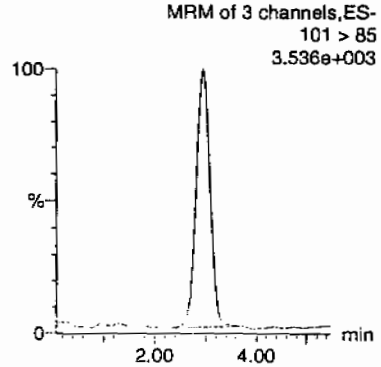

Perchlorate-O(18)

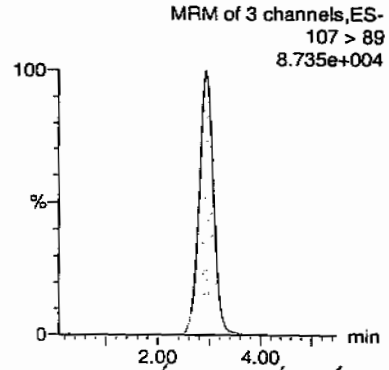

Hmm 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	2.95	3197.777	3197.777	bb			0.0473	94.56	-5.44	299.884	2.89
WCL091120-07CRI	Perchlorate-101	101 > 85	2.95	1106.728	1106.728	bb			0.0485	96.91	-3.09	68.355	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.94	28633.686	28633.686	bb			0.4738	94.76	-5.24	5521.7...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127051a
Date: 27-Nov-2009
Time: 18:34:45
ID: WCL091120-07CRI
Vial: 1:2,B

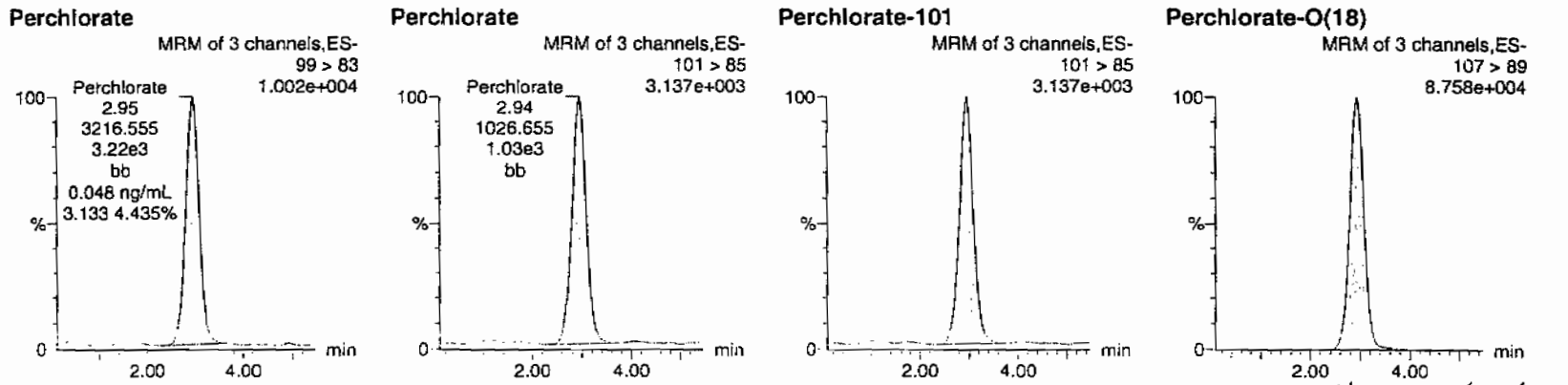

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	2.95	3216.555	3216.555	bb			0.0476	95.11	-4.89	577.874	3.13
WCL091120-07CRI	Perchlorate-101	101 > 85	2.94	1026.655	1026.655	bb			0.0449	89.90	-10.10	248.039	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.94	28596.330	28596.330	bb			0.4732	94.64	-5.36	5231.2...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127063a
Date: 27-Nov-2009
Time: 20:17:31
ID: WCL091120-07CRI
Vial: 1:2,B

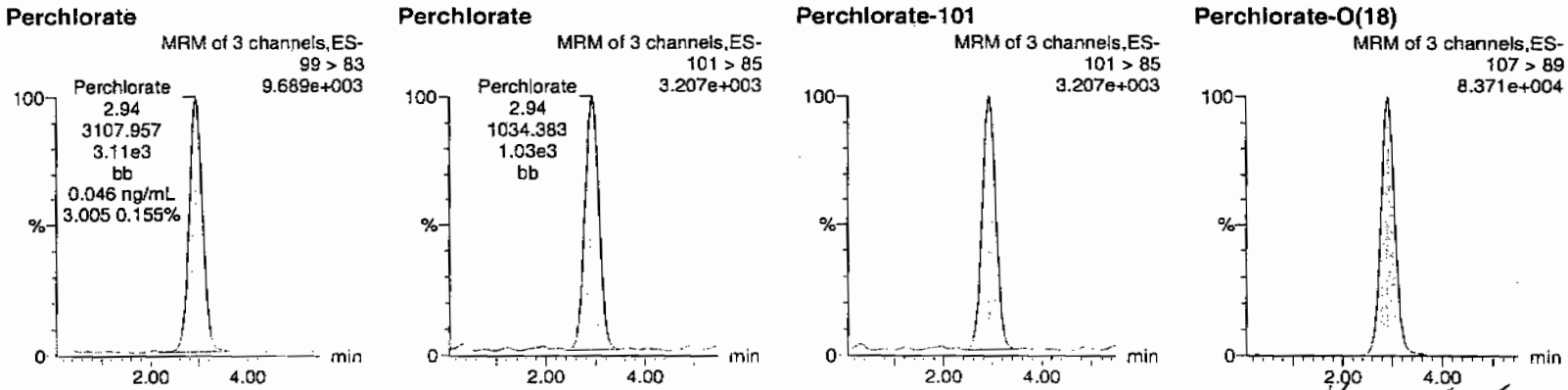

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	2.94	3107.957	3107.957	bb			0.0460	91.90	-8.10	392.715	3.00
WCL091120-07CRI	Perchlorate-101	101 > 85	2.94	1034.383	1034.383	bb			0.0453	90.57	-9.43	200.015	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.92	27597.184	27597.184	bb			0.4567	91.33	-8.67	910.421	

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127075a
Date: 27-Nov-2009
Time: 22:00:18
ID: WCL091120-07CRI
Vial: 1:2,B

LMT 11/28/09

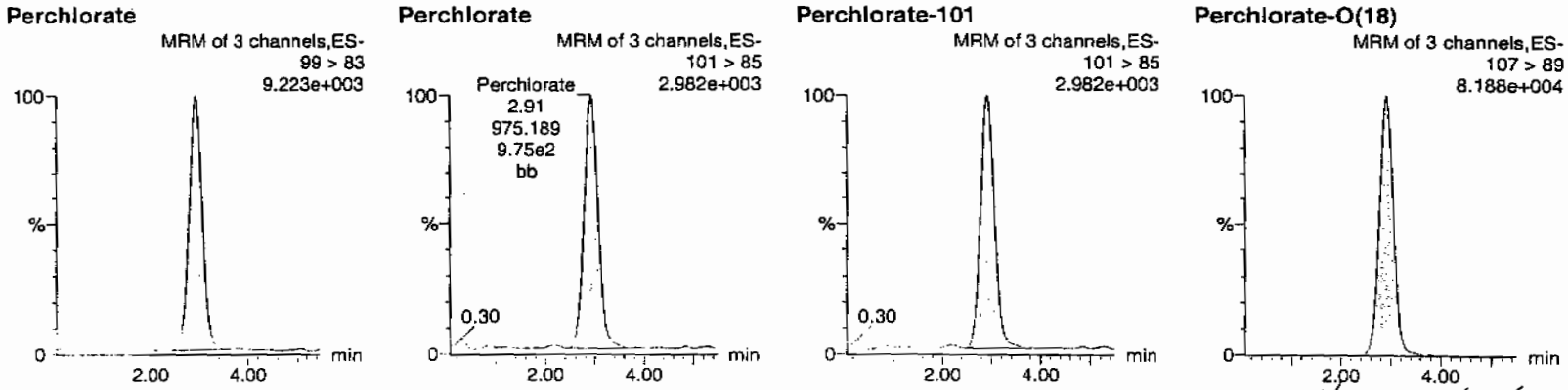

HMM 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	2.94	2902.042	2902.042	bb			0.0429	85.81	-14.19	242.264	2.98
WCL091120-07CRI	Perchlorate-101	101 > 85	2.91	975.189	975.189	bb			0.0427	85.39	-14.61	137.722	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.91	26864.770	26864.770	bb			0.4445	88.91	-11.09	5827.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SURFACE WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 24-NOV-09

GEL Job No (SDG): 10-544-1

GEL Sample ID: 1201977175

Date Filtered: 24-NOV-09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	27-NOV-09 18:43	per1127052a
	Perchlorate Isotope Ratio						1	27-NOV-09 18:43	per1127052a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	27-NOV-09 18:43	per1127052a
	Perchlorate-O(18)			0.476	ug/L		1	27-NOV-09 18:43	per1127052a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127052a
Date: 27-Nov-2009
Time: 18:43:18
ID: 1201977175 | LANC | 924871 | LIQ | MB | 1 |
Vial: 2:1,A

MH 11/28/09

Perchlorate

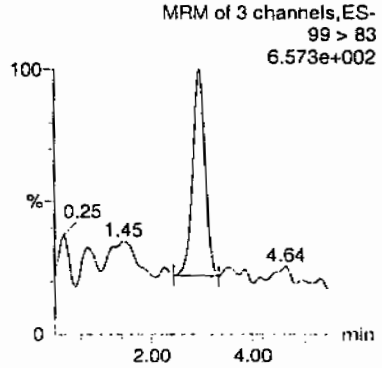

Perchlorate

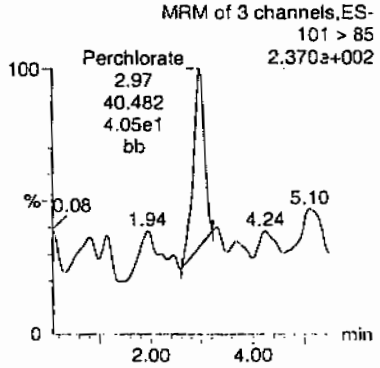

Perchlorate-101

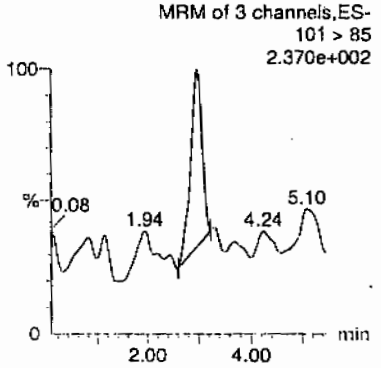

Perchlorate-O(18)

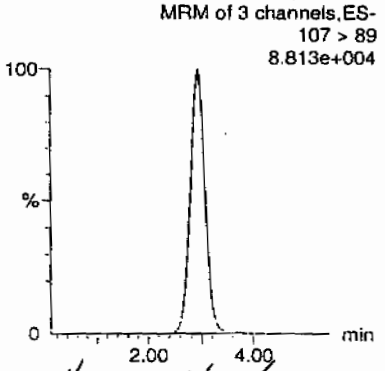

HMM 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201977175	Perchlorate	99 > 83	2.95	149.745	149.745	bb			0.0022			25.914	3.70
1201977175	Perchlorate-101	101 > 85	2.97	40.482	40.482	bb			0.0018			15.707	
1201977175	Perchlorate-O(18)	107 > 89	2.94	28771.303	28771.303	bb			0.4761	95.22	-4.78	12901....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SURFACE WATER

Extraction Batch ID: 924868

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 24–NOV–09

GEL Job No (SDG): 10–544–1

GEL Sample ID: 1201977176

Date Filtered: 24–NOV–09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.05	.2	0.195	ug/L	J	1	27–NOV–09 18:52	per1127053a
	Perchlorate Isotope Ratio			3.12			1	27–NOV–09 18:52	per1127053a
14797–73–0	Perchlorate–101	.05	.2	0.185	ug/L	J	1	27–NOV–09 18:52	per1127053a
	Perchlorate–O(18)			0.478	ug/L		1	27–NOV–09 18:52	per1127053a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127053a
Date: 27-Nov-2009
Time: 18:52:01
ID: 1201977176 | LANC | 92487 | LIQ | LCS | 1 |
Vial: 2:1,B

MAT 11/28/09

Perchlorate

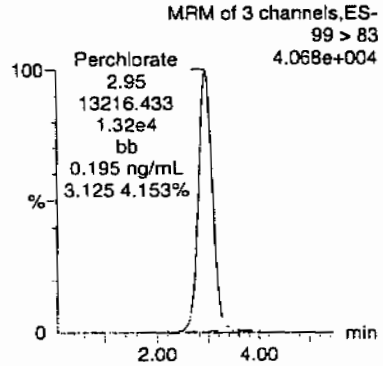

Perchlorate

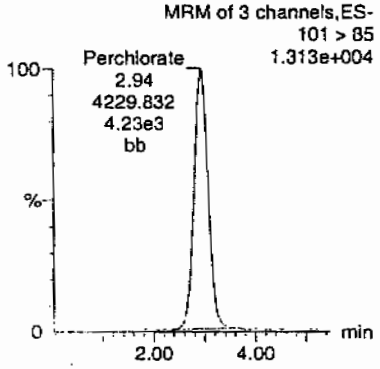

Perchlorate-101

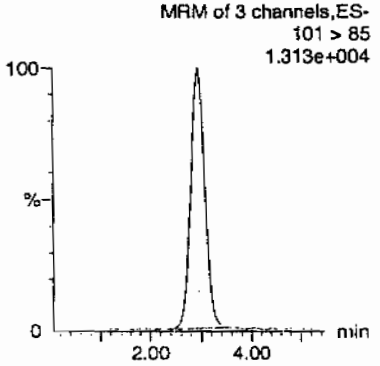

Perchlorate-O(18)

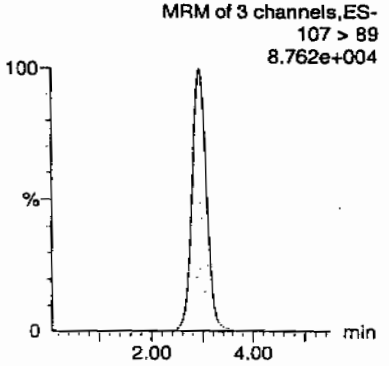

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201977176	Perchlorate	99 > 83	2.95	13216.433	13216.433	bb			0.1954	97.70	-2.30	2699.7...	3.12
1201977176	Perchlorate-101	101 > 85	2.94	4229.832	4229.832	bb			0.1852	92.59	-7.41	926.849	
1201977176	Perchlorate-O(18)	107 > 89	2.94	28893.750	28893.750	bb			0.4781	95.62	-4.38	6023.6...	

$$\frac{13216.433}{67635.7} = 0.1954$$

HMM 11/30/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 924868 **Verified by:** _____

Analyst: Jareth Shirley

Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6

Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1201977175 MB	24-NOV-2009 15:38:44	10	10	1
1201977176 LCS	24-NOV-2009 15:38:44	10	10	1
241181001	24-NOV-2009 15:38:44	10	10	1
241181002	24-NOV-2009 15:38:44	10	10	1
241187001	24-NOV-2009 15:38:44	10	10	1
1201977185 MS (241187001)	24-NOV-2009 15:38:44	10	10	1
1201977186 MSD (241187001)	24-NOV-2009 15:38:44	10	10	1
241187002	24-NOV-2009 15:38:44	10	10	1
241187003	24-NOV-2009 15:38:44	10	10	1
241187004	24-NOV-2009 15:38:44	10	10	1
241192003	24-NOV-2009 15:38:44	10	10	1
241325001	24-NOV-2009 15:38:44	10	10	1
241325002	24-NOV-2009 15:38:44	10	10	1
241414003	24-NOV-2009 15:38:44	10	10	1
241414004	24-NOV-2009 15:38:44	10	10	1
1201977177 MS (241414004)	24-NOV-2009 15:38:44	10	10	1
1201977178 MSD (241414004)	24-NOV-2009 15:38:44	10	10	1
1201977187 ICS	24-NOV-2009 15:38:44	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201977187	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
LCS	1201977176	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MS	1201977177	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MS	1201977185	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MSD	1201977178	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MSD	1201977186	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1133543	10	mL
RGNT	All	O2SI HPLC Grade Water	1197509	10	mL

Comments:

Desalting cartridges used: 090415-1-Ba & 090902-1-H

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 11/27/09
Extr. Injection Volume: 20uL
Sequence Number: per112709a
Initial Calibration Date: 11/27/09

Method: EPA 6850-Modified
Int. Std.: UCL090612-01.2
Mobile Phase Lot#: 1191829, 1197509
Standard-Samp Reagent Lot#:: 1197509

Reviewed BY: HMW
Date: 11/30/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091120-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1127001a	IPB001	MAP	11/27/2009 11:27			1		USE	B
per1127002a	IPB001	MAP	11/27/2009 11:35			1		USE	B
per1127003a	WCLICAL-01	MAP	11/27/2009 11:44			1		USE	I
per1127004a	WCLICAL-02	MAP	11/27/2009 11:53			1		USE	I
per1127005a	WCLICAL-03	MAP	11/27/2009 12:01			1		USE	I
per1127006a	WCLICAL-04	MAP	11/27/2009 12:10			1		USE	I
per1127007a	WCLICAL-05	MAP	11/27/2009 12:18			1		USE	I
per1127008a	IPB002	MAP	11/27/2009 12:27			1		USE	B
per1127009a	WCLICV	MAP	11/27/2009 12:35			1		USE	C
per1127010a	IPB003	MAP	11/27/2009 12:44			1		USE	B
per1127011a	WCLCRI	MAP	11/27/2009 12:52			1		USE	C
per1127012a	1201982077	MAP	11/27/2009 13:01	927048	Various	1	LANL	USE	S
per1127013a	1201982078	MAP	11/27/2009 13:09	927048	Various	1	LANL	USE	S
per1127014a	1201982083	MAP	11/27/2009 13:18	927048	Various	1	LANL	USE	S
per1127015a	241848004	MAP	11/27/2009 13:26	927048	10-683	1	LANL	USE	S
per1127016a	241848005	MAP	11/27/2009 13:35	927048	10-683	1	LANL	USE	S
per1127017a	241848006	MAP	11/27/2009 13:44	927048	10-683	1	LANL	USE	S
per1127018a	1201982081	MAP	11/27/2009 13:52	927048	10-683	1	LANL	USE	S
per1127019a	1201982082	MAP	11/27/2009 14:01	927048	10-683	1	LANL	USE	S
per1127020a	WCLCCV	MAP	11/27/2009 14:09			1		USE	C
per1127021a	IPB004	MAP	11/27/2009 14:18			1		USE	B
per1127022a	WCLCRI	MAP	11/27/2009 14:26			1		USE	C
per1127023a	241850001	MAP	11/27/2009 14:35	927048	10-686	1	LANL	USE	S
per1127024a	1201982079	MAP	11/27/2009 14:43	927048	10-686	1	LANL	USE	S
per1127025a	1201982080	MAP	11/27/2009 14:52	927048	10-686	1	LANL	USE	S
per1127026a	WCLCCV	MAP	11/27/2009 15:00			1		USE	C
per1127027a	IPB005	MAP	11/27/2009 15:09			1		USE	B
per1127028a	WCLCRI	MAP	11/27/2009 15:18			1		USE	C
per1127029a	1201981682	MAP	11/27/2009 15:26	926862	Various	1	LANL	USE	S

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per1127030a	1201981683	MAP	11/27/2009 15:35	926862	Various	1	LANL	USE	S
per1127031a	1201981688	MAP	11/27/2009 15:43	926862	Various	1	LANL	USE	S
per1127032a	241337001	MAP	11/27/2009 15:52	926862	10-546-1	1	LANL	USE	S
per1127033a	241337002	MAP	11/27/2009 16:00	926862	10-546-1	1	LANL	USE	S
per1127034a	241600003	MAP	11/27/2009 16:09	926862	10-633	1	LANL	USE	S
per1127035a	1201981684	MAP	11/27/2009 16:17	926862	10-633	1	LANL	USE	S
per1127036a	1201981685	MAP	11/27/2009 16:26	926862	10-633	1	LANL	USE	S
per1127037a	241600004	MAP	11/27/2009 16:35	926862	10-633	1	LANL	USE	S
per1127038a	WCLCCV	MAP	11/27/2009 16:43			1		USE	C
per1127039a	IPB006	MAP	11/27/2009 16:52			1		USE	B
per1127040a	WCLCRI	MAP	11/27/2009 17:00			1		USE	C
per1127041a	241601001	MAP	11/27/2009 17:09	926862	10-636	1	LANL	USE	S
per1127042a	241601003	MAP	11/27/2009 17:17	926862	10-636	1	LANL	USE	S
per1127043a	241606001	MAP	11/27/2009 17:26	926862	10-638-1	1	LANL	USE	S
per1127044a	241612001	MAP	11/27/2009 17:34	926862	10-642-1	1	LANL	USE	S
per1127045a	1201981686	MAP	11/27/2009 17:43	926862	10-642-1	1	LANL	USE	S
per1127046a	1201981687	MAP	11/27/2009 17:52	926862	10-642-1	1	LANL	USE	S
per1127047a	241612002	MAP	11/27/2009 18:00	926862	10-642-1	1	LANL	USE	S
per1127048a	241813007	MAP	11/27/2009 18:09	926862	10-671	1	LANL	USE	S
per1127049a	WCLCCV	MAP	11/27/2009 18:17			1		USE	C
per1127050a	IPB007	MAP	11/27/2009 18:26			1		USE	B
per1127051a	WCLCRI	MAP	11/27/2009 18:34			1		USE	C
per1127052a	1201977175	MAP	11/27/2009 18:43	924871	Various	1	LANL	USE	S
per1127053a	1201977176	MAP	11/27/2009 18:52	924871	Various	1	LANL	USE	S
per1127054a	1201977187	MAP	11/27/2009 19:00	924871	Various	1	LANL	USE	S
per1127055a	241181001	MAP	11/27/2009 19:09	924871	10-520-1	1	LANL	USE	S
per1127056a	241181002	MAP	11/27/2009 19:17	924871	10-520-1	1	LANL	USE	S
per1127057a	241187001	MAP	11/27/2009 19:26	924871	10-521	1	LANL	USE	S
per1127058a	1201977185	MAP	11/27/2009 19:34	924871	10-521	1	LANL	USE	S
per1127059a	1201977186	MAP	11/27/2009 19:43	924871	10-521	1	LANL	USE	S
per1127060a	241187002	MAP	11/27/2009 19:51	924871	10-521	1	LANL	USE	S
per1127061a	WCLCCV	MAP	11/27/2009 20:00			1		USE	C
per1127062a	IPB008	MAP	11/27/2009 20:09			1		USE	B
per1127063a	WCLCRI	MAP	11/27/2009 20:17			1		USE	C
per1127064a	241187003	MAP	11/27/2009 20:26	924871	10-521	1	LANL	USE	S
per1127065a	241187004	MAP	11/27/2009 20:34	924871	10-521	1	LANL	USE	S
per1127066a	241192003	MAP	11/27/2009 20:43	924871	10-500-2	1	LANL	USE	S

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per1127067a	241325001	MAP	11/27/2009 20:51	924871	10-544-1	1	LANL	USE	S
per1127068a	241325002	MAP	11/27/2009 21:00	924871	10-544-1	1	LANL	USE	S
per1127069a	241414003	MAP	11/27/2009 21:08	924871	10-560	1	LANL	USE	S
per1127070a	241414004	MAP	11/27/2009 21:17	924871	10-560	1	LANL	USE	S
per1127071a	1201977177	MAP	11/27/2009 21:25	924871	10-560	1	LANL	USE	S
per1127072a	1201977178	MAP	11/27/2009 21:34	924871	10-560	1	LANL	USE	S
per1127073a	WCLCCV	MAP	11/27/2009 21:42			1		USE	C
per1127074a	IPB009	MAP	11/27/2009 21:51			1		USE	B
per1127075a	WCLCRI	MAP	11/27/2009 22:00			1		USE	C

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127058a
Date: 27-Nov-2009
Time: 19:34:36
ID: 1201977185 | LAW | 924871 | LIQ | 241187001 LS | 1 |
Vial: 2:2,A

MMT 11/28/09

Perchlorate

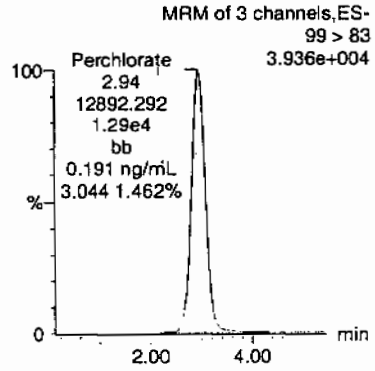

Perchlorate

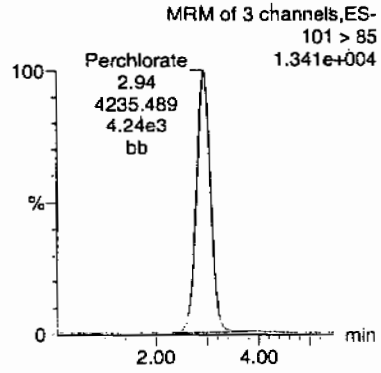

Perchlorate-101

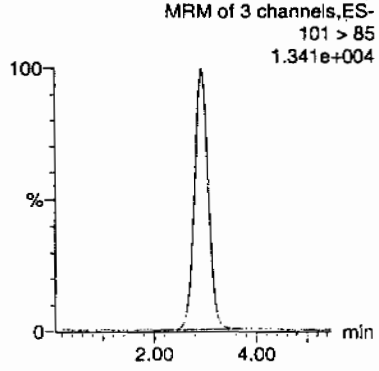

Perchlorate-O(18)

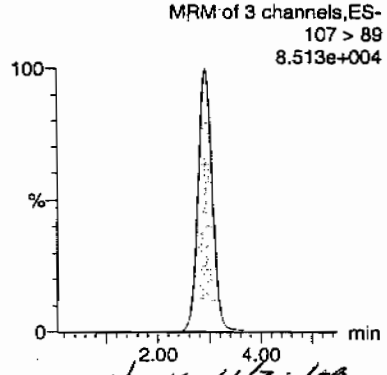

HMK 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201977185	Perchlorate	99 > 83	2.94	12892.292	12892.292	bb			0.1906	95.31	-4.69	2284.5...	3.04
1201977185	Perchlorate-101	101 > 85	2.94	4235.489	4235.489	bb			0.1854	92.72	-7.28	1196.9...	
1201977185	Perchlorate-O(18)	107 > 89	2.92	27791.021	27791.021	bb			0.4599	91.97	-8.03	2278.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per112709a.qld

Last Altered: Saturday, November 28, 2009 9:29:22 AM Eastern Standard Time
Printed: Saturday, November 28, 2009 9:43:40 AM Eastern Standard Time

Name: per1127059a
Date: 27-Nov-2009
Time: 19:43:09
ID: 1201977186 | LANL | 924871 | LCD | 241187001 MSD | 1 |
Vial: 2:2,B

MMT 11/28/09

Perchlorate

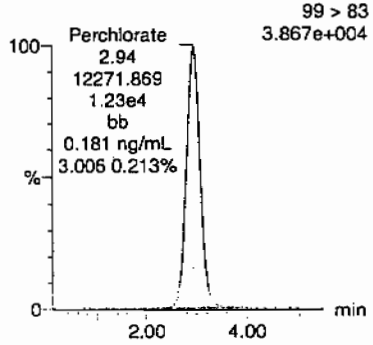

Perchlorate

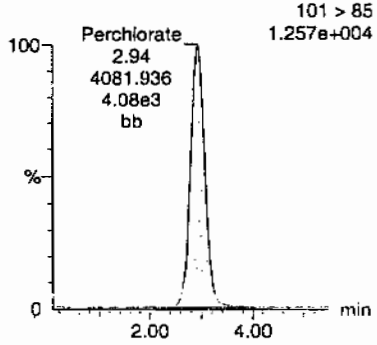

Perchlorate-101

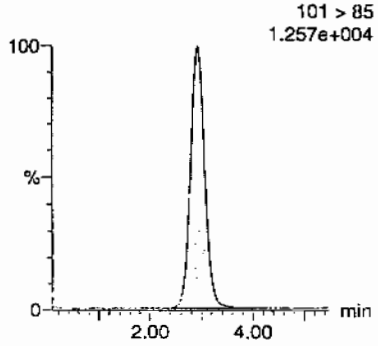

Perchlorate-O(18)

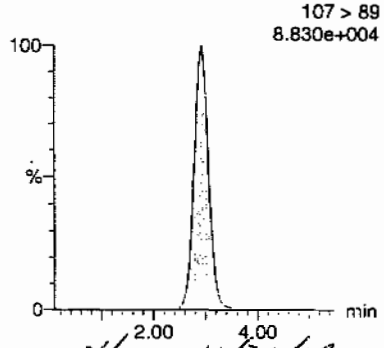

HMM 11/30/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201977186	Perchlorate	99 > 83	2.94	12271.869	12271.869	bb			0.1814	90.72	-9.28	1129.2...	3.01
1201977186	Perchlorate-101	101 > 85	2.94	4081.936	4081.936	bb			0.1787	89.35	-10.65	1496.0...	
1201977186	Perchlorate-O(18)	107 > 89	2.92	28714.121	28714.121	bb			0.4751	95.03	-4.97	4809.6...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-544

Sample Analysis

Sample ID	Client ID
241322001	RE03-09-13618
241322002	RE03-09-13622
241322003	RE03-09-13620
241322004	RE03-09-13619
241322005	RE03-09-13624
241322006	RE03-09-13623
241322007	RE03-09-13626
241322008	RE03-09-13621
241322009	RE03-09-13627
241322010	RE03-09-13625
241322011	RE03-10-6084
241322012	RE03-10-6085
1201977903	Method Blank (MB) **ICP**
1201990789	Method Blank (MB) **ICP**
1201977908	Laboratory Control Sample (LCS)
1201990790	Laboratory Control Sample (LCS)
1201977905	241322001(RE03-09-13618L) Serial Dilution (SD)
1201977904	241322001(RE03-09-13618D) Sample Duplicate (DUP)
1201977906	241322001(RE03-09-13618S) Matrix Spike (MS)
1201977907	241322001(RE03-09-13618SD) Matrix Spike Duplicate (MSD)
1201977909	Method Blank (MB) **ICP-MS**
1201977914	Laboratory Control Sample (LCS)
1201977911	241322001(RE03-09-13618L) Serial Dilution (SD)
1201977910	241322001(RE03-09-13618D) Sample Duplicate (DUP)
1201977912	241322001(RE03-09-13618S) Matrix Spike (MS)
1201977913	241322001(RE03-09-13618SD) Matrix Spike Duplicate (MSD)
1201977144	Method Blank (MB) **CVAA**
1201977145	Laboratory Control Sample (LCS)
1201977148	241336001(RE03-09-13770L) Serial Dilution (SD)

1201977146	241336001(RE03-09-13770D) Sample Duplicate (DUP)
1201977147	241336001(RE03-09-13770S) Matrix Spike (MS)
1201977149	241336001(RE03-09-13770SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925182, 930802, 925185 and 924854
Prep Batch :	925181, 930801, 925183 and 924853
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-

7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS analyzed with this SDG met the acceptance criteria of percent recovery.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241322001 (RE03-09-13618)-ICP and ICP-MS and 241336001 (RE03-09-13770)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of barium, calcium, magnesium and sodium as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of calcium, magnesium, potassium, sodium and titanium as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of aluminum, barium, calcium, chromium, cobalt, iron, magnesium, potassium, sodium, vanadium, zinc, nickel and uranium as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as

virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 763016 and 767341. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nik-Cole A. Elmore **Date:** 12.14.09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322001 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13618 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2990000	ug/Kg	*	7820	23000	23000	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-36-0	Antimony	1150	ug/Kg	U	380	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-38-2	Arsenic	0.813	mg/kg	J	0.224	1.12	1.12	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-39-3	Barium	42200	ug/Kg	*N	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-41-7	Beryllium	0.281	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-42-8	Boron	5750	ug/Kg	U	1150	5750	5750	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-43-9	Cadmium	575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-70-2	Calcium	890000	ug/Kg	*N	9200	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-47-3	Chromium	3450	ug/Kg	*	173	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-48-4	Cobalt	1730	ug/Kg	*	173	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-50-8	Copper	2220	ug/Kg		345	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-89-6	Iron	9590000	ug/Kg	*	9200	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-92-1	Lead	4020	ug/Kg		288	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-93-2	Lithium	4.79	mg/kg		0.449	2.24	2.24	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7439-95-4	Magnesium	1430000	ug/Kg	*N	9780	34500	34500	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-96-5	Manganese	235000	ug/Kg		230	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182
7439-97-6	Mercury	12.8	ug/kg	U	4.34	12.8	12.8	1	AV	JXL1	12/03/09 10:33	120309S1-6	924854
7440-02-0	Nickel	1.92	mg/kg	*	0.112	0.449	0.449	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-09-7	Potassium	689000	ug/Kg	*N	7360	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7782-49-2	Selenium	1.12	mg/kg	U	0.561	1.12	1.12	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-21-3	Silicon	590000	ug/Kg		1710	11400	11400	1	P	HSC	12/10/09 08:55	121009-1	930802
7440-22-4	Silver	238	ug/Kg	J	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-23-5	Sodium	144000	ug/Kg	*N	8050	28800	28800	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-28-0	Thallium	0.0832	mg/kg	J	0.0673	0.224	0.224	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-32-6	Titanium	220000	ug/Kg	N	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-61-1	Uranium	0.336	mg/kg	*	0.0148	0.0449	0.0449	2	MS	BAJ	11/26/09 22:37	091126-3	925185
7440-62-2	Vanadium	6050	ug/Kg	*	115	575	575	1	P	HSC	12/05/09 03:58	120409A-2	925182
7440-66-6	Zinc	41000	ug/Kg	*	380	1150	1150	1	P	HSC	12/05/09 03:58	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.548	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.507	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.52	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.513	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322002 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13622 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1750000	ug/Kg	*	7190	21100	21100	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-36-0	Antimony	1060	ug/Kg	U	349	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-38-2	Arsenic	0.802	mg/kg	J	0.21	1.05	1.05	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-39-3	Barium	25200	ug/Kg	*N	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-41-7	Beryllium	0.482	mg/kg		0.021	0.105	0.105	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-42-8	Boron	5280	ug/Kg	U	1060	5280	5280	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-70-2	Calcium	758000	ug/Kg	*N	8450	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-47-3	Chromium	1730	ug/Kg	*	159	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-48-4	Cobalt	493	ug/Kg	J*	159	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-50-8	Copper	2190	ug/Kg		317	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-89-6	Iron	6240000	ug/Kg	*	8450	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-92-1	Lead	13300	ug/Kg		264	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-93-2	Lithium	6.35	mg/kg		0.419	2.1	2.1	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7439-95-4	Magnesium	351000	ug/Kg	*N	8980	31700	31700	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-96-5	Manganese	208000	ug/Kg		211	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182
7439-97-6	Mercury	7.4	ug/kg	J	4.07	12	12	1	AV	JXL1	12/03/09 10:35	120309S1-6	924854
7440-02-0	Nickel	3.6	mg/kg	*	0.105	0.419	0.419	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-09-7	Potassium	346000	ug/Kg	*N	6760	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7782-49-2	Selenium	1.05	mg/kg	U	0.524	1.05	1.05	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-21-3	Silicon	712000	ug/Kg		1550	10300	10300	1	P	HSC	12/10/09 09:13	121009-1	930802
7440-22-4	Silver	223	ug/Kg	J	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-23-5	Sodium	208000	ug/Kg	*N	7400	26400	26400	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-28-0	Thallium	0.0675	mg/kg	J	0.0629	0.21	0.21	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-32-6	Titanium	183000	ug/Kg	N	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-61-1	Uranium	0.521	mg/kg	*	0.0138	0.0419	0.0419	2	MS	BAJ	11/26/09 23:20	091126-3	925185
7440-62-2	Vanadium	3670	ug/Kg	*	106	528	528	1	P	HSC	12/05/09 04:33	120409A-2	925182
7440-66-6	Zinc	30000	ug/Kg	*	349	1060	1060	1	P	HSC	12/05/09 04:33	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.534	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.504	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.508	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.516	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322003 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13620 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1980000	ug/Kg	*	7180	21100	21100	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-36-0	Antimony	1060	ug/Kg	U	348	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-38-2	Arsenic	1.05	mg/kg	J	0.213	1.06	1.06	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-39-3	Barium	24400	ug/Kg	*N	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-41-7	Beryllium	0.380	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-42-8	Boron	5280	ug/Kg	U	1060	5280	5280	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-70-2	Calcium	712000	ug/Kg	*N	8440	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-47-3	Chromium	5350	ug/Kg	*	158	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-48-4	Cobalt	706	ug/Kg	*	158	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-50-8	Copper	2850	ug/Kg		317	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-89-6	Iron	7060000	ug/Kg	*	8440	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-92-1	Lead	37300	ug/Kg		264	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-93-2	Lithium	6.53	mg/kg		0.426	2.13	2.13	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7439-95-4	Magnesium	332000	ug/Kg	*N	8970	31700	31700	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-96-5	Manganese	226000	ug/Kg		211	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182
7439-97-6	Mercury	11.9	ug/kg	J	4.22	12.4	12.4	1	AV	JXL1	12/03/09 10:37	120309S1-6	924854
7440-02-0	Nickel	2.25	mg/kg	*	0.106	0.426	0.426	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-09-7	Potassium	378000	ug/Kg	*N	6750	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7782-49-2	Selenium	1.06	mg/kg	U	0.532	1.06	1.06	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-21-3	Silicon	758000	ug/Kg		1600	10700	10700	1	P	HSC	12/10/09 09:17	121009-1	930802
7440-22-4	Silver	270	ug/Kg	J	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-23-5	Sodium	161000	ug/Kg	*N	7390	26400	26400	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-28-0	Thallium	0.331	mg/kg		0.0638	0.213	0.213	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-32-6	Titanium	256000	ug/Kg	N	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-61-1	Uranium	0.611	mg/kg	*	0.014	0.0426	0.0426	2	MS	BAJ	11/26/09 23:26	091126-3	925185
7440-62-2	Vanadium	4760	ug/Kg	*	106	528	528	1	P	HSC	12/05/09 04:40	120409A-2	925182
7440-66-6	Zinc	36900	ug/Kg	*	348	1060	1060	1	P	HSC	12/05/09 04:40	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.515	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.505	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.5	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322004 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13619 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1610000	ug/Kg	*	7820	23000	23000	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-36-0	Antimony	1150	ug/Kg	U	379	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-38-2	Arsenic	3.61	mg/kg		0.226	1.13	1.13	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-39-3	Barium	16600	ug/Kg	*N	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-41-7	Beryllium	0.553	mg/kg		0.0226	0.113	0.113	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-42-8	Boron	5750	ug/Kg	U	1150	5750	5750	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-43-9	Cadmium	575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-70-2	Calcium	472000	ug/Kg	*N	9200	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-47-3	Chromium	14900	ug/Kg	*	172	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-48-4	Cobalt	604	ug/Kg	*	172	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-50-8	Copper	3120	ug/Kg		345	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-89-6	Iron	5860000	ug/Kg	*	9200	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-92-1	Lead	4320	ug/Kg		287	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-93-2	Lithium	4.37	mg/kg		0.452	2.26	2.26	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7439-95-4	Magnesium	310000	ug/Kg	*N	9770	34500	34500	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-96-5	Manganese	112000	ug/Kg		230	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182
7439-97-6	Mercury	5.78	ug/kg	J	4.61	13.6	13.6	1	AV	JXL1	12/03/09 10:39	120309S1-6	924854
7440-02-0	Nickel	4.5	mg/kg	*	0.113	0.452	0.452	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-09-7	Potassium	484000	ug/Kg	*N	7360	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7782-49-2	Selenium	1.13	mg/kg	U	0.565	1.13	1.13	2	MS	BAJ	11/26/09 23:32	091126-3	925185
7440-21-3	Silicon	624000	ug/Kg		1720	11500	11500	1	P	HSC	12/10/09 09:28	121009-1	930802
7440-22-4	Silver	575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-23-5	Sodium	245000	ug/Kg	*N	8050	28700	28700	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-28-0	Thallium	0.132	mg/kg	J	0.0678	0.226	0.226	2	MS	BAJ	11/27/09 19:11	091127-5	925185
7440-32-6	Titanium	149000	ug/Kg	N	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-61-1	Uranium	0.716	mg/kg	*	0.0149	0.0452	0.0452	2	MS	BAJ	11/27/09 18:27	091127-4	925185
7440-62-2	Vanadium	5100	ug/Kg	*	115	575	575	1	P	HSC	12/05/09 05:02	120409A-2	925182
7440-66-6	Zinc	24700	ug/Kg	*	379	1150	1150	1	P	HSC	12/05/09 05:02	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.518	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.518	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.509	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322005 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13624 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2490000	ug/Kg	*	8760	25800	25800	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-36-0	Antimony	1290	ug/Kg	U	425	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-38-2	Arsenic	0.640	mg/kg	J	0.258	1.29	1.29	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-39-3	Barium	15900	ug/Kg	*N	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-41-7	Beryllium	0.333	mg/kg		0.0258	0.129	0.129	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-42-8	Boron	6440	ug/Kg	U	1290	6440	6440	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-43-9	Cadmium	644	ug/Kg	U	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-70-2	Calcium	603000	ug/Kg	*N	10300	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-47-3	Chromium	5300	ug/Kg	*	193	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-48-4	Cobalt	746	ug/Kg	*	193	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-50-8	Copper	4420	ug/Kg		386	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-89-6	Iron	7350000	ug/Kg	*	10300	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-92-1	Lead	12300	ug/Kg		322	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-93-2	Lithium	5.35	mg/kg		0.515	2.58	2.58	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7439-95-4	Magnesium	488000	ug/Kg	*N	10900	38600	38600	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-96-5	Manganese	111000	ug/Kg		258	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182
7439-97-6	Mercury	15.5	ug/kg		5.22	15.4	15.4	1	AV	JXL1	12/03/09 10:41	120309S1-6	924854
7440-02-0	Nickel	1.96	mg/kg	*	0.129	0.515	0.515	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-09-7	Potassium	790000	ug/Kg	*N	8240	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7782-49-2	Selenium	1.29	mg/kg	U	0.644	1.29	1.29	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-21-3	Silicon	808000	ug/Kg		1940	12900	12900	1	P	HSC	12/10/09 09:32	121009-1	930802
7440-22-4	Silver	681	ug/Kg		129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-23-5	Sodium	384000	ug/Kg	*N	9020	32200	32200	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-28-0	Thallium	0.258	mg/kg	U	0.0773	0.258	0.258	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-32-6	Titanium	273000	ug/Kg	N	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-61-1	Uranium	0.582	mg/kg	*	0.017	0.0515	0.0515	2	MS	BAJ	11/26/09 23:38	091126-3	925185
7440-62-2	Vanadium	5360	ug/Kg	*	129	644	644	1	P	HSC	12/05/09 05:08	120409A-2	925182
7440-66-6	Zinc	82400	ug/Kg	*	425	1290	1290	1	P	HSC	12/05/09 05:08	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.505	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.502	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.502	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.5	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322006 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13623 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 96.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1720000	ug/Kg	*	6920	20300	20300	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-36-0	Antimony	1020	ug/Kg	U	336	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-38-2	Arsenic	0.820	mg/kg	J	0.206	1.03	1.03	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-39-3	Barium	22300	ug/Kg	*N	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-41-7	Beryllium	0.539	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-42-8	Boron	5090	ug/Kg	U	1020	5090	5090	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-43-9	Cadmium	509	ug/Kg	U	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-70-2	Calcium	748000	ug/Kg	*N	8140	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-47-3	Chromium	3090	ug/Kg	*	153	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-48-4	Cobalt	460	ug/Kg	J*	153	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-50-8	Copper	4610	ug/Kg		305	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-89-6	Iron	6320000	ug/Kg	*	8140	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-92-1	Lead	8790	ug/Kg		254	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-93-2	Lithium	6.95	mg/kg		0.413	2.06	2.06	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7439-95-4	Magnesium	345000	ug/Kg	*N	8650	30500	30500	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-96-5	Manganese	225000	ug/Kg		203	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182
7439-97-6	Mercury	11.3	ug/kg	J	3.97	11.7	11.7	1	AV	JXL1	12/03/09 10:43	120309S1-6	924854
7440-02-0	Nickel	1.99	mg/kg	*	0.103	0.413	0.413	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-09-7	Potassium	333000	ug/Kg	*N	6510	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7782-49-2	Selenium	1.03	mg/kg	U	0.516	1.03	1.03	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-21-3	Silicon	583000	ug/Kg		1490	9940	9940	1	P	HSC	12/10/09 09:35	121009-1	930802
7440-22-4	Silver	198	ug/Kg	J	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-23-5	Sodium	455000	ug/Kg	*N	7120	25400	25400	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-28-0	Thallium	0.0642	mg/kg	J	0.0619	0.206	0.206	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-32-6	Titanium	196000	ug/Kg	N	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-61-1	Uranium	0.626	mg/kg	*	0.0136	0.0413	0.0413	2	MS	BAJ	11/26/09 23:44	091126-3	925185
7440-62-2	Vanadium	3820	ug/Kg	*	102	509	509	1	P	HSC	12/05/09 05:16	120409A-2	925182
7440-66-6	Zinc	31000	ug/Kg	*	336	1020	1020	1	P	HSC	12/05/09 05:16	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.533	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.51	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.503	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.522	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322007 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13626 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1810000	ug/Kg	*	8050	23700	23700	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-36-0	Antimony	1180	ug/Kg	U	391	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-38-2	Arsenic	0.755	mg/kg	J	0.23	1.15	1.15	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-39-3	Barium	14600	ug/Kg	*N	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-41-7	Beryllium	0.405	mg/kg		0.023	0.115	0.115	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-42-8	Boron	5920	ug/Kg	U	1180	5920	5920	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-43-9	Cadmium	592	ug/Kg	U	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-70-2	Calcium	326000	ug/Kg	*N	9470	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-47-3	Chromium	2600	ug/Kg	*	178	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-48-4	Cobalt	669	ug/Kg	*	178	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-50-8	Copper	2410	ug/Kg		355	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-89-6	Iron	5420000	ug/Kg	*	9470	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-92-1	Lead	6240	ug/Kg		296	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-93-2	Lithium	5.15	mg/kg		0.46	2.3	2.3	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7439-95-4	Magnesium	268000	ug/Kg	*N	10100	35500	35500	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-96-5	Manganese	181000	ug/Kg		237	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182
7439-97-6	Mercury	7.95	ug/kg	J	4.02	11.8	11.8	1	AV	JXL1	12/03/09 10:49	120309S1-6	924854
7440-02-0	Nickel	1.51	mg/kg	*	0.115	0.46	0.46	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-09-7	Potassium	471000	ug/Kg	*N	7570	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7782-49-2	Selenium	1.15	mg/kg	U	0.575	1.15	1.15	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-21-3	Silicon	572000	ug/Kg		1690	11300	11300	1	P	HSC	12/10/09 09:39	121009-1	930802
7440-22-4	Silver	477	ug/Kg	J	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-23-5	Sodium	262000	ug/Kg	*N	8290	29600	29600	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-28-0	Thallium	0.230	mg/kg	U	0.0689	0.23	0.23	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-32-6	Titanium	183000	ug/Kg	N	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-61-1	Uranium	0.397	mg/kg	*	0.0152	0.046	0.046	2	MS	BAJ	11/26/09 23:51	091126-3	925185
7440-62-2	Vanadium	3730	ug/Kg	*	118	592	592	1	P	HSC	12/05/09 05:23	120409A-2	925182
7440-66-6	Zinc	52700	ug/Kg	*	391	1180	1180	1	P	HSC	12/05/09 05:23	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.6	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.515	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.525	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322008 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13621 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1830000	ug/Kg	*	7060	20800	20800	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-36-0	Antimony	1040	ug/Kg	U	343	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-38-2	Arsenic	1.39	mg/kg		0.2	0.999	0.999	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-39-3	Barium	17700	ug/Kg	*N	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-41-7	Beryllium	0.419	mg/kg		0.02	0.0999	0.0999	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-42-8	Boron	5190	ug/Kg	U	1040	5190	5190	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-43-9	Cadmium	519	ug/Kg	U	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-70-2	Calcium	299000	ug/Kg	*N	8310	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-47-3	Chromium	4330	ug/Kg	*	156	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-48-4	Cobalt	543	ug/Kg	*	156	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-50-8	Copper	2020	ug/Kg		311	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-89-6	Iron	8100000	ug/Kg	*	8310	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-92-1	Lead	15900	ug/Kg		260	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-93-2	Lithium	5.94	mg/kg		0.4	2	2	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7439-95-4	Magnesium	179000	ug/Kg	*N	8830	31100	31100	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-96-5	Manganese	300000	ug/Kg		208	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182
7439-97-6	Mercury	12.2	ug/kg	U	4.15	12.2	12.2	1	AV	JXL1	12/03/09 10:51	120309S1-6	924854
7440-02-0	Nickel	2.27	mg/kg	*	0.0999	0.4	0.4	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-09-7	Potassium	372000	ug/Kg	*N	6650	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7782-49-2	Selenium	0.999	mg/kg	U	0.499	0.999	0.999	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-21-3	Silicon	483000	ug/Kg		1500	9990	9990	1	P	HSC	12/10/09 09:43	121009-1	930802
7440-22-4	Silver	369	ug/Kg	J	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-23-5	Sodium	250000	ug/Kg	*N	7270	26000	26000	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-28-0	Thallium	0.368	mg/kg		0.0599	0.2	0.2	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-32-6	Titanium	353000	ug/Kg	N	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-61-1	Uranium	0.567	mg/kg	*	0.0132	0.04	0.04	2	MS	BAJ	11/27/09 00:09	091126-3	925185
7440-62-2	Vanadium	4010	ug/Kg	*	104	519	519	1	P	HSC	12/05/09 05:30	120409A-2	925182
7440-66-6	Zinc	38600	ug/Kg	*	343	1040	1040	1	P	HSC	12/05/09 05:30	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.515	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.505	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.525	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322009 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13627 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 93

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3710000	ug/Kg	*	7320	21500	21500	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-36-0	Antimony	1080	ug/Kg	U	355	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-38-2	Arsenic	0.695	mg/kg	J	0.205	1.02	1.02	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-39-3	Barium	18000	ug/Kg	*N	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-41-7	Beryllium	0.485	mg/kg		0.0205	0.102	0.102	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-42-8	Boron	5380	ug/Kg	U	1080	5380	5380	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-70-2	Calcium	351000	ug/Kg	*N	8610	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-47-3	Chromium	2440	ug/Kg	*	161	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-48-4	Cobalt	454	ug/Kg	J*	161	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-50-8	Copper	3360	ug/Kg		323	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-89-6	Iron	6160000	ug/Kg	*	8610	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-92-1	Lead	6350	ug/Kg		269	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-93-2	Lithium	7.71	mg/kg		0.41	2.05	2.05	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7439-95-4	Magnesium	272000	ug/Kg	*N	9140	32300	32300	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-96-5	Manganese	126000	ug/Kg		215	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182
7439-97-6	Mercury	9.75	ug/kg	J	4.2	12.4	12.4	1	AV	JXL1	12/03/09 10:53	120309S1-6	924854
7440-02-0	Nickel	1.96	mg/kg	*	0.102	0.41	0.41	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-09-7	Potassium	562000	ug/Kg	*N	6890	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7782-49-2	Selenium	1.02	mg/kg	U	0.512	1.02	1.02	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-21-3	Silicon	558000	ug/Kg		1560	10400	10400	1	P	HSC	12/10/09 09:46	121009-1	930802
7440-22-4	Silver	398	ug/Kg	J	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-23-5	Sodium	345000	ug/Kg	*N	7530	26900	26900	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-28-0	Thallium	0.205	mg/kg	U	0.0615	0.205	0.205	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-32-6	Titanium	177000	ug/Kg	N	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-61-1	Uranium	0.609	mg/kg	*	0.0135	0.041	0.041	2	MS	BAJ	11/27/09 00:15	091126-3	925185
7440-62-2	Vanadium	4150	ug/Kg	*	108	538	538	1	P	HSC	12/05/09 05:37	120409A-2	925182
7440-66-6	Zinc	43700	ug/Kg	*	355	1080	1080	1	P	HSC	12/05/09 05:37	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.522	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.5	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.525	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.518	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322010 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-09-13625 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2520000	ug/Kg	*	7850	23100	23100	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-36-0	Antimony	1160	ug/Kg	U	381	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-38-2	Arsenic	0.70	mg/kg	J	0.238	1.19	1.19	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-39-3	Barium	12300	ug/Kg	*N	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-41-7	Beryllium	0.516	mg/kg		0.0238	0.119	0.119	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-42-8	Boron	5780	ug/Kg	U	1160	5780	5780	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-43-9	Cadmium	578	ug/Kg	U	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-70-2	Calcium	169000	ug/Kg	*N	9240	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-47-3	Chromium	5390	ug/Kg	*	173	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-48-4	Cobalt	351	ug/Kg	J*	173	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-50-8	Copper	1990	ug/Kg		347	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-89-6	Iron	6500000	ug/Kg	*	9240	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-92-1	Lead	5710	ug/Kg		289	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-93-2	Lithium	4.5	mg/kg		0.477	2.38	2.38	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7439-95-4	Magnesium	168000	ug/Kg	*N	9820	34700	34700	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-96-5	Manganese	142000	ug/Kg		231	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182
7439-97-6	Mercury	13.4	ug/kg	U	4.55	13.4	13.4	1	AV	JXL1	12/03/09 10:55	120309S1-6	924854
7440-02-0	Nickel	1.54	mg/kg	*	0.119	0.477	0.477	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-09-7	Potassium	580000	ug/Kg	*N	7390	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7782-49-2	Selenium	1.19	mg/kg	U	0.596	1.19	1.19	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-21-3	Silicon	617000	ug/Kg		1760	11800	11800	1	P	HSC	12/10/09 09:50	121009-1	930802
7440-22-4	Silver	193	ug/Kg	J	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-23-5	Sodium	448000	ug/Kg	*N	8090	28900	28900	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-28-0	Thallium	0.238	mg/kg	U	0.0715	0.238	0.238	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-32-6	Titanium	189000	ug/Kg	N	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-61-1	Uranium	0.617	mg/kg	*	0.0157	0.0477	0.0477	2	MS	BAJ	11/27/09 00:21	091126-3	925185
7440-62-2	Vanadium	3540	ug/Kg	*	116	578	578	1	P	HSC	12/05/09 05:44	120409A-2	925182
7440-66-6	Zinc	43400	ug/Kg	*	381	1160	1160	1	P	HSC	12/05/09 05:44	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.54	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.521	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.505	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.512	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322011 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6084 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1530000	ug/Kg	*	7780	22900	22900	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-36-0	Antimony	1140	ug/Kg	U	378	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-38-2	Arsenic	0.801	mg/kg	J	0.219	1.1	1.1	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-39-3	Barium	24400	ug/Kg	*N	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-41-7	Beryllium	0.253	mg/kg		0.0219	0.11	0.11	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-42-8	Boron	5720	ug/Kg	U	1140	5720	5720	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-43-9	Cadmium	572	ug/Kg	U	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-70-2	Calcium	601000	ug/Kg	*N	9160	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-47-3	Chromium	3320	ug/Kg	*	172	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-48-4	Cobalt	957	ug/Kg	*	172	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-50-8	Copper	2160	ug/Kg		343	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-89-6	Iron	5570000	ug/Kg	*	9160	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-92-1	Lead	5340	ug/Kg		286	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-93-2	Lithium	4.1	mg/kg		0.439	2.19	2.19	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7439-95-4	Magnesium	330000	ug/Kg	*N	9730	34300	34300	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-96-5	Manganese	197000	ug/Kg		229	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182
7439-97-6	Mercury	12.4	ug/kg	U	4.23	12.4	12.4	1	AV	JXL1	12/03/09 10:57	120309S1-6	924854
7440-02-0	Nickel	1.81	mg/kg	*	0.11	0.439	0.439	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-09-7	Potassium	401000	ug/Kg	*N	7320	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7782-49-2	Selenium	1.1	mg/kg	U	0.548	1.1	1.1	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-21-3	Silicon	472000	ug/Kg		1670	11100	11100	1	P	HSC	12/10/09 09:54	121009-1	930802
7440-22-4	Silver	572	ug/Kg	U	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-23-5	Sodium	178000	ug/Kg	*N	8010	28600	28600	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-28-0	Thallium	0.219	mg/kg	U	0.0658	0.219	0.219	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-32-6	Titanium	220000	ug/Kg	N	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-61-1	Uranium	0.302	mg/kg	*	0.0145	0.0439	0.0439	2	MS	BAJ	11/27/09 00:27	091126-3	925185
7440-62-2	Vanadium	4040	ug/Kg	*	114	572	572	1	P	HSC	12/05/09 05:51	120409A-2	925182
7440-66-6	Zinc	36700	ug/Kg	*	378	1140	1140	1	P	HSC	12/05/09 05:51	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.553	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.501	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.523	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.516	g	50	mL	12/09/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241322012 **BASIS:** Dry Weight **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6085 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1790000	ug/Kg	*	6880	20200	20200	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-36-0	Antimony	1010	ug/Kg	U	334	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-38-2	Arsenic	1.34	mg/kg		0.206	1.03	1.03	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-39-3	Barium	17900	ug/Kg	*N	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-41-7	Beryllium	0.422	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-42-8	Boron	5060	ug/Kg	U	1010	5060	5060	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-43-9	Cadmium	506	ug/Kg	U	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-70-2	Calcium	298000	ug/Kg	*N	8100	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-47-3	Chromium	4120	ug/Kg	*	152	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-48-4	Cobalt	615	ug/Kg	*	152	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-50-8	Copper	2030	ug/Kg		304	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-89-6	Iron	7790000	ug/Kg	*	8100	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-92-1	Lead	16200	ug/Kg		253	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-93-2	Lithium	6.11	mg/kg		0.411	2.06	2.06	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7439-95-4	Magnesium	168000	ug/Kg	*N	8600	30400	30400	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-96-5	Manganese	323000	ug/Kg		202	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182
7439-97-6	Mercury	5.69	ug/kg	J	4.23	12.4	12.4	1	AV	JXL1	12/03/09 10:59	120309S1-6	924854
7440-02-0	Nickel	2.25	mg/kg	*	0.103	0.411	0.411	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-09-7	Potassium	398000	ug/Kg	*N	6480	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7782-49-2	Selenium	1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-21-3	Silicon	482000	ug/Kg		1500	10000	10000	1	P	HSC	12/10/09 09:57	121009-1	930802
7440-22-4	Silver	220	ug/Kg	J	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-23-5	Sodium	265000	ug/Kg	*N	7080	25300	25300	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-28-0	Thallium	0.365	mg/kg		0.0617	0.206	0.206	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-32-6	Titanium	391000	ug/Kg	N	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-61-1	Uranium	0.582	mg/kg	*	0.0136	0.0411	0.0411	2	MS	BAJ	11/27/09 00:34	091126-3	925185
7440-62-2	Vanadium	3940	ug/Kg	*	101	506	506	1	P	HSC	12/05/09 05:58	120409A-2	925182
7440-66-6	Zinc	40700	ug/Kg	*	334	1010	1010	1	P	HSC	12/05/09 05:58	120409A-2	925182

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924854	924853	SW846 7471A Prep	0.505	g	30	mL	12/02/09	TXB3
925182	925181	SW846 3050B	0.517	g	50	mL	11/21/09	BCD1
925185	925183	SW846 3050B	0.509	g	50	mL	11/21/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

930802	930801	SW846 3050B	0.523	g	50	mL	12/09/09	FGA

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	26-NOV-09 21:17	091126-3
	Beryllium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	26-NOV-09 21:17	091126-3
	Lithium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	26-NOV-09 21:17	091126-3
	Nickel	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	26-NOV-09 21:17	091126-3
	Selenium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	26-NOV-09 21:17	091126-3
	Thallium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	26-NOV-09 21:17	091126-3
	Uranium	52.1	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	26-NOV-09 21:17	091126-3
	Uranium	54.4	ug/L	50	ug/L	108.8	90.0 – 110.0	MS	27-NOV-09 16:14	091127-4
	Thallium	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	27-NOV-09 18:40	091127-5
	Mercury	5.01	ug/L	5	ug/L	100.1	90.0 – 110.0	AV	03-DEC-09 09:51	120309S1-6
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Antimony	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Lead	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Manganese	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-2
	Silicon	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	10-DEC-09 02:42	121009-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Arsenic	48.2	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	26-NOV-09 21:48	091126-3
	Beryllium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	26-NOV-09 21:48	091126-3
	Lithium	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	26-NOV-09 21:48	091126-3
	Nickel	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	26-NOV-09 21:48	091126-3
	Selenium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	26-NOV-09 21:48	091126-3
	Thallium	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	26-NOV-09 21:48	091126-3
	Uranium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	26-NOV-09 21:48	091126-3
	Uranium	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	27-NOV-09 16:23	091127-4
	Thallium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	27-NOV-09 18:52	091127-5
	Mercury	4.93	ug/L	5	ug/L	98.7	80.0 – 120.0	AV	03-DEC-09 09:57	120309S1-6
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Antimony	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Boron	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Cadmium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Lead	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Manganese	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Titanium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04-DEC-09 10:35	120409A-2
	Silicon	2480	ug/L	2500	ug/L	99.2	90.0 – 110.0	P	10-DEC-09 03:05	121009-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Arsenic	48.6	ug/L	50	ug/L	97.1	90.0 - 110.0	MS	26-NOV-09 22:06	091126-3
	Beryllium	52.7	ug/L	50	ug/L	105.5	90.0 - 110.0	MS	26-NOV-09 22:06	091126-3
	Lithium	50.5	ug/L	50	ug/L	100.9	90.0 - 110.0	MS	26-NOV-09 22:06	091126-3
	Nickel	51.3	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	26-NOV-09 22:06	091126-3
	Selenium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	26-NOV-09 22:06	091126-3
	Thallium	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	26-NOV-09 22:06	091126-3
	Uranium	55.1	ug/L	50	ug/L	110.3	90.0 - 110.0	MS	26-NOV-09 22:06	091126-3
	Uranium	53.7	ug/L	50	ug/L	107.3	90.0 - 110.0	MS	27-NOV-09 16:39	091127-4
	Thallium	51.4	ug/L	50	ug/L	102.7	90.0 - 110.0	MS	27-NOV-09 18:59	091127-5
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 - 120.0	AV	03-DEC-09 10:21	120309S1-6
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Antimony	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Barium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Boron	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Cadmium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Calcium	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Chromium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Copper	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Lead	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Manganese	500	ug/L	500	ug/L	100	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Silver	495	ug/L	500	ug/L	99	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Titanium	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Zinc	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Silicon	2440	ug/L	2500	ug/L	97.5	90.0 - 110.0	P	10-DEC-09 03:39	121009-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Arsenic	47.5	ug/L	50	ug/L	95	90.0 - 110.0	MS	26-NOV-09 23:07	091126-3
	Beryllium	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	26-NOV-09 23:07	091126-3
	Lithium	49.1	ug/L	50	ug/L	98.2	90.0 - 110.0	MS	26-NOV-09 23:07	091126-3
	Nickel	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	26-NOV-09 23:07	091126-3
	Selenium	50	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	26-NOV-09 23:07	091126-3
	Thallium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	26-NOV-09 23:07	091126-3
	Uranium	53.6	ug/L	50	ug/L	107.1	90.0 - 110.0	MS	26-NOV-09 23:07	091126-3
	Uranium	54.2	ug/L	50	ug/L	108.4	90.0 - 110.0	MS	27-NOV-09 16:56	091127-4
	Thallium	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	27-NOV-09 19:14	091127-5
	Mercury	5.2	ug/L	5	ug/L	104	80.0 - 120.0	AV	03-DEC-09 10:45	120309S1-6
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Antimony	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Barium	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Boron	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Cadmium	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Chromium	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Copper	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Lead	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Manganese	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Silver	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Zinc	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 12:13	120409A-2
	Silicon	2420	ug/L	2500	ug/L	96.7	90.0 - 110.0	P	10-DEC-09 04:06	121009-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Arsenic	46.5	ug/L	50	ug/L	93	90.0 – 110.0	MS	26-NOV-09 23:57	091126-3
	Beryllium	51.1	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	26-NOV-09 23:57	091126-3
	Lithium	48.6	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	26-NOV-09 23:57	091126-3
	Nickel	49.9	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	26-NOV-09 23:57	091126-3
	Selenium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	26-NOV-09 23:57	091126-3
	Thallium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	26-NOV-09 23:57	091126-3
	Uranium	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	26-NOV-09 23:57	091126-3
	Uranium	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	27-NOV-09 17:08	091127-4
	Mercury	5.33	ug/L	5	ug/L	106.6	80.0 – 120.0	AV	03-DEC-09 11:09	120309S1-6
	Aluminum	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Lead	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-2
	Silicon	2420	ug/L	2500	ug/L	97	90.0 – 110.0	P	10-DEC-09 04:40	121009-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Arsenic	47.7	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	27–NOV–09 00:40	091126–3
	Beryllium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	27–NOV–09 00:40	091126–3
	Lithium	49.1	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	27–NOV–09 00:40	091126–3
	Nickel	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	27–NOV–09 00:40	091126–3
	Selenium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	27–NOV–09 00:40	091126–3
	Thallium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	27–NOV–09 00:40	091126–3
	Uranium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	27–NOV–09 00:40	091126–3
	Uranium	53.7	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	27–NOV–09 17:20	091127–4
	Mercury	5.3	ug/L	5	ug/L	106	80.0 – 120.0	AV	03–DEC–09 11:33	120309S1–6
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Silicon	2420	ug/L	2500	ug/L	96.8	90.0 – 110.0	P	10–DEC–09 05:19	121009–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV06										
	Uranium	53.4	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	27-NOV-09 17:38	091127-4
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Boron	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Cadmium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Lead	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Manganese	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 14:52	120409A-2
	Silicon	2420	ug/L	2500	ug/L	96.9	90.0 – 110.0	P	10-DEC-09 05:48	121009-1
CCV07										
	Uranium	54.5	ug/L	50	ug/L	108.9	90.0 – 110.0	MS	27-NOV-09 17:55	091127-4
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Antimony	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Boron	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 15:48	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Copper	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Lead	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Manganese	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Silver	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 15:48	120409A-2
	Silicon	2420	ug/L	2500	ug/L	96.8	90.0 - 110.0	P	10-DEC-09 06:21	121009-1
CCV08										
	Uranium	53.5	ug/L	50	ug/L	107.1	90.0 - 110.0	MS	27-NOV-09 18:04	091127-4
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Antimony	516	ug/L	500	ug/L	103.1	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Barium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Boron	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Calcium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Chromium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Copper	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Lead	514	ug/L	500	ug/L	102.9	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2
	Silver	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 16:58	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-2
	Silicon	2450	ug/L	2500	ug/L	98.1	90.0 – 110.0	P	10-DEC-09 06:47	121009-1
CCV09										
	Uranium	53.9	ug/L	50	ug/L	107.8	90.0 – 110.0	MS	27-NOV-09 18:20	091127-4
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Boron	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Cadmium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Manganese	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 18:01	120409A-2
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	10-DEC-09 07:14	121009-1
CCV10										
	Uranium	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	27-NOV-09 18:29	091127-4
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Antimony	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Calcium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Chromium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Cobalt	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Copper	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Sodium	9790	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 19:19	120409A-2
	Silicon	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	10-DEC-09 08:04	121009-1
CCV11										
	Aluminum	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Calcium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2
	Iron	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	04-DEC-09 20:30	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Manganese	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Silver	510	ug/L	500	ug/L	102	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Titanium	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Vanadium	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Zinc	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 20:30	120409A-2
	Silicon	2490	ug/L	2500	ug/L	99.7	90.0 - 110.0	P	10-DEC-09 08:41	121009-1
CCV12										
	Aluminum	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Antimony	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Barium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Boron	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Copper	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Iron	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Lead	514	ug/L	500	ug/L	102.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Magnesium	5100	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Silver	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silicon	2480	ug/L	2500	ug/L	99.2	90.0 - 110.0	P	10-DEC-09 09:21	121009-1
CCV13										
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Antimony	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Barium	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Boron	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Chromium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Copper	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Lead	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Manganese	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Silver	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Titanium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Vanadium	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Zinc	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Silicon	2470	ug/L	2500	ug/L	98.8	90.0 - 110.0	P	10-DEC-09 10:01	121009-1
CCV14										
	Aluminum	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Antimony	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Barium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Boron	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Copper	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Iron	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Lead	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Silver	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Sodium	10500	ug/L	10000	ug/L	104.7	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Titanium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Zinc	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
CCV15										
	Aluminum	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Antimony	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Barium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Boron	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Chromium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Copper	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Iron	5350	ug/L	5000	ug/L	107.1	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Lead	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Magnesium	5430	ug/L	5000	ug/L	108.5	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Silver	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Sodium	10600	ug/L	10000	ug/L	106.1	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Zinc	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
CCV16										
	Aluminum	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Antimony	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Barium	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Boron	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Cadmium	514	ug/L	500	ug/L	102.7	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Calcium	5140	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Chromium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Copper	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Lead	517	ug/L	500	ug/L	103.3	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Magnesium	5290	ug/L	5000	ug/L	105.7	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Manganese	515	ug/L	500	ug/L	103	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Silver	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Sodium	10200	ug/L	10000	ug/L	102.4	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Titanium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Vanadium	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
	Zinc	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	05-DEC-09 02:42	120409A-2
CCV17										
	Aluminum	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Antimony	529	ug/L	500	ug/L	105.7	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Barium	520	ug/L	500	ug/L	104	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Boron	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Cadmium	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Calcium	5110	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Chromium	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	515	ug/L	500	ug/L	103	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Copper	519	ug/L	500	ug/L	103.9	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Lead	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Magnesium	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Manganese	522	ug/L	500	ug/L	104.3	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Potassium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Silver	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Sodium	10600	ug/L	10000	ug/L	105.7	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Titanium	518	ug/L	500	ug/L	103.5	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Vanadium	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
	Zinc	514	ug/L	500	ug/L	102.9	90.0 - 110.0	P	05-DEC-09 03:30	120409A-2
CCV18										
	Aluminum	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Antimony	533	ug/L	500	ug/L	106.6	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Barium	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Boron	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Cadmium	525	ug/L	500	ug/L	104.9	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Calcium	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Chromium	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Cobalt	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Copper	523	ug/L	500	ug/L	104.7	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Iron	5160	ug/L	5000	ug/L	103.2	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Lead	529	ug/L	500	ug/L	105.7	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Magnesium	5280	ug/L	5000	ug/L	105.5	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Manganese	525	ug/L	500	ug/L	105.1	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Potassium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Silver	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Titanium	521	ug/L	500	ug/L	104.3	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	526	ug/L	500	ug/L	105.3	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 04:48	120409A-2
CCV19										
	Aluminum	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Antimony	530	ug/L	500	ug/L	106	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Barium	522	ug/L	500	ug/L	104.5	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Boron	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Cadmium	523	ug/L	500	ug/L	104.7	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Calcium	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Chromium	519	ug/L	500	ug/L	103.9	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Cobalt	519	ug/L	500	ug/L	103.9	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Copper	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Iron	5190	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Lead	527	ug/L	500	ug/L	105.3	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Magnesium	5410	ug/L	5000	ug/L	108.3	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Manganese	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Silver	521	ug/L	500	ug/L	104.3	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Sodium	10200	ug/L	10000	ug/L	101.7	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Titanium	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Vanadium	525	ug/L	500	ug/L	105	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2
	Zinc	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	05-DEC-09 06:05	120409A-2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.1	ug/L	2	ug/L	104.9	70.0 - 130.0	MS	26-NOV-09 21:29	091126-3
	Thallium	1.17	ug/L	1	ug/L	117.2	70.0 - 130.0	MS	26-NOV-09 21:29	091126-3
	Beryllium	.559	ug/L	.5	ug/L	111.8	70.0 - 130.0	MS	26-NOV-09 21:29	091126-3
	Arsenic	5.44	ug/L	5	ug/L	108.7	70.0 - 130.0	MS	26-NOV-09 21:29	091126-3
	Uranium	.252	ug/L	.2	ug/L	126	70.0 - 130.0	MS	26-NOV-09 21:29	091126-3
	Lithium	10.8	ug/L	10	ug/L	107.9	70.0 - 130.0	MS	26-NOV-09 21:29	091126-3
	Selenium	5.84	ug/L	5	ug/L	116.8	70.0 - 130.0	MS	26-NOV-09 21:29	091126-3
	Uranium	.254	ug/L	.2	ug/L	127	70.0 - 130.0	MS	27-NOV-09 16:18	091127-4
	Thallium	1.09	ug/L	1	ug/L	109	70.0 - 130.0	MS	27-NOV-09 18:45	091127-5
	Mercury	.194	ug/L	.2	ug/L	97.2	70.0 - 130.0	AV	03-DEC-09 09:55	120309S1-6
PQL01										
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Potassium	162	ug/L	150	ug/L	107.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Sodium	292	ug/L	300	ug/L	97.4	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Barium	5.2	ug/L	5	ug/L	104	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Chromium	5.1	ug/L	5	ug/L	102	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Calcium	203	ug/L	200	ug/L	101.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Cadmium	5.09	ug/L	5	ug/L	101.8	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Antimony	11.8	ug/L	10	ug/L	118.1	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Manganese	10.5	ug/L	10	ug/L	105.4	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Lead	9.1	ug/L	10	ug/L	91	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2
	Aluminum	206	ug/L	200	ug/L	103	70.0 - 130.0	P	04-DEC-09 09:48	120409A-2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Silicon	97.9	ug/L	100	ug/L	97.9	70.0 - 130.0	P	10-DEC-09 02:49	121009-1
PQL02										
	Aluminum	213	ug/L	200	ug/L	106.5	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Iron	107	ug/L	100	ug/L	106.8	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Lead	10	ug/L	10	ug/L	100.2	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Magnesium	232	ug/L	300	ug/L	77.2	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Manganese	10.7	ug/L	10	ug/L	106.6	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Potassium	168	ug/L	150	ug/L	112.3	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Silver	4.88	ug/L	5	ug/L	97.7	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Sodium	343	ug/L	300	ug/L	114.4	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Antimony	14.9	ug/L	10	ug/L	149	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Barium	5.08	ug/L	5	ug/L	101.6	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Cadmium	5.08	ug/L	5	ug/L	101.5	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Chromium	5.14	ug/L	5	ug/L	102.8	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Cobalt	4.93	ug/L	5	ug/L	98.6	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Copper	10.8	ug/L	10	ug/L	107.9	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Vanadium	4.98	ug/L	5	ug/L	99.5	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Zinc	10.2	ug/L	10	ug/L	101.7	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Calcium	207	ug/L	200	ug/L	103.6	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Boron	49.9	ug/L	50	ug/L	99.8	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2
	Titanium	5.01	ug/L	5	ug/L	100.2	70.0 - 130.0	P	04-DEC-09 23:20	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-NOV-09 21:23	091126-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	26-NOV-09 21:23	091126-3
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	26-NOV-09 21:23	091126-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-NOV-09 21:23	091126-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-NOV-09 21:23	091126-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-NOV-09 21:23	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	26-NOV-09 21:23	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	27-NOV-09 16:16	091127-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	27-NOV-09 18:42	091127-5
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	03-DEC-09 09:53	120309S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 09:41	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 09:41	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 09:41	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 09:41	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 09:41	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 09:41	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 09:41	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 09:41	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 09:41	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 09:41	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 09:41	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 09:41	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 09:41	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 09:41	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 09:41	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 09:41	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 09:41	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 09:41	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 09:41	120409A-2
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 02:45	121009-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB01										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-NOV-09 21:54	091126-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	26-NOV-09 21:54	091126-3
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	26-NOV-09 21:54	091126-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-NOV-09 21:54	091126-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-NOV-09 21:54	091126-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-NOV-09 21:54	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	26-NOV-09 21:54	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	27-NOV-09 16:25	091127-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	27-NOV-09 18:54	091127-5
	Mercury	-0.093	+/-.2	J	0.068	0.2	SOL	AV	03-DEC-09 09:59	120309S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 10:42	120409A-2
	Antimony	3.77	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Boron	10.73	+/-50	J	10.0	50.0	SOL	P	04-DEC-09 10:42	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 10:42	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Potassium	101.63	+/-250	J	64.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 03:08	121009-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB02										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	26–NOV–09 22:12	091126–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	26–NOV–09 22:12	091126–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	26–NOV–09 22:12	091126–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	26–NOV–09 22:12	091126–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	26–NOV–09 22:12	091126–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	26–NOV–09 22:12	091126–3
	Uranium	0.081	+/–.2	J	0.066	0.2	SOL	MS	26–NOV–09 22:12	091126–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	27–NOV–09 16:41	091127–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	27–NOV–09 19:01	091127–5
	Mercury	–0.107	+/–.2	J	0.068	0.2	SOL	AV	03–DEC–09 10:23	120309S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 11:03	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 11:03	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 11:03	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 11:03	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 11:03	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 11:03	120409A–2
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 03:43	121009–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB03										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-NOV-09 23:14	091126-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	26-NOV-09 23:14	091126-3
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	26-NOV-09 23:14	091126-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-NOV-09 23:14	091126-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-NOV-09 23:14	091126-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-NOV-09 23:14	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	26-NOV-09 23:14	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	27-NOV-09 16:58	091127-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	27-NOV-09 19:16	091127-5
	Mercury	-0.117	+/-.2	J	0.068	0.2	SOL	AV	03-DEC-09 10:47	120309S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 12:20	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 12:20	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 12:20	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 04:10	121009-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB04										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	27-NOV-09 00:03	091126-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	27-NOV-09 00:03	091126-3
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	27-NOV-09 00:03	091126-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	27-NOV-09 00:03	091126-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	27-NOV-09 00:03	091126-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	27-NOV-09 00:03	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	27-NOV-09 00:03	091126-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	27-NOV-09 17:10	091127-4
	Mercury	-0.122	+/-.2	J	0.068	0.2	SOL	AV	03-DEC-09 11:11	120309S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 12:55	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 12:55	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 12:55	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 12:55	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 12:55	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 12:55	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 12:55	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 12:55	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 12:55	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 12:55	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 12:55	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 12:55	120409A-2
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 04:43	121009-1
CCB05										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	27-NOV-09 00:46	091126-3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	27–NOV–09 00:46	091126–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	27–NOV–09 00:46	091126–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	27–NOV–09 00:46	091126–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	27–NOV–09 00:46	091126–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	27–NOV–09 00:46	091126–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	27–NOV–09 00:46	091126–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	27–NOV–09 17:21	091127–4
	Mercury	–0.076	+/–.2	J	0.068	0.2	SOL	AV	03–DEC–09 11:35	120309S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 14:03	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 14:03	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:03	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:03	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 14:03	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 14:03	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 14:03	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 05:22	121009–1
CCB06										
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	27–NOV–09 17:40	091127–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 14:59	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	3.35	+/–10	J	3.3	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 14:59	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 14:59	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 14:59	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:59	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 14:59	120409A–2
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 05:51	121009–1
CCB07										
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	27–NOV–09 17:57	091127–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 15:55	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 15:55	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 15:55	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 15:55	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 15:55	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 15:55	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 15:55	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 15:55	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 15:55	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 15:55	120409A-2
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 06:25	121009-1
CCB08										
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	27-NOV-09 18:06	091127-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 17:05	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 17:05	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 17:05	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 17:05	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 17:05	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 17:05	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 17:05	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 06:51	121009–1
CCB09										
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	27–NOV–09 18:21	091127–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 18:08	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 18:08	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 18:08	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 07:17	121009–1
CCB10										
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	27–NOV–09 18:30	091127–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 19:26	120409A–2
	Antimony	3.31	+/–10	J	3.3	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 19:26	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 19:26	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 19:26	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 19:26	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 19:26	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 19:26	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 19:26	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 19:26	120409A–2
	Silicon	142.34	+/–100		15.0	100	SOL	P	10–DEC–09 08:08	121009–1
CCB11										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 20:36	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 20:36	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 20:36	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 20:36	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Silicon	18.21	+/-100	J	15.0	100	SOL	P	10-DEC-09 08:44	121009-1
CCB12										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 21:47	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 21:47	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 21:47	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 21:47	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 21:47	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 21:47	120409A-2
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	10-DEC-09 09:24	121009-1
CCB13										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 23:27	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 23:27	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 23:27	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 23:27	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 23:27	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 23:27	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	10–DEC–09 10:05	121009–1
CCB14										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 00:43	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 00:43	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Potassium	137.31	+/–250	J	64.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	05-DEC-09 00:43	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 00:43	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 00:43	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	05-DEC-09 00:43	120409A-2
CCB15										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	05-DEC-09 01:54	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-DEC-09 01:54	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 01:54	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	05-DEC-09 01:54	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 01:54	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	05-DEC-09 01:54	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	05-DEC-09 01:54	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	05-DEC-09 01:54	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	05-DEC-09 01:54	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	05-DEC-09 01:54	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	05-DEC-09 01:54	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	05-DEC-09 01:54	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	05-DEC-09 01:54	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	05-DEC-09 01:54	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 01:54	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	05-DEC-09 01:54	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 01:54	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 01:54	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	05-DEC-09 01:54	120409A-2
CCB16										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	05-DEC-09 02:49	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-DEC-09 02:49	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 02:49	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	05-DEC-09 02:49	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 02:49	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	05-DEC-09 02:49	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 02:49	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 02:49	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 02:49	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 02:49	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 02:49	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 02:49	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 02:49	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 02:49	120409A–2
CCB17										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 03:37	120409A–2
	Antimony	3.63	+/–10	J	3.3	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 03:37	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 03:37	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 03:37	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 03:37	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 03:37	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 03:37	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 03:37	120409A–2
CCB18										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 04:54	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 04:54	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 04:54	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 04:54	120409A–2
CCB19										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 06:12	120409A–2
	Antimony	3.88	+/–10	J	3.3	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 06:12	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 06:12	120409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–544

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 06:12	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 06:12	120409A–2

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–544
Contract: LANL01004
Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201977144								
	Mercury	–4.48	ug/kg	+/–10.695	J	AV	3.64	10.7
1201977903								
	Aluminum	6800	ug/Kg	+/–20000	U	P	6800	20000
	Antimony	489	ug/Kg	+/–1000	J	P	330	1000
	Barium	100	ug/Kg	+/–500	U	P	100	500
	Boron	1000	ug/Kg	+/–5000	U	P	1000	5000
	Cadmium	100	ug/Kg	+/–500	U	P	100	500
	Calcium	8000	ug/Kg	+/–25000	U	P	8000	25000
	Chromium	150	ug/Kg	+/–500	U	P	150	500
	Cobalt	150	ug/Kg	+/–500	U	P	150	500
	Copper	300	ug/Kg	+/–1000	U	P	300	1000
	Iron	8000	ug/Kg	+/–25000	U	P	8000	25000
	Lead	250	ug/Kg	+/–1000	U	P	250	1000
	Magnesium	8500	ug/Kg	+/–30000	U	P	8500	30000
	Manganese	200	ug/Kg	+/–1000	U	P	200	1000
	Potassium	6400	ug/Kg	+/–25000	U	P	6400	25000
	Silver	100	ug/Kg	+/–500	U	P	100	500
	Sodium	7000	ug/Kg	+/–25000	U	P	7000	25000
	Titanium	100	ug/Kg	+/–500	U	P	100	500
	Vanadium	100	ug/Kg	+/–500	U	P	100	500
	Zinc	421	ug/Kg	+/–1000	J	P	330	1000
1201977909								
	Arsenic	0.198	mg/kg	+/–0.99	U	MS	0.198	0.99
	Beryllium	0.0198	mg/kg	+/–0.099	U	MS	0.0198	0.099
	Lithium	0.396	mg/kg	+/–1.98	U	MS	0.396	1.98
	Nickel	0.099	mg/kg	+/–0.396	U	MS	0.099	0.396
	Selenium	0.495	mg/kg	+/–0.99	U	MS	0.495	0.99
	Thallium	0.0594	mg/kg	+/–0.198	U	MS	0.0594	0.198
	Uranium	0.0131	mg/kg	+/–0.04	U	MS	0.0131	0.0396
1201990789								
	Silicon	4960	ug/Kg	+/–9615.385	J	P	1440	9620

METALS
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Interference Check Sample

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Silicon	22.1	ug/L					10-DEC-09 02:52	121009-1
ICSAB01									
	Silicon	5120	ug/L	5000	ug/L	102	80.0 - 120.0	10-DEC-09 02:55	121009-1

METALS
-4-
Interference Check Sample

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 - 120.0	04-DEC-09 09:55	120409A-2
	Antimony	4.98	ug/L					04-DEC-09 09:55	120409A-2
	Barium	1.92	ug/L					04-DEC-09 09:55	120409A-2
	Boron	-5.89	ug/L					04-DEC-09 09:55	120409A-2
	Cadmium	-0.11	ug/L					04-DEC-09 09:55	120409A-2
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 - 120.0	04-DEC-09 09:55	120409A-2
	Chromium	1.28	ug/L					04-DEC-09 09:55	120409A-2
	Cobalt	-1.39	ug/L					04-DEC-09 09:55	120409A-2
	Copper	1.06	ug/L					04-DEC-09 09:55	120409A-2
	Iron	184000	ug/L	200000	ug/L	92	80.0 - 120.0	04-DEC-09 09:55	120409A-2
	Lead	-2.66	ug/L					04-DEC-09 09:55	120409A-2
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 - 120.0	04-DEC-09 09:55	120409A-2
	Manganese	7.66	ug/L					04-DEC-09 09:55	120409A-2
	Potassium	-19.7	ug/L					04-DEC-09 09:55	120409A-2
	Silver	-1.58	ug/L					04-DEC-09 09:55	120409A-2
	Sodium	24.7	ug/L					04-DEC-09 09:55	120409A-2
	Titanium	-0.536	ug/L					04-DEC-09 09:55	120409A-2
	Vanadium	-1.65	ug/L					04-DEC-09 09:55	120409A-2
	Zinc	-7.1	ug/L					04-DEC-09 09:55	120409A-2
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Antimony	551	ug/L	500	ug/L	110	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Barium	505	ug/L	500	ug/L	101	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Boron	519	ug/L	500	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Cadmium	473	ug/L	500	ug/L	94.6	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Chromium	482	ug/L	500	ug/L	96.3	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 - 120.0	04-DEC-09 10:01	120409A-2
	Copper	574	ug/L	500	ug/L	115	80.0 - 120.0	04-DEC-09 10:01	120409A-2

METALS
-4-
Interference Check Sample

SDG No: 10-544

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Lead	473	ug/L	500	ug/L	94.7	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Manganese	501	ug/L	500	ug/L	100	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Potassium	5530	ug/L	5000	ug/L	111	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Silver	274	ug/L	250	ug/L	110	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Sodium	5210	ug/L	5000	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Titanium	514	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Vanadium	513	ug/L	500	ug/L	103	80.0 – 120.0	04-DEC-09 10:01	120409A-2
	Zinc	488	ug/L	500	ug/L	97.7	80.0 – 120.0	04-DEC-09 10:01	120409A-2

METALS
–4–
Interference Check Sample

SDG No: 10–544

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.204	ug/L					26–NOV–09 21:35	091126–3
	Beryllium	0.079	ug/L					26–NOV–09 21:35	091126–3
	Lithium	0.132	ug/L					26–NOV–09 21:35	091126–3
	Nickel	3.37	ug/L					26–NOV–09 21:35	091126–3
	Selenium	–1.51	ug/L					26–NOV–09 21:35	091126–3
	Thallium	0.025	ug/L					26–NOV–09 21:35	091126–3
	Uranium	0.003	ug/L					26–NOV–09 21:35	091126–3
ICSAB01									
	Arsenic	20.5	ug/L	20	ug/L	103	80.0 – 120.0	26–NOV–09 21:42	091126–3
	Beryllium	18.3	ug/L	20	ug/L	91.6	80.0 – 120.0	26–NOV–09 21:42	091126–3
	Lithium	19.3	ug/L	20	ug/L	96.5	80.0 – 120.0	26–NOV–09 21:42	091126–3
	Nickel	22.3	ug/L	22.7	ug/L	98.4	80.0 – 120.0	26–NOV–09 21:42	091126–3
	Selenium	18.5	ug/L	20	ug/L	92.7	80.0 – 120.0	26–NOV–09 21:42	091126–3
	Thallium	22.2	ug/L	20	ug/L	111	80.0 – 120.0	26–NOV–09 21:42	091126–3
	Uranium	23.5	ug/L	20	ug/L	118	80.0 – 120.0	26–NOV–09 21:42	091126–3

METALS
–4–
Interference Check Sample

SDG No: 10–544

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	0.016	ug/L					27–NOV–09 16:19	091127–4
ICSAB01									
	Uranium	23.9	ug/L	20	ug/L	120	80.0 – 120.0	27–NOV–09 16:21	091127–4

METALS
–4–
Interference Check Sample

SDG No: 10–544

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	–0.032	ug/L					27–NOV–09 18:47	091127–5
ICSAB01									
	Thallium	21.3	ug/L	20	ug/L	106	80.0 – 120.0	27–NOV–09 18:49	091127–5

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-544 **Client ID** RE03-09-13770S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241336001 **Spike ID:** 1201977147

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	145		5.17	J	127	110		AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–544 **Client ID** RE03–09–13770SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241336001 **Spike ID:** 1201977149

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	149		5.17	J	131	110		AV

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-544 **Client ID** RE03-09-13618S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 86

Sample ID: 241322001 **Spike ID:** 1201977906

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Potassium	ug/Kg	75-125	1090000		689000		580000	69.6	N	P
Silicon	ug/Kg	75-125	1210000		590000		577000	107		P
Silver	ug/Kg	75-125	61400		238	J	58000	106		P
Sodium	ug/Kg	75-125	900000		144000		580000	130	N	P
Titanium	ug/Kg	75-125	282000		220000		58000	108		P
Vanadium	ug/Kg	75-125	66400		6050		58000	104		P
Zinc	ug/Kg	75-125	94100		41000		58000	91.6		P
Aluminum	ug/Kg		3190000		2990000		580000	34	N/A	P
Antimony	ug/Kg	75-125	61000		380	U	58000	105		P
Barium	ug/Kg	75-125	85000		42200		58000	73.9	N	P
Boron	ug/Kg	75-125	61200		1150	U	58000	105		P
Cadmium	ug/Kg	75-125	60500		115	U	58000	104		P
Calcium	ug/Kg	75-125	1170000		890000		580000	49	N	P
Chromium	ug/Kg	75-125	64500		3450		58000	105		P
Cobalt	ug/Kg	75-125	60400		1730		58000	101		P
Copper	ug/Kg	75-125	65900		2220		58000	110		P
Iron	ug/Kg		6920000		9590000		580000	-460	N/A	P
Lead	ug/Kg	75-125	67300		4020		58000	109		P
Magnesium	ug/Kg	75-125	1020000		1430000		580000	-71.3	N	P
Manganese	ug/Kg		234000		235000		58000	-.961	N/A	P

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–544 **Client ID** RE03–09–13618SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 86

Sample ID: 241322001 **Spike ID:** 1201977907

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		3230000		2990000		583000	40.6	N/A	P
Antimony	ug/Kg	75–125	61000		380	U	58300	104		P
Barium	ug/Kg	75–125	86300		42200		58300	75.6		P
Boron	ug/Kg	75–125	62400		1150	U	58300	106		P
Cadmium	ug/Kg	75–125	60900		115	U	58300	104		P
Calcium	ug/Kg	75–125	1170000		890000		583000	48	N	P
Chromium	ug/Kg	75–125	65600		3450		58300	107		P
Cobalt	ug/Kg	75–125	60400		1730		58300	101		P
Copper	ug/Kg	75–125	67100		2220		58300	111		P
Iron	ug/Kg		6940000		9590000		583000	–454	N/A	P
Lead	ug/Kg	75–125	75300		4020		58300	122		P
Magnesium	ug/Kg	75–125	1070000		1430000		583000	–62.6	N	P
Manganese	ug/Kg		257000		235000		58300	38.2	N/A	P
Potassium	ug/Kg	75–125	1110000		689000		583000	72.9	N	P
Silicon	ug/Kg	75–125	1180000		590000		575000	103		P
Silver	ug/Kg	75–125	62000		238	J	58300	106		P
Sodium	ug/Kg	75–125	920000		144000		583000	133	N	P
Titanium	ug/Kg	75–125	307000		220000		58300	149	N	P
Vanadium	ug/Kg	75–125	67300		6050		58300	105		P
Zinc	ug/Kg	75–125	96100		41000		58300	94.5		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-544 **Client ID** RE03-09-13618S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 86

Sample ID: 241322001 **Spike ID:** 1201977912

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.05		0.813	J	9.17	89.9		MS
Beryllium	mg/kg	75-125	5.49		0.281		5.73	90.9		MS
Lithium	mg/kg	75-125	9.9		4.79		5.73	89.3		MS
Nickel	mg/kg	75-125	7.42		1.92		5.73	96.1		MS
Selenium	mg/kg	75-125	2.07		0.561	U	2.29	84.6		MS
Thallium	mg/kg	75-125	11.3		0.0832	J	11.5	97.7		MS
Uranium	mg/kg	75-125	6.36		0.336		5.73	105		MS

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-544 **Client ID** RE03-09-13618SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 86

Sample ID: 241322001 **Spike ID:** 1201977913

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.28		0.813	J	9.11	92.9		MS
Beryllium	mg/kg	75-125	5.8		0.281		5.69	96.8		MS
Lithium	mg/kg	75-125	10.5		4.79		5.69	101		MS
Nickel	mg/kg	75-125	8.29		1.92		5.69	112		MS
Selenium	mg/kg	75-125	2.14		0.561	U	2.28	88.1		MS
Thallium	mg/kg	75-125	11.6		0.0832	J	11.4	101		MS
Uranium	mg/kg	75-125	6.53		0.336		5.69	109		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-544

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13770D

Sample ID: 241336001 **Duplicate ID:** 1201977146 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-12.6	5.17	J	6.89	J	28.5		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-544

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13770SD

Sample ID: 1201977147 **Duplicate ID:** 1201977149 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	145		149		2.95		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-544

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13618D

Sample ID: 241322001 **Duplicate ID:** 1201977904 **Percent Solids for Dup:** 86

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	2990000		1450000		69.5	*	P
Antimony	ug/Kg		380	U	369	U			P
Barium	ug/Kg	+/-20%	42200		32500		25.8	*	P
Boron	ug/Kg		1150	U	1120	U			P
Cadmium	ug/Kg		115	U	112	U			P
Calcium	ug/Kg	+/-20%	890000		637000		33.1	*	P
Chromium	ug/Kg	+/-20%	3450		6470		60.9	*	P
Cobalt	ug/Kg	+/-560	1730		844		69	*	P
Copper	ug/Kg	+/-1120	2220		3100		33.1		P
Iron	ug/Kg	+/-20%	9590000		6020000		45.7	*	P
Lead	ug/Kg	+/-1120	4020		4690		15.5		P
Magnesium	ug/Kg	+/-20%	1430000		374000		117	*	P
Manganese	ug/Kg	+/-20%	235000		210000		11.2		P
Potassium	ug/Kg	+/-20%	689000		424000		47.7	*	P
Silicon	ug/Kg	+/-20%	590000		626000		5.84		P
Silver	ug/Kg		238	J	112	U	200		P
Sodium	ug/Kg	+/-20%	144000		180000		22.1	*	P
Titanium	ug/Kg	+/-20%	220000		208000		5.48		P
Vanadium	ug/Kg	+/-20%	6050		4670		25.7	*	P
Zinc	ug/Kg	+/-20%	41000		33100		21.3	*	P

Metals
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Duplicate Sample Summary

SDG No.: 10–544

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13618SD

Sample ID: 1201977906 **Duplicate ID:** 1201977907 **Percent Solids for Dup:** 86

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	3190000		3230000		1.24		P
Antimony	ug/Kg	+/–20	61000		61000		.135		P
Barium	ug/Kg	+/–20	85000		86300		1.42		P
Boron	ug/Kg	+/–20	61200		62400		1.92		P
Cadmium	ug/Kg	+/–20	60500		60900		.635		P
Calcium	ug/Kg	+/–20	1170000		1170000		.355		P
Chromium	ug/Kg	+/–20	64500		65600		1.68		P
Cobalt	ug/Kg	+/–20	60400		60400		.0995		P
Copper	ug/Kg	+/–20	65900		67100		1.73		P
Iron	ug/Kg	+/–20	6920000		6940000		.29		P
Lead	ug/Kg	+/–20	67300		75300		11.3		P
Magnesium	ug/Kg	+/–20	1020000		1070000		4.63		P
Manganese	ug/Kg	+/–20	234000		257000		9.3		P
Potassium	ug/Kg	+/–20	1090000		1110000		1.92		P
Silicon	ug/Kg	+/–20	1210000		1180000		2.2		P
Silver	ug/Kg	+/–20	61400		62000		.93		P
Sodium	ug/Kg	+/–20	900000		920000		2.28		P
Titanium	ug/Kg	+/–20	282000		307000		8.26		P
Vanadium	ug/Kg	+/–20	66400		67300		1.33		P
Zinc	ug/Kg	+/–20	94100		96100		2.13		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–544

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13618D

Sample ID: 241322001 **Duplicate ID:** 1201977910 **Percent Solids for Dup:** 86

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.16	0.813	J	1.29		45.3		MS
Beryllium	mg/kg	+/–.116	0.281		0.349		21.5		MS
Lithium	mg/kg	+/–2.32	4.79		6.47		29.8		MS
Nickel	mg/kg	+/–.465	1.92		2.67		32.6	*	MS
Selenium	mg/kg		0.561	U	0.581	U			MS
Thallium	mg/kg	+/–.232	0.0832	J	0.101	J	18.9		MS
Uranium	mg/kg	+/–20%	0.336		0.439		26.6	*	MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-544

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13618SD

Sample ID: 1201977912 **Duplicate ID:** 1201977913 **Percent Solids for Dup:** 86

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	9.05		9.28		2.46		MS
Beryllium	mg/kg	+/-20	5.49		5.8		5.42		MS
Lithium	mg/kg	+/-20	9.9		10.5		6.02		MS
Nickel	mg/kg	+/-20	7.42		8.29		11.1		MS
Selenium	mg/kg	+/-20	2.07		2.14		3.25		MS
Thallium	mg/kg	+/-20	11.3		11.6		2.8		MS
Uranium	mg/kg	+/-20	6.36		6.53		2.59		MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10-544

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977145								
	Mercury	ug/kg	5150	5780		112	71.6-128.3	AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–544

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977908								
	Iron	ug/Kg	20000000	13400000		67.1	51.5–145.5	P
	Lead	ug/Kg	161000	163000		101	83.1–114.7	P
	Magnesium	ug/Kg	2980000	2780000		93.2	81–114.3	P
	Manganese	ug/Kg	398000	361000		90.6	76.6–106.6	P
	Potassium	ug/Kg	2390000	2010000		84.2	72.2–111.1	P
	Silver	ug/Kg	133000	129000		96.8	81.7–115.7	P
	Sodium	ug/Kg	614000	586000		95.4	71.5–109.3	P
	Titanium	ug/Kg	382000	286000		75	41.7–148.3	P
	Vanadium	ug/Kg	166000	137000		82.5	65–118.6	P
	Zinc	ug/Kg	195000	190000		97.6	82.8–111.9	P
	Aluminum	ug/Kg	7290000	5580000		76.6	63.5–118	P
	Antimony	ug/Kg	121000	90600		74.8	39.1–132.1	P
	Barium	ug/Kg	475000	461000		97.1	82–110.6	P
	Boron	ug/Kg	139000	131000		94.4	74.9–113.6	P
	Cadmium	ug/Kg	116000	116000		100	77.9–115.2	P
	Calcium	ug/Kg	3720000	3530000		94.8	77.4–111.7	P
	Chromium	ug/Kg	84000	69600		82.8	66.6–116.5	P
	Cobalt	ug/Kg	83000	80500		97	79–113.9	P
	Copper	ug/Kg	105000	100000		95.4	77.6–112	P

METALS
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Laboratory Control Sample Summary

SDG NO. 10-544

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977914								
	Arsenic	mg/kg	255	254		99.4	83-120	MS
	Beryllium	mg/kg	86.4	92.5		107	81.2-126.8	MS
	Lithium	mg/kg	8.01	8.06	J	101	66.7-133.7	MS
	Nickel	mg/kg	101	106		105	83.3-121.4	MS
	Selenium	mg/kg	171	183		107	80.2-125.9	MS
	Thallium	mg/kg	203	226		111	78-123.2	MS
	Uranium	mg/kg	2.12	1.89		89.1	61.9-130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-544

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201990790								
	Silicon	ug/Kg	1210000	874000		72.1	10-190	P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–544 **Client ID** RE03–09–13770L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241336001 **Serial Dilution ID:** 1201977148

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.079	J	.34	U	100			AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-544 **Client ID** RE03-09-13618L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241322001 **Serial Dilution ID:** 1201977905

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	26000		25700		1.15		10	P
Antimony	3.3	U	16.5	U				P
Barium	367		360		2.04		10	P
Boron	10	U	50	U				P
Cadmium	1	U	5	U				P
Calcium	7730		7650		1.03		10	P
Chromium	30		29.8		.833			P
Cobalt	15.1		15.3	J	1.32			P
Copper	19.3		19.4	J	.518			P
Iron	83400		81500		2.28		10	P
Lead	34.9		33.6	J	3.72			P
Magnesium	12400		12500		.403		10	P
Manganese	2040		2040		0		10	P
Potassium	5990		5950		.668		10	P
Silicon	5190		5050		2.7		10	P
Silver	2.07	J	5	U	100			P
Sodium	1250		1350		8			P
Titanium	1910		1870		2.09		10	P
Vanadium	52.6		51		3.04		10	P
Zinc	357		350		2.1		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-544 **Client ID** RE03-09-13618L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241322001 **Serial Dilution ID:** 1201977911

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	3.62	J	5	U	100			MS
Beryllium	1.25		1.43	J	14.4			MS
Lithium	21.4		23.2	J	8.18			MS
Nickel	8.56		9.65	J	12.7			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.371	J	1.5	U	100			MS
Uranium	1.5		1.68		12			MS

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-544 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925181							
1201977903	MB for batch 925181	MB	S	21-NOV-09	.5g	50mL	
1201977908	LCS for batch 925181	LCS	S	21-NOV-09	.513g	50mL	
1201977906	RE03-09-13618S	MS	S	21-NOV-09	.503g	50mL	
1201977907	RE03-09-13618SD	MSD	S	21-NOV-09	.5g	50mL	
1201977904	RE03-09-13618D	DUP	S	21-NOV-09	.521g	50mL	
241322001	RE03-09-13618	SAMPLE	S	21-NOV-09	.507g	50mL	
241322002	RE03-09-13622	SAMPLE	S	21-NOV-09	.504g	50mL	
241322003	RE03-09-13620	SAMPLE	S	21-NOV-09	.505g	50mL	
241322004	RE03-09-13619	SAMPLE	S	21-NOV-09	.509g	50mL	
241322005	RE03-09-13624	SAMPLE	S	21-NOV-09	.502g	50mL	
241322006	RE03-09-13623	SAMPLE	S	21-NOV-09	.51g	50mL	
241322007	RE03-09-13626	SAMPLE	S	21-NOV-09	.5g	50mL	
241322008	RE03-09-13621	SAMPLE	S	21-NOV-09	.505g	50mL	
241322009	RE03-09-13627	SAMPLE	S	21-NOV-09	.5g	50mL	
241322010	RE03-09-13625	SAMPLE	S	21-NOV-09	.521g	50mL	
241322011	RE03-10-6084	SAMPLE	S	21-NOV-09	.501g	50mL	
241322012	RE03-10-6085	SAMPLE	S	21-NOV-09	.517g	50mL	
Batch Number 930801							
1201990789	MB for batch 930801	MB	S	09-DEC-09	.52g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-544 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
1201990790	LCS for batch 930801	LCS	S	09-DEC-09	.504g	50mL	
1201977906	RE03-09-13618S	MS	S	09-DEC-09	.505g	50mL	
1201977907	RE03-09-13618SD	MSD	S	09-DEC-09	.507g	50mL	
1201977904	RE03-09-13618D	DUP	S	09-DEC-09	.522g	50mL	
241322001	RE03-09-13618	SAMPLE	S	09-DEC-09	.513g	50mL	
241322002	RE03-09-13622	SAMPLE	S	09-DEC-09	.516g	50mL	
241322003	RE03-09-13620	SAMPLE	S	09-DEC-09	.5g	50mL	
241322004	RE03-09-13619	SAMPLE	S	09-DEC-09	.509g	50mL	
241322005	RE03-09-13624	SAMPLE	S	09-DEC-09	.5g	50mL	
241322006	RE03-09-13623	SAMPLE	S	09-DEC-09	.522g	50mL	
241322007	RE03-09-13626	SAMPLE	S	09-DEC-09	.525g	50mL	
241322008	RE03-09-13621	SAMPLE	S	09-DEC-09	.525g	50mL	
241322009	RE03-09-13627	SAMPLE	S	09-DEC-09	.518g	50mL	
241322010	RE03-09-13625	SAMPLE	S	09-DEC-09	.512g	50mL	
241322011	RE03-10-6084	SAMPLE	S	09-DEC-09	.516g	50mL	
241322012	RE03-10-6085	SAMPLE	S	09-DEC-09	.523g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-544 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925183						
1201977909	MB for batch 925183	MB	S	21-NOV-09	.505g	50mL	
1201977914	LCS for batch 925183	LCS	S	21-NOV-09	.524g	50mL	
1201977912	RE03-09-13618S	MS	S	21-NOV-09	.509g	50mL	
1201977913	RE03-09-13618SD	MSD	S	21-NOV-09	.512g	50mL	
1201977910	RE03-09-13618D	DUP	S	21-NOV-09	.502g	50mL	
241322001	RE03-09-13618	SAMPLE	S	21-NOV-09	.52g	50mL	
241322002	RE03-09-13622	SAMPLE	S	21-NOV-09	.508g	50mL	
241322003	RE03-09-13620	SAMPLE	S	21-NOV-09	.501g	50mL	
241322004	RE03-09-13619	SAMPLE	S	21-NOV-09	.518g	50mL	
241322005	RE03-09-13624	SAMPLE	S	21-NOV-09	.502g	50mL	
241322006	RE03-09-13623	SAMPLE	S	21-NOV-09	.503g	50mL	
241322007	RE03-09-13626	SAMPLE	S	21-NOV-09	.515g	50mL	
241322008	RE03-09-13621	SAMPLE	S	21-NOV-09	.525g	50mL	
241322009	RE03-09-13627	SAMPLE	S	21-NOV-09	.525g	50mL	
241322010	RE03-09-13625	SAMPLE	S	21-NOV-09	.505g	50mL	
241322011	RE03-10-6084	SAMPLE	S	21-NOV-09	.523g	50mL	
241322012	RE03-10-6085	SAMPLE	S	21-NOV-09	.509g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-544 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	924853						
1201977144	MB for batch 924853	MB	S	02-DEC-09	.561g	30mL	
1201977145	LCS for batch 924853	LCS	S	02-DEC-09	.202g	30mL	
1201977147	RE03-09-13770S	MS	S	02-DEC-09	.526g	30mL	
1201977149	RE03-09-13770SD	MSD	S	02-DEC-09	.51g	30mL	
1201977146	RE03-09-13770D	DUP	S	02-DEC-09	.529g	30mL	
241322001	RE03-09-13618	SAMPLE	S	02-DEC-09	.548g	30mL	
241322002	RE03-09-13622	SAMPLE	S	02-DEC-09	.534g	30mL	
241322003	RE03-09-13620	SAMPLE	S	02-DEC-09	.515g	30mL	
241322004	RE03-09-13619	SAMPLE	S	02-DEC-09	.518g	30mL	
241322005	RE03-09-13624	SAMPLE	S	02-DEC-09	.505g	30mL	
241322006	RE03-09-13623	SAMPLE	S	02-DEC-09	.533g	30mL	
241322007	RE03-09-13626	SAMPLE	S	02-DEC-09	.6g	30mL	
241322008	RE03-09-13621	SAMPLE	S	02-DEC-09	.515g	30mL	
241322009	RE03-09-13627	SAMPLE	S	02-DEC-09	.522g	30mL	
241322010	RE03-09-13625	SAMPLE	S	02-DEC-09	.54g	30mL	
241322011	RE03-10-6084	SAMPLE	S	02-DEC-09	.553g	30mL	
241322012	RE03-10-6085	SAMPLE	S	02-DEC-09	.505g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 26–NOV–09 **End Date:** 27–NOV–09

Client Sdg: 10–544
Method MS
Data File: 091126–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	20:59			X		X									X				X		X				X		X		
S10	1	21:05			X		X									X				X		X				X		X		
S100	1	21:11			X		X									X				X		X				X		X		
ICV01	1	21:17			X		X									X				X		X				X		X		
ICB01	1	21:23			X		X									X				X		X				X		X		
CRDL01	1	21:29			X		X									X				X		X				X		X		
ICSA01	1	21:35			X		X									X				X		X				X		X		
ICSAB01	1	21:42			X		X									X				X		X				X		X		
CCV01	1	21:48			X		X									X				X		X				X		X		
CCB01	1	21:54			X		X									X				X		X				X		X		
LR01	1	22:00			X		X									X				X		X				X		X		
CCV02	1	22:06			X		X									X				X		X				X		X		
CCB02	1	22:12			X		X									X				X		X				X		X		
1201977909	2	22:18			X		X									X				X		X				X		X		
1201977914	20	22:24														X														
1201977914	40	22:31			X		X													X		X				X		X		
241322001	2	22:37			X		X									X				X		X				X		X		
1201977910	2	22:43			X		X									X				X		X				X		X		
1201977912	2	22:49			X		X									X				X		X				X		X		
1201977913	2	22:55			X		X									X				X		X				X		X		
1201977911	10	23:01			X		X									X				X		X				X		X		
CCV03	1	23:07			X		X									X				X		X				X		X		
CCB03	1	23:14			X		X									X				X		X				X		X		
241322002	2	23:20			X		X									X				X		X				X		X		
241322003	2	23:26			X		X									X				X		X				X		X		
241322004	2	23:32			X		X									X				X		X								
241322005	2	23:38			X		X									X				X		X				X		X		
241322006	2	23:44			X		X									X				X		X				X		X		
241322007	2	23:51			X		X									X				X		X				X		X		
CCV04	1	23:57			X		X									X				X		X				X		X		
CCB04	1	00:03			X		X									X				X		X				X		X		
241322008	2	00:09			X		X									X				X		X				X		X		
241322009	2	00:15			X		X									X				X		X				X		X		
241322010	2	00:21			X		X									X				X		X				X		X		
241322011	2	00:27			X		X									X				X		X				X		X		
241322012	2	00:34			X		X									X				X		X				X		X		
CCV05	1	00:40			X		X									X				X		X				X		X		
CCB05	1	00:46			X		X									X				X		X				X		X		

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 27-NOV-09 **End Date:** 27-NOV-09

Client Sdg: 10-544
Method MS
Data File: 091127-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	16:09																										X		
S10	1	16:11																										X		
S100	1	16:13																										X		
ICV01	1	16:14																										X		
ICB01	1	16:16																										X		
CRDL01	1	16:18																										X		
ICSA01	1	16:19																										X		
ICSAB01	1	16:21																										X		
CCV01	1	16:23																										X		
CCB01	1	16:25																										X		
ZZZZZZ	2	16:26																												
ZZZZZZ	40	16:28																												
ZZZZZZ	2	16:30																												
ZZZZZZ	2	16:31																												
ZZZZZZ	2	16:33																												
ZZZZZZ	2	16:35																												
ZZZZZZ	2	16:36																												
ZZZZZZ	2	16:38																												
CCV02	1	16:39																										X		
CCB02	1	16:41																										X		
ZZZZZZ	2	16:43																												
ZZZZZZ	2	16:45																												
ZZZZZZ	2	16:46																												
ZZZZZZ	2	16:48																												
ZZZZZZ	10	16:50																												
ZZZZZZ	2	16:51																												
ZZZZZZ	2	16:53																												
ZZZZZZ	2	16:55																												
CCV03	1	16:56																										X		
CCB03	1	16:58																										X		
ZZZZZZ	2	17:00																												
ZZZZZZ	2	17:01																												
ZZZZZZ	2	17:03																												
ZZZZZZ	2	17:05																												
ZZZZZZ	2	17:06																												
CCV04	1	17:08																										X		
CCB04	1	17:10																										X		
ZZZZZZ	2	17:11																												
ZZZZZZ	2	17:13																												
ZZZZZZ	2	17:15																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	2	17:16																											
ZZZZZZ	2	17:18																											
CCV05	1	17:20																								X			
CCB05	1	17:21																								X			
ZZZZZZ	2	17:25																											
ZZZZZZ	40	17:26																											
ZZZZZZ	2	17:28																											
ZZZZZZ	2	17:30																											
ZZZZZZ	2	17:31																											
ZZZZZZ	2	17:33																											
ZZZZZZ	2	17:35																											
ZZZZZZ	2	17:37																											
CCV06	1	17:38																								X			
CCB06	1	17:40																								X			
ZZZZZZ	2	17:42																											
ZZZZZZ	2	17:43																											
ZZZZZZ	2	17:45																											
ZZZZZZ	2	17:47																											
ZZZZZZ	2	17:49																											
ZZZZZZ	2	17:50																											
ZZZZZZ	2	17:52																											
ZZZZZZ	2	17:54																											
CCV07	1	17:55																								X			
CCB07	1	17:57																								X			
ZZZZZZ	2	17:59																											
ZZZZZZ	2	18:01																											
ZZZZZZ	2	18:02																											
CCV08	1	18:04																								X			
CCB08	1	18:06																								X			
ZZZZZZ	2	18:07																											
ZZZZZZ	2	18:09																											
ZZZZZZ	2	18:11																											
ZZZZZZ	2	18:13																											
ZZZZZZ	10	18:14																											
ZZZZZZ	2	18:16																											
ZZZZZZ	2	18:18																											
CCV09	1	18:20																								X			
CCB09	1	18:21																								X			
ZZZZZZ	2	18:24																											
ZZZZZZ	40	18:25																											

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
241322004	2	18:27																										X		
CCV10	1	18:29																										X		
CCB10	1	18:30																										X		

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 27-NOV-09 **End Date:** 27-NOV-09

Client Sdg: 10-544
Method MS
Data File: 091127-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	18:33																								X				
S10	1	18:35																								X				
S100	1	18:38																								X				
ICV01	1	18:40																								X				
ICB01	1	18:42																								X				
CRDL01	1	18:45																								X				
ICSA01	1	18:47																								X				
ICSAB01	1	18:49																								X				
CCV01	1	18:52																								X				
CCB01	1	18:54																								X				
LR01	1	18:57																								X				
CCV02	1	18:59																								X				
CCB02	1	19:01																								X				
ZZZZZZ	2	19:04																												
ZZZZZZ	40	19:06																												
ZZZZZZ	2	19:08																												
241322004	2	19:11																								X				
CCV03	1	19:14																								X				
CCB03	1	19:16																								X				

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–544
Method P
Data File: 120409A–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	09:08		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	09:14	X	X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	09:21	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	09:28	X							X				X			X								X					
ICV01	1	09:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	09:41	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	09:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	09:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	10:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	10:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	10:12	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	10:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	10:49	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	10:56	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	11:03	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	12:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV04	1	12:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	12:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	14:03	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
ZZZZZZ	1	14:45																												
CCV06	1	14:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	14:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	15:06																												
ZZZZZZ	1	15:13																												
ZZZZZZ	5	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	15:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	16:02																												
ZZZZZZ	1	16:09																												
ZZZZZZ	1	16:16																												
ZZZZZZ	1	16:23																												
ZZZZZZ	1	16:30																												
ZZZZZZ	5	16:37																												
ZZZZZZ	1	16:44																												
ZZZZZZ	1	16:51																												
CCV08	1	16:58	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	17:05	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	17:12																												
ZZZZZZ	1	17:19																												
ZZZZZZ	1	17:26																												
ZZZZZZ	1	17:33																												
ZZZZZZ	1	17:40																												
ZZZZZZ	1	17:47																												
ZZZZZZ	1	17:54																												
CCV09	1	18:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	18:08	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	18:15																												
ZZZZZZ	2	18:22																												
ZZZZZZ	1	18:29																												
ZZZZZZ	1	18:36																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	18:43																												
ZZZZZZ	1	18:50																												
ZZZZZZ	5	18:58																												
ZZZZZZ	1	19:05																												
ZZZZZZ	1	19:12																												
CCV10	1	19:19	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB10	1	19:26	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	19:33																												
ZZZZZZ	1	19:40																												
ZZZZZZ	1	19:47																												
ZZZZZZ	1	19:54																												
ZZZZZZ	1	20:01																												
ZZZZZZ	1	20:08																												
ZZZZZZ	1	20:15																												
ZZZZZZ	1	20:22																												
CCV11	1	20:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB11	1	20:36	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	20:43																												
ZZZZZZ	1	20:50																												
ZZZZZZ	1	20:58																												
ZZZZZZ	1	21:05																												
ZZZZZZ	1	21:12																												
ZZZZZZ	1	21:19																												
ZZZZZZ	1	21:26																												
ZZZZZZ	1	21:33																												
CCV12	1	21:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB12	1	21:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	22:03																												
ZZZZZZ	1	22:10																												
ZZZZZZ	1	22:17																												
ZZZZZZ	1	22:24																												
ZZZZZZ	1	22:31																												
ZZZZZZ	1	22:38																												
ZZZZZZ	1	22:45																												
ZZZZZZ	1	22:53																												
ZZZZZZ	5	23:00																												
ZZZZZZ	1	23:07																												
CCV13	1	23:14	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL02	1	23:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB13	1	23:27	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	23:34																										
ZZZZZZ	2	23:41																										
ZZZZZZ	1	23:48																										
ZZZZZZ	1	23:55																										
ZZZZZZ	1	00:02																										
ZZZZZZ	1	00:10																										
ZZZZZZ	1	00:16																										
ZZZZZZ	1	00:24																										
ZZZZZZ	1	00:30																										
CCV14	1	00:36	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB14	1	00:43	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	5	00:50																										
ZZZZZZ	1	00:57																										
ZZZZZZ	1	01:04																										
ZZZZZZ	1	01:11																										
ZZZZZZ	1	01:18																										
ZZZZZZ	1	01:25																										
ZZZZZZ	1	01:33																										
ZZZZZZ	1	01:40																										
CCV15	1	01:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB15	1	01:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	02:01																										
ZZZZZZ	1	02:08																										
ZZZZZZ	1	02:15																										
ZZZZZZ	1	02:21																										
ZZZZZZ	1	02:28																										
ZZZZZZ	5	02:35																										
CCV16	1	02:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB16	1	02:49	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	02:56																										
ZZZZZZ	1	03:03																										
ZZZZZZ	1	03:10																										
ZZZZZZ	1	03:16																										
ZZZZZZ	1	03:23																										
CCV17	1	03:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB17	1	03:37	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977903	1	03:44	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977908	2	03:51	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322001	1	03:58	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977904	1	04:05	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
1201977906	1	04:12	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977907	1	04:19	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201977905	5	04:26	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322002	1	04:33	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322003	1	04:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV18	1	04:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB18	1	04:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322004	1	05:02	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322005	1	05:08	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322006	1	05:16	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322007	1	05:23	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322008	1	05:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322009	1	05:37	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322010	1	05:44	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322011	1	05:51	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241322012	1	05:58	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV19	1	06:05	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB19	1	06:12	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 03–DEC–09 **End Date:** 03–DEC–09

Client Sdg: 10–544
Method AV
Data File: 120309S1–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:39																	X											
S0.2	1	09:41																	X											
S0.5	1	09:43																	X											
S2.0	1	09:45																	X											
S5.0	1	09:47																	X											
S10	1	09:49																	X											
ICV01	1	09:51																	X											
ICB01	1	09:53																	X											
CRDL01	1	09:55																	X											
CCV01	1	09:57																	X											
CCB01	1	09:59																	X											
ZZZZZZ	1	10:01																												
ZZZZZZ	10	10:03																												
ZZZZZZ	1	10:05																												
ZZZZZZ	1	10:07																												
ZZZZZZ	1	10:09																												
ZZZZZZ	1	10:11																												
ZZZZZZ	1	10:13																												
ZZZZZZ	1	10:15																												
ZZZZZZ	1	10:17																												
ZZZZZZ	5	10:19																												
CCV02	1	10:21																	X											
CCB02	1	10:23																	X											
ZZZZZZ	1	10:25																												
1201977144	1	10:27																	X											
1201977145	10	10:29																	X											
ZZZZZZ	1	10:31																												
241322001	1	10:33																	X											
241322002	1	10:35																	X											
241322003	1	10:37																	X											
241322004	1	10:39																	X											
241322005	1	10:41																	X											
241322006	1	10:43																	X											
CCV03	1	10:45																	X											
CCB03	1	10:47																	X											
241322007	1	10:49																	X											
241322008	1	10:51																	X											
241322009	1	10:53																	X											
241322010	1	10:55																	X											
241322011	1	10:57																	X											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
241322012	1	10:59																X										
ZZZZZZ	1	11:01																										
1201977146	1	11:03																X										
1201977147	1	11:05																X										
1201977149	1	11:07																X										
CCV04	1	11:09																X										
CCB04	1	11:11																X										
1201977148	5	11:13																X										
ZZZZZZ	1	11:15																										
ZZZZZZ	1	11:17																										
ZZZZZZ	1	11:19																										
ZZZZZZ	1	11:21																										
ZZZZZZ	1	11:23																										
ZZZZZZ	1	11:25																										
ZZZZZZ	1	11:27																										
ZZZZZZ	5	11:29																										
ZZZZZZ	1	11:31																										
CCV05	1	11:33																X										
CCB05	1	11:35																X										

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 10-DEC-09 **End Date:** 10-DEC-09

Client Sdg: 10-544
Method P
Data File: 121009-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:26																					X							
S0.1	1	02:29																					X							
S0.5	1	02:32																					X							
SCAL	1	02:36																					X							
S10	1	02:39																												
ICV01	1	02:42																					X							
ICB01	1	02:45																					X							
PQL01	1	02:49																					X							
ICSA01	1	02:52																					X							
ICSAB01	1	02:55																					X							
LR01	1	02:58																					X							
LR02	1	03:01																					X							
CCV01	1	03:05																					X							
CCB01	1	03:08																					X							
ZZZZZZ	1	03:20																												
ZZZZZZ	1	03:24																												
ZZZZZZ	1	03:28																												
ZZZZZZ	1	03:31																												
ZZZZZZ	1	03:35																												
CCV02	1	03:39																					X							
CCB02	1	03:43																					X							
ZZZZZZ	1	03:47																												
ZZZZZZ	1	03:51																												
ZZZZZZ	5	03:55																												
ZZZZZZ	1	03:59																												
ZZZZZZ	1	04:02																												
CCV03	1	04:06																					X							
CCB03	1	04:10																					X							
ZZZZZZ	1	04:14																												
ZZZZZZ	1	04:17																												
ZZZZZZ	1	04:21																												
ZZZZZZ	1	04:25																												
ZZZZZZ	1	04:28																												
ZZZZZZ	5	04:32																												
ZZZZZZ	1	04:36																												
CCV04	1	04:40																					X							
CCB04	1	04:43																					X							
ZZZZZZ	1	04:47																												
ZZZZZZ	1	04:51																												
ZZZZZZ	1	04:55																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	04:59																											
ZZZZZZ	1	05:03																											
ZZZZZZ	1	05:07																											
ZZZZZZ	1	05:11																											
ZZZZZZ	1	05:15																											
CCV05	1	05:19																			X								
CCB05	1	05:22																			X								
ZZZZZZ	1	05:26																											
ZZZZZZ	1	05:29																											
ZZZZZZ	1	05:33																											
ZZZZZZ	1	05:37																											
ZZZZZZ	1	05:40																											
ZZZZZZ	5	05:44																											
CCV06	1	05:48																			X								
CCB06	1	05:51																			X								
ZZZZZZ	1	05:55																											
ZZZZZZ	1	05:59																											
ZZZZZZ	1	06:02																											
ZZZZZZ	1	06:06																											
ZZZZZZ	1	06:10																											
ZZZZZZ	1	06:14																											
ZZZZZZ	1	06:18																											
CCV07	1	06:21																			X								
CCB07	1	06:25																			X								
ZZZZZZ	1	06:28																											
ZZZZZZ	1	06:32																											
ZZZZZZ	1	06:36																											
ZZZZZZ	1	06:39																											
ZZZZZZ	1	06:41																											
ZZZZZZ	1	06:44																											
CCV08	1	06:47																			X								
CCB08	1	06:51																			X								
ZZZZZZ	5	06:55																											
ZZZZZZ	1	06:58																											
ZZZZZZ	1	07:02																											
ZZZZZZ	1	07:05																											
ZZZZZZ	1	07:08																											
ZZZZZZ	1	07:11																											
CCV09	1	07:14																			X								
CCB09	1	07:17																			X								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	07:33																												
ZZZZZZ	2	07:37																												
ZZZZZZ	1	07:40																												
ZZZZZZ	1	07:43																												
ZZZZZZ	1	07:47																												
ZZZZZZ	1	07:50																												
ZZZZZZ	5	07:53																												
ZZZZZZ	1	07:57																												
ZZZZZZ	1	08:00																												
CCV10	1	08:04																					X							
CCB10	1	08:08																					X							
ZZZZZZ	1	08:11																												
ZZZZZZ	1	08:15																												
ZZZZZZ	1	08:19																												
ZZZZZZ	1	08:22																												
ZZZZZZ	1	08:26																												
ZZZZZZ	1	08:30																												
ZZZZZZ	1	08:33																												
ZZZZZZ	1	08:37																												
CCV11	1	08:41																					X							
CCB11	1	08:44																					X							
1201990789	1	08:48																					X							
1201990790	2	08:52																					X							
241322001	1	08:55																					X							
1201977904	1	08:59																					X							
1201977906	1	09:02																					X							
1201977907	1	09:06																					X							
1201977905	5	09:10																					X							
241322002	1	09:13																					X							
241322003	1	09:17																					X							
CCV12	1	09:21																					X							
CCB12	1	09:24																					X							
241322004	1	09:28																					X							
241322005	1	09:32																					X							
241322006	1	09:35																					X							
241322007	1	09:39																					X							
241322008	1	09:43																					X							
241322009	1	09:46																					X							
241322010	1	09:50																					X							
241322011	1	09:54																					X							

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
241322012	1	09:57																			X							
CCV13	1	10:01																			X							
CCB13	1	10:05																			X							

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-544

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	2
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-544

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-544

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10--544

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10-544

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–544

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

Raw Data

12/10/2009 02:24:56 Hg ReAlign... Actual peak offset (nm): 0.005
Drift (nm): -0.000 Slit adjustment: -3

Analysis Begun

Start Time: 12/10/2009 02:26:08 **Plasma On Time: 12/6/2009 23:29:48**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\120909.sif
Batch ID:
Results Data Set: 121009
Results Library: c:\pe\optima1\Results\Results.mdb

Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/9/2009 10:29:07**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/10/2009 02:26:11**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time

1	Sc RADIAL	116394.7	116394.7	99.8	%	02:26:45
1	Al 396.153Radial†	122.6	122.8	[0.00]	µg/L	02:26:45
1	Ca 317.933Radial†	415.6	416.5	[0.00]	µg/L	02:27:05
1	Fe 238.204 Radial†	15.8	15.8	[0.00]	µg/L	02:27:05
1	K 766.490 Radial†	724.9	726.3	[0.00]	µg/L	02:26:45
1	Mg 279.077 IEC†	15.3	15.3	[0.00]	µg/L	02:27:05
1	Na 589.592 Radial†	-603.5	-604.8	[0.00]	µg/L	02:26:45
1	Sr 421.552†	-57.0	-57.1	[0.00]	µg/L	02:26:45
1	Sc 361.383	2011794.4	2011794.4	99.484	%	02:28:07
1	Y 371.029	1256223.9	1256223.9	99.799	%	02:28:07
1	Ag 328.068†	21.7	21.8	[0.00]	µg/L	02:28:13
1	As 188.979†	1.5	1.5	[0.00]	µg/L	02:28:33
1	B 249.677†	137.7	138.4	[0.00]	µg/L	02:28:33
1	Ba 233.527†	-72.3	-72.7	[0.00]	µg/L	02:28:33
1	Be 313.107†	3486.9	3505.0	[0.00]	µg/L	02:28:13
1	Cd 226.502†	-96.5	-97.0	[0.00]	µg/L	02:28:33
1	Co 228.616†	-68.3	-68.6	[0.00]	µg/L	02:28:33
1	Cr 267.716†	-90.5	-90.9	[0.00]	µg/L	02:28:13
1	Cu 324.752†	4270.4	4292.6	[0.00]	µg/L	02:28:13
1	Mn 257.610†	-207.5	-208.6	[0.00]	µg/L	02:28:33
1	Mo 202.031†	-4.2	-4.2	[0.00]	µg/L	02:28:33
1	Ni 231.604†	271.5	272.9	[0.00]	µg/L	02:28:33
1	P 214.914†	201.2	202.3	[0.00]	µg/L	02:28:33
1	Pb 220.353†	49.5	49.8	[0.00]	µg/L	02:28:33
1	S 181.975 Axial†	23.8	23.9	[0.00]	µg/L	02:28:33
1	Sb 206.836†	26.1	26.3	[0.00]	µg/L	02:28:33
1	Se 196.026†	4.7	4.7	[0.00]	µg/L	02:28:33
1	SiO2†	2754.9	2769.2	[0.00]	µg/L	02:28:13
1	Si 251.611†	322.6	324.3	[0.00]	µg/L	02:28:33
1	Sn 189.927†	22.1	22.2	[0.00]	µg/L	02:28:33
1	Ti 334.940†	750.7	754.6	[0.00]	µg/L	02:28:13
1	Tl 190.801†	-25.8	-25.9	[0.00]	µg/L	02:28:33
1	U 409.014†	687.2	690.8	[0.00]	µg/L	02:28:13
1	V 292.402†	-154.1	-154.9	[0.00]	µg/L	02:28:13
1	Zn 213.857†	529.4	532.1	[0.00]	µg/L	02:28:33
2	Sc RADIAL	117444.7	117444.7	101	%	02:27:11
2	Al 396.153Radial†	118.9	118.1	[0.00]	µg/L	02:27:11
2	Ca 317.933Radial†	402.2	399.4	[0.00]	µg/L	02:27:31
2	Fe 238.204 Radial†	13.6	13.5	[0.00]	µg/L	02:27:31
2	K 766.490 Radial†	678.0	673.3	[0.00]	µg/L	02:27:11
2	Mg 279.077 IEC†	15.2	15.1	[0.00]	µg/L	02:27:31
2	Na 589.592 Radial†	-639.2	-634.8	[0.00]	µg/L	02:27:11
2	Sr 421.552†	-81.6	-81.0	[0.00]	µg/L	02:27:11
2	Sc 361.383	2015611.3	2015611.3	99.673	%	02:28:39
2	Y 371.029	1254118.8	1254118.8	99.632	%	02:28:39
2	Ag 328.068†	-13.2	-13.3	[0.00]	µg/L	02:28:45
2	As 188.979†	0.5	0.5	[0.00]	µg/L	02:29:06
2	B 249.677†	142.0	142.4	[0.00]	µg/L	02:29:06
2	Ba 233.527†	-79.5	-79.8	[0.00]	µg/L	02:29:06
2	Be 313.107†	3562.3	3573.9	[0.00]	µg/L	02:28:45
2	Cd 226.502†	-99.7	-100.1	[0.00]	µg/L	02:29:06
2	Co 228.616†	-71.2	-71.4	[0.00]	µg/L	02:29:06
2	Cr 267.716†	-107.4	-107.7	[0.00]	µg/L	02:28:45
2	Cu 324.752†	4279.3	4293.3	[0.00]	µg/L	02:28:45
2	Mn 257.610†	-190.8	-191.5	[0.00]	µg/L	02:29:06
2	Mo 202.031†	-2.0	-2.0	[0.00]	µg/L	02:29:06
2	Ni 231.604†	272.7	273.6	[0.00]	µg/L	02:29:06
2	P 214.914†	196.6	197.3	[0.00]	µg/L	02:29:06
2	Pb 220.353†	59.7	59.9	[0.00]	µg/L	02:29:06
2	S 181.975 Axial†	21.8	21.8	[0.00]	µg/L	02:29:06
2	Sb 206.836†	18.6	18.6	[0.00]	µg/L	02:29:06
2	Se 196.026†	11.5	11.5	[0.00]	µg/L	02:29:06
2	SiO2†	2765.7	2774.8	[0.00]	µg/L	02:28:45
2	Si 251.611†	319.5	320.5	[0.00]	µg/L	02:29:06
2	Sn 189.927†	20.9	21.0	[0.00]	µg/L	02:29:06
2	Ti 334.940†	799.3	801.9	[0.00]	µg/L	02:28:45
2	Tl 190.801†	-21.0	-21.1	[0.00]	µg/L	02:29:06
2	U 409.014†	716.4	718.8	[0.00]	µg/L	02:28:45
2	V 292.402†	-129.9	-130.4	[0.00]	µg/L	02:28:45
2	Zn 213.857†	516.6	518.3	[0.00]	µg/L	02:29:06
3	Sc RADIAL	116046.5	116046.5	99.5	%	02:27:37

3	Al 396.153Radial†	128.3	129.0	[0.00]	µg/L	02:27:37
3	Ca 317.933Radial†	420.3	422.5	[0.00]	µg/L	02:27:57
3	Fe 238.204 Radial†	16.0	16.1	[0.00]	µg/L	02:27:57
3	K 766.490 Radial†	644.5	647.8	[0.00]	µg/L	02:27:37
3	Mg 279.077 IEC†	15.8	15.9	[0.00]	µg/L	02:27:57
3	Na 589.592 Radial†	-659.5	-662.8	[0.00]	µg/L	02:27:37
3	Sr 421.552†	-48.6	-48.8	[0.00]	µg/L	02:27:37
3	Sc 361.383	2039265.3	2039265.3	100.84	%	02:29:12
3	Y 371.029	1265900.8	1265900.8	100.57	%	02:29:12
3	Ag 328.068†	22.9	22.7	[0.00]	µg/L	02:29:17
3	As 188.979†	4.6	4.6	[0.00]	µg/L	02:29:38
3	B 249.677†	133.8	132.7	[0.00]	µg/L	02:29:38
3	Ba 233.527†	-82.4	-81.7	[0.00]	µg/L	02:29:38
3	Be 313.107†	3497.9	3468.7	[0.00]	µg/L	02:29:17
3	Cd 226.502†	-100.6	-99.8	[0.00]	µg/L	02:29:38
3	Co 228.616†	-60.4	-59.9	[0.00]	µg/L	02:29:38
3	Cr 267.716†	-101.6	-100.7	[0.00]	µg/L	02:29:17
3	Cu 324.752†	4259.0	4223.4	[0.00]	µg/L	02:29:17
3	Mn 257.610†	-205.7	-204.0	[0.00]	µg/L	02:29:38
3	Mo 202.031†	-4.9	-4.9	[0.00]	µg/L	02:29:38
3	Ni 231.604†	282.6	280.2	[0.00]	µg/L	02:29:38
3	P 214.914†	204.9	203.2	[0.00]	µg/L	02:29:38
3	Pb 220.353†	59.6	59.1	[0.00]	µg/L	02:29:38
3	S 181.975 Axial†	20.9	20.7	[0.00]	µg/L	02:29:38
3	Sb 206.836†	18.6	18.4	[0.00]	µg/L	02:29:38
3	Se 196.026†	13.5	13.4	[0.00]	µg/L	02:29:38
3	SiO2†	2733.0	2710.1	[0.00]	µg/L	02:29:17
3	Si 251.611†	333.6	330.8	[0.00]	µg/L	02:29:38
3	Sn 189.927†	24.2	24.0	[0.00]	µg/L	02:29:38
3	Ti 334.940†	773.2	766.7	[0.00]	µg/L	02:29:17
3	Tl 190.801†	-14.2	-14.1	[0.00]	µg/L	02:29:38
3	U 409.014†	788.4	781.8	[0.00]	µg/L	02:29:17
3	V 292.402†	-95.8	-95.0	[0.00]	µg/L	02:29:17
3	Zn 213.857†	534.0	529.5	[0.00]	µg/L	02:29:38

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2022223.7	14881.34	0.74%	100.000	%
Sc RADIAL	116628.7	727.82	0.62%	100	%
Y 371.029	1258747.8	6283.42	0.50%	100.00	%
Ag 328.068†	10.4	20.53	197.25%	[0.00]	µg/L
Al 396.153Radial†	123.3	5.46	4.43%	[0.00]	µg/L
As 188.979†	2.2	2.12	95.86%	[0.00]	µg/L
B 249.677†	137.9	4.88	3.54%	[0.00]	µg/L
Ba 233.527†	-78.0	4.76	6.10%	[0.00]	µg/L
Be 313.107†	3515.9	53.46	1.52%	[0.00]	µg/L
Ca 317.933Radial†	412.8	11.97	2.90%	[0.00]	µg/L
Cd 226.502†	-99.0	1.66	1.68%	[0.00]	µg/L
Co 228.616†	-66.7	6.02	9.04%	[0.00]	µg/L
Cr 267.716†	-99.8	8.43	8.45%	[0.00]	µg/L
Cu 324.752†	4269.8	40.16	0.94%	[0.00]	µg/L
Fe 238.204 Radial†	15.2	1.41	9.29%	[0.00]	µg/L
K 766.490 Radial†	682.5	40.08	5.87%	[0.00]	µg/L
Mg 279.077 IEC†	15.4	0.42	2.70%	[0.00]	µg/L
Mn 257.610†	-201.3	8.86	4.40%	[0.00]	µg/L
Mo 202.031†	-3.7	1.51	41.20%	[0.00]	µg/L
Na 589.592 Radial†	-634.1	29.02	4.58%	[0.00]	µg/L
Ni 231.604†	275.6	4.06	1.47%	[0.00]	µg/L
P 214.914†	200.9	3.19	1.59%	[0.00]	µg/L
Pb 220.353†	56.3	5.64	10.03%	[0.00]	µg/L
S 181.975 Axial†	22.2	1.65	7.47%	[0.00]	µg/L
Sb 206.836†	21.1	4.46	21.15%	[0.00]	µg/L
Se 196.026†	9.9	4.58	46.43%	[0.00]	µg/L
SiO2†	2751.4	35.82	1.30%	[0.00]	µg/L
Si 251.611†	325.2	5.22	1.61%	[0.00]	µg/L
Sn 189.927†	22.4	1.52	6.78%	[0.00]	µg/L
Sr 421.552†	-62.3	16.72	26.84%	[0.00]	µg/L
Ti 334.940†	774.4	24.57	3.17%	[0.00]	µg/L
Tl 190.801†	-20.4	5.94	29.15%	[0.00]	µg/L

U 409.014†	730.5	46.63	6.38%	[0.00] µg/L
V 292.402†	-126.7	30.12	23.77%	[0.00] µg/L
Zn 213.857†	526.6	7.34	1.39%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/10/2009 02:29:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	117559.6	117559.6	101	%	02:30:22
1	K 766.490 Radial†	2726.3	2022.2	[1000]	µg/L	02:30:22
1	Sr 421.552†	20442.1	20342.5	[100]	µg/L	02:30:22
1	Sc 361.383	2023025.9	2023025.9	100.04	%	02:30:44
1	Y 371.029	1260425.7	1260425.7	100.13	%	02:30:44
1	Ag 328.068†	11176.8	11162.0	[100]	µg/L	02:30:50
1	As 188.979†	59.6	57.4	[100]	µg/L	02:31:10
1	B 249.677†	2449.1	2310.3	[100]	µg/L	02:30:50
1	Ba 233.527†	3928.2	4004.7	[100]	µg/L	02:30:50
1	Be 313.107†	165785.9	162204.3	[100]	µg/L	02:30:44
1	Cd 226.502†	3792.3	3889.8	[100]	µg/L	02:30:50
1	Co 228.616†	2047.7	2113.5	[100]	µg/L	02:31:10
1	Cr 267.716†	4750.5	4848.4	[100]	µg/L	02:30:50
1	Cu 324.752†	19139.5	14862.2	[100]	µg/L	02:30:50
1	Mn 257.610†	32038.9	32227.5	[100]	µg/L	02:30:50
1	Mo 202.031†	865.1	868.4	[100]	µg/L	02:31:10
1	Ni 231.604†	2188.1	1911.7	[100]	µg/L	02:30:50
1	P 214.914†	452.6	251.6	[500]	µg/L	02:31:10
1	Pb 220.353†	461.9	405.4	[100]	µg/L	02:31:10
1	S 181.975 Axial†	65.3	43.1	[200]	µg/L	02:31:10
1	Sb 206.836†	129.3	108.2	[100]	µg/L	02:31:10
1	Se 196.026†	93.4	83.4	[100]	µg/L	02:31:10
1	SiO2†	8649.5	5894.7	[1069.5]	µg/L	02:30:50
1	Si 251.611†	7136.5	6808.4	[500]	µg/L	02:30:50
1	Sn 189.927†	217.7	195.2	[100]	µg/L	02:31:10
1	Ti 334.940†	44240.9	43449.0	[100]	µg/L	02:30:50
1	Tl 190.801†	49.9	70.2	[100]	µg/L	02:31:10
1	U 409.014†	1782.6	1051.5	[100]	µg/L	02:30:50
1	V 292.402†	8907.2	9030.4	[100]	µg/L	02:30:50
1	Zn 213.857†	4441.6	3913.2	[100]	µg/L	02:30:50
2	Sc RADIAL	117486.7	117486.7	101	%	02:30:28
2	K 766.490 Radial†	2767.7	2065.0	[1000]	µg/L	02:30:28
2	Sr 421.552†	20343.1	20256.8	[100]	µg/L	02:30:28
2	Sc 361.383	2037610.9	2037610.9	100.76	%	02:31:17
2	Y 371.029	1270288.6	1270288.6	100.92	%	02:31:17
2	Ag 328.068†	11067.9	10973.9	[100]	µg/L	02:31:22
2	As 188.979†	56.8	54.2	[100]	µg/L	02:31:43
2	B 249.677†	2395.1	2239.1	[100]	µg/L	02:31:22
2	Ba 233.527†	3899.6	3948.2	[100]	µg/L	02:31:22
2	Be 313.107†	165931.2	161162.3	[100]	µg/L	02:31:17
2	Cd 226.502†	3799.6	3869.8	[100]	µg/L	02:31:22
2	Co 228.616†	1969.8	2021.6	[100]	µg/L	02:31:43
2	Cr 267.716†	4740.5	4804.5	[100]	µg/L	02:31:22
2	Cu 324.752†	19057.2	14643.5	[100]	µg/L	02:31:22
2	Mn 257.610†	32022.8	31982.3	[100]	µg/L	02:31:22
2	Mo 202.031†	833.7	831.1	[100]	µg/L	02:31:43
2	Ni 231.604†	2180.8	1888.8	[100]	µg/L	02:31:22
2	P 214.914†	448.4	244.1	[500]	µg/L	02:31:43
2	Pb 220.353†	448.4	388.8	[100]	µg/L	02:31:43
2	S 181.975 Axial†	65.6	43.0	[200]	µg/L	02:31:43
2	Sb 206.836†	117.6	95.6	[100]	µg/L	02:31:43
2	Se 196.026†	94.0	83.4	[100]	µg/L	02:31:43
2	SiO2†	8636.2	5819.6	[1069.5]	µg/L	02:31:22
2	Si 251.611†	7108.1	6729.3	[500]	µg/L	02:31:22
2	Sn 189.927†	212.6	188.6	[100]	µg/L	02:31:43
2	Ti 334.940†	44293.6	43184.7	[100]	µg/L	02:31:22
2	Tl 190.801†	42.5	62.5	[100]	µg/L	02:31:43
2	U 409.014†	1871.4	1126.8	[100]	µg/L	02:31:22
2	V 292.402†	8925.8	8985.1	[100]	µg/L	02:31:22

2	Zn 213.857†	4419.3	3859.3	[100]	µg/L	02:31:22
3	Sc RADIAL	118235.9	118235.9	101	%	02:30:34
3	K 766.490 Radial†	2767.8	2047.7	[1000]	µg/L	02:30:34
3	Sr 421.552†	20472.9	20256.9	[100]	µg/L	02:30:34
3	Sc 361.383	2034992.9	2034992.9	100.63	%	02:31:49
3	Y 371.029	1270927.6	1270927.6	100.97	%	02:31:49
3	Ag 328.068†	11140.1	11059.8	[100]	µg/L	02:31:55
3	As 188.979†	61.6	59.0	[100]	µg/L	02:32:15
3	B 249.677†	2378.5	2225.7	[100]	µg/L	02:31:55
3	Ba 233.527†	3905.2	3958.7	[100]	µg/L	02:31:55
3	Be 313.107†	166370.3	161810.5	[100]	µg/L	02:31:49
3	Cd 226.502†	3801.0	3876.2	[100]	µg/L	02:31:55
3	Co 228.616†	2030.4	2084.3	[100]	µg/L	02:32:15
3	Cr 267.716†	4755.4	4825.3	[100]	µg/L	02:31:55
3	Cu 324.752†	19183.5	14793.3	[100]	µg/L	02:31:55
3	Mn 257.610†	31952.0	31952.8	[100]	µg/L	02:31:55
3	Mo 202.031†	860.8	859.1	[100]	µg/L	02:32:15
3	Ni 231.604†	2184.5	1895.2	[100]	µg/L	02:31:55
3	P 214.914†	447.2	243.4	[500]	µg/L	02:32:15
3	Pb 220.353†	456.1	397.0	[100]	µg/L	02:32:15
3	S 181.975 Axial†	66.6	44.0	[200]	µg/L	02:32:15
3	Sb 206.836†	126.4	104.5	[100]	µg/L	02:32:15
3	Se 196.026†	92.0	81.6	[100]	µg/L	02:32:15
3	SiO2†	8640.5	5834.9	[1069.5]	µg/L	02:31:55
3	Si 251.611†	7151.3	6781.2	[500]	µg/L	02:31:55
3	Sn 189.927†	226.0	202.2	[100]	µg/L	02:32:15
3	Ti 334.940†	44226.1	43174.2	[100]	µg/L	02:31:55
3	Tl 190.801†	45.6	65.7	[100]	µg/L	02:32:15
3	U 409.014†	1892.5	1150.2	[100]	µg/L	02:31:55
3	V 292.402†	8866.6	8937.7	[100]	µg/L	02:31:55
3	Zn 213.857†	4411.5	3857.2	[100]	µg/L	02:31:55

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2031876.5	7775.87	0.38%	100.48	%
Sc RADIAL	117760.7	413.13	0.35%	101	%
Y 371.029	1267213.9	5887.44	0.46%	100.67	%
Ag 328.068†	11065.2	94.16	0.85%	[100]	µg/L
As 188.979†	56.9	2.47	4.34%	[100]	µg/L
B 249.677†	2258.4	45.43	2.01%	[100]	µg/L
Ba 233.527†	3970.6	30.07	0.76%	[100]	µg/L
Be 313.107†	161725.7	526.16	0.33%	[100]	µg/L
Cd 226.502†	3878.6	10.19	0.26%	[100]	µg/L
Co 228.616†	2073.2	46.96	2.27%	[100]	µg/L
Cr 267.716†	4826.1	21.98	0.46%	[100]	µg/L
Cu 324.752†	14766.3	111.80	0.76%	[100]	µg/L
K 766.490 Radial†	2045.0	21.54	1.05%	[1000]	µg/L
Mn 257.610†	32054.2	150.82	0.47%	[100]	µg/L
Mo 202.031†	852.9	19.43	2.28%	[100]	µg/L
Ni 231.604†	1898.6	11.81	0.62%	[100]	µg/L
P 214.914†	246.4	4.51	1.83%	[500]	µg/L
Pb 220.353†	397.0	8.34	2.10%	[100]	µg/L
S 181.975 Axial†	43.4	0.57	1.32%	[200]	µg/L
Sb 206.836†	102.8	6.47	6.30%	[100]	µg/L
Se 196.026†	82.8	1.05	1.27%	[100]	µg/L
SiO2†	5849.7	39.68	0.68%	[1069.5]	µg/L
Si 251.611†	6773.0	40.22	0.59%	[500]	µg/L
Sn 189.927†	195.3	6.79	3.48%	[100]	µg/L
Sr 421.552†	20285.4	49.47	0.24%	[100]	µg/L
Ti 334.940†	43269.3	155.71	0.36%	[100]	µg/L
Tl 190.801†	66.2	3.88	5.86%	[100]	µg/L
U 409.014†	1109.5	51.61	4.65%	[100]	µg/L
V 292.402†	8984.4	46.33	0.52%	[100]	µg/L
Zn 213.857†	3876.5	31.73	0.82%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/10/2009 02:32:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	118394.2	118394.2	102	%	02:32:57
1	Al 396.153Radial†	10512.5	10232.5	[5000]	µg/L	02:32:57
1	Ca 317.933Radial†	13569.3	12954.2	[5000]	µg/L	02:33:18
1	K 766.490 Radial†	10544.3	9704.6	[5000]	µg/L	02:32:57
1	Mg 279.077 IEC†	850.4	822.3	[5000]	µg/L	02:33:18
1	Sr 421.552†	100733.3	99293.4	[500]	µg/L	02:32:57
1	Sc 361.383	2040216.3	2040216.3	100.89	%	02:34:21
1	Y 371.029	1264250.0	1264250.0	100.44	%	02:34:21
1	Ag 328.068†	56207.3	55701.2	[500]	µg/L	02:34:27
1	As 188.979†	278.3	273.6	[500]	µg/L	02:34:48
1	B 249.677†	11560.8	11321.0	[500]	µg/L	02:34:27
1	Ba 233.527†	19454.6	19361.1	[500]	µg/L	02:34:27
1	Be 313.107†	801779.7	791192.9	[500]	µg/L	02:34:21
1	Cd 226.502†	18808.6	18741.7	[500]	µg/L	02:34:27
1	Co 228.616†	10358.1	10333.4	[500]	µg/L	02:34:27
1	Cr 267.716†	23700.0	23590.8	[500]	µg/L	02:34:27
1	Cu 324.752†	76431.4	71487.6	[500]	µg/L	02:34:27
1	Mn 257.610†	156312.6	155135.4	[500]	µg/L	02:34:21
1	Mo 202.031†	4354.2	4319.5	[500]	µg/L	02:34:48
1	Ni 231.604†	9444.1	9085.3	[500]	µg/L	02:34:27
1	P 214.914†	1457.6	1243.8	[2500]	µg/L	02:34:48
1	Pb 220.353†	2000.2	1926.3	[500]	µg/L	02:34:48
1	S 181.975 Axial†	230.0	205.9	[1000]	µg/L	02:34:48
1	Sb 206.836†	539.9	514.1	[500]	µg/L	02:34:48
1	Se 196.026†	404.0	390.6	[500]	µg/L	02:34:48
1	SiO2†	32284.4	29248.3	[5347.5]	µg/L	02:34:27
1	Si 251.611†	34556.5	33926.5	[2500]	µg/L	02:34:27
1	Sn 189.927†	1031.7	1000.1	[500]	µg/L	02:34:48
1	Ti 334.940†	224213.3	221461.6	[500]	µg/L	02:34:21
1	Tl 190.801†	308.7	326.4	[500]	µg/L	02:34:48
1	U 409.014†	6308.9	5522.8	[500]	µg/L	02:34:27
1	V 292.402†	44245.2	43981.7	[500]	µg/L	02:34:27
1	Zn 213.857†	19570.7	18871.5	[500]	µg/L	02:34:27
2	Sc RADIAL	117609.6	117609.6	101	%	02:33:23
2	Al 396.153Radial†	10471.7	10261.1	[5000]	µg/L	02:33:23
2	Ca 317.933Radial†	13607.4	13081.2	[5000]	µg/L	02:33:44
2	K 766.490 Radial†	10455.1	9685.5	[5000]	µg/L	02:33:23
2	Mg 279.077 IEC†	851.4	828.9	[5000]	µg/L	02:33:44
2	Sr 421.552†	99948.5	99177.1	[500]	µg/L	02:33:23
2	Sc 361.383	2030613.9	2030613.9	100.41	%	02:34:55
2	Y 371.029	1259458.6	1259458.6	100.06	%	02:34:55
2	Ag 328.068†	56316.8	56073.7	[500]	µg/L	02:35:00
2	As 188.979†	277.3	273.9	[500]	µg/L	02:35:21
2	B 249.677†	11641.0	11455.1	[500]	µg/L	02:35:00
2	Ba 233.527†	19417.1	19414.9	[500]	µg/L	02:35:00
2	Be 313.107†	804946.4	798104.6	[500]	µg/L	02:34:55
2	Cd 226.502†	18766.4	18787.8	[500]	µg/L	02:35:00
2	Co 228.616†	10321.4	10345.4	[500]	µg/L	02:35:00
2	Cr 267.716†	23744.9	23746.6	[500]	µg/L	02:35:00
2	Cu 324.752†	76426.4	71840.8	[500]	µg/L	02:35:00
2	Mn 257.610†	156983.3	156536.0	[500]	µg/L	02:34:55
2	Mo 202.031†	4320.6	4306.4	[500]	µg/L	02:35:21
2	Ni 231.604†	9503.7	9188.8	[500]	µg/L	02:35:00
2	P 214.914†	1432.8	1226.0	[2500]	µg/L	02:35:21
2	Pb 220.353†	1995.9	1931.4	[500]	µg/L	02:35:21
2	S 181.975 Axial†	227.7	204.6	[1000]	µg/L	02:35:21
2	Sb 206.836†	535.9	512.5	[500]	µg/L	02:35:21
2	Se 196.026†	408.3	396.7	[500]	µg/L	02:35:21
2	SiO2†	32247.8	29363.2	[5347.5]	µg/L	02:35:00

2	Si 251.611†	34579.2	34111.1	[2500]	µg/L	02:35:00
2	Sn 189.927†	1018.4	991.8	[500]	µg/L	02:35:21
2	Ti 334.940†	225492.0	223785.9	[500]	µg/L	02:34:55
2	Tl 190.801†	299.7	318.8	[500]	µg/L	02:35:21
2	U 409.014†	6151.3	5395.5	[500]	µg/L	02:35:00
2	V 292.402†	44349.8	44293.3	[500]	µg/L	02:35:00
2	Zn 213.857†	19564.7	18957.2	[500]	µg/L	02:35:00
3	Sc RADIAL	117511.1	117511.1	101	%	02:33:49
3	Al 396.153Radial†	10422.2	10220.7	[5000]	µg/L	02:33:49
3	Ca 317.933Radial†	13536.7	13022.2	[5000]	µg/L	02:34:10
3	K 766.490 Radial†	10415.1	9654.4	[5000]	µg/L	02:33:49
3	Mg 279.077 IEC†	854.9	833.1	[5000]	µg/L	02:34:10
3	Sr 421.552†	99843.4	99156.0	[500]	µg/L	02:33:49
3	Sc 361.383	2035673.7	2035673.7	100.67	%	02:35:28
3	Y 371.029	1262009.6	1262009.6	100.26	%	02:35:28
3	Ag 328.068†	56490.3	56106.7	[500]	µg/L	02:35:34
3	As 188.979†	272.4	268.4	[500]	µg/L	02:35:54
3	B 249.677†	11695.9	11480.8	[500]	µg/L	02:35:34
3	Ba 233.527†	19519.1	19468.2	[500]	µg/L	02:35:34
3	Be 313.107†	804893.5	796059.5	[500]	µg/L	02:35:28
3	Cd 226.502†	18841.0	18815.4	[500]	µg/L	02:35:34
3	Co 228.616†	10390.5	10388.5	[500]	µg/L	02:35:34
3	Cr 267.716†	23786.3	23728.9	[500]	µg/L	02:35:34
3	Cu 324.752†	76720.2	71943.6	[500]	µg/L	02:35:34
3	Mn 257.610†	156901.6	156066.3	[500]	µg/L	02:35:28
3	Mo 202.031†	4250.9	4226.4	[500]	µg/L	02:35:54
3	Ni 231.604†	9551.4	9212.8	[500]	µg/L	02:35:34
3	P 214.914†	1420.4	1210.1	[2500]	µg/L	02:35:54
3	Pb 220.353†	1971.3	1902.0	[500]	µg/L	02:35:54
3	S 181.975 Axial†	230.1	206.4	[1000]	µg/L	02:35:54
3	Sb 206.836†	524.0	499.4	[500]	µg/L	02:35:54
3	Se 196.026†	402.6	390.1	[500]	µg/L	02:35:54
3	SiO2†	32438.5	29472.8	[5347.5]	µg/L	02:35:34
3	Si 251.611†	34758.0	34203.2	[2500]	µg/L	02:35:34
3	Sn 189.927†	1003.3	974.3	[500]	µg/L	02:35:54
3	Ti 334.940†	225143.6	222881.6	[500]	µg/L	02:35:28
3	Tl 190.801†	304.7	323.1	[500]	µg/L	02:35:54
3	U 409.014†	6242.2	5470.5	[500]	µg/L	02:35:34
3	V 292.402†	44464.6	44297.5	[500]	µg/L	02:35:34
3	Zn 213.857†	19586.3	18930.3	[500]	µg/L	02:35:34

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2035501.3	4803.51	0.24%	100.66	%
Sc RADIAL	117838.3	483.97	0.41%	101	%
Y 371.029	1261906.1	2397.38	0.19%	100.25	%
Ag 328.068†	55960.5	225.20	0.40%	[500]	µg/L
Al 396.153Radial†	10238.1	20.79	0.20%	[5000]	µg/L
As 188.979†	272.0	3.09	1.14%	[500]	µg/L
B 249.677†	11418.9	85.82	0.75%	[500]	µg/L
Ba 233.527†	19414.7	53.55	0.28%	[500]	µg/L
Be 313.107†	795119.0	3550.50	0.45%	[500]	µg/L
Ca 317.933Radial†	13019.2	63.54	0.49%	[5000]	µg/L
Cd 226.502†	18781.6	37.27	0.20%	[500]	µg/L
Co 228.616†	10355.8	28.95	0.28%	[500]	µg/L
Cr 267.716†	23688.8	85.32	0.36%	[500]	µg/L
Cu 324.752†	71757.3	239.19	0.33%	[500]	µg/L
K 766.490 Radial†	9681.5	25.32	0.26%	[5000]	µg/L
Mg 279.077 IEC†	828.1	5.45	0.66%	[5000]	µg/L
Mn 257.610†	155912.6	712.85	0.46%	[500]	µg/L
Mo 202.031†	4284.1	50.37	1.18%	[500]	µg/L
Ni 231.604†	9162.3	67.76	0.74%	[500]	µg/L
P 214.914†	1226.6	16.85	1.37%	[2500]	µg/L
Pb 220.353†	1919.9	15.70	0.82%	[500]	µg/L
S 181.975 Axial†	205.6	0.90	0.44%	[1000]	µg/L
Sb 206.836†	508.7	8.07	1.59%	[500]	µg/L
Se 196.026†	392.5	3.71	0.94%	[500]	µg/L
SiO2†	29361.4	112.27	0.38%	[5347.5]	µg/L
Si 251.611†	34080.3	140.90	0.41%	[2500]	µg/L

Sn 189.927†	988.7	13.21	1.34%	[500] µg/L
Sr 421.552†	99208.8	73.97	0.07%	[500] µg/L
Ti 334.940†	222709.7	1171.66	0.53%	[500] µg/L
Tl 190.801†	322.8	3.79	1.17%	[500] µg/L
U 409.014†	5462.9	63.99	1.17%	[500] µg/L
V 292.402†	44190.8	181.11	0.41%	[500] µg/L
Zn 213.857†	18919.7	43.82	0.23%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/10/2009 02:36:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	119743.9	119743.9	103	%	02:36:36
1	Al 396.153Radial†	20616.9	19957.2	[10000]	µg/L	02:36:36
1	Ca 317.933Radial†	27133.5	26014.8	[10000]	µg/L	02:36:56
1	Fe 238.204 Radial†	1640.9	1583.1	[10000]	µg/L	02:36:56
1	K 766.490 Radial†	20307.4	19096.6	[10000]	µg/L	02:36:36
1	Mg 279.077 IEC†	1713.2	1653.2	[10000]	µg/L	02:36:56
1	Na 589.592 Radial†	40142.2	39731.9	[10000]	µg/L	02:36:36
1	Sr 421.552†	199391.3	194266.2	[1000]	µg/L	02:36:36
1	Sc 361.383	2048864.6	2048864.6	101.32	%	02:38:01
1	Y 371.029	1264226.7	1264226.7	100.44	%	02:38:01
1	Ag 328.068†	109177.1	107747.1	[1000]	µg/L	02:38:06
1	As 188.979†	560.4	550.9	[1000]	µg/L	02:38:27
1	B 249.677†	23259.8	22819.5	[1000]	µg/L	02:38:06
1	Ba 233.527†	39002.6	38573.5	[1000]	µg/L	02:38:06
1	Be 313.107†	1621159.0	1596563.6	[1000]	µg/L	02:38:01
1	Cd 226.502†	37482.2	37093.8	[1000]	µg/L	02:38:06
1	Co 228.616†	20629.7	20428.1	[1000]	µg/L	02:38:06
1	Cr 267.716†	47676.6	47156.5	[1000]	µg/L	02:38:06
1	Cu 324.752†	148795.1	142590.6	[1000]	µg/L	02:38:06
1	Mn 257.610†	316772.8	312855.3	[1000]	µg/L	02:38:01
1	Mo 202.031†	8535.8	8428.5	[1000]	µg/L	02:38:06
1	Ni 231.604†	18577.4	18060.3	[1000]	µg/L	02:38:06
1	P 214.914†	2694.5	2458.5	[5000]	µg/L	02:38:27
1	Pb 220.353†	3944.3	3836.8	[1000]	µg/L	02:38:27
1	S 181.975 Axial†	435.0	407.2	[2000]	µg/L	02:38:27
1	Sb 206.836†	1049.1	1014.4	[1000]	µg/L	02:38:27
1	Se 196.026†	795.5	775.2	[1000]	µg/L	02:38:27
1	SiO2†	60968.5	57424.4	[10695]	µg/L	02:38:06
1	Si 251.611†	67766.2	66559.8	[5000]	µg/L	02:38:06
1	Sn 189.927†	1987.5	1939.2	[1000]	µg/L	02:38:27
1	Ti 334.940†	442941.1	436407.2	[1000]	µg/L	02:38:01
1	Tl 190.801†	633.8	646.0	[1000]	µg/L	02:38:27
1	U 409.014†	11805.2	10921.2	[1000]	µg/L	02:38:06
1	V 292.402†	88964.1	87934.1	[1000]	µg/L	02:38:06
1	Zn 213.857†	38215.5	37191.9	[1000]	µg/L	02:38:06
2	Sc RADIAL	119056.1	119056.1	102	%	02:37:02
2	Al 396.153Radial†	21203.3	20647.7	[10000]	µg/L	02:37:02
2	Ca 317.933Radial†	27106.2	26140.8	[10000]	µg/L	02:37:22
2	Fe 238.204 Radial†	1634.3	1585.8	[10000]	µg/L	02:37:22
2	K 766.490 Radial†	20803.8	19697.2	[10000]	µg/L	02:37:02
2	Mg 279.077 IEC†	1706.7	1656.4	[10000]	µg/L	02:37:22
2	Na 589.592 Radial†	41070.8	40867.5	[10000]	µg/L	02:37:02
2	Sr 421.552†	204769.9	200657.1	[1000]	µg/L	02:37:02
2	Sc 361.383	2013723.8	2013723.8	99.580	%	02:38:34
2	Y 371.029	1244074.5	1244074.5	98.834	%	02:38:34
2	Ag 328.068†	109694.1	110146.7	[1000]	µg/L	02:38:39
2	As 188.979†	558.3	558.4	[1000]	µg/L	02:39:00
2	B 249.677†	23401.1	23362.0	[1000]	µg/L	02:38:39
2	Ba 233.527†	39199.2	39442.7	[1000]	µg/L	02:38:39
2	Be 313.107†	1595181.2	1598398.6	[1000]	µg/L	02:38:34
2	Cd 226.502†	37768.9	38027.3	[1000]	µg/L	02:38:39
2	Co 228.616†	20736.6	20890.8	[1000]	µg/L	02:38:39
2	Cr 267.716†	48017.7	48320.1	[1000]	µg/L	02:38:39
2	Cu 324.752†	149257.8	145618.1	[1000]	µg/L	02:38:39
2	Mn 257.610†	311708.4	313225.4	[1000]	µg/L	02:38:34
2	Mo 202.031†	8623.4	8663.5	[1000]	µg/L	02:38:39
2	Ni 231.604†	18636.3	18439.4	[1000]	µg/L	02:38:39
2	P 214.914†	2711.0	2521.5	[5000]	µg/L	02:39:00
2	Pb 220.353†	3976.4	3937.0	[1000]	µg/L	02:39:00

2	S 181.975 Axial†	431.7	411.3	[2000]	µg/L	02:39:00
2	Sb 206.836†	1059.2	1042.6	[1000]	µg/L	02:39:00
2	Se 196.026†	796.4	789.8	[1000]	µg/L	02:39:00
2	SiO2†	61237.4	58744.6	[10695]	µg/L	02:38:39
2	Si 251.611†	68123.7	68086.0	[5000]	µg/L	02:38:39
2	Sn 189.927†	1994.6	1980.6	[1000]	µg/L	02:39:00
2	Ti 334.940†	436107.6	437174.0	[1000]	µg/L	02:38:34
2	Tl 190.801†	639.8	662.9	[1000]	µg/L	02:39:00
2	U 409.014†	11787.5	11106.8	[1000]	µg/L	02:38:39
2	V 292.402†	89426.4	89930.6	[1000]	µg/L	02:38:39
2	Zn 213.857†	38502.4	38138.2	[1000]	µg/L	02:38:39
3	Sc RADIAL	117907.6	117907.6	101	%	02:37:28
3	Al 396.153Radial†	21174.5	20821.5	[10000]	µg/L	02:37:28
3	Ca 317.933Radial†	26926.1	26221.3	[10000]	µg/L	02:37:49
3	Fe 238.204 Radial†	1619.4	1586.6	[10000]	µg/L	02:37:49
3	K 766.490 Radial†	20837.9	19929.4	[10000]	µg/L	02:37:28
3	Mg 279.077 IEC†	1696.3	1662.5	[10000]	µg/L	02:37:49
3	Na 589.592 Radial†	41077.3	41265.9	[10000]	µg/L	02:37:28
3	Sr 421.552†	204426.3	202271.2	[1000]	µg/L	02:37:28
3	Sc 361.383	2012021.1	2012021.1	99.495	%	02:39:07
3	Y 371.029	1244191.8	1244191.8	98.844	%	02:39:07
3	Ag 328.068†	108949.8	109491.9	[1000]	µg/L	02:39:13
3	As 188.979†	547.1	547.6	[1000]	µg/L	02:39:33
3	B 249.677†	23225.9	23205.8	[1000]	µg/L	02:39:13
3	Ba 233.527†	38770.5	39045.2	[1000]	µg/L	02:39:13
3	Be 313.107†	1599961.6	1604558.8	[1000]	µg/L	02:39:07
3	Cd 226.502†	37279.1	37567.1	[1000]	µg/L	02:39:13
3	Co 228.616†	20580.2	20751.2	[1000]	µg/L	02:39:13
3	Cr 267.716†	47443.6	47783.9	[1000]	µg/L	02:39:13
3	Cu 324.752†	148191.1	144672.7	[1000]	µg/L	02:39:13
3	Mn 257.610†	312485.6	314271.5	[1000]	µg/L	02:39:07
3	Mo 202.031†	8541.0	8587.9	[1000]	µg/L	02:39:13
3	Ni 231.604†	18456.8	18274.8	[1000]	µg/L	02:39:13
3	P 214.914†	2650.2	2462.7	[5000]	µg/L	02:39:33
3	Pb 220.353†	3890.7	3854.1	[1000]	µg/L	02:39:33
3	S 181.975 Axial†	424.0	404.0	[2000]	µg/L	02:39:33
3	Sb 206.836†	1027.6	1011.7	[1000]	µg/L	02:39:33
3	Se 196.026†	785.1	779.2	[1000]	µg/L	02:39:33
3	SiO2†	60631.2	58187.2	[10695]	µg/L	02:39:13
3	Si 251.611†	67579.4	67596.8	[5000]	µg/L	02:39:13
3	Sn 189.927†	1933.0	1920.4	[1000]	µg/L	02:39:33
3	Ti 334.940†	437339.8	438783.0	[1000]	µg/L	02:39:07
3	Tl 190.801†	625.3	648.8	[1000]	µg/L	02:39:33
3	U 409.014†	11805.2	11134.6	[1000]	µg/L	02:39:13
3	V 292.402†	88610.0	89186.0	[1000]	µg/L	02:39:13
3	Zn 213.857†	38077.2	37743.7	[1000]	µg/L	02:39:13

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2024869.8	20797.47	1.03%	100.13	%
Sc RADIAL	118902.6	927.75	0.78%	102	%
Y 371.029	1250831.0	11601.19	0.93%	99.371	%
Ag 328.068†	109128.6	1240.37	1.14%	[1000]	µg/L
Al 396.153Radial†	20475.5	457.18	2.23%	[10000]	µg/L
As 188.979†	552.3	5.54	1.00%	[1000]	µg/L
B 249.677†	23129.1	279.25	1.21%	[1000]	µg/L
Ba 233.527†	39020.5	435.13	1.12%	[1000]	µg/L
Be 313.107†	1599840.3	4188.04	0.26%	[1000]	µg/L
Ca 317.933Radial†	26125.6	104.07	0.40%	[10000]	µg/L
Cd 226.502†	37562.7	466.80	1.24%	[1000]	µg/L
Co 228.616†	20690.0	237.32	1.15%	[1000]	µg/L
Cr 267.716†	47753.5	582.40	1.22%	[1000]	µg/L
Cu 324.752†	144293.8	1548.92	1.07%	[1000]	µg/L
Fe 238.204 Radial†	1585.2	1.87	0.12%	[10000]	µg/L
K 766.490 Radial†	19574.4	429.77	2.20%	[10000]	µg/L
Mg 279.077 IEC†	1657.4	4.73	0.29%	[10000]	µg/L
Mn 257.610†	313450.7	734.49	0.23%	[1000]	µg/L
Mo 202.031†	8560.0	119.98	1.40%	[1000]	µg/L
Na 589.592 Radial†	40621.7	795.95	1.96%	[10000]	µg/L

Ni 231.604†	18258.1	190.09	1.04%	[1000]	µg/L
P 214.914†	2480.9	35.24	1.42%	[5000]	µg/L
Pb 220.353†	3876.0	53.53	1.38%	[1000]	µg/L
S 181.975 Axial†	407.5	3.67	0.90%	[2000]	µg/L
Sb 206.836†	1022.9	17.12	1.67%	[1000]	µg/L
Se 196.026†	781.4	7.55	0.97%	[1000]	µg/L
SiO2†	58118.7	662.73	1.14%	[10695]	µg/L
Si 251.611†	67414.2	779.31	1.16%	[5000]	µg/L
Sn 189.927†	1946.7	30.78	1.58%	[1000]	µg/L
Sr 421.552†	199064.8	4233.36	2.13%	[1000]	µg/L
Ti 334.940†	437454.7	1212.55	0.28%	[1000]	µg/L
Tl 190.801†	652.6	9.08	1.39%	[1000]	µg/L
U 409.014†	11054.2	116.01	1.05%	[1000]	µg/L
V 292.402†	89016.9	1008.96	1.13%	[1000]	µg/L
Zn 213.857†	37691.3	475.32	1.26%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/10/2009 02:39:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	117579.4	117579.4	101	%	02:40:15
1	Al 396.153Radial†	102713.5	101759.7	[50000]	µg/L	02:40:15
1	Ca 317.933Radial†	132449.9	130966.2	[50000]	µg/L	02:40:15
1	Fe 238.204 Radial†	3188.2	3147.2	[20000]	µg/L	02:40:35
1	Mg 279.077 IEC†	8192.1	8110.4	[50000]	µg/L	02:40:35
1	Na 589.592 Radial†	80464.3	80447.7	[20000]	µg/L	02:40:15
1	Sc 361.383	2020400.8	2020400.8	99.910	%	02:41:39
1	Y 371.029	1238955.1	1238955.1	98.428	%	02:41:39
2	Sc RADIAL	117418.3	117418.3	101	%	02:40:41
2	Al 396.153Radial†	102440.1	101627.9	[50000]	µg/L	02:40:41
2	Ca 317.933Radial†	131997.2	130696.7	[50000]	µg/L	02:40:41
2	Fe 238.204 Radial†	3177.0	3140.5	[20000]	µg/L	02:41:01
2	Mg 279.077 IEC†	8154.2	8083.9	[50000]	µg/L	02:41:01
2	Na 589.592 Radial†	80330.3	80424.1	[20000]	µg/L	02:40:41
2	Sc 361.383	2020059.9	2020059.9	99.893	%	02:41:47
2	Y 371.029	1238410.6	1238410.6	98.384	%	02:41:47
3	Sc RADIAL	118489.3	118489.3	102	%	02:41:07
3	Al 396.153Radial†	99940.4	98247.7	[50000]	µg/L	02:41:07
3	Ca 317.933Radial†	128243.8	125817.1	[50000]	µg/L	02:41:07
3	Fe 238.204 Radial†	3193.2	3127.9	[20000]	µg/L	02:41:27
3	Mg 279.077 IEC†	8217.1	8072.7	[50000]	µg/L	02:41:27
3	Na 589.592 Radial†	78282.4	77687.2	[20000]	µg/L	02:41:07
3	Sc 361.383	2010279.6	2010279.6	99.409	%	02:41:55
3	Y 371.029	1234084.4	1234084.4	98.041	%	02:41:55

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2016913.5	5747.58	0.28%	99.737	%
Sc RADIAL	117829.0	577.49	0.49%	101	%
Y 371.029	1237150.0	2668.87	0.22%	98.284	%
Al 396.153Radial†	100545.1	1990.69	1.98%	[50000]	µg/L
Ca 317.933Radial†	129160.0	2898.14	2.24%	[50000]	µg/L
Fe 238.204 Radial†	3138.5	9.79	0.31%	[20000]	µg/L
Mg 279.077 IEC†	8089.0	19.38	0.24%	[50000]	µg/L
Na 589.592 Radial†	79519.7	1587.00	2.00%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	109.7	0.00000	0.999948	
Al 396.153Radial	3	Lin Thru 0	0.0	2.013	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	0.5508	0.00000	0.999977	
B 249.677	3	Lin Thru 0	0.0	23.07	0.00000	0.999986	
Ba 233.527	3	Lin Thru 0	0.0	38.99	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	1598	0.00000	0.999997	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.585	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	37.57	0.00000	0.999996	
Co 228.616	3	Lin Thru 0	0.0	20.69	0.00000	1.000000	
Cr 267.716	3	Lin Thru 0	0.0	47.68	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	144.2	0.00000	0.999995	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1572	0.00000	0.999992	
K 766.490 Radial	3	Lin Thru 0	0.0	1.954	0.00000	0.999982	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1620	0.00000	0.999987	
Mn 257.610	3	Lin Thru 0	0.0	313.2	0.00000	0.999996	
Mo 202.031	3	Lin Thru 0	0.0	8.561	0.00000	1.000000	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.993	0.00000	0.999963	

Ni 231.604	3	Lin Thru 0	0.0	18.28	0.00000	0.999993
P 214.914	3	Lin Thru 0	0.0	0.4951	0.00000	0.999990
Pb 220.353	3	Lin Thru 0	0.0	3.870	0.00000	0.999990
S 181.975 Axial	3	Lin Thru 0	0.0	0.2042	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	1.022	0.00000	0.999998
Se 196.026	3	Lin Thru 0	0.0	0.7825	0.00000	0.999985
SiO2	3	Lin Thru 0	0.0	5.446	0.00000	0.999991
Si 251.611	3	Lin Thru 0	0.0	13.51	0.00000	0.999990
Sn 189.927	3	Lin Thru 0	0.0	1.953	0.00000	0.999980
Sr 421.552	3	Lin Thru 0	0.0	199.0	0.00000	0.999998
Ti 334.940	3	Lin Thru 0	0.0	439.0	0.00000	0.999973
Tl 190.801	3	Lin Thru 0	0.0	0.6512	0.00000	0.999990
U 409.014	3	Lin Thru 0	0.0	11.03	0.00000	0.999989
V 292.402	3	Lin Thru 0	0.0	88.90	0.00000	0.999995
Zn 213.857	3	Lin Thru 0	0.0	37.73	0.00000	0.999996

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/10/2009 02:42:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	118253.7	118253.7	101	%			02:42:37
1	Al 396.153Radial†	10571.7	10303.1	5099.2	µg/L	5099.2	ppb	02:42:37
1	Ca 317.933Radial†	13538.4	12939.6	5006.6	µg/L	5006.6	ppb	02:42:57
1	Fe 238.204 Radial†	824.2	797.7	5089.8	µg/L	5089.8	ppb	02:42:57
1	K 766.490 Radial†	5468.8	4711.2	2411.1	µg/L	2411.1	ppb	02:42:37
1	Mg 279.077 IEC†	851.6	824.5	5096.1	µg/L	5096.1	ppb	02:42:57
1	Na 589.592 Radial†	9534.0	10037.1	2513.5	µg/L	2513.5	ppb	02:42:37
1	Sr 421.552†	105600.3	104211.4	523.76	µg/L	523.76	ppb	02:42:37
1	Sc 361.383	2030054.5	2030054.5	100.39	%			02:44:01
1	Y 371.029	1258208.0	1258208.0	99.957	%			02:44:01
1	Ag 328.068†	27988.3	27869.9	257.85	µg/L	257.85	ppb	02:44:06
1	As 188.979†	266.8	263.5	477.30	µg/L	477.30	ppb	02:44:27
1	B 249.677†	12099.7	11915.2	514.95	µg/L	514.95	ppb	02:44:06
1	Ba 233.527†	19765.6	19767.4	508.05	µg/L	508.05	ppb	02:44:06
1	Be 313.107†	411393.3	406290.5	254.06	µg/L	254.06	ppb	02:44:01
1	Cd 226.502†	18701.6	18728.4	498.93	µg/L	498.93	ppb	02:44:06
1	Co 228.616†	10482.5	10508.8	508.00	µg/L	508.00	ppb	02:44:06
1	Cr 267.716†	23365.3	23374.9	491.37	µg/L	491.37	ppb	02:44:06
1	Cu 324.752†	77406.1	72837.8	506.33	µg/L	506.33	ppb	02:44:06
1	Mn 257.610†	155319.3	154921.5	495.30	µg/L	495.30	ppb	02:44:01
1	Mo 202.031†	4509.2	4495.5	525.29	µg/L	525.29	ppb	02:44:27
1	Ni 231.604†	9218.5	8907.4	487.33	µg/L	487.33	ppb	02:44:06
1	P 214.914†	1447.1	1240.6	2451.4	µg/L	2451.4	ppb	02:44:27
1	Pb 220.353†	1990.9	1926.9	498.82	µg/L	498.82	ppb	02:44:27
1	S 181.975 Axial†	524.8	500.6	2449.7	µg/L	2449.7	ppb	02:44:27
1	Sb 206.836†	518.7	495.6	483.55	µg/L	483.55	ppb	02:44:27
1	Se 196.026†	1990.8	1973.2	2523.8	µg/L	2523.8	ppb	02:44:27
1	SiO2†	60530.6	57545.7	10567	µg/L	10567	ppb	02:44:06
1	Si 251.611†	67349.6	66764.6	4892.6	µg/L	4892.6	ppb	02:44:06
1	Sn 189.927†	1071.1	1044.6	537.60	µg/L	537.60	ppb	02:44:27
1	Ti 334.940†	216180.0	214571.7	488.50	µg/L	488.50	ppb	02:44:01
1	Tl 190.801†	316.0	335.2	516.96	µg/L	516.96	ppb	02:44:27
1	U 409.014†	5896.1	5142.9	465.48	µg/L	465.48	ppb	02:44:06
1	V 292.402†	43934.5	43891.8	498.56	µg/L	498.56	ppb	02:44:06
1	Zn 213.857†	19285.1	18684.0	491.27	µg/L	491.27	ppb	02:44:06
2	Sc RADIAL	117252.8	117252.8	101	%			02:43:03
2	Al 396.153Radial†	10561.5	10382.0	5138.3	µg/L	5138.3	ppb	02:43:03
2	Ca 317.933Radial†	13539.5	13054.6	5051.1	µg/L	5051.1	ppb	02:43:23
2	Fe 238.204 Radial†	825.9	806.4	5145.1	µg/L	5145.1	ppb	02:43:23
2	K 766.490 Radial†	5526.1	4814.2	2463.8	µg/L	2463.8	ppb	02:43:03
2	Mg 279.077 IEC†	850.1	830.2	5131.2	µg/L	5131.2	ppb	02:43:23
2	Na 589.592 Radial†	9450.3	10034.1	2512.8	µg/L	2512.8	ppb	02:43:03
2	Sr 421.552†	105207.8	104710.1	526.27	µg/L	526.27	ppb	02:43:03
2	Sc 361.383	2026539.7	2026539.7	100.21	%			02:44:34
2	Y 371.029	1256791.4	1256791.4	99.845	%			02:44:34
2	Ag 328.068†	28161.9	28091.5	259.89	µg/L	259.89	ppb	02:44:40
2	As 188.979†	270.5	267.7	484.93	µg/L	484.93	ppb	02:45:00
2	B 249.677†	12175.5	12011.7	519.12	µg/L	519.12	ppb	02:44:40
2	Ba 233.527†	19803.6	19839.4	509.90	µg/L	509.90	ppb	02:44:40
2	Be 313.107†	413927.5	409530.1	256.08	µg/L	256.08	ppb	02:44:34
2	Cd 226.502†	18775.7	18834.7	501.77	µg/L	501.77	ppb	02:44:40
2	Co 228.616†	10502.0	10546.3	509.81	µg/L	509.81	ppb	02:44:40
2	Cr 267.716†	23395.5	23445.4	492.86	µg/L	492.86	ppb	02:44:40
2	Cu 324.752†	77788.3	73352.9	509.91	µg/L	509.91	ppb	02:44:40
2	Mn 257.610†	156423.0	156291.2	499.68	µg/L	499.68	ppb	02:44:34
2	Mo 202.031†	4519.8	4513.9	527.44	µg/L	527.44	ppb	02:45:00
2	Ni 231.604†	9239.8	8944.6	489.37	µg/L	489.37	ppb	02:44:40
2	P 214.914†	1469.2	1265.2	2500.7	µg/L	2500.7	ppb	02:45:00
2	Pb 220.353†	2001.8	1941.3	502.53	µg/L	502.53	ppb	02:45:00

2	S 181.975 Axial†	526.7	503.4	2463.3 µg/L	2463.3 ppb	02:45:00
2	Sb 206.836†	523.6	501.4	489.20 µg/L	489.20 ppb	02:45:00
2	Se 196.026†	1989.7	1975.6	2527.0 µg/L	2527.0 ppb	02:45:00
2	SiO2†	60808.8	57927.9	10637 µg/L	10637 ppb	02:44:40
2	Si 251.611†	67522.3	67053.3	4913.8 µg/L	4913.8 ppb	02:44:40
2	Sn 189.927†	1072.4	1047.7	539.25 µg/L	539.25 ppb	02:45:00
2	Ti 334.940†	217522.1	216284.4	492.39 µg/L	492.39 ppb	02:44:34
2	Tl 190.801†	312.1	331.8	511.81 µg/L	511.81 ppb	02:45:00
2	U 409.014†	6002.1	5258.9	475.98 µg/L	475.98 ppb	02:44:40
2	V 292.402†	44068.7	44101.6	500.96 µg/L	500.96 ppb	02:44:40
2	Zn 213.857†	19329.9	18762.1	493.32 µg/L	493.32 ppb	02:44:40
3	Sc RADIAL	117095.1	117095.1	100 %		02:43:29
3	Al 396.153Radial†	10617.1	10451.6	5173.6 µg/L	5173.6 ppb	02:43:29
3	Ca 317.933Radial†	13602.6	13135.7	5082.5 µg/L	5082.5 ppb	02:43:49
3	Fe 238.204 Radial†	830.4	811.9	5180.2 µg/L	5180.2 ppb	02:43:49
3	K 766.490 Radial†	5536.0	4831.4	2472.7 µg/L	2472.7 ppb	02:43:29
3	Mg 279.077 IEC†	853.6	834.7	5158.8 µg/L	5158.8 ppb	02:43:49
3	Na 589.592 Radial†	9494.4	10090.6	2526.9 µg/L	2526.9 ppb	02:43:29
3	Sr 421.552†	105501.1	105143.2	528.45 µg/L	528.45 ppb	02:43:29
3	Sc 361.383	2023199.8	2023199.8	100.05 %		02:45:07
3	Y 371.029	1256679.8	1256679.8	99.836 %		02:45:07
3	Ag 328.068†	27856.5	27832.6	257.51 µg/L	257.51 ppb	02:45:13
3	As 188.979†	257.6	255.2	462.27 µg/L	462.27 ppb	02:45:34
3	B 249.677†	12047.9	11904.3	514.45 µg/L	514.45 ppb	02:45:13
3	Ba 233.527†	19648.7	19717.3	506.76 µg/L	506.76 ppb	02:45:13
3	Be 313.107†	413871.5	410156.0	256.47 µg/L	256.47 ppb	02:45:07
3	Cd 226.502†	18596.3	18686.3	497.81 µg/L	497.81 ppb	02:45:13
3	Co 228.616†	10405.9	10467.6	505.97 µg/L	505.97 ppb	02:45:13
3	Cr 267.716†	23138.4	23227.0	488.27 µg/L	488.27 ppb	02:45:13
3	Cu 324.752†	77072.0	72765.1	505.84 µg/L	505.84 ppb	02:45:13
3	Mn 257.610†	156264.3	156390.2	500.00 µg/L	500.00 ppb	02:45:07
3	Mo 202.031†	4359.0	4360.6	509.53 µg/L	509.53 ppb	02:45:34
3	Ni 231.604†	9107.2	8827.2	482.95 µg/L	482.95 ppb	02:45:13
3	P 214.914†	1424.4	1222.8	2415.0 µg/L	2415.0 ppb	02:45:34
3	Pb 220.353†	1946.7	1889.5	489.11 µg/L	489.11 ppb	02:45:34
3	S 181.975 Axial†	508.8	486.4	2380.0 µg/L	2380.0 ppb	02:45:34
3	Sb 206.836†	506.0	484.6	472.83 µg/L	472.83 ppb	02:45:34
3	Se 196.026†	1938.2	1927.4	2465.3 µg/L	2465.3 ppb	02:45:34
3	SiO2†	60311.5	57531.0	10565 µg/L	10565 ppb	02:45:13
3	Si 251.611†	66947.1	66589.6	4880.5 µg/L	4880.5 ppb	02:45:13
3	Sn 189.927†	1028.2	1005.3	517.52 µg/L	517.52 ppb	02:45:34
3	Ti 334.940†	217570.8	216691.5	493.32 µg/L	493.32 ppb	02:45:07
3	Tl 190.801†	311.0	331.2	510.87 µg/L	510.87 ppb	02:45:34
3	U 409.014†	5973.8	5240.5	474.31 µg/L	474.31 ppb	02:45:13
3	V 292.402†	43700.4	43806.0	497.51 µg/L	497.51 ppb	02:45:13
3	Zn 213.857†	19164.5	18628.6	489.81 µg/L	489.81 ppb	02:45:13

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2026598.0	100.22	%	0.170				0.17%
Sc RADIAL	117533.9	101	%	0.5				0.53%
Y 371.029	1257226.4	99.879	%	0.0677				0.07%
Ag 328.068†	27931.3	258.42	µg/L	1.287	258.42	ppb	1.287	0.50%
QC value within limits for Ag 328.068 Recovery = 103.37%								
Al 396.153Radial†	10378.9	5137.0	µg/L	37.20	5137.0	ppb	37.20	0.72%
QC value within limits for Al 396.153Radial Recovery = 102.74%								
As 188.979†	262.2	474.83	µg/L	11.528	474.83	ppb	11.528	2.43%
QC value within limits for As 188.979 Recovery = 94.97%								
B 249.677†	11943.7	516.17	µg/L	2.563	516.17	ppb	2.563	0.50%
QC value within limits for B 249.677 Recovery = 103.23%								
Ba 233.527†	19774.7	508.24	µg/L	1.578	508.24	ppb	1.578	0.31%
QC value within limits for Ba 233.527 Recovery = 101.65%								
Be 313.107†	408658.9	255.54	µg/L	1.297	255.54	ppb	1.297	0.51%
QC value within limits for Be 313.107 Recovery = 102.22%								
Ca 317.933Radial†	13043.3	5046.7	µg/L	38.13	5046.7	ppb	38.13	0.76%
QC value within limits for Ca 317.933Radial Recovery = 100.93%								
Cd 226.502†	18749.8	499.50	µg/L	2.041	499.50	ppb	2.041	0.41%
QC value within limits for Cd 226.502 Recovery = 99.90%								
Co 228.616†	10507.5	507.93	µg/L	1.925	507.93	ppb	1.925	0.38%

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   QC value within limits for Co 228.616  Recovery = 101.59%
Cr 267.716†            23349.1      490.83 µg/L        2.342      490.83 ppb        2.342   0.48%
   QC value within limits for Cr 267.716  Recovery = 98.17%
Cu 324.752†            72985.2      507.36 µg/L        2.223      507.36 ppb        2.223   0.44%
   QC value within limits for Cu 324.752  Recovery = 101.47%
Fe 238.204 Radial†       805.3      5138.4 µg/L       45.56      5138.4 ppb       45.56   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.77%
K 766.490 Radial†       4785.6      2449.2 µg/L       33.27      2449.2 ppb       33.27   1.36%
   QC value within limits for K 766.490 Radial  Recovery = 97.97%
Mg 279.077 IEC†          829.8      5128.7 µg/L       31.41      5128.7 ppb       31.41   0.61%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.57%
Mn 257.610†           155867.7      498.33 µg/L        2.626      498.33 ppb        2.626   0.53%
   QC value within limits for Mn 257.610  Recovery = 99.67%
Mo 202.031†            4456.6      520.75 µg/L        9.777      520.75 ppb        9.777   1.88%
   QC value within limits for Mo 202.031  Recovery = 104.15%
Na 589.592 Radial†    10054.0      2517.8 µg/L        7.96      2517.8 ppb        7.96   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 100.71%
Ni 231.604†            8893.1      486.55 µg/L        3.281      486.55 ppb        3.281   0.67%
   QC value within limits for Ni 231.604  Recovery = 97.31%
P 214.914†             1242.9      2455.7 µg/L       42.99      2455.7 ppb       42.99   1.75%
   QC value within limits for P 214.914  Recovery = 98.23%
Pb 220.353†            1919.2      496.82 µg/L        6.931      496.82 ppb        6.931   1.40%
   QC value within limits for Pb 220.353  Recovery = 99.36%
S 181.975 Axial†        496.8      2431.0 µg/L       44.69      2431.0 ppb       44.69   1.84%
   QC value within limits for S 181.975 Axial  Recovery = 97.24%
Sb 206.836†             493.9      481.86 µg/L        8.316      481.86 ppb        8.316   1.73%
   QC value within limits for Sb 206.836  Recovery = 96.37%
Se 196.026†            1958.7      2505.4 µg/L       34.74      2505.4 ppb       34.74   1.39%
   QC value within limits for Se 196.026  Recovery = 100.21%
SiO2†                 57668.2       10590 µg/L        41.3       10590 ppb        41.3   0.39%
   QC value within limits for SiO2  Recovery = 99.02%
Si 251.611†           66802.5      4895.6 µg/L       16.81      4895.6 ppb       16.81   0.34%
   QC value within limits for Si 251.611  Recovery = 97.91%
Sn 189.927†            1032.5      531.46 µg/L       12.100      531.46 ppb       12.100   2.28%
   QC value within limits for Sn 189.927  Recovery = 106.29%
Sr 421.552†          104688.2      526.16 µg/L        2.343      526.16 ppb        2.343   0.45%
   QC value within limits for Sr 421.552  Recovery = 105.23%
Ti 334.940†          215849.2      491.40 µg/L        2.560      491.40 ppb        2.560   0.52%
   QC value within limits for Ti 334.940  Recovery = 98.28%
Tl 190.801†             332.7      513.21 µg/L        3.283      513.21 ppb        3.283   0.64%
   QC value within limits for Tl 190.801  Recovery = 102.64%
U 409.014†             5214.1      471.92 µg/L        5.646      471.92 ppb        5.646   1.20%
   QC value within limits for U 409.014  Recovery = 94.38%
V 292.402†            43933.1      499.01 µg/L        1.768      499.01 ppb        1.768   0.35%
   QC value within limits for V 292.402  Recovery = 99.80%
Zn 213.857†           18691.6      491.47 µg/L        1.761      491.47 ppb        1.761   0.36%
   QC value within limits for Zn 213.857  Recovery = 98.29%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/10/2009 02:45:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114557.6	114557.6	98.2	%			02:46:16
1	Al 396.153Radial†	162.5	42.2	20.921	µg/L	20.921	ppb	02:46:16
1	Ca 317.933Radial†	416.5	11.3	4.3776	µg/L	4.3776	ppb	02:46:37
1	Fe 238.204 Radial†	17.3	2.4	15.286	µg/L	15.286	ppb	02:46:37
1	K 766.490 Radial†	624.9	-46.2	-23.667	µg/L	-23.667	ppb	02:46:16
1	Mg 279.077 IEC†	9.0	-6.3	-38.899	µg/L	-38.899	ppb	02:46:37
1	Na 589.592 Radial†	-637.4	-14.8	-3.7070	µg/L	-3.7070	ppb	02:46:16
1	Sr 421.552†	-52.2	9.2	0.0463	µg/L	0.0463	ppb	02:46:16
1	Sc 361.383	1993683.0	1993683.0	98.589	%			02:47:39
1	Y 371.029	1242102.5	1242102.5	98.678	%			02:47:39
1	Ag 328.068†	84.8	75.6	0.6939	µg/L	0.6939	ppb	02:47:44
1	As 188.979†	6.0	3.8	6.9356	µg/L	6.9356	ppb	02:48:05
1	B 249.677†	201.0	66.0	2.8557	µg/L	2.8557	ppb	02:48:05
1	Ba 233.527†	-56.3	20.9	0.5373	µg/L	0.5373	ppb	02:48:05
1	Be 313.107†	4077.6	620.1	0.3877	µg/L	0.3877	ppb	02:47:44
1	Cd 226.502†	-66.5	31.6	0.8372	µg/L	0.8372	ppb	02:48:05
1	Co 228.616†	-59.2	6.6	0.3167	µg/L	0.3167	ppb	02:48:05
1	Cr 267.716†	-81.3	17.3	0.3647	µg/L	0.3647	ppb	02:47:44
1	Cu 324.752†	4264.0	55.2	0.3863	µg/L	0.3863	ppb	02:47:44
1	Mn 257.610†	-57.8	142.7	0.4575	µg/L	0.4575	ppb	02:48:05
1	Mo 202.031†	1.5	5.2	0.6065	µg/L	0.6065	ppb	02:48:05
1	Ni 231.604†	285.7	14.2	0.7768	µg/L	0.7768	ppb	02:48:05
1	P 214.914†	203.7	5.7	11.442	µg/L	11.442	ppb	02:48:05
1	Pb 220.353†	52.4	-3.1	-0.8008	µg/L	-0.8008	ppb	02:48:05
1	S 181.975 Axial†	26.6	4.8	23.664	µg/L	23.664	ppb	02:48:05
1	Sb 206.836†	17.9	-3.0	-2.9003	µg/L	-2.9003	ppb	02:48:05
1	Se 196.026†	17.1	7.5	9.6292	µg/L	9.6292	ppb	02:48:05
1	SiO2†	2802.0	90.7	16.661	µg/L	16.661	ppb	02:47:44
1	Si 251.611†	380.1	60.4	4.3182	µg/L	4.3182	ppb	02:48:05
1	Sn 189.927†	27.8	5.7	2.9337	µg/L	2.9337	ppb	02:48:05
1	Ti 334.940†	1166.6	408.9	0.9311	µg/L	0.9311	ppb	02:47:44
1	Tl 190.801†	-24.7	-4.7	-7.1707	µg/L	-7.1707	ppb	02:48:05
1	U 409.014†	684.6	-36.0	-3.2694	µg/L	-3.2694	ppb	02:47:44
1	V 292.402†	-83.2	42.4	0.4767	µg/L	0.4767	ppb	02:47:44
1	Zn 213.857†	547.1	28.3	0.7460	µg/L	0.7460	ppb	02:48:05
2	Sc RADIAL	114325.9	114325.9	98.0	%			02:46:42
2	Al 396.153Radial†	150.9	30.6	15.182	µg/L	15.182	ppb	02:46:42
2	Ca 317.933Radial†	417.0	12.6	4.8884	µg/L	4.8884	ppb	02:47:03
2	Fe 238.204 Radial†	15.5	0.7	4.4025	µg/L	4.4025	ppb	02:47:03
2	K 766.490 Radial†	639.6	-30.0	-15.364	µg/L	-15.364	ppb	02:46:42
2	Mg 279.077 IEC†	14.7	-0.4	-2.7607	µg/L	-2.7607	ppb	02:47:03
2	Na 589.592 Radial†	-610.4	11.4	2.8562	µg/L	2.8562	ppb	02:46:42
2	Sr 421.552†	-7.6	54.6	0.2743	µg/L	0.2743	ppb	02:46:42
2	Sc 361.383	1993045.4	1993045.4	98.557	%			02:48:11
2	Y 371.029	1242168.7	1242168.7	98.683	%			02:48:11
2	Ag 328.068†	98.8	89.9	0.8206	µg/L	0.8206	ppb	02:48:16
2	As 188.979†	3.5	1.3	2.3811	µg/L	2.3811	ppb	02:48:37
2	B 249.677†	183.9	48.8	2.1121	µg/L	2.1121	ppb	02:48:37
2	Ba 233.527†	-51.5	25.8	0.6624	µg/L	0.6624	ppb	02:48:37
2	Be 313.107†	3759.4	298.6	0.1866	µg/L	0.1866	ppb	02:48:16
2	Cd 226.502†	-76.1	21.8	0.5833	µg/L	0.5833	ppb	02:48:37
2	Co 228.616†	-66.0	-0.3	-0.0145	µg/L	-0.0145	ppb	02:48:37
2	Cr 267.716†	-112.4	-14.3	-0.2990	µg/L	-0.2990	ppb	02:48:16
2	Cu 324.752†	4194.0	-14.3	-0.0985	µg/L	-0.0985	ppb	02:48:16
2	Mn 257.610†	-104.3	95.5	0.3055	µg/L	0.3055	ppb	02:48:37
2	Mo 202.031†	3.3	7.1	0.8237	µg/L	0.8237	ppb	02:48:37
2	Ni 231.604†	295.4	24.2	1.3214	µg/L	1.3214	ppb	02:48:37
2	P 214.914†	194.4	-3.7	-7.4496	µg/L	-7.4496	ppb	02:48:37
2	Pb 220.353†	59.9	4.5	1.1651	µg/L	1.1651	ppb	02:48:37

2	S 181.975 Axial†	28.2	6.4	31.387 µg/L	31.387 ppb		02:48:37
2	Sb 206.836†	21.2	0.4	0.3885 µg/L	0.3885 ppb		02:48:37
2	Se 196.026†	16.4	6.8	8.6516 µg/L	8.6516 ppb		02:48:37
2	SiO2†	2740.3	29.1	5.3415 µg/L	5.3415 ppb		02:48:16
2	Si 251.611†	385.3	65.7	4.8142 µg/L	4.8142 ppb		02:48:37
2	Sn 189.927†	22.8	0.7	0.3848 µg/L	0.3848 ppb		02:48:37
2	Ti 334.940†	1084.0	325.5	0.7411 µg/L	0.7411 ppb		02:48:16
2	Tl 190.801†	-21.4	-1.3	-1.9814 µg/L	-1.9814 ppb		02:48:37
2	U 409.014†	762.9	43.6	3.9560 µg/L	3.9560 ppb		02:48:16
2	V 292.402†	-112.5	12.6	0.1542 µg/L	0.1542 ppb		02:48:16
2	Zn 213.857†	539.5	20.8	0.5439 µg/L	0.5439 ppb		02:48:37
3	Sc RADIAL	112118.0	112118.0	96.1 %			02:47:08
3	Al 396.153Radial†	121.3	2.9	1.4154 µg/L	1.4154 ppb		02:47:08
3	Ca 317.933Radial†	468.8	74.9	28.964 µg/L	28.964 ppb		02:47:28
3	Fe 238.204 Radial†	22.6	8.4	53.142 µg/L	53.142 ppb		02:47:28
3	K 766.490 Radial†	725.0	71.7	36.676 µg/L	36.676 ppb		02:47:08
3	Mg 279.077 IEC†	23.0	8.5	52.405 µg/L	52.405 ppb		02:47:28
3	Na 589.592 Radial†	-600.1	9.9	2.4705 µg/L	2.4705 ppb		02:47:08
3	Sr 421.552†	-61.2	-1.3	-0.0066 µg/L	-0.0066 ppb		02:47:08
3	Sc 361.383	2021689.1	2021689.1	99.974 %			02:48:43
3	Y 371.029	1256954.7	1256954.7	99.858 %			02:48:43
3	Ag 328.068†	119.2	108.8	0.9973 µg/L	0.9973 ppb		02:48:48
3	As 188.979†	6.4	4.2	7.6108 µg/L	7.6108 ppb		02:49:09
3	B 249.677†	155.3	17.5	0.7400 µg/L	0.7400 ppb		02:49:09
3	Ba 233.527†	-67.3	10.7	0.2753 µg/L	0.2753 ppb		02:49:09
3	Be 313.107†	3756.1	241.2	0.1508 µg/L	0.1508 ppb		02:48:48
3	Cd 226.502†	-77.8	21.2	0.5589 µg/L	0.5589 ppb		02:49:09
3	Co 228.616†	-60.7	5.9	0.2849 µg/L	0.2849 ppb		02:49:09
3	Cr 267.716†	-138.1	-38.3	-0.8029 µg/L	-0.8029 ppb		02:48:48
3	Cu 324.752†	4223.1	-45.6	-0.3047 µg/L	-0.3047 ppb		02:48:48
3	Mn 257.610†	-133.7	67.6	0.2226 µg/L	0.2226 ppb		02:49:09
3	Mo 202.031†	-0.6	3.0	0.3556 µg/L	0.3556 ppb		02:49:09
3	Ni 231.604†	280.2	4.7	0.2581 µg/L	0.2581 ppb		02:49:09
3	P 214.914†	192.6	-8.3	-16.786 µg/L	-16.786 ppb		02:49:09
3	Pb 220.353†	48.5	-7.7	-2.0002 µg/L	-2.0002 ppb		02:49:09
3	S 181.975 Axial†	25.9	3.7	18.204 µg/L	18.204 ppb		02:49:09
3	Sb 206.836†	26.2	5.1	4.9871 µg/L	4.9871 ppb		02:49:09
3	Se 196.026†	11.2	1.3	1.6891 µg/L	1.6891 ppb		02:49:09
3	SiO2†	2773.5	22.9	4.2038 µg/L	4.2038 ppb		02:48:48
3	Si 251.611†	360.3	35.2	2.6466 µg/L	2.6466 ppb		02:49:09
3	Sn 189.927†	18.5	-3.9	-1.9748 µg/L	-1.9748 ppb		02:49:09
3	Ti 334.940†	991.3	217.1	0.4930 µg/L	0.4930 ppb		02:48:48
3	Tl 190.801†	-20.4	-0.0	-0.0160 µg/L	-0.0160 ppb		02:49:09
3	U 409.014†	712.4	-17.8	-1.6275 µg/L	-1.6275 ppb		02:48:48
3	V 292.402†	-114.0	12.8	0.1476 µg/L	0.1476 ppb		02:48:48
3	Zn 213.857†	537.1	10.6	0.2722 µg/L	0.2722 ppb		02:49:09

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2002805.8	99.040	%	0.8088				0.82%
Sc RADIAL	113667.2	97.5	%	1.15				1.18%
Y 371.029	1247075.3	99.073	%	0.6797				0.69%
Ag 328.068†	91.4	0.8372	µg/L	0.15243	0.8372	ppb	0.15243	18.21%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	25.2	12.506	µg/L	10.0242	12.506	ppb	10.0242	80.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.1	5.6425	µg/L	2.84456	5.6425	ppb	2.84456	50.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	44.1	1.9026	µg/L	1.07329	1.9026	ppb	1.07329	56.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.1	0.4917	µg/L	0.19752	0.4917	ppb	0.19752	40.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	386.7	0.2417	µg/L	0.12773	0.2417	ppb	0.12773	52.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	32.9	12.743	µg/L	14.0501	12.743	ppb	14.0501	110.25%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	24.8	0.6598	µg/L	0.15407	0.6598	ppb	0.15407	23.35%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.1	0.1957	µg/L	0.18270	0.1957	ppb	0.18270	93.35%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -11.7     -0.2457 µg/L       0.58563     -0.2457 ppb        0.58563 238.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -1.6     -0.0056 µg/L       0.35474     -0.0056 ppb        0.35474 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.8      24.277 µg/L       25.5834      24.277 ppb        25.5834 105.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -1.5     -0.7850 µg/L      32.70716     -0.7850 ppb       32.70716 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.6      3.5817 µg/L      45.98133      3.5817 ppb       45.98133 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              101.9      0.3286 µg/L       0.11914      0.3286 ppb        0.11914  36.26%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.1      0.5953 µg/L       0.23422      0.5953 ppb        0.23422  39.35%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         2.2      0.5399 µg/L       3.68297      0.5399 ppb        3.68297 682.17%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.4      0.7855 µg/L       0.53171      0.7855 ppb        0.53171  67.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.1     -4.2643 µg/L      14.38110     -4.2643 ppb       14.38110 337.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.1     -0.5453 µg/L       1.59802     -0.5453 ppb        1.59802 293.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           5.0      24.419 µg/L        6.6239      24.419 ppb         6.6239  27.13%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.8      0.8251 µg/L       3.96177      0.8251 ppb        3.96177 480.16%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.2      6.6566 µg/L       4.32972      6.6566 ppb        4.32972  65.04%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     47.6      8.7356 µg/L       6.88753      8.7356 ppb        6.88753  78.84%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               53.8      3.9263 µg/L       1.13572      3.9263 ppb        1.13572  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.9      0.4479 µg/L       2.45488      0.4479 ppb        2.45488 548.12%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               20.8      0.1047 µg/L       0.14928      0.1047 ppb        0.14928 142.64%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              317.2      0.7217 µg/L       0.21972      0.7217 ppb        0.21972  30.44%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.0     -3.0560 µg/L       3.69642     -3.0560 ppb        3.69642 120.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -3.4     -0.3137 µg/L       3.78768     -0.3137 ppb        3.78768 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                22.6      0.2595 µg/L       0.18810      0.2595 ppb        0.18810  72.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               19.9      0.5207 µg/L       0.23773      0.5207 ppb        0.23773  45.65%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/10/2009 02:49:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115322.0	115322.0	98.9	%			02:49:51
1	Al 396.153Radial†	556.3	439.3	217.89	µg/L	217.89	ppb	02:49:51
1	Ca 317.933Radial†	947.0	544.9	210.85	µg/L	210.85	ppb	02:50:11
1	Fe 238.204 Radial†	36.7	21.9	139.59	µg/L	139.59	ppb	02:50:11
1	K 766.490 Radial†	1010.1	339.0	173.51	µg/L	173.51	ppb	02:49:51
1	Mg 279.077 IEC†	63.4	48.7	300.59	µg/L	300.59	ppb	02:50:11
1	Na 589.592 Radial†	641.8	1283.2	321.34	µg/L	321.34	ppb	02:49:51
1	Sr 421.552†	966.2	1039.5	5.2245	µg/L	5.2245	ppb	02:49:51
1	Sc 361.383	2008463.3	2008463.3	99.320	%			02:51:13
1	Y 371.029	1249809.3	1249809.3	99.290	%			02:51:13
1	Ag 328.068†	651.9	646.0	5.9341	µg/L	5.9341	ppb	02:51:19
1	As 188.979†	16.8	14.7	26.661	µg/L	26.661	ppb	02:51:39
1	B 249.677†	1270.9	1141.7	49.451	µg/L	49.451	ppb	02:51:19
1	Ba 233.527†	127.0	205.9	5.2929	µg/L	5.2929	ppb	02:51:39
1	Be 313.107†	11369.7	7931.7	4.9613	µg/L	4.9613	ppb	02:51:19
1	Cd 226.502†	90.6	190.2	5.0993	µg/L	5.0993	ppb	02:51:39
1	Co 228.616†	26.6	93.5	4.5307	µg/L	4.5307	ppb	02:51:39
1	Cr 267.716†	123.6	224.2	4.7140	µg/L	4.7140	ppb	02:51:19
1	Cu 324.752†	5710.7	1480.1	10.296	µg/L	10.296	ppb	02:51:19
1	Mn 257.610†	2970.2	3191.9	10.209	µg/L	10.209	ppb	02:51:19
1	Mo 202.031†	85.4	89.7	10.478	µg/L	10.478	ppb	02:51:39
1	Ni 231.604†	369.3	96.2	5.2646	µg/L	5.2646	ppb	02:51:39
1	P 214.914†	266.6	67.5	135.21	µg/L	135.21	ppb	02:51:39
1	Pb 220.353†	91.0	35.4	9.1262	µg/L	9.1262	ppb	02:51:39
1	S 181.975 Axial†	43.3	21.4	104.70	µg/L	104.70	ppb	02:51:39
1	Sb 206.836†	25.8	4.9	4.7700	µg/L	4.7700	ppb	02:51:39
1	Se 196.026†	42.4	32.8	41.910	µg/L	41.910	ppb	02:51:39
1	SiO2†	3925.0	1200.5	220.45	µg/L	220.45	ppb	02:51:19
1	Si 251.611†	1656.6	1342.8	98.556	µg/L	98.556	ppb	02:51:39
1	Sn 189.927†	41.3	19.2	9.9508	µg/L	9.9508	ppb	02:51:39
1	Ti 334.940†	3070.5	2317.1	5.2664	µg/L	5.2664	ppb	02:51:19
1	Tl 190.801†	-6.4	14.0	21.477	µg/L	21.477	ppb	02:51:39
1	U 409.014†	1368.6	647.5	58.689	µg/L	58.689	ppb	02:51:19
1	V 292.402†	316.9	445.8	5.1946	µg/L	5.1946	ppb	02:51:19
1	Zn 213.857†	906.4	386.0	10.165	µg/L	10.165	ppb	02:51:39
2	Sc RADIAL	115523.7	115523.7	99.1	%			02:50:17
2	Al 396.153Radial†	532.9	414.7	205.65	µg/L	205.65	ppb	02:50:17
2	Ca 317.933Radial†	939.0	535.2	207.09	µg/L	207.09	ppb	02:50:37
2	Fe 238.204 Radial†	33.8	19.0	120.97	µg/L	120.97	ppb	02:50:37
2	K 766.490 Radial†	1028.8	356.2	182.30	µg/L	182.30	ppb	02:50:17
2	Mg 279.077 IEC†	68.4	53.6	331.29	µg/L	331.29	ppb	02:50:37
2	Na 589.592 Radial†	652.2	1292.5	323.68	µg/L	323.68	ppb	02:50:17
2	Sr 421.552†	954.5	1025.9	5.1564	µg/L	5.1564	ppb	02:50:17
2	Sc 361.383	2015459.0	2015459.0	99.665	%			02:51:46
2	Y 371.029	1256823.8	1256823.8	99.847	%			02:51:46
2	Ag 328.068†	556.5	548.0	5.0389	µg/L	5.0389	ppb	02:51:51
2	As 188.979†	18.6	16.4	29.742	µg/L	29.742	ppb	02:52:12
2	B 249.677†	1272.3	1138.7	49.327	µg/L	49.327	ppb	02:51:51
2	Ba 233.527†	119.4	197.9	5.0854	µg/L	5.0854	ppb	02:52:12
2	Be 313.107†	11424.6	7947.1	4.9709	µg/L	4.9709	ppb	02:51:51
2	Cd 226.502†	91.2	190.4	5.0976	µg/L	5.0976	ppb	02:52:12
2	Co 228.616†	31.1	97.9	4.7428	µg/L	4.7428	ppb	02:52:12
2	Cr 267.716†	138.5	238.7	5.0182	µg/L	5.0182	ppb	02:51:51
2	Cu 324.752†	5720.5	1469.9	10.222	µg/L	10.222	ppb	02:51:51
2	Mn 257.610†	3029.4	3240.9	10.364	µg/L	10.364	ppb	02:51:51
2	Mo 202.031†	86.0	90.0	10.513	µg/L	10.513	ppb	02:52:12
2	Ni 231.604†	385.2	110.9	6.0691	µg/L	6.0691	ppb	02:52:12
2	P 214.914†	274.4	74.4	149.23	µg/L	149.23	ppb	02:52:12
2	Pb 220.353†	96.1	40.2	10.374	µg/L	10.374	ppb	02:52:12

2	S 181.975 Axial†	44.2	22.2	108.55 µg/L	108.55 ppb	02:52:12
2	Sb 206.836†	34.3	13.3	12.965 µg/L	12.965 ppb	02:52:12
2	Se 196.026†	46.4	36.7	46.905 µg/L	46.905 ppb	02:52:12
2	SiO2†	3881.9	1143.6	210.00 µg/L	210.00 ppb	02:51:51
2	Si 251.611†	1658.5	1338.9	98.166 µg/L	98.166 ppb	02:52:12
2	Sn 189.927†	46.1	23.8	12.323 µg/L	12.323 ppb	02:52:12
2	Ti 334.940†	3148.5	2384.7	5.4205 µg/L	5.4205 ppb	02:51:51
2	Tl 190.801†	-10.9	9.5	14.556 µg/L	14.556 ppb	02:52:12
2	U 409.014†	1217.7	491.4	44.533 µg/L	44.533 ppb	02:51:51
2	V 292.402†	311.2	438.9	5.0928 µg/L	5.0928 ppb	02:51:51
2	Zn 213.857†	900.6	376.9	9.9224 µg/L	9.9224 ppb	02:52:12
3	Sc RADIAL	114605.5	114605.5	98.3 %		02:50:43
3	Al 396.153Radial†	570.2	456.9	226.64 µg/L	226.64 ppb	02:50:43
3	Ca 317.933Radial†	920.6	524.1	202.77 µg/L	202.77 ppb	02:51:03
3	Fe 238.204 Radial†	35.0	20.4	129.93 µg/L	129.93 ppb	02:51:03
3	K 766.490 Radial†	1005.7	341.0	174.50 µg/L	174.50 ppb	02:50:43
3	Mg 279.077 IEC†	62.3	48.0	296.25 µg/L	296.25 ppb	02:51:03
3	Na 589.592 Radial†	596.4	1241.1	310.80 µg/L	310.80 ppb	02:50:43
3	Sr 421.552†	965.6	1044.9	5.2517 µg/L	5.2517 ppb	02:50:43
3	Sc 361.383	2024345.6	2024345.6	100.10 %		02:52:18
3	Y 371.029	1263256.8	1263256.8	100.36 %		02:52:18
3	Ag 328.068†	582.5	571.5	5.2543 µg/L	5.2543 ppb	02:52:23
3	As 188.979†	18.2	16.0	28.974 µg/L	28.974 ppb	02:52:44
3	B 249.677†	1244.1	1104.9	47.859 µg/L	47.859 ppb	02:52:23
3	Ba 233.527†	117.2	195.1	5.0147 µg/L	5.0147 ppb	02:52:44
3	Be 313.107†	11278.2	7750.5	4.8480 µg/L	4.8480 ppb	02:52:23
3	Cd 226.502†	81.0	179.9	4.8190 µg/L	4.8190 ppb	02:52:44
3	Co 228.616†	33.9	100.6	4.8719 µg/L	4.8719 ppb	02:52:44
3	Cr 267.716†	131.8	231.5	4.8657 µg/L	4.8657 ppb	02:52:23
3	Cu 324.752†	5701.2	1425.5	9.9155 µg/L	9.9155 ppb	02:52:23
3	Mn 257.610†	2953.5	3151.8	10.080 µg/L	10.080 ppb	02:52:23
3	Mo 202.031†	84.0	87.6	10.239 µg/L	10.239 ppb	02:52:44
3	Ni 231.604†	373.8	97.8	5.3508 µg/L	5.3508 ppb	02:52:44
3	P 214.914†	267.3	66.1	132.42 µg/L	132.42 ppb	02:52:44
3	Pb 220.353†	91.6	35.3	9.1064 µg/L	9.1064 ppb	02:52:44
3	S 181.975 Axial†	40.4	18.2	89.053 µg/L	89.053 ppb	02:52:44
3	Sb 206.836†	23.9	2.8	2.6916 µg/L	2.6916 ppb	02:52:44
3	Se 196.026†	34.7	24.8	31.669 µg/L	31.669 ppb	02:52:44
3	SiO2†	3909.0	1153.5	211.82 µg/L	211.82 ppb	02:52:23
3	Si 251.611†	1646.8	1319.8	96.955 µg/L	96.955 ppb	02:52:44
3	Sn 189.927†	36.9	14.4	7.5091 µg/L	7.5091 ppb	02:52:44
3	Ti 334.940†	3105.4	2327.7	5.2909 µg/L	5.2909 ppb	02:52:23
3	Tl 190.801†	-5.1	15.2	23.422 µg/L	23.422 ppb	02:52:44
3	U 409.014†	1281.7	549.9	49.844 µg/L	49.844 ppb	02:52:23
3	V 292.402†	313.2	439.6	5.1073 µg/L	5.1073 ppb	02:52:23
3	Zn 213.857†	898.7	371.1	9.7717 µg/L	9.7717 ppb	02:52:44

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2016089.3	99.697	%	0.3936				0.39%
Sc RADIAL	115150.4	98.7	%	0.41				0.42%
Y 371.029	1256630.0	99.832	%	0.5343				0.54%
Ag 328.068†	588.5	5.4091	µg/L	0.46727	5.4091	ppb	0.46727	8.64%
QC value within limits for Ag 328.068 Recovery = 108.18%								
Al 396.153Radial†	437.0	216.73	µg/L	10.544	216.73	ppb	10.544	4.87%
QC value within limits for Al 396.153Radial Recovery = 108.36%								
As 188.979†	15.7	28.459	µg/L	1.6037	28.459	ppb	1.6037	5.64%
QC value within limits for As 188.979 Recovery = 94.86%								
B 249.677†	1128.4	48.879	µg/L	0.8857	48.879	ppb	0.8857	1.81%
QC value within limits for B 249.677 Recovery = 97.76%								
Ba 233.527†	199.6	5.1310	µg/L	0.14457	5.1310	ppb	0.14457	2.82%
QC value within limits for Ba 233.527 Recovery = 102.62%								
Be 313.107†	7876.4	4.9267	µg/L	0.06839	4.9267	ppb	0.06839	1.39%
QC value within limits for Be 313.107 Recovery = 98.53%								
Ca 317.933Radial†	534.7	206.90	µg/L	4.042	206.90	ppb	4.042	1.95%
QC value within limits for Ca 317.933Radial Recovery = 103.45%								
Cd 226.502†	186.8	5.0053	µg/L	0.16132	5.0053	ppb	0.16132	3.22%
QC value within limits for Cd 226.502 Recovery = 100.11%								
Co 228.616†	97.3	4.7151	µg/L	0.17226	4.7151	ppb	0.17226	3.65%

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   QC value within limits for Co 228.616  Recovery = 94.30%
Cr 267.716†              231.5      4.8660 µg/L       0.15212      4.8660 ppb        0.15212   3.13%
   QC value within limits for Cr 267.716  Recovery = 97.32%
Cu 324.752†             1458.5      10.145 µg/L        0.2018      10.145 ppb         0.2018   1.99%
   QC value within limits for Cu 324.752  Recovery = 101.45%
Fe 238.204 Radial†        20.4      130.17 µg/L         9.310      130.17 ppb          9.310   7.15%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 130.17%
K 766.490 Radial†        345.4      176.77 µg/L         4.815      176.77 ppb          4.815   2.72%
   QC value within limits for K 766.490 Radial  Recovery = 117.84%
Mg 279.077 IEC†           50.1      309.38 µg/L        19.098      309.38 ppb         19.098   6.17%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.13%
Mn 257.610†             3194.9      10.218 µg/L        0.1420      10.218 ppb         0.1420   1.39%
   QC value within limits for Mn 257.610  Recovery = 102.18%
Mo 202.031†               89.1      10.410 µg/L        0.1491      10.410 ppb         0.1491   1.43%
   QC value within limits for Mo 202.031  Recovery = 104.10%
Na 589.592 Radial†      1272.3      318.61 µg/L         6.866      318.61 ppb          6.866   2.15%
   QC value within limits for Na 589.592 Radial  Recovery = 106.20%
Ni 231.604†              101.7      5.5615 µg/L       0.44174      5.5615 ppb        0.44174   7.94%
   QC value within limits for Ni 231.604  Recovery = 111.23%
P 214.914†                69.3      138.95 µg/L         9.013      138.95 ppb          9.013   6.49%
   QC value within limits for P 214.914  Recovery = 92.64%
Pb 220.353†               36.9      9.5355 µg/L       0.72606      9.5355 ppb        0.72606   7.61%
   QC value within limits for Pb 220.353  Recovery = 95.35%
S 181.975 Axial†          20.6      100.77 µg/L        10.325      100.77 ppb         10.325  10.25%
   QC value within limits for S 181.975 Axial  Recovery = 100.77%
Sb 206.836†                7.0      6.8090 µg/L       5.43193      6.8090 ppb        5.43193  79.78%
   QC value less than the lower limit for Sb 206.836  Recovery = 68.09%
Se 196.026†               31.4      40.161 µg/L        7.7671      40.161 ppb         7.7671  19.34%
   QC value greater than the upper limit for Se 196.026  Recovery = 133.87%
SiO2†                   1165.9      214.09 µg/L         5.585      214.09 ppb          5.585   2.61%
   QC value within limits for SiO2  Recovery = 100.51%
Si 251.611†             1333.8      97.893 µg/L        0.8347      97.893 ppb         0.8347   0.85%
   QC value within limits for Si 251.611  Recovery = 97.89%
Sn 189.927†               19.1      9.9277 µg/L       2.40711      9.9277 ppb        2.40711  24.25%
   QC value within limits for Sn 189.927  Recovery = 99.28%
Sr 421.552†             1036.8      5.2109 µg/L       0.04911      5.2109 ppb        0.04911   0.94%
   QC value within limits for Sr 421.552  Recovery = 104.22%
Ti 334.940†             2343.2      5.3259 µg/L       0.08282      5.3259 ppb        0.08282   1.56%
   QC value within limits for Ti 334.940  Recovery = 106.52%
Tl 190.801†               12.9      19.818 µg/L        4.6603      19.818 ppb         4.6603  23.52%
   QC value within limits for Tl 190.801  Recovery = 99.09%
U 409.014†               562.9      51.022 µg/L        7.1510      51.022 ppb         7.1510  14.02%
   QC value within limits for U 409.014  Recovery = 102.04%
V 292.402†               441.5      5.1315 µg/L       0.05505      5.1315 ppb        0.05505   1.07%
   QC value within limits for V 292.402  Recovery = 102.63%
Zn 213.857†              378.0      9.9531 µg/L       0.19848      9.9531 ppb        0.19848   1.99%
   QC value within limits for Zn 213.857  Recovery = 99.53%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/10/2009 02:52:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112284.4	112284.4	96.3	%			02:53:34
1	Al 396.153Radial†	1015707.8	1054881.9	524130	µg/L	524130	ppb	02:53:28
1	Ca 317.933Radial†	1243220.2	1290907.3	499480	µg/L	499480	ppb	02:53:28
1	Fe 238.204 Radial†	28495.3	29582.6	188130	µg/L	188130	ppb	02:53:34
1	K 766.490 Radial†	709.1	54.0	27.649	µg/L	27.649	ppb	02:53:34
1	Mg 279.077 IEC†	76114.9	79044.3	487750	µg/L	487750	ppb	02:53:34
1	Na 589.592 Radial†	-514.9	99.3	24.864	µg/L	24.864	ppb	02:53:34
1	Sr 421.552†	642.9	730.1	3.6695	µg/L	3.6695	ppb	02:53:34
1	Sc 361.383	1866598.6	1866598.6	92.304	%			02:54:08
1	Y 371.029	1133613.3	1133613.3	90.059	%			02:54:08
1	Ag 328.068†	-1920.8	-2091.4	-4.3283	µg/L	-4.3283	ppb	02:54:08
1	As 188.979†	38.4	39.3	-31.699	µg/L	-31.699	ppb	02:54:28
1	B 249.677†	1997.6	2026.3	28.683	µg/L	28.683	ppb	02:54:08
1	Ba 233.527†	160.1	251.5	6.4179	µg/L	6.4179	ppb	02:54:28
1	Be 313.107†	2543.5	-760.3	-0.4856	µg/L	-0.4856	ppb	02:54:08
1	Cd 226.502†	534.1	677.6	3.4787	µg/L	3.4787	ppb	02:54:28
1	Co 228.616†	-89.8	-30.6	-1.5652	µg/L	-1.5652	ppb	02:54:28
1	Cr 267.716†	-238.3	-158.4	-3.3577	µg/L	-3.3577	ppb	02:54:28
1	Cu 324.752†	-399.3	-4702.3	7.7929	µg/L	7.7929	ppb	02:54:08
1	Mn 257.610†	-2429.5	-2430.7	15.887	µg/L	15.887	ppb	02:54:08
1	Mo 202.031†	-107.2	-112.4	-5.7399	µg/L	-5.7399	ppb	02:54:28
1	Ni 231.604†	248.6	-6.2	-0.3418	µg/L	-0.3418	ppb	02:54:28
1	P 214.914†	200.1	15.9	3.2456	µg/L	3.2456	ppb	02:54:28
1	Pb 220.353†	-65.1	-126.8	10.533	µg/L	10.533	ppb	02:54:28
1	S 181.975 Axial†	59.1	41.8	107.26	µg/L	107.26	ppb	02:54:28
1	Sb 206.836†	65.0	49.3	1.5449	µg/L	1.5449	ppb	02:54:28
1	Se 196.026†	21.8	13.7	18.143	µg/L	18.143	ppb	02:54:28
1	SiO2†	2554.5	16.1	2.9532	µg/L	2.9532	ppb	02:54:28
1	Si 251.611†	556.6	277.8	28.684	µg/L	28.684	ppb	02:54:28
1	Sn 189.927†	-393.6	-448.8	0.6631	µg/L	0.6631	ppb	02:54:28
1	Ti 334.940†	11442.8	11622.4	-1.6106	µg/L	-1.6106	ppb	02:54:08
1	Tl 190.801†	31.2	54.2	16.520	µg/L	16.520	ppb	02:54:28
1	U 409.014†	992.8	345.1	8.0003	µg/L	8.0003	ppb	02:54:08
1	V 292.402†	-1390.2	-1379.4	-0.2096	µg/L	-0.2096	ppb	02:54:08
1	Zn 213.857†	1761.8	1382.0	3.3392	µg/L	3.3392	ppb	02:54:28
2	Sc RADIAL	112711.7	112711.7	96.6	%			02:53:45
2	Al 396.153Radial†	1005475.3	1040294.3	516880	µg/L	516880	ppb	02:53:40
2	Ca 317.933Radial†	1227908.3	1270167.9	491450	µg/L	491450	ppb	02:53:40
2	Fe 238.204 Radial†	28859.6	29847.4	189810	µg/L	189810	ppb	02:53:45
2	K 766.490 Radial†	684.3	25.6	13.098	µg/L	13.098	ppb	02:53:45
2	Mg 279.077 IEC†	76926.0	79583.9	491080	µg/L	491080	ppb	02:53:45
2	Na 589.592 Radial†	-506.3	110.2	27.589	µg/L	27.589	ppb	02:53:45
2	Sr 421.552†	661.6	746.9	3.7537	µg/L	3.7537	ppb	02:53:45
2	Sc 361.383	1873254.9	1873254.9	92.633	%			02:54:35
2	Y 371.029	1142871.7	1142871.7	90.794	%			02:54:35
2	Ag 328.068†	-1934.3	-2098.5	-4.2628	µg/L	-4.2628	ppb	02:54:35
2	As 188.979†	38.5	39.4	-30.675	µg/L	-30.675	ppb	02:54:56
2	B 249.677†	2043.5	2068.2	29.971	µg/L	29.971	ppb	02:54:35
2	Ba 233.527†	151.7	241.8	6.1692	µg/L	6.1692	ppb	02:54:56
2	Be 313.107†	2471.1	-848.3	-0.5407	µg/L	-0.5407	ppb	02:54:35
2	Cd 226.502†	545.1	687.4	3.6100	µg/L	3.6100	ppb	02:54:56
2	Co 228.616†	-87.2	-27.4	-1.4096	µg/L	-1.4096	ppb	02:54:56
2	Cr 267.716†	-227.7	-146.0	-3.0984	µg/L	-3.0984	ppb	02:54:56
2	Cu 324.752†	-452.2	-4757.9	7.7691	µg/L	7.7691	ppb	02:54:35
2	Mn 257.610†	-2446.7	-2439.9	16.069	µg/L	16.069	ppb	02:54:35
2	Mo 202.031†	-97.6	-101.7	-4.4138	µg/L	-4.4138	ppb	02:54:56
2	Ni 231.604†	242.3	-14.0	-0.7661	µg/L	-0.7661	ppb	02:54:56
2	P 214.914†	201.6	16.7	0.2447	µg/L	0.2447	ppb	02:54:56
2	Pb 220.353†	-63.1	-124.4	10.514	µg/L	10.514	ppb	02:54:56

2	S 181.975 Axial†	61.1	43.8	116.04 µg/L	116.04 ppb		02:54:56
2	Sb 206.836†	52.4	35.5	-11.281 µg/L	-11.281 ppb		02:54:56
2	Se 196.026†	23.3	15.3	18.845 µg/L	18.845 ppb		02:54:56
2	SiO2†	2468.5	-86.6	-15.897 µg/L	-15.897 ppb		02:54:56
2	Si 251.611†	443.7	153.8	19.663 µg/L	19.663 ppb		02:54:56
2	Sn 189.927†	-403.5	-458.0	-4.9572 µg/L	-4.9572 ppb		02:54:56
2	Ti 334.940†	11563.8	11709.0	-0.9623 µg/L	-0.9623 ppb		02:54:35
2	Tl 190.801†	23.3	45.5	4.2671 µg/L	4.2671 ppb		02:54:56
2	U 409.014†	1037.9	390.0	11.562 µg/L	11.562 ppb		02:54:35
2	V 292.402†	-1425.8	-1412.5	-0.4293 µg/L	-0.4293 ppb		02:54:35
2	Zn 213.857†	1769.1	1383.1	3.0996 µg/L	3.0996 ppb		02:54:56
3	Sc RADIAL	112495.2	112495.2	96.5 %			02:53:57
3	Al 396.153Radial†	1006819.3	1043689.7	518570 µg/L	518570 ppb		02:53:51
3	Ca 317.933Radial†	1229286.9	1274041.9	492950 µg/L	492950 ppb		02:53:51
3	Fe 238.204 Radial†	29027.8	30079.2	191290 µg/L	191290 ppb		02:53:57
3	K 766.490 Radial†	730.1	74.5	38.107 µg/L	38.107 ppb		02:53:57
3	Mg 279.077 IEC†	77486.5	80318.2	495610 µg/L	495610 ppb		02:53:57
3	Na 589.592 Radial†	-526.4	88.4	22.139 µg/L	22.139 ppb		02:53:57
3	Sr 421.552†	607.3	691.9	3.4774 µg/L	3.4774 ppb		02:53:57
3	Sc 361.383	1863246.7	1863246.7	92.139 %			02:55:03
3	Y 371.029	1138140.3	1138140.3	90.418 %			02:55:03
3	Ag 328.068†	-1947.6	-2124.1	-4.3788 µg/L	-4.3788 ppb		02:55:03
3	As 188.979†	38.4	39.5	-30.950 µg/L	-30.950 ppb		02:55:23
3	B 249.677†	2007.8	2041.3	28.340 µg/L	28.340 ppb		02:55:03
3	Ba 233.527†	158.2	249.8	6.3738 µg/L	6.3738 ppb		02:55:23
3	Be 313.107†	2432.0	-876.3	-0.5583 µg/L	-0.5583 ppb		02:55:03
3	Cd 226.502†	557.8	704.4	3.9605 µg/L	3.9605 ppb		02:55:23
3	Co 228.616†	-87.8	-28.7	-1.4688 µg/L	-1.4688 ppb		02:55:23
3	Cr 267.716†	-213.8	-132.2	-2.8101 µg/L	-2.8101 ppb		02:55:23
3	Cu 324.752†	-452.9	-4761.4	8.0619 µg/L	8.0619 ppb		02:55:03
3	Mn 257.610†	-2442.6	-2449.7	16.223 µg/L	16.223 ppb		02:55:03
3	Mo 202.031†	-99.4	-104.2	-4.6498 µg/L	-4.6498 ppb		02:55:23
3	Ni 231.604†	233.8	-21.8	-1.1926 µg/L	-1.1926 ppb		02:55:23
3	P 214.914†	210.0	27.0	19.822 µg/L	19.822 ppb		02:55:23
3	Pb 220.353†	-69.8	-132.0	8.6465 µg/L	8.6465 ppb		02:55:23
3	S 181.975 Axial†	43.5	25.1	23.779 µg/L	23.779 ppb		02:55:23
3	Sb 206.836†	60.3	44.3	-2.7487 µg/L	-2.7487 ppb		02:55:23
3	Se 196.026†	20.9	12.8	15.013 µg/L	15.013 ppb		02:55:23
3	SiO2†	2453.2	-88.9	-16.320 µg/L	-16.320 ppb		02:55:23
3	Si 251.611†	419.1	129.6	17.968 µg/L	17.968 ppb		02:55:23
3	Sn 189.927†	-405.9	-463.0	-6.0982 µg/L	-6.0982 ppb		02:55:23
3	Ti 334.940†	11534.2	11744.0	-0.9669 µg/L	-0.9669 ppb		02:55:03
3	Tl 190.801†	19.9	41.9	-1.3947 µg/L	-1.3947 ppb		02:55:23
3	U 409.014†	1202.3	574.5	28.050 µg/L	28.050 ppb		02:55:03
3	V 292.402†	-1399.5	-1392.2	-0.0560 µg/L	-0.0560 ppb		02:55:03
3	Zn 213.857†	1767.2	1391.4	3.0406 µg/L	3.0406 ppb		02:55:23

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1867700.1	92.359	%	0.2519				0.27%
Sc RADIAL	112497.1	96.5	%	0.18				0.19%
Y 371.029	1138208.4	90.424	%	0.3678				0.41%
Ag 328.068†	-2104.7	-4.3233	µg/L	0.05814	-4.3233	ppb	0.05814	1.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1046288.6	519860	µg/L	3792.6	519860	ppb	3792.6	0.73%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	39.4	-31.108	µg/L	0.5301	-31.108	ppb	0.5301	1.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2045.2	28.998	µg/L	0.8600	28.998	ppb	0.8600	2.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	247.7	6.3203	µg/L	0.13273	6.3203	ppb	0.13273	2.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-828.3	-0.5282	µg/L	0.03794	-0.5282	ppb	0.03794	7.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1278372.3	494630	µg/L	4266.6	494630	ppb	4266.6	0.86%
QC value within limits for Ca 317.933Radial Recovery = 98.93%								
Cd 226.502†	689.8	3.6831	µg/L	0.24907	3.6831	ppb	0.24907	6.76%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-28.9	-1.4812	µg/L	0.07852	-1.4812	ppb	0.07852	5.30%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -145.5     -3.0888 µg/L       0.27393     -3.0888 ppb        0.27393   8.87%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4740.5      7.8746 µg/L       0.16259      7.8746 ppb        0.16259   2.06%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    29836.4      189740 µg/L        1580.1      189740 ppb         1580.1   0.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.87%
K 766.490 Radial†        51.4      26.285 µg/L       12.5603      26.285 ppb        12.5603  47.79%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       79648.8      491480 µg/L        3945.4      491480 ppb         3945.4   0.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.30%
Mn 257.610†           -2440.1      16.060 µg/L        0.1684      16.060 ppb         0.1684   1.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -106.1     -4.9345 µg/L       0.70739     -4.9345 ppb        0.70739  14.34%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       99.3      24.864 µg/L        2.7250      24.864 ppb         2.7250  10.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -14.0     -0.7669 µg/L       0.42541     -0.7669 ppb        0.42541  55.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               19.9      7.7708 µg/L      10.54396      7.7708 ppb       10.54396 135.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -127.7      9.8980 µg/L       1.08392      9.8980 ppb        1.08392  10.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         36.9      82.359 µg/L       50.9214      82.359 ppb        50.9214  61.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              43.0     -4.1615 µg/L       6.52845     -4.1615 ppb        6.52845 156.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              13.9      17.334 µg/L        2.0398      17.334 ppb         2.0398  11.77%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -53.1     -9.7546 µg/L      11.00728     -9.7546 ppb       11.00728 112.84%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             187.0      22.105 µg/L        5.7601      22.105 ppb         5.7601  26.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -456.6     -3.4641 µg/L       3.61953     -3.4641 ppb        3.61953 104.49%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             723.0      3.6336 µg/L       0.14167      3.6336 ppb        0.14167   3.90%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11691.8     -1.1800 µg/L       0.37299     -1.1800 ppb        0.37299  31.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              47.2      6.4642 µg/L       9.15726      6.4642 ppb        9.15726 141.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              436.5      15.871 µg/L       10.6968      15.871 ppb        10.6968  67.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1394.7     -0.2316 µg/L       0.18758     -0.2316 ppb        0.18758  80.98%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1385.5      3.1598 µg/L       0.15811      3.1598 ppb        0.15811   5.00%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/10/2009 02:55:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112601.6	112601.6	96.5	%			02:56:12
1	Al 396.153Radial†	1002078.1	1037792.7	515620	µg/L	515620	ppb	02:56:06
1	Ca 317.933Radial†	1224021.9	1267384.6	490380	µg/L	490380	ppb	02:56:06
1	Fe 238.204 Radial†	29078.7	30103.5	191460	µg/L	191460	ppb	02:56:12
1	K 766.490 Radial†	10580.2	10276.1	5259.2	µg/L	5259.2	ppb	02:56:12
1	Mg 279.077 IEC†	78014.1	80788.7	498530	µg/L	498530	ppb	02:56:12
1	Na 589.592 Radial†	19777.2	21118.6	5288.6	µg/L	5288.6	ppb	02:56:12
1	Sr 421.552†	98444.3	102027.3	512.79	µg/L	512.79	ppb	02:56:12
1	Sc 361.383	1861040.3	1861040.3	92.029	%			02:56:46
1	Y 371.029	1136362.9	1136362.9	90.277	%			02:56:46
1	Ag 328.068†	25163.6	27332.5	267.64	µg/L	267.64	ppb	02:56:52
1	As 188.979†	302.0	325.9	489.95	µg/L	489.95	ppb	02:57:13
1	B 249.677†	12970.8	13956.4	544.83	µg/L	544.83	ppb	02:56:52
1	Ba 233.527†	17722.2	19335.2	496.96	µg/L	496.96	ppb	02:56:52
1	Be 313.107†	359334.4	386940.2	241.93	µg/L	241.93	ppb	02:56:46
1	Cd 226.502†	16681.3	18225.0	471.04	µg/L	471.04	ppb	02:56:52
1	Co 228.616†	8163.5	8937.2	431.87	µg/L	431.87	ppb	02:57:13
1	Cr 267.716†	20819.9	22722.9	477.69	µg/L	477.69	ppb	02:56:52
1	Cu 324.752†	73247.1	75321.2	563.58	µg/L	563.58	ppb	02:56:52
1	Mn 257.610†	133074.9	144801.8	486.42	µg/L	486.42	ppb	02:56:52
1	Mo 202.031†	3789.8	4121.7	488.96	µg/L	488.96	ppb	02:57:13
1	Ni 231.604†	7555.0	7933.8	434.07	µg/L	434.07	ppb	02:57:13
1	P 214.914†	1349.7	1265.7	2463.6	µg/L	2463.6	ppb	02:57:13
1	Pb 220.353†	1627.4	1712.1	485.31	µg/L	485.31	ppb	02:57:13
1	S 181.975 Axial†	550.8	576.4	2722.6	µg/L	2722.6	ppb	02:57:13
1	Sb 206.836†	532.1	557.1	498.43	µg/L	498.43	ppb	02:57:13
1	Se 196.026†	1681.3	1817.1	2319.4	µg/L	2319.4	ppb	02:57:13
1	SiO2†	57741.9	59991.5	11016	µg/L	11016	ppb	02:56:52
1	Si 251.611†	64526.9	69790.4	5124.5	µg/L	5124.5	ppb	02:56:52
1	Sn 189.927†	520.8	543.5	509.35	µg/L	509.35	ppb	02:57:13
1	Ti 334.940†	216652.8	234642.5	506.92	µg/L	506.92	ppb	02:56:52
1	Tl 190.801†	289.6	335.0	452.28	µg/L	452.28	ppb	02:57:13
1	U 409.014†	5516.3	5263.6	453.12	µg/L	453.12	ppb	02:56:52
1	V 292.402†	40099.2	43698.9	511.31	µg/L	511.31	ppb	02:56:52
1	Zn 213.857†	18245.0	19298.6	474.50	µg/L	474.50	ppb	02:56:52
2	Sc RADIAL	114472.9	114472.9	98.2	%			02:56:24
2	Al 396.153Radial†	1001900.0	1020644.4	507100	µg/L	507100	ppb	02:56:18
2	Ca 317.933Radial†	1224144.8	1246784.9	482410	µg/L	482410	ppb	02:56:18
2	Fe 238.204 Radial†	29309.9	29846.7	189820	µg/L	189820	ppb	02:56:24
2	K 766.490 Radial†	10657.2	10175.4	5207.6	µg/L	5207.6	ppb	02:56:24
2	Mg 279.077 IEC†	78509.6	79972.7	493490	µg/L	493490	ppb	02:56:24
2	Na 589.592 Radial†	19883.7	20892.3	5231.9	µg/L	5231.9	ppb	02:56:24
2	Sr 421.552†	99154.4	101084.0	508.05	µg/L	508.05	ppb	02:56:24
2	Sc 361.383	1864640.5	1864640.5	92.207	%			02:57:19
2	Y 371.029	1139661.9	1139661.9	90.539	%			02:57:19
2	Ag 328.068†	25128.0	27241.2	266.68	µg/L	266.68	ppb	02:57:25
2	As 188.979†	304.2	327.7	494.68	µg/L	494.68	ppb	02:57:46
2	B 249.677†	12999.5	13960.2	545.52	µg/L	545.52	ppb	02:57:25
2	Ba 233.527†	17730.6	19307.0	496.24	µg/L	496.24	ppb	02:57:25
2	Be 313.107†	357681.5	384393.8	240.34	µg/L	240.34	ppb	02:57:19
2	Cd 226.502†	16651.6	18157.8	469.38	µg/L	469.38	ppb	02:57:25
2	Co 228.616†	8165.5	8922.2	431.14	µg/L	431.14	ppb	02:57:46
2	Cr 267.716†	20852.4	22714.5	477.52	µg/L	477.52	ppb	02:57:25
2	Cu 324.752†	73328.3	75255.6	562.78	µg/L	562.78	ppb	02:57:25
2	Mn 257.610†	133083.4	144531.8	485.35	µg/L	485.35	ppb	02:57:25
2	Mo 202.031†	3796.7	4121.2	488.83	µg/L	488.83	ppb	02:57:46
2	Ni 231.604†	7539.1	7900.6	432.25	µg/L	432.25	ppb	02:57:46
2	P 214.914†	1354.9	1268.5	2468.3	µg/L	2468.3	ppb	02:57:46
2	Pb 220.353†	1626.5	1707.7	483.44	µg/L	483.44	ppb	02:57:46

2	S 181.975 Axial†	547.4	571.5	2699.4 µg/L	2699.4 ppb	02:57:46
2	Sb 206.836†	530.4	554.1	496.31 µg/L	496.31 ppb	02:57:46
2	Se 196.026†	1676.1	1807.9	2307.4 µg/L	2307.4 ppb	02:57:46
2	SiO2†	57868.5	60007.7	11019 µg/L	11019 ppb	02:57:25
2	Si 251.611†	64657.3	69796.4	5124.9 µg/L	5124.9 ppb	02:57:25
2	Sn 189.927†	526.3	548.4	508.89 µg/L	508.89 ppb	02:57:46
2	Ti 334.940†	217071.3	234641.8	507.37 µg/L	507.37 ppb	02:57:25
2	Tl 190.801†	297.3	342.8	465.33 µg/L	465.33 ppb	02:57:46
2	U 409.014†	5585.4	5327.0	458.99 µg/L	458.99 ppb	02:57:25
2	V 292.402†	40196.6	43720.5	511.43 µg/L	511.43 ppb	02:57:25
2	Zn 213.857†	18311.6	19332.6	475.73 µg/L	475.73 ppb	02:57:25
3	Sc RADIAL	113610.9	113610.9	97.4 %		02:56:35
3	Al 396.153Radial†	1006505.3	1033117.4	513290 µg/L	513290 ppb	02:56:30
3	Ca 317.933Radial†	1229991.4	1262250.5	488390 µg/L	488390 ppb	02:56:30
3	Fe 238.204 Radial†	29103.6	29861.5	189920 µg/L	189920 ppb	02:56:35
3	K 766.490 Radial†	10600.3	10199.4	5219.9 µg/L	5219.9 ppb	02:56:35
3	Mg 279.077 IEC†	77880.0	79933.2	493250 µg/L	493250 ppb	02:56:35
3	Na 589.592 Radial†	19810.0	20970.3	5251.5 µg/L	5251.5 ppb	02:56:35
3	Sr 421.552†	98489.3	101167.7	508.47 µg/L	508.47 ppb	02:56:35
3	Sc 361.383	1859128.7	1859128.7	91.935 %		02:57:52
3	Y 371.029	1136430.4	1136430.4	90.283 %		02:57:52
3	Ag 328.068†	25048.2	27235.2	266.63 µg/L	266.63 ppb	02:57:58
3	As 188.979†	293.0	316.5	473.37 µg/L	473.37 ppb	02:58:18
3	B 249.677†	12959.2	13958.2	545.40 µg/L	545.40 ppb	02:57:58
3	Ba 233.527†	17691.9	19322.0	496.62 µg/L	496.62 ppb	02:57:58
3	Be 313.107†	360826.7	388964.9	243.20 µg/L	243.20 ppb	02:57:52
3	Cd 226.502†	16630.6	18188.5	470.19 µg/L	470.19 ppb	02:57:58
3	Co 228.616†	8193.0	8978.4	433.86 µg/L	433.86 ppb	02:58:18
3	Cr 267.716†	20730.3	22648.7	476.14 µg/L	476.14 ppb	02:57:58
3	Cu 324.752†	72972.3	75104.2	561.75 µg/L	561.75 ppb	02:57:58
3	Mn 257.610†	132691.7	144533.6	485.37 µg/L	485.37 ppb	02:57:58
3	Mo 202.031†	3800.7	4137.8	490.77 µg/L	490.77 ppb	02:58:18
3	Ni 231.604†	7565.5	7953.6	435.15 µg/L	435.15 ppb	02:58:18
3	P 214.914†	1354.3	1272.2	2477.8 µg/L	2477.8 ppb	02:58:18
3	Pb 220.353†	1632.4	1719.4	487.02 µg/L	487.02 ppb	02:58:18
3	S 181.975 Axial†	554.6	581.1	2746.5 µg/L	2746.5 ppb	02:58:18
3	Sb 206.836†	540.8	567.2	508.51 µg/L	508.51 ppb	02:58:18
3	Se 196.026†	1696.3	1835.2	2343.4 µg/L	2343.4 ppb	02:58:18
3	SiO2†	57529.3	59824.8	10986 µg/L	10986 ppb	02:57:58
3	Si 251.611†	64428.3	69755.1	5122.0 µg/L	5122.0 ppb	02:57:58
3	Sn 189.927†	516.3	539.2	505.45 µg/L	505.45 ppb	02:58:18
3	Ti 334.940†	216419.5	234630.8	507.01 µg/L	507.01 ppb	02:57:58
3	Tl 190.801†	296.3	342.7	464.36 µg/L	464.36 ppb	02:58:18
3	U 409.014†	5460.9	5209.5	448.46 µg/L	448.46 ppb	02:57:58
3	V 292.402†	40032.8	43671.5	510.88 µg/L	510.88 ppb	02:57:58
3	Zn 213.857†	18258.5	19333.6	475.74 µg/L	475.74 ppb	02:57:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1861603.2	92.057	%	0.1384				0.15%
Sc RADIAL	113561.8	97.4	%	0.80				0.82%
Y 371.029	1137485.1	90.366	%	0.1498				0.17%
Ag 328.068†	27269.6	266.99	µg/L	0.570	266.99	ppb	0.570	0.21%
QC value within limits for Ag 328.068 Recovery = 106.79%								
Al 396.153Radial†	1030518.2	512000	µg/L	4404.5	512000	ppb	4404.5	0.86%
QC value within limits for Al 396.153Radial Recovery = 102.40%								
As 188.979†	323.4	486.00	µg/L	11.193	486.00	ppb	11.193	2.30%
QC value within limits for As 188.979 Recovery = 97.20%								
B 249.677†	13958.3	545.25	µg/L	0.364	545.25	ppb	0.364	0.07%
QC value within limits for B 249.677 Recovery = 109.05%								
Ba 233.527†	19321.4	496.61	µg/L	0.361	496.61	ppb	0.361	0.07%
QC value within limits for Ba 233.527 Recovery = 99.32%								
Be 313.107†	386766.3	241.82	µg/L	1.433	241.82	ppb	1.433	0.59%
QC value within limits for Be 313.107 Recovery = 96.73%								
Ca 317.933Radial†	1258806.7	487060	µg/L	4148.9	487060	ppb	4148.9	0.85%
QC value within limits for Ca 317.933Radial Recovery = 97.41%								
Cd 226.502†	18190.4	470.20	µg/L	0.831	470.20	ppb	0.831	0.18%
QC value within limits for Cd 226.502 Recovery = 94.04%								
Co 228.616†	8945.9	432.29	µg/L	1.410	432.29	ppb	1.410	0.33%

QC value within limits for Co 228.616 Recovery = 86.46%

Cr 267.716†	22695.4	477.12 µg/L	0.852	477.12 ppb	0.852	0.18%

QC value within limits for Cr 267.716 Recovery = 95.42%

Cu 324.752†	75227.0	562.70 µg/L	0.920	562.70 ppb	0.920	0.16%

QC value within limits for Cu 324.752 Recovery = 112.54%

Fe 238.204 Radial†	29937.2	190400 µg/L	916.9	190400 ppb	916.9	0.48%

QC value within limits for Fe 238.204 Radial Recovery = 95.20%

K 766.490 Radial†	10217.0	5228.9 µg/L	26.91	5228.9 ppb	26.91	0.51%

QC value within limits for K 766.490 Radial Recovery = 104.58%

Mg 279.077 IEC†	80231.5	495090 µg/L	2980.3	495090 ppb	2980.3	0.60%

QC value within limits for Mg 279.077 IEC Recovery = 99.02%

Mn 257.610†	144622.4	485.71 µg/L	0.611	485.71 ppb	0.611	0.13%

QC value within limits for Mn 257.610 Recovery = 97.14%

Mo 202.031†	4126.9	489.52 µg/L	1.085	489.52 ppb	1.085	0.22%

QC value within limits for Mo 202.031 Recovery = 97.90%

Na 589.592 Radial†	20993.7	5257.3 µg/L	28.79	5257.3 ppb	28.79	0.55%

QC value within limits for Na 589.592 Radial Recovery = 105.15%

Ni 231.604†	7929.3	433.82 µg/L	1.465	433.82 ppb	1.465	0.34%

QC value within limits for Ni 231.604 Recovery = 86.76%

P 214.914†	1268.8	2469.9 µg/L	7.25	2469.9 ppb	7.25	0.29%

QC value within limits for P 214.914 Recovery = 98.79%

Pb 220.353†	1713.1	485.26 µg/L	1.790	485.26 ppb	1.790	0.37%

QC value within limits for Pb 220.353 Recovery = 97.05%

S 181.975 Axial†	576.3	2722.8 µg/L	23.52	2722.8 ppb	23.52	0.86%

QC value within limits for S 181.975 Axial Recovery = 108.91%

Sb 206.836†	559.5	501.09 µg/L	6.517	501.09 ppb	6.517	1.30%

QC value within limits for Sb 206.836 Recovery = 100.22%

Se 196.026†	1820.1	2323.4 µg/L	18.33	2323.4 ppb	18.33	0.79%

QC value within limits for Se 196.026 Recovery = 92.94%

SiO2†	59941.3	11007 µg/L	18.6	11007 ppb	18.6	0.17%

QC value within limits for SiO2 Recovery = 102.92%

Si 251.611†	69780.6	5123.8 µg/L	1.58	5123.8 ppb	1.58	0.03%

QC value within limits for Si 251.611 Recovery = 102.48%

Sn 189.927†	543.7	507.89 µg/L	2.132	507.89 ppb	2.132	0.42%

QC value within limits for Sn 189.927 Recovery = 101.58%

Sr 421.552†	101426.3	509.77 µg/L	2.624	509.77 ppb	2.624	0.51%

QC value within limits for Sr 421.552 Recovery = 101.95%

Ti 334.940†	234638.4	507.10 µg/L	0.237	507.10 ppb	0.237	0.05%

QC value within limits for Ti 334.940 Recovery = 101.42%

Tl 190.801†	340.2	460.66 µg/L	7.271	460.66 ppb	7.271	1.58%

QC value within limits for Tl 190.801 Recovery = 92.13%

U 409.014†	5266.7	453.52 µg/L	5.276	453.52 ppb	5.276	1.16%

QC value within limits for U 409.014 Recovery = 90.70%

V 292.402†	43697.0	511.21 µg/L	0.288	511.21 ppb	0.288	0.06%

QC value within limits for V 292.402 Recovery = 102.24%

Zn 213.857†	19321.6	475.32 µg/L	0.709	475.32 ppb	0.709	0.15%

QC value within limits for Zn 213.857 Recovery = 95.06%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/10/2009 02:58:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111504.9	111504.9	95.6	%			02:59:09
1	Al 396.153Radial†	983487.9	1028557.3	511050	µg/L	511050	ppb	02:59:03
1	Ca 317.933Radial†	1212074.4	1267358.2	490370	µg/L	490370	ppb	02:59:03
1	Fe 238.204 Radial†	68115.9	71230.8	452990	µg/L	452990	ppb	02:59:09
1	K 766.490 Radial†	702.0	51.8	26.504	µg/L	26.504	ppb	02:59:09
1	Mg 279.077 IEC†	74475.0	77881.8	480180	µg/L	480180	ppb	02:59:09
1	Na 589.592 Radial†	1879972.5	1966994.0	492580	µg/L	492580	ppb	02:59:03
1	Sr 421.552†	866.1	968.2	4.8660	µg/L	4.8660	ppb	02:59:09
1	Sc 361.383	1864230.3	1864230.3	92.187	%			02:59:44
1	Y 371.029	1127608.4	1127608.4	89.582	%			02:59:44
1	Ag 328.068†	-3721.5	-4047.3	-1.5222	µg/L	-1.5222	ppb	02:59:50
1	As 188.979†	33.6	34.2	-78.094	µg/L	-78.094	ppb	03:00:11
1	B 249.677†	4583.2	4833.8	67.107	µg/L	67.107	ppb	02:59:50
1	Ba 233.527†	256.0	355.8	9.0131	µg/L	9.0131	ppb	03:00:11
1	Be 313.107†	-2140.2	-5837.4	-3.6679	µg/L	-3.6679	ppb	02:59:50
1	Cd 226.502†	1348.6	1561.8	16.279	µg/L	16.279	ppb	02:59:50
1	Co 228.616†	47.4	118.1	5.5657	µg/L	5.5657	ppb	03:00:11
1	Cr 267.716†	-277.5	-201.2	-4.3449	µg/L	-4.3449	ppb	03:00:11
1	Cu 324.752†	-7537.0	-12445.5	10.975	µg/L	10.975	ppb	02:59:50
1	Mn 257.610†	-13415.1	-14350.7	11.119	µg/L	11.119	ppb	02:59:50
1	Mo 202.031†	-195.8	-208.7	-6.5794	µg/L	-6.5794	ppb	03:00:11
1	Ni 231.604†	229.4	-26.7	-1.4620	µg/L	-1.4620	ppb	03:00:11
1	P 214.914†	350.9	179.8	23.404	µg/L	23.404	ppb	03:00:11
1	Pb 220.353†	16.5	-38.4	17.421	µg/L	17.421	ppb	03:00:11
1	S 181.975 Axial†	63.9	47.2	95.333	µg/L	95.333	ppb	03:00:11
1	Sb 206.836†	49.3	32.3	-6.4970	µg/L	-6.4970	ppb	03:00:11
1	Se 196.026†	-106.7	-125.7	27.298	µg/L	27.298	ppb	03:00:11
1	SiO2†	2280.7	-277.4	-50.944	µg/L	-50.944	ppb	03:00:11
1	Si 251.611†	-223.0	-567.1	-33.078	µg/L	-33.078	ppb	03:00:11
1	Sn 189.927†	-443.4	-503.4	0.2752	µg/L	0.2752	ppb	03:00:11
1	Ti 334.940†	17175.9	17857.1	13.104	µg/L	13.104	ppb	02:59:50
1	Tl 190.801†	2.7	23.3	-29.751	µg/L	-29.751	ppb	03:00:11
1	U 409.014†	140637.9	151826.5	13693	µg/L	13693	ppb	02:59:50
1	V 292.402†	-4505.9	-4761.1	5.4978	µg/L	5.4978	ppb	02:59:50
1	Zn 213.857†	2977.7	2703.4	10.438	µg/L	10.438	ppb	03:00:11
2	Sc RADIAL	111318.2	111318.2	95.4	%			02:59:21
2	Al 396.153Radial†	980837.3	1027504.9	510530	µg/L	510530	ppb	02:59:16
2	Ca 317.933Radial†	1207186.3	1264362.3	489210	µg/L	489210	ppb	02:59:16
2	Fe 238.204 Radial†	68784.0	72050.2	458200	µg/L	458200	ppb	02:59:21
2	K 766.490 Radial†	737.0	89.6	45.880	µg/L	45.880	ppb	02:59:21
2	Mg 279.077 IEC†	75131.5	78700.2	485230	µg/L	485230	ppb	02:59:21
2	Na 589.592 Radial†	1874931.3	1965009.0	492090	µg/L	492090	ppb	02:59:16
2	Sr 421.552†	900.5	1005.7	5.0548	µg/L	5.0548	ppb	02:59:21
2	Sc 361.383	1835548.6	1835548.6	90.769	%			03:00:17
2	Y 371.029	1110309.3	1110309.3	88.207	%			03:00:17
2	Ag 328.068†	-3708.4	-4096.0	-1.5597	µg/L	-1.5597	ppb	03:00:22
2	As 188.979†	34.5	35.8	-75.844	µg/L	-75.844	ppb	03:00:43
2	B 249.677†	4565.6	4892.1	67.996	µg/L	67.996	ppb	03:00:22
2	Ba 233.527†	254.6	358.5	9.0810	µg/L	9.0810	ppb	03:00:43
2	Be 313.107†	-2271.6	-6018.4	-3.7814	µg/L	-3.7814	ppb	03:00:22
2	Cd 226.502†	1409.5	1651.9	18.454	µg/L	18.454	ppb	03:00:22
2	Co 228.616†	37.3	107.8	5.0638	µg/L	5.0638	ppb	03:00:43
2	Cr 267.716†	-252.9	-178.8	-3.8771	µg/L	-3.8771	ppb	03:00:43
2	Cu 324.752†	-7653.6	-12701.8	10.317	µg/L	10.317	ppb	03:00:22
2	Mn 257.610†	-13452.0	-14618.7	10.919	µg/L	10.919	ppb	03:00:22
2	Mo 202.031†	-197.2	-213.6	-6.9402	µg/L	-6.9402	ppb	03:00:43
2	Ni 231.604†	213.6	-40.3	-2.2029	µg/L	-2.2029	ppb	03:00:43
2	P 214.914†	374.8	212.1	82.338	µg/L	82.338	ppb	03:00:43
2	Pb 220.353†	21.4	-32.6	18.586	µg/L	18.586	ppb	03:00:43

2	S 181.975 Axial†	67.3	52.0	117.47	µg/L	117.47	ppb	03:00:43
2	Sb 206.836†	55.9	40.5	1.7280	µg/L	1.7280	ppb	03:00:43
2	Se 196.026†	-119.1	-141.1	8.9989	µg/L	8.9989	ppb	03:00:43
2	SiO2†	2257.4	-264.4	-48.549	µg/L	-48.549	ppb	03:00:43
2	Si 251.611†	-251.6	-602.4	-35.393	µg/L	-35.393	ppb	03:00:43
2	Sn 189.927†	-451.5	-519.9	-6.7782	µg/L	-6.7782	ppb	03:00:43
2	Ti 334.940†	17219.0	18195.8	13.940	µg/L	13.940	ppb	03:00:22
2	Tl 190.801†	8.0	29.2	-20.528	µg/L	-20.528	ppb	03:00:43
2	U 409.014†	141065.2	154681.1	13951	µg/L	13951	ppb	03:00:22
2	V 292.402†	-4498.4	-4829.1	5.5721	µg/L	5.5721	ppb	03:00:22
2	Zn 213.857†	2959.4	2733.7	10.555	µg/L	10.555	ppb	03:00:43
3	Sc RADIAL	111262.9	111262.9	95.4	%			02:59:34
3	Al 396.153Radial†	980927.6	1028110.1	510830	µg/L	510830	ppb	02:59:29
3	Ca 317.933Radial†	1208004.7	1265848.6	489780	µg/L	489780	ppb	02:59:29
3	Fe 238.204 Radial†	68676.3	71973.1	457710	µg/L	457710	ppb	02:59:34
3	K 766.490 Radial†	787.5	143.0	73.186	µg/L	73.186	ppb	02:59:34
3	Mg 279.077 IEC†	74943.4	78542.2	484250	µg/L	484250	ppb	02:59:34
3	Na 589.592 Radial†	1873584.8	1964573.5	491980	µg/L	491980	ppb	02:59:29
3	Sr 421.552†	861.2	965.1	4.8505	µg/L	4.8505	ppb	02:59:34
3	Sc 361.383	1848335.3	1848335.3	91.401	%			03:00:49
3	Y 371.029	1117737.4	1117737.4	88.798	%			03:00:49
3	Ag 328.068†	-3682.7	-4039.5	-1.0889	µg/L	-1.0889	ppb	03:00:55
3	As 188.979†	35.3	36.4	-74.787	µg/L	-74.787	ppb	03:01:15
3	B 249.677†	4721.4	5027.7	74.029	µg/L	74.029	ppb	03:00:55
3	Ba 233.527†	273.3	377.1	9.5554	µg/L	9.5554	ppb	03:01:15
3	Be 313.107†	-2251.1	-5978.7	-3.7564	µg/L	-3.7564	ppb	03:00:55
3	Cd 226.502†	1402.6	1633.6	17.970	µg/L	17.970	ppb	03:00:55
3	Co 228.616†	26.6	95.8	4.4828	µg/L	4.4828	ppb	03:01:15
3	Cr 267.716†	-259.7	-184.4	-3.9959	µg/L	-3.9959	ppb	03:01:15
3	Cu 324.752†	-7695.7	-12689.4	10.297	µg/L	10.297	ppb	03:00:55
3	Mn 257.610†	-13482.6	-14549.7	11.077	µg/L	11.077	ppb	03:00:55
3	Mo 202.031†	-206.5	-222.3	-7.9773	µg/L	-7.9773	ppb	03:01:15
3	Ni 231.604†	237.2	-16.0	-0.8774	µg/L	-0.8774	ppb	03:01:15
3	P 214.914†	382.2	217.2	93.525	µg/L	93.525	ppb	03:01:15
3	Pb 220.353†	11.9	-43.3	15.909	µg/L	15.909	ppb	03:01:15
3	S 181.975 Axial†	58.0	41.3	65.172	µg/L	65.172	ppb	03:01:15
3	Sb 206.836†	58.5	42.9	4.0189	µg/L	4.0189	ppb	03:01:15
3	Se 196.026†	-102.5	-122.0	33.507	µg/L	33.507	ppb	03:01:15
3	SiO2†	2287.5	-248.6	-45.657	µg/L	-45.657	ppb	03:01:15
3	Si 251.611†	-256.1	-605.4	-35.747	µg/L	-35.747	ppb	03:01:15
3	Sn 189.927†	-447.4	-511.9	-2.8484	µg/L	-2.8484	ppb	03:01:15
3	Ti 334.940†	17124.3	17960.9	13.373	µg/L	13.373	ppb	03:00:55
3	Tl 190.801†	17.5	39.5	-4.8719	µg/L	-4.8719	ppb	03:01:15
3	U 409.014†	141529.7	154114.1	13900	µg/L	13900	ppb	03:00:55
3	V 292.402†	-4590.5	-4895.7	4.6932	µg/L	4.6932	ppb	03:00:55
3	Zn 213.857†	2967.3	2719.8	10.260	µg/L	10.260	ppb	03:01:15

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1849371.4	91.452	%	0.7105				0.78%
Sc RADIAL	111362.0	95.5	%	0.11				0.11%
Y 371.029	1118551.7	88.862	%	0.6894				0.78%
Ag 328.068†	-4060.9	-1.3903	µg/L	0.26162	-1.3903	ppb	0.26162	18.82%
Al 396.153Radial†	1028057.4	510800	µg/L	262.4	510800	ppb	262.4	0.05%
QC value within limits for Al 396.153Radial Recovery = 102.16%								
As 188.979†	35.5	-76.242	µg/L	1.6891	-76.242	ppb	1.6891	2.22%
B 249.677†	4917.9	69.711	µg/L	3.7661	69.711	ppb	3.7661	5.40%
Ba 233.527†	363.8	9.2165	µg/L	0.29546	9.2165	ppb	0.29546	3.21%
Be 313.107†	-5944.9	-3.7352	µg/L	0.05966	-3.7352	ppb	0.05966	1.60%
Ca 317.933Radial†	1265856.4	489780	µg/L	579.6	489780	ppb	579.6	0.12%
QC value within limits for Ca 317.933Radial Recovery = 97.96%								
Cd 226.502†	1615.8	17.568	µg/L	1.1422	17.568	ppb	1.1422	6.50%
Co 228.616†	107.2	5.0374	µg/L	0.54194	5.0374	ppb	0.54194	10.76%
Cr 267.716†	-188.1	-4.0726	µg/L	0.24311	-4.0726	ppb	0.24311	5.97%
Cu 324.752†	-12612.2	10.530	µg/L	0.3858	10.530	ppb	0.3858	3.66%
Fe 238.204 Radial†	71751.4	456300	µg/L	2877.6	456300	ppb	2877.6	0.63%
QC value within limits for Fe 238.204 Radial Recovery = 91.26%								
K 766.490 Radial†	94.8	48.523	µg/L	23.4529	48.523	ppb	23.4529	48.33%
Mg 279.077 IEC†	78374.7	483220	µg/L	2676.3	483220	ppb	2676.3	0.55%

QC value within limits for Mg 279.077 IEC Recovery = 96.64%

Mn 257.610†	-14506.4	11.038 µg/L	0.1059	11.038 ppb	0.1059	0.96%
Mo 202.031†	-214.9	-7.1656 µg/L	0.72568	-7.1656 ppb	0.72568	10.13%
Na 589.592 Radial†	1965525.5	492220 µg/L	323.1	492220 ppb	323.1	0.07%

QC value within limits for Na 589.592 Radial Recovery = 98.44%

Ni 231.604†	-27.7	-1.5141 µg/L	0.66432	-1.5141 ppb	0.66432	43.87%
P 214.914†	203.0	66.422 µg/L	37.6725	66.422 ppb	37.6725	56.72%
Pb 220.353†	-38.1	17.305 µg/L	1.3422	17.305 ppb	1.3422	7.76%
S 181.975 Axial†	46.8	92.658 µg/L	26.2517	92.658 ppb	26.2517	28.33%
Sb 206.836†	38.6	-0.2501 µg/L	5.52995	-0.2501 ppb	5.52995	>999.9%
Se 196.026†	-129.6	23.268 µg/L	12.7414	23.268 ppb	12.7414	54.76%
SiO2†	-263.5	-48.384 µg/L	2.6475	-48.384 ppb	2.6475	5.47%
Si 251.611†	-591.6	-34.739 µg/L	1.4493	-34.739 ppb	1.4493	4.17%
Sn 189.927†	-511.7	-3.1171 µg/L	3.53438	-3.1171 ppb	3.53438	113.39%
Sr 421.552†	979.7	4.9238 µg/L	0.11371	4.9238 ppb	0.11371	2.31%
Ti 334.940†	18004.6	13.472 µg/L	0.4271	13.472 ppb	0.4271	3.17%
Tl 190.801†	30.7	-18.383 µg/L	12.5772	-18.383 ppb	12.5772	68.42%
U 409.014†	153540.6	13848 µg/L	136.5	13848 ppb	136.5	0.99%

QC value within limits for U 409.014 Recovery = 92.32%

V 292.402†	-4828.6	5.2543 µg/L	0.48738	5.2543 ppb	0.48738	9.28%
Zn 213.857†	2719.0	10.417 µg/L	0.1485	10.417 ppb	0.1485	1.43%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/10/2009 03:01:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	123511.7	123511.7	106	%			03:02:07
1	Al 396.153Radial†	967.4	790.2	22.239	µg/L	22.239	ppb	03:02:07
1	Ca 317.933Radial†	660.8	211.2	81.710	µg/L	81.710	ppb	03:02:27
1	Fe 238.204 Radial†	17.2	1.1	320.45	µg/L	320.45	ppb	03:02:27
1	K 766.490 Radial†	575490.0	542736.5	277770	µg/L	277770	ppb	03:02:01
1	Mg 279.077 IEC†	-34.0	-47.5	-50.348	µg/L	-50.348	ppb	03:02:27
1	Na 589.592 Radial†	-137.0	504.8	126.40	µg/L	126.40	ppb	03:02:07
1	Sr 421.552†	1923685.9	1816544.9	9129.9	µg/L	9129.9	ppb	03:02:01
1	Sc 361.383	1995017.0	1995017.0	98.655	%			03:03:59
1	Y 371.029	1209781.9	1209781.9	96.110	%			03:03:59
1	Ag 328.068†	-7099.5	-7206.7	2.0971	µg/L	2.0971	ppb	03:03:59
1	As 188.979†	5263.9	5333.5	9692.2	µg/L	9692.2	ppb	03:04:04
1	B 249.677†	110947.4	112322.6	4869.4	µg/L	4869.4	ppb	03:03:59
1	Ba 233.527†	548878.1	556441.3	14293	µg/L	14293	ppb	03:03:59
1	Be 313.107†	4560535.9	4619213.4	2886.8	µg/L	2886.8	ppb	03:03:48
1	Cd 226.502†	356212.9	361169.6	9623.2	µg/L	9623.2	ppb	03:03:59
1	Co 228.616†	193481.2	196186.4	9482.0	µg/L	9482.0	ppb	03:03:59
1	Cr 267.716†	1124902.6	1140343.0	23938	µg/L	23938	ppb	03:03:59
1	Cu 324.752†	2905093.7	2940441.6	20396	µg/L	20396	ppb	03:03:59
1	Mn 257.610†	2884294.6	2923829.9	9335.8	µg/L	9335.8	ppb	03:03:59
1	Mo 202.031†	82256.8	83382.3	9739.4	µg/L	9739.4	ppb	03:03:59
1	Ni 231.604†	173740.5	175834.3	9620.1	µg/L	9620.1	ppb	03:03:59
1	P 214.914†	8758.1	8676.6	15253	µg/L	15253	ppb	03:04:04
1	Pb 220.353†	94834.6	96071.6	24829	µg/L	24829	ppb	03:03:59
1	S 181.975 Axial†	10279.0	10397.0	50906	µg/L	50906	ppb	03:04:04
1	Sb 206.836†	10261.2	10380.1	10068	µg/L	10068	ppb	03:04:04
1	Se 196.026†	7423.8	7515.2	9604.2	µg/L	9604.2	ppb	03:04:04
1	SiO2†	530846.7	535334.7	98304	µg/L	98304	ppb	03:03:59
1	Si 251.611†	610758.6	618762.5	44747	µg/L	44747	ppb	03:03:59
1	Sn 189.927†	20718.1	20978.2	10742	µg/L	10742	ppb	03:04:04
1	Ti 334.940†	4305220.4	4363157.6	9938.9	µg/L	9938.9	ppb	03:03:48
1	Tl 190.801†	6189.8	6294.6	9726.4	µg/L	9726.4	ppb	03:04:04
1	U 409.014†	1864.0	1159.0	105.09	µg/L	105.09	ppb	03:03:59
1	V 292.402†	867605.6	879564.1	9962.2	µg/L	9962.2	ppb	03:03:59
1	Zn 213.857†	544709.1	551610.8	14541	µg/L	14541	ppb	03:03:59
2	Sc RADIAL	119662.2	119662.2	103	%			03:02:39
2	Al 396.153Radial†	1213.5	1059.5	151.82	µg/L	151.82	ppb	03:02:39
2	Ca 317.933Radial†	904.9	469.2	181.53	µg/L	181.53	ppb	03:02:59
2	Fe 238.204 Radial†	20.9	5.2	349.97	µg/L	349.97	ppb	03:02:59
2	K 766.490 Radial†	582179.6	566738.1	290050	µg/L	290050	ppb	03:02:33
2	Mg 279.077 IEC†	-19.1	-34.1	35.389	µg/L	35.389	ppb	03:02:59
2	Na 589.592 Radial†	25.1	658.5	164.91	µg/L	164.91	ppb	03:02:39
2	Sr 421.552†	1947743.9	1898428.4	9541.4	µg/L	9541.4	ppb	03:02:33
2	Sc 361.383	1991028.4	1991028.4	98.457	%			03:04:24
2	Y 371.029	1210880.7	1210880.7	96.197	%			03:04:24
2	Ag 328.068†	-7192.8	-7315.9	1.8070	µg/L	1.8070	ppb	03:04:24
2	As 188.979†	5296.2	5376.9	9770.7	µg/L	9770.7	ppb	03:04:29
2	B 249.677†	111834.2	113448.5	4918.2	µg/L	4918.2	ppb	03:04:24
2	Ba 233.527†	553631.3	562383.6	14446	µg/L	14446	ppb	03:04:24
2	Be 313.107†	4535937.6	4603490.4	2877.0	µg/L	2877.0	ppb	03:04:13
2	Cd 226.502†	359304.8	365033.4	9726.1	µg/L	9726.1	ppb	03:04:24
2	Co 228.616†	195093.1	198216.5	9580.4	µg/L	9580.4	ppb	03:04:24
2	Cr 267.716†	1133922.9	1151788.9	24179	µg/L	24179	ppb	03:04:24
2	Cu 324.752†	2927972.4	2969577.8	20598	µg/L	20598	ppb	03:04:24
2	Mn 257.610†	2906208.6	2951944.2	9425.6	µg/L	9425.6	ppb	03:04:24
2	Mo 202.031†	83022.9	84327.3	9849.8	µg/L	9849.8	ppb	03:04:24
2	Ni 231.604†	175062.5	177529.8	9712.9	µg/L	9712.9	ppb	03:04:24
2	P 214.914†	8799.7	8736.7	15350	µg/L	15350	ppb	03:04:29
2	Pb 220.353†	95569.2	97010.3	25071	µg/L	25071	ppb	03:04:24

2	S 181.975 Axial†	10268.8	10407.5	50958 µg/L	50958 ppb	03:04:29
2	Sb 206.836†	10297.5	10437.7	10123 µg/L	10123 ppb	03:04:29
2	Se 196.026†	7392.2	7498.1	9582.4 µg/L	9582.4 ppb	03:04:29
2	SiO2†	535028.9	540660.3	99282 µg/L	99282 ppb	03:04:24
2	Si 251.611†	615643.4	624964.0	45200 µg/L	45200 ppb	03:04:24
2	Sn 189.927†	20734.6	21037.1	10772 µg/L	10772 ppb	03:04:29
2	Ti 334.940†	4282611.0	4348936.2	9906.5 µg/L	9906.5 ppb	03:04:13
2	Tl 190.801†	6192.0	6309.4	9748.8 µg/L	9748.8 ppb	03:04:29
2	U 409.014†	1808.8	1106.7	100.34 µg/L	100.34 ppb	03:04:24
2	V 292.402†	874856.6	888690.5	10066 µg/L	10066 ppb	03:04:24
2	Zn 213.857†	548147.9	556209.6	14662 µg/L	14662 ppb	03:04:24
3	Sc RADIAL	115737.2	115737.2	99.2 %		03:03:11
3	Al 396.153Radial†	806.5	689.5	-29.272 µg/L	-29.272 ppb	03:03:11
3	Ca 317.933Radial†	709.2	301.9	116.81 µg/L	116.81 ppb	03:03:31
3	Fe 238.204 Radial†	10.7	-4.4	286.77 µg/L	286.77 ppb	03:03:31
3	K 766.490 Radial†	580258.2	584045.4	298910 µg/L	298910 ppb	03:03:05
3	Mg 279.077 IEC†	-33.0	-48.7	-56.262 µg/L	-56.262 ppb	03:03:31
3	Na 589.592 Radial†	-312.6	319.1	79.917 µg/L	79.917 ppb	03:03:11
3	Sr 421.552†	1941195.7	1956210.8	9831.9 µg/L	9831.9 ppb	03:03:05
3	Sc 361.383	1987125.1	1987125.1	98.264 %		03:04:49
3	Y 371.029	1209146.7	1209146.7	96.059 %		03:04:49
3	Ag 328.068†	-7118.4	-7254.5	1.8505 µg/L	1.8505 ppb	03:04:49
3	As 188.979†	5201.9	5291.5	9616.1 µg/L	9616.1 ppb	03:04:54
3	B 249.677†	111423.3	113253.5	4909.8 µg/L	4909.8 ppb	03:04:49
3	Ba 233.527†	548637.9	558406.5	14343 µg/L	14343 ppb	03:04:49
3	Be 313.107†	4563466.4	4640554.9	2900.1 µg/L	2900.1 ppb	03:04:38
3	Cd 226.502†	356039.5	362427.2	9656.7 µg/L	9656.7 ppb	03:04:49
3	Co 228.616†	193139.6	196617.6	9502.8 µg/L	9502.8 ppb	03:04:49
3	Cr 267.716†	1121485.7	1141394.3	23960 µg/L	23960 ppb	03:04:49
3	Cu 324.752†	2905622.0	2952674.1	20481 µg/L	20481 ppb	03:04:49
3	Mn 257.610†	2880301.2	2931377.2	9359.9 µg/L	9359.9 ppb	03:04:49
3	Mo 202.031†	82252.0	83708.5	9777.5 µg/L	9777.5 ppb	03:04:49
3	Ni 231.604†	173402.0	176189.2	9639.5 µg/L	9639.5 ppb	03:04:49
3	P 214.914†	8605.0	8556.1	14994 µg/L	14994 ppb	03:04:54
3	Pb 220.353†	94780.1	96397.9	24913 µg/L	24913 ppb	03:04:49
3	S 181.975 Axial†	10066.0	10221.6	50047 µg/L	50047 ppb	03:04:54
3	Sb 206.836†	10058.0	10214.5	9905.7 µg/L	9905.7 ppb	03:04:54
3	Se 196.026†	7247.3	7365.5	9412.9 µg/L	9412.9 ppb	03:04:54
3	SiO2†	532030.5	538676.3	98918 µg/L	98918 ppb	03:04:49
3	Si 251.611†	611781.1	622261.8	45005 µg/L	45005 ppb	03:04:49
3	Sn 189.927†	20156.3	20489.9	10492 µg/L	10492 ppb	03:04:54
3	Ti 334.940†	4312010.6	4387399.1	9994.1 µg/L	9994.1 ppb	03:04:38
3	Tl 190.801†	6124.3	6252.9	9662.8 µg/L	9662.8 ppb	03:04:54
3	U 409.014†	1776.0	1076.9	97.649 µg/L	97.649 ppb	03:04:49
3	V 292.402†	866616.3	882050.1	9990.4 µg/L	9990.4 ppb	03:04:49
3	Zn 213.857†	543533.1	552606.8	14567 µg/L	14567 ppb	03:04:49

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1991056.9	98.459	%	0.1951				0.20%
Sc RADIAL	119637.0	103	%	3.3				3.25%
Y 371.029	1209936.4	96.122	%	0.0697				0.07%
Ag 328.068†	-7259.1	1.9182	µg/L	0.15643	1.9182	ppb	0.15643	8.16%
Al 396.153Radial†	846.4	48.261	µg/L	93.3060	48.261	ppb	93.3060	193.34%
As 188.979†	5334.0	9693.0	µg/L	77.34	9693.0	ppb	77.34	0.80%
QC value within limits for As 188.979 Recovery = 96.93%								
B 249.677†	113008.2	4899.1	µg/L	26.08	4899.1	ppb	26.08	0.53%
QC value within limits for B 249.677 Recovery = 97.98%								
Ba 233.527†	559077.1	14361	µg/L	77.8	14361	ppb	77.8	0.54%
QC value within limits for Ba 233.527 Recovery = 95.74%								
Be 313.107†	4621086.2	2888.0	µg/L	11.62	2888.0	ppb	11.62	0.40%
QC value within limits for Be 313.107 Recovery = 96.27%								
Ca 317.933Radial†	327.4	126.68	µg/L	50.636	126.68	ppb	50.636	39.97%
Cd 226.502†	362876.7	9668.7	µg/L	52.50	9668.7	ppb	52.50	0.54%
QC value within limits for Cd 226.502 Recovery = 96.69%								
Co 228.616†	197006.8	9521.7	µg/L	51.87	9521.7	ppb	51.87	0.54%
QC value within limits for Co 228.616 Recovery = 95.22%								
Cr 267.716†	1144508.7	24026	µg/L	132.8	24026	ppb	132.8	0.55%
QC value within limits for Cr 267.716 Recovery = 96.10%								

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Cu 324.752†          2954231.2       20492 µg/L        101.5       20492 ppb        101.5   0.50%
   QC value within limits for Cu 324.752  Recovery = 102.46%
Fe 238.204 Radial†         0.6      319.06 µg/L       31.624      319.06 ppb       31.624   9.91%
K 766.490 Radial†     564506.7      288910 µg/L      10616.8      288910 ppb      10616.8   3.67%
   QC value within limits for K 766.490 Radial  Recovery = 96.30%
Mg 279.077 IEC†          -43.4     -23.740 µg/L      51.2929     -23.740 ppb      51.2929 216.06%
Mn 257.610†          2935717.1      9373.8 µg/L        46.46      9373.8 ppb        46.46   0.50%
   QC value within limits for Mn 257.610  Recovery = 93.74%
Mo 202.031†            83806.0      9788.9 µg/L        56.07      9788.9 ppb        56.07   0.57%
   QC value within limits for Mo 202.031  Recovery = 97.89%
Na 589.592 Radial†       494.1      123.75 µg/L       42.560      123.75 ppb       42.560  34.39%
Ni 231.604†           176517.8      9657.5 µg/L        48.92      9657.5 ppb        48.92   0.51%
   QC value within limits for Ni 231.604  Recovery = 96.57%
P 214.914†              8656.5       15199 µg/L        184.3       15199 ppb        184.3   1.21%
   QC value within limits for P 214.914  Recovery = 101.33%
Pb 220.353†            96493.3       24938 µg/L        123.2       24938 ppb        123.2   0.49%
   QC value within limits for Pb 220.353  Recovery = 99.75%
S 181.975 Axial†       10342.1       50637 µg/L        511.3       50637 ppb        511.3   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 101.27%
Sb 206.836†            10344.1       10032 µg/L        112.8       10032 ppb        112.8   1.12%
   QC value within limits for Sb 206.836  Recovery = 100.32%
Se 196.026†             7459.6      9533.2 µg/L       104.74      9533.2 ppb       104.74   1.10%
   QC value within limits for Se 196.026  Recovery = 95.33%
SiO2†                 538223.8       98835 µg/L        494.2     ♦ 98835 ppb        494.2   0.50%
   QC value within limits for SiO2  Recovery = 92.37%
Si 251.611†           621996.1       44984 µg/L        227.0       44984 ppb        227.0   0.50%
   QC value less than the lower limit for Si 251.611  Recovery = 89.97%
Sn 189.927†            20835.1       10669 µg/L        153.8       10669 ppb        153.8   1.44%
   QC value within limits for Sn 189.927  Recovery = 106.69%
Sr 421.552†          1890394.7      9501.1 µg/L       352.72      9501.1 ppb       352.72   3.71%
   QC value within limits for Sr 421.552  Recovery = 95.01%
Ti 334.940†          4366497.6      9946.5 µg/L        44.30      9946.5 ppb        44.30   0.45%
   QC value within limits for Ti 334.940  Recovery = 99.47%
Tl 190.801†             6285.6      9712.7 µg/L        44.63      9712.7 ppb        44.63   0.46%
   QC value within limits for Tl 190.801  Recovery = 97.13%
U 409.014†              1114.2      101.02 µg/L        3.766      101.02 ppb        3.766   3.73%
V 292.402†            883434.9       10006 µg/L         53.5       10006 ppb         53.5   0.53%
   QC value within limits for V 292.402  Recovery = 100.06%
Zn 213.857†           553475.7       14590 µg/L         63.7       14590 ppb         63.7   0.44%
   QC value within limits for Zn 213.857  Recovery = 97.27%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:05:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114144.5	114144.5	97.9	%			03:05:41
1	Al 396.153Radial†	10436.6	10540.5	5217.6	µg/L	5217.6	ppb	03:05:41
1	Ca 317.933Radial†	13444.9	13324.8	5155.6	µg/L	5155.6	ppb	03:06:01
1	Fe 238.204 Radial†	805.8	808.2	5156.2	µg/L	5156.2	ppb	03:06:01
1	K 766.490 Radial†	10527.8	10074.4	5156.0	µg/L	5156.0	ppb	03:05:41
1	Mg 279.077 IEC†	848.6	851.6	5263.2	µg/L	5263.2	ppb	03:06:01
1	Na 589.592 Radial†	39836.4	41337.4	10352	µg/L	10352	ppb	03:05:41
1	Sr 421.552†	98847.3	101060.8	507.93	µg/L	507.93	ppb	03:05:41
1	Sc 361.383	1981668.3	1981668.3	97.995	%			03:07:05
1	Y 371.029	1243227.2	1243227.2	98.767	%			03:07:05
1	Ag 328.068†	55086.8	56203.8	516.19	µg/L	516.19	ppb	03:07:11
1	As 188.979†	280.1	283.7	513.94	µg/L	513.94	ppb	03:07:31
1	B 249.677†	11537.3	11635.6	502.81	µg/L	502.81	ppb	03:07:11
1	Ba 233.527†	18979.6	19446.1	499.82	µg/L	499.82	ppb	03:07:11
1	Be 313.107†	791780.9	804469.0	503.20	µg/L	503.20	ppb	03:07:05
1	Cd 226.502†	18405.4	18881.0	503.03	µg/L	503.03	ppb	03:07:11
1	Co 228.616†	10118.1	10391.8	502.24	µg/L	502.24	ppb	03:07:11
1	Cr 267.716†	23267.9	23843.9	501.22	µg/L	501.22	ppb	03:07:11
1	Cu 324.752†	75053.4	72319.6	502.75	µg/L	502.75	ppb	03:07:11
1	Mn 257.610†	154624.5	157990.3	505.11	µg/L	505.11	ppb	03:07:05
1	Mo 202.031†	4306.2	4398.0	513.91	µg/L	513.91	ppb	03:07:31
1	Ni 231.604†	9286.9	9201.4	503.42	µg/L	503.42	ppb	03:07:11
1	P 214.914†	1416.1	1244.1	2458.7	µg/L	2458.7	ppb	03:07:31
1	Pb 220.353†	1988.6	1973.1	510.71	µg/L	510.71	ppb	03:07:31
1	S 181.975 Axial†	231.6	214.2	1047.1	µg/L	1047.1	ppb	03:07:31
1	Sb 206.836†	544.3	534.4	521.61	µg/L	521.61	ppb	03:07:31
1	Se 196.026†	403.0	401.4	515.11	µg/L	515.11	ppb	03:07:31
1	SiO2†	31674.8	29571.7	5430.3	µg/L	5430.3	ppb	03:07:11
1	Si 251.611†	33910.5	34279.3	2486.9	µg/L	2486.9	ppb	03:07:11
1	Sn 189.927†	1018.2	1016.6	523.37	µg/L	523.37	ppb	03:07:31
1	Ti 334.940†	228089.7	231983.2	528.15	µg/L	528.15	ppb	03:07:05
1	Tl 190.801†	308.6	335.3	517.48	µg/L	517.48	ppb	03:07:31
1	U 409.014†	6124.4	5519.3	499.59	µg/L	499.59	ppb	03:07:11
1	V 292.402†	43315.8	44329.0	503.46	µg/L	503.46	ppb	03:07:11
1	Zn 213.857†	19223.4	19090.2	501.95	µg/L	501.95	ppb	03:07:11
2	Sc RADIAL	114667.4	114667.4	98.3	%			03:06:07
2	Al 396.153Radial†	10372.1	10426.2	5161.1	µg/L	5161.1	ppb	03:06:07
2	Ca 317.933Radial†	13402.6	13219.0	5114.7	µg/L	5114.7	ppb	03:06:27
2	Fe 238.204 Radial†	801.6	800.1	5104.9	µg/L	5104.9	ppb	03:06:27
2	K 766.490 Radial†	10389.3	9884.6	5058.8	µg/L	5058.8	ppb	03:06:07
2	Mg 279.077 IEC†	849.9	849.0	5246.7	µg/L	5246.7	ppb	03:06:27
2	Na 589.592 Radial†	39629.5	40941.5	10253	µg/L	10253	ppb	03:06:07
2	Sr 421.552†	98064.9	99804.5	501.61	µg/L	501.61	ppb	03:06:07
2	Sc 361.383	2005021.9	2005021.9	99.149	%			03:07:38
2	Y 371.029	1253973.1	1253973.1	99.621	%			03:07:38
2	Ag 328.068†	55400.1	55865.0	513.08	µg/L	513.08	ppb	03:07:44
2	As 188.979†	267.3	267.4	484.37	µg/L	484.37	ppb	03:08:05
2	B 249.677†	11616.4	11578.3	500.34	µg/L	500.34	ppb	03:07:44
2	Ba 233.527†	19178.0	19420.5	499.16	µg/L	499.16	ppb	03:07:44
2	Be 313.107†	796648.5	799967.3	500.39	µg/L	500.39	ppb	03:07:38
2	Cd 226.502†	18542.5	18800.5	500.88	µg/L	500.88	ppb	03:07:44
2	Co 228.616†	10194.4	10348.5	500.15	µg/L	500.15	ppb	03:07:44
2	Cr 267.716†	23441.5	23742.4	499.09	µg/L	499.09	ppb	03:07:44
2	Cu 324.752†	75567.0	71945.5	500.14	µg/L	500.14	ppb	03:07:44
2	Mn 257.610†	155451.5	156986.5	501.90	µg/L	501.90	ppb	03:07:38
2	Mo 202.031†	4298.1	4338.6	506.97	µg/L	506.97	ppb	03:08:05
2	Ni 231.604†	9268.7	9072.6	496.37	µg/L	496.37	ppb	03:07:44
2	P 214.914†	1413.0	1224.3	2418.7	µg/L	2418.7	ppb	03:08:05
2	Pb 220.353†	1997.0	1957.9	506.77	µg/L	506.77	ppb	03:08:05

2	S 181.975 Axial†	231.6	211.5	1034.0 µg/L	1034.0 ppb		03:08:05
2	Sb 206.836†	529.1	512.5	500.19 µg/L	500.19 ppb		03:08:05
2	Se 196.026†	391.5	384.9	494.06 µg/L	494.06 ppb		03:08:05
2	SiO2†	31848.7	29370.6	5393.4 µg/L	5393.4 ppb		03:07:44
2	Si 251.611†	34119.2	34086.7	2473.4 µg/L	2473.4 ppb		03:07:44
2	Sn 189.927†	1015.1	1001.4	515.54 µg/L	515.54 ppb		03:08:05
2	Ti 334.940†	228032.7	229214.7	521.84 µg/L	521.84 ppb		03:07:38
2	Tl 190.801†	300.8	323.8	499.73 µg/L	499.73 ppb		03:08:05
2	U 409.014†	6157.9	5480.3	496.06 µg/L	496.06 ppb		03:07:44
2	V 292.402†	43595.4	44096.2	500.79 µg/L	500.79 ppb		03:07:44
2	Zn 213.857†	19377.0	19016.6	500.04 µg/L	500.04 ppb		03:07:44
3	Sc RADIAL	115758.8	115758.8	99.3 %			03:06:33
3	Al 396.153Radial†	10512.7	10468.4	5182.4 µg/L	5182.4 ppb		03:06:33
3	Ca 317.933Radial†	13441.8	13130.0	5080.3 µg/L	5080.3 ppb		03:06:54
3	Fe 238.204 Radial†	803.7	794.6	5069.6 µg/L	5069.6 ppb		03:06:54
3	K 766.490 Radial†	10567.8	9964.7	5099.8 µg/L	5099.8 ppb		03:06:33
3	Mg 279.077 IEC†	848.2	839.1	5185.7 µg/L	5185.7 ppb		03:06:54
3	Na 589.592 Radial†	40049.8	40984.9	10264 µg/L	10264 ppb		03:06:33
3	Sr 421.552†	99216.5	100024.4	502.72 µg/L	502.72 ppb		03:06:33
3	Sc 361.383	1999085.5	1999085.5	98.856 %			03:08:12
3	Y 371.029	1246729.6	1246729.6	99.045 %			03:08:12
3	Ag 328.068†	55248.9	55878.0	513.20 µg/L	513.20 ppb		03:08:17
3	As 188.979†	273.7	274.6	497.60 µg/L	497.60 ppb		03:08:38
3	B 249.677†	11581.1	11577.2	500.31 µg/L	500.31 ppb		03:08:17
3	Ba 233.527†	19153.8	19453.5	500.01 µg/L	500.01 ppb		03:08:17
3	Be 313.107†	790801.9	796439.0	498.18 µg/L	498.18 ppb		03:08:12
3	Cd 226.502†	18500.0	18813.1	501.23 µg/L	501.23 ppb		03:08:17
3	Co 228.616†	10194.3	10379.0	501.61 µg/L	501.61 ppb		03:08:17
3	Cr 267.716†	23445.2	23816.3	500.64 µg/L	500.64 ppb		03:08:17
3	Cu 324.752†	75436.1	72039.5	500.78 µg/L	500.78 ppb		03:08:17
3	Mn 257.610†	154128.5	156113.8	499.11 µg/L	499.11 ppb		03:08:12
3	Mo 202.031†	4217.2	4269.6	498.91 µg/L	498.91 ppb		03:08:38
3	Ni 231.604†	9320.7	9153.0	500.77 µg/L	500.77 ppb		03:08:17
3	P 214.914†	1385.8	1200.9	2371.5 µg/L	2371.5 ppb		03:08:38
3	Pb 220.353†	1945.4	1911.7	494.80 µg/L	494.80 ppb		03:08:38
3	S 181.975 Axial†	227.9	208.4	1018.9 µg/L	1018.9 ppb		03:08:38
3	Sb 206.836†	527.6	512.6	500.32 µg/L	500.32 ppb		03:08:38
3	Se 196.026†	405.1	399.9	513.13 µg/L	513.13 ppb		03:08:38
3	SiO2†	31834.9	29452.0	5408.3 µg/L	5408.3 ppb		03:08:17
3	Si 251.611†	34097.9	34167.4	2479.8 µg/L	2479.8 ppb		03:08:17
3	Sn 189.927†	1001.2	990.4	509.88 µg/L	509.88 ppb		03:08:38
3	Ti 334.940†	225520.7	227356.6	517.61 µg/L	517.61 ppb		03:08:12
3	Tl 190.801†	300.7	324.6	500.89 µg/L	500.89 ppb		03:08:38
3	U 409.014†	6145.2	5485.9	496.58 µg/L	496.58 ppb		03:08:17
3	V 292.402†	43585.7	44216.9	502.09 µg/L	502.09 ppb		03:08:17
3	Zn 213.857†	19355.7	19053.1	500.99 µg/L	500.99 ppb		03:08:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1995258.6	98.667	%	0.6002				0.61%
Sc RADIAL	114856.9	98.5	%	0.71				0.72%
Y 371.029	1247976.6	99.144	%	0.4354				0.44%
Ag 328.068†	55982.3	514.16	µg/L	1.761	514.16	ppb	1.761	0.34%
QC value within limits for Ag 328.068 Recovery = 102.83%								
Al 396.153Radial†	10478.4	5187.0	µg/L	28.55	5187.0	ppb	28.55	0.55%
QC value within limits for Al 396.153Radial Recovery = 103.74%								
As 188.979†	275.2	498.64	µg/L	14.812	498.64	ppb	14.812	2.97%
QC value within limits for As 188.979 Recovery = 99.73%								
B 249.677†	11597.0	501.15	µg/L	1.435	501.15	ppb	1.435	0.29%
QC value within limits for B 249.677 Recovery = 100.23%								
Ba 233.527†	19440.0	499.66	µg/L	0.446	499.66	ppb	0.446	0.09%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	800291.8	500.59	µg/L	2.517	500.59	ppb	2.517	0.50%
QC value within limits for Be 313.107 Recovery = 100.12%								
Ca 317.933Radial†	13224.6	5116.9	µg/L	37.72	5116.9	ppb	37.72	0.74%
QC value within limits for Ca 317.933Radial Recovery = 102.34%								
Cd 226.502†	18831.6	501.71	µg/L	1.154	501.71	ppb	1.154	0.23%
QC value within limits for Cd 226.502 Recovery = 100.34%								
Co 228.616†	10373.1	501.33	µg/L	1.075	501.33	ppb	1.075	0.21%

QC value within limits for Co 228.616 Recovery = 100.27%

Cr 267.716†	23800.9	500.32 µg/L	1.104	500.32 ppb	1.104	0.22%

QC value within limits for Cr 267.716 Recovery = 100.06%

Cu 324.752†	72101.6	501.22 µg/L	1.357	501.22 ppb	1.357	0.27%

QC value within limits for Cu 324.752 Recovery = 100.24%

Fe 238.204 Radial†	800.9	5110.2 µg/L	43.57	5110.2 ppb	43.57	0.85%

QC value within limits for Fe 238.204 Radial Recovery = 102.20%

K 766.490 Radial†	9974.6	5104.9 µg/L	48.78	5104.9 ppb	48.78	0.96%

QC value within limits for K 766.490 Radial Recovery = 102.10%

Mg 279.077 IEC†	846.6	5231.9 µg/L	40.80	5231.9 ppb	40.80	0.78%

QC value within limits for Mg 279.077 IEC Recovery = 104.64%

Mn 257.610†	157030.2	502.04 µg/L	3.004	502.04 ppb	3.004	0.60%

QC value within limits for Mn 257.610 Recovery = 100.41%

Mo 202.031†	4335.4	506.60 µg/L	7.506	506.60 ppb	7.506	1.48%

QC value within limits for Mo 202.031 Recovery = 101.32%

Na 589.592 Radial†	41087.9	10289 µg/L	54.4	10289 ppb	54.4	0.53%

QC value within limits for Na 589.592 Radial Recovery = 102.89%

Ni 231.604†	9142.4	500.19 µg/L	3.559	500.19 ppb	3.559	0.71%

QC value within limits for Ni 231.604 Recovery = 100.04%

P 214.914†	1223.1	2416.3 µg/L	43.65	2416.3 ppb	43.65	1.81%

QC value within limits for P 214.914 Recovery = 96.65%

Pb 220.353†	1947.6	504.09 µg/L	8.284	504.09 ppb	8.284	1.64%

QC value within limits for Pb 220.353 Recovery = 100.82%

S 181.975 Axial†	211.4	1033.3 µg/L	14.10	1033.3 ppb	14.10	1.36%

QC value within limits for S 181.975 Axial Recovery = 103.33%

Sb 206.836†	519.8	507.37 µg/L	12.333	507.37 ppb	12.333	2.43%

QC value within limits for Sb 206.836 Recovery = 101.47%

Se 196.026†	395.4	507.43 µg/L	11.620	507.43 ppb	11.620	2.29%

QC value within limits for Se 196.026 Recovery = 101.49%

SiO2†	29464.7	5410.7 µg/L	18.58	5410.7 ppb	18.58	0.34%

QC value within limits for SiO2 Recovery = 101.18%

Si 251.611†	34177.8	2480.0 µg/L	6.79	2480.0 ppb	6.79	0.27%

QC value within limits for Si 251.611 Recovery = 99.20%

Sn 189.927†	1002.8	516.26 µg/L	6.774	516.26 ppb	6.774	1.31%

QC value within limits for Sn 189.927 Recovery = 103.25%

Sr 421.552†	100296.6	504.09 µg/L	3.372	504.09 ppb	3.372	0.67%

QC value within limits for Sr 421.552 Recovery = 100.82%

Ti 334.940†	229518.2	522.54 µg/L	5.301	522.54 ppb	5.301	1.01%

QC value within limits for Ti 334.940 Recovery = 104.51%

Tl 190.801†	327.9	506.04 µg/L	9.929	506.04 ppb	9.929	1.96%

QC value within limits for Tl 190.801 Recovery = 101.21%

U 409.014†	5495.1	497.41 µg/L	1.905	497.41 ppb	1.905	0.38%

QC value within limits for U 409.014 Recovery = 99.48%

V 292.402†	44214.0	502.11 µg/L	1.339	502.11 ppb	1.339	0.27%

QC value within limits for V 292.402 Recovery = 100.42%

Zn 213.857†	19053.3	500.99 µg/L	0.952	500.99 ppb	0.952	0.19%

QC value within limits for Zn 213.857 Recovery = 100.20%

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 03:08:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114417.2	114417.2	98.1	%			03:09:19
1	Al 396.153Radial†	347.2	230.6	114.52	µg/L	114.52	ppb	03:09:19
1	Ca 317.933Radial†	488.7	85.4	33.037	µg/L	33.037	ppb	03:09:40
1	Fe 238.204 Radial†	22.9	8.1	51.712	µg/L	51.712	ppb	03:09:40
1	K 766.490 Radial†	766.2	98.5	50.423	µg/L	50.423	ppb	03:09:19
1	Mg 279.077 IEC†	12.4	-2.8	-17.126	µg/L	-17.126	ppb	03:09:40
1	Na 589.592 Radial†	-462.2	163.0	40.817	µg/L	40.817	ppb	03:09:19
1	Sr 421.552†	208.4	274.7	1.3807	µg/L	1.3807	ppb	03:09:19
1	Sc 361.383	1995000.1	1995000.1	98.654	%			03:10:42
1	Y 371.029	1245351.6	1245351.6	98.936	%			03:10:42
1	Ag 328.068†	93.2	84.1	0.7790	µg/L	0.7790	ppb	03:10:48
1	As 188.979†	0.7	-1.5	-2.7125	µg/L	-2.7125	ppb	03:11:08
1	B 249.677†	246.8	112.3	4.8518	µg/L	4.8518	ppb	03:10:48
1	Ba 233.527†	-31.5	46.1	1.1852	µg/L	1.1852	ppb	03:11:08
1	Be 313.107†	4185.9	727.1	0.4533	µg/L	0.4533	ppb	03:10:48
1	Cd 226.502†	-49.1	49.2	1.3105	µg/L	1.3105	ppb	03:11:08
1	Co 228.616†	-56.0	9.9	0.4733	µg/L	0.4733	ppb	03:11:08
1	Cr 267.716†	16.7	116.8	2.4519	µg/L	2.4519	ppb	03:10:48
1	Cu 324.752†	4508.1	299.9	2.0912	µg/L	2.0912	ppb	03:10:48
1	Mn 257.610†	17.4	218.9	0.7056	µg/L	0.7056	ppb	03:11:08
1	Mo 202.031†	6.1	9.9	1.1576	µg/L	1.1576	ppb	03:11:08
1	Ni 231.604†	302.8	31.4	1.7169	µg/L	1.7169	ppb	03:11:08
1	P 214.914†	193.1	-5.2	-10.742	µg/L	-10.742	ppb	03:11:08
1	Pb 220.353†	54.9	-0.6	-0.1573	µg/L	-0.1573	ppb	03:11:08
1	S 181.975 Axial†	27.1	5.3	26.179	µg/L	26.179	ppb	03:11:08
1	Sb 206.836†	24.0	3.2	3.1558	µg/L	3.1558	ppb	03:11:08
1	Se 196.026†	17.4	7.7	9.9118	µg/L	9.9118	ppb	03:11:08
1	SiO2†	2767.2	53.6	9.8478	µg/L	9.8478	ppb	03:10:48
1	Si 251.611†	414.4	94.9	6.7462	µg/L	6.7462	ppb	03:11:08
1	Sn 189.927†	25.5	3.4	1.7733	µg/L	1.7733	ppb	03:11:08
1	Ti 334.940†	2766.1	2029.5	4.6211	µg/L	4.6211	ppb	03:10:48
1	Tl 190.801†	-19.7	0.4	0.6021	µg/L	0.6021	ppb	03:11:08
1	U 409.014†	754.9	34.8	3.1444	µg/L	3.1444	ppb	03:10:48
1	V 292.402†	-13.1	113.5	1.2937	µg/L	1.2937	ppb	03:10:48
1	Zn 213.857†	588.1	69.5	1.8259	µg/L	1.8259	ppb	03:11:08
2	Sc RADIAL	117860.7	117860.7	101	%			03:09:45
2	Al 396.153Radial†	214.4	88.9	44.127	µg/L	44.127	ppb	03:09:45
2	Ca 317.933Radial†	486.6	68.7	26.590	µg/L	26.590	ppb	03:10:06
2	Fe 238.204 Radial†	22.8	7.4	46.771	µg/L	46.771	ppb	03:10:06
2	K 766.490 Radial†	795.0	104.2	53.316	µg/L	53.316	ppb	03:09:45
2	Mg 279.077 IEC†	23.1	7.4	45.512	µg/L	45.512	ppb	03:10:06
2	Na 589.592 Radial†	-523.3	116.3	29.127	µg/L	29.127	ppb	03:09:45
2	Sr 421.552†	29.3	91.3	0.4590	µg/L	0.4590	ppb	03:09:45
2	Sc 361.383	1997369.1	1997369.1	98.771	%			03:11:14
2	Y 371.029	1246763.1	1246763.1	99.048	%			03:11:14
2	Ag 328.068†	52.4	42.6	0.3985	µg/L	0.3985	ppb	03:11:20
2	As 188.979†	1.8	-0.4	-0.7433	µg/L	-0.7433	ppb	03:11:41
2	B 249.677†	245.0	110.2	4.7625	µg/L	4.7625	ppb	03:11:20
2	Ba 233.527†	-25.7	52.0	1.3351	µg/L	1.3351	ppb	03:11:41
2	Be 313.107†	3856.7	388.8	0.2418	µg/L	0.2418	ppb	03:11:20
2	Cd 226.502†	-47.5	50.9	1.3473	µg/L	1.3473	ppb	03:11:41
2	Co 228.616†	-53.7	12.3	0.5872	µg/L	0.5872	ppb	03:11:41
2	Cr 267.716†	-29.5	69.9	1.4682	µg/L	1.4682	ppb	03:11:20
2	Cu 324.752†	4431.3	216.6	1.5127	µg/L	1.5127	ppb	03:11:20
2	Mn 257.610†	5.8	207.2	0.6675	µg/L	0.6675	ppb	03:11:41
2	Mo 202.031†	6.0	9.7	1.1376	µg/L	1.1376	ppb	03:11:41
2	Ni 231.604†	295.7	23.8	1.3032	µg/L	1.3032	ppb	03:11:41
2	P 214.914†	185.0	-13.6	-27.633	µg/L	-27.633	ppb	03:11:41
2	Pb 220.353†	66.0	10.6	2.7495	µg/L	2.7495	ppb	03:11:41

2	S 181.975 Axial†	30.3	8.6	41.862 µg/L	41.862 ppb	03:11:41
2	Sb 206.836†	19.9	-1.0	-0.9352 µg/L	-0.9352 ppb	03:11:41
2	Se 196.026†	14.8	5.1	6.5079 µg/L	6.5079 ppb	03:11:41
2	SiO2†	2749.9	32.8	6.0158 µg/L	6.0158 ppb	03:11:20
2	Si 251.611†	402.0	81.8	5.6975 µg/L	5.6975 ppb	03:11:41
2	Sn 189.927†	30.8	8.7	4.4984 µg/L	4.4984 ppb	03:11:41
2	Ti 334.940†	2483.1	1739.6	3.9611 µg/L	3.9611 ppb	03:11:20
2	Tl 190.801†	-19.2	1.0	1.4890 µg/L	1.4890 ppb	03:11:41
2	U 409.014†	643.7	-78.7	-7.1468 µg/L	-7.1468 ppb	03:11:20
2	V 292.402†	-44.6	81.6	0.9182 µg/L	0.9182 ppb	03:11:20
2	Zn 213.857†	590.3	71.0	1.8660 µg/L	1.8660 ppb	03:11:41
3	Sc RADIAL	114149.3	114149.3	97.9 %		03:10:11
3	Al 396.153Radial†	258.4	140.7	69.882 µg/L	69.882 ppb	03:10:11
3	Ca 317.933Radial†	524.0	122.6	47.438 µg/L	47.438 ppb	03:10:32
3	Fe 238.204 Radial†	22.6	7.9	50.241 µg/L	50.241 ppb	03:10:32
3	K 766.490 Radial†	820.7	156.0	79.855 µg/L	79.855 ppb	03:10:11
3	Mg 279.077 IEC†	19.1	4.1	25.232 µg/L	25.232 ppb	03:10:32
3	Na 589.592 Radial†	-445.2	179.3	44.892 µg/L	44.892 ppb	03:10:11
3	Sr 421.552†	148.6	214.1	1.0760 µg/L	1.0760 ppb	03:10:11
3	Sc 361.383	1997534.1	1997534.1	98.779 %		03:11:47
3	Y 371.029	1246478.5	1246478.5	99.025 %		03:11:47
3	Ag 328.068†	30.6	20.6	0.1969 µg/L	0.1969 ppb	03:11:52
3	As 188.979†	5.6	3.4	6.2527 µg/L	6.2527 ppb	03:12:13
3	B 249.677†	205.1	69.8	3.0115 µg/L	3.0115 ppb	03:11:52
3	Ba 233.527†	-24.9	52.9	1.3578 µg/L	1.3578 ppb	03:12:13
3	Be 313.107†	3828.2	359.6	0.2237 µg/L	0.2237 ppb	03:11:52
3	Cd 226.502†	-50.7	47.6	1.2686 µg/L	1.2686 ppb	03:12:13
3	Co 228.616†	-41.8	24.4	1.1731 µg/L	1.1731 ppb	03:12:13
3	Cr 267.716†	-67.0	32.0	0.6721 µg/L	0.6721 ppb	03:11:52
3	Cu 324.752†	4349.8	133.8	0.9387 µg/L	0.9387 ppb	03:11:52
3	Mn 257.610†	-3.7	197.6	0.6372 µg/L	0.6372 ppb	03:12:13
3	Mo 202.031†	7.6	11.3	1.3250 µg/L	1.3250 ppb	03:12:13
3	Ni 231.604†	285.7	13.7	0.7498 µg/L	0.7498 ppb	03:12:13
3	P 214.914†	195.4	-3.1	-6.3589 µg/L	-6.3589 ppb	03:12:13
3	Pb 220.353†	60.1	4.5	1.1735 µg/L	1.1735 ppb	03:12:13
3	S 181.975 Axial†	24.6	2.7	13.314 µg/L	13.314 ppb	03:12:13
3	Sb 206.836†	21.8	1.0	0.9558 µg/L	0.9558 ppb	03:12:13
3	Se 196.026†	14.0	4.3	5.5866 µg/L	5.5866 ppb	03:12:13
3	SiO2†	2715.5	-2.3	-0.4193 µg/L	-0.4193 ppb	03:11:52
3	Si 251.611†	416.1	96.0	6.9174 µg/L	6.9174 ppb	03:12:13
3	Sn 189.927†	22.5	0.4	0.2175 µg/L	0.2175 ppb	03:12:13
3	Ti 334.940†	2314.1	1568.3	3.5698 µg/L	3.5698 ppb	03:11:52
3	Tl 190.801†	-18.9	1.2	1.9016 µg/L	1.9016 ppb	03:12:13
3	U 409.014†	797.9	77.3	6.9967 µg/L	6.9967 ppb	03:11:52
3	V 292.402†	-54.1	72.0	0.8343 µg/L	0.8343 ppb	03:11:52
3	Zn 213.857†	589.1	69.7	1.8361 µg/L	1.8361 ppb	03:12:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1996634.4	98.735	%	0.0701				0.07%
Sc RADIAL	115475.7	99.0	%	1.77				1.79%
Y 371.029	1246197.7	99.003	%	0.0593				0.06%
Ag 328.068†	49.1	0.4581	µg/L	0.29562	0.4581	ppb	0.29562	64.53%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	153.4	76.176	µg/L	35.6155	76.176	ppb	35.6155	46.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.9323	µg/L	4.71163	0.9323	ppb	4.71163	505.38%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	97.4	4.2086	µg/L	1.03768	4.2086	ppb	1.03768	24.66%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	50.3	1.2927	µg/L	0.09375	1.2927	ppb	0.09375	7.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	491.8	0.3063	µg/L	0.12764	0.3063	ppb	0.12764	41.68%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	92.2	35.688	µg/L	10.6736	35.688	ppb	10.6736	29.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	49.2	1.3088	µg/L	0.03934	1.3088	ppb	0.03934	3.01%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	15.5	0.7445	µg/L	0.37548	0.7445	ppb	0.37548	50.43%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 72.9      1.5307 µg/L       0.89151      1.5307 ppb        0.89151  58.24%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                216.8      1.5142 µg/L       0.57628      1.5142 ppb        0.57628  38.06%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†           7.8      49.575 µg/L        2.5370     49.575 ppb         2.5370   5.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          119.6      61.198 µg/L       16.2219     61.198 ppb        16.2219  26.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†              2.9      17.873 µg/L       31.9613     17.873 ppb        31.9613 178.83%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                207.9       0.6701 µg/L       0.03427      0.6701 ppb        0.03427   5.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 10.3       1.2067 µg/L       0.10290      1.2067 ppb        0.10290   8.53%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         152.9      38.278 µg/L        8.1834     38.278 ppb         8.1834  21.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 23.0       1.2567 µg/L       0.48524      1.2567 ppb        0.48524  38.61%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  -7.3     -14.911 µg/L       11.2330    -14.911 ppb        11.2330  75.33%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                  4.8       1.2552 µg/L       1.45510      1.2552 ppb        1.45510 115.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†             5.5      27.118 µg/L       14.2972     27.118 ppb        14.2972  52.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                  1.1       1.0588 µg/L       2.04743      1.0588 ppb        2.04743 193.37%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                  5.7       7.3354 µg/L       2.27825      7.3354 ppb        2.27825  31.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                       28.0       5.1481 µg/L       5.18826      5.1481 ppb        5.18826 100.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                 90.9       6.4537 µg/L       0.66048      6.4537 ppb        0.66048  10.23%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                  4.2       2.1631 µg/L       2.16689      2.1631 ppb        2.16689 100.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                193.4       0.9719 µg/L       0.46956      0.9719 ppb        0.46956  48.31%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               1779.1       4.0507 µg/L       0.53134      4.0507 ppb        0.53134  13.12%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                  0.9       1.3309 µg/L       0.66401      1.3309 ppb        0.66401  49.89%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  11.1       0.9981 µg/L       7.31195      0.9981 ppb        7.31195 732.59%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  89.0       1.0154 µg/L       0.24466      1.0154 ppb        0.24466  24.10%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 70.1       1.8427 µg/L       0.02084      1.8427 ppb        0.02084   1.13%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 6
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:39:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	119102.6	119102.6	102	%			03:40:24
1	Al 396.153Radial†	10313.6	9976.0	4937.6	µg/L	4937.6	ppb	03:40:24
1	Ca 317.933Radial†	13526.7	12832.9	4965.3	µg/L	4965.3	ppb	03:40:44
1	Fe 238.204 Radial†	803.0	771.2	4920.6	µg/L	4920.6	ppb	03:40:44
1	K 766.490 Radial†	10448.0	9548.6	4886.8	µg/L	4886.8	ppb	03:40:24
1	Mg 279.077 IEC†	848.2	815.1	5037.8	µg/L	5037.8	ppb	03:40:44
1	Na 589.592 Radial†	41105.5	40885.8	10239	µg/L	10239	ppb	03:40:24
1	Sr 421.552†	98068.7	96094.0	482.97	µg/L	482.97	ppb	03:40:24
1	Sc 361.383	2073293.8	2073293.8	102.53	%			03:41:48
1	Y 371.029	1280044.1	1280044.1	101.69	%			03:41:48
1	Ag 328.068†	56424.5	55024.2	505.36	µg/L	505.36	ppb	03:41:54
1	As 188.979†	284.5	275.3	498.72	µg/L	498.72	ppb	03:42:14
1	B 249.677†	12484.4	12039.0	520.37	µg/L	520.37	ppb	03:41:54
1	Ba 233.527†	19653.9	19247.8	494.72	µg/L	494.72	ppb	03:41:54
1	Be 313.107†	813355.6	789804.8	494.04	µg/L	494.04	ppb	03:41:48
1	Cd 226.502†	19115.7	18743.8	499.38	µg/L	499.38	ppb	03:41:54
1	Co 228.616†	10469.6	10278.4	496.79	µg/L	496.79	ppb	03:41:54
1	Cr 267.716†	23953.2	23463.0	493.21	µg/L	493.21	ppb	03:41:54
1	Cu 324.752†	76369.4	70218.5	488.12	µg/L	488.12	ppb	03:41:54
1	Mn 257.610†	158087.5	154394.8	493.60	µg/L	493.60	ppb	03:41:48
1	Mo 202.031†	4397.7	4293.0	501.64	µg/L	501.64	ppb	03:42:14
1	Ni 231.604†	9601.3	9089.3	497.28	µg/L	497.28	ppb	03:41:54
1	P 214.914†	1461.8	1224.9	2421.5	µg/L	2421.5	ppb	03:42:14
1	Pb 220.353†	2032.0	1925.6	498.43	µg/L	498.43	ppb	03:42:14
1	S 181.975 Axial†	243.3	215.1	1051.9	µg/L	1051.9	ppb	03:42:14
1	Sb 206.836†	546.6	512.0	499.67	µg/L	499.67	ppb	03:42:14
1	Se 196.026†	408.4	388.4	498.45	µg/L	498.45	ppb	03:42:14
1	SiO2†	32390.7	28841.5	5296.2	µg/L	5296.2	ppb	03:41:54
1	Si 251.611†	34828.3	33645.2	2441.6	µg/L	2441.6	ppb	03:41:54
1	Sn 189.927†	1048.6	1000.4	514.93	µg/L	514.93	ppb	03:42:14
1	Ti 334.940†	226183.6	219837.8	500.49	µg/L	500.49	ppb	03:41:48
1	Tl 190.801†	311.5	324.2	500.19	µg/L	500.19	ppb	03:42:14
1	U 409.014†	6157.9	5275.8	477.56	µg/L	477.56	ppb	03:41:54
1	V 292.402†	44572.5	43601.3	495.14	µg/L	495.14	ppb	03:41:54
1	Zn 213.857†	19724.7	18712.2	492.01	µg/L	492.01	ppb	03:41:54
2	Sc RADIAL	119473.2	119473.2	102	%			03:40:50
2	Al 396.153Radial†	10374.6	10004.3	4951.6	µg/L	4951.6	ppb	03:40:50
2	Ca 317.933Radial†	13530.0	12795.1	4950.7	µg/L	4950.7	ppb	03:41:10
2	Fe 238.204 Radial†	811.5	777.0	4958.0	µg/L	4958.0	ppb	03:41:10
2	K 766.490 Radial†	10606.8	9671.8	4949.9	µg/L	4949.9	ppb	03:40:50
2	Mg 279.077 IEC†	851.7	816.0	5043.4	µg/L	5043.4	ppb	03:41:10
2	Na 589.592 Radial†	40679.7	40345.2	10103	µg/L	10103	ppb	03:40:50
2	Sr 421.552†	99361.2	97057.8	487.81	µg/L	487.81	ppb	03:40:50
2	Sc 361.383	2085453.2	2085453.2	103.13	%			03:42:21
2	Y 371.029	1289070.2	1289070.2	102.41	%			03:42:21
2	Ag 328.068†	56316.5	54598.6	501.47	µg/L	501.47	ppb	03:42:27
2	As 188.979†	295.6	284.4	515.33	µg/L	515.33	ppb	03:42:47
2	B 249.677†	12384.7	11871.4	513.09	µg/L	513.09	ppb	03:42:27
2	Ba 233.527†	19723.9	19203.9	493.58	µg/L	493.58	ppb	03:42:27
2	Be 313.107†	827955.1	799336.2	500.00	µg/L	500.00	ppb	03:42:21
2	Cd 226.502†	19172.3	18690.0	497.93	µg/L	497.93	ppb	03:42:27
2	Co 228.616†	10494.1	10242.6	495.05	µg/L	495.05	ppb	03:42:27
2	Cr 267.716†	24040.9	23411.8	492.13	µg/L	492.13	ppb	03:42:27
2	Cu 324.752†	76365.6	69780.5	485.09	µg/L	485.09	ppb	03:42:27
2	Mn 257.610†	160819.2	156144.6	499.19	µg/L	499.19	ppb	03:42:21
2	Mo 202.031†	4436.1	4305.3	503.07	µg/L	503.07	ppb	03:42:47
2	Ni 231.604†	9553.2	8988.0	491.74	µg/L	491.74	ppb	03:42:27
2	P 214.914†	1477.8	1232.1	2436.4	µg/L	2436.4	ppb	03:42:47
2	Pb 220.353†	2058.7	1940.0	502.16	µg/L	502.16	ppb	03:42:47

2	S 181.975 Axial†	237.3	208.0	1016.8 µg/L	1016.8 ppb	03:42:47
2	Sb 206.836†	552.5	514.7	502.32 µg/L	502.32 ppb	03:42:47
2	Se 196.026†	417.1	394.6	506.35 µg/L	506.35 ppb	03:42:47
2	SiO2†	32486.7	28750.4	5279.5 µg/L	5279.5 ppb	03:42:27
2	Si 251.611†	34837.8	33456.4	2427.3 µg/L	2427.3 ppb	03:42:27
2	Sn 189.927†	1058.7	1004.2	516.89 µg/L	516.89 ppb	03:42:47
2	Ti 334.940†	230176.6	222423.4	506.38 µg/L	506.38 ppb	03:42:21
2	Tl 190.801†	314.7	325.5	502.28 µg/L	502.28 ppb	03:42:47
2	U 409.014†	6143.8	5227.0	473.13 µg/L	473.13 ppb	03:42:27
2	V 292.402†	44654.8	43427.7	493.19 µg/L	493.19 ppb	03:42:27
2	Zn 213.857†	19811.8	18684.5	491.31 µg/L	491.31 ppb	03:42:27
3	Sc RADIAL	118270.2	118270.2	101 %		03:41:16
3	Al 396.153Radial†	10386.7	10119.3	5009.1 µg/L	5009.1 ppb	03:41:16
3	Ca 317.933Radial†	13646.3	13044.1	5047.0 µg/L	5047.0 ppb	03:41:36
3	Fe 238.204 Radial†	815.3	788.9	5033.2 µg/L	5033.2 ppb	03:41:36
3	K 766.490 Radial†	10469.3	9641.5	4934.4 µg/L	4934.4 ppb	03:41:16
3	Mg 279.077 IEC†	859.1	831.7	5140.1 µg/L	5140.1 ppb	03:41:36
3	Na 589.592 Radial†	40383.3	40456.9	10131 µg/L	10131 ppb	03:41:16
3	Sr 421.552†	99237.2	97922.2	492.15 µg/L	492.15 ppb	03:41:16
3	Sc 361.383	2075214.7	2075214.7	102.62 %		03:42:54
3	Y 371.029	1283122.2	1283122.2	101.94 %		03:42:54
3	Ag 328.068†	56469.9	55017.5	505.32 µg/L	505.32 ppb	03:43:00
3	As 188.979†	277.8	268.5	486.41 µg/L	486.41 ppb	03:43:21
3	B 249.677†	12345.0	11891.9	513.96 µg/L	513.96 ppb	03:43:00
3	Ba 233.527†	19803.0	19375.4	497.99 µg/L	497.99 ppb	03:43:00
3	Be 313.107†	822121.4	797612.5	498.92 µg/L	498.92 ppb	03:42:54
3	Cd 226.502†	19233.1	18840.9	501.97 µg/L	501.97 ppb	03:43:00
3	Co 228.616†	10520.6	10318.6	498.71 µg/L	498.71 ppb	03:43:00
3	Cr 267.716†	24111.6	23595.7	496.00 µg/L	496.00 ppb	03:43:00
3	Cu 324.752†	76394.4	70173.9	487.84 µg/L	487.84 ppb	03:43:00
3	Mn 257.610†	159748.2	155870.3	498.33 µg/L	498.33 ppb	03:42:54
3	Mo 202.031†	4334.1	4227.1	493.93 µg/L	493.93 ppb	03:43:21
3	Ni 231.604†	9691.8	9168.7	501.63 µg/L	501.63 ppb	03:43:00
3	P 214.914†	1457.6	1219.4	2410.3 µg/L	2410.3 ppb	03:43:21
3	Pb 220.353†	2019.5	1911.7	494.79 µg/L	494.79 ppb	03:43:21
3	S 181.975 Axial†	238.9	210.6	1029.7 µg/L	1029.7 ppb	03:43:21
3	Sb 206.836†	535.8	501.0	488.91 µg/L	488.91 ppb	03:43:21
3	Se 196.026†	402.7	382.6	491.02 µg/L	491.02 ppb	03:43:21
3	SiO2†	32450.3	28870.3	5301.5 µg/L	5301.5 ppb	03:43:00
3	Si 251.611†	34870.5	33654.9	2442.6 µg/L	2442.6 ppb	03:43:00
3	Sn 189.927†	1033.2	984.4	506.82 µg/L	506.82 ppb	03:43:21
3	Ti 334.940†	228381.2	221775.1	504.90 µg/L	504.90 ppb	03:42:54
3	Tl 190.801†	311.9	324.3	500.48 µg/L	500.48 ppb	03:43:21
3	U 409.014†	6337.8	5445.5	492.92 µg/L	492.92 ppb	03:43:00
3	V 292.402†	44744.5	43728.7	496.55 µg/L	496.55 ppb	03:43:00
3	Zn 213.857†	19847.3	18813.9	494.67 µg/L	494.67 ppb	03:43:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2077987.2	102.76	%	0.323				0.31%
Sc RADIAL	118948.7	102	%	0.5				0.52%
Y 371.029	1284078.8	102.01	%	0.365				0.36%
Ag 328.068†	54880.1	504.05	µg/L	2.234	504.05	ppb	2.234	0.44%
QC value within limits for Ag 328.068 Recovery = 100.81%								
Al 396.153Radial†	10033.2	4966.1	µg/L	37.87	4966.1	ppb	37.87	0.76%
QC value within limits for Al 396.153Radial Recovery = 99.32%								
As 188.979†	276.1	500.16	µg/L	14.513	500.16	ppb	14.513	2.90%
QC value within limits for As 188.979 Recovery = 100.03%								
B 249.677†	11934.1	515.81	µg/L	3.976	515.81	ppb	3.976	0.77%
QC value within limits for B 249.677 Recovery = 103.16%								
Ba 233.527†	19275.7	495.43	µg/L	2.288	495.43	ppb	2.288	0.46%
QC value within limits for Ba 233.527 Recovery = 99.09%								
Be 313.107†	795584.5	497.65	µg/L	3.177	497.65	ppb	3.177	0.64%
QC value within limits for Be 313.107 Recovery = 99.53%								
Ca 317.933Radial†	12890.7	4987.7	µg/L	51.91	4987.7	ppb	51.91	1.04%
QC value within limits for Ca 317.933Radial Recovery = 99.75%								
Cd 226.502†	18758.2	499.76	µg/L	2.045	499.76	ppb	2.045	0.41%
QC value within limits for Cd 226.502 Recovery = 99.95%								
Co 228.616†	10279.9	496.85	µg/L	1.827	496.85	ppb	1.827	0.37%

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   QC value within limits for Co 228.616  Recovery = 99.37%
Cr 267.716†            23490.2      493.78 µg/L        1.994      493.78 ppb        1.994   0.40%
   QC value within limits for Cr 267.716  Recovery = 98.76%
Cu 324.752†            70057.6      487.02 µg/L        1.673      487.02 ppb        1.673   0.34%
   QC value within limits for Cu 324.752  Recovery = 97.40%
Fe 238.204 Radial†       779.0      4970.6 µg/L       57.37      4970.6 ppb       57.37   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.41%
K 766.490 Radial†       9620.6      4923.7 µg/L       32.86      4923.7 ppb       32.86   0.67%
   QC value within limits for K 766.490 Radial  Recovery = 98.47%
Mg 279.077 IEC†          820.9      5073.7 µg/L       57.52      5073.7 ppb       57.52   1.13%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.47%
Mn 257.610†           155469.9      497.04 µg/L       3.010      497.04 ppb       3.010   0.61%
   QC value within limits for Mn 257.610  Recovery = 99.41%
Mo 202.031†            4275.1      499.55 µg/L       4.912      499.55 ppb       4.912   0.98%
   QC value within limits for Mo 202.031  Recovery = 99.91%
Na 589.592 Radial†    40562.7       10158 µg/L        71.5       10158 ppb        71.5   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 101.58%
Ni 231.604†            9082.0      496.89 µg/L       4.956      496.89 ppb       4.956   1.00%
   QC value within limits for Ni 231.604  Recovery = 99.38%
P 214.914†             1225.4      2422.7 µg/L       13.11      2422.7 ppb       13.11   0.54%
   QC value within limits for P 214.914  Recovery = 96.91%
Pb 220.353†            1925.8      498.46 µg/L       3.684      498.46 ppb       3.684   0.74%
   QC value within limits for Pb 220.353  Recovery = 99.69%
S 181.975 Axial†        211.2      1032.8 µg/L       17.75      1032.8 ppb       17.75   1.72%
   QC value within limits for S 181.975 Axial  Recovery = 103.28%
Sb 206.836†             509.2      496.97 µg/L       7.099      496.97 ppb       7.099   1.43%
   QC value within limits for Sb 206.836  Recovery = 99.39%
Se 196.026†             388.5      498.61 µg/L       7.670      498.61 ppb       7.670   1.54%
   QC value within limits for Se 196.026  Recovery = 99.72%
SiO2†                  28820.7      5292.4 µg/L       11.49      5292.4 ppb       11.49   0.22%
   QC value within limits for SiO2  Recovery = 98.97%
Si 251.611†            33585.5      2437.2 µg/L        8.56      2437.2 ppb        8.56   0.35%
   QC value within limits for Si 251.611  Recovery = 97.49%
Sn 189.927†             996.3      512.88 µg/L       5.335      512.88 ppb       5.335   1.04%
   QC value within limits for Sn 189.927  Recovery = 102.58%
Sr 421.552†            97024.7      487.64 µg/L       4.597      487.64 ppb       4.597   0.94%
   QC value within limits for Sr 421.552  Recovery = 97.53%
Ti 334.940†           221345.4      503.93 µg/L       3.064      503.93 ppb       3.064   0.61%
   QC value within limits for Ti 334.940  Recovery = 100.79%
Tl 190.801†             324.7      500.98 µg/L       1.133      500.98 ppb       1.133   0.23%
   QC value within limits for Tl 190.801  Recovery = 100.20%
U 409.014†             5316.1      481.20 µg/L      10.388      481.20 ppb      10.388   2.16%
   QC value within limits for U 409.014  Recovery = 96.24%
V 292.402†            43585.9      494.96 µg/L       1.687      494.96 ppb       1.687   0.34%
   QC value within limits for V 292.402  Recovery = 98.99%
Zn 213.857†           18736.9      492.66 µg/L       1.774      492.66 ppb       1.774   0.36%
   QC value within limits for Zn 213.857  Recovery = 98.53%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 03:43:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117089.0	117089.0	100	%			03:44:02
1	Al 396.153Radial†	148.5	24.6	12.236	µg/L	12.236	ppb	03:44:02
1	Ca 317.933Radial†	432.6	18.2	7.0268	µg/L	7.0268	ppb	03:44:23
1	Fe 238.204 Radial†	17.5	2.3	14.641	µg/L	14.641	ppb	03:44:23
1	K 766.490 Radial†	844.7	158.9	81.339	µg/L	81.339	ppb	03:44:02
1	Mg 279.077 IEC†	18.6	3.1	18.947	µg/L	18.947	ppb	03:44:23
1	Na 589.592 Radial†	-199.3	435.6	109.09	µg/L	109.09	ppb	03:44:02
1	Sr 421.552†	-61.2	1.4	0.0069	µg/L	0.0069	ppb	03:44:02
1	Sc 361.383	2025357.8	2025357.8	100.15	%			03:45:25
1	Y 371.029	1260935.3	1260935.3	100.17	%			03:45:25
1	Ag 328.068†	89.0	78.5	0.7186	µg/L	0.7186	ppb	03:45:30
1	As 188.979†	2.9	0.7	1.2387	µg/L	1.2387	ppb	03:45:51
1	B 249.677†	558.1	419.4	18.177	µg/L	18.177	ppb	03:45:30
1	Ba 233.527†	-71.5	6.7	0.1717	µg/L	0.1717	ppb	03:45:51
1	Be 313.107†	3697.0	175.4	0.1094	µg/L	0.1094	ppb	03:45:30
1	Cd 226.502†	-84.9	14.2	0.3796	µg/L	0.3796	ppb	03:45:51
1	Co 228.616†	-76.3	-9.6	-0.4639	µg/L	-0.4639	ppb	03:45:51
1	Cr 267.716†	-146.5	-46.4	-0.9735	µg/L	-0.9735	ppb	03:45:30
1	Cu 324.752†	4172.4	-103.8	-0.7171	µg/L	-0.7171	ppb	03:45:30
1	Mn 257.610†	-212.9	-11.3	-0.0341	µg/L	-0.0341	ppb	03:45:51
1	Mo 202.031†	-4.2	-0.5	-0.0614	µg/L	-0.0614	ppb	03:45:51
1	Ni 231.604†	289.4	13.4	0.7326	µg/L	0.7326	ppb	03:45:51
1	P 214.914†	202.3	1.1	2.2453	µg/L	2.2453	ppb	03:45:51
1	Pb 220.353†	57.5	1.1	0.2932	µg/L	0.2932	ppb	03:45:51
1	S 181.975 Axial†	30.1	7.9	38.651	µg/L	38.651	ppb	03:45:51
1	Sb 206.836†	22.5	1.3	1.3215	µg/L	1.3215	ppb	03:45:51
1	Se 196.026†	10.6	0.8	0.9643	µg/L	0.9643	ppb	03:45:51
1	SiO2†	2690.9	-64.6	-11.862	µg/L	-11.862	ppb	03:45:30
1	Si 251.611†	348.9	23.2	1.6188	µg/L	1.6188	ppb	03:45:51
1	Sn 189.927†	24.0	1.6	0.8183	µg/L	0.8183	ppb	03:45:51
1	Ti 334.940†	1194.3	418.0	0.9519	µg/L	0.9519	ppb	03:45:30
1	Tl 190.801†	-16.2	4.2	6.4273	µg/L	6.4273	ppb	03:45:51
1	U 409.014†	755.0	23.4	2.1186	µg/L	2.1186	ppb	03:45:30
1	V 292.402†	-102.2	24.6	0.2814	µg/L	0.2814	ppb	03:45:30
1	Zn 213.857†	545.0	17.5	0.4586	µg/L	0.4586	ppb	03:45:51
2	Sc RADIAL	113832.5	113832.5	97.6	%			03:44:28
2	Al 396.153Radial†	144.3	24.6	12.204	µg/L	12.204	ppb	03:44:28
2	Ca 317.933Radial†	436.6	34.6	13.388	µg/L	13.388	ppb	03:44:49
2	Fe 238.204 Radial†	19.2	4.5	28.580	µg/L	28.580	ppb	03:44:49
2	K 766.490 Radial†	712.6	47.6	24.383	µg/L	24.383	ppb	03:44:28
2	Mg 279.077 IEC†	17.8	2.8	16.948	µg/L	16.948	ppb	03:44:49
2	Na 589.592 Radial†	39.4	674.5	168.91	µg/L	168.91	ppb	03:44:28
2	Sr 421.552†	-63.2	-2.4	-0.0122	µg/L	-0.0122	ppb	03:44:28
2	Sc 361.383	2028517.3	2028517.3	100.31	%			03:45:57
2	Y 371.029	1263352.3	1263352.3	100.37	%			03:45:57
2	Ag 328.068†	55.1	44.6	0.4097	µg/L	0.4097	ppb	03:46:03
2	As 188.979†	1.3	-0.9	-1.6949	µg/L	-1.6949	ppb	03:46:23
2	B 249.677†	498.4	359.0	15.553	µg/L	15.553	ppb	03:46:03
2	Ba 233.527†	-69.2	9.1	0.2326	µg/L	0.2326	ppb	03:46:23
2	Be 313.107†	3596.3	69.3	0.0430	µg/L	0.0430	ppb	03:46:03
2	Cd 226.502†	-80.9	18.4	0.4916	µg/L	0.4916	ppb	03:46:23
2	Co 228.616†	-67.3	-0.4	-0.0211	µg/L	-0.0211	ppb	03:46:23
2	Cr 267.716†	-93.8	6.2	0.1315	µg/L	0.1315	ppb	03:46:03
2	Cu 324.752†	4156.5	-126.2	-0.8693	µg/L	-0.8693	ppb	03:46:03
2	Mn 257.610†	-207.3	-5.3	-0.0134	µg/L	-0.0134	ppb	03:46:23
2	Mo 202.031†	-4.3	-0.6	-0.0682	µg/L	-0.0682	ppb	03:46:23
2	Ni 231.604†	295.5	19.0	1.0421	µg/L	1.0421	ppb	03:46:23
2	P 214.914†	192.3	-9.2	-18.517	µg/L	-18.517	ppb	03:46:23
2	Pb 220.353†	55.0	-1.5	-0.3822	µg/L	-0.3822	ppb	03:46:23

2	S 181.975 Axial†	31.4	9.1	44.639 µg/L	44.639 ppb	03:46:23
2	Sb 206.836†	18.4	-2.8	-2.7400 µg/L	-2.7400 ppb	03:46:23
2	Se 196.026†	11.2	1.2	1.6029 µg/L	1.6029 ppb	03:46:23
2	SiO2†	2675.2	-84.5	-15.519 µg/L	-15.519 ppb	03:46:03
2	Si 251.611†	344.9	18.6	1.3210 µg/L	1.3210 ppb	03:46:23
2	Sn 189.927†	23.5	1.1	0.5528 µg/L	0.5528 ppb	03:46:23
2	Ti 334.940†	1146.6	368.6	0.8389 µg/L	0.8389 ppb	03:46:03
2	Tl 190.801†	-24.7	-4.3	-6.5271 µg/L	-6.5271 ppb	03:46:23
2	U 409.014†	794.1	61.2	5.5401 µg/L	5.5401 ppb	03:46:03
2	V 292.402†	-110.3	16.8	0.1999 µg/L	0.1999 ppb	03:46:03
2	Zn 213.857†	542.9	14.6	0.3780 µg/L	0.3780 ppb	03:46:23
3	Sc RADIAL	115492.1	115492.1	99.0 %		03:44:54
3	Al 396.153Radial†	145.2	23.3	11.589 µg/L	11.589 ppb	03:44:54
3	Ca 317.933Radial†	436.7	28.3	10.943 µg/L	10.943 ppb	03:45:14
3	Fe 238.204 Radial†	15.2	0.2	1.0069 µg/L	1.0069 ppb	03:45:14
3	K 766.490 Radial†	690.6	14.9	7.6272 µg/L	7.6272 ppb	03:44:54
3	Mg 279.077 IEC†	17.1	1.8	11.341 µg/L	11.341 ppb	03:45:14
3	Na 589.592 Radial†	-186.8	445.4	111.55 µg/L	111.55 ppb	03:44:54
3	Sr 421.552†	-32.6	29.4	0.1476 µg/L	0.1476 ppb	03:44:54
3	Sc 361.383	2021784.9	2021784.9	99.978 %		03:46:29
3	Y 371.029	1258730.2	1258730.2	99.999 %		03:46:29
3	Ag 328.068†	37.5	27.1	0.2464 µg/L	0.2464 ppb	03:46:35
3	As 188.979†	3.0	0.8	1.4497 µg/L	1.4497 ppb	03:46:55
3	B 249.677†	485.2	347.5	15.064 µg/L	15.064 ppb	03:46:35
3	Ba 233.527†	-67.1	10.9	0.2793 µg/L	0.2793 ppb	03:46:55
3	Be 313.107†	3582.7	67.6	0.0420 µg/L	0.0420 ppb	03:46:35
3	Cd 226.502†	-96.5	2.5	0.0583 µg/L	0.0583 ppb	03:46:55
3	Co 228.616†	-67.8	-1.2	-0.0572 µg/L	-0.0572 ppb	03:46:55
3	Cr 267.716†	-157.6	-57.9	-1.2135 µg/L	-1.2135 ppb	03:46:35
3	Cu 324.752†	4159.9	-109.0	-0.7555 µg/L	-0.7555 ppb	03:46:35
3	Mn 257.610†	-224.0	-22.7	-0.0724 µg/L	-0.0724 ppb	03:46:55
3	Mo 202.031†	-2.9	0.8	0.0957 µg/L	0.0957 ppb	03:46:55
3	Ni 231.604†	287.3	11.8	0.6476 µg/L	0.6476 ppb	03:46:55
3	P 214.914†	202.7	1.8	3.8020 µg/L	3.8020 ppb	03:46:55
3	Pb 220.353†	46.2	-10.0	-2.5785 µg/L	-2.5785 ppb	03:46:55
3	S 181.975 Axial†	26.2	4.1	19.890 µg/L	19.890 ppb	03:46:55
3	Sb 206.836†	14.1	-7.0	-6.8593 µg/L	-6.8593 ppb	03:46:55
3	Se 196.026†	10.7	0.8	0.9986 µg/L	0.9986 ppb	03:46:55
3	SiO2†	2736.0	-14.8	-2.7145 µg/L	-2.7145 ppb	03:46:35
3	Si 251.611†	355.7	30.6	2.2227 µg/L	2.2227 ppb	03:46:55
3	Sn 189.927†	22.9	0.5	0.2415 µg/L	0.2415 ppb	03:46:55
3	Ti 334.940†	1119.0	344.9	0.7850 µg/L	0.7850 ppb	03:46:35
3	Tl 190.801†	-20.7	-0.3	-0.5112 µg/L	-0.5112 ppb	03:46:55
3	U 409.014†	605.1	-125.2	-11.352 µg/L	-11.352 ppb	03:46:35
3	V 292.402†	-136.1	-9.4	-0.1228 µg/L	-0.1228 ppb	03:46:35
3	Zn 213.857†	536.9	10.4	0.2717 µg/L	0.2717 ppb	03:46:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025220.0	100.15	%	0.167				0.17%
Sc RADIAL	115471.2	99.0	%	1.40				1.41%
Y 371.029	1261005.9	100.18	%	0.184				0.18%
Ag 328.068†	50.0	0.4582	µg/L	0.23980	0.4582	ppb	0.23980	52.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	24.2	12.010	µg/L	0.3646	12.010	ppb	0.3646	3.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.3312	µg/L	1.75779	0.3312	ppb	1.75779	530.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	375.3	16.265	µg/L	1.6745	16.265	ppb	1.6745	10.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.9	0.2279	µg/L	0.05398	0.2279	ppb	0.05398	23.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	104.1	0.0648	µg/L	0.03861	0.0648	ppb	0.03861	59.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	27.0	10.452	µg/L	3.2087	10.452	ppb	3.2087	30.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.7	0.3098	µg/L	0.22493	0.3098	ppb	0.22493	72.60%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-3.7	-0.1807	µg/L	0.24589	-0.1807	ppb	0.24589	136.07%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -32.7     -0.6851 µg/L       0.71734     -0.6851 ppb        0.71734 104.70%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -113.0     -0.7807 µg/L       0.07913     -0.7807 ppb        0.07913  10.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.3      14.743 µg/L       13.7867      14.743 ppb        13.7867  93.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         73.8      37.783 µg/L       38.6397      37.783 ppb        38.6397 102.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.6      15.746 µg/L        3.9431      15.746 ppb         3.9431  25.04%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -13.1     -0.0400 µg/L       0.02992     -0.0400 ppb        0.02992  74.81%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.1     -0.0113 µg/L       0.09275     -0.0113 ppb        0.09275 821.72%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       518.5      129.85 µg/L        33.849      129.85 ppb         33.849  26.07%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.8      0.8074 µg/L       0.20766      0.8074 ppb        0.20766  25.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.1     -4.1566 µg/L      12.46085     -4.1566 ppb       12.46085 299.79%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -3.5     -0.8892 µg/L       1.50143     -0.8892 ppb        1.50143 168.86%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           7.0      34.393 µg/L       12.9124      34.393 ppb        12.9124  37.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.8     -2.7593 µg/L       4.09048     -2.7593 ppb        4.09048 148.25%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.9      1.1886 µg/L       0.35923      1.1886 ppb        0.35923  30.22%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -54.6     -10.032 µg/L        6.5955     -10.032 ppb         6.5955  65.75%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               24.1      1.7208 µg/L       0.45944      1.7208 ppb        0.45944  26.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.0      0.5375 µg/L       0.28871      0.5375 ppb        0.28871  53.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.4      0.0475 µg/L       0.08728      0.0475 ppb        0.08728 183.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              377.2      0.8586 µg/L       0.08517      0.8586 ppb        0.08517   9.92%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.1     -0.2037 µg/L       6.48268     -0.2037 ppb        6.48268 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -13.6     -1.2311 µg/L       8.93033     -1.2311 ppb        8.93033 725.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                10.7      0.1195 µg/L       0.21379      0.1195 ppb        0.21379 178.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.1      0.3694 µg/L       0.09378      0.3694 ppb        0.09378  25.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 04:06:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	119005.9	119005.9	102	%			04:07:26
1	Al 396.153Radial†	10293.7	9964.8	4932.1	µg/L	4932.1	ppb	04:07:26
1	Ca 317.933Radial†	13436.7	12755.6	4935.4	µg/L	4935.4	ppb	04:07:47
1	Fe 238.204 Radial†	806.0	774.8	4943.3	µg/L	4943.3	ppb	04:07:47
1	K 766.490 Radial†	10443.3	9552.2	4888.7	µg/L	4888.7	ppb	04:07:26
1	Mg 279.077 IEC†	840.9	808.6	4997.7	µg/L	4997.7	ppb	04:07:47
1	Na 589.592 Radial†	39923.3	39759.9	9956.9	µg/L	9956.9	ppb	04:07:26
1	Sr 421.552†	98401.2	96497.9	485.00	µg/L	485.00	ppb	04:07:26
1	Sc 361.383	2042485.1	2042485.1	101.00	%			04:08:51
1	Y 371.029	1260543.1	1260543.1	100.14	%			04:08:51
1	Ag 328.068†	55349.9	54790.4	503.21	µg/L	503.21	ppb	04:08:56
1	As 188.979†	281.9	276.9	501.64	µg/L	501.64	ppb	04:09:17
1	B 249.677†	11646.5	11393.1	492.36	µg/L	492.36	ppb	04:08:56
1	Ba 233.527†	19122.3	19010.6	488.62	µg/L	488.62	ppb	04:08:56
1	Be 313.107†	795411.9	784005.5	490.41	µg/L	490.41	ppb	04:08:51
1	Cd 226.502†	18574.8	18489.5	492.60	µg/L	492.60	ppb	04:08:56
1	Co 228.616†	10195.5	10161.0	491.12	µg/L	491.12	ppb	04:08:56
1	Cr 267.716†	23352.6	23220.7	488.12	µg/L	488.12	ppb	04:08:56
1	Cu 324.752†	75047.3	70033.1	486.84	µg/L	486.84	ppb	04:08:56
1	Mn 257.610†	154776.5	153442.4	490.56	µg/L	490.56	ppb	04:08:51
1	Mo 202.031†	4311.9	4272.8	499.28	µg/L	499.28	ppb	04:09:17
1	Ni 231.604†	9335.0	8966.8	490.59	µg/L	490.59	ppb	04:08:56
1	P 214.914†	1424.8	1209.7	2391.0	µg/L	2391.0	ppb	04:09:17
1	Pb 220.353†	1999.9	1923.8	497.93	µg/L	497.93	ppb	04:09:17
1	S 181.975 Axial†	230.0	205.6	1005.3	µg/L	1005.3	ppb	04:09:17
1	Sb 206.836†	538.3	511.8	499.50	µg/L	499.50	ppb	04:09:17
1	Se 196.026†	412.9	398.9	511.85	µg/L	511.85	ppb	04:09:17
1	SiO2†	31694.8	28629.0	5257.2	µg/L	5257.2	ppb	04:08:56
1	Si 251.611†	33953.1	33291.1	2415.6	µg/L	2415.6	ppb	04:08:56
1	Sn 189.927†	1026.6	994.0	511.67	µg/L	511.67	ppb	04:09:17
1	Ti 334.940†	222234.5	219255.5	499.17	µg/L	499.17	ppb	04:08:51
1	Tl 190.801†	309.7	327.0	504.60	µg/L	504.60	ppb	04:09:17
1	U 409.014†	6123.0	5331.8	482.63	µg/L	482.63	ppb	04:08:56
1	V 292.402†	43592.7	43287.0	491.59	µg/L	491.59	ppb	04:08:56
1	Zn 213.857†	19273.8	18556.0	487.91	µg/L	487.91	ppb	04:08:56
2	Sc RADIAL	117749.8	117749.8	101	%			04:07:52
2	Al 396.153Radial†	10335.9	10114.2	5006.3	µg/L	5006.3	ppb	04:07:52
2	Ca 317.933Radial†	13430.4	12889.7	4987.3	µg/L	4987.3	ppb	04:08:13
2	Fe 238.204 Radial†	808.8	786.0	5014.4	µg/L	5014.4	ppb	04:08:13
2	K 766.490 Radial†	10392.7	9611.3	4918.9	µg/L	4918.9	ppb	04:07:52
2	Mg 279.077 IEC†	839.1	815.6	5041.0	µg/L	5041.0	ppb	04:08:13
2	Na 589.592 Radial†	39891.3	40145.6	10053	µg/L	10053	ppb	04:07:52
2	Sr 421.552†	98127.3	97255.3	488.80	µg/L	488.80	ppb	04:07:52
2	Sc 361.383	2034901.1	2034901.1	100.63	%			04:09:24
2	Y 371.029	1260510.3	1260510.3	100.14	%			04:09:24
2	Ag 328.068†	54042.4	53695.3	493.17	µg/L	493.17	ppb	04:09:29
2	As 188.979†	284.0	280.0	507.30	µg/L	507.30	ppb	04:09:50
2	B 249.677†	11404.7	11195.8	483.79	µg/L	483.79	ppb	04:09:29
2	Ba 233.527†	18782.3	18743.3	481.75	µg/L	481.75	ppb	04:09:29
2	Be 313.107†	783195.9	774800.7	484.65	µg/L	484.65	ppb	04:09:24
2	Cd 226.502†	18132.3	18118.3	482.69	µg/L	482.69	ppb	04:09:29
2	Co 228.616†	9982.2	9986.7	482.71	µg/L	482.71	ppb	04:09:29
2	Cr 267.716†	22854.1	22811.5	479.52	µg/L	479.52	ppb	04:09:29
2	Cu 324.752†	73321.6	68595.0	476.88	µg/L	476.88	ppb	04:09:29
2	Mn 257.610†	152395.7	151647.6	484.84	µg/L	484.84	ppb	04:09:24
2	Mo 202.031†	4314.2	4291.0	501.40	µg/L	501.40	ppb	04:09:50
2	Ni 231.604†	9124.7	8792.3	481.04	µg/L	481.04	ppb	04:09:29
2	P 214.914†	1424.1	1214.3	2401.5	µg/L	2401.5	ppb	04:09:50
2	Pb 220.353†	2001.1	1932.3	500.19	µg/L	500.19	ppb	04:09:50

2	S 181.975 Axial†	232.3	208.7	1020.6 µg/L	1020.6 ppb	04:09:50
2	Sb 206.836†	536.3	511.8	499.54 µg/L	499.54 ppb	04:09:50
2	Se 196.026†	403.2	390.8	501.57 µg/L	501.57 ppb	04:09:50
2	SiO2†	31161.1	28215.6	5181.3 µg/L	5181.3 ppb	04:09:29
2	Si 251.611†	33294.0	32761.3	2376.5 µg/L	2376.5 ppb	04:09:29
2	Sn 189.927†	1025.0	996.2	512.80 µg/L	512.80 ppb	04:09:50
2	Ti 334.940†	219712.3	217569.0	495.32 µg/L	495.32 ppb	04:09:24
2	Tl 190.801†	307.8	326.2	503.31 µg/L	503.31 ppb	04:09:50
2	U 409.014†	5921.8	5154.5	466.54 µg/L	466.54 ppb	04:09:29
2	V 292.402†	42697.9	42558.6	483.40 µg/L	483.40 ppb	04:09:29
2	Zn 213.857†	18825.1	18181.2	478.03 µg/L	478.03 ppb	04:09:29
3	Sc RADIAL	118925.1	118925.1	102 %		04:08:18
3	Al 396.153Radial†	10385.0	10061.1	4980.1 µg/L	4980.1 ppb	04:08:18
3	Ca 317.933Radial†	13472.5	12799.6	4952.4 µg/L	4952.4 ppb	04:08:39
3	Fe 238.204 Radial†	812.8	781.9	4989.1 µg/L	4989.1 ppb	04:08:39
3	K 766.490 Radial†	10466.2	9581.6	4903.7 µg/L	4903.7 ppb	04:08:18
3	Mg 279.077 IEC†	842.2	810.5	5008.9 µg/L	5008.9 ppb	04:08:39
3	Na 589.592 Radial†	40126.6	39985.9	10013 µg/L	10013 ppb	04:08:18
3	Sr 421.552†	99040.4	97190.2	488.48 µg/L	488.48 ppb	04:08:18
3	Sc 361.383	2020476.4	2020476.4	99.914 %		04:09:57
3	Y 371.029	1249610.6	1249610.6	99.274 %		04:09:57
3	Ag 328.068†	55583.9	55621.6	510.84 µg/L	510.84 ppb	04:10:03
3	As 188.979†	266.2	264.2	478.68 µg/L	478.68 ppb	04:10:23
3	B 249.677†	11766.0	11638.3	502.98 µg/L	502.98 ppb	04:10:03
3	Ba 233.527†	19299.0	19393.7	498.47 µg/L	498.47 ppb	04:10:03
3	Be 313.107†	788210.1	785375.8	491.27 µg/L	491.27 ppb	04:09:57
3	Cd 226.502†	18670.4	18785.5	500.49 µg/L	500.49 ppb	04:10:03
3	Co 228.616†	10245.5	10321.0	498.84 µg/L	498.84 ppb	04:10:03
3	Cr 267.716†	23540.9	23661.0	497.38 µg/L	497.38 ppb	04:10:03
3	Cu 324.752†	75321.4	71116.7	494.37 µg/L	494.37 ppb	04:10:03
3	Mn 257.610†	153329.5	153663.4	491.27 µg/L	491.27 ppb	04:09:57
3	Mo 202.031†	4240.5	4247.8	496.36 µg/L	496.36 ppb	04:10:23
3	Ni 231.604†	9423.7	9156.3	500.95 µg/L	500.95 ppb	04:10:03
3	P 214.914†	1410.1	1210.4	2391.4 µg/L	2391.4 ppb	04:10:23
3	Pb 220.353†	1957.9	1903.3	492.63 µg/L	492.63 ppb	04:10:23
3	S 181.975 Axial†	225.7	203.7	995.89 µg/L	995.89 ppb	04:10:23
3	Sb 206.836†	535.2	514.6	502.20 µg/L	502.20 ppb	04:10:23
3	Se 196.026†	391.0	381.5	489.63 µg/L	489.63 ppb	04:10:23
3	SiO2†	31888.4	29164.6	5355.5 µg/L	5355.5 ppb	04:10:03
3	Si 251.611†	34149.9	33854.2	2457.4 µg/L	2457.4 ppb	04:10:03
3	Sn 189.927†	1011.8	990.3	509.76 µg/L	509.76 ppb	04:10:23
3	Ti 334.940†	220246.6	219662.6	500.10 µg/L	500.10 ppb	04:09:57
3	Tl 190.801†	298.9	319.5	493.07 µg/L	493.07 ppb	04:10:23
3	U 409.014†	6145.2	5420.1	490.62 µg/L	490.62 ppb	04:10:03
3	V 292.402†	43772.3	43936.9	498.90 µg/L	498.90 ppb	04:10:03
3	Zn 213.857†	19413.9	18904.0	497.06 µg/L	497.06 ppb	04:10:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032620.9	100.51	%	0.553				0.55%
Sc RADIAL	118560.2	102	%	0.6				0.59%
Y 371.029	1256888.0	99.852	%	0.5007				0.50%
Ag 328.068†	54702.4	502.41	µg/L	8.860	502.41	ppb	8.860	1.76%
QC value within limits for Ag 328.068 Recovery = 100.48%								
Al 396.153Radial†	10046.7	4972.8	µg/L	37.60	4972.8	ppb	37.60	0.76%
QC value within limits for Al 396.153Radial Recovery = 99.46%								
As 188.979†	273.7	495.87	µg/L	15.159	495.87	ppb	15.159	3.06%
QC value within limits for As 188.979 Recovery = 99.17%								
B 249.677†	11409.1	493.04	µg/L	9.613	493.04	ppb	9.613	1.95%
QC value within limits for B 249.677 Recovery = 98.61%								
Ba 233.527†	19049.2	489.61	µg/L	8.401	489.61	ppb	8.401	1.72%
QC value within limits for Ba 233.527 Recovery = 97.92%								
Be 313.107†	781394.0	488.78	µg/L	3.598	488.78	ppb	3.598	0.74%
QC value within limits for Be 313.107 Recovery = 97.76%								
Ca 317.933Radial†	12815.0	4958.4	µg/L	26.46	4958.4	ppb	26.46	0.53%
QC value within limits for Ca 317.933Radial Recovery = 99.17%								
Cd 226.502†	18464.4	491.93	µg/L	8.919	491.93	ppb	8.919	1.81%
QC value within limits for Cd 226.502 Recovery = 98.39%								
Co 228.616†	10156.2	490.89	µg/L	8.069	490.89	ppb	8.069	1.64%

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   QC value within limits for Co 228.616  Recovery = 98.18%
Cr 267.716†            23231.1      488.34 µg/L         8.928      488.34 ppb          8.928   1.83%
   QC value within limits for Cr 267.716  Recovery = 97.67%
Cu 324.752†            69914.9      486.03 µg/L         8.771      486.03 ppb          8.771   1.80%
   QC value within limits for Cu 324.752  Recovery = 97.21%
Fe 238.204 Radial†       780.9      4982.2 µg/L        36.03      4982.2 ppb         36.03   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.64%
K 766.490 Radial†       9581.7      4903.8 µg/L        15.11      4903.8 ppb         15.11   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 98.08%
Mg 279.077 IEC†          811.6      5015.9 µg/L        22.44      5015.9 ppb         22.44   0.45%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.32%
Mn 257.610†           152917.8      488.89 µg/L         3.527      488.89 ppb         3.527   0.72%
   QC value within limits for Mn 257.610  Recovery = 97.78%
Mo 202.031†            4270.5      499.01 µg/L         2.534      499.01 ppb         2.534   0.51%
   QC value within limits for Mo 202.031  Recovery = 99.80%
Na 589.592 Radial†    39963.8       10008 µg/L          48.5       10008 ppb          48.5   0.48%
   QC value within limits for Na 589.592 Radial  Recovery = 100.08%
Ni 231.604†            8971.8      490.86 µg/L         9.959      490.86 ppb         9.959   2.03%
   QC value within limits for Ni 231.604  Recovery = 98.17%
P 214.914†             1211.5      2394.6 µg/L          5.97      2394.6 ppb          5.97   0.25%
   QC value within limits for P 214.914  Recovery = 95.79%
Pb 220.353†            1919.8      496.92 µg/L         3.880      496.92 ppb         3.880   0.78%
   QC value within limits for Pb 220.353  Recovery = 99.38%
S 181.975 Axial†         206.0      1007.2 µg/L        12.46      1007.2 ppb        12.46   1.24%
   QC value within limits for S 181.975 Axial  Recovery = 100.72%
Sb 206.836†              512.7      500.42 µg/L         1.548      500.42 ppb         1.548   0.31%
   QC value within limits for Sb 206.836  Recovery = 100.08%
Se 196.026†              390.4      501.02 µg/L        11.121      501.02 ppb        11.121   2.22%
   QC value within limits for Se 196.026  Recovery = 100.20%
SiO2†                  28669.7      5264.7 µg/L        87.37      5264.7 ppb         87.37   1.66%
   QC value within limits for SiO2  Recovery = 98.45%
Si 251.611†            33302.2      2416.5 µg/L        40.46      2416.5 ppb         40.46   1.67%
   QC value within limits for Si 251.611  Recovery = 96.66%
Sn 189.927†              993.5      511.41 µg/L         1.533      511.41 ppb         1.533   0.30%
   QC value within limits for Sn 189.927  Recovery = 102.28%
Sr 421.552†            96981.2      487.42 µg/L         2.110      487.42 ppb         2.110   0.43%
   QC value within limits for Sr 421.552  Recovery = 97.48%
Ti 334.940†           218829.1      498.20 µg/L         2.530      498.20 ppb         2.530   0.51%
   QC value within limits for Ti 334.940  Recovery = 99.64%
Tl 190.801†              324.3      500.33 µg/L         6.320      500.33 ppb         6.320   1.26%
   QC value within limits for Tl 190.801  Recovery = 100.07%
U 409.014†              5302.1      479.93 µg/L        12.266      479.93 ppb        12.266   2.56%
   QC value within limits for U 409.014  Recovery = 95.99%
V 292.402†             43260.8      491.30 µg/L         7.757      491.30 ppb         7.757   1.58%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†            18547.1      487.67 µg/L         9.519      487.67 ppb         9.519   1.95%
   QC value within limits for Zn 213.857  Recovery = 97.53%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 04:10:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115639.0	115639.0	99.2	%			04:11:05
1	Al 396.153Radial†	156.9	35.0	17.356	µg/L	17.356	ppb	04:11:05
1	Ca 317.933Radial†	436.6	27.6	10.676	µg/L	10.676	ppb	04:11:25
1	Fe 238.204 Radial†	18.5	3.5	22.446	µg/L	22.446	ppb	04:11:25
1	K 766.490 Radial†	786.8	111.1	56.847	µg/L	56.847	ppb	04:11:05
1	Mg 279.077 IEC†	11.0	-4.3	-26.840	µg/L	-26.840	ppb	04:11:25
1	Na 589.592 Radial†	-267.9	363.9	91.129	µg/L	91.129	ppb	04:11:05
1	Sr 421.552†	-68.1	-6.4	-0.0321	µg/L	-0.0321	ppb	04:11:05
1	Sc 361.383	2046993.6	2046993.6	101.22	%			04:12:27
1	Y 371.029	1273420.2	1273420.2	101.17	%			04:12:27
1	Ag 328.068†	77.0	65.6	0.5997	µg/L	0.5997	ppb	04:12:33
1	As 188.979†	2.3	0.1	0.1715	µg/L	0.1715	ppb	04:12:53
1	B 249.677†	367.3	225.0	9.7477	µg/L	9.7477	ppb	04:12:33
1	Ba 233.527†	-65.5	13.4	0.3427	µg/L	0.3427	ppb	04:12:53
1	Be 313.107†	3542.7	-16.0	-0.0103	µg/L	-0.0103	ppb	04:12:33
1	Cd 226.502†	-91.5	8.5	0.2274	µg/L	0.2274	ppb	04:12:53
1	Co 228.616†	-60.8	6.6	0.3171	µg/L	0.3171	ppb	04:12:53
1	Cr 267.716†	-145.2	-43.6	-0.9148	µg/L	-0.9148	ppb	04:12:33
1	Cu 324.752†	4166.8	-153.4	-1.0593	µg/L	-1.0593	ppb	04:12:33
1	Mn 257.610†	-217.5	-13.6	-0.0405	µg/L	-0.0405	ppb	04:12:53
1	Mo 202.031†	-1.1	2.6	0.3058	µg/L	0.3058	ppb	04:12:53
1	Ni 231.604†	297.2	18.0	0.9874	µg/L	0.9874	ppb	04:12:53
1	P 214.914†	197.4	-5.9	-11.829	µg/L	-11.829	ppb	04:12:53
1	Pb 220.353†	49.6	-7.2	-1.8707	µg/L	-1.8707	ppb	04:12:53
1	S 181.975 Axial†	25.8	3.4	16.470	µg/L	16.470	ppb	04:12:53
1	Sb 206.836†	19.6	-1.8	-1.7395	µg/L	-1.7395	ppb	04:12:53
1	Se 196.026†	9.2	-0.8	-0.9878	µg/L	-0.9878	ppb	04:12:53
1	SiO2†	2736.9	-47.6	-8.7330	µg/L	-8.7330	ppb	04:12:33
1	Si 251.611†	351.8	22.4	1.6130	µg/L	1.6130	ppb	04:12:53
1	Sn 189.927†	22.2	-0.4	-0.2305	µg/L	-0.2305	ppb	04:12:53
1	Ti 334.940†	1084.8	297.3	0.6766	µg/L	0.6766	ppb	04:12:33
1	Tl 190.801†	-19.9	0.8	1.1576	µg/L	1.1576	ppb	04:12:53
1	U 409.014†	756.3	16.7	1.5112	µg/L	1.5112	ppb	04:12:33
1	V 292.402†	-131.0	-2.6	-0.0233	µg/L	-0.0233	ppb	04:12:33
1	Zn 213.857†	539.7	6.5	0.1683	µg/L	0.1683	ppb	04:12:53
2	Sc RADIAL	115483.1	115483.1	99.0	%			04:11:31
2	Al 396.153Radial†	139.0	17.1	8.4812	µg/L	8.4812	ppb	04:11:31
2	Ca 317.933Radial†	416.1	7.5	2.9040	µg/L	2.9040	ppb	04:11:51
2	Fe 238.204 Radial†	13.6	-1.4	-8.9957	µg/L	-8.9957	ppb	04:11:51
2	K 766.490 Radial†	755.8	80.8	41.341	µg/L	41.341	ppb	04:11:31
2	Mg 279.077 IEC†	14.0	-1.3	-7.7965	µg/L	-7.7965	ppb	04:11:51
2	Na 589.592 Radial†	-313.4	317.6	79.527	µg/L	79.527	ppb	04:11:31
2	Sr 421.552†	-77.3	-15.8	-0.0792	µg/L	-0.0792	ppb	04:11:31
2	Sc 361.383	2028601.9	2028601.9	100.32	%			04:12:59
2	Y 371.029	1262475.9	1262475.9	100.30	%			04:12:59
2	Ag 328.068†	25.2	14.7	0.1335	µg/L	0.1335	ppb	04:13:05
2	As 188.979†	2.0	-0.2	-0.3754	µg/L	-0.3754	ppb	04:13:25
2	B 249.677†	363.4	224.4	9.7303	µg/L	9.7303	ppb	04:13:05
2	Ba 233.527†	-67.7	10.5	0.2701	µg/L	0.2701	ppb	04:13:25
2	Be 313.107†	3500.1	-26.8	-0.0170	µg/L	-0.0170	ppb	04:13:05
2	Cd 226.502†	-77.2	22.1	0.5844	µg/L	0.5844	ppb	04:13:25
2	Co 228.616†	-64.0	2.9	0.1382	µg/L	0.1382	ppb	04:13:25
2	Cr 267.716†	-112.7	-12.5	-0.2623	µg/L	-0.2623	ppb	04:13:05
2	Cu 324.752†	4176.8	-106.1	-0.7380	µg/L	-0.7380	ppb	04:13:05
2	Mn 257.610†	-218.5	-16.4	-0.0536	µg/L	-0.0536	ppb	04:13:25
2	Mo 202.031†	-0.4	3.3	0.3795	µg/L	0.3795	ppb	04:13:25
2	Ni 231.604†	286.7	10.3	0.5611	µg/L	0.5611	ppb	04:13:25
2	P 214.914†	203.8	2.2	4.7067	µg/L	4.7067	ppb	04:13:25
2	Pb 220.353†	50.8	-5.6	-1.4386	µg/L	-1.4386	ppb	04:13:25

2	S 181.975 Axial†	30.4	8.1	39.742 µg/L	39.742 ppb	04:13:25
2	Sb 206.836†	12.6	-8.6	-8.3972 µg/L	-8.3972 ppb	04:13:25
2	Se 196.026†	8.7	-1.2	-1.5563 µg/L	-1.5563 ppb	04:13:25
2	SiO2†	2747.0	-13.0	-2.3964 µg/L	-2.3964 ppb	04:13:05
2	Si 251.611†	345.6	19.3	1.2542 µg/L	1.2542 ppb	04:13:25
2	Sn 189.927†	29.0	6.5	3.3311 µg/L	3.3311 ppb	04:13:25
2	Ti 334.940†	1024.5	246.9	0.5622 µg/L	0.5622 ppb	04:13:05
2	Tl 190.801†	-19.2	1.2	1.8761 µg/L	1.8761 ppb	04:13:25
2	U 409.014†	674.2	-58.4	-5.2889 µg/L	-5.2889 ppb	04:13:05
2	V 292.402†	-120.2	6.9	0.0712 µg/L	0.0712 ppb	04:13:05
2	Zn 213.857†	548.9	20.5	0.5438 µg/L	0.5438 ppb	04:13:25
3	Sc RADIAL	116381.2	116381.2	99.8 %		04:11:57
3	Al 396.153Radial†	165.2	42.3	20.986 µg/L	20.986 ppb	04:11:57
3	Ca 317.933Radial†	426.0	14.2	5.4851 µg/L	5.4851 ppb	04:12:17
3	Fe 238.204 Radial†	14.7	-0.5	-2.9914 µg/L	-2.9914 ppb	04:12:17
3	K 766.490 Radial†	719.2	38.3	19.577 µg/L	19.577 ppb	04:11:57
3	Mg 279.077 IEC†	17.8	2.4	14.819 µg/L	14.819 ppb	04:12:17
3	Na 589.592 Radial†	-316.5	317.0	79.379 µg/L	79.379 ppb	04:11:57
3	Sr 421.552†	-108.3	-46.2	-0.2324 µg/L	-0.2324 ppb	04:11:57
3	Sc 361.383	2033268.1	2033268.1	100.55 %		04:13:31
3	Y 371.029	1265609.7	1265609.7	100.55 %		04:13:31
3	Ag 328.068†	54.2	43.5	0.3944 µg/L	0.3944 ppb	04:13:37
3	As 188.979†	11.2	8.9	16.117 µg/L	16.117 ppb	04:13:57
3	B 249.677†	370.9	231.1	10.019 µg/L	10.019 ppb	04:13:37
3	Ba 233.527†	-73.9	4.5	0.1156 µg/L	0.1156 ppb	04:13:57
3	Be 313.107†	3543.9	8.8	0.0052 µg/L	0.0052 ppb	04:13:37
3	Cd 226.502†	-81.8	17.6	0.4688 µg/L	0.4688 ppb	04:13:57
3	Co 228.616†	-69.7	-2.6	-0.1278 µg/L	-0.1278 ppb	04:13:57
3	Cr 267.716†	-121.9	-21.4	-0.4498 µg/L	-0.4498 ppb	04:13:37
3	Cu 324.752†	4190.7	-101.8	-0.7067 µg/L	-0.7067 ppb	04:13:37
3	Mn 257.610†	-208.3	-5.9	-0.0191 µg/L	-0.0191 ppb	04:13:57
3	Mo 202.031†	-1.3	2.4	0.2782 µg/L	0.2782 ppb	04:13:57
3	Ni 231.604†	284.9	7.7	0.4239 µg/L	0.4239 ppb	04:13:57
3	P 214.914†	193.9	-8.1	-16.212 µg/L	-16.212 ppb	04:13:57
3	Pb 220.353†	53.8	-2.7	-0.6997 µg/L	-0.6997 ppb	04:13:57
3	S 181.975 Axial†	24.7	2.4	11.779 µg/L	11.779 ppb	04:13:57
3	Sb 206.836†	17.5	-3.7	-3.5889 µg/L	-3.5889 ppb	04:13:57
3	Se 196.026†	12.4	2.5	3.1776 µg/L	3.1776 ppb	04:13:57
3	SiO2†	2749.8	-16.5	-3.0271 µg/L	-3.0271 ppb	04:13:37
3	Si 251.611†	367.0	39.8	2.9265 µg/L	2.9265 ppb	04:13:57
3	Sn 189.927†	21.4	-1.1	-0.5616 µg/L	-0.5616 ppb	04:13:57
3	Ti 334.940†	1118.9	338.4	0.7705 µg/L	0.7705 ppb	04:13:37
3	Tl 190.801†	-18.9	1.6	2.4301 µg/L	2.4301 ppb	04:13:57
3	U 409.014†	709.9	-24.4	-2.2159 µg/L	-2.2159 ppb	04:13:37
3	V 292.402†	-149.3	-21.7	-0.2465 µg/L	-0.2465 ppb	04:13:37
3	Zn 213.857†	547.0	17.4	0.4600 µg/L	0.4600 ppb	04:13:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2036287.9	100.70	%	0.473				0.47%
Sc RADIAL	115834.4	99.3	%	0.41				0.41%
Y 371.029	1267168.6	100.67	%	0.448				0.44%
Ag 328.068†	41.2	0.3759	µg/L	0.23365	0.3759	ppb	0.23365	62.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	31.4	15.608	µg/L	6.4332	15.608	ppb	6.4332	41.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.9	5.3044	µg/L	9.36814	5.3044	ppb	9.36814	176.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	226.8	9.8322	µg/L	0.16167	9.8322	ppb	0.16167	1.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.5	0.2428	µg/L	0.11602	0.2428	ppb	0.11602	47.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-11.4	-0.0074	µg/L	0.01137	-0.0074	ppb	0.01137	154.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.4	6.3551	µg/L	3.95851	6.3551	ppb	3.95851	62.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	16.1	0.4269	µg/L	0.18219	0.4269	ppb	0.18219	42.68%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.3	0.1092	µg/L	0.22387	0.1092	ppb	0.22387	205.03%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -25.9     -0.5423 µg/L       0.33594     -0.5423 ppb        0.33594  61.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -120.4     -0.8347 µg/L       0.19516     -0.8347 ppb        0.19516  23.38%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      3.4864 µg/L      16.69195      3.4864 ppb       16.69195 478.78%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         76.7     39.255 µg/L       18.7226      39.255 ppb        18.7226  47.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.1     -6.6059 µg/L      20.85538     -6.6059 ppb       20.85538 315.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -12.0     -0.0377 µg/L       0.01741     -0.0377 ppb        0.01741  46.14%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.7      0.3212 µg/L       0.05237      0.3212 ppb        0.05237  16.31%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       332.8     83.345 µg/L        6.7413     83.345 ppb         6.7413   8.09%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               12.0      0.6575 µg/L       0.29387      0.6575 ppb        0.29387  44.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.9     -7.7782 µg/L      11.03213     -7.7782 ppb       11.03213 141.83%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.2     -1.3363 µg/L       0.59213     -1.3363 ppb        0.59213  44.31%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.6      22.664 µg/L       14.9752      22.664 ppb        14.9752  66.08%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -4.7     -4.5752 µg/L       3.43668     -4.5752 ppb        3.43668  75.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.2      0.2112 µg/L       2.58468      0.2112 ppb        2.58468 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -25.7     -4.7188 µg/L       3.49064     -4.7188 ppb        3.49064  73.97%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               27.1      1.9312 µg/L       0.88039      1.9312 ppb        0.88039  45.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.7      0.8463 µg/L       2.15822      0.8463 ppb        2.15822 255.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -22.8     -0.1146 µg/L       0.10474     -0.1146 ppb        0.10474  91.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              294.2      0.6698 µg/L       0.10433      0.6698 ppb        0.10433  15.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.2      1.8213 µg/L       0.63805      1.8213 ppb        0.63805  35.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -22.0     -1.9979 µg/L       3.40527     -1.9979 ppb        3.40527 170.45%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.8     -0.0662 µg/L       0.16313     -0.0662 ppb        0.16313 246.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.8      0.3907 µg/L       0.19708      0.3907 ppb        0.19708  50.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 04:40:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117131.8	117131.8	100	%			04:40:46
1	Al 396.153Radial†	10298.6	10131.1	5014.8	µg/L	5014.8	ppb	04:40:46
1	Ca 317.933Radial†	13241.0	12771.4	4941.5	µg/L	4941.5	ppb	04:41:06
1	Fe 238.204 Radial†	794.4	775.8	4949.8	µg/L	4949.8	ppb	04:41:06
1	K 766.490 Radial†	10374.1	9647.1	4937.2	µg/L	4937.2	ppb	04:40:46
1	Mg 279.077 IEC†	832.7	813.7	5028.7	µg/L	5028.7	ppb	04:41:06
1	Na 589.592 Radial†	39970.9	40433.3	10125	µg/L	10125	ppb	04:40:46
1	Sr 421.552†	97142.2	96787.2	486.45	µg/L	486.45	ppb	04:40:46
1	Sc 361.383	2010513.1	2010513.1	99.421	%			04:42:10
1	Y 371.029	1241971.9	1241971.9	98.667	%			04:42:10
1	Ag 328.068†	54362.3	54668.5	502.07	µg/L	502.07	ppb	04:42:15
1	As 188.979†	264.3	263.7	477.67	µg/L	477.67	ppb	04:42:36
1	B 249.677†	11352.9	11281.1	487.51	µg/L	487.51	ppb	04:42:15
1	Ba 233.527†	18588.5	18774.8	482.57	µg/L	482.57	ppb	04:42:15
1	Be 313.107†	778478.3	779496.8	487.59	µg/L	487.59	ppb	04:42:10
1	Cd 226.502†	17947.5	18151.0	483.58	µg/L	483.58	ppb	04:42:15
1	Co 228.616†	9918.1	10042.5	485.38	µg/L	485.38	ppb	04:42:15
1	Cr 267.716†	22771.1	23003.6	483.56	µg/L	483.56	ppb	04:42:15
1	Cu 324.752†	73941.2	70102.1	487.32	µg/L	487.32	ppb	04:42:15
1	Mn 257.610†	151757.2	152842.5	488.65	µg/L	488.65	ppb	04:42:10
1	Mo 202.031†	4219.2	4247.5	496.32	µg/L	496.32	ppb	04:42:36
1	Ni 231.604†	9071.8	8849.1	484.14	µg/L	484.14	ppb	04:42:15
1	P 214.914†	1394.3	1201.5	2374.2	µg/L	2374.2	ppb	04:42:36
1	Pb 220.353†	1946.4	1901.5	492.18	µg/L	492.18	ppb	04:42:36
1	S 181.975 Axial†	227.2	206.4	1009.1	µg/L	1009.1	ppb	04:42:36
1	Sb 206.836†	528.4	510.4	498.15	µg/L	498.15	ppb	04:42:36
1	Se 196.026†	395.7	388.1	498.09	µg/L	498.09	ppb	04:42:36
1	SiO2†	31122.5	28552.4	5243.1	µg/L	5243.1	ppb	04:42:15
1	Si 251.611†	33348.7	33217.7	2410.5	µg/L	2410.5	ppb	04:42:15
1	Sn 189.927†	997.9	981.4	505.19	µg/L	505.19	ppb	04:42:36
1	Ti 334.940†	218849.0	219349.4	499.38	µg/L	499.38	ppb	04:42:10
1	Tl 190.801†	306.2	328.4	506.69	µg/L	506.69	ppb	04:42:36
1	U 409.014†	6015.1	5319.7	481.53	µg/L	481.53	ppb	04:42:15
1	V 292.402†	42531.4	42905.9	487.29	µg/L	487.29	ppb	04:42:15
1	Zn 213.857†	18805.9	18388.8	483.51	µg/L	483.51	ppb	04:42:15
2	Sc RADIAL	116562.1	116562.1	99.9	%			04:41:12
2	Al 396.153Radial†	10283.1	10165.7	5032.0	µg/L	5032.0	ppb	04:41:12
2	Ca 317.933Radial†	13213.0	12807.8	4955.6	µg/L	4955.6	ppb	04:41:32
2	Fe 238.204 Radial†	792.9	778.2	4965.1	µg/L	4965.1	ppb	04:41:32
2	K 766.490 Radial†	10444.5	9768.0	4999.1	µg/L	4999.1	ppb	04:41:12
2	Mg 279.077 IEC†	829.4	814.4	5033.5	µg/L	5033.5	ppb	04:41:32
2	Na 589.592 Radial†	40229.8	40886.9	10239	µg/L	10239	ppb	04:41:12
2	Sr 421.552†	97706.8	97824.9	491.67	µg/L	491.67	ppb	04:41:12
2	Sc 361.383	2006234.6	2006234.6	99.209	%			04:42:43
2	Y 371.029	1242302.8	1242302.8	98.694	%			04:42:43
2	Ag 328.068†	54951.8	55379.4	508.59	µg/L	508.59	ppb	04:42:49
2	As 188.979†	270.9	270.8	490.61	µg/L	490.61	ppb	04:43:09
2	B 249.677†	11387.5	11340.4	490.07	µg/L	490.07	ppb	04:42:49
2	Ba 233.527†	18829.2	19057.3	489.83	µg/L	489.83	ppb	04:42:49
2	Be 313.107†	779345.1	782040.4	489.18	µg/L	489.18	ppb	04:42:43
2	Cd 226.502†	18159.2	18402.9	490.30	µg/L	490.30	ppb	04:42:49
2	Co 228.616†	10047.4	10194.1	492.71	µg/L	492.71	ppb	04:42:49
2	Cr 267.716†	22990.3	23273.3	489.23	µg/L	489.23	ppb	04:42:49
2	Cu 324.752†	74696.4	71021.9	493.70	µg/L	493.70	ppb	04:42:49
2	Mn 257.610†	151782.0	153193.0	489.77	µg/L	489.77	ppb	04:42:43
2	Mo 202.031†	4223.3	4260.7	497.86	µg/L	497.86	ppb	04:43:09
2	Ni 231.604†	9171.8	8969.3	490.72	µg/L	490.72	ppb	04:42:49
2	P 214.914†	1399.2	1209.4	2389.5	µg/L	2389.5	ppb	04:43:09
2	Pb 220.353†	1940.4	1899.6	491.67	µg/L	491.67	ppb	04:43:09

2	S 181.975 Axial†	232.2	211.9	1036.2 µg/L	1036.2 ppb	04:43:09
2	Sb 206.836†	531.2	514.3	501.96 µg/L	501.96 ppb	04:43:09
2	Se 196.026†	398.0	391.3	502.18 µg/L	502.18 ppb	04:43:09
2	SiO2†	31320.7	28818.9	5292.1 µg/L	5292.1 ppb	04:42:49
2	Si 251.611†	33588.9	33531.4	2433.5 µg/L	2433.5 ppb	04:42:49
2	Sn 189.927†	999.2	984.7	506.93 µg/L	506.93 ppb	04:43:09
2	Ti 334.940†	219290.3	220263.5	501.46 µg/L	501.46 ppb	04:42:43
2	Tl 190.801†	306.6	329.4	508.19 µg/L	508.19 ppb	04:43:09
2	U 409.014†	6100.9	5419.1	490.54 µg/L	490.54 ppb	04:42:49
2	V 292.402†	43026.3	43495.9	493.95 µg/L	493.95 ppb	04:42:49
2	Zn 213.857†	18963.2	18587.7	488.73 µg/L	488.73 ppb	04:42:49
3	Sc RADIAL	116475.4	116475.4	99.9 %		04:41:38
3	Al 396.153Radial†	10372.7	10263.1	5080.7 µg/L	5080.7 ppb	04:41:38
3	Ca 317.933Radial†	13235.6	12840.2	4968.1 µg/L	4968.1 ppb	04:41:58
3	Fe 238.204 Radial†	793.7	779.6	4973.9 µg/L	4973.9 ppb	04:41:58
3	K 766.490 Radial†	10499.6	9831.0	5031.4 µg/L	5031.4 ppb	04:41:38
3	Mg 279.077 IEC†	827.0	812.7	5022.4 µg/L	5022.4 ppb	04:41:58
3	Na 589.592 Radial†	40701.6	41389.3	10365 µg/L	10365 ppb	04:41:38
3	Sr 421.552†	97969.4	98160.7	493.35 µg/L	493.35 ppb	04:41:38
3	Sc 361.383	2012177.2	2012177.2	99.503 %		04:43:16
3	Y 371.029	1244322.9	1244322.9	98.854 %		04:43:16
3	Ag 328.068†	54982.4	55246.5	507.38 µg/L	507.38 ppb	04:43:22
3	As 188.979†	270.5	269.6	488.51 µg/L	488.51 ppb	04:43:42
3	B 249.677†	11410.5	11329.7	489.60 µg/L	489.60 ppb	04:43:22
3	Ba 233.527†	18842.5	19014.6	488.73 µg/L	488.73 ppb	04:43:22
3	Be 313.107†	782780.9	783173.3	489.89 µg/L	489.89 ppb	04:43:16
3	Cd 226.502†	18220.9	18410.9	490.51 µg/L	490.51 ppb	04:43:22
3	Co 228.616†	10075.1	10192.0	492.59 µg/L	492.59 ppb	04:43:22
3	Cr 267.716†	23099.4	23314.6	490.10 µg/L	490.10 ppb	04:43:22
3	Cu 324.752†	74719.3	70822.6	492.32 µg/L	492.32 ppb	04:43:22
3	Mn 257.610†	152397.5	153359.7	490.30 µg/L	490.30 ppb	04:43:16
3	Mo 202.031†	4169.8	4194.3	490.10 µg/L	490.10 ppb	04:43:42
3	Ni 231.604†	9189.9	8960.2	490.22 µg/L	490.22 ppb	04:43:22
3	P 214.914†	1379.8	1185.8	2341.7 µg/L	2341.7 ppb	04:43:42
3	Pb 220.353†	1930.5	1883.9	487.60 µg/L	487.60 ppb	04:43:42
3	S 181.975 Axial†	227.4	206.4	1009.0 µg/L	1009.0 ppb	04:43:42
3	Sb 206.836†	518.4	499.9	487.89 µg/L	487.89 ppb	04:43:42
3	Se 196.026†	390.6	382.6	491.10 µg/L	491.10 ppb	04:43:42
3	SiO2†	31361.1	28766.3	5282.4 µg/L	5282.4 ppb	04:43:22
3	Si 251.611†	33628.0	33470.7	2429.5 µg/L	2429.5 ppb	04:43:22
3	Sn 189.927†	984.4	966.9	497.78 µg/L	497.78 ppb	04:43:42
3	Ti 334.940†	220111.7	220436.3	501.86 µg/L	501.86 ppb	04:43:16
3	Tl 190.801†	290.5	312.4	482.06 µg/L	482.06 ppb	04:43:42
3	U 409.014†	6071.7	5371.6	486.23 µg/L	486.23 ppb	04:43:22
3	V 292.402†	43139.8	43481.9	493.73 µg/L	493.73 ppb	04:43:22
3	Zn 213.857†	19050.2	18618.7	489.56 µg/L	489.56 ppb	04:43:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2009641.7	99.378	%	0.1516				0.15%
Sc RADIAL	116723.1	100	%	0.3				0.31%
Y 371.029	1242865.9	98.738	%	0.1011				0.10%
Ag 328.068†	55098.1	506.01	µg/L	3.472	506.01	ppb	3.472	0.69%
QC value within limits for Ag 328.068 Recovery = 101.20%								
Al 396.153Radial†	10186.6	5042.5	µg/L	34.15	5042.5	ppb	34.15	0.68%
QC value within limits for Al 396.153Radial Recovery = 100.85%								
As 188.979†	268.0	485.60	µg/L	6.941	485.60	ppb	6.941	1.43%
QC value within limits for As 188.979 Recovery = 97.12%								
B 249.677†	11317.1	489.06	µg/L	1.366	489.06	ppb	1.366	0.28%
QC value within limits for B 249.677 Recovery = 97.81%								
Ba 233.527†	18948.9	487.04	µg/L	3.914	487.04	ppb	3.914	0.80%
QC value within limits for Ba 233.527 Recovery = 97.41%								
Be 313.107†	781570.2	488.88	µg/L	1.178	488.88	ppb	1.178	0.24%
QC value within limits for Be 313.107 Recovery = 97.78%								
Ca 317.933Radial†	12806.5	4955.1	µg/L	13.33	4955.1	ppb	13.33	0.27%
QC value within limits for Ca 317.933Radial Recovery = 99.10%								
Cd 226.502†	18321.6	488.13	µg/L	3.940	488.13	ppb	3.940	0.81%
QC value within limits for Cd 226.502 Recovery = 97.63%								
Co 228.616†	10142.9	490.23	µg/L	4.196	490.23	ppb	4.196	0.86%

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   QC value within limits for Co 228.616  Recovery = 98.05%
Cr 267.716†            23197.2      487.63 µg/L        3.551      487.63 ppb          3.551   0.73%
   QC value within limits for Cr 267.716  Recovery = 97.53%
Cu 324.752†            70648.9      491.12 µg/L        3.359      491.12 ppb          3.359   0.68%
   QC value within limits for Cu 324.752  Recovery = 98.22%
Fe 238.204 Radial†       777.8      4962.9 µg/L       12.20      4962.9 ppb          12.20   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.26%
K 766.490 Radial†       9748.7      4989.3 µg/L       47.83      4989.3 ppb          47.83   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 99.79%
Mg 279.077 IEC†          813.6      5028.2 µg/L        5.61      5028.2 ppb           5.61   0.11%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.56%
Mn 257.610†           153131.7      489.57 µg/L       0.844      489.57 ppb          0.844   0.17%
   QC value within limits for Mn 257.610  Recovery = 97.91%
Mo 202.031†             4234.1      494.76 µg/L       4.105      494.76 ppb          4.105   0.83%
   QC value within limits for Mo 202.031  Recovery = 98.95%
Na 589.592 Radial†     40903.2       10243 µg/L       119.7       10243 ppb          119.7   1.17%
   QC value within limits for Na 589.592 Radial  Recovery = 102.43%
Ni 231.604†             8926.2      488.36 µg/L       3.663      488.36 ppb          3.663   0.75%
   QC value within limits for Ni 231.604  Recovery = 97.67%
P 214.914†              1198.9      2368.5 µg/L       24.41      2368.5 ppb          24.41   1.03%
   QC value within limits for P 214.914  Recovery = 94.74%
Pb 220.353†             1895.0      490.48 µg/L       2.512      490.48 ppb          2.512   0.51%
   QC value within limits for Pb 220.353  Recovery = 98.10%
S 181.975 Axial†         208.2      1018.1 µg/L       15.69      1018.1 ppb          15.69   1.54%
   QC value within limits for S 181.975 Axial  Recovery = 101.81%
Sb 206.836†              508.2      496.00 µg/L       7.277      496.00 ppb          7.277   1.47%
   QC value within limits for Sb 206.836  Recovery = 99.20%
Se 196.026†              387.4      497.12 µg/L       5.606      497.12 ppb          5.606   1.13%
   QC value within limits for Se 196.026  Recovery = 99.42%
SiO2†                  28712.5      5272.5 µg/L       25.92      5272.5 ppb          25.92   0.49%
   QC value within limits for SiO2  Recovery = 98.60%
Si 251.611†            33406.6      2424.5 µg/L       12.30      2424.5 ppb          12.30   0.51%
   QC value within limits for Si 251.611  Recovery = 96.98%
Sn 189.927†              977.6      503.30 µg/L       4.858      503.30 ppb          4.858   0.97%
   QC value within limits for Sn 189.927  Recovery = 100.66%
Sr 421.552†            97590.9      490.49 µg/L       3.599      490.49 ppb          3.599   0.73%
   QC value within limits for Sr 421.552  Recovery = 98.10%
Ti 334.940†           220016.4      500.90 µg/L       1.330      500.90 ppb          1.330   0.27%
   QC value within limits for Ti 334.940  Recovery = 100.18%
Tl 190.801†              323.4      498.98 µg/L      14.670      498.98 ppb         14.670   2.94%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†              5370.1      486.10 µg/L       4.504      486.10 ppb          4.504   0.93%
   QC value within limits for U 409.014  Recovery = 97.22%
V 292.402†             43294.6      491.66 µg/L       3.786      491.66 ppb          3.786   0.77%
   QC value within limits for V 292.402  Recovery = 98.33%
Zn 213.857†            18531.7      487.27 µg/L       3.281      487.27 ppb          3.281   0.67%
   QC value within limits for Zn 213.857  Recovery = 97.45%
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 04:43:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113588.2	113588.2	97.4	%			04:44:24
1	Al 396.153Radial†	148.9	29.6	14.679	µg/L	14.679	ppb	04:44:24
1	Ca 317.933Radial†	426.0	24.7	9.5432	µg/L	9.5432	ppb	04:44:44
1	Fe 238.204 Radial†	14.5	-0.3	-1.8215	µg/L	-1.8215	ppb	04:44:44
1	K 766.490 Radial†	784.9	123.4	63.155	µg/L	63.155	ppb	04:44:24
1	Mg 279.077 IEC†	15.5	0.4	2.7231	µg/L	2.7231	ppb	04:44:44
1	Na 589.592 Radial†	-371.7	252.5	63.233	µg/L	63.233	ppb	04:44:24
1	Sr 421.552†	-43.3	17.8	0.0895	µg/L	0.0895	ppb	04:44:24
1	Sc 361.383	2019606.0	2019606.0	99.871	%			04:45:46
1	Y 371.029	1257603.9	1257603.9	99.909	%			04:45:46
1	Ag 328.068†	18.1	7.7	0.0761	µg/L	0.0761	ppb	04:45:52
1	As 188.979†	-0.0	-2.3	-4.1113	µg/L	-4.1113	ppb	04:46:13
1	B 249.677†	256.4	118.9	5.1535	µg/L	5.1535	ppb	04:46:13
1	Ba 233.527†	-64.3	13.6	0.3514	µg/L	0.3514	ppb	04:46:13
1	Be 313.107†	3828.5	317.6	0.1985	µg/L	0.1985	ppb	04:45:52
1	Cd 226.502†	-92.0	6.8	0.1751	µg/L	0.1751	ppb	04:46:13
1	Co 228.616†	-67.5	-1.0	-0.0477	µg/L	-0.0477	ppb	04:46:13
1	Cr 267.716†	-99.6	0.1	0.0042	µg/L	0.0042	ppb	04:45:52
1	Cu 324.752†	4138.4	-126.0	-0.8743	µg/L	-0.8743	ppb	04:45:52
1	Mn 257.610†	-173.7	27.4	0.0872	µg/L	0.0872	ppb	04:46:13
1	Mo 202.031†	-1.3	2.4	0.2806	µg/L	0.2806	ppb	04:46:13
1	Ni 231.604†	269.1	-6.1	-0.3349	µg/L	-0.3349	ppb	04:46:13
1	P 214.914†	186.2	-14.5	-29.126	µg/L	-29.126	ppb	04:46:13
1	Pb 220.353†	49.1	-7.1	-1.8261	µg/L	-1.8261	ppb	04:46:13
1	S 181.975 Axial†	26.7	4.6	22.630	µg/L	22.630	ppb	04:46:13
1	Sb 206.836†	19.8	-1.3	-1.2436	µg/L	-1.2436	ppb	04:46:13
1	Se 196.026†	7.0	-2.9	-3.6953	µg/L	-3.6953	ppb	04:46:13
1	SiO2†	2740.0	-7.8	-1.4274	µg/L	-1.4274	ppb	04:45:52
1	Si 251.611†	361.5	36.7	2.7509	µg/L	2.7509	ppb	04:46:13
1	Sn 189.927†	18.3	-4.1	-2.1159	µg/L	-2.1159	ppb	04:46:13
1	Ti 334.940†	1036.9	263.8	0.6004	µg/L	0.6004	ppb	04:45:52
1	Tl 190.801†	-17.5	2.9	4.3949	µg/L	4.3949	ppb	04:46:13
1	U 409.014†	631.6	-98.1	-8.8903	µg/L	-8.8903	ppb	04:45:52
1	V 292.402†	-54.2	72.5	0.8029	µg/L	0.8029	ppb	04:45:52
1	Zn 213.857†	538.6	12.7	0.3395	µg/L	0.3395	ppb	04:46:13
2	Sc RADIAL	114563.0	114563.0	98.2	%			04:44:50
2	Al 396.153Radial†	127.5	6.5	3.2427	µg/L	3.2427	ppb	04:44:50
2	Ca 317.933Radial†	405.9	0.5	0.1836	µg/L	0.1836	ppb	04:45:10
2	Fe 238.204 Radial†	19.7	4.9	30.923	µg/L	30.923	ppb	04:45:10
2	K 766.490 Radial†	644.2	-26.7	-13.657	µg/L	-13.657	ppb	04:44:50
2	Mg 279.077 IEC†	14.4	-0.8	-4.9726	µg/L	-4.9726	ppb	04:45:10
2	Na 589.592 Radial†	-333.3	294.8	73.824	µg/L	73.824	ppb	04:44:50
2	Sr 421.552†	-70.6	-9.6	-0.0481	µg/L	-0.0481	ppb	04:44:50
2	Sc 361.383	2010407.0	2010407.0	99.416	%			04:46:19
2	Y 371.029	1252503.3	1252503.3	99.504	%			04:46:19
2	Ag 328.068†	109.0	99.3	0.9072	µg/L	0.9072	ppb	04:46:24
2	As 188.979†	-4.3	-6.6	-11.899	µg/L	-11.899	ppb	04:46:45
2	B 249.677†	248.8	112.4	4.8633	µg/L	4.8633	ppb	04:46:45
2	Ba 233.527†	-65.7	11.9	0.3063	µg/L	0.3063	ppb	04:46:45
2	Be 313.107†	3440.8	-54.8	-0.0345	µg/L	-0.0345	ppb	04:46:24
2	Cd 226.502†	-88.1	10.3	0.2741	µg/L	0.2741	ppb	04:46:45
2	Co 228.616†	-62.7	3.6	0.1725	µg/L	0.1725	ppb	04:46:45
2	Cr 267.716†	-134.9	-35.9	-0.7536	µg/L	-0.7536	ppb	04:46:24
2	Cu 324.752†	4133.9	-111.6	-0.7672	µg/L	-0.7672	ppb	04:46:24
2	Mn 257.610†	-180.7	19.6	0.0663	µg/L	0.0663	ppb	04:46:45
2	Mo 202.031†	-9.0	-5.4	-0.6277	µg/L	-0.6277	ppb	04:46:45
2	Ni 231.604†	281.2	7.3	0.3970	µg/L	0.3970	ppb	04:46:45
2	P 214.914†	196.8	-3.0	-5.9870	µg/L	-5.9870	ppb	04:46:45
2	Pb 220.353†	51.7	-4.3	-1.1016	µg/L	-1.1016	ppb	04:46:45

2	S 181.975 Axial†	26.5	4.5	21.922 µg/L	21.922 ppb	04:46:45
2	Sb 206.836†	14.7	-6.4	-6.2096 µg/L	-6.2096 ppb	04:46:45
2	Se 196.026†	9.4	-0.4	-0.5135 µg/L	-0.5135 ppb	04:46:45
2	SiO2†	2691.8	-43.7	-8.0328 µg/L	-8.0328 ppb	04:46:24
2	Si 251.611†	351.0	27.8	2.1528 µg/L	2.1528 ppb	04:46:45
2	Sn 189.927†	17.3	-5.0	-2.5604 µg/L	-2.5604 ppb	04:46:45
2	Ti 334.940†	1040.3	272.0	0.6196 µg/L	0.6196 ppb	04:46:24
2	Tl 190.801†	-15.7	4.6	7.0621 µg/L	7.0621 ppb	04:46:45
2	U 409.014†	736.6	10.4	0.9400 µg/L	0.9400 ppb	04:46:24
2	V 292.402†	-128.7	-2.7	-0.0310 µg/L	-0.0310 ppb	04:46:24
2	Zn 213.857†	550.5	27.1	0.7145 µg/L	0.7145 ppb	04:46:45
3	Sc RADIAL	114473.5	114473.5	98.2 %		04:45:16
3	Al 396.153Radial†	134.5	13.8	6.8406 µg/L	6.8406 ppb	04:45:16
3	Ca 317.933Radial†	430.0	25.3	9.7966 µg/L	9.7966 ppb	04:45:36
3	Fe 238.204 Radial†	18.4	3.6	22.942 µg/L	22.942 ppb	04:45:36
3	K 766.490 Radial†	733.1	64.5	32.991 µg/L	32.991 ppb	04:45:16
3	Mg 279.077 IEC†	12.3	-2.9	-17.757 µg/L	-17.757 ppb	04:45:36
3	Na 589.592 Radial†	-437.7	188.1	47.115 µg/L	47.115 ppb	04:45:16
3	Sr 421.552†	-39.0	22.5	0.1133 µg/L	0.1133 ppb	04:45:16
3	Sc 361.383	2029864.0	2029864.0	100.38 %		04:46:51
3	Y 371.029	1265029.6	1265029.6	100.50 %		04:46:51
3	Ag 328.068†	43.1	32.5	0.2971 µg/L	0.2971 ppb	04:46:56
3	As 188.979†	0.6	-1.6	-2.8570 µg/L	-2.8570 ppb	04:47:17
3	B 249.677†	240.3	101.5	4.3943 µg/L	4.3943 ppb	04:47:17
3	Ba 233.527†	-70.1	8.2	0.2106 µg/L	0.2106 ppb	04:47:17
3	Be 313.107†	3502.1	-27.0	-0.0170 µg/L	-0.0170 ppb	04:46:56
3	Cd 226.502†	-90.3	9.0	0.2387 µg/L	0.2387 ppb	04:47:17
3	Co 228.616†	-61.3	5.6	0.2707 µg/L	0.2707 ppb	04:47:17
3	Cr 267.716†	-119.2	-19.0	-0.3987 µg/L	-0.3987 ppb	04:46:56
3	Cu 324.752†	4134.5	-150.9	-1.0415 µg/L	-1.0415 ppb	04:46:56
3	Mn 257.610†	-193.4	8.7	0.0306 µg/L	0.0306 ppb	04:47:17
3	Mo 202.031†	-3.1	0.6	0.0664 µg/L	0.0664 ppb	04:47:17
3	Ni 231.604†	282.2	5.6	0.3043 µg/L	0.3043 ppb	04:47:17
3	P 214.914†	185.5	-16.1	-32.354 µg/L	-32.354 ppb	04:47:17
3	Pb 220.353†	54.1	-2.4	-0.6163 µg/L	-0.6163 ppb	04:47:17
3	S 181.975 Axial†	27.7	5.4	26.623 µg/L	26.623 ppb	04:47:17
3	Sb 206.836†	19.6	-1.6	-1.5540 µg/L	-1.5540 ppb	04:47:17
3	Se 196.026†	13.6	3.7	4.7718 µg/L	4.7718 ppb	04:47:17
3	SiO2†	2677.3	-84.1	-15.444 µg/L	-15.444 ppb	04:46:56
3	Si 251.611†	350.1	23.6	1.7564 µg/L	1.7564 ppb	04:47:17
3	Sn 189.927†	20.5	-2.0	-0.9976 µg/L	-0.9976 ppb	04:47:17
3	Ti 334.940†	954.5	176.5	0.4015 µg/L	0.4015 ppb	04:46:56
3	Tl 190.801†	-21.4	-1.0	-1.5316 µg/L	-1.5316 ppb	04:47:17
3	U 409.014†	747.3	14.0	1.2688 µg/L	1.2688 ppb	04:46:56
3	V 292.402†	-137.9	-10.7	-0.1156 µg/L	-0.1156 ppb	04:46:56
3	Zn 213.857†	532.3	3.7	0.0958 µg/L	0.0958 ppb	04:47:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2019959.0	99.888	%	0.4813				0.48%
Sc RADIAL	114208.2	97.9	%	0.46				0.47%
Y 371.029	1258378.9	99.971	%	0.5004				0.50%
Ag 328.068†	46.5	0.4268	µg/L	0.43048	0.4268	ppb	0.43048	100.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.6	8.2542	µg/L	5.84794	8.2542	ppb	5.84794	70.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.5	-6.2890	µg/L	4.89846	-6.2890	ppb	4.89846	77.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	110.9	4.8037	µg/L	0.38308	4.8037	ppb	0.38308	7.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.3	0.2894	µg/L	0.07193	0.2894	ppb	0.07193	24.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.6	0.0490	µg/L	0.12979	0.0490	ppb	0.12979	264.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	16.8	6.5078	µg/L	5.47836	6.5078	ppb	5.47836	84.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	8.7	0.2293	µg/L	0.05015	0.2293	ppb	0.05015	21.87%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.8	0.1319	µg/L	0.16305	0.1319	ppb	0.16305	123.65%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -18.3     -0.3827 µg/L       0.37919     -0.3827 ppb        0.37919  99.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -129.5     -0.8944 µg/L       0.13823     -0.8944 ppb        0.13823  15.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.7      17.348 µg/L       17.0742      17.348 ppb        17.0742  98.42%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         53.7      27.496 µg/L       38.6996      27.496 ppb        38.6996 140.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.1     -6.6688 µg/L      10.34480     -6.6688 ppb       10.34480 155.12%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.5      0.0614 µg/L       0.02862      0.0614 ppb        0.02862  46.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.8     -0.0935 µg/L       0.47479     -0.0935 ppb        0.47479 507.57%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       245.1      61.391 µg/L       13.4493      61.391 ppb        13.4493  21.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.2      0.1221 µg/L       0.39848      0.1221 ppb        0.39848 326.29%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -11.2     -22.489 µg/L       14.3819     -22.489 ppb        14.3819  63.95%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.6     -1.1813 µg/L       0.60882     -1.1813 ppb        0.60882  51.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.8      23.725 µg/L        2.5344      23.725 ppb         2.5344  10.68%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.1     -3.0024 µg/L       2.78185     -3.0024 ppb        2.78185  92.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.1      0.1877 µg/L       4.27688      0.1877 ppb        4.27688 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -45.2     -8.3015 µg/L       7.01231     -8.3015 ppb        7.01231  84.47%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               29.4      2.2200 µg/L       0.50065      2.2200 ppb        0.50065  22.55%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.7     -1.8913 µg/L       0.80527     -1.8913 ppb        0.80527  42.58%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.3      0.0516 µg/L       0.08711      0.0516 ppb        0.08711 168.93%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              237.4      0.5405 µg/L       0.12075      0.5405 ppb        0.12075  22.34%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.2      3.3085 µg/L       4.39867      3.3085 ppb        4.39867 132.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -24.5     -2.2272 µg/L       5.77282     -2.2272 ppb        5.77282 259.20%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.7      0.2188 µg/L       0.50762      0.2188 ppb        0.50762 232.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.5      0.3833 µg/L       0.31163      0.3833 ppb        0.31163  81.31%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 05:19:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117579.6	117579.6	101	%			05:19:38
1	Al 396.153Radial†	10298.8	10092.2	4995.5	µg/L	4995.5	ppb	05:19:38
1	Ca 317.933Radial†	13164.9	12645.7	4892.9	µg/L	4892.9	ppb	05:19:59
1	Fe 238.204 Radial†	789.4	767.9	4899.3	µg/L	4899.3	ppb	05:19:59
1	K 766.490 Radial†	10620.6	9852.2	5042.2	µg/L	5042.2	ppb	05:19:38
1	Mg 279.077 IEC†	824.5	802.4	4959.4	µg/L	4959.4	ppb	05:19:59
1	Na 589.592 Radial†	40861.0	41164.6	10309	µg/L	10309	ppb	05:19:38
1	Sr 421.552†	97952.3	97222.3	488.64	µg/L	488.64	ppb	05:19:38
1	Sc 361.383	2028849.9	2028849.9	100.33	%			05:21:02
1	Y 371.029	1253689.1	1253689.1	99.598	%			05:21:02
1	Ag 328.068†	54836.4	54646.9	501.89	µg/L	501.89	ppb	05:21:07
1	As 188.979†	270.6	267.5	484.67	µg/L	484.67	ppb	05:21:28
1	B 249.677†	12214.9	12037.1	520.30	µg/L	520.30	ppb	05:21:07
1	Ba 233.527†	18864.9	18881.4	485.31	µg/L	485.31	ppb	05:21:07
1	Be 313.107†	784629.4	778550.9	487.00	µg/L	487.00	ppb	05:21:02
1	Cd 226.502†	18220.9	18260.3	486.50	µg/L	486.50	ppb	05:21:07
1	Co 228.616†	10026.5	10060.4	486.25	µg/L	486.25	ppb	05:21:07
1	Cr 267.716†	23122.5	23146.8	486.57	µg/L	486.57	ppb	05:21:07
1	Cu 324.752†	74484.2	69971.2	486.40	µg/L	486.40	ppb	05:21:07
1	Mn 257.610†	150751.3	150460.3	481.03	µg/L	481.03	ppb	05:21:07
1	Mo 202.031†	4268.4	4258.1	497.55	µg/L	497.55	ppb	05:21:28
1	Ni 231.604†	9198.4	8892.8	486.53	µg/L	486.53	ppb	05:21:07
1	P 214.914†	1408.5	1203.0	2377.3	µg/L	2377.3	ppb	05:21:28
1	Pb 220.353†	1962.0	1899.3	491.62	µg/L	491.62	ppb	05:21:28
1	S 181.975 Axial†	278.7	255.7	1250.3	µg/L	1250.3	ppb	05:21:28
1	Sb 206.836†	534.5	511.7	499.38	µg/L	499.38	ppb	05:21:28
1	Se 196.026†	402.6	391.5	502.33	µg/L	502.33	ppb	05:21:28
1	SiO2†	31367.7	28513.9	5236.0	µg/L	5236.0	ppb	05:21:07
1	Si 251.611†	33605.3	33170.4	2407.0	µg/L	2407.0	ppb	05:21:07
1	Sn 189.927†	1003.7	978.0	503.47	µg/L	503.47	ppb	05:21:28
1	Ti 334.940†	220219.3	218725.6	497.96	µg/L	497.96	ppb	05:21:02
1	Tl 190.801†	301.8	321.2	495.59	µg/L	495.59	ppb	05:21:28
1	U 409.014†	6088.0	5337.7	483.17	µg/L	483.17	ppb	05:21:07
1	V 292.402†	43205.2	43190.8	490.50	µg/L	490.50	ppb	05:21:07
1	Zn 213.857†	18968.7	18380.1	483.27	µg/L	483.27	ppb	05:21:07
2	Sc RADIAL	116388.5	116388.5	99.8	%			05:20:04
2	Al 396.153Radial†	10220.0	10117.8	5008.2	µg/L	5008.2	ppb	05:20:04
2	Ca 317.933Radial†	13089.3	12703.5	4915.3	µg/L	4915.3	ppb	05:20:24
2	Fe 238.204 Radial†	788.1	774.6	4942.3	µg/L	4942.3	ppb	05:20:24
2	K 766.490 Radial†	10578.1	9917.4	5075.6	µg/L	5075.6	ppb	05:20:04
2	Mg 279.077 IEC†	829.6	815.9	5042.5	µg/L	5042.5	ppb	05:20:24
2	Na 589.592 Radial†	40630.5	41348.4	10355	µg/L	10355	ppb	05:20:04
2	Sr 421.552†	97143.0	97405.7	489.56	µg/L	489.56	ppb	05:20:04
2	Sc 361.383	2016378.8	2016378.8	99.711	%			05:21:35
2	Y 371.029	1245556.1	1245556.1	98.952	%			05:21:35
2	Ag 328.068†	55026.1	55175.2	506.73	µg/L	506.73	ppb	05:21:40
2	As 188.979†	265.1	263.6	477.63	µg/L	477.63	ppb	05:22:01
2	B 249.677†	12175.6	12073.1	521.84	µg/L	521.84	ppb	05:21:40
2	Ba 233.527†	18939.0	19071.9	490.20	µg/L	490.20	ppb	05:21:40
2	Be 313.107†	783614.2	782369.8	489.38	µg/L	489.38	ppb	05:21:35
2	Cd 226.502†	18268.4	18420.4	490.77	µg/L	490.77	ppb	05:21:40
2	Co 228.616†	10056.1	10151.9	490.67	µg/L	490.67	ppb	05:21:40
2	Cr 267.716†	23100.9	23267.7	489.11	µg/L	489.11	ppb	05:21:40
2	Cu 324.752†	74768.3	70715.3	491.57	µg/L	491.57	ppb	05:21:40
2	Mn 257.610†	151243.8	151883.6	485.58	µg/L	485.58	ppb	05:21:40
2	Mo 202.031†	4251.0	4267.0	498.59	µg/L	498.59	ppb	05:22:01
2	Ni 231.604†	9224.0	8975.1	491.04	µg/L	491.04	ppb	05:21:40
2	P 214.914†	1402.8	1206.0	2382.8	µg/L	2382.8	ppb	05:22:01
2	Pb 220.353†	1975.1	1924.5	498.12	µg/L	498.12	ppb	05:22:01

2	S 181.975 Axial†	267.7	246.3	1204.5 µg/L	1204.5 ppb	05:22:01
2	Sb 206.836†	529.8	510.2	497.93 µg/L	497.93 ppb	05:22:01
2	Se 196.026†	399.7	391.0	501.77 µg/L	501.77 ppb	05:22:01
2	SiO2†	31517.0	28857.0	5299.1 µg/L	5299.1 ppb	05:21:40
2	Si 251.611†	33727.3	33499.8	2431.1 µg/L	2431.1 ppb	05:21:40
2	Sn 189.927†	1008.3	988.8	508.99 µg/L	508.99 ppb	05:22:01
2	Ti 334.940†	220290.3	220154.5	501.22 µg/L	501.22 ppb	05:21:35
2	Tl 190.801†	306.1	327.3	505.02 µg/L	505.02 ppb	05:22:01
2	U 409.014†	6103.6	5390.8	487.98 µg/L	487.98 ppb	05:21:40
2	V 292.402†	43207.6	43459.6	493.54 µg/L	493.54 ppb	05:21:40
2	Zn 213.857†	19029.2	18557.7	487.94 µg/L	487.94 ppb	05:21:40
3	Sc RADIAL	116439.5	116439.5	99.8 %		05:20:30
3	Al 396.153Radial†	10328.6	10222.1	5060.4 µg/L	5060.4 ppb	05:20:30
3	Ca 317.933Radial†	13130.7	12739.2	4929.1 µg/L	4929.1 ppb	05:20:50
3	Fe 238.204 Radial†	790.3	776.5	4954.1 µg/L	4954.1 ppb	05:20:50
3	K 766.490 Radial†	10660.5	9995.3	5115.5 µg/L	5115.5 ppb	05:20:30
3	Mg 279.077 IEC†	836.6	822.6	5083.4 µg/L	5083.4 ppb	05:20:50
3	Na 589.592 Radial†	40938.8	41639.4	10428 µg/L	10428 ppb	05:20:30
3	Sr 421.552†	98058.0	98279.6	493.95 µg/L	493.95 ppb	05:20:30
3	Sc 361.383	2037404.5	2037404.5	100.75 %		05:22:08
3	Y 371.029	1259573.1	1259573.1	100.07 %		05:22:08
3	Ag 328.068†	55391.6	54968.4	504.84 µg/L	504.84 ppb	05:22:13
3	As 188.979†	268.9	264.7	479.58 µg/L	479.58 ppb	05:22:34
3	B 249.677†	12155.9	11927.4	515.52 µg/L	515.52 ppb	05:22:13
3	Ba 233.527†	19088.2	19024.0	488.97 µg/L	488.97 ppb	05:22:13
3	Be 313.107†	790038.1	780635.6	488.30 µg/L	488.30 ppb	05:22:08
3	Cd 226.502†	18453.0	18414.5	490.61 µg/L	490.61 ppb	05:22:13
3	Co 228.616†	10158.2	10149.1	490.52 µg/L	490.52 ppb	05:22:13
3	Cr 267.716†	23336.8	23262.7	489.01 µg/L	489.01 ppb	05:22:13
3	Cu 324.752†	75258.7	70428.1	489.58 µg/L	489.58 ppb	05:22:13
3	Mn 257.610†	152462.4	151527.8	484.45 µg/L	484.45 ppb	05:22:13
3	Mo 202.031†	4202.6	4174.9	487.84 µg/L	487.84 ppb	05:22:34
3	Ni 231.604†	9299.3	8954.4	489.91 µg/L	489.91 ppb	05:22:13
3	P 214.914†	1386.0	1174.7	2319.8 µg/L	2319.8 ppb	05:22:34
3	Pb 220.353†	1948.9	1878.1	486.11 µg/L	486.11 ppb	05:22:34
3	S 181.975 Axial†	267.2	243.0	1188.4 µg/L	1188.4 ppb	05:22:34
3	Sb 206.836†	525.5	500.5	488.41 µg/L	488.41 ppb	05:22:34
3	Se 196.026†	390.2	377.4	484.41 µg/L	484.41 ppb	05:22:34
3	SiO2†	31667.5	28680.1	5266.6 µg/L	5266.6 ppb	05:22:13
3	Si 251.611†	33963.7	33385.4	2423.2 µg/L	2423.2 ppb	05:22:13
3	Sn 189.927†	1001.1	971.3	500.04 µg/L	500.04 ppb	05:22:34
3	Ti 334.940†	221758.4	219331.7	499.34 µg/L	499.34 ppb	05:22:08
3	Tl 190.801†	304.7	322.8	498.05 µg/L	498.05 ppb	05:22:34
3	U 409.014†	6215.8	5439.0	492.35 µg/L	492.35 ppb	05:22:13
3	V 292.402†	43585.1	43387.1	492.66 µg/L	492.66 ppb	05:22:13
3	Zn 213.857†	19211.3	18541.5	487.52 µg/L	487.52 ppb	05:22:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027544.4	100.26	%	0.523				0.52%
Sc RADIAL	116802.6	100	%	0.6				0.58%
Y 371.029	1252939.4	99.539	%	0.5592				0.56%
Ag 328.068†	54930.2	504.48	µg/L	2.439	504.48	ppb	2.439	0.48%
QC value within limits for Ag 328.068 Recovery = 100.90%								
Al 396.153Radial†	10144.0	5021.3	µg/L	34.39	5021.3	ppb	34.39	0.68%
QC value within limits for Al 396.153Radial Recovery = 100.43%								
As 188.979†	265.3	480.63	µg/L	3.636	480.63	ppb	3.636	0.76%
QC value within limits for As 188.979 Recovery = 96.13%								
B 249.677†	12012.5	519.22	µg/L	3.294	519.22	ppb	3.294	0.63%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	18992.4	488.16	µg/L	2.545	488.16	ppb	2.545	0.52%
QC value within limits for Ba 233.527 Recovery = 97.63%								
Be 313.107†	780518.8	488.23	µg/L	1.196	488.23	ppb	1.196	0.24%
QC value within limits for Be 313.107 Recovery = 97.65%								
Ca 317.933Radial†	12696.2	4912.4	µg/L	18.27	4912.4	ppb	18.27	0.37%
QC value within limits for Ca 317.933Radial Recovery = 98.25%								
Cd 226.502†	18365.1	489.29	µg/L	2.419	489.29	ppb	2.419	0.49%
QC value within limits for Cd 226.502 Recovery = 97.86%								
Co 228.616†	10120.5	489.15	µg/L	2.508	489.15	ppb	2.508	0.51%

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   QC value within limits for Co 228.616  Recovery = 97.83%
Cr 267.716†            23225.7      488.23 µg/L        1.438      488.23 ppb          1.438   0.29%
   QC value within limits for Cr 267.716  Recovery = 97.65%
Cu 324.752†            70371.5      489.18 µg/L        2.608      489.18 ppb          2.608   0.53%
   QC value within limits for Cu 324.752  Recovery = 97.84%
Fe 238.204 Radial†       773.0      4931.9 µg/L       28.87      4931.9 ppb         28.87   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.64%
K 766.490 Radial†       9921.6      5077.8 µg/L       36.66      5077.8 ppb         36.66   0.72%
   QC value within limits for K 766.490 Radial  Recovery = 101.56%
Mg 279.077 IEC†          813.6      5028.5 µg/L       63.20      5028.5 ppb         63.20   1.26%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.57%
Mn 257.610†           151290.5      483.69 µg/L        2.368      483.69 ppb          2.368   0.49%
   QC value within limits for Mn 257.610  Recovery = 96.74%
Mo 202.031†             4233.3      494.66 µg/L        5.930      494.66 ppb          5.930   1.20%
   QC value within limits for Mo 202.031  Recovery = 98.93%
Na 589.592 Radial†     41384.2       10364 µg/L         60.0       10364 ppb           60.0   0.58%
   QC value within limits for Na 589.592 Radial  Recovery = 103.64%
Ni 231.604†             8940.8      489.16 µg/L        2.344      489.16 ppb          2.344   0.48%
   QC value within limits for Ni 231.604  Recovery = 97.83%
P 214.914†              1194.6      2360.0 µg/L       34.91      2360.0 ppb         34.91   1.48%
   QC value within limits for P 214.914  Recovery = 94.40%
Pb 220.353†             1900.7      491.95 µg/L        6.015      491.95 ppb          6.015   1.22%
   QC value within limits for Pb 220.353  Recovery = 98.39%
S 181.975 Axial†         248.3      1214.4 µg/L       32.11      1214.4 ppb         32.11   2.64%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 121.44%
Sb 206.836†              507.4      495.24 µg/L        5.955      495.24 ppb          5.955   1.20%
   QC value within limits for Sb 206.836  Recovery = 99.05%
Se 196.026†              386.6      496.17 µg/L       10.189      496.17 ppb         10.189   2.05%
   QC value within limits for Se 196.026  Recovery = 99.23%
SiO2†                  28683.7      5267.2 µg/L       31.51      5267.2 ppb         31.51   0.60%
   QC value within limits for SiO2  Recovery = 98.50%
Si 251.611†            33351.9      2420.4 µg/L       12.25      2420.4 ppb         12.25   0.51%
   QC value within limits for Si 251.611  Recovery = 96.82%
Sn 189.927†              979.4      504.17 µg/L        4.518      504.17 ppb          4.518   0.90%
   QC value within limits for Sn 189.927  Recovery = 100.83%
Sr 421.552†            97635.9      490.72 µg/L        2.839      490.72 ppb          2.839   0.58%
   QC value within limits for Sr 421.552  Recovery = 98.14%
Ti 334.940†           219403.9      499.51 µg/L        1.633      499.51 ppb          1.633   0.33%
   QC value within limits for Ti 334.940  Recovery = 99.90%
Tl 190.801†              323.8      499.55 µg/L        4.892      499.55 ppb          4.892   0.98%
   QC value within limits for Tl 190.801  Recovery = 99.91%
U 409.014†              5389.2      487.83 µg/L        4.591      487.83 ppb          4.591   0.94%
   QC value within limits for U 409.014  Recovery = 97.57%
V 292.402†             43345.8      492.23 µg/L        1.565      492.23 ppb          1.565   0.32%
   QC value within limits for V 292.402  Recovery = 98.45%
Zn 213.857†            18493.1      486.25 µg/L        2.583      486.25 ppb          2.583   0.53%
   QC value within limits for Zn 213.857  Recovery = 97.25%
QC Failed.  Continue with analysis.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 05:22:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115329.1	115329.1	98.9	%			05:23:15
1	Al 396.153Radial†	153.5	31.9	15.843	µg/L	15.843	ppb	05:23:15
1	Ca 317.933Radial†	458.9	51.3	19.844	µg/L	19.844	ppb	05:23:35
1	Fe 238.204 Radial†	13.7	-1.4	-8.5985	µg/L	-8.5985	ppb	05:23:35
1	K 766.490 Radial†	839.2	166.1	85.028	µg/L	85.028	ppb	05:23:15
1	Mg 279.077 IEC†	11.3	-4.0	-24.664	µg/L	-24.664	ppb	05:23:35
1	Na 589.592 Radial†	962.8	1607.7	402.61	µg/L	402.61	ppb	05:23:15
1	Sr 421.552†	16.5	79.0	0.3972	µg/L	0.3972	ppb	05:23:15
1	Sc 361.383	1999901.7	1999901.7	98.896	%			05:24:37
1	Y 371.029	1243400.7	1243400.7	98.781	%			05:24:37
1	Ag 328.068†	79.2	69.7	0.6367	µg/L	0.6367	ppb	05:24:43
1	As 188.979†	2.2	-0.0	-0.0624	µg/L	-0.0624	ppb	05:25:03
1	B 249.677†	611.9	480.9	20.849	µg/L	20.849	ppb	05:24:43
1	Ba 233.527†	-73.2	4.0	0.1033	µg/L	0.1033	ppb	05:25:03
1	Be 313.107†	3550.8	74.6	0.0464	µg/L	0.0464	ppb	05:24:43
1	Cd 226.502†	-89.2	8.8	0.2356	µg/L	0.2356	ppb	05:25:03
1	Co 228.616†	-70.0	-4.1	-0.2016	µg/L	-0.2016	ppb	05:25:03
1	Cr 267.716†	-114.7	-16.2	-0.3385	µg/L	-0.3385	ppb	05:24:43
1	Cu 324.752†	4109.1	-114.8	-0.7979	µg/L	-0.7979	ppb	05:24:43
1	Mn 257.610†	-201.0	-1.9	-0.0073	µg/L	-0.0073	ppb	05:25:03
1	Mo 202.031†	-3.6	0.0	0.0002	µg/L	0.0002	ppb	05:25:03
1	Ni 231.604†	284.6	12.2	0.6678	µg/L	0.6678	ppb	05:25:03
1	P 214.914†	191.6	-7.2	-14.432	µg/L	-14.432	ppb	05:25:03
1	Pb 220.353†	45.8	-9.9	-2.5695	µg/L	-2.5695	ppb	05:25:03
1	S 181.975 Axial†	70.0	48.6	238.11	µg/L	238.11	ppb	05:25:03
1	Sb 206.836†	24.1	3.2	3.1691	µg/L	3.1691	ppb	05:25:03
1	Se 196.026†	11.8	2.1	2.6743	µg/L	2.6743	ppb	05:25:03
1	SiO2†	2653.0	-68.8	-12.634	µg/L	-12.634	ppb	05:24:43
1	Si 251.611†	360.0	38.8	2.8648	µg/L	2.8648	ppb	05:25:03
1	Sn 189.927†	19.8	-2.4	-1.2283	µg/L	-1.2283	ppb	05:25:03
1	Ti 334.940†	1054.2	291.6	0.6631	µg/L	0.6631	ppb	05:24:43
1	Tl 190.801†	-15.3	4.9	7.5755	µg/L	7.5755	ppb	05:25:03
1	U 409.014†	740.0	17.8	1.6205	µg/L	1.6205	ppb	05:24:43
1	V 292.402†	-96.9	28.8	0.3259	µg/L	0.3259	ppb	05:24:43
1	Zn 213.857†	548.0	27.5	0.7280	µg/L	0.7280	ppb	05:25:03
2	Sc RADIAL	114187.4	114187.4	97.9	%			05:23:41
2	Al 396.153Radial†	156.9	37.0	18.391	µg/L	18.391	ppb	05:23:41
2	Ca 317.933Radial†	468.3	65.5	25.351	µg/L	25.351	ppb	05:24:01
2	Fe 238.204 Radial†	16.8	2.0	12.686	µg/L	12.686	ppb	05:24:01
2	K 766.490 Radial†	867.1	203.1	103.96	µg/L	103.96	ppb	05:23:41
2	Mg 279.077 IEC†	13.9	-1.3	-7.8939	µg/L	-7.8939	ppb	05:24:01
2	Na 589.592 Radial†	1827.0	2500.2	626.10	µg/L	626.10	ppb	05:23:41
2	Sr 421.552†	-22.5	39.4	0.1978	µg/L	0.1978	ppb	05:23:41
2	Sc 361.383	2017457.6	2017457.6	99.764	%			05:25:09
2	Y 371.029	1254873.9	1254873.9	99.692	%			05:25:09
2	Ag 328.068†	16.9	6.6	0.0607	µg/L	0.0607	ppb	05:25:15
2	As 188.979†	-0.1	-2.3	-4.2418	µg/L	-4.2418	ppb	05:25:35
2	B 249.677†	572.6	436.1	18.903	µg/L	18.903	ppb	05:25:15
2	Ba 233.527†	-76.0	1.9	0.0480	µg/L	0.0480	ppb	05:25:35
2	Be 313.107†	3599.2	91.9	0.0573	µg/L	0.0573	ppb	05:25:15
2	Cd 226.502†	-93.6	5.1	0.1285	µg/L	0.1285	ppb	05:25:35
2	Co 228.616†	-75.4	-9.0	-0.4346	µg/L	-0.4346	ppb	05:25:35
2	Cr 267.716†	-132.0	-32.5	-0.6823	µg/L	-0.6823	ppb	05:25:15
2	Cu 324.752†	4119.9	-140.1	-0.9693	µg/L	-0.9693	ppb	05:25:15
2	Mn 257.610†	-201.5	-0.7	-0.0006	µg/L	-0.0006	ppb	05:25:35
2	Mo 202.031†	-4.6	-1.0	-0.1144	µg/L	-0.1144	ppb	05:25:35
2	Ni 231.604†	280.1	5.2	0.2835	µg/L	0.2835	ppb	05:25:35
2	P 214.914†	184.4	-16.1	-32.455	µg/L	-32.455	ppb	05:25:35
2	Pb 220.353†	49.4	-6.7	-1.7272	µg/L	-1.7272	ppb	05:25:35

2	S 181.975 Axial†	63.0	41.0	200.78 µg/L	200.78 ppb	05:25:35
2	Sb 206.836†	19.4	-1.6	-1.5925 µg/L	-1.5925 ppb	05:25:35
2	Se 196.026†	13.2	3.4	4.3394 µg/L	4.3394 ppb	05:25:35
2	SiO2†	2686.1	-58.9	-10.812 µg/L	-10.812 ppb	05:25:15
2	Si 251.611†	353.1	28.7	2.1222 µg/L	2.1222 ppb	05:25:35
2	Sn 189.927†	19.5	-2.8	-1.4527 µg/L	-1.4527 ppb	05:25:35
2	Ti 334.940†	1029.9	257.9	0.5861 µg/L	0.5861 ppb	05:25:15
2	Tl 190.801†	-15.8	4.6	6.9990 µg/L	6.9990 ppb	05:25:35
2	U 409.014†	620.6	-108.4	-9.8289 µg/L	-9.8289 ppb	05:25:15
2	V 292.402†	-128.4	-1.9	-0.0374 µg/L	-0.0374 ppb	05:25:15
2	Zn 213.857†	544.8	19.4	0.5138 µg/L	0.5138 ppb	05:25:35
3	Sc RADIAL	114187.2	114187.2	97.9 %		05:24:07
3	Al 396.153Radial†	161.1	41.2	20.500 µg/L	20.500 ppb	05:24:07
3	Ca 317.933Radial†	446.7	43.5	16.817 µg/L	16.817 ppb	05:24:27
3	Fe 238.204 Radial†	16.0	1.2	7.5319 µg/L	7.5319 ppb	05:24:27
3	K 766.490 Radial†	917.1	254.2	130.11 µg/L	130.11 ppb	05:24:07
3	Mg 279.077 IEC†	13.7	-1.4	-8.7847 µg/L	-8.7847 ppb	05:24:27
3	Na 589.592 Radial†	3044.5	3743.7	937.52 µg/L	937.52 ppb	05:24:07
3	Sr 421.552†	-5.4	56.8	0.2854 µg/L	0.2854 ppb	05:24:07
3	Sc 361.383	2009601.7	2009601.7	99.376 %		05:25:41
3	Y 371.029	1250014.9	1250014.9	99.306 %		05:25:41
3	Ag 328.068†	72.8	62.8	0.5750 µg/L	0.5750 ppb	05:25:47
3	As 188.979†	5.2	3.0	5.3929 µg/L	5.3929 ppb	05:26:07
3	B 249.677†	523.9	389.3	16.876 µg/L	16.876 ppb	05:25:47
3	Ba 233.527†	-70.1	7.5	0.1934 µg/L	0.1934 ppb	05:26:07
3	Be 313.107†	3453.1	-41.1	-0.0258 µg/L	-0.0258 ppb	05:25:47
3	Cd 226.502†	-92.9	5.5	0.1427 µg/L	0.1427 ppb	05:26:07
3	Co 228.616†	-79.2	-13.0	-0.6296 µg/L	-0.6296 ppb	05:26:07
3	Cr 267.716†	-112.7	-13.6	-0.2850 µg/L	-0.2850 ppb	05:25:47
3	Cu 324.752†	4167.7	-75.9	-0.5249 µg/L	-0.5249 ppb	05:25:47
3	Mn 257.610†	-206.4	-6.4	-0.0194 µg/L	-0.0194 ppb	05:26:07
3	Mo 202.031†	-6.0	-2.4	-0.2747 µg/L	-0.2747 ppb	05:26:07
3	Ni 231.604†	298.2	24.5	1.3432 µg/L	1.3432 ppb	05:26:07
3	P 214.914†	193.7	-5.9	-11.941 µg/L	-11.941 ppb	05:26:07
3	Pb 220.353†	50.0	-5.9	-1.5268 µg/L	-1.5268 ppb	05:26:07
3	S 181.975 Axial†	55.1	33.2	162.80 µg/L	162.80 ppb	05:26:07
3	Sb 206.836†	24.5	3.6	3.5143 µg/L	3.5143 ppb	05:26:07
3	Se 196.026†	17.1	7.3	9.3555 µg/L	9.3555 ppb	05:26:07
3	SiO2†	2693.8	-40.7	-7.4736 µg/L	-7.4736 ppb	05:25:47
3	Si 251.611†	343.1	20.1	1.4206 µg/L	1.4206 ppb	05:26:07
3	Sn 189.927†	22.7	0.4	0.2189 µg/L	0.2189 ppb	05:26:07
3	Ti 334.940†	917.6	148.9	0.3383 µg/L	0.3383 ppb	05:25:47
3	Tl 190.801†	-23.3	-3.0	-4.6569 µg/L	-4.6569 ppb	05:26:07
3	U 409.014†	657.1	-69.2	-6.2761 µg/L	-6.2761 ppb	05:25:47
3	V 292.402†	-101.9	24.2	0.2610 µg/L	0.2610 ppb	05:25:47
3	Zn 213.857†	539.6	16.4	0.4277 µg/L	0.4277 ppb	05:26:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2008987.0	99.345	%	0.4349				0.44%
Sc RADIAL	114567.9	98.2	%	0.57				0.58%
Y 371.029	1249429.8	99.260	%	0.4575				0.46%
Ag 328.068†	46.3	0.4241	µg/L	0.31625	0.4241	ppb	0.31625	74.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	36.7	18.245	µg/L	2.3323	18.245	ppb	2.3323	12.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.3629	µg/L	4.83143	0.3629	ppb	4.83143	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	435.4	18.876	µg/L	1.9870	18.876	ppb	1.9870	10.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.1149	µg/L	0.07340	0.1149	ppb	0.07340	63.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.8	0.0260	µg/L	0.04518	0.0260	ppb	0.04518	174.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	53.4	20.671	µg/L	4.3269	20.671	ppb	4.3269	20.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.5	0.1689	µg/L	0.05814	0.1689	ppb	0.05814	34.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.7	-0.4219	µg/L	0.21432	-0.4219	ppb	0.21432	50.80%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -20.8     -0.4352 µg/L       0.21558     -0.4352 ppb        0.21558  49.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -110.3     -0.7641 µg/L       0.22412     -0.7641 ppb        0.22412  29.33%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.6      3.8733 µg/L      11.10410      3.8733 ppb       11.10410 286.69%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        207.8      106.37 µg/L        22.638      106.37 ppb         22.638  21.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.2     -13.781 µg/L        9.4354     -13.781 ppb         9.4354  68.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -3.0     -0.0091 µg/L       0.00953     -0.0091 ppb        0.00953 104.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.1     -0.1297 µg/L       0.13808     -0.1297 ppb        0.13808 106.49%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      2617.2      655.41 µg/L       268.656      655.41 ppb        268.656  40.99%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.0      0.7648 µg/L       0.53646      0.7648 ppb        0.53646  70.14%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.7     -19.609 µg/L       11.1941     -19.609 ppb        11.1941  57.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -7.5     -1.9412 µg/L       0.55331     -1.9412 ppb        0.55331  28.50%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          41.0      200.56 µg/L        37.658      200.56 ppb         37.658  18.78%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                1.7      1.6970 µg/L       2.85395      1.6970 ppb        2.85395 168.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                4.3      5.4564 µg/L       3.47784      5.4564 ppb        3.47784  63.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -56.1     -10.307 µg/L        2.6172     -10.307 ppb         2.6172  25.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               29.2      2.1359 µg/L       0.72220      2.1359 ppb        0.72220  33.81%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.6     -0.8207 µg/L       0.90729     -0.8207 ppb        0.90729 110.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               58.4      0.2935 µg/L       0.09994      0.2935 ppb        0.09994  34.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              232.8      0.5292 µg/L       0.16974      0.5292 ppb        0.16974  32.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.2      3.3058 µg/L       6.90199      3.3058 ppb        6.90199 208.78%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -53.2     -4.8282 µg/L       5.86042     -4.8282 ppb        5.86042 121.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                17.0      0.1832 µg/L       0.19377      0.1832 ppb        0.19377 105.78%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               21.1      0.5565 µg/L       0.15462      0.5565 ppb        0.15462  27.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 40
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 05:48:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115837.9	115837.9	99.3	%			05:48:40
1	Al 396.153Radial†	10200.3	10146.6	5022.4	µg/L	5022.4	ppb	05:48:40
1	Ca 317.933Radial†	13122.9	12799.8	4952.5	µg/L	4952.5	ppb	05:49:00
1	Fe 238.204 Radial†	787.7	777.9	4963.5	µg/L	4963.5	ppb	05:49:00
1	K 766.490 Radial†	10323.1	9711.1	4970.0	µg/L	4970.0	ppb	05:48:40
1	Mg 279.077 IEC†	826.4	816.6	5047.0	µg/L	5047.0	ppb	05:49:00
1	Na 589.592 Radial†	39478.0	40381.6	10113	µg/L	10113	ppb	05:48:40
1	Sr 421.552†	96827.5	97550.9	490.29	µg/L	490.29	ppb	05:48:40
1	Sc 361.383	2005122.6	2005122.6	99.154	%			05:50:04
1	Y 371.029	1243470.3	1243470.3	98.786	%			05:50:04
1	Ag 328.068†	55033.0	55491.9	509.64	µg/L	509.64	ppb	05:50:09
1	As 188.979†	273.1	273.2	495.02	µg/L	495.02	ppb	05:50:30
1	B 249.677†	11436.9	11396.6	492.51	µg/L	492.51	ppb	05:50:09
1	Ba 233.527†	18928.1	19167.5	492.66	µg/L	492.66	ppb	05:50:09
1	Be 313.107†	778861.2	781988.0	489.15	µg/L	489.15	ppb	05:50:04
1	Cd 226.502†	18338.7	18594.1	495.39	µg/L	495.39	ppb	05:50:09
1	Co 228.616†	10064.0	10216.5	493.80	µg/L	493.80	ppb	05:50:09
1	Cr 267.716†	23116.4	23413.3	492.18	µg/L	492.18	ppb	05:50:09
1	Cu 324.752†	74736.7	71104.3	494.27	µg/L	494.27	ppb	05:50:09
1	Mn 257.610†	151323.5	152815.4	488.56	µg/L	488.56	ppb	05:50:04
1	Mo 202.031†	4244.6	4284.5	500.64	µg/L	500.64	ppb	05:50:30
1	Ni 231.604†	9206.9	9009.8	492.94	µg/L	492.94	ppb	05:50:09
1	P 214.914†	1400.8	1211.9	2394.3	µg/L	2394.3	ppb	05:50:30
1	Pb 220.353†	1950.3	1910.7	494.54	µg/L	494.54	ppb	05:50:30
1	S 181.975 Axial†	250.0	230.0	1124.5	µg/L	1124.5	ppb	05:50:30
1	Sb 206.836†	527.4	510.7	498.46	µg/L	498.46	ppb	05:50:30
1	Se 196.026†	397.7	391.2	502.02	µg/L	502.02	ppb	05:50:30
1	SiO2†	31463.7	28980.6	5321.8	µg/L	5321.8	ppb	05:50:09
1	Si 251.611†	33738.6	33701.1	2446.0	µg/L	2446.0	ppb	05:50:09
1	Sn 189.927†	1000.0	986.1	507.65	µg/L	507.65	ppb	05:50:30
1	Ti 334.940†	218707.3	219798.2	500.40	µg/L	500.40	ppb	05:50:04
1	Tl 190.801†	297.8	320.7	494.80	µg/L	494.80	ppb	05:50:30
1	U 409.014†	6102.1	5423.7	490.96	µg/L	490.96	ppb	05:50:09
1	V 292.402†	43241.2	43736.8	496.68	µg/L	496.68	ppb	05:50:09
1	Zn 213.857†	19101.5	18737.8	492.70	µg/L	492.70	ppb	05:50:09
2	Sc RADIAL	115966.7	115966.7	99.4	%			05:49:05
2	Al 396.153Radial†	10318.2	10253.8	5075.7	µg/L	5075.7	ppb	05:49:05
2	Ca 317.933Radial†	13127.2	12789.3	4948.4	µg/L	4948.4	ppb	05:49:26
2	Fe 238.204 Radial†	786.3	775.6	4948.5	µg/L	4948.5	ppb	05:49:26
2	K 766.490 Radial†	10413.4	9790.3	5010.6	µg/L	5010.6	ppb	05:49:05
2	Mg 279.077 IEC†	826.3	815.6	5040.6	µg/L	5040.6	ppb	05:49:26
2	Na 589.592 Radial†	39824.1	40685.5	10189	µg/L	10189	ppb	05:49:05
2	Sr 421.552†	97615.0	98234.5	493.72	µg/L	493.72	ppb	05:49:05
2	Sc 361.383	2019908.0	2019908.0	99.885	%			05:50:37
2	Y 371.029	1251573.5	1251573.5	99.430	%			05:50:37
2	Ag 328.068†	54745.4	54797.8	503.26	µg/L	503.26	ppb	05:50:42
2	As 188.979†	277.8	275.9	499.97	µg/L	499.97	ppb	05:51:03
2	B 249.677†	11365.3	11240.4	485.74	µg/L	485.74	ppb	05:50:42
2	Ba 233.527†	18792.2	18891.8	485.57	µg/L	485.57	ppb	05:50:42
2	Be 313.107†	787523.7	784910.7	490.97	µg/L	490.97	ppb	05:50:37
2	Cd 226.502†	18204.3	18324.1	488.20	µg/L	488.20	ppb	05:50:42
2	Co 228.616†	10002.9	10081.0	487.24	µg/L	487.24	ppb	05:50:42
2	Cr 267.716†	22903.8	23029.9	484.12	µg/L	484.12	ppb	05:50:42
2	Cu 324.752†	74357.5	70173.0	487.81	µg/L	487.81	ppb	05:50:42
2	Mn 257.610†	152942.3	153319.0	490.17	µg/L	490.17	ppb	05:50:37
2	Mo 202.031†	4268.3	4276.9	499.75	µg/L	499.75	ppb	05:51:03
2	Ni 231.604†	9166.1	8901.0	486.98	µg/L	486.98	ppb	05:50:42
2	P 214.914†	1407.1	1207.8	2387.0	µg/L	2387.0	ppb	05:51:03
2	Pb 220.353†	1958.8	1904.8	493.05	µg/L	493.05	ppb	05:51:03

2	S 181.975 Axial†	246.3	224.4	1097.4 µg/L	1097.4 ppb	05:51:03
2	Sb 206.836†	541.3	520.8	508.34 µg/L	508.34 ppb	05:51:03
2	Se 196.026†	402.0	392.6	503.80 µg/L	503.80 ppb	05:51:03
2	SiO2†	31335.0	28619.5	5255.4 µg/L	5255.4 ppb	05:50:42
2	Si 251.611†	33587.5	33300.8	2416.3 µg/L	2416.3 ppb	05:50:42
2	Sn 189.927†	1010.8	989.6	509.41 µg/L	509.41 ppb	05:51:03
2	Ti 334.940†	221209.4	220688.6	502.43 µg/L	502.43 ppb	05:50:37
2	Tl 190.801†	301.7	322.5	497.58 µg/L	497.58 ppb	05:51:03
2	U 409.014†	6120.9	5397.4	488.58 µg/L	488.58 ppb	05:50:42
2	V 292.402†	42971.4	43147.4	490.04 µg/L	490.04 ppb	05:50:42
2	Zn 213.857†	18989.9	18485.0	486.04 µg/L	486.04 ppb	05:50:42
3	Sc RADIAL	115915.6	115915.6	99.4 %		05:49:31
3	Al 396.153Radial†	10213.9	10153.4	5026.3 µg/L	5026.3 ppb	05:49:31
3	Ca 317.933Radial†	13108.5	12776.3	4943.4 µg/L	4943.4 ppb	05:49:52
3	Fe 238.204 Radial†	785.6	775.3	4946.5 µg/L	4946.5 ppb	05:49:52
3	K 766.490 Radial†	10354.7	9736.0	4982.7 µg/L	4982.7 ppb	05:49:31
3	Mg 279.077 IEC†	830.7	820.4	5070.1 µg/L	5070.1 ppb	05:49:52
3	Na 589.592 Radial†	39382.4	40258.8	10082 µg/L	10082 ppb	05:49:31
3	Sr 421.552†	96711.2	97368.5	489.37 µg/L	489.37 ppb	05:49:31
3	Sc 361.383	2028648.8	2028648.8	100.32 %		05:51:10
3	Y 371.029	1257270.3	1257270.3	99.883 %		05:51:10
3	Ag 328.068†	54760.2	54576.3	501.23 µg/L	501.23 ppb	05:51:16
3	As 188.979†	270.5	267.4	484.52 µg/L	484.52 ppb	05:51:36
3	B 249.677†	11404.7	11230.7	485.32 µg/L	485.32 ppb	05:51:16
3	Ba 233.527†	18836.3	18854.7	484.62 µg/L	484.62 ppb	05:51:16
3	Be 313.107†	787723.4	781712.7	488.97 µg/L	488.97 ppb	05:51:10
3	Cd 226.502†	18219.1	18260.3	486.49 µg/L	486.49 ppb	05:51:16
3	Co 228.616†	9999.6	10034.6	484.98 µg/L	484.98 ppb	05:51:16
3	Cr 267.716†	23006.5	23033.5	484.19 µg/L	484.19 ppb	05:51:16
3	Cu 324.752†	74386.3	69880.9	485.78 µg/L	485.78 ppb	05:51:16
3	Mn 257.610†	153111.2	152827.6	488.60 µg/L	488.60 ppb	05:51:10
3	Mo 202.031†	4171.3	4161.8	486.31 µg/L	486.31 ppb	05:51:36
3	Ni 231.604†	9177.0	8872.3	485.41 µg/L	485.41 ppb	05:51:16
3	P 214.914†	1383.4	1178.1	2326.8 µg/L	2326.8 ppb	05:51:36
3	Pb 220.353†	1917.4	1855.1	480.17 µg/L	480.17 ppb	05:51:36
3	S 181.975 Axial†	239.8	216.9	1060.3 µg/L	1060.3 ppb	05:51:36
3	Sb 206.836†	523.6	500.8	488.80 µg/L	488.80 ppb	05:51:36
3	Se 196.026†	394.1	383.0	491.50 µg/L	491.50 ppb	05:51:36
3	SiO2†	31366.2	28515.5	5236.3 µg/L	5236.3 ppb	05:51:16
3	Si 251.611†	33573.6	33142.0	2405.6 µg/L	2405.6 ppb	05:51:16
3	Sn 189.927†	979.5	953.9	491.17 µg/L	491.17 ppb	05:51:36
3	Ti 334.940†	221039.2	219564.7	499.87 µg/L	499.87 ppb	05:51:10
3	Tl 190.801†	301.9	321.3	495.87 µg/L	495.87 ppb	05:51:36
3	U 409.014†	5989.2	5239.8	474.28 µg/L	474.28 ppb	05:51:16
3	V 292.402†	42978.3	42968.9	487.91 µg/L	487.91 ppb	05:51:16
3	Zn 213.857†	18996.1	18409.3	484.05 µg/L	484.05 ppb	05:51:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017893.1	99.786	%	0.5881				0.59%
Sc RADIAL	115906.7	99.4	%	0.06				0.06%
Y 371.029	1250771.4	99.366	%	0.5509				0.55%
Ag 328.068†	54955.3	504.71	µg/L	4.387	504.71	ppb	4.387	0.87%
QC value within limits for Ag 328.068 Recovery = 100.94%								
Al 396.153Radial†	10184.6	5041.5	µg/L	29.69	5041.5	ppb	29.69	0.59%
QC value within limits for Al 396.153Radial Recovery = 100.83%								
As 188.979†	272.2	493.17	µg/L	7.891	493.17	ppb	7.891	1.60%
QC value within limits for As 188.979 Recovery = 98.63%								
B 249.677†	11289.3	487.86	µg/L	4.034	487.86	ppb	4.034	0.83%
QC value within limits for B 249.677 Recovery = 97.57%								
Ba 233.527†	18971.4	487.62	µg/L	4.393	487.62	ppb	4.393	0.90%
QC value within limits for Ba 233.527 Recovery = 97.52%								
Be 313.107†	782870.5	489.70	µg/L	1.108	489.70	ppb	1.108	0.23%
QC value within limits for Be 313.107 Recovery = 97.94%								
Ca 317.933Radial†	12788.5	4948.1	µg/L	4.54	4948.1	ppb	4.54	0.09%
QC value within limits for Ca 317.933Radial Recovery = 98.96%								
Cd 226.502†	18392.8	490.03	µg/L	4.724	490.03	ppb	4.724	0.96%
QC value within limits for Cd 226.502 Recovery = 98.01%								
Co 228.616†	10110.7	488.67	µg/L	4.581	488.67	ppb	4.581	0.94%

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   QC value within limits for Co 228.616  Recovery = 97.73%
Cr 267.716†            23158.9      486.83 µg/L        4.632      486.83 ppb          4.632   0.95%
   QC value within limits for Cr 267.716  Recovery = 97.37%
Cu 324.752†            70386.1      489.29 µg/L        4.434      489.29 ppb          4.434   0.91%
   QC value within limits for Cu 324.752  Recovery = 97.86%
Fe 238.204 Radial†       776.3      4952.8 µg/L         9.29      4952.8 ppb           9.29   0.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.06%
K 766.490 Radial†       9745.8      4987.8 µg/L        20.73      4987.8 ppb          20.73   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 99.76%
Mg 279.077 IEC†          817.5      5052.6 µg/L        15.54      5052.6 ppb          15.54   0.31%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.05%
Mn 257.610†           152987.3      489.11 µg/L        0.917      489.11 ppb          0.917   0.19%
   QC value within limits for Mn 257.610  Recovery = 97.82%
Mo 202.031†             4241.1      495.57 µg/L        8.030      495.57 ppb          8.030   1.62%
   QC value within limits for Mo 202.031  Recovery = 99.11%
Na 589.592 Radial†     40442.0       10128 µg/L         55.0       10128 ppb           55.0   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 101.28%
Ni 231.604†             8927.7      488.45 µg/L        3.968      488.45 ppb          3.968   0.81%
   QC value within limits for Ni 231.604  Recovery = 97.69%
P 214.914†              1199.3      2369.4 µg/L        37.06      2369.4 ppb          37.06   1.56%
   QC value within limits for P 214.914  Recovery = 94.78%
Pb 220.353†             1890.2      489.25 µg/L        7.903      489.25 ppb          7.903   1.62%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†         223.7      1094.1 µg/L        32.22      1094.1 ppb          32.22   2.94%
   QC value within limits for S 181.975 Axial  Recovery = 109.41%
Sb 206.836†              510.8      498.53 µg/L        9.768      498.53 ppb          9.768   1.96%
   QC value within limits for Sb 206.836  Recovery = 99.71%
Se 196.026†              388.9      499.11 µg/L        6.648      499.11 ppb          6.648   1.33%
   QC value within limits for Se 196.026  Recovery = 99.82%
SiO2†                   28705.2      5271.2 µg/L        44.83      5271.2 ppb          44.83   0.85%
   QC value within limits for SiO2  Recovery = 98.57%
Si 251.611†             33381.3      2422.6 µg/L        20.97      2422.6 ppb          20.97   0.87%
   QC value within limits for Si 251.611  Recovery = 96.91%
Sn 189.927†              976.6      502.74 µg/L       10.064      502.74 ppb         10.064   2.00%
   QC value within limits for Sn 189.927  Recovery = 100.55%
Sr 421.552†             97718.0      491.13 µg/L        2.295      491.13 ppb          2.295   0.47%
   QC value within limits for Sr 421.552  Recovery = 98.23%
Ti 334.940†            220017.2      500.90 µg/L        1.351      500.90 ppb          1.351   0.27%
   QC value within limits for Ti 334.940  Recovery = 100.18%
Tl 190.801†              321.5      496.09 µg/L        1.403      496.09 ppb          1.403   0.28%
   QC value within limits for Tl 190.801  Recovery = 99.22%
U 409.014†              5353.6      484.61 µg/L        9.018      484.61 ppb          9.018   1.86%
   QC value within limits for U 409.014  Recovery = 96.92%
V 292.402†              43284.4      491.54 µg/L        4.572      491.54 ppb          4.572   0.93%
   QC value within limits for V 292.402  Recovery = 98.31%
Zn 213.857†             18544.0      487.60 µg/L        4.532      487.60 ppb          4.532   0.93%
   QC value within limits for Zn 213.857  Recovery = 97.52%
All analyte(s) passed QC.
```

Sequence No.: 41 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 12/10/2009 05:51:45**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114637.1	114637.1	98.3	%			05:52:20
1	Al 396.153Radial†	135.1	14.2	7.0565	µg/L	7.0565	ppb	05:52:20
1	Ca 317.933Radial†	411.0	5.3	2.0690	µg/L	2.0690	ppb	05:52:40
1	Fe 238.204 Radial†	16.7	1.8	11.709	µg/L	11.709	ppb	05:52:40
1	K 766.490 Radial†	790.9	122.1	62.501	µg/L	62.501	ppb	05:52:20
1	Mg 279.077 IEC†	15.5	0.4	2.1558	µg/L	2.1558	ppb	05:52:40
1	Na 589.592 Radial†	-326.1	302.4	75.716	µg/L	75.716	ppb	05:52:20
1	Sr 421.552†	-99.9	-39.3	-0.1974	µg/L	-0.1974	ppb	05:52:20
1	Sc 361.383	2009804.3	2009804.3	99.386	%			05:53:42
1	Y 371.029	1252128.0	1252128.0	99.474	%			05:53:42
1	Ag 328.068†	32.0	21.8	0.1992	µg/L	0.1992	ppb	05:53:48
1	As 188.979†	4.4	2.2	3.9813	µg/L	3.9813	ppb	05:54:08
1	B 249.677†	255.4	119.1	5.1594	µg/L	5.1594	ppb	05:54:08
1	Ba 233.527†	-75.7	1.9	0.0486	µg/L	0.0486	ppb	05:54:08
1	Be 313.107†	3600.3	106.6	0.0665	µg/L	0.0665	ppb	05:53:48
1	Cd 226.502†	-89.6	8.8	0.2327	µg/L	0.2327	ppb	05:54:08
1	Co 228.616†	-66.2	0.0	-0.0010	µg/L	-0.0010	ppb	05:54:08
1	Cr 267.716†	-100.4	-1.2	-0.0256	µg/L	-0.0256	ppb	05:53:48
1	Cu 324.752†	4098.3	-146.2	-1.0115	µg/L	-1.0115	ppb	05:53:48
1	Mn 257.610†	-203.2	-3.1	-0.0085	µg/L	-0.0085	ppb	05:54:08
1	Mo 202.031†	-3.5	0.2	0.0238	µg/L	0.0238	ppb	05:54:08
1	Ni 231.604†	295.7	21.9	1.2007	µg/L	1.2007	ppb	05:54:08
1	P 214.914†	199.1	-0.6	-1.0127	µg/L	-1.0127	ppb	05:54:08
1	Pb 220.353†	51.6	-4.3	-1.1084	µg/L	-1.1084	ppb	05:54:08
1	S 181.975 Axial†	42.1	20.2	98.774	µg/L	98.774	ppb	05:54:08
1	Sb 206.836†	16.5	-4.5	-4.4186	µg/L	-4.4186	ppb	05:54:08
1	Se 196.026†	15.2	5.5	6.9918	µg/L	6.9918	ppb	05:54:08
1	SiO2†	2657.5	-77.5	-14.229	µg/L	-14.229	ppb	05:53:48
1	Si 251.611†	356.7	33.7	2.4232	µg/L	2.4232	ppb	05:54:08
1	Sn 189.927†	23.7	1.4	0.7176	µg/L	0.7176	ppb	05:54:08
1	Ti 334.940†	1043.5	275.6	0.6276	µg/L	0.6276	ppb	05:53:48
1	Tl 190.801†	-16.3	4.0	6.1069	µg/L	6.1069	ppb	05:54:08
1	U 409.014†	704.6	-21.5	-1.9550	µg/L	-1.9550	ppb	05:53:48
1	V 292.402†	-135.8	-9.9	-0.1133	µg/L	-0.1133	ppb	05:53:48
1	Zn 213.857†	539.3	16.0	0.4179	µg/L	0.4179	ppb	05:54:08
2	Sc RADIAL	115125.2	115125.2	98.7	%			05:52:46
2	Al 396.153Radial†	146.3	24.9	12.364	µg/L	12.364	ppb	05:52:46
2	Ca 317.933Radial†	421.9	14.7	5.6684	µg/L	5.6684	ppb	05:53:06
2	Fe 238.204 Radial†	15.5	0.5	3.4418	µg/L	3.4418	ppb	05:53:06
2	K 766.490 Radial†	839.3	167.7	85.849	µg/L	85.849	ppb	05:52:46
2	Mg 279.077 IEC†	13.7	-1.6	-9.7881	µg/L	-9.7881	ppb	05:53:06
2	Na 589.592 Radial†	-379.9	249.2	62.405	µg/L	62.405	ppb	05:52:46
2	Sr 421.552†	-49.0	12.7	0.0638	µg/L	0.0638	ppb	05:52:46
2	Sc 361.383	2003156.0	2003156.0	99.057	%			05:54:14
2	Y 371.029	1247675.9	1247675.9	99.120	%			05:54:14
2	Ag 328.068†	28.9	18.7	0.1720	µg/L	0.1720	ppb	05:54:20
2	As 188.979†	5.6	3.5	6.2888	µg/L	6.2888	ppb	05:54:41
2	B 249.677†	251.7	116.2	5.0374	µg/L	5.0374	ppb	05:54:41
2	Ba 233.527†	-69.6	7.8	0.2011	µg/L	0.2011	ppb	05:54:41
2	Be 313.107†	3675.4	194.5	0.1215	µg/L	0.1215	ppb	05:54:20
2	Cd 226.502†	-88.3	9.8	0.2614	µg/L	0.2614	ppb	05:54:41
2	Co 228.616†	-62.5	3.6	0.1730	µg/L	0.1730	ppb	05:54:41
2	Cr 267.716†	-138.9	-40.5	-0.8483	µg/L	-0.8483	ppb	05:54:20
2	Cu 324.752†	4137.2	-93.2	-0.6456	µg/L	-0.6456	ppb	05:54:20
2	Mn 257.610†	-199.4	0.1	0.0006	µg/L	0.0006	ppb	05:54:41
2	Mo 202.031†	-1.0	2.7	0.3129	µg/L	0.3129	ppb	05:54:41
2	Ni 231.604†	297.6	24.9	1.3629	µg/L	1.3629	ppb	05:54:41
2	P 214.914†	190.0	-9.1	-18.259	µg/L	-18.259	ppb	05:54:41
2	Pb 220.353†	49.2	-6.6	-1.7084	µg/L	-1.7084	ppb	05:54:41

2	S 181.975 Axial†	35.5	13.6	66.757 µg/L	66.757 ppb		05:54:41
2	Sb 206.836†	19.0	-2.0	-1.9198 µg/L	-1.9198 ppb		05:54:41
2	Se 196.026†	20.0	10.3	13.185 µg/L	13.185 ppb		05:54:41
2	SiO2†	2669.4	-56.6	-10.394 µg/L	-10.394 ppb		05:54:20
2	Si 251.611†	353.9	32.1	2.3977 µg/L	2.3977 ppb		05:54:41
2	Sn 189.927†	18.1	-4.1	-2.0975 µg/L	-2.0975 ppb		05:54:41
2	Ti 334.940†	993.2	228.2	0.5195 µg/L	0.5195 ppb		05:54:20
2	Tl 190.801†	-22.1	-2.0	-3.0439 µg/L	-3.0439 ppb		05:54:41
2	U 409.014†	699.8	-24.0	-2.1789 µg/L	-2.1789 ppb		05:54:20
2	V 292.402†	-113.5	12.1	0.1353 µg/L	0.1353 ppb		05:54:20
2	Zn 213.857†	530.1	8.5	0.2203 µg/L	0.2203 ppb		05:54:41
3	Sc RADIAL	114101.3	114101.3	97.8 %			05:53:12
3	Al 396.153Radial†	104.3	-16.7	-8.3266 µg/L	-8.3266 ppb		05:53:12
3	Ca 317.933Radial†	425.4	22.0	8.5151 µg/L	8.5151 ppb		05:53:32
3	Fe 238.204 Radial†	16.9	2.1	13.269 µg/L	13.269 ppb		05:53:32
3	K 766.490 Radial†	741.9	75.8	38.817 µg/L	38.817 ppb		05:53:12
3	Mg 279.077 IEC†	15.3	0.2	1.3248 µg/L	1.3248 ppb		05:53:32
3	Na 589.592 Radial†	-387.0	238.6	59.745 µg/L	59.745 ppb		05:53:12
3	Sr 421.552†	-63.7	-2.8	-0.0140 µg/L	-0.0140 ppb		05:53:12
3	Sc 361.383	2029979.0	2029979.0	100.38 %			05:54:47
3	Y 371.029	1264771.0	1264771.0	100.48 %			05:54:47
3	Ag 328.068†	113.4	102.5	0.9349 µg/L	0.9349 ppb		05:54:52
3	As 188.979†	0.7	-1.5	-2.6930 µg/L	-2.6930 ppb		05:55:13
3	B 249.677†	248.1	109.3	4.7358 µg/L	4.7358 ppb		05:55:13
3	Ba 233.527†	-68.5	9.8	0.2524 µg/L	0.2524 ppb		05:55:13
3	Be 313.107†	3659.8	130.0	0.0812 µg/L	0.0812 ppb		05:54:52
3	Cd 226.502†	-80.8	18.4	0.4862 µg/L	0.4862 ppb		05:55:13
3	Co 228.616†	-67.4	-0.5	-0.0231 µg/L	-0.0231 ppb		05:55:13
3	Cr 267.716†	-138.5	-38.2	-0.8015 µg/L	-0.8015 ppb		05:54:52
3	Cu 324.752†	4098.9	-186.5	-1.2910 µg/L	-1.2910 ppb		05:54:52
3	Mn 257.610†	-201.9	0.2	0.0022 µg/L	0.0022 ppb		05:55:13
3	Mo 202.031†	6.2	9.8	1.1472 µg/L	1.1472 ppb		05:55:13
3	Ni 231.604†	285.9	9.2	0.5053 µg/L	0.5053 ppb		05:55:13
3	P 214.914†	196.4	-5.3	-10.601 µg/L	-10.601 ppb		05:55:13
3	Pb 220.353†	46.6	-9.8	-2.5263 µg/L	-2.5263 ppb		05:55:13
3	S 181.975 Axial†	34.5	12.2	59.623 µg/L	59.623 ppb		05:55:13
3	Sb 206.836†	17.4	-3.8	-3.6736 µg/L	-3.6736 ppb		05:55:13
3	Se 196.026†	15.5	5.5	7.0909 µg/L	7.0909 ppb		05:55:13
3	SiO2†	2697.7	-64.0	-11.745 µg/L	-11.745 ppb		05:54:52
3	Si 251.611†	367.0	40.4	3.0765 µg/L	3.0765 ppb		05:55:13
3	Sn 189.927†	15.6	-6.9	-3.5046 µg/L	-3.5046 ppb		05:55:13
3	Ti 334.940†	965.4	187.3	0.4262 µg/L	0.4262 ppb		05:54:52
3	Tl 190.801†	-22.4	-1.9	-2.9318 µg/L	-2.9318 ppb		05:55:13
3	U 409.014†	665.9	-67.1	-6.0880 µg/L	-6.0880 ppb		05:54:52
3	V 292.402†	-136.1	-8.9	-0.1006 µg/L	-0.1006 ppb		05:54:52
3	Zn 213.857†	537.6	8.9	0.2328 µg/L	0.2328 ppb		05:55:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2014313.1	99.609	%	0.6907				0.69%
Sc RADIAL	114621.2	98.3	%	0.44				0.45%
Y 371.029	1254858.3	99.691	%	0.7046				0.71%
Ag 328.068†	47.7	0.4354	µg/L	0.43283	0.4354	ppb	0.43283	99.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.5	3.6980	µg/L	10.74639	3.6980	ppb	10.74639	290.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.4	2.5257	µg/L	4.66444	2.5257	ppb	4.66444	184.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	114.9	4.9775	µg/L	0.21805	4.9775	ppb	0.21805	4.38%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.5	0.1674	µg/L	0.10603	0.1674	ppb	0.10603	63.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	143.7	0.0897	µg/L	0.02849	0.0897	ppb	0.02849	31.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	14.0	5.4175	µg/L	3.23041	5.4175	ppb	3.23041	59.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	12.4	0.3268	µg/L	0.13884	0.3268	ppb	0.13884	42.49%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.0	0.0496	µg/L	0.10740	0.0496	ppb	0.10740	216.52%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -26.6     -0.5585 µg/L       0.46210     -0.5585 ppb        0.46210  82.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -142.0     -0.9827 µg/L       0.32366     -0.9827 ppb        0.32366  32.94%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.5      9.4733 µg/L       5.28125      9.4733 ppb        5.28125  55.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        121.9      62.389 µg/L       23.5165      62.389 ppb        23.5165  37.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3     -2.1025 µg/L       6.66887     -2.1025 ppb        6.66887 317.19%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -1.0     -0.0019 µg/L       0.00581     -0.0019 ppb        0.00581 306.80%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.2      0.4946 µg/L       0.58334      0.4946 ppb        0.58334 117.94%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       263.4      65.955 µg/L        8.5573      65.955 ppb         8.5573  12.97%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               18.7      1.0230 µg/L       0.45560      1.0230 ppb        0.45560  44.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -5.0     -9.9577 µg/L       8.64129     -9.9577 ppb        8.64129  86.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -6.9     -1.7810 µg/L       0.71173     -1.7810 ppb        0.71173  39.96%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          15.3      75.051 µg/L       20.8519      75.051 ppb        20.8519  27.78%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.4     -3.3373 µg/L       1.28287     -3.3373 ppb        1.28287  38.44%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                7.1      9.0892 µg/L       3.54730      9.0892 ppb        3.54730  39.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -66.0     -12.123 µg/L        1.9450     -12.123 ppb         1.9450  16.04%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               35.4      2.6324 µg/L       0.38473      2.6324 ppb        0.38473  14.61%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.2     -1.6282 µg/L       2.14989     -1.6282 ppb        2.14989 132.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -9.8     -0.0492 µg/L       0.13413     -0.0492 ppb        0.13413 272.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              230.4      0.5245 µg/L       0.10079      0.5245 ppb        0.10079  19.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.0      0.0437 µg/L       5.25117      0.0437 ppb        5.25117 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -37.6     -3.4073 µg/L       2.32424     -3.4073 ppb        2.32424  68.21%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -2.2     -0.0262 µg/L       0.14000     -0.0262 ppb        0.14000 534.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               11.1      0.2903 µg/L       0.11066      0.2903 ppb        0.11066  38.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 49
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 06:21:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116748.5	116748.5	100	%			06:22:18
1	Al 396.153Radial†	10225.1	10091.3	4995.2	µg/L	4995.2	ppb	06:22:18
1	Ca 317.933Radial†	13075.1	12648.9	4894.1	µg/L	4894.1	ppb	06:22:38
1	Fe 238.204 Radial†	786.1	770.1	4913.6	µg/L	4913.6	ppb	06:22:38
1	K 766.490 Radial†	10518.4	9825.1	5028.4	µg/L	5028.4	ppb	06:22:18
1	Mg 279.077 IEC†	828.6	812.3	5020.3	µg/L	5020.3	ppb	06:22:38
1	Na 589.592 Radial†	39675.6	40269.0	10084	µg/L	10084	ppb	06:22:18
1	Sr 421.552†	96587.8	96550.9	485.26	µg/L	485.26	ppb	06:22:18
1	Sc 361.383	2048636.3	2048636.3	101.31	%			06:23:42
1	Y 371.029	1263771.4	1263771.4	100.40	%			06:23:42
1	Ag 328.068†	54765.9	54049.4	496.40	µg/L	496.40	ppb	06:23:47
1	As 188.979†	270.1	264.4	479.06	µg/L	479.06	ppb	06:24:08
1	B 249.677†	11392.5	11107.7	480.00	µg/L	480.00	ppb	06:23:47
1	Ba 233.527†	18877.7	18712.3	480.96	µg/L	480.96	ppb	06:23:47
1	Be 313.107†	791545.4	777824.4	486.54	µg/L	486.54	ppb	06:23:42
1	Cd 226.502†	18270.9	18134.3	483.13	µg/L	483.13	ppb	06:23:47
1	Co 228.616†	10047.2	9984.4	482.57	µg/L	482.57	ppb	06:23:47
1	Cr 267.716†	23063.2	22865.7	480.66	µg/L	480.66	ppb	06:23:47
1	Cu 324.752†	74446.1	69216.6	481.17	µg/L	481.17	ppb	06:23:47
1	Mn 257.610†	150853.9	149110.3	476.73	µg/L	476.73	ppb	06:23:47
1	Mo 202.031†	4266.2	4214.9	492.51	µg/L	492.51	ppb	06:24:08
1	Ni 231.604†	9223.5	8829.0	483.04	µg/L	483.04	ppb	06:23:47
1	P 214.914†	1414.6	1195.5	2362.8	µg/L	2362.8	ppb	06:24:08
1	Pb 220.353†	1976.3	1894.6	490.39	µg/L	490.39	ppb	06:24:08
1	S 181.975 Axial†	250.3	224.9	1099.8	µg/L	1099.8	ppb	06:24:08
1	Sb 206.836†	540.6	512.5	500.25	µg/L	500.25	ppb	06:24:08
1	Se 196.026†	406.2	391.1	501.82	µg/L	501.82	ppb	06:24:08
1	SiO2†	31330.3	28175.0	5173.8	µg/L	5173.8	ppb	06:23:47
1	Si 251.611†	33650.7	32891.6	2386.5	µg/L	2386.5	ppb	06:23:47
1	Sn 189.927†	1015.3	979.7	504.36	µg/L	504.36	ppb	06:24:08
1	Ti 334.940†	221398.7	217769.8	495.79	µg/L	495.79	ppb	06:23:42
1	Tl 190.801†	303.3	319.8	493.40	µg/L	493.40	ppb	06:24:08
1	U 409.014†	6041.6	5233.3	473.70	µg/L	473.70	ppb	06:23:47
1	V 292.402†	43095.2	42666.3	484.55	µg/L	484.55	ppb	06:23:47
1	Zn 213.857†	19055.2	18282.9	480.72	µg/L	480.72	ppb	06:23:47
2	Sc RADIAL	116740.6	116740.6	100	%			06:22:44
2	Al 396.153Radial†	10289.2	10156.0	5027.2	µg/L	5027.2	ppb	06:22:44
2	Ca 317.933Radial†	13118.1	12692.8	4911.1	µg/L	4911.1	ppb	06:23:04
2	Fe 238.204 Radial†	785.4	769.5	4909.8	µg/L	4909.8	ppb	06:23:04
2	K 766.490 Radial†	10526.7	9834.1	5033.0	µg/L	5033.0	ppb	06:22:44
2	Mg 279.077 IEC†	830.6	814.4	5033.2	µg/L	5033.2	ppb	06:23:04
2	Na 589.592 Radial†	40195.1	40790.6	10215	µg/L	10215	ppb	06:22:44
2	Sr 421.552†	97435.3	97404.1	489.55	µg/L	489.55	ppb	06:22:44
2	Sc 361.383	2019809.7	2019809.7	99.881	%			06:24:15
2	Y 371.029	1247980.0	1247980.0	99.145	%			06:24:15
2	Ag 328.068†	55294.0	55349.7	508.32	µg/L	508.32	ppb	06:24:20
2	As 188.979†	276.3	274.5	497.27	µg/L	497.27	ppb	06:24:41
2	B 249.677†	11511.4	11387.3	492.12	µg/L	492.12	ppb	06:24:20
2	Ba 233.527†	19016.4	19117.2	491.36	µg/L	491.36	ppb	06:24:20
2	Be 313.107†	785120.2	782542.7	489.49	µg/L	489.49	ppb	06:24:15
2	Cd 226.502†	18408.7	18529.7	493.68	µg/L	493.68	ppb	06:24:20
2	Co 228.616†	10158.9	10237.7	494.82	µg/L	494.82	ppb	06:24:20
2	Cr 267.716†	23223.1	23350.7	490.86	µg/L	490.86	ppb	06:24:20
2	Cu 324.752†	75067.0	70886.9	492.75	µg/L	492.75	ppb	06:24:20
2	Mn 257.610†	152114.5	152497.7	487.54	µg/L	487.54	ppb	06:24:20
2	Mo 202.031†	4255.7	4264.4	498.30	µg/L	498.30	ppb	06:24:41
2	Ni 231.604†	9263.8	8999.3	492.36	µg/L	492.36	ppb	06:24:20
2	P 214.914†	1407.5	1208.3	2387.5	µg/L	2387.5	ppb	06:24:41
2	Pb 220.353†	1964.5	1910.6	494.51	µg/L	494.51	ppb	06:24:41

2	S 181.975 Axial†	246.3	224.4	1097.4 µg/L	1097.4 ppb	06:24:41
2	Sb 206.836†	533.0	512.5	500.19 µg/L	500.19 ppb	06:24:41
2	Se 196.026†	399.5	390.1	500.59 µg/L	500.59 ppb	06:24:41
2	SiO2†	31560.0	28846.3	5297.1 µg/L	5297.1 ppb	06:24:20
2	Si 251.611†	33860.1	33575.3	2436.5 µg/L	2436.5 ppb	06:24:20
2	Sn 189.927†	1020.9	999.7	514.58 µg/L	514.58 ppb	06:24:41
2	Ti 334.940†	220067.2	219555.8	499.85 µg/L	499.85 ppb	06:24:15
2	Tl 190.801†	302.8	323.5	499.19 µg/L	499.19 ppb	06:24:41
2	U 409.014†	6070.2	5347.0	484.02 µg/L	484.02 ppb	06:24:20
2	V 292.402†	43393.9	43572.5	494.80 µg/L	494.80 ppb	06:24:20
2	Zn 213.857†	19230.7	18727.0	492.43 µg/L	492.43 ppb	06:24:20
3	Sc RADIAL	116320.4	116320.4	99.7 %		06:23:10
3	Al 396.153Radial†	10194.2	10097.9	4998.5 µg/L	4998.5 ppb	06:23:10
3	Ca 317.933Radial†	13074.0	12695.9	4912.3 µg/L	4912.3 ppb	06:23:30
3	Fe 238.204 Radial†	785.5	772.4	4928.6 µg/L	4928.6 ppb	06:23:30
3	K 766.490 Radial†	10409.0	9754.1	4992.0 µg/L	4992.0 ppb	06:23:10
3	Mg 279.077 IEC†	825.6	812.3	5020.5 µg/L	5020.5 ppb	06:23:30
3	Na 589.592 Radial†	39616.2	40355.3	10106 µg/L	10106 ppb	06:23:10
3	Sr 421.552†	96283.7	96601.2	485.51 µg/L	485.51 ppb	06:23:10
3	Sc 361.383	2019100.1	2019100.1	99.846 %		06:24:48
3	Y 371.029	1248568.4	1248568.4	99.191 %		06:24:48
3	Ag 328.068†	55208.6	55283.6	507.72 µg/L	507.72 ppb	06:24:53
3	As 188.979†	264.4	262.5	475.65 µg/L	475.65 ppb	06:25:14
3	B 249.677†	11509.2	11389.2	492.20 µg/L	492.20 ppb	06:24:53
3	Ba 233.527†	19010.4	19117.8	491.38 µg/L	491.38 ppb	06:24:53
3	Be 313.107†	780104.3	777795.3	486.52 µg/L	486.52 ppb	06:24:48
3	Cd 226.502†	18430.6	18558.1	494.44 µg/L	494.44 ppb	06:24:53
3	Co 228.616†	10140.8	10223.1	494.11 µg/L	494.11 ppb	06:24:53
3	Cr 267.716†	23231.3	23367.0	491.20 µg/L	491.20 ppb	06:24:53
3	Cu 324.752†	74842.1	70688.1	491.38 µg/L	491.38 ppb	06:24:53
3	Mn 257.610†	151889.5	152325.8	486.99 µg/L	486.99 ppb	06:24:53
3	Mo 202.031†	4201.1	4211.2	492.08 µg/L	492.08 ppb	06:25:14
3	Ni 231.604†	9286.5	9025.3	493.78 µg/L	493.78 ppb	06:24:53
3	P 214.914†	1389.3	1190.5	2351.5 µg/L	2351.5 ppb	06:25:14
3	Pb 220.353†	1956.7	1903.5	492.67 µg/L	492.67 ppb	06:25:14
3	S 181.975 Axial†	245.1	223.3	1091.8 µg/L	1091.8 ppb	06:25:14
3	Sb 206.836†	527.7	507.4	495.16 µg/L	495.16 ppb	06:25:14
3	Se 196.026†	391.6	382.3	490.69 µg/L	490.69 ppb	06:25:14
3	SiO2†	31560.9	28858.4	5299.3 µg/L	5299.3 ppb	06:24:53
3	Si 251.611†	33862.8	33590.0	2438.2 µg/L	2438.2 ppb	06:24:53
3	Sn 189.927†	1001.9	981.0	505.01 µg/L	505.01 ppb	06:25:14
3	Ti 334.940†	218659.2	218223.1	496.82 µg/L	496.82 ppb	06:24:48
3	Tl 190.801†	299.6	320.4	494.39 µg/L	494.39 ppb	06:25:14
3	U 409.014†	6154.8	5433.9	491.89 µg/L	491.89 ppb	06:24:53
3	V 292.402†	43358.3	43552.2	494.54 µg/L	494.54 ppb	06:24:53
3	Zn 213.857†	19209.6	18712.6	492.04 µg/L	492.04 ppb	06:24:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2029182.0	100.34	%	0.833				0.83%
Sc RADIAL	116603.2	100.0	%	0.21				0.21%
Y 371.029	1253439.9	99.578	%	0.7112				0.71%
Ag 328.068†	54894.2	504.15	µg/L	6.717	504.15	ppb	6.717	1.33%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	10115.1	5007.0	µg/L	17.56	5007.0	ppb	17.56	0.35%
QC value within limits for Al 396.153Radial Recovery = 100.14%								
As 188.979†	267.1	483.99	µg/L	11.625	483.99	ppb	11.625	2.40%
QC value within limits for As 188.979 Recovery = 96.80%								
B 249.677†	11294.7	488.11	µg/L	7.020	488.11	ppb	7.020	1.44%
QC value within limits for B 249.677 Recovery = 97.62%								
Ba 233.527†	18982.5	487.90	µg/L	6.012	487.90	ppb	6.012	1.23%
QC value within limits for Ba 233.527 Recovery = 97.58%								
Be 313.107†	779387.4	487.52	µg/L	1.709	487.52	ppb	1.709	0.35%
QC value within limits for Be 313.107 Recovery = 97.50%								
Ca 317.933Radial†	12679.2	4905.8	µg/L	10.17	4905.8	ppb	10.17	0.21%
QC value within limits for Ca 317.933Radial Recovery = 98.12%								
Cd 226.502†	18407.4	490.42	µg/L	6.317	490.42	ppb	6.317	1.29%
QC value within limits for Cd 226.502 Recovery = 98.08%								
Co 228.616†	10148.4	490.50	µg/L	6.874	490.50	ppb	6.874	1.40%

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   QC value within limits for Co 228.616  Recovery = 98.10%
Cr 267.716†            23194.5      487.57 µg/L        5.988      487.57 ppb          5.988   1.23%
   QC value within limits for Cr 267.716  Recovery = 97.51%
Cu 324.752†            70263.9      488.43 µg/L        6.329      488.43 ppb          6.329   1.30%
   QC value within limits for Cu 324.752  Recovery = 97.69%
Fe 238.204 Radial†       770.7      4917.3 µg/L         9.97      4917.3 ppb           9.97   0.20%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.35%
K 766.490 Radial†       9804.5      5017.8 µg/L        22.42      5017.8 ppb          22.42   0.45%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†          813.0      5024.6 µg/L         7.37      5024.6 ppb           7.37   0.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.49%
Mn 257.610†           151311.2      483.75 µg/L        6.093      483.75 ppb          6.093   1.26%
   QC value within limits for Mn 257.610  Recovery = 96.75%
Mo 202.031†            4230.2      494.30 µg/L        3.471      494.30 ppb          3.471   0.70%
   QC value within limits for Mo 202.031  Recovery = 98.86%
Na 589.592 Radial†    40471.7       10135 µg/L         70.0       10135 ppb           70.0   0.69%
   QC value within limits for Na 589.592 Radial  Recovery = 101.35%
Ni 231.604†            8951.2      489.73 µg/L        5.834      489.73 ppb          5.834   1.19%
   QC value within limits for Ni 231.604  Recovery = 97.95%
P 214.914†             1198.1      2367.3 µg/L        18.42      2367.3 ppb          18.42   0.78%
   QC value within limits for P 214.914  Recovery = 94.69%
Pb 220.353†            1902.9      492.52 µg/L        2.067      492.52 ppb          2.067   0.42%
   QC value within limits for Pb 220.353  Recovery = 98.50%
S 181.975 Axial†        224.2      1096.3 µg/L         4.14      1096.3 ppb           4.14   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 109.63%
Sb 206.836†             510.8      498.53 µg/L        2.922      498.53 ppb          2.922   0.59%
   QC value within limits for Sb 206.836  Recovery = 99.71%
Se 196.026†             387.8      497.70 µg/L        6.104      497.70 ppb          6.104   1.23%
   QC value within limits for Se 196.026  Recovery = 99.54%
SiO2†                  28626.5      5256.7 µg/L        71.83      5256.7 ppb          71.83   1.37%
   QC value within limits for SiO2  Recovery = 98.30%
Si 251.611†            33352.3      2420.4 µg/L        29.34      2420.4 ppb          29.34   1.21%
   QC value within limits for Si 251.611  Recovery = 96.82%
Sn 189.927†             986.8      507.98 µg/L        5.720      507.98 ppb          5.720   1.13%
   QC value within limits for Sn 189.927  Recovery = 101.60%
Sr 421.552†            96852.1      486.78 µg/L        2.406      486.78 ppb          2.406   0.49%
   QC value within limits for Sr 421.552  Recovery = 97.36%
Ti 334.940†           218516.2      497.49 µg/L        2.114      497.49 ppb          2.114   0.43%
   QC value within limits for Ti 334.940  Recovery = 99.50%
Tl 190.801†             321.2      495.66 µg/L        3.098      495.66 ppb          3.098   0.63%
   QC value within limits for Tl 190.801  Recovery = 99.13%
U 409.014†             5338.1      483.20 µg/L        9.123      483.20 ppb          9.123   1.89%
   QC value within limits for U 409.014  Recovery = 96.64%
V 292.402†            43263.6      491.30 µg/L        5.845      491.30 ppb          5.845   1.19%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†           18574.2      488.39 µg/L        6.649      488.39 ppb          6.649   1.36%
   QC value within limits for Zn 213.857  Recovery = 97.68%
All analyte(s) passed QC.
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Sequence No.: 50
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 06:25:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113892.6	113892.6	97.7	%			06:25:57
1	Al 396.153Radial†	134.1	14.0	6.9338	µg/L	6.9338	ppb	06:25:57
1	Ca 317.933Radial†	425.4	22.8	8.8357	µg/L	8.8357	ppb	06:26:18
1	Fe 238.204 Radial†	16.1	1.4	8.6980	µg/L	8.6980	ppb	06:26:18
1	K 766.490 Radial†	873.7	212.2	108.61	µg/L	108.61	ppb	06:25:57
1	Mg 279.077 IEC†	16.5	1.4	8.7757	µg/L	8.7757	ppb	06:26:18
1	Na 589.592 Radial†	-112.3	519.1	129.99	µg/L	129.99	ppb	06:25:57
1	Sr 421.552†	-25.3	36.4	0.1828	µg/L	0.1828	ppb	06:25:57
1	Sc 361.383	2013279.5	2013279.5	99.558	%			06:27:20
1	Y 371.029	1252788.1	1252788.1	99.527	%			06:27:20
1	Ag 328.068†	43.5	33.3	0.3073	µg/L	0.3073	ppb	06:27:26
1	As 188.979†	3.3	1.1	1.9199	µg/L	1.9199	ppb	06:27:46
1	B 249.677†	227.7	90.9	3.9376	µg/L	3.9376	ppb	06:27:26
1	Ba 233.527†	-69.1	8.6	0.2219	µg/L	0.2219	ppb	06:27:46
1	Be 313.107†	3568.1	68.1	0.0425	µg/L	0.0425	ppb	06:27:26
1	Cd 226.502†	-93.4	5.1	0.1303	µg/L	0.1303	ppb	06:27:46
1	Co 228.616†	-67.2	-0.9	-0.0413	µg/L	-0.0413	ppb	06:27:46
1	Cr 267.716†	-125.9	-26.6	-0.5573	µg/L	-0.5573	ppb	06:27:26
1	Cu 324.752†	4113.4	-138.1	-0.9557	µg/L	-0.9557	ppb	06:27:26
1	Mn 257.610†	-195.2	5.3	0.0179	µg/L	0.0179	ppb	06:27:46
1	Mo 202.031†	0.3	4.0	0.4687	µg/L	0.4687	ppb	06:27:46
1	Ni 231.604†	288.0	13.7	0.7481	µg/L	0.7481	ppb	06:27:46
1	P 214.914†	191.1	-9.0	-18.048	µg/L	-18.048	ppb	06:27:46
1	Pb 220.353†	53.9	-2.2	-0.5464	µg/L	-0.5464	ppb	06:27:46
1	S 181.975 Axial†	40.3	18.3	89.534	µg/L	89.534	ppb	06:27:46
1	Sb 206.836†	20.4	-0.6	-0.6067	µg/L	-0.6067	ppb	06:27:46
1	Se 196.026†	7.6	-2.3	-2.9062	µg/L	-2.9062	ppb	06:27:46
1	SiO2†	2712.7	-26.6	-4.8879	µg/L	-4.8879	ppb	06:27:26
1	Si 251.611†	361.7	38.1	2.8016	µg/L	2.8016	ppb	06:27:46
1	Sn 189.927†	20.1	-2.2	-1.1324	µg/L	-1.1324	ppb	06:27:46
1	Ti 334.940†	925.6	155.3	0.3532	µg/L	0.3532	ppb	06:27:26
1	Tl 190.801†	-24.4	-4.2	-6.4149	µg/L	-6.4149	ppb	06:27:46
1	U 409.014†	632.6	-95.1	-8.6204	µg/L	-8.6204	ppb	06:27:26
1	V 292.402†	-84.6	41.8	0.4598	µg/L	0.4598	ppb	06:27:26
1	Zn 213.857†	531.3	7.0	0.1819	µg/L	0.1819	ppb	06:27:46
2	Sc RADIAL	114170.3	114170.3	97.9	%			06:26:23
2	Al 396.153Radial†	141.2	21.0	10.415	µg/L	10.415	ppb	06:26:23
2	Ca 317.933Radial†	415.1	11.3	4.3666	µg/L	4.3666	ppb	06:26:44
2	Fe 238.204 Radial†	15.8	0.9	5.9649	µg/L	5.9649	ppb	06:26:44
2	K 766.490 Radial†	799.9	134.7	68.923	µg/L	68.923	ppb	06:26:23
2	Mg 279.077 IEC†	14.9	-0.2	-1.1572	µg/L	-1.1572	ppb	06:26:44
2	Na 589.592 Radial†	-138.3	492.8	123.41	µg/L	123.41	ppb	06:26:23
2	Sr 421.552†	-68.7	-7.9	-0.0396	µg/L	-0.0396	ppb	06:26:23
2	Sc 361.383	2006719.9	2006719.9	99.233	%			06:27:52
2	Y 371.029	1249750.1	1249750.1	99.285	%			06:27:52
2	Ag 328.068†	76.7	66.9	0.6098	µg/L	0.6098	ppb	06:27:58
2	As 188.979†	1.3	-0.9	-1.5991	µg/L	-1.5991	ppb	06:28:18
2	B 249.677†	214.3	78.1	3.3836	µg/L	3.3836	ppb	06:27:58
2	Ba 233.527†	-75.8	1.6	0.0416	µg/L	0.0416	ppb	06:28:18
2	Be 313.107†	3567.3	79.0	0.0493	µg/L	0.0493	ppb	06:27:58
2	Cd 226.502†	-79.7	18.7	0.4948	µg/L	0.4948	ppb	06:28:18
2	Co 228.616†	-64.9	1.2	0.0593	µg/L	0.0593	ppb	06:28:18
2	Cr 267.716†	-142.8	-44.2	-0.9261	µg/L	-0.9261	ppb	06:27:58
2	Cu 324.752†	4071.8	-166.5	-1.1539	µg/L	-1.1539	ppb	06:27:58
2	Mn 257.610†	-185.2	14.7	0.0476	µg/L	0.0476	ppb	06:28:18
2	Mo 202.031†	-1.2	2.4	0.2846	µg/L	0.2846	ppb	06:28:18
2	Ni 231.604†	292.8	19.5	1.0680	µg/L	1.0680	ppb	06:28:18
2	P 214.914†	190.2	-9.2	-18.538	µg/L	-18.538	ppb	06:28:18
2	Pb 220.353†	52.0	-3.9	-0.9877	µg/L	-0.9877	ppb	06:28:18

2	S 181.975 Axial†	41.9	20.0	98.036 µg/L	98.036 ppb	06:28:18
2	Sb 206.836†	10.6	-10.4	-10.207 µg/L	-10.207 ppb	06:28:18
2	Se 196.026†	17.0	7.2	9.2538 µg/L	9.2538 ppb	06:28:18
2	SiO2†	2717.4	-12.9	-2.3772 µg/L	-2.3772 ppb	06:27:58
2	Si 251.611†	364.1	41.7	3.0755 µg/L	3.0755 ppb	06:28:18
2	Sn 189.927†	20.6	-1.6	-0.8430 µg/L	-0.8430 ppb	06:28:18
2	Ti 334.940†	899.6	132.2	0.3008 µg/L	0.3008 ppb	06:27:58
2	Tl 190.801†	-18.9	1.3	1.9778 µg/L	1.9778 ppb	06:28:18
2	U 409.014†	672.2	-53.0	-4.8083 µg/L	-4.8083 ppb	06:27:58
2	V 292.402†	-131.2	-5.4	-0.0666 µg/L	-0.0666 ppb	06:27:58
2	Zn 213.857†	539.7	17.3	0.4535 µg/L	0.4535 ppb	06:28:18
3	Sc RADIAL	114292.5	114292.5	98.0 %		06:26:49
3	Al 396.153Radial†	129.8	9.2	4.5635 µg/L	4.5635 ppb	06:26:49
3	Ca 317.933Radial†	412.0	7.7	2.9633 µg/L	2.9633 ppb	06:27:10
3	Fe 238.204 Radial†	15.8	1.0	6.2506 µg/L	6.2506 ppb	06:27:10
3	K 766.490 Radial†	836.8	171.5	87.752 µg/L	87.752 ppb	06:26:49
3	Mg 279.077 IEC†	15.1	-0.0	-0.1313 µg/L	-0.1313 ppb	06:27:10
3	Na 589.592 Radial†	322.5	963.2	241.20 µg/L	241.20 ppb	06:26:49
3	Sr 421.552†	-55.9	5.3	0.0264 µg/L	0.0264 ppb	06:26:49
3	Sc 361.383	2010058.1	2010058.1	99.398 %		06:28:25
3	Y 371.029	1250621.1	1250621.1	99.354 %		06:28:25
3	Ag 328.068†	82.4	72.5	0.6602 µg/L	0.6602 ppb	06:28:30
3	As 188.979†	3.3	1.1	1.9255 µg/L	1.9255 ppb	06:28:51
3	B 249.677†	197.0	60.3	2.6131 µg/L	2.6131 ppb	06:28:30
3	Ba 233.527†	-69.9	7.7	0.1977 µg/L	0.1977 ppb	06:28:51
3	Be 313.107†	3478.7	-16.1	-0.0102 µg/L	-0.0102 ppb	06:28:30
3	Cd 226.502†	-90.4	8.1	0.2141 µg/L	0.2141 ppb	06:28:51
3	Co 228.616†	-59.4	6.9	0.3313 µg/L	0.3313 ppb	06:28:51
3	Cr 267.716†	-120.3	-21.3	-0.4467 µg/L	-0.4467 ppb	06:28:30
3	Cu 324.752†	4082.7	-162.4	-1.1252 µg/L	-1.1252 ppb	06:28:30
3	Mn 257.610†	-187.8	12.4	0.0404 µg/L	0.0404 ppb	06:28:51
3	Mo 202.031†	-4.3	-0.7	-0.0810 µg/L	-0.0810 ppb	06:28:51
3	Ni 231.604†	294.0	20.2	1.1048 µg/L	1.1048 ppb	06:28:51
3	P 214.914†	195.7	-4.0	-7.9568 µg/L	-7.9568 ppb	06:28:51
3	Pb 220.353†	49.0	-6.9	-1.7885 µg/L	-1.7885 ppb	06:28:51
3	S 181.975 Axial†	41.0	19.1	93.502 µg/L	93.502 ppb	06:28:51
3	Sb 206.836†	22.0	1.0	1.0081 µg/L	1.0081 ppb	06:28:51
3	Se 196.026†	14.7	4.9	6.2356 µg/L	6.2356 ppb	06:28:51
3	SiO2†	2646.1	-89.2	-16.387 µg/L	-16.387 ppb	06:28:30
3	Si 251.611†	346.9	23.7	1.7725 µg/L	1.7725 ppb	06:28:51
3	Sn 189.927†	19.4	-2.9	-1.5024 µg/L	-1.5024 ppb	06:28:51
3	Ti 334.940†	903.3	134.3	0.3059 µg/L	0.3059 ppb	06:28:30
3	Tl 190.801†	-21.1	-0.8	-1.2444 µg/L	-1.2444 ppb	06:28:51
3	U 409.014†	706.7	-19.5	-1.7710 µg/L	-1.7710 ppb	06:28:30
3	V 292.402†	-144.9	-19.0	-0.2169 µg/L	-0.2169 ppb	06:28:30
3	Zn 213.857†	541.5	18.1	0.4747 µg/L	0.4747 ppb	06:28:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2010019.1	99.396	%	0.1622				0.16%
Sc RADIAL	114118.4	97.8	%	0.18				0.18%
Y 371.029	1251053.1	99.389	%	0.1243				0.13%
Ag 328.068†	57.6	0.5258	µg/L	0.19082	0.5258	ppb	0.19082	36.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	7.3042	µg/L	2.94352	7.3042	ppb	2.94352	40.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.4	0.7488	µg/L	2.03331	0.7488	ppb	2.03331	271.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	76.4	3.3114	µg/L	0.66522	3.3114	ppb	0.66522	20.09%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.0	0.1537	µg/L	0.09789	0.1537	ppb	0.09789	63.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	43.7	0.0272	µg/L	0.03257	0.0272	ppb	0.03257	119.72%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.9	5.3885	µg/L	3.06669	5.3885	ppb	3.06669	56.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.6	0.2797	µg/L	0.19089	0.2797	ppb	0.19089	68.24%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.4	0.1164	µg/L	0.19277	0.1164	ppb	0.19277	165.58%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -30.7     -0.6433 µg/L       0.25104     -0.6433 ppb        0.25104  39.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -155.7     -1.0783 µg/L       0.10710     -1.0783 ppb        0.10710   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.1      6.9712 µg/L       1.50229      6.9712 ppb        1.50229  21.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        172.8     88.428 µg/L       19.8512     88.428 ppb        19.8512  22.45%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.4      2.4957 µg/L       5.46279      2.4957 ppb        5.46279 218.89%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               10.8      0.0353 µg/L       0.01551      0.0353 ppb        0.01551  43.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.9      0.2241 µg/L       0.27979      0.2241 ppb        0.27979 124.86%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       658.4     164.87 µg/L        66.188     164.87 ppb         66.188  40.15%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               17.8      0.9736 µg/L       0.19621      0.9736 ppb        0.19621  20.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -7.4     -14.847 µg/L        5.9725     -14.847 ppb         5.9725  40.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.3     -1.1076 µg/L       0.62967     -1.1076 ppb        0.62967  56.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          19.1      93.691 µg/L        4.2537      93.691 ppb         4.2537   4.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.3     -3.2687 µg/L       6.06310     -3.2687 ppb        6.06310 185.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.3      4.1944 µg/L       6.33174      4.1944 ppb        6.33174 150.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -42.9     -7.8841 µg/L       7.47025     -7.8841 ppb        7.47025  94.75%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               34.5      2.5499 µg/L       0.68700      2.5499 ppb        0.68700  26.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.3     -1.1593 µg/L       0.33057     -1.1593 ppb        0.33057  28.52%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               11.2      0.0565 µg/L       0.11421      0.0565 ppb        0.11421 202.12%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              140.6      0.3200 µg/L       0.02892      0.3200 ppb        0.02892   9.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.2     -1.8938 µg/L       4.23387     -1.8938 ppb        4.23387 223.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -55.9     -5.0666 µg/L       3.43201     -5.0666 ppb        3.43201  67.74%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 5.8      0.0588 µg/L       0.35534      0.0588 ppb        0.35534 604.77%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.1      0.3700 µg/L       0.16326      0.3700 ppb        0.16326  44.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/10/2009 06:47:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114319.3	114319.3	98.0	%			06:48:26
1	Al 396.153Radial†	10479.2	10567.6	5231.7	µg/L	5231.7	ppb	06:48:26
1	Ca 317.933Radial†	13073.4	12924.7	5000.8	µg/L	5000.8	ppb	06:48:47
1	Fe 238.204 Radial†	799.1	800.1	5104.6	µg/L	5104.6	ppb	06:48:47
1	K 766.490 Radial†	10338.6	9865.0	5048.8	µg/L	5048.8	ppb	06:48:26
1	Mg 279.077 IEC†	824.6	825.8	5103.3	µg/L	5103.3	ppb	06:48:47
1	Na 589.592 Radial†	39533.0	40965.7	10259	µg/L	10259	ppb	06:48:26
1	Sr 421.552†	96435.2	98445.6	494.78	µg/L	494.78	ppb	06:48:26
1	Sc 361.383	2004032.1	2004032.1	99.100	%			06:49:50
1	Y 371.029	1246917.0	1246917.0	99.060	%			06:49:50
1	Ag 328.068†	54782.5	55269.4	507.60	µg/L	507.60	ppb	06:49:56
1	As 188.979†	272.5	272.8	494.18	µg/L	494.18	ppb	06:50:16
1	B 249.677†	11281.6	11246.1	485.94	µg/L	485.94	ppb	06:49:56
1	Ba 233.527†	18772.5	19021.0	488.89	µg/L	488.89	ppb	06:49:56
1	Be 313.107†	779611.8	783172.8	489.89	µg/L	489.89	ppb	06:49:50
1	Cd 226.502†	18206.2	18470.4	492.08	µg/L	492.08	ppb	06:49:56
1	Co 228.616†	10005.9	10163.4	491.23	µg/L	491.23	ppb	06:49:56
1	Cr 267.716†	22918.8	23226.6	488.25	µg/L	488.25	ppb	06:49:56
1	Cu 324.752†	74267.7	70672.1	491.31	µg/L	491.31	ppb	06:49:56
1	Mn 257.610†	150178.2	151742.8	485.16	µg/L	485.16	ppb	06:49:56
1	Mo 202.031†	4218.0	4260.0	497.79	µg/L	497.79	ppb	06:50:16
1	Ni 231.604†	9167.4	8975.0	491.03	µg/L	491.03	ppb	06:49:56
1	P 214.914†	1398.2	1210.0	2390.9	µg/L	2390.9	ppb	06:50:16
1	Pb 220.353†	1939.2	1900.6	491.95	µg/L	491.95	ppb	06:50:16
1	S 181.975 Axial†	233.0	213.0	1041.4	µg/L	1041.4	ppb	06:50:16
1	Sb 206.836†	531.2	514.9	502.52	µg/L	502.52	ppb	06:50:16
1	Se 196.026†	401.9	395.7	507.85	µg/L	507.85	ppb	06:50:16
1	SiO2†	31520.0	29054.7	5335.4	µg/L	5335.4	ppb	06:49:56
1	Si 251.611†	33791.4	33772.9	2451.3	µg/L	2451.3	ppb	06:49:56
1	Sn 189.927†	1001.8	988.4	508.87	µg/L	508.87	ppb	06:50:16
1	Ti 334.940†	218508.7	219717.8	500.22	µg/L	500.22	ppb	06:49:50
1	Tl 190.801†	296.5	319.6	493.16	µg/L	493.16	ppb	06:50:16
1	U 409.014†	6034.1	5358.5	485.02	µg/L	485.02	ppb	06:49:56
1	V 292.402†	42934.6	43451.1	493.45	µg/L	493.45	ppb	06:49:56
1	Zn 213.857†	19011.9	18657.8	490.58	µg/L	490.58	ppb	06:49:56
2	Sc RADIAL	115890.0	115890.0	99.4	%			06:48:53
2	Al 396.153Radial†	10330.5	10273.1	5085.3	µg/L	5085.3	ppb	06:48:53
2	Ca 317.933Radial†	13016.4	12686.6	4908.7	µg/L	4908.7	ppb	06:49:13
2	Fe 238.204 Radial†	790.2	780.1	4977.3	µg/L	4977.3	ppb	06:49:13
2	K 766.490 Radial†	10399.8	9783.6	5007.1	µg/L	5007.1	ppb	06:48:53
2	Mg 279.077 IEC†	827.1	816.9	5049.0	µg/L	5049.0	ppb	06:49:13
2	Na 589.592 Radial†	39461.3	40346.9	10104	µg/L	10104	ppb	06:48:53
2	Sr 421.552†	96648.3	97326.7	489.16	µg/L	489.16	ppb	06:48:53
2	Sc 361.383	2012293.1	2012293.1	99.509	%			06:50:23
2	Y 371.029	1251324.9	1251324.9	99.410	%			06:50:23
2	Ag 328.068†	54780.7	55040.6	505.49	µg/L	505.49	ppb	06:50:29
2	As 188.979†	274.1	273.2	495.00	µg/L	495.00	ppb	06:50:49
2	B 249.677†	11385.4	11303.7	488.48	µg/L	488.48	ppb	06:50:29
2	Ba 233.527†	18815.3	18986.2	488.00	µg/L	488.00	ppb	06:50:29
2	Be 313.107†	786355.0	786719.8	492.11	µg/L	492.11	ppb	06:50:23
2	Cd 226.502†	18251.6	18440.7	491.30	µg/L	491.30	ppb	06:50:29
2	Co 228.616†	10028.9	10145.0	490.34	µg/L	490.34	ppb	06:50:29
2	Cr 267.716†	23028.8	23242.3	488.58	µg/L	488.58	ppb	06:50:29
2	Cu 324.752†	74217.0	70313.5	488.79	µg/L	488.79	ppb	06:50:29
2	Mn 257.610†	150279.8	151222.7	483.48	µg/L	483.48	ppb	06:50:29
2	Mo 202.031†	4247.5	4272.1	499.20	µg/L	499.20	ppb	06:50:49
2	Ni 231.604†	9169.6	8939.2	489.08	µg/L	489.08	ppb	06:50:29
2	P 214.914†	1402.5	1208.5	2388.3	µg/L	2388.3	ppb	06:50:49
2	Pb 220.353†	1949.9	1903.3	492.66	µg/L	492.66	ppb	06:50:49

2	S 181.975 Axial†	242.6	221.7	1084.0 µg/L	1084.0 ppb	06:50:49
2	Sb 206.836†	528.7	510.2	497.95 µg/L	497.95 ppb	06:50:49
2	Se 196.026†	405.6	397.8	510.42 µg/L	510.42 ppb	06:50:49
2	SiO2†	31594.8	28999.3	5325.2 µg/L	5325.2 ppb	06:50:29
2	Si 251.611†	33849.1	33691.0	2445.2 µg/L	2445.2 ppb	06:50:29
2	Sn 189.927†	1006.8	989.4	509.32 µg/L	509.32 ppb	06:50:49
2	Ti 334.940†	220193.0	220505.2	502.02 µg/L	502.02 ppb	06:50:23
2	Tl 190.801†	303.9	325.8	502.66 µg/L	502.66 ppb	06:50:49
2	U 409.014†	6005.3	5304.4	480.14 µg/L	480.14 ppb	06:50:29
2	V 292.402†	42960.4	43299.1	491.73 µg/L	491.73 ppb	06:50:29
2	Zn 213.857†	19010.9	18578.1	488.49 µg/L	488.49 ppb	06:50:29
3	Sc RADIAL	115171.0	115171.0	98.8 %		06:49:19
3	Al 396.153Radial†	10371.9	10379.8	5138.4 µg/L	5138.4 ppb	06:49:19
3	Ca 317.933Radial†	13068.4	12821.0	4960.7 µg/L	4960.7 ppb	06:49:39
3	Fe 238.204 Radial†	794.5	789.4	5036.6 µg/L	5036.6 ppb	06:49:39
3	K 766.490 Radial†	10371.6	9820.3	5025.9 µg/L	5025.9 ppb	06:49:19
3	Mg 279.077 IEC†	819.0	813.9	5030.1 µg/L	5030.1 ppb	06:49:39
3	Na 589.592 Radial†	39486.5	40620.3	10172 µg/L	10172 ppb	06:49:19
3	Sr 421.552†	96771.1	98058.2	492.84 µg/L	492.84 ppb	06:49:19
3	Sc 361.383	2007332.3	2007332.3	99.264 %		06:50:56
3	Y 371.029	1247335.9	1247335.9	99.093 %		06:50:56
3	Ag 328.068†	54901.0	55297.9	507.86 µg/L	507.86 ppb	06:51:02
3	As 188.979†	269.2	269.0	487.39 µg/L	487.39 ppb	06:51:22
3	B 249.677†	11431.1	11378.0	491.68 µg/L	491.68 ppb	06:51:02
3	Ba 233.527†	18854.1	19072.0	490.21 µg/L	490.21 ppb	06:51:02
3	Be 313.107†	782162.4	784449.0	490.69 µg/L	490.69 ppb	06:50:56
3	Cd 226.502†	18282.2	18516.8	493.32 µg/L	493.32 ppb	06:51:02
3	Co 228.616†	10035.1	10176.2	491.85 µg/L	491.85 ppb	06:51:02
3	Cr 267.716†	23024.4	23295.0	489.69 µg/L	489.69 ppb	06:51:02
3	Cu 324.752†	74504.3	70787.3	492.09 µg/L	492.09 ppb	06:51:02
3	Mn 257.610†	150551.9	151870.1	485.55 µg/L	485.55 ppb	06:51:02
3	Mo 202.031†	4229.2	4264.3	498.28 µg/L	498.28 ppb	06:51:22
3	Ni 231.604†	9205.5	8998.2	492.30 µg/L	492.30 ppb	06:51:02
3	P 214.914†	1395.7	1205.1	2381.0 µg/L	2381.0 ppb	06:51:22
3	Pb 220.353†	1956.5	1914.7	495.62 µg/L	495.62 ppb	06:51:22
3	S 181.975 Axial†	238.5	218.1	1066.5 µg/L	1066.5 ppb	06:51:22
3	Sb 206.836†	533.8	516.7	504.24 µg/L	504.24 ppb	06:51:22
3	Se 196.026†	399.0	392.1	503.25 µg/L	503.25 ppb	06:51:22
3	SiO2†	31583.7	29066.6	5337.5 µg/L	5337.5 ppb	06:51:02
3	Si 251.611†	33926.1	33852.6	2457.3 µg/L	2457.3 ppb	06:51:02
3	Sn 189.927†	1001.6	986.6	507.89 µg/L	507.89 ppb	06:51:22
3	Ti 334.940†	219011.5	219861.8	500.55 µg/L	500.55 ppb	06:50:56
3	Tl 190.801†	306.5	329.1	507.76 µg/L	507.76 ppb	06:51:22
3	U 409.014†	5938.0	5251.6	475.34 µg/L	475.34 ppb	06:51:02
3	V 292.402†	43051.5	43497.6	493.95 µg/L	493.95 ppb	06:51:02
3	Zn 213.857†	19013.7	18628.2	489.79 µg/L	489.79 ppb	06:51:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2007885.8	99.291	%	0.2056				0.21%
Sc RADIAL	115126.7	98.7	%	0.67				0.68%
Y 371.029	1248525.9	99.188	%	0.1933				0.19%
Ag 328.068†	55202.6	506.98	µg/L	1.298	506.98	ppb	1.298	0.26%
QC value within limits for Ag 328.068 Recovery = 101.40%								
Al 396.153Radial†	10406.8	5151.8	µg/L	74.12	5151.8	ppb	74.12	1.44%
QC value within limits for Al 396.153Radial Recovery = 103.04%								
As 188.979†	271.7	492.19	µg/L	4.178	492.19	ppb	4.178	0.85%
QC value within limits for As 188.979 Recovery = 98.44%								
B 249.677†	11309.3	488.70	µg/L	2.877	488.70	ppb	2.877	0.59%
QC value within limits for B 249.677 Recovery = 97.74%								
Ba 233.527†	19026.4	489.03	µg/L	1.109	489.03	ppb	1.109	0.23%
QC value within limits for Ba 233.527 Recovery = 97.81%								
Be 313.107†	784780.5	490.89	µg/L	1.124	490.89	ppb	1.124	0.23%
QC value within limits for Be 313.107 Recovery = 98.18%								
Ca 317.933Radial†	12810.8	4956.8	µg/L	46.19	4956.8	ppb	46.19	0.93%
QC value within limits for Ca 317.933Radial Recovery = 99.14%								
Cd 226.502†	18475.9	492.23	µg/L	1.019	492.23	ppb	1.019	0.21%
QC value within limits for Cd 226.502 Recovery = 98.45%								
Co 228.616†	10161.5	491.14	µg/L	0.757	491.14	ppb	0.757	0.15%

```
   QC value within limits for Co 228.616  Recovery = 98.23%
Cr 267.716†            23254.6      488.84 µg/L         0.753      488.84 ppb          0.753   0.15%
   QC value within limits for Cr 267.716  Recovery = 97.77%
Cu 324.752†            70591.0      490.73 µg/L         1.723      490.73 ppb          1.723   0.35%
   QC value within limits for Cu 324.752  Recovery = 98.15%
Fe 238.204 Radial†       789.9      5039.5 µg/L         63.70      5039.5 ppb          63.70   1.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.79%
K 766.490 Radial†       9823.0      5027.3 µg/L         20.86      5027.3 ppb          20.86   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 100.55%
Mg 279.077 IEC†          818.9      5060.8 µg/L         38.01      5060.8 ppb          38.01   0.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.22%
Mn 257.610†           151611.9      484.73 µg/L         1.101      484.73 ppb          1.101   0.23%
   QC value within limits for Mn 257.610  Recovery = 96.95%
Mo 202.031†             4265.5      498.42 µg/L         0.716      498.42 ppb          0.716   0.14%
   QC value within limits for Mo 202.031  Recovery = 99.68%
Na 589.592 Radial†     40644.3       10178 µg/L          77.7       10178 ppb           77.7   0.76%
   QC value within limits for Na 589.592 Radial  Recovery = 101.78%
Ni 231.604†             8970.8      490.80 µg/L         1.625      490.80 ppb          1.625   0.33%
   QC value within limits for Ni 231.604  Recovery = 98.16%
P 214.914†              1207.9      2386.7 µg/L          5.13      2386.7 ppb           5.13   0.21%
   QC value within limits for P 214.914  Recovery = 95.47%
Pb 220.353†             1906.2      493.41 µg/L         1.946      493.41 ppb          1.946   0.39%
   QC value within limits for Pb 220.353  Recovery = 98.68%
S 181.975 Axial†         217.6      1063.9 µg/L         21.42      1063.9 ppb          21.42   2.01%
   QC value within limits for S 181.975 Axial  Recovery = 106.39%
Sb 206.836†              513.9      501.57 µg/L         3.253      501.57 ppb          3.253   0.65%
   QC value within limits for Sb 206.836  Recovery = 100.31%
Se 196.026†              395.2      507.17 µg/L         3.631      507.17 ppb          3.631   0.72%
   QC value within limits for Se 196.026  Recovery = 101.43%
SiO2†                   29040.2      5332.7 µg/L          6.59      5332.7 ppb           6.59   0.12%
   QC value within limits for SiO2  Recovery = 99.72%
Si 251.611†             33772.1      2451.3 µg/L          6.04      2451.3 ppb           6.04   0.25%
   QC value within limits for Si 251.611  Recovery = 98.05%
Sn 189.927†              988.1      508.69 µg/L         0.732      508.69 ppb          0.732   0.14%
   QC value within limits for Sn 189.927  Recovery = 101.74%
Sr 421.552†             97943.5      492.26 µg/L         2.856      492.26 ppb          2.856   0.58%
   QC value within limits for Sr 421.552  Recovery = 98.45%
Ti 334.940†            220028.3      500.93 µg/L         0.958      500.93 ppb          0.958   0.19%
   QC value within limits for Ti 334.940  Recovery = 100.19%
Tl 190.801†              324.8      501.19 µg/L         7.409      501.19 ppb          7.409   1.48%
   QC value within limits for Tl 190.801  Recovery = 100.24%
U 409.014†              5304.8      480.17 µg/L         4.837      480.17 ppb          4.837   1.01%
   QC value within limits for U 409.014  Recovery = 96.03%
V 292.402†             43415.9      493.04 µg/L         1.165      493.04 ppb          1.165   0.24%
   QC value within limits for V 292.402  Recovery = 98.61%
Zn 213.857†            18621.3      489.62 µg/L         1.053      489.62 ppb          1.053   0.22%
   QC value within limits for Zn 213.857  Recovery = 97.92%
All analyte(s) passed QC.
```

Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/10/2009 06:51:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113967.3	113967.3	97.7	%			06:52:06
1	Al 396.153Radial†	165.3	45.9	22.738	µg/L	22.738	ppb	06:52:06
1	Ca 317.933Radial†	428.9	26.2	10.133	µg/L	10.133	ppb	06:52:27
1	Fe 238.204 Radial†	23.8	9.2	58.473	µg/L	58.473	ppb	06:52:27
1	K 766.490 Radial†	786.9	122.8	62.847	µg/L	62.847	ppb	06:52:06
1	Mg 279.077 IEC†	17.9	2.9	18.034	µg/L	18.034	ppb	06:52:27
1	Na 589.592 Radial†	-452.1	171.5	42.944	µg/L	42.944	ppb	06:52:06
1	Sr 421.552†	-90.4	-30.2	-0.1518	µg/L	-0.1518	ppb	06:52:06
1	Sc 361.383	2011620.7	2011620.7	99.476	%			06:53:29
1	Y 371.029	1254148.3	1254148.3	99.635	%			06:53:29
1	Ag 328.068†	132.0	122.3	1.1217	µg/L	1.1217	ppb	06:53:34
1	As 188.979†	3.3	1.2	2.0779	µg/L	2.0779	ppb	06:53:55
1	B 249.677†	222.8	86.1	3.7158	µg/L	3.7158	ppb	06:53:55
1	Ba 233.527†	-48.4	29.3	0.7532	µg/L	0.7532	ppb	06:53:55
1	Be 313.107†	3576.9	79.8	0.0497	µg/L	0.0497	ppb	06:53:34
1	Cd 226.502†	-86.0	12.5	0.3341	µg/L	0.3341	ppb	06:53:55
1	Co 228.616†	-62.8	3.5	0.1701	µg/L	0.1701	ppb	06:53:55
1	Cr 267.716†	-138.7	-39.6	-0.8298	µg/L	-0.8298	ppb	06:53:34
1	Cu 324.752†	4100.5	-147.7	-1.0117	µg/L	-1.0117	ppb	06:53:34
1	Mn 257.610†	-36.0	165.2	0.5348	µg/L	0.5348	ppb	06:53:55
1	Mo 202.031†	6.3	10.0	1.1739	µg/L	1.1739	ppb	06:53:55
1	Ni 231.604†	297.6	23.6	1.2927	µg/L	1.2927	ppb	06:53:55
1	P 214.914†	186.7	-13.2	-26.653	µg/L	-26.653	ppb	06:53:55
1	Pb 220.353†	47.7	-8.3	-2.1353	µg/L	-2.1353	ppb	06:53:55
1	S 181.975 Axial†	34.1	12.1	59.147	µg/L	59.147	ppb	06:53:55
1	Sb 206.836†	24.0	3.0	2.9668	µg/L	2.9668	ppb	06:53:55
1	Se 196.026†	11.8	2.0	2.6337	µg/L	2.6337	ppb	06:53:55
1	SiO2†	2771.3	34.5	6.3418	µg/L	6.3418	ppb	06:53:34
1	Si 251.611†	463.2	140.4	10.244	µg/L	10.244	ppb	06:53:55
1	Sn 189.927†	26.1	3.8	1.9826	µg/L	1.9826	ppb	06:53:55
1	Ti 334.940†	1108.4	339.9	0.7736	µg/L	0.7736	ppb	06:53:34
1	Tl 190.801†	-19.2	1.0	1.6062	µg/L	1.6062	ppb	06:53:55
1	U 409.014†	799.1	72.9	6.5957	µg/L	6.5957	ppb	06:53:34
1	V 292.402†	-97.8	28.4	0.3431	µg/L	0.3431	ppb	06:53:34
1	Zn 213.857†	546.7	22.9	0.5959	µg/L	0.5959	ppb	06:53:55
2	Sc RADIAL	114874.9	114874.9	98.5	%			06:52:32
2	Al 396.153Radial†	170.2	49.5	24.571	µg/L	24.571	ppb	06:52:32
2	Ca 317.933Radial†	443.1	37.1	14.373	µg/L	14.373	ppb	06:52:53
2	Fe 238.204 Radial†	21.2	6.4	40.467	µg/L	40.467	ppb	06:52:53
2	K 766.490 Radial†	747.7	76.6	39.206	µg/L	39.206	ppb	06:52:32
2	Mg 279.077 IEC†	16.7	1.5	9.2979	µg/L	9.2979	ppb	06:52:53
2	Na 589.592 Radial†	-406.0	221.9	55.559	µg/L	55.559	ppb	06:52:32
2	Sr 421.552†	-5.6	56.6	0.2843	µg/L	0.2843	ppb	06:52:32
2	Sc 361.383	2002324.3	2002324.3	99.016	%			06:54:01
2	Y 371.029	1249453.9	1249453.9	99.262	%			06:54:01
2	Ag 328.068†	39.8	29.8	0.2767	µg/L	0.2767	ppb	06:54:07
2	As 188.979†	7.2	5.0	9.0855	µg/L	9.0855	ppb	06:54:27
2	B 249.677†	211.8	76.1	3.2861	µg/L	3.2861	ppb	06:54:27
2	Ba 233.527†	-59.3	18.2	0.4667	µg/L	0.4667	ppb	06:54:27
2	Be 313.107†	3716.9	238.0	0.1488	µg/L	0.1488	ppb	06:54:07
2	Cd 226.502†	-82.3	15.8	0.4181	µg/L	0.4181	ppb	06:54:27
2	Co 228.616†	-66.2	-0.2	-0.0126	µg/L	-0.0126	ppb	06:54:27
2	Cr 267.716†	-130.9	-32.4	-0.6783	µg/L	-0.6783	ppb	06:54:07
2	Cu 324.752†	4163.0	-65.4	-0.4446	µg/L	-0.4446	ppb	06:54:07
2	Mn 257.610†	-121.9	78.2	0.2549	µg/L	0.2549	ppb	06:54:27
2	Mo 202.031†	-2.3	1.3	0.1586	µg/L	0.1586	ppb	06:54:27
2	Ni 231.604†	314.3	41.9	2.2898	µg/L	2.2898	ppb	06:54:27
2	P 214.914†	192.4	-6.6	-13.435	µg/L	-13.435	ppb	06:54:27
2	Pb 220.353†	50.7	-5.1	-1.3032	µg/L	-1.3032	ppb	06:54:27

2	S 181.975 Axial†	33.9	12.1	59.256 µg/L	59.256 ppb		06:54:27
2	Sb 206.836†	19.7	-1.2	-1.2058 µg/L	-1.2058 ppb		06:54:27
2	Se 196.026†	12.6	2.9	3.7126 µg/L	3.7126 ppb		06:54:27
2	SiO2†	2768.5	44.6	8.1932 µg/L	8.1932 ppb		06:54:07
2	Si 251.611†	460.9	140.2	10.402 µg/L	10.402 ppb		06:54:27
2	Sn 189.927†	19.3	-2.9	-1.4658 µg/L	-1.4658 ppb		06:54:27
2	Ti 334.940†	952.1	187.2	0.4256 µg/L	0.4256 ppb		06:54:07
2	Tl 190.801†	-21.8	-1.7	-2.5495 µg/L	-2.5495 ppb		06:54:27
2	U 409.014†	678.5	-45.2	-4.1094 µg/L	-4.1094 ppb		06:54:07
2	V 292.402†	-103.6	22.1	0.2466 µg/L	0.2466 ppb		06:54:07
2	Zn 213.857†	539.2	17.9	0.4588 µg/L	0.4588 ppb		06:54:27
3	Sc RADIAL	116525.7	116525.7	99.9 %			06:52:58
3	Al 396.153Radial†	328.7	205.7	102.20 µg/L	102.20 ppb		06:52:58
3	Ca 317.933Radial†	451.8	39.4	15.250 µg/L	15.250 ppb		06:53:19
3	Fe 238.204 Radial†	24.2	9.0	57.310 µg/L	57.310 ppb		06:53:19
3	K 766.490 Radial†	732.7	50.8	26.018 µg/L	26.018 ppb		06:52:58
3	Mg 279.077 IEC†	17.5	2.1	12.684 µg/L	12.684 ppb		06:53:19
3	Na 589.592 Radial†	-324.2	309.6	77.543 µg/L	77.543 ppb		06:52:58
3	Sr 421.552†	8.5	70.9	0.3561 µg/L	0.3561 ppb		06:52:58
3	Sc 361.383	2001635.2	2001635.2	98.982 %			06:54:33
3	Y 371.029	1246863.9	1246863.9	99.056 %			06:54:33
3	Ag 328.068†	72.2	62.6	0.5744 µg/L	0.5744 ppb		06:54:39
3	As 188.979†	1.6	-0.6	-1.0811 µg/L	-1.0811 ppb		06:54:59
3	B 249.677†	196.2	60.4	2.5995 µg/L	2.5995 ppb		06:54:59
3	Ba 233.527†	-66.7	10.7	0.2738 µg/L	0.2738 ppb		06:54:59
3	Be 313.107†	3589.6	110.7	0.0691 µg/L	0.0691 ppb		06:54:39
3	Cd 226.502†	-85.4	12.7	0.3286 µg/L	0.3286 ppb		06:54:59
3	Co 228.616†	-59.2	6.8	0.3277 µg/L	0.3277 ppb		06:54:59
3	Cr 267.716†	-100.0	-1.3	-0.0267 µg/L	-0.0267 ppb		06:54:39
3	Cu 324.752†	4098.0	-129.7	-0.8871 µg/L	-0.8871 ppb		06:54:39
3	Mn 257.610†	-107.0	93.2	0.3048 µg/L	0.3048 ppb		06:54:59
3	Mo 202.031†	-4.4	-0.7	-0.0847 µg/L	-0.0847 ppb		06:54:59
3	Ni 231.604†	292.6	20.1	1.0980 µg/L	1.0980 ppb		06:54:59
3	P 214.914†	195.4	-3.5	-6.9865 µg/L	-6.9865 ppb		06:54:59
3	Pb 220.353†	33.1	-22.9	-5.8942 µg/L	-5.8942 ppb		06:54:59
3	S 181.975 Axial†	31.3	9.5	46.375 µg/L	46.375 ppb		06:54:59
3	Sb 206.836†	17.6	-3.3	-3.2563 µg/L	-3.2563 ppb		06:54:59
3	Se 196.026†	13.6	3.8	4.9319 µg/L	4.9319 ppb		06:54:59
3	SiO2†	2766.6	43.7	8.0174 µg/L	8.0174 ppb		06:54:39
3	Si 251.611†	456.9	136.4	10.094 µg/L	10.094 ppb		06:54:59
3	Sn 189.927†	21.2	-1.0	-0.4991 µg/L	-0.4991 ppb		06:54:59
3	Ti 334.940†	933.1	168.3	0.3825 µg/L	0.3825 ppb		06:54:39
3	Tl 190.801†	-17.0	3.1	4.8360 µg/L	4.8360 ppb		06:54:59
3	U 409.014†	642.5	-81.4	-7.3892 µg/L	-7.3892 ppb		06:54:39
3	V 292.402†	-131.3	-5.9	-0.0740 µg/L	-0.0740 ppb		06:54:39
3	Zn 213.857†	534.2	13.1	0.3351 µg/L	0.3351 ppb		06:54:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005193.4	99.158	%	0.2758				0.28%
Sc RADIAL	115122.6	98.7	%	1.11				1.13%
Y 371.029	1250155.4	99.317	%	0.2933				0.30%
Ag 328.068†	71.6	0.6576	µg/L	0.42860	0.6576	ppb	0.42860	65.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	100.3	49.836	µg/L	45.3568	49.836	ppb	45.3568	91.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	3.3608	µg/L	5.20326	3.3608	ppb	5.20326	154.82%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	74.2	3.2005	µg/L	0.56305	3.2005	ppb	0.56305	17.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.4	0.4979	µg/L	0.24124	0.4979	ppb	0.24124	48.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	142.8	0.0892	µg/L	0.05250	0.0892	ppb	0.05250	58.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	34.2	13.252	µg/L	2.7365	13.252	ppb	2.7365	20.65%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.7	0.3603	µg/L	0.05017	0.3603	ppb	0.05017	13.93%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.4	0.1618	µg/L	0.17029	0.1618	ppb	0.17029	105.27%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -24.4     -0.5116 µg/L       0.42670     -0.5116 ppb        0.42670  83.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -114.2     -0.7812 µg/L       0.29802     -0.7812 ppb        0.29802  38.15%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         8.2      52.083 µg/L       10.0770      52.083 ppb        10.0770  19.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         83.4      42.690 µg/L       18.6603      42.690 ppb        18.6603  43.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      13.338 µg/L        4.4047      13.338 ppb         4.4047  33.02%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              112.2       0.3648 µg/L       0.14931       0.3648 ppb        0.14931  40.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.5       0.4159 µg/L       0.66762       0.4159 ppb        0.66762 160.51%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       234.3      58.682 µg/L       17.5098      58.682 ppb        17.5098  29.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               28.5       1.5602 µg/L       0.63933       1.5602 ppb        0.63933  40.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -7.8     -15.691 µg/L       10.0253     -15.691 ppb        10.0253  63.89%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -12.1      -3.1109 µg/L       2.44606      -3.1109 ppb        2.44606  78.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          11.2      54.926 µg/L        7.4056      54.926 ppb         7.4056  13.48%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.5      -0.4984 µg/L       3.17130      -0.4984 ppb        3.17130 636.27%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.9       3.7594 µg/L       1.14983       3.7594 ppb        1.14983  30.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     40.9       7.5175 µg/L       1.02192       7.5175 ppb        1.02192  13.59%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              139.0      10.247 µg/L        0.1540      10.247 ppb         0.1540   1.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.0       0.0059 µg/L       1.77876       0.0059 ppb        1.77876 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               32.4       0.1629 µg/L       0.27486       0.1629 ppb        0.27486 168.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              231.8       0.5272 µg/L       0.21446       0.5272 ppb        0.21446  40.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.8       1.2975 µg/L       3.70240       1.2975 ppb        3.70240 285.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -17.9      -1.6343 µg/L       7.31360      -1.6343 ppb        7.31360 447.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                14.9       0.1719 µg/L       0.21837       0.1719 ppb        0.21837 127.05%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               18.0       0.4633 µg/L       0.13046       0.4633 ppb        0.13046  28.16%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 65
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 07:14:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112917.3	112917.3	96.8	%			07:14:36
1	Al 396.153Radial†	10322.0	10538.0	5216.9	µg/L	5216.9	ppb	07:14:36
1	Ca 317.933Radial†	13073.0	13089.9	5064.7	µg/L	5064.7	ppb	07:14:56
1	Fe 238.204 Radial†	790.1	800.9	5109.8	µg/L	5109.8	ppb	07:14:56
1	K 766.490 Radial†	10300.5	9956.5	5095.6	µg/L	5095.6	ppb	07:14:36
1	Mg 279.077 IEC†	823.4	835.0	5160.2	µg/L	5160.2	ppb	07:14:56
1	Na 589.592 Radial†	39312.0	41238.3	10327	µg/L	10327	ppb	07:14:36
1	Sr 421.552†	95886.7	99100.6	498.08	µg/L	498.08	ppb	07:14:36
1	Sc 361.383	2006610.4	2006610.4	99.228	%			07:16:00
1	Y 371.029	1248498.0	1248498.0	99.186	%			07:16:00
1	Ag 328.068†	55104.9	55523.2	509.93	µg/L	509.93	ppb	07:16:06
1	As 188.979†	276.1	276.1	500.14	µg/L	500.14	ppb	07:16:26
1	B 249.677†	11464.3	11415.6	493.29	µg/L	493.29	ppb	07:16:06
1	Ba 233.527†	19036.2	19262.4	495.09	µg/L	495.09	ppb	07:16:06
1	Be 313.107†	790200.8	792833.4	495.93	µg/L	495.93	ppb	07:16:00
1	Cd 226.502†	18355.5	18597.3	495.46	µg/L	495.46	ppb	07:16:06
1	Co 228.616†	10092.4	10237.5	494.80	µg/L	494.80	ppb	07:16:06
1	Cr 267.716†	23170.9	23451.0	492.96	µg/L	492.96	ppb	07:16:06
1	Cu 324.752†	74979.9	71293.6	495.62	µg/L	495.62	ppb	07:16:06
1	Mn 257.610†	154312.4	155714.4	497.84	µg/L	497.84	ppb	07:16:00
1	Mo 202.031†	4235.4	4272.0	499.19	µg/L	499.19	ppb	07:16:26
1	Ni 231.604†	9209.8	9005.9	492.72	µg/L	492.72	ppb	07:16:06
1	P 214.914†	1396.0	1206.0	2382.2	µg/L	2382.2	ppb	07:16:26
1	Pb 220.353†	1964.2	1923.3	497.81	µg/L	497.81	ppb	07:16:26
1	S 181.975 Axial†	236.4	216.1	1056.6	µg/L	1056.6	ppb	07:16:26
1	Sb 206.836†	535.0	518.0	505.60	µg/L	505.60	ppb	07:16:26
1	Se 196.026†	406.0	399.3	512.43	µg/L	512.43	ppb	07:16:26
1	SiO2†	31738.0	29233.6	5368.2	µg/L	5368.2	ppb	07:16:06
1	Si 251.611†	34053.2	33992.9	2467.4	µg/L	2467.4	ppb	07:16:06
1	Sn 189.927†	1003.9	989.3	509.31	µg/L	509.31	ppb	07:16:26
1	Ti 334.940†	221121.3	222067.4	505.57	µg/L	505.57	ppb	07:16:00
1	Tl 190.801†	306.6	329.4	508.26	µg/L	508.26	ppb	07:16:26
1	U 409.014†	6018.3	5334.7	482.86	µg/L	482.86	ppb	07:16:06
1	V 292.402†	43224.3	43687.4	496.11	µg/L	496.11	ppb	07:16:06
1	Zn 213.857†	19349.8	18973.7	498.93	µg/L	498.93	ppb	07:16:06
2	Sc RADIAL	114382.4	114382.4	98.1	%			07:15:02
2	Al 396.153Radial†	10230.7	10308.4	5102.7	µg/L	5102.7	ppb	07:15:02
2	Ca 317.933Radial†	13106.5	12951.1	5011.0	µg/L	5011.0	ppb	07:15:22
2	Fe 238.204 Radial†	790.9	791.2	5048.0	µg/L	5048.0	ppb	07:15:22
2	K 766.490 Radial†	10322.5	9842.7	5037.4	µg/L	5037.4	ppb	07:15:02
2	Mg 279.077 IEC†	835.6	836.6	5170.1	µg/L	5170.1	ppb	07:15:22
2	Na 589.592 Radial†	39219.9	40624.3	10173	µg/L	10173	ppb	07:15:02
2	Sr 421.552†	95938.4	97884.8	491.97	µg/L	491.97	ppb	07:15:02
2	Sc 361.383	1998268.6	1998268.6	98.815	%			07:16:33
2	Y 371.029	1243111.0	1243111.0	98.758	%			07:16:33
2	Ag 328.068†	54691.2	55336.5	508.20	µg/L	508.20	ppb	07:16:39
2	As 188.979†	278.2	279.3	506.05	µg/L	506.05	ppb	07:16:59
2	B 249.677†	11310.1	11307.8	488.63	µg/L	488.63	ppb	07:16:39
2	Ba 233.527†	18917.5	19222.3	494.06	µg/L	494.06	ppb	07:16:39
2	Be 313.107†	780792.8	786637.0	492.05	µg/L	492.05	ppb	07:16:33
2	Cd 226.502†	18117.1	18433.2	491.09	µg/L	491.09	ppb	07:16:39
2	Co 228.616†	9969.3	10155.4	490.85	µg/L	490.85	ppb	07:16:39
2	Cr 267.716†	22901.9	23276.2	489.29	µg/L	489.29	ppb	07:16:39
2	Cu 324.752†	74282.0	70902.7	492.89	µg/L	492.89	ppb	07:16:39
2	Mn 257.610†	151907.8	153930.2	492.13	µg/L	492.13	ppb	07:16:33
2	Mo 202.031†	4248.9	4303.5	502.87	µg/L	502.87	ppb	07:16:59
2	Ni 231.604†	9145.5	8979.5	491.28	µg/L	491.28	ppb	07:16:39
2	P 214.914†	1391.1	1206.9	2384.4	µg/L	2384.4	ppb	07:16:59
2	Pb 220.353†	1961.6	1928.8	499.26	µg/L	499.26	ppb	07:16:59

2	S 181.975 Axial†	241.6	222.4	1087.4 µg/L	1087.4 ppb	07:16:59
2	Sb 206.836†	522.6	507.8	495.57 µg/L	495.57 ppb	07:16:59
2	Se 196.026†	406.3	401.3	514.93 µg/L	514.93 ppb	07:16:59
2	SiO2†	31437.4	29062.9	5336.9 µg/L	5336.9 ppb	07:16:39
2	Si 251.611†	33751.1	33830.5	2455.3 µg/L	2455.3 ppb	07:16:39
2	Sn 189.927†	1006.2	995.9	512.68 µg/L	512.68 ppb	07:16:59
2	Ti 334.940†	218679.3	220526.4	502.06 µg/L	502.06 ppb	07:16:33
2	Tl 190.801†	301.3	325.3	501.89 µg/L	501.89 ppb	07:16:59
2	U 409.014†	5943.1	5283.9	478.27 µg/L	478.27 ppb	07:16:39
2	V 292.402†	42795.7	43435.4	493.29 µg/L	493.29 ppb	07:16:39
2	Zn 213.857†	19208.2	18911.8	497.31 µg/L	497.31 ppb	07:16:39
3	Sc RADIAL	113802.2	113802.2	97.6 %		07:15:28
3	Al 396.153Radial†	10180.7	10310.2	5103.9 µg/L	5103.9 ppb	07:15:28
3	Ca 317.933Radial†	13127.4	13040.7	5045.7 µg/L	5045.7 ppb	07:15:48
3	Fe 238.204 Radial†	796.7	801.3	5112.3 µg/L	5112.3 ppb	07:15:48
3	K 766.490 Radial†	10249.9	9822.0	5026.8 µg/L	5026.8 ppb	07:15:28
3	Mg 279.077 IEC†	838.6	844.0	5215.6 µg/L	5215.6 ppb	07:15:48
3	Na 589.592 Radial†	39216.1	40824.1	10223 µg/L	10223 ppb	07:15:28
3	Sr 421.552†	95579.5	98015.7	492.62 µg/L	492.62 ppb	07:15:28
3	Sc 361.383	1995882.6	1995882.6	98.697 %		07:17:07
3	Y 371.029	1240911.4	1240911.4	98.583 %		07:17:07
3	Ag 328.068†	54566.4	55276.2	507.66 µg/L	507.66 ppb	07:17:12
3	As 188.979†	277.6	279.0	505.57 µg/L	505.57 ppb	07:17:33
3	B 249.677†	11307.9	11319.3	489.11 µg/L	489.11 ppb	07:17:12
3	Ba 233.527†	18850.6	19177.4	492.91 µg/L	492.91 ppb	07:17:12
3	Be 313.107†	785406.9	792256.6	495.57 µg/L	495.57 ppb	07:17:07
3	Cd 226.502†	18185.2	18524.2	493.52 µg/L	493.52 ppb	07:17:12
3	Co 228.616†	10001.5	10200.2	492.99 µg/L	492.99 ppb	07:17:12
3	Cr 267.716†	22937.0	23339.5	490.62 µg/L	490.62 ppb	07:17:12
3	Cu 324.752†	74064.1	70771.8	492.00 µg/L	492.00 ppb	07:17:12
3	Mn 257.610†	152539.1	154753.6	494.77 µg/L	494.77 ppb	07:17:07
3	Mo 202.031†	4187.9	4246.8	496.25 µg/L	496.25 ppb	07:17:33
3	Ni 231.604†	9165.0	9010.4	492.97 µg/L	492.97 ppb	07:17:12
3	P 214.914†	1385.4	1202.8	2376.2 µg/L	2376.2 ppb	07:17:33
3	Pb 220.353†	1944.4	1913.8	495.35 µg/L	495.35 ppb	07:17:33
3	S 181.975 Axial†	236.4	217.4	1062.7 µg/L	1062.7 ppb	07:17:33
3	Sb 206.836†	525.5	511.4	499.09 µg/L	499.09 ppb	07:17:33
3	Se 196.026†	398.3	393.7	505.23 µg/L	505.23 ppb	07:17:33
3	SiO2†	31354.4	29016.8	5328.4 µg/L	5328.4 ppb	07:17:12
3	Si 251.611†	33720.3	33840.1	2456.2 µg/L	2456.2 ppb	07:17:12
3	Sn 189.927†	994.6	985.3	507.29 µg/L	507.29 ppb	07:17:33
3	Ti 334.940†	219779.2	221905.4	505.20 µg/L	505.20 ppb	07:17:07
3	Tl 190.801†	305.7	330.1	509.39 µg/L	509.39 ppb	07:17:33
3	U 409.014†	6031.5	5380.7	487.03 µg/L	487.03 ppb	07:17:12
3	V 292.402†	42759.8	43450.9	493.44 µg/L	493.44 ppb	07:17:12
3	Zn 213.857†	19142.8	18868.8	496.15 µg/L	496.15 ppb	07:17:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2000253.9	98.914	%	0.2785				0.28%
Sc RADIAL	113700.6	97.5	%	0.63				0.65%
Y 371.029	1244173.5	98.842	%	0.3101				0.31%
Ag 328.068†	55378.6	508.60	µg/L	1.185	508.60	ppb	1.185	0.23%
QC value within limits for Ag 328.068 Recovery = 101.72%								
Al 396.153Radial†	10385.5	5141.1	µg/L	65.61	5141.1	ppb	65.61	1.28%
QC value within limits for Al 396.153Radial Recovery = 102.82%								
As 188.979†	278.1	503.92	µg/L	3.279	503.92	ppb	3.279	0.65%
QC value within limits for As 188.979 Recovery = 100.78%								
B 249.677†	11347.6	490.34	µg/L	2.561	490.34	ppb	2.561	0.52%
QC value within limits for B 249.677 Recovery = 98.07%								
Ba 233.527†	19220.7	494.02	µg/L	1.093	494.02	ppb	1.093	0.22%
QC value within limits for Ba 233.527 Recovery = 98.80%								
Be 313.107†	790575.7	494.52	µg/L	2.141	494.52	ppb	2.141	0.43%
QC value within limits for Be 313.107 Recovery = 98.90%								
Ca 317.933Radial†	13027.2	5040.5	µg/L	27.23	5040.5	ppb	27.23	0.54%
QC value within limits for Ca 317.933Radial Recovery = 100.81%								
Cd 226.502†	18518.2	493.36	µg/L	2.188	493.36	ppb	2.188	0.44%
QC value within limits for Cd 226.502 Recovery = 98.67%								
Co 228.616†	10197.7	492.88	µg/L	1.978	492.88	ppb	1.978	0.40%

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   QC value within limits for Co 228.616  Recovery = 98.58%
Cr 267.716†            23355.6      490.96 µg/L         1.859      490.96 ppb          1.859   0.38%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†            70989.4      493.50 µg/L         1.885      493.50 ppb          1.885   0.38%
   QC value within limits for Cu 324.752  Recovery = 98.70%
Fe 238.204 Radial†       797.8      5090.1 µg/L        36.43      5090.1 ppb         36.43   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.80%
K 766.490 Radial†       9873.7      5053.3 µg/L        37.09      5053.3 ppb         37.09   0.73%
   QC value within limits for K 766.490 Radial  Recovery = 101.07%
Mg 279.077 IEC†          838.5      5182.0 µg/L        29.55      5182.0 ppb         29.55   0.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.64%
Mn 257.610†           154799.4      494.91 µg/L         2.855      494.91 ppb          2.855   0.58%
   QC value within limits for Mn 257.610  Recovery = 98.98%
Mo 202.031†            4274.1      499.43 µg/L         3.318      499.43 ppb          3.318   0.66%
   QC value within limits for Mo 202.031  Recovery = 99.89%
Na 589.592 Radial†     40895.6       10241 µg/L          78.4       10241 ppb           78.4   0.77%
   QC value within limits for Na 589.592 Radial  Recovery = 102.41%
Ni 231.604†            8998.6      492.32 µg/L         0.913      492.32 ppb          0.913   0.19%
   QC value within limits for Ni 231.604  Recovery = 98.46%
P 214.914†             1205.2      2380.9 µg/L          4.28      2380.9 ppb           4.28   0.18%
   QC value within limits for P 214.914  Recovery = 95.24%
Pb 220.353†            1922.0      497.48 µg/L         1.976      497.48 ppb          1.976   0.40%
   QC value within limits for Pb 220.353  Recovery = 99.50%
S 181.975 Axial†        218.6      1068.9 µg/L         16.29      1068.9 ppb         16.29   1.52%
   QC value within limits for S 181.975 Axial  Recovery = 106.89%
Sb 206.836†             512.4      500.09 µg/L         5.088      500.09 ppb         5.088   1.02%
   QC value within limits for Sb 206.836  Recovery = 100.02%
Se 196.026†             398.1      510.86 µg/L         5.036      510.86 ppb         5.036   0.99%
   QC value within limits for Se 196.026  Recovery = 102.17%
SiO2†                  29104.4      5344.5 µg/L         20.97      5344.5 ppb         20.97   0.39%
   QC value within limits for SiO2  Recovery = 99.94%
Si 251.611†            33887.8      2459.6 µg/L          6.72      2459.6 ppb          6.72   0.27%
   QC value within limits for Si 251.611  Recovery = 98.39%
Sn 189.927†             990.1      509.76 µg/L         2.725      509.76 ppb         2.725   0.53%
   QC value within limits for Sn 189.927  Recovery = 101.95%
Sr 421.552†            98333.7      494.22 µg/L         3.354      494.22 ppb         3.354   0.68%
   QC value within limits for Sr 421.552  Recovery = 98.84%
Ti 334.940†           221499.7      504.27 µg/L         1.927      504.27 ppb         1.927   0.38%
   QC value within limits for Ti 334.940  Recovery = 100.85%
Tl 190.801†             328.3      506.51 µg/L         4.043      506.51 ppb         4.043   0.80%
   QC value within limits for Tl 190.801  Recovery = 101.30%
U 409.014†             5333.1      482.72 µg/L         4.384      482.72 ppb         4.384   0.91%
   QC value within limits for U 409.014  Recovery = 96.54%
V 292.402†             43524.5      494.28 µg/L         1.588      494.28 ppb         1.588   0.32%
   QC value within limits for V 292.402  Recovery = 98.86%
Zn 213.857†            18918.1      497.47 µg/L         1.396      497.47 ppb         1.396   0.28%
   QC value within limits for Zn 213.857  Recovery = 99.49%
All analyte(s) passed QC.
```

Sequence No.: 66
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 07:17:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112989.9	112989.9	96.9	%			07:18:15
1	Al 396.153Radial†	150.2	31.7	15.783	µg/L	15.783	ppb	07:18:15
1	Ca 317.933Radial†	439.0	40.4	15.633	µg/L	15.633	ppb	07:18:36
1	Fe 238.204 Radial†	21.7	7.2	45.695	µg/L	45.695	ppb	07:18:36
1	K 766.490 Radial†	710.7	51.1	26.173	µg/L	26.173	ppb	07:18:15
1	Mg 279.077 IEC†	10.0	-5.1	-31.347	µg/L	-31.347	ppb	07:18:36
1	Na 589.592 Radial†	-480.6	138.1	34.573	µg/L	34.573	ppb	07:18:15
1	Sr 421.552†	-61.7	-1.4	-0.0068	µg/L	-0.0068	ppb	07:18:15
1	Sc 361.383	2003994.4	2003994.4	99.099	%			07:19:38
1	Y 371.029	1249084.7	1249084.7	99.232	%			07:19:38
1	Ag 328.068†	44.7	34.7	0.3198	µg/L	0.3198	ppb	07:19:43
1	As 188.979†	7.8	5.7	10.264	µg/L	10.264	ppb	07:20:04
1	B 249.677†	185.7	49.6	2.1350	µg/L	2.1350	ppb	07:20:04
1	Ba 233.527†	-31.3	46.4	1.1912	µg/L	1.1912	ppb	07:20:04
1	Be 313.107†	3572.5	89.1	0.0555	µg/L	0.0555	ppb	07:19:43
1	Cd 226.502†	-86.7	11.5	0.2991	µg/L	0.2991	ppb	07:20:04
1	Co 228.616†	-71.0	-5.0	-0.2437	µg/L	-0.2437	ppb	07:20:04
1	Cr 267.716†	-146.5	-48.0	-1.0068	µg/L	-1.0068	ppb	07:19:43
1	Cu 324.752†	4073.5	-159.2	-1.0943	µg/L	-1.0943	ppb	07:19:43
1	Mn 257.610†	64.8	266.7	0.8575	µg/L	0.8575	ppb	07:20:04
1	Mo 202.031†	-6.5	-2.9	-0.3324	µg/L	-0.3324	ppb	07:20:04
1	Ni 231.604†	287.6	14.7	0.8024	µg/L	0.8024	ppb	07:20:04
1	P 214.914†	191.3	-7.9	-15.817	µg/L	-15.817	ppb	07:20:04
1	Pb 220.353†	55.3	-0.5	-0.1150	µg/L	-0.1150	ppb	07:20:04
1	S 181.975 Axial†	31.7	9.9	48.384	µg/L	48.384	ppb	07:20:04
1	Sb 206.836†	25.2	4.3	4.2065	µg/L	4.2065	ppb	07:20:04
1	Se 196.026†	3.9	-6.0	-7.5633	µg/L	-7.5633	ppb	07:20:04
1	SiO2†	2752.0	25.7	4.7189	µg/L	4.7189	ppb	07:19:43
1	Si 251.611†	465.0	144.0	10.665	µg/L	10.665	ppb	07:20:04
1	Sn 189.927†	20.5	-1.7	-0.8695	µg/L	-0.8695	ppb	07:20:04
1	Ti 334.940†	1032.8	267.8	0.6090	µg/L	0.6090	ppb	07:19:43
1	Tl 190.801†	-17.8	2.4	3.6555	µg/L	3.6555	ppb	07:20:04
1	U 409.014†	664.2	-60.2	-5.4675	µg/L	-5.4675	ppb	07:19:43
1	V 292.402†	-124.8	0.8	0.0012	µg/L	0.0012	ppb	07:19:43
1	Zn 213.857†	632.7	111.9	2.9580	µg/L	2.9580	ppb	07:20:04
2	Sc RADIAL	114035.1	114035.1	97.8	%			07:18:41
2	Al 396.153Radial†	173.0	53.6	26.627	µg/L	26.627	ppb	07:18:41
2	Ca 317.933Radial†	438.1	35.3	13.674	µg/L	13.674	ppb	07:19:02
2	Fe 238.204 Radial†	20.7	6.0	38.276	µg/L	38.276	ppb	07:19:02
2	K 766.490 Radial†	742.4	76.8	39.328	µg/L	39.328	ppb	07:18:41
2	Mg 279.077 IEC†	14.8	-0.3	-1.6390	µg/L	-1.6390	ppb	07:19:02
2	Na 589.592 Radial†	-518.5	103.8	25.986	µg/L	25.986	ppb	07:18:41
2	Sr 421.552†	-71.6	-10.9	-0.0547	µg/L	-0.0547	ppb	07:18:41
2	Sc 361.383	2012333.3	2012333.3	99.511	%			07:20:10
2	Y 371.029	1255023.0	1255023.0	99.704	%			07:20:10
2	Ag 328.068†	152.2	142.5	1.3006	µg/L	1.3006	ppb	07:20:15
2	As 188.979†	6.3	4.1	7.4023	µg/L	7.4023	ppb	07:20:36
2	B 249.677†	192.9	56.0	2.4159	µg/L	2.4159	ppb	07:20:36
2	Ba 233.527†	-18.7	59.3	1.5195	µg/L	1.5195	ppb	07:20:36
2	Be 313.107†	3508.6	10.0	0.0061	µg/L	0.0061	ppb	07:20:15
2	Cd 226.502†	-92.2	6.4	0.1629	µg/L	0.1629	ppb	07:20:36
2	Co 228.616†	-61.1	5.3	0.2539	µg/L	0.2539	ppb	07:20:36
2	Cr 267.716†	-117.8	-18.6	-0.3897	µg/L	-0.3897	ppb	07:20:15
2	Cu 324.752†	4096.9	-152.7	-1.0513	µg/L	-1.0513	ppb	07:20:15
2	Mn 257.610†	144.0	346.1	1.1099	µg/L	1.1099	ppb	07:20:36
2	Mo 202.031†	-0.5	3.2	0.3725	µg/L	0.3725	ppb	07:20:36
2	Ni 231.604†	296.6	22.5	1.2293	µg/L	1.2293	ppb	07:20:36
2	P 214.914†	179.3	-20.7	-41.699	µg/L	-41.699	ppb	07:20:36
2	Pb 220.353†	47.6	-8.5	-2.1787	µg/L	-2.1787	ppb	07:20:36

2	S 181.975 Axial†	29.6	7.6	37.149 µg/L	37.149 ppb	07:20:36
2	Sb 206.836†	18.5	-2.5	-2.4613 µg/L	-2.4613 ppb	07:20:36
2	Se 196.026†	7.7	-2.2	-2.7247 µg/L	-2.7247 ppb	07:20:36
2	SiO2†	2721.1	-16.9	-3.1123 µg/L	-3.1123 ppb	07:20:15
2	Si 251.611†	435.1	112.0	8.2802 µg/L	8.2802 ppb	07:20:36
2	Sn 189.927†	21.0	-1.3	-0.6590 µg/L	-0.6590 ppb	07:20:36
2	Ti 334.940†	907.2	137.3	0.3119 µg/L	0.3119 ppb	07:20:15
2	Tl 190.801†	-14.0	6.3	9.6422 µg/L	9.6422 ppb	07:20:36
2	U 409.014†	654.7	-72.6	-6.5871 µg/L	-6.5871 ppb	07:20:15
2	V 292.402†	-146.3	-20.3	-0.2328 µg/L	-0.2328 ppb	07:20:15
2	Zn 213.857†	650.8	127.4	3.3678 µg/L	3.3678 ppb	07:20:36
3	Sc RADIAL	112710.7	112710.7	96.6 %		07:19:07
3	Al 396.153Radial†	131.5	12.8	6.3588 µg/L	6.3588 ppb	07:19:07
3	Ca 317.933Radial†	437.8	40.2	15.572 µg/L	15.572 ppb	07:19:27
3	Fe 238.204 Radial†	20.2	5.7	36.215 µg/L	36.215 ppb	07:19:27
3	K 766.490 Radial†	697.2	39.0	19.952 µg/L	19.952 ppb	07:19:07
3	Mg 279.077 IEC†	16.1	1.2	7.6302 µg/L	7.6302 ppb	07:19:27
3	Na 589.592 Radial†	-511.7	104.6	26.202 µg/L	26.202 ppb	07:19:07
3	Sr 421.552†	-39.0	21.9	0.1102 µg/L	0.1102 ppb	07:19:07
3	Sc 361.383	2015562.4	2015562.4	99.671 %		07:20:42
3	Y 371.029	1257218.0	1257218.0	99.878 %		07:20:42
3	Ag 328.068†	95.6	85.5	0.7832 µg/L	0.7832 ppb	07:20:48
3	As 188.979†	-2.3	-4.6	-8.2969 µg/L	-8.2969 ppb	07:21:08
3	B 249.677†	191.0	53.8	2.3215 µg/L	2.3215 ppb	07:21:08
3	Ba 233.527†	-21.3	56.7	1.4549 µg/L	1.4549 ppb	07:21:08
3	Be 313.107†	3610.3	106.3	0.0664 µg/L	0.0664 ppb	07:20:48
3	Cd 226.502†	-88.8	9.9	0.2615 µg/L	0.2615 ppb	07:21:08
3	Co 228.616†	-62.1	4.4	0.2099 µg/L	0.2099 ppb	07:21:08
3	Cr 267.716†	-104.0	-4.6	-0.0954 µg/L	-0.0954 ppb	07:20:48
3	Cu 324.752†	4159.7	-96.3	-0.6604 µg/L	-0.6604 ppb	07:20:48
3	Mn 257.610†	165.6	367.4	1.1778 µg/L	1.1778 ppb	07:21:08
3	Mo 202.031†	-6.4	-2.8	-0.3202 µg/L	-0.3202 ppb	07:21:08
3	Ni 231.604†	292.9	18.3	1.0020 µg/L	1.0020 ppb	07:21:08
3	P 214.914†	183.3	-17.0	-34.259 µg/L	-34.259 ppb	07:21:08
3	Pb 220.353†	52.9	-3.1	-0.8130 µg/L	-0.8130 ppb	07:21:08
3	S 181.975 Axial†	28.9	6.9	33.570 µg/L	33.570 ppb	07:21:08
3	Sb 206.836†	28.0	6.9	6.7908 µg/L	6.7908 ppb	07:21:08
3	Se 196.026†	15.7	5.9	7.5200 µg/L	7.5200 ppb	07:21:08
3	SiO2†	2727.0	-15.3	-2.8137 µg/L	-2.8137 ppb	07:20:48
3	Si 251.611†	437.2	113.4	8.3190 µg/L	8.3190 ppb	07:21:08
3	Sn 189.927†	25.3	3.0	1.5335 µg/L	1.5335 ppb	07:21:08
3	Ti 334.940†	928.2	156.8	0.3564 µg/L	0.3564 ppb	07:20:48
3	Tl 190.801†	-20.8	-0.5	-0.7579 µg/L	-0.7579 ppb	07:21:08
3	U 409.014†	730.9	2.8	0.2514 µg/L	0.2514 ppb	07:20:48
3	V 292.402†	-115.1	11.2	0.1272 µg/L	0.1272 ppb	07:20:48
3	Zn 213.857†	644.6	120.1	3.1750 µg/L	3.1750 ppb	07:21:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2010630.1	99.427	%	0.2952				0.30%
Sc RADIAL	113245.2	97.1	%	0.60				0.62%
Y 371.029	1253775.2	99.605	%	0.3343				0.34%
Ag 328.068†	87.6	0.8012	µg/L	0.49065	0.8012	ppb	0.49065	61.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	32.7	16.256	µg/L	10.1426	16.256	ppb	10.1426	62.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	3.1232	µg/L	9.99310	3.1232	ppb	9.99310	319.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.1	2.2908	µg/L	0.14294	2.2908	ppb	0.14294	6.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	54.1	1.3885	µg/L	0.17389	1.3885	ppb	0.17389	12.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	68.5	0.0427	µg/L	0.03213	0.0427	ppb	0.03213	75.28%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	38.7	14.960	µg/L	1.1137	14.960	ppb	1.1137	7.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.2	0.2412	µg/L	0.07037	0.2412	ppb	0.07037	29.18%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.5	0.0734	µg/L	0.27547	0.0734	ppb	0.27547	375.37%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -23.7     -0.4973 µg/L       0.46510     -0.4973 ppb        0.46510  93.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -136.1     -0.9353 µg/L       0.23906     -0.9353 ppb        0.23906  25.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         6.3      40.062 µg/L        4.9859      40.062 ppb         4.9859  12.45%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         55.7      28.484 µg/L        9.8922      28.484 ppb         9.8922  34.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.4      -8.4519 µg/L      20.36206     -8.4519 ppb       20.36206 240.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              326.8       1.0484 µg/L       0.16879      1.0484 ppb        0.16879  16.10%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.8      -0.0934 µg/L       0.40346     -0.0934 ppb        0.40346 432.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       115.5      28.920 µg/L        4.8963      28.920 ppb         4.8963  16.93%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               18.5       1.0113 µg/L       0.21359      1.0113 ppb        0.21359  21.12%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.2     -30.592 µg/L       13.3252     -30.592 ppb       13.3252  43.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.0      -1.0356 µg/L       1.04972      -1.0356 ppb       1.04972 101.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.1      39.701 µg/L        7.7295      39.701 ppb         7.7295  19.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.9       2.8453 µg/L       4.77391      2.8453 ppb        4.77391 167.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.7      -0.9227 µg/L       7.70142     -0.9227 ppb        7.70142 834.68%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -2.2      -0.4024 µg/L       4.43765     -0.4024 ppb        4.43765 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              123.1       9.0881 µg/L       1.36581      9.0881 ppb        1.36581  15.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.0       0.0017 µg/L       1.33076      0.0017 ppb        1.33076 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.2       0.0162 µg/L       0.08484      0.0162 ppb        0.08484 522.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              187.3       0.4258 µg/L       0.16027      0.4258 ppb        0.16027  37.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.7       4.1799 µg/L       5.21983      4.1799 ppb        5.21983 124.88%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -43.3      -3.9344 µg/L       3.66797     -3.9344 ppb        3.66797  93.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -2.8      -0.0348 µg/L       0.18272     -0.0348 ppb        0.18272 525.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              119.8       3.1669 µg/L       0.20503      3.1669 ppb        0.20503   6.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 08:04:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115401.2	115401.2	98.9	%			08:05:08
1	Al 396.153Radial†	10471.1	10459.2	5177.4	µg/L	5177.4	ppb	08:05:08
1	Ca 317.933Radial†	13799.6	13533.6	5236.4	µg/L	5236.4	ppb	08:05:28
1	Fe 238.204 Radial†	807.1	800.6	5107.7	µg/L	5107.7	ppb	08:05:28
1	K 766.490 Radial†	10514.4	9943.7	5089.1	µg/L	5089.1	ppb	08:05:08
1	Mg 279.077 IEC†	845.4	839.0	5185.0	µg/L	5185.0	ppb	08:05:28
1	Na 589.592 Radial†	40160.4	41221.6	10323	µg/L	10323	ppb	08:05:08
1	Sr 421.552†	98300.6	99408.5	499.62	µg/L	499.62	ppb	08:05:08
1	Sc 361.383	2016316.7	2016316.7	99.708	%			08:06:31
1	Y 371.029	1259420.4	1259420.4	100.05	%			08:06:31
1	Ag 328.068†	55557.7	55710.0	511.65	µg/L	511.65	ppb	08:06:37
1	As 188.979†	280.8	279.4	506.21	µg/L	506.21	ppb	08:06:57
1	B 249.677†	11487.0	11382.8	491.86	µg/L	491.86	ppb	08:06:37
1	Ba 233.527†	19175.7	19309.9	496.32	µg/L	496.32	ppb	08:06:37
1	Be 313.107†	797192.9	796012.5	497.92	µg/L	497.92	ppb	08:06:31
1	Cd 226.502†	18589.9	18743.3	499.36	µg/L	499.36	ppb	08:06:37
1	Co 228.616†	10216.2	10312.7	498.45	µg/L	498.45	ppb	08:06:37
1	Cr 267.716†	23361.2	23529.4	494.62	µg/L	494.62	ppb	08:06:37
1	Cu 324.752†	75319.3	71270.2	495.46	µg/L	495.46	ppb	08:06:37
1	Mn 257.610†	152705.7	153354.4	490.30	µg/L	490.30	ppb	08:06:37
1	Mo 202.031†	4330.0	4346.4	507.87	µg/L	507.87	ppb	08:06:57
1	Ni 231.604†	9357.6	9109.5	498.39	µg/L	498.39	ppb	08:06:37
1	P 214.914†	1421.2	1224.4	2419.7	µg/L	2419.7	ppb	08:06:57
1	Pb 220.353†	2001.6	1951.2	505.05	µg/L	505.05	ppb	08:06:57
1	S 181.975 Axial†	238.9	217.5	1063.2	µg/L	1063.2	ppb	08:06:57
1	Sb 206.836†	545.3	525.8	513.18	µg/L	513.18	ppb	08:06:57
1	Se 196.026†	410.1	401.5	515.21	µg/L	515.21	ppb	08:06:57
1	SiO2†	32841.6	30186.4	5543.2	µg/L	5543.2	ppb	08:06:37
1	Si 251.611†	35214.7	34992.6	2540.6	µg/L	2540.6	ppb	08:06:37
1	Sn 189.927†	1032.4	1013.1	521.54	µg/L	521.54	ppb	08:06:57
1	Ti 334.940†	224312.7	224195.4	510.40	µg/L	510.40	ppb	08:06:31
1	Tl 190.801†	305.8	327.0	504.59	µg/L	504.59	ppb	08:06:57
1	U 409.014†	6127.9	5415.4	490.18	µg/L	490.18	ppb	08:06:37
1	V 292.402†	43682.4	43937.1	498.99	µg/L	498.99	ppb	08:06:37
1	Zn 213.857†	19333.5	18863.5	495.98	µg/L	495.98	ppb	08:06:37
2	Sc RADIAL	116297.5	116297.5	99.7	%			08:05:34
2	Al 396.153Radial†	10375.1	10281.4	5089.2	µg/L	5089.2	ppb	08:05:34
2	Ca 317.933Radial†	13895.5	13522.3	5232.0	µg/L	5232.0	ppb	08:05:54
2	Fe 238.204 Radial†	809.5	796.6	5082.6	µg/L	5082.6	ppb	08:05:54
2	K 766.490 Radial†	10470.7	9818.1	5024.8	µg/L	5024.8	ppb	08:05:34
2	Mg 279.077 IEC†	842.8	829.8	5128.2	µg/L	5128.2	ppb	08:05:54
2	Na 589.592 Radial†	39951.1	40699.0	10192	µg/L	10192	ppb	08:05:34
2	Sr 421.552†	97993.8	98335.2	494.23	µg/L	494.23	ppb	08:05:34
2	Sc 361.383	2024666.6	2024666.6	100.12	%			08:07:04
2	Y 371.029	1263207.3	1263207.3	100.35	%			08:07:04
2	Ag 328.068†	55674.3	55596.7	510.61	µg/L	510.61	ppb	08:07:10
2	As 188.979†	278.5	275.9	499.89	µg/L	499.89	ppb	08:07:30
2	B 249.677†	11514.5	11362.8	491.01	µg/L	491.01	ppb	08:07:10
2	Ba 233.527†	19242.9	19297.7	496.00	µg/L	496.00	ppb	08:07:10
2	Be 313.107†	802510.6	798026.4	499.18	µg/L	499.18	ppb	08:07:04
2	Cd 226.502†	18587.5	18664.1	497.25	µg/L	497.25	ppb	08:07:10
2	Co 228.616†	10250.9	10305.2	498.07	µg/L	498.07	ppb	08:07:10
2	Cr 267.716†	23416.5	23488.0	493.75	µg/L	493.75	ppb	08:07:10
2	Cu 324.752†	75457.4	71096.6	494.25	µg/L	494.25	ppb	08:07:10
2	Mn 257.610†	153009.2	153026.0	489.25	µg/L	489.25	ppb	08:07:10
2	Mo 202.031†	4321.3	4319.7	504.76	µg/L	504.76	ppb	08:07:30
2	Ni 231.604†	9358.4	9071.6	496.32	µg/L	496.32	ppb	08:07:10
2	P 214.914†	1417.3	1214.7	2400.2	µg/L	2400.2	ppb	08:07:30
2	Pb 220.353†	1979.6	1920.9	497.21	µg/L	497.21	ppb	08:07:30

2	S 181.975 Axial†	238.3	215.8	1055.2 µg/L	1055.2 ppb	08:07:30
2	Sb 206.836†	535.6	513.8	501.45 µg/L	501.45 ppb	08:07:30
2	Se 196.026†	409.7	399.4	512.56 µg/L	512.56 ppb	08:07:30
2	SiO2†	32787.6	29996.7	5508.3 µg/L	5508.3 ppb	08:07:10
2	Si 251.611†	35155.3	34787.7	2525.6 µg/L	2525.6 ppb	08:07:10
2	Sn 189.927†	1030.1	1006.5	518.16 µg/L	518.16 ppb	08:07:30
2	Ti 334.940†	225319.1	224272.8	510.58 µg/L	510.58 ppb	08:07:04
2	Tl 190.801†	306.2	326.2	503.34 µg/L	503.34 ppb	08:07:30
2	U 409.014†	6119.3	5381.4	487.11 µg/L	487.11 ppb	08:07:10
2	V 292.402†	43821.8	43895.7	498.50 µg/L	498.50 ppb	08:07:10
2	Zn 213.857†	19430.1	18880.0	496.44 µg/L	496.44 ppb	08:07:10
3	Sc RADIAL	114799.5	114799.5	98.4 %		08:06:00
3	Al 396.153Radial†	10412.3	10454.9	5175.6 µg/L	5175.6 ppb	08:06:00
3	Ca 317.933Radial†	13500.5	13302.8	5147.1 µg/L	5147.1 ppb	08:06:20
3	Fe 238.204 Radial†	797.0	794.5	5069.1 µg/L	5069.1 ppb	08:06:20
3	K 766.490 Radial†	10534.5	10019.9	5128.1 µg/L	5128.1 ppb	08:06:00
3	Mg 279.077 IEC†	834.8	832.6	5145.7 µg/L	5145.7 ppb	08:06:20
3	Na 589.592 Radial†	39859.5	41128.7	10300 µg/L	10300 ppb	08:06:00
3	Sr 421.552†	97728.2	99347.6	499.32 µg/L	499.32 ppb	08:06:00
3	Sc 361.383	2020951.7	2020951.7	99.937 %		08:07:37
3	Y 371.029	1258212.6	1258212.6	99.957 %		08:07:37
3	Ag 328.068†	55437.6	55462.1	509.38 µg/L	509.38 ppb	08:07:43
3	As 188.979†	274.3	272.3	493.24 µg/L	493.24 ppb	08:08:03
3	B 249.677†	11539.3	11408.7	493.00 µg/L	493.00 ppb	08:07:43
3	Ba 233.527†	19174.6	19264.7	495.16 µg/L	495.16 ppb	08:07:43
3	Be 313.107†	801802.9	798791.7	499.66 µg/L	499.66 ppb	08:07:37
3	Cd 226.502†	18554.8	18665.4	497.28 µg/L	497.28 ppb	08:07:43
3	Co 228.616†	10229.2	10302.3	497.93 µg/L	497.93 ppb	08:07:43
3	Cr 267.716†	23383.7	23498.3	493.96 µg/L	493.96 ppb	08:07:43
3	Cu 324.752†	75189.0	70966.6	493.34 µg/L	493.34 ppb	08:07:43
3	Mn 257.610†	152741.1	153038.5	489.29 µg/L	489.29 ppb	08:07:43
3	Mo 202.031†	4279.0	4285.4	500.75 µg/L	500.75 ppb	08:08:03
3	Ni 231.604†	9337.1	9067.4	496.09 µg/L	496.09 ppb	08:07:43
3	P 214.914†	1416.6	1216.6	2404.0 µg/L	2404.0 ppb	08:08:03
3	Pb 220.353†	1980.6	1925.6	498.41 µg/L	498.41 ppb	08:08:03
3	S 181.975 Axial†	240.9	218.9	1070.1 µg/L	1070.1 ppb	08:08:03
3	Sb 206.836†	536.4	515.6	503.24 µg/L	503.24 ppb	08:08:03
3	Se 196.026†	415.3	405.7	520.55 µg/L	520.55 ppb	08:08:03
3	SiO2†	32701.3	29970.5	5503.5 µg/L	5503.5 ppb	08:07:43
3	Si 251.611†	35249.0	34946.0	2537.5 µg/L	2537.5 ppb	08:07:43
3	Sn 189.927†	1017.9	996.2	512.86 µg/L	512.86 ppb	08:08:03
3	Ti 334.940†	225035.5	224402.8	510.88 µg/L	510.88 ppb	08:07:37
3	Tl 190.801†	313.3	333.8	515.05 µg/L	515.05 ppb	08:08:03
3	U 409.014†	6015.6	5288.9	478.72 µg/L	478.72 ppb	08:07:43
3	V 292.402†	43693.7	43847.9	497.92 µg/L	497.92 ppb	08:07:43
3	Zn 213.857†	19367.2	18852.8	495.72 µg/L	495.72 ppb	08:07:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020645.0	99.922	%	0.2069				0.21%
Sc RADIAL	115499.4	99.0	%	0.65				0.65%
Y 371.029	1260280.1	100.12	%	0.207				0.21%
Ag 328.068†	55589.6	510.55	µg/L	1.137	510.55	ppb	1.137	0.22%
QC value within limits for Ag 328.068 Recovery = 102.11%								
Al 396.153Radial†	10398.5	5147.4	µg/L	50.43	5147.4	ppb	50.43	0.98%
QC value within limits for Al 396.153Radial Recovery = 102.95%								
As 188.979†	275.9	499.78	µg/L	6.484	499.78	ppb	6.484	1.30%
QC value within limits for As 188.979 Recovery = 99.96%								
B 249.677†	11384.8	491.96	µg/L	1.001	491.96	ppb	1.001	0.20%
QC value within limits for B 249.677 Recovery = 98.39%								
Ba 233.527†	19290.8	495.82	µg/L	0.601	495.82	ppb	0.601	0.12%
QC value within limits for Ba 233.527 Recovery = 99.16%								
Be 313.107†	797610.2	498.92	µg/L	0.898	498.92	ppb	0.898	0.18%
QC value within limits for Be 313.107 Recovery = 99.78%								
Ca 317.933Radial†	13452.9	5205.2	µg/L	50.33	5205.2	ppb	50.33	0.97%
QC value within limits for Ca 317.933Radial Recovery = 104.10%								
Cd 226.502†	18690.9	497.96	µg/L	1.211	497.96	ppb	1.211	0.24%
QC value within limits for Cd 226.502 Recovery = 99.59%								
Co 228.616†	10306.7	498.15	µg/L	0.268	498.15	ppb	0.268	0.05%

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   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            23505.2      494.11 µg/L         0.453      494.11 ppb          0.453   0.09%
   QC value within limits for Cr 267.716  Recovery = 98.82%
Cu 324.752†            71111.1      494.35 µg/L         1.061      494.35 ppb          1.061   0.21%
   QC value within limits for Cu 324.752  Recovery = 98.87%
Fe 238.204 Radial†       797.2      5086.4 µg/L        19.60      5086.4 ppb         19.60   0.39%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.73%
K 766.490 Radial†       9927.2      5080.6 µg/L        52.16      5080.6 ppb         52.16   1.03%
   QC value within limits for K 766.490 Radial  Recovery = 101.61%
Mg 279.077 IEC†          833.8      5153.0 µg/L        29.08      5153.0 ppb         29.08   0.56%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.06%
Mn 257.610†           153139.6      489.61 µg/L         0.596      489.61 ppb          0.596   0.12%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†             4317.2      504.46 µg/L         3.570      504.46 ppb          3.570   0.71%
   QC value within limits for Mo 202.031  Recovery = 100.89%
Na 589.592 Radial†     41016.4       10272 µg/L          69.8       10272 ppb           69.8   0.68%
   QC value within limits for Na 589.592 Radial  Recovery = 102.72%
Ni 231.604†             9082.8      496.93 µg/L         1.268      496.93 ppb          1.268   0.26%
   QC value within limits for Ni 231.604  Recovery = 99.39%
P 214.914†              1218.6      2408.0 µg/L        10.36      2408.0 ppb         10.36   0.43%
   QC value within limits for P 214.914  Recovery = 96.32%
Pb 220.353†             1932.6      500.22 µg/L         4.221      500.22 ppb          4.221   0.84%
   QC value within limits for Pb 220.353  Recovery = 100.04%
S 181.975 Axial†         217.4      1062.8 µg/L         7.47      1062.8 ppb          7.47   0.70%
   QC value within limits for S 181.975 Axial  Recovery = 106.28%
Sb 206.836†              518.4      505.95 µg/L         6.316      505.95 ppb          6.316   1.25%
   QC value within limits for Sb 206.836  Recovery = 101.19%
Se 196.026†              402.2      516.11 µg/L         4.071      516.11 ppb          4.071   0.79%
   QC value within limits for Se 196.026  Recovery = 103.22%
SiO2†                  30051.2      5518.3 µg/L        21.64      5518.3 ppb         21.64   0.39%
   QC value within limits for SiO2  Recovery = 103.19%
Si 251.611†            34908.8      2534.6 µg/L         7.91      2534.6 ppb          7.91   0.31%
   QC value within limits for Si 251.611  Recovery = 101.38%
Sn 189.927†             1005.2      517.52 µg/L         4.375      517.52 ppb          4.375   0.85%
   QC value within limits for Sn 189.927  Recovery = 103.50%
Sr 421.552†            99030.4      497.72 µg/L         3.030      497.72 ppb          3.030   0.61%
   QC value within limits for Sr 421.552  Recovery = 99.54%
Ti 334.940†           224290.3      510.62 µg/L         0.241      510.62 ppb          0.241   0.05%
   QC value within limits for Ti 334.940  Recovery = 102.12%
Tl 190.801†              329.0      507.66 µg/L         6.431      507.66 ppb          6.431   1.27%
   QC value within limits for Tl 190.801  Recovery = 101.53%
U 409.014†              5361.9      485.34 µg/L         5.931      485.34 ppb          5.931   1.22%
   QC value within limits for U 409.014  Recovery = 97.07%
V 292.402†             43893.6      498.47 µg/L         0.538      498.47 ppb          0.538   0.11%
   QC value within limits for V 292.402  Recovery = 99.69%
Zn 213.857†            18865.4      496.05 µg/L         0.363      496.05 ppb          0.363   0.07%
   QC value within limits for Zn 213.857  Recovery = 99.21%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 08:08:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114023.9	114023.9	97.8	%			08:08:45
1	Al 396.153Radial†	179.0	59.8	29.678	µg/L	29.678	ppb	08:08:45
1	Ca 317.933Radial†	565.2	165.4	63.981	µg/L	63.981	ppb	08:09:06
1	Fe 238.204 Radial†	21.1	6.4	40.927	µg/L	40.927	ppb	08:09:06
1	K 766.490 Radial†	752.6	87.3	44.669	µg/L	44.669	ppb	08:08:45
1	Mg 279.077 IEC†	16.8	1.7	10.474	µg/L	10.474	ppb	08:09:06
1	Na 589.592 Radial†	-492.9	130.0	32.543	µg/L	32.543	ppb	08:08:45
1	Sr 421.552†	3.3	65.7	0.3302	µg/L	0.3302	ppb	08:08:45
1	Sc 361.383	2014246.2	2014246.2	99.606	%			08:10:08
1	Y 371.029	1257444.9	1257444.9	99.896	%			08:10:08
1	Ag 328.068†	162.9	153.1	1.3991	µg/L	1.3991	ppb	08:10:13
1	As 188.979†	2.3	0.1	0.2255	µg/L	0.2255	ppb	08:10:34
1	B 249.677†	191.1	54.0	2.3300	µg/L	2.3300	ppb	08:10:34
1	Ba 233.527†	-60.2	17.6	0.4520	µg/L	0.4520	ppb	08:10:34
1	Be 313.107†	3602.1	100.5	0.0623	µg/L	0.0623	ppb	08:10:13
1	Cd 226.502†	-98.4	0.2	0.0034	µg/L	0.0034	ppb	08:10:34
1	Co 228.616†	-69.4	-3.0	-0.1450	µg/L	-0.1450	ppb	08:10:34
1	Cr 267.716†	-110.1	-10.8	-0.2262	µg/L	-0.2262	ppb	08:10:13
1	Cu 324.752†	4181.6	-71.6	-0.4882	µg/L	-0.4882	ppb	08:10:13
1	Mn 257.610†	-1.4	199.9	0.6436	µg/L	0.6436	ppb	08:10:34
1	Mo 202.031†	5.5	9.2	1.0762	µg/L	1.0762	ppb	08:10:34
1	Ni 231.604†	302.6	28.3	1.5457	µg/L	1.5457	ppb	08:10:34
1	P 214.914†	189.6	-10.5	-21.295	µg/L	-21.295	ppb	08:10:34
1	Pb 220.353†	48.5	-7.6	-1.9486	µg/L	-1.9486	ppb	08:10:34
1	S 181.975 Axial†	32.1	10.1	49.496	µg/L	49.496	ppb	08:10:34
1	Sb 206.836†	19.5	-1.6	-1.5188	µg/L	-1.5188	ppb	08:10:34
1	Se 196.026†	7.7	-2.1	-2.6718	µg/L	-2.6718	ppb	08:10:34
1	SiO2†	3177.8	439.0	80.623	µg/L	80.623	ppb	08:10:13
1	Si 251.611†	938.3	616.8	45.611	µg/L	45.611	ppb	08:10:34
1	Sn 189.927†	19.3	-3.1	-1.5521	µg/L	-1.5521	ppb	08:10:34
1	Ti 334.940†	1475.3	706.8	1.6063	µg/L	1.6063	ppb	08:10:13
1	Tl 190.801†	-17.5	2.8	4.2649	µg/L	4.2649	ppb	08:10:34
1	U 409.014†	735.8	8.3	0.7457	µg/L	0.7457	ppb	08:10:13
1	V 292.402†	-125.7	0.5	0.0179	µg/L	0.0179	ppb	08:10:13
1	Zn 213.857†	587.9	63.6	1.6745	µg/L	1.6745	ppb	08:10:34
2	Sc RADIAL	114135.7	114135.7	97.9	%			08:09:11
2	Al 396.153Radial†	180.7	61.3	30.436	µg/L	30.436	ppb	08:09:11
2	Ca 317.933Radial†	678.8	280.8	108.66	µg/L	108.66	ppb	08:09:31
2	Fe 238.204 Radial†	21.9	7.2	46.042	µg/L	46.042	ppb	08:09:31
2	K 766.490 Radial†	742.9	76.7	39.234	µg/L	39.234	ppb	08:09:11
2	Mg 279.077 IEC†	13.5	-1.7	-10.340	µg/L	-10.340	ppb	08:09:31
2	Na 589.592 Radial†	-493.5	129.8	32.502	µg/L	32.502	ppb	08:09:11
2	Sr 421.552†	-36.6	24.9	0.1253	µg/L	0.1253	ppb	08:09:11
2	Sc 361.383	2008809.2	2008809.2	99.337	%			08:10:40
2	Y 371.029	1254538.4	1254538.4	99.666	%			08:10:40
2	Ag 328.068†	122.9	113.3	1.0350	µg/L	1.0350	ppb	08:10:45
2	As 188.979†	0.4	-1.8	-3.3755	µg/L	-3.3755	ppb	08:11:06
2	B 249.677†	184.0	47.4	2.0391	µg/L	2.0391	ppb	08:11:06
2	Ba 233.527†	-61.7	16.0	0.4096	µg/L	0.4096	ppb	08:11:06
2	Be 313.107†	3528.1	35.8	0.0220	µg/L	0.0220	ppb	08:10:45
2	Cd 226.502†	-99.6	-1.3	-0.0447	µg/L	-0.0447	ppb	08:11:06
2	Co 228.616†	-61.3	5.0	0.2411	µg/L	0.2411	ppb	08:11:06
2	Cr 267.716†	-115.3	-16.2	-0.3412	µg/L	-0.3412	ppb	08:10:45
2	Cu 324.752†	4093.3	-149.1	-1.0245	µg/L	-1.0245	ppb	08:10:45
2	Mn 257.610†	-58.5	142.5	0.4606	µg/L	0.4606	ppb	08:11:06
2	Mo 202.031†	6.6	10.3	1.2075	µg/L	1.2075	ppb	08:11:06
2	Ni 231.604†	301.7	28.1	1.5379	µg/L	1.5379	ppb	08:11:06
2	P 214.914†	188.0	-11.7	-23.618	µg/L	-23.618	ppb	08:11:06
2	Pb 220.353†	45.3	-10.6	-2.7317	µg/L	-2.7317	ppb	08:11:06

2	S 181.975 Axial†	30.4	8.4	41.150 µg/L	41.150 ppb	08:11:06
2	Sb 206.836†	20.5	-0.4	-0.4397 µg/L	-0.4397 ppb	08:11:06
2	Se 196.026†	14.0	4.2	5.4601 µg/L	5.4601 ppb	08:11:06
2	SiO2†	3223.4	493.5	90.629 µg/L	90.629 ppb	08:10:45
2	Si 251.611†	1095.4	777.5	57.577 µg/L	57.577 ppb	08:11:06
2	Sn 189.927†	16.4	-5.9	-3.0034 µg/L	-3.0034 ppb	08:11:06
2	Ti 334.940†	1311.3	545.6	1.2368 µg/L	1.2368 ppb	08:10:45
2	Tl 190.801†	-21.5	-1.3	-2.0056 µg/L	-2.0056 ppb	08:11:06
2	U 409.014†	602.2	-124.3	-11.273 µg/L	-11.273 ppb	08:10:45
2	V 292.402†	-142.0	-16.2	-0.1888 µg/L	-0.1888 ppb	08:10:45
2	Zn 213.857†	572.2	49.3	1.2965 µg/L	1.2965 ppb	08:11:06
3	Sc RADIAL	113888.1	113888.1	97.7 %		08:09:37
3	Al 396.153Radial†	142.6	22.7	11.290 µg/L	11.290 ppb	08:09:37
3	Ca 317.933Radial†	675.5	279.0	107.95 µg/L	107.95 ppb	08:09:57
3	Fe 238.204 Radial†	19.9	5.2	33.335 µg/L	33.335 ppb	08:09:57
3	K 766.490 Radial†	779.0	115.2	58.969 µg/L	58.969 ppb	08:09:37
3	Mg 279.077 IEC†	11.2	-4.0	-24.655 µg/L	-24.655 ppb	08:09:57
3	Na 589.592 Radial†	-516.9	104.7	26.226 µg/L	26.226 ppb	08:09:37
3	Sr 421.552†	-66.5	-5.8	-0.0290 µg/L	-0.0290 ppb	08:09:37
3	Sc 361.383	2030726.8	2030726.8	100.42 %		08:11:12
3	Y 371.029	1267162.5	1267162.5	100.67 %		08:11:12
3	Ag 328.068†	98.3	87.5	0.8017 µg/L	0.8017 ppb	08:11:18
3	As 188.979†	3.7	1.4	2.5864 µg/L	2.5864 ppb	08:11:38
3	B 249.677†	183.4	44.8	1.9325 µg/L	1.9325 ppb	08:11:38
3	Ba 233.527†	-54.8	23.5	0.6024 µg/L	0.6024 ppb	08:11:38
3	Be 313.107†	3533.2	2.6	0.0011 µg/L	0.0011 ppb	08:11:18
3	Cd 226.502†	-85.7	13.6	0.3623 µg/L	0.3623 ppb	08:11:38
3	Co 228.616†	-70.9	-4.0	-0.1936 µg/L	-0.1936 ppb	08:11:38
3	Cr 267.716†	-124.0	-23.7	-0.4963 µg/L	-0.4963 ppb	08:11:18
3	Cu 324.752†	4161.9	-125.2	-0.8616 µg/L	-0.8616 ppb	08:11:18
3	Mn 257.610†	44.9	246.1	0.7898 µg/L	0.7898 ppb	08:11:38
3	Mo 202.031†	-0.7	3.0	0.3465 µg/L	0.3465 ppb	08:11:38
3	Ni 231.604†	305.1	28.3	1.5475 µg/L	1.5475 ppb	08:11:38
3	P 214.914†	190.8	-10.9	-21.884 µg/L	-21.884 ppb	08:11:38
3	Pb 220.353†	41.4	-15.1	-3.8944 µg/L	-3.8944 ppb	08:11:38
3	S 181.975 Axial†	33.1	10.8	52.741 µg/L	52.741 ppb	08:11:38
3	Sb 206.836†	18.3	-2.9	-2.8644 µg/L	-2.8644 ppb	08:11:38
3	Se 196.026†	10.2	0.3	0.4111 µg/L	0.4111 ppb	08:11:38
3	SiO2†	3815.0	1047.7	192.39 µg/L	192.39 ppb	08:11:18
3	Si 251.611†	4722.1	4377.1	323.82 µg/L	323.82 ppb	08:11:38
Saturated within auto integration window (code 4)						
3	Sn 189.927†	23.9	1.4	0.7418 µg/L	0.7418 ppb	08:11:38
3	Ti 334.940†	1346.0	565.9	1.2831 µg/L	1.2831 ppb	08:11:18
3	Tl 190.801†	-17.4	3.0	4.6315 µg/L	4.6315 ppb	08:11:38
3	U 409.014†	736.7	3.2	0.2857 µg/L	0.2857 ppb	08:11:18
3	V 292.402†	-111.4	15.8	0.1833 µg/L	0.1833 ppb	08:11:18
3	Zn 213.857†	585.2	56.1	1.4780 µg/L	1.4780 ppb	08:11:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017927.4	99.788	%	0.5644				0.57%
Sc RADIAL	114015.9	97.8	%	0.11				0.11%
Y 371.029	1259715.3	100.08	%	0.525				0.52%
Ag 328.068†	118.0	1.0786	µg/L	0.30110	1.0786	ppb	0.30110	27.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	48.0	23.801	µg/L	10.8420	23.801	ppb	10.8420	45.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.1879	µg/L	3.00240	-0.1879	ppb	3.00240	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	48.7	2.1005	µg/L	0.20575	2.1005	ppb	0.20575	9.79%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.0	0.4880	µg/L	0.10131	0.4880	ppb	0.10131	20.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	46.3	0.0285	µg/L	0.03111	0.0285	ppb	0.03111	109.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	241.7	93.532	µg/L	25.5948	93.532	ppb	25.5948	27.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.2	0.1070	µg/L	0.22244	0.1070	ppb	0.22244	207.89%
QC value within limits for Cd 226.502 Recovery = Not calculated								

```
Co 228.616†                -0.7     -0.0325 µg/L       0.23819     -0.0325 ppb        0.23819 733.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -16.9     -0.3545 µg/L       0.13554     -0.3545 ppb        0.13554  38.23%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -115.3     -0.7914 µg/L       0.27494     -0.7914 ppb        0.27494  34.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          6.3      40.101 µg/L        6.3936      40.101 ppb         6.3936  15.94%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.1      47.624 µg/L       10.1940      47.624 ppb        10.1940  21.41%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.3      -8.1739 µg/L      17.66460     -8.1739 ppb       17.66460 216.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               196.2       0.6313 µg/L       0.16494      0.6313 ppb        0.16494  26.13%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.5       0.8767 µg/L       0.46388      0.8767 ppb        0.46388  52.91%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        121.5      30.424 µg/L        3.6355      30.424 ppb         3.6355  11.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                28.2       1.5437 µg/L       0.00513      1.5437 ppb        0.00513   0.33%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -11.0     -22.266 µg/L        1.2074     -22.266 ppb         1.2074   5.42%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.1      -2.8582 µg/L       0.97906      -2.8582 ppb        0.97906  34.25%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            9.8      47.796 µg/L        5.9794      47.796 ppb         5.9794  12.51%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -1.6      -1.6076 µg/L       1.21479      -1.6076 ppb        1.21479  75.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.8       1.0665 µg/L       4.10537      1.0665 ppb        4.10537 384.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     660.1     121.21 µg/L         61.840     121.21 ppb         61.840  51.02%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              1923.8     142.34 µg/L        157.283     142.34 ppb        157.283 110.50%
   Saturated within auto integration window (code 4)
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.5      -1.2712 µg/L       1.88836      -1.2712 ppb        1.88836 148.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                28.3       0.1422 µg/L       0.18016      0.1422 ppb        0.18016 126.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               606.1       1.3754 µg/L       0.20131      1.3754 ppb        0.20131  14.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.5       2.2969 µg/L       3.73058      2.2969 ppb        3.73058 162.42%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -37.6      -3.4138 µg/L       6.80994      -3.4138 ppb        6.80994 199.48%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  0.0       0.0041 µg/L       0.18641      0.0041 ppb        0.18641 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                56.4       1.4830 µg/L       0.18907      1.4830 ppb        0.18907  12.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 08:41:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115906.5	115906.5	99.4	%			08:41:43
1	Al 396.153Radial†	10451.4	10393.2	5144.6	µg/L	5144.6	ppb	08:41:43
1	Ca 317.933Radial†	13347.9	13018.3	5037.0	µg/L	5037.0	ppb	08:42:04
1	Fe 238.204 Radial†	804.5	794.3	5067.9	µg/L	5067.9	ppb	08:42:04
1	K 766.490 Radial†	10471.8	9854.6	5043.5	µg/L	5043.5	ppb	08:41:43
1	Mg 279.077 IEC†	838.6	828.4	5119.9	µg/L	5119.9	ppb	08:42:04
1	Na 589.592 Radial†	40180.5	41065.0	10284	µg/L	10284	ppb	08:41:43
1	Sr 421.552†	98277.9	98952.6	497.33	µg/L	497.33	ppb	08:41:43
1	Sc 361.383	2014614.8	2014614.8	99.624	%			08:43:08
1	Y 371.029	1258875.0	1258875.0	100.01	%			08:43:08
1	Ag 328.068†	55513.0	55712.3	511.66	µg/L	511.66	ppb	08:43:13
1	As 188.979†	269.4	268.2	485.95	µg/L	485.95	ppb	08:43:34
1	B 249.677†	11444.7	11350.1	490.46	µg/L	490.46	ppb	08:43:13
1	Ba 233.527†	19068.9	19218.9	493.98	µg/L	493.98	ppb	08:43:13
1	Be 313.107†	793345.7	792826.2	495.92	µg/L	495.92	ppb	08:43:08
1	Cd 226.502†	18473.1	18641.9	496.65	µg/L	496.65	ppb	08:43:13
1	Co 228.616†	10175.8	10280.9	496.91	µg/L	496.91	ppb	08:43:13
1	Cr 267.716†	23195.2	23382.6	491.53	µg/L	491.53	ppb	08:43:13
1	Cu 324.752†	75103.8	71117.7	494.39	µg/L	494.39	ppb	08:43:13
1	Mn 257.610†	153931.9	154714.6	494.64	µg/L	494.64	ppb	08:43:08
1	Mo 202.031†	4341.3	4361.3	509.62	µg/L	509.62	ppb	08:43:34
1	Ni 231.604†	9278.1	9037.6	494.46	µg/L	494.46	ppb	08:43:13
1	P 214.914†	1425.7	1230.2	2431.5	µg/L	2431.5	ppb	08:43:34
1	Pb 220.353†	1982.3	1933.5	500.48	µg/L	500.48	ppb	08:43:34
1	S 181.975 Axial†	236.1	214.9	1050.6	µg/L	1050.6	ppb	08:43:34
1	Sb 206.836†	542.3	523.3	510.72	µg/L	510.72	ppb	08:43:34
1	Se 196.026†	408.2	399.8	513.10	µg/L	513.10	ppb	08:43:34
1	SiO2†	32208.2	29578.5	5431.5	µg/L	5431.5	ppb	08:43:13
1	Si 251.611†	34579.9	34385.2	2495.6	µg/L	2495.6	ppb	08:43:13
1	Sn 189.927†	1034.0	1015.5	522.73	µg/L	522.73	ppb	08:43:34
1	Ti 334.940†	223962.5	224033.9	510.05	µg/L	510.05	ppb	08:43:08
1	Tl 190.801†	311.8	333.3	514.33	µg/L	514.33	ppb	08:43:34
1	U 409.014†	6095.2	5387.8	487.68	µg/L	487.68	ppb	08:43:13
1	V 292.402†	43500.3	43791.3	497.36	µg/L	497.36	ppb	08:43:13
1	Zn 213.857†	19289.7	18835.9	495.28	µg/L	495.28	ppb	08:43:13
2	Sc RADIAL	116043.1	116043.1	99.5	%			08:42:09
2	Al 396.153Radial†	10532.7	10462.6	5179.2	µg/L	5179.2	ppb	08:42:09
2	Ca 317.933Radial†	13307.4	12961.8	5015.2	µg/L	5015.2	ppb	08:42:30
2	Fe 238.204 Radial†	806.1	795.0	5072.1	µg/L	5072.1	ppb	08:42:30
2	K 766.490 Radial†	10523.7	9894.4	5063.8	µg/L	5063.8	ppb	08:42:09
2	Mg 279.077 IEC†	841.3	830.1	5130.2	µg/L	5130.2	ppb	08:42:30
2	Na 589.592 Radial†	40403.3	41241.3	10328	µg/L	10328	ppb	08:42:09
2	Sr 421.552†	98769.0	99329.7	499.23	µg/L	499.23	ppb	08:42:09
2	Sc 361.383	2030014.8	2030014.8	100.39	%			08:43:41
2	Y 371.029	1265623.8	1265623.8	100.55	%			08:43:41
2	Ag 328.068†	55696.2	55472.0	509.45	µg/L	509.45	ppb	08:43:47
2	As 188.979†	278.2	274.9	498.04	µg/L	498.04	ppb	08:44:07
2	B 249.677†	11545.9	11363.7	491.05	µg/L	491.05	ppb	08:43:47
2	Ba 233.527†	19146.4	19151.0	492.23	µg/L	492.23	ppb	08:43:47
2	Be 313.107†	803081.5	796483.4	498.21	µg/L	498.21	ppb	08:43:41
2	Cd 226.502†	18566.2	18593.9	495.38	µg/L	495.38	ppb	08:43:47
2	Co 228.616†	10224.1	10251.6	495.48	µg/L	495.48	ppb	08:43:47
2	Cr 267.716†	23313.9	23324.2	490.30	µg/L	490.30	ppb	08:43:47
2	Cu 324.752†	75507.8	70948.2	493.21	µg/L	493.21	ppb	08:43:47
2	Mn 257.610†	155905.8	155508.8	497.18	µg/L	497.18	ppb	08:43:41
2	Mo 202.031†	4329.7	4316.8	504.41	µg/L	504.41	ppb	08:44:07
2	Ni 231.604†	9318.9	9007.6	492.82	µg/L	492.82	ppb	08:43:47
2	P 214.914†	1421.8	1215.5	2401.8	µg/L	2401.8	ppb	08:44:07
2	Pb 220.353†	1992.7	1928.8	499.26	µg/L	499.26	ppb	08:44:07

2	S 181.975 Axial†	245.5	222.4	1087.4 µg/L	1087.4 ppb	08:44:07
2	Sb 206.836†	545.7	522.5	509.98 µg/L	509.98 ppb	08:44:07
2	Se 196.026†	411.9	400.4	513.84 µg/L	513.84 ppb	08:44:07
2	SiO2†	32221.9	29346.9	5389.0 µg/L	5389.0 ppb	08:43:47
2	Si 251.611†	34622.9	34164.8	2479.5 µg/L	2479.5 ppb	08:43:47
2	Sn 189.927†	1029.7	1003.3	516.49 µg/L	516.49 ppb	08:44:07
2	Ti 334.940†	226842.6	225197.6	512.70 µg/L	512.70 ppb	08:43:41
2	Tl 190.801†	313.3	332.5	513.05 µg/L	513.05 ppb	08:44:07
2	U 409.014†	6155.9	5401.8	488.95 µg/L	488.95 ppb	08:43:47
2	V 292.402†	43643.9	43603.1	495.21 µg/L	495.21 ppb	08:43:47
2	Zn 213.857†	19354.1	18753.2	493.10 µg/L	493.10 ppb	08:43:47
3	Sc RADIAL	115981.2	115981.2	99.4 %		08:42:35
3	Al 396.153Radial†	10397.9	10332.7	5115.1 µg/L	5115.1 ppb	08:42:35
3	Ca 317.933Radial†	13422.6	13084.8	5062.8 µg/L	5062.8 ppb	08:42:56
3	Fe 238.204 Radial†	807.0	796.3	5080.9 µg/L	5080.9 ppb	08:42:56
3	K 766.490 Radial†	10504.5	9880.6	5056.8 µg/L	5056.8 ppb	08:42:35
3	Mg 279.077 IEC†	845.4	834.7	5158.2 µg/L	5158.2 ppb	08:42:56
3	Na 589.592 Radial†	40016.3	40873.8	10236 µg/L	10236 ppb	08:42:35
3	Sr 421.552†	97581.3	98188.4	493.49 µg/L	493.49 ppb	08:42:35
3	Sc 361.383	2038620.0	2038620.0	100.81 %		08:44:14
3	Y 371.029	1269563.4	1269563.4	100.86 %		08:44:14
3	Ag 328.068†	56244.1	55781.3	512.30 µg/L	512.30 ppb	08:44:20
3	As 188.979†	271.9	267.5	484.56 µg/L	484.56 ppb	08:44:40
3	B 249.677†	11665.2	11433.6	494.07 µg/L	494.07 ppb	08:44:20
3	Ba 233.527†	19369.1	19291.4	495.84 µg/L	495.84 ppb	08:44:20
3	Be 313.107†	795352.3	785439.5	491.30 µg/L	491.30 ppb	08:44:14
3	Cd 226.502†	18796.9	18744.7	499.39 µg/L	499.39 ppb	08:44:20
3	Co 228.616†	10360.8	10344.1	499.94 µg/L	499.94 ppb	08:44:20
3	Cr 267.716†	23639.8	23549.5	495.04 µg/L	495.04 ppb	08:44:20
3	Cu 324.752†	76274.3	71391.1	496.29 µg/L	496.29 ppb	08:44:20
3	Mn 257.610†	154367.7	153327.5	490.21 µg/L	490.21 ppb	08:44:14
3	Mo 202.031†	4259.0	4228.4	494.09 µg/L	494.09 ppb	08:44:40
3	Ni 231.604†	9434.0	9082.5	496.92 µg/L	496.92 ppb	08:44:20
3	P 214.914†	1399.0	1186.9	2343.3 µg/L	2343.3 ppb	08:44:40
3	Pb 220.353†	1959.3	1887.3	488.49 µg/L	488.49 ppb	08:44:40
3	S 181.975 Axial†	239.5	215.4	1053.3 µg/L	1053.3 ppb	08:44:40
3	Sb 206.836†	534.1	508.7	496.48 µg/L	496.48 ppb	08:44:40
3	Se 196.026†	402.7	389.6	500.06 µg/L	500.06 ppb	08:44:40
3	SiO2†	32613.5	29599.9	5435.5 µg/L	5435.5 ppb	08:44:20
3	Si 251.611†	35014.5	34407.7	2498.5 µg/L	2498.5 ppb	08:44:20
3	Sn 189.927†	1004.3	973.8	501.40 µg/L	501.40 ppb	08:44:40
3	Ti 334.940†	224706.5	222124.8	505.70 µg/L	505.70 ppb	08:44:14
3	Tl 190.801†	306.3	324.2	500.25 µg/L	500.25 ppb	08:44:40
3	U 409.014†	6199.0	5418.6	490.48 µg/L	490.48 ppb	08:44:20
3	V 292.402†	44204.5	43975.8	499.33 µg/L	499.33 ppb	08:44:20
3	Zn 213.857†	19621.9	18937.5	497.95 µg/L	497.95 ppb	08:44:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2027749.9	100.27	%	0.601				0.60%
Sc RADIAL	115976.9	99.4	%	0.06				0.06%
Y 371.029	1264687.4	100.47	%	0.429				0.43%
Ag 328.068†	55655.2	511.14	µg/L	1.494	511.14	ppb	1.494	0.29%
QC value within limits for Ag 328.068 Recovery = 102.23%								
Al 396.153Radial†	10396.2	5146.3	µg/L	32.11	5146.3	ppb	32.11	0.62%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	270.2	489.52	µg/L	7.413	489.52	ppb	7.413	1.51%
QC value within limits for As 188.979 Recovery = 97.90%								
B 249.677†	11382.4	491.86	µg/L	1.940	491.86	ppb	1.940	0.39%
QC value within limits for B 249.677 Recovery = 98.37%								
Ba 233.527†	19220.4	494.02	µg/L	1.805	494.02	ppb	1.805	0.37%
QC value within limits for Ba 233.527 Recovery = 98.80%								
Be 313.107†	791583.1	495.15	µg/L	3.519	495.15	ppb	3.519	0.71%
QC value within limits for Be 313.107 Recovery = 99.03%								
Ca 317.933Radial†	13021.6	5038.3	µg/L	23.82	5038.3	ppb	23.82	0.47%
QC value within limits for Ca 317.933Radial Recovery = 100.77%								
Cd 226.502†	18660.2	497.14	µg/L	2.053	497.14	ppb	2.053	0.41%
QC value within limits for Cd 226.502 Recovery = 99.43%								
Co 228.616†	10292.2	497.44	µg/L	2.278	497.44	ppb	2.278	0.46%

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   QC value within limits for Co 228.616  Recovery = 99.49%
Cr 267.716†            23418.8      492.29 µg/L        2.456      492.29 ppb          2.456   0.50%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†            71152.3      494.63 µg/L        1.551      494.63 ppb          1.551   0.31%
   QC value within limits for Cu 324.752  Recovery = 98.93%
Fe 238.204 Radial†       795.2      5073.6 µg/L         6.62      5073.6 ppb           6.62   0.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.47%
K 766.490 Radial†       9876.5      5054.7 µg/L        10.34      5054.7 ppb          10.34   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 101.09%
Mg 279.077 IEC†          831.1      5136.1 µg/L        19.82      5136.1 ppb          19.82   0.39%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.72%
Mn 257.610†           154517.0      494.01 µg/L        3.524      494.01 ppb          3.524   0.71%
   QC value within limits for Mn 257.610  Recovery = 98.80%
Mo 202.031†             4302.2      502.71 µg/L        7.904      502.71 ppb          7.904   1.57%
   QC value within limits for Mo 202.031  Recovery = 100.54%
Na 589.592 Radial†     41060.0       10282 µg/L         46.0       10282 ppb           46.0   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 102.82%
Ni 231.604†             9042.6      494.73 µg/L        2.064      494.73 ppb          2.064   0.42%
   QC value within limits for Ni 231.604  Recovery = 98.95%
P 214.914†              1210.8      2392.2 µg/L        44.88      2392.2 ppb          44.88   1.88%
   QC value within limits for P 214.914  Recovery = 95.69%
Pb 220.353†             1916.5      496.07 µg/L        6.600      496.07 ppb          6.600   1.33%
   QC value within limits for Pb 220.353  Recovery = 99.21%
S 181.975 Axial†         217.6      1063.7 µg/L        20.51      1063.7 ppb          20.51   1.93%
   QC value within limits for S 181.975 Axial  Recovery = 106.37%
Sb 206.836†              518.2      505.73 µg/L        8.019      505.73 ppb          8.019   1.59%
   QC value within limits for Sb 206.836  Recovery = 101.15%
Se 196.026†              396.6      509.00 µg/L        7.750      509.00 ppb          7.750   1.52%
   QC value within limits for Se 196.026  Recovery = 101.80%
SiO2†                   29508.4      5418.7 µg/L        25.76      5418.7 ppb          25.76   0.48%
   QC value within limits for SiO2  Recovery = 101.33%
Si 251.611†             34319.3      2491.2 µg/L        10.23      2491.2 ppb          10.23   0.41%
   QC value within limits for Si 251.611  Recovery = 99.65%
Sn 189.927†              997.5      513.54 µg/L       10.970      513.54 ppb         10.970   2.14%
   QC value within limits for Sn 189.927  Recovery = 102.71%
Sr 421.552†             98823.5      496.68 µg/L        2.923      496.68 ppb          2.923   0.59%
   QC value within limits for Sr 421.552  Recovery = 99.34%
Ti 334.940†            223785.4      509.48 µg/L        3.535      509.48 ppb          3.535   0.69%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†              330.0      509.21 µg/L        7.786      509.21 ppb          7.786   1.53%
   QC value within limits for Tl 190.801  Recovery = 101.84%
U 409.014†              5402.7      489.04 µg/L        1.402      489.04 ppb          1.402   0.29%
   QC value within limits for U 409.014  Recovery = 97.81%
V 292.402†              43790.1      497.30 µg/L        2.062      497.30 ppb          2.062   0.41%
   QC value within limits for V 292.402  Recovery = 99.46%
Zn 213.857†             18842.2      495.44 µg/L        2.433      495.44 ppb          2.433   0.49%
   QC value within limits for Zn 213.857  Recovery = 99.09%
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 08:44:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114652.2	114652.2	98.3	%			08:45:22
1	Al 396.153Radial†	164.5	44.0	21.845	µg/L	21.845	ppb	08:45:22
1	Ca 317.933Radial†	483.4	79.0	30.557	µg/L	30.557	ppb	08:45:42
1	Fe 238.204 Radial†	24.5	9.8	62.085	µg/L	62.085	ppb	08:45:42
1	K 766.490 Radial†	801.0	132.3	67.711	µg/L	67.711	ppb	08:45:22
1	Mg 279.077 IEC†	8.4	-6.9	-42.781	µg/L	-42.781	ppb	08:45:42
1	Na 589.592 Radial†	-516.0	109.2	27.355	µg/L	27.355	ppb	08:45:22
1	Sr 421.552†	-55.3	6.1	0.0306	µg/L	0.0306	ppb	08:45:22
1	Sc 361.383	2035715.8	2035715.8	100.67	%			08:46:44
1	Y 371.029	1271585.5	1271585.5	101.02	%			08:46:44
1	Ag 328.068†	139.2	127.8	1.1724	µg/L	1.1724	ppb	08:46:50
1	As 188.979†	3.2	0.9	1.6561	µg/L	1.6561	ppb	08:47:10
1	B 249.677†	173.6	34.6	1.4798	µg/L	1.4798	ppb	08:47:10
1	Ba 233.527†	-64.3	14.2	0.3653	µg/L	0.3653	ppb	08:47:10
1	Be 313.107†	3588.4	48.7	0.0298	µg/L	0.0298	ppb	08:46:50
1	Cd 226.502†	-102.9	-3.2	-0.0970	µg/L	-0.0970	ppb	08:47:10
1	Co 228.616†	-74.6	-7.5	-0.3630	µg/L	-0.3630	ppb	08:47:10
1	Cr 267.716†	-145.8	-45.1	-0.9444	µg/L	-0.9444	ppb	08:46:50
1	Cu 324.752†	4126.8	-170.3	-1.1683	µg/L	-1.1683	ppb	08:46:50
1	Mn 257.610†	-49.2	152.5	0.4946	µg/L	0.4946	ppb	08:47:10
1	Mo 202.031†	3.2	6.8	0.8006	µg/L	0.8006	ppb	08:47:10
1	Ni 231.604†	299.1	21.6	1.1815	µg/L	1.1815	ppb	08:47:10
1	P 214.914†	186.0	-16.1	-32.433	µg/L	-32.433	ppb	08:47:10
1	Pb 220.353†	49.8	-6.8	-1.7381	µg/L	-1.7381	ppb	08:47:10
1	S 181.975 Axial†	31.3	9.0	43.859	µg/L	43.859	ppb	08:47:10
1	Sb 206.836†	19.8	-1.5	-1.4360	µg/L	-1.4360	ppb	08:47:10
1	Se 196.026†	5.2	-4.7	-5.9689	µg/L	-5.9689	ppb	08:47:10
1	SiO2†	2877.1	106.6	19.580	µg/L	19.580	ppb	08:46:50
1	Si 251.611†	559.6	230.7	16.966	µg/L	16.966	ppb	08:47:10
1	Sn 189.927†	22.5	-0.1	-0.0344	µg/L	-0.0344	ppb	08:47:10
1	Ti 334.940†	1596.3	811.3	1.8465	µg/L	1.8465	ppb	08:46:50
1	Tl 190.801†	-20.6	-0.1	-0.1110	µg/L	-0.1110	ppb	08:47:10
1	U 409.014†	611.1	-123.4	-11.200	µg/L	-11.200	ppb	08:46:50
1	V 292.402†	-101.0	26.4	0.2900	µg/L	0.2900	ppb	08:46:50
1	Zn 213.857†	565.3	34.9	0.9146	µg/L	0.9146	ppb	08:47:10
2	Sc RADIAL	114296.2	114296.2	98.0	%			08:45:48
2	Al 396.153Radial†	173.8	54.1	26.823	µg/L	26.823	ppb	08:45:48
2	Ca 317.933Radial†	480.7	77.7	30.076	µg/L	30.076	ppb	08:46:08
2	Fe 238.204 Radial†	23.2	8.5	53.769	µg/L	53.769	ppb	08:46:08
2	K 766.490 Radial†	702.2	34.0	17.413	µg/L	17.413	ppb	08:45:48
2	Mg 279.077 IEC†	13.0	-2.2	-13.350	µg/L	-13.350	ppb	08:46:08
2	Na 589.592 Radial†	-563.2	59.4	14.882	µg/L	14.882	ppb	08:45:48
2	Sr 421.552†	-40.8	20.7	0.1040	µg/L	0.1040	ppb	08:45:48
2	Sc 361.383	2020871.5	2020871.5	99.933	%			08:47:16
2	Y 371.029	1262102.8	1262102.8	100.27	%			08:47:16
2	Ag 328.068†	109.2	98.8	0.9032	µg/L	0.9032	ppb	08:47:22
2	As 188.979†	-1.5	-3.7	-6.7694	µg/L	-6.7694	ppb	08:47:42
2	B 249.677†	186.8	49.0	2.1094	µg/L	2.1094	ppb	08:47:42
2	Ba 233.527†	-65.0	13.0	0.3323	µg/L	0.3323	ppb	08:47:42
2	Be 313.107†	3577.4	64.0	0.0395	µg/L	0.0395	ppb	08:47:22
2	Cd 226.502†	-91.9	7.0	0.1766	µg/L	0.1766	ppb	08:47:42
2	Co 228.616†	-75.7	-9.1	-0.4406	µg/L	-0.4406	ppb	08:47:42
2	Cr 267.716†	-110.9	-11.2	-0.2359	µg/L	-0.2359	ppb	08:47:22
2	Cu 324.752†	4103.7	-163.3	-1.1215	µg/L	-1.1215	ppb	08:47:22
2	Mn 257.610†	-103.6	97.6	0.3185	µg/L	0.3185	ppb	08:47:42
2	Mo 202.031†	4.2	7.8	0.9176	µg/L	0.9176	ppb	08:47:42
2	Ni 231.604†	298.5	23.2	1.2676	µg/L	1.2676	ppb	08:47:42
2	P 214.914†	186.0	-14.8	-29.720	µg/L	-29.720	ppb	08:47:42
2	Pb 220.353†	45.3	-10.9	-2.8073	µg/L	-2.8073	ppb	08:47:42

2	S 181.975 Axial†	30.4	8.2	40.334	µg/L	40.334 ppb	08:47:42
2	Sb 206.836†	21.9	0.8	0.7777	µg/L	0.7777 ppb	08:47:42
2	Se 196.026†	13.1	3.2	4.1724	µg/L	4.1724 ppb	08:47:42
2	SiO2†	2820.0	70.5	12.941	µg/L	12.941 ppb	08:47:22
2	Si 251.611†	544.2	219.4	16.163	µg/L	16.163 ppb	08:47:42
2	Sn 189.927†	22.3	-0.1	-0.0548	µg/L	-0.0548 ppb	08:47:42
2	Ti 334.940†	1429.9	656.4	1.4936	µg/L	1.4936 ppb	08:47:22
2	Tl 190.801†	-17.9	2.5	3.8272	µg/L	3.8272 ppb	08:47:42
2	U 409.014†	624.1	-105.9	-9.6129	µg/L	-9.6129 ppb	08:47:22
2	V 292.402†	-152.5	-25.9	-0.2962	µg/L	-0.2962 ppb	08:47:22
2	Zn 213.857†	564.8	38.5	1.0114	µg/L	1.0114 ppb	08:47:42
3	Sc RADIAL	114076.9	114076.9	97.8	%		08:46:14
3	Al 396.153Radial†	160.2	40.5	20.102	µg/L	20.102 ppb	08:46:14
3	Ca 317.933Radial†	440.9	38.0	14.718	µg/L	14.718 ppb	08:46:34
3	Fe 238.204 Radial†	20.2	5.5	35.030	µg/L	35.030 ppb	08:46:34
3	K 766.490 Radial†	788.2	123.4	63.146	µg/L	63.146 ppb	08:46:14
3	Mg 279.077 IEC†	11.1	-4.1	-25.206	µg/L	-25.206 ppb	08:46:34
3	Na 589.592 Radial†	-494.2	128.8	32.258	µg/L	32.258 ppb	08:46:14
3	Sr 421.552†	-30.6	31.0	0.1560	µg/L	0.1560 ppb	08:46:14
3	Sc 361.383	2019338.6	2019338.6	99.857	%		08:47:48
3	Y 371.029	1260383.4	1260383.4	100.13	%		08:47:48
3	Ag 328.068†	121.8	111.6	1.0199	µg/L	1.0199 ppb	08:47:54
3	As 188.979†	1.0	-1.2	-2.2338	µg/L	-2.2338 ppb	08:48:14
3	B 249.677†	158.0	20.4	0.8737	µg/L	0.8737 ppb	08:48:14
3	Ba 233.527†	-60.3	17.7	0.4536	µg/L	0.4536 ppb	08:48:14
3	Be 313.107†	3502.1	-8.8	-0.0061	µg/L	-0.0061 ppb	08:47:54
3	Cd 226.502†	-95.9	3.0	0.0759	µg/L	0.0759 ppb	08:48:14
3	Co 228.616†	-70.1	-3.5	-0.1736	µg/L	-0.1736 ppb	08:48:14
3	Cr 267.716†	-127.5	-27.8	-0.5840	µg/L	-0.5840 ppb	08:47:54
3	Cu 324.752†	4071.1	-192.9	-1.3302	µg/L	-1.3302 ppb	08:47:54
3	Mn 257.610†	28.4	229.7	0.7379	µg/L	0.7379 ppb	08:48:14
3	Mo 202.031†	1.2	4.8	0.5668	µg/L	0.5668 ppb	08:48:14
3	Ni 231.604†	310.7	35.6	1.9481	µg/L	1.9481 ppb	08:48:14
3	P 214.914†	188.3	-12.3	-24.748	µg/L	-24.748 ppb	08:48:14
3	Pb 220.353†	42.5	-13.7	-3.5421	µg/L	-3.5421 ppb	08:48:14
3	S 181.975 Axial†	29.2	7.1	34.573	µg/L	34.573 ppb	08:48:14
3	Sb 206.836†	22.9	1.9	1.8186	µg/L	1.8186 ppb	08:48:14
3	Se 196.026†	12.9	3.0	3.9287	µg/L	3.9287 ppb	08:48:14
3	SiO2†	2830.4	83.0	15.250	µg/L	15.250 ppb	08:47:54
3	Si 251.611†	616.8	292.5	21.487	µg/L	21.487 ppb	08:48:14
3	Sn 189.927†	25.7	3.3	1.6886	µg/L	1.6886 ppb	08:48:14
3	Ti 334.940†	1489.9	717.6	1.6338	µg/L	1.6338 ppb	08:47:54
3	Tl 190.801†	-18.9	1.4	2.1541	µg/L	2.1541 ppb	08:48:14
3	U 409.014†	689.5	-40.0	-3.6301	µg/L	-3.6301 ppb	08:47:54
3	V 292.402†	-126.9	-0.4	-0.0032	µg/L	-0.0032 ppb	08:47:54
3	Zn 213.857†	564.8	38.9	1.0207	µg/L	1.0207 ppb	08:48:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025308.6	100.15	%	0.447				0.45%
Sc RADIAL	114341.8	98.0	%	0.25				0.25%
Y 371.029	1264690.6	100.47	%	0.479				0.48%
Ag 328.068†	112.7	1.0318	µg/L	0.13497	1.0318	ppb	0.13497	13.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	46.2	22.923	µg/L	3.4881	22.923	ppb	3.4881	15.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-2.4490	µg/L	4.21682	-2.4490	ppb	4.21682	172.18%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	34.7	1.4876	µg/L	0.61788	1.4876	ppb	0.61788	41.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.0	0.3838	µg/L	0.06272	0.3838	ppb	0.06272	16.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	34.6	0.0211	µg/L	0.02400	0.0211	ppb	0.02400	113.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	64.9	25.117	µg/L	9.0094	25.117	ppb	9.0094	35.87%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.3	0.0518	µg/L	0.13840	0.0518	ppb	0.13840	267.04%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-6.7	-0.3257	µg/L	0.13734	-0.3257	ppb	0.13734	42.16%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -28.0     -0.5881 µg/L       0.35426     -0.5881 ppb        0.35426  60.23%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -175.5     -1.2066 µg/L       0.10951     -1.2066 ppb        0.10951   9.08%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         7.9      50.295 µg/L       13.8578      50.295 ppb        13.8578  27.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         96.6      49.423 µg/L       27.8154      49.423 ppb        27.8154  56.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.4     -27.112 µg/L       14.8079     -27.112 ppb        14.8079  54.62%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              159.9      0.5170 µg/L       0.21063      0.5170 ppb        0.21063  40.74%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.5      0.7617 µg/L       0.17861      0.7617 ppb        0.17861  23.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        99.2      24.832 µg/L        8.9587      24.832 ppb         8.9587  36.08%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               26.8      1.4657 µg/L       0.41997      1.4657 ppb        0.41997  28.65%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -14.4     -28.967 µg/L        3.8974     -28.967 ppb         3.8974  13.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -10.5     -2.6958 µg/L       0.90716     -2.6958 ppb        0.90716  33.65%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.1      39.588 µg/L        4.6874      39.588 ppb         4.6874  11.84%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.4      0.3868 µg/L       1.66216      0.3868 ppb        1.66216 429.76%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.5      0.7107 µg/L       5.78602      0.7107 ppb        5.78602 814.13%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     86.7      15.924 µg/L        3.3704      15.924 ppb         3.3704  21.17%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              247.5      18.205 µg/L        2.8702      18.205 ppb         2.8702  15.77%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.0      0.5331 µg/L       1.00076      0.5331 ppb        1.00076 187.72%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               19.3      0.0969 µg/L       0.06300      0.0969 ppb        0.06300  65.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              728.5      1.6580 µg/L       0.17765      1.6580 ppb        0.17765  10.71%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.3      1.9568 µg/L       1.97649      1.9568 ppb        1.97649 101.01%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -89.8     -8.1475 µg/L       3.99181     -8.1475 ppb        3.99181  48.99%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 0.1     -0.0031 µg/L       0.29307     -0.0031 ppb        0.29307 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               37.5      0.9822 µg/L       0.05876      0.9822 ppb        0.05876   5.98%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: 1201990789|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 318
Date Collected: 12/10/2009 08:48:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201990789|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114575.9	114575.9	98.2	%			08:49:01
1	Al 396.153Radial†	158.0	37.6	18.639	µg/L	18.639	ppb	08:49:01
1	Ca 317.933Radial†	508.4	104.8	40.540	µg/L	40.540	ppb	08:49:22
1	Fe 238.204 Radial†	27.0	12.4	78.633	µg/L	78.633	ppb	08:49:22
1	K 766.490 Radial†	693.1	23.1	11.808	µg/L	11.808	ppb	08:49:01
1	Mg 279.077 IEC†	13.4	-1.8	-10.989	µg/L	-10.989	ppb	08:49:22
1	Na 589.592 Radial†	-533.6	91.0	22.777	µg/L	22.777	ppb	08:49:01
1	Sr 421.552†	-4.8	57.4	0.2885	µg/L	0.2885	ppb	08:49:01
1	Sc 361.383	2003084.6	2003084.6	99.054	%			08:50:24
1	Y 371.029	1245172.3	1245172.3	98.922	%			08:50:24
1	Ag 328.068†	148.2	139.2	1.2747	µg/L	1.2747	ppb	08:50:29
1	As 188.979†	2.9	0.7	1.3415	µg/L	1.3415	ppb	08:50:50
1	B 249.677†	183.9	47.8	2.0470	µg/L	2.0470	ppb	08:50:29
1	Ba 233.527†	-58.2	19.3	0.4941	µg/L	0.4941	ppb	08:50:50
1	Be 313.107†	3494.2	11.7	0.0068	µg/L	0.0068	ppb	08:50:29
1	Cd 226.502†	-92.3	5.8	0.1493	µg/L	0.1493	ppb	08:50:50
1	Co 228.616†	-65.9	0.1	0.0038	µg/L	0.0038	ppb	08:50:50
1	Cr 267.716†	-79.2	19.9	0.4162	µg/L	0.4162	ppb	08:50:29
1	Cu 324.752†	4107.0	-123.5	-0.8397	µg/L	-0.8397	ppb	08:50:29
1	Mn 257.610†	80.9	283.0	0.9136	µg/L	0.9136	ppb	08:50:50
1	Mo 202.031†	3.7	7.4	0.8676	µg/L	0.8676	ppb	08:50:50
1	Ni 231.604†	305.3	32.7	1.7883	µg/L	1.7883	ppb	08:50:50
1	P 214.914†	184.3	-14.8	-29.865	µg/L	-29.865	ppb	08:50:50
1	Pb 220.353†	54.6	-1.1	-0.2848	µg/L	-0.2848	ppb	08:50:50
1	S 181.975 Axial†	35.3	13.4	65.821	µg/L	65.821	ppb	08:50:50
1	Sb 206.836†	18.2	-2.7	-2.6830	µg/L	-2.6830	ppb	08:50:50
1	Se 196.026†	12.1	2.4	3.1086	µg/L	3.1086	ppb	08:50:50
1	SiO2†	2756.9	31.8	5.8447	µg/L	5.8447	ppb	08:50:29
1	Si 251.611†	557.2	237.3	17.481	µg/L	17.481	ppb	08:50:50
1	Sn 189.927†	22.5	0.3	0.1797	µg/L	0.1797	ppb	08:50:50
1	Ti 334.940†	1418.5	657.6	1.4958	µg/L	1.4958	ppb	08:50:29
1	Tl 190.801†	-16.4	3.8	5.8411	µg/L	5.8411	ppb	08:50:50
1	U 409.014†	714.9	-8.8	-0.8087	µg/L	-0.8087	ppb	08:50:29
1	V 292.402†	-134.0	-8.5	-0.0846	µg/L	-0.0846	ppb	08:50:29
1	Zn 213.857†	603.3	82.5	2.1694	µg/L	2.1694	ppb	08:50:50
2	Sc RADIAL	114009.4	114009.4	97.8	%			08:49:27
2	Al 396.153Radial†	183.7	64.6	32.095	µg/L	32.095	ppb	08:49:27
2	Ca 317.933Radial†	495.3	93.9	36.330	µg/L	36.330	ppb	08:49:48
2	Fe 238.204 Radial†	27.0	12.4	78.935	µg/L	78.935	ppb	08:49:48
2	K 766.490 Radial†	707.8	41.6	21.289	µg/L	21.289	ppb	08:49:27
2	Mg 279.077 IEC†	11.2	-4.0	-24.982	µg/L	-24.982	ppb	08:49:48
2	Na 589.592 Radial†	-526.0	96.0	24.048	µg/L	24.048	ppb	08:49:27
2	Sr 421.552†	-2.7	59.6	0.2993	µg/L	0.2993	ppb	08:49:27
2	Sc 361.383	2000308.5	2000308.5	98.916	%			08:50:56
2	Y 371.029	1244069.7	1244069.7	98.834	%			08:50:56
2	Ag 328.068†	121.2	112.1	1.0308	µg/L	1.0308	ppb	08:51:02
2	As 188.979†	3.3	1.1	1.9654	µg/L	1.9654	ppb	08:51:22
2	B 249.677†	180.6	44.7	1.9130	µg/L	1.9130	ppb	08:51:02
2	Ba 233.527†	-57.8	19.7	0.5049	µg/L	0.5049	ppb	08:51:22
2	Be 313.107†	3534.8	57.7	0.0354	µg/L	0.0354	ppb	08:51:02
2	Cd 226.502†	-85.5	12.5	0.3262	µg/L	0.3262	ppb	08:51:22
2	Co 228.616†	-52.8	13.3	0.6370	µg/L	0.6370	ppb	08:51:22
2	Cr 267.716†	-68.3	30.7	0.6448	µg/L	0.6448	ppb	08:51:02
2	Cu 324.752†	4162.9	-61.3	-0.4079	µg/L	-0.4079	ppb	08:51:02
2	Mn 257.610†	-23.6	177.4	0.5765	µg/L	0.5765	ppb	08:51:22
2	Mo 202.031†	-4.7	-1.1	-0.1256	µg/L	-0.1256	ppb	08:51:22
2	Ni 231.604†	308.6	36.4	1.9907	µg/L	1.9907	ppb	08:51:22
2	P 214.914†	185.2	-13.7	-27.775	µg/L	-27.775	ppb	08:51:22
2	Pb 220.353†	64.1	8.5	2.2133	µg/L	2.2133	ppb	08:51:22

2	S 181.975 Axial†	31.4	9.6	46.855	µg/L	46.855 ppb	08:51:22
2	Sb 206.836†	15.8	-5.1	-5.0020	µg/L	-5.0020 ppb	08:51:22
2	Se 196.026†	8.7	-1.1	-1.3414	µg/L	-1.3414 ppb	08:51:22
2	SiO2†	2781.2	60.3	11.081	µg/L	11.081 ppb	08:51:02
2	Si 251.611†	541.0	221.7	16.431	µg/L	16.431 ppb	08:51:22
2	Sn 189.927†	17.3	-4.9	-2.5149	µg/L	-2.5149 ppb	08:51:22
2	Ti 334.940†	1557.0	799.7	1.8196	µg/L	1.8196 ppb	08:51:02
2	Tl 190.801†	-19.9	0.2	0.3861	µg/L	0.3861 ppb	08:51:22
2	U 409.014†	672.4	-50.7	-4.6107	µg/L	-4.6107 ppb	08:51:02
2	V 292.402†	-94.1	31.6	0.3535	µg/L	0.3535 ppb	08:51:02
2	Zn 213.857†	604.9	84.9	2.2330	µg/L	2.2330 ppb	08:51:22
3	Sc RADIAL	113915.7	113915.7	97.7	%		08:49:53
3	Al 396.153Radial†	180.5	61.6	30.585	µg/L	30.585 ppb	08:49:53
3	Ca 317.933Radial†	479.5	78.1	30.227	µg/L	30.227 ppb	08:50:14
3	Fe 238.204 Radial†	26.7	12.2	77.269	µg/L	77.269 ppb	08:50:14
3	K 766.490 Radial†	753.5	88.9	45.511	µg/L	45.511 ppb	08:49:53
3	Mg 279.077 IEC†	14.6	-0.5	-2.9104	µg/L	-2.9104 ppb	08:50:14
3	Na 589.592 Radial†	-481.8	140.8	35.259	µg/L	35.259 ppb	08:49:53
3	Sr 421.552†	-5.2	57.0	0.2863	µg/L	0.2863 ppb	08:49:53
3	Sc 361.383	2014944.7	2014944.7	99.640	%		08:51:28
3	Y 371.029	1254141.0	1254141.0	99.634	%		08:51:28
3	Ag 328.068†	103.1	93.0	0.8531	µg/L	0.8531 ppb	08:51:34
3	As 188.979†	5.2	3.0	5.4658	µg/L	5.4658 ppb	08:51:55
3	B 249.677†	180.0	42.8	1.8305	µg/L	1.8305 ppb	08:51:34
3	Ba 233.527†	-63.5	14.3	0.3667	µg/L	0.3667 ppb	08:51:55
3	Be 313.107†	3476.2	-27.2	-0.0176	µg/L	-0.0176 ppb	08:51:34
3	Cd 226.502†	-87.9	10.7	0.2760	µg/L	0.2760 ppb	08:51:55
3	Co 228.616†	-71.5	-5.1	-0.2518	µg/L	-0.2518 ppb	08:51:55
3	Cr 267.716†	-91.2	8.3	0.1738	µg/L	0.1738 ppb	08:51:34
3	Cu 324.752†	4097.0	-157.9	-1.0790	µg/L	-1.0790 ppb	08:51:34
3	Mn 257.610†	17.7	219.1	0.7094	µg/L	0.7094 ppb	08:51:55
3	Mo 202.031†	-4.3	-0.6	-0.0689	µg/L	-0.0689 ppb	08:51:55
3	Ni 231.604†	298.4	23.9	1.3056	µg/L	1.3056 ppb	08:51:55
3	P 214.914†	179.8	-20.5	-41.274	µg/L	-41.274 ppb	08:51:55
3	Pb 220.353†	41.9	-14.2	-3.6522	µg/L	-3.6522 ppb	08:51:55
3	S 181.975 Axial†	30.8	8.8	42.921	µg/L	42.921 ppb	08:51:55
3	Sb 206.836†	13.7	-7.4	-7.2348	µg/L	-7.2348 ppb	08:51:55
3	Se 196.026†	7.2	-2.6	-3.2994	µg/L	-3.2994 ppb	08:51:55
3	SiO2†	2843.5	102.4	18.799	µg/L	18.799 ppb	08:51:34
3	Si 251.611†	1952.6	1634.4	120.90	µg/L	120.90 ppb	08:51:55
3	Sn 189.927†	21.2	-1.1	-0.5706	µg/L	-0.5706 ppb	08:51:55
3	Ti 334.940†	1436.4	667.2	1.5180	µg/L	1.5180 ppb	08:51:34
3	Tl 190.801†	-19.6	0.7	1.1030	µg/L	1.1030 ppb	08:51:55
3	U 409.014†	645.8	-82.3	-7.4778	µg/L	-7.4778 ppb	08:51:34
3	V 292.402†	-138.9	-12.7	-0.1489	µg/L	-0.1489 ppb	08:51:34
3	Zn 213.857†	596.5	72.0	1.8953	µg/L	1.8953 ppb	08:51:55

Mean Data: 1201990789|930802|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2006112.6	99.203	%	0.3844				0.39%
Sc RADIAL	114167.0	97.9	%	0.31				0.31%
Y 371.029	1247794.3	99.130	%	0.4388				0.44%
Ag 328.068†	114.8	1.0529	µg/L	0.21163	1.0529	ppb	0.21163	20.10%
Al 396.153Radial†	54.6	27.106	µg/L	7.3714	27.106	ppb	7.3714	27.19%
As 188.979†	1.6	2.9242	µg/L	2.22302	2.9242	ppb	2.22302	76.02%
B 249.677†	45.1	1.9302	µg/L	0.10925	1.9302	ppb	0.10925	5.66%
Ba 233.527†	17.7	0.4552	µg/L	0.07690	0.4552	ppb	0.07690	16.89%
Be 313.107†	14.1	0.0082	µg/L	0.02651	0.0082	ppb	0.02651	323.10%
Ca 317.933Radial†	92.3	35.699	µg/L	5.1856	35.699	ppb	5.1856	14.53%
Cd 226.502†	9.7	0.2505	µg/L	0.09114	0.2505	ppb	0.09114	36.38%
Co 228.616†	2.7	0.1297	µg/L	0.45757	0.1297	ppb	0.45757	352.88%
Cr 267.716†	19.6	0.4116	µg/L	0.23550	0.4116	ppb	0.23550	57.22%
Cu 324.752†	-114.2	-0.7755	µg/L	0.34009	-0.7755	ppb	0.34009	43.85%
Fe 238.204 Radial†	12.3	78.279	µg/L	0.8878	78.279	ppb	0.8878	1.13%
K 766.490 Radial†	51.2	26.202	µg/L	17.3804	26.202	ppb	17.3804	66.33%
Mg 279.077 IEC†	-2.1	-12.960	µg/L	11.1671	-12.960	ppb	11.1671	86.16%
Mn 257.610†	226.5	0.7331	µg/L	0.16980	0.7331	ppb	0.16980	23.16%
Mo 202.031†	1.9	0.2244	µg/L	0.55780	0.2244	ppb	0.55780	248.59%
Na 589.592 Radial†	109.3	27.361	µg/L	6.8690	27.361	ppb	6.8690	25.11%

Ni 231.604†	31.0	1.6949	µg/L	0.35197	1.6949	ppb	0.35197 20.77%
P 214.914†	-16.3	-32.971	µg/L	7.2661	-32.971	ppb	7.2661 22.04%
Pb 220.353†	-2.2	-0.5746	µg/L	2.94348	-0.5746	ppb	2.94348 512.28%
S 181.975 Axial†	10.6	51.865	µg/L	12.2447	51.865	ppb	12.2447 23.61%
Sb 206.836†	-5.1	-4.9733	µg/L	2.27600	-4.9733	ppb	2.27600 45.76%
Se 196.026†	-0.5	-0.5107	µg/L	3.28372	-0.5107	ppb	3.28372 642.95%
SiO2†	64.8	11.908	µg/L	6.5165	11.908	ppb	6.5165 54.72%
Si 251.611†	697.8	51.605	µg/L	60.0171	51.605	ppb	60.0171 116.30%
Sn 189.927†	-1.9	-0.9686	µg/L	1.39074	-0.9686	ppb	1.39074 143.58%
Sr 421.552†	58.0	0.2914	µg/L	0.00696	0.2914	ppb	0.00696 2.39%
Ti 334.940†	708.2	1.6111	µg/L	0.18086	1.6111	ppb	0.18086 11.23%
Tl 190.801†	1.6	2.4434	µg/L	2.96427	2.4434	ppb	2.96427 121.32%
U 409.014†	-47.3	-4.2991	µg/L	3.34548	-4.2991	ppb	3.34548 77.82%
V 292.402†	3.5	0.0400	µg/L	0.27344	0.0400	ppb	0.27344 683.89%
Zn 213.857†	79.8	2.0992	µg/L	0.17944	2.0992	ppb	0.17944 8.55%

Sequence No.: 23
Sample ID: 1201990790|930802|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 319
Date Collected: 12/10/2009 08:52:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201990790|930802|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	117622.5	117622.5	101	%			08:52:36
1	Al 396.153Radial†	78419.0	77633.1	38564	µg/L	38564	ppb	08:52:36
1	Ca 317.933Radial†	117589.4	116183.1	44954	µg/L	44954	ppb	08:52:36
1	Fe 238.204 Radial†	13562.5	13432.8	85440	µg/L	85440	ppb	08:52:57
1	K 766.490 Radial†	36551.4	35560.1	18199	µg/L	18199	ppb	08:52:36
1	Mg 279.077 IEC†	2840.5	2801.0	17174	µg/L	17174	ppb	08:52:57
1	Na 589.592 Radial†	17628.0	18113.1	4536.0	µg/L	4536.0	ppb	08:52:36
1	Sr 421.552†	198484.3	196869.6	989.46	µg/L	989.46	ppb	08:52:36
1	Sc 361.383	2031784.7	2031784.7	100.47	%			08:54:01
1	Y 371.029	1267012.7	1267012.7	100.66	%			08:54:01
1	Ag 328.068†	14803.8	14723.8	144.68	µg/L	144.68	ppb	08:54:07
1	As 188.979†	277.5	273.9	484.97	µg/L	484.97	ppb	08:54:27
1	B 249.677†	16133.0	15919.2	663.27	µg/L	663.27	ppb	08:54:07
1	Ba 233.527†	33638.6	33558.4	861.87	µg/L	861.87	ppb	08:54:07
1	Be 313.107†	573496.9	567282.3	353.98	µg/L	353.98	ppb	08:54:01
1	Cd 226.502†	10346.7	10396.9	270.74	µg/L	270.74	ppb	08:54:07
1	Co 228.616†	8775.7	8801.0	420.21	µg/L	420.21	ppb	08:54:07
1	Cr 267.716†	51297.8	51156.2	1074.1	µg/L	1074.1	ppb	08:54:07
1	Cu 324.752†	118325.0	113498.4	805.63	µg/L	805.63	ppb	08:54:07
1	Mn 257.610†	791759.3	788234.9	2527.6	µg/L	2527.6	ppb	08:54:01
1	Mo 202.031†	2049.5	2043.5	242.05	µg/L	242.05	ppb	08:54:27
1	Ni 231.604†	11374.0	11044.9	604.28	µg/L	604.28	ppb	08:54:07
1	P 214.914†	2020.6	1810.2	3483.2	µg/L	3483.2	ppb	08:54:27
1	Pb 220.353†	1696.8	1632.6	423.85	µg/L	423.85	ppb	08:54:27
1	S 181.975 Axial†	370.3	346.4	1681.1	µg/L	1681.1	ppb	08:54:27
1	Sb 206.836†	857.1	831.9	814.58	µg/L	814.58	ppb	08:54:27
1	Se 196.026†	1019.0	1004.3	1342.5	µg/L	1342.5	ppb	08:54:27
1	SiO2†	55447.7	52435.4	9628.8	µg/L	9628.8	ppb	08:54:07
1	Si 251.611†	61296.6	60683.0	4365.1	µg/L	4365.1	ppb	08:54:07
1	Sn 189.927†	913.6	886.9	477.56	µg/L	477.56	ppb	08:54:27
1	Ti 334.940†	1189358.3	1182987.1	2692.2	µg/L	2692.2	ppb	08:54:01
1	Tl 190.801†	351.2	369.9	589.26	µg/L	589.26	ppb	08:54:27
1	U 409.014†	519.5	-213.4	-34.236	µg/L	-34.236	ppb	08:54:07
1	V 292.402†	48245.9	48145.6	550.19	µg/L	550.19	ppb	08:54:07
1	Zn 213.857†	101206.4	100203.5	2642.0	µg/L	2642.0	ppb	08:54:07
2	Sc RADIAL	116372.9	116372.9	99.8	%			08:53:02
2	Al 396.153Radial†	78584.2	78633.6	39061	µg/L	39061	ppb	08:53:02
2	Ca 317.933Radial†	117468.9	117314.2	45391	µg/L	45391	ppb	08:53:02
2	Fe 238.204 Radial†	13660.1	13674.9	86980	µg/L	86980	ppb	08:53:23
2	K 766.490 Radial†	36576.1	35973.9	18411	µg/L	18411	ppb	08:53:02
2	Mg 279.077 IEC†	2856.9	2847.7	17459	µg/L	17459	ppb	08:53:23
2	Na 589.592 Radial†	17600.9	18273.7	4576.2	µg/L	4576.2	ppb	08:53:02
2	Sr 421.552†	198758.0	199257.0	1001.5	µg/L	1001.5	ppb	08:53:02
2	Sc 361.383	2029810.9	2029810.9	100.38	%			08:54:34
2	Y 371.029	1265825.2	1265825.2	100.56	%			08:54:34
2	Ag 328.068†	14882.5	14816.4	145.66	µg/L	145.66	ppb	08:54:40
2	As 188.979†	281.2	278.0	492.07	µg/L	492.07	ppb	08:55:00
2	B 249.677†	16157.7	15959.4	664.52	µg/L	664.52	ppb	08:54:40
2	Ba 233.527†	33766.1	33717.9	865.97	µg/L	865.97	ppb	08:54:40
2	Be 313.107†	578040.6	572364.0	357.15	µg/L	357.15	ppb	08:54:34
2	Cd 226.502†	10398.1	10458.2	272.26	µg/L	272.26	ppb	08:54:40
2	Co 228.616†	8797.2	8830.9	421.60	µg/L	421.60	ppb	08:54:40
2	Cr 267.716†	51521.9	51429.1	1079.8	µg/L	1079.8	ppb	08:54:40
2	Cu 324.752†	118529.9	113817.0	808.17	µg/L	808.17	ppb	08:54:40
2	Mn 257.610†	797894.0	795112.9	2549.7	µg/L	2549.7	ppb	08:54:34
2	Mo 202.031†	2023.7	2019.9	239.35	µg/L	239.35	ppb	08:55:00
2	Ni 231.604†	11466.0	11147.5	609.90	µg/L	609.90	ppb	08:54:40
2	P 214.914†	2020.9	1812.5	3485.9	µg/L	3485.9	ppb	08:55:00
2	Pb 220.353†	1672.9	1610.4	418.12	µg/L	418.12	ppb	08:55:00

2	S 181.975 Axial†	373.1	349.6	1696.2 µg/L	1696.2 ppb	08:55:00
2	Sb 206.836†	861.7	837.4	819.94 µg/L	819.94 ppb	08:55:00
2	Se 196.026†	1010.7	997.1	1334.2 µg/L	1334.2 ppb	08:55:00
2	SiO2†	56230.4	53268.8	9781.8 µg/L	9781.8 ppb	08:54:40
2	Si 251.611†	62274.9	61716.9	4440.9 µg/L	4440.9 ppb	08:54:40
2	Sn 189.927†	908.1	882.3	475.52 µg/L	475.52 ppb	08:55:00
2	Ti 334.940†	1198279.7	1193026.2	2715.1 µg/L	2715.1 ppb	08:54:34
2	Tl 190.801†	349.4	368.5	587.33 µg/L	587.33 ppb	08:55:00
2	U 409.014†	543.7	-188.8	-32.277 µg/L	-32.277 ppb	08:54:40
2	V 292.402†	48440.5	48386.1	553.00 µg/L	553.00 ppb	08:54:40
2	Zn 213.857†	101515.9	100609.8	2652.6 µg/L	2652.6 ppb	08:54:40
3	Sc RADIAL	117594.7	117594.7	101 %		08:53:28
3	Al 396.153Radial†	79133.6	78360.3	38925 µg/L	38925 ppb	08:53:28
3	Ca 317.933Radial†	118979.1	117588.9	45497 µg/L	45497 ppb	08:53:28
3	Fe 238.204 Radial†	13654.6	13527.2	86040 µg/L	86040 ppb	08:53:48
3	K 766.490 Radial†	36848.9	35863.7	18355 µg/L	18355 ppb	08:53:28
3	Mg 279.077 IEC†	2855.8	2816.9	17271 µg/L	17271 ppb	08:53:48
3	Na 589.592 Radial†	17697.5	18186.2	4554.3 µg/L	4554.3 ppb	08:53:28
3	Sr 421.552†	200560.4	198975.2	1000.0 µg/L	1000.0 ppb	08:53:28
3	Sc 361.383	2047828.0	2047828.0	101.27 %		08:55:07
3	Y 371.029	1277524.7	1277524.7	101.49 %		08:55:07
3	Ag 328.068†	14804.3	14608.8	143.66 µg/L	143.66 ppb	08:55:13
3	As 188.979†	270.7	265.1	468.70 µg/L	468.70 ppb	08:55:34
3	B 249.677†	16157.2	15817.3	658.66 µg/L	658.66 ppb	08:55:13
3	Ba 233.527†	33705.1	33361.7	856.82 µg/L	856.82 ppb	08:55:13
3	Be 313.107†	581168.7	570386.4	355.92 µg/L	355.92 ppb	08:55:07
3	Cd 226.502†	10392.4	10361.4	269.76 µg/L	269.76 ppb	08:55:13
3	Co 228.616†	8775.0	8731.9	416.83 µg/L	416.83 ppb	08:55:13
3	Cr 267.716†	51390.2	50847.5	1067.6 µg/L	1067.6 ppb	08:55:13
3	Cu 324.752†	118135.6	112388.7	798.06 µg/L	798.06 ppb	08:55:13
3	Mn 257.610†	801781.8	791958.3	2539.5 µg/L	2539.5 ppb	08:55:07
3	Mo 202.031†	2040.8	2019.0	239.20 µg/L	239.20 ppb	08:55:34
3	Ni 231.604†	11464.2	11045.2	604.30 µg/L	604.30 ppb	08:55:13
3	P 214.914†	2008.6	1782.5	3427.7 µg/L	3427.7 ppb	08:55:34
3	Pb 220.353†	1680.7	1603.4	416.32 µg/L	416.32 ppb	08:55:34
3	S 181.975 Axial†	368.5	341.7	1657.9 µg/L	1657.9 ppb	08:55:34
3	Sb 206.836†	854.1	822.3	805.17 µg/L	805.17 ppb	08:55:34
3	Se 196.026†	1035.9	1013.1	1354.2 µg/L	1354.2 ppb	08:55:34
3	SiO2†	56345.0	52889.2	9712.1 µg/L	9712.1 ppb	08:55:13
3	Si 251.611†	62288.7	61184.7	4401.9 µg/L	4401.9 ppb	08:55:13
3	Sn 189.927†	911.8	878.0	473.18 µg/L	473.18 ppb	08:55:34
3	Ti 334.940†	1204577.4	1188741.9	2705.3 µg/L	2705.3 ppb	08:55:07
3	Tl 190.801†	342.1	358.2	571.43 µg/L	571.43 ppb	08:55:34
3	U 409.014†	606.7	-131.3	-26.890 µg/L	-26.890 ppb	08:55:13
3	V 292.402†	48394.1	47915.8	547.64 µg/L	547.64 ppb	08:55:13
3	Zn 213.857†	101389.7	99595.4	2625.8 µg/L	2625.8 ppb	08:55:13

Mean Data: 1201990790|930802|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2036474.5	100.70	%	0.489				0.49%
Sc RADIAL	117196.7	100	%	0.6				0.61%
Y 371.029	1270120.9	100.90	%	0.512				0.51%
Ag 328.068†	14716.3	144.66	µg/L	1.002	144.66	ppb	1.002	0.69%
Al 396.153Radial†	78209.0	38850	µg/L	257.0	38850	ppb	257.0	0.66%
As 188.979†	272.3	481.91	µg/L	11.984	481.91	ppb	11.984	2.49%
B 249.677†	15898.6	662.15	µg/L	3.088	662.15	ppb	3.088	0.47%
Ba 233.527†	33546.0	861.56	µg/L	4.581	861.56	ppb	4.581	0.53%
Be 313.107†	570010.9	355.68	µg/L	1.599	355.68	ppb	1.599	0.45%
Ca 317.933Radial†	117028.7	45281	µg/L	288.3	45281	ppb	288.3	0.64%
Cd 226.502†	10405.5	270.92	µg/L	1.262	270.92	ppb	1.262	0.47%
Co 228.616†	8788.0	419.55	µg/L	2.450	419.55	ppb	2.450	0.58%
Cr 267.716†	51144.3	1073.9	µg/L	6.11	1073.9	ppb	6.11	0.57%
Cu 324.752†	113234.7	803.95	µg/L	5.259	803.95	ppb	5.259	0.65%
Fe 238.204 Radial†	13545.0	86153	µg/L	776.2	86153	ppb	776.2	0.90%
K 766.490 Radial†	35799.2	18322	µg/L	109.7	18322	ppb	109.7	0.60%
Mg 279.077 IEC†	2821.9	17301	µg/L	145.3	17301	ppb	145.3	0.84%
Mn 257.610†	791768.7	2539.0	µg/L	11.09	2539.0	ppb	11.09	0.44%
Mo 202.031†	2027.4	240.20	µg/L	1.602	240.20	ppb	1.602	0.67%
Na 589.592 Radial†	18191.0	4555.5	µg/L	20.14	4555.5	ppb	20.14	0.44%

Ni 231.604†	11079.2	606.16 µg/L	3.237	606.16 ppb	3.237	0.53%
P 214.914†	1801.7	3465.6 µg/L	32.87	3465.6 ppb	32.87	0.95%
Pb 220.353†	1615.4	419.43 µg/L	3.930	419.43 ppb	3.930	0.94%
S 181.975 Axial†	345.9	1678.4 µg/L	19.29	1678.4 ppb	19.29	1.15%
Sb 206.836†	830.5	813.23 µg/L	7.476	813.23 ppb	7.476	0.92%
Se 196.026†	1004.8	1343.6 µg/L	10.02	1343.6 ppb	10.02	0.75%
SiO2†	52864.5	9707.6 µg/L	76.63	9707.6 ppb	76.63	0.79%
Si 251.611†	61194.9	4402.6 µg/L	37.88	4402.6 ppb	37.88	0.86%
Sn 189.927†	882.4	475.42 µg/L	2.191	475.42 ppb	2.191	0.46%
Sr 421.552†	198367.3	996.99 µg/L	6.557	996.99 ppb	6.557	0.66%
Ti 334.940†	1188251.7	2704.2 µg/L	11.46	2704.2 ppb	11.46	0.42%
Tl 190.801†	365.5	582.68 µg/L	9.784	582.68 ppb	9.784	1.68%
U 409.014†	-177.8	-31.134 µg/L	3.8043	-31.134 ppb	3.8043	12.22%
V 292.402†	48149.2	550.28 µg/L	2.681	550.28 ppb	2.681	0.49%
Zn 213.857†	100136.2	2640.1 µg/L	13.47	2640.1 ppb	13.47	0.51%

Sequence No.: 24
Sample ID: 241322001|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 320
Date Collected: 12/10/2009 08:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322001|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	115074.1	115074.1	98.7	%			08:56:15
1	Al 396.153Radial†	25374.6	25594.0	12716	µg/L	12716	ppb	08:56:15
1	Ca 317.933Radial†	12338.0	12091.9	4678.6	µg/L	4678.6	ppb	08:56:36
1	Fe 238.204 Radial†	11012.6	11146.2	70885	µg/L	70885	ppb	08:56:36
1	K 766.490 Radial†	5999.4	5397.9	2762.6	µg/L	2762.6	ppb	08:56:15
1	Mg 279.077 IEC†	485.2	476.4	2836.7	µg/L	2836.7	ppb	08:56:36
1	Na 589.592 Radial†	1321.7	1973.6	494.25	µg/L	494.25	ppb	08:56:15
1	Sr 421.552†	5165.1	5297.2	26.624	µg/L	26.624	ppb	08:56:15
1	Sc 361.383	2031161.1	2031161.1	100.44	%			08:57:40
1	Y 371.029	1304889.1	1304889.1	103.67	%			08:57:40
1	Ag 328.068†	-508.6	-516.7	1.4095	µg/L	1.4095	ppb	08:57:45
1	As 188.979†	6.4	4.2	3.9330	µg/L	3.9330	ppb	08:58:06
1	B 249.677†	963.6	821.5	13.322	µg/L	13.322	ppb	08:57:45
1	Ba 233.527†	7143.0	7189.6	184.57	µg/L	184.57	ppb	08:57:45
1	Be 313.107†	10217.5	6656.7	3.1582	µg/L	3.1582	ppb	08:57:45
1	Cd 226.502†	192.8	290.9	2.2348	µg/L	2.2348	ppb	08:57:45
1	Co 228.616†	230.8	296.5	8.6617	µg/L	8.6617	ppb	08:58:06
1	Cr 267.716†	1308.5	1402.6	29.595	µg/L	29.595	ppb	08:57:45
1	Cu 324.752†	4993.8	702.0	20.095	µg/L	20.095	ppb	08:57:45
1	Mn 257.610†	474221.5	472336.2	1517.1	µg/L	1517.1	ppb	08:57:40
1	Mo 202.031†	70.2	73.6	11.380	µg/L	11.380	ppb	08:58:06
1	Ni 231.604†	683.5	405.0	22.156	µg/L	22.156	ppb	08:58:06
1	P 214.914†	622.7	419.0	766.61	µg/L	766.61	ppb	08:58:06
1	Pb 220.353†	239.2	181.9	47.293	µg/L	47.293	ppb	08:58:06
1	S 181.975 Axial†	61.6	39.1	180.75	µg/L	180.75	ppb	08:58:06
1	Sb 206.836†	21.4	0.2	9.7785	µg/L	9.7785	ppb	08:58:06
1	Se 196.026†	-21.2	-31.0	9.5272	µg/L	9.5272	ppb	08:58:06
1	SiO2†	64714.4	61678.2	11326	µg/L	11326	ppb	08:57:45
1	Si 251.611†	71793.9	71152.8	5166.9	µg/L	5166.9	ppb	08:57:45
1	Sn 189.927†	-11.7	-34.0	-7.4937	µg/L	-7.4937	ppb	08:58:06
1	Ti 334.940†	1200387.9	1194331.6	2720.3	µg/L	2720.3	ppb	08:57:40
1	Tl 190.801†	-32.0	-11.5	7.3774	µg/L	7.3774	ppb	08:58:06
1	U 409.014†	113.6	-617.3	-69.097	µg/L	-69.097	ppb	08:57:45
1	V 292.402†	6744.3	6841.4	82.710	µg/L	82.710	ppb	08:57:45
1	Zn 213.857†	15283.3	14689.4	381.59	µg/L	381.59	ppb	08:57:45
2	Sc RADIAL	113464.6	113464.6	97.3	%			08:56:42
2	Al 396.153Radial†	25557.0	26146.4	12991	µg/L	12991	ppb	08:56:42
2	Ca 317.933Radial†	12359.1	12291.0	4755.6	µg/L	4755.6	ppb	08:57:02
2	Fe 238.204 Radial†	11038.0	11330.7	72058	µg/L	72058	ppb	08:57:02
2	K 766.490 Radial†	6083.5	5570.6	2851.0	µg/L	2851.0	ppb	08:56:42
2	Mg 279.077 IEC†	486.9	485.0	2888.6	µg/L	2888.6	ppb	08:57:02
2	Na 589.592 Radial†	1308.3	1978.9	495.55	µg/L	495.55	ppb	08:56:42
2	Sr 421.552†	5144.5	5350.3	26.891	µg/L	26.891	ppb	08:56:42
2	Sc 361.383	2017620.0	2017620.0	99.772	%			08:58:12
2	Y 371.029	1295744.8	1295744.8	102.94	%			08:58:12
2	Ag 328.068†	-566.0	-577.7	0.9457	µg/L	0.9457	ppb	08:58:18
2	As 188.979†	8.6	6.4	7.7411	µg/L	7.7411	ppb	08:58:39
2	B 249.677†	959.6	824.0	13.062	µg/L	13.062	ppb	08:58:18
2	Ba 233.527†	7091.5	7185.7	184.47	µg/L	184.47	ppb	08:58:18
2	Be 313.107†	10254.3	6761.9	3.2214	µg/L	3.2214	ppb	08:58:18
2	Cd 226.502†	158.1	257.4	1.2555	µg/L	1.2555	ppb	08:58:18
2	Co 228.616†	229.2	296.3	8.6423	µg/L	8.6423	ppb	08:58:39
2	Cr 267.716†	1300.3	1403.0	29.604	µg/L	29.604	ppb	08:58:18
2	Cu 324.752†	4884.3	625.7	19.818	µg/L	19.818	ppb	08:58:18
2	Mn 257.610†	471528.1	472805.3	1518.7	µg/L	1518.7	ppb	08:58:12
2	Mo 202.031†	72.5	76.4	11.751	µg/L	11.751	ppb	08:58:39
2	Ni 231.604†	672.5	398.5	21.802	µg/L	21.802	ppb	08:58:39
2	P 214.914†	622.6	423.1	773.65	µg/L	773.65	ppb	08:58:39
2	Pb 220.353†	240.3	184.6	47.999	µg/L	47.999	ppb	08:58:39

2	S 181.975 Axial†	60.5	38.4	177.14 µg/L	177.14 ppb	08:58:39
2	Sb 206.836†	15.7	-5.4	4.3339 µg/L	4.3339 ppb	08:58:39
2	Se 196.026†	-26.3	-36.2	3.6414 µg/L	3.6414 ppb	08:58:39
2	SiO2†	64877.7	62274.4	11436 µg/L	11436 ppb	08:58:18
2	Si 251.611†	72041.4	71880.5	5220.4 µg/L	5220.4 ppb	08:58:18
2	Sn 189.927†	-7.9	-30.3	-5.4140 µg/L	-5.4140 ppb	08:58:39
2	Ti 334.940†	1195475.9	1197429.2	2727.4 µg/L	2727.4 ppb	08:58:12
2	Tl 190.801†	-32.1	-11.8	7.0884 µg/L	7.0884 ppb	08:58:39
2	U 409.014†	171.0	-559.1	-64.034 µg/L	-64.034 ppb	08:58:18
2	V 292.402†	6689.4	6831.4	82.704 µg/L	82.704 ppb	08:58:18
2	Zn 213.857†	15219.0	14727.1	382.46 µg/L	382.46 ppb	08:58:18
3	Sc RADIAL	115013.4	115013.4	98.6 %		08:57:07
3	Al 396.153Radial†	25356.1	25588.9	12714 µg/L	12714 ppb	08:57:07
3	Ca 317.933Radial†	12267.8	12027.3	4653.6 µg/L	4653.6 ppb	08:57:28
3	Fe 238.204 Radial†	10941.9	11080.5	70467 µg/L	70467 ppb	08:57:28
3	K 766.490 Radial†	6024.7	5426.8	2777.4 µg/L	2777.4 ppb	08:57:07
3	Mg 279.077 IEC†	474.1	465.3	2769.0 µg/L	2769.0 ppb	08:57:28
3	Na 589.592 Radial†	1295.3	1947.5	487.71 µg/L	487.71 ppb	08:57:07
3	Sr 421.552†	5123.7	5258.0	26.426 µg/L	26.426 ppb	08:57:07
3	Sc 361.383	2029374.4	2029374.4	100.35 %		08:58:45
3	Y 371.029	1303590.6	1303590.6	103.56 %		08:58:45
3	Ag 328.068†	-509.4	-518.0	1.3619 µg/L	1.3619 ppb	08:58:51
3	As 188.979†	5.0	2.8	1.4537 µg/L	1.4537 ppb	08:59:12
3	B 249.677†	944.1	802.9	12.649 µg/L	12.649 ppb	08:58:51
3	Ba 233.527†	7128.3	7181.3	184.35 µg/L	184.35 ppb	08:58:51
3	Be 313.107†	10229.2	6677.2	3.1748 µg/L	3.1748 ppb	08:58:51
3	Cd 226.502†	165.7	264.0	1.5477 µg/L	1.5477 ppb	08:58:51
3	Co 228.616†	231.3	297.2	8.7201 µg/L	8.7201 ppb	08:59:12
3	Cr 267.716†	1342.7	1437.8	30.332 µg/L	30.332 ppb	08:58:51
3	Cu 324.752†	4965.7	678.4	19.842 µg/L	19.842 ppb	08:58:51
3	Mn 257.610†	471378.6	469919.0	1509.3 µg/L	1509.3 ppb	08:58:45
3	Mo 202.031†	78.8	82.2	12.365 µg/L	12.365 ppb	08:59:12
3	Ni 231.604†	682.7	404.7	22.144 µg/L	22.144 ppb	08:59:12
3	P 214.914†	627.1	424.0	777.33 µg/L	777.33 ppb	08:59:12
3	Pb 220.353†	234.6	177.5	46.181 µg/L	46.181 ppb	08:59:12
3	S 181.975 Axial†	57.5	35.2	161.40 µg/L	161.40 ppb	08:59:12
3	Sb 206.836†	13.0	-8.1	1.5668 µg/L	1.5668 ppb	08:59:12
3	Se 196.026†	-21.1	-30.9	9.4093 µg/L	9.4093 ppb	08:59:12
3	SiO2†	64858.2	61878.3	11363 µg/L	11363 ppb	08:58:51
3	Si 251.611†	71992.1	71413.2	5186.3 µg/L	5186.3 ppb	08:58:51
3	Sn 189.927†	-3.1	-25.5	-3.1964 µg/L	-3.1964 ppb	08:59:12
3	Ti 334.940†	1194900.8	1189916.1	2710.3 µg/L	2710.3 ppb	08:58:45
3	Tl 190.801†	-40.6	-20.1	-5.8754 µg/L	-5.8754 ppb	08:59:12
3	U 409.014†	55.9	-674.8	-74.227 µg/L	-74.227 ppb	08:58:51
3	V 292.402†	6702.6	6805.7	82.273 µg/L	82.273 ppb	08:58:51
3	Zn 213.857†	15272.1	14691.6	381.69 µg/L	381.69 ppb	08:58:51

Mean Data: 241322001|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026051.8	100.19	%	0.364				0.36%
Sc RADIAL	114517.3	98.2	%	0.78				0.80%
Y 371.029	1301408.2	103.39	%	0.393				0.38%
Ag 328.068†	-537.5	1.2390	µg/L	0.25517	1.2390	ppb	0.25517	20.59%
Al 396.153Radial†	25776.5	12807	µg/L	159.2	12807	ppb	159.2	1.24%
As 188.979†	4.5	4.3759	µg/L	3.16706	4.3759	ppb	3.16706	72.37%
B 249.677†	816.1	13.011	µg/L	0.3396	13.011	ppb	0.3396	2.61%
Ba 233.527†	7185.5	184.46	µg/L	0.108	184.46	ppb	0.108	0.06%
Be 313.107†	6698.6	3.1848	µg/L	0.03276	3.1848	ppb	0.03276	1.03%
Ca 317.933Radial†	12136.7	4695.9	µg/L	53.17	4695.9	ppb	53.17	1.13%
Cd 226.502†	270.8	1.6793	µg/L	0.50271	1.6793	ppb	0.50271	29.94%
Co 228.616†	296.7	8.6747	µg/L	0.04046	8.6747	ppb	0.04046	0.47%
Cr 267.716†	1414.5	29.844	µg/L	0.4230	29.844	ppb	0.4230	1.42%
Cu 324.752†	668.7	19.918	µg/L	0.1537	19.918	ppb	0.1537	0.77%
Fe 238.204 Radial†	11185.8	71137	µg/L	824.8	71137	ppb	824.8	1.16%
K 766.490 Radial†	5465.1	2797.0	µg/L	47.35	2797.0	ppb	47.35	1.69%
Mg 279.077 IEC†	475.6	2831.4	µg/L	59.96	2831.4	ppb	59.96	2.12%
Mn 257.610†	471686.9	1515.0	µg/L	5.03	1515.0	ppb	5.03	0.33%
Mo 202.031†	77.4	11.832	µg/L	0.4977	11.832	ppb	0.4977	4.21%
Na 589.592 Radial†	1966.7	492.51	µg/L	4.201	492.51	ppb	4.201	0.85%

Ni 231.604†	402.7	22.034	µg/L	0.2011	22.034	ppb	0.2011	0.91%
P 214.914†	422.0	772.53	µg/L	5.443	772.53	ppb	5.443	0.70%
Pb 220.353†	181.3	47.158	µg/L	0.9166	47.158	ppb	0.9166	1.94%
S 181.975 Axial†	37.6	173.10	µg/L	10.289	173.10	ppb	10.289	5.94%
Sb 206.836†	-4.4	5.2264	µg/L	4.17797	5.2264	ppb	4.17797	79.94%
Se 196.026†	-32.7	7.5260	µg/L	3.36466	7.5260	ppb	3.36466	44.71%
SiO2†	61943.6	11375	µg/L	55.7	11375	ppb	55.7	0.49%
Si 251.611†	71482.2	5191.2	µg/L	27.07	5191.2	ppb	27.07	0.52%
Sn 189.927†	-29.9	-5.3680	µg/L	2.14903	-5.3680	ppb	2.14903	40.03%
Sr 421.552†	5301.8	26.647	µg/L	0.2329	26.647	ppb	0.2329	0.87%
Ti 334.940†	1193892.3	2719.3	µg/L	8.60	2719.3	ppb	8.60	0.32%
Tl 190.801†	-14.5	2.8635	µg/L	7.56946	2.8635	ppb	7.56946	264.35%
U 409.014†	-617.1	-69.120	µg/L	5.0963	-69.120	ppb	5.0963	7.37%
V 292.402†	6826.2	82.563	µg/L	0.2506	82.563	ppb	0.2506	0.30%
Zn 213.857†	14702.7	381.91	µg/L	0.477	381.91	ppb	0.477	0.12%

Sequence No.: 25
Sample ID: 1201977904|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 321
Date Collected: 12/10/2009 08:59:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977904|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115894.4	115894.4	99.4	%			08:59:53
1	Al 396.153Radial†	23505.3	23530.9	11691	µg/L	11691	ppb	08:59:53
1	Ca 317.933Radial†	13687.2	13361.2	5169.7	µg/L	5169.7	ppb	09:00:14
1	Fe 238.204 Radial†	9712.7	9759.1	62063	µg/L	62063	ppb	09:00:14
1	K 766.490 Radial†	5689.0	5042.6	2580.7	µg/L	2580.7	ppb	08:59:53
1	Mg 279.077 IEC†	441.9	429.3	2559.2	µg/L	2559.2	ppb	09:00:14
1	Na 589.592 Radial†	1437.8	2081.0	521.13	µg/L	521.13	ppb	08:59:53
1	Sr 421.552†	5533.6	5631.0	28.301	µg/L	28.301	ppb	08:59:53
1	Sc 361.383	2023966.2	2023966.2	100.09	%			09:01:17
1	Y 371.029	1305326.6	1305326.6	103.70	%			09:01:17
1	Ag 328.068†	-436.3	-446.3	1.0840	µg/L	1.0840	ppb	09:01:23
1	As 188.979†	-0.4	-2.6	-7.6794	µg/L	-7.6794	ppb	09:01:43
1	B 249.677†	813.1	674.5	9.7244	µg/L	9.7244	ppb	09:01:23
1	Ba 233.527†	8234.2	8305.2	213.10	µg/L	213.10	ppb	09:01:23
1	Be 313.107†	9422.9	5898.9	2.7440	µg/L	2.7440	ppb	09:01:23
1	Cd 226.502†	143.2	242.1	1.6085	µg/L	1.6085	ppb	09:01:23
1	Co 228.616†	213.6	280.1	8.2111	µg/L	8.2111	ppb	09:01:43
1	Cr 267.716†	1284.2	1382.9	29.089	µg/L	29.089	ppb	09:01:23
1	Cu 324.752†	5153.9	879.7	19.433	µg/L	19.433	ppb	09:01:23
1	Mn 257.610†	481696.2	481482.8	1545.2	µg/L	1545.2	ppb	09:01:17
1	Mo 202.031†	70.8	74.4	11.127	µg/L	11.127	ppb	09:01:43
1	Ni 231.604†	678.3	402.2	22.004	µg/L	22.004	ppb	09:01:43
1	P 214.914†	509.6	308.3	552.74	µg/L	552.74	ppb	09:01:43
1	Pb 220.353†	218.9	162.5	42.308	µg/L	42.308	ppb	09:01:43
1	S 181.975 Axial†	57.0	34.8	160.58	µg/L	160.58	ppb	09:01:43
1	Sb 206.836†	13.5	-7.6	1.4524	µg/L	1.4524	ppb	09:01:43
1	Se 196.026†	-23.5	-33.3	0.5189	µg/L	0.5189	ppb	09:01:43
1	SiO2†	69620.3	66809.0	12268	µg/L	12268	ppb	09:01:23
1	Si 251.611†	77501.2	77109.3	5613.7	µg/L	5613.7	ppb	09:01:23
1	Sn 189.927†	-17.0	-39.4	-11.236	µg/L	-11.236	ppb	09:01:43
1	Ti 334.940†	1124914.9	1123172.0	2558.2	µg/L	2558.2	ppb	09:01:17
1	Tl 190.801†	-34.9	-14.5	1.7372	µg/L	1.7372	ppb	09:01:43
1	U 409.014†	-25.7	-756.2	-80.025	µg/L	-80.025	ppb	09:01:23
1	V 292.402†	3200.8	3324.8	42.413	µg/L	42.413	ppb	09:01:23
1	Zn 213.857†	15246.2	14706.5	382.99	µg/L	382.99	ppb	09:01:23
2	Sc RADIAL	114471.6	114471.6	98.2	%			09:00:19
2	Al 396.153Radial†	23291.6	23607.2	11729	µg/L	11729	ppb	09:00:19
2	Ca 317.933Radial†	13674.6	13519.5	5231.0	µg/L	5231.0	ppb	09:00:39
2	Fe 238.204 Radial†	9700.4	9868.1	62756	µg/L	62756	ppb	09:00:39
2	K 766.490 Radial†	5654.1	5078.1	2598.9	µg/L	2598.9	ppb	09:00:19
2	Mg 279.077 IEC†	441.3	434.2	2588.3	µg/L	2588.3	ppb	09:00:39
2	Na 589.592 Radial†	1413.8	2074.5	519.51	µg/L	519.51	ppb	09:00:19
2	Sr 421.552†	5415.0	5579.4	28.042	µg/L	28.042	ppb	09:00:19
2	Sc 361.383	2026981.6	2026981.6	100.24	%			09:01:50
2	Y 371.029	1308026.4	1308026.4	103.91	%			09:01:50
2	Ag 328.068†	-492.1	-501.3	0.6348	µg/L	0.6348	ppb	09:01:55
2	As 188.979†	-1.8	-4.0	-10.329	µg/L	-10.329	ppb	09:02:16
2	B 249.677†	827.7	687.9	10.089	µg/L	10.089	ppb	09:01:55
2	Ba 233.527†	8249.0	8307.7	213.16	µg/L	213.16	ppb	09:01:55
2	Be 313.107†	9439.7	5901.6	2.7488	µg/L	2.7488	ppb	09:01:55
2	Cd 226.502†	145.1	243.7	1.6033	µg/L	1.6033	ppb	09:01:55
2	Co 228.616†	193.2	259.4	7.2298	µg/L	7.2298	ppb	09:02:16
2	Cr 267.716†	1297.5	1394.2	29.327	µg/L	29.327	ppb	09:01:55
2	Cu 324.752†	5118.0	836.2	19.280	µg/L	19.280	ppb	09:01:55
2	Mn 257.610†	481832.7	480903.0	1543.4	µg/L	1543.4	ppb	09:01:50
2	Mo 202.031†	77.1	80.6	11.880	µg/L	11.880	ppb	09:02:16
2	Ni 231.604†	680.5	403.3	22.066	µg/L	22.066	ppb	09:02:16
2	P 214.914†	521.4	319.3	574.23	µg/L	574.23	ppb	09:02:16
2	Pb 220.353†	209.9	153.1	39.879	µg/L	39.879	ppb	09:02:16

2	S 181.975 Axial†	52.9	30.6	140.30	µg/L	140.30 ppb	09:02:16
2	Sb 206.836†	20.9	-0.2	8.6575	µg/L	8.6575 ppb	09:02:16
2	Se 196.026†	-19.7	-29.5	5.8406	µg/L	5.8406 ppb	09:02:16
2	SiO2†	69674.2	66759.3	12259	µg/L	12259 ppb	09:01:55
2	Si 251.611†	77583.4	77076.1	5611.4	µg/L	5611.4 ppb	09:01:55
2	Sn 189.927†	-11.8	-34.2	-8.4805	µg/L	-8.4805 ppb	09:02:16
2	Ti 334.940†	1122978.7	1119568.4	2550.0	µg/L	2550.0 ppb	09:01:50
2	Tl 190.801†	-32.7	-12.3	5.0602	µg/L	5.0602 ppb	09:02:16
2	U 409.014†	48.5	-682.1	-73.437	µg/L	-73.437 ppb	09:01:55
2	V 292.402†	3173.0	3292.3	42.120	µg/L	42.120 ppb	09:01:55
2	Zn 213.857†	15311.3	14748.8	384.03	µg/L	384.03 ppb	09:01:55
3	Sc RADIAL	115229.5	115229.5	98.8	%		09:00:45
3	Al 396.153Radial†	23472.6	23634.3	11743	µg/L	11743 ppb	09:00:45
3	Ca 317.933Radial†	13689.1	13442.6	5201.2	µg/L	5201.2 ppb	09:01:05
3	Fe 238.204 Radial†	9711.9	9814.6	62417	µg/L	62417 ppb	09:01:05
3	K 766.490 Radial†	5677.6	5064.0	2591.7	µg/L	2591.7 ppb	09:00:45
3	Mg 279.077 IEC†	437.6	427.5	2547.3	µg/L	2547.3 ppb	09:01:05
3	Na 589.592 Radial†	1391.1	2042.1	511.40	µg/L	511.40 ppb	09:00:45
3	Sr 421.552†	5479.7	5608.5	28.188	µg/L	28.188 ppb	09:00:45
3	Sc 361.383	2023962.2	2023962.2	100.09	%		09:02:23
3	Y 371.029	1305850.8	1305850.8	103.74	%		09:02:23
3	Ag 328.068†	-512.3	-522.3	0.4248	µg/L	0.4248 ppb	09:02:29
3	As 188.979†	-1.5	-3.7	-9.6008	µg/L	-9.6008 ppb	09:02:49
3	B 249.677†	847.8	709.2	11.119	µg/L	11.119 ppb	09:02:29
3	Ba 233.527†	8277.3	8348.3	214.20	µg/L	214.20 ppb	09:02:29
3	Be 313.107†	9492.5	5968.5	2.7856	µg/L	2.7856 ppb	09:02:29
3	Cd 226.502†	128.6	227.5	1.1929	µg/L	1.1929 ppb	09:02:29
3	Co 228.616†	196.6	263.1	7.3774	µg/L	7.3774 ppb	09:02:49
3	Cr 267.716†	1346.4	1445.0	30.395	µg/L	30.395 ppb	09:02:29
3	Cu 324.752†	5123.7	849.5	19.300	µg/L	19.300 ppb	09:02:29
3	Mn 257.610†	483443.2	483229.3	1550.8	µg/L	1550.8 ppb	09:02:23
3	Mo 202.031†	74.4	78.0	11.567	µg/L	11.567 ppb	09:02:49
3	Ni 231.604†	682.1	405.9	22.210	µg/L	22.210 ppb	09:02:49
3	P 214.914†	511.5	310.2	556.32	µg/L	556.32 ppb	09:02:49
3	Pb 220.353†	216.2	159.8	41.606	µg/L	41.606 ppb	09:02:49
3	S 181.975 Axial†	55.2	33.0	151.72	µg/L	151.72 ppb	09:02:49
3	Sb 206.836†	19.5	-1.6	7.3230	µg/L	7.3230 ppb	09:02:49
3	Se 196.026†	-22.8	-32.6	1.6775	µg/L	1.6775 ppb	09:02:49
3	SiO2†	69159.9	66349.1	12184	µg/L	12184 ppb	09:02:29
3	Si 251.611†	76994.2	76602.8	5575.8	µg/L	5575.8 ppb	09:02:29
3	Sn 189.927†	-7.8	-30.2	-6.4698	µg/L	-6.4698 ppb	09:02:49
3	Ti 334.940†	1127273.4	1125530.7	2563.6	µg/L	2563.6 ppb	09:02:23
3	Tl 190.801†	-36.3	-15.9	-0.3720	µg/L	-0.3720 ppb	09:02:49
3	U 409.014†	-23.1	-753.6	-79.855	µg/L	-79.855 ppb	09:02:29
3	V 292.402†	3264.3	3388.3	43.159	µg/L	43.159 ppb	09:02:29
3	Zn 213.857†	15420.9	14881.0	387.57	µg/L	387.57 ppb	09:02:29

Mean Data: 1201977904|930802|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024970.0	100.14	%	0.086				0.09%
Sc RADIAL	115198.5	98.8	%	0.61				0.62%
Y 371.029	1306401.3	103.79	%	0.114				0.11%
Ag 328.068†	-490.0	0.7145	µg/L	0.33678	0.7145	ppb	0.33678	47.13%
Al 396.153Radial†	23590.8	11721	µg/L	26.6	11721	ppb	26.6	0.23%
As 188.979†	-3.4	-9.2030	µg/L	1.36875	-9.2030	ppb	1.36875	14.87%
B 249.677†	690.6	10.311	µg/L	0.7232	10.311	ppb	0.7232	7.01%
Ba 233.527†	8320.4	213.49	µg/L	0.621	213.49	ppb	0.621	0.29%
Be 313.107†	5923.0	2.7594	µg/L	0.02274	2.7594	ppb	0.02274	0.82%
Ca 317.933Radial†	13441.1	5200.6	µg/L	30.63	5200.6	ppb	30.63	0.59%
Cd 226.502†	237.7	1.4682	µg/L	0.23847	1.4682	ppb	0.23847	16.24%
Co 228.616†	267.5	7.6061	µg/L	0.52908	7.6061	ppb	0.52908	6.96%
Cr 267.716†	1407.4	29.604	µg/L	0.6954	29.604	ppb	0.6954	2.35%
Cu 324.752†	855.1	19.338	µg/L	0.0832	19.338	ppb	0.0832	0.43%
Fe 238.204 Radial†	9813.9	62412	µg/L	346.6	62412	ppb	346.6	0.56%
K 766.490 Radial†	5061.6	2590.5	µg/L	9.17	2590.5	ppb	9.17	0.35%
Mg 279.077 IEC†	430.3	2564.9	µg/L	21.12	2564.9	ppb	21.12	0.82%
Mn 257.610†	481871.7	1546.5	µg/L	3.86	1546.5	ppb	3.86	0.25%
Mo 202.031†	77.7	11.525	µg/L	0.3782	11.525	ppb	0.3782	3.28%
Na 589.592 Radial†	2065.9	517.35	µg/L	5.215	517.35	ppb	5.215	1.01%

Ni 231.604†	403.8	22.093	µg/L	0.1055	22.093	ppb	0.1055	0.48%
P 214.914†	312.6	561.10	µg/L	11.517	561.10	ppb	11.517	2.05%
Pb 220.353†	158.4	41.264	µg/L	1.2500	41.264	ppb	1.2500	3.03%
S 181.975 Axial†	32.8	150.86	µg/L	10.169	150.86	ppb	10.169	6.74%
Sb 206.836†	-3.2	5.8110	µg/L	3.83315	5.8110	ppb	3.83315	65.96%
Se 196.026†	-31.8	2.6790	µg/L	2.79868	2.6790	ppb	2.79868	104.47%
SiO2†	66639.1	12237	µg/L	46.4	12237	ppb	46.4	0.38%
Si 251.611†	76929.4	5600.3	µg/L	21.23	5600.3	ppb	21.23	0.38%
Sn 189.927†	-34.6	-8.7286	µg/L	2.39256	-8.7286	ppb	2.39256	27.41%
Sr 421.552†	5606.3	28.177	µg/L	0.1301	28.177	ppb	0.1301	0.46%
Ti 334.940†	1122757.0	2557.3	µg/L	6.84	2557.3	ppb	6.84	0.27%
Tl 190.801†	-14.2	2.1418	µg/L	2.73863	2.1418	ppb	2.73863	127.87%
U 409.014†	-730.6	-77.772	µg/L	3.7556	-77.772	ppb	3.7556	4.83%
V 292.402†	3335.1	42.564	µg/L	0.5359	42.564	ppb	0.5359	1.26%
Zn 213.857†	14778.7	384.86	µg/L	2.404	384.86	ppb	2.404	0.62%

Sequence No.: 26
Sample ID: 1201977906|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 322
Date Collected: 12/10/2009 09:02:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977906|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116583.3	116583.3	100.0	%			09:03:31
1	Al 396.153Radial†	52638.0	52535.2	26084	µg/L	26084	ppb	09:03:31
1	Ca 317.933Radial†	25625.5	25222.7	9759.2	µg/L	9759.2	ppb	09:03:52
1	Fe 238.204 Radial†	11105.1	11094.3	70571	µg/L	70571	ppb	09:03:52
1	K 766.490 Radial†	16357.4	15681.3	8025.5	µg/L	8025.5	ppb	09:03:31
1	Mg 279.077 IEC†	1454.2	1439.3	8794.8	µg/L	8794.8	ppb	09:03:52
1	Na 589.592 Radial†	21392.3	22034.8	5518.0	µg/L	5518.0	ppb	09:03:31
1	Sr 421.552†	101188.0	101289.7	509.08	µg/L	509.08	ppb	09:03:31
1	Sc 361.383	2006328.4	2006328.4	99.214	%			09:04:56
1	Y 371.029	1287374.9	1287374.9	102.27	%			09:04:56
1	Ag 328.068†	54607.3	55029.5	510.88	µg/L	510.88	ppb	09:05:01
1	As 188.979†	270.8	270.7	488.08	µg/L	488.08	ppb	09:05:22
1	B 249.677†	12331.2	12291.0	510.65	µg/L	510.65	ppb	09:05:01
1	Ba 233.527†	25796.4	26078.8	670.01	µg/L	670.01	ppb	09:05:01
1	Be 313.107†	816410.7	819362.9	511.46	µg/L	511.46	ppb	09:04:56
1	Cd 226.502†	18771.5	19019.2	501.62	µg/L	501.62	ppb	09:05:01
1	Co 228.616†	10297.8	10446.0	498.82	µg/L	498.82	ppb	09:05:01
1	Cr 267.716†	25196.0	25495.4	535.94	µg/L	535.94	ppb	09:05:01
1	Cu 324.752†	79322.7	75681.4	540.12	µg/L	540.12	ppb	09:05:01
1	Mn 257.610†	583266.0	588088.3	1886.6	µg/L	1886.6	ppb	09:04:56
1	Mo 202.031†	4206.5	4243.5	498.43	µg/L	498.43	ppb	09:05:22
1	Ni 231.604†	9783.2	9585.2	524.42	µg/L	524.42	ppb	09:05:01
1	P 214.914†	855.2	661.1	1208.4	µg/L	1208.4	ppb	09:05:22
1	Pb 220.353†	2178.0	2139.0	554.56	µg/L	554.56	ppb	09:05:22
1	S 181.975 Axial†	1109.1	1095.8	5353.3	µg/L	5353.3	ppb	09:05:22
1	Sb 206.836†	506.3	489.2	487.53	µg/L	487.53	ppb	09:05:22
1	Se 196.026†	377.1	370.2	520.26	µg/L	520.26	ppb	09:05:22
1	SiO2†	128020.0	126282.9	23190	µg/L	23190	ppb	09:05:01
1	Si 251.611†	144508.7	145328.3	10601	µg/L	10601	ppb	09:05:01
1	Sn 189.927†	1002.2	987.8	518.00	µg/L	518.00	ppb	09:05:22
1	Ti 334.940†	1481657.3	1492621.4	3399.5	µg/L	3399.5	ppb	09:04:56
1	Tl 190.801†	301.5	324.3	526.39	µg/L	526.39	ppb	09:05:22
1	U 409.014†	5516.4	4829.6	424.96	µg/L	424.96	ppb	09:05:01
1	V 292.402†	46927.7	47426.2	543.41	µg/L	543.41	ppb	09:05:01
1	Zn 213.857†	33221.5	32958.1	862.30	µg/L	862.30	ppb	09:05:01
2	Sc RADIAL	116955.7	116955.7	100	%			09:03:57
2	Al 396.153Radial†	53569.3	53296.2	26462	µg/L	26462	ppb	09:03:57
2	Ca 317.933Radial†	25698.0	25213.4	9755.6	µg/L	9755.6	ppb	09:04:17
2	Fe 238.204 Radial†	11165.0	11118.6	70726	µg/L	70726	ppb	09:04:17
2	K 766.490 Radial†	16649.9	15920.9	8148.1	µg/L	8148.1	ppb	09:03:57
2	Mg 279.077 IEC†	1447.8	1428.3	8726.3	µg/L	8726.3	ppb	09:04:17
2	Na 589.592 Radial†	21791.8	22365.0	5600.7	µg/L	5600.7	ppb	09:03:57
2	Sr 421.552†	103090.8	102864.8	517.00	µg/L	517.00	ppb	09:03:57
2	Sc 361.383	2034744.1	2034744.1	100.62	%			09:05:29
2	Y 371.029	1306337.6	1306337.6	103.78	%			09:05:29
2	Ag 328.068†	54795.9	54448.3	505.56	µg/L	505.56	ppb	09:05:35
2	As 188.979†	274.1	270.2	486.98	µg/L	486.98	ppb	09:05:55
2	B 249.677†	12308.3	12094.8	502.10	µg/L	502.10	ppb	09:05:35
2	Ba 233.527†	25798.2	25717.5	660.74	µg/L	660.74	ppb	09:05:35
2	Be 313.107†	818451.4	809899.4	505.55	µg/L	505.55	ppb	09:05:29
2	Cd 226.502†	18814.4	18797.6	495.70	µg/L	495.70	ppb	09:05:35
2	Co 228.616†	10355.3	10358.2	494.64	µg/L	494.64	ppb	09:05:35
2	Cr 267.716†	25324.5	25268.5	531.17	µg/L	531.17	ppb	09:05:35
2	Cu 324.752†	79365.8	74607.6	532.70	µg/L	532.70	ppb	09:05:35
2	Mn 257.610†	584566.0	581170.3	1864.6	µg/L	1864.6	ppb	09:05:29
2	Mo 202.031†	4183.7	4161.6	488.87	µg/L	488.87	ppb	09:05:55
2	Ni 231.604†	9845.3	9509.2	520.26	µg/L	520.26	ppb	09:05:35
2	P 214.914†	858.1	652.0	1190.6	µg/L	1190.6	ppb	09:05:55
2	Pb 220.353†	2173.3	2103.7	545.44	µg/L	545.44	ppb	09:05:55

2	S 181.975 Axial†	1113.1	1084.1	5296.2 µg/L	5296.2 ppb	09:05:55
2	Sb 206.836†	507.8	483.5	481.89 µg/L	481.89 ppb	09:05:55
2	Se 196.026†	380.8	368.6	518.36 µg/L	518.36 ppb	09:05:55
2	SiO2†	128205.3	124665.0	22892 µg/L	22892 ppb	09:05:35
2	Si 251.611†	144924.7	143707.7	10483 µg/L	10483 ppb	09:05:35
2	Sn 189.927†	995.9	967.3	507.56 µg/L	507.56 ppb	09:05:55
2	Ti 334.940†	1485783.2	1475866.3	3361.4 µg/L	3361.4 ppb	09:05:29
2	Tl 190.801†	287.1	305.7	497.57 µg/L	497.57 ppb	09:05:55
2	U 409.014†	5570.9	4806.2	422.80 µg/L	422.80 ppb	09:05:35
2	V 292.402†	47162.1	46998.7	538.55 µg/L	538.55 ppb	09:05:35
2	Zn 213.857†	33324.8	32593.1	852.65 µg/L	852.65 ppb	09:05:35
3	Sc RADIAL	115708.0	115708.0	99.2 %		09:04:23
3	Al 396.153Radial†	52936.3	53234.2	26431 µg/L	26431 ppb	09:04:23
3	Ca 317.933Radial†	25713.8	25505.6	9868.6 µg/L	9868.6 ppb	09:04:43
3	Fe 238.204 Radial†	11152.3	11225.8	71407 µg/L	71407 ppb	09:04:43
3	K 766.490 Radial†	16493.7	15942.5	8159.2 µg/L	8159.2 ppb	09:04:23
3	Mg 279.077 IEC†	1447.4	1443.4	8818.7 µg/L	8818.7 ppb	09:04:43
3	Na 589.592 Radial†	21518.1	22323.4	5590.3 µg/L	5590.3 ppb	09:04:23
3	Sr 421.552†	101783.5	102655.7	515.94 µg/L	515.94 ppb	09:04:23
3	Sc 361.383	2039414.7	2039414.7	100.85 %		09:06:02
3	Y 371.029	1309964.1	1309964.1	104.07 %		09:06:02
3	Ag 328.068†	54557.6	54087.3	502.30 µg/L	502.30 ppb	09:06:08
3	As 188.979†	276.9	272.3	490.71 µg/L	490.71 ppb	09:06:28
3	B 249.677†	12313.6	12072.0	500.89 µg/L	500.89 ppb	09:06:08
3	Ba 233.527†	25677.2	25538.8	656.15 µg/L	656.15 ppb	09:06:08
3	Be 313.107†	817353.9	806948.2	503.71 µg/L	503.71 ppb	09:06:02
3	Cd 226.502†	18739.5	18680.5	492.52 µg/L	492.52 ppb	09:06:08
3	Co 228.616†	10263.6	10243.7	489.14 µg/L	489.14 ppb	09:06:08
3	Cr 267.716†	25168.2	25055.9	526.70 µg/L	526.70 ppb	09:06:08
3	Cu 324.752†	79084.7	74148.3	529.66 µg/L	529.66 ppb	09:06:08
3	Mn 257.610†	583759.4	579040.0	1857.9 µg/L	1857.9 ppb	09:06:02
3	Mo 202.031†	4195.6	4163.9	489.16 µg/L	489.16 ppb	09:06:28
3	Ni 231.604†	9738.6	9381.0	513.24 µg/L	513.24 ppb	09:06:08
3	P 214.914†	860.3	652.1	1190.4 µg/L	1190.4 ppb	09:06:28
3	Pb 220.353†	2171.3	2096.7	543.64 µg/L	543.64 ppb	09:06:28
3	S 181.975 Axial†	1120.1	1088.5	5317.7 µg/L	5317.7 ppb	09:06:28
3	Sb 206.836†	507.7	482.3	480.67 µg/L	480.67 ppb	09:06:28
3	Se 196.026†	383.4	370.3	520.90 µg/L	520.90 ppb	09:06:28
3	SiO2†	127042.4	123220.1	22627 µg/L	22627 ppb	09:06:08
3	Si 251.611†	143526.7	141991.6	10357 µg/L	10357 ppb	09:06:08
3	Sn 189.927†	993.4	962.6	505.27 µg/L	505.27 ppb	09:06:28
3	Ti 334.940†	1482468.4	1469197.6	3346.2 µg/L	3346.2 ppb	09:06:02
3	Tl 190.801†	292.7	310.6	504.94 µg/L	504.94 ppb	09:06:28
3	U 409.014†	5533.0	4755.9	418.12 µg/L	418.12 ppb	09:06:08
3	V 292.402†	46942.4	46673.5	534.94 µg/L	534.94 ppb	09:06:08
3	Zn 213.857†	33171.7	32365.5	846.58 µg/L	846.58 ppb	09:06:08

Mean Data: 1201977906|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026829.1	100.23	%	0.886				0.88%
Sc RADIAL	116415.6	99.8	%	0.55				0.55%
Y 371.029	1301225.5	103.37	%	0.964				0.93%
Ag 328.068†	54521.7	506.25	µg/L	4.331	506.25	ppb	4.331	0.86%
Al 396.153Radial†	53021.9	26326	µg/L	210.2	26326	ppb	210.2	0.80%
As 188.979†	271.1	488.59	µg/L	1.917	488.59	ppb	1.917	0.39%
B 249.677†	12152.6	504.55	µg/L	5.322	504.55	ppb	5.322	1.05%
Ba 233.527†	25778.4	662.30	µg/L	7.065	662.30	ppb	7.065	1.07%
Be 313.107†	812070.2	506.91	µg/L	4.048	506.91	ppb	4.048	0.80%
Ca 317.933Radial†	25313.9	9794.5	µg/L	64.27	9794.5	ppb	64.27	0.66%
Cd 226.502†	18832.4	496.61	µg/L	4.617	496.61	ppb	4.617	0.93%
Co 228.616†	10349.3	494.20	µg/L	4.857	494.20	ppb	4.857	0.98%
Cr 267.716†	25273.2	531.27	µg/L	4.620	531.27	ppb	4.620	0.87%
Cu 324.752†	74812.5	534.16	µg/L	5.378	534.16	ppb	5.378	1.01%
Fe 238.204 Radial†	11146.2	70901	µg/L	445.0	70901	ppb	445.0	0.63%
K 766.490 Radial†	15848.2	8110.9	µg/L	74.19	8110.9	ppb	74.19	0.91%
Mg 279.077 IEC†	1437.0	8779.9	µg/L	47.95	8779.9	ppb	47.95	0.55%
Mn 257.610†	582766.2	1869.7	µg/L	15.06	1869.7	ppb	15.06	0.81%
Mo 202.031†	4189.7	492.15	µg/L	5.436	492.15	ppb	5.436	1.10%
Na 589.592 Radial†	22241.0	5569.7	µg/L	45.04	5569.7	ppb	45.04	0.81%

Ni 231.604†	9491.8	519.31 µg/L	5.647	519.31 ppb	5.647	1.09%
P 214.914†	655.0	1196.5 µg/L	10.31	1196.5 ppb	10.31	0.86%
Pb 220.353†	2113.1	547.88 µg/L	5.854	547.88 ppb	5.854	1.07%
S 181.975 Axial†	1089.4	5322.4 µg/L	28.83	5322.4 ppb	28.83	0.54%
Sb 206.836†	485.0	483.36 µg/L	3.661	483.36 ppb	3.661	0.76%
Se 196.026†	369.7	519.84 µg/L	1.320	519.84 ppb	1.320	0.25%
SiO2†	124722.7	22903 µg/L	281.4	22903 ppb	281.4	1.23%
Si 251.611†	143675.9	10480 µg/L	122.2	10480 ppb	122.2	1.17%
Sn 189.927†	972.6	510.28 µg/L	6.789	510.28 ppb	6.789	1.33%
Sr 421.552†	102270.1	514.01 µg/L	4.300	514.01 ppb	4.300	0.84%
Ti 334.940†	1479228.4	3369.0 µg/L	27.49	3369.0 ppb	27.49	0.82%
Tl 190.801†	313.5	509.64 µg/L	14.975	509.64 ppb	14.975	2.94%
U 409.014†	4797.2	421.96 µg/L	3.495	421.96 ppb	3.495	0.83%
V 292.402†	47032.8	538.97 µg/L	4.253	538.97 ppb	4.253	0.79%
Zn 213.857†	32638.9	853.84 µg/L	7.929	853.84 ppb	7.929	0.93%

Sequence No.: 27
Sample ID: 1201977907|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 323
Date Collected: 12/10/2009 09:06:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977907|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115665.5	115665.5	99.2	%			09:07:10
1	Al 396.153Radial†	48780.0	49062.9	24359	µg/L	24359	ppb	09:07:10
1	Ca 317.933Radial†	24491.4	24282.5	9395.4	µg/L	9395.4	ppb	09:07:30
1	Fe 238.204 Radial†	10731.4	10805.6	68735	µg/L	68735	ppb	09:07:30
1	K 766.490 Radial†	16635.7	16091.8	8235.6	µg/L	8235.6	ppb	09:07:10
1	Mg 279.077 IEC†	1422.8	1419.2	8673.3	µg/L	8673.3	ppb	09:07:30
1	Na 589.592 Radial†	21170.6	21981.0	5504.6	µg/L	5504.6	ppb	09:07:10
1	Sr 421.552†	100855.5	101757.6	511.43	µg/L	511.43	ppb	09:07:10
1	Sc 361.383	2032211.3	2032211.3	100.49	%			09:08:35
1	Y 371.029	1303301.1	1303301.1	103.54	%			09:08:35
1	Ag 328.068†	54311.8	54034.5	501.62	µg/L	501.62	ppb	09:08:40
1	As 188.979†	273.8	270.3	486.96	µg/L	486.96	ppb	09:09:01
1	B 249.677†	12205.5	12007.7	498.95	µg/L	498.95	ppb	09:08:40
1	Ba 233.527†	26926.1	26871.8	690.34	µg/L	690.34	ppb	09:08:40
1	Be 313.107†	803834.2	796367.8	497.16	µg/L	497.16	ppb	09:08:35
1	Cd 226.502†	18844.2	18850.6	497.30	µg/L	497.30	ppb	09:08:40
1	Co 228.616†	10323.4	10339.3	494.14	µg/L	494.14	ppb	09:08:40
1	Cr 267.716†	27926.2	27888.8	586.12	µg/L	586.12	ppb	09:08:40
1	Cu 324.752†	78528.7	73873.0	527.18	µg/L	527.18	ppb	09:08:40
1	Mn 257.610†	689485.7	686298.5	2200.0	µg/L	2200.0	ppb	09:08:35
1	Mo 202.031†	4194.2	4177.2	490.62	µg/L	490.62	ppb	09:09:01
1	Ni 231.604†	10425.6	10098.8	552.52	µg/L	552.52	ppb	09:08:40
1	P 214.914†	923.0	717.6	1325.4	µg/L	1325.4	ppb	09:09:01
1	Pb 220.353†	2164.9	2098.0	543.83	µg/L	543.83	ppb	09:09:01
1	S 181.975 Axial†	1087.1	1059.6	5176.8	µg/L	5176.8	ppb	09:09:01
1	Sb 206.836†	505.6	482.0	479.39	µg/L	479.39	ppb	09:09:01
1	Se 196.026†	365.3	353.6	497.77	µg/L	497.77	ppb	09:09:01
1	SiO2†	126564.1	123190.7	22622	µg/L	22622	ppb	09:08:40
1	Si 251.611†	142841.6	141814.4	10350	µg/L	10350	ppb	09:08:40
1	Sn 189.927†	994.0	966.7	506.92	µg/L	506.92	ppb	09:09:01
1	Ti 334.940†	1396426.7	1388789.4	3163.0	µg/L	3163.0	ppb	09:08:35
1	Tl 190.801†	288.1	307.1	499.60	µg/L	499.60	ppb	09:09:01
1	U 409.014†	5480.9	4723.5	415.67	µg/L	415.67	ppb	09:08:40
1	V 292.402†	46920.9	46817.1	536.34	µg/L	536.34	ppb	09:08:40
1	Zn 213.857†	32431.2	31745.2	830.23	µg/L	830.23	ppb	09:08:40
2	Sc RADIAL	117905.1	117905.1	101	%			09:07:36
2	Al 396.153Radial†	49222.5	48566.3	24112	µg/L	24112	ppb	09:07:36
2	Ca 317.933Radial†	24490.2	23812.3	9213.4	µg/L	9213.4	ppb	09:07:56
2	Fe 238.204 Radial†	10733.7	10602.3	67442	µg/L	67442	ppb	09:07:56
2	K 766.490 Radial†	16734.8	15871.2	8122.7	µg/L	8122.7	ppb	09:07:36
2	Mg 279.077 IEC†	1427.4	1396.5	8534.9	µg/L	8534.9	ppb	09:07:56
2	Na 589.592 Radial†	21361.4	21764.3	5450.3	µg/L	5450.3	ppb	09:07:36
2	Sr 421.552†	101890.6	100849.8	506.87	µg/L	506.87	ppb	09:07:36
2	Sc 361.383	2031402.2	2031402.2	100.45	%			09:09:08
2	Y 371.029	1302571.9	1302571.9	103.48	%			09:09:08
2	Ag 328.068†	53572.4	53320.0	494.94	µg/L	494.94	ppb	09:09:14
2	As 188.979†	274.3	270.8	488.12	µg/L	488.12	ppb	09:09:34
2	B 249.677†	12047.3	11855.0	492.74	µg/L	492.74	ppb	09:09:14
2	Ba 233.527†	26389.4	26348.3	676.89	µg/L	676.89	ppb	09:09:14
2	Be 313.107†	804992.4	797839.4	498.08	µg/L	498.08	ppb	09:09:08
2	Cd 226.502†	18464.3	18479.8	487.52	µg/L	487.52	ppb	09:09:14
2	Co 228.616†	10148.5	10169.3	485.92	µg/L	485.92	ppb	09:09:14
2	Cr 267.716†	27437.1	27412.9	576.11	µg/L	576.11	ppb	09:09:14
2	Cu 324.752†	77396.2	72776.7	519.30	µg/L	519.30	ppb	09:09:14
2	Mn 257.610†	690552.9	687634.1	2204.1	µg/L	2204.1	ppb	09:09:08
2	Mo 202.031†	4200.1	4184.8	491.45	µg/L	491.45	ppb	09:09:34
2	Ni 231.604†	10248.3	9926.4	543.09	µg/L	543.09	ppb	09:09:14
2	P 214.914†	923.7	718.6	1329.7	µg/L	1329.7	ppb	09:09:34
2	Pb 220.353†	2182.5	2116.4	548.60	µg/L	548.60	ppb	09:09:34

2	S 181.975 Axial†	1089.4	1062.3	5190.2 µg/L	5190.2 ppb	09:09:34
2	Sb 206.836†	500.3	477.0	474.54 µg/L	474.54 ppb	09:09:34
2	Se 196.026†	365.2	353.7	496.95 µg/L	496.95 ppb	09:09:34
2	SiO2†	124963.6	121647.6	22338 µg/L	22338 ppb	09:09:14
2	Si 251.611†	141164.1	140201.1	10231 µg/L	10231 ppb	09:09:14
2	Sn 189.927†	984.1	957.2	501.83 µg/L	501.83 ppb	09:09:34
2	Ti 334.940†	1397115.8	1390028.8	3165.9 µg/L	3165.9 ppb	09:09:08
2	Tl 190.801†	291.0	310.0	504.18 µg/L	504.18 ppb	09:09:34
2	U 409.014†	5479.2	4724.0	415.95 µg/L	415.95 ppb	09:09:14
2	V 292.402†	46092.5	46011.0	527.17 µg/L	527.17 ppb	09:09:14
2	Zn 213.857†	31912.7	31241.9	817.09 µg/L	817.09 ppb	09:09:14
3	Sc RADIAL	116418.9	116418.9	99.8 %		09:08:02
3	Al 396.153Radial†	49059.3	49024.4	24340 µg/L	24340 ppb	09:08:02
3	Ca 317.933Radial†	24581.5	24213.0	9368.5 µg/L	9368.5 ppb	09:08:22
3	Fe 238.204 Radial†	10775.7	10779.9	68572 µg/L	68572 ppb	09:08:22
3	K 766.490 Radial†	16746.4	16094.1	8236.8 µg/L	8236.8 ppb	09:08:02
3	Mg 279.077 IEC†	1434.6	1421.8	8689.2 µg/L	8689.2 ppb	09:08:22
3	Na 589.592 Radial†	21295.4	21967.9	5501.3 µg/L	5501.3 ppb	09:08:02
3	Sr 421.552†	101403.2	101648.2	510.88 µg/L	510.88 ppb	09:08:02
3	Sc 361.383	2028710.4	2028710.4	100.32 %		09:09:41
3	Y 371.029	1302045.1	1302045.1	103.44 %		09:09:41
3	Ag 328.068†	54195.3	54011.6	501.39 µg/L	501.39 ppb	09:09:47
3	As 188.979†	269.3	266.2	479.72 µg/L	479.72 ppb	09:10:07
3	B 249.677†	12238.3	12061.3	501.32 µg/L	501.32 ppb	09:09:47
3	Ba 233.527†	26826.0	26818.3	688.96 µg/L	688.96 ppb	09:09:47
3	Be 313.107†	807897.5	801798.4	500.55 µg/L	500.55 ppb	09:09:41
3	Cd 226.502†	18675.4	18714.6	493.69 µg/L	493.69 ppb	09:09:47
3	Co 228.616†	10327.1	10360.8	495.13 µg/L	495.13 ppb	09:09:47
3	Cr 267.716†	27820.6	27831.4	584.91 µg/L	584.91 ppb	09:09:47
3	Cu 324.752†	78369.3	73848.9	526.98 µg/L	526.98 ppb	09:09:47
3	Mn 257.610†	693350.9	691335.3	2216.1 µg/L	2216.1 ppb	09:09:41
3	Mo 202.031†	4159.7	4150.1	487.44 µg/L	487.44 ppb	09:10:07
3	Ni 231.604†	10408.9	10100.1	552.59 µg/L	552.59 ppb	09:09:47
3	P 214.914†	914.4	710.6	1311.2 µg/L	1311.2 ppb	09:10:07
3	Pb 220.353†	2173.3	2110.1	546.96 µg/L	546.96 ppb	09:10:07
3	S 181.975 Axial†	1078.8	1053.2	5145.3 µg/L	5145.3 ppb	09:10:07
3	Sb 206.836†	503.4	480.7	478.18 µg/L	478.18 ppb	09:10:07
3	Se 196.026†	364.4	353.3	497.29 µg/L	497.29 ppb	09:10:07
3	SiO2†	125610.9	122457.9	22487 µg/L	22487 ppb	09:09:47
3	Si 251.611†	141884.8	141105.9	10297 µg/L	10297 ppb	09:09:47
3	Sn 189.927†	974.6	949.0	497.84 µg/L	497.84 ppb	09:10:07
3	Ti 334.940†	1401731.7	1396475.3	3180.5 µg/L	3180.5 ppb	09:09:41
3	Tl 190.801†	288.1	307.6	500.50 µg/L	500.50 ppb	09:10:07
3	U 409.014†	5513.3	4765.2	419.48 µg/L	419.48 ppb	09:09:47
3	V 292.402†	46757.0	46734.2	535.38 µg/L	535.38 ppb	09:09:47
3	Zn 213.857†	32405.1	31774.9	831.03 µg/L	831.03 ppb	09:09:47

Mean Data: 1201977907|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030774.6	100.42	%	0.091				0.09%
Sc RADIAL	116663.2	100	%	1.0				0.98%
Y 371.029	1302639.4	103.49	%	0.050				0.05%
Ag 328.068†	53788.7	499.32	µg/L	3.792	499.32	ppb	3.792	0.76%
Al 396.153Radial†	48884.5	24270	µg/L	137.3	24270	ppb	137.3	0.57%
As 188.979†	269.1	484.94	µg/L	4.553	484.94	ppb	4.553	0.94%
B 249.677†	11974.7	497.67	µg/L	4.435	497.67	ppb	4.435	0.89%
Ba 233.527†	26679.4	685.40	µg/L	7.399	685.40	ppb	7.399	1.08%
Be 313.107†	798668.5	498.60	µg/L	1.754	498.60	ppb	1.754	0.35%
Ca 317.933Radial†	24102.6	9325.8	µg/L	98.22	9325.8	ppb	98.22	1.05%
Cd 226.502†	18681.7	492.84	µg/L	4.946	492.84	ppb	4.946	1.00%
Co 228.616†	10289.8	491.73	µg/L	5.055	491.73	ppb	5.055	1.03%
Cr 267.716†	27711.0	582.38	µg/L	5.460	582.38	ppb	5.460	0.94%
Cu 324.752†	73499.5	524.48	µg/L	4.493	524.48	ppb	4.493	0.86%
Fe 238.204 Radial†	10729.3	68249	µg/L	704.0	68249	ppb	704.0	1.03%
K 766.490 Radial†	16019.0	8198.3	µg/L	65.53	8198.3	ppb	65.53	0.80%
Mg 279.077 IEC†	1412.5	8632.5	µg/L	84.84	8632.5	ppb	84.84	0.98%
Mn 257.610†	688422.6	2206.7	µg/L	8.35	2206.7	ppb	8.35	0.38%
Mo 202.031†	4170.7	489.83	µg/L	2.117	489.83	ppb	2.117	0.43%
Na 589.592 Radial†	21904.4	5485.4	µg/L	30.43	5485.4	ppb	30.43	0.55%

Ni 231.604†	10041.8	549.40	µg/L	5.464	549.40	ppb	5.464	0.99%
P 214.914†	715.6	1322.1	µg/L	9.70	1322.1	ppb	9.70	0.73%
Pb 220.353†	2108.2	546.46	µg/L	2.422	546.46	ppb	2.422	0.44%
S 181.975 Axial†	1058.4	5170.8	µg/L	23.07	5170.8	ppb	23.07	0.45%
Sb 206.836†	479.9	477.37	µg/L	2.522	477.37	ppb	2.522	0.53%
Se 196.026†	353.5	497.34	µg/L	0.414	497.34	ppb	0.414	0.08%
SiO2†	122432.1	22482	µg/L	141.7	22482	ppb	141.7	0.63%
Si 251.611†	141040.4	10293	µg/L	59.8	10293	ppb	59.8	0.58%
Sn 189.927†	957.7	502.20	µg/L	4.551	502.20	ppb	4.551	0.91%
Sr 421.552†	101418.5	509.73	µg/L	2.491	509.73	ppb	2.491	0.49%
Ti 334.940†	1391764.5	3169.8	µg/L	9.40	3169.8	ppb	9.40	0.30%
Tl 190.801†	308.2	501.42	µg/L	2.425	501.42	ppb	2.425	0.48%
U 409.014†	4737.6	417.03	µg/L	2.124	417.03	ppb	2.124	0.51%
V 292.402†	46520.8	532.97	µg/L	5.038	532.97	ppb	5.038	0.95%
Zn 213.857†	31587.3	826.12	µg/L	7.827	826.12	ppb	7.827	0.95%

Sequence No.: 28
Sample ID: 1201977905|930802|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 324
Date Collected: 12/10/2009 09:10:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977905|930802|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114213.7	114213.7	97.9	%			09:10:49
1	Al 396.153Radial†	5016.5	4999.3	2483.9	µg/L	2483.9	ppb	09:10:49
1	Ca 317.933Radial†	2728.5	2373.4	918.32	µg/L	918.32	ppb	09:11:09
1	Fe 238.204 Radial†	2151.1	2181.4	13873	µg/L	13873	ppb	09:11:09
1	K 766.490 Radial†	1749.2	1103.7	564.88	µg/L	564.88	ppb	09:10:49
1	Mg 279.077 IEC†	105.5	92.3	549.28	µg/L	549.28	ppb	09:11:09
1	Na 589.592 Radial†	-201.1	428.7	107.36	µg/L	107.36	ppb	09:10:49
1	Sr 421.552†	993.1	1076.4	5.4101	µg/L	5.4101	ppb	09:10:49
1	Sc 361.383	2042879.2	2042879.2	101.02	%			09:12:12
1	Y 371.029	1282643.8	1282643.8	101.90	%			09:12:12
1	Ag 328.068†	33.5	22.8	1.4060	µg/L	1.4060	ppb	09:12:17
1	As 188.979†	1.9	-0.3	-1.3550	µg/L	-1.3550	ppb	09:12:38
1	B 249.677†	302.9	161.9	2.6579	µg/L	2.6579	ppb	09:12:17
1	Ba 233.527†	1288.8	1353.8	34.756	µg/L	34.756	ppb	09:12:38
1	Be 313.107†	4854.3	1289.3	0.6125	µg/L	0.6125	ppb	09:12:17
1	Cd 226.502†	-30.8	68.5	0.7437	µg/L	0.7437	ppb	09:12:38
1	Co 228.616†	-8.4	58.3	1.7251	µg/L	1.7251	ppb	09:12:38
1	Cr 267.716†	157.6	255.8	5.3993	µg/L	5.3993	ppb	09:12:17
1	Cu 324.752†	4187.3	-124.8	2.1139	µg/L	2.1139	ppb	09:12:17
1	Mn 257.610†	90739.2	90023.1	289.19	µg/L	289.19	ppb	09:12:17
1	Mo 202.031†	10.4	14.0	2.1755	µg/L	2.1755	ppb	09:12:38
1	Ni 231.604†	364.9	85.6	4.6831	µg/L	4.6831	ppb	09:12:38
1	P 214.914†	265.1	61.5	108.80	µg/L	108.80	ppb	09:12:38
1	Pb 220.353†	78.6	21.5	5.6163	µg/L	5.6163	ppb	09:12:38
1	S 181.975 Axial†	33.8	11.3	52.962	µg/L	52.962	ppb	09:12:38
1	Sb 206.836†	25.4	4.0	5.8034	µg/L	5.8034	ppb	09:12:38
1	Se 196.026†	4.8	-5.1	3.0330	µg/L	3.0330	ppb	09:12:38
1	SiO2†	14938.3	12035.9	2210.2	µg/L	2210.2	ppb	09:12:17
1	Si 251.611†	14441.4	13970.2	1014.8	µg/L	1014.8	ppb	09:12:17
1	Sn 189.927†	14.5	-8.1	-2.1877	µg/L	-2.1877	ppb	09:12:38
1	Ti 334.940†	233573.8	230437.7	524.87	µg/L	524.87	ppb	09:12:12
1	Tl 190.801†	-23.2	-2.6	0.7841	µg/L	0.7841	ppb	09:12:38
1	U 409.014†	582.5	-153.9	-16.519	µg/L	-16.519	ppb	09:12:17
1	V 292.402†	1232.0	1346.3	16.265	µg/L	16.265	ppb	09:12:17
1	Zn 213.857†	3398.9	2837.9	73.702	µg/L	73.702	ppb	09:12:17
2	Sc RADIAL	114233.4	114233.4	97.9	%			09:11:15
2	Al 396.153Radial†	5026.6	5008.7	2488.6	µg/L	2488.6	ppb	09:11:15
2	Ca 317.933Radial†	2734.2	2378.8	920.41	µg/L	920.41	ppb	09:11:35
2	Fe 238.204 Radial†	2159.0	2189.1	13922	µg/L	13922	ppb	09:11:35
2	K 766.490 Radial†	1768.4	1123.0	574.73	µg/L	574.73	ppb	09:11:15
2	Mg 279.077 IEC†	99.2	85.8	509.49	µg/L	509.49	ppb	09:11:35
2	Na 589.592 Radial†	-223.6	405.8	101.63	µg/L	101.63	ppb	09:11:15
2	Sr 421.552†	962.7	1045.2	5.2533	µg/L	5.2533	ppb	09:11:15
2	Sc 361.383	2032633.2	2032633.2	100.51	%			09:12:44
2	Y 371.029	1275848.4	1275848.4	101.36	%			09:12:44
2	Ag 328.068†	37.8	27.2	1.4482	µg/L	1.4482	ppb	09:12:50
2	As 188.979†	3.3	1.0	1.1346	µg/L	1.1346	ppb	09:13:10
2	B 249.677†	320.3	180.8	3.4608	µg/L	3.4608	ppb	09:12:50
2	Ba 233.527†	1308.4	1379.7	35.420	µg/L	35.420	ppb	09:13:10
2	Be 313.107†	5002.1	1460.7	0.7190	µg/L	0.7190	ppb	09:12:50
2	Cd 226.502†	-50.4	48.8	0.2146	µg/L	0.2146	ppb	09:13:10
2	Co 228.616†	-7.4	59.3	1.7660	µg/L	1.7660	ppb	09:13:10
2	Cr 267.716†	132.1	231.2	4.8840	µg/L	4.8840	ppb	09:12:50
2	Cu 324.752†	4323.7	31.8	3.2106	µg/L	3.2106	ppb	09:12:50
2	Mn 257.610†	90523.5	90261.2	289.95	µg/L	289.95	ppb	09:12:50
2	Mo 202.031†	7.8	11.4	1.8813	µg/L	1.8813	ppb	09:13:10
2	Ni 231.604†	366.7	89.2	4.8816	µg/L	4.8816	ppb	09:13:10
2	P 214.914†	269.7	67.4	120.49	µg/L	120.49	ppb	09:13:10
2	Pb 220.353†	81.2	24.5	6.3952	µg/L	6.3952	ppb	09:13:10

2	S 181.975 Axial†	32.7	10.4	48.895 µg/L	48.895 ppb	09:13:10
2	Sb 206.836†	19.5	-1.7	0.2278 µg/L	0.2278 ppb	09:13:10
2	Se 196.026†	1.1	-8.8	-1.5357 µg/L	-1.5357 ppb	09:13:10
2	SiO2†	14928.4	12100.6	2222.1 µg/L	2222.1 ppb	09:12:50
2	Si 251.611†	14397.7	13998.8	1016.8 µg/L	1016.8 ppb	09:12:50
2	Sn 189.927†	16.0	-6.4	-1.3588 µg/L	-1.3588 ppb	09:13:10
2	Ti 334.940†	233178.5	231209.9	526.63 µg/L	526.63 ppb	09:12:44
2	Tl 190.801†	-20.4	0.1	4.9337 µg/L	4.9337 ppb	09:13:10
2	U 409.014†	563.3	-170.1	-17.996 µg/L	-17.996 ppb	09:12:50
2	V 292.402†	1195.8	1316.4	15.928 µg/L	15.928 ppb	09:12:50
2	Zn 213.857†	3375.6	2831.6	73.529 µg/L	73.529 ppb	09:12:50
3	Sc RADIAL	115096.1	115096.1	98.7 %		09:11:41
3	Al 396.153Radial†	5026.8	4970.5	2469.5 µg/L	2469.5 ppb	09:11:41
3	Ca 317.933Radial†	2709.4	2332.8	902.59 µg/L	902.59 ppb	09:12:01
3	Fe 238.204 Radial†	2145.9	2159.3	13732 µg/L	13732 ppb	09:12:01
3	K 766.490 Radial†	1733.1	1073.7	549.48 µg/L	549.48 ppb	09:11:41
3	Mg 279.077 IEC†	104.6	90.5	538.71 µg/L	538.71 ppb	09:12:01
3	Na 589.592 Radial†	-209.6	421.7	105.60 µg/L	105.60 ppb	09:11:41
3	Sr 421.552†	893.9	968.1	4.8658 µg/L	4.8658 ppb	09:11:41
3	Sc 361.383	2045189.1	2045189.1	101.14 %		09:13:17
3	Y 371.029	1283417.1	1283417.1	101.96 %		09:13:17
3	Ag 328.068†	10.6	0.1	1.1861 µg/L	1.1861 ppb	09:13:22
3	As 188.979†	1.0	-1.2	-2.9033 µg/L	-2.9033 ppb	09:13:43
3	B 249.677†	314.4	173.1	3.1845 µg/L	3.1845 ppb	09:13:22
3	Ba 233.527†	1297.4	1360.9	34.937 µg/L	34.937 ppb	09:13:43
3	Be 313.107†	4858.2	1287.8	0.6121 µg/L	0.6121 ppb	09:13:22
3	Cd 226.502†	-43.5	56.0	0.4186 µg/L	0.4186 ppb	09:13:43
3	Co 228.616†	-16.6	50.2	1.3382 µg/L	1.3382 ppb	09:13:43
3	Cr 267.716†	143.0	241.2	5.0937 µg/L	5.0937 ppb	09:13:22
3	Cu 324.752†	4293.6	-24.4	2.7807 µg/L	2.7807 ppb	09:13:22
3	Mn 257.610†	89447.8	88644.7	284.77 µg/L	284.77 ppb	09:13:22
3	Mo 202.031†	11.6	15.1	2.3044 µg/L	2.3044 ppb	09:13:43
3	Ni 231.604†	373.8	94.1	5.1471 µg/L	5.1471 ppb	09:13:43
3	P 214.914†	266.1	62.2	110.38 µg/L	110.38 ppb	09:13:43
3	Pb 220.353†	77.1	19.9	5.2164 µg/L	5.2164 ppb	09:13:43
3	S 181.975 Axial†	34.5	12.0	56.457 µg/L	56.457 ppb	09:13:43
3	Sb 206.836†	14.8	-6.5	-4.5336 µg/L	-4.5336 ppb	09:13:43
3	Se 196.026†	2.8	-7.1	0.3904 µg/L	0.3904 ppb	09:13:43
3	SiO2†	14815.3	11897.5	2184.8 µg/L	2184.8 ppb	09:13:22
3	Si 251.611†	14360.5	13874.0	1007.8 µg/L	1007.8 ppb	09:13:22
3	Sn 189.927†	13.4	-9.2	-2.7927 µg/L	-2.7927 ppb	09:13:43
3	Ti 334.940†	233124.7	229732.5	523.26 µg/L	523.26 ppb	09:13:17
3	Tl 190.801†	-19.2	1.4	6.9379 µg/L	6.9379 ppb	09:13:43
3	U 409.014†	545.9	-190.7	-19.833 µg/L	-19.833 ppb	09:13:22
3	V 292.402†	1211.9	1325.1	16.010 µg/L	16.010 ppb	09:13:22
3	Zn 213.857†	3347.6	2783.4	72.269 µg/L	72.269 ppb	09:13:22

Mean Data: 1201977905|930802|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2040233.8	100.89	%	0.330				0.33%
Sc RADIAL	114514.4	98.2	%	0.43				0.44%
Y 371.029	1280636.4	101.74	%	0.331				0.33%
Ag 328.068†	16.7	1.3468	µg/L	0.14075	1.3468	ppb	0.14075	10.45%
Al 396.153Radial†	4992.8	2480.7	µg/L	9.92	2480.7	ppb	9.92	0.40%
As 188.979†	-0.2	-1.0412	µg/L	2.03716	-1.0412	ppb	2.03716	195.65%
B 249.677†	171.9	3.1011	µg/L	0.40785	3.1011	ppb	0.40785	13.15%
Ba 233.527†	1364.8	35.038	µg/L	0.3430	35.038	ppb	0.3430	0.98%
Be 313.107†	1345.9	0.6479	µg/L	0.06162	0.6479	ppb	0.06162	9.51%
Ca 317.933Radial†	2361.7	913.77	µg/L	9.739	913.77	ppb	9.739	1.07%
Cd 226.502†	57.8	0.4590	µg/L	0.26686	0.4590	ppb	0.26686	58.14%
Co 228.616†	55.9	1.6098	µg/L	0.23610	1.6098	ppb	0.23610	14.67%
Cr 267.716†	242.7	5.1257	µg/L	0.25914	5.1257	ppb	0.25914	5.06%
Cu 324.752†	-39.1	2.7018	µg/L	0.55259	2.7018	ppb	0.55259	20.45%
Fe 238.204 Radial†	2176.6	13842	µg/L	98.3	13842	ppb	98.3	0.71%
K 766.490 Radial†	1100.1	563.03	µg/L	12.726	563.03	ppb	12.726	2.26%
Mg 279.077 IEC†	89.5	532.49	µg/L	20.611	532.49	ppb	20.611	3.87%
Mn 257.610†	89643.0	287.97	µg/L	2.799	287.97	ppb	2.799	0.97%
Mo 202.031†	13.5	2.1204	µg/L	0.21688	2.1204	ppb	0.21688	10.23%
Na 589.592 Radial†	418.7	104.86	µg/L	2.936	104.86	ppb	2.936	2.80%

Ni 231.604†	89.6	4.9039	µg/L	0.23280	4.9039	ppb	0.23280	4.75%
P 214.914†	63.7	113.23	µg/L	6.345	113.23	ppb	6.345	5.60%
Pb 220.353†	22.0	5.7426	µg/L	0.59949	5.7426	ppb	0.59949	10.44%
S 181.975 Axial†	11.2	52.771	µg/L	3.7845	52.771	ppb	3.7845	7.17%
Sb 206.836†	-1.4	0.4992	µg/L	5.17384	0.4992	ppb	5.17384	>999.9%
Se 196.026†	-7.0	0.6292	µg/L	2.29365	0.6292	ppb	2.29365	364.52%
SiO2†	12011.3	2205.7	µg/L	19.05	2205.7	ppb	19.05	0.86%
Si 251.611†	13947.7	1013.2	µg/L	4.75	1013.2	ppb	4.75	0.47%
Sn 189.927†	-7.9	-2.1131	µg/L	0.71987	-2.1131	ppb	0.71987	34.07%
Sr 421.552†	1029.9	5.1764	µg/L	0.28021	5.1764	ppb	0.28021	5.41%
Ti 334.940†	230460.0	524.92	µg/L	1.683	524.92	ppb	1.683	0.32%
Tl 190.801†	-0.4	4.2186	µg/L	3.13858	4.2186	ppb	3.13858	74.40%
U 409.014†	-171.5	-18.116	µg/L	1.6600	-18.116	ppb	1.6600	9.16%
V 292.402†	1329.2	16.068	µg/L	0.1755	16.068	ppb	0.1755	1.09%
Zn 213.857†	2817.6	73.167	µg/L	0.7819	73.167	ppb	0.7819	1.07%

Sequence No.: 29
Sample ID: 241322002|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 325
Date Collected: 12/10/2009 09:13:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322002|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116567.6	116567.6	99.9	%			09:14:25
1	Al 396.153Radial†	41684.1	41582.6	20660	µg/L	20660	ppb	09:14:25
1	Ca 317.933Radial†	17189.3	16785.5	6494.6	µg/L	6494.6	ppb	09:14:25
1	Fe 238.204 Radial†	12261.9	12253.1	77924	µg/L	77924	ppb	09:14:45
1	K 766.490 Radial†	6547.7	5868.6	3003.5	µg/L	3003.5	ppb	09:14:25
1	Mg 279.077 IEC†	630.7	615.6	3686.4	µg/L	3686.4	ppb	09:14:45
1	Na 589.592 Radial†	3813.5	4449.6	1114.3	µg/L	1114.3	ppb	09:14:25
1	Sr 421.552†	8298.1	8364.7	42.041	µg/L	42.041	ppb	09:14:25
1	Sc 361.383	2045094.5	2045094.5	101.13	%			09:15:49
1	Y 371.029	1374193.5	1374193.5	109.17	%			09:15:49
1	Ag 328.068†	-531.2	-535.6	1.5153	µg/L	1.5153	ppb	09:15:55
1	As 188.979†	12.4	10.0	13.548	µg/L	13.548	ppb	09:16:15
1	B 249.677†	1085.1	935.1	16.037	µg/L	16.037	ppb	09:15:55
1	Ba 233.527†	8608.1	8589.9	220.40	µg/L	220.40	ppb	09:15:55
1	Be 313.107†	15724.7	12032.9	6.4798	µg/L	6.4798	ppb	09:15:55
1	Cd 226.502†	192.5	289.3	1.6070	µg/L	1.6070	ppb	09:15:55
1	Co 228.616†	190.4	255.0	6.4321	µg/L	6.4321	ppb	09:16:15
1	Cr 267.716†	904.3	993.9	20.931	µg/L	20.931	ppb	09:15:55
1	Cu 324.752†	4916.3	591.6	20.841	µg/L	20.841	ppb	09:15:55
1	Mn 257.610†	776588.7	768105.3	2462.4	µg/L	2462.4	ppb	09:15:49
1	Mo 202.031†	128.1	130.4	18.290	µg/L	18.290	ppb	09:16:15
1	Ni 231.604†	586.5	304.4	16.652	µg/L	16.652	ppb	09:16:15
1	P 214.914†	534.2	327.3	576.16	µg/L	576.16	ppb	09:16:15
1	Pb 220.353†	421.5	360.5	94.119	µg/L	94.119	ppb	09:16:15
1	S 181.975 Axial†	79.6	56.5	264.58	µg/L	264.58	ppb	09:16:15
1	Sb 206.836†	11.4	-9.8	0.2072	µg/L	0.2072	ppb	09:16:15
1	Se 196.026†	-22.8	-32.4	12.536	µg/L	12.536	ppb	09:16:15
1	SiO2†	86085.1	82371.0	15126	µg/L	15126	ppb	09:15:55
1	Si 251.611†	96366.8	94963.9	6924.4	µg/L	6924.4	ppb	09:15:55
1	Sn 189.927†	-1.2	-23.6	-0.7418	µg/L	-0.7418	ppb	09:16:15
1	Ti 334.940†	1259710.7	1244848.6	2835.3	µg/L	2835.3	ppb	09:15:49
1	Tl 190.801†	-40.4	-19.6	-0.6148	µg/L	-0.6148	ppb	09:16:15
1	U 409.014†	-396.1	-1122.2	-116.14	µg/L	-116.14	ppb	09:15:49
1	V 292.402†	3153.2	3244.7	42.798	µg/L	42.798	ppb	09:15:55
1	Zn 213.857†	16187.0	15479.3	401.78	µg/L	401.78	ppb	09:15:55
2	Sc RADIAL	116688.4	116688.4	100	%			09:14:51
2	Al 396.153Radial†	41599.7	41455.1	20597	µg/L	20597	ppb	09:14:51
2	Ca 317.933Radial†	17089.4	16667.8	6449.1	µg/L	6449.1	ppb	09:14:51
2	Fe 238.204 Radial†	12216.8	12195.4	77557	µg/L	77557	ppb	09:15:11
2	K 766.490 Radial†	6467.2	5781.4	2958.9	µg/L	2958.9	ppb	09:14:51
2	Mg 279.077 IEC†	633.2	617.4	3698.1	µg/L	3698.1	ppb	09:15:11
2	Na 589.592 Radial†	3809.2	4441.4	1112.2	µg/L	1112.2	ppb	09:14:51
2	Sr 421.552†	8251.6	8309.7	41.764	µg/L	41.764	ppb	09:14:51
2	Sc 361.383	2043308.3	2043308.3	101.04	%			09:16:23
2	Y 371.029	1373959.6	1373959.6	109.15	%			09:16:23
2	Ag 328.068†	-514.7	-519.8	1.6316	µg/L	1.6316	ppb	09:16:28
2	As 188.979†	7.7	5.4	5.1912	µg/L	5.1912	ppb	09:16:49
2	B 249.677†	1079.1	930.1	15.935	µg/L	15.935	ppb	09:16:28
2	Ba 233.527†	8534.4	8524.4	218.72	µg/L	218.72	ppb	09:16:28
2	Be 313.107†	15523.9	11847.8	6.3603	µg/L	6.3603	ppb	09:16:28
2	Cd 226.502†	185.8	282.8	1.4667	µg/L	1.4667	ppb	09:16:28
2	Co 228.616†	189.4	254.1	6.3729	µg/L	6.3729	ppb	09:16:49
2	Cr 267.716†	932.8	1022.9	21.539	µg/L	21.539	ppb	09:16:28
2	Cu 324.752†	4881.4	561.2	20.552	µg/L	20.552	ppb	09:16:28
2	Mn 257.610†	778753.5	770919.0	2471.3	µg/L	2471.3	ppb	09:16:23
2	Mo 202.031†	133.6	135.9	18.922	µg/L	18.922	ppb	09:16:49
2	Ni 231.604†	600.5	318.7	17.438	µg/L	17.438	ppb	09:16:49
2	P 214.914†	538.9	332.4	586.98	µg/L	586.98	ppb	09:16:49
2	Pb 220.353†	432.3	371.6	96.975	µg/L	96.975	ppb	09:16:49

2	S 181.975 Axial†	70.6	47.7	221.49 µg/L	221.49 ppb	09:16:49
2	Sb 206.836†	15.4	-5.9	4.0798 µg/L	4.0798 ppb	09:16:49
2	Se 196.026†	-28.8	-38.4	4.6338 µg/L	4.6338 ppb	09:16:49
2	SiO2†	85316.7	81685.0	15000 µg/L	15000 ppb	09:16:28
2	Si 251.611†	95742.2	94429.0	6884.5 µg/L	6884.5 ppb	09:16:28
2	Sn 189.927†	-1.9	-24.3	-1.1452 µg/L	-1.1452 ppb	09:16:49
2	Ti 334.940†	1262950.1	1249143.4	2845.1 µg/L	2845.1 ppb	09:16:23
2	Tl 190.801†	-40.4	-19.6	-0.5396 µg/L	-0.5396 ppb	09:16:49
2	U 409.014†	-353.4	-1080.2	-112.27 µg/L	-112.27 ppb	09:16:23
2	V 292.402†	3165.6	3259.7	42.947 µg/L	42.947 ppb	09:16:28
2	Zn 213.857†	16063.0	15370.7	398.94 µg/L	398.94 ppb	09:16:28
3	Sc RADIAL	115580.4	115580.4	99.1 %		09:15:16
3	Al 396.153Radial†	41408.0	41660.3	20699 µg/L	20699 ppb	09:15:16
3	Ca 317.933Radial†	16940.8	16681.7	6454.5 µg/L	6454.5 ppb	09:15:16
3	Fe 238.204 Radial†	12291.2	12387.5	78779 µg/L	78779 ppb	09:15:37
3	K 766.490 Radial†	6529.7	5906.5	3022.9 µg/L	3022.9 ppb	09:15:16
3	Mg 279.077 IEC†	635.8	626.1	3749.9 µg/L	3749.9 ppb	09:15:37
3	Na 589.592 Radial†	3762.7	4430.9	1109.6 µg/L	1109.6 ppb	09:15:16
3	Sr 421.552†	8261.0	8398.2	42.209 µg/L	42.209 ppb	09:15:16
3	Sc 361.383	2027813.2	2027813.2	100.28 %		09:16:56
3	Y 371.029	1364314.1	1364314.1	108.39 %		09:16:56
3	Ag 328.068†	-519.9	-528.8	1.6481 µg/L	1.6481 ppb	09:17:02
3	As 188.979†	12.5	10.3	13.882 µg/L	13.882 ppb	09:17:22
3	B 249.677†	1009.6	869.0	12.900 µg/L	12.900 ppb	09:17:02
3	Ba 233.527†	8489.6	8544.2	219.23 µg/L	219.23 ppb	09:17:02
3	Be 313.107†	15565.8	12007.0	6.4628 µg/L	6.4628 ppb	09:17:02
3	Cd 226.502†	203.8	302.2	1.8838 µg/L	1.8838 ppb	09:17:02
3	Co 228.616†	197.7	263.8	6.8579 µg/L	6.8579 ppb	09:17:22
3	Cr 267.716†	875.7	973.1	20.495 µg/L	20.495 ppb	09:17:02
3	Cu 324.752†	4907.2	623.9	21.250 µg/L	21.250 ppb	09:17:02
3	Mn 257.610†	769879.1	767958.3	2462.0 µg/L	2462.0 ppb	09:16:56
3	Mo 202.031†	135.7	139.0	19.335 µg/L	19.335 ppb	09:17:22
3	Ni 231.604†	591.0	313.8	17.166 µg/L	17.166 ppb	09:17:22
3	P 214.914†	528.9	326.5	573.54 µg/L	573.54 ppb	09:17:22
3	Pb 220.353†	434.3	376.9	98.344 µg/L	98.344 ppb	09:17:22
3	S 181.975 Axial†	73.6	51.2	238.44 µg/L	238.44 ppb	09:17:22
3	Sb 206.836†	10.5	-10.6	-0.5487 µg/L	-0.5487 ppb	09:17:22
3	Se 196.026†	-24.9	-34.7	10.148 µg/L	10.148 ppb	09:17:22
3	SiO2†	84788.8	81803.7	15022 µg/L	15022 ppb	09:17:02
3	Si 251.611†	95077.6	94490.3	6889.4 µg/L	6889.4 ppb	09:17:02
3	Sn 189.927†	-5.2	-27.6	-2.7024 µg/L	-2.7024 ppb	09:17:22
3	Ti 334.940†	1249909.5	1245689.8	2837.2 µg/L	2837.2 ppb	09:16:56
3	Tl 190.801†	-40.6	-20.1	-1.3701 µg/L	-1.3701 ppb	09:17:22
3	U 409.014†	-404.1	-1133.4	-117.32 µg/L	-117.32 ppb	09:16:56
3	V 292.402†	3171.8	3289.8	43.381 µg/L	43.381 ppb	09:17:02
3	Zn 213.857†	15975.5	15404.8	399.71 µg/L	399.71 ppb	09:17:02

Mean Data: 241322002|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2038738.7	100.82	%	0.470				0.47%
Sc RADIAL	116278.8	99.7	%	0.52				0.52%
Y 371.029	1370822.4	108.90	%	0.448				0.41%
Ag 328.068†	-528.1	1.5983	µg/L	0.07240	1.5983	ppb	0.07240	4.53%
Al 396.153Radial†	41566.0	20652	µg/L	51.5	20652	ppb	51.5	0.25%
As 188.979†	8.6	10.874	µg/L	4.9239	10.874	ppb	4.9239	45.28%
B 249.677†	911.4	14.957	µg/L	1.7822	14.957	ppb	1.7822	11.92%
Ba 233.527†	8552.8	219.45	µg/L	0.862	219.45	ppb	0.862	0.39%
Be 313.107†	11962.6	6.4343	µg/L	0.06464	6.4343	ppb	0.06464	1.00%
Ca 317.933Radial†	16711.7	6466.1	µg/L	24.88	6466.1	ppb	24.88	0.38%
Cd 226.502†	291.4	1.6525	µg/L	0.21224	1.6525	ppb	0.21224	12.84%
Co 228.616†	257.6	6.5543	µg/L	0.26456	6.5543	ppb	0.26456	4.04%
Cr 267.716†	996.7	20.988	µg/L	0.5244	20.988	ppb	0.5244	2.50%
Cu 324.752†	592.2	20.881	µg/L	0.3504	20.881	ppb	0.3504	1.68%
Fe 238.204 Radial†	12278.7	78087	µg/L	627.0	78087	ppb	627.0	0.80%
K 766.490 Radial†	5852.2	2995.1	µg/L	32.82	2995.1	ppb	32.82	1.10%
Mg 279.077 IEC†	619.7	3711.5	µg/L	33.81	3711.5	ppb	33.81	0.91%
Mn 257.610†	768994.2	2465.2	µg/L	5.27	2465.2	ppb	5.27	0.21%
Mo 202.031†	135.1	18.849	µg/L	0.5263	18.849	ppb	0.5263	2.79%
Na 589.592 Radial†	4440.7	1112.0	µg/L	2.35	1112.0	ppb	2.35	0.21%

Ni 231.604†	312.3	17.086	µg/L	0.3990	17.086	ppb	0.3990	2.34%
P 214.914†	328.7	578.89	µg/L	7.125	578.89	ppb	7.125	1.23%
Pb 220.353†	369.7	96.479	µg/L	2.1561	96.479	ppb	2.1561	2.23%
S 181.975 Axial†	51.8	241.50	µg/L	21.707	241.50	ppb	21.707	8.99%
Sb 206.836†	-8.8	1.2461	µg/L	2.48298	1.2461	ppb	2.48298	199.26%
Se 196.026†	-35.2	9.1058	µg/L	4.05278	9.1058	ppb	4.05278	44.51%
SiO2†	81953.2	15049	µg/L	67.3	15049	ppb	67.3	0.45%
Si 251.611†	94627.8	6899.4	µg/L	21.78	6899.4	ppb	21.78	0.32%
Sn 189.927†	-25.1	-1.5298	µg/L	1.03533	-1.5298	ppb	1.03533	67.68%
Sr 421.552†	8357.5	42.005	µg/L	0.2247	42.005	ppb	0.2247	0.53%
Ti 334.940†	1246560.6	2839.2	µg/L	5.19	2839.2	ppb	5.19	0.18%
Tl 190.801†	-19.8	-0.8415	µg/L	0.45931	-0.8415	ppb	0.45931	54.58%
U 409.014†	-1111.9	-115.25	µg/L	2.643	-115.25	ppb	2.643	2.29%
V 292.402†	3264.7	43.042	µg/L	0.3028	43.042	ppb	0.3028	0.70%
Zn 213.857†	15418.3	400.14	µg/L	1.470	400.14	ppb	1.470	0.37%

Sequence No.: 30
Sample ID: 241322003|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 326
Date Collected: 12/10/2009 09:17:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322003|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116198.2	116198.2	99.6	%			09:18:04
1	Al 396.153Radial†	38851.8	38872.4	19313	µg/L	19313	ppb	09:18:04
1	Ca 317.933Radial†	16256.5	15904.0	6153.6	µg/L	6153.6	ppb	09:18:04
1	Fe 238.204 Radial†	10291.6	10314.5	65596	µg/L	65596	ppb	09:18:24
1	K 766.490 Radial†	5828.7	5167.8	2644.8	µg/L	2644.8	ppb	09:18:04
1	Mg 279.077 IEC†	531.6	518.1	3102.7	µg/L	3102.7	ppb	09:18:24
1	Na 589.592 Radial†	1665.4	2305.7	577.41	µg/L	577.41	ppb	09:18:04
1	Sr 421.552†	8238.5	8331.3	41.873	µg/L	41.873	ppb	09:18:04
1	Sc 361.383	2033636.0	2033636.0	100.56	%			09:19:29
1	Y 371.029	1360580.8	1360580.8	108.09	%			09:19:29
1	Ag 328.068†	-405.0	-413.1	1.6546	µg/L	1.6546	ppb	09:19:34
1	As 188.979†	11.3	9.1	13.669	µg/L	13.669	ppb	09:19:55
1	B 249.677†	908.8	765.9	12.575	µg/L	12.575	ppb	09:19:34
1	Ba 233.527†	8033.9	8066.9	206.98	µg/L	206.98	ppb	09:19:34
1	Be 313.107†	13430.7	9839.5	5.1012	µg/L	5.1012	ppb	09:19:34
1	Cd 226.502†	164.5	262.5	1.8797	µg/L	1.8797	ppb	09:19:34
1	Co 228.616†	188.0	253.6	6.3409	µg/L	6.3409	ppb	09:19:55
1	Cr 267.716†	1976.3	2065.0	43.391	µg/L	43.391	ppb	09:19:34
1	Cu 324.752†	5918.2	1615.2	25.294	µg/L	25.294	ppb	09:19:34
1	Mn 257.610†	642975.9	639569.0	2050.4	µg/L	2050.4	ppb	09:19:29
1	Mo 202.031†	151.3	154.1	20.577	µg/L	20.577	ppb	09:19:55
1	Ni 231.604†	799.3	519.2	28.409	µg/L	28.409	ppb	09:19:55
1	P 214.914†	530.8	326.9	588.55	µg/L	588.55	ppb	09:19:55
1	Pb 220.353†	1099.0	1036.6	268.85	µg/L	268.85	ppb	09:19:55
1	S 181.975 Axial†	86.0	63.4	300.15	µg/L	300.15	ppb	09:19:55
1	Sb 206.836†	22.7	1.4	11.236	µg/L	11.236	ppb	09:19:55
1	Se 196.026†	-25.2	-34.9	0.8828	µg/L	0.8828	ppb	09:19:55
1	SiO2†	87858.0	84613.6	15538	µg/L	15538	ppb	09:19:34
1	Si 251.611†	98491.2	97613.2	7120.1	µg/L	7120.1	ppb	09:19:34
1	Sn 189.927†	-6.0	-28.4	-4.8482	µg/L	-4.8482	ppb	09:19:55
1	Ti 334.940†	1259824.8	1251980.6	2851.6	µg/L	2851.6	ppb	09:19:29
1	Tl 190.801†	-36.2	-15.6	4.1000	µg/L	4.1000	ppb	09:19:55
1	U 409.014†	-123.9	-853.7	-89.506	µg/L	-89.506	ppb	09:19:29
1	V 292.402†	3072.3	3181.8	41.143	µg/L	41.143	ppb	09:19:34
1	Zn 213.857†	13887.0	13282.4	344.81	µg/L	344.81	ppb	09:19:34
2	Sc RADIAL	115138.0	115138.0	98.7	%			09:18:30
2	Al 396.153Radial†	39601.6	39991.0	19869	µg/L	19869	ppb	09:18:30
2	Ca 317.933Radial†	16465.5	16265.9	6293.6	µg/L	6293.6	ppb	09:18:30
2	Fe 238.204 Radial†	10348.9	10467.7	66570	µg/L	66570	ppb	09:18:50
2	K 766.490 Radial†	5970.0	5364.8	2745.7	µg/L	2745.7	ppb	09:18:30
2	Mg 279.077 IEC†	527.8	519.2	3108.0	µg/L	3108.0	ppb	09:18:50
2	Na 589.592 Radial†	1710.0	2366.3	592.57	µg/L	592.57	ppb	09:18:30
2	Sr 421.552†	8344.6	8514.9	42.796	µg/L	42.796	ppb	09:18:30
2	Sc 361.383	2050221.2	2050221.2	101.38	%			09:20:02
2	Y 371.029	1371647.8	1371647.8	108.97	%			09:20:02
2	Ag 328.068†	-370.0	-375.4	2.0736	µg/L	2.0736	ppb	09:20:07
2	As 188.979†	13.5	11.1	17.070	µg/L	17.070	ppb	09:20:28
2	B 249.677†	924.0	773.5	12.601	µg/L	12.601	ppb	09:20:07
2	Ba 233.527†	7979.7	7948.8	203.95	µg/L	203.95	ppb	09:20:07
2	Be 313.107†	13313.0	9615.3	4.9797	µg/L	4.9797	ppb	09:20:07
2	Cd 226.502†	156.6	253.4	1.5625	µg/L	1.5625	ppb	09:20:07
2	Co 228.616†	186.2	250.3	6.2842	µg/L	6.2842	ppb	09:20:28
2	Cr 267.716†	1939.8	2013.1	42.302	µg/L	42.302	ppb	09:20:07
2	Cu 324.752†	5895.7	1545.4	25.019	µg/L	25.019	ppb	09:20:07
2	Mn 257.610†	636153.3	627667.4	2012.5	µg/L	2012.5	ppb	09:20:02
2	Mo 202.031†	151.2	152.8	20.462	µg/L	20.462	ppb	09:20:28
2	Ni 231.604†	803.6	517.1	28.291	µg/L	28.291	ppb	09:20:28
2	P 214.914†	524.3	316.3	566.21	µg/L	566.21	ppb	09:20:28
2	Pb 220.353†	1087.3	1016.2	263.62	µg/L	263.62	ppb	09:20:28

2	S 181.975 Axial†	86.7	63.4	299.86 µg/L	299.86 ppb	09:20:28
2	Sb 206.836†	12.6	-8.6	1.1623 µg/L	1.1623 ppb	09:20:28
2	Se 196.026†	-26.4	-35.9	0.3635 µg/L	0.3635 ppb	09:20:28
2	SiO2†	88110.2	84155.6	15454 µg/L	15454 ppb	09:20:07
2	Si 251.611†	98884.0	97208.4	7091.8 µg/L	7091.8 ppb	09:20:07
2	Sn 189.927†	-1.7	-24.1	-2.5251 µg/L	-2.5251 ppb	09:20:28
2	Ti 334.940†	1247545.3	1229734.5	2800.9 µg/L	2800.9 ppb	09:20:02
2	Tl 190.801†	-33.2	-12.4	8.5268 µg/L	8.5268 ppb	09:20:28
2	U 409.014†	-105.8	-834.8	-87.971 µg/L	-87.971 ppb	09:20:02
2	V 292.402†	3071.5	3156.3	40.938 µg/L	40.938 ppb	09:20:07
2	Zn 213.857†	13804.1	13088.9	339.58 µg/L	339.58 ppb	09:20:07
3	Sc RADIAL	114118.2	114118.2	97.8 %		09:18:56
3	Al 396.153Radial†	38953.6	39687.2	19718 µg/L	19718 ppb	09:18:56
3	Ca 317.933Radial†	16151.4	16093.9	6227.1 µg/L	6227.1 ppb	09:18:56
3	Fe 238.204 Radial†	10273.2	10484.1	66674 µg/L	66674 ppb	09:19:16
3	K 766.490 Radial†	5952.8	5401.3	2764.3 µg/L	2764.3 ppb	09:18:56
3	Mg 279.077 IEC†	532.3	528.5	3165.4 µg/L	3165.4 ppb	09:19:16
3	Na 589.592 Radial†	1697.1	2368.5	593.13 µg/L	593.13 ppb	09:18:56
3	Sr 421.552†	8169.6	8411.6	42.276 µg/L	42.276 ppb	09:18:56
3	Sc 361.383	2039546.6	2039546.6	100.86 %		09:20:35
3	Y 371.029	1365655.4	1365655.4	108.49 %		09:20:35
3	Ag 328.068†	-429.5	-436.3	1.5305 µg/L	1.5305 ppb	09:20:41
3	As 188.979†	11.0	8.7	12.654 µg/L	12.654 ppb	09:21:01
3	B 249.677†	907.0	761.5	12.046 µg/L	12.046 ppb	09:20:41
3	Ba 233.527†	8010.5	8020.5	205.79 µg/L	205.79 ppb	09:20:41
3	Be 313.107†	13402.6	9772.9	5.0767 µg/L	5.0767 ppb	09:20:41
3	Cd 226.502†	170.8	268.3	1.9462 µg/L	1.9462 ppb	09:20:41
3	Co 228.616†	194.7	259.7	6.7306 µg/L	6.7306 ppb	09:21:01
3	Cr 267.716†	1970.1	2053.2	43.144 µg/L	43.144 ppb	09:20:41
3	Cu 324.752†	5958.9	1638.5	25.687 µg/L	25.687 ppb	09:20:41
3	Mn 257.610†	633396.5	628218.0	2014.3 µg/L	2014.3 ppb	09:20:35
3	Mo 202.031†	156.6	158.9	21.184 µg/L	21.184 ppb	09:21:01
3	Ni 231.604†	796.0	513.7	28.106 µg/L	28.106 ppb	09:21:01
3	P 214.914†	524.2	318.8	571.09 µg/L	571.09 ppb	09:21:01
3	Pb 220.353†	1089.8	1024.3	265.70 µg/L	265.70 ppb	09:21:01
3	S 181.975 Axial†	89.7	66.8	316.63 µg/L	316.63 ppb	09:21:01
3	Sb 206.836†	17.0	-4.3	5.4787 µg/L	5.4787 ppb	09:21:01
3	Se 196.026†	-11.3	-21.0	19.357 µg/L	19.357 ppb	09:21:01
3	SiO2†	88201.2	84700.7	15554 µg/L	15554 ppb	09:20:41
3	Si 251.611†	98848.3	97683.6	7126.8 µg/L	7126.8 ppb	09:20:41
3	Sn 189.927†	-0.5	-22.9	-1.8918 µg/L	-1.8918 ppb	09:21:01
3	Ti 334.940†	1243029.2	1231697.1	2805.4 µg/L	2805.4 ppb	09:20:35
3	Tl 190.801†	-36.4	-15.7	3.4642 µg/L	3.4642 ppb	09:21:01
3	U 409.014†	-187.2	-916.1	-95.360 µg/L	-95.360 ppb	09:20:35
3	V 292.402†	3109.0	3209.3	41.536 µg/L	41.536 ppb	09:20:41
3	Zn 213.857†	13911.1	13266.3	344.27 µg/L	344.27 ppb	09:20:41

Mean Data: 241322003|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2041134.6	100.94	%	0.416				0.41%
Sc RADIAL	115151.4	98.7	%	0.89				0.90%
Y 371.029	1365961.3	108.52	%	0.440				0.41%
Ag 328.068†	-408.3	1.7529	µg/L	0.28456	1.7529	ppb	0.28456	16.23%
Al 396.153Radial†	39516.9	19634	µg/L	287.4	19634	ppb	287.4	1.46%
As 188.979†	9.6	14.464	µg/L	2.3132	14.464	ppb	2.3132	15.99%
B 249.677†	767.0	12.407	µg/L	0.3134	12.407	ppb	0.3134	2.53%
Ba 233.527†	8012.1	205.58	µg/L	1.526	205.58	ppb	1.526	0.74%
Be 313.107†	9742.6	5.0525	µg/L	0.06425	5.0525	ppb	0.06425	1.27%
Ca 317.933Radial†	16087.9	6224.7	µg/L	70.06	6224.7	ppb	70.06	1.13%
Cd 226.502†	261.4	1.7961	µg/L	0.20503	1.7961	ppb	0.20503	11.42%
Co 228.616†	254.5	6.4519	µg/L	0.24303	6.4519	ppb	0.24303	3.77%
Cr 267.716†	2043.8	42.945	µg/L	0.5708	42.945	ppb	0.5708	1.33%
Cu 324.752†	1599.7	25.333	µg/L	0.3359	25.333	ppb	0.3359	1.33%
Fe 238.204 Radial†	10422.1	66280	µg/L	594.8	66280	ppb	594.8	0.90%
K 766.490 Radial†	5311.3	2718.3	µg/L	64.28	2718.3	ppb	64.28	2.36%
Mg 279.077 IEC†	522.0	3125.4	µg/L	34.77	3125.4	ppb	34.77	1.11%
Mn 257.610†	631818.2	2025.7	µg/L	21.38	2025.7	ppb	21.38	1.06%
Mo 202.031†	155.3	20.741	µg/L	0.3876	20.741	ppb	0.3876	1.87%
Na 589.592 Radial†	2346.8	587.70	µg/L	8.922	587.70	ppb	8.922	1.52%

Ni 231.604†	516.7	28.269	µg/L	0.1525	28.269	ppb	0.1525	0.54%
P 214.914†	320.7	575.28	µg/L	11.747	575.28	ppb	11.747	2.04%
Pb 220.353†	1025.7	266.05	µg/L	2.634	266.05	ppb	2.634	0.99%
S 181.975 Axial†	64.5	305.54	µg/L	9.600	305.54	ppb	9.600	3.14%
Sb 206.836†	-3.8	5.9588	µg/L	5.05380	5.9588	ppb	5.05380	84.81%
Se 196.026†	-30.6	6.8679	µg/L	10.81930	6.8679	ppb	10.81930	157.53%
SiO2†	84490.0	15515	µg/L	53.8	15515	ppb	53.8	0.35%
Si 251.611†	97501.7	7112.9	µg/L	18.55	7112.9	ppb	18.55	0.26%
Sn 189.927†	-25.1	-3.0884	µg/L	1.55664	-3.0884	ppb	1.55664	50.40%
Sr 421.552†	8419.3	42.315	µg/L	0.4626	42.315	ppb	0.4626	1.09%
Ti 334.940†	1237804.1	2819.3	µg/L	28.06	2819.3	ppb	28.06	1.00%
Tl 190.801†	-14.5	5.3637	µg/L	2.75772	5.3637	ppb	2.75772	51.41%
U 409.014†	-868.2	-90.946	µg/L	3.8994	-90.946	ppb	3.8994	4.29%
V 292.402†	3182.5	41.206	µg/L	0.3035	41.206	ppb	0.3035	0.74%
Zn 213.857†	13212.5	342.89	µg/L	2.877	342.89	ppb	2.877	0.84%

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 09:21:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115109.5	115109.5	98.7	%			09:21:47
1	Al 396.153Radial†	10510.5	10526.0	5210.7	µg/L	5210.7	ppb	09:21:47
1	Ca 317.933Radial†	13226.1	12987.8	5025.3	µg/L	5025.3	ppb	09:22:07
1	Fe 238.204 Radial†	798.0	793.3	5061.7	µg/L	5061.7	ppb	09:22:07
1	K 766.490 Radial†	10482.4	9938.3	5086.3	µg/L	5086.3	ppb	09:21:47
1	Mg 279.077 IEC†	839.9	835.5	5163.9	µg/L	5163.9	ppb	09:22:07
1	Na 589.592 Radial†	40345.4	41512.0	10396	µg/L	10396	ppb	09:21:47
1	Sr 421.552†	98426.4	99787.7	501.53	µg/L	501.53	ppb	09:21:47
1	Sc 361.383	2035279.1	2035279.1	100.65	%			09:23:11
1	Y 371.029	1268476.1	1268476.1	100.77	%			09:23:11
1	Ag 328.068†	55990.3	55620.8	510.82	µg/L	510.82	ppb	09:23:17
1	As 188.979†	274.5	270.5	490.06	µg/L	490.06	ppb	09:23:37
1	B 249.677†	11625.0	11412.6	493.17	µg/L	493.17	ppb	09:23:17
1	Ba 233.527†	19282.3	19236.6	494.43	µg/L	494.43	ppb	09:23:17
1	Be 313.107†	803976.6	795303.6	497.48	µg/L	497.48	ppb	09:23:11
1	Cd 226.502†	18701.1	18680.1	497.67	µg/L	497.67	ppb	09:23:17
1	Co 228.616†	10256.9	10257.7	495.78	µg/L	495.78	ppb	09:23:17
1	Cr 267.716†	23491.2	23440.3	492.74	µg/L	492.74	ppb	09:23:17
1	Cu 324.752†	75937.1	71180.2	494.82	µg/L	494.82	ppb	09:23:17
1	Mn 257.610†	155500.5	154704.4	494.61	µg/L	494.61	ppb	09:23:11
1	Mo 202.031†	4337.6	4313.5	504.03	µg/L	504.03	ppb	09:23:37
1	Ni 231.604†	9429.5	9093.4	497.51	µg/L	497.51	ppb	09:23:17
1	P 214.914†	1423.8	1213.8	2398.3	µg/L	2398.3	ppb	09:23:37
1	Pb 220.353†	1987.9	1918.8	496.69	µg/L	496.69	ppb	09:23:37
1	S 181.975 Axial†	241.4	217.7	1064.6	µg/L	1064.6	ppb	09:23:37
1	Sb 206.836†	546.3	521.6	509.13	µg/L	509.13	ppb	09:23:37
1	Se 196.026†	418.8	406.3	521.30	µg/L	521.30	ppb	09:23:37
1	SiO2†	32220.0	29261.9	5373.4	µg/L	5373.4	ppb	09:23:17
1	Si 251.611†	34510.1	33963.5	2464.7	µg/L	2464.7	ppb	09:23:17
1	Sn 189.927†	1030.8	1001.8	515.71	µg/L	515.71	ppb	09:23:37
1	Ti 334.940†	226154.1	223929.0	509.81	µg/L	509.81	ppb	09:23:11
1	Tl 190.801†	311.6	330.0	509.16	µg/L	509.16	ppb	09:23:37
1	U 409.014†	6076.4	5307.0	480.36	µg/L	480.36	ppb	09:23:17
1	V 292.402†	43925.3	43770.3	497.07	µg/L	497.07	ppb	09:23:17
1	Zn 213.857†	19503.8	18852.1	495.69	µg/L	495.69	ppb	09:23:17
2	Sc RADIAL	116249.3	116249.3	99.7	%			09:22:13
2	Al 396.153Radial†	10447.0	10357.8	5127.1	µg/L	5127.1	ppb	09:22:13
2	Ca 317.933Radial†	13232.9	12863.3	4977.1	µg/L	4977.1	ppb	09:22:33
2	Fe 238.204 Radial†	801.0	788.5	5030.9	µg/L	5030.9	ppb	09:22:33
2	K 766.490 Radial†	10524.0	9875.8	5054.3	µg/L	5054.3	ppb	09:22:13
2	Mg 279.077 IEC†	832.2	819.4	5064.5	µg/L	5064.5	ppb	09:22:33
2	Na 589.592 Radial†	40215.0	40980.3	10262	µg/L	10262	ppb	09:22:13
2	Sr 421.552†	98087.7	98470.1	494.91	µg/L	494.91	ppb	09:22:13
2	Sc 361.383	2013792.2	2013792.2	99.583	%			09:23:44
2	Y 371.029	1253117.8	1253117.8	99.553	%			09:23:44
2	Ag 328.068†	55727.3	55950.2	513.84	µg/L	513.84	ppb	09:23:50
2	As 188.979†	272.6	271.5	491.93	µg/L	491.93	ppb	09:24:10
2	B 249.677†	11557.7	11468.2	495.59	µg/L	495.59	ppb	09:23:50
2	Ba 233.527†	19132.4	19290.6	495.82	µg/L	495.82	ppb	09:23:50
2	Be 313.107†	795709.9	795525.5	497.61	µg/L	497.61	ppb	09:23:44
2	Cd 226.502†	18636.2	18813.2	501.22	µg/L	501.22	ppb	09:23:50
2	Co 228.616†	10204.2	10313.5	498.48	µg/L	498.48	ppb	09:23:50
2	Cr 267.716†	23391.0	23588.8	495.86	µg/L	495.86	ppb	09:23:50
2	Cu 324.752†	75518.9	71565.3	497.49	µg/L	497.49	ppb	09:23:50
2	Mn 257.610†	153944.3	154790.2	494.88	µg/L	494.88	ppb	09:23:44
2	Mo 202.031†	4316.0	4337.8	506.86	µg/L	506.86	ppb	09:24:10
2	Ni 231.604†	9303.4	9066.8	496.05	µg/L	496.05	ppb	09:23:50
2	P 214.914†	1417.7	1222.7	2416.1	µg/L	2416.1	ppb	09:24:10
2	Pb 220.353†	1981.3	1933.3	500.42	µg/L	500.42	ppb	09:24:10

2	S 181.975 Axial†	237.8	216.6	1059.3 µg/L	1059.3 ppb	09:24:10
2	Sb 206.836†	541.1	522.2	509.71 µg/L	509.71 ppb	09:24:10
2	Se 196.026†	395.8	387.6	497.46 µg/L	497.46 ppb	09:24:10
2	SiO2†	32068.6	29451.5	5408.2 µg/L	5408.2 ppb	09:23:50
2	Si 251.611†	34424.1	34243.0	2485.2 µg/L	2485.2 ppb	09:23:50
2	Sn 189.927†	1027.8	1009.7	519.73 µg/L	519.73 ppb	09:24:10
2	Ti 334.940†	223999.0	224162.4	510.34 µg/L	510.34 ppb	09:23:44
2	Tl 190.801†	311.7	333.3	514.33 µg/L	514.33 ppb	09:24:10
2	U 409.014†	6102.9	5398.0	488.62 µg/L	488.62 ppb	09:23:50
2	V 292.402†	43736.9	44046.7	500.21 µg/L	500.21 ppb	09:23:50
2	Zn 213.857†	19406.0	18960.6	498.58 µg/L	498.58 ppb	09:23:50
3	Sc RADIAL	115262.8	115262.8	98.8 %		09:22:39
3	Al 396.153Radial†	10457.3	10458.0	5177.1 µg/L	5177.1 ppb	09:22:39
3	Ca 317.933Radial†	13262.1	13006.5	5032.5 µg/L	5032.5 ppb	09:22:59
3	Fe 238.204 Radial†	793.8	788.0	5027.8 µg/L	5027.8 ppb	09:22:59
3	K 766.490 Radial†	10548.5	9991.1	5113.3 µg/L	5113.3 ppb	09:22:39
3	Mg 279.077 IEC†	837.5	832.0	5141.6 µg/L	5141.6 ppb	09:22:59
3	Na 589.592 Radial†	40083.5	41192.6	10316 µg/L	10316 ppb	09:22:39
3	Sr 421.552†	97899.0	99121.4	498.18 µg/L	498.18 ppb	09:22:39
3	Sc 361.383	2024673.7	2024673.7	100.12 %		09:24:18
3	Y 371.029	1260157.1	1260157.1	100.11 %		09:24:18
3	Ag 328.068†	55897.4	55819.4	512.65 µg/L	512.65 ppb	09:24:23
3	As 188.979†	274.4	271.8	492.46 µg/L	492.46 ppb	09:24:44
3	B 249.677†	11609.5	11457.6	495.13 µg/L	495.13 ppb	09:24:23
3	Ba 233.527†	19235.7	19290.5	495.82 µg/L	495.82 ppb	09:24:23
3	Be 313.107†	796982.6	792502.3	495.72 µg/L	495.72 ppb	09:24:18
3	Cd 226.502†	18707.2	18783.6	500.44 µg/L	500.44 ppb	09:24:23
3	Co 228.616†	10259.6	10313.9	498.49 µg/L	498.49 ppb	09:24:23
3	Cr 267.716†	23550.9	23622.2	496.56 µg/L	496.56 ppb	09:24:23
3	Cu 324.752†	75829.9	71468.4	496.81 µg/L	496.81 ppb	09:24:23
3	Mn 257.610†	154206.8	154221.5	493.06 µg/L	493.06 ppb	09:24:18
3	Mo 202.031†	4273.3	4271.8	499.16 µg/L	499.16 ppb	09:24:44
3	Ni 231.604†	9366.8	9079.9	496.77 µg/L	496.77 ppb	09:24:23
3	P 214.914†	1397.6	1195.0	2360.1 µg/L	2360.1 ppb	09:24:44
3	Pb 220.353†	1960.1	1901.4	492.16 µg/L	492.16 ppb	09:24:44
3	S 181.975 Axial†	235.3	212.9	1040.8 µg/L	1040.8 ppb	09:24:44
3	Sb 206.836†	544.8	523.0	510.44 µg/L	510.44 ppb	09:24:44
3	Se 196.026†	414.9	404.5	519.04 µg/L	519.04 ppb	09:24:44
3	SiO2†	32218.3	29427.9	5403.9 µg/L	5403.9 ppb	09:24:23
3	Si 251.611†	34617.4	34250.3	2486.2 µg/L	2486.2 ppb	09:24:23
3	Sn 189.927†	1017.1	993.5	511.47 µg/L	511.47 ppb	09:24:44
3	Ti 334.940†	224179.6	223133.9	508.00 µg/L	508.00 ppb	09:24:18
3	Tl 190.801†	304.9	324.9	501.37 µg/L	501.37 ppb	09:24:44
3	U 409.014†	6187.3	5449.4	493.27 µg/L	493.27 ppb	09:24:23
3	V 292.402†	43924.4	43998.0	499.62 µg/L	499.62 ppb	09:24:23
3	Zn 213.857†	19422.1	18872.0	496.22 µg/L	496.22 ppb	09:24:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024581.7	100.12	%	0.531				0.53%
Sc RADIAL	115540.5	99.1	%	0.53				0.54%
Y 371.029	1260583.7	100.15	%	0.611				0.61%
Ag 328.068†	55796.8	512.44	µg/L	1.522	512.44	ppb	1.522	0.30%
QC value within limits for Ag 328.068 Recovery = 102.49%								
Al 396.153Radial†	10447.2	5171.7	µg/L	42.10	5171.7	ppb	42.10	0.81%
QC value within limits for Al 396.153Radial Recovery = 103.43%								
As 188.979†	271.3	491.49	µg/L	1.261	491.49	ppb	1.261	0.26%
QC value within limits for As 188.979 Recovery = 98.30%								
B 249.677†	11446.1	494.63	µg/L	1.286	494.63	ppb	1.286	0.26%
QC value within limits for B 249.677 Recovery = 98.93%								
Ba 233.527†	19272.5	495.36	µg/L	0.801	495.36	ppb	0.801	0.16%
QC value within limits for Ba 233.527 Recovery = 99.07%								
Be 313.107†	794443.8	496.94	µg/L	1.054	496.94	ppb	1.054	0.21%
QC value within limits for Be 313.107 Recovery = 99.39%								
Ca 317.933Radial†	12952.6	5011.6	µg/L	30.12	5011.6	ppb	30.12	0.60%
QC value within limits for Ca 317.933Radial Recovery = 100.23%								
Cd 226.502†	18759.0	499.78	µg/L	1.865	499.78	ppb	1.865	0.37%
QC value within limits for Cd 226.502 Recovery = 99.96%								
Co 228.616†	10295.0	497.58	µg/L	1.561	497.58	ppb	1.561	0.31%

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   QC value within limits for Co 228.616  Recovery = 99.52%
Cr 267.716†            23550.4      495.06 µg/L        2.035      495.06 ppb          2.035   0.41%
   QC value within limits for Cr 267.716  Recovery = 99.01%
Cu 324.752†            71404.6      496.37 µg/L        1.386      496.37 ppb          1.386   0.28%
   QC value within limits for Cu 324.752  Recovery = 99.27%
Fe 238.204 Radial†       789.9      5040.1 µg/L       18.73      5040.1 ppb         18.73   0.37%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.80%
K 766.490 Radial†       9935.1      5084.6 µg/L       29.52      5084.6 ppb         29.52   0.58%
   QC value within limits for K 766.490 Radial  Recovery = 101.69%
Mg 279.077 IEC†          829.0      5123.3 µg/L       52.17      5123.3 ppb         52.17   1.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.47%
Mn 257.610†           154572.0      494.18 µg/L        0.980      494.18 ppb         0.980   0.20%
   QC value within limits for Mn 257.610  Recovery = 98.84%
Mo 202.031†             4307.7      503.35 µg/L        3.896      503.35 ppb         3.896   0.77%
   QC value within limits for Mo 202.031  Recovery = 100.67%
Na 589.592 Radial†     41228.3       10325 µg/L         67.0       10325 ppb          67.0   0.65%
   QC value within limits for Na 589.592 Radial  Recovery = 103.25%
Ni 231.604†             9080.0      496.78 µg/L        0.729      496.78 ppb         0.729   0.15%
   QC value within limits for Ni 231.604  Recovery = 99.36%
P 214.914†              1210.5      2391.5 µg/L       28.63      2391.5 ppb         28.63   1.20%
   QC value within limits for P 214.914  Recovery = 95.66%
Pb 220.353†             1917.9      496.42 µg/L        4.138      496.42 ppb         4.138   0.83%
   QC value within limits for Pb 220.353  Recovery = 99.28%
S 181.975 Axial†         215.8      1054.9 µg/L       12.47      1054.9 ppb         12.47   1.18%
   QC value within limits for S 181.975 Axial  Recovery = 105.49%
Sb 206.836†              522.3      509.76 µg/L        0.657      509.76 ppb         0.657   0.13%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†              399.5      512.60 µg/L       13.159      512.60 ppb        13.159   2.57%
   QC value within limits for Se 196.026  Recovery = 102.52%
SiO2†                   29380.4      5395.2 µg/L       18.97      5395.2 ppb         18.97   0.35%
   QC value within limits for SiO2  Recovery = 100.89%
Si 251.611†             34152.3      2478.7 µg/L       12.14      2478.7 ppb         12.14   0.49%
   QC value within limits for Si 251.611  Recovery = 99.15%
Sn 189.927†             1001.7      515.64 µg/L        4.130      515.64 ppb         4.130   0.80%
   QC value within limits for Sn 189.927  Recovery = 103.13%
Sr 421.552†             99126.4      498.21 µg/L        3.311      498.21 ppb         3.311   0.66%
   QC value within limits for Sr 421.552  Recovery = 99.64%
Ti 334.940†            223741.8      509.38 µg/L        1.230      509.38 ppb         1.230   0.24%
   QC value within limits for Ti 334.940  Recovery = 101.88%
Tl 190.801†              329.4      508.29 µg/L        6.525      508.29 ppb         6.525   1.28%
   QC value within limits for Tl 190.801  Recovery = 101.66%
U 409.014†              5384.8      487.42 µg/L        6.540      487.42 ppb         6.540   1.34%
   QC value within limits for U 409.014  Recovery = 97.48%
V 292.402†              43938.3      498.97 µg/L        1.668      498.97 ppb         1.668   0.33%
   QC value within limits for V 292.402  Recovery = 99.79%
Zn 213.857†             18894.9      496.83 µg/L        1.536      496.83 ppb         1.536   0.31%
   QC value within limits for Zn 213.857  Recovery = 99.37%
All analyte(s) passed QC.
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Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 09:24:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113159.3	113159.3	97.0	%			09:25:25
1	Al 396.153Radial†	128.4	9.0	4.4617	µg/L	4.4617	ppb	09:25:25
1	Ca 317.933Radial†	430.3	30.7	11.880	µg/L	11.880	ppb	09:25:45
1	Fe 238.204 Radial†	21.6	7.1	45.237	µg/L	45.237	ppb	09:25:45
1	K 766.490 Radial†	733.1	73.1	37.390	µg/L	37.390	ppb	09:25:25
1	Mg 279.077 IEC†	14.7	-0.3	-2.0939	µg/L	-2.0939	ppb	09:25:45
1	Na 589.592 Radial†	-554.8	62.3	15.589	µg/L	15.589	ppb	09:25:25
1	Sr 421.552†	-48.9	11.9	0.0599	µg/L	0.0599	ppb	09:25:25
1	Sc 361.383	2032138.4	2032138.4	100.49	%			09:26:48
1	Y 371.029	1269177.7	1269177.7	100.83	%			09:26:48
1	Ag 328.068†	171.0	159.7	1.4608	µg/L	1.4608	ppb	09:26:53
1	As 188.979†	-1.8	-4.0	-7.2727	µg/L	-7.2727	ppb	09:27:14
1	B 249.677†	172.7	34.0	1.4592	µg/L	1.4592	ppb	09:27:14
1	Ba 233.527†	-59.6	18.7	0.4807	µg/L	0.4807	ppb	09:27:14
1	Be 313.107†	3811.1	276.6	0.1719	µg/L	0.1719	ppb	09:26:53
1	Cd 226.502†	-103.1	-3.6	-0.1070	µg/L	-0.1070	ppb	09:27:14
1	Co 228.616†	-69.6	-2.6	-0.1299	µg/L	-0.1299	ppb	09:27:14
1	Cr 267.716†	-119.5	-19.1	-0.4004	µg/L	-0.4004	ppb	09:26:53
1	Cu 324.752†	4182.5	-107.7	-0.7372	µg/L	-0.7372	ppb	09:26:53
1	Mn 257.610†	-80.9	120.8	0.3916	µg/L	0.3916	ppb	09:27:14
1	Mo 202.031†	0.9	4.5	0.5302	µg/L	0.5302	ppb	09:27:14
1	Ni 231.604†	306.8	29.7	1.6264	µg/L	1.6264	ppb	09:27:14
1	P 214.914†	187.9	-13.9	-28.026	µg/L	-28.026	ppb	09:27:14
1	Pb 220.353†	49.1	-7.4	-1.9118	µg/L	-1.9118	ppb	09:27:14
1	S 181.975 Axial†	32.5	10.2	49.971	µg/L	49.971	ppb	09:27:14
1	Sb 206.836†	24.2	3.0	2.9165	µg/L	2.9165	ppb	09:27:14
1	Se 196.026†	20.2	10.2	13.130	µg/L	13.130	ppb	09:27:14
1	SiO2†	2817.6	52.4	9.6308	µg/L	9.6308	ppb	09:26:53
1	Si 251.611†	474.3	146.8	10.769	µg/L	10.769	ppb	09:27:14
1	Sn 189.927†	20.0	-2.5	-1.2715	µg/L	-1.2715	ppb	09:27:14
1	Ti 334.940†	2243.5	1458.1	3.3208	µg/L	3.3208	ppb	09:26:53
1	Tl 190.801†	-19.3	1.1	1.7585	µg/L	1.7585	ppb	09:27:14
1	U 409.014†	594.5	-138.8	-12.596	µg/L	-12.596	ppb	09:26:53
1	V 292.402†	-115.5	11.8	0.1193	µg/L	0.1193	ppb	09:26:53
1	Zn 213.857†	566.0	36.6	0.9574	µg/L	0.9574	ppb	09:27:14
2	Sc RADIAL	113989.5	113989.5	97.7	%			09:25:51
2	Al 396.153Radial†	172.0	52.7	26.117	µg/L	26.117	ppb	09:25:51
2	Ca 317.933Radial†	420.1	17.0	6.5909	µg/L	6.5909	ppb	09:26:11
2	Fe 238.204 Radial†	20.9	6.2	39.421	µg/L	39.421	ppb	09:26:11
2	K 766.490 Radial†	745.2	79.9	40.914	µg/L	40.914	ppb	09:25:51
2	Mg 279.077 IEC†	12.3	-2.8	-17.354	µg/L	-17.354	ppb	09:26:11
2	Na 589.592 Radial†	-571.0	49.9	12.489	µg/L	12.489	ppb	09:25:51
2	Sr 421.552†	-34.0	27.5	0.1381	µg/L	0.1381	ppb	09:25:51
2	Sc 361.383	2009036.4	2009036.4	99.348	%			09:27:20
2	Y 371.029	1254311.7	1254311.7	99.648	%			09:27:20
2	Ag 328.068†	180.5	171.3	1.5661	µg/L	1.5661	ppb	09:27:25
2	As 188.979†	2.8	0.6	1.1621	µg/L	1.1621	ppb	09:27:46
2	B 249.677†	172.3	35.6	1.5289	µg/L	1.5289	ppb	09:27:46
2	Ba 233.527†	-63.8	13.9	0.3561	µg/L	0.3561	ppb	09:27:46
2	Be 313.107†	3604.7	112.5	0.0696	µg/L	0.0696	ppb	09:27:25
2	Cd 226.502†	-104.0	-5.7	-0.1562	µg/L	-0.1562	ppb	09:27:46
2	Co 228.616†	-80.1	-14.0	-0.6763	µg/L	-0.6763	ppb	09:27:46
2	Cr 267.716†	-116.7	-17.7	-0.3711	µg/L	-0.3711	ppb	09:27:25
2	Cu 324.752†	4041.7	-201.5	-1.3894	µg/L	-1.3894	ppb	09:27:25
2	Mn 257.610†	-64.7	136.2	0.4398	µg/L	0.4398	ppb	09:27:46
2	Mo 202.031†	9.0	12.7	1.4861	µg/L	1.4861	ppb	09:27:46
2	Ni 231.604†	298.7	25.1	1.3731	µg/L	1.3731	ppb	09:27:46
2	P 214.914†	181.5	-18.2	-36.609	µg/L	-36.609	ppb	09:27:46
2	Pb 220.353†	43.3	-12.7	-3.2687	µg/L	-3.2687	ppb	09:27:46

2	S 181.975 Axial†	28.4	6.5	31.616 µg/L	31.616 ppb	09:27:46
2	Sb 206.836†	17.5	-3.5	-3.3814 µg/L	-3.3814 ppb	09:27:46
2	Se 196.026†	10.7	0.9	1.2326 µg/L	1.2326 ppb	09:27:46
2	SiO2†	2749.7	16.3	3.0017 µg/L	3.0017 ppb	09:27:25
2	Si 251.611†	522.9	201.1	14.730 µg/L	14.730 ppb	09:27:46
2	Sn 189.927†	23.9	1.7	0.8708 µg/L	0.8708 ppb	09:27:46
2	Ti 334.940†	1694.0	930.7	2.1197 µg/L	2.1197 ppb	09:27:25
2	Tl 190.801†	-19.3	1.0	1.5092 µg/L	1.5092 ppb	09:27:46
2	U 409.014†	700.2	-25.7	-2.3359 µg/L	-2.3359 ppb	09:27:25
2	V 292.402†	-109.6	16.4	0.1939 µg/L	0.1939 ppb	09:27:25
2	Zn 213.857†	573.9	51.0	1.3438 µg/L	1.3438 ppb	09:27:46
3	Sc RADIAL	114234.8	114234.8	97.9 %		09:26:17
3	Al 396.153Radial†	174.7	55.0	27.300 µg/L	27.300 ppb	09:26:17
3	Ca 317.933Radial†	427.3	23.5	9.0915 µg/L	9.0915 ppb	09:26:37
3	Fe 238.204 Radial†	17.8	3.1	19.462 µg/L	19.462 ppb	09:26:37
3	K 766.490 Radial†	749.6	82.8	42.381 µg/L	42.381 ppb	09:26:17
3	Mg 279.077 IEC†	8.0	-7.3	-45.054 µg/L	-45.054 ppb	09:26:37
3	Na 589.592 Radial†	-525.7	97.4	24.383 µg/L	24.383 ppb	09:26:17
3	Sr 421.552†	-58.5	2.6	0.0129 µg/L	0.0129 ppb	09:26:17
3	Sc 361.383	2017970.1	2017970.1	99.790 %		09:27:52
3	Y 371.029	1260345.7	1260345.7	100.13 %		09:27:52
3	Ag 328.068†	75.5	65.3	0.5960 µg/L	0.5960 ppb	09:27:58
3	As 188.979†	1.4	-0.8	-1.5322 µg/L	-1.5322 ppb	09:28:18
3	B 249.677†	179.3	41.8	1.8072 µg/L	1.8072 ppb	09:28:18
3	Ba 233.527†	-76.0	1.9	0.0474 µg/L	0.0474 ppb	09:28:18
3	Be 313.107†	3711.9	203.9	0.1267 µg/L	0.1267 ppb	09:27:58
3	Cd 226.502†	-104.5	-5.7	-0.1576 µg/L	-0.1576 ppb	09:28:18
3	Co 228.616†	-58.4	8.1	0.3897 µg/L	0.3897 ppb	09:28:18
3	Cr 267.716†	-131.0	-31.5	-0.6599 µg/L	-0.6599 ppb	09:27:58
3	Cu 324.752†	4101.8	-159.3	-1.1011 µg/L	-1.1011 ppb	09:27:58
3	Mn 257.610†	-39.2	162.1	0.5200 µg/L	0.5200 ppb	09:28:18
3	Mo 202.031†	5.4	9.1	1.0616 µg/L	1.0616 ppb	09:28:18
3	Ni 231.604†	304.0	29.1	1.5905 µg/L	1.5905 ppb	09:28:18
3	P 214.914†	177.6	-23.0	-46.264 µg/L	-46.264 ppb	09:28:18
3	Pb 220.353†	50.4	-5.8	-1.4785 µg/L	-1.4785 ppb	09:28:18
3	S 181.975 Axial†	28.9	6.8	33.126 µg/L	33.126 ppb	09:28:18
3	Sb 206.836†	24.1	3.0	2.9703 µg/L	2.9703 ppb	09:28:18
3	Se 196.026†	15.1	5.2	6.7173 µg/L	6.7173 ppb	09:28:18
3	SiO2†	2764.8	19.2	3.5321 µg/L	3.5321 ppb	09:27:58
3	Si 251.611†	511.7	187.5	13.798 µg/L	13.798 ppb	09:28:18
3	Sn 189.927†	20.3	-2.1	-1.0812 µg/L	-1.0812 ppb	09:28:18
3	Ti 334.940†	1829.9	1059.3	2.4126 µg/L	2.4126 ppb	09:27:58
3	Tl 190.801†	-18.3	2.1	3.1863 µg/L	3.1863 ppb	09:28:18
3	U 409.014†	651.9	-77.2	-7.0060 µg/L	-7.0060 ppb	09:27:58
3	V 292.402†	-134.7	-8.2	-0.0951 µg/L	-0.0951 ppb	09:27:58
3	Zn 213.857†	566.3	40.8	1.0752 µg/L	1.0752 ppb	09:28:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2019714.9	99.876	%	0.5761				0.58%
Sc RADIAL	113794.5	97.6	%	0.48				0.50%
Y 371.029	1261278.4	100.20	%	0.594				0.59%
Ag 328.068†	132.1	1.2076	µg/L	0.53230	1.2076	ppb	0.53230	44.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	38.9	19.293	µg/L	12.8579	19.293	ppb	12.8579	66.65%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.4	-2.5476	µg/L	4.30809	-2.5476	ppb	4.30809	169.11%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	37.1	1.5985	µg/L	0.18412	1.5985	ppb	0.18412	11.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.5	0.2947	µg/L	0.22306	0.2947	ppb	0.22306	75.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	197.7	0.1227	µg/L	0.05125	0.1227	ppb	0.05125	41.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	23.7	9.1873	µg/L	2.64570	9.1873	ppb	2.64570	28.80%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-5.0	-0.1403	µg/L	0.02881	-0.1403	ppb	0.02881	20.55%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.8	-0.1388	µg/L	0.53310	-0.1388	ppb	0.53310	383.96%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -22.8     -0.4771 µg/L       0.15894     -0.4771 ppb        0.15894  33.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -156.2     -1.0759 µg/L       0.32684     -1.0759 ppb        0.32684  30.38%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         5.5      34.706 µg/L       13.5188      34.706 ppb        13.5188  38.95%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         78.6      40.228 µg/L        2.5653      40.228 ppb         2.5653   6.38%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -3.5     -21.501 µg/L       21.7784     -21.501 ppb        21.7784 101.29%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              139.7      0.4505 µg/L       0.06488      0.4505 ppb        0.06488  14.40%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                8.8      1.0260 µg/L       0.47892      1.0260 ppb        0.47892  46.68%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        69.8      17.487 µg/L        6.1702      17.487 ppb         6.1702  35.28%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               28.0      1.5300 µg/L       0.13707      1.5300 ppb        0.13707   8.96%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -18.3     -36.967 µg/L        9.1242     -36.967 ppb         9.1242  24.68%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -8.6     -2.2197 µg/L       0.93393     -2.2197 ppb        0.93393  42.08%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           7.8      38.238 µg/L       10.1891      38.238 ppb        10.1891  26.65%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.8      0.8352 µg/L       3.65172      0.8352 ppb        3.65172 437.24%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.5      7.0265 µg/L       5.95456      7.0265 ppb        5.95456  84.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     29.3      5.3882 µg/L       3.68378      5.3882 ppb        3.68378  68.37%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              178.5      13.099 µg/L        2.0713      13.099 ppb         2.0713  15.81%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.0     -0.4940 µg/L       1.18576     -0.4940 ppb        1.18576 240.05%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               14.0      0.0703 µg/L       0.06327      0.0703 ppb        0.06327  89.99%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             1149.4      2.6177 µg/L       0.62625      2.6177 ppb        0.62625  23.92%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.4      2.1513 µg/L       0.90493      2.1513 ppb        0.90493  42.06%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -80.6     -7.3127 µg/L       5.13701     -7.3127 ppb        5.13701  70.25%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 6.6      0.0727 µg/L       0.15004      0.0727 ppb        0.15004 206.28%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               42.8      1.1255 µg/L       0.19805      1.1255 ppb        0.19805  17.60%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: 241322004|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 327
Date Collected: 12/10/2009 09:28:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322004|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116349.6	116349.6	99.8	%			09:29:04
1	Al 396.153Radial†	30262.1	30211.3	15010	µg/L	15010	ppb	09:29:04
1	Ca 317.933Radial†	16603.2	16230.3	6279.8	µg/L	6279.8	ppb	09:29:04
1	Fe 238.204 Radial†	9679.7	9687.7	61609	µg/L	61609	ppb	09:29:24
1	K 766.490 Radial†	7639.7	6975.5	3570.0	µg/L	3570.0	ppb	09:29:04
1	Mg 279.077 IEC†	450.9	436.5	2604.5	µg/L	2604.5	ppb	09:29:24
1	Na 589.592 Radial†	4073.1	4716.9	1181.2	µg/L	1181.2	ppb	09:29:04
1	Sr 421.552†	7878.8	7960.0	40.007	µg/L	40.007	ppb	09:29:04
1	Sc 361.383	2032772.9	2032772.9	100.52	%			09:30:28
1	Y 371.029	1483373.0	1483373.0	117.85	%			09:30:28
1	Ag 328.068†	-773.5	-779.9	-1.8417	µg/L	-1.8417	ppb	09:30:34
1	As 188.979†	30.7	28.3	47.641	µg/L	47.641	ppb	09:30:54
1	B 249.677†	876.6	734.2	12.455	µg/L	12.455	ppb	09:30:34
1	Ba 233.527†	9976.4	10002.6	256.68	µg/L	256.68	ppb	09:30:34
1	Be 313.107†	16079.3	12480.0	6.9655	µg/L	6.9655	ppb	09:30:34
1	Cd 226.502†	149.9	248.1	1.7195	µg/L	1.7195	ppb	09:30:34
1	Co 228.616†	188.8	254.5	7.5600	µg/L	7.5600	ppb	09:30:54
1	Cr 267.716†	5478.8	5550.2	116.54	µg/L	116.54	ppb	09:30:34
1	Cu 324.752†	6241.7	1939.5	26.687	µg/L	26.687	ppb	09:30:34
1	Mn 257.610†	346109.2	344514.4	1107.8	µg/L	1107.8	ppb	09:30:28
1	Mo 202.031†	93.0	96.2	13.653	µg/L	13.653	ppb	09:30:54
1	Ni 231.604†	1424.8	1141.8	62.472	µg/L	62.472	ppb	09:30:54
1	P 214.914†	639.8	435.6	810.82	µg/L	810.82	ppb	09:30:54
1	Pb 220.353†	254.7	197.1	51.708	µg/L	51.708	ppb	09:30:54
1	S 181.975 Axial†	126.9	104.1	500.13	µg/L	500.13	ppb	09:30:54
1	Sb 206.836†	20.6	-0.7	6.5924	µg/L	6.5924	ppb	09:30:54
1	Se 196.026†	-23.1	-32.9	0.9247	µg/L	0.9247	ppb	09:30:54
1	SiO2†	67485.2	64383.6	11823	µg/L	11823	ppb	09:30:34
1	Si 251.611†	75176.5	74461.1	5427.2	µg/L	5427.2	ppb	09:30:34
1	Sn 189.927†	-5.7	-28.0	-5.2159	µg/L	-5.2159	ppb	09:30:54
1	Ti 334.940†	1006681.6	1000682.9	2279.1	µg/L	2279.1	ppb	09:30:28
1	Tl 190.801†	-37.9	-17.4	-6.5725	µg/L	-6.5725	ppb	09:30:54
1	U 409.014†	-2038.8	-2758.7	-261.48	µg/L	-261.48	ppb	09:30:28
1	V 292.402†	5179.4	5279.3	64.086	µg/L	64.086	ppb	09:30:34
1	Zn 213.857†	11513.3	10926.9	282.64	µg/L	282.64	ppb	09:30:34
2	Sc RADIAL	114086.5	114086.5	97.8	%			09:29:30
2	Al 396.153Radial†	30112.5	30660.2	15233	µg/L	15233	ppb	09:29:30
2	Ca 317.933Radial†	16415.5	16368.5	6333.3	µg/L	6333.3	ppb	09:29:30
2	Fe 238.204 Radial†	9717.1	9918.4	63077	µg/L	63077	ppb	09:29:50
2	K 766.490 Radial†	7657.7	7145.9	3657.2	µg/L	3657.2	ppb	09:29:30
2	Mg 279.077 IEC†	453.7	448.4	2675.5	µg/L	2675.5	ppb	09:29:50
2	Na 589.592 Radial†	4031.4	4755.3	1190.8	µg/L	1190.8	ppb	09:29:30
2	Sr 421.552†	7855.5	8092.8	40.674	µg/L	40.674	ppb	09:29:30
2	Sc 361.383	2029191.4	2029191.4	100.34	%			09:31:02
2	Y 371.029	1482573.5	1482573.5	117.78	%			09:31:02
2	Ag 328.068†	-787.3	-795.0	-1.8654	µg/L	-1.8654	ppb	09:31:08
2	As 188.979†	30.3	28.0	46.840	µg/L	46.840	ppb	09:31:28
2	B 249.677†	839.0	698.3	10.437	µg/L	10.437	ppb	09:31:08
2	Ba 233.527†	9937.4	9981.3	256.13	µg/L	256.13	ppb	09:31:08
2	Be 313.107†	16065.3	12494.2	6.9743	µg/L	6.9743	ppb	09:31:08
2	Cd 226.502†	152.5	251.0	1.6852	µg/L	1.6852	ppb	09:31:08
2	Co 228.616†	196.9	262.8	7.9637	µg/L	7.9637	ppb	09:31:28
2	Cr 267.716†	5472.4	5553.4	116.60	µg/L	116.60	ppb	09:31:08
2	Cu 324.752†	6304.1	2012.7	27.510	µg/L	27.510	ppb	09:31:08
2	Mn 257.610†	345369.8	344385.2	1107.6	µg/L	1107.6	ppb	09:31:02
2	Mo 202.031†	88.9	92.3	13.262	µg/L	13.262	ppb	09:31:28
2	Ni 231.604†	1429.5	1149.0	62.865	µg/L	62.865	ppb	09:31:28
2	P 214.914†	640.2	437.1	812.14	µg/L	812.14	ppb	09:31:28
2	Pb 220.353†	243.2	186.1	48.856	µg/L	48.856	ppb	09:31:28

2	S 181.975 Axial†	128.7	106.1	509.83	µg/L	509.83 ppb	09:31:28
2	Sb 206.836†	23.2	2.0	9.2072	µg/L	9.2072 ppb	09:31:28
2	Se 196.026†	-17.5	-27.3	9.0482	µg/L	9.0482 ppb	09:31:28
2	SiO2†	67378.1	64395.3	11825	µg/L	11825 ppb	09:31:08
2	Si 251.611†	75120.1	74537.0	5432.8	µg/L	5432.8 ppb	09:31:08
2	Sn 189.927†	-10.1	-32.4	-7.2637	µg/L	-7.2637 ppb	09:31:28
2	Ti 334.940†	1004930.0	1000704.9	2279.2	µg/L	2279.2 ppb	09:31:02
2	Tl 190.801†	-30.5	-10.0	4.6797	µg/L	4.6797 ppb	09:31:28
2	U 409.014†	-1996.1	-2719.7	-258.22	µg/L	-258.22 ppb	09:31:02
2	V 292.402†	5150.7	5259.7	63.989	µg/L	63.989 ppb	09:31:08
2	Zn 213.857†	11456.7	10890.7	281.52	µg/L	281.52 ppb	09:31:08
3	Sc RADIAL	115242.7	115242.7	98.8	%		09:29:56
3	Al 396.153Radial†	30347.9	30589.5	15198	µg/L	15198 ppb	09:29:56
3	Ca 317.933Radial†	16544.7	16330.9	6318.8	µg/L	6318.8 ppb	09:29:56
3	Fe 238.204 Radial†	9707.0	9808.5	62378	µg/L	62378 ppb	09:30:16
3	K 766.490 Radial†	7727.8	7138.2	3653.3	µg/L	3653.3 ppb	09:29:56
3	Mg 279.077 IEC†	452.1	442.1	2637.8	µg/L	2637.8 ppb	09:30:16
3	Na 589.592 Radial†	4061.7	4744.6	1188.2	µg/L	1188.2 ppb	09:29:56
3	Sr 421.552†	7943.8	8101.6	40.718	µg/L	40.718 ppb	09:29:56
3	Sc 361.383	2013051.3	2013051.3	99.546	%		09:31:35
3	Y 371.029	1475125.6	1475125.6	117.19	%		09:31:35
3	Ag 328.068†	-796.9	-810.9	-2.0662	µg/L	-2.0662 ppb	09:31:41
3	As 188.979†	26.7	24.6	40.918	µg/L	40.918 ppb	09:32:01
3	B 249.677†	826.4	692.3	10.397	µg/L	10.397 ppb	09:31:41
3	Ba 233.527†	9843.2	9966.1	255.74	µg/L	255.74 ppb	09:31:41
3	Be 313.107†	15978.6	12535.6	6.9844	µg/L	6.9844 ppb	09:31:41
3	Cd 226.502†	133.9	233.5	1.2733	µg/L	1.2733 ppb	09:31:41
3	Co 228.616†	192.0	259.5	7.7167	µg/L	7.7167 ppb	09:32:01
3	Cr 267.716†	5407.0	5531.4	116.14	µg/L	116.14 ppb	09:31:41
3	Cu 324.752†	6254.6	2013.4	27.364	µg/L	27.364 ppb	09:31:41
3	Mn 257.610†	349039.0	350830.7	1128.0	µg/L	1128.0 ppb	09:31:35
3	Mo 202.031†	91.7	95.8	13.636	µg/L	13.636 ppb	09:32:01
3	Ni 231.604†	1422.0	1152.9	63.078	µg/L	63.078 ppb	09:32:01
3	P 214.914†	637.4	439.4	817.70	µg/L	817.70 ppb	09:32:01
3	Pb 220.353†	260.4	205.3	53.818	µg/L	53.818 ppb	09:32:01
3	S 181.975 Axial†	127.4	105.8	508.34	µg/L	508.34 ppb	09:32:01
3	Sb 206.836†	19.3	-1.7	5.7067	µg/L	5.7067 ppb	09:32:01
3	Se 196.026†	-25.9	-35.9	-2.3751	µg/L	-2.3751 ppb	09:32:01
3	SiO2†	66961.7	64515.4	11847	µg/L	11847 ppb	09:31:41
3	Si 251.611†	74543.3	74557.8	5432.7	µg/L	5432.7 ppb	09:31:41
3	Sn 189.927†	-3.6	-26.1	-4.0916	µg/L	-4.0916 ppb	09:32:01
3	Ti 334.940†	1015622.2	1019475.4	2321.9	µg/L	2321.9 ppb	09:31:35
3	Tl 190.801†	-31.0	-10.8	3.9353	µg/L	3.9353 ppb	09:32:01
3	U 409.014†	-1987.3	-2726.8	-258.74	µg/L	-258.74 ppb	09:31:35
3	V 292.402†	5103.6	5253.6	63.864	µg/L	63.864 ppb	09:31:41
3	Zn 213.857†	11393.2	10918.4	282.33	µg/L	282.33 ppb	09:31:41

Mean Data: 241322004|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025005.2	100.14	%	0.520				0.52%
Sc RADIAL	115226.3	98.8	%	0.97				0.98%
Y 371.029	1480357.4	117.61	%	0.361				0.31%
Ag 328.068†	-795.3	-1.9244	µg/L	0.12331	-1.9244	ppb	0.12331	6.41%
Al 396.153Radial†	30487.0	15147	µg/L	119.9	15147	ppb	119.9	0.79%
As 188.979†	27.0	45.133	µg/L	3.6724	45.133	ppb	3.6724	8.14%
B 249.677†	708.3	11.096	µg/L	1.1768	11.096	ppb	1.1768	10.61%
Ba 233.527†	9983.3	256.19	µg/L	0.471	256.19	ppb	0.471	0.18%
Be 313.107†	12503.3	6.9747	µg/L	0.00946	6.9747	ppb	0.00946	0.14%
Ca 317.933Radial†	16309.9	6310.6	µg/L	27.65	6310.6	ppb	27.65	0.44%
Cd 226.502†	244.2	1.5594	µg/L	0.24830	1.5594	ppb	0.24830	15.92%
Co 228.616†	258.9	7.7468	µg/L	0.20353	7.7468	ppb	0.20353	2.63%
Cr 267.716†	5545.0	116.43	µg/L	0.250	116.43	ppb	0.250	0.21%
Cu 324.752†	1988.5	27.187	µg/L	0.4389	27.187	ppb	0.4389	1.61%
Fe 238.204 Radial†	9804.9	62355	µg/L	734.0	62355	ppb	734.0	1.18%
K 766.490 Radial†	7086.5	3626.8	µg/L	49.24	3626.8	ppb	49.24	1.36%
Mg 279.077 IEC†	442.3	2639.3	µg/L	35.57	2639.3	ppb	35.57	1.35%
Mn 257.610†	346576.8	1114.5	µg/L	11.77	1114.5	ppb	11.77	1.06%
Mo 202.031†	94.7	13.517	µg/L	0.2210	13.517	ppb	0.2210	1.63%
Na 589.592 Radial†	4739.0	1186.8	µg/L	4.96	1186.8	ppb	4.96	0.42%

Ni 231.604†	1147.9	62.805	µg/L	0.3077	62.805	ppb	0.3077	0.49%
P 214.914†	437.4	813.55	µg/L	3.652	813.55	ppb	3.652	0.45%
Pb 220.353†	196.2	51.461	µg/L	2.4901	51.461	ppb	2.4901	4.84%
S 181.975 Axial†	105.3	506.10	µg/L	5.224	506.10	ppb	5.224	1.03%
Sb 206.836†	-0.1	7.1688	µg/L	1.82004	7.1688	ppb	1.82004	25.39%
Se 196.026†	-32.0	2.5326	µg/L	5.87892	2.5326	ppb	5.87892	232.13%
SiO2†	64431.5	11832	µg/L	13.4	11832	ppb	13.4	0.11%
Si 251.611†	74518.6	5430.9	µg/L	3.24	5430.9	ppb	3.24	0.06%
Sn 189.927†	-28.8	-5.5237	µg/L	1.60833	-5.5237	ppb	1.60833	29.12%
Sr 421.552†	8051.5	40.466	µg/L	0.3988	40.466	ppb	0.3988	0.99%
Ti 334.940†	1006954.4	2293.4	µg/L	24.70	2293.4	ppb	24.70	1.08%
Tl 190.801†	-12.7	0.6808	µg/L	6.29257	0.6808	ppb	6.29257	924.25%
U 409.014†	-2735.1	-259.48	µg/L	1.754	-259.48	ppb	1.754	0.68%
V 292.402†	5264.2	63.980	µg/L	0.1111	63.980	ppb	0.1111	0.17%
Zn 213.857†	10912.0	282.16	µg/L	0.578	282.16	ppb	0.578	0.20%

Sequence No.: 34
Sample ID: 241322005|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 328
Date Collected: 12/10/2009 09:32:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322005|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115386.5	115386.5	98.9	%			09:32:43
1	Al 396.153Radial†	71778.3	72427.7	35986	µg/L	35986	ppb	09:32:43
1	Ca 317.933Radial†	6873.3	6534.5	2528.3	µg/L	2528.3	ppb	09:33:03
1	Fe 238.204 Radial†	17703.7	17879.2	113700	µg/L	113700	ppb	09:33:03
1	K 766.490 Radial†	22986.5	22551.5	11542	µg/L	11542	ppb	09:32:43
1	Mg 279.077 IEC†	1979.4	1985.3	12090	µg/L	12090	ppb	09:33:03
1	Na 589.592 Radial†	7911.3	8630.6	2161.3	µg/L	2161.3	ppb	09:32:43
1	Sr 421.552†	6459.4	6591.3	33.127	µg/L	33.127	ppb	09:33:03
1	Sc 361.383	2026263.8	2026263.8	100.20	%			09:34:08
1	Y 371.029	1316447.5	1316447.5	104.58	%			09:34:08
1	Ag 328.068†	-700.6	-709.6	3.1597	µg/L	3.1597	ppb	09:34:13
1	As 188.979†	6.2	4.0	3.7588	µg/L	3.7588	ppb	09:34:34
1	B 249.677†	1330.1	1189.6	15.815	µg/L	15.815	ppb	09:34:13
1	Ba 233.527†	5583.1	5650.0	145.12	µg/L	145.12	ppb	09:34:13
1	Be 313.107†	14943.0	11397.3	5.2910	µg/L	5.2910	ppb	09:34:13
1	Cd 226.502†	318.1	416.4	2.2356	µg/L	2.2356	ppb	09:34:13
1	Co 228.616†	315.2	381.2	8.0722	µg/L	8.0722	ppb	09:34:34
1	Cr 267.716†	3860.4	3952.5	83.116	µg/L	83.116	ppb	09:34:13
1	Cu 324.752†	4971.4	691.7	29.221	µg/L	29.221	ppb	09:34:13
1	Mn 257.610†	602305.8	601306.3	1934.3	µg/L	1934.3	ppb	09:34:08
1	Mo 202.031†	141.9	145.3	21.442	µg/L	21.442	ppb	09:34:34
1	Ni 231.604†	622.8	346.0	18.928	µg/L	18.928	ppb	09:34:34
1	P 214.914†	883.2	680.5	1253.1	µg/L	1253.1	ppb	09:34:34
1	Pb 220.353†	437.5	380.3	100.11	µg/L	100.11	ppb	09:34:34
1	S 181.975 Axial†	72.6	50.3	227.51	µg/L	227.51	ppb	09:34:34
1	Sb 206.836†	10.0	-11.1	7.0194	µg/L	7.0194	ppb	09:34:34
1	Se 196.026†	-35.5	-45.3	17.026	µg/L	17.026	ppb	09:34:34
1	SiO2†	77520.7	74614.7	13702	µg/L	13702	ppb	09:34:13
1	Si 251.611†	86486.3	85988.6	6179.9	µg/L	6179.9	ppb	09:34:13
1	Sn 189.927†	2.7	-19.7	6.2728	µg/L	6.2728	ppb	09:34:34
1	Ti 334.940†	2187909.2	2182772.4	4972.0	µg/L	4972.0	ppb	09:34:08
1	Tl 190.801†	-42.7	-22.2	9.6064	µg/L	9.6064	ppb	09:34:13
1	U 409.014†	-149.8	-879.9	-100.95	µg/L	-100.95	ppb	09:34:08
1	V 292.402†	8419.0	8528.9	105.21	µg/L	105.21	ppb	09:34:13
1	Zn 213.857†	35497.8	34900.3	912.48	µg/L	912.48	ppb	09:34:13
2	Sc RADIAL	114867.1	114867.1	98.5	%			09:33:09
2	Al 396.153Radial†	71538.1	72511.9	36027	µg/L	36027	ppb	09:33:09
2	Ca 317.933Radial†	6881.5	6574.2	2543.7	µg/L	2543.7	ppb	09:33:29
2	Fe 238.204 Radial†	17761.9	18019.2	114590	µg/L	114590	ppb	09:33:29
2	K 766.490 Radial†	22907.8	22576.6	11554	µg/L	11554	ppb	09:33:09
2	Mg 279.077 IEC†	1988.2	2003.3	12200	µg/L	12200	ppb	09:33:29
2	Na 589.592 Radial†	7933.7	8689.5	2176.1	µg/L	2176.1	ppb	09:33:09
2	Sr 421.552†	6485.2	6646.9	33.407	µg/L	33.407	ppb	09:33:29
2	Sc 361.383	2002638.1	2002638.1	99.031	%			09:34:41
2	Y 371.029	1302279.8	1302279.8	103.46	%			09:34:41
2	Ag 328.068†	-674.9	-691.9	3.4048	µg/L	3.4048	ppb	09:34:46
2	As 188.979†	2.8	0.6	-2.5420	µg/L	-2.5420	ppb	09:35:07
2	B 249.677†	1387.3	1263.0	18.720	µg/L	18.720	ppb	09:34:46
2	Ba 233.527†	5613.1	5746.0	147.58	µg/L	147.58	ppb	09:34:46
2	Be 313.107†	15147.1	11779.4	5.5350	µg/L	5.5350	ppb	09:34:46
2	Cd 226.502†	343.1	445.4	2.9447	µg/L	2.9447	ppb	09:34:46
2	Co 228.616†	333.0	402.9	9.1496	µg/L	9.1496	ppb	09:35:07
2	Cr 267.716†	3900.2	4038.1	84.916	µg/L	84.916	ppb	09:34:46
2	Cu 324.752†	5069.1	848.9	30.503	µg/L	30.503	ppb	09:34:46
2	Mn 257.610†	593043.9	599045.1	1927.2	µg/L	1927.2	ppb	09:34:41
2	Mo 202.031†	144.5	149.6	21.973	µg/L	21.973	ppb	09:35:07
2	Ni 231.604†	622.1	352.6	19.290	µg/L	19.290	ppb	09:35:07
2	P 214.914†	886.9	694.7	1280.6	µg/L	1280.6	ppb	09:35:07
2	Pb 220.353†	453.2	401.4	105.54	µg/L	105.54	ppb	09:35:07

2	S 181.975 Axial†	73.6	52.2	236.79 µg/L	236.79 ppb	09:35:07
2	Sb 206.836†	13.7	-7.3	10.738 µg/L	10.738 ppb	09:35:07
2	Se 196.026†	-31.2	-41.4	22.657 µg/L	22.657 ppb	09:35:07
2	SiO2†	78450.4	76466.3	14042 µg/L	14042 ppb	09:34:46
2	Si 251.611†	87569.9	88101.2	6336.7 µg/L	6336.7 ppb	09:34:46
2	Sn 189.927†	0.6	-21.8	5.3356 µg/L	5.3356 ppb	09:35:07
2	Ti 334.940†	2156566.6	2176883.1	4958.6 µg/L	4958.6 ppb	09:34:41
2	Tl 190.801†	-53.3	-33.5	-7.8118 µg/L	-7.8118 ppb	09:34:46
2	U 409.014†	-59.1	-790.1	-92.977 µg/L	-92.977 ppb	09:34:41
2	V 292.402†	8496.6	8706.4	107.29 µg/L	107.29 ppb	09:34:46
2	Zn 213.857†	35595.6	35417.1	926.07 µg/L	926.07 ppb	09:34:46
3	Sc RADIAL	114716.2	114716.2	98.4 %		09:33:35
3	Al 396.153Radial†	71944.5	73020.7	36280 µg/L	36280 ppb	09:33:35
3	Ca 317.933Radial†	6863.8	6565.4	2540.3 µg/L	2540.3 ppb	09:33:55
3	Fe 238.204 Radial†	17713.5	17993.6	114430 µg/L	114430 ppb	09:33:55
3	K 766.490 Radial†	23013.9	22715.1	11625 µg/L	11625 ppb	09:33:35
3	Mg 279.077 IEC†	1983.8	2001.4	12188 µg/L	12188 ppb	09:33:55
3	Na 589.592 Radial†	7999.4	8766.8	2195.4 µg/L	2195.4 ppb	09:33:35
3	Sr 421.552†	6506.7	6677.5	33.561 µg/L	33.561 ppb	09:33:55
3	Sc 361.383	2010380.2	2010380.2	99.414 %		09:35:14
3	Y 371.029	1308131.6	1308131.6	103.92 %		09:35:14
3	Ag 328.068†	-709.1	-723.7	3.0918 µg/L	3.0918 ppb	09:35:20
3	As 188.979†	5.4	3.2	2.2211 µg/L	2.2211 ppb	09:35:40
3	B 249.677†	1355.6	1225.7	17.154 µg/L	17.154 ppb	09:35:20
3	Ba 233.527†	5519.9	5630.4	144.62 µg/L	144.62 ppb	09:35:20
3	Be 313.107†	14872.3	11444.1	5.3176 µg/L	5.3176 ppb	09:35:20
3	Cd 226.502†	337.1	438.1	2.7603 µg/L	2.7603 ppb	09:35:20
3	Co 228.616†	317.8	386.4	8.3077 µg/L	8.3077 ppb	09:35:40
3	Cr 267.716†	3826.3	3948.6	83.036 µg/L	83.036 ppb	09:35:20
3	Cu 324.752†	4997.9	757.5	29.834 µg/L	29.834 ppb	09:35:20
3	Mn 257.610†	597985.3	601709.4	1935.6 µg/L	1935.6 ppb	09:35:14
3	Mo 202.031†	139.3	143.8	21.296 µg/L	21.296 ppb	09:35:40
3	Ni 231.604†	632.0	360.2	19.707 µg/L	19.707 ppb	09:35:40
3	P 214.914†	889.4	693.7	1279.0 µg/L	1279.0 ppb	09:35:40
3	Pb 220.353†	440.8	387.1	101.88 µg/L	101.88 ppb	09:35:40
3	S 181.975 Axial†	73.8	52.0	236.05 µg/L	236.05 ppb	09:35:40
3	Sb 206.836†	14.3	-6.7	11.341 µg/L	11.341 ppb	09:35:40
3	Se 196.026†	-34.5	-44.6	18.470 µg/L	18.470 ppb	09:35:40
3	SiO2†	77492.9	75198.0	13809 µg/L	13809 ppb	09:35:20
3	Si 251.611†	86384.4	86568.1	6222.5 µg/L	6222.5 ppb	09:35:20
3	Sn 189.927†	0.6	-21.8	5.3208 µg/L	5.3208 ppb	09:35:40
3	Ti 334.940†	2173842.3	2185874.3	4979.1 µg/L	4979.1 ppb	09:35:14
3	Tl 190.801†	-51.1	-31.1	-3.8870 µg/L	-3.8870 ppb	09:35:20
3	U 409.014†	-90.4	-821.4	-95.777 µg/L	-95.777 ppb	09:35:14
3	V 292.402†	8398.9	8575.2	105.79 µg/L	105.79 ppb	09:35:20
3	Zn 213.857†	35283.6	34964.8	914.10 µg/L	914.10 ppb	09:35:20

Mean Data: 241322005|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2013094.0	99.549	%	0.5956				0.60%
Sc RADIAL	114989.9	98.6	%	0.30				0.31%
Y 371.029	1308953.0	103.99	%	0.566				0.54%
Ag 328.068†	-708.4	3.2188	µg/L	0.16462	3.2188	ppb	0.16462	5.11%
Al 396.153Radial†	72653.4	36098	µg/L	159.4	36098	ppb	159.4	0.44%
As 188.979†	2.6	1.1460	µg/L	3.28511	1.1460	ppb	3.28511	286.66%
B 249.677†	1226.1	17.230	µg/L	1.4540	17.230	ppb	1.4540	8.44%
Ba 233.527†	5675.5	145.77	µg/L	1.589	145.77	ppb	1.589	1.09%
Be 313.107†	11540.2	5.3812	µg/L	0.13387	5.3812	ppb	0.13387	2.49%
Ca 317.933Radial†	6558.0	2537.4	µg/L	8.08	2537.4	ppb	8.08	0.32%
Cd 226.502†	433.3	2.6469	µg/L	0.36790	2.6469	ppb	0.36790	13.90%
Co 228.616†	390.1	8.5098	µg/L	0.56641	8.5098	ppb	0.56641	6.66%
Cr 267.716†	3979.7	83.689	µg/L	1.0630	83.689	ppb	1.0630	1.27%
Cu 324.752†	766.0	29.853	µg/L	0.6408	29.853	ppb	0.6408	2.15%
Fe 238.204 Radial†	17964.0	114240	µg/L	474.2	114240	ppb	474.2	0.42%
K 766.490 Radial†	22614.4	11574	µg/L	45.1	11574	ppb	45.1	0.39%
Mg 279.077 IEC†	1996.6	12159	µg/L	60.4	12159	ppb	60.4	0.50%
Mn 257.610†	600686.9	1932.4	µg/L	4.55	1932.4	ppb	4.55	0.24%
Mo 202.031†	146.2	21.570	µg/L	0.3561	21.570	ppb	0.3561	1.65%
Na 589.592 Radial†	8695.6	2177.6	µg/L	17.12	2177.6	ppb	17.12	0.79%

Ni 231.604†	352.9	19.308	µg/L	0.3898	19.308	ppb	0.3898	2.02%
P 214.914†	689.6	1270.9	µg/L	15.41	1270.9	ppb	15.41	1.21%
Pb 220.353†	389.6	102.51	µg/L	2.769	102.51	ppb	2.769	2.70%
S 181.975 Axial†	51.5	233.45	µg/L	5.153	233.45	ppb	5.153	2.21%
Sb 206.836†	-8.4	9.6994	µg/L	2.34045	9.6994	ppb	2.34045	24.13%
Se 196.026†	-43.8	19.384	µg/L	2.9250	19.384	ppb	2.9250	15.09%
SiO2†	75426.3	13851	µg/L	173.8	13851	ppb	173.8	1.26%
Si 251.611†	86886.0	6246.3	µg/L	81.10	6246.3	ppb	81.10	1.30%
Sn 189.927†	-21.1	5.6431	µg/L	0.54539	5.6431	ppb	0.54539	9.66%
Sr 421.552†	6638.6	33.365	µg/L	0.2198	33.365	ppb	0.2198	0.66%
Ti 334.940†	2181843.3	4969.9	µg/L	10.40	4969.9	ppb	10.40	0.21%
Tl 190.801†	-28.9	-0.6975	µg/L	9.13666	-0.6975	ppb	9.13666	>999.9%
U 409.014†	-830.5	-96.569	µg/L	4.0464	-96.569	ppb	4.0464	4.19%
V 292.402†	8603.5	106.10	µg/L	1.076	106.10	ppb	1.076	1.01%
Zn 213.857†	35094.1	917.55	µg/L	7.425	917.55	ppb	7.425	0.81%

Sequence No.: 35
Sample ID: 241322006|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 329
Date Collected: 12/10/2009 09:35:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322006|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	114444.4	114444.4	98.1	%			09:36:22
1	Al 396.153Radial†	41669.5	42341.4	21037	µg/L	21037	ppb	09:36:22
1	Ca 317.933Radial†	20580.8	20560.8	7955.4	µg/L	7955.4	ppb	09:36:22
1	Fe 238.204 Radial†	12060.0	12275.0	78063	µg/L	78063	ppb	09:36:42
1	K 766.490 Radial†	6722.7	6168.5	3157.0	µg/L	3157.0	ppb	09:36:22
1	Mg 279.077 IEC†	674.5	671.9	4033.7	µg/L	4033.7	ppb	09:36:42
1	Na 589.592 Radial†	14932.3	15851.4	3969.6	µg/L	3969.6	ppb	09:36:22
1	Sr 421.552†	9837.6	10087.6	50.700	µg/L	50.700	ppb	09:36:22
1	Sc 361.383	2016505.1	2016505.1	99.717	%			09:37:47
1	Y 371.029	1357839.6	1357839.6	107.87	%			09:37:47
1	Ag 328.068†	-503.2	-515.0	1.7275	µg/L	1.7275	ppb	09:37:53
1	As 188.979†	12.6	10.4	13.972	µg/L	13.972	ppb	09:38:13
1	B 249.677†	1023.2	888.2	13.958	µg/L	13.958	ppb	09:37:53
1	Ba 233.527†	8380.6	8482.4	217.64	µg/L	217.64	ppb	09:37:53
1	Be 313.107†	15731.4	12260.1	6.6300	µg/L	6.6300	ppb	09:37:53
1	Cd 226.502†	209.4	309.0	2.1306	µg/L	2.1306	ppb	09:38:13
1	Co 228.616†	181.6	248.8	6.1851	µg/L	6.1851	ppb	09:38:13
1	Cr 267.716†	1005.2	1107.8	23.324	µg/L	23.324	ppb	09:38:13
1	Cu 324.752†	5152.8	897.7	22.995	µg/L	22.995	ppb	09:37:53
1	Mn 257.610†	729703.8	731974.5	2347.0	µg/L	2347.0	ppb	09:37:47
1	Mo 202.031†	144.5	148.6	20.419	µg/L	20.419	ppb	09:38:13
1	Ni 231.604†	639.8	366.1	20.027	µg/L	20.027	ppb	09:38:13
1	P 214.914†	590.8	391.6	705.63	µg/L	705.63	ppb	09:38:13
1	Pb 220.353†	462.7	407.7	106.34	µg/L	106.34	ppb	09:38:13
1	S 181.975 Axial†	121.9	100.1	478.10	µg/L	478.10	ppb	09:38:13
1	Sb 206.836†	18.2	-2.8	6.8534	µg/L	6.8534	ppb	09:38:13
1	Se 196.026†	-31.9	-41.9	0.6021	µg/L	0.6021	ppb	09:38:13
1	SiO2†	73027.0	70482.8	12943	µg/L	12943	ppb	09:37:53
1	Si 251.611†	81322.9	81228.3	5908.9	µg/L	5908.9	ppb	09:37:53
1	Sn 189.927†	-14.2	-36.6	-7.0167	µg/L	-7.0167	ppb	09:38:13
1	Ti 334.940†	1232565.0	1235286.0	2813.4	µg/L	2813.4	ppb	09:37:47
1	Tl 190.801†	-38.7	-18.5	0.3060	µg/L	0.3060	ppb	09:38:13
1	U 409.014†	-285.6	-1016.8	-106.58	µg/L	-106.58	ppb	09:37:47
1	V 292.402†	3283.1	3419.2	44.802	µg/L	44.802	ppb	09:37:53
1	Zn 213.857†	15639.9	15157.7	393.21	µg/L	393.21	ppb	09:37:53
2	Sc RADIAL	115912.4	115912.4	99.4	%			09:36:48
2	Al 396.153Radial†	42398.8	42537.5	21134	µg/L	21134	ppb	09:36:48
2	Ca 317.933Radial†	20942.6	20659.2	7993.5	µg/L	7993.5	ppb	09:36:48
2	Fe 238.204 Radial†	12169.6	12229.6	77775	µg/L	77775	ppb	09:37:08
2	K 766.490 Radial†	6857.2	6217.1	3181.8	µg/L	3181.8	ppb	09:36:48
2	Mg 279.077 IEC†	676.4	665.1	3992.1	µg/L	3992.1	ppb	09:37:08
2	Na 589.592 Radial†	15222.5	15950.7	3994.4	µg/L	3994.4	ppb	09:36:48
2	Sr 421.552†	10050.8	10175.2	51.140	µg/L	51.140	ppb	09:36:48
2	Sc 361.383	2017917.8	2017917.8	99.787	%			09:38:21
2	Y 371.029	1359060.4	1359060.4	107.97	%			09:38:21
2	Ag 328.068†	-512.9	-524.4	1.6169	µg/L	1.6169	ppb	09:38:26
2	As 188.979†	13.0	10.8	14.673	µg/L	14.673	ppb	09:38:47
2	B 249.677†	1063.2	927.6	15.756	µg/L	15.756	ppb	09:38:26
2	Ba 233.527†	8410.9	8506.9	218.27	µg/L	218.27	ppb	09:38:26
2	Be 313.107†	15753.6	12271.4	6.6349	µg/L	6.6349	ppb	09:38:26
2	Cd 226.502†	205.9	305.3	2.0568	µg/L	2.0568	ppb	09:38:47
2	Co 228.616†	182.9	250.0	6.2297	µg/L	6.2297	ppb	09:38:47
2	Cr 267.716†	1011.4	1113.4	23.439	µg/L	23.439	ppb	09:38:47
2	Cu 324.752†	5173.2	914.5	23.049	µg/L	23.049	ppb	09:38:26
2	Mn 257.610†	732073.2	733836.7	2352.9	µg/L	2352.9	ppb	09:38:21
2	Mo 202.031†	146.0	150.0	20.571	µg/L	20.571	ppb	09:38:47
2	Ni 231.604†	632.0	357.8	19.573	µg/L	19.573	ppb	09:38:47
2	P 214.914†	583.8	384.1	690.91	µg/L	690.91	ppb	09:38:47
2	Pb 220.353†	444.6	389.3	101.59	µg/L	101.59	ppb	09:38:47

2	S 181.975 Axial†	120.5	98.6	470.79 µg/L	470.79 ppb	09:38:47
2	Sb 206.836†	10.7	-10.4	-0.5664 µg/L	-0.5664 ppb	09:38:47
2	Se 196.026†	-22.1	-32.0	12.967 µg/L	12.967 ppb	09:38:47
2	SiO2†	72769.8	70173.7	12886 µg/L	12886 ppb	09:38:26
2	Si 251.611†	81048.2	80896.0	5884.1 µg/L	5884.1 ppb	09:38:26
2	Sn 189.927†	-13.4	-35.9	-6.6736 µg/L	-6.6736 ppb	09:38:47
2	Ti 334.940†	1235977.8	1237840.7	2819.3 µg/L	2819.3 ppb	09:38:21
2	Tl 190.801†	-37.9	-17.6	1.7712 µg/L	1.7712 ppb	09:38:47
2	U 409.014†	-258.6	-989.6	-104.06 µg/L	-104.06 ppb	09:38:21
2	V 292.402†	3252.2	3385.9	44.409 µg/L	44.409 ppb	09:38:26
2	Zn 213.857†	15643.5	15150.3	393.05 µg/L	393.05 ppb	09:38:26
3	Sc RADIAL	114610.0	114610.0	98.3 %		09:37:14
3	Al 396.153Radial†	42201.7	42821.7	21276 µg/L	21276 ppb	09:37:14
3	Ca 317.933Radial†	20810.4	20764.2	8034.1 µg/L	8034.1 ppb	09:37:14
3	Fe 238.204 Radial†	12060.4	12257.7	77953 µg/L	77953 ppb	09:37:34
3	K 766.490 Radial†	6836.6	6274.5	3211.2 µg/L	3211.2 ppb	09:37:14
3	Mg 279.077 IEC†	670.0	666.4	3999.7 µg/L	3999.7 ppb	09:37:34
3	Na 589.592 Radial†	15147.8	16048.7	4019.0 µg/L	4019.0 ppb	09:37:14
3	Sr 421.552†	9980.8	10218.9	51.360 µg/L	51.360 ppb	09:37:14
3	Sc 361.383	2027564.8	2027564.8	100.26 %		09:38:54
3	Y 371.029	1365230.5	1365230.5	108.46 %		09:38:54
3	Ag 328.068†	-486.2	-495.3	1.8938 µg/L	1.8938 ppb	09:39:00
3	As 188.979†	6.4	4.2	2.6156 µg/L	2.6156 ppb	09:39:21
3	B 249.677†	1061.2	920.5	15.393 µg/L	15.393 ppb	09:39:00
3	Ba 233.527†	8356.0	8412.1	215.84 µg/L	215.84 ppb	09:39:00
3	Be 313.107†	15766.8	12209.4	6.6009 µg/L	6.6009 ppb	09:39:00
3	Cd 226.502†	198.3	296.8	1.8147 µg/L	1.8147 ppb	09:39:21
3	Co 228.616†	203.6	269.7	7.2095 µg/L	7.2095 ppb	09:39:21
3	Cr 267.716†	1005.1	1102.3	23.206 µg/L	23.206 ppb	09:39:21
3	Cu 324.752†	5189.2	905.7	23.027 µg/L	23.027 ppb	09:39:00
3	Mn 257.610†	732955.3	731225.8	2344.6 µg/L	2344.6 ppb	09:38:54
3	Mo 202.031†	149.6	152.9	20.919 µg/L	20.919 ppb	09:39:21
3	Ni 231.604†	637.6	360.3	19.713 µg/L	19.713 ppb	09:39:21
3	P 214.914†	583.1	380.6	683.73 µg/L	683.73 ppb	09:39:21
3	Pb 220.353†	452.0	394.6	102.97 µg/L	102.97 ppb	09:39:21
3	S 181.975 Axial†	121.2	98.8	471.45 µg/L	471.45 ppb	09:39:21
3	Sb 206.836†	21.1	-0.1	9.4711 µg/L	9.4711 ppb	09:39:21
3	Se 196.026†	-22.6	-32.4	12.649 µg/L	12.649 ppb	09:39:21
3	SiO2†	72201.6	69260.0	12718 µg/L	12718 ppb	09:39:00
3	Si 251.611†	80341.3	79804.5	5803.7 µg/L	5803.7 ppb	09:39:00
3	Sn 189.927†	-12.2	-34.6	-5.9906 µg/L	-5.9906 ppb	09:39:21
3	Ti 334.940†	1236234.2	1232203.2	2806.4 µg/L	2806.4 ppb	09:38:54
3	Tl 190.801†	-40.4	-19.9	-1.9761 µg/L	-1.9761 ppb	09:39:21
3	U 409.014†	-273.5	-1003.2	-105.32 µg/L	-105.32 ppb	09:38:54
3	V 292.402†	3236.6	3354.8	44.074 µg/L	44.074 ppb	09:39:00
3	Zn 213.857†	15601.8	15034.0	389.95 µg/L	389.95 ppb	09:39:00

Mean Data: 241322006|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020662.6	99.923	%	0.2976				0.30%
Sc RADIAL	114988.9	98.6	%	0.69				0.70%
Y 371.029	1360710.1	108.10	%	0.315				0.29%
Ag 328.068†	-511.6	1.7460	µg/L	0.13940	1.7460	ppb	0.13940	7.98%
Al 396.153Radial†	42566.9	21149	µg/L	120.0	21149	ppb	120.0	0.57%
As 188.979†	8.5	10.420	µg/L	6.7681	10.420	ppb	6.7681	64.95%
B 249.677†	912.1	15.036	µg/L	0.9510	15.036	ppb	0.9510	6.32%
Ba 233.527†	8467.1	217.25	µg/L	1.263	217.25	ppb	1.263	0.58%
Be 313.107†	12247.0	6.6219	µg/L	0.01839	6.6219	ppb	0.01839	0.28%
Ca 317.933Radial†	20661.4	7994.3	µg/L	39.35	7994.3	ppb	39.35	0.49%
Cd 226.502†	303.7	2.0007	µg/L	0.16528	2.0007	ppb	0.16528	8.26%
Co 228.616†	256.2	6.5414	µg/L	0.57902	6.5414	ppb	0.57902	8.85%
Cr 267.716†	1107.8	23.323	µg/L	0.1168	23.323	ppb	0.1168	0.50%
Cu 324.752†	906.0	23.024	µg/L	0.0274	23.024	ppb	0.0274	0.12%
Fe 238.204 Radial†	12254.1	77930	µg/L	145.6	77930	ppb	145.6	0.19%
K 766.490 Radial†	6220.0	3183.3	µg/L	27.15	3183.3	ppb	27.15	0.85%
Mg 279.077 IEC†	667.8	4008.5	µg/L	22.17	4008.5	ppb	22.17	0.55%
Mn 257.610†	732345.7	2348.2	µg/L	4.28	2348.2	ppb	4.28	0.18%
Mo 202.031†	150.5	20.637	µg/L	0.2562	20.637	ppb	0.2562	1.24%
Na 589.592 Radial†	15950.2	3994.3	µg/L	24.70	3994.3	ppb	24.70	0.62%

Ni 231.604†	361.4	19.771 µg/L	0.2326	19.771 ppb	0.2326	1.18%
P 214.914†	385.4	693.42 µg/L	11.167	693.42 ppb	11.167	1.61%
Pb 220.353†	397.2	103.63 µg/L	2.445	103.63 ppb	2.445	2.36%
S 181.975 Axial†	99.2	473.45 µg/L	4.043	473.45 ppb	4.043	0.85%
Sb 206.836†	-4.4	5.2527 µg/L	5.20669	5.2527 ppb	5.20669	99.12%
Se 196.026†	-35.4	8.7391 µg/L	7.04867	8.7391 ppb	7.04867	80.66%
SiO2†	69972.2	12849 µg/L	116.8	12849 ppb	116.8	0.91%
Si 251.611†	80642.9	5865.5 µg/L	54.98	5865.5 ppb	54.98	0.94%
Sn 189.927†	-35.7	-6.5603 µg/L	0.52235	-6.5603 ppb	0.52235	7.96%
Sr 421.552†	10160.6	51.067 µg/L	0.3360	51.067 ppb	0.3360	0.66%
Ti 334.940†	1235110.0	2813.0 µg/L	6.43	2813.0 ppb	6.43	0.23%
Tl 190.801†	-18.7	0.0337 µg/L	1.88841	0.0337 ppb	1.88841	>999.9%
U 409.014†	-1003.2	-105.32 µg/L	1.261	-105.32 ppb	1.261	1.20%
V 292.402†	3386.6	44.429 µg/L	0.3643	44.429 ppb	0.3643	0.82%
Zn 213.857†	15114.0	392.07 µg/L	1.838	392.07 ppb	1.838	0.47%

Sequence No.: 36
Sample ID: 241322007|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 330
Date Collected: 12/10/2009 09:39:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322007|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	114287.5	114287.5	98.0	%			09:40:02
1	Al 396.153Radial†	34181.3	34758.2	17270	µg/L	17270	ppb	09:40:02
1	Ca 317.933Radial†	14910.3	14802.9	5727.6	µg/L	5727.6	ppb	09:40:02
1	Fe 238.204 Radial†	9672.7	9855.7	62678	µg/L	62678	ppb	09:40:22
1	K 766.490 Radial†	6466.3	5916.3	3027.9	µg/L	3027.9	ppb	09:40:02
1	Mg 279.077 IEC†	641.4	639.1	3853.4	µg/L	3853.4	ppb	09:40:22
1	Na 589.592 Radial†	2419.5	3103.1	777.10	µg/L	777.10	ppb	09:40:02
1	Sr 421.552†	4644.4	4801.9	24.134	µg/L	24.134	ppb	09:40:02
1	Sc 361.383	2020081.4	2020081.4	99.894	%			09:41:27
1	Y 371.029	1315441.2	1315441.2	104.50	%			09:41:27
1	Ag 328.068†	-12.4	-22.9	4.9977	µg/L	4.9977	ppb	09:41:32
1	As 188.979†	1.9	-0.3	-3.9092	µg/L	-3.9092	ppb	09:41:53
1	B 249.677†	796.0	659.0	8.8582	µg/L	8.8582	ppb	09:41:32
1	Ba 233.527†	4269.9	4352.5	111.72	µg/L	111.72	ppb	09:41:32
1	Be 313.107†	11709.9	8206.5	4.2339	µg/L	4.2339	ppb	09:41:32
1	Cd 226.502†	159.2	258.3	1.9986	µg/L	1.9986	ppb	09:41:32
1	Co 228.616†	195.1	261.9	7.5874	µg/L	7.5874	ppb	09:41:53
1	Cr 267.716†	1344.0	1445.2	30.398	µg/L	30.398	ppb	09:41:32
1	Cu 324.752†	7008.9	2746.5	32.514	µg/L	32.514	ppb	09:41:32
1	Mn 257.610†	472927.9	473630.7	1520.2	µg/L	1520.2	ppb	09:41:27
1	Mo 202.031†	53.2	57.0	9.1173	µg/L	9.1173	ppb	09:41:53
1	Ni 231.604†	593.6	318.7	17.435	µg/L	17.435	ppb	09:41:53
1	P 214.914†	709.8	509.6	959.36	µg/L	959.36	ppb	09:41:53
1	Pb 220.353†	355.2	299.3	78.115	µg/L	78.115	ppb	09:41:53
1	S 181.975 Axial†	58.3	36.2	167.25	µg/L	167.25	ppb	09:41:53
1	Sb 206.836†	19.9	-1.2	7.1859	µg/L	7.1859	ppb	09:41:53
1	Se 196.026†	-13.8	-23.6	12.877	µg/L	12.877	ppb	09:41:53
1	SiO2†	62856.6	60171.9	11049	µg/L	11049	ppb	09:41:32
1	Si 251.611†	69724.4	69473.2	5052.6	µg/L	5052.6	ppb	09:41:32
1	Sn 189.927†	-1.2	-23.6	-2.6774	µg/L	-2.6774	ppb	09:41:53
1	Ti 334.940†	1068400.0	1068758.6	2434.2	µg/L	2434.2	ppb	09:41:27
1	Tl 190.801†	-31.3	-11.0	6.1264	µg/L	6.1264	ppb	09:41:53
1	U 409.014†	118.8	-611.6	-67.017	µg/L	-67.017	ppb	09:41:27
1	V 292.402†	3253.9	3384.1	43.137	µg/L	43.137	ppb	09:41:32
1	Zn 213.857†	25939.2	25440.0	667.38	µg/L	667.38	ppb	09:41:32
2	Sc RADIAL	113935.4	113935.4	97.7	%			09:40:28
2	Al 396.153Radial†	34393.7	35083.4	17431	µg/L	17431	ppb	09:40:28
2	Ca 317.933Radial†	14876.1	14814.9	5732.2	µg/L	5732.2	ppb	09:40:28
2	Fe 238.204 Radial†	9761.1	9976.7	63447	µg/L	63447	ppb	09:40:48
2	K 766.490 Radial†	6448.1	5918.0	3028.8	µg/L	3028.8	ppb	09:40:28
2	Mg 279.077 IEC†	653.9	653.9	3943.7	µg/L	3943.7	ppb	09:40:48
2	Na 589.592 Radial†	2455.3	3147.5	788.21	µg/L	788.21	ppb	09:40:28
2	Sr 421.552†	4698.7	4872.0	24.487	µg/L	24.487	ppb	09:40:28
2	Sc 361.383	2013302.9	2013302.9	99.559	%			09:42:00
2	Y 371.029	1312193.4	1312193.4	104.25	%			09:42:00
2	Ag 328.068†	-58.8	-69.5	4.6316	µg/L	4.6316	ppb	09:42:06
2	As 188.979†	13.0	10.8	16.157	µg/L	16.157	ppb	09:42:27
2	B 249.677†	822.4	688.2	9.8835	µg/L	9.8835	ppb	09:42:06
2	Ba 233.527†	4253.0	4349.9	111.65	µg/L	111.65	ppb	09:42:06
2	Be 313.107†	11723.7	8259.7	4.2672	µg/L	4.2672	ppb	09:42:06
2	Cd 226.502†	137.1	236.7	1.3618	µg/L	1.3618	ppb	09:42:06
2	Co 228.616†	202.4	269.9	7.9763	µg/L	7.9763	ppb	09:42:27
2	Cr 267.716†	1345.9	1451.6	30.532	µg/L	30.532	ppb	09:42:06
2	Cu 324.752†	6995.0	2756.3	32.747	µg/L	32.747	ppb	09:42:06
2	Mn 257.610†	471407.2	473697.3	1520.5	µg/L	1520.5	ppb	09:42:00
2	Mo 202.031†	60.7	64.6	10.042	µg/L	10.042	ppb	09:42:27
2	Ni 231.604†	606.4	333.5	18.247	µg/L	18.247	ppb	09:42:27
2	P 214.914†	715.9	518.2	975.76	µg/L	975.76	ppb	09:42:27
2	Pb 220.353†	344.4	289.7	75.632	µg/L	75.632	ppb	09:42:27

2	S 181.975 Axial†	66.6	44.7	209.06 µg/L	209.06 ppb	09:42:27
2	Sb 206.836†	12.8	-8.3	0.3129 µg/L	0.3129 ppb	09:42:27
2	Se 196.026†	-19.2	-29.2	6.2699 µg/L	6.2699 ppb	09:42:27
2	SiO2†	63316.3	60845.4	11173 µg/L	11173 ppb	09:42:06
2	Si 251.611†	70302.0	70288.3	5113.0 µg/L	5113.0 ppb	09:42:06
2	Sn 189.927†	-6.0	-28.4	-5.0464 µg/L	-5.0464 ppb	09:42:27
2	Ti 334.940†	1064766.1	1068709.6	2434.1 µg/L	2434.1 ppb	09:42:00
2	Tl 190.801†	-34.5	-14.3	1.0251 µg/L	1.0251 ppb	09:42:27
2	U 409.014†	89.4	-640.6	-69.796 µg/L	-69.796 ppb	09:42:00
2	V 292.402†	3223.3	3364.4	42.980 µg/L	42.980 ppb	09:42:06
2	Zn 213.857†	25978.1	25566.6	670.65 µg/L	670.65 ppb	09:42:06
3	Sc RADIAL	114385.0	114385.0	98.1 %		09:40:54
3	Al 396.153Radial†	34524.6	35078.5	17429 µg/L	17429 ppb	09:40:54
3	Ca 317.933Radial†	15006.2	14887.8	5760.4 µg/L	5760.4 ppb	09:40:54
3	Fe 238.204 Radial†	9725.4	9901.0	62966 µg/L	62966 ppb	09:41:14
3	K 766.490 Radial†	6492.3	5937.1	3038.6 µg/L	3038.6 ppb	09:40:54
3	Mg 279.077 IEC†	638.8	635.9	3833.4 µg/L	3833.4 ppb	09:41:14
3	Na 589.592 Radial†	2464.9	3147.3	788.16 µg/L	788.16 ppb	09:40:54
3	Sr 421.552†	4746.5	4901.9	24.637 µg/L	24.637 ppb	09:40:54
3	Sc 361.383	2014733.9	2014733.9	99.630 %		09:42:34
3	Y 371.029	1313265.2	1313265.2	104.33 %		09:42:34
3	Ag 328.068†	19.7	9.4	5.3113 µg/L	5.3113 ppb	09:42:40
3	As 188.979†	5.9	3.7	3.2052 µg/L	3.2052 ppb	09:43:00
3	B 249.677†	827.1	692.3	10.214 µg/L	10.214 ppb	09:42:40
3	Ba 233.527†	4255.0	4348.9	111.62 µg/L	111.62 ppb	09:42:40
3	Be 313.107†	11684.8	8212.3	4.2390 µg/L	4.2390 ppb	09:42:40
3	Cd 226.502†	151.3	250.9	1.7799 µg/L	1.7799 ppb	09:42:40
3	Co 228.616†	203.7	271.1	8.0409 µg/L	8.0409 ppb	09:43:00
3	Cr 267.716†	1369.8	1474.7	31.016 µg/L	31.016 ppb	09:42:40
3	Cu 324.752†	6940.5	2696.6	32.230 µg/L	32.230 ppb	09:42:40
3	Mn 257.610†	470742.3	472693.6	1517.2 µg/L	1517.2 ppb	09:42:34
3	Mo 202.031†	59.0	62.9	9.8216 µg/L	9.8216 ppb	09:43:00
3	Ni 231.604†	595.0	321.7	17.600 µg/L	17.600 ppb	09:43:00
3	P 214.914†	706.6	508.3	956.47 µg/L	956.47 ppb	09:43:00
3	Pb 220.353†	339.3	284.3	74.253 µg/L	74.253 ppb	09:43:00
3	S 181.975 Axial†	60.3	38.4	177.88 µg/L	177.88 ppb	09:43:00
3	Sb 206.836†	19.6	-1.4	6.9841 µg/L	6.9841 ppb	09:43:00
3	Se 196.026†	-21.8	-31.7	2.7515 µg/L	2.7515 ppb	09:43:00
3	SiO2†	62665.9	60147.5	11045 µg/L	11045 ppb	09:42:40
3	Si 251.611†	69484.4	69417.5	5048.8 µg/L	5048.8 ppb	09:42:40
3	Sn 189.927†	-6.7	-29.2	-5.5048 µg/L	-5.5048 ppb	09:43:00
3	Ti 334.940†	1063774.2	1066954.4	2430.1 µg/L	2430.1 ppb	09:42:34
3	Tl 190.801†	-33.2	-13.0	3.0134 µg/L	3.0134 ppb	09:43:00
3	U 409.014†	160.4	-569.5	-63.256 µg/L	-63.256 ppb	09:42:34
3	V 292.402†	3205.2	3343.9	42.719 µg/L	42.719 ppb	09:42:40
3	Zn 213.857†	25840.9	25410.3	666.56 µg/L	666.56 ppb	09:42:40

Mean Data: 241322007|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2016039.4	99.694	%	0.1767				0.18%
Sc RADIAL	114202.6	97.9	%	0.20				0.21%
Y 371.029	1313633.2	104.36	%	0.131				0.13%
Ag 328.068†	-27.7	4.9802	µg/L	0.34019	4.9802	ppb	0.34019	6.83%
Al 396.153Radial†	34973.4	17377	µg/L	92.6	17377	ppb	92.6	0.53%
As 188.979†	4.7	5.1511	µg/L	10.17388	5.1511	ppb	10.17388	197.51%
B 249.677†	679.8	9.6520	µg/L	0.70701	9.6520	ppb	0.70701	7.33%
Ba 233.527†	4350.4	111.66	µg/L	0.048	111.66	ppb	0.048	0.04%
Be 313.107†	8226.2	4.2467	µg/L	0.01796	4.2467	ppb	0.01796	0.42%
Ca 317.933Radial†	14835.2	5740.0	µg/L	17.76	5740.0	ppb	17.76	0.31%
Cd 226.502†	248.6	1.7135	µg/L	0.32357	1.7135	ppb	0.32357	18.88%
Co 228.616†	267.7	7.8682	µg/L	0.24532	7.8682	ppb	0.24532	3.12%
Cr 267.716†	1457.2	30.649	µg/L	0.3249	30.649	ppb	0.3249	1.06%
Cu 324.752†	2733.1	32.497	µg/L	0.2592	32.497	ppb	0.2592	0.80%
Fe 238.204 Radial†	9911.2	63030	µg/L	388.7	63030	ppb	388.7	0.62%
K 766.490 Radial†	5923.8	3031.7	µg/L	5.93	3031.7	ppb	5.93	0.20%
Mg 279.077 IEC†	643.0	3876.8	µg/L	58.74	3876.8	ppb	58.74	1.52%
Mn 257.610†	473340.6	1519.3	µg/L	1.80	1519.3	ppb	1.80	0.12%
Mo 202.031†	61.5	9.6602	µg/L	0.48290	9.6602	ppb	0.48290	5.00%
Na 589.592 Radial†	3132.6	784.49	µg/L	6.400	784.49	ppb	6.400	0.82%

Ni 231.604†	324.6	17.760 µg/L	0.4292	17.760 ppb	0.4292	2.42%
P 214.914†	512.1	963.86 µg/L	10.404	963.86 ppb	10.404	1.08%
Pb 220.353†	291.1	76.000 µg/L	1.9570	76.000 ppb	1.9570	2.58%
S 181.975 Axial†	39.8	184.73 µg/L	21.731	184.73 ppb	21.731	11.76%
Sb 206.836†	-3.6	4.8276 µg/L	3.91119	4.8276 ppb	3.91119	81.02%
Se 196.026†	-28.2	7.2996 µg/L	5.14094	7.2996 ppb	5.14094	70.43%
SiO2†	60388.3	11089 µg/L	72.7	11089 ppb	72.7	0.66%
Si 251.611†	69726.3	5071.5 µg/L	36.05	5071.5 ppb	36.05	0.71%
Sn 189.927†	-27.1	-4.4096 µg/L	1.51745	-4.4096 ppb	1.51745	34.41%
Sr 421.552†	4858.6	24.419 µg/L	0.2580	24.419 ppb	0.2580	1.06%
Ti 334.940†	1068140.9	2432.8 µg/L	2.34	2432.8 ppb	2.34	0.10%
Tl 190.801†	-12.7	3.3883 µg/L	2.57121	3.3883 ppb	2.57121	75.88%
U 409.014†	-607.2	-66.690 µg/L	3.2822	-66.690 ppb	3.2822	4.92%
V 292.402†	3364.1	42.946 µg/L	0.2110	42.946 ppb	0.2110	0.49%
Zn 213.857†	25472.3	668.20 µg/L	2.161	668.20 ppb	2.161	0.32%

Sequence No.: 37
Sample ID: 241322008|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 331
Date Collected: 12/10/2009 09:43:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322008|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115021.0	115021.0	98.6	%			09:43:42
1	Al 396.153Radial†	31281.3	31595.3	15697	µg/L	15697	ppb	09:43:42
1	Ca 317.933Radial†	7183.1	6870.8	2658.4	µg/L	2658.4	ppb	09:43:42
1	Fe 238.204 Radial†	11730.6	11879.4	75548	µg/L	75548	ppb	09:43:42
1	K 766.490 Radial†	4554.8	3936.0	2014.4	µg/L	2014.4	ppb	09:43:42
1	Mg 279.077 IEC†	297.1	285.9	1654.2	µg/L	1654.2	ppb	09:44:02
1	Na 589.592 Radial†	2803.0	3476.3	870.56	µg/L	870.56	ppb	09:43:42
1	Sr 421.552†	4673.0	4800.6	24.128	µg/L	24.128	ppb	09:43:42
1	Sc 361.383	2029582.1	2029582.1	100.36	%			09:45:06
1	Y 371.029	1370884.4	1370884.4	108.91	%			09:45:06
1	Ag 328.068†	-535.1	-543.5	1.2183	µg/L	1.2183	ppb	09:45:12
1	As 188.979†	8.5	6.2	10.715	µg/L	10.715	ppb	09:45:32
1	B 249.677†	942.1	800.8	10.959	µg/L	10.959	ppb	09:45:12
1	Ba 233.527†	6282.8	6338.1	162.63	µg/L	162.63	ppb	09:45:12
1	Be 313.107†	14012.2	10445.5	5.0509	µg/L	5.0509	ppb	09:45:12
1	Cd 226.502†	221.5	319.7	2.6237	µg/L	2.6237	ppb	09:45:12
1	Co 228.616†	246.3	312.1	6.7648	µg/L	6.7648	ppb	09:45:32
1	Cr 267.716†	1847.1	1940.2	40.763	µg/L	40.763	ppb	09:45:12
1	Cu 324.752†	4751.7	464.7	19.451	µg/L	19.451	ppb	09:45:12
1	Mn 257.610†	968007.7	964699.5	3089.8	µg/L	3089.8	ppb	09:45:06
1	Mo 202.031†	239.9	242.7	31.317	µg/L	31.317	ppb	09:45:32
1	Ni 231.604†	819.8	541.3	29.616	µg/L	29.616	ppb	09:45:32
1	P 214.914†	506.5	303.8	529.90	µg/L	529.90	ppb	09:45:32
1	Pb 220.353†	604.9	546.5	141.80	µg/L	141.80	ppb	09:45:32
1	S 181.975 Axial†	45.6	23.2	102.29	µg/L	102.29	ppb	09:45:32
1	Sb 206.836†	11.0	-10.1	4.5818	µg/L	4.5818	ppb	09:45:32
1	Se 196.026†	-28.3	-38.0	3.9741	µg/L	3.9741	ppb	09:45:32
1	SiO2†	61261.3	58287.9	10703	µg/L	10703	ppb	09:45:12
1	Si 251.611†	67861.4	67290.2	4834.0	µg/L	4834.0	ppb	09:45:12
1	Sn 189.927†	8.1	-14.4	2.4451	µg/L	2.4451	ppb	09:45:32
1	Ti 334.940†	1768482.3	1761296.1	4011.9	µg/L	4011.9	ppb	09:45:06
1	Tl 190.801†	-44.1	-23.6	4.7565	µg/L	4.7565	ppb	09:45:32
1	U 409.014†	-241.6	-971.2	-102.10	µg/L	-102.10	ppb	09:45:06
1	V 292.402†	2641.4	2758.6	37.249	µg/L	37.249	ppb	09:45:12
1	Zn 213.857†	15770.2	15186.4	394.26	µg/L	394.26	ppb	09:45:12
2	Sc RADIAL	114431.0	114431.0	98.1	%			09:44:08
2	Al 396.153Radial†	31442.4	31922.9	15860	µg/L	15860	ppb	09:44:08
2	Ca 317.933Radial†	7192.9	6918.3	2676.8	µg/L	2676.8	ppb	09:44:08
2	Fe 238.204 Radial†	11753.8	11964.3	76088	µg/L	76088	ppb	09:44:08
2	K 766.490 Radial†	4516.2	3920.5	2006.5	µg/L	2006.5	ppb	09:44:08
2	Mg 279.077 IEC†	288.5	278.6	1608.6	µg/L	1608.6	ppb	09:44:28
2	Na 589.592 Radial†	2843.3	3532.0	884.49	µg/L	884.49	ppb	09:44:08
2	Sr 421.552†	4708.4	4861.1	24.432	µg/L	24.432	ppb	09:44:08
2	Sc 361.383	2022499.5	2022499.5	100.01	%			09:45:40
2	Y 371.029	1365276.5	1365276.5	108.46	%			09:45:40
2	Ag 328.068†	-477.7	-488.0	1.7704	µg/L	1.7704	ppb	09:45:45
2	As 188.979†	7.7	5.5	9.2438	µg/L	9.2438	ppb	09:46:06
2	B 249.677†	931.6	793.7	10.480	µg/L	10.480	ppb	09:45:45
2	Ba 233.527†	6335.2	6412.4	164.54	µg/L	164.54	ppb	09:45:45
2	Be 313.107†	14020.6	10502.8	5.0970	µg/L	5.0970	ppb	09:45:45
2	Cd 226.502†	201.0	300.0	2.0585	µg/L	2.0585	ppb	09:45:45
2	Co 228.616†	251.0	317.6	7.0862	µg/L	7.0862	ppb	09:46:06
2	Cr 267.716†	1851.7	1951.3	40.996	µg/L	40.996	ppb	09:45:45
2	Cu 324.752†	4680.3	409.9	19.186	µg/L	19.186	ppb	09:45:45
2	Mn 257.610†	958056.6	958127.3	3068.9	µg/L	3068.9	ppb	09:45:40
2	Mo 202.031†	223.6	227.2	29.528	µg/L	29.528	ppb	09:46:06
2	Ni 231.604†	816.8	541.2	29.608	µg/L	29.608	ppb	09:46:06
2	P 214.914†	500.2	299.3	520.20	µg/L	520.20	ppb	09:46:06
2	Pb 220.353†	600.1	543.7	141.09	µg/L	141.09	ppb	09:46:06

2	S 181.975 Axial†	43.2	21.1	91.688 µg/L	91.688 ppb		09:46:06
2	Sb 206.836†	18.8	-2.3	12.116 µg/L	12.116 ppb		09:46:06
2	Se 196.026†	-18.5	-28.4	16.666 µg/L	16.666 ppb		09:46:06
2	SiO2†	60866.5	58106.8	10670 µg/L	10670 ppb		09:45:45
2	Si 251.611†	67472.6	67138.2	4823.8 µg/L	4823.8 ppb		09:45:45
2	Sn 189.927†	6.8	-15.6	1.8706 µg/L	1.8706 ppb		09:46:06
2	Ti 334.940†	1750115.9	1749102.9	3984.2 µg/L	3984.2 ppb		09:45:40
2	Tl 190.801†	-37.2	-16.9	14.794 µg/L	14.794 ppb		09:46:06
2	U 409.014†	-228.3	-958.7	-101.07 µg/L	-101.07 ppb		09:45:40
2	V 292.402†	2679.5	2805.8	37.814 µg/L	37.814 ppb		09:45:45
2	Zn 213.857†	15782.3	15253.5	395.98 µg/L	395.98 ppb		09:45:45
3	Sc RADIAL	114400.6	114400.6	98.1 %			09:44:34
3	Al 396.153Radial†	31572.5	32064.1	15930 µg/L	15930 ppb		09:44:34
3	Ca 317.933Radial†	7250.0	6978.4	2700.1 µg/L	2700.1 ppb		09:44:34
3	Fe 238.204 Radial†	11861.1	12076.9	76804 µg/L	76804 ppb		09:44:34
3	K 766.490 Radial†	4590.0	3996.9	2045.6 µg/L	2045.6 ppb		09:44:34
3	Mg 279.077 IEC†	289.7	279.9	1615.8 µg/L	1615.8 ppb		09:44:54
3	Na 589.592 Radial†	2884.5	3574.8	895.21 µg/L	895.21 ppb		09:44:34
3	Sr 421.552†	4720.8	4875.0	24.502 µg/L	24.502 ppb		09:44:34
3	Sc 361.383	2021382.9	2021382.9	99.958 %			09:46:13
3	Y 371.029	1365487.8	1365487.8	108.48 %			09:46:13
3	Ag 328.068†	-528.8	-539.4	1.3573 µg/L	1.3573 ppb		09:46:19
3	As 188.979†	6.2	4.0	6.4520 µg/L	6.4520 ppb		09:46:39
3	B 249.677†	909.8	772.3	9.3296 µg/L	9.3296 ppb		09:46:19
3	Ba 233.527†	6302.1	6382.8	163.78 µg/L	163.78 ppb		09:46:19
3	Be 313.107†	13835.7	10325.5	4.9820 µg/L	4.9820 ppb		09:46:19
3	Cd 226.502†	181.5	280.5	1.4897 µg/L	1.4897 ppb		09:46:19
3	Co 228.616†	249.4	316.2	6.9946 µg/L	6.9946 ppb		09:46:39
3	Cr 267.716†	1823.7	1924.3	40.429 µg/L	40.429 ppb		09:46:19
3	Cu 324.752†	4763.2	495.4	19.934 µg/L	19.934 ppb		09:46:19
3	Mn 257.610†	959055.6	959655.8	3073.8 µg/L	3073.8 ppb		09:46:13
3	Mo 202.031†	225.4	229.1	29.782 µg/L	29.782 ppb		09:46:39
3	Ni 231.604†	824.3	549.1	30.041 µg/L	30.041 ppb		09:46:39
3	P 214.914†	507.9	307.2	535.28 µg/L	535.28 ppb		09:46:39
3	Pb 220.353†	596.8	540.8	140.32 µg/L	140.32 ppb		09:46:39
3	S 181.975 Axial†	48.2	26.1	116.16 µg/L	116.16 ppb		09:46:39
3	Sb 206.836†	15.9	-5.2	9.3844 µg/L	9.3844 ppb		09:46:39
3	Se 196.026†	-30.4	-40.2	2.0452 µg/L	2.0452 ppb		09:46:39
3	SiO2†	61386.6	58660.8	10772 µg/L	10772 ppb		09:46:19
3	Si 251.611†	67992.9	67696.0	4864.7 µg/L	4864.7 ppb		09:46:19
3	Sn 189.927†	6.1	-16.3	1.5892 µg/L	1.5892 ppb		09:46:39
3	Ti 334.940†	1754026.5	1753981.6	3995.3 µg/L	3995.3 ppb		09:46:13
3	Tl 190.801†	-40.2	-19.8	10.352 µg/L	10.352 ppb		09:46:39
3	U 409.014†	-171.3	-901.8	-96.045 µg/L	-96.045 ppb		09:46:13
3	V 292.402†	2658.7	2786.5	37.665 µg/L	37.665 ppb		09:46:19
3	Zn 213.857†	15766.2	15246.1	395.71 µg/L	395.71 ppb		09:46:19

Mean Data: 241322008|930802|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024488.2	100.11	%	0.220				0.22%
Sc RADIAL	114617.5	98.3	%	0.30				0.31%
Y 371.029	1367216.3	108.62	%	0.253				0.23%
Ag 328.068†	-523.7	1.4486	µg/L	0.28718	1.4486	ppb	0.28718	19.82%
Al 396.153Radial†	31860.8	15829	µg/L	119.5	15829	ppb	119.5	0.76%
As 188.979†	5.2	8.8036	µg/L	2.16537	8.8036	ppb	2.16537	24.60%
B 249.677†	788.9	10.256	µg/L	0.8375	10.256	ppb	0.8375	8.17%
Ba 233.527†	6377.8	163.65	µg/L	0.960	163.65	ppb	0.960	0.59%
Be 313.107†	10424.6	5.0433	µg/L	0.05790	5.0433	ppb	0.05790	1.15%
Ca 317.933Radial†	6922.5	2678.4	µg/L	20.87	2678.4	ppb	20.87	0.78%
Cd 226.502†	300.1	2.0573	µg/L	0.56705	2.0573	ppb	0.56705	27.56%
Co 228.616†	315.3	6.9485	µg/L	0.16558	6.9485	ppb	0.16558	2.38%
Cr 267.716†	1938.6	40.729	µg/L	0.2850	40.729	ppb	0.2850	0.70%
Cu 324.752†	456.7	19.524	µg/L	0.3790	19.524	ppb	0.3790	1.94%
Fe 238.204 Radial†	11973.5	76146	µg/L	630.0	76146	ppb	630.0	0.83%
K 766.490 Radial†	3951.1	2022.1	µg/L	20.67	2022.1	ppb	20.67	1.02%
Mg 279.077 IEC†	281.5	1626.2	µg/L	24.53	1626.2	ppb	24.53	1.51%
Mn 257.610†	960827.5	3077.5	µg/L	10.93	3077.5	ppb	10.93	0.36%
Mo 202.031†	233.0	30.209	µg/L	0.9679	30.209	ppb	0.9679	3.20%
Na 589.592 Radial†	3527.7	883.42	µg/L	12.362	883.42	ppb	12.362	1.40%

Ni 231.604†	543.8	29.755	µg/L	0.2475	29.755	ppb	0.2475	0.83%
P 214.914†	303.4	528.46	µg/L	7.647	528.46	ppb	7.647	1.45%
Pb 220.353†	543.6	141.07	µg/L	0.739	141.07	ppb	0.739	0.52%
S 181.975 Axial†	23.5	103.38	µg/L	12.274	103.38	ppb	12.274	11.87%
Sb 206.836†	-5.9	8.6939	µg/L	3.81406	8.6939	ppb	3.81406	43.87%
Se 196.026†	-35.6	7.5619	µg/L	7.94352	7.5619	ppb	7.94352	105.05%
SiO2†	58351.8	10715	µg/L	51.9	10715	ppb	51.9	0.48%
Si 251.611†	67374.8	4840.8	µg/L	21.28	4840.8	ppb	21.28	0.44%
Sn 189.927†	-15.4	1.9683	µg/L	0.43624	1.9683	ppb	0.43624	22.16%
Sr 421.552†	4845.6	24.354	µg/L	0.1989	24.354	ppb	0.1989	0.82%
Ti 334.940†	1754793.5	3997.1	µg/L	13.98	3997.1	ppb	13.98	0.35%
Tl 190.801†	-20.1	9.9677	µg/L	5.02996	9.9677	ppb	5.02996	50.46%
U 409.014†	-943.9	-99.737	µg/L	3.2392	-99.737	ppb	3.2392	3.25%
V 292.402†	2783.6	37.576	µg/L	0.2928	37.576	ppb	0.2928	0.78%
Zn 213.857†	15228.7	395.32	µg/L	0.925	395.32	ppb	0.925	0.23%

Sequence No.: 38
Sample ID: 241322009|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 332
Date Collected: 12/10/2009 09:46:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322009|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	113876.2	113876.2	97.6	%			09:47:21
1	Al 396.153Radial†	61946.5	63320.5	31461	µg/L	31461	ppb	09:47:21
1	Ca 317.933Radial†	7731.5	7505.6	2904.1	µg/L	2904.1	ppb	09:47:41
1	Fe 238.204 Radial†	10539.2	10778.8	68548	µg/L	68548	ppb	09:47:41
1	K 766.490 Radial†	7939.5	7448.9	3812.2	µg/L	3812.2	ppb	09:47:21
1	Mg 279.077 IEC†	390.9	384.9	2275.3	µg/L	2275.3	ppb	09:47:41
1	Na 589.592 Radial†	6248.1	7033.3	1761.3	µg/L	1761.3	ppb	09:47:21
1	Sr 421.552†	4232.8	4397.4	22.101	µg/L	22.101	ppb	09:47:21
1	Sc 361.383	2016985.2	2016985.2	99.741	%			09:48:45
1	Y 371.029	1332205.4	1332205.4	105.84	%			09:48:45
1	Ag 328.068†	-193.4	-204.3	3.7827	µg/L	3.7827	ppb	09:48:51
1	As 188.979†	14.1	11.9	17.696	µg/L	17.696	ppb	09:49:11
1	B 249.677†	863.0	727.4	9.9766	µg/L	9.9766	ppb	09:48:51
1	Ba 233.527†	5135.8	5227.2	134.14	µg/L	134.14	ppb	09:48:51
1	Be 313.107†	15562.3	12086.8	6.6778	µg/L	6.6778	ppb	09:48:51
1	Cd 226.502†	152.1	251.4	1.3308	µg/L	1.3308	ppb	09:48:51
1	Co 228.616†	162.7	229.8	6.1267	µg/L	6.1267	ppb	09:49:11
1	Cr 267.716†	1023.1	1125.5	23.685	µg/L	23.685	ppb	09:48:51
1	Cu 324.752†	6791.3	2539.2	32.337	µg/L	32.337	ppb	09:48:51
1	Mn 257.610†	377089.2	378269.9	1216.4	µg/L	1216.4	ppb	09:48:45
1	Mo 202.031†	60.9	64.7	10.255	µg/L	10.255	ppb	09:49:11
1	Ni 231.604†	597.8	323.8	17.716	µg/L	17.716	ppb	09:49:11
1	P 214.914†	781.7	582.9	1105.9	µg/L	1105.9	ppb	09:49:11
1	Pb 220.353†	306.3	250.8	66.784	µg/L	66.784	ppb	09:49:11
1	S 181.975 Axial†	58.5	36.5	168.09	µg/L	168.09	ppb	09:49:11
1	Sb 206.836†	18.6	-2.4	6.1462	µg/L	6.1462	ppb	09:49:11
1	Se 196.026†	-19.3	-29.3	10.051	µg/L	10.051	ppb	09:49:11
1	SiO2†	66014.4	63434.5	11649	µg/L	11649	ppb	09:48:51
1	Si 251.611†	73380.1	73245.4	5332.9	µg/L	5332.9	ppb	09:48:51
1	Sn 189.927†	2.4	-20.0	-1.0732	µg/L	-1.0732	ppb	09:49:11
1	Ti 334.940†	1048055.2	1050002.7	2391.7	µg/L	2391.7	ppb	09:48:45
1	Tl 190.801†	-35.4	-15.1	-1.0728	µg/L	-1.0728	ppb	09:49:11
1	U 409.014†	-330.4	-1061.7	-108.99	µg/L	-108.99	ppb	09:48:45
1	V 292.402†	2932.7	3067.0	39.990	µg/L	39.990	ppb	09:48:51
1	Zn 213.857†	20087.4	19612.9	512.35	µg/L	512.35	ppb	09:48:51
2	Sc RADIAL	114432.7	114432.7	98.1	%			09:47:47
2	Al 396.153Radial†	62490.5	63566.4	31583	µg/L	31583	ppb	09:47:47
2	Ca 317.933Radial†	7750.7	7486.7	2896.7	µg/L	2896.7	ppb	09:48:07
2	Fe 238.204 Radial†	10560.5	10748.0	68352	µg/L	68352	ppb	09:48:07
2	K 766.490 Radial†	8036.0	7507.7	3842.4	µg/L	3842.4	ppb	09:47:47
2	Mg 279.077 IEC†	394.9	387.0	2289.0	µg/L	2289.0	ppb	09:48:07
2	Na 589.592 Radial†	6297.2	7052.2	1766.0	µg/L	1766.0	ppb	09:47:47
2	Sr 421.552†	4272.4	4416.7	22.198	µg/L	22.198	ppb	09:47:47
2	Sc 361.383	2010676.0	2010676.0	99.429	%			09:49:19
2	Y 371.029	1328496.3	1328496.3	105.54	%			09:49:19
2	Ag 328.068†	-204.6	-216.2	3.6573	µg/L	3.6573	ppb	09:49:25
2	As 188.979†	7.2	5.1	5.3159	µg/L	5.3159	ppb	09:49:45
2	B 249.677†	880.2	747.4	10.905	µg/L	10.905	ppb	09:49:25
2	Ba 233.527†	5118.4	5225.8	134.11	µg/L	134.11	ppb	09:49:25
2	Be 313.107†	15607.8	12181.5	6.7299	µg/L	6.7299	ppb	09:49:25
2	Cd 226.502†	149.4	249.2	1.2802	µg/L	1.2802	ppb	09:49:25
2	Co 228.616†	164.0	231.6	6.1695	µg/L	6.1695	ppb	09:49:45
2	Cr 267.716†	1034.3	1140.0	23.989	µg/L	23.989	ppb	09:49:25
2	Cu 324.752†	6776.6	2545.7	32.340	µg/L	32.340	ppb	09:49:25
2	Mn 257.610†	378948.9	381326.6	1226.2	µg/L	1226.2	ppb	09:49:19
2	Mo 202.031†	48.6	52.5	8.8233	µg/L	8.8233	ppb	09:49:45
2	Ni 231.604†	581.5	309.3	16.920	µg/L	16.920	ppb	09:49:45
2	P 214.914†	794.1	597.8	1136.3	µg/L	1136.3	ppb	09:49:45
2	Pb 220.353†	302.0	247.5	65.933	µg/L	65.933	ppb	09:49:45

2	S 181.975 Axial†	57.5	35.7	164.37 µg/L	164.37 ppb	09:49:45
2	Sb 206.836†	17.3	-3.7	4.9739 µg/L	4.9739 ppb	09:49:45
2	Se 196.026†	-27.5	-37.6	-0.6845 µg/L	-0.6845 ppb	09:49:45
2	SiO2†	66766.2	64398.3	11826 µg/L	11826 ppb	09:49:25
2	Si 251.611†	74225.3	74326.4	5412.3 µg/L	5412.3 ppb	09:49:25
2	Sn 189.927†	-0.4	-22.8	-2.5438 µg/L	-2.5438 ppb	09:49:45
2	Ti 334.940†	1053267.9	1058542.6	2411.1 µg/L	2411.1 ppb	09:49:19
2	Tl 190.801†	-37.6	-17.4	-4.3932 µg/L	-4.3932 ppb	09:49:45
2	U 409.014†	-411.6	-1144.5	-116.46 µg/L	-116.46 ppb	09:49:19
2	V 292.402†	2910.2	3053.6	39.801 µg/L	39.801 ppb	09:49:25
2	Zn 213.857†	20085.5	19674.3	514.00 µg/L	514.00 ppb	09:49:25
3	Sc RADIAL	114879.1	114879.1	98.5 %		09:48:13
3	Al 396.153Radial†	62428.5	63256.0	31429 µg/L	31429 ppb	09:48:13
3	Ca 317.933Radial†	7743.1	7448.3	2881.9 µg/L	2881.9 ppb	09:48:33
3	Fe 238.204 Radial†	10585.8	10731.8	68250 µg/L	68250 ppb	09:48:33
3	K 766.490 Radial†	8078.3	7518.9	3848.1 µg/L	3848.1 ppb	09:48:13
3	Mg 279.077 IEC†	391.9	382.5	2260.8 µg/L	2260.8 ppb	09:48:33
3	Na 589.592 Radial†	6319.7	7050.1	1765.5 µg/L	1765.5 ppb	09:48:13
3	Sr 421.552†	4285.8	4413.4	22.181 µg/L	22.181 ppb	09:48:13
3	Sc 361.383	2021324.9	2021324.9	99.956 %		09:49:53
3	Y 371.029	1335389.5	1335389.5	106.09 %		09:49:53
3	Ag 328.068†	-119.9	-130.4	4.4281 µg/L	4.4281 ppb	09:49:58
3	As 188.979†	10.0	7.8	10.283 µg/L	10.283 ppb	09:50:19
3	B 249.677†	880.1	742.6	10.732 µg/L	10.732 ppb	09:49:58
3	Ba 233.527†	5136.5	5216.8	133.88 µg/L	133.88 ppb	09:49:58
3	Be 313.107†	15592.0	12083.0	6.6802 µg/L	6.6802 ppb	09:49:58
3	Cd 226.502†	163.3	262.3	1.6467 µg/L	1.6467 ppb	09:49:58
3	Co 228.616†	163.0	229.7	6.1481 µg/L	6.1481 ppb	09:50:19
3	Cr 267.716†	1043.5	1143.8	24.066 µg/L	24.066 ppb	09:49:58
3	Cu 324.752†	6826.5	2559.8	32.416 µg/L	32.416 ppb	09:49:58
3	Mn 257.610†	375526.3	375894.6	1208.8 µg/L	1208.8 ppb	09:49:53
3	Mo 202.031†	59.2	62.9	10.027 µg/L	10.027 ppb	09:50:19
3	Ni 231.604†	583.4	308.1	16.857 µg/L	16.857 ppb	09:50:19
3	P 214.914†	794.5	593.9	1128.5 µg/L	1128.5 ppb	09:50:19
3	Pb 220.353†	304.4	248.3	66.129 µg/L	66.129 ppb	09:50:19
3	S 181.975 Axial†	58.6	36.5	168.24 µg/L	168.24 ppb	09:50:19
3	Sb 206.836†	19.5	-1.6	6.8929 µg/L	6.8929 ppb	09:50:19
3	Se 196.026†	-22.2	-32.1	6.2804 µg/L	6.2804 ppb	09:50:19
3	SiO2†	66551.8	63830.0	11721 µg/L	11721 ppb	09:49:58
3	Si 251.611†	73928.0	73635.7	5362.3 µg/L	5362.3 ppb	09:49:58
3	Sn 189.927†	2.9	-19.6	-0.9033 µg/L	-0.9033 ppb	09:50:19
3	Ti 334.940†	1044696.9	1044387.0	2378.9 µg/L	2378.9 ppb	09:49:53
3	Tl 190.801†	-33.5	-13.2	1.8252 µg/L	1.8252 ppb	09:50:19
3	U 409.014†	-280.1	-1010.7	-104.31 µg/L	-104.31 ppb	09:49:53
3	V 292.402†	2877.0	3005.0	39.274 µg/L	39.274 ppb	09:49:58
3	Zn 213.857†	20159.4	19641.7	513.15 µg/L	513.15 ppb	09:49:58

Mean Data: 241322009|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2016328.7	99.708	%	0.2648				0.27%
Sc RADIAL	114396.0	98.1	%	0.43				0.44%
Y 371.029	1332030.4	105.82	%	0.274				0.26%
Ag 328.068†	-183.6	3.9560	µg/L	0.41364	3.9560	ppb	0.41364	10.46%
Al 396.153Radial†	63381.0	31491	µg/L	81.4	31491	ppb	81.4	0.26%
As 188.979†	8.3	11.098	µg/L	6.2302	11.098	ppb	6.2302	56.14%
B 249.677†	739.1	10.538	µg/L	0.4939	10.538	ppb	0.4939	4.69%
Ba 233.527†	5223.3	134.04	µg/L	0.145	134.04	ppb	0.145	0.11%
Be 313.107†	12117.1	6.6960	µg/L	0.02939	6.6960	ppb	0.02939	0.44%
Ca 317.933Radial†	7480.2	2894.2	µg/L	11.31	2894.2	ppb	11.31	0.39%
Cd 226.502†	254.3	1.4192	µg/L	0.19860	1.4192	ppb	0.19860	13.99%
Co 228.616†	230.4	6.1481	µg/L	0.02143	6.1481	ppb	0.02143	0.35%
Cr 267.716†	1136.4	23.914	µg/L	0.2012	23.914	ppb	0.2012	0.84%
Cu 324.752†	2548.2	32.364	µg/L	0.0445	32.364	ppb	0.0445	0.14%
Fe 238.204 Radial†	10752.9	68383	µg/L	151.7	68383	ppb	151.7	0.22%
K 766.490 Radial†	7491.8	3834.2	µg/L	19.25	3834.2	ppb	19.25	0.50%
Mg 279.077 IEC†	384.8	2275.0	µg/L	14.07	2275.0	ppb	14.07	0.62%
Mn 257.610†	378497.0	1217.1	µg/L	8.70	1217.1	ppb	8.70	0.71%
Mo 202.031†	60.1	9.7020	µg/L	0.76947	9.7020	ppb	0.76947	7.93%
Na 589.592 Radial†	7045.2	1764.3	µg/L	2.60	1764.3	ppb	2.60	0.15%

Ni 231.604†	313.7	17.164	µg/L	0.4790	17.164	ppb	0.4790	2.79%
P 214.914†	591.5	1123.5	µg/L	15.79	1123.5	ppb	15.79	1.41%
Pb 220.353†	248.9	66.282	µg/L	0.4453	66.282	ppb	0.4453	0.67%
S 181.975 Axial†	36.2	166.90	µg/L	2.190	166.90	ppb	2.190	1.31%
Sb 206.836†	-2.6	6.0043	µg/L	0.96735	6.0043	ppb	0.96735	16.11%
Se 196.026†	-33.0	5.2156	µg/L	5.44631	5.2156	ppb	5.44631	104.42%
SiO2†	63887.6	11732	µg/L	89.0	11732	ppb	89.0	0.76%
Si 251.611†	73735.8	5369.2	µg/L	40.13	5369.2	ppb	40.13	0.75%
Sn 189.927†	-20.8	-1.5068	µg/L	0.90211	-1.5068	ppb	0.90211	59.87%
Sr 421.552†	4409.2	22.160	µg/L	0.0518	22.160	ppb	0.0518	0.23%
Ti 334.940†	1050977.4	2393.9	µg/L	16.24	2393.9	ppb	16.24	0.68%
Tl 190.801†	-15.2	-1.2136	µg/L	3.11158	-1.2136	ppb	3.11158	256.39%
U 409.014†	-1072.3	-109.92	µg/L	6.127	-109.92	ppb	6.127	5.57%
V 292.402†	3041.9	39.688	µg/L	0.3713	39.688	ppb	0.3713	0.94%
Zn 213.857†	19642.9	513.17	µg/L	0.826	513.17	ppb	0.826	0.16%

Sequence No.: 39
Sample ID: 241322010|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 333
Date Collected: 12/10/2009 09:50:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322010|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113499.0	113499.0	97.3	%			09:51:00
1	Al 396.153Radial†	46137.5	47286.4	23494	µg/L	23494	ppb	09:51:00
1	Ca 317.933Radial†	4205.3	3908.5	1512.3	µg/L	1512.3	ppb	09:51:21
1	Fe 238.204 Radial†	10080.4	10343.2	65778	µg/L	65778	ppb	09:51:00
1	K 766.490 Radial†	8616.2	8171.3	4182.0	µg/L	4182.0	ppb	09:51:00
1	Mg 279.077 IEC†	325.4	318.9	1872.3	µg/L	1872.3	ppb	09:51:21
1	Na 589.592 Radial†	10210.1	11125.7	2786.1	µg/L	2786.1	ppb	09:51:00
1	Sr 421.552†	2843.1	2983.8	14.996	µg/L	14.996	ppb	09:51:00
1	Sc 361.383	2027326.0	2027326.0	100.25	%			09:52:25
1	Y 371.029	1347287.6	1347287.6	107.03	%			09:52:25
1	Ag 328.068†	-343.5	-353.0	2.1679	µg/L	2.1679	ppb	09:52:30
1	As 188.979†	11.6	9.4	13.727	µg/L	13.727	ppb	09:52:51
1	B 249.677†	830.8	690.8	9.2636	µg/L	9.2636	ppb	09:52:30
1	Ba 233.527†	4132.5	4200.1	107.79	µg/L	107.79	ppb	09:52:30
1	Be 313.107†	13907.8	10356.9	5.5960	µg/L	5.5960	ppb	09:52:30
1	Cd 226.502†	131.4	230.1	0.9923	µg/L	0.9923	ppb	09:52:30
1	Co 228.616†	139.1	205.4	4.9545	µg/L	4.9545	ppb	09:52:51
1	Cr 267.716†	1399.2	1495.5	31.430	µg/L	31.430	ppb	09:52:30
1	Cu 324.752†	5074.6	792.0	19.623	µg/L	19.623	ppb	09:52:30
1	Mn 257.610†	440808.2	439900.1	1412.9	µg/L	1412.9	ppb	09:52:25
1	Mo 202.031†	68.9	72.4	11.043	µg/L	11.043	ppb	09:52:51
1	Ni 231.604†	534.2	257.2	14.074	µg/L	14.074	ppb	09:52:51
1	P 214.914†	574.2	371.8	681.49	µg/L	681.49	ppb	09:52:51
1	Pb 220.353†	370.6	313.4	82.286	µg/L	82.286	ppb	09:52:51
1	S 181.975 Axial†	50.5	28.3	128.30	µg/L	128.30	ppb	09:52:51
1	Sb 206.836†	21.4	0.3	8.8645	µg/L	8.8645	ppb	09:52:51
1	Se 196.026†	-16.5	-26.3	11.864	µg/L	11.864	ppb	09:52:51
1	SiO2†	65309.2	62393.5	11457	µg/L	11457	ppb	09:52:30
1	Si 251.611†	72374.8	71867.4	5230.7	µg/L	5230.7	ppb	09:52:30
1	Sn 189.927†	12.3	-10.1	3.2437	µg/L	3.2437	ppb	09:52:51
1	Ti 334.940†	1052652.3	1049228.6	2390.0	µg/L	2390.0	ppb	09:52:25
1	Tl 190.801†	-36.3	-15.9	-1.3990	µg/L	-1.3990	ppb	09:52:51
1	U 409.014†	-29.8	-760.2	-81.167	µg/L	-81.167	ppb	09:52:25
1	V 292.402†	2422.9	2543.5	33.926	µg/L	33.926	ppb	09:52:30
1	Zn 213.857†	17013.9	16444.5	428.72	µg/L	428.72	ppb	09:52:30
2	Sc RADIAL	114883.8	114883.8	98.5	%			09:51:26
2	Al 396.153Radial†	46846.1	47434.3	23568	µg/L	23568	ppb	09:51:26
2	Ca 317.933Radial†	4217.8	3869.1	1497.0	µg/L	1497.0	ppb	09:51:46
2	Fe 238.204 Radial†	10249.4	10389.9	66075	µg/L	66075	ppb	09:51:26
2	K 766.490 Radial†	8762.1	8212.7	4203.2	µg/L	4203.2	ppb	09:51:26
2	Mg 279.077 IEC†	323.7	313.2	1836.2	µg/L	1836.2	ppb	09:51:46
2	Na 589.592 Radial†	10346.6	11137.9	2789.2	µg/L	2789.2	ppb	09:51:26
2	Sr 421.552†	2884.1	2990.2	15.029	µg/L	15.029	ppb	09:51:26
2	Sc 361.383	2043226.9	2043226.9	101.04	%			09:52:58
2	Y 371.029	1357956.7	1357956.7	107.88	%			09:52:58
2	Ag 328.068†	-319.2	-326.3	2.4315	µg/L	2.4315	ppb	09:53:04
2	As 188.979†	3.9	1.7	-0.3523	µg/L	-0.3523	ppb	09:53:24
2	B 249.677†	821.4	675.1	8.4898	µg/L	8.4898	ppb	09:53:04
2	Ba 233.527†	4184.1	4219.1	108.28	µg/L	108.28	ppb	09:53:04
2	Be 313.107†	14084.4	10423.7	5.6427	µg/L	5.6427	ppb	09:53:04
2	Cd 226.502†	135.3	232.9	1.0403	µg/L	1.0403	ppb	09:53:04
2	Co 228.616†	124.7	190.1	4.2427	µg/L	4.2427	ppb	09:53:24
2	Cr 267.716†	1346.6	1432.6	30.110	µg/L	30.110	ppb	09:53:04
2	Cu 324.752†	5063.1	741.3	19.335	µg/L	19.335	ppb	09:53:04
2	Mn 257.610†	442026.5	437684.1	1405.8	µg/L	1405.8	ppb	09:52:58
2	Mo 202.031†	73.6	76.5	11.529	µg/L	11.529	ppb	09:53:24
2	Ni 231.604†	536.6	255.6	13.982	µg/L	13.982	ppb	09:53:24
2	P 214.914†	565.7	359.0	655.23	µg/L	655.23	ppb	09:53:24
2	Pb 220.353†	362.2	302.2	79.403	µg/L	79.403	ppb	09:53:24

2	S 181.975 Axial†	53.0	30.3	138.09 µg/L	138.09 ppb	09:53:24
2	Sb 206.836†	18.1	-3.2	5.4444 µg/L	5.4444 ppb	09:53:24
2	Se 196.026†	-29.1	-38.7	-3.6837 µg/L	-3.6837 ppb	09:53:24
2	SiO2†	65857.9	62429.5	11464 µg/L	11464 ppb	09:53:04
2	Si 251.611†	73020.6	71944.7	5236.8 µg/L	5236.8 ppb	09:53:04
2	Sn 189.927†	15.9	-6.7	5.0532 µg/L	5.0532 ppb	09:53:24
2	Ti 334.940†	1055014.9	1043395.5	2376.7 µg/L	2376.7 ppb	09:52:58
2	Tl 190.801†	-39.1	-18.3	-5.2843 µg/L	-5.2843 ppb	09:53:24
2	U 409.014†	-78.6	-808.3	-85.585 µg/L	-85.585 ppb	09:52:58
2	V 292.402†	2403.5	2505.5	33.518 µg/L	33.518 ppb	09:53:04
2	Zn 213.857†	17067.9	16365.8	426.60 µg/L	426.60 ppb	09:53:04
3	Sc RADIAL	115306.7	115306.7	98.9 %		09:51:52
3	Al 396.153Radial†	46664.6	47076.3	23390 µg/L	23390 ppb	09:51:52
3	Ca 317.933Radial†	4191.5	3826.8	1480.7 µg/L	1480.7 ppb	09:52:12
3	Fe 238.204 Radial†	10207.6	10309.4	65563 µg/L	65563 ppb	09:51:52
3	K 766.490 Radial†	8776.0	8194.2	4193.7 µg/L	4193.7 ppb	09:51:52
3	Mg 279.077 IEC†	321.8	310.1	1818.0 µg/L	1818.0 ppb	09:52:12
3	Na 589.592 Radial†	10310.3	11062.6	2770.4 µg/L	2770.4 ppb	09:51:52
3	Sr 421.552†	2870.7	2965.9	14.907 µg/L	14.907 ppb	09:51:52
3	Sc 361.383	2027142.8	2027142.8	100.24 %		09:53:31
3	Y 371.029	1347460.1	1347460.1	107.05 %		09:53:31
3	Ag 328.068†	-276.1	-285.9	2.7656 µg/L	2.7656 ppb	09:53:37
3	As 188.979†	14.2	11.9	18.359 µg/L	18.359 ppb	09:53:57
3	B 249.677†	852.0	712.1	10.255 µg/L	10.255 ppb	09:53:37
3	Ba 233.527†	4233.7	4301.5	110.39 µg/L	110.39 ppb	09:53:37
3	Be 313.107†	14113.2	10563.1	5.7259 µg/L	5.7259 ppb	09:53:37
3	Cd 226.502†	138.2	236.9	1.1894 µg/L	1.1894 ppb	09:53:37
3	Co 228.616†	127.2	193.6	4.3851 µg/L	4.3851 ppb	09:53:57
3	Cr 267.716†	1387.4	1483.9	31.188 µg/L	31.188 ppb	09:53:37
3	Cu 324.752†	5068.0	786.0	19.535 µg/L	19.535 ppb	09:53:37
3	Mn 257.610†	440428.2	439560.8	1411.8 µg/L	1411.8 ppb	09:53:31
3	Mo 202.031†	64.6	68.1	10.528 µg/L	10.528 ppb	09:53:57
3	Ni 231.604†	537.9	261.0	14.279 µg/L	14.279 ppb	09:53:57
3	P 214.914†	569.4	367.1	672.19 µg/L	672.19 ppb	09:53:57
3	Pb 220.353†	370.2	313.0	82.188 µg/L	82.188 ppb	09:53:57
3	S 181.975 Axial†	50.3	28.0	127.18 µg/L	127.18 ppb	09:53:57
3	Sb 206.836†	17.6	-3.5	5.1513 µg/L	5.1513 ppb	09:53:57
3	Se 196.026†	-17.6	-27.4	10.316 µg/L	10.316 ppb	09:53:57
3	SiO2†	65925.3	63014.0	11571 µg/L	11571 ppb	09:53:37
3	Si 251.611†	73192.8	72690.0	5291.5 µg/L	5291.5 ppb	09:53:37
3	Sn 189.927†	21.0	-1.4	7.6639 µg/L	7.6639 ppb	09:53:57
3	Ti 334.940†	1051477.5	1048151.5	2387.5 µg/L	2387.5 ppb	09:53:31
3	Tl 190.801†	-39.8	-19.3	-6.6711 µg/L	-6.6711 ppb	09:53:57
3	U 409.014†	-44.2	-774.5	-82.432 µg/L	-82.432 ppb	09:53:31
3	V 292.402†	2458.9	2579.7	34.309 µg/L	34.309 ppb	09:53:37
3	Zn 213.857†	17208.4	16640.0	433.92 µg/L	433.92 ppb	09:53:37

Mean Data: 241322010|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032565.2	100.51	%	0.457				0.45%
Sc RADIAL	114563.1	98.2	%	0.81				0.83%
Y 371.029	1350901.5	107.32	%	0.485				0.45%
Ag 328.068†	-321.7	2.4550	µg/L	0.29950	2.4550	ppb	0.29950	12.20%
Al 396.153Radial†	47265.7	23484	µg/L	89.4	23484	ppb	89.4	0.38%
As 188.979†	7.7	10.578	µg/L	9.7451	10.578	ppb	9.7451	92.13%
B 249.677†	692.7	9.3362	µg/L	0.88492	9.3362	ppb	0.88492	9.48%
Ba 233.527†	4240.3	108.82	µg/L	1.383	108.82	ppb	1.383	1.27%
Be 313.107†	10447.9	5.6549	µg/L	0.06581	5.6549	ppb	0.06581	1.16%
Ca 317.933Radial†	3868.1	1496.7	µg/L	15.81	1496.7	ppb	15.81	1.06%
Cd 226.502†	233.3	1.0740	µg/L	0.10277	1.0740	ppb	0.10277	9.57%
Co 228.616†	196.4	4.5274	µg/L	0.37665	4.5274	ppb	0.37665	8.32%
Cr 267.716†	1470.6	30.909	µg/L	0.7029	30.909	ppb	0.7029	2.27%
Cu 324.752†	773.1	19.498	µg/L	0.1475	19.498	ppb	0.1475	0.76%
Fe 238.204 Radial†	10347.5	65805	µg/L	256.8	65805	ppb	256.8	0.39%
K 766.490 Radial†	8192.7	4192.9	µg/L	10.61	4192.9	ppb	10.61	0.25%
Mg 279.077 IEC†	314.1	1842.2	µg/L	27.62	1842.2	ppb	27.62	1.50%
Mn 257.610†	439048.3	1410.2	µg/L	3.78	1410.2	ppb	3.78	0.27%
Mo 202.031†	72.3	11.034	µg/L	0.5005	11.034	ppb	0.5005	4.54%
Na 589.592 Radial†	11108.7	2781.9	µg/L	10.11	2781.9	ppb	10.11	0.36%

Ni 231.604†	257.9	14.111 µg/L	0.1519	14.111 ppb	0.1519	1.08%
P 214.914†	366.0	669.64 µg/L	13.315	669.64 ppb	13.315	1.99%
Pb 220.353†	309.5	81.292 µg/L	1.6366	81.292 ppb	1.6366	2.01%
S 181.975 Axial†	28.8	131.19 µg/L	6.000	131.19 ppb	6.000	4.57%
Sb 206.836†	-2.1	6.4867 µg/L	2.06445	6.4867 ppb	2.06445	31.83%
Se 196.026†	-30.8	6.1657 µg/L	8.56488	6.1657 ppb	8.56488	138.91%
SiO2†	62612.3	11498 µg/L	64.0	11498 ppb	64.0	0.56%
Si 251.611†	72167.4	5253.0 µg/L	33.47	5253.0 ppb	33.47	0.64%
Sn 189.927†	-6.1	5.3203 µg/L	2.22219	5.3203 ppb	2.22219	41.77%
Sr 421.552†	2980.0	14.977 µg/L	0.0632	14.977 ppb	0.0632	0.42%
Ti 334.940†	1046925.2	2384.7 µg/L	7.07	2384.7 ppb	7.07	0.30%
Tl 190.801†	-17.8	-4.4515 µg/L	2.73294	-4.4515 ppb	2.73294	61.39%
U 409.014†	-781.0	-83.061 µg/L	2.2752	-83.061 ppb	2.2752	2.74%
V 292.402†	2542.9	33.918 µg/L	0.3956	33.918 ppb	0.3956	1.17%
Zn 213.857†	16483.4	429.75 µg/L	3.768	429.75 ppb	3.768	0.88%

Sequence No.: 40
Sample ID: 241322011|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 334
Date Collected: 12/10/2009 09:54:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322011|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114142.5	114142.5	97.9	%			09:54:39
1	Al 396.153Radial†	17638.5	17899.4	8893.1	µg/L	8893.1	ppb	09:54:39
1	Ca 317.933Radial†	14919.6	14831.8	5738.7	µg/L	5738.7	ppb	09:54:59
1	Fe 238.204 Radial†	10198.6	10405.5	66175	µg/L	66175	ppb	09:54:59
1	K 766.490 Radial†	5711.5	5153.5	2637.5	µg/L	2637.5	ppb	09:54:39
1	Mg 279.077 IEC†	428.9	422.8	2513.1	µg/L	2513.1	ppb	09:54:59
1	Na 589.592 Radial†	1661.9	2332.2	584.04	µg/L	584.04	ppb	09:54:39
1	Sr 421.552†	5389.8	5569.5	27.992	µg/L	27.992	ppb	09:54:39
1	Sc 361.383	2035083.8	2035083.8	100.64	%			09:56:03
1	Y 371.029	1328099.5	1328099.5	105.51	%			09:56:03
1	Ag 328.068†	-417.6	-425.4	1.6782	µg/L	1.6782	ppb	09:56:08
1	As 188.979†	0.0	-2.2	-6.4016	µg/L	-6.4016	ppb	09:56:29
1	B 249.677†	811.4	668.4	8.1679	µg/L	8.1679	ppb	09:56:08
1	Ba 233.527†	8447.4	8472.1	217.40	µg/L	217.40	ppb	09:56:08
1	Be 313.107†	9821.9	6243.9	2.8037	µg/L	2.8037	ppb	09:56:08
1	Cd 226.502†	160.4	258.3	1.7280	µg/L	1.7280	ppb	09:56:08
1	Co 228.616†	231.8	297.0	8.1489	µg/L	8.1489	ppb	09:56:29
1	Cr 267.716†	1107.9	1200.7	25.295	µg/L	25.295	ppb	09:56:08
1	Cu 324.752†	5707.2	1401.4	23.935	µg/L	23.935	ppb	09:56:08
1	Mn 257.610†	736441.8	731989.4	2345.6	µg/L	2345.6	ppb	09:56:03
1	Mo 202.031†	78.3	81.5	12.123	µg/L	12.123	ppb	09:56:29
1	Ni 231.604†	745.3	465.0	25.440	µg/L	25.440	ppb	09:56:29
1	P 214.914†	639.6	434.6	801.66	µg/L	801.66	ppb	09:56:29
1	Pb 220.353†	342.3	283.8	73.370	µg/L	73.370	ppb	09:56:29
1	S 181.975 Axial†	69.1	46.5	217.44	µg/L	217.44	ppb	09:56:29
1	Sb 206.836†	17.1	-4.1	6.4310	µg/L	6.4310	ppb	09:56:29
1	Se 196.026†	-15.9	-25.6	13.324	µg/L	13.324	ppb	09:56:29
1	SiO2†	54141.6	51048.1	9374.0	µg/L	9374.0	ppb	09:56:08
1	Si 251.611†	59644.4	58942.3	4253.9	µg/L	4253.9	ppb	09:56:08
1	Sn 189.927†	-12.3	-34.7	-8.2141	µg/L	-8.2141	ppb	09:56:29
1	Ti 334.940†	1317495.2	1308395.3	2980.1	µg/L	2980.1	ppb	09:56:03
1	Tl 190.801†	-34.5	-14.0	8.5856	µg/L	8.5856	ppb	09:56:29
1	U 409.014†	-11.0	-741.3	-79.436	µg/L	-79.436	ppb	09:56:08
1	V 292.402†	4242.2	4342.1	54.200	µg/L	54.200	ppb	09:56:08
1	Zn 213.857†	18377.2	17734.4	462.78	µg/L	462.78	ppb	09:56:08
2	Sc RADIAL	115245.1	115245.1	98.8	%			09:55:05
2	Al 396.153Radial†	17986.4	18079.0	8982.3	µg/L	8982.3	ppb	09:55:05
2	Ca 317.933Radial†	15070.4	14838.6	5741.3	µg/L	5741.3	ppb	09:55:25
2	Fe 238.204 Radial†	10282.9	10391.2	66083	µg/L	66083	ppb	09:55:25
2	K 766.490 Radial†	5765.5	5152.2	2636.8	µg/L	2636.8	ppb	09:55:05
2	Mg 279.077 IEC†	440.6	430.5	2560.7	µg/L	2560.7	ppb	09:55:25
2	Na 589.592 Radial†	1676.7	2330.9	583.71	µg/L	583.71	ppb	09:55:05
2	Sr 421.552†	5472.1	5600.1	28.146	µg/L	28.146	ppb	09:55:05
2	Sc 361.383	2026941.1	2026941.1	100.23	%			09:56:36
2	Y 371.029	1322642.2	1322642.2	105.08	%			09:56:36
2	Ag 328.068†	-452.0	-461.4	1.3428	µg/L	1.3428	ppb	09:56:41
2	As 188.979†	1.7	-0.6	-3.4506	µg/L	-3.4506	ppb	09:57:02
2	B 249.677†	849.1	709.3	9.9674	µg/L	9.9674	ppb	09:56:41
2	Ba 233.527†	8432.3	8490.7	217.88	µg/L	217.88	ppb	09:56:41
2	Be 313.107†	9885.9	6347.1	2.8686	µg/L	2.8686	ppb	09:56:41
2	Cd 226.502†	169.2	267.8	1.9816	µg/L	1.9816	ppb	09:56:41
2	Co 228.616†	236.7	302.8	8.4314	µg/L	8.4314	ppb	09:57:02
2	Cr 267.716†	1082.4	1179.7	24.855	µg/L	24.855	ppb	09:56:41
2	Cu 324.752†	5667.1	1384.1	23.796	µg/L	23.796	ppb	09:56:41
2	Mn 257.610†	733595.4	732089.4	2345.9	µg/L	2345.9	ppb	09:56:36
2	Mo 202.031†	85.9	89.3	13.033	µg/L	13.033	ppb	09:57:02
2	Ni 231.604†	758.1	480.7	26.303	µg/L	26.303	ppb	09:57:02
2	P 214.914†	641.6	439.2	811.09	µg/L	811.09	ppb	09:57:02
2	Pb 220.353†	348.1	291.1	75.263	µg/L	75.263	ppb	09:57:02

2	S 181.975 Axial†	67.0	44.7	208.85 µg/L	208.85 ppb	09:57:02
2	Sb 206.836†	20.2	-1.0	9.4918 µg/L	9.4918 ppb	09:57:02
2	Se 196.026†	-23.7	-33.6	3.1275 µg/L	3.1275 ppb	09:57:02
2	SiO2†	54110.0	51232.7	9407.9 µg/L	9407.9 ppb	09:56:41
2	Si 251.611†	59571.0	59107.1	4266.2 µg/L	4266.2 ppb	09:56:41
2	Sn 189.927†	-12.5	-34.9	-8.3312 µg/L	-8.3312 ppb	09:57:02
2	Ti 334.940†	1311760.4	1307933.0	2979.0 µg/L	2979.0 ppb	09:56:36
2	Tl 190.801†	-41.6	-21.1	-2.4539 µg/L	-2.4539 ppb	09:57:02
2	U 409.014†	-109.9	-840.1	-88.374 µg/L	-88.374 ppb	09:56:41
2	V 292.402†	4230.1	4347.0	54.240 µg/L	54.240 ppb	09:56:41
2	Zn 213.857†	18336.5	17767.2	463.65 µg/L	463.65 ppb	09:56:41
3	Sc RADIAL	114299.1	114299.1	98.0 %		09:55:31
3	Al 396.153Radial†	18016.7	18260.6	9072.6 µg/L	9072.6 ppb	09:55:31
3	Ca 317.933Radial†	14978.5	14871.0	5753.9 µg/L	5753.9 ppb	09:55:51
3	Fe 238.204 Radial†	10213.2	10406.2	66179 µg/L	66179 ppb	09:55:51
3	K 766.490 Radial†	5783.4	5218.8	2670.9 µg/L	2670.9 ppb	09:55:31
3	Mg 279.077 IEC†	438.5	432.0	2569.8 µg/L	2569.8 ppb	09:55:51
3	Na 589.592 Radial†	1678.9	2347.2	587.80 µg/L	587.80 ppb	09:55:31
3	Sr 421.552†	5462.5	5636.2	28.327 µg/L	28.327 ppb	09:55:31
3	Sc 361.383	2038156.1	2038156.1	100.79 %		09:57:09
3	Y 371.029	1330125.7	1330125.7	105.67 %		09:57:09
3	Ag 328.068†	-459.0	-465.8	1.3068 µg/L	1.3068 ppb	09:57:14
3	As 188.979†	2.3	0.1	-2.3966 µg/L	-2.3966 ppb	09:57:35
3	B 249.677†	866.8	722.2	10.497 µg/L	10.497 ppb	09:57:14
3	Ba 233.527†	8393.7	8406.1	215.71 µg/L	215.71 ppb	09:57:14
3	Be 313.107†	9897.7	6304.5	2.8486 µg/L	2.8486 ppb	09:57:14
3	Cd 226.502†	151.8	249.6	1.4983 µg/L	1.4983 ppb	09:57:14
3	Co 228.616†	233.6	298.5	8.2588 µg/L	8.2588 ppb	09:57:35
3	Cr 267.716†	1029.0	1120.8	23.619 µg/L	23.619 ppb	09:57:14
3	Cu 324.752†	5661.4	1347.4	23.561 µg/L	23.561 ppb	09:57:14
3	Mn 257.610†	733375.9	727844.4	2332.3 µg/L	2332.3 ppb	09:57:09
3	Mo 202.031†	78.3	81.3	12.103 µg/L	12.103 ppb	09:57:35
3	Ni 231.604†	761.7	480.1	26.270 µg/L	26.270 ppb	09:57:35
3	P 214.914†	640.2	434.2	801.03 µg/L	801.03 ppb	09:57:35
3	Pb 220.353†	340.8	281.8	72.870 µg/L	72.870 ppb	09:57:35
3	S 181.975 Axial†	68.1	45.4	212.28 µg/L	212.28 ppb	09:57:35
3	Sb 206.836†	26.4	5.1	15.379 µg/L	15.379 ppb	09:57:35
3	Se 196.026†	-18.5	-28.2	10.043 µg/L	10.043 ppb	09:57:35
3	SiO2†	53798.4	50626.5	9296.6 µg/L	9296.6 ppb	09:57:14
3	Si 251.611†	59252.1	58463.7	4219.1 µg/L	4219.1 ppb	09:57:14
3	Sn 189.927†	-9.4	-31.7	-6.6814 µg/L	-6.6814 ppb	09:57:35
3	Ti 334.940†	1311024.6	1300001.8	2961.0 µg/L	2961.0 ppb	09:57:09
3	Tl 190.801†	-38.0	-17.3	3.2563 µg/L	3.2563 ppb	09:57:35
3	U 409.014†	41.1	-689.7	-74.756 µg/L	-74.756 ppb	09:57:14
3	V 292.402†	4208.2	4302.1	53.757 µg/L	53.757 ppb	09:57:14
3	Zn 213.857†	18304.4	17634.6	460.13 µg/L	460.13 ppb	09:57:14

Mean Data: 241322011|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2033393.7	100.55	%	0.287				0.29%
Sc RADIAL	114562.2	98.2	%	0.51				0.52%
Y 371.029	1326955.8	105.42	%	0.308				0.29%
Ag 328.068†	-450.8	1.4426	µg/L	0.20481	1.4426	ppb	0.20481	14.20%
Al 396.153Radial†	18079.7	8982.7	µg/L	89.73	8982.7	ppb	89.73	1.00%
As 188.979†	-0.9	-4.0829	µg/L	2.07603	-4.0829	ppb	2.07603	50.85%
B 249.677†	699.9	9.5441	µg/L	1.22088	9.5441	ppb	1.22088	12.79%
Ba 233.527†	8456.3	217.00	µg/L	1.141	217.00	ppb	1.141	0.53%
Be 313.107†	6298.5	2.8403	µg/L	0.03325	2.8403	ppb	0.03325	1.17%
Ca 317.933Radial†	14847.1	5744.6	µg/L	8.10	5744.6	ppb	8.10	0.14%
Cd 226.502†	258.6	1.7359	µg/L	0.24173	1.7359	ppb	0.24173	13.93%
Co 228.616†	299.4	8.2797	µg/L	0.14241	8.2797	ppb	0.14241	1.72%
Cr 267.716†	1167.1	24.589	µg/L	0.8692	24.589	ppb	0.8692	3.53%
Cu 324.752†	1377.6	23.764	µg/L	0.1887	23.764	ppb	0.1887	0.79%
Fe 238.204 Radial†	10401.0	66146	µg/L	54.0	66146	ppb	54.0	0.08%
K 766.490 Radial†	5174.8	2648.4	µg/L	19.48	2648.4	ppb	19.48	0.74%
Mg 279.077 IEC†	428.4	2547.8	µg/L	30.42	2547.8	ppb	30.42	1.19%
Mn 257.610†	730641.1	2341.3	µg/L	7.73	2341.3	ppb	7.73	0.33%
Mo 202.031†	84.1	12.420	µg/L	0.5311	12.420	ppb	0.5311	4.28%
Na 589.592 Radial†	2336.8	585.18	µg/L	2.273	585.18	ppb	2.273	0.39%

Ni 231.604†	475.3	26.004 µg/L	0.4890	26.004 ppb	0.4890	1.88%
P 214.914†	436.0	804.59 µg/L	5.637	804.59 ppb	5.637	0.70%
Pb 220.353†	285.6	73.834 µg/L	1.2622	73.834 ppb	1.2622	1.71%
S 181.975 Axial†	45.6	212.86 µg/L	4.325	212.86 ppb	4.325	2.03%
Sb 206.836†	0.0	10.434 µg/L	4.5478	10.434 ppb	4.5478	43.59%
Se 196.026†	-29.1	8.8317 µg/L	5.20528	8.8317 ppb	5.20528	58.94%
SiO2†	50969.1	9359.5 µg/L	57.06	9359.5 ppb	57.06	0.61%
Si 251.611†	58837.7	4246.4 µg/L	24.39	4246.4 ppb	24.39	0.57%
Sn 189.927†	-33.8	-7.7422 µg/L	0.92055	-7.7422 ppb	0.92055	11.89%
Sr 421.552†	5601.9	28.155 µg/L	0.1677	28.155 ppb	0.1677	0.60%
Ti 334.940†	1305443.4	2973.4 µg/L	10.75	2973.4 ppb	10.75	0.36%
Tl 190.801†	-17.5	3.1293 µg/L	5.52085	3.1293 ppb	5.52085	176.42%
U 409.014†	-757.1	-80.855 µg/L	6.9191	-80.855 ppb	6.9191	8.56%
V 292.402†	4330.4	54.066 µg/L	0.2679	54.066 ppb	0.2679	0.50%
Zn 213.857†	17712.1	462.19 µg/L	1.835	462.19 ppb	1.835	0.40%

Sequence No.: 41
Sample ID: 241322012|930802|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 335
Date Collected: 12/10/2009 09:57:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322012|930802|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114052.2	114052.2	97.8	%			09:58:16
1	Al 396.153Radial†	31002.5	31579.6	15690	µg/L	15690	ppb	09:58:16
1	Ca 317.933Radial†	7306.3	7058.6	2731.1	µg/L	2731.1	ppb	09:58:16
1	Fe 238.204 Radial†	11954.9	12209.8	77649	µg/L	77649	ppb	09:58:16
1	K 766.490 Radial†	4393.2	3810.0	1949.9	µg/L	1949.9	ppb	09:58:16
1	Mg 279.077 IEC†	278.8	269.7	1551.1	µg/L	1551.1	ppb	09:58:36
1	Na 589.592 Radial†	2844.8	3543.2	887.30	µg/L	887.30	ppb	09:58:16
1	Sr 421.552†	4951.8	5126.0	25.763	µg/L	25.763	ppb	09:58:16
1	Sc 361.383	2039366.8	2039366.8	100.85	%			09:59:41
1	Y 371.029	1375652.4	1375652.4	109.29	%			09:59:41
1	Ag 328.068†	-578.7	-584.2	1.0285	µg/L	1.0285	ppb	09:59:47
1	As 188.979†	6.4	4.1	6.9873	µg/L	6.9873	ppb	10:00:07
1	B 249.677†	928.8	783.2	9.5347	µg/L	9.5347	ppb	09:59:47
1	Ba 233.527†	6772.2	6793.3	174.31	µg/L	174.31	ppb	09:59:47
1	Be 313.107†	13952.5	10319.4	4.9092	µg/L	4.9092	ppb	09:59:47
1	Cd 226.502†	199.2	296.5	1.8543	µg/L	1.8543	ppb	09:59:47
1	Co 228.616†	283.3	347.6	8.1242	µg/L	8.1242	ppb	10:00:07
1	Cr 267.716†	3047.9	3122.0	65.553	µg/L	65.553	ppb	09:59:47
1	Cu 324.752†	4609.0	300.5	18.763	µg/L	18.763	ppb	09:59:47
1	Mn 257.610†	1040349.2	1031805.2	3304.3	µg/L	3304.3	ppb	09:59:41
1	Mo 202.031†	235.6	237.3	30.772	µg/L	30.772	ppb	10:00:07
1	Ni 231.604†	1023.0	738.8	40.423	µg/L	40.423	ppb	10:00:07
1	P 214.914†	476.0	271.1	461.52	µg/L	461.52	ppb	10:00:07
1	Pb 220.353†	589.5	528.3	137.08	µg/L	137.08	ppb	10:00:07
1	S 181.975 Axial†	43.6	21.1	91.317	µg/L	91.317	ppb	10:00:07
1	Sb 206.836†	18.9	-2.3	12.726	µg/L	12.726	ppb	10:00:07
1	Se 196.026†	-19.6	-29.3	16.686	µg/L	16.686	ppb	10:00:07
1	SiO2†	62026.4	58753.6	10789	µg/L	10789	ppb	09:59:47
1	Si 251.611†	68702.7	67800.0	4865.7	µg/L	4865.7	ppb	09:59:47
1	Sn 189.927†	3.4	-19.0	0.3116	µg/L	0.3116	ppb	10:00:07
1	Ti 334.940†	1852054.2	1835711.2	4181.4	µg/L	4181.4	ppb	09:59:41
1	Tl 190.801†	-47.0	-26.2	2.7992	µg/L	2.7992	ppb	10:00:07
1	U 409.014†	-279.4	-1007.5	-105.78	µg/L	-105.78	ppb	09:59:41
1	V 292.402†	2855.5	2958.3	39.657	µg/L	39.657	ppb	09:59:47
1	Zn 213.857†	16420.2	15755.5	409.07	µg/L	409.07	ppb	09:59:47
2	Sc RADIAL	114779.6	114779.6	98.4	%			09:58:42
2	Al 396.153Radial†	31358.3	31740.2	15769	µg/L	15769	ppb	09:58:42
2	Ca 317.933Radial†	7402.9	7109.4	2750.8	µg/L	2750.8	ppb	09:58:42
2	Fe 238.204 Radial†	12154.5	12335.2	78446	µg/L	78446	ppb	09:58:42
2	K 766.490 Radial†	4435.3	3824.3	1957.2	µg/L	1957.2	ppb	09:58:42
2	Mg 279.077 IEC†	276.3	265.3	1523.3	µg/L	1523.3	ppb	09:59:02
2	Na 589.592 Radial†	2850.2	3530.2	884.06	µg/L	884.06	ppb	09:58:42
2	Sr 421.552†	5051.2	5194.9	26.109	µg/L	26.109	ppb	09:58:42
2	Sc 361.383	2032679.5	2032679.5	100.52	%			10:00:14
2	Y 371.029	1370739.0	1370739.0	108.90	%			10:00:14
2	Ag 328.068†	-542.4	-550.0	1.4058	µg/L	1.4058	ppb	10:00:20
2	As 188.979†	17.4	15.0	26.802	µg/L	26.802	ppb	10:00:41
2	B 249.677†	927.5	784.9	9.3583	µg/L	9.3583	ppb	10:00:20
2	Ba 233.527†	6788.6	6831.7	175.30	µg/L	175.30	ppb	10:00:20
2	Be 313.107†	14076.3	10488.0	5.0110	µg/L	5.0110	ppb	10:00:20
2	Cd 226.502†	194.4	292.4	1.6908	µg/L	1.6908	ppb	10:00:20
2	Co 228.616†	270.6	335.9	7.5390	µg/L	7.5390	ppb	10:00:41
2	Cr 267.716†	3046.1	3130.2	65.725	µg/L	65.725	ppb	10:00:20
2	Cu 324.752†	4774.3	479.9	20.179	µg/L	20.179	ppb	10:00:20
2	Mn 257.610†	1039206.1	1034061.9	3311.6	µg/L	3311.6	ppb	10:00:14
2	Mo 202.031†	237.5	240.0	31.113	µg/L	31.113	ppb	10:00:41
2	Ni 231.604†	1046.5	765.5	41.885	µg/L	41.885	ppb	10:00:41
2	P 214.914†	479.4	276.1	470.47	µg/L	470.47	ppb	10:00:41
2	Pb 220.353†	595.2	535.9	139.04	µg/L	139.04	ppb	10:00:41

2	S 181.975 Axial†	46.5	24.1	106.10 µg/L	106.10 ppb	10:00:41
2	Sb 206.836†	12.9	-8.3	6.9213 µg/L	6.9213 ppb	10:00:41
2	Se 196.026†	-31.1	-40.8	2.5595 µg/L	2.5595 ppb	10:00:41
2	SiO2†	61040.9	57975.5	10646 µg/L	10646 ppb	10:00:20
2	Si 251.611†	67809.9	67135.9	4816.1 µg/L	4816.1 ppb	10:00:20
2	Sn 189.927†	9.1	-13.4	3.2799 µg/L	3.2799 ppb	10:00:41
2	Ti 334.940†	1850361.5	1840069.0	4191.4 µg/L	4191.4 ppb	10:00:14
2	Tl 190.801†	-43.3	-22.7	8.2897 µg/L	8.2897 ppb	10:00:41
2	U 409.014†	-181.5	-911.0	-97.182 µg/L	-97.182 ppb	10:00:14
2	V 292.402†	2879.4	2991.3	40.111 µg/L	40.111 ppb	10:00:20
2	Zn 213.857†	16463.5	15852.1	411.54 µg/L	411.54 ppb	10:00:20
3	Sc RADIAL	115407.4	115407.4	99.0 %		09:59:08
3	Al 396.153Radial†	31330.5	31538.7	15669 µg/L	15669 ppb	09:59:08
3	Ca 317.933Radial†	7363.6	7028.7	2719.6 µg/L	2719.6 ppb	09:59:08
3	Fe 238.204 Radial†	12121.2	12234.3	77805 µg/L	77805 ppb	09:59:08
3	K 766.490 Radial†	4383.8	3747.7	1918.0 µg/L	1918.0 ppb	09:59:08
3	Mg 279.077 IEC†	268.2	255.6	1464.0 µg/L	1464.0 ppb	09:59:28
3	Na 589.592 Radial†	2913.0	3577.9	896.00 µg/L	896.00 ppb	09:59:08
3	Sr 421.552†	5031.6	5147.2	25.870 µg/L	25.870 ppb	09:59:08
3	Sc 361.383	2050008.6	2050008.6	101.37 %		10:00:48
3	Y 371.029	1383198.5	1383198.5	109.89 %		10:00:48
3	Ag 328.068†	-615.9	-617.9	0.7304 µg/L	0.7304 ppb	10:00:54
3	As 188.979†	8.2	5.9	10.172 µg/L	10.172 ppb	10:01:14
3	B 249.677†	971.0	820.0	11.082 µg/L	11.082 ppb	10:00:54
3	Ba 233.527†	6768.9	6755.2	173.33 µg/L	173.33 ppb	10:00:54
3	Be 313.107†	14130.7	10423.3	4.9772 µg/L	4.9772 ppb	10:00:54
3	Cd 226.502†	227.8	323.7	2.5700 µg/L	2.5700 ppb	10:00:54
3	Co 228.616†	275.4	338.3	7.6940 µg/L	7.6940 ppb	10:01:14
3	Cr 267.716†	3038.4	3097.0	65.027 µg/L	65.027 ppb	10:00:54
3	Cu 324.752†	4729.8	395.9	19.459 µg/L	19.459 ppb	10:00:54
3	Mn 257.610†	1043859.9	1029913.2	3298.3 µg/L	3298.3 ppb	10:00:48
3	Mo 202.031†	235.5	236.0	30.627 µg/L	30.627 ppb	10:01:14
3	Ni 231.604†	1024.9	735.4	40.237 µg/L	40.237 ppb	10:01:14
3	P 214.914†	482.5	275.1	469.26 µg/L	469.26 ppb	10:01:14
3	Pb 220.353†	587.4	523.1	135.74 µg/L	135.74 ppb	10:01:14
3	S 181.975 Axial†	42.7	19.9	85.767 µg/L	85.767 ppb	10:01:14
3	Sb 206.836†	19.3	-2.0	12.990 µg/L	12.990 ppb	10:01:14
3	Se 196.026†	-26.8	-36.3	7.8753 µg/L	7.8753 ppb	10:01:14
3	SiO2†	61294.4	57712.3	10598 µg/L	10598 ppb	10:00:54
3	Si 251.611†	67917.9	66672.2	4782.6 µg/L	4782.6 ppb	10:00:54
3	Sn 189.927†	1.8	-20.6	-0.5084 µg/L	-0.5084 ppb	10:01:14
3	Ti 334.940†	1858139.1	1832180.3	4173.4 µg/L	4173.4 ppb	10:00:48
3	Tl 190.801†	-46.1	-25.1	4.3483 µg/L	4.3483 ppb	10:01:14
3	U 409.014†	-212.5	-940.1	-99.699 µg/L	-99.699 ppb	10:00:48
3	V 292.402†	2828.6	2917.0	39.214 µg/L	39.214 ppb	10:00:54
3	Zn 213.857†	16455.9	15706.2	407.75 µg/L	407.75 ppb	10:00:54

Mean Data: 241322012|930802|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2040685.0	100.91	%	0.432				0.43%
Sc RADIAL	114746.4	98.4	%	0.58				0.59%
Y 371.029	1376530.0	109.36	%	0.499				0.46%
Ag 328.068†	-584.1	1.0549	µg/L	0.33846	1.0549	ppb	0.33846	32.09%
Al 396.153Radial†	31619.5	15709	µg/L	52.9	15709	ppb	52.9	0.34%
As 188.979†	8.3	14.654	µg/L	10.6404	14.654	ppb	10.6404	72.61%
B 249.677†	796.0	9.9918	µg/L	0.94862	9.9918	ppb	0.94862	9.49%
Ba 233.527†	6793.4	174.31	µg/L	0.982	174.31	ppb	0.982	0.56%
Be 313.107†	10410.2	4.9658	µg/L	0.05187	4.9658	ppb	0.05187	1.04%
Ca 317.933Radial†	7065.6	2733.8	µg/L	15.77	2733.8	ppb	15.77	0.58%
Cd 226.502†	304.2	2.0384	µg/L	0.46762	2.0384	ppb	0.46762	22.94%
Co 228.616†	340.6	7.7858	µg/L	0.30318	7.7858	ppb	0.30318	3.89%
Cr 267.716†	3116.4	65.435	µg/L	0.3638	65.435	ppb	0.3638	0.56%
Cu 324.752†	392.1	19.467	µg/L	0.7081	19.467	ppb	0.7081	3.64%
Fe 238.204 Radial†	12259.7	77967	µg/L	422.7	77967	ppb	422.7	0.54%
K 766.490 Radial†	3794.0	1941.7	µg/L	20.83	1941.7	ppb	20.83	1.07%
Mg 279.077 IEC†	263.5	1512.8	µg/L	44.47	1512.8	ppb	44.47	2.94%
Mn 257.610†	1031926.8	3304.7	µg/L	6.67	3304.7	ppb	6.67	0.20%
Mo 202.031†	237.8	30.837	µg/L	0.2495	30.837	ppb	0.2495	0.81%
Na 589.592 Radial†	3550.4	889.12	µg/L	6.176	889.12	ppb	6.176	0.69%

Ni 231.604†	746.6	40.848	µg/L	0.9026	40.848	ppb	0.9026	2.21%
P 214.914†	274.1	467.08	µg/L	4.855	467.08	ppb	4.855	1.04%
Pb 220.353†	529.1	137.28	µg/L	1.661	137.28	ppb	1.661	1.21%
S 181.975 Axial†	21.7	94.394	µg/L	10.5088	94.394	ppb	10.5088	11.13%
Sb 206.836†	-4.2	10.879	µg/L	3.4299	10.879	ppb	3.4299	31.53%
Se 196.026†	-35.4	9.0403	µg/L	7.13508	9.0403	ppb	7.13508	78.93%
SiO2†	58147.1	10678	µg/L	99.4	10678	ppb	99.4	0.93%
Si 251.611†	67202.7	4821.5	µg/L	41.82	4821.5	ppb	41.82	0.87%
Sn 189.927†	-17.7	1.0277	µg/L	1.99308	1.0277	ppb	1.99308	193.93%
Sr 421.552†	5156.0	25.914	µg/L	0.1773	25.914	ppb	0.1773	0.68%
Ti 334.940†	1835986.8	4182.1	µg/L	9.00	4182.1	ppb	9.00	0.22%
Tl 190.801†	-24.7	5.1457	µg/L	2.83080	5.1457	ppb	2.83080	55.01%
U 409.014†	-952.9	-100.89	µg/L	4.423	-100.89	ppb	4.423	4.38%
V 292.402†	2955.5	39.661	µg/L	0.4482	39.661	ppb	0.4482	1.13%
Zn 213.857†	15771.3	409.45	µg/L	1.923	409.45	ppb	1.923	0.47%

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 10:01:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115174.3	115174.3	98.8	%			10:02:02
1	Al 396.153Radial†	10439.9	10448.4	5172.3	µg/L	5172.3	ppb	10:02:02
1	Ca 317.933Radial†	13208.1	12962.1	5015.3	µg/L	5015.3	ppb	10:02:23
1	Fe 238.204 Radial†	797.8	792.7	5057.6	µg/L	5057.6	ppb	10:02:23
1	K 766.490 Radial†	10495.6	9945.7	5090.1	µg/L	5090.1	ppb	10:02:02
1	Mg 279.077 IEC†	839.9	835.0	5160.6	µg/L	5160.6	ppb	10:02:23
1	Na 589.592 Radial†	39948.4	41086.9	10289	µg/L	10289	ppb	10:02:02
1	Sr 421.552†	97477.2	98770.4	496.42	µg/L	496.42	ppb	10:02:02
1	Sc 361.383	2031198.2	2031198.2	100.44	%			10:03:27
1	Y 371.029	1265433.5	1265433.5	100.53	%			10:03:27
1	Ag 328.068†	56366.4	56106.9	515.28	µg/L	515.28	ppb	10:03:32
1	As 188.979†	280.4	276.9	501.70	µg/L	501.70	ppb	10:03:53
1	B 249.677†	11704.9	11515.3	497.63	µg/L	497.63	ppb	10:03:32
1	Ba 233.527†	19376.6	19369.1	497.84	µg/L	497.84	ppb	10:03:32
1	Be 313.107†	797424.1	790385.0	494.40	µg/L	494.40	ppb	10:03:27
1	Cd 226.502†	18820.0	18835.8	501.83	µg/L	501.83	ppb	10:03:32
1	Co 228.616†	10337.5	10358.5	500.65	µg/L	500.65	ppb	10:03:32
1	Cr 267.716†	23692.8	23687.9	497.94	µg/L	497.94	ppb	10:03:32
1	Cu 324.752†	76399.6	71792.3	499.07	µg/L	499.07	ppb	10:03:32
1	Mn 257.610†	154543.4	154062.0	492.55	µg/L	492.55	ppb	10:03:27
1	Mo 202.031†	4308.8	4293.4	501.69	µg/L	501.69	ppb	10:03:53
1	Ni 231.604†	9461.7	9144.3	500.30	µg/L	500.30	ppb	10:03:32
1	P 214.914†	1401.9	1194.8	2359.3	µg/L	2359.3	ppb	10:03:53
1	Pb 220.353†	1990.7	1925.7	498.42	µg/L	498.42	ppb	10:03:53
1	S 181.975 Axial†	236.3	213.1	1042.0	µg/L	1042.0	ppb	10:03:53
1	Sb 206.836†	536.3	512.8	500.48	µg/L	500.48	ppb	10:03:53
1	Se 196.026†	402.5	390.9	501.63	µg/L	501.63	ppb	10:03:53
1	SiO2†	32388.9	29494.4	5416.1	µg/L	5416.1	ppb	10:03:32
1	Si 251.611†	34694.0	34215.5	2483.6	µg/L	2483.6	ppb	10:03:32
1	Sn 189.927†	1021.3	994.4	511.93	µg/L	511.93	ppb	10:03:53
1	Ti 334.940†	225256.1	223486.4	508.80	µg/L	508.80	ppb	10:03:27
1	Tl 190.801†	305.1	324.1	500.13	µg/L	500.13	ppb	10:03:53
1	U 409.014†	6270.2	5512.0	498.95	µg/L	498.95	ppb	10:03:32
1	V 292.402†	44233.2	44164.5	501.52	µg/L	501.52	ppb	10:03:32
1	Zn 213.857†	19616.8	19003.5	499.68	µg/L	499.68	ppb	10:03:32
2	Sc RADIAL	113675.2	113675.2	97.5	%			10:02:29
2	Al 396.153Radial†	10380.8	10527.3	5211.4	µg/L	5211.4	ppb	10:02:29
2	Ca 317.933Radial†	13225.9	13156.8	5090.6	µg/L	5090.6	ppb	10:02:49
2	Fe 238.204 Radial†	796.2	801.7	5114.7	µg/L	5114.7	ppb	10:02:49
2	K 766.490 Radial†	10485.0	10074.9	5156.2	µg/L	5156.2	ppb	10:02:29
2	Mg 279.077 IEC†	834.2	840.5	5194.2	µg/L	5194.2	ppb	10:02:49
2	Na 589.592 Radial†	40004.3	41677.8	10437	µg/L	10437	ppb	10:02:29
2	Sr 421.552†	97377.1	99969.4	502.44	µg/L	502.44	ppb	10:02:29
2	Sc 361.383	2030768.3	2030768.3	100.42	%			10:04:00
2	Y 371.029	1264137.2	1264137.2	100.43	%			10:04:00
2	Ag 328.068†	56032.7	55786.6	512.35	µg/L	512.35	ppb	10:04:06
2	As 188.979†	275.3	271.9	492.64	µg/L	492.64	ppb	10:04:26
2	B 249.677†	11643.8	11457.0	495.08	µg/L	495.08	ppb	10:04:06
2	Ba 233.527†	19211.1	19208.4	493.71	µg/L	493.71	ppb	10:04:06
2	Be 313.107†	805816.6	798910.2	499.73	µg/L	499.73	ppb	10:04:00
2	Cd 226.502†	18667.7	18688.1	497.88	µg/L	497.88	ppb	10:04:06
2	Co 228.616†	10258.1	10281.6	496.92	µg/L	496.92	ppb	10:04:06
2	Cr 267.716†	23496.7	23497.6	493.95	µg/L	493.95	ppb	10:04:06
2	Cu 324.752†	75961.4	71372.0	496.16	µg/L	496.16	ppb	10:04:06
2	Mn 257.610†	155993.2	155538.2	497.28	µg/L	497.28	ppb	10:04:00
2	Mo 202.031†	4317.8	4303.3	502.85	µg/L	502.85	ppb	10:04:26
2	Ni 231.604†	9368.6	9053.6	495.33	µg/L	495.33	ppb	10:04:06
2	P 214.914†	1405.3	1198.5	2367.2	µg/L	2367.2	ppb	10:04:26
2	Pb 220.353†	1983.1	1918.5	496.59	µg/L	496.59	ppb	10:04:26

2	S 181.975 Axial†	234.2	211.1	1032.1 µg/L	1032.1 ppb	10:04:26
2	Sb 206.836†	542.4	519.0	506.54 µg/L	506.54 ppb	10:04:26
2	Se 196.026†	408.0	396.4	508.76 µg/L	508.76 ppb	10:04:26
2	SiO2†	32099.0	29212.6	5364.4 µg/L	5364.4 ppb	10:04:06
2	Si 251.611†	34387.0	33917.1	2461.1 µg/L	2461.1 ppb	10:04:06
2	Sn 189.927†	1030.8	1004.1	516.93 µg/L	516.93 ppb	10:04:26
2	Ti 334.940†	227415.5	225684.3	513.80 µg/L	513.80 ppb	10:04:00
2	Tl 190.801†	305.3	324.4	500.68 µg/L	500.68 ppb	10:04:26
2	U 409.014†	6124.1	5367.9	485.87 µg/L	485.87 ppb	10:04:06
2	V 292.402†	43961.6	43903.4	498.57 µg/L	498.57 ppb	10:04:06
2	Zn 213.857†	19422.3	18814.0	494.68 µg/L	494.68 ppb	10:04:06
3	Sc RADIAL	115750.3	115750.3	99.2 %		10:02:55
3	Al 396.153Radial†	10406.2	10361.9	5129.4 µg/L	5129.4 ppb	10:02:55
3	Ca 317.933Radial†	13247.7	12935.5	5005.0 µg/L	5005.0 ppb	10:03:15
3	Fe 238.204 Radial†	799.5	790.4	5042.8 µg/L	5042.8 ppb	10:03:15
3	K 766.490 Radial†	10518.2	9915.6	5074.7 µg/L	5074.7 ppb	10:02:55
3	Mg 279.077 IEC†	842.7	833.7	5152.1 µg/L	5152.1 ppb	10:03:15
3	Na 589.592 Radial†	40037.3	40975.2	10261 µg/L	10261 ppb	10:02:55
3	Sr 421.552†	97813.2	98617.8	495.65 µg/L	495.65 ppb	10:02:55
3	Sc 361.383	2034373.0	2034373.0	100.60 %		10:04:33
3	Y 371.029	1266197.0	1266197.0	100.59 %		10:04:33
3	Ag 328.068†	55914.2	55569.9	510.37 µg/L	510.37 ppb	10:04:39
3	As 188.979†	278.6	274.7	497.70 µg/L	497.70 ppb	10:04:59
3	B 249.677†	11583.6	11376.5	491.61 µg/L	491.61 ppb	10:04:39
3	Ba 233.527†	19283.2	19246.1	494.68 µg/L	494.68 ppb	10:04:39
3	Be 313.107†	806613.4	798280.4	499.34 µg/L	499.34 ppb	10:04:33
3	Cd 226.502†	18703.7	18691.0	497.97 µg/L	497.97 ppb	10:04:39
3	Co 228.616†	10299.1	10304.3	498.01 µg/L	498.01 ppb	10:04:39
3	Cr 267.716†	23581.0	23540.0	494.84 µg/L	494.84 ppb	10:04:39
3	Cu 324.752†	75896.0	71172.9	494.77 µg/L	494.77 ppb	10:04:39
3	Mn 257.610†	156228.8	155497.1	497.14 µg/L	497.14 ppb	10:04:33
3	Mo 202.031†	4285.8	4263.9	498.24 µg/L	498.24 ppb	10:04:59
3	Ni 231.604†	9398.4	9066.7	496.05 µg/L	496.05 ppb	10:04:39
3	P 214.914†	1411.5	1202.1	2374.6 µg/L	2374.6 ppb	10:04:59
3	Pb 220.353†	1973.8	1905.8	493.28 µg/L	493.28 ppb	10:04:59
3	S 181.975 Axial†	235.6	212.0	1036.5 µg/L	1036.5 ppb	10:04:59
3	Sb 206.836†	534.6	510.3	498.05 µg/L	498.05 ppb	10:04:59
3	Se 196.026†	401.6	389.3	499.63 µg/L	499.63 ppb	10:04:59
3	SiO2†	32172.1	29228.6	5367.3 µg/L	5367.3 ppb	10:04:39
3	Si 251.611†	34465.2	33934.1	2462.8 µg/L	2462.8 ppb	10:04:39
3	Sn 189.927†	1015.1	986.6	507.94 µg/L	507.94 ppb	10:04:59
3	Ti 334.940†	227373.8	225241.5	512.80 µg/L	512.80 ppb	10:04:33
3	Tl 190.801†	307.0	325.5	502.37 µg/L	502.37 ppb	10:04:59
3	U 409.014†	6188.5	5421.0	490.70 µg/L	490.70 ppb	10:04:39
3	V 292.402†	44018.2	43882.1	498.30 µg/L	498.30 ppb	10:04:39
3	Zn 213.857†	19484.0	18841.0	495.41 µg/L	495.41 ppb	10:04:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032113.2	100.49	%	0.097				0.10%
Sc RADIAL	114866.6	98.5	%	0.92				0.93%
Y 371.029	1265255.9	100.52	%	0.083				0.08%
Ag 328.068†	55821.1	512.67	µg/L	2.475	512.67	ppb	2.475	0.48%
QC value within limits for Ag 328.068 Recovery = 102.53%								
Al 396.153Radial†	10445.9	5171.1	µg/L	41.01	5171.1	ppb	41.01	0.79%
QC value within limits for Al 396.153Radial Recovery = 103.42%								
As 188.979†	274.5	497.35	µg/L	4.544	497.35	ppb	4.544	0.91%
QC value within limits for As 188.979 Recovery = 99.47%								
B 249.677†	11449.6	494.77	µg/L	3.018	494.77	ppb	3.018	0.61%
QC value within limits for B 249.677 Recovery = 98.95%								
Ba 233.527†	19274.5	495.41	µg/L	2.159	495.41	ppb	2.159	0.44%
QC value within limits for Ba 233.527 Recovery = 99.08%								
Be 313.107†	795858.5	497.82	µg/L	2.972	497.82	ppb	2.972	0.60%
QC value within limits for Be 313.107 Recovery = 99.56%								
Ca 317.933Radial†	13018.1	5037.0	µg/L	46.75	5037.0	ppb	46.75	0.93%
QC value within limits for Ca 317.933Radial Recovery = 100.74%								
Cd 226.502†	18738.3	499.23	µg/L	2.256	499.23	ppb	2.256	0.45%
QC value within limits for Cd 226.502 Recovery = 99.85%								
Co 228.616†	10314.8	498.52	µg/L	1.915	498.52	ppb	1.915	0.38%

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   QC value within limits for Co 228.616  Recovery = 99.70%
Cr 267.716†            23575.2      495.58 µg/L        2.099      495.58 ppb          2.099   0.42%
   QC value within limits for Cr 267.716  Recovery = 99.12%
Cu 324.752†            71445.8      496.67 µg/L        2.193      496.67 ppb          2.193   0.44%
   QC value within limits for Cu 324.752  Recovery = 99.33%
Fe 238.204 Radial†       794.9      5071.7 µg/L        37.98      5071.7 ppb          37.98   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.43%
K 766.490 Radial†       9978.7      5107.0 µg/L        43.32      5107.0 ppb          43.32   0.85%
   QC value within limits for K 766.490 Radial  Recovery = 102.14%
Mg 279.077 IEC†          836.4      5169.0 µg/L        22.24      5169.0 ppb          22.24   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.38%
Mn 257.610†           155032.4      495.65 µg/L        2.686      495.65 ppb          2.686   0.54%
   QC value within limits for Mn 257.610  Recovery = 99.13%
Mo 202.031†             4286.9      500.92 µg/L        2.397      500.92 ppb          2.397   0.48%
   QC value within limits for Mo 202.031  Recovery = 100.18%
Na 589.592 Radial†     41246.6       10329 µg/L         94.5       10329 ppb           94.5   0.92%
   QC value within limits for Na 589.592 Radial  Recovery = 103.29%
Ni 231.604†            9088.2      497.23 µg/L        2.683      497.23 ppb          2.683   0.54%
   QC value within limits for Ni 231.604  Recovery = 99.45%
P 214.914†             1198.5      2367.1 µg/L         7.61      2367.1 ppb           7.61   0.32%
   QC value within limits for P 214.914  Recovery = 94.68%
Pb 220.353†            1916.6      496.10 µg/L        2.605      496.10 ppb          2.605   0.53%
   QC value within limits for Pb 220.353  Recovery = 99.22%
S 181.975 Axial†        212.1      1036.9 µg/L         4.95      1036.9 ppb           4.95   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 103.69%
Sb 206.836†             514.0      501.69 µg/L        4.374      501.69 ppb          4.374   0.87%
   QC value within limits for Sb 206.836  Recovery = 100.34%
Se 196.026†             392.2      503.34 µg/L        4.800      503.34 ppb          4.800   0.95%
   QC value within limits for Se 196.026  Recovery = 100.67%
SiO2†                  29311.8      5382.6 µg/L        29.07      5382.6 ppb          29.07   0.54%
   QC value within limits for SiO2  Recovery = 100.66%
Si 251.611†            34022.2      2469.2 µg/L        12.52      2469.2 ppb          12.52   0.51%
   QC value within limits for Si 251.611  Recovery = 98.77%
Sn 189.927†             995.0      512.27 µg/L        4.504      512.27 ppb          4.504   0.88%
   QC value within limits for Sn 189.927  Recovery = 102.45%
Sr 421.552†            99119.2      498.17 µg/L        3.720      498.17 ppb          3.720   0.75%
   QC value within limits for Sr 421.552  Recovery = 99.63%
Ti 334.940†           224804.1      511.80 µg/L        2.646      511.80 ppb          2.646   0.52%
   QC value within limits for Ti 334.940  Recovery = 102.36%
Tl 190.801†             324.7      501.06 µg/L        1.169      501.06 ppb          1.169   0.23%
   QC value within limits for Tl 190.801  Recovery = 100.21%
U 409.014†             5433.7      491.84 µg/L        6.614      491.84 ppb          6.614   1.34%
   QC value within limits for U 409.014  Recovery = 98.37%
V 292.402†             43983.3      499.46 µg/L        1.784      499.46 ppb          1.784   0.36%
   QC value within limits for V 292.402  Recovery = 99.89%
Zn 213.857†            18886.2      496.59 µg/L        2.702      496.59 ppb          2.702   0.54%
   QC value within limits for Zn 213.857  Recovery = 99.32%
All analyte(s) passed QC.
```

Sequence No.: 43
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 10:05:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114305.9	114305.9	98.0	%			10:05:41
1	Al 396.153Radial†	178.7	59.0	29.306	µg/L	29.306	ppb	10:05:41
1	Ca 317.933Radial†	419.7	15.5	5.9946	µg/L	5.9946	ppb	10:06:01
1	Fe 238.204 Radial†	23.8	9.1	57.942	µg/L	57.942	ppb	10:06:01
1	K 766.490 Radial†	695.4	27.0	13.830	µg/L	13.830	ppb	10:05:41
1	Mg 279.077 IEC†	16.3	1.2	7.3882	µg/L	7.3882	ppb	10:06:01
1	Na 589.592 Radial†	-583.0	39.3	9.8293	µg/L	9.8293	ppb	10:05:41
1	Sr 421.552†	-57.2	4.0	0.0200	µg/L	0.0200	ppb	10:05:41
1	Sc 361.383	2026501.1	2026501.1	100.21	%			10:07:03
1	Y 371.029	1265866.5	1265866.5	100.57	%			10:07:03
1	Ag 328.068†	176.8	166.0	1.5182	µg/L	1.5182	ppb	10:07:09
1	As 188.979†	4.9	2.7	4.8388	µg/L	4.8388	ppb	10:07:29
1	B 249.677†	176.0	37.8	1.6183	µg/L	1.6183	ppb	10:07:29
1	Ba 233.527†	-60.3	17.9	0.4596	µg/L	0.4596	ppb	10:07:29
1	Be 313.107†	3640.3	116.7	0.0721	µg/L	0.0721	ppb	10:07:09
1	Cd 226.502†	-96.2	3.0	0.0698	µg/L	0.0698	ppb	10:07:29
1	Co 228.616†	-66.7	0.1	0.0005	µg/L	0.0005	ppb	10:07:29
1	Cr 267.716†	-134.0	-34.0	-0.7122	µg/L	-0.7122	ppb	10:07:09
1	Cu 324.752†	4105.0	-173.5	-1.1909	µg/L	-1.1909	ppb	10:07:09
1	Mn 257.610†	192.7	393.7	1.2643	µg/L	1.2643	ppb	10:07:29
1	Mo 202.031†	-0.1	3.6	0.4254	µg/L	0.4254	ppb	10:07:29
1	Ni 231.604†	307.0	30.8	1.6842	µg/L	1.6842	ppb	10:07:29
1	P 214.914†	185.1	-16.2	-32.641	µg/L	-32.641	ppb	10:07:29
1	Pb 220.353†	38.0	-18.3	-4.7186	µg/L	-4.7186	ppb	10:07:29
1	S 181.975 Axial†	28.9	6.6	32.518	µg/L	32.518	ppb	10:07:29
1	Sb 206.836†	25.2	4.0	3.9256	µg/L	3.9256	ppb	10:07:29
1	Se 196.026†	14.5	4.6	5.8857	µg/L	5.8857	ppb	10:07:29
1	SiO2†	2706.8	-50.3	-9.2284	µg/L	-9.2284	ppb	10:07:09
1	Si 251.611†	450.8	124.6	9.1315	µg/L	9.1315	ppb	10:07:29
1	Sn 189.927†	21.9	-0.6	-0.2968	µg/L	-0.2968	ppb	10:07:29
1	Ti 334.940†	1881.1	1102.8	2.5116	µg/L	2.5116	ppb	10:07:09
1	Tl 190.801†	-24.5	-4.0	-6.1666	µg/L	-6.1666	ppb	10:07:29
1	U 409.014†	637.8	-94.0	-8.5369	µg/L	-8.5369	ppb	10:07:09
1	V 292.402†	-123.0	4.0	0.0385	µg/L	0.0385	ppb	10:07:09
1	Zn 213.857†	589.4	61.5	1.6176	µg/L	1.6176	ppb	10:07:29
2	Sc RADIAL	114684.2	114684.2	98.3	%			10:06:07
2	Al 396.153Radial†	140.6	19.7	9.7944	µg/L	9.7944	ppb	10:06:07
2	Ca 317.933Radial†	435.2	29.8	11.520	µg/L	11.520	ppb	10:06:27
2	Fe 238.204 Radial†	20.7	5.9	37.541	µg/L	37.541	ppb	10:06:27
2	K 766.490 Radial†	720.5	50.2	25.708	µg/L	25.708	ppb	10:06:07
2	Mg 279.077 IEC†	16.0	0.9	5.3451	µg/L	5.3451	ppb	10:06:27
2	Na 589.592 Radial†	-566.3	58.2	14.564	µg/L	14.564	ppb	10:06:07
2	Sr 421.552†	-20.8	41.1	0.2067	µg/L	0.2067	ppb	10:06:07
2	Sc 361.383	2032799.2	2032799.2	100.52	%			10:07:35
2	Y 371.029	1269565.7	1269565.7	100.86	%			10:07:35
2	Ag 328.068†	202.5	191.1	1.7467	µg/L	1.7467	ppb	10:07:41
2	As 188.979†	4.0	1.7	3.1278	µg/L	3.1278	ppb	10:08:01
2	B 249.677†	159.4	20.8	0.8880	µg/L	0.8880	ppb	10:08:01
2	Ba 233.527†	-59.4	18.9	0.4860	µg/L	0.4860	ppb	10:08:01
2	Be 313.107†	3602.4	67.8	0.0418	µg/L	0.0418	ppb	10:07:41
2	Cd 226.502†	-90.0	9.5	0.2446	µg/L	0.2446	ppb	10:08:01
2	Co 228.616†	-61.9	5.0	0.2401	µg/L	0.2401	ppb	10:08:01
2	Cr 267.716†	-126.9	-26.5	-0.5541	µg/L	-0.5541	ppb	10:07:41
2	Cu 324.752†	4075.0	-216.0	-1.4902	µg/L	-1.4902	ppb	10:07:41
2	Mn 257.610†	321.6	521.3	1.6692	µg/L	1.6692	ppb	10:08:01
2	Mo 202.031†	-1.1	2.6	0.2995	µg/L	0.2995	ppb	10:08:01
2	Ni 231.604†	307.7	30.5	1.6693	µg/L	1.6693	ppb	10:08:01
2	P 214.914†	187.9	-14.0	-28.138	µg/L	-28.138	ppb	10:08:01
2	Pb 220.353†	59.9	3.3	0.8687	µg/L	0.8687	ppb	10:08:01

2	S 181.975 Axial†	28.7	6.4	31.457 µg/L	31.457 ppb	10:08:01
2	Sb 206.836†	24.2	2.9	2.8896 µg/L	2.8896 ppb	10:08:01
2	Se 196.026†	11.4	1.4	1.8530 µg/L	1.8530 ppb	10:08:01
2	SiO2†	2714.1	-51.4	-9.4440 µg/L	-9.4440 ppb	10:07:41
2	Si 251.611†	508.6	180.8	13.349 µg/L	13.349 ppb	10:08:01
2	Sn 189.927†	20.1	-2.4	-1.2386 µg/L	-1.2386 ppb	10:08:01
2	Ti 334.940†	1556.8	774.3	1.7632 µg/L	1.7632 ppb	10:07:41
2	Tl 190.801†	-19.8	0.7	1.1229 µg/L	1.1229 ppb	10:08:01
2	U 409.014†	643.3	-90.5	-8.2100 µg/L	-8.2100 ppb	10:07:41
2	V 292.402†	-100.7	26.5	0.2903 µg/L	0.2903 ppb	10:07:41
2	Zn 213.857†	595.5	65.7	1.7311 µg/L	1.7311 ppb	10:08:01
3	Sc RADIAL	115244.6	115244.6	98.8 %		10:06:32
3	Al 396.153Radial†	153.1	31.6	15.684 µg/L	15.684 ppb	10:06:32
3	Ca 317.933Radial†	422.1	14.4	5.5599 µg/L	5.5599 ppb	10:06:53
3	Fe 238.204 Radial†	20.6	5.7	36.205 µg/L	36.205 ppb	10:06:53
3	K 766.490 Radial†	754.8	81.4	41.644 µg/L	41.644 ppb	10:06:32
3	Mg 279.077 IEC†	14.5	-0.8	-4.8167 µg/L	-4.8167 ppb	10:06:53
3	Na 589.592 Radial†	-563.1	64.3	16.098 µg/L	16.098 ppb	10:06:32
3	Sr 421.552†	-14.6	47.5	0.2388 µg/L	0.2388 ppb	10:06:32
3	Sc 361.383	2027714.0	2027714.0	100.27 %		10:08:07
3	Y 371.029	1265951.7	1265951.7	100.57 %		10:08:07
3	Ag 328.068†	159.0	148.2	1.3528 µg/L	1.3528 ppb	10:08:13
3	As 188.979†	2.7	0.5	0.9195 µg/L	0.9195 ppb	10:08:34
3	B 249.677†	166.8	28.5	1.2231 µg/L	1.2231 ppb	10:08:34
3	Ba 233.527†	-64.5	13.7	0.3512 µg/L	0.3512 ppb	10:08:34
3	Be 313.107†	3570.0	44.5	0.0270 µg/L	0.0270 ppb	10:08:13
3	Cd 226.502†	-93.8	5.4	0.1434 µg/L	0.1434 ppb	10:08:34
3	Co 228.616†	-70.8	-3.9	-0.1916 µg/L	-0.1916 ppb	10:08:34
3	Cr 267.716†	-111.8	-11.7	-0.2462 µg/L	-0.2462 ppb	10:08:13
3	Cu 324.752†	4037.8	-242.9	-1.6774 µg/L	-1.6774 ppb	10:08:13
3	Mn 257.610†	170.7	371.6	1.1910 µg/L	1.1910 ppb	10:08:34
3	Mo 202.031†	4.2	7.9	0.9185 µg/L	0.9185 ppb	10:08:34
3	Ni 231.604†	323.6	47.1	2.5779 µg/L	2.5779 ppb	10:08:34
3	P 214.914†	186.8	-14.6	-29.366 µg/L	-29.366 ppb	10:08:34
3	Pb 220.353†	48.7	-7.7	-1.9777 µg/L	-1.9777 ppb	10:08:34
3	S 181.975 Axial†	30.3	8.1	39.520 µg/L	39.520 ppb	10:08:34
3	Sb 206.836†	18.2	-3.0	-2.9094 µg/L	-2.9094 ppb	10:08:34
3	Se 196.026†	5.0	-4.8	-6.1633 µg/L	-6.1633 ppb	10:08:34
3	SiO2†	2707.1	-51.6	-9.4796 µg/L	-9.4796 ppb	10:08:13
3	Si 251.611†	458.6	132.2	9.7098 µg/L	9.7098 ppb	10:08:34
3	Sn 189.927†	20.5	-2.0	-1.0234 µg/L	-1.0234 ppb	10:08:34
3	Ti 334.940†	1769.8	990.6	2.2562 µg/L	2.2562 ppb	10:08:13
3	Tl 190.801†	-14.6	5.8	8.8761 µg/L	8.8761 ppb	10:08:34
3	U 409.014†	714.9	-17.5	-1.5936 µg/L	-1.5936 ppb	10:08:13
3	V 292.402†	-140.5	-13.4	-0.1443 µg/L	-0.1443 ppb	10:08:13
3	Zn 213.857†	591.7	63.4	1.6663 µg/L	1.6663 ppb	10:08:34

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2029004.8	100.34	%	0.165				0.16%
Sc RADIAL	114744.9	98.4	%	0.40				0.41%
Y 371.029	1267128.0	100.67	%	0.168				0.17%
Ag 328.068†	168.4	1.5392	µg/L	0.19782	1.5392	ppb	0.19782	12.85%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	36.8	18.261	µg/L	10.0081	18.261	ppb	10.0081	54.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.6	2.9620	µg/L	1.96493	2.9620	ppb	1.96493	66.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	29.0	1.2432	µg/L	0.36556	1.2432	ppb	0.36556	29.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	16.8	0.4323	µg/L	0.07140	0.4323	ppb	0.07140	16.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	76.4	0.0470	µg/L	0.02300	0.0470	ppb	0.02300	48.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	19.9	7.6915	µg/L	3.32275	7.6915	ppb	3.32275	43.20%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.9	0.1526	µg/L	0.08774	0.1526	ppb	0.08774	57.49%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.4	0.0163	µg/L	0.21632	0.0163	ppb	0.21632	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -24.0     -0.5042 µg/L       0.23695     -0.5042 ppb        0.23695  47.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -210.8     -1.4528 µg/L       0.24538     -1.4528 ppb        0.24538  16.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         6.9      43.896 µg/L      12.1830      43.896 ppb       12.1830  27.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         52.9      27.060 µg/L      13.9564      27.060 ppb       13.9564  51.58%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.4       2.6389 µg/L       6.53707      2.6389 ppb        6.53707 247.72%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              428.8       1.3748 µg/L       0.25758      1.3748 ppb        0.25758  18.74%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.7       0.5478 µg/L       0.32716      0.5478 ppb        0.32716  59.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        53.9      13.497 µg/L       3.2678      13.497 ppb         3.2678  24.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               36.1       1.9771 µg/L       0.52035      1.9771 ppb        0.52035  26.32%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -14.9     -30.048 µg/L       2.3278     -30.048 ppb         2.3278   7.75%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -7.6      -1.9425 µg/L       2.79380     -1.9425 ppb        2.79380 143.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           7.0      34.498 µg/L       4.3811      34.498 ppb         4.3811  12.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                1.3       1.3019 µg/L       3.68373      1.3019 ppb        3.68373 282.94%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.4       0.5252 µg/L       6.13327      0.5252 ppb        6.13327 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -51.1      -9.3840 µg/L       0.13594     -9.3840 ppb        0.13594   1.45%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              145.9      10.730 µg/L       2.2861      10.730 ppb         2.2861  21.31%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.7      -0.8529 µg/L       0.49354     -0.8529 ppb        0.49354  57.86%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               30.9       0.1552 µg/L       0.11816      0.1552 ppb        0.11816  76.15%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              955.9       2.1770 µg/L       0.38047      2.1770 ppb        0.38047  17.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.8       1.2775 µg/L       7.52255      1.2775 ppb        7.52255 588.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -67.3      -6.1135 µg/L       3.91774     -6.1135 ppb        3.91774  64.08%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 5.7       0.0615 µg/L       0.21819      0.0615 ppb        0.21819 354.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               63.6       1.6717 µg/L       0.05694      1.6717 ppb        0.05694   3.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00] ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00] ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00] ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00] ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00] ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00] ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00] ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00] ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00] ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00] ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00] ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00] ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00] ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00] ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00] ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00] ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00] ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00] ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00] ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00] ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00] ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00] ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00] ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00] ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00] ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00] ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00] ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00] ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00] ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00] ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43 %	09:04:58
2	Sc Radial	4907.6	4907.6	100.0 %	09:03:36
2	Y 371.029	887859.3	887859.3	100.38 %	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74 %	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00] ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00] ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00] ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00] ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00] ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00] ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00] ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00] ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00] ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00] ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00] ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00] ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00] ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00] ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00] ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00] ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00] ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00] ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00] ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00] ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00] ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00] ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00] ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00] ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00] ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00] ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00] ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00] ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00] ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00] ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00] ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00] ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260 %	09:05:29
3	Sc Radial	4823.8	4823.8	98.2 %	09:04:01
3	Y 371.029	877949.7	877949.7	99.263 %	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13 %	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7 ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22 ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3 ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80 ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2 ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9 ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52 ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75 ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38 ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56 ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50 ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65 ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16 ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453 ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293 %		09:38:03
3	Sc Radial	4901.3	4901.3	99.8 %		09:36:44
3	Y 371.029	861618.1	861618.1	97.417 %		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79 %		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44 ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6 ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49 ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04 ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71 ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45 ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3 ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32 ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52 ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91 ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13 ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4 ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2 ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8 ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16 ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72 ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3 ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30 ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6 ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68 ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4 ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17 ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8 ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3 ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45 ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46 ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68 ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65 ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14 ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35 ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97 ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560 ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

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Ca 317.933Radial†        2844.7      5036.6 ug/L        62.48      5036.6 ppb        62.48   1.24%
   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†             58712.0      511.84 ug/L        0.548      511.84 ppb        0.548   0.11%
   QC value within limits for Cd 226.502  Recovery = 102.37%
Co 228.616†             31299.0      515.85 ug/L        4.347      515.85 ppb        4.347   0.84%
   QC value within limits for Co 228.616  Recovery = 103.17%
Cr 267.716†             55808.3      502.22 ug/L        0.664      502.22 ppb        0.664   0.13%
   QC value within limits for Cr 267.716  Recovery = 100.44%
Cu 324.752†            194870.1      520.66 ug/L        0.629      520.66 ppb        0.629   0.12%
   QC value within limits for Cu 324.752  Recovery = 104.13%
Fe 238.204 Radial†        417.6      5064.8 ug/L        94.14      5064.8 ppb        94.14   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.30%
K 766.490 Radial†       13749.0      2500.5 ug/L         7.68      2500.5 ppb         7.68   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.02%
Mg 279.077 IEC†           117.5      5266.4 ug/L        91.10      5266.4 ppb        91.10   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†            554773.8      525.75 ug/L        0.407      525.75 ppb        0.407   0.08%
   QC value within limits for Mn 257.610  Recovery = 105.15%
Mo 202.031†             10431.0      553.90 ug/L        4.052      553.90 ppb        4.052   0.73%
   QC value greater than the upper limit for Mo 202.031  Recovery = 110.78%
Na 589.592 Radial†       8728.4      2448.3 ug/L        22.68      2448.3 ppb        22.68   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 97.93%
Ni 231.604†             26132.9      511.71 ug/L        4.139      511.71 ppb        4.139   0.81%
   QC value within limits for Ni 231.604  Recovery = 102.34%
P 214.914†               5812.7      2521.9 ug/L        18.35      2521.9 ppb        18.35   0.73%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              5504.1      518.39 ug/L        2.831      518.39 ppb        2.831   0.55%
   QC value within limits for Pb 220.353  Recovery = 103.68%
S 181.975 Axial†         2375.5      2558.4 ug/L        15.13      2558.4 ppb        15.13   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†              1947.3      522.68 ug/L        3.231      522.68 ppb        3.231   0.62%
   QC value within limits for Sb 206.836  Recovery = 104.54%
Se 196.026†              5969.5      2664.5 ug/L        20.95      2664.5 ppb        20.95   0.79%
   QC value within limits for Se 196.026  Recovery = 106.58%
Si 251.611†            193620.3      4905.1 ug/L         2.68      4905.1 ppb         2.68   0.05%
   QC value within limits for Si 251.611  Recovery = 98.10%
Sn 189.927†              4161.1      550.94 ug/L        4.468      550.94 ppb        4.468   0.81%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.19%
Sr 421.552†            100372.3      526.55 ug/L        0.859      526.55 ppb        0.859   0.16%
   QC value within limits for Sr 421.552  Recovery = 105.31%
Ti 334.940†            367149.6      506.26 ug/L        0.490      506.26 ppb        0.490   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.25%
Tl 190.801†              2251.7      547.80 ug/L        5.406      547.80 ppb        5.406   0.99%
   QC value within limits for Tl 190.801  Recovery = 109.56%
U 409.014†              19450.3      501.27 ug/L        1.183      501.27 ppb        1.183   0.24%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†              90935.8      528.06 ug/L        0.368      528.06 ppb        0.368   0.07%
   QC value within limits for V 292.402  Recovery = 105.61%
Zn 213.857†             71271.1      519.16 ug/L        0.195      519.16 ppb        0.195   0.04%
   QC value within limits for Zn 213.857  Recovery = 103.83%
SiO2†                  194471.8       10543 ug/L         82.7       10543 ppb         82.7   0.78%
   QC value within limits for SiO2  Recovery = 98.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573 ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874 ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858 ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828 ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035 ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137 ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619 ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177 ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430 ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693 ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067 ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993 ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191 ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448 ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62 %		09:45:16
3	Sc Radial	4809.8	4809.8	98.0 %		09:43:49
3	Y 371.029	891134.4	891134.4	100.75 %		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29 %		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441 ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723 ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610 ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180 ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992 ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472 ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457 ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343 ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153 ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058 ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762 ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825 ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115 ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478 ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335 ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760 ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264 ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146 ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869 ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168 ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676 ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895 ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168 ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177 ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090 ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625 ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335 ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911 ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862 ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122 ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761 ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033 ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %		09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %		09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

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Ca 317.933Radial†        114.9      203.44 ug/L        5.843      203.44 ppb        5.843   2.87%
   QC value within limits for Ca 317.933Radial  Recovery = 101.72%
Cd 226.502†              583.9      5.0878 ug/L      0.03067      5.0878 ppb      0.03067   0.60%
   QC value within limits for Cd 226.502  Recovery = 101.76%
Co 228.616†              304.8      5.0359 ug/L      0.08115      5.0359 ppb      0.08115   1.61%
   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†              568.2      5.0983 ug/L      0.10423      5.0983 ppb      0.10423   2.04%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†             3983.8      10.643 ug/L       0.4808      10.643 ppb       0.4808   4.52%
   QC value within limits for Cu 324.752  Recovery = 106.43%
Fe 238.204 Radial†         6.6      79.730 ug/L      29.0033      79.730 ppb      29.0033  36.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 79.73%
K 766.490 Radial†        889.4      161.88 ug/L       26.810      161.88 ppb       26.810  16.56%
   QC value within limits for K 766.490 Radial  Recovery = 107.92%
Mg 279.077 IEC†            7.3      326.69 ug/L       36.025      326.69 ppb       36.025  11.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.90%
Mn 257.610†            11132.0      10.543 ug/L       0.1659      10.543 ppb       0.1659   1.57%
   QC value within limits for Mn 257.610  Recovery = 105.43%
Mo 202.031†              195.8      10.395 ug/L       0.7057      10.395 ppb       0.7057   6.79%
   QC value within limits for Mo 202.031  Recovery = 103.95%
Na 589.592 Radial†      1041.2      292.04 ug/L       11.429      292.04 ppb       11.429   3.91%
   QC value within limits for Na 589.592 Radial  Recovery = 97.35%
Ni 231.604†              277.1      5.4266 ug/L      0.08048      5.4266 ppb      0.08048   1.48%
   QC value within limits for Ni 231.604  Recovery = 108.53%
P 214.914†               338.0      149.63 ug/L        3.816      149.63 ppb        3.816   2.55%
   QC value within limits for P 214.914  Recovery = 99.75%
Pb 220.353†               96.3      9.0961 ug/L      1.14169      9.0961 ppb      1.14169  12.55%
   QC value within limits for Pb 220.353  Recovery = 90.96%
S 181.975 Axial†          89.5      96.357 ug/L       7.4396      96.357 ppb       7.4396   7.72%
   QC value within limits for S 181.975 Axial  Recovery = 96.36%
Sb 206.836†               43.7      11.807 ug/L       0.5867      11.807 ppb       0.5867   4.97%
   QC value within limits for Sb 206.836  Recovery = 118.07%
Se 196.026†               65.7      29.405 ug/L       2.6665      29.405 ppb       2.6665   9.07%
   QC value within limits for Se 196.026  Recovery = 98.02%
Si 251.611†             4059.5      102.83 ug/L        1.217      102.83 ppb        1.217   1.18%
   QC value within limits for Si 251.611  Recovery = 102.83%
Sn 189.927†               80.0      10.600 ug/L       0.2084      10.600 ppb       0.2084   1.97%
   QC value within limits for Sn 189.927  Recovery = 106.00%
Sr 421.552†              936.7      4.9127 ug/L      0.04891      4.9127 ppb      0.04891   1.00%
   QC value within limits for Sr 421.552  Recovery = 98.25%
Ti 334.940†             3574.6      4.9172 ug/L      0.11528      4.9172 ppb      0.11528   2.34%
   QC value within limits for Ti 334.940  Recovery = 98.34%
Tl 190.801†               82.0      19.906 ug/L       0.6555      19.906 ppb       0.6555   3.29%
   QC value within limits for Tl 190.801  Recovery = 99.53%
U 409.014†              1925.7      49.768 ug/L       2.3685      49.768 ppb       2.3685   4.76%
   QC value within limits for U 409.014  Recovery = 99.54%
V 292.402†               835.7      5.0170 ug/L      0.03359      5.0170 ppb      0.03359   0.67%
   QC value within limits for V 292.402  Recovery = 100.34%
Zn 213.857†             1408.8      10.286 ug/L       0.1748      10.286 ppb       0.1748   1.70%
   QC value within limits for Zn 213.857  Recovery = 102.86%
SiO2†                   4025.3      218.19 ug/L        1.897      218.19 ppb        1.897   0.87%
   QC value within limits for SiO2  Recovery = 102.44%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125	ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358	ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332	ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716	ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926	ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720	ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740	ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396	ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397	ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291	ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433	ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413	ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610	ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770	ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657	%		09:58:28
3	Sc Radial	4452.3	4452.3	90.7	%		09:57:29
3	Y 371.029	763138.6	763138.6	86.282	%		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26	%		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167	ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860	ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512	ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439	ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675	ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922	ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820	ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732	ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789	ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279	ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638	ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310	ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175	ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750	ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540	ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843	ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311	ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227	ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915	ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746	ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932	ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176	ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896	ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226	ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013	ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829	ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545	ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683	ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715	ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573	ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528	ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768	ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

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Ca 317.933Radial†     272506.6      482480 ug/L        5269.3      482480 ppb         5269.3   1.09%
   QC value within limits for Ca 317.933Radial  Recovery = 96.50%
Cd 226.502†            56301.0      472.81 ug/L         3.758      472.81 ppb          3.758   0.79%
   QC value within limits for Cd 226.502  Recovery = 94.56%
Co 228.616†            28228.3      462.55 ug/L         3.948      462.55 ppb          3.948   0.85%
   QC value within limits for Co 228.616  Recovery = 92.51%
Cr 267.716†            53154.8      481.60 ug/L         2.521      481.60 ppb          2.521   0.52%
   QC value within limits for Cr 267.716  Recovery = 96.32%
Cu 324.752†           211552.8      574.38 ug/L         6.835      574.38 ppb          6.835   1.19%
   QC value within limits for Cu 324.752  Recovery = 114.88%
Fe 238.204 Radial†     15285.8      184820 ug/L        1613.6      184820 ppb         1613.6   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.41%
K 766.490 Radial†      30276.9      5529.3 ug/L         61.46      5529.3 ppb          61.46   1.11%
   QC value within limits for K 766.490 Radial  Recovery = 110.59%
Mg 279.077 IEC†        11072.2      495270 ug/L        3223.1      495270 ppb         3223.1   0.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.05%
Mn 257.610†           519055.3      500.72 ug/L         5.664      500.72 ppb          5.664   1.13%
   QC value within limits for Mn 257.610  Recovery = 100.14%
Mo 202.031†            9037.2       492.69 ug/L         3.967      492.69 ppb          3.967   0.81%
   QC value within limits for Mo 202.031  Recovery = 98.54%
Na 589.592 Radial†     18579.3      5211.5 ug/L         48.18      5211.5 ppb          48.18   0.92%
   QC value within limits for Na 589.592 Radial  Recovery = 104.23%
Ni 231.604†            23602.9      462.17 ug/L         3.523      462.17 ppb          3.523   0.76%
   QC value within limits for Ni 231.604  Recovery = 92.43%
P 214.914†              5752.3      2520.4 ug/L         39.08      2520.4 ppb          39.08   1.55%
   QC value within limits for P 214.914  Recovery = 100.81%
Pb 220.353†             3920.0      473.36 ug/L         5.165      473.36 ppb          5.165   1.09%
   QC value within limits for Pb 220.353  Recovery = 94.67%
S 181.975 Axial†        2522.0      2612.1 ug/L         33.01      2612.1 ppb          33.01   1.26%
   QC value within limits for S 181.975 Axial  Recovery = 104.49%
Sb 206.836†             2110.6      551.22 ug/L         2.592      551.22 ppb          2.592   0.47%
   QC value within limits for Sb 206.836  Recovery = 110.24%
Se 196.026†             4382.9      2608.9 ug/L         24.27      2608.9 ppb          24.27   0.93%
   QC value within limits for Se 196.026  Recovery = 104.36%
Si 251.611†           211822.2      5368.0 ug/L         59.89      5368.0 ppb          59.89   1.12%
   QC value within limits for Si 251.611  Recovery = 107.36%
Sn 189.927†             3306.5      490.18 ug/L         5.219      490.18 ppb          5.219   1.06%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            95213.6      495.06 ug/L         5.584      495.06 ppb          5.584   1.13%
   QC value within limits for Sr 421.552  Recovery = 99.01%
Ti 334.940†           354526.5      513.76 ug/L         5.094      513.76 ppb          5.094   0.99%
   QC value within limits for Ti 334.940  Recovery = 102.75%
Tl 190.801†             1932.2      484.94 ug/L         3.312      484.94 ppb          3.312   0.68%
   QC value within limits for Tl 190.801  Recovery = 96.99%
U 409.014†             20126.5      496.18 ug/L         5.005      496.18 ppb          5.005   1.01%
   QC value within limits for U 409.014  Recovery = 99.24%
V 292.402†             91259.0      512.63 ug/L         5.805      512.63 ppb          5.805   1.13%
   QC value within limits for V 292.402  Recovery = 102.53%
Zn 213.857†            71647.8      488.25 ug/L         4.200      488.25 ppb          4.200   0.86%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                 212042.7       11499 ug/L         145.5       11499 ppb          145.5   1.27%
   QC value within limits for SiO2  Recovery = 107.52%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756 ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667 ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135 ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848 ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093 ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797 ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198 ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818 ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763 ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182 ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618 ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359 ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817 ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239 ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303 %		10:09:54
3	Sc Radial	4249.7	4249.7	86.6 %		10:08:52
3	Y 371.029	725964.8	725964.8	82.079 %		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68 %		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798 ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190 ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643 ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484 ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540 ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451 ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510 ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493 ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166 ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306 ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824 ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920 ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523 ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000 ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543 ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915 ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130 ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607 ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07 ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769 ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606 ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498 ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648 ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634 ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188 ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173 ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661 ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929 ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598 ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512 ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635 ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674 ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731 ug/L	14731 ppb		10:16:40
2	Pb 220.353†	248482.1	260348.9	24447 ug/L	24447 ppb		10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788 ug/L	51788 ppb		10:16:40
2	Sb 206.836†	38447.2	40237.0	10413 ug/L	10413 ppb		10:16:40
2	Se 196.026†	22029.2	23096.0	10261 ug/L	10261 ppb		10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861 ug/L	47861 ppb		10:16:35
2	Sn 189.927†	75436.2	79020.2	10451 ug/L	10451 ppb		10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6 ug/L	9440.6 ppb		10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9 ug/L	9887.9 ppb		10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4 ug/L	9993.4 ppb		10:16:40
2	U 409.014†	-1890.4	793.9	-25.762 ug/L	-25.762 ppb		10:16:40
2	V 292.402†	1672052.7	1753005.2	10154 ug/L	10154 ppb		10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064 ug/L	14064 ppb		10:16:35
2	SiO2†	1854816.0	1942233.7	104910 ug/L	104910 ppb		10:17:14
3	Sc 361.383	988641.8	988641.8	95.109 %			10:16:54
3	Sc Radial	4729.3	4729.3	96.3 %			10:15:38
3	Y 371.029	819320.7	819320.7	92.634 %			10:16:54
3	Y RADIAL	5365.7	5365.7	95.02 %			10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602 ug/L	3.2602 ppb		10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512 ug/L	89.512 ppb		10:15:38
3	As 188.979†	30234.5	31825.9	10000 ug/L	10000 ppb		10:17:00
3	B 249.677†	253820.4	267339.4	5029.4 ug/L	5029.4 ppb		10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711 ug/L	13711 ppb		10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8 ug/L	2949.8 ppb		10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255 ug/L	41.255 ppb		10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7 ug/L	9764.7 ppb		10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6 ug/L	9048.6 ppb		10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049 ug/L	24049 ppb		10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842 ug/L	20842 ppb		10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040 ug/L	-4.8040 ppb		10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920 ug/L	288920 ppb		10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120 ug/L	67.120 ppb		10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3 ug/L	9608.3 ppb		10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1 ug/L	9732.1 ppb		10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49 ug/L	158.49 ppb		10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0 ug/L	9890.0 ppb		10:16:54
3	P 214.914†	38530.7	40247.0	14805 ug/L	14805 ppb		10:17:00
3	Pb 220.353†	247695.8	260509.3	24462 ug/L	24462 ppb		10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768 ug/L	51768 ppb		10:17:00
3	Sb 206.836†	38484.3	40428.7	10462 ug/L	10462 ppb		10:17:00
3	Se 196.026†	22001.3	23154.1	10287 ug/L	10287 ppb		10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957 ug/L	47957 ppb		10:16:54
3	Sn 189.927†	75099.1	78965.5	10444 ug/L	10444 ppb		10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4 ug/L	9338.4 ppb		10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1 ug/L	9968.1 ppb		10:16:48
3	Tl 190.801†	39204.4	41264.8	10043 ug/L	10043 ppb		10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525 ug/L	-16.525 ppb		10:17:00
3	V 292.402†	1668512.3	1755925.1	10171 ug/L	10171 ppb		10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095 ug/L	14095 ppb		10:16:54
3	SiO2†	1844505.7	1938761.5	104720 ug/L	104720 ppb		10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

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   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb         20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L         28.6       24016 ppb          28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L         68.9       20784 ppb          68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L      12.73507      7.1483 ppb      12.73507 178.15%
K 766.490 Radial†   1604818.8      292410 ug/L       3446.4      292410 ppb        3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†          -5.2     -33.655 ug/L      97.1262     -33.655 ppb       97.1262 288.59%
Mn 257.610†        10099618.1      9563.8 ug/L        44.75      9563.8 ppb         44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb          5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb         0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb         11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb          37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb          16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb          14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb          35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb          21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb          48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb           3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb        113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb         40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb          24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb        5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb           8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb          18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb        1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

Ca 317.933Radial†	2842.6	5033.0 ug/L	38.86	5033.0 ppb	38.86	0.77%
QC value within limits for Ca 317.933Radial Recovery = 100.66%						
Cd 226.502†	57296.6	499.49 ug/L	1.604	499.49 ppb	1.604	0.32%
QC value within limits for Cd 226.502 Recovery = 99.90%						
Co 228.616†	29764.2	490.44 ug/L	1.510	490.44 ppb	1.510	0.31%
QC value within limits for Co 228.616 Recovery = 98.09%						
Cr 267.716†	55373.5	498.28 ug/L	1.039	498.28 ppb	1.039	0.21%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	186833.2	499.20 ug/L	1.013	499.20 ppb	1.013	0.20%
QC value within limits for Cu 324.752 Recovery = 99.84%						
Fe 238.204 Radial†	413.6	5016.3 ug/L	43.97	5016.3 ppb	43.97	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 100.33%						
K 766.490 Radial†	27646.2	5030.3 ug/L	29.10	5030.3 ppb	29.10	0.58%
QC value within limits for K 766.490 Radial Recovery = 100.61%						
Mg 279.077 IEC†	115.0	5152.7 ug/L	45.64	5152.7 ppb	45.64	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 103.05%						
Mn 257.610†	527884.4	500.28 ug/L	0.793	500.28 ppb	0.793	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%						
Mo 202.031†	9375.3	497.87 ug/L	2.477	497.87 ppb	2.477	0.50%
QC value within limits for Mo 202.031 Recovery = 99.57%						
Na 589.592 Radial†	34004.4	9538.2 ug/L	12.76	9538.2 ppb	12.76	0.13%
QC value within limits for Na 589.592 Radial Recovery = 95.38%						
Ni 231.604†	25164.0	492.74 ug/L	1.916	492.74 ppb	1.916	0.39%
QC value within limits for Ni 231.604 Recovery = 98.55%						
P 214.914†	5537.8	2401.6 ug/L	5.33	2401.6 ppb	5.33	0.22%
QC value within limits for P 214.914 Recovery = 96.06%						
Pb 220.353†	5333.7	502.25 ug/L	2.030	502.25 ppb	2.030	0.40%
QC value within limits for Pb 220.353 Recovery = 100.45%						
S 181.975 Axial†	914.8	984.56 ug/L	14.228	984.56 ppb	14.228	1.45%
QC value within limits for S 181.975 Axial Recovery = 98.46%						
Sb 206.836†	1878.1	502.30 ug/L	0.614	502.30 ppb	0.614	0.12%
QC value within limits for Sb 206.836 Recovery = 100.46%						
Se 196.026†	1126.1	518.56 ug/L	3.244	518.56 ppb	3.244	0.63%
QC value within limits for Se 196.026 Recovery = 103.71%						
Si 251.611†	97340.7	2460.2 ug/L	4.93	2460.2 ppb	4.93	0.20%
QC value within limits for Si 251.611 Recovery = 98.41%						
Sn 189.927†	3741.6	495.45 ug/L	2.400	495.45 ppb	2.400	0.48%
QC value within limits for Sn 189.927 Recovery = 99.09%						
Sr 421.552†	93386.6	489.90 ug/L	1.389	489.90 ppb	1.389	0.28%
QC value within limits for Sr 421.552 Recovery = 97.98%						
Ti 334.940†	359415.4	495.61 ug/L	0.472	495.61 ppb	0.472	0.10%
QC value within limits for Ti 334.940 Recovery = 99.12%						
Tl 190.801†	2062.9	502.10 ug/L	2.272	502.10 ppb	2.272	0.45%
QC value within limits for Tl 190.801 Recovery = 100.42%						
U 409.014†	18512.1	477.03 ug/L	1.407	477.03 ppb	1.407	0.29%
QC value within limits for U 409.014 Recovery = 95.41%						
V 292.402†	86553.8	502.14 ug/L	0.660	502.14 ppb	0.660	0.13%
QC value within limits for V 292.402 Recovery = 100.43%						
Zn 213.857†	67981.0	495.14 ug/L	0.700	495.14 ppb	0.700	0.14%
QC value within limits for Zn 213.857 Recovery = 99.03%						
SiO2†	97459.5	5271.0 ug/L	21.25	5271.0 ppb	21.25	0.40%
QC value within limits for SiO2 Recovery = 98.57%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142	ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204	ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748	ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236	ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607	ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238	ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416	ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924	ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677	ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894	ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750	ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873	ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359	ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940	ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70	%		10:46:30
3	Sc Radial	4898.4	4898.4	99.8	%		10:45:03
3	Y 371.029	891482.0	891482.0	100.79	%		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70	%		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626	ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479	ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415	ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651	ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466	ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383	ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758	ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172	ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063	ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401	ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056	ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671	ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339	ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75	ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452	ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415	ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775	ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537	ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081	ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238	ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446	ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873	ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933	ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715	ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116	ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563	ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284	ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025	ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651	ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454	ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553	ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424	ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5      -1.5484 ug/L       2.77737      -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2      -4.5703 ug/L       5.15146      -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2       3.7743 ug/L       1.87844       3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3      -1.9597 ug/L       2.16197      -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2       1.5615 ug/L       0.21151       1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5       1.5214 ug/L       0.96781       1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5      -0.0343 ug/L       0.07167      -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1      -0.0500 ug/L       0.01994      -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446       0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -175.7      -4.5411 ug/L       3.27969      -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -22.7      -0.1300 ug/L       0.15236      -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217       0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3       2.3658 ug/L       1.17872       2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753	ug/L	-8.3753	ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374	ug/L	0.9374	ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728	ug/L	17.728	ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640	ug/L	1.8640	ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03	ug/L	183.03	ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144	ug/L	-36.144	ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244	ug/L	-0.8244	ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527	ug/L	0.3527	ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635	ug/L	-0.1635	ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719	ug/L	-3.3719	ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309	ug/L	4.2309	ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606	ug/L	-6.7606	ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455	ug/L	-0.4455	ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451	ug/L	-81.451	ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220	%			10:53:23
3	Sc Radial	4812.6	4812.6	98.0	%			10:52:05
3	Y 371.029	862360.3	862360.3	97.500	%			10:53:23
3	Y RADIAL	5507.3	5507.3	97.52	%			10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149	ug/L	-2.3149	ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070	ug/L	-4.1070	ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627	ug/L	-11.627	ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198	ug/L	1.4198	ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813	ug/L	-0.0813	ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080	ug/L	0.0080	ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437	ug/L	21.437	ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926	ug/L	-0.8926	ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116	ug/L	0.0116	ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157	ug/L	0.1157	ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678	ug/L	-5.1678	ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140	ug/L	382140	ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864	ug/L	62.864	ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088	ug/L	-8.8088	ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260	ug/L	-6.2260	ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035	ug/L	0.0035	ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218	ug/L	10.218	ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003	ug/L	2.5003	ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049	ug/L	-17.049	ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633	ug/L	0.8633	ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577	ug/L	16.577	ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703	ug/L	1.2703	ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98	ug/L	187.98	ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230	ug/L	-36.230	ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851	ug/L	0.0851	ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075	ug/L	0.5075	ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587	ug/L	-0.1587	ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379	ug/L	-1.5379	ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506	ug/L	6.4506	ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115	ug/L	-7.3115	ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488	ug/L	-0.5488	ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404	ug/L	-87.404	ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774	13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122	678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903	2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898	87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095	54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575	16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955	33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103	38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019	16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134	87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174	2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643	0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699	166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835	18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037	6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860	37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671	54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332	7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455	68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899	5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8	ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07	ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86	ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37	ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66	ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8	ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84	ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95	ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61	ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62	ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09	ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56	ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99	ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0	ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71	%		11:00:17
3	Sc Radial	4925.8	4925.8	100	%		10:58:53
3	Y 371.029	877905.3	877905.3	99.258	%		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84	%		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35	ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8	ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79	ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35	ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61	ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82	ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2	ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62	ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69	ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61	ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06	ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7	ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2	ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0	ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71	ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33	ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1	ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55	ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1	ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20	ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00	ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56	ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51	ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1	ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74	ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39	ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24	ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29	ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34	ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66	ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31	ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1	ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

Ca 317.933Radial†	2795.2	4949.0 ug/L	61.06	4949.0 ppb	61.06	1.23%
QC value within limits for Ca 317.933Radial Recovery = 98.98%						
Cd 226.502†	57300.2	499.53 ug/L	1.852	499.53 ppb	1.852	0.37%
QC value within limits for Cd 226.502 Recovery = 99.91%						
Co 228.616†	29608.9	487.87 ug/L	1.689	487.87 ppb	1.689	0.35%
QC value within limits for Co 228.616 Recovery = 97.57%						
Cr 267.716†	55297.6	497.60 ug/L	1.743	497.60 ppb	1.743	0.35%
QC value within limits for Cr 267.716 Recovery = 99.52%						
Cu 324.752†	186009.6	496.99 ug/L	1.464	496.99 ppb	1.464	0.29%
QC value within limits for Cu 324.752 Recovery = 99.40%						
Fe 238.204 Radial†	405.0	4912.1 ug/L	80.46	4912.1 ppb	80.46	1.64%
QC value within limits for Fe 238.204 Radial Recovery = 98.24%						
K 766.490 Radial†	27016.4	4915.6 ug/L	26.56	4915.6 ppb	26.56	0.54%
QC value within limits for K 766.490 Radial Recovery = 98.31%						
Mg 279.077 IEC†	111.4	4989.5 ug/L	96.39	4989.5 ppb	96.39	1.93%
QC value within limits for Mg 279.077 IEC Recovery = 99.79%						
Mn 257.610†	527731.1	500.13 ug/L	1.476	500.13 ppb	1.476	0.30%
QC value within limits for Mn 257.610 Recovery = 100.03%						
Mo 202.031†	9298.8	493.81 ug/L	2.195	493.81 ppb	2.195	0.44%
QC value within limits for Mo 202.031 Recovery = 98.76%						
Na 589.592 Radial†	33372.8	9361.1 ug/L	50.41	9361.1 ppb	50.41	0.54%
QC value within limits for Na 589.592 Radial Recovery = 93.61%						
Ni 231.604†	25005.0	489.63 ug/L	1.726	489.63 ppb	1.726	0.35%
QC value within limits for Ni 231.604 Recovery = 97.93%						
P 214.914†	5502.4	2386.1 ug/L	11.15	2386.1 ppb	11.15	0.47%
QC value within limits for P 214.914 Recovery = 95.45%						
Pb 220.353†	5299.9	499.06 ug/L	1.860	499.06 ppb	1.860	0.37%
QC value within limits for Pb 220.353 Recovery = 99.81%						
S 181.975 Axial†	903.8	972.73 ug/L	4.706	972.73 ppb	4.706	0.48%
QC value within limits for S 181.975 Axial Recovery = 97.27%						
Sb 206.836†	1847.1	494.01 ug/L	3.403	494.01 ppb	3.403	0.69%
QC value within limits for Sb 206.836 Recovery = 98.80%						
Se 196.026†	1106.9	509.66 ug/L	6.212	509.66 ppb	6.212	1.22%
QC value within limits for Se 196.026 Recovery = 101.93%						
Si 251.611†	97204.8	2456.9 ug/L	7.70	2456.9 ppb	7.70	0.31%
QC value within limits for Si 251.611 Recovery = 98.28%						
Sn 189.927†	3719.5	492.52 ug/L	2.434	492.52 ppb	2.434	0.49%
QC value within limits for Sn 189.927 Recovery = 98.50%						
Sr 421.552†	92292.4	484.16 ug/L	1.112	484.16 ppb	1.112	0.23%
QC value within limits for Sr 421.552 Recovery = 96.83%						
Ti 334.940†	358750.6	494.69 ug/L	1.509	494.69 ppb	1.509	0.31%
QC value within limits for Ti 334.940 Recovery = 98.94%						
Tl 190.801†	2050.0	498.98 ug/L	1.719	498.98 ppb	1.719	0.34%
QC value within limits for Tl 190.801 Recovery = 99.80%						
U 409.014†	18423.6	474.75 ug/L	1.188	474.75 ppb	1.188	0.25%
QC value within limits for U 409.014 Recovery = 94.95%						
V 292.402†	86361.9	501.00 ug/L	1.491	501.00 ppb	1.491	0.30%
QC value within limits for V 292.402 Recovery = 100.20%						
Zn 213.857†	67835.2	494.11 ug/L	1.146	494.11 ppb	1.146	0.23%
QC value within limits for Zn 213.857 Recovery = 98.82%						
SiO2†	96661.6	5227.9 ug/L	22.02	5227.9 ppb	22.02	0.42%
QC value within limits for SiO2 Recovery = 97.76%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951	ug/L	0.9951 ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458	ug/L	1.7458 ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298	ug/L	-2.7298 ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989	ug/L	2.8989 ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951	ug/L	-3.2951 ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309	ug/L	0.5309 ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661	ug/L	1.2661 ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167	ug/L	-0.1167 ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867	ug/L	-0.0867 ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171	ug/L	-1.7171 ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062	ug/L	0.7062 ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749	ug/L	-0.3749 ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912	ug/L	0.1912 ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073	ug/L	2.4073 ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43	%		11:07:13
3	Sc Radial	4909.9	4909.9	100	%		11:05:46
3	Y 371.029	889449.2	889449.2	100.56	%		11:07:13
3	Y RADIAL	5657.3	5657.3	100.2	%		11:05:46
3	Ag 328.068†	489.6	13.4	0.0605	ug/L	0.0605 ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350	ug/L	22.350 ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242	ug/L	0.7242 ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618	ug/L	7.2618 ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758	ug/L	0.0758 ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242	ug/L	0.0242 ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990	ug/L	3.8990 ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798	ug/L	0.1798 ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058	ug/L	0.0058 ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718	ug/L	0.1718 ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108	ug/L	-0.2108 ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976	ug/L	16.976 ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709	ug/L	25.709 ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52	ug/L	-176.52 ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313	ug/L	0.0313 ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939	ug/L	0.1939 ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755	ug/L	1.0755 ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707	ug/L	-0.0707 ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232	ug/L	0.5232 ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380	ug/L	0.5380 ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618	ug/L	-7.9618 ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903	ug/L	2.2903 ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492	ug/L	0.3492 ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962	ug/L	0.5962 ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103	ug/L	2.2103 ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222	ug/L	-0.0222 ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947	ug/L	-0.0947 ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125	ug/L	-2.2125 ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983	ug/L	-2.0983 ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210	ug/L	0.0210 ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153	ug/L	0.3153 ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484	ug/L	1.7484 ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5 ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62 ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4 ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79 ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50 ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7 ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14 ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22 ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73 ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06 ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23 ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73 ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1 ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2 %		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86 %		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9 ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9 ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0 ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6 ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3 ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8 ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49 ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849 %		12:17:52
3	Y 371.029	872084.7	872084.7	98.600 %		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61 ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35 ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70 ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37 ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30 ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46 ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38 ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43 ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62 ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50 ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54 ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00 ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1 ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64 ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0 ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03 ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64 ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1 ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18 ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49 ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93 ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25 ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98 ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35 ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4 ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L         3.149      507.31 ppb          3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L         3.818      500.79 ppb          3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L         3.018      504.61 ppb          3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L         2.623      506.08 ppb          2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L        45.45      5082.5 ppb         45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L        68.50      4957.3 ppb         68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L        11.74      5217.9 ppb         11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L         3.320      507.64 ppb          3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L         3.216      507.25 ppb          3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L       135.46      9625.8 ppb        135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L         3.555      502.09 ppb          3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L        11.55      2454.7 ppb         11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L         3.072      511.03 ppb          3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L         2.21      1000.2 ppb          2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L         3.960      508.48 ppb          3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L         3.225      525.79 ppb          3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L        14.63      2500.7 ppb         14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L         3.651      502.21 ppb          3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L         6.861      494.05 ppb          6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L         2.661      502.89 ppb          2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L         2.825      511.74 ppb          2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L         2.617      485.15 ppb          2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L         2.757      508.62 ppb          2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L         3.269      502.43 ppb          3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L        57.67      5346.1 ppb         57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -23.990 ug/L       73.3513     -23.990 ppb       73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time: 11/30/2009 06:07:59**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/4/2009 12:48:33**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L        53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L        85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L       105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L        48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L       151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L        43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L        52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L        47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750 ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466 ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347 ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960 ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216 ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014 ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740 ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164 ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635 ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594 ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408 ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073 ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106 ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8 %		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0 %		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013 ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244 ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453 ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928 ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436 ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845 ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165 ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628 %		12:59:35
3	Y 371.029	880903.4	880903.4	99.597 %		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441 ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565 ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068 ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624 ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288 ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633 ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888 ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060 ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141 ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162 ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630 ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537 ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106 ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791 ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859 ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539 ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160 ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207 ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458 ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330 ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739 ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096 ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533 ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302 ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247 ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8     34.227 ug/L       24.6248     34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758	ug/L	7.6758	ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119	ug/L	2.2119	ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324	ug/L	-7.1324	ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069	ug/L	3.1069	ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363	ug/L	-1.9363	ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149	ug/L	1.8149	ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313	ug/L	0.4313	ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017	ug/L	0.1017	ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009	ug/L	-1.3009	ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491	ug/L	-1.7491	ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527	ug/L	0.3527	ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144	ug/L	0.3144	ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249	ug/L	3.2249	ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0	%			14:06:39
3	Y RADIAL	5653.4	5653.4	100.1	%			14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078	ug/L	9.0078	ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238	ug/L	25.238	ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557	ug/L	-11.557	ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614	ug/L	26.614	ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277	ug/L	-67.277	ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433	ug/L	13.433	ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743	ug/L	-0.0743	ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53	%			14:08:07
3	Y 371.029	887847.1	887847.1	100.38	%			14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092	ug/L	-0.0092	ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368	ug/L	0.7368	ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077	ug/L	3.0077	ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964	ug/L	0.0964	ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077	ug/L	-0.0077	ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791	ug/L	0.1791	ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226	ug/L	-0.0226	ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834	ug/L	0.0834	ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251	ug/L	0.3251	ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064	ug/L	0.0064	ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662	ug/L	-0.0662	ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191	ug/L	-0.1191	ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622	ug/L	-4.6622	ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536	ug/L	-1.2536	ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407	ug/L	-6.9407	ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302	ug/L	2.5302	ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220	ug/L	-5.9220	ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899	ug/L	2.1899	ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576	ug/L	-0.1576	ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379	ug/L	0.0379	ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674	ug/L	-2.8674	ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636	ug/L	2.5636	ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930	ug/L	-0.1930	ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247	ug/L	0.2247	ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671	ug/L	4.2671	ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         141.0      25.699 ug/L        9.7077      25.699 ppb        9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.9     -40.386 ug/L       44.6154     -40.386 ppb       44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         56.4      15.809 ug/L       12.6890      15.809 ppb       12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb         59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb         14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb        179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb         10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb         13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L         5.14      2504.1 ppb          5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb         40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
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Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237	ug/L	8.7237	ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503	ug/L	-0.7503	ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231	ug/L	-7.3231	ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716	ug/L	4.0716	ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231	ug/L	-1.9231	ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718	ug/L	1.4718	ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274	ug/L	1.5274	ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146	ug/L	-0.1146	ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667	ug/L	-0.1667	ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992	ug/L	-4.3992	ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848	ug/L	-0.0848	ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817	ug/L	0.1817	ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213	ug/L	3.4213	ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101	%			15:02:30
3	Y RADIAL	5692.8	5692.8	100.8	%			15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650	ug/L	-1.9650	ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501	ug/L	16.501	ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962	ug/L	-12.962	ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364	ug/L	13.364	ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663	ug/L	48.663	ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078	ug/L	36.078	ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131	ug/L	-0.1131	ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06	%			15:03:57
3	Y 371.029	884765.2	884765.2	100.03	%			15:03:57
3	Ag 328.068†	546.5	72.1	0.2822	ug/L	0.2822	ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412	ug/L	1.2412	ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362	ug/L	0.7362	ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116	ug/L	-0.0116	ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116	ug/L	0.0116	ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212	ug/L	0.0212	ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510	ug/L	0.2510	ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157	ug/L	0.3157	ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543	ug/L	0.3543	ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154	ug/L	0.0154	ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656	ug/L	-0.0656	ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330	ug/L	-0.1330	ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179	ug/L	1.9179	ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499	ug/L	-1.5499	ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618	ug/L	-1.6618	ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470	ug/L	1.9470	ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666	ug/L	-1.0666	ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213	ug/L	1.7213	ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060	ug/L	-0.0060	ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030	ug/L	0.0030	ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751	ug/L	1.5751	ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249	ug/L	-2.0249	ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440	ug/L	-0.2440	ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181	ug/L	0.3181	ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869	ug/L	1.9869	ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.3     -15.423 ug/L        6.5866     -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        112.2      20.428 ug/L       19.9912      20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.7      29.809 ug/L       20.4595      29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       117.2      32.884 ug/L        2.9232      32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb	15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb	15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb	15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb	15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb	15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb	15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb	15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb	15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb	15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb	15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb	15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb	15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb	15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %		15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %		15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb	15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb	15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb	15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb	15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb	15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb	15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb	15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %		15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %		15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb	15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb	15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb	15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb	15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb	15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb	15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb	15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb	15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb	15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb	15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb	15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb	15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb	15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb	15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb	15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb	15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb	15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb	15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb	15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb	15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb	15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb	15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb	15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb	15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb	15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L        2.287      511.43 ppb          2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L        1.146      503.91 ppb          1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L        1.662      508.31 ppb          1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L        2.326      511.16 ppb          2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L       25.16      5027.1 ppb          25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L       44.05      4939.1 ppb          44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L       81.91      5126.5 ppb          81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L        2.081      512.46 ppb          2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L        1.419      507.72 ppb          1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L       66.05      9820.7 ppb          66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L        1.302      503.63 ppb          1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L       10.07      2478.2 ppb          10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L        0.126      512.95 ppb          0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L         2.77      1003.1 ppb           2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L        3.500      515.53 ppb          3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L        2.058      527.42 ppb          2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L         9.97      2519.4 ppb           9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L        1.147      506.74 ppb          1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L        3.343      499.14 ppb          3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L        2.319      508.04 ppb          2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L        1.578      508.52 ppb          1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L        2.387      493.42 ppb          2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L        2.377      512.95 ppb          2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L        1.824      506.84 ppb          1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L       37.27      5379.2 ppb          37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120	ug/L	2.5120 ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279	ug/L	-1.9279 ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495	ug/L	-0.1495 ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770	ug/L	1.6770 ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989	ug/L	-2.4989 ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415	ug/L	1.7415 ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240	ug/L	2.0240 ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840	ug/L	0.0840 ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260	ug/L	-1.7260 ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950	ug/L	0.4950 ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658	ug/L	0.1658 ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793	ug/L	0.3793 ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045	ug/L	1.4045 ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9	%		15:58:24
3	Y RADIAL	5536.8	5536.8	98.05	%		15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014	ug/L	-2.7014 ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137	ug/L	10.137 ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928	ug/L	-19.928 ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858	ug/L	37.858 ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734	ug/L	69.734 ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211	ug/L	45.211 ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220	ug/L	-0.2220 ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773	%		15:59:52
3	Y 371.029	882258.7	882258.7	99.750	%		15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838	ug/L	-0.2838 ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697	ug/L	0.9697 ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790	ug/L	1.1790 ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208	ug/L	0.0208 ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339	ug/L	0.0339 ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026	ug/L	0.1026 ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501	ug/L	-0.2501 ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010	ug/L	0.1010 ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474	ug/L	0.1474 ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012	ug/L	0.0012 ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361	ug/L	0.1361 ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230	ug/L	0.2230 ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402	ug/L	3.5402 ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038	ug/L	1.3038 ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872	ug/L	-2.2872 ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858	ug/L	5.1858 ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930	ug/L	-1.6930 ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103	ug/L	1.3103 ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187	ug/L	1.9187 ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536	ug/L	0.0536 ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928	ug/L	-0.6928 ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296	ug/L	1.2296 ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732	ug/L	-0.2732 ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459	ug/L	0.3459 ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862	ug/L	3.4862 ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7    -20.252 ug/L       10.1579    -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0001 ug/L       0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1199 ug/L       0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7      0.1902 ug/L       0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      4.1321 ug/L       1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4     -0.1226 ug/L       1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0     -0.0008 ug/L       2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      2.4728 ug/L       2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1     -2.3223 ug/L       0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0      1.3081 ug/L       0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.3975 ug/L       0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5     -0.0971 ug/L       0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5      0.0132 ug/L       0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -0.5672 ug/L       1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9      0.7761 ug/L       0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4     -0.0073 ug/L       0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0      0.3381 ug/L       0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6      2.8325 ug/L       1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0	ug/L	2467.0 ppb	17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00	ug/L	510.00 ppb	17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08	ug/L	988.08 ppb	17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65	ug/L	511.65 ppb	17:02:35
2	Se 196.026†	1101.6	1134.9	522.91	ug/L	522.91 ppb	17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9	ug/L	2523.9 ppb	17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00	ug/L	505.00 ppb	17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34	ug/L	508.34 ppb	17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32	ug/L	505.32 ppb	17:02:35
2	U 409.014†	16132.6	19081.4	491.71	ug/L	491.71 ppb	17:02:15
2	V 292.402†	85992.6	88533.4	513.61	ug/L	513.61 ppb	17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27	ug/L	506.27 ppb	17:02:15
2	SiO2†	99096.4	99571.7	5385.4	ug/L	5385.4 ppb	17:03:13
3	Sc Radial	4783.8	4783.8	97.4	%		17:01:19
3	Y RADIAL	5474.3	5474.3	96.94	%		17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1	ug/L	5154.1 ppb	17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7	ug/L	5093.7 ppb	17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5	ug/L	5010.5 ppb	17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8	ug/L	5005.8 ppb	17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6	ug/L	5244.6 ppb	17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6	ug/L	9733.6 ppb	17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13	ug/L	501.13 ppb	17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474	%		17:02:43
3	Y 371.029	860032.6	860032.6	97.237	%		17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06	ug/L	509.06 ppb	17:02:43
3	As 188.979†	1574.3	1635.3	513.94	ug/L	513.94 ppb	17:03:03
3	B 249.677†	25888.6	26755.8	503.69	ug/L	503.69 ppb	17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18	ug/L	511.18 ppb	17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43	ug/L	511.43 ppb	17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37	ug/L	511.37 ppb	17:02:43
3	Co 228.616†	30331.0	30887.2	508.95	ug/L	508.95 ppb	17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88	ug/L	509.88 ppb	17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19	ug/L	511.19 ppb	17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05	ug/L	512.05 ppb	17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93	ug/L	513.93 ppb	17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25	ug/L	508.25 ppb	17:03:03
3	P 214.914†	5929.5	5756.2	2497.7	ug/L	2497.7 ppb	17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78	ug/L	517.78 ppb	17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4	ug/L	1006.4 ppb	17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71	ug/L	516.71 ppb	17:03:03
3	Se 196.026†	1126.1	1164.9	535.77	ug/L	535.77 ppb	17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5	ug/L	2520.5 ppb	17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39	ug/L	512.39 ppb	17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94	ug/L	507.94 ppb	17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85	ug/L	515.85 ppb	17:03:03
3	U 409.014†	16138.4	19162.4	493.81	ug/L	493.81 ppb	17:02:43
3	V 292.402†	85723.1	88659.8	514.45	ug/L	514.45 ppb	17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31	ug/L	506.31 ppb	17:02:43
3	SiO2†	99466.9	100408.9	5430.6	ug/L	5430.6 ppb	17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L        1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L        3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L        0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L        0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L       62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L       18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L       10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L        0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L        3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L       43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L        2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L       15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L        4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L       13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L        3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L        6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L         3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L        3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L        1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L        0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L        5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L        2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L        0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L        1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L       22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
```

Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628 ug/L	-2.1628 ppb		17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982 ug/L	1.3982 ppb		17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236 ug/L	2.6236 ppb		17:09:34
2	Sb 206.836†	49.9	15.7	4.1740 ug/L	4.1740 ppb		17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105 ug/L	-1.6105 ppb		17:09:34
2	Si 251.611†	628.2	76.8	1.9315 ug/L	1.9315 ppb		17:09:34
2	Sn 189.927†	5.3	9.7	1.2851 ug/L	1.2851 ppb		17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699 ug/L	0.0699 ppb		17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234 ug/L	-0.2234 ppb		17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719 ug/L	-3.0719 ppb		17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052 ug/L	-0.4052 ppb		17:09:14
2	Zn 213.857†	959.6	83.5	0.6171 ug/L	0.6171 ppb		17:09:34
2	SiO2†	603.8	10.7	0.5423 ug/L	0.5423 ppb		17:10:14
3	Sc Radial	4823.8	4823.8	98.3 %			17:08:12
3	Y RADIAL	5537.0	5537.0	98.05 %			17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834 ug/L	11.834 ppb		17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300 ug/L	10.300 ppb		17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132 ug/L	-18.132 ppb		17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822 ug/L	13.822 ppb		17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369 ug/L	60.369 ppb		17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232 ug/L	30.232 ppb		17:08:12
3	Sr 421.552†	12.6	20.3	0.1063 ug/L	0.1063 ppb		17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05 %			17:09:39
3	Y 371.029	885792.9	885792.9	100.15 %			17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296 ug/L	-0.3296 ppb		17:09:44
3	As 188.979†	-34.7	1.9	0.5789 ug/L	0.5789 ppb		17:10:04
3	B 249.677†	-424.2	42.1	0.7986 ug/L	0.7986 ppb		17:10:04
3	Ba 233.527†	12.8	12.8	0.0818 ug/L	0.0818 ppb		17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557 ug/L	0.0557 ppb		17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147 ug/L	0.1147 ppb		17:10:04
3	Co 228.616†	-81.4	5.0	0.0830 ug/L	0.0830 ppb		17:10:04
3	Cr 267.716†	106.9	19.1	0.1704 ug/L	0.1704 ppb		17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477 ug/L	0.1477 ppb		17:09:44
3	Mn 257.610†	610.1	33.1	0.0284 ug/L	0.0284 ppb		17:10:04
3	Mo 202.031†	31.4	2.1	0.1121 ug/L	0.1121 ppb		17:10:04
3	Ni 231.604†	133.0	1.0	0.0189 ug/L	0.0189 ppb		17:10:04
3	P 214.914†	272.4	7.2	3.2450 ug/L	3.2450 ppb		17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314 ug/L	0.1314 ppb		17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316 ug/L	-0.9316 ppb		17:10:04
3	Sb 206.836†	35.8	1.1	0.3268 ug/L	0.3268 ppb		17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605 ug/L	-2.1605 ppb		17:10:04
3	Si 251.611†	612.6	54.6	1.3742 ug/L	1.3742 ppb		17:10:04
3	Sn 189.927†	12.1	16.5	2.1777 ug/L	2.1777 ppb		17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180 ug/L	-0.0180 ppb		17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673 ug/L	-1.9673 ppb		17:10:04
3	U 409.014†	-2701.8	73.4	1.9008 ug/L	1.9008 ppb		17:09:39
3	V 292.402†	-1606.8	2.4	0.0234 ug/L	0.0234 ppb		17:09:44
3	Zn 213.857†	941.9	55.9	0.4102 ug/L	0.4102 ppb		17:10:04
3	SiO2†	646.1	46.8	2.5143 ug/L	2.5143 ppb		17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         115.7      21.072 ug/L        7.6270      21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.0     -42.772 ug/L       91.5125     -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        125.9      35.327 ug/L        6.6209      35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 18:01:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4830.0	4830.0	98.4	%			18:03:34
1	Y RADIAL	5529.5	5529.5	97.92	%			18:03:34
1	Al 396.153Radial†	7608.5	7777.9	5114.3	ug/L	5114.3	ppb	18:03:34
1	Ca 317.933Radial†	2838.8	2867.8	5077.6	ug/L	5077.6	ppb	18:03:54
1	Fe 238.204 Radial†	423.3	419.3	5084.9	ug/L	5084.9	ppb	18:03:54
1	K 766.490 Radial†	29286.1	27199.9	4948.8	ug/L	4948.8	ppb	18:03:34
1	Mg 279.077 IEC†	113.0	112.4	5035.0	ug/L	5035.0	ppb	18:03:54
1	Na 589.592 Radial†	33434.5	35266.2	9892.2	ug/L	9892.2	ppb	18:03:34
1	Sr 421.552†	94452.4	96018.5	503.71	ug/L	503.71	ppb	18:03:34
1	Sc 361.383	1035614.3	1035614.3	99.628	%			18:04:53
1	Y 371.029	868981.8	868981.8	98.249	%			18:04:53
1	Ag 328.068†	126389.0	126387.2	504.08	ug/L	504.08	ppb	18:04:53
1	As 188.979†	1566.5	1609.0	505.73	ug/L	505.73	ppb	18:05:13
1	B 249.677†	25789.7	26352.1	496.08	ug/L	496.08	ppb	18:04:53
1	Ba 233.527†	78461.3	78754.5	507.26	ug/L	507.26	ppb	18:04:53
1	Be 313.107†	1611683.8	1622579.0	506.90	ug/L	506.90	ppb	18:04:53
1	Cd 226.502†	57528.7	57979.3	505.44	ug/L	505.44	ppb	18:04:53
1	Co 228.616†	30048.6	30247.1	498.39	ug/L	498.39	ppb	18:05:13
1	Cr 267.716†	55897.5	56018.6	504.09	ug/L	504.09	ppb	18:04:53
1	Cu 324.752†	197518.4	189318.8	505.84	ug/L	505.84	ppb	18:04:53
1	Mn 257.610†	534062.2	535480.8	507.48	ug/L	507.48	ppb	18:04:53
1	Mo 202.031†	9485.8	9492.0	504.07	ug/L	504.07	ppb	18:05:13
1	Ni 231.604†	25499.9	25463.2	498.60	ug/L	498.60	ppb	18:05:13
1	P 214.914†	5884.7	5641.6	2447.0	ug/L	2447.0	ppb	18:05:13
1	Pb 220.353†	5298.3	5393.7	507.89	ug/L	507.89	ppb	18:05:13
1	S 181.975 Axial†	974.6	918.2	988.21	ug/L	988.21	ppb	18:05:13
1	Sb 206.836†	1936.0	1908.6	510.46	ug/L	510.46	ppb	18:05:13
1	Se 196.026†	1104.7	1130.2	520.64	ug/L	520.64	ppb	18:05:13
1	Si 251.611†	99034.8	98847.1	2498.4	ug/L	2498.4	ppb	18:04:53
1	Sn 189.927†	3777.7	3796.2	502.67	ug/L	502.67	ppb	18:05:13
1	Ti 334.940†	362106.9	364720.2	502.92	ug/L	502.92	ppb	18:04:53
1	Tl 190.801†	2016.9	2068.7	503.55	ug/L	503.55	ppb	18:05:13
1	U 409.014†	15956.3	18789.9	484.19	ug/L	484.19	ppb	18:04:53
1	V 292.402†	85828.1	87757.3	509.11	ug/L	509.11	ppb	18:04:53
1	Zn 213.857†	69570.7	68945.1	502.18	ug/L	502.18	ppb	18:04:53
1	SiO2†	99394.4	99166.7	5363.6	ug/L	5363.6	ppb	18:06:13
2	Sc Radial	4837.6	4837.6	98.5	%			18:03:59
2	Y RADIAL	5523.5	5523.5	97.81	%			18:03:59
2	Al 396.153Radial†	7635.5	7793.2	5124.5	ug/L	5124.5	ppb	18:03:59
2	Ca 317.933Radial†	2827.0	2851.3	5048.3	ug/L	5048.3	ppb	18:04:19
2	Fe 238.204 Radial†	425.3	420.7	5101.5	ug/L	5101.5	ppb	18:04:19
2	K 766.490 Radial†	29236.2	27102.5	4931.0	ug/L	4931.0	ppb	18:03:59
2	Mg 279.077 IEC†	116.1	115.4	5167.3	ug/L	5167.3	ppb	18:04:19
2	Na 589.592 Radial†	33358.2	35135.5	9855.5	ug/L	9855.5	ppb	18:03:59
2	Sr 421.552†	94046.6	95456.0	500.76	ug/L	500.76	ppb	18:03:59
2	Sc 361.383	1035808.6	1035808.6	99.646	%			18:05:20
2	Y 371.029	867528.3	867528.3	98.085	%			18:05:20
2	Ag 328.068†	126769.6	126745.3	505.50	ug/L	505.50	ppb	18:05:20
2	As 188.979†	1557.5	1599.7	502.84	ug/L	502.84	ppb	18:05:41
2	B 249.677†	25701.8	26259.1	494.32	ug/L	494.32	ppb	18:05:20
2	Ba 233.527†	78605.2	78884.1	508.09	ug/L	508.09	ppb	18:05:20
2	Be 313.107†	1608110.3	1618689.4	505.69	ug/L	505.69	ppb	18:05:20
2	Cd 226.502†	57666.3	58106.5	506.55	ug/L	506.55	ppb	18:05:20
2	Co 228.616†	29927.7	30120.2	496.29	ug/L	496.29	ppb	18:05:41
2	Cr 267.716†	55912.4	56023.0	504.13	ug/L	504.13	ppb	18:05:20
2	Cu 324.752†	197921.4	189686.1	506.82	ug/L	506.82	ppb	18:05:20
2	Mn 257.610†	534944.8	536266.0	508.23	ug/L	508.23	ppb	18:05:20
2	Mo 202.031†	9432.8	9437.1	501.16	ug/L	501.16	ppb	18:05:41
2	Ni 231.604†	25444.8	25403.1	497.42	ug/L	497.42	ppb	18:05:41

2	P 214.914†	5862.9	5618.6	2436.5	ug/L	2436.5 ppb	18:05:41
2	Pb 220.353†	5283.8	5378.1	506.42	ug/L	506.42 ppb	18:05:41
2	S 181.975 Axial†	962.8	906.1	975.23	ug/L	975.23 ppb	18:05:41
2	Sb 206.836†	1917.4	1889.5	505.30	ug/L	505.30 ppb	18:05:41
2	Se 196.026†	1087.0	1112.2	512.72	ug/L	512.72 ppb	18:05:41
2	Si 251.611†	99182.7	98977.0	2501.8	ug/L	2501.8 ppb	18:05:20
2	Sn 189.927†	3754.3	3771.9	499.47	ug/L	499.47 ppb	18:05:41
2	Ti 334.940†	362842.0	365389.7	503.84	ug/L	503.84 ppb	18:05:20
2	Tl 190.801†	1992.7	2044.0	497.59	ug/L	497.59 ppb	18:05:41
2	U 409.014†	15978.8	18809.5	484.69	ug/L	484.69 ppb	18:05:20
2	V 292.402†	85852.5	87765.6	509.12	ug/L	509.12 ppb	18:05:20
2	Zn 213.857†	69526.6	68887.7	501.76	ug/L	501.76 ppb	18:05:20
2	SiO2†	99499.1	99253.0	5368.4	ug/L	5368.4 ppb	18:06:19
3	Sc Radial	4799.2	4799.2	97.7	%		18:04:24
3	Y RADIAL	5498.6	5498.6	97.37	%		18:04:24
3	Al 396.153Radial†	7619.7	7839.0	5154.6	ug/L	5154.6 ppb	18:04:24
3	Ca 317.933Radial†	2853.2	2901.0	5136.3	ug/L	5136.3 ppb	18:04:44
3	Fe 238.204 Radial†	431.9	430.9	5225.2	ug/L	5225.2 ppb	18:04:44
3	K 766.490 Radial†	29093.2	27193.5	4947.7	ug/L	4947.7 ppb	18:04:24
3	Mg 279.077 IEC†	119.0	119.2	5339.1	ug/L	5339.1 ppb	18:04:44
3	Na 589.592 Radial†	32907.5	34945.0	9802.1	ug/L	9802.1 ppb	18:04:24
3	Sr 421.552†	93251.9	95406.2	500.50	ug/L	500.50 ppb	18:04:24
3	Sc 361.383	1038206.6	1038206.6	99.877	%		18:05:48
3	Y 371.029	871182.2	871182.2	98.498	%		18:05:48
3	Ag 328.068†	126926.4	126608.4	504.99	ug/L	504.99 ppb	18:05:48
3	As 188.979†	1576.5	1615.1	507.65	ug/L	507.65 ppb	18:06:08
3	B 249.677†	25829.6	26327.4	495.59	ug/L	495.59 ppb	18:05:48
3	Ba 233.527†	78220.4	78316.7	504.45	ug/L	504.45 ppb	18:05:48
3	Be 313.107†	1610405.9	1617260.4	505.24	ug/L	505.24 ppb	18:05:48
3	Cd 226.502†	57420.6	57726.9	503.22	ug/L	503.22 ppb	18:05:48
3	Co 228.616†	30208.3	30331.8	499.79	ug/L	499.79 ppb	18:06:08
3	Cr 267.716†	55861.2	55842.1	502.50	ug/L	502.50 ppb	18:05:48
3	Cu 324.752†	198284.6	189591.0	506.57	ug/L	506.57 ppb	18:05:48
3	Mn 257.610†	533597.1	533676.7	505.78	ug/L	505.78 ppb	18:05:48
3	Mo 202.031†	9542.9	9525.4	505.86	ug/L	505.86 ppb	18:06:08
3	Ni 231.604†	25662.7	25562.4	500.54	ug/L	500.54 ppb	18:06:08
3	P 214.914†	5892.8	5635.0	2443.9	ug/L	2443.9 ppb	18:06:08
3	Pb 220.353†	5325.7	5407.8	509.22	ug/L	509.22 ppb	18:06:08
3	S 181.975 Axial†	987.2	928.3	999.15	ug/L	999.15 ppb	18:06:08
3	Sb 206.836†	1957.6	1925.3	514.98	ug/L	514.98 ppb	18:06:08
3	Se 196.026†	1116.3	1139.0	525.06	ug/L	525.06 ppb	18:06:08
3	Si 251.611†	98993.5	98557.6	2491.0	ug/L	2491.0 ppb	18:05:48
3	Sn 189.927†	3799.2	3808.2	504.27	ug/L	504.27 ppb	18:06:08
3	Ti 334.940†	362935.3	364642.1	502.82	ug/L	502.82 ppb	18:05:48
3	Tl 190.801†	2018.1	2064.8	502.60	ug/L	502.60 ppb	18:06:08
3	U 409.014†	16280.7	19074.7	491.53	ug/L	491.53 ppb	18:05:48
3	V 292.402†	85865.0	87579.2	508.12	ug/L	508.12 ppb	18:05:48
3	Zn 213.857†	69400.3	68600.1	499.61	ug/L	499.61 ppb	18:05:48
3	SiO2†	98935.3	98458.0	5325.0	ug/L	5325.0 ppb	18:06:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1036543.2	99.717	%	0.1389				0.14%
Sc Radial	4822.3	98.2	%	0.41				0.42%
Y 371.029	869230.8	98.277	%	0.2080				0.21%
Y RADIAL	5517.2	97.70	%	0.290				0.30%
Ag 328.068†	126580.3	504.86	ug/L	0.722	504.86	ppb	0.722	0.14%
QC value within limits for Ag 328.068 Recovery = 100.97%								
Al 396.153Radial†	7803.3	5131.1	ug/L	20.93	5131.1	ppb	20.93	0.41%
QC value within limits for Al 396.153Radial Recovery = 102.62%								
As 188.979†	1607.9	505.41	ug/L	2.420	505.41	ppb	2.420	0.48%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	26312.9	495.33	ug/L	0.906	495.33	ppb	0.906	0.18%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	78651.7	506.60	ug/L	1.909	506.60	ppb	1.909	0.38%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1619509.6	505.94	ug/L	0.858	505.94	ppb	0.858	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	2873.4	5087.4	ug/L	44.83	5087.4	ppb	44.83	0.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.75%
Cd 226.502†          57937.6      505.07 ug/L        1.691      505.07 ppb        1.691   0.33%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†          30233.1      498.16 ug/L        1.760      498.16 ppb        1.760   0.35%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†          55961.2      503.57 ug/L        0.928      503.57 ppb        0.928   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.71%
Cu 324.752†         189532.0      506.41 ug/L        0.510      506.41 ppb        0.510   0.10%
   QC value within limits for Cu 324.752  Recovery = 101.28%
Fe 238.204 Radial†     423.6      5137.2 ug/L       76.66      5137.2 ppb       76.66   1.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†    27165.3      4942.5 ug/L        9.94      4942.5 ppb        9.94   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†        115.6      5180.4 ug/L      152.48      5180.4 ppb      152.48   2.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.61%
Mn 257.610†         535141.2      507.16 ug/L        1.252      507.16 ppb        1.252   0.25%
   QC value within limits for Mn 257.610  Recovery = 101.43%
Mo 202.031†           9484.8      503.70 ug/L        2.371      503.70 ppb        2.371   0.47%
   QC value within limits for Mo 202.031  Recovery = 100.74%
Na 589.592 Radial†   35115.6      9849.9 ug/L       45.31      9849.9 ppb       45.31   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†          25476.2      498.85 ug/L        1.575      498.85 ppb        1.575   0.32%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†            5631.7      2442.5 ug/L        5.37      2442.5 ppb        5.37   0.22%
   QC value within limits for P 214.914  Recovery = 97.70%
Pb 220.353†           5393.2      507.84 ug/L        1.401      507.84 ppb        1.401   0.28%
   QC value within limits for Pb 220.353  Recovery = 101.57%
S 181.975 Axial†       917.5      987.53 ug/L       11.972      987.53 ppb       11.972   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 98.75%
Sb 206.836†           1907.8      510.25 ug/L        4.840      510.25 ppb        4.840   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.05%
Se 196.026†           1127.2      519.48 ug/L        6.252      519.48 ppb        6.252   1.20%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†          98793.9      2497.0 ug/L        5.50      2497.0 ppb        5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 99.88%
Sn 189.927†           3792.1      502.14 ug/L        2.448      502.14 ppb        2.448   0.49%
   QC value within limits for Sn 189.927  Recovery = 100.43%
Sr 421.552†          95626.9      501.65 ug/L        1.784      501.65 ppb        1.784   0.36%
   QC value within limits for Sr 421.552  Recovery = 100.33%
Ti 334.940†         364917.3      503.19 ug/L        0.566      503.19 ppb        0.566   0.11%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†           2059.2      501.25 ug/L        3.199      501.25 ppb        3.199   0.64%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†           18891.3      486.80 ug/L        4.105      486.80 ppb        4.105   0.84%
   QC value within limits for U 409.014  Recovery = 97.36%
V 292.402†           87700.7      508.78 ug/L        0.576      508.78 ppb        0.576   0.11%
   QC value within limits for V 292.402  Recovery = 101.76%
Zn 213.857†          68811.0      501.18 ug/L        1.379      501.18 ppb        1.379   0.28%
   QC value within limits for Zn 213.857  Recovery = 100.24%
SiO2†                98959.2      5352.4 ug/L       23.80      5352.4 ppb       23.80   0.44%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
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Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 18:08:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4766.6	4766.6	97.1	%			18:10:25
1	Y RADIAL	5473.3	5473.3	96.92	%			18:10:25
1	Al 396.153Radial†	-20.4	22.8	15.038	ug/L	15.038	ppb	18:10:25
1	Ca 317.933Radial†	22.5	5.3	9.4050	ug/L	9.4050	ppb	18:10:45
1	Fe 238.204 Radial†	8.0	-2.8	-33.253	ug/L	-33.253	ppb	18:10:45
1	K 766.490 Radial†	2545.0	51.9	9.4686	ug/L	9.4686	ppb	18:10:25
1	Mg 279.077 IEC†	4.0	1.6	72.341	ug/L	72.341	ppb	18:10:45
1	Na 589.592 Radial†	-1272.2	-30.5	-8.5443	ug/L	-8.5443	ppb	18:10:25
1	Sr 421.552†	-32.1	-25.7	-0.1348	ug/L	-0.1348	ppb	18:10:25
1	Sc 361.383	1034609.2	1034609.2	99.531	%			18:11:42
1	Y 371.029	881696.7	881696.7	99.687	%			18:11:42
1	Ag 328.068†	446.5	-25.5	-0.1118	ug/L	-0.1118	ppb	18:11:47
1	As 188.979†	-33.8	2.6	0.8128	ug/L	0.8128	ppb	18:12:07
1	B 249.677†	-454.8	9.1	0.1770	ug/L	0.1770	ppb	18:12:07
1	Ba 233.527†	-2.6	-2.6	-0.0192	ug/L	-0.0192	ppb	18:12:07
1	Be 313.107†	-4791.6	59.7	0.0187	ug/L	0.0187	ppb	18:11:47
1	Cd 226.502†	-228.8	5.7	0.0536	ug/L	0.0536	ppb	18:12:07
1	Co 228.616†	-84.4	1.6	0.0263	ug/L	0.0263	ppb	18:12:07
1	Cr 267.716†	106.0	18.8	0.1679	ug/L	0.1679	ppb	18:12:07
1	Cu 324.752†	8941.8	46.4	0.1223	ug/L	0.1223	ppb	18:11:47
1	Mn 257.610†	570.8	-3.2	-0.0077	ug/L	-0.0077	ppb	18:12:07
1	Mo 202.031†	29.9	0.8	0.0391	ug/L	0.0391	ppb	18:12:07
1	Ni 231.604†	151.8	20.6	0.4030	ug/L	0.4030	ppb	18:12:07
1	P 214.914†	248.4	-15.6	-6.9397	ug/L	-6.9397	ppb	18:12:07
1	Pb 220.353†	-71.0	4.3	0.4060	ug/L	0.4060	ppb	18:12:07
1	S 181.975 Axial†	60.8	0.9	1.0132	ug/L	1.0132	ppb	18:12:07
1	Sb 206.836†	49.6	15.2	4.0184	ug/L	4.0184	ppb	18:12:07
1	Se 196.026†	-29.1	-7.9	-3.6032	ug/L	-3.6032	ppb	18:12:07
1	Si 251.611†	580.7	25.8	0.6494	ug/L	0.6494	ppb	18:12:07
1	Sn 189.927†	0.4	4.7	0.6278	ug/L	0.6278	ppb	18:12:07
1	Ti 334.940†	-1230.3	24.3	0.0350	ug/L	0.0350	ppb	18:11:47
1	Tl 190.801†	-42.1	1.9	0.4708	ug/L	0.4708	ppb	18:12:07
1	U 409.014†	-2850.8	-90.3	-2.3302	ug/L	-2.3302	ppb	18:11:42
1	V 292.402†	-1689.4	-88.8	-0.5058	ug/L	-0.5058	ppb	18:11:47
1	Zn 213.857†	887.3	5.9	0.0415	ug/L	0.0415	ppb	18:12:07
1	SiO2†	594.9	-1.3	-0.0849	ug/L	-0.0849	ppb	18:13:13
2	Sc Radial	4831.6	4831.6	98.4	%			18:10:50
2	Y RADIAL	5539.0	5539.0	98.08	%			18:10:50
2	Al 396.153Radial†	-19.9	23.6	15.571	ug/L	15.571	ppb	18:10:50
2	Ca 317.933Radial†	20.6	3.1	5.4395	ug/L	5.4395	ppb	18:11:10
2	Fe 238.204 Radial†	12.0	1.2	14.105	ug/L	14.105	ppb	18:11:10
2	K 766.490 Radial†	2640.1	113.3	20.647	ug/L	20.647	ppb	18:10:50
2	Mg 279.077 IEC†	6.5	4.1	183.27	ug/L	183.27	ppb	18:11:10
2	Na 589.592 Radial†	-1259.8	-0.2	-0.0693	ug/L	-0.0693	ppb	18:10:50
2	Sr 421.552†	-7.2	0.1	0.0004	ug/L	0.0004	ppb	18:10:50
2	Sc 361.383	1027067.1	1027067.1	98.806	%			18:12:12
2	Y 371.029	874594.2	874594.2	98.884	%			18:12:12
2	Ag 328.068†	449.8	-18.9	-0.0704	ug/L	-0.0704	ppb	18:12:17
2	As 188.979†	-40.3	-4.2	-1.3039	ug/L	-1.3039	ppb	18:12:37
2	B 249.677†	-427.8	33.1	0.6230	ug/L	0.6230	ppb	18:12:37
2	Ba 233.527†	-2.6	-2.6	-0.0166	ug/L	-0.0166	ppb	18:12:37
2	Be 313.107†	-4776.7	39.5	0.0122	ug/L	0.0122	ppb	18:12:17
2	Cd 226.502†	-219.3	13.7	0.1183	ug/L	0.1183	ppb	18:12:37
2	Co 228.616†	-75.9	9.5	0.1565	ug/L	0.1565	ppb	18:12:37
2	Cr 267.716†	97.6	11.0	0.0989	ug/L	0.0989	ppb	18:12:37
2	Cu 324.752†	8954.3	125.1	0.3347	ug/L	0.3347	ppb	18:12:17
2	Mn 257.610†	567.3	-2.6	-0.0044	ug/L	-0.0044	ppb	18:12:37
2	Mo 202.031†	27.2	-1.7	-0.0888	ug/L	-0.0888	ppb	18:12:37
2	Ni 231.604†	137.1	6.8	0.1336	ug/L	0.1336	ppb	18:12:37

2	P 214.914†	289.4	27.8	12.395	ug/L	12.395 ppb	18:12:37
2	Pb 220.353†	-86.1	-11.5	-1.0822	ug/L	-1.0822 ppb	18:12:37
2	S 181.975 Axial†	51.7	-7.8	-8.3923	ug/L	-8.3923 ppb	18:12:37
2	Sb 206.836†	34.7	0.5	0.1412	ug/L	0.1412 ppb	18:12:37
2	Se 196.026†	-20.9	0.2	0.1369	ug/L	0.1369 ppb	18:12:37
2	Si 251.611†	575.3	24.6	0.6161	ug/L	0.6161 ppb	18:12:37
2	Sn 189.927†	3.8	8.2	1.0891	ug/L	1.0891 ppb	18:12:37
2	Ti 334.940†	-1271.1	-26.0	-0.0353	ug/L	-0.0353 ppb	18:12:17
2	Tl 190.801†	-40.7	3.1	0.7471	ug/L	0.7471 ppb	18:12:37
2	U 409.014†	-2766.3	-25.8	-0.6692	ug/L	-0.6692 ppb	18:12:12
2	V 292.402†	-1617.8	-28.8	-0.1657	ug/L	-0.1657 ppb	18:12:17
2	Zn 213.857†	888.8	14.0	0.0937	ug/L	0.0937 ppb	18:12:37
2	SiO2†	620.8	29.3	1.5731	ug/L	1.5731 ppb	18:13:18
3	Sc Radial	4720.5	4720.5	96.1	%		18:11:15
3	Y RADIAL	5456.3	5456.3	96.62	%		18:11:15
3	Al 396.153Radial†	-34.8	7.6	5.0192	ug/L	5.0192 ppb	18:11:15
3	Ca 317.933Radial†	12.2	-5.1	-9.1137	ug/L	-9.1137 ppb	18:11:35
3	Fe 238.204 Radial†	9.7	-0.9	-10.769	ug/L	-10.769 ppb	18:11:35
3	K 766.490 Radial†	2595.0	129.5	23.622	ug/L	23.622 ppb	18:11:15
3	Mg 279.077 IEC†	2.1	-0.3	-11.938	ug/L	-11.938 ppb	18:11:35
3	Na 589.592 Radial†	-1312.6	-85.3	-23.919	ug/L	-23.919 ppb	18:11:15
3	Sr 421.552†	1.0	8.4	0.0443	ug/L	0.0443 ppb	18:11:15
3	Sc 361.383	1017127.6	1017127.6	97.849	%		18:12:42
3	Y 371.029	865924.7	865924.7	97.903	%		18:12:42
3	Ag 328.068†	366.4	-99.6	-0.4011	ug/L	-0.4011 ppb	18:12:47
3	As 188.979†	-29.3	6.6	2.0560	ug/L	2.0560 ppb	18:13:07
3	B 249.677†	-440.2	16.3	0.3089	ug/L	0.3089 ppb	18:13:07
3	Ba 233.527†	9.3	9.5	0.0592	ug/L	0.0592 ppb	18:13:07
3	Be 313.107†	-4801.3	-32.9	-0.0104	ug/L	-0.0104 ppb	18:12:47
3	Cd 226.502†	-236.4	-5.9	-0.0502	ug/L	-0.0502 ppb	18:13:07
3	Co 228.616†	-91.6	-7.3	-0.1196	ug/L	-0.1196 ppb	18:13:07
3	Cr 267.716†	114.8	29.6	0.2642	ug/L	0.2642 ppb	18:13:07
3	Cu 324.752†	8925.1	183.8	0.4903	ug/L	0.4903 ppb	18:12:47
3	Mn 257.610†	576.7	12.7	0.0111	ug/L	0.0111 ppb	18:13:07
3	Mo 202.031†	31.1	2.6	0.1363	ug/L	0.1363 ppb	18:13:07
3	Ni 231.604†	141.1	12.2	0.2399	ug/L	0.2399 ppb	18:13:07
3	P 214.914†	272.2	13.1	5.7950	ug/L	5.7950 ppb	18:13:07
3	Pb 220.353†	-73.4	0.5	0.0523	ug/L	0.0523 ppb	18:13:07
3	S 181.975 Axial†	54.0	-4.9	-5.2941	ug/L	-5.2941 ppb	18:13:07
3	Sb 206.836†	34.2	0.3	0.1003	ug/L	0.1003 ppb	18:13:07
3	Se 196.026†	-20.9	0.0	-0.0283	ug/L	-0.0283 ppb	18:13:07
3	Si 251.611†	567.7	22.6	0.5592	ug/L	0.5592 ppb	18:13:07
3	Sn 189.927†	3.6	8.0	1.0610	ug/L	1.0610 ppb	18:13:07
3	Ti 334.940†	-1272.2	-39.7	-0.0555	ug/L	-0.0555 ppb	18:12:47
3	Tl 190.801†	-39.6	3.8	0.9126	ug/L	0.9126 ppb	18:13:07
3	U 409.014†	-2696.8	17.9	0.4644	ug/L	0.4644 ppb	18:12:42
3	V 292.402†	-1683.0	-111.5	-0.6339	ug/L	-0.6339 ppb	18:12:47
3	Zn 213.857†	892.5	26.6	0.1945	ug/L	0.1945 ppb	18:13:07
3	SiO2†	608.0	22.3	1.1842	ug/L	1.1842 ppb	18:13:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026268.0	98.729	%	0.8435				0.85%
Sc Radial	4772.9	97.2	%	1.14				1.17%
Y 371.029	874071.9	98.825	%	0.8931				0.90%
Y RADIAL	5489.5	97.21	%	0.774				0.80%
Ag 328.068†	-48.0	-0.1945	ug/L	0.18018	-0.1945	ppb	0.18018	92.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.0	11.876	ug/L	5.9441	11.876	ppb	5.9441	50.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	0.5216	ug/L	1.69881	0.5216	ppb	1.69881	325.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.5	0.3696	ug/L	0.22913	0.3696	ppb	0.22913	61.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0078	ug/L	0.04452	0.0078	ppb	0.04452	572.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.1	0.0069	ug/L	0.01526	0.0069	ppb	0.01526	222.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	1.9103	ug/L	9.75075	1.9103	ppb	9.75075	510.44%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.5      0.0406 ug/L       0.08501      0.0406 ppb        0.08501 209.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.3      0.0211 ug/L       0.13814      0.0211 ppb        0.13814 655.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.8      0.1770 ug/L       0.08304      0.1770 ppb        0.08304  46.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               118.4      0.3158 ug/L       0.18470      0.3158 ppb        0.18470  58.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -9.9724 ug/L      23.68902     -9.9724 ppb       23.68902 237.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          98.3      17.912 ug/L        7.4622      17.912 ppb         7.4622  41.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.8      81.225 ug/L       97.9077      81.225 ppb        97.9077 120.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0003 ug/L       0.01006     -0.0003 ppb        0.01006 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0289 ug/L       0.11291      0.0289 ppb        0.11291 390.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -38.7     -10.844 ug/L      12.0902     -10.844 ppb       12.0902 111.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.2      0.2588 ug/L       0.13570      0.2588 ppb        0.13570  52.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7502 ug/L       9.82845      3.7502 ppb        9.82845 262.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.3     -0.2079 ug/L       0.77747     -0.2079 ppb        0.77747 373.89%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.9     -4.2244 ug/L       4.79313     -4.2244 ppb        4.79313 113.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.3      1.4200 ug/L       2.25041      1.4200 ppb        2.25041 158.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.5     -1.1649 ug/L       2.11326     -1.1649 ppb        2.11326 181.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.3      0.6082 ug/L       0.04564      0.6082 ppb        0.04564   7.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.0      0.9260 ug/L       0.25857      0.9260 ppb        0.25857  27.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.7     -0.0300 ug/L       0.09336     -0.0300 ppb        0.09336 310.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.8     -0.0186 ug/L       0.04751     -0.0186 ppb        0.04751 255.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      0.7102 ug/L       0.22320      0.7102 ppb        0.22320  31.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.7     -0.8450 ug/L       1.40556     -0.8450 ppb        1.40556 166.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -76.4     -0.4351 ug/L       0.24200     -0.4351 ppb        0.24200  55.62%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                15.5      0.1099 ug/L       0.07776      0.1099 ppb        0.07776  70.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      16.8      0.8908 ug/L       0.86705      0.8908 ppb        0.86705  97.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 19:19:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4734.3	4734.3	96.4	%			19:21:09
1	Y RADIAL	5406.0	5406.0	95.73	%			19:21:09
1	Al 396.153Radial†	7520.0	7842.3	5156.8	ug/L	5156.8	ppb	19:21:09
1	Ca 317.933Radial†	2824.2	2911.0	5154.0	ug/L	5154.0	ppb	19:21:29
1	Fe 238.204 Radial†	417.6	422.1	5118.6	ug/L	5118.6	ppb	19:21:29
1	K 766.490 Radial†	28948.3	27451.3	4994.6	ug/L	4994.6	ppb	19:21:09
1	Mg 279.077 IEC†	112.6	114.3	5118.6	ug/L	5118.6	ppb	19:21:29
1	Na 589.592 Radial†	32433.3	34914.9	9793.6	ug/L	9793.6	ppb	19:21:09
1	Sr 421.552†	92081.5	95500.4	500.99	ug/L	500.99	ppb	19:21:09
1	Sc 361.383	1033401.4	1033401.4	99.415	%			19:22:28
1	Y 371.029	865851.8	865851.8	97.895	%			19:22:28
1	Ag 328.068†	127285.7	127560.8	508.74	ug/L	508.74	ppb	19:22:28
1	As 188.979†	1572.9	1618.7	508.81	ug/L	508.81	ppb	19:22:48
1	B 249.677†	26054.4	26673.9	502.15	ug/L	502.15	ppb	19:22:28
1	Ba 233.527†	79037.3	79502.5	512.07	ug/L	512.07	ppb	19:22:28
1	Be 313.107†	1617567.7	1631961.8	509.83	ug/L	509.83	ppb	19:22:28
1	Cd 226.502†	58065.0	58642.4	511.22	ug/L	511.22	ppb	19:22:28
1	Co 228.616†	30149.0	30412.8	501.11	ug/L	501.11	ppb	19:22:48
1	Cr 267.716†	56148.9	56391.5	507.44	ug/L	507.44	ppb	19:22:28
1	Cu 324.752†	198503.5	190734.3	509.62	ug/L	509.62	ppb	19:22:28
1	Mn 257.610†	537564.0	540151.2	511.91	ug/L	511.91	ppb	19:22:28
1	Mo 202.031†	9476.2	9502.7	504.65	ug/L	504.65	ppb	19:22:48
1	Ni 231.604†	25566.4	25584.9	500.98	ug/L	500.98	ppb	19:22:48
1	P 214.914†	5881.3	5650.8	2450.5	ug/L	2450.5	ppb	19:22:48
1	Pb 220.353†	5299.7	5406.5	509.10	ug/L	509.10	ppb	19:22:48
1	S 181.975 Axial†	975.7	921.3	991.62	ug/L	991.62	ppb	19:22:48
1	Sb 206.836†	1937.8	1914.6	511.96	ug/L	511.96	ppb	19:22:48
1	Se 196.026†	1106.3	1134.2	522.52	ug/L	522.52	ppb	19:22:48
1	Si 251.611†	99946.8	99977.3	2527.1	ug/L	2527.1	ppb	19:22:28
1	Sn 189.927†	3766.0	3792.5	502.20	ug/L	502.20	ppb	19:22:48
1	Ti 334.940†	364631.3	368037.8	507.50	ug/L	507.50	ppb	19:22:28
1	Tl 190.801†	2033.0	2089.2	508.54	ug/L	508.54	ppb	19:22:48
1	U 409.014†	16208.7	19078.1	491.63	ug/L	491.63	ppb	19:22:28
1	V 292.402†	86101.1	88216.4	511.75	ug/L	511.75	ppb	19:22:28
1	Zn 213.857†	69834.6	69360.0	505.20	ug/L	505.20	ppb	19:22:28
1	SiO2†	99520.5	99507.2	5382.1	ug/L	5382.1	ppb	19:23:48
2	Sc Radial	4785.5	4785.5	97.5	%			19:21:34
2	Y RADIAL	5470.8	5470.8	96.88	%			19:21:34
2	Al 396.153Radial†	7596.8	7837.7	5153.6	ug/L	5153.6	ppb	19:21:34
2	Ca 317.933Radial†	2796.5	2851.2	5048.2	ug/L	5048.2	ppb	19:21:54
2	Fe 238.204 Radial†	417.0	416.8	5055.5	ug/L	5055.5	ppb	19:21:54
2	K 766.490 Radial†	29186.6	27374.5	4980.7	ug/L	4980.7	ppb	19:21:34
2	Mg 279.077 IEC†	113.5	114.0	5106.5	ug/L	5106.5	ppb	19:21:54
2	Na 589.592 Radial†	32666.5	34794.2	9759.8	ug/L	9759.8	ppb	19:21:34
2	Sr 421.552†	93027.7	95449.3	500.72	ug/L	500.72	ppb	19:21:34
2	Sc 361.383	1026012.3	1026012.3	98.704	%			19:22:55
2	Y 371.029	860635.0	860635.0	97.305	%			19:22:55
2	Ag 328.068†	126120.5	127302.4	507.70	ug/L	507.70	ppb	19:22:55
2	As 188.979†	1582.1	1639.5	515.25	ug/L	515.25	ppb	19:23:15
2	B 249.677†	25839.3	26644.7	501.60	ug/L	501.60	ppb	19:22:55
2	Ba 233.527†	77930.9	78954.2	508.54	ug/L	508.54	ppb	19:22:55
2	Be 313.107†	1600999.0	1626893.3	508.25	ug/L	508.25	ppb	19:22:55
2	Cd 226.502†	57183.2	58169.6	507.10	ug/L	507.10	ppb	19:22:55
2	Co 228.616†	30107.6	30589.2	504.04	ug/L	504.04	ppb	19:23:15
2	Cr 267.716†	55469.2	56109.7	504.91	ug/L	504.91	ppb	19:22:55
2	Cu 324.752†	196925.1	190573.2	509.19	ug/L	509.19	ppb	19:22:55
2	Mn 257.610†	531288.3	537687.2	509.57	ug/L	509.57	ppb	19:22:55
2	Mo 202.031†	9505.9	9601.4	509.88	ug/L	509.88	ppb	19:23:15
2	Ni 231.604†	25542.1	25745.5	504.13	ug/L	504.13	ppb	19:23:15

2	P 214.914†	5874.3	5686.3	2466.5 ug/L	2466.5 ppb	19:23:15
2	Pb 220.353†	5291.5	5436.6	511.94 ug/L	511.94 ppb	19:23:15
2	S 181.975 Axial†	980.6	933.4	1004.6 ug/L	1004.6 ppb	19:23:15
2	Sb 206.836†	1940.2	1931.0	516.49 ug/L	516.49 ppb	19:23:15
2	Se 196.026†	1107.9	1143.8	526.56 ug/L	526.56 ppb	19:23:15
2	Si 251.611†	98767.5	99506.6	2515.0 ug/L	2515.0 ppb	19:22:55
2	Sn 189.927†	3748.6	3802.2	503.46 ug/L	503.46 ppb	19:23:15
2	Ti 334.940†	361053.9	367054.8	506.14 ug/L	506.14 ppb	19:22:55
2	Tl 190.801†	2027.9	2098.8	510.82 ug/L	510.82 ppb	19:23:15
2	U 409.014†	16079.4	19064.5	491.29 ug/L	491.29 ppb	19:22:55
2	V 292.402†	85328.7	88057.5	510.93 ug/L	510.93 ppb	19:22:55
2	Zn 213.857†	69041.3	69062.2	503.00 ug/L	503.00 ppb	19:22:55
2	SiO2†	99115.1	99817.4	5398.7 ug/L	5398.7 ppb	19:23:53
3	Sc Radial	4799.7	4799.7	97.8 %		19:21:59
3	Y RADIAL	5465.7	5465.7	96.79 %		19:21:59
3	Al 396.153Radial†	7583.0	7800.6	5129.2 ug/L	5129.2 ppb	19:21:59
3	Ca 317.933Radial†	2825.1	2872.0	5084.9 ug/L	5084.9 ppb	19:22:19
3	Fe 238.204 Radial†	417.4	415.9	5044.6 ug/L	5044.6 ppb	19:22:19
3	K 766.490 Radial†	29293.9	27395.8	4984.4 ug/L	4984.4 ppb	19:21:59
3	Mg 279.077 IEC†	115.6	115.8	5186.8 ug/L	5186.8 ppb	19:22:19
3	Na 589.592 Radial†	32936.4	34971.3	9809.4 ug/L	9809.4 ppb	19:21:59
3	Sr 421.552†	93348.6	95495.6	500.96 ug/L	500.96 ppb	19:21:59
3	Sc 361.383	1029039.8	1029039.8	98.995 %		19:23:23
3	Y 371.029	861082.3	861082.3	97.356 %		19:23:23
3	Ag 328.068†	127149.9	127966.3	510.33 ug/L	510.33 ppb	19:23:23
3	As 188.979†	1573.5	1626.0	511.09 ug/L	511.09 ppb	19:23:43
3	B 249.677†	26080.1	26810.8	504.74 ug/L	504.74 ppb	19:23:23
3	Ba 233.527†	78942.9	79744.1	513.62 ug/L	513.62 ppb	19:23:23
3	Be 313.107†	1613383.4	1634631.2	510.67 ug/L	510.67 ppb	19:23:23
3	Cd 226.502†	57882.5	58705.6	511.78 ug/L	511.78 ppb	19:23:23
3	Co 228.616†	30053.5	30444.9	501.64 ug/L	501.64 ppb	19:23:43
3	Cr 267.716†	56141.1	56623.1	509.52 ug/L	509.52 ppb	19:23:23
3	Cu 324.752†	198524.5	191601.8	511.93 ug/L	511.93 ppb	19:23:23
3	Mn 257.610†	537675.2	542555.3	514.18 ug/L	514.18 ppb	19:23:23
3	Mo 202.031†	9456.1	9522.9	505.71 ug/L	505.71 ppb	19:23:43
3	Ni 231.604†	25447.2	25573.5	500.76 ug/L	500.76 ppb	19:23:43
3	P 214.914†	5869.1	5663.6	2455.9 ug/L	2455.9 ppb	19:23:43
3	Pb 220.353†	5261.2	5390.2	507.57 ug/L	507.57 ppb	19:23:43
3	S 181.975 Axial†	980.3	930.1	1001.1 ug/L	1001.1 ppb	19:23:43
3	Sb 206.836†	1917.3	1902.2	508.63 ug/L	508.63 ppb	19:23:43
3	Se 196.026†	1106.5	1139.1	524.44 ug/L	524.44 ppb	19:23:43
3	Si 251.611†	99912.6	100369.0	2537.0 ug/L	2537.0 ppb	19:23:23
3	Sn 189.927†	3745.3	3787.6	501.55 ug/L	501.55 ppb	19:23:43
3	Ti 334.940†	364672.1	369633.5	509.69 ug/L	509.69 ppb	19:23:23
3	Tl 190.801†	2011.5	2076.2	505.42 ug/L	505.42 ppb	19:23:43
3	U 409.014†	16224.5	19163.1	493.83 ug/L	493.83 ppb	19:23:23
3	V 292.402†	85974.8	88455.8	513.15 ug/L	513.15 ppb	19:23:23
3	Zn 213.857†	69723.6	69545.6	506.57 ug/L	506.57 ppb	19:23:23
3	SiO2†	99840.5	100254.7	5422.7 ug/L	5422.7 ppb	19:23:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1029484.5	99.038	%	0.3573				0.36%
Sc Radial	4773.2	97.2	%	0.70				0.72%
Y 371.029	862523.0	97.519	%	0.3269				0.34%
Y RADIAL	5447.5	96.46	%	0.638				0.66%
Ag 328.068†	127609.8	508.92	ug/L	1.327	508.92	ppb	1.327	0.26%
QC value within limits for Ag 328.068 Recovery = 101.78%								
Al 396.153Radial†	7826.9	5146.5	ug/L	15.11	5146.5	ppb	15.11	0.29%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	1628.1	511.72	ug/L	3.263	511.72	ppb	3.263	0.64%
QC value within limits for As 188.979 Recovery = 102.34%								
B 249.677†	26709.8	502.83	ug/L	1.681	502.83	ppb	1.681	0.33%
QC value within limits for B 249.677 Recovery = 100.57%								
Ba 233.527†	79400.2	511.41	ug/L	2.603	511.41	ppb	2.603	0.51%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1631162.1	509.58	ug/L	1.229	509.58	ppb	1.229	0.24%
QC value within limits for Be 313.107 Recovery = 101.92%								
Ca 317.933Radial†	2878.1	5095.7	ug/L	53.75	5095.7	ppb	53.75	1.05%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.91%
Cd 226.502†            58505.9      510.03 ug/L        2.552      510.03 ppb          2.552   0.50%
   QC value within limits for Cd 226.502  Recovery = 102.01%
Co 228.616†            30482.3      502.26 ug/L        1.557      502.26 ppb          1.557   0.31%
   QC value within limits for Co 228.616  Recovery = 100.45%
Cr 267.716†            56374.8      507.29 ug/L        2.312      507.29 ppb          2.312   0.46%
   QC value within limits for Cr 267.716  Recovery = 101.46%
Cu 324.752†           190969.7      510.25 ug/L        1.476      510.25 ppb          1.476   0.29%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5072.9 ug/L       39.96      5072.9 ppb         39.96   0.79%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27407.2      4986.6 ug/L        7.20      4986.6 ppb          7.20   0.14%
   QC value within limits for K 766.490 Radial  Recovery = 99.73%
Mg 279.077 IEC†          114.7      5137.3 ug/L       43.26      5137.3 ppb         43.26   0.84%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.75%
Mn 257.610†           540131.2      511.88 ug/L        2.304      511.88 ppb          2.304   0.45%
   QC value within limits for Mn 257.610  Recovery = 102.38%
Mo 202.031†             9542.3      506.74 ug/L        2.766      506.74 ppb          2.766   0.55%
   QC value within limits for Mo 202.031  Recovery = 101.35%
Na 589.592 Radial†     34893.5      9787.6 ug/L       25.38      9787.6 ppb         25.38   0.26%
   QC value within limits for Na 589.592 Radial  Recovery = 97.88%
Ni 231.604†            25634.6      501.95 ug/L        1.883      501.95 ppb          1.883   0.38%
   QC value within limits for Ni 231.604  Recovery = 100.39%
P 214.914†              5666.9      2457.7 ug/L        8.16      2457.7 ppb          8.16   0.33%
   QC value within limits for P 214.914  Recovery = 98.31%
Pb 220.353†             5411.1      509.54 ug/L        2.216      509.54 ppb          2.216   0.43%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         928.3      999.11 ug/L        6.718      999.11 ppb          6.718   0.67%
   QC value within limits for S 181.975 Axial  Recovery = 99.91%
Sb 206.836†             1915.9      512.36 ug/L        3.943      512.36 ppb          3.943   0.77%
   QC value within limits for Sb 206.836  Recovery = 102.47%
Se 196.026†             1139.0      524.51 ug/L        2.021      524.51 ppb          2.021   0.39%
   QC value within limits for Se 196.026  Recovery = 104.90%
Si 251.611†            99951.0      2526.4 ug/L       11.01      2526.4 ppb         11.01   0.44%
   QC value within limits for Si 251.611  Recovery = 101.05%
Sn 189.927†             3794.1      502.40 ug/L        0.975      502.40 ppb          0.975   0.19%
   QC value within limits for Sn 189.927  Recovery = 100.48%
Sr 421.552†            95481.8      500.89 ug/L        0.147      500.89 ppb          0.147   0.03%
   QC value within limits for Sr 421.552  Recovery = 100.18%
Ti 334.940†           368242.1      507.78 ug/L        1.794      507.78 ppb          1.794   0.35%
   QC value within limits for Ti 334.940  Recovery = 101.56%
Tl 190.801†             2088.1      508.26 ug/L        2.710      508.26 ppb          2.710   0.53%
   QC value within limits for Tl 190.801  Recovery = 101.65%
U 409.014†             19101.9      492.25 ug/L        1.381      492.25 ppb          1.381   0.28%
   QC value within limits for U 409.014  Recovery = 98.45%
V 292.402†             88243.3      511.95 ug/L        1.124      511.95 ppb          1.124   0.22%
   QC value within limits for V 292.402  Recovery = 102.39%
Zn 213.857†            69322.6      504.92 ug/L        1.801      504.92 ppb          1.801   0.36%
   QC value within limits for Zn 213.857  Recovery = 100.98%
SiO2†                  99859.8      5401.2 ug/L       20.41      5401.2 ppb         20.41   0.38%
   QC value within limits for SiO2  Recovery = 101.00%
All analyte(s) passed QC.
```

Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 19:26:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4859.6	4859.6	99.0	%			19:28:00
1	Y RADIAL	5593.3	5593.3	99.05	%			19:28:00
1	Al 396.153Radial†	-40.8	2.6	1.7303	ug/L	1.7303	ppb	19:28:00
1	Ca 317.933Radial†	22.6	5.0	8.9356	ug/L	8.9356	ppb	19:28:20
1	Fe 238.204 Radial†	9.0	-1.9	-22.856	ug/L	-22.856	ppb	19:28:20
1	K 766.490 Radial†	2744.6	203.5	37.066	ug/L	37.066	ppb	19:28:00
1	Mg 279.077 IEC†	3.4	0.9	40.419	ug/L	40.419	ppb	19:28:20
1	Na 589.592 Radial†	-1155.6	112.5	31.546	ug/L	31.546	ppb	19:28:00
1	Sr 421.552†	-48.7	-41.8	-0.2194	ug/L	-0.2194	ppb	19:28:00
1	Sc 361.383	1021125.3	1021125.3	98.234	%			19:29:17
1	Y 371.029	867915.2	867915.2	98.129	%			19:29:17
1	Ag 328.068†	462.9	-2.9	-0.0206	ug/L	-0.0206	ppb	19:29:22
1	As 188.979†	-36.9	-1.0	-0.3161	ug/L	-0.3161	ppb	19:29:42
1	B 249.677†	-320.6	139.7	2.6438	ug/L	2.6438	ppb	19:29:42
1	Ba 233.527†	5.5	5.6	0.0351	ug/L	0.0351	ppb	19:29:42
1	Be 313.107†	-4888.0	-101.9	-0.0321	ug/L	-0.0321	ppb	19:29:22
1	Cd 226.502†	-223.3	8.3	0.0746	ug/L	0.0746	ppb	19:29:42
1	Co 228.616†	-87.7	-3.0	-0.0486	ug/L	-0.0486	ppb	19:29:42
1	Cr 267.716†	99.2	13.2	0.1175	ug/L	0.1175	ppb	19:29:42
1	Cu 324.752†	8965.9	189.6	0.5051	ug/L	0.5051	ppb	19:29:22
1	Mn 257.610†	613.2	47.6	0.0420	ug/L	0.0420	ppb	19:29:42
1	Mo 202.031†	25.5	-3.3	-0.1741	ug/L	-0.1741	ppb	19:29:42
1	Ni 231.604†	116.0	-13.9	-0.2714	ug/L	-0.2714	ppb	19:29:42
1	P 214.914†	270.6	10.3	4.5763	ug/L	4.5763	ppb	19:29:42
1	Pb 220.353†	-67.8	6.5	0.6136	ug/L	0.6136	ppb	19:29:42
1	S 181.975 Axial†	58.0	-1.1	-1.1385	ug/L	-1.1385	ppb	19:29:42
1	Sb 206.836†	45.4	11.6	3.0650	ug/L	3.0650	ppb	19:29:42
1	Se 196.026†	-20.7	0.3	0.0561	ug/L	0.0561	ppb	19:29:42
1	Si 251.611†	693.1	147.9	3.7429	ug/L	3.7429	ppb	19:29:42
1	Sn 189.927†	4.9	9.3	1.2360	ug/L	1.2360	ppb	19:29:42
1	Ti 334.940†	-1354.4	-118.3	-0.1636	ug/L	-0.1636	ppb	19:29:22
1	Tl 190.801†	-38.9	4.6	1.1230	ug/L	1.1230	ppb	19:29:42
1	U 409.014†	-2649.8	76.5	1.9812	ug/L	1.9812	ppb	19:29:17
1	V 292.402†	-1586.9	-6.9	-0.0336	ug/L	-0.0336	ppb	19:29:22
1	Zn 213.857†	891.7	22.2	0.1648	ug/L	0.1648	ppb	19:29:42
1	SiO2†	691.8	105.2	5.6857	ug/L	5.6857	ppb	19:30:48
2	Sc Radial	4973.2	4973.2	101	%			19:28:25
2	Y RADIAL	5719.4	5719.4	101.3	%			19:28:25
2	Al 396.153Radial†	-19.7	24.3	16.050	ug/L	16.050	ppb	19:28:25
2	Ca 317.933Radial†	18.3	0.2	0.4419	ug/L	0.4419	ppb	19:28:45
2	Fe 238.204 Radial†	9.5	-1.6	-19.945	ug/L	-19.945	ppb	19:28:45
2	K 766.490 Radial†	2626.7	23.6	4.2865	ug/L	4.2865	ppb	19:28:25
2	Mg 279.077 IEC†	1.9	-0.6	-28.589	ug/L	-28.589	ppb	19:28:45
2	Na 589.592 Radial†	-1152.3	142.3	39.923	ug/L	39.923	ppb	19:28:25
2	Sr 421.552†	-30.3	-22.5	-0.1180	ug/L	-0.1180	ppb	19:28:25
2	Sc 361.383	1022927.5	1022927.5	98.407	%			19:29:47
2	Y 371.029	869879.4	869879.4	98.351	%			19:29:47
2	Ag 328.068†	404.4	-63.1	-0.2583	ug/L	-0.2583	ppb	19:29:52
2	As 188.979†	-30.4	5.7	1.7705	ug/L	1.7705	ppb	19:30:12
2	B 249.677†	-344.7	115.9	2.1918	ug/L	2.1918	ppb	19:30:12
2	Ba 233.527†	-1.2	-1.2	-0.0093	ug/L	-0.0093	ppb	19:30:12
2	Be 313.107†	-4878.6	-83.7	-0.0263	ug/L	-0.0263	ppb	19:29:52
2	Cd 226.502†	-258.3	-26.8	-0.2320	ug/L	-0.2320	ppb	19:30:12
2	Co 228.616†	-78.4	6.6	0.1096	ug/L	0.1096	ppb	19:30:12
2	Cr 267.716†	110.6	24.6	0.2201	ug/L	0.2201	ppb	19:30:12
2	Cu 324.752†	8839.3	44.9	0.1188	ug/L	0.1188	ppb	19:29:52
2	Mn 257.610†	617.9	51.2	0.0470	ug/L	0.0470	ppb	19:30:12
2	Mo 202.031†	27.5	-1.3	-0.0686	ug/L	-0.0686	ppb	19:30:12
2	Ni 231.604†	127.6	-2.3	-0.0455	ug/L	-0.0455	ppb	19:30:12

2	P 214.914†	262.7	1.9	0.8608 ug/L	0.8608 ppb	19:30:12
2	Pb 220.353†	-89.8	-15.7	-1.4658 ug/L	-1.4658 ppb	19:30:12
2	S 181.975 Axial†	60.3	1.2	1.3132 ug/L	1.3132 ppb	19:30:12
2	Sb 206.836†	51.4	17.6	4.6687 ug/L	4.6687 ppb	19:30:12
2	Se 196.026†	-24.0	-3.0	-1.3881 ug/L	-1.3881 ppb	19:30:12
2	Si 251.611†	694.1	147.7	3.7462 ug/L	3.7462 ppb	19:30:12
2	Sn 189.927†	8.2	12.7	1.6790 ug/L	1.6790 ppb	19:30:12
2	Ti 334.940†	-1312.1	-72.9	-0.1008 ug/L	-0.1008 ppb	19:29:52
2	Tl 190.801†	-38.6	5.0	1.2170 ug/L	1.2170 ppb	19:30:12
2	U 409.014†	-2709.4	20.7	0.5367 ug/L	0.5367 ppb	19:29:47
2	V 292.402†	-1645.6	-63.8	-0.3625 ug/L	-0.3625 ppb	19:29:52
2	Zn 213.857†	909.3	38.5	0.2858 ug/L	0.2858 ppb	19:30:12
2	SiO2†	681.2	93.2	5.0540 ug/L	5.0540 ppb	19:30:53
3	Sc Radial	4734.5	4734.5	96.4 %		19:28:50
3	Y RADIAL	5469.4	5469.4	96.85 %		19:28:50
3	Al 396.153Radial†	-57.9	-16.2	-10.705 ug/L	-10.705 ppb	19:28:50
3	Ca 317.933Radial†	19.2	2.0	3.6020 ug/L	3.6020 ppb	19:29:10
3	Fe 238.204 Radial†	12.9	2.4	28.804 ug/L	28.804 ppb	19:29:10
3	K 766.490 Radial†	2588.2	114.5	20.867 ug/L	20.867 ppb	19:28:50
3	Mg 279.077 IEC†	2.7	0.3	12.846 ug/L	12.846 ppb	19:29:10
3	Na 589.592 Radial†	-1173.4	63.2	17.714 ug/L	17.714 ppb	19:28:50
3	Sr 421.552†	-25.4	-18.9	-0.0992 ug/L	-0.0992 ppb	19:28:50
3	Sc 361.383	1032249.4	1032249.4	99.304 %		19:30:17
3	Y 371.029	877796.3	877796.3	99.246 %		19:30:17
3	Ag 328.068†	478.9	8.2	0.0429 ug/L	0.0429 ppb	19:30:22
3	As 188.979†	-33.0	3.3	1.0373 ug/L	1.0373 ppb	19:30:42
3	B 249.677†	-362.9	100.7	1.8983 ug/L	1.8983 ppb	19:30:42
3	Ba 233.527†	-11.7	-11.8	-0.0748 ug/L	-0.0748 ppb	19:30:42
3	Be 313.107†	-4885.3	-45.6	-0.0143 ug/L	-0.0143 ppb	19:30:22
3	Cd 226.502†	-235.2	-1.2	-0.0134 ug/L	-0.0134 ppb	19:30:42
3	Co 228.616†	-70.9	14.9	0.2453 ug/L	0.2453 ppb	19:30:42
3	Cr 267.716†	101.8	14.7	0.1334 ug/L	0.1334 ppb	19:30:42
3	Cu 324.752†	8905.9	30.8	0.0836 ug/L	0.0836 ppb	19:30:22
3	Mn 257.610†	593.8	21.3	0.0228 ug/L	0.0228 ppb	19:30:42
3	Mo 202.031†	28.5	-0.6	-0.0281 ug/L	-0.0281 ppb	19:30:42
3	Ni 231.604†	124.5	-6.6	-0.1289 ug/L	-0.1289 ppb	19:30:42
3	P 214.914†	276.2	13.0	5.7884 ug/L	5.7884 ppb	19:30:42
3	Pb 220.353†	-85.6	-10.6	-1.0028 ug/L	-1.0028 ppb	19:30:42
3	S 181.975 Axial†	60.9	1.2	1.2949 ug/L	1.2949 ppb	19:30:42
3	Sb 206.836†	42.7	8.3	2.1980 ug/L	2.1980 ppb	19:30:42
3	Se 196.026†	-29.7	-8.5	-3.6795 ug/L	-3.6795 ppb	19:30:42
3	Si 251.611†	830.1	278.2	7.0587 ug/L	7.0587 ppb	19:30:42
3	Sn 189.927†	-1.8	2.5	0.3286 ug/L	0.3286 ppb	19:30:42
3	Ti 334.940†	-1281.0	-29.6	-0.0398 ug/L	-0.0398 ppb	19:30:22
3	Tl 190.801†	-33.4	10.7	2.5775 ug/L	2.5775 ppb	19:30:42
3	U 409.014†	-2829.9	-75.8	-1.9637 ug/L	-1.9637 ppb	19:30:17
3	V 292.402†	-1608.9	-11.6	-0.0750 ug/L	-0.0750 ppb	19:30:22
3	Zn 213.857†	917.9	38.8	0.2827 ug/L	0.2827 ppb	19:30:42
3	SiO2†	710.3	116.2	6.3012 ug/L	6.3012 ppb	19:30:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025434.0	98.648	%	0.5744				0.58%
Sc Radial	4855.8	98.9	%	2.43				2.46%
Y 371.029	871863.7	98.575	%	0.5914				0.60%
Y RADIAL	5594.0	99.06	%	2.214				2.23%
Ag 328.068†	-19.3	-0.0786	ug/L	0.15877	-0.0786	ppb	0.15877	201.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.6	2.3583	ug/L	13.38841	2.3583	ppb	13.38841	567.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.7	0.8305	ug/L	1.05856	0.8305	ppb	1.05856	127.45%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	118.8	2.2446	ug/L	0.37555	2.2446	ppb	0.37555	16.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.5	-0.0163	ug/L	0.05531	-0.0163	ppb	0.05531	339.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-77.1	-0.0242	ug/L	0.00907	-0.0242	ppb	0.00907	37.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.4	4.3265	ug/L	4.29295	4.3265	ppb	4.29295	99.22%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -6.6     -0.0569 ug/L       0.15788     -0.0569 ppb        0.15788 277.35%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.2      0.1021 ug/L       0.14708      0.1021 ppb        0.14708 144.04%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.5      0.1570 ug/L       0.05521      0.1570 ppb        0.05521  35.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                88.4      0.2359 ug/L       0.23386      0.2359 ppb        0.23386  99.15%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.4     -4.6659 ug/L      29.02191     -4.6659 ppb       29.02191 622.01%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         113.9      20.740 ug/L       16.3900      20.740 ppb        16.3900  79.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.2      8.2252 ug/L      34.73562      8.2252 ppb       34.73562 422.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               40.0      0.0373 ug/L       0.01278      0.0373 ppb        0.01278  34.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.7     -0.0903 ug/L       0.07539     -0.0903 ppb        0.07539  83.53%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       106.0      29.728 ug/L       11.2159      29.728 ppb        11.2159  37.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -7.6     -0.1486 ug/L       0.11427     -0.1486 ppb        0.11427  76.90%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 8.4      3.7418 ug/L       2.56760      3.7418 ppb        2.56760  68.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -6.6     -0.6183 ug/L       1.09168     -0.6183 ppb        1.09168 176.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.5      0.4899 ug/L       1.41023      0.4899 ppb        1.41023 287.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               12.5      3.3106 ug/L       1.25350      3.3106 ppb        1.25350  37.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.7     -1.6705 ug/L       1.88373     -1.6705 ppb        1.88373 112.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              191.3      4.8493 ug/L       1.91339      4.8493 ppb        1.91339  39.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.2      1.0812 ug/L       0.68841      1.0812 ppb        0.68841  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -27.7     -0.1455 ug/L       0.06465     -0.1455 ppb        0.06465  44.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -73.6     -0.1014 ug/L       0.06191     -0.1014 ppb        0.06191  61.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.8      1.6392 ug/L       0.81398      1.6392 ppb        0.81398  49.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 7.1      0.1847 ug/L       1.99587      0.1847 ppb        1.99587 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -27.4     -0.1570 ug/L       0.17915     -0.1570 ppb        0.17915 114.08%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               33.2      0.2444 ug/L       0.06898      0.2444 ppb        0.06898  28.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    104.9      5.6803 ug/L       0.62364      5.6803 ppb        0.62364  10.98%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 67
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 20:30:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4702.0	4702.0	95.8	%			20:31:55
1	Y RADIAL	5377.3	5377.3	95.22	%			20:31:55
1	Al 396.153Radial†	7431.8	7803.8	5131.4	ug/L	5131.4	ppb	20:31:55
1	Ca 317.933Radial†	2829.4	2936.5	5199.2	ug/L	5199.2	ppb	20:32:15
1	Fe 238.204 Radial†	424.4	432.2	5240.9	ug/L	5240.9	ppb	20:32:15
1	K 766.490 Radial†	28853.9	27558.8	5014.1	ug/L	5014.1	ppb	20:31:55
1	Mg 279.077 IEC†	115.4	118.0	5286.1	ug/L	5286.1	ppb	20:32:15
1	Na 589.592 Radial†	32504.2	35219.8	9879.1	ug/L	9879.1	ppb	20:31:55
1	Sr 421.552†	91622.1	95676.2	501.91	ug/L	501.91	ppb	20:31:55
1	Sc 361.383	1027536.7	1027536.7	98.851	%			20:33:14
1	Y 371.029	860937.1	860937.1	97.340	%			20:33:14
1	Ag 328.068†	126985.9	127988.2	510.48	ug/L	510.48	ppb	20:33:14
1	As 188.979†	1559.9	1614.7	507.59	ug/L	507.59	ppb	20:33:34
1	B 249.677†	25901.3	26668.5	502.03	ug/L	502.03	ppb	20:33:14
1	Ba 233.527†	78653.3	79567.8	512.50	ug/L	512.50	ppb	20:33:14
1	Be 313.107†	1610870.8	1634473.5	510.62	ug/L	510.62	ppb	20:33:14
1	Cd 226.502†	57778.0	58685.4	511.58	ug/L	511.58	ppb	20:33:14
1	Co 228.616†	30035.1	30470.6	502.06	ug/L	502.06	ppb	20:33:34
1	Cr 267.716†	55939.4	56502.0	508.44	ug/L	508.44	ppb	20:33:14
1	Cu 324.752†	198760.0	192133.4	513.36	ug/L	513.36	ppb	20:33:14
1	Mn 257.610†	537058.6	542726.0	514.36	ug/L	514.36	ppb	20:33:14
1	Mo 202.031†	9428.1	9508.5	504.96	ug/L	504.96	ppb	20:33:34
1	Ni 231.604†	25429.0	25592.7	501.13	ug/L	501.13	ppb	20:33:34
1	P 214.914†	5864.0	5667.0	2457.0	ug/L	2457.0	ppb	20:33:34
1	Pb 220.353†	5274.2	5411.0	509.51	ug/L	509.51	ppb	20:33:34
1	S 181.975 Axial†	964.8	915.9	985.74	ug/L	985.74	ppb	20:33:34
1	Sb 206.836†	1912.4	1900.0	508.03	ug/L	508.03	ppb	20:33:34
1	Se 196.026†	1108.8	1143.1	526.92	ug/L	526.92	ppb	20:33:34
1	Si 251.611†	99572.9	100172.9	2532.0	ug/L	2532.0	ppb	20:33:14
1	Sn 189.927†	3725.2	3772.9	499.61	ug/L	499.61	ppb	20:33:34
1	Ti 334.940†	364552.3	370051.2	510.28	ug/L	510.28	ppb	20:33:14
1	Tl 190.801†	2006.9	2074.5	505.00	ug/L	505.00	ppb	20:33:34
1	U 409.014†	16191.2	19153.4	493.56	ug/L	493.56	ppb	20:33:14
1	V 292.402†	86005.3	88613.8	514.02	ug/L	514.02	ppb	20:33:14
1	Zn 213.857†	69770.4	69696.0	507.65	ug/L	507.65	ppb	20:33:14
1	SiO2†	98276.4	98819.9	5344.7	ug/L	5344.7	ppb	20:34:35
2	Sc Radial	4785.6	4785.6	97.5	%			20:32:20
2	Y RADIAL	5467.4	5467.4	96.82	%			20:32:20
2	Al 396.153Radial†	7580.1	7820.5	5142.2	ug/L	5142.2	ppb	20:32:20
2	Ca 317.933Radial†	2839.7	2895.5	5126.5	ug/L	5126.5	ppb	20:32:40
2	Fe 238.204 Radial†	427.8	427.9	5189.6	ug/L	5189.6	ppb	20:32:40
2	K 766.490 Radial†	29213.9	27402.2	4985.6	ug/L	4985.6	ppb	20:32:20
2	Mg 279.077 IEC†	113.7	114.1	5112.2	ug/L	5112.2	ppb	20:32:40
2	Na 589.592 Radial†	32954.8	35089.6	9842.6	ug/L	9842.6	ppb	20:32:20
2	Sr 421.552†	93125.5	95548.5	501.24	ug/L	501.24	ppb	20:32:20
2	Sc 361.383	1026644.8	1026644.8	98.765	%			20:33:42
2	Y 371.029	859634.7	859634.7	97.192	%			20:33:42
2	Ag 328.068†	126641.1	127750.7	509.52	ug/L	509.52	ppb	20:33:42
2	As 188.979†	1566.1	1622.3	509.93	ug/L	509.93	ppb	20:34:02
2	B 249.677†	25929.8	26720.2	503.00	ug/L	503.00	ppb	20:33:42
2	Ba 233.527†	78497.2	79478.9	511.92	ug/L	511.92	ppb	20:33:42
2	Be 313.107†	1606450.2	1631413.4	509.66	ug/L	509.66	ppb	20:33:42
2	Cd 226.502†	57791.5	58749.8	512.15	ug/L	512.15	ppb	20:33:42
2	Co 228.616†	30272.6	30737.5	506.47	ug/L	506.47	ppb	20:34:02
2	Cr 267.716†	55859.6	56470.3	508.15	ug/L	508.15	ppb	20:33:42
2	Cu 324.752†	197635.0	191169.0	510.78	ug/L	510.78	ppb	20:33:42
2	Mn 257.610†	535808.2	541932.0	513.60	ug/L	513.60	ppb	20:33:42
2	Mo 202.031†	9531.1	9621.0	510.93	ug/L	510.93	ppb	20:34:02
2	Ni 231.604†	25651.1	25840.0	505.97	ug/L	505.97	ppb	20:34:02

2	P 214.914†	5929.5	5738.6	2489.6 ug/L	2489.6 ppb	20:34:02
2	Pb 220.353†	5318.5	5460.6	514.18 ug/L	514.18 ppb	20:34:02
2	S 181.975 Axial†	981.4	933.5	1004.8 ug/L	1004.8 ppb	20:34:02
2	Sb 206.836†	1941.8	1931.5	516.59 ug/L	516.59 ppb	20:34:02
2	Se 196.026†	1121.2	1156.6	532.71 ug/L	532.71 ppb	20:34:02
2	Si 251.611†	99220.3	99903.5	2525.1 ug/L	2525.1 ppb	20:33:42
2	Sn 189.927†	3770.5	3822.0	506.10 ug/L	506.10 ppb	20:34:02
2	Ti 334.940†	363645.0	369453.0	509.45 ug/L	509.45 ppb	20:33:42
2	Tl 190.801†	2036.5	2106.2	512.65 ug/L	512.65 ppb	20:34:02
2	U 409.014†	16111.0	19086.4	491.83 ug/L	491.83 ppb	20:33:42
2	V 292.402†	85677.7	88357.7	512.64 ug/L	512.64 ppb	20:33:42
2	Zn 213.857†	69552.8	69537.0	506.46 ug/L	506.46 ppb	20:33:42
2	SiO2†	98637.1	99271.6	5369.0 ug/L	5369.0 ppb	20:34:40
3	Sc Radial	4803.0	4803.0	97.8 %		20:32:45
3	Y RADIAL	5492.6	5492.6	97.26 %		20:32:45
3	Al 396.153Radial†	7555.9	7767.6	5107.2 ug/L	5107.2 ppb	20:32:45
3	Ca 317.933Radial†	2839.4	2884.6	5107.4 ug/L	5107.4 ppb	20:33:05
3	Fe 238.204 Radial†	421.7	420.1	5095.0 ug/L	5095.0 ppb	20:33:05
3	K 766.490 Radial†	29167.5	27246.0	4957.2 ug/L	4957.2 ppb	20:32:45
3	Mg 279.077 IEC†	115.1	115.1	5157.4 ug/L	5157.4 ppb	20:33:05
3	Na 589.592 Radial†	32894.9	34905.7	9791.0 ug/L	9791.0 ppb	20:32:45
3	Sr 421.552†	93186.1	95263.8	499.75 ug/L	499.75 ppb	20:32:45
3	Sc 361.383	1019479.4	1019479.4	98.076 %		20:34:09
3	Y 371.029	854951.8	854951.8	96.663 %		20:34:09
3	Ag 328.068†	125810.9	127805.5	509.71 ug/L	509.71 ppb	20:34:09
3	As 188.979†	1564.7	1632.0	512.94 ug/L	512.94 ppb	20:34:29
3	B 249.677†	25680.2	26650.2	501.69 ug/L	501.69 ppb	20:34:09
3	Ba 233.527†	77943.4	79472.8	511.88 ug/L	511.88 ppb	20:34:09
3	Be 313.107†	1597867.7	1634094.7	510.50 ug/L	510.50 ppb	20:34:09
3	Cd 226.502†	57340.4	58701.2	511.74 ug/L	511.74 ppb	20:34:09
3	Co 228.616†	30063.8	30740.1	506.51 ug/L	506.51 ppb	20:34:29
3	Cr 267.716†	55561.3	56563.7	508.99 ug/L	508.99 ppb	20:34:09
3	Cu 324.752†	196076.0	190985.9	510.29 ug/L	510.29 ppb	20:34:09
3	Mn 257.610†	531811.3	541669.7	513.34 ug/L	513.34 ppb	20:34:09
3	Mo 202.031†	9455.5	9611.8	510.43 ug/L	510.43 ppb	20:34:29
3	Ni 231.604†	25501.1	25869.5	506.55 ug/L	506.55 ppb	20:34:29
3	P 214.914†	5870.0	5720.0	2481.4 ug/L	2481.4 ppb	20:34:29
3	Pb 220.353†	5276.6	5455.7	513.72 ug/L	513.72 ppb	20:34:29
3	S 181.975 Axial†	963.3	922.1	992.48 ug/L	992.48 ppb	20:34:29
3	Sb 206.836†	1929.1	1932.3	516.76 ug/L	516.76 ppb	20:34:29
3	Se 196.026†	1093.6	1136.4	523.45 ug/L	523.45 ppb	20:34:29
3	Si 251.611†	98515.1	99890.5	2524.8 ug/L	2524.8 ppb	20:34:09
3	Sn 189.927†	3733.3	3810.9	504.63 ug/L	504.63 ppb	20:34:29
3	Ti 334.940†	360954.1	369297.1	509.23 ug/L	509.23 ppb	20:34:09
3	Tl 190.801†	2032.2	2116.3	515.09 ug/L	515.09 ppb	20:34:29
3	U 409.014†	16100.6	19190.5	494.53 ug/L	494.53 ppb	20:34:09
3	V 292.402†	85203.8	88484.2	513.38 ug/L	513.38 ppb	20:34:09
3	Zn 213.857†	68958.9	69426.4	505.65 ug/L	505.65 ppb	20:34:09
3	SiO2†	99215.7	100563.5	5439.3 ug/L	5439.3 ppb	20:34:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024553.6	98.564	%	0.4249				0.43%
Sc Radial	4763.5	97.0	%	1.10				1.13%
Y 371.029	858507.8	97.065	%	0.3559				0.37%
Y RADIAL	5445.8	96.43	%	1.074				1.11%
Ag 328.068†	127848.1	509.91	ug/L	0.509	509.91	ppb	0.509	0.10%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 396.153Radial†	7797.3	5126.9	ug/L	17.89	5126.9	ppb	17.89	0.35%
QC value within limits for Al 396.153Radial Recovery = 102.54%								
As 188.979†	1623.0	510.16	ug/L	2.681	510.16	ppb	2.681	0.53%
QC value within limits for As 188.979 Recovery = 102.03%								
B 249.677†	26679.6	502.24	ug/L	0.680	502.24	ppb	0.680	0.14%
QC value within limits for B 249.677 Recovery = 100.45%								
Ba 233.527†	79506.5	512.10	ug/L	0.345	512.10	ppb	0.345	0.07%
QC value within limits for Ba 233.527 Recovery = 102.42%								
Be 313.107†	1633327.2	510.26	ug/L	0.521	510.26	ppb	0.521	0.10%
QC value within limits for Be 313.107 Recovery = 102.05%								
Ca 317.933Radial†	2905.5	5144.4	ug/L	48.43	5144.4	ppb	48.43	0.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.89%
Cd 226.502†            58712.1      511.82 ug/L         0.295      511.82 ppb          0.295   0.06%
   QC value within limits for Cd 226.502  Recovery = 102.36%
Co 228.616†            30649.4      505.02 ug/L         2.561      505.02 ppb          2.561   0.51%
   QC value within limits for Co 228.616  Recovery = 101.00%
Cr 267.716†            56512.0      508.53 ug/L         0.426      508.53 ppb          0.426   0.08%
   QC value within limits for Cr 267.716  Recovery = 101.71%
Cu 324.752†           191429.4      511.48 ug/L         1.650      511.48 ppb          1.650   0.32%
   QC value within limits for Cu 324.752  Recovery = 102.30%
Fe 238.204 Radial†       426.7      5175.2 ug/L        74.03      5175.2 ppb          74.03   1.43%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.50%
K 766.490 Radial†      27402.3      4985.6 ug/L        28.46      4985.6 ppb          28.46   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 99.71%
Mg 279.077 IEC†          115.8      5185.2 ug/L        90.21      5185.2 ppb          90.21   1.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.70%
Mn 257.610†           542109.3      513.77 ug/L         0.526      513.77 ppb          0.526   0.10%
   QC value within limits for Mn 257.610  Recovery = 102.75%
Mo 202.031†             9580.4      508.77 ug/L         3.312      508.77 ppb          3.312   0.65%
   QC value within limits for Mo 202.031  Recovery = 101.75%
Na 589.592 Radial†     35071.7      9837.6 ug/L        44.26      9837.6 ppb          44.26   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 98.38%
Ni 231.604†            25767.4      504.55 ug/L         2.976      504.55 ppb          2.976   0.59%
   QC value within limits for Ni 231.604  Recovery = 100.91%
P 214.914†              5708.5      2476.0 ug/L        16.93      2476.0 ppb          16.93   0.68%
   QC value within limits for P 214.914  Recovery = 99.04%
Pb 220.353†             5442.4      512.47 ug/L         2.575      512.47 ppb          2.575   0.50%
   QC value within limits for Pb 220.353  Recovery = 102.49%
S 181.975 Axial†         923.8      994.32 ug/L         9.641      994.32 ppb          9.641   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 99.43%
Sb 206.836†             1921.3      513.79 ug/L         4.990      513.79 ppb          4.990   0.97%
   QC value within limits for Sb 206.836  Recovery = 102.76%
Se 196.026†             1145.4      527.69 ug/L         4.679      527.69 ppb          4.679   0.89%
   QC value within limits for Se 196.026  Recovery = 105.54%
Si 251.611†            99989.0      2527.3 ug/L         4.11      2527.3 ppb           4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.09%
Sn 189.927†             3801.9      503.45 ug/L         3.403      503.45 ppb          3.403   0.68%
   QC value within limits for Sn 189.927  Recovery = 100.69%
Sr 421.552†            95496.2      500.97 ug/L         1.107      500.97 ppb          1.107   0.22%
   QC value within limits for Sr 421.552  Recovery = 100.19%
Ti 334.940†           369600.4      509.65 ug/L         0.552      509.65 ppb          0.552   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.93%
Tl 190.801†             2099.0      510.91 ug/L         5.263      510.91 ppb          5.263   1.03%
   QC value within limits for Tl 190.801  Recovery = 102.18%
U 409.014†             19143.5      493.31 ug/L         1.368      493.31 ppb          1.368   0.28%
   QC value within limits for U 409.014  Recovery = 98.66%
V 292.402†             88485.2      513.34 ug/L         0.690      513.34 ppb          0.690   0.13%
   QC value within limits for V 292.402  Recovery = 102.67%
Zn 213.857†            69553.1      506.59 ug/L         1.003      506.59 ppb          1.003   0.20%
   QC value within limits for Zn 213.857  Recovery = 101.32%
SiO2†                  99551.7      5384.3 ug/L        49.11      5384.3 ppb          49.11   0.91%
   QC value within limits for SiO2  Recovery = 100.69%
All analyte(s) passed QC.
```

Sequence No.: 68
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 20:36:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4812.6	4812.6	98.0	%			20:38:46
1	Y RADIAL	5523.3	5523.3	97.81	%			20:38:46
1	Al 396.153Radial†	-20.7	22.6	14.921	ug/L	14.921	ppb	20:38:46
1	Ca 317.933Radial†	20.2	2.8	4.9844	ug/L	4.9844	ppb	20:39:06
1	Fe 238.204 Radial†	10.6	-0.2	-2.6844	ug/L	-2.6844	ppb	20:39:06
1	K 766.490 Radial†	2567.1	49.4	8.9866	ug/L	8.9866	ppb	20:38:46
1	Mg 279.077 IEC†	5.1	2.7	121.07	ug/L	121.07	ppb	20:39:06
1	Na 589.592 Radial†	-1148.9	107.9	30.257	ug/L	30.257	ppb	20:38:46
1	Sr 421.552†	-2.9	4.5	0.0234	ug/L	0.0234	ppb	20:38:46
1	Sc 361.383	1040681.4	1040681.4	100.12	%			20:40:03
1	Y 371.029	885157.6	885157.6	100.08	%			20:40:03
1	Ag 328.068†	490.2	15.5	0.0601	ug/L	0.0601	ppb	20:40:08
1	As 188.979†	-47.5	-10.8	-3.3792	ug/L	-3.3792	ppb	20:40:28
1	B 249.677†	-388.8	77.8	1.4702	ug/L	1.4702	ppb	20:40:28
1	Ba 233.527†	-1.4	-1.4	-0.0090	ug/L	-0.0090	ppb	20:40:28
1	Be 313.107†	-4852.4	27.1	0.0086	ug/L	0.0086	ppb	20:40:08
1	Cd 226.502†	-231.1	4.8	0.0417	ug/L	0.0417	ppb	20:40:28
1	Co 228.616†	-85.6	0.8	0.0147	ug/L	0.0147	ppb	20:40:28
1	Cr 267.716†	85.6	-2.3	-0.0210	ug/L	-0.0210	ppb	20:40:28
1	Cu 324.752†	9023.5	75.6	0.2018	ug/L	0.2018	ppb	20:40:08
1	Mn 257.610†	623.8	46.4	0.0414	ug/L	0.0414	ppb	20:40:28
1	Mo 202.031†	40.9	11.6	0.6171	ug/L	0.6171	ppb	20:40:28
1	Ni 231.604†	114.0	-18.1	-0.3537	ug/L	-0.3537	ppb	20:40:28
1	P 214.914†	268.4	3.0	1.3352	ug/L	1.3352	ppb	20:40:28
1	Pb 220.353†	-75.6	0.1	0.0122	ug/L	0.0122	ppb	20:40:28
1	S 181.975 Axial†	52.7	-7.5	-8.0489	ug/L	-8.0489	ppb	20:40:28
1	Sb 206.836†	47.9	13.2	3.5146	ug/L	3.5146	ppb	20:40:28
1	Se 196.026†	-22.8	-1.4	-0.6463	ug/L	-0.6463	ppb	20:40:28
1	Si 251.611†	636.7	78.4	1.9742	ug/L	1.9742	ppb	20:40:28
1	Sn 189.927†	1.2	5.5	0.7321	ug/L	0.7321	ppb	20:40:28
1	Ti 334.940†	-1223.5	38.3	0.0529	ug/L	0.0529	ppb	20:40:08
1	Tl 190.801†	-49.2	-4.9	-1.1792	ug/L	-1.1792	ppb	20:40:28
1	U 409.014†	-2752.4	24.7	0.6391	ug/L	0.6391	ppb	20:40:03
1	V 292.402†	-1612.2	-1.8	0.0029	ug/L	0.0029	ppb	20:40:08
1	Zn 213.857†	878.7	-7.9	-0.0601	ug/L	-0.0601	ppb	20:40:28
1	SiO2†	640.5	40.7	2.1761	ug/L	2.1761	ppb	20:41:34
2	Sc Radial	4826.9	4826.9	98.3	%			20:39:11
2	Y RADIAL	5564.4	5564.4	98.53	%			20:39:11
2	Al 396.153Radial†	-23.3	20.1	13.261	ug/L	13.261	ppb	20:39:11
2	Ca 317.933Radial†	14.8	-2.8	-4.9687	ug/L	-4.9687	ppb	20:39:31
2	Fe 238.204 Radial†	10.1	-0.8	-9.2048	ug/L	-9.2048	ppb	20:39:31
2	K 766.490 Radial†	2555.3	29.6	5.3974	ug/L	5.3974	ppb	20:39:11
2	Mg 279.077 IEC†	1.6	-0.8	-37.045	ug/L	-37.045	ppb	20:39:31
2	Na 589.592 Radial†	-1190.6	68.9	19.327	ug/L	19.327	ppb	20:39:11
2	Sr 421.552†	-10.4	-3.1	-0.0165	ug/L	-0.0165	ppb	20:39:11
2	Sc 361.383	1027744.7	1027744.7	98.871	%			20:40:33
2	Y 371.029	873701.1	873701.1	98.783	%			20:40:33
2	Ag 328.068†	474.1	5.4	0.0186	ug/L	0.0186	ppb	20:40:38
2	As 188.979†	-34.2	2.0	0.6224	ug/L	0.6224	ppb	20:40:58
2	B 249.677†	-406.4	55.0	1.0412	ug/L	1.0412	ppb	20:40:58
2	Ba 233.527†	-8.3	-8.3	-0.0545	ug/L	-0.0545	ppb	20:40:58
2	Be 313.107†	-4885.4	-67.2	-0.0213	ug/L	-0.0213	ppb	20:40:38
2	Cd 226.502†	-238.0	-5.0	-0.0430	ug/L	-0.0430	ppb	20:40:58
2	Co 228.616†	-84.6	0.8	0.0139	ug/L	0.0139	ppb	20:40:58
2	Cr 267.716†	97.8	11.1	0.0997	ug/L	0.0997	ppb	20:40:58
2	Cu 324.752†	8932.2	96.7	0.2577	ug/L	0.2577	ppb	20:40:38
2	Mn 257.610†	614.8	45.1	0.0425	ug/L	0.0425	ppb	20:40:58
2	Mo 202.031†	36.7	7.8	0.4150	ug/L	0.4150	ppb	20:40:58
2	Ni 231.604†	129.9	-0.5	-0.0106	ug/L	-0.0106	ppb	20:40:58

2	P 214.914†	298.1	36.4	16.259	ug/L	16.259	ppb	20:40:58
2	Pb 220.353†	-83.9	-9.3	-0.8664	ug/L	-0.8664	ppb	20:40:58
2	S 181.975 Axial†	50.6	-9.0	-9.6579	ug/L	-9.6579	ppb	20:40:58
2	Sb 206.836†	35.5	1.2	0.3502	ug/L	0.3502	ppb	20:40:58
2	Se 196.026†	-35.8	-14.8	-6.6064	ug/L	-6.6064	ppb	20:40:58
2	Si 251.611†	629.3	78.9	1.9907	ug/L	1.9907	ppb	20:40:58
2	Sn 189.927†	4.1	8.5	1.1255	ug/L	1.1255	ppb	20:40:58
2	Ti 334.940†	-1360.7	-115.8	-0.1595	ug/L	-0.1595	ppb	20:40:38
2	Tl 190.801†	-47.7	-4.0	-0.9589	ug/L	-0.9589	ppb	20:40:58
2	U 409.014†	-2795.5	-53.4	-1.3802	ug/L	-1.3802	ppb	20:40:33
2	V 292.402†	-1640.2	-50.5	-0.2849	ug/L	-0.2849	ppb	20:40:38
2	Zn 213.857†	880.9	5.4	0.0419	ug/L	0.0419	ppb	20:40:58
2	SiO2†	642.6	50.9	2.7392	ug/L	2.7392	ppb	20:41:39
3	Sc Radial	4828.7	4828.7	98.4	%			20:39:36
3	Y RADIAL	5560.2	5560.2	98.46	%			20:39:36
3	Al 396.153Radial†	-29.5	13.8	9.0944	ug/L	9.0944	ppb	20:39:36
3	Ca 317.933Radial†	20.4	3.0	5.2305	ug/L	5.2305	ppb	20:39:56
3	Fe 238.204 Radial†	10.4	-0.4	-4.9292	ug/L	-4.9292	ppb	20:39:56
3	K 766.490 Radial†	2650.6	125.6	22.878	ug/L	22.878	ppb	20:39:36
3	Mg 279.077 IEC†	3.7	1.3	58.592	ug/L	58.592	ppb	20:39:56
3	Na 589.592 Radial†	-1156.4	104.1	29.209	ug/L	29.209	ppb	20:39:36
3	Sr 421.552†	11.2	18.8	0.0987	ug/L	0.0987	ppb	20:39:36
3	Sc 361.383	1029854.8	1029854.8	99.074	%			20:41:03
3	Y 371.029	874784.5	874784.5	98.905	%			20:41:03
3	Ag 328.068†	442.4	-27.5	-0.1088	ug/L	-0.1088	ppb	20:41:09
3	As 188.979†	-42.0	-5.8	-1.7955	ug/L	-1.7955	ppb	20:41:29
3	B 249.677†	-424.6	37.5	0.7097	ug/L	0.7097	ppb	20:41:29
3	Ba 233.527†	-5.0	-5.1	-0.0322	ug/L	-0.0322	ppb	20:41:29
3	Be 313.107†	-4858.6	-30.1	-0.0093	ug/L	-0.0093	ppb	20:41:09
3	Cd 226.502†	-233.7	-0.3	-0.0018	ug/L	-0.0018	ppb	20:41:29
3	Co 228.616†	-93.7	-8.2	-0.1348	ug/L	-0.1348	ppb	20:41:29
3	Cr 267.716†	124.9	38.3	0.3450	ug/L	0.3450	ppb	20:41:29
3	Cu 324.752†	8892.5	38.2	0.1017	ug/L	0.1017	ppb	20:41:09
3	Mn 257.610†	601.3	30.2	0.0270	ug/L	0.0270	ppb	20:41:29
3	Mo 202.031†	37.6	8.7	0.4599	ug/L	0.4599	ppb	20:41:29
3	Ni 231.604†	146.3	15.7	0.3079	ug/L	0.3079	ppb	20:41:29
3	P 214.914†	290.5	28.1	12.563	ug/L	12.563	ppb	20:41:29
3	Pb 220.353†	-61.3	13.7	1.2877	ug/L	1.2877	ppb	20:41:29
3	S 181.975 Axial†	57.8	-1.7	-1.8852	ug/L	-1.8852	ppb	20:41:29
3	Sb 206.836†	40.5	6.2	1.6719	ug/L	1.6719	ppb	20:41:29
3	Se 196.026†	-21.1	0.1	0.0088	ug/L	0.0088	ppb	20:41:29
3	Si 251.611†	621.1	69.3	1.7388	ug/L	1.7388	ppb	20:41:29
3	Sn 189.927†	8.5	12.9	1.7113	ug/L	1.7113	ppb	20:41:29
3	Ti 334.940†	-1217.0	32.0	0.0449	ug/L	0.0449	ppb	20:41:09
3	Tl 190.801†	-54.6	-10.9	-2.6257	ug/L	-2.6257	ppb	20:41:29
3	U 409.014†	-2796.2	-48.3	-1.2499	ug/L	-1.2499	ppb	20:41:03
3	V 292.402†	-1562.1	31.8	0.1879	ug/L	0.1879	ppb	20:41:09
3	Zn 213.857†	895.5	18.4	0.1312	ug/L	0.1312	ppb	20:41:29
3	SiO2†	678.0	85.3	4.5910	ug/L	4.5910	ppb	20:41:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1032760.3	99.353	%	0.6677				0.67%
Sc Radial	4822.8	98.2	%	0.18				0.18%
Y 371.029	877881.1	99.255	%	0.7151				0.72%
Y RADIAL	5549.3	98.27	%	0.401				0.41%
Ag 328.068†	-2.2	-0.0100	ug/L	0.08805	-0.0100	ppb	0.08805	877.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.8	12.426	ug/L	3.0019	12.426	ppb	3.0019	24.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.9	-1.5174	ug/L	2.01527	-1.5174	ppb	2.01527	132.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.8	1.0737	ug/L	0.38131	1.0737	ppb	0.38131	35.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.9	-0.0319	ug/L	0.02279	-0.0319	ppb	0.02279	71.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-23.4	-0.0073	ug/L	0.01501	-0.0073	ppb	0.01501	204.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	1.7487	ug/L	5.81876	1.7487	ppb	5.81876	332.75%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -0.2     -0.0010 ug/L       0.04236     -0.0010 ppb        0.04236 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -2.2     -0.0354 ug/L       0.08607     -0.0354 ppb        0.08607 243.13%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              15.7      0.1412 ug/L       0.18654      0.1412 ppb        0.18654 132.08%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              70.2      0.1871 ug/L       0.07906      0.1871 ppb        0.07906  42.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.5     -5.6061 ug/L       3.31252     -5.6061 ppb        3.31252  59.09%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        68.2      12.421 ug/L        9.2325      12.421 ppb         9.2325  74.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.1      47.540 ug/L       79.6362      47.540 ppb        79.6362 167.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              40.6      0.0370 ug/L       0.00864      0.0370 ppb        0.00864  23.36%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               9.4      0.4973 ug/L       0.10610      0.4973 ppb        0.10610  21.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       93.6      26.264 ug/L        6.0309      26.264 ppb         6.0309  22.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.0     -0.0188 ug/L       0.33087     -0.0188 ppb        0.33087 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               22.5      10.052 ug/L        7.7722      10.052 ppb         7.7722  77.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.5      0.1445 ug/L       1.08312      0.1445 ppb        1.08312 749.59%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.1     -6.5307 ug/L       4.10270     -6.5307 ppb        4.10270  62.82%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.9      1.8456 ug/L       1.58934      1.8456 ppb        1.58934  86.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.4     -2.4146 ug/L       3.64495     -2.4146 ppb        3.64495 150.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              75.5      1.9012 ug/L       0.14094      1.9012 ppb        0.14094   7.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               9.0      1.1896 ug/L       0.49272      1.1896 ppb        0.49272  41.42%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               6.7      0.0352 ug/L       0.05850      0.0352 ppb        0.05850 166.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -15.2     -0.0206 ug/L       0.12036     -0.0206 ppb        0.12036 585.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -6.6     -1.5879 ug/L       0.90543     -1.5879 ppb        0.90543  57.02%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -25.7     -0.6637 ug/L       1.13010     -0.6637 ppb        1.13010 170.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -6.8     -0.0314 ug/L       0.23824     -0.0314 ppb        0.23824 759.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               5.3      0.0377 ug/L       0.09572      0.0377 ppb        0.09572 254.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    59.0      3.1688 ug/L       1.26346      3.1688 ppb        1.26346  39.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 77
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 21:40:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4890.1	4890.1	99.6	%			21:42:34
1	Y RADIAL	5623.9	5623.9	99.59	%			21:42:34
1	Al 396.153Radial†	7665.8	7740.4	5089.3	ug/L	5089.3	ppb	21:42:34
1	Ca 317.933Radial†	2790.7	2784.1	4929.3	ug/L	4929.3	ppb	21:42:54
1	Fe 238.204 Radial†	419.1	409.8	4970.8	ug/L	4970.8	ppb	21:42:54
1	K 766.490 Radial†	29440.3	26988.8	4910.3	ug/L	4910.3	ppb	21:42:34
1	Mg 279.077 IEC†	112.4	110.3	4943.1	ug/L	4943.1	ppb	21:42:54
1	Na 589.592 Radial†	33401.2	34815.1	9765.6	ug/L	9765.6	ppb	21:42:34
1	Sr 421.552†	94490.9	94877.2	497.72	ug/L	497.72	ppb	21:42:34
1	Sc 361.383	1022148.7	1022148.7	98.332	%			21:43:54
1	Y 371.029	857288.2	857288.2	96.927	%			21:43:54
1	Ag 328.068†	126449.9	128120.3	510.92	ug/L	510.92	ppb	21:43:54
1	As 188.979†	1554.7	1617.7	508.48	ug/L	508.48	ppb	21:44:14
1	B 249.677†	25682.4	26584.0	500.46	ug/L	500.46	ppb	21:43:54
1	Ba 233.527†	78064.2	79388.1	511.33	ug/L	511.33	ppb	21:43:54
1	Be 313.107†	1605119.3	1637214.5	511.47	ug/L	511.47	ppb	21:43:54
1	Cd 226.502†	57460.6	58670.7	511.48	ug/L	511.48	ppb	21:43:54
1	Co 228.616†	29953.6	30547.9	503.35	ug/L	503.35	ppb	21:44:14
1	Cr 267.716†	55656.2	56512.3	508.53	ug/L	508.53	ppb	21:43:54
1	Cu 324.752†	197442.3	191853.2	512.60	ug/L	512.60	ppb	21:43:54
1	Mn 257.610†	532950.9	541412.6	513.09	ug/L	513.09	ppb	21:43:54
1	Mo 202.031†	9454.1	9585.2	509.01	ug/L	509.01	ppb	21:44:14
1	Ni 231.604†	25461.0	25760.9	504.43	ug/L	504.43	ppb	21:44:14
1	P 214.914†	5871.1	5705.5	2474.6	ug/L	2474.6	ppb	21:44:14
1	Pb 220.353†	5273.3	5438.3	512.09	ug/L	512.09	ppb	21:44:14
1	S 181.975 Axial†	963.6	919.9	990.04	ug/L	990.04	ppb	21:44:14
1	Sb 206.836†	1918.1	1916.0	512.42	ug/L	512.42	ppb	21:44:14
1	Se 196.026†	1085.7	1125.5	518.17	ug/L	518.17	ppb	21:44:14
1	Si 251.611†	99190.9	100315.4	2535.6	ug/L	2535.6	ppb	21:43:54
1	Sn 189.927†	3737.8	3805.5	503.90	ug/L	503.90	ppb	21:44:14
1	Ti 334.940†	361901.3	369299.2	509.22	ug/L	509.22	ppb	21:43:54
1	Tl 190.801†	2002.0	2080.2	506.36	ug/L	506.36	ppb	21:44:14
1	U 409.014†	16098.1	19145.1	493.38	ug/L	493.38	ppb	21:43:54
1	V 292.402†	85422.5	88479.7	513.34	ug/L	513.34	ppb	21:43:54
1	Zn 213.857†	69272.5	69561.7	506.68	ug/L	506.68	ppb	21:43:54
1	SiO2†	99897.5	100992.6	5462.7	ug/L	5462.7	ppb	21:45:14
2	Sc Radial	4765.6	4765.6	97.1	%			21:43:00
2	Y RADIAL	5427.4	5427.4	96.11	%			21:43:00
2	Al 396.153Radial†	7485.7	7755.9	5099.5	ug/L	5099.5	ppb	21:43:00
2	Ca 317.933Radial†	2824.8	2892.4	5121.1	ug/L	5121.1	ppb	21:43:20
2	Fe 238.204 Radial†	425.1	427.0	5178.2	ug/L	5178.2	ppb	21:43:20
2	K 766.490 Radial†	28845.6	27148.6	4939.4	ug/L	4939.4	ppb	21:43:00
2	Mg 279.077 IEC†	119.3	120.4	5392.1	ug/L	5392.1	ppb	21:43:20
2	Na 589.592 Radial†	32528.1	34792.0	9759.1	ug/L	9759.1	ppb	21:43:00
2	Sr 421.552†	91997.4	94787.7	497.25	ug/L	497.25	ppb	21:43:00
2	Sc 361.383	1020467.1	1020467.1	98.171	%			21:44:21
2	Y 371.029	857323.5	857323.5	96.931	%			21:44:21
2	Ag 328.068†	126179.2	128056.4	510.74	ug/L	510.74	ppb	21:44:21
2	As 188.979†	1571.5	1637.4	514.66	ug/L	514.66	ppb	21:44:41
2	B 249.677†	25622.6	26566.2	500.09	ug/L	500.09	ppb	21:44:21
2	Ba 233.527†	77898.1	79349.7	511.09	ug/L	511.09	ppb	21:44:21
2	Be 313.107†	1603707.5	1638466.3	511.86	ug/L	511.86	ppb	21:44:21
2	Cd 226.502†	57368.7	58673.4	511.49	ug/L	511.49	ppb	21:44:21
2	Co 228.616†	30031.3	30677.3	505.48	ug/L	505.48	ppb	21:44:41
2	Cr 267.716†	55637.5	56586.5	509.20	ug/L	509.20	ppb	21:44:21
2	Cu 324.752†	196554.4	191279.7	511.08	ug/L	511.08	ppb	21:44:21
2	Mn 257.610†	531554.1	540882.9	512.60	ug/L	512.60	ppb	21:44:21
2	Mo 202.031†	9476.6	9624.0	511.09	ug/L	511.09	ppb	21:44:41
2	Ni 231.604†	25515.7	25859.2	506.35	ug/L	506.35	ppb	21:44:41

2	P 214.914†	5884.1	5728.6	2485.0 ug/L	2485.0 ppb	21:44:41
2	Pb 220.353†	5312.4	5486.9	516.65 ug/L	516.65 ppb	21:44:41
2	S 181.975 Axial†	972.0	930.0	1000.9 ug/L	1000.9 ppb	21:44:41
2	Sb 206.836†	1912.0	1913.0	511.65 ug/L	511.65 ppb	21:44:41
2	Se 196.026†	1112.6	1154.7	531.83 ug/L	531.83 ppb	21:44:41
2	Si 251.611†	98859.6	100144.2	2531.2 ug/L	2531.2 ppb	21:44:21
2	Sn 189.927†	3730.3	3804.2	503.74 ug/L	503.74 ppb	21:44:41
2	Ti 334.940†	361448.2	369444.2	509.44 ug/L	509.44 ppb	21:44:21
2	Tl 190.801†	2029.1	2111.1	513.84 ug/L	513.84 ppb	21:44:41
2	U 409.014†	15945.8	19016.9	490.03 ug/L	490.03 ppb	21:44:21
2	V 292.402†	85399.1	88599.0	514.03 ug/L	514.03 ppb	21:44:21
2	Zn 213.857†	69184.0	69587.6	506.82 ug/L	506.82 ppb	21:44:21
2	SiO2†	98500.4	99736.9	5394.3 ug/L	5394.3 ppb	21:45:19
3	Sc Radial	4812.4	4812.4	98.0 %		21:43:25
3	Y RADIAL	5504.8	5504.8	97.48 %		21:43:25
3	Al 396.153Radial†	7617.7	7815.5	5138.9 ug/L	5138.9 ppb	21:43:25
3	Ca 317.933Radial†	2787.1	2825.7	5002.9 ug/L	5002.9 ppb	21:43:45
3	Fe 238.204 Radial†	414.7	412.1	4998.8 ug/L	4998.8 ppb	21:43:45
3	K 766.490 Radial†	29333.1	27356.9	4977.3 ug/L	4977.3 ppb	21:43:25
3	Mg 279.077 IEC†	111.3	111.1	4976.6 ug/L	4976.6 ppb	21:43:45
3	Na 589.592 Radial†	33369.1	35324.0	9908.4 ug/L	9908.4 ppb	21:43:25
3	Sr 421.552†	94268.0	96182.1	504.57 ug/L	504.57 ppb	21:43:25
3	Sc 361.383	1021109.7	1021109.7	98.232 %		21:44:48
3	Y 371.029	856254.7	856254.7	96.810 %		21:44:48
3	Ag 328.068†	126137.4	127933.0	510.19 ug/L	510.19 ppb	21:44:48
3	As 188.979†	1558.4	1623.0	510.15 ug/L	510.15 ppb	21:45:09
3	B 249.677†	25675.0	26603.0	500.82 ug/L	500.82 ppb	21:44:48
3	Ba 233.527†	78080.4	79485.3	511.96 ug/L	511.96 ppb	21:44:48
3	Be 313.107†	1599607.4	1633264.3	510.24 ug/L	510.24 ppb	21:44:48
3	Cd 226.502†	57353.5	58621.2	511.05 ug/L	511.05 ppb	21:44:48
3	Co 228.616†	30025.6	30652.1	505.07 ug/L	505.07 ppb	21:45:09
3	Cr 267.716†	55545.8	56457.5	508.03 ug/L	508.03 ppb	21:44:48
3	Cu 324.752†	197040.1	191648.1	512.05 ug/L	512.05 ppb	21:44:48
3	Mn 257.610†	532363.3	541365.8	513.05 ug/L	513.05 ppb	21:44:48
3	Mo 202.031†	9466.7	9607.8	510.21 ug/L	510.21 ppb	21:45:09
3	Ni 231.604†	25449.1	25775.1	504.70 ug/L	504.70 ppb	21:45:09
3	P 214.914†	5864.4	5704.8	2474.4 ug/L	2474.4 ppb	21:45:09
3	Pb 220.353†	5291.7	5462.5	514.37 ug/L	514.37 ppb	21:45:09
3	S 181.975 Axial†	975.2	932.6	1003.8 ug/L	1003.8 ppb	21:45:09
3	Sb 206.836†	1921.5	1921.5	513.90 ug/L	513.90 ppb	21:45:09
3	Se 196.026†	1089.8	1130.8	520.59 ug/L	520.59 ppb	21:45:09
3	Si 251.611†	99112.5	100338.3	2536.1 ug/L	2536.1 ppb	21:44:48
3	Sn 189.927†	3733.7	3805.2	503.86 ug/L	503.86 ppb	21:45:09
3	Ti 334.940†	361617.6	369385.0	509.35 ug/L	509.35 ppb	21:44:48
3	Tl 190.801†	2021.6	2102.3	511.70 ug/L	511.70 ppb	21:45:09
3	U 409.014†	16093.5	19157.0	493.68 ug/L	493.68 ppb	21:44:48
3	V 292.402†	85298.0	88441.4	513.14 ug/L	513.14 ppb	21:44:48
3	Zn 213.857†	69230.4	69590.6	506.89 ug/L	506.89 ppb	21:44:48
3	SiO2†	98371.3	99542.4	5383.8 ug/L	5383.8 ppb	21:45:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1021241.9	98.245	%	0.0816				0.08%
Sc Radial	4822.7	98.2	%	1.28				1.30%
Y 371.029	856955.5	96.889	%	0.0686				0.07%
Y RADIAL	5518.7	97.73	%	1.752				1.79%
Ag 328.068†	128036.6	510.62	ug/L	0.383	510.62	ppb	0.383	0.07%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7770.6	5109.2	ug/L	26.19	5109.2	ppb	26.19	0.51%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	1626.1	511.10	ug/L	3.194	511.10	ppb	3.194	0.62%
QC value within limits for As 188.979 Recovery = 102.22%								
B 249.677†	26584.4	500.46	ug/L	0.361	500.46	ppb	0.361	0.07%
QC value within limits for B 249.677 Recovery = 100.09%								
Ba 233.527†	79407.7	511.46	ug/L	0.446	511.46	ppb	0.446	0.09%
QC value within limits for Ba 233.527 Recovery = 102.29%								
Be 313.107†	1636315.1	511.19	ug/L	0.847	511.19	ppb	0.847	0.17%
QC value within limits for Be 313.107 Recovery = 102.24%								
Ca 317.933Radial†	2834.1	5017.8	ug/L	96.77	5017.8	ppb	96.77	1.93%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58655.1      511.34 ug/L         0.252      511.34 ppb          0.252   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.27%
Co 228.616†            30625.8      504.63 ug/L         1.131      504.63 ppb          1.131   0.22%
   QC value within limits for Co 228.616  Recovery = 100.93%
Cr 267.716†            56518.8      508.59 ug/L         0.585      508.59 ppb          0.585   0.11%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191593.7      511.91 ug/L         0.770      511.91 ppb          0.770   0.15%
   QC value within limits for Cu 324.752  Recovery = 102.38%
Fe 238.204 Radial†       416.3      5049.2 ug/L        112.52      5049.2 ppb        112.52   2.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.98%
K 766.490 Radial†      27164.8      4942.4 ug/L         33.60      4942.4 ppb         33.60   0.68%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          113.9      5103.9 ug/L        250.10      5103.9 ppb        250.10   4.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.08%
Mn 257.610†           541220.4      512.91 ug/L         0.271      512.91 ppb          0.271   0.05%
   QC value within limits for Mn 257.610  Recovery = 102.58%
Mo 202.031†             9605.7      510.10 ug/L         1.040      510.10 ppb          1.040   0.20%
   QC value within limits for Mo 202.031  Recovery = 102.02%
Na 589.592 Radial†     34977.0      9811.0 ug/L         84.35      9811.0 ppb         84.35   0.86%
   QC value within limits for Na 589.592 Radial  Recovery = 98.11%
Ni 231.604†            25798.4      505.16 ug/L         1.041      505.16 ppb          1.041   0.21%
   QC value within limits for Ni 231.604  Recovery = 101.03%
P 214.914†              5713.0      2478.0 ug/L          6.08      2478.0 ppb          6.08   0.25%
   QC value within limits for P 214.914  Recovery = 99.12%
Pb 220.353†             5462.6      514.37 ug/L         2.277      514.37 ppb          2.277   0.44%
   QC value within limits for Pb 220.353  Recovery = 102.87%
S 181.975 Axial†         927.5      998.25 ug/L         7.249      998.25 ppb          7.249   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 99.82%
Sb 206.836†             1916.8      512.66 ug/L         1.139      512.66 ppb          1.139   0.22%
   QC value within limits for Sb 206.836  Recovery = 102.53%
Se 196.026†             1137.0      523.53 ug/L         7.291      523.53 ppb          7.291   1.39%
   QC value within limits for Se 196.026  Recovery = 104.71%
Si 251.611†           100266.0      2534.3 ug/L          2.71      2534.3 ppb           2.71   0.11%
   QC value within limits for Si 251.611  Recovery = 101.37%
Sn 189.927†             3805.0      503.83 ug/L         0.082      503.83 ppb          0.082   0.02%
   QC value within limits for Sn 189.927  Recovery = 100.77%
Sr 421.552†            95282.3      499.85 ug/L         4.095      499.85 ppb          4.095   0.82%
   QC value within limits for Sr 421.552  Recovery = 99.97%
Ti 334.940†           369376.1      509.34 ug/L         0.106      509.34 ppb          0.106   0.02%
   QC value within limits for Ti 334.940  Recovery = 101.87%
Tl 190.801†             2097.9      510.63 ug/L         3.852      510.63 ppb          3.852   0.75%
   QC value within limits for Tl 190.801  Recovery = 102.13%
U 409.014†             19106.3      492.36 ug/L         2.023      492.36 ppb          2.023   0.41%
   QC value within limits for U 409.014  Recovery = 98.47%
V 292.402†             88506.7      513.50 ug/L         0.466      513.50 ppb          0.466   0.09%
   QC value within limits for V 292.402  Recovery = 102.70%
Zn 213.857†            69580.0      506.80 ug/L         0.106      506.80 ppb          0.106   0.02%
   QC value within limits for Zn 213.857  Recovery = 101.36%
SiO2†                 100090.6      5413.6 ug/L         42.84      5413.6 ppb         42.84   0.79%
   QC value within limits for SiO2  Recovery = 101.24%
All analyte(s) passed QC.
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Sequence No.: 78
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 21:47:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5040.1	5040.1	103	%			21:49:26
1	Y RADIAL	5787.6	5787.6	102.5	%			21:49:26
1	Al 396.153Radial†	-21.8	22.6	14.879	ug/L	14.879	ppb	21:49:26
1	Ca 317.933Radial†	19.4	1.1	1.9413	ug/L	1.9413	ppb	21:49:46
1	Fe 238.204 Radial†	9.2	-2.1	-25.139	ug/L	-25.139	ppb	21:49:46
1	K 766.490 Radial†	2572.3	-63.7	-11.628	ug/L	-11.628	ppb	21:49:26
1	Mg 279.077 IEC†	5.2	2.5	113.89	ug/L	113.89	ppb	21:49:46
1	Na 589.592 Radial†	-1229.6	82.2	23.052	ug/L	23.052	ppb	21:49:26
1	Sr 421.552†	6.3	13.6	0.0713	ug/L	0.0713	ppb	21:49:26
1	Sc 361.383	1022554.3	1022554.3	98.371	%			21:50:43
1	Y 371.029	869982.1	869982.1	98.362	%			21:50:43
1	Ag 328.068†	423.0	-44.0	-0.1825	ug/L	-0.1825	ppb	21:50:48
1	As 188.979†	-36.4	-0.4	-0.1243	ug/L	-0.1243	ppb	21:51:08
1	B 249.677†	-421.5	37.7	0.7157	ug/L	0.7157	ppb	21:51:08
1	Ba 233.527†	3.9	3.9	0.0243	ug/L	0.0243	ppb	21:51:08
1	Be 313.107†	-4890.7	-97.8	-0.0306	ug/L	-0.0306	ppb	21:50:48
1	Cd 226.502†	-227.2	4.7	0.0433	ug/L	0.0433	ppb	21:51:08
1	Co 228.616†	-103.0	-18.4	-0.3017	ug/L	-0.3017	ppb	21:51:08
1	Cr 267.716†	110.5	24.6	0.2202	ug/L	0.2202	ppb	21:51:08
1	Cu 324.752†	8928.6	138.9	0.3698	ug/L	0.3698	ppb	21:50:48
1	Mn 257.610†	606.5	39.9	0.0331	ug/L	0.0331	ppb	21:51:08
1	Mo 202.031†	37.4	8.7	0.4619	ug/L	0.4619	ppb	21:51:08
1	Ni 231.604†	107.3	-22.8	-0.4470	ug/L	-0.4470	ppb	21:51:08
1	P 214.914†	274.6	14.0	6.2571	ug/L	6.2571	ppb	21:51:08
1	Pb 220.353†	-80.1	-5.9	-0.5461	ug/L	-0.5461	ppb	21:51:08
1	S 181.975 Axial†	61.4	2.3	2.5171	ug/L	2.5171	ppb	21:51:08
1	Sb 206.836†	39.3	5.3	1.4134	ug/L	1.4134	ppb	21:51:08
1	Se 196.026†	-24.6	-3.7	-1.7129	ug/L	-1.7129	ppb	21:51:08
1	Si 251.611†	646.6	99.6	2.5235	ug/L	2.5235	ppb	21:51:08
1	Sn 189.927†	2.5	6.9	0.9141	ug/L	0.9141	ppb	21:51:08
1	Ti 334.940†	-1285.7	-46.6	-0.0640	ug/L	-0.0640	ppb	21:50:48
1	Tl 190.801†	-49.4	-6.0	-1.4524	ug/L	-1.4524	ppb	21:51:08
1	U 409.014†	-2742.7	-14.1	-0.3621	ug/L	-0.3621	ppb	21:50:43
1	V 292.402†	-1590.1	-7.9	-0.0330	ug/L	-0.0330	ppb	21:50:48
1	Zn 213.857†	912.1	41.6	0.3066	ug/L	0.3066	ppb	21:51:08
1	SiO2†	713.3	126.1	6.8394	ug/L	6.8394	ppb	21:52:14
2	Sc Radial	4780.7	4780.7	97.4	%			21:49:51
2	Y RADIAL	5465.2	5465.2	96.78	%			21:49:51
2	Al 396.153Radial†	-65.1	-23.1	-15.291	ug/L	-15.291	ppb	21:49:51
2	Ca 317.933Radial†	18.3	0.9	1.6184	ug/L	1.6184	ppb	21:50:11
2	Fe 238.204 Radial†	12.2	1.5	18.657	ug/L	18.657	ppb	21:50:11
2	K 766.490 Radial†	2589.3	89.6	16.327	ug/L	16.327	ppb	21:49:51
2	Mg 279.077 IEC†	1.6	-0.9	-40.434	ug/L	-40.434	ppb	21:50:11
2	Na 589.592 Radial†	-1197.6	50.1	14.044	ug/L	14.044	ppb	21:49:51
2	Sr 421.552†	-31.6	-25.1	-0.1315	ug/L	-0.1315	ppb	21:49:51
2	Sc 361.383	1030244.0	1030244.0	99.111	%			21:51:13
2	Y 371.029	876739.0	876739.0	99.126	%			21:51:13
2	Ag 328.068†	344.0	-127.0	-0.5001	ug/L	-0.5001	ppb	21:51:18
2	As 188.979†	-28.7	7.7	2.3958	ug/L	2.3958	ppb	21:51:38
2	B 249.677†	-466.9	-5.0	-0.0974	ug/L	-0.0974	ppb	21:51:38
2	Ba 233.527†	-1.3	-1.3	-0.0087	ug/L	-0.0087	ppb	21:51:38
2	Be 313.107†	-4823.4	7.3	0.0023	ug/L	0.0023	ppb	21:51:18
2	Cd 226.502†	-241.9	-8.4	-0.0746	ug/L	-0.0746	ppb	21:51:38
2	Co 228.616†	-74.4	11.2	0.1861	ug/L	0.1861	ppb	21:51:38
2	Cr 267.716†	92.2	5.3	0.0466	ug/L	0.0466	ppb	21:51:38
2	Cu 324.752†	8841.2	-17.0	-0.0446	ug/L	-0.0446	ppb	21:51:18
2	Mn 257.610†	621.8	50.7	0.0507	ug/L	0.0507	ppb	21:51:38
2	Mo 202.031†	41.4	12.5	0.6650	ug/L	0.6650	ppb	21:51:38
2	Ni 231.604†	151.6	21.1	0.4123	ug/L	0.4123	ppb	21:51:38

2	P 214.914†	285.1	22.5	10.085	ug/L	10.085	ppb	21:51:38
2	Pb 220.353†	-78.4	-3.6	-0.3399	ug/L	-0.3399	ppb	21:51:38
2	S 181.975 Axial†	60.3	0.7	0.7490	ug/L	0.7490	ppb	21:51:38
2	Sb 206.836†	49.6	15.4	4.0872	ug/L	4.0872	ppb	21:51:38
2	Se 196.026†	-27.2	-6.0	-2.6014	ug/L	-2.6014	ppb	21:51:38
2	Si 251.611†	664.9	113.2	2.8554	ug/L	2.8554	ppb	21:51:38
2	Sn 189.927†	4.5	8.9	1.1761	ug/L	1.1761	ppb	21:51:38
2	Ti 334.940†	-1220.8	28.7	0.0395	ug/L	0.0395	ppb	21:51:18
2	Tl 190.801†	-50.5	-6.6	-1.6073	ug/L	-1.6073	ppb	21:51:38
2	U 409.014†	-2733.6	15.9	0.4089	ug/L	0.4089	ppb	21:51:13
2	V 292.402†	-1696.8	-103.5	-0.5860	ug/L	-0.5860	ppb	21:51:18
2	Zn 213.857†	905.4	27.9	0.2022	ug/L	0.2022	ppb	21:51:38
2	SiO2†	685.1	92.2	4.9640	ug/L	4.9640	ppb	21:52:19
3	Sc Radial	4788.6	4788.6	97.5	%			21:50:16
3	Y RADIAL	5467.5	5467.5	96.82	%			21:50:16
3	Al 396.153Radial†	-36.4	6.4	4.2310	ug/L	4.2310	ppb	21:50:16
3	Ca 317.933Radial†	17.4	-0.0	-0.0388	ug/L	-0.0388	ppb	21:50:36
3	Fe 238.204 Radial†	11.4	0.7	8.1139	ug/L	8.1139	ppb	21:50:36
3	K 766.490 Radial†	2680.4	178.8	32.565	ug/L	32.565	ppb	21:50:16
3	Mg 279.077 IEC†	5.7	3.4	150.15	ug/L	150.15	ppb	21:50:36
3	Na 589.592 Radial†	-1132.3	119.0	33.377	ug/L	33.377	ppb	21:50:16
3	Sr 421.552†	1.2	8.7	0.0455	ug/L	0.0455	ppb	21:50:16
3	Sc 361.383	1026701.1	1026701.1	98.770	%			21:51:43
3	Y 371.029	872343.9	872343.9	98.629	%			21:51:43
3	Ag 328.068†	397.4	-71.7	-0.2845	ug/L	-0.2845	ppb	21:51:48
3	As 188.979†	-39.7	-3.6	-1.1085	ug/L	-1.1085	ppb	21:52:08
3	B 249.677†	-435.9	24.8	0.4672	ug/L	0.4672	ppb	21:52:08
3	Ba 233.527†	-8.3	-8.4	-0.0542	ug/L	-0.0542	ppb	21:52:08
3	Be 313.107†	-4848.9	-35.3	-0.0111	ug/L	-0.0111	ppb	21:51:48
3	Cd 226.502†	-222.3	10.6	0.0913	ug/L	0.0913	ppb	21:52:08
3	Co 228.616†	-93.9	-8.8	-0.1438	ug/L	-0.1438	ppb	21:52:08
3	Cr 267.716†	102.3	15.8	0.1406	ug/L	0.1406	ppb	21:52:08
3	Cu 324.752†	8943.6	117.5	0.3142	ug/L	0.3142	ppb	21:51:48
3	Mn 257.610†	596.0	26.8	0.0234	ug/L	0.0234	ppb	21:52:08
3	Mo 202.031†	36.7	7.9	0.4215	ug/L	0.4215	ppb	21:52:08
3	Ni 231.604†	105.8	-24.8	-0.4865	ug/L	-0.4865	ppb	21:52:08
3	P 214.914†	272.3	10.6	4.7081	ug/L	4.7081	ppb	21:52:08
3	Pb 220.353†	-82.0	-7.5	-0.7002	ug/L	-0.7002	ppb	21:52:08
3	S 181.975 Axial†	56.1	-3.3	-3.5446	ug/L	-3.5446	ppb	21:52:08
3	Sb 206.836†	43.6	9.6	2.5399	ug/L	2.5399	ppb	21:52:08
3	Se 196.026†	-33.2	-12.2	-5.3898	ug/L	-5.3898	ppb	21:52:08
3	Si 251.611†	651.9	102.4	2.5795	ug/L	2.5795	ppb	21:52:08
3	Sn 189.927†	3.0	7.3	0.9696	ug/L	0.9696	ppb	21:52:08
3	Ti 334.940†	-1272.6	-28.0	-0.0394	ug/L	-0.0394	ppb	21:51:48
3	Tl 190.801†	-53.0	-9.4	-2.2674	ug/L	-2.2674	ppb	21:52:08
3	U 409.014†	-2674.4	66.3	1.7135	ug/L	1.7135	ppb	21:51:43
3	V 292.402†	-1650.3	-62.3	-0.3451	ug/L	-0.3451	ppb	21:51:48
3	Zn 213.857†	906.9	32.6	0.2365	ug/L	0.2365	ppb	21:52:08
3	SiO2†	687.8	97.4	5.2451	ug/L	5.2451	ppb	21:52:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026499.8	98.751	%	0.3703				0.37%
Sc Radial	4869.8	99.2	%	3.00				3.03%
Y 371.029	873021.7	98.706	%	0.3877				0.39%
Y RADIAL	5573.4	98.69	%	3.284				3.33%
Ag 328.068†	-80.9	-0.3224	ug/L	0.16218	-0.3224	ppb	0.16218	50.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.0	1.2729	ug/L	15.30100	1.2729	ppb	15.30100	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	0.3877	ug/L	1.80737	0.3877	ppb	1.80737	466.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.1	0.3618	ug/L	0.41666	0.3618	ppb	0.41666	115.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0129	ug/L	0.03943	-0.0129	ppb	0.03943	306.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-41.9	-0.0131	ug/L	0.01657	-0.0131	ppb	0.01657	126.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.7	1.1736	ug/L	1.06233	1.1736	ppb	1.06233	90.52%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 2.3      0.0200 ug/L       0.08538      0.0200 ppb        0.08538 427.65%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.0865 ug/L       0.24890     -0.0865 ppb        0.24890 287.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                15.2      0.1358 ug/L       0.08694      0.1358 ppb        0.08694  64.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                79.8      0.2131 ug/L       0.22489      0.2131 ppb        0.22489 105.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.5441 ug/L      22.85815      0.5441 ppb       22.85815 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          68.2      12.422 ug/L       22.3536      12.422 ppb        22.3536 179.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.7      74.535 ug/L      101.2033      74.535 ppb       101.2033 135.78%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                39.1      0.0357 ug/L       0.01383      0.0357 ppb        0.01383  38.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.7      0.5162 ug/L       0.13051      0.5162 ppb        0.13051  25.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         83.7      23.491 ug/L        9.6740      23.491 ppb         9.6740  41.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -8.9     -0.1737 ug/L       0.50791     -0.1737 ppb        0.50791 292.40%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.7      7.0166 ug/L       2.76756      7.0166 ppb        2.76756  39.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -5.6     -0.5287 ug/L       0.18076     -0.5287 ppb        0.18076  34.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.1     -0.0928 ug/L       3.11728     -0.0928 ppb        3.11728 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                10.1      2.6802 ug/L       1.34240      2.6802 ppb        1.34240  50.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.3     -3.2347 ug/L       1.91851     -3.2347 ppb        1.91851  59.31%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.1      2.6528 ug/L       0.17767      2.6528 ppb        0.17767   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.7      1.0199 ug/L       0.13804      1.0199 ppb        0.13804  13.53%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.9     -0.0049 ug/L       0.11036     -0.0049 ppb        0.11036 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.3     -0.0213 ug/L       0.05410     -0.0213 ppb        0.05410 254.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -7.3     -1.7757 ug/L       0.43279     -1.7757 ppb        0.43279  24.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 22.7      0.5867 ug/L       1.04917      0.5867 ppb        1.04917 178.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -57.9     -0.3214 ug/L       0.27724     -0.3214 ppb        0.27724  86.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                34.0      0.2484 ug/L       0.05318      0.2484 ppb        0.05318  21.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     105.2      5.6828 ug/L       1.01143      5.6828 ppb        1.01143  17.80%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 23:14:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4714.7	4714.7	96.0	%			23:15:56
1	Y RADIAL	5400.3	5400.3	95.63	%			23:15:56
1	Al 396.153Radial†	7509.6	7863.9	5171.0	ug/L	5171.0	ppb	23:15:56
1	Ca 317.933Radial†	2790.4	2887.9	5113.2	ug/L	5113.2	ppb	23:16:16
1	Fe 238.204 Radial†	410.7	416.7	5053.8	ug/L	5053.8	ppb	23:16:16
1	K 766.490 Radial†	28936.2	27563.4	5015.0	ug/L	5015.0	ppb	23:15:56
1	Mg 279.077 IEC†	112.0	114.1	5112.4	ug/L	5112.4	ppb	23:16:16
1	Na 589.592 Radial†	32821.6	35458.9	9946.2	ug/L	9946.2	ppb	23:15:56
1	Sr 421.552†	92586.5	96423.0	505.83	ug/L	505.83	ppb	23:15:56
1	Sc 361.383	1017505.4	1017505.4	97.886	%			23:17:16
1	Y 371.029	854009.4	854009.4	96.556	%			23:17:16
1	Ag 328.068†	125397.8	127632.4	509.01	ug/L	509.01	ppb	23:17:16
1	As 188.979†	1550.0	1620.1	509.24	ug/L	509.24	ppb	23:17:36
1	B 249.677†	25388.6	26403.1	497.03	ug/L	497.03	ppb	23:17:16
1	Ba 233.527†	77356.9	79027.9	509.02	ug/L	509.02	ppb	23:17:16
1	Be 313.107†	1585415.9	1624534.7	507.52	ug/L	507.52	ppb	23:17:16
1	Cd 226.502†	56729.9	58190.9	507.29	ug/L	507.29	ppb	23:17:16
1	Co 228.616†	29804.8	30534.9	503.13	ug/L	503.13	ppb	23:17:36
1	Cr 267.716†	55236.9	56342.3	507.00	ug/L	507.00	ppb	23:17:16
1	Cu 324.752†	195572.8	190859.6	509.95	ug/L	509.95	ppb	23:17:16
1	Mn 257.610†	528787.2	539632.3	511.41	ug/L	511.41	ppb	23:17:16
1	Mo 202.031†	9376.8	9550.1	507.15	ug/L	507.15	ppb	23:17:36
1	Ni 231.604†	25212.9	25625.6	501.78	ug/L	501.78	ppb	23:17:36
1	P 214.914†	5821.7	5682.3	2464.6	ug/L	2464.6	ppb	23:17:36
1	Pb 220.353†	5232.7	5421.3	510.50	ug/L	510.50	ppb	23:17:36
1	S 181.975 Axial†	966.0	926.8	997.47	ug/L	997.47	ppb	23:17:36
1	Sb 206.836†	1917.3	1924.1	514.51	ug/L	514.51	ppb	23:17:36
1	Se 196.026†	1094.7	1139.7	524.74	ug/L	524.74	ppb	23:17:36
1	Si 251.611†	98033.7	99593.5	2517.3	ug/L	2517.3	ppb	23:17:16
1	Sn 189.927†	3704.6	3788.9	501.72	ug/L	501.72	ppb	23:17:36
1	Ti 334.940†	359437.1	368461.3	508.08	ug/L	508.08	ppb	23:17:16
1	Tl 190.801†	1999.1	2086.6	507.89	ug/L	507.89	ppb	23:17:36
1	U 409.014†	16020.8	19140.8	493.26	ug/L	493.26	ppb	23:17:16
1	V 292.402†	84856.9	88298.3	512.27	ug/L	512.27	ppb	23:17:16
1	Zn 213.857†	68408.6	69000.6	502.56	ug/L	502.56	ppb	23:17:16
1	SiO2†	97937.3	99453.7	5379.1	ug/L	5379.1	ppb	23:18:36
2	Sc Radial	4693.4	4693.4	95.6	%			23:16:22
2	Y RADIAL	5372.6	5372.6	95.14	%			23:16:22
2	Al 396.153Radial†	7426.4	7812.5	5137.0	ug/L	5137.0	ppb	23:16:22
2	Ca 317.933Radial†	2765.6	2875.2	5090.7	ug/L	5090.7	ppb	23:16:42
2	Fe 238.204 Radial†	408.7	416.5	5051.8	ug/L	5051.8	ppb	23:16:42
2	K 766.490 Radial†	28682.5	27434.9	4991.6	ug/L	4991.6	ppb	23:16:22
2	Mg 279.077 IEC†	110.2	112.8	5053.5	ug/L	5053.5	ppb	23:16:42
2	Na 589.592 Radial†	32168.8	34931.3	9798.2	ug/L	9798.2	ppb	23:16:22
2	Sr 421.552†	91350.1	95567.6	501.34	ug/L	501.34	ppb	23:16:22
2	Sc 361.383	1017546.5	1017546.5	97.890	%			23:17:43
2	Y 371.029	853335.7	853335.7	96.480	%			23:17:43
2	Ag 328.068†	125443.7	127674.0	509.17	ug/L	509.17	ppb	23:17:43
2	As 188.979†	1549.8	1619.8	509.14	ug/L	509.14	ppb	23:18:03
2	B 249.677†	25451.0	26465.8	498.22	ug/L	498.22	ppb	23:17:43
2	Ba 233.527†	77553.5	79225.5	510.29	ug/L	510.29	ppb	23:17:43
2	Be 313.107†	1585661.2	1624719.8	507.58	ug/L	507.58	ppb	23:17:43
2	Cd 226.502†	56912.5	58375.1	508.90	ug/L	508.90	ppb	23:17:43
2	Co 228.616†	29868.0	30598.2	504.17	ug/L	504.17	ppb	23:18:03
2	Cr 267.716†	55200.9	56303.2	506.64	ug/L	506.64	ppb	23:17:43
2	Cu 324.752†	195984.2	191271.9	511.05	ug/L	511.05	ppb	23:17:43
2	Mn 257.610†	529531.6	540370.9	512.11	ug/L	512.11	ppb	23:17:43
2	Mo 202.031†	9388.3	9561.5	507.76	ug/L	507.76	ppb	23:18:03
2	Ni 231.604†	25250.9	25663.4	502.52	ug/L	502.52	ppb	23:18:03

2	P 214.914†	5824.6	5685.0	2465.7 ug/L	2465.7 ppb	23:18:03
2	Pb 220.353†	5245.7	5434.3	511.72 ug/L	511.72 ppb	23:18:03
2	S 181.975 Axial†	973.1	933.9	1005.2 ug/L	1005.2 ppb	23:18:03
2	Sb 206.836†	1933.9	1941.0	519.07 ug/L	519.07 ppb	23:18:03
2	Se 196.026†	1094.7	1139.7	524.72 ug/L	524.72 ppb	23:18:03
2	Si 251.611†	98139.4	99697.5	2519.9 ug/L	2519.9 ppb	23:17:43
2	Sn 189.927†	3740.9	3825.9	506.60 ug/L	506.60 ppb	23:18:03
2	Ti 334.940†	360172.5	369197.8	509.09 ug/L	509.09 ppb	23:17:43
2	Tl 190.801†	1998.4	2085.7	507.70 ug/L	507.70 ppb	23:18:03
2	U 409.014†	16275.1	19400.0	499.96 ug/L	499.96 ppb	23:17:43
2	V 292.402†	84923.8	88363.1	512.66 ug/L	512.66 ppb	23:17:43
2	Zn 213.857†	68522.3	69114.0	503.39 ug/L	503.39 ppb	23:17:43
2	SiO2†	98851.1	100383.1	5429.5 ug/L	5429.5 ppb	23:18:41
3	Sc Radial	4677.3	4677.3	95.3 %		23:16:47
3	Y RADIAL	5333.1	5333.1	94.44 %		23:16:47
3	Al 396.153Radial†	7346.1	7754.9	5099.0 ug/L	5099.0 ppb	23:16:47
3	Ca 317.933Radial†	2770.2	2890.0	5116.9 ug/L	5116.9 ppb	23:17:07
3	Fe 238.204 Radial†	412.2	421.7	5113.9 ug/L	5113.9 ppb	23:17:07
3	K 766.490 Radial†	28487.4	27333.3	4973.1 ug/L	4973.1 ppb	23:16:47
3	Mg 279.077 IEC†	114.7	117.9	5283.2 ug/L	5283.2 ppb	23:17:07
3	Na 589.592 Radial†	32021.9	34893.0	9787.5 ug/L	9787.5 ppb	23:16:47
3	Sr 421.552†	90635.2	95146.1	499.13 ug/L	499.13 ppb	23:16:47
3	Sc 361.383	1017820.0	1017820.0	97.916 %		23:18:10
3	Y 371.029	852862.6	852862.6	96.427 %		23:18:10
3	Ag 328.068†	125601.8	127801.1	509.70 ug/L	509.70 ppb	23:18:10
3	As 188.979†	1539.9	1609.3	505.87 ug/L	505.87 ppb	23:18:31
3	B 249.677†	25599.7	26610.6	500.95 ug/L	500.95 ppb	23:18:10
3	Ba 233.527†	77742.2	79397.0	511.39 ug/L	511.39 ppb	23:18:10
3	Be 313.107†	1585449.3	1624068.1	507.37 ug/L	507.37 ppb	23:18:10
3	Cd 226.502†	57090.7	58541.4	510.34 ug/L	510.34 ppb	23:18:10
3	Co 228.616†	29866.0	30588.0	504.00 ug/L	504.00 ppb	23:18:31
3	Cr 267.716†	55247.6	56335.8	506.94 ug/L	506.94 ppb	23:18:10
3	Cu 324.752†	195576.6	190801.8	509.80 ug/L	509.80 ppb	23:18:10
3	Mn 257.610†	530410.5	541123.1	512.83 ug/L	512.83 ppb	23:18:10
3	Mo 202.031†	9367.5	9537.7	506.50 ug/L	506.50 ppb	23:18:31
3	Ni 231.604†	25262.4	25668.1	502.61 ug/L	502.61 ppb	23:18:31
3	P 214.914†	5819.9	5678.7	2463.0 ug/L	2463.0 ppb	23:18:31
3	Pb 220.353†	5224.5	5411.2	509.53 ug/L	509.53 ppb	23:18:31
3	S 181.975 Axial†	979.3	940.1	1011.8 ug/L	1011.8 ppb	23:18:31
3	Sb 206.836†	1916.7	1922.8	514.22 ug/L	514.22 ppb	23:18:31
3	Se 196.026†	1092.7	1137.4	523.93 ug/L	523.93 ppb	23:18:31
3	Si 251.611†	98151.4	99682.8	2519.6 ug/L	2519.6 ppb	23:18:10
3	Sn 189.927†	3724.7	3808.3	504.29 ug/L	504.29 ppb	23:18:31
3	Ti 334.940†	360231.9	369159.5	509.04 ug/L	509.04 ppb	23:18:10
3	Tl 190.801†	2003.3	2090.2	508.78 ug/L	508.78 ppb	23:18:31
3	U 409.014†	15900.2	19012.6	489.94 ug/L	489.94 ppb	23:18:10
3	V 292.402†	84932.2	88348.5	512.54 ug/L	512.54 ppb	23:18:10
3	Zn 213.857†	68684.2	69260.5	504.46 ug/L	504.46 ppb	23:18:10
3	SiO2†	97977.4	99463.8	5379.6 ug/L	5379.6 ppb	23:18:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1017624.0	97.897	%	0.0165				0.02%
Sc Radial	4695.1	95.6	%	0.38				0.40%
Y 371.029	853402.5	96.488	%	0.0652				0.07%
Y RADIAL	5368.7	95.07	%	0.598				0.63%
Ag 328.068†	127702.5	509.29	ug/L	0.362	509.29	ppb	0.362	0.07%
QC value within limits for Ag 328.068 Recovery = 101.86%								
Al 396.153Radial†	7810.4	5135.7	ug/L	35.99	5135.7	ppb	35.99	0.70%
QC value within limits for Al 396.153Radial Recovery = 102.71%								
As 188.979†	1616.4	508.08	ug/L	1.916	508.08	ppb	1.916	0.38%
QC value within limits for As 188.979 Recovery = 101.62%								
B 249.677†	26493.2	498.73	ug/L	2.007	498.73	ppb	2.007	0.40%
QC value within limits for B 249.677 Recovery = 99.75%								
Ba 233.527†	79216.8	510.23	ug/L	1.188	510.23	ppb	1.188	0.23%
QC value within limits for Ba 233.527 Recovery = 102.05%								
Be 313.107†	1624440.9	507.49	ug/L	0.104	507.49	ppb	0.104	0.02%
QC value within limits for Be 313.107 Recovery = 101.50%								
Ca 317.933Radial†	2884.4	5106.9	ug/L	14.16	5106.9	ppb	14.16	0.28%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.14%
Cd 226.502†            58369.2      508.84 ug/L         1.526      508.84 ppb          1.526   0.30%
   QC value within limits for Cd 226.502  Recovery = 101.77%
Co 228.616†            30573.7      503.77 ug/L         0.559      503.77 ppb          0.559   0.11%
   QC value within limits for Co 228.616  Recovery = 100.75%
Cr 267.716†            56327.1      506.86 ug/L         0.190      506.86 ppb          0.190   0.04%
   QC value within limits for Cr 267.716  Recovery = 101.37%
Cu 324.752†           190977.8      510.27 ug/L         0.684      510.27 ppb          0.684   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5073.2 ug/L        35.32      5073.2 ppb         35.32   0.70%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27443.9      4993.2 ug/L        20.99      4993.2 ppb         20.99   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 99.86%
Mg 279.077 IEC†          115.0      5149.7 ug/L       119.29      5149.7 ppb        119.29   2.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.99%
Mn 257.610†           540375.4      512.12 ug/L         0.707      512.12 ppb          0.707   0.14%
   QC value within limits for Mn 257.610  Recovery = 102.42%
Mo 202.031†             9549.7      507.14 ug/L         0.630      507.14 ppb          0.630   0.12%
   QC value within limits for Mo 202.031  Recovery = 101.43%
Na 589.592 Radial†     35094.4      9844.0 ug/L        88.71      9844.0 ppb         88.71   0.90%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25652.4      502.30 ug/L         0.456      502.30 ppb          0.456   0.09%
   QC value within limits for Ni 231.604  Recovery = 100.46%
P 214.914†              5682.0      2464.4 ug/L         1.38      2464.4 ppb          1.38   0.06%
   QC value within limits for P 214.914  Recovery = 98.58%
Pb 220.353†             5422.3      510.58 ug/L         1.096      510.58 ppb          1.096   0.21%
   QC value within limits for Pb 220.353  Recovery = 102.12%
S 181.975 Axial†         933.6      1004.8 ug/L         7.18      1004.8 ppb          7.18   0.71%
   QC value within limits for S 181.975 Axial  Recovery = 100.48%
Sb 206.836†             1929.3      515.93 ug/L         2.720      515.93 ppb          2.720   0.53%
   QC value within limits for Sb 206.836  Recovery = 103.19%
Se 196.026†             1138.9      524.46 ug/L         0.464      524.46 ppb          0.464   0.09%
   QC value within limits for Se 196.026  Recovery = 104.89%
Si 251.611†            99657.9      2518.9 ug/L         1.43      2518.9 ppb          1.43   0.06%
   QC value within limits for Si 251.611  Recovery = 100.76%
Sn 189.927†             3807.7      504.21 ug/L         2.441      504.21 ppb          2.441   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.84%
Sr 421.552†            95712.2      502.10 ug/L         3.413      502.10 ppb          3.413   0.68%
   QC value within limits for Sr 421.552  Recovery = 100.42%
Ti 334.940†           368939.6      508.74 ug/L         0.571      508.74 ppb          0.571   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.75%
Tl 190.801†             2087.5      508.12 ug/L         0.578      508.12 ppb          0.578   0.11%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             19184.5      494.38 ug/L         5.106      494.38 ppb          5.106   1.03%
   QC value within limits for U 409.014  Recovery = 98.88%
V 292.402†             88336.6      512.49 ug/L         0.199      512.49 ppb          0.199   0.04%
   QC value within limits for V 292.402  Recovery = 102.50%
Zn 213.857†            69125.0      503.47 ug/L         0.949      503.47 ppb          0.949   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.69%
SiO2†                  99766.9      5396.1 ug/L        28.97      5396.1 ppb         28.97   0.54%
   QC value within limits for SiO2  Recovery = 100.91%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: PQL
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 12/4/2009 23:20:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4801.8	4801.8	97.8	%			23:22:48
1	Y RADIAL	5499.8	5499.8	97.39	%			23:22:48
1	Al 396.153Radial†	270.5	320.3	211.10	ug/L	211.10	ppb	23:22:48
1	Ca 317.933Radial†	131.3	116.4	206.03	ug/L	206.03	ppb	23:23:08
1	Fe 238.204 Radial†	20.1	9.5	115.14	ug/L	115.14	ppb	23:23:08
1	K 766.490 Radial†	3379.3	885.8	161.20	ug/L	161.20	ppb	23:22:48
1	Mg 279.077 IEC†	5.2	2.8	124.00	ug/L	124.00	ppb	23:23:08
1	Na 589.592 Radial†	-68.3	1210.1	339.44	ug/L	339.44	ppb	23:22:48
1	Sr 421.552†	928.6	956.8	5.0181	ug/L	5.0181	ppb	23:22:48
1	Sc 361.383	1023931.8	1023931.8	98.504	%			23:24:05
1	Y 371.029	871465.8	871465.8	98.530	%			23:24:05
1	Ag 328.068†	1661.9	1213.1	4.8160	ug/L	4.8160	ppb	23:24:10
1	As 188.979†	52.0	89.4	27.879	ug/L	27.879	ppb	23:24:30
1	B 249.677†	2129.5	2628.0	49.637	ug/L	49.637	ppb	23:24:10
1	Ba 233.527†	781.8	793.7	5.1145	ug/L	5.1145	ppb	23:24:30
1	Be 313.107†	10804.8	15842.9	4.9496	ug/L	4.9496	ppb	23:24:10
1	Cd 226.502†	336.6	577.4	5.0270	ug/L	5.0270	ppb	23:24:30
1	Co 228.616†	207.2	296.7	4.9008	ug/L	4.9008	ppb	23:24:30
1	Cr 267.716†	658.1	580.4	5.2076	ug/L	5.2076	ppb	23:24:30
1	Cu 324.752†	12741.3	3997.3	10.681	ug/L	10.681	ppb	23:24:10
1	Mn 257.610†	11629.9	11229.9	10.643	ug/L	10.643	ppb	23:24:10
1	Mo 202.031†	216.8	190.8	10.135	ug/L	10.135	ppb	23:24:30
1	Ni 231.604†	402.3	276.4	5.4134	ug/L	5.4134	ppb	23:24:30
1	P 214.914†	605.9	349.9	154.96	ug/L	154.96	ppb	23:24:30
1	Pb 220.353†	32.3	108.3	10.223	ug/L	10.223	ppb	23:24:30
1	S 181.975 Axial†	151.9	94.2	101.40	ug/L	101.40	ppb	23:24:30
1	Sb 206.836†	84.6	51.2	13.806	ug/L	13.806	ppb	23:24:30
1	Se 196.026†	39.0	61.0	27.463	ug/L	27.463	ppb	23:24:30
1	Si 251.611†	4564.1	4075.8	103.24	ug/L	103.24	ppb	23:24:10
1	Sn 189.927†	85.6	91.2	12.083	ug/L	12.083	ppb	23:24:30
1	Ti 334.940†	2376.2	3672.8	5.0511	ug/L	5.0511	ppb	23:24:10
1	Tl 190.801†	32.2	76.9	18.678	ug/L	18.678	ppb	23:24:30
1	U 409.014†	-698.3	2065.1	53.367	ug/L	53.367	ppb	23:24:05
1	V 292.402†	-731.4	866.0	5.1837	ug/L	5.1837	ppb	23:24:10
1	Zn 213.857†	2234.6	1383.0	10.100	ug/L	10.100	ppb	23:24:30
1	SiO2†	4486.3	3955.4	214.39	ug/L	214.39	ppb	23:25:36
2	Sc Radial	4744.2	4744.2	96.6	%			23:23:14
2	Y RADIAL	5463.2	5463.2	96.74	%			23:23:14
2	Al 396.153Radial†	267.8	321.0	211.52	ug/L	211.52	ppb	23:23:14
2	Ca 317.933Radial†	129.5	116.1	205.64	ug/L	205.64	ppb	23:23:34
2	Fe 238.204 Radial†	17.0	6.6	80.295	ug/L	80.295	ppb	23:23:34
2	K 766.490 Radial†	3455.4	1006.4	183.19	ug/L	183.19	ppb	23:23:14
2	Mg 279.077 IEC†	7.5	5.3	235.23	ug/L	235.23	ppb	23:23:34
2	Na 589.592 Radial†	-62.1	1215.7	340.99	ug/L	340.99	ppb	23:23:14
2	Sr 421.552†	907.6	946.7	4.9647	ug/L	4.9647	ppb	23:23:14
2	Sc 361.383	1030987.4	1030987.4	99.183	%			23:24:36
2	Y 371.029	877089.0	877089.0	99.166	%			23:24:36
2	Ag 328.068†	1678.5	1218.3	4.8247	ug/L	4.8247	ppb	23:24:41
2	As 188.979†	58.8	95.9	29.900	ug/L	29.900	ppb	23:25:01
2	B 249.677†	2110.4	2593.8	48.997	ug/L	48.997	ppb	23:24:41
2	Ba 233.527†	784.1	790.5	5.0923	ug/L	5.0923	ppb	23:25:01
2	Be 313.107†	10954.8	15919.0	4.9732	ug/L	4.9732	ppb	23:24:41
2	Cd 226.502†	356.1	594.7	5.1813	ug/L	5.1813	ppb	23:25:01
2	Co 228.616†	196.6	284.6	4.7014	ug/L	4.7014	ppb	23:25:01
2	Cr 267.716†	644.4	561.9	5.0411	ug/L	5.0411	ppb	23:25:01
2	Cu 324.752†	12830.8	3999.1	10.684	ug/L	10.684	ppb	23:24:41
2	Mn 257.610†	11652.0	11171.4	10.582	ug/L	10.582	ppb	23:24:41
2	Mo 202.031†	213.6	186.1	9.8810	ug/L	9.8810	ppb	23:25:01
2	Ni 231.604†	392.4	263.7	5.1633	ug/L	5.1633	ppb	23:25:01

2	P 214.914†	594.8	334.6	148.10 ug/L	148.10 ppb	23:25:01
2	Pb 220.353†	50.6	126.5	11.935 ug/L	11.935 ppb	23:25:01
2	S 181.975 Axial†	148.5	89.6	96.533 ug/L	96.533 ppb	23:25:01
2	Sb 206.836†	88.4	54.5	14.620 ug/L	14.620 ppb	23:25:01
2	Se 196.026†	36.5	58.2	26.109 ug/L	26.109 ppb	23:25:01
2	Si 251.611†	4523.6	4003.2	101.40 ug/L	101.40 ppb	23:24:41
2	Sn 189.927†	68.8	73.7	9.7759 ug/L	9.7759 ppb	23:25:01
2	Ti 334.940†	2335.4	3615.1	4.9717 ug/L	4.9717 ppb	23:24:41
2	Tl 190.801†	36.6	81.1	19.693 ug/L	19.693 ppb	23:25:01
2	U 409.014†	-709.8	2058.3	53.196 ug/L	53.196 ppb	23:24:36
2	V 292.402†	-772.1	830.1	4.9819 ug/L	4.9819 ppb	23:24:41
2	Zn 213.857†	2255.4	1388.4	10.141 ug/L	10.141 ppb	23:25:01
2	SiO2†	4532.3	3970.6	215.23 ug/L	215.23 ppb	23:25:41
3	Sc Radial	4849.7	4849.7	98.8 %		23:23:39
3	Y RADIAL	5571.3	5571.3	98.66 %		23:23:39
3	Al 396.153Radial†	281.1	328.3	216.34 ug/L	216.34 ppb	23:23:39
3	Ca 317.933Radial†	134.9	118.7	210.17 ug/L	210.17 ppb	23:23:59
3	Fe 238.204 Radial†	21.1	10.3	125.08 ug/L	125.08 ppb	23:23:59
3	K 766.490 Radial†	3411.6	884.4	160.94 ug/L	160.94 ppb	23:23:39
3	Mg 279.077 IEC†	9.9	7.5	335.60 ug/L	335.60 ppb	23:23:59
3	Na 589.592 Radial†	-36.1	1243.4	348.78 ug/L	348.78 ppb	23:23:39
3	Sr 421.552†	917.9	936.7	4.9123 ug/L	4.9123 ppb	23:23:39
3	Sc 361.383	1021503.5	1021503.5	98.270 %		23:25:06
3	Y 371.029	868276.8	868276.8	98.169 %		23:25:06
3	Ag 328.068†	1705.9	1261.9	5.0129 ug/L	5.0129 ppb	23:25:11
3	As 188.979†	38.9	76.2	23.756 ug/L	23.756 ppb	23:25:31
3	B 249.677†	2201.6	2706.4	51.117 ug/L	51.117 ppb	23:25:11
3	Ba 233.527†	766.6	780.1	5.0267 ug/L	5.0267 ppb	23:25:31
3	Be 313.107†	10958.3	16025.2	5.0064 ug/L	5.0064 ppb	23:25:11
3	Cd 226.502†	335.2	576.7	5.0206 ug/L	5.0206 ppb	23:25:31
3	Co 228.616†	223.3	313.6	5.1806 ug/L	5.1806 ppb	23:25:31
3	Cr 267.716†	653.0	576.7	5.1751 ug/L	5.1751 ppb	23:25:31
3	Cu 324.752†	12833.0	4121.4	11.013 ug/L	11.013 ppb	23:25:11
3	Mn 257.610†	11731.4	11361.2	10.765 ug/L	10.765 ppb	23:25:11
3	Mo 202.031†	224.0	198.7	10.554 ug/L	10.554 ppb	23:25:31
3	Ni 231.604†	399.0	274.0	5.3662 ug/L	5.3662 ppb	23:25:31
3	P 214.914†	595.7	341.1	150.91 ug/L	150.91 ppb	23:25:31
3	Pb 220.353†	7.8	83.5	7.8955 ug/L	7.8955 ppb	23:25:31
3	S 181.975 Axial†	145.6	88.1	94.834 ug/L	94.834 ppb	23:25:31
3	Sb 206.836†	93.6	60.6	16.266 ug/L	16.266 ppb	23:25:31
3	Se 196.026†	42.8	64.9	29.231 ug/L	29.231 ppb	23:25:31
3	Si 251.611†	4592.6	4115.8	104.26 ug/L	104.26 ppb	23:25:11
3	Sn 189.927†	77.3	83.0	11.003 ug/L	11.003 ppb	23:25:31
3	Ti 334.940†	2339.1	3640.7	5.0081 ug/L	5.0081 ppb	23:25:11
3	Tl 190.801†	44.6	89.7	21.755 ug/L	21.755 ppb	23:25:31
3	U 409.014†	-784.6	1975.6	51.051 ug/L	51.051 ppb	23:25:06
3	V 292.402†	-802.4	791.9	4.7645 ug/L	4.7645 ppb	23:25:11
3	Zn 213.857†	2251.2	1405.2	10.255 ug/L	10.255 ppb	23:25:31
3	SiO2†	4519.1	3999.6	216.79 ug/L	216.79 ppb	23:25:46

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025474.2	98.652	%	0.4739				0.48%
Sc Radial	4798.6	97.7	%	1.08				1.10%
Y 371.029	872277.2	98.622	%	0.5045				0.51%
Y RADIAL	5511.4	97.60	%	0.974				1.00%
Ag 328.068†	1231.1	4.8845	ug/L	0.11126	4.8845	ppb	0.11126	2.28%
QC value within limits for Ag 328.068 Recovery = 97.69%								
Al 396.153Radial†	323.2	212.99	ug/L	2.915	212.99	ppb	2.915	1.37%
QC value within limits for Al 396.153Radial Recovery = 106.49%								
As 188.979†	87.2	27.178	ug/L	3.1313	27.178	ppb	3.1313	11.52%
QC value within limits for As 188.979 Recovery = 90.59%								
B 249.677†	2642.7	49.917	ug/L	1.0875	49.917	ppb	1.0875	2.18%
QC value within limits for B 249.677 Recovery = 99.83%								
Ba 233.527†	788.1	5.0778	ug/L	0.04568	5.0778	ppb	0.04568	0.90%
QC value within limits for Ba 233.527 Recovery = 101.56%								
Be 313.107†	15929.0	4.9764	ug/L	0.02851	4.9764	ppb	0.02851	0.57%
QC value within limits for Be 313.107 Recovery = 99.53%								
Ca 317.933Radial†	117.1	207.28	ug/L	2.511	207.28	ppb	2.511	1.21%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.64%
Cd 226.502†              582.9      5.0763 ug/L       0.09099      5.0763 ppb        0.09099   1.79%
   QC value within limits for Cd 226.502  Recovery = 101.53%
Co 228.616†              298.3      4.9276 ug/L       0.24071      4.9276 ppb        0.24071   4.88%
   QC value within limits for Co 228.616  Recovery = 98.55%
Cr 267.716†              573.0      5.1413 ug/L       0.08828      5.1413 ppb        0.08828   1.72%
   QC value within limits for Cr 267.716  Recovery = 102.83%
Cu 324.752†             4039.3      10.792 ug/L        0.1908      10.792 ppb         0.1908   1.77%
   QC value within limits for Cu 324.752  Recovery = 107.92%
Fe 238.204 Radial†         8.8      106.84 ug/L        23.519      106.84 ppb         23.519  22.01%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.84%
K 766.490 Radial†        925.5      168.44 ug/L        12.773      168.44 ppb         12.773   7.58%
   QC value within limits for K 766.490 Radial  Recovery = 112.29%
Mg 279.077 IEC†            5.2      231.61 ug/L       105.846      231.61 ppb        105.846  45.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 77.20%
Mn 257.610†            11254.1      10.663 ug/L        0.0928      10.663 ppb         0.0928   0.87%
   QC value within limits for Mn 257.610  Recovery = 106.63%
Mo 202.031†              191.9      10.190 ug/L        0.3397      10.190 ppb         0.3397   3.33%
   QC value within limits for Mo 202.031  Recovery = 101.90%
Na 589.592 Radial†      1223.1      343.07 ug/L         5.006      343.07 ppb          5.006   1.46%
   QC value within limits for Na 589.592 Radial  Recovery = 114.36%
Ni 231.604†              271.4      5.3143 ug/L       0.13286      5.3143 ppb        0.13286   2.50%
   QC value within limits for Ni 231.604  Recovery = 106.29%
P 214.914†               341.9      151.33 ug/L         3.451      151.33 ppb          3.451   2.28%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              106.1      10.018 ug/L        2.0275      10.018 ppb         2.0275  20.24%
   QC value within limits for Pb 220.353  Recovery = 100.18%
S 181.975 Axial†          90.6      97.588 ug/L        3.4066      97.588 ppb         3.4066   3.49%
   QC value within limits for S 181.975 Axial  Recovery = 97.59%
Sb 206.836†               55.4      14.897 ug/L        1.2535      14.897 ppb         1.2535   8.41%
   QC value greater than the upper limit for Sb 206.836  Recovery = 148.97%
Se 196.026†               61.4      27.601 ug/L        1.5654      27.601 ppb         1.5654   5.67%
   QC value within limits for Se 196.026  Recovery = 92.00%
Si 251.611†             4064.9      102.97 ug/L         1.446      102.97 ppb          1.446   1.40%
   QC value within limits for Si 251.611  Recovery = 102.97%
Sn 189.927†               82.6      10.954 ug/L        1.1545      10.954 ppb         1.1545  10.54%
   QC value within limits for Sn 189.927  Recovery = 109.54%
Sr 421.552†              946.7      4.9650 ug/L       0.05292      4.9650 ppb        0.05292   1.07%
   QC value within limits for Sr 421.552  Recovery = 99.30%
Ti 334.940†             3642.8      5.0103 ug/L       0.03975      5.0103 ppb        0.03975   0.79%
   QC value within limits for Ti 334.940  Recovery = 100.21%
Tl 190.801†               82.6      20.042 ug/L        1.5683      20.042 ppb         1.5683   7.83%
   QC value within limits for Tl 190.801  Recovery = 100.21%
U 409.014†              2033.0      52.538 ug/L        1.2906      52.538 ppb         1.2906   2.46%
   QC value within limits for U 409.014  Recovery = 105.08%
V 292.402†               829.3      4.9767 ug/L       0.20963      4.9767 ppb        0.20963   4.21%
   QC value within limits for V 292.402  Recovery = 99.53%
Zn 213.857†             1392.2      10.165 ug/L        0.0804      10.165 ppb         0.0804   0.79%
   QC value within limits for Zn 213.857  Recovery = 101.65%
SiO2†                   3975.2      215.47 ug/L         1.216      215.47 ppb          1.216   0.56%
   QC value within limits for SiO2  Recovery = 101.16%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 23:27:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4871.5	4871.5	99.2	%			23:29:49
1	Y RADIAL	5607.3	5607.3	99.29	%			23:29:49
1	Al 396.153Radial†	-52.1	-8.7	-5.7846	ug/L	-5.7846	ppb	23:29:49
1	Ca 317.933Radial†	22.9	5.2	9.2806	ug/L	9.2806	ppb	23:30:09
1	Fe 238.204 Radial†	9.8	-1.2	-13.977	ug/L	-13.977	ppb	23:30:09
1	K 766.490 Radial†	2510.6	-39.2	-7.1844	ug/L	-7.1844	ppb	23:29:49
1	Mg 279.077 IEC†	5.7	3.3	146.35	ug/L	146.35	ppb	23:30:09
1	Na 589.592 Radial†	-1046.6	225.2	63.160	ug/L	63.160	ppb	23:29:49
1	Sr 421.552†	2.2	9.7	0.0506	ug/L	0.0506	ppb	23:29:49
1	Sc 361.383	1013672.5	1013672.5	97.517	%			23:31:05
1	Y 371.029	862264.0	862264.0	97.490	%			23:31:05
1	Ag 328.068†	396.0	-68.0	-0.2713	ug/L	-0.2713	ppb	23:31:10
1	As 188.979†	-44.3	-8.8	-2.7519	ug/L	-2.7519	ppb	23:31:30
1	B 249.677†	-513.5	-60.5	-1.1410	ug/L	-1.1410	ppb	23:31:30
1	Ba 233.527†	-16.6	-17.0	-0.1105	ug/L	-0.1105	ppb	23:31:30
1	Be 313.107†	-4862.2	-112.1	-0.0351	ug/L	-0.0351	ppb	23:31:10
1	Cd 226.502†	-218.8	11.3	0.0998	ug/L	0.0998	ppb	23:31:30
1	Co 228.616†	-93.2	-9.3	-0.1511	ug/L	-0.1511	ppb	23:31:30
1	Cr 267.716†	105.4	20.3	0.1833	ug/L	0.1833	ppb	23:31:30
1	Cu 324.752†	8978.5	269.7	0.7194	ug/L	0.7194	ppb	23:31:10
1	Mn 257.610†	691.6	132.5	0.1213	ug/L	0.1213	ppb	23:31:30
1	Mo 202.031†	35.8	7.5	0.3978	ug/L	0.3978	ppb	23:31:30
1	Ni 231.604†	131.4	2.8	0.0542	ug/L	0.0542	ppb	23:31:30
1	P 214.914†	284.5	26.6	11.832	ug/L	11.832	ppb	23:31:30
1	Pb 220.353†	-90.8	-17.5	-1.6454	ug/L	-1.6454	ppb	23:31:30
1	S 181.975 Axial†	59.1	0.5	0.5268	ug/L	0.5268	ppb	23:31:30
1	Sb 206.836†	41.8	8.2	2.2020	ug/L	2.2020	ppb	23:31:30
1	Se 196.026†	-27.4	-6.8	-3.0462	ug/L	-3.0462	ppb	23:31:30
1	Si 251.611†	580.1	37.2	0.9342	ug/L	0.9342	ppb	23:31:30
1	Sn 189.927†	10.6	15.2	2.0176	ug/L	2.0176	ppb	23:31:30
1	Ti 334.940†	-1290.1	-62.5	-0.0839	ug/L	-0.0839	ppb	23:31:10
1	Tl 190.801†	-46.0	-2.9	-0.6933	ug/L	-0.6933	ppb	23:31:30
1	U 409.014†	-2869.4	-168.4	-4.3534	ug/L	-4.3534	ppb	23:31:05
1	V 292.402†	-1604.7	-37.0	-0.2094	ug/L	-0.2094	ppb	23:31:10
1	Zn 213.857†	935.4	73.7	0.5363	ug/L	0.5363	ppb	23:31:30
1	SiO2†	628.3	45.3	2.4370	ug/L	2.4370	ppb	23:32:36
2	Sc Radial	4835.2	4835.2	98.5	%			23:30:14
2	Y RADIAL	5566.2	5566.2	98.57	%			23:30:14
2	Al 396.153Radial†	-22.1	21.3	14.087	ug/L	14.087	ppb	23:30:14
2	Ca 317.933Radial†	27.4	9.9	17.604	ug/L	17.604	ppb	23:30:34
2	Fe 238.204 Radial†	10.0	-0.8	-9.9083	ug/L	-9.9083	ppb	23:30:34
2	K 766.490 Radial†	2641.1	112.3	20.436	ug/L	20.436	ppb	23:30:14
2	Mg 279.077 IEC†	-0.8	-3.4	-150.32	ug/L	-150.32	ppb	23:30:34
2	Na 589.592 Radial†	-1027.3	236.8	66.427	ug/L	66.427	ppb	23:30:14
2	Sr 421.552†	-33.9	-27.0	-0.1421	ug/L	-0.1421	ppb	23:30:14
2	Sc 361.383	1020698.7	1020698.7	98.193	%			23:31:36
2	Y 371.029	869465.6	869465.6	98.304	%			23:31:36
2	Ag 328.068†	360.6	-106.8	-0.4282	ug/L	-0.4282	ppb	23:31:41
2	As 188.979†	-42.0	-6.2	-1.9339	ug/L	-1.9339	ppb	23:32:01
2	B 249.677†	-513.0	-56.4	-1.0641	ug/L	-1.0641	ppb	23:32:01
2	Ba 233.527†	-2.7	-2.7	-0.0180	ug/L	-0.0180	ppb	23:32:01
2	Be 313.107†	-4926.8	-143.5	-0.0448	ug/L	-0.0448	ppb	23:31:41
2	Cd 226.502†	-240.7	-9.5	-0.0820	ug/L	-0.0820	ppb	23:32:01
2	Co 228.616†	-86.0	-1.3	-0.0218	ug/L	-0.0218	ppb	23:32:01
2	Cr 267.716†	106.7	20.9	0.1868	ug/L	0.1868	ppb	23:32:01
2	Cu 324.752†	9044.3	273.3	0.7293	ug/L	0.7293	ppb	23:31:41
2	Mn 257.610†	677.5	113.3	0.1091	ug/L	0.1091	ppb	23:32:01
2	Mo 202.031†	20.0	-8.9	-0.4705	ug/L	-0.4705	ppb	23:32:01
2	Ni 231.604†	131.2	1.7	0.0338	ug/L	0.0338	ppb	23:32:01

2	P 214.914†	283.0	23.1	10.248	ug/L	10.248 ppb	23:32:01
2	Pb 220.353†	-91.0	-17.1	-1.6020	ug/L	-1.6020 ppb	23:32:01
2	S 181.975 Axial†	57.0	-2.1	-2.2662	ug/L	-2.2662 ppb	23:32:01
2	Sb 206.836†	48.1	14.3	3.7867	ug/L	3.7867 ppb	23:32:01
2	Se 196.026†	-24.6	-3.7	-1.6569	ug/L	-1.6569 ppb	23:32:01
2	Si 251.611†	614.5	68.2	1.7289	ug/L	1.7289 ppb	23:32:01
2	Sn 189.927†	7.5	12.0	1.5919	ug/L	1.5919 ppb	23:32:01
2	Ti 334.940†	-1245.4	-7.9	-0.0103	ug/L	-0.0103 ppb	23:31:41
2	Tl 190.801†	-55.4	-12.1	-2.9308	ug/L	-2.9308 ppb	23:32:01
2	U 409.014†	-2693.7	30.7	0.7943	ug/L	0.7943 ppb	23:31:36
2	V 292.402†	-1612.5	-33.7	-0.1999	ug/L	-0.1999 ppb	23:31:41
2	Zn 213.857†	922.1	53.5	0.3982	ug/L	0.3982 ppb	23:32:01
2	SiO2†	669.2	82.5	4.4753	ug/L	4.4753 ppb	23:32:41
3	Sc Radial	4748.4	4748.4	96.7	%		23:30:39
3	Y RADIAL	5479.6	5479.6	97.03	%		23:30:39
3	Al 396.153Radial†	-33.9	8.7	5.7621	ug/L	5.7621 ppb	23:30:39
3	Ca 317.933Radial†	28.1	11.2	19.840	ug/L	19.840 ppb	23:30:59
3	Fe 238.204 Radial†	8.8	-1.9	-23.358	ug/L	-23.358 ppb	23:30:59
3	K 766.490 Radial†	2558.4	75.8	13.787	ug/L	13.787 ppb	23:30:39
3	Mg 279.077 IEC†	3.9	1.6	70.670	ug/L	70.670 ppb	23:30:59
3	Na 589.592 Radial†	-1075.4	168.0	47.119	ug/L	47.119 ppb	23:30:39
3	Sr 421.552†	14.0	21.9	0.1146	ug/L	0.1146 ppb	23:30:39
3	Sc 361.383	1015576.5	1015576.5	97.700	%		23:32:06
3	Y 371.029	863771.4	863771.4	97.660	%		23:32:06
3	Ag 328.068†	380.9	-84.2	-0.3412	ug/L	-0.3412 ppb	23:32:11
3	As 188.979†	-32.5	3.3	1.0392	ug/L	1.0392 ppb	23:32:31
3	B 249.677†	-537.6	-84.2	-1.5884	ug/L	-1.5884 ppb	23:32:31
3	Ba 233.527†	4.0	4.1	0.0246	ug/L	0.0246 ppb	23:32:31
3	Be 313.107†	-4876.0	-116.8	-0.0365	ug/L	-0.0365 ppb	23:32:11
3	Cd 226.502†	-224.9	5.4	0.0498	ug/L	0.0498 ppb	23:32:31
3	Co 228.616†	-81.1	3.3	0.0540	ug/L	0.0540 ppb	23:32:31
3	Cr 267.716†	76.1	-9.9	-0.0895	ug/L	-0.0895 ppb	23:32:31
3	Cu 324.752†	8939.7	212.7	0.5668	ug/L	0.5668 ppb	23:32:11
3	Mn 257.610†	692.6	132.2	0.1215	ug/L	0.1215 ppb	23:32:31
3	Mo 202.031†	25.7	-2.9	-0.1571	ug/L	-0.1571 ppb	23:32:31
3	Ni 231.604†	129.4	0.5	0.0103	ug/L	0.0103 ppb	23:32:31
3	P 214.914†	279.4	20.8	9.2607	ug/L	9.2607 ppb	23:32:31
3	Pb 220.353†	-94.3	-21.0	-1.9687	ug/L	-1.9687 ppb	23:32:31
3	S 181.975 Axial†	60.9	2.2	2.3676	ug/L	2.3676 ppb	23:32:31
3	Sb 206.836†	47.9	14.4	3.7978	ug/L	3.7978 ppb	23:32:31
3	Se 196.026†	-31.5	-10.8	-4.8785	ug/L	-4.8785 ppb	23:32:31
3	Si 251.611†	605.5	62.1	1.5733	ug/L	1.5733 ppb	23:32:31
3	Sn 189.927†	2.5	6.9	0.9119	ug/L	0.9119 ppb	23:32:31
3	Ti 334.940†	-1255.0	-24.1	-0.0314	ug/L	-0.0314 ppb	23:32:11
3	Tl 190.801†	-58.6	-15.8	-3.8131	ug/L	-3.8131 ppb	23:32:31
3	U 409.014†	-2781.8	-73.3	-1.8919	ug/L	-1.8919 ppb	23:32:06
3	V 292.402†	-1624.8	-54.5	-0.3128	ug/L	-0.3128 ppb	23:32:11
3	Zn 213.857†	931.6	68.0	0.4988	ug/L	0.4988 ppb	23:32:31
3	SiO2†	633.2	49.1	2.6561	ug/L	2.6561 ppb	23:32:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1016649.2	97.803	%	0.3496				0.36%
Sc Radial	4818.3	98.1	%	1.29				1.31%
Y 371.029	865167.0	97.818	%	0.4294				0.44%
Y RADIAL	5551.0	98.30	%	1.154				1.17%
Ag 328.068†	-86.3	-0.3469	ug/L	0.07860	-0.3469	ppb	0.07860	22.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.1	4.6881	ug/L	9.97909	4.6881	ppb	9.97909	212.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.9	-1.2155	ug/L	1.99504	-1.2155	ppb	1.99504	164.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-67.0	-1.2645	ug/L	0.28313	-1.2645	ppb	0.28313	22.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0346	ug/L	0.06907	-0.0346	ppb	0.06907	199.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-124.1	-0.0388	ug/L	0.00523	-0.0388	ppb	0.00523	13.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.8	15.575	ug/L	5.5643	15.575	ppb	5.5643	35.73%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 2.4      0.0225 ug/L       0.09392      0.0225 ppb        0.09392 417.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.4     -0.0396 ug/L       0.10367     -0.0396 ppb        0.10367 261.60%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                10.4      0.0935 ug/L       0.15853      0.0935 ppb        0.15853 169.54%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               251.9      0.6718 ug/L       0.09112      0.6718 ppb        0.09112  13.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3     -15.748 ug/L        6.8974     -15.748 ppb         6.8974  43.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          49.6      9.0129 ug/L      14.41589      9.0129 ppb       14.41589 159.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.5     22.236 ug/L      154.1510     22.236 ppb       154.1510 693.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               126.0      0.1173 ug/L       0.00712      0.1173 ppb        0.00712   6.06%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.4     -0.0766 ug/L       0.43970     -0.0766 ppb        0.43970 574.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        210.0     58.902 ug/L       10.3344     58.902 ppb        10.3344  17.55%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.7      0.0328 ug/L       0.02200      0.0328 ppb        0.02200  67.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 23.5     10.447 ug/L        1.2973     10.447 ppb         1.2973  12.42%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -18.5     -1.7387 ug/L       0.20035     -1.7387 ppb        0.20035  11.52%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.2      0.2094 ug/L       2.33316      0.2094 ppb        2.33316 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.3      3.2622 ug/L       0.91815      3.2622 ppb        0.91815  28.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.1     -3.1939 ug/L       1.61586     -3.1939 ppb        1.61586  50.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                55.9      1.4121 ug/L       0.42116      1.4121 ppb        0.42116  29.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                11.4      1.5071 ug/L       0.55775      1.5071 ppb        0.55775  37.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 1.5      0.0077 ug/L       0.13358      0.0077 ppb        0.13358 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -31.5     -0.0419 ug/L       0.03787     -0.0419 ppb        0.03787  90.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -10.3     -2.4791 ug/L       1.60823     -2.4791 ppb        1.60823  64.87%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -70.3     -1.8170 ug/L       2.57465     -1.8170 ppb        2.57465 141.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -41.7     -0.2407 ug/L       0.06263     -0.2407 ppb        0.06263  26.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                65.1      0.4778 ug/L       0.07141      0.4778 ppb        0.07141  14.95%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      58.9      3.1895 ug/L       1.11895      3.1895 ppb        1.11895  35.08%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 00:36:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4724.2	4724.2	96.2	%			00:38:27
1	Y RADIAL	5387.3	5387.3	95.40	%			00:38:27
1	Al 396.153Radial†	7249.2	7577.7	4982.0	ug/L	4982.0	ppb	00:38:27
1	Ca 317.933Radial†	2821.6	2914.5	5160.3	ug/L	5160.3	ppb	00:38:47
1	Fe 238.204 Radial†	426.6	432.4	5243.1	ug/L	5243.1	ppb	00:38:47
1	K 766.490 Radial†	29528.4	28118.4	5115.8	ug/L	5115.8	ppb	00:38:27
1	Mg 279.077 IEC†	112.5	114.5	5127.0	ug/L	5127.0	ppb	00:38:47
1	Na 589.592 Radial†	34706.3	37349.1	10476	ug/L	10476	ppb	00:38:27
1	Sr 421.552†	92671.3	96317.7	505.28	ug/L	505.28	ppb	00:38:27
1	Sc 361.383	1022442.0	1022442.0	98.361	%			00:39:46
1	Y 371.029	856449.7	856449.7	96.832	%			00:39:46
1	Ag 328.068†	126514.0	128148.6	511.11	ug/L	511.11	ppb	00:39:46
1	As 188.979†	1537.9	1600.1	503.06	ug/L	503.06	ppb	00:40:06
1	B 249.677†	26015.4	26915.1	506.69	ug/L	506.69	ppb	00:39:46
1	Ba 233.527†	78278.0	79582.7	512.59	ug/L	512.59	ppb	00:39:46
1	Be 313.107†	1597600.9	1629102.6	508.95	ug/L	508.95	ppb	00:39:46
1	Cd 226.502†	57507.6	58701.7	511.73	ug/L	511.73	ppb	00:39:46
1	Co 228.616†	29880.2	30464.6	501.96	ug/L	501.96	ppb	00:40:06
1	Cr 267.716†	55698.3	56538.9	508.77	ug/L	508.77	ppb	00:39:46
1	Cu 324.752†	197695.8	192053.4	513.15	ug/L	513.15	ppb	00:39:46
1	Mn 257.610†	533851.9	542173.1	513.84	ug/L	513.84	ppb	00:39:46
1	Mo 202.031†	9394.8	9522.1	505.68	ug/L	505.68	ppb	00:40:06
1	Ni 231.604†	25313.7	25603.7	501.35	ug/L	501.35	ppb	00:40:06
1	P 214.914†	5844.6	5676.9	2461.5	ug/L	2461.5	ppb	00:40:06
1	Pb 220.353†	5250.1	5413.2	509.68	ug/L	509.68	ppb	00:40:06
1	S 181.975 Axial†	982.4	938.7	1010.3	ug/L	1010.3	ppb	00:40:06
1	Sb 206.836†	1921.6	1919.0	513.10	ug/L	513.10	ppb	00:40:06
1	Se 196.026†	1112.7	1152.7	531.17	ug/L	531.17	ppb	00:40:06
1	Si 251.611†	99140.4	100235.2	2533.6	ug/L	2533.6	ppb	00:39:46
1	Sn 189.927†	3723.6	3790.0	501.86	ug/L	501.86	ppb	00:40:06
1	Ti 334.940†	362915.1	370224.4	510.51	ug/L	510.51	ppb	00:39:46
1	Tl 190.801†	2016.8	2094.6	509.88	ug/L	509.88	ppb	00:40:06
1	U 409.014†	16241.7	19286.4	496.99	ug/L	496.99	ppb	00:39:46
1	V 292.402†	85409.3	88441.4	513.04	ug/L	513.04	ppb	00:39:46
1	Zn 213.857†	69340.0	69610.2	507.02	ug/L	507.02	ppb	00:39:46
1	SiO2†	97449.4	98474.6	5325.8	ug/L	5325.8	ppb	00:41:06
2	Sc Radial	4697.0	4697.0	95.7	%			00:38:52
2	Y RADIAL	5379.3	5379.3	95.26	%			00:38:52
2	Al 396.153Radial†	7258.8	7631.3	5017.4	ug/L	5017.4	ppb	00:38:52
2	Ca 317.933Radial†	2830.0	2940.3	5205.9	ug/L	5205.9	ppb	00:39:12
2	Fe 238.204 Radial†	431.9	440.5	5341.7	ug/L	5341.7	ppb	00:39:12
2	K 766.490 Radial†	29376.2	28136.9	5119.2	ug/L	5119.2	ppb	00:38:52
2	Mg 279.077 IEC†	112.0	114.6	5133.9	ug/L	5133.9	ppb	00:39:12
2	Na 589.592 Radial†	34567.4	37412.6	10494	ug/L	10494	ppb	00:38:52
2	Sr 421.552†	92372.6	96562.9	506.56	ug/L	506.56	ppb	00:38:52
2	Sc 361.383	1018914.9	1018914.9	98.021	%			00:40:13
2	Y 371.029	853792.7	853792.7	96.532	%			00:40:13
2	Ag 328.068†	126054.5	128125.0	511.06	ug/L	511.06	ppb	00:40:13
2	As 188.979†	1550.5	1618.4	508.75	ug/L	508.75	ppb	00:40:33
2	B 249.677†	26055.6	27047.7	509.17	ug/L	509.17	ppb	00:40:13
2	Ba 233.527†	77935.8	79509.1	512.13	ug/L	512.13	ppb	00:40:13
2	Be 313.107†	1592539.8	1629561.7	509.09	ug/L	509.09	ppb	00:40:13
2	Cd 226.502†	57262.3	58653.8	511.30	ug/L	511.30	ppb	00:40:13
2	Co 228.616†	29949.4	30640.3	504.86	ug/L	504.86	ppb	00:40:33
2	Cr 267.716†	55485.9	56518.2	508.58	ug/L	508.58	ppb	00:40:13
2	Cu 324.752†	197135.2	192177.2	513.48	ug/L	513.48	ppb	00:40:13
2	Mn 257.610†	531491.5	541643.9	513.34	ug/L	513.34	ppb	00:40:13
2	Mo 202.031†	9394.4	9554.8	507.43	ug/L	507.43	ppb	00:40:33
2	Ni 231.604†	25328.0	25707.4	503.38	ug/L	503.38	ppb	00:40:33

2	P 214.914†	5849.1	5702.0	2472.6 ug/L	2472.6 ppb	00:40:33
2	Pb 220.353†	5248.9	5430.4	511.30 ug/L	511.30 ppb	00:40:33
2	S 181.975 Axial†	985.1	944.9	1017.0 ug/L	1017.0 ppb	00:40:33
2	Sb 206.836†	1931.0	1935.4	517.52 ug/L	517.52 ppb	00:40:33
2	Se 196.026†	1113.2	1157.1	533.49 ug/L	533.49 ppb	00:40:33
2	Si 251.611†	98867.7	100305.8	2535.3 ug/L	2535.3 ppb	00:40:13
2	Sn 189.927†	3735.6	3815.3	505.22 ug/L	505.22 ppb	00:40:33
2	Ti 334.940†	361572.2	370131.5	510.39 ug/L	510.39 ppb	00:40:13
2	Tl 190.801†	2006.8	2091.5	509.11 ug/L	509.11 ppb	00:40:33
2	U 409.014†	16168.5	19268.8	496.53 ug/L	496.53 ppb	00:40:13
2	V 292.402†	85315.0	88645.7	514.22 ug/L	514.22 ppb	00:40:13
2	Zn 213.857†	69007.1	69514.6	506.30 ug/L	506.30 ppb	00:40:13
2	SiO2†	98365.7	99752.3	5395.2 ug/L	5395.2 ppb	00:41:11
3	Sc Radial	4739.6	4739.6	96.5 %		00:39:17
3	Y RADIAL	5396.1	5396.1	95.55 %		00:39:17
3	Al 396.153Radial†	7294.9	7600.5	4996.8 ug/L	4996.8 ppb	00:39:17
3	Ca 317.933Radial†	2856.0	2940.6	5206.5 ug/L	5206.5 ppb	00:39:37
3	Fe 238.204 Radial†	433.9	438.5	5317.8 ug/L	5317.8 ppb	00:39:37
3	K 766.490 Radial†	29539.7	28030.4	5099.8 ug/L	5099.8 ppb	00:39:17
3	Mg 279.077 IEC†	116.7	118.4	5304.7 ug/L	5304.7 ppb	00:39:37
3	Na 589.592 Radial†	34691.3	37216.3	10439 ug/L	10439 ppb	00:39:17
3	Sr 421.552†	92705.4	96039.9	503.82 ug/L	503.82 ppb	00:39:17
3	Sc 361.383	1014054.8	1014054.8	97.554 %		00:40:41
3	Y 371.029	850716.7	850716.7	96.184 %		00:40:41
3	Ag 328.068†	125109.0	127772.2	509.65 ug/L	509.65 ppb	00:40:41
3	As 188.979†	1565.7	1641.6	515.95 ug/L	515.95 ppb	00:41:01
3	B 249.677†	25823.6	26937.3	507.08 ug/L	507.08 ppb	00:40:41
3	Ba 233.527†	77508.1	79451.7	511.76 ug/L	511.76 ppb	00:40:41
3	Be 313.107†	1583424.5	1628004.6	508.60 ug/L	508.60 ppb	00:40:41
3	Cd 226.502†	57046.4	58712.6	511.82 ug/L	511.82 ppb	00:40:41
3	Co 228.616†	30057.3	30897.3	509.11 ug/L	509.11 ppb	00:41:01
3	Cr 267.716†	55205.2	56501.8	508.44 ug/L	508.44 ppb	00:40:41
3	Cu 324.752†	195462.7	191426.6	511.48 ug/L	511.48 ppb	00:40:41
3	Mn 257.610†	528161.9	540829.5	512.57 ug/L	512.57 ppb	00:40:41
3	Mo 202.031†	9437.8	9645.2	512.22 ug/L	512.22 ppb	00:41:01
3	Ni 231.604†	25432.0	25937.8	507.89 ug/L	507.89 ppb	00:41:01
3	P 214.914†	5888.8	5771.3	2504.0 ug/L	2504.0 ppb	00:41:01
3	Pb 220.353†	5299.8	5508.3	518.62 ug/L	518.62 ppb	00:41:01
3	S 181.975 Axial†	987.2	951.9	1024.6 ug/L	1024.6 ppb	00:41:01
3	Sb 206.836†	1940.8	1954.9	522.86 ug/L	522.86 ppb	00:41:01
3	Se 196.026†	1100.8	1149.8	530.20 ug/L	530.20 ppb	00:41:01
3	Si 251.611†	98099.0	100001.3	2527.5 ug/L	2527.5 ppb	00:40:41
3	Sn 189.927†	3752.1	3850.5	509.88 ug/L	509.88 ppb	00:41:01
3	Ti 334.940†	358864.3	369123.7	509.00 ug/L	509.00 ppb	00:40:41
3	Tl 190.801†	2019.8	2114.7	514.68 ug/L	514.68 ppb	00:41:01
3	U 409.014†	15957.1	19131.2	492.97 ug/L	492.97 ppb	00:40:41
3	V 292.402†	84864.2	88600.8	514.04 ug/L	514.04 ppb	00:40:41
3	Zn 213.857†	68662.3	69498.5	506.15 ug/L	506.15 ppb	00:40:41
3	SiO2†	97968.1	99825.7	5399.0 ug/L	5399.0 ppb	00:41:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1018470.6	97.979	%	0.4051				0.41%
Sc Radial	4720.3	96.1	%	0.44				0.46%
Y 371.029	853653.0	96.516	%	0.3244				0.34%
Y RADIAL	5387.6	95.40	%	0.149				0.16%
Ag 328.068†	128015.3	510.61	ug/L	0.828	510.61	ppb	0.828	0.16%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7603.2	4998.7	ug/L	17.74	4998.7	ppb	17.74	0.35%
QC value within limits for Al 396.153Radial Recovery = 99.97%								
As 188.979†	1620.0	509.25	ug/L	6.463	509.25	ppb	6.463	1.27%
QC value within limits for As 188.979 Recovery = 101.85%								
B 249.677†	26966.7	507.65	ug/L	1.336	507.65	ppb	1.336	0.26%
QC value within limits for B 249.677 Recovery = 101.53%								
Ba 233.527†	79514.5	512.16	ug/L	0.419	512.16	ppb	0.419	0.08%
QC value within limits for Ba 233.527 Recovery = 102.43%								
Be 313.107†	1628889.7	508.88	ug/L	0.251	508.88	ppb	0.251	0.05%
QC value within limits for Be 313.107 Recovery = 101.78%								
Ca 317.933Radial†	2931.8	5190.9	ug/L	26.50	5190.9	ppb	26.50	0.51%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.82%
Cd 226.502†            58689.4      511.61 ug/L        0.276      511.61 ppb          0.276   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.32%
Co 228.616†            30667.4      505.31 ug/L        3.595      505.31 ppb          3.595   0.71%
   QC value within limits for Co 228.616  Recovery = 101.06%
Cr 267.716†            56519.6      508.60 ug/L        0.165      508.60 ppb          0.165   0.03%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191885.7      512.70 ug/L        1.074      512.70 ppb          1.074   0.21%
   QC value within limits for Cu 324.752  Recovery = 102.54%
Fe 238.204 Radial†       437.1      5300.9 ug/L       51.45      5300.9 ppb         51.45   0.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.02%
K 766.490 Radial†      28095.2      5111.6 ug/L       10.35      5111.6 ppb         10.35   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 102.23%
Mg 279.077 IEC†          115.8      5188.5 ug/L      100.69      5188.5 ppb        100.69   1.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.77%
Mn 257.610†           541548.8      513.25 ug/L        0.639      513.25 ppb          0.639   0.12%
   QC value within limits for Mn 257.610  Recovery = 102.65%
Mo 202.031†             9574.1      508.44 ug/L        3.386      508.44 ppb          3.386   0.67%
   QC value within limits for Mo 202.031  Recovery = 101.69%
Na 589.592 Radial†     37326.0       10470 ug/L         28.1       10470 ppb           28.1   0.27%
   QC value within limits for Na 589.592 Radial  Recovery = 104.70%
Ni 231.604†            25749.6      504.21 ug/L        3.349      504.21 ppb          3.349   0.66%
   QC value within limits for Ni 231.604  Recovery = 100.84%
P 214.914†              5716.8      2479.4 ug/L       22.07      2479.4 ppb         22.07   0.89%
   QC value within limits for P 214.914  Recovery = 99.18%
Pb 220.353†             5450.6      513.20 ug/L        4.761      513.20 ppb          4.761   0.93%
   QC value within limits for Pb 220.353  Recovery = 102.64%
S 181.975 Axial†         945.1      1017.3 ug/L         7.12      1017.3 ppb          7.12   0.70%
   QC value within limits for S 181.975 Axial  Recovery = 101.73%
Sb 206.836†             1936.4      517.83 ug/L        4.883      517.83 ppb          4.883   0.94%
   QC value within limits for Sb 206.836  Recovery = 103.57%
Se 196.026†             1153.2      531.62 ug/L        1.691      531.62 ppb          1.691   0.32%
   QC value within limits for Se 196.026  Recovery = 106.32%
Si 251.611†           100180.8      2532.1 ug/L         4.11      2532.1 ppb          4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.28%
Sn 189.927†             3818.6      505.65 ug/L        4.024      505.65 ppb          4.024   0.80%
   QC value within limits for Sn 189.927  Recovery = 101.13%
Sr 421.552†            96306.8      505.22 ug/L        1.373      505.22 ppb          1.373   0.27%
   QC value within limits for Sr 421.552  Recovery = 101.04%
Ti 334.940†           369826.6      509.96 ug/L        0.840      509.96 ppb          0.840   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.99%
Tl 190.801†             2100.3      511.22 ug/L        3.017      511.22 ppb          3.017   0.59%
   QC value within limits for Tl 190.801  Recovery = 102.24%
U 409.014†             19228.8      495.50 ug/L        2.199      495.50 ppb          2.199   0.44%
   QC value within limits for U 409.014  Recovery = 99.10%
V 292.402†             88562.6      513.77 ug/L        0.634      513.77 ppb          0.634   0.12%
   QC value within limits for V 292.402  Recovery = 102.75%
Zn 213.857†            69541.1      506.49 ug/L        0.468      506.49 ppb          0.468   0.09%
   QC value within limits for Zn 213.857  Recovery = 101.30%
SiO2†                  99350.9      5373.3 ug/L        41.18      5373.3 ppb         41.18   0.77%
   QC value within limits for SiO2  Recovery = 100.48%
All analyte(s) passed QC.
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Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 00:43:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4521.7	4521.7	92.1	%			00:45:18
1	Y RADIAL	5191.1	5191.1	91.92	%			00:45:18
1	Al 396.153Radial†	-5.4	37.9	25.009	ug/L	25.009	ppb	00:45:18
1	Ca 317.933Radial†	54.7	41.5	73.564	ug/L	73.564	ppb	00:45:38
1	Fe 238.204 Radial†	11.0	0.9	11.351	ug/L	11.351	ppb	00:45:38
1	K 766.490 Radial†	3177.9	881.1	160.57	ug/L	160.57	ppb	00:45:18
1	Mg 279.077 IEC†	3.2	1.0	43.808	ug/L	43.808	ppb	00:45:38
1	Na 589.592 Radial†	-1030.4	161.2	45.214	ug/L	45.214	ppb	00:45:18
1	Sr 421.552†	2.1	9.7	0.0501	ug/L	0.0501	ppb	00:45:18
1	Sc 361.383	1050972.6	1050972.6	101.11	%			00:46:35
1	Y 371.029	892918.2	892918.2	100.96	%			00:46:35
1	Ag 328.068†	361.4	-116.6	-0.4594	ug/L	-0.4594	ppb	00:46:40
1	As 188.979†	-31.6	5.4	1.6699	ug/L	1.6699	ppb	00:47:00
1	B 249.677†	-219.7	248.8	4.7003	ug/L	4.7003	ppb	00:47:00
1	Ba 233.527†	52.6	52.0	0.3350	ug/L	0.3350	ppb	00:47:00
1	Be 313.107†	-4864.3	62.8	0.0199	ug/L	0.0199	ppb	00:46:40
1	Cd 226.502†	-217.5	20.5	0.1775	ug/L	0.1775	ppb	00:47:00
1	Co 228.616†	-90.2	-2.9	-0.0477	ug/L	-0.0477	ppb	00:47:00
1	Cr 267.716†	132.7	43.5	0.3910	ug/L	0.3910	ppb	00:47:00
1	Cu 324.752†	9084.0	47.2	0.1265	ug/L	0.1265	ppb	00:46:40
1	Mn 257.610†	753.9	168.9	0.1603	ug/L	0.1603	ppb	00:47:00
1	Mo 202.031†	34.3	4.6	0.2472	ug/L	0.2472	ppb	00:47:00
1	Ni 231.604†	134.4	1.0	0.0198	ug/L	0.0198	ppb	00:47:00
1	P 214.914†	285.8	17.6	7.8873	ug/L	7.8873	ppb	00:47:00
1	Pb 220.353†	-78.9	-2.4	-0.2247	ug/L	-0.2247	ppb	00:47:00
1	S 181.975 Axial†	65.8	5.0	5.3960	ug/L	5.3960	ppb	00:47:00
1	Sb 206.836†	44.0	8.9	2.3854	ug/L	2.3854	ppb	00:47:00
1	Se 196.026†	-23.7	-2.1	-0.8829	ug/L	-0.8829	ppb	00:47:00
1	Si 251.611†	659.4	94.5	2.3346	ug/L	2.3346	ppb	00:47:00
1	Sn 189.927†	16.6	20.8	2.7581	ug/L	2.7581	ppb	00:47:00
1	Ti 334.940†	-1162.7	110.4	0.1558	ug/L	0.1558	ppb	00:46:40
1	Tl 190.801†	-49.4	-4.6	-1.0998	ug/L	-1.0998	ppb	00:47:00
1	U 409.014†	-2785.1	19.3	0.4972	ug/L	0.4972	ppb	00:46:35
1	V 292.402†	-1602.5	23.6	0.1383	ug/L	0.1383	ppb	00:46:40
1	Zn 213.857†	1007.1	110.6	0.8096	ug/L	0.8096	ppb	00:47:00
1	SiO2†	683.6	77.1	4.0425	ug/L	4.0425	ppb	00:48:06
2	Sc Radial	4647.0	4647.0	94.6	%			00:45:43
2	Y RADIAL	5327.0	5327.0	94.33	%			00:45:43
2	Al 396.153Radial†	-18.8	24.0	15.793	ug/L	15.793	ppb	00:45:43
2	Ca 317.933Radial†	53.0	38.1	67.531	ug/L	67.531	ppb	00:46:03
2	Fe 238.204 Radial†	9.4	-1.0	-12.306	ug/L	-12.306	ppb	00:46:03
2	K 766.490 Radial†	3194.5	805.6	146.80	ug/L	146.80	ppb	00:45:43
2	Mg 279.077 IEC†	2.7	0.3	14.785	ug/L	14.785	ppb	00:46:03
2	Na 589.592 Radial†	-1082.3	136.4	38.274	ug/L	38.274	ppb	00:45:43
2	Sr 421.552†	21.5	30.1	0.1573	ug/L	0.1573	ppb	00:45:43
2	Sc 361.383	1018433.6	1018433.6	97.975	%			00:47:05
2	Y 371.029	866004.9	866004.9	97.913	%			00:47:05
2	Ag 328.068†	386.3	-79.7	-0.3217	ug/L	-0.3217	ppb	00:47:10
2	As 188.979†	-29.6	6.4	1.9970	ug/L	1.9970	ppb	00:47:30
2	B 249.677†	-226.3	235.1	4.4446	ug/L	4.4446	ppb	00:47:30
2	Ba 233.527†	63.7	65.0	0.4175	ug/L	0.4175	ppb	00:47:30
2	Be 313.107†	-4837.8	-63.9	-0.0198	ug/L	-0.0198	ppb	00:47:10
2	Cd 226.502†	-220.8	10.3	0.0907	ug/L	0.0907	ppb	00:47:30
2	Co 228.616†	-94.2	-9.8	-0.1603	ug/L	-0.1603	ppb	00:47:30
2	Cr 267.716†	111.1	25.6	0.2293	ug/L	0.2293	ppb	00:47:30
2	Cu 324.752†	8998.6	247.1	0.6594	ug/L	0.6594	ppb	00:47:10
2	Mn 257.610†	772.9	212.2	0.1994	ug/L	0.1994	ppb	00:47:30
2	Mo 202.031†	40.5	12.1	0.6427	ug/L	0.6427	ppb	00:47:30
2	Ni 231.604†	129.9	0.7	0.0129	ug/L	0.0129	ppb	00:47:30

2	P 214.914†	279.2	19.8	8.7896 ug/L	8.7896 ppb	00:47:30
2	Pb 220.353†	-67.9	6.2	0.5917 ug/L	0.5917 ppb	00:47:30
2	S 181.975 Axial†	68.7	10.0	10.778 ug/L	10.778 ppb	00:47:30
2	Sb 206.836†	41.1	7.3	1.9597 ug/L	1.9597 ppb	00:47:30
2	Se 196.026†	-17.8	3.2	1.3932 ug/L	1.3932 ppb	00:47:30
2	Si 251.611†	653.7	109.5	2.7176 ug/L	2.7176 ppb	00:47:30
2	Sn 189.927†	5.7	10.1	1.3438 ug/L	1.3438 ppb	00:47:30
2	Ti 334.940†	-1180.8	55.2	0.0792 ug/L	0.0792 ppb	00:47:10
2	Tl 190.801†	-40.3	3.1	0.7634 ug/L	0.7634 ppb	00:47:30
2	U 409.014†	-2681.6	36.9	0.9562 ug/L	0.9562 ppb	00:47:05
2	V 292.402†	-1569.4	6.7	0.0514 ug/L	0.0514 ppb	00:47:10
2	Zn 213.857†	1024.5	160.1	1.1763 ug/L	1.1763 ppb	00:47:30
2	SiO2†	683.9	99.0	5.2392 ug/L	5.2392 ppb	00:48:11
3	Sc Radial	4821.8	4821.8	98.2 %		00:46:08
3	Y RADIAL	5518.4	5518.4	97.72 %		00:46:08
3	Al 396.153Radial†	-23.3	20.0	13.226 ug/L	13.226 ppb	00:46:08
3	Ca 317.933Radial†	57.3	40.5	71.703 ug/L	71.703 ppb	00:46:28
3	Fe 238.204 Radial†	10.5	-0.3	-3.7245 ug/L	-3.7245 ppb	00:46:28
3	K 766.490 Radial†	3087.2	573.9	104.56 ug/L	104.56 ppb	00:46:08
3	Mg 279.077 IEC†	2.0	-0.5	-20.834 ug/L	-20.834 ppb	00:46:28
3	Na 589.592 Radial†	-956.0	306.5	85.983 ug/L	85.983 ppb	00:46:08
3	Sr 421.552†	35.6	43.6	0.2282 ug/L	0.2282 ppb	00:46:08
3	Sc 361.383	995395.5	995395.5	95.759 %		00:47:35
3	Y 371.029	847159.0	847159.0	95.782 %		00:47:35
3	Ag 328.068†	467.6	14.2	0.0541 ug/L	0.0541 ppb	00:47:40
3	As 188.979†	-42.5	-7.7	-2.4165 ug/L	-2.4165 ppb	00:48:00
3	B 249.677†	-206.8	250.1	4.7272 ug/L	4.7272 ppb	00:48:00
3	Ba 233.527†	67.0	70.0	0.4475 ug/L	0.4475 ppb	00:48:00
3	Be 313.107†	-4854.6	-195.7	-0.0612 ug/L	-0.0612 ppb	00:47:40
3	Cd 226.502†	-214.8	11.4	0.0996 ug/L	0.0996 ppb	00:48:00
3	Co 228.616†	-85.5	-3.0	-0.0490 ug/L	-0.0490 ppb	00:48:00
3	Cr 267.716†	124.6	42.3	0.3799 ug/L	0.3799 ppb	00:48:00
3	Cu 324.752†	9014.1	475.9	1.2706 ug/L	1.2706 ppb	00:47:40
3	Mn 257.610†	774.6	232.2	0.2199 ug/L	0.2199 ppb	00:48:00
3	Mo 202.031†	29.3	1.4	0.0742 ug/L	0.0742 ppb	00:48:00
3	Ni 231.604†	130.9	4.8	0.0934 ug/L	0.0934 ppb	00:48:00
3	P 214.914†	294.4	42.4	18.763 ug/L	18.763 ppb	00:48:00
3	Pb 220.353†	-84.5	-12.7	-1.1900 ug/L	-1.1900 ppb	00:48:00
3	S 181.975 Axial†	68.1	11.0	11.882 ug/L	11.882 ppb	00:48:00
3	Sb 206.836†	42.7	10.0	2.6294 ug/L	2.6294 ppb	00:48:00
3	Se 196.026†	-21.3	-0.9	-0.4117 ug/L	-0.4117 ppb	00:48:00
3	Si 251.611†	666.8	138.7	3.4851 ug/L	3.4851 ppb	00:48:00
3	Sn 189.927†	1.0	5.4	0.7209 ug/L	0.7209 ppb	00:48:00
3	Ti 334.940†	-1270.4	-66.2	-0.0861 ug/L	-0.0861 ppb	00:47:40
3	Tl 190.801†	-40.7	1.7	0.4199 ug/L	0.4199 ppb	00:48:00
3	U 409.014†	-2795.2	-145.1	-3.7507 ug/L	-3.7507 ppb	00:47:35
3	V 292.402†	-1677.5	-143.3	-0.8267 ug/L	-0.8267 ppb	00:47:40
3	Zn 213.857†	1013.0	172.3	1.2652 ug/L	1.2652 ppb	00:48:00
3	SiO2†	700.2	132.2	7.0999 ug/L	7.0999 ppb	00:48:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021600.6	98.280	%	2.6863				2.73%
Sc Radial	4663.5	95.0	%	3.07				3.23%
Y 371.029	868694.0	98.217	%	2.6002				2.65%
Y RADIAL	5345.5	94.66	%	2.911				3.08%
Ag 328.068†	-60.7	-0.2423	ug/L	0.26579	-0.2423	ppb	0.26579	109.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.3	18.009	ug/L	6.1963	18.009	ppb	6.1963	34.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4168	ug/L	2.45921	0.4168	ppb	2.45921	590.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	244.7	4.6240	ug/L	0.15595	4.6240	ppb	0.15595	3.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	62.3	0.4000	ug/L	0.05826	0.4000	ppb	0.05826	14.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-65.6	-0.0204	ug/L	0.04054	-0.0204	ppb	0.04054	199.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	40.1	70.932	ug/L	3.0895	70.932	ppb	3.0895	4.36%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.0      0.1226 ug/L       0.04776      0.1226 ppb        0.04776  38.95%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.0857 ug/L       0.06462     -0.0857 ppb        0.06462  75.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                37.1      0.3334 ug/L       0.09031      0.3334 ppb        0.09031  27.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               256.7      0.6855 ug/L       0.57248      0.6855 ppb        0.57248  83.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.1     -1.5600 ug/L      11.97601     -1.5600 ppb       11.97601 767.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         753.6      137.31 ug/L        29.186      137.31 ppb         29.186  21.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.3      12.587 ug/L       32.3769      12.587 ppb        32.3769 257.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               204.4      0.1932 ug/L       0.03029      0.1932 ppb        0.03029  15.68%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.1      0.3214 ug/L       0.29141      0.3214 ppb        0.29141  90.68%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        201.4      56.490 ug/L       25.7761      56.490 ppb        25.7761  45.63%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.1      0.0420 ug/L       0.04461      0.0420 ppb        0.04461 106.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                26.6      11.813 ug/L        6.0357      11.813 ppb         6.0357  51.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -3.0     -0.2743 ug/L       0.89188     -0.2743 ppb        0.89188 325.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.7      9.3521 ug/L       3.47029      9.3521 ppb        3.47029  37.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                8.7      2.3248 ug/L       0.33890      2.3248 ppb        0.33890  14.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.1      0.0329 ug/L       1.20138      0.0329 ppb        1.20138 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               114.3      2.8458 ug/L       0.58587      2.8458 ppb        0.58587  20.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               12.1      1.6076 ug/L       1.04389      1.6076 ppb        1.04389  64.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               27.8      0.1452 ug/L       0.08967      0.1452 ppb        0.08967  61.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               33.1      0.0496 ug/L       0.12363      0.0496 ppb        0.12363 249.14%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.1      0.0278 ug/L       0.99153      0.0278 ppb        0.99153 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -29.6     -0.7657 ug/L       2.59518     -0.7657 ppb        2.59518 338.91%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -37.7     -0.2123 ug/L       0.53382     -0.2123 ppb        0.53382 251.43%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              147.7      1.0837 ug/L       0.24149      1.0837 ppb        0.24149  22.28%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    102.8      5.4605 ug/L       1.54071      5.4605 ppb        1.54071  28.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 01:47:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4299.3	4299.3	87.6	%			01:49:11
1	Y RADIAL	4894.4	4894.4	86.67	%			01:49:11
1	Al 396.153Radial†	7477.1	8582.5	5645.2	ug/L	5645.2	ppb	01:49:11
1	Ca 317.933Radial†	2804.8	3185.2	5639.4	ug/L	5639.4	ppb	01:49:31
1	Fe 238.204 Radial†	423.4	472.6	5729.4	ug/L	5729.4	ppb	01:49:31
1	K 766.490 Radial†	29126.4	30692.4	5584.7	ug/L	5584.7	ppb	01:49:11
1	Mg 279.077 IEC†	116.5	130.6	5847.8	ug/L	5847.8	ppb	01:49:31
1	Na 589.592 Radial†	34383.3	40545.3	11373	ug/L	11373	ppb	01:49:11
1	Sr 421.552†	93422.8	106695.0	559.72	ug/L	559.72	ppb	01:49:11
1	Sc 361.383	1012171.3	1012171.3	97.373	%			01:50:30
1	Y 371.029	849502.2	849502.2	96.047	%			01:50:30
1	Ag 328.068†	125286.8	128193.4	511.44	ug/L	511.44	ppb	01:50:30
1	As 188.979†	1554.8	1633.4	513.48	ug/L	513.48	ppb	01:50:50
1	B 249.677†	25408.1	26559.8	499.89	ug/L	499.89	ppb	01:50:30
1	Ba 233.527†	77302.3	79388.3	511.36	ug/L	511.36	ppb	01:50:30
1	Be 313.107†	1582466.1	1630040.8	509.24	ug/L	509.24	ppb	01:50:30
1	Cd 226.502†	56989.2	58762.6	512.21	ug/L	512.21	ppb	01:50:30
1	Co 228.616†	30027.3	30923.9	509.54	ug/L	509.54	ppb	01:50:50
1	Cr 267.716†	55013.9	56410.6	507.62	ug/L	507.62	ppb	01:50:30
1	Cu 324.752†	195092.1	191418.9	511.48	ug/L	511.48	ppb	01:50:30
1	Mn 257.610†	527540.9	541199.2	512.95	ug/L	512.95	ppb	01:50:30
1	Mo 202.031†	9434.7	9660.1	513.04	ug/L	513.04	ppb	01:50:50
1	Ni 231.604†	25403.3	25956.9	508.26	ug/L	508.26	ppb	01:50:50
1	P 214.914†	5894.0	5787.9	2511.3	ug/L	2511.3	ppb	01:50:50
1	Pb 220.353†	5261.6	5479.2	516.00	ug/L	516.00	ppb	01:50:50
1	S 181.975 Axial†	977.0	943.3	1015.2	ug/L	1015.2	ppb	01:50:50
1	Sb 206.836†	1924.8	1942.1	519.44	ug/L	519.44	ppb	01:50:50
1	Se 196.026†	1115.1	1166.6	539.11	ug/L	539.11	ppb	01:50:50
1	Si 251.611†	98040.2	100128.0	2530.5	ug/L	2530.5	ppb	01:50:30
1	Sn 189.927†	3720.3	3825.0	506.56	ug/L	506.56	ppb	01:50:50
1	Ti 334.940†	358657.4	369595.8	509.67	ug/L	509.67	ppb	01:50:30
1	Tl 190.801†	2010.5	2109.0	513.33	ug/L	513.33	ppb	01:50:50
1	U 409.014†	16019.7	19225.9	495.37	ug/L	495.37	ppb	01:50:30
1	V 292.402†	84695.3	88589.2	513.94	ug/L	513.94	ppb	01:50:30
1	Zn 213.857†	68453.4	69414.9	505.47	ug/L	505.47	ppb	01:50:30
1	SiO2†	97533.4	99566.2	5384.5	ug/L	5384.5	ppb	01:51:50
2	Sc Radial	4803.9	4803.9	97.8	%			01:49:36
2	Y RADIAL	5500.3	5500.3	97.40	%			01:49:36
2	Al 396.153Radial†	7416.3	7623.5	5012.1	ug/L	5012.1	ppb	01:49:36
2	Ca 317.933Radial†	2803.4	2847.3	5041.2	ug/L	5041.2	ppb	01:49:56
2	Fe 238.204 Radial†	421.7	420.0	5093.8	ug/L	5093.8	ppb	01:49:56
2	K 766.490 Radial†	29115.7	27187.7	4946.4	ug/L	4946.4	ppb	01:49:36
2	Mg 279.077 IEC†	115.7	115.8	5187.2	ug/L	5187.2	ppb	01:49:56
2	Na 589.592 Radial†	34198.5	36232.0	10163	ug/L	10163	ppb	01:49:36
2	Sr 421.552†	92976.3	95032.4	498.54	ug/L	498.54	ppb	01:49:36
2	Sc 361.383	1019716.1	1019716.1	98.098	%			01:50:57
2	Y 371.029	854661.7	854661.7	96.630	%			01:50:57
2	Ag 328.068†	125935.2	127902.4	510.09	ug/L	510.09	ppb	01:50:57
2	As 188.979†	1566.4	1633.3	513.37	ug/L	513.37	ppb	01:51:18
2	B 249.677†	25543.0	26504.3	498.93	ug/L	498.93	ppb	01:50:57
2	Ba 233.527†	77916.8	79427.3	511.59	ug/L	511.59	ppb	01:50:57
2	Be 313.107†	1591692.7	1627421.7	508.42	ug/L	508.42	ppb	01:50:57
2	Cd 226.502†	57336.1	58683.2	511.58	ug/L	511.58	ppb	01:50:57
2	Co 228.616†	30081.1	30750.6	506.69	ug/L	506.69	ppb	01:51:18
2	Cr 267.716†	55495.7	56483.7	508.27	ug/L	508.27	ppb	01:50:57
2	Cu 324.752†	196283.9	191151.4	510.73	ug/L	510.73	ppb	01:50:57
2	Mn 257.610†	531306.5	541029.2	512.74	ug/L	512.74	ppb	01:50:57
2	Mo 202.031†	9441.1	9594.9	509.54	ug/L	509.54	ppb	01:51:18
2	Ni 231.604†	25470.5	25832.3	505.83	ug/L	505.83	ppb	01:51:18

2	P 214.914†	5875.2	5723.9	2483.1 ug/L	2483.1 ppb	01:51:18
2	Pb 220.353†	5305.6	5484.0	516.35 ug/L	516.35 ppb	01:51:18
2	S 181.975 Axial†	979.0	937.9	1009.5 ug/L	1009.5 ppb	01:51:18
2	Sb 206.836†	1941.0	1944.0	519.89 ug/L	519.89 ppb	01:51:18
2	Se 196.026†	1112.7	1155.6	531.94 ug/L	531.94 ppb	01:51:18
2	Si 251.611†	98770.7	100127.8	2530.8 ug/L	2530.8 ppb	01:50:57
2	Sn 189.927†	3759.7	3836.9	508.06 ug/L	508.06 ppb	01:51:18
2	Ti 334.940†	360907.6	369164.3	509.04 ug/L	509.04 ppb	01:50:57
2	Tl 190.801†	2030.8	2114.4	514.63 ug/L	514.63 ppb	01:51:18
2	U 409.014†	16204.4	19292.5	497.17 ug/L	497.17 ppb	01:50:57
2	V 292.402†	85148.9	88408.0	512.93 ug/L	512.93 ppb	01:50:57
2	Zn 213.857†	69026.4	69478.9	506.04 ug/L	506.04 ppb	01:50:57
2	SiO2†	98416.0	99724.8	5393.7 ug/L	5393.7 ppb	01:51:56
3	Sc Radial	4653.9	4653.9	94.8 %		01:50:01
3	Y RADIAL	5285.5	5285.5	93.60 %		01:50:01
3	Al 396.153Radial†	7374.8	7824.0	5144.9 ug/L	5144.9 ppb	01:50:01
3	Ca 317.933Radial†	2775.7	2910.5	5153.0 ug/L	5153.0 ppb	01:50:21
3	Fe 238.204 Radial†	420.1	432.2	5240.5 ug/L	5240.5 ppb	01:50:21
3	K 766.490 Radial†	28686.0	27693.4	5038.5 ug/L	5038.5 ppb	01:50:01
3	Mg 279.077 IEC†	113.3	117.0	5241.8 ug/L	5241.8 ppb	01:50:21
3	Na 589.592 Radial†	33614.3	36742.0	10306 ug/L	10306 ppb	01:50:01
3	Sr 421.552†	91948.8	97010.7	508.91 ug/L	508.91 ppb	01:50:01
3	Sc 361.383	1026292.2	1026292.2	98.731 %		01:51:25
3	Y 371.029	859974.2	859974.2	97.231 %		01:51:25
3	Ag 328.068†	126896.0	128053.0	510.73 ug/L	510.73 ppb	01:51:25
3	As 188.979†	1550.3	1606.9	505.15 ug/L	505.15 ppb	01:51:45
3	B 249.677†	25960.1	26759.9	503.77 ug/L	503.77 ppb	01:51:25
3	Ba 233.527†	78365.6	79372.9	511.24 ug/L	511.24 ppb	01:51:25
3	Be 313.107†	1601191.8	1626646.3	508.18 ug/L	508.18 ppb	01:51:25
3	Cd 226.502†	57747.8	58725.7	511.93 ug/L	511.93 ppb	01:51:25
3	Co 228.616†	29723.5	30191.9	497.46 ug/L	497.46 ppb	01:51:45
3	Cr 267.716†	55821.4	56451.1	507.98 ug/L	507.98 ppb	01:51:25
3	Cu 324.752†	198006.8	191614.3	511.98 ug/L	511.98 ppb	01:51:25
3	Mn 257.610†	534643.9	540939.1	512.66 ug/L	512.66 ppb	01:51:25
3	Mo 202.031†	9319.7	9410.2	499.75 ug/L	499.75 ppb	01:51:45
3	Ni 231.604†	25146.3	25337.5	496.14 ug/L	496.14 ppb	01:51:45
3	P 214.914†	5813.5	5623.1	2437.6 ug/L	2437.6 ppb	01:51:45
3	Pb 220.353†	5214.3	5356.9	504.41 ug/L	504.41 ppb	01:51:45
3	S 181.975 Axial†	962.4	914.7	984.49 ug/L	984.49 ppb	01:51:45
3	Sb 206.836†	1911.6	1901.6	508.30 ug/L	508.30 ppb	01:51:45
3	Se 196.026†	1101.0	1136.5	523.98 ug/L	523.98 ppb	01:51:45
3	Si 251.611†	99331.7	100050.8	2529.0 ug/L	2529.0 ppb	01:51:25
3	Sn 189.927†	3699.0	3750.9	496.69 ug/L	496.69 ppb	01:51:45
3	Ti 334.940†	363362.3	369293.1	509.23 ug/L	509.23 ppb	01:51:25
3	Tl 190.801†	1992.9	2062.8	502.19 ug/L	502.19 ppb	01:51:45
3	U 409.014†	16432.7	19417.9	500.39 ug/L	500.39 ppb	01:51:25
3	V 292.402†	85649.8	88359.2	512.50 ug/L	512.50 ppb	01:51:25
3	Zn 213.857†	69536.9	69545.1	506.57 ug/L	506.57 ppb	01:51:25
3	SiO2†	99250.6	99927.3	5405.1 ug/L	5405.1 ppb	01:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1019393.2	98.067	%	0.6798				0.69%
Sc Radial	4585.7	93.4	%	5.28				5.65%
Y 371.029	854712.7	96.636	%	0.5920				0.61%
Y RADIAL	5226.7	92.55	%	5.439				5.88%
Ag 328.068†	128049.6	510.76	ug/L	0.677	510.76	ppb	0.677	0.13%
QC value within limits for Ag 328.068 Recovery = 102.15%								
Al 396.153Radial†	8010.0	5267.4	ug/L	333.86	5267.4	ppb	333.86	6.34%
QC value within limits for Al 396.153Radial Recovery = 105.35%								
As 188.979†	1624.5	510.67	ug/L	4.776	510.67	ppb	4.776	0.94%
QC value within limits for As 188.979 Recovery = 102.13%								
B 249.677†	26608.0	500.86	ug/L	2.560	500.86	ppb	2.560	0.51%
QC value within limits for B 249.677 Recovery = 100.17%								
Ba 233.527†	79396.2	511.40	ug/L	0.175	511.40	ppb	0.175	0.03%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1628036.3	508.61	ug/L	0.555	508.61	ppb	0.555	0.11%
QC value within limits for Be 313.107 Recovery = 101.72%								
Ca 317.933Radial†	2981.0	5277.9	ug/L	318.04	5277.9	ppb	318.04	6.03%

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   QC value within limits for Ca 317.933Radial  Recovery = 105.56%
Cd 226.502†            58723.8      511.91 ug/L         0.316      511.91 ppb          0.316   0.06%
   QC value within limits for Cd 226.502  Recovery = 102.38%
Co 228.616†            30622.1      504.56 ug/L         6.316      504.56 ppb          6.316   1.25%
   QC value within limits for Co 228.616  Recovery = 100.91%
Cr 267.716†            56448.5      507.96 ug/L         0.322      507.96 ppb          0.322   0.06%
   QC value within limits for Cr 267.716  Recovery = 101.59%
Cu 324.752†           191394.9      511.40 ug/L         0.626      511.40 ppb          0.626   0.12%
   QC value within limits for Cu 324.752  Recovery = 102.28%
Fe 238.204 Radial†       441.6      5354.6 ug/L        332.82      5354.6 ppb         332.82   6.22%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.09%
K 766.490 Radial†      28524.5      5189.8 ug/L        345.01      5189.8 ppb         345.01   6.65%
   QC value within limits for K 766.490 Radial  Recovery = 103.80%
Mg 279.077 IEC†          121.1      5425.6 ug/L        366.67      5425.6 ppb         366.67   6.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.51%
Mn 257.610†           541055.9      512.78 ug/L         0.148      512.78 ppb          0.148   0.03%
   QC value within limits for Mn 257.610  Recovery = 102.56%
Mo 202.031†             9555.1      507.44 ug/L         6.890      507.44 ppb          6.890   1.36%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     37839.8       10614 ug/L         661.1       10614 ppb          661.1   6.23%
   QC value within limits for Na 589.592 Radial  Recovery = 106.14%
Ni 231.604†            25708.9      503.41 ug/L         6.415      503.41 ppb          6.415   1.27%
   QC value within limits for Ni 231.604  Recovery = 100.68%
P 214.914†              5711.6      2477.3 ug/L        37.20      2477.3 ppb         37.20   1.50%
   QC value within limits for P 214.914  Recovery = 99.09%
Pb 220.353†             5440.0      512.26 ug/L         6.794      512.26 ppb          6.794   1.33%
   QC value within limits for Pb 220.353  Recovery = 102.45%
S 181.975 Axial†         932.0      1003.1 ug/L        16.32      1003.1 ppb         16.32   1.63%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1929.2      515.88 ug/L         6.569      515.88 ppb          6.569   1.27%
   QC value within limits for Sb 206.836  Recovery = 103.18%
Se 196.026†             1152.9      531.67 ug/L         7.571      531.67 ppb          7.571   1.42%
   QC value within limits for Se 196.026  Recovery = 106.33%
Si 251.611†           100102.2      2530.1 ug/L         0.96      2530.1 ppb          0.96   0.04%
   QC value within limits for Si 251.611  Recovery = 101.20%
Sn 189.927†             3804.3      503.77 ug/L         6.174      503.77 ppb          6.174   1.23%
   QC value within limits for Sn 189.927  Recovery = 100.75%
Sr 421.552†            99579.4      522.39 ug/L        32.741      522.39 ppb         32.741   6.27%
   QC value within limits for Sr 421.552  Recovery = 104.48%
Ti 334.940†           369351.0      509.31 ug/L         0.323      509.31 ppb          0.323   0.06%
   QC value within limits for Ti 334.940  Recovery = 101.86%
Tl 190.801†             2095.4      510.05 ug/L         6.834      510.05 ppb          6.834   1.34%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19312.1      497.65 ug/L         2.545      497.65 ppb          2.545   0.51%
   QC value within limits for U 409.014  Recovery = 99.53%
V 292.402†             88452.2      513.12 ug/L         0.736      513.12 ppb          0.736   0.14%
   QC value within limits for V 292.402  Recovery = 102.62%
Zn 213.857†            69479.6      506.03 ug/L         0.550      506.03 ppb          0.550   0.11%
   QC value within limits for Zn 213.857  Recovery = 101.21%
SiO2†                  99739.4      5394.4 ug/L        10.32      5394.4 ppb         10.32   0.19%
   QC value within limits for SiO2  Recovery = 100.88%
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 01:54:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4684.7	4684.7	95.4	%			01:56:02
1	Y RADIAL	5376.2	5376.2	95.20	%			01:56:02
1	Al 396.153Radial†	-33.0	9.2	6.0923	ug/L	6.0923	ppb	01:56:02
1	Ca 317.933Radial†	27.5	10.9	19.356	ug/L	19.356	ppb	01:56:22
1	Fe 238.204 Radial†	9.3	-1.2	-15.086	ug/L	-15.086	ppb	01:56:22
1	K 766.490 Radial†	2611.2	167.1	30.437	ug/L	30.437	ppb	01:56:02
1	Mg 279.077 IEC†	3.0	0.7	30.807	ug/L	30.807	ppb	01:56:22
1	Na 589.592 Radial†	-1139.2	86.0	24.124	ug/L	24.124	ppb	01:56:02
1	Sr 421.552†	-24.6	-18.4	-0.0967	ug/L	-0.0967	ppb	01:56:02
1	Sc 361.383	1013939.4	1013939.4	97.543	%			01:57:19
1	Y 371.029	863202.3	863202.3	97.596	%			01:57:19
1	Ag 328.068†	488.6	26.9	0.1039	ug/L	0.1039	ppb	01:57:24
1	As 188.979†	-31.8	4.0	1.2379	ug/L	1.2379	ppb	01:57:44
1	B 249.677†	-365.6	91.3	1.7277	ug/L	1.7277	ppb	01:57:24
1	Ba 233.527†	8.8	9.1	0.0584	ug/L	0.0584	ppb	01:57:44
1	Be 313.107†	-4811.4	-58.7	-0.0184	ug/L	-0.0184	ppb	01:57:24
1	Cd 226.502†	-233.7	-3.9	-0.0328	ug/L	-0.0328	ppb	01:57:44
1	Co 228.616†	-104.6	-20.9	-0.3443	ug/L	-0.3443	ppb	01:57:44
1	Cr 267.716†	86.2	0.5	0.0056	ug/L	0.0056	ppb	01:57:44
1	Cu 324.752†	9039.6	329.9	0.8802	ug/L	0.8802	ppb	01:57:24
1	Mn 257.610†	676.1	116.5	0.1082	ug/L	0.1082	ppb	01:57:44
1	Mo 202.031†	28.7	0.2	0.0084	ug/L	0.0084	ppb	01:57:44
1	Ni 231.604†	126.0	-2.8	-0.0537	ug/L	-0.0537	ppb	01:57:44
1	P 214.914†	276.9	18.8	8.2734	ug/L	8.2734	ppb	01:57:44
1	Pb 220.353†	-52.2	22.0	2.0705	ug/L	2.0705	ppb	01:57:44
1	S 181.975 Axial†	58.5	-0.1	-0.1531	ug/L	-0.1531	ppb	01:57:44
1	Sb 206.836†	44.0	10.5	2.7760	ug/L	2.7760	ppb	01:57:44
1	Se 196.026†	-32.5	-11.9	-5.3425	ug/L	-5.3425	ppb	01:57:44
1	Si 251.611†	648.3	107.0	2.7074	ug/L	2.7074	ppb	01:57:44
1	Sn 189.927†	-3.4	0.9	0.1154	ug/L	0.1154	ppb	01:57:44
1	Ti 334.940†	-1263.1	-34.5	-0.0459	ug/L	-0.0459	ppb	01:57:24
1	Tl 190.801†	-55.5	-12.6	-3.0554	ug/L	-3.0554	ppb	01:57:44
1	U 409.014†	-2764.2	-59.9	-1.5458	ug/L	-1.5458	ppb	01:57:19
1	V 292.402†	-1522.6	47.6	0.2726	ug/L	0.2726	ppb	01:57:24
1	Zn 213.857†	958.3	96.9	0.7119	ug/L	0.7119	ppb	01:57:44
1	SiO2†	660.0	77.6	4.1938	ug/L	4.1938	ppb	01:58:50
2	Sc Radial	4711.8	4711.8	96.0	%			01:56:27
2	Y RADIAL	5341.3	5341.3	94.58	%			01:56:27
2	Al 396.153Radial†	-50.5	-8.8	-5.8553	ug/L	-5.8553	ppb	01:56:27
2	Ca 317.933Radial†	35.7	19.3	34.231	ug/L	34.231	ppb	01:56:47
2	Fe 238.204 Radial†	12.8	2.4	28.467	ug/L	28.467	ppb	01:56:47
2	K 766.490 Radial†	2724.4	269.3	49.073	ug/L	49.073	ppb	01:56:27
2	Mg 279.077 IEC†	1.2	-1.3	-57.256	ug/L	-57.256	ppb	01:56:47
2	Na 589.592 Radial†	-1160.9	70.3	19.712	ug/L	19.712	ppb	01:56:27
2	Sr 421.552†	-45.9	-40.4	-0.2123	ug/L	-0.2123	ppb	01:56:27
2	Sc 361.383	1035025.5	1035025.5	99.571	%			01:57:49
2	Y 371.029	879839.7	879839.7	99.477	%			01:57:49
2	Ag 328.068†	348.9	-123.6	-0.4830	ug/L	-0.4830	ppb	01:57:54
2	As 188.979†	-35.8	0.7	0.2088	ug/L	0.2088	ppb	01:58:14
2	B 249.677†	-347.3	117.3	2.2117	ug/L	2.2117	ppb	01:57:54
2	Ba 233.527†	26.1	26.2	0.1691	ug/L	0.1691	ppb	01:58:14
2	Be 313.107†	-4859.6	-6.6	-0.0020	ug/L	-0.0020	ppb	01:57:54
2	Cd 226.502†	-242.4	-7.8	-0.0707	ug/L	-0.0707	ppb	01:58:14
2	Co 228.616†	-74.7	11.3	0.1871	ug/L	0.1871	ppb	01:58:14
2	Cr 267.716†	112.9	25.6	0.2302	ug/L	0.2302	ppb	01:58:14
2	Cu 324.752†	8971.2	72.3	0.1946	ug/L	0.1946	ppb	01:57:54
2	Mn 257.610†	700.1	126.5	0.1236	ug/L	0.1236	ppb	01:58:14
2	Mo 202.031†	34.8	5.7	0.3045	ug/L	0.3045	ppb	01:58:14
2	Ni 231.604†	128.8	-2.6	-0.0513	ug/L	-0.0513	ppb	01:58:14

2	P 214.914†	276.7	12.8	5.6620 ug/L	5.6620 ppb	01:58:14
2	Pb 220.353†	-76.9	-1.7	-0.1641 ug/L	-0.1641 ppb	01:58:14
2	S 181.975 Axial†	54.3	-5.5	-5.9676 ug/L	-5.9676 ppb	01:58:14
2	Sb 206.836†	49.6	15.2	4.0138 ug/L	4.0138 ppb	01:58:14
2	Se 196.026†	-23.0	-1.7	-0.6625 ug/L	-0.6625 ppb	01:58:14
2	Si 251.611†	625.9	71.0	1.7803 ug/L	1.7803 ppb	01:58:14
2	Sn 189.927†	-2.0	2.3	0.3133 ug/L	0.3133 ppb	01:58:14
2	Ti 334.940†	-1240.2	14.9	0.0219 ug/L	0.0219 ppb	01:57:54
2	Tl 190.801†	-48.5	-4.4	-1.0752 ug/L	-1.0752 ppb	01:58:14
2	U 409.014†	-2735.4	26.8	0.6878 ug/L	0.6878 ppb	01:57:49
2	V 292.402†	-1644.0	-42.6	-0.2439 ug/L	-0.2439 ppb	01:57:54
2	Zn 213.857†	954.7	73.3	0.5378 ug/L	0.5378 ppb	01:58:14
2	SiO2†	633.2	36.9	1.9538 ug/L	1.9538 ppb	01:58:55
3	Sc Radial	4760.6	4760.6	97.0 %		01:56:52
3	Y RADIAL	5428.0	5428.0	96.12 %		01:56:52
3	Al 396.153Radial†	-11.5	31.9	21.063 ug/L	21.063 ppb	01:56:52
3	Ca 317.933Radial†	26.6	9.6	17.052 ug/L	17.052 ppb	01:57:12
3	Fe 238.204 Radial†	11.9	1.3	15.259 ug/L	15.259 ppb	01:57:12
3	K 766.490 Radial†	2736.4	252.6	46.017 ug/L	46.017 ppb	01:56:52
3	Mg 279.077 IEC†	1.9	-0.5	-24.024 ug/L	-24.024 ppb	01:57:12
3	Na 589.592 Radial†	-1099.6	145.9	40.924 ug/L	40.924 ppb	01:56:52
3	Sr 421.552†	11.9	19.6	0.1029 ug/L	0.1029 ppb	01:56:52
3	Sc 361.383	1016726.7	1016726.7	97.811 %		01:58:19
3	Y 371.029	863841.9	863841.9	97.668 %		01:58:19
3	Ag 328.068†	512.1	49.5	0.2013 ug/L	0.2013 ppb	01:58:25
3	As 188.979†	-40.7	-5.0	-1.5457 ug/L	-1.5457 ppb	01:58:45
3	B 249.677†	-398.0	59.2	1.1169 ug/L	1.1169 ppb	01:58:25
3	Ba 233.527†	31.6	32.3	0.2081 ug/L	0.2081 ppb	01:58:45
3	Be 313.107†	-4826.9	-61.0	-0.0189 ug/L	-0.0189 ppb	01:58:25
3	Cd 226.502†	-219.6	11.1	0.0952 ug/L	0.0952 ppb	01:58:45
3	Co 228.616†	-93.4	-9.2	-0.1519 ug/L	-0.1519 ppb	01:58:45
3	Cr 267.716†	108.1	22.7	0.2046 ug/L	0.2046 ppb	01:58:45
3	Cu 324.752†	8950.2	213.0	0.5697 ug/L	0.5697 ppb	01:58:25
3	Mn 257.610†	675.2	113.6	0.1095 ug/L	0.1095 ppb	01:58:45
3	Mo 202.031†	24.0	-4.8	-0.2510 ug/L	-0.2510 ppb	01:58:45
3	Ni 231.604†	120.5	-8.7	-0.1708 ug/L	-0.1708 ppb	01:58:45
3	P 214.914†	283.8	25.0	11.102 ug/L	11.102 ppb	01:58:45
3	Pb 220.353†	-58.8	15.5	1.4561 ug/L	1.4561 ppb	01:58:45
3	S 181.975 Axial†	63.9	5.2	5.5995 ug/L	5.5995 ppb	01:58:45
3	Sb 206.836†	42.3	8.6	2.2753 ug/L	2.2753 ppb	01:58:45
3	Se 196.026†	-29.2	-8.5	-3.7225 ug/L	-3.7225 ppb	01:58:45
3	Si 251.611†	646.3	103.2	2.6076 ug/L	2.6076 ppb	01:58:45
3	Sn 189.927†	-0.4	3.9	0.5167 ug/L	0.5167 ppb	01:58:45
3	Ti 334.940†	-1206.0	27.4	0.0389 ug/L	0.0389 ppb	01:58:25
3	Tl 190.801†	-37.9	5.5	1.3441 ug/L	1.3441 ppb	01:58:45
3	U 409.014†	-2736.9	-24.2	-0.6275 ug/L	-0.6275 ppb	01:58:19
3	V 292.402†	-1578.7	-5.6	-0.0396 ug/L	-0.0396 ppb	01:58:25
3	Zn 213.857†	960.4	96.4	0.7080 ug/L	0.7080 ppb	01:58:45
3	SiO2†	663.0	78.8	4.2533 ug/L	4.2533 ppb	01:59:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1021897.2	98.308	%	1.1019				1.12%
Sc Radial	4719.0	96.1	%	0.78				0.81%
Y 371.029	868961.3	98.247	%	1.0658				1.08%
Y RADIAL	5381.9	95.30	%	0.772				0.81%
Ag 328.068†	-15.7	-0.0593	ug/L	0.37021	-0.0593	ppb	0.37021	624.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.8	7.1000	ug/L	13.48742	7.1000	ppb	13.48742	189.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0330	ug/L	1.40746	-0.0330	ppb	1.40746	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	89.2	1.6855	ug/L	0.54862	1.6855	ppb	0.54862	32.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.5	0.1452	ug/L	0.07767	0.1452	ppb	0.07767	53.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-42.1	-0.0131	ug/L	0.00961	-0.0131	ppb	0.00961	73.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.3	23.546	ug/L	9.3245	23.546	ppb	9.3245	39.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -0.2     -0.0028 ug/L       0.08689     -0.0028 ppb        0.08689 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.3     -0.1030 ug/L       0.26902     -0.1030 ppb        0.26902 261.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.3      0.1468 ug/L       0.12293      0.1468 ppb        0.12293  83.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               205.1      0.5481 ug/L       0.34331      0.5481 ppb        0.34331  62.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.8      9.5465 ug/L      22.33121      9.5465 ppb       22.33121 233.92%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         229.7     41.843 ug/L        9.9945     41.843 ppb         9.9945  23.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4    -16.824 ug/L       44.4707    -16.824 ppb        44.4707 264.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               118.8      0.1138 ug/L       0.00855      0.1138 ppb        0.00855   7.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.4      0.0206 ug/L       0.27798      0.0206 ppb        0.27798 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        100.7     28.254 ug/L       11.1925     28.254 ppb        11.1925  39.61%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.7     -0.0919 ug/L       0.06830     -0.0919 ppb        0.06830  74.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 18.9      8.3457 ug/L       2.72050      8.3457 ppb        2.72050  32.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.9      1.1208 ug/L       1.15443      1.1208 ppb        1.15443 103.00%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.1738 ug/L       5.78356     -0.1738 ppb        5.78356 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                11.5      3.0217 ug/L       0.89490      3.0217 ppb        0.89490  29.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.4     -3.2425 ug/L       2.37661     -3.2425 ppb        2.37661  73.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                93.7      2.3651 ug/L       0.50890      2.3651 ppb        0.50890  21.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.4      0.3151 ug/L       0.20064      0.3151 ppb        0.20064  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -13.1     -0.0687 ug/L       0.15945     -0.0687 ppb        0.15945 232.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 2.6      0.0050 ug/L       0.04488      0.0050 ppb        0.04488 901.20%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.8     -0.9288 ug/L       2.20340     -0.9288 ppb        2.20340 237.22%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -19.1     -0.4952 ug/L       1.12265     -0.4952 ppb        1.12265 226.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -0.2     -0.0036 ug/L       0.26014     -0.0036 ppb        0.26014 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                88.9      0.6526 ug/L       0.09938      0.6526 ppb        0.09938  15.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      64.4      3.4669 ug/L       1.31078      3.4669 ppb        1.31078  37.81%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 41
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 02:42:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4720.2	4720.2	96.1	%			02:44:26
1	Y RADIAL	5371.6	5371.6	95.12	%			02:44:26
1	Al 396.153Radial†	7236.1	7570.4	4977.0	ug/L	4977.0	ppb	02:44:26
1	Ca 317.933Radial†	2799.2	2893.7	5123.5	ug/L	5123.5	ppb	02:44:46
1	Fe 238.204 Radial†	423.2	429.2	5205.3	ug/L	5205.3	ppb	02:44:46
1	K 766.490 Radial†	28450.8	27023.5	4916.4	ug/L	4916.4	ppb	02:44:26
1	Mg 279.077 IEC†	116.3	118.4	5305.4	ug/L	5305.4	ppb	02:44:46
1	Na 589.592 Radial†	33648.1	36278.9	10176	ug/L	10176	ppb	02:44:26
1	Sr 421.552†	91061.6	94724.6	496.92	ug/L	496.92	ppb	02:44:26
1	Sc 361.383	1007803.1	1007803.1	96.952	%			02:45:45
1	Y 371.029	844856.8	844856.8	95.521	%			02:45:45
1	Ag 328.068†	125232.7	128695.3	513.27	ug/L	513.27	ppb	02:45:45
1	As 188.979†	1543.2	1628.3	511.84	ug/L	511.84	ppb	02:46:05
1	B 249.677†	25407.7	26672.5	502.09	ug/L	502.09	ppb	02:45:45
1	Ba 233.527†	77257.8	79686.5	513.26	ug/L	513.26	ppb	02:45:45
1	Be 313.107†	1580507.5	1635064.6	510.81	ug/L	510.81	ppb	02:45:45
1	Cd 226.502†	56774.3	58794.6	512.54	ug/L	512.54	ppb	02:45:45
1	Co 228.616†	29811.8	30835.3	508.08	ug/L	508.08	ppb	02:46:05
1	Cr 267.716†	54963.2	56603.1	509.34	ug/L	509.34	ppb	02:45:45
1	Cu 324.752†	195519.8	192728.4	514.95	ug/L	514.95	ppb	02:45:45
1	Mn 257.610†	527336.6	543336.7	514.93	ug/L	514.93	ppb	02:45:45
1	Mo 202.031†	9364.8	9629.9	511.40	ug/L	511.40	ppb	02:46:05
1	Ni 231.604†	25295.6	25958.8	508.30	ug/L	508.30	ppb	02:46:05
1	P 214.914†	5845.6	5764.2	2500.4	ug/L	2500.4	ppb	02:46:05
1	Pb 220.353†	5240.3	5480.6	516.02	ug/L	516.02	ppb	02:46:05
1	S 181.975 Axial†	964.8	935.0	1006.4	ug/L	1006.4	ppb	02:46:05
1	Sb 206.836†	1924.7	1950.6	521.69	ug/L	521.69	ppb	02:46:05
1	Se 196.026†	1102.6	1158.6	533.67	ug/L	533.67	ppb	02:46:05
1	Si 251.611†	98022.8	100546.5	2541.4	ug/L	2541.4	ppb	02:45:45
1	Sn 189.927†	3730.8	3852.4	510.11	ug/L	510.11	ppb	02:46:05
1	Ti 334.940†	358528.1	371058.8	511.66	ug/L	511.66	ppb	02:45:45
1	Tl 190.801†	1990.7	2097.6	510.57	ug/L	510.57	ppb	02:46:05
1	U 409.014†	16327.4	19614.7	505.48	ug/L	505.48	ppb	02:45:45
1	V 292.402†	84560.3	88827.0	515.36	ug/L	515.36	ppb	02:45:45
1	Zn 213.857†	68483.5	69750.7	508.01	ug/L	508.01	ppb	02:45:45
1	SiO2†	97177.9	99633.6	5388.7	ug/L	5388.7	ppb	02:47:06
2	Sc Radial	4739.2	4739.2	96.5	%			02:44:51
2	Y RADIAL	5336.0	5336.0	94.49	%			02:44:51
2	Al 396.153Radial†	7393.8	7703.7	5065.0	ug/L	5065.0	ppb	02:44:51
2	Ca 317.933Radial†	2794.4	2877.1	5094.0	ug/L	5094.0	ppb	02:45:11
2	Fe 238.204 Radial†	423.9	428.2	5192.7	ug/L	5192.7	ppb	02:45:11
2	K 766.490 Radial†	28934.8	27406.6	4986.2	ug/L	4986.2	ppb	02:44:51
2	Mg 279.077 IEC†	114.7	116.4	5212.0	ug/L	5212.0	ppb	02:45:11
2	Na 589.592 Radial†	34193.1	36703.6	10295	ug/L	10295	ppb	02:44:51
2	Sr 421.552†	92905.9	96256.6	504.96	ug/L	504.96	ppb	02:44:51
2	Sc 361.383	1005245.5	1005245.5	96.706	%			02:46:13
2	Y 371.029	843518.7	843518.7	95.370	%			02:46:13
2	Ag 328.068†	124595.3	128364.8	511.97	ug/L	511.97	ppb	02:46:13
2	As 188.979†	1536.3	1625.2	510.86	ug/L	510.86	ppb	02:46:33
2	B 249.677†	25383.4	26714.1	502.88	ug/L	502.88	ppb	02:46:13
2	Ba 233.527†	77192.8	79822.0	514.13	ug/L	514.13	ppb	02:46:13
2	Be 313.107†	1579923.8	1638608.7	511.91	ug/L	511.91	ppb	02:46:13
2	Cd 226.502†	56856.6	59028.8	514.59	ug/L	514.59	ppb	02:46:13
2	Co 228.616†	29718.2	30816.7	507.78	ug/L	507.78	ppb	02:46:33
2	Cr 267.716†	55072.6	56860.5	511.66	ug/L	511.66	ppb	02:46:13
2	Cu 324.752†	193978.0	191647.3	512.06	ug/L	512.06	ppb	02:46:13
2	Mn 257.610†	526055.9	543396.2	514.99	ug/L	514.99	ppb	02:46:13
2	Mo 202.031†	9349.3	9638.5	511.86	ug/L	511.86	ppb	02:46:33
2	Ni 231.604†	25202.2	25928.6	507.71	ug/L	507.71	ppb	02:46:33

2	P 214.914†	5803.8	5736.3	2488.4 ug/L	2488.4 ppb	02:46:33
2	Pb 220.353†	5214.2	5467.3	514.80 ug/L	514.80 ppb	02:46:33
2	S 181.975 Axial†	965.6	938.4	1010.0 ug/L	1010.0 ppb	02:46:33
2	Sb 206.836†	1917.2	1947.9	520.91 ug/L	520.91 ppb	02:46:33
2	Se 196.026†	1095.8	1154.4	531.79 ug/L	531.79 ppb	02:46:33
2	Si 251.611†	97663.5	100432.2	2538.5 ug/L	2538.5 ppb	02:46:13
2	Sn 189.927†	3718.8	3849.7	509.76 ug/L	509.76 ppb	02:46:33
2	Ti 334.940†	357380.3	370812.8	511.32 ug/L	511.32 ppb	02:46:13
2	Tl 190.801†	1981.6	2093.4	509.55 ug/L	509.55 ppb	02:46:33
2	U 409.014†	16034.2	19354.3	498.75 ug/L	498.75 ppb	02:46:13
2	V 292.402†	84448.6	88933.4	515.96 ug/L	515.96 ppb	02:46:13
2	Zn 213.857†	68267.9	69707.5	507.70 ug/L	507.70 ppb	02:46:13
2	SiO2†	97730.2	100459.8	5433.5 ug/L	5433.5 ppb	02:47:11
3	Sc Radial	4607.2	4607.2	93.8 %		02:45:16
3	Y RADIAL	5215.2	5215.2	92.35 %		02:45:16
3	Al 396.153Radial†	7181.0	7696.3	5059.9 ug/L	5059.9 ppb	02:45:16
3	Ca 317.933Radial†	2766.3	2930.2	5187.9 ug/L	5187.9 ppb	02:45:36
3	Fe 238.204 Radial†	419.2	435.7	5284.0 ug/L	5284.0 ppb	02:45:36
3	K 766.490 Radial†	28235.7	27520.3	5007.0 ug/L	5007.0 ppb	02:45:16
3	Mg 279.077 IEC†	114.2	119.2	5338.8 ug/L	5338.8 ppb	02:45:36
3	Na 589.592 Radial†	33080.0	36532.3	10247 ug/L	10247 ppb	02:45:16
3	Sr 421.552†	89564.2	95453.0	500.74 ug/L	500.74 ppb	02:45:16
3	Sc 361.383	1004884.5	1004884.5	96.672 %		02:46:40
3	Y 371.029	844040.6	844040.6	95.429 %		02:46:40
3	Ag 328.068†	124839.7	128664.0	513.18 ug/L	513.18 ppb	02:46:40
3	As 188.979†	1549.4	1639.3	515.27 ug/L	515.27 ppb	02:47:00
3	B 249.677†	25417.2	26758.4	503.69 ug/L	503.69 ppb	02:46:40
3	Ba 233.527†	77137.8	79793.7	513.96 ug/L	513.96 ppb	02:46:40
3	Be 313.107†	1580116.2	1639394.7	512.16 ug/L	512.16 ppb	02:46:40
3	Cd 226.502†	56733.2	58922.2	513.65 ug/L	513.65 ppb	02:46:40
3	Co 228.616†	29992.5	31111.5	512.64 ug/L	512.64 ppb	02:47:00
3	Cr 267.716†	55029.0	56835.9	511.44 ug/L	511.44 ppb	02:46:40
3	Cu 324.752†	194241.1	191991.5	512.99 ug/L	512.99 ppb	02:46:40
3	Mn 257.610†	525312.0	542822.2	514.45 ug/L	514.45 ppb	02:46:40
3	Mo 202.031†	9410.2	9704.9	515.39 ug/L	515.39 ppb	02:47:00
3	Ni 231.604†	25402.6	26145.3	511.95 ug/L	511.95 ppb	02:47:00
3	P 214.914†	5868.5	5805.5	2519.2 ug/L	2519.2 ppb	02:47:00
3	Pb 220.353†	5255.7	5512.2	519.01 ug/L	519.01 ppb	02:47:00
3	S 181.975 Axial†	974.2	947.6	1020.0 ug/L	1020.0 ppb	02:47:00
3	Sb 206.836†	1930.9	1962.8	525.01 ug/L	525.01 ppb	02:47:00
3	Se 196.026†	1103.8	1163.2	536.01 ug/L	536.01 ppb	02:47:00
3	Si 251.611†	97549.0	100350.1	2536.3 ug/L	2536.3 ppb	02:46:40
3	Sn 189.927†	3751.3	3884.8	514.41 ug/L	514.41 ppb	02:47:00
3	Ti 334.940†	357018.5	370571.4	510.99 ug/L	510.99 ppb	02:46:40
3	Tl 190.801†	2004.9	2118.1	515.51 ug/L	515.51 ppb	02:47:00
3	U 409.014†	15981.3	19305.5	497.48 ug/L	497.48 ppb	02:46:40
3	V 292.402†	84540.8	89060.1	516.72 ug/L	516.72 ppb	02:46:40
3	Zn 213.857†	68311.1	69777.6	508.17 ug/L	508.17 ppb	02:46:40
3	SiO2†	97561.3	100321.4	5425.8 ug/L	5425.8 ppb	02:47:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1005977.7	96.777	%	0.1531				0.16%
Sc Radial	4688.9	95.5	%	1.45				1.52%
Y 371.029	844138.7	95.440	%	0.0763				0.08%
Y RADIAL	5307.6	93.99	%	1.451				1.54%
Ag 328.068†	128574.7	512.81	ug/L	0.730	512.81	ppb	0.730	0.14%
QC value within limits for Ag 328.068 Recovery = 102.56%								
Al 396.153Radial†	7656.8	5034.0	ug/L	49.43	5034.0	ppb	49.43	0.98%
QC value within limits for Al 396.153Radial Recovery = 100.68%								
As 188.979†	1630.9	512.66	ug/L	2.319	512.66	ppb	2.319	0.45%
QC value within limits for As 188.979 Recovery = 102.53%								
B 249.677†	26715.0	502.89	ug/L	0.800	502.89	ppb	0.800	0.16%
QC value within limits for B 249.677 Recovery = 100.58%								
Ba 233.527†	79767.4	513.78	ug/L	0.461	513.78	ppb	0.461	0.09%
QC value within limits for Ba 233.527 Recovery = 102.76%								
Be 313.107†	1637689.3	511.62	ug/L	0.719	511.62	ppb	0.719	0.14%
QC value within limits for Be 313.107 Recovery = 102.32%								
Ca 317.933Radial†	2900.3	5135.1	ug/L	48.05	5135.1	ppb	48.05	0.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.70%
Cd 226.502†            58915.2      513.59 ug/L         1.023      513.59 ppb          1.023   0.20%
   QC value within limits for Cd 226.502  Recovery = 102.72%
Co 228.616†            30921.2      509.50 ug/L         2.724      509.50 ppb          2.724   0.53%
   QC value within limits for Co 228.616  Recovery = 101.90%
Cr 267.716†            56766.5      510.82 ug/L         1.278      510.82 ppb          1.278   0.25%
   QC value within limits for Cr 267.716  Recovery = 102.16%
Cu 324.752†           192122.4      513.33 ug/L         1.475      513.33 ppb          1.475   0.29%
   QC value within limits for Cu 324.752  Recovery = 102.67%
Fe 238.204 Radial†       431.0      5227.3 ug/L        49.45      5227.3 ppb         49.45   0.95%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.55%
K 766.490 Radial†      27316.8      4969.9 ug/L        47.44      4969.9 ppb         47.44   0.95%
   QC value within limits for K 766.490 Radial  Recovery = 99.40%
Mg 279.077 IEC†          118.0      5285.4 ug/L        65.73      5285.4 ppb         65.73   1.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.71%
Mn 257.610†           543185.1      514.79 ug/L         0.295      514.79 ppb         0.295   0.06%
   QC value within limits for Mn 257.610  Recovery = 102.96%
Mo 202.031†             9657.8      512.88 ug/L         2.183      512.88 ppb         2.183   0.43%
   QC value within limits for Mo 202.031  Recovery = 102.58%
Na 589.592 Radial†     36504.9       10240 ug/L          59.9       10240 ppb          59.9   0.59%
   QC value within limits for Na 589.592 Radial  Recovery = 102.40%
Ni 231.604†            26010.9      509.32 ug/L         2.298      509.32 ppb         2.298   0.45%
   QC value within limits for Ni 231.604  Recovery = 101.86%
P 214.914†              5768.7      2502.6 ug/L        15.51      2502.6 ppb        15.51   0.62%
   QC value within limits for P 214.914  Recovery = 100.11%
Pb 220.353†             5486.7      516.61 ug/L         2.166      516.61 ppb         2.166   0.42%
   QC value within limits for Pb 220.353  Recovery = 103.32%
S 181.975 Axial†         940.4      1012.1 ug/L         7.01      1012.1 ppb          7.01   0.69%
   QC value within limits for S 181.975 Axial  Recovery = 101.21%
Sb 206.836†             1953.7      522.54 ug/L         2.176      522.54 ppb         2.176   0.42%
   QC value within limits for Sb 206.836  Recovery = 104.51%
Se 196.026†             1158.7      533.83 ug/L         2.115      533.83 ppb         2.115   0.40%
   QC value within limits for Se 196.026  Recovery = 106.77%
Si 251.611†           100442.9      2538.7 ug/L          2.56      2538.7 ppb          2.56   0.10%
   QC value within limits for Si 251.611  Recovery = 101.55%
Sn 189.927†             3862.3      511.43 ug/L         2.585      511.43 ppb         2.585   0.51%
   QC value within limits for Sn 189.927  Recovery = 102.29%
Sr 421.552†            95478.1      500.87 ug/L         4.021      500.87 ppb         4.021   0.80%
   QC value within limits for Sr 421.552  Recovery = 100.17%
Ti 334.940†           370814.3      511.32 ug/L         0.333      511.32 ppb         0.333   0.07%
   QC value within limits for Ti 334.940  Recovery = 102.26%
Tl 190.801†             2103.0      511.87 ug/L         3.188      511.87 ppb         3.188   0.62%
   QC value within limits for Tl 190.801  Recovery = 102.37%
U 409.014†             19424.8      500.57 ug/L         4.303      500.57 ppb         4.303   0.86%
   QC value within limits for U 409.014  Recovery = 100.11%
V 292.402†             88940.2      516.01 ug/L         0.684      516.01 ppb         0.684   0.13%
   QC value within limits for V 292.402  Recovery = 103.20%
Zn 213.857†            69745.3      507.96 ug/L         0.240      507.96 ppb         0.240   0.05%
   QC value within limits for Zn 213.857  Recovery = 101.59%
SiO2†                 100138.3      5416.0 ug/L         23.97      5416.0 ppb         23.97   0.44%
   QC value within limits for SiO2  Recovery = 101.28%
All analyte(s) passed QC.
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Sequence No.: 42
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 02:49:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4758.0	4758.0	96.9	%			02:51:17
1	Y RADIAL	5448.8	5448.8	96.49	%			02:51:17
1	Al 396.153Radial†	-30.7	12.1	7.9921	ug/L	7.9921	ppb	02:51:17
1	Ca 317.933Radial†	27.6	10.7	18.924	ug/L	18.924	ppb	02:51:37
1	Fe 238.204 Radial†	11.3	0.7	8.2934	ug/L	8.2934	ppb	02:51:37
1	K 766.490 Radial†	2622.7	136.8	24.916	ug/L	24.916	ppb	02:51:17
1	Mg 279.077 IEC†	1.3	-1.2	-52.148	ug/L	-52.148	ppb	02:51:37
1	Na 589.592 Radial†	-1101.8	143.0	40.120	ug/L	40.120	ppb	02:51:17
1	Sr 421.552†	37.3	45.9	0.2404	ug/L	0.2404	ppb	02:51:17
1	Sc 361.383	1031146.6	1031146.6	99.198	%			02:52:34
1	Y 371.029	876939.5	876939.5	99.149	%			02:52:34
1	Ag 328.068†	421.9	-48.7	-0.1920	ug/L	-0.1920	ppb	02:52:39
1	As 188.979†	-42.2	-6.0	-1.8566	ug/L	-1.8566	ppb	02:52:59
1	B 249.677†	-344.3	119.0	2.2473	ug/L	2.2473	ppb	02:52:59
1	Ba 233.527†	16.0	16.2	0.1036	ug/L	0.1036	ppb	02:52:59
1	Be 313.107†	-4930.5	-96.4	-0.0300	ug/L	-0.0300	ppb	02:52:39
1	Cd 226.502†	-231.5	2.3	0.0192	ug/L	0.0192	ppb	02:52:59
1	Co 228.616†	-88.3	-2.7	-0.0444	ug/L	-0.0444	ppb	02:52:59
1	Cr 267.716†	98.5	11.5	0.1027	ug/L	0.1027	ppb	02:52:59
1	Cu 324.752†	9074.0	209.9	0.5610	ug/L	0.5610	ppb	02:52:39
1	Mn 257.610†	628.5	56.9	0.0557	ug/L	0.0557	ppb	02:52:59
1	Mo 202.031†	33.3	4.3	0.2280	ug/L	0.2280	ppb	02:52:59
1	Ni 231.604†	132.6	1.7	0.0331	ug/L	0.0331	ppb	02:52:59
1	P 214.914†	278.2	15.3	6.7593	ug/L	6.7593	ppb	02:52:59
1	Pb 220.353†	-84.3	-9.5	-0.8859	ug/L	-0.8859	ppb	02:52:59
1	S 181.975 Axial†	63.3	3.7	4.0191	ug/L	4.0191	ppb	02:52:59
1	Sb 206.836†	45.3	11.0	2.9007	ug/L	2.9007	ppb	02:52:59
1	Se 196.026†	-25.6	-4.4	-1.9118	ug/L	-1.9118	ppb	02:52:59
1	Si 251.611†	635.9	83.4	2.1064	ug/L	2.1064	ppb	02:52:59
1	Sn 189.927†	-3.6	0.7	0.0996	ug/L	0.0996	ppb	02:52:59
1	Ti 334.940†	-1223.0	27.6	0.0388	ug/L	0.0388	ppb	02:52:39
1	Tl 190.801†	-57.9	-14.1	-3.4124	ug/L	-3.4124	ppb	02:52:59
1	U 409.014†	-2734.1	17.8	0.4587	ug/L	0.4587	ppb	02:52:34
1	V 292.402†	-1631.1	-35.8	-0.2033	ug/L	-0.2033	ppb	02:52:39
1	Zn 213.857†	937.2	59.2	0.4351	ug/L	0.4351	ppb	02:52:59
1	SiO2†	684.4	90.9	4.9121	ug/L	4.9121	ppb	02:54:05
2	Sc Radial	4766.9	4766.9	97.1	%			02:51:42
2	Y RADIAL	5455.1	5455.1	96.60	%			02:51:42
2	Al 396.153Radial†	-32.7	10.1	6.6831	ug/L	6.6831	ppb	02:51:42
2	Ca 317.933Radial†	24.9	7.8	13.798	ug/L	13.798	ppb	02:52:02
2	Fe 238.204 Radial†	8.3	-2.4	-29.305	ug/L	-29.305	ppb	02:52:02
2	K 766.490 Radial†	2735.1	247.5	45.085	ug/L	45.085	ppb	02:51:42
2	Mg 279.077 IEC†	1.4	-1.1	-47.238	ug/L	-47.238	ppb	02:52:02
2	Na 589.592 Radial†	-1043.3	205.4	57.623	ug/L	57.623	ppb	02:51:42
2	Sr 421.552†	22.1	30.2	0.1581	ug/L	0.1581	ppb	02:51:42
2	Sc 361.383	1026306.6	1026306.6	98.732	%			02:53:04
2	Y 371.029	873162.8	873162.8	98.722	%			02:53:04
2	Ag 328.068†	474.4	6.4	0.0134	ug/L	0.0134	ppb	02:53:09
2	As 188.979†	-40.6	-4.5	-1.4149	ug/L	-1.4149	ppb	02:53:29
2	B 249.677†	-360.9	100.6	1.9058	ug/L	1.9058	ppb	02:53:29
2	Ba 233.527†	24.1	24.5	0.1559	ug/L	0.1559	ppb	02:53:29
2	Be 313.107†	-4854.3	-42.7	-0.0135	ug/L	-0.0135	ppb	02:53:09
2	Cd 226.502†	-247.7	-15.3	-0.1301	ug/L	-0.1301	ppb	02:53:29
2	Co 228.616†	-103.1	-18.1	-0.2970	ug/L	-0.2970	ppb	02:53:29
2	Cr 267.716†	100.0	13.5	0.1196	ug/L	0.1196	ppb	02:53:29
2	Cu 324.752†	9027.9	206.3	0.5495	ug/L	0.5495	ppb	02:53:09
2	Mn 257.610†	616.4	47.6	0.0431	ug/L	0.0431	ppb	02:53:29
2	Mo 202.031†	36.1	7.3	0.3874	ug/L	0.3874	ppb	02:53:29
2	Ni 231.604†	127.6	-2.7	-0.0526	ug/L	-0.0526	ppb	02:53:29

2	P 214.914†	273.3	11.7	5.1954 ug/L	5.1954 ppb	02:53:29
2	Pb 220.353†	-71.7	2.9	0.2801 ug/L	0.2801 ppb	02:53:29
2	S 181.975 Axial†	54.5	-4.9	-5.2613 ug/L	-5.2613 ppb	02:53:29
2	Sb 206.836†	46.9	12.9	3.4198 ug/L	3.4198 ppb	02:53:29
2	Se 196.026†	-24.1	-3.1	-1.4613 ug/L	-1.4613 ppb	02:53:29
2	Si 251.611†	643.1	93.7	2.3564 ug/L	2.3564 ppb	02:53:29
2	Sn 189.927†	1.9	6.2	0.8270 ug/L	0.8270 ppb	02:53:29
2	Ti 334.940†	-1303.8	-60.1	-0.0833 ug/L	-0.0833 ppb	02:53:09
2	Tl 190.801†	-49.9	-6.2	-1.5084 ug/L	-1.5084 ppb	02:53:29
2	U 409.014†	-2642.8	97.2	2.5165 ug/L	2.5165 ppb	02:53:04
2	V 292.402†	-1600.6	-12.6	-0.0584 ug/L	-0.0584 ppb	02:53:09
2	Zn 213.857†	930.6	56.9	0.4225 ug/L	0.4225 ppb	02:53:29
2	SiO2†	667.0	76.5	4.1061 ug/L	4.1061 ppb	02:54:10
3	Sc Radial	4695.8	4695.8	95.6 %		02:52:07
3	Y RADIAL	5383.5	5383.5	95.33 %		02:52:07
3	Al 396.153Radial†	-18.8	24.1	15.896 ug/L	15.896 ppb	02:52:07
3	Ca 317.933Radial†	26.7	10.1	17.937 ug/L	17.937 ppb	02:52:27
3	Fe 238.204 Radial†	8.1	-2.5	-30.645 ug/L	-30.645 ppb	02:52:27
3	K 766.490 Radial†	2791.8	349.5	63.686 ug/L	63.686 ppb	02:52:07
3	Mg 279.077 IEC†	5.5	3.2	143.88 ug/L	143.88 ppb	02:52:27
3	Na 589.592 Radial†	-1123.7	105.1	29.467 ug/L	29.467 ppb	02:52:07
3	Sr 421.552†	-29.8	-23.8	-0.1249 ug/L	-0.1249 ppb	02:52:07
3	Sc 361.383	1026880.5	1026880.5	98.788 %		02:53:34
3	Y 371.029	874820.6	874820.6	98.909 %		02:53:34
3	Ag 328.068†	589.1	122.2	0.4735 ug/L	0.4735 ppb	02:53:39
3	As 188.979†	-35.5	0.6	0.1923 ug/L	0.1923 ppb	02:53:59
3	B 249.677†	-345.8	116.0	2.1968 ug/L	2.1968 ppb	02:53:59
3	Ba 233.527†	17.0	17.2	0.1075 ug/L	0.1075 ppb	02:53:59
3	Be 313.107†	-4889.6	-75.7	-0.0237 ug/L	-0.0237 ppb	02:53:39
3	Cd 226.502†	-230.9	1.9	0.0195 ug/L	0.0195 ppb	02:53:59
3	Co 228.616†	-86.5	-1.2	-0.0183 ug/L	-0.0183 ppb	02:53:59
3	Cr 267.716†	107.4	21.0	0.1871 ug/L	0.1871 ppb	02:53:59
3	Cu 324.752†	8987.7	160.6	0.4272 ug/L	0.4272 ppb	02:53:39
3	Mn 257.610†	647.3	78.5	0.0686 ug/L	0.0686 ppb	02:53:59
3	Mo 202.031†	37.2	8.4	0.4461 ug/L	0.4461 ppb	02:53:59
3	Ni 231.604†	125.9	-4.5	-0.0883 ug/L	-0.0883 ppb	02:53:59
3	P 214.914†	278.7	17.0	7.5735 ug/L	7.5735 ppb	02:53:59
3	Pb 220.353†	-86.0	-11.5	-1.0735 ug/L	-1.0735 ppb	02:53:59
3	S 181.975 Axial†	59.6	0.2	0.2217 ug/L	0.2217 ppb	02:53:59
3	Sb 206.836†	44.3	10.2	2.6878 ug/L	2.6878 ppb	02:53:59
3	Se 196.026†	-30.4	-9.4	-4.2943 ug/L	-4.2943 ppb	02:53:59
3	Si 251.611†	646.2	96.4	2.4192 ug/L	2.4192 ppb	02:53:59
3	Sn 189.927†	-1.6	2.7	0.3641 ug/L	0.3641 ppb	02:53:59
3	Ti 334.940†	-1288.7	-44.0	-0.0588 ug/L	-0.0588 ppb	02:53:39
3	Tl 190.801†	-39.1	4.6	1.1253 ug/L	1.1253 ppb	02:53:59
3	U 409.014†	-2835.5	-96.3	-2.4872 ug/L	-2.4872 ppb	02:53:34
3	V 292.402†	-1723.1	-135.7	-0.7675 ug/L	-0.7675 ppb	02:53:39
3	Zn 213.857†	930.8	56.7	0.4147 ug/L	0.4147 ppb	02:53:59
3	SiO2†	642.4	51.2	2.7179 ug/L	2.7179 ppb	02:54:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1028111.2	98.906	%	0.2544				0.26%
Sc Radial	4740.2	96.5	%	0.79				0.82%
Y 371.029	874974.3	98.927	%	0.2140				0.22%
Y RADIAL	5429.1	96.14	%	0.702				0.73%
Ag 328.068†	26.6	0.0983	ug/L	0.34079	0.0983	ppb	0.34079	346.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.5	10.191	ug/L	4.9845	10.191	ppb	4.9845	48.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0264	ug/L	1.07832	-1.0264	ppb	1.07832	105.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	111.9	2.1166	ug/L	0.18430	2.1166	ppb	0.18430	8.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.3	0.1223	ug/L	0.02909	0.1223	ppb	0.02909	23.78%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-71.6	-0.0224	ug/L	0.00834	-0.0224	ppb	0.00834	37.21%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.5	16.886	ug/L	2.7199	16.886	ppb	2.7199	16.11%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -3.7     -0.0305 ug/L       0.08631     -0.0305 ppb        0.08631 283.22%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -7.4     -0.1199 ug/L       0.15392     -0.1199 ppb        0.15392 128.41%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                15.3      0.1365 ug/L       0.04466      0.1365 ppb        0.04466  32.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               192.3      0.5126 ug/L       0.07414      0.5126 ppb        0.07414  14.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.4     -17.219 ug/L      22.1046     -17.219 ppb       22.1046 128.37%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         244.6      44.562 ug/L      19.3900      44.562 ppb       19.3900  43.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.3      14.830 ug/L     111.7847      14.830 ppb      111.7847 753.77%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                61.0      0.0558 ug/L       0.01278      0.0558 ppb        0.01278  22.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.7      0.3539 ug/L       0.11285      0.3539 ppb        0.11285  31.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        151.2      42.403 ug/L      14.2160      42.403 ppb       14.2160  33.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.8     -0.0360 ug/L       0.06239     -0.0360 ppb        0.06239 173.55%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 14.7      6.5094 ug/L       1.20856      6.5094 ppb        1.20856  18.57%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.0     -0.5598 ug/L       0.73335     -0.5598 ppb        0.73335 131.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.3     -0.3402 ug/L       4.66562     -0.3402 ppb        4.66562 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                11.3      3.0028 ug/L       0.37654      3.0028 ppb        0.37654  12.54%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.6     -2.5558 ug/L       1.52234     -2.5558 ppb        1.52234  59.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                91.2      2.2940 ug/L       0.16548      2.2940 ppb        0.16548   7.21%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.2      0.4303 ug/L       0.36814      0.4303 ppb        0.36814  85.56%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                17.4      0.0912 ug/L       0.19161      0.0912 ppb        0.19161 210.11%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -25.5     -0.0344 ug/L       0.06458     -0.0344 ppb        0.06458 187.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.2     -1.2652 ug/L       2.27863     -1.2652 ppb        2.27863 180.11%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  6.2      0.1627 ug/L       2.51498      0.1627 ppb        2.51498 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -61.4     -0.3431 ug/L       0.37462     -0.3431 ppb        0.37462 109.19%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                57.6      0.4241 ug/L       0.01031      0.4241 ppb        0.01031   2.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      72.9      3.9120 ug/L       1.10988      3.9120 ppb        1.10988  28.37%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 48
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 03:30:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4791.1	4791.1	97.6	%			03:32:32
1	Y RADIAL	5443.1	5443.1	96.39	%			03:32:32
1	Al 396.153Radial†	7505.1	7734.7	5085.2	ug/L	5085.2	ppb	03:32:32
1	Ca 317.933Radial†	2723.9	2773.5	4910.6	ug/L	4910.6	ppb	03:32:52
1	Fe 238.204 Radial†	412.0	411.2	4987.8	ug/L	4987.8	ppb	03:32:52
1	K 766.490 Radial†	29532.3	27694.1	5038.4	ug/L	5038.4	ppb	03:32:32
1	Mg 279.077 IEC†	112.4	112.7	5049.3	ug/L	5049.3	ppb	03:32:52
1	Na 589.592 Radial†	35571.7	37732.5	10584	ug/L	10584	ppb	03:32:32
1	Sr 421.552†	95134.4	97497.6	511.47	ug/L	511.47	ppb	03:32:32
1	Sc 361.383	1011685.0	1011685.0	97.326	%			03:33:51
1	Y 371.029	848446.6	848446.6	95.927	%			03:33:51
1	Ag 328.068†	127059.5	130076.7	518.72	ug/L	518.72	ppb	03:33:51
1	As 188.979†	1572.3	1652.1	519.26	ug/L	519.26	ppb	03:34:11
1	B 249.677†	25804.9	26980.1	507.92	ug/L	507.92	ppb	03:33:51
1	Ba 233.527†	78634.7	80795.4	520.40	ug/L	520.40	ppb	03:33:51
1	Be 313.107†	1608700.1	1657776.8	517.90	ug/L	517.90	ppb	03:33:51
1	Cd 226.502†	58056.0	59886.9	522.09	ug/L	522.09	ppb	03:33:51
1	Co 228.616†	30303.5	31222.5	514.46	ug/L	514.46	ppb	03:34:11
1	Cr 267.716†	56153.3	57608.5	518.39	ug/L	518.39	ppb	03:33:51
1	Cu 324.752†	197844.6	194343.4	519.25	ug/L	519.25	ppb	03:33:51
1	Mn 257.610†	536780.2	550952.8	522.13	ug/L	522.13	ppb	03:33:51
1	Mo 202.031†	9513.5	9745.7	517.53	ug/L	517.53	ppb	03:34:11
1	Ni 231.604†	25684.3	26258.1	514.16	ug/L	514.16	ppb	03:34:11
1	P 214.914†	5938.9	5836.9	2532.5	ug/L	2532.5	ppb	03:34:11
1	Pb 220.353†	5350.0	5572.5	524.70	ug/L	524.70	ppb	03:34:11
1	S 181.975 Axial†	980.2	947.1	1019.4	ug/L	1019.4	ppb	03:34:11
1	Sb 206.836†	1961.6	1980.9	529.71	ug/L	529.71	ppb	03:34:11
1	Se 196.026†	1115.8	1167.8	536.97	ug/L	536.97	ppb	03:34:11
1	Si 251.611†	99627.4	101807.2	2573.3	ug/L	2573.3	ppb	03:33:51
1	Sn 189.927†	3800.4	3909.2	517.61	ug/L	517.61	ppb	03:34:11
1	Ti 334.940†	364387.9	375660.7	517.99	ug/L	517.99	ppb	03:33:51
1	Tl 190.801†	2030.8	2130.8	518.65	ug/L	518.65	ppb	03:34:11
1	U 409.014†	16258.7	19479.4	502.00	ug/L	502.00	ppb	03:33:51
1	V 292.402†	86271.3	90250.3	523.60	ug/L	523.60	ppb	03:33:51
1	Zn 213.857†	69738.5	70769.2	515.48	ug/L	515.48	ppb	03:33:51
1	SiO2†	100104.5	102256.1	5530.8	ug/L	5530.8	ppb	03:35:12
2	Sc Radial	4673.5	4673.5	95.2	%			03:32:57
2	Y RADIAL	5314.3	5314.3	94.11	%			03:32:57
2	Al 396.153Radial†	7385.6	7802.6	5129.9	ug/L	5129.9	ppb	03:32:57
2	Ca 317.933Radial†	2822.0	2946.8	5217.4	ug/L	5217.4	ppb	03:33:17
2	Fe 238.204 Radial†	423.5	433.9	5262.3	ug/L	5262.3	ppb	03:33:17
2	K 766.490 Radial†	28953.3	27847.0	5066.3	ug/L	5066.3	ppb	03:32:57
2	Mg 279.077 IEC†	117.1	120.5	5399.1	ug/L	5399.1	ppb	03:33:17
2	Na 589.592 Radial†	34715.6	37749.9	10589	ug/L	10589	ppb	03:32:57
2	Sr 421.552†	93223.8	97942.2	513.80	ug/L	513.80	ppb	03:32:57
2	Sc 361.383	1001457.7	1001457.7	96.342	%			03:34:19
2	Y 371.029	839538.7	839538.7	94.920	%			03:34:19
2	Ag 328.068†	125940.1	130248.0	519.47	ug/L	519.47	ppb	03:34:19
2	As 188.979†	1568.6	1664.7	523.23	ug/L	523.23	ppb	03:34:39
2	B 249.677†	25550.1	26986.3	507.99	ug/L	507.99	ppb	03:34:19
2	Ba 233.527†	77847.7	80803.6	520.46	ug/L	520.46	ppb	03:34:19
2	Be 313.107†	1589789.6	1655028.3	517.04	ug/L	517.04	ppb	03:34:19
2	Cd 226.502†	57266.7	59676.7	520.24	ug/L	520.24	ppb	03:34:19
2	Co 228.616†	30303.4	31540.3	519.71	ug/L	519.71	ppb	03:34:39
2	Cr 267.716†	55467.3	57485.7	517.29	ug/L	517.29	ppb	03:34:19
2	Cu 324.752†	195973.7	194477.4	519.62	ug/L	519.62	ppb	03:34:19
2	Mn 257.610†	531182.3	550774.8	521.98	ug/L	521.98	ppb	03:34:19
2	Mo 202.031†	9494.2	9825.5	521.78	ug/L	521.78	ppb	03:34:39
2	Ni 231.604†	25660.9	26503.3	518.96	ug/L	518.96	ppb	03:34:39

2	P 214.914†	5946.8	5907.5	2563.9 ug/L	2563.9 ppb	03:34:39
2	Pb 220.353†	5335.9	5614.1	528.60 ug/L	528.60 ppb	03:34:39
2	S 181.975 Axial†	981.8	959.0	1032.2 ug/L	1032.2 ppb	03:34:39
2	Sb 206.836†	1957.0	1996.6	534.06 ug/L	534.06 ppb	03:34:39
2	Se 196.026†	1114.3	1178.0	542.50 ug/L	542.50 ppb	03:34:39
2	Si 251.611†	98465.4	101646.6	2569.1 ug/L	2569.1 ppb	03:34:19
2	Sn 189.927†	3789.7	3937.9	521.44 ug/L	521.44 ppb	03:34:39
2	Ti 334.940†	360406.2	375351.3	517.58 ug/L	517.58 ppb	03:34:19
2	Tl 190.801†	2041.6	2163.4	526.50 ug/L	526.50 ppb	03:34:39
2	U 409.014†	16130.9	19517.4	502.95 ug/L	502.95 ppb	03:34:19
2	V 292.402†	85243.6	90088.9	522.71 ug/L	522.71 ppb	03:34:19
2	Zn 213.857†	68988.2	70722.1	515.06 ug/L	515.06 ppb	03:34:19
2	SiO2†	98896.7	102052.8	5519.6 ug/L	5519.6 ppb	03:35:17
3	Sc Radial	4638.7	4638.7	94.5 %		03:33:22
3	Y RADIAL	5265.0	5265.0	93.23 %		03:33:22
3	Al 396.153Radial†	7317.5	7788.8	5121.1 ug/L	5121.1 ppb	03:33:22
3	Ca 317.933Radial†	2800.1	2945.9	5215.7 ug/L	5215.7 ppb	03:33:42
3	Fe 238.204 Radial†	424.4	438.2	5314.4 ug/L	5314.4 ppb	03:33:42
3	K 766.490 Radial†	28790.6	27903.2	5076.5 ug/L	5076.5 ppb	03:33:22
3	Mg 279.077 IEC†	117.4	121.8	5455.5 ug/L	5455.5 ppb	03:33:42
3	Na 589.592 Radial†	34247.0	37527.9	10527 ug/L	10527 ppb	03:33:22
3	Sr 421.552†	92385.6	97790.6	513.00 ug/L	513.00 ppb	03:33:22
3	Sc 361.383	1015792.9	1015792.9	97.721 %		03:34:46
3	Y 371.029	852110.6	852110.6	96.342 %		03:34:46
3	Ag 328.068†	127392.9	129889.9	518.06 ug/L	518.06 ppb	03:34:46
3	As 188.979†	1556.9	1629.9	512.38 ug/L	512.38 ppb	03:35:06
3	B 249.677†	25886.5	26956.4	507.44 ug/L	507.44 ppb	03:34:46
3	Ba 233.527†	78667.2	80501.9	518.52 ug/L	518.52 ppb	03:34:46
3	Be 313.107†	1609328.0	1651734.9	516.02 ug/L	516.02 ppb	03:34:46
3	Cd 226.502†	57942.9	59529.9	518.94 ug/L	518.94 ppb	03:34:46
3	Co 228.616†	30186.2	30976.6	510.40 ug/L	510.40 ppb	03:35:06
3	Cr 267.716†	56056.0	57275.5	515.40 ug/L	515.40 ppb	03:34:46
3	Cu 324.752†	198759.4	194457.4	519.57 ug/L	519.57 ppb	03:34:46
3	Mn 257.610†	537324.2	549279.0	520.57 ug/L	520.57 ppb	03:34:46
3	Mo 202.031†	9493.6	9685.7	514.37 ug/L	514.37 ppb	03:35:06
3	Ni 231.604†	25548.4	26012.3	509.35 ug/L	509.35 ppb	03:35:06
3	P 214.914†	5910.7	5783.4	2508.2 ug/L	2508.2 ppb	03:35:06
3	Pb 220.353†	5310.6	5510.1	518.81 ug/L	518.81 ppb	03:35:06
3	S 181.975 Axial†	984.1	947.0	1019.3 ug/L	1019.3 ppb	03:35:06
3	Sb 206.836†	1942.4	1953.1	522.31 ug/L	522.31 ppb	03:35:06
3	Se 196.026†	1092.8	1139.7	525.70 ug/L	525.70 ppb	03:35:06
3	Si 251.611†	99738.9	101507.4	2565.7 ug/L	2565.7 ppb	03:34:46
3	Sn 189.927†	3778.2	3870.6	512.54 ug/L	512.54 ppb	03:35:06
3	Ti 334.940†	365307.9	375088.1	517.22 ug/L	517.22 ppb	03:34:46
3	Tl 190.801†	2025.5	2117.0	515.32 ug/L	515.32 ppb	03:35:06
3	U 409.014†	16456.9	19614.7	505.46 ug/L	505.46 ppb	03:34:46
3	V 292.402†	86238.5	89858.3	521.28 ug/L	521.28 ppb	03:34:46
3	Zn 213.857†	69650.3	70389.1	512.67 ug/L	512.67 ppb	03:34:46
3	SiO2†	100500.7	102245.6	5530.4 ug/L	5530.4 ppb	03:35:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1009645.2	97.130	%	0.7102				0.73%
Sc Radial	4701.1	95.8	%	1.63				1.70%
Y 371.029	846698.6	95.730	%	0.7310				0.76%
Y RADIAL	5340.8	94.57	%	1.629				1.72%
Ag 328.068†	130071.5	518.75	ug/L	0.706	518.75	ppb	0.706	0.14%
QC value within limits for Ag 328.068 Recovery = 103.75%								
Al 396.153Radial†	7775.4	5112.1	ug/L	23.64	5112.1	ppb	23.64	0.46%
QC value within limits for Al 396.153Radial Recovery = 102.24%								
As 188.979†	1648.9	518.29	ug/L	5.491	518.29	ppb	5.491	1.06%
QC value within limits for As 188.979 Recovery = 103.66%								
B 249.677†	26974.3	507.78	ug/L	0.300	507.78	ppb	0.300	0.06%
QC value within limits for B 249.677 Recovery = 101.56%								
Ba 233.527†	80700.3	519.79	ug/L	1.102	519.79	ppb	1.102	0.21%
QC value within limits for Ba 233.527 Recovery = 103.96%								
Be 313.107†	1654846.7	516.99	ug/L	0.944	516.99	ppb	0.944	0.18%
QC value within limits for Be 313.107 Recovery = 103.40%								
Ca 317.933Radial†	2888.7	5114.6	ug/L	176.67	5114.6	ppb	176.67	3.45%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.29%
Cd 226.502†            59697.8      520.43 ug/L         1.583      520.43 ppb          1.583   0.30%
   QC value within limits for Cd 226.502  Recovery = 104.09%
Co 228.616†            31246.5      514.86 ug/L         4.665      514.86 ppb          4.665   0.91%
   QC value within limits for Co 228.616  Recovery = 102.97%
Cr 267.716†            57456.5      517.02 ug/L         1.512      517.02 ppb          1.512   0.29%
   QC value within limits for Cr 267.716  Recovery = 103.40%
Cu 324.752†           194426.0      519.48 ug/L         0.202      519.48 ppb          0.202   0.04%
   QC value within limits for Cu 324.752  Recovery = 103.90%
Fe 238.204 Radial†       427.8      5188.2 ug/L        175.49      5188.2 ppb         175.49   3.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.76%
K 766.490 Radial†      27814.7      5060.4 ug/L         19.73      5060.4 ppb          19.73   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 101.21%
Mg 279.077 IEC†          118.3      5301.3 ug/L        220.06      5301.3 ppb         220.06   4.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.03%
Mn 257.610†           550335.6      521.56 ug/L         0.861      521.56 ppb          0.861   0.17%
   QC value within limits for Mn 257.610  Recovery = 104.31%
Mo 202.031†             9752.3      517.89 ug/L         3.719      517.89 ppb          3.719   0.72%
   QC value within limits for Mo 202.031  Recovery = 103.58%
Na 589.592 Radial†     37670.1       10566 ug/L          34.6       10566 ppb           34.6   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 105.66%
Ni 231.604†            26257.9      514.16 ug/L         4.807      514.16 ppb          4.807   0.93%
   QC value within limits for Ni 231.604  Recovery = 102.83%
P 214.914†              5842.6      2534.9 ug/L         27.90      2534.9 ppb          27.90   1.10%
   QC value within limits for P 214.914  Recovery = 101.39%
Pb 220.353†             5565.6      524.04 ug/L         4.928      524.04 ppb          4.928   0.94%
   QC value within limits for Pb 220.353  Recovery = 104.81%
S 181.975 Axial†         951.0      1023.6 ug/L          7.42      1023.6 ppb           7.42   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 102.36%
Sb 206.836†             1976.9      528.69 ug/L         5.941      528.69 ppb          5.941   1.12%
   QC value within limits for Sb 206.836  Recovery = 105.74%
Se 196.026†             1161.8      535.06 ug/L         8.566      535.06 ppb          8.566   1.60%
   QC value within limits for Se 196.026  Recovery = 107.01%
Si 251.611†           101653.7      2569.3 ug/L          3.79      2569.3 ppb           3.79   0.15%
   QC value within limits for Si 251.611  Recovery = 102.77%
Sn 189.927†             3905.9      517.20 ug/L         4.466      517.20 ppb          4.466   0.86%
   QC value within limits for Sn 189.927  Recovery = 103.44%
Sr 421.552†            97743.5      512.76 ug/L         1.184      512.76 ppb          1.184   0.23%
   QC value within limits for Sr 421.552  Recovery = 102.55%
Ti 334.940†           375366.7      517.60 ug/L         0.387      517.60 ppb          0.387   0.07%
   QC value within limits for Ti 334.940  Recovery = 103.52%
Tl 190.801†             2137.1      520.16 ug/L         5.739      520.16 ppb          5.739   1.10%
   QC value within limits for Tl 190.801  Recovery = 104.03%
U 409.014†             19537.2      503.47 ug/L         1.789      503.47 ppb          1.789   0.36%
   QC value within limits for U 409.014  Recovery = 100.69%
V 292.402†             90065.8      522.53 ug/L         1.171      522.53 ppb          1.171   0.22%
   QC value within limits for V 292.402  Recovery = 104.51%
Zn 213.857†            70626.8      514.40 ug/L         1.515      514.40 ppb          1.515   0.29%
   QC value within limits for Zn 213.857  Recovery = 102.88%
SiO2†                 102184.8      5526.9 ug/L          6.38      5526.9 ppb           6.38   0.12%
   QC value within limits for SiO2  Recovery = 103.36%
All analyte(s) passed QC.
```

Sequence No.: 49
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 03:37:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4722.4	4722.4	96.2	%			03:39:24
1	Y RADIAL	5401.1	5401.1	95.64	%			03:39:24
1	Al 396.153Radial†	-22.5	20.4	13.474	ug/L	13.474	ppb	03:39:24
1	Ca 317.933Radial†	32.1	15.5	27.514	ug/L	27.514	ppb	03:39:44
1	Fe 238.204 Radial†	12.2	1.7	20.576	ug/L	20.576	ppb	03:39:44
1	K 766.490 Radial†	2801.1	342.7	62.426	ug/L	62.426	ppb	03:39:24
1	Mg 279.077 IEC†	0.8	-1.7	-74.493	ug/L	-74.493	ppb	03:39:44
1	Na 589.592 Radial†	-979.1	262.0	73.485	ug/L	73.485	ppb	03:39:24
1	Sr 421.552†	29.6	38.1	0.1999	ug/L	0.1999	ppb	03:39:24
1	Sc 361.383	1018156.6	1018156.6	97.948	%			03:40:41
1	Y 371.029	866128.0	866128.0	97.926	%			03:40:41
1	Ag 328.068†	412.6	-52.8	-0.2044	ug/L	-0.2044	ppb	03:40:46
1	As 188.979†	-34.3	1.6	0.5098	ug/L	0.5098	ppb	03:41:06
1	B 249.677†	-417.3	40.1	0.7554	ug/L	0.7554	ppb	03:41:06
1	Ba 233.527†	-3.7	-3.7	-0.0234	ug/L	-0.0234	ppb	03:41:06
1	Be 313.107†	-4859.4	-87.3	-0.0273	ug/L	-0.0273	ppb	03:40:46
1	Cd 226.502†	-229.2	1.6	0.0121	ug/L	0.0121	ppb	03:41:06
1	Co 228.616†	-106.2	-22.1	-0.3630	ug/L	-0.3630	ppb	03:41:06
1	Cr 267.716†	97.2	11.5	0.1027	ug/L	0.1027	ppb	03:41:06
1	Cu 324.752†	8894.7	143.5	0.3842	ug/L	0.3842	ppb	03:40:46
1	Mn 257.610†	621.8	58.2	0.0585	ug/L	0.0585	ppb	03:41:06
1	Mo 202.031†	36.1	7.6	0.4059	ug/L	0.4059	ppb	03:41:06
1	Ni 231.604†	125.7	-3.6	-0.0699	ug/L	-0.0699	ppb	03:41:06
1	P 214.914†	281.9	22.6	10.074	ug/L	10.074	ppb	03:41:06
1	Pb 220.353†	-73.0	1.0	0.0959	ug/L	0.0959	ppb	03:41:06
1	S 181.975 Axial†	64.3	5.5	5.9664	ug/L	5.9664	ppb	03:41:06
1	Sb 206.836†	40.9	7.2	1.9150	ug/L	1.9150	ppb	03:41:06
1	Se 196.026†	-37.4	-16.8	-7.3481	ug/L	-7.3481	ppb	03:41:06
1	Si 251.611†	667.0	123.3	3.1011	ug/L	3.1011	ppb	03:41:06
1	Sn 189.927†	4.8	9.2	1.2250	ug/L	1.2250	ppb	03:41:06
1	Ti 334.940†	-1254.4	-20.2	-0.0270	ug/L	-0.0270	ppb	03:40:46
1	Tl 190.801†	-46.5	-3.3	-0.7874	ug/L	-0.7874	ppb	03:41:06
1	U 409.014†	-2670.9	47.1	1.2148	ug/L	1.2148	ppb	03:40:41
1	V 292.402†	-1590.5	-15.3	-0.0845	ug/L	-0.0845	ppb	03:40:46
1	Zn 213.857†	938.2	72.3	0.5316	ug/L	0.5316	ppb	03:41:06
1	SiO2†	662.0	76.9	4.1070	ug/L	4.1070	ppb	03:42:12
2	Sc Radial	4912.8	4912.8	100	%			03:39:49
2	Y RADIAL	5625.0	5625.0	99.61	%			03:39:49
2	Al 396.153Radial†	-32.8	11.0	7.2225	ug/L	7.2225	ppb	03:39:49
2	Ca 317.933Radial†	32.8	14.9	26.452	ug/L	26.452	ppb	03:40:09
2	Fe 238.204 Radial†	10.1	-0.8	-10.272	ug/L	-10.272	ppb	03:40:09
2	K 766.490 Radial†	2739.7	168.5	30.672	ug/L	30.672	ppb	03:39:49
2	Mg 279.077 IEC†	1.0	-1.5	-64.967	ug/L	-64.967	ppb	03:40:09
2	Na 589.592 Radial†	-990.5	290.0	81.359	ug/L	81.359	ppb	03:39:49
2	Sr 421.552†	-7.0	0.5	0.0021	ug/L	0.0021	ppb	03:39:49
2	Sc 361.383	1027840.9	1027840.9	98.880	%			03:41:11
2	Y 371.029	873341.0	873341.0	98.742	%			03:41:11
2	Ag 328.068†	410.6	-58.8	-0.2372	ug/L	-0.2372	ppb	03:41:16
2	As 188.979†	-33.8	2.4	0.7469	ug/L	0.7469	ppb	03:41:36
2	B 249.677†	-380.9	80.9	1.5308	ug/L	1.5308	ppb	03:41:36
2	Ba 233.527†	10.6	10.8	0.0682	ug/L	0.0682	ppb	03:41:36
2	Be 313.107†	-4882.2	-63.6	-0.0200	ug/L	-0.0200	ppb	03:41:16
2	Cd 226.502†	-234.8	-1.8	-0.0149	ug/L	-0.0149	ppb	03:41:36
2	Co 228.616†	-90.2	-4.9	-0.0784	ug/L	-0.0784	ppb	03:41:36
2	Cr 267.716†	113.9	27.4	0.2458	ug/L	0.2458	ppb	03:41:36
2	Cu 324.752†	9014.4	179.0	0.4774	ug/L	0.4774	ppb	03:41:16
2	Mn 257.610†	654.4	85.1	0.0808	ug/L	0.0808	ppb	03:41:36
2	Mo 202.031†	39.0	10.2	0.5405	ug/L	0.5405	ppb	03:41:36
2	Ni 231.604†	117.0	-13.6	-0.2663	ug/L	-0.2663	ppb	03:41:36

2	P 214.914†	277.2	15.3	6.7768 ug/L	6.7768 ppb	03:41:36
2	Pb 220.353†	-75.2	-0.5	-0.0424 ug/L	-0.0424 ppb	03:41:36
2	S 181.975 Axial†	63.4	4.0	4.3255 ug/L	4.3255 ppb	03:41:36
2	Sb 206.836†	51.5	17.4	4.6182 ug/L	4.6182 ppb	03:41:36
2	Se 196.026†	-20.0	1.2	0.4908 ug/L	0.4908 ppb	03:41:36
2	Si 251.611†	640.9	90.5	2.2767 ug/L	2.2767 ppb	03:41:36
2	Sn 189.927†	1.8	6.1	0.8147 ug/L	0.8147 ppb	03:41:36
2	Ti 334.940†	-1310.9	-65.3	-0.0886 ug/L	-0.0886 ppb	03:41:16
2	Tl 190.801†	-44.2	-0.4	-0.1050 ug/L	-0.1050 ppb	03:41:36
2	U 409.014†	-2763.1	-20.5	-0.5282 ug/L	-0.5282 ppb	03:41:11
2	V 292.402†	-1636.7	-46.7	-0.2606 ug/L	-0.2606 ppb	03:41:16
2	Zn 213.857†	957.4	82.7	0.6118 ug/L	0.6118 ppb	03:41:36
2	SiO2†	694.3	103.1	5.5550 ug/L	5.5550 ppb	03:42:17
3	Sc Radial	4786.7	4786.7	97.5 %		03:40:14
3	Y RADIAL	5462.5	5462.5	96.73 %		03:40:14
3	Al 396.153Radial†	-17.2	26.1	17.250 ug/L	17.250 ppb	03:40:14
3	Ca 317.933Radial†	29.9	12.8	22.699 ug/L	22.699 ppb	03:40:34
3	Fe 238.204 Radial†	10.9	0.2	1.8749 ug/L	1.8749 ppb	03:40:34
3	K 766.490 Radial†	2628.9	127.0	23.120 ug/L	23.120 ppb	03:40:14
3	Mg 279.077 IEC†	0.9	-1.6	-71.125 ug/L	-71.125 ppb	03:40:34
3	Na 589.592 Radial†	-1068.0	184.5	51.755 ug/L	51.755 ppb	03:40:14
3	Sr 421.552†	-6.7	0.6	0.0028 ug/L	0.0028 ppb	03:40:14
3	Sc 361.383	1017748.2	1017748.2	97.909 %		03:41:41
3	Y 371.029	865276.6	865276.6	97.830 %		03:41:41
3	Ag 328.068†	336.9	-130.0	-0.5131 ug/L	-0.5131 ppb	03:41:46
3	As 188.979†	-39.6	-3.8	-1.1839 ug/L	-1.1839 ppb	03:42:06
3	B 249.677†	-415.7	41.5	0.7840 ug/L	0.7840 ppb	03:42:06
3	Ba 233.527†	-13.6	-13.9	-0.0897 ug/L	-0.0897 ppb	03:42:06
3	Be 313.107†	-4785.3	-13.6	-0.0043 ug/L	-0.0043 ppb	03:41:46
3	Cd 226.502†	-234.5	-3.9	-0.0338 ug/L	-0.0338 ppb	03:42:06
3	Co 228.616†	-96.1	-11.8	-0.1941 ug/L	-0.1941 ppb	03:42:06
3	Cr 267.716†	115.7	30.4	0.2741 ug/L	0.2741 ppb	03:42:06
3	Cu 324.752†	8913.6	166.5	0.4446 ug/L	0.4446 ppb	03:41:46
3	Mn 257.610†	642.9	79.9	0.0772 ug/L	0.0772 ppb	03:42:06
3	Mo 202.031†	32.1	3.5	0.1882 ug/L	0.1882 ppb	03:42:06
3	Ni 231.604†	135.7	6.7	0.1308 ug/L	0.1308 ppb	03:42:06
3	P 214.914†	292.2	33.4	14.865 ug/L	14.865 ppb	03:42:06
3	Pb 220.353†	-67.5	6.6	0.6219 ug/L	0.6219 ppb	03:42:06
3	S 181.975 Axial†	60.7	1.9	2.0199 ug/L	2.0199 ppb	03:42:06
3	Sb 206.836†	50.1	16.5	4.3616 ug/L	4.3616 ppb	03:42:06
3	Se 196.026†	-26.5	-5.7	-2.5189 ug/L	-2.5189 ppb	03:42:06
3	Si 251.611†	641.5	97.6	2.4646 ug/L	2.4646 ppb	03:42:06
3	Sn 189.927†	1.1	5.4	0.7228 ug/L	0.7228 ppb	03:42:06
3	Ti 334.940†	-1250.3	-16.6	-0.0203 ug/L	-0.0203 ppb	03:41:46
3	Tl 190.801†	-47.6	-4.3	-1.0464 ug/L	-1.0464 ppb	03:42:06
3	U 409.014†	-2844.0	-130.7	-3.3803 ug/L	-3.3803 ppb	03:41:41
3	V 292.402†	-1616.2	-42.2	-0.2472 ug/L	-0.2472 ppb	03:41:46
3	Zn 213.857†	944.8	79.5	0.5848 ug/L	0.5848 ppb	03:42:06
3	SiO2†	676.9	92.3	4.9873 ug/L	4.9873 ppb	03:42:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021248.5	98.246	%	0.5496				0.56%
Sc Radial	4807.3	97.9	%	1.97				2.02%
Y 371.029	868248.5	98.166	%	0.5009				0.51%
Y RADIAL	5496.2	97.33	%	2.049				2.11%
Ag 328.068†	-80.5	-0.3182	ug/L	0.16955	-0.3182	ppb	0.16955	53.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	19.2	12.649	ug/L	5.0642	12.649	ppb	5.0642	40.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.1	0.0242	ug/L	1.05295	0.0242	ppb	1.05295	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	54.2	1.0234	ug/L	0.43965	1.0234	ppb	0.43965	42.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.3	-0.0150	ug/L	0.07930	-0.0150	ppb	0.07930	529.37%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-54.8	-0.0172	ug/L	0.01175	-0.0172	ppb	0.01175	68.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	14.4	25.555	ug/L	2.5294	25.555	ppb	2.5294	9.90%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -1.3     -0.0122 ug/L       0.02305     -0.0122 ppb        0.02305 188.64%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -12.9     -0.2118 ug/L       0.14315     -0.2118 ppb        0.14315  67.58%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              23.1      0.2075 ug/L       0.09187      0.2075 ppb        0.09187  44.27%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             163.0      0.4354 ug/L       0.04728      0.4354 ppb        0.04728  10.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       0.3      4.0593 ug/L      15.53958      4.0593 ppb       15.53958 382.81%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       212.7     38.739 ug/L       20.8576     38.739 ppb        20.8576  53.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.6    -70.195 ug/L        4.8310    -70.195 ppb         4.8310   6.88%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              74.4      0.0722 ug/L       0.01197      0.0722 ppb        0.01197  16.58%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               7.1      0.3782 ug/L       0.17782      0.3782 ppb        0.17782  47.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      245.5     68.866 ug/L       15.3326     68.866 ppb        15.3326  22.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -3.5     -0.0685 ug/L       0.19852     -0.0685 ppb        0.19852 289.94%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               23.8     10.572 ug/L        4.0671     10.572 ppb         4.0671  38.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               2.4      0.2251 ug/L       0.35048      0.2251 ppb        0.35048 155.68%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.8      4.1039 ug/L       1.98255      4.1039 ppb        1.98255  48.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              13.7      3.6316 ug/L       1.49217      3.6316 ppb        1.49217  41.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -7.1     -3.1254 ug/L       3.95449     -3.1254 ppb        3.95449 126.53%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             103.8      2.6141 ug/L       0.43206      2.6141 ppb        0.43206  16.53%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               6.9      0.9208 ug/L       0.26740      0.9208 ppb        0.26740  29.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              13.1      0.0683 ug/L       0.11399      0.0683 ppb        0.11399 166.98%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -34.0     -0.0453 ug/L       0.03765     -0.0453 ppb        0.03765  83.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.7     -0.6463 ug/L       0.48628     -0.6463 ppb        0.48628  75.24%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -34.7     -0.8979 ug/L       2.31974     -0.8979 ppb        2.31974 258.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -34.7     -0.1974 ug/L       0.09801     -0.1974 ppb        0.09801  49.64%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              78.1      0.5761 ug/L       0.04078      0.5761 ppb        0.04078   7.08%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    90.8      4.8831 ug/L       0.72959      4.8831 ppb        0.72959  14.94%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 50
Sample ID: 1201977903|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/5/2009 03:44:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977903|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4712.1	4712.1	96.0	%			03:46:26
1	Y RADIAL	5368.7	5368.7	95.07	%			03:46:26
1	Al 396.153Radial†	-9.6	33.7	22.290	ug/L	22.290	ppb	03:46:26
1	Ca 317.933Radial†	35.1	18.7	33.082	ug/L	33.082	ppb	03:46:46
1	Fe 238.204 Radial†	12.0	1.5	18.081	ug/L	18.081	ppb	03:46:46
1	K 766.490 Radial†	2505.6	41.2	7.4602	ug/L	7.4602	ppb	03:46:26
1	Mg 279.077 IEC†	2.0	-0.4	-18.654	ug/L	-18.654	ppb	03:46:46
1	Na 589.592 Radial†	-955.9	283.9	79.643	ug/L	79.643	ppb	03:46:26
1	Sr 421.552†	-5.1	2.1	0.0108	ug/L	0.0108	ppb	03:46:26
1	Sc 361.383	995131.8	995131.8	95.733	%			03:47:43
1	Y 371.029	846371.4	846371.4	95.693	%			03:47:43
1	Ag 328.068†	340.9	-117.9	-0.4624	ug/L	-0.4624	ppb	03:47:48
1	As 188.979†	-36.1	-1.1	-0.3431	ug/L	-0.3431	ppb	03:48:08
1	B 249.677†	-478.6	-33.8	-0.6407	ug/L	-0.6407	ppb	03:48:08
1	Ba 233.527†	45.0	47.0	0.3015	ug/L	0.3015	ppb	03:48:08
1	Be 313.107†	-4873.8	-217.1	-0.0669	ug/L	-0.0669	ppb	03:47:48
1	Cd 226.502†	-237.2	-12.2	-0.1081	ug/L	-0.1081	ppb	03:48:08
1	Co 228.616†	-97.4	-15.4	-0.2547	ug/L	-0.2547	ppb	03:48:08
1	Cr 267.716†	149.0	67.9	0.6101	ug/L	0.6101	ppb	03:48:08
1	Cu 324.752†	8990.4	453.6	1.2122	ug/L	1.2122	ppb	03:47:48
1	Mn 257.610†	1624.9	1120.6	1.0633	ug/L	1.0633	ppb	03:47:48
1	Mo 202.031†	25.6	-2.5	-0.1322	ug/L	-0.1322	ppb	03:48:08
1	Ni 231.604†	121.4	-5.2	-0.1012	ug/L	-0.1012	ppb	03:48:08
1	P 214.914†	289.8	37.6	16.673	ug/L	16.673	ppb	03:48:08
1	Pb 220.353†	-82.1	-10.2	-0.9595	ug/L	-0.9595	ppb	03:48:08
1	S 181.975 Axial†	62.3	5.0	5.3582	ug/L	5.3582	ppb	03:48:08
1	Sb 206.836†	57.2	25.1	6.6530	ug/L	6.6530	ppb	03:48:08
1	Se 196.026†	-18.4	2.1	1.0037	ug/L	1.0037	ppb	03:48:08
1	Si 251.611†	883.5	365.2	9.2675	ug/L	9.2675	ppb	03:48:08
1	Sn 189.927†	14.2	19.2	2.5395	ug/L	2.5395	ppb	03:48:08
1	Ti 334.940†	-939.3	279.3	0.3876	ug/L	0.3876	ppb	03:47:48
1	Tl 190.801†	-48.4	-6.3	-1.5045	ug/L	-1.5045	ppb	03:48:08
1	U 409.014†	-2727.1	-74.7	-1.9351	ug/L	-1.9351	ppb	03:47:43
1	V 292.402†	-1618.1	-81.7	-0.4772	ug/L	-0.4772	ppb	03:47:48
1	Zn 213.857†	1399.3	576.1	4.2312	ug/L	4.2312	ppb	03:48:08
1	SiO2†	916.9	358.7	19.477	ug/L	19.477	ppb	03:49:14
2	Sc Radial	4600.2	4600.2	93.7	%			03:46:51
2	Y RADIAL	5257.9	5257.9	93.11	%			03:46:51
2	Al 396.153Radial†	-17.2	25.5	16.806	ug/L	16.806	ppb	03:46:51
2	Ca 317.933Radial†	31.6	15.9	28.221	ug/L	28.221	ppb	03:47:11
2	Fe 238.204 Radial†	12.2	2.0	24.343	ug/L	24.343	ppb	03:47:11
2	K 766.490 Radial†	2696.6	308.5	56.189	ug/L	56.189	ppb	03:46:51
2	Mg 279.077 IEC†	4.5	2.3	103.97	ug/L	103.97	ppb	03:47:11
2	Na 589.592 Radial†	-1029.9	180.7	50.693	ug/L	50.693	ppb	03:46:51
2	Sr 421.552†	-3.7	3.5	0.0181	ug/L	0.0181	ppb	03:46:51
2	Sc 361.383	1011700.2	1011700.2	97.327	%			03:48:13
2	Y 371.029	859601.1	859601.1	97.188	%			03:48:13
2	Ag 328.068†	426.1	-36.3	-0.1343	ug/L	-0.1343	ppb	03:48:18
2	As 188.979†	-44.6	-9.2	-2.8657	ug/L	-2.8657	ppb	03:48:39
2	B 249.677†	-476.3	-23.3	-0.4425	ug/L	-0.4425	ppb	03:48:39
2	Ba 233.527†	42.9	44.1	0.2839	ug/L	0.2839	ppb	03:48:39
2	Be 313.107†	-4885.3	-145.5	-0.0449	ug/L	-0.0449	ppb	03:48:18
2	Cd 226.502†	-233.4	-4.2	-0.0390	ug/L	-0.0390	ppb	03:48:39
2	Co 228.616†	-108.6	-25.3	-0.4168	ug/L	-0.4168	ppb	03:48:39
2	Cr 267.716†	133.3	49.1	0.4426	ug/L	0.4426	ppb	03:48:39
2	Cu 324.752†	8978.3	287.3	0.7686	ug/L	0.7686	ppb	03:48:18
2	Mn 257.610†	1594.1	1061.2	1.0054	ug/L	1.0054	ppb	03:48:18
2	Mo 202.031†	30.4	2.0	0.1092	ug/L	0.1092	ppb	03:48:39
2	Ni 231.604†	138.8	10.7	0.2099	ug/L	0.2099	ppb	03:48:39

2	P 214.914†	293.1	36.0	16.002 ug/L	16.002 ppb	03:48:39
2	Pb 220.353†	-72.5	1.1	0.1039 ug/L	0.1039 ppb	03:48:39
2	S 181.975 Axial†	60.2	1.7	1.8722 ug/L	1.8722 ppb	03:48:39
2	Sb 206.836†	49.0	15.7	4.1812 ug/L	4.1812 ppb	03:48:39
2	Se 196.026†	-23.0	-2.2	-0.9074 ug/L	-0.9074 ppb	03:48:39
2	Si 251.611†	881.5	348.1	8.8118 ug/L	8.8118 ppb	03:48:39
2	Sn 189.927†	13.0	17.7	2.3459 ug/L	2.3459 ppb	03:48:39
2	Ti 334.940†	-1065.5	165.7	0.2313 ug/L	0.2313 ppb	03:48:18
2	Tl 190.801†	-53.2	-10.4	-2.5106 ug/L	-2.5106 ppb	03:48:39
2	U 409.014†	-2821.4	-125.0	-3.2345 ug/L	-3.2345 ppb	03:48:13
2	V 292.402†	-1595.3	-30.6	-0.1817 ug/L	-0.1817 ppb	03:48:18
2	Zn 213.857†	1407.6	560.7	4.1119 ug/L	4.1119 ppb	03:48:39
2	SiO2†	956.2	383.4	20.775 ug/L	20.775 ppb	03:49:19
3	Sc Radial	4675.8	4675.8	95.2 %		03:47:17
3	Y RADIAL	5310.8	5310.8	94.04 %		03:47:17
3	Al 396.153Radial†	-18.9	24.0	15.842 ug/L	15.842 ppb	03:47:17
3	Ca 317.933Radial†	33.9	17.8	31.487 ug/L	31.487 ppb	03:47:37
3	Fe 238.204 Radial†	13.8	3.5	42.383 ug/L	42.383 ppb	03:47:37
3	K 766.490 Radial†	2611.3	172.5	31.388 ug/L	31.388 ppb	03:47:17
3	Mg 279.077 IEC†	4.6	2.3	103.08 ug/L	103.08 ppb	03:47:37
3	Na 589.592 Radial†	-959.6	272.3	76.385 ug/L	76.385 ppb	03:47:17
3	Sr 421.552†	6.2	13.9	0.0726 ug/L	0.0726 ppb	03:47:17
3	Sc 361.383	998737.0	998737.0	96.080 %		03:48:44
3	Y 371.029	847877.4	847877.4	95.863 %		03:48:44
3	Ag 328.068†	479.7	25.2	0.1105 ug/L	0.1105 ppb	03:48:49
3	As 188.979†	-33.2	2.1	0.6606 ug/L	0.6606 ppb	03:49:09
3	B 249.677†	-449.7	-2.0	-0.0431 ug/L	-0.0431 ppb	03:49:09
3	Ba 233.527†	50.4	52.5	0.3380 ug/L	0.3380 ppb	03:49:09
3	Be 313.107†	-4722.5	-41.3	-0.0123 ug/L	-0.0123 ppb	03:48:49
3	Cd 226.502†	-232.8	-6.7	-0.0622 ug/L	-0.0622 ppb	03:49:09
3	Co 228.616†	-82.3	0.7	0.0094 ug/L	0.0094 ppb	03:49:09
3	Cr 267.716†	152.0	70.4	0.6325 ug/L	0.6325 ppb	03:49:09
3	Cu 324.752†	8878.6	303.4	0.8123 ug/L	0.8123 ppb	03:48:49
3	Mn 257.610†	1674.0	1165.7	1.1061 ug/L	1.1061 ppb	03:48:49
3	Mo 202.031†	26.0	-2.1	-0.1101 ug/L	-0.1101 ppb	03:49:09
3	Ni 231.604†	146.4	20.4	0.3999 ug/L	0.3999 ppb	03:49:09
3	P 214.914†	289.0	35.7	15.825 ug/L	15.825 ppb	03:49:09
3	Pb 220.353†	-63.3	9.6	0.9030 ug/L	0.9030 ppb	03:49:09
3	S 181.975 Axial†	68.2	10.8	11.677 ug/L	11.677 ppb	03:49:09
3	Sb 206.836†	47.3	14.6	3.8476 ug/L	3.8476 ppb	03:49:09
3	Se 196.026†	-27.5	-7.2	-3.0397 ug/L	-3.0397 ppb	03:49:09
3	Si 251.611†	881.1	359.4	9.1143 ug/L	9.1143 ppb	03:49:09
3	Sn 189.927†	7.8	12.4	1.6475 ug/L	1.6475 ppb	03:49:09
3	Ti 334.940†	-1002.1	217.5	0.3009 ug/L	0.3009 ppb	03:48:49
3	Tl 190.801†	-46.1	-3.8	-0.9027 ug/L	-0.9027 ppb	03:49:09
3	U 409.014†	-2622.6	44.4	1.1413 ug/L	1.1413 ppb	03:48:44
3	V 292.402†	-1611.0	-68.2	-0.3948 ug/L	-0.3948 ppb	03:48:49
3	Zn 213.857†	1414.3	586.5	4.2984 ug/L	4.2984 ppb	03:49:09
3	SiO2†	928.7	367.6	19.948 ug/L	19.948 ppb	03:49:24

Mean Data: 1201977903|925182|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1001856.3	96.380	%	0.8383				0.87%
Sc Radial	4662.7	95.0	%	1.16				1.22%
Y 371.029	851283.3	96.248	%	0.8189				0.85%
Y RADIAL	5312.5	94.07	%	0.982				1.04%
Ag 328.068†	-43.0	-0.1621	ug/L	0.28748	-0.1621	ppb	0.28748	177.37%
Al 396.153Radial†	27.7	18.313	ug/L	3.4781	18.313	ppb	3.4781	18.99%
As 188.979†	-2.8	-0.8494	ug/L	1.81682	-0.8494	ppb	1.81682	213.89%
B 249.677†	-19.7	-0.3754	ug/L	0.30438	-0.3754	ppb	0.30438	81.08%
Ba 233.527†	47.9	0.3078	ug/L	0.02761	0.3078	ppb	0.02761	8.97%
Be 313.107†	-134.6	-0.0414	ug/L	0.02749	-0.0414	ppb	0.02749	66.46%
Ca 317.933Radial†	17.5	30.930	ug/L	2.4780	30.930	ppb	2.4780	8.01%
Cd 226.502†	-7.7	-0.0698	ug/L	0.03514	-0.0698	ppb	0.03514	50.36%
Co 228.616†	-13.3	-0.2207	ug/L	0.21511	-0.2207	ppb	0.21511	97.47%
Cr 267.716†	62.5	0.5618	ug/L	0.10379	0.5618	ppb	0.10379	18.48%
Cu 324.752†	348.1	0.9310	ug/L	0.24445	0.9310	ppb	0.24445	26.26%
Fe 238.204 Radial†	2.3	28.269	ug/L	12.6175	28.269	ppb	12.6175	44.63%
K 766.490 Radial†	174.1	31.679	ug/L	24.3658	31.679	ppb	24.3658	76.91%

Mg 279.077 IEC†	1.4	62.798	ug/L	70.5409	62.798	ppb	70.5409 112.33%
Mn 257.610†	1115.8	1.0583	ug/L	0.05057	1.0583	ppb	0.05057 4.78%
Mo 202.031†	-0.9	-0.0443	ug/L	0.13346	-0.0443	ppb	0.13346 300.98%
Na 589.592 Radial†	245.7	68.907	ug/L	15.8574	68.907	ppb	15.8574 23.01%
Ni 231.604†	8.6	0.1695	ug/L	0.25295	0.1695	ppb	0.25295 149.20%
P 214.914†	36.4	16.166	ug/L	0.4471	16.166	ppb	0.4471 2.77%
Pb 220.353†	0.2	0.0158	ug/L	0.93438	0.0158	ppb	0.93438 >999.9%
S 181.975 Axial†	5.9	6.3024	ug/L	4.97006	6.3024	ppb	4.97006 78.86%
Sb 206.836†	18.5	4.8939	ug/L	1.53251	4.8939	ppb	1.53251 31.31%
Se 196.026†	-2.4	-0.9812	ug/L	2.02267	-0.9812	ppb	2.02267 206.15%
Si 251.611†	357.6	9.0645	ug/L	0.23188	9.0645	ppb	0.23188 2.56%
Sn 189.927†	16.4	2.1776	ug/L	0.46922	2.1776	ppb	0.46922 21.55%
Sr 421.552†	6.5	0.0338	ug/L	0.03379	0.0338	ppb	0.03379 99.86%
Ti 334.940†	220.8	0.3066	ug/L	0.07830	0.3066	ppb	0.07830 25.54%
Tl 190.801†	-6.8	-1.6393	ug/L	0.81239	-1.6393	ppb	0.81239 49.56%
U 409.014†	-51.8	-1.3428	ug/L	2.24723	-1.3428	ppb	2.24723 167.36%
V 292.402†	-60.2	-0.3512	ug/L	0.15248	-0.3512	ppb	0.15248 43.41%
Zn 213.857†	574.4	4.2138	ug/L	0.09444	4.2138	ppb	0.09444 2.24%
SiO2†	369.9	20.067	ug/L	0.6569	20.067	ppb	0.6569 3.27%

Sequence No.: 51
Sample ID: 1201977908|925182|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 12/5/2009 03:51:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977908|925182|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4738.0	4738.0	96.5	%			03:53:51
1	Y RADIAL	5649.0	5649.0	100.0	%			03:53:51
1	Al 396.153Radial†	41919.8	43482.9	28695	ug/L	28695	ppb	03:53:31
1	Ca 317.933Radial†	9894.8	10235.6	18122	ug/L	18122	ppb	03:53:31
1	Fe 238.204 Radial†	5525.9	5715.1	69110	ug/L	69110	ppb	03:53:51
1	K 766.490 Radial†	57263.4	56769.3	10328	ug/L	10328	ppb	03:53:31
1	Mg 279.077 IEC†	309.7	318.4	14196	ug/L	14196	ppb	03:53:51
1	Na 589.592 Radial†	9102.4	10712.3	3004.8	ug/L	3004.8	ppb	03:53:31
1	Sr 421.552†	147881.5	153248.6	803.84	ug/L	803.84	ppb	03:53:31
1	Sc 361.383	1024437.1	1024437.1	98.553	%			03:54:50
1	Y 371.029	907419.7	907419.7	102.59	%			03:54:50
1	Ag 328.068†	159062.0	160924.2	662.50	ug/L	662.50	ppb	03:54:50
1	As 188.979†	4049.3	4145.3	1314.0	ug/L	1314.0	ppb	03:55:10
1	B 249.677†	35362.6	36348.1	676.70	ug/L	676.70	ppb	03:54:50
1	Ba 233.527†	364023.0	369369.6	2377.1	ug/L	2377.1	ppb	03:54:50
1	Be 313.107†	1423647.0	1449430.5	454.82	ug/L	454.82	ppb	03:54:50
1	Cd 226.502†	68074.3	69309.7	597.86	ug/L	597.86	ppb	03:54:50
1	Co 228.616†	24944.3	25397.0	416.19	ug/L	416.19	ppb	03:55:10
1	Cr 267.716†	39099.2	39585.7	358.16	ug/L	358.16	ppb	03:54:50
1	Cu 324.752†	197945.1	191914.9	516.04	ug/L	516.04	ppb	03:54:50
1	Mn 257.610†	1927327.2	1955057.9	1858.0	ug/L	1858.0	ppb	03:54:50
1	Mo 202.031†	7689.1	7772.7	417.38	ug/L	417.38	ppb	03:55:10
1	Ni 231.604†	25816.3	26063.6	510.41	ug/L	510.41	ppb	03:55:10
1	P 214.914†	8864.8	8729.8	3784.1	ug/L	3784.1	ppb	03:55:10
1	Pb 220.353†	8724.4	8928.1	839.48	ug/L	839.48	ppb	03:55:10
1	S 181.975 Axial†	982.9	937.3	1004.2	ug/L	1004.2	ppb	03:55:10
1	Sb 206.836†	1768.6	1759.9	471.69	ug/L	471.69	ppb	03:55:10
1	Se 196.026†	1688.2	1734.4	1020.4	ug/L	1020.4	ppb	03:55:10
1	Si 251.611†	703671.6	713449.0	18107	ug/L	18107	ppb	03:54:50
1	Sn 189.927†	3994.9	4057.9	539.52	ug/L	539.52	ppb	03:55:10
1	Ti 334.940†	1051813.0	1068521.8	1474.7	ug/L	1474.7	ppb	03:54:50
1	Tl 190.801†	4231.4	4337.8	1068.2	ug/L	1068.2	ppb	03:55:10
1	U 409.014†	-7249.3	-4581.8	-127.84	ug/L	-127.84	ppb	03:54:50
1	V 292.402†	120946.0	124330.9	705.46	ug/L	705.46	ppb	03:54:50
1	Zn 213.857†	133841.9	134922.1	980.48	ug/L	980.48	ppb	03:54:50
1	SiO2†	700359.5	710046.9	38564	ug/L	38564	ppb	03:56:10
2	Sc Radial	4782.9	4782.9	97.4	%			03:54:16
2	Y RADIAL	5690.9	5690.9	100.8	%			03:54:16
2	Al 396.153Radial†	42183.4	43345.9	28605	ug/L	28605	ppb	03:53:56
2	Ca 317.933Radial†	9971.6	10218.3	18092	ug/L	18092	ppb	03:53:56
2	Fe 238.204 Radial†	5471.1	5605.2	67781	ug/L	67781	ppb	03:54:16
2	K 766.490 Radial†	57775.1	56737.8	10322	ug/L	10322	ppb	03:53:56
2	Mg 279.077 IEC†	308.6	314.3	14013	ug/L	14013	ppb	03:54:16
2	Na 589.592 Radial†	9288.5	10814.8	3033.6	ug/L	3033.6	ppb	03:53:56
2	Sr 421.552†	149607.1	153582.3	805.59	ug/L	805.59	ppb	03:53:56
2	Sc 361.383	1036156.2	1036156.2	99.680	%			03:55:17
2	Y 371.029	917415.9	917415.9	103.73	%			03:55:17
2	Ag 328.068†	159625.4	159663.9	657.05	ug/L	657.05	ppb	03:55:17
2	As 188.979†	4017.5	4067.0	1289.3	ug/L	1289.3	ppb	03:55:37
2	B 249.677†	35408.9	35988.7	670.10	ug/L	670.10	ppb	03:55:17
2	Ba 233.527†	364687.2	365858.3	2354.5	ug/L	2354.5	ppb	03:55:17
2	Be 313.107†	1425457.7	1434908.9	450.27	ug/L	450.27	ppb	03:55:17
2	Cd 226.502†	67994.6	68448.6	590.47	ug/L	590.47	ppb	03:55:17
2	Co 228.616†	24813.2	24979.2	409.33	ug/L	409.33	ppb	03:55:37
2	Cr 267.716†	39176.2	39214.2	354.79	ug/L	354.79	ppb	03:55:17
2	Cu 324.752†	199044.6	190746.2	512.85	ug/L	512.85	ppb	03:55:17
2	Mn 257.610†	1931219.4	1936843.9	1840.6	ug/L	1840.6	ppb	03:55:17
2	Mo 202.031†	7677.1	7672.5	411.97	ug/L	411.97	ppb	03:55:37
2	Ni 231.604†	25720.9	25671.6	502.74	ug/L	502.74	ppb	03:55:37

2	P 214.914†	8835.7	8599.0	3727.1 ug/L	3727.1 ppb	03:55:37
2	Pb 220.353†	8678.0	8781.4	825.79 ug/L	825.79 ppb	03:55:37
2	S 181.975 Axial†	977.7	920.7	986.37 ug/L	986.37 ppb	03:55:37
2	Sb 206.836†	1737.7	1708.6	458.04 ug/L	458.04 ppb	03:55:37
2	Se 196.026†	1679.6	1706.3	1003.1 ug/L	1003.1 ppb	03:55:37
2	Si 251.611†	705818.6	707527.4	17957 ug/L	17957 ppb	03:55:17
2	Sn 189.927†	3996.1	4013.3	533.59 ug/L	533.59 ppb	03:55:37
2	Ti 334.940†	1055358.0	1060007.3	1462.9 ug/L	1462.9 ppb	03:55:17
2	Tl 190.801†	4203.1	4260.9	1049.5 ug/L	1049.5 ppb	03:55:37
2	U 409.014†	-7142.9	-4391.8	-122.75 ug/L	-122.75 ppb	03:55:17
2	V 292.402†	121142.3	123139.8	698.79 ug/L	698.79 ppb	03:55:17
2	Zn 213.857†	134012.2	133557.0	970.64 ug/L	970.64 ppb	03:55:17
2	SiO2†	702313.1	703969.2	38234 ug/L	38234 ppb	03:56:16
3	Sc Radial	4732.6	4732.6	96.4 %		03:54:41
3	Y RADIAL	5648.1	5648.1	100.0 %		03:54:41
3	Al 396.153Radial†	41805.6	43414.2	28649 ug/L	28649 ppb	03:54:21
3	Ca 317.933Radial†	9843.6	10194.2	18049 ug/L	18049 ppb	03:54:21
3	Fe 238.204 Radial†	5530.8	5726.8	69251 ug/L	69251 ppb	03:54:41
3	K 766.490 Radial†	57027.3	56592.3	10296 ug/L	10296 ppb	03:54:21
3	Mg 279.077 IEC†	316.7	326.1	14538 ug/L	14538 ppb	03:54:41
3	Na 589.592 Radial†	9011.2	10628.5	2981.3 ug/L	2981.3 ppb	03:54:21
3	Sr 421.552†	147604.1	153136.3	803.25 ug/L	803.25 ppb	03:54:21
3	Sc 361.383	1017744.3	1017744.3	97.909 %		03:55:44
3	Y 371.029	902735.2	902735.2	102.07 %		03:55:44
3	Ag 328.068†	157847.9	160745.5	661.84 ug/L	661.84 ppb	03:55:44
3	As 188.979†	4003.2	4125.3	1307.7 ug/L	1307.7 ppb	03:56:05
3	B 249.677†	34937.7	36150.1	672.94 ug/L	672.94 ppb	03:55:44
3	Ba 233.527†	360507.4	368207.9	2369.6 ug/L	2369.6 ppb	03:55:44
3	Be 313.107†	1410818.7	1445827.8	453.68 ug/L	453.68 ppb	03:55:44
3	Cd 226.502†	67502.6	69180.1	596.71 ug/L	596.71 ppb	03:55:44
3	Co 228.616†	24644.1	25256.9	413.89 ug/L	413.89 ppb	03:56:05
3	Cr 267.716†	38818.3	39559.7	357.93 ug/L	357.93 ppb	03:55:44
3	Cu 324.752†	195627.5	190868.6	513.25 ug/L	513.25 ppb	03:55:44
3	Mn 257.610†	1908995.6	1949195.2	1852.4 ug/L	1852.4 ppb	03:55:44
3	Mo 202.031†	7637.9	7771.8	417.34 ug/L	417.34 ppb	03:56:05
3	Ni 231.604†	25596.5	26011.3	509.39 ug/L	509.39 ppb	03:56:05
3	P 214.914†	8771.2	8693.4	3768.1 ug/L	3768.1 ppb	03:56:05
3	Pb 220.353†	8639.1	8899.2	836.75 ug/L	836.75 ppb	03:56:05
3	S 181.975 Axial†	969.0	929.6	995.94 ug/L	995.94 ppb	03:56:05
3	Sb 206.836†	1728.4	1730.6	463.97 ug/L	463.97 ppb	03:56:05
3	Se 196.026†	1659.8	1716.7	1013.0 ug/L	1013.0 ppb	03:56:05
3	Si 251.611†	695781.4	710085.7	18021 ug/L	18021 ppb	03:55:44
3	Sn 189.927†	3954.0	4042.8	537.51 ug/L	537.51 ppb	03:56:05
3	Ti 334.940†	1040927.1	1064421.8	1469.0 ug/L	1469.0 ppb	03:55:44
3	Tl 190.801†	4191.9	4325.7	1065.2 ug/L	1065.2 ppb	03:56:05
3	U 409.014†	-7275.3	-4656.7	-129.79 ug/L	-129.79 ppb	03:55:44
3	V 292.402†	119914.9	124084.8	704.04 ug/L	704.04 ppb	03:55:44
3	Zn 213.857†	132510.8	134455.7	977.04 ug/L	977.04 ppb	03:55:44
3	SiO2†	706064.7	720547.3	39135 ug/L	39135 ppb	03:56:21

Mean Data: 1201977908|925182|2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026112.5	98.714	%	0.8966				0.91%
Sc Radial	4751.1	96.8	%	0.56				0.58%
Y 371.029	909190.3	102.80	%	0.848				0.82%
Y RADIAL	5662.7	100.3	%	0.43				0.43%
Ag 328.068†	160444.5	660.46	ug/L	2.972	660.46	ppb	2.972	0.45%
Al 396.153Radial†	43414.3	28650	ug/L	45.1	28650	ppb	45.1	0.16%
As 188.979†	4112.6	1303.7	ug/L	12.84	1303.7	ppb	12.84	0.98%
B 249.677†	36162.3	673.25	ug/L	3.310	673.25	ppb	3.310	0.49%
Ba 233.527†	367811.9	2367.1	ug/L	11.53	2367.1	ppb	11.53	0.49%
Be 313.107†	1443389.1	452.92	ug/L	2.369	452.92	ppb	2.369	0.52%
Ca 317.933Radial†	10216.0	18088	ug/L	36.8	18088	ppb	36.8	0.20%
Cd 226.502†	68979.5	595.01	ug/L	3.973	595.01	ppb	3.973	0.67%
Co 228.616†	25211.0	413.14	ug/L	3.491	413.14	ppb	3.491	0.85%
Cr 267.716†	39453.2	356.96	ug/L	1.885	356.96	ppb	1.885	0.53%
Cu 324.752†	191176.6	514.05	ug/L	1.737	514.05	ppb	1.737	0.34%
Fe 238.204 Radial†	5682.4	68714	ug/L	811.0	68714	ppb	811.0	1.18%
K 766.490 Radial†	56699.8	10315	ug/L	17.2	10315	ppb	17.2	0.17%

Mg 279.077 IEC†	319.6	14249	ug/L	266.6	14249	ppb	266.6	1.87%
Mn 257.610†	1947032.3	1850.3	ug/L	8.88	1850.3	ppb	8.88	0.48%
Mo 202.031†	7739.0	415.56	ug/L	3.114	415.56	ppb	3.114	0.75%
Na 589.592 Radial†	10718.5	3006.5	ug/L	26.18	3006.5	ppb	26.18	0.87%
Ni 231.604†	25915.5	507.51	ug/L	4.168	507.51	ppb	4.168	0.82%
P 214.914†	8674.1	3759.8	ug/L	29.45	3759.8	ppb	29.45	0.78%
Pb 220.353†	8869.6	834.01	ug/L	7.246	834.01	ppb	7.246	0.87%
S 181.975 Axial†	929.2	995.50	ug/L	8.913	995.50	ppb	8.913	0.90%
Sb 206.836†	1733.1	464.57	ug/L	6.847	464.57	ppb	6.847	1.47%
Se 196.026†	1719.1	1012.2	ug/L	8.67	1012.2	ppb	8.67	0.86%
Si 251.611†	710354.0	18028	ug/L	75.4	18028	ppb	75.4	0.42%
Sn 189.927†	4038.0	536.87	ug/L	3.012	536.87	ppb	3.012	0.56%
Sr 421.552†	153322.4	804.23	ug/L	1.217	804.23	ppb	1.217	0.15%
Ti 334.940†	1064317.0	1468.9	ug/L	5.87	1468.9	ppb	5.87	0.40%
Tl 190.801†	4308.1	1061.0	ug/L	10.07	1061.0	ppb	10.07	0.95%
U 409.014†	-4543.4	-126.79	ug/L	3.634	-126.79	ppb	3.634	2.87%
V 292.402†	123851.8	702.77	ug/L	3.515	702.77	ppb	3.515	0.50%
Zn 213.857†	134311.6	976.05	ug/L	4.996	976.05	ppb	4.996	0.51%
SiO2†	711521.1	38644	ug/L	455.7	38644	ppb	455.7	1.18%

Sequence No.: 52
Sample ID: 241322001|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 12/5/2009 03:58:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322001|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4733.4	4733.4	96.4	%			04:00:47
1	Y RADIAL	5965.3	5965.3	105.6	%			04:00:47
1	Al 396.153Radial†	38057.1	39518.3	26095	ug/L	26095	ppb	04:00:27
1	Ca 317.933Radial†	4215.7	4354.9	7710.5	ug/L	7710.5	ppb	04:00:47
1	Fe 238.204 Radial†	6652.4	6889.2	83292	ug/L	83292	ppb	04:00:47
1	K 766.490 Radial†	34352.9	33062.8	6005.3	ug/L	6005.3	ppb	04:00:27
1	Mg 279.077 IEC†	272.1	279.7	12445	ug/L	12445	ppb	04:00:47
1	Na 589.592 Radial†	3119.6	4515.8	1266.7	ug/L	1266.7	ppb	04:00:27
1	Sr 421.552†	6080.5	6314.4	33.056	ug/L	33.056	ppb	04:00:27
1	Sc 361.383	1021429.6	1021429.6	98.263	%			04:01:45
1	Y 371.029	958315.0	958315.0	108.35	%			04:01:45
1	Ag 328.068†	-5688.8	-6263.4	1.9508	ug/L	1.9508	ppb	04:01:50
1	As 188.979†	-97.1	-62.3	9.5204	ug/L	9.5204	ppb	04:02:10
1	B 249.677†	320.1	791.9	3.8653	ug/L	3.8653	ppb	04:01:50
1	Ba 233.527†	55126.0	56100.4	363.64	ug/L	363.64	ppb	04:01:50
1	Be 313.107†	-11600.8	-6931.9	1.6002	ug/L	1.6002	ppb	04:01:50
1	Cd 226.502†	672.9	920.4	-0.2856	ug/L	-0.2856	ppb	04:02:10
1	Co 228.616†	1108.2	1214.1	14.894	ug/L	14.894	ppb	04:02:10
1	Cr 267.716†	3147.4	3115.3	29.640	ug/L	29.640	ppb	04:02:10
1	Cu 324.752†	14182.8	5496.0	18.926	ug/L	18.926	ppb	04:01:50
1	Mn 257.610†	2111464.4	2148207.8	2042.3	ug/L	2042.3	ppb	04:01:45
1	Mo 202.031†	48.8	20.4	6.9926	ug/L	6.9926	ppb	04:02:10
1	Ni 231.604†	1256.9	1147.2	22.466	ug/L	22.466	ppb	04:02:10
1	P 214.914†	3434.5	3230.0	1384.1	ug/L	1384.1	ppb	04:02:10
1	Pb 220.353†	292.3	373.0	34.029	ug/L	34.029	ppb	04:02:10
1	S 181.975 Axial†	156.3	98.9	101.44	ug/L	101.44	ppb	04:02:10
1	Sb 206.836†	60.9	27.4	2.0626	ug/L	2.0626	ppb	04:02:10
1	Se 196.026†	-501.9	-489.4	85.519	ug/L	85.519	ppb	04:02:10
1	Si 251.611†	864229.8	878947.4	22320	ug/L	22320	ppb	04:01:45
1	Sn 189.927†	-34.4	-30.6	-2.1233	ug/L	-2.1233	ppb	04:02:10
1	Ti 334.940†	1362154.4	1387490.9	1914.2	ug/L	1914.2	ppb	04:01:45
1	Tl 190.801†	-154.1	-112.5	-0.1475	ug/L	-0.1475	ppb	04:02:10
1	U 409.014†	-8097.0	-5466.1	-151.86	ug/L	-151.86	ppb	04:01:50
1	V 292.402†	9906.4	11690.0	52.156	ug/L	52.156	ppb	04:01:50
1	Zn 213.857†	49280.0	49265.5	353.47	ug/L	353.47	ppb	04:01:50
1	SiO2†	856207.9	870742.3	47320	ug/L	47320	ppb	04:03:18
2	Sc Radial	4682.9	4682.9	95.4	%			04:01:12
2	Y RADIAL	5901.8	5901.8	104.5	%			04:01:12
2	Al 396.153Radial†	37883.9	39763.0	26256	ug/L	26256	ppb	04:00:52
2	Ca 317.933Radial†	4169.2	4353.3	7707.7	ug/L	7707.7	ppb	04:01:12
2	Fe 238.204 Radial†	6560.5	6867.3	83028	ug/L	83028	ppb	04:01:12
2	K 766.490 Radial†	34211.7	33299.6	6048.5	ug/L	6048.5	ppb	04:00:52
2	Mg 279.077 IEC†	268.2	278.6	12397	ug/L	12397	ppb	04:01:12
2	Na 589.592 Radial†	3054.8	4482.8	1257.4	ug/L	1257.4	ppb	04:00:52
2	Sr 421.552†	6082.0	6384.1	33.422	ug/L	33.422	ppb	04:00:52
2	Sc 361.383	1007904.2	1007904.2	96.962	%			04:02:16
2	Y 371.029	944419.2	944419.2	106.78	%			04:02:16
2	Ag 328.068†	-5547.1	-6195.0	2.1448	ug/L	2.1448	ppb	04:02:21
2	As 188.979†	-87.5	-53.6	12.164	ug/L	12.164	ppb	04:02:41
2	B 249.677†	354.7	831.9	4.6561	ug/L	4.6561	ppb	04:02:21
2	Ba 233.527†	55017.4	56741.2	367.75	ug/L	367.75	ppb	04:02:21
2	Be 313.107†	-11377.7	-6860.2	1.6225	ug/L	1.6225	ppb	04:02:21
2	Cd 226.502†	654.9	911.1	-0.3408	ug/L	-0.3408	ppb	04:02:41
2	Co 228.616†	1104.3	1225.2	15.082	ug/L	15.082	ppb	04:02:41
2	Cr 267.716†	3142.3	3153.0	29.977	ug/L	29.977	ppb	04:02:41
2	Cu 324.752†	14190.3	5697.4	19.450	ug/L	19.450	ppb	04:02:21
2	Mn 257.610†	2083125.7	2147816.7	2041.9	ug/L	2041.9	ppb	04:02:16
2	Mo 202.031†	46.8	19.0	6.8988	ug/L	6.8988	ppb	04:02:41
2	Ni 231.604†	1256.6	1164.1	22.795	ug/L	22.795	ppb	04:02:41

2	P 214.914†	3396.1	3237.4	1387.5	ug/L	1387.5 ppb	04:02:41
2	Pb 220.353†	291.7	376.4	34.399	ug/L	34.399 ppb	04:02:41
2	S 181.975 Axial†	159.6	104.5	107.47	ug/L	107.47 ppb	04:02:41
2	Sb 206.836†	63.0	30.3	2.8021	ug/L	2.8021 ppb	04:02:41
2	Se 196.026†	-505.9	-500.4	79.712	ug/L	79.712 ppb	04:02:41
2	Si 251.611†	852904.9	879070.1	22323	ug/L	22323 ppb	04:02:16
2	Sn 189.927†	-43.0	-40.0	-3.3693	ug/L	-3.3693 ppb	04:02:41
2	Ti 334.940†	1344083.4	1387456.1	1914.1	ug/L	1914.1 ppb	04:02:16
2	Tl 190.801†	-157.3	-118.0	-1.4595	ug/L	-1.4595 ppb	04:02:41
2	U 409.014†	-8162.8	-5644.6	-156.44	ug/L	-156.44 ppb	04:02:21
2	V 292.402†	9902.0	11820.8	52.934	ug/L	52.934 ppb	04:02:21
2	Zn 213.857†	49201.2	49857.2	357.85	ug/L	357.85 ppb	04:02:21
2	SiO2†	851358.3	877433.6	47684	ug/L	47684 ppb	04:03:24
3	Sc Radial	4676.1	4676.1	95.2	%		04:01:37
3	Y RADIAL	5901.9	5901.9	104.5	%		04:01:37
3	Al 396.153Radial†	37034.7	38928.5	25705	ug/L	25705 ppb	04:01:17
3	Ca 317.933Radial†	4205.2	4397.4	7785.7	ug/L	7785.7 ppb	04:01:37
3	Fe 238.204 Radial†	6610.2	6929.4	83778	ug/L	83778 ppb	04:01:37
3	K 766.490 Radial†	33438.3	32539.1	5909.9	ug/L	5909.9 ppb	04:01:17
3	Mg 279.077 IEC†	269.5	280.5	12478	ug/L	12478 ppb	04:01:37
3	Na 589.592 Radial†	2953.3	4380.7	1228.8	ug/L	1228.8 ppb	04:01:17
3	Sr 421.552†	5914.3	6217.1	32.546	ug/L	32.546 ppb	04:01:17
3	Sc 361.383	1004784.7	1004784.7	96.662	%		04:02:47
3	Y 371.029	943411.5	943411.5	106.66	%		04:02:47
3	Ag 328.068†	-5595.1	-6262.4	2.1171	ug/L	2.1171 ppb	04:02:52
3	As 188.979†	-94.6	-61.3	9.8497	ug/L	9.8497 ppb	04:03:12
3	B 249.677†	236.7	711.0	2.2715	ug/L	2.2715 ppb	04:02:52
3	Ba 233.527†	55003.0	56902.5	368.82	ug/L	368.82 ppb	04:02:52
3	Be 313.107†	-11532.1	-7056.4	1.5514	ug/L	1.5514 ppb	04:02:52
3	Cd 226.502†	671.2	930.0	-0.2500	ug/L	-0.2500 ppb	04:03:12
3	Co 228.616†	1111.5	1236.2	15.265	ug/L	15.265 ppb	04:03:12
3	Cr 267.716†	3162.8	3184.3	30.273	ug/L	30.273 ppb	04:03:12
3	Cu 324.752†	14163.3	5714.9	19.535	ug/L	19.535 ppb	04:02:52
3	Mn 257.610†	2071000.5	2141942.6	2036.4	ug/L	2036.4 ppb	04:02:47
3	Mo 202.031†	53.4	26.0	7.3237	ug/L	7.3237 ppb	04:03:12
3	Ni 231.604†	1284.7	1197.2	23.444	ug/L	23.444 ppb	04:03:12
3	P 214.914†	3426.6	3279.8	1405.7	ug/L	1405.7 ppb	04:03:12
3	Pb 220.353†	312.5	398.8	36.322	ug/L	36.322 ppb	04:03:12
3	S 181.975 Axial†	162.0	107.5	110.80	ug/L	110.80 ppb	04:03:12
3	Sb 206.836†	56.1	23.4	1.0413	ug/L	1.0413 ppb	04:03:12
3	Se 196.026†	-503.6	-499.6	82.772	ug/L	82.772 ppb	04:03:12
3	Si 251.611†	847799.2	876519.0	22259	ug/L	22259 ppb	04:02:47
3	Sn 189.927†	-35.3	-32.2	-2.3110	ug/L	-2.3110 ppb	04:03:12
3	Ti 334.940†	1336408.0	1383819.2	1909.1	ug/L	1909.1 ppb	04:02:47
3	Tl 190.801†	-163.6	-125.0	-3.2399	ug/L	-3.2399 ppb	04:03:12
3	U 409.014†	-8253.5	-5764.6	-159.63	ug/L	-159.63 ppb	04:02:52
3	V 292.402†	9849.7	11798.4	52.698	ug/L	52.698 ppb	04:02:52
3	Zn 213.857†	49167.8	49980.1	358.67	ug/L	358.67 ppb	04:02:52
3	SiO2†	859230.5	888303.7	48275	ug/L	48275 ppb	04:03:30

Mean Data: 241322001|925182|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1011372.8	97.296	%	0.8512				0.87%
Sc Radial	4697.5	95.7	%	0.64				0.67%
Y 371.029	948715.2	107.26	%	0.942				0.88%
Y RADIAL	5923.0	104.9	%	0.65				0.62%
Ag 328.068†	-6240.3	2.0709	ug/L	0.10494	2.0709	ppb	0.10494	5.07%
Al 396.153Radial†	39403.3	26019	ug/L	283.3	26019	ppb	283.3	1.09%
As 188.979†	-59.1	10.511	ug/L	1.4408	10.511	ppb	1.4408	13.71%
B 249.677†	778.3	3.5976	ug/L	1.21459	3.5976	ppb	1.21459	33.76%
Ba 233.527†	56581.4	366.74	ug/L	2.731	366.74	ppb	2.731	0.74%
Be 313.107†	-6949.5	1.5914	ug/L	0.03633	1.5914	ppb	0.03633	2.28%
Ca 317.933Radial†	4368.5	7734.6	ug/L	44.26	7734.6	ppb	44.26	0.57%
Cd 226.502†	920.5	-0.2921	ug/L	0.04575	-0.2921	ppb	0.04575	15.66%
Co 228.616†	1225.2	15.081	ug/L	0.1855	15.081	ppb	0.1855	1.23%
Cr 267.716†	3150.9	29.963	ug/L	0.3163	29.963	ppb	0.3163	1.06%
Cu 324.752†	5636.1	19.304	ug/L	0.3300	19.304	ppb	0.3300	1.71%
Fe 238.204 Radial†	6895.3	83366	ug/L	380.4	83366	ppb	380.4	0.46%
K 766.490 Radial†	32967.2	5987.9	ug/L	70.91	5987.9	ppb	70.91	1.18%

Mg 279.077 IEC†	279.6	12440	ug/L	40.8	12440	ppb	40.8	0.33%
Mn 257.610†	2145989.0	2040.2	ug/L	3.29	2040.2	ppb	3.29	0.16%
Mo 202.031†	21.8	7.0717	ug/L	0.22324	7.0717	ppb	0.22324	3.16%
Na 589.592 Radial†	4459.8	1251.0	ug/L	19.75	1251.0	ppb	19.75	1.58%
Ni 231.604†	1169.5	22.902	ug/L	0.4977	22.902	ppb	0.4977	2.17%
P 214.914†	3249.1	1392.4	ug/L	11.62	1392.4	ppb	11.62	0.83%
Pb 220.353†	382.8	34.917	ug/L	1.2308	34.917	ppb	1.2308	3.52%
S 181.975 Axial†	103.7	106.57	ug/L	4.742	106.57	ppb	4.742	4.45%
Sb 206.836†	27.1	1.9687	ug/L	0.88415	1.9687	ppb	0.88415	44.91%
Se 196.026†	-496.5	82.668	ug/L	2.9047	82.668	ppb	2.9047	3.51%
Si 251.611†	878178.8	22301	ug/L	36.5	22301	ppb	36.5	0.16%
Sn 189.927†	-34.3	-2.6012	ug/L	0.67179	-2.6012	ppb	0.67179	25.83%
Sr 421.552†	6305.2	33.008	ug/L	0.4403	33.008	ppb	0.4403	1.33%
Ti 334.940†	1386255.4	1912.5	ug/L	2.91	1912.5	ppb	2.91	0.15%
Tl 190.801†	-118.5	-1.6156	ug/L	1.55209	-1.6156	ppb	1.55209	96.07%
U 409.014†	-5625.1	-155.97	ug/L	3.910	-155.97	ppb	3.910	2.51%
V 292.402†	11769.7	52.596	ug/L	0.3987	52.596	ppb	0.3987	0.76%
Zn 213.857†	49700.9	356.66	ug/L	2.793	356.66	ppb	2.793	0.78%
SiO2†	878826.5	47760	ug/L	481.7	47760	ppb	481.7	1.01%

Sequence No.: 53
Sample ID: 1201977904|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/5/2009 04:05:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977904|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4771.3	4771.3	97.2	%			04:07:36
1	Y RADIAL	6127.5	6127.5	108.5	%			04:07:36
1	Al 396.153Radial†	18798.4	19387.6	12802	ug/L	12802	ppb	04:07:36
1	Ca 317.933Radial†	3090.0	3161.8	5598.0	ug/L	5598.0	ppb	04:07:56
1	Fe 238.204 Radial†	4297.8	4411.5	53336	ug/L	53336	ppb	04:07:36
1	K 766.490 Radial†	22510.5	20594.0	3732.3	ug/L	3732.3	ppb	04:07:36
1	Mg 279.077 IEC†	73.3	73.0	3219.7	ug/L	3219.7	ppb	04:07:56
1	Na 589.592 Radial†	4291.1	5695.5	1597.6	ug/L	1597.6	ppb	04:07:36
1	Sr 421.552†	5742.1	5916.1	30.986	ug/L	30.986	ppb	04:07:36
1	Sc 361.383	1016812.1	1016812.1	97.819	%			04:08:54
1	Y 371.029	963933.1	963933.1	108.98	%			04:08:54
1	Ag 328.068†	-3712.8	-4269.6	0.2932	ug/L	0.2932	ppb	04:08:59
1	As 188.979†	-75.0	-40.1	11.376	ug/L	11.376	ppb	04:09:19
1	B 249.677†	126.5	595.4	4.1459	ug/L	4.1459	ppb	04:08:59
1	Ba 233.527†	44303.9	45291.7	293.06	ug/L	293.06	ppb	04:08:59
1	Be 313.107†	-10281.3	-5636.6	1.9010	ug/L	1.9010	ppb	04:08:59
1	Cd 226.502†	412.5	657.3	0.4257	ug/L	0.4257	ppb	04:09:19
1	Co 228.616†	630.4	730.8	7.4450	ug/L	7.4450	ppb	04:09:19
1	Cr 267.716†	6281.5	6333.8	57.994	ug/L	57.994	ppb	04:09:19
1	Cu 324.752†	18093.1	9559.0	28.248	ug/L	28.248	ppb	04:08:59
1	Mn 257.610†	1933640.6	1976177.2	1876.6	ug/L	1876.6	ppb	04:08:54
1	Mo 202.031†	150.4	124.5	10.389	ug/L	10.389	ppb	04:09:19
1	Ni 231.604†	2126.1	2041.5	39.993	ug/L	39.993	ppb	04:09:19
1	P 214.914†	2588.7	2381.3	1022.4	ug/L	1022.4	ppb	04:09:19
1	Pb 220.353†	379.1	463.1	41.963	ug/L	41.963	ppb	04:09:19
1	S 181.975 Axial†	217.2	161.9	171.93	ug/L	171.93	ppb	04:09:19
1	Sb 206.836†	64.7	31.5	2.5722	ug/L	2.5722	ppb	04:09:19
1	Se 196.026†	-350.6	-337.1	44.326	ug/L	44.326	ppb	04:09:19
1	Si 251.611†	942003.7	962449.4	24442	ug/L	24442	ppb	04:08:54
1	Sn 189.927†	-25.0	-21.2	-1.5063	ug/L	-1.5063	ppb	04:09:19
1	Ti 334.940†	1318789.1	1349453.9	1861.6	ug/L	1861.6	ppb	04:08:54
1	Tl 190.801†	-156.0	-115.2	-2.4485	ug/L	-2.4485	ppb	04:09:19
1	U 409.014†	-8048.9	-5454.3	-147.84	ug/L	-147.84	ppb	04:08:59
1	V 292.402†	7346.8	9119.2	41.913	ug/L	41.913	ppb	04:08:59
1	Zn 213.857†	41388.4	41425.6	298.92	ug/L	298.92	ppb	04:08:59
1	SiO2†	937262.3	957560.9	52041	ug/L	52041	ppb	04:10:27
2	Sc Radial	4723.7	4723.7	96.2	%			04:08:01
2	Y RADIAL	6035.3	6035.3	106.9	%			04:08:01
2	Al 396.153Radial†	18759.6	19541.9	12904	ug/L	12904	ppb	04:08:01
2	Ca 317.933Radial†	3137.6	3243.3	5742.4	ug/L	5742.4	ppb	04:08:21
2	Fe 238.204 Radial†	4289.3	4447.2	53767	ug/L	53767	ppb	04:08:01
2	K 766.490 Radial†	22594.7	20914.8	3790.7	ug/L	3790.7	ppb	04:08:01
2	Mg 279.077 IEC†	76.3	76.9	3392.8	ug/L	3392.8	ppb	04:08:21
2	Na 589.592 Radial†	4302.9	5752.2	1613.5	ug/L	1613.5	ppb	04:08:01
2	Sr 421.552†	5761.8	5996.1	31.405	ug/L	31.405	ppb	04:08:01
2	Sc 361.383	1024035.7	1024035.7	98.514	%			04:09:25
2	Y 371.029	968910.4	968910.4	109.55	%			04:09:25
2	Ag 328.068†	-3588.2	-4116.4	1.0356	ug/L	1.0356	ppb	04:09:30
2	As 188.979†	-65.9	-30.3	14.486	ug/L	14.486	ppb	04:09:50
2	B 249.677†	67.5	534.6	2.9391	ug/L	2.9391	ppb	04:09:30
2	Ba 233.527†	43733.8	44393.5	287.31	ug/L	287.31	ppb	04:09:30
2	Be 313.107†	-10133.4	-5412.4	1.9668	ug/L	1.9668	ppb	04:09:30
2	Cd 226.502†	404.9	646.7	0.2896	ug/L	0.2896	ppb	04:09:50
2	Co 228.616†	648.9	745.0	7.6734	ug/L	7.6734	ppb	04:09:50
2	Cr 267.716†	6311.3	6318.8	57.866	ug/L	57.866	ppb	04:09:50
2	Cu 324.752†	17811.9	9143.1	27.160	ug/L	27.160	ppb	04:09:30
2	Mn 257.610†	1945952.5	1974730.7	1875.3	ug/L	1875.3	ppb	04:09:25
2	Mo 202.031†	140.6	113.5	9.8367	ug/L	9.8367	ppb	04:09:50
2	Ni 231.604†	2113.5	2013.4	39.443	ug/L	39.443	ppb	04:09:50

2	P 214.914†	2575.1	2348.8	1007.7 ug/L	1007.7 ppb	04:09:50
2	Pb 220.353†	376.4	457.6	41.434 ug/L	41.434 ppb	04:09:50
2	S 181.975 Axial†	209.6	152.6	161.92 ug/L	161.92 ppb	04:09:50
2	Sb 206.836†	57.8	24.0	0.6255 ug/L	0.6255 ppb	04:09:50
2	Se 196.026†	-335.8	-319.4	53.707 ug/L	53.707 ppb	04:09:50
2	Si 251.611†	948975.7	962733.5	24449 ug/L	24449 ppb	04:09:25
2	Sn 189.927†	-11.3	-7.2	0.3738 ug/L	0.3738 ppb	04:09:50
2	Ti 334.940†	1326689.4	1347963.1	1859.6 ug/L	1859.6 ppb	04:09:25
2	Tl 190.801†	-160.1	-118.3	-3.2086 ug/L	-3.2086 ppb	04:09:50
2	U 409.014†	-8221.5	-5571.5	-150.92 ug/L	-150.92 ppb	04:09:30
2	V 292.402†	7281.4	8999.7	41.156 ug/L	41.156 ppb	04:09:30
2	Zn 213.857†	40810.8	40540.9	292.37 ug/L	292.37 ppb	04:09:30
2	SiO2†	957357.2	971200.0	52782 ug/L	52782 ppb	04:10:33
3	Sc Radial	4677.1	4677.1	95.3 %		04:08:26
3	Y RADIAL	5991.7	5991.7	106.1 %		04:08:26
3	Al 396.153Radial†	18900.1	19884.1	13130 ug/L	13130 ppb	04:08:26
3	Ca 317.933Radial†	3104.2	3240.8	5737.9 ug/L	5737.9 ppb	04:08:46
3	Fe 238.204 Radial†	4287.4	4489.6	54281 ug/L	54281 ppb	04:08:26
3	K 766.490 Radial†	22590.1	21144.4	3832.7 ug/L	3832.7 ppb	04:08:26
3	Mg 279.077 IEC†	76.1	77.4	3418.1 ug/L	3418.1 ppb	04:08:46
3	Na 589.592 Radial†	4234.9	5725.5	1606.0 ug/L	1606.0 ppb	04:08:26
3	Sr 421.552†	5773.7	6068.3	31.784 ug/L	31.784 ppb	04:08:26
3	Sc 361.383	1027495.4	1027495.4	98.847 %		04:09:56
3	Y 371.029	973490.3	973490.3	110.07 %		04:09:56
3	Ag 328.068†	-3706.0	-4223.2	0.7776 ug/L	0.7776 ppb	04:10:01
3	As 188.979†	-66.0	-30.1	14.610 ug/L	14.610 ppb	04:10:21
3	B 249.677†	107.3	574.7	3.6286 ug/L	3.6286 ppb	04:10:01
3	Ba 233.527†	44615.4	45136.0	292.10 ug/L	292.10 ppb	04:10:01
3	Be 313.107†	-10324.4	-5570.9	1.9191 ug/L	1.9191 ppb	04:10:01
3	Cd 226.502†	400.9	641.3	0.1909 ug/L	0.1909 ppb	04:10:21
3	Co 228.616†	641.9	735.7	7.5136 ug/L	7.5136 ppb	04:10:21
3	Cr 267.716†	6286.4	6271.9	57.455 ug/L	57.455 ppb	04:10:21
3	Cu 324.752†	18078.7	9352.1	27.744 ug/L	27.744 ppb	04:10:01
3	Mn 257.610†	1949083.6	1971247.2	1872.0 ug/L	1872.0 ppb	04:09:56
3	Mo 202.031†	146.9	119.4	10.186 ug/L	10.186 ppb	04:10:21
3	Ni 231.604†	2119.2	2012.0	39.414 ug/L	39.414 ppb	04:10:21
3	P 214.914†	2602.3	2367.5	1015.6 ug/L	1015.6 ppb	04:10:21
3	Pb 220.353†	387.1	467.2	42.343 ug/L	42.343 ppb	04:10:21
3	S 181.975 Axial†	224.8	167.3	177.69 ug/L	177.69 ppb	04:10:21
3	Sb 206.836†	63.5	29.6	2.0909 ug/L	2.0909 ppb	04:10:21
3	Se 196.026†	-353.8	-336.6	47.985 ug/L	47.985 ppb	04:10:21
3	Si 251.611†	950575.4	961108.3	24407 ug/L	24407 ppb	04:09:56
3	Sn 189.927†	-16.3	-12.1	-0.2740 ug/L	-0.2740 ppb	04:10:21
3	Ti 334.940†	1331809.5	1348608.5	1860.4 ug/L	1860.4 ppb	04:09:56
3	Tl 190.801†	-158.2	-115.8	-2.6001 ug/L	-2.6001 ppb	04:10:21
3	U 409.014†	-8143.5	-5464.5	-148.22 ug/L	-148.22 ppb	04:10:01
3	V 292.402†	7496.8	9192.8	42.192 ug/L	42.192 ppb	04:10:01
3	Zn 213.857†	41563.4	41162.8	296.89 ug/L	296.89 ppb	04:10:01
3	SiO2†	937620.3	947960.7	51519 ug/L	51519 ppb	04:10:39

Mean Data: 1201977904|925182|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1022781.1	98.393	%	0.5244				0.53%
Sc Radial	4724.0	96.2	%	0.96				1.00%
Y 371.029	968777.9	109.53	%	0.540				0.49%
Y RADIAL	6051.5	107.2	%	1.23				1.15%
Ag 328.068†	-4203.1	0.7021	ug/L	0.37695	0.7021	ppb	0.37695	53.69%
Al 396.153Radial†	19604.5	12945	ug/L	167.8	12945	ppb	167.8	1.30%
As 188.979†	-33.5	13.491	ug/L	1.8327	13.491	ppb	1.8327	13.58%
B 249.677†	568.2	3.5712	ug/L	0.60542	3.5712	ppb	0.60542	16.95%
Ba 233.527†	44940.4	290.82	ug/L	3.083	290.82	ppb	3.083	1.06%
Be 313.107†	-5539.9	1.9290	ug/L	0.03402	1.9290	ppb	0.03402	1.76%
Ca 317.933Radial†	3215.3	5692.8	ug/L	82.11	5692.8	ppb	82.11	1.44%
Cd 226.502†	648.4	0.3021	ug/L	0.11789	0.3021	ppb	0.11789	39.03%
Co 228.616†	737.2	7.5440	ug/L	0.11721	7.5440	ppb	0.11721	1.55%
Cr 267.716†	6308.2	57.772	ug/L	0.2811	57.772	ppb	0.2811	0.49%
Cu 324.752†	9351.4	27.717	ug/L	0.5448	27.717	ppb	0.5448	1.97%
Fe 238.204 Radial†	4449.4	53795	ug/L	473.1	53795	ppb	473.1	0.88%
K 766.490 Radial†	20884.4	3785.2	ug/L	50.43	3785.2	ppb	50.43	1.33%

Mg 279.077 IEC†	75.8	3343.6	ug/L	108.01	3343.6	ppb	108.01	3.23%
Mn 257.610†	1974051.7	1874.6	ug/L	2.35	1874.6	ppb	2.35	0.13%
Mo 202.031†	119.1	10.137	ug/L	0.2795	10.137	ppb	0.2795	2.76%
Na 589.592 Radial†	5724.4	1605.7	ug/L	7.96	1605.7	ppb	7.96	0.50%
Ni 231.604†	2022.3	39.617	ug/L	0.3266	39.617	ppb	0.3266	0.82%
P 214.914†	2365.9	1015.2	ug/L	7.32	1015.2	ppb	7.32	0.72%
Pb 220.353†	462.6	41.913	ug/L	0.4565	41.913	ppb	0.4565	1.09%
S 181.975 Axial†	160.6	170.51	ug/L	7.982	170.51	ppb	7.982	4.68%
Sb 206.836†	28.4	1.7629	ug/L	1.01395	1.7629	ppb	1.01395	57.52%
Se 196.026†	-331.0	48.673	ug/L	4.7283	48.673	ppb	4.7283	9.71%
Si 251.611†	962097.0	24433	ug/L	22.1	24433	ppb	22.1	0.09%
Sn 189.927†	-13.5	-0.4688	ug/L	0.95510	-0.4688	ppb	0.95510	203.73%
Sr 421.552†	5993.5	31.392	ug/L	0.3989	31.392	ppb	0.3989	1.27%
Ti 334.940†	1348675.1	1860.5	ug/L	1.03	1860.5	ppb	1.03	0.06%
Tl 190.801†	-116.4	-2.7524	ug/L	0.40227	-2.7524	ppb	0.40227	14.62%
U 409.014†	-5496.8	-148.99	ug/L	1.681	-148.99	ppb	1.681	1.13%
V 292.402†	9103.9	41.754	ug/L	0.5364	41.754	ppb	0.5364	1.28%
Zn 213.857†	41043.1	296.06	ug/L	3.350	296.06	ppb	3.350	1.13%
SiO2†	958907.2	52114	ug/L	634.7	52114	ppb	634.7	1.22%

Sequence No.: 54
Sample ID: 1201977906|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 12/5/2009 04:12:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977906|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4697.8	4697.8	95.7	%			04:14:43
1	Y RADIAL	6192.0	6192.0	109.6	%			04:14:43
1	Al 396.153Radial†	39876.0	41718.6	27525	ug/L	27525	ppb	04:14:43
1	Ca 317.933Radial†	5514.6	5745.6	10173	ug/L	10173	ppb	04:14:43
1	Fe 238.204 Radial†	4757.8	4961.5	60001	ug/L	60001	ppb	04:14:43
1	K 766.490 Radial†	52218.4	52004.5	9456.0	ug/L	9456.0	ppb	04:14:43
1	Mg 279.077 IEC†	191.3	197.4	8791.3	ug/L	8791.3	ppb	04:15:03
1	Na 589.592 Radial†	25401.4	27827.3	7805.5	ug/L	7805.5	ppb	04:14:43
1	Sr 421.552†	101850.3	106452.4	558.40	ug/L	558.40	ppb	04:14:43
1	Sc 361.383	1007645.5	1007645.5	96.937	%			04:16:02
1	Y 371.029	972774.1	972774.1	109.98	%			04:16:02
1	Ag 328.068†	124889.7	128361.7	529.74	ug/L	529.74	ppb	04:16:02
1	As 188.979†	1546.3	1631.7	537.50	ug/L	537.50	ppb	04:16:23
1	B 249.677†	27139.5	28463.1	528.61	ug/L	528.61	ppb	04:16:02
1	Ba 233.527†	110172.8	113653.9	733.66	ug/L	733.66	ppb	04:16:02
1	Be 313.107†	1653954.5	1711087.2	538.29	ug/L	538.29	ppb	04:16:02
1	Cd 226.502†	58490.1	60573.8	522.60	ug/L	522.60	ppb	04:16:02
1	Co 228.616†	31017.7	32084.0	523.87	ug/L	523.87	ppb	04:16:23
1	Cr 267.716†	59941.2	61747.3	556.72	ug/L	556.72	ppb	04:16:02
1	Cu 324.752†	213651.0	211464.0	567.78	ug/L	567.78	ppb	04:16:02
1	Mn 257.610†	2062841.5	2127443.0	2020.4	ug/L	2020.4	ppb	04:16:02
1	Mo 202.031†	9470.9	9740.9	521.18	ug/L	521.18	ppb	04:16:23
1	Ni 231.604†	26847.9	27564.2	539.75	ug/L	539.75	ppb	04:16:23
1	P 214.914†	3179.0	3014.3	1226.1	ug/L	1226.1	ppb	04:16:23
1	Pb 220.353†	5939.6	6202.9	584.36	ug/L	584.36	ppb	04:16:23
1	S 181.975 Axial†	4873.6	4967.5	5346.6	ug/L	5346.6	ppb	04:16:23
1	Sb 206.836†	1974.7	2002.4	529.89	ug/L	529.89	ppb	04:16:23
1	Se 196.026†	809.6	856.6	598.73	ug/L	598.73	ppb	04:16:23
1	Si 251.611†	1197453.4	1234730.8	31344	ug/L	31344	ppb	04:16:02
1	Sn 189.927†	3878.6	4005.5	531.64	ug/L	531.64	ppb	04:16:23
1	Ti 334.940†	1710246.5	1765544.4	2435.4	ug/L	2435.4	ppb	04:16:02
1	Tl 190.801†	1918.6	2023.5	516.57	ug/L	516.57	ppb	04:16:23
1	U 409.014†	9547.9	12623.5	317.75	ug/L	317.75	ppb	04:16:02
1	V 292.402†	96164.1	100811.1	573.30	ug/L	573.30	ppb	04:16:02
1	Zn 213.857†	109413.3	111984.8	812.74	ug/L	812.74	ppb	04:16:02
1	SiO2†	1198621.5	1235894.5	67141	ug/L	67141	ppb	04:17:24
2	Sc Radial	4636.8	4636.8	94.4	%			04:15:08
2	Y RADIAL	6113.1	6113.1	108.3	%			04:15:08
2	Al 396.153Radial†	39444.6	41809.6	27586	ug/L	27586	ppb	04:15:08
2	Ca 317.933Radial†	5433.6	5735.6	10155	ug/L	10155	ppb	04:15:08
2	Fe 238.204 Radial†	4688.9	4953.8	59909	ug/L	59909	ppb	04:15:08
2	K 766.490 Radial†	51480.3	51940.3	9444.3	ug/L	9444.3	ppb	04:15:08
2	Mg 279.077 IEC†	193.0	201.8	8989.4	ug/L	8989.4	ppb	04:15:29
2	Na 589.592 Radial†	24959.0	27707.7	7772.0	ug/L	7772.0	ppb	04:15:08
2	Sr 421.552†	100138.1	106038.5	556.23	ug/L	556.23	ppb	04:15:08
2	Sc 361.383	1002940.9	1002940.9	96.485	%			04:16:30
2	Y 371.029	968059.3	968059.3	109.45	%			04:16:30
2	Ag 328.068†	124491.6	128553.4	530.46	ug/L	530.46	ppb	04:16:30
2	As 188.979†	1517.4	1609.3	530.54	ug/L	530.54	ppb	04:16:50
2	B 249.677†	27057.6	28509.5	529.51	ug/L	529.51	ppb	04:16:30
2	Ba 233.527†	109795.9	113796.4	734.57	ug/L	734.57	ppb	04:16:30
2	Be 313.107†	1644833.1	1709637.0	537.84	ug/L	537.84	ppb	04:16:30
2	Cd 226.502†	58121.4	60474.7	521.74	ug/L	521.74	ppb	04:16:30
2	Co 228.616†	30549.9	31749.4	518.34	ug/L	518.34	ppb	04:16:50
2	Cr 267.716†	59596.5	61680.2	556.11	ug/L	556.11	ppb	04:16:30
2	Cu 324.752†	213461.8	212301.8	570.01	ug/L	570.01	ppb	04:16:30
2	Mn 257.610†	2054484.6	2128763.6	2021.6	ug/L	2021.6	ppb	04:16:30
2	Mo 202.031†	9332.2	9642.9	515.97	ug/L	515.97	ppb	04:16:50
2	Ni 231.604†	26502.8	27336.5	535.29	ug/L	535.29	ppb	04:16:50

2	P 214.914†	3112.8	2961.1	1201.9 ug/L	1201.9 ppb	04:16:50
2	Pb 220.353†	5863.4	6152.6	579.65 ug/L	579.65 ppb	04:16:50
2	S 181.975 Axial†	4787.9	4902.2	5276.2 ug/L	5276.2 ppb	04:16:50
2	Sb 206.836†	1937.2	1973.2	521.97 ug/L	521.97 ppb	04:16:50
2	Se 196.026†	779.4	829.2	586.25 ug/L	586.25 ppb	04:16:50
2	Si 251.611†	1194164.8	1237116.9	31405 ug/L	31405 ppb	04:16:30
2	Sn 189.927†	3825.2	3968.9	526.79 ug/L	526.79 ppb	04:16:50
2	Ti 334.940†	1704560.2	1767926.8	2438.6 ug/L	2438.6 ppb	04:16:30
2	Tl 190.801†	1907.7	2021.5	516.14 ug/L	516.14 ppb	04:16:50
2	U 409.014†	9520.3	12641.2	318.22 ug/L	318.22 ppb	04:16:30
2	V 292.402†	95611.4	100703.5	572.63 ug/L	572.63 ppb	04:16:30
2	Zn 213.857†	108997.5	112083.3	813.49 ug/L	813.49 ppb	04:16:30
2	SiO2†	1209818.2	1253299.3	68087 ug/L	68087 ppb	04:17:30
3	Sc Radial	4734.7	4734.7	96.4 %		04:15:34
3	Y RADIAL	6196.5	6196.5	109.7 %		04:15:34
3	Al 396.153Radial†	40060.8	41585.3	27438 ug/L	27438 ppb	04:15:34
3	Ca 317.933Radial†	5487.6	5672.6	10043 ug/L	10043 ppb	04:15:34
3	Fe 238.204 Radial†	4732.9	4896.8	59219 ug/L	59219 ppb	04:15:34
3	K 766.490 Radial†	52158.6	51517.0	9367.2 ug/L	9367.2 ppb	04:15:34
3	Mg 279.077 IEC†	187.7	192.1	8554.6 ug/L	8554.6 ppb	04:15:54
3	Na 589.592 Radial†	25241.8	27454.7	7701.0 ug/L	7701.0 ppb	04:15:34
3	Sr 421.552†	102012.2	105790.2	554.93 ug/L	554.93 ppb	04:15:34
3	Sc 361.383	1006068.1	1006068.1	96.785 %		04:16:57
3	Y 371.029	972306.5	972306.5	109.93 %		04:16:57
3	Ag 328.068†	124523.6	128185.5	528.79 ug/L	528.79 ppb	04:16:57
3	As 188.979†	1543.9	1631.8	537.38 ug/L	537.38 ppb	04:17:17
3	B 249.677†	26993.0	28355.7	526.70 ug/L	526.70 ppb	04:16:57
3	Ba 233.527†	109812.6	113459.9	732.39 ug/L	732.39 ppb	04:16:57
3	Be 313.107†	1650397.2	1710087.0	537.97 ug/L	537.97 ppb	04:16:57
3	Cd 226.502†	58193.5	60362.0	520.83 ug/L	520.83 ppb	04:16:57
3	Co 228.616†	30727.1	31834.0	519.76 ug/L	519.76 ppb	04:17:17
3	Cr 267.716†	59760.9	61658.0	555.90 ug/L	555.90 ppb	04:16:57
3	Cu 324.752†	213287.1	211433.7	567.66 ug/L	567.66 ppb	04:16:57
3	Mn 257.610†	2055178.8	2122862.3	2016.0 ug/L	2016.0 ppb	04:16:57
3	Mo 202.031†	9374.0	9656.1	516.62 ug/L	516.62 ppb	04:17:17
3	Ni 231.604†	26618.6	27370.8	535.96 ug/L	535.96 ppb	04:17:17
3	P 214.914†	3123.4	2962.0	1203.2 ug/L	1203.2 ppb	04:17:17
3	Pb 220.353†	5857.6	6127.7	577.34 ug/L	577.34 ppb	04:17:17
3	S 181.975 Axial†	4837.1	4937.7	5314.4 ug/L	5314.4 ppb	04:17:17
3	Sb 206.836†	1956.9	1987.3	525.73 ug/L	525.73 ppb	04:17:17
3	Se 196.026†	784.3	831.8	584.89 ug/L	584.89 ppb	04:17:17
3	Si 251.611†	1193611.1	1232697.8	31293 ug/L	31293 ppb	04:16:57
3	Sn 189.927†	3841.2	3973.1	527.33 ug/L	527.33 ppb	04:17:17
3	Ti 334.940†	1706269.4	1764201.4	2433.5 ug/L	2433.5 ppb	04:16:57
3	Tl 190.801†	1931.9	2040.3	520.61 ug/L	520.61 ppb	04:17:17
3	U 409.014†	9542.0	12632.9	318.09 ug/L	318.09 ppb	04:16:57
3	V 292.402†	95810.7	100601.4	572.16 ug/L	572.16 ppb	04:16:57
3	Zn 213.857†	108789.4	111517.1	809.41 ug/L	809.41 ppb	04:16:57
3	SiO2†	1200988.6	1240278.9	67379 ug/L	67379 ppb	04:17:35

Mean Data: 1201977906|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1005551.5	96.736	%	0.2304				0.24%
Sc Radial	4689.8	95.5	%	1.01				1.05%
Y 371.029	971046.6	109.79	%	0.294				0.27%
Y RADIAL	6167.2	109.2	%	0.83				0.76%
Ag 328.068†	128366.8	529.66	ug/L	0.842	529.66	ppb	0.842	0.16%
Al 396.153Radial†	41704.5	27516	ug/L	74.5	27516	ppb	74.5	0.27%
As 188.979†	1624.3	535.14	ug/L	3.986	535.14	ppb	3.986	0.74%
B 249.677†	28442.8	528.27	ug/L	1.440	528.27	ppb	1.440	0.27%
Ba 233.527†	113636.7	733.54	ug/L	1.099	733.54	ppb	1.099	0.15%
Be 313.107†	1710270.4	538.04	ug/L	0.229	538.04	ppb	0.229	0.04%
Ca 317.933Radial†	5717.9	10124	ug/L	70.1	10124	ppb	70.1	0.69%
Cd 226.502†	60470.2	521.72	ug/L	0.886	521.72	ppb	0.886	0.17%
Co 228.616†	31889.1	520.66	ug/L	2.873	520.66	ppb	2.873	0.55%
Cr 267.716†	61695.2	556.24	ug/L	0.425	556.24	ppb	0.425	0.08%
Cu 324.752†	211733.2	568.48	ug/L	1.325	568.48	ppb	1.325	0.23%
Fe 238.204 Radial†	4937.4	59710	ug/L	427.3	59710	ppb	427.3	0.72%
K 766.490 Radial†	51820.6	9422.5	ug/L	48.24	9422.5	ppb	48.24	0.51%

Mg 279.077 IEC†	197.1	8778.4	ug/L	217.67	8778.4	ppb	217.67	2.48%
Mn 257.610†	2126356.3	2019.3	ug/L	2.97	2019.3	ppb	2.97	0.15%
Mo 202.031†	9680.0	517.92	ug/L	2.834	517.92	ppb	2.834	0.55%
Na 589.592 Radial†	27663.2	7759.5	ug/L	53.36	7759.5	ppb	53.36	0.69%
Ni 231.604†	27423.8	537.00	ug/L	2.404	537.00	ppb	2.404	0.45%
P 214.914†	2979.2	1210.4	ug/L	13.58	1210.4	ppb	13.58	1.12%
Pb 220.353†	6161.1	580.45	ug/L	3.577	580.45	ppb	3.577	0.62%
S 181.975 Axial†	4935.8	5312.4	ug/L	35.24	5312.4	ppb	35.24	0.66%
Sb 206.836†	1987.6	525.86	ug/L	3.961	525.86	ppb	3.961	0.75%
Se 196.026†	839.2	589.96	ug/L	7.630	589.96	ppb	7.630	1.29%
Si 251.611†	1234848.5	31347	ug/L	56.2	31347	ppb	56.2	0.18%
Sn 189.927†	3982.5	528.59	ug/L	2.659	528.59	ppb	2.659	0.50%
Sr 421.552†	106093.7	556.52	ug/L	1.755	556.52	ppb	1.755	0.32%
Ti 334.940†	1765890.9	2435.8	ug/L	2.60	2435.8	ppb	2.60	0.11%
Tl 190.801†	2028.4	517.78	ug/L	2.465	517.78	ppb	2.465	0.48%
U 409.014†	12632.5	318.02	ug/L	0.243	318.02	ppb	0.243	0.08%
V 292.402†	100705.3	572.70	ug/L	0.577	572.70	ppb	0.577	0.10%
Zn 213.857†	111861.7	811.88	ug/L	2.172	811.88	ppb	2.172	0.27%
SiO2†	1243157.6	67536	ug/L	492.1	67536	ppb	492.1	0.73%

Sequence No.: 55
Sample ID: 1201977907|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 12/5/2009 04:19:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977907|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4725.8	4725.8	96.3	%			04:21:41
1	Y RADIAL	6043.0	6043.0	107.0	%			04:21:41
1	Al 396.153Radial†	40637.4	42262.5	27884	ug/L	27884	ppb	04:21:41
1	Ca 317.933Radial†	5524.4	5721.5	10130	ug/L	10130	ppb	04:21:41
1	Fe 238.204 Radial†	4811.0	4987.2	60312	ug/L	60312	ppb	04:21:41
1	K 766.490 Radial†	53356.3	52863.1	9610.1	ug/L	9610.1	ppb	04:21:41
1	Mg 279.077 IEC†	202.4	207.7	9254.4	ug/L	9254.4	ppb	04:22:01
1	Na 589.592 Radial†	26214.4	28514.5	7998.3	ug/L	7998.3	ppb	04:21:41
1	Sr 421.552†	104013.3	108068.2	566.88	ug/L	566.88	ppb	04:21:41
1	Sc 361.383	1011143.9	1011143.9	97.274	%			04:23:00
1	Y 371.029	949747.8	949747.8	107.38	%			04:23:00
1	Ag 328.068†	126195.5	129258.3	533.36	ug/L	533.36	ppb	04:23:00
1	As 188.979†	1538.9	1618.6	535.15	ug/L	535.15	ppb	04:23:21
1	B 249.677†	27659.0	28900.3	536.83	ug/L	536.83	ppb	04:23:00
1	Ba 233.527†	111809.6	114943.4	741.97	ug/L	741.97	ppb	04:23:00
1	Be 313.107†	1676713.9	1728581.4	544.14	ug/L	544.14	ppb	04:23:00
1	Cd 226.502†	58777.0	60660.0	523.32	ug/L	523.32	ppb	04:23:00
1	Co 228.616†	31146.7	32105.9	523.80	ug/L	523.80	ppb	04:23:21
1	Cr 267.716†	60932.5	62552.5	563.95	ug/L	563.95	ppb	04:23:00
1	Cu 324.752†	217720.8	214885.4	576.93	ug/L	576.93	ppb	04:23:00
1	Mn 257.610†	2264442.2	2327331.4	2209.7	ug/L	2209.7	ppb	04:23:00
1	Mo 202.031†	9523.6	9761.3	522.28	ug/L	522.28	ppb	04:23:21
1	Ni 231.604†	27199.3	27829.7	544.95	ug/L	544.95	ppb	04:23:21
1	P 214.914†	3113.6	2935.8	1189.4	ug/L	1189.4	ppb	04:23:21
1	Pb 220.353†	6672.8	6935.4	653.17	ug/L	653.17	ppb	04:23:21
1	S 181.975 Axial†	4928.0	5006.0	5387.9	ug/L	5387.9	ppb	04:23:21
1	Sb 206.836†	1980.4	2001.3	528.92	ug/L	528.92	ppb	04:23:21
1	Se 196.026†	844.2	889.2	614.33	ug/L	614.33	ppb	04:23:21
1	Si 251.611†	1210318.5	1243682.6	31571	ug/L	31571	ppb	04:23:00
1	Sn 189.927†	3907.0	4020.8	533.67	ug/L	533.67	ppb	04:23:21
1	Ti 334.940†	1858362.0	1911707.0	2636.9	ug/L	2636.9	ppb	04:23:00
1	Tl 190.801†	1968.6	2068.1	530.00	ug/L	530.00	ppb	04:23:21
1	U 409.014†	11713.1	14815.4	374.37	ug/L	374.37	ppb	04:23:00
1	V 292.402†	97259.9	101594.3	577.65	ug/L	577.65	ppb	04:23:00
1	Zn 213.857†	111627.8	113870.8	826.51	ug/L	826.51	ppb	04:23:00
1	SiO2†	1213214.8	1246618.7	67724	ug/L	67724	ppb	04:24:22
2	Sc Radial	4813.4	4813.4	98.0	%			04:22:06
2	Y RADIAL	6144.7	6144.7	108.8	%			04:22:06
2	Al 396.153Radial†	40942.6	41805.8	27583	ug/L	27583	ppb	04:22:06
2	Ca 317.933Radial†	5540.4	5633.5	9974.3	ug/L	9974.3	ppb	04:22:06
2	Fe 238.204 Radial†	4816.3	4901.7	59278	ug/L	59278	ppb	04:22:06
2	K 766.490 Radial†	53804.7	52312.0	9509.8	ug/L	9509.8	ppb	04:22:06
2	Mg 279.077 IEC†	201.7	203.2	9052.3	ug/L	9052.3	ppb	04:22:27
2	Na 589.592 Radial†	26162.3	27965.9	7844.4	ug/L	7844.4	ppb	04:22:06
2	Sr 421.552†	104579.4	106679.8	559.60	ug/L	559.60	ppb	04:22:06
2	Sc 361.383	1025974.3	1025974.3	98.700	%			04:23:28
2	Y 371.029	964211.7	964211.7	109.02	%			04:23:28
2	Ag 328.068†	127345.9	128548.6	530.21	ug/L	530.21	ppb	04:23:28
2	As 188.979†	1533.8	1590.6	526.19	ug/L	526.19	ppb	04:23:48
2	B 249.677†	27955.7	28789.9	534.91	ug/L	534.91	ppb	04:23:28
2	Ba 233.527†	112976.5	114464.1	738.85	ug/L	738.85	ppb	04:23:28
2	Be 313.107†	1697113.7	1724333.6	542.80	ug/L	542.80	ppb	04:23:28
2	Cd 226.502†	59469.2	60487.9	521.92	ug/L	521.92	ppb	04:23:28
2	Co 228.616†	30848.9	31341.4	511.22	ug/L	511.22	ppb	04:23:48
2	Cr 267.716†	61545.0	62267.6	561.37	ug/L	561.37	ppb	04:23:28
2	Cu 324.752†	220043.0	214002.9	574.52	ug/L	574.52	ppb	04:23:28
2	Mn 257.610†	2287682.1	2317227.5	2200.0	ug/L	2200.0	ppb	04:23:28
2	Mo 202.031†	9440.5	9535.6	510.23	ug/L	510.23	ppb	04:23:48
2	Ni 231.604†	26989.1	27212.5	532.86	ug/L	532.86	ppb	04:23:48

2	P 214.914†	3086.3	2861.9	1157.2 ug/L	1157.2 ppb	04:23:48
2	Pb 220.353†	6597.0	6759.5	636.65 ug/L	636.65 ppb	04:23:48
2	S 181.975 Axial†	4861.7	4865.6	5236.8 ug/L	5236.8 ppb	04:23:48
2	Sb 206.836†	1962.3	1953.5	515.94 ug/L	515.94 ppb	04:23:48
2	Se 196.026†	810.5	842.6	589.87 ug/L	589.87 ppb	04:23:48
2	Si 251.611†	1222915.9	1238460.5	31439 ug/L	31439 ppb	04:23:28
2	Sn 189.927†	3880.7	3936.2	522.44 ug/L	522.44 ppb	04:23:48
2	Ti 334.940†	1878263.9	1904255.6	2626.6 ug/L	2626.6 ppb	04:23:28
2	Tl 190.801†	1957.7	2027.7	520.16 ug/L	520.16 ppb	04:23:48
2	U 409.014†	11961.0	14892.4	376.49 ug/L	376.49 ppb	04:23:28
2	V 292.402†	98474.3	101379.4	576.42 ug/L	576.42 ppb	04:23:28
2	Zn 213.857†	112877.0	113477.7	823.81 ug/L	823.81 ppb	04:23:28
2	SiO2†	1218668.5	1234115.8	67045 ug/L	67045 ppb	04:24:27
3	Sc Radial	4793.8	4793.8	97.6 %		04:22:32
3	Y RADIAL	6135.5	6135.5	108.6 %		04:22:32
3	Al 396.153Radial†	40813.6	41844.1	27608 ug/L	27608 ppb	04:22:32
3	Ca 317.933Radial†	5521.4	5637.1	9980.6 ug/L	9980.6 ppb	04:22:32
3	Fe 238.204 Radial†	4773.2	4877.6	58987 ug/L	58987 ppb	04:22:32
3	K 766.490 Radial†	53660.2	52387.9	9523.7 ug/L	9523.7 ppb	04:22:32
3	Mg 279.077 IEC†	202.1	204.5	9111.3 ug/L	9111.3 ppb	04:22:52
3	Na 589.592 Radial†	26012.2	27921.0	7831.8 ug/L	7831.8 ppb	04:22:32
3	Sr 421.552†	104269.9	106798.1	560.22 ug/L	560.22 ppb	04:22:32
3	Sc 361.383	1011392.0	1011392.0	97.298 %		04:23:55
3	Y 371.029	951579.0	951579.0	107.59 %		04:23:55
3	Ag 328.068†	125672.2	128688.7	530.68 ug/L	530.68 ppb	04:23:55
3	As 188.979†	1543.3	1622.8	536.15 ug/L	536.15 ppb	04:24:15
3	B 249.677†	27519.8	28750.2	534.18 ug/L	534.18 ppb	04:23:55
3	Ba 233.527†	111224.3	114313.5	737.87 ug/L	737.87 ppb	04:23:55
3	Be 313.107†	1673922.7	1725289.8	543.09 ug/L	543.09 ppb	04:23:55
3	Cd 226.502†	58460.9	60320.3	520.49 ug/L	520.49 ppb	04:23:55
3	Co 228.616†	30880.7	31824.7	519.20 ug/L	519.20 ppb	04:24:15
3	Cr 267.716†	60689.8	62287.7	561.54 ug/L	561.54 ppb	04:23:55
3	Cu 324.752†	216538.1	213614.9	573.47 ug/L	573.47 ppb	04:23:55
3	Mn 257.610†	2254651.4	2316697.7	2199.5 ug/L	2199.5 ppb	04:23:55
3	Mo 202.031†	9470.1	9703.8	519.14 ug/L	519.14 ppb	04:24:15
3	Ni 231.604†	27050.3	27669.7	541.81 ug/L	541.81 ppb	04:24:15
3	P 214.914†	3061.1	2881.0	1166.3 ug/L	1166.3 ppb	04:24:15
3	Pb 220.353†	6615.2	6874.5	647.50 ug/L	647.50 ppb	04:24:15
3	S 181.975 Axial†	4876.8	4952.2	5330.0 ug/L	5330.0 ppb	04:24:15
3	Sb 206.836†	1968.1	1988.2	525.43 ug/L	525.43 ppb	04:24:15
3	Se 196.026†	809.0	852.9	593.41 ug/L	593.41 ppb	04:24:15
3	Si 251.611†	1204337.5	1237230.3	31408 ug/L	31408 ppb	04:23:55
3	Sn 189.927†	3894.1	4006.6	531.74 ug/L	531.74 ppb	04:24:15
3	Ti 334.940†	1851483.5	1904168.9	2626.5 ug/L	2626.5 ppb	04:23:55
3	Tl 190.801†	1964.6	2063.4	528.74 ug/L	528.74 ppb	04:24:15
3	U 409.014†	11796.5	14898.2	376.68 ug/L	376.68 ppb	04:23:55
3	V 292.402†	97073.2	101377.9	576.58 ug/L	576.58 ppb	04:23:55
3	Zn 213.857†	111148.1	113349.7	822.83 ug/L	822.83 ppb	04:23:55
3	SiO2†	1223568.0	1256953.6	68285 ug/L	68285 ppb	04:24:33

Mean Data: 1201977907|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1016170.1	97.757	%	0.8169				0.84%
Sc Radial	4777.7	97.3	%	0.94				0.96%
Y 371.029	955179.5	107.99	%	0.890				0.82%
Y RADIAL	6107.7	108.2	%	1.00				0.92%
Ag 328.068†	128831.9	531.42	ug/L	1.699	531.42	ppb	1.699	0.32%
Al 396.153Radial†	41970.8	27692	ug/L	167.1	27692	ppb	167.1	0.60%
As 188.979†	1610.7	532.50	ug/L	5.487	532.50	ppb	5.487	1.03%
B 249.677†	28813.5	535.31	ug/L	1.368	535.31	ppb	1.368	0.26%
Ba 233.527†	114573.7	739.56	ug/L	2.140	739.56	ppb	2.140	0.29%
Be 313.107†	1726068.3	543.34	ug/L	0.706	543.34	ppb	0.706	0.13%
Ca 317.933Radial†	5664.0	10028	ug/L	88.2	10028	ppb	88.2	0.88%
Cd 226.502†	60489.4	521.91	ug/L	1.416	521.91	ppb	1.416	0.27%
Co 228.616†	31757.3	518.07	ug/L	6.369	518.07	ppb	6.369	1.23%
Cr 267.716†	62369.3	562.29	ug/L	1.442	562.29	ppb	1.442	0.26%
Cu 324.752†	214167.7	574.97	ug/L	1.774	574.97	ppb	1.774	0.31%
Fe 238.204 Radial†	4922.1	59526	ug/L	696.4	59526	ppb	696.4	1.17%
K 766.490 Radial†	52521.0	9547.9	ug/L	54.38	9547.9	ppb	54.38	0.57%

Mg 279.077 IEC†	205.2	9139.3	ug/L	103.95	9139.3	ppb	103.95	1.14%
Mn 257.610†	2320418.9	2203.1	ug/L	5.74	2203.1	ppb	5.74	0.26%
Mo 202.031†	9666.9	517.22	ug/L	6.251	517.22	ppb	6.251	1.21%
Na 589.592 Radial†	28133.8	7891.5	ug/L	92.68	7891.5	ppb	92.68	1.17%
Ni 231.604†	27570.6	539.87	ug/L	6.272	539.87	ppb	6.272	1.16%
P 214.914†	2892.9	1171.0	ug/L	16.56	1171.0	ppb	16.56	1.41%
Pb 220.353†	6856.4	645.77	ug/L	8.396	645.77	ppb	8.396	1.30%
S 181.975 Axial†	4941.3	5318.2	ug/L	76.28	5318.2	ppb	76.28	1.43%
Sb 206.836†	1981.0	523.43	ug/L	6.720	523.43	ppb	6.720	1.28%
Se 196.026†	861.6	599.20	ug/L	13.220	599.20	ppb	13.220	2.21%
Si 251.611†	1239791.1	31473	ug/L	86.9	31473	ppb	86.9	0.28%
Sn 189.927†	3987.9	529.28	ug/L	6.006	529.28	ppb	6.006	1.13%
Sr 421.552†	107182.1	562.23	ug/L	4.037	562.23	ppb	4.037	0.72%
Ti 334.940†	1906710.5	2630.0	ug/L	5.97	2630.0	ppb	5.97	0.23%
Tl 190.801†	2053.0	526.30	ug/L	5.357	526.30	ppb	5.357	1.02%
U 409.014†	14868.7	375.85	ug/L	1.285	375.85	ppb	1.285	0.34%
V 292.402†	101450.5	576.88	ug/L	0.669	576.88	ppb	0.669	0.12%
Zn 213.857†	113566.1	824.38	ug/L	1.904	824.38	ppb	1.904	0.23%
SiO2†	1245896.0	67685	ug/L	621.3	67685	ppb	621.3	0.92%

Sequence No.: 56
Sample ID: 1201977905|925182|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 12/5/2009 04:26:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201977905|925182|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4649.8	4649.8	94.7	%			04:28:39
1	Y RADIAL	5404.5	5404.5	95.70	%			04:28:39
1	Al 396.153Radial†	7441.4	7901.1	5217.2	ug/L	5217.2	ppb	04:28:39
1	Ca 317.933Radial†	844.5	873.8	1547.2	ug/L	1547.2	ppb	04:28:59
1	Fe 238.204 Radial†	1296.6	1358.1	16420	ug/L	16420	ppb	04:28:59
1	K 766.490 Radial†	8629.9	6542.7	1188.3	ug/L	1188.3	ppb	04:28:39
1	Mg 279.077 IEC†	55.5	56.1	2496.1	ug/L	2496.1	ppb	04:28:59
1	Na 589.592 Radial†	-330.8	930.7	261.07	ug/L	261.07	ppb	04:28:39
1	Sr 421.552†	1138.0	1209.0	6.3287	ug/L	6.3287	ppb	04:28:39
1	Sc 361.383	1024379.8	1024379.8	98.547	%			04:29:56
1	Y 371.029	885143.8	885143.8	100.08	%			04:29:56
1	Ag 328.068†	-868.5	-1355.4	-0.0993	ug/L	-0.0993	ppb	04:30:01
1	As 188.979†	-52.5	-16.7	0.4803	ug/L	0.4803	ppb	04:30:21
1	B 249.677†	-238.2	224.4	2.0520	ug/L	2.0520	ppb	04:30:01
1	Ba 233.527†	10829.9	10989.6	71.238	ug/L	71.238	ppb	04:30:01
1	Be 313.107†	-6275.9	-1494.5	0.2683	ug/L	0.2683	ppb	04:30:01
1	Cd 226.502†	-48.8	186.1	-0.0158	ug/L	-0.0158	ppb	04:30:21
1	Co 228.616†	158.9	247.6	3.0797	ug/L	3.0797	ppb	04:30:21
1	Cr 267.716†	699.7	622.3	5.9141	ug/L	5.9141	ppb	04:30:01
1	Cu 324.752†	9839.4	1047.0	3.6335	ug/L	3.6335	ppb	04:30:01
1	Mn 257.610†	423955.4	429629.6	408.43	ug/L	408.43	ppb	04:29:56
1	Mo 202.031†	31.2	2.4	1.2922	ug/L	1.2922	ppb	04:30:21
1	Ni 231.604†	366.5	239.9	4.6987	ug/L	4.6987	ppb	04:30:21
1	P 214.914†	894.1	642.2	275.33	ug/L	275.33	ppb	04:30:21
1	Pb 220.353†	1.6	77.2	7.0670	ug/L	7.0670	ppb	04:30:21
1	S 181.975 Axial†	76.2	17.3	17.570	ug/L	17.570	ppb	04:30:21
1	Sb 206.836†	54.4	20.6	4.4013	ug/L	4.4013	ppb	04:30:21
1	Se 196.026†	-120.0	-100.4	15.139	ug/L	15.139	ppb	04:30:21
1	Si 251.611†	169112.3	171048.1	4343.6	ug/L	4343.6	ppb	04:29:56
1	Sn 189.927†	-14.4	-10.3	-0.9805	ug/L	-0.9805	ppb	04:30:21
1	Ti 334.940†	265662.4	270839.8	373.65	ug/L	373.65	ppb	04:29:56
1	Tl 190.801†	-71.7	-28.5	-1.5542	ug/L	-1.5542	ppb	04:30:21
1	U 409.014†	-3649.5	-929.4	-26.105	ug/L	-26.105	ppb	04:29:56
1	V 292.402†	599.2	2216.6	9.7896	ug/L	9.7896	ppb	04:30:01
1	Zn 213.857†	10409.1	9677.0	69.422	ug/L	69.422	ppb	04:30:01
1	SiO2†	167133.3	168998.5	9184.2	ug/L	9184.2	ppb	04:31:27
2	Sc Radial	4606.3	4606.3	93.8	%			04:29:04
2	Y RADIAL	5382.8	5382.8	95.32	%			04:29:04
2	Al 396.153Radial†	7189.3	7706.7	5088.9	ug/L	5088.9	ppb	04:29:04
2	Ca 317.933Radial†	829.0	865.8	1532.9	ug/L	1532.9	ppb	04:29:24
2	Fe 238.204 Radial†	1290.2	1364.2	16494	ug/L	16494	ppb	04:29:24
2	K 766.490 Radial†	8652.1	6652.6	1208.3	ug/L	1208.3	ppb	04:29:04
2	Mg 279.077 IEC†	54.5	55.5	2471.2	ug/L	2471.2	ppb	04:29:24
2	Na 589.592 Radial†	-299.4	960.9	269.52	ug/L	269.52	ppb	04:29:04
2	Sr 421.552†	1139.1	1221.6	6.3946	ug/L	6.3946	ppb	04:29:04
2	Sc 361.383	1016222.6	1016222.6	97.762	%			04:30:26
2	Y 371.029	877380.8	877380.8	99.199	%			04:30:26
2	Ag 328.068†	-845.0	-1338.4	-0.0052	ug/L	-0.0052	ppb	04:30:31
2	As 188.979†	-45.7	-10.1	2.5300	ug/L	2.5300	ppb	04:30:51
2	B 249.677†	-258.8	201.4	1.6079	ug/L	1.6079	ppb	04:30:31
2	Ba 233.527†	10861.6	11110.3	72.017	ug/L	72.017	ppb	04:30:31
2	Be 313.107†	-6301.4	-1571.7	0.2449	ug/L	0.2449	ppb	04:30:31
2	Cd 226.502†	-41.6	193.1	0.0373	ug/L	0.0373	ppb	04:30:51
2	Co 228.616†	158.9	248.8	3.0972	ug/L	3.0972	ppb	04:30:51
2	Cr 267.716†	705.1	633.5	6.0176	ug/L	6.0176	ppb	04:30:31
2	Cu 324.752†	9838.1	1125.8	3.8478	ug/L	3.8478	ppb	04:30:31
2	Mn 257.610†	420423.4	429470.0	408.28	ug/L	408.28	ppb	04:30:26
2	Mo 202.031†	24.4	-4.3	0.9423	ug/L	0.9423	ppb	04:30:51
2	Ni 231.604†	337.1	212.9	4.1695	ug/L	4.1695	ppb	04:30:51

2	P 214.914†	889.3	644.5	276.23 ug/L	276.23 ppb	04:30:51
2	Pb 220.353†	-3.2	72.2	6.5674 ug/L	6.5674 ppb	04:30:51
2	S 181.975 Axial†	68.9	10.4	10.169 ug/L	10.169 ppb	04:30:51
2	Sb 206.836†	38.2	4.4	0.1604 ug/L	0.1604 ppb	04:30:51
2	Se 196.026†	-112.9	-94.1	18.161 ug/L	18.161 ppb	04:30:51
2	Si 251.611†	167756.1	171038.3	4343.4 ug/L	4343.4 ppb	04:30:26
2	Sn 189.927†	-7.2	-3.1	-0.0224 ug/L	-0.0224 ppb	04:30:51
2	Ti 334.940†	263806.6	271105.4	374.02 ug/L	374.02 ppb	04:30:26
2	Tl 190.801†	-59.7	-16.8	1.2866 ug/L	1.2866 ppb	04:30:51
2	U 409.014†	-3606.8	-915.4	-25.753 ug/L	-25.753 ppb	04:30:26
2	V 292.402†	740.1	2365.5	10.626 ug/L	10.626 ppb	04:30:31
2	Zn 213.857†	10390.7	9743.0	69.904 ug/L	69.904 ppb	04:30:31
2	SiO2†	165859.1	169056.4	9187.3 ug/L	9187.3 ppb	04:31:33
3	Sc Radial	4704.7	4704.7	95.8 %		04:29:29
3	Y RADIAL	5486.3	5486.3	97.15 %		04:29:29
3	Al 396.153Radial†	7394.7	7760.8	5124.6 ug/L	5124.6 ppb	04:29:29
3	Ca 317.933Radial†	827.5	845.8	1497.4 ug/L	1497.4 ppb	04:29:49
3	Fe 238.204 Radial†	1281.7	1326.6	16038 ug/L	16038 ppb	04:29:49
3	K 766.490 Radial†	8684.2	6493.2	1179.3 ug/L	1179.3 ppb	04:29:29
3	Mg 279.077 IEC†	56.4	56.4	2508.0 ug/L	2508.0 ppb	04:29:49
3	Na 589.592 Radial†	-274.3	993.7	278.74 ug/L	278.74 ppb	04:29:29
3	Sr 421.552†	1172.2	1230.7	6.4428 ug/L	6.4428 ppb	04:29:29
3	Sc 361.383	1011425.0	1011425.0	97.301 %		04:30:57
3	Y 371.029	874206.1	874206.1	98.840 %		04:30:57
3	Ag 328.068†	-819.5	-1316.3	-0.0598 ug/L	-0.0598 ppb	04:31:02
3	As 188.979†	-60.1	-25.2	-2.2490 ug/L	-2.2490 ppb	04:31:22
3	B 249.677†	-319.4	137.9	0.4675 ug/L	0.4675 ppb	04:31:02
3	Ba 233.527†	10889.6	11191.7	72.522 ug/L	72.522 ppb	04:31:02
3	Be 313.107†	-6191.0	-1488.9	0.2685 ug/L	0.2685 ppb	04:31:02
3	Cd 226.502†	-44.1	190.3	0.0590 ug/L	0.0590 ppb	04:31:22
3	Co 228.616†	151.1	241.6	2.9897 ug/L	2.9897 ppb	04:31:22
3	Cr 267.716†	690.4	621.7	5.9046 ug/L	5.9046 ppb	04:31:02
3	Cu 324.752†	9908.2	1245.6	4.1444 ug/L	4.1444 ppb	04:31:02
3	Mn 257.610†	417863.1	428878.5	407.68 ug/L	407.68 ppb	04:30:57
3	Mo 202.031†	37.3	9.1	1.6212 ug/L	1.6212 ppb	04:31:22
3	Ni 231.604†	356.1	234.1	4.5839 ug/L	4.5839 ppb	04:31:22
3	P 214.914†	895.5	655.3	281.37 ug/L	281.37 ppb	04:31:22
3	Pb 220.353†	-4.2	71.2	6.5193 ug/L	6.5193 ppb	04:31:22
3	S 181.975 Axial†	78.6	20.7	21.321 ug/L	21.321 ppb	04:31:22
3	Sb 206.836†	39.7	6.2	0.6219 ug/L	0.6219 ppb	04:31:22
3	Se 196.026†	-110.0	-91.6	17.615 ug/L	17.615 ppb	04:31:22
3	Si 251.611†	166297.5	170353.2	4326.0 ug/L	4326.0 ppb	04:30:57
3	Sn 189.927†	-9.2	-5.1	-0.3045 ug/L	-0.3045 ppb	04:31:22
3	Ti 334.940†	261761.4	270283.5	372.88 ug/L	372.88 ppb	04:30:57
3	Tl 190.801†	-61.4	-18.8	0.7827 ug/L	0.7827 ppb	04:31:22
3	U 409.014†	-3780.4	-1111.3	-30.760 ug/L	-30.760 ppb	04:30:57
3	V 292.402†	644.3	2270.6	10.154 ug/L	10.154 ppb	04:31:02
3	Zn 213.857†	10414.6	9818.0	70.494 ug/L	70.494 ppb	04:31:02
3	SiO2†	168442.1	172515.9	9375.4 ug/L	9375.4 ppb	04:31:38

Mean Data: 1201977905|925182|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1017342.5	97.870	%	0.6301				0.64%
Sc Radial	4653.6	94.8	%	1.00				1.06%
Y 371.029	878910.2	99.372	%	0.6362				0.64%
Y RADIAL	5424.5	96.06	%	0.967				1.01%
Ag 328.068†	-1336.7	-0.0548	ug/L	0.04721	-0.0548	ppb	0.04721	86.22%
Al 396.153Radial†	7789.6	5143.6	ug/L	66.24	5143.6	ppb	66.24	1.29%
As 188.979†	-17.3	0.2538	ug/L	2.39752	0.2538	ppb	2.39752	944.72%
B 249.677†	187.9	1.3758	ug/L	0.81735	1.3758	ppb	0.81735	59.41%
Ba 233.527†	11097.2	71.926	ug/L	0.6473	71.926	ppb	0.6473	0.90%
Be 313.107†	-1518.4	0.2606	ug/L	0.01355	0.2606	ppb	0.01355	5.20%
Ca 317.933Radial†	861.8	1525.8	ug/L	25.60	1525.8	ppb	25.60	1.68%
Cd 226.502†	189.8	0.0268	ug/L	0.03851	0.0268	ppb	0.03851	143.48%
Co 228.616†	246.0	3.0555	ug/L	0.05767	3.0555	ppb	0.05767	1.89%
Cr 267.716†	625.8	5.9454	ug/L	0.06267	5.9454	ppb	0.06267	1.05%
Cu 324.752†	1139.4	3.8752	ug/L	0.25657	3.8752	ppb	0.25657	6.62%
Fe 238.204 Radial†	1349.6	16317	ug/L	244.3	16317	ppb	244.3	1.50%
K 766.490 Radial†	6562.8	1192.0	ug/L	14.87	1192.0	ppb	14.87	1.25%

Mg 279.077 IEC†	56.0	2491.8	ug/L	18.75	2491.8	ppb	18.75	0.75%
Mn 257.610†	429326.1	408.13	ug/L	0.398	408.13	ppb	0.398	0.10%
Mo 202.031†	2.4	1.2852	ug/L	0.33949	1.2852	ppb	0.33949	26.42%
Na 589.592 Radial†	961.8	269.78	ug/L	8.839	269.78	ppb	8.839	3.28%
Ni 231.604†	229.0	4.4840	ug/L	0.27839	4.4840	ppb	0.27839	6.21%
P 214.914†	647.3	277.64	ug/L	3.258	277.64	ppb	3.258	1.17%
Pb 220.353†	73.6	6.7179	ug/L	0.30331	6.7179	ppb	0.30331	4.51%
S 181.975 Axial†	16.1	16.353	ug/L	5.6744	16.353	ppb	5.6744	34.70%
Sb 206.836†	10.4	1.7279	ug/L	2.32674	1.7279	ppb	2.32674	134.66%
Se 196.026†	-95.4	16.972	ug/L	1.6106	16.972	ppb	1.6106	9.49%
Si 251.611†	170813.2	4337.7	ug/L	10.12	4337.7	ppb	10.12	0.23%
Sn 189.927†	-6.2	-0.4358	ug/L	0.49235	-0.4358	ppb	0.49235	112.98%
Sr 421.552†	1220.4	6.3887	ug/L	0.05727	6.3887	ppb	0.05727	0.90%
Ti 334.940†	270742.9	373.52	ug/L	0.578	373.52	ppb	0.578	0.15%
Tl 190.801†	-21.4	0.1717	ug/L	1.51572	0.1717	ppb	1.51572	882.76%
U 409.014†	-985.4	-27.539	ug/L	2.7948	-27.539	ppb	2.7948	10.15%
V 292.402†	2284.3	10.190	ug/L	0.4192	10.190	ppb	0.4192	4.11%
Zn 213.857†	9746.0	69.940	ug/L	0.5370	69.940	ppb	0.5370	0.77%
SiO2†	170190.3	9249.0	ug/L	109.47	9249.0	ppb	109.47	1.18%

Sequence No.: 57
Sample ID: 241322002|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 12/5/2009 04:33:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322002|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4712.2	4712.2	96.0	%			04:35:43
1	Y RADIAL	6792.7	6792.7	120.3	%			04:35:43
1	Al 396.153Radial†	23478.2	24506.0	16181	ug/L	16181	ppb	04:35:43
1	Ca 317.933Radial†	3821.2	3963.5	7017.6	ug/L	7017.6	ppb	04:35:43
1	Fe 238.204 Radial†	4620.0	4802.7	58065	ug/L	58065	ppb	04:35:43
1	K 766.490 Radial†	19458.5	17704.5	3204.7	ug/L	3204.7	ppb	04:35:43
1	Mg 279.077 IEC†	73.0	73.5	3240.8	ug/L	3240.8	ppb	04:36:03
1	Na 589.592 Radial†	5455.3	6963.9	1953.4	ug/L	1953.4	ppb	04:35:43
1	Sr 421.552†	8008.4	8351.4	43.750	ug/L	43.750	ppb	04:35:43
1	Sc 361.383	1024420.5	1024420.5	98.551	%			04:37:00
1	Y 371.029	1089200.0	1089200.0	123.15	%			04:37:00
1	Ag 328.068†	-3780.5	-4310.2	1.6717	ug/L	1.6717	ppb	04:37:05
1	As 188.979†	-39.0	-3.0	22.573	ug/L	22.573	ppb	04:37:25
1	B 249.677†	259.9	729.8	6.0672	ug/L	6.0672	ppb	04:37:05
1	Ba 233.527†	36292.7	36826.4	238.84	ug/L	238.84	ppb	04:37:05
1	Be 313.107†	-718.4	4144.9	4.7021	ug/L	4.7021	ppb	04:37:05
1	Cd 226.502†	422.6	664.5	-0.0007	ug/L	-0.0007	ppb	04:37:25
1	Co 228.616†	460.2	553.2	4.7215	ug/L	4.7215	ppb	04:37:25
1	Cr 267.716†	1769.4	1707.7	16.536	ug/L	16.536	ppb	04:37:25
1	Cu 324.752†	15319.9	6607.7	20.608	ug/L	20.608	ppb	04:37:05
1	Mn 257.610†	2049465.2	2079023.4	1974.5	ug/L	1974.5	ppb	04:37:00
1	Mo 202.031†	205.8	179.6	13.651	ug/L	13.651	ppb	04:37:25
1	Ni 231.604†	890.7	771.8	15.117	ug/L	15.117	ppb	04:37:25
1	P 214.914†	1589.3	1347.6	558.62	ug/L	558.62	ppb	04:37:25
1	Pb 220.353†	1283.1	1377.5	128.19	ug/L	128.19	ppb	04:37:25
1	S 181.975 Axial†	317.9	262.5	279.66	ug/L	279.66	ppb	04:37:25
1	Sb 206.836†	60.4	26.6	2.7382	ug/L	2.7382	ppb	04:37:25
1	Se 196.026†	-350.8	-334.5	62.608	ug/L	62.608	ppb	04:37:25
1	Si 251.611†	1138931.7	1155120.7	29335	ug/L	29335	ppb	04:37:00
1	Sn 189.927†	-2.9	1.4	1.7046	ug/L	1.7046	ppb	04:37:25
1	Ti 334.940†	1238267.4	1257735.1	1735.2	ug/L	1735.2	ppb	04:37:00
1	Tl 190.801†	-163.6	-121.7	-4.2970	ug/L	-4.2970	ppb	04:37:25
1	U 409.014†	-11643.3	-9040.6	-241.07	ug/L	-241.07	ppb	04:37:00
1	V 292.402†	6345.4	8047.2	35.075	ug/L	35.075	ppb	04:37:05
1	Zn 213.857†	39831.1	39531.2	284.71	ug/L	284.71	ppb	04:37:05
1	SiO2†	1139322.5	1155475.8	62797	ug/L	62797	ppb	04:38:34
2	Sc Radial	4521.1	4521.1	92.1	%			04:36:08
2	Y RADIAL	6564.2	6564.2	116.2	%			04:36:08
2	Al 396.153Radial†	23701.7	25782.9	17024	ug/L	17024	ppb	04:36:08
2	Ca 317.933Radial†	3854.3	4167.8	7379.1	ug/L	7379.1	ppb	04:36:08
2	Fe 238.204 Radial†	4624.2	5010.7	60581	ug/L	60581	ppb	04:36:08
2	K 766.490 Radial†	19485.3	18590.8	3366.5	ug/L	3366.5	ppb	04:36:08
2	Mg 279.077 IEC†	73.6	77.5	3415.0	ug/L	3415.0	ppb	04:36:28
2	Na 589.592 Radial†	5400.9	7145.1	2004.2	ug/L	2004.2	ppb	04:36:08
2	Sr 421.552†	7994.3	8688.9	45.518	ug/L	45.518	ppb	04:36:08
2	Sc 361.383	1035687.2	1035687.2	99.635	%			04:37:31
2	Y 371.029	1100223.5	1100223.5	124.39	%			04:37:31
2	Ag 328.068†	-3842.6	-4330.8	2.3853	ug/L	2.3853	ppb	04:37:36
2	As 188.979†	-48.3	-11.9	20.153	ug/L	20.153	ppb	04:37:56
2	B 249.677†	242.3	709.3	5.3449	ug/L	5.3449	ppb	04:37:36
2	Ba 233.527†	36705.2	36839.8	239.02	ug/L	239.02	ppb	04:37:36
2	Be 313.107†	-869.2	4001.6	4.6518	ug/L	4.6518	ppb	04:37:36
2	Cd 226.502†	425.9	663.1	-0.2636	ug/L	-0.2636	ppb	04:37:56
2	Co 228.616†	458.8	546.8	4.5824	ug/L	4.5824	ppb	04:37:56
2	Cr 267.716†	1737.7	1656.3	16.120	ug/L	16.120	ppb	04:37:56
2	Cu 324.752†	15586.2	6705.8	20.998	ug/L	20.998	ppb	04:37:36
2	Mn 257.610†	2064285.8	2071275.5	1967.4	ug/L	1967.4	ppb	04:37:31
2	Mo 202.031†	189.4	160.9	12.833	ug/L	12.833	ppb	04:37:56
2	Ni 231.604†	906.4	777.8	15.234	ug/L	15.234	ppb	04:37:56

2	P 214.914†	1577.8	1318.4	543.79 ug/L	543.79 ppb	04:37:56
2	Pb 220.353†	1262.0	1342.2	124.85 ug/L	124.85 ppb	04:37:56
2	S 181.975 Axial†	326.5	267.6	284.94 ug/L	284.94 ppb	04:37:56
2	Sb 206.836†	50.8	16.3	0.0219 ug/L	0.0219 ppb	04:37:56
2	Se 196.026†	-355.6	-335.5	71.305 ug/L	71.305 ppb	04:37:56
2	Si 251.611†	1148017.5	1151667.9	29247 ug/L	29247 ppb	04:37:31
2	Sn 189.927†	-5.0	-0.7	1.4902 ug/L	1.4902 ppb	04:37:56
2	Ti 334.940†	1249808.8	1255650.3	1732.4 ug/L	1732.4 ppb	04:37:31
2	Tl 190.801†	-161.2	-117.5	-3.3133 ug/L	-3.3133 ppb	04:37:56
2	U 409.014†	-11813.3	-9082.6	-242.47 ug/L	-242.47 ppb	04:37:31
2	V 292.402†	6366.1	7997.9	34.401 ug/L	34.401 ppb	04:37:36
2	Zn 213.857†	40355.9	39618.2	285.10 ug/L	285.10 ppb	04:37:36
2	SiO2†	1137369.5	1140939.4	62007 ug/L	62007 ppb	04:38:40
3	Sc Radial	4609.7	4609.7	93.9 %		04:36:33
3	Y RADIAL	6683.3	6683.3	118.3 %		04:36:33
3	Al 396.153Radial†	23490.5	25063.1	16549 ug/L	16549 ppb	04:36:33
3	Ca 317.933Radial†	3791.5	4020.4	7118.3 ug/L	7118.3 ppb	04:36:33
3	Fe 238.204 Radial†	4561.3	4847.2	58604 ug/L	58604 ppb	04:36:33
3	K 766.490 Radial†	19326.1	18014.4	3261.4 ug/L	3261.4 ppb	04:36:33
3	Mg 279.077 IEC†	72.7	74.9	3301.5 ug/L	3301.5 ppb	04:36:53
3	Na 589.592 Radial†	5299.7	6924.5	1942.3 ug/L	1942.3 ppb	04:36:33
3	Sr 421.552†	7929.4	8452.9	44.281 ug/L	44.281 ppb	04:36:33
3	Sc 361.383	1031406.1	1031406.1	99.223 %		04:38:02
3	Y 371.029	1095147.2	1095147.2	123.82 %		04:38:02
3	Ag 328.068†	-3696.0	-4199.0	2.2778 ug/L	2.2778 ppb	04:38:07
3	As 188.979†	-44.8	-8.6	20.860 ug/L	20.860 ppb	04:38:28
3	B 249.677†	286.6	754.9	6.4696 ug/L	6.4696 ppb	04:38:07
3	Ba 233.527†	36209.7	36493.3	236.72 ug/L	236.72 ppb	04:38:07
3	Be 313.107†	-945.3	3921.2	4.6187 ug/L	4.6187 ppb	04:38:07
3	Cd 226.502†	444.4	683.5	0.1116 ug/L	0.1116 ppb	04:38:28
3	Co 228.616†	461.5	551.5	4.6968 ug/L	4.6968 ppb	04:38:28
3	Cr 267.716†	1757.3	1683.3	16.325 ug/L	16.325 ppb	04:38:28
3	Cu 324.752†	15358.5	6541.3	20.458 ug/L	20.458 ppb	04:38:07
3	Mn 257.610†	2053231.6	2068734.6	1964.8 ug/L	1964.8 ppb	04:38:02
3	Mo 202.031†	197.8	170.1	13.182 ug/L	13.182 ppb	04:38:28
3	Ni 231.604†	915.7	791.0	15.492 ug/L	15.492 ppb	04:38:28
3	P 214.914†	1587.3	1334.7	552.53 ug/L	552.53 ppb	04:38:28
3	Pb 220.353†	1267.3	1352.8	125.90 ug/L	125.90 ppb	04:38:28
3	S 181.975 Axial†	314.7	257.0	273.68 ug/L	273.68 ppb	04:38:28
3	Sb 206.836†	56.0	21.8	1.4590 ug/L	1.4590 ppb	04:38:28
3	Se 196.026†	-368.4	-349.9	57.772 ug/L	57.772 ppb	04:38:28
3	Si 251.611†	1140840.0	1149216.7	29185 ug/L	29185 ppb	04:38:02
3	Sn 189.927†	-12.7	-8.5	0.4081 ug/L	0.4081 ppb	04:38:28
3	Ti 334.940†	1241698.5	1252683.2	1728.3 ug/L	1728.3 ppb	04:38:02
3	Tl 190.801†	-172.5	-129.6	-6.2866 ug/L	-6.2866 ppb	04:38:28
3	U 409.014†	-11549.3	-8865.8	-236.62 ug/L	-236.62 ppb	04:38:02
3	V 292.402†	6361.6	8020.0	34.848 ug/L	34.848 ppb	04:38:07
3	Zn 213.857†	39873.2	39299.9	282.96 ug/L	282.96 ppb	04:38:07
3	SiO2†	1135336.7	1143628.9	62154 ug/L	62154 ppb	04:38:46

Mean Data: 241322002|925182|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1030504.6	99.136	%	0.5471				0.55%
Sc Radial	4614.3	94.0	%	1.95				2.07%
Y 371.029	1094856.9	123.79	%	0.624				0.50%
Y RADIAL	6680.1	118.3	%	2.02				1.71%
Ag 328.068†	-4280.0	2.1116	ug/L	0.38473	2.1116	ppb	0.38473	18.22%
Al 396.153Radial†	25117.3	16585	ug/L	422.7	16585	ppb	422.7	2.55%
As 188.979†	-7.8	21.196	ug/L	1.2443	21.196	ppb	1.2443	5.87%
B 249.677†	731.3	5.9606	ug/L	0.56988	5.9606	ppb	0.56988	9.56%
Ba 233.527†	36719.8	238.19	ug/L	1.279	238.19	ppb	1.279	0.54%
Be 313.107†	4022.6	4.6575	ug/L	0.04202	4.6575	ppb	0.04202	0.90%
Ca 317.933Radial†	4050.6	7171.7	ug/L	186.61	7171.7	ppb	186.61	2.60%
Cd 226.502†	670.4	-0.0509	ug/L	0.19256	-0.0509	ppb	0.19256	378.32%
Co 228.616†	550.5	4.6669	ug/L	0.07420	4.6669	ppb	0.07420	1.59%
Cr 267.716†	1682.4	16.327	ug/L	0.2081	16.327	ppb	0.2081	1.27%
Cu 324.752†	6618.3	20.688	ug/L	0.2789	20.688	ppb	0.2789	1.35%
Fe 238.204 Radial†	4886.9	59083	ug/L	1324.6	59083	ppb	1324.6	2.24%
K 766.490 Radial†	18103.2	3277.5	ug/L	82.08	3277.5	ppb	82.08	2.50%

Mg 279.077 IEC†	75.3	3319.1	ug/L	88.38	3319.1	ppb	88.38	2.66%
Mn 257.610†	2073011.2	1968.9	ug/L	5.02	1968.9	ppb	5.02	0.25%
Mo 202.031†	170.2	13.222	ug/L	0.4104	13.222	ppb	0.4104	3.10%
Na 589.592 Radial†	7011.2	1966.6	ug/L	33.00	1966.6	ppb	33.00	1.68%
Ni 231.604†	780.2	15.281	ug/L	0.1921	15.281	ppb	0.1921	1.26%
P 214.914†	1333.6	551.65	ug/L	7.456	551.65	ppb	7.456	1.35%
Pb 220.353†	1357.5	126.31	ug/L	1.707	126.31	ppb	1.707	1.35%
S 181.975 Axial†	262.4	279.42	ug/L	5.636	279.42	ppb	5.636	2.02%
Sb 206.836†	21.6	1.4064	ug/L	1.35892	1.4064	ppb	1.35892	96.63%
Se 196.026†	-340.0	63.895	ug/L	6.8577	63.895	ppb	6.8577	10.73%
Si 251.611†	1152001.8	29256	ug/L	75.3	29256	ppb	75.3	0.26%
Sn 189.927†	-2.6	1.2010	ug/L	0.69495	1.2010	ppb	0.69495	57.86%
Sr 421.552†	8497.8	44.516	ug/L	0.9068	44.516	ppb	0.9068	2.04%
Ti 334.940†	1255356.2	1732.0	ug/L	3.50	1732.0	ppb	3.50	0.20%
Tl 190.801†	-122.9	-4.6323	ug/L	1.51475	-4.6323	ppb	1.51475	32.70%
U 409.014†	-8996.3	-240.05	ug/L	3.057	-240.05	ppb	3.057	1.27%
V 292.402†	8021.7	34.775	ug/L	0.3430	34.775	ppb	0.3430	0.99%
Zn 213.857†	39483.1	284.26	ug/L	1.144	284.26	ppb	1.144	0.40%
SiO2†	1146681.4	62319	ug/L	420.4	62319	ppb	420.4	0.67%

Sequence No.: 58
Sample ID: 241322003|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 12/5/2009 04:40:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322003|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4771.5	4771.5	97.2	%			04:42:51
1	Y RADIAL	6800.7	6800.7	120.4	%			04:42:51
1	Al 396.153Radial†	27555.0	28396.7	18750	ug/L	18750	ppb	04:42:51
1	Ca 317.933Radial†	3713.7	3803.4	6734.0	ug/L	6734.0	ppb	04:42:51
1	Fe 238.204 Radial†	5382.9	5527.7	66831	ug/L	66831	ppb	04:42:51
1	K 766.490 Radial†	21632.0	19688.9	3564.9	ug/L	3564.9	ppb	04:42:51
1	Mg 279.077 IEC†	69.5	69.1	3033.4	ug/L	3033.4	ppb	04:43:11
1	Na 589.592 Radial†	4029.1	5425.8	1521.9	ug/L	1521.9	ppb	04:42:51
1	Sr 421.552†	7828.8	8062.9	42.239	ug/L	42.239	ppb	04:42:51
1	Sc 361.383	1020590.7	1020590.7	98.182	%			04:44:09
1	Y 371.029	1078794.2	1078794.2	121.97	%			04:44:09
1	Ag 328.068†	-4269.1	-4822.2	2.4872	ug/L	2.4872	ppb	04:44:14
1	As 188.979†	-56.0	-20.4	24.466	ug/L	24.466	ppb	04:44:34
1	B 249.677†	318.3	790.3	6.0375	ug/L	6.0375	ppb	04:44:14
1	Ba 233.527†	35206.5	35858.3	232.97	ug/L	232.97	ppb	04:44:14
1	Be 313.107†	-8709.5	-3996.8	3.5588	ug/L	3.5588	ppb	04:44:14
1	Cd 226.502†	578.2	824.5	0.5288	ug/L	0.5288	ppb	04:44:34
1	Co 228.616†	676.4	775.3	6.7428	ug/L	6.7428	ppb	04:44:34
1	Cr 267.716†	5513.5	5527.8	51.036	ug/L	51.036	ppb	04:44:34
1	Cu 324.752†	17659.8	9049.2	27.575	ug/L	27.575	ppb	04:44:14
1	Mn 257.610†	2239161.9	2280035.6	2165.7	ug/L	2165.7	ppb	04:44:09
1	Mo 202.031†	309.2	285.7	19.904	ug/L	19.904	ppb	04:44:34
1	Ni 231.604†	1667.9	1566.9	30.693	ug/L	30.693	ppb	04:44:34
1	P 214.914†	1815.1	1583.6	656.97	ug/L	656.97	ppb	04:44:34
1	Pb 220.353†	3668.5	3812.0	356.58	ug/L	356.58	ppb	04:44:34
1	S 181.975 Axial†	329.6	275.6	293.27	ug/L	293.27	ppb	04:44:34
1	Sb 206.836†	69.1	35.8	2.6082	ug/L	2.6082	ppb	04:44:34
1	Se 196.026†	-416.6	-403.0	64.133	ug/L	64.133	ppb	04:44:34
1	Si 251.611†	1115991.6	1136092.8	28851	ug/L	28851	ppb	04:44:09
1	Sn 189.927†	7.3	11.7	3.1537	ug/L	3.1537	ppb	04:44:34
1	Ti 334.940†	1738941.8	1772392.8	2445.1	ug/L	2445.1	ppb	04:44:09
1	Tl 190.801†	-178.8	-137.8	-1.6033	ug/L	-1.6033	ppb	04:44:34
1	U 409.014†	-11605.4	-9046.2	-242.39	ug/L	-242.39	ppb	04:44:09
1	V 292.402†	8542.7	10309.4	45.972	ug/L	45.972	ppb	04:44:14
1	Zn 213.857†	49129.2	49153.1	354.48	ug/L	354.48	ppb	04:44:14
1	SiO2†	1118215.1	1138316.0	61864	ug/L	61864	ppb	04:45:42
2	Sc Radial	4737.5	4737.5	96.5	%			04:43:16
2	Y RADIAL	6803.1	6803.1	120.5	%			04:43:16
2	Al 396.153Radial†	27269.6	28304.9	18690	ug/L	18690	ppb	04:43:16
2	Ca 317.933Radial†	3678.2	3794.1	6717.6	ug/L	6717.6	ppb	04:43:16
2	Fe 238.204 Radial†	5309.1	5491.1	66389	ug/L	66389	ppb	04:43:16
2	K 766.490 Radial†	21499.5	19711.7	3569.5	ug/L	3569.5	ppb	04:43:16
2	Mg 279.077 IEC†	72.5	72.6	3192.6	ug/L	3192.6	ppb	04:43:36
2	Na 589.592 Radial†	3986.1	5411.0	1517.8	ug/L	1517.8	ppb	04:43:16
2	Sr 421.552†	7805.2	8096.4	42.415	ug/L	42.415	ppb	04:43:16
2	Sc 361.383	1029802.9	1029802.9	99.069	%			04:44:40
2	Y 371.029	1087039.1	1087039.1	122.90	%			04:44:40
2	Ag 328.068†	-4341.8	-4856.7	2.2045	ug/L	2.2045	ppb	04:44:45
2	As 188.979†	-59.1	-23.1	23.281	ug/L	23.281	ppb	04:45:05
2	B 249.677†	299.0	767.9	5.6740	ug/L	5.6740	ppb	04:44:45
2	Ba 233.527†	35366.4	35698.9	231.93	ug/L	231.93	ppb	04:44:45
2	Be 313.107†	-9023.9	-4234.8	3.4193	ug/L	3.4193	ppb	04:44:45
2	Cd 226.502†	568.0	809.0	0.4372	ug/L	0.4372	ppb	04:45:05
2	Co 228.616†	674.0	766.6	6.6776	ug/L	6.6776	ppb	04:45:05
2	Cr 267.716†	5540.2	5504.5	50.817	ug/L	50.817	ppb	04:45:05
2	Cu 324.752†	17710.3	8939.3	27.259	ug/L	27.259	ppb	04:44:45
2	Mn 257.610†	2223353.2	2243676.7	2131.2	ug/L	2131.2	ppb	04:44:40
2	Mo 202.031†	319.0	292.8	20.248	ug/L	20.248	ppb	04:45:05
2	Ni 231.604†	1684.4	1568.3	30.721	ug/L	30.721	ppb	04:45:05

2	P 214.914†	1824.6	1576.6	654.22 ug/L	654.22 ppb	04:45:05
2	Pb 220.353†	3673.3	3783.4	353.92 ug/L	353.92 ppb	04:45:05
2	S 181.975 Axial†	325.6	268.6	285.69 ug/L	285.69 ppb	04:45:05
2	Sb 206.836†	64.0	30.0	1.1831 ug/L	1.1831 ppb	04:45:05
2	Se 196.026†	-421.4	-404.0	62.077 ug/L	62.077 ppb	04:45:05
2	Si 251.611†	1108968.0	1118835.0	28413 ug/L	28413 ppb	04:44:40
2	Sn 189.927†	4.6	9.0	2.7814 ug/L	2.7814 ppb	04:45:05
2	Ti 334.940†	1730773.5	1748303.8	2411.8 ug/L	2411.8 ppb	04:44:40
2	Tl 190.801†	-181.2	-138.6	-2.2455 ug/L	-2.2455 ppb	04:45:05
2	U 409.014†	-11669.3	-9005.0	-241.26 ug/L	-241.26 ppb	04:44:40
2	V 292.402†	8428.3	10116.0	44.980 ug/L	44.980 ppb	04:44:45
2	Zn 213.857†	48997.3	48572.3	350.25 ug/L	350.25 ppb	04:44:45
2	SiO2†	1114956.0	1124837.9	61132 ug/L	61132 ppb	04:45:48
3	Sc Radial	4714.8	4714.8	96.0 %		04:43:41
3	Y RADIAL	6761.3	6761.3	119.7 %		04:43:41
3	Al 396.153Radial†	27476.3	28655.8	18921 ug/L	18921 ppb	04:43:41
3	Ca 317.933Radial†	3703.1	3838.3	6795.8 ug/L	6795.8 ppb	04:43:41
3	Fe 238.204 Radial†	5376.8	5588.0	67560 ug/L	67560 ppb	04:43:41
3	K 766.490 Radial†	21607.3	19930.9	3609.5 ug/L	3609.5 ppb	04:43:41
3	Mg 279.077 IEC†	72.6	73.1	3214.8 ug/L	3214.8 ppb	04:44:01
3	Na 589.592 Radial†	4027.9	5474.3	1535.5 ug/L	1535.5 ppb	04:43:41
3	Sr 421.552†	7836.3	8167.6	42.788 ug/L	42.788 ppb	04:43:41
3	Sc 361.383	1037484.3	1037484.3	99.808 %		04:45:11
3	Y 371.029	1094924.5	1094924.5	123.79 %		04:45:11
3	Ag 328.068†	-4270.1	-4752.4	2.9880 ug/L	2.9880 ppb	04:45:16
3	As 188.979†	-54.4	-17.9	25.072 ug/L	25.072 ppb	04:45:36
3	B 249.677†	307.6	774.3	5.6395 ug/L	5.6395 ppb	04:45:16
3	Ba 233.527†	35045.7	35113.2	228.21 ug/L	228.21 ppb	04:45:16
3	Be 313.107†	-8844.0	-3987.1	3.4924 ug/L	3.4924 ppb	04:45:16
3	Cd 226.502†	546.7	783.4	0.0973 ug/L	0.0973 ppb	04:45:36
3	Co 228.616†	677.9	765.5	6.6444 ug/L	6.6444 ppb	04:45:36
3	Cr 267.716†	5528.1	5451.0	50.356 ug/L	50.356 ppb	04:45:36
3	Cu 324.752†	17420.0	8516.1	26.189 ug/L	26.189 ppb	04:45:16
3	Mn 257.610†	2238458.7	2242195.2	2129.9 ug/L	2129.9 ppb	04:45:11
3	Mo 202.031†	313.7	285.1	19.921 ug/L	19.921 ppb	04:45:36
3	Ni 231.604†	1685.3	1556.6	30.492 ug/L	30.492 ppb	04:45:36
3	P 214.914†	1830.2	1568.6	649.93 ug/L	649.93 ppb	04:45:36
3	Pb 220.353†	3655.0	3737.6	349.58 ug/L	349.58 ppb	04:45:36
3	S 181.975 Axial†	327.1	267.6	284.58 ug/L	284.58 ppb	04:45:36
3	Sb 206.836†	74.1	39.7	3.7450 ug/L	3.7450 ppb	04:45:36
3	Se 196.026†	-430.6	-410.0	63.660 ug/L	63.660 ppb	04:45:36
3	Si 251.611†	1117617.8	1119213.7	28423 ug/L	28423 ppb	04:45:11
3	Sn 189.927†	3.8	8.1	2.6903 ug/L	2.6903 ppb	04:45:36
3	Ti 334.940†	1742168.7	1746786.1	2409.7 ug/L	2409.7 ppb	04:45:11
3	Tl 190.801†	-170.0	-126.0	0.7803 ug/L	0.7803 ppb	04:45:36
3	U 409.014†	-11734.1	-8982.8	-240.84 ug/L	-240.84 ppb	04:45:11
3	V 292.402†	8434.7	10059.4	44.476 ug/L	44.476 ppb	04:45:16
3	Zn 213.857†	48725.1	47933.5	345.44 ug/L	345.44 ppb	04:45:16
3	SiO2†	1112231.8	1113775.9	60531 ug/L	60531 ppb	04:45:54

Mean Data: 241322003|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1029292.6	99.020	%	0.8137				0.82%
Sc Radial	4741.3	96.6	%	0.58				0.60%
Y 371.029	1086919.3	122.89	%	0.912				0.74%
Y RADIAL	6788.4	120.2	%	0.42				0.35%
Ag 328.068†	-4810.4	2.5599	ug/L	0.39675	2.5599	ppb	0.39675	15.50%
Al 396.153Radial†	28452.5	18787	ug/L	120.2	18787	ppb	120.2	0.64%
As 188.979†	-20.5	24.273	ug/L	0.9112	24.273	ppb	0.9112	3.75%
B 249.677†	777.5	5.7837	ug/L	0.22050	5.7837	ppb	0.22050	3.81%
Ba 233.527†	35556.8	231.04	ug/L	2.503	231.04	ppb	2.503	1.08%
Be 313.107†	-4072.9	3.4902	ug/L	0.06978	3.4902	ppb	0.06978	2.00%
Ca 317.933Radial†	3811.9	6749.1	ug/L	41.24	6749.1	ppb	41.24	0.61%
Cd 226.502†	805.6	0.3544	ug/L	0.22740	0.3544	ppb	0.22740	64.16%
Co 228.616†	769.1	6.6883	ug/L	0.05004	6.6883	ppb	0.05004	0.75%
Cr 267.716†	5494.4	50.736	ug/L	0.3470	50.736	ppb	0.3470	0.68%
Cu 324.752†	8834.9	27.008	ug/L	0.7267	27.008	ppb	0.7267	2.69%
Fe 238.204 Radial†	5535.6	66927	ug/L	591.5	66927	ppb	591.5	0.88%
K 766.490 Radial†	19777.2	3581.3	ug/L	24.52	3581.3	ppb	24.52	0.68%

Mg 279.077 IEC†	71.6	3146.9	ug/L	98.92	3146.9	ppb	98.92	3.14%
Mn 257.610†	2255302.5	2142.3	ug/L	20.29	2142.3	ppb	20.29	0.95%
Mo 202.031†	287.9	20.024	ug/L	0.1939	20.024	ppb	0.1939	0.97%
Na 589.592 Radial†	5437.0	1525.1	ug/L	9.30	1525.1	ppb	9.30	0.61%
Ni 231.604†	1563.9	30.635	ug/L	0.1250	30.635	ppb	0.1250	0.41%
P 214.914†	1576.3	653.71	ug/L	3.547	653.71	ppb	3.547	0.54%
Pb 220.353†	3777.7	353.36	ug/L	3.535	353.36	ppb	3.535	1.00%
S 181.975 Axial†	270.6	287.85	ug/L	4.728	287.85	ppb	4.728	1.64%
Sb 206.836†	35.1	2.5121	ug/L	1.28368	2.5121	ppb	1.28368	51.10%
Se 196.026†	-405.7	63.290	ug/L	1.0767	63.290	ppb	1.0767	1.70%
Si 251.611†	1124713.8	28562	ug/L	250.3	28562	ppb	250.3	0.88%
Sn 189.927†	9.6	2.8751	ug/L	0.24552	2.8751	ppb	0.24552	8.54%
Sr 421.552†	8109.0	42.481	ug/L	0.2802	42.481	ppb	0.2802	0.66%
Ti 334.940†	1755827.6	2422.2	ug/L	19.81	2422.2	ppb	19.81	0.82%
Tl 190.801†	-134.2	-1.0228	ug/L	1.59423	-1.0228	ppb	1.59423	155.87%
U 409.014†	-9011.3	-241.50	ug/L	0.800	-241.50	ppb	0.800	0.33%
V 292.402†	10161.6	45.143	ug/L	0.7609	45.143	ppb	0.7609	1.69%
Zn 213.857†	48553.0	350.06	ug/L	4.521	350.06	ppb	4.521	1.29%
SiO2†	1125643.3	61176	ug/L	668.0	61176	ppb	668.0	1.09%

Sequence No.: 59
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 04:48:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4672.7	4672.7	95.2	%			04:49:59
1	Y RADIAL	5289.6	5289.6	93.67	%			04:49:59
1	Al 396.153Radial†	7513.9	7938.8	5219.8	ug/L	5219.8	ppb	04:49:59
1	Ca 317.933Radial†	2774.5	2897.4	5130.0	ug/L	5130.0	ppb	04:50:19
1	Fe 238.204 Radial†	410.1	419.9	5093.0	ug/L	5093.0	ppb	04:50:19
1	K 766.490 Radial†	29043.0	27946.4	5084.5	ug/L	5084.5	ppb	04:49:59
1	Mg 279.077 IEC†	112.0	115.2	5161.4	ug/L	5161.4	ppb	04:50:19
1	Na 589.592 Radial†	33905.9	36905.5	10352	ug/L	10352	ppb	04:49:59
1	Sr 421.552†	93124.6	97855.0	513.34	ug/L	513.34	ppb	04:49:59
1	Sc 361.383	1007690.0	1007690.0	96.941	%			04:51:18
1	Y 371.029	844367.2	844367.2	95.466	%			04:51:18
1	Ag 328.068†	127375.6	130920.4	522.09	ug/L	522.09	ppb	04:51:18
1	As 188.979†	1578.8	1665.3	523.40	ug/L	523.40	ppb	04:51:38
1	B 249.677†	25958.7	27243.8	512.88	ug/L	512.88	ppb	04:51:18
1	Ba 233.527†	79002.9	81495.5	524.90	ug/L	524.90	ppb	04:51:18
1	Be 313.107†	1610745.0	1666439.2	520.61	ug/L	520.61	ppb	04:51:18
1	Cd 226.502†	58180.1	60251.4	525.27	ug/L	525.27	ppb	04:51:18
1	Co 228.616†	30475.0	31522.9	519.41	ug/L	519.41	ppb	04:51:38
1	Cr 267.716†	56349.3	58039.4	522.26	ug/L	522.26	ppb	04:51:18
1	Cu 324.752†	198418.5	195741.2	522.99	ug/L	522.99	ppb	04:51:18
1	Mn 257.610†	538389.1	554799.0	525.78	ug/L	525.78	ppb	04:51:18
1	Mo 202.031†	9538.2	9809.9	520.94	ug/L	520.94	ppb	04:51:38
1	Ni 231.604†	25829.5	26512.5	519.15	ug/L	519.15	ppb	04:51:38
1	P 214.914†	5969.4	5892.6	2556.8	ug/L	2556.8	ppb	04:51:38
1	Pb 220.353†	5353.7	5598.1	527.14	ug/L	527.14	ppb	04:51:38
1	S 181.975 Axial†	988.1	959.2	1032.4	ug/L	1032.4	ppb	04:51:38
1	Sb 206.836†	1957.4	1984.5	530.73	ug/L	530.73	ppb	04:51:38
1	Se 196.026†	1130.0	1187.1	545.90	ug/L	545.90	ppb	04:51:38
1	Si 251.611†	100123.8	102725.2	2596.5	ug/L	2596.5	ppb	04:51:18
1	Sn 189.927†	3817.2	3941.9	521.96	ug/L	521.96	ppb	04:51:38
1	Ti 334.940†	365411.8	378201.3	521.50	ug/L	521.50	ppb	04:51:18
1	Tl 190.801†	2035.8	2144.3	521.94	ug/L	521.94	ppb	04:51:38
1	U 409.014†	16408.2	19699.8	507.68	ug/L	507.68	ppb	04:51:18
1	V 292.402†	86331.4	90663.7	526.01	ug/L	526.01	ppb	04:51:18
1	Zn 213.857†	69861.2	71179.8	518.44	ug/L	518.44	ppb	04:51:18
1	SiO2†	101552.6	104157.6	5634.0	ug/L	5634.0	ppb	04:52:38
2	Sc Radial	4614.0	4614.0	94.0	%			04:50:24
2	Y RADIAL	5284.1	5284.1	93.57	%			04:50:24
2	Al 396.153Radial†	7441.5	7962.2	5234.9	ug/L	5234.9	ppb	04:50:24
2	Ca 317.933Radial†	2770.7	2930.4	5188.4	ug/L	5188.4	ppb	04:50:44
2	Fe 238.204 Radial†	410.7	426.0	5167.6	ug/L	5167.6	ppb	04:50:44
2	K 766.490 Radial†	28816.4	28093.7	5111.4	ug/L	5111.4	ppb	04:50:24
2	Mg 279.077 IEC†	112.6	117.3	5256.9	ug/L	5256.9	ppb	04:50:44
2	Na 589.592 Radial†	33532.6	36961.7	10368	ug/L	10368	ppb	04:50:24
2	Sr 421.552†	92058.7	97966.1	513.93	ug/L	513.93	ppb	04:50:24
2	Sc 361.383	1001489.5	1001489.5	96.345	%			04:51:45
2	Y 371.029	841171.0	841171.0	95.105	%			04:51:45
2	Ag 328.068†	126798.9	131135.2	522.98	ug/L	522.98	ppb	04:51:45
2	As 188.979†	1588.5	1685.4	529.68	ug/L	529.68	ppb	04:52:05
2	B 249.677†	25806.0	27251.2	512.99	ug/L	512.99	ppb	04:51:45
2	Ba 233.527†	78268.7	81238.0	523.25	ug/L	523.25	ppb	04:51:45
2	Be 313.107†	1602207.9	1667865.5	521.05	ug/L	521.05	ppb	04:51:45
2	Cd 226.502†	57610.9	60032.1	523.35	ug/L	523.35	ppb	04:51:45
2	Co 228.616†	30708.7	31960.0	526.63	ug/L	526.63	ppb	04:52:05
2	Cr 267.716†	55915.4	57948.9	521.46	ug/L	521.46	ppb	04:51:45
2	Cu 324.752†	197297.7	195845.2	523.27	ug/L	523.27	ppb	04:51:45
2	Mn 257.610†	534139.5	553826.6	524.86	ug/L	524.86	ppb	04:51:45
2	Mo 202.031†	9632.1	9968.3	529.35	ug/L	529.35	ppb	04:52:05
2	Ni 231.604†	25965.8	26819.0	525.14	ug/L	525.14	ppb	04:52:05

2	P 214.914†	6030.9	5994.6	2602.5 ug/L	2602.5 ppb	04:52:05
2	Pb 220.353†	5395.7	5676.0	534.46 ug/L	534.46 ppb	04:52:05
2	S 181.975 Axial†	1007.3	985.4	1060.7 ug/L	1060.7 ppb	04:52:05
2	Sb 206.836†	1982.6	2023.2	541.22 ug/L	541.22 ppb	04:52:05
2	Se 196.026†	1131.0	1195.2	549.83 ug/L	549.83 ppb	04:52:05
2	Si 251.611†	99171.2	102375.9	2587.4 ug/L	2587.4 ppb	04:51:45
2	Sn 189.927†	3833.6	3983.3	527.44 ug/L	527.44 ppb	04:52:05
2	Ti 334.940†	362746.9	377769.0	520.91 ug/L	520.91 ppb	04:51:45
2	Tl 190.801†	2058.2	2180.5	530.64 ug/L	530.64 ppb	04:52:05
2	U 409.014†	16159.1	19546.2	503.70 ug/L	503.70 ppb	04:51:45
2	V 292.402†	86001.8	90873.0	527.31 ug/L	527.31 ppb	04:51:45
2	Zn 213.857†	69386.4	71133.1	518.05 ug/L	518.05 ppb	04:51:45
2	SiO2†	100945.1	104175.6	5634.6 ug/L	5634.6 ppb	04:52:43
3	Sc Radial	4553.7	4553.7	92.7 %		04:50:49
3	Y RADIAL	5202.7	5202.7	92.13 %		04:50:49
3	Al 396.153Radial†	7345.4	7963.4	5236.2 ug/L	5236.2 ppb	04:50:49
3	Ca 317.933Radial†	2782.2	2981.8	5279.4 ug/L	5279.4 ppb	04:51:09
3	Fe 238.204 Radial†	408.9	429.9	5214.1 ug/L	5214.1 ppb	04:51:09
3	K 766.490 Radial†	28427.4	28080.0	5108.8 ug/L	5108.8 ppb	04:50:49
3	Mg 279.077 IEC†	114.3	120.8	5409.7 ug/L	5409.7 ppb	04:51:09
3	Na 589.592 Radial†	33396.6	37287.1	10459 ug/L	10459 ppb	04:50:49
3	Sr 421.552†	91164.7	98298.5	515.67 ug/L	515.67 ppb	04:50:49
3	Sc 361.383	1010836.8	1010836.8	97.244 %		04:52:13
3	Y 371.029	848349.8	848349.8	95.916 %		04:52:13
3	Ag 328.068†	127942.6	131094.3	522.82 ug/L	522.82 ppb	04:52:13
3	As 188.979†	1570.5	1651.6	519.16 ug/L	519.16 ppb	04:52:33
3	B 249.677†	26104.0	27309.9	514.12 ug/L	514.12 ppb	04:52:13
3	Ba 233.527†	79124.6	81367.0	524.08 ug/L	524.08 ppb	04:52:13
3	Be 313.107†	1619685.4	1670460.4	521.86 ug/L	521.86 ppb	04:52:13
3	Cd 226.502†	58361.9	60251.5	525.25 ug/L	525.25 ppb	04:52:13
3	Co 228.616†	30318.6	31264.1	515.14 ug/L	515.14 ppb	04:52:33
3	Cr 267.716†	56483.6	57996.6	521.88 ug/L	521.88 ppb	04:52:13
3	Cu 324.752†	199411.0	196124.7	524.02 ug/L	524.02 ppb	04:52:13
3	Mn 257.610†	540036.0	554763.7	525.75 ug/L	525.75 ppb	04:52:13
3	Mo 202.031†	9513.0	9753.3	517.95 ug/L	517.95 ppb	04:52:33
3	Ni 231.604†	25706.0	26302.5	515.03 ug/L	515.03 ppb	04:52:33
3	P 214.914†	5944.2	5847.6	2536.4 ug/L	2536.4 ppb	04:52:33
3	Pb 220.353†	5343.0	5570.0	524.48 ug/L	524.48 ppb	04:52:33
3	S 181.975 Axial†	991.2	959.2	1032.4 ug/L	1032.4 ppb	04:52:33
3	Sb 206.836†	1948.5	1969.1	526.52 ug/L	526.52 ppb	04:52:33
3	Se 196.026†	1117.9	1170.9	539.19 ug/L	539.19 ppb	04:52:33
3	Si 251.611†	100311.2	102596.3	2593.3 ug/L	2593.3 ppb	04:52:13
3	Sn 189.927†	3798.7	3910.7	517.85 ug/L	517.85 ppb	04:52:33
3	Ti 334.940†	366784.5	378439.4	521.84 ug/L	521.84 ppb	04:52:13
3	Tl 190.801†	2031.3	2133.2	519.26 ug/L	519.26 ppb	04:52:33
3	U 409.014†	16372.1	19610.1	505.34 ug/L	505.34 ppb	04:52:13
3	V 292.402†	86613.2	90676.3	526.02 ug/L	526.02 ppb	04:52:13
3	Zn 213.857†	70305.9	71412.8	520.16 ug/L	520.16 ppb	04:52:13
3	SiO2†	101094.3	103360.2	5590.8 ug/L	5590.8 ppb	04:52:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1006672.1	96.843	%	0.4575				0.47%
Sc Radial	4613.5	94.0	%	1.21				1.29%
Y 371.029	844629.3	95.496	%	0.4066				0.43%
Y RADIAL	5258.8	93.12	%	0.862				0.93%
Ag 328.068†	131050.0	522.63	ug/L	0.471	522.63	ppb	0.471	0.09%
QC value within limits for Ag 328.068 Recovery = 104.53%								
Al 396.153Radial†	7954.8	5230.3	ug/L	9.11	5230.3	ppb	9.11	0.17%
QC value within limits for Al 396.153Radial Recovery = 104.61%								
As 188.979†	1667.4	524.08	ug/L	5.292	524.08	ppb	5.292	1.01%
QC value within limits for As 188.979 Recovery = 104.82%								
B 249.677†	27268.3	513.33	ug/L	0.688	513.33	ppb	0.688	0.13%
QC value within limits for B 249.677 Recovery = 102.67%								
Ba 233.527†	81366.8	524.08	ug/L	0.824	524.08	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 104.82%								
Be 313.107†	1668255.0	521.17	ug/L	0.636	521.17	ppb	0.636	0.12%
QC value within limits for Be 313.107 Recovery = 104.23%								
Ca 317.933Radial†	2936.6	5199.3	ug/L	75.33	5199.3	ppb	75.33	1.45%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.99%
Cd 226.502†            60178.4      524.62 ug/L         1.102      524.62 ppb          1.102   0.21%
   QC value within limits for Cd 226.502  Recovery = 104.92%
Co 228.616†            31582.3      520.39 ug/L         5.810      520.39 ppb          5.810   1.12%
   QC value within limits for Co 228.616  Recovery = 104.08%
Cr 267.716†            57995.0      521.87 ug/L         0.404      521.87 ppb          0.404   0.08%
   QC value within limits for Cr 267.716  Recovery = 104.37%
Cu 324.752†           195903.7      523.43 ug/L         0.533      523.43 ppb          0.533   0.10%
   QC value within limits for Cu 324.752  Recovery = 104.69%
Fe 238.204 Radial†       425.3      5158.2 ug/L        61.05      5158.2 ppb         61.05   1.18%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.16%
K 766.490 Radial†      28040.1      5101.5 ug/L        14.82      5101.5 ppb         14.82   0.29%
   QC value within limits for K 766.490 Radial  Recovery = 102.03%
Mg 279.077 IEC†          117.8      5276.0 ug/L       125.25      5276.0 ppb        125.25   2.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.52%
Mn 257.610†           554463.1      525.46 ug/L         0.521      525.46 ppb          0.521   0.10%
   QC value within limits for Mn 257.610  Recovery = 105.09%
Mo 202.031†             9843.8      522.75 ug/L         5.912      522.75 ppb          5.912   1.13%
   QC value within limits for Mo 202.031  Recovery = 104.55%
Na 589.592 Radial†     37051.4       10393 ug/L          57.8       10393 ppb           57.8   0.56%
   QC value within limits for Na 589.592 Radial  Recovery = 103.93%
Ni 231.604†            26544.7      519.77 ug/L         5.085      519.77 ppb          5.085   0.98%
   QC value within limits for Ni 231.604  Recovery = 103.95%
P 214.914†              5911.6      2565.2 ug/L        33.82      2565.2 ppb         33.82   1.32%
   QC value within limits for P 214.914  Recovery = 102.61%
Pb 220.353†             5614.7      528.69 ug/L         5.169      528.69 ppb          5.169   0.98%
   QC value within limits for Pb 220.353  Recovery = 105.74%
S 181.975 Axial†         967.9      1041.8 ug/L        16.32      1041.8 ppb         16.32   1.57%
   QC value within limits for S 181.975 Axial  Recovery = 104.18%
Sb 206.836†             1992.3      532.82 ug/L         7.567      532.82 ppb          7.567   1.42%
   QC value within limits for Sb 206.836  Recovery = 106.56%
Se 196.026†             1184.4      544.97 ug/L         5.379      544.97 ppb          5.379   0.99%
   QC value within limits for Se 196.026  Recovery = 108.99%
Si 251.611†           102565.8      2592.4 ug/L          4.58      2592.4 ppb          4.58   0.18%
   QC value within limits for Si 251.611  Recovery = 103.70%
Sn 189.927†             3945.3      522.42 ug/L         4.813      522.42 ppb          4.813   0.92%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†            98039.9      514.31 ug/L         1.210      514.31 ppb          1.210   0.24%
   QC value within limits for Sr 421.552  Recovery = 102.86%
Ti 334.940†           378136.6      521.42 ug/L         0.470      521.42 ppb          0.470   0.09%
   QC value within limits for Ti 334.940  Recovery = 104.28%
Tl 190.801†             2152.7      523.95 ug/L         5.949      523.95 ppb          5.949   1.14%
   QC value within limits for Tl 190.801  Recovery = 104.79%
U 409.014†             19618.7      505.57 ug/L         2.000      505.57 ppb          2.000   0.40%
   QC value within limits for U 409.014  Recovery = 101.11%
V 292.402†             90737.7      526.45 ug/L         0.749      526.45 ppb          0.749   0.14%
   QC value within limits for V 292.402  Recovery = 105.29%
Zn 213.857†            71241.9      518.89 ug/L         1.122      518.89 ppb          1.122   0.22%
   QC value within limits for Zn 213.857  Recovery = 103.78%
SiO2†                 103897.8      5619.8 ug/L        25.13      5619.8 ppb         25.13   0.45%
   QC value within limits for SiO2  Recovery = 105.09%
All analyte(s) passed QC.
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Sequence No.: 60
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 04:54:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4520.6	4520.6	92.1	%			04:56:51
1	Y RADIAL	5179.1	5179.1	91.71	%			04:56:51
1	Al 396.153Radial†	-26.7	14.7	9.7431	ug/L	9.7431	ppb	04:56:51
1	Ca 317.933Radial†	26.4	10.8	19.198	ug/L	19.198	ppb	04:57:11
1	Fe 238.204 Radial†	12.0	2.0	24.206	ug/L	24.206	ppb	04:57:11
1	K 766.490 Radial†	2663.1	322.8	58.819	ug/L	58.819	ppb	04:56:51
1	Mg 279.077 IEC†	-0.0	-2.5	-113.66	ug/L	-113.66	ppb	04:57:11
1	Na 589.592 Radial†	-1067.5	120.6	33.821	ug/L	33.821	ppb	04:56:51
1	Sr 421.552†	-35.9	-31.6	-0.1660	ug/L	-0.1660	ppb	04:56:51
1	Sc 361.383	1021283.2	1021283.2	98.249	%			04:58:08
1	Y 371.029	867839.3	867839.3	98.120	%			04:58:08
1	Ag 328.068†	365.5	-102.1	-0.3995	ug/L	-0.3995	ppb	04:58:13
1	As 188.979†	-41.2	-5.3	-1.6433	ug/L	-1.6433	ppb	04:58:33
1	B 249.677†	-323.5	136.8	2.5833	ug/L	2.5833	ppb	04:58:33
1	Ba 233.527†	7.6	7.7	0.0498	ug/L	0.0498	ppb	04:58:33
1	Be 313.107†	-4931.2	-145.1	-0.0451	ug/L	-0.0451	ppb	04:58:13
1	Cd 226.502†	-210.6	21.3	0.1828	ug/L	0.1828	ppb	04:58:33
1	Co 228.616†	-98.2	-13.6	-0.2256	ug/L	-0.2256	ppb	04:58:33
1	Cr 267.716†	93.7	7.6	0.0681	ug/L	0.0681	ppb	04:58:33
1	Cu 324.752†	9044.5	268.2	0.7175	ug/L	0.7175	ppb	04:58:13
1	Mn 257.610†	660.0	95.1	0.0945	ug/L	0.0945	ppb	04:58:33
1	Mo 202.031†	25.6	-3.2	-0.1674	ug/L	-0.1674	ppb	04:58:33
1	Ni 231.604†	119.9	-9.9	-0.1937	ug/L	-0.1937	ppb	04:58:33
1	P 214.914†	286.4	26.4	11.710	ug/L	11.710	ppb	04:58:33
1	Pb 220.353†	-76.6	-2.4	-0.2293	ug/L	-0.2293	ppb	04:58:33
1	S 181.975 Axial†	51.3	-7.8	-8.4489	ug/L	-8.4489	ppb	04:58:33
1	Sb 206.836†	38.0	4.0	1.0804	ug/L	1.0804	ppb	04:58:33
1	Se 196.026†	-18.8	2.3	1.0889	ug/L	1.0889	ppb	04:58:33
1	Si 251.611†	699.8	154.6	3.9047	ug/L	3.9047	ppb	04:58:33
1	Sn 189.927†	8.9	13.4	1.7715	ug/L	1.7715	ppb	04:58:33
1	Ti 334.940†	-1177.8	61.7	0.0857	ug/L	0.0857	ppb	04:58:13
1	Tl 190.801†	-47.1	-3.7	-0.8959	ug/L	-0.8959	ppb	04:58:33
1	U 409.014†	-2688.8	37.3	0.9604	ug/L	0.9604	ppb	04:58:08
1	V 292.402†	-1644.3	-65.1	-0.3797	ug/L	-0.3797	ppb	04:58:13
1	Zn 213.857†	959.8	91.3	0.6732	ug/L	0.6732	ppb	04:58:33
1	SiO2†	722.8	136.6	7.3772	ug/L	7.3772	ppb	04:59:39
2	Sc Radial	4834.5	4834.5	98.5	%			04:57:17
2	Y RADIAL	5522.0	5522.0	97.78	%			04:57:17
2	Al 396.153Radial†	-44.1	-1.0	-0.6448	ug/L	-0.6448	ppb	04:57:17
2	Ca 317.933Radial†	25.9	8.5	15.077	ug/L	15.077	ppb	04:57:37
2	Fe 238.204 Radial†	7.8	-3.1	-37.367	ug/L	-37.367	ppb	04:57:37
2	K 766.490 Radial†	2703.4	176.0	32.049	ug/L	32.049	ppb	04:57:17
2	Mg 279.077 IEC†	5.0	2.6	116.86	ug/L	116.86	ppb	04:57:37
2	Na 589.592 Radial†	-1081.8	181.3	50.853	ug/L	50.853	ppb	04:57:17
2	Sr 421.552†	24.7	32.5	0.1706	ug/L	0.1706	ppb	04:57:17
2	Sc 361.383	1017865.2	1017865.2	97.920	%			04:58:39
2	Y 371.029	866285.8	866285.8	97.944	%			04:58:39
2	Ag 328.068†	461.0	-3.3	-0.0243	ug/L	-0.0243	ppb	04:58:44
2	As 188.979†	-35.0	0.9	0.2595	ug/L	0.2595	ppb	04:59:04
2	B 249.677†	-364.5	93.8	1.7783	ug/L	1.7783	ppb	04:59:04
2	Ba 233.527†	2.7	2.8	0.0160	ug/L	0.0160	ppb	04:59:04
2	Be 313.107†	-4794.3	-22.2	-0.0070	ug/L	-0.0070	ppb	04:58:44
2	Cd 226.502†	-245.7	-15.2	-0.1292	ug/L	-0.1292	ppb	04:59:04
2	Co 228.616†	-92.6	-8.3	-0.1360	ug/L	-0.1360	ppb	04:59:04
2	Cr 267.716†	123.7	38.6	0.3464	ug/L	0.3464	ppb	04:59:04
2	Cu 324.752†	8805.4	54.9	0.1448	ug/L	0.1448	ppb	04:58:44
2	Mn 257.610†	642.1	79.1	0.0690	ug/L	0.0690	ppb	04:59:04
2	Mo 202.031†	28.7	0.1	0.0028	ug/L	0.0028	ppb	04:59:04
2	Ni 231.604†	126.5	-2.8	-0.0545	ug/L	-0.0545	ppb	04:59:04

2	P 214.914†	286.9	27.9	12.507 ug/L	12.507 ppb	04:59:04
2	Pb 220.353†	-69.3	4.8	0.4527 ug/L	0.4527 ppb	04:59:04
2	S 181.975 Axial†	60.3	1.5	1.5693 ug/L	1.5693 ppb	04:59:04
2	Sb 206.836†	39.9	6.1	1.6321 ug/L	1.6321 ppb	04:59:04
2	Se 196.026†	-22.3	-1.4	-0.7363 ug/L	-0.7363 ppb	04:59:04
2	Si 251.611†	667.7	124.3	3.1404 ug/L	3.1404 ppb	04:59:04
2	Sn 189.927†	7.9	12.4	1.6452 ug/L	1.6452 ppb	04:59:04
2	Ti 334.940†	-1263.9	-30.3	-0.0403 ug/L	-0.0403 ppb	04:58:44
2	Tl 190.801†	-50.5	-7.3	-1.7607 ug/L	-1.7607 ppb	04:59:04
2	U 409.014†	-2787.9	-73.1	-1.8868 ug/L	-1.8868 ppb	04:58:39
2	V 292.402†	-1604.2	-29.8	-0.1658 ug/L	-0.1658 ppb	04:58:44
2	Zn 213.857†	953.4	88.1	0.6473 ug/L	0.6473 ppb	04:59:04
2	SiO2†	695.3	111.0	5.9979 ug/L	5.9979 ppb	04:59:44
3	Sc Radial	4712.5	4712.5	96.0 %		04:57:42
3	Y RADIAL	5384.6	5384.6	95.35 %		04:57:42
3	Al 396.153Radial†	-8.9	34.5	22.772 ug/L	22.772 ppb	04:57:42
3	Ca 317.933Radial†	29.9	13.3	23.595 ug/L	23.595 ppb	04:58:02
3	Fe 238.204 Radial†	12.0	1.5	18.616 ug/L	18.616 ppb	04:58:02
3	K 766.490 Radial†	2725.7	270.3	49.252 ug/L	49.252 ppb	04:57:42
3	Mg 279.077 IEC†	0.1	-2.4	-108.21 ug/L	-108.21 ppb	04:58:02
3	Na 589.592 Radial†	-1086.2	148.2	41.582 ug/L	41.582 ppb	04:57:42
3	Sr 421.552†	15.0	23.1	0.1208 ug/L	0.1208 ppb	04:57:42
3	Sc 361.383	962362.8	962362.8	92.581 %		04:59:09
3	Y 371.029	818697.4	818697.4	92.564 %		04:59:09
3	Ag 328.068†	428.8	-10.9	-0.0351 ug/L	-0.0351 ppb	04:59:14
3	As 188.979†	-47.0	-14.1	-4.4063 ug/L	-4.4063 ppb	04:59:34
3	B 249.677†	-358.2	79.1	1.4939 ug/L	1.4939 ppb	04:59:34
3	Ba 233.527†	12.1	13.1	0.0830 ug/L	0.0830 ppb	04:59:34
3	Be 313.107†	-4899.6	-418.3	-0.1308 ug/L	-0.1308 ppb	04:59:14
3	Cd 226.502†	-243.3	-27.2	-0.2389 ug/L	-0.2389 ppb	04:59:34
3	Co 228.616†	-95.8	-17.1	-0.2827 ug/L	-0.2827 ppb	04:59:34
3	Cr 267.716†	98.7	18.9	0.1704 ug/L	0.1704 ppb	04:59:34
3	Cu 324.752†	8998.0	781.6	2.0883 ug/L	2.0883 ppb	04:59:14
3	Mn 257.610†	646.8	122.0	0.1194 ug/L	0.1194 ppb	04:59:34
3	Mo 202.031†	23.4	-3.9	-0.2080 ug/L	-0.2080 ppb	04:59:34
3	Ni 231.604†	128.4	6.8	0.1334 ug/L	0.1334 ppb	04:59:34
3	P 214.914†	279.8	37.1	16.276 ug/L	16.276 ppb	04:59:34
3	Pb 220.353†	-80.9	-11.8	-1.1052 ug/L	-1.1052 ppb	04:59:34
3	S 181.975 Axial†	61.5	6.4	6.8648 ug/L	6.8648 ppb	04:59:34
3	Sb 206.836†	45.1	14.1	3.7416 ug/L	3.7416 ppb	04:59:34
3	Se 196.026†	-27.7	-8.5	-3.6979 ug/L	-3.6979 ppb	04:59:34
3	Si 251.611†	668.9	164.9	4.1691 ug/L	4.1691 ppb	04:59:34
3	Sn 189.927†	7.8	12.8	1.6941 ug/L	1.6941 ppb	04:59:34
3	Ti 334.940†	-1300.0	-143.8	-0.1941 ug/L	-0.1941 ppb	04:59:14
3	Tl 190.801†	-45.5	-4.9	-1.1897 ug/L	-1.1897 ppb	04:59:34
3	U 409.014†	-2811.9	-263.3	-6.8088 ug/L	-6.8088 ppb	04:59:09
3	V 292.402†	-1632.5	-154.8	-0.9073 ug/L	-0.9073 ppb	04:59:14
3	Zn 213.857†	959.4	150.8	1.1064 ug/L	1.1064 ppb	04:59:34
3	SiO2†	690.1	146.4	7.9147 ug/L	7.9147 ppb	04:59:49

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1000503.7	96.250	%	3.1819				3.31%
Sc Radial	4689.2	95.5	%	3.22				3.37%
Y 371.029	850940.8	96.209	%	3.1583				3.28%
Y RADIAL	5361.9	94.95	%	3.056				3.22%
Ag 328.068†	-38.7	-0.1530	ug/L	0.21356	-0.1530	ppb	0.21356	139.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.1	10.624	ug/L	11.7334	10.624	ppb	11.7334	110.45%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-6.2	-1.9300	ug/L	2.34606	-1.9300	ppb	2.34606	121.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	103.3	1.9518	ug/L	0.56508	1.9518	ppb	0.56508	28.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.9	0.0496	ug/L	0.03350	0.0496	ppb	0.03350	67.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-195.2	-0.0610	ug/L	0.06342	-0.0610	ppb	0.06342	104.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.9	19.290	ug/L	4.2602	19.290	ppb	4.2602	22.09%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -7.1     -0.0617 ug/L       0.21875     -0.0617 ppb        0.21875 354.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -13.0     -0.2148 ug/L       0.07393     -0.2148 ppb        0.07393  34.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.7      0.1950 ug/L       0.14078      0.1950 ppb        0.14078  72.20%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               368.3      0.9835 ug/L       0.99867      0.9835 ppb        0.99867 101.54%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.2      1.8182 ug/L      34.05071      1.8182 ppb       34.05071 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         256.4      46.707 ug/L       13.5656      46.707 ppb        13.5656  29.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.8     -35.006 ug/L      131.5455     -35.006 ppb       131.5455 375.78%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                98.7      0.0943 ug/L       0.02521      0.0943 ppb        0.02521  26.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.3     -0.1242 ug/L       0.11183     -0.1242 ppb        0.11183  90.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        150.0      42.085 ug/L        8.5271      42.085 ppb         8.5271  20.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -2.0     -0.0383 ug/L       0.16413     -0.0383 ppb        0.16413 428.67%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 30.5      13.498 ug/L        2.4387      13.498 ppb         2.4387  18.07%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.1     -0.2939 ug/L       0.78096     -0.2939 ppb        0.78096 265.69%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.0     -0.0050 ug/L       7.77729     -0.0050 ppb        7.77729 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 8.1      2.1514 ug/L       1.40454      2.1514 ppb        1.40454  65.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.5     -1.1151 ug/L       2.41580     -1.1151 ppb        2.41580 216.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               147.9      3.7381 ug/L       0.53422      3.7381 ppb        0.53422  14.29%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                12.9      1.7036 ug/L       0.06369      1.7036 ppb        0.06369   3.74%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 8.0      0.0418 ug/L       0.18170      0.0418 ppb        0.18170 434.60%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -37.4     -0.0496 ug/L       0.14012     -0.0496 ppb        0.14012 282.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.3     -1.2821 ug/L       0.43976     -1.2821 ppb        0.43976  34.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -99.7     -2.5784 ug/L       3.93049     -2.5784 ppb        3.93049 152.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -83.2     -0.4842 ug/L       0.38166     -0.4842 ppb        0.38166  78.82%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               110.1      0.8090 ug/L       0.25789      0.8090 ppb        0.25789  31.88%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     131.3      7.0966 ug/L       0.98875      7.0966 ppb        0.98875  13.93%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 61
Sample ID: 241322004|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 114
Date Collected: 12/5/2009 05:02:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322004|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4800.2	4800.2	97.8	%			05:03:54
1	Y RADIAL	8554.8	8554.8	151.5	%			05:03:54
1	Al 396.153Radial†	20730.8	21247.5	14030	ug/L	14030	ppb	05:03:54
1	Ca 317.933Radial†	2268.8	2302.7	4077.0	ug/L	4077.0	ppb	05:04:14
1	Fe 238.204 Radial†	4123.3	4206.3	50855	ug/L	50855	ppb	05:03:54
1	K 766.490 Radial†	25175.2	23179.9	4214.8	ug/L	4214.8	ppb	05:03:54
1	Mg 279.077 IEC†	61.0	59.8	2634.4	ug/L	2634.4	ppb	05:04:14
1	Na 589.592 Radial†	6188.0	7609.1	2134.4	ug/L	2134.4	ppb	05:03:54
1	Sr 421.552†	4537.9	4648.8	24.352	ug/L	24.352	ppb	05:03:54
1	Sc 361.383	1025160.6	1025160.6	98.622	%			05:05:11
1	Y 371.029	1333488.3	1333488.3	150.77	%			05:05:11
1	Ag 328.068†	-3509.9	-4033.0	0.8247	ug/L	0.8247	ppb	05:05:11
1	As 188.979†	89.4	127.2	58.419	ug/L	58.419	ppb	05:05:31
1	B 249.677†	60.1	527.1	3.1935	ug/L	3.1935	ppb	05:05:11
1	Ba 233.527†	21943.9	22250.5	144.95	ug/L	144.95	ppb	05:05:11
1	Be 313.107†	5020.6	9964.7	5.6508	ug/L	5.6508	ppb	05:05:11
1	Cd 226.502†	306.5	546.4	-0.2757	ug/L	-0.2757	ppb	05:05:31
1	Co 228.616†	416.6	508.7	4.9340	ug/L	4.9340	ppb	05:05:31
1	Cr 267.716†	14180.1	14290.4	129.57	ug/L	129.57	ppb	05:05:11
1	Cu 324.752†	17845.4	9157.2	27.049	ug/L	27.049	ppb	05:05:11
1	Mn 257.610†	1011015.2	1024563.7	975.23	ug/L	975.23	ppb	05:05:11
1	Mo 202.031†	155.1	128.0	10.403	ug/L	10.403	ppb	05:05:31
1	Ni 231.604†	3536.6	3454.1	67.673	ug/L	67.673	ppb	05:05:31
1	P 214.914†	2269.7	2036.3	870.74	ug/L	870.74	ppb	05:05:31
1	Pb 220.353†	339.1	419.4	38.345	ug/L	38.345	ppb	05:05:31
1	S 181.975 Axial†	159.1	101.2	106.27	ug/L	106.27	ppb	05:05:31
1	Sb 206.836†	71.9	38.2	4.1689	ug/L	4.1689	ppb	05:05:31
1	Se 196.026†	-317.5	-300.6	51.488	ug/L	51.488	ppb	05:05:31
1	Si 251.611†	1050372.8	1064490.2	27033	ug/L	27033	ppb	05:05:11
1	Sn 189.927†	19.4	24.0	4.2835	ug/L	4.2835	ppb	05:05:31
1	Ti 334.940†	924156.2	938328.3	1294.6	ug/L	1294.6	ppb	05:05:11
1	Tl 190.801†	-152.4	-110.3	-10.841	ug/L	-10.841	ppb	05:05:31
1	U 409.014†	-23832.9	-21391.9	-559.71	ug/L	-559.71	ppb	05:05:11
1	V 292.402†	7797.7	9515.2	44.343	ug/L	44.343	ppb	05:05:11
1	Zn 213.857†	30451.4	29991.3	214.98	ug/L	214.98	ppb	05:05:11
1	SiO2†	1059763.3	1073970.5	58367	ug/L	58367	ppb	05:06:30
2	Sc Radial	4737.0	4737.0	96.5	%			05:04:19
2	Y RADIAL	8361.7	8361.7	148.1	%			05:04:19
2	Al 396.153Radial†	20425.2	21213.9	14008	ug/L	14008	ppb	05:04:19
2	Ca 317.933Radial†	2265.2	2330.0	4125.3	ug/L	4125.3	ppb	05:04:39
2	Fe 238.204 Radial†	4067.1	4204.4	50832	ug/L	50832	ppb	05:04:19
2	K 766.490 Radial†	24764.9	23098.6	4200.0	ug/L	4200.0	ppb	05:04:19
2	Mg 279.077 IEC†	65.0	64.9	2859.5	ug/L	2859.5	ppb	05:04:39
2	Na 589.592 Radial†	6071.4	7572.8	2124.2	ug/L	2124.2	ppb	05:04:19
2	Sr 421.552†	4468.7	4639.1	24.301	ug/L	24.301	ppb	05:04:19
2	Sc 361.383	1019366.4	1019366.4	98.065	%			05:05:37
2	Y 371.029	1327868.7	1327868.7	150.13	%			05:05:37
2	Ag 328.068†	-3495.0	-4038.0	0.8025	ug/L	0.8025	ppb	05:05:37
2	As 188.979†	86.7	125.0	57.718	ug/L	57.718	ppb	05:05:57
2	B 249.677†	45.7	512.7	2.9227	ug/L	2.9227	ppb	05:05:37
2	Ba 233.527†	21652.2	22079.6	143.85	ug/L	143.85	ppb	05:05:37
2	Be 313.107†	5006.0	9978.7	5.6511	ug/L	5.6511	ppb	05:05:37
2	Cd 226.502†	303.7	545.3	-0.2823	ug/L	-0.2823	ppb	05:05:57
2	Co 228.616†	441.7	536.8	5.4028	ug/L	5.4028	ppb	05:05:57
2	Cr 267.716†	14028.5	14217.5	128.91	ug/L	128.91	ppb	05:05:37
2	Cu 324.752†	17770.1	9183.3	27.117	ug/L	27.117	ppb	05:05:37
2	Mn 257.610†	1003683.6	1022914.4	973.66	ug/L	973.66	ppb	05:05:37
2	Mo 202.031†	171.6	145.7	11.340	ug/L	11.340	ppb	05:05:57
2	Ni 231.604†	3547.9	3486.0	68.297	ug/L	68.297	ppb	05:05:57

2	P 214.914†	2273.2	2053.0	878.17 ug/L	878.17 ppb	05:05:57
2	Pb 220.353†	329.3	411.4	37.587 ug/L	37.587 ppb	05:05:57
2	S 181.975 Axial†	157.6	100.6	105.59 ug/L	105.59 ppb	05:05:57
2	Sb 206.836†	66.9	33.6	2.9807 ug/L	2.9807 ppb	05:05:57
2	Se 196.026†	-313.5	-298.4	52.379 ug/L	52.379 ppb	05:05:57
2	Si 251.611†	1043033.3	1063059.7	26997 ug/L	26997 ppb	05:05:37
2	Sn 189.927†	18.6	23.3	4.1959 ug/L	4.1959 ppb	05:05:57
2	Ti 334.940†	917478.9	936845.6	1292.6 ug/L	1292.6 ppb	05:05:37
2	Tl 190.801†	-155.0	-113.8	-11.714 ug/L	-11.714 ppb	05:05:57
2	U 409.014†	-23939.3	-21637.7	-566.07 ug/L	-566.07 ppb	05:05:37
2	V 292.402†	7763.6	9525.3	44.413 ug/L	44.413 ppb	05:05:37
2	Zn 213.857†	30207.2	29917.8	214.43 ug/L	214.43 ppb	05:05:37
2	SiO2†	1055302.0	1075529.1	58452 ug/L	58452 ppb	05:06:35
3	Sc Radial	4729.3	4729.3	96.3 %		05:04:44
3	Y RADIAL	8394.3	8394.3	148.6 %		05:04:44
3	Al 396.153Radial†	20344.6	21164.5	13975 ug/L	13975 ppb	05:04:44
3	Ca 317.933Radial†	2253.0	2321.1	4109.6 ug/L	4109.6 ppb	05:05:04
3	Fe 238.204 Radial†	4081.9	4226.6	51100 ug/L	51100 ppb	05:04:44
3	K 766.490 Radial†	24756.4	23131.3	4205.9 ug/L	4205.9 ppb	05:04:44
3	Mg 279.077 IEC†	59.1	58.9	2590.8 ug/L	2590.8 ppb	05:05:04
3	Na 589.592 Radial†	6058.9	7570.0	2123.4 ug/L	2123.4 ppb	05:04:44
3	Sr 421.552†	4485.9	4664.4	24.434 ug/L	24.434 ppb	05:04:44
3	Sc 361.383	1006158.1	1006158.1	96.794 %		05:06:03
3	Y 371.029	1310204.9	1310204.9	148.13 %		05:06:03
3	Ag 328.068†	-3376.9	-3962.8	1.1864 ug/L	1.1864 ppb	05:06:03
3	As 188.979†	100.8	140.7	62.654 ug/L	62.654 ppb	05:06:23
3	B 249.677†	35.7	503.0	2.7044 ug/L	2.7044 ppb	05:06:03
3	Ba 233.527†	21483.9	22195.5	144.61 ug/L	144.61 ppb	05:06:03
3	Be 313.107†	4823.3	9857.0	5.6146 ug/L	5.6146 ppb	05:06:03
3	Cd 226.502†	303.2	548.8	-0.2776 ug/L	-0.2776 ppb	05:06:23
3	Co 228.616†	438.0	538.8	5.4306 ug/L	5.4306 ppb	05:06:23
3	Cr 267.716†	13911.0	14284.0	129.52 ug/L	129.52 ppb	05:06:03
3	Cu 324.752†	17551.1	9195.0	27.162 ug/L	27.162 ppb	05:06:03
3	Mn 257.610†	992238.1	1024525.7	975.22 ug/L	975.22 ppb	05:06:03
3	Mo 202.031†	165.3	141.6	11.137 ug/L	11.137 ppb	05:06:23
3	Ni 231.604†	3570.0	3556.3	69.674 ug/L	69.674 ppb	05:06:23
3	P 214.914†	2306.3	2117.5	906.81 ug/L	906.81 ppb	05:06:23
3	Pb 220.353†	316.3	402.3	36.710 ug/L	36.710 ppb	05:06:23
3	S 181.975 Axial†	167.6	113.0	119.00 ug/L	119.00 ppb	05:06:23
3	Sb 206.836†	53.6	20.8	-0.4200 ug/L	-0.4200 ppb	05:06:23
3	Se 196.026†	-322.7	-312.1	47.283 ug/L	47.283 ppb	05:06:23
3	Si 251.611†	1030606.4	1064183.8	27025 ug/L	27025 ppb	05:06:03
3	Sn 189.927†	12.8	17.5	3.4370 ug/L	3.4370 ppb	05:06:23
3	Ti 334.940†	906126.0	937398.5	1293.3 ug/L	1293.3 ppb	05:06:03
3	Tl 190.801†	-149.3	-110.0	-10.781 ug/L	-10.781 ppb	05:06:23
3	U 409.014†	-23642.3	-21651.4	-566.46 ug/L	-566.46 ppb	05:06:03
3	V 292.402†	7670.7	9533.3	44.407 ug/L	44.407 ppb	05:06:03
3	Zn 213.857†	29900.4	30005.2	215.04 ug/L	215.04 ppb	05:06:03
3	SiO2†	1045484.4	1079513.2	58668 ug/L	58668 ppb	05:06:41

Mean Data: 241322004|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1016895.1	97.827	%	0.9369				0.96%
Sc Radial	4755.5	96.9	%	0.79				0.82%
Y 371.029	1323854.0	149.68	%	1.374				0.92%
Y RADIAL	8436.9	149.4	%	1.83				1.23%
Ag 328.068†	-4011.3	0.9379	ug/L	0.21551	0.9379	ppb	0.21551	22.98%
Al 396.153Radial†	21208.6	14004	ug/L	27.6	14004	ppb	27.6	0.20%
As 188.979†	131.0	59.597	ug/L	2.6702	59.597	ppb	2.6702	4.48%
B 249.677†	514.2	2.9402	ug/L	0.24505	2.9402	ppb	0.24505	8.33%
Ba 233.527†	22175.2	144.47	ug/L	0.562	144.47	ppb	0.562	0.39%
Be 313.107†	9933.5	5.6388	ug/L	0.02095	5.6388	ppb	0.02095	0.37%
Ca 317.933Radial†	2317.9	4104.0	ug/L	24.66	4104.0	ppb	24.66	0.60%
Cd 226.502†	546.9	-0.2785	ug/L	0.00337	-0.2785	ppb	0.00337	1.21%
Co 228.616†	528.1	5.2558	ug/L	0.27899	5.2558	ppb	0.27899	5.31%
Cr 267.716†	14264.0	129.33	ug/L	0.363	129.33	ppb	0.363	0.28%
Cu 324.752†	9178.5	27.109	ug/L	0.0571	27.109	ppb	0.0571	0.21%
Fe 238.204 Radial†	4212.4	50929	ug/L	148.5	50929	ppb	148.5	0.29%
K 766.490 Radial†	23136.6	4206.9	ug/L	7.45	4206.9	ppb	7.45	0.18%

Mg 279.077 IEC†	61.2	2694.9	ug/L	144.20	2694.9	ppb	144.20	5.35%
Mn 257.610†	1024001.2	974.70	ug/L	0.902	974.70	ppb	0.902	0.09%
Mo 202.031†	138.5	10.960	ug/L	0.4931	10.960	ppb	0.4931	4.50%
Na 589.592 Radial†	7584.0	2127.3	ug/L	6.12	2127.3	ppb	6.12	0.29%
Ni 231.604†	3498.8	68.548	ug/L	1.0243	68.548	ppb	1.0243	1.49%
P 214.914†	2069.0	885.24	ug/L	19.049	885.24	ppb	19.049	2.15%
Pb 220.353†	411.1	37.548	ug/L	0.8186	37.548	ppb	0.8186	2.18%
S 181.975 Axial†	104.9	110.29	ug/L	7.551	110.29	ppb	7.551	6.85%
Sb 206.836†	30.9	2.2432	ug/L	2.38170	2.2432	ppb	2.38170	106.17%
Se 196.026†	-303.7	50.383	ug/L	2.7216	50.383	ppb	2.7216	5.40%
Si 251.611†	1063911.2	27018	ug/L	19.1	27018	ppb	19.1	0.07%
Sn 189.927†	21.6	3.9721	ug/L	0.46552	3.9721	ppb	0.46552	11.72%
Sr 421.552†	4650.8	24.362	ug/L	0.0670	24.362	ppb	0.0670	0.28%
Ti 334.940†	937524.1	1293.5	ug/L	1.03	1293.5	ppb	1.03	0.08%
Tl 190.801†	-111.4	-11.112	ug/L	0.5223	-11.112	ppb	0.5223	4.70%
U 409.014†	-21560.3	-564.08	ug/L	3.785	-564.08	ppb	3.785	0.67%
V 292.402†	9524.6	44.388	ug/L	0.0389	44.388	ppb	0.0389	0.09%
Zn 213.857†	29971.4	214.81	ug/L	0.338	214.81	ppb	0.338	0.16%
SiO2†	1076337.6	58496	ug/L	155.3	58496	ppb	155.3	0.27%

Sequence No.: 62
Sample ID: 241322005|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 115
Date Collected: 12/5/2009 05:08:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322005|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4729.0	4729.0	96.3	%			05:10:47
1	Y RADIAL	6199.0	6199.0	109.8	%			05:10:47
1	Al 396.153Radial†	28084.5	29201.6	19282	ug/L	19282	ppb	05:10:47
1	Ca 317.933Radial†	2568.1	2648.4	4689.0	ug/L	4689.0	ppb	05:11:07
1	Fe 238.204 Radial†	4542.5	4705.1	56886	ug/L	56886	ppb	05:10:47
1	K 766.490 Radial†	34759.2	33518.1	6100.9	ug/L	6100.9	ppb	05:10:47
1	Mg 279.077 IEC†	83.0	83.7	3697.6	ug/L	3697.6	ppb	05:11:07
1	Na 589.592 Radial†	9040.4	10665.8	2991.8	ug/L	2991.8	ppb	05:10:47
1	Sr 421.552†	6326.4	6575.6	34.455	ug/L	34.455	ppb	05:10:47
1	Sc 361.383	1026436.7	1026436.7	98.745	%			05:12:04
1	Y 371.029	989980.8	989980.8	111.93	%			05:12:04
1	Ag 328.068†	-2861.8	-3372.2	5.0410	ug/L	5.0410	ppb	05:12:09
1	As 188.979†	-76.7	-41.1	13.776	ug/L	13.776	ppb	05:12:29
1	B 249.677†	194.7	663.2	4.9598	ug/L	4.9598	ppb	05:12:09
1	Ba 233.527†	18652.2	18889.3	123.58	ug/L	123.58	ppb	05:12:09
1	Be 313.107†	-11224.6	-6493.3	2.1422	ug/L	2.1422	ppb	05:12:09
1	Cd 226.502†	415.5	656.5	0.0466	ug/L	0.0466	ppb	05:12:29
1	Co 228.616†	578.9	672.5	5.8075	ug/L	5.8075	ppb	05:12:29
1	Cr 267.716†	4482.9	4452.1	41.170	ug/L	41.170	ppb	05:12:29
1	Cu 324.752†	20341.9	11662.9	34.048	ug/L	34.048	ppb	05:12:09
1	Mn 257.610†	893493.8	904274.0	861.90	ug/L	861.90	ppb	05:12:04
1	Mo 202.031†	100.0	72.1	7.8590	ug/L	7.8590	ppb	05:12:29
1	Ni 231.604†	823.1	701.7	13.741	ug/L	13.741	ppb	05:12:29
1	P 214.914†	2234.4	1997.7	849.32	ug/L	849.32	ppb	05:12:29
1	Pb 220.353†	923.5	1010.8	94.526	ug/L	94.526	ppb	05:12:29
1	S 181.975 Axial†	342.3	286.6	304.98	ug/L	304.98	ppb	05:12:29
1	Sb 206.836†	65.8	32.0	2.3810	ug/L	2.3810	ppb	05:12:29
1	Se 196.026†	-346.8	-329.9	60.348	ug/L	60.348	ppb	05:12:29
1	Si 251.611†	1063946.0	1076911.8	27348	ug/L	27348	ppb	05:12:04
1	Sn 189.927†	37.5	42.3	6.8562	ug/L	6.8562	ppb	05:12:29
1	Ti 334.940†	1516438.9	1536974.3	2120.2	ug/L	2120.2	ppb	05:12:04
1	Tl 190.801†	-158.1	-115.8	-6.3687	ug/L	-6.3687	ppb	05:12:29
1	U 409.014†	-10096.4	-7450.8	-199.87	ug/L	-199.87	ppb	05:12:09
1	V 292.402†	7566.9	9271.6	41.838	ug/L	41.838	ppb	05:12:09
1	Zn 213.857†	87463.8	87690.0	638.68	ug/L	638.68	ppb	05:12:09
1	SiO2†	1064111.3	1077037.8	58532	ug/L	58532	ppb	05:13:38
2	Sc Radial	4679.0	4679.0	95.3	%			05:11:12
2	Y RADIAL	6145.2	6145.2	108.8	%			05:11:12
2	Al 396.153Radial†	27939.4	29361.0	19387	ug/L	19387	ppb	05:11:12
2	Ca 317.933Radial†	2543.3	2650.9	4693.5	ug/L	4693.5	ppb	05:11:32
2	Fe 238.204 Radial†	4508.1	4719.4	57058	ug/L	57058	ppb	05:11:12
2	K 766.490 Radial†	34654.5	33793.8	6151.2	ug/L	6151.2	ppb	05:11:12
2	Mg 279.077 IEC†	86.2	87.9	3885.8	ug/L	3885.8	ppb	05:11:32
2	Na 589.592 Radial†	8848.1	10564.4	2963.3	ug/L	2963.3	ppb	05:11:12
2	Sr 421.552†	6226.5	6541.0	34.273	ug/L	34.273	ppb	05:11:12
2	Sc 361.383	1031810.1	1031810.1	99.262	%			05:12:35
2	Y 371.029	996846.5	996846.5	112.71	%			05:12:35
2	Ag 328.068†	-2733.9	-3228.3	5.6627	ug/L	5.6627	ppb	05:12:40
2	As 188.979†	-76.8	-40.8	13.886	ug/L	13.886	ppb	05:13:00
2	B 249.677†	278.1	746.3	6.5072	ug/L	6.5072	ppb	05:12:40
2	Ba 233.527†	18591.1	18729.4	122.56	ug/L	122.56	ppb	05:12:40
2	Be 313.107†	-11337.8	-6548.2	2.1243	ug/L	2.1243	ppb	05:12:40
2	Cd 226.502†	429.2	668.0	0.1299	ug/L	0.1299	ppb	05:13:00
2	Co 228.616†	573.4	664.0	5.6637	ug/L	5.6637	ppb	05:13:00
2	Cr 267.716†	4483.0	4428.5	40.960	ug/L	40.960	ppb	05:13:00
2	Cu 324.752†	20368.6	11582.6	33.842	ug/L	33.842	ppb	05:12:40
2	Mn 257.610†	895980.0	902066.5	859.83	ug/L	859.83	ppb	05:12:35
2	Mo 202.031†	96.0	67.5	7.6283	ug/L	7.6283	ppb	05:13:00
2	Ni 231.604†	825.2	699.4	13.696	ug/L	13.696	ppb	05:13:00

2	P 214.914†	2246.4	1998.0	849.37 ug/L	849.37 ppb	05:13:00
2	Pb 220.353†	944.0	1026.6	96.023 ug/L	96.023 ppb	05:13:00
2	S 181.975 Axial†	351.0	293.5	312.39 ug/L	312.39 ppb	05:13:00
2	Sb 206.836†	74.6	40.6	4.6197 ug/L	4.6197 ppb	05:13:00
2	Se 196.026†	-355.3	-336.6	57.984 ug/L	57.984 ppb	05:13:00
2	Si 251.611†	1068902.3	1076293.9	27332 ug/L	27332 ppb	05:12:35
2	Sn 189.927†	34.6	39.2	6.4511 ug/L	6.4511 ppb	05:13:00
2	Ti 334.940†	1524082.7	1536677.4	2119.8 ug/L	2119.8 ppb	05:12:35
2	Tl 190.801†	-155.5	-112.4	-5.5427 ug/L	-5.5427 ppb	05:13:00
2	U 409.014†	-10126.1	-7427.4	-199.28 ug/L	-199.28 ppb	05:12:40
2	V 292.402†	7476.8	9140.9	41.066 ug/L	41.066 ppb	05:12:40
2	Zn 213.857†	87407.2	87171.7	634.85 ug/L	634.85 ppb	05:12:40
2	SiO2†	1057888.0	1065156.3	57887 ug/L	57887 ppb	05:13:44
3	Sc Radial	4746.6	4746.6	96.7 %		05:11:37
3	Y RADIAL	6255.2	6255.2	110.8 %		05:11:37
3	Al 396.153Radial†	28412.1	29432.5	19435 ug/L	19435 ppb	05:11:37
3	Ca 317.933Radial†	2562.4	2632.6	4661.1 ug/L	4661.1 ppb	05:11:57
3	Fe 238.204 Radial†	4591.5	4738.3	57287 ug/L	57287 ppb	05:11:37
3	K 766.490 Radial†	35190.7	33830.9	6157.9 ug/L	6157.9 ppb	05:11:37
3	Mg 279.077 IEC†	85.1	85.6	3779.0 ug/L	3779.0 ppb	05:11:57
3	Na 589.592 Radial†	9031.5	10621.9	2979.4 ug/L	2979.4 ppb	05:11:37
3	Sr 421.552†	6350.8	6576.5	34.460 ug/L	34.460 ppb	05:11:37
3	Sc 361.383	1023516.1	1023516.1	98.464 %		05:13:06
3	Y 371.029	987479.8	987479.8	111.65 %		05:13:06
3	Ag 328.068†	-2858.0	-3376.6	5.1501 ug/L	5.1501 ppb	05:13:11
3	As 188.979†	-85.0	-49.7	11.198 ug/L	11.198 ppb	05:13:32
3	B 249.677†	191.0	660.1	4.8462 ug/L	4.8462 ppb	05:13:11
3	Ba 233.527†	18678.4	18969.8	124.11 ug/L	124.11 ppb	05:13:11
3	Be 313.107†	-11269.3	-6571.2	2.1275 ug/L	2.1275 ppb	05:13:11
3	Cd 226.502†	422.9	665.2	0.0827 ug/L	0.0827 ppb	05:13:32
3	Co 228.616†	583.8	679.2	5.9013 ug/L	5.9013 ppb	05:13:32
3	Cr 267.716†	4482.5	4464.6	41.289 ug/L	41.289 ppb	05:13:32
3	Cu 324.752†	20627.7	12012.0	35.000 ug/L	35.000 ppb	05:13:11
3	Mn 257.610†	893247.6	906605.9	864.15 ug/L	864.15 ppb	05:13:06
3	Mo 202.031†	97.6	69.9	7.7707 ug/L	7.7707 ppb	05:13:32
3	Ni 231.604†	830.9	712.0	13.943 ug/L	13.943 ppb	05:13:32
3	P 214.914†	2237.8	2007.6	853.31 ug/L	853.31 ppb	05:13:32
3	Pb 220.353†	937.2	1027.4	96.087 ug/L	96.087 ppb	05:13:32
3	S 181.975 Axial†	353.1	298.5	317.74 ug/L	317.74 ppb	05:13:32
3	Sb 206.836†	56.7	23.0	-0.0280 ug/L	-0.0280 ppb	05:13:32
3	Se 196.026†	-351.7	-335.8	59.159 ug/L	59.159 ppb	05:13:32
3	Si 251.611†	1063957.3	1079997.8	27426 ug/L	27426 ppb	05:13:06
3	Sn 189.927†	35.1	40.0	6.5515 ug/L	6.5515 ppb	05:13:32
3	Ti 334.940†	1515619.3	1540524.0	2125.1 ug/L	2125.1 ppb	05:13:06
3	Tl 190.801†	-139.9	-97.9	-1.9738 ug/L	-1.9738 ppb	05:13:32
3	U 409.014†	-9998.8	-7380.8	-198.11 ug/L	-198.11 ppb	05:13:11
3	V 292.402†	7551.8	9278.1	41.813 ug/L	41.813 ppb	05:13:11
3	Zn 213.857†	87987.3	88474.4	644.40 ug/L	644.40 ppb	05:13:11
3	SiO2†	1074561.6	1090726.1	59276 ug/L	59276 ppb	05:13:49

Mean Data: 241322005|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1027254.3	98.824	%	0.4047				0.41%
Sc Radial	4718.2	96.1	%	0.71				0.74%
Y 371.029	991435.7	112.09	%	0.548				0.49%
Y RADIAL	6199.8	109.8	%	0.97				0.89%
Ag 328.068†	-3325.7	5.2846	ug/L	0.33200	5.2846	ppb	0.33200	6.28%
Al 396.153Radial†	29331.7	19368	ug/L	78.0	19368	ppb	78.0	0.40%
As 188.979†	-43.9	12.953	ug/L	1.5210	12.953	ppb	1.5210	11.74%
B 249.677†	689.9	5.4377	ug/L	0.92796	5.4377	ppb	0.92796	17.07%
Ba 233.527†	18862.9	123.42	ug/L	0.790	123.42	ppb	0.790	0.64%
Be 313.107†	-6537.6	2.1313	ug/L	0.00955	2.1313	ppb	0.00955	0.45%
Ca 317.933Radial†	2644.0	4681.2	ug/L	17.55	4681.2	ppb	17.55	0.37%
Cd 226.502†	663.2	0.0864	ug/L	0.04176	0.0864	ppb	0.04176	48.33%
Co 228.616†	671.9	5.7908	ug/L	0.11966	5.7908	ppb	0.11966	2.07%
Cr 267.716†	4448.4	41.140	ug/L	0.1668	41.140	ppb	0.1668	0.41%
Cu 324.752†	11752.5	34.297	ug/L	0.6180	34.297	ppb	0.6180	1.80%
Fe 238.204 Radial†	4720.9	57077	ug/L	201.1	57077	ppb	201.1	0.35%
K 766.490 Radial†	33714.3	6136.6	ug/L	31.17	6136.6	ppb	31.17	0.51%

Mg 279.077 IEC†	85.7	3787.5	ug/L	94.38	3787.5	ppb	94.38	2.49%
Mn 257.610†	904315.5	861.96	ug/L	2.162	861.96	ppb	2.162	0.25%
Mo 202.031†	69.8	7.7526	ug/L	0.11641	7.7526	ppb	0.11641	1.50%
Na 589.592 Radial†	10617.4	2978.2	ug/L	14.27	2978.2	ppb	14.27	0.48%
Ni 231.604†	704.3	13.793	ug/L	0.1314	13.793	ppb	0.1314	0.95%
P 214.914†	2001.1	850.67	ug/L	2.285	850.67	ppb	2.285	0.27%
Pb 220.353†	1021.6	95.545	ug/L	0.8832	95.545	ppb	0.8832	0.92%
S 181.975 Axial†	292.8	311.70	ug/L	6.406	311.70	ppb	6.406	2.06%
Sb 206.836†	31.9	2.3242	ug/L	2.32436	2.3242	ppb	2.32436	100.01%
Se 196.026†	-334.1	59.164	ug/L	1.1817	59.164	ppb	1.1817	2.00%
Si 251.611†	1077734.5	27369	ug/L	50.4	27369	ppb	50.4	0.18%
Sn 189.927†	40.5	6.6196	ug/L	0.21094	6.6196	ppb	0.21094	3.19%
Sr 421.552†	6564.3	34.396	ug/L	0.1063	34.396	ppb	0.1063	0.31%
Ti 334.940†	1538058.6	2121.7	ug/L	2.95	2121.7	ppb	2.95	0.14%
Tl 190.801†	-108.7	-4.6284	ug/L	2.33578	-4.6284	ppb	2.33578	50.47%
U 409.014†	-7419.7	-199.09	ug/L	0.896	-199.09	ppb	0.896	0.45%
V 292.402†	9230.2	41.572	ug/L	0.4385	41.572	ppb	0.4385	1.05%
Zn 213.857†	87778.7	639.31	ug/L	4.807	639.31	ppb	4.807	0.75%
SiO2†	1077640.1	58565	ug/L	695.4	58565	ppb	695.4	1.19%

Sequence No.: 63
Sample ID: 241322006|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 116
Date Collected: 12/5/2009 05:16:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322006|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4734.3	4734.3	96.4	%			05:17:55
1	Y RADIAL	6908.6	6908.6	122.3	%			05:17:55
1	Al 396.153Radial†	25282.3	26262.6	17341	ug/L	17341	ppb	05:17:55
1	Ca 317.933Radial†	4108.9	4243.3	7512.9	ug/L	7512.9	ppb	05:17:55
1	Fe 238.204 Radial†	5085.6	5263.0	63631	ug/L	63631	ppb	05:17:55
1	K 766.490 Radial†	20305.2	18487.8	3343.8	ug/L	3343.8	ppb	05:17:55
1	Mg 279.077 IEC†	79.4	79.8	3517.9	ug/L	3517.9	ppb	05:18:15
1	Na 589.592 Radial†	14490.5	16307.2	4574.2	ug/L	4574.2	ppb	05:17:55
1	Sr 421.552†	8895.8	9232.8	48.369	ug/L	48.369	ppb	05:17:55
1	Sc 361.383	1032870.3	1032870.3	99.364	%			05:19:13
1	Y 371.029	1103149.8	1103149.8	124.72	%			05:19:13
1	Ag 328.068†	-4048.1	-4548.1	2.5195	ug/L	2.5195	ppb	05:19:18
1	As 188.979†	-54.6	-18.3	20.301	ug/L	20.301	ppb	05:19:38
1	B 249.677†	246.6	714.3	5.0340	ug/L	5.0340	ppb	05:19:18
1	Ba 233.527†	33071.7	33283.5	216.29	ug/L	216.29	ppb	05:19:18
1	Be 313.107†	-342.4	4529.3	5.2056	ug/L	5.2056	ppb	05:19:18
1	Cd 226.502†	481.0	719.8	-0.0707	ug/L	-0.0707	ppb	05:19:38
1	Co 228.616†	492.9	582.4	4.6970	ug/L	4.6970	ppb	05:19:38
1	Cr 267.716†	3275.0	3208.2	30.128	ug/L	30.128	ppb	05:19:38
1	Cu 324.752†	24178.0	15395.3	44.359	ug/L	44.359	ppb	05:19:18
1	Mn 257.610†	2305490.2	2319674.7	2202.9	ug/L	2202.9	ppb	05:19:13
1	Mo 202.031†	247.7	220.0	16.190	ug/L	16.190	ppb	05:19:38
1	Ni 231.604†	1228.2	1104.1	21.628	ug/L	21.628	ppb	05:19:38
1	P 214.914†	1785.2	1531.5	633.03	ug/L	633.03	ppb	05:19:38
1	Pb 220.353†	860.9	941.9	87.086	ug/L	87.086	ppb	05:19:38
1	S 181.975 Axial†	414.6	357.1	381.37	ug/L	381.37	ppb	05:19:38
1	Sb 206.836†	52.5	18.2	-0.2196	ug/L	-0.2196	ppb	05:19:38
1	Se 196.026†	-403.7	-384.9	60.517	ug/L	60.517	ppb	05:19:38
1	Si 251.611†	1165700.5	1172606.4	29779	ug/L	29779	ppb	05:19:13
1	Sn 189.927†	2.0	6.4	2.4857	ug/L	2.4857	ppb	05:19:38
1	Ti 334.940†	1389077.8	1399232.0	1930.4	ug/L	1930.4	ppb	05:19:13
1	Tl 190.801†	-170.6	-127.4	-2.8095	ug/L	-2.8095	ppb	05:19:38
1	U 409.014†	-12522.9	-9829.1	-262.18	ug/L	-262.18	ppb	05:19:13
1	V 292.402†	6817.9	8470.1	36.426	ug/L	36.426	ppb	05:19:18
1	Zn 213.857†	42255.2	41640.2	299.60	ug/L	299.60	ppb	05:19:18
1	SiO2†	1154214.0	1161005.0	63098	ug/L	63098	ppb	05:20:46
2	Sc Radial	4843.9	4843.9	98.7	%			05:18:20
2	Y RADIAL	6989.6	6989.6	123.8	%			05:18:20
2	Al 396.153Radial†	24623.1	25001.5	16508	ug/L	16508	ppb	05:18:20
2	Ca 317.933Radial†	4021.8	4058.6	7185.9	ug/L	7185.9	ppb	05:18:20
2	Fe 238.204 Radial†	4970.8	5027.4	60782	ug/L	60782	ppb	05:18:20
2	K 766.490 Radial†	19993.9	17696.1	3199.3	ug/L	3199.3	ppb	05:18:20
2	Mg 279.077 IEC†	79.0	77.6	3420.1	ug/L	3420.1	ppb	05:18:40
2	Na 589.592 Radial†	14243.8	15717.4	4408.7	ug/L	4408.7	ppb	05:18:20
2	Sr 421.552†	8648.8	8773.8	45.964	ug/L	45.964	ppb	05:18:20
2	Sc 361.383	1028678.4	1028678.4	98.961	%			05:19:44
2	Y 371.029	1099124.1	1099124.1	124.27	%			05:19:44
2	Ag 328.068†	-4080.7	-4597.7	1.4258	ug/L	1.4258	ppb	05:19:49
2	As 188.979†	-48.5	-12.4	21.729	ug/L	21.729	ppb	05:20:09
2	B 249.677†	139.4	607.0	3.3846	ug/L	3.3846	ppb	05:19:49
2	Ba 233.527†	33678.4	34032.1	221.00	ug/L	221.00	ppb	05:19:49
2	Be 313.107†	-199.8	4672.0	5.2568	ug/L	5.2568	ppb	05:19:49
2	Cd 226.502†	495.7	736.5	0.3604	ug/L	0.3604	ppb	05:20:09
2	Co 228.616†	480.5	571.9	4.5611	ug/L	4.5611	ppb	05:20:09
2	Cr 267.716†	3340.3	3287.6	30.792	ug/L	30.792	ppb	05:20:09
2	Cu 324.752†	24592.0	15912.8	45.596	ug/L	45.596	ppb	05:19:49
2	Mn 257.610†	2303455.2	2327073.4	2209.6	ug/L	2209.6	ppb	05:19:44
2	Mo 202.031†	259.2	232.7	16.659	ug/L	16.659	ppb	05:20:09
2	Ni 231.604†	1233.4	1114.4	21.829	ug/L	21.829	ppb	05:20:09

2	P 214.914†	1813.4	1567.3	650.84	ug/L	650.84 ppb	05:20:09
2	Pb 220.353†	842.1	926.5	85.684	ug/L	85.684 ppb	05:20:09
2	S 181.975 Axial†	406.9	351.1	375.03	ug/L	375.03 ppb	05:20:09
2	Sb 206.836†	56.2	22.1	0.7780	ug/L	0.7780 ppb	05:20:09
2	Se 196.026†	-390.5	-373.3	55.329	ug/L	55.329 ppb	05:20:09
2	Si 251.611†	1163743.0	1175409.0	29850	ug/L	29850 ppb	05:19:44
2	Sn 189.927†	5.1	9.5	2.8178	ug/L	2.8178 ppb	05:20:09
2	Ti 334.940†	1385901.2	1401718.8	1933.8	ug/L	1933.8 ppb	05:19:44
2	Tl 190.801†	-173.6	-131.2	-3.6818	ug/L	-3.6818 ppb	05:20:09
2	U 409.014†	-12489.9	-9847.1	-262.29	ug/L	-262.29 ppb	05:19:44
2	V 292.402†	6970.4	8652.1	37.904	ug/L	37.904 ppb	05:19:49
2	Zn 213.857†	43206.9	42775.1	308.21	ug/L	308.21 ppb	05:19:49
2	SiO2†	1165376.4	1177018.2	63968	ug/L	63968 ppb	05:20:52
3	Sc Radial	4728.8	4728.8	96.3	%		05:18:45
3	Y RADIAL	6825.5	6825.5	120.9	%		05:18:45
3	Al 396.153Radial†	24549.5	25532.5	16859	ug/L	16859 ppb	05:18:45
3	Ca 317.933Radial†	4021.8	4157.9	7361.6	ug/L	7361.6 ppb	05:18:45
3	Fe 238.204 Radial†	4945.9	5124.1	61952	ug/L	61952 ppb	05:18:45
3	K 766.490 Radial†	19894.1	18085.7	3270.4	ug/L	3270.4 ppb	05:18:45
3	Mg 279.077 IEC†	73.2	73.5	3233.9	ug/L	3233.9 ppb	05:19:05
3	Na 589.592 Radial†	14040.5	15857.7	4448.1	ug/L	4448.1 ppb	05:18:45
3	Sr 421.552†	8606.2	8942.8	46.850	ug/L	46.850 ppb	05:18:45
3	Sc 361.383	1025323.9	1025323.9	98.638	%		05:20:15
3	Y 371.029	1093363.9	1093363.9	123.62	%		05:20:15
3	Ag 328.068†	-4042.0	-4571.9	1.9051	ug/L	1.9051 ppb	05:20:20
3	As 188.979†	-49.3	-13.4	21.577	ug/L	21.577 ppb	05:20:40
3	B 249.677†	326.7	797.4	6.8272	ug/L	6.8272 ppb	05:20:20
3	Ba 233.527†	33489.5	33952.0	220.53	ug/L	220.53 ppb	05:20:20
3	Be 313.107†	-178.7	4692.7	5.2549	ug/L	5.2549 ppb	05:20:20
3	Cd 226.502†	515.4	758.2	0.4322	ug/L	0.4322 ppb	05:20:40
3	Co 228.616†	463.9	556.6	4.3014	ug/L	4.3014 ppb	05:20:40
3	Cr 267.716†	3275.1	3232.6	30.321	ug/L	30.321 ppb	05:20:40
3	Cu 324.752†	24638.9	16041.6	46.000	ug/L	46.000 ppb	05:20:20
3	Mn 257.610†	2294198.8	2325304.5	2208.1	ug/L	2208.1 ppb	05:20:15
3	Mo 202.031†	249.9	224.1	16.288	ug/L	16.288 ppb	05:20:40
3	Ni 231.604†	1211.0	1095.8	21.464	ug/L	21.464 ppb	05:20:40
3	P 214.914†	1779.4	1538.8	637.20	ug/L	637.20 ppb	05:20:40
3	Pb 220.353†	847.6	934.8	86.448	ug/L	86.448 ppb	05:20:40
3	S 181.975 Axial†	412.7	358.3	382.74	ug/L	382.74 ppb	05:20:40
3	Sb 206.836†	65.4	31.6	3.2719	ug/L	3.2719 ppb	05:20:40
3	Se 196.026†	-384.4	-368.3	61.769	ug/L	61.769 ppb	05:20:40
3	Si 251.611†	1157702.1	1173132.1	29792	ug/L	29792 ppb	05:20:15
3	Sn 189.927†	-12.0	-7.9	0.5599	ug/L	0.5599 ppb	05:20:40
3	Ti 334.940†	1378356.8	1398652.1	1929.6	ug/L	1929.6 ppb	05:20:15
3	Tl 190.801†	-180.0	-138.3	-5.4253	ug/L	-5.4253 ppb	05:20:40
3	U 409.014†	-12659.0	-10059.9	-267.94	ug/L	-267.94 ppb	05:20:15
3	V 292.402†	7072.6	8778.8	38.435	ug/L	38.435 ppb	05:20:20
3	Zn 213.857†	42897.1	42603.9	306.85	ug/L	306.85 ppb	05:20:20
3	SiO2†	1159664.4	1175080.1	63863	ug/L	63863 ppb	05:20:58

Mean Data: 241322006|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1028957.5	98.987	%	0.3637				0.37%
Sc Radial	4769.0	97.1	%	1.32				1.36%
Y 371.029	1098545.9	124.20	%	0.556				0.45%
Y RADIAL	6907.9	122.3	%	1.45				1.19%
Ag 328.068†	-4572.6	1.9501	ug/L	0.54827	1.9501	ppb	0.54827	28.11%
Al 396.153Radial†	25598.9	16903	ug/L	418.1	16903	ppb	418.1	2.47%
As 188.979†	-14.7	21.202	ug/L	0.7845	21.202	ppb	0.7845	3.70%
B 249.677†	706.2	5.0819	ug/L	1.72180	5.0819	ppb	1.72180	33.88%
Ba 233.527†	33755.9	219.27	ug/L	2.592	219.27	ppb	2.592	1.18%
Be 313.107†	4631.4	5.2391	ug/L	0.02906	5.2391	ppb	0.02906	0.55%
Ca 317.933Radial†	4153.3	7353.5	ug/L	163.63	7353.5	ppb	163.63	2.23%
Cd 226.502†	738.2	0.2406	ug/L	0.27200	0.2406	ppb	0.27200	113.03%
Co 228.616†	570.3	4.5198	ug/L	0.20099	4.5198	ppb	0.20099	4.45%
Cr 267.716†	3242.8	30.414	ug/L	0.3415	30.414	ppb	0.3415	1.12%
Cu 324.752†	15783.2	45.318	ug/L	0.8547	45.318	ppb	0.8547	1.89%
Fe 238.204 Radial†	5138.2	62121	ug/L	1432.0	62121	ppb	1432.0	2.31%
K 766.490 Radial†	18089.8	3271.2	ug/L	72.24	3271.2	ppb	72.24	2.21%

Mg 279.077 IEC†	77.0	3390.6	ug/L	144.31	3390.6	ppb	144.31	4.26%
Mn 257.610†	2324017.5	2206.9	ug/L	3.52	2206.9	ppb	3.52	0.16%
Mo 202.031†	225.6	16.379	ug/L	0.2475	16.379	ppb	0.2475	1.51%
Na 589.592 Radial†	15960.8	4477.0	ug/L	86.44	4477.0	ppb	86.44	1.93%
Ni 231.604†	1104.8	21.640	ug/L	0.1829	21.640	ppb	0.1829	0.85%
P 214.914†	1545.9	640.36	ug/L	9.316	640.36	ppb	9.316	1.45%
Pb 220.353†	934.4	86.406	ug/L	0.7018	86.406	ppb	0.7018	0.81%
S 181.975 Axial†	355.5	379.71	ug/L	4.115	379.71	ppb	4.115	1.08%
Sb 206.836†	24.0	1.2768	ug/L	1.79840	1.2768	ppb	1.79840	140.85%
Se 196.026†	-375.5	59.205	ug/L	3.4146	59.205	ppb	3.4146	5.77%
Si 251.611†	1173715.8	29807	ug/L	37.8	29807	ppb	37.8	0.13%
Sn 189.927†	2.7	1.9545	ug/L	1.21910	1.9545	ppb	1.21910	62.37%
Sr 421.552†	8983.1	47.061	ug/L	1.2164	47.061	ppb	1.2164	2.58%
Ti 334.940†	1399867.6	1931.3	ug/L	2.24	1931.3	ppb	2.24	0.12%
Tl 190.801†	-132.3	-3.9722	ug/L	1.33186	-3.9722	ppb	1.33186	33.53%
U 409.014†	-9912.0	-264.14	ug/L	3.292	-264.14	ppb	3.292	1.25%
V 292.402†	8633.6	37.588	ug/L	1.0408	37.588	ppb	1.0408	2.77%
Zn 213.857†	42339.7	304.89	ug/L	4.630	304.89	ppb	4.630	1.52%
SiO2†	1171034.4	63643	ug/L	475.0	63643	ppb	475.0	0.75%

Sequence No.: 64
Sample ID: 241322007|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 117
Date Collected: 12/5/2009 05:23:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322007|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4754.9	4754.9	96.8	%			05:25:03
1	Y RADIAL	6267.4	6267.4	111.0	%			05:25:03
1	Al 396.153Radial†	22492.2	23268.5	15365	ug/L	15365	ppb	05:25:03
1	Ca 317.933Radial†	1532.4	1564.5	2770.0	ug/L	2770.0	ppb	05:25:23
1	Fe 238.204 Radial†	3706.1	3815.8	46133	ug/L	46133	ppb	05:25:23
1	K 766.490 Radial†	24001.5	22213.7	4031.9	ug/L	4031.9	ppb	05:25:03
1	Mg 279.077 IEC†	54.4	53.7	2361.5	ug/L	2361.5	ppb	05:25:23
1	Na 589.592 Radial†	6407.4	7896.0	2214.8	ug/L	2214.8	ppb	05:25:03
1	Sr 421.552†	3315.1	3430.5	17.972	ug/L	17.972	ppb	05:25:03
1	Sc 361.383	1030019.5	1030019.5	99.090	%			05:26:20
1	Y 371.029	998730.2	998730.2	112.92	%			05:26:20
1	Ag 328.068†	-2199.0	-2693.3	4.3248	ug/L	4.3248	ppb	05:26:25
1	As 188.979†	-48.8	-12.7	16.127	ug/L	16.127	ppb	05:26:45
1	B 249.677†	39.9	506.3	3.4244	ug/L	3.4244	ppb	05:26:25
1	Ba 233.527†	18746.9	18919.2	123.34	ug/L	123.34	ppb	05:26:25
1	Be 313.107†	-5147.1	-320.5	2.9347	ug/L	2.9347	ppb	05:26:25
1	Cd 226.502†	284.7	523.0	-0.0418	ug/L	-0.0418	ppb	05:26:45
1	Co 228.616†	496.7	587.6	5.7908	ug/L	5.7908	ppb	05:26:45
1	Cr 267.716†	2433.2	2367.8	22.244	ug/L	22.244	ppb	05:26:45
1	Cu 324.752†	15634.8	6841.0	20.622	ug/L	20.622	ppb	05:26:25
1	Mn 257.610†	1595463.5	1609546.1	1528.7	ug/L	1528.7	ppb	05:26:20
1	Mo 202.031†	78.7	50.2	5.9358	ug/L	5.9358	ppb	05:26:45
1	Ni 231.604†	897.4	773.7	15.154	ug/L	15.154	ppb	05:26:45
1	P 214.914†	2202.6	1957.8	840.84	ug/L	840.84	ppb	05:26:45
1	Pb 220.353†	475.4	555.3	51.782	ug/L	51.782	ppb	05:26:45
1	S 181.975 Axial†	147.7	88.9	92.792	ug/L	92.792	ppb	05:26:45
1	Sb 206.836†	64.2	30.1	3.7452	ug/L	3.7452	ppb	05:26:45
1	Se 196.026†	-303.1	-284.5	41.435	ug/L	41.435	ppb	05:26:45
1	Si 251.611†	888648.9	896256.3	22760	ug/L	22760	ppb	05:26:20
1	Sn 189.927†	20.8	25.3	4.2584	ug/L	4.2584	ppb	05:26:45
1	Ti 334.940†	1107930.8	1119371.0	1544.2	ug/L	1544.2	ppb	05:26:20
1	Tl 190.801†	-147.7	-104.8	-4.2821	ug/L	-4.2821	ppb	05:26:45
1	U 409.014†	-11721.5	-9055.2	-239.96	ug/L	-239.96	ppb	05:26:25
1	V 292.402†	5432.3	7090.7	31.503	ug/L	31.503	ppb	05:26:25
1	Zn 213.857†	61607.2	61287.7	445.75	ug/L	445.75	ppb	05:26:25
1	SiO2†	889292.6	896864.5	48742	ug/L	48742	ppb	05:27:54
2	Sc Radial	4795.4	4795.4	97.7	%			05:25:28
2	Y RADIAL	6254.8	6254.8	110.8	%			05:25:28
2	Al 396.153Radial†	22488.6	23068.4	15232	ug/L	15232	ppb	05:25:28
2	Ca 317.933Radial†	1534.5	1553.2	2750.0	ug/L	2750.0	ppb	05:25:48
2	Fe 238.204 Radial†	3708.7	3786.1	45775	ug/L	45775	ppb	05:25:48
2	K 766.490 Radial†	23792.4	21789.9	3954.6	ug/L	3954.6	ppb	05:25:28
2	Mg 279.077 IEC†	51.8	50.6	2223.1	ug/L	2223.1	ppb	05:25:48
2	Na 589.592 Radial†	6389.3	7821.6	2193.9	ug/L	2193.9	ppb	05:25:28
2	Sr 421.552†	3299.2	3385.2	17.735	ug/L	17.735	ppb	05:25:28
2	Sc 361.383	1036216.9	1036216.9	99.686	%			05:26:51
2	Y 371.029	1004434.7	1004434.7	113.56	%			05:26:51
2	Ag 328.068†	-2231.9	-2713.0	4.1237	ug/L	4.1237	ppb	05:26:57
2	As 188.979†	-52.5	-16.0	15.060	ug/L	15.060	ppb	05:27:17
2	B 249.677†	-50.3	415.6	1.7590	ug/L	1.7590	ppb	05:26:57
2	Ba 233.527†	18708.4	18767.4	122.36	ug/L	122.36	ppb	05:26:57
2	Be 313.107†	-5023.3	-165.2	2.9925	ug/L	2.9925	ppb	05:26:57
2	Cd 226.502†	282.9	519.5	-0.0365	ug/L	-0.0365	ppb	05:27:17
2	Co 228.616†	471.4	559.2	5.3200	ug/L	5.3200	ppb	05:27:17
2	Cr 267.716†	2383.4	2303.1	21.653	ug/L	21.653	ppb	05:27:17
2	Cu 324.752†	15406.6	6517.7	19.741	ug/L	19.741	ppb	05:26:57
2	Mn 257.610†	1610449.0	1614949.0	1533.8	ug/L	1533.8	ppb	05:26:51
2	Mo 202.031†	96.1	67.1	6.8088	ug/L	6.8088	ppb	05:27:17
2	Ni 231.604†	905.1	776.0	15.199	ug/L	15.199	ppb	05:27:17

2	P 214.914†	2182.4	1924.1	826.18 ug/L	826.18 ppb	05:27:17
2	Pb 220.353†	487.6	564.7	52.669 ug/L	52.669 ppb	05:27:17
2	S 181.975 Axial†	155.6	96.0	100.42 ug/L	100.42 ppb	05:27:17
2	Sb 206.836†	58.5	24.1	2.1726 ug/L	2.1726 ppb	05:27:17
2	Se 196.026†	-298.9	-278.5	42.780 ug/L	42.780 ppb	05:27:17
2	Si 251.611†	897276.9	899547.8	22844 ug/L	22844 ppb	05:26:51
2	Sn 189.927†	21.9	26.3	4.3800 ug/L	4.3800 ppb	05:27:17
2	Ti 334.940†	1118054.3	1122839.3	1548.9 ug/L	1548.9 ppb	05:26:51
2	Tl 190.801†	-147.0	-103.2	-3.8424 ug/L	-3.8424 ppb	05:27:17
2	U 409.014†	-11394.8	-8656.7	-229.61 ug/L	-229.61 ppb	05:26:57
2	V 292.402†	5441.3	7067.0	31.447 ug/L	31.447 ppb	05:26:57
2	Zn 213.857†	61307.4	60615.0	440.85 ug/L	440.85 ppb	05:26:57
2	SiO2†	886054.0	888248.1	48273 ug/L	48273 ppb	05:28:00
3	Sc Radial	4822.5	4822.5	98.2 %		05:25:53
3	Y RADIAL	6349.9	6349.9	112.4 %		05:25:53
3	Al 396.153Radial†	22719.6	23174.1	15302 ug/L	15302 ppb	05:25:53
3	Ca 317.933Radial†	1546.2	1556.3	2755.5 ug/L	2755.5 ppb	05:26:13
3	Fe 238.204 Radial†	3711.5	3767.6	45551 ug/L	45551 ppb	05:26:13
3	K 766.490 Radial†	23968.5	21832.3	3962.3 ug/L	3962.3 ppb	05:25:53
3	Mg 279.077 IEC†	51.7	50.1	2202.4 ug/L	2202.4 ppb	05:26:13
3	Na 589.592 Radial†	6521.3	7919.2	2221.3 ug/L	2221.3 ppb	05:25:53
3	Sr 421.552†	3353.4	3421.4	17.925 ug/L	17.925 ppb	05:25:53
3	Sc 361.383	1021781.7	1021781.7	98.297 %		05:27:22
3	Y 371.029	989257.4	989257.4	111.85 %		05:27:22
3	Ag 328.068†	-2306.8	-2820.8	3.6329 ug/L	3.6329 ppb	05:27:28
3	As 188.979†	-56.4	-20.8	13.557 ug/L	13.557 ppb	05:27:48
3	B 249.677†	-51.3	413.9	1.7547 ug/L	1.7547 ppb	05:27:28
3	Ba 233.527†	18764.4	19089.5	124.42 ug/L	124.42 ppb	05:27:28
3	Be 313.107†	-5005.9	-218.7	2.9781 ug/L	2.9781 ppb	05:27:28
3	Cd 226.502†	289.9	530.5	0.0827 ug/L	0.0827 ppb	05:27:48
3	Co 228.616†	495.9	590.8	5.8408 ug/L	5.8408 ppb	05:27:48
3	Cr 267.716†	2390.6	2344.3	22.022 ug/L	22.022 ppb	05:27:48
3	Cu 324.752†	15589.5	6922.1	20.809 ug/L	20.809 ppb	05:27:28
3	Mn 257.610†	1589619.7	1616582.2	1535.3 ug/L	1535.3 ppb	05:27:22
3	Mo 202.031†	82.9	55.1	6.1530 ug/L	6.1530 ppb	05:27:48
3	Ni 231.604†	917.5	801.4	15.697 ug/L	15.697 ppb	05:27:48
3	P 214.914†	2164.6	1937.0	831.97 ug/L	831.97 ppb	05:27:48
3	Pb 220.353†	491.2	575.3	53.691 ug/L	53.691 ppb	05:27:48
3	S 181.975 Axial†	154.8	97.4	101.89 ug/L	101.89 ppb	05:27:48
3	Sb 206.836†	54.1	20.4	1.1764 ug/L	1.1764 ppb	05:27:48
3	Se 196.026†	-296.6	-280.4	41.136 ug/L	41.136 ppb	05:27:48
3	Si 251.611†	885331.0	900111.1	22858 ug/L	22858 ppb	05:27:22
3	Sn 189.927†	19.1	23.8	4.0462 ug/L	4.0462 ppb	05:27:48
3	Ti 334.940†	1103289.2	1123663.4	1550.1 ug/L	1550.1 ppb	05:27:22
3	Tl 190.801†	-159.8	-118.3	-7.4715 ug/L	-7.4715 ppb	05:27:48
3	U 409.014†	-11583.3	-9010.0	-238.72 ug/L	-238.72 ppb	05:27:28
3	V 292.402†	5381.8	7083.6	31.547 ug/L	31.547 ppb	05:27:28
3	Zn 213.857†	61548.9	61729.6	449.06 ug/L	449.06 ppb	05:27:28
3	SiO2†	882799.1	897494.0	48776 ug/L	48776 ppb	05:28:06

Mean Data: 241322007|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1029339.3	99.024	%	0.6967				0.70%
Sc Radial	4790.9	97.6	%	0.69				0.71%
Y 371.029	997474.1	112.78	%	0.867				0.77%
Y RADIAL	6290.7	111.4	%	0.91				0.82%
Ag 328.068†	-2742.4	4.0271	ug/L	0.35592	4.0271	ppb	0.35592	8.84%
Al 396.153Radial†	23170.3	15300	ug/L	66.1	15300	ppb	66.1	0.43%
As 188.979†	-16.5	14.914	ug/L	1.2912	14.914	ppb	1.2912	8.66%
B 249.677†	445.3	2.3127	ug/L	0.96276	2.3127	ppb	0.96276	41.63%
Ba 233.527†	18925.4	123.37	ug/L	1.031	123.37	ppb	1.031	0.84%
Be 313.107†	-234.8	2.9684	ug/L	0.03008	2.9684	ppb	0.03008	1.01%
Ca 317.933Radial†	1558.0	2758.5	ug/L	10.34	2758.5	ppb	10.34	0.37%
Cd 226.502†	524.3	0.0015	ug/L	0.07042	0.0015	ppb	0.07042	>999.9%
Co 228.616†	579.2	5.6506	ug/L	0.28738	5.6506	ppb	0.28738	5.09%
Cr 267.716†	2338.4	21.973	ug/L	0.2983	21.973	ppb	0.2983	1.36%
Cu 324.752†	6760.3	20.391	ug/L	0.5707	20.391	ppb	0.5707	2.80%
Fe 238.204 Radial†	3789.8	45820	ug/L	293.7	45820	ppb	293.7	0.64%
K 766.490 Radial†	21945.3	3983.0	ug/L	42.59	3983.0	ppb	42.59	1.07%

Mg 279.077 IEC†	51.4	2262.3	ug/L	86.49	2262.3	ppb	86.49	3.82%
Mn 257.610†	1613692.4	1532.6	ug/L	3.46	1532.6	ppb	3.46	0.23%
Mo 202.031†	57.5	6.2992	ug/L	0.45450	6.2992	ppb	0.45450	7.22%
Na 589.592 Radial†	7878.9	2210.0	ug/L	14.31	2210.0	ppb	14.31	0.65%
Ni 231.604†	783.7	15.350	ug/L	0.3010	15.350	ppb	0.3010	1.96%
P 214.914†	1939.6	833.00	ug/L	7.382	833.00	ppb	7.382	0.89%
Pb 220.353†	565.1	52.714	ug/L	0.9552	52.714	ppb	0.9552	1.81%
S 181.975 Axial†	94.1	98.368	ug/L	4.8846	98.368	ppb	4.8846	4.97%
Sb 206.836†	24.9	2.3647	ug/L	1.29515	2.3647	ppb	1.29515	54.77%
Se 196.026†	-281.1	41.784	ug/L	0.8758	41.784	ppb	0.8758	2.10%
Si 251.611†	898638.4	22821	ug/L	52.9	22821	ppb	52.9	0.23%
Sn 189.927†	25.1	4.2282	ug/L	0.16895	4.2282	ppb	0.16895	4.00%
Sr 421.552†	3412.4	17.877	ug/L	0.1255	17.877	ppb	0.1255	0.70%
Ti 334.940†	1121957.9	1547.7	ug/L	3.14	1547.7	ppb	3.14	0.20%
Tl 190.801†	-108.8	-5.1987	ug/L	1.98058	-5.1987	ppb	1.98058	38.10%
U 409.014†	-8907.3	-236.10	ug/L	5.651	-236.10	ppb	5.651	2.39%
V 292.402†	7080.4	31.499	ug/L	0.0502	31.499	ppb	0.0502	0.16%
Zn 213.857†	61210.8	445.22	ug/L	4.130	445.22	ppb	4.130	0.93%
SiO2†	894202.2	48597	ug/L	280.8	48597	ppb	280.8	0.58%

Sequence No.: 65
Sample ID: 241322008|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 118
Date Collected: 12/5/2009 05:30:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322008|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.8	4773.8	97.2	%			05:32:11
1	Y RADIAL	7115.6	7115.6	126.0	%			05:32:11
1	Al 396.153Radial†	25737.3	26513.8	17507	ug/L	17507	ppb	05:32:11
1	Ca 317.933Radial†	1575.2	1602.2	2836.8	ug/L	2836.8	ppb	05:32:31
1	Fe 238.204 Radial†	6225.9	6392.2	77282	ug/L	77282	ppb	05:32:11
1	K 766.490 Radial†	21633.4	19679.7	3555.6	ug/L	3555.6	ppb	05:32:11
1	Mg 279.077 IEC†	41.8	40.5	1747.6	ug/L	1747.6	ppb	05:32:31
1	Na 589.592 Radial†	7046.8	8527.4	2391.9	ug/L	2391.9	ppb	05:32:11
1	Sr 421.552†	5017.1	5167.4	27.084	ug/L	27.084	ppb	05:32:11
1	Sc 361.383	1095309.3	1095309.3	105.37	%			05:33:29
1	Y 371.029	1177783.1	1177783.1	133.16	%			05:33:29
1	Ag 328.068†	-5042.3	-5259.4	4.1328	ug/L	4.1328	ppb	05:33:34
1	As 188.979†	-71.0	-30.8	30.036	ug/L	30.036	ppb	05:33:54
1	B 249.677†	131.4	590.8	0.8791	ug/L	0.8791	ppb	05:33:34
1	Ba 233.527†	26351.6	25008.6	163.65	ug/L	163.65	ppb	05:33:34
1	Be 313.107†	-16477.9	-10764.1	3.1405	ug/L	3.1405	ppb	05:33:34
1	Cd 226.502†	665.2	866.9	-0.1480	ug/L	-0.1480	ppb	05:33:54
1	Co 228.616†	762.9	810.3	5.3311	ug/L	5.3311	ppb	05:33:54
1	Cr 267.716†	4707.4	4379.7	40.905	ug/L	40.905	ppb	05:33:54
1	Cu 324.752†	15030.2	5326.7	18.167	ug/L	18.167	ppb	05:33:34
1	Mn 257.610†	3108125.6	2949133.4	2800.3	ug/L	2800.3	ppb	05:33:29
1	Mo 202.031†	463.7	410.9	27.286	ug/L	27.286	ppb	05:33:54
1	Ni 231.604†	1638.7	1423.2	27.877	ug/L	27.877	ppb	05:33:54
1	P 214.914†	1576.6	1231.1	492.13	ug/L	492.13	ppb	05:33:54
1	Pb 220.353†	1630.9	1623.3	150.01	ug/L	150.01	ppb	05:33:54
1	S 181.975 Axial†	149.9	82.1	85.044	ug/L	85.044	ppb	05:33:54
1	Sb 206.836†	74.1	35.7	0.9549	ug/L	0.9549	ppb	05:33:54
1	Se 196.026†	-483.1	-437.1	87.038	ug/L	87.038	ppb	05:33:54
1	Si 251.611†	1041883.2	988222.6	25096	ug/L	25096	ppb	05:33:29
1	Sn 189.927†	63.5	64.6	9.8860	ug/L	9.8860	ppb	05:33:54
1	Ti 334.940†	2523745.2	2396374.9	3305.5	ug/L	3305.5	ppb	05:33:29
1	Tl 190.801†	-226.0	-170.2	0.8644	ug/L	0.8644	ppb	05:33:54
1	U 409.014†	-13453.0	-9993.4	-268.17	ug/L	-268.17	ppb	05:33:29
1	V 292.402†	7972.5	9174.7	36.961	ug/L	36.961	ppb	05:33:34
1	Zn 213.857†	53174.4	49578.6	356.68	ug/L	356.68	ppb	05:33:34
1	SiO2†	1047888.0	993880.0	54014	ug/L	54014	ppb	05:35:03
2	Sc Radial	4733.0	4733.0	96.4	%			05:32:37
2	Y RADIAL	7048.6	7048.6	124.8	%			05:32:37
2	Al 396.153Radial†	25927.8	26939.8	17788	ug/L	17788	ppb	05:32:37
2	Ca 317.933Radial†	1591.2	1632.8	2890.9	ug/L	2890.9	ppb	05:32:57
2	Fe 238.204 Radial†	6251.4	6473.8	78270	ug/L	78270	ppb	05:32:37
2	K 766.490 Radial†	21690.0	19930.5	3600.9	ug/L	3600.9	ppb	05:32:37
2	Mg 279.077 IEC†	39.4	38.4	1651.7	ug/L	1651.7	ppb	05:32:57
2	Na 589.592 Radial†	7028.0	8570.4	2404.0	ug/L	2404.0	ppb	05:32:37
2	Sr 421.552†	4991.3	5185.1	27.177	ug/L	27.177	ppb	05:32:37
2	Sc 361.383	1090788.4	1090788.4	104.94	%			05:34:00
2	Y 371.029	1174365.9	1174365.9	132.78	%			05:34:00
2	Ag 328.068†	-5239.1	-5466.8	3.6325	ug/L	3.6325	ppb	05:34:05
2	As 188.979†	-64.2	-24.6	32.422	ug/L	32.422	ppb	05:34:25
2	B 249.677†	244.4	699.0	2.7936	ug/L	2.7936	ppb	05:34:05
2	Ba 233.527†	27169.4	25891.6	169.36	ug/L	169.36	ppb	05:34:05
2	Be 313.107†	-16734.4	-11073.4	3.1110	ug/L	3.1110	ppb	05:34:05
2	Cd 226.502†	678.2	882.0	-0.1159	ug/L	-0.1159	ppb	05:34:25
2	Co 228.616†	747.0	798.2	5.0492	ug/L	5.0492	ppb	05:34:25
2	Cr 267.716†	4683.3	4375.2	40.886	ug/L	40.886	ppb	05:34:25
2	Cu 324.752†	15384.7	5723.6	19.277	ug/L	19.277	ppb	05:34:05
2	Mn 257.610†	3136769.9	2988655.8	2837.9	ug/L	2837.9	ppb	05:34:00
2	Mo 202.031†	471.4	420.0	27.841	ug/L	27.841	ppb	05:34:25
2	Ni 231.604†	1609.3	1401.6	27.455	ug/L	27.455	ppb	05:34:25

2	P 214.914†	1558.3	1219.9	486.25 ug/L	486.25 ppb	05:34:25
2	Pb 220.353†	1623.0	1622.3	149.89 ug/L	149.89 ppb	05:34:25
2	S 181.975 Axial†	143.4	76.5	78.933 ug/L	78.933 ppb	05:34:25
2	Sb 206.836†	85.3	46.6	3.7670 ug/L	3.7670 ppb	05:34:25
2	Se 196.026†	-475.9	-432.1	92.821 ug/L	92.821 ppb	05:34:25
2	Si 251.611†	1051855.0	1001823.6	25441 ug/L	25441 ppb	05:34:00
2	Sn 189.927†	62.7	64.1	9.8321 ug/L	9.8321 ppb	05:34:25
2	Ti 334.940†	2539249.6	2421076.9	3339.6 ug/L	3339.6 ppb	05:34:00
2	Tl 190.801†	-225.6	-170.7	1.2191 ug/L	1.2191 ppb	05:34:25
2	U 409.014†	-13499.7	-10090.7	-270.81 ug/L	-270.81 ppb	05:34:00
2	V 292.402†	8230.1	9451.5	38.358 ug/L	38.358 ppb	05:34:05
2	Zn 213.857†	54902.2	51434.3	370.23 ug/L	370.23 ppb	05:34:05
2	SiO2†	1060029.1	1009571.8	54867 ug/L	54867 ppb	05:35:08
3	Sc Radial	4714.2	4714.2	96.0 %		05:33:02
3	Y RADIAL	7013.5	7013.5	124.2 %		05:33:02
3	Al 396.153Radial†	25670.7	26779.1	17682 ug/L	17682 ppb	05:33:02
3	Ca 317.933Radial†	1588.9	1636.9	2898.2 ug/L	2898.2 ppb	05:33:22
3	Fe 238.204 Radial†	6236.8	6484.5	78399 ug/L	78399 ppb	05:33:02
3	K 766.490 Radial†	21597.6	19923.8	3597.4 ug/L	3597.4 ppb	05:33:02
3	Mg 279.077 IEC†	42.1	41.3	1783.3 ug/L	1783.3 ppb	05:33:22
3	Na 589.592 Radial†	7090.2	8664.2	2430.3 ug/L	2430.3 ppb	05:33:02
3	Sr 421.552†	4934.7	5146.7	26.975 ug/L	26.975 ppb	05:33:02
3	Sc 361.383	1034582.5	1034582.5	99.529 %		05:34:31
3	Y 371.029	1131667.6	1131667.6	127.95 %		05:34:31
3	Ag 328.068†	-5170.7	-5669.2	2.8964 ug/L	2.8964 ppb	05:34:36
3	As 188.979†	-79.7	-43.5	28.454 ug/L	28.454 ppb	05:34:56
3	B 249.677†	294.4	761.9	3.9635 ug/L	3.9635 ppb	05:34:36
3	Ba 233.527†	26999.6	27127.5	177.31 ug/L	177.31 ppb	05:34:36
3	Be 313.107†	-16776.2	-11981.8	3.2771 ug/L	3.2771 ppb	05:34:36
3	Cd 226.502†	679.7	918.6	0.1918 ug/L	0.1918 ppb	05:34:56
3	Co 228.616†	753.6	843.5	5.3115 ug/L	5.3115 ppb	05:34:56
3	Cr 267.716†	4724.9	4659.5	43.452 ug/L	43.452 ppb	05:34:56
3	Cu 324.752†	15233.2	6367.8	21.005 ug/L	21.005 ppb	05:34:36
3	Mn 257.610†	3171190.8	3185636.4	3024.4 ug/L	3024.4 ppb	05:34:31
3	Mo 202.031†	460.9	433.8	28.583 ug/L	28.583 ppb	05:34:56
3	Ni 231.604†	1630.5	1506.3	29.505 ug/L	29.505 ppb	05:34:56
3	P 214.914†	1586.1	1328.5	534.40 ug/L	534.40 ppb	05:34:56
3	Pb 220.353†	1648.0	1731.4	160.10 ug/L	160.10 ppb	05:34:56
3	S 181.975 Axial†	149.0	89.6	93.074 ug/L	93.074 ppb	05:34:56
3	Sb 206.836†	87.9	53.7	4.9709 ug/L	4.9709 ppb	05:34:56
3	Se 196.026†	-489.8	-470.7	76.191 ug/L	76.191 ppb	05:34:56
3	Si 251.611†	1061439.3	1065909.8	27069 ug/L	27069 ppb	05:34:31
3	Sn 189.927†	63.6	68.3	10.390 ug/L	10.390 ppb	05:34:56
3	Ti 334.940†	2573354.1	2586804.8	3568.2 ug/L	3568.2 ppb	05:34:31
3	Tl 190.801†	-229.3	-186.1	0.3349 ug/L	0.3349 ppb	05:34:56
3	U 409.014†	-13533.5	-10823.7	-289.78 ug/L	-289.78 ppb	05:34:31
3	V 292.402†	8219.9	9867.3	40.443 ug/L	40.443 ppb	05:34:36
3	Zn 213.857†	54430.7	53803.0	387.60 ug/L	387.60 ppb	05:34:36
3	SiO2†	1055983.5	1060386.7	57629 ug/L	57629 ppb	05:35:14

Mean Data: 241322008|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1073560.1	103.28	%	3.255				3.15%
Sc Radial	4740.3	96.5	%	0.62				0.64%
Y 371.029	1161272.2	131.30	%	2.905				2.21%
Y RADIAL	7059.2	125.0	%	0.92				0.74%
Ag 328.068†	-5465.1	3.5539	ug/L	0.62194	3.5539	ppb	0.62194	17.50%
Al 396.153Radial†	26744.3	17659	ug/L	142.1	17659	ppb	142.1	0.80%
As 188.979†	-33.0	30.304	ug/L	1.9977	30.304	ppb	1.9977	6.59%
B 249.677†	683.9	2.5454	ug/L	1.55712	2.5454	ppb	1.55712	61.17%
Ba 233.527†	26009.2	170.10	ug/L	6.862	170.10	ppb	6.862	4.03%
Be 313.107†	-11273.1	3.1762	ug/L	0.08861	3.1762	ppb	0.08861	2.79%
Ca 317.933Radial†	1624.0	2875.3	ug/L	33.53	2875.3	ppb	33.53	1.17%
Cd 226.502†	889.2	-0.0241	ug/L	0.18761	-0.0241	ppb	0.18761	779.85%
Co 228.616†	817.3	5.2306	ug/L	0.15737	5.2306	ppb	0.15737	3.01%
Cr 267.716†	4471.5	41.748	ug/L	1.4764	41.748	ppb	1.4764	3.54%
Cu 324.752†	5806.0	19.483	ug/L	1.4298	19.483	ppb	1.4298	7.34%
Fe 238.204 Radial†	6450.2	77984	ug/L	610.7	77984	ppb	610.7	0.78%
K 766.490 Radial†	19844.7	3584.6	ug/L	25.19	3584.6	ppb	25.19	0.70%

Mg 279.077 IEC†	40.1	1727.5	ug/L	68.06	1727.5	ppb	68.06	3.94%
Mn 257.610†	3041141.9	2887.5	ug/L	120.01	2887.5	ppb	120.01	4.16%
Mo 202.031†	421.6	27.903	ug/L	0.6509	27.903	ppb	0.6509	2.33%
Na 589.592 Radial†	8587.3	2408.7	ug/L	19.63	2408.7	ppb	19.63	0.82%
Ni 231.604†	1443.7	28.279	ug/L	1.0824	28.279	ppb	1.0824	3.83%
P 214.914†	1259.8	504.26	ug/L	26.268	504.26	ppb	26.268	5.21%
Pb 220.353†	1659.0	153.34	ug/L	5.861	153.34	ppb	5.861	3.82%
S 181.975 Axial†	82.8	85.684	ug/L	7.0920	85.684	ppb	7.0920	8.28%
Sb 206.836†	45.3	3.2310	ug/L	2.06097	3.2310	ppb	2.06097	63.79%
Se 196.026†	-446.6	85.350	ug/L	8.4426	85.350	ppb	8.4426	9.89%
Si 251.611†	1018652.0	25869	ug/L	1053.6	25869	ppb	1053.6	4.07%
Sn 189.927†	65.7	10.036	ug/L	0.3077	10.036	ppb	0.3077	3.07%
Sr 421.552†	5166.4	27.079	ug/L	0.1008	27.079	ppb	0.1008	0.37%
Ti 334.940†	2468085.5	3404.4	ug/L	142.83	3404.4	ppb	142.83	4.20%
Tl 190.801†	-175.7	0.8061	ug/L	0.44495	0.8061	ppb	0.44495	55.19%
U 409.014†	-10302.6	-276.25	ug/L	11.789	-276.25	ppb	11.789	4.27%
V 292.402†	9497.8	38.587	ug/L	1.7522	38.587	ppb	1.7522	4.54%
Zn 213.857†	51605.3	371.50	ug/L	15.500	371.50	ppb	15.500	4.17%
SiO2†	1021279.5	55503	ug/L	1889.4	55503	ppb	1889.4	3.40%

Sequence No.: 66
Sample ID: 241322009|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 119
Date Collected: 12/5/2009 05:37:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322009|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4742.5	4742.5	96.6	%			05:39:20
1	Y RADIAL	6689.0	6689.0	118.4	%			05:39:20
1	Al 396.153Radial†	50300.6	52117.8	34414	ug/L	34414	ppb	05:39:20
1	Ca 317.933Radial†	1790.0	1835.3	3249.4	ug/L	3249.4	ppb	05:39:40
1	Fe 238.204 Radial†	4570.2	4720.3	57069	ug/L	57069	ppb	05:39:20
1	K 766.490 Radial†	30247.1	28744.0	5229.0	ug/L	5229.0	ppb	05:39:20
1	Mg 279.077 IEC†	57.1	56.6	2485.5	ug/L	2485.5	ppb	05:39:40
1	Na 589.592 Radial†	9860.6	11488.2	3222.4	ug/L	3222.4	ppb	05:39:20
1	Sr 421.552†	4570.8	4739.4	24.835	ug/L	24.835	ppb	05:39:20
1	Sc 361.383	1020231.1	1020231.1	98.148	%			05:40:37
1	Y 371.029	1060877.8	1060877.8	119.95	%			05:40:37
1	Ag 328.068†	-3195.0	-3729.4	3.7737	ug/L	3.7737	ppb	05:40:37
1	As 188.979†	-28.3	7.8	25.022	ug/L	25.022	ppb	05:40:57
1	B 249.677†	-13.8	452.0	0.9500	ug/L	0.9500	ppb	05:40:37
1	Ba 233.527†	25248.0	25724.5	167.49	ug/L	167.49	ppb	05:40:37
1	Be 313.107†	4732.4	9695.6	6.2512	ug/L	6.2512	ppb	05:40:37
1	Cd 226.502†	407.3	650.6	-0.0198	ug/L	-0.0198	ppb	05:40:57
1	Co 228.616†	425.8	520.2	4.3378	ug/L	4.3378	ppb	05:40:57
1	Cr 267.716†	2419.5	2377.3	22.559	ug/L	22.559	ppb	05:40:57
1	Cu 324.752†	19201.8	10626.7	31.290	ug/L	31.290	ppb	05:40:37
1	Mn 257.610†	1212739.2	1235047.5	1175.2	ug/L	1175.2	ppb	05:40:37
1	Mo 202.031†	98.1	70.8	7.8033	ug/L	7.8033	ppb	05:40:57
1	Ni 231.604†	1063.8	951.9	18.646	ug/L	18.646	ppb	05:40:57
1	P 214.914†	2710.1	2496.1	1077.6	ug/L	1077.6	ppb	05:40:57
1	Pb 220.353†	497.0	581.9	57.651	ug/L	57.651	ppb	05:40:57
1	S 181.975 Axial†	158.1	101.0	102.03	ug/L	102.03	ppb	05:40:57
1	Sb 206.836†	54.3	20.7	0.6502	ug/L	0.6502	ppb	05:40:57
1	Se 196.026†	-364.3	-349.8	52.042	ug/L	52.042	ppb	05:40:57
1	Si 251.611†	1188329.9	1210196.7	30733	ug/L	30733	ppb	05:40:37
1	Sn 189.927†	0.6	5.0	1.7758	ug/L	1.7758	ppb	05:40:57
1	Ti 334.940†	1167476.2	1190767.6	1642.7	ug/L	1642.7	ppb	05:40:37
1	Tl 190.801†	-144.6	-103.1	-4.6906	ug/L	-4.6906	ppb	05:40:57
1	U 409.014†	-13678.4	-11162.6	-295.82	ug/L	-295.82	ppb	05:40:37
1	V 292.402†	6949.9	8689.5	38.797	ug/L	38.797	ppb	05:40:37
1	Zn 213.857†	55897.3	56066.6	406.30	ug/L	406.30	ppb	05:40:37
1	SiO2†	1202723.4	1224820.4	66565	ug/L	66565	ppb	05:41:55
2	Sc Radial	4705.6	4705.6	95.8	%			05:39:45
2	Y RADIAL	6646.3	6646.3	117.7	%			05:39:45
2	Al 396.153Radial†	49527.5	51719.6	34151	ug/L	34151	ppb	05:39:45
2	Ca 317.933Radial†	1799.8	1860.0	3293.2	ug/L	3293.2	ppb	05:40:05
2	Fe 238.204 Radial†	4519.1	4704.2	56874	ug/L	56874	ppb	05:39:45
2	K 766.490 Radial†	29770.6	28492.4	5183.1	ug/L	5183.1	ppb	05:39:45
2	Mg 279.077 IEC†	60.2	60.4	2652.2	ug/L	2652.2	ppb	05:40:05
2	Na 589.592 Radial†	9634.9	11332.8	3178.8	ug/L	3178.8	ppb	05:39:45
2	Sr 421.552†	4540.1	4744.4	24.861	ug/L	24.861	ppb	05:39:45
2	Sc 361.383	1018937.7	1018937.7	98.023	%			05:41:03
2	Y 371.029	1058304.5	1058304.5	119.65	%			05:41:03
2	Ag 328.068†	-3177.3	-3715.4	3.7629	ug/L	3.7629	ppb	05:41:03
2	As 188.979†	-26.8	9.3	25.457	ug/L	25.457	ppb	05:41:23
2	B 249.677†	-39.8	425.5	0.4758	ug/L	0.4758	ppb	05:41:03
2	Ba 233.527†	25133.2	25640.0	166.94	ug/L	166.94	ppb	05:41:03
2	Be 313.107†	4813.5	9784.5	6.2799	ug/L	6.2799	ppb	05:41:03
2	Cd 226.502†	414.0	658.0	0.0642	ug/L	0.0642	ppb	05:41:23
2	Co 228.616†	410.2	504.8	4.0826	ug/L	4.0826	ppb	05:41:23
2	Cr 267.716†	2421.6	2382.7	22.602	ug/L	22.602	ppb	05:41:23
2	Cu 324.752†	19147.8	10596.4	31.199	ug/L	31.199	ppb	05:41:03
2	Mn 257.610†	1211255.6	1235102.5	1175.2	ug/L	1175.2	ppb	05:41:03
2	Mo 202.031†	74.4	46.7	6.5103	ug/L	6.5103	ppb	05:41:23
2	Ni 231.604†	1030.1	918.9	18.000	ug/L	18.000	ppb	05:41:23

2	P 214.914†	2695.8	2485.0	1072.8	ug/L	1072.8 ppb	05:41:23
2	Pb 220.353†	506.9	592.7	58.618	ug/L	58.618 ppb	05:41:23
2	S 181.975 Axial†	161.2	104.3	105.67	ug/L	105.67 ppb	05:41:23
2	Sb 206.836†	52.5	18.9	0.1706	ug/L	0.1706 ppb	05:41:23
2	Se 196.026†	-363.9	-349.9	51.267	ug/L	51.267 ppb	05:41:23
2	Si 251.611†	1187588.8	1210977.5	30753	ug/L	30753 ppb	05:41:03
2	Sn 189.927†	9.1	13.6	2.9197	ug/L	2.9197 ppb	05:41:23
2	Ti 334.940†	1166334.1	1191112.4	1643.2	ug/L	1643.2 ppb	05:41:03
2	Tl 190.801†	-156.6	-115.5	-7.6969	ug/L	-7.6969 ppb	05:41:23
2	U 409.014†	-13591.1	-11091.2	-293.95	ug/L	-293.95 ppb	05:41:03
2	V 292.402†	6862.7	8609.6	38.358	ug/L	38.358 ppb	05:41:03
2	Zn 213.857†	55886.2	56127.6	406.77	ug/L	406.77 ppb	05:41:03
2	SiO2†	1200548.2	1224156.8	66529	ug/L	66529 ppb	05:42:01
3	Sc Radial	4728.1	4728.1	96.3	%		05:40:10
3	Y RADIAL	6703.3	6703.3	118.7	%		05:40:10
3	Al 396.153Radial†	50942.8	52943.2	34959	ug/L	34959 ppb	05:40:10
3	Ca 317.933Radial†	1780.7	1831.2	3242.2	ug/L	3242.2 ppb	05:40:30
3	Fe 238.204 Radial†	4624.4	4791.0	57924	ug/L	57924 ppb	05:40:10
3	K 766.490 Radial†	30354.7	28951.1	5266.8	ug/L	5266.8 ppb	05:40:10
3	Mg 279.077 IEC†	56.2	55.8	2448.8	ug/L	2448.8 ppb	05:40:30
3	Na 589.592 Radial†	9796.6	11452.8	3212.5	ug/L	3212.5 ppb	05:40:10
3	Sr 421.552†	4644.9	4830.7	25.314	ug/L	25.314 ppb	05:40:10
3	Sc 361.383	1015146.5	1015146.5	97.659	%		05:41:29
3	Y 371.029	1055143.0	1055143.0	119.30	%		05:41:29
3	Ag 328.068†	-3296.8	-3849.9	3.5685	ug/L	3.5685 ppb	05:41:29
3	As 188.979†	-30.5	5.4	24.407	ug/L	24.407 ppb	05:41:49
3	B 249.677†	99.0	567.5	3.0196	ug/L	3.0196 ppb	05:41:29
3	Ba 233.527†	24987.8	25586.9	166.64	ug/L	166.64 ppb	05:41:29
3	Be 313.107†	4759.2	9747.3	6.2667	ug/L	6.2667 ppb	05:41:29
3	Cd 226.502†	401.6	646.9	-0.1381	ug/L	-0.1381 ppb	05:41:49
3	Co 228.616†	418.9	515.2	4.2427	ug/L	4.2427 ppb	05:41:49
3	Cr 267.716†	2427.5	2397.9	22.759	ug/L	22.759 ppb	05:41:49
3	Cu 324.752†	19010.4	10528.7	31.072	ug/L	31.072 ppb	05:41:29
3	Mn 257.610†	1206614.3	1234964.7	1175.2	ug/L	1175.2 ppb	05:41:29
3	Mo 202.031†	85.4	58.2	7.1978	ug/L	7.1978 ppb	05:41:49
3	Ni 231.604†	1012.6	904.9	17.725	ug/L	17.725 ppb	05:41:49
3	P 214.914†	2705.8	2505.5	1081.4	ug/L	1081.4 ppb	05:41:49
3	Pb 220.353†	526.5	614.7	60.776	ug/L	60.776 ppb	05:41:49
3	S 181.975 Axial†	158.1	101.8	102.81	ug/L	102.81 ppb	05:41:49
3	Sb 206.836†	45.9	12.4	-1.5440	ug/L	-1.5440 ppb	05:41:49
3	Se 196.026†	-361.4	-348.7	55.615	ug/L	55.615 ppb	05:41:49
3	Si 251.611†	1181405.0	1209170.0	30707	ug/L	30707 ppb	05:41:29
3	Sn 189.927†	9.7	14.3	3.0238	ug/L	3.0238 ppb	05:41:49
3	Ti 334.940†	1161426.6	1190530.8	1642.4	ug/L	1642.4 ppb	05:41:29
3	Tl 190.801†	-153.6	-113.0	-7.0719	ug/L	-7.0719 ppb	05:41:49
3	U 409.014†	-13662.9	-11216.5	-297.32	ug/L	-297.32 ppb	05:41:29
3	V 292.402†	6893.9	8667.6	38.529	ug/L	38.529 ppb	05:41:29
3	Zn 213.857†	55657.9	56106.6	406.52	ug/L	406.52 ppb	05:41:29
3	SiO2†	1184804.2	1212609.3	65901	ug/L	65901 ppb	05:42:07

Mean Data: 241322009|925182|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1018105.1	97.943	%	0.2542				0.26%
Sc Radial	4725.4	96.2	%	0.38				0.39%
Y 371.029	1058108.4	119.63	%	0.325				0.27%
Y RADIAL	6679.5	118.3	%	0.53				0.44%
Ag 328.068†	-3764.9	3.7017	ug/L	0.11549	3.7017	ppb	0.11549	3.12%
Al 396.153Radial†	52260.2	34508	ug/L	412.1	34508	ppb	412.1	1.19%
As 188.979†	7.5	24.962	ug/L	0.5276	24.962	ppb	0.5276	2.11%
B 249.677†	481.7	1.4818	ug/L	1.35272	1.4818	ppb	1.35272	91.29%
Ba 233.527†	25650.5	167.02	ug/L	0.432	167.02	ppb	0.432	0.26%
Be 313.107†	9742.5	6.2659	ug/L	0.01435	6.2659	ppb	0.01435	0.23%
Ca 317.933Radial†	1842.2	3261.6	ug/L	27.59	3261.6	ppb	27.59	0.85%
Cd 226.502†	651.8	-0.0312	ug/L	0.10164	-0.0312	ppb	0.10164	325.47%
Co 228.616†	513.4	4.2210	ug/L	0.12896	4.2210	ppb	0.12896	3.06%
Cr 267.716†	2386.0	22.640	ug/L	0.1053	22.640	ppb	0.1053	0.47%
Cu 324.752†	10583.9	31.187	ug/L	0.1095	31.187	ppb	0.1095	0.35%
Fe 238.204 Radial†	4738.5	57289	ug/L	558.2	57289	ppb	558.2	0.97%
K 766.490 Radial†	28729.2	5226.3	ug/L	41.93	5226.3	ppb	41.93	0.80%

Mg 279.077 IEC†	57.6	2528.8	ug/L	108.40	2528.8	ppb	108.40	4.29%
Mn 257.610†	1235038.2	1175.2	ug/L	0.02	1175.2	ppb	0.02	0.00%
Mo 202.031†	58.5	7.1705	ug/L	0.64689	7.1705	ppb	0.64689	9.02%
Na 589.592 Radial†	11424.6	3204.6	ug/L	22.85	3204.6	ppb	22.85	0.71%
Ni 231.604†	925.3	18.124	ug/L	0.4728	18.124	ppb	0.4728	2.61%
P 214.914†	2495.6	1077.3	ug/L	4.33	1077.3	ppb	4.33	0.40%
Pb 220.353†	596.4	59.015	ug/L	1.6000	59.015	ppb	1.6000	2.71%
S 181.975 Axial†	102.4	103.50	ug/L	1.917	103.50	ppb	1.917	1.85%
Sb 206.836†	17.3	-0.2411	ug/L	1.15355	-0.2411	ppb	1.15355	478.51%
Se 196.026†	-349.4	52.975	ug/L	2.3191	52.975	ppb	2.3191	4.38%
Si 251.611†	1210114.8	30731	ug/L	23.0	30731	ppb	23.0	0.07%
Sn 189.927†	11.0	2.5731	ug/L	0.69244	2.5731	ppb	0.69244	26.91%
Sr 421.552†	4771.5	25.003	ug/L	0.2694	25.003	ppb	0.2694	1.08%
Ti 334.940†	1190803.6	1642.7	ug/L	0.40	1642.7	ppb	0.40	0.02%
Tl 190.801†	-110.6	-6.4865	ug/L	1.58635	-6.4865	ppb	1.58635	24.46%
U 409.014†	-11156.8	-295.70	ug/L	1.689	-295.70	ppb	1.689	0.57%
V 292.402†	8655.6	38.561	ug/L	0.2213	38.561	ppb	0.2213	0.57%
Zn 213.857†	56100.2	406.53	ug/L	0.233	406.53	ppb	0.233	0.06%
SiO2†	1220528.8	66332	ug/L	373.2	66332	ppb	373.2	0.56%

Sequence No.: 67
Sample ID: 241322010|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 120
Date Collected: 12/5/2009 05:44:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322010|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4728.9	4728.9	96.3	%			05:46:13
1	Y RADIAL	6643.7	6643.7	117.6	%			05:46:13
1	Al 396.153Radial†	31768.8	33027.6	21808	ug/L	21808	ppb	05:46:13
1	Ca 317.933Radial†	817.6	831.1	1471.4	ug/L	1471.4	ppb	05:46:33
1	Fe 238.204 Radial†	4502.7	4663.9	56387	ug/L	56387	ppb	05:46:13
1	K 766.490 Radial†	29069.1	27611.4	5020.0	ug/L	5020.0	ppb	05:46:13
1	Mg 279.077 IEC†	33.1	31.9	1380.1	ug/L	1380.1	ppb	05:46:33
1	Na 589.592 Radial†	12193.5	13939.8	3910.1	ug/L	3910.1	ppb	05:46:13
1	Sr 421.552†	2760.1	2873.1	15.060	ug/L	15.060	ppb	05:46:13
1	Sc 361.383	1019388.4	1019388.4	98.067	%			05:47:30
1	Y 371.029	1053986.7	1053986.7	119.17	%			05:47:30
1	Ag 328.068†	-3744.9	-4292.8	1.2488	ug/L	1.2488	ppb	05:47:30
1	As 188.979†	-52.7	-17.2	17.187	ug/L	17.187	ppb	05:47:50
1	B 249.677†	-87.5	376.9	-0.3761	ug/L	-0.3761	ppb	05:47:30
1	Ba 233.527†	16016.2	16331.9	107.11	ug/L	107.11	ppb	05:47:30
1	Be 313.107†	-460.3	4404.5	4.6112	ug/L	4.6112	ppb	05:47:30
1	Cd 226.502†	402.5	646.1	0.0120	ug/L	0.0120	ppb	05:47:50
1	Co 228.616†	354.4	447.7	3.1118	ug/L	3.1118	ppb	05:47:50
1	Cr 267.716†	5065.7	5077.8	46.767	ug/L	46.767	ppb	05:47:50
1	Cu 324.752†	14140.8	5482.1	17.516	ug/L	17.516	ppb	05:47:30
1	Mn 257.610†	1276432.0	1301017.3	1237.6	ug/L	1237.6	ppb	05:47:30
1	Mo 202.031†	129.3	102.6	9.4431	ug/L	9.4431	ppb	05:47:50
1	Ni 231.604†	1298.7	1192.4	23.358	ug/L	23.358	ppb	05:47:50
1	P 214.914†	1985.2	1759.2	746.62	ug/L	746.62	ppb	05:47:50
1	Pb 220.353†	426.7	510.6	48.203	ug/L	48.203	ppb	05:47:50
1	S 181.975 Axial†	125.4	67.7	68.693	ug/L	68.693	ppb	05:47:50
1	Sb 206.836†	67.3	34.0	4.0389	ug/L	4.0389	ppb	05:47:50
1	Se 196.026†	-361.6	-347.3	50.771	ug/L	50.771	ppb	05:47:50
1	Si 251.611†	1167703.7	1190164.7	30224	ug/L	30224	ppb	05:47:30
1	Sn 189.927†	64.5	70.1	10.189	ug/L	10.189	ppb	05:47:50
1	Ti 334.940†	1170008.0	1194332.5	1647.5	ug/L	1647.5	ppb	05:47:30
1	Tl 190.801†	-138.2	-96.7	-3.0479	ug/L	-3.0479	ppb	05:47:50
1	U 409.014†	-10645.2	-8081.0	-216.11	ug/L	-216.11	ppb	05:47:30
1	V 292.402†	5537.2	7254.9	30.827	ug/L	30.827	ppb	05:47:30
1	Zn 213.857†	51997.1	52136.5	377.51	ug/L	377.51	ppb	05:47:30
1	SiO2†	1184713.3	1207468.2	65622	ug/L	65622	ppb	05:48:48
2	Sc Radial	4684.9	4684.9	95.4	%			05:46:38
2	Y RADIAL	6578.6	6578.6	116.5	%			05:46:38
2	Al 396.153Radial†	31571.1	33130.2	21876	ug/L	21876	ppb	05:46:38
2	Ca 317.933Radial†	803.5	824.2	1459.3	ug/L	1459.3	ppb	05:46:58
2	Fe 238.204 Radial†	4470.2	4673.8	56506	ug/L	56506	ppb	05:46:38
2	K 766.490 Radial†	28932.2	27751.4	5045.7	ug/L	5045.7	ppb	05:46:38
2	Mg 279.077 IEC†	33.7	32.8	1419.5	ug/L	1419.5	ppb	05:46:58
2	Na 589.592 Radial†	11996.7	13852.5	3885.6	ug/L	3885.6	ppb	05:46:38
2	Sr 421.552†	2722.3	2860.4	14.993	ug/L	14.993	ppb	05:46:38
2	Sc 361.383	1032889.5	1032889.5	99.366	%			05:47:56
2	Y 371.029	1062380.1	1062380.1	120.12	%			05:47:56
2	Ag 328.068†	-3567.0	-4063.9	2.1903	ug/L	2.1903	ppb	05:47:56
2	As 188.979†	-47.3	-11.0	18.893	ug/L	18.893	ppb	05:48:16
2	B 249.677†	-18.1	447.9	0.9496	ug/L	0.9496	ppb	05:47:56
2	Ba 233.527†	15944.3	16046.1	105.27	ug/L	105.27	ppb	05:47:56
2	Be 313.107†	-445.6	4425.4	4.5599	ug/L	4.5599	ppb	05:47:56
2	Cd 226.502†	392.5	630.7	-0.1346	ug/L	-0.1346	ppb	05:48:16
2	Co 228.616†	356.9	445.5	3.1352	ug/L	3.1352	ppb	05:48:16
2	Cr 267.716†	5069.5	5014.1	46.195	ug/L	46.195	ppb	05:48:16
2	Cu 324.752†	14012.8	5164.7	16.675	ug/L	16.675	ppb	05:47:56
2	Mn 257.610†	1272667.9	1280215.9	1217.9	ug/L	1217.9	ppb	05:47:56
2	Mo 202.031†	131.2	102.8	9.4625	ug/L	9.4625	ppb	05:48:16
2	Ni 231.604†	1304.3	1180.7	23.130	ug/L	23.130	ppb	05:48:16

2	P 214.914†	1996.3	1743.9	739.81 ug/L	739.81 ppb	05:48:16
2	Pb 220.353†	450.7	529.2	49.949 ug/L	49.949 ppb	05:48:16
2	S 181.975 Axial†	131.5	72.3	73.542 ug/L	73.542 ppb	05:48:16
2	Sb 206.836†	60.4	26.2	2.0550 ug/L	2.0550 ppb	05:48:16
2	Se 196.026†	-363.9	-344.9	52.300 ug/L	52.300 ppb	05:48:16
2	Si 251.611†	1163413.6	1170283.1	29719 ug/L	29719 ppb	05:47:56
2	Sn 189.927†	55.1	59.8	8.8323 ug/L	8.8323 ppb	05:48:16
2	Ti 334.940†	1164336.9	1173030.5	1618.1 ug/L	1618.1 ppb	05:47:56
2	Tl 190.801†	-148.0	-104.7	-5.3227 ug/L	-5.3227 ppb	05:48:16
2	U 409.014†	-10694.7	-7989.0	-213.74 ug/L	-213.74 ppb	05:47:56
2	V 292.402†	5509.7	7153.4	30.266 ug/L	30.266 ppb	05:47:56
2	Zn 213.857†	51935.6	51381.5	371.96 ug/L	371.96 ppb	05:47:56
2	SiO2†	1187639.5	1194622.4	64924 ug/L	64924 ppb	05:48:54
3	Sc Radial	4712.5	4712.5	96.0 %		05:47:03
3	Y RADIAL	6594.7	6594.7	116.8 %		05:47:03
3	Al 396.153Radial†	31566.2	32930.8	21745 ug/L	21745 ppb	05:47:03
3	Ca 317.933Radial†	805.2	821.0	1453.7 ug/L	1453.7 ppb	05:47:23
3	Fe 238.204 Radial†	4456.2	4631.7	55998 ug/L	55998 ppb	05:47:03
3	K 766.490 Radial†	28796.5	27431.8	4987.2 ug/L	4987.2 ppb	05:47:03
3	Mg 279.077 IEC†	36.8	35.9	1557.8 ug/L	1557.8 ppb	05:47:23
3	Na 589.592 Radial†	11899.4	13677.3	3836.5 ug/L	3836.5 ppb	05:47:03
3	Sr 421.552†	2697.1	2817.4	14.768 ug/L	14.768 ppb	05:47:03
3	Sc 361.383	1019058.0	1019058.0	98.035 %		05:48:22
3	Y 371.029	1051055.3	1051055.3	118.83 %		05:48:22
3	Ag 328.068†	-3632.3	-4179.1	1.5813 ug/L	1.5813 ppb	05:48:22
3	As 188.979†	-42.5	-6.8	20.375 ug/L	20.375 ppb	05:48:42
3	B 249.677†	-16.6	449.1	1.0412 ug/L	1.0412 ppb	05:48:22
3	Ba 233.527†	15932.4	16251.8	106.58 ug/L	106.58 ppb	05:48:22
3	Be 313.107†	-520.5	4343.0	4.5931 ug/L	4.5931 ppb	05:48:22
3	Cd 226.502†	393.6	637.1	-0.0271 ug/L	-0.0271 ppb	05:48:42
3	Co 228.616†	338.9	432.0	2.8568 ug/L	2.8568 ppb	05:48:42
3	Cr 267.716†	5104.4	5119.0	47.132 ug/L	47.132 ppb	05:48:42
3	Cu 324.752†	14133.2	5478.9	17.488 ug/L	17.488 ppb	05:48:22
3	Mn 257.610†	1276458.5	1301466.4	1238.0 ug/L	1238.0 ppb	05:48:22
3	Mo 202.031†	127.9	101.2	9.3451 ug/L	9.3451 ppb	05:48:42
3	Ni 231.604†	1328.1	1222.8	23.954 ug/L	23.954 ppb	05:48:42
3	P 214.914†	2002.1	1777.1	754.90 ug/L	754.90 ppb	05:48:42
3	Pb 220.353†	446.5	531.0	50.135 ug/L	50.135 ppb	05:48:42
3	S 181.975 Axial†	124.1	66.5	67.334 ug/L	67.334 ppb	05:48:42
3	Sb 206.836†	54.7	21.2	0.6557 ug/L	0.6557 ppb	05:48:42
3	Se 196.026†	-359.5	-345.4	50.237 ug/L	50.237 ppb	05:48:42
3	Si 251.611†	1167609.4	1190454.7	30232 ug/L	30232 ppb	05:48:22
3	Sn 189.927†	67.4	73.1	10.578 ug/L	10.578 ppb	05:48:42
3	Ti 334.940†	1170028.2	1194740.0	1648.0 ug/L	1648.0 ppb	05:48:22
3	Tl 190.801†	-139.8	-98.3	-3.4399 ug/L	-3.4399 ppb	05:48:42
3	U 409.014†	-10892.2	-8336.6	-222.67 ug/L	-222.67 ppb	05:48:22
3	V 292.402†	5518.7	7237.8	30.777 ug/L	30.777 ppb	05:48:22
3	Zn 213.857†	52137.9	52297.4	378.72 ug/L	378.72 ppb	05:48:22
3	SiO2†	1187659.0	1210864.8	65807 ug/L	65807 ppb	05:49:00

Mean Data: 241322010|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1023778.6	98.489	%	0.7592				0.77%
Sc Radial	4708.7	95.9	%	0.45				0.47%
Y 371.029	1055807.4	119.37	%	0.665				0.56%
Y RADIAL	6605.7	117.0	%	0.60				0.51%
Ag 328.068†	-4178.6	1.6734	ug/L	0.47746	1.6734	ppb	0.47746	28.53%
Al 396.153Radial†	33029.5	21810	ug/L	65.8	21810	ppb	65.8	0.30%
As 188.979†	-11.6	18.818	ug/L	1.5958	18.818	ppb	1.5958	8.48%
B 249.677†	424.6	0.5383	ug/L	0.79316	0.5383	ppb	0.79316	147.36%
Ba 233.527†	16209.9	106.32	ug/L	0.943	106.32	ppb	0.943	0.89%
Be 313.107†	4391.0	4.5881	ug/L	0.02598	4.5881	ppb	0.02598	0.57%
Ca 317.933Radial†	825.4	1461.5	ug/L	9.06	1461.5	ppb	9.06	0.62%
Cd 226.502†	637.9	-0.0499	ug/L	0.07588	-0.0499	ppb	0.07588	152.06%
Co 228.616†	441.8	3.0346	ug/L	0.15446	3.0346	ppb	0.15446	5.09%
Cr 267.716†	5070.3	46.698	ug/L	0.4724	46.698	ppb	0.4724	1.01%
Cu 324.752†	5375.2	17.227	ug/L	0.4778	17.227	ppb	0.4778	2.77%
Fe 238.204 Radial†	4656.4	56297	ug/L	265.8	56297	ppb	265.8	0.47%
K 766.490 Radial†	27598.2	5017.6	ug/L	29.32	5017.6	ppb	29.32	0.58%

Mg 279.077 IEC†	33.5	1452.5	ug/L	93.34	1452.5	ppb	93.34	6.43%
Mn 257.610†	1294233.2	1231.2	ug/L	11.48	1231.2	ppb	11.48	0.93%
Mo 202.031†	102.2	9.4169	ug/L	0.06293	9.4169	ppb	0.06293	0.67%
Na 589.592 Radial†	13823.2	3877.4	ug/L	37.50	3877.4	ppb	37.50	0.97%
Ni 231.604†	1198.6	23.481	ug/L	0.4255	23.481	ppb	0.4255	1.81%
P 214.914†	1760.1	747.11	ug/L	7.558	747.11	ppb	7.558	1.01%
Pb 220.353†	523.6	49.429	ug/L	1.0657	49.429	ppb	1.0657	2.16%
S 181.975 Axial†	68.8	69.856	ug/L	3.2635	69.856	ppb	3.2635	4.67%
Sb 206.836†	27.1	2.2498	ug/L	1.69998	2.2498	ppb	1.69998	75.56%
Se 196.026†	-345.9	51.103	ug/L	1.0705	51.103	ppb	1.0705	2.09%
Si 251.611†	1183634.2	30058	ug/L	293.7	30058	ppb	293.7	0.98%
Sn 189.927†	67.7	9.8667	ug/L	0.91668	9.8667	ppb	0.91668	9.29%
Sr 421.552†	2850.3	14.940	ug/L	0.1530	14.940	ppb	0.1530	1.02%
Ti 334.940†	1187367.6	1637.9	ug/L	17.13	1637.9	ppb	17.13	1.05%
Tl 190.801†	-99.9	-3.9368	ug/L	1.21610	-3.9368	ppb	1.21610	30.89%
U 409.014†	-8135.5	-217.51	ug/L	4.623	-217.51	ppb	4.623	2.13%
V 292.402†	7215.4	30.623	ug/L	0.3106	30.623	ppb	0.3106	1.01%
Zn 213.857†	51938.5	376.06	ug/L	3.609	376.06	ppb	3.609	0.96%
SiO2†	1204318.4	65451	ug/L	465.6	65451	ppb	465.6	0.71%

Sequence No.: 68
Sample ID: 241322011|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 121
Date Collected: 12/5/2009 05:51:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322011|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4707.5	4707.5	95.9	%			05:53:06
1	Y RADIAL	5999.0	5999.0	106.2	%			05:53:06
1	Al 396.153Radial†	19822.8	20718.1	13680	ug/L	13680	ppb	05:53:06
1	Ca 317.933Radial†	2918.7	3026.2	5358.0	ug/L	5358.0	ppb	05:53:26
1	Fe 238.204 Radial†	3954.4	4113.3	49731	ug/L	49731	ppb	05:53:06
1	K 766.490 Radial†	21321.2	19667.5	3565.3	ug/L	3565.3	ppb	05:53:06
1	Mg 279.077 IEC†	64.8	65.1	2869.3	ug/L	2869.3	ppb	05:53:26
1	Na 589.592 Radial†	4187.8	5647.6	1584.1	ug/L	1584.1	ppb	05:53:06
1	Sr 421.552†	4864.3	5080.7	26.606	ug/L	26.606	ppb	05:53:06
1	Sc 361.383	1034376.5	1034376.5	99.509	%			05:54:24
1	Y 371.029	974393.5	974393.5	110.17	%			05:54:24
1	Ag 328.068†	-3259.5	-3749.6	1.1837	ug/L	1.1837	ppb	05:54:29
1	As 188.979†	-65.2	-28.9	14.740	ug/L	14.740	ppb	05:54:49
1	B 249.677†	-11.5	454.6	1.9603	ug/L	1.9603	ppb	05:54:29
1	Ba 233.527†	32532.8	32693.4	211.98	ug/L	211.98	ppb	05:54:29
1	Be 313.107†	-11245.9	-6427.5	1.7637	ug/L	1.7637	ppb	05:54:29
1	Cd 226.502†	345.6	583.0	0.1264	ug/L	0.1264	ppb	05:54:49
1	Co 228.616†	702.2	792.0	8.3563	ug/L	8.3563	ppb	05:54:49
1	Cr 267.716†	3156.3	3084.1	28.722	ug/L	28.722	ppb	05:54:49
1	Cu 324.752†	14844.3	5980.1	18.507	ug/L	18.507	ppb	05:54:29
1	Mn 257.610†	1806076.0	1814416.3	1723.1	ug/L	1723.1	ppb	05:54:24
1	Mo 202.031†	119.5	90.9	8.3490	ug/L	8.3490	ppb	05:54:49
1	Ni 231.604†	1255.5	1129.7	22.127	ug/L	22.127	ppb	05:54:49
1	P 214.914†	2612.3	2360.1	1017.6	ug/L	1017.6	ppb	05:54:49
1	Pb 220.353†	427.8	505.5	46.440	ug/L	46.440	ppb	05:54:49
1	S 181.975 Axial†	141.1	81.6	85.275	ug/L	85.275	ppb	05:54:49
1	Sb 206.836†	62.4	28.1	2.1102	ug/L	2.1102	ppb	05:54:49
1	Se 196.026†	-311.6	-291.7	51.304	ug/L	51.304	ppb	05:54:49
1	Si 251.611†	963900.6	968101.9	24585	ug/L	24585	ppb	05:54:24
1	Sn 189.927†	-15.2	-10.9	-0.2190	ug/L	-0.2190	ppb	05:54:49
1	Ti 334.940†	1381694.1	1389776.2	1917.2	ug/L	1917.2	ppb	05:54:24
1	Tl 190.801†	-157.9	-114.4	-2.6748	ug/L	-2.6748	ppb	05:54:49
1	U 409.014†	-8374.3	-5641.7	-152.17	ug/L	-152.17	ppb	05:54:29
1	V 292.402†	6109.4	7748.1	34.520	ug/L	34.520	ppb	05:54:29
1	Zn 213.857†	44591.5	43926.1	317.77	ug/L	317.77	ppb	05:54:29
1	SiO2†	962412.1	966564.7	52530	ug/L	52530	ppb	05:55:57
2	Sc Radial	4943.7	4943.7	101	%			05:53:31
2	Y RADIAL	6269.1	6269.1	111.0	%			05:53:31
2	Al 396.153Radial†	19850.7	19757.9	13046	ug/L	13046	ppb	05:53:31
2	Ca 317.933Radial†	2918.4	2880.5	5100.0	ug/L	5100.0	ppb	05:53:51
2	Fe 238.204 Radial†	3969.2	3930.9	47526	ug/L	47526	ppb	05:53:31
2	K 766.490 Radial†	21540.5	18822.8	3411.2	ug/L	3411.2	ppb	05:53:31
2	Mg 279.077 IEC†	67.0	64.0	2824.4	ug/L	2824.4	ppb	05:53:51
2	Na 589.592 Radial†	4141.3	5392.7	1512.7	ug/L	1512.7	ppb	05:53:31
2	Sr 421.552†	4865.8	4839.7	25.344	ug/L	25.344	ppb	05:53:31
2	Sc 361.383	1028487.9	1028487.9	98.942	%			05:54:55
2	Y 371.029	968081.6	968081.6	109.45	%			05:54:55
2	Ag 328.068†	-3274.5	-3783.6	0.3539	ug/L	0.3539	ppb	05:55:00
2	As 188.979†	-65.9	-30.0	14.089	ug/L	14.089	ppb	05:55:20
2	B 249.677†	-29.7	436.1	1.9031	ug/L	1.9031	ppb	05:55:00
2	Ba 233.527†	32655.3	33004.4	213.89	ug/L	213.89	ppb	05:55:00
2	Be 313.107†	-11145.8	-6391.0	1.7800	ug/L	1.7800	ppb	05:55:00
2	Cd 226.502†	327.5	566.7	0.2044	ug/L	0.2044	ppb	05:55:20
2	Co 228.616†	694.9	788.7	8.3275	ug/L	8.3275	ppb	05:55:20
2	Cr 267.716†	3192.8	3139.2	29.178	ug/L	29.178	ppb	05:55:20
2	Cu 324.752†	15073.5	6297.1	19.241	ug/L	19.241	ppb	05:55:00
2	Mn 257.610†	1800961.6	1819638.9	1727.8	ug/L	1727.8	ppb	05:54:55
2	Mo 202.031†	111.8	83.8	7.8179	ug/L	7.8179	ppb	05:55:20
2	Ni 231.604†	1215.2	1096.2	21.471	ug/L	21.471	ppb	05:55:20

2	P 214.914†	2607.4	2370.2	1023.6	ug/L	1023.6	ppb	05:55:20
2	Pb 220.353†	439.6	519.8	47.821	ug/L	47.821	ppb	05:55:20
2	S 181.975 Axial†	136.3	77.7	81.150	ug/L	81.150	ppb	05:55:20
2	Sb 206.836†	69.2	35.3	3.9524	ug/L	3.9524	ppb	05:55:20
2	Se 196.026†	-309.2	-291.1	43.569	ug/L	43.569	ppb	05:55:20
2	Si 251.611†	959544.2	969245.0	24614	ug/L	24614	ppb	05:54:55
2	Sn 189.927†	-24.2	-20.1	-1.4832	ug/L	-1.4832	ppb	05:55:20
2	Ti 334.940†	1375615.3	1391582.3	1919.7	ug/L	1919.7	ppb	05:54:55
2	Tl 190.801†	-154.5	-111.9	-2.0407	ug/L	-2.0407	ppb	05:55:20
2	U 409.014†	-8221.1	-5535.0	-149.14	ug/L	-149.14	ppb	05:55:00
2	V 292.402†	6290.9	7966.7	36.103	ug/L	36.103	ppb	05:55:00
2	Zn 213.857†	45146.5	44743.6	324.00	ug/L	324.00	ppb	05:55:00
2	SiO2†	951750.9	961326.9	52246	ug/L	52246	ppb	05:56:03
3	Sc Radial	4752.4	4752.4	96.8	%			05:53:56
3	Y RADIAL	6049.6	6049.6	107.1	%			05:53:56
3	Al 396.153Radial†	19739.5	20436.8	13495	ug/L	13495	ppb	05:53:56
3	Ca 317.933Radial†	2912.8	2991.4	5296.3	ug/L	5296.3	ppb	05:54:16
3	Fe 238.204 Radial†	3919.7	4038.4	48826	ug/L	48826	ppb	05:53:56
3	K 766.490 Radial†	21360.8	19498.4	3534.5	ug/L	3534.5	ppb	05:53:56
3	Mg 279.077 IEC†	67.3	67.0	2956.9	ug/L	2956.9	ppb	05:54:16
3	Na 589.592 Radial†	4143.9	5561.1	1559.9	ug/L	1559.9	ppb	05:53:56
3	Sr 421.552†	4866.7	5035.2	26.368	ug/L	26.368	ppb	05:53:56
3	Sc 361.383	1030765.7	1030765.7	99.161	%			05:55:26
3	Y 371.029	972031.8	972031.8	109.90	%			05:55:26
3	Ag 328.068†	-3232.2	-3733.6	0.9620	ug/L	0.9620	ppb	05:55:31
3	As 188.979†	-66.4	-30.3	14.174	ug/L	14.174	ppb	05:55:51
3	B 249.677†	-134.0	331.0	-0.2557	ug/L	-0.2557	ppb	05:55:31
3	Ba 233.527†	32505.6	32780.5	212.50	ug/L	212.50	ppb	05:55:31
3	Be 313.107†	-11168.4	-6388.9	1.7769	ug/L	1.7769	ppb	05:55:31
3	Cd 226.502†	344.0	582.5	0.2126	ug/L	0.2126	ppb	05:55:51
3	Co 228.616†	701.7	794.0	8.4016	ug/L	8.4016	ppb	05:55:51
3	Cr 267.716†	3180.2	3119.3	29.022	ug/L	29.022	ppb	05:55:51
3	Cu 324.752†	14948.0	6136.9	18.879	ug/L	18.879	ppb	05:55:31
3	Mn 257.610†	1801664.3	1816325.2	1724.8	ug/L	1724.8	ppb	05:55:26
3	Mo 202.031†	126.2	98.0	8.6643	ug/L	8.6643	ppb	05:55:51
3	Ni 231.604†	1231.5	1110.0	21.740	ug/L	21.740	ppb	05:55:51
3	P 214.914†	2593.2	2350.0	1013.7	ug/L	1013.7	ppb	05:55:51
3	Pb 220.353†	418.9	498.0	45.767	ug/L	45.767	ppb	05:55:51
3	S 181.975 Axial†	133.3	74.3	77.417	ug/L	77.417	ppb	05:55:51
3	Sb 206.836†	55.3	21.2	0.2549	ug/L	0.2549	ppb	05:55:51
3	Se 196.026†	-307.1	-288.3	49.547	ug/L	49.547	ppb	05:55:51
3	Si 251.611†	960127.3	967689.9	24575	ug/L	24575	ppb	05:55:26
3	Sn 189.927†	-26.4	-22.3	-1.7431	ug/L	-1.7431	ppb	05:55:51
3	Ti 334.940†	1377316.8	1390225.9	1917.8	ug/L	1917.8	ppb	05:55:26
3	Tl 190.801†	-150.6	-107.6	-1.0243	ug/L	-1.0243	ppb	05:55:51
3	U 409.014†	-8299.8	-5596.0	-150.88	ug/L	-150.88	ppb	05:55:31
3	V 292.402†	6210.6	7871.7	35.374	ug/L	35.374	ppb	05:55:31
3	Zn 213.857†	44687.2	44179.6	319.72	ug/L	319.72	ppb	05:55:31
3	SiO2†	967483.0	975066.5	52992	ug/L	52992	ppb	05:56:09

Mean Data: 241322011|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031210.0	99.204	%	0.2857				0.29%
Sc Radial	4801.2	97.8	%	2.56				2.61%
Y 371.029	971502.3	109.84	%	0.361				0.33%
Y RADIAL	6105.9	108.1	%	2.54				2.35%
Ag 328.068†	-3755.6	0.8332	ug/L	0.42962	0.8332	ppb	0.42962	51.56%
Al 396.153Radial†	20304.2	13407	ug/L	325.9	13407	ppb	325.9	2.43%
As 188.979†	-29.8	14.334	ug/L	0.3540	14.334	ppb	0.3540	2.47%
B 249.677†	407.2	1.2026	ug/L	1.26327	1.2026	ppb	1.26327	105.05%
Ba 233.527†	32826.1	212.79	ug/L	0.991	212.79	ppb	0.991	0.47%
Be 313.107†	-6402.4	1.7735	ug/L	0.00866	1.7735	ppb	0.00866	0.49%
Ca 317.933Radial†	2966.0	5251.4	ug/L	134.69	5251.4	ppb	134.69	2.56%
Cd 226.502†	577.4	0.1811	ug/L	0.04760	0.1811	ppb	0.04760	26.28%
Co 228.616†	791.6	8.3618	ug/L	0.03738	8.3618	ppb	0.03738	0.45%
Cr 267.716†	3114.2	28.974	ug/L	0.2320	28.974	ppb	0.2320	0.80%
Cu 324.752†	6138.0	18.876	ug/L	0.3672	18.876	ppb	0.3672	1.95%
Fe 238.204 Radial†	4027.6	48694	ug/L	1108.1	48694	ppb	1108.1	2.28%
K 766.490 Radial†	19329.6	3503.7	ug/L	81.54	3503.7	ppb	81.54	2.33%

Mg 279.077 IEC†	65.4	2883.5	ug/L	67.42	2883.5	ppb	67.42	2.34%
Mn 257.610†	1816793.5	1725.2	ug/L	2.39	1725.2	ppb	2.39	0.14%
Mo 202.031†	90.9	8.2771	ug/L	0.42775	8.2771	ppb	0.42775	5.17%
Na 589.592 Radial†	5533.8	1552.2	ug/L	36.35	1552.2	ppb	36.35	2.34%
Ni 231.604†	1112.0	21.779	ug/L	0.3299	21.779	ppb	0.3299	1.51%
P 214.914†	2360.1	1018.3	ug/L	4.96	1018.3	ppb	4.96	0.49%
Pb 220.353†	507.8	46.676	ug/L	1.0470	46.676	ppb	1.0470	2.24%
S 181.975 Axial†	77.9	81.281	ug/L	3.9308	81.281	ppb	3.9308	4.84%
Sb 206.836†	28.2	2.1058	ug/L	1.84876	2.1058	ppb	1.84876	87.79%
Se 196.026†	-290.4	48.140	ug/L	4.0551	48.140	ppb	4.0551	8.42%
Si 251.611†	968345.6	24591	ug/L	20.5	24591	ppb	20.5	0.08%
Sn 189.927†	-17.8	-1.1484	ug/L	0.81532	-1.1484	ppb	0.81532	70.99%
Sr 421.552†	4985.2	26.106	ug/L	0.6705	26.106	ppb	0.6705	2.57%
Ti 334.940†	1390528.1	1918.2	ug/L	1.29	1918.2	ppb	1.29	0.07%
Tl 190.801†	-111.3	-1.9133	ug/L	0.83257	-1.9133	ppb	0.83257	43.52%
U 409.014†	-5590.9	-150.73	ug/L	1.523	-150.73	ppb	1.523	1.01%
V 292.402†	7862.1	35.332	ug/L	0.7924	35.332	ppb	0.7924	2.24%
Zn 213.857†	44283.1	320.50	ug/L	3.183	320.50	ppb	3.183	0.99%
SiO2†	967652.7	52589	ug/L	376.8	52589	ppb	376.8	0.72%

Sequence No.: 69
Sample ID: 241322012|925182|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 122
Date Collected: 12/5/2009 05:58:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241322012|925182|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4764.4	4764.4	97.0	%			06:00:14
1	Y RADIAL	7104.2	7104.2	125.8	%			06:00:14
1	Al 396.153Radial†	26027.0	26864.6	17738	ug/L	17738	ppb	06:00:14
1	Ca 317.933Radial†	1622.9	1654.6	2929.4	ug/L	2929.4	ppb	06:00:34
1	Fe 238.204 Radial†	6227.9	6406.8	77459	ug/L	77459	ppb	06:00:14
1	K 766.490 Radial†	23628.3	21779.3	3933.4	ug/L	3933.4	ppb	06:00:14
1	Mg 279.077 IEC†	39.5	38.2	1645.3	ug/L	1645.3	ppb	06:00:34
1	Na 589.592 Radial†	7904.7	9425.7	2643.9	ug/L	2643.9	ppb	06:00:14
1	Sr 421.552†	4846.4	5001.6	26.213	ug/L	26.213	ppb	06:00:14
1	Sc 361.383	1030454.9	1030454.9	99.131	%			06:01:32
1	Y 371.029	1128877.6	1128877.6	127.63	%			06:01:32
1	Ag 328.068†	-5242.8	-5762.8	2.2376	ug/L	2.2376	ppb	06:01:37
1	As 188.979†	-80.4	-44.5	30.424	ug/L	30.424	ppb	06:01:57
1	B 249.677†	227.0	695.1	2.8218	ug/L	2.8218	ppb	06:01:37
1	Ba 233.527†	26855.1	27090.4	177.03	ug/L	177.03	ppb	06:01:37
1	Be 313.107†	-19189.3	-14483.5	3.0672	ug/L	3.0672	ppb	06:01:37
1	Cd 226.502†	677.8	919.3	0.2914	ug/L	0.2914	ppb	06:01:57
1	Co 228.616†	830.6	924.2	6.0425	ug/L	6.0425	ppb	06:01:57
1	Cr 267.716†	4383.6	4334.2	40.517	ug/L	40.517	ppb	06:01:57
1	Cu 324.752†	14797.0	5989.1	19.945	ug/L	19.945	ppb	06:01:37
1	Mn 257.610†	3331946.2	3360562.7	3190.0	ug/L	3190.0	ppb	06:01:32
1	Mo 202.031†	489.5	464.6	30.148	ug/L	30.148	ppb	06:01:57
1	Ni 231.604†	1553.3	1435.0	28.106	ug/L	28.106	ppb	06:01:57
1	P 214.914†	1743.6	1493.8	609.29	ug/L	609.29	ppb	06:01:57
1	Pb 220.353†	1630.5	1720.4	159.17	ug/L	159.17	ppb	06:01:57
1	S 181.975 Axial†	148.8	90.0	93.500	ug/L	93.500	ppb	06:01:57
1	Sb 206.836†	76.2	42.2	1.2510	ug/L	1.2510	ppb	06:01:57
1	Se 196.026†	-477.5	-460.3	77.400	ug/L	77.400	ppb	06:01:57
1	Si 251.611†	1080675.2	1089586.0	27670	ug/L	27670	ppb	06:01:32
1	Sn 189.927†	61.7	66.5	10.149	ug/L	10.149	ppb	06:01:57
1	Ti 334.940†	2771582.2	2797126.2	3858.3	ug/L	3858.3	ppb	06:01:32
1	Tl 190.801†	-248.9	-206.8	-1.4703	ug/L	-1.4703	ppb	06:01:57
1	U 409.014†	-14276.6	-11627.7	-310.44	ug/L	-310.44	ppb	06:01:32
1	V 292.402†	7909.0	9586.8	38.641	ug/L	38.641	ppb	06:01:37
1	Zn 213.857†	56213.5	55820.5	402.53	ug/L	402.53	ppb	06:01:37
1	SiO2†	1078608.8	1087460.1	59100	ug/L	59100	ppb	06:03:05
2	Sc Radial	4777.1	4777.1	97.3	%			06:00:39
2	Y RADIAL	7114.2	7114.2	126.0	%			06:00:39
2	Al 396.153Radial†	25975.1	26740.0	17656	ug/L	17656	ppb	06:00:39
2	Ca 317.933Radial†	1629.4	1656.8	2933.5	ug/L	2933.5	ppb	06:00:59
2	Fe 238.204 Radial†	6186.6	6347.3	76740	ug/L	76740	ppb	06:00:39
2	K 766.490 Radial†	23677.2	21765.1	3930.8	ug/L	3930.8	ppb	06:00:39
2	Mg 279.077 IEC†	40.2	38.8	1672.6	ug/L	1672.6	ppb	06:00:59
2	Na 589.592 Radial†	7866.6	9365.0	2626.9	ug/L	2626.9	ppb	06:00:39
2	Sr 421.552†	4875.1	5017.9	26.299	ug/L	26.299	ppb	06:00:39
2	Sc 361.383	1026038.4	1026038.4	98.707	%			06:02:03
2	Y 371.029	1123366.4	1123366.4	127.01	%			06:02:03
2	Ag 328.068†	-5300.5	-5844.0	1.6948	ug/L	1.6948	ppb	06:02:08
2	As 188.979†	-77.0	-41.5	31.261	ug/L	31.261	ppb	06:02:28
2	B 249.677†	194.1	662.7	2.3058	ug/L	2.3058	ppb	06:02:08
2	Ba 233.527†	26975.0	27328.5	178.54	ug/L	178.54	ppb	06:02:08
2	Be 313.107†	-18916.6	-14290.5	3.1254	ug/L	3.1254	ppb	06:02:08
2	Cd 226.502†	680.1	924.6	0.4101	ug/L	0.4101	ppb	06:02:28
2	Co 228.616†	826.2	923.3	6.0421	ug/L	6.0421	ppb	06:02:28
2	Cr 267.716†	4418.6	4388.7	40.997	ug/L	40.997	ppb	06:02:28
2	Cu 324.752†	14844.5	6101.5	20.209	ug/L	20.209	ppb	06:02:08
2	Mn 257.610†	3313835.8	3356683.0	3186.2	ug/L	3186.2	ppb	06:02:03
2	Mo 202.031†	493.5	470.8	30.426	ug/L	30.426	ppb	06:02:28
2	Ni 231.604†	1581.3	1470.1	28.795	ug/L	28.795	ppb	06:02:28

2	P 214.914†	1743.0	1500.7	612.92	ug/L	612.92	ppb	06:02:28
2	Pb 220.353†	1665.6	1763.0	163.20	ug/L	163.20	ppb	06:02:28
2	S 181.975 Axial†	151.1	93.0	96.674	ug/L	96.674	ppb	06:02:28
2	Sb 206.836†	85.2	51.7	3.7721	ug/L	3.7721	ppb	06:02:28
2	Se 196.026†	-478.7	-463.6	73.339	ug/L	73.339	ppb	06:02:28
2	Si 251.611†	1075287.7	1088820.4	27651	ug/L	27651	ppb	06:02:03
2	Sn 189.927†	76.1	81.4	12.110	ug/L	12.110	ppb	06:02:28
2	Ti 334.940†	2758975.2	2796388.8	3857.3	ug/L	3857.3	ppb	06:02:03
2	Tl 190.801†	-229.3	-188.0	3.0419	ug/L	3.0419	ppb	06:02:28
2	U 409.014†	-14421.8	-11836.9	-315.76	ug/L	-315.76	ppb	06:02:03
2	V 292.402†	8022.6	9736.2	39.602	ug/L	39.602	ppb	06:02:08
2	Zn 213.857†	56341.4	56194.1	405.34	ug/L	405.34	ppb	06:02:08
2	SiO2†	1081289.8	1094859.8	59502	ug/L	59502	ppb	06:03:11
3	Sc Radial	4715.3	4715.3	96.0	%			06:01:04
3	Y RADIAL	7000.8	7000.8	124.0	%			06:01:04
3	Al 396.153Radial†	25632.2	26732.9	17651	ug/L	17651	ppb	06:01:04
3	Ca 317.933Radial†	1635.5	1685.1	2983.4	ug/L	2983.4	ppb	06:01:24
3	Fe 238.204 Radial†	6099.7	6340.3	76655	ug/L	76655	ppb	06:01:04
3	K 766.490 Radial†	23374.7	21769.0	3931.5	ug/L	3931.5	ppb	06:01:04
3	Mg 279.077 IEC†	39.7	38.9	1675.0	ug/L	1675.0	ppb	06:01:24
3	Na 589.592 Radial†	7636.5	9231.3	2589.4	ug/L	2589.4	ppb	06:01:04
3	Sr 421.552†	4769.1	4973.1	26.064	ug/L	26.064	ppb	06:01:04
3	Sc 361.383	1037498.2	1037498.2	99.809	%			06:02:34
3	Y 371.029	1138652.5	1138652.5	128.74	%			06:02:34
3	Ag 328.068†	-5122.0	-5605.8	2.6000	ug/L	2.6000	ppb	06:02:39
3	As 188.979†	-70.4	-34.0	33.642	ug/L	33.642	ppb	06:02:59
3	B 249.677†	213.0	679.5	2.6343	ug/L	2.6343	ppb	06:02:39
3	Ba 233.527†	26897.1	26948.6	176.09	ug/L	176.09	ppb	06:02:39
3	Be 313.107†	-19377.0	-14540.2	3.0623	ug/L	3.0623	ppb	06:02:39
3	Cd 226.502†	672.2	909.2	0.2833	ug/L	0.2833	ppb	06:02:59
3	Co 228.616†	842.3	930.3	6.1401	ug/L	6.1401	ppb	06:02:59
3	Cr 267.716†	4419.7	4340.3	40.556	ug/L	40.556	ppb	06:02:59
3	Cu 324.752†	14944.1	6035.2	20.027	ug/L	20.027	ppb	06:02:39
3	Mn 257.610†	3354138.6	3359980.0	3189.3	ug/L	3189.3	ppb	06:02:34
3	Mo 202.031†	494.5	466.2	30.177	ug/L	30.177	ppb	06:02:59
3	Ni 231.604†	1571.7	1442.8	28.260	ug/L	28.260	ppb	06:02:59
3	P 214.914†	1754.7	1492.9	609.52	ug/L	609.52	ppb	06:02:59
3	Pb 220.353†	1636.9	1715.6	158.77	ug/L	158.77	ppb	06:02:59
3	S 181.975 Axial†	148.6	88.8	92.232	ug/L	92.232	ppb	06:02:59
3	Sb 206.836†	75.3	40.8	0.8668	ug/L	0.8668	ppb	06:02:59
3	Se 196.026†	-485.6	-465.2	72.305	ug/L	72.305	ppb	06:02:59
3	Si 251.611†	1088616.9	1090142.3	27684	ug/L	27684	ppb	06:02:34
3	Sn 189.927†	72.5	77.0	11.524	ug/L	11.524	ppb	06:02:59
3	Ti 334.940†	2795209.9	2801818.9	3864.7	ug/L	3864.7	ppb	06:02:34
3	Tl 190.801†	-236.9	-193.1	1.8835	ug/L	1.8835	ppb	06:02:59
3	U 409.014†	-14292.1	-11545.5	-308.22	ug/L	-308.22	ppb	06:02:34
3	V 292.402†	7917.9	9541.6	38.504	ug/L	38.504	ppb	06:02:39
3	Zn 213.857†	56102.5	55324.3	398.96	ug/L	398.96	ppb	06:02:39
3	SiO2†	1103162.3	1104674.1	60035	ug/L	60035	ppb	06:03:17

Mean Data: 241322012|925182|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031330.5	99.216	%	0.5560				0.56%
Sc Radial	4752.3	96.8	%	0.66				0.69%
Y 371.029	1130298.8	127.79	%	0.875				0.68%
Y RADIAL	7073.1	125.2	%	1.11				0.89%
Ag 328.068†	-5737.6	2.1775	ug/L	0.45563	2.1775	ppb	0.45563	20.92%
Al 396.153Radial†	26779.2	17682	ug/L	48.9	17682	ppb	48.9	0.28%
As 188.979†	-40.0	31.776	ug/L	1.6696	31.776	ppb	1.6696	5.25%
B 249.677†	679.1	2.5873	ug/L	0.26116	2.5873	ppb	0.26116	10.09%
Ba 233.527†	27122.5	177.22	ug/L	1.234	177.22	ppb	1.234	0.70%
Be 313.107†	-14438.1	3.0850	ug/L	0.03511	3.0850	ppb	0.03511	1.14%
Ca 317.933Radial†	1665.5	2948.8	ug/L	30.08	2948.8	ppb	30.08	1.02%
Cd 226.502†	917.7	0.3283	ug/L	0.07097	0.3283	ppb	0.07097	21.62%
Co 228.616†	925.9	6.0749	ug/L	0.05645	6.0749	ppb	0.05645	0.93%
Cr 267.716†	4354.4	40.690	ug/L	0.2664	40.690	ppb	0.2664	0.65%
Cu 324.752†	6041.9	20.060	ug/L	0.1349	20.060	ppb	0.1349	0.67%
Fe 238.204 Radial†	6364.8	76952	ug/L	441.9	76952	ppb	441.9	0.57%
K 766.490 Radial†	21771.1	3931.9	ug/L	1.33	3931.9	ppb	1.33	0.03%

Mg 279.077 IEC†	38.7	1664.3	ug/L	16.48	1664.3	ppb	16.48	0.99%
Mn 257.610†	3359075.2	3188.5	ug/L	2.01	3188.5	ppb	2.01	0.06%
Mo 202.031†	467.2	30.250	ug/L	0.1530	30.250	ppb	0.1530	0.51%
Na 589.592 Radial†	9340.7	2620.1	ug/L	27.90	2620.1	ppb	27.90	1.06%
Ni 231.604†	1449.3	28.387	ug/L	0.3612	28.387	ppb	0.3612	1.27%
P 214.914†	1495.8	610.58	ug/L	2.035	610.58	ppb	2.035	0.33%
Pb 220.353†	1733.0	160.38	ug/L	2.455	160.38	ppb	2.455	1.53%
S 181.975 Axial†	90.6	94.135	ug/L	2.2885	94.135	ppb	2.2885	2.43%
Sb 206.836†	44.9	1.9633	ug/L	1.57822	1.9633	ppb	1.57822	80.39%
Se 196.026†	-463.0	74.348	ug/L	2.6933	74.348	ppb	2.6933	3.62%
Si 251.611†	1089516.3	27668	ug/L	16.9	27668	ppb	16.9	0.06%
Sn 189.927†	75.0	11.261	ug/L	1.0068	11.261	ppb	1.0068	8.94%
Sr 421.552†	4997.5	26.192	ug/L	0.1190	26.192	ppb	0.1190	0.45%
Ti 334.940†	2798444.6	3860.1	ug/L	4.06	3860.1	ppb	4.06	0.11%
Tl 190.801†	-196.0	1.1517	ug/L	2.34339	1.1517	ppb	2.34339	203.47%
U 409.014†	-11670.0	-311.48	ug/L	3.876	-311.48	ppb	3.876	1.24%
V 292.402†	9621.6	38.916	ug/L	0.5982	38.916	ppb	0.5982	1.54%
Zn 213.857†	55779.6	402.28	ug/L	3.198	402.28	ppb	3.198	0.79%
SiO2†	1095664.7	59546	ug/L	469.3	59546	ppb	469.3	0.79%

Sequence No.: 70
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 06:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4567.7	4567.7	93.0	%			06:07:21
1	Y RADIAL	5179.7	5179.7	91.72	%			06:07:21
1	Al 396.153Radial†	7377.7	7973.9	5242.7	ug/L	5242.7	ppb	06:07:21
1	Ca 317.933Radial†	2752.3	2940.5	5206.3	ug/L	5206.3	ppb	06:07:41
1	Fe 238.204 Radial†	407.0	426.5	5172.8	ug/L	5172.8	ppb	06:07:41
1	K 766.490 Radial†	28460.2	28021.6	5098.3	ug/L	5098.3	ppb	06:07:21
1	Mg 279.077 IEC†	113.3	119.3	5344.9	ug/L	5344.9	ppb	06:07:41
1	Na 589.592 Radial†	32876.8	36618.4	10271	ug/L	10271	ppb	06:07:21
1	Sr 421.552†	90692.7	97490.8	511.43	ug/L	511.43	ppb	06:07:21
1	Sc 361.383	1000705.2	1000705.2	96.269	%			06:08:41
1	Y 371.029	839102.2	839102.2	94.871	%			06:08:41
1	Ag 328.068†	126477.8	130904.9	522.05	ug/L	522.05	ppb	06:08:41
1	As 188.979†	1579.2	1677.0	527.06	ug/L	527.06	ppb	06:09:01
1	B 249.677†	25576.7	27034.0	508.88	ug/L	508.88	ppb	06:08:41
1	Ba 233.527†	78050.3	81074.8	522.20	ug/L	522.20	ppb	06:08:41
1	Be 313.107†	1595808.2	1662521.2	519.38	ug/L	519.38	ppb	06:08:41
1	Cd 226.502†	57543.4	60008.9	523.15	ug/L	523.15	ppb	06:08:41
1	Co 228.616†	30592.5	31864.3	525.05	ug/L	525.05	ppb	06:09:01
1	Cr 267.716†	55678.7	57748.6	519.65	ug/L	519.65	ppb	06:08:41
1	Cu 324.752†	196864.6	195555.8	522.50	ug/L	522.50	ppb	06:08:41
1	Mn 257.610†	532930.8	553005.7	524.08	ug/L	524.08	ppb	06:08:41
1	Mo 202.031†	9606.9	9949.9	528.38	ug/L	528.38	ppb	06:09:01
1	Ni 231.604†	25906.9	26778.8	524.36	ug/L	524.36	ppb	06:09:01
1	P 214.914†	6012.4	5980.3	2596.1	ug/L	2596.1	ppb	06:09:01
1	Pb 220.353†	5377.7	5661.6	533.11	ug/L	533.11	ppb	06:09:01
1	S 181.975 Axial†	987.5	965.7	1039.4	ug/L	1039.4	ppb	06:09:01
1	Sb 206.836†	1958.0	1999.2	534.86	ug/L	534.86	ppb	06:09:01
1	Se 196.026†	1125.0	1189.9	547.48	ug/L	547.48	ppb	06:09:01
1	Si 251.611†	99156.5	102441.3	2589.1	ug/L	2589.1	ppb	06:08:41
1	Sn 189.927†	3804.2	3956.0	523.83	ug/L	523.83	ppb	06:09:01
1	Ti 334.940†	362193.1	377488.8	520.53	ug/L	520.53	ppb	06:08:41
1	Tl 190.801†	2060.3	2184.4	531.58	ug/L	531.58	ppb	06:09:01
1	U 409.014†	16212.7	19614.9	505.48	ug/L	505.48	ppb	06:08:41
1	V 292.402†	85546.2	90469.7	525.00	ug/L	525.00	ppb	06:08:41
1	Zn 213.857†	69216.9	71013.5	517.18	ug/L	517.18	ppb	06:08:41
1	SiO2†	99036.3	102275.0	5531.4	ug/L	5531.4	ppb	06:10:01
2	Sc Radial	4592.3	4592.3	93.5	%			06:07:47
2	Y RADIAL	5265.0	5265.0	93.23	%			06:07:47
2	Al 396.153Radial†	7274.4	7821.0	5142.0	ug/L	5142.0	ppb	06:07:47
2	Ca 317.933Radial†	2802.5	2978.3	5273.3	ug/L	5273.3	ppb	06:08:07
2	Fe 238.204 Radial†	408.6	425.9	5165.4	ug/L	5165.4	ppb	06:08:07
2	K 766.490 Radial†	27982.8	27347.4	4975.5	ug/L	4975.5	ppb	06:07:47
2	Mg 279.077 IEC†	113.3	118.6	5313.5	ug/L	5313.5	ppb	06:08:07
2	Na 589.592 Radial†	32081.0	35578.4	9979.7	ug/L	9979.7	ppb	06:07:47
2	Sr 421.552†	88787.1	94931.5	498.00	ug/L	498.00	ppb	06:07:47
2	Sc 361.383	1012628.0	1012628.0	97.416	%			06:09:08
2	Y 371.029	849172.2	849172.2	96.009	%			06:09:08
2	Ag 328.068†	127611.3	130521.6	520.53	ug/L	520.53	ppb	06:09:08
2	As 188.979†	1589.6	1668.4	524.38	ug/L	524.38	ppb	06:09:28
2	B 249.677†	26013.1	27169.1	511.46	ug/L	511.46	ppb	06:09:08
2	Ba 233.527†	78881.4	80973.4	521.55	ug/L	521.55	ppb	06:09:08
2	Be 313.107†	1615140.9	1662849.1	519.49	ug/L	519.49	ppb	06:09:08
2	Cd 226.502†	58161.9	59940.0	522.54	ug/L	522.54	ppb	06:09:08
2	Co 228.616†	30597.6	31495.4	518.96	ug/L	518.96	ppb	06:09:28
2	Cr 267.716†	56265.1	57669.5	518.94	ug/L	518.94	ppb	06:09:08
2	Cu 324.752†	198993.4	195333.3	521.90	ug/L	521.90	ppb	06:09:08
2	Mn 257.610†	538631.2	552339.2	523.45	ug/L	523.45	ppb	06:09:08
2	Mo 202.031†	9606.9	9832.5	522.15	ug/L	522.15	ppb	06:09:28
2	Ni 231.604†	25911.4	26466.6	518.25	ug/L	518.25	ppb	06:09:28

2	P 214.914†	5992.6	5886.4	2554.1 ug/L	2554.1 ppb	06:09:28
2	Pb 220.353†	5357.5	5575.1	524.96 ug/L	524.96 ppb	06:09:28
2	S 181.975 Axial†	989.1	955.2	1028.1 ug/L	1028.1 ppb	06:09:28
2	Sb 206.836†	1966.7	1984.2	530.71 ug/L	530.71 ppb	06:09:28
2	Se 196.026†	1142.0	1193.7	549.11 ug/L	549.11 ppb	06:09:28
2	Si 251.611†	100213.6	102313.7	2586.1 ug/L	2586.1 ppb	06:09:08
2	Sn 189.927†	3817.9	3923.5	519.54 ug/L	519.54 ppb	06:09:28
2	Ti 334.940†	366047.3	377015.5	519.88 ug/L	519.88 ppb	06:09:08
2	Tl 190.801†	2055.5	2154.2	524.31 ug/L	524.31 ppb	06:09:28
2	U 409.014†	16422.9	19632.4	505.93 ug/L	505.93 ppb	06:09:08
2	V 292.402†	86544.8	90448.5	524.79 ug/L	524.79 ppb	06:09:08
2	Zn 213.857†	69924.6	70893.5	516.33 ug/L	516.33 ppb	06:09:08
2	SiO2†	99590.8	101633.0	5496.8 ug/L	5496.8 ppb	06:10:06
3	Sc Radial	4509.2	4509.2	91.8 %		06:08:12
3	Y RADIAL	5165.2	5165.2	91.47 %		06:08:12
3	Al 396.153Radial†	7368.2	8066.5	5304.3 ug/L	5304.3 ppb	06:08:12
3	Ca 317.933Radial†	2780.9	3010.1	5329.5 ug/L	5329.5 ppb	06:08:32
3	Fe 238.204 Radial†	406.8	432.0	5238.6 ug/L	5238.6 ppb	06:08:32
3	K 766.490 Radial†	28334.7	28281.8	5145.6 ug/L	5145.6 ppb	06:08:12
3	Mg 279.077 IEC†	116.7	124.6	5581.4 ug/L	5581.4 ppb	06:08:32
3	Na 589.592 Radial†	32429.5	36589.8	10263 ug/L	10263 ppb	06:08:12
3	Sr 421.552†	90118.3	98129.8	514.78 ug/L	514.78 ppb	06:08:12
3	Sc 361.383	1010855.5	1010855.5	97.246 %		06:09:35
3	Y 371.029	848028.8	848028.8	95.880 %		06:09:35
3	Ag 328.068†	127589.4	130728.8	521.38 ug/L	521.38 ppb	06:09:35
3	As 188.979†	1573.7	1654.9	520.19 ug/L	520.19 ppb	06:09:56
3	B 249.677†	25970.4	27172.0	511.51 ug/L	511.51 ppb	06:09:35
3	Ba 233.527†	78988.0	81225.0	523.17 ug/L	523.17 ppb	06:09:35
3	Be 313.107†	1616001.9	1666641.7	520.67 ug/L	520.67 ppb	06:09:35
3	Cd 226.502†	58278.4	60164.5	524.49 ug/L	524.49 ppb	06:09:35
3	Co 228.616†	30267.5	31211.0	514.26 ug/L	514.26 ppb	06:09:56
3	Cr 267.716†	56260.1	57765.7	519.81 ug/L	519.81 ppb	06:09:35
3	Cu 324.752†	198628.5	195316.2	521.86 ug/L	521.86 ppb	06:09:35
3	Mn 257.610†	538745.1	553425.9	524.48 ug/L	524.48 ppb	06:09:35
3	Mo 202.031†	9501.8	9741.6	517.33 ug/L	517.33 ppb	06:09:56
3	Ni 231.604†	25619.6	26213.2	513.28 ug/L	513.28 ppb	06:09:56
3	P 214.914†	5926.4	5829.1	2528.4 ug/L	2528.4 ppb	06:09:56
3	Pb 220.353†	5316.8	5542.9	521.95 ug/L	521.95 ppb	06:09:56
3	S 181.975 Axial†	983.7	951.4	1024.0 ug/L	1024.0 ppb	06:09:56
3	Sb 206.836†	1942.3	1962.7	524.82 ug/L	524.82 ppb	06:09:56
3	Se 196.026†	1112.9	1165.8	536.99 ug/L	536.99 ppb	06:09:56
3	Si 251.611†	100019.8	102294.7	2585.6 ug/L	2585.6 ppb	06:09:35
3	Sn 189.927†	3777.5	3888.8	514.96 ug/L	514.96 ppb	06:09:56
3	Ti 334.940†	366015.4	377641.6	520.74 ug/L	520.74 ppb	06:09:35
3	Tl 190.801†	2010.4	2111.6	514.05 ug/L	514.05 ppb	06:09:56
3	U 409.014†	16324.6	19560.9	504.07 ug/L	504.07 ppb	06:09:35
3	V 292.402†	86558.8	90618.7	525.68 ug/L	525.68 ppb	06:09:35
3	Zn 213.857†	69930.1	71025.0	517.32 ug/L	517.32 ppb	06:09:35
3	SiO2†	100602.5	102852.6	5563.2 ug/L	5563.2 ppb	06:10:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1008062.9	96.977	%	0.6189				0.64%
Sc Radial	4556.4	92.8	%	0.87				0.94%
Y 371.029	845434.4	95.587	%	0.6234				0.65%
Y RADIAL	5203.3	92.14	%	0.955				1.04%
Ag 328.068†	130718.4	521.32	ug/L	0.763	521.32	ppb	0.763	0.15%
QC value within limits for Ag 328.068 Recovery = 104.26%								
Al 396.153Radial†	7953.8	5229.7	ug/L	81.92	5229.7	ppb	81.92	1.57%
QC value within limits for Al 396.153Radial Recovery = 104.59%								
As 188.979†	1666.8	523.87	ug/L	3.465	523.87	ppb	3.465	0.66%
QC value within limits for As 188.979 Recovery = 104.77%								
B 249.677†	27125.0	510.62	ug/L	1.501	510.62	ppb	1.501	0.29%
QC value within limits for B 249.677 Recovery = 102.12%								
Ba 233.527†	81091.1	522.31	ug/L	0.816	522.31	ppb	0.816	0.16%
QC value within limits for Ba 233.527 Recovery = 104.46%								
Be 313.107†	1664004.0	519.85	ug/L	0.715	519.85	ppb	0.715	0.14%
QC value within limits for Be 313.107 Recovery = 103.97%								
Ca 317.933Radial†	2976.3	5269.7	ug/L	61.66	5269.7	ppb	61.66	1.17%

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   QC value within limits for Ca 317.933Radial  Recovery = 105.39%
Cd 226.502†            60037.8      523.39 ug/L         0.997      523.39 ppb          0.997   0.19%
   QC value within limits for Cd 226.502  Recovery = 104.68%
Co 228.616†            31523.6      519.43 ug/L         5.410      519.43 ppb          5.410   1.04%
   QC value within limits for Co 228.616  Recovery = 103.89%
Cr 267.716†            57727.9      519.47 ug/L         0.463      519.47 ppb          0.463   0.09%
   QC value within limits for Cr 267.716  Recovery = 103.89%
Cu 324.752†           195401.8      522.09 ug/L         0.356      522.09 ppb          0.356   0.07%
   QC value within limits for Cu 324.752  Recovery = 104.42%
Fe 238.204 Radial†       428.1      5192.3 ug/L        40.29      5192.3 ppb         40.29   0.78%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.85%
K 766.490 Radial†      27883.6      5073.1 ug/L        87.82      5073.1 ppb         87.82   1.73%
   QC value within limits for K 766.490 Radial  Recovery = 101.46%
Mg 279.077 IEC†          120.8      5413.3 ug/L       146.46      5413.3 ppb        146.46   2.71%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.27%
Mn 257.610†           552923.6      524.01 ug/L         0.520      524.01 ppb          0.520   0.10%
   QC value within limits for Mn 257.610  Recovery = 104.80%
Mo 202.031†             9841.3      522.62 ug/L         5.540      522.62 ppb          5.540   1.06%
   QC value within limits for Mo 202.031  Recovery = 104.52%
Na 589.592 Radial†     36262.2       10172 ug/L       166.2         10172 ppb        166.2   1.63%
   QC value within limits for Na 589.592 Radial  Recovery = 101.72%
Ni 231.604†            26486.2      518.63 ug/L         5.548      518.63 ppb          5.548   1.07%
   QC value within limits for Ni 231.604  Recovery = 103.73%
P 214.914†              5898.6      2559.6 ug/L        34.18      2559.6 ppb         34.18   1.34%
   QC value within limits for P 214.914  Recovery = 102.38%
Pb 220.353†             5593.2      526.67 ug/L         5.776      526.67 ppb          5.776   1.10%
   QC value within limits for Pb 220.353  Recovery = 105.33%
S 181.975 Axial†         957.4      1030.5 ug/L         7.97      1030.5 ppb          7.97   0.77%
   QC value within limits for S 181.975 Axial  Recovery = 103.05%
Sb 206.836†             1982.0      530.13 ug/L         5.043      530.13 ppb          5.043   0.95%
   QC value within limits for Sb 206.836  Recovery = 106.03%
Se 196.026†             1183.1      544.53 ug/L         6.582      544.53 ppb          6.582   1.21%
   QC value within limits for Se 196.026  Recovery = 108.91%
Si 251.611†           102349.9      2586.9 ug/L         1.92      2586.9 ppb          1.92   0.07%
   QC value within limits for Si 251.611  Recovery = 103.48%
Sn 189.927†             3922.8      519.44 ug/L         4.434      519.44 ppb          4.434   0.85%
   QC value within limits for Sn 189.927  Recovery = 103.89%
Sr 421.552†            96850.7      508.07 ug/L         8.880      508.07 ppb          8.880   1.75%
   QC value within limits for Sr 421.552  Recovery = 101.61%
Ti 334.940†           377382.0      520.38 ug/L         0.451      520.38 ppb          0.451   0.09%
   QC value within limits for Ti 334.940  Recovery = 104.08%
Tl 190.801†             2150.1      523.31 ug/L         8.809      523.31 ppb          8.809   1.68%
   QC value within limits for Tl 190.801  Recovery = 104.66%
U 409.014†             19602.7      505.16 ug/L         0.969      505.16 ppb          0.969   0.19%
   QC value within limits for U 409.014  Recovery = 101.03%
V 292.402†             90512.3      525.16 ug/L         0.469      525.16 ppb          0.469   0.09%
   QC value within limits for V 292.402  Recovery = 105.03%
Zn 213.857†            70977.3      516.94 ug/L         0.531      516.94 ppb          0.531   0.10%
   QC value within limits for Zn 213.857  Recovery = 103.39%
SiO2†                 102253.5      5530.5 ug/L        33.19      5530.5 ppb         33.19   0.60%
   QC value within limits for SiO2  Recovery = 103.42%
All analyte(s) passed QC.
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Sequence No.: 71
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 06:12:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4812.0	4812.0	98.0	%			06:14:14
1	Y RADIAL	5530.6	5530.6	97.94	%			06:14:14
1	Al 396.153Radial†	-39.8	3.2	2.1360	ug/L	2.1360	ppb	06:14:14
1	Ca 317.933Radial†	24.7	7.4	13.029	ug/L	13.029	ppb	06:14:34
1	Fe 238.204 Radial†	8.3	-2.5	-30.025	ug/L	-30.025	ppb	06:14:34
1	K 766.490 Radial†	2655.3	139.7	25.424	ug/L	25.424	ppb	06:14:14
1	Mg 279.077 IEC†	3.5	1.1	47.742	ug/L	47.742	ppb	06:14:34
1	Na 589.592 Radial†	-1025.6	233.5	65.508	ug/L	65.508	ppb	06:14:14
1	Sr 421.552†	-21.7	-14.7	-0.0774	ug/L	-0.0774	ppb	06:14:14
1	Sc 361.383	1011287.7	1011287.7	97.288	%			06:15:31
1	Y 371.029	859837.8	859837.8	97.215	%			06:15:31
1	Ag 328.068†	420.9	-41.4	-0.1753	ug/L	-0.1753	ppb	06:15:36
1	As 188.979†	-45.3	-9.9	-3.0954	ug/L	-3.0954	ppb	06:15:56
1	B 249.677†	-411.3	43.4	0.8238	ug/L	0.8238	ppb	06:15:56
1	Ba 233.527†	13.2	13.6	0.0859	ug/L	0.0859	ppb	06:15:56
1	Be 313.107†	-4842.3	-103.4	-0.0321	ug/L	-0.0321	ppb	06:15:36
1	Cd 226.502†	-231.9	-2.8	-0.0211	ug/L	-0.0211	ppb	06:15:56
1	Co 228.616†	-88.2	-4.3	-0.0708	ug/L	-0.0708	ppb	06:15:56
1	Cr 267.716†	119.7	35.2	0.3155	ug/L	0.3155	ppb	06:15:56
1	Cu 324.752†	9003.7	317.3	0.8457	ug/L	0.8457	ppb	06:15:36
1	Mn 257.610†	625.7	66.4	0.0590	ug/L	0.0590	ppb	06:15:56
1	Mo 202.031†	25.8	-2.7	-0.1447	ug/L	-0.1447	ppb	06:15:56
1	Ni 231.604†	127.9	-0.4	-0.0087	ug/L	-0.0087	ppb	06:15:56
1	P 214.914†	275.1	17.7	7.8196	ug/L	7.8196	ppb	06:15:56
1	Pb 220.353†	-76.7	-3.2	-0.3012	ug/L	-0.3012	ppb	06:15:56
1	S 181.975 Axial†	60.6	2.1	2.2992	ug/L	2.2992	ppb	06:15:56
1	Sb 206.836†	49.3	16.1	4.2468	ug/L	4.2468	ppb	06:15:56
1	Se 196.026†	-33.4	-13.0	-5.8633	ug/L	-5.8633	ppb	06:15:56
1	Si 251.611†	644.0	104.3	2.6399	ug/L	2.6399	ppb	06:15:56
1	Sn 189.927†	2.9	7.3	0.9671	ug/L	0.9671	ppb	06:15:56
1	Ti 334.940†	-1185.9	41.5	0.0576	ug/L	0.0576	ppb	06:15:36
1	Tl 190.801†	-42.1	1.0	0.2361	ug/L	0.2361	ppb	06:15:56
1	U 409.014†	-2677.1	22.2	0.5768	ug/L	0.5768	ppb	06:15:31
1	V 292.402†	-1606.6	-42.9	-0.2411	ug/L	-0.2411	ppb	06:15:36
1	Zn 213.857†	958.6	99.7	0.7330	ug/L	0.7330	ppb	06:15:56
1	SiO2†	637.0	55.7	3.0072	ug/L	3.0072	ppb	06:17:02
2	Sc Radial	4675.0	4675.0	95.2	%			06:14:39
2	Y RADIAL	5375.1	5375.1	95.18	%			06:14:39
2	Al 396.153Radial†	-46.3	-4.9	-3.2271	ug/L	-3.2271	ppb	06:14:39
2	Ca 317.933Radial†	29.0	12.6	22.275	ug/L	22.275	ppb	06:14:59
2	Fe 238.204 Radial†	6.7	-4.0	-48.380	ug/L	-48.380	ppb	06:14:59
2	K 766.490 Radial†	2515.0	71.8	13.055	ug/L	13.055	ppb	06:14:39
2	Mg 279.077 IEC†	1.8	-0.7	-29.422	ug/L	-29.422	ppb	06:14:59
2	Na 589.592 Radial†	-1067.8	158.5	44.469	ug/L	44.469	ppb	06:14:39
2	Sr 421.552†	3.7	11.3	0.0593	ug/L	0.0593	ppb	06:14:39
2	Sc 361.383	1004408.3	1004408.3	96.626	%			06:16:01
2	Y 371.029	853307.0	853307.0	96.477	%			06:16:01
2	Ag 328.068†	451.9	-6.3	-0.0405	ug/L	-0.0405	ppb	06:16:07
2	As 188.979†	-43.4	-8.3	-2.6020	ug/L	-2.6020	ppb	06:16:27
2	B 249.677†	-395.5	56.8	1.0804	ug/L	1.0804	ppb	06:16:27
2	Ba 233.527†	0.2	0.3	-0.0016	ug/L	-0.0016	ppb	06:16:27
2	Be 313.107†	-4994.6	-295.0	-0.0921	ug/L	-0.0921	ppb	06:16:07
2	Cd 226.502†	-231.1	-3.5	-0.0254	ug/L	-0.0254	ppb	06:16:27
2	Co 228.616†	-88.8	-5.5	-0.0898	ug/L	-0.0898	ppb	06:16:27
2	Cr 267.716†	107.3	23.3	0.2082	ug/L	0.2082	ppb	06:16:27
2	Cu 324.752†	9097.9	478.2	1.2745	ug/L	1.2745	ppb	06:16:07
2	Mn 257.610†	624.4	69.5	0.0615	ug/L	0.0615	ppb	06:16:27
2	Mo 202.031†	33.8	5.8	0.3030	ug/L	0.3030	ppb	06:16:27
2	Ni 231.604†	134.5	7.3	0.1429	ug/L	0.1429	ppb	06:16:27

2	P 214.914†	278.4	23.0	10.133 ug/L	10.133 ppb	06:16:27
2	Pb 220.353†	-71.3	1.8	0.1732 ug/L	0.1732 ppb	06:16:27
2	S 181.975 Axial†	58.3	0.2	0.2677 ug/L	0.2677 ppb	06:16:27
2	Sb 206.836†	47.5	14.5	3.8440 ug/L	3.8440 ppb	06:16:27
2	Se 196.026†	-22.7	-2.1	-1.1116 ug/L	-1.1116 ppb	06:16:27
2	Si 251.611†	647.1	112.1	2.8338 ug/L	2.8338 ppb	06:16:27
2	Sn 189.927†	3.9	8.4	1.1061 ug/L	1.1061 ppb	06:16:27
2	Ti 334.940†	-1259.3	-42.8	-0.0565 ug/L	-0.0565 ppb	06:16:07
2	Tl 190.801†	-48.7	-6.2	-1.4939 ug/L	-1.4939 ppb	06:16:27
2	U 409.014†	-2807.5	-131.6	-3.3967 ug/L	-3.3967 ppb	06:16:01
2	V 292.402†	-1663.4	-113.0	-0.6423 ug/L	-0.6423 ppb	06:16:07
2	Zn 213.857†	958.6	106.5	0.7860 ug/L	0.7860 ppb	06:16:27
2	SiO2†	671.4	95.8	5.1761 ug/L	5.1761 ppb	06:17:07
3	Sc Radial	4661.6	4661.6	94.9 %		06:15:05
3	Y RADIAL	5342.3	5342.3	94.60 %		06:15:05
3	Al 396.153Radial†	-39.9	1.8	1.1455 ug/L	1.1455 ppb	06:15:05
3	Ca 317.933Radial†	28.8	12.5	22.089 ug/L	22.089 ppb	06:15:25
3	Fe 238.204 Radial†	8.1	-2.5	-29.632 ug/L	-29.632 ppb	06:15:25
3	K 766.490 Radial†	2660.8	232.9	42.430 ug/L	42.430 ppb	06:15:05
3	Mg 279.077 IEC†	0.9	-1.6	-69.835 ug/L	-69.835 ppb	06:15:25
3	Na 589.592 Radial†	-1102.7	118.6	33.259 ug/L	33.259 ppb	06:15:05
3	Sr 421.552†	25.2	34.0	0.1781 ug/L	0.1781 ppb	06:15:05
3	Sc 361.383	1020354.8	1020354.8	98.160 %		06:16:32
3	Y 371.029	868222.5	868222.5	98.163 %		06:16:32
3	Ag 328.068†	378.9	-88.0	-0.3563 ug/L	-0.3563 ppb	06:16:37
3	As 188.979†	-39.7	-3.8	-1.1900 ug/L	-1.1900 ppb	06:16:57
3	B 249.677†	-407.5	51.0	0.9674 ug/L	0.9674 ppb	06:16:57
3	Ba 233.527†	11.3	11.6	0.0729 ug/L	0.0729 ppb	06:16:57
3	Be 313.107†	-4842.0	-58.8	-0.0185 ug/L	-0.0185 ppb	06:16:37
3	Cd 226.502†	-228.1	3.2	0.0313 ug/L	0.0313 ppb	06:16:57
3	Co 228.616†	-81.7	3.1	0.0531 ug/L	0.0531 ppb	06:16:57
3	Cr 267.716†	95.3	9.3	0.0837 ug/L	0.0837 ppb	06:16:57
3	Cu 324.752†	8919.0	148.7	0.3956 ug/L	0.3956 ppb	06:16:37
3	Mn 257.610†	636.5	71.7	0.0662 ug/L	0.0662 ppb	06:16:57
3	Mo 202.031†	36.4	7.8	0.4144 ug/L	0.4144 ppb	06:16:57
3	Ni 231.604†	135.5	6.1	0.1201 ug/L	0.1201 ppb	06:16:57
3	P 214.914†	275.6	15.6	6.9614 ug/L	6.9614 ppb	06:16:57
3	Pb 220.353†	-72.7	1.5	0.1442 ug/L	0.1442 ppb	06:16:57
3	S 181.975 Axial†	50.7	-8.4	-9.0557 ug/L	-9.0557 ppb	06:16:57
3	Sb 206.836†	47.1	13.4	3.5376 ug/L	3.5376 ppb	06:16:57
3	Se 196.026†	-22.9	-2.0	-0.9840 ug/L	-0.9840 ppb	06:16:57
3	Si 251.611†	623.1	77.2	1.9367 ug/L	1.9367 ppb	06:16:57
3	Sn 189.927†	0.6	5.0	0.6630 ug/L	0.6630 ppb	06:16:57
3	Ti 334.940†	-1301.1	-65.1	-0.0871 ug/L	-0.0871 ppb	06:16:37
3	Tl 190.801†	-49.7	-6.4	-1.5540 ug/L	-1.5540 ppb	06:16:57
3	U 409.014†	-2859.0	-138.6	-3.5801 ug/L	-3.5801 ppb	06:16:32
3	V 292.402†	-1608.1	-29.7	-0.1681 ug/L	-0.1681 ppb	06:16:37
3	Zn 213.857†	964.9	97.5	0.7201 ug/L	0.7201 ppb	06:16:57
3	SiO2†	686.3	100.1	5.3895 ug/L	5.3895 ppb	06:17:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1012016.9	97.358	%	0.7694				0.79%
Sc Radial	4716.2	96.1	%	1.70				1.77%
Y 371.029	860455.8	97.285	%	0.8454				0.87%
Y RADIAL	5416.0	95.91	%	1.781				1.86%
Ag 328.068†	-45.3	-0.1907	ug/L	0.15846	-0.1907	ppb	0.15846	83.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.0	0.0181	ug/L	2.85376	0.0181	ppb	2.85376	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-7.3	-2.2958	ug/L	0.98896	-2.2958	ppb	0.98896	43.08%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	50.4	0.9572	ug/L	0.12857	0.9572	ppb	0.12857	13.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.5	0.0524	ug/L	0.04721	0.0524	ppb	0.04721	90.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-152.4	-0.0476	ug/L	0.03916	-0.0476	ppb	0.03916	82.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.8	19.131	ug/L	5.2856	19.131	ppb	5.2856	27.63%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -1.0     -0.0051 ug/L       0.03154     -0.0051 ppb        0.03154 620.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.2     -0.0358 ug/L       0.07759     -0.0358 ppb        0.07759 216.51%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.6      0.2024 ug/L       0.11603      0.2024 ppb        0.11603  57.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               314.7      0.8386 ug/L       0.43946      0.8386 ppb        0.43946  52.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -3.0     -36.012 ug/L       10.7127     -36.012 ppb        10.7127  29.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         148.1      26.969 ug/L       14.7483      26.969 ppb        14.7483  54.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4     -17.172 ug/L       59.7377     -17.172 ppb        59.7377 347.88%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                69.2      0.0623 ug/L       0.00367      0.0623 ppb        0.00367   5.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.6      0.1909 ug/L       0.29593      0.1909 ppb        0.29593 155.00%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        170.2      47.746 ug/L       16.3719      47.746 ppb        16.3719  34.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.3      0.0848 ug/L       0.08174      0.0848 ppb        0.08174  96.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 18.8      8.3048 ug/L       1.64072      8.3048 ppb        1.64072  19.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.0      0.0054 ug/L       0.26590      0.0054 ppb        0.26590 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.0     -2.1629 ug/L       6.05516     -2.1629 ppb        6.05516 279.95%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                14.7      3.8761 ug/L       0.35571      3.8761 ppb        0.35571   9.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.7     -2.6530 ug/L       2.78099     -2.6530 ppb        2.78099 104.83%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                97.9      2.4702 ug/L       0.47204      2.4702 ppb        0.47204  19.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.9      0.9121 ug/L       0.22660      0.9121 ppb        0.22660  24.84%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                10.2      0.0533 ug/L       0.12783      0.0533 ppb        0.12783 239.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -22.1     -0.0287 ug/L       0.07622     -0.0287 ppb        0.07622 265.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.9     -0.9373 ug/L       1.01660     -0.9373 ppb        1.01660 108.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -82.7     -2.1333 ug/L       2.34883     -2.1333 ppb        2.34883 110.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -61.9     -0.3505 ug/L       0.25532     -0.3505 ppb        0.25532  72.85%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               101.2      0.7464 ug/L       0.03494      0.7464 ppb        0.03494   4.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      83.9      4.5243 ug/L       1.31815      4.5243 ppb        1.31815  29.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, November 26, 2009 13:03:56
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1318
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6323.4	6323.399	75.256	1.2
	Mg	24.0	50162.2	50162.167	1376.872	2.7
	Co	58.9	95669.6	95669.610	2212.611	2.3
	Rh	102.9	175043.7	175043.706	973.065	0.6
	In	114.9	248038.6	248038.634	1433.843	0.6
	Pb	208.0	194795.2	194795.152	1537.000	0.8
⌈>	Ba	137.9	242851.6	242851.607	3151.975	1.3
⌊	Ba++	69.0	4150.6	0.017	0.000	2.8
⌈>	Ce	139.9	283495.5	283495.491	2633.672	0.9
⌊	CeO	155.9	7656.8	0.027	0.000	0.8
	Bkgd	220.0	16.6	16.600	2.133	12.8

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	5.3	6518.8
Co	59	9	5.5	98151.4
In	115	9	5.8	250097.5

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	608	2065	0.592
Be	9.0	9.0	2054	2075	0.618
Mg	24.0	24.0	5693	2075	0.597
Mg	25.0	25.0	5957	2090	0.592
Mg	26.0	25.9	6150	2090	0.587
Co	58.9	58.9	14184	2110	0.600
Rh	102.9	102.9	24877	2165	0.596
In	114.9	114.9	27791	2180	0.622
Ce	139.9	139.9	33863	2200	0.620
Pb	206.0	206.0	49948	2295	0.603
Pb	207.0	207.0	50159	2265	0.593
Pb	208.0	208.0	50451	2275	0.640
U	238.1	238.1	57730	2280	0.700

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, November 26, 2009 20:59:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\Blank.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		162	
	Be	9		ug/L		11	
	B	11		ug/L		745	
	Na	23		ug/L		14674	
	Mg	24		ug/L		3334	
	Al	27		ug/L		4001	
	P	31		ug/L		7558	
	K	39		ug/L		435558	
	Ca	43		ug/L		203	
>	Sc	45		ug/L		1416309	
	Ti	47		ug/L		422	
	V	51		ug/L		-4035	
	Cr	52		ug/L		-180	
	Cr	53		ug/L		86828	
	Mn	55		ug/L		1166	
	Fe	57		ug/L		4148	
	Co	59		ug/L		72	
	Ni	60		ug/L		59	
	Cu	63		ug/L		127	
	Cu	65		ug/L		89	
	Zn	66		ug/L		236	
	Zn	67		ug/L		11462	
	Zn	68		ug/L		1424	
>	Ge	74		ug/L		417590	
	As	75		ug/L		-232	
	Se	77		ug/L		4985	
	Se	82		ug/L		-20	
	Kr	83		ug/L		101	
	Sr	88		ug/L		168	
	Y	89		ug/L		54	
	Mo	98		ug/L		82	
	Ag	107		ug/L		57	
	Cd	111		ug/L		23	
	Cd	114		ug/L		37	
>	In	115		ug/L		284726	
	Sn	120		ug/L		458	
	Sb	121		ug/L		1091	
	Sb	123		ug/L		853	
	Ba	135		ug/L		33	
	Ba	137		ug/L		39	
	Ho	165		ug/L		45	
>	Lu	175		ug/L		493218	
	Tl	205		ug/L		335	
	Pb	208		ug/L		943	
	Bi	209		ug/L		404	
	Th	232		ug/L		3532	
	U	238		ug/L		514	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	0.9999
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, November 26, 2009 21:05:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\Standard 1.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.849	21897	0.015
	Be	9	10.000	ug/L	1.142	4349	0.003
	B	11	20.000	ug/L	4.648	8479	0.005
	Na	23	1000.000	ug/L	5.144	4182578	2.928
	Mg	24	1000.000	ug/L	3.624	2839363	1.992
	Al	27	1000.000	ug/L	5.479	3290373	2.310
	P	31	1000.000	ug/L	1.120	215634	0.146
	K	39	1000.000	ug/L	8.726	5050499	3.240
	Ca	43	1000.000	ug/L	4.427	12407	0.009
>	Sc	45		ug/L		1423171	1423171.000
	Ti	47	10.000	ug/L	0.258	6634	0.004
	V	51	10.000	ug/L	2.074	64182	0.048
	Cr	52	10.000	ug/L	1.327	53434	0.038
	Cr	53		ug/L		93617	0.004
	Mn	55	10.000	ug/L	1.571	92017	0.064
	Fe	57	1000.000	ug/L	3.017	185286	0.127
	Co	59	10.000	ug/L	1.546	69381	0.049
	Ni	60	10.000	ug/L	0.731	15053	0.011
	Cu	63		ug/L		36018	0.025
	Cu	65	10.000	ug/L	1.119	18154	0.013
	Zn	66	10.000	ug/L	3.754	12487	0.029
	Zn	67		ug/L		13468	0.005
	Zn	68		ug/L		10361	0.021
>	Ge	74		ug/L		419413	419412.830
	As	75	10.000	ug/L	2.046	12049	0.029
	Se	77		ug/L		5963	0.002
	Se	82	10.000	ug/L	2.940	1361	0.003
	Kr	83		ug/L		81	-0.000
	Sr	88	10.000	ug/L	1.696	165983	0.576
	Y	89		ug/L		65	0.000
	Mo	98	10.000	ug/L	2.217	36748	0.127
	Ag	107	10.000	ug/L	2.390	65119	0.226
	Cd	111	10.000	ug/L	0.227	16203	0.056
	Cd	114		ug/L		39467	0.137
>	In	115		ug/L		287705	287704.777
	Sn	120	10.000	ug/L	1.732	69328	0.239
	Sb	121	10.000	ug/L	8.391	50397	0.171
	Sb	123		ug/L		39176	0.133
	Ba	135		ug/L		17493	0.036
	Ba	137	10.000	ug/L	0.171	30854	0.063
	Ho	165		ug/L		44	-0.000
>	Lu	175		ug/L		491066	491065.851
	Tl	205	10.000	ug/L	0.300	208366	0.424
	Pb	208	10.000	ug/L	2.550	329428	0.669
	Bi	209		ug/L		439	0.000
	Th	232	10.000	ug/L	1.980	438752	0.886
	U	238	10.000	ug/L	0.541	477974	0.972

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, November 26, 2009 21:11:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\Standard 2.113

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.030**	**ug/L**	3.716	227001	0.157
	Be	9	**99.979**	**ug/L**	2.259	42998	0.030
	B	11	**200.121**	**ug/L**	5.422	84095	0.058
	Na	23	**9999.524**	**ug/L**	9.540	42029045	29.140
	Mg	24	**10000.548**	**ug/L**	12.052	28843908	20.035
	Al	27	**10002.253**	**ug/L**	10.087	34037531	23.636
	P	31	**9990.647**	**ug/L**	2.056	1931811	1.336
	K	39	**10006.873**	**ug/L**	14.113	50619710	34.814
	Ca	43	**9999.642**	**ug/L**	1.953	123317	0.085
>	Sc	45		**ug/L**		1441004	1441003.608
	Ti	47	**100.004**	**ug/L**	2.436	63531	0.044
	V	51	**99.988**	**ug/L**	2.137	678555	0.474
	Cr	52	**99.974**	**ug/L**	2.561	528431	0.367
	Cr	53		**ug/L**		148609	0.042
	Mn	55	**99.948**	**ug/L**	1.482	875058	0.607
	Fe	57	**9989.723**	**ug/L**	3.501	1665186	1.153
	Co	59	**99.946**	**ug/L**	2.892	665193	0.462
	Ni	60	**99.963**	**ug/L**	0.294	146461	0.102
	Cu	63		**ug/L**		353313	0.245
	Cu	65	**99.958**	**ug/L**	1.534	175521	0.122
	Zn	66	**99.995**	**ug/L**	2.170	121897	0.291
	Zn	67		**ug/L**		31109	0.047
	Zn	68		**ug/L**		89911	0.211
>	Ge	74		**ug/L**		418559	418558.519
	As	75	**99.991**	**ug/L**	1.809	121223	0.290
	Se	77		**ug/L**		14647	0.023
	Se	82	**99.957**	**ug/L**	2.391	13192	0.032
	Kr	83		**ug/L**		122	0.000
	Sr	88	**99.913**	**ug/L**	0.329	1508446	5.297
	Y	89		**ug/L**		195	0.000
	Mo	98	**99.999**	**ug/L**	0.766	362712	1.274
	Ag	107	**99.950**	**ug/L**	1.304	613205	2.153
	Cd	111	**99.985**	**ug/L**	1.509	157784	0.554
	Cd	114		**ug/L**		374981	1.317
>	In	115		**ug/L**		284758	284758.018
	Sn	120	**99.957**	**ug/L**	1.621	653605	2.294
	Sb	121	**100.038**	**ug/L**	5.813	508395	1.782
	Sb	123		**ug/L**		402141	1.409
	Ba	135		**ug/L**		169256	0.355
	Ba	137	**99.975**	**ug/L**	1.319	291504	0.612
	Ho	165		**ug/L**		56	0.000
>	Lu	175		**ug/L**		476077	476076.738
	Tl	205	**99.844**	**ug/L**	1.543	1741858	3.658
	Pb	208	**99.900**	**ug/L**	0.796	2893500	6.076
	Bi	209		**ug/L**		658	0.001
	Th	232	**99.895**	**ug/L**	1.976	3817482	8.012
	U	238	**99.848**	**ug/L**	1.324	4012482	8.427

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, November 26, 2009 21:17:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 1.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.353**	ug/L	1.222	116986	0.079
	Be	9	**52.041**	ug/L	0.891	22901	0.016
	B	11	**105.120**	ug/L	2.484	45570	0.030
	Na	23	**4544.285**	ug/L	6.815	19534333	13.243
	Mg	24	**5170.884**	ug/L	6.069	15269461	10.359
	Al	27	**5283.459**	ug/L	6.478	18406800	12.485
	P	31	**5234.960**	ug/L	2.213	1039187	0.700
	K	39	**4816.265**	ug/L	13.435	25164951	16.756
	Ca	43	**4870.521**	ug/L	4.486	61543	0.042
>	Sc	45		ug/L		1473884	1473883.752
	Ti	47	**49.313**	ug/L	1.151	32272	0.022
	V	51	**49.896**	ug/L	2.655	344297	0.236
	Cr	52	**50.498**	ug/L	2.622	272963	0.185
	Cr	53		ug/L		117760	0.019
	Mn	55	**51.371**	ug/L	0.452	460688	0.312
	Fe	57	**5093.931**	ug/L	1.996	870852	0.588
	Co	59	**49.187**	ug/L	3.169	334931	0.227
	Ni	60	**49.499**	ug/L	1.738	74204	0.050
	Cu	63		ug/L		181852	0.123
	Cu	65	**50.459**	ug/L	1.448	90686	0.061
	Zn	66	**50.866**	ug/L	0.360	62801	0.148
	Zn	67		ug/L		21317	0.023
	Zn	68		ug/L		46185	0.106
>	Ge	74		ug/L		423057	423056.930
	As	75	**48.258**	ug/L	0.602	59010	0.140
	Se	77		ug/L		9940	0.012
	Se	82	**50.111**	ug/L	2.136	6674	0.016
	Kr	83		ug/L		90	-0.000
	Sr	88	**51.936**	ug/L	0.506	790655	2.753
	Y	89		ug/L		90	0.000
	Mo	98	**49.420**	ug/L	2.069	180760	0.629
	Ag	107	**50.786**	ug/L	0.918	314177	1.094
	Cd	111	**50.193**	ug/L	0.615	79872	0.278
	Cd	114		ug/L		190817	0.665
>	In	115		ug/L		287102	287102.330
	Sn	120	**51.821**	ug/L	0.250	341879	1.189
	Sb	121	**49.657**	ug/L	8.653	254962	0.884
	Sb	123		ug/L		200680	0.696
	Ba	135		ug/L		84836	0.175
	Ba	137	**50.204**	ug/L	3.944	149275	0.307
	Ho	165		ug/L		90	0.000
>	Lu	175		ug/L		485654	485654.185
	Tl	205	**51.492**	ug/L	3.236	916233	1.887
	Pb	208	**52.984**	ug/L	2.060	1565549	3.222
	Bi	209		ug/L		509	0.000
	Th	232	**49.466**	ug/L	2.317	1929608	3.967
	U	238	**52.046**	ug/L	2.169	2133289	4.393

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	100.706				
|	Be	9	104.081				
|	B	11	105.120				
|	Na	23	90.886				
|	Mg	24	103.418				
|	Al	27	104.623				
|	P	31	104.699				
|	K	39	96.325				
|	Ca	43	97.410				
|>	Sc	45		104.1			
|	Ti	47	98.625				
|	V	51	99.792				
|	Cr	52	100.996				
|	Cr	53					
|	Mn	55	102.742				
|	Fe	57	101.879				
|	Co	59	98.374				
|	Ni	60	98.997				
|	Cu	63					
⌊	Cu	65	100.918				
⌈	Zn	66	101.731				
|	Zn	67					
|	Zn	68					
|>	Ge	74		101.3			
|	As	75	96.516				
|	Se	77					
|	Se	82	100.223				
⌊	Kr	83					
⌈	Sr	88	103.872				
|	Y	89					
|	Mo	98	98.840				
|	Ag	107	101.571				
|	Cd	111	100.385				
|	Cd	114					
|>	In	115		100.8			
|	Sn	120	103.643				
|	Sb	121	99.313				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	100.408				
|	Ho	165					
|>	Lu	175		98.5			
|	Tl	205	102.984				
|	Pb	208	105.968				
|	Bi	209					
|	Th	232	98.932				
⌊	U	238	104.093				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, November 26, 2009 21:23:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 2.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.007**	ug/L	205.977	179	0.000
	Be	9	**0.006**	ug/L	156.331	14	0.000
	B	11	**4.447**	ug/L	14.429	2574	0.001
	Na	23	**-0.336**	ug/L	247.501	13340	-0.001
	Mg	24	**-0.357**	ug/L	148.700	2334	-0.001
	Al	27	**-0.300**	ug/L	100.888	3000	-0.001
	P	31	**0.549**	ug/L	319.145	7683	0.000
	K	39	**-3.203**	ug/L	225.030	421151	-0.011
	Ca	43	**-0.585**	ug/L	569.257	196	-0.000
>	Sc	45		ug/L		1420440	1420440.077
	Ti	47	**-0.067**	ug/L	49.939	381	-0.000
	V	51	**0.104**	ug/L	693.575	-3329	0.000
	Cr	52	**0.092**	ug/L	38.150	298	0.000
	Cr	53		ug/L		87403	0.000
	Mn	55	**-0.011**	ug/L	6.080	1073	-0.000
	Fe	57	**0.738**	ug/L	157.997	4281	0.000
	Co	59	**0.001**	ug/L	50.403	82	0.000
	Ni	60	**0.007**	ug/L	64.696	70	0.000
	Cu	63		ug/L		151	0.000
	Cu	65	**0.001**	ug/L	100.389	91	0.000
	Zn	66	**0.030**	ug/L	31.545	272	0.000
	Zn	67		ug/L		11142	-0.001
	Zn	68		ug/L		1406	-0.000
>	Ge	74		ug/L		415196	415196.167
	As	75	**-0.150**	ug/L	167.766	-409	-0.000
	Se	77		ug/L		5202	0.001
	Se	82	**0.117**	ug/L	75.493	-4	0.000
	Kr	83		ug/L		96	-0.000
	Sr	88	**0.001**	ug/L	147.138	174	0.000
	Y	89		ug/L		59	0.000
	Mo	98	**0.070**	ug/L	32.644	331	0.001
	Ag	107	**0.000**	ug/L	889.592	58	0.000
	Cd	111	**0.004**	ug/L	64.956	29	0.000
	Cd	114		ug/L		56	0.000
>	In	115		ug/L		281902	281901.733
	Sn	120	**0.289**	ug/L	20.206	2321	0.007
	Sb	121	**1.615**	ug/L	25.375	9188	0.029
	Sb	123		ug/L		7365	0.023
	Ba	135		ug/L		28	-0.000
	Ba	137	**0.002**	ug/L	151.005	44	0.000
	Ho	165		ug/L		49	0.000
>	Lu	175		ug/L		489527	489526.506
	Tl	205	**0.022**	ug/L	25.964	735	0.001
	Pb	208	**0.002**	ug/L	67.378	1010	0.000
	Bi	209		ug/L		395	-0.000
	Th	232	**0.506**	ug/L	26.343	23390	0.041
	U	238	**0.014**	ug/L	32.042	1095	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, November 26, 2009 21:29:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 3.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.787**	ug/L	3.197	23843	0.017
	Be	9	**0.559**	ug/L	6.013	243	0.000
	B	11	**17.558**	ug/L	7.462	7807	0.005
	Na	23	**260.579**	ug/L	3.518	1073559	0.759
	Mg	24	**13.261**	ug/L	31.810	40058	0.027
	Al	27	**34.818**	ug/L	12.456	119170	0.082
	P	31	**58.661**	ug/L	12.195	18365	0.008
	K	39	**316.182**	ug/L	11.505	1960367	1.100
	Ca	43	**221.370**	ug/L	5.238	2836	0.002
>	Sc	45		ug/L		1396278	1396278.363
	Ti	47	**8.374**	ug/L	8.533	5521	0.004
	V	51	**10.446**	ug/L	13.896	64842	0.050
	Cr	52	**10.639**	ug/L	7.924	54194	0.039
	Cr	53		ug/L		91425	0.004
	Mn	55	**5.658**	ug/L	5.459	49000	0.034
	Fe	57	**118.185**	ug/L	8.264	23085	0.014
	Co	59	**1.086**	ug/L	5.328	7066	0.005
	Ni	60	**2.098**	ug/L	6.479	3029	0.002
	Cu	63		ug/L		3870	0.003
	Cu	65	**1.139**	ug/L	3.744	2023	0.001
	Zn	66	**11.121**	ug/L	4.508	13226	0.032
	Zn	67		ug/L		13226	0.005
	Zn	68		ug/L		10455	0.023
>	Ge	74		ug/L		402280	402280.412
	As	75	**5.436**	ug/L	4.941	6120	0.016
	Se	77		ug/L		5531	0.002
	Se	82	**5.838**	ug/L	2.537	723	0.002
	Kr	83		ug/L		88	-0.000
	Sr	88	**11.320**	ug/L	1.606	171930	0.600
	Y	89		ug/L		49	-0.000
	Mo	98	**0.534**	ug/L	6.726	2027	0.007
	Ag	107	**1.033**	ug/L	1.775	6427	0.022
	Cd	111	**1.019**	ug/L	4.709	1639	0.006
	Cd	114		ug/L		4099	0.014
>	In	115		ug/L		286264	286264.003
	Sn	120	**5.412**	ug/L	1.802	36004	0.124
	Sb	121	**3.308**	ug/L	5.730	17962	0.059
	Sb	123		ug/L		13944	0.046
	Ba	135		ug/L		3583	0.007
	Ba	137	**2.097**	ug/L	3.410	6278	0.013
	Ho	165		ug/L		47	0.000
>	Lu	175		ug/L		486227	486226.669
	Tl	205	**1.172**	ug/L	2.878	21194	0.043
	Pb	208	**2.296**	ug/L	3.728	68787	0.140
	Bi	209		ug/L		394	-0.000
	Th	232	**1.317**	ug/L	1.289	54811	0.106
	U	238	**0.252**	ug/L	3.744	10863	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	107.874				
	Be	9	111.815				
	B	11	117.055				
	Na	23	104.232				
	Mg	24	88.405				
	Al	27	116.061				
	P	31	117.321				
	K	39	105.394				
	Ca	43	110.685				
>	Sc	45		98.6			
	Ti	47	83.737				
	V	51	104.464				
	Cr	52	106.391				
	Cr	53					
	Mn	55	113.163				
	Fe	57	118.185				
	Co	59	108.642				
	Ni	60	104.897				
	Cu	63					
	Cu	65	113.935				
	Zn	66	111.205				
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75	108.730				
	Se	77					
	Se	82	116.764				
	Kr	83					
	Sr	88	113.199				
	Y	89					
	Mo	98	106.757				
	Ag	107	103.299				
	Cd	111	101.885				
	Cd	114					
>	In	115		100.5			
	Sn	120	108.235				
	Sb	121	110.251				
	Sb	123					
	Ba	135					
	Ba	137	104.847				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	117.169				
	Pb	208	114.805				
	Bi	209					
	Th	232	131.654				
	U	238	126.211				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, November 26, 2009 21:35:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 4.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.132**	ug/L	13.344	412	0.000
	Be	9	**0.079**	ug/L	8.293	40	0.000
	B	11	**1.518**	ug/L	21.778	1233	0.000
	Na	23	**90727.423**	ug/L	4.404	337566612	264.395
	Mg	24	**93296.608**	ug/L	5.594	238621174	186.910
	Al	27	**93157.992**	ug/L	3.117	281090157	220.139
	P	31	**97219.606**	ug/L	1.826	16600609	12.996
	K	39	**94517.615**	ug/L	1.006	420220872	328.831
	Ca	43	**92290.006**	ug/L	0.384	1007113	0.789
>	Sc	45		ug/L		1276766	1276766.297
	Ti	47	**1434.869**	ug/L	2.218	802690	0.628
	V	51	**0.536**	ug/L	31.959	-397	0.003
	Cr	52	**2.328**	ug/L	2.083	10748	0.009
	Cr	53		ug/L		67411	-0.009
	Mn	55	**6.108**	ug/L	1.051	48376	0.037
	Fe	57	**111907.879**	ug/L	1.938	16495628	12.917
	Co	59	**0.380**	ug/L	1.985	2304	0.002
	Ni	60	**3.374**	ug/L	1.926	4431	0.003
	Cu	63		ug/L		12239	0.009
	Cu	65	**4.847**	ug/L	1.690	7619	0.006
	Zn	66	**3.825**	ug/L	2.105	4362	0.011
	Zn	67		ug/L		10470	0.001
	Zn	68		ug/L		1961	0.002
>	Ge	74		ug/L		373327	373326.514
	As	75	**0.204**	ug/L	187.705	14	0.001
	Se	77		ug/L		5753	0.003
	Se	82	**-1.510**	ug/L	29.197	-196	-0.000
	Kr	83		ug/L		380	0.001
	Sr	88	**1.261**	ug/L	0.678	17415	0.067
	Y	89		ug/L		545	0.002
	Mo	98	**1967.018**	ug/L	2.224	6466950	25.050
	Ag	107	**0.074**	ug/L	8.708	463	0.002
	Cd	111	**0.559**	ug/L	24.485	820	0.003
	Cd	114		ug/L		10481	0.040
>	In	115		ug/L		258250	258249.993
	Sn	120	**0.251**	ug/L	6.747	1903	0.006
	Sb	121	**0.423**	ug/L	20.087	2936	0.008
	Sb	123		ug/L		2277	0.006
	Ba	135		ug/L		1130	0.003
	Ba	137	**0.719**	ug/L	4.971	1910	0.004
	Ho	165		ug/L		1169	0.003
>	Lu	175		ug/L		425942	425941.596
	Tl	205	**0.025**	ug/L	7.973	680	0.001
	Pb	208	**0.194**	ug/L	0.139	5831	0.012
	Bi	209		ug/L		1273	0.002
	Th	232	**0.349**	ug/L	32.196	14972	0.028
	U	238	**0.003**	ug/L	37.818	536	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	90.727				
	Mg	24	93.297				
	Al	27	93.158				
	P	31	97.220				
	K	39	94.518				
	Ca	43	92.290				
>	Sc	45			90.1		
	Ti	47	71.743				
	V	51					
	Cr	52	62.923				
	Cr	53					
	Mn	55	105.314				
	Fe	57	111.908				
	Co	59	151.826				
	Ni	60	124.947				
	Cu	63					
	Cu	65	167.145				
	Zn	66	106.237				
	Zn	67					
	Zn	68					
>	Ge	74			89.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	105.085				
	Y	89					
	Mo	98	98.351				
	Ag	107					
	Cd	111	139.838				
	Cd	114					
>	In	115			90.7		
	Sn	120					
	Sb	121	422.724				
	Sb	123					
	Ba	135					
	Ba	137	107.375				
	Ho	165					
>	Lu	175			86.4		
	Tl	205					
	Pb	208	96.830				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, November 26, 2009 21:42:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 5.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.297**	ug/L	3.442	39258	0.030
	Be	9	**18.317**	ug/L	5.675	7045	0.005
	B	11	**18.202**	ug/L	3.991	7454	0.005
	Na	23	**93356.213**	ug/L	2.417	350742384	272.056
	Mg	24	**93162.863**	ug/L	7.986	240089612	186.642
	Al	27	**89082.626**	ug/L	8.707	270804090	210.508
	P	31	**93215.607**	ug/L	4.100	16049743	12.461
	K	39	**96713.112**	ug/L	9.995	433165607	336.469
	Ca	43	**89411.443**	ug/L	5.889	983527	0.764
>	Sc	45		ug/L		1288552	1288552.438
	Ti	47	**1387.969**	ug/L	6.005	782646	0.608
	V	51	**21.045**	ug/L	2.827	124759	0.100
	Cr	52	**22.669**	ug/L	2.827	106997	0.083
	Cr	53		ug/L		77009	-0.001
	Mn	55	**26.879**	ug/L	3.897	211064	0.163
	Fe	57	**108512.081**	ug/L	3.453	16131597	12.525
	Co	59	**20.370**	ug/L	1.131	121294	0.094
	Ni	60	**22.325**	ug/L	2.876	29274	0.023
	Cu	63		ug/L		69301	0.054
	Cu	65	**22.921**	ug/L	3.779	36030	0.028
	Zn	66	**22.631**	ug/L	2.250	24485	0.066
	Zn	67		ug/L		13650	0.010
	Zn	68		ug/L		16868	0.042
>	Ge	74		ug/L		369061	369061.394
	As	75	**20.517**	ug/L	2.925	21776	0.060
	Se	77		ug/L		7361	0.008
	Se	82	**18.540**	ug/L	3.859	2144	0.006
	Kr	83		ug/L		350	0.001
	Sr	88	**23.840**	ug/L	2.052	326711	1.264
	Y	89		ug/L		514	0.002
	Mo	98	**1946.232**	ug/L	3.774	6403652	24.785
	Ag	107	**19.034**	ug/L	0.688	106019	0.410
	Cd	111	**19.922**	ug/L	1.167	28548	0.110
	Cd	114		ug/L		78824	0.305
>	In	115		ug/L		258435	258435.090
	Sn	120	**20.994**	ug/L	3.636	124875	0.482
	Sb	121	**22.304**	ug/L	4.542	103610	0.397
	Sb	123		ug/L		80937	0.310
	Ba	135		ug/L		32243	0.074
	Ba	137	**21.222**	ug/L	0.148	56696	0.130
	Ho	165		ug/L		1105	0.002
>	Lu	175		ug/L		435986	435985.732
	Tl	205	**22.179**	ug/L	2.490	354465	0.813
	Pb	208	**21.556**	ug/L	2.945	572179	1.311
	Bi	209		ug/L		1741	0.003
	Th	232	**22.391**	ug/L	3.770	785693	1.796
	U	238	**23.529**	ug/L	2.207	865999	1.986

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	96.484				
	Be	9	91.583				
	B	11	91.012				
	Na	23	93.356				
	Mg	24	93.163				
	Al	27	89.083				
	P	31	93.216				
	K	39	96.713				
	Ca	43	89.411				
>	Sc	45		91.0			
	Ti	47	69.398				
	V	51	105.226				
	Cr	52	95.651				
	Cr	53					
	Mn	55	104.184				
	Fe	57	108.512				
	Co	59	100.592				
	Ni	60	98.349				
	Cu	63					
	Cu	65	100.093				
	Zn	66	95.893				
	Zn	67					
	Zn	68					
>	Ge	74		88.4			
	As	75	102.587				
	Se	77					
	Se	82	92.702				
	Kr	83					
	Sr	88	112.454				
	Y	89					
	Mo	98	97.312				
	Ag	107	95.168				
	Cd	111	97.657				
	Cd	114					
>	In	115		90.8			
	Sn	120	104.968				
	Sb	121	110.967				
	Sb	123					
	Ba	135					
	Ba	137	102.672				
	Ho	165					
>	Lu	175		88.4			
	Tl	205	110.895				
	Pb	208	106.712				
	Bi	209					
	Th	232	111.955				
	U	238	117.645				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, November 26, 2009 21:48:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 6.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.951**	**ug/L**	3.343	101400	0.079
	Be	9	**52.021**	**ug/L**	2.631	20005	0.016
	B	11	**99.929**	**ug/L**	2.295	37894	0.029
	Na	23	**4595.275**	**ug/L**	14.396	17264535	13.391
	Mg	24	**4975.894**	**ug/L**	10.549	12823020	9.969
	Al	27	**4734.891**	**ug/L**	7.276	14400494	11.189
	P	31	**5133.492**	**ug/L**	4.815	890342	0.686
	K	39	**5274.344**	**ug/L**	11.972	23990627	18.350
	Ca	43	**4917.283**	**ug/L**	1.926	54322	0.042
>	Sc	45		**ug/L**		1288589	1288588.548
	Ti	47	**52.357**	**ug/L**	2.682	29924	0.023
	V	51	**52.284**	**ug/L**	4.441	315374	0.248
	Cr	52	**52.073**	**ug/L**	3.057	245964	0.191
	Cr	53		**ug/L**		106762	0.022
	Mn	55	**53.597**	**ug/L**	2.810	419936	0.325
	Fe	57	**5438.738**	**ug/L**	2.158	812484	0.628
	Co	59	**52.390**	**ug/L**	4.263	311661	0.242
	Ni	60	**52.074**	**ug/L**	4.249	68196	0.053
	Cu	63		**ug/L**		166017	0.129
	Cu	65	**52.546**	**ug/L**	3.439	82503	0.064
	Zn	66	**50.881**	**ug/L**	1.310	57614	0.148
	Zn	67		**ug/L**		19654	0.023
	Zn	68		**ug/L**		42153	0.105
>	Ge	74		**ug/L**		388006	388006.431
	As	75	**48.236**	**ug/L**	1.283	54085	0.140
	Se	77		**ug/L**		8799	0.011
	Se	82	**52.015**	**ug/L**	3.851	6351	0.016
	Kr	83		**ug/L**		98	0.000
	Sr	88	**50.415**	**ug/L**	4.359	742146	2.673
	Y	89		**ug/L**		134	0.000
	Mo	98	**48.700**	**ug/L**	4.165	172280	0.620
	Ag	107	**48.973**	**ug/L**	5.426	292884	1.055
	Cd	111	**48.831**	**ug/L**	3.331	75162	0.271
	Cd	114		**ug/L**		179072	0.645
>	In	115		**ug/L**		277923	277922.973
	Sn	120	**50.289**	**ug/L**	5.172	320759	1.154
	Sb	121	**46.852**	**ug/L**	6.429	233210	0.834
	Sb	123		**ug/L**		182948	0.655
	Ba	135		**ug/L**		81278	0.169
	Ba	137	**48.599**	**ug/L**	2.081	143045	0.298
	Ho	165		**ug/L**		96	0.000
>	Lu	175		**ug/L**		480588	480587.605
	Tl	205	**51.652**	**ug/L**	1.852	909715	1.892
	Pb	208	**52.504**	**ug/L**	1.825	1535401	3.193
	Bi	209		**ug/L**		480	0.000
	Th	232	**49.432**	**ug/L**	0.854	1908626	3.964
	U	238	**52.700**	**ug/L**	1.761	2137881	4.448

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	99.901				
	Be	9	104.042				
	B	11	99.929				
	Na	23	91.905				
	Mg	24	99.518				
	Al	27	93.760				
	P	31	102.670				
	K	39	105.487				
	Ca	43	98.346				
>	Sc	45		91.0			
	Ti	47	104.713				
	V	51	104.568				
	Cr	52	104.147				
	Cr	53					
	Mn	55	107.195				
	Fe	57	108.775				
	Co	59	104.781				
	Ni	60	104.148				
	Cu	63					
	Cu	65	105.092				
	Zn	66	101.762				
	Zn	67					
	Zn	68					
>	Ge	74		92.9			
	As	75	96.471				
	Se	77					
	Se	82	104.030				
	Kr	83					
	Sr	88	100.831				
	Y	89					
	Mo	98	97.401				
	Ag	107	97.945				
	Cd	111	97.662				
	Cd	114					
>	In	115		97.6			
	Sn	120	100.578				
	Sb	121	93.704				
	Sb	123					
	Ba	135					
	Ba	137	97.198				
	Ho	165					
>	Lu	175		97.4			
	Tl	205	103.303				
	Pb	208	105.009				
	Bi	209					
	Th	232	98.864				
	U	238	105.400				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, November 26, 2009 21:54:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 7.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.017**	ug/L	32.605	183	0.000
	Be	9	**0.035**	ug/L	27.293	24	0.000
	B	11	**2.605**	ug/L	12.082	1652	0.001
	Na	23	**0.533**	ug/L	279.133	15342	0.002
	Mg	24	**-0.403**	ug/L	95.166	2000	-0.001
	Al	27	**0.658**	ug/L	71.758	5668	0.002
	P	31	**-0.759**	ug/L	177.547	6756	-0.000
	K	39	**-1.580**	ug/L	216.754	389576	-0.005
	Ca	43	**1.755**	ug/L	9.390	204	0.000
>	Sc	45		ug/L		1290421	1290420.744
	Ti	47	**0.574**	ug/L	14.506	709	0.000
	V	51	**0.239**	ug/L	44.288	-2208	0.001
	Cr	52	**0.005**	ug/L	1560.993	-144	0.000
	Cr	53		ug/L		79487	0.000
	Mn	55	**-0.019**	ug/L	23.339	917	-0.000
	Fe	57	**2.562**	ug/L	6.196	4161	0.000
	Co	59	**0.001**	ug/L	220.416	69	0.000
	Ni	60	**0.011**	ug/L	15.059	69	0.000
	Cu	63		ug/L		134	0.000
	Cu	65	**0.001**	ug/L	455.107	83	0.000
	Zn	66	**0.032**	ug/L	38.670	255	0.000
	Zn	67		ug/L		10513	-0.000
	Zn	68		ug/L		1247	-0.000
>	Ge	74		ug/L		387013	387012.673
	As	75	**-0.382**	ug/L	66.651	-643	-0.001
	Se	77		ug/L		4631	0.000
	Se	82	**0.206**	ug/L	75.730	7	0.000
	Kr	83		ug/L		74	-0.000
	Sr	88	**0.001**	ug/L	70.650	180	0.000
	Y	89		ug/L		50	-0.000
	Mo	98	**0.152**	ug/L	23.861	602	0.002
	Ag	107	**0.001**	ug/L	164.821	61	0.000
	Cd	111	**0.003**	ug/L	166.801	27	0.000
	Cd	114		ug/L		52	0.000
>	In	115		ug/L		270486	270485.913
	Sn	120	**0.218**	ug/L	22.123	1787	0.005
	Sb	121	**1.145**	ug/L	30.338	6541	0.020
	Sb	123		ug/L		5129	0.016
	Ba	135		ug/L		29	-0.000
	Ba	137	**0.002**	ug/L	124.635	43	0.000
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		480135	480134.741
	Tl	205	**0.017**	ug/L	41.735	629	0.001
	Pb	208	**0.003**	ug/L	38.620	1016	0.000
	Bi	209		ug/L		358	-0.000
	Th	232	**0.339**	ug/L	30.225	16470	0.027
	U	238	**0.012**	ug/L	31.038	994	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.3		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, November 26, 2009 22:00:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 10.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**879.870**	ug/L	2.307	1708971	1.385
	Be	9	**918.685**	ug/L	2.239	338309	0.274
	B	11	**0.740**	ug/L	19.422	913	0.000
	Na	23	**45973.881**	ug/L	3.931	165447668	133.976
	Mg	24	**45979.095**	ug/L	7.631	113803944	92.114
	Al	27	**46858.218**	ug/L	4.683	136711181	110.729
	P	31	**23786.205**	ug/L	2.406	3931534	3.180
	K	39	**49114.734**	ug/L	3.491	211173063	170.872
	Ca	43	**46832.616**	ug/L	3.174	494040	0.400
>	Sc	45		ug/L		1234187	1234187.483
	Ti	47	**45.280**	ug/L	2.927	24836	0.020
	V	51	**895.289**	ug/L	2.308	5232701	4.243
	Cr	52	**892.546**	ug/L	1.686	4043194	3.276
	Cr	53		ug/L		572035	0.402
	Mn	55	**936.753**	ug/L	1.809	7016813	5.685
	Fe	57	**55453.444**	ug/L	2.698	7903677	6.401
	Co	59	**846.925**	ug/L	1.193	4827835	3.912
	Ni	60	**865.841**	ug/L	0.841	1086023	0.880
	Cu	63		ug/L		2598336	2.106
	Cu	65	**831.344**	ug/L	2.189	1249547	1.013
	Zn	66	**2324.835**	ug/L	2.951	2457582	6.759
	Zn	67		ug/L		379184	1.015
	Zn	68		ug/L		1580835	4.345
>	Ge	74		ug/L		363606	363605.520
	As	75	**871.718**	ug/L	1.803	919521	2.530
	Se	77		ug/L		44473	0.110
	Se	82	**476.031**	ug/L	0.923	54638	0.150
	Kr	83		ug/L		212	0.000
	Sr	88	**1023.908**	ug/L	3.245	13511643	54.280
	Y	89		ug/L		438	0.002
	Mo	98	**1047.869**	ug/L	3.040	3322034	13.345
	Ag	107	**238.399**	ug/L	2.488	1278472	5.136
	Cd	111	**900.754**	ug/L	0.691	1242520	4.991
	Cd	114		ug/L		3079470	12.371
>	In	115		ug/L		248936	248936.054
	Sn	120	**992.912**	ug/L	3.734	5671721	22.785
	Sb	121	**241.867**	ug/L	9.174	1073374	4.307
	Sb	123		ug/L		848047	3.403
	Ba	135		ug/L		1342727	2.956
	Ba	137	**909.442**	ug/L	3.134	2529733	5.569
	Ho	165		ug/L		365	0.001
>	Lu	175		ug/L		454302	454302.324
	Tl	205	**502.958**	ug/L	1.814	8371560	18.428
	Pb	208	**4819.946**	ug/L	2.352	133162153	293.145
	Bi	209		ug/L		3888	0.008
	Th	232	**2454.590**	ug/L	2.824	89425052	196.860
	U	238	**5120.960**	ug/L	2.774	196329955	432.214

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	87.987				
	Be	9	91.868				
	B	11					
	Na	23	91.948				
	Mg	24	91.958				
	Al	27	93.716				
	P	31	95.145				
	K	39	98.229				
	Ca	43	93.665				
>	Sc	45		87.1			
	Ti	47					
	V	51	89.529				
	Cr	52	89.255				
	Cr	53					
	Mn	55	93.675				
	Fe	57	110.907				
	Co	59	84.692				
	Ni	60	86.584				
	Cu	63					
	Cu	65	83.134				
	Zn	66	92.993				
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75	87.172				
	Se	77					
	Se	82	95.206				
	Kr	83					
	Sr	88	102.391				
	Y	89					
	Mo	98	104.787				
	Ag	107	95.360				
	Cd	111	90.075				
	Cd	114					
>	In	115		87.4			
	Sn	120	99.291				
	Sb	121	96.747				
	Sb	123					
	Ba	135					
	Ba	137	90.944				
	Ho	165					
>	Lu	175		92.1			
	Tl	205	100.592				
	Pb	208	96.399				
	Bi	209					
	Th	232	98.184				
	U	238	102.419				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Li	7	LRS is out of limits (+/- 10%)
QC Std 10	V	51	LRS is out of limits (+/- 10%)
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)

QC Std 10	As	75LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, November 26, 2009 22:06:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 11.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.446**	**ug/L**	1.070	105705	0.079
	Be	9	**52.727**	**ug/L**	3.484	20919	0.016
	B	11	**99.897**	**ug/L**	2.438	39089	0.029
	Na	23	**5516.462**	**ug/L**	6.118	21389782	16.076
	Mg	24	**5350.944**	**ug/L**	4.729	14254173	10.720
	Al	27	**4902.799**	**ug/L**	4.922	15396956	11.586
	P	31	**5174.827**	**ug/L**	4.617	926290	0.692
	K	39	**5231.588**	**ug/L**	6.776	24612506	18.201
	Ca	43	**5000.689**	**ug/L**	1.354	56987	0.043
>	Sc	45		**ug/L**		1329143	1329142.723
	Ti	47	**50.248**	**ug/L**	1.986	29641	0.022
	V	51	**50.641**	**ug/L**	4.994	315066	0.240
	Cr	52	**50.702**	**ug/L**	2.698	247119	0.186
	Cr	53		**ug/L**		107161	0.019
	Mn	55	**52.737**	**ug/L**	1.611	426418	0.320
	Fe	57	**5342.096**	**ug/L**	3.005	823254	0.617
	Co	59	**50.159**	**ug/L**	1.771	307997	0.232
	Ni	60	**51.256**	**ug/L**	4.656	69274	0.052
	Cu	63		**ug/L**		169966	0.128
	Cu	65	**52.426**	**ug/L**	1.133	84961	0.064
	Zn	66	**51.112**	**ug/L**	1.573	58433	0.149
	Zn	67		**ug/L**		20169	0.024
	Zn	68		**ug/L**		43208	0.107
>	Ge	74		**ug/L**		391756	391755.626
	As	75	**48.556**	**ug/L**	1.116	54979	0.141
	Se	77		**ug/L**		8841	0.011
	Se	82	**51.378**	**ug/L**	3.353	6337	0.016
	Kr	83		**ug/L**		92	-0.000
	Sr	88	**51.100**	**ug/L**	0.574	745427	2.709
	Y	89		**ug/L**		88	0.000
	Mo	98	**49.270**	**ug/L**	0.296	172703	0.627
	Ag	107	**50.263**	**ug/L**	1.966	297932	1.083
	Cd	111	**49.790**	**ug/L**	1.829	75918	0.276
	Cd	114		**ug/L**		184422	0.670
>	In	115		**ug/L**		275121	275120.866
	Sn	120	**54.899**	**ug/L**	2.106	346989	1.260
	Sb	121	**53.537**	**ug/L**	4.881	263409	0.953
	Sb	123		**ug/L**		206801	0.748
	Ba	135		**ug/L**		83641	0.173
	Ba	137	**49.225**	**ug/L**	3.021	145346	0.301
	Ho	165		**ug/L**		100	0.000
>	Lu	175		**ug/L**		482093	482093.029
	Tl	205	**52.398**	**ug/L**	0.566	925870	1.920
	Pb	208	**53.455**	**ug/L**	1.859	1568208	3.251
	Bi	209		**ug/L**		440	0.000
	Th	232	**55.767**	**ug/L**	2.502	2159772	4.473
	U	238	**55.126**	**ug/L**	0.913	2243463	4.653

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.893				
	Be	9	105.453				
	B	11	99.897				
	Na	23	110.329				
	Mg	24	107.019				
	Al	27	97.085				
	P	31	103.497				
	K	39	104.632				
	Ca	43	100.014				
>	Sc	45		93.8			
	Ti	47	100.496				
	V	51	101.281				
	Cr	52	101.404				
	Cr	53					
	Mn	55	105.474				
	Fe	57	106.842				
	Co	59	100.318				
	Ni	60	102.512				
	Cu	63					
	Cu	65	104.853				
	Zn	66	102.223				
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75	97.112				
	Se	77					
	Se	82	102.755				
	Kr	83					
	Sr	88	102.200				
	Y	89					
	Mo	98	98.540				
	Ag	107	100.526				
	Cd	111	99.581				
	Cd	114					
>	In	115		96.6			
	Sn	120	109.798				
	Sb	121	107.074				
	Sb	123					
	Ba	135					
	Ba	137	98.450				
	Ho	165					
>	Lu	175		97.7			
	Tl	205	104.796				
	Pb	208	106.910				
	Bi	209					
	Th	232	111.534				
	U	238	110.251				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Na	23	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, November 26, 2009 22:12:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 12.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.076**	ug/L	10.670	307	0.000
	Be	9	**0.009**	ug/L	143.048	14	0.000
	B	11	**2.571**	ug/L	22.514	1663	0.001
	Na	23	**1.602**	ug/L	26.518	19680	0.005
	Mg	24	**-0.026**	ug/L	1587.268	3000	-0.000
	Al	27	**0.853**	ug/L	59.512	6335	0.002
	P	31	**-0.927**	ug/L	295.838	6831	-0.000
	K	39	**4.298**	ug/L	180.554	422512	0.015
	Ca	43	**1.086**	ug/L	108.240	200	0.000
>	Sc	45		ug/L		1311191	1311190.540
	Ti	47	**0.035**	ug/L	161.071	410	0.000
	V	51	**0.165**	ug/L	324.560	-2687	0.001
	Cr	52	**0.094**	ug/L	36.795	285	0.000
	Cr	53		ug/L		78028	-0.002
	Mn	55	**-0.015**	ug/L	54.521	960	-0.000
	Fe	57	**0.871**	ug/L	207.113	3969	0.000
	Co	59	**0.008**	ug/L	13.013	116	0.000
	Ni	60	**0.003**	ug/L	137.073	59	0.000
	Cu	63		ug/L		226	0.000
	Cu	65	**0.029**	ug/L	2.574	130	0.000
	Zn	66	**0.073**	ug/L	74.789	300	0.000
	Zn	67		ug/L		10752	0.000
	Zn	68		ug/L		1372	0.000
>	Ge	74		ug/L		385643	385642.771
	As	75	**0.022**	ug/L	205.048	-189	0.000
	Se	77		ug/L		4456	-0.000
	Se	82	**0.199**	ug/L	64.092	6	0.000
	Kr	83		ug/L		81	-0.000
	Sr	88	**0.003**	ug/L	91.640	199	0.000
	Y	89		ug/L		52	-0.000
	Mo	98	**0.192**	ug/L	11.049	748	0.002
	Ag	107	**0.004**	ug/L	52.145	79	0.000
	Cd	111	**0.014**	ug/L	23.362	43	0.000
	Cd	114		ug/L		46	0.000
>	In	115		ug/L		273929	273929.264
	Sn	120	**1.343**	ug/L	4.758	8882	0.031
	Sb	121	**2.527**	ug/L	20.029	13363	0.045
	Sb	123		ug/L		10538	0.036
	Ba	135		ug/L		34	0.000
	Ba	137	**0.008**	ug/L	13.050	62	0.000
	Ho	165		ug/L		48	0.000
>	Lu	175		ug/L		495023	495022.738
	Tl	205	**0.023**	ug/L	24.406	750	0.001
	Pb	208	**0.012**	ug/L	29.168	1321	0.001
	Bi	209		ug/L		349	-0.000
	Th	232	**0.996**	ug/L	19.187	43027	0.080
	U	238	**0.081**	ug/L	16.618	3908	0.007

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977909
Sample Date/Time: Thursday, November 26, 2009 22:18:46
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925185|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\1201977909.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	ug/L	93.596	184	0.000
	Be	9	**0.006**	ug/L	205.207	13	0.000
	B	11	**0.758**	ug/L	1.022	1048	0.000
	Na	23	**1.414**	ug/L	60.925	20348	0.004
	Mg	24	**-0.344**	ug/L	63.574	2334	-0.001
	Al	27	**3.127**	ug/L	21.294	14341	0.007
	P	31	**29.998**	ug/L	20.595	13136	0.004
	K	39	**1.007**	ug/L	959.952	437315	0.004
	Ca	43	**7.733**	ug/L	8.855	294	0.000
>	Sc	45		ug/L		1405432	1405431.916
	Ti	47	**0.274**	ug/L	22.064	588	0.000
	V	51	**0.563**	ug/L	111.008	-289	0.003
	Cr	52	**0.483**	ug/L	10.023	2308	0.002
	Cr	53		ug/L		61247	-0.018
	Mn	55	**0.125**	ug/L	0.955	2221	0.001
	Fe	57	**12.957**	ug/L	5.661	6219	0.001
	Co	59	**0.002**	ug/L	29.789	86	0.000
	Ni	60	**0.047**	ug/L	35.542	126	0.000
	Cu	63		ug/L		666	0.000
	Cu	65	**0.169**	ug/L	5.175	378	0.000
	Zn	66	**0.576**	ug/L	4.348	897	0.002
	Zn	67		ug/L		8474	-0.006
	Zn	68		ug/L		1630	0.001
>	Ge	74		ug/L		400265	400264.569
	As	75	**0.079**	ug/L	178.784	-131	0.000
	Se	77		ug/L		3205	-0.004
	Se	82	**0.169**	ug/L	15.460	3	0.000
	Kr	83		ug/L		84	-0.000
	Sr	88	**0.015**	ug/L	8.722	405	0.001
	Y	89		ug/L		75	0.000
	Mo	98	**0.104**	ug/L	12.342	467	0.001
	Ag	107	**0.004**	ug/L	48.643	83	0.000
	Cd	111	**0.014**	ug/L	55.445	46	0.000
	Cd	114		ug/L		26	-0.000
>	In	115		ug/L		289616	289616.417
	Sn	120	**0.565**	ug/L	1.904	4217	0.013
	Sb	121	**1.033**	ug/L	21.242	6424	0.018
	Sb	123		ug/L		5089	0.015
	Ba	135		ug/L		115	0.000
	Ba	137	**0.048**	ug/L	1.455	195	0.000
	Ho	165		ug/L		46	-0.000
>	Lu	175		ug/L		527848	527847.713
	Tl	205	**0.005**	ug/L	24.259	447	0.000
	Pb	208	**0.018**	ug/L	19.820	1576	0.001
	Bi	209		ug/L		469	0.000
	Th	232	**0.703**	ug/L	18.737	33542	0.056
	U	238	**0.040**	ug/L	17.651	2317	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977914
Sample Date/Time: Thursday, November 26, 2009 22:24:53
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925185|20|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\1201977914.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.223**	ug/L	2.147	9099	0.007
	Be	9	**46.500**	ug/L	2.451	18677	0.014
	B	11	**69.813**	ug/L	2.670	27863	0.020
	Na	23	**286.652**	ug/L	5.155	1137225	0.835
	Mg	24	**1742.171**	ug/L	6.477	4700722	3.490
	Al	27	**4625.254**	ug/L	6.697	14701478	10.930
	P	31	**408.001**	ug/L	2.309	80563	0.055
	K	39	**1208.278**	ug/L	9.491	6076901	4.204
	Ca	43	**1905.550**	ug/L	1.685	22107	0.016
>	Sc	45		ug/L		1345631	1345631.132
	Ti	47	**117.371**	ug/L	1.545	69558	0.051
	V	51	**64.395**	ug/L	3.815	406637	0.305
	Cr	52	**35.402**	ug/L	2.004	174623	0.130
	Cr	53		ug/L		92454	0.007
	Mn	55	**178.627**	ug/L	1.849	1459368	1.084
	Fe	57	**5812.111**	ug/L	1.195	906637	0.671
	Co	59	**44.037**	ug/L	2.024	273746	0.203
	Ni	60	**53.545**	ug/L	3.026	73257	0.054
	Cu	63		ug/L		167392	0.124
	Cu	65	**51.058**	ug/L	0.689	83779	0.062
	Zn	66	**103.300**	ug/L	0.156	118440	0.300
	Zn	67		ug/L		29055	0.046
	Zn	68		ug/L		88147	0.221
>	Ge	74		ug/L		393637	393637.295
	As	75	**128.440**	ug/L	1.873	146468	0.373
	Se	77		ug/L		12365	0.019
	Se	82	**91.735**	ug/L	1.291	11383	0.029
	Kr	83		ug/L		93	-0.000
	Sr	88	**84.712**	ug/L	1.355	1244578	4.491
	Y	89		ug/L		107102	0.386
	Mo	98	**41.073**	ug/L	1.488	145028	0.523
	Ag	107	**10.750**	ug/L	1.063	64233	0.232
	Cd	111	**65.597**	ug/L	0.384	100746	0.363
	Cd	114		ug/L		241159	0.870
>	In	115		ug/L		277108	277108.196
	Sn	120	**23.792**	ug/L	1.797	151731	0.546
	Sb	121	**14.063**	ug/L	0.372	70463	0.250
	Sb	123		ug/L		54816	0.195
	Ba	135		ug/L		397449	0.796
	Ba	137	**226.125**	ug/L	2.228	691605	1.385
	Ho	165		ug/L		8046	0.016
>	Lu	175		ug/L		499425	499424.850
	Tl	205	**105.340**	ug/L	0.949	1927910	3.860
	Pb	208	**86.673**	ug/L	0.903	2633589	5.271
	Bi	209		ug/L		5306	0.010
	Th	232	**7.294**	ug/L	2.653	295723	0.585
	U	238	**0.958**	ug/L	2.595	40917	0.081

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977914
Sample Date/Time: Thursday, November 26, 2009 22:31:01
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925185|40|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\1201977914.126

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.159**	ug/L	0.965	4632	0.003
	Be	9	**24.240**	ug/L	2.401	9546	0.007
	B	11	**38.543**	ug/L	2.776	15383	0.011
	Na	23	**169.185**	ug/L	5.621	663409	0.493
	Mg	24	**755.810**	ug/L	8.748	1998366	1.514
	Al	27	**2431.207**	ug/L	3.817	7577208	5.745
	P	31	**206.969**	ug/L	2.314	43504	0.028
	K	39	**681.580**	ug/L	7.031	3532029	2.371
	Ca	43	**963.107**	ug/L	3.222	11037	0.008
>	Sc	45		ug/L		1318279	1318279.203
	Ti	47	**60.713**	ug/L	1.778	35444	0.027
	V	51	**33.991**	ug/L	0.690	208596	0.161
	Cr	52	**18.265**	ug/L	1.855	88201	0.067
	Cr	53		ug/L		85323	0.003
	Mn	55	**97.046**	ug/L	0.568	777412	0.589
	Fe	57	**3099.601**	ug/L	1.779	475456	0.358
	Co	59	**22.582**	ug/L	1.692	137577	0.104
	Ni	60	**27.847**	ug/L	1.929	37362	0.028
	Cu	63		ug/L		86182	0.065
	Cu	65	**26.415**	ug/L	2.220	42494	0.032
	Zn	66	**53.589**	ug/L	0.620	60754	0.156
	Zn	67		ug/L		19999	0.024
	Zn	68		ug/L		46072	0.115
>	Ge	74		ug/L		388555	388555.280
	As	75	**66.439**	ug/L	1.488	74691	0.193
	Se	77		ug/L		8490	0.010
	Se	82	**48.042**	ug/L	1.098	5877	0.015
	Kr	83		ug/L		91	-0.000
	Sr	88	**45.193**	ug/L	2.761	659824	2.396
	Y	89		ug/L		54315	0.197
	Mo	98	**20.893**	ug/L	3.344	73345	0.266
	Ag	107	**5.530**	ug/L	2.474	32862	0.119
	Cd	111	**33.213**	ug/L	1.754	50702	0.184
	Cd	114		ug/L		123613	0.449
>	In	115		ug/L		275411	275410.973
	Sn	120	**12.194**	ug/L	0.784	77505	0.280
	Sb	121	**7.305**	ug/L	1.002	36886	0.130
	Sb	123		ug/L		29045	0.102
	Ba	135		ug/L		208525	0.424
	Ba	137	**121.158**	ug/L	2.202	364836	0.742
	Ho	165		ug/L		4061	0.008
>	Lu	175		ug/L		491729	491729.267
	Tl	205	**59.150**	ug/L	1.165	1065973	2.167
	Pb	208	**47.020**	ug/L	1.313	1407055	2.860
	Bi	209		ug/L		2784	0.005
	Th	232	**3.880**	ug/L	0.615	156524	0.311
	U	238	**0.495**	ug/L	2.193	21034	0.042

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			93.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322001
Sample Date/Time: Thursday, November 26, 2009 22:37:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322001.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.364**	ug/L	3.646	48310	0.034
	Be	9	**1.254**	ug/L	3.513	547	0.000
	B	11	**3.692**	ug/L	9.214	2281	0.001
	Na	23	**307.634**	ug/L	11.617	1300148	0.896
	Mg	24	**1752.017**	ug/L	3.728	5027679	3.510
	Al	27	**10331.000**	ug/L	2.114	34972628	24.413
	P	31	**374.842**	ug/L	6.609	79333	0.050
	K	39	**1593.796**	ug/L	12.532	8365173	5.545
	Ca	43	**2129.226**	ug/L	6.528	26236	0.018
>	Sc	45		ug/L		1432455	1432454.512
	Ti	47	**618.829**	ug/L	3.990	388360	0.271
	V	51	**19.453**	ug/L	0.572	127962	0.092
	Cr	52	**9.017**	ug/L	3.417	47206	0.033
	Cr	53		ug/L		60007	-0.019
	Mn	55	**649.146**	ug/L	3.119	5641411	3.939
	Fe	57	**25781.876**	ug/L	1.308	4266563	2.976
	Co	59	**3.876**	ug/L	0.748	25717	0.018
	Ni	60	**8.561**	ug/L	2.985	12518	0.009
	Cu	63		ug/L		34171	0.024
	Cu	65	**10.074**	ug/L	7.420	17645	0.012
	Zn	66	**132.838**	ug/L	1.645	154914	0.386
	Zn	67		ug/L		31623	0.052
	Zn	68		ug/L		112122	0.276
>	Ge	74		ug/L		400498	400498.101
	As	75	**3.623**	ug/L	6.882	3990	0.011
	Se	77		ug/L		2847	-0.005
	Se	82	**0.593**	ug/L	26.235	56	0.000
	Kr	83		ug/L		162	0.000
	Sr	88	**13.658**	ug/L	3.630	207181	0.724
	Y	89		ug/L		959627	3.357
	Mo	98	**3.974**	ug/L	1.401	14550	0.051
	Ag	107	**0.215**	ug/L	6.494	1381	0.005
	Cd	111	**1.009**	ug/L	12.027	1623	0.006
	Cd	114		ug/L		450	0.001
>	In	115		ug/L		285870	285869.914
	Sn	120	**2.713**	ug/L	2.650	18263	0.062
	Sb	121	**0.371**	ug/L	14.707	2982	0.007
	Sb	123		ug/L		2420	0.005
	Ba	135		ug/L		146980	0.274
	Ba	137	**78.063**	ug/L	3.756	256549	0.478
	Ho	165		ug/L		71345	0.133
>	Lu	175		ug/L		536670	536670.283
	Tl	205	**0.371**	ug/L	10.767	7645	0.014
	Pb	208	**22.686**	ug/L	2.193	741323	1.380
	Bi	209		ug/L		21676	0.040
	Th	232	**14.974**	ug/L	2.497	648206	1.201
	U	238	**1.497**	ug/L	0.675	68356	0.126

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977910
Sample Date/Time: Thursday, November 26, 2009 22:43:18
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\1201977910.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**27.847**	ug/L	6.226	65775	0.044
	Be	9	**1.502**	ug/L	2.363	684	0.000
	B	11	**3.852**	ug/L	6.514	2457	0.001
	Na	23	**318.673**	ug/L	9.604	1404227	0.929
	Mg	24	**2561.715**	ug/L	5.695	7686355	5.132
	Al	27	**16154.891**	ug/L	6.439	57227936	38.175
	P	31	**414.786**	ug/L	6.812	90974	0.055
	K	39	**2383.410**	ug/L	13.137	12854170	8.292
	Ca	43	**2628.256**	ug/L	6.036	33833	0.022
>	Sc	45		ug/L		1500379	1500379.489
	Ti	47	**682.765**	ug/L	7.186	447807	0.299
	V	51	**21.503**	ug/L	5.214	148299	0.102
	Cr	52	**11.935**	ug/L	4.259	65431	0.044
	Cr	53		ug/L		61050	-0.021
	Mn	55	**672.897**	ug/L	7.026	6111491	4.083
	Fe	57	**32806.663**	ug/L	7.403	5670981	3.787
	Co	59	**4.516**	ug/L	5.443	31310	0.021
	Ni	60	**11.486**	ug/L	6.886	17530	0.012
	Cu	63		ug/L		46662	0.031
	Cu	65	**13.161**	ug/L	8.232	24068	0.016
	Zn	66	**177.796**	ug/L	5.132	209985	0.517
	Zn	67		ug/L		40092	0.071
	Zn	68		ug/L		154223	0.377
>	Ge	74		ug/L		406032	406031.938
	As	75	**5.548**	ug/L	2.155	6310	0.016
	Se	77		ug/L		2715	-0.005
	Se	82	**0.115**	ug/L	143.214	-4	0.000
	Kr	83		ug/L		198	0.000
	Sr	88	**17.110**	ug/L	5.421	268020	0.907
	Y	89		ug/L		950137	3.217
	Mo	98	**3.769**	ug/L	3.831	14260	0.048
	Ag	107	**0.243**	ug/L	6.752	1602	0.005
	Cd	111	**1.019**	ug/L	9.304	1691	0.006
	Cd	114		ug/L		689	0.002
>	In	115		ug/L		295320	295320.405
	Sn	120	**2.338**	ug/L	4.723	16320	0.054
	Sb	121	**0.221**	ug/L	9.928	2292	0.004
	Sb	123		ug/L		1754	0.003
	Ba	135		ug/L		177611	0.335
	Ba	137	**96.100**	ug/L	1.660	312317	0.588
	Ho	165		ug/L		70986	0.134
>	Lu	175		ug/L		530694	530694.314
	Tl	205	**0.433**	ug/L	3.129	8781	0.016
	Pb	208	**28.444**	ug/L	1.405	919053	1.730
	Bi	209		ug/L		46034	0.086
	Th	232	**15.071**	ug/L	2.500	645202	1.209
	U	238	**1.888**	ug/L	1.482	85127	0.159

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977912
Sample Date/Time: Thursday, November 26, 2009 22:49:28
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\1201977912.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**43.227**	ug/L	1.527	96934	0.068
	Be	9	**23.958**	ug/L	1.910	10178	0.007
	B	11	**48.381**	ug/L	4.180	20638	0.014
	Na	23	**1208.819**	ug/L	6.969	5021699	3.523
	Mg	24	**2953.349**	ug/L	11.167	8409102	5.917
	Al	27	**13037.599**	ug/L	12.652	43762539	30.809
	P	31	**1243.992**	ug/L	2.913	244043	0.166
	K	39	**3161.368**	ug/L	1.707	16081297	10.999
	Ca	43	**3052.307**	ug/L	3.297	37292	0.026
>	Sc	45		ug/L		1422376	1422375.655
	Ti	47	**604.686**	ug/L	1.690	377045	0.265
	V	51	**43.885**	ug/L	3.874	291621	0.208
	Cr	52	**34.278**	ug/L	2.934	178712	0.126
	Cr	53		ug/L		72492	-0.010
	Mn	55	**604.606**	ug/L	1.374	5219002	3.669
	Fe	57	**25657.134**	ug/L	1.936	4215433	2.961
	Co	59	**28.409**	ug/L	4.600	186645	0.131
	Ni	60	**32.395**	ug/L	0.978	46889	0.033
	Cu	63		ug/L		120361	0.085
	Cu	65	**34.412**	ug/L	1.435	59704	0.042
	Zn	66	**147.955**	ug/L	1.450	173261	0.430
	Zn	67		ug/L		33980	0.057
	Zn	68		ug/L		125459	0.308
>	Ge	74		ug/L		402281	402281.195
	As	75	**39.512**	ug/L	1.285	45901	0.115
	Se	77		ug/L		3393	-0.004
	Se	82	**9.037**	ug/L	3.554	1129	0.003
	Kr	83		ug/L		176	0.000
	Sr	88	**40.835**	ug/L	1.414	634495	2.165
	Y	89		ug/L		903663	3.084
	Mo	98	**26.891**	ug/L	1.583	100426	0.342
	Ag	107	**24.085**	ug/L	1.599	152081	0.519
	Cd	111	**5.691**	ug/L	3.368	9261	0.032
	Cd	114		ug/L		18571	0.063
>	In	115		ug/L		293039	293038.818
	Sn	120	**25.252**	ug/L	1.420	170278	0.579
	Sb	121	**76.999**	ug/L	1.898	402850	1.371
	Sb	123		ug/L		318277	1.083
	Ba	135		ug/L		190360	0.354
	Ba	137	**101.405**	ug/L	2.709	334007	0.621
	Ho	165		ug/L		67129	0.125
>	Lu	175		ug/L		537944	537943.985
	Tl	205	**49.231**	ug/L	1.722	970578	1.804
	Pb	208	**111.102**	ug/L	1.103	3635582	6.757
	Bi	209		ug/L		28278	0.052
	Th	232	**37.261**	ug/L	2.897	1610982	2.988
	U	238	**27.773**	ug/L	3.783	1261069	2.344

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977913
Sample Date/Time: Thursday, November 26, 2009 22:55:38
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\1201977913.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.180**	ug/L	1.965	102603	0.073
	Be	9	**25.441**	ug/L	3.413	10708	0.008
	B	11	**50.150**	ug/L	3.460	21174	0.015
	Na	23	**1356.419**	ug/L	9.056	5579377	3.953
	Mg	24	**2935.911**	ug/L	8.020	8288644	5.882
	Al	27	**11798.919**	ug/L	6.143	39274074	27.882
	P	31	**1386.782**	ug/L	2.645	268741	0.185
	K	39	**2973.788**	ug/L	5.084	15018670	10.346
	Ca	43	**3507.101**	ug/L	1.779	42454	0.030
>	Sc	45		ug/L		1409603	1409603.399
	Ti	47	**699.848**	ug/L	3.192	432317	0.307
	V	51	**45.162**	ug/L	3.532	297548	0.214
	Cr	52	**40.999**	ug/L	3.103	211840	0.150
	Cr	53		ug/L		75571	-0.008
	Mn	55	**669.568**	ug/L	2.812	5726931	4.063
	Fe	57	**28274.835**	ug/L	1.301	4603995	3.264
	Co	59	**29.771**	ug/L	1.682	193881	0.138
	Ni	60	**36.406**	ug/L	1.335	52207	0.037
	Cu	63		ug/L		123700	0.088
	Cu	65	**36.367**	ug/L	1.898	62529	0.044
	Zn	66	**155.108**	ug/L	1.540	182739	0.451
	Zn	67		ug/L		35038	0.059
	Zn	68		ug/L		133045	0.325
>	Ge	74		ug/L		404678	404677.557
	As	75	**40.736**	ug/L	1.343	47618	0.118
	Se	77		ug/L		3415	-0.003
	Se	82	**9.391**	ug/L	4.189	1182	0.003
	Kr	83		ug/L		178	0.000
	Sr	88	**43.443**	ug/L	2.196	669952	2.303
	Y	89		ug/L		1055253	3.628
	Mo	98	**28.416**	ug/L	1.798	105323	0.362
	Ag	107	**25.753**	ug/L	3.261	161393	0.555
	Cd	111	**6.160**	ug/L	3.186	9949	0.034
	Cd	114		ug/L		19460	0.067
>	In	115		ug/L		290853	290852.824
	Sn	120	**26.992**	ug/L	1.257	180603	0.619
	Sb	121	**77.078**	ug/L	1.612	400301	1.373
	Sb	123		ug/L		315413	1.081
	Ba	135		ug/L		197773	0.359
	Ba	137	**102.240**	ug/L	2.937	345212	0.626
	Ho	165		ug/L		80092	0.145
>	Lu	175		ug/L		551461	551461.262
	Tl	205	**50.929**	ug/L	1.805	1029200	1.866
	Pb	208	**112.980**	ug/L	3.260	3789313	6.871
	Bi	209		ug/L		26880	0.048
	Th	232	**39.530**	ug/L	2.130	1751877	3.170
	U	238	**28.671**	ug/L	2.464	1334695	2.420

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		111.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201977911
Sample Date/Time: Thursday, November 26, 2009 23:01:47
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925185|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\1201977911.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.634**	**ug/L**	1.363	9288	0.007
	Be	9	**0.286**	**ug/L**	20.343	117	0.000
	B	11	**1.980**	**ug/L**	17.016	1376	0.001
	Na	23	**68.483**	**ug/L**	8.214	263075	0.200
	Mg	24	**362.581**	**ug/L**	2.630	913666	0.726
	Al	27	**2093.230**	**ug/L**	7.343	6203784	4.946
	P	31	**91.805**	**ug/L**	5.036	22070	0.012
	K	39	**362.812**	**ug/L**	13.830	1965789	1.262
	Ca	43	**466.817**	**ug/L**	3.621	5179	0.004
>	Sc	45		**ug/L**		1253655	1253655.310
	Ti	47	**135.021**	**ug/L**	1.831	74493	0.059
	V	51	**4.610**	**ug/L**	1.993	23813	0.022
	Cr	52	**2.003**	**ug/L**	0.518	9059	0.007
	Cr	53		**ug/L**		64321	-0.010
	Mn	55	**144.548**	**ug/L**	2.899	1100392	0.877
	Fe	57	**5328.590**	**ug/L**	1.731	774586	0.615
	Co	59	**0.850**	**ug/L**	2.992	4988	0.004
	Ni	60	**1.926**	**ug/L**	1.028	2506	0.002
	Cu	63		**ug/L**		7116	0.006
	Cu	65	**2.365**	**ug/L**	0.561	3691	0.003
	Zn	66	**30.493**	**ug/L**	0.482	33350	0.089
	Zn	67		**ug/L**		13815	0.010
	Zn	68		**ug/L**		24645	0.063
>	Ge	74		**ug/L**		373810	373810.239
	As	75	**0.613**	**ug/L**	15.948	457	0.002
	Se	77		**ug/L**		3374	-0.003
	Se	82	**0.306**	**ug/L**	44.759	19	0.000
	Kr	83		**ug/L**		89	-0.000
	Sr	88	**2.847**	**ug/L**	1.060	40910	0.151
	Y	89		**ug/L**		202482	0.750
	Mo	98	**0.847**	**ug/L**	1.946	2990	0.011
	Ag	107	**0.040**	**ug/L**	6.984	287	0.001
	Cd	111	**0.227**	**ug/L**	17.839	361	0.001
	Cd	114		**ug/L**		113	0.000
>	In	115		**ug/L**		269964	269964.267
	Sn	120	**0.717**	**ug/L**	1.780	4873	0.016
	Sb	121	**0.425**	**ug/L**	14.545	3078	0.008
	Sb	123		**ug/L**		2358	0.006
	Ba	135		**ug/L**		30318	0.061
	Ba	137	**17.073**	**ug/L**	1.366	52207	0.105
	Ho	165		**ug/L**		14775	0.030
>	Lu	175		**ug/L**		499003	499003.163
	Tl	205	**0.099**	**ug/L**	10.597	2144	0.004
	Pb	208	**5.136**	**ug/L**	0.826	156823	0.312
	Bi	209		**ug/L**		4882	0.009
	Th	232	**3.597**	**ug/L**	0.963	147523	0.288
	U	238	**0.336**	**ug/L**	0.276	14687	0.028

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, November 26, 2009 23:07:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 8.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.093**	ug/L	1.005	99182	0.077
	Be	9	**50.829**	ug/L	2.199	19451	0.015
	B	11	**96.989**	ug/L	1.798	36617	0.028
	Na	23	**4608.745**	ug/L	5.946	17230657	13.431
	Mg	24	**4911.174**	ug/L	7.630	12616521	9.839
	Al	27	**4665.567**	ug/L	6.413	14128731	11.025
	P	31	**4965.769**	ug/L	1.225	857619	0.664
	K	39	**4768.142**	ug/L	15.801	21663110	16.589
	Ca	43	**4759.883**	ug/L	0.647	52312	0.041
>	Sc	45		ug/L		1281574	1281573.711
	Ti	47	**49.748**	ug/L	1.240	28304	0.022
	V	51	**49.421**	ug/L	3.043	296527	0.234
	Cr	52	**50.947**	ug/L	0.778	239484	0.187
	Cr	53		ug/L		102925	0.019
	Mn	55	**52.292**	ug/L	1.220	407724	0.317
	Fe	57	**5253.504**	ug/L	1.230	780885	0.606
	Co	59	**49.992**	ug/L	1.063	296036	0.231
	Ni	60	**50.837**	ug/L	1.536	66275	0.052
	Cu	63		ug/L		163418	0.127
	Cu	65	**51.774**	ug/L	0.548	80905	0.063
	Zn	66	**49.496**	ug/L	2.410	55574	0.144
	Zn	67		ug/L		18992	0.022
	Zn	68		ug/L		41243	0.104
>	Ge	74		ug/L		384667	384666.712
	As	75	**47.497**	ug/L	1.940	52804	0.138
	Se	77		ug/L		8765	0.011
	Se	82	**50.025**	ug/L	4.226	6059	0.016
	Kr	83		ug/L		92	-0.000
	Sr	88	**49.997**	ug/L	1.884	722551	2.650
	Y	89		ug/L		169	0.000
	Mo	98	**47.362**	ug/L	2.835	164475	0.603
	Ag	107	**49.775**	ug/L	2.308	292312	1.072
	Cd	111	**48.955**	ug/L	0.755	73959	0.271
	Cd	114		ug/L		178106	0.653
>	In	115		ug/L		272557	272556.709
	Sn	120	**51.540**	ug/L	3.025	322764	1.183
	Sb	121	**46.894**	ug/L	11.890	228726	0.835
	Sb	123		ug/L		180498	0.659
	Ba	135		ug/L		81192	0.166
	Ba	137	**47.795**	ug/L	1.137	142785	0.293
	Ho	165		ug/L		99	0.000
>	Lu	175		ug/L		487700	487700.040
	Tl	205	**52.119**	ug/L	2.143	931579	1.910
	Pb	208	**52.707**	ug/L	0.679	1564265	3.206
	Bi	209		ug/L		511	0.000
	Th	232	**49.580**	ug/L	0.715	1942723	3.976
	U	238	**53.563**	ug/L	0.437	2205306	4.521

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.185				
	Be	9	101.658				
	B	11	96.989				
	Na	23	92.175				
	Mg	24	98.223				
	Al	27	92.387				
	P	31	99.315				
	K	39	95.363				
	Ca	43	95.198				
>	Sc	45			90.5		
	Ti	47	99.497				
	V	51	98.841				
	Cr	52	101.894				
	Cr	53					
	Mn	55	104.585				
	Fe	57	105.070				
	Co	59	99.984				
	Ni	60	101.673				
	Cu	63					
	Cu	65	103.548				
	Zn	66	98.993				
	Zn	67					
	Zn	68					
>	Ge	74			92.1		
	As	75	94.994				
	Se	77					
	Se	82	100.051				
	Kr	83					
	Sr	88	99.995				
	Y	89					
	Mo	98	94.725				
	Ag	107	99.550				
	Cd	111	97.909				
	Cd	114					
>	In	115			95.7		
	Sn	120	103.079				
	Sb	121	93.788				
	Sb	123					
	Ba	135					
	Ba	137	95.590				
	Ho	165					
>	Lu	175			98.9		
	Tl	205	104.238				
	Pb	208	105.413				
	Bi	209					
	Th	232	99.159				
	U	238	107.125				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, November 26, 2009 23:14:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 9.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.001**	ug/L	444.873	146	-0.000
	Be	9	**0.014**	ug/L	28.117	15	0.000
	B	11	**2.695**	ug/L	10.852	1691	0.001
	Na	23	**0.777**	ug/L	189.117	16343	0.002
	Mg	24	**-0.404**	ug/L	1.543	2000	-0.001
	Al	27	**0.327**	ug/L	149.221	4667	0.001
	P	31	**-0.170**	ug/L	487.026	6882	-0.000
	K	39	**1.967**	ug/L	207.625	407056	0.007
	Ca	43	**2.278**	ug/L	99.709	211	0.000
>	Sc	45		ug/L		1295123	1295122.890
	Ti	47	**-0.005**	ug/L	2028.527	383	-0.000
	V	51	**-0.074**	ug/L	860.728	-4141	-0.000
	Cr	52	**-0.010**	ug/L	591.220	-212	-0.000
	Cr	53		ug/L		75899	-0.003
	Mn	55	**-0.008**	ug/L	66.468	1003	-0.000
	Fe	57	**1.168**	ug/L	44.546	3967	0.000
	Co	59	**0.006**	ug/L	23.370	99	0.000
	Ni	60	**0.010**	ug/L	78.678	68	0.000
	Cu	63		ug/L		129	0.000
	Cu	65	**0.007**	ug/L	95.624	93	0.000
	Zn	66	**0.006**	ug/L	179.943	225	0.000
	Zn	67		ug/L		10398	-0.000
	Zn	68		ug/L		1312	-0.000
>	Ge	74		ug/L		384965	384965.320
	As	75	**-0.383**	ug/L	66.772	-642	-0.001
	Se	77		ug/L		4398	-0.001
	Se	82	**0.125**	ug/L	104.733	-3	0.000
	Kr	83		ug/L		87	-0.000
	Sr	88	**0.005**	ug/L	22.322	234	0.000
	Y	89		ug/L		52	0.000
	Mo	98	**0.064**	ug/L	17.393	301	0.001
	Ag	107	**0.003**	ug/L	76.040	73	0.000
	Cd	111	**0.008**	ug/L	79.056	35	0.000
	Cd	114		ug/L		61	0.000
>	In	115		ug/L		271744	271744.040
	Sn	120	**0.251**	ug/L	17.343	2006	0.006
	Sb	121	**1.326**	ug/L	26.378	7481	0.024
	Sb	123		ug/L		5799	0.018
	Ba	135		ug/L		41	0.000
	Ba	137	**0.005**	ug/L	94.749	56	0.000
	Ho	165		ug/L		47	0.000
>	Lu	175		ug/L		500212	500212.247
	Tl	205	**0.025**	ug/L	19.329	797	0.001
	Pb	208	**0.009**	ug/L	18.551	1241	0.001
	Bi	209		ug/L		382	-0.000
	Th	232	**0.421**	ug/L	30.028	20488	0.034
	U	238	**0.021**	ug/L	18.860	1394	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322002
Sample Date/Time: Thursday, November 26, 2009 23:20:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322002.134

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**30.270**	ug/L	0.591	66434	0.048
	Be	9	**2.301**	ug/L	0.717	966	0.001
	B	11	**4.936**	ug/L	3.220	2716	0.001
	Na	23	**448.645**	ug/L	5.121	1831772	1.307
	Mg	24	**2246.480**	ug/L	7.868	6258070	4.501
	Al	27	**14910.821**	ug/L	7.010	48999083	35.235
	P	31	**4861.261**	ug/L	1.532	911094	0.650
	K	39	**1863.290**	ug/L	7.850	9436857	6.482
	Ca	43	**2759.096**	ug/L	0.735	32994	0.024
>	Sc	45		ug/L		1390832	1390831.675
	Ti	47	**684.314**	ug/L	2.622	417128	0.300
	V	51	**30.314**	ug/L	3.910	195747	0.144
	Cr	52	**22.489**	ug/L	3.738	114577	0.083
	Cr	53		ug/L		65729	-0.014
	Mn	55	**1335.299**	ug/L	3.263	11267227	8.103
	Fe	57	**43537.172**	ug/L	4.100	6989984	5.025
	Co	59	**8.155**	ug/L	2.244	52455	0.038
	Ni	60	**17.188**	ug/L	0.532	24353	0.017
	Cu	63		ug/L		54478	0.039
	Cu	65	**16.079**	ug/L	2.028	27322	0.020
	Zn	66	**120.161**	ug/L	2.287	137717	0.349
	Zn	67		ug/L		28808	0.046
	Zn	68		ug/L		101982	0.256
>	Ge	74		ug/L		393613	393613.370
	As	75	**3.827**	ug/L	2.394	4152	0.011
	Se	77		ug/L		2642	-0.005
	Se	82	**0.261**	ug/L	86.469	14	0.000
	Kr	83		ug/L		221	0.000
	Sr	88	**20.894**	ug/L	1.194	320245	1.108
	Y	89		ug/L		1397291	4.835
	Mo	98	**6.350**	ug/L	2.134	23452	0.081
	Ag	107	**0.449**	ug/L	2.645	2851	0.010
	Cd	111	**1.207**	ug/L	6.481	1956	0.007
	Cd	114		ug/L		593	0.002
>	In	115		ug/L		288981	288980.720
	Sn	120	**2.331**	ug/L	1.900	15922	0.053
	Sb	121	**0.442**	ug/L	15.513	3383	0.008
	Sb	123		ug/L		2623	0.006
	Ba	135		ug/L		191808	0.347
	Ba	137	**98.678**	ug/L	1.856	333624	0.604
	Ho	165		ug/L		102291	0.185
>	Lu	175		ug/L		552144	552143.825
	Tl	205	**0.322**	ug/L	1.744	6887	0.012
	Pb	208	**41.078**	ug/L	2.800	1380022	2.498
	Bi	209		ug/L		23688	0.042
	Th	232	**18.563**	ug/L	3.755	825591	1.489
	U	238	**2.485**	ug/L	2.162	116348	0.210

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			98.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			94.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			101.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			111.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241322003
Sample Date/Time: Thursday, November 26, 2009 23:26:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322003.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**30.674**	ug/L	0.608	64691	0.048
	Be	9	**1.785**	ug/L	2.047	723	0.001
	B	11	**3.814**	ug/L	3.220	2177	0.001
	Na	23	**298.098**	ug/L	7.556	1174499	0.869
	Mg	24	**1964.666**	ug/L	3.267	5265727	3.936
	Al	27	**13617.560**	ug/L	7.253	43014462	32.179
	P	31	**322.176**	ug/L	0.755	64702	0.043
	K	39	**1556.784**	ug/L	5.559	7652729	5.416
	Ca	43	**2358.506**	ug/L	1.407	27134	0.020
>	Sc	45		ug/L		1336708	1336708.230
	Ti	47	**844.887**	ug/L	2.235	494929	0.370
	V	51	**20.370**	ug/L	2.382	125201	0.097
	Cr	52	**13.326**	ug/L	2.421	65199	0.049
	Cr	53		ug/L		56328	-0.019
	Mn	55	**930.912**	ug/L	2.304	7551031	5.649
	Fe	57	**31823.396**	ug/L	0.365	4913888	3.673
	Co	59	**3.637**	ug/L	1.437	22528	0.017
	Ni	60	**10.597**	ug/L	0.582	14453	0.011
	Cu	63		ug/L		37414	0.028
	Cu	65	**11.891**	ug/L	0.873	19446	0.014
	Zn	66	**146.721**	ug/L	0.794	163475	0.427
	Zn	67		ug/L		32119	0.056
	Zn	68		ug/L		118575	0.306
>	Ge	74		ug/L		382748	382747.613
	As	75	**4.940**	ug/L	7.104	5273	0.014
	Se	77		ug/L		2460	-0.006
	Se	82	**0.354**	ug/L	77.205	25	0.000
	Kr	83		ug/L		212	0.000
	Sr	88	**17.181**	ug/L	3.113	267542	0.911
	Y	89		ug/L		1455838	4.959
	Mo	98	**8.192**	ug/L	3.972	30703	0.104
	Ag	107	**0.745**	ug/L	2.351	4769	0.016
	Cd	111	**1.434**	ug/L	2.856	2357	0.008
	Cd	114		ug/L		885	0.003
>	In	115		ug/L		293652	293652.364
	Sn	120	**3.315**	ug/L	2.776	22801	0.076
	Sb	121	**0.241**	ug/L	4.968	2384	0.004
	Sb	123		ug/L		1853	0.003
	Ba	135		ug/L		172866	0.319
	Ba	137	**91.475**	ug/L	1.993	303148	0.560
	Ho	165		ug/L		111577	0.206
>	Lu	175		ug/L		541220	541220.095
	Tl	205	**1.556**	ug/L	2.625	31206	0.057
	Pb	208	**99.764**	ug/L	1.949	3284013	6.068
	Bi	209		ug/L		199309	0.368
	Th	232	**20.047**	ug/L	3.183	873649	1.608
	U	238	**2.871**	ug/L	1.747	131670	0.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322004
Sample Date/Time: Thursday, November 26, 2009 23:32:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322004.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.327**	ug/L	1.732	44773	0.030
	Be	9	**2.446**	ug/L	5.485	1080	0.001
	B	11	**3.644**	ug/L	3.228	2317	0.001
	Na	23	**1153.550**	ug/L	10.181	4946126	3.362
	Mg	24	**2767.951**	ug/L	3.255	8133770	5.545
	Al	27	**17080.517**	ug/L	5.095	59285150	40.362
	P	31	**1157.575**	ug/L	2.226	234685	0.155
	K	39	**2565.919**	ug/L	7.189	13539444	8.927
	Ca	43	**8015.405**	ug/L	4.838	100566	0.068
>	Sc	45		ug/L		1466745	1466745.217
	Ti	47	**770.603**	ug/L	3.938	494945	0.337
	V	51	**39.365**	ug/L	1.041	269364	0.187
	Cr	52	**23.048**	ug/L	0.714	123863	0.085
	Cr	53		ug/L		63123	-0.018
	Mn	55	**909.898**	ug/L	3.759	8092248	5.522
	Fe	57	**35220.768**	ug/L	3.233	5963629	4.065
	Co	59	**8.263**	ug/L	2.557	56039	0.038
	Ni	60	**19.914**	ug/L	2.494	29731	0.020
	Cu	63		ug/L		58445	0.040
	Cu	65	**16.522**	ug/L	4.564	29576	0.020
	Zn	66	**137.077**	ug/L	2.400	162569	0.399
	Zn	67		ug/L		32785	0.053
	Zn	68		ug/L		119947	0.291
>	Ge	74		ug/L		407513	407512.918
	As	75	**15.973**	ug/L	3.079	18653	0.046
	Se	77		ug/L		2891	-0.005
	Se	82	**0.866**	ug/L	19.541	92	0.000
	Kr	83		ug/L		350	0.001
	Sr	88	**51.515**	ug/L	1.248	806131	2.731
	Y	89		ug/L		2922240	9.902
	Mo	98	**4.292**	ug/L	1.622	16217	0.055
	Ag	107	**0.255**	ug/L	6.258	1680	0.005
	Cd	111	**1.934**	ug/L	2.318	3188	0.011
	Cd	114		ug/L		778	0.003
>	In	115		ug/L		295107	295106.972
	Sn	120	**3.546**	ug/L	2.744	24487	0.081
	Sb	121	**0.343**	ug/L	5.541	2935	0.006
	Sb	123		ug/L		2304	0.005
	Ba	135		ug/L		287341	0.475
	Ba	137	**135.256**	ug/L	2.535	501078	0.828
	Ho	165		ug/L		240508	0.398
>	Lu	175		ug/L		604980	604980.033
	Tl	205	**0.523**	ug/L	1.503	12014	0.019
	Pb	208	**21.120**	ug/L	0.446	778258	1.285
	Bi	209		ug/L		47579	0.078
	Th	232	**16.104**	ug/L	1.373	785636	1.292
	U	238	**3.044**	ug/L	1.809	156052	0.257

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		122.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Lu 175 Int Std for sa	Lu	175	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241322005
Sample Date/Time: Thursday, November 26, 2009 23:38:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322005.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.756**	ug/L	1.754	46464	0.033
	Be	9	**1.294**	ug/L	3.341	558	0.000
	B	11	**2.976**	ug/L	2.885	1965	0.001
	Na	23	**939.067**	ug/L	6.318	3890710	2.737
	Mg	24	**1860.730**	ug/L	2.037	5285803	3.728
	Al	27	**13684.214**	ug/L	8.111	45819753	32.337
	P	31	**467.871**	ug/L	1.221	96203	0.063
	K	39	**2601.193**	ug/L	4.969	13255674	9.050
	Ca	43	**1600.299**	ug/L	2.255	19581	0.014
>	Sc	45		ug/L		1417402	1417401.973
	Ti	47	**761.872**	ug/L	0.684	473394	0.334
	V	51	**18.752**	ug/L	1.604	121891	0.089
	Cr	52	**23.113**	ug/L	1.571	120037	0.085
	Cr	53		ug/L		63334	-0.017
	Mn	55	**342.915**	ug/L	0.342	2950726	2.081
	Fe	57	**28615.355**	ug/L	4.292	4683419	3.303
	Co	59	**3.189**	ug/L	1.511	20951	0.015
	Ni	60	**7.616**	ug/L	1.889	11029	0.008
	Cu	63		ug/L		49525	0.035
	Cu	65	**14.833**	ug/L	1.852	25705	0.018
	Zn	66	**279.669**	ug/L	1.916	324168	0.813
	Zn	67		ug/L		56311	0.114
	Zn	68		ug/L		234093	0.584
>	Ge	74		ug/L		398491	398491.280
	As	75	**2.484**	ug/L	11.802	2651	0.007
	Se	77		ug/L		2467	-0.006
	Se	82	**0.282**	ug/L	73.174	17	0.000
	Kr	83		ug/L		195	0.000
	Sr	88	**16.588**	ug/L	1.359	255406	0.879
	Y	89		ug/L		979101	3.374
	Mo	98	**2.806**	ug/L	0.843	10453	0.036
	Ag	107	**1.870**	ug/L	2.039	11754	0.040
	Cd	111	**1.219**	ug/L	13.224	1985	0.007
	Cd	114		ug/L		369	0.001
>	In	115		ug/L		290234	290233.520
	Sn	120	**3.964**	ug/L	2.419	26862	0.091
	Sb	121	**0.178**	ug/L	8.501	2030	0.003
	Sb	123		ug/L		1588	0.002
	Ba	135		ug/L		83119	0.154
	Ba	137	**44.125**	ug/L	2.282	145849	0.270
	Ho	165		ug/L		69611	0.129
>	Lu	175		ug/L		539694	539693.770
	Tl	205	**0.114**	ug/L	3.979	2613	0.004
	Pb	208	**56.348**	ug/L	0.558	1850649	3.427
	Bi	209		ug/L		18189	0.033
	Th	232	**18.987**	ug/L	1.854	825589	1.523
	U	238	**2.259**	ug/L	1.759	103448	0.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322006
Sample Date/Time: Thursday, November 26, 2009 23:44:49
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322006.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**33.669**	ug/L	0.977	76084	0.053
	Be	9	**2.611**	ug/L	1.276	1127	0.001
	B	11	**5.488**	ug/L	3.870	3026	0.002
	Na	23	**1804.421**	ug/L	14.222	7533852	5.258
	Mg	24	**2710.089**	ug/L	11.598	7792473	5.429
	Al	27	**16846.945**	ug/L	4.850	57040917	39.810
	P	31	**337.749**	ug/L	2.102	72324	0.045
	K	39	**2172.893**	ug/L	6.775	11260229	7.560
	Ca	43	**3791.629**	ug/L	1.795	46615	0.032
>	Sc	45		ug/L		1432480	1432479.657
	Ti	47	**628.166**	ug/L	0.845	394556	0.275
	V	51	**19.927**	ug/L	1.995	131149	0.094
	Cr	52	**12.309**	ug/L	0.628	64528	0.045
	Cr	53		ug/L		55891	-0.022
	Mn	55	**873.590**	ug/L	0.914	7596092	5.301
	Fe	57	**30740.291**	ug/L	1.417	5085714	3.548
	Co	59	**3.134**	ug/L	2.083	20802	0.014
	Ni	60	**9.643**	ug/L	3.888	14090	0.010
	Cu	63		ug/L		61474	0.043
	Cu	65	**18.004**	ug/L	0.489	31503	0.022
	Zn	66	**125.129**	ug/L	0.313	147076	0.364
	Zn	67		ug/L		29877	0.047
	Zn	68		ug/L		108214	0.265
>	Ge	74		ug/L		403662	403661.937
	As	75	**3.974**	ug/L	1.078	4431	0.012
	Se	77		ug/L		2565	-0.006
	Se	82	**0.202**	ug/L	71.422	7	0.000
	Kr	83		ug/L		251	0.000
	Sr	88	**27.633**	ug/L	4.243	430695	1.465
	Y	89		ug/L		1607215	5.468
	Mo	98	**6.557**	ug/L	4.134	24631	0.084
	Ag	107	**0.697**	ug/L	3.485	4475	0.015
	Cd	111	**1.361**	ug/L	5.229	2243	0.008
	Cd	114		ug/L		741	0.002
>	In	115		ug/L		294157	294156.733
	Sn	120	**3.034**	ug/L	2.059	20944	0.070
	Sb	121	**0.113**	ug/L	23.027	1717	0.002
	Sb	123		ug/L		1364	0.002
	Ba	135		ug/L		183276	0.329
	Ba	137	**93.776**	ug/L	1.731	320253	0.574
	Ho	165		ug/L		125416	0.225
>	Lu	175		ug/L		557716	557716.154
	Tl	205	**0.311**	ug/L	2.826	6731	0.011
	Pb	208	**41.229**	ug/L	2.056	1399219	2.508
	Bi	209		ug/L		21077	0.037
	Th	232	**21.388**	ug/L	2.381	960485	1.715
	U	238	**3.035**	ug/L	1.509	143420	0.256

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		113.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322007
Sample Date/Time: Thursday, November 26, 2009 23:51:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322007.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**22.388**	ug/L	1.162	47619	0.035
	Be	9	**1.764**	ug/L	1.825	720	0.001
	B	11	**1.593**	ug/L	9.537	1329	0.000
	Na	23	**440.595**	ug/L	2.880	1743304	1.284
	Mg	24	**1346.040**	ug/L	6.292	3633810	2.697
	Al	27	**10232.741**	ug/L	14.714	32541375	24.181
	P	31	**472.378**	ug/L	3.992	92228	0.063
	K	39	**1552.620**	ug/L	7.900	7685936	5.402
	Ca	43	**1353.744**	ug/L	3.496	15771	0.012
>	Sc	45		ug/L		1346892	1346891.736
	Ti	47	**517.363**	ug/L	1.308	305590	0.227
	V	51	**15.780**	ug/L	1.698	96874	0.075
	Cr	52	**12.377**	ug/L	1.613	61013	0.045
	Cr	53		ug/L		54470	-0.021
	Mn	55	**646.643**	ug/L	1.500	5285935	3.924
	Fe	57	**23556.307**	ug/L	2.525	3665423	2.719
	Co	59	**3.585**	ug/L	1.672	22371	0.017
	Ni	60	**6.574**	ug/L	0.349	9056	0.007
	Cu	63		ug/L		39223	0.029
	Cu	65	**12.297**	ug/L	0.331	20259	0.015
	Zn	66	**219.103**	ug/L	1.430	245437	0.637
	Zn	67		ug/L		44219	0.087
	Zn	68		ug/L		179479	0.463
>	Ge	74		ug/L		384970	384969.594
	As	75	**3.286**	ug/L	3.652	3457	0.010
	Se	77		ug/L		2376	-0.006
	Se	82	**0.333**	ug/L	51.977	22	0.000
	Kr	83		ug/L		173	0.000
	Sr	88	**10.497**	ug/L	1.492	159992	0.556
	Y	89		ug/L		887461	3.090
	Mo	98	**2.273**	ug/L	2.252	8399	0.029
	Ag	107	**1.620**	ug/L	4.548	10077	0.035
	Cd	111	**1.054**	ug/L	6.941	1701	0.006
	Cd	114		ug/L		548	0.002
>	In	115		ug/L		287230	287229.909
	Sn	120	**2.636**	ug/L	2.668	17835	0.060
	Sb	121	**0.058**	ug/L	16.041	1397	0.001
	Sb	123		ug/L		1100	0.001
	Ba	135		ug/L		101493	0.190
	Ba	137	**54.067**	ug/L	1.285	177033	0.331
	Ho	165		ug/L		66059	0.123
>	Lu	175		ug/L		534624	534623.661
	Tl	205	**0.104**	ug/L	7.047	2410	0.004
	Pb	208	**28.955**	ug/L	3.008	942253	1.761
	Bi	209		ug/L		17802	0.032
	Th	232	**17.527**	ug/L	1.497	755256	1.406
	U	238	**1.726**	ug/L	3.015	78419	0.146

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, November 26, 2009 23:57:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 8.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.624**	ug/L	2.078	97619	0.077
	Be	9	**51.126**	ug/L	0.648	19438	0.015
	B	11	**96.425**	ug/L	1.806	36172	0.028
	Na	23	**4605.760**	ug/L	4.845	17102965	13.422
	Mg	24	**5070.452**	ug/L	10.294	12932006	10.158
	Al	27	**5005.226**	ug/L	2.066	15063828	11.828
	P	31	**4929.159**	ug/L	2.072	845831	0.659
	K	39	**4541.542**	ug/L	6.877	20515956	15.800
	Ca	43	**4767.805**	ug/L	2.522	52057	0.041
>	Sc	45		ug/L		1273320	1273319.747
	Ti	47	**50.299**	ug/L	0.851	28428	0.022
	V	51	**48.497**	ug/L	3.555	288929	0.230
	Cr	52	**49.729**	ug/L	2.343	232256	0.183
	Cr	53		ug/L		98211	0.016
	Mn	55	**52.003**	ug/L	1.289	402906	0.316
	Fe	57	**5276.385**	ug/L	0.941	779136	0.609
	Co	59	**50.407**	ug/L	1.455	296548	0.233
	Ni	60	**49.854**	ug/L	2.174	64573	0.051
	Cu	63		ug/L		157589	0.124
	Cu	65	**50.574**	ug/L	1.483	78523	0.062
	Zn	66	**49.082**	ug/L	2.914	54492	0.143
	Zn	67		ug/L		18260	0.021
	Zn	68		ug/L		39881	0.101
>	Ge	74		ug/L		380530	380529.812
	As	75	**46.490**	ug/L	1.994	51137	0.135
	Se	77		ug/L		8253	0.010
	Se	82	**50.015**	ug/L	1.017	5991	0.016
	Kr	83		ug/L		104	0.000
	Sr	88	**49.561**	ug/L	1.708	704943	2.627
	Y	89		ug/L		232	0.001
	Mo	98	**48.310**	ug/L	2.631	165091	0.615
	Ag	107	**49.036**	ug/L	0.894	283478	1.056
	Cd	111	**49.447**	ug/L	3.572	73506	0.274
	Cd	114		ug/L		175285	0.653
>	In	115		ug/L		268326	268325.994
	Sn	120	**51.123**	ug/L	2.297	315085	1.173
	Sb	121	**46.796**	ug/L	10.173	224935	0.833
	Sb	123		ug/L		176007	0.652
	Ba	135		ug/L		79568	0.162
	Ba	137	**47.401**	ug/L	1.292	142145	0.290
	Ho	165		ug/L		118	0.000
>	Lu	175		ug/L		489610	489609.846
	Tl	205	**51.278**	ug/L	2.278	920021	1.879
	Pb	208	**52.169**	ug/L	1.001	1554271	3.173
	Bi	209		ug/L		520	0.000
	Th	232	**48.879**	ug/L	3.150	1922390	3.920
	U	238	**52.360**	ug/L	2.063	2163857	4.419

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	97.248				
	Be	9	102.252				
	B	11	96.425				
	Na	23	92.115				
	Mg	24	101.409				
	Al	27	99.113				
	P	31	98.583				
	K	39	90.831				
	Ca	43	95.356				
>	Sc	45		89.9			
	Ti	47	100.599				
	V	51	96.995				
	Cr	52	99.458				
	Cr	53					
	Mn	55	104.005				
	Fe	57	105.528				
	Co	59	100.814				
	Ni	60	99.708				
	Cu	63					
	Cu	65	101.147				
	Zn	66	98.164				
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75	92.979				
	Se	77					
	Se	82	100.031				
	Kr	83					
	Sr	88	99.123				
	Y	89					
	Mo	98	96.620				
	Ag	107	98.071				
	Cd	111	98.895				
	Cd	114					
>	In	115		94.2			
	Sn	120	102.246				
	Sb	121	93.591				
	Sb	123					
	Ba	135					
	Ba	137	94.803				
	Ho	165					
>	Lu	175		99.3			
	Tl	205	102.556				
	Pb	208	104.338				
	Bi	209					
	Th	232	97.758				
	U	238	104.720				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Friday, November 27, 2009 00:03:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 9.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.011**	**ug/L**	55.569	128	-0.000
	Be	9	**0.007**	**ug/L**	124.606	13	0.000
	B	11	**1.876**	**ug/L**	31.332	1407	0.001
	Na	23	**0.536**	**ug/L**	234.205	15676	0.002
	Mg	24	**-0.289**	**ug/L**	77.514	2334	-0.001
	Al	27	**-0.017**	**ug/L**	2103.361	3667	-0.000
	P	31	**1.949**	**ug/L**	108.544	7365	0.000
	K	39	**1.553**	**ug/L**	313.114	411866	0.005
	Ca	43	**-0.034**	**ug/L**	6044.396	188	-0.000
>	Sc	45		**ug/L**		1315929	1315928.593
	Ti	47	**0.047**	**ug/L**	38.379	419	0.000
	V	51	**0.149**	**ug/L**	383.541	-2822	0.001
	Cr	52	**0.024**	**ug/L**	148.832	-52	0.000
	Cr	53		**ug/L**		74648	-0.005
	Mn	55	**0.010**	**ug/L**	82.503	1164	0.000
	Fe	57	**2.524**	**ug/L**	37.877	4237	0.000
	Co	59	**0.004**	**ug/L**	20.361	92	0.000
	Ni	60	**0.010**	**ug/L**	60.350	69	0.000
	Cu	63		**ug/L**		145	0.000
	Cu	65	**0.006**	**ug/L**	82.605	93	0.000
	Zn	66	**0.019**	**ug/L**	90.599	240	0.000
	Zn	67		**ug/L**		10276	-0.001
	Zn	68		**ug/L**		1349	0.000
>	Ge	74		**ug/L**		385673	385673.213
	As	75	**-0.329**	**ug/L**	45.262	-584	-0.001
	Se	77		**ug/L**		4185	-0.001
	Se	82	**0.125**	**ug/L**	157.054	-3	0.000
	Kr	83		**ug/L**		90	-0.000
	Sr	88	**0.006**	**ug/L**	23.382	245	0.000
	Y	89		**ug/L**		68	0.000
	Mo	98	**0.059**	**ug/L**	38.136	285	0.001
	Ag	107	**0.005**	**ug/L**	27.447	84	0.000
	Cd	111	**0.012**	**ug/L**	70.035	41	0.000
	Cd	114		**ug/L**		61	0.000
>	In	115		**ug/L**		274096	274095.616
	Sn	120	**0.209**	**ug/L**	25.689	1753	0.005
	Sb	121	**1.204**	**ug/L**	33.954	6930	0.021
	Sb	123		**ug/L**		5362	0.017
	Ba	135		**ug/L**		40	0.000
	Ba	137	**0.008**	**ug/L**	35.800	62	0.000
	Ho	165		**ug/L**		50	0.000
>	Lu	175		**ug/L**		496931	496930.847
	Tl	205	**0.017**	**ug/L**	20.680	641	0.001
	Pb	208	**0.012**	**ug/L**	21.450	1311	0.001
	Bi	209		**ug/L**		400	-0.000
	Th	232	**0.384**	**ug/L**	29.806	18872	0.031
	U	238	**0.019**	**ug/L**	18.286	1297	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322008
Sample Date/Time: Friday, November 27, 2009 00:09:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322008.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**29.737**	ug/L	0.990	64550	0.047
	Be	9	**2.097**	ug/L	3.212	871	0.001
	B	11	**2.603**	ug/L	7.419	1759	0.001
	Na	23	**566.488**	ug/L	1.664	2285434	1.651
	Mg	24	**1284.574**	ug/L	9.462	3544901	2.574
	Al	27	**10293.678**	ug/L	7.103	33476472	24.325
	P	31	**295.320**	ug/L	2.634	61646	0.039
	K	39	**1286.934**	ug/L	5.589	6584064	4.477
	Ca	43	**1310.748**	ug/L	2.482	15605	0.011
>	Sc	45		ug/L		1375683	1375683.429
	Ti	47	**1319.673**	ug/L	3.020	795394	0.578
	V	51	**18.661**	ug/L	2.404	117732	0.088
	Cr	52	**11.514**	ug/L	2.927	57957	0.042
	Cr	53		ug/L		56585	-0.020
	Mn	55	**1472.358**	ug/L	1.819	12291501	8.935
	Fe	57	**39942.849**	ug/L	0.753	6346246	4.610
	Co	59	**4.470**	ug/L	2.352	28477	0.021
	Ni	60	**11.385**	ug/L	1.897	15976	0.012
	Cu	63		ug/L		35485	0.026
	Cu	65	**11.455**	ug/L	1.359	19282	0.014
	Zn	66	**185.322**	ug/L	0.590	206408	0.539
	Zn	67		ug/L		38707	0.074
	Zn	68		ug/L		151406	0.392
>	Ge	74		ug/L		382683	382682.780
	As	75	**6.973**	ug/L	4.312	7531	0.020
	Se	77		ug/L		2487	-0.005
	Se	82	**0.395**	ug/L	19.275	30	0.000
	Kr	83		ug/L		242	0.000
	Sr	88	**14.431**	ug/L	1.477	231267	0.765
	Y	89		ug/L		1732980	5.737
	Mo	98	**13.272**	ug/L	1.510	51147	0.169
	Ag	107	**0.462**	ug/L	3.234	3069	0.010
	Cd	111	**1.762**	ug/L	5.897	2973	0.010
	Cd	114		ug/L		821	0.003
>	In	115		ug/L		302077	302076.761
	Sn	120	**6.571**	ug/L	1.966	46037	0.151
	Sb	121	**0.509**	ug/L	12.783	3898	0.009
	Sb	123		ug/L		3062	0.007
	Ba	135		ug/L		147936	0.270
	Ba	137	**78.219**	ug/L	1.372	262331	0.479
	Ho	165		ug/L		130491	0.238
>	Lu	175		ug/L		547666	547666.474
	Tl	205	**1.841**	ug/L	3.173	37296	0.067
	Pb	208	**62.737**	ug/L	2.008	2090250	3.816
	Bi	209		ug/L		353538	0.645
	Th	232	**23.180**	ug/L	3.602	1021705	1.859
	U	238	**2.837**	ug/L	2.843	131687	0.239

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		106.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		111.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EE Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241322009
Sample Date/Time: Friday, November 27, 2009 00:15:35
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322009.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**37.633**	ug/L	2.564	82819	0.059
	Be	9	**2.368**	ug/L	3.046	997	0.001
	B	11	**3.611**	ug/L	2.562	2192	0.001
	Na	23	**959.730**	ug/L	5.731	3916769	2.797
	Mg	24	**1925.478**	ug/L	1.357	5386185	3.857
	Al	27	**21898.748**	ug/L	9.318	72189488	51.748
	P	31	**471.077**	ug/L	1.825	95324	0.063
	K	39	**2650.809**	ug/L	7.003	13297938	9.222
	Ca	43	**1208.540**	ug/L	1.230	14613	0.010
>	Sc	45		ug/L		1395597	1395597.339
	Ti	47	**655.123**	ug/L	1.218	400798	0.287
	V	51	**18.904**	ug/L	0.767	121038	0.090
	Cr	52	**12.785**	ug/L	2.829	65294	0.047
	Cr	53		ug/L		56192	-0.021
	Mn	55	**480.506**	ug/L	1.843	4069955	2.916
	Fe	57	**29303.552**	ug/L	2.364	4723424	3.382
	Co	59	**3.299**	ug/L	2.814	21332	0.015
	Ni	60	**9.571**	ug/L	2.833	13632	0.010
	Cu	63		ug/L		47797	0.034
	Cu	65	**14.272**	ug/L	2.138	24346	0.017
	Zn	66	**202.754**	ug/L	2.038	227867	0.589
	Zn	67		ug/L		41388	0.080
	Zn	68		ug/L		162995	0.419
>	Ge	74		ug/L		386257	386256.502
	As	75	**3.391**	ug/L	7.289	3585	0.010
	Se	77		ug/L		2415	-0.006
	Se	82	**0.000**	ug/L	27458.983	-18	0.000
	Kr	83		ug/L		230	0.000
	Sr	88	**11.954**	ug/L	1.267	180123	0.634
	Y	89		ug/L		1280872	4.511
	Mo	98	**3.136**	ug/L	1.656	11422	0.040
	Ag	107	**1.846**	ug/L	2.184	11346	0.040
	Cd	111	**1.404**	ug/L	3.843	2231	0.008
	Cd	114		ug/L		515	0.002
>	In	115		ug/L		283975	283975.415
	Sn	120	**2.127**	ug/L	2.824	14311	0.049
	Sb	121	**0.097**	ug/L	24.452	1578	0.002
	Sb	123		ug/L		1254	0.001
	Ba	135		ug/L		123104	0.232
	Ba	137	**66.698**	ug/L	3.219	216826	0.408
	Ho	165		ug/L		94760	0.178
>	Lu	175		ug/L		530926	530926.179
	Tl	205	**0.164**	ug/L	2.058	3546	0.006
	Pb	208	**25.823**	ug/L	2.553	834568	1.571
	Bi	209		ug/L		7724	0.014
	Th	232	**22.444**	ug/L	0.895	959379	1.800
	U	238	**2.970**	ug/L	3.004	133608	0.251

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322010
Sample Date/Time: Friday, November 27, 2009 00:21:44
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322010.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**18.878**	ug/L	2.091	39969	0.030
	Be	9	**2.165**	ug/L	2.729	876	0.001
	B	11	**2.494**	ug/L	8.743	1671	0.001
	Na	23	**1192.491**	ug/L	8.582	4675106	3.475
	Mg	24	**1250.766**	ug/L	7.971	3358478	2.506
	Al	27	**15423.517**	ug/L	9.635	48812063	36.447
	P	31	**353.095**	ug/L	2.351	70376	0.047
	K	39	**2358.290**	ug/L	4.632	11408151	8.205
	Ca	43	**664.916**	ug/L	1.339	7806	0.006
>	Sc	45		ug/L		1339946	1339946.498
	Ti	47	**603.695**	ug/L	0.743	354638	0.264
	V	51	**15.834**	ug/L	3.956	96698	0.075
	Cr	52	**9.195**	ug/L	1.404	45042	0.034
	Cr	53		ug/L		50463	-0.024
	Mn	55	**580.216**	ug/L	2.257	4718554	3.521
	Fe	57	**27053.399**	ug/L	2.757	4187931	3.123
	Co	59	**2.265**	ug/L	2.375	14087	0.010
	Ni	60	**6.451**	ug/L	1.684	8840	0.007
	Cu	63		ug/L		28887	0.021
	Cu	65	**8.951**	ug/L	1.225	14692	0.011
	Zn	66	**148.619**	ug/L	1.406	163384	0.432
	Zn	67		ug/L		31101	0.055
	Zn	68		ug/L		117411	0.308
>	Ge	74		ug/L		377676	377676.460
	As	75	**2.939**	ug/L	0.923	3011	0.009
	Se	77		ug/L		2266	-0.006
	Se	82	**0.433**	ug/L	16.447	34	0.000
	Kr	83		ug/L		202	0.000
	Sr	88	**11.338**	ug/L	3.191	168940	0.601
	Y	89		ug/L		1356626	4.830
	Mo	98	**3.156**	ug/L	2.612	11366	0.040
	Ag	107	**0.720**	ug/L	7.178	4411	0.016
	Cd	111	**1.398**	ug/L	2.903	2198	0.008
	Cd	114		ug/L		732	0.002
>	In	115		ug/L		280865	280865.432
	Sn	120	**3.131**	ug/L	1.939	20625	0.072
	Sb	121	**0.146**	ug/L	7.798	1807	0.003
	Sb	123		ug/L		1408	0.002
	Ba	135		ug/L		97315	0.177
	Ba	137	**50.562**	ug/L	1.235	170166	0.310
	Ho	165		ug/L		102146	0.186
>	Lu	175		ug/L		549429	549428.688
	Tl	205	**0.154**	ug/L	1.170	3468	0.006
	Pb	208	**15.586**	ug/L	1.617	521793	0.948
	Bi	209		ug/L		5474	0.009
	Th	232	**19.410**	ug/L	1.703	859081	1.557
	U	238	**2.587**	ug/L	2.412	120486	0.218

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			90.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			111.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322011
Sample Date/Time: Friday, November 27, 2009 00:27:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322011.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**18.688**	ug/L	0.250	40009	0.029
	Be	9	**1.155**	ug/L	2.715	477	0.000
	B	11	**2.012**	ug/L	9.082	1501	0.001
	Na	23	**292.041**	ug/L	9.324	1165492	0.851
	Mg	24	**1796.709**	ug/L	6.063	4875673	3.600
	Al	27	**10174.634**	ug/L	7.164	32541375	24.043
	P	31	**469.938**	ug/L	0.424	92328	0.063
	K	39	**1475.217**	ug/L	0.890	7368959	5.132
	Ca	43	**5613.176**	ug/L	2.596	65205	0.048
>	Sc	45		ug/L		1354740	1354739.537
	Ti	47	**515.357**	ug/L	1.442	306206	0.226
	V	51	**16.155**	ug/L	0.900	99847	0.077
	Cr	52	**7.895**	ug/L	0.682	39089	0.029
	Cr	53		ug/L		52374	-0.023
	Mn	55	**659.308**	ug/L	2.376	5420768	4.001
	Fe	57	**22203.958**	ug/L	2.837	3476044	2.563
	Co	59	**4.292**	ug/L	4.316	26912	0.020
	Ni	60	**8.241**	ug/L	2.315	11402	0.008
	Cu	63		ug/L		36562	0.027
	Cu	65	**11.142**	ug/L	2.579	18471	0.014
	Zn	66	**119.206**	ug/L	3.500	136160	0.347
	Zn	67		ug/L		27556	0.043
	Zn	68		ug/L		98752	0.248
>	Ge	74		ug/L		392440	392439.555
	As	75	**3.652**	ug/L	5.801	3944	0.011
	Se	77		ug/L		2543	-0.005
	Se	82	**0.429**	ug/L	23.335	35	0.000
	Kr	83		ug/L		149	0.000
	Sr	88	**17.735**	ug/L	1.773	266961	0.940
	Y	89		ug/L		771782	2.719
	Mo	98	**3.019**	ug/L	1.839	10993	0.038
	Ag	107	**0.160**	ug/L	2.777	1034	0.003
	Cd	111	**0.801**	ug/L	8.471	1283	0.004
	Cd	114		ug/L		515	0.002
>	In	115		ug/L		283884	283884.176
	Sn	120	**2.061**	ug/L	1.539	13881	0.047
	Sb	121	**0.042**	ug/L	29.290	1296	0.001
	Sb	123		ug/L		1051	0.001
	Ba	135		ug/L		169464	0.320
	Ba	137	**90.772**	ug/L	1.615	294115	0.556
	Ho	165		ug/L		58934	0.111
>	Lu	175		ug/L		529125	529125.242
	Tl	205	**0.243**	ug/L	1.773	5070	0.009
	Pb	208	**22.161**	ug/L	1.477	714070	1.348
	Bi	209		ug/L		39661	0.074
	Th	232	**13.808**	ug/L	1.506	589695	1.107
	U	238	**1.375**	ug/L	2.726	61948	0.116

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322012
Sample Date/Time: Friday, November 27, 2009 00:34:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\241322012.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**29.738**	ug/L	1.231	64637	0.047
	Be	9	**2.053**	ug/L	2.474	855	0.001
	B	11	**1.739**	ug/L	4.498	1418	0.001
	Na	23	**553.101**	ug/L	11.748	2239786	1.612
	Mg	24	**1083.305**	ug/L	3.716	2991369	2.170
	Al	27	**10226.885**	ug/L	2.709	33289453	24.167
	P	31	**339.408**	ug/L	2.211	69842	0.045
	K	39	**1393.501**	ug/L	5.489	7100284	4.848
	Ca	43	**1494.084**	ug/L	1.675	17788	0.013
>	Sc	45		ug/L		1377727	1377726.802
	Ti	47	**1201.569**	ug/L	2.799	725068	0.526
	V	51	**17.963**	ug/L	1.720	113317	0.085
	Cr	52	**10.991**	ug/L	1.105	55392	0.040
	Cr	53		ug/L		52263	-0.023
	Mn	55	**1388.985**	ug/L	2.915	11607562	8.429
	Fe	57	**37801.547**	ug/L	3.396	6011579	4.363
	Co	59	**3.558**	ug/L	2.412	22711	0.016
	Ni	60	**10.933**	ug/L	2.600	15360	0.011
	Cu	63		ug/L		35451	0.026
	Cu	65	**11.327**	ug/L	2.761	19088	0.014
	Zn	66	**161.420**	ug/L	3.623	184376	0.469
	Zn	67		ug/L		34529	0.060
	Zn	68		ug/L		133617	0.337
>	Ge	74		ug/L		392755	392754.577
	As	75	**6.497**	ug/L	3.122	7183	0.019
	Se	77		ug/L		2373	-0.006
	Se	82	**0.519**	ug/L	24.983	46	0.000
	Kr	83		ug/L		233	0.000
	Sr	88	**20.731**	ug/L	1.746	332543	1.099
	Y	89		ug/L		1701556	5.626
	Mo	98	**12.378**	ug/L	0.687	47762	0.158
	Ag	107	**0.534**	ug/L	3.300	3539	0.012
	Cd	111	**1.730**	ug/L	6.900	2926	0.010
	Cd	114		ug/L		1274	0.004
>	In	115		ug/L		302457	302457.453
	Sn	120	**6.113**	ug/L	1.050	42907	0.140
	Sb	121	**0.224**	ug/L	2.178	2366	0.004
	Sb	123		ug/L		1877	0.003
	Ba	135		ug/L		153019	0.275
	Ba	137	**78.173**	ug/L	0.738	266455	0.479
	Ho	165		ug/L		128387	0.231
>	Lu	175		ug/L		556572	556571.615
	Tl	205	**1.778**	ug/L	2.189	36626	0.065
	Pb	208	**69.994**	ug/L	1.360	2369967	4.257
	Bi	209		ug/L		306416	0.550
	Th	232	**22.400**	ug/L	3.127	1003489	1.797
	U	238	**2.832**	ug/L	3.490	133580	0.239

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		106.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		112.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 00:40:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 6.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.129**	ug/L	2.030	98123	0.077
	Be	9	**51.756**	ug/L	1.671	19574	0.015
	B	11	**95.964**	ug/L	2.580	35823	0.028
	Na	23	**4406.528**	ug/L	4.580	16284691	12.841
	Mg	24	**4794.958**	ug/L	4.087	12174842	9.606
	Al	27	**4750.341**	ug/L	8.598	14233930	11.225
	P	31	**4980.922**	ug/L	2.066	850313	0.666
	K	39	**4633.059**	ug/L	8.303	20817839	16.119
	Ca	43	**4782.543**	ug/L	1.656	51951	0.041
>	Sc	45		ug/L		1266798	1266797.506
	Ti	47	**50.757**	ug/L	1.687	28541	0.022
	V	51	**49.188**	ug/L	4.674	291754	0.233
	Cr	52	**50.629**	ug/L	2.873	235268	0.186
	Cr	53		ug/L		96854	0.015
	Mn	55	**52.147**	ug/L	0.236	401914	0.316
	Fe	57	**5220.513**	ug/L	0.400	767042	0.603
	Co	59	**49.957**	ug/L	1.074	292415	0.231
	Ni	60	**51.105**	ug/L	2.772	65837	0.052
	Cu	63		ug/L		157984	0.125
	Cu	65	**51.465**	ug/L	1.465	79503	0.063
	Zn	66	**49.651**	ug/L	2.025	54844	0.144
	Zn	67		ug/L		17976	0.020
	Zn	68		ug/L		40046	0.102
>	Ge	74		ug/L		378487	378486.951
	As	75	**47.652**	ug/L	1.063	52127	0.138
	Se	77		ug/L		8277	0.010
	Se	82	**51.235**	ug/L	2.626	6104	0.016
	Kr	83		ug/L		82	-0.000
	Sr	88	**49.471**	ug/L	1.862	711262	2.623
	Y	89		ug/L		286	0.001
	Mo	98	**46.990**	ug/L	4.001	162322	0.598
	Ag	107	**49.130**	ug/L	1.581	287046	1.058
	Cd	111	**48.650**	ug/L	2.998	73111	0.270
	Cd	114		ug/L		176129	0.649
>	In	115		ug/L		271141	271140.952
	Sn	120	**51.180**	ug/L	1.669	318864	1.174
	Sb	121	**46.465**	ug/L	12.587	225364	0.827
	Sb	123		ug/L		176685	0.649
	Ba	135		ug/L		79610	0.164
	Ba	137	**47.781**	ug/L	3.540	141807	0.293
	Ho	165		ug/L		122	0.000
>	Lu	175		ug/L		484576	484576.410
	Tl	205	**51.469**	ug/L	1.682	914087	1.886
	Pb	208	**51.941**	ug/L	0.821	1531661	3.159
	Bi	209		ug/L		535	0.000
	Th	232	**48.944**	ug/L	1.470	1905514	3.925
	U	238	**52.492**	ug/L	0.863	2147392	4.430

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.258				
	Be	9	103.512				
	B	11	95.964				
	Na	23	88.131				
	Mg	24	95.899				
	Al	27	94.066				
	P	31	99.618				
	K	39	92.661				
	Ca	43	95.651				
>	Sc	45		89.4			
	Ti	47	101.514				
	V	51	98.376				
	Cr	52	101.257				
	Cr	53					
	Mn	55	104.295				
	Fe	57	104.410				
	Co	59	99.913				
	Ni	60	102.211				
	Cu	63					
	Cu	65	102.929				
	Zn	66	99.303				
	Zn	67					
	Zn	68					
>	Ge	74		90.6			
	As	75	95.305				
	Se	77					
	Se	82	102.470				
	Kr	83					
	Sr	88	98.942				
	Y	89					
	Mo	98	93.981				
	Ag	107	98.260				
	Cd	111	97.301				
	Cd	114					
>	In	115		95.2			
	Sn	120	102.359				
	Sb	121	92.931				
	Sb	123					
	Ba	135					
	Ba	137	95.562				
	Ho	165					
>	Lu	175		98.2			
	Tl	205	102.939				
	Pb	208	103.882				
	Bi	209					
	Th	232	97.888				
	U	238	104.983				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 00:46:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 7.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.010**	**ug/L**	103.286	131	-0.000
	Be	9	**0.013**	**ug/L**	68.883	15	0.000
	B	11	**1.928**	**ug/L**	17.397	1426	0.001
	Na	23	**1.591**	**ug/L**	83.479	19681	0.005
	Mg	24	**-0.026**	**ug/L**	3904.812	3000	-0.000
	Al	27	**1.059**	**ug/L**	30.432	7002	0.003
	P	31	**1.837**	**ug/L**	62.989	7338	0.000
	K	39	**-2.286**	**ug/L**	175.677	393691	-0.008
	Ca	43	**-0.029**	**ug/L**	7175.834	188	-0.000
>	Sc	45		**ug/L**		1314492	1314491.832
	Ti	47	**0.141**	**ug/L**	18.072	472	0.000
	V	51	**0.213**	**ug/L**	159.392	-2447	0.001
	Cr	52	**-0.000**	**ug/L**	13332.724	-167	-0.000
	Cr	53		**ug/L**		72996	-0.006
	Mn	55	**0.031**	**ug/L**	17.114	1329	0.000
	Fe	57	**2.295**	**ug/L**	33.127	4197	0.000
	Co	59	**0.006**	**ug/L**	23.566	102	0.000
	Ni	60	**0.002**	**ug/L**	242.767	58	0.000
	Cu	63		**ug/L**		151	0.000
	Cu	65	**0.001**	**ug/L**	1631.100	85	0.000
	Zn	66	**0.006**	**ug/L**	325.016	225	0.000
	Zn	67		**ug/L**		10198	-0.001
	Zn	68		**ug/L**		1328	0.000
>	Ge	74		**ug/L**		384504	384503.825
	As	75	**-0.129**	**ug/L**	195.683	-355	-0.000
	Se	77		**ug/L**		3989	-0.002
	Se	82	**0.133**	**ug/L**	62.598	-2	0.000
	Kr	83		**ug/L**		86	-0.000
	Sr	88	**0.005**	**ug/L**	21.411	238	0.000
	Y	89		**ug/L**		70	0.000
	Mo	98	**0.058**	**ug/L**	31.355	281	0.001
	Ag	107	**0.005**	**ug/L**	41.106	82	0.000
	Cd	111	**0.017**	**ug/L**	18.638	48	0.000
	Cd	114		**ug/L**		62	0.000
>	In	115		**ug/L**		272704	272703.956
	Sn	120	**0.203**	**ug/L**	19.876	1709	0.005
	Sb	121	**1.154**	**ug/L**	29.038	6676	0.021
	Sb	123		**ug/L**		5276	0.016
	Ba	135		**ug/L**		40	0.000
	Ba	137	**0.010**	**ug/L**	18.444	69	0.000
	Ho	165		**ug/L**		47	0.000
>	Lu	175		**ug/L**		484577	484577.239
	Tl	205	**0.017**	**ug/L**	27.084	629	0.001
	Pb	208	**0.012**	**ug/L**	8.034	1275	0.001
	Bi	209		**ug/L**		382	-0.000
	Th	232	**0.381**	**ug/L**	32.385	18310	0.031
	U	238	**0.019**	**ug/L**	23.646	1301	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, November 27, 2009 10:08:50
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1333
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	4800.4	4800.407	91.695	1.9
	Mg	24.0	45430.3	45430.325	336.268	0.7
	Co	58.9	84190.2	84190.174	925.240	1.1
	Rh	102.9	152596.3	152596.335	1558.205	1.0
	In	114.9	213531.6	213531.570	2401.811	1.1
	Pb	208.0	175302.0	175301.968	2335.580	1.3
⌈>	Ba	137.9	193477.9	193477.949	1989.896	1.0
⌊	Ba++	69.0	2755.7	0.014	0.000	1.4
⌈>	Ce	139.9	234615.6	234615.580	3396.188	1.4
⌊	CeO	155.9	6231.4	0.027	0.001	2.1
	Bkgd	220.0	13.5	13.500	3.482	25.8

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	4.3	5054.6
Co	59	9	4.5	81811.9
In	115	9	5.0	216039.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	602	2050	0.639
Be	9.0	9.0	2053	2070	0.617
Mg	24.0	24.0	5687	2060	0.617
Mg	25.0	25.0	5963	2080	0.605
Mg	26.0	26.0	6169	2070	0.585
Co	58.9	58.9	14190	2100	0.586
Rh	102.9	102.9	24880	2155	0.603
In	114.9	114.9	27794	2180	0.598
Ce	139.9	139.9	33866	2200	0.612
Pb	206.0	206.0	49948	2295	0.596
Pb	207.0	207.0	50171	2265	0.592
Pb	208.0	208.0	50451	2275	0.635
U	238.1	238.0	57722	2280	0.686

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Friday, November 27, 2009 16:09:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\Blank.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		416501	
⌊	U	238		ug/L		266	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Friday, November 27, 2009 16:11:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\Standard 1.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		413930	413930.189
	U	238	10.000	ug/L	0.479	387636	0.936

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Friday, November 27, 2009 16:13:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\Standard 2.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		417801	417801.321
⌊	U	238	99.779	ug/L	1.508	3195124	7.647

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Friday, November 27, 2009 16:14:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 1.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		413515	413515.281
	U	238	54.412	ug/L	1.141	1724745	4.170

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.3			
	U	238	108.824				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Friday, November 27, 2009 16:16:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 2.122

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		419624	419623.869
⌊	U	238	**0.062**	**ug/L**	2.151	2273	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Friday, November 27, 2009 16:18:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 3.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		421764	421764.107
⌊	U	238	0.254	ug/L	3.520	8462	0.019

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		101.3			
⌊	U	238	126.754				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Friday, November 27, 2009 16:19:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 4.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		363888	363888.366
	U	238	0.016	ug/L	2.612	688	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		87.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, November 27, 2009 16:21:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 5.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		420222	420221.695
	U	238	23.943	ug/L	0.980	771309	1.835

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.9			
	U	238	119.713				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 16:23:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.126

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		410760	410760.301
⌊	U	238	53.955	ug/L	1.149	1698687	4.135

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.6			
⌊	U	238	107.910				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 16:25:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		415685	415685.182
⌊	U	238	0.043	ug/L	7.552	1631	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		99.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 16:39:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		420188	420188.043
⌊	U	238	53.649	ug/L	1.068	1727749	4.112

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.9			
⌊	U	238	107.299				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 16:41:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		414931	414930.558
	U	238	0.038	ug/L	4.380	1471	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 16:56:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.146

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		406711	406710.612
⌊	U	238	**54.203**	**ug/L**	0.839	1689751	4.154

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.6			
⌊	U	238	108.406				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 16:58:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		411807	411807.037
⌊	U	238	0.038	ug/L	6.157	1454	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 17:08:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.153

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		408433	408432.960
[	U	238	53.688	ug/L	1.099	1680659	4.115

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		98.1			
[	U	238	107.376				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 17:10:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		414445	414444.666
⌊	U	238	0.035	ug/L	3.775	1376	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		99.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 17:20:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.160

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		408937	408937.441
⌊	U	238	53.738	ug/L	1.420	1684200	4.118

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.2			
⌊	U	238	107.477				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 17:21:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		413857	413856.548
⌊	U	238	0.039	ug/L	3.449	1503	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		99.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 17:38:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		404187	404186.947
[	U	238	53.443	ug/L	0.977	1655612	4.096

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		97.0			
[	U	238	106.885				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 17:40:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		410742	410741.579
⌊	U	238	0.034	ug/L	11.069	1326	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 17:55:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		410287	410286.843
	U	238	**54.446**	ug/L	0.408	1712253	4.173

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.5			
	U	238	108.892				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 17:57:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		412642	412642.031
	U	238	0.037	ug/L	2.785	1424	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.1			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 18:04:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		411843	411842.691
[	U	238	53.528	ug/L	2.888	1689168	4.102

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		98.9			
[	U	238	107.055				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 18:06:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.186

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		422432	422431.619
⌊	U	238	**0.045**	**ug/L**	3.680	1731	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		101.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 18:20:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		407459	407459.108
[	U	238	53.885	ug/L	0.900	1682834	4.130

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		97.8			
[	U	238	107.770				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 18:21:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		413128	413127.704
⌊	U	238	0.050	ug/L	1.994	1839	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		99.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322004
Sample Date/Time: Friday, November 27, 2009 18:27:32
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|ba|
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\241322004.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		496199	496199.011
⌊	U	238	3.167	ug/L	2.075	120739	0.243

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		119.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 18:29:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		407545	407544.550
	U	238	53.601	ug/L	0.338	1674446	4.108

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.8			
	U	238	107.202				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 18:30:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.200

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		410098	410098.066
⌊	U	238	0.047	ug/L	1.590	1734	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Friday, November 27, 2009 18:33:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\Blank.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		104	
	Be	9		ug/L		12	
>	Sc	45		ug/L		1746448	
	Ni	60		ug/L		66	
>	Lu	175		ug/L		414181	
	Tl	205		ug/L		2194	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
Sc	45	Simple Linear	
Ni	60	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Friday, November 27, 2009 18:35:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\Standard 1.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	3.936	25666	0.015
	Be	9	10.000	ug/L	3.222	4775	0.003
>	Sc	45		ug/L		1720358	1720358.410
	Ni	60	10.000	ug/L	4.882	15783	0.009
>	Lu	175		ug/L		411160	411159.764
	Tl	205	10.000	ug/L	2.310	176220	0.423

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Friday, November 27, 2009 18:38:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\Standard 2.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.965**	**ug/L**	2.576	250568	0.144
	Be	9	**99.950**	**ug/L**	1.840	45985	0.026
>	Sc	45		**ug/L**		1744421	1744421.129
	Ni	60	**99.939**	**ug/L**	3.885	150179	0.086
>	Lu	175		**ug/L**		405130	405129.831
	Tl	205	**99.863**	**ug/L**	2.189	1508249	3.718

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Friday, November 27, 2009 18:40:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 1.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.214**	**ug/L**	3.031	128671	0.071
	Be	9	**50.626**	**ug/L**	0.745	24291	0.013
>	Sc	45		**ug/L**		1818299	1818298.624
	Ni	60	**49.132**	**ug/L**	1.731	77039	0.042
>	Lu	175		**ug/L**		408212	408211.568
	Tl	205	**51.364**	**ug/L**	0.624	782804	1.912

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.429				
	Be	9	101.252				
>	Sc	45		104.1			
	Ni	60	98.265				
>	Lu	175		98.6			
	Tl	205	102.727				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Friday, November 27, 2009 18:42:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 2.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.003**	**ug/L**	154.526	114	0.000
	Be	9	**0.006**	**ug/L**	83.044	15	0.000
>	Sc	45		**ug/L**		1791423	1791423.303
	Ni	60	**0.001**	**ug/L**	573.445	69	0.000
>	Lu	175		**ug/L**		411022	411021.677
	Tl	205	**0.043**	**ug/L**	5.967	2840	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		102.6			
	Ni	60					
>	Lu	175		99.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Friday, November 27, 2009 18:45:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 3.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.764**	**ug/L**	2.869	28012	0.015
	Be	9	**0.497**	**ug/L**	8.196	248	0.000
>	Sc	45		**ug/L**		1805095	1805095.100
	Ni	60	**2.156**	**ug/L**	2.410	3420	0.002
>	Lu	175		**ug/L**		416023	416022.830
	Tl	205	**1.090**	**ug/L**	1.831	19097	0.041

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	107.639				
	Be	9	99.338				
>	Sc	45		103.4			
	Ni	60	107.796				
>	Lu	175		100.4			
	Tl	205	109.043				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Friday, November 27, 2009 18:47:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 4.207

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.065**	**ug/L**	1.470	264	0.000
	Be	9	**0.054**	**ug/L**	14.855	36	0.000
>	Sc	45		**ug/L**		1713527	1713526.957
	Ni	60	**3.396**	**ug/L**	4.180	5076	0.003
>	Lu	175		**ug/L**		361447	361447.441
	Tl	205	**-0.032**	**ug/L**	11.578	1482	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		98.1			
	Ni	60	125.790				
>	Lu	175		87.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, November 27, 2009 18:49:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 5.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.814**	**ug/L**	5.293	47118	0.028
	Be	9	**18.645**	**ug/L**	3.768	8136	0.005
>	Sc	45		**ug/L**		1653455	1653454.628
	Ni	60	**22.372**	**ug/L**	1.773	31926	0.019
>	Lu	175		**ug/L**		362308	362307.837
	Tl	205	**21.284**	**ug/L**	0.955	289040	0.792

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	99.071				
	Be	9	93.225				
>	Sc	45		94.7			
	Ni	60	98.556				
>	Lu	175		87.5			
	Tl	205	106.421				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 18:52:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.209

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.999**	**ug/L**	2.645	130426	0.070
	Be	9	**49.523**	**ug/L**	2.885	24189	0.013
>	Sc	45		**ug/L**		1851090	1851089.598
	Ni	60	**49.549**	**ug/L**	0.846	79103	0.043
>	Lu	175		**ug/L**		403713	403712.514
	Tl	205	**51.789**	**ug/L**	3.237	780312	1.928

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	97.998				
	Be	9	99.047				
>	Sc	45		106.0			
	Ni	60	99.098				
>	Lu	175		97.5			
	Tl	205	103.579				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 18:54:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.022**	**ug/L**	19.146	171	0.000
	Be	9	**0.006**	**ug/L**	52.683	15	0.000
>	Sc	45		**ug/L**		1872772	1872772.422
	Ni	60	**0.002**	**ug/L**	222.901	73	0.000
>	Lu	175		**ug/L**		410597	410596.911
	Tl	205	**0.031**	**ug/L**	5.844	2654	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		107.2			
	Ni	60					
>	Lu	175		99.1			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Friday, November 27, 2009 18:57:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 10.211

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**851.371**	**ug/L**	3.032	2107800	1.223
	Be	9	**868.693**	**ug/L**	2.176	394841	0.229
>	Sc	45		**ug/L**		1723799	1723799.328
	Ni	60	**824.805**	**ug/L**	2.152	1224872	0.711
>	Lu	175		**ug/L**		370008	370007.781
	Tl	205	**443.378**	**ug/L**	0.333	6110323	16.509

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	85.137				
|	Be	9	86.869				
|>	Sc	45			98.7		
⌊	Ni	60	82.481				
⌈>	Lu	175			89.3		
⌊	Tl	205	88.676				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Li	7	LRS is out of limits (+/- 10%)
QC Std 10	Be	9	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Tl	205	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Friday, November 27, 2009 18:59:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 11.212

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.565**	**ug/L**	0.911	128600	0.070
	Be	9	**49.644**	**ug/L**	1.644	24122	0.013
>	Sc	45		**ug/L**		1841220	1841220.297
	Ni	60	**48.796**	**ug/L**	1.235	77485	0.042
>	Lu	175		**ug/L**		403585	403584.666
	Tl	205	**51.346**	**ug/L**	2.077	773629	1.912

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.130				
	Be	9	99.289				
>	Sc	45		105.4			
	Ni	60	97.592				
>	Lu	175		97.4			
	Tl	205	102.693				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Friday, November 27, 2009 19:01:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 12.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.062**	**ug/L**	16.566	274	0.000
	Be	9	**0.017**	**ug/L**	49.701	21	0.000
>	Sc	45		**ug/L**		1850233	1850233.073
	Ni	60	**0.025**	**ug/L**	37.418	110	0.000
>	Lu	175		**ug/L**		409383	409383.359
	Tl	205	**0.101**	**ug/L**	13.935	3714	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		105.9			
	Ni	60					
>	Lu	175		98.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241322004
Sample Date/Time: Friday, November 27, 2009 19:11:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925185|2|baj
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\241322004.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.213**	**ug/L**	1.894	59189	0.029
	Be	9	**2.497**	**ug/L**	0.785	1353	0.001
>	Sc	45		**ug/L**		2033950	2033950.254
	Ni	60	**19.729**	**ug/L**	2.207	34652	0.017
>	Lu	175		**ug/L**		487940	487939.808
	Tl	205	**0.582**	**ug/L**	3.532	13161	0.022

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		116.5			
	Ni	60					
>	Lu	175		117.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, November 27, 2009 19:14:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 6.218

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.890**	**ug/L**	2.621	130619	0.069
	Be	9	**49.158**	**ug/L**	2.139	24601	0.013
>	Sc	45		**ug/L**		1896705	1896704.735
	Ni	60	**48.881**	**ug/L**	1.249	79959	0.042
>	Lu	175		**ug/L**		411761	411761.196
	Tl	205	**51.183**	**ug/L**	1.385	786860	1.906

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	95.779				
	Be	9	98.316				
>	Sc	45		108.6			
	Ni	60	97.762				
>	Lu	175		99.4			
	Tl	205	102.366				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, November 27, 2009 19:16:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be ni and tl.mth
Dataset File: C:\elandata\Dataset\091127\QC Std 7.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.017**	**ug/L**	5.757	163	0.000
	Be	9	**0.007**	**ug/L**	83.920	16	0.000
>	Sc	45		**ug/L**		1919087	1919087.005
	Ni	60	**0.015**	**ug/L**	60.841	97	0.000
>	Lu	175		**ug/L**		408448	408447.818
	Tl	205	**0.052**	**ug/L**	5.341	2957	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
>	Sc	45		109.9			
	Ni	60					
>	Lu	175		98.6			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/03/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120309S1.SIF Results Data Set Name: 120309S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/03/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0050	0.0050	09:39:10	No
2			0.0048	0.0048	09:39:45	No
Mean:			0.0049			
SD :			0.0002			
%RSD:			3.3559			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/03/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0019	0.0068	09:41:07	No
2			0.0018	0.0067	09:41:42	No
Mean:			0.0018			
SD :			0.0001			
%RSD:			4.3825			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00919
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/03/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0044	0.0093	09:43:05	No
2			0.0044	0.0093	09:43:40	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.8225			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99978 Slope: 0.00877
Intercept : 0.00003

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/03/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0170	0.0219	09:45:05	No
2			0.0171	0.0220	09:45:40	No
Mean:			0.0171			
SD :			0.0000			
%RSD:			0.1087			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99996 Slope: 0.00849
Intercept : 0.00009

==========
Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/03/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0422	0.0471	09:47:05	No
2			0.0431	0.0480	09:47:40	No
Mean:			0.0426			
SD :			0.0006			
%RSD:			1.4797			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99999 Slope: 0.00851
Intercept : 0.00008

==========
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/03/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0859	0.0908	09:49:06	No
2			0.0865	0.0914	09:49:40	No
Mean:			0.0862			
SD :			0.0004			
%RSD:			0.5037			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00861
Intercept : -0.00003

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0049	---	----	----	----
S0.2	0.0018	0.200	0.217	0.0001	4.4
S0.5	0.0044	0.500	0.514	0.0000	0.8
S2.0	0.0171	2.000	1.985	0.0000	0.1
S5.0	0.0426	5.000	4.956	0.0006	1.5
S10	0.0862	10.000	10.02	0.0004	0.5
Calib Blank	0.0049	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00861 Intercept: 0.0000

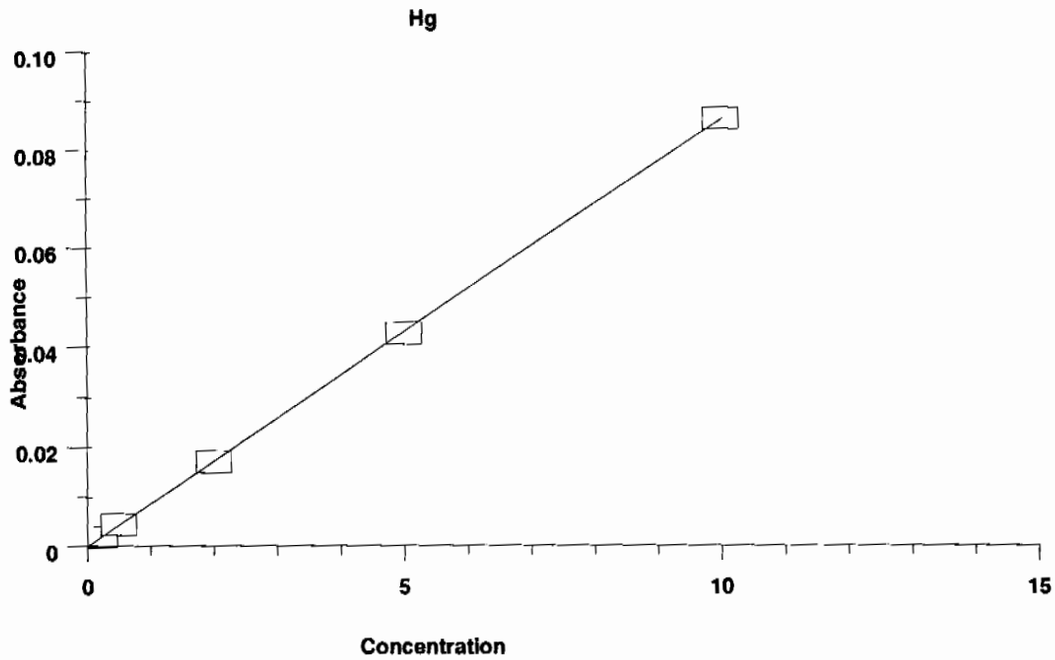

==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/03/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.010	5.010	0.0431	0.0480	09:51:08	No
2	5.003	5.003	0.0430	0.0479	09:51:43	No
Mean:	5.006	5.006	0.0431			
SD :	0.0051	0.0051	0.0000			
%RSD:	0.1	0.1	0.1012			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/03/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	0.0048	09:53:05	No
2	-0.043	-0.043	-0.0004	0.0045	09:53:40	No
Mean:	-0.027	-0.027	-0.0003			
SD :	0.0234	0.0234	0.0002			
%RSD:	88.1	88.1	77.6941			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/03/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.196	0.196	0.0017	0.0065	09:55:04	No
2	0.192	0.192	0.0016	0.0065	09:55:39	No
Mean:	0.194	0.194	0.0016			
SD :	0.0026	0.0026	0.0000			
%RSD:	1.4	1.4	1.3886			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.919	4.919	0.0423	0.0472	09:57:04	No
2	4.947	4.947	0.0425	0.0474	09:57:39	No
Mean:	4.933	4.933	0.0424			
SD :	0.0195	0.0195	0.0002			
%RSD:	0.4	0.4	0.3953			

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0008	0.0041	09:59:07	No
2	-0.092	-0.092	-0.0008	0.0041	09:59:42	No
Mean:	-0.093	-0.093	-0.0008			
SD :	0.0005	0.0005	0.0000			
%RSD:	0.6	0.6	0.5646			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/03/2009
Sample ID: 1201984311|i||928031|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.086	-0.086	-0.0008	0.0041	10:01:08	No
2	-0.088	-0.088	-0.0008	0.0041	10:01:43	No
Mean:	-0.087	-0.087	-0.0008			
SD :	0.0016	0.0016	0.0000			
%RSD:	1.8	1.8	1.7124			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/03/2009
Sample ID: 1201984312|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.352	3.352	0.0288	0.0337	10:03:08	No
2	3.314	3.314	0.0285	0.0334	10:03:43	No
Mean:	3.333	3.333	0.0287			
SD :	0.0270	0.0270	0.0002			
%RSD:	0.8	0.8	0.8107			

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/03/2009
Sample ID: 241905001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.374	0.374	0.0032	0.0081	10:05:10	No
2	0.314	0.314	0.0027	0.0076	10:05:45	No
Mean:	0.344	0.344	0.0029			
SD :	0.0425	0.0425	0.0004			
%RSD:	12.3	12.3	12.4771			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/03/2009
Sample ID: 241909001|i|||

%RSD: 0.6 0.6 0.6312

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/03/2009
Sample ID: 1201984315|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.145	-0.145	-0.0013	0.0036	10:19:00	No
2	-0.145	-0.145	-0.0013	0.0036	10:19:34	No
Mean:	-0.145	-0.145	-0.0013			
SD :	0.0002	0.0002	0.0000			
%RSD:	0.1	0.1	0.1265			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.051	5.051	0.0434	0.0483	10:20:58	No
2	5.071	5.071	0.0436	0.0485	10:21:33	No
Mean:	5.061	5.061	0.0435			
SD :	0.0145	0.0145	0.0001			
%RSD:	0.3	0.3	0.2869			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.105	-0.105	-0.0009	0.0040	10:23:01	No
2	-0.109	-0.109	-0.0010	0.0039	10:23:36	No
Mean:	-0.107	-0.107	-0.0010			
SD :	0.0029	0.0029	0.0000			
%RSD:	2.7	2.7	2.6002			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/03/2009
Sample ID: 241913002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.120	0.120	0.0010	0.0059	10:25:01	No
2	0.080	0.080	0.0007	0.0055	10:25:36	No
Mean:	0.100	0.100	0.0008			
SD :	0.0282	0.0282	0.0002			
%RSD:	28.1	28.1	29.1664			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/03/2009
Sample ID: 1201977144|i||924854|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0008	0.0041	10:27:00	No
2	-0.079	-0.079	-0.0007	0.0042	10:27:36	No
Mean:	-0.084	-0.084	-0.0008			
SD :	0.0067	0.0067	0.0001			
%RSD:	8.0	8.0	7.6499			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/03/2009
Sample ID: 1201977145|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.893	3.893	0.0335	0.0384	10:29:00	No
2	3.888	3.888	0.0334	0.0383	10:29:35	No
Mean:	3.890	3.890	0.0335			
SD :	0.0039	0.0039	0.0000			
%RSD:						

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 12/03/2009
Sample ID: 241301001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.051	-0.051	-0.0005	0.0044	10:30:59	No
2	-0.066	-0.066	-0.0006	0.0043	10:31:34	No
Mean:	-0.058	-0.058	-0.0005			
SD :	0.0108	0.0108	0.0001			
%RSD:	18.4	18.4	17.3659			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 12/03/2009
Sample ID: 241322001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.055	-0.055	-0.0005	0.0044	10:32:59	No
2	-0.046	-0.046	-0.0004	0.0045	10:33:33	No
Mean:	-0.051	-0.051	-0.0005			
SD :	0.0064	0.0064	0.0001			
%RSD:	12.5	12.5	11.6839			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 12/03/2009
Sample ID: 241322002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.127	0.127	0.0011	0.0059	10:34:58	No
2	0.120	0.120	0.0010	0.0059	10:35:33	No
Mean:	0.124	0.124	0.0010			
SD :	0.0046	0.0046	0.0000			
%RSD:	3.8	3.8	3.8653			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 12/03/2009
Sample ID: 241322003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.194	0.194	0.0016	0.0065	10:36:59	No
2	0.189	0.189	0.0016	0.0065	10:37:34	No
Mean:	0.192	0.192	0.0016			
SD :	0.0031	0.0031	0.0000			
%RSD:	1.6	1.6	1.6557			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 12/03/2009
Sample ID: 241322004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.081	0.081	0.0007	0.0056	10:39:00	No
2	0.089	0.089	0.0007	0.0056	10:39:34	No
Mean:	0.085	0.085	0.0007			
SD :	0.0055	0.0055	0.0000			

%RSD: 6.5 6.5 6.7332

==========

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 12/03/2009
Sample ID: 241322005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.210	0.210	0.0018	0.0067	10:41:01	No
2	0.194	0.194	0.0016	0.0065	10:41:36	No
Mean:	0.202	0.202	0.0017			
SD :	0.0108	0.0108	0.0001			
%RSD:	5.4	5.4	5.4663			

==========

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 12/03/2009
Sample ID: 241322006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.206	0.206	0.0017	0.0066	10:43:02	No
2	0.181	0.181	0.0015	0.0064	10:43:37	No
Mean:	0.194	0.194	0.0016			
SD :	0.0179	0.0179	0.0002			
%RSD:	9.2	9.2	9.3873			

==========

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.199	5.199	0.0447	0.0496	10:45:04	No
2	5.200	5.200	0.0447	0.0496	10:45:39	No
Mean:	5.200	5.200	0.0447			
SD :	0.0006	0.0006	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.130	-0.130	-0.0012	0.0037	10:47:06	No
2	-0.104	-0.104	-0.0009	0.0040	10:47:41	No
Mean:	-0.117	-0.117	-0.0010			
SD :	0.0186	0.0186	0.0002			
%RSD:	15.9	15.9	15.4300			

QC value within specified limits.

==========

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 12/03/2009
Sample ID: 241322007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.148	0.148	0.0012	0.0061	10:49:05	No
2	0.120	0.120	0.0010	0.0059	10:49:39	No
Mean:	0.134	0.134	0.0011			
SD :	0.0197	0.0197	0.0002			
%RSD:	14.6	14.6	15.0443			

==========

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 12/03/2009
Sample ID: 241322008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.066	0.066	0.0005	0.0054	10:50:59	No
2	0.052	0.052	0.0004	0.0053	10:51:34	No
Mean:	0.059	0.059	0.0005			
SD :	0.0097	0.0097	0.0001			
%RSD:	16.4	16.4	17.4890			

Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 12/03/2009
Sample ID: 241322009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.165	0.165	0.0014	0.0063	10:52:55	No
2	0.150	0.150	0.0013	0.0061	10:53:30	No
Mean:	0.158	0.158	0.0013			
SD :	0.0105	0.0105	0.0001			
%RSD:	6.6	6.6	6.8004			

Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 12/03/2009
Sample ID: 241322010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.052	0.052	0.0004	0.0053	10:54:52	No
2	0.048	0.048	0.0004	0.0053	10:55:27	No
Mean:	0.050	0.050	0.0004			
SD :	0.0030	0.0030	0.0000			
%RSD:	5.9	5.9	6.3811			

Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 12/03/2009
Sample ID: 241322011|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.032	-0.032	-0.0003	0.0046	10:56:49	No
2	-0.051	-0.051	-0.0005	0.0044	10:57:24	No
Mean:	-0.042	-0.042	-0.0004			
SD :	0.0135	0.0135	0.0001			
%RSD:	32.3	32.3	29.7342			

Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 12/03/2009
Sample ID: 241322012|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.099	0.099	0.0008	0.0057	10:58:46	No
2	0.084	0.084	0.0007	0.0056	10:59:21	No
Mean:	0.092	0.092	0.0008			
SD :	0.0102	0.0102	0.0001			
%RSD:	11.1	11.1	11.5738			

Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 12/03/2009
Sample ID: 241336001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.088	0.088	0.0007	0.0056	11:00:44	No
2	0.069	0.069	0.0006	0.0055	11:01:19	No
Mean:	0.079	0.079	0.0006			
SD :	0.0135	0.0135	0.0001			

%RSD: 17.1 17.1 17.8719

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/03/2009
Sample ID: 1201977146|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0009	0.0058	11:02:42	No
2	0.106	0.106	0.0009	0.0058	11:03:18	No
Mean:	0.109	0.109	0.0009			
SD :	0.0043	0.0043	0.0000			
%RSD:	4.0	4.0	4.1049			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/03/2009
Sample ID: 1201977147|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.306	2.306	0.0198	0.0247	11:04:42	No
2	2.257	2.257	0.0194	0.0243	11:05:17	No
Mean:	2.281	2.281	0.0196			
SD :	0.0351	0.0351	0.0003			
%RSD:	1.5	1.5	1.5398			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/03/2009
Sample ID: 1201977149|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.277	2.277	0.0196	0.0245	11:06:41	No
2	2.279	2.279	0.0196	0.0245	11:07:16	No
Mean:	2.278	2.278	0.0196			
SD :	0.0018	0.0018	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.327	5.327	0.0458	0.0507	11:08:41	No
2	5.335	5.335	0.0459	0.0508	11:09:15	No
Mean:	5.331	5.331	0.0458			
SD :	0.0058	0.0058	0.0001			
%RSD:	0.1	0.1	0.1092			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.125	-0.125	-0.0011	0.0038	11:10:43	No
2	-0.119	-0.119	-0.0011	0.0038	11:11:17	No
Mean:	-0.122	-0.122	-0.0011			
SD :	0.0044	0.0044	0.0000			
%RSD:	3.6	3.6	3.4749			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/03/2009
Sample ID: 1201977148|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.155	-0.155	-0.0014	0.0035	11:12:43	No
2	-0.174	-0.174	-0.0015	0.0034	11:13:18	No
Mean:	-0.164	-0.164	-0.0014			
SD :	0.0133	0.0133	0.0001			
%RSD:	8.1	8.1	7.9467			

Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 12/03/2009
Sample ID: 241336002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0022	0.0071	11:14:42	No
2	0.225	0.225	0.0019	0.0068	11:15:18	No
Mean:	0.241	0.241	0.0020			
SD :	0.0237	0.0237	0.0002			
%RSD:	9.8	9.8	9.9558			

Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 12/03/2009
Sample ID: 1201981567|i||926805|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.079	-0.079	-0.0007	0.0042	11:16:44	No
2	-0.109	-0.109	-0.0010	0.0039	11:17:19	No
Mean:	-0.094	-0.094	-0.0008			
SD :	0.0212	0.0212	0.0002			
%RSD:	22.5	22.5	21.7114			

Element: Hg Seq. No.: 51 AS Loc.: 45 Date: 12/03/2009
Sample ID: 1201981568|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.150	2.150	0.0185	0.0234	11:18:45	No
2	2.133	2.133	0.0183	0.0232	11:19:20	No
Mean:	2.142	2.142	0.0184			
SD :	0.0122	0.0122	0.0001			
%RSD:	0.6	0.6	0.5696			

Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 12/03/2009
Sample ID: 241081001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.304	-0.304	-0.0026	0.0022	11:20:46	No
2	-0.310	-0.310	-0.0027	0.0022	11:21:21	No
Mean:	-0.307	-0.307	-0.0027			
SD :	0.0037	0.0037	0.0000			
%RSD:	1.2	1.2	1.1939			

Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 12/03/2009
Sample ID: 1201981569|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.363	-0.363	-0.0032	0.0017	11:22:48	No
2	-0.374	-0.374	-0.0032	0.0016	11:23:23	No
Mean:	-0.368	-0.368	-0.0032			
SD :	0.0077	0.0077	0.0001			

%RSD: 2.1 2.1 2.0689

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/03/2009
Sample ID: 1201981570|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.195	0.195	0.0016	0.0065	11:24:47	No
2	0.184	0.184	0.0016	0.0064	11:25:21	No
Mean:	0.189	0.189	0.0016			
SD :	0.0078	0.0078	0.0001			
%RSD:	4.1	4.1	4.2199			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/03/2009
Sample ID: 1201981572|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.567	0.567	0.0048	0.0097	11:26:42	No
2	0.565	0.565	0.0048	0.0097	11:27:16	No
Mean:	0.566	0.566	0.0048			
SD :	0.0014	0.0014	0.0000			
%RSD:	0.2	0.2	0.2427			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/03/2009
Sample ID: 1201981571|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.287	-0.287	-0.0025	0.0024	11:28:37	No
2	-0.303	-0.303	-0.0026	0.0022	11:29:11	No
Mean:	-0.295	-0.295	-0.0026			
SD :	0.0109	0.0109	0.0001			
%RSD:	3.7	3.7	3.6474			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/03/2009
Sample ID: 241081002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.245	-0.245	-0.0021	0.0027	11:30:32	No
2	-0.243	-0.243	-0.0021	0.0028	11:31:06	No
Mean:	-0.244	-0.244	-0.0021			
SD :	0.0016	0.0016	0.0000			
%RSD:	0.7	0.7	0.6451			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/03/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.328	5.328	0.0458	0.0507	11:32:30	No
2	5.275	5.275	0.0454	0.0503	11:33:05	No
Mean:	5.301	5.301	0.0456			
SD :	0.0374	0.0374	0.0003			
%RSD:	0.7	0.7	0.7065			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/03/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0008	0.0041	11:34:33	No
2	-0.064	-0.064	-0.0006	0.0043	11:35:08	No
Mean:	-0.076	-0.076	-0.0007			
SD :	0.0160	0.0160	0.0001			
%RSD:	21.1	21.1	20.1811			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/03/2009
Sample ID: 241081003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.232	-0.232	-0.0020	0.0029	11:36:34	No
2	-0.256	-0.256	-0.0022	0.0027	11:37:09	No
Mean:	-0.244	-0.244	-0.0021			
SD :	0.0167	0.0167	0.0001			
%RSD:	6.9	6.9	6.7660			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/03/2009
Sample ID: 241081004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.296	-0.296	-0.0026	0.0023	11:38:31	No
2	-0.308	-0.308	-0.0027	0.0022	11:39:05	No
Mean:	-0.302	-0.302	-0.0026			
SD :	0.0082	0.0082	0.0001			
%RSD:	2.7	2.7	2.6874			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/03/2009
Sample ID: 241081005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.322	-0.322	-0.0028	0.0021	11:40:28	No
2	-0.329	-0.329	-0.0029	0.0020	11:41:03	No
Mean:	-0.325	-0.325	-0.0028			
SD :	0.0055	0.0055	0.0000			
%RSD:	1.7	1.7	1.6800			

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/03/2009
Sample ID: 241081006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.198	-0.198	-0.0017	0.0032	11:42:26	No
2	-0.192	-0.192	-0.0017	0.0032	11:43:01	No
Mean:	-0.195	-0.195	-0.0017			
SD :	0.0040	0.0040	0.0000			
%RSD:	2.0	2.0	2.0111			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/03/2009
Sample ID: 241081007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.301	-0.301	-0.0026	0.0023	11:44:25	No
2	-0.305	-0.305	-0.0027	0.0022	11:44:59	No
Mean:	-0.303	-0.303	-0.0026			
SD :	0.0032	0.0032	0.0000			

Miscellaneous

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925183

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977914	UI647733-01	.524	g
MS	1201977912	UI091015-A	.5	mL
MS	1201977912	UI091015-B	.5	mL
MSD	1201977913	UI091015-A	.5	mL
MSD	1201977913	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977909		SW846 3050B	21-NOV-2009 09:54	0.505 g	50 mL	99.0099	SOIL
LCS	1201977914		SW846 3050B	21-NOV-2009 09:54	0.524 g	50 mL	95.41985	SOIL
SAMPLE	241322001		SW846 3050B	21-NOV-2009 09:54	0.52 g	50 mL	96.15385	SOIL
DUP	1201977910	241322001	SW846 3050B	21-NOV-2009 09:54	0.502 g	50 mL	99.60159	SOIL
SDILT	1201977911	241322001	SW846 3050B	21-NOV-2009 09:54	0.52 g	50 mL	96.15385	SOIL
MS	1201977912	241322001	SW846 3050B	21-NOV-2009 09:54	0.509 g	50 mL	98.23183	SOIL
MSD	1201977913	241322001	SW846 3050B	21-NOV-2009 09:54	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241322002		SW846 3050B	21-NOV-2009 09:54	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241322003		SW846 3050B	21-NOV-2009 09:54	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241322004		SW846 3050B	21-NOV-2009 09:54	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241322005		SW846 3050B	21-NOV-2009 09:54	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241322006		SW846 3050B	21-NOV-2009 09:54	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241322007		SW846 3050B	21-NOV-2009 09:54	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241322008		SW846 3050B	21-NOV-2009 09:54	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241322009		SW846 3050B	21-NOV-2009 09:54	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241322010		SW846 3050B	21-NOV-2009 09:54	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241322011		SW846 3050B	21-NOV-2009 09:54	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241322012		SW846 3050B	21-NOV-2009 09:54	0.509 g	50 mL	98.23183	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments The QC sample is a grey soil with small rocks.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925181

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977908	UI652380	.513	g
MS	1201977906	UI091119-01	.25	mL
MS	1201977906	UI091119-06	.25	mL
MSD	1201977907	UI091119-01	.25	mL
MSD	1201977907	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977903		SW846 3050B	21-NOV-2009 10:35	0.5 g	50 mL	100	SOIL
LCS	1201977908		SW846 3050B	21-NOV-2009 10:35	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241322001		SW846 3050B	21-NOV-2009 10:35	0.507 g	50 mL	98.61933	SOIL
DUP	1201977904	241322001	SW846 3050B	21-NOV-2009 10:35	0.521 g	50 mL	95.96929	SOIL
SDILT	1201977905	241322001	SW846 3050B	21-NOV-2009 10:35	0.507 g	50 mL	98.61933	SOIL
MS	1201977906	241322001	SW846 3050B	21-NOV-2009 10:35	0.503 g	50 mL	99.40358	SOIL
MSD	1201977907	241322001	SW846 3050B	21-NOV-2009 10:35	0.5 g	50 mL	100	SOIL
SAMPLE	241322002		SW846 3050B	21-NOV-2009 10:35	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241322003		SW846 3050B	21-NOV-2009 10:35	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241322004		SW846 3050B	21-NOV-2009 10:35	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241322005		SW846 3050B	21-NOV-2009 10:35	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241322006		SW846 3050B	21-NOV-2009 10:35	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241322007		SW846 3050B	21-NOV-2009 10:35	0.5 g	50 mL	100	SOIL
SAMPLE	241322008		SW846 3050B	21-NOV-2009 10:35	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241322009		SW846 3050B	21-NOV-2009 10:35	0.5 g	50 mL	100	SOIL
SAMPLE	241322010		SW846 3050B	21-NOV-2009 10:35	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241322011		SW846 3050B	21-NOV-2009 10:35	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241322012		SW846 3050B	21-NOV-2009 10:35	0.517 g	50 mL	96.7118	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments The QC sample is a grey soil with small rocks.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 930801

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201990790	UI062540-I	.504	g
MS	1201977906	UI091119-01	.25	mL
MS	1201977906	UI091119-06	.25	mL
MSD	1201977907	UI091119-01	.25	mL
MSD	1201977907	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201990789		SW846 3050B	09-DEC-2009 13:00	0.52 g	50 mL	96.15385	SOIL
LCS	1201990790		SW846 3050B	09-DEC-2009 13:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241322001		SW846 3050B	09-DEC-2009 13:00	0.513 g	50 mL	97.46589	SOIL
DUP	1201977904	241322001	SW846 3050B	09-DEC-2009 13:00	0.522 g	50 mL	95.78544	SOIL
SDILT	1201977905	241322001	SW846 3050B	09-DEC-2009 13:00	0.513 g	50 mL	97.46589	SOIL
MS	1201977906	241322001	SW846 3050B	09-DEC-2009 13:00	0.505 g	50 mL	99.0099	SOIL
MSD	1201977907	241322001	SW846 3050B	09-DEC-2009 13:00	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241322002		SW846 3050B	09-DEC-2009 13:00	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241322003		SW846 3050B	09-DEC-2009 13:00	0.5 g	50 mL	100	SOIL
SAMPLE	241322004		SW846 3050B	09-DEC-2009 13:00	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241322005		SW846 3050B	09-DEC-2009 13:00	0.5 g	50 mL	100	SOIL
SAMPLE	241322006		SW846 3050B	09-DEC-2009 13:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241322007		SW846 3050B	09-DEC-2009 13:00	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241322008		SW846 3050B	09-DEC-2009 13:00	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241322009		SW846 3050B	09-DEC-2009 13:00	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241322010		SW846 3050B	09-DEC-2009 13:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241322011		SW846 3050B	09-DEC-2009 13:00	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241322012		SW846 3050B	09-DEC-2009 13:00	0.523 g	50 mL	95.60229	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238341	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments Brown,gritty soil w/rocky material.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 924853

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977145	UI031809A	.202	g
MS	1201977147	WHG091202-14	.3	mL
MSD	1201977149	WHG091202-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977144		SW846 7471A Prep	02-DEC-2009 12:45	0.561 g	30 mL	53.47594	SOIL
LCS	1201977145		SW846 7471A Prep	02-DEC-2009 12:45	0.202 g	30 mL	148.51485	SOIL
SAMPLE	241301001		SW846 7471A Prep	02-DEC-2009 12:45	0.578 g	30 mL	51.90311	SOIL
SAMPLE	241322001		SW846 7471A Prep	02-DEC-2009 12:45	0.548 g	30 mL	54.74453	SOIL
SAMPLE	241322002		SW846 7471A Prep	02-DEC-2009 12:45	0.534 g	30 mL	56.17978	SOIL
SAMPLE	241322003		SW846 7471A Prep	02-DEC-2009 12:45	0.515 g	30 mL	58.25243	SOIL
SAMPLE	241322004		SW846 7471A Prep	02-DEC-2009 12:45	0.518 g	30 mL	57.91506	SOIL
SAMPLE	241322005		SW846 7471A Prep	02-DEC-2009 12:45	0.505 g	30 mL	59.40594	SOIL
SAMPLE	241322006		SW846 7471A Prep	02-DEC-2009 12:45	0.533 g	30 mL	56.28518	SOIL
SAMPLE	241322007		SW846 7471A Prep	02-DEC-2009 12:45	0.6 g	30 mL	50	SOIL
SAMPLE	241322008		SW846 7471A Prep	02-DEC-2009 12:45	0.515 g	30 mL	58.25243	SOIL
SAMPLE	241322009		SW846 7471A Prep	02-DEC-2009 12:45	0.522 g	30 mL	57.47126	SOIL
SAMPLE	241322010		SW846 7471A Prep	02-DEC-2009 12:45	0.54 g	30 mL	55.55556	SOIL
SAMPLE	241322011		SW846 7471A Prep	02-DEC-2009 12:45	0.553 g	30 mL	54.24955	SOIL
SAMPLE	241322012		SW846 7471A Prep	02-DEC-2009 12:45	0.505 g	30 mL	59.40594	SOIL
SAMPLE	241336001		SW846 7471A Prep	02-DEC-2009 12:45	0.509 g	30 mL	58.9391	SOIL
DUP	1201977146	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.529 g	30 mL	56.71078	SOIL
MS	1201977147	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.526 g	30 mL	57.03422	SOIL
MSD	1201977149	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.51 g	30 mL	58.82353	SOIL
SDILT	1201977148	241336001	SW846 7471A Prep	02-DEC-2009 12:45	0.509 g	30 mL	58.9391	SOIL
SAMPLE	241336002		SW846 7471A Prep	02-DEC-2009 12:45	0.537 g	30 mL	55.86592	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091202-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091202-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091202-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091202-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091202-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091202-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments. Sample 241336001 is a brown soil.
Digestion Start Date: 02-DEC-09 12:45
Digestion End Date: 02-DEC-09 13:15

GEL Laboratories LLC
Form GEL-NCR

NCR Report No.: 763016
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
28-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925185	See Below		

Potentially affected work order(s)(SDG): 241322(10-544)

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:

1. Failed RPD for DUP:

   QC 1201977910DUP

NRG Disposition:

The sample and sample duplicate % RPD failed outside the control limits for Ni and U due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Elizabeth Janssen 01-DEC-09

Data Validator/Group Leader:

Rose Jenkins 01-DEC-09

GEL Laboratories LLC
Form GEL-NCR

NCR Report No.: 767341
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
08-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925182	See Below		

Potentially affected work order(s)(SDG): 241322(10-544)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201977906MS 2. Failed RPD for DUP: QC 1201977904DUP 3. Failed Recovery for MSD/PSD: QC 1201977907MSD	1. The matrix spike recovery failed outside of the control limits for barium,calcium,magnesium,potassium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for aluminum,barium,calcium,chromium,cobalt,iron,magnesium, potassium,sodium,vanadium and zinc due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for calcium,magnesium,potassium,titanium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 09-DEC-09

Data Validator/Group Leader:
Eric Lawson 11-DEC-09

Standard Logbook

Serial ID:	UHG1167639-01	**Opened:**	13-AUG-09	**Amount :**	125 mL
Name:	MHGSTOCK1	**Received:**	13-AUG-09	**Catalog Number :**	PLHG4-2Y
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	15-37HG
Employee:	Bryan Davis			**Solvent :**	10% HNO3
Supplier:	Spex				
Description:	Mercury Source Standard #1 1,000 mg/L				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID:	UHG1167641-02	**Opened:**	13-AUG-09	**Amount :**	100 mL
Name:	MHGSTOCK2	**Received:**	13-AUG-09	**Catalog Number :**	AHG1KN-100
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	4905530
Employee:	Bryan Davis			**Solvent :**	3% HNO3
Supplier:	Ricca Chemical Company				
Description:	Mercury Source Standard #2 1,000 mg/L				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID:	UI031809A	**Opened:**	18-MAR-09	**Catalog Number :**	540
Name:	METALSOILSRM	**Received:**	18-MAR-09	**Lot Number :**	D061-540
Type:	Source Material	**Expires:**	10-OCT-10		
Employee:	Jamie Johnson				
Supplier:	ERA				
Description:	Metals LCS Soil SRM				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si

Standard Logbook

Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI

Standard Logbook

Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090929-01 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 29-SEP-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-31CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090929-02 **Opened:** 29-SEP-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 29-SEP-09 **Lot Number :** 19-174JB
Type: Source Material **Expires:** 29-SEP-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090929-03 **Opened:** 29-SEP-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 29-SEP-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-30CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091202-01 **Opened:** 02-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 02-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 03-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: IHG091202-02 **Opened:** 02-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 03-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091202-07 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091202-08 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091202-09 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Standard Logbook

Serial ID: WHG091202-10 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091202-11 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091202-12 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091202-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091202-14 **Opened:** 02-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 02-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 08-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Carnello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091210-43 **Opened:** 10-DEC-09 **Balance Id :** 216

Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667

Type: Working **Expires:** 11-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193

Employee: Helen Camello

Supplier: GEL

Description: TRACE ICP 0.5/CCV CALIBRATION STD.

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WMS091126-04 **Opened:** 26-NOV-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 26-NOV-09 **Balance Id :** 4025216
Type: Working **Expires:** 27-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1232660
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091126-04A **Opened:** 26-NOV-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 26-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 27-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091126-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091126-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091126-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091126-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091126-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091126-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091126-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091126-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091126-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091126-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091126-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS091126-05 **Opened:** 26-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 26-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 27-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091126-06 **Opened:** 26-NOV-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 26-NOV-09 **Pipet Id :** 3820544
Type: Working **Expires:** 27-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS091126-07 **Opened:** 26-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 26-NOV-09 **Lot Number :** 1010773
Type: Working **Expires:** 27-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1232660
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091126-08 **Opened:** 26-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 26-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 27-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091126-70 **Opened:** 26-NOV-09 **Balance Id :** 40245216

Name: ICPMS LINEAR RANGE ST **Received:** 26-NOV-09 **Pipet Id :** 1758088

Type: Working **Expires:** 27-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660

Employee: Paul Boyd

Supplier: 02SI

Description: ICPMS LINEAR RANGE STANDARD

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091127-04 **Opened:** 27-NOV-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 27-NOV-09 **Balance Id :** 4025216
Type: Working **Expires:** 28-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1232660
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091127-04A **Opened:** 27-NOV-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 27-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 28-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091127-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091127-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091127-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091127-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091127-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091127-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091127-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091127-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091127-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091127-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091127-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091127-05 **Opened:** 27-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 27-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 28-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091127-06 **Opened:** 27-NOV-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 27-NOV-09 **Pipet Id :** 3820544
Type: Working **Expires:** 28-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091127-07 **Opened:** 27-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 27-NOV-09 **Lot Number :** 1010773
Type: Working **Expires:** 28-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1232660
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091127-08 **Opened:** 27-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 27-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 28-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091127-70 **Opened:** 27-NOV-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 27-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 28-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215798 **Opened:** 06-NOV-09 **Lot Number :** H14024 L
Name: I-HNO3 **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1232660 **Opened:** 23-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 23-NOV-09
Type: Reagent/Solvent **Expires:** 30-NOV-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A
1215798	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Standard Logbook

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238341 **Opened:** 04-DEC-09 **Lot Number :** H44032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Carnello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-544-1

Sample Analysis

Sample ID	Client ID
241325001	RE03-10-6088
241325002	RE03-10-6090
1201978326	Method Blank (MB) **ICP**
1201978327	Laboratory Control Sample (LCS)
1201978330	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978328	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978329	241325001(RE03-10-6088S) Matrix Spike (MS)
1201978333	Method Blank (MB) **ICP-MS**
1201978334	Laboratory Control Sample (LCS)
1201978337	241325001(RE03-10-6088L) Serial Dilution (SD)
1201978335	241325001(RE03-10-6088D) Sample Duplicate (DUP)
1201978336	241325001(RE03-10-6088S) Matrix Spike (MS)
1201977150	Method Blank (MB) **CVAA**
1201977151	Laboratory Control Sample (LCS)
1201977154	241420001(RE03-10-3933L) Serial Dilution (SD)
1201977152	241420001(RE03-10-3933D) Sample Duplicate (DUP)
1201977153	241420001(RE03-10-3933S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	925377, 925379 and 924857
Prep Batch :	925376, 925378 and 924856
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The laboratory control sample (LCS) results met the acceptance requirements for all analytes, with the exception of mercury. However, the sample in this SDG did not contain mercury above the RDL, therefore the implied high bias did not adversely affect the results.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241325001 and 241420001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: 762537. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: KristaPaison **Date:** 12/14/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241325001 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6088 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:16	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:14	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 16:16	120409A-1	925377
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 16:16	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 16:16	120409A-1	925377
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:38	112509W1-7	924857
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 16:16	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-28-0	Thallium	0.490	ug/L	J	0.3	1	1	1	MS	BAJ	12/05/09 07:31	091204-5	925379
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:20	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:16	120409A-1	925377
7440-66-6	Zinc	9.12	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 16:16	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-544-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241325002 **BASIS:** As Received **DATE COLLECTED** 16-NOV-09

CLIENT ID: RE03-10-6090 **LEVEL:** Low **DATE RECEIVED** 18-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	78.2	ug/L	J	68	200	200	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/06/09 07:26	091205-4	925379
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-39-3	Barium	2.83	ug/L	J	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/05/09 20:21	091205-6	925379
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7440-70-2	Calcium	56.5	ug/L	J	50	200	200	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-47-3	Chromium	12.7	ug/L		1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 16:44	120409A-1	925377
7439-89-6	Iron	113	ug/L		30	100	100	1	P	HSC	12/04/09 16:44	120409A-1	925377
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 16:44	120409A-1	925377
7439-96-5	Manganese	6.67	ug/L		1	5	5	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	ETL	11/25/09 10:40	112509W1-7	924857
7440-02-0	Nickel	6.43	ug/L		1.5	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 16:44	120409A-1	925377
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-21-3	Silicon	170	ug/L		25	100	100	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-23-5	Sodium	215	ug/L	J	100	300	300	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/05/09 07:55	091204-5	925379
7440-32-6	Titanium	1.84	ug/L	J	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/06/09 02:30	091205-2	925379
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 16:44	120409A-1	925377
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 16:44	120409A-1	925377

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
924857	924856	SW846 7470A Prep	20	mL	20	mL	11/24/09	TXB3
925377	925376	SW846 3005A	50	mL	50	mL	11/22/09	BCD1
925379	925378	SW846 3005A	50	mL	50	mL	11/22/09	BCD1

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.1	ug/L	5	ug/L	101.9	90.0 – 110.0	AV	25-NOV-09 07:57	112509W1-7
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Nickel	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Selenium	2660	ug/L	2500	ug/L	106.6	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Silicon	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Lead	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Lithium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Manganese	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Thallium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	05-DEC-09 02:48	091204-5
	Beryllium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	05-DEC-09 19:59	091205-6
	Uranium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	06-DEC-09 01:58	091205-2
	Antimony	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	06-DEC-09 06:55	091205-4
CCV01										
	Mercury	4.94	ug/L	5	ug/L	98.9	80.0 – 120.0	AV	25-NOV-09 08:02	112509W1-7

GEL Laboratories LLC

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Boron	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Selenium	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Titanium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05-DEC-09 03:18	091204-5
	Lead	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	05-DEC-09 03:18	091204-5
	Lithium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	05-DEC-09 03:18	091204-5
	Manganese	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	05-DEC-09 03:18	091204-5
	Thallium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	05-DEC-09 03:18	091204-5
	Beryllium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	05-DEC-09 20:08	091205-6
	Uranium	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	06-DEC-09 02:10	091205-2
	Antimony	45.1	ug/L	50	ug/L	90.3	90.0 – 110.0	MS	06-DEC-09 07:07	091205-4
CCV02										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	25-NOV-09 08:25	112509W1-7
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–544–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Boron	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Nickel	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Selenium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Cadmium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Lead	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Lithium	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Manganese	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Thallium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	05–DEC–09 03:37	091204–5
	Beryllium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	05–DEC–09 20:23	091205–6
	Uranium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	06–DEC–09 02:33	091205–2
	Antimony	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	06–DEC–09 07:28	091205–4
CCV03										
	Mercury	5.15	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	25–NOV–09 08:48	112509W1–7
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Arsenic	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Boron	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Chromium	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Copper	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Nickel	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Selenium	526	ug/L	500	ug/L	105.2	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 12:13	120409A-1
	Cadmium	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	05-DEC-09 04:38	091204-5
	Lead	51.4	ug/L	50	ug/L	102.9	90.0 - 110.0	MS	05-DEC-09 04:38	091204-5
	Lithium	52.9	ug/L	50	ug/L	105.7	90.0 - 110.0	MS	05-DEC-09 04:38	091204-5
	Manganese	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	05-DEC-09 04:38	091204-5
	Thallium	50	ug/L	50	ug/L	100	90.0 - 110.0	MS	05-DEC-09 04:38	091204-5
CCV04										
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 - 120.0	AV	25-NOV-09 09:12	112509W1-7
	Aluminum	5200	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	04-DEC-09 12:48	120409A-1
	Arsenic	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	04-DEC-09 12:48	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 12:48	120409A-1
	Boron	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 12:48	120409A-1
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 12:48	120409A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	04-DEC-09 12:48	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Selenium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lead	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Lithium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Manganese	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
	Thallium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	05-DEC-09 05:34	091204-5
CCV05										
	Mercury	5.14	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	25-NOV-09 09:35	112509W1-7
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Selenium	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 13:57	120409A-1
	Cadmium	49.8	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Lead	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Lithium	54.8	ug/L	50	ug/L	109.5	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Manganese	52.5	ug/L	50	ug/L	105	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	05-DEC-09 06:23	091204-5
CCV06										
	Mercury	5.33	ug/L	5	ug/L	106.5	80.0 - 120.0	AV	25-NOV-09 09:58	112509W1-7
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Boron	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Copper	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Nickel	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Selenium	524	ug/L	500	ug/L	104.9	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Silicon	2500	ug/L	2500	ug/L	100.2	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Titanium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Zinc	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 14:52	120409A-1
	Cadmium	50.6	ug/L	50	ug/L	101.1	90.0 - 110.0	MS	05-DEC-09 07:06	091204-5
	Lead	52.6	ug/L	50	ug/L	105.2	90.0 - 110.0	MS	05-DEC-09 07:06	091204-5
	Lithium	55.2	ug/L	50	ug/L	110.3	90.0 - 110.0	MS	05-DEC-09 07:06	091204-5
	Manganese	53.8	ug/L	50	ug/L	107.6	90.0 - 110.0	MS	05-DEC-09 07:06	091204-5
	Thallium	51.8	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	05-DEC-09 07:06	091204-5
CCV07										
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 - 120.0	AV	25-NOV-09 10:21	112509W1-7
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Barium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Boron	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Copper	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Nickel	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Selenium	527	ug/L	500	ug/L	105.5	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Silicon	2520	ug/L	2500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Silver	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Titanium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	04-DEC-09 15:48	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 15:48	120409A-1
	Cadmium	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Lead	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Lithium	53.3	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Manganese	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
	Thallium	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	05-DEC-09 08:02	091204-5
CCV08										
	Mercury	5.19	ug/L	5	ug/L	103.8	80.0 – 120.0	AV	25-NOV-09 10:44	112509W1-7
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Arsenic	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Chromium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Nickel	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Selenium	528	ug/L	500	ug/L	105.7	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Silicon	2520	ug/L	2500	ug/L	101	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 16:58	120409A-1
CCV09										
	Mercury	5.19	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	25-NOV-09 11:08	112509W1-7

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.206	ug/L	.2	ug/L	103	70.0 – 130.0	AV	25-NOV-09 08:00	112509W1-7
	Lead	2.3	ug/L	2	ug/L	115.2	70.0 – 130.0	MS	05-DEC-09 03:00	091204-5
	Manganese	5.72	ug/L	5	ug/L	114.5	70.0 – 130.0	MS	05-DEC-09 03:00	091204-5
	Thallium	1.2	ug/L	1	ug/L	119.6	70.0 – 130.0	MS	05-DEC-09 03:00	091204-5
	Cadmium	1.11	ug/L	1	ug/L	111.3	70.0 – 130.0	MS	05-DEC-09 03:00	091204-5
	Lithium	11.4	ug/L	10	ug/L	114.1	70.0 – 130.0	MS	05-DEC-09 03:00	091204-5
	Beryllium	.573	ug/L	.5	ug/L	114.6	70.0 – 130.0	MS	05-DEC-09 20:03	091205-6
	Uranium	.218	ug/L	.2	ug/L	109	70.0 – 130.0	MS	06-DEC-09 02:03	091205-2
	Antimony	3	ug/L	3	ug/L	100.1	70.0 – 130.0	MS	06-DEC-09 07:00	091205-4
PQL01										
	Aluminum	206	ug/L	200	ug/L	103	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Nickel	5.43	ug/L	5	ug/L	108.5	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Potassium	162	ug/L	150	ug/L	107.9	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Arsenic	29.2	ug/L	30	ug/L	97.5	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Barium	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Chromium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Calcium	203	ug/L	200	ug/L	101.7	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Selenium	29.4	ug/L	30	ug/L	98	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Silicon	103	ug/L	100	ug/L	102.8	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	04-DEC-09 09:48	120409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-544-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 07:58	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 09:41	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 09:41	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 09:41	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 09:41	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 09:41	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 09:41	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 09:41	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 02:54	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 02:54	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 02:54	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 02:54	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 02:54	091204-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	05-DEC-09 20:01	091205-6
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	06-DEC-09 02:00	091205-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	06-DEC-09 06:57	091205-4
CCB01										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 08:04	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 10:42	120409A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–544–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 10:42	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Potassium	101.63	+/–150	J	50.0	150	LIQ	P	04–DEC–09 10:42	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 03:24	091204–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	05–DEC–09 20:09	091205–6
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	06–DEC–09 02:13	091205–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	06–DEC–09 07:09	091205–4
CCB02										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 08:27	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 11:03	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-544-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 11:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 11:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 11:03	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 11:03	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 11:03	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 11:03	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 11:03	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 03:43	091204-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	05-DEC-09 20:25	091205-6
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	06-DEC-09 02:35	091205-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	06-DEC-09 07:31	091205-4
CCB03										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 08:50	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 12:20	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 12:20	120409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-544-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 12:20	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 12:20	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 12:20	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 12:20	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 12:20	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 12:20	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 04:44	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 04:44	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 04:44	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 04:44	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 04:44	091204-5
CCB04										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 09:13	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 12:55	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 12:55	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 12:55	120409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-544-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 12:55	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 05:40	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 05:40	091204-5
CCB05										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 09:37	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 14:03	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 14:03	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–544–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 14:03	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	05–DEC–09 06:29	091204–5
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	05–DEC–09 06:29	091204–5
CCB06	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 10:00	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 14:59	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 14:59	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 14:59	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 14:59	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 14:59	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 14:59	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 14:59	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	05–DEC–09 07:12	091204–5

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-544-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 07:12	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 07:12	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 07:12	091204-5
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-DEC-09 07:12	091204-5
CCB07										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-NOV-09 10:23	112509W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 15:55	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 15:55	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 15:55	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 15:55	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 15:55	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 15:55	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 15:55	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 15:55	120409A-1
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	05-DEC-09 08:08	091204-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	05-DEC-09 08:08	091204-5
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	05-DEC-09 08:08	091204-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-DEC-09 08:08	091204-5
	Thallium	0.523	+/-1	J	0.3	1.0	LIQ	MS	05-DEC-09 08:08	091204-5

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–544–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB08										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 10:46	112509W1–7
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 17:05	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 17:05	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 17:05	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 17:05	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 17:05	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 17:05	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 17:05	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 17:05	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 17:05	120409A–1
CCB09										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–NOV–09 11:09	112509W1–7

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-544-1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201977150								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1201978326								
	Chromium	1	ug/L	+/-5.0	U	P	1	5
	Cobalt	1	ug/L	+/-5.0	U	P	1	5
	Copper	3	ug/L	+/-10.0	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5.0	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30.0	U	P	5	30
	Silicon	25	ug/L	+/-100	U	P	25	100
	Calcium	50	ug/L	+/-200	U	P	50	200
	Boron	15	ug/L	+/-50.0	U	P	15	50
	Barium	1	ug/L	+/-5.0	U	P	1	5
	Arsenic	5	ug/L	+/-30.0	U	P	5	30
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Silver	1	ug/L	+/-5.0	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Titanium	1	ug/L	+/-5.0	U	P	1	5
	Vanadium	1	ug/L	+/-5.0	U	P	1	5
	Zinc	3.3	ug/L	+/-10.0	U	P	3.3	10
1201978333								
	Antimony	1	ug/L	+/-3.0	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1.0	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Lithium	2	ug/L	+/-10.0	U	MS	2	10
	Manganese	1	ug/L	+/-5.0	U	MS	1	5
	Thallium	0.3	ug/L	+/-1.0	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2

METALS
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Interference Check Sample

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Arsenic	-0.564	ug/L					04-DEC-09 09:55	120409A-1
	Barium	1.92	ug/L					04-DEC-09 09:55	120409A-1
	Boron	-5.89	ug/L					04-DEC-09 09:55	120409A-1
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Chromium	1.28	ug/L					04-DEC-09 09:55	120409A-1
	Cobalt	-1.39	ug/L					04-DEC-09 09:55	120409A-1
	Copper	1.06	ug/L					04-DEC-09 09:55	120409A-1
	Iron	184000	ug/L	200000	ug/L	92	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	04-DEC-09 09:55	120409A-1
	Nickel	3.73	ug/L					04-DEC-09 09:55	120409A-1
	Potassium	-19.7	ug/L					04-DEC-09 09:55	120409A-1
	Selenium	-0.0013	ug/L					04-DEC-09 09:55	120409A-1
	Silicon	0.455	ug/L					04-DEC-09 09:55	120409A-1
	Silver	-1.58	ug/L					04-DEC-09 09:55	120409A-1
	Sodium	24.7	ug/L					04-DEC-09 09:55	120409A-1
	Titanium	-0.536	ug/L					04-DEC-09 09:55	120409A-1
	Vanadium	-1.65	ug/L					04-DEC-09 09:55	120409A-1
	Zinc	-7.1	ug/L					04-DEC-09 09:55	120409A-1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Arsenic	512	ug/L	500	ug/L	102	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Barium	505	ug/L	500	ug/L	101	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Boron	519	ug/L	500	ug/L	104	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Chromium	482	ug/L	500	ug/L	96.3	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Copper	574	ug/L	500	ug/L	115	80.0 – 120.0	04-DEC-09 10:01	120409A-1
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 – 120.0	04-DEC-09 10:01	120409A-1

METALS

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Interference Check Sample

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Nickel	462	ug/L	500	ug/L	92.4	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Potassium	5530	ug/L	5000	ug/L	111	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Selenium	2610	ug/L	2500	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Silicon	5370	ug/L	5000	ug/L	107	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Silver	274	ug/L	250	ug/L	110	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Sodium	5210	ug/L	5000	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Titanium	514	ug/L	500	ug/L	103	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Vanadium	513	ug/L	500	ug/L	103	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Zinc	488	ug/L	500	ug/L	97.7	80.0 - 120.0	04-DEC-09 10:01	120409A-1

METALS

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Interference Check Sample

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	-0.012	ug/L					06-DEC-09 02:05	091205-2
ICSAB01									
	Uranium	21.8	ug/L	20	ug/L	109	80.0 - 120.0	06-DEC-09 02:08	091205-2

METALS

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Interference Check Sample

SDG No: 10–544–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.157	ug/L					06–DEC–09 07:02	091205–4
ICSAB01									
	Antimony	22.4	ug/L	20.1	ug/L	111	80.0 – 120.0	06–DEC–09 07:04	091205–4

METALS
-4-
Interference Check Sample

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Cadmium	0.546	ug/L					05-DEC-09 03:06	091204-5
	Lead	0.294	ug/L					05-DEC-09 03:06	091204-5
	Lithium	0.133	ug/L					05-DEC-09 03:06	091204-5
	Manganese	6.12	ug/L					05-DEC-09 03:06	091204-5
	Thallium	0.046	ug/L					05-DEC-09 03:06	091204-5
ICSAB01									
	Cadmium	20.4	ug/L	20.4	ug/L	100	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Lead	21.5	ug/L	20.5	ug/L	105	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Lithium	20.3	ug/L	20	ug/L	102	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Manganese	27.6	ug/L	25.8	ug/L	107	80.0 - 120.0	05-DEC-09 03:12	091204-5
	Thallium	21.4	ug/L	20	ug/L	107	80.0 - 120.0	05-DEC-09 03:12	091204-5

METALS
-4-
Interference Check Sample

SDG No: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.079	ug/L					05-DEC-09 20:04	091205-6
ICSAB01									
	Beryllium	21.3	ug/L	20	ug/L	106	80.0 - 120.0	05-DEC-09 20:06	091205-6

METALS
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Matrix Spike Summary

SDG NO. 10-544-1 **Client ID** RE03-10-3933S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241420001 **Spike ID:** 1201977153

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.13		0.066	U	2	106		AV

CEL Laboratories LLC

METALS
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Matrix Spike Summary

SDG NO. 10-544-1 **Client ID** RE03-10-6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978329

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5270		68	U	5000	105		P
Arsenic	ug/L	75-125	515		5	U	500	103		P
Barium	ug/L	75-125	534		1	U	500	107		P
Boron	ug/L	75-125	513		15	U	500	102		P
Calcium	ug/L	75-125	5180		50	U	5000	103		P
Chromium	ug/L	75-125	521		1	U	500	104		P
Cobalt	ug/L	75-125	508		1	U	500	102		P
Copper	ug/L	75-125	532		3	U	500	106		P
Iron	ug/L	75-125	5240		30	U	5000	105		P
Magnesium	ug/L	75-125	5350		85	U	5000	107		P
Nickel	ug/L	75-125	517		1.5	U	500	103		P
Potassium	ug/L	75-125	5100		50	U	5000	102		P
Selenium	ug/L	75-125	519		5	U	500	104		P
Silicon	ug/L	75-125	5170		25	U	5000	103		P
Silver	ug/L	75-125	519		1	U	500	104		P
Sodium	ug/L	75-125	5160		100	U	5000	102		P
Titanium	ug/L	75-125	527		1	U	500	105		P
Vanadium	ug/L	75-125	533		1	U	500	107		P
Zinc	ug/L	75-125	511		9.12	J	500	100		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-544-1 **Client ID** RE03-10-6088S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241325001 **Spike ID:** 1201978336

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	233		1	U	200	116		MS
Beryllium	ug/L	75-125	47.7		0.1	U	50	95.5		MS
Cadmium	ug/L	75-125	10.9		0.11	U	10	109		MS
Lead	ug/L	75-125	43.6		0.5	U	40	109		MS
Lithium	ug/L	75-125	53.8		2	U	50	108		MS
Manganese	ug/L	75-125	51.7		1	U	50	103		MS
Thallium	ug/L	75-125	96.5		0.49	J	100	96		MS
Uranium	ug/L	75-125	56.7		0.05	U	50	113		MS

GEL Laboratories LLC

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03-10-3933D

Sample ID: 241420001 **Duplicate ID:** 1201977152 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–544–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–6088D

Sample ID: 241325001 **Duplicate ID:** 1201978328 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Boron	ug/L		15	U	15	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L		50	U	50	U			P
Selenium	ug/L		5	U	5	U			P
Silicon	ug/L		25	U	25	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L		100	U	100	U			P
Titanium	ug/L		1	U	1	U			P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		9.12	J	3.3	U	200		P

Metals
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Duplicate Sample Summary

SDG No.: 10-544-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03-10-6088D

Sample ID: 241325001 **Duplicate ID:** 1201978335 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Lithium	ug/L		2	U	2	U			MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.49	J	0.3	U	200		MS
Uranium	ug/L		0.05	U	0.05	U			MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-544-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201977151								
	Mercury	ug/L	2	2.48		124	80-120	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-544-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978327								
	Aluminum	ug/L	5000	5310		106	80-120	P
	Arsenic	ug/L	500	519		104	80-120	P
	Barium	ug/L	500	535		107	80-120	P
	Boron	ug/L	500	514		103	80-120	P
	Calcium	ug/L	5000	5280		106	80-120	P
	Chromium	ug/L	500	519		104	80-120	P
	Cobalt	ug/L	500	510		102	80-120	P
	Copper	ug/L	500	529		106	80-120	P
	Iron	ug/L	5000	5280		106	80-120	P
	Magnesium	ug/L	5000	5300		106	80-120	P
	Nickel	ug/L	500	516		103	80-120	P
	Potassium	ug/L	5000	5140		103	80-120	P
	Selenium	ug/L	500	519		104	80-120	P
	Silicon	ug/L	5000	5150		103	80-120	P
	Silver	ug/L	500	520		104	80-120	P
	Sodium	ug/L	5000	5200		104	80-120	P
	Titanium	ug/L	500	525		105	80-120	P
	Vanadium	ug/L	500	530		106	80-120	P
	Zinc	ug/L	500	510		102	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-544-1

Contract: LANL01004

Aqueous LCS Source:O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978334								
	Antimony	ug/L	50	57.4		115	80-120	MS
	Beryllium	ug/L	50	50.6		101	80-120	MS
	Cadmium	ug/L	50	52.9		106	80-120	MS
	Lead	ug/L	50	53.4		107	80-120	MS
	Lithium	ug/L	50	52.5		105	80-120	MS
	Manganese	ug/L	50	51.1		102	80-120	MS
	Thallium	ug/L	50	49.7		99.5	80-120	MS
	Uranium	ug/L	50	58.9		118	80-120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-544-1 **Client ID** RE03-10-3933L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241420001 **Serial Dilution ID:** 1201977154

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

CEL Laboratories LLC

METALS
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Serial Dilution Sample Summary

SDG NO. 10-544-1 **Client ID** RE03-10-6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978330

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Boron	15	U	75	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silicon	25	U	125	U				P
Silver	1	U	5	U				P
Sodium	100	U	500	U				P
Titanium	1	U	5	U				P
Vanadium	1	U	5	U				P
Zinc	9.12	J	16.5	U	100			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-544-1 **Client ID** RE03-10-6088L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241325001 **Serial Dilution ID:** 1201978337

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Lithium	2	U	10	U				MS
Manganese	1	U	5	U				MS
Thallium	.49	J	6.35		1200			MS
Uranium	.05	U	.25	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-544-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925376							
1201978326	MB for batch 925376	MB	W	22-NOV-09	50mL	50mL	
1201978327	LCS for batch 925376	LCS	W	22-NOV-09	50mL	50mL	
1201978329	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978328	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241325001	RE03-10-6088	SAMPLE	W	22-NOV-09	50mL	50mL	
241325002	RE03-10-6090	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-544-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925378						
1201978333	MB for batch 925378	MB	W	22-NOV-09	50mL	50mL	
1201978334	LCS for batch 925378	LCS	W	22-NOV-09	50mL	50mL	
1201978336	RE03-10-6088S	MS	W	22-NOV-09	50mL	50mL	
1201978335	RE03-10-6088D	DUP	W	22-NOV-09	50mL	50mL	
241325001	RE03-10-6088	SAMPLE	W	22-NOV-09	50mL	50mL	
241325002	RE03-10-6090	SAMPLE	W	22-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-544-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	924856						
1201977150	MB for batch 924856	MB	W	24-NOV-09	20mL	20mL	
1201977151	LCS for batch 924856	LCS	W	24-NOV-09	20mL	20mL	
1201977153	RE03-10-3933S	MS	W	24-NOV-09	20mL	20mL	
1201977152	RE03-10-3933D	DUP	W	24-NOV-09	20mL	20mL	
241325001	RE03-10-6088	SAMPLE	W	24-NOV-09	20mL	20mL	
241325002	RE03-10-6090	SAMPLE	W	24-NOV-09	20mL	20mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05-DEC-09 **End Date:** 05-DEC-09

Client Sdg: 10-544-1
Method MS
Data File: 091204-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:29							X						X	X		X								X				
S10	1	02:36							X						X	X		X								X				
S100	1	02:42							X						X	X		X								X				
ICV01	1	02:48							X						X	X		X								X				
ICB01	1	02:54							X						X	X		X								X				
CRDL01	1	03:00							X						X	X		X								X				
ICSA01	1	03:06							X						X	X		X								X				
ICSAB01	1	03:12							X						X	X		X								X				
CCV01	1	03:18							X						X	X		X								X				
CCB01	1	03:24							X						X	X		X								X				
LR01	1	03:31							X						X	X		X								X				
CCV02	1	03:37							X						X	X		X								X				
CCB02	1	03:43							X						X	X		X								X				
ZZZZZZ	2	03:49																												
ZZZZZZ	20	03:55																												
ZZZZZZ	40	04:01																												
ZZZZZZ	2	04:07																												
ZZZZZZ	2	04:14																												
ZZZZZZ	2	04:20																												
ZZZZZZ	2	04:26																												
ZZZZZZ	10	04:32																												
CCV03	1	04:38							X						X	X		X								X				
CCB03	1	04:44							X						X	X		X								X				
ZZZZZZ	2	04:50																												
ZZZZZZ	2	04:57																												
ZZZZZZ	2	05:03																												
ZZZZZZ	2	05:09																												
ZZZZZZ	2	05:15																												
ZZZZZZ	2	05:21																												
ZZZZZZ	2	05:27																												
CCV04	1	05:34							X						X	X		X								X				
CCB04	1	05:40							X						X	X		X								X				
ZZZZZZ	2	05:46																												
ZZZZZZ	2	05:52																												
ZZZZZZ	2	05:58																												
ZZZZZZ	2	06:04																												
ZZZZZZ	2	06:11																												
ZZZZZZ	2	06:17																												
CCV05	1	06:23							X						X	X		X								X				
CCB05	1	06:29							X						X	X		X								X				

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	2	06:35																										
ZZZZZZ	2	06:41																										
ZZZZZZ	2	06:48																										
ZZZZZZ	2	06:54																										
ZZZZZZ	2	07:00																										
CCV06	1	07:06						X					X	X		X							X				
CCB06	1	07:12						X					X	X		X							X				
1201978333	1	07:18						X					X	X		X							X				
1201978334	1	07:24						X					X	X		X							X				
241325001	1	07:31						X					X	X		X							X				
1201978335	1	07:37						X					X	X		X							X				
1201978336	1	07:43						X					X	X		X							X				
1201978337	5	07:49						X					X	X		X							X				
241325002	1	07:55						X					X	X		X							X				
CCV07	1	08:02						X					X	X		X							X				
CCB07	1	08:08						X					X	X		X							X				

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05-DEC-09 **End Date:** 06-DEC-09

Client Sdg: 10-544-1
Method MS
Data File: 091205-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:54					X																							
S10	1	19:56					X																							
S100	1	19:58					X																							
ICV01	1	19:59					X																							
ICB01	1	20:01					X																							
CRDL01	1	20:03					X																							
ICSA01	1	20:04					X																							
ICSAB01	1	20:06					X																							
CCV01	1	20:08					X																							
CCB01	1	20:09					X																							
1201978333	1	20:11					X																							
1201978334	1	20:13					X																							
241325001	1	20:14					X																							
1201978335	1	20:16					X																							
1201978336	1	20:18					X																							
1201978337	5	20:20					X																							
241325002	1	20:21					X																							
CCV02	1	20:23					X																							
CCB02	1	20:25					X																							

Metals

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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 04–DEC–09

Client Sdg: 10–544–1
Method P
Data File: 120409A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S0.1	1	09:08			X	X		X			X	X	X							X	X	X	X	X			X		X	X
S0.5	1	09:14	X		X	X		X		X	X	X	X				X			X	X	X	X	X			X		X	X
SCAL	1	09:21	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S10	1	09:28	X							X				X			X								X					
ICV01	1	09:34	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICB01	1	09:41	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
PQL01	1	09:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSA01	1	09:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSAB01	1	10:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR01	1	10:06	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR02	1	10:12	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB01	1	10:42	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR03	1	10:49	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV02	1	10:56	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB02	1	11:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB03	1	12:20	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV04	1	12:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB04	1	12:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
CCB05	1	14:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
ZZZZZZ	1	14:45																												
CCV06	1	14:52	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB06	1	14:59	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	15:06																												
ZZZZZZ	1	15:13																												
ZZZZZZ	5	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB07	1	15:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978326	1	16:02	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978327	1	16:09	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241325001	1	16:16	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978328	1	16:23	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978329	1	16:30	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978330	5	16:37	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241325002	1	16:44	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:51																												
CCV08	1	16:58	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB08	1	17:05	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 25–NOV–09 **End Date:** 25–NOV–09

Client Sdg: 10–544–1
Method AV
Data File: 112509W1–7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Ti	Ti	U	V	Zn
S0.0	1	07:45																	X											
S0.2	1	07:47																	X											
S0.5	1	07:49																	X											
S2.0	1	07:51																	X											
S5.0	1	07:53																	X											
S10.0	1	07:55																	X											
ICV01	1	07:57																	X											
ICB01	1	07:58																	X											
CRDL01	1	08:00																	X											
CCV01	1	08:02																	X											
CCB01	1	08:04																	X											
ZZZZZZ	1	08:06																												
ZZZZZZ	1	08:08																												
ZZZZZZ	1	08:10																												
ZZZZZZ	1	08:12																												
ZZZZZZ	1	08:14																												
ZZZZZZ	1	08:16																												
ZZZZZZ	1	08:18																												
ZZZZZZ	1	08:20																												
ZZZZZZ	1	08:22																												
ZZZZZZ	5	08:23																												
CCV02	1	08:25																	X											
CCB02	1	08:27																	X											
ZZZZZZ	1	08:29																												
ZZZZZZ	1	08:31																												
ZZZZZZ	1	08:33																												
ZZZZZZ	1	08:35																												
ZZZZZZ	1	08:37																												
ZZZZZZ	1	08:39																												
ZZZZZZ	1	08:41																												
ZZZZZZ	1	08:43																												
ZZZZZZ	5	08:45																												
ZZZZZZ	1	08:47																												
CCV03	1	08:48																	X											
CCB03	1	08:50																	X											
ZZZZZZ	1	08:52																												
ZZZZZZ	1	08:54																												
ZZZZZZ	1	08:56																												
ZZZZZZ	1	08:58																												
ZZZZZZ	1	09:00																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	09:02																											
ZZZZZZ	1	09:04																											
ZZZZZZ	5	09:06																											
ZZZZZZ	1	09:08																											
ZZZZZZ	1	09:10																											
CCV04	1	09:12															X												
CCB04	1	09:13															X												
ZZZZZZ	1	09:15																											
ZZZZZZ	1	09:17																											
ZZZZZZ	1	09:19																											
ZZZZZZ	1	09:21																											
ZZZZZZ	1	09:23																											
ZZZZZZ	1	09:25																											
ZZZZZZ	1	09:27																											
ZZZZZZ	5	09:29																											
ZZZZZZ	1	09:31																											
ZZZZZZ	1	09:33																											
CCV05	1	09:35															X												
CCB05	1	09:37															X												
ZZZZZZ	1	09:39																											
ZZZZZZ	1	09:40																											
ZZZZZZ	1	09:42																											
ZZZZZZ	1	09:44																											
ZZZZZZ	1	09:46																											
ZZZZZZ	1	09:48																											
ZZZZZZ	1	09:50																											
ZZZZZZ	1	09:52																											
ZZZZZZ	1	09:54																											
ZZZZZZ	1	09:56																											
CCV06	1	09:58															X												
CCB06	1	10:00															X												
ZZZZZZ	1	10:02																											
ZZZZZZ	1	10:04																											
ZZZZZZ	1	10:06																											
ZZZZZZ	1	10:07																											
ZZZZZZ	1	10:09																											
ZZZZZZ	5	10:11																											
ZZZZZZ	1	10:13																											
ZZZZZZ	1	10:15																											
ZZZZZZ	1	10:17																											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	10:19																												
CCV07	1	10:21																	X											
CCB07	1	10:23																	X											
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
1201977150	1	10:35																	X											
1201977151	1	10:37																	X											
241325001	1	10:38																	X											
241325002	1	10:40																	X											
ZZZZZZ	1	10:42																												
CCV08	1	10:44																	X											
CCB08	1	10:46																	X											
ZZZZZZ	1	10:48																												
ZZZZZZ	1	10:50																												
1201977152	1	10:52																	X											
1201977153	1	10:54																	X											
1201977154	5	10:56																	X											
ZZZZZZ	1	10:58																												
ZZZZZZ	1	11:00																												
ZZZZZZ	1	11:02																												
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:06																												
CCV09	1	11:08																	X											
CCB09	1	11:09																	X											

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05-DEC-09
End Date: 06-DEC-09
Client Sdg: 10-544-1
Method MS
Data File: 091205-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	01:51																										X		
S10	1	01:53																										X		
S100	1	01:55																										X		
ICV01	1	01:58																										X		
ICB01	1	02:00																										X		
CRDL01	1	02:03																										X		
ICSA01	1	02:05																										X		
ICSAB01	1	02:08																										X		
CCV01	1	02:10																										X		
CCB01	1	02:13																										X		
1201978333	1	02:15																										X		
1201978334	1	02:18																										X		
241325001	1	02:20																										X		
1201978335	1	02:23																										X		
1201978336	1	02:25																										X		
1201978337	5	02:28																										X		
241325002	1	02:30																										X		
CCV02	1	02:33																										X		
CCB02	1	02:35																										X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05–DEC–09 **End Date:** 06–DEC–09

Client Sdg: 10–544–1
Method MS
Data File: 091205–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:48		X																										
S10	1	06:50		X																										
S100	1	06:53		X																										
ICV01	1	06:55		X																										
ICB01	1	06:57		X																										
CRDL01	1	07:00		X																										
ICSA01	1	07:02		X																										
ICSAB01	1	07:04		X																										
CCV01	1	07:07		X																										
CCB01	1	07:09		X																										
1201978333	1	07:11		X																										
1201978334	1	07:14		X																										
241325001	1	07:16		X																										
1201978335	1	07:19		X																										
1201978336	1	07:21		X																										
1201978337	5	07:24		X																										
241325002	1	07:26		X																										
CCV02	1	07:28		X																										
CCB02	1	07:31		X																										

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-544-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-544-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-544-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	15.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silicon	251.611	25.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-544-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-544-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-544-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-544-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–544–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09

Raw Data

Spectra

Method: Hg_ReAlign
Result: 121109

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

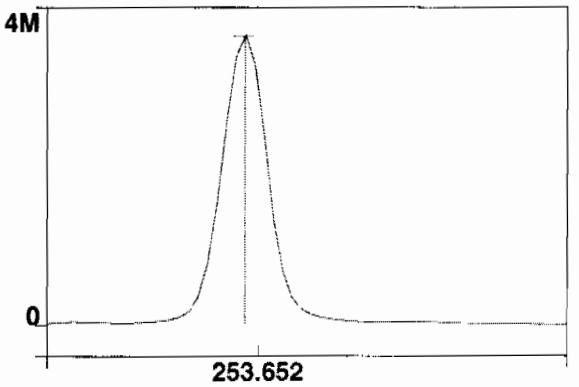

Intensity: 3630000.1 cps
Conc:

1

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00] ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00] ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00] ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00] ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00] ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00] ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00] ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00] ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00] ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00] ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00] ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00] ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00] ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00] ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00] ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00] ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00] ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00] ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00] ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00] ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00] ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00] ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00] ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00] ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00] ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00] ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00] ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00] ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00] ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00] ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43 %	09:04:58
2	Sc Radial	4907.6	4907.6	100.0 %	09:03:36
2	Y 371.029	887859.3	887859.3	100.38 %	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74 %	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00] ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00] ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00] ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00] ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00] ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00] ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00] ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00] ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00] ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00] ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00] ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00] ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00] ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00] ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00] ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00] ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00] ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00] ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00] ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00] ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00] ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00] ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00] ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00] ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00] ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00] ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00] ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00] ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00] ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00] ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00] ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00] ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260 %	09:05:29
3	Sc Radial	4823.8	4823.8	98.2 %	09:04:01
3	Y 371.029	877949.7	877949.7	99.263 %	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13 %	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7 ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22 ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3 ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80 ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2 ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9 ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52 ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75 ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38 ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56 ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50 ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65 ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16 ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453 ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293 %		09:38:03
3	Sc Radial	4901.3	4901.3	99.8 %		09:36:44
3	Y 371.029	861618.1	861618.1	97.417 %		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79 %		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44 ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6 ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49 ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04 ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71 ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45 ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3 ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32 ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52 ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91 ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13 ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4 ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2 ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8 ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16 ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72 ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3 ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30 ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6 ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68 ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4 ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17 ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8 ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3 ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45 ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46 ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68 ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65 ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14 ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35 ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97 ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560 ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

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Ca 317.933Radial†        2844.7      5036.6 ug/L        62.48      5036.6 ppb        62.48   1.24%
   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†             58712.0      511.84 ug/L        0.548      511.84 ppb        0.548   0.11%
   QC value within limits for Cd 226.502  Recovery = 102.37%
Co 228.616†             31299.0      515.85 ug/L        4.347      515.85 ppb        4.347   0.84%
   QC value within limits for Co 228.616  Recovery = 103.17%
Cr 267.716†             55808.3      502.22 ug/L        0.664      502.22 ppb        0.664   0.13%
   QC value within limits for Cr 267.716  Recovery = 100.44%
Cu 324.752†            194870.1      520.66 ug/L        0.629      520.66 ppb        0.629   0.12%
   QC value within limits for Cu 324.752  Recovery = 104.13%
Fe 238.204 Radial†        417.6      5064.8 ug/L        94.14      5064.8 ppb        94.14   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.30%
K 766.490 Radial†       13749.0      2500.5 ug/L         7.68      2500.5 ppb         7.68   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.02%
Mg 279.077 IEC†           117.5      5266.4 ug/L        91.10      5266.4 ppb        91.10   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†            554773.8      525.75 ug/L        0.407      525.75 ppb        0.407   0.08%
   QC value within limits for Mn 257.610  Recovery = 105.15%
Mo 202.031†             10431.0      553.90 ug/L        4.052      553.90 ppb        4.052   0.73%
   QC value greater than the upper limit for Mo 202.031  Recovery = 110.78%
Na 589.592 Radial†       8728.4      2448.3 ug/L        22.68      2448.3 ppb        22.68   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 97.93%
Ni 231.604†             26132.9      511.71 ug/L        4.139      511.71 ppb        4.139   0.81%
   QC value within limits for Ni 231.604  Recovery = 102.34%
P 214.914†               5812.7      2521.9 ug/L        18.35      2521.9 ppb        18.35   0.73%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              5504.1      518.39 ug/L        2.831      518.39 ppb        2.831   0.55%
   QC value within limits for Pb 220.353  Recovery = 103.68%
S 181.975 Axial†         2375.5      2558.4 ug/L        15.13      2558.4 ppb        15.13   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†              1947.3      522.68 ug/L        3.231      522.68 ppb        3.231   0.62%
   QC value within limits for Sb 206.836  Recovery = 104.54%
Se 196.026†              5969.5      2664.5 ug/L        20.95      2664.5 ppb        20.95   0.79%
   QC value within limits for Se 196.026  Recovery = 106.58%
Si 251.611†            193620.3      4905.1 ug/L         2.68      4905.1 ppb         2.68   0.05%
   QC value within limits for Si 251.611  Recovery = 98.10%
Sn 189.927†              4161.1      550.94 ug/L        4.468      550.94 ppb        4.468   0.81%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.19%
Sr 421.552†            100372.3      526.55 ug/L        0.859      526.55 ppb        0.859   0.16%
   QC value within limits for Sr 421.552  Recovery = 105.31%
Ti 334.940†            367149.6      506.26 ug/L        0.490      506.26 ppb        0.490   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.25%
Tl 190.801†              2251.7      547.80 ug/L        5.406      547.80 ppb        5.406   0.99%
   QC value within limits for Tl 190.801  Recovery = 109.56%
U 409.014†              19450.3      501.27 ug/L        1.183      501.27 ppb        1.183   0.24%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†              90935.8      528.06 ug/L        0.368      528.06 ppb        0.368   0.07%
   QC value within limits for V 292.402  Recovery = 105.61%
Zn 213.857†             71271.1      519.16 ug/L        0.195      519.16 ppb        0.195   0.04%
   QC value within limits for Zn 213.857  Recovery = 103.83%
SiO2†                  194471.8       10543 ug/L         82.7       10543 ppb         82.7   0.78%
   QC value within limits for SiO2  Recovery = 98.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573 ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874 ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858 ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828 ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035 ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137 ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619 ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177 ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430 ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693 ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067 ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993 ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191 ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448 ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62 %		09:45:16
3	Sc Radial	4809.8	4809.8	98.0 %		09:43:49
3	Y 371.029	891134.4	891134.4	100.75 %		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29 %		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441 ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723 ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610 ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180 ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992 ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472 ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457 ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343 ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153 ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058 ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762 ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825 ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115 ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478 ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335 ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760 ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264 ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146 ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869 ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168 ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676 ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895 ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168 ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177 ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090 ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625 ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335 ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911 ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862 ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122 ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761 ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033 ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %		09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %		09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

Ca 317.933Radial†	114.9	203.44 ug/L	5.843	203.44 ppb	5.843	2.87%
QC value within limits for Ca 317.933Radial Recovery = 101.72%						
Cd 226.502†	583.9	5.0878 ug/L	0.03067	5.0878 ppb	0.03067	0.60%
QC value within limits for Cd 226.502 Recovery = 101.76%						
Co 228.616†	304.8	5.0359 ug/L	0.08115	5.0359 ppb	0.08115	1.61%
QC value within limits for Co 228.616 Recovery = 100.72%						
Cr 267.716†	568.2	5.0983 ug/L	0.10423	5.0983 ppb	0.10423	2.04%
QC value within limits for Cr 267.716 Recovery = 101.97%						
Cu 324.752†	3983.8	10.643 ug/L	0.4808	10.643 ppb	0.4808	4.52%
QC value within limits for Cu 324.752 Recovery = 106.43%						
Fe 238.204 Radial†	6.6	79.730 ug/L	29.0033	79.730 ppb	29.0033	36.38%
QC value within limits for Fe 238.204 Radial Recovery = 79.73%						
K 766.490 Radial†	889.4	161.88 ug/L	26.810	161.88 ppb	26.810	16.56%
QC value within limits for K 766.490 Radial Recovery = 107.92%						
Mg 279.077 IEC†	7.3	326.69 ug/L	36.025	326.69 ppb	36.025	11.03%
QC value within limits for Mg 279.077 IEC Recovery = 108.90%						
Mn 257.610†	11132.0	10.543 ug/L	0.1659	10.543 ppb	0.1659	1.57%
QC value within limits for Mn 257.610 Recovery = 105.43%						
Mo 202.031†	195.8	10.395 ug/L	0.7057	10.395 ppb	0.7057	6.79%
QC value within limits for Mo 202.031 Recovery = 103.95%						
Na 589.592 Radial†	1041.2	292.04 ug/L	11.429	292.04 ppb	11.429	3.91%
QC value within limits for Na 589.592 Radial Recovery = 97.35%						
Ni 231.604†	277.1	5.4266 ug/L	0.08048	5.4266 ppb	0.08048	1.48%
QC value within limits for Ni 231.604 Recovery = 108.53%						
P 214.914†	338.0	149.63 ug/L	3.816	149.63 ppb	3.816	2.55%
QC value within limits for P 214.914 Recovery = 99.75%						
Pb 220.353†	96.3	9.0961 ug/L	1.14169	9.0961 ppb	1.14169	12.55%
QC value within limits for Pb 220.353 Recovery = 90.96%						
S 181.975 Axial†	89.5	96.357 ug/L	7.4396	96.357 ppb	7.4396	7.72%
QC value within limits for S 181.975 Axial Recovery = 96.36%						
Sb 206.836†	43.7	11.807 ug/L	0.5867	11.807 ppb	0.5867	4.97%
QC value within limits for Sb 206.836 Recovery = 118.07%						
Se 196.026†	65.7	29.405 ug/L	2.6665	29.405 ppb	2.6665	9.07%
QC value within limits for Se 196.026 Recovery = 98.02%						
Si 251.611†	4059.5	102.83 ug/L	1.217	102.83 ppb	1.217	1.18%
QC value within limits for Si 251.611 Recovery = 102.83%						
Sn 189.927†	80.0	10.600 ug/L	0.2084	10.600 ppb	0.2084	1.97%
QC value within limits for Sn 189.927 Recovery = 106.00%						
Sr 421.552†	936.7	4.9127 ug/L	0.04891	4.9127 ppb	0.04891	1.00%
QC value within limits for Sr 421.552 Recovery = 98.25%						
Ti 334.940†	3574.6	4.9172 ug/L	0.11528	4.9172 ppb	0.11528	2.34%
QC value within limits for Ti 334.940 Recovery = 98.34%						
Tl 190.801†	82.0	19.906 ug/L	0.6555	19.906 ppb	0.6555	3.29%
QC value within limits for Tl 190.801 Recovery = 99.53%						
U 409.014†	1925.7	49.768 ug/L	2.3685	49.768 ppb	2.3685	4.76%
QC value within limits for U 409.014 Recovery = 99.54%						
V 292.402†	835.7	5.0170 ug/L	0.03359	5.0170 ppb	0.03359	0.67%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	1408.8	10.286 ug/L	0.1748	10.286 ppb	0.1748	1.70%
QC value within limits for Zn 213.857 Recovery = 102.86%						
SiO2†	4025.3	218.19 ug/L	1.897	218.19 ppb	1.897	0.87%
QC value within limits for SiO2 Recovery = 102.44%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125 ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358 ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332 ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716 ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926 ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720 ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740 ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396 ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397 ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291 ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433 ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413 ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610 ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770 ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657 %		09:58:28
3	Sc Radial	4452.3	4452.3	90.7 %		09:57:29
3	Y 371.029	763138.6	763138.6	86.282 %		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26 %		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167 ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860 ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512 ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439 ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675 ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922 ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820 ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732 ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789 ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279 ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638 ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310 ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175 ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750 ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540 ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843 ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311 ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227 ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915 ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746 ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932 ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176 ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896 ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226 ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013 ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829 ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545 ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683 ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715 ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573 ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528 ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768 ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

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Ca 317.933Radial†     272506.6      482480 ug/L        5269.3      482480 ppb         5269.3   1.09%
   QC value within limits for Ca 317.933Radial  Recovery = 96.50%
Cd 226.502†            56301.0      472.81 ug/L         3.758      472.81 ppb          3.758   0.79%
   QC value within limits for Cd 226.502  Recovery = 94.56%
Co 228.616†            28228.3      462.55 ug/L         3.948      462.55 ppb          3.948   0.85%
   QC value within limits for Co 228.616  Recovery = 92.51%
Cr 267.716†            53154.8      481.60 ug/L         2.521      481.60 ppb          2.521   0.52%
   QC value within limits for Cr 267.716  Recovery = 96.32%
Cu 324.752†           211552.8      574.38 ug/L         6.835      574.38 ppb          6.835   1.19%
   QC value within limits for Cu 324.752  Recovery = 114.88%
Fe 238.204 Radial†     15285.8      184820 ug/L        1613.6      184820 ppb         1613.6   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.41%
K 766.490 Radial†      30276.9      5529.3 ug/L         61.46      5529.3 ppb          61.46   1.11%
   QC value within limits for K 766.490 Radial  Recovery = 110.59%
Mg 279.077 IEC†        11072.2      495270 ug/L        3223.1      495270 ppb         3223.1   0.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.05%
Mn 257.610†           519055.3      500.72 ug/L         5.664      500.72 ppb          5.664   1.13%
   QC value within limits for Mn 257.610  Recovery = 100.14%
Mo 202.031†             9037.2      492.69 ug/L         3.967      492.69 ppb          3.967   0.81%
   QC value within limits for Mo 202.031  Recovery = 98.54%
Na 589.592 Radial†     18579.3      5211.5 ug/L         48.18      5211.5 ppb          48.18   0.92%
   QC value within limits for Na 589.592 Radial  Recovery = 104.23%
Ni 231.604†            23602.9      462.17 ug/L         3.523      462.17 ppb          3.523   0.76%
   QC value within limits for Ni 231.604  Recovery = 92.43%
P 214.914†              5752.3      2520.4 ug/L         39.08      2520.4 ppb          39.08   1.55%
   QC value within limits for P 214.914  Recovery = 100.81%
Pb 220.353†             3920.0      473.36 ug/L         5.165      473.36 ppb          5.165   1.09%
   QC value within limits for Pb 220.353  Recovery = 94.67%
S 181.975 Axial†        2522.0      2612.1 ug/L         33.01      2612.1 ppb          33.01   1.26%
   QC value within limits for S 181.975 Axial  Recovery = 104.49%
Sb 206.836†             2110.6      551.22 ug/L         2.592      551.22 ppb          2.592   0.47%
   QC value within limits for Sb 206.836  Recovery = 110.24%
Se 196.026†             4382.9      2608.9 ug/L         24.27      2608.9 ppb          24.27   0.93%
   QC value within limits for Se 196.026  Recovery = 104.36%
Si 251.611†           211822.2      5368.0 ug/L         59.89      5368.0 ppb          59.89   1.12%
   QC value within limits for Si 251.611  Recovery = 107.36%
Sn 189.927†             3306.5      490.18 ug/L         5.219      490.18 ppb          5.219   1.06%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            95213.6      495.06 ug/L         5.584      495.06 ppb          5.584   1.13%
   QC value within limits for Sr 421.552  Recovery = 99.01%
Ti 334.940†           354526.5      513.76 ug/L         5.094      513.76 ppb          5.094   0.99%
   QC value within limits for Ti 334.940  Recovery = 102.75%
Tl 190.801†             1932.2      484.94 ug/L         3.312      484.94 ppb          3.312   0.68%
   QC value within limits for Tl 190.801  Recovery = 96.99%
U 409.014†             20126.5      496.18 ug/L         5.005      496.18 ppb          5.005   1.01%
   QC value within limits for U 409.014  Recovery = 99.24%
V 292.402†             91259.0      512.63 ug/L         5.805      512.63 ppb          5.805   1.13%
   QC value within limits for V 292.402  Recovery = 102.53%
Zn 213.857†            71647.8      488.25 ug/L         4.200      488.25 ppb          4.200   0.86%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                 212042.7       11499 ug/L         145.5       11499 ppb          145.5   1.27%
   QC value within limits for SiO2  Recovery = 107.52%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756 ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667 ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135 ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848 ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093 ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797 ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198 ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818 ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763 ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182 ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618 ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359 ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817 ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239 ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303 %		10:09:54
3	Sc Radial	4249.7	4249.7	86.6 %		10:08:52
3	Y 371.029	725964.8	725964.8	82.079 %		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68 %		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798 ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190 ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643 ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484 ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540 ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451 ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510 ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493 ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166 ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306 ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824 ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920 ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523 ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000 ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543 ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915 ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130 ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607 ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07 ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769 ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606 ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498 ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648 ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634 ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188 ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173 ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661 ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929 ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598 ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512 ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635 ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674 ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731 ug/L	14731 ppb	10:16:40
2	Pb 220.353†	248482.1	260348.9	24447 ug/L	24447 ppb	10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788 ug/L	51788 ppb	10:16:40
2	Sb 206.836†	38447.2	40237.0	10413 ug/L	10413 ppb	10:16:40
2	Se 196.026†	22029.2	23096.0	10261 ug/L	10261 ppb	10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861 ug/L	47861 ppb	10:16:35
2	Sn 189.927†	75436.2	79020.2	10451 ug/L	10451 ppb	10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6 ug/L	9440.6 ppb	10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9 ug/L	9887.9 ppb	10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4 ug/L	9993.4 ppb	10:16:40
2	U 409.014†	-1890.4	793.9	-25.762 ug/L	-25.762 ppb	10:16:40
2	V 292.402†	1672052.7	1753005.2	10154 ug/L	10154 ppb	10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064 ug/L	14064 ppb	10:16:35
2	SiO2†	1854816.0	1942233.7	104910 ug/L	104910 ppb	10:17:14
3	Sc 361.383	988641.8	988641.8	95.109 %		10:16:54
3	Sc Radial	4729.3	4729.3	96.3 %		10:15:38
3	Y 371.029	819320.7	819320.7	92.634 %		10:16:54
3	Y RADIAL	5365.7	5365.7	95.02 %		10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602 ug/L	3.2602 ppb	10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512 ug/L	89.512 ppb	10:15:38
3	As 188.979†	30234.5	31825.9	10000 ug/L	10000 ppb	10:17:00
3	B 249.677†	253820.4	267339.4	5029.4 ug/L	5029.4 ppb	10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711 ug/L	13711 ppb	10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8 ug/L	2949.8 ppb	10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255 ug/L	41.255 ppb	10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7 ug/L	9764.7 ppb	10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6 ug/L	9048.6 ppb	10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049 ug/L	24049 ppb	10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842 ug/L	20842 ppb	10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040 ug/L	-4.8040 ppb	10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920 ug/L	288920 ppb	10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120 ug/L	67.120 ppb	10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3 ug/L	9608.3 ppb	10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1 ug/L	9732.1 ppb	10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49 ug/L	158.49 ppb	10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0 ug/L	9890.0 ppb	10:16:54
3	P 214.914†	38530.7	40247.0	14805 ug/L	14805 ppb	10:17:00
3	Pb 220.353†	247695.8	260509.3	24462 ug/L	24462 ppb	10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768 ug/L	51768 ppb	10:17:00
3	Sb 206.836†	38484.3	40428.7	10462 ug/L	10462 ppb	10:17:00
3	Se 196.026†	22001.3	23154.1	10287 ug/L	10287 ppb	10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957 ug/L	47957 ppb	10:16:54
3	Sn 189.927†	75099.1	78965.5	10444 ug/L	10444 ppb	10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4 ug/L	9338.4 ppb	10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1 ug/L	9968.1 ppb	10:16:48
3	Tl 190.801†	39204.4	41264.8	10043 ug/L	10043 ppb	10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525 ug/L	-16.525 ppb	10:17:00
3	V 292.402†	1668512.3	1755925.1	10171 ug/L	10171 ppb	10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095 ug/L	14095 ppb	10:16:54
3	SiO2†	1844505.7	1938761.5	104720 ug/L	104720 ppb	10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

QC value within limits for Cd 226.502 Recovery = 97.49%

Co 228.616†	547875.8	9024.9 ug/L	20.83	9024.9 ppb	20.83	0.23%
QC value within limits for Co 228.616 Recovery = 90.25%						
Cr 267.716†	2671231.6	24016 ug/L	28.6	24016 ppb	28.6	0.12%
QC value within limits for Cr 267.716 Recovery = 96.06%						
Cu 324.752†	7782785.2	20784 ug/L	68.9	20784 ppb	68.9	0.33%
QC value within limits for Cu 324.752 Recovery = 103.92%						
Fe 238.204 Radial†	-23.0	7.1483 ug/L	12.73507	7.1483 ppb	12.73507	178.15%
K 766.490 Radial†	1604818.8	292410 ug/L	3446.4	292410 ppb	3446.4	1.18%
QC value within limits for K 766.490 Radial Recovery = 97.47%						
Mg 279.077 IEC†	-5.2	-33.655 ug/L	97.1262	-33.655 ppb	97.1262	288.59%
Mn 257.610†	10099618.1	9563.8 ug/L	44.75	9563.8 ppb	44.75	0.47%
QC value within limits for Mn 257.610 Recovery = 95.64%						
Mo 202.031†	183355.2	9730.1 ug/L	5.02	9730.1 ppb	5.02	0.05%
QC value within limits for Mo 202.031 Recovery = 97.30%						
Na 589.592 Radial†	560.9	157.34 ug/L	0.999	157.34 ppb	0.999	0.63%
Ni 231.604†	504449.1	9878.2 ug/L	11.25	9878.2 ppb	11.25	0.11%
QC value within limits for Ni 231.604 Recovery = 98.78%						
P 214.914†	40151.7	14771 ug/L	37.2	14771 ppb	37.2	0.25%
QC value within limits for P 214.914 Recovery = 98.48%						
Pb 220.353†	260519.4	24463 ug/L	16.5	24463 ppb	16.5	0.07%
QC value within limits for Pb 220.353 Recovery = 97.85%						
S 181.975 Axial†	48063.5	51783 ug/L	14.1	51783 ppb	14.1	0.03%
QC value within limits for S 181.975 Axial Recovery = 103.57%						
Sb 206.836†	40387.4	10452 ug/L	35.3	10452 ppb	35.3	0.34%
QC value within limits for Sb 206.836 Recovery = 104.52%						
Se 196.026†	23147.4	10284 ug/L	21.5	10284 ppb	21.5	0.21%
QC value within limits for Se 196.026 Recovery = 102.84%						
Si 251.611†	1898311.4	47911 ug/L	48.3	47911 ppb	48.3	0.10%
QC value within limits for Si 251.611 Recovery = 95.82%						
Sn 189.927†	78998.1	10448 ug/L	3.8	10448 ppb	3.8	0.04%
QC value within limits for Sn 189.927 Recovery = 104.48%						
Sr 421.552†	1800865.2	9448.1 ug/L	113.65	9448.1 ppb	113.65	1.20%
QC value within limits for Sr 421.552 Recovery = 94.48%						
Ti 334.940†	7204497.8	9928.5 ug/L	40.08	9928.5 ppb	40.08	0.40%
QC value within limits for Ti 334.940 Recovery = 99.29%						
Tl 190.801†	41162.2	10017 ug/L	24.6	10017 ppb	24.6	0.25%
QC value within limits for Tl 190.801 Recovery = 100.17%						
U 409.014†	1018.8	-19.980 ug/L	5.0391	-19.980 ppb	5.0391	25.22%
V 292.402†	1754383.3	10162 ug/L	8.4	10162 ppb	8.4	0.08%
QC value within limits for V 292.402 Recovery = 101.62%						
Zn 213.857†	1927187.2	14074 ug/L	18.5	14074 ppb	18.5	0.13%
QC value within limits for Zn 213.857 Recovery = 93.82%						
SiO2†	1925618.9	104000 ug/L	1406.0	104000 ppb	1406.0	1.35%
QC value within limits for SiO2 Recovery = 97.20%						

All analyte(s) passed QC.

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

Ca 317.933Radial†	2842.6	5033.0 ug/L	38.86	5033.0 ppb	38.86	0.77%
QC value within limits for Ca 317.933Radial Recovery = 100.66%						
Cd 226.502†	57296.6	499.49 ug/L	1.604	499.49 ppb	1.604	0.32%
QC value within limits for Cd 226.502 Recovery = 99.90%						
Co 228.616†	29764.2	490.44 ug/L	1.510	490.44 ppb	1.510	0.31%
QC value within limits for Co 228.616 Recovery = 98.09%						
Cr 267.716†	55373.5	498.28 ug/L	1.039	498.28 ppb	1.039	0.21%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	186833.2	499.20 ug/L	1.013	499.20 ppb	1.013	0.20%
QC value within limits for Cu 324.752 Recovery = 99.84%						
Fe 238.204 Radial†	413.6	5016.3 ug/L	43.97	5016.3 ppb	43.97	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 100.33%						
K 766.490 Radial†	27646.2	5030.3 ug/L	29.10	5030.3 ppb	29.10	0.58%
QC value within limits for K 766.490 Radial Recovery = 100.61%						
Mg 279.077 IEC†	115.0	5152.7 ug/L	45.64	5152.7 ppb	45.64	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 103.05%						
Mn 257.610†	527884.4	500.28 ug/L	0.793	500.28 ppb	0.793	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%						
Mo 202.031†	9375.3	497.87 ug/L	2.477	497.87 ppb	2.477	0.50%
QC value within limits for Mo 202.031 Recovery = 99.57%						
Na 589.592 Radial†	34004.4	9538.2 ug/L	12.76	9538.2 ppb	12.76	0.13%
QC value within limits for Na 589.592 Radial Recovery = 95.38%						
Ni 231.604†	25164.0	492.74 ug/L	1.916	492.74 ppb	1.916	0.39%
QC value within limits for Ni 231.604 Recovery = 98.55%						
P 214.914†	5537.8	2401.6 ug/L	5.33	2401.6 ppb	5.33	0.22%
QC value within limits for P 214.914 Recovery = 96.06%						
Pb 220.353†	5333.7	502.25 ug/L	2.030	502.25 ppb	2.030	0.40%
QC value within limits for Pb 220.353 Recovery = 100.45%						
S 181.975 Axial†	914.8	984.56 ug/L	14.228	984.56 ppb	14.228	1.45%
QC value within limits for S 181.975 Axial Recovery = 98.46%						
Sb 206.836†	1878.1	502.30 ug/L	0.614	502.30 ppb	0.614	0.12%
QC value within limits for Sb 206.836 Recovery = 100.46%						
Se 196.026†	1126.1	518.56 ug/L	3.244	518.56 ppb	3.244	0.63%
QC value within limits for Se 196.026 Recovery = 103.71%						
Si 251.611†	97340.7	2460.2 ug/L	4.93	2460.2 ppb	4.93	0.20%
QC value within limits for Si 251.611 Recovery = 98.41%						
Sn 189.927†	3741.6	495.45 ug/L	2.400	495.45 ppb	2.400	0.48%
QC value within limits for Sn 189.927 Recovery = 99.09%						
Sr 421.552†	93386.6	489.90 ug/L	1.389	489.90 ppb	1.389	0.28%
QC value within limits for Sr 421.552 Recovery = 97.98%						
Ti 334.940†	359415.4	495.61 ug/L	0.472	495.61 ppb	0.472	0.10%
QC value within limits for Ti 334.940 Recovery = 99.12%						
Tl 190.801†	2062.9	502.10 ug/L	2.272	502.10 ppb	2.272	0.45%
QC value within limits for Tl 190.801 Recovery = 100.42%						
U 409.014†	18512.1	477.03 ug/L	1.407	477.03 ppb	1.407	0.29%
QC value within limits for U 409.014 Recovery = 95.41%						
V 292.402†	86553.8	502.14 ug/L	0.660	502.14 ppb	0.660	0.13%
QC value within limits for V 292.402 Recovery = 100.43%						
Zn 213.857†	67981.0	495.14 ug/L	0.700	495.14 ppb	0.700	0.14%
QC value within limits for Zn 213.857 Recovery = 99.03%						
SiO2†	97459.5	5271.0 ug/L	21.25	5271.0 ppb	21.25	0.40%
QC value within limits for SiO2 Recovery = 98.57%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142 ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204 ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748 ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236 ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607 ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238 ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416 ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924 ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677 ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894 ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750 ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873 ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359 ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940 ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70 %		10:46:30
3	Sc Radial	4898.4	4898.4	99.8 %		10:45:03
3	Y 371.029	891482.0	891482.0	100.79 %		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70 %		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626 ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479 ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415 ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651 ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466 ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383 ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758 ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172 ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063 ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401 ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056 ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671 ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339 ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75 ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452 ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415 ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775 ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537 ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081 ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238 ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446 ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873 ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933 ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715 ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116 ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563 ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284 ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025 ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651 ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454 ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553 ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424 ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5      -1.5484 ug/L       2.77737      -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2      -4.5703 ug/L       5.15146      -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2       3.7743 ug/L       1.87844       3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3      -1.9597 ug/L       2.16197      -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2       1.5615 ug/L       0.21151       1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5       1.5214 ug/L       0.96781       1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5      -0.0343 ug/L       0.07167      -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1      -0.0500 ug/L       0.01994      -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446       0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -175.7      -4.5411 ug/L       3.27969      -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -22.7      -0.1300 ug/L       0.15236      -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217       0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3       2.3658 ug/L       1.17872       2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753 ug/L	-8.3753 ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374 ug/L	0.9374 ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728 ug/L	17.728 ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640 ug/L	1.8640 ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03 ug/L	183.03 ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144 ug/L	-36.144 ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244 ug/L	-0.8244 ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527 ug/L	0.3527 ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635 ug/L	-0.1635 ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719 ug/L	-3.3719 ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309 ug/L	4.2309 ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606 ug/L	-6.7606 ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455 ug/L	-0.4455 ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451 ug/L	-81.451 ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220 %		10:53:23
3	Sc Radial	4812.6	4812.6	98.0 %		10:52:05
3	Y 371.029	862360.3	862360.3	97.500 %		10:53:23
3	Y RADIAL	5507.3	5507.3	97.52 %		10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149 ug/L	-2.3149 ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070 ug/L	-4.1070 ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627 ug/L	-11.627 ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198 ug/L	1.4198 ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813 ug/L	-0.0813 ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080 ug/L	0.0080 ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437 ug/L	21.437 ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926 ug/L	-0.8926 ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116 ug/L	0.0116 ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157 ug/L	0.1157 ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678 ug/L	-5.1678 ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140 ug/L	382140 ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864 ug/L	62.864 ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088 ug/L	-8.8088 ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260 ug/L	-6.2260 ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035 ug/L	0.0035 ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218 ug/L	10.218 ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003 ug/L	2.5003 ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049 ug/L	-17.049 ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633 ug/L	0.8633 ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577 ug/L	16.577 ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703 ug/L	1.2703 ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98 ug/L	187.98 ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230 ug/L	-36.230 ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851 ug/L	0.0851 ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075 ug/L	0.5075 ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587 ug/L	-0.1587 ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379 ug/L	-1.5379 ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506 ug/L	6.4506 ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115 ug/L	-7.3115 ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488 ug/L	-0.5488 ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404 ug/L	-87.404 ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774 13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122 678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903 2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898 87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095 54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575 16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955 33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103 38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019 16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134 87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174 2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643 0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699 166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835 18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037 6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860 37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671 54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332 7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455 68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899 5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8 ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07 ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86 ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37 ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66 ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8 ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84 ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95 ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61 ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62 ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09 ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56 ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99 ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0 ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71 %		11:00:17
3	Sc Radial	4925.8	4925.8	100 %		10:58:53
3	Y 371.029	877905.3	877905.3	99.258 %		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84 %		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35 ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8 ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79 ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35 ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61 ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82 ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2 ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62 ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69 ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61 ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06 ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7 ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2 ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0 ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71 ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33 ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1 ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55 ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1 ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20 ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00 ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56 ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51 ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1 ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74 ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39 ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24 ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29 ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34 ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66 ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31 ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1 ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

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Ca 317.933Radial†        2795.2      4949.0 ug/L         61.06      4949.0 ppb          61.06   1.23%
   QC value within limits for Ca 317.933Radial  Recovery = 98.98%
Cd 226.502†             57300.2      499.53 ug/L          1.852      499.53 ppb           1.852   0.37%
   QC value within limits for Cd 226.502  Recovery = 99.91%
Co 228.616†             29608.9      487.87 ug/L          1.689      487.87 ppb           1.689   0.35%
   QC value within limits for Co 228.616  Recovery = 97.57%
Cr 267.716†             55297.6      497.60 ug/L          1.743      497.60 ppb           1.743   0.35%
   QC value within limits for Cr 267.716  Recovery = 99.52%
Cu 324.752†            186009.6      496.99 ug/L          1.464      496.99 ppb           1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 99.40%
Fe 238.204 Radial†        405.0      4912.1 ug/L         80.46      4912.1 ppb          80.46   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.24%
K 766.490 Radial†       27016.4      4915.6 ug/L         26.56      4915.6 ppb          26.56   0.54%
   QC value within limits for K 766.490 Radial  Recovery = 98.31%
Mg 279.077 IEC†           111.4      4989.5 ug/L         96.39      4989.5 ppb          96.39   1.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.79%
Mn 257.610†            527731.1      500.13 ug/L          1.476      500.13 ppb           1.476   0.30%
   QC value within limits for Mn 257.610  Recovery = 100.03%
Mo 202.031†              9298.8      493.81 ug/L          2.195      493.81 ppb           2.195   0.44%
   QC value within limits for Mo 202.031  Recovery = 98.76%
Na 589.592 Radial†      33372.8      9361.1 ug/L         50.41      9361.1 ppb          50.41   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†             25005.0      489.63 ug/L          1.726      489.63 ppb           1.726   0.35%
   QC value within limits for Ni 231.604  Recovery = 97.93%
P 214.914†               5502.4      2386.1 ug/L         11.15      2386.1 ppb          11.15   0.47%
   QC value within limits for P 214.914  Recovery = 95.45%
Pb 220.353†              5299.9      499.06 ug/L          1.860      499.06 ppb           1.860   0.37%
   QC value within limits for Pb 220.353  Recovery = 99.81%
S 181.975 Axial†          903.8      972.73 ug/L          4.706      972.73 ppb           4.706   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 97.27%
Sb 206.836†              1847.1      494.01 ug/L          3.403      494.01 ppb           3.403   0.69%
   QC value within limits for Sb 206.836  Recovery = 98.80%
Se 196.026†              1106.9      509.66 ug/L          6.212      509.66 ppb           6.212   1.22%
   QC value within limits for Se 196.026  Recovery = 101.93%
Si 251.611†             97204.8      2456.9 ug/L          7.70      2456.9 ppb           7.70   0.31%
   QC value within limits for Si 251.611  Recovery = 98.28%
Sn 189.927†              3719.5      492.52 ug/L          2.434      492.52 ppb           2.434   0.49%
   QC value within limits for Sn 189.927  Recovery = 98.50%
Sr 421.552†             92292.4      484.16 ug/L          1.112      484.16 ppb           1.112   0.23%
   QC value within limits for Sr 421.552  Recovery = 96.83%
Ti 334.940†            358750.6      494.69 ug/L          1.509      494.69 ppb           1.509   0.31%
   QC value within limits for Ti 334.940  Recovery = 98.94%
Tl 190.801†              2050.0      498.98 ug/L          1.719      498.98 ppb           1.719   0.34%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†              18423.6      474.75 ug/L          1.188      474.75 ppb           1.188   0.25%
   QC value within limits for U 409.014  Recovery = 94.95%
V 292.402†              86361.9      501.00 ug/L          1.491      501.00 ppb           1.491   0.30%
   QC value within limits for V 292.402  Recovery = 100.20%
Zn 213.857†             67835.2      494.11 ug/L          1.146      494.11 ppb           1.146   0.23%
   QC value within limits for Zn 213.857  Recovery = 98.82%
SiO2†                   96661.6      5227.9 ug/L         22.02      5227.9 ppb          22.02   0.42%
   QC value within limits for SiO2  Recovery = 97.76%
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951 ug/L	0.9951 ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458 ug/L	1.7458 ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298 ug/L	-2.7298 ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989 ug/L	2.8989 ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951 ug/L	-3.2951 ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309 ug/L	0.5309 ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661 ug/L	1.2661 ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167 ug/L	-0.1167 ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867 ug/L	-0.0867 ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171 ug/L	-1.7171 ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062 ug/L	0.7062 ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749 ug/L	-0.3749 ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912 ug/L	0.1912 ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073 ug/L	2.4073 ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43 %		11:07:13
3	Sc Radial	4909.9	4909.9	100 %		11:05:46
3	Y 371.029	889449.2	889449.2	100.56 %		11:07:13
3	Y RADIAL	5657.3	5657.3	100.2 %		11:05:46
3	Ag 328.068†	489.6	13.4	0.0605 ug/L	0.0605 ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350 ug/L	22.350 ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242 ug/L	0.7242 ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618 ug/L	7.2618 ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758 ug/L	0.0758 ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242 ug/L	0.0242 ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990 ug/L	3.8990 ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798 ug/L	0.1798 ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058 ug/L	0.0058 ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718 ug/L	0.1718 ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108 ug/L	-0.2108 ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976 ug/L	16.976 ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709 ug/L	25.709 ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52 ug/L	-176.52 ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313 ug/L	0.0313 ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939 ug/L	0.1939 ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755 ug/L	1.0755 ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707 ug/L	-0.0707 ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232 ug/L	0.5232 ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380 ug/L	0.5380 ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618 ug/L	-7.9618 ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903 ug/L	2.2903 ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492 ug/L	0.3492 ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962 ug/L	0.5962 ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103 ug/L	2.2103 ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222 ug/L	-0.0222 ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947 ug/L	-0.0947 ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125 ug/L	-2.2125 ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983 ug/L	-2.0983 ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210 ug/L	0.0210 ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153 ug/L	0.3153 ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484 ug/L	1.7484 ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5 ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62 ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4 ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79 ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50 ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7 ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14 ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22 ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73 ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06 ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23 ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73 ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1 ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2 %		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86 %		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9 ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9 ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0 ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6 ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3 ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8 ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49 ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849 %		12:17:52
3	Y 371.029	872084.7	872084.7	98.600 %		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61 ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35 ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70 ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37 ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30 ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46 ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38 ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43 ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62 ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50 ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54 ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00 ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1 ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64 ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0 ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03 ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64 ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1 ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18 ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49 ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93 ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25 ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98 ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35 ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4 ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L        3.149      507.31 ppb        3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L        3.818      500.79 ppb        3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L        3.018      504.61 ppb        3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L        2.623      506.08 ppb        2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L       45.45      5082.5 ppb       45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L       68.50      4957.3 ppb       68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L       11.74      5217.9 ppb       11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L        3.320      507.64 ppb        3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L        3.216      507.25 ppb        3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L      135.46      9625.8 ppb      135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L        3.555      502.09 ppb        3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L       11.55      2454.7 ppb       11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L        3.072      511.03 ppb        3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L        2.21      1000.2 ppb        2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L        3.960      508.48 ppb        3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L        3.225      525.79 ppb        3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L       14.63      2500.7 ppb       14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L        3.651      502.21 ppb        3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L        6.861      494.05 ppb        6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L        2.661      502.89 ppb        2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L        2.825      511.74 ppb        2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L        2.617      485.15 ppb        2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L        2.757      508.62 ppb        2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L        3.269      502.43 ppb        3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L       57.67      5346.1 ppb       57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -23.990 ug/L       73.3513     -23.990 ppb        73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/4/2009 12:48:32 Plasma On Time: 11/30/2009 06:07:59
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/4/2009 12:48:33
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L        53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L        85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L       105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L        48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L       151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L        43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L        52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L        47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750 ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466 ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347 ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960 ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216 ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014 ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740 ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164 ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635 ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594 ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408 ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073 ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106 ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8 %		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0 %		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013 ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244 ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453 ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928 ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436 ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845 ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165 ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628 %		12:59:35
3	Y 371.029	880903.4	880903.4	99.597 %		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441 ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565 ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068 ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624 ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288 ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633 ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888 ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060 ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141 ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162 ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630 ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537 ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106 ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791 ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859 ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539 ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160 ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207 ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458 ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330 ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739 ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096 ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533 ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302 ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247 ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8      34.227 ug/L       24.6248      34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
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Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758 ug/L	7.6758 ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119 ug/L	2.2119 ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324 ug/L	-7.1324 ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069 ug/L	3.1069 ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363 ug/L	-1.9363 ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149 ug/L	1.8149 ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313 ug/L	0.4313 ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017 ug/L	0.1017 ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009 ug/L	-1.3009 ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491 ug/L	-1.7491 ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527 ug/L	0.3527 ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144 ug/L	0.3144 ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249 ug/L	3.2249 ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0 %		14:06:39
3	Y RADIAL	5653.4	5653.4	100.1 %		14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078 ug/L	9.0078 ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238 ug/L	25.238 ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557 ug/L	-11.557 ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614 ug/L	26.614 ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277 ug/L	-67.277 ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433 ug/L	13.433 ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743 ug/L	-0.0743 ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53 %		14:08:07
3	Y 371.029	887847.1	887847.1	100.38 %		14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092 ug/L	-0.0092 ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368 ug/L	0.7368 ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077 ug/L	3.0077 ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964 ug/L	0.0964 ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077 ug/L	-0.0077 ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791 ug/L	0.1791 ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226 ug/L	-0.0226 ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834 ug/L	0.0834 ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251 ug/L	0.3251 ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064 ug/L	0.0064 ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662 ug/L	-0.0662 ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191 ug/L	-0.1191 ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622 ug/L	-4.6622 ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536 ug/L	-1.2536 ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407 ug/L	-6.9407 ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302 ug/L	2.5302 ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220 ug/L	-5.9220 ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899 ug/L	2.1899 ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576 ug/L	-0.1576 ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379 ug/L	0.0379 ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674 ug/L	-2.8674 ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636 ug/L	2.5636 ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930 ug/L	-0.1930 ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247 ug/L	0.2247 ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671 ug/L	4.2671 ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         141.0      25.699 ug/L        9.7077      25.699 ppb        9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.9     -40.386 ug/L       44.6154     -40.386 ppb       44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         56.4      15.809 ug/L       12.6890      15.809 ppb       12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

QC value within limits for Ca 317.933Radial Recovery = 103.15%

Cd 226.502†	58423.3	509.31 ug/L	1.488	509.31 ppb	1.488	0.29%

QC value within limits for Cd 226.502 Recovery = 101.86%

Co 228.616†	30442.1	501.61 ug/L	2.828	501.61 ppb	2.828	0.56%

QC value within limits for Co 228.616 Recovery = 100.32%

Cr 267.716†	56269.6	506.35 ug/L	0.861	506.35 ppb	0.861	0.17%

QC value within limits for Cr 267.716 Recovery = 101.27%

Cu 324.752†	189933.4	507.48 ug/L	0.255	507.48 ppb	0.255	0.05%

QC value within limits for Cu 324.752 Recovery = 101.50%

Fe 238.204 Radial†	423.2	5132.9 ug/L	59.15	5132.9 ppb	59.15	1.15%

QC value within limits for Fe 238.204 Radial Recovery = 102.66%

K 766.490 Radial†	27571.2	5016.5 ug/L	14.81	5016.5 ppb	14.81	0.30%

QC value within limits for K 766.490 Radial Recovery = 100.33%

Mg 279.077 IEC†	117.6	5269.0 ug/L	179.54	5269.0 ppb	179.54	3.41%

QC value within limits for Mg 279.077 IEC Recovery = 105.38%

Mn 257.610†	537849.9	509.73 ug/L	0.854	509.73 ppb	0.854	0.17%

QC value within limits for Mn 257.610 Recovery = 101.95%

Mo 202.031†	9556.0	507.47 ug/L	1.556	507.47 ppb	1.556	0.31%

QC value within limits for Mo 202.031 Recovery = 101.49%

Na 589.592 Radial†	34640.7	9716.7 ug/L	10.47	9716.7 ppb	10.47	0.11%

QC value within limits for Na 589.592 Radial Recovery = 97.17%

Ni 231.604†	25673.8	502.72 ug/L	2.451	502.72 ppb	2.451	0.49%

QC value within limits for Ni 231.604 Recovery = 100.54%

P 214.914†	5673.8	2461.2 ug/L	13.76	2461.2 ppb	13.76	0.56%

QC value within limits for P 214.914 Recovery = 98.45%

Pb 220.353†	5435.5	511.83 ug/L	1.105	511.83 ppb	1.105	0.22%

QC value within limits for Pb 220.353 Recovery = 102.37%

S 181.975 Axial†	927.4	998.14 ug/L	8.273	998.14 ppb	8.273	0.83%

QC value within limits for S 181.975 Axial Recovery = 99.81%

Sb 206.836†	1906.1	509.90 ug/L	0.408	509.90 ppb	0.408	0.08%

QC value within limits for Sb 206.836 Recovery = 101.98%

Se 196.026†	1138.0	524.26 ug/L	1.359	524.26 ppb	1.359	0.26%

QC value within limits for Se 196.026 Recovery = 104.85%

Si 251.611†	99074.1	2504.1 ug/L	5.14	2504.1 ppb	5.14	0.21%

QC value within limits for Si 251.611 Recovery = 100.16%

Sn 189.927†	3827.1	506.77 ug/L	3.397	506.77 ppb	3.397	0.67%

QC value within limits for Sn 189.927 Recovery = 101.35%

Sr 421.552†	95173.6	499.27 ug/L	0.828	499.27 ppb	0.828	0.17%

QC value within limits for Sr 421.552 Recovery = 99.85%

Ti 334.940†	366116.9	504.85 ug/L	0.626	504.85 ppb	0.626	0.12%

QC value within limits for Ti 334.940 Recovery = 100.97%

Tl 190.801†	2091.2	508.98 ug/L	1.494	508.98 ppb	1.494	0.29%

QC value within limits for Tl 190.801 Recovery = 101.80%

U 409.014†	18904.3	487.13 ug/L	3.634	487.13 ppb	3.634	0.75%

QC value within limits for U 409.014 Recovery = 97.43%

V 292.402†	88093.7	511.09 ug/L	0.286	511.09 ppb	0.286	0.06%

QC value within limits for V 292.402 Recovery = 102.22%

Zn 213.857†	69254.2	504.41 ug/L	0.937	504.41 ppb	0.937	0.19%

QC value within limits for Zn 213.857 Recovery = 100.88%

SiO2†	98473.9	5325.8 ug/L	40.57	5325.8 ppb	40.57	0.76%

QC value within limits for SiO2 Recovery = 99.59%

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237 ug/L	8.7237 ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503 ug/L	-0.7503 ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231 ug/L	-7.3231 ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716 ug/L	4.0716 ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231 ug/L	-1.9231 ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718 ug/L	1.4718 ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274 ug/L	1.5274 ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146 ug/L	-0.1146 ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667 ug/L	-0.1667 ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992 ug/L	-4.3992 ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848 ug/L	-0.0848 ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817 ug/L	0.1817 ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213 ug/L	3.4213 ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101 %		15:02:30
3	Y RADIAL	5692.8	5692.8	100.8 %		15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650 ug/L	-1.9650 ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501 ug/L	16.501 ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962 ug/L	-12.962 ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364 ug/L	13.364 ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663 ug/L	48.663 ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078 ug/L	36.078 ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131 ug/L	-0.1131 ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06 %		15:03:57
3	Y 371.029	884765.2	884765.2	100.03 %		15:03:57
3	Ag 328.068†	546.5	72.1	0.2822 ug/L	0.2822 ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412 ug/L	1.2412 ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362 ug/L	0.7362 ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116 ug/L	-0.0116 ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116 ug/L	0.0116 ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212 ug/L	0.0212 ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510 ug/L	0.2510 ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157 ug/L	0.3157 ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543 ug/L	0.3543 ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154 ug/L	0.0154 ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656 ug/L	-0.0656 ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330 ug/L	-0.1330 ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179 ug/L	1.9179 ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499 ug/L	-1.5499 ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618 ug/L	-1.6618 ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470 ug/L	1.9470 ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666 ug/L	-1.0666 ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213 ug/L	1.7213 ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060 ug/L	-0.0060 ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030 ug/L	0.0030 ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751 ug/L	1.5751 ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249 ug/L	-2.0249 ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440 ug/L	-0.2440 ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181 ug/L	0.3181 ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869 ug/L	1.9869 ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3    -15.423 ug/L        6.5866    -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2     20.428 ug/L       19.9912     20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7     29.809 ug/L       20.4595     29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2     32.884 ug/L        2.9232     32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb	15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb	15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb	15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb	15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb	15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb	15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb	15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb	15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb	15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb	15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb	15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb	15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb	15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %		15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %		15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb	15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb	15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb	15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb	15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb	15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb	15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb	15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %		15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %		15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb	15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb	15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb	15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb	15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb	15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb	15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb	15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb	15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb	15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb	15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb	15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb	15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb	15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb	15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb	15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb	15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb	15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb	15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb	15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb	15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb	15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb	15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb	15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb	15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb	15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L        2.287      511.43 ppb          2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L        1.146      503.91 ppb          1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L        1.662      508.31 ppb          1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L        2.326      511.16 ppb          2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L        25.16      5027.1 ppb          25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L        44.05      4939.1 ppb          44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L        81.91      5126.5 ppb          81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L        2.081      512.46 ppb          2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L        1.419      507.72 ppb          1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L        66.05      9820.7 ppb          66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L        1.302      503.63 ppb          1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L        10.07      2478.2 ppb          10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L        0.126      512.95 ppb          0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L         2.77      1003.1 ppb           2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L        3.500      515.53 ppb          3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L        2.058      527.42 ppb          2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L         9.97      2519.4 ppb           9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L        1.147      506.74 ppb          1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L        3.343      499.14 ppb          3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L        2.319      508.04 ppb          2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L        1.578      508.52 ppb          1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L        2.387      493.42 ppb          2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L        2.377      512.95 ppb          2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L        1.824      506.84 ppb          1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L        37.27      5379.2 ppb          37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120 ug/L	2.5120 ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279 ug/L	-1.9279 ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495 ug/L	-0.1495 ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770 ug/L	1.6770 ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989 ug/L	-2.4989 ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415 ug/L	1.7415 ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240 ug/L	2.0240 ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840 ug/L	0.0840 ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260 ug/L	-1.7260 ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950 ug/L	0.4950 ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658 ug/L	0.1658 ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793 ug/L	0.3793 ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045 ug/L	1.4045 ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9 %		15:58:24
3	Y RADIAL	5536.8	5536.8	98.05 %		15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014 ug/L	-2.7014 ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137 ug/L	10.137 ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928 ug/L	-19.928 ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858 ug/L	37.858 ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734 ug/L	69.734 ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211 ug/L	45.211 ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220 ug/L	-0.2220 ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773 %		15:59:52
3	Y 371.029	882258.7	882258.7	99.750 %		15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838 ug/L	-0.2838 ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697 ug/L	0.9697 ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790 ug/L	1.1790 ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208 ug/L	0.0208 ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339 ug/L	0.0339 ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026 ug/L	0.1026 ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501 ug/L	-0.2501 ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010 ug/L	0.1010 ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474 ug/L	0.1474 ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012 ug/L	0.0012 ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361 ug/L	0.1361 ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230 ug/L	0.2230 ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402 ug/L	3.5402 ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038 ug/L	1.3038 ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872 ug/L	-2.2872 ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858 ug/L	5.1858 ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930 ug/L	-1.6930 ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103 ug/L	1.3103 ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187 ug/L	1.9187 ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536 ug/L	0.0536 ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928 ug/L	-0.6928 ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296 ug/L	1.2296 ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732 ug/L	-0.2732 ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459 ug/L	0.3459 ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862 ug/L	3.4862 ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -20.252 ug/L       10.1579     -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0001 ug/L       0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1199 ug/L       0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7      0.1902 ug/L       0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      4.1321 ug/L       1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4     -0.1226 ug/L       1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0     -0.0008 ug/L       2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      2.4728 ug/L       2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1     -2.3223 ug/L       0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0      1.3081 ug/L       0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.3975 ug/L       0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5     -0.0971 ug/L       0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5      0.0132 ug/L       0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -0.5672 ug/L       1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9      0.7761 ug/L       0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4     -0.0073 ug/L       0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0      0.3381 ug/L       0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6      2.8325 ug/L       1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 29
Sample ID: 1201978326|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 16:02:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978326|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4932.6	4932.6	100	%			16:04:35
1	Y RADIAL	5701.0	5701.0	101.0	%			16:04:35
1	Al 396.153Radial†	-28.2	15.7	10.406	ug/L	10.406	ppb	16:04:35
1	Ca 317.933Radial†	22.5	4.6	8.0674	ug/L	8.0674	ppb	16:04:55
1	Fe 238.204 Radial†	10.8	-0.3	-3.4536	ug/L	-3.4536	ppb	16:04:55
1	K 766.490 Radial†	2630.1	48.4	8.8026	ug/L	8.8026	ppb	16:04:35
1	Mg 279.077 IEC†	3.4	0.9	39.158	ug/L	39.158	ppb	16:04:55
1	Na 589.592 Radial†	-1152.5	132.8	37.244	ug/L	37.244	ppb	16:04:35
1	Sr 421.552†	4.1	11.5	0.0602	ug/L	0.0602	ppb	16:04:35
1	Sc 361.383	1047796.0	1047796.0	100.80	%			16:05:52
1	Y 371.029	890128.2	890128.2	100.64	%			16:05:52
1	Ag 328.068†	470.6	-7.2	-0.0322	ug/L	-0.0322	ppb	16:05:57
1	As 188.979†	-45.4	-8.4	-2.6125	ug/L	-2.6125	ppb	16:06:17
1	B 249.677†	-465.2	4.6	0.0868	ug/L	0.0868	ppb	16:06:17
1	Ba 233.527†	33.4	33.2	0.2130	ug/L	0.2130	ppb	16:06:17
1	Be 313.107†	-4907.8	5.1	0.0022	ug/L	0.0022	ppb	16:05:57
1	Cd 226.502†	-245.2	-7.6	-0.0657	ug/L	-0.0657	ppb	16:06:17
1	Co 228.616†	-85.7	1.3	0.0199	ug/L	0.0199	ppb	16:06:17
1	Cr 267.716†	99.7	11.1	0.0987	ug/L	0.0987	ppb	16:06:17
1	Cu 324.752†	9071.5	62.0	0.1655	ug/L	0.1655	ppb	16:05:57
1	Mn 257.610†	701.4	119.2	0.1118	ug/L	0.1118	ppb	16:06:17
1	Mo 202.031†	24.4	-5.0	-0.2655	ug/L	-0.2655	ppb	16:06:17
1	Ni 231.604†	152.3	19.2	0.3755	ug/L	0.3755	ppb	16:06:17
1	P 214.914†	287.8	20.4	9.1377	ug/L	9.1377	ppb	16:06:17
1	Pb 220.353†	-83.3	-7.0	-0.6596	ug/L	-0.6596	ppb	16:06:17
1	S 181.975 Axial†	54.2	-6.4	-6.8784	ug/L	-6.8784	ppb	16:06:17
1	Sb 206.836†	50.2	15.2	4.0336	ug/L	4.0336	ppb	16:06:17
1	Se 196.026†	-19.6	1.9	0.8388	ug/L	0.8388	ppb	16:06:17
1	Si 251.611†	842.9	278.6	7.0704	ug/L	7.0704	ppb	16:06:17
1	Sn 189.927†	11.3	15.5	2.0556	ug/L	2.0556	ppb	16:06:17
1	Ti 334.940†	-1063.2	205.7	0.2829	ug/L	0.2829	ppb	16:05:57
1	Tl 190.801†	-47.9	-3.2	-0.7814	ug/L	-0.7814	ppb	16:06:17
1	U 409.014†	-2690.0	105.4	2.7241	ug/L	2.7241	ppb	16:05:52
1	V 292.402†	-1632.0	-10.5	-0.0575	ug/L	-0.0575	ppb	16:05:57
1	Zn 213.857†	1197.6	302.5	2.2192	ug/L	2.2192	ppb	16:06:17
1	SiO2†	871.6	265.6	14.426	ug/L	14.426	ppb	16:07:23
2	Sc Radial	4922.9	4922.9	100	%			16:05:00
2	Y RADIAL	5665.1	5665.1	100.3	%			16:05:00
2	Al 396.153Radial†	-44.3	-0.4	-0.2733	ug/L	-0.2733	ppb	16:05:00
2	Ca 317.933Radial†	19.5	1.6	2.8673	ug/L	2.8673	ppb	16:05:20
2	Fe 238.204 Radial†	10.8	-0.2	-2.4500	ug/L	-2.4500	ppb	16:05:20
2	K 766.490 Radial†	2568.4	-7.9	-1.4645	ug/L	-1.4645	ppb	16:05:00
2	Mg 279.077 IEC†	3.0	0.5	23.514	ug/L	23.514	ppb	16:05:20
2	Na 589.592 Radial†	-1173.1	110.0	30.847	ug/L	30.847	ppb	16:05:00
2	Sr 421.552†	-1.2	6.2	0.0326	ug/L	0.0326	ppb	16:05:00
2	Sc 361.383	1045732.5	1045732.5	100.60	%			16:06:22
2	Y 371.029	888127.7	888127.7	100.41	%			16:06:22
2	Ag 328.068†	411.6	-64.9	-0.2604	ug/L	-0.2604	ppb	16:06:27
2	As 188.979†	-33.8	3.0	0.9431	ug/L	0.9431	ppb	16:06:47
2	B 249.677†	-464.8	4.1	0.0771	ug/L	0.0771	ppb	16:06:47
2	Ba 233.527†	9.7	9.7	0.0619	ug/L	0.0619	ppb	16:06:47
2	Be 313.107†	-4970.4	-66.8	-0.0202	ug/L	-0.0202	ppb	16:06:27
2	Cd 226.502†	-238.1	-1.0	-0.0083	ug/L	-0.0083	ppb	16:06:47
2	Co 228.616†	-82.8	4.0	0.0642	ug/L	0.0642	ppb	16:06:47
2	Cr 267.716†	150.6	61.9	0.5551	ug/L	0.5551	ppb	16:06:47
2	Cu 324.752†	9047.6	56.1	0.1496	ug/L	0.1496	ppb	16:06:27
2	Mn 257.610†	695.9	115.1	0.1083	ug/L	0.1083	ppb	16:06:47
2	Mo 202.031†	22.4	-7.0	-0.3715	ug/L	-0.3715	ppb	16:06:47
2	Ni 231.604†	141.5	8.8	0.1717	ug/L	0.1717	ppb	16:06:47

2	P 214.914†	298.8	31.9	14.259	ug/L	14.259	ppb	16:06:47
2	Pb 220.353†	-91.7	-15.5	-1.4603	ug/L	-1.4603	ppb	16:06:47
2	S 181.975 Axial†	56.1	-4.4	-4.7179	ug/L	-4.7179	ppb	16:06:47
2	Sb 206.836†	62.0	27.0	7.1139	ug/L	7.1139	ppb	16:06:47
2	Se 196.026†	-25.3	-3.7	-1.6687	ug/L	-1.6687	ppb	16:06:47
2	Si 251.611†	833.7	271.1	6.8868	ug/L	6.8868	ppb	16:06:47
2	Sn 189.927†	9.2	13.5	1.7797	ug/L	1.7797	ppb	16:06:47
2	Ti 334.940†	-1036.3	230.3	0.3164	ug/L	0.3164	ppb	16:06:27
2	Tl 190.801†	-48.5	-4.0	-0.9635	ug/L	-0.9635	ppb	16:06:47
2	U 409.014†	-2683.6	106.4	2.7500	ug/L	2.7500	ppb	16:06:22
2	V 292.402†	-1620.0	-1.8	-0.0100	ug/L	-0.0100	ppb	16:06:27
2	Zn 213.857†	1174.4	281.8	2.0687	ug/L	2.0687	ppb	16:06:47
2	SiO2†	829.9	225.9	12.283	ug/L	12.283	ppb	16:07:28
3	Sc Radial	4880.5	4880.5	99.4	%			16:05:25
3	Y RADIAL	5628.3	5628.3	99.67	%			16:05:25
3	Al 396.153Radial†	-54.2	-10.8	-7.0720	ug/L	-7.0720	ppb	16:05:25
3	Ca 317.933Radial†	25.5	7.8	13.789	ug/L	13.789	ppb	16:05:45
3	Fe 238.204 Radial†	11.9	0.9	11.439	ug/L	11.439	ppb	16:05:45
3	K 766.490 Radial†	2528.4	-26.0	-4.7596	ug/L	-4.7596	ppb	16:05:25
3	Mg 279.077 IEC†	3.8	1.3	58.615	ug/L	58.615	ppb	16:05:45
3	Na 589.592 Radial†	-1099.0	174.4	48.923	ug/L	48.923	ppb	16:05:25
3	Sr 421.552†	-12.5	-5.2	-0.0274	ug/L	-0.0274	ppb	16:05:25
3	Sc 361.383	1052110.0	1052110.0	101.21	%			16:06:53
3	Y 371.029	894573.2	894573.2	101.14	%			16:06:53
3	Ag 328.068†	477.4	-2.4	-0.0078	ug/L	-0.0078	ppb	16:06:58
3	As 188.979†	-40.0	-2.9	-0.9061	ug/L	-0.9061	ppb	16:07:18
3	B 249.677†	-462.1	9.5	0.1785	ug/L	0.1785	ppb	16:07:18
3	Ba 233.527†	19.2	19.0	0.1226	ug/L	0.1226	ppb	16:07:18
3	Be 313.107†	-4864.4	67.9	0.0218	ug/L	0.0218	ppb	16:06:58
3	Cd 226.502†	-235.8	2.6	0.0219	ug/L	0.0219	ppb	16:07:18
3	Co 228.616†	-84.9	2.4	0.0368	ug/L	0.0368	ppb	16:07:18
3	Cr 267.716†	131.5	42.1	0.3779	ug/L	0.3779	ppb	16:07:18
3	Cu 324.752†	9038.5	-7.4	-0.0193	ug/L	-0.0193	ppb	16:06:58
3	Mn 257.610†	703.9	118.8	0.1125	ug/L	0.1125	ppb	16:07:18
3	Mo 202.031†	15.2	-14.2	-0.7520	ug/L	-0.7520	ppb	16:07:18
3	Ni 231.604†	134.1	0.6	0.0112	ug/L	0.0112	ppb	16:07:18
3	P 214.914†	282.0	13.5	6.0665	ug/L	6.0665	ppb	16:07:18
3	Pb 220.353†	-81.6	-5.1	-0.4804	ug/L	-0.4804	ppb	16:07:18
3	S 181.975 Axial†	62.9	2.1	2.2393	ug/L	2.2393	ppb	16:07:18
3	Sb 206.836†	61.1	25.7	6.8028	ug/L	6.8028	ppb	16:07:18
3	Se 196.026†	-16.2	5.4	2.4187	ug/L	2.4187	ppb	16:07:18
3	Si 251.611†	849.1	281.3	7.1499	ug/L	7.1499	ppb	16:07:18
3	Sn 189.927†	16.7	20.8	2.7541	ug/L	2.7541	ppb	16:07:18
3	Ti 334.940†	-1053.5	219.6	0.3025	ug/L	0.3025	ppb	16:06:58
3	Tl 190.801†	-36.3	8.4	2.0381	ug/L	2.0381	ppb	16:07:18
3	U 409.014†	-2722.0	84.7	2.1866	ug/L	2.1866	ppb	16:06:53
3	V 292.402†	-1627.7	0.3	-0.0055	ug/L	-0.0055	ppb	16:06:58
3	Zn 213.857†	1207.3	307.2	2.2544	ug/L	2.2544	ppb	16:07:18
3	SiO2†	828.4	219.4	11.939	ug/L	11.939	ppb	16:07:33

Mean Data: 1201978326|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048546.1	100.87	%	0.313				0.31%
Sc Radial	4912.0	100	%	0.6				0.56%
Y 371.029	890943.0	100.73	%	0.373				0.37%
Y RADIAL	5664.8	100.3	%	0.64				0.64%
Ag 328.068†	-24.8	-0.1001	ug/L	0.13934	-0.1001	ppb	0.13934	139.15%
Al 396.153Radial†	1.5	1.0203	ug/L	8.81059	1.0203	ppb	8.81059	863.51%
As 188.979†	-2.8	-0.8585	ug/L	1.77824	-0.8585	ppb	1.77824	207.13%
B 249.677†	6.1	0.1141	ug/L	0.05597	0.1141	ppb	0.05597	49.05%
Ba 233.527†	20.6	0.1325	ug/L	0.07601	0.1325	ppb	0.07601	57.37%
Be 313.107†	2.1	0.0012	ug/L	0.02100	0.0012	ppb	0.02100	>999.9%
Ca 317.933Radial†	4.7	8.2412	ug/L	5.46291	8.2412	ppb	5.46291	66.29%
Cd 226.502†	-2.0	-0.0174	ug/L	0.04451	-0.0174	ppb	0.04451	256.23%
Co 228.616†	2.6	0.0403	ug/L	0.02233	0.0403	ppb	0.02233	55.42%
Cr 267.716†	38.4	0.3439	ug/L	0.23006	0.3439	ppb	0.23006	66.90%
Cu 324.752†	36.9	0.0986	ug/L	0.10239	0.0986	ppb	0.10239	103.84%
Fe 238.204 Radial†	0.2	1.8453	ug/L	8.32389	1.8453	ppb	8.32389	451.10%
K 766.490 Radial†	4.8	0.8595	ug/L	7.07346	0.8595	ppb	7.07346	822.99%

Mg 279.077 IEC†	0.9	40.429	ug/L	17.5850	40.429	ppb	17.5850	43.50%
Mn 257.610†	117.7	0.1109	ug/L	0.00225	0.1109	ppb	0.00225	2.03%
Mo 202.031†	-8.7	-0.4630	ug/L	0.25584	-0.4630	ppb	0.25584	55.26%
Na 589.592 Radial†	139.1	39.005	ug/L	9.1656	39.005	ppb	9.1656	23.50%
Ni 231.604†	9.5	0.1861	ug/L	0.18257	0.1861	ppb	0.18257	98.11%
P 214.914†	21.9	9.8210	ug/L	4.13868	9.8210	ppb	4.13868	42.14%
Pb 220.353†	-9.2	-0.8668	ug/L	0.52173	-0.8668	ppb	0.52173	60.19%
S 181.975 Axial†	-2.9	-3.1190	ug/L	4.76449	-3.1190	ppb	4.76449	152.76%
Sb 206.836†	22.6	5.9834	ug/L	1.69577	5.9834	ppb	1.69577	28.34%
Se 196.026†	1.2	0.5296	ug/L	2.06114	0.5296	ppb	2.06114	389.18%
Si 251.611†	277.0	7.0357	ug/L	0.13492	7.0357	ppb	0.13492	1.92%
Sn 189.927†	16.6	2.1965	ug/L	0.50223	2.1965	ppb	0.50223	22.87%
Sr 421.552†	4.2	0.0218	ug/L	0.04480	0.0218	ppb	0.04480	205.23%
Ti 334.940†	218.5	0.3006	ug/L	0.01686	0.3006	ppb	0.01686	5.61%
Tl 190.801†	0.4	0.0977	ug/L	1.68287	0.0977	ppb	1.68287	>999.9%
U 409.014†	98.8	2.5536	ug/L	0.31806	2.5536	ppb	0.31806	12.46%
V 292.402†	-4.0	-0.0243	ug/L	0.02883	-0.0243	ppb	0.02883	118.46%
Zn 213.857†	297.2	2.1808	ug/L	0.09862	2.1808	ppb	0.09862	4.52%
SiO2†	237.0	12.883	ug/L	1.3476	12.883	ppb	1.3476	10.46%

Sequence No.: 30
Sample ID: 1201978327|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 12/4/2009 16:09:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978327|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4958.9	4958.9	101	%			16:11:38
1	Y RADIAL	5669.9	5669.9	100.4	%			16:11:38
1	Al 396.153Radial†	8113.0	8076.3	5311.1	ug/L	5311.1	ppb	16:11:38
1	Ca 317.933Radial†	3022.8	2975.0	5267.3	ug/L	5267.3	ppb	16:11:58
1	Fe 238.204 Radial†	449.9	434.4	5267.9	ug/L	5267.9	ppb	16:11:58
1	K 766.490 Radial†	31238.0	28358.5	5161.7	ug/L	5161.7	ppb	16:11:38
1	Mg 279.077 IEC†	123.0	119.3	5343.4	ug/L	5343.4	ppb	16:11:58
1	Na 589.592 Radial†	17471.8	18578.4	5211.2	ug/L	5211.2	ppb	16:11:38
1	Sr 421.552†	101178.1	100181.7	525.55	ug/L	525.55	ppb	16:11:38
1	Sc 361.383	1050652.2	1050652.2	101.07	%			16:12:57
1	Y 371.029	879674.3	879674.3	99.458	%			16:12:57
1	Ag 328.068†	132265.3	130385.2	520.02	ug/L	520.02	ppb	16:12:57
1	As 188.979†	1620.6	1640.0	515.61	ug/L	515.61	ppb	16:13:17
1	B 249.677†	27101.4	27279.4	513.56	ug/L	513.56	ppb	16:12:57
1	Ba 233.527†	84009.8	83116.8	535.34	ug/L	535.34	ppb	16:12:57
1	Be 313.107†	1679850.3	1666866.9	520.75	ug/L	520.75	ppb	16:12:57
1	Cd 226.502†	59978.0	59576.1	519.36	ug/L	519.36	ppb	16:12:57
1	Co 228.616†	31004.2	30760.9	506.83	ug/L	506.83	ppb	16:13:17
1	Cr 267.716†	58436.2	57727.2	519.46	ug/L	519.46	ppb	16:12:57
1	Cu 324.752†	209196.2	198034.9	529.12	ug/L	529.12	ppb	16:12:57
1	Mn 257.610†	566653.9	560053.5	530.77	ug/L	530.77	ppb	16:12:57
1	Mo 202.031†	9717.9	9585.4	509.04	ug/L	509.04	ppb	16:13:17
1	Ni 231.604†	26636.3	26221.2	513.44	ug/L	513.44	ppb	16:13:17
1	P 214.914†	1593.6	1311.6	506.78	ug/L	506.78	ppb	16:13:17
1	Pb 220.353†	5528.1	5544.9	522.11	ug/L	522.11	ppb	16:13:17
1	S 181.975 Axial†	4891.6	4779.5	5148.4	ug/L	5148.4	ppb	16:13:17
1	Sb 206.836†	2085.9	2029.1	542.45	ug/L	542.45	ppb	16:13:17
1	Se 196.026†	1103.9	1113.6	513.95	ug/L	513.95	ppb	16:13:17
1	Si 251.611†	206012.2	203264.6	5150.0	ug/L	5150.0	ppb	16:12:57
1	Sn 189.927†	4058.0	4019.2	532.19	ug/L	532.19	ppb	16:13:17
1	Ti 334.940†	383578.9	380761.7	525.03	ug/L	525.03	ppb	16:12:57
1	Tl 190.801†	2102.4	2124.3	517.21	ug/L	517.21	ppb	16:13:17
1	U 409.014†	18070.3	20652.2	532.28	ug/L	532.28	ppb	16:12:57
1	V 292.402†	90867.9	91510.5	530.71	ug/L	530.71	ppb	16:12:57
1	Zn 213.857†	71715.8	70067.8	510.28	ug/L	510.28	ppb	16:12:57
1	SiO2†	206309.8	203517.6	11035	ug/L	11035	ppb	16:14:18
2	Sc Radial	4963.2	4963.2	101	%			16:12:03
2	Y RADIAL	5655.3	5655.3	100.1	%			16:12:03
2	Al 396.153Radial†	8080.8	8037.5	5285.3	ug/L	5285.3	ppb	16:12:03
2	Ca 317.933Radial†	2994.5	2944.4	5213.1	ug/L	5213.1	ppb	16:12:23
2	Fe 238.204 Radial†	447.3	431.5	5232.9	ug/L	5232.9	ppb	16:12:23
2	K 766.490 Radial†	30944.8	28041.7	5104.0	ug/L	5104.0	ppb	16:12:03
2	Mg 279.077 IEC†	119.6	115.8	5189.1	ug/L	5189.1	ppb	16:12:23
2	Na 589.592 Radial†	17434.6	18526.6	5196.7	ug/L	5196.7	ppb	16:12:03
2	Sr 421.552†	100365.2	99290.5	520.87	ug/L	520.87	ppb	16:12:03
2	Sc 361.383	1045640.0	1045640.0	100.59	%			16:13:24
2	Y 371.029	876102.0	876102.0	99.054	%			16:13:24
2	Ag 328.068†	131586.0	130337.2	519.82	ug/L	519.82	ppb	16:13:24
2	As 188.979†	1635.5	1662.5	522.59	ug/L	522.59	ppb	16:13:45
2	B 249.677†	26997.6	27304.7	514.03	ug/L	514.03	ppb	16:13:24
2	Ba 233.527†	83542.1	83050.2	534.91	ug/L	534.91	ppb	16:13:24
2	Be 313.107†	1672613.6	1667639.4	520.99	ug/L	520.99	ppb	16:13:24
2	Cd 226.502†	59555.6	59440.5	518.18	ug/L	518.18	ppb	16:13:24
2	Co 228.616†	31088.2	30991.5	510.64	ug/L	510.64	ppb	16:13:45
2	Cr 267.716†	58139.2	57709.1	519.30	ug/L	519.30	ppb	16:13:24
2	Cu 324.752†	208437.3	198272.5	529.76	ug/L	529.76	ppb	16:13:24
2	Mn 257.610†	563467.5	559573.2	530.31	ug/L	530.31	ppb	16:13:24
2	Mo 202.031†	9765.4	9678.6	513.99	ug/L	513.99	ppb	16:13:45
2	Ni 231.604†	26665.8	26376.8	516.49	ug/L	516.49	ppb	16:13:45

2	P 214.914†	1603.2	1328.6	514.37 ug/L	514.37 ppb	16:13:45
2	Pb 220.353†	5546.0	5588.9	526.25 ug/L	526.25 ppb	16:13:45
2	S 181.975 Axial†	4888.7	4799.8	5170.3 ug/L	5170.3 ppb	16:13:45
2	Sb 206.836†	2089.5	2042.5	546.17 ug/L	546.17 ppb	16:13:45
2	Se 196.026†	1106.1	1121.0	517.11 ug/L	517.11 ppb	16:13:45
2	Si 251.611†	205001.7	203237.0	5149.2 ug/L	5149.2 ppb	16:13:24
2	Sn 189.927†	4063.4	4043.8	535.45 ug/L	535.45 ppb	16:13:45
2	Ti 334.940†	381741.4	380754.2	525.02 ug/L	525.02 ppb	16:13:24
2	Tl 190.801†	2126.4	2158.1	525.37 ug/L	525.37 ppb	16:13:45
2	U 409.014†	17926.3	20594.7	530.80 ug/L	530.80 ppb	16:13:24
2	V 292.402†	90378.3	91454.7	530.46 ug/L	530.46 ppb	16:13:24
2	Zn 213.857†	71330.6	70025.1	509.95 ug/L	509.95 ppb	16:13:24
2	SiO2†	206080.2	204267.8	11075 ug/L	11075 ppb	16:14:23
3	Sc Radial	4914.8	4914.8	100 %		16:12:28
3	Y RADIAL	5625.1	5625.1	99.61 %		16:12:28
3	Al 396.153Radial†	8063.4	8098.9	5325.8 ug/L	5325.8 ppb	16:12:28
3	Ca 317.933Radial†	3041.7	3020.7	5348.3 ug/L	5348.3 ppb	16:12:48
3	Fe 238.204 Radial†	452.2	440.8	5345.2 ug/L	5345.2 ppb	16:12:48
3	K 766.490 Radial†	30932.4	28331.0	5156.8 ug/L	5156.8 ppb	16:12:28
3	Mg 279.077 IEC†	122.5	119.9	5370.1 ug/L	5370.1 ppb	16:12:48
3	Na 589.592 Radial†	17300.1	18562.2	5206.7 ug/L	5206.7 ppb	16:12:28
3	Sr 421.552†	99856.3	99760.7	523.34 ug/L	523.34 ppb	16:12:28
3	Sc 361.383	1051624.1	1051624.1	101.17 %		16:13:52
3	Y 371.029	882020.4	882020.4	99.723 %		16:13:52
3	Ag 328.068†	132258.1	130257.2	519.54 ug/L	519.54 ppb	16:13:52
3	As 188.979†	1636.9	1654.6	520.16 ug/L	520.16 ppb	16:14:12
3	B 249.677†	27226.7	27378.4	515.40 ug/L	515.40 ppb	16:13:52
3	Ba 233.527†	84017.1	83047.2	534.89 ug/L	534.89 ppb	16:13:52
3	Be 313.107†	1682549.8	1667999.2	521.10 ug/L	521.10 ppb	16:13:52
3	Cd 226.502†	59890.8	59435.0	518.12 ug/L	518.12 ppb	16:13:52
3	Co 228.616†	31439.2	31162.6	513.46 ug/L	513.46 ppb	16:14:12
3	Cr 267.716†	58446.0	57683.5	519.07 ug/L	519.07 ppb	16:13:52
3	Cu 324.752†	209521.8	198165.4	529.48 ug/L	529.48 ppb	16:13:52
3	Mn 257.610†	565740.6	558632.6	529.43 ug/L	529.43 ppb	16:13:52
3	Mo 202.031†	9864.9	9721.8	516.29 ug/L	516.29 ppb	16:14:12
3	Ni 231.604†	26968.8	26525.5	519.40 ug/L	519.40 ppb	16:14:12
3	P 214.914†	1624.7	1340.8	519.84 ug/L	519.84 ppb	16:14:12
3	Pb 220.353†	5608.9	5619.7	529.15 ug/L	529.15 ppb	16:14:12
3	S 181.975 Axial†	4949.8	4832.6	5205.5 ug/L	5205.5 ppb	16:14:12
3	Sb 206.836†	2101.2	2042.3	546.21 ug/L	546.21 ppb	16:14:12
3	Se 196.026†	1130.6	1138.9	525.48 ug/L	525.48 ppb	16:14:12
3	Si 251.611†	205851.2	202917.1	5141.0 ug/L	5141.0 ppb	16:13:52
3	Sn 189.927†	4109.2	4066.1	538.41 ug/L	538.41 ppb	16:14:12
3	Ti 334.940†	383544.0	380376.6	524.50 ug/L	524.50 ppb	16:13:52
3	Tl 190.801†	2140.4	2160.0	525.79 ug/L	525.79 ppb	16:14:12
3	U 409.014†	18073.3	20638.6	531.92 ug/L	531.92 ppb	16:13:52
3	V 292.402†	90832.3	91392.2	530.13 ug/L	530.13 ppb	16:13:52
3	Zn 213.857†	71564.1	69852.3	508.65 ug/L	508.65 ppb	16:13:52
3	SiO2†	206714.7	203729.2	11046 ug/L	11046 ppb	16:14:28

Mean Data: 1201978327|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049305.4	100.94	%	0.309				0.31%
Sc Radial	4945.6	101	%	0.5				0.54%
Y 371.029	879265.6	99.412	%	0.3370				0.34%
Y RADIAL	5650.1	100.1	%	0.40				0.40%
Ag 328.068†	130326.5	519.80	ug/L	0.245	519.80	ppb	0.245	0.05%
Al 396.153Radial†	8070.9	5307.4	ug/L	20.48	5307.4	ppb	20.48	0.39%
As 188.979†	1652.4	519.45	ug/L	3.545	519.45	ppb	3.545	0.68%
B 249.677†	27320.8	514.33	ug/L	0.958	514.33	ppb	0.958	0.19%
Ba 233.527†	83071.4	535.04	ug/L	0.253	535.04	ppb	0.253	0.05%
Be 313.107†	1667501.8	520.95	ug/L	0.180	520.95	ppb	0.180	0.03%
Ca 317.933Radial†	2980.0	5276.3	ug/L	68.03	5276.3	ppb	68.03	1.29%
Cd 226.502†	59483.9	518.55	ug/L	0.696	518.55	ppb	0.696	0.13%
Co 228.616†	30971.7	510.31	ug/L	3.329	510.31	ppb	3.329	0.65%
Cr 267.716†	57706.6	519.28	ug/L	0.197	519.28	ppb	0.197	0.04%
Cu 324.752†	198157.6	529.45	ug/L	0.317	529.45	ppb	0.317	0.06%
Fe 238.204 Radial†	435.6	5282.0	ug/L	57.45	5282.0	ppb	57.45	1.09%
K 766.490 Radial†	28243.7	5140.9	ug/L	31.98	5140.9	ppb	31.98	0.62%

Mg 279.077 IEC†	118.3	5300.9 ug/L	97.74	5300.9 ppb	97.74	1.84%
Mn 257.610†	559419.8	530.17 ug/L	0.680	530.17 ppb	0.680	0.13%
Mo 202.031†	9661.9	513.11 ug/L	3.701	513.11 ppb	3.701	0.72%
Na 589.592 Radial†	18555.8	5204.9 ug/L	7.43	5204.9 ppb	7.43	0.14%
Ni 231.604†	26374.5	516.45 ug/L	2.979	516.45 ppb	2.979	0.58%
P 214.914†	1327.0	513.66 ug/L	6.563	513.66 ppb	6.563	1.28%
Pb 220.353†	5584.5	525.83 ug/L	3.537	525.83 ppb	3.537	0.67%
S 181.975 Axial†	4804.0	5174.7 ug/L	28.85	5174.7 ppb	28.85	0.56%
Sb 206.836†	2038.0	544.94 ug/L	2.158	544.94 ppb	2.158	0.40%
Se 196.026†	1124.5	518.85 ug/L	5.955	518.85 ppb	5.955	1.15%
Si 251.611†	203139.6	5146.7 ug/L	4.97	5146.7 ppb	4.97	0.10%
Sn 189.927†	4043.0	535.35 ug/L	3.108	535.35 ppb	3.108	0.58%
Sr 421.552†	99744.3	523.25 ug/L	2.339	523.25 ppb	2.339	0.45%
Ti 334.940†	380630.8	524.85 ug/L	0.301	524.85 ppb	0.301	0.06%
Tl 190.801†	2147.5	522.79 ug/L	4.838	522.79 ppb	4.838	0.93%
U 409.014†	20628.5	531.67 ug/L	0.773	531.67 ppb	0.773	0.15%
V 292.402†	91452.4	530.43 ug/L	0.294	530.43 ppb	0.294	0.06%
Zn 213.857†	69981.7	509.63 ug/L	0.863	509.63 ppb	0.863	0.17%
SiO2†	203838.2	11052 ug/L	21.0	11052 ppb	21.0	0.19%

Sequence No.: 31
Sample ID: 241325001|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 12/4/2009 16:16:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241325001|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4889.7	4889.7	99.6	%			16:18:31
1	Y RADIAL	5629.6	5629.6	99.69	%			16:18:31
1	Al 396.153Radial†	-1.5	42.3	27.897	ug/L	27.897	ppb	16:18:31
1	Ca 317.933Radial†	29.5	11.8	20.913	ug/L	20.913	ppb	16:18:51
1	Fe 238.204 Radial†	9.4	-1.5	-18.336	ug/L	-18.336	ppb	16:18:51
1	K 766.490 Radial†	2518.3	-40.9	-7.4917	ug/L	-7.4917	ppb	16:18:31
1	Mg 279.077 IEC†	5.4	3.0	132.37	ug/L	132.37	ppb	16:18:51
1	Na 589.592 Radial†	-1039.7	236.0	66.194	ug/L	66.194	ppb	16:18:31
1	Sr 421.552†	20.2	27.7	0.1450	ug/L	0.1450	ppb	16:18:31
1	Sc 361.383	1053367.2	1053367.2	101.34	%			16:19:47
1	Y 371.029	892139.9	892139.9	100.87	%			16:19:47
1	Ag 328.068†	395.7	-83.6	-0.3416	ug/L	-0.3416	ppb	16:19:52
1	As 188.979†	-35.6	1.5	0.4707	ug/L	0.4707	ppb	16:20:12
1	B 249.677†	-369.5	101.5	1.9200	ug/L	1.9200	ppb	16:20:12
1	Ba 233.527†	19.5	19.3	0.1229	ug/L	0.1229	ppb	16:20:12
1	Be 313.107†	-4882.4	55.9	0.0179	ug/L	0.0179	ppb	16:19:52
1	Cd 226.502†	-244.8	-5.9	-0.0494	ug/L	-0.0494	ppb	16:20:12
1	Co 228.616†	-88.7	-1.3	-0.0200	ug/L	-0.0200	ppb	16:20:12
1	Cr 267.716†	118.5	29.1	0.2599	ug/L	0.2599	ppb	16:20:12
1	Cu 324.752†	9031.7	-24.9	-0.0674	ug/L	-0.0674	ppb	16:19:52
1	Mn 257.610†	732.1	145.8	0.1338	ug/L	0.1338	ppb	16:20:12
1	Mo 202.031†	37.0	7.3	0.3853	ug/L	0.3853	ppb	16:20:12
1	Ni 231.604†	139.1	5.4	0.1049	ug/L	0.1049	ppb	16:20:12
1	P 214.914†	289.4	20.4	9.2010	ug/L	9.2010	ppb	16:20:12
1	Pb 220.353†	-100.4	-23.5	-2.1978	ug/L	-2.1978	ppb	16:20:12
1	S 181.975 Axial†	57.4	-3.4	-3.7110	ug/L	-3.7110	ppb	16:20:12
1	Sb 206.836†	56.8	21.4	5.6717	ug/L	5.6717	ppb	16:20:12
1	Se 196.026†	-25.3	-3.6	-1.6609	ug/L	-1.6609	ppb	16:20:12
1	Si 251.611†	1172.6	599.5	15.216	ug/L	15.216	ppb	16:20:12
1	Sn 189.927†	8.5	12.8	1.6903	ug/L	1.6903	ppb	16:20:12
1	Ti 334.940†	-1108.9	166.1	0.2282	ug/L	0.2282	ppb	16:19:52
1	Tl 190.801†	-43.6	1.2	0.2958	ug/L	0.2958	ppb	16:20:12
1	U 409.014†	-2639.1	169.6	4.3871	ug/L	4.3871	ppb	16:19:47
1	V 292.402†	-1646.5	-16.3	-0.0737	ug/L	-0.0737	ppb	16:19:52
1	Zn 213.857†	2180.8	1266.5	9.3029	ug/L	9.3029	ppb	16:20:12
1	SiO2†	1232.9	617.6	33.544	ug/L	33.544	ppb	16:21:18
2	Sc Radial	4856.3	4856.3	98.9	%			16:18:56
2	Y RADIAL	5630.0	5630.0	99.70	%			16:18:56
2	Al 396.153Radial†	-37.0	6.4	4.2104	ug/L	4.2104	ppb	16:18:56
2	Ca 317.933Radial†	29.2	11.7	20.706	ug/L	20.706	ppb	16:19:16
2	Fe 238.204 Radial†	10.1	-0.8	-10.047	ug/L	-10.047	ppb	16:19:16
2	K 766.490 Radial†	2571.7	30.5	5.5295	ug/L	5.5295	ppb	16:18:56
2	Mg 279.077 IEC†	3.9	1.4	63.583	ug/L	63.583	ppb	16:19:16
2	Na 589.592 Radial†	-1098.1	169.8	47.628	ug/L	47.628	ppb	16:18:56
2	Sr 421.552†	3.0	10.4	0.0545	ug/L	0.0545	ppb	16:18:56
2	Sc 361.383	1061457.8	1061457.8	102.11	%			16:20:18
2	Y 371.029	900092.9	900092.9	101.77	%			16:20:18
2	Ag 328.068†	401.3	-81.1	-0.3247	ug/L	-0.3247	ppb	16:20:23
2	As 188.979†	-39.0	-1.6	-0.4930	ug/L	-0.4930	ppb	16:20:43
2	B 249.677†	-424.7	50.2	0.9493	ug/L	0.9493	ppb	16:20:43
2	Ba 233.527†	14.6	14.4	0.0926	ug/L	0.0926	ppb	16:20:43
2	Be 313.107†	-4878.7	96.3	0.0307	ug/L	0.0307	ppb	16:20:23
2	Cd 226.502†	-230.8	9.6	0.0850	ug/L	0.0850	ppb	16:20:43
2	Co 228.616†	-77.5	10.4	0.1720	ug/L	0.1720	ppb	16:20:43
2	Cr 267.716†	109.3	19.3	0.1733	ug/L	0.1733	ppb	16:20:43
2	Cu 324.752†	9073.2	-52.2	-0.1398	ug/L	-0.1398	ppb	16:20:23
2	Mn 257.610†	735.6	143.7	0.1339	ug/L	0.1339	ppb	16:20:43
2	Mo 202.031†	41.3	11.2	0.5936	ug/L	0.5936	ppb	16:20:43
2	Ni 231.604†	141.3	6.4	0.1259	ug/L	0.1259	ppb	16:20:43

2	P 214.914†	278.1	7.2	3.2703	ug/L	3.2703 ppb	16:20:43
2	Pb 220.353†	-85.4	-8.0	-0.7500	ug/L	-0.7500 ppb	16:20:43
2	S 181.975 Axial†	58.9	-2.5	-2.6470	ug/L	-2.6470 ppb	16:20:43
2	Sb 206.836†	53.4	17.7	4.6991	ug/L	4.6991 ppb	16:20:43
2	Se 196.026†	-24.7	-2.8	-1.2660	ug/L	-1.2660 ppb	16:20:43
2	Si 251.611†	1145.0	563.7	14.297	ug/L	14.297 ppb	16:20:43
2	Sn 189.927†	10.3	14.4	1.9088	ug/L	1.9088 ppb	16:20:43
2	Ti 334.940†	-1046.4	235.7	0.3256	ug/L	0.3256 ppb	16:20:23
2	Tl 190.801†	-32.3	12.6	3.0573	ug/L	3.0573 ppb	16:20:43
2	U 409.014†	-2778.2	53.3	1.3788	ug/L	1.3788 ppb	16:20:18
2	V 292.402†	-1581.5	59.8	0.3559	ug/L	0.3559 ppb	16:20:23
2	Zn 213.857†	2149.5	1219.4	8.9585	ug/L	8.9585 ppb	16:20:43
2	SiO2†	1241.5	616.8	33.482	ug/L	33.482 ppb	16:21:23
3	Sc Radial	4890.6	4890.6	99.6	%		16:19:21
3	Y RADIAL	5628.6	5628.6	99.67	%		16:19:21
3	Al 396.153Radial†	-19.2	24.5	16.191	ug/L	16.191 ppb	16:19:21
3	Ca 317.933Radial†	35.9	18.2	32.279	ug/L	32.279 ppb	16:19:41
3	Fe 238.204 Radial†	12.2	1.3	15.539	ug/L	15.539 ppb	16:19:41
3	K 766.490 Radial†	2473.0	-86.9	-15.853	ug/L	-15.853 ppb	16:19:21
3	Mg 279.077 IEC†	-1.9	-4.4	-197.29	ug/L	-197.29 ppb	16:19:41
3	Na 589.592 Radial†	-1133.4	142.1	39.869	ug/L	39.869 ppb	16:19:21
3	Sr 421.552†	11.3	18.8	0.0982	ug/L	0.0982 ppb	16:19:21
3	Sc 361.383	1053587.2	1053587.2	101.36	%		16:20:48
3	Y 371.029	895076.6	895076.6	101.20	%		16:20:48
3	Ag 328.068†	502.0	21.2	0.0874	ug/L	0.0874 ppb	16:20:53
3	As 188.979†	-42.3	-5.1	-1.5819	ug/L	-1.5819 ppb	16:21:13
3	B 249.677†	-373.4	97.7	1.8434	ug/L	1.8434 ppb	16:21:13
3	Ba 233.527†	31.8	31.4	0.2040	ug/L	0.2040 ppb	16:21:13
3	Be 313.107†	-4881.6	57.7	0.0186	ug/L	0.0186 ppb	16:20:53
3	Cd 226.502†	-240.9	-2.0	-0.0191	ug/L	-0.0191 ppb	16:21:13
3	Co 228.616†	-86.0	1.4	0.0231	ug/L	0.0231 ppb	16:21:13
3	Cr 267.716†	116.8	27.4	0.2466	ug/L	0.2466 ppb	16:21:13
3	Cu 324.752†	9035.1	-23.3	-0.0615	ug/L	-0.0615 ppb	16:20:53
3	Mn 257.610†	734.3	147.8	0.1452	ug/L	0.1452 ppb	16:21:13
3	Mo 202.031†	33.5	3.8	0.2035	ug/L	0.2035 ppb	16:21:13
3	Ni 231.604†	121.7	-11.9	-0.2327	ug/L	-0.2327 ppb	16:21:13
3	P 214.914†	280.6	11.7	5.2342	ug/L	5.2342 ppb	16:21:13
3	Pb 220.353†	-67.6	8.9	0.8381	ug/L	0.8381 ppb	16:21:13
3	S 181.975 Axial†	65.2	4.3	4.5930	ug/L	4.5930 ppb	16:21:13
3	Sb 206.836†	48.9	13.6	3.5892	ug/L	3.5892 ppb	16:21:13
3	Se 196.026†	-32.3	-10.5	-4.6033	ug/L	-4.6033 ppb	16:21:13
3	Si 251.611†	1169.1	595.8	15.132	ug/L	15.132 ppb	16:21:13
3	Sn 189.927†	-2.8	1.6	0.2151	ug/L	0.2151 ppb	16:21:13
3	Ti 334.940†	-1037.2	237.2	0.3268	ug/L	0.3268 ppb	16:20:53
3	Tl 190.801†	-48.4	-3.5	-0.8340	ug/L	-0.8340 ppb	16:21:13
3	U 409.014†	-2638.8	170.5	4.4056	ug/L	4.4056 ppb	16:20:48
3	V 292.402†	-1512.0	116.8	0.6726	ug/L	0.6726 ppb	16:20:53
3	Zn 213.857†	2151.5	1237.1	9.0974	ug/L	9.0974 ppb	16:21:13
3	SiO2†	1214.7	599.4	32.580	ug/L	32.580 ppb	16:21:29

Mean Data: 241325001|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1056137.4	101.60	%	0.443				0.44%
Sc Radial	4878.9	99.4	%	0.40				0.40%
Y 371.029	895769.8	101.28	%	0.455				0.45%
Y RADIAL	5629.4	99.68	%	0.013				0.01%
Ag 328.068†	-47.8	-0.1930	ug/L	0.24295	-0.1930	ppb	0.24295	125.90%
Al 396.153Radial†	24.4	16.100	ug/L	11.8436	16.100	ppb	11.8436	73.56%
As 188.979†	-1.7	-0.5347	ug/L	1.02696	-0.5347	ppb	1.02696	192.06%
B 249.677†	83.1	1.5709	ug/L	0.53966	1.5709	ppb	0.53966	34.35%
Ba 233.527†	21.7	0.1398	ug/L	0.05759	0.1398	ppb	0.05759	41.19%
Be 313.107†	69.9	0.0224	ug/L	0.00717	0.0224	ppb	0.00717	32.02%
Ca 317.933Radial†	13.9	24.633	ug/L	6.6230	24.633	ppb	6.6230	26.89%
Cd 226.502†	0.6	0.0055	ug/L	0.07050	0.0055	ppb	0.07050	>999.9%
Co 228.616†	3.5	0.0584	ug/L	0.10073	0.0584	ppb	0.10073	172.61%
Cr 267.716†	25.3	0.2266	ug/L	0.04660	0.2266	ppb	0.04660	20.57%
Cu 324.752†	-33.5	-0.0896	ug/L	0.04360	-0.0896	ppb	0.04360	48.68%
Fe 238.204 Radial†	-0.4	-4.2814	ug/L	17.65838	-4.2814	ppb	17.65838	412.44%
K 766.490 Radial†	-32.5	-5.9384	ug/L	10.77557	-5.9384	ppb	10.77557	181.45%

Mg 279.077 IEC†	-0.0	-0.4462	ug/L	173.90852	-0.4462	ppb	173.90852	>999.9%
Mn 257.610†	145.8	0.1376	ug/L	0.00657	0.1376	ppb	0.00657	4.77%
Mo 202.031†	7.4	0.3941	ug/L	0.19521	0.3941	ppb	0.19521	49.53%
Na 589.592 Radial†	182.6	51.231	ug/L	13.5271	51.231	ppb	13.5271	26.40%
Ni 231.604†	-0.0	-0.0006	ug/L	0.20122	-0.0006	ppb	0.20122	>999.9%
P 214.914†	13.1	5.9018	ug/L	3.02119	5.9018	ppb	3.02119	51.19%
Pb 220.353†	-7.5	-0.7032	ug/L	1.51844	-0.7032	ppb	1.51844	215.92%
S 181.975 Axial†	-0.5	-0.5883	ug/L	4.51860	-0.5883	ppb	4.51860	768.05%
Sb 206.836†	17.6	4.6534	ug/L	1.04204	4.6534	ppb	1.04204	22.39%
Se 196.026†	-5.6	-2.5101	ug/L	1.82351	-2.5101	ppb	1.82351	72.65%
Si 251.611†	586.3	14.881	ug/L	0.5077	14.881	ppb	0.5077	3.41%
Sn 189.927†	9.6	1.2714	ug/L	0.92128	1.2714	ppb	0.92128	72.46%
Sr 421.552†	19.0	0.0992	ug/L	0.04524	0.0992	ppb	0.04524	45.60%
Ti 334.940†	213.0	0.2935	ug/L	0.05656	0.2935	ppb	0.05656	19.27%
Tl 190.801†	3.5	0.8397	ug/L	2.00184	0.8397	ppb	2.00184	238.41%
U 409.014†	131.1	3.3905	ug/L	1.74222	3.3905	ppb	1.74222	51.39%
V 292.402†	53.4	0.3183	ug/L	0.37459	0.3183	ppb	0.37459	117.69%
Zn 213.857†	1241.0	9.1196	ug/L	0.17327	9.1196	ppb	0.17327	1.90%
SiO2†	611.2	33.202	ug/L	0.5396	33.202	ppb	0.5396	1.63%

Sequence No.: 32
Sample ID: 1201978328|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 12/4/2009 16:23:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978328|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4948.8	4948.8	101	%			16:25:32
1	Y RADIAL	5689.1	5689.1	100.7	%			16:25:32
1	Al 396.153Radial†	-43.8	0.3	0.2043	ug/L	0.2043	ppb	16:25:32
1	Ca 317.933Radial†	23.6	5.6	9.8315	ug/L	9.8315	ppb	16:25:52
1	Fe 238.204 Radial†	12.6	1.5	17.696	ug/L	17.696	ppb	16:25:52
1	K 766.490 Radial†	2581.7	-8.2	-1.5491	ug/L	-1.5491	ppb	16:25:32
1	Mg 279.077 IEC†	5.7	3.1	139.57	ug/L	139.57	ppb	16:25:52
1	Na 589.592 Radial†	-1111.9	176.8	49.599	ug/L	49.599	ppb	16:25:32
1	Sr 421.552†	21.2	28.4	0.1489	ug/L	0.1489	ppb	16:25:32
1	Sc 361.383	1061054.4	1061054.4	102.08	%			16:26:48
1	Y 371.029	900097.4	900097.4	101.77	%			16:26:48
1	Ag 328.068†	495.2	11.1	0.0469	ug/L	0.0469	ppb	16:26:53
1	As 188.979†	-36.4	0.9	0.2997	ug/L	0.2997	ppb	16:27:14
1	B 249.677†	-491.0	-14.9	-0.2843	ug/L	-0.2843	ppb	16:27:14
1	Ba 233.527†	3.3	3.2	0.0216	ug/L	0.0216	ppb	16:27:14
1	Be 313.107†	-4910.6	63.1	0.0205	ug/L	0.0205	ppb	16:26:53
1	Cd 226.502†	-227.8	12.4	0.1065	ug/L	0.1065	ppb	16:27:14
1	Co 228.616†	-84.8	3.2	0.0506	ug/L	0.0506	ppb	16:27:14
1	Cr 267.716†	141.5	50.9	0.4565	ug/L	0.4565	ppb	16:27:14
1	Cu 324.752†	9070.6	-51.3	-0.1360	ug/L	-0.1360	ppb	16:26:53
1	Mn 257.610†	3120.7	2480.5	2.3481	ug/L	2.3481	ppb	16:26:53
1	Mo 202.031†	24.0	-5.7	-0.3034	ug/L	-0.3034	ppb	16:27:14
1	Ni 231.604†	129.3	-5.2	-0.1023	ug/L	-0.1023	ppb	16:27:14
1	P 214.914†	276.6	5.9	2.6490	ug/L	2.6490	ppb	16:27:14
1	Pb 220.353†	-82.4	-5.2	-0.4874	ug/L	-0.4874	ppb	16:27:14
1	S 181.975 Axial†	51.9	-9.3	-9.9671	ug/L	-9.9671	ppb	16:27:14
1	Sb 206.836†	49.3	13.6	3.5927	ug/L	3.5927	ppb	16:27:14
1	Se 196.026†	-18.1	3.7	1.6896	ug/L	1.6896	ppb	16:27:14
1	Si 251.611†	1109.6	529.4	13.448	ug/L	13.448	ppb	16:27:14
1	Sn 189.927†	3.2	7.5	0.9932	ug/L	0.9932	ppb	16:27:14
1	Ti 334.940†	-996.5	284.2	0.3909	ug/L	0.3909	ppb	16:26:53
1	Tl 190.801†	-42.3	2.8	0.7035	ug/L	0.7035	ppb	16:27:14
1	U 409.014†	-2705.8	123.2	3.1828	ug/L	3.1828	ppb	16:26:48
1	V 292.402†	-1627.2	14.4	0.0844	ug/L	0.0844	ppb	16:26:53
1	Zn 213.857†	1036.1	129.4	0.9454	ug/L	0.9454	ppb	16:27:14
1	SiO2†	1177.3	554.3	30.133	ug/L	30.133	ppb	16:28:20
2	Sc Radial	5027.2	5027.2	102	%			16:25:57
2	Y RADIAL	5771.3	5771.3	102.2	%			16:25:57
2	Al 396.153Radial†	-27.9	16.6	10.921	ug/L	10.921	ppb	16:25:57
2	Ca 317.933Radial†	30.5	12.0	21.199	ug/L	21.199	ppb	16:26:17
2	Fe 238.204 Radial†	11.3	0.1	1.0451	ug/L	1.0451	ppb	16:26:17
2	K 766.490 Radial†	2506.0	-122.0	-22.288	ug/L	-22.288	ppb	16:25:57
2	Mg 279.077 IEC†	3.0	0.4	20.081	ug/L	20.081	ppb	16:26:17
2	Na 589.592 Radial†	-1140.9	165.7	46.469	ug/L	46.469	ppb	16:25:57
2	Sr 421.552†	29.2	35.9	0.1881	ug/L	0.1881	ppb	16:25:57
2	Sc 361.383	1057285.3	1057285.3	101.71	%			16:27:19
2	Y 371.029	897680.4	897680.4	101.49	%			16:27:19
2	Ag 328.068†	541.1	57.9	0.2287	ug/L	0.2287	ppb	16:27:24
2	As 188.979†	-41.2	-3.9	-1.2033	ug/L	-1.2033	ppb	16:27:44
2	B 249.677†	-498.8	-24.3	-0.4589	ug/L	-0.4589	ppb	16:27:44
2	Ba 233.527†	3.7	3.7	0.0241	ug/L	0.0241	ppb	16:27:44
2	Be 313.107†	-4893.1	63.2	0.0204	ug/L	0.0204	ppb	16:27:24
2	Cd 226.502†	-227.8	11.7	0.1017	ug/L	0.1017	ppb	16:27:44
2	Co 228.616†	-84.5	3.2	0.0528	ug/L	0.0528	ppb	16:27:44
2	Cr 267.716†	130.8	40.8	0.3666	ug/L	0.3666	ppb	16:27:44
2	Cu 324.752†	8992.4	-96.5	-0.2577	ug/L	-0.2577	ppb	16:27:24
2	Mn 257.610†	3172.4	2542.3	2.4071	ug/L	2.4071	ppb	16:27:24
2	Mo 202.031†	37.8	7.9	0.4219	ug/L	0.4219	ppb	16:27:44
2	Ni 231.604†	148.9	14.4	0.2830	ug/L	0.2830	ppb	16:27:44

2	P 214.914†	293.7	23.6	10.636	ug/L	10.636 ppb	16:27:44
2	Pb 220.353†	-77.9	-1.0	-0.0932	ug/L	-0.0932 ppb	16:27:44
2	S 181.975 Axial†	64.1	2.9	3.1341	ug/L	3.1341 ppb	16:27:44
2	Sb 206.836†	57.7	22.1	5.8439	ug/L	5.8439 ppb	16:27:44
2	Se 196.026†	-19.5	2.2	0.9744	ug/L	0.9744 ppb	16:27:44
2	Si 251.611†	1120.5	544.0	13.811	ug/L	13.811 ppb	16:27:44
2	Sn 189.927†	5.8	10.1	1.3318	ug/L	1.3318 ppb	16:27:44
2	Ti 334.940†	-1008.6	268.8	0.3709	ug/L	0.3709 ppb	16:27:24
2	Tl 190.801†	-52.0	-6.8	-1.6369	ug/L	-1.6369 ppb	16:27:44
2	U 409.014†	-2749.2	71.0	1.8354	ug/L	1.8354 ppb	16:27:19
2	V 292.402†	-1602.8	32.7	0.1966	ug/L	0.1966 ppb	16:27:24
2	Zn 213.857†	1048.6	145.4	1.0658	ug/L	1.0658 ppb	16:27:44
2	SiO2†	1160.5	541.9	29.446	ug/L	29.446 ppb	16:28:25
3	Sc Radial	4996.7	4996.7	102	%		16:26:22
3	Y RADIAL	5739.5	5739.5	101.6	%		16:26:22
3	Al 396.153Radial†	-49.7	-5.1	-3.3500	ug/L	-3.3500 ppb	16:26:22
3	Ca 317.933Radial†	31.4	13.1	23.131	ug/L	23.131 ppb	16:26:42
3	Fe 238.204 Radial†	12.5	1.3	15.775	ug/L	15.775 ppb	16:26:42
3	K 766.490 Radial†	2650.6	35.0	6.3180	ug/L	6.3180 ppb	16:26:22
3	Mg 279.077 IEC†	2.8	0.3	12.304	ug/L	12.304 ppb	16:26:42
3	Na 589.592 Radial†	-1144.9	155.0	43.467	ug/L	43.467 ppb	16:26:22
3	Sr 421.552†	35.1	41.9	0.2197	ug/L	0.2197 ppb	16:26:22
3	Sc 361.383	1051991.8	1051991.8	101.20	%		16:27:49
3	Y 371.029	894184.1	894184.1	101.10	%		16:27:49
3	Ag 328.068†	459.0	-20.5	-0.0795	ug/L	-0.0795 ppb	16:27:54
3	As 188.979†	-45.5	-8.3	-2.5901	ug/L	-2.5901 ppb	16:28:14
3	B 249.677†	-493.9	-22.0	-0.4173	ug/L	-0.4173 ppb	16:28:14
3	Ba 233.527†	18.9	18.7	0.1204	ug/L	0.1204 ppb	16:28:14
3	Be 313.107†	-4954.2	-21.4	-0.0059	ug/L	-0.0059 ppb	16:27:54
3	Cd 226.502†	-258.6	-19.9	-0.1748	ug/L	-0.1748 ppb	16:28:14
3	Co 228.616†	-80.4	6.9	0.1117	ug/L	0.1117 ppb	16:28:14
3	Cr 267.716†	134.7	45.3	0.4061	ug/L	0.4061 ppb	16:28:14
3	Cu 324.752†	9031.2	-13.7	-0.0357	ug/L	-0.0357 ppb	16:27:54
3	Mn 257.610†	3241.8	2626.6	2.4886	ug/L	2.4886 ppb	16:27:54
3	Mo 202.031†	25.7	-3.8	-0.2014	ug/L	-0.2014 ppb	16:28:14
3	Ni 231.604†	150.2	16.5	0.3233	ug/L	0.3233 ppb	16:28:14
3	P 214.914†	279.5	11.1	4.9720	ug/L	4.9720 ppb	16:28:14
3	Pb 220.353†	-81.8	-5.3	-0.5011	ug/L	-0.5011 ppb	16:28:14
3	S 181.975 Axial†	63.7	2.8	3.0579	ug/L	3.0579 ppb	16:28:14
3	Sb 206.836†	43.3	8.2	2.1557	ug/L	2.1557 ppb	16:28:14
3	Se 196.026†	-29.1	-7.4	-3.2137	ug/L	-3.2137 ppb	16:28:14
3	Si 251.611†	1140.6	569.4	14.461	ug/L	14.461 ppb	16:28:14
3	Sn 189.927†	0.9	5.3	0.6987	ug/L	0.6987 ppb	16:28:14
3	Ti 334.940†	-984.9	287.2	0.3963	ug/L	0.3963 ppb	16:27:54
3	Tl 190.801†	-48.3	-3.5	-0.8221	ug/L	-0.8221 ppb	16:28:14
3	U 409.014†	-2724.1	82.3	2.1252	ug/L	2.1252 ppb	16:27:49
3	V 292.402†	-1677.7	-49.3	-0.2835	ug/L	-0.2835 ppb	16:27:54
3	Zn 213.857†	1046.0	148.0	1.0835	ug/L	1.0835 ppb	16:28:14
3	SiO2†	2257.1	1631.3	88.657	ug/L	88.657 ppb	16:28:30

Mean Data: 1201978328|925377|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1056777.2	101.66	%	0.438				0.43%
Sc Radial	4990.9	102	%	0.8				0.79%
Y 371.029	897320.7	101.45	%	0.336				0.33%
Y RADIAL	5733.3	101.5	%	0.73				0.72%
Ag 328.068†	16.2	0.0654	ug/L	0.15495	0.0654	ppb	0.15495	237.01%
Al 396.153Radial†	3.9	2.5918	ug/L	7.42912	2.5918	ppb	7.42912	286.63%
As 188.979†	-3.8	-1.1646	ug/L	1.44530	-1.1646	ppb	1.44530	124.11%
B 249.677†	-20.4	-0.3868	ug/L	0.09116	-0.3868	ppb	0.09116	23.57%
Ba 233.527†	8.6	0.0554	ug/L	0.05632	0.0554	ppb	0.05632	101.70%
Be 313.107†	35.0	0.0117	ug/L	0.01521	0.0117	ppb	0.01521	130.34%
Ca 317.933Radial†	10.2	18.054	ug/L	7.1861	18.054	ppb	7.1861	39.80%
Cd 226.502†	1.4	0.0111	ug/L	0.16107	0.0111	ppb	0.16107	>999.9%
Co 228.616†	4.4	0.0717	ug/L	0.03463	0.0717	ppb	0.03463	48.29%
Cr 267.716†	45.7	0.4097	ug/L	0.04503	0.4097	ppb	0.04503	10.99%
Cu 324.752†	-53.8	-0.1431	ug/L	0.11118	-0.1431	ppb	0.11118	77.70%
Fe 238.204 Radial†	1.0	11.505	ug/L	9.1094	11.505	ppb	9.1094	79.18%
K 766.490 Radial†	-31.8	-5.8397	ug/L	14.77781	-5.8397	ppb	14.77781	253.06%

Mg 279.077 IEC†	1.3	57.318	ug/L	71.3369	57.318	ppb	71.3369	124.46%
Mn 257.610†	2549.8	2.4146	ug/L	0.07055	2.4146	ppb	0.07055	2.92%
Mo 202.031†	-0.5	-0.0277	ug/L	0.39266	-0.0277	ppb	0.39266	>999.9%
Na 589.592 Radial†	165.8	46.512	ug/L	3.0663	46.512	ppb	3.0663	6.59%
Ni 231.604†	8.6	0.1680	ug/L	0.23491	0.1680	ppb	0.23491	139.83%
P 214.914†	13.5	6.0858	ug/L	4.10843	6.0858	ppb	4.10843	67.51%
Pb 220.353†	-3.8	-0.3606	ug/L	0.23167	-0.3606	ppb	0.23167	64.25%
S 181.975 Axial†	-1.2	-1.2584	ug/L	7.54206	-1.2584	ppb	7.54206	599.34%
Sb 206.836†	14.6	3.8641	ug/L	1.85902	3.8641	ppb	1.85902	48.11%
Se 196.026†	-0.5	-0.1832	ug/L	2.64869	-0.1832	ppb	2.64869	>999.9%
Si 251.611†	547.6	13.907	ug/L	0.5133	13.907	ppb	0.5133	3.69%
Sn 189.927†	7.6	1.0079	ug/L	0.31682	1.0079	ppb	0.31682	31.43%
Sr 421.552†	35.4	0.1856	ug/L	0.03546	0.1856	ppb	0.03546	19.11%
Ti 334.940†	280.1	0.3860	ug/L	0.01335	0.3860	ppb	0.01335	3.46%
Tl 190.801†	-2.5	-0.5852	ug/L	1.18804	-0.5852	ppb	1.18804	203.03%
U 409.014†	92.2	2.3811	ug/L	0.70923	2.3811	ppb	0.70923	29.79%
V 292.402†	-0.7	-0.0008	ug/L	0.25111	-0.0008	ppb	0.25111	>999.9%
Zn 213.857†	140.9	1.0316	ug/L	0.07514	1.0316	ppb	0.07514	7.28%
SiO2†	909.2	49.412	ug/L	33.9890	49.412	ppb	33.9890	68.79%

Sequence No.: 33
Sample ID: 1201978329|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/4/2009 16:30:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978329|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5008.2	5008.2	102	%			16:32:33
1	Y RADIAL	5680.8	5680.8	100.6	%			16:32:33
1	Al 396.153Radial†	8081.3	7966.2	5238.1	ug/L	5238.1	ppb	16:32:33
1	Ca 317.933Radial†	2981.7	2905.2	5143.8	ug/L	5143.8	ppb	16:32:53
1	Fe 238.204 Radial†	449.9	430.0	5215.1	ug/L	5215.1	ppb	16:32:53
1	K 766.490 Radial†	31041.5	27861.5	5071.2	ug/L	5071.2	ppb	16:32:33
1	Mg 279.077 IEC†	122.3	117.4	5259.8	ug/L	5259.8	ppb	16:32:53
1	Na 589.592 Radial†	17360.2	18298.8	5132.8	ug/L	5132.8	ppb	16:32:33
1	Sr 421.552†	100638.6	98666.9	517.60	ug/L	517.60	ppb	16:32:33
1	Sc 361.383	1046617.3	1046617.3	100.69	%			16:33:52
1	Y 371.029	876052.0	876052.0	99.048	%			16:33:52
1	Ag 328.068†	131428.1	130058.3	518.72	ug/L	518.72	ppb	16:33:52
1	As 188.979†	1624.6	1650.1	518.76	ug/L	518.76	ppb	16:34:12
1	B 249.677†	26944.4	27226.9	512.56	ug/L	512.56	ppb	16:33:52
1	Ba 233.527†	83633.9	83063.9	535.00	ug/L	535.00	ppb	16:33:52
1	Be 313.107†	1667156.9	1660667.3	518.82	ug/L	518.82	ppb	16:33:52
1	Cd 226.502†	59533.6	59363.5	517.51	ug/L	517.51	ppb	16:33:52
1	Co 228.616†	31106.7	30981.0	510.47	ug/L	510.47	ppb	16:34:12
1	Cr 267.716†	58467.2	57980.9	521.75	ug/L	521.75	ppb	16:33:52
1	Cu 324.752†	209336.2	198971.8	531.62	ug/L	531.62	ppb	16:33:52
1	Mn 257.610†	565692.9	561260.4	531.90	ug/L	531.90	ppb	16:33:52
1	Mo 202.031†	9822.2	9726.1	516.50	ug/L	516.50	ppb	16:34:12
1	Ni 231.604†	26806.7	26492.0	518.75	ug/L	518.75	ppb	16:34:12
1	P 214.914†	1610.2	1334.1	516.57	ug/L	516.57	ppb	16:34:12
1	Pb 220.353†	5554.0	5591.7	526.50	ug/L	526.50	ppb	16:34:12
1	S 181.975 Axial†	4924.9	4831.2	5204.1	ug/L	5204.1	ppb	16:34:12
1	Sb 206.836†	2097.5	2048.5	547.81	ug/L	547.81	ppb	16:34:12
1	Se 196.026†	1126.7	1140.4	525.67	ug/L	525.67	ppb	16:34:12
1	Si 251.611†	206056.6	204094.4	5170.9	ug/L	5170.9	ppb	16:33:52
1	Sn 189.927†	4094.4	4070.8	539.00	ug/L	539.00	ppb	16:34:12
1	Ti 334.940†	383148.6	381797.5	526.45	ug/L	526.45	ppb	16:33:52
1	Tl 190.801†	2114.9	2144.8	522.15	ug/L	522.15	ppb	16:34:12
1	U 409.014†	17989.8	20641.2	532.00	ug/L	532.00	ppb	16:33:52
1	V 292.402†	90934.8	91923.5	533.18	ug/L	533.18	ppb	16:33:52
1	Zn 213.857†	71475.4	70102.7	510.51	ug/L	510.51	ppb	16:33:52
1	SiO2†	209406.5	207380.1	11244	ug/L	11244	ppb	16:35:12
2	Sc Radial	4964.3	4964.3	101	%			16:32:58
2	Y RADIAL	5653.8	5653.8	100.1	%			16:32:58
2	Al 396.153Radial†	8042.2	7997.5	5258.9	ug/L	5258.9	ppb	16:32:58
2	Ca 317.933Radial†	2982.8	2932.2	5191.5	ug/L	5191.5	ppb	16:33:18
2	Fe 238.204 Radial†	450.9	434.9	5274.2	ug/L	5274.2	ppb	16:33:18
2	K 766.490 Radial†	30939.6	28029.8	5101.9	ug/L	5101.9	ppb	16:32:58
2	Mg 279.077 IEC†	125.9	122.0	5464.4	ug/L	5464.4	ppb	16:33:18
2	Na 589.592 Radial†	17289.1	18378.9	5155.3	ug/L	5155.3	ppb	16:32:58
2	Sr 421.552†	100182.3	99087.7	519.81	ug/L	519.81	ppb	16:32:58
2	Sc 361.383	1048828.2	1048828.2	100.90	%			16:34:19
2	Y 371.029	879039.3	879039.3	99.386	%			16:34:19
2	Ag 328.068†	131959.3	130309.5	519.73	ug/L	519.73	ppb	16:34:19
2	As 188.979†	1608.6	1630.8	512.76	ug/L	512.76	ppb	16:34:39
2	B 249.677†	27082.9	27307.7	514.09	ug/L	514.09	ppb	16:34:19
2	Ba 233.527†	83768.5	83022.2	534.73	ug/L	534.73	ppb	16:34:19
2	Be 313.107†	1671718.8	1661698.1	519.14	ug/L	519.14	ppb	16:34:19
2	Cd 226.502†	59784.9	59487.9	518.59	ug/L	518.59	ppb	16:34:19
2	Co 228.616†	31041.0	30850.7	508.31	ug/L	508.31	ppb	16:34:39
2	Cr 267.716†	58576.4	57966.7	521.62	ug/L	521.62	ppb	16:34:19
2	Cu 324.752†	210269.6	199458.6	532.93	ug/L	532.93	ppb	16:34:19
2	Mn 257.610†	567207.7	561577.3	532.21	ug/L	532.21	ppb	16:34:19
2	Mo 202.031†	9806.8	9690.2	514.60	ug/L	514.60	ppb	16:34:39
2	Ni 231.604†	26777.4	26406.8	517.08	ug/L	517.08	ppb	16:34:39

2	P 214.914†	1589.6	1310.3	505.64 ug/L	505.64 ppb	16:34:39
2	Pb 220.353†	5524.8	5551.1	522.69 ug/L	522.69 ppb	16:34:39
2	S 181.975 Axial†	4889.8	4786.1	5155.5 ug/L	5155.5 ppb	16:34:39
2	Sb 206.836†	2083.0	2029.8	542.79 ug/L	542.79 ppb	16:34:39
2	Se 196.026†	1102.4	1114.0	514.16 ug/L	514.16 ppb	16:34:39
2	Si 251.611†	206514.0	204116.4	5171.5 ug/L	5171.5 ppb	16:34:19
2	Sn 189.927†	4084.1	4052.1	536.53 ug/L	536.53 ppb	16:34:39
2	Ti 334.940†	384627.7	382461.2	527.37 ug/L	527.37 ppb	16:34:19
2	Tl 190.801†	2122.2	2147.6	522.84 ug/L	522.84 ppb	16:34:39
2	U 409.014†	18118.0	20730.5	534.30 ug/L	534.30 ppb	16:34:19
2	V 292.402†	91078.7	91875.7	532.88 ug/L	532.88 ppb	16:34:19
2	Zn 213.857†	71725.7	70201.1	511.23 ug/L	511.23 ppb	16:34:19
2	SiO2†	205788.1	203355.5	11026 ug/L	11026 ppb	16:35:18
3	Sc Radial	4951.9	4951.9	101 %		16:33:23
3	Y RADIAL	5645.1	5645.1	99.96 %		16:33:23
3	Al 396.153Radial†	8095.8	8070.7	5307.3 ug/L	5307.3 ppb	16:33:23
3	Ca 317.933Radial†	2982.8	2939.6	5204.6 ug/L	5204.6 ppb	16:33:43
3	Fe 238.204 Radial†	446.0	431.2	5229.5 ug/L	5229.5 ppb	16:33:43
3	K 766.490 Radial†	30946.0	28113.1	5117.0 ug/L	5117.0 ppb	16:33:23
3	Mg 279.077 IEC†	122.7	119.2	5337.4 ug/L	5337.4 ppb	16:33:43
3	Na 589.592 Radial†	17339.1	18471.4	5181.2 ug/L	5181.2 ppb	16:33:23
3	Sr 421.552†	100380.7	99533.5	522.15 ug/L	522.15 ppb	16:33:23
3	Sc 361.383	1049768.6	1049768.6	100.99 %		16:34:47
3	Y 371.029	880675.4	880675.4	99.571 %		16:34:47
3	Ag 328.068†	131636.5	129872.8	517.99 ug/L	517.99 ppb	16:34:47
3	As 188.979†	1614.7	1635.4	514.19 ug/L	514.19 ppb	16:35:07
3	B 249.677†	27083.3	27284.1	513.65 ug/L	513.65 ppb	16:34:47
3	Ba 233.527†	83678.8	82859.0	533.68 ug/L	533.68 ppb	16:34:47
3	Be 313.107†	1675494.3	1663952.4	519.84 ug/L	519.84 ppb	16:34:47
3	Cd 226.502†	59601.0	59252.7	516.54 ug/L	516.54 ppb	16:34:47
3	Co 228.616†	30954.0	30737.0	506.44 ug/L	506.44 ppb	16:35:07
3	Cr 267.716†	58547.9	57886.5	520.90 ug/L	520.90 ppb	16:34:47
3	Cu 324.752†	210297.3	199299.4	532.50 ug/L	532.50 ppb	16:34:47
3	Mn 257.610†	566805.3	560675.2	531.35 ug/L	531.35 ppb	16:34:47
3	Mo 202.031†	9775.1	9650.1	512.47 ug/L	512.47 ppb	16:35:07
3	Ni 231.604†	26699.0	26305.5	515.10 ug/L	515.10 ppb	16:35:07
3	P 214.914†	1596.3	1315.6	508.10 ug/L	508.10 ppb	16:35:07
3	Pb 220.353†	5516.1	5537.6	521.43 ug/L	521.43 ppb	16:35:07
3	S 181.975 Axial†	4874.1	4766.2	5134.1 ug/L	5134.1 ppb	16:35:07
3	Sb 206.836†	2094.9	2039.7	545.36 ug/L	545.36 ppb	16:35:07
3	Se 196.026†	1111.7	1122.2	517.65 ug/L	517.65 ppb	16:35:07
3	Si 251.611†	206327.9	203748.7	5162.2 ug/L	5162.2 ppb	16:34:47
3	Sn 189.927†	4078.5	4042.9	535.32 ug/L	535.32 ppb	16:35:07
3	Ti 334.940†	384623.3	382115.4	526.89 ug/L	526.89 ppb	16:34:47
3	Tl 190.801†	2112.7	2136.3	520.13 ug/L	520.13 ppb	16:35:07
3	U 409.014†	18127.3	20723.7	534.13 ug/L	534.13 ppb	16:34:47
3	V 292.402†	91179.5	91894.7	532.97 ug/L	532.97 ppb	16:34:47
3	Zn 213.857†	71660.1	70072.5	510.30 ug/L	510.30 ppb	16:34:47
3	SiO2†	206766.5	204141.7	11068 ug/L	11068 ppb	16:35:23

Mean Data: 1201978329|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048404.7	100.86	%	0.156				0.15%
Sc Radial	4974.8	101	%	0.6				0.59%
Y 371.029	878588.9	99.335	%	0.2651				0.27%
Y RADIAL	5659.9	100.2	%	0.33				0.33%
Ag 328.068†	130080.2	518.82	ug/L	0.876	518.82	ppb	0.876	0.17%
Al 396.153Radial†	8011.5	5268.1	ug/L	35.50	5268.1	ppb	35.50	0.67%
As 188.979†	1638.8	515.24	ug/L	3.134	515.24	ppb	3.134	0.61%
B 249.677†	27272.9	513.43	ug/L	0.786	513.43	ppb	0.786	0.15%
Ba 233.527†	82981.7	534.47	ug/L	0.696	534.47	ppb	0.696	0.13%
Be 313.107†	1662105.9	519.27	ug/L	0.524	519.27	ppb	0.524	0.10%
Ca 317.933Radial†	2925.7	5180.0	ug/L	32.02	5180.0	ppb	32.02	0.62%
Cd 226.502†	59368.0	517.55	ug/L	1.024	517.55	ppb	1.024	0.20%
Co 228.616†	30856.2	508.40	ug/L	2.017	508.40	ppb	2.017	0.40%
Cr 267.716†	57944.7	521.42	ug/L	0.458	521.42	ppb	0.458	0.09%
Cu 324.752†	199243.3	532.35	ug/L	0.664	532.35	ppb	0.664	0.12%
Fe 238.204 Radial†	432.1	5239.6	ug/L	30.80	5239.6	ppb	30.80	0.59%
K 766.490 Radial†	28001.5	5096.7	ug/L	23.34	5096.7	ppb	23.34	0.46%

Mg 279.077 IEC†	119.5	5353.9 ug/L	103.27	5353.9 ppb	103.27	1.93%
Mn 257.610†	561171.0	531.82 ug/L	0.434	531.82 ppb	0.434	0.08%
Mo 202.031†	9688.8	514.53 ug/L	2.017	514.53 ppb	2.017	0.39%
Na 589.592 Radial†	18383.1	5156.4 ug/L	24.23	5156.4 ppb	24.23	0.47%
Ni 231.604†	26401.4	516.98 ug/L	1.829	516.98 ppb	1.829	0.35%
P 214.914†	1320.0	510.10 ug/L	5.737	510.10 ppb	5.737	1.12%
Pb 220.353†	5560.1	523.54 ug/L	2.640	523.54 ppb	2.640	0.50%
S 181.975 Axial†	4794.5	5164.6 ug/L	35.89	5164.6 ppb	35.89	0.69%
Sb 206.836†	2039.4	545.32 ug/L	2.510	545.32 ppb	2.510	0.46%
Se 196.026†	1125.5	519.16 ug/L	5.904	519.16 ppb	5.904	1.14%
Si 251.611†	203986.5	5168.2 ug/L	5.21	5168.2 ppb	5.21	0.10%
Sn 189.927†	4055.2	536.95 ug/L	1.877	536.95 ppb	1.877	0.35%
Sr 421.552†	99096.1	519.85 ug/L	2.273	519.85 ppb	2.273	0.44%
Ti 334.940†	382124.7	526.91 ug/L	0.459	526.91 ppb	0.459	0.09%
Tl 190.801†	2142.9	521.71 ug/L	1.413	521.71 ppb	1.413	0.27%
U 409.014†	20698.5	533.48 ug/L	1.283	533.48 ppb	1.283	0.24%
V 292.402†	91898.0	533.01 ug/L	0.156	533.01 ppb	0.156	0.03%
Zn 213.857†	70125.4	510.68 ug/L	0.485	510.68 ppb	0.485	0.09%
SiO2†	204959.1	11113 ug/L	115.9	11113 ppb	115.9	1.04%

Sequence No.: 34
Sample ID: 1201978330|925377|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/4/2009 16:37:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978330|925377|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4846.6	4846.6	98.7	%			16:39:26
1	Y RADIAL	5589.9	5589.9	98.99	%			16:39:26
1	Al 396.153Radial†	-22.3	21.2	14.008	ug/L	14.008	ppb	16:39:26
1	Ca 317.933Radial†	19.2	1.6	2.8537	ug/L	2.8537	ppb	16:39:46
1	Fe 238.204 Radial†	12.8	2.0	24.335	ug/L	24.335	ppb	16:39:46
1	K 766.490 Radial†	2652.4	117.4	21.402	ug/L	21.402	ppb	16:39:26
1	Mg 279.077 IEC†	1.2	-1.3	-58.635	ug/L	-58.635	ppb	16:39:46
1	Na 589.592 Radial†	-1206.5	57.8	16.205	ug/L	16.205	ppb	16:39:26
1	Sr 421.552†	-23.5	-16.4	-0.0860	ug/L	-0.0860	ppb	16:39:26
1	Sc 361.383	1028230.0	1028230.0	98.917	%			16:40:42
1	Y 371.029	872841.8	872841.8	98.686	%			16:40:42
1	Ag 328.068†	426.6	-42.8	-0.1581	ug/L	-0.1581	ppb	16:40:48
1	As 188.979†	-39.9	-3.8	-1.1745	ug/L	-1.1745	ppb	16:41:08
1	B 249.677†	-388.3	73.5	1.3863	ug/L	1.3863	ppb	16:41:08
1	Ba 233.527†	-5.9	-6.0	-0.0378	ug/L	-0.0378	ppb	16:41:08
1	Be 313.107†	-4930.2	-110.2	-0.0340	ug/L	-0.0340	ppb	16:40:48
1	Cd 226.502†	-218.8	14.5	0.1239	ug/L	0.1239	ppb	16:41:08
1	Co 228.616†	-92.5	-7.2	-0.1180	ug/L	-0.1180	ppb	16:41:08
1	Cr 267.716†	116.4	29.9	0.2707	ug/L	0.2707	ppb	16:41:08
1	Cu 324.752†	9019.7	180.9	0.4843	ug/L	0.4843	ppb	16:40:48
1	Mn 257.610†	622.0	52.1	0.0528	ug/L	0.0528	ppb	16:41:08
1	Mo 202.031†	36.9	8.0	0.4289	ug/L	0.4289	ppb	16:41:08
1	Ni 231.604†	127.6	-2.9	-0.0566	ug/L	-0.0566	ppb	16:41:08
1	P 214.914†	286.1	24.1	10.695	ug/L	10.695	ppb	16:41:08
1	Pb 220.353†	-61.2	13.7	1.2909	ug/L	1.2909	ppb	16:41:08
1	S 181.975 Axial†	56.8	-2.6	-2.8489	ug/L	-2.8489	ppb	16:41:08
1	Sb 206.836†	39.7	5.5	1.4711	ug/L	1.4711	ppb	16:41:08
1	Se 196.026†	-26.6	-5.5	-2.3643	ug/L	-2.3643	ppb	16:41:08
1	Si 251.611†	691.0	140.9	3.5606	ug/L	3.5606	ppb	16:41:08
1	Sn 189.927†	6.5	10.9	1.4397	ug/L	1.4397	ppb	16:41:08
1	Ti 334.940†	-1117.1	131.2	0.1832	ug/L	0.1832	ppb	16:40:48
1	Tl 190.801†	-51.5	-7.9	-1.8965	ug/L	-1.8965	ppb	16:41:08
1	U 409.014†	-2935.2	-193.4	-5.0029	ug/L	-5.0029	ppb	16:40:42
1	V 292.402†	-1617.3	-26.5	-0.1607	ug/L	-0.1607	ppb	16:40:48
1	Zn 213.857†	952.4	77.3	0.5673	ug/L	0.5673	ppb	16:41:08
1	SiO2†	728.6	137.5	7.4320	ug/L	7.4320	ppb	16:42:14
2	Sc Radial	4930.9	4930.9	100	%			16:39:51
2	Y RADIAL	5661.0	5661.0	100.2	%			16:39:51
2	Al 396.153Radial†	-16.1	27.8	18.353	ug/L	18.353	ppb	16:39:51
2	Ca 317.933Radial†	23.3	5.4	9.4787	ug/L	9.4787	ppb	16:40:11
2	Fe 238.204 Radial†	8.2	-2.8	-34.265	ug/L	-34.265	ppb	16:40:11
2	K 766.490 Radial†	2594.4	13.8	2.4919	ug/L	2.4919	ppb	16:39:51
2	Mg 279.077 IEC†	2.4	-0.1	-4.9919	ug/L	-4.9919	ppb	16:40:11
2	Na 589.592 Radial†	-1160.8	124.1	34.820	ug/L	34.820	ppb	16:39:51
2	Sr 421.552†	-27.7	-20.2	-0.1058	ug/L	-0.1058	ppb	16:39:51
2	Sc 361.383	1050220.0	1050220.0	101.03	%			16:41:13
2	Y 371.029	890516.9	890516.9	100.68	%			16:41:13
2	Ag 328.068†	400.4	-77.7	-0.3198	ug/L	-0.3198	ppb	16:41:18
2	As 188.979†	-41.5	-4.5	-1.4023	ug/L	-1.4023	ppb	16:41:38
2	B 249.677†	-420.8	49.6	0.9424	ug/L	0.9424	ppb	16:41:38
2	Ba 233.527†	9.3	9.3	0.0580	ug/L	0.0580	ppb	16:41:38
2	Be 313.107†	-4881.4	42.4	0.0134	ug/L	0.0134	ppb	16:41:18
2	Cd 226.502†	-230.3	7.7	0.0702	ug/L	0.0702	ppb	16:41:38
2	Co 228.616†	-90.2	-3.0	-0.0490	ug/L	-0.0490	ppb	16:41:38
2	Cr 267.716†	105.2	16.4	0.1462	ug/L	0.1462	ppb	16:41:38
2	Cu 324.752†	8877.3	-151.0	-0.4050	ug/L	-0.4050	ppb	16:41:18
2	Mn 257.610†	625.4	42.4	0.0368	ug/L	0.0368	ppb	16:41:38
2	Mo 202.031†	31.1	1.5	0.0781	ug/L	0.0781	ppb	16:41:38
2	Ni 231.604†	129.4	-3.9	-0.0760	ug/L	-0.0760	ppb	16:41:38

2	P 214.914†	275.3	7.4	3.3965	ug/L	3.3965 ppb	16:41:38
2	Pb 220.353†	-75.4	0.9	0.0924	ug/L	0.0924 ppb	16:41:38
2	S 181.975 Axial†	53.3	-7.4	-7.9256	ug/L	-7.9256 ppb	16:41:38
2	Sb 206.836†	30.5	-4.5	-1.1699	ug/L	-1.1699 ppb	16:41:38
2	Se 196.026†	-16.4	5.2	2.1600	ug/L	2.1600 ppb	16:41:38
2	Si 251.611†	733.1	168.0	4.2623	ug/L	4.2623 ppb	16:41:38
2	Sn 189.927†	-1.2	3.1	0.4142	ug/L	0.4142 ppb	16:41:38
2	Ti 334.940†	-1195.6	77.1	0.1067	ug/L	0.1067 ppb	16:41:18
2	Tl 190.801†	-43.9	0.8	0.2024	ug/L	0.2024 ppb	16:41:38
2	U 409.014†	-2799.8	2.8	0.0771	ug/L	0.0771 ppb	16:41:13
2	V 292.402†	-1649.3	-23.9	-0.1306	ug/L	-0.1306 ppb	16:41:18
2	Zn 213.857†	945.9	50.7	0.3770	ug/L	0.3770 ppb	16:41:38
2	SiO2†	753.9	147.2	7.9901	ug/L	7.9901 ppb	16:42:19
3	Sc Radial	4870.2	4870.2	99.2	%		16:40:16
3	Y RADIAL	5605.3	5605.3	99.26	%		16:40:16
3	Al 396.153Radial†	-42.0	1.5	0.9971	ug/L	0.9971 ppb	16:40:16
3	Ca 317.933Radial†	22.6	4.9	8.7091	ug/L	8.7091 ppb	16:40:36
3	Fe 238.204 Radial†	9.5	-1.4	-16.794	ug/L	-16.794 ppb	16:40:36
3	K 766.490 Radial†	2644.7	96.6	17.592	ug/L	17.592 ppb	16:40:16
3	Mg 279.077 IEC†	6.3	3.8	171.40	ug/L	171.40 ppb	16:40:36
3	Na 589.592 Radial†	-1154.3	116.3	32.612	ug/L	32.612 ppb	16:40:16
3	Sr 421.552†	-51.0	-44.0	-0.2308	ug/L	-0.2308 ppb	16:40:16
3	Sc 361.383	1040755.4	1040755.4	100.12	%		16:41:43
3	Y 371.029	884432.9	884432.9	99.996	%		16:41:43
3	Ag 328.068†	473.7	-1.0	-0.0113	ug/L	-0.0113 ppb	16:41:48
3	As 188.979†	-38.5	-1.9	-0.5903	ug/L	-0.5903 ppb	16:42:08
3	B 249.677†	-441.2	25.4	0.4826	ug/L	0.4826 ppb	16:42:08
3	Ba 233.527†	-12.6	-12.6	-0.0809	ug/L	-0.0809 ppb	16:42:08
3	Be 313.107†	-4808.8	71.0	0.0223	ug/L	0.0223 ppb	16:41:48
3	Cd 226.502†	-247.4	-11.5	-0.0984	ug/L	-0.0984 ppb	16:42:08
3	Co 228.616†	-72.9	13.5	0.2223	ug/L	0.2223 ppb	16:42:08
3	Cr 267.716†	103.8	15.9	0.1417	ug/L	0.1417 ppb	16:42:08
3	Cu 324.752†	8963.3	14.9	0.0389	ug/L	0.0389 ppb	16:41:48
3	Mn 257.610†	616.2	38.7	0.0318	ug/L	0.0318 ppb	16:42:08
3	Mo 202.031†	24.2	-5.0	-0.2688	ug/L	-0.2688 ppb	16:42:08
3	Ni 231.604†	130.3	-1.8	-0.0350	ug/L	-0.0350 ppb	16:42:08
3	P 214.914†	268.5	3.0	1.3911	ug/L	1.3911 ppb	16:42:08
3	Pb 220.353†	-64.2	11.5	1.0773	ug/L	1.0773 ppb	16:42:08
3	S 181.975 Axial†	61.6	1.4	1.5125	ug/L	1.5125 ppb	16:42:08
3	Sb 206.836†	38.6	3.9	1.0492	ug/L	1.0492 ppb	16:42:08
3	Se 196.026†	-9.2	12.2	5.3446	ug/L	5.3446 ppb	16:42:08
3	Si 251.611†	702.4	143.9	3.6481	ug/L	3.6481 ppb	16:42:08
3	Sn 189.927†	7.6	11.9	1.5797	ug/L	1.5797 ppb	16:42:08
3	Ti 334.940†	-1204.9	57.1	0.0775	ug/L	0.0775 ppb	16:41:48
3	Tl 190.801†	-37.6	6.7	1.6179	ug/L	1.6179 ppb	16:42:08
3	U 409.014†	-2635.6	141.6	3.6619	ug/L	3.6619 ppb	16:41:43
3	V 292.402†	-1555.1	55.3	0.3262	ug/L	0.3262 ppb	16:41:48
3	Zn 213.857†	936.3	49.6	0.3601	ug/L	0.3601 ppb	16:42:08
3	SiO2†	729.1	129.2	7.0056	ug/L	7.0056 ppb	16:42:24

Mean Data: 1201978330|925377|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039735.1	100.02	%	1.061				1.06%
Sc Radial	4882.6	99.4	%	0.89				0.89%
Y 371.029	882597.2	99.788	%	1.0152				1.02%
Y RADIAL	5618.7	99.50	%	0.662				0.67%
Ag 328.068†	-40.5	-0.1631	ug/L	0.15432	-0.1631	ppb	0.15432	94.64%
Al 396.153Radial†	16.8	11.119	ug/L	9.0313	11.119	ppb	9.0313	81.22%
As 188.979†	-3.4	-1.0557	ug/L	0.41884	-1.0557	ppb	0.41884	39.68%
B 249.677†	49.5	0.9371	ug/L	0.45186	0.9371	ppb	0.45186	48.22%
Ba 233.527†	-3.1	-0.0202	ug/L	0.07108	-0.0202	ppb	0.07108	351.58%
Be 313.107†	1.1	0.0006	ug/L	0.03027	0.0006	ppb	0.03027	>999.9%
Ca 317.933Radial†	4.0	7.0139	ug/L	3.62329	7.0139	ppb	3.62329	51.66%
Cd 226.502†	3.6	0.0319	ug/L	0.11599	0.0319	ppb	0.11599	363.86%
Co 228.616†	1.1	0.0184	ug/L	0.17988	0.0184	ppb	0.17988	976.55%
Cr 267.716†	20.7	0.1862	ug/L	0.07317	0.1862	ppb	0.07317	39.30%
Cu 324.752†	14.9	0.0394	ug/L	0.44463	0.0394	ppb	0.44463	>999.9%
Fe 238.204 Radial†	-0.7	-8.9079	ug/L	30.08502	-8.9079	ppb	30.08502	337.73%
K 766.490 Radial†	75.9	13.829	ug/L	10.0010	13.829	ppb	10.0010	72.32%

Mg 279.077 IEC†	0.8	35.925	ug/L	120.3538	35.925	ppb	120.3538 335.01%
Mn 257.610†	44.4	0.0405	ug/L	0.01100	0.0405	ppb	0.01100 27.17%
Mo 202.031†	1.5	0.0794	ug/L	0.34888	0.0794	ppb	0.34888 439.47%
Na 589.592 Radial†	99.4	27.879	ug/L	10.1700	27.879	ppb	10.1700 36.48%
Ni 231.604†	-2.9	-0.0559	ug/L	0.02049	-0.0559	ppb	0.02049 36.68%
P 214.914†	11.5	5.1609	ug/L	4.89650	5.1609	ppb	4.89650 94.88%
Pb 220.353†	8.7	0.8202	ug/L	0.63926	0.8202	ppb	0.63926 77.94%
S 181.975 Axial†	-2.9	-3.0873	ug/L	4.72358	-3.0873	ppb	4.72358 153.00%
Sb 206.836†	1.6	0.4501	ug/L	1.41878	0.4501	ppb	1.41878 315.20%
Se 196.026†	3.9	1.7134	ug/L	3.87381	1.7134	ppb	3.87381 226.09%
Si 251.611†	150.9	3.8237	ug/L	0.38238	3.8237	ppb	0.38238 10.00%
Sn 189.927†	8.6	1.1445	ug/L	0.63631	1.1445	ppb	0.63631 55.60%
Sr 421.552†	-26.8	-0.1409	ug/L	0.07847	-0.1409	ppb	0.07847 55.70%
Ti 334.940†	88.4	0.1224	ug/L	0.05457	0.1224	ppb	0.05457 44.57%
Tl 190.801†	-0.1	-0.0254	ug/L	1.76825	-0.0254	ppb	1.76825 >999.9%
U 409.014†	-16.3	-0.4213	ug/L	4.35384	-0.4213	ppb	4.35384 >999.9%
V 292.402†	1.6	0.0116	ug/L	0.27286	0.0116	ppb	0.27286 >999.9%
Zn 213.857†	59.2	0.4348	ug/L	0.11505	0.4348	ppb	0.11505 26.46%
SiO2†	137.9	7.4759	ug/L	0.49372	7.4759	ppb	0.49372 6.60%

Sequence No.: 35
Sample ID: 241325002|925377|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 12/4/2009 16:44:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241325002|925377|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4946.8	4946.8	101	%			16:46:27
1	Y RADIAL	5702.5	5702.5	101.0	%			16:46:27
1	Al 396.153Radial†	65.9	109.2	72.069	ug/L	72.069	ppb	16:46:27
1	Ca 317.933Radial†	46.7	28.5	50.424	ug/L	50.424	ppb	16:46:47
1	Fe 238.204 Radial†	21.2	10.0	121.18	ug/L	121.18	ppb	16:46:47
1	K 766.490 Radial†	2671.3	81.7	14.724	ug/L	14.724	ppb	16:46:27
1	Mg 279.077 IEC†	3.6	1.1	47.450	ug/L	47.450	ppb	16:46:47
1	Na 589.592 Radial†	-472.8	810.7	227.41	ug/L	227.41	ppb	16:46:27
1	Sr 421.552†	154.3	160.6	0.8419	ug/L	0.8419	ppb	16:46:27
1	Sc 361.383	1058027.5	1058027.5	101.78	%			16:47:43
1	Y 371.029	897102.4	897102.4	101.43	%			16:47:43
1	Ag 328.068†	415.2	-66.1	-0.2264	ug/L	-0.2264	ppb	16:47:48
1	As 188.979†	-31.4	5.8	1.8412	ug/L	1.8412	ppb	16:48:08
1	B 249.677†	-443.1	30.7	0.5645	ug/L	0.5645	ppb	16:48:08
1	Ba 233.527†	450.6	442.7	2.8484	ug/L	2.8484	ppb	16:48:08
1	Be 313.107†	-4977.3	-16.1	-0.0016	ug/L	-0.0016	ppb	16:47:48
1	Cd 226.502†	-221.6	17.9	0.1482	ug/L	0.1482	ppb	16:48:08
1	Co 228.616†	-80.4	7.3	0.1141	ug/L	0.1141	ppb	16:48:08
1	Cr 267.716†	1500.5	1386.5	12.457	ug/L	12.457	ppb	16:48:08
1	Cu 324.752†	9493.6	389.7	1.0469	ug/L	1.0469	ppb	16:47:48
1	Mn 257.610†	7737.4	7025.1	6.6636	ug/L	6.6636	ppb	16:47:48
1	Mo 202.031†	49.5	19.4	1.0363	ug/L	1.0363	ppb	16:48:08
1	Ni 231.604†	481.4	341.0	6.6819	ug/L	6.6819	ppb	16:48:08
1	P 214.914†	302.6	32.2	14.152	ug/L	14.152	ppb	16:48:08
1	Pb 220.353†	-77.5	-0.6	-0.0477	ug/L	-0.0477	ppb	16:48:08
1	S 181.975 Axial†	61.8	0.6	0.6408	ug/L	0.6408	ppb	16:48:08
1	Sb 206.836†	48.4	12.9	3.1250	ug/L	3.1250	ppb	16:48:08
1	Se 196.026†	-20.9	0.9	0.8271	ug/L	0.8271	ppb	16:48:08
1	Si 251.611†	7369.1	6682.3	169.68	ug/L	169.68	ppb	16:47:48
1	Sn 189.927†	-1.7	2.7	0.3638	ug/L	0.3638	ppb	16:48:08
1	Ti 334.940†	22.2	1282.2	1.7658	ug/L	1.7658	ppb	16:47:48
1	Tl 190.801†	-40.4	4.6	1.1692	ug/L	1.1692	ppb	16:48:08
1	U 409.014†	-2734.0	87.9	2.2331	ug/L	2.2331	ppb	16:47:43
1	V 292.402†	-1643.1	-5.7	-0.0380	ug/L	-0.0380	ppb	16:47:48
1	Zn 213.857†	1190.1	283.7	2.0276	ug/L	2.0276	ppb	16:48:08
1	SiO2†	7512.2	6781.5	368.52	ug/L	368.52	ppb	16:49:14
2	Sc Radial	4977.6	4977.6	101	%			16:46:52
2	Y RADIAL	5734.9	5734.9	101.6	%			16:46:52
2	Al 396.153Radial†	85.0	127.6	84.205	ug/L	84.205	ppb	16:46:52
2	Ca 317.933Radial†	55.1	36.6	64.724	ug/L	64.724	ppb	16:47:12
2	Fe 238.204 Radial†	21.9	10.6	127.95	ug/L	127.95	ppb	16:47:12
2	K 766.490 Radial†	2788.6	181.1	32.838	ug/L	32.838	ppb	16:46:52
2	Mg 279.077 IEC†	2.2	-0.3	-14.408	ug/L	-14.408	ppb	16:47:12
2	Na 589.592 Radial†	-543.1	744.2	208.76	ug/L	208.76	ppb	16:46:52
2	Sr 421.552†	181.6	186.6	0.9781	ug/L	0.9781	ppb	16:46:52
2	Sc 361.383	1039982.5	1039982.5	100.05	%			16:48:14
2	Y 371.029	882550.4	882550.4	99.783	%			16:48:14
2	Ag 328.068†	360.0	-114.3	-0.4119	ug/L	-0.4119	ppb	16:48:19
2	As 188.979†	-50.3	-13.7	-4.2313	ug/L	-4.2313	ppb	16:48:39
2	B 249.677†	-458.9	7.4	0.1227	ug/L	0.1227	ppb	16:48:39
2	Ba 233.527†	439.5	439.4	2.8277	ug/L	2.8277	ppb	16:48:39
2	Be 313.107†	-4841.1	35.1	0.0146	ug/L	0.0146	ppb	16:48:19
2	Cd 226.502†	-218.2	17.5	0.1439	ug/L	0.1439	ppb	16:48:39
2	Co 228.616†	-68.0	18.3	0.2951	ug/L	0.2951	ppb	16:48:39
2	Cr 267.716†	1514.6	1426.1	12.815	ug/L	12.815	ppb	16:48:39
2	Cu 324.752†	9395.5	453.5	1.2175	ug/L	1.2175	ppb	16:48:19
2	Mn 257.610†	7689.8	7109.4	6.7453	ug/L	6.7453	ppb	16:48:19
2	Mo 202.031†	48.7	19.4	1.0382	ug/L	1.0382	ppb	16:48:39
2	Ni 231.604†	457.7	325.5	6.3785	ug/L	6.3785	ppb	16:48:39

2	P 214.914†	291.9	26.7	11.662	ug/L	11.662	ppb	16:48:39
2	Pb 220.353†	-78.4	-2.8	-0.2564	ug/L	-0.2564	ppb	16:48:39
2	S 181.975 Axial†	62.4	2.2	2.4011	ug/L	2.4011	ppb	16:48:39
2	Sb 206.836†	62.8	28.2	7.1419	ug/L	7.1419	ppb	16:48:39
2	Se 196.026†	-27.1	-5.7	-2.0530	ug/L	-2.0530	ppb	16:48:39
2	Si 251.611†	7262.0	6700.8	170.15	ug/L	170.15	ppb	16:48:19
2	Sn 189.927†	0.5	4.8	0.6431	ug/L	0.6431	ppb	16:48:39
2	Ti 334.940†	91.5	1351.9	1.8639	ug/L	1.8639	ppb	16:48:19
2	Tl 190.801†	-51.0	-6.8	-1.5795	ug/L	-1.5795	ppb	16:48:39
2	U 409.014†	-2806.1	-30.8	-0.8371	ug/L	-0.8371	ppb	16:48:14
2	V 292.402†	-1581.1	28.2	0.1477	ug/L	0.1477	ppb	16:48:19
2	Zn 213.857†	1191.7	305.6	2.1917	ug/L	2.1917	ppb	16:48:39
2	SiO2†	7444.0	6841.4	371.76	ug/L	371.76	ppb	16:49:19
3	Sc Radial	4973.0	4973.0	101	%			16:47:17
3	Y RADIAL	5713.5	5713.5	101.2	%			16:47:17
3	Al 396.153Radial†	75.7	118.5	78.244	ug/L	78.244	ppb	16:47:17
3	Ca 317.933Radial†	49.1	30.6	54.265	ug/L	54.265	ppb	16:47:37
3	Fe 238.204 Radial†	18.7	7.4	90.021	ug/L	90.021	ppb	16:47:37
3	K 766.490 Radial†	2711.7	107.7	19.457	ug/L	19.457	ppb	16:47:17
3	Mg 279.077 IEC†	2.1	-0.4	-19.279	ug/L	-19.279	ppb	16:47:37
3	Na 589.592 Radial†	-539.7	747.1	209.57	ug/L	209.57	ppb	16:47:17
3	Sr 421.552†	201.4	206.2	1.0814	ug/L	1.0814	ppb	16:47:17
3	Sc 361.383	1059480.4	1059480.4	101.92	%			16:48:44
3	Y 371.029	898794.6	898794.6	101.62	%			16:48:44
3	Ag 328.068†	396.7	-84.8	-0.3059	ug/L	-0.3059	ppb	16:48:49
3	As 188.979†	-41.9	-4.5	-1.3798	ug/L	-1.3798	ppb	16:49:09
3	B 249.677†	-488.5	-13.2	-0.2615	ug/L	-0.2615	ppb	16:49:09
3	Ba 233.527†	444.6	436.2	2.8075	ug/L	2.8075	ppb	16:49:09
3	Be 313.107†	-4806.7	158.0	0.0530	ug/L	0.0530	ppb	16:48:49
3	Cd 226.502†	-233.6	6.4	0.0512	ug/L	0.0512	ppb	16:49:09
3	Co 228.616†	-75.3	12.5	0.1979	ug/L	0.1979	ppb	16:49:09
3	Cr 267.716†	1538.6	1421.8	12.776	ug/L	12.776	ppb	16:49:09
3	Cu 324.752†	9536.8	419.3	1.1242	ug/L	1.1242	ppb	16:48:49
3	Mn 257.610†	7784.9	7061.2	6.6960	ug/L	6.6960	ppb	16:48:49
3	Mo 202.031†	41.6	11.5	0.6186	ug/L	0.6186	ppb	16:49:09
3	Ni 231.604†	457.9	317.3	6.2176	ug/L	6.2176	ppb	16:49:09
3	P 214.914†	282.8	12.4	5.3071	ug/L	5.3071	ppb	16:49:09
3	Pb 220.353†	-93.2	-15.9	-1.4810	ug/L	-1.4810	ppb	16:49:09
3	S 181.975 Axial†	68.0	6.6	7.0784	ug/L	7.0784	ppb	16:49:09
3	Sb 206.836†	56.2	20.5	5.1159	ug/L	5.1159	ppb	16:49:09
3	Se 196.026†	-20.3	1.5	0.9717	ug/L	0.9717	ppb	16:49:09
3	Si 251.611†	7434.6	6736.6	171.07	ug/L	171.07	ppb	16:48:49
3	Sn 189.927†	-1.8	2.5	0.3439	ug/L	0.3439	ppb	16:49:09
3	Ti 334.940†	118.1	1376.3	1.8964	ug/L	1.8964	ppb	16:48:49
3	Tl 190.801†	-53.1	-7.9	-1.8506	ug/L	-1.8506	ppb	16:49:09
3	U 409.014†	-2799.1	27.7	0.6797	ug/L	0.6797	ppb	16:48:44
3	V 292.402†	-1500.1	136.8	0.7719	ug/L	0.7719	ppb	16:48:49
3	Zn 213.857†	1179.7	271.9	1.9489	ug/L	1.9489	ppb	16:49:09
3	SiO2†	7410.7	6671.8	362.57	ug/L	362.57	ppb	16:49:24

Mean Data: 241325002|925377|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1052496.8	101.25	%	1.045				1.03%
Sc Radial	4965.8	101	%	0.3				0.33%
Y 371.029	892815.8	100.94	%	1.010				1.00%
Y RADIAL	5717.0	101.2	%	0.29				0.29%
Ag 328.068†	-88.4	-0.3147	ug/L	0.09305	-0.3147	ppb	0.09305	29.57%
Al 396.153Radial†	118.4	78.172	ug/L	6.0681	78.172	ppb	6.0681	7.76%
As 188.979†	-4.2	-1.2566	ug/L	3.03810	-1.2566	ppb	3.03810	241.76%
B 249.677†	8.3	0.1419	ug/L	0.41335	0.1419	ppb	0.41335	291.27%
Ba 233.527†	439.4	2.8278	ug/L	0.02045	2.8278	ppb	0.02045	0.72%
Be 313.107†	59.0	0.0220	ug/L	0.02801	0.0220	ppb	0.02801	127.24%
Ca 317.933Radial†	31.9	56.471	ug/L	7.4010	56.471	ppb	7.4010	13.11%
Cd 226.502†	13.9	0.1144	ug/L	0.05481	0.1144	ppb	0.05481	47.89%
Co 228.616†	12.7	0.2024	ug/L	0.09055	0.2024	ppb	0.09055	44.74%
Cr 267.716†	1411.4	12.683	ug/L	0.1962	12.683	ppb	0.1962	1.55%
Cu 324.752†	420.8	1.1296	ug/L	0.08546	1.1296	ppb	0.08546	7.57%
Fe 238.204 Radial†	9.4	113.05	ug/L	20.231	113.05	ppb	20.231	17.90%
K 766.490 Radial†	123.5	22.340	ug/L	9.3952	22.340	ppb	9.3952	42.06%

Mg 279.077 IEC†	0.1	4.5878	ug/L	37.19947	4.5878	ppb	37.19947	810.84%
Mn 257.610†	7065.2	6.7016	ug/L	0.04114	6.7016	ppb	0.04114	0.61%
Mo 202.031†	16.8	0.8977	ug/L	0.24172	0.8977	ppb	0.24172	26.93%
Na 589.592 Radial†	767.4	215.25	ug/L	10.542	215.25	ppb	10.542	4.90%
Ni 231.604†	328.0	6.4260	ug/L	0.23577	6.4260	ppb	0.23577	3.67%
P 214.914†	23.7	10.374	ug/L	4.5609	10.374	ppb	4.5609	43.97%
Pb 220.353†	-6.4	-0.5950	ug/L	0.77433	-0.5950	ppb	0.77433	130.13%
S 181.975 Axial†	3.1	3.3734	ug/L	3.32712	3.3734	ppb	3.32712	98.63%
Sb 206.836†	20.5	5.1276	ug/L	2.00850	5.1276	ppb	2.00850	39.17%
Se 196.026†	-1.1	-0.0848	ug/L	1.70609	-0.0848	ppb	1.70609	>999.9%
Si 251.611†	6706.6	170.30	ug/L	0.705	170.30	ppb	0.705	0.41%
Sn 189.927†	3.3	0.4503	ug/L	0.16729	0.4503	ppb	0.16729	37.15%
Sr 421.552†	184.4	0.9671	ug/L	0.12016	0.9671	ppb	0.12016	12.42%
Ti 334.940†	1336.8	1.8420	ug/L	0.06797	1.8420	ppb	0.06797	3.69%
Tl 190.801†	-3.3	-0.7536	ug/L	1.67069	-0.7536	ppb	1.67069	221.69%
U 409.014†	28.3	0.6919	ug/L	1.53514	0.6919	ppb	1.53514	221.88%
V 292.402†	53.1	0.2939	ug/L	0.42426	0.2939	ppb	0.42426	144.38%
Zn 213.857†	287.1	2.0561	ug/L	0.12391	2.0561	ppb	0.12391	6.03%
SiO2†	6764.9	367.62	ug/L	4.661	367.62	ppb	4.661	1.27%

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0 ug/L	2467.0 ppb	17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00 ug/L	510.00 ppb	17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08 ug/L	988.08 ppb	17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65 ug/L	511.65 ppb	17:02:35
2	Se 196.026†	1101.6	1134.9	522.91 ug/L	522.91 ppb	17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9 ug/L	2523.9 ppb	17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00 ug/L	505.00 ppb	17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34 ug/L	508.34 ppb	17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32 ug/L	505.32 ppb	17:02:35
2	U 409.014†	16132.6	19081.4	491.71 ug/L	491.71 ppb	17:02:15
2	V 292.402†	85992.6	88533.4	513.61 ug/L	513.61 ppb	17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27 ug/L	506.27 ppb	17:02:15
2	SiO2†	99096.4	99571.7	5385.4 ug/L	5385.4 ppb	17:03:13
3	Sc Radial	4783.8	4783.8	97.4 %		17:01:19
3	Y RADIAL	5474.3	5474.3	96.94 %		17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1 ug/L	5154.1 ppb	17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7 ug/L	5093.7 ppb	17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5 ug/L	5010.5 ppb	17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8 ug/L	5005.8 ppb	17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6 ug/L	5244.6 ppb	17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6 ug/L	9733.6 ppb	17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13 ug/L	501.13 ppb	17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474 %		17:02:43
3	Y 371.029	860032.6	860032.6	97.237 %		17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06 ug/L	509.06 ppb	17:02:43
3	As 188.979†	1574.3	1635.3	513.94 ug/L	513.94 ppb	17:03:03
3	B 249.677†	25888.6	26755.8	503.69 ug/L	503.69 ppb	17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18 ug/L	511.18 ppb	17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43 ug/L	511.43 ppb	17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37 ug/L	511.37 ppb	17:02:43
3	Co 228.616†	30331.0	30887.2	508.95 ug/L	508.95 ppb	17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88 ug/L	509.88 ppb	17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19 ug/L	511.19 ppb	17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05 ug/L	512.05 ppb	17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93 ug/L	513.93 ppb	17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25 ug/L	508.25 ppb	17:03:03
3	P 214.914†	5929.5	5756.2	2497.7 ug/L	2497.7 ppb	17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78 ug/L	517.78 ppb	17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4 ug/L	1006.4 ppb	17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71 ug/L	516.71 ppb	17:03:03
3	Se 196.026†	1126.1	1164.9	535.77 ug/L	535.77 ppb	17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5 ug/L	2520.5 ppb	17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39 ug/L	512.39 ppb	17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94 ug/L	507.94 ppb	17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85 ug/L	515.85 ppb	17:03:03
3	U 409.014†	16138.4	19162.4	493.81 ug/L	493.81 ppb	17:02:43
3	V 292.402†	85723.1	88659.8	514.45 ug/L	514.45 ppb	17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31 ug/L	506.31 ppb	17:02:43
3	SiO2†	99466.9	100408.9	5430.6 ug/L	5430.6 ppb	17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L         1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L         3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L         0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L         0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L        62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L        18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L        10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L         0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L         3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L        43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L         2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L        15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L         4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L        13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L         3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L         6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L          3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L         3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L         1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L         0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L         5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L         2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L         0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L         1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L        22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
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Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628 ug/L	-2.1628 ppb	17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982 ug/L	1.3982 ppb	17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236 ug/L	2.6236 ppb	17:09:34
2	Sb 206.836†	49.9	15.7	4.1740 ug/L	4.1740 ppb	17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105 ug/L	-1.6105 ppb	17:09:34
2	Si 251.611†	628.2	76.8	1.9315 ug/L	1.9315 ppb	17:09:34
2	Sn 189.927†	5.3	9.7	1.2851 ug/L	1.2851 ppb	17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699 ug/L	0.0699 ppb	17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234 ug/L	-0.2234 ppb	17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719 ug/L	-3.0719 ppb	17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052 ug/L	-0.4052 ppb	17:09:14
2	Zn 213.857†	959.6	83.5	0.6171 ug/L	0.6171 ppb	17:09:34
2	SiO2†	603.8	10.7	0.5423 ug/L	0.5423 ppb	17:10:14
3	Sc Radial	4823.8	4823.8	98.3 %		17:08:12
3	Y RADIAL	5537.0	5537.0	98.05 %		17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834 ug/L	11.834 ppb	17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300 ug/L	10.300 ppb	17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132 ug/L	-18.132 ppb	17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822 ug/L	13.822 ppb	17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369 ug/L	60.369 ppb	17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232 ug/L	30.232 ppb	17:08:12
3	Sr 421.552†	12.6	20.3	0.1063 ug/L	0.1063 ppb	17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05 %		17:09:39
3	Y 371.029	885792.9	885792.9	100.15 %		17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296 ug/L	-0.3296 ppb	17:09:44
3	As 188.979†	-34.7	1.9	0.5789 ug/L	0.5789 ppb	17:10:04
3	B 249.677†	-424.2	42.1	0.7986 ug/L	0.7986 ppb	17:10:04
3	Ba 233.527†	12.8	12.8	0.0818 ug/L	0.0818 ppb	17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557 ug/L	0.0557 ppb	17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147 ug/L	0.1147 ppb	17:10:04
3	Co 228.616†	-81.4	5.0	0.0830 ug/L	0.0830 ppb	17:10:04
3	Cr 267.716†	106.9	19.1	0.1704 ug/L	0.1704 ppb	17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477 ug/L	0.1477 ppb	17:09:44
3	Mn 257.610†	610.1	33.1	0.0284 ug/L	0.0284 ppb	17:10:04
3	Mo 202.031†	31.4	2.1	0.1121 ug/L	0.1121 ppb	17:10:04
3	Ni 231.604†	133.0	1.0	0.0189 ug/L	0.0189 ppb	17:10:04
3	P 214.914†	272.4	7.2	3.2450 ug/L	3.2450 ppb	17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314 ug/L	0.1314 ppb	17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316 ug/L	-0.9316 ppb	17:10:04
3	Sb 206.836†	35.8	1.1	0.3268 ug/L	0.3268 ppb	17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605 ug/L	-2.1605 ppb	17:10:04
3	Si 251.611†	612.6	54.6	1.3742 ug/L	1.3742 ppb	17:10:04
3	Sn 189.927†	12.1	16.5	2.1777 ug/L	2.1777 ppb	17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180 ug/L	-0.0180 ppb	17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673 ug/L	-1.9673 ppb	17:10:04
3	U 409.014†	-2701.8	73.4	1.9008 ug/L	1.9008 ppb	17:09:39
3	V 292.402†	-1606.8	2.4	0.0234 ug/L	0.0234 ppb	17:09:44
3	Zn 213.857†	941.9	55.9	0.4102 ug/L	0.4102 ppb	17:10:04
3	SiO2†	646.1	46.8	2.5143 ug/L	2.5143 ppb	17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         115.7      21.072 ug/L        7.6270      21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.0     -42.772 ug/L       91.5125     -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        125.9      35.327 ug/L        6.6209      35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 14:45:06
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.293
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1083.0	1083.041	31.331	2.9
	Mg	24.0	17160.1	17160.100	83.179	0.5
	Co	58.9	41851.8	41851.817	233.658	0.6
	Rh	102.9	69668.7	69668.682	726.654	1.0
	In	114.9	88317.6	88317.573	728.115	0.8
	Pb	208.0	54128.4	54128.357	444.880	0.8
⌈>	Ba	137.9	76857.7	76857.668	361.085	0.5
⌊	Ba++	69.0	1192.0	0.016	0.000	2.2
⌈>	Ce	139.9	92145.2	92145.232	645.220	0.7
⌊	CeO	155.9	1941.5	0.021	0.000	1.3
	Bkgd	220.0	4.6	4.600	1.710	37.2

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.0	649.7
Co	59	15	7.0	23678.9
In	115	15	8.3	56319.1

ICPMS #4 TUNING REPORT

File Name: 091205.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	604	2060	0.678
Be	9.0	9.0	2044	2055	0.677
Mg	24.0	24.0	5675	2085	0.609
Mg	25.0	25.0	5949	2080	0.649
Mg	26.0	26.0	6152	2095	0.653
Co	58.9	58.9	14166	2120	0.711
Rh	102.9	102.9	24871	2220	0.689
In	114.9	114.9	27780	2255	0.676
Ce	139.9	139.9	33857	2300	0.664
Pb	206.0	206.0	49925	2460	0.687
Pb	207.0	207.0	50113	2380	0.647
Pb	208.0	208.0	50436	2490	0.665
U	238.1	238.0	57686	2480	0.669

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 01:51:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Blank.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94881	
|	Sb	121		ug/L		206	
⌊	Sb	123		ug/L		168	
⌈>	Lu	175		ug/L		124843	
⌊	U	238		ug/L		274	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 01:53:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		93794	93794.222
|	Sb	121	10.000	ug/L	1.806	14981	0.158
⌊	Sb	123		ug/L		11540	0.121
⌈>	Lu	175		ug/L		124991	124991.001
⌊	U	238	10.000	ug/L	1.907	105780	0.844

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 01:55:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97726	97726.327
|	Sb	121	100.045	ug/L	2.339	161443	1.650
⌊	Sb	123		ug/L		123252	1.259
⌈>	Lu	175		ug/L		131325	131324.849
⌊	U	238	99.969	ug/L	1.560	1075405	8.186

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 01:58:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		101548	101548.169
|	Sb	121	47.532	ug/L	3.319	79808	0.784
⌊	Sb	123		ug/L		60743	0.596
⌈>	Lu	175		ug/L		131776	131776.014
⌊	U	238	52.464	ug/L	0.204	566416	4.296

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.0			
|	Sb	121	95.063				
⌊	Sb	123					
⌈>	Lu	175		105.6			
⌊	U	238	104.928				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 02:00:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99963	99963.314
|	Sb	121	**0.646**	ug/L	2.928	1282	0.011
⌊	Sb	123		ug/L		1016	0.008
⌈>	Lu	175		ug/L		129577	129576.659
⌊	U	238	**0.007**	ug/L	20.004	363	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		105.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		103.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 02:03:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99922	99922.127
|	Sb	121	**3.019**	ug/L	2.978	5191	0.050
⌊	Sb	123		ug/L		4004	0.038
⌈>	Lu	175		ug/L		130370	130370.500
⌊	U	238	**0.218**	ug/L	0.590	2617	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		105.3			
|	Sb	121	100.629				
⌊	Sb	123					
⌈>	Lu	175		104.4			
⌊	U	238	109.180				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 02:05:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96099	96098.868
|	Sb	121	0.275	ug/L	5.749	645	0.005
⌊	Sb	123		ug/L		499	0.003
⌈>	Lu	175		ug/L		136251	136251.066
⌊	U	238	-0.012	ug/L	5.267	161	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.3			
|	Sb	121	275.478				
⌊	Sb	123					
⌈>	Lu	175		109.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 02:08:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		95824	95823.967
|	Sb	121	22.746	ug/L	1.165	36149	0.375
⌊	Sb	123		ug/L		27696	0.287
⌈>	Lu	175		ug/L		134971	134970.625
⌊	U	238	21.753	ug/L	0.441	240717	1.781

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.0			
|	Sb	121	113.163				
⌊	Sb	123					
⌈>	Lu	175		108.1			
⌊	U	238	108.764				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:10:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.667

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		105255	105255.407
|	Sb	121	**46.271**	ug/L	3.521	80528	0.763
⌊	Sb	123		ug/L		61839	0.586
⌈>	Lu	175		ug/L		137607	137607.309
⌊	U	238	**52.272**	ug/L	0.865	589321	4.280

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.9			
|	Sb	121	92.543				
⌊	Sb	123					
⌈>	Lu	175		110.2			
⌊	U	238	104.544				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:13:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.668

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103341	103341.175
|	Sb	121	0.466	ug/L	1.179	1019	0.008
⌊	Sb	123		ug/L		786	0.006
⌈>	Lu	175		ug/L		134147	134146.585
⌊	U	238	0.007	ug/L	53.173	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.9			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 02:15:39
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.669

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98677	98677.061
|	Sb	121	0.297	ug/L	11.519	697	0.005
⌊	Sb	123		ug/L		532	0.004
⌈>	Lu	175		ug/L		134491	134490.586
⌊	U	238	-0.019	ug/L	6.656	81	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		104.0			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 02:18:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.670

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		94240	94239.748
|	Sb	121	**60.514**	ug/L	4.873	94098	0.998
⌊	Sb	123		ug/L		71790	0.761
⌈>	Lu	175		ug/L		131309	131309.045
⌊	U	238	**58.935**	ug/L	4.695	633198	4.826

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.3			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		105.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241325001
Sample Date/Time: Sunday, December 06, 2009 02:20:44
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241325001.671

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97968	97967.783
|	Sb	121	0.114	ug/L	3.474	397	0.002
⌊	Sb	123		ug/L		325	0.002
⌈>	Lu	175		ug/L		134607	134607.252
⌊	U	238	-0.010	ug/L	14.643	182	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		103.3			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 02:23:17
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.672

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97907	97907.017
|	Sb	121	0.053	ug/L	29.941	298	0.001
⌊	Sb	123		ug/L		221	0.000
⌈>	Lu	175		ug/L		134933	134932.994
⌊	U	238	-0.021	ug/L	3.566	68	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		103.2			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		108.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 02:25:49
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.673

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		97276	97275.842
|	Sb	121	230.692	ug/L	1.853	370180	3.804
⌊	Sb	123		ug/L		285040	2.929
⌈>	Lu	175		ug/L		138254	138254.229
⌊	U	238	56.663	ug/L	0.828	641847	4.640

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		102.5			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		110.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 02:28:20
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.674

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102303	102302.909
|	Sb	121	0.116	ug/L	8.019	418	0.002
⌊	Sb	123		ug/L		342	0.002
⌈>	Lu	175		ug/L		133000	132999.932
⌊	U	238	-0.011	ug/L	8.371	173	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		107.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		106.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241325002
Sample Date/Time: Sunday, December 06, 2009 02:30:51
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\241325002.675

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		95995	95995.000
|	Sb	121	0.029	ug/L	40.411	255	0.000
⌊	Sb	123		ug/L		222	0.001
⌈>	Lu	175		ug/L		133424	133423.971
⌊	U	238	-0.007	ug/L	10.578	211	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		101.2			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		106.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 02:33:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104645	104645.062
|	Sb	121	44.663	ug/L	3.625	77290	0.736
⌊	Sb	123		ug/L		58955	0.562
⌈>	Lu	175		ug/L		135843	135843.408
⌊	U	238	52.000	ug/L	1.107	578638	4.258

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		110.3			
|	Sb	121	89.325				
⌊	Sb	123					
⌈>	Lu	175		108.8			
⌊	U	238	103.999				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 02:35:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.677

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102840	102840.323
|	Sb	121	0.475	ug/L	4.081	1029	0.008
⌊	Sb	123		ug/L		832	0.006
⌈>	Lu	175		ug/L		134766	134766.026
⌊	U	238	0.007	ug/L	27.530	371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		108.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		107.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 06, 2009 06:48:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Blank.698

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		103990	
Sb	121		ug/L		387	
Sb	123		ug/L		284	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115					
Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 06, 2009 06:50:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.699

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104439	104438.648
|	Sb	121	10.000	ug/L	3.353	15696	0.147
⌊	Sb	123		ug/L		12228	0.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 06, 2009 06:53:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.700

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		102809	102808.739
|	Sb	121	100.057	ug/L	1.734	160268	1.555
⌊	Sb	123		ug/L		122687	1.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115					
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 06, 2009 06:55:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.701

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		104936	104936.382
Sb	121	47.429	ug/L	2.427	77727	0.737
Sb	123		ug/L		59633	0.566

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		100.9			
Sb	121	94.858				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 06, 2009 06:57:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103664	103664.345
|	Sb	121	0.577	ug/L	6.610	1314	0.009
⌊	Sb	123		ug/L		1011	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.7			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 06, 2009 07:00:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.703

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		103667	103667.137
Sb	121	3.003	ug/L	2.855	5223	0.047
Sb	123		ug/L		4048	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
In	115		99.7			
Sb	121	100.103				
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 06, 2009 07:02:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.704

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		96888	96888.062
|	Sb	121	0.157	ug/L	17.849	596	0.002
⌊	Sb	123		ug/L		456	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		93.2			
|	Sb	121	156.604				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 06, 2009 07:04:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.705

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		97262	97261.862
	Sb	121	22.379	ug/L	2.910	34184	0.348
	Sb	123		ug/L		26455	0.269

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		93.5			
	Sb	121	111.337				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:07:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.706

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		104423	104422.693
|	Sb	121	45.130	ug/L	0.662	73637	0.702
⌊	Sb	123		ug/L		56804	0.541

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		100.4			
|	Sb	121	90.261				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:09:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.707

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103475	103475.010
|	Sb	121	0.373	ug/L	6.997	985	0.006
⌊	Sb	123		ug/L		765	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.5			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Sunday, December 06, 2009 07:11:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978333.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		99218	99217.948
	Sb	121	0.232	ug/L	1.796	727	0.004
	Sb	123		ug/L		547	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		95.4			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Sunday, December 06, 2009 07:14:23
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978334.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98264	98264.209
|	Sb	121	57.361	ug/L	4.434	87916	0.892
⌊	Sb	123		ug/L		66805	0.677

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		94.5			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241325001
Sample Date/Time: Sunday, December 06, 2009 07:16:49
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241325001.710

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		99085	99085.011
|	Sb	121	0.047	ug/L	42.424	440	0.001
⌊	Sb	123		ug/L		349	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.3			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Sunday, December 06, 2009 07:19:16
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978335.711

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98799	98799.490
|	Sb	121	-0.050	ug/L	7.222	290	-0.001
⌊	Sb	123		ug/L		239	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		95.0			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Sunday, December 06, 2009 07:21:42
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978336.712

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		98020	98019.587
|	Sb	121	232.616	ug/L	5.328	354564	3.616
⌊	Sb	123		ug/L		273620	2.790

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		94.3			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Sunday, December 06, 2009 07:24:06
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\1201978337.713

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		101812	101811.784
	Sb	121	0.073	ug/L	16.762	494	0.001
	Sb	123		ug/L		385	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		97.9			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241325002
Sample Date/Time: Sunday, December 06, 2009 07:26:32
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\241325002.714

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		96856	96856.289
	Sb	121	-0.051	ug/L	20.285	283	-0.001
	Sb	123		ug/L		243	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		93.1			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 06, 2009 07:28:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.715

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		102894	102894.081
	Sb	121	52.491	ug/L	4.276	84269	0.816
	Sb	123		ug/L		63858	0.618

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	In	115		98.9			
	Sb	121	104.981				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 06, 2009 07:31:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.716

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		103848	103848.492
|	Sb	121	0.180	ug/L	15.753	676	0.003
⌊	Sb	123		ug/L		524	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	In	115		99.9			
|	Sb	121					
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, December 04, 2009 17:10:05
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1393
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3656.5	3656.468	46.959	1.3
	Mg	24.0	33148.4	33148.415	197.622	0.6
	Co	58.9	77411.2	77411.206	1133.042	1.5
	Rh	102.9	141123.3	141123.253	984.846	0.7
	In	114.9	192067.3	192067.328	2730.625	1.4
	Pb	208.0	142811.1	142811.081	483.021	0.3
⌈>	Ba	137.9	191898.6	191898.598	1606.226	0.8
⌊	Ba++	69.0	3033.7	0.016	0.000	1.1
⌈>	Ce	139.9	239168.6	239168.575	2249.215	0.9
⌊	CeO	155.9	4645.9	0.019	0.000	1.3
	Bkgd	220.0	17.2	17.200	2.280	13.3

Current Optimization File Data

Current Value	Description
0.82	Nebulizer Gas Flow
6.25	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	5.8	3946.9
Co	59	9	6.0	76591.8
In	115	9	6.5	198967.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2060	0.592
Be	9.0	9.0	2066	2070	0.631
Mg	24.0	24.0	5699	2070	0.696
Mg	25.0	25.0	5915	2075	0.626
Mg	26.0	26.0	6201	2070	0.658
Co	58.9	59.0	14190	2095	0.653
Rh	102.9	102.9	24874	2160	0.628
In	114.9	114.9	27788	2180	0.627
Ce	139.9	139.9	33872	2195	0.644
Pb	206.0	206.0	49948	2290	0.613
Pb	207.0	207.0	50159	2260	0.606
Pb	208.0	208.0	50451	2280	0.640
U	238.1	238.1	57732	2295	0.653

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 02:29:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Blank.654

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		83	
	Be	9		ug/L		12	
	B	11		ug/L		565	
	Na	23		ug/L		7002	
	Mg	24		ug/L		3000	
	Al	27		ug/L		8003	
	P	31		ug/L		3471	
	K	39		ug/L		457208	
	Ca	43		ug/L		213	
>	Sc	45		ug/L		325296	
	Ti	47		ug/L		307	
	V	51		ug/L		5688	
	Cr	52		ug/L		-1171	
	Cr	53		ug/L		67764	
	Mn	55		ug/L		1013	
	Fe	57		ug/L		6366	
	Co	59		ug/L		113	
	Ni	60		ug/L		81	
	Cu	63		ug/L		175	
	Cu	65		ug/L		94	
	Zn	66		ug/L		258	
	Zn	67		ug/L		6067	
	Zn	68		ug/L		747	
>	Ge	74		ug/L		367892	
	As	75		ug/L		147	
	Se	77		ug/L		3492	
	Se	82		ug/L		-11	
	Kr	83		ug/L		110	
	Sr	88		ug/L		189	
	Y	89		ug/L		59	
	Mo	98		ug/L		110	
	Ag	107		ug/L		55	
	Cd	111		ug/L		24	
	Cd	114		ug/L		54	
>	In	115		ug/L		223674	
	Sn	120		ug/L		439	
	Sb	121		ug/L		548	
	Sb	123		ug/L		448	
	Ba	135		ug/L		38	
	Ba	137		ug/L		61	
	Ho	165		ug/L		40	
>	Lu	175		ug/L		367322	
	Tl	205		ug/L		712	
	Pb	208		ug/L		984	
	Bi	209		ug/L		376	
	Th	232		ug/L		1896	
	U	238		ug/L		408	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 02:36:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 1.655

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.268	15542	0.048
	Be	9	10.000	ug/L	0.927	3331	0.010
	B	11	20.000	ug/L	4.411	6183	0.017
	Na	23	1000.000	ug/L	2.304	2871399	8.893
	Mg	24	1000.000	ug/L	0.121	1863055	5.774
	Al	27	1000.000	ug/L	7.415	2926472	9.062
	P	31	1000.000	ug/L	3.205	182352	0.555
	K	39	1000.000	ug/L	11.422	4958549	13.998
	Ca	43	1000.000	ug/L	1.960	9893	0.030
>	Sc	45		ug/L		322144	322144.200
	Ti	47	10.000	ug/L	1.104	5000	0.015
	V	51	10.000	ug/L	8.230	62190	0.176
	Cr	52	10.000	ug/L	0.249	43558	0.139
	Cr	53		ug/L		79619	0.039
	Mn	55	10.000	ug/L	0.164	78434	0.240
	Fe	57	1000.000	ug/L	1.712	164717	0.492
	Co	59	10.000	ug/L	2.061	58983	0.183
	Ni	60	10.000	ug/L	2.986	12462	0.038
	Cu	63		ug/L		30558	0.094
	Cu	65	10.000	ug/L	1.703	14838	0.046
	Zn	66	10.000	ug/L	2.419	10687	0.028
	Zn	67		ug/L		8046	0.005
	Zn	68		ug/L		8364	0.021
>	Ge	74		ug/L		367660	367660.467
	As	75	10.000	ug/L	0.994	10809	0.029
	Se	77		ug/L		4931	0.004
	Se	82	10.000	ug/L	4.356	1088	0.003
	Kr	83		ug/L		106	-0.000
	Sr	88	10.000	ug/L	0.458	124702	0.559
	Y	89		ug/L		63	0.000
	Mo	98	10.000	ug/L	0.600	28839	0.129
	Ag	107	10.000	ug/L	0.886	49442	0.222
	Cd	111	10.000	ug/L	0.816	12165	0.055
	Cd	114		ug/L		28717	0.129
>	In	115		ug/L		222563	222563.256
	Sn	120	10.000	ug/L	4.055	49744	0.222
	Sb	121	10.000	ug/L	11.691	35653	0.158
	Sb	123		ug/L		28005	0.124
	Ba	135		ug/L		13512	0.037
	Ba	137	10.000	ug/L	0.828	24071	0.066
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		364712	364711.741
	Tl	205	10.000	ug/L	1.179	153881	0.420
	Pb	208	10.000	ug/L	1.449	235761	0.644
	Bi	209		ug/L		384	0.000
	Th	232	10.000	ug/L	1.876	272227	0.741
	U	238	10.000	ug/L	1.851	300336	0.822

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 02:42:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 2.656

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.980**	ug/L	0.704	156240	0.470
	Be	9	**99.961**	ug/L	0.979	32944	0.099
	B	11	**200.020**	ug/L	3.536	59127	0.176
	Na	23	**10006.696**	ug/L	2.940	31684406	95.373
	Mg	24	**10011.906**	ug/L	5.136	21789350	65.623
	Al	27	**10002.905**	ug/L	10.624	30963959	93.355
	P	31	**9989.801**	ug/L	1.904	1675066	5.035
	K	39	**9997.962**	ug/L	7.215	45973459	137.155
	Ca	43	**9997.517**	ug/L	3.951	97522	0.293
>	Sc	45		ug/L		332045	332045.124
	Ti	47	**100.007**	ug/L	2.350	49067	0.147
	V	51	**99.984**	ug/L	3.276	579381	1.728
	Cr	52	**99.982**	ug/L	2.030	451432	1.364
	Cr	53		ug/L		145292	0.229
	Mn	55	**99.966**	ug/L	1.870	772327	2.323
	Fe	57	**9988.172**	ug/L	4.279	1464426	4.393
	Co	59	**99.957**	ug/L	0.728	581507	1.751
	Ni	60	**99.981**	ug/L	0.989	125275	0.377
	Cu	63		ug/L		299907	0.903
	Cu	65	**99.971**	ug/L	2.592	147706	0.445
	Zn	66	**99.987**	ug/L	1.708	104895	0.280
	Zn	67		ug/L		24828	0.050
	Zn	68		ug/L		76488	0.203
>	Ge	74		ug/L		373529	373528.738
	As	75	**100.010**	ug/L	0.969	109601	0.293
	Se	77		ug/L		13814	0.027
	Se	82	**99.964**	ug/L	1.181	10769	0.029
	Kr	83		ug/L		138	0.000
	Sr	88	**99.942**	ug/L	0.937	1178005	5.282
	Y	89		ug/L		156	0.000
	Mo	98	**99.993**	ug/L	2.875	285749	1.281
	Ag	107	**99.956**	ug/L	1.702	473704	2.124
	Cd	111	**99.976**	ug/L	1.185	118713	0.532
	Cd	114		ug/L		279353	1.253
>	In	115		ug/L		222981	222980.818
	Sn	120	**99.993**	ug/L	1.690	490793	2.199
	Sb	121	**100.112**	ug/L	9.451	396906	1.779
	Sb	123		ug/L		312221	1.399
	Ba	135		ug/L		133607	0.375
	Ba	137	**99.998**	ug/L	0.628	234019	0.657
	Ho	165		ug/L		53	0.000
>	Lu	175		ug/L		356006	356005.501
	Tl	205	**99.865**	ug/L	1.271	1316358	3.696
	Pb	208	**99.921**	ug/L	0.369	2123639	5.963
	Bi	209		ug/L		521	0.000
	Th	232	**99.954**	ug/L	1.354	2524233	7.085
	U	238	**99.877**	ug/L	2.285	2604978	7.316

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 02:48:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 1.657

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.754**	ug/L	1.871	81520	0.243
	Be	9	**52.697**	ug/L	3.657	17497	0.052
	B	11	**109.542**	ug/L	3.920	32884	0.097
	Na	23	**4602.047**	ug/L	2.954	14687911	43.862
	Mg	24	**4978.796**	ug/L	2.172	10917581	32.633
	Al	27	**4758.204**	ug/L	3.854	14862464	44.407
	P	31	**5275.789**	ug/L	1.572	893070	2.659
	K	39	**4730.387**	ug/L	10.830	22204413	64.893
	Ca	43	**5059.015**	ug/L	0.813	49855	0.148
>	Sc	45		ug/L		334573	334573.295
	Ti	47	**50.275**	ug/L	4.388	24999	0.074
	V	51	**51.547**	ug/L	1.584	303857	0.891
	Cr	52	**51.730**	ug/L	3.000	234714	0.705
	Cr	53		ug/L		112569	0.128
	Mn	55	**51.930**	ug/L	3.638	404616	1.207
	Fe	57	**5181.134**	ug/L	0.099	768921	2.279
	Co	59	**49.440**	ug/L	2.075	289817	0.866
	Ni	60	**50.089**	ug/L	0.920	63283	0.189
	Cu	63		ug/L		157248	0.470
	Cu	65	**51.541**	ug/L	2.414	76765	0.229
	Zn	66	**51.172**	ug/L	0.975	53884	0.143
	Zn	67		ug/L		16218	0.027
	Zn	68		ug/L		39964	0.105
>	Ge	74		ug/L		374072	374071.882
	As	75	**47.863**	ug/L	3.253	52598	0.140
	Se	77		ug/L		9276	0.015
	Se	82	**49.996**	ug/L	1.532	5389	0.014
	Kr	83		ug/L		129	0.000
	Sr	88	**51.089**	ug/L	1.916	599434	2.700
	Y	89		ug/L		107	0.000
	Mo	98	**50.405**	ug/L	3.850	143408	0.646
	Ag	107	**50.413**	ug/L	1.470	237837	1.071
	Cd	111	**50.386**	ug/L	2.430	59555	0.268
	Cd	114		ug/L		141968	0.639
>	In	115		ug/L		221956	221955.880
	Sn	120	**51.024**	ug/L	3.316	249445	1.122
	Sb	121	**48.038**	ug/L	11.255	189857	0.854
	Sb	123		ug/L		148988	0.670
	Ba	135		ug/L		67472	0.186
	Ba	137	**49.832**	ug/L	2.258	118635	0.327
	Ho	165		ug/L		81	0.000
>	Lu	175		ug/L		362133	362133.114
	Tl	205	**51.019**	ug/L	1.264	684350	1.888
	Pb	208	**52.132**	ug/L	1.299	1127496	3.111
	Bi	209		ug/L		421	0.000
	Th	232	**50.374**	ug/L	2.626	1294845	3.571
	U	238	**52.866**	ug/L	1.221	1402577	3.872

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	103.509				
	Be	9	105.394				
	B	11	109.542				
	Na	23	92.041				
	Mg	24	99.576				
	Al	27	94.222				
	P	31	105.516				
	K	39	94.608				
	Ca	43	101.180				
>	Sc	45		102.9			
	Ti	47	100.551				
	V	51	103.094				
	Cr	52	103.461				
	Cr	53					
	Mn	55	103.859				
	Fe	57	103.623				
	Co	59	98.879				
	Ni	60	100.178				
	Cu	63					
	Cu	65	103.083				
	Zn	66	102.345				
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75	95.725				
	Se	77					
	Se	82	99.991				
	Kr	83					
	Sr	88	102.179				
	Y	89					
	Mo	98	100.809				
	Ag	107	100.826				
	Cd	111	100.772				
	Cd	114					
>	In	115		99.2			
	Sn	120	102.048				
	Sb	121	96.075				
	Sb	123					
	Ba	135					
	Ba	137	99.663				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	102.038				
	Pb	208	104.263				
	Bi	209					
	Th	232	100.747				
	U	238	105.731				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 02:54:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 2.658

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.040**	ug/L	30.669	143	0.000
	Be	9	**0.026**	ug/L	6.323	20	0.000
	B	11	**5.314**	ug/L	12.145	2075	0.005
	Na	23	**2.832**	ug/L	53.845	15676	0.027
	Mg	24	**3.017**	ug/L	34.751	9336	0.020
	Al	27	**2.320**	ug/L	66.584	15008	0.022
	P	31	**4.079**	ug/L	25.449	4108	0.002
	K	39	**2.526**	ug/L	154.623	464775	0.035
	Ca	43	**3.164**	ug/L	69.386	242	0.000
>	Sc	45		ug/L		322887	322886.661
	Ti	47	**0.013**	ug/L	216.146	311	0.000
	V	51	**0.258**	ug/L	166.985	7071	0.004
	Cr	52	**0.066**	ug/L	188.033	-879	0.001
	Cr	53		ug/L		67393	0.000
	Mn	55	**0.007**	ug/L	122.333	1059	0.000
	Fe	57	**4.316**	ug/L	9.005	6932	0.002
	Co	59	**0.022**	ug/L	26.589	237	0.000
	Ni	60	**0.013**	ug/L	110.042	96	0.000
	Cu	63		ug/L		245	0.000
	Cu	65	**0.027**	ug/L	18.534	133	0.000
	Zn	66	**0.045**	ug/L	46.386	303	0.000
	Zn	67		ug/L		5908	-0.000
	Zn	68		ug/L		772	0.000
>	Ge	74		ug/L		366642	366641.550
	As	75	**0.023**	ug/L	543.824	171	0.000
	Se	77		ug/L		3691	0.001
	Se	82	**-0.112**	ug/L	125.363	-23	-0.000
	Kr	83		ug/L		114	0.000
	Sr	88	**0.015**	ug/L	47.178	366	0.001
	Y	89		ug/L		43	-0.000
	Mo	98	**0.122**	ug/L	24.449	459	0.002
	Ag	107	**0.018**	ug/L	52.088	142	0.000
	Cd	111	**0.016**	ug/L	42.009	43	0.000
	Cd	114		ug/L		91	0.000
>	In	115		ug/L		223944	223944.208
	Sn	120	**0.512**	ug/L	12.937	2964	0.011
	Sb	121	**1.427**	ug/L	17.965	6227	0.025
	Sb	123		ug/L		4924	0.020
	Ba	135		ug/L		60	0.000
	Ba	137	**0.014**	ug/L	29.189	95	0.000
	Ho	165		ug/L		45	0.000
>	Lu	175		ug/L		368839	368839.171
	Tl	205	**0.159**	ug/L	21.683	2880	0.006
	Pb	208	**0.021**	ug/L	20.418	1446	0.001
	Bi	209		ug/L		372	-0.000
	Th	232	**0.322**	ug/L	13.552	10321	0.023
	U	238	**0.031**	ug/L	26.660	1247	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 03:00:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 3.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.411**	ug/L	1.528	17552	0.054
	Be	9	**0.577**	ug/L	7.263	198	0.001
	B	11	**19.046**	ug/L	0.638	6032	0.017
	Na	23	**244.917**	ug/L	4.909	767110	2.334
	Mg	24	**16.048**	ug/L	41.204	37052	0.105
	Al	27	**35.032**	ug/L	22.710	114132	0.327
	P	31	**67.507**	ug/L	1.242	14546	0.034
	K	39	**270.704**	ug/L	2.625	1666197	3.714
	Ca	43	**223.743**	ug/L	0.846	2349	0.007
>	Sc	45		ug/L		325470	325469.703
	Ti	47	**9.230**	ug/L	0.659	4718	0.014
	V	51	**11.156**	ug/L	3.134	68473	0.193
	Cr	52	**11.116**	ug/L	3.279	48147	0.152
	Cr	53		ug/L		91452	0.073
	Mn	55	**5.723**	ug/L	0.910	44304	0.133
	Fe	57	**118.097**	ug/L	4.311	23275	0.052
	Co	59	**1.104**	ug/L	2.631	6408	0.019
	Ni	60	**2.183**	ug/L	1.528	2761	0.008
	Cu	63		ug/L		3563	0.010
	Cu	65	**1.144**	ug/L	2.964	1750	0.005
	Zn	66	**10.934**	ug/L	1.179	11539	0.031
	Zn	67		ug/L		9355	0.009
	Zn	68		ug/L		8951	0.022
>	Ge	74		ug/L		368286	368286.456
	As	75	**5.201**	ug/L	6.037	5759	0.015
	Se	77		ug/L		5651	0.006
	Se	82	**5.408**	ug/L	4.211	564	0.002
	Kr	83		ug/L		106	-0.000
	Sr	88	**11.419**	ug/L	0.805	135019	0.604
	Y	89		ug/L		49	-0.000
	Mo	98	**0.552**	ug/L	1.856	1690	0.007
	Ag	107	**1.046**	ug/L	1.917	5021	0.022
	Cd	111	**1.113**	ug/L	2.266	1348	0.006
	Cd	114		ug/L		3061	0.013
>	In	115		ug/L		223405	223405.298
	Sn	120	**5.656**	ug/L	1.025	28228	0.124
	Sb	121	**3.626**	ug/L	6.710	14937	0.064
	Sb	123		ug/L		11721	0.050
	Ba	135		ug/L		2907	0.008
	Ba	137	**2.127**	ug/L	2.383	5138	0.014
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		363271	363271.336
	Tl	205	**1.196**	ug/L	3.137	16779	0.044
	Pb	208	**2.304**	ug/L	0.713	50921	0.137
	Bi	209		ug/L		331	-0.000
	Th	232	**1.387**	ug/L	2.932	37591	0.098
	U	238	**0.254**	ug/L	0.539	7174	0.019

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	114.107				
	Be	9	115.481				
	B	11	126.974				
	Na	23	97.967				
	Mg	24	106.988				
	Al	27	116.775				
	P	31	135.015				
	K	39	90.235				
	Ca	43	111.871				
>	Sc	45		100.1			
	Ti	47	92.299				
	V	51	111.558				
	Cr	52	111.162				
	Cr	53					
	Mn	55	114.459				
	Fe	57	118.097				
	Co	59	110.421				
	Ni	60	109.174				
	Cu	63					
	Cu	65	114.420				
	Zn	66	109.339				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75	104.012				
	Se	77					
	Se	82	108.157				
	Kr	83					
	Sr	88	114.185				
	Y	89					
	Mo	98	110.406				
	Ag	107	104.600				
	Cd	111	111.251				
	Cd	114					
>	In	115		99.9			
	Sn	120	113.113				
	Sb	121	120.876				
	Sb	123					
	Ba	135					
	Ba	137	106.332				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	119.589				
	Pb	208	115.210				
	Bi	209					
	Th	232	138.716				
	U	238	127.215				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	P	31	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 03:06:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 4.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.133**	ug/L	14.153	292	0.001
	Be	9	**0.113**	ug/L	20.921	49	0.000
	B	11	**1.915**	ug/L	17.624	1134	0.002
	Na	23	**91260.194**	ug/L	3.361	287994573	869.794
	Mg	24	**100461.732**	ug/L	3.250	218065300	658.473
	Al	27	**93009.750**	ug/L	5.819	287171837	868.037
	P	31	**95325.534**	ug/L	1.753	15906388	48.048
	K	39	**92215.233**	ug/L	2.892	419158827	1265.037
	Ca	43	**93932.565**	ug/L	0.771	912162	2.755
>	Sc	45		ug/L		331040	331040.369
	Ti	47	**1477.981**	ug/L	1.342	718635	2.170
	V	51	**0.472**	ug/L	68.934	8469	0.008
	Cr	52	**3.074**	ug/L	7.610	12673	0.042
	Cr	53		ug/L		68952	-0.000
	Mn	55	**6.121**	ug/L	0.917	48129	0.142
	Fe	57	**102215.553**	ug/L	1.374	14885439	44.953
	Co	59	**0.281**	ug/L	1.957	1745	0.005
	Ni	60	**2.754**	ug/L	3.278	3521	0.010
	Cu	63		ug/L		11685	0.035
	Cu	65	**4.604**	ug/L	1.479	6873	0.020
	Zn	66	**3.428**	ug/L	0.594	3788	0.010
	Zn	67		ug/L		7368	0.004
	Zn	68		ug/L		1695	0.003
>	Ge	74		ug/L		367679	367679.141
	As	75	**-0.007**	ug/L	7431.206	138	-0.000
	Se	77		ug/L		5679	0.006
	Se	82	**-0.917**	ug/L	20.413	-108	-0.000
	Kr	83		ug/L		280	0.000
	Sr	88	**1.292**	ug/L	2.333	14842	0.068
	Y	89		ug/L		411	0.002
	Mo	98	**2147.326**	ug/L	3.297	5906088	27.516
	Ag	107	**0.081**	ug/L	14.652	421	0.002
	Cd	111	**0.546**	ug/L	24.541	647	0.003
	Cd	114		ug/L		6856	0.032
>	In	115		ug/L		214699	214699.337
	Sn	120	**0.426**	ug/L	4.235	2433	0.009
	Sb	121	**0.384**	ug/L	16.642	1990	0.007
	Sb	123		ug/L		1617	0.006
	Ba	135		ug/L		978	0.003
	Ba	137	**0.712**	ug/L	3.113	1649	0.005
	Ho	165		ug/L		901	0.003
>	Lu	175		ug/L		340404	340404.446
	Tl	205	**0.046**	ug/L	20.645	1244	0.002
	Pb	208	**0.294**	ug/L	1.368	6874	0.018
	Bi	209		ug/L		965	0.002
	Th	232	**0.786**	ug/L	33.527	20691	0.056
	U	238	**0.112**	ug/L	3.389	3183	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23	91.260				
|	Mg	24	100.462				
|	Al	27	93.010				
|	P	31	95.326				
|	K	39	92.215				
|	Ca	43	93.933				
|>	Sc	45		101.8			
|	Ti	47	73.899				
|	V	51					
|	Cr	52	83.076				
|	Cr	53					
|	Mn	55	105.531				
|	Fe	57	102.216				
|	Co	59	112.408				
|	Ni	60	102.016				
|	Cu	63					
⌊	Cu	65	158.753				
⌈	Zn	66	95.211				
|	Zn	67					
|	Zn	68					
|>	Ge	74		99.9			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	107.674				
|	Y	89					
|	Mo	98	107.366				
|	Ag	107					
|	Cd	111	136.404				
|	Cd	114					
|>	In	115		96.0			
|	Sn	120					
|	Sb	121	383.649				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	106.311				
|	Ho	165					
|>	Lu	175		92.7			
|	Tl	205					
|	Pb	208	146.765				
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 03:12:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 5.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.317**	ug/L	3.364	31107	0.096
	Be	9	**19.234**	ug/L	2.507	6207	0.019
	B	11	**19.438**	ug/L	4.152	6129	0.017
	Na	23	**99073.516**	ug/L	2.909	306838457	944.262
	Mg	24	**99557.273**	ug/L	5.522	212018111	652.545
	Al	27	**97347.246**	ug/L	3.062	295101632	908.518
	P	31	**97263.889**	ug/L	4.180	15913691	49.025
	K	39	**95834.052**	ug/L	3.850	427720686	1314.681
	Ca	43	**94651.729**	ug/L	1.177	901545	2.776
>	Sc	45		ug/L		324774	324773.835
	Ti	47	**1483.017**	ug/L	2.999	707138	2.178
	V	51	**22.137**	ug/L	5.218	129828	0.383
	Cr	52	**24.375**	ug/L	5.139	106693	0.332
	Cr	53		ug/L		79180	0.036
	Mn	55	**27.581**	ug/L	2.597	209115	0.641
	Fe	57	**104028.057**	ug/L	3.311	14856281	45.751
	Co	59	**20.901**	ug/L	4.184	118938	0.366
	Ni	60	**22.341**	ug/L	3.932	27425	0.084
	Cu	63		ug/L		68141	0.209
	Cu	65	**23.987**	ug/L	1.450	34734	0.107
	Zn	66	**22.497**	ug/L	2.661	23239	0.063
	Zn	67		ug/L		10617	0.013
	Zn	68		ug/L		15807	0.041
>	Ge	74		ug/L		364770	364770.358
	As	75	**20.757**	ug/L	3.324	22334	0.061
	Se	77		ug/L		7124	0.010
	Se	82	**19.872**	ug/L	1.839	2082	0.006
	Kr	83		ug/L		272	0.000
	Sr	88	**24.222**	ug/L	0.723	277534	1.280
	Y	89		ug/L		411	0.002
	Mo	98	**2114.437**	ug/L	2.469	5868610	27.094
	Ag	107	**19.515**	ug/L	1.933	89895	0.415
	Cd	111	**20.422**	ug/L	3.892	23573	0.109
	Cd	114		ug/L		62939	0.290
>	In	115		ug/L		216625	216624.562
	Sn	120	**21.335**	ug/L	1.907	102070	0.469
	Sb	121	**23.795**	ug/L	3.631	92110	0.423
	Sb	123		ug/L		72711	0.334
	Ba	135		ug/L		28466	0.083
	Ba	137	**21.907**	ug/L	2.821	49653	0.144
	Ho	165		ug/L		942	0.003
>	Lu	175		ug/L		344588	344587.864
	Tl	205	**21.387**	ug/L	2.823	273330	0.791
	Pb	208	**21.492**	ug/L	2.381	442728	1.282
	Bi	209		ug/L		1322	0.003
	Th	232	**22.551**	ug/L	2.588	552478	1.599
	U	238	**23.826**	ug/L	1.602	601675	1.745

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	101.584				
	Be	9	96.172				
	B	11	97.188				
	Na	23	99.074				
	Mg	24	99.557				
	Al	27	97.347				
	P	31	97.264				
	K	39	95.834				
	Ca	43	94.652				
>	Sc	45		99.8			
	Ti	47	74.151				
	V	51	110.683				
	Cr	52	102.849				
	Cr	53					
	Mn	55	106.905				
	Fe	57	104.028				
	Co	59	103.213				
	Ni	60	98.416				
	Cu	63					
	Cu	65	104.745				
	Zn	66	95.326				
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75	103.787				
	Se	77					
	Se	82	99.362				
	Kr	83					
	Sr	88	114.255				
	Y	89					
	Mo	98	105.722				
	Ag	107	97.573				
	Cd	111	100.108				
	Cd	114					
>	In	115		96.8			
	Sn	120	106.675				
	Sb	121	118.384				
	Sb	123					
	Ba	135					
	Ba	137	105.985				
	Ho	165					
>	Lu	175		93.8			
	Tl	205	106.933				
	Pb	208	106.394				
	Bi	209					
	Th	232	112.757				
	U	238	119.129				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 03:18:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.494**	**ug/L**	1.475	76824	0.242
	Be	9	**52.602**	**ug/L**	1.232	16550	0.052
	B	11	**101.515**	**ug/L**	2.435	28913	0.090
	Na	23	**4945.476**	**ug/L**	4.582	14935445	47.135
	Mg	24	**5121.495**	**ug/L**	1.922	10642709	33.569
	Al	27	**5030.481**	**ug/L**	5.042	14894915	46.948
	P	31	**5320.040**	**ug/L**	2.105	853081	2.682
	K	39	**4897.029**	**ug/L**	11.192	21739095	67.179
	Ca	43	**5067.031**	**ug/L**	2.885	47277	0.149
>	Sc	45		**ug/L**		316880	316879.709
	Ti	47	**54.881**	**ug/L**	0.833	25832	0.081
	V	51	**52.971**	**ug/L**	3.490	295517	0.916
	Cr	52	**52.559**	**ug/L**	2.303	225926	0.717
	Cr	53		**ug/L**		106918	0.129
	Mn	55	**52.667**	**ug/L**	1.091	388822	1.224
	Fe	57	**5350.264**	**ug/L**	2.101	751603	2.353
	Co	59	**50.209**	**ug/L**	1.694	278766	0.880
	Ni	60	**50.819**	**ug/L**	0.999	60805	0.192
	Cu	63		**ug/L**		149098	0.470
	Cu	65	**51.728**	**ug/L**	0.743	72990	0.230
	Zn	66	**50.620**	**ug/L**	2.959	51955	0.142
	Zn	67		**ug/L**		15315	0.026
	Zn	68		**ug/L**		38309	0.103
>	Ge	74		**ug/L**		364622	364621.590
	As	75	**46.755**	**ug/L**	0.945	50100	0.137
	Se	77		**ug/L**		9049	0.015
	Se	82	**50.789**	**ug/L**	1.729	5336	0.015
	Kr	83		**ug/L**		100	-0.000
	Sr	88	**49.973**	**ug/L**	1.263	585667	2.641
	Y	89		**ug/L**		111	0.000
	Mo	98	**49.883**	**ug/L**	2.153	141774	0.639
	Ag	107	**50.353**	**ug/L**	1.063	237302	1.070
	Cd	111	**50.612**	**ug/L**	1.832	59753	0.269
	Cd	114		**ug/L**		140960	0.636
>	In	115		**ug/L**		221686	221685.874
	Sn	120	**49.763**	**ug/L**	2.159	243020	1.095
	Sb	121	**46.864**	**ug/L**	12.040	184895	0.833
	Sb	123		**ug/L**		147008	0.662
	Ba	135		**ug/L**		67344	0.185
	Ba	137	**49.462**	**ug/L**	1.848	118185	0.325
	Ho	165		**ug/L**		76	0.000
>	Lu	175		**ug/L**		363415	363415.120
	Tl	205	**51.231**	**ug/L**	1.287	689658	1.896
	Pb	208	**52.410**	**ug/L**	0.685	1137510	3.127
	Bi	209		**ug/L**		380	0.000
	Th	232	**50.296**	**ug/L**	0.506	1297506	3.565
	U	238	**52.593**	**ug/L**	1.504	1400414	3.852

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.987				
	Be	9	105.204				
	B	11	101.515				
	Na	23	98.910				
	Mg	24	102.430				
	Al	27	99.613				
	P	31	106.401				
	K	39	97.941				
	Ca	43	101.341				
>	Sc	45		97.4			
	Ti	47	109.762				
	V	51	105.942				
	Cr	52	105.119				
	Cr	53					
	Mn	55	105.333				
	Fe	57	107.005				
	Co	59	100.419				
	Ni	60	101.638				
	Cu	63					
	Cu	65	103.457				
	Zn	66	101.240				
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75	93.510				
	Se	77					
	Se	82	101.577				
	Kr	83					
	Sr	88	99.947				
	Y	89					
	Mo	98	99.766				
	Ag	107	100.707				
	Cd	111	101.225				
	Cd	114					
>	In	115		99.1			
	Sn	120	99.526				
	Sb	121	93.728				
	Sb	123					
	Ba	135					
	Ba	137	98.924				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	102.462				
	Pb	208	104.821				
	Bi	209					
	Th	232	100.592				
	U	238	105.187				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 03:24:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.022**	ug/L	13.690	111	0.000
	Be	9	**0.034**	ug/L	62.996	22	0.000
	B	11	**3.237**	ug/L	15.543	1420	0.003
	Na	23	**4.991**	ug/L	18.503	21349	0.048
	Mg	24	**4.170**	ug/L	76.122	11339	0.027
	Al	27	**2.916**	ug/L	42.035	16009	0.027
	P	31	**8.263**	ug/L	13.037	4587	0.004
	K	39	**20.166**	ug/L	34.334	519974	0.277
	Ca	43	**8.140**	ug/L	23.358	277	0.000
>	Sc	45		ug/L		309216	309215.594
	Ti	47	**1.062**	ug/L	6.669	774	0.002
	V	51	**0.160**	ug/L	179.355	6263	0.003
	Cr	52	**-0.137**	ug/L	67.510	-1692	-0.002
	Cr	53		ug/L		66434	0.006
	Mn	55	**-0.006**	ug/L	149.171	919	-0.000
	Fe	57	**9.839**	ug/L	4.340	7389	0.004
	Co	59	**0.016**	ug/L	18.081	193	0.000
	Ni	60	**0.019**	ug/L	36.518	100	0.000
	Cu	63		ug/L		219	0.000
	Cu	65	**0.028**	ug/L	26.941	127	0.000
	Zn	66	**0.038**	ug/L	18.968	290	0.000
	Zn	67		ug/L		5847	-0.000
	Zn	68		ug/L		758	0.000
>	Ge	74		ug/L		359437	359437.203
	As	75	**-0.013**	ug/L	2600.637	130	-0.000
	Se	77		ug/L		3779	0.001
	Se	82	**0.001**	ug/L	15902.475	-11	0.000
	Kr	83		ug/L		101	-0.000
	Sr	88	**0.011**	ug/L	42.023	312	0.001
	Y	89		ug/L		43	-0.000
	Mo	98	**0.312**	ug/L	15.361	985	0.004
	Ag	107	**0.014**	ug/L	52.884	117	0.000
	Cd	111	**0.022**	ug/L	30.796	50	0.000
	Cd	114		ug/L		91	0.000
>	In	115		ug/L		219100	219100.424
	Sn	120	**0.408**	ug/L	10.406	2401	0.009
	Sb	121	**1.078**	ug/L	19.874	4739	0.019
	Sb	123		ug/L		3744	0.015
	Ba	135		ug/L		57	0.000
	Ba	137	**0.012**	ug/L	13.306	90	0.000
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		372286	372286.021
	Tl	205	**0.155**	ug/L	25.073	2853	0.006
	Pb	208	**0.018**	ug/L	32.192	1395	0.001
	Bi	209		ug/L		325	-0.000
	Th	232	**0.218**	ug/L	16.886	7670	0.015
	U	238	**0.026**	ug/L	24.830	1117	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Saturday, December 05, 2009 03:31:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 10.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**939.329**	ug/L	1.435	1352503	4.419
	Be	9	**954.770**	ug/L	3.872	289915	0.947
	B	11	**1.277**	ug/L	10.583	876	0.001
	Na	23	**45361.556**	ug/L	10.553	132240704	432.338
	Mg	24	**50831.691**	ug/L	8.514	101885972	333.175
	Al	27	**46812.174**	ug/L	8.484	133673676	436.886
	P	31	**24705.045**	ug/L	5.970	3812517	12.452
	K	39	**45977.597**	ug/L	7.344	193386333	630.735
	Ca	43	**48648.703**	ug/L	2.229	436815	1.427
>	Sc	45		ug/L		306128	306127.946
	Ti	47	**41.466**	ug/L	4.428	18921	0.061
	V	51	**1014.760**	ug/L	5.544	5371038	17.539
	Cr	52	**1006.360**	ug/L	5.710	4197108	13.724
	Cr	53		ug/L		548118	1.583
	Mn	55	**973.610**	ug/L	4.661	6923815	22.629
	Fe	57	**52320.330**	ug/L	5.538	7044387	23.010
	Co	59	**958.254**	ug/L	5.712	5134913	16.787
	Ni	60	**892.271**	ug/L	1.615	1029972	3.365
	Cu	63		ug/L		2653237	8.668
	Cu	65	**870.883**	ug/L	3.082	1185360	3.873
	Zn	66	**1978.436**	ug/L	1.943	1933522	5.542
	Zn	67		ug/L		358473	1.011
	Zn	68		ug/L		1490911	4.272
>	Ge	74		ug/L		348856	348855.810
	As	75	**879.135**	ug/L	2.456	898633	2.576
	Se	77		ug/L		41384	0.109
	Se	82	**490.934**	ug/L	1.206	49435	0.142
	Kr	83		ug/L		170	0.000
	Sr	88	**1053.959**	ug/L	4.960	11442443	55.708
	Y	89		ug/L		359	0.001
	Mo	98	**1125.540**	ug/L	4.030	2963250	14.423
	Ag	107	**243.655**	ug/L	3.473	1063928	5.179
	Cd	111	**924.588**	ug/L	0.950	1011612	4.923
	Cd	114		ug/L		2628242	12.791
>	In	115		ug/L		205493	205492.547
	Sn	120	**1054.640**	ug/L	3.536	4766031	23.197
	Sb	121	**227.169**	ug/L	15.925	829420	4.037
	Sb	123		ug/L		662613	3.225
	Ba	135		ug/L		1177832	3.361
	Ba	137	**828.898**	ug/L	2.739	1909272	5.448
	Ho	165		ug/L		294	0.001
>	Lu	175		ug/L		350570	350569.865
	Tl	205	**489.283**	ug/L	2.690	6346450	18.107
	Pb	208	**4923.827**	ug/L	2.596	102978605	293.817
	Bi	209		ug/L		2898	0.007
	Th	232	**2519.921**	ug/L	3.264	62599943	178.623
	U	238	**5241.764**	ug/L	2.995	134559502	383.954

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	93.933				
	Be	9	95.477				
	B	11					
	Na	23	90.723				
	Mg	24	101.663				
	Al	27	93.624				
	P	31	98.820				
	K	39	91.955				
	Ca	43	97.297				
>	Sc	45		94.1			
	Ti	47					
	V	51	101.476				
	Cr	52	100.636				
	Cr	53					
	Mn	55	97.361				
	Fe	57	104.641				
	Co	59	95.825				
	Ni	60	89.227				
	Cu	63					
	Cu	65	87.088				
	Zn	66	79.137				
	Zn	67					
	Zn	68					
>	Ge	74		94.8			
	As	75	87.913				
	Se	77					
	Se	82	98.187				
	Kr	83					
	Sr	88	105.396				
	Y	89					
	Mo	98	112.554				
	Ag	107	97.462				
	Cd	111	92.459				
	Cd	114					
>	In	115		91.9			
	Sn	120	105.464				
	Sb	121	90.868				
	Sb	123					
	Ba	135					
	Ba	137	82.890				
	Ho	165					
>	Lu	175		95.4			
	Tl	205	97.857				
	Pb	208	98.477				
	Bi	209					
	Th	232	100.797				
	U	238	104.835				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Saturday, December 05, 2009 03:37:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 11.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.653**	ug/L	3.012	79823	0.248
	Be	9	**53.503**	ug/L	3.175	17102	0.053
	B	11	**103.696**	ug/L	4.014	29993	0.091
	Na	23	**4884.243**	ug/L	1.219	14997980	46.551
	Mg	24	**5447.889**	ug/L	4.082	11498821	35.708
	Al	27	**5132.455**	ug/L	10.084	15408228	47.900
	P	31	**5461.456**	ug/L	2.871	889829	2.753
	K	39	**4565.749**	ug/L	2.784	20622330	62.634
	Ca	43	**5159.513**	ug/L	1.591	48941	0.151
>	Sc	45		ug/L		322104	322104.480
	Ti	47	**52.244**	ug/L	3.454	24999	0.077
	V	51	**53.576**	ug/L	4.504	303658	0.926
	Cr	52	**52.869**	ug/L	3.491	230980	0.721
	Cr	53		ug/L		108298	0.128
	Mn	55	**53.716**	ug/L	2.410	402972	1.248
	Fe	57	**5405.725**	ug/L	3.413	771590	2.377
	Co	59	**51.009**	ug/L	2.294	287857	0.894
	Ni	60	**50.991**	ug/L	2.336	62000	0.192
	Cu	63		ug/L		154728	0.480
	Cu	65	**52.764**	ug/L	2.153	75655	0.235
	Zn	66	**52.240**	ug/L	2.584	54255	0.146
	Zn	67		ug/L		16628	0.029
	Zn	68		ug/L		40051	0.107
>	Ge	74		ug/L		369038	369038.162
	As	75	**48.738**	ug/L	1.537	52839	0.143
	Se	77		ug/L		8749	0.014
	Se	82	**50.840**	ug/L	1.260	5405	0.015
	Kr	83		ug/L		114	0.000
	Sr	88	**51.453**	ug/L	1.274	602065	2.720
	Y	89		ug/L		101	0.000
	Mo	98	**51.247**	ug/L	0.387	145456	0.657
	Ag	107	**51.580**	ug/L	1.779	242651	1.096
	Cd	111	**52.035**	ug/L	0.643	61346	0.277
	Cd	114		ug/L		144853	0.654
>	In	115		ug/L		221331	221330.607
	Sn	120	**60.262**	ug/L	2.190	293836	1.325
	Sb	121	**53.667**	ug/L	6.738	211474	0.954
	Sb	123		ug/L		168000	0.758
	Ba	135		ug/L		68486	0.187
	Ba	137	**49.838**	ug/L	1.072	119671	0.328
	Ho	165		ug/L		80	0.000
>	Lu	175		ug/L		365175	365175.476
	Tl	205	**51.474**	ug/L	0.723	696296	1.905
	Pb	208	**53.947**	ug/L	0.905	1176558	3.219
	Bi	209		ug/L		347	-0.000
	Th	232	**55.162**	ug/L	1.308	1429815	3.910
	U	238	**53.765**	ug/L	0.978	1438529	3.938

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	105.307				
	Be	9	107.007				
	B	11	103.696				
	Na	23	97.685				
	Mg	24	108.958				
	Al	27	101.633				
	P	31	109.229				
	K	39	91.315				
	Ca	43	103.190				
>	Sc	45		99.0			
	Ti	47	104.488				
	V	51	107.153				
	Cr	52	105.738				
	Cr	53					
	Mn	55	107.431				
	Fe	57	108.114				
	Co	59	102.017				
	Ni	60	101.981				
	Cu	63					
	Cu	65	105.528				
	Zn	66	104.479				
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75	97.476				
	Se	77					
	Se	82	101.680				
	Kr	83					
	Sr	88	102.907				
	Y	89					
	Mo	98	102.495				
	Ag	107	103.160				
	Cd	111	104.070				
	Cd	114					
>	In	115		99.0			
	Sn	120	120.523				
	Sb	121	107.334				
	Sb	123					
	Ba	135					
	Ba	137	99.675				
	Ho	165					
>	Lu	175		99.4			
	Tl	205	102.947				
	Pb	208	107.893				
	Bi	209					
	Th	232	110.323				
	U	238	107.530				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Saturday, December 05, 2009 03:43:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 12.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.153**	**ug/L**	7.571	307	0.001
	Be	9	**0.073**	**ug/L**	15.887	34	0.000
	B	11	**3.163**	**ug/L**	17.669	1424	0.003
	Na	23	**6.167**	**ug/L**	39.723	25357	0.059
	Mg	24	**4.108**	**ug/L**	20.018	11338	0.027
	Al	27	**2.590**	**ug/L**	23.286	15342	0.024
	P	31	**7.508**	**ug/L**	13.284	4542	0.004
	K	39	**10.052**	**ug/L**	18.490	484759	0.138
	Ca	43	**6.999**	**ug/L**	17.215	271	0.000
>	Sc	45		**ug/L**		314096	314095.650
	Ti	47	**0.173**	**ug/L**	6.221	377	0.000
	V	51	**0.242**	**ug/L**	105.715	6783	0.004
	Cr	52	**-0.072**	**ug/L**	64.549	-1442	-0.001
	Cr	53		**ug/L**		66165	0.002
	Mn	55	**0.035**	**ug/L**	45.916	1232	0.001
	Fe	57	**4.208**	**ug/L**	8.909	6728	0.002
	Co	59	**0.062**	**ug/L**	20.896	451	0.001
	Ni	60	**0.065**	**ug/L**	21.719	155	0.000
	Cu	63		**ug/L**		371	0.001
	Cu	65	**0.083**	**ug/L**	26.235	207	0.000
	Zn	66	**0.157**	**ug/L**	19.964	415	0.000
	Zn	67		**ug/L**		6279	0.001
	Zn	68		**ug/L**		924	0.001
>	Ge	74		**ug/L**		364366	364365.801
	As	75	**0.054**	**ug/L**	282.304	205	0.000
	Se	77		**ug/L**		3504	0.000
	Se	82	**0.022**	**ug/L**	641.535	-9	0.000
	Kr	83		**ug/L**		105	-0.000
	Sr	88	**0.049**	**ug/L**	23.904	763	0.003
	Y	89		**ug/L**		47	-0.000
	Mo	98	**0.359**	**ug/L**	11.203	1132	0.005
	Ag	107	**0.064**	**ug/L**	22.653	357	0.001
	Cd	111	**0.053**	**ug/L**	41.196	87	0.000
	Cd	114		**ug/L**		196	0.001
>	In	115		**ug/L**		222678	222678.180
	Sn	120	**2.415**	**ug/L**	7.302	12266	0.053
	Sb	121	**2.130**	**ug/L**	13.300	8975	0.038
	Sb	123		**ug/L**		7138	0.030
	Ba	135		**ug/L**		98	0.000
	Ba	137	**0.053**	**ug/L**	19.840	189	0.000
	Ho	165		**ug/L**		39	-0.000
>	Lu	175		**ug/L**		366395	366395.215
	Tl	205	**0.244**	**ug/L**	17.652	4022	0.009
	Pb	208	**0.226**	**ug/L**	24.890	5941	0.014
	Bi	209		**ug/L**		294	-0.000
	Th	232	**0.824**	**ug/L**	4.329	23305	0.058
	U	238	**0.304**	**ug/L**	15.992	8568	0.022

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 04:38:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.675

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.850**	**ug/L**	1.999	68742	0.249
	Be	9	**56.200**	**ug/L**	1.543	15415	0.056
	B	11	**107.689**	**ug/L**	4.076	26715	0.095
	Na	23	**4869.724**	**ug/L**	7.435	12824889	46.413
	Mg	24	**5021.295**	**ug/L**	5.303	9093689	32.912
	Al	27	**4817.219**	**ug/L**	0.836	12425704	44.958
	P	31	**5241.512**	**ug/L**	0.721	732748	2.642
	K	39	**4627.687**	**ug/L**	2.497	17926392	63.484
	Ca	43	**4942.719**	**ug/L**	2.302	40219	0.145
>	Sc	45		ug/L		276241	276241.453
	Ti	47	**49.518**	**ug/L**	2.905	20349	0.073
	V	51	**51.637**	**ug/L**	3.461	251408	0.892
	Cr	52	**52.169**	**ug/L**	2.699	195519	0.711
	Cr	53		ug/L		89339	0.115
	Mn	55	**52.294**	**ug/L**	1.047	336598	1.215
	Fe	57	**5334.610**	**ug/L**	1.840	653553	2.346
	Co	59	**49.480**	**ug/L**	1.457	239544	0.867
	Ni	60	**49.869**	**ug/L**	0.979	52019	0.188
	Cu	63		ug/L		129521	0.468
	Cu	65	**51.664**	**ug/L**	2.072	63553	0.230
	Zn	66	**49.017**	**ug/L**	3.326	44712	0.137
	Zn	67		ug/L		12831	0.023
	Zn	68		ug/L		33421	0.101
>	Ge	74		ug/L		324100	324100.463
	As	75	**46.373**	**ug/L**	2.220	44147	0.136
	Se	77		ug/L		7394	0.013
	Se	82	**49.035**	**ug/L**	2.877	4576	0.014
	Kr	83		ug/L		115	0.000
	Sr	88	**48.162**	**ug/L**	1.971	516562	2.546
	Y	89		ug/L		190	0.001
	Mo	98	**47.939**	**ug/L**	1.518	124700	0.614
	Ag	107	**49.879**	**ug/L**	2.551	215097	1.060
	Cd	111	**49.816**	**ug/L**	0.806	53824	0.265
	Cd	114		ug/L		128662	0.634
>	In	115		ug/L		202844	202843.635
	Sn	120	**49.959**	**ug/L**	1.832	223298	1.099
	Sb	121	**46.314**	**ug/L**	9.947	167462	0.823
	Sb	123		ug/L		132949	0.653
	Ba	135		ug/L		61565	0.171
	Ba	137	**45.705**	**ug/L**	0.190	108417	0.300
	Ho	165		ug/L		91	0.000
>	Lu	175		ug/L		360743	360743.002
	Tl	205	**50.008**	**ug/L**	0.374	668276	1.851
	Pb	208	**51.424**	**ug/L**	1.219	1107878	3.069
	Bi	209		ug/L		417	0.000
	Th	232	**50.118**	**ug/L**	1.302	1283480	3.553
	U	238	**53.114**	**ug/L**	2.487	1403737	3.891

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.701				
	Be	9	112.399				
	B	11	107.689				
	Na	23	97.394				
	Mg	24	100.426				
	Al	27	95.390				
	P	31	104.830				
	K	39	92.554				
	Ca	43	98.854				
>	Sc	45		84.9			
	Ti	47	99.036				
	V	51	103.275				
	Cr	52	104.337				
	Cr	53					
	Mn	55	104.588				
	Fe	57	106.692				
	Co	59	98.960				
	Ni	60	99.737				
	Cu	63					
	Cu	65	103.328				
	Zn	66	98.034				
	Zn	67					
	Zn	68					
>	Ge	74		88.1			
	As	75	92.746				
	Se	77					
	Se	82	98.070				
	Kr	83					
	Sr	88	96.324				
	Y	89					
	Mo	98	95.878				
	Ag	107	99.757				
	Cd	111	99.633				
	Cd	114					
>	In	115		90.7			
	Sn	120	99.917				
	Sb	121	92.627				
	Sb	123					
	Ba	135					
	Ba	137	91.411				
	Ho	165					
>	Lu	175		98.2			
	Tl	205	100.015				
	Pb	208	102.848				
	Bi	209					
	Th	232	100.237				
	U	238	106.228				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 04:44:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.676

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.048**	**ug/L**	5.628	135	0.000
	Be	9	**0.044**	**ug/L**	21.979	22	0.000
	B	11	**3.394**	**ug/L**	16.213	1324	0.003
	Na	23	**1.014**	**ug/L**	100.846	8669	0.010
	Mg	24	**-0.120**	**ug/L**	549.825	2334	-0.001
	Al	27	**1.070**	**ug/L**	17.342	9670	0.010
	P	31	**4.174**	**ug/L**	37.874	3566	0.002
	K	39	**16.585**	**ug/L**	51.399	457253	0.228
	Ca	43	**4.590**	**ug/L**	59.187	221	0.000
>	Sc	45		**ug/L**		279579	279579.140
	Ti	47	**0.134**	**ug/L**	59.967	319	0.000
	V	51	**0.250**	**ug/L**	23.475	6099	0.004
	Cr	52	**-0.038**	**ug/L**	169.419	-1157	-0.001
	Cr	53		**ug/L**		56733	-0.006
	Mn	55	**0.030**	**ug/L**	9.083	1064	0.001
	Fe	57	**5.253**	**ug/L**	20.816	6115	0.002
	Co	59	**0.013**	**ug/L**	23.099	163	0.000
	Ni	60	**0.030**	**ug/L**	5.695	101	0.000
	Cu	63		**ug/L**		189	0.000
	Cu	65	**0.014**	**ug/L**	10.528	98	0.000
	Zn	66	**-0.010**	**ug/L**	166.663	223	-0.000
	Zn	67		**ug/L**		4898	-0.002
	Zn	68		**ug/L**		605	-0.000
>	Ge	74		**ug/L**		332786	332786.420
	As	75	**0.109**	**ug/L**	304.216	240	0.000
	Se	77		**ug/L**		3021	-0.000
	Se	82	**-0.175**	**ug/L**	103.504	-27	-0.000
	Kr	83		**ug/L**		101	0.000
	Sr	88	**0.010**	**ug/L**	14.257	285	0.001
	Y	89		**ug/L**		65	0.000
	Mo	98	**0.104**	**ug/L**	26.890	380	0.001
	Ag	107	**0.014**	**ug/L**	13.749	111	0.000
	Cd	111	**0.018**	**ug/L**	31.640	43	0.000
	Cd	114		**ug/L**		82	0.000
>	In	115		**ug/L**		208746	208745.770
	Sn	120	**0.473**	**ug/L**	14.260	2580	0.010
	Sb	121	**1.206**	**ug/L**	18.865	4981	0.021
	Sb	123		**ug/L**		4022	0.017
	Ba	135		**ug/L**		48	0.000
	Ba	137	**0.006**	**ug/L**	66.946	77	0.000
	Ho	165		**ug/L**		45	0.000
>	Lu	175		**ug/L**		368604	368603.926
	Tl	205	**0.130**	**ug/L**	19.964	2493	0.005
	Pb	208	**0.017**	**ug/L**	11.052	1354	0.001
	Bi	209		**ug/L**		332	-0.000
	Th	232	**0.252**	**ug/L**	12.191	8491	0.018
	U	238	**0.027**	**ug/L**	21.121	1152	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		85.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 05:34:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.684

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.696**	ug/L	1.490	71287	0.243
	Be	9	**53.305**	ug/L	2.182	15498	0.053
	B	11	**102.608**	ug/L	1.636	27007	0.090
	Na	23	**4903.533**	ug/L	0.506	13692562	46.735
	Mg	24	**6002.867**	ug/L	2.176	11524591	39.346
	Al	27	**4862.918**	ug/L	4.870	13298926	45.384
	P	31	**5283.363**	ug/L	1.151	782978	2.663
	K	39	**4829.137**	ug/L	1.557	19810931	66.248
	Ca	43	**5018.657**	ug/L	1.455	43295	0.147
>	Sc	45		ug/L		292854	292853.693
	Ti	47	**50.562**	ug/L	0.909	22018	0.074
	V	51	**53.533**	ug/L	3.087	276055	0.925
	Cr	52	**53.214**	ug/L	3.170	211455	0.726
	Cr	53		ug/L		92412	0.107
	Mn	55	**53.277**	ug/L	1.250	363516	1.238
	Fe	57	**5450.161**	ug/L	0.915	707638	2.397
	Co	59	**52.132**	ug/L	1.315	267560	0.913
	Ni	60	**52.374**	ug/L	0.941	57916	0.198
	Cu	63		ug/L		141140	0.481
	Cu	65	**53.192**	ug/L	1.184	69375	0.237
	Zn	66	**50.327**	ug/L	1.388	49311	0.141
	Zn	67		ug/L		13344	0.022
	Zn	68		ug/L		36293	0.102
>	Ge	74		ug/L		348053	348052.722
	As	75	**46.394**	ug/L	0.595	47448	0.136
	Se	77		ug/L		7951	0.013
	Se	82	**50.222**	ug/L	2.905	5036	0.015
	Kr	83		ug/L		110	0.000
	Sr	88	**49.273**	ug/L	1.290	557786	2.604
	Y	89		ug/L		316	0.001
	Mo	98	**49.220**	ug/L	1.560	135146	0.631
	Ag	107	**50.184**	ug/L	1.780	228412	1.067
	Cd	111	**50.603**	ug/L	1.337	57709	0.269
	Cd	114		ug/L		135299	0.632
>	In	115		ug/L		214117	214116.913
	Sn	120	**50.030**	ug/L	1.713	236013	1.100
	Sb	121	**46.558**	ug/L	10.132	177710	0.827
	Sb	123		ug/L		141215	0.657
	Ba	135		ug/L		65597	0.178
	Ba	137	**47.784**	ug/L	1.843	115546	0.314
	Ho	165		ug/L		102	0.000
>	Lu	175		ug/L		367804	367803.711
	Tl	205	**50.301**	ug/L	1.232	685286	1.861
	Pb	208	**52.250**	ug/L	1.960	1147506	3.118
	Bi	209		ug/L		367	-0.000
	Th	232	**50.158**	ug/L	2.573	1309378	3.555
	U	238	**52.913**	ug/L	1.852	1425887	3.876

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	103.392				
	Be	9	106.610				
	B	11	102.608				
	Na	23	98.071				
	Mg	24	120.057				
	Al	27	96.295				
	P	31	105.667				
	K	39	96.583				
	Ca	43	100.373				
>	Sc	45		90.0			
	Ti	47	101.125				
	V	51	107.067				
	Cr	52	106.429				
	Cr	53					
	Mn	55	106.554				
	Fe	57	109.003				
	Co	59	104.265				
	Ni	60	104.748				
	Cu	63					
	Cu	65	106.384				
	Zn	66	100.654				
	Zn	67					
	Zn	68					
>	Ge	74		94.6			
	As	75	92.787				
	Se	77					
	Se	82	100.445				
	Kr	83					
	Sr	88	98.545				
	Y	89					
	Mo	98	98.441				
	Ag	107	100.369				
	Cd	111	101.205				
	Cd	114					
>	In	115		95.7			
	Sn	120	100.061				
	Sb	121	93.117				
	Sb	123					
	Ba	135					
	Ba	137	95.569				
	Ho	165					
>	Lu	175		100.1			
	Tl	205	100.603				
	Pb	208	104.499				
	Bi	209					
	Th	232	100.317				
	U	238	105.825				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 05:40:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.685

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.029**	**ug/L**	44.690	113	0.000
	Be	9	**0.041**	**ug/L**	45.890	22	0.000
	B	11	**2.657**	**ug/L**	22.350	1178	0.002
	Na	23	**2.212**	**ug/L**	77.112	12339	0.021
	Mg	24	**0.359**	**ug/L**	92.092	3334	0.002
	Al	27	**0.454**	**ug/L**	329.332	8336	0.004
	P	31	**3.821**	**ug/L**	18.252	3634	0.002
	K	39	**0.206**	**ug/L**	4680.265	406053	0.003
	Ca	43	**6.446**	**ug/L**	55.421	244	0.000
>	Sc	45		**ug/L**		288410	288409.997
	Ti	47	**0.223**	**ug/L**	24.477	367	0.000
	V	51	**0.158**	**ug/L**	183.019	5843	0.003
	Cr	52	**0.077**	**ug/L**	220.020	-741	0.001
	Cr	53		**ug/L**		56675	-0.012
	Mn	55	**0.090**	**ug/L**	18.231	1502	0.002
	Fe	57	**5.220**	**ug/L**	24.247	6307	0.002
	Co	59	**0.017**	**ug/L**	26.559	187	0.000
	Ni	60	**0.020**	**ug/L**	36.139	93	0.000
	Cu	63		**ug/L**		233	0.000
	Cu	65	**0.024**	**ug/L**	42.124	115	0.000
	Zn	66	**-0.039**	**ug/L**	26.672	204	-0.000
	Zn	67		**ug/L**		4786	-0.003
	Zn	68		**ug/L**		575	-0.000
>	Ge	74		**ug/L**		345254	345253.604
	As	75	**0.106**	**ug/L**	67.301	245	0.000
	Se	77		**ug/L**		3020	-0.001
	Se	82	**0.028**	**ug/L**	426.250	-8	0.000
	Kr	83		**ug/L**		97	-0.000
	Sr	88	**0.011**	**ug/L**	24.874	312	0.001
	Y	89		**ug/L**		84	0.000
	Mo	98	**0.093**	**ug/L**	28.653	365	0.001
	Ag	107	**0.015**	**ug/L**	31.500	123	0.000
	Cd	111	**0.016**	**ug/L**	24.637	42	0.000
	Cd	114		**ug/L**		84	0.000
>	In	115		**ug/L**		216744	216743.639
	Sn	120	**0.389**	**ug/L**	16.579	2282	0.009
	Sb	121	**1.082**	**ug/L**	20.808	4695	0.019
	Sb	123		**ug/L**		3600	0.015
	Ba	135		**ug/L**		54	0.000
	Ba	137	**0.013**	**ug/L**	5.579	92	0.000
	Ho	165		**ug/L**		39	-0.000
>	Lu	175		**ug/L**		370019	370018.765
	Tl	205	**0.111**	**ug/L**	30.588	2237	0.004
	Pb	208	**0.021**	**ug/L**	27.601	1452	0.001
	Bi	209		**ug/L**		325	-0.000
	Th	232	**0.235**	**ug/L**	17.350	8064	0.017
	U	238	**0.025**	**ug/L**	33.856	1094	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 06:23:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.692

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.764**	ug/L	1.305	66893	0.258
	Be	9	**57.929**	ug/L	1.753	14916	0.057
	B	11	**108.525**	ug/L	1.125	25272	0.096
	Na	23	**5222.250**	ug/L	3.523	12910874	49.773
	Mg	24	**4888.939**	ug/L	2.309	8314885	32.044
	Al	27	**4827.205**	ug/L	11.045	11688186	45.051
	P	31	**5251.882**	ug/L	2.836	689278	2.647
	K	39	**4375.393**	ug/L	1.045	15931339	60.023
	Ca	43	**4931.862**	ug/L	0.753	37684	0.145
>	Sc	45		ug/L		259380	259379.985
	Ti	47	**49.740**	ug/L	2.618	19182	0.073
	V	51	**51.265**	ug/L	1.990	234316	0.886
	Cr	52	**50.965**	ug/L	1.484	179325	0.695
	Cr	53		ug/L		80036	0.100
	Mn	55	**52.484**	ug/L	1.532	317149	1.220
	Fe	57	**5398.651**	ug/L	2.426	620749	2.374
	Co	59	**50.193**	ug/L	1.805	228120	0.879
	Ni	60	**49.900**	ug/L	2.957	48866	0.188
	Cu	63		ug/L		121025	0.466
	Cu	65	**50.416**	ug/L	0.996	58242	0.224
	Zn	66	**49.656**	ug/L	2.267	42333	0.139
	Zn	67		ug/L		11802	0.022
	Zn	68		ug/L		30818	0.100
>	Ge	74		ug/L		302922	302921.955
	As	75	**45.643**	ug/L	1.049	40624	0.134
	Se	77		ug/L		6454	0.012
	Se	82	**50.322**	ug/L	2.740	4392	0.015
	Kr	83		ug/L		91	0.000
	Sr	88	**48.212**	ug/L	1.327	487151	2.548
	Y	89		ug/L		250	0.001
	Mo	98	**47.973**	ug/L	0.493	117583	0.615
	Ag	107	**49.158**	ug/L	1.331	199711	1.045
	Cd	111	**49.832**	ug/L	1.358	50726	0.265
	Cd	114		ug/L		119820	0.627
>	In	115		ug/L		191133	191133.325
	Sn	120	**50.705**	ug/L	0.713	213520	1.115
	Sb	121	**46.766**	ug/L	10.039	159502	0.831
	Sb	123		ug/L		126470	0.659
	Ba	135		ug/L		58608	0.166
	Ba	137	**44.657**	ug/L	2.069	103837	0.293
	Ho	165		ug/L		85	0.000
>	Lu	175		ug/L		353658	353658.350
	Tl	205	**50.607**	ug/L	1.386	662935	1.873
	Pb	208	**52.083**	ug/L	2.358	1099876	3.108
	Bi	209		ug/L		317	-0.000
	Th	232	**50.493**	ug/L	1.469	1267573	3.579
	U	238	**53.831**	ug/L	2.139	1394705	3.943

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	109.529				
	Be	9	115.857				
	B	11	108.525				
	Na	23	104.445				
	Mg	24	97.779				
	Al	27	95.588				
	P	31	105.038				
	K	39	87.508				
	Ca	43	98.637				
>	Sc	45		79.7			
	Ti	47	99.479				
	V	51	102.530				
	Cr	52	101.929				
	Cr	53					
	Mn	55	104.968				
	Fe	57	107.973				
	Co	59	100.385				
	Ni	60	99.800				
	Cu	63					
	Cu	65	100.832				
	Zn	66	99.312				
	Zn	67					
	Zn	68					
>	Ge	74		82.3			
	As	75	91.286				
	Se	77					
	Se	82	100.643				
	Kr	83					
	Sr	88	96.424				
	Y	89					
	Mo	98	95.946				
	Ag	107	98.315				
	Cd	111	99.664				
	Cd	114					
>	In	115		85.5			
	Sn	120	101.411				
	Sb	121	93.532				
	Sb	123					
	Ba	135					
	Ba	137	89.314				
	Ho	165					
>	Lu	175		96.3			
	Tl	205	101.214				
	Pb	208	104.166				
	Bi	209					
	Th	232	100.987				
	U	238	107.663				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 8	Ba	137	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 06:29:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.693

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	ug/L	15.535	100	0.000
	Be	9	**0.041**	ug/L	43.779	20	0.000
	B	11	**2.753**	ug/L	26.393	1098	0.002
	Na	23	**4.242**	ug/L	38.678	16343	0.040
	Mg	24	**0.920**	ug/L	168.385	4001	0.006
	Al	27	**1.276**	ug/L	139.491	9670	0.012
	P	31	**7.261**	ug/L	38.555	3781	0.004
	K	39	**8.894**	ug/L	116.746	403666	0.122
	Ca	43	**1.594**	ug/L	227.833	185	0.000
>	Sc	45		ug/L		264028	264027.913
	Ti	47	**0.262**	ug/L	21.057	351	0.000
	V	51	**-0.100**	ug/L	435.334	4139	-0.002
	Cr	52	**-0.104**	ug/L	72.478	-1325	-0.001
	Cr	53		ug/L		51233	-0.014
	Mn	55	**0.126**	ug/L	11.095	1595	0.003
	Fe	57	**4.274**	ug/L	32.692	5663	0.002
	Co	59	**0.019**	ug/L	6.544	179	0.000
	Ni	60	**0.015**	ug/L	106.152	81	0.000
	Cu	63		ug/L		247	0.000
	Cu	65	**0.018**	ug/L	12.694	98	0.000
	Zn	66	**-0.027**	ug/L	67.595	195	-0.000
	Zn	67		ug/L		4570	-0.002
	Zn	68		ug/L		616	-0.000
>	Ge	74		ug/L		311952	311951.776
	As	75	**-0.143**	ug/L	71.276	-7	-0.000
	Se	77		ug/L		2400	-0.002
	Se	82	**-0.137**	ug/L	119.966	-21	-0.000
	Kr	83		ug/L		93	0.000
	Sr	88	**0.011**	ug/L	25.483	280	0.001
	Y	89		ug/L		83	0.000
	Mo	98	**0.098**	ug/L	35.184	345	0.001
	Ag	107	**0.015**	ug/L	14.087	112	0.000
	Cd	111	**0.016**	ug/L	5.995	39	0.000
	Cd	114		ug/L		74	0.000
>	In	115		ug/L		197686	197685.845
	Sn	120	**0.394**	ug/L	14.690	2102	0.009
	Sb	121	**1.149**	ug/L	21.160	4524	0.020
	Sb	123		ug/L		3613	0.016
	Ba	135		ug/L		53	0.000
	Ba	137	**0.011**	ug/L	38.304	85	0.000
	Ho	165		ug/L		42	0.000
>	Lu	175		ug/L		357093	357092.754
	Tl	205	**0.110**	ug/L	33.828	2148	0.004
	Pb	208	**0.024**	ug/L	9.125	1475	0.001
	Bi	209		ug/L		277	-0.000
	Th	232	**0.259**	ug/L	17.994	8414	0.018
	U	238	**0.028**	ug/L	16.514	1123	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		81.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 07:06:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.699

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.149**	**ug/L**	1.620	68555	0.259
	Be	9	**57.821**	**ug/L**	2.854	15155	0.057
	B	11	**109.310**	**ug/L**	2.660	25907	0.096
	Na	23	**4906.560**	**ug/L**	7.329	12340242	46.764
	Mg	24	**5266.264**	**ug/L**	13.438	9116596	34.518
	Al	27	**5235.395**	**ug/L**	2.083	12912466	48.861
	P	31	**5327.683**	**ug/L**	0.288	711930	2.685
	K	39	**4481.359**	**ug/L**	5.684	16617684	61.477
	Ca	43	**5070.137**	**ug/L**	2.275	39449	0.149
>	Sc	45		**ug/L**		264055	264054.803
	Ti	47	**51.309**	**ug/L**	4.556	20133	0.075
	V	51	**52.670**	**ug/L**	3.730	244860	0.910
	Cr	52	**53.032**	**ug/L**	3.197	189935	0.723
	Cr	53		**ug/L**		81214	0.099
	Mn	55	**53.774**	**ug/L**	3.959	330780	1.250
	Fe	57	**5398.743**	**ug/L**	2.474	631997	2.374
	Co	59	**51.052**	**ug/L**	1.939	236179	0.894
	Ni	60	**50.803**	**ug/L**	0.758	50663	0.192
	Cu	63		**ug/L**		127160	0.481
	Cu	65	**52.573**	**ug/L**	2.581	61807	0.234
	Zn	66	**49.910**	**ug/L**	1.582	43747	0.140
	Zn	67		**ug/L**		12111	0.022
	Zn	68		**ug/L**		32502	0.102
>	Ge	74		**ug/L**		311314	311314.455
	As	75	**47.404**	**ug/L**	0.787	43366	0.139
	Se	77		**ug/L**		6464	0.011
	Se	82	**50.942**	**ug/L**	0.913	4569	0.015
	Kr	83		**ug/L**		110	0.000
	Sr	88	**48.827**	**ug/L**	0.747	502847	2.581
	Y	89		**ug/L**		299	0.001
	Mo	98	**48.344**	**ug/L**	1.029	120744	0.619
	Ag	107	**49.946**	**ug/L**	1.491	206811	1.062
	Cd	111	**50.570**	**ug/L**	0.584	52464	0.269
	Cd	114		**ug/L**		124100	0.637
>	In	115		**ug/L**		194771	194770.825
	Sn	120	**51.456**	**ug/L**	1.806	220793	1.132
	Sb	121	**47.443**	**ug/L**	11.499	164727	0.843
	Sb	123		**ug/L**		130663	0.669
	Ba	135		**ug/L**		60386	0.171
	Ba	137	**45.880**	**ug/L**	0.929	106348	0.302
	Ho	165		**ug/L**		103	0.000
>	Lu	175		**ug/L**		352530	352530.376
	Tl	205	**51.765**	**ug/L**	1.396	675918	1.916
	Pb	208	**52.577**	**ug/L**	0.533	1106925	3.137
	Bi	209		**ug/L**		341	-0.000
	Th	232	**51.192**	**ug/L**	3.103	1280750	3.629
	U	238	**53.918**	**ug/L**	1.377	1392522	3.949

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.298				
	Be	9	115.643				
	B	11	109.310				
	Na	23	98.131				
	Mg	24	105.325				
	Al	27	103.671				
	P	31	106.554				
	K	39	89.627				
	Ca	43	101.403				
>	Sc	45		81.2			
	Ti	47	102.617				
	V	51	105.340				
	Cr	52	106.064				
	Cr	53					
	Mn	55	107.548				
	Fe	57	107.975				
	Co	59	102.105				
	Ni	60	101.606				
	Cu	63					
	Cu	65	105.146				
	Zn	66	99.820				
	Zn	67					
	Zn	68					
>	Ge	74		84.6			
	As	75	94.808				
	Se	77					
	Se	82	101.884				
	Kr	83					
	Sr	88	97.654				
	Y	89					
	Mo	98	96.688				
	Ag	107	99.893				
	Cd	111	101.140				
	Cd	114					
>	In	115		87.1			
	Sn	120	102.912				
	Sb	121	94.885				
	Sb	123					
	Ba	135					
	Ba	137	91.760				
	Ho	165					
>	Lu	175		96.0			
	Tl	205	103.530				
	Pb	208	105.154				
	Bi	209					
	Th	232	102.384				
	U	238	107.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	CCV is out of limits (+/- 10%)
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 07:12:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.700

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.023**	ug/L	30.318	100	0.000
	Be	9	**0.020**	ug/L	61.049	15	0.000
	B	11	**2.674**	ug/L	23.866	1126	0.002
	Na	23	**3.090**	ug/L	46.022	14007	0.029
	Mg	24	**0.256**	ug/L	5.076	3000	0.002
	Al	27	**-0.170**	ug/L	347.673	6335	-0.002
	P	31	**5.820**	ug/L	13.237	3743	0.003
	K	39	**12.703**	ug/L	66.968	434528	0.174
	Ca	43	**1.353**	ug/L	323.516	191	0.000
>	Sc	45		ug/L		275154	275154.062
	Ti	47	**0.266**	ug/L	29.793	367	0.000
	V	51	**-0.135**	ug/L	166.461	4171	-0.002
	Cr	52	**-0.052**	ug/L	76.021	-1185	-0.001
	Cr	53		ug/L		52244	-0.018
	Mn	55	**0.087**	ug/L	12.775	1413	0.002
	Fe	57	**3.432**	ug/L	14.992	5800	0.002
	Co	59	**0.014**	ug/L	40.615	164	0.000
	Ni	60	**0.015**	ug/L	69.744	84	0.000
	Cu	63		ug/L		247	0.000
	Cu	65	**0.015**	ug/L	28.098	98	0.000
	Zn	66	**-0.017**	ug/L	35.618	211	-0.000
	Zn	67		ug/L		4681	-0.002
	Zn	68		ug/L		595	-0.000
>	Ge	74		ug/L		322731	322731.006
	As	75	**-0.159**	ug/L	111.724	-22	-0.000
	Se	77		ug/L		2600	-0.001
	Se	82	**-0.005**	ug/L	1841.843	-10	-0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	**0.012**	ug/L	34.372	297	0.001
	Y	89		ug/L		75	0.000
	Mo	98	**0.096**	ug/L	30.109	350	0.001
	Ag	107	**0.013**	ug/L	41.846	106	0.000
	Cd	111	**0.030**	ug/L	12.815	54	0.000
	Cd	114		ug/L		86	0.000
>	In	115		ug/L		203252	203252.473
	Sn	120	**0.391**	ug/L	14.389	2148	0.009
	Sb	121	**1.125**	ug/L	22.148	4566	0.020
	Sb	123		ug/L		3598	0.016
	Ba	135		ug/L		57	0.000
	Ba	137	**0.007**	ug/L	87.275	75	0.000
	Ho	165		ug/L		38	-0.000
>	Lu	175		ug/L		360284	360283.717
	Tl	205	**0.115**	ug/L	31.082	2232	0.004
	Pb	208	**0.025**	ug/L	14.324	1499	0.001
	Bi	209		ug/L		275	-0.000
	Th	232	**0.247**	ug/L	16.506	8169	0.018
	U	238	**0.025**	ug/L	23.317	1063	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		84.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 07:18:48
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978333.701

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.076**	ug/L	13.263	186	0.000
	Be	9	**0.015**	ug/L	164.326	15	0.000
	B	11	**1.179**	ug/L	10.398	840	0.001
	Na	23	**3.765**	ug/L	36.521	17344	0.036
	Mg	24	**-0.903**	ug/L	1.374	1000	-0.006
	Al	27	**-1.346**	ug/L	38.308	3667	-0.013
	P	31	**3.451**	ug/L	51.913	3754	0.002
	K	39	**9.770**	ug/L	35.450	466161	0.134
	Ca	43	**21.676**	ug/L	9.353	391	0.001
>	Sc	45		ug/L		302722	302721.671
	Ti	47	**0.674**	ug/L	5.493	586	0.001
	V	51	**-2.438**	ug/L	84.274	-7546	-0.042
	Cr	52	**-1.450**	ug/L	14.710	-7065	-0.020
	Cr	53		ug/L		222197	0.527
	Mn	55	**0.196**	ug/L	3.898	2319	0.005
	Fe	57	**3.328**	ug/L	54.979	6365	0.001
	Co	59	**0.001**	ug/L	243.566	109	0.000
	Ni	60	**0.024**	ug/L	48.510	102	0.000
	Cu	63		ug/L		283	0.000
	Cu	65	**0.028**	ug/L	41.735	125	0.000
	Zn	66	**0.993**	ug/L	7.224	1137	0.003
	Zn	67		ug/L		30480	0.077
	Zn	68		ug/L		2685	0.006
>	Ge	74		ug/L		326630	326629.610
	As	75	**-0.222**	ug/L	186.772	-81	-0.001
	Se	77		ug/L		15105	0.037
	Se	82	**0.103**	ug/L	164.798	-0	0.000
	Kr	83		ug/L		81	-0.000
	Sr	88	**0.014**	ug/L	4.687	314	0.001
	Y	89		ug/L		58	0.000
	Mo	98	**0.003**	ug/L	67.762	103	0.000
	Ag	107	**0.002**	ug/L	52.475	59	0.000
	Cd	111	**0.012**	ug/L	93.401	34	0.000
	Cd	114		ug/L		22	-0.000
>	In	115		ug/L		197388	197387.639
	Sn	120	**1.246**	ug/L	26.841	5800	0.027
	Sb	121	**0.536**	ug/L	31.358	2365	0.010
	Sb	123		ug/L		1827	0.007
	Ba	135		ug/L		36	0.000
	Ba	137	**-0.001**	ug/L	153.767	52	-0.000
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		332931	332931.155
	Tl	205	**0.006**	ug/L	88.321	722	0.000
	Pb	208	**-0.010**	ug/L	25.396	688	-0.001
	Bi	209		ug/L		320	-0.000
	Th	232	**0.289**	ug/L	21.629	8539	0.020
	U	238	**-0.007**	ug/L	18.225	201	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 07:24:59
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978334.702

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.474**	ug/L	3.162	74411	0.247
	Be	9	**56.061**	ug/L	2.016	16768	0.056
	B	11	**111.074**	ug/L	3.758	30024	0.098
	Na	23	**1925.567**	ug/L	10.301	5526532	18.352
	Mg	24	**2107.333**	ug/L	5.817	4160306	13.812
	Al	27	**1903.180**	ug/L	7.131	5354381	17.762
	P	31	**2165.864**	ug/L	3.879	331920	1.092
	K	39	**2108.461**	ug/L	12.656	9149323	28.925
	Ca	43	**2094.955**	ug/L	2.510	18704	0.061
>	Sc	45		ug/L		301309	301308.535
	Ti	47	**46.342**	ug/L	2.914	20778	0.068
	V	51	**46.689**	ug/L	5.039	248251	0.807
	Cr	52	**47.962**	ug/L	4.193	195858	0.654
	Cr	53		ug/L		265005	0.672
	Mn	55	**51.145**	ug/L	3.601	358878	1.189
	Fe	57	**2138.970**	ug/L	3.653	289170	0.941
	Co	59	**49.887**	ug/L	3.980	263244	0.874
	Ni	60	**51.082**	ug/L	4.304	58077	0.193
	Cu	63		ug/L		137053	0.455
	Cu	65	**49.625**	ug/L	4.325	66540	0.221
	Zn	66	**53.981**	ug/L	3.127	48708	0.151
	Zn	67		ug/L		42557	0.116
	Zn	68		ug/L		36914	0.113
>	Ge	74		ug/L		320725	320725.138
	As	75	**49.095**	ug/L	2.983	46248	0.144
	Se	77		ug/L		19317	0.051
	Se	82	**54.433**	ug/L	2.005	5032	0.016
	Kr	83		ug/L		106	0.000
	Sr	88	**53.598**	ug/L	1.729	537157	2.833
	Y	89		ug/L		306	0.001
	Mo	98	**50.341**	ug/L	1.578	122403	0.645
	Ag	107	**52.552**	ug/L	2.363	211748	1.117
	Cd	111	**52.862**	ug/L	1.165	53377	0.281
	Cd	114		ug/L		127478	0.672
>	In	115		ug/L		189582	189581.558
	Sn	120	**55.127**	ug/L	1.519	230245	1.213
	Sb	121	**60.838**	ug/L	0.683	205394	1.081
	Sb	123		ug/L		162601	0.856
	Ba	135		ug/L		59727	0.179
	Ba	137	**47.639**	ug/L	2.297	104322	0.313
	Ho	165		ug/L		75	0.000
>	Lu	175		ug/L		333082	333081.650
	Tl	205	**49.737**	ug/L	0.550	613733	1.841
	Pb	208	**53.406**	ug/L	1.363	1062256	3.187
	Bi	209		ug/L		880264	2.642
	Th	232	**52.488**	ug/L	0.140	1240960	3.721
	U	238	**56.093**	ug/L	2.189	1368663	4.109

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241325001
Sample Date/Time: Saturday, December 05, 2009 07:31:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241325001.703

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.074**	ug/L	7.212	183	0.000
	Be	9	**0.000**	ug/L	792.616	11	0.000
	B	11	**3.829**	ug/L	16.780	1551	0.003
	Na	23	**4.407**	ug/L	56.234	19348	0.042
	Mg	24	**-0.566**	ug/L	53.048	1667	-0.004
	Al	27	**-0.050**	ug/L	1006.478	7335	-0.000
	P	31	**12.869**	ug/L	8.871	5207	0.006
	K	39	**13.845**	ug/L	39.000	484076	0.190
	Ca	43	**25.936**	ug/L	10.774	430	0.001
>	Sc	45		ug/L		303442	303442.003
	Ti	47	**0.704**	ug/L	4.511	600	0.001
	V	51	**-2.587**	ug/L	50.867	-8335	-0.045
	Cr	52	**-1.619**	ug/L	6.684	-7797	-0.022
	Cr	53		ug/L		250632	0.618
	Mn	55	**0.221**	ug/L	3.121	2504	0.005
	Fe	57	**8.161**	ug/L	8.973	7027	0.004
	Co	59	**-0.001**	ug/L	237.671	100	-0.000
	Ni	60	**0.035**	ug/L	43.166	116	0.000
	Cu	63		ug/L		513	0.001
	Cu	65	**0.115**	ug/L	4.088	243	0.001
	Zn	66	**1.293**	ug/L	1.803	1394	0.004
	Zn	67		ug/L		36870	0.098
	Zn	68		ug/L		3190	0.008
>	Ge	74		ug/L		322630	322629.682
	As	75	**0.192**	ug/L	75.663	311	0.001
	Se	77		ug/L		16109	0.040
	Se	82	**-0.117**	ug/L	68.608	-20	-0.000
	Kr	83		ug/L		96	-0.000
	Sr	88	**0.020**	ug/L	0.999	370	0.001
	Y	89		ug/L		56	0.000
	Mo	98	**0.049**	ug/L	53.198	217	0.001
	Ag	107	**0.015**	ug/L	28.342	110	0.000
	Cd	111	**0.004**	ug/L	194.889	25	0.000
	Cd	114		ug/L		45	-0.000
>	In	115		ug/L		193612	193612.071
	Sn	120	**0.474**	ug/L	13.393	2400	0.010
	Sb	121	**0.401**	ug/L	22.476	1853	0.007
	Sb	123		ug/L		1479	0.006
	Ba	135		ug/L		91	0.000
	Ba	137	**0.035**	ug/L	7.776	133	0.000
	Ho	165		ug/L		46	0.000
>	Lu	175		ug/L		336197	336197.461
	Tl	205	**0.490**	ug/L	24.950	6729	0.018
	Pb	208	**0.027**	ug/L	12.695	1449	0.002
	Bi	209		ug/L		340	-0.000
	Th	232	**0.789**	ug/L	35.533	20466	0.056
	U	238	**0.004**	ug/L	137.664	473	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			87.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			86.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			91.5		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 07:37:19
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978335.704

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.069**	ug/L	9.101	173	0.000
	Be	9	**0.010**	ug/L	56.584	14	0.000
	B	11	**1.350**	ug/L	13.214	871	0.001
	Na	23	**5.759**	ug/L	51.495	22686	0.055
	Mg	24	**-0.728**	ug/L	80.710	1333	-0.005
	Al	27	**0.124**	ug/L	171.089	7669	0.001
	P	31	**11.971**	ug/L	10.798	4974	0.006
	K	39	**14.797**	ug/L	18.999	478898	0.203
	Ca	43	**26.350**	ug/L	5.463	425	0.001
>	Sc	45		ug/L		297730	297730.141
	Ti	47	**0.518**	ug/L	11.417	508	0.001
	V	51	**-3.360**	ug/L	41.851	-12024	-0.058
	Cr	52	**-1.675**	ug/L	7.990	-7871	-0.023
	Cr	53		ug/L		246505	0.620
	Mn	55	**0.216**	ug/L	1.474	2424	0.005
	Fe	57	**5.615**	ug/L	21.587	6562	0.002
	Co	59	**-0.004**	ug/L	13.434	84	-0.000
	Ni	60	**0.034**	ug/L	29.228	112	0.000
	Cu	63		ug/L		380	0.001
	Cu	65	**0.083**	ug/L	12.918	196	0.000
	Zn	66	**1.040**	ug/L	4.247	1130	0.003
	Zn	67		ug/L		36507	0.100
	Zn	68		ug/L		2998	0.008
>	Ge	74		ug/L		312562	312561.671
	As	75	**-0.398**	ug/L	59.578	-241	-0.001
	Se	77		ug/L		15683	0.041
	Se	82	**-0.068**	ug/L	15.756	-15	-0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	**0.018**	ug/L	21.766	342	0.001
	Y	89		ug/L		47	-0.000
	Mo	98	**-0.004**	ug/L	54.280	83	-0.000
	Ag	107	**0.009**	ug/L	9.158	82	0.000
	Cd	111	**-0.004**	ug/L	204.056	17	-0.000
	Cd	114		ug/L		31	-0.000
>	In	115		ug/L		191581	191581.401
	Sn	120	**0.281**	ug/L	5.906	1558	0.006
	Sb	121	**0.107**	ug/L	20.901	833	0.002
	Sb	123		ug/L		647	0.001
	Ba	135		ug/L		74	0.000
	Ba	137	**0.027**	ug/L	21.823	113	0.000
	Ho	165		ug/L		44	0.000
>	Lu	175		ug/L		332090	332090.331
	Tl	205	**0.163**	ug/L	7.474	2647	0.006
	Pb	208	**0.026**	ug/L	11.067	1403	0.002
	Bi	209		ug/L		237	-0.000
	Th	232	**0.267**	ug/L	20.239	7989	0.019
	U	238	**-0.010**	ug/L	1.368	130	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			85.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			85.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			90.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 07:43:29
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978336.705

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.826**	ug/L	1.329	75150	0.253
	Be	9	**56.678**	ug/L	1.865	16686	0.056
	B	11	**116.608**	ug/L	4.909	30994	0.103
	Na	23	**2050.666**	ug/L	5.051	5802728	19.545
	Mg	24	**2031.353**	ug/L	4.667	3951288	13.314
	Al	27	**1963.631**	ug/L	5.634	5442883	18.326
	P	31	**2113.617**	ug/L	0.350	319061	1.065
	K	39	**1834.666**	ug/L	9.096	7875514	25.169
	Ca	43	**2091.185**	ug/L	4.741	18373	0.061
>	Sc	45		ug/L		296524	296524.133
	Ti	47	**46.891**	ug/L	2.244	20692	0.069
	V	51	**45.784**	ug/L	4.016	239752	0.791
	Cr	52	**50.085**	ug/L	2.275	201424	0.683
	Cr	53		ug/L		273515	0.714
	Mn	55	**51.725**	ug/L	1.348	357367	1.202
	Fe	57	**2213.557**	ug/L	2.416	294424	0.974
	Co	59	**50.179**	ug/L	2.036	260713	0.879
	Ni	60	**50.825**	ug/L	1.450	56903	0.192
	Cu	63		ug/L		135466	0.456
	Cu	65	**49.478**	ug/L	1.094	65341	0.220
	Zn	66	**53.193**	ug/L	2.232	46714	0.149
	Zn	67		ug/L		45180	0.128
	Zn	68		ug/L		35314	0.111
>	Ge	74		ug/L		312049	312048.794
	As	75	**77.830**	ug/L	3.717	71274	0.228
	Se	77		ug/L		17244	0.046
	Se	82	**20.603**	ug/L	2.149	1847	0.006
	Kr	83		ug/L		113	0.000
	Sr	88	**54.495**	ug/L	0.852	544589	2.880
	Y	89		ug/L		85	0.000
	Mo	98	**50.668**	ug/L	2.361	122797	0.649
	Ag	107	**52.827**	ug/L	1.717	212261	1.123
	Cd	111	**10.927**	ug/L	1.695	11018	0.058
	Cd	114		ug/L		25001	0.132
>	In	115		ug/L		189021	189021.386
	Sn	120	**55.844**	ug/L	1.668	232521	1.228
	Sb	121	**235.133**	ug/L	0.868	790160	4.178
	Sb	123		ug/L		639056	3.379
	Ba	135		ug/L		60386	0.180
	Ba	137	**48.137**	ug/L	2.744	106038	0.316
	Ho	165		ug/L		240	0.001
>	Lu	175		ug/L		335064	335063.825
	Tl	205	**96.512**	ug/L	0.770	1197287	3.572
	Pb	208	**43.612**	ug/L	0.743	872841	2.602
	Bi	209		ug/L		495	0.000
	Th	232	**55.066**	ug/L	0.733	1309533	3.903
	U	238	**57.627**	ug/L	2.013	1414520	4.221

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 07:49:41
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978337.706

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	ug/L	75.472	87	0.000
	Be	9	**0.030**	ug/L	78.276	18	0.000
	B	11	**3.012**	ug/L	17.136	1183	0.003
	Na	23	**2.186**	ug/L	63.165	11338	0.021
	Mg	24	**-1.034**	ug/L	31.220	667	-0.007
	Al	27	**-1.309**	ug/L	16.609	3334	-0.012
	P	31	**5.214**	ug/L	9.524	3578	0.003
	K	39	**11.539**	ug/L	28.981	420781	0.158
	Ca	43	**17.241**	ug/L	13.964	313	0.001
>	Sc	45		ug/L		269039	269038.703
	Ti	47	**0.258**	ug/L	8.504	356	0.000
	V	51	**0.112**	ug/L	600.727	5185	0.002
	Cr	52	**-0.743**	ug/L	5.523	-3698	-0.010
	Cr	53		ug/L		104933	0.182
	Mn	55	**0.062**	ug/L	7.989	1226	0.001
	Fe	57	**0.739**	ug/L	297.514	5348	0.000
	Co	59	**0.002**	ug/L	211.496	102	0.000
	Ni	60	**0.018**	ug/L	66.933	85	0.000
	Cu	63		ug/L		388	0.001
	Cu	65	**0.088**	ug/L	14.728	183	0.000
	Zn	66	**0.429**	ug/L	11.110	589	0.001
	Zn	67		ug/L		10754	0.018
	Zn	68		ug/L		1381	0.002
>	Ge	74		ug/L		309597	309596.511
	As	75	**0.224**	ug/L	154.882	325	0.001
	Se	77		ug/L		5548	0.008
	Se	82	**-0.168**	ug/L	153.703	-24	-0.000
	Kr	83		ug/L		99	0.000
	Sr	88	**0.006**	ug/L	16.143	229	0.000
	Y	89		ug/L		49	-0.000
	Mo	98	**0.032**	ug/L	24.990	176	0.000
	Ag	107	**0.004**	ug/L	38.739	63	0.000
	Cd	111	**0.001**	ug/L	483.564	23	0.000
	Cd	114		ug/L		41	-0.000
>	In	115		ug/L		195783	195783.457
	Sn	120	**0.293**	ug/L	1.896	1645	0.006
	Sb	121	**0.658**	ug/L	15.029	2774	0.012
	Sb	123		ug/L		2185	0.009
	Ba	135		ug/L		71	0.000
	Ba	137	**0.022**	ug/L	25.138	108	0.000
	Ho	165		ug/L		47	0.000
>	Lu	175		ug/L		351452	351451.990
	Tl	205	**1.267**	ug/L	23.890	17137	0.047
	Pb	208	**0.013**	ug/L	7.298	1224	0.001
	Bi	209		ug/L		288	-0.000
	Th	232	**0.210**	ug/L	16.907	7040	0.015
	U	238	**0.003**	ug/L	14.631	479	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		82.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241325002
Sample Date/Time: Saturday, December 05, 2009 07:55:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241325002.707

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.106**	ug/L	3.780	220	0.000
	Be	9	**0.027**	ug/L	74.596	18	0.000
	B	11	**1.584**	ug/L	11.657	912	0.001
	Na	23	**165.236**	ug/L	6.354	464800	1.575
	Mg	24	**11.354**	ug/L	25.233	24355	0.074
	Al	27	**68.647**	ug/L	15.996	193316	0.641
	P	31	**15.897**	ug/L	2.609	5437	0.008
	K	39	**55.848**	ug/L	14.774	631676	0.766
	Ca	43	**72.343**	ug/L	4.618	808	0.002
>	Sc	45		ug/L		291024	291023.754
	Ti	47	**2.183**	ug/L	35.828	1207	0.003
	V	51	**-2.728**	ug/L	65.276	-8720	-0.047
	Cr	52	**11.650**	ug/L	3.973	45172	0.159
	Cr	53		ug/L		255315	0.670
	Mn	55	**6.666**	ug/L	3.612	45977	0.155
	Fe	57	**141.444**	ug/L	4.031	23792	0.062
	Co	59	**0.217**	ug/L	4.586	1207	0.004
	Ni	60	**6.540**	ug/L	1.042	7250	0.025
	Cu	63		ug/L		3134	0.010
	Cu	65	**1.110**	ug/L	3.374	1520	0.005
	Zn	66	**1.981**	ug/L	2.260	1980	0.006
	Zn	67		ug/L		36538	0.099
	Zn	68		ug/L		3652	0.009
>	Ge	74		ug/L		316958	316957.540
	As	75	**-0.650**	ug/L	82.077	-472	-0.002
	Se	77		ug/L		16040	0.041
	Se	82	**-0.130**	ug/L	117.023	-21	-0.000
	Kr	83		ug/L		105	0.000
	Sr	88	**1.140**	ug/L	2.246	11599	0.060
	Y	89		ug/L		5103	0.027
	Mo	98	**0.358**	ug/L	0.769	964	0.005
	Ag	107	**0.012**	ug/L	12.136	95	0.000
	Cd	111	**0.078**	ug/L	5.085	99	0.000
	Cd	114		ug/L		229	0.001
>	In	115		ug/L		189752	189751.665
	Sn	120	**0.256**	ug/L	5.192	1442	0.006
	Sb	121	**0.222**	ug/L	14.206	1212	0.004
	Sb	123		ug/L		969	0.003
	Ba	135		ug/L		985	0.003
	Ba	137	**0.783**	ug/L	3.109	1791	0.005
	Ho	165		ug/L		421	0.001
>	Lu	175		ug/L		337349	337348.733
	Tl	205	**0.289**	ug/L	3.211	4262	0.011
	Pb	208	**0.254**	ug/L	1.384	6021	0.015
	Bi	209		ug/L		382	0.000
	Th	232	**0.402**	ug/L	21.620	11339	0.028
	U	238	**0.004**	ug/L	18.209	480	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			89.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			86.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			84.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			91.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 08:02:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.708

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.249**	**ug/L**	0.829	68705	0.250
	Be	9	**56.325**	**ug/L**	1.034	15323	0.056
	B	11	**105.974**	**ug/L**	2.611	26081	0.093
	Na	23	**5113.312**	**ug/L**	5.666	13356436	48.735
	Mg	24	**5227.783**	**ug/L**	1.615	9391468	34.265
	Al	27	**5147.637**	**ug/L**	2.947	13172073	48.042
	P	31	**5238.448**	**ug/L**	0.988	726386	2.640
	K	39	**4422.767**	**ug/L**	4.189	17013205	60.673
	Ca	43	**4920.187**	**ug/L**	1.171	39718	0.144
>	Sc	45		**ug/L**		274010	274009.674
	Ti	47	**49.100**	**ug/L**	2.577	20011	0.072
	V	51	**51.034**	**ug/L**	3.178	246450	0.882
	Cr	52	**50.565**	**ug/L**	4.764	187932	0.690
	Cr	53		**ug/L**		110660	0.195
	Mn	55	**52.352**	**ug/L**	3.091	334215	1.217
	Fe	57	**5243.039**	**ug/L**	2.542	637115	2.306
	Co	59	**49.376**	**ug/L**	3.405	237083	0.865
	Ni	60	**49.730**	**ug/L**	1.204	51457	0.188
	Cu	63		**ug/L**		127977	0.466
	Cu	65	**51.580**	**ug/L**	1.650	62937	0.229
	Zn	66	**49.626**	**ug/L**	1.898	44784	0.139
	Zn	67		**ug/L**		15634	0.032
	Zn	68		**ug/L**		33492	0.102
>	Ge	74		**ug/L**		320532	320532.294
	As	75	**46.148**	**ug/L**	3.519	43471	0.135
	Se	77		**ug/L**		7906	0.015
	Se	82	**50.277**	**ug/L**	2.704	4643	0.015
	Kr	83		**ug/L**		98	0.000
	Sr	88	**49.254**	**ug/L**	0.313	516792	2.603
	Y	89		**ug/L**		163	0.001
	Mo	98	**48.149**	**ug/L**	1.785	122513	0.617
	Ag	107	**49.779**	**ug/L**	2.535	209970	1.058
	Cd	111	**50.744**	**ug/L**	2.887	53620	0.270
	Cd	114		**ug/L**		126834	0.639
>	In	115		**ug/L**		198436	198435.927
	Sn	120	**49.928**	**ug/L**	2.977	218248	1.098
	Sb	121	**46.236**	**ug/L**	10.067	163636	0.822
	Sb	123		**ug/L**		130797	0.657
	Ba	135		**ug/L**		60641	0.171
	Ba	137	**45.839**	**ug/L**	1.338	106559	0.301
	Ho	165		**ug/L**		88	0.000
>	Lu	175		**ug/L**		353540	353539.945
	Tl	205	**50.163**	**ug/L**	2.971	656857	1.856
	Pb	208	**52.146**	**ug/L**	0.638	1101016	3.112
	Bi	209		**ug/L**		327	-0.000
	Th	232	**49.480**	**ug/L**	2.526	1241625	3.507
	U	238	**53.968**	**ug/L**	1.569	1397845	3.953

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	106.499				
	Be	9	112.650				
	B	11	105.974				
	Na	23	102.266				
	Mg	24	104.556				
	Al	27	101.933				
	P	31	104.769				
	K	39	88.455				
	Ca	43	98.404				
>	Sc	45		84.2			
	Ti	47	98.200				
	V	51	102.067				
	Cr	52	101.131				
	Cr	53					
	Mn	55	104.705				
	Fe	57	104.861				
	Co	59	98.752				
	Ni	60	99.459				
	Cu	63					
	Cu	65	103.160				
	Zn	66	99.251				
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75	92.297				
	Se	77					
	Se	82	100.555				
	Kr	83					
	Sr	88	98.509				
	Y	89					
	Mo	98	96.298				
	Ag	107	99.557				
	Cd	111	101.489				
	Cd	114					
>	In	115		88.7			
	Sn	120	99.856				
	Sb	121	92.472				
	Sb	123					
	Ba	135					
	Ba	137	91.677				
	Ho	165					
>	Lu	175		96.2			
	Tl	205	100.327				
	Pb	208	104.293				
	Bi	209					
	Th	232	98.961				
	U	238	107.936				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 08:08:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.709

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	**ug/L**	44.018	81	0.000
	Be	9	**0.034**	**ug/L**	76.649	19	0.000
	B	11	**3.193**	**ug/L**	18.494	1214	0.003
	Na	23	**1.547**	**ug/L**	81.007	9670	0.015
	Mg	24	**1.061**	**ug/L**	185.551	4334	0.007
	Al	27	**0.723**	**ug/L**	92.807	8336	0.007
	P	31	**5.062**	**ug/L**	23.750	3525	0.003
	K	39	**12.990**	**ug/L**	49.749	421811	0.178
	Ca	43	**5.886**	**ug/L**	39.322	221	0.000
>	Sc	45		**ug/L**		266467	266467.294
	Ti	47	**0.092**	**ug/L**	62.201	287	0.000
	V	51	**0.195**	**ug/L**	212.424	5575	0.003
	Cr	52	**-0.275**	**ug/L**	22.904	-1959	-0.004
	Cr	53		**ug/L**		67198	0.044
	Mn	55	**0.017**	**ug/L**	2.424	935	0.000
	Fe	57	**5.339**	**ug/L**	9.158	5840	0.002
	Co	59	**0.011**	**ug/L**	10.492	146	0.000
	Ni	60	**0.018**	**ug/L**	46.382	84	0.000
	Cu	63		**ug/L**		187	0.000
	Cu	65	**0.009**	**ug/L**	22.584	88	0.000
	Zn	66	**0.085**	**ug/L**	36.840	299	0.000
	Zn	67		**ug/L**		6142	0.003
	Zn	68		**ug/L**		809	0.001
>	Ge	74		**ug/L**		319019	319019.264
	As	75	**0.020**	**ug/L**	342.803	147	0.000
	Se	77		**ug/L**		3181	0.000
	Se	82	**-0.026**	**ug/L**	414.347	-12	-0.000
	Kr	83		**ug/L**		93	-0.000
	Sr	88	**0.007**	**ug/L**	8.563	241	0.000
	Y	89		**ug/L**		44	-0.000
	Mo	98	**0.109**	**ug/L**	29.189	382	0.001
	Ag	107	**0.012**	**ug/L**	23.916	102	0.000
	Cd	111	**0.018**	**ug/L**	37.546	41	0.000
	Cd	114		**ug/L**		69	0.000
>	In	115		**ug/L**		201770	201770.025
	Sn	120	**0.392**	**ug/L**	18.681	2137	0.009
	Sb	121	**1.257**	**ug/L**	22.869	5002	0.022
	Sb	123		**ug/L**		3911	0.017
	Ba	135		**ug/L**		46	0.000
	Ba	137	**0.000**	**ug/L**	1660.599	59	0.000
	Ho	165		**ug/L**		39	0.000
>	Lu	175		**ug/L**		351683	351682.748
	Tl	205	**0.523**	**ug/L**	17.405	7477	0.019
	Pb	208	**0.018**	**ug/L**	12.624	1330	0.001
	Bi	209		**ug/L**		266	-0.000
	Th	232	**0.485**	**ug/L**	13.683	13899	0.034
	U	238	**0.025**	**ug/L**	20.325	1046	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		81.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 11:20:22
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1404
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6084.1	6084.096	126.122	2.1
	Mg	24.0	37933.7	37933.699	246.062	0.6
	Co	58.9	131465.5	131465.545	391.169	0.3
	Rh	102.9	287728.9	287728.860	2520.918	0.9
	In	114.9	384046.5	384046.542	2719.920	0.7
	Pb	208.0	227115.9	227115.942	904.488	0.4
⌈>	Ba	137.9	372943.0	372943.011	2197.849	0.6
⌊	Ba++	69.0	6670.6	0.018	0.000	0.7
⌈>	Ce	139.9	452582.0	452582.036	2432.404	0.5
⌊	CeO	155.9	10781.5	0.024	0.001	2.4
	Bkgd	220.0	29.1	29.100	2.485	8.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	7.0	5548.1
Co	59	9	7.0	144363.8
In	115	9	7.3	374732.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	604	2060	0.615
Be	9.0	9.1	2061	2070	0.655
Mg	24.0	24.0	5671	2080	0.651
Mg	25.0	25.0	5923	2075	0.623
Mg	26.0	26.0	6187	2070	0.695
Co	58.9	58.9	14186	2110	0.657
Rh	102.9	102.9	24872	2160	0.653
In	114.9	114.9	27786	2180	0.652
Ce	139.9	139.9	33870	2195	0.677
Pb	206.0	206.0	49948	2290	0.663
Pb	207.0	207.0	50159	2260	0.626
Pb	208.0	208.0	50451	2280	0.672
U	238.1	238.0	57718	2285	0.714

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 19:54:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Blank.201

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		26	
Sc	45		ug/L		451819	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 19:56:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 1.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	10.000	ug/L	1.504	4291	0.010
⌊>	Sc	45		ug/L		448236	448236.284

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 19:58:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\Standard 2.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	99.950	ug/L	1.387	41554	0.091
⌊>	Sc	45		ug/L		458207	458206.717

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 19:59:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 1.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	51.550	ug/L	2.261	21535	0.047
⌊>	Sc	45		ug/L		460155	460154.758

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	103.100				
⌊>	Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 20:01:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 2.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.007	ug/L	87.518	30	0.000
⌊>	Sc	45		ug/L		468270	468269.954

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 20:03:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 3.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.573	ug/L	13.614	270	0.001
⌊>	Sc	45		ug/L		468826	468826.477

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	114.555				
⌊>	Sc	45		103.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 20:04:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 4.207

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.079	ug/L	26.149	60	0.000
Sc	45		ug/L		458641	458641.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		101.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 20:06:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 5.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	21.293	ug/L	2.059	8369	0.019
⌊>	Sc	45		ug/L		432165	432164.506

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	106.466				
⌊>	Sc	45		95.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 20:08:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**52.874**	**ug/L**	4.235	21543	0.048
⌊>	Sc	45		**ug/L**		449096	449096.234

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	105.748				
⌊>	Sc	45		99.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 20:09:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.019	ug/L	39.713	35	0.000
⌊>	Sc	45		ug/L		460215	460215.149

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978333
Sample Date/Time: Saturday, December 05, 2009 20:11:27
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978333.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.003	ug/L	279.819	26	-0.000
>	Sc	45		ug/L		468278	468278.242

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978334
Sample Date/Time: Saturday, December 05, 2009 20:13:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925379|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978334.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**50.558**	**ug/L**	1.108	21913	0.046
⌊>	Sc	45		**ug/L**		477347	477346.608

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		105.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241325001
Sample Date/Time: Saturday, December 05, 2009 20:14:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241325001.213

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.004	ug/L	341.871	27	-0.000
Sc	45		ug/L		491230	491229.962

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		108.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978335
Sample Date/Time: Saturday, December 05, 2009 20:16:38
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978335.214

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**-0.016**	**ug/L**	56.833	22	-0.000
⌊>	Sc	45		**ug/L**		495941	495941.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		109.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978336
Sample Date/Time: Saturday, December 05, 2009 20:18:22
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978336.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	47.743	ug/L	2.253	21693	0.043
>	Sc	45		ug/L		500478	500478.200

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		110.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978337
Sample Date/Time: Saturday, December 05, 2009 20:20:07
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925379|5|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\1201978337.216

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.022**	**ug/L**	50.979	36	0.000
⌊>	Sc	45		**ug/L**		459820	459820.282

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241325002
Sample Date/Time: Saturday, December 05, 2009 20:21:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925379|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\241325002.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.020	ug/L	67.784	36	0.000
⌊>	Sc	45		ug/L		476314	476313.594

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		105.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 20:23:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 8.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	49.475	ug/L	2.143	21229	0.045
⌊>	Sc	45		ug/L		472626	472625.711

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	98.949				
⌊>	Sc	45		104.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 20:25:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 9.219

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.026	ug/L	41.795	38	0.000
Sc	45		ug/L		463752	463751.924

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\112509W1.SIF
Batch ID:
Results Data Set: 112509W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: WATER **Method Last Saved: 10/28/2009 09:43:18**
Method Description: 7470A, 245.2, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 11/25/2009 07:43:51**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	07:44:53	Yes
2		[0.00]	0.0000	-0.0012	0.0000	07:45:28	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0001				
%RSD:		0.00	79.37				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 11/25/2009 07:45:47**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0022	0.0098	0.0023	07:46:47	Yes
2		[0.2]	0.0021	0.0090	0.0022	07:47:22	Yes
Mean:		[0.2]	0.0022				
SD:		0.0	0.0001				
%RSD:		0.0	2.65				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01093 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 11/25/2009 07:47:41**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0055	0.0237	0.0055	07:48:42	Yes
2		[0.5]	0.0054	0.0235	0.0055	07:49:18	Yes
Mean:		[0.5]	0.0054				
SD:		0.0	0.0000				
%RSD:		0.0	0.63				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999997 Slope: 0.01087 Intercept: 0.00000

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 11/25/2009 07:49:37**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0221	0.0989	0.0222	07:50:39	Yes
2		[2.0]	0.0218	0.0966	0.0219	07:51:13	Yes
Mean:		[2.0]	0.0219				
SD:		0.0	0.0002				
%RSD:		0.0	0.98				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999997 Slope: 0.01098 Intercept: -0.00002

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 11/25/2009 07:51:33**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0544	0.2419	0.0545	07:52:35	Yes
2		[5.0]	0.0541	0.2417	0.0542	07:53:10	Yes
Mean:		[5.0]	0.0543				
SD:		0.0	0.0003				
%RSD:		0.0	0.47				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999989 Slope: 0.01086 Intercept: 0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 11/25/2009 07:53:31**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1094	0.4861	0.1095	07:54:31	Yes
2		[10.0]	0.1082	0.4828	0.1083	07:55:06	Yes
Mean:		[10.0]	0.1088				
SD:		0.0	0.0008				
%RSD:		0.0	0.75				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999997 Slope: 0.01088 Intercept: 0.00002

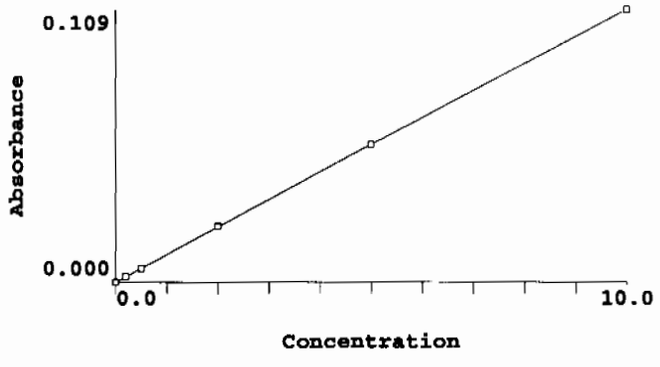

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.002	0.00	79.4
S0.2	0.0022	0.2	0.199	0.00	2.6
S0.5	0.0054	0.5	0.498	0.00	0.6
S2.0	0.0219	2.0	2.015	0.00	1.0

S5.0	0.0543	5.0	4.987	0.00	0.5
S10.0	0.1088	10.0	10.004	0.00	0.8

Correlation Coef.: 0.999997 Slope: 0.01088 Intercept: 0.00002

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 11/25/2009 07:55:25**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.095	5.095	0.0554	0.2474	0.0555	07:56:26	Yes
2	5.098	5.098	0.0555	0.2472	0.0555	07:57:00	Yes
Mean:	5.096	5.096	0.0554				
SD:	0.002	0.002	0.0000				
%RSD:	0.045	0.045	0.04				

QC value within limits for Hg 253.7 Recovery = 101.92%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 11/25/2009 07:57:20**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	-0.0005	0.0002	07:58:21	Yes
2	0.001	0.001	0.0000	-0.0003	0.0001	07:58:56	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	94.87	94.87	62.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 11/25/2009 07:59:16**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.202	0.202	0.0022	0.0098	0.0023	08:00:17	Yes
2	0.209	0.209	0.0023	0.0107	0.0024	08:00:52	Yes
Mean:	0.206	0.206	0.0023				
SD:	0.005	0.005	0.0001				
%RSD:	2.487	2.487	2.46				

QC value within limits for Hg 253.7 Recovery = 102.90%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 08:01:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.971	4.971	0.0541	0.2417	0.0542	08:02:13	Yes
2	4.915	4.915	0.0535	0.2403	0.0536	08:02:48	Yes
Mean:	4.943	4.943	0.0538				
SD:	0.040	0.040	0.0004				
%RSD:	0.800	0.800	0.80				

QC value within limits for Hg 253.7 Recovery = 98.86%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 11/25/2009 08:03:08
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	-0.0001	0.0001	08:04:08	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	08:04:43	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	139.3	139.3	46.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201975633|924182|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 11/25/2009 08:05:03
Data Type: Original

Replicate Data: 1201975633|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0003	0.0001	08:06:04	Yes
2	0.005	0.005	0.0001	0.0007	0.0002	08:06:39	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	35.89	35.89	22.80				

Sequence No.: 13
Sample ID: 1201975634|924182|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 11/25/2009 08:06:59
Data Type: Original

Replicate Data: 1201975634|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.004	2.004	0.0218	0.0979	0.0219	08:08:01	Yes
2	1.969	1.969	0.0214	0.0960	0.0215	08:08:36	Yes
Mean:	1.986	1.986	0.0216				
SD:	0.025	0.025	0.0003				
%RSD:	1.251	1.251	1.25				

Sequence No.: 14
Sample ID: 241023001|924182|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 11/25/2009 08:08:57
Data Type: Original

Replicate Data: 241023001|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0004	0.0001	08:09:57	Yes
2	0.006	0.006	0.0001	0.0006	0.0002	08:10:32	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.007	0.007	0.0001				
%RSD:	397.9	397.9	171.58				

Sequence No.: 15
Sample ID: 241023002|924182|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 11/25/2009 08:10:51
Data Type: Original

Replicate Data: 241023002|924182|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1201975636|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.066	2.066	0.0225	0.1030	0.0226	08:21:25	Yes
2	2.062	2.062	0.0224	0.1024	0.0225	08:22:00	Yes
Mean:	2.064	2.064	0.0225				
SD:	0.003	0.003	0.0000				
%RSD:	0.147	0.147	0.15				

Sequence No.: 21 Autosampler Location: 21
Sample ID: 1201975637|924182|5 Date Collected: 11/25/2009 08:22:19
Analyst: JXL1 Data Type: Original

Replicate Data: 1201975637|924182|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	-0.0000	0.0001	08:23:21	Yes
2	0.002	0.002	0.0000	0.0003	0.0001	08:23:55	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	440.4	440.4	69.93				

Sequence No.: 22 Autosampler Location: 7
Sample ID: CCV Date Collected: 11/25/2009 08:24:15
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.059	5.059	0.0550	0.2479	0.0551	08:25:15	Yes
2	5.059	5.059	0.0550	0.2474	0.0551	08:25:50	Yes
Mean:	5.059	5.059	0.0550				
SD:	0.000	0.000	0.0000				
%RSD:	0.001	0.001	0.00				

QC value within limits for Hg 253.7 Recovery = 101.18%
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 08:26:09
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0003	0.0001	08:27:10	Yes
2	0.001	0.001	0.0000	0.0002	0.0001	08:27:45	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.88	11.88	4.76				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 Autosampler Location: 22
Sample ID: 241100002|924182|1 Date Collected: 11/25/2009 08:28:04
Analyst: JXL1 Data Type: Original

Replicate Data: 241100002|924182|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0009	0.0002	08:29:05	Yes
2	0.000	0.000	0.0000	0.0001	0.0001	08:29:40	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	-0.0003	0.0000	08:38:45	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0001	08:39:20	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	43.78	43.78	90.87				

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 1201975651|924188|1 **Date Collected: 11/25/2009 08:39:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975651|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0002	0.0001	08:40:40	Yes
2	0.001	0.001	0.0000	-0.0001	0.0001	08:41:15	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	501.1	501.1	177.48				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 1201975652|924188|1 **Date Collected: 11/25/2009 08:41:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975652|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.133	2.133	0.0232	0.1045	0.0233	08:42:35	Yes
2	2.123	2.123	0.0231	0.1029	0.0232	08:43:10	Yes
Mean:	2.128	2.128	0.0232				
SD:	0.007	0.007	0.0001				
%RSD:	0.330	0.330	0.33				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 1201975653|924188|5 **Date Collected: 11/25/2009 08:43:29**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975653|924188|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	08:44:30	Yes
2	0.000	0.000	0.0000	0.0002	0.0001	08:45:04	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	189.6	189.6	57.77				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 241113002|924188|1 **Date Collected: 11/25/2009 08:45:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241113002|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0001	0.0001	08:46:24	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	08:47:00	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	110.4	110.4	28.08				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 08:47:19**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.185	5.185	0.0564	0.2539	0.0565	08:48:19	Yes
2	5.121	5.121	0.0557	0.2508	0.0558	08:48:54	Yes
Mean:	5.153	5.153	0.0561				
SD:	0.045	0.045	0.0005				
%RSD:	0.870	0.870	0.87				

QC value within limits for Hg 253.7 Recovery = 103.06%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 11/25/2009 08:49:13
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0007	0.0002	08:50:14	Yes
2	0.006	0.006	0.0001	0.0010	0.0002	08:50:49	Yes
Mean:	0.006	0.006	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	5.555	5.555	4.04				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 241113003|924188|1 Date Collected: 11/25/2009 08:51:08
Analyst: JXL1 Data Type: Original

Replicate Data: 241113003|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0009	0.0001	08:52:09	Yes
2	0.005	0.005	0.0001	0.0009	0.0002	08:52:44	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	8.282	8.282	5.65				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 241113004|924188|1 Date Collected: 11/25/2009 08:53:03
Analyst: JXL1 Data Type: Original

Replicate Data: 241113004|924188|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	08:54:04	Yes
2	0.002	0.002	0.0001	0.0004	0.0001	08:54:39	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	9.874	9.874	5.09				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1201980105|926110|1 Date Collected: 11/25/2009 08:54:59
Analyst: JXL1 Data Type: Original

Replicate Data: 1201980105|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0005	0.0001	08:56:00	Yes

Replicate Data: 1201980109|926110|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0007	0.0002	09:05:41	Yes
2	0.006	0.006	0.0001	0.0006	0.0002	09:06:16	Yes
Mean:	0.007	0.007	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	15.16	15.16	11.56				

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 241679002|926110|1 **Date Collected: 11/25/2009 09:06:36**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241679002|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0001	0.0008	0.0002	09:07:37	Yes
2	0.011	0.011	0.0001	0.0010	0.0002	09:08:12	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	13.90	13.90	11.50				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 241679003|926110|1 **Date Collected: 11/25/2009 09:08:31**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241679003|926110|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0004	0.0001	09:09:32	Yes
2	0.001	0.001	0.0000	0.0003	0.0001	09:10:07	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.63	11.63	3.80				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 09:10:26**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.175	5.175	0.0563	0.2548	0.0564	09:11:27	Yes
2	5.142	5.142	0.0559	0.2518	0.0560	09:12:01	Yes
Mean:	5.158	5.158	0.0561				
SD:	0.024	0.024	0.0003				
%RSD:	0.459	0.459	0.46				

QC value within limits for Hg 253.7 Recovery = 103.17%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 09:12:20**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0002	0.0001	09:13:21	Yes
2	0.004	0.004	0.0001	0.0008	0.0001	09:13:56	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	63.63	63.63	37.18				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 240662013|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0006	0.0001	09:32:41	Yes
2	0.003	0.003	0.0001	0.0006	0.0001	09:33:16	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	5.342	5.342	2.96				

Sequence No.: 58
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 11/25/2009 09:33:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.156	5.156	0.0561	0.2550	0.0562	09:34:36	Yes
2	5.115	5.115	0.0556	0.2512	0.0557	09:35:11	Yes
Mean:	5.135	5.135	0.0559				
SD:	0.029	0.029	0.0003				
%RSD:	0.565	0.565	0.57				

QC value within limits for Hg 253.7 Recovery = 102.70%
All analyte(s) passed QC.

Sequence No.: 59
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 11/25/2009 09:35:30
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0007	0.0001	09:36:31	Yes
2	0.002	0.002	0.0001	0.0004	0.0001	09:37:05	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	22.74	22.74	13.18				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60
Sample ID: 240662014|926084|1
Analyst: JXL1
Autosampler Location: 52
Date Collected: 11/25/2009 09:37:25
Data Type: Original

Replicate Data: 240662014|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	09:38:26	Yes
2	0.003	0.003	0.0001	0.0005	0.0001	09:39:01	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	35.16	35.16	18.82				

Sequence No.: 61
Sample ID: 240662015|926084|1
Analyst: JXL1
Autosampler Location: 53
Date Collected: 11/25/2009 09:39:20
Data Type: Original

Replicate Data: 240662015|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	09:40:21	Yes
2	0.000	0.000	0.0000	0.0003	0.0001	09:40:56	Yes
Mean:	0.000	0.000	0.0000				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	0.0001	0.0006	0.0001	09:50:01	Yes
2	0.002	0.002	0.0000	0.0005	0.0001	09:50:36	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	6.220	6.220	3.35				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 240662021|926084|1 **Date Collected: 11/25/2009 09:50:56**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 240662021|926084|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0003	0.0001	09:51:57	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	09:52:32	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	87.29	87.29	24.88				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 1201975681|924202|1 **Date Collected: 11/25/2009 09:52:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975681|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	-0.0001	0.0001	09:53:54	Yes
2	-0.001	-0.001	0.0000	0.0003	0.0001	09:54:28	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	77.75	77.75	539.91				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201975682|924202|1 **Date Collected: 11/25/2009 09:54:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201975682|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.158	2.158	0.0235	0.1039	0.0236	09:55:50	Yes
2	2.147	2.147	0.0234	0.1040	0.0234	09:56:25	Yes
Mean:	2.152	2.152	0.0234				
SD:	0.008	0.008	0.0001				
%RSD:	0.366	0.366	0.37				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 09:56:46**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.325	5.325	0.0579	0.2583	0.0580	09:57:46	Yes
2	5.328	5.328	0.0580	0.2568	0.0580	09:58:21	Yes
Mean:	5.326	5.326	0.0579				
SD:	0.002	0.002	0.0000				
%RSD:	0.042	0.042	0.04				

QC value within limits for Hg 253.7 Recovery = 106.52%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 11/25/2009 09:58:40
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0005	0.0001	09:59:41	Yes
2	0.002	0.002	0.0000	0.0003	0.0001	10:00:16	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	32.93	32.93	19.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 241181001|924202|1
Analyst: JXL1
Autosampler Location: 62
Date Collected: 11/25/2009 10:00:35
Data Type: Original

Replicate Data: 241181001|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	10:01:36	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:02:11	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	15.93	15.93	6.59				

Sequence No.: 73
Sample ID: 241181002|924202|1
Analyst: JXL1
Autosampler Location: 63
Date Collected: 11/25/2009 10:02:31
Data Type: Original

Replicate Data: 241181002|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0008	0.0001	10:03:32	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:04:07	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	84.39	84.39	47.31				

Sequence No.: 74
Sample ID: 241187001|924202|1
Analyst: JXL1
Autosampler Location: 64
Date Collected: 11/25/2009 10:04:27
Data Type: Original

Replicate Data: 241187001|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0005	0.0001	10:05:28	Yes
2	0.003	0.003	0.0001	0.0008	0.0001	10:06:03	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	103.3	103.3	43.30				

Sequence No.: 75
Sample ID: 1201975683|924202|1
Analyst: JXL1
Autosampler Location: 65
Date Collected: 11/25/2009 10:06:22
Data Type: Original

Replicate Data: 1201975683|924202|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0008	0.0001	10:07:24	Yes
2	0.003	0.003	0.0001	0.0008	0.0001	10:07:58	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0003	0.0001	10:17:05	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0001	10:17:41	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	67.15	67.15	339.04				

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201978915|925614|1 **Date Collected: 11/25/2009 10:18:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978915|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0001	0.0001	10:19:02	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	10:19:38	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	>999.9%	>999.9%	74.32				

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 10:19:58**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.062	5.062	0.0551	0.2465	0.0552	10:20:58	Yes
2	5.120	5.120	0.0557	0.2483	0.0558	10:21:33	Yes
Mean:	5.091	5.091	0.0554				
SD:	0.041	0.041	0.0004				
%RSD:	0.801	0.801	0.80				

QC value within limits for Hg 253.7 Recovery = 101.83%
All analyte(s) passed QC.

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 10:21:52**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0005	0.0001	10:22:53	Yes
2	0.004	0.004	0.0001	0.0006	0.0001	10:23:27	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	11.13	11.13	7.31				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201978916|925614|1 **Date Collected: 11/25/2009 10:23:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978916|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.156	2.156	0.0235	0.1050	0.0236	10:24:48	Yes
2	2.157	2.157	0.0235	0.1044	0.0236	10:25:24	Yes
Mean:	2.156	2.156	0.0235				
SD:	0.000	0.000	0.0000				
%RSD:	0.012	0.012	0.01				

Sequence No.: 85
Sample ID: 241606001|925614|1
Analyst: JXL1
Autosampler Location: 73
Date Collected: 11/25/2009 10:25:44
Data Type: Original

Replicate Data: 241606001|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	10:26:46	Yes
2	0.003	0.003	0.0001	0.0005	0.0001	10:27:21	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	16.67	16.67	9.23				

Sequence No.: 86
Sample ID: 1201978917|925614|1
Analyst: JXL1
Autosampler Location: 74
Date Collected: 11/25/2009 10:27:41
Data Type: Original

Replicate Data: 1201978917|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0001	0.0001	10:28:43	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	10:29:17	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	11.33	11.33	4.94				

Sequence No.: 87
Sample ID: 1201978918|925614|1
Analyst: JXL1
Autosampler Location: 75
Date Collected: 11/25/2009 10:29:37
Data Type: Original

Replicate Data: 1201978918|925614|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.268	2.268	0.0247	0.1098	0.0248	10:30:39	Yes
2	2.264	2.264	0.0246	0.1091	0.0247	10:31:14	Yes
Mean:	2.266	2.266	0.0247				
SD:	0.003	0.003	0.0000				
%RSD:	0.132	0.132	0.13				

Sequence No.: 88
Sample ID: 1201978923|925614|5
Analyst: JXL1
Autosampler Location: 76
Date Collected: 11/25/2009 10:31:34
Data Type: Original

Replicate Data: 1201978923|925614|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0007	0.0002	10:32:35	Yes
2	0.003	0.003	0.0001	0.0003	0.0001	10:33:10	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	32.84	32.84	22.27				

Sequence No.: 89
Sample ID: 1201977150|924857|1
Analyst: JXL1
Autosampler Location: 77
Date Collected: 11/25/2009 10:33:30
Data Type: Original

Replicate Data: 1201977150|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0006	0.0002	10:34:32	Yes

2	0.003	0.003	0.0001	0.0006	0.0001	10:35:07	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	22.06	22.06	14.18				

==========

Sequence No.: 90 **Autosampler Location: 78**
Sample ID: 1201977151|924857|1 **Date Collected: 11/25/2009 10:35:27**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977151|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.485	2.485	0.0271	0.1189	0.0271	10:36:28	Yes
2	2.477	2.477	0.0270	0.1182	0.0270	10:37:03	Yes
Mean:	2.481	2.481	0.0270				
SD:	0.006	0.006	0.0001				
%RSD:	0.237	0.237	0.24				

==========

Sequence No.: 91 **Autosampler Location: 79**
Sample ID: 241325001|924857|1 **Date Collected: 11/25/2009 10:37:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241325001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0004	0.0001	10:38:25	Yes
2	0.003	0.003	0.0001	0.0006	0.0001	10:38:59	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	6.270	6.270	3.75				

==========

Sequence No.: 92 **Autosampler Location: 80**
Sample ID: 241325002|924857|1 **Date Collected: 11/25/2009 10:39:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241325002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0006	0.0001	10:40:21	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	10:40:56	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	24.41	24.41	10.34				

==========

Sequence No.: 93 **Autosampler Location: 81**
Sample ID: 241337001|924857|1 **Date Collected: 11/25/2009 10:41:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241337001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	10:42:17	Yes
2	0.003	0.003	0.0001	0.0004	0.0001	10:42:52	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	88.77	88.77	40.99				

==========

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 10:43:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.197	5.197	0.0565	0.2547	0.0566	10:44:12	Yes
2	5.185	5.185	0.0564	0.2530	0.0565	10:44:47	Yes
Mean:	5.191	5.191	0.0565				
SD:	0.009	0.009	0.0001				
%RSD:	0.167	0.167	0.17				

QC value within limits for Hg 253.7 Recovery = 103.81%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 10:45:06**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	-0.0000	0.0001	10:46:07	Yes
2	0.001	0.001	0.0000	0.0001	0.0001	10:46:42	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	21.36	21.36	5.58				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 241337002|924857|1 **Date Collected: 11/25/2009 10:47:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241337002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0001	0.0001	10:48:03	Yes
2	0.001	0.001	0.0000	0.0005	0.0001	10:48:38	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	429.1	429.1	60.58				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 241420001|924857|1 **Date Collected: 11/25/2009 10:48:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241420001|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0004	0.0001	10:49:59	Yes
2	0.003	0.003	0.0001	0.0007	0.0001	10:50:34	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	69.81	69.81	32.63				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 1201977152|924857|1 **Date Collected: 11/25/2009 10:50:54**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977152|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0006	0.0001	10:51:55	Yes
2	0.002	0.002	0.0000	0.0004	0.0001	10:52:30	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.000	0.000	0.0000				

%RSD:	14.51	14.51	7.82

==========

Sequence No.: 99 **Autosampler Location: 85**
Sample ID: 1201977153|924857|1 **Date Collected: 11/25/2009 10:52:51**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977153|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.116	2.116	0.0230	0.1043	0.0231	10:53:52	Yes
2	2.134	2.134	0.0232	0.1045	0.0233	10:54:27	Yes
Mean:	2.125	2.125	0.0231				
SD:	0.013	0.013	0.0001				
%RSD:	0.603	0.603	0.60				

==========

Sequence No.: 100 **Autosampler Location: 86**
Sample ID: 1201977154|924857|5 **Date Collected: 11/25/2009 10:54:48**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201977154|924857|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0001	0.0005	0.0001	10:55:49	Yes
2	0.004	0.004	0.0001	0.0006	0.0001	10:56:24	Yes
Mean:	0.003	0.003	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	24.95	24.95	14.79				

==========

Sequence No.: 101 **Autosampler Location: 87**
Sample ID: 241420002|924857|1 **Date Collected: 11/25/2009 10:56:44**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241420002|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0008	0.0002	10:57:46	Yes
2	0.005	0.005	0.0001	0.0008	0.0002	10:58:21	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	12.03	12.03	8.35				

==========

Sequence No.: 102 **Autosampler Location: 88**
Sample ID: 241420003|924857|1 **Date Collected: 11/25/2009 10:58:41**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241420003|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0004	0.0001	10:59:42	Yes
2	0.001	0.001	0.0000	0.0004	0.0001	11:00:17	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	80.81	80.81	30.60				

==========

Sequence No.: 103 **Autosampler Location: 89**
Sample ID: 241420004|924857|1 **Date Collected: 11/25/2009 11:00:37**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241420004|924857|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.001	-0.001	0.0000	0.0002	0.0001	11:01:39	Yes
2	0.001	0.001	0.0000	0.0002	0.0001	11:02:14	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	>999.9%	>999.9%	46.29				

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 1201978859|925586|1 **Date Collected: 11/25/2009 11:02:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978859|925586|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	11:03:36	Yes
2	0.003	0.003	0.0001	0.0004	0.0001	11:04:11	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	68.64	68.64	31.44				

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 1201978860|925586|1 **Date Collected: 11/25/2009 11:04:31**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978860|925586|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.182	2.182	0.0238	0.1068	0.0238	11:05:32	Yes
2	2.176	2.176	0.0237	0.1064	0.0238	11:06:07	Yes
Mean:	2.179	2.179	0.0237				
SD:	0.004	0.004	0.0000				
%RSD:	0.188	0.188	0.19				

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 11/25/2009 11:06:27**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.191	5.191	0.0565	0.2553	0.0566	11:07:28	Yes
2	5.183	5.183	0.0564	0.2535	0.0565	11:08:03	Yes
Mean:	5.187	5.187	0.0564				
SD:	0.006	0.006	0.0001				
%RSD:	0.110	0.110	0.11				

QC value within limits for Hg 253.7 Recovery = 103.75%
All analyte(s) passed QC.

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 11/25/2009 11:08:22**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0005	0.0001	11:09:22	Yes
2	0.005	0.005	0.0001	0.0006	0.0002	11:09:57	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	56.28	56.28	35.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 924856

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201977151	WHG091124-13	.2	mL
MS	1201977153	WHG091124-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201977150		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
LCS	1201977151		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241325001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241325002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241337001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241337002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420001		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
DUP	1201977152	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
MS	1201977153	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SDILT	1201977154	241420001	SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420002		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420003		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER
SAMPLE	241420004		SW846 7470A Prep	24-NOV-2009 12:40	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1191649-C	1.5 mL	5% Potassium Persulfate
1214179-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091124-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091124-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091124-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091124-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091124-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091124-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments. Digestion Start Date: 24-NOV-09 12:40
Digestion End Date: 24-NOV-09 14:40

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925376

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978327	UI091119-01	.25	mL
LCS	1201978327	UI091119-06	.25	mL
MS	1201978329	UI091119-01	.25	mL
MS	1201978329	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978326		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
LCS	1201978327		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
DUP	1201978328	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
MS	1201978329	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SDILT	1201978330	241325001	SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:02	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925378

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978334	UI091119-A00	.5	mL
LCS	1201978334	UI091119-B	.5	mL
MS	1201978336	UI090930-A	.5	mL
MS	1201978336	UI090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978333		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
LCS	1201978334		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
DUP	1201978335	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
MS	1201978336	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SDILT	1201978337	241325001	SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241325002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241337002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420003		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241420004		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537001		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER
SAMPLE	241537002		SW846 3005A	22-NOV-2009 07:11	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments

GEL Laboratories LLC
Form GEL-NCR

NCR Report No.: 762537
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
25-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7470A	Liquid	LANL
Batch ID:	**Sample Numbers:**		
924857	See Below		

Potentially affected work order(s)(SDG): 241325(10-544-1),241337(10-546-1),241420(10-577-1)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for LCS/LCSD: QC 1201977151LCS	1. The above noted analytes recovered slightly high in the laboratory control sample (LCS), however, the sample in this SDG did not contain those analytes above the RDL, therefore the implied high bias did not adversely affect the results.

Originator's Name:

Eric Lawson 25-NOV-09

Data Validator/Group Leader:

Jason Loy 30-NOV-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID:	UI090701-09	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #1	**Received:**	01-JUL-09	**Catalog Number :**	160044-09-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016477
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Master Soln #1				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID:	UI090701-10	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #2	**Received:**	01-JUL-09	**Catalog Number :**	160044-08-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016476
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Soln #2				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID:	UI090701-40	**Opened:**	01-JUL-09	**Amount :**	500 mL
Name:	TRACE ICP Stock PQL St	**Received:**	30-JUN-09	**Catalog Number :**	160543-01-03
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016475
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3+TrHF
Supplier:	02si				
Description:	TRACE ICP Stock PQL Standard				
Comments:	None				

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: O2SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091119-A00 **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091119-B **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091124-01 **Opened:** 24-NOV-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 24-NOV-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 25-NOV-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091124-02 **Opened:** 24-NOV-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 25-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091124-01 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG091124-02 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091124-03 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091124-04 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG091124-05 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG091124-06 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091124-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091124-13 **Opened:** 24-NOV-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 24-NOV-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 30-NOV-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091204-04 **Opened:** 04-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 04-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091204-04A **Opened:** 04-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091204-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091204-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091204-05 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091204-06 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 04-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091204-07 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 04-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-08 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091204-70 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091205-04 **Opened:** 05-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 05-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091205-04A **Opened:** 05-DEC-09 **Balance Id :** 4025216

Name: ICPMS Cal Standard 10 **Received:** 05-DEC-09 **Pipet Id :** 3541598

Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091205-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091205-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091205-05 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091205-06 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 05-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091205-07 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 05-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091205-08 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 05-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1116812 **Opened:** 29-APR-09 **Lot Number :** E45475
Name: B-K2S2O8S-MER **Received:** 29-APR-09
Type: Reagent/Solvent **Expires:** 29-APR-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1191649-C **Opened:** 17-SEP-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 17-SEP-09
Type: Reagent/Solvent **Expires:** 17-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1116812	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID

Standard Logbook

Comments: None

Serial ID: 1214179-C **Opened:** 03-NOV-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 03-NOV-09
Type: Reagent/Solvent **Expires:** 03-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL

Standard Logbook

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-544

Method/Analysis Information

Product: **pH**

Analytical Batch: 924497 **Method:** SW846 9045C/9045D

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
241322001	RE03-09-13618
241322002	RE03-09-13622
241322003	RE03-09-13620
241322004	RE03-09-13619
241322005	RE03-09-13624
241322006	RE03-09-13623
241322007	RE03-09-13626
241322008	RE03-09-13621
241322009	RE03-09-13627
241322010	RE03-09-13625
241322011	RE03-10-6084
241322012	RE03-10-6085
1201976367	241322001(RE03-09-13618) Sample Duplicate (DUP)
1201976369	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 17.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Electrode analysis was performed on a PerpHecT LogR pH/ISE.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 241322001 (RE03-09-13618).

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
The following samples from this sample group were received by the lab outside of the method specified holding time: 1201976367 (RE03-09-13618), 241322001 (RE03-09-13618), 241322002 (RE03-09-13622), 241322003 (RE03-09-13620), 241322004 (RE03-09-13619), 241322005 (RE03-09-13624), 241322006 (RE03-09-13623), 241322007 (RE03-09-13626), 241322008 (RE03-09-13621), 241322009 (RE03-09-13627), 241322010 (RE03-09-13625), 241322011 (RE03-10-6084) and 241322012 (RE03-10-6085).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated

electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	923861 and 924475	**Method:**	SW846 9012A
Prep Batch :	923858 and 924474	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241322001	RE03-09-13618
241322002	RE03-09-13622
241322003	RE03-09-13620
241322004	RE03-09-13619
241322005	RE03-09-13624
241322006	RE03-09-13623
241322007	RE03-09-13626
241322008	RE03-09-13621
241322009	RE03-09-13627
241322010	RE03-09-13625
241322011	RE03-10-6084
241322012	RE03-10-6085
1201974854	Method Blank (MB)
1201974855	241178010(RE03-09-13763) Sample Duplicate (DUP)
1201974857	241178010(RE03-09-13763) Matrix Spike (MS)
1201974859	241178010(RE03-09-13763) Matrix Spike Duplicate (MSD)
1201974861	Laboratory Control Sample (LCS)
1201976322	Method Blank (MB)
1201976323	241322004(RE03-09-13619) Sample Duplicate (DUP)
1201976324	241322005(RE03-09-13624) Sample Duplicate (DUP)
1201976325	241322004(RE03-09-13619) Matrix Spike (MS)
1201976326	241322005(RE03-09-13624) Matrix Spike (MS)
1201976327	241322004(RE03-09-13619) Matrix Spike Duplicate (MSD)
1201976328	241322005(RE03-09-13624) Matrix Spike Duplicate (MSD)
1201976329	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 241178010 (RE03-09-13763)- Batch 923861, 241322004 (RE03-09-13619) and 241322005 (RE03-09-13624)- Batch 924475.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable. 1201976326 (RE03-09-13624) and 1201976328 (RE03-09-13624)- Batch 924475.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201974855 (RE03-09-13763)- Batch 923861, 1201976323 (RE03-09-13619) and 241322004 (RE03-09-13619)- Batch 924475.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration: 1201974861 (LCS)- Batch 923861 and 1201976329 (LCS)- Batch 924475.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 762014 1201976326 (RE03-09-13624), 1201976328 (RE03-09-13624), 241322004 (RE03-09-13619), 241322005 (RE03-09-13624), 241322006 (RE03-09-13623), 241322007 (RE03-09-13626), 241322008 (RE03-09-13621), 241322009 (RE03-09-13627), 241322010 (RE03-09-13625), 241322011 (RE03-10-6084) and 241322012 (RE03-10-6085)- Batch 924475.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Method/Analysis Information

Product:	**Ion Chromatography**		
Analytical Batch:	924715	**Method:**	EPA 300.0
Prep Batch :	924713	**Method:**	EPA 300.0 PREP

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
241322001	RE03-09-13618
241322002	RE03-09-13622
241322003	RE03-09-13620
241322004	RE03-09-13619
241322005	RE03-09-13624
241322006	RE03-09-13623
241322007	RE03-09-13626
241322008	RE03-09-13621
241322009	RE03-09-13627
241322010	RE03-09-13625
241322011	RE03-10-6084
241322012	RE03-10-6085
1201976799	Method Blank (MB)
1201976804	Laboratory Control Sample (LCS)
1201984518	241336002(RE03-10-5897) Sample Duplicate (DUP)
1201984519	241322011(RE03-10-6084) Sample Duplicate (DUP)
1201984520	241336002(RE03-10-5897) Matrix Spike (MS)
1201984521	241322011(RE03-10-6084) Matrix Spike (MS)
1201984522	241336002(RE03-10-5897) Matrix Spike Duplicate (MSD)
1201984523	241322011(RE03-10-6084) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 17.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241322011 (RE03-10-6084) and 241336002 (RE03-10-5897).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery falls outside of the GEL acceptance limits but within the client specified limits. 1201984520 (RE03-10-5897) and 1201984521 (RE03-10-6084).

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery falls outside of the GEL acceptance limits but within the client specified limits. 1201984522 (RE03-10-5897) and 1201984523 (RE03-10-6084).

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation

The following NCR was generated for this SDG: 768832 1201984520 (RE03-10-5897), 1201984521 (RE03-10-6084), 1201984522 (RE03-10-5897) and 1201984523 (RE03-10-6084).

Manual Integrations

The following samples from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1201976804 (LCS), 1201984520 (RE03-10-5897), 1201984521 (RE03-10-6084), 1201984522 (RE03-10-5897) and 1201984523 (RE03-10-6084).

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 14Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-544 GEL Work Order: 241322

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13622	Project:	LANL01004
Sample ID:	241322002	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.12%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
SW9045C pH Federal "As Received"										
pH at Temp 21.1C	H	6.60	0.010	0.100	SU	1	TXT1 11/19/09	1458	924497	1
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.0	261	ug/kg	1	AXC2 11/27/09	1127	923861	2
Ion Chromatography Federal										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.308	1.03	mg/kg	1	VH1 12/09/09	0742	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1602	923858

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13620	Project:	LANL01004
Sample ID:	241322003	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	6.18%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
SW9045C pH Federal "As Received"										
pH at Temp 20.9C	H	6.39	0.010	0.100	SU	1	TXT1 11/19/09	1501	924497	1
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2 11/27/09	1133	923861	2
Ion Chromatography Federal										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.279	0.929	mg/kg	1	VH1 12/09/09	0808	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1602	923858

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID: RE03-09-13619
Sample ID: 241322004
Matrix: S
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client
Moisture: 14.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 21.0C	H	7.51	0.010	0.100	SU	1	TXT1	11/19/09	1505	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	73.7	271	ug/kg	1	AXC2	11/23/09	1513	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.307	1.02	mg/kg	1	VH1	12/09/09	0834	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13618	Project:	LANL01004
Sample ID:	241322001	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	14.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.9C	H	7.29	0.010	0.100	SU	1	TXT1	11/19/09	1452	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	69.6	256	ug/kg	1	AXC2	11/27/09	1126	923861	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.74	0.350	1.17	mg/kg	1	VH1	12/09/09	0715	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1602	923858

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13624	Project:	LANL01004
Sample ID:	241322005	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	22.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
SW9045C pH Federal "As Received"										
pH at Temp 21.0C	H	7.35	0.010	0.100	SU	1	TXT1 11/19/09	1510	924497	1
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		1540	86.2	317	ug/kg	1	AXC2 11/23/09	1516	924475	2
Ion Chromatography Federal										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.343	1.14	mg/kg	1	VH1 12/09/09	0900	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID: RE03-09-13623
Sample ID: 241322006
Matrix: S
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client
Moisture: 3.64%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.9C	H	8.67	0.010	0.100	SU	1	TXT1	11/19/09	1513	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	69.2	254	ug/kg	1	AXC2	11/23/09	1523	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.278	0.927	mg/kg	1	VH1	12/09/09	0926	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13626	Project:	LANL01004
Sample ID:	241322007	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	15.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.9C	H	7.68	0.010	0.100	SU	1	TXT1	11/19/09	1515	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total		1170	78.9	290	ug/kg	1	AXC2	11/23/09	1524	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.337	1.12	mg/kg	1	VH1	12/09/09	0952	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID: RE03-09-13621
Sample ID: 241322008
Matrix: S
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client
Moisture: 4.64%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
SW9045C pH Federal "As Received"										
pH at Temp 20.9C	H	6.71	0.010	0.100	SU	1	TXT1 11/19/09	1516	924497	1
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.9	257	ug/kg	1	AXC2 11/23/09	1525	924475	2
Ion Chromatography Federal										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.299	0.996	mg/kg	1	VH1 12/09/09	1018	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID: RE03-09-13627
Sample ID: 241322009
Matrix: S
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client
Moisture: 7.05%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.5C	H	7.37	0.010	0.100	SU	1	TXT1	11/19/09	1518	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total		1610	70.3	259	ug/kg	1	AXC2	11/23/09	1526	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.297	0.992	mg/kg	1	VH1	12/09/09	1136	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-09-13625	Project:	LANL01004
Sample ID:	241322010	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	16.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.6C	H	7.88	0.010	0.100	SU	1	TXT1	11/19/09	1526	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total		289	73.1	269	ug/kg	1	AXC2	11/23/09	1527	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.302	1.01	mg/kg	1	VH1	12/09/09	1202	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-10-6084	Project:	LANL01004
Sample ID:	241322011	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	12.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.7C	H	7.36	0.010	0.100	SU	1	TXT1	11/19/09	1528	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2	11/23/09	1528	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.38	0.301	1.00	mg/kg	1	VH1	12/09/09	1229	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 15, 2009

Client SDG: 10-544

Client Sample ID:	RE03-10-6085	Project:	LANL01004
Sample ID:	241322012	Client ID:	LANL010
Matrix:	S		
Collect Date:	16-NOV-09 12:00		
Receive Date:	18-NOV-09		
Collector:	Client		
Moisture:	4.43%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
SW9045C pH Federal "As Received"											
pH at Temp 20.7C	H	6.75	0.010	0.100	SU	1	TXT1	11/19/09	1531	924497	1
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	68.4	252	ug/kg	1	AXC2	11/23/09	1529	924475	2
Ion Chromatography Federal											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.300	1.00	mg/kg	1	VH1	12/09/09	1413	924715	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	VH1	12/08/09	1722	924713
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/20/09	1529	924474

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

Quality Control Summary

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QC Summary

Report Date: December 15, 2009

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241322

Parmname	NOM		Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Electrode Analysis												
Batch 924497												
QC1201976367 241322001 DUP												
pH		H	7.29	H	7.31	SU	0.274			(0%-10%)	TXT1	11/19/09 14:57
QC1201976369 LCS												
pH	7.00				6.95	SU			99.3	(95%-105%)		11/19/09 14:30
Flow Injection Analysis												
Batch 923861												
QC1201974855 241178010 DUP												
Cyanide, Total		J	99.6	U	ND	ug/kg	200	^			AXC2	11/27/09 10:58
QC1201974861 LCS												
Cyanide, Total	67900				64300	ug/kg			94.6	(46%-145%)		11/27/09 10:56
QC1201974854 MB												
Cyanide, Total				U	250	ug/kg						11/27/09 10:55
QC1201974857 241178010 MS												
Cyanide, Total	4790	J	99.6		4520	ug/kg			92.4	(50%-130%)		11/27/09 10:59
QC1201974859 241178010 MSD												
Cyanide, Total	5170	J	99.6		5160	ug/kg	13.1		97.9	(0%-30%)		11/27/09 11:00
Batch 924475												
QC1201976323 241322004 DUP												
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				AXC2	11/23/09 15:13
QC1201976324 241322005 DUP												
Cyanide, Total			1540		1460	ug/kg	5.29	^		(+/-311)		11/23/09 15:17
QC1201976329 LCS												
Cyanide, Total	67900				64300	ug/kg			94.6	(46%-145%)		11/23/09 15:12
QC1201976322 MB												
Cyanide, Total				U	250	ug/kg						11/23/09 15:11
QC1201976325 241322004 MS												
Cyanide, Total	5740	U	ND		4940	ug/kg			86.1	(50%-130%)		11/23/09 15:14
QC1201976326 241322005 MS												
Cyanide, Total	5570		1540		6020	ug/kg			80.4	(50%-130%)		11/23/09 15:18
QC1201976327 241322004 MSD												
Cyanide, Total	5850	U	ND		5190	ug/kg	4.84		88.6	(0%-30%)		11/23/09 15:15
QC1201976328 241322005 MSD												
Cyanide, Total	6220		1540		9020	ug/kg	39.8*		120	(0%-30%)		11/23/09 15:19
Ion Chromatography												
Batch 924715												
QC1201984518 241336002 DUP												
Nitrate-N		U	ND	U	ND	mg/kg	N/A				VH1	12/09/09 15:31
QC1201984519 241322011 DUP												
Nitrate-N			1.38		1.36	mg/kg	1.83	^		(+/-0.999)		12/09/09 12:55
QC1201976804 LCS												
Nitrate-N	50.0				53.0	mg/kg			106	(90%-110%)		12/09/09 06:49
QC1201976799 MB												

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QC Summary

Workorder: 241322

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 924715											
Nitrate-N				U	1.00	mg/kg					12/09/09 06:23
QC1201984520 241336002 MS											
Nitrate-N	52.7	U	ND		62.4	mg/kg		118*	(90%-110%)	VH1	12/09/09 16:50
QC1201984521 241322011 MS											
Nitrate-N	49.6		1.38		60.7	mg/kg		119*	(90%-110%)		12/09/09 13:21
QC1201984522 241336002 MSD											
Nitrate-N	52.1	U	ND		61.7	mg/kg	1.14	119*	(0%-20%)		12/09/09 17:16
QC1201984523 241322011 MSD											
Nitrate-N	50.2		1.38		59.6	mg/kg	1.75	116*	(0%-20%)		12/09/09 13:47

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound

QC Summary

Workorder: 241322

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 14-DEC-2009 15:35

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-544

Flow Injection Analysis
Method: SW846 9012A Concentration Units:ug/L
Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**23-NOV-2009 13:51:02**	**OM_11-23-2009_13-43-07**	**146**	**150**	**97**	**(90%-110%)**	**Yes**
CCV	23-NOV-2009 15:07:34	OM_11-23-2009_13-43-07	102	100	102	(90%-110%)	Yes
CCV	23-NOV-2009 15:20:06	OM_11-23-2009_13-43-07	105	100	105	(90%-110%)	Yes
CCV	23-NOV-2009 15:32:38	OM_11-23-2009_13-43-07	101	100	101	(90%-110%)	Yes
ICV	**27-NOV-2009 10:10:16**	**OM_11-27-2009_10-01-36**	**136**	**150**	**91**	**(90%-110%)**	**Yes**
CCV	27-NOV-2009 10:51:56	OM_11-27-2009_10-51-09	100	100	100	(90%-110%)	Yes
CCV	27-NOV-2009 11:04:26	OM_11-27-2009_10-51-09	100	100	100	(90%-110%)	Yes
CCV	27-NOV-2009 11:16:53	OM_11-27-2009_10-51-09	98	100	98	(90%-110%)	Yes
CCV	27-NOV-2009 11:29:24	OM_11-27-2009_10-51-09	104	100	104	(90%-110%)	Yes
CCV	27-NOV-2009 11:33:55	OM_11-27-2009_10-51-09	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-NOV-2009 13:52:52**	**OM_11-23-2009_13-43-07**	**0.99**	**5**	**Yes**
CCB	23-NOV-2009 15:09:25	OM_11-23-2009_13-43-07	-0.0136	5	Yes
CCB	23-NOV-2009 15:21:55	OM_11-23-2009_13-43-07	0.299	5	Yes
CCB	23-NOV-2009 15:34:28	OM_11-23-2009_13-43-07	0.197	5	Yes
ICB	**27-NOV-2009 10:12:07**	**OM_11-27-2009_10-01-36**	**2.2**	**5**	**Yes**
CCB	27-NOV-2009 10:53:47	OM_11-27-2009_10-51-09	1.04	5	Yes
CCB	27-NOV-2009 11:06:16	OM_11-27-2009_10-51-09	0.185	5	Yes
CCB	27-NOV-2009 11:18:43	OM_11-27-2009_10-51-09	1.29	5	Yes
CCB	27-NOV-2009 11:31:14	OM_11-27-2009_10-51-09	1.14	5	Yes
CCB	27-NOV-2009 11:35:45	OM_11-27-2009_10-51-09	1.2	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 14-DEC-2009 15:35

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-544**

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex ICS-3000 Ion Chromatograph

Parmname: Nitrate-N

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**08-DEC-2009 19:05:00**	**091208**	**5.195**	**5**	**104**	**(90%-110%)**	**Yes**
CCV	09-DEC-2009 05:31:00	091208	5.2603	5	105	(90%-110%)	Yes
CCV	09-DEC-2009 10:44:00	091208	7.9396	7.5	106	(90%-110%)	Yes
CCV	09-DEC-2009 15:57:00	091208	5.1618	5	103	(90%-110%)	Yes
CCV	09-DEC-2009 17:42:00	091208	7.9121	7.5	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**08-DEC-2009 19:31:00**	**091208**	**0**	**0.1**	**Yes**
CCB	09-DEC-2009 05:57:00	091208	0	0.1	Yes
CCB	09-DEC-2009 11:10:00	091208	0	0.1	Yes
CCB	09-DEC-2009 16:23:00	091208	0	0.1	Yes
CCB	09-DEC-2009 18:08:00	091208	0	0.1	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 923858

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201974861	URF1200957-01	.25	g
MS	1201974857	URF1184831-02	.025	mL
MS	1201974858	URF1184831-02	.025	mL
MSD	1201974859	URF1184831-02	.025	mL
MSD	1201974860	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201974854		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.5 g	25 mL	50	SOIL
LCS	1201974861		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241178010		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.55 g	25 mL	45.45455	SOIL
DUP	1201974855	241178010	SW846 9010B Prep	25-NOV-2009 16:02	>12	0.56 g	25 mL	44.64286	SOIL
MS	1201974857	241178010	SW846 9010B Prep	25-NOV-2009 16:02	>12	0.54 g	25 mL	46.2963	SOIL
MSD	1201974859	241178010	SW846 9010B Prep	25-NOV-2009 16:02	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241178011		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241178012		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241178013		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241178014		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241178015		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241178016		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241178017		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241178018		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241178019		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241180001		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241180002		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	241180003		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241227003		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.55 g	25 mL	45.45455	SOIL
DUP	1201974856	241227003	SW846 9010B Prep	25-NOV-2009 16:02	>12	0.53 g	25 mL	47.16981	SOIL
MS	1201974858	241227003	SW846 9010B Prep	25-NOV-2009 16:02	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1201974860	241227003	SW846 9010B Prep	25-NOV-2009 16:02	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241227004		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241227005		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241227006		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241322001		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241322002		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322003		SW846 9010B Prep	25-NOV-2009 16:02	>12	0.52 g	25 mL	48.07692	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 924474

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201976329	URF1200957-01	.25	g
MS	1201976325	URF1184831-02	.025	mL
MS	1201976326	URF1184831-02	.025	mL
MSD	1201976327	URF1184831-02	.025	mL
MSD	1201976328	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201976322		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
LCS	1201976329		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241322004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1201976323	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.57 g	25 mL	43.85965	SOIL
MS	1201976325	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1201976327	241322004	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241322005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1201976324	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
MS	1201976326	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.58 g	25 mL	43.10345	SOIL
MSD	1201976328	241322005	SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322006		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322007		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322008		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241322009		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322010		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241322011		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241322012		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241336001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241336002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241351001		SW846 9010C Distillation	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOLID
SAMPLE	241358001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.511 g	25 mL	48.92368	MISC SOLID
SAMPLE	241417001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241417002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241419001		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241419002		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241419003		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241419004		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241419005		SW846 9010B Prep	20-NOV-2009 15:29	>12	0.51 g	25 mL	49.01961	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091120-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/23/2009 13:43:53	OM_11-23-2009_13-43-07
150 ppb		1	axc2	11/23/2009 13:44:44	OM_11-23-2009_13-43-07
100 ppb		1	axc2	11/23/2009 13:45:37	OM_11-23-2009_13-43-07
50 ppb		1	axc2	11/23/2009 13:46:30	OM_11-23-2009_13-43-07
10 ppb		1	axc2	11/23/2009 13:47:23	OM_11-23-2009_13-43-07
CRDL 5.0 ppb		1	axc2	11/23/2009 13:48:17	OM_11-23-2009_13-43-07
ICAL-00		1	axc2	11/23/2009 13:49:11	OM_11-23-2009_13-43-07
ICV		1	axc2	11/23/2009 13:51:02	OM_11-23-2009_13-43-07
ICB		1	axc2	11/23/2009 13:52:52	OM_11-23-2009_13-43-07
CRDL		1	axc2	11/23/2009 13:54:42	OM_11-23-2009_13-43-07
1201977264	924911	1	axc2	11/23/2009 13:56:32	OM_11-23-2009_13-43-07
1201977271	924911	25	axc2	11/23/2009 13:57:25	OM_11-23-2009_13-43-07
240999001	924911	1	axc2	11/23/2009 13:58:18	OM_11-23-2009_13-43-07
1201977265	924911	1	axc2	11/23/2009 13:59:11	OM_11-23-2009_13-43-07
1201977267	924911	1	axc2	11/23/2009 14:00:04	OM_11-23-2009_13-43-07
1201977269	924911	1	axc2	11/23/2009 14:00:57	OM_11-23-2009_13-43-07
241414003	924911	1	axc2	11/23/2009 14:01:50	OM_11-23-2009_13-43-07
1201977266	924911	1	axc2	11/23/2009 14:02:42	OM_11-23-2009_13-43-07
1201977268	924911	1	axc2	11/23/2009 14:03:34	OM_11-23-2009_13-43-07
1201977270	924911	1	axc2	11/23/2009 14:04:27	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:05:20	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:07:09	OM_11-23-2009_13-43-07
241414004	924911	1	axc2	11/23/2009 14:08:57	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:09:49	OM_11-23-2009_13-43-07
1201974823	923850	25	axc2	11/23/2009 14:10:42	OM_11-23-2009_13-43-07
241029014	923850	1	axc2	11/23/2009 14:11:33	OM_11-23-2009_13-43-07
1201974817	923850	1	axc2	11/23/2009 14:12:25	OM_11-23-2009_13-43-07
1201974819	923850	1	axc2	11/23/2009 14:13:19	OM_11-23-2009_13-43-07
1201974821*	923850	1	axc2	11/23/2009 14:14:12	OM_11-23-2009_13-43-07
1201974816*	923850	1	axc2	11/23/2009 14:15:04	OM_11-23-2009_13-43-07
241105010	923850	1	axc2	11/23/2009 14:15:57	OM_11-23-2009_13-43-07
241105011	923850	1	axc2	11/23/2009 14:16:51	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:17:43	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:19:34	OM_11-23-2009_13-43-07
1201974816	923850	1	axc2	11/23/2009 14:21:21	OM_11-23-2009_13-43-07
1201974821	923850	1	axc2	11/23/2009 14:22:15	OM_11-23-2009_13-43-07
241105012	923850	1	axc2	11/23/2009 14:23:09	OM_11-23-2009_13-43-07
241106001	923850	1	axc2	11/23/2009 14:24:01	OM_11-23-2009_13-43-07
241106002	923850	1	axc2	11/23/2009 14:24:54	OM_11-23-2009_13-43-07
241178001	923850	1	axc2	11/23/2009 14:25:47	OM_11-23-2009_13-43-07
241178002*	923850	1	axc2	11/23/2009 14:26:40	OM_11-23-2009_13-43-07
241178003	923850	1	axc2	11/23/2009 14:27:32	OM_11-23-2009_13-43-07
241178004	923850	1	axc2	11/23/2009 14:28:24	OM_11-23-2009_13-43-07
241178005	923850	1	axc2	11/23/2009 14:29:17	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:30:10	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:31:59	OM_11-23-2009_13-43-07
241178002	923850	1	axc2	11/23/2009 14:33:48	OM_11-23-2009_13-43-07
241178006	923850	1	axc2	11/23/2009 14:34:40	OM_11-23-2009_13-43-07
241178007	923850	1	axc2	11/23/2009 14:35:31	OM_11-23-2009_13-43-07
241178008	923850	1	axc2	11/23/2009 14:36:24	OM_11-23-2009_13-43-07
241178009	923850	1	axc2	11/23/2009 14:37:18	OM_11-23-2009_13-43-07
241227001	923850	1	axc2	11/23/2009 14:38:11	OM_11-23-2009_13-43-07
1201974818	923850	1	axc2	11/23/2009 14:39:05	OM_11-23-2009_13-43-07
1201974820	923850	1	axc2	11/23/2009 14:39:59	OM_11-23-2009_13-43-07
1201974822	923850	1	axc2	11/23/2009 14:40:52	OM_11-23-2009_13-43-07
241227002	923850	1	axc2	11/23/2009 14:41:45	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009 14:42:37	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009 14:44:27	OM_11-23-2009_13-43-07

241227007	923850	1	axc2	11/23/2009	14:46:17	OM_11-23-2009_13-43-07
241227008	923850	1	axc2	11/23/2009	14:47:10	OM_11-23-2009_13-43-07
241227009	923850	1	axc2	11/23/2009	14:48:03	OM_11-23-2009_13-43-07
1201972404	922839	1	axc2	11/23/2009	14:48:55	OM_11-23-2009_13-43-07
1201972411*	922839	25	axc2	11/23/2009	14:49:47	OM_11-23-2009_13-43-07
241044009	922839	1	axc2	11/23/2009	14:50:40	OM_11-23-2009_13-43-07
1201972405	922839	1	axc2	11/23/2009	14:51:32	OM_11-23-2009_13-43-07
1201972407	922839	1	axc2	11/23/2009	14:52:24	OM_11-23-2009_13-43-07
1201972409	922839	1	axc2	11/23/2009	14:53:16	OM_11-23-2009_13-43-07
241044010	922839	1	axc2	11/23/2009	14:54:10	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	14:55:02	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	14:56:52	OM_11-23-2009_13-43-07
1201972406	922839	1	axc2	11/23/2009	14:58:43	OM_11-23-2009_13-43-07
1201972408	922839	1	axc2	11/23/2009	14:59:37	OM_11-23-2009_13-43-07
1201972410	922839	1	axc2	11/23/2009	15:00:31	OM_11-23-2009_13-43-07
1201972411	922839	1	axc2	11/23/2009	15:01:23	OM_11-23-2009_13-43-07
241044011	922839	1	axc2	11/23/2009	15:02:17	OM_11-23-2009_13-43-07
241044012	922839	1	axc2	11/23/2009	15:03:10	OM_11-23-2009_13-43-07
241044013	922839	1	axc2	11/23/2009	15:04:03	OM_11-23-2009_13-43-07
241044014	922839	1	axc2	11/23/2009	15:04:56	OM_11-23-2009_13-43-07
241044015	922839	1	axc2	11/23/2009	15:05:49	OM_11-23-2009_13-43-07
241044016	922839	1	axc2	11/23/2009	15:06:42	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:07:34	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:09:25	OM_11-23-2009_13-43-07
1201976322	924475	1	axc2	11/23/2009	15:11:16	OM_11-23-2009_13-43-07
1201976329	924475	25	axc2	11/23/2009	15:12:08	OM_11-23-2009_13-43-07
241322004	924475	1	axc2	11/23/2009	15:13:01	OM_11-23-2009_13-43-07
1201976323	924475	1	axc2	11/23/2009	15:13:53	OM_11-23-2009_13-43-07
1201976325	924475	1	axc2	11/23/2009	15:14:46	OM_11-23-2009_13-43-07
1201976327	924475	1	axc2	11/23/2009	15:15:39	OM_11-23-2009_13-43-07
241322005	924475	1	axc2	11/23/2009	15:16:31	OM_11-23-2009_13-43-07
1201976324	924475	1	axc2	11/23/2009	15:17:24	OM_11-23-2009_13-43-07
1201976326	924475	1	axc2	11/23/2009	15:18:19	OM_11-23-2009_13-43-07
1201976328	924475	1	axc2	11/23/2009	15:19:13	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:20:06	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:21:55	OM_11-23-2009_13-43-07
241322006	924475	1	axc2	11/23/2009	15:23:45	OM_11-23-2009_13-43-07
241322007	924475	1	axc2	11/23/2009	15:24:40	OM_11-23-2009_13-43-07
241322008	924475	1	axc2	11/23/2009	15:25:33	OM_11-23-2009_13-43-07
241322009	924475	1	axc2	11/23/2009	15:26:27	OM_11-23-2009_13-43-07
241322010	924475	1	axc2	11/23/2009	15:27:20	OM_11-23-2009_13-43-07
241322011	924475	1	axc2	11/23/2009	15:28:14	OM_11-23-2009_13-43-07
241322012	924475	1	axc2	11/23/2009	15:29:07	OM_11-23-2009_13-43-07
241336001	924475	1	axc2	11/23/2009	15:30:00	OM_11-23-2009_13-43-07
241336002	924475	1	axc2	11/23/2009	15:30:53	OM_11-23-2009_13-43-07
241351001	924475	1	axc2	11/23/2009	15:31:46	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:32:38	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:34:28	OM_11-23-2009_13-43-07
241358001	924475	1	axc2	11/23/2009	15:36:17	OM_11-23-2009_13-43-07
241417001	924475	1	axc2	11/23/2009	15:37:10	OM_11-23-2009_13-43-07
241417002	924475	1	axc2	11/23/2009	15:38:02	OM_11-23-2009_13-43-07
241419001	924475	1	axc2	11/23/2009	15:38:57	OM_11-23-2009_13-43-07
241419002	924475	1	axc2	11/23/2009	15:39:51	OM_11-23-2009_13-43-07
241419003	924475	1	axc2	11/23/2009	15:40:45	OM_11-23-2009_13-43-07
241419004	924475	1	axc2	11/23/2009	15:41:39	OM_11-23-2009_13-43-07
241419005	924475	1	axc2	11/23/2009	15:42:34	OM_11-23-2009_13-43-07
1201976319	924469	1	axc2	11/23/2009	15:43:28	OM_11-23-2009_13-43-07
1201976321	924469	1	axc2	11/23/2009	15:44:22	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:45:15	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:47:06	OM_11-23-2009_13-43-07

241351001	924469	1	axc2	11/23/2009	15:48:58	OM_11-23-2009_13-43-07
241358001	924469	1	axc2	11/23/2009	15:49:51	OM_11-23-2009_13-43-07
1201976320	924469	1	axc2	11/23/2009	15:50:44	OM_11-23-2009_13-43-07
1201977272	924915	1	axc2	11/23/2009	15:51:37	OM_11-23-2009_13-43-07
1201977274	924915	1	axc2	11/23/2009	15:52:31	OM_11-23-2009_13-43-07
241372013	924915	1	axc2	11/23/2009	15:53:24	OM_11-23-2009_13-43-07
1201977273	924915	1	axc2	11/23/2009	15:54:17	OM_11-23-2009_13-43-07
1201974883*	923869	1	axc2	11/23/2009	15:55:10	OM_11-23-2009_13-43-07
1201974885	923869	250	axc2	11/23/2009	15:56:05	OM_11-23-2009_13-43-07
241243008	923869	1	axc2	11/23/2009	15:56:59	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	15:57:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	15:59:42	OM_11-23-2009_13-43-07
1201974884	923869	1	axc2	11/23/2009	16:01:33	OM_11-23-2009_13-43-07
241305001	923869	1	axc2	11/23/2009	16:02:27	OM_11-23-2009_13-43-07
241310001	923869	1	axc2	11/23/2009	16:03:21	OM_11-23-2009_13-43-07
1201974883	923869	1	axc2	11/23/2009	16:04:14	OM_11-23-2009_13-43-07
241372013	924915	25	axc2	11/23/2009	16:05:07	OM_11-23-2009_13-43-07
1201977273	924915	25	axc2	11/23/2009	16:06:00	OM_11-23-2009_13-43-07
CCV		1	axc2	11/23/2009	16:06:52	OM_11-23-2009_13-43-07
CCB		1	axc2	11/23/2009	16:08:43	OM_11-23-2009_13-43-07

Author: axc2

Date : 11/23/2009

Original Run Filename: OM_11-23-2009_13-43-07.OMN created 11/23/2009 13:43:07
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-23-2009_13-43-07.OMN last modified 11/23/2009 16:09:47
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091123-01	1	S1	200	7.32	11/23/2009@13:43:53			200 ppb
WCN091123-02	1	S2	150	5.67	11/23/2009@13:44:44			150 ppb
WCN091123-03	1	S3	100	3.86	11/23/2009@13:45:37			100 ppb
WCN091123-04	1	S4	50.0	2.03	11/23/2009@13:46:30			50 ppb
WCN091123-05	1	S5	10.0	0.478	11/23/2009@13:47:23			10 ppb
WCN091123-06	1	S6	5.00	0.278	11/23/2009@13:48:17			CRDL 5.0 ppb
WCN091123-08	1	S7	0.00	0.0410	11/23/2009@13:49:11			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99962 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091123-07	1	S8	146	5.46	11/23/2009@13:51:02			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091123-08	1	S7	0.990	0.157	11/23/2009@13:52:52			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.990 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.990 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091123-06	1	S6	3.65	0.254	11/23/2009@13:54:42			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.65 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.65 > 2.50					
		Message	Pass					
		Action	None					
1201977264|924911|MB	1	1	-1.60	0.0619	11/23/2009@13:56:32			
1201977271||LCS	1	2	47.2	1.85	11/23/2009@13:57:25			
240999001	1	3	1.47	0.174	11/23/2009@13:58:18			
1201977265||DUP	1	4	-0.419	0.105	11/23/2009@13:59:11			
1201977267||MS	1	5	96.0	3.63	11/23/2009@14:00:04			
1201977269||MSD	1	6	100	3.79	11/23/2009@14:00:57			
241414003	1	7	0.930	0.154	11/23/2009@14:01:50			
1201977266||DUP	1	8	-1.21	0.0761	11/23/2009@14:02:42			
1201977268||MS	1	9	97.9	3.70	11/23/2009@14:03:34			
1201977270||MSD	1	10	100	3.79	11/23/2009@14:04:27			
WCN091123-03	1	S3	102	3.84	11/23/2009@14:05:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.820	0.0904	11/23/2009@14:07:09			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.820 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.820 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241414004	1	11	-1.68	0.0592	11/23/2009@14:08:57			
1201974816|923850|MB	1	12	329	12.2	11/23/2009@14:09:49			
1201974823||LCS	1	13	32.8	1.32	11/23/2009@14:10:42		25.00	
241029014	1	14	-0.305	0.109	11/23/2009@14:11:33			
1201974817||DUP	1	15	-0.427	0.105	11/23/2009@14:12:25			
1201974819||MS	1	16	87.8	3.33	11/23/2009@14:13:19			
1201974821||MSD	1	17	1.31e+3	48.0	11/23/2009@14:14:12			
1201974816|923850|MB	1	12	37.3	1.49	11/23/2009@14:15:04			
241105010	1	18	1.27	0.167	11/23/2009@14:15:57			
241105011	1	19	4.57	0.288	11/23/2009@14:16:51			
WCN091123-03	1	S3	98.7	3.73	11/23/2009@14:17:43			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.283	0.131	11/23/2009@14:19:34			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.283 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.283 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974816|923850|MB	1	12	-0.327	0.108	11/23/2009@14:21:21			
1201974821||MSD	1	17	86.6	3.29	11/23/2009@14:22:15			
241105012	1	20	7.92	0.410	11/23/2009@14:23:09			
241106001	1	21	3.76	0.258	11/23/2009@14:24:01			
241106002	1	22	3.78	0.259	11/23/2009@14:24:54			
241178001	1	23	1.84	0.188	11/23/2009@14:25:47			
241178002	1	24	11.2	0.532	11/23/2009@14:26:40			
241178003	1	25	0.189	0.127	11/23/2009@14:27:32			
241178004	1	26	1.98	0.193	11/23/2009@14:28:24			
241178005	1	27	0.997	0.157	11/23/2009@14:29:17			
WCN091123-03	1	S3	100	3.78	11/23/2009@14:30:10			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	-0.825	0.0902	11/23/2009@14:31:59			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	-0.825 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.825 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241178002	1	24	5.73	0.330	11/23/2009@14:33:48			
241178006	1	28	5.86	0.335	11/23/2009@14:34:40			
241178007	1	29	-0.190	0.113	11/23/2009@14:35:31			
241178008	1	30	-1.36	0.0706	11/23/2009@14:36:24			
241178009	1	31	1.84	0.188	11/23/2009@14:37:18			
241227001	1	32	-0.273	0.110	11/23/2009@14:38:11			
1201974818||DUP	1	33	-0.588	0.0989	11/23/2009@14:39:05			
1201974820||MS	1	34	75.0	2.86	11/23/2009@14:39:59			
1201974822||MSD	1	35	94.3	3.57	11/23/2009@14:40:52			
241227002	1	36	2.66	0.218	11/23/2009@14:41:45			
WCN091123-03	1	S3	103	3.90	11/23/2009@14:42:37			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.0197	0.121	11/23/2009@14:44:27			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.0197 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.0197 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241227007	1	37	-0.734	0.0936	11/23/2009@14:46:17			
241227008	1	38	-0.129	0.116	11/23/2009@14:47:10			
241227009	1	39	-1.21	0.0763	11/23/2009@14:48:03			
1201972404|922839|MB	1	40	-1.55	0.0639	11/23/2009@14:48:55			
1201972411||LCS	1	41	6.31	0.351	11/23/2009@14:49:47		25.00	
241044009	1	42	1.63	0.180	11/23/2009@14:50:40			
1201972405||DUP	1	43	3.10	0.234	11/23/2009@14:51:32			
1201972407||MS	1	44	96.7	3.66	11/23/2009@14:52:24			
1201972409||MSD	1	45	57.8	2.23	11/23/2009@14:53:16			
241044010	1	46	35.5	1.42	11/23/2009@14:54:10			
WCN091123-03	1	S3	103	3.89	11/23/2009@14:55:02			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.383	0.134	11/23/2009@14:56:52			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.383 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.383 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1201972406||DUP	1	47	104	3.93	11/23/2009@14:58:43			
1201972408||MS	1	48	83.1	3.16	11/23/2009@14:59:37			
1201972410||MSD	1	49	124	4.64	11/23/2009@15:00:31			
1201972411||LCS	1	41	30.2	1.22	11/23/2009@15:01:23		25.00	
241044011	1	50	1.28	0.167	11/23/2009@15:02:17			
241044012	1	51	130	4.88	11/23/2009@15:03:10			
241044013	1	52	84.2	3.20	11/23/2009@15:04:03			
241044014	1	53	43.9	1.73	11/23/2009@15:04:56			
241044015	1	54	3.47	0.247	11/23/2009@15:05:49			
241044016	1	55	1.61	0.179	11/23/2009@15:06:42			
WCN091123-03	1	S3	102	3.84	11/23/2009@15:07:34			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091123-08	1	S7	-0.0136	0.120	11/23/2009@15:09:25			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.0136 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.0136 > -5.00					
Message			CCB Passed					
Action			Continue					
1201976322|924475|MB	1	68	-1.93	0.0498	11/23/2009@15:11:16			
1201976329||LCS	1	69	25.7	1.06	11/23/2009@15:12:08		25.00	
241322004	1	70	-0.0665	0.118	11/23/2009@15:13:01			
1201976323||DUP	1	71	-0.966	0.0851	11/23/2009@15:13:53			
1201976325||MS	1	72	86.1	3.27	11/23/2009@15:14:46			
1201976327||MSD	1	73	88.6	3.36	11/23/2009@15:15:39			
241322005	1	74	24.3	1.01	11/23/2009@15:16:31			
1201976324||DUP	1	75	23.5	0.978	11/23/2009@15:17:24			
1201976326||MS	1	76	108	4.06	11/23/2009@15:18:19			
1201976328||MSD	1	77	145	5.43	11/23/2009@15:19:13			
WCN091123-03	1	S3	105	3.97	11/23/2009@15:20:06			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091123-08	1	S7	0.299	0.131	11/23/2009@15:21:55			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.299 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.299 > -5.00					
Message			CCB Passed					
Action			Continue					
241322006	1	78	-1.16	0.0778	11/23/2009@15:23:45			
241322007	1	79	20.1	0.856	11/23/2009@15:24:40			
241322008	1	80	-0.573	0.0995	11/23/2009@15:25:33			
241322009	1	81	31.1	1.26	11/23/2009@15:26:27			
241322010	1	82	5.38	0.317	11/23/2009@15:27:20			
241322011	1	83	-0.970	0.0849	11/23/2009@15:28:14			
241322012	1	84	-1.30	0.0730	11/23/2009@15:29:07			
241336001	1	85	-0.872	0.0885	11/23/2009@15:30:00			

241336002	1	86	-1.18	0.0773	11/23/2009@15:30:53			
241351001	1	87	-0.356	0.107	11/23/2009@15:31:46			
WCN091123-03	1	S3	101	3.80	11/23/2009@15:32:38			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		0.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		0.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	0.197	0.128	11/23/2009@15:34:28			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		0.197 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.197 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241358001	1	88	-0.601	0.0984	11/23/2009@15:36:17			
241417001	1	89	10.7	0.512	11/23/2009@15:37:10			
241417002	1	90	-0.304	0.109	11/23/2009@15:38:02			
241419001	1	91	-1.19	0.0767	11/23/2009@15:38:57			
241419002	1	92	-0.704	0.0946	11/23/2009@15:39:51			
241419003	1	93	-1.52	0.0648	11/23/2009@15:40:45			
241419004	1	94	-1.69	0.0587	11/23/2009@15:41:39			
241419005	1	95	-0.486	0.103	11/23/2009@15:42:34			
1201976319|924469|MB	1	96	-1.53	0.0643	11/23/2009@15:43:28			
1201976321||LCS	1	97	-1.96	0.0489	11/23/2009@15:44:22			
WCN091123-03	1	S3	100	3.78	11/23/2009@15:45:15			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		0.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		0.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091123-08	1	S7	-0.667	0.0960	11/23/2009@15:47:06			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.667 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.667 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241351001	1	98	7.19	0.383	11/23/2009@15:48:58			
241358001	1	99	1.09	0.160	11/23/2009@15:49:51			
1201976320||DUP	1	100	2.18	0.200	11/23/2009@15:50:44			
1201977272|924915|MB	1	101	-1.40	0.0691	11/23/2009@15:51:37			
1201977274||LCS	1	102	-1.86	0.0525	11/23/2009@15:52:31			
241372013	1	103	1.47e+3	53.8	11/23/2009@15:53:24			
1201977273||DUP	1	104	1.37e+3	50.2	11/23/2009@15:54:17			
1201974883|923869|MB	1	105	37.0	1.47	11/23/2009@15:55:10			
1201974885||LCS	1	106	77.3	2.94	11/23/2009@15:56:05			
241243008	1	107	2.12	0.198	11/23/2009@15:56:59			
WCN091123-03	1	S3	103	3.88	11/23/2009@15:57:52			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		2.8 < 10.0					
	Message		CCV Passed					
	Action		Continue					

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DQM Test: < - Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	0.854	0.152	11/23/2009@15:59:42			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.854 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.854 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201974884||DUP	1	108	-2.22	0.0393	11/23/2009@16:01:33			
241305001	1	109	-1.40	0.0694	11/23/2009@16:02:27			
241310001	1	110	-0.820	0.0904	11/23/2009@16:03:21			
1201974883|923869|MB	1	105	-0.331	0.108	11/23/2009@16:04:14			
241372013|924915|	1	103	98.6	3.73	11/23/2009@16:05:07		25.00	
1201977273||DUP	1	104	70.4	2.70	11/23/2009@16:06:00		25.00	
WCN091123-03	1	S3	102	3.86	11/23/2009@16:06:52			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091123-08	1	S7	1.27	0.167	11/23/2009@16:08:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.27 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.27 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_11-23-2009_13-43-07.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2

Date : 11/23/2009

Channel 1: Current View

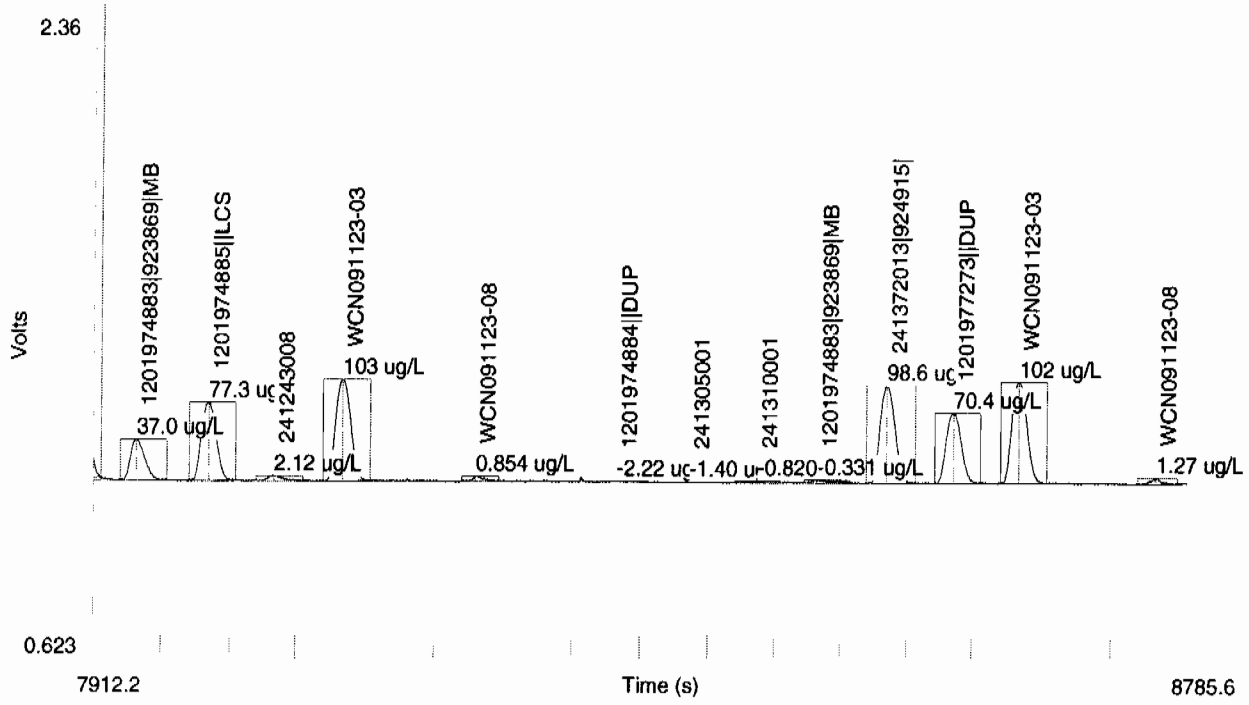

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.32	0.539	1.5	11/23/2009	13:44:56
2	150	1	5.67	0.419	-1.2	11/23/2009	13:45:48
3	100	1	3.86	0.284	-2.2	11/23/2009	13:46:40
4	50.0	1	2.03	0.148	-3.9	11/23/2009	13:47:33
5	10.0	1	0.478	0.0334	2.0	11/23/2009	13:48:26
6	5.00	1	0.278	0.0178	8.7	11/23/2009	13:49:20
7	0.00	1	0.0410	0.00186		11/23/2009	13:50:14

Figure 1: TCYANIDE

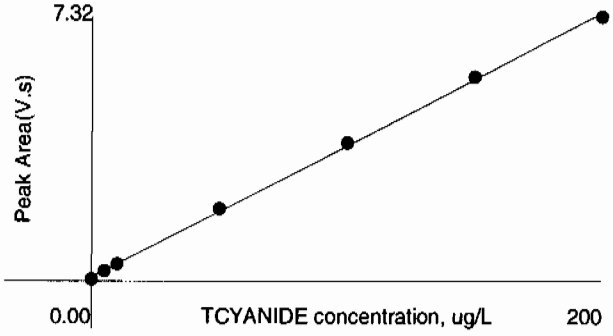

Area = 0.0365 * Conc + 0.122
Conc = 27.4 * Area - 3.29
Correlation Coefficient (r) = 0.99962

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/27/2009 10:03:07	OM_11-27-2009_10-01-36
150 ppb		1	axc2	11/27/2009 10:03:59	OM_11-27-2009_10-01-36
100 ppb		1	axc2	11/27/2009 10:04:51	OM_11-27-2009_10-01-36
50 ppb		1	axc2	11/27/2009 10:05:44	OM_11-27-2009_10-01-36
10 ppb		1	axc2	11/27/2009 10:06:38	OM_11-27-2009_10-01-36
CRDL 5.0 ppb		1	axc2	11/27/2009 10:07:31	OM_11-27-2009_10-01-36
ICAL-00		1	axc2	11/27/2009 10:08:25	OM_11-27-2009_10-01-36
ICV		1	axc2	11/27/2009 10:10:16	OM_11-27-2009_10-01-36
ICB		1	axc2	11/27/2009 10:12:07	OM_11-27-2009_10-01-36
CRDL		1	axc2	11/27/2009 10:13:56	OM_11-27-2009_10-01-36
1201977256	924909	1	axc2	11/27/2009 10:15:46	OM_11-27-2009_10-01-36
1201977263	924909	25	axc2	11/27/2009 10:16:39	OM_11-27-2009_10-01-36
241419006	924909	1	axc2	11/27/2009 10:17:32	OM_11-27-2009_10-01-36
1201977257	924909	1	axc2	11/27/2009 10:18:25	OM_11-27-2009_10-01-36
1201977259	924909	1	axc2	11/27/2009 10:19:18	OM_11-27-2009_10-01-36
1201977261	924909	1	axc2	11/27/2009 10:20:11	OM_11-27-2009_10-01-36
241419007	924909	1	axc2	11/27/2009 10:21:03	OM_11-27-2009_10-01-36
1201977258	924909	1	axc2	11/27/2009 10:21:56	OM_11-27-2009_10-01-36
1201977260	924909	1	axc2	11/27/2009 10:22:49	OM_11-27-2009_10-01-36
1201977262	924909	1	axc2	11/27/2009 10:23:41	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:24:34	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:26:23	OM_11-27-2009_10-01-36
241419008	924909	1	axc2	11/27/2009 10:28:12	OM_11-27-2009_10-01-36
241419009	924909	1	axc2	11/27/2009 10:29:03	OM_11-27-2009_10-01-36
241419010	924909	1	axc2	11/27/2009 10:29:55	OM_11-27-2009_10-01-36
241419011	924909	1	axc2	11/27/2009 10:30:47	OM_11-27-2009_10-01-36
241419012	924909	1	axc2	11/27/2009 10:31:38	OM_11-27-2009_10-01-36
241419013	924909	1	axc2	11/27/2009 10:32:32	OM_11-27-2009_10-01-36
241419014	924909	1	axc2	11/27/2009 10:33:26	OM_11-27-2009_10-01-36
241419015	924909	1	axc2	11/27/2009 10:34:20	OM_11-27-2009_10-01-36
241419016	924909	1	axc2	11/27/2009 10:35:12	OM_11-27-2009_10-01-36
241425001	924909	1	axc2	11/27/2009 10:36:06	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:36:59	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:38:49	OM_11-27-2009_10-01-36
241425002	924909	1	axc2	11/27/2009 10:40:38	OM_11-27-2009_10-01-36
241506001	924909	1	axc2	11/27/2009 10:41:31	OM_11-27-2009_10-01-36
241506002	924909	1	axc2	11/27/2009 10:42:24	OM_11-27-2009_10-01-36
241506003	924909	1	axc2	11/27/2009 10:43:16	OM_11-27-2009_10-01-36
241524002	924909	1	axc2	11/27/2009 10:44:08	OM_11-27-2009_10-01-36
241620001	924909	1	axc2	11/27/2009 10:45:01	OM_11-27-2009_10-01-36
241620002	924909	1	axc2	11/27/2009 10:45:53	OM_11-27-2009_10-01-36
241620003	924909	1	axc2	11/27/2009 10:46:45	OM_11-27-2009_10-01-36
CCV		1	axc2	11/27/2009 10:47:37	OM_11-27-2009_10-01-36
CCB		1	axc2	11/27/2009 10:49:28	OM_11-27-2009_10-01-36

Author: axc2 Date : 11/27/2009

Original Run Filename: OM_11-27-2009_10-01-36.OMN created 11/27/2009 10:01:36
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-27-2009_10-01-36.OMN last modified 11/27/2009 10:50:33
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091127-01	1	S1	200	5.88	11/27/2009@10:03:07			200 ppb
WCN091127-02	1	S2	150	4.51	11/27/2009@10:03:59			150 ppb
WCN091127-03	1	S3	100	3.08	11/27/2009@10:04:51			100 ppb
WCN091127-04	1	S4	50.0	1.57	11/27/2009@10:05:44			50 ppb
WCN091127-05	1	S5	10.0	0.412	11/27/2009@10:06:38			10 ppb
WCN091127-06	1	S6	5.00	0.234	11/27/2009@10:07:31			CRDL 5.0 ppb
WCN091127-08	1	S7	0.00	0.0432	11/27/2009@10:08:25			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99982 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091127-07	1	S8	136	4.06	11/27/2009@10:10:16			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-9.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-9.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091127-08	1	S7	2.20	0.162	11/27/2009@10:12:07			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091127-06	1	S6	3.74	0.207	11/27/2009@10:13:56			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.74 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.74 > 2.50					
		Message	Pass					
		Action	None					
1201977256|924909|MB	1	1	-1.74	0.0468	11/27/2009@10:15:46			
1201977263||LCS	1	2	25.6	0.844	11/27/2009@10:16:39		25.00	
241419006	1	3	-0.168	0.0926	11/27/2009@10:17:32			
1201977257||DUP	1	4	-1.37	0.0576	11/27/2009@10:18:25			
1201977259||MS	1	5	92.3	2.79	11/27/2009@10:19:18			
1201977261||MSD	1	6	114	3.43	11/27/2009@10:20:11			
241419007	1	7	0.444	0.110	11/27/2009@10:21:03			
1201977258||DUP	1	8	-1.07	0.0662	11/27/2009@10:21:56			
1201977260||MS	1	9	94.5	2.86	11/27/2009@10:22:49			
1201977262||MSD	1	10	94.6	2.86	11/27/2009@10:23:41			
WCN091127-03	1	S3	102	3.08	11/27/2009@10:24:34			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.1 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	1.61	0.145	11/27/2009@10:26:23			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	1.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	1.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241419008	1	11	-1.21	0.0622	11/27/2009@10:28:12			
241419009	1	12	-1.78	0.0454	11/27/2009@10:29:03			
241419010	1	13	-0.932	0.0703	11/27/2009@10:29:55			
241419011	1	14	-0.480	0.0835	11/27/2009@10:30:47			
241419012	1	15	-0.681	0.0776	11/27/2009@10:31:38			
241419013	1	16	-0.600	0.0800	11/27/2009@10:32:32			
241419014	1	17	-1.90	0.0420	11/27/2009@10:33:26			
241419015	1	18	-0.00651	0.0973	11/27/2009@10:34:20			
241419016	1	19	35.2	1.13	11/27/2009@10:35:12			
241425001	1	20	50.3	1.57	11/27/2009@10:36:06			
WCN091127-03	1	S3	101	3.05	11/27/2009@10:36:59			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	0.566	0.114	11/27/2009@10:38:49			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.566 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.566 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241425002	1	21	2.41	0.168	11/27/2009@10:40:38			
241506001	1	22	-1.73	0.0471	11/27/2009@10:41:31			
241506002	1	23	-0.925	0.0705	11/27/2009@10:42:24			
241506003	1	24	-1.33	0.0588	11/27/2009@10:43:16			
241524002	1	25	-1.12	0.0647	11/27/2009@10:44:08			
241620001	1	26	-2.08	0.0366	11/27/2009@10:45:01			
241620002	1	27	-1.34	0.0584	11/27/2009@10:45:53			
241620003	1	28	-1.61	0.0505	11/27/2009@10:46:45			
WCN091127-03	1	S3	101	3.04	11/27/2009@10:47:37			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	1.36	0.137	11/27/2009@10:49:28			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	1.36 < 5.00					

Author: axc2

Date : 11/27/2009

Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.36 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-27-2009_10-01-36.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

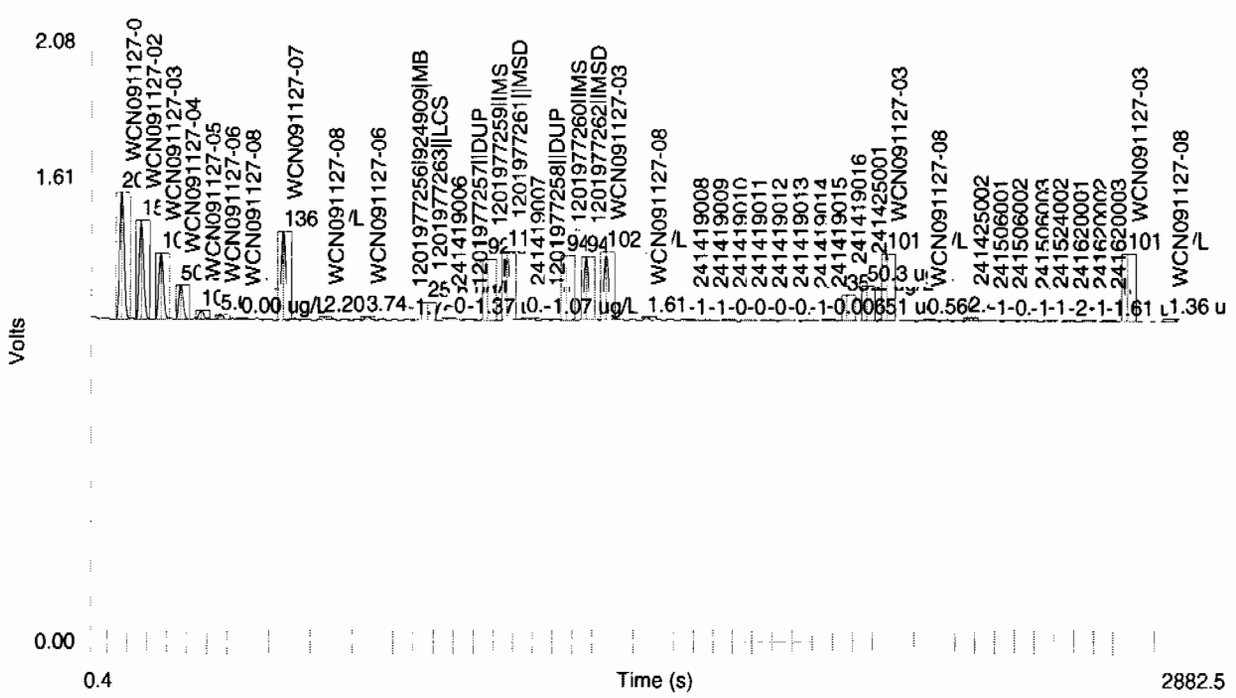

Author: axc2 Date : 11/27/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	5.88	0.431	1.0	11/27/2009	10:04:10
2	150	1	4.51	0.335	-0.8	11/27/2009	10:05:02
3	100	1	3.08	0.224	-1.9	11/27/2009	10:05:54
4	50.0	1	1.57	0.116	-0.6	11/27/2009	10:06:47
5	10.0	1	0.412	0.0289	-5.6	11/27/2009	10:07:41
6	5.00	1	0.234	0.0149	4.2	11/27/2009	10:08:34
7	0.00	1	0.0432	0.00308		11/27/2009	10:09:28

Figure 1: TCYANIDE

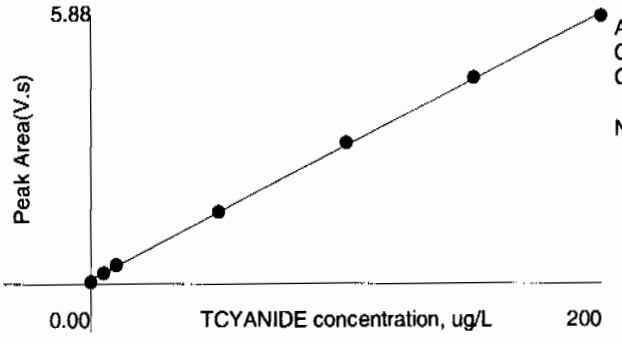

Area = 0.0292 * Conc + 0.0983
Conc = 34.2 * Area - 3.34
Correlation Coefficient (r) = 0.99982

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	11/27/2009 10:51:56	OM_11-27-2009_10-51-09
CCB		1	axc2	11/27/2009 10:53:47	OM_11-27-2009_10-51-09
1201974854	923861	1	axc2	11/27/2009 10:55:35	OM_11-27-2009_10-51-09
1201974861	923861	25	axc2	11/27/2009 10:56:26	OM_11-27-2009_10-51-09
241178010	923861	1	axc2	11/27/2009 10:57:20	OM_11-27-2009_10-51-09
1201974855	923861	1	axc2	11/27/2009 10:58:14	OM_11-27-2009_10-51-09
1201974857	923861	1	axc2	11/27/2009 10:59:08	OM_11-27-2009_10-51-09
1201974859	923861	1	axc2	11/27/2009 11:00:01	OM_11-27-2009_10-51-09
241178011	923861	1	axc2	11/27/2009 11:00:54	OM_11-27-2009_10-51-09
241178012	923861	1	axc2	11/27/2009 11:01:48	OM_11-27-2009_10-51-09
241178013	923861	1	axc2	11/27/2009 11:02:41	OM_11-27-2009_10-51-09
241178014	923861	1	axc2	11/27/2009 11:03:34	OM_11-27-2009_10-51-09
CCV		1	axc2	11/27/2009 11:04:26	OM_11-27-2009_10-51-09
CCB		1	axc2	11/27/2009 11:06:16	OM_11-27-2009_10-51-09
241178015	923861	1	axc2	11/27/2009 11:08:05	OM_11-27-2009_10-51-09
241178016	923861	1	axc2	11/27/2009 11:08:57	OM_11-27-2009_10-51-09
241178017	923861	1	axc2	11/27/2009 11:09:50	OM_11-27-2009_10-51-09
241178018	923861	1	axc2	11/27/2009 11:10:42	OM_11-27-2009_10-51-09
241178019	923861	1	axc2	11/27/2009 11:11:34	OM_11-27-2009_10-51-09
241180001	923861	1	axc2	11/27/2009 11:12:26	OM_11-27-2009_10-51-09
241180002	923861	1	axc2	11/27/2009 11:13:18	OM_11-27-2009_10-51-09
241180003	923861	1	axc2	11/27/2009 11:14:12	OM_11-27-2009_10-51-09
241227003	923861	1	axc2	11/27/2009 11:15:06	OM_11-27-2009_10-51-09
1201974856	923861	1	axc2	11/27/2009 11:16:01	OM_11-27-2009_10-51-09
CCV		1	axc2	11/27/2009 11:16:53	OM_11-27-2009_10-51-09
CCB		1	axc2	11/27/2009 11:18:43	OM_11-27-2009_10-51-09
1201974858*	923861	1	axc2	11/27/2009 11:20:32	OM_11-27-2009_10-51-09
1201974860*	923861	1	axc2	11/27/2009 11:21:25	OM_11-27-2009_10-51-09
241227004*	923861	1	axc2	11/27/2009 11:22:19	OM_11-27-2009_10-51-09
241227005	923861	1	axc2	11/27/2009 11:23:12	OM_11-27-2009_10-51-09
241227006	923861	1	axc2	11/27/2009 11:24:05	OM_11-27-2009_10-51-09
1201974860	923861	1	axc2	11/27/2009 11:24:59	OM_11-27-2009_10-51-09
241227004	923861	1	axc2	11/27/2009 11:25:52	OM_11-27-2009_10-51-09
241322001	923861	1	axc2	11/27/2009 11:26:45	OM_11-27-2009_10-51-09
241322002	923861	1	axc2	11/27/2009 11:27:38	OM_11-27-2009_10-51-09
1201974858	923861	1	axc2	11/27/2009 11:28:32	OM_11-27-2009_10-51-09
CCV		1	axc2	11/27/2009 11:29:24	OM_11-27-2009_10-51-09
CCB		1	axc2	11/27/2009 11:31:14	OM_11-27-2009_10-51-09
241322003	923861	1	axc2	11/27/2009 11:33:02	OM_11-27-2009_10-51-09
CCV		1	axc2	11/27/2009 11:33:55	OM_11-27-2009_10-51-09
CCB		1	axc2	11/27/2009 11:35:45	OM_11-27-2009_10-51-09

Author: axc2

Date : 11/27/2009

Original Run Filename: OM_11-27-2009_10-51-09.OMN created 11/27/2009 10:51:09
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-27-2009_10-51-09.OMN last modified 11/27/2009 11:36:50
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091127-03	1	S3	100	3.02	11/27/2009@10:51:56			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	1.04	0.128	11/27/2009@10:53:47			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.04 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.04 > -5.00					
		Message	CCB Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
1201974854|923861|MB	1	29	-1.48	0.0542	11/27/2009@10:55:35			
1201974861||LCS	1	30	25.7	0.848	11/27/2009@10:56:26		25.00	
241178010	1	31	2.12	0.159	11/27/2009@10:57:20			
1201974855||DUP	1	32	0.999	0.127	11/27/2009@10:58:14			
1201974857||MS	1	33	94.5	2.86	11/27/2009@10:59:08			
1201974859||MSD	1	34	99.8	3.01	11/27/2009@11:00:01			
241178011	1	35	4.46	0.228	11/27/2009@11:00:54			
241178012	1	36	1.21	0.133	11/27/2009@11:01:48			
241178013	1	37	51.7	1.61	11/27/2009@11:02:41			
241178014	1	38	0.904	0.124	11/27/2009@11:03:34			
WCN091127-03	1	S3	100	3.02	11/27/2009@11:04:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091127-08	1	S7	0.185	0.103	11/27/2009@11:06:16			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.185 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.185 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241178015	1	39	7.04	0.303	11/27/2009@11:08:05			
241178016	1	40	-0.431	0.0849	11/27/2009@11:08:57			
241178017	1	41	8.14	0.335	11/27/2009@11:09:50			
241178018	1	42	-1.08	0.0660	11/27/2009@11:10:42			
241178019	1	43	0.401	0.109	11/27/2009@11:11:34			

241180001	1	44	5.20	0.249	11/27/2009@11:12:26			
241180002	1	45	1.47	0.141	11/27/2009@11:13:18			
241180003	1	46	20.5	0.695	11/27/2009@11:14:12			
241227003	1	47	0.615	0.115	11/27/2009@11:15:06			
1201974856||DUP	1	48	-0.123	0.0939	11/27/2009@11:16:01			
WCN091127-03	1	S3	98.0	2.96	11/27/2009@11:16:53			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		-2.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		-2.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091127-08	1	S7	1.29	0.135	11/27/2009@11:18:43			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		1.29 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		1.29 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1201974858||MS	1	49	46.6	1.46	11/27/2009@11:20:32			
1201974860||MSD	1	50	-52.0	-1.42	11/27/2009@11:21:25			
241227004	1	51	8.29	0.340	11/27/2009@11:22:19			
241227005	1	52	1.18	0.132	11/27/2009@11:23:12			
241227006	1	53	-0.0962	0.0947	11/27/2009@11:24:05			
1201974860||MSD	1	50	70.3	2.15	11/27/2009@11:24:59			
241227004	1	51	3.17	0.190	11/27/2009@11:25:52			
241322001	1	54	-3.59	-0.00737	11/27/2009@11:26:45			
241322002	1	55	-1.19	0.0626	11/27/2009@11:27:38			
1201974858||MS	1	49	68.2	2.09	11/27/2009@11:28:32			
WCN091127-03	1	S3	104	3.14	11/27/2009@11:29:24			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091127-08	1	S7	1.14	0.131	11/27/2009@11:31:14			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		1.14 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		1.14 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241322003	1	56	-0.0128	0.0971	11/27/2009@11:33:02			
WCN091127-03	1	S3	101	3.06	11/27/2009@11:33:55			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		1.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		1.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091127-08	1	S7	1.20	0.132	11/27/2009@11:35:45			CCB
	Known Conc:		0.00					

Author: axc2

Date : 11/27/2009

DQM Test: > + Concentration Limit						
Result:	1.20 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.20 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-27-2009_10-51-09.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

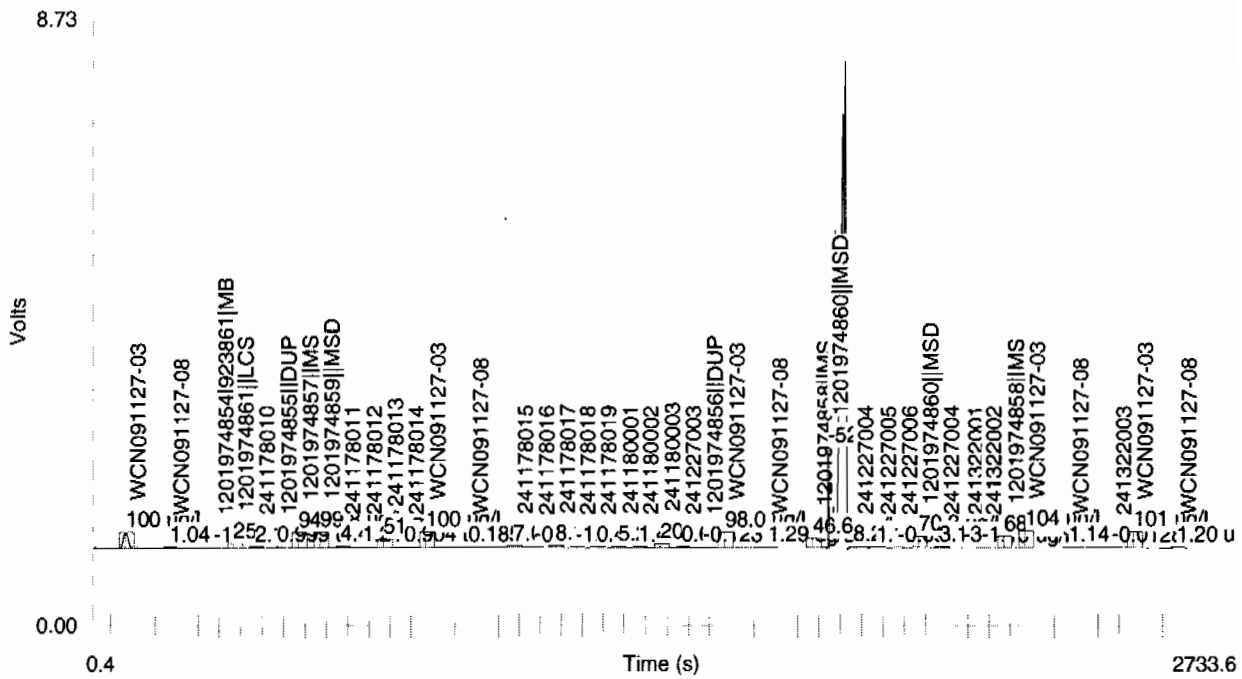

Author: axc2 Date : 11/27/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	5.88	0.431	1.0	11/27/2009	10:04:10
2	150	1	4.51	0.335	-0.8	11/27/2009	10:05:02
3	100	1	3.08	0.224	-1.9	11/27/2009	10:05:54
4	50.0	1	1.57	0.116	-0.6	11/27/2009	10:06:47
5	10.0	1	0.412	0.0289	-5.6	11/27/2009	10:07:41
6	5.00	1	0.234	0.0149	4.2	11/27/2009	10:08:34
7	0.00	1	0.0432	0.00308		11/27/2009	10:09:28

Figure 1: TCYANIDE

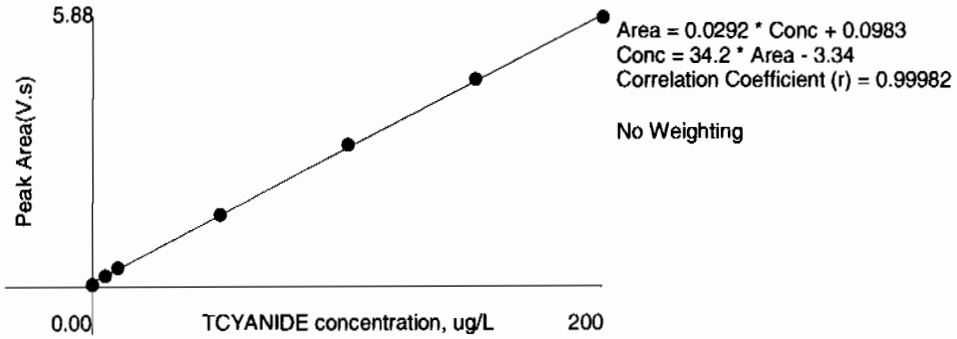

Ion Chromatography

Prep LogBook

Analyst: VH1 Verified by:_____

Batch: 924713

Lab SOP: GL-GC-E-086 REV# 17

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201976804	UIC091123SPK	.8	mL
MS	1201984520	UIC091123SPK	.8	mL
MS	1201984521	UIC091123SPK	.8	mL
MSD	1201984522	UIC091123SPK	.8	mL
MSD	1201984523	UIC091123SPK	.8	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201976799		EPA 300.0 PREP	08-DEC-2009 17:22	4 g	40 mL	10	SOIL
LCS	1201976804		EPA 300.0 PREP	08-DEC-2009 17:22	4 g	40 mL	10	SOIL
SAMPLE	241322001		EPA 300.0 PREP	08-DEC-2009 17:22	4 g	40 mL	10	SOIL
SAMPLE	241322002		EPA 300.0 PREP	08-DEC-2009 17:22	4.15 g	40 mL	9.63855	SOIL
SAMPLE	241322003		EPA 300.0 PREP	08-DEC-2009 17:22	4.59 g	40 mL	8.7146	SOIL
SAMPLE	241322004		EPA 300.0 PREP	08-DEC-2009 17:22	4.58 g	40 mL	8.73362	SOIL
SAMPLE	241322005		EPA 300.0 PREP	08-DEC-2009 17:22	4.52 g	40 mL	8.84956	SOIL
SAMPLE	241322006		EPA 300.0 PREP	08-DEC-2009 17:22	4.48 g	40 mL	8.92857	SOIL
SAMPLE	241322007		EPA 300.0 PREP	08-DEC-2009 17:22	4.21 g	40 mL	9.50119	SOIL
SAMPLE	241322008		EPA 300.0 PREP	08-DEC-2009 17:22	4.21 g	40 mL	9.50119	SOIL
SAMPLE	241322009		EPA 300.0 PREP	08-DEC-2009 17:22	4.34 g	40 mL	9.21659	SOIL
SAMPLE	241322010		EPA 300.0 PREP	08-DEC-2009 17:22	4.78 g	40 mL	8.3682	SOIL
SAMPLE	241322011		EPA 300.0 PREP	08-DEC-2009 17:22	4.57 g	40 mL	8.75274	SOIL
DUP	1201984519	241322011	EPA 300.0 PREP	08-DEC-2009 17:22	4.59 g	40 mL	8.7146	SOIL
MS	1201984521	241322011	EPA 300.0 PREP	08-DEC-2009 17:22	4.62 g	40 mL	8.65801	SOIL
MSD	1201984523	241322011	EPA 300.0 PREP	08-DEC-2009 17:22	4.57 g	40 mL	8.75274	SOIL
SAMPLE	241322012		EPA 300.0 PREP	08-DEC-2009 17:22	4.18 g	40 mL	9.56938	SOIL
SAMPLE	241336001		EPA 300.0 PREP	08-DEC-2009 17:22	4.46 g	40 mL	8.96861	SOIL
SAMPLE	241336002		EPA 300.0 PREP	08-DEC-2009 17:22	4.07 g	40 mL	9.82801	SOIL
DUP	1201984518	241336002	EPA 300.0 PREP	08-DEC-2009 17:22	4.1 g	40 mL	9.7561	SOIL
MS	1201984520	241336002	EPA 300.0 PREP	08-DEC-2009 17:22	4.08 g	40 mL	9.80392	SOIL
MSD	1201984522	241336002	EPA 300.0 PREP	08-DEC-2009 17:22	4.13 g	40 mL	9.68523	SOIL

Comments

This is runlog for Sequence 091211.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
ICAL-07	12/04/09 17:49		1	091211	VH1
ICAL-06	12/04/09 18:15		1	091211	VH1
ICAL-05	12/04/09 18:41		1	091211	VH1
ICAL-04	12/04/09 19:07		1	091211	VH1
ICAL-03	12/04/09 19:34		1	091211	VH1
ICAL-02	12/04/09 20:00		1	091211	VH1
ICAL-01	12/04/09 20:26		1	091211	VH1

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

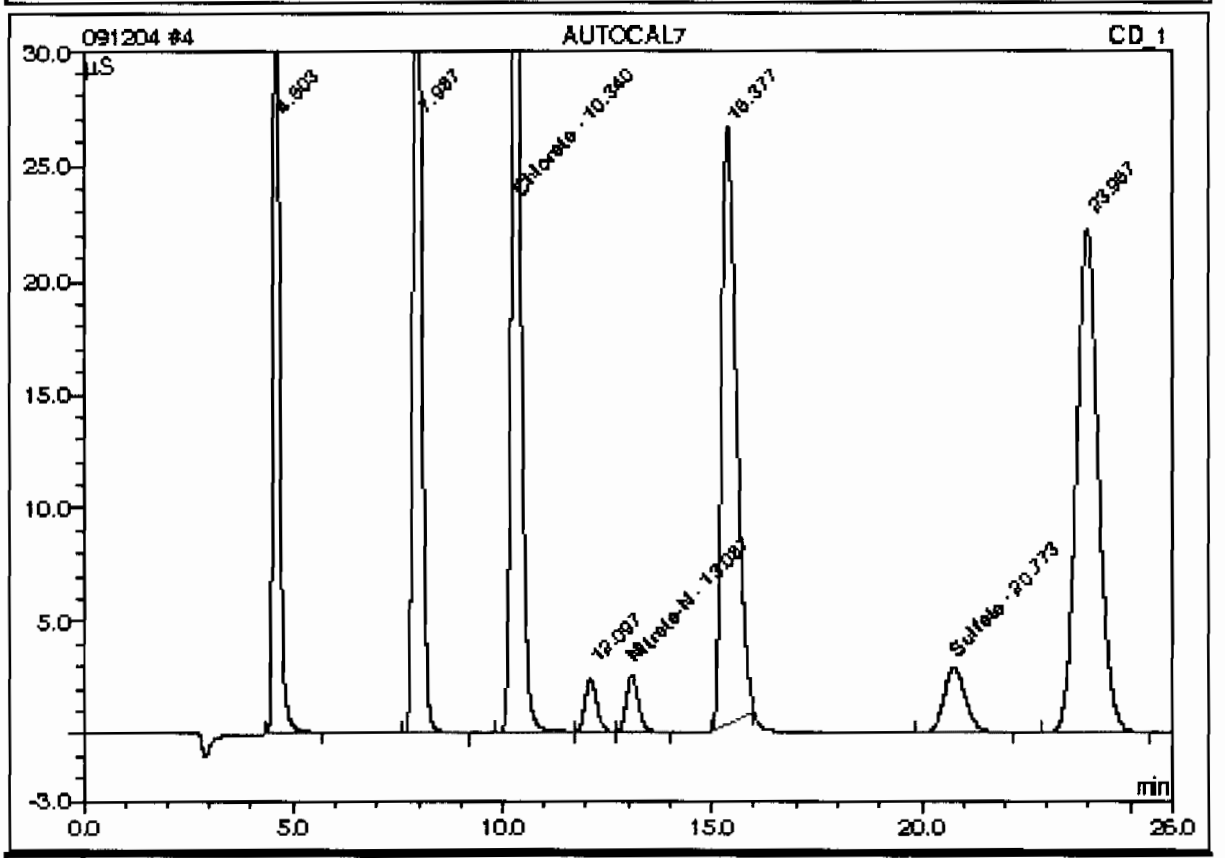

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	10.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	20.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	10.0000	n.a.	n.a.	n.a.	n.a.
3	10.34	Chlorate	5.0000	5.0000		10.04178	18.48
n.a.	n.a.	Bromide	5.0000	n.a.	n.a.	n.a.	n.a.
5	13.09	Nitrate-N	10.0000	10.0000		0.85988	1.58
n.a.	n.a.	O-Phosphate-P	5.0000	n.a.	n.a.	n.a.	n.a.
7	20.77	Sulfate	40.0000	40.0000		1.71920	3.16
Total:				55.0000	0.000	12.621	23.22

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

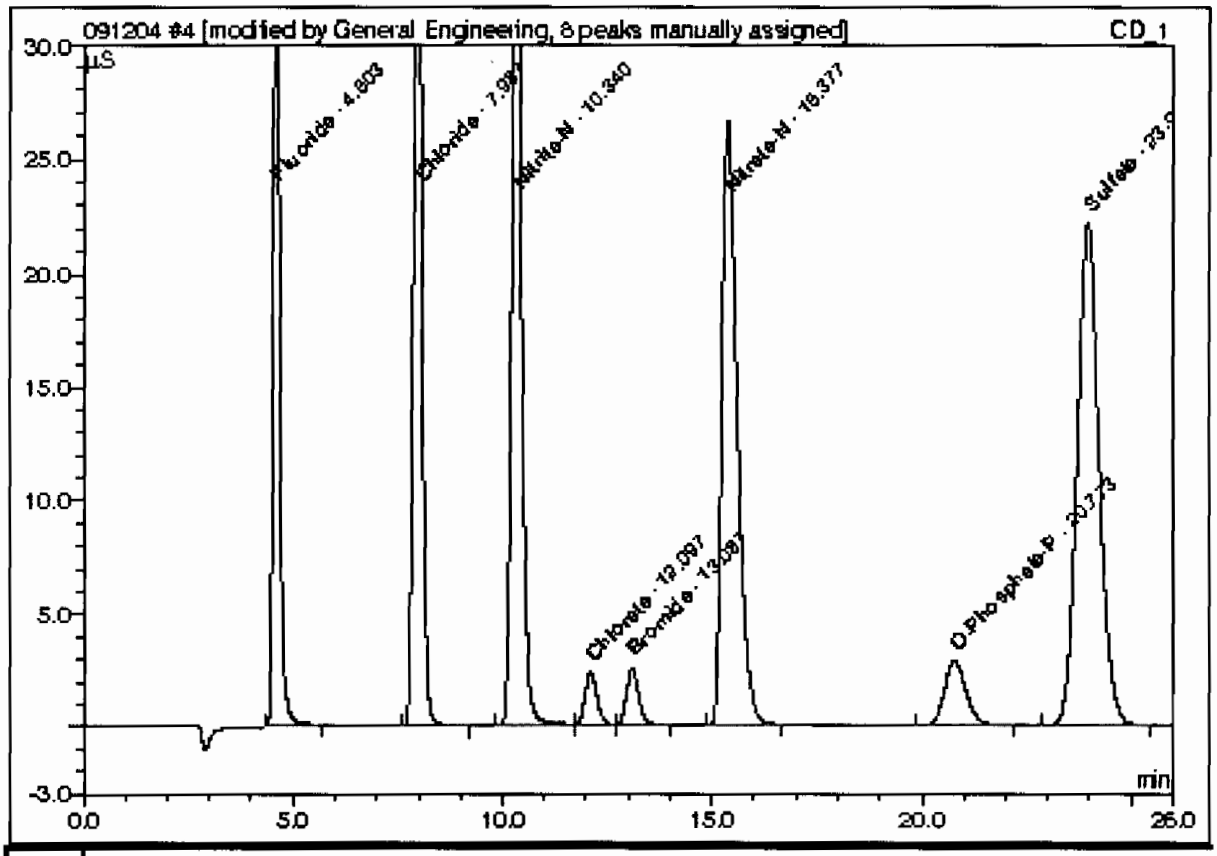

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	10.0000	10.0775		6.86020	12.49
2	7.99	Chloride	20.0000	20.4028		9.96643	18.14
3	10.34	Nitrite-N	10.0000	10.0965		10.04178	18.28
4	12.10	Chlorate	5.0000	5.0660		0.79061	1.44
5	13.09	Bromide	5.0000	5.0440		0.85988	1.56
6	15.38	Nitrate-N	10.0000	10.1668		11.30060	20.57
7	20.77	O-Phosphate-P	5.0000	5.0563		1.71920	3.13
8	23.97	Sulfate	40.0000	40.5844		13.40847	24.40
Total:				106.4944	0.000	54.947	100.00

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

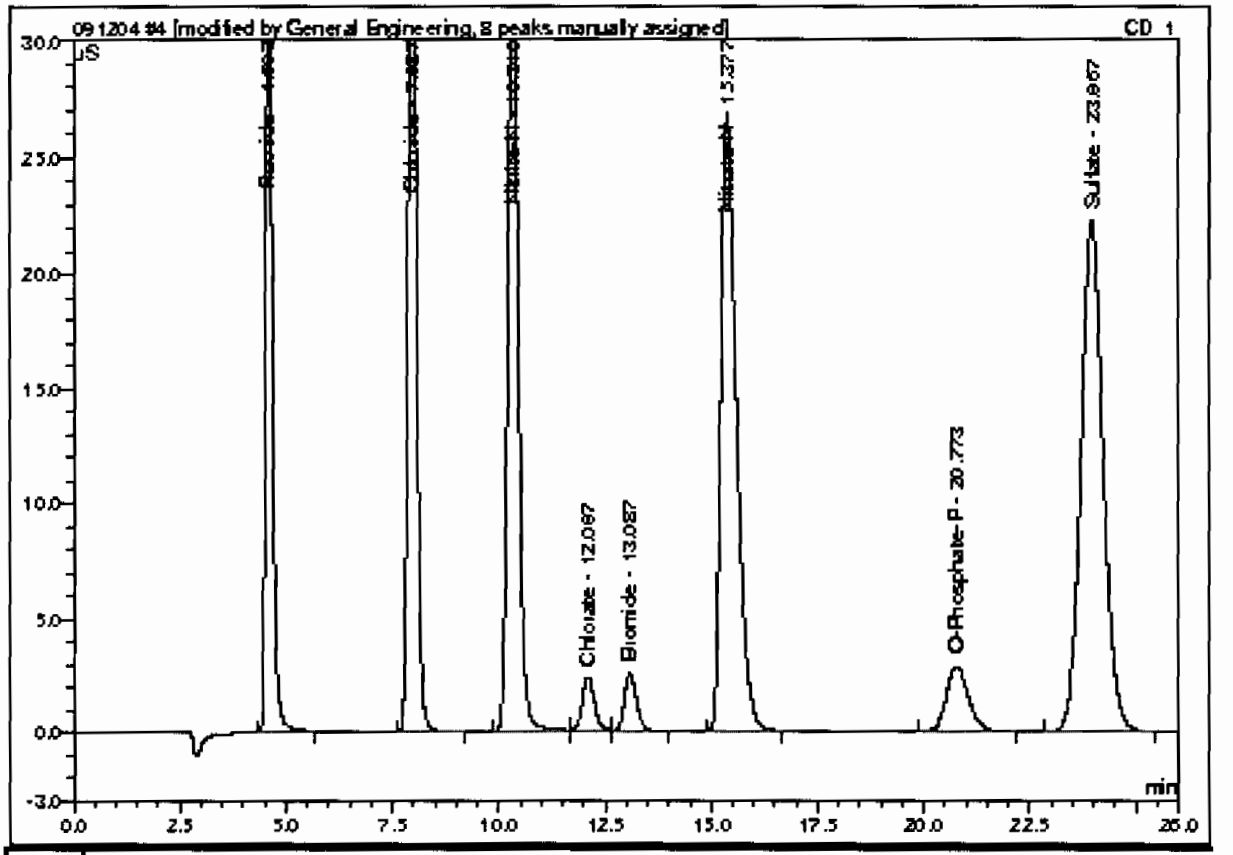

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	10.0000	10.0000		6.86020	12.49
2	7.99	Chloride	20.0000	20.0000		9.96643	18.14
3	10.34	Nitrite-N	10.0000	10.0000		10.04178	18.28
4	12.10	Chlorate	5.0000	-1.2236		0.79061	1.44
5	13.09	Bromide	5.0000	5.0000		0.85988	1.56
6	15.38	Nitrate-N	10.0000	10.0000		11.30060	20.57
7	20.77	O-Phosphate-P	5.0000	5.0000		1.71920	3.13
8	23.97	Sulfate	40.0000	40.0000		13.40847	24.40
Total:				98.7764	0.000	54.947	100.00

4 AUTOCAL7

Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 17:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

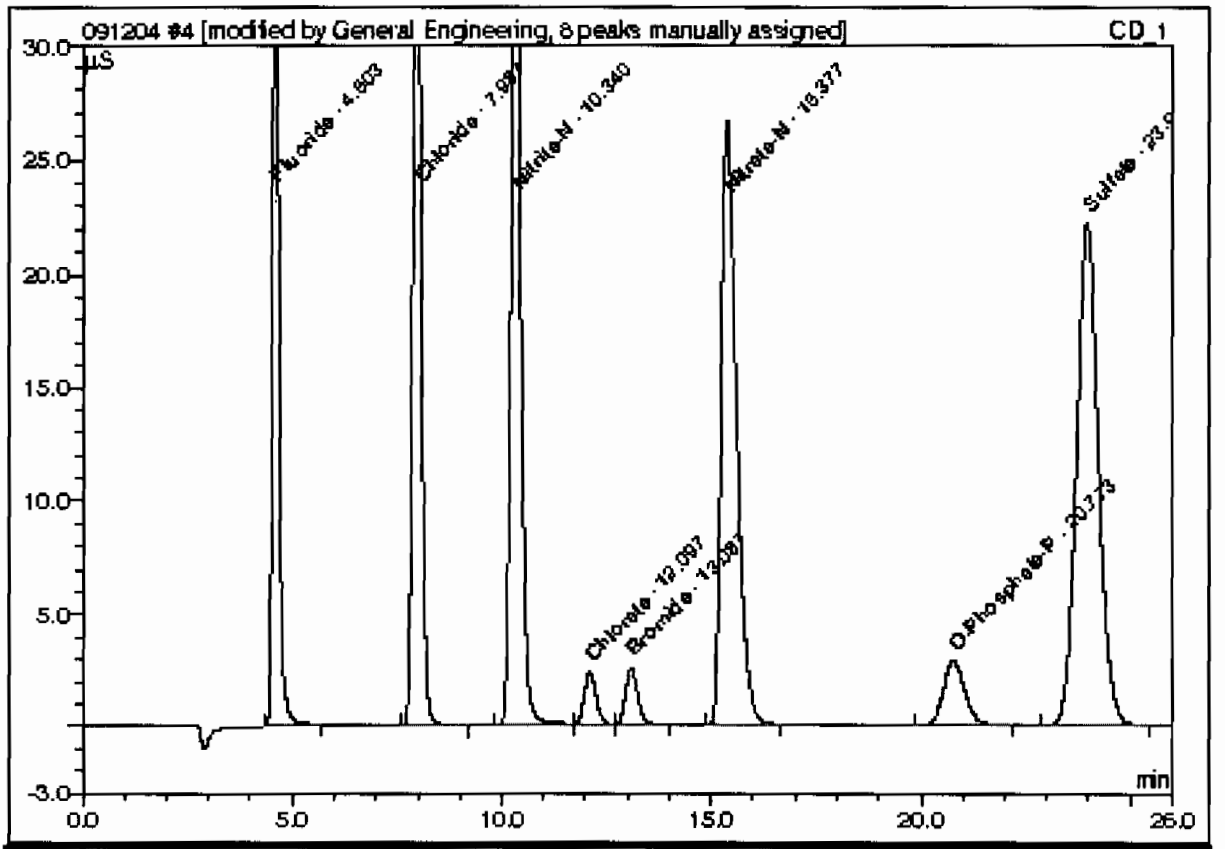

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	10.0000	10.0775		6.86020	12.49
2	7.99	Chloride	20.0000	20.4028		9.96643	18.14
3	10.34	Nitrite-N	10.0000	10.0965		10.04178	18.28
4	12.10	Chlorate	5.0000	5.0660		0.79061	1.44
5	13.09	Bromide	5.0000	5.0440		0.85988	1.56
6	15.38	Nitrate-N	10.0000	10.1668		11.30060	20.57
7	20.77	O-Phosphate-P	5.0000	5.0563		1.71920	3.13
8	23.97	Sulfate	40.0000	40.5844		13.40847	24.40
Total:				106.4944	0.000	54.947	100.00

5 AUTOCAL6

Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

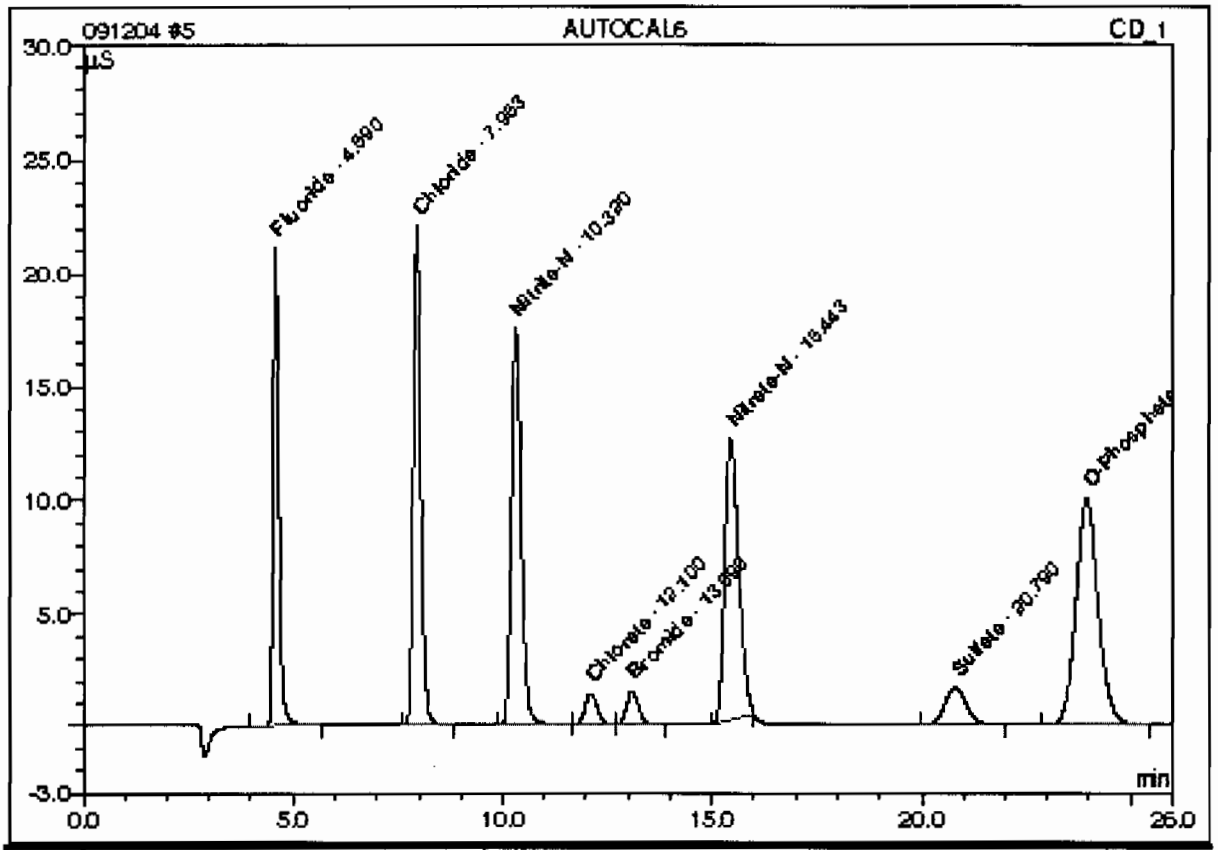

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	5.0000	4.8612		3.28723	12.87
2	7.96	Chloride	10.0000	9.3238		4.47774	17.53
3	10.32	Nitrite-N	5.0000	4.8233		4.75475	18.62
4	12.10	Chlorate	3.0000	2.9480		0.46190	1.81
5	13.09	Bromide	3.0000	2.9624		0.50611	1.98
6	15.44	Nitrate-N	5.0000	4.5398		4.87029	19.07
7	20.79	Sulfate	20.0000	8.6531		0.99882	3.91
8	23.94	O-Phosphate-P	3.0000	10.0660		6.17944	24.20
Total:				48.1776	0.000	25.536	100.00

5 AUTOCAL6

Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

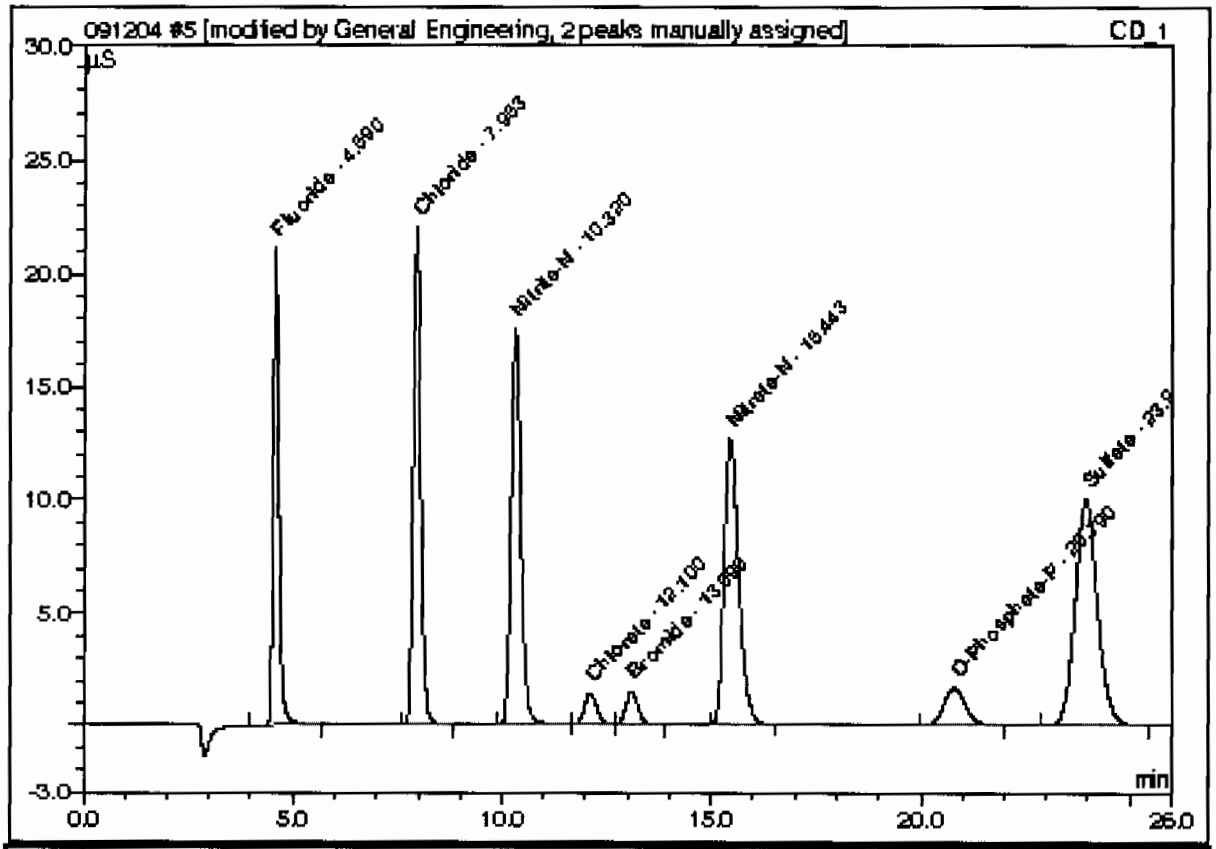

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	5.0000	4.8471		3.28723	12.74
2	7.96	Chloride	10.0000	9.2049		4.47774	17.35
3	10.32	Nitrite-N	5.0000	4.8180		4.75475	18.43
4	12.10	Chlorate	3.0000	2.9823		0.46190	1.79
5	13.09	Bromide	3.0000	2.9858		0.50611	1.96
6	15.44	Nitrate-N	5.0000	4.6775		5.13598	19.91
7	20.79	O-Phosphate-P	3.0000	2.9694		0.99882	3.87
8	23.94	Sulfate	20.0000	18.8564		6.17944	23.95
Total:				51.3412	0.000	25.802	100.00

5 AUTOCAL6

Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

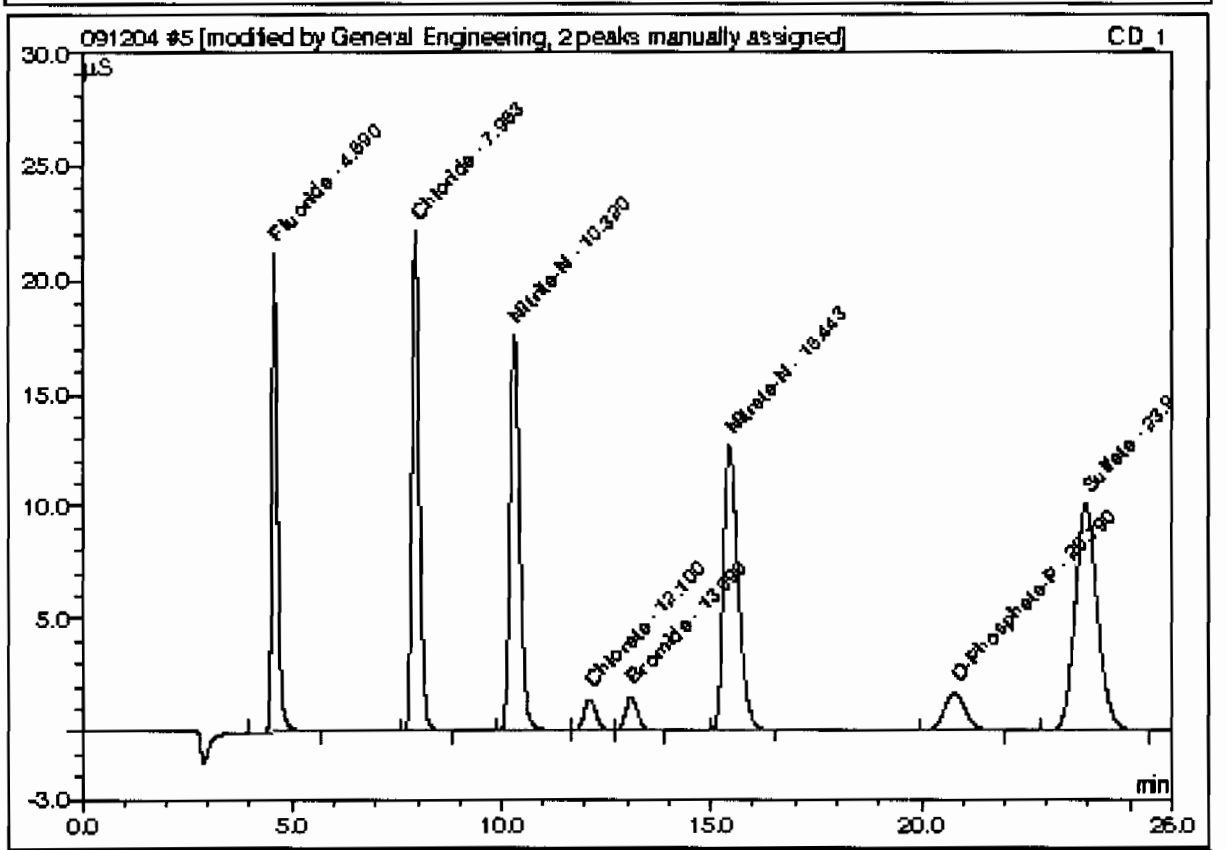

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	5.0000	4.8471		3.28723	12.74
2	7.96	Chloride	10.0000	9.2049		4.47774	17.35
3	10.32	Nitrite-N	5.0000	4.8180		4.75475	18.43
4	12.10	Chlorate	3.0000	2.9823		0.46190	1.79
5	13.09	Bromide	3.0000	2.9858		0.50611	1.96
6	15.44	Nitrate-N	5.0000	4.6775		5.13598	19.91
7	20.79	O-Phosphate-P	3.0000	2.9694		0.99882	3.87
8	23.94	Sulfate	20.0000	18.8564		6.17944	23.95
Total:				51.3412	0.000	25.802	100.00

6 AUTOCAL5

Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:41	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

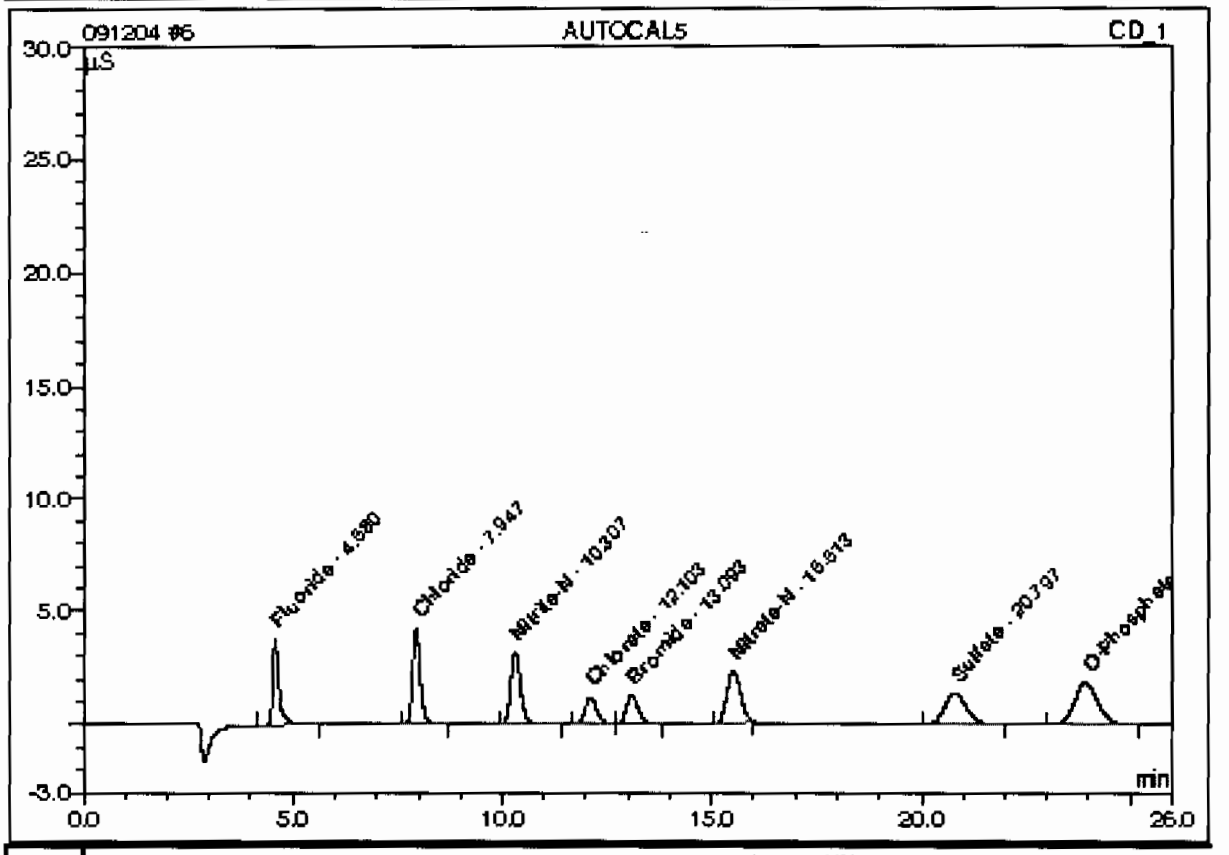

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	1.0000	1.0104		0.65024	10.75
2	7.95	Chloride	2.0000	2.0706		0.88618	14.66
3	10.31	Nitrite-N	1.0000	0.9709		0.86711	14.34
4	12.10	Chlorate	2.5000	2.3966		0.36939	6.11
5	13.09	Bromide	2.5000	2.4349		0.41178	6.81
6	15.51	Nitrate-N	1.0000	0.9546		0.87343	14.45
7	20.80	Sulfate	4.0000	3.3775		0.81659	13.51
8	23.93	O-Phosphate-P	2.5000	3.2109		1.17144	19.37
Total:				16.4266	0.000	6.046	100.00

6 AUTOCAL5

Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:41	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

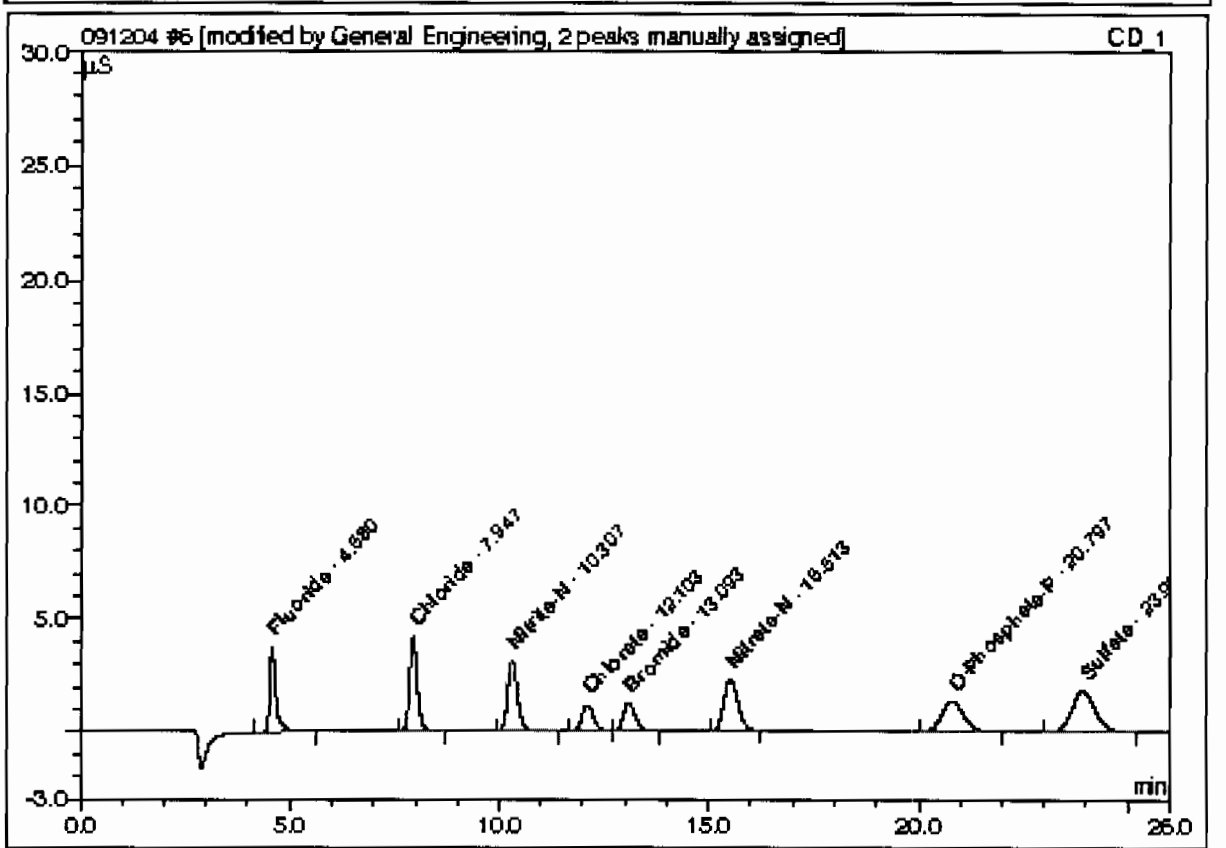

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	1.0000	0.9868		0.65024	10.66
2	7.95	Chloride	2.0000	1.8775		0.88618	14.53
3	10.31	Nitrite-N	1.0000	0.9366		0.86711	14.22
4	12.10	Chlorate	2.5000	2.3958		0.36939	6.06
5	13.09	Bromide	2.5000	2.4369		0.41178	6.75
6	15.51	Nitrate-N	1.0000	0.9290		0.92628	15.19
7	20.80	O-Phosphate-P	2.5000	2.4415		0.81659	13.39
8	23.93	Sulfate	4.0000	3.8040		1.17144	19.21
Total:				15.8080	0.000	6.099	100.00

6 AUTOCAL5

Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 18:41	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

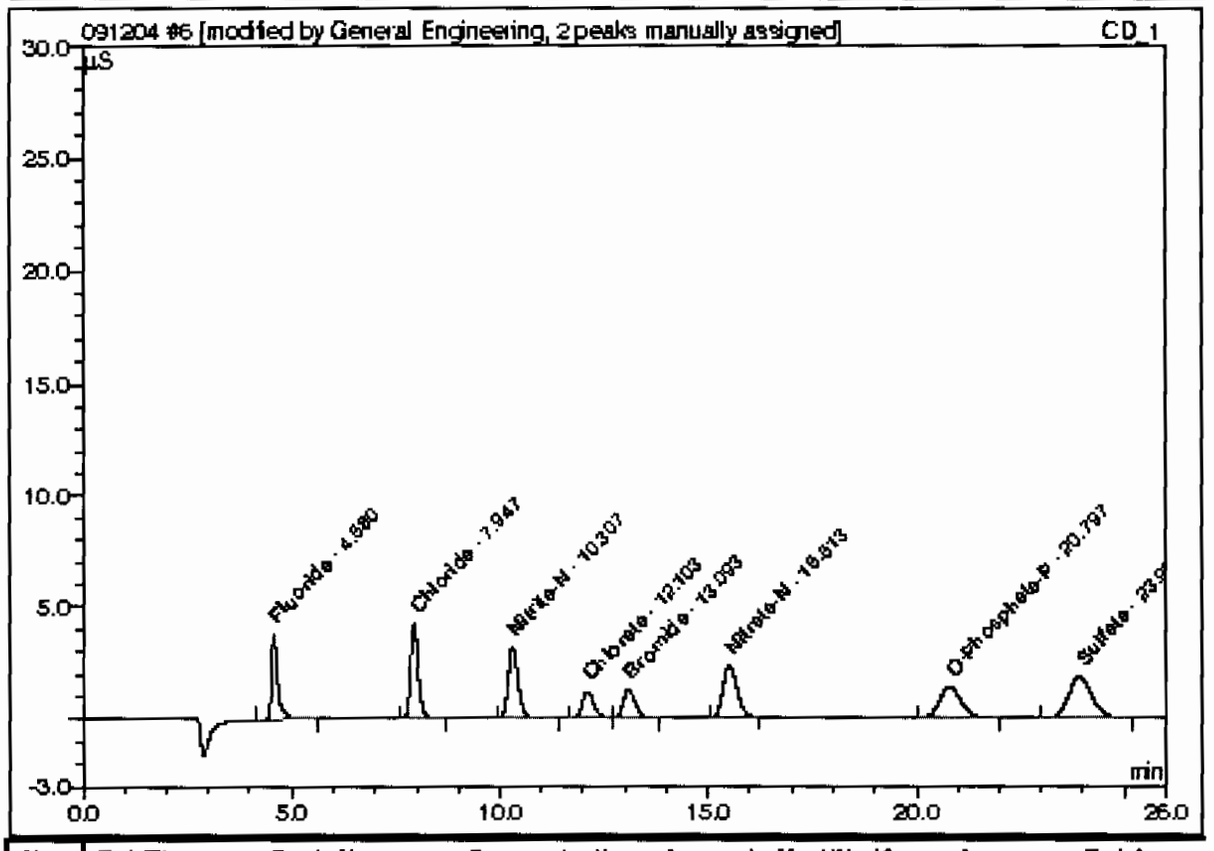

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	1.0000	0.9868		0.65024	10.66
2	7.95	Chloride	2.0000	1.8775		0.88618	14.53
3	10.31	Nitrite-N	1.0000	0.9366		0.86711	14.22
4	12.10	Chlorate	2.5000	2.3958		0.36939	6.06
5	13.09	Bromide	2.5000	2.4369		0.41178	6.75
6	15.51	Nitrate-N	1.0000	0.9290		0.92628	15.19
7	20.80	O-Phosphate-P	2.5000	2.4415		0.81659	13.39
8	23.93	Sulfate	4.0000	3.8040		1.17144	19.21
Total:				15.8080	0.000	6.099	100.00

7 AUTOCAL4

Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 19:07	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

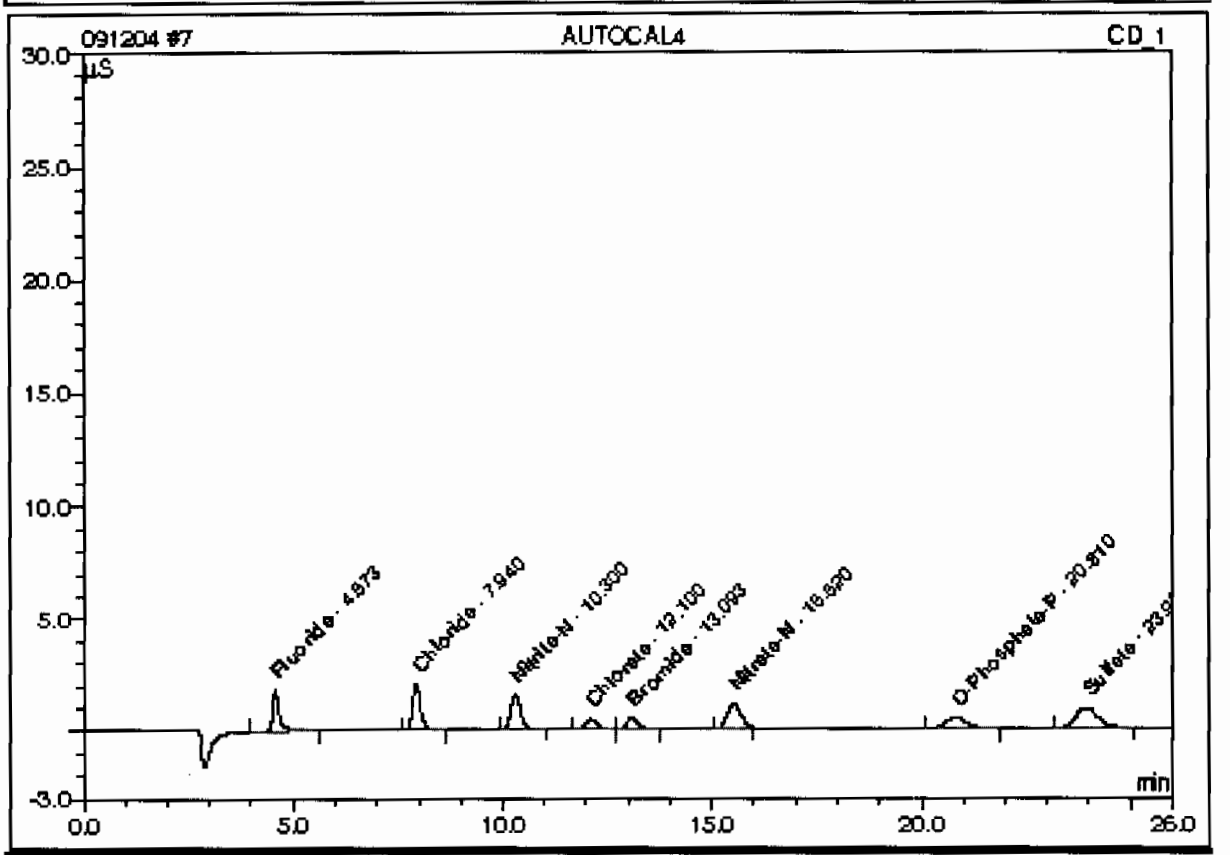

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.5000	0.5116		0.32563	11.63
2	7.94	Chloride	1.0000	0.9842		0.44832	16.01
3	10.30	Nitrite-N	0.5000	0.4927		0.42244	15.08
4	12.10	Chlorate	1.0000	0.9770		0.14557	5.20
5	13.09	Bromide	1.0000	0.9768		0.16083	5.74
6	15.52	Nitrate-N	0.5000	0.4871		0.43005	15.36
7	20.81	O-Phosphate-P	1.0000	0.9627		0.30614	10.93
8	23.93	Sulfate	2.0000	1.9710		0.56158	20.05
Total:				7.3629	0.000	2.801	100.00

8 AUTOCAL3

Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 19:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

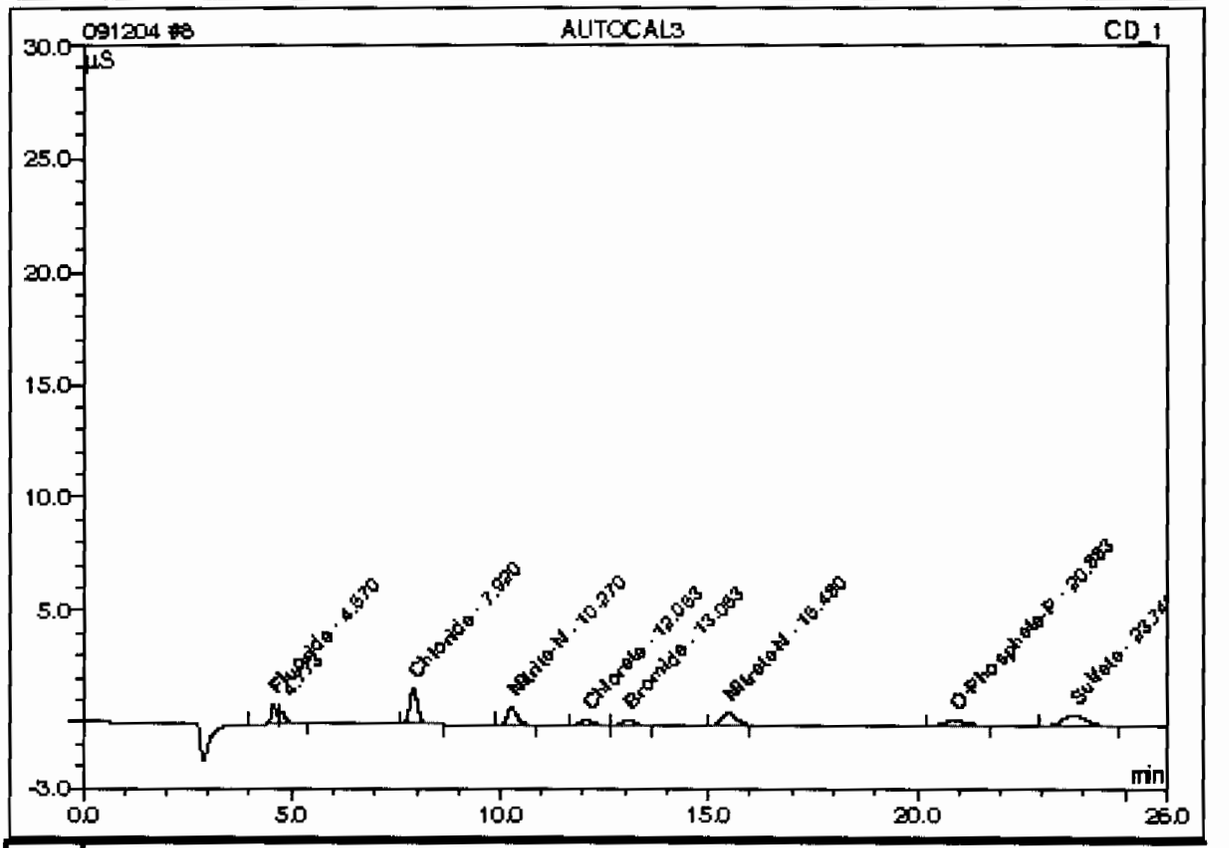

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.2500	0.2303		0.13351	8.29
3	7.92	Chloride	0.5000	0.7629		0.33988	21.10
4	10.27	Nitrite-N	0.2500	0.2772		0.20664	12.83
5	12.06	Chlorate	0.5000	0.5055		0.07119	4.42
6	13.05	Bromide	0.5000	0.5012		0.07908	4.91
7	15.48	Nitrate-N	0.2500	0.3025		0.22271	13.82
8	20.88	O-Phosphate-P	0.5000	0.4831		0.14059	8.73
9	23.74	Sulfate	1.0000	1.2327		0.31595	19.61
Total:				4.2954	0.000	1.510	93.69

9 AUTOCAL2

Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:00	Analyst:	VH1
Run Time (min):	11.91	Column:	AS23-002588;GLGCE086;300;9056

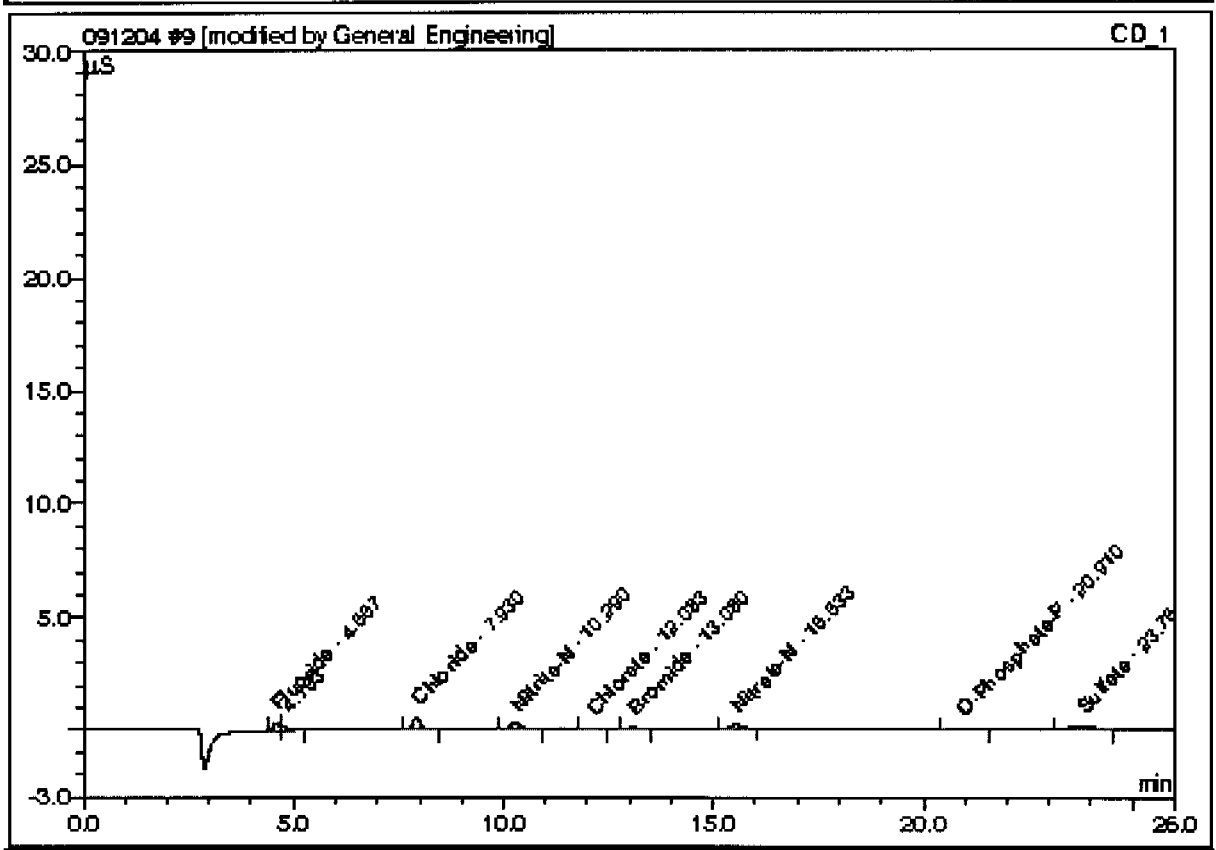

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.1000	0.1178	*	0.05666	9.21
3	7.93	Chloride	0.2000	0.3219		0.12373	20.11
4	10.29	Nitrite-N	0.1000	0.1582		0.08742	14.21
5	12.08	Chlorate	0.2000	0.2193	*	0.02606	4.24
6	13.08	Bromide	0.2000	0.2142	*	0.02977	4.84
7	15.53	Nitrate-N	0.1000	0.1829	*	0.08841	14.37
8	20.91	O-Phosphate-P	0.2000	0.2113	*	0.04679	7.60
9	23.75	Sulfate	0.4000	0.6686	*	0.12826	20.85
Total:				2.0943	0.000	0.587	95.42

9 AUTOCAL2

Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:00	Analyst:	VH1
Run Time (min):	11.91	Column:	AS23-002588;GLGCE086;300;9056

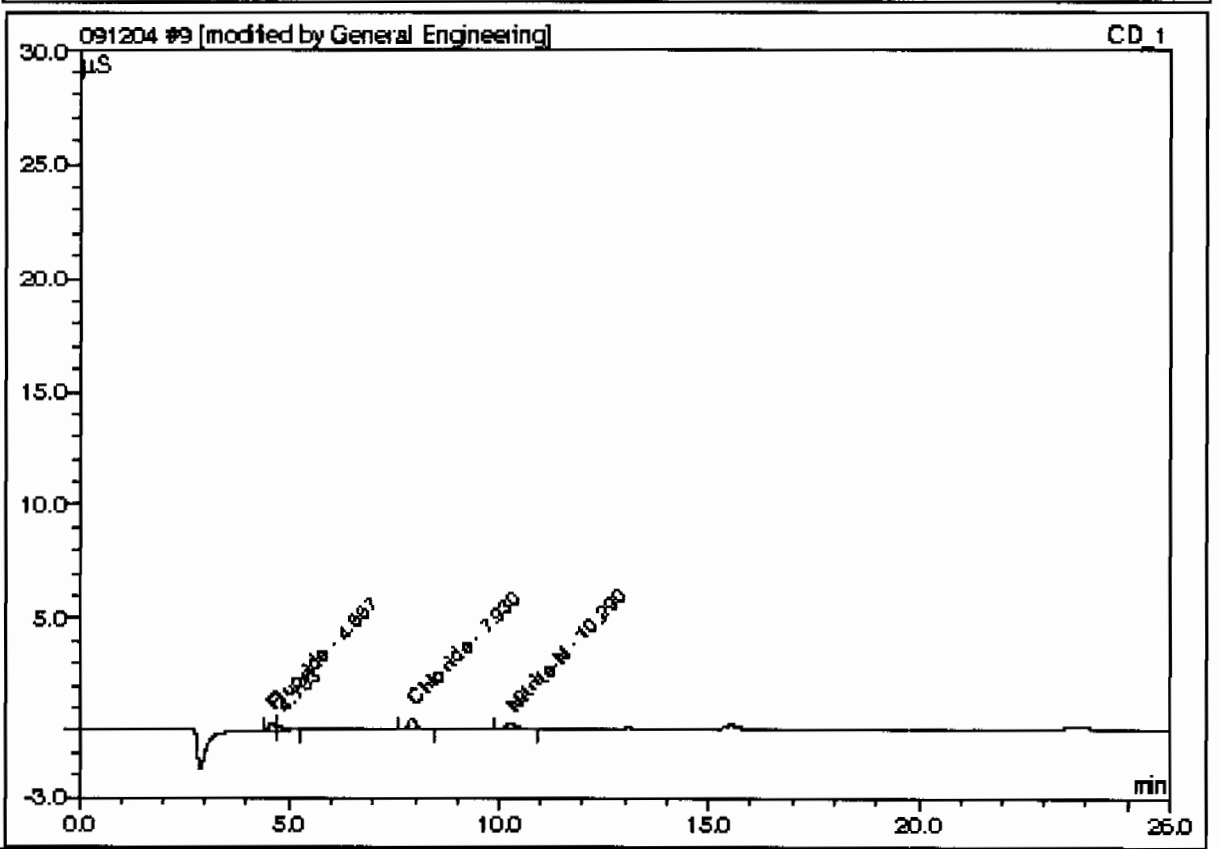

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.1000	0.1269		0.05666	19.14
3	7.93	Chloride	0.2000	0.3376		0.12373	41.80
4	10.29	Nitrite-N	0.1000	0.1582		0.08742	29.53
n.a.	n.a.	Chlorate	0.2000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.2000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.1000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.2000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.4000	n.a.	n.a.	n.a.	n.a.
Total:				0.6228	0.000	0.268	90.47

9 AUTOCAL2

Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:00	Analyst:	VH1
Run Time (min):	11.91	Column:	AS23-002588;GLGCE086;300;9056

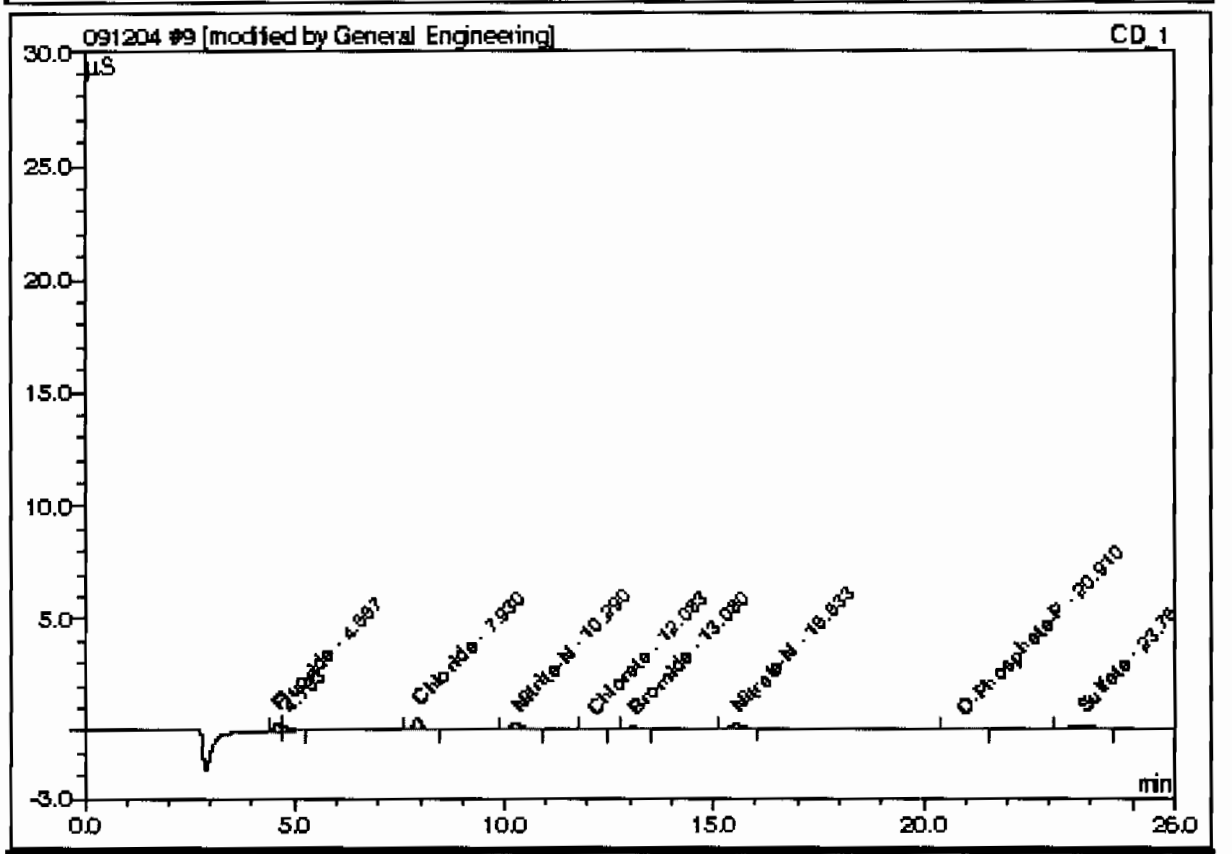

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.1000	0.1178	*	0.05666	9.21
3	7.93	Chloride	0.2000	0.3219		0.12373	20.11
4	10.29	Nitrite-N	0.1000	0.1582		0.08742	14.21
5	12.08	Chlorate	0.2000	0.2193	*	0.02606	4.24
6	13.08	Bromide	0.2000	0.2142	*	0.02977	4.84
7	15.53	Nitrate-N	0.1000	0.1829	*	0.08841	14.37
8	20.91	O-Phosphate-P	0.2000	0.2113	*	0.04679	7.60
9	23.75	Sulfate	0.4000	0.6686	*	0.12826	20.85
Total:				2.0943	0.000	0.587	95.42

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	Analyst:	VH1
Run Time (min):	16.92	Column:	AS23-002398; GL GC B086;300;9056

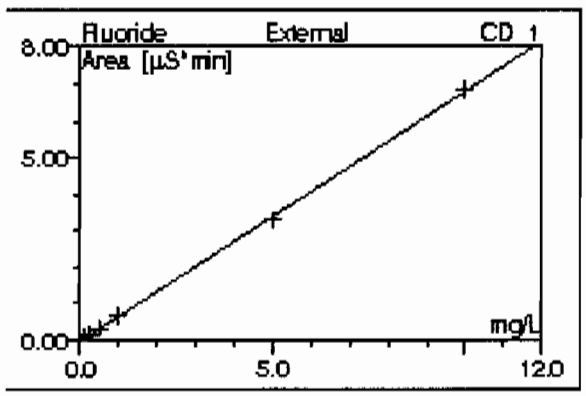

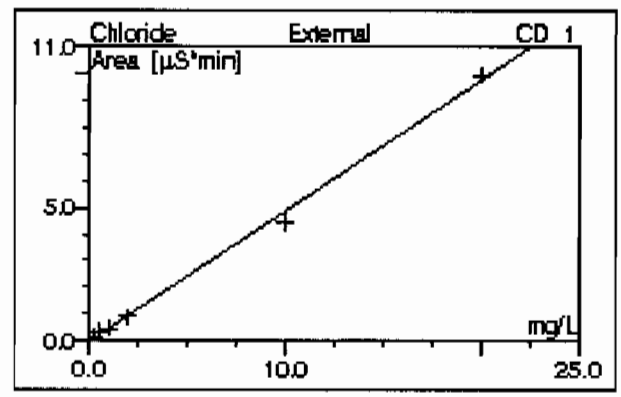

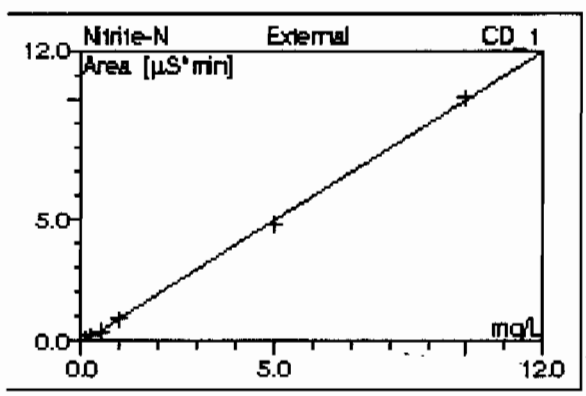

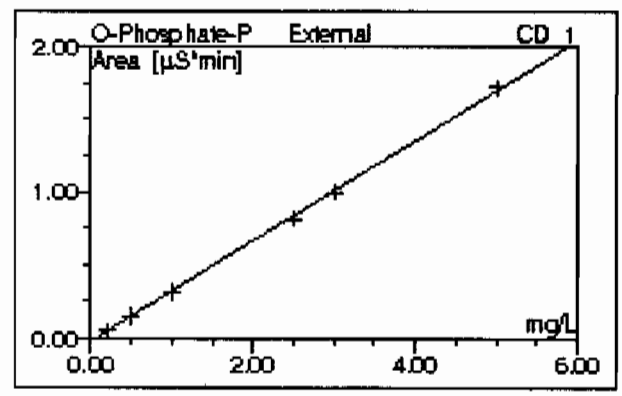

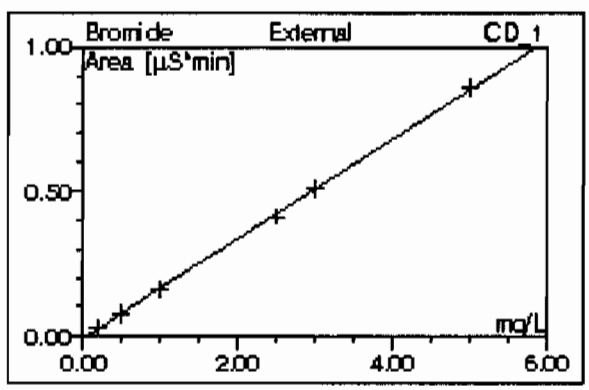

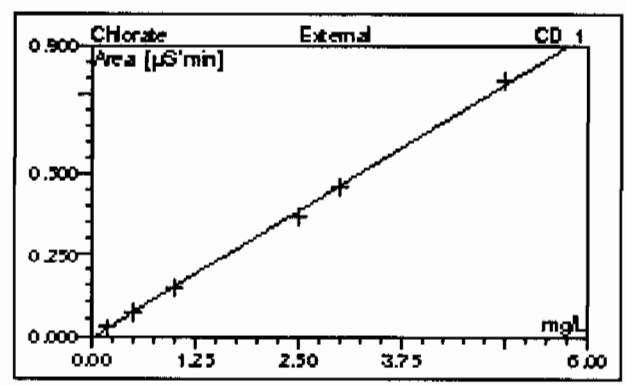

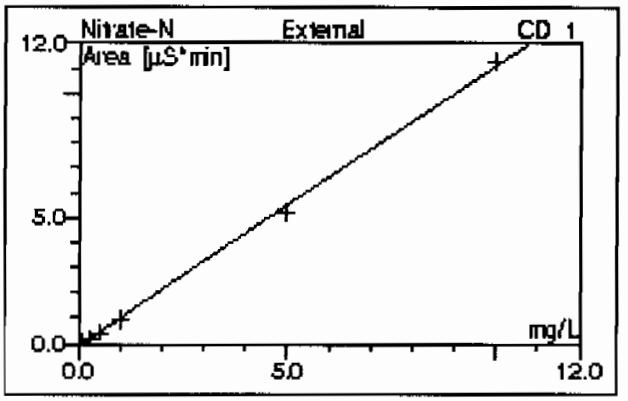

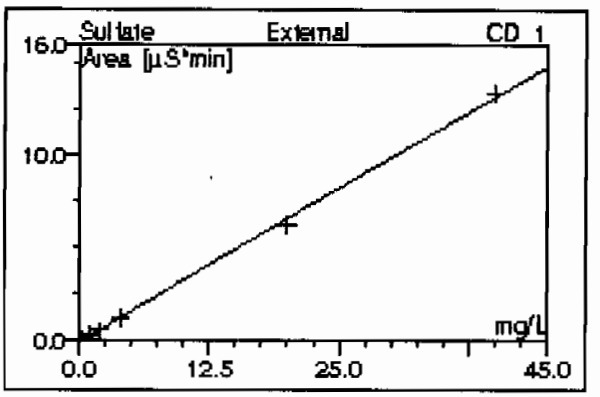

No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
1	4.57	Fluoride	0LOff	99.9624	-0.0238	0.6831	0.0000
2	7.92	Chloride	0LOff	99.7390	-0.0341	0.4902	0.0000
n.a.	n.a.	Nitrite-N	0LOff	99.9363	-0.0710	1.0016	0.0000
n.a.	n.a.	Chlorate	0LOff	99.9030	-0.0085	0.1577	0.0000
n.a.	n.a.	Bromide	0LOff	99.9594	-0.0071	0.1719	0.0000
n.a.	n.a.	Nitrate-N	0LOff	99.8161	-0.1170	1.1230	0.0000
n.a.	n.a.	O-Phosphate-P	0LOff	99.9452	-0.0262	0.3452	0.0000
n.a.	n.a.	Sulfate	0LOff	99.8573	-0.0942	0.3327	0.0000
Average:				99.8898	-0.0477	0.5382	0.0000

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	Analyst:	VH1
Run Time (min):	16.92	Column:	AS23-002588;GLGCE086;300;9056

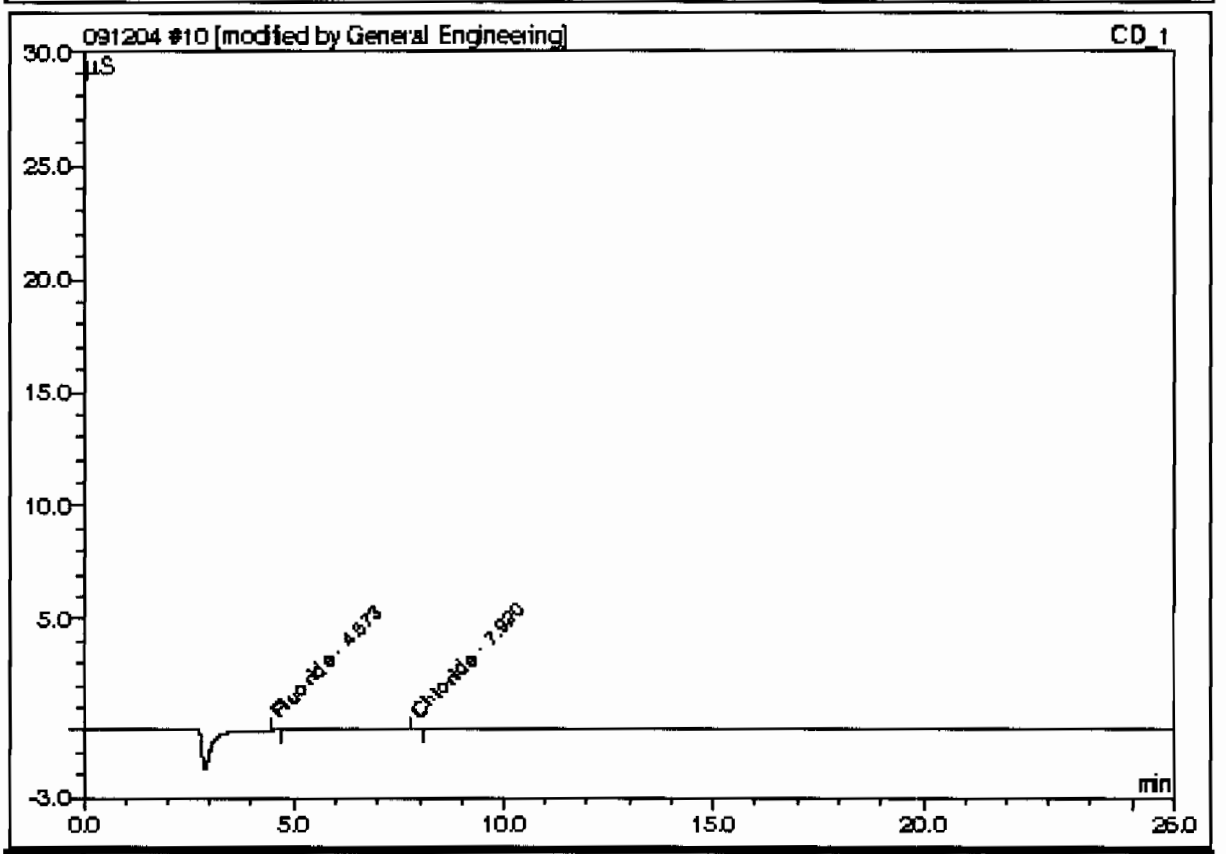

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.0000	0.0440	`	0.00619	65.14
2	7.92	Chloride	0.0000	0.0763	`	0.00331	34.86
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.1202	0.000	0.010	100.00

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	Analyst:	VH1
Run Time (min):	16.92	Column:	AS23-002588;GLGCE086;300;9056

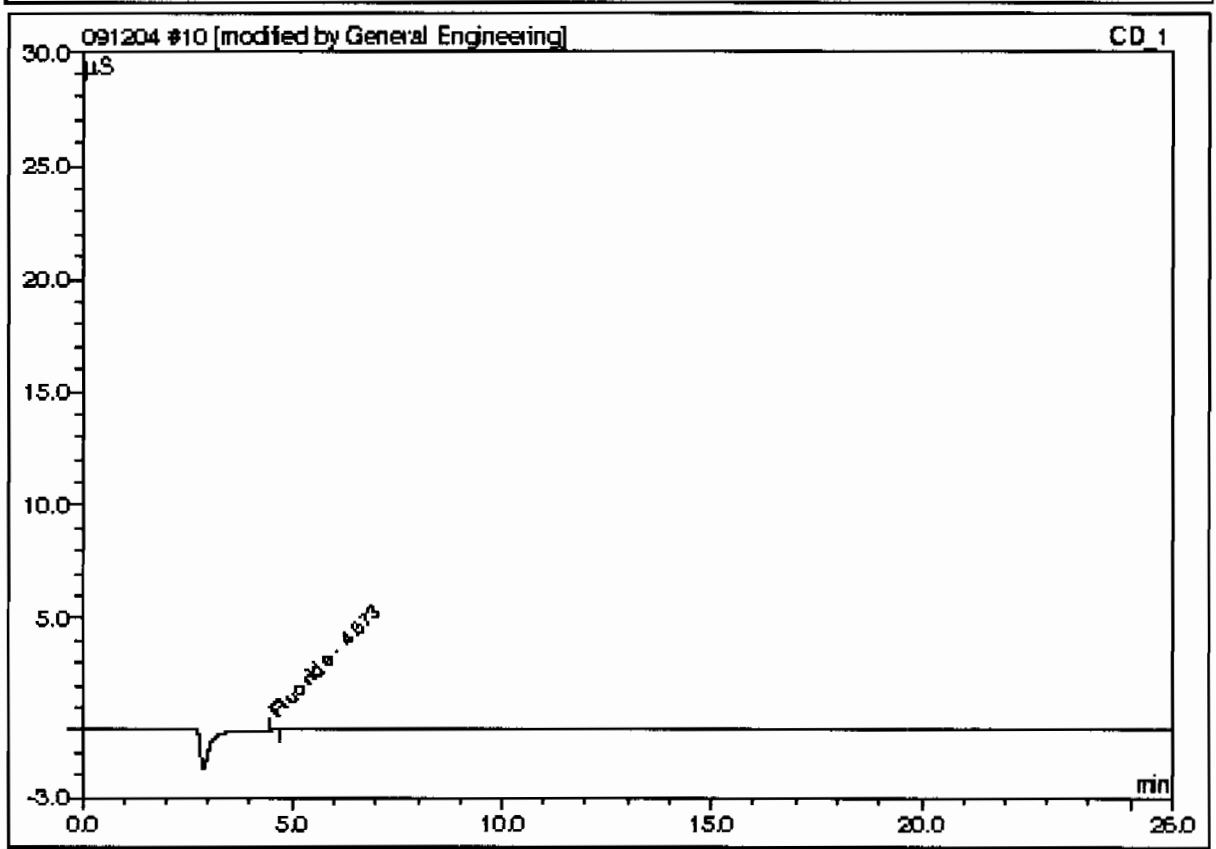

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.0000	0.0440	*	0.00619	100.00
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0440	0.000	0.006	100.00

10 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:26	Analyst:	VH1
Run Time (min):	16.92	Column:	AS23-002588;GLGCE086;300;9056

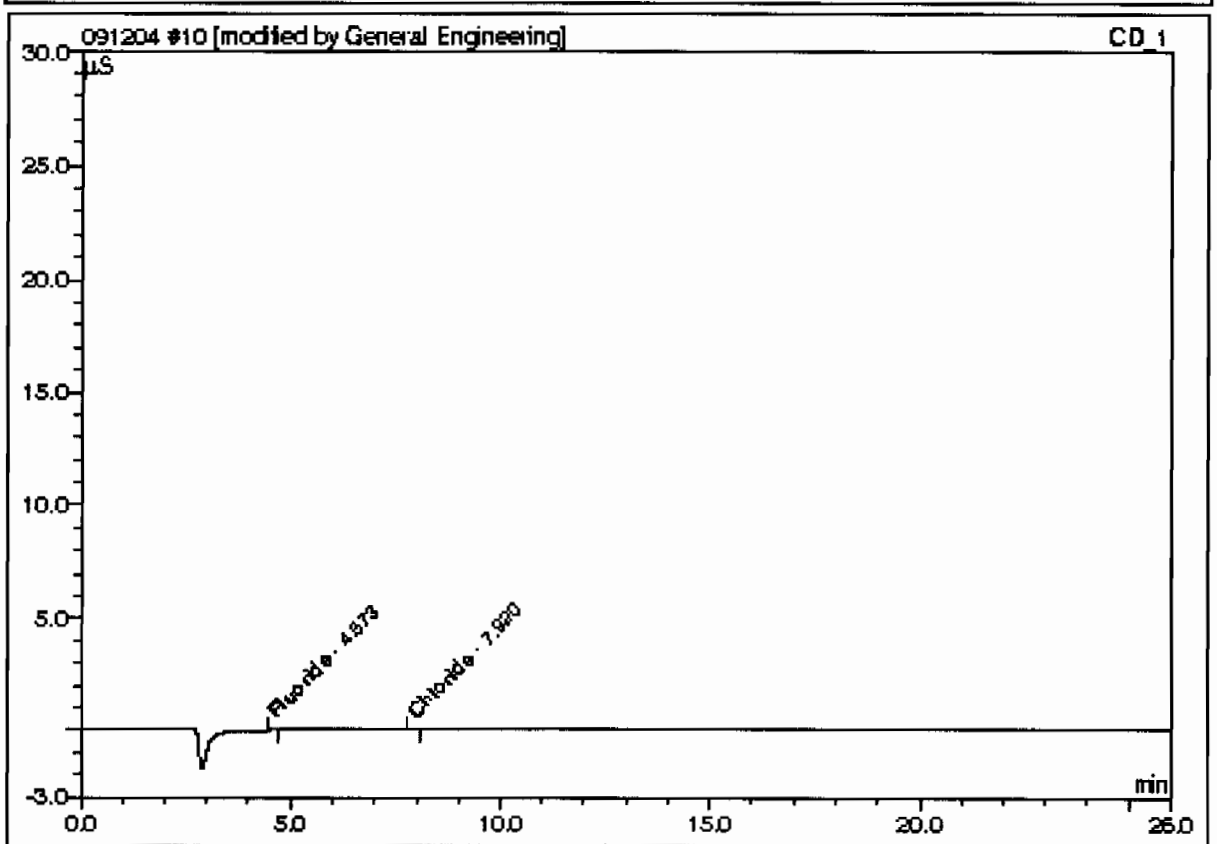

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	0.0000	0.0440	*	0.00619	65.14
2	7.92	Chloride	0.0000	0.0763	*	0.00331	34.86
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.1202	0.000	0.010	100.00

This is runlog for Sequence 091204.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	12/04/09 16:31		1	091204	VH1
BLK	12/04/09 16:57		1	091204	VH1
BLK	12/04/09 17:23		1	091204	VH1
ICAL-07	12/04/09 17:49		1	091204	VH1
ICAL-06	12/04/09 18:15		1	091204	VH1
ICAL-05	12/04/09 18:41		1	091204	VH1
ICAL-04	12/04/09 19:07		1	091204	VH1
ICAL-03	12/04/09 19:34		1	091204	VH1
ICAL-02	12/04/09 20:00		1	091204	VH1
ICAL-01	12/04/09 20:26		1	091204	VH1
ICV	12/04/09 20:52		1	091204	VH1
ICB	12/04/09 21:18		1	091204	VH1
1201987564	12/04/09 21:44	929381	1	091204	VH1
1201987567	12/04/09 22:10	929381	1	091204	VH1
242097001	12/04/09 22:36	929381	1	091204	VH1
242097002	12/04/09 23:02	929381	1	091204	VH1
1201987565	12/04/09 23:28	929381	1	091204	VH1
1201987566	12/04/09 23:54	929381	1	091204	VH1

11 WIC091204-02ICV

Sample Name:	WIC091204-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

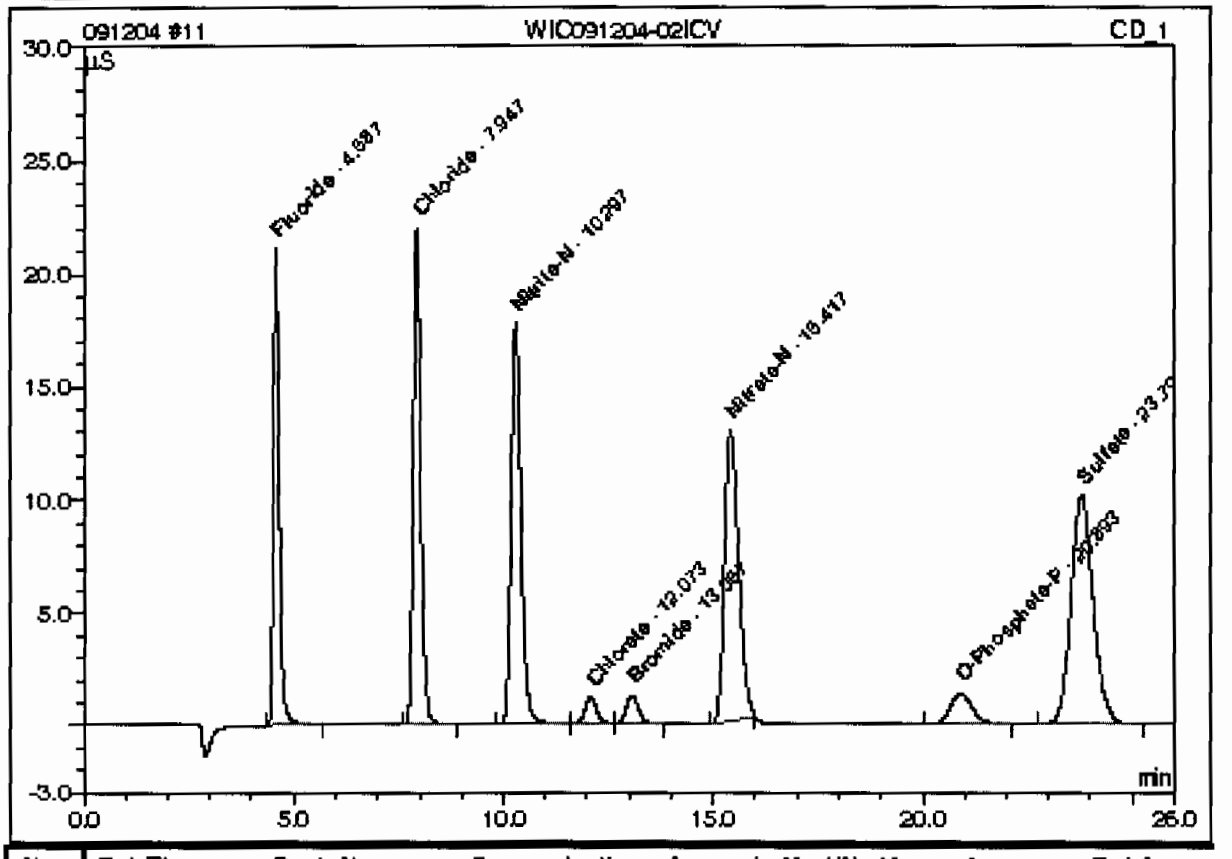

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	4.9043		3.32633	12.99
2	7.95	Chloride	n.a.	9.2547		4.50217	17.58
3	10.30	Nitrite-N	n.a.	4.8882		4.82510	18.84
4	12.07	Chlorate	n.a.	2.5539		0.39433	1.54
5	13.06	Bromide	n.a.	2.5442		0.43021	1.68
6	15.42	Nitrate-N	n.a.	4.5957		5.04412	19.70
7	20.89	O-Phosphate-P	n.a.	2.4911		0.83373	3.26
8	23.79	Sulfate	n.a.	19.0819		6.25447	24.42
Total:				50.3140	0.000	25.610	100.00

11 WIC091204-02ICV

Sample Name:	WIC091204-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

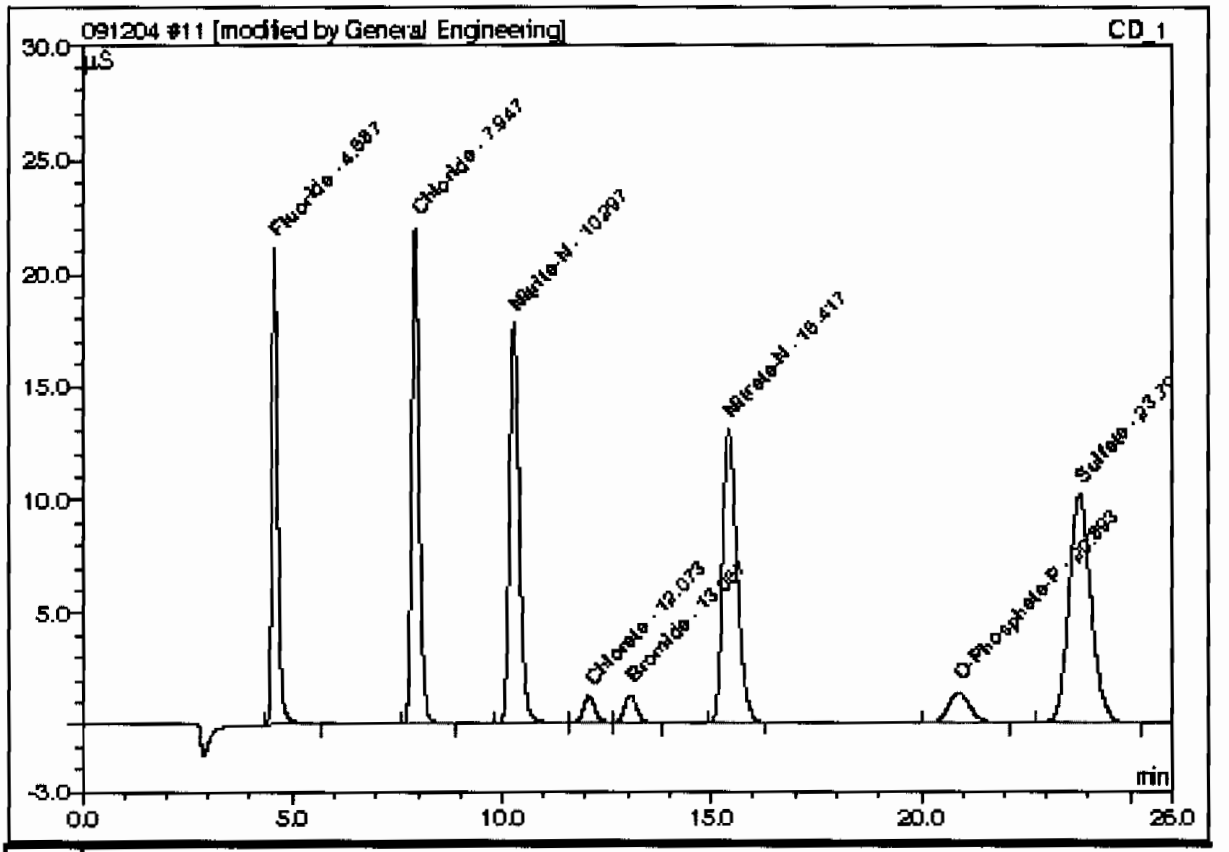

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	4.9043		3.32633	12.90
2	7.95	Chloride	n.a.	9.2547		4.50217	17.47
3	10.30	Nitrite-N	n.a.	4.8882		4.82510	18.72
4	12.07	Chlorate	n.a.	2.5539		0.39433	1.53
5	13.06	Bromide	n.a.	2.5442		0.43021	1.67
6	15.42	Nitrate-N	n.a.	4.7447		5.21143	20.22
7	20.89	O-Phosphate-P	n.a.	2.4911		0.83373	3.23
8	23.79	Sulfate	n.a.	19.0819		6.25447	24.26
Total:				50.4630	0.000	25.778	100.00

11 WIC091204-02ICV

Sample Name:	WIC091204-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 20:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

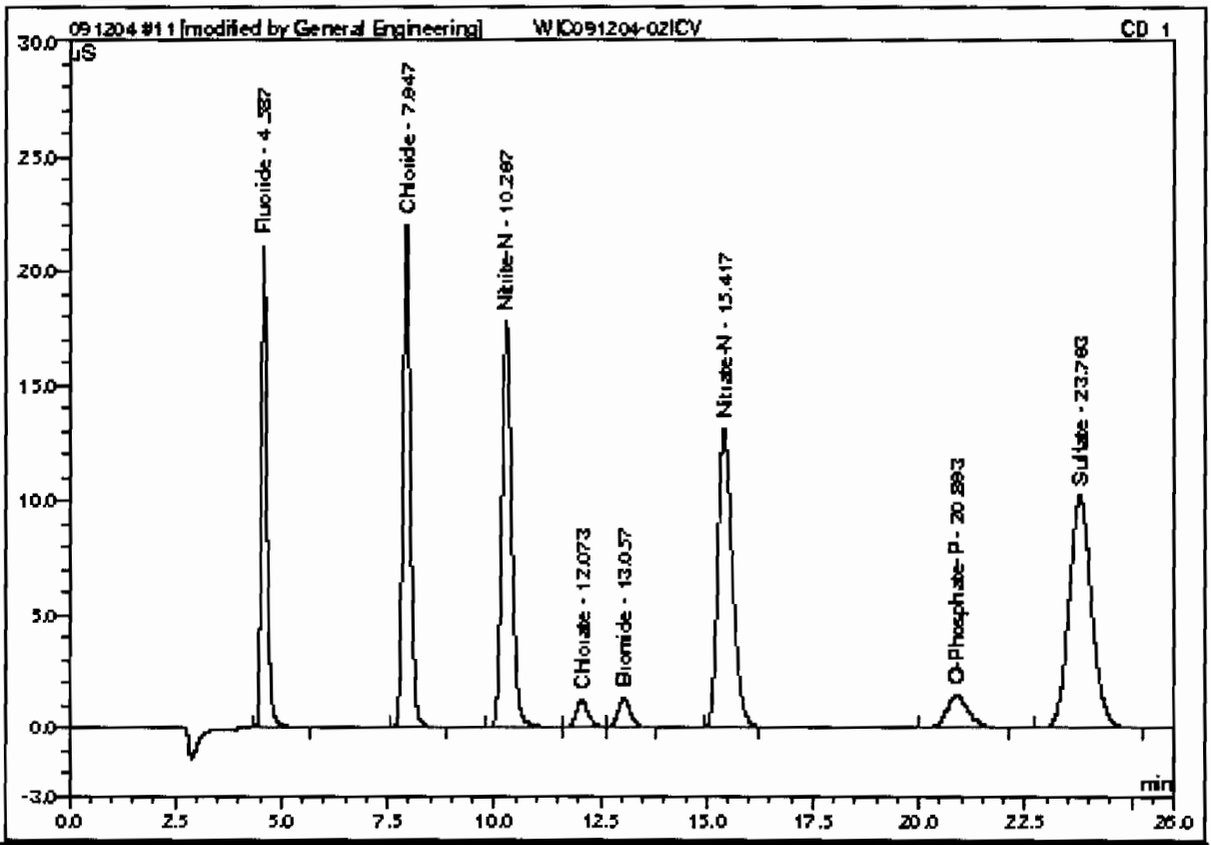

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	4.9043		3.32633	12.90
2	7.95	Chloride	n.a.	9.2547		4.50217	17.47
3	10.30	Nitrite-N	n.a.	4.8882		4.82510	18.72
4	12.07	Chlorate	n.a.	2.5539		0.39433	1.53
5	13.06	Bromide	n.a.	2.5442		0.43021	1.67
6	15.42	Nitrate-N	n.a.	4.7447		5.21143	20.22
7	20.89	O-Phosphate-P	n.a.	2.4911		0.83373	3.23
8	23.79	Sulfate	n.a.	19.0819		6.25447	24.26
Total:				50.4630	0.000	25.778	100.00

12 ICB

Sample Name:	ICB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/4/2009 21:18	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

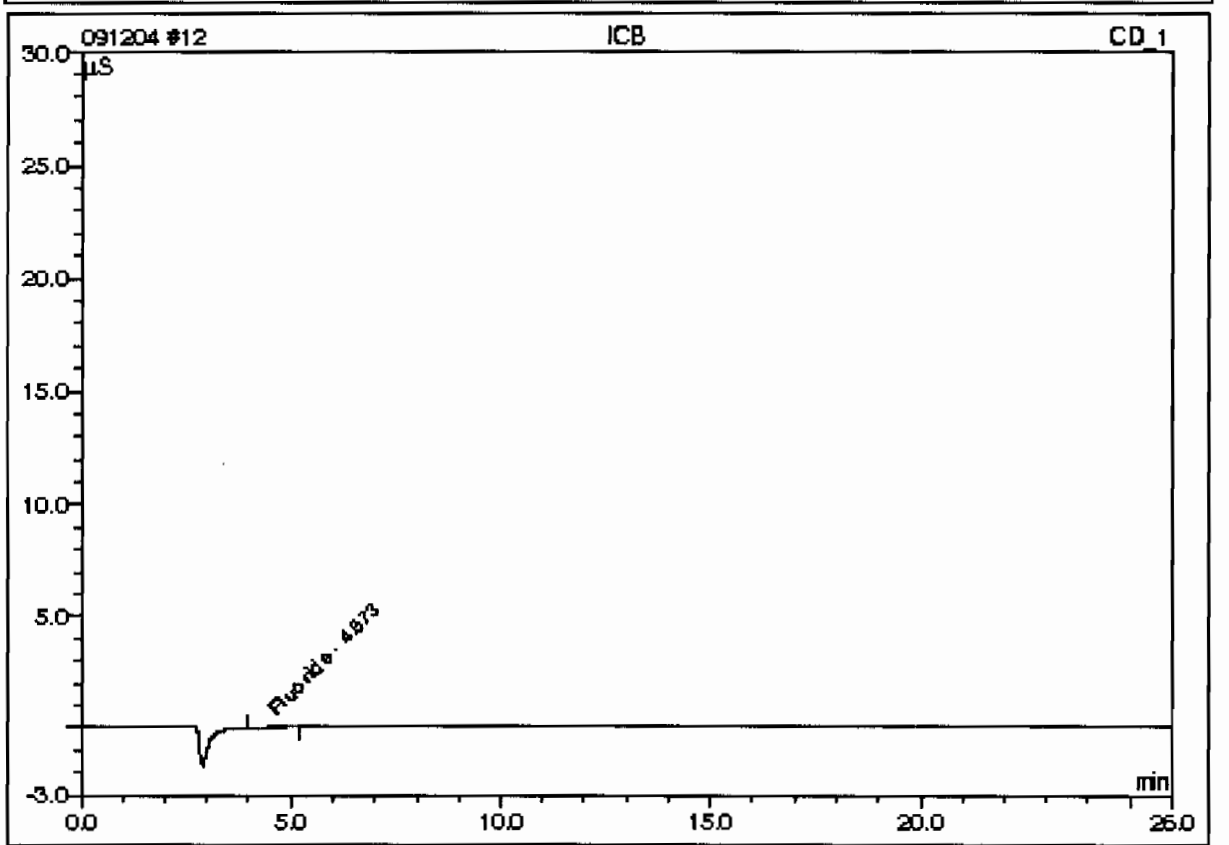

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.0579		0.01570	100.00
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0579	0.000	0.016	100.00

This is runlog for Sequence 091208.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	12/08/09 17:47		1	091208	VH1
BLK	12/08/09 18:13		1	091208	VH1
BLK	12/08/09 18:39		1	091208	VH1
ICV	12/08/09 19:05		1	091208	VH1
ICB	12/08/09 19:31		1	091208	VH1
1201990630	12/08/09 19:57	930716	1	091208	VH1
1201990633	12/08/09 20:23	930716	1	091208	VH1
242482002	12/08/09 20:49	930716	1	091208	VH1
1201990631	12/08/09 21:15	930716	1	091208	VH1
1201990632	12/08/09 21:41	930716	1	091208	VH1
242482003	12/08/09 22:07	930716	1	091208	VH1
242482002	12/08/09 22:34	930716	10	091208	VH1
1201990631	12/08/09 23:00	930716	10	091208	VH1
1201990632	12/08/09 23:26	930716	10	091208	VH1
242482003	12/08/09 23:52	930716	10	091208	VH1

11 WIC091208-02ICV

Sample Name:	WIC091208-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/8/2009 19:05	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

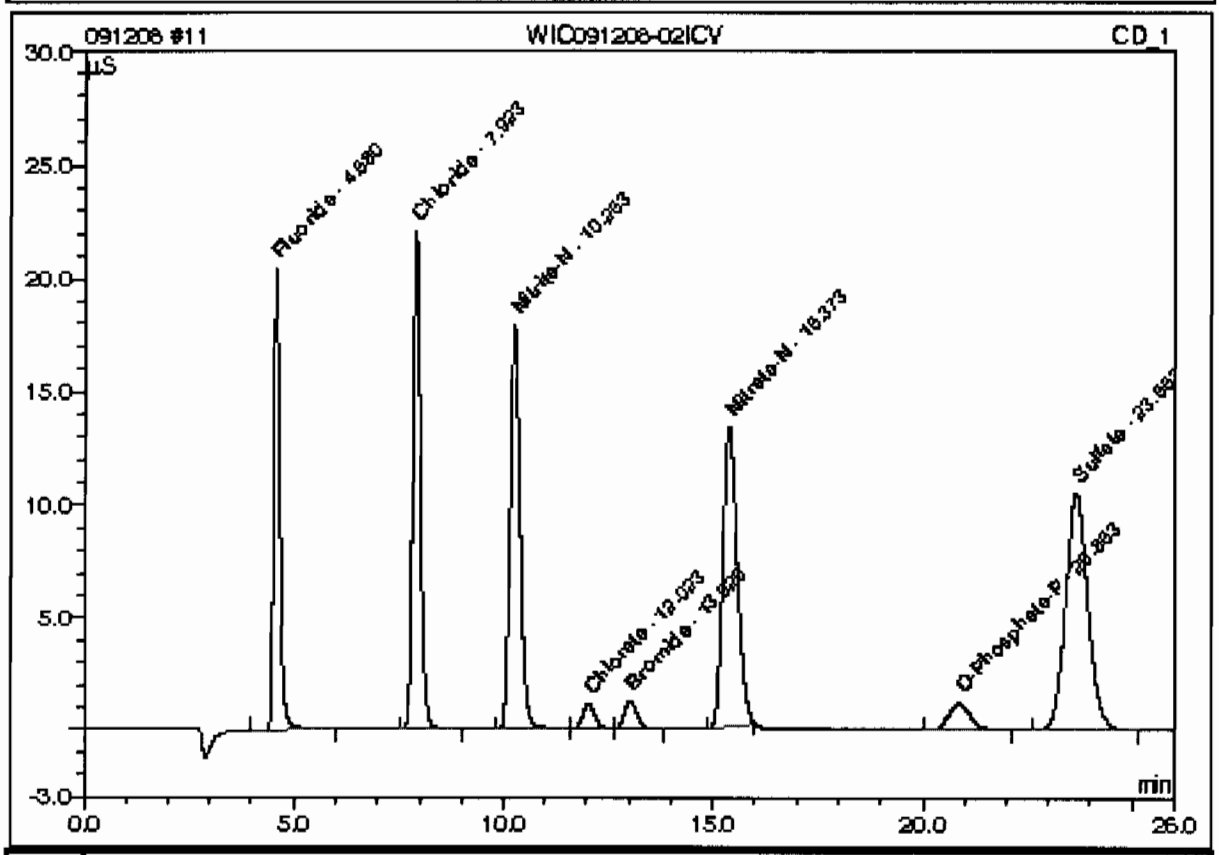

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.0656		3.43664	13.03
2	7.92	Chloride	n.a.	9.5805		4.65901	17.67
3	10.26	Nitrite-N	n.a.	5.0390		4.97610	18.87
4	12.02	Chlorate	n.a.	2.4682		0.38108	1.45
5	13.02	Bromide	n.a.	2.5666		0.43439	1.65
6	15.37	Nitrate-N	n.a.	5.0764		5.29250	20.07
7	20.85	O-Phosphate-P	n.a.	2.1236		0.70737	2.68
8	23.65	Sulfate	n.a.	19.7557		6.47919	24.57
Total:				51.6757	0.000	26.366	100.00

11 WIC091208-02ICV

Sample Name:	WIC091208-02ICV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/8/2009 19:05	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

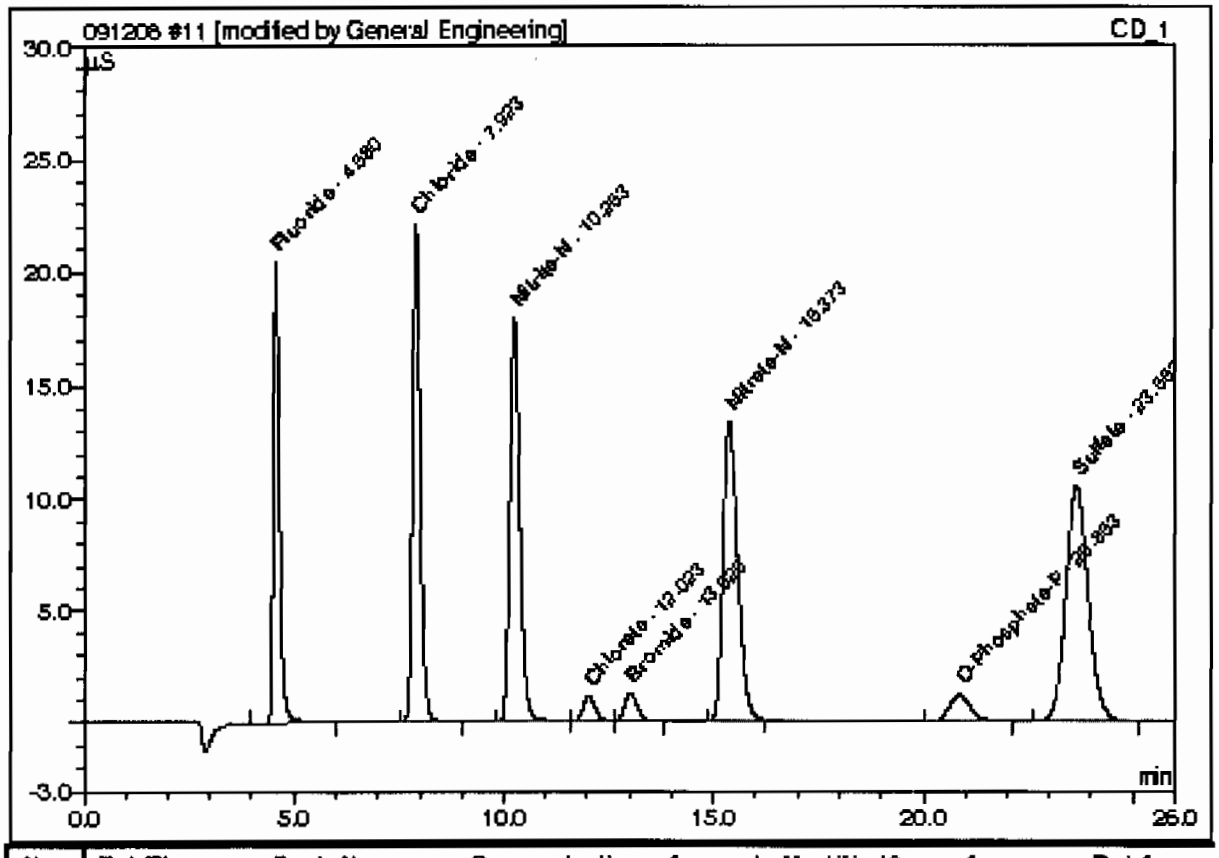

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.0656		3.43664	12.97
2	7.92	Chloride	n.a.	9.5805		4.65901	17.59
3	10.26	Nitrite-N	n.a.	5.0390		4.97610	18.78
4	12.02	Chlorate	n.a.	2.4682		0.38108	1.44
5	13.02	Bromide	n.a.	2.5666		0.43439	1.64
6	15.37	Nitrate-N	n.a.	5.1950		5.41851	20.45
7	20.85	O-Phosphate-P	n.a.	2.1236		0.70737	2.67
8	23.65	Sulfate	n.a.	19.7557		6.47919	24.46
Total:				51.7942	0.000	26.492	100.00

12 ICB

Sample Name:	ICB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/8/2009 19:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

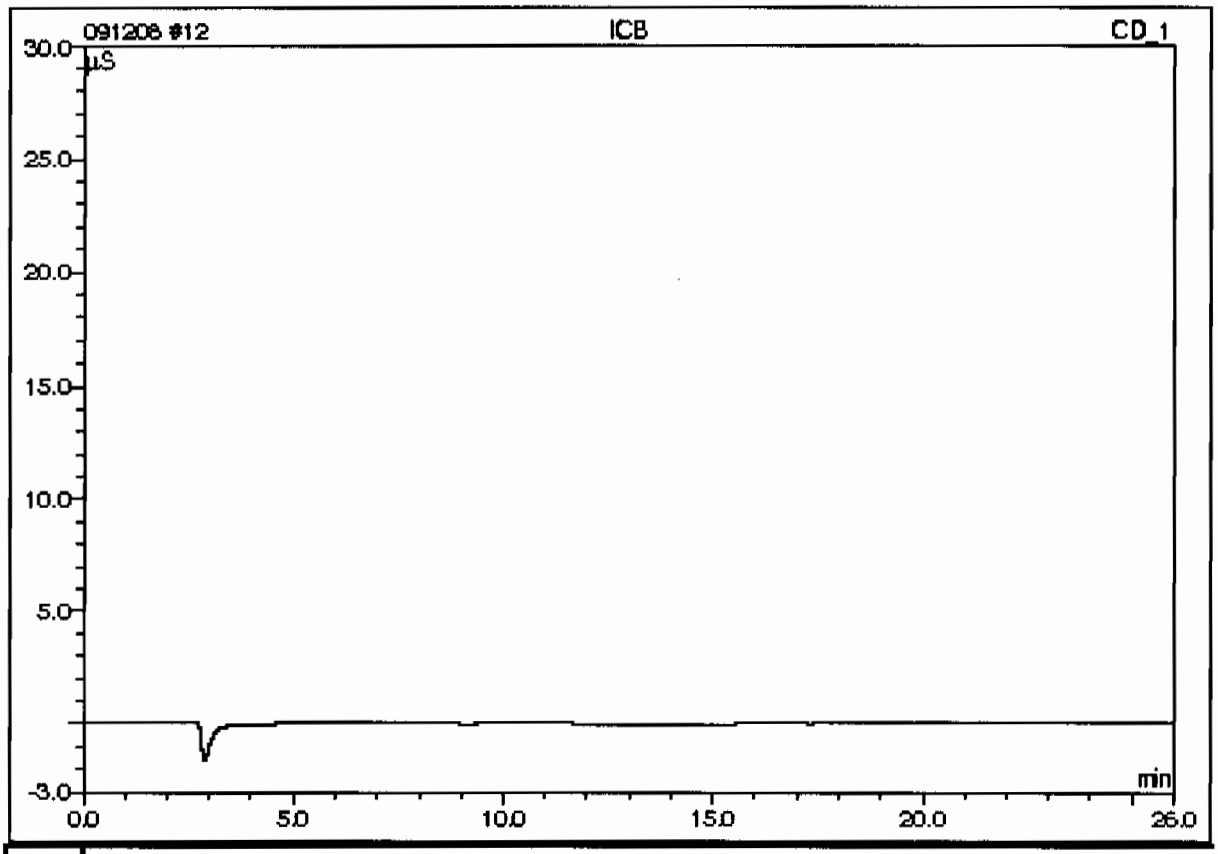

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 091208.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
CVH	12/09/09 00:18		1	091208	VH1
CCB	12/09/09 00:44		1	091208	VH1
1201990650	12/09/09 01:10	930722	1	091208	VH1
1201990653	12/09/09 01:36	930722	1	091208	VH1
242486001	12/09/09 02:02	930722	1	091208	VH1
1201990651	12/09/09 02:28	930722	1	091208	VH1
1201990652	12/09/09 02:54	930722	1	091208	VH1
242486002	12/09/09 03:21	930722	1	091208	VH1
242486003	12/09/09 03:47	930722	1	091208	VH1
242486004	12/09/09 04:13	930722	1	091208	VH1
242486005	12/09/09 04:39	930722	1	091208	VH1
242486006	12/09/09 05:05	930722	1	091208	VH1
CCV	12/09/09 05:31		1	091208	VH1
CCB	12/09/09 05:57		1	091208	VH1
1201976799	12/09/09 06:23	924715	1	091208	VH1
1201976804	12/09/09 06:49	924715	1	091208	VH1
241322001	12/09/09 07:15	924715	1	091208	VH1
241322002	12/09/09 07:42	924715	1	091208	VH1
241322003	12/09/09 08:08	924715	1	091208	VH1
241322004	12/09/09 08:34	924715	1	091208	VH1
241322005	12/09/09 09:00	924715	1	091208	VH1
241322006	12/09/09 09:26	924715	1	091208	VH1
241322007	12/09/09 09:52	924715	1	091208	VH1
241322008	12/09/09 10:18	924715	1	091208	VH1
CVH	12/09/09 10:44		1	091208	VH1
CCB	12/09/09 11:10		1	091208	VH1
241322009	12/09/09 11:36	924715	1	091208	VH1
241322010	12/09/09 12:02	924715	1	091208	VH1

241322011	12/09/09	12:29	924715	1	091208	VH1
1201984519	12/09/09	12:55	924715	1	091208	VH1
1201984521	12/09/09	13:21	924715	1	091208	VH1
1201984523	12/09/09	13:47	924715	1	091208	VH1
241322012	12/09/09	14:13	924715	1	091208	VH1
241336001	12/09/09	14:39	924715	1	091208	VH1
241336002	12/09/09	15:05	924715	1	091208	VH1
1201984518	12/09/09	15:31	924715	1	091208	VH1
CCV	12/09/09	15:57		1	091208	VH1
CCB	12/09/09	16:23		1	091208	VH1
1201984520	12/09/09	16:50	924715	1	091208	VH1
1201984522	12/09/09	17:16	924715	1	091208	VH1
CVH	12/09/09	17:42		1	091208	VH1
CCB	12/09/09	18:08		1	091208	VH1

35 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 5:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

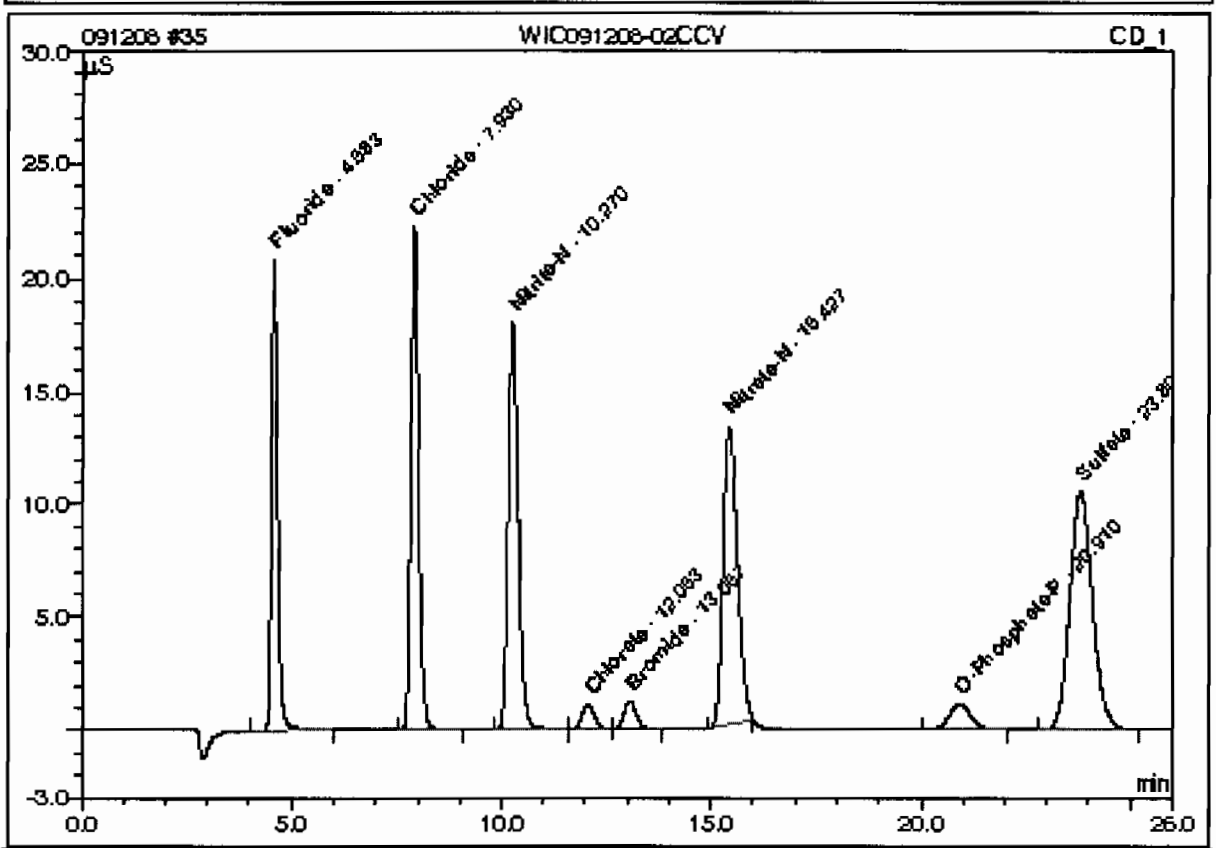

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.1021		3.46157	13.10
2	7.93	Chloride	n.a.	9.5996		4.66836	17.67
3	10.27	Nitrite-N	n.a.	5.0430		4.98010	18.85
4	12.05	Chlorate	n.a.	2.4437		0.37722	1.43
5	13.06	Bromide	n.a.	2.5710		0.43515	1.65
6	15.43	Nitrate-N	n.a.	5.0216		5.23420	19.81
7	20.91	O-Phosphate-P	n.a.	2.0944		0.69728	2.64
8	23.81	Sulfate	n.a.	20.0254		6.56892	24.86
Total:				51.9008	0.000	26.423	100.00

35 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 5:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

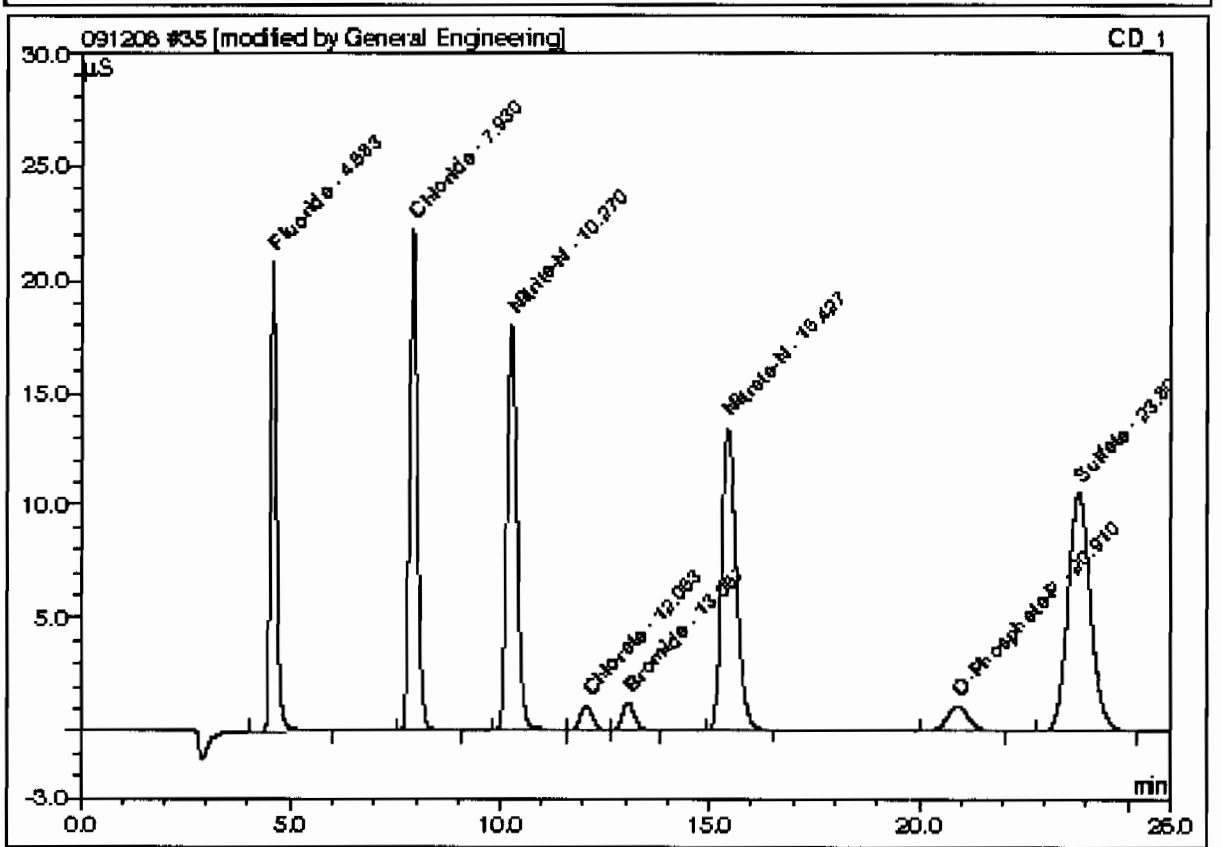

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.1021		3.46157	12.98
2	7.93	Chloride	n.a.	9.5996		4.66836	17.50
3	10.27	Nitrite-N	n.a.	5.0430		4.98010	18.67
4	12.05	Chlorate	n.a.	2.4437		0.37722	1.41
5	13.06	Bromide	n.a.	2.5710		0.43515	1.63
6	15.43	Nitrate-N	n.a.	5.2603		5.48788	20.57
7	20.91	O-Phosphate-P	n.a.	2.0944		0.69728	2.61
8	23.81	Sulfate	n.a.	20.0254		6.56892	24.62
Total:				52.1394	0.000	26.676	100.00

36 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 5:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

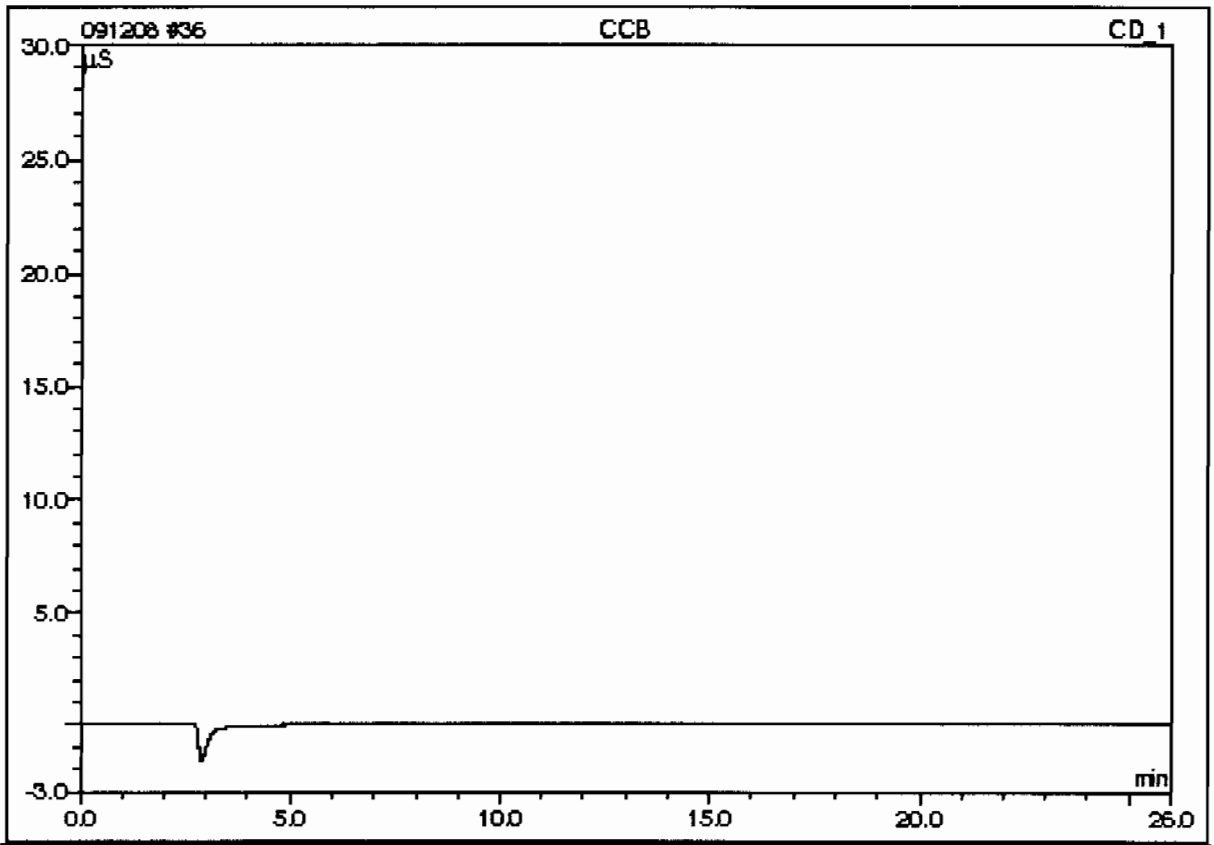

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

37 1201976799/924715/1/1/MB

Sample Name:	1201976799/924715/1/1/MB	*Injection Volume:*	50.0
Vial Number:	47	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 6:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

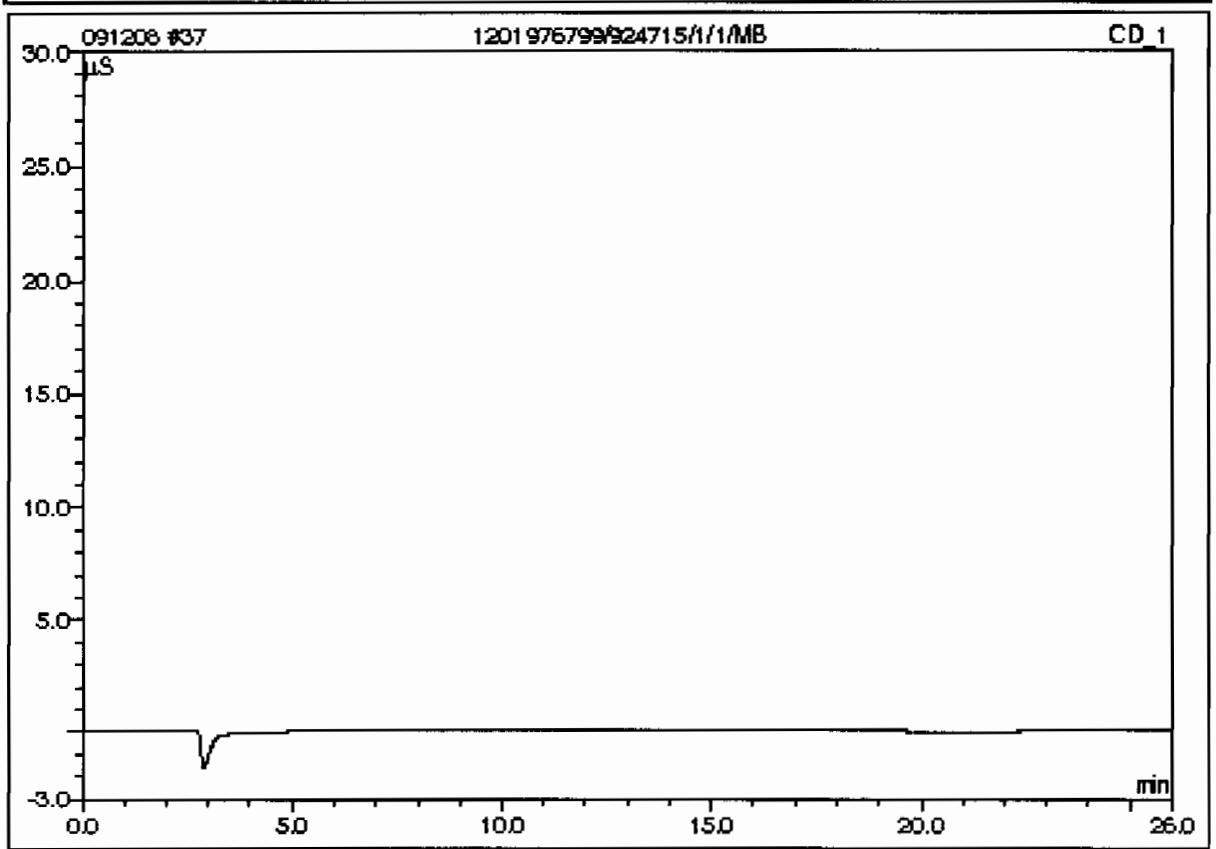

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

38 1201976804/924715/1/1/LCS

Sample Name:	1201976804/924715/1/1/LCS	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 6:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

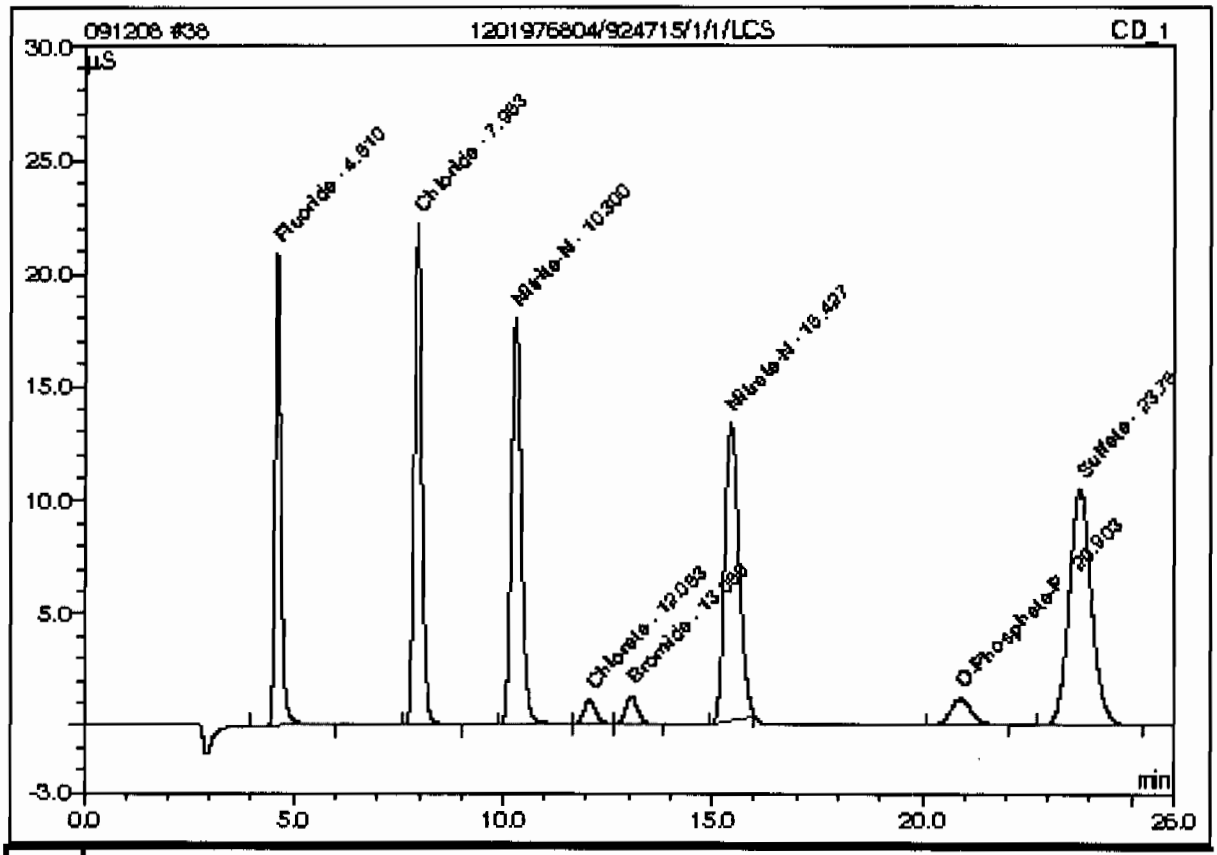

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.61	Fluoride	n.a.	5.1206		3.47418	13.15
2	7.98	Chloride	n.a.	9.6084		4.67271	17.69
3	10.30	Nitrite-N	n.a.	5.0490		4.98616	18.87
4	12.08	Chlorate	n.a.	2.4445		0.37735	1.43
5	13.05	Bromide	n.a.	2.5675		0.43454	1.64
6	15.43	Nitrate-N	n.a.	5.0646		5.27990	19.99
7	20.90	O-Phosphate-P	n.a.	2.0825		0.69321	2.62
8	23.75	Sulfate	n.a.	19.8159		6.49922	24.60
Total:				51.7530	0.000	26.417	100.00

38 1201976804/924715/1/1/LCS

Sample Name:	1201976804/924715/1/1/LCS	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 6:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

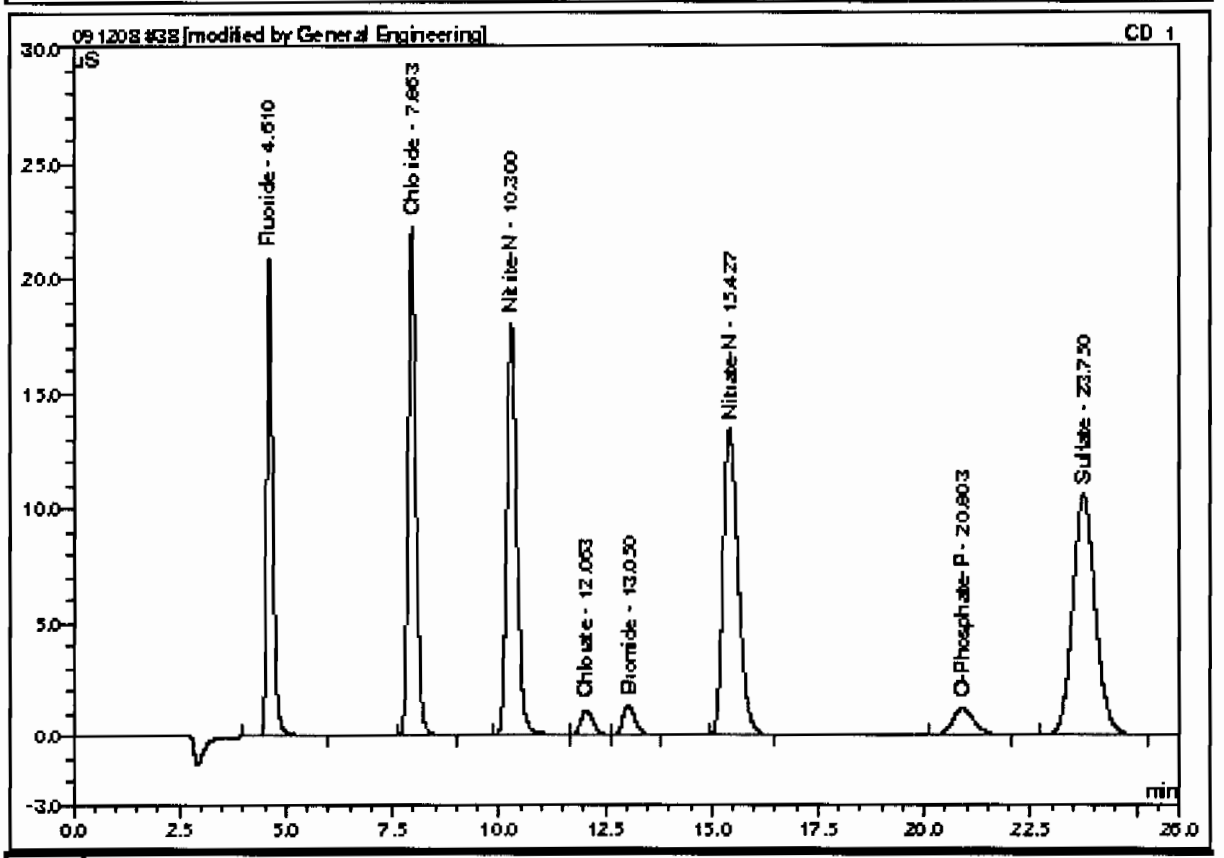

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.61	Fluoride	n.a.	5.1206		3.47418	13.03
2	7.96	Chloride	n.a.	9.6084		4.67271	17.52
3	10.30	Nitrite-N	n.a.	5.0490		4.98616	18.70
4	12.06	Chlorate	n.a.	2.4445		0.37735	1.42
5	13.05	Bromide	n.a.	2.5675		0.43454	1.63
6	15.43	Nitrate-N	n.a.	5.2979		5.52787	20.73
7	20.90	O-Phosphate-P	n.a.	2.0825		0.69321	2.60
8	23.75	Sulfate	n.a.	19.8159		6.49922	24.37
Total:				51.9863	0.000	26.665	100.00

39 241322001/924715/1/1/

Sample Name:	241322001/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 7:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

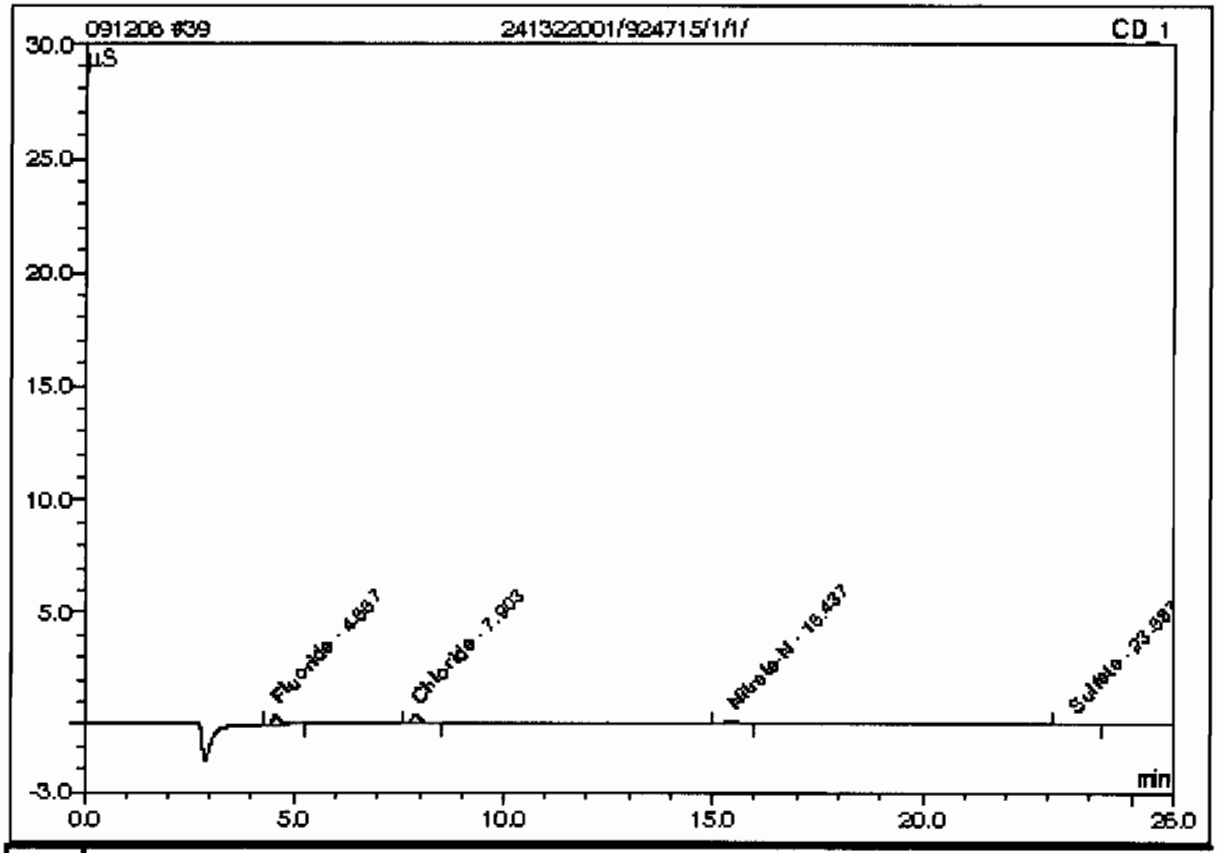

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1511		0.07940	32.76
2	7.90	Chloride	n.a.	0.2720		0.09151	37.76
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	15.44	Nitrate-N	n.a.	0.1490		0.05472	22.57
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	23.59	Sulfate	n.a.	0.3290		0.01675	6.91
Total:				0.9010	0.000	0.242	100.00

40 241322002/924715/1/1/

Sample Name:	241322002/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 7:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

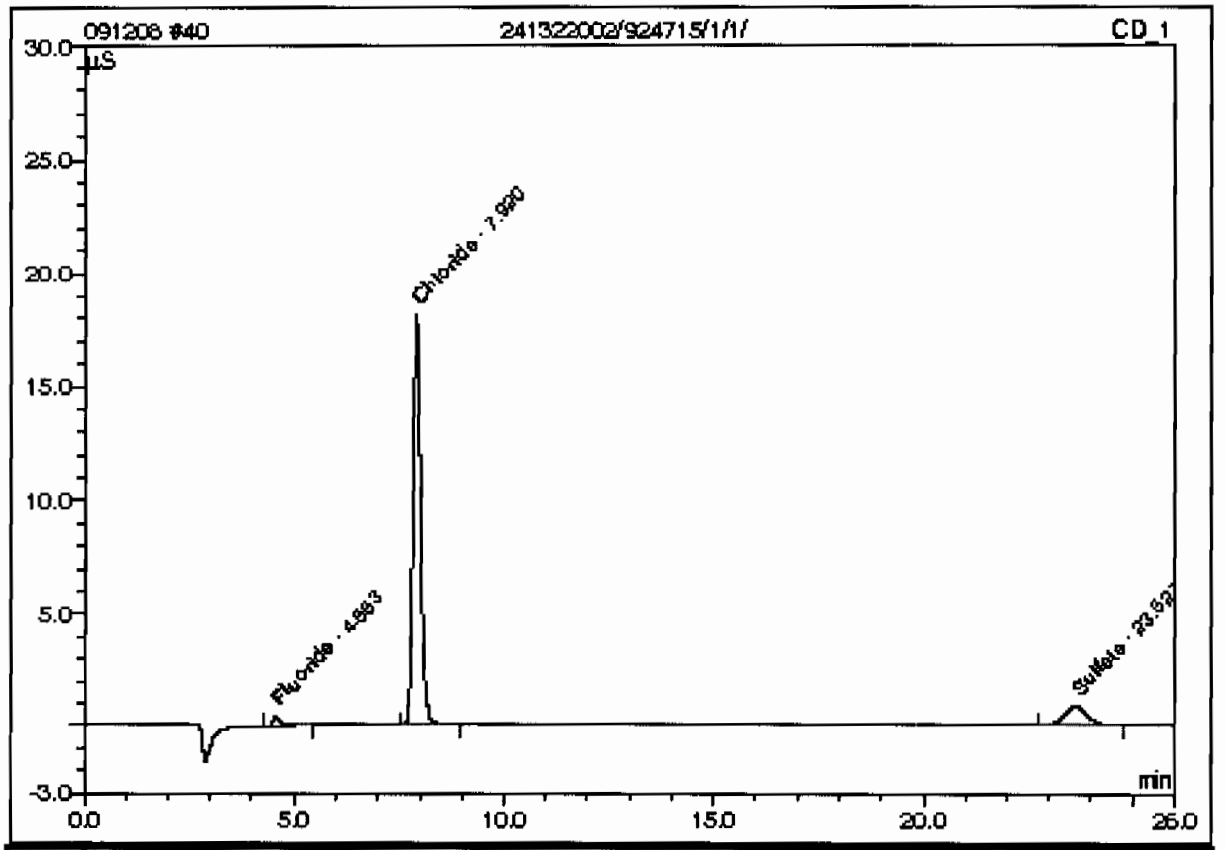

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.56	Fluoride	n.a.	0.1558		0.08264	1.85
2	7.92	Chloride	n.a.	7.8739		3.82163	85.64
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.63	Sulfate	n.a.	1.9564		0.55813	12.51
Total:				9.9862	0.000	4.462	100.00

41 241322003/924715/1/1/

Sample Name:	241322003/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 8:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

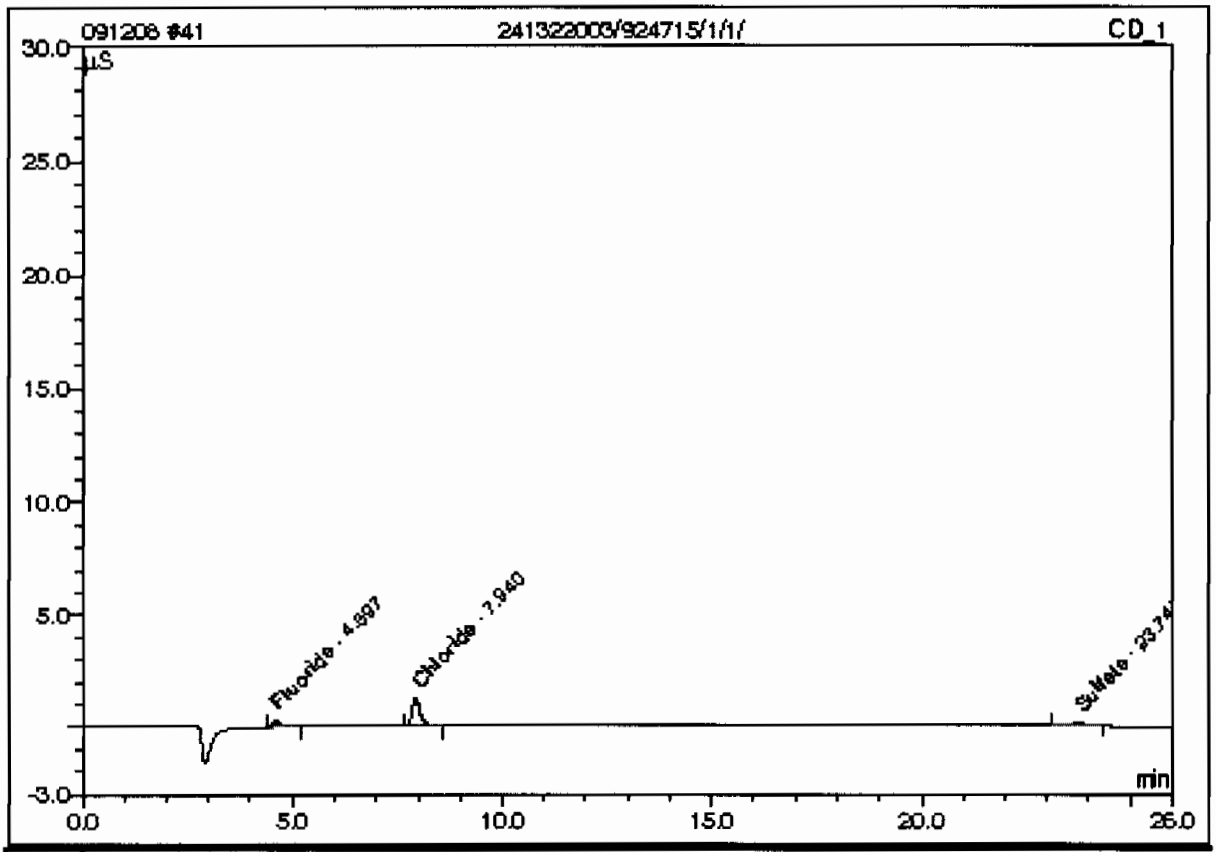

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	0.1050		0.04793	13.08
2	7.94	Chloride	n.a.	0.6322		0.26829	73.24
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.75	Sulfate	n.a.	0.4293		0.05010	13.68
Total:				1.1665	0.000	0.366	100.00

42 241322004/924715/1/1/

Sample Name:	241322004/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 8:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

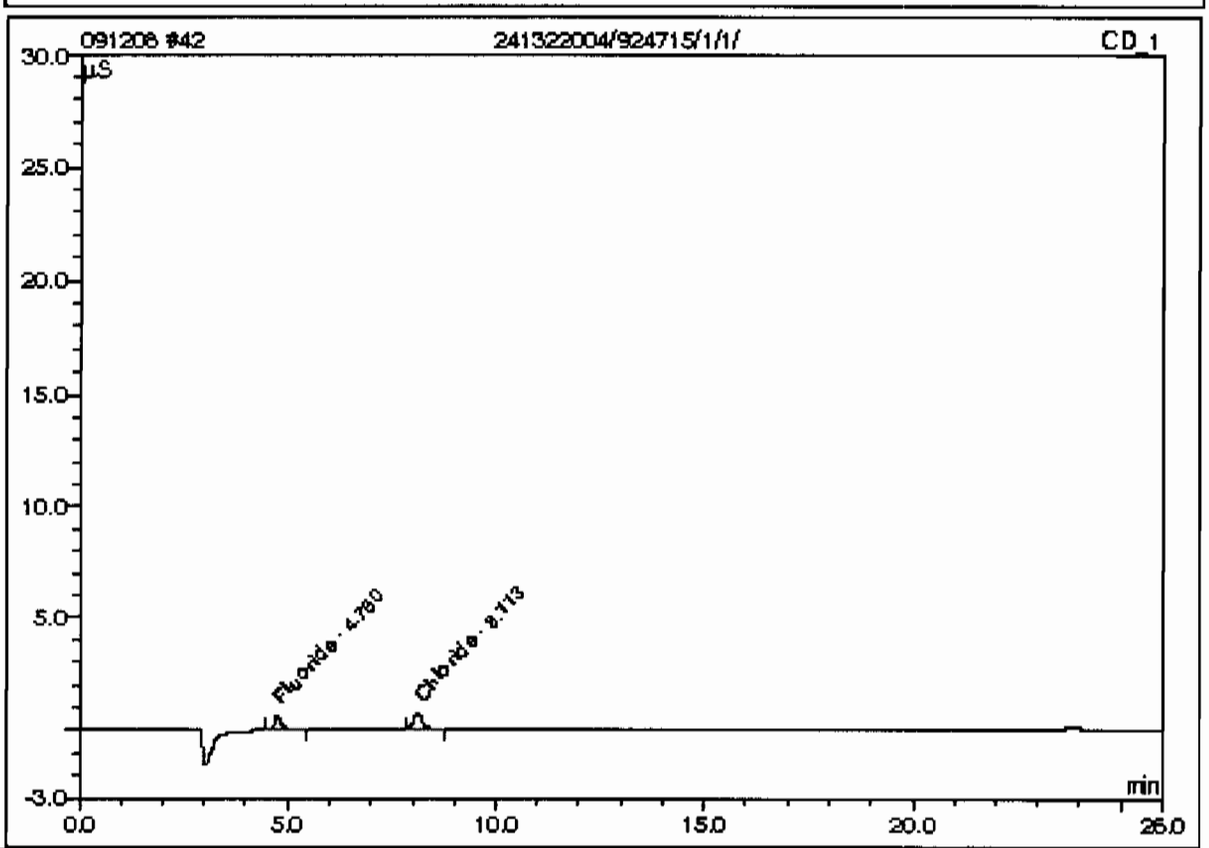

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.75	Fluoride	n.a.	0.2047		0.11603	41.81
2	8.11	Chloride	n.a.	0.4146		0.16150	58.19
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.6193	0.000	0.278	100.00

43 241322005/924715/1/1/

Sample Name:	241322005/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 9:00	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

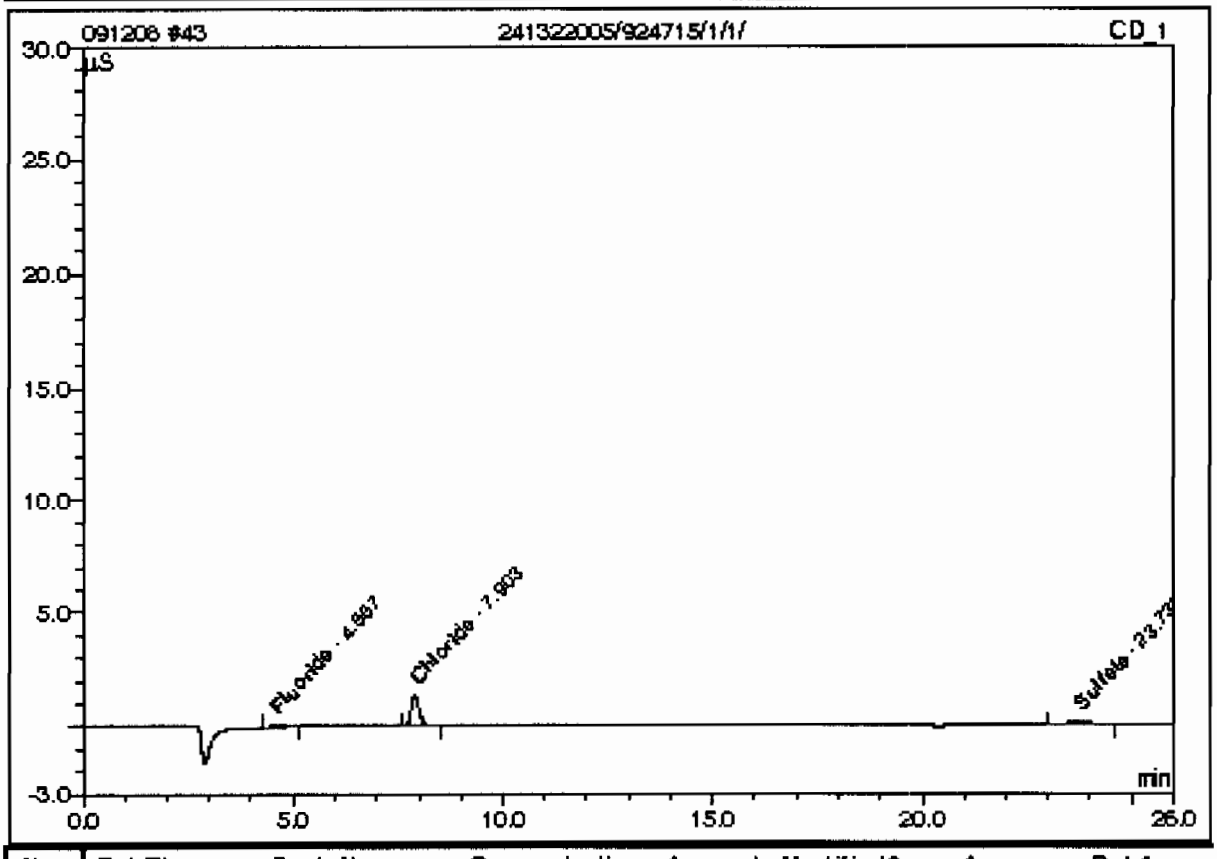

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.0648		0.02041	4.92
2	7.90	Chloride	n.a.	0.6804		0.29192	70.42
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.73	Sulfate	n.a.	0.5860		0.10224	24.66
Total:				1.3312	0.000	0.415	100.00

44 241322006/924715/1/1/

Sample Name:	241322006/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 9:26	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

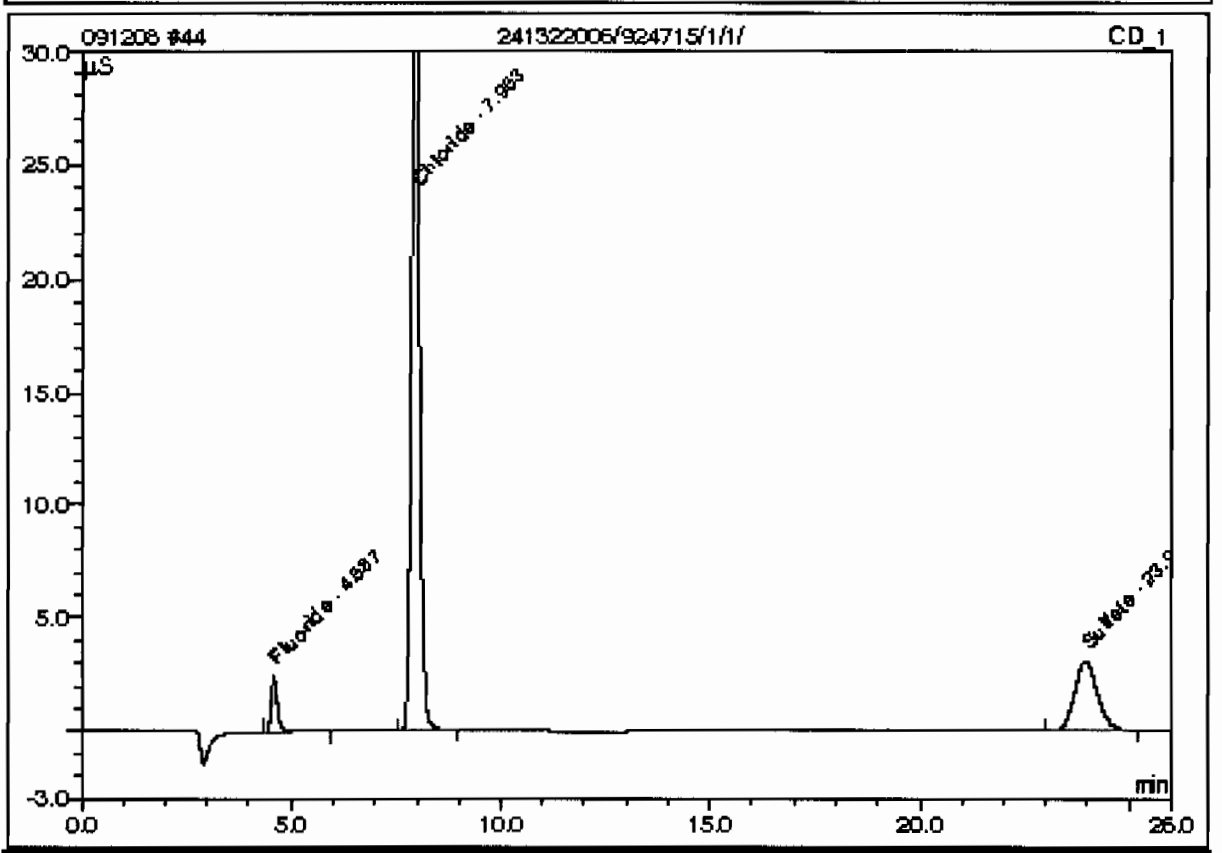

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	0.6693		0.43336	4.21
2	7.96	Chloride	n.a.	16.1935		7.90388	76.87
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.95	Sulfate	n.a.	6.1238		1.94442	18.91
Total:				22.9866	0.000	10.282	100.00

45 241322007/924715/1/1/

Sample Name:	241322007/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 9:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

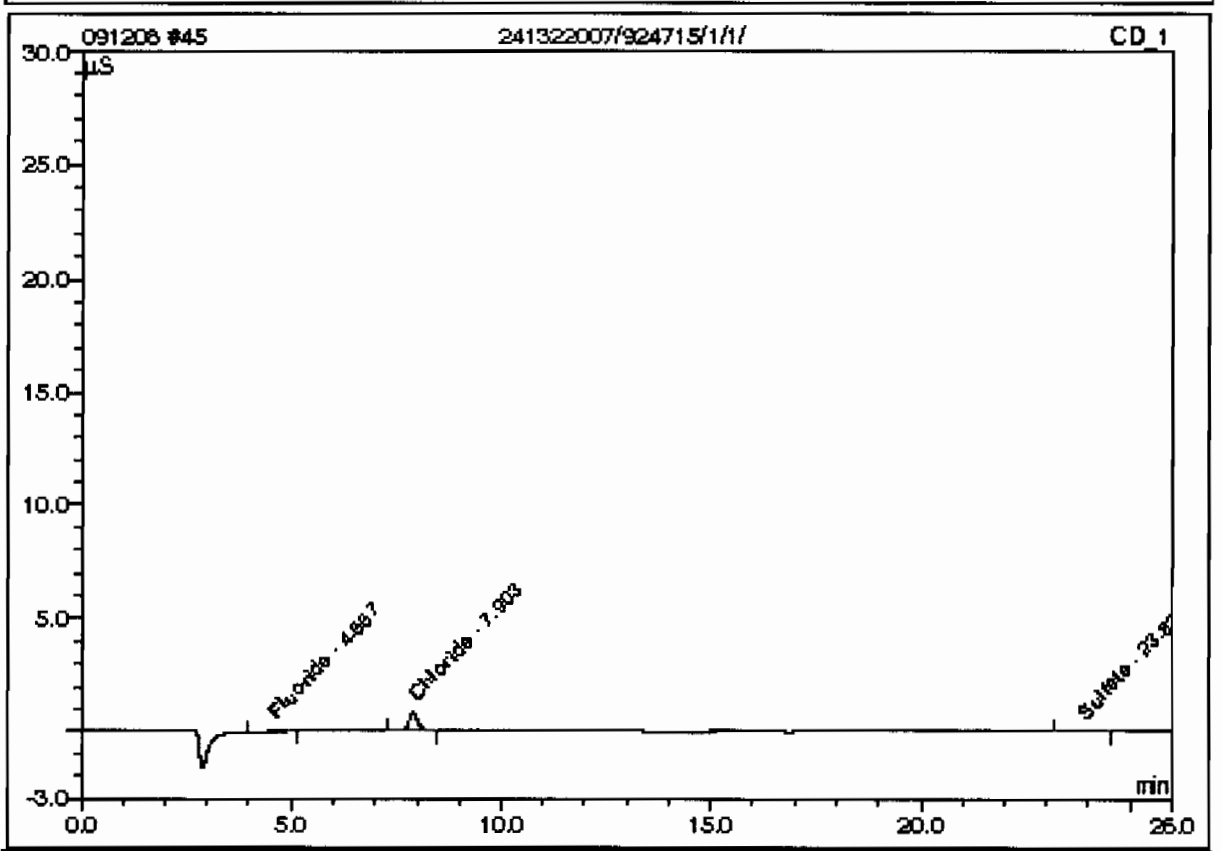

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.0644		0.02014	8.48
2	7.90	Chloride	n.a.	0.4709		0.18910	79.62
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.83	Sulfate	n.a.	0.3636		0.02826	11.90
Total:				0.8988	0.000	0.238	100.00

46 241322008/924715/1/1/

Sample Name:	241322008/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 10:18	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

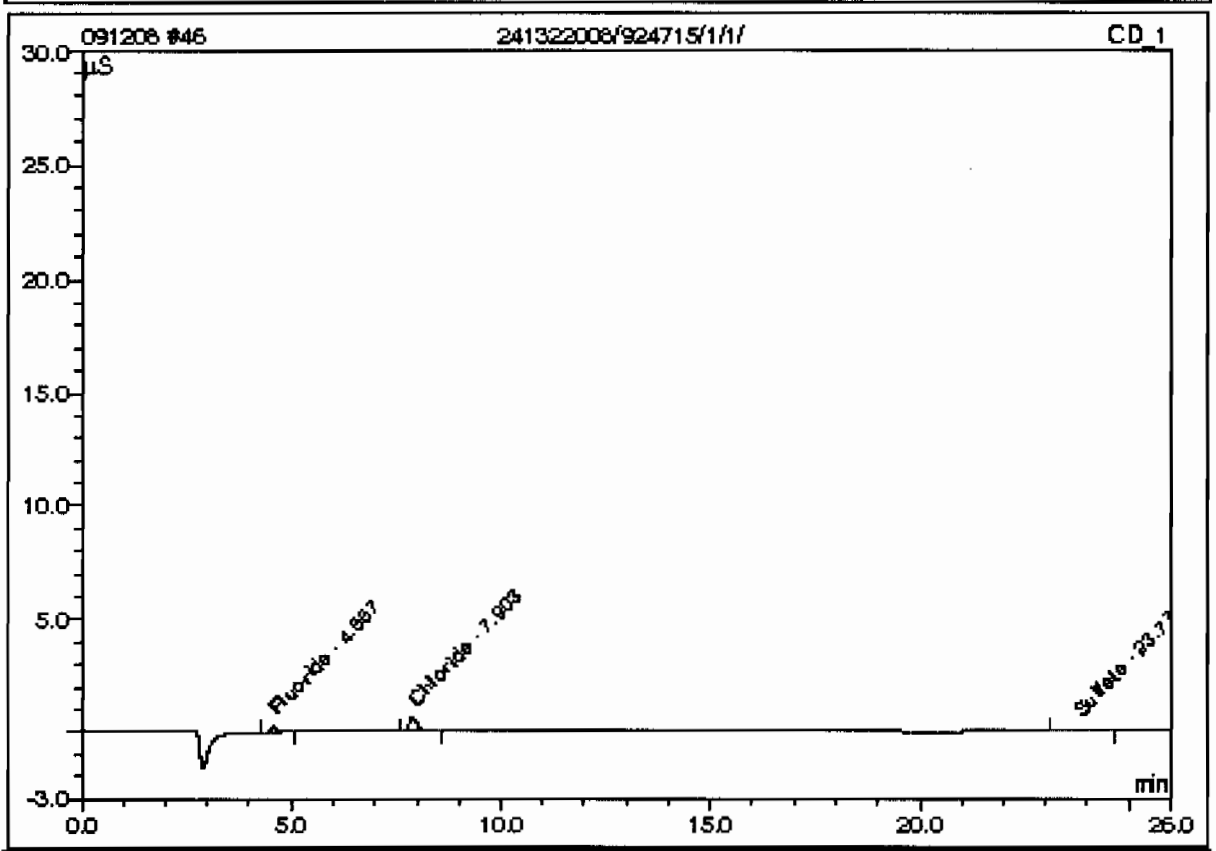

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1014		0.04547	18.12
2	7.90	Chloride	n.a.	0.3710		0.14012	55.82
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.77	Sulfate	n.a.	0.4753		0.06541	26.06
Total:				0.9477	0.000	0.251	100.00

47 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 10:44	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

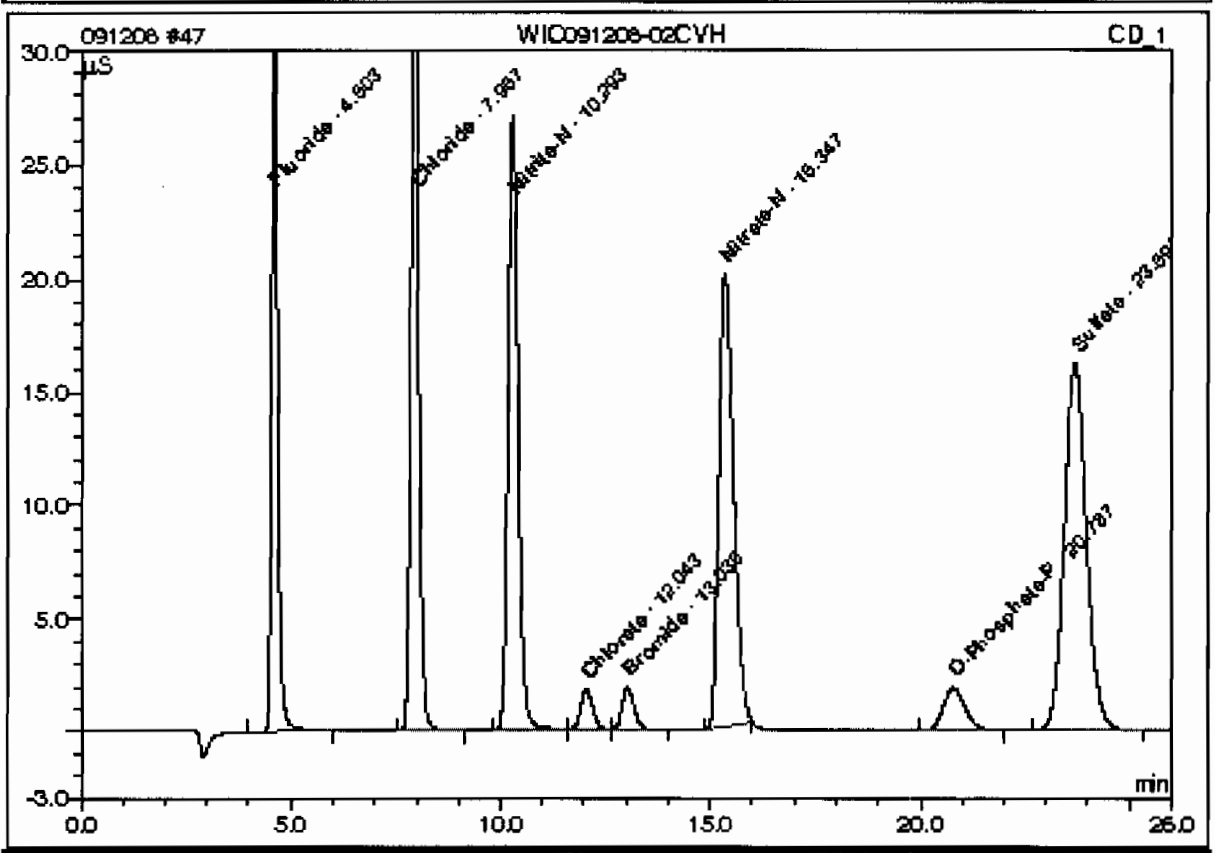

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	7.6604		5.20926	12.89
2	7.96	Chloride	n.a.	14.8760		7.25737	17.96
3	10.29	Nitrite-N	n.a.	7.5896		7.53090	18.63
4	12.04	Chlorate	n.a.	3.8376		0.59679	1.48
5	13.03	Bromide	n.a.	3.8386		0.65263	1.61
6	15.35	Nitrate-N	n.a.	7.7463		8.13053	20.12
7	20.79	O-Phosphate-P	n.a.	3.3136		1.11773	2.77
8	23.69	Sulfate	n.a.	30.1008		9.92057	24.55
Total:				78.9630	0.000	40.416	100.00

47 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 10:44	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

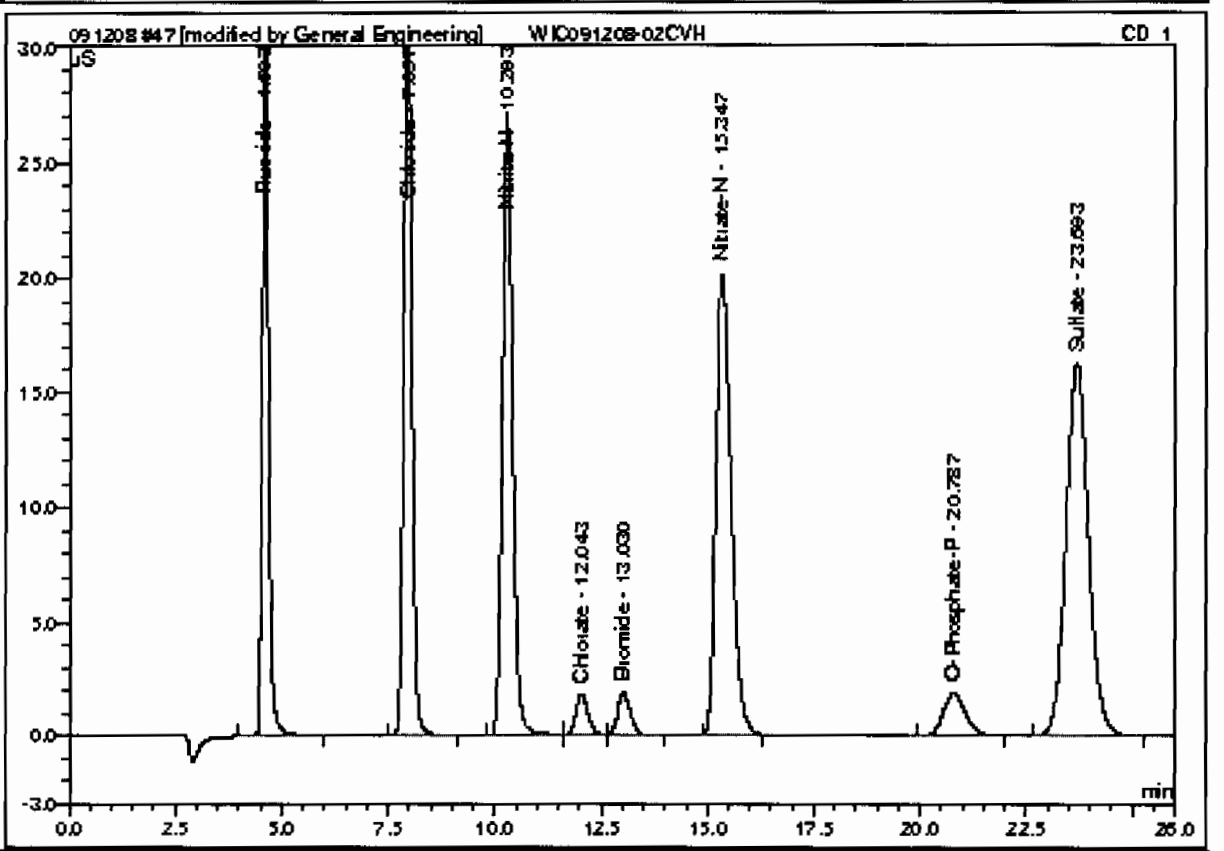

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	7.6604		5.20926	12.82
2	7.96	Chloride	n.a.	14.8760		7.25737	17.87
3	10.29	Nitrite-N	n.a.	7.5896		7.53090	18.54
4	12.04	Chlorate	n.a.	3.8376		0.59679	1.47
5	13.03	Bromide	n.a.	3.8386		0.65263	1.61
6	15.35	Nitrate-N	n.a.	7.9396		8.33594	20.52
7	20.79	O-Phosphate-P	n.a.	3.3136		1.11773	2.75
8	23.69	Sulfate	n.a.	30.1008		9.92057	24.42
Total:				79.1563	0.000	40.621	100.00

48 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 11:10	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

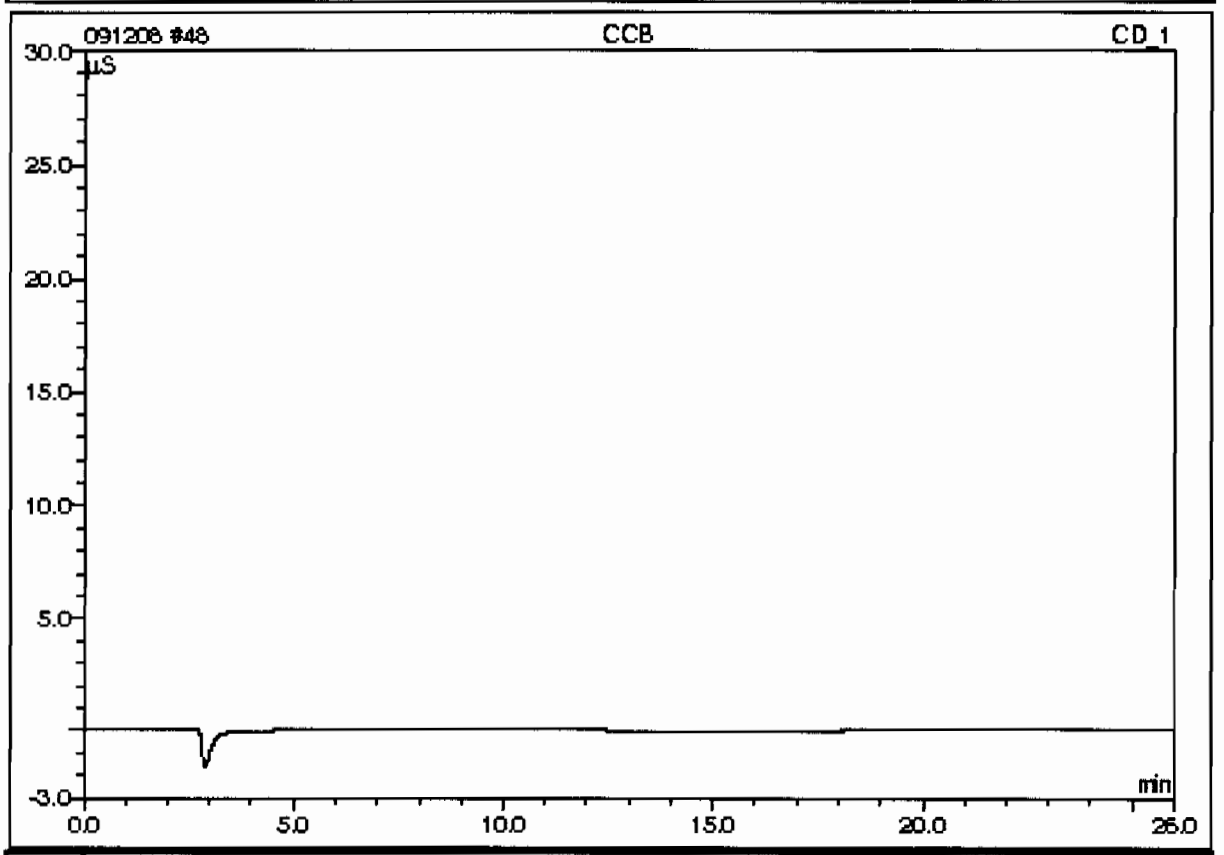

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

49 241322009/924715/1/1/

Sample Name:	241322009/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	48	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 11:36	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

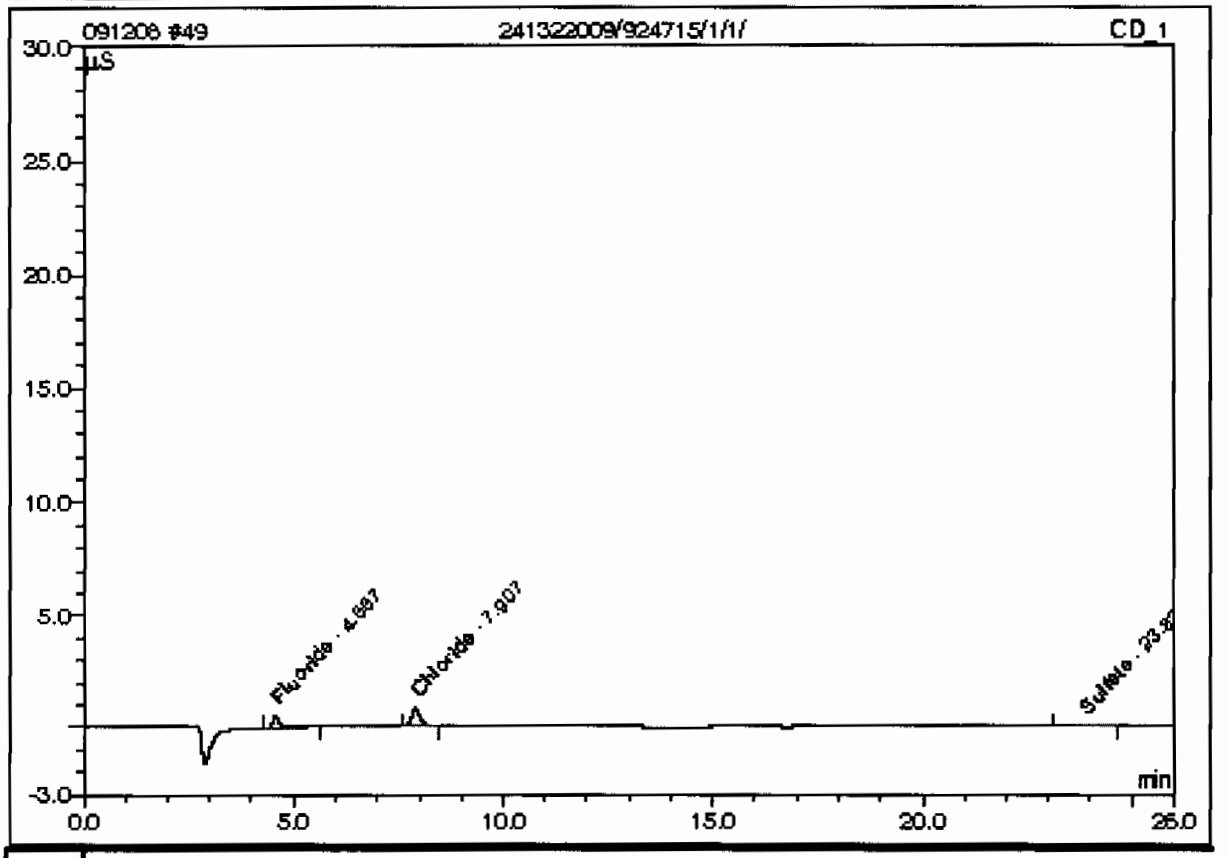

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1987		0.11190	34.02
2	7.91	Chloride	n.a.	0.4556		0.18163	55.21
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.84	Sulfate	n.a.	0.3851		0.03542	10.77
Total:				1.0394	0.000	0.329	100.00

50 241322010/924715/1/1/

Sample Name:	241322010/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 12:02	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

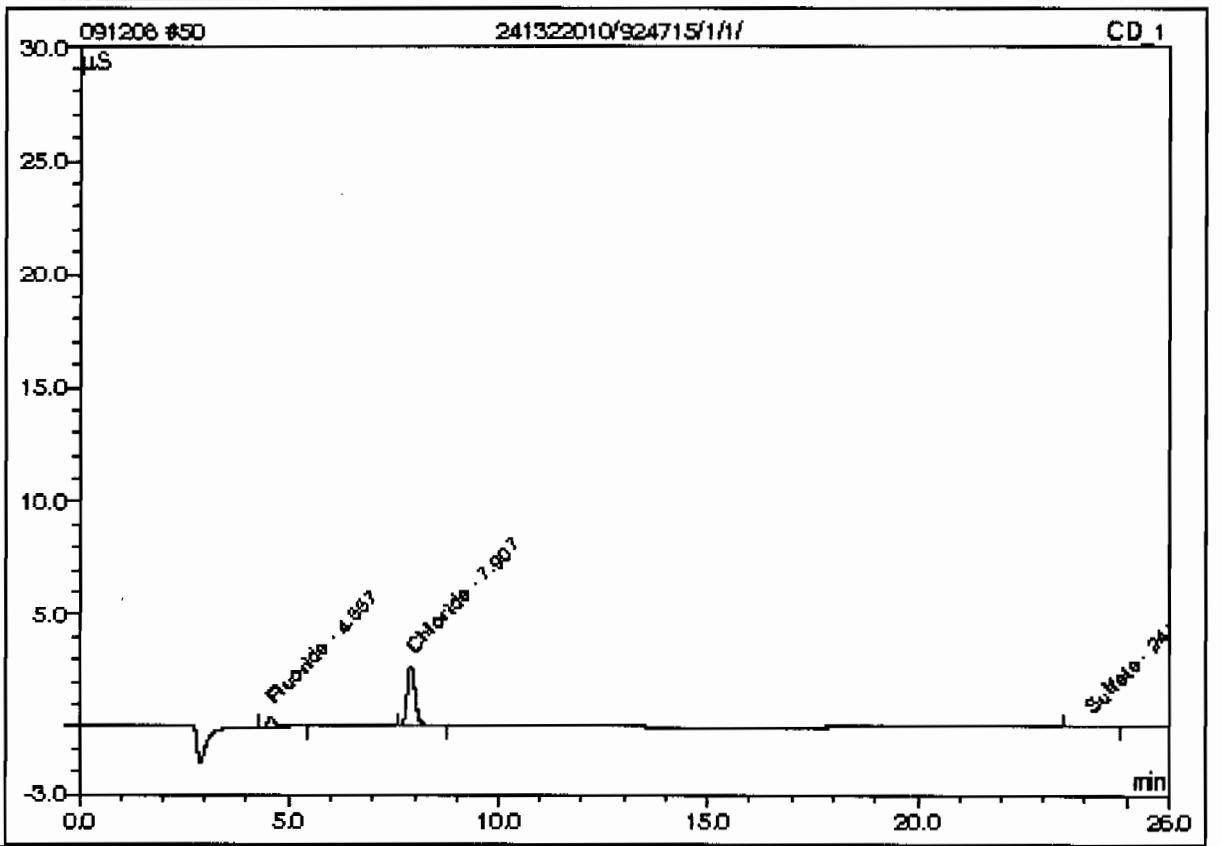

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1677		0.09072	12.31
2	7.91	Chloride	n.a.	1.3174		0.60449	82.00
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	24.10	Sulfate	n.a.	0.4049		0.04200	5.70
Total:				1.8900	0.000	0.737	100.00

51 241322011/924715/1/1/

Sample Name:	241322011/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 12:29	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

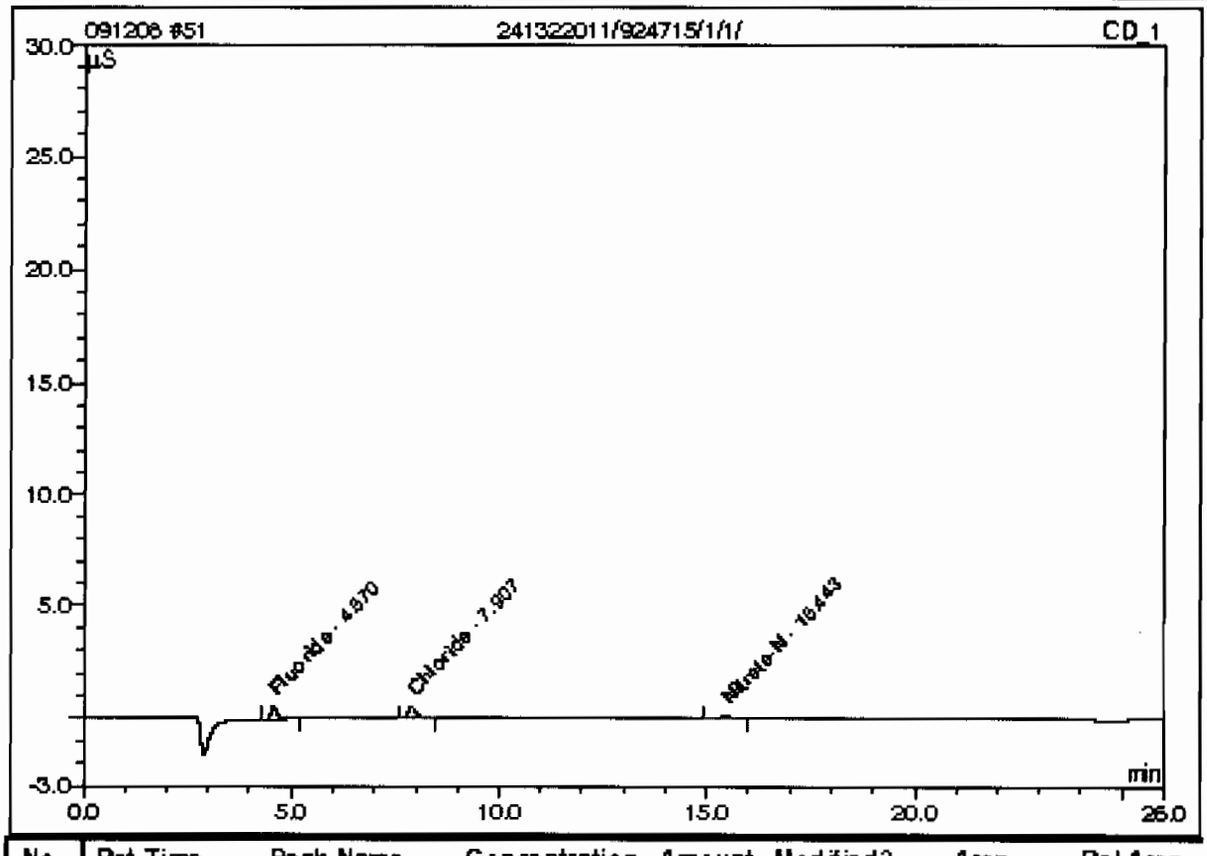

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1805		0.09948	39.52
2	7.91	Chloride	n.a.	0.3085		0.10946	43.49
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	15.44	Nitrate-N	n.a.	0.1377		0.04277	16.99
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.6268	0.000	0.252	100.00

52 1201984519/924715/1/1/DUP

Sample Name:	1201984519/924715/1/1/DUP	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 12:55	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

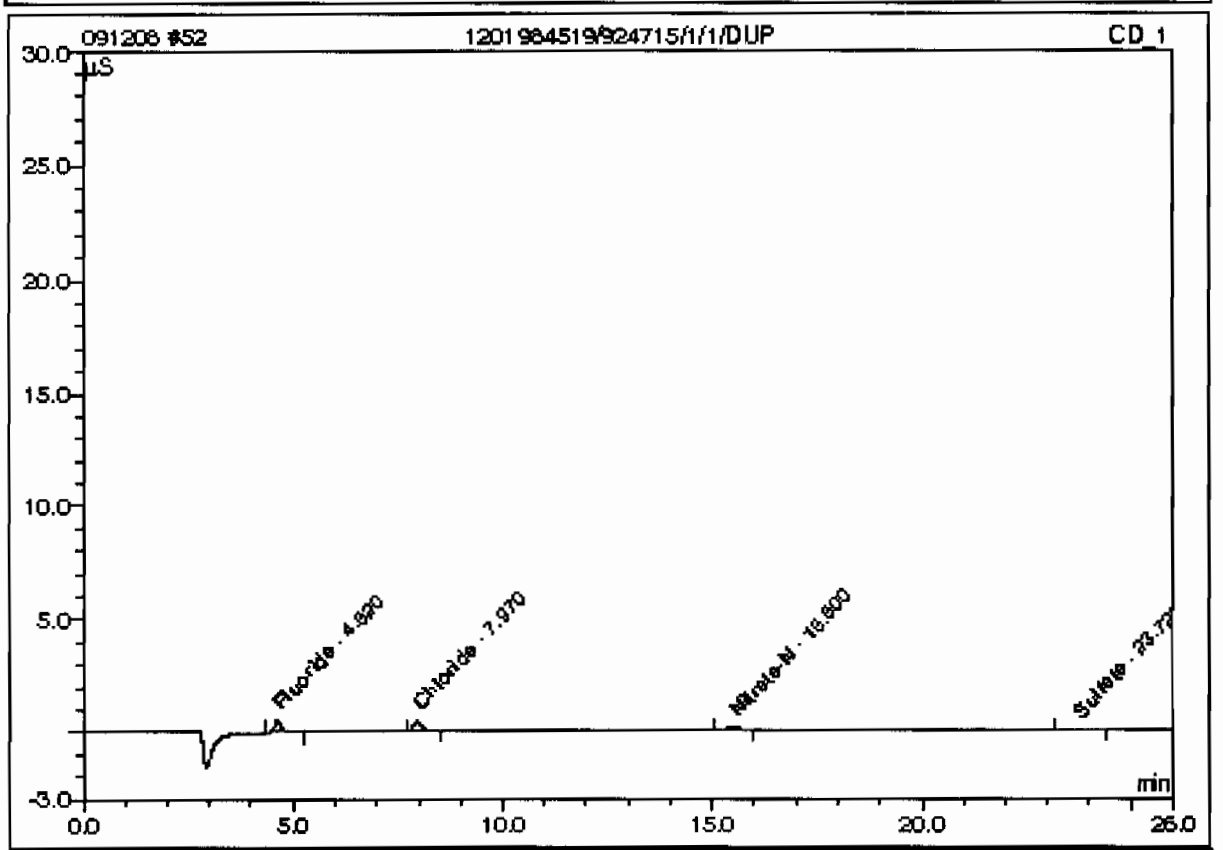

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.62	Fluoride	n.a.	0.1751		0.09580	37.38
2	7.97	Chloride	n.a.	0.2891		0.09994	39.00
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	15.50	Nitrate-N	n.a.	0.1358		0.04076	15.91
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	23.72	Sulfate	n.a.	0.3380		0.01976	7.71
Total:				0.9381	0.000	0.256	100.00

53 1201984521/924715/1/1/MS

Sample Name:	1201984521/924715/1/1/MS	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:21	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

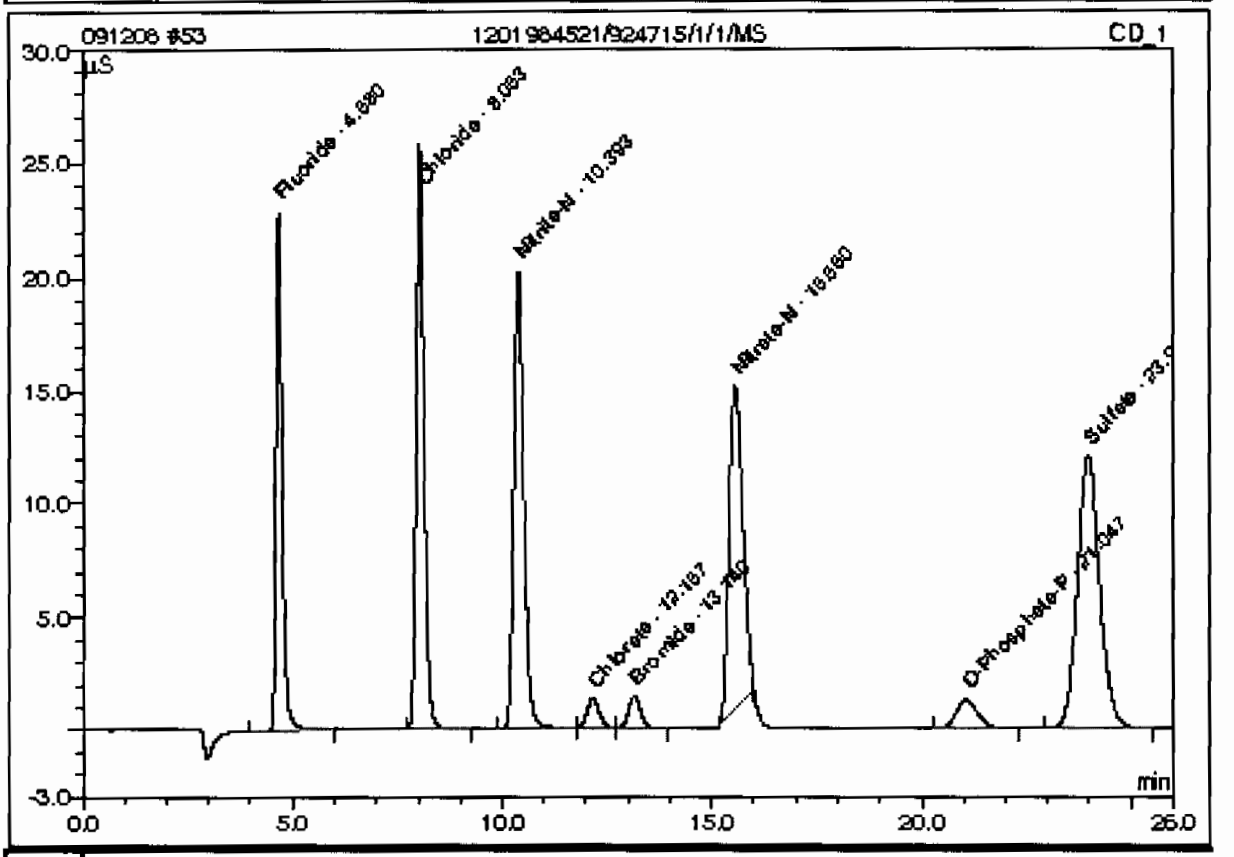

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.68	Fluoride	n.a.	5.7478		3.90265	13.17
2	8.05	Chloride	n.a.	11.1800		5.44383	18.37
3	10.39	Nitrite-N	n.a.	5.7080		5.64623	19.06
4	12.16	Chlorate	n.a.	3.0425		0.47155	1.59
5	13.14	Bromide	n.a.	3.0268		0.51335	1.73
6	15.56	Nitrate-N	n.a.	5.2290		5.45464	18.41
7	21.05	O-Phosphate-P	n.a.	2.3185		0.77458	2.61
8	23.97	Sulfate	n.a.	22.5853		7.42048	25.05
Total:				58.8379	0.000	29.627	100.00

53 1201984521/924715/1/1/MS

Sample Name:	1201984521/924715/1/1/MS	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:21	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

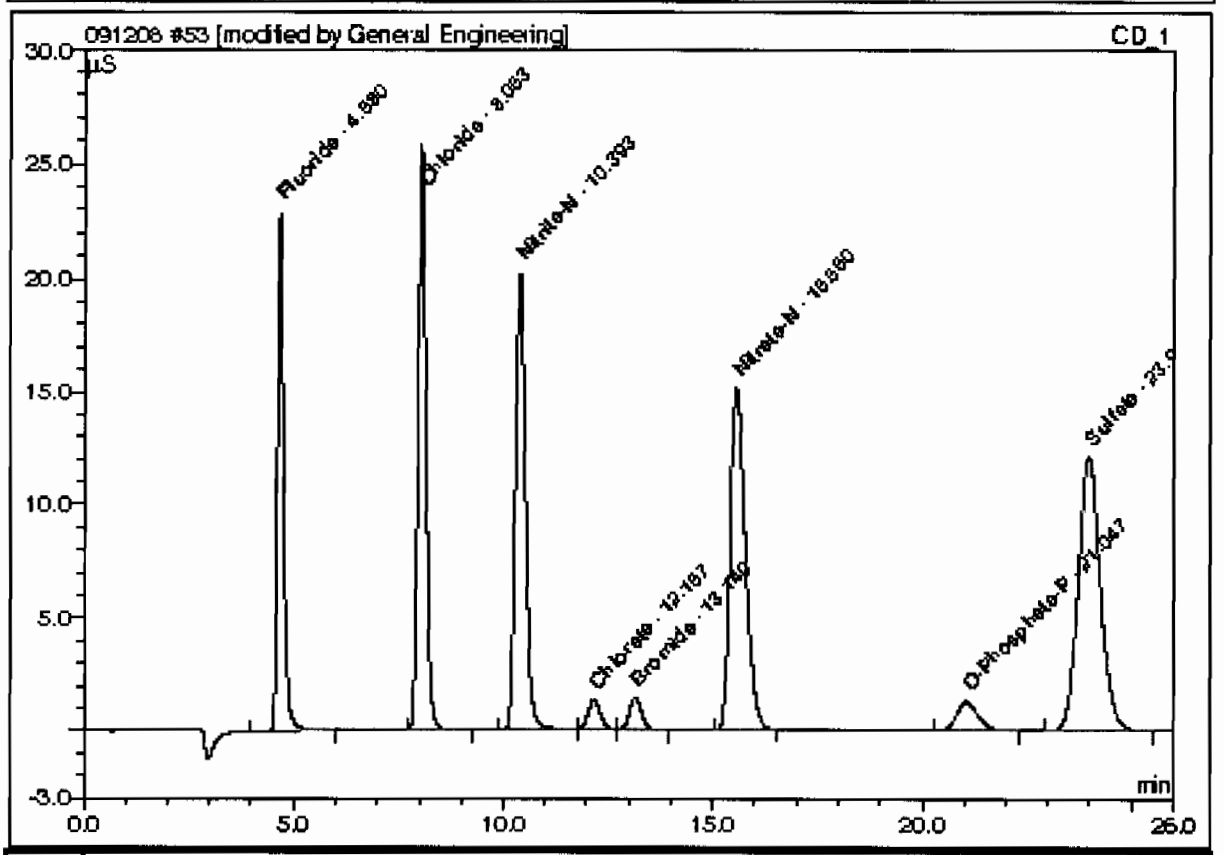

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.68	Fluoride	n.a.	5.7478		3.90265	12.77
2	8.05	Chloride	n.a.	11.1800		5.44383	17.81
3	10.39	Nitrite-N	n.a.	5.7080		5.64623	18.47
4	12.16	Chlorate	n.a.	3.0425		0.47155	1.54
5	13.14	Bromide	n.a.	3.0268		0.51335	1.68
6	15.56	Nitrate-N	n.a.	6.1095		6.39061	20.91
7	21.05	O-Phosphate-P	n.a.	2.3185		0.77458	2.53
8	23.97	Sulfate	n.a.	22.5853		7.42048	24.28
Total:				59.7184	0.000	30.563	100.00

54 1201984523/924715/1/1/MSD

Sample Name:	1201984523/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:47	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

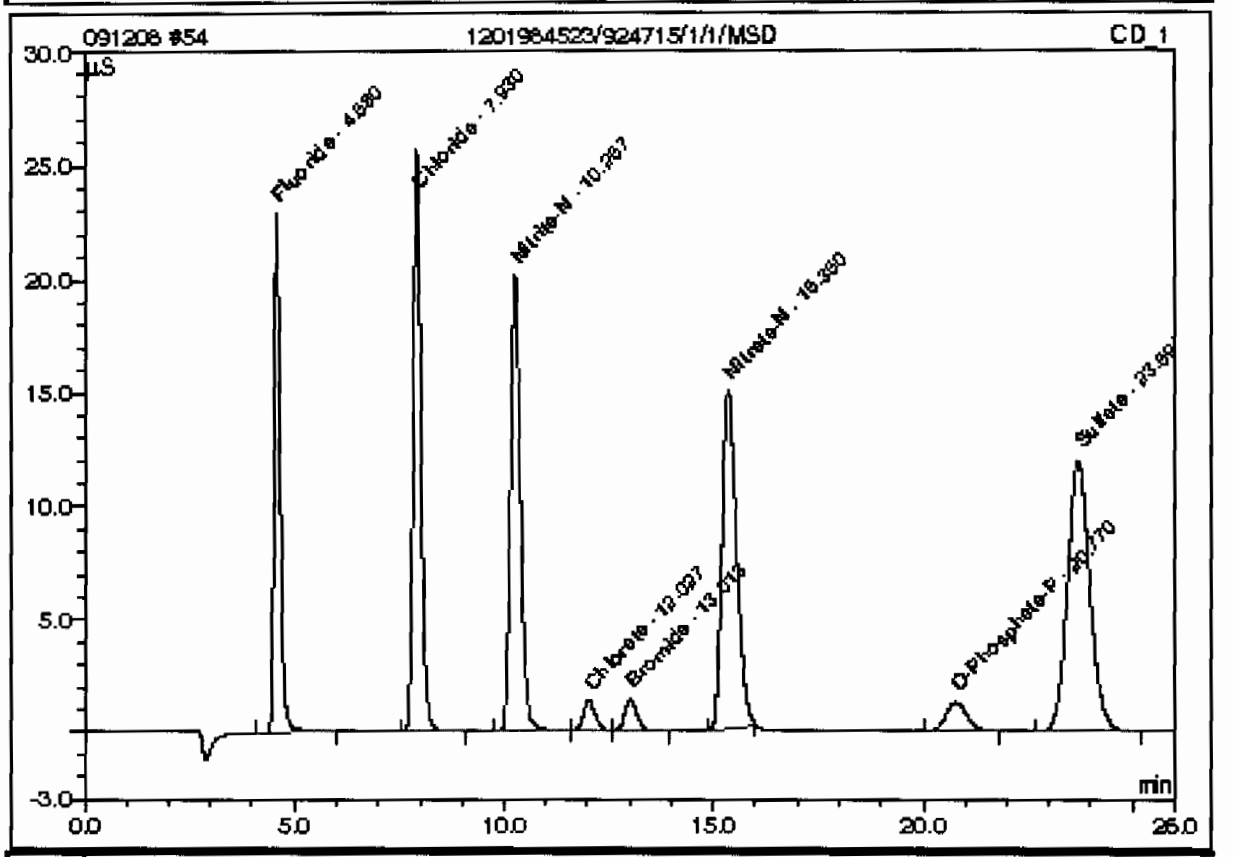

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.6654		3.84637	12.78
2	7.93	Chloride	n.a.	11.1337		5.42110	18.02
3	10.27	Nitrite-N	n.a.	5.6813		5.61946	18.68
4	12.03	Chlorate	n.a.	2.9641		0.45919	1.53
5	13.01	Bromide	n.a.	2.9436		0.49907	1.66
6	15.35	Nitrate-N	n.a.	5.7989		6.06047	20.14
7	20.77	O-Phosphate-P	n.a.	2.3127		0.77259	2.57
8	23.70	Sulfate	n.a.	22.5555		7.41058	24.63
Total:				59.0552	0.000	30.089	100.00

54 1201984523/924715/1/1/MSD

Sample Name:	1201984523/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 13:47	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

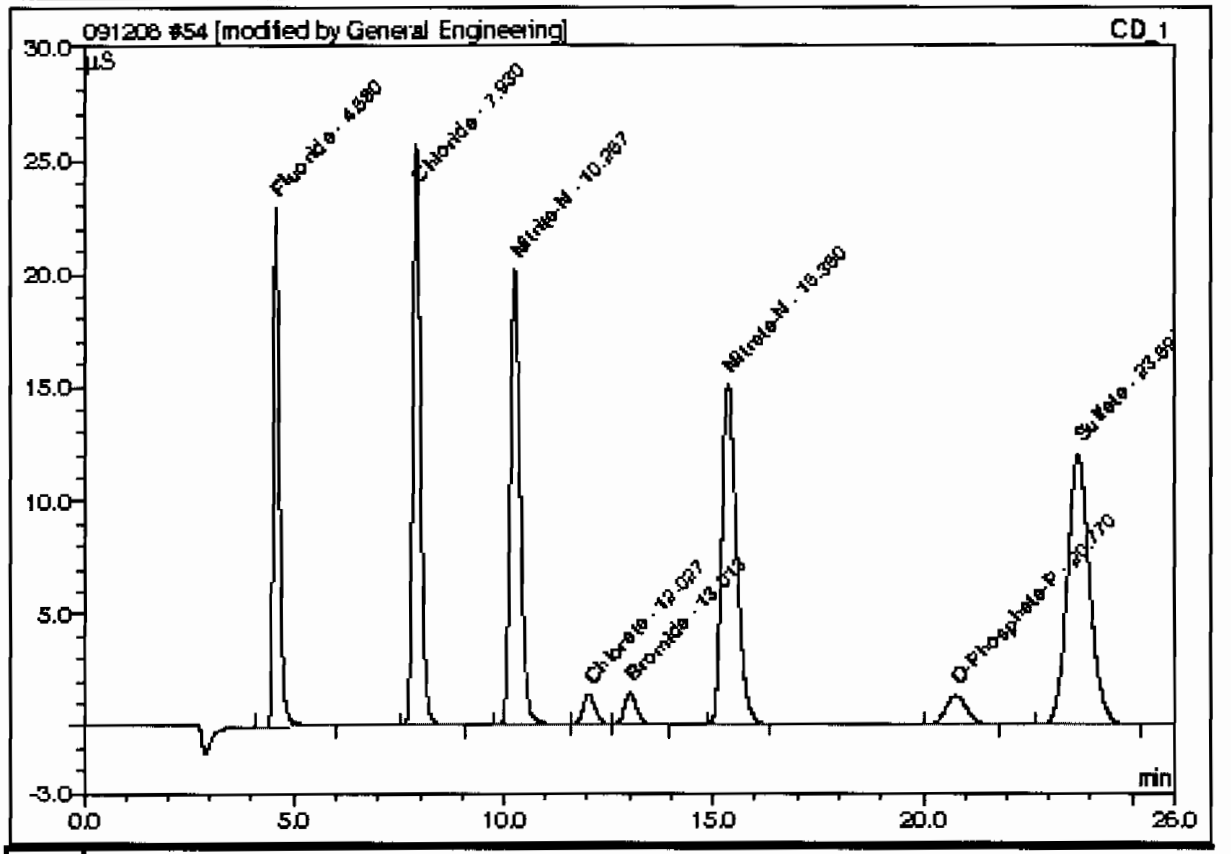

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.6654		3.84637	12.72
2	7.93	Chloride	n.a.	11.1337		5.42110	17.93
3	10.27	Nitrite-N	n.a.	5.6813		5.61946	18.58
4	12.03	Chlorate	n.a.	2.9641		0.45919	1.52
5	13.01	Bromide	n.a.	2.9436		0.49907	1.65
6	15.35	Nitrate-N	n.a.	5.9384		6.20878	20.53
7	20.77	O-Phosphate-P	n.a.	2.3127		0.77259	2.56
8	23.70	Sulfate	n.a.	22.5555		7.41058	24.51
Total:				59.1947	0.000	30.237	100.00

55 241322012/924715/1/1/

Sample Name:	241322012/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 14:13	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

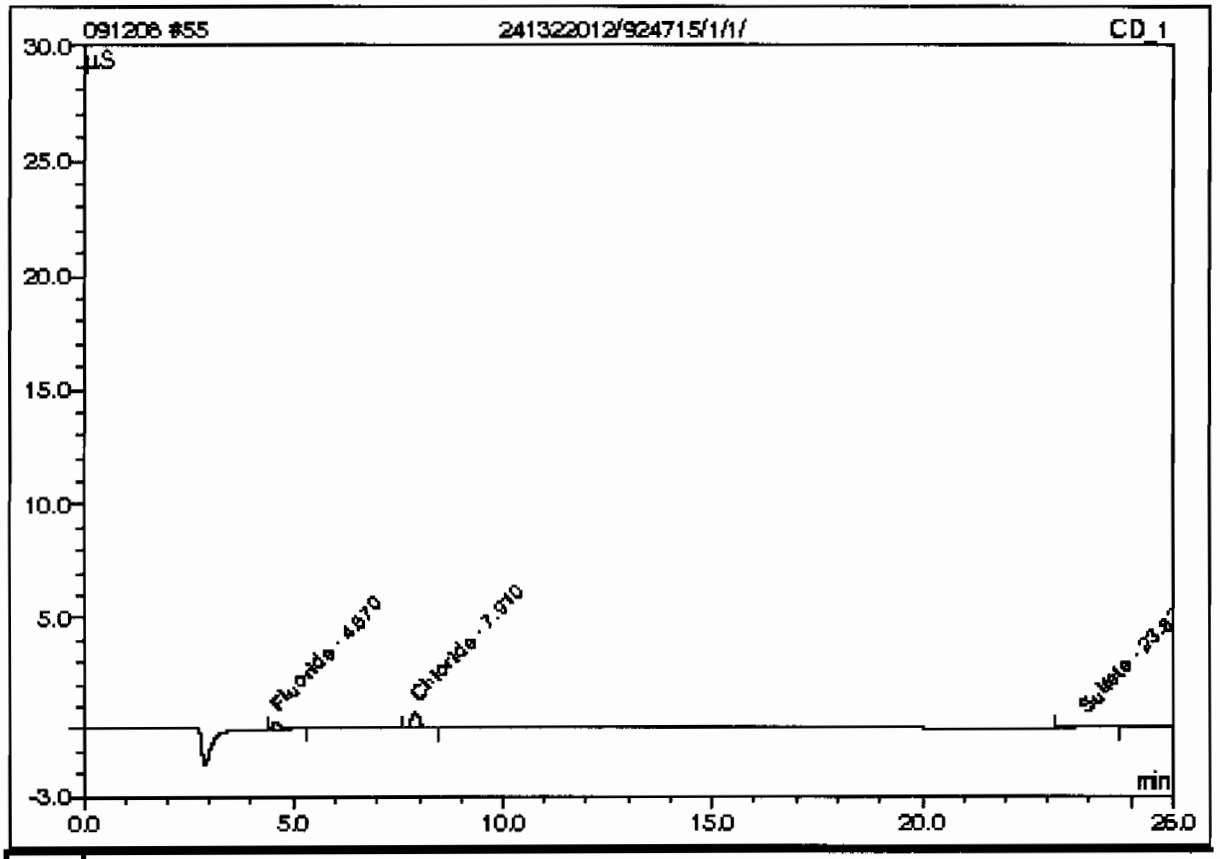

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1205		0.05848	20.16
2	7.91	Chloride	n.a.	0.4122		0.16033	55.27
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.84	Sulfate	n.a.	0.4928		0.07125	24.56
Total:				1.0255	0.000	0.290	100.00

57 241336002/924715/1/1/

Sample Name:	241336002/924715/1/1/	*Injection Volume:*	50.0
Vial Number:	49	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:05	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

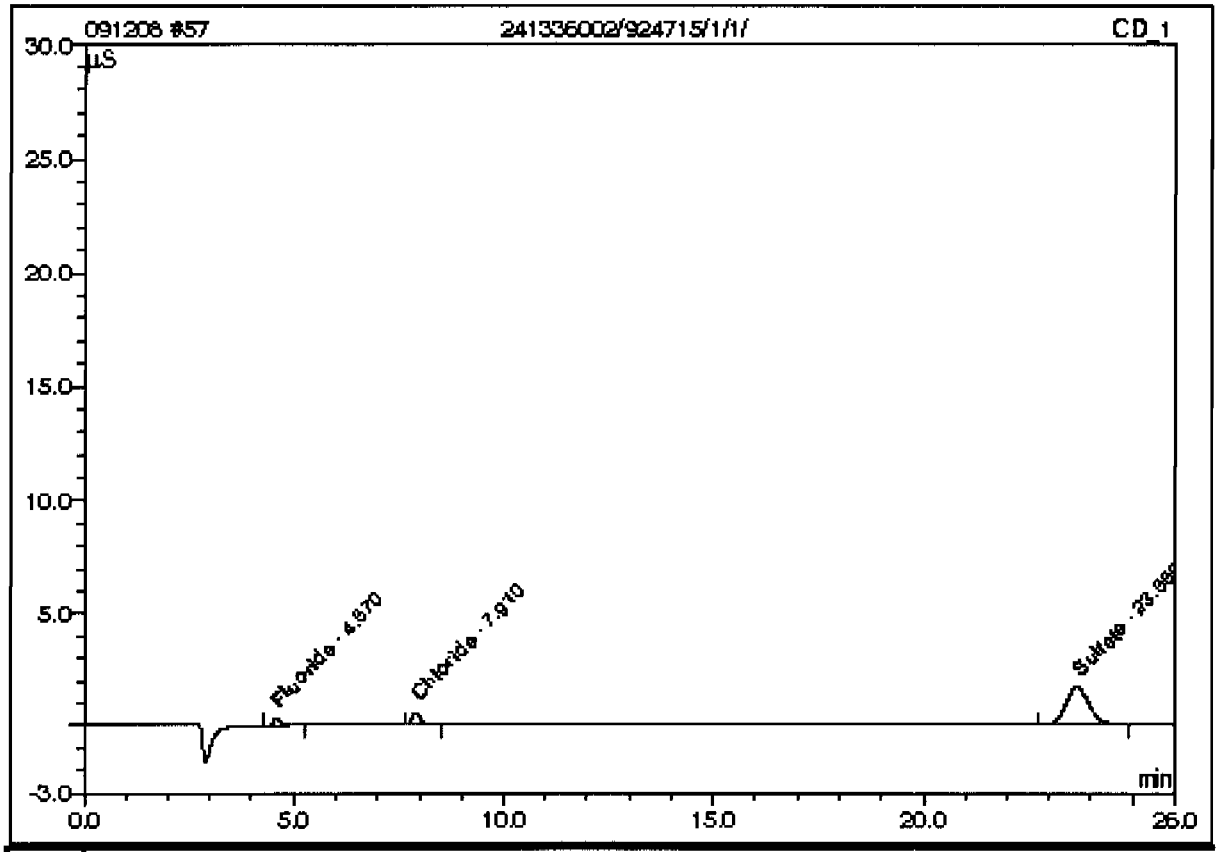

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1256		0.06197	4.89
2	7.91	Chloride	n.a.	0.3486		0.12911	10.18
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.66	Sulfate	n.a.	3.5175		1.07744	84.94
Total:				3.9917	0.000	1.269	100.00

58 1201984518/924715/1/1/DUP

Sample Name:	1201984518/924715/1/1/DUP	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:31	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

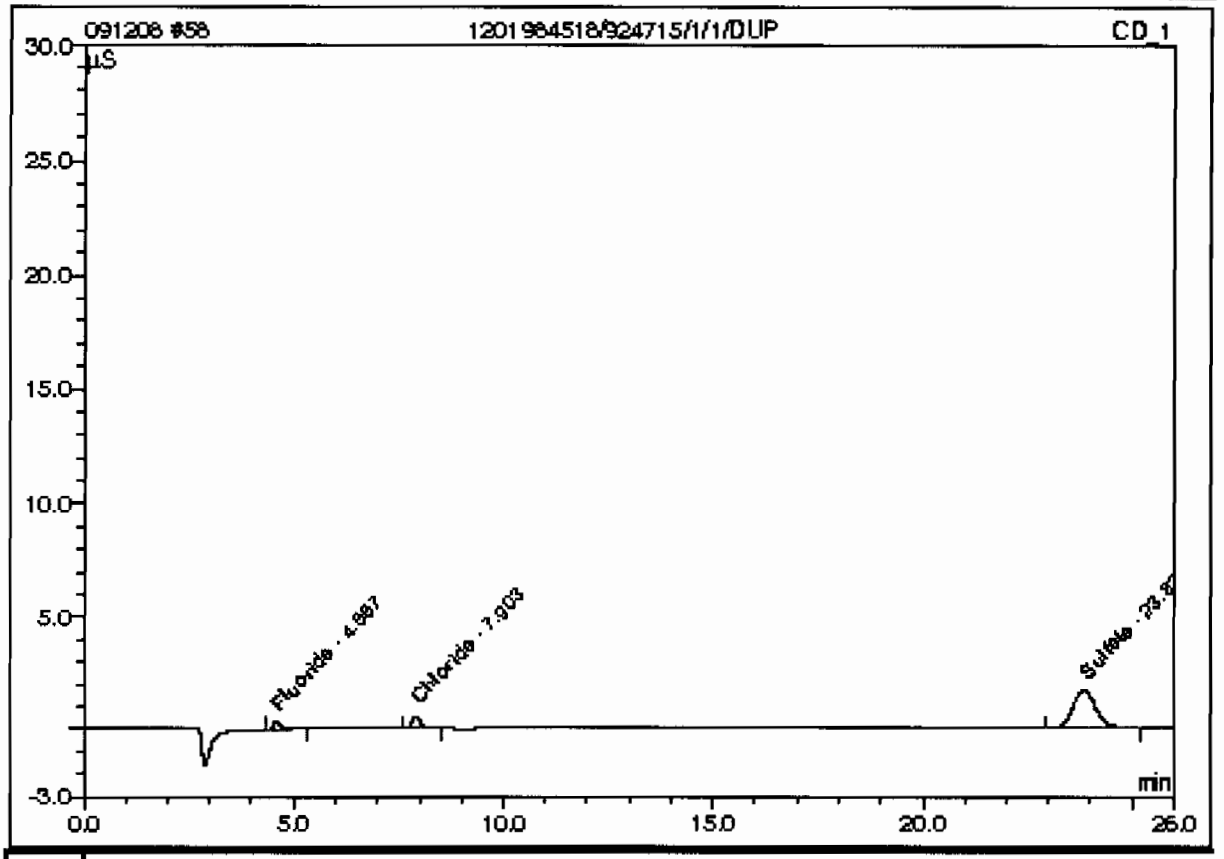

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.57	Fluoride	n.a.	0.1264		0.06251	4.91
2	7.90	Chloride	n.a.	0.3494		0.12949	10.18
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.84	Sulfate	n.a.	3.5262		1.08034	84.91
Total:				4.0020	0.000	1.272	100.00

59 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

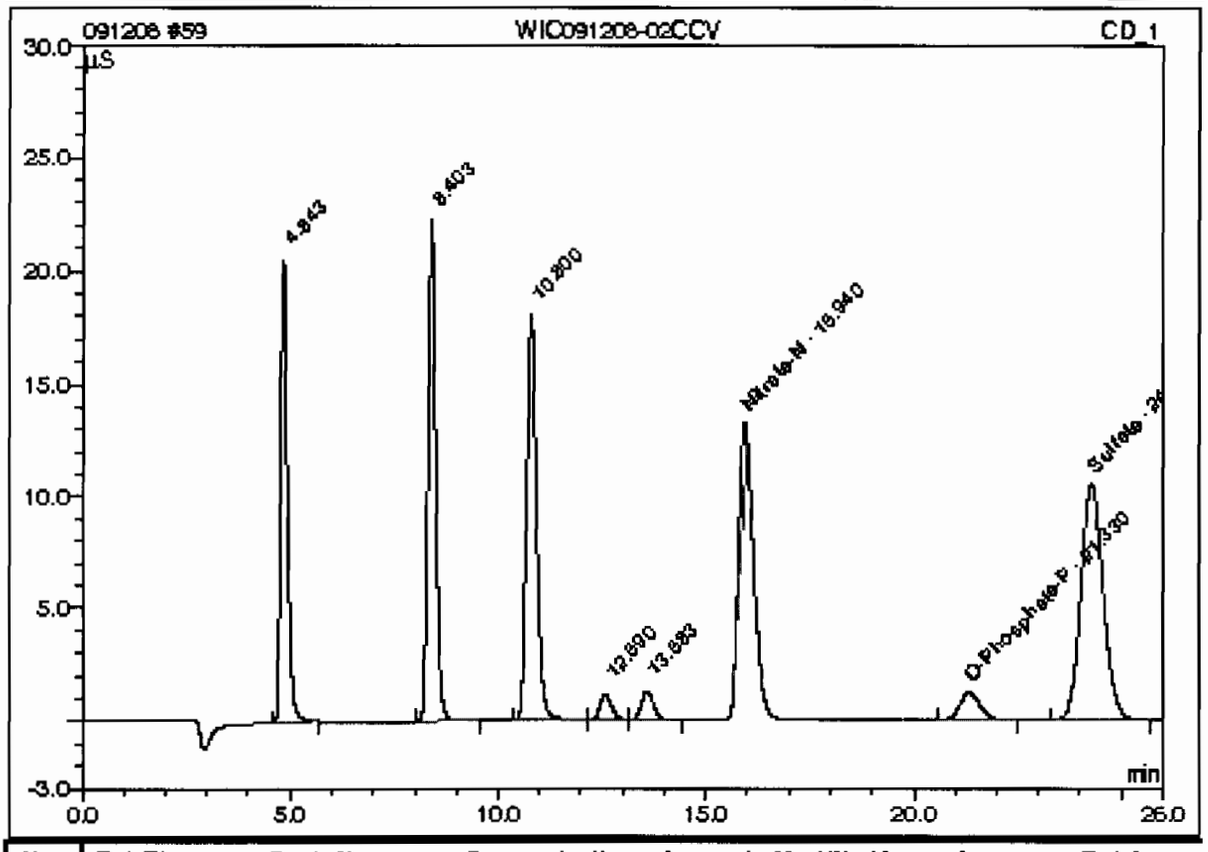

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
6	15.94	Nitrate-N	n.a.	0.7290		0.67132	3.00
7	21.33	O-Phosphate-P	n.a.	2.0944		0.69730	3.12
8	24.28	Sulfate	n.a.	19.7744		6.48540	29.02
Total:				22.5978	0.000	7.854	35.15

59 WIC091208-02CCV

Sample Name:	WIC091208-02CCV	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 15:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

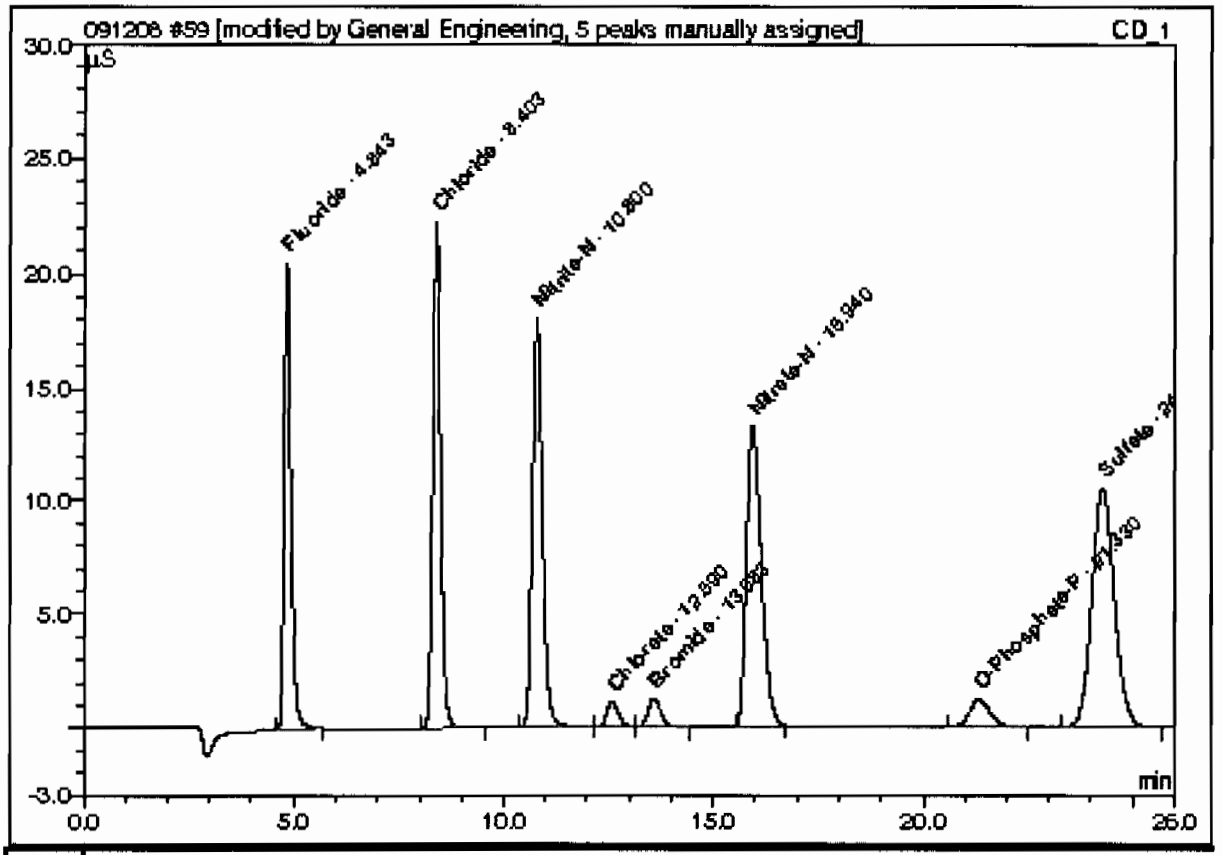

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.84	Fluoride	n.a.	5.5637		3.77689	13.96
2	8.40	Chloride	n.a.	9.9162		4.82374	17.83
3	10.80	Nitrite-N	n.a.	5.1299		5.06721	18.73
4	12.59	Chlorate	n.a.	2.4883		0.38423	1.42
5	13.58	Bromide	n.a.	2.6018		0.44043	1.63
6	15.94	Nitrate-N	n.a.	5.1618		5.38323	19.89
7	21.33	O-Phosphate-P	n.a.	2.0944		0.69730	2.58
8	24.28	Sulfate	n.a.	19.7744		6.48540	23.97
Total:				52.7305	0.000	27.058	100.00

60 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 16:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

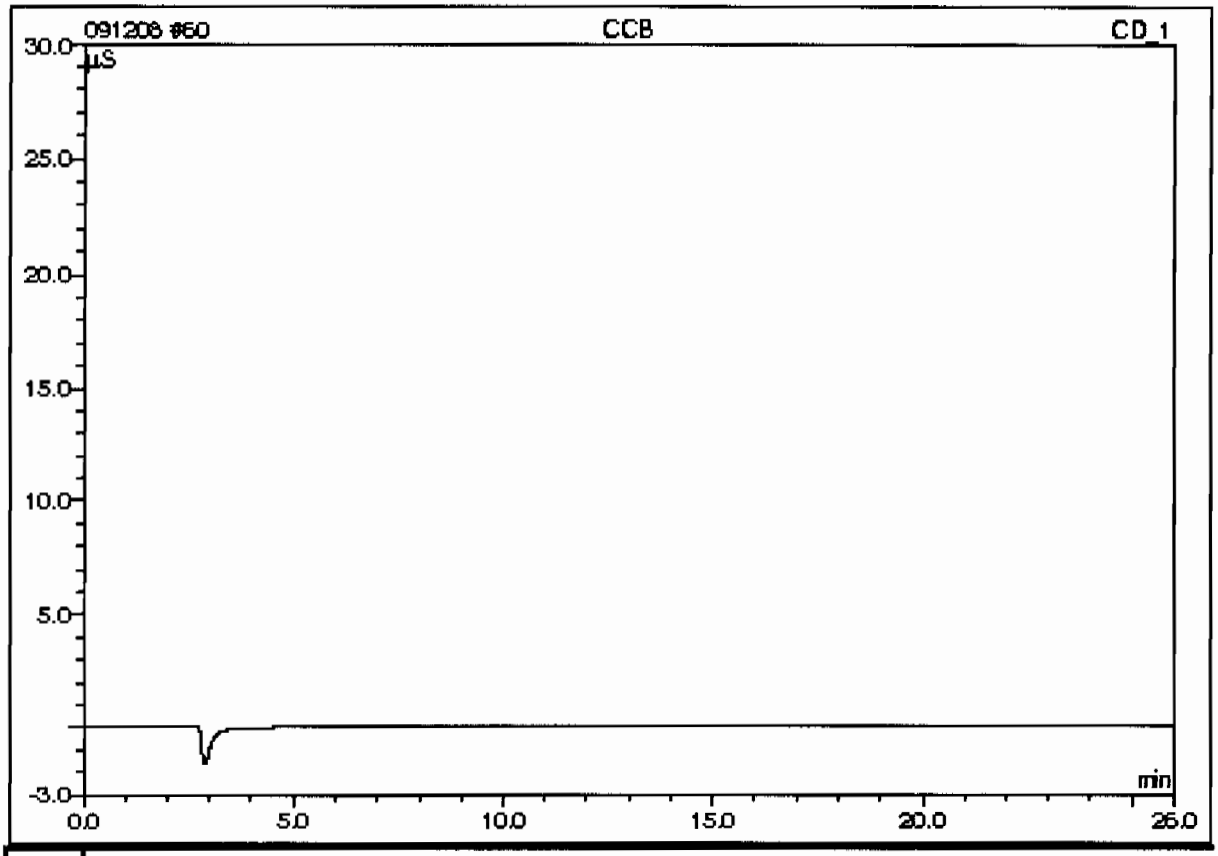

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

61 1201984520/924715/1/1/MS

Sample Name:	1201984520/924715/1/1/MS	*Injection Volume:*	50.0
Vial Number:	50	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 16:50	Analyst:	VH1
Run Time (min):	24.90	Column:	AS23-002588;GLGCE086;300;9056

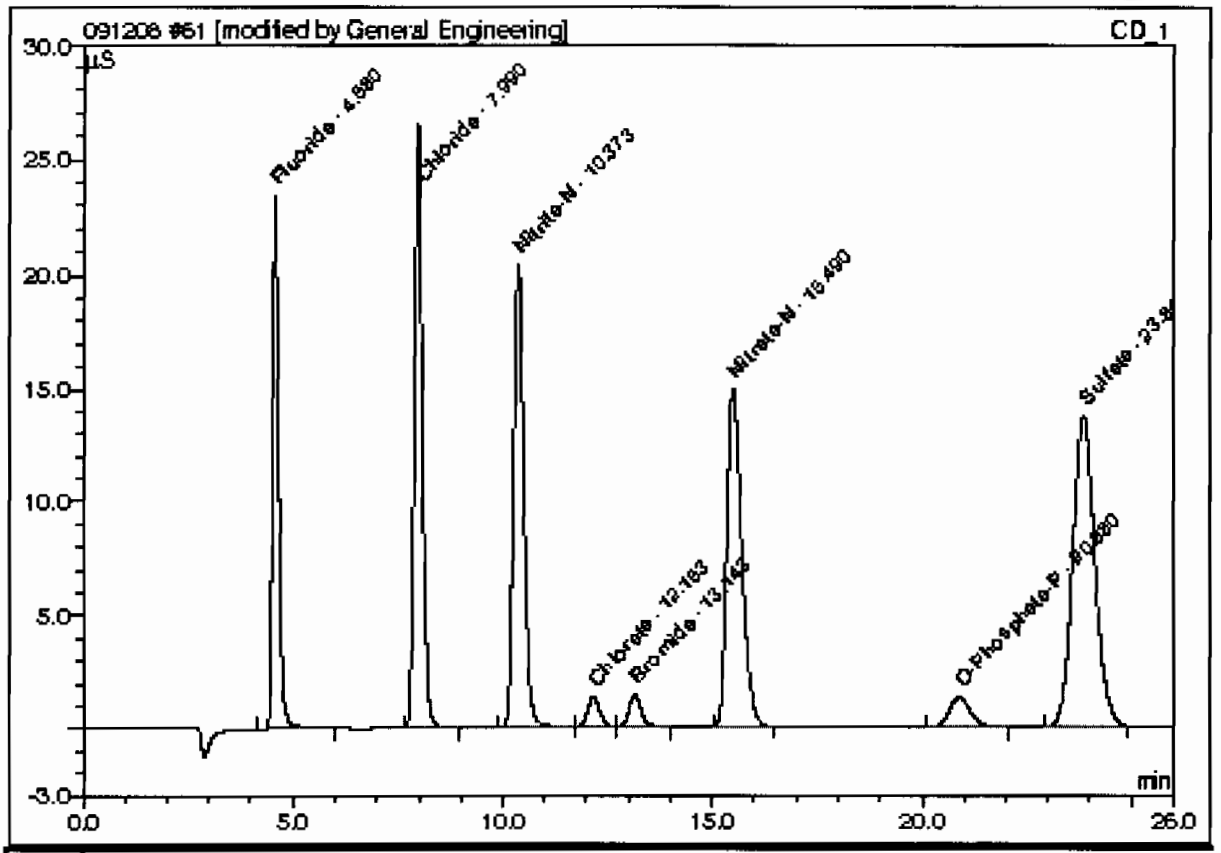

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.7909		3.93213	12.40
2	7.99	Chloride	n.a.	11.7509		5.72397	18.04
3	10.37	Nitrite-N	n.a.	5.8100		5.74840	18.12
4	12.15	Chlorate	n.a.	3.0025		0.46523	1.47
5	13.14	Bromide	n.a.	2.9866		0.50644	1.60
6	15.49	Nitrate-N	n.a.	5.9244		6.19385	19.53
7	20.88	O-Phosphate-P	n.a.	2.3387		0.78154	2.46
8	23.85	Sulfate	n.a.	25.4425		8.37095	26.39
Total:				63.0465	0.000	31.723	100.00

62 1201984522/924715/1/1/MSD

Sample Name:	1201984522/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	51	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

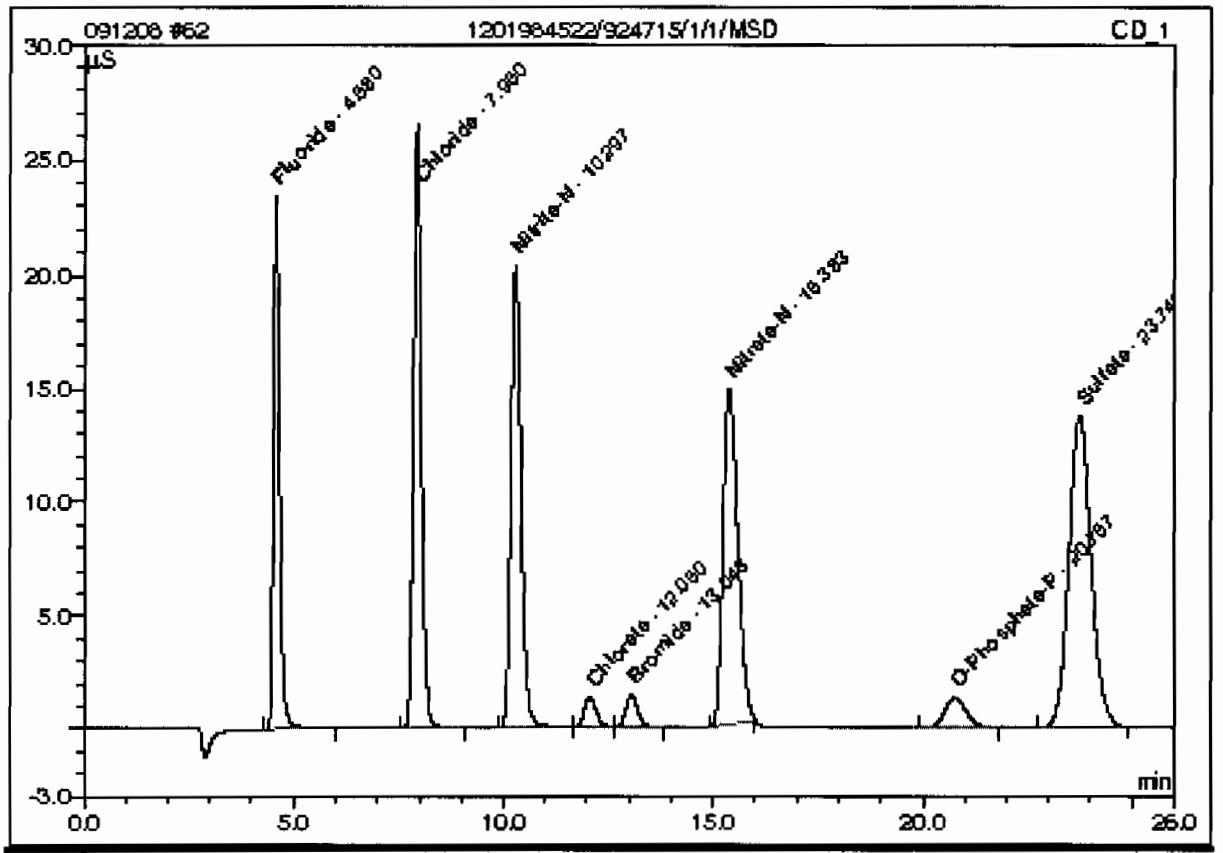

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.8054		3.94204	12.55
2	7.95	Chloride	n.a.	11.5426		5.62177	17.89
3	10.30	Nitrite-N	n.a.	5.7589		5.69715	18.13
4	12.06	Chlorate	n.a.	2.9695		0.46004	1.46
5	13.04	Bromide	n.a.	2.9522		0.50056	1.59
6	15.38	Nitrate-N	n.a.	5.7410		5.99893	19.09
7	20.77	O-Phosphate-P	n.a.	2.3492		0.78516	2.50
8	23.74	Sulfate	n.a.	25.5802		8.41676	26.79
Total:				62.6991	0.000	31.422	100.00

62 1201984522/924715/1/1/MSD

Sample Name:	1201984522/924715/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	51	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

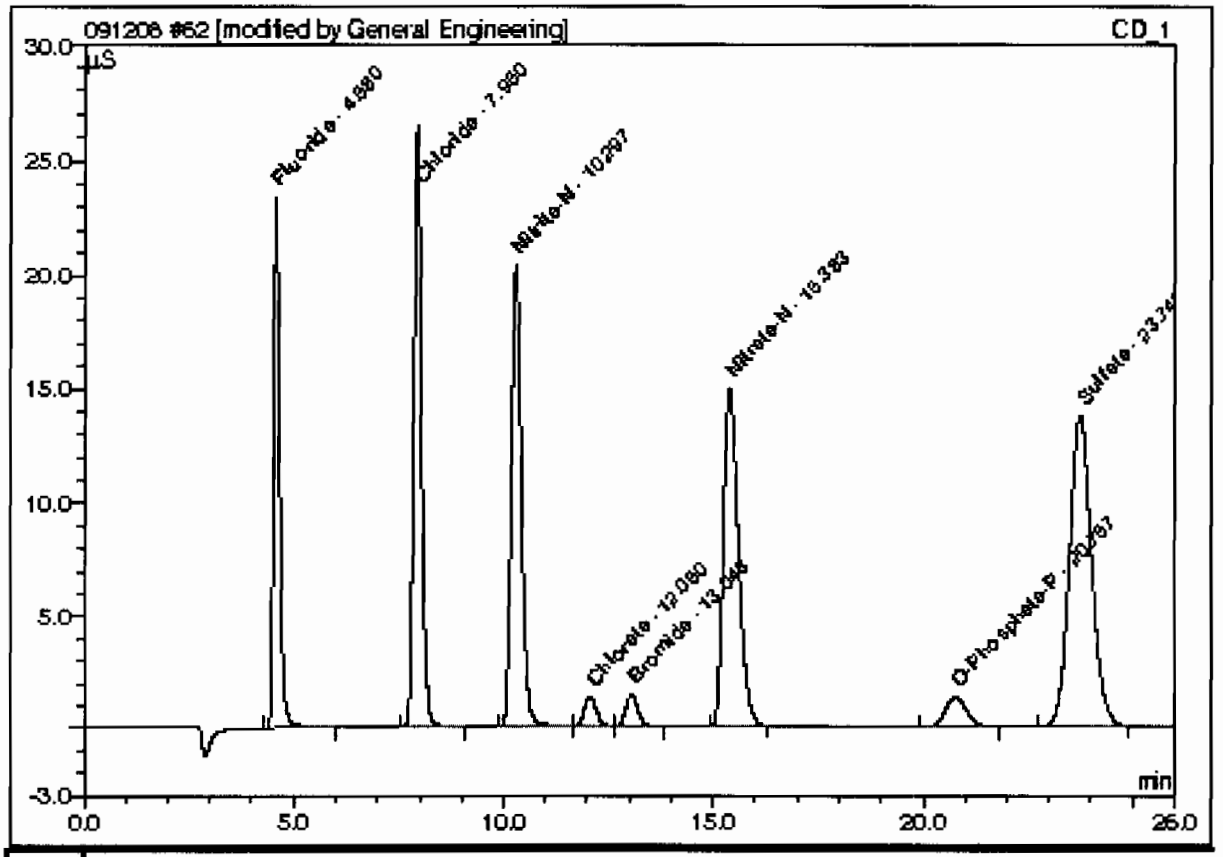

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.58	Fluoride	n.a.	5.8054		3.94204	12.47
2	7.95	Chloride	n.a.	11.5426		5.62177	17.78
3	10.30	Nitrite-N	n.a.	5.7589		5.69715	18.02
4	12.06	Chlorate	n.a.	2.9695		0.46004	1.45
5	13.04	Bromide	n.a.	2.9522		0.50056	1.58
6	15.38	Nitrate-N	n.a.	5.9292		6.19898	19.60
7	20.77	O-Phosphate-P	n.a.	2.3492		0.78516	2.48
8	23.74	Sulfate	n.a.	25.5802		8.41676	26.62
Total:				62.8873	0.000	31.622	100.00

12/9/2009 6:08 PM

63 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

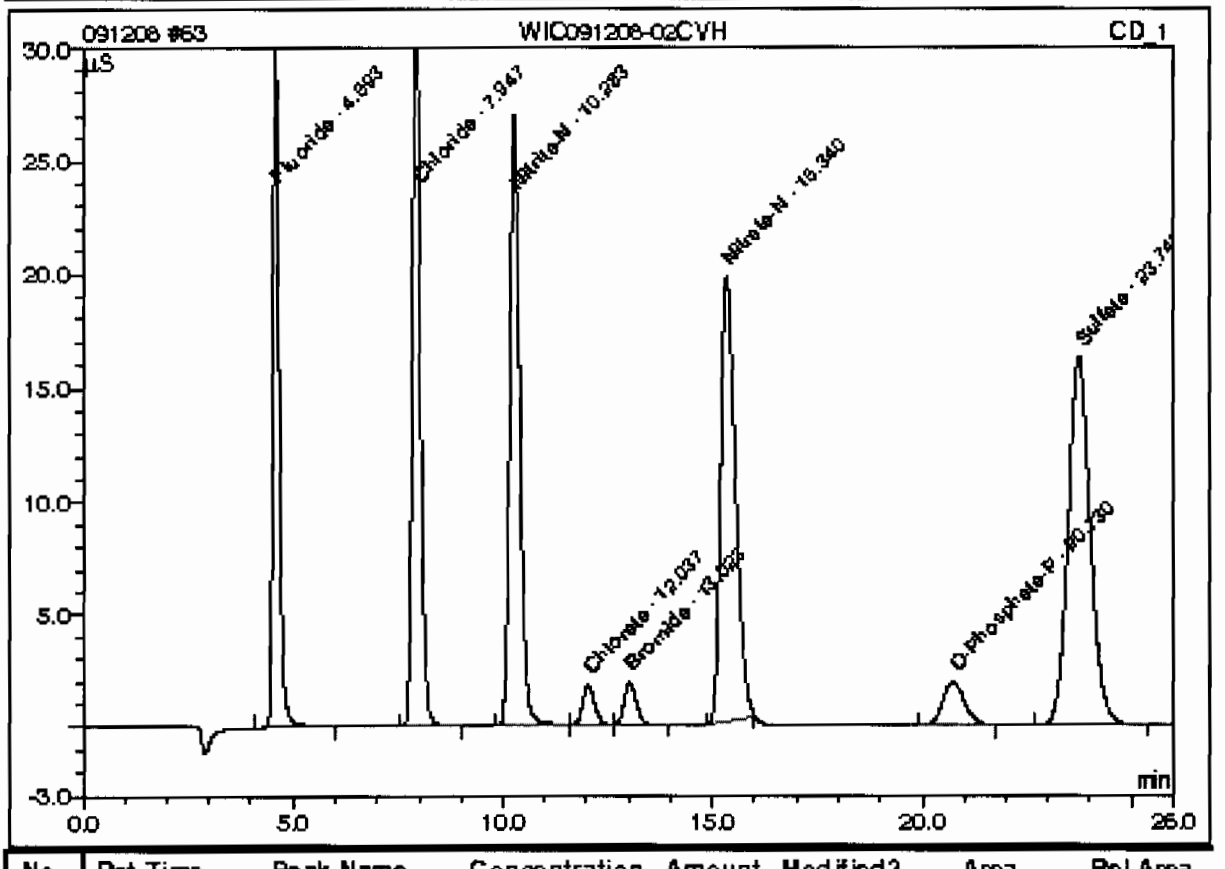

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	7.6578		5.20745	12.88
2	7.95	Chloride	n.a.	14.8592		7.24917	17.93
3	10.28	Nitrite-N	n.a.	7.5948		7.53607	18.64
4	12.04	Chlorate	n.a.	3.8432		0.59766	1.48
5	13.02	Bromide	n.a.	3.8322		0.65152	1.61
6	15.34	Nitrate-N	n.a.	7.7059		8.08754	20.01
7	20.73	O-Phosphate-P	n.a.	3.3825		1.14151	2.82
8	23.74	Sulfate	n.a.	30.1874		9.94936	24.61
Total:				79.0630	0.000	40.420	100.00

63 WIC091208-02CVH

Sample Name:	WIC091208-02CVH	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 17:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

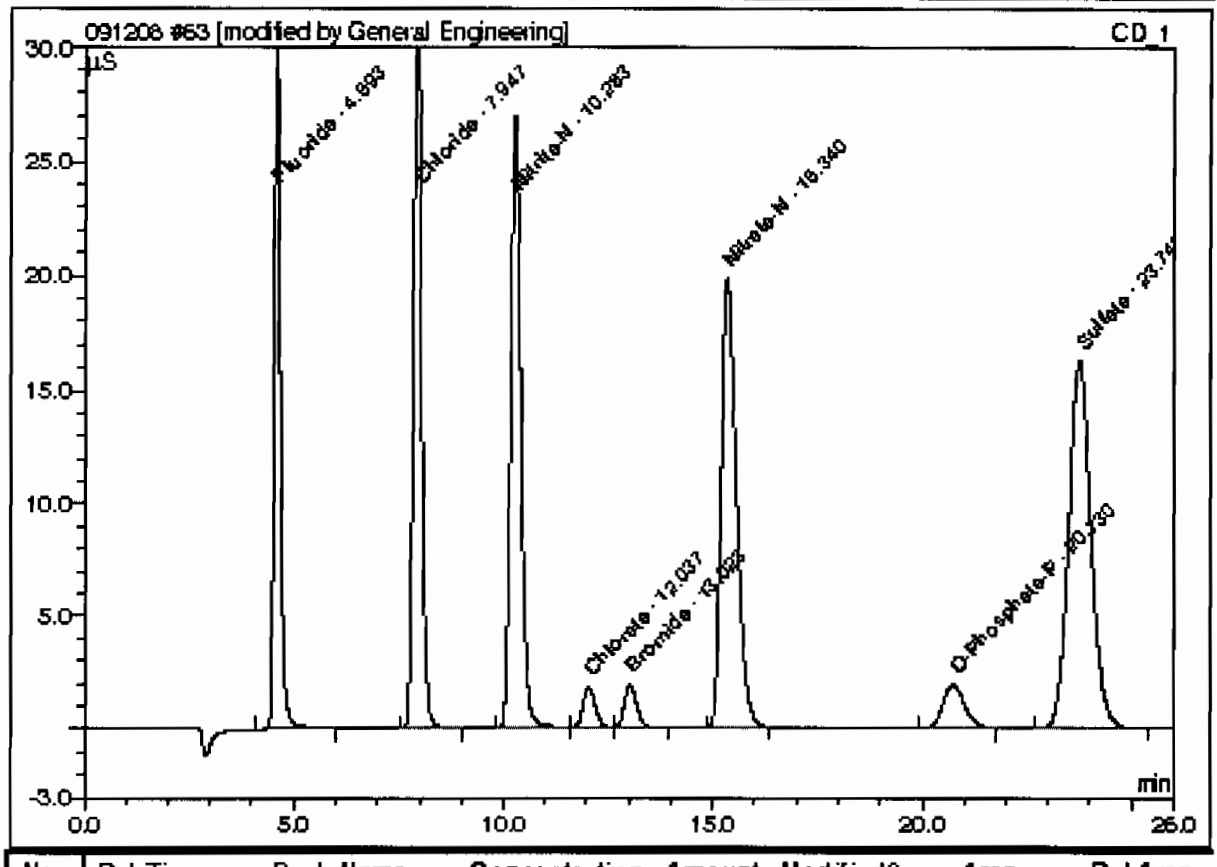

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.59	Fluoride	n.a.	7.6578		5.20745	12.81
2	7.95	Chloride	n.a.	14.8592		7.24917	17.84
3	10.28	Nitrite-N	n.a.	7.5948		7.53607	18.54
4	12.04	Chlorate	n.a.	3.8432		0.59766	1.47
5	13.02	Bromide	n.a.	3.8322		0.65152	1.60
6	15.34	Nitrate-N	n.a.	7.9121		8.30671	20.44
7	20.73	O-Phosphate-P	n.a.	3.3825		1.14151	2.81
8	23.74	Sulfate	n.a.	30.1874		9.94936	24.48
Total:				79.2692	0.000	40.639	100.00

64 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	46	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	120409an	*Sample Amount:*	1.0000
Recording Time:	12/9/2009 18:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

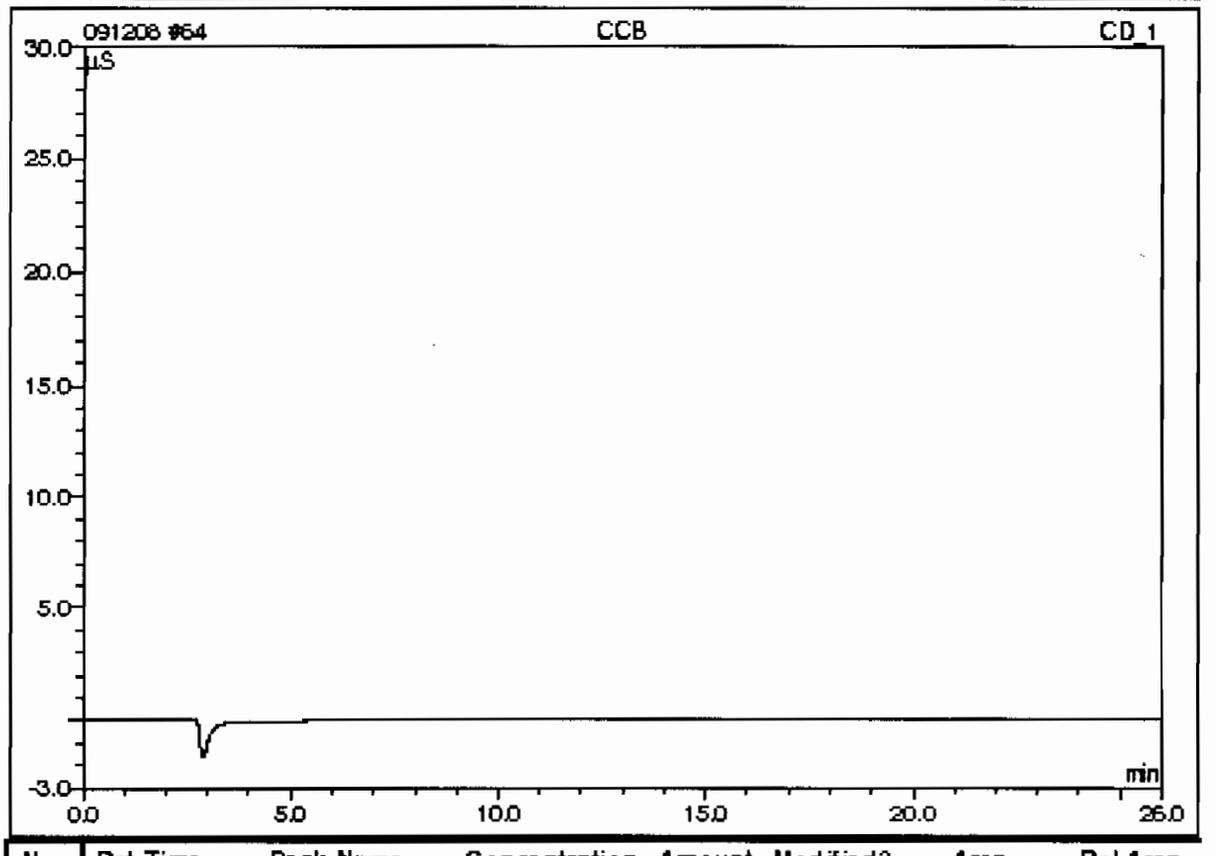

No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

pH

pH / Corrosivity LogBook

Analyst: TXT1
Batch: 924497
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045C/9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM090728-PH	PH 7 BUFFER FOR PH
LCS	1201976369	IMM090728-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
1201976369 LCS		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:30	pH	20	20	6.95	20.1'C	7	99.286	
1201976369 LCS		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:30	pH 2	20	20	6.95	20.2'C	7	99.286	
241243008		Sludge	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:32	pH	20	20	7.19	20.9'C			
241243008		Sludge	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:32	pH 2	20	20	7.2	20.9'C			
241305001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:34	pH	5	20	6.74	21.4'C			
241305001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:34	pH 2	5	20	6.73	21.4'C			
241310001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:39	pH	20	20	10.22	21.2'C			
241310001		Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:39	pH 2	20	20	10.22	21.2'C			
1201976368 DUP	241310001	Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:41	pH	20	20	10.36	21.3'C			1.361
1201976368 DUP	241310001	Solid	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:41	pH 2	20	20	10.37	21.4'C			1.457
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:43	pH	20	20	7	20.3'C	7	100	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:43	pH 2	20	20	7	20.3'C	7	100	
241322001		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:52	pH	20	20	7.29	20.9'C			
241322001		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:52	pH 2	20	20	7.3	20.9'C			
1201976367 DUP	241322001	Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:57	pH	20	20	7.31	21.1'C			.274
1201976367 DUP	241322001	Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:57	pH 2	20	20	7.31	21.1'C			.137
241322002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:58	pH	20	20	6.6	21.1'C			
241322002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 14:58	pH 2	20	20	6.6	21.1'C			
241322003		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:01	pH	20	20	6.39	20.9'C			
241322003		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:01	pH 2	20	20	6.43	20.9'C			
241322004		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:05	pH	20	20	7.51	21.0'C			
241322004		Soil	19-NOV-2009	19-NOV-2009	19-NOV-09 15:05	pH 2	20	20	7.51	21.1'C			

pH / Corrosivity LogBook

Analyst: TXT1
Batch: 924497
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM090728-PH	PH 7 BUFFER FOR PH
LCS	1201976369	IMM090728-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:08	pH	20	20	7.03	20.2'C	7	100.429	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:08	pH 2	20	20	7.02	20.2'C	7	100.286	
241322005		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:10	pH	20	20	7.35	21.0'C			
241322005		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:10	pH 2	20	20	7.35	21.0'C			
241322006		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:13	pH	20	20	8.67	20.9'C			
241322006		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:13	pH 2	20	20	8.69	20.9'C			
241322007		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:15	pH	20	20	7.68	20.9'C			
241322007		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:15	pH 2	20	20	7.66	20.9'C			
241322008		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:16	pH	20	20	6.71	20.9'C			
241322008		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:16	pH 2	20	20	6.75	20.9'C			
241322009		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:18	pH	20	20	7.37	20.5'C			
241322009		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:18	pH 2	20	20	7.38	20.5'C			
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:20	pH	20	20	7.02	20.1'C	7	100.286	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:20	pH 2	20	20	7.02	20.1'C	7	100.286	
241322010		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:26	pH	20	20	7.88	20.6'C			
241322010		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:26	pH 2	20	20	7.89	20.6'C			
241322011		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:28	pH	20	20	7.36	20.7'C			
241322011		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:28	pH 2	20	20	7.36	20.7'C			
241322012		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:31	pH	20	20	6.75	20.7'C			
241322012		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:31	pH 2	20	20	6.79	20.7'C			
241336001		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:32	pH	20	20	8.36	20.7'C			
241336001		Soil	19-NOV-2009	19-NOV-2009	19-NOV-09 15:32	pH 2	20	20	8.36	20.7'C			

pH / Corrosivity LogBook

Analyst: TXT1
Batch: 924497
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045C/9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM090728-PH	PH 7 BUFFER FOR PH
LCS	1201976369	IMM090728-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
241336002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:34	pH	20	20	8.55	20.7'C			
241336002		Soil	19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:34	pH 2	20	20	8.54	20.7'C			
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:35	pH	20	20	7.03	20.5'C	7	100.429	
CCV			19-NOV-2009 10:20:13	19-NOV-2009 10:25:13	19-NOV-09 15:35	pH 2	20	20	7.02	20.5'C	7	100.286	

Calibration Information:
Run Date: 19-NOV-09 14:23
Instrument: PHX742
Analyst: TXT1

	Standard	Observed	Theoretical		C	%Recovery
14:23	IMM091119-PH1	4.01	4	SU	21.6	100.25
14:23	IMM091119-PH-	7.02	7	SU	21.6	100.29
14:23	UPH091119-a	9.99	10	SU	21.6	99.9
14:23	UPH091119-02c-	2.08	2	SU	21.6	104
14:23	091119-a	11.97	12	SU	21.6	99.75
14:23	IMM091119-a	7.01	7	SU	21.6	100.14

Comments:

Miscellaneous

GEL Laboratories LLC
Form GEL-NCR

NCR Report No.: 762014
Revision No.: 3

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
24-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	SW846 9012A	Solid	CARE, LANL, MECP
Batch ID:	**Sample Numbers:**		
924475	See Below		

Potentially affected work order(s)(SDG): 241322(10-544),241336(10-546),241351(EUI-7395),241358,241417(10-575),241419(10-577)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for MS/MSD: QC 1201976326MS QC 1201976328MSD	1. The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable.
2. Container scanning event for custody missed: 241322 004, 005, 006, 007, 008, 009, 010, 011, 012 241336 001, 002 241417 001, 002, 241419 001, 002, 003, 004, 005	2. The following samples were not scanned prior to analysis. However samples were in custody of analyst during time of analysis.

Originator's Name:

Ashley Earl 24-NOV-09

Data Validator/Group Leader:

Elzbieta Szulc 24-NOV-09

GEL Laboratories LLC
Form GEL-NCR

NCR Report No.: 768832
Revision No.: 3

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
10-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
IC	EPA 300.0	Solid	LANL
Batch ID:	**Sample Numbers:**		
924715	See Below		

Potentially affected work order(s)(SDG): 241322(10-544),241336(10-546)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/MSD: QC 1201984521MS, QC 1201984523MSD QC 1201984520MS, QC 1201984522MSD	1. The MS and MSD recoveries fall outside of the GEL acceptance limits but within the client specified limits.

Originator's Name:
Virginia Wininger 10-DEC-09

Data Validator/Group Leader:
Julia Hamilton 14-DEC-09

General Chemistry Analysis

Case Narrative

General Chemistry Narrative

Los Alamos National Laboratory (LANL)

SDG 10-544-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	923864	**Method:**	SW846 9012A
Prep Batch :	923862	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241325001	RE03-10-6088
241325002	RE03-10-6090
1201974863	Method Blank (MB)
1201974864	241181002(RE03-10-5526) Sample Duplicate (DUP)
1201974865	241173002(CAMO-10-3225) Sample Duplicate (DUP)
1201974866	241181002(RE03-10-5526) Matrix Spike (MS)
1201974867	241173002(CAMO-10-3225) Matrix Spike (MS)
1201974868	241181002(RE03-10-5526) Matrix Spike Duplicate (MSD)
1201974869	241173002(CAMO-10-3225) Matrix Spike Duplicate (MSD)
1201974870	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241173002 (CAMO-10-3225) and 241181002 (RE03-10-5526).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201974864 (RE03-10-5526) and 1201974865 (CAMO-10-3225).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Method/Analysis Information

Product: **Nitrate Nitrite by Cadmium Reduction**

Analytical Batch: 924449 **Method:** EPA 353.2

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 353.2:

Sample ID	Client ID
241325001	RE03-10-6088
241325002	RE03-10-6090
1201976287	Method Blank (MB)
1201976288	241325001(RE03-10-6088) Sample Duplicate (DUP)
1201976289	241308002(CAMO-10-3126) Sample Duplicate (DUP)
1201976290	241325001(RE03-10-6088) Post Spike (PS)
1201976291	241308002(CAMO-10-3126) Post Spike (PS)
1201976292	Laboratory Control Sample (LCS)
1201977217	241414003(CAWR-10-4973) Sample Duplicate (DUP)
1201977218	241411001(SWWS46-10-6914) Sample Duplicate (DUP)
1201977219	241414003(CAWR-10-4973) Post Spike (PS)
1201977220	241411001(SWWS46-10-6914) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-128 REV# 5.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Nutrient analysis was performed on a Lachat QuickChem FIA+ 8500 Series.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241308002 (CAMO-10-3126), 241325001 (RE03-10-6088), 241411001 (SWWS46-10-6914) and 241414003 (CAWR-10-4973).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201976288 (RE03-10-6088).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to matrix interference: 1201976288 (RE03-10-6088), 1201976289 (CAMO-10-3126), 1201976290 (RE03-10-6088), 1201976291 (CAMO-10-3126), 1201977217 (CAWR-10-4973), 1201977218 (SWWS46-10-6914), 1201977219 (CAWR-10-4973), 1201977220 (SWWS46-10-6914), 241325001 (RE03-10-6088) and 241325002 (RE03-10-6090).

Sample Re-analysis
The following samples were reanalyzed due to PS failure: 1201977217 (CAWR-10-4973) and 1201977219 (CAWR-10-4973). The following samples were re-analyzed due to DUP RPD failure: 1201976288 (RE03-10-6088), 1201976290 (RE03-10-6088) and 241325001 (RE03-10-6088).

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 14Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-544-1 GEL Work Order: 241325

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 26, 2009

Client SDG: 10-544-1

Client Sample ID: RE03-10-6088
Sample ID: 241325001
Matrix: W
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1703	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	J	0.061	0.050	0.250	mg/L	5	AXH3 11/24/09	1431	924449	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: November 26, 2009

Client SDG: 10-544-1

Client Sample ID: RE03-10-6090
Sample ID: 241325002
Matrix: W
Collect Date: 16-NOV-09 12:00
Receive Date: 18-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/24/09	1704	923864	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.050	0.250	mg/L	5	AXH3 11/23/09	1152	924449	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/24/09	1505	923862

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: November 26, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241325

Parmname	NOM		Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Flow Injection Analysis												
Batch 923864												
QC1201974864 241181002 DUP												
Cyanide, Total		U	ND	U	ND	ug/L	N/A				AXC2	11/24/09 16:52
QC1201974865 241173002 DUP												
Cyanide, Total		U	ND	U	ND	ug/L	N/A					11/24/09 16:43
QC1201974870 LCS												
Cyanide, Total	50.0				54.7	ug/L			109	(90%-110%)		11/24/09 16:41
QC1201974863 MB												
Cyanide, Total				U	5.00	ug/L						11/24/09 16:40
QC1201974866 241181002 MS												
Cyanide, Total	100	U	ND		107	ug/L			107	(60%-127%)		11/24/09 16:53
QC1201974867 241173002 MS												
Cyanide, Total	100	U	ND		101	ug/L			101	(60%-127%)		11/24/09 16:44
QC1201974868 241181002 MSD												
Cyanide, Total	100	U	ND		102	ug/L	4.78		102	(0%-20%)		11/24/09 16:54
QC1201974869 241173002 MSD												
Cyanide, Total	100	U	ND		99.6	ug/L	1.40		99.6	(0%-20%)		11/24/09 16:45
Nutrient Analysis												
Batch 924449												
QC1201976288 241325001 DUP												
Nitrogen, Nitrate/Nitrite		J	0.061	U	ND	mg/L	200	^			AXH3	11/24/09 14:32
QC1201976289 241308002 DUP												
Nitrogen, Nitrate/Nitrite			0.360		0.338	mg/L	6.16	^		(+/-0.250)		11/23/09 11:38
QC1201977217 241414003 DUP												
Nitrogen, Nitrate/Nitrite		J	0.0825	J	0.0855	mg/L	3.57	^		(+/-0.250)		11/23/09 13:18
QC1201977218 241411001 DUP												
Nitrogen, Nitrate/Nitrite			1.24		1.23	mg/L	0.406	^		(+/-0.250)		11/23/09 12:03
QC1201976292 LCS												
Nitrogen, Nitrate/Nitrite	1.00				0.964	mg/L			96.4	(90%-110%)		11/23/09 11:28
QC1201976287 MB												
Nitrogen, Nitrate/Nitrite				U	0.050	mg/L						11/23/09 11:27
QC1201976290 241325001 PS												
Nitrogen, Nitrate/Nitrite	1.00	J	0.0122		1.01	mg/L			99.8	(90%-110%)		11/24/09 14:33
QC1201976291 241308002 PS												
Nitrogen, Nitrate/Nitrite	1.00		0.0719		1.04	mg/L			96.8	(90%-110%)		11/23/09 11:44
QC1201977219 241414003 PS												
Nitrogen, Nitrate/Nitrite	1.00	J	0.0165		1.01	mg/L			99.4	(90%-110%)		11/23/09 13:24
QC1201977220 241411001 PS												
Nitrogen, Nitrate/Nitrite	1.00		0.247		1.25	mg/L			100	(90%-110%)		11/23/09 12:04

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

** Analyte is a surrogate compound

QC Summary

Workorder: 241325

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 26-NOV-2009 14:21

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-544-1**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**24-NOV-2009 13:50:59**	**OM_11-24-2009_13-43-04**	**145**	**150**	**97**	**(90%-110%)**	**Yes**
CCV	24-NOV-2009 16:34:27	OM_11-24-2009_16-32-55	94	100	94	(90%-110%)	Yes
CCV	24-NOV-2009 16:46:55	OM_11-24-2009_16-32-55	91.9	100	92	(90%-110%)	Yes
CCV	24-NOV-2009 16:59:20	OM_11-24-2009_16-32-55	92	100	92	(90%-110%)	Yes
CCV	24-NOV-2009 17:11:53	OM_11-24-2009_16-32-55	92.4	100	92	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**24-NOV-2009 13:52:49**	**OM_11-24-2009_13-43-04**	**1.98**	**5**	**Yes**
CCB	24-NOV-2009 16:36:18	OM_11-24-2009_16-32-55	-0.718	5	Yes
CCB	24-NOV-2009 16:48:45	OM_11-24-2009_16-32-55	0.186	5	Yes
CCB	24-NOV-2009 17:01:10	OM_11-24-2009_16-32-55	0.178	5	Yes
CCB	24-NOV-2009 17:13:43	OM_11-24-2009_16-32-55	-0.0981	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 26-NOV-2009 14:21

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-544-1**

Nutrient Analysis

Method: EPA 353.2 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8500 Series

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**23-NOV-2009 11:18:08**	**OM_11-23-2009_11-08-40**	**0.979**	**1**	**98**	**(90%-110%)**	**Yes**
CCV	23-NOV-2009 11:39:37	OM_11-23-2009_11-08-40	0.984	1	98	(90%-110%)	Yes
CCV	23-NOV-2009 11:56:23	OM_11-23-2009_11-08-40	1.01	1	101	(90%-110%)	Yes
CCV	23-NOV-2009 12:13:05	OM_11-23-2009_11-08-40	1.02	1	102	(90%-110%)	Yes
CCV	23-NOV-2009 13:03:22	OM_11-23-2009_11-08-40	1.03	1	103	(90%-110%)	Yes
CCV	23-NOV-2009 13:20:09	OM_11-23-2009_11-08-40	1.01	1	101	(90%-110%)	Yes
CCV	23-NOV-2009 13:27:11	OM_11-23-2009_11-08-40	0.99	1	99	(90%-110%)	Yes
ICV	**24-NOV-2009 14:21:57**	**OM_11-24-2009_14-11-43**	**0.972**	**1**	**97**	**(90%-110%)**	**Yes**
CCV	24-NOV-2009 14:36:06	OM_11-24-2009_14-11-43	0.967	1	97	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-NOV-2009 11:20:30**	**OM_11-23-2009_11-08-40**	**0.00363**	**0.05**	**Yes**
CCB	23-NOV-2009 11:41:58	OM_11-23-2009_11-08-40	0.00179	0.05	Yes
CCB	23-NOV-2009 11:58:44	OM_11-23-2009_11-08-40	0.00278	0.05	Yes
CCB	23-NOV-2009 12:15:26	OM_11-23-2009_11-08-40	0.00404	0.05	Yes
CCB	23-NOV-2009 13:05:45	OM_11-23-2009_11-08-40	0.00314	0.05	Yes
CCB	23-NOV-2009 13:22:31	OM_11-23-2009_11-08-40	0.0037	0.05	Yes
CCB	23-NOV-2009 13:29:33	OM_11-23-2009_11-08-40	0.00354	0.05	Yes
ICB	**24-NOV-2009 14:24:19**	**OM_11-24-2009_14-11-43**	**0.00345**	**0.05**	**Yes**
CCB	24-NOV-2009 14:38:27	OM_11-24-2009_14-11-43	0.00231	0.05	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 923862

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201974870	URF1184831-02	.0125	mL
MS	1201974866	URF1184831-02	.025	mL
MS	1201974867	URF1184831-02	.025	mL
MSD	1201974868	URF1184831-02	.025	mL
MSD	1201974869	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201974863		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
LCS	1201974870		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241173002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201974865	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
MS	1201974867	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201974869	241173002	EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241173004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241176002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241181002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
DUP	1201974864	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
MS	1201974866	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
MSD	1201974868	241181002	SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241218001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	MISC LIQUID
SAMPLE	241308001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241308004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241312002		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241312004		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241325001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241325002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241337001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241337002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241340001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241372013		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241420001		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420002		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420003		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241420004		SW846 9010B Prep	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WATER
SAMPLE	241430001		EPA 335.4	24-NOV-2009 15:05	>12	25 mL	25 mL	1	WASTE WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/24/2009 13:43:49	OM_11-24-2009_13-43-04
150 ppb		1	axc2	11/24/2009 13:44:42	OM_11-24-2009_13-43-04
100 ppb		1	axc2	11/24/2009 13:45:34	OM_11-24-2009_13-43-04
50 ppb		1	axc2	11/24/2009 13:46:27	OM_11-24-2009_13-43-04
10 ppb		1	axc2	11/24/2009 13:47:20	OM_11-24-2009_13-43-04
CRDL 5.0 ppb		1	axc2	11/24/2009 13:48:14	OM_11-24-2009_13-43-04
ICAL-00		1	axc2	11/24/2009 13:49:08	OM_11-24-2009_13-43-04
ICV		1	axc2	11/24/2009 13:50:59	OM_11-24-2009_13-43-04
ICB		1	axc2	11/24/2009 13:52:49	OM_11-24-2009_13-43-04
CRDL		1	axc2	11/24/2009 13:54:39	OM_11-24-2009_13-43-04
1201974838	923855	1	axc2	11/24/2009 13:56:29	OM_11-24-2009_13-43-04
1201974840	923855	1	axc2	11/24/2009 13:57:22	OM_11-24-2009_13-43-04
1201974842	923855	1	axc2	11/24/2009 13:58:15	OM_11-24-2009_13-43-04
241187002	923855	1	axc2	11/24/2009 13:59:09	OM_11-24-2009_13-43-04
241187003	923855	1	axc2	11/24/2009 14:00:02	OM_11-24-2009_13-43-04
241187004	923855	1	axc2	11/24/2009 14:00:55	OM_11-24-2009_13-43-04
241223001	923855	1	axc2	11/24/2009 14:01:48	OM_11-24-2009_13-43-04
1201974839	923855	1	axc2	11/24/2009 14:02:40	OM_11-24-2009_13-43-04
1201974841	923855	1	axc2	11/24/2009 14:03:32	OM_11-24-2009_13-43-04
1201974843	923855	1	axc2	11/24/2009 14:04:25	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:05:17	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:07:08	OM_11-24-2009_13-43-04
241223002	923855	1	axc2	11/24/2009 14:08:55	OM_11-24-2009_13-43-04
241223003	923855	1	axc2	11/24/2009 14:09:47	OM_11-24-2009_13-43-04
241223004	923855	1	axc2	11/24/2009 14:10:40	OM_11-24-2009_13-43-04
241223005	923855	1	axc2	11/24/2009 14:11:34	OM_11-24-2009_13-43-04
241223006	923855	1	axc2	11/24/2009 14:12:28	OM_11-24-2009_13-43-04
241223007	923855	1	axc2	11/24/2009 14:13:22	OM_11-24-2009_13-43-04
241223008	923855	1	axc2	11/24/2009 14:14:15	OM_11-24-2009_13-43-04
241223009	923855	1	axc2	11/24/2009 14:15:08	OM_11-24-2009_13-43-04
241234001	923855	1	axc2	11/24/2009 14:16:02	OM_11-24-2009_13-43-04
241234002	923855	1	axc2	11/24/2009 14:16:55	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:17:48	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:19:38	OM_11-24-2009_13-43-04
241234003	923855	1	axc2	11/24/2009 14:21:27	OM_11-24-2009_13-43-04
241234004	923855	1	axc2	11/24/2009 14:22:20	OM_11-24-2009_13-43-04
241234005	923855	1	axc2	11/24/2009 14:23:13	OM_11-24-2009_13-43-04
241234006	923855	1	axc2	11/24/2009 14:24:05	OM_11-24-2009_13-43-04
CCV		1	axc2	11/24/2009 14:24:58	OM_11-24-2009_13-43-04
CCB		1	axc2	11/24/2009 14:26:48	OM_11-24-2009_13-43-04

Author: axc2

Date : 11/24/2009

Original Run Filename: OM_11-24-2009_13-43-04.OMN created 11/24/2009 13:43:04
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-24-2009_13-43-04.OMN last modified 11/24/2009 14:27:53
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091124-01	1	S1	200	4.18	11/24/2009@13:43:49			200 ppb
WCN091124-02	1	S2	150	3.20	11/24/2009@13:44:42			150 ppb
WCN091124-03	1	S3	100	2.16	11/24/2009@13:45:34			100 ppb
WCN091124-04	1	S4	50.0	1.09	11/24/2009@13:46:27			50 ppb
WCN091124-05	1	S5	10.0	0.307	11/24/2009@13:47:20			10 ppb
WCN091124-06	1	S6	5.00	0.207	11/24/2009@13:48:14			CRDL 5.0 ppb
WCN091124-08	1	S7	0.00	0.0224	11/24/2009@13:49:08			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99979 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091124-07	1	S8	145	3.07	11/24/2009@13:50:59			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-3.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-3.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091124-08	1	S7	1.98	0.116	11/24/2009@13:52:49			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.98 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.98 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091124-06	1	S6	5.07	0.180	11/24/2009@13:54:39			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	5.07 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	5.07 > 2.50					
		Message	Pass					
		Action	None					
1201974838|923855|DUP	1	33	-2.51	0.0229	11/24/2009@13:56:29			
1201974840||MS	1	34	105	2.25	11/24/2009@13:57:22			
1201974842||MSD	1	35	111	2.37	11/24/2009@13:58:15			
241187002	1	36	0.929	0.0940	11/24/2009@13:59:09			
241187003	1	37	-3.63	-1.34e-4	11/24/2009@14:00:02			
241187004	1	38	-3.90	-0.00567	11/24/2009@14:00:55			
241223001	1	39	5.27	0.184	11/24/2009@14:01:48			
1201974839||DUP	1	40	5.12	0.181	11/24/2009@14:02:40			
1201974841||MS	1	41	78.3	1.69	11/24/2009@14:03:32			
1201974843||MSD	1	42	78.5	1.70	11/24/2009@14:04:25			
WCN091124-03	1	S3	100	2.14	11/24/2009@14:05:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.0 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	-0.278	0.0691	11/24/2009@14:07:08			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-0.278 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-0.278 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241223002	1	43	-2.44	0.0244	11/24/2009@14:08:55			
241223003	1	44	-2.53	0.0226	11/24/2009@14:09:47			
241223004	1	45	1.66	0.109	11/24/2009@14:10:40			
241223005	1	46	-0.692	0.0605	11/24/2009@14:11:34			
241223006	1	47	2.97	0.136	11/24/2009@14:12:28			
241223007	1	48	-1.72	0.0392	11/24/2009@14:13:22			
241223008	1	49	-1.42	0.0454	11/24/2009@14:14:15			
241223009	1	50	-1.94	0.0347	11/24/2009@14:15:08			
241234001	1	51	13.2	0.348	11/24/2009@14:16:02			
241234002	1	52	15.1	0.387	11/24/2009@14:16:55			
WCN091124-03	1	S3	99.3	2.13	11/24/2009@14:17:48			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	-0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	-0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.383	0.0827	11/24/2009@14:19:38			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.383 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.383 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241234003	1	53	182	3.84	11/24/2009@14:21:27			
241234004	1	54	126	2.67	11/24/2009@14:22:20			
241234005	1	55	44.2	0.988	11/24/2009@14:23:13			
241234006	1	56	1.64	0.109	11/24/2009@14:24:05			
WCN091124-03	1	S3	101	2.15	11/24/2009@14:24:58			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.634	0.0879	11/24/2009@14:26:48			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.634 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.634 > -5.00					

Author: axc2 Date : 11/24/2009

Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-24-2009_13-43-04.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

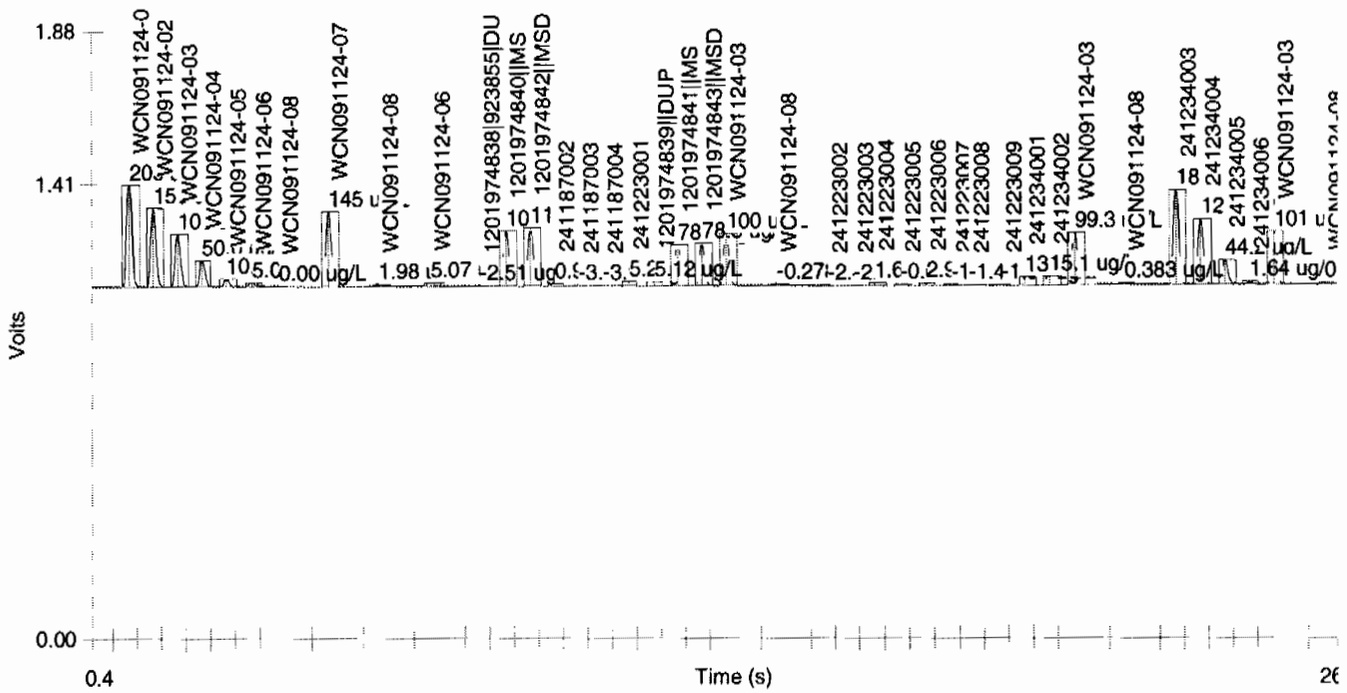

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	4.18	0.310	0.7	11/24/2009	13:44:53
2	150	1	3.20	0.240	-0.9	11/24/2009	13:45:45
3	100	1	2.16	0.161	-0.8	11/24/2009	13:46:37
4	50.0	1	1.09	0.0801	1.7	11/24/2009	13:47:30
5	10.0	1	0.307	0.0241	-8.7	11/24/2009	13:48:23
6	5.00	1	0.207	0.0121	-15.7	11/24/2009	13:49:17
7	0.00	1	0.0224	5.28e-4		11/24/2009	13:50:11

Author: axc2

Date : 11/24/2009

Figure 1: TCYANIDE

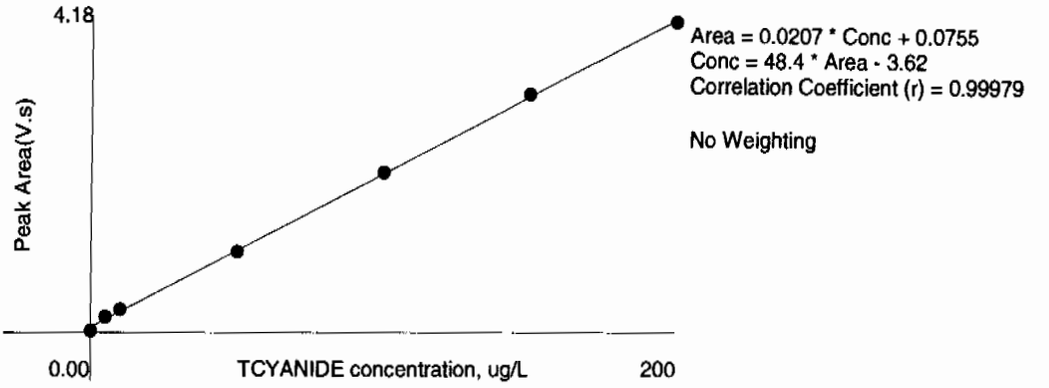

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	11/24/2009 16:34:27	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 16:36:18	OM_11-24-2009_16-32-55
241053004	922839	1	axc2	11/24/2009 16:38:07	OM_11-24-2009_16-32-55
241053009	922839	1	axc2	11/24/2009 16:38:59	OM_11-24-2009_16-32-55
241053011	922839	1	axc2	11/24/2009 16:39:51	OM_11-24-2009_16-32-55
1201974863	923864	1	axc2	11/24/2009 16:40:43	OM_11-24-2009_16-32-55
1201974870	923864	1	axc2	11/24/2009 16:41:35	OM_11-24-2009_16-32-55
241173002	923864	1	axc2	11/24/2009 16:42:29	OM_11-24-2009_16-32-55
1201974865	923864	1	axc2	11/24/2009 16:43:23	OM_11-24-2009_16-32-55
1201974867	923864	1	axc2	11/24/2009 16:44:16	OM_11-24-2009_16-32-55
1201974869	923864	1	axc2	11/24/2009 16:45:10	OM_11-24-2009_16-32-55
241173004	923864	1	axc2	11/24/2009 16:46:03	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 16:46:55	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 16:48:45	OM_11-24-2009_16-32-55
241176002	923864	1	axc2	11/24/2009 16:50:35	OM_11-24-2009_16-32-55
241181002	923864	1	axc2	11/24/2009 16:51:28	OM_11-24-2009_16-32-55
1201974864	923864	1	axc2	11/24/2009 16:52:21	OM_11-24-2009_16-32-55
1201974866	923864	1	axc2	11/24/2009 16:53:13	OM_11-24-2009_16-32-55
1201974868	923864	1	axc2	11/24/2009 16:54:06	OM_11-24-2009_16-32-55
241218001	923864	1	axc2	11/24/2009 16:54:58	OM_11-24-2009_16-32-55
241308001*	923864	1	axc2	11/24/2009 16:55:51	OM_11-24-2009_16-32-55
241308004	923864	1	axc2	11/24/2009 16:56:43	OM_11-24-2009_16-32-55
241312002	923864	1	axc2	11/24/2009 16:57:35	OM_11-24-2009_16-32-55
241312004	923864	1	axc2	11/24/2009 16:58:27	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 16:59:20	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:01:10	OM_11-24-2009_16-32-55
241308001	923864	1	axc2	11/24/2009 17:02:58	OM_11-24-2009_16-32-55
241325001	923864	1	axc2	11/24/2009 17:03:52	OM_11-24-2009_16-32-55
241325002	923864	1	axc2	11/24/2009 17:04:47	OM_11-24-2009_16-32-55
241337001	923864	1	axc2	11/24/2009 17:05:41	OM_11-24-2009_16-32-55
241337002	923864	1	axc2	11/24/2009 17:06:34	OM_11-24-2009_16-32-55
241340001	923864	1	axc2	11/24/2009 17:07:28	OM_11-24-2009_16-32-55
241372013*	923864	1	axc2	11/24/2009 17:08:21	OM_11-24-2009_16-32-55
241420001	923864	1	axc2	11/24/2009 17:09:14	OM_11-24-2009_16-32-55
241420002	923864	1	axc2	11/24/2009 17:10:08	OM_11-24-2009_16-32-55
241420003	923864	1	axc2	11/24/2009 17:11:00	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 17:11:53	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:13:43	OM_11-24-2009_16-32-55
241372013	923864	1	axc2	11/24/2009 17:15:33	OM_11-24-2009_16-32-55
241420004	923864	1	axc2	11/24/2009 17:16:25	OM_11-24-2009_16-32-55
241430001	923864	1	axc2	11/24/2009 17:17:18	OM_11-24-2009_16-32-55
241218001	923864	5	axc2	11/24/2009 17:18:11	OM_11-24-2009_16-32-55
241340001	923864	5	axc2	11/24/2009 17:19:04	OM_11-24-2009_16-32-55
CCV		1	axc2	11/24/2009 17:19:56	OM_11-24-2009_16-32-55
CCB		1	axc2	11/24/2009 17:21:47	OM_11-24-2009_16-32-55

Author: axc2 Date : 11/24/2009

Original Run Filename: OM_11-24-2009_16-32-55.OMN created 11/24/2009 16:32:55
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-24-2009_16-32-55.OMN last modified 11/24/2009 17:22:52
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091124-03	1	S3	94.0	2.02	11/24/2009@16:34:27			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		-6.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		-6.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091124-08	1	S7	-0.718	0.0600	11/24/2009@16:36:18			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.718 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.718 > -5.00					
	Message		CCB Passed					
	Action		Continue					
	Calibration:		Table/Fig. 1					
241053004|922839|	1	21	110	2.35	11/24/2009@16:38:07			
241053009	1	26	7.48	0.229	11/24/2009@16:38:59			
241053011	1	28	1.23	0.100	11/24/2009@16:39:51			
1201974863|923864|MB	1	29	-1.71	0.0395	11/24/2009@16:40:43			
1201974870||LCS	1	30	54.7	1.21	11/24/2009@16:41:35			
241173002	1	31	-0.479	0.0649	11/24/2009@16:42:29			
1201974865||DUP	1	32	-1.98	0.0339	11/24/2009@16:43:23			
1201974867||MS	1	33	101	2.17	11/24/2009@16:44:16			
1201974869||MSD	1	34	99.6	2.13	11/24/2009@16:45:10			
241173004	1	35	0.314	0.0813	11/24/2009@16:46:03			
WCN091124-03	1	S3	91.9	1.97	11/24/2009@16:46:55			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		-8.1 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		-8.1 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091124-08	1	S7	0.186	0.0787	11/24/2009@16:48:45			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		0.186 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.186 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241176002	1	36	-2.34	0.0265	11/24/2009@16:50:35			
241181002	1	37	-2.73	0.0183	11/24/2009@16:51:28			
1201974864||DUP	1	38	-4.33	-0.0146	11/24/2009@16:52:21			
1201974866||MS	1	39	107	2.29	11/24/2009@16:53:13			
1201974868||MSD	1	40	102	2.19	11/24/2009@16:54:06			

241218001	1	41	436	9.08	11/24/2009@16:54:58			
241308001	1	42	7.18	0.223	11/24/2009@16:55:51			
241308004	1	43	-2.29	0.0276	11/24/2009@16:56:43			
241312002	1	44	-2.28	0.0276	11/24/2009@16:57:35			
241312004	1	45	-3.02	0.0123	11/24/2009@16:58:27			
WCN091124-03	1	S3	92.0	1.98	11/24/2009@16:59:20			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		-8.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		-8.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091124-08	1	S7	0.178	0.0785	11/24/2009@17:01:10			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		0.178 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.178 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241308001	1	42	-2.06	0.0323	11/24/2009@17:02:58			
241325001	1	46	-3.02	0.0123	11/24/2009@17:03:52			
241325002	1	47	-2.38	0.0256	11/24/2009@17:04:47			
241337001	1	48	-2.22	0.0289	11/24/2009@17:05:41			
241337002	1	49	-2.25	0.0283	11/24/2009@17:06:34			
241340001	1	50	318	6.64	11/24/2009@17:07:28			
241372013	1	51	187	3.94	11/24/2009@17:08:21			
241420001	1	52	2.45	0.125	11/24/2009@17:09:14			
241420002	1	53	-1.58	0.0422	11/24/2009@17:10:08			
241420003	1	54	-2.08	0.0318	11/24/2009@17:11:00			
WCN091124-03	1	S3	92.4	1.98	11/24/2009@17:11:53			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		-7.6 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		-7.6 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091124-08	1	S7	-0.0981	0.0728	11/24/2009@17:13:43			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.0981 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.0981 > -5.00					
	Message		CCB Passed					
	Action		Continue					
241372013	1	51	176	3.72	11/24/2009@17:15:33			
241420004	1	55	3.67	0.151	11/24/2009@17:16:25			
241430001	1	56	1.20	0.0997	11/24/2009@17:17:18			
241218001	1	41	74.8	1.62	11/24/2009@17:18:11		5.00	
241340001	1	50	60.7	1.33	11/24/2009@17:19:04		5.00	
WCN091124-03	1	S3	94.0	2.02	11/24/2009@17:19:56			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		-6.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		-6.0 < 10.0					

Author: axc2

Date : 11/24/2009

		Message	CCV Passed					
		Action	Continue					
WCN091124-08	1	S7	0.419	0.0835	11/24/2009@17:21:47			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.419 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.419 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_11-24-2009_16-32-55.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

Author: axc2 Date : 11/24/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	4.18	0.310	0.7	11/24/2009	13:44:53
2	150	1	3.20	0.240	-0.9	11/24/2009	13:45:45
3	100	1	2.16	0.161	-0.8	11/24/2009	13:46:37
4	50.0	1	1.09	0.0801	1.7	11/24/2009	13:47:30
5	10.0	1	0.307	0.0241	-8.7	11/24/2009	13:48:23
6	5.00	1	0.207	0.0121	-15.7	11/24/2009	13:49:17
7	0.00	1	0.0224	5.28e-4		11/24/2009	13:50:11

Figure 1: TCYANIDE

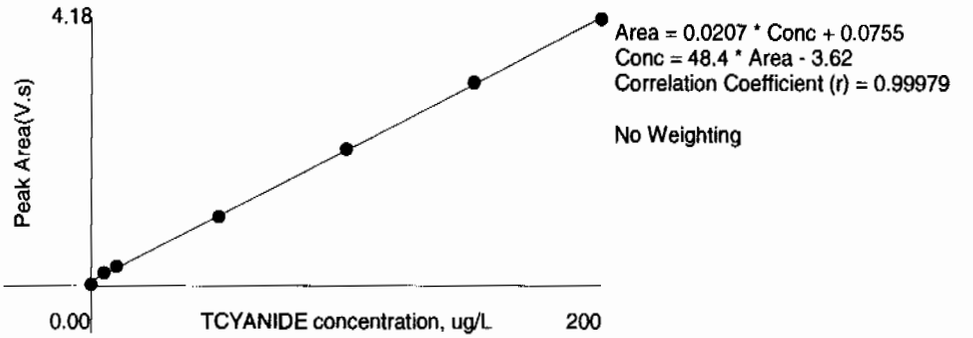

Nitrate Nitrite by Cadmium Reduction

This is runlog lachat3

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
1.5 PPM		1	axh3	11/23/2009 11:09:42	OM_11-23-2009_11-08-40
1.0 PPM		1	axh3	11/23/2009 11:10:54	OM_11-23-2009_11-08-40
0.5 ppm		1	axh3	11/23/2009 11:12:06	OM_11-23-2009_11-08-40
0.1 ppm		1	axh3	11/23/2009 11:13:19	OM_11-23-2009_11-08-40
0.05 ppm		1	axh3	11/23/2009 11:14:33	OM_11-23-2009_11-08-40
ICAL-00		1	axh3	11/23/2009 11:15:46	OM_11-23-2009_11-08-40
1.0 ppm ICV		1	axh3	11/23/2009 11:18:08	OM_11-23-2009_11-08-40
ICB		1	axh3	11/23/2009 11:20:30	OM_11-23-2009_11-08-40
Nitrate 1.0 ppm		1	axh3	11/23/2009 11:22:50	OM_11-23-2009_11-08-40
Nitrite 1.0 ppm		1	axh3	11/23/2009 11:25:10	OM_11-23-2009_11-08-40
1201976287	924449	1	axh3	11/23/2009 11:27:30	OM_11-23-2009_11-08-40
1201976292	924449	1	axh3	11/23/2009 11:28:44	OM_11-23-2009_11-08-40
241166002	924449	25	axh3	11/23/2009 11:29:57	OM_11-23-2009_11-08-40
1201977800	924449	25	axh3	11/23/2009 11:31:09	OM_11-23-2009_11-08-40
1201977801	924449	25	axh3	11/23/2009 11:32:22	OM_11-23-2009_11-08-40
241166006	924449	25	axh3	11/23/2009 11:33:35	OM_11-23-2009_11-08-40
241166009	924449	25	axh3	11/23/2009 11:34:48	OM_11-23-2009_11-08-40
241166015	924449	25	axh3	11/23/2009 11:36:01	OM_11-23-2009_11-08-40
241308002	924449	5	axh3	11/23/2009 11:37:12	OM_11-23-2009_11-08-40
1201976289	924449	5	axh3	11/23/2009 11:38:24	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009 11:39:37	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009 11:41:58	OM_11-23-2009_11-08-40
1201976291	924449	5	axh3	11/23/2009 11:44:18	OM_11-23-2009_11-08-40
241308003	924449	5	axh3	11/23/2009 11:45:30	OM_11-23-2009_11-08-40
241312001	924449	10	axh3	11/23/2009 11:46:42	OM_11-23-2009_11-08-40
241312003	924449	5	axh3	11/23/2009 11:47:54	OM_11-23-2009_11-08-40
241325001	924449	5	axh3	11/23/2009 11:49:05	OM_11-23-2009_11-08-40
1201976288	924449	5	axh3	11/23/2009 11:50:18	OM_11-23-2009_11-08-40
1201976290	924449	5	axh3	11/23/2009 11:51:32	OM_11-23-2009_11-08-40
241325002	924449	5	axh3	11/23/2009 11:52:45	OM_11-23-2009_11-08-40
241339007	924449	5	axh3	11/23/2009 11:53:57	OM_11-23-2009_11-08-40
241340002	924449	10	axh3	11/23/2009 11:55:10	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009 11:56:23	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009 11:58:44	OM_11-23-2009_11-08-40
241407001	924449	5	axh3	11/23/2009 12:01:04	OM_11-23-2009_11-08-40
241411001	924449	5	axh3	11/23/2009 12:02:16	OM_11-23-2009_11-08-40
1201977218	924449	5	axh3	11/23/2009 12:03:29	OM_11-23-2009_11-08-40
1201977220	924449	5	axh3	11/23/2009 12:04:41	OM_11-23-2009_11-08-40
241411002	924449	5	axh3	11/23/2009 12:05:53	OM_11-23-2009_11-08-40
241411003	924449	5	axh3	11/23/2009 12:07:05	OM_11-23-2009_11-08-40
241414003	924449	5	axh3	11/23/2009 12:08:18	OM_11-23-2009_11-08-40
1201977217	924449	5	axh3	11/23/2009 12:09:29	OM_11-23-2009_11-08-40
1201977219	924449	5	axh3	11/23/2009 12:10:41	OM_11-23-2009_11-08-40
241414004	924449	5	axh3	11/23/2009 12:11:53	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009 12:13:05	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009 12:15:26	OM_11-23-2009_11-08-40
241491001	924449	5	axh3	11/23/2009 12:17:47	OM_11-23-2009_11-08-40
241542002	924449	5	axh3	11/23/2009 12:19:00	OM_11-23-2009_11-08-40
1201978997	925645	1	axh3	11/23/2009 12:20:13	OM_11-23-2009_11-08-40
1201979008	925645	1	axh3	11/23/2009 12:21:26	OM_11-23-2009_11-08-40
241449002	925645	5	axh3	11/23/2009 12:22:38	OM_11-23-2009_11-08-40
1201978999	925645	5	axh3	11/23/2009 12:23:51	OM_11-23-2009_11-08-40
1201979004	925645	5	axh3	11/23/2009 12:25:03	OM_11-23-2009_11-08-40
241449003	925645	5	axh3	11/23/2009 12:26:16	OM_11-23-2009_11-08-40
241511002	925645	5	axh3	11/23/2009 12:27:29	OM_11-23-2009_11-08-40
241511004	925645	10	axh3	11/23/2009 12:28:41	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009 12:29:53	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009 12:32:14	OM_11-23-2009_11-08-40

241529001	925645	25	axh3	11/23/2009	12:34:33	OM_11-23-2009_11-08-40
1201978998	925645	25	axh3	11/23/2009	12:35:46	OM_11-23-2009_11-08-40
1201979003	925645	25	axh3	11/23/2009	12:36:58	OM_11-23-2009_11-08-40
241563002	925645	5	axh3	11/23/2009	12:38:10	OM_11-23-2009_11-08-40
1201979001	925645	5	axh3	11/23/2009	12:39:21	OM_11-23-2009_11-08-40
1201979006	925645	5	axh3	11/23/2009	12:40:34	OM_11-23-2009_11-08-40
241573001	925645	10	axh3	11/23/2009	12:41:48	OM_11-23-2009_11-08-40
241573002	925645	5	axh3	11/23/2009	12:43:01	OM_11-23-2009_11-08-40
241573003	925645	5	axh3	11/23/2009	12:44:14	OM_11-23-2009_11-08-40
241573004	925645	5	axh3	11/23/2009	12:45:26	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009	12:46:38	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009	12:48:59	OM_11-23-2009_11-08-40
241573005	925645	10	axh3	11/23/2009	12:51:21	OM_11-23-2009_11-08-40
241573006	925645	5	axh3	11/23/2009	12:52:33	OM_11-23-2009_11-08-40
1201979000	925645	5	axh3	11/23/2009	12:53:46	OM_11-23-2009_11-08-40
1201979005	925645	5	axh3	11/23/2009	12:54:58	OM_11-23-2009_11-08-40
241573007	925645	5	axh3	11/23/2009	12:56:10	OM_11-23-2009_11-08-40
241573008	925645	5	axh3	11/23/2009	12:57:22	OM_11-23-2009_11-08-40
241573009	925645	5	axh3	11/23/2009	12:58:34	OM_11-23-2009_11-08-40
241573010	925645	5	axh3	11/23/2009	12:59:46	OM_11-23-2009_11-08-40
241590002	925645	5	axh3	11/23/2009	13:00:58	OM_11-23-2009_11-08-40
241606001	925645	5	axh3	11/23/2009	13:02:10	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009	13:03:22	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009	13:05:45	OM_11-23-2009_11-08-40
1201979002	925645	5	axh3	11/23/2009	13:08:06	OM_11-23-2009_11-08-40
1201979007	925645	5	axh3	11/23/2009	13:09:19	OM_11-23-2009_11-08-40
241612001	925645	5	axh3	11/23/2009	13:10:32	OM_11-23-2009_11-08-40
241612002	925645	5	axh3	11/23/2009	13:11:45	OM_11-23-2009_11-08-40
241563002	925645	5	axh3	11/23/2009	13:12:57	OM_11-23-2009_11-08-40
1201979001	925645	5	axh3	11/23/2009	13:14:08	OM_11-23-2009_11-08-40
1201979006	925645	5	axh3	11/23/2009	13:15:21	OM_11-23-2009_11-08-40
241590002	925645	5	axh3	11/23/2009	13:16:33	OM_11-23-2009_11-08-40
241414003	924449	5	axh3	11/23/2009	13:17:45	OM_11-23-2009_11-08-40
1201977217	924449	5	axh3	11/23/2009	13:18:57	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009	13:20:09	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009	13:22:31	OM_11-23-2009_11-08-40
1201977219	924449	5	axh3	11/23/2009	13:24:51	OM_11-23-2009_11-08-40
1.0 ppm CCV		1	axh3	11/23/2009	13:27:11	OM_11-23-2009_11-08-40
CCB		1	axh3	11/23/2009	13:29:33	OM_11-23-2009_11-08-40

Author: lachat

Date : 11/23/2009

Original Run Filename: OM_11-23-2009_11-08-40.OMN created 11/23/2009 11:08:40
Original Run Author's Signature: [lachat]
Current Run Filename: OM_11-23-2009_11-08-40.OMN last modified 11/23/2009 13:30:55
Current Run Author's Signature: [lachat]
Description: EPA 353.2
Cadmium Colum 9056CAJ
LCS nominal 1.0 mg/L

Sample	Rep.	Cup No.	Channel 1 NO3 + NO2 Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR091123-26	1	S9	1.50	18.7	11/23/2009@11:09:42			1.5 PPM
WTR091123-25	1	S10	1.00	12.3	11/23/2009@11:10:54			1.0 PPM
WTR091123-24	1	S11	0.500	6.07	11/23/2009@11:12:06			0.5 ppm
WTR091123-23	1	S12	0.100	1.24	11/23/2009@11:13:19			0.1 ppm
WTR091123-21	1	S13	0.0500	0.637	11/23/2009@11:14:33			0.05 ppm
0.0ppm	1	S15	0.00	-0.00299	11/23/2009@11:15:46			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99993 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR091123-27 ICV	1	S16	0.979	12.1	11/23/2009@11:18:08			1.0 ppm ICV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.979 < 1.10					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.979 > 0.894					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S15	0.00363	0.00830	11/23/2009@11:20:30			ICB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.00363 < 0.0500					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.00363 > -0.0500					
		Message	ICB Passed					
		Action	Continue					
WTR091123-22	1	S1	0.960	11.9	11/23/2009@11:22:50			Nitrate 1.0 ppm
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.960 < 1.10					
		Message	Nitrate Standard Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.960 > 0.894					
		Message	Nitrate Standard Passed					
		Action	Continue					
WTR091123-28	1	S2	0.955	11.8	11/23/2009@11:25:10			Nitrite 1.0 ppm
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.955 < 1.10					
		Message	Nitrite Standard Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.955 > 0.894					
		Message	Nitrite Standard Passed					
		Action	Continue					
1201976287|924449|MB	1	1	0.00861	0.0702	11/23/2009@11:27:30			
1201976292||LCS	1	2	0.964	11.9	11/23/2009@11:28:44			
241166002	1	3	0.150	1.83	11/23/2009@11:29:57		25.00	
1201977800||DUP	1	4	0.147	1.79	11/23/2009@11:31:09		25.00	
1201977801||PS	1	5	1.10	13.6	11/23/2009@11:32:22		25.00	

241166006	1	6	0.201	2.47	11/23/2009@11:33:35		25.00	
241166009	1	7	0.159	1.94	11/23/2009@11:34:48		25.00	
241166015	1	8	0.277	3.40	11/23/2009@11:36:01		25.00	
241308002	1	9	0.0719	0.857	11/23/2009@11:37:12		5.00	
1201976289||DUP	1	10	0.0676	0.803	11/23/2009@11:38:24		5.00	
WTR091123-25 CCV	1	S10	0.984	12.2	11/23/2009@11:39:37			1.0 ppm CCV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.984 < 1.10					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.984 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00179	-0.0146	11/23/2009@11:41:58			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.00179 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.00179 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
1201976291||PS	1	11	1.04	12.9	11/23/2009@11:44:18		5.00	
241308003	1	12	0.0922	1.11	11/23/2009@11:45:30		5.00	
241312001	1	13	0.192	2.35	11/23/2009@11:46:42		10.00	
241312003	1	14	0.0650	0.771	11/23/2009@11:47:54		5.00	
241325001	1	15	0.0706	0.841	11/23/2009@11:49:05		5.00	
1201976288||DUP	1	16	0.00889	0.0736	11/23/2009@11:50:18		5.00	
1201976290||PS	1	17	1.03	12.8	11/23/2009@11:51:32		5.00	
241325002	1	18	0.00808	0.0635	11/23/2009@11:52:45		5.00	
241339007	1	19	0.0675	0.802	11/23/2009@11:53:57		5.00	
241340002	1	20	0.443	5.47	11/23/2009@11:55:10		10.00	
WTR091123-25 CCV	1	S10	1.01	12.5	11/23/2009@11:56:23			1.0 ppm CCV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	1.01 < 1.10					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.01 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00278	-0.00238	11/23/2009@11:58:44			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.00278 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.00278 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
241407001	1	21	0.672	8.31	11/23/2009@12:01:04		5.00	
241411001	1	22	0.247	3.04	11/23/2009@12:02:16		5.00	
1201977218||DUP	1	23	0.246	3.02	11/23/2009@12:03:29		5.00	
1201977220||PS	1	24	1.25	15.5	11/23/2009@12:04:41		5.00	
241411002	1	25	0.282	3.46	11/23/2009@12:05:53		5.00	
241411003	1	26	0.542	6.70	11/23/2009@12:07:05		5.00	
241414003	1	27	0.0138	0.134	11/23/2009@12:08:18		5.00	
1201977217||DUP	1	28	0.0141	0.138	11/23/2009@12:09:29		5.00	
1201977219||PS	1	29	0.0614	0.726	11/23/2009@12:10:41		5.00	
241414004	1	30	0.0123	0.116	11/23/2009@12:11:53		5.00	
WTR091123-25 CCV	1	S10	1.02	12.6	11/23/2009@12:13:05			1.0 ppm CCV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								

		Result:	1.02 < 1.10					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.02 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00404	0.0134	11/23/2009@12:15:26			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.00404 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.00404 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
241491001	1	31	0.779	9.65	11/23/2009@12:17:47		5.00	
241542002	1	32	0.176	2.16	11/23/2009@12:19:00		5.00	
1201978997|925645|MB	1	33	0.0110	0.0999	11/23/2009@12:20:13			
1201979008||LCS	1	34	1.01	12.6	11/23/2009@12:21:26			
241449002	1	35	0.00902	0.0753	11/23/2009@12:22:38		5.00	
1201978999||DUP	1	36	0.00924	0.0779	11/23/2009@12:23:51		5.00	
1201979004||PS	1	37	1.02	12.7	11/23/2009@12:25:03		5.00	
241449003	1	38	0.0105	0.0938	11/23/2009@12:26:16		5.00	
241511002	1	39	0.440	5.43	11/23/2009@12:27:29		5.00	
241511004	1	40	0.498	6.16	11/23/2009@12:28:41		10.00	
WTR091123-25 CCV	1	S10	1.02	12.6	11/23/2009@12:29:53			1.0 ppm CCV
		Known Conc:	1.00					
			DQM Test: > + Concentration Limit					
		Result:	1.02 < 1.10					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.02 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00256	-0.00503	11/23/2009@12:32:14			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.00256 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.00256 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
241529001	1	41	0.302	3.72	11/23/2009@12:34:33		25.00	
1201978998||DUP	1	42	0.295	3.63	11/23/2009@12:35:46		25.00	
1201979003||PS	1	43	1.30	16.1	11/23/2009@12:36:58		25.00	
241563002	1	44	0.0553	0.651	11/23/2009@12:38:10		5.00	
1201979001||DUP	1	45	0.127	1.54	11/23/2009@12:39:21		5.00	
1201979006||PS	1	46	1.15	14.2	11/23/2009@12:40:34		5.00	
241573001	1	47	0.231	2.83	11/23/2009@12:41:48		10.00	
241573002	1	48	0.392	4.84	11/23/2009@12:43:01		5.00	
241573003	1	49	0.231	2.84	11/23/2009@12:44:14		5.00	
241573004	1	50	0.348	4.29	11/23/2009@12:45:26		5.00	
WTR091123-25 CCV	1	S10	1.02	12.7	11/23/2009@12:46:38			1.0 ppm CCV
		Known Conc:	1.00					
			DQM Test: > + Concentration Limit					
		Result:	1.02 < 1.10					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.02 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00381	0.0104	11/23/2009@12:48:59			CCB

		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.00381 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.00381 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
241573005	1	51	0.222	2.72	11/23/2009@12:51:21		10.00	
241573006	1	52	0.214	2.63	11/23/2009@12:52:33		5.00	
1201979000||DUP	1	53	0.209	2.56	11/23/2009@12:53:46		5.00	
1201979005||PS	1	54	1.24	15.3	11/23/2009@12:54:58		5.00	
241573007	1	55	0.365	4.50	11/23/2009@12:56:10		5.00	
241573008	1	56	0.244	3.00	11/23/2009@12:57:22		5.00	
241573009	1	57	0.0318	0.359	11/23/2009@12:58:34		5.00	
241573010	1	58	0.222	2.72	11/23/2009@12:59:46		5.00	
241590002	1	59	0.0561	0.661	11/23/2009@13:00:58		5.00	
241606001	1	60	0.0231	0.250	11/23/2009@13:02:10		5.00	
WTR091123-25 CCV	1	S10	1.03	12.8	11/23/2009@13:03:22			1.0 ppm CCV
		Known Conc:	1.00					
			DQM Test: > + Concentration Limit					
		Result:	1.03 < 1.10					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.03 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00314	0.00221	11/23/2009@13:05:45			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.00314 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.00314 > -0.0500					
		Message	CCB Passed					
		Action	Continue					
1201979002||DUP	1	61	0.0230	0.249	11/23/2009@13:08:06		5.00	
1201979007||PS	1	62	1.05	13.1	11/23/2009@13:09:19		5.00	
241612001	1	63	0.00712	0.0517	11/23/2009@13:10:32		5.00	
241612002	1	64	0.00734	0.0544	11/23/2009@13:11:45		5.00	
241563002	1	44	0.129	1.57	11/23/2009@13:12:57		5.00	
1201979001||DUP	1	45	0.128	1.56	11/23/2009@13:14:08		5.00	
1201979006||PS	1	46	1.20	14.9	11/23/2009@13:15:21		5.00	
241590002	1	59	0.0943	1.13	11/23/2009@13:16:33		5.00	
241414003|924449|	1	27	0.0165	0.169	11/23/2009@13:17:45		5.00	
1201977217||DUP	1	28	0.0171	0.175	11/23/2009@13:18:57		5.00	
WTR091123-25 CCV	1	S10	1.01	12.5	11/23/2009@13:20:09			1.0 ppm CCV
		Known Conc:	1.00					
			DQM Test: > + Concentration Limit					
		Result:	1.01 < 1.10					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.01 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00370	0.00914	11/23/2009@13:22:31			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.00370 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.00370 > -0.0500					
		Message	CCB Passed					

Author: lachat

Date : 11/23/2009

		Action	Continue					
1201977219||PS	1	29	1.01	12.5	11/23/2009@13:24:51		5.00	
WTR091123-25 CCV	1	S10	0.990	12.3	11/23/2009@13:27:11			1.0 ppm CCV
		Known Conc:	1.00					
			DQM Test: > + Concentration Limit					
		Result:	0.990 < 1.10					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.990 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00354	0.00718	11/23/2009@13:29:33			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.00354 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.00354 > -0.0500					
		Message	CCB Passed					
		Action	Continue					

Channel 1 (NO3 + NO2) : Current View

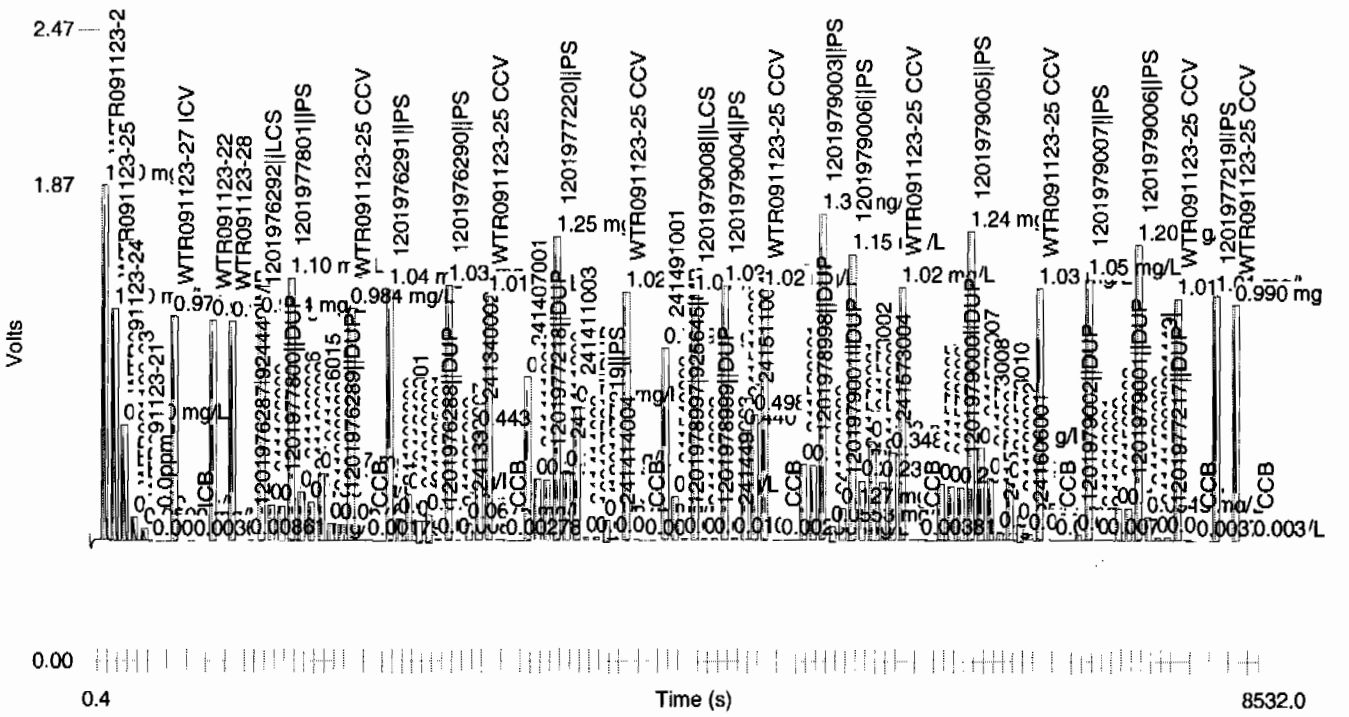

Author: lachat

Date : 11/23/2009

Table 1: NO3 + NO2

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.50	1	18.7	1.39	-0.6	11/23/2009	11:11:01
2	1.00	1	12.3	0.907	0.9	11/23/2009	11:12:13
3	0.500	1	6.07	0.449	1.8	11/23/2009	11:13:26
4	0.100	1	1.24	0.0902	-2.6	11/23/2009	11:14:39
5	0.0500	1	0.637	0.0461	-8.8	11/23/2009	11:15:52
6	0.00	1	-0.00299	-2.46e-4		11/23/2009	11:17:06

Figure 1: NO3 + NO2

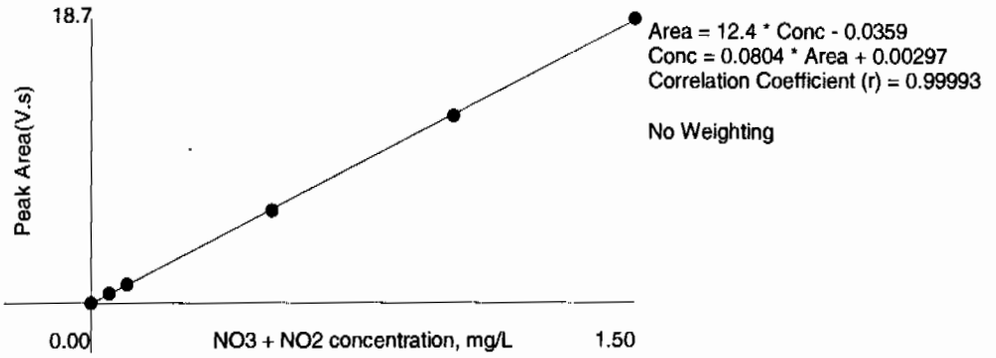

This is runlog lachat3

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
1.5 PPM		1	axh3	11/24/2009 14:13:30	OM_11-24-2009_14-11-43
1.0 PPM		1	axh3	11/24/2009 14:14:42	OM_11-24-2009_14-11-43
0.5 ppm		1	axh3	11/24/2009 14:15:55	OM_11-24-2009_14-11-43
0.1 ppm		1	axh3	11/24/2009 14:17:08	OM_11-24-2009_14-11-43
0.05 ppm		1	axh3	11/24/2009 14:18:21	OM_11-24-2009_14-11-43
ICAL-00		1	axh3	11/24/2009 14:19:35	OM_11-24-2009_14-11-43
1.0 ppm ICV		1	axh3	11/24/2009 14:21:57	OM_11-24-2009_14-11-43
ICB		1	axh3	11/24/2009 14:24:19	OM_11-24-2009_14-11-43
Nitrate 1.0 ppm		1	axh3	11/24/2009 14:26:39	OM_11-24-2009_14-11-43
Nitrite 1.0 ppm		1	axh3	11/24/2009 14:28:58	OM_11-24-2009_14-11-43
241325001	924449	5	axh3	11/24/2009 14:31:20	OM_11-24-2009_14-11-43
1201976288	924449	5	axh3	11/24/2009 14:32:33	OM_11-24-2009_14-11-43
1201976290	924449	5	axh3	11/24/2009 14:33:46	OM_11-24-2009_14-11-43
1.0 ppm CCV		1	axh3	11/24/2009 14:36:06	OM_11-24-2009_14-11-43
CCB		1	axh3	11/24/2009 14:38:27	OM_11-24-2009_14-11-43

Author: lachat

Date : 11/24/2009

Original Run Filename: OM_11-24-2009_14-11-43.OMN created 11/24/2009 14:11:43
Original Run Author's Signature: [lachat]
Current Run Filename: OM_11-24-2009_14-11-43.OMN last modified 11/24/2009 14:39:51
Current Run Author's Signature: [lachat]
Description: EPA 353.2
Cadmium Colum 9056CAJ
LCS nominal 1.0 mg/L

Sample	Rep.	Cup No.	Channel 1 NO3 + NO2 Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR091124-26	1	S9	1.50	18.7	11/24/2009@14:13:30			1.5 PPM
WTR091124-25	1	S10	1.00	12.2	11/24/2009@14:14:42			1.0 PPM
WTR091124-24	1	S11	0.500	6.11	11/24/2009@14:15:55			0.5 ppm
WTR091124-23	1	S12	0.100	1.24	11/24/2009@14:17:08			0.1 ppm
WTR091124-21	1	S13	0.0500	0.636	11/24/2009@14:18:21			0.05 ppm
0.0ppm	1	S15	0.00	-0.00686	11/24/2009@14:19:35			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99987 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR091124-27 ICV	1	S16	0.972	12.0	11/24/2009@14:21:57			1.0 ppm ICV
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.972 < 1.10					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.972 > 0.894					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S15	0.00345	0.00841	11/24/2009@14:24:19			ICB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.00345 < 0.0500					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.00345 > -0.0500					
		Message	ICB Passed					
		Action	Continue					
WTR091124-22	1	S1	0.961	11.9	11/24/2009@14:26:39			Nitrate 1.0 ppm
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.961 < 1.10					
		Message	Nitrate Standard Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.961 > 0.894					
		Message	Nitrate Standard Passed					
		Action	Continue					
WTR091124-28	1	S2	0.956	11.8	11/24/2009@14:28:58			Nitrite 1.0 ppm
		Known Conc:	1.00					
DQM Test: > + Concentration Limit								
		Result:	0.956 < 1.10					
		Message	Nitrite Standard Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.956 > 0.894					
		Message	Nitrite Standard Passed					
		Action	Continue					
241325001|924449|	1	1	0.0122	0.117	11/24/2009@14:31:20		5.00	
1201976288||DUP	1	2	0.00763	0.0602	11/24/2009@14:32:33		5.00	
1201976290||PS	1	3	1.01	12.5	11/24/2009@14:33:46		5.00	
WTR091124-25 CCV	1	S10	0.967	12.0	11/24/2009@14:36:06			1.0 ppm CCV
		Known Conc:	1.00					

Author: lachat

Date : 11/24/2009

DQM Test: > + Concentration Limit								
		Result:	0.967 < 1.10					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.967 > 0.894					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	0.00231	-0.00569	11/24/2009@14:38:27			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.00231 < 0.0500					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.00231 > -0.0500					
		Message	CCB Passed					
		Action	Continue					

Channel 1 (NO3 + NO2) : Current View

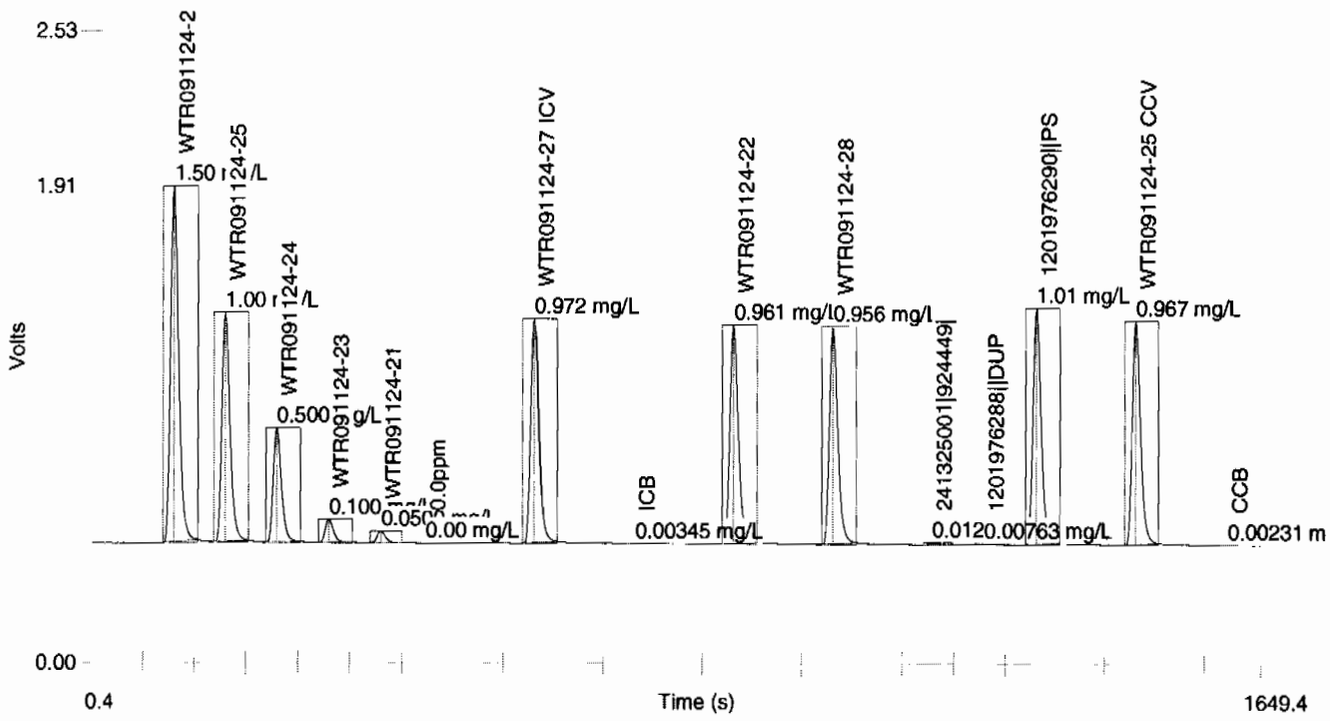

Table 1: NO3 + NO2

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.50	1	18.7	1.43	-0.8	11/24/2009	14:14:50
2	1.00	1	12.2	0.928	1.7	11/24/2009	14:16:02
3	0.500	1	6.11	0.463	0.9	11/24/2009	14:17:14
4	0.100	1	1.24	0.0935	-2.8	11/24/2009	14:18:28
5	0.0500	1	0.636	0.0478	-8.3	11/24/2009	14:19:41
6	0.00	1	-0.00686	-5.82e-4		11/24/2009	14:20:55

Author: lachat

Date : 11/24/2009

Figure 1: NO3 + NO2

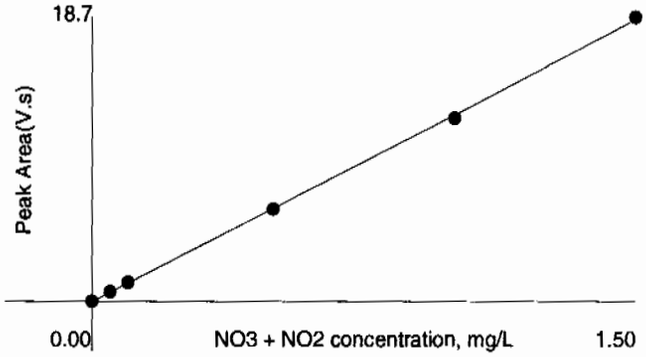

Area = 12.4 * Conc - 0.0327
Conc = 0.0806 * Area + 0.00277
Correlation Coefficient (r) = 0.99987

No Weighting

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-604

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	SW-846:8082	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	

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REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13930	S	11/18/2009	
		1	RE03-09-13931	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

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Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-604

REQUEST NUMBER: 10-604

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13875	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13865	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13865	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13868	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13868	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13867	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13867	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13864	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13864	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13871	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13871	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13877	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13877	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13869	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13869	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13870	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13870	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13873	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13873	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13863	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13863	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13874	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13874	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13866	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13866	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13862	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13862	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13876	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13876	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13872	1	SEPTUM AMBER GLASS	8260B	Ice	S

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-604

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13930	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-13931	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
[illegible]		11/19/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13862 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608289	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Clay Sand with Tuff Qbt-3 Reddish brown (5YR 5/3)

SAMPLE COMMENTS: Encountered Tuff 6" inches

LOCATION DESC: 03-015-6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 19.4 ppm
Background α = 16 dpm
Screen: β = 1352 dpm

COLLECTED BY (PRINT) M. Nawak REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13863 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1007	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608289		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay fill light Reddish brown (5YR 6/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-015-6

FIELD SCREENING/MEASUREMENT RESULTS: PID = 44.6 ppm
Background: α = 16 dpm
Screening: β = 1532 dpm

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13864 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608290		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay Dark Reddish brown (5YR 3/2)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-015-7

FIELD SCREENING/MEASUREMENT RESULTS: PID = 27.2 ppm

Background: α = 16 dpm
Screening: β = 1350 dpm

COLLECTED BY (PRINT) D. Thomas

REVIEWED BY (PRINT) S. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13865 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1010	SUB-MEDIA:	OTHER	N/A
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608290		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	N/A	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay Dark Reddish brown (5 YR 3/3)

SAMPLE COMMENTS:

LOCATION DESC: 03-15-7

FIELD SCREENING/MEASUREMENT RESULTS: PID = 4.7 ppm
Background Screening: α = 16 dpm
β = ~~18~~ 1352
JJ 11-18-09

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13866 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1033	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608291		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay sand fill Reddish brown (5YR 4/4)

SAMPLE COMMENTS: Identified plant Roots in sample

LOCATION DESC: 03-15-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background Screening: α = 16 dpm
β = 1350

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jerome Jordan (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13867 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1040	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608291	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay Sand fill dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Back ground Screen: α = 16 dpm
β = 1350 ↓

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan	11-18-09 1630	(Printed Name) Sherri Sherwood	11-18-09 1630
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13868 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/04	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1038	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	Ok
LOCATION ID:	03-608292	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Clay Sand Fill dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: Plant Roots in Sample

LOCATION DESC: 03-15-4

FIELD SCREENING/MEASUREMENT RESULTS: FID = 1.4 ppm
Background: α = 16 dpm
Screening: β = 1352 ↓

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Foster

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Foster	11-18-04	(Printed Name) Sherri Sherwood	11-18-04
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13869 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1042	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608292		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay Sand Fill Reddish brown (5YR 4/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-4

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background screening: α = 16 dpm
β = 1352 ↓

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13870 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1118	SUB-MEDIA:	OTHER	NH
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608293	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: silty Sand with clay. dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: Plant Roots Identified in Sample

LOCATION DESC: 03-15-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 5.5 ppm
Background Screening: α = 16 dpm
β = 1350 ↓

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** J. Todd

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-18-09 1630	(Printed Name) [signature]	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13871 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608293	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay with silt. Reddish brown (5YR 4/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 7.1 ppm
Background screening: α = 16 dpm
β = 1352 dpm

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13872 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1202	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608294	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand, ~~reddish brown (5YR 4/3)~~ dark Reddish gray (5YR 4/2) MS 11/18/09

SAMPLE COMMENTS: Plant Roots Identified

LOCATION DESC: 03-015-8

FIELD SCREENING/MEASUREMENT RESULTS: PID = 90.2 ppm
Background α = 16 dpm
Screening β = 1350 dpm

COLLECTED BY (PRINT) M. Nayek REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13873 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1210	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608294	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / ~~NO~~ / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. dark Reddish gray (5YR 4/2)

SAMPLE COMMENTS: Plant Roots Identified

LOCATION DESC: 03-015-8

FIELD SCREENING/MEASUREMENT RESULTS: PID = 6.1 ppm
Background Screening α = 16 dpm
β = 1352 dpm

COLLECTED BY (PRINT) M. NAuck REVIEWED BY (PRINT) J. Jost

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jost	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13874 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1240	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608295	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: silty Sand Fill, Reddish yellow (7.5YR 6/6)

SAMPLE COMMENTS: Plant Root in Sample

LOCATION DESC: 03-15-10

FIELD SCREENING/MEASUREMENT RESULTS: PID= 125 ppm
Background, α= 16 dpm
Screening: β= 1352 dpm

Samples: MDA

COLLECTED BY (PRINT) L. Horne, M. Nauck

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09	(Printed Name) Sherri Sherwood	11/18/09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13875 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1242	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608295	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Clay Sand Fill. light Brown (7.5 YR 6/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-10

FIELD SCREENING/MEASUREMENT RESULTS: PID = 7.0 ppm Samples: 4MDA
Background screening: α = 16 dpm, β = 1352 dpm

COLLECTED BY (PRINT) L. Horne, M. Nauck REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13876 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1314	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608296		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, Dark brown (7.5YR 3/2)

SAMPLE COMMENTS: Plant Roots Identified in Sample

LOCATION DESC: 03-15-9

FIELD SCREENING/MEASUREMENT RESULTS: PID = 6.3ppm
Background, α = 16 dpm
Screening β = 1352 dpm

Samples: 4MDA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Nowt

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nowt	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13877 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1317	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608296	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand with clay. Dark brown (7.5 YR 3/2)

SAMPLE COMMENTS: Plant Roots Identified in Sample.

LOCATION DESC: 03-15-9

FIELD SCREENING/MEASUREMENT RESULTS: PID = 9.7 ppm Samples: <MDA

Background screening: α = 16 dpm
β = 1352 dpm

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) M. Ward

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Ward	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

COLLECTION LOG/FIELD CHAIN OF CUSTODY

EV: EVENT NAME: Soil Sampling at CU 03-015-00, Part 1

SAMP: RE03-09-13930 WORK ORDER:

	NNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLE):		11-18-09	MEDIA:	~~NA~~	All H
TIME COLLE		1033	SUB-MEDIA:	OTHER	NA
PRS ID:		03-015	SAMPLE TECH CODE:	HA	ok
LOCATION ID		03-608291	FIELD QC TYPE:	FTB	
LOCATION TY		ok	FIELD PREP:	NA	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DEP			SCREEN/PORT DESC:	NA	
FIELD MATR	S		EXCAVATED: YES / NO / NA		

COMPOSITE COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PR	DER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 ~~2~~	NW 11-18-09	82608 Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DI of QC sample of RE03-09-13866

SAMPLE C NA

LOCATION NA

FIELD SC REMENT RESULTS: NA

COLLECT M. Nauck REVIEWED BY (PRINT) M. Rains

RELINQUI	Date/Time	RECEIVED BY	Date/Time
(Printed Na M. Nauck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQU	Date/Time	RECEIVED BY	Date/Time
(Printed Na		(Printed Name)	
(Signature)		(Signature)	

[illegible] COLLECTION LOG/FIELD CHAIN OF CUSTODY

E[illegible] **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMP[illegible] RE03-09-13931 **WORK ORDER:**

	[illegible]NNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLL[illegible]):		11-18-09	MEDIA:	NA	AIR
TIME COLL[illegible]		1240	SUB-MEDIA:	OTHER	NA
PRS ID:		03-015	SAMPLE TECH CODE:	HA	OK
LOCATION I[illegible]		03-608295	FIELD QC TYPE:	FTB	—
LOCATION T[illegible]		OK	FIELD PREP:	NA	—
TOP DEPTH:		—	SAMPLE USAGE:	QC	—
BOTTOM DE[illegible]		—	SCREEN/PORT DESC:		NA
FIELD MATR[illegible]	S		EXCAVATED: YES / NO (NA)		

COMPOS[illegible] ____ COMPOSITE TIME INTERVAL: ____ WATER FLOWING: YES / NO (NA)

BOREHOLE: (NA) [illegible]OREHOLE DECLINATION: ____ BOREHOLE DIRECTION: ____

#	[illegible]	[illegible]ER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 NW 11-18-09	826087 [illegible]p Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE [illegible] [illegible]f QC Sample of RE0309-13874

SAMPLE [illegible] NA

LOCATION [illegible] NA

FIELD SC[illegible] [illegible]REMENT RESULTS: NA

COLLECT[illegible] M. Lauck

REVIEWED BY (PRINT) M. Rains

RELINQ[illegible]	Date/Time	RECEIVED BY	Date/Time
(Printed N[illegible] M. Lauck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature) [illegible]	1630	(Signature) Sherri Sherwood	1630
RELINQ[illegible]	Date/Time	RECEIVED BY	Date/Time
(Printed N[illegible]		(Printed Name)	
(Signature[illegible]		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-604 VALIDATION DATE: 1/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the FTBs, sample RE03-09-13930 and -13931, associated with samples -13866, -13867, -13874 and -13875 respectively, acetone was detected. All the associated sample results were NDs and, thus, were not qualified.
2. The ICV %Ds were >20% for acetone, 2-butanone and 2-hexanone. In the CCV associated with the samples -13877 and -13872, the %Ds were >20% for dichlorodifluoromethane, acetone, 2-butanone and 2-hexanone. In the CCV associated with all the other samples, the %Ds were >20% for bromochloromethane and 1,2-dibromo-3-chloropropane. The acetone results for samples -13830 and -13831 were detects and, thus, were qualified J,V7c. All the other associated sample results were NDs and, thus, were qualified UJ,V7c.

Reviewed by: MLD **Level I** **Date:** 01/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/26/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13862	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 06:33	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:23	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n344.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.391	1.15	
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15	
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15	
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15	
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15	
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15	
67-64-1	Acetone	U	5.76	ug/kg	1.91	5.76	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15	
74-88-4	Iodomethane	U	5.76	ug/kg	1.84	5.76	
75-09-2	Methylene chloride	U	5.76	ug/kg	2.30	5.76	
75-15-0	Carbon disulfide	U	5.76	ug/kg	1.44	5.76	
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15	
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15	
78-93-3	2-Butanone	U	5.76	ug/kg	1.73	5.76	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15	
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15	
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15	
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.380	1.15	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15	
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15	
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15	
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15	
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15	
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.380	1.15	
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15	
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15	
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15	
108-10-1	4-Methyl-2-pentanone	U	5.76	ug/kg	1.44	5.76	
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15	
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15	
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15	
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15	
591-78-6	2-Hexanone	U	5.76	ug/kg	1.73	5.76	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15	
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15	
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15	
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15	
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13862	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 06:33	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:23	Aliquot:	5 g	Final Volume:	5 mL
Data File:	In344.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.345	1.15	
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30	
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15	
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15	
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15	
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15	
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15	
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15	
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15	
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15	
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15	
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15	
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15	
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15	
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15	
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15	
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15	
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15	
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.76	ug/kg	1.84	5.76	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15	
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13863	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 05:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:20	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n341.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09	
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09	
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09	
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09	
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09	
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09	
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47	
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47	
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47	
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09	
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09	
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09	
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09	
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09	
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09	
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09	
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09	
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09	
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09	
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09	
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47	
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09	
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09	
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09	
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09	
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09	
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09	
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09	
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09	
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09	

ETM
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13863	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 05:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:20	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n341.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09	
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19	
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09	
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09	
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09	
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09	
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09	
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09	
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09	
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09	
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09	
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09	
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09	
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09	
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09	
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09	
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09	
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09	
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09	
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

ETM
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540005	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13864	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 02:01	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:14	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n335.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10	
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10	
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49	
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49	
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540005	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13864	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 02:01	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:14	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n335.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10	
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.329	2.20	
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10	
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10	
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10	
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10	
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10	
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10	
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10	
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10	
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10	
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10	
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10	
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10	
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10	
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540002	Date Received:	11/20/2009 08:50	%Moisture:	13.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13865	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 00:30	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:11	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n332.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.393	1.16	
74-87-3	Chloromethane	U	1.16	ug/kg	0.347	1.16	
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.347	1.16	
74-83-9	Bromomethane	U	1.16	ug/kg	0.347	1.16	
75-00-3	Chloroethane	U	1.16	ug/kg	0.347	1.16	
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.347	1.16	
67-64-1	Acetone	U	5.78	ug/kg	1.92	5.78	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.347	1.16	
74-88-4	Iodomethane	U	5.78	ug/kg	1.85	5.78	
75-09-2	Methylene chloride	U	5.78	ug/kg	2.31	5.78	
75-15-0	Carbon disulfide	U	5.78	ug/kg	1.44	5.78	
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.347	1.16	
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.347	1.16	
78-93-3	2-Butanone	U	5.78	ug/kg	1.73	5.78	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.347	1.16	
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.347	1.16	
67-66-3	Chloroform	U	1.16	ug/kg	0.347	1.16	
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.381	1.16	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.347	1.16	
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.347	1.16	
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.347	1.16	
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.347	1.16	
71-43-2	Benzene	U	1.16	ug/kg	0.347	1.16	
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.381	1.16	
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.347	1.16	
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.347	1.16	
74-95-3	Dibromomethane	U	1.16	ug/kg	0.347	1.16	
108-10-1	4-Methyl-2-pentanone	U	5.78	ug/kg	1.44	5.78	
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.347	1.16	
108-88-3	Toluene	U	1.16	ug/kg	0.347	1.16	
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.347	1.16	
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.347	1.16	
591-78-6	2-Hexanone	U	5.78	ug/kg	1.73	5.78	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.347	1.16	
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.347	1.16	
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.347	1.16	
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.347	1.16	
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.347	1.16	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540002	Date Received:	11/20/2009 08:50	%Moisture:	13.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13865	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 00:30	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:11	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n332.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.347	1.16	
179601-23-1	m,p-Xylenes	U	2.31	ug/kg	0.347	2.31	
95-47-6	o-Xylene	U	1.16	ug/kg	0.347	1.16	
100-42-5	Styrene	U	1.16	ug/kg	0.347	1.16	
75-25-2	Bromoform	U	1.16	ug/kg	0.347	1.16	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.347	1.16	
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.347	1.16	
108-86-1	Bromobenzene	U	1.16	ug/kg	0.347	1.16	
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.347	1.16	
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.347	1.16	
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.347	1.16	
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.347	1.16	
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.347	1.16	
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.347	1.16	
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.347	1.16	
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.347	1.16	
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.347	1.16	
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16	
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16	
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.347	1.16	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.347	1.16	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.78	ug/kg	1.85	5.78	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.347	1.16	
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540013	Date Received:	11/20/2009 08:50	%Moisture:	14
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13866	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 06:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:22	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n343.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.395	1.16	
74-87-3	Chloromethane	U	1.16	ug/kg	0.349	1.16	
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.349	1.16	
74-83-9	Bromomethane	U	1.16	ug/kg	0.349	1.16	
75-00-3	Chloroethane	U	1.16	ug/kg	0.349	1.16	
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.349	1.16	
67-64-1	Acetone	U	5.82	ug/kg	1.93	5.82	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.349	1.16	
74-88-4	Iodomethane	U	5.82	ug/kg	1.86	5.82	
75-09-2	Methylene chloride	U	5.82	ug/kg	2.33	5.82	
75-15-0	Carbon disulfide	U	5.82	ug/kg	1.45	5.82	
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.349	1.16	
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.349	1.16	
78-93-3	2-Butanone	U	5.82	ug/kg	1.74	5.82	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.349	1.16	
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.349	1.16	
67-66-3	Chloroform	U	1.16	ug/kg	0.349	1.16	
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.384	1.16	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.349	1.16	
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.349	1.16	
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.349	1.16	
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.349	1.16	
71-43-2	Benzene	U	1.16	ug/kg	0.349	1.16	
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.384	1.16	
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.349	1.16	
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.349	1.16	
74-95-3	Dibromomethane	U	1.16	ug/kg	0.349	1.16	
108-10-1	4-Methyl-2-pentanone	U	5.82	ug/kg	1.45	5.82	
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.349	1.16	
108-88-3	Toluene	U	1.16	ug/kg	0.349	1.16	
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.349	1.16	
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.349	1.16	
591-78-6	2-Hexanone	U	5.82	ug/kg	1.74	5.82	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.349	1.16	
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.349	1.16	
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.349	1.16	
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.349	1.16	
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.349	1.16	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540013	Date Received:	11/20/2009 08:50	%Moisture:	14
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13866	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 06:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:22	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n343.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.349	1.16	
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.349	2.33	
95-47-6	o-Xylene	U	1.16	ug/kg	0.349	1.16	
100-42-5	Styrene	U	1.16	ug/kg	0.349	1.16	
75-25-2	Bromoform	U	1.16	ug/kg	0.349	1.16	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.349	1.16	
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.349	1.16	
108-86-1	Bromobenzene	U	1.16	ug/kg	0.349	1.16	
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.349	1.16	
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.349	1.16	
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.349	1.16	
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.349	1.16	
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.349	1.16	
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.349	1.16	
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.349	1.16	
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.349	1.16	
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.349	1.16	
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16	
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16	
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.349	1.16	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.349	1.16	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.82	ug/kg	1.86	5.82	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.349	1.16	
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540004	Date Received:	11/20/2009 08:50	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13867	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 01:31	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:13	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n334.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14	
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14	
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14	
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14	
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14	
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14	
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14	
74-88-4	Iodomethane	U	5.70	ug/kg	1.83	5.70	
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70	
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70	
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14	
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14	
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14	
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14	
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14	
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14	
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14	
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14	
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14	
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14	
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14	
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14	
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14	
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14	
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70	
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14	
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14	
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14	
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14	
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14	
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14	
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14	
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14	
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540004	Date Received:	11/20/2009 08:50	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13867	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 01:31	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:13	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n334.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14	
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28	
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14	
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14	
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14	
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14	
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14	
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14	
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14	
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14	
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14	
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14	
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14	
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14	
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14	
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14	
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14	
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14	
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.83	5.70	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14	
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540003	Date Received:	11/20/2009 08:50	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13868	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 01:01	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:12	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n333.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13	
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13	
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13	
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13	
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13	
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13	
67-64-1	Acetone	U	5.64	ug/kg	1.87	5.64	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13	
74-88-4	Iodomethane	U	5.64	ug/kg	1.81	5.64	
75-09-2	Methylene chloride	U	5.64	ug/kg	2.26	5.64	
75-15-0	Carbon disulfide	U	5.64	ug/kg	1.41	5.64	
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13	
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13	
78-93-3	2-Butanone	U	5.64	ug/kg	1.69	5.64	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13	
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13	
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13	
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13	
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13	
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13	
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13	
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13	
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13	
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13	
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13	
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13	
108-10-1	4-Methyl-2-pentanone	U	5.64	ug/kg	1.41	5.64	
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13	
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13	
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13	
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13	
591-78-6	2-Hexanone	U	5.64	ug/kg	1.69	5.64	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13	
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13	
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13	
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13	
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540003	Date Received:	11/20/2009 08:50	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13868	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 01:01	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:12	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n333.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13	
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.338	2.26	
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13	
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13	
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13	
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13	
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13	
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13	
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13	
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13	
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13	
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13	
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13	
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13	
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13	
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13	
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13	
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13	
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.64	ug/kg	1.81	5.64	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13	
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540008	Date Received:	11/20/2009 08:50	%Moisture:	16.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13869	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 03:32	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:17	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n338.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20	
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20	
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20	
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20	
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20	
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20	
67-64-1	Acetone	U	6.01	ug/kg	1.99	6.01	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20	
74-88-4	Iodomethane	U	6.01	ug/kg	1.92	6.01	
75-09-2	Methylene chloride	U	6.01	ug/kg	2.40	6.01	
75-15-0	Carbon disulfide	U	6.01	ug/kg	1.50	6.01	
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20	
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20	
78-93-3	2-Butanone	U	6.01	ug/kg	1.80	6.01	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20	
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20	
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20	
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20	
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20	
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20	
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20	
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20	
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20	
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20	
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20	
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20	
108-10-1	4-Methyl-2-pentanone	U	6.01	ug/kg	1.50	6.01	
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20	
108-88-3	Toluene	U	1.20	ug/kg	0.360	1.20	
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20	
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20	
591-78-6	2-Hexanone	U	6.01	ug/kg	1.80	6.01	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20	
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20	
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20	
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20	
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540008	Date Received:	11/20/2009 08:50	%Moisture:	16.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13869	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 03:32	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:17	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n338.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20	
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40	
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20	
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20	
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20	
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20	
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20	
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20	
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20	
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20	
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20	
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20	
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20	
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20	
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20	
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20	
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20	
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20	
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.01	ug/kg	1.92	6.01	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20	
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

ETM
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540009	Date Received:	11/20/2009 08:50	%Moisture:	13.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13870	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 04:02	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:18	Aliquot:	5 g	Final Volume:	5 mL
Data File:	In339.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.394	1.16	
74-87-3	Chloromethane	U	1.16	ug/kg	0.348	1.16	
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.348	1.16	
74-83-9	Bromomethane	U	1.16	ug/kg	0.348	1.16	
75-00-3	Chloroethane	U	1.16	ug/kg	0.348	1.16	
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.348	1.16	
67-64-1	Acetone	U	5.80	ug/kg	1.92	5.80	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.348	1.16	
74-88-4	Iodomethane	U	5.80	ug/kg	1.85	5.80	
75-09-2	Methylene chloride	U	5.80	ug/kg	2.32	5.80	
75-15-0	Carbon disulfide	U	5.80	ug/kg	1.45	5.80	
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.348	1.16	
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.348	1.16	
78-93-3	2-Butanone	U	5.80	ug/kg	1.74	5.80	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.348	1.16	
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.348	1.16	
67-66-3	Chloroform	U	1.16	ug/kg	0.348	1.16	
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.383	1.16	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.348	1.16	
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.348	1.16	
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.348	1.16	
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.348	1.16	
71-43-2	Benzene	U	1.16	ug/kg	0.348	1.16	
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.383	1.16	
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.348	1.16	
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.348	1.16	
74-95-3	Dibromomethane	U	1.16	ug/kg	0.348	1.16	
108-10-1	4-Methyl-2-pentanone	U	5.80	ug/kg	1.45	5.80	
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.348	1.16	
108-88-3	Toluene	U	1.16	ug/kg	0.348	1.16	
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.348	1.16	
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.348	1.16	
591-78-6	2-Hexanone	U	5.80	ug/kg	1.74	5.80	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.348	1.16	
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.348	1.16	
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.348	1.16	
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.348	1.16	
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.348	1.16	

ETM
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540009	Date Received:	11/20/2009 08:50	%Moisture:	13.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13870	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 04:02	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:18	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n339.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.348	1.16	
179601-23-1	m,p-Xylenes	U	2.32	ug/kg	0.348	2.32	
95-47-6	o-Xylene	U	1.16	ug/kg	0.348	1.16	
100-42-5	Styrene	U	1.16	ug/kg	0.348	1.16	
75-25-2	Bromoform	U	1.16	ug/kg	0.348	1.16	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.348	1.16	
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.348	1.16	
108-86-1	Bromobenzene	U	1.16	ug/kg	0.348	1.16	
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.348	1.16	
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.348	1.16	
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.348	1.16	
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.348	1.16	
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.348	1.16	
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.348	1.16	
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.348	1.16	
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.348	1.16	
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.348	1.16	
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16	
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16	
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.348	1.16	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.348	1.16	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.80	ug/kg	1.85	5.80	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.348	1.16	
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540006	Date Received:	11/20/2009 08:50	%Moisture:	16.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13871	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 02:31	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:15	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n336.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.406	1.19	
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19	
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19	
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19	
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19	
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19	
67-64-1	Acetone	U	5.97	ug/kg	1.98	5.97	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
74-88-4	Iodomethane	U	5.97	ug/kg	1.91	5.97	
75-09-2	Methylene chloride	U	5.97	ug/kg	2.39	5.97	
75-15-0	Carbon disulfide	U	5.97	ug/kg	1.49	5.97	
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19	
78-93-3	2-Butanone	U	5.97	ug/kg	1.79	5.97	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19	
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19	
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.394	1.19	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19	
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19	
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19	
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19	
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19	
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.394	1.19	
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19	
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19	
108-10-1	4-Methyl-2-pentanone	U	5.97	ug/kg	1.49	5.97	
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19	
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19	
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19	
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19	
591-78-6	2-Hexanone	U	5.97	ug/kg	1.79	5.97	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19	
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19	
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19	
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19	
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540006	Date Received:	11/20/2009 08:50	%Moisture:	16.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13871	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 02:31	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:15	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n336.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19	
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.358	2.39	
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19	
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19	
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19	
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19	
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19	
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19	
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19	
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19	
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19	
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19	
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19	
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19	
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19	
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19	
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19	
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19	
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.97	ug/kg	1.91	5.97	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19	
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540016	Date Received:	11/20/2009 08:50	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13872	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/27/2009 08:13	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/27/2009 06:31	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n506.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10	UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10	
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52	
75-09-2	Methylene chloride	J	5.22	ug/kg	2.21	5.52	
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540016	Date Received:	11/20/2009 08:50	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13872	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/27/2009 08:13	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/27/2009 06:31	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n506.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene		1.25	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	16.54	7.49	ug/kg		J
508-32-7	Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	17.97	6.33	ug/kg	95	NJ
7785-70-8	1R-.alpha.-Pinene	18.1	12.6	ug/kg	97	NJ
79-92-5	Camphene	18.44	37.3	ug/kg	91	NJ
13466-78-9	3-Carene	19.13	21.2	ug/kg	97	NJ
138-86-3	Limonene	19.37	9.98	ug/kg	93	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540010	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13873	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 04:32	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:19	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n340.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10	
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10	
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49	
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49	
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540010	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13873	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 04:32	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:19	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n340.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10	
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.329	2.20	
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10	
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10	
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10	
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10	
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10	
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10	
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10	
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10	
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10	
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10	
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10	
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10	
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10	
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540012	Date Received:	11/20/2009 08:50	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13874	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 05:32	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:21	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n342.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08	
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08	
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08	
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08	
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08	
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08	
67-64-1	Acetone	U	5.39	ug/kg	1.79	5.39	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
74-88-4	Iodomethane	U	5.39	ug/kg	1.72	5.39	
75-09-2	Methylene chloride	U	5.39	ug/kg	2.15	5.39	
75-15-0	Carbon disulfide	U	5.39	ug/kg	1.35	5.39	
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08	
78-93-3	2-Butanone	U	5.39	ug/kg	1.62	5.39	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08	
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08	
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08	
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08	
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08	
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08	
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08	
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08	
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08	
108-10-1	4-Methyl-2-pentanone	U	5.39	ug/kg	1.35	5.39	
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08	
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08	
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08	
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08	
591-78-6	2-Hexanone	U	5.39	ug/kg	1.62	5.39	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08	
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08	
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08	
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540012	Date Received:	11/20/2009 08:50	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13874	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 05:32	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:21	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n342.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08	
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15	
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08	
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08	
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08	
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08	
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08	
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08	
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08	
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08	
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08	
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08	
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08	
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08	
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08	
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08	
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08	
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08	
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08	
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13875	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 00:00	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	ln331.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12	
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12	
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12	
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12	
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12	
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12	
67-64-1	Acetone	U	5.58	ug/kg	1.85	5.58	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
74-88-4	Iodomethane	U	5.58	ug/kg	1.79	5.58	
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58	
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.40	5.58	
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12	
78-93-3	2-Butanone	U	5.58	ug/kg	1.68	5.58	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12	
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12	
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12	
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12	
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12	
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12	
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12	
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12	
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12	
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.40	5.58	
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12	
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12	
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12	
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12	
591-78-6	2-Hexanone	U	5.58	ug/kg	1.68	5.58	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12	
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12	
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12	
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13875	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 00:00	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n331.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12	
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23	
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12	
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12	
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12	
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12	
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12	
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12	
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12	
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12	
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12	
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12	
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12	
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12	
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12	
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12	
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12	
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12	
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.79	5.58	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12	
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

ETM
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540015	Date Received:	11/20/2009 08:50	%Moisture:	10.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13876	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 07:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:24	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n345.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11	
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11	
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11	
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57	
75-09-2	Methylene chloride	U	5.57	ug/kg	2.23	5.57	
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11	
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11	
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11	
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11	
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540015	Date Received:	11/20/2009 08:50	%Moisture:	10.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13876	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 07:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:24	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n345.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11	
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23	
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11	
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11	
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11	
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11	
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11	
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11	
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11	
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11	
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11	
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11	
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11	
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11	
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11	
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11	
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11	
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11	
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.57	ug/kg	1.78	5.57	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11	
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540007	Date Received:	11/20/2009 08:50	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13877	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/27/2009 07:43	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/27/2009 06:30	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n505.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11	UJ,V7c
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11	
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11	
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57	
75-09-2	Methylene chloride	J	4.18	ug/kg	2.23	5.57	
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11	
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11	
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11	
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11	
108-88-3	Toluene		2.62	ug/kg	0.334	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11	
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540007	Date Received:	11/20/2009 08:50	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13877	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/27/2009 07:43	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/27/2009 06:30	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n505.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.57	ug/kg	1.78	5.57
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	18.1	5.88	ug/kg	95	NJ
1000150-36-1	4-Carene	19.13	20.2	ug/kg	94	NJ
5989-54-8	Cyclohexene, 1-methyl-4-(1-methylethenyl	19.37	7.52	ug/kg	93	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540017	Date Received:	11/20/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13930	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 08:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:26	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n347.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone		14.2	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540017	Date Received:	11/20/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13930	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 08:03	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:26	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n347.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00	
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00	
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00	
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00	
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00	
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00	
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00	
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00	
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00	
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	16.51	6.75	ug/kg	97	NJ
	Unknown	16.53	6.18	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540018	Date Received:	11/20/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13931	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 08:34	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:27	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n348.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	2.34	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	UJ,V7c
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

ETM
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540018	Date Received:	11/20/2009 08:50		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13931	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	926743	Inst:	VOA1.I	Dilution:	1
Run Date:	11/26/2009 08:34	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	11/25/2009 14:27	Aliquot:	5 g	Final Volume:	5 mL
Data File:	1n348.d	Column:	RTX-Volatiles	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00	
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00	
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00	
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00	
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00	
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00	
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00	
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00	
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00	
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-604 VALIDATION DATE: 1/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV %D was >20% for pyridine. In the CCV associated with samples RE03-09-13864 and -13877, the %Ds were >20% for bis(2-chloroisopropyl)ether, hexachlorocyclopentadiene and p-nitroaniline. In the CCV associated with all the other samples, the %Ds were pyridine, bis(2-chloroisopropyl)ether, n-nitrosodipropylamine, m-nitroaniline and p-nitroaniline. All the associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. It should be noted that the MS %R for hexachloroethane was not within the laboratory's QC limit. However, MS/MSD analyses are not required for this analysis and, thus, no sample data were qualified.

Reviewed by: MLD **Level I** **Date:** 01/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/26/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13862	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:55	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s1l0422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	383	ug/kg	76.7	383	
108-95-2	Phenol	U	383	ug/kg	76.7	383	
95-57-8	2-Chlorophenol	U	383	ug/kg	76.7	383	
106-46-7	1,4-Dichlorobenzene	U	383	ug/kg	76.7	383	
621-64-7	N-Nitrosodipropylamine	U	383	ug/kg	76.7	383	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	383	ug/kg	76.7	383	
83-32-9	Acenaphthene	U	38.3	ug/kg	12.7	38.3	
121-14-2	2,4-Dinitrotoluene	U	383	ug/kg	38.3	383	
100-02-7	4-Nitrophenol	U	383	ug/kg	127	383	
87-86-5	Pentachlorophenol	U	383	ug/kg	95.8	383	
129-00-0	Pyrene		93.8	ug/kg	11.5	38.3	
110-86-1	Pyridine	U	383	ug/kg	76.7	383	UJ,SV7c
62-53-3	Aniline	U	383	ug/kg	115	383	
111-44-4	bis(2-Chloroethyl) ether	U	383	ug/kg	76.7	383	
541-73-1	1,3-Dichlorobenzene	U	383	ug/kg	76.7	383	
100-51-6	Benzyl alcohol	U	383	ug/kg	115	383	
95-50-1	1,2-Dichlorobenzene	U	383	ug/kg	76.7	383	
108-60-1	bis(2-Chloroisopropyl)ether	U	383	ug/kg	76.7	383	UJ,SV7c
95-48-7	o-Cresol	U	383	ug/kg	76.7	383	
65794-96-9	m,p-Cresols	U	383	ug/kg	115	383	
67-72-1	Hexachloroethane	U	383	ug/kg	76.7	383	
98-95-3	Nitrobenzene	U	383	ug/kg	76.7	383	
78-59-1	Isophorone	U	383	ug/kg	76.7	383	
88-75-5	2-Nitrophenol	U	383	ug/kg	76.7	383	
105-67-9	2,4-Dimethylphenol	U	383	ug/kg	134	383	
111-91-1	bis(2-Chloroethoxy)methane	U	383	ug/kg	76.7	383	
120-83-2	2,4-Dichlorophenol	U	383	ug/kg	76.7	383	
65-85-0	Benzoic acid	U	767	ug/kg	192	767	
91-20-3	Naphthalene	U	38.3	ug/kg	11.5	38.3	
106-47-8	4-Chloroaniline	U	383	ug/kg	76.7	383	
87-68-3	Hexachlorobutadiene	U	383	ug/kg	76.7	383	
91-57-6	2-Methylnaphthalene	U	38.3	ug/kg	7.67	38.3	
77-47-4	Hexachlorocyclopentadiene	U	383	ug/kg	76.7	383	
88-06-2	2,4,6-Trichlorophenol	U	383	ug/kg	76.7	383	
95-95-4	2,4,5-Trichlorophenol	U	383	ug/kg	76.7	383	
91-58-7	2-Chloronaphthalene	U	38.3	ug/kg	12.7	38.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	383	ug/kg	76.7	383	
99-09-2	3-Nitroaniline	U	383	ug/kg	76.7	383	UJ,SV7c

ETM
1/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13862	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:55	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	383	ug/kg	76.7	383	
606-20-2	2,6-Dinitrotoluene	U	383	ug/kg	38.3	383	
208-96-8	Acenaphthylene	U	38.3	ug/kg	11.5	38.3	
51-28-5	2,4-Dinitrophenol	U	767	ug/kg	146	767	
132-64-9	Dibenzofuran	U	383	ug/kg	76.7	383	
84-66-2	Diethylphthalate	U	383	ug/kg	76.7	383	
86-73-7	Fluorene	U	38.3	ug/kg	11.5	38.3	
7005-72-3	4-Chlorophenylphenylether	U	383	ug/kg	76.7	383	
534-52-1	2-Methyl-4,6-dinitrophenol	U	383	ug/kg	76.7	383	
100-01-6	4-Nitroaniline	U	383	ug/kg	115	383	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	383	ug/kg	76.7	383	
122-66-7	Azobenzene	U	383	ug/kg	76.7	383	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	383	ug/kg	76.7	383	
118-74-1	Hexachlorobenzene	U	383	ug/kg	76.7	383	
85-01-8	Phenanthrene		65.0	ug/kg	11.5	38.3	
120-12-7	Anthracene	J	9.98	ug/kg	7.67	38.3	
84-74-2	Di-n-butylphthalate	U	383	ug/kg	76.7	383	
206-44-0	Fluoranthene		115	ug/kg	11.5	38.3	
85-68-7	Butylbenzylphthalate	U	383	ug/kg	76.7	383	
56-55-3	Benzo(a)anthracene		46.8	ug/kg	11.5	38.3	
91-94-1	3,3'-Dichlorobenzidine	U	383	ug/kg	115	383	
218-01-9	Chrysene		66.0	ug/kg	11.5	38.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	383	ug/kg	76.7	383	
117-84-0	Di-n-octylphthalate	U	383	ug/kg	76.7	383	
205-99-2	Benzo(b)fluoranthene		179	ug/kg	11.5	38.3	
207-08-9	Benzo(k)fluoranthene	U	38.3	ug/kg	11.5	38.3	
50-32-8	Benzo(a)pyrene	J	38.1	ug/kg	11.5	38.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.3	ug/kg	11.5	38.3	
53-70-3	Dibenzo(a,h)anthracene	U	38.3	ug/kg	11.5	38.3	
191-24-2	Benzo(ghi)perylene	J	29.3	ug/kg	11.5	38.3	
120-82-1	1,2,4-Trichlorobenzene	U	383	ug/kg	76.7	383	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	596	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	276	ug/kg	98	NJ

ETM
1/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13862	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:55	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-84-5	13-Docosenamide, (Z)-	9.19	188	ug/kg	95	NJ
112-95-8	Eicosane	10.32	191	ug/kg	98	NJ
	Unknown	11.76	241	ug/kg		J

ETM
1/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13863	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:46	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110419.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.9	364	
108-95-2	Phenol	U	364	ug/kg	72.9	364	
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364	
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364	
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364	
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4	
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364	
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364	
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364	
129-00-0	Pyrene	J	13.2	ug/kg	10.9	36.4	
110-86-1	Pyridine	U	364	ug/kg	72.9	364	UJ,SV7c
62-53-3	Aniline	U	364	ug/kg	109	364	
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364	
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364	
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364	
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364	
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.9	364	UJ,SV7c
95-48-7	o-Cresol	U	364	ug/kg	72.9	364	
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364	
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364	
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364	
78-59-1	Isophorone	U	364	ug/kg	72.9	364	
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364	
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364	
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364	
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364	
65-85-0	Benzoic acid	U	729	ug/kg	182	729	
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4	
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364	
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364	
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4	
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364	
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364	
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364	
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	364	ug/kg	72.9	364	
99-09-2	3-Nitroaniline	U	364	ug/kg	72.9	364	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13863	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:46	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110419.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	364	ug/kg	72.9	364	
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364	
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4	
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729	
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364	
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364	
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4	
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364	
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364	
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364	
122-66-7	Azobenzene	U	364	ug/kg	72.9	364	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364	
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364	
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4	
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4	
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364	
206-44-0	Fluoranthene	J	12.7	ug/kg	10.9	36.4	
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364	
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4	
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364	
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4	
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364	
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364	
205-99-2	Benzo(b)fluoranthene		106	ug/kg	10.9	36.4	
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4	
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4	
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4	
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4	
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	590	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.15	286	ug/kg	98	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13863	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:46	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110419.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.19	181	ug/kg		J
	Unknown	10.17	672	ug/kg		J
	Unknown	10.87	866	ug/kg		J

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540005	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13864	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/07/2009 13:12	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s110711.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	73.0	365	
108-95-2	Phenol	U	365	ug/kg	73.0	365	
95-57-8	2-Chlorophenol	U	365	ug/kg	73.0	365	
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	73.0	365	
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	73.0	365	
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	73.0	365	
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5	
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365	
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365	
87-86-5	Pentachlorophenol	U	365	ug/kg	91.3	365	
129-00-0	Pyrene	U	36.5	ug/kg	11.0	36.5	
110-86-1	Pyridine	U	365	ug/kg	73.0	365	UJ,SV7c
62-53-3	Aniline	U	365	ug/kg	110	365	
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	73.0	365	
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	73.0	365	
100-51-6	Benzyl alcohol	U	365	ug/kg	110	365	
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	73.0	365	
108-60-1	bis(2-Chloroisopropyl)ether	U	365	ug/kg	73.0	365	UJ,SV7c
95-48-7	o-Cresol	U	365	ug/kg	73.0	365	
65794-96-9	m,p-Cresols	U	365	ug/kg	110	365	
67-72-1	Hexachloroethane	U	365	ug/kg	73.0	365	
98-95-3	Nitrobenzene	U	365	ug/kg	73.0	365	
78-59-1	Isophorone	U	365	ug/kg	73.0	365	
88-75-5	2-Nitrophenol	U	365	ug/kg	73.0	365	
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365	
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	73.0	365	
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	73.0	365	
65-85-0	Benzoic acid	U	730	ug/kg	183	730	
91-20-3	Naphthalene	U	36.5	ug/kg	11.0	36.5	
106-47-8	4-Chloroaniline	U	365	ug/kg	73.0	365	
87-68-3	Hexachlorobutadiene	U	365	ug/kg	73.0	365	
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.30	36.5	
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	73.0	365	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	73.0	365	
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	73.0	365	
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	365	ug/kg	73.0	365	
99-09-2	3-Nitroaniline	U	365	ug/kg	73.0	365	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540005	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13864	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/07/2009 13:12	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s110711.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	365	ug/kg	73.0	365	
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365	
208-96-8	Acenaphthylene	U	36.5	ug/kg	11.0	36.5	
51-28-5	2,4-Dinitrophenol	U	730	ug/kg	139	730	
132-64-9	Dibenzofuran	U	365	ug/kg	73.0	365	
84-66-2	Diethylphthalate	U	365	ug/kg	73.0	365	
86-73-7	Fluorene	U	36.5	ug/kg	11.0	36.5	
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	73.0	365	
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	73.0	365	
100-01-6	4-Nitroaniline	U	365	ug/kg	110	365	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	365	ug/kg	73.0	365	
122-66-7	Azobenzene	U	365	ug/kg	73.0	365	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	73.0	365	
118-74-1	Hexachlorobenzene	U	365	ug/kg	73.0	365	
85-01-8	Phenanthrene	U	36.5	ug/kg	11.0	36.5	
120-12-7	Anthracene	U	36.5	ug/kg	7.30	36.5	
84-74-2	Di-n-butylphthalate	U	365	ug/kg	73.0	365	
206-44-0	Fluoranthene	U	36.5	ug/kg	11.0	36.5	
85-68-7	Butylbenzylphthalate	U	365	ug/kg	73.0	365	
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	11.0	36.5	
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	110	365	
218-01-9	Chrysene	U	36.5	ug/kg	11.0	36.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	73.0	365	
117-84-0	Di-n-octylphthalate	U	365	ug/kg	73.0	365	
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	11.0	36.5	
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	11.0	36.5	
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	11.0	36.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	11.0	36.5	
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	11.0	36.5	
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	11.0	36.5	
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	73.0	365	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.8	412	ug/kg		JA
	Unknown	6.1	216	ug/kg		J

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540005	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13864	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/07/2009 13:12	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	s110711.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	6.78	22.7	ug/kg		J
57-10-3	n-Hexadecanoic acid	7.12	45.8	ug/kg	99	NJ
74685-33-9	3-Eicosene, (E)-	7.53	19.8	ug/kg	84	NJ
	Unknown	7.6	22.5	ug/kg		J
1120-16-7	Dodecanamide	7.64	21.2	ug/kg	89	NJ
301-02-0	9-Octadecenamide, (Z)-	8.02	316	ug/kg	95	NJ
	Unknown	9.01	152	ug/kg		J
	Unknown	10.11	1150	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540002	Date Received:	11/20/2009 08:50	%Moisture:	13.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13865	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 12:41	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110411.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	385	ug/kg	77.0	385	
108-95-2	Phenol	U	385	ug/kg	77.0	385	
95-57-8	2-Chlorophenol	U	385	ug/kg	77.0	385	
106-46-7	1,4-Dichlorobenzene	U	385	ug/kg	77.0	385	
621-64-7	N-Nitrosodipropylamine	U	385	ug/kg	77.0	385	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	385	ug/kg	77.0	385	
83-32-9	Acenaphthene	U	38.5	ug/kg	12.7	38.5	
121-14-2	2,4-Dinitrotoluene	U	385	ug/kg	38.5	385	
100-02-7	4-Nitrophenol	U	385	ug/kg	127	385	
87-86-5	Pentachlorophenol	U	385	ug/kg	96.3	385	
129-00-0	Pyrene	U	38.5	ug/kg	11.6	38.5	
110-86-1	Pyridine	U	385	ug/kg	77.0	385	UJ,SV7c
62-53-3	Aniline	U	385	ug/kg	116	385	
111-44-4	bis(2-Chloroethyl) ether	U	385	ug/kg	77.0	385	
541-73-1	1,3-Dichlorobenzene	U	385	ug/kg	77.0	385	
100-51-6	Benzyl alcohol	U	385	ug/kg	116	385	
95-50-1	1,2-Dichlorobenzene	U	385	ug/kg	77.0	385	
108-60-1	bis(2-Chloroisopropyl)ether	U	385	ug/kg	77.0	385	UJ,SV7c
95-48-7	o-Cresol	U	385	ug/kg	77.0	385	
65794-96-9	m,p-Cresols	U	385	ug/kg	116	385	
67-72-1	Hexachloroethane	U	385	ug/kg	77.0	385	
98-95-3	Nitrobenzene	U	385	ug/kg	77.0	385	
78-59-1	Isophorone	U	385	ug/kg	77.0	385	
88-75-5	2-Nitrophenol	U	385	ug/kg	77.0	385	
105-67-9	2,4-Dimethylphenol	U	385	ug/kg	135	385	
111-91-1	bis(2-Chloroethoxy)methane	U	385	ug/kg	77.0	385	
120-83-2	2,4-Dichlorophenol	U	385	ug/kg	77.0	385	
65-85-0	Benzoic acid	U	770	ug/kg	193	770	
91-20-3	Naphthalene	U	38.5	ug/kg	11.6	38.5	
106-47-8	4-Chloroaniline	U	385	ug/kg	77.0	385	
87-68-3	Hexachlorobutadiene	U	385	ug/kg	77.0	385	
91-57-6	2-Methylnaphthalene	U	38.5	ug/kg	7.70	38.5	
77-47-4	Hexachlorocyclopentadiene	U	385	ug/kg	77.0	385	
88-06-2	2,4,6-Trichlorophenol	U	385	ug/kg	77.0	385	
95-95-4	2,4,5-Trichlorophenol	U	385	ug/kg	77.0	385	
91-58-7	2-Chloronaphthalene	U	38.5	ug/kg	12.7	38.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	385	ug/kg	77.0	385	
99-09-2	3-Nitroaniline	U	385	ug/kg	77.0	385	UJ,SV7c

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540002	Date Received:	11/20/2009 08:50	%Moisture:	13.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13865	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 12:41	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	stl0411.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	385	ug/kg	77.0	385	
606-20-2	2,6-Dinitrotoluene	U	385	ug/kg	38.5	385	
208-96-8	Acenaphthylene	U	38.5	ug/kg	11.6	38.5	
51-28-5	2,4-Dinitrophenol	U	770	ug/kg	146	770	
132-64-9	Dibenzofuran	U	385	ug/kg	77.0	385	
84-66-2	Diethylphthalate	U	385	ug/kg	77.0	385	
86-73-7	Fluorene	U	38.5	ug/kg	11.6	38.5	
7005-72-3	4-Chlorophenylphenylether	U	385	ug/kg	77.0	385	
534-52-1	2-Methyl-4,6-dinitrophenol	U	385	ug/kg	77.0	385	
100-01-6	4-Nitroaniline	U	385	ug/kg	116	385	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	385	ug/kg	77.0	385	
122-66-7	Azobenzene	U	385	ug/kg	77.0	385	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	385	ug/kg	77.0	385	
118-74-1	Hexachlorobenzene	U	385	ug/kg	77.0	385	
85-01-8	Phenanthrene	U	38.5	ug/kg	11.6	38.5	
120-12-7	Anthracene	U	38.5	ug/kg	7.70	38.5	
84-74-2	Di-n-butylphthalate	U	385	ug/kg	77.0	385	
206-44-0	Fluoranthene	U	38.5	ug/kg	11.6	38.5	
85-68-7	Butylbenzylphthalate	U	385	ug/kg	77.0	385	
56-55-3	Benzo(a)anthracene	U	38.5	ug/kg	11.6	38.5	
91-94-1	3,3'-Dichlorobenzidine	U	385	ug/kg	116	385	
218-01-9	Chrysene	U	38.5	ug/kg	11.6	38.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	385	ug/kg	77.0	385	
117-84-0	Di-n-octylphthalate	U	385	ug/kg	77.0	385	
205-99-2	Benzo(b)fluoranthene	U	38.5	ug/kg	11.6	38.5	
207-08-9	Benzo(k)fluoranthene	U	38.5	ug/kg	11.6	38.5	
50-32-8	Benzo(a)pyrene	U	38.5	ug/kg	11.6	38.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.5	ug/kg	11.6	38.5	
53-70-3	Dibenzo(a,h)anthracene	U	38.5	ug/kg	11.6	38.5	
191-24-2	Benzo(ghi)perylene	U	38.5	ug/kg	11.6	38.5	
120-82-1	1,2,4-Trichlorobenzene	U	385	ug/kg	77.0	385	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	474	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	213	ug/kg	93	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540002	Date Received:	11/20/2009 08:50	%Moisture:	13.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13865	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 12:41	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110411.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.77	412	ug/kg		J
	Unknown	11.96	172	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540013	Date Received:	11/20/2009 08:50	%Moisture:	14
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13866	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:33	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.5	388	
108-95-2	Phenol	U	388	ug/kg	77.5	388	
95-57-8	2-Chlorophenol	U	388	ug/kg	77.5	388	
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.5	388	
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.5	388	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.5	388	
83-32-9	Acenaphthene		61.8	ug/kg	12.8	38.8	
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388	
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388	
87-86-5	Pentachlorophenol	U	388	ug/kg	96.9	388	
129-00-0	Pyrene		415	ug/kg	11.6	38.8	
110-86-1	Pyridine	U	388	ug/kg	77.5	388	UJ,SV7c
62-53-3	Aniline	U	388	ug/kg	116	388	
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.5	388	
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.5	388	
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388	
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.5	388	
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.5	388	UJ,SV7c
95-48-7	o-Cresol	U	388	ug/kg	77.5	388	
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388	
67-72-1	Hexachloroethane	U	388	ug/kg	77.5	388	
98-95-3	Nitrobenzene	U	388	ug/kg	77.5	388	
78-59-1	Isophorone	U	388	ug/kg	77.5	388	
88-75-5	2-Nitrophenol	U	388	ug/kg	77.5	388	
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388	
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.5	388	
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.5	388	
65-85-0	Benzoic acid	U	775	ug/kg	194	775	
91-20-3	Naphthalene	J	30.8	ug/kg	11.6	38.8	
106-47-8	4-Chloroaniline	U	388	ug/kg	77.5	388	
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.5	388	
91-57-6	2-Methylnaphthalene	J	13.2	ug/kg	7.75	38.8	
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.5	388	
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.5	388	
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.5	388	
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	388	ug/kg	77.5	388	
99-09-2	3-Nitroaniline	U	388	ug/kg	77.5	388	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540013	Date Received:	11/20/2009 08:50	%Moisture:	14
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13866	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:33	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	388	ug/kg	77.5	388	
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388	
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8	
51-28-5	2,4-Dinitrophenol	U	775	ug/kg	147	775	
132-64-9	Dibenzofuran	U	388	ug/kg	77.5	388	
84-66-2	Diethylphthalate	U	388	ug/kg	77.5	388	
86-73-7	Fluorene		56.6	ug/kg	11.6	38.8	
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.5	388	
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.5	388	
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	388	ug/kg	77.5	388	
122-66-7	Azobenzene	U	388	ug/kg	77.5	388	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.5	388	
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.5	388	
85-01-8	Phenanthrene		411	ug/kg	11.6	38.8	
120-12-7	Anthracene		108	ug/kg	7.75	38.8	
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.5	388	
206-44-0	Fluoranthene		513	ug/kg	11.6	38.8	
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.5	388	
56-55-3	Benzo(a)anthracene		193	ug/kg	11.6	38.8	
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388	
218-01-9	Chrysene		208	ug/kg	11.6	38.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.5	388	
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.5	388	
205-99-2	Benzo(b)fluoranthene		352	ug/kg	11.6	38.8	
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8	
50-32-8	Benzo(a)pyrene		169	ug/kg	11.6	38.8	
193-39-5	Indeno(1,2,3-cd)pyrene		84.3	ug/kg	11.6	38.8	
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8	
191-24-2	Benzo(ghi)perylene		114	ug/kg	11.6	38.8	
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.5	388	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.75	215	ug/kg		J
	Unknown Aldol Condensate	2.92	632	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540013	Date Received:	11/20/2009 08:50	%Moisture:	14
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13866	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:33	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
559-74-0	Friedelan-3-one	8.45	179	ug/kg	84	NJ
112-95-8	Eicosane	10.32	200	ug/kg	98	NJ
	Unknown	10.83	232	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540004	Date Received:	11/20/2009 08:50	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13867	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:27	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110413.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	76.0	380	
108-95-2	Phenol	U	380	ug/kg	76.0	380	
95-57-8	2-Chlorophenol	U	380	ug/kg	76.0	380	
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	76.0	380	
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	76.0	380	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	76.0	380	
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0	
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380	
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380	
87-86-5	Pentachlorophenol	U	380	ug/kg	95.1	380	
129-00-0	Pyrene		66.9	ug/kg	11.4	38.0	
110-86-1	Pyridine	U	380	ug/kg	76.0	380	UJ,SV7c
62-53-3	Aniline	U	380	ug/kg	114	380	
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	76.0	380	
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	76.0	380	
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380	
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	76.0	380	
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	76.0	380	UJ,SV7c
95-48-7	o-Cresol	U	380	ug/kg	76.0	380	
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380	
67-72-1	Hexachloroethane	U	380	ug/kg	76.0	380	
98-95-3	Nitrobenzene	U	380	ug/kg	76.0	380	
78-59-1	Isophorone	U	380	ug/kg	76.0	380	
88-75-5	2-Nitrophenol	U	380	ug/kg	76.0	380	
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380	
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	76.0	380	
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	76.0	380	
65-85-0	Benzoic acid	U	760	ug/kg	190	760	
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0	
106-47-8	4-Chloroaniline	U	380	ug/kg	76.0	380	
87-68-3	Hexachlorobutadiene	U	380	ug/kg	76.0	380	
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.60	38.0	
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	76.0	380	
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	76.0	380	
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	76.0	380	
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	380	ug/kg	76.0	380	
99-09-2	3-Nitroaniline	U	380	ug/kg	76.0	380	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540004	Date Received:	11/20/2009 08:50	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13867	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:27	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110413.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	380	ug/kg	76.0	380	
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380	
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0	
51-28-5	2,4-Dinitrophenol	U	760	ug/kg	144	760	
132-64-9	Dibenzofuran	U	380	ug/kg	76.0	380	
84-66-2	Diethylphthalate	U	380	ug/kg	76.0	380	
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0	
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	76.0	380	
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	76.0	380	
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	380	ug/kg	76.0	380	
122-66-7	Azobenzene	U	380	ug/kg	76.0	380	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	76.0	380	
118-74-1	Hexachlorobenzene	U	380	ug/kg	76.0	380	
85-01-8	Phenanthrene		49.3	ug/kg	11.4	38.0	
120-12-7	Anthracene	J	11.3	ug/kg	7.60	38.0	
84-74-2	Di-n-butylphthalate	U	380	ug/kg	76.0	380	
206-44-0	Fluoranthene		75.6	ug/kg	11.4	38.0	
85-68-7	Butylbenzylphthalate	U	380	ug/kg	76.0	380	
56-55-3	Benzo(a)anthracene	J	34.7	ug/kg	11.4	38.0	
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380	
218-01-9	Chrysene	J	31.8	ug/kg	11.4	38.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	380	ug/kg	76.0	380	
117-84-0	Di-n-octylphthalate	U	380	ug/kg	76.0	380	
205-99-2	Benzo(b)fluoranthene		141	ug/kg	11.4	38.0	
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0	
50-32-8	Benzo(a)pyrene	J	21.5	ug/kg	11.4	38.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0	
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0	
191-24-2	Benzo(ghi)perylene	J	18.4	ug/kg	11.4	38.0	
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	76.0	380	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
75-09-2	Methylene Chloride	1.71	7370	ug/kg	91	NJ
75-09-2	Methylene Chloride	1.76	20300	ug/kg	95	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540004	Date Received:	11/20/2009 08:50	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13867	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:27	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110413.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1000132-10-9	5,9-Dodecadien-2-one, 6,10-dimethyl-, (E	1.79	175	ug/kg	53	NJ
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.92	625	ug/kg	56	NJ
301-02-0	9-Octadecenamide, (Z)-	8.14	199	ug/kg	98	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540003	Date Received:	11/20/2009 08:50	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13868	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:04	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s1l0412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.1	375	
108-95-2	Phenol	U	375	ug/kg	75.1	375	
95-57-8	2-Chlorophenol	U	375	ug/kg	75.1	375	
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.1	375	
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.1	375	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.1	375	
83-32-9	Acenaphthene	J	29.8	ug/kg	12.4	37.5	
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375	
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375	
87-86-5	Pentachlorophenol	U	375	ug/kg	93.9	375	
129-00-0	Pyrene		339	ug/kg	11.3	37.5	
110-86-1	Pyridine	U	375	ug/kg	75.1	375	UJ,SV7c
62-53-3	Aniline	U	375	ug/kg	113	375	
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.1	375	
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.1	375	
100-51-6	Benzyl alcohol	U	375	ug/kg	113	375	
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.1	375	
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.1	375	UJ,SV7c
95-48-7	o-Cresol	U	375	ug/kg	75.1	375	
65794-96-9	m,p-Cresols	U	375	ug/kg	113	375	
67-72-1	Hexachloroethane	U	375	ug/kg	75.1	375	
98-95-3	Nitrobenzene	U	375	ug/kg	75.1	375	
78-59-1	Isophorone	U	375	ug/kg	75.1	375	
88-75-5	2-Nitrophenol	U	375	ug/kg	75.1	375	
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375	
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.1	375	
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.1	375	
65-85-0	Benzoic acid	U	751	ug/kg	188	751	
91-20-3	Naphthalene	U	37.5	ug/kg	11.3	37.5	
106-47-8	4-Chloroaniline	U	375	ug/kg	75.1	375	
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.1	375	
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.51	37.5	
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.1	375	
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.1	375	
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.1	375	
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	375	ug/kg	75.1	375	
99-09-2	3-Nitroaniline	U	375	ug/kg	75.1	375	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540003	Date Received:	11/20/2009 08:50	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13868	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:04	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s110412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	375	ug/kg	75.1	375	
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375	
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.3	37.5	
51-28-5	2,4-Dinitrophenol	U	751	ug/kg	143	751	
132-64-9	Dibenzofuran	U	375	ug/kg	75.1	375	
84-66-2	Diethylphthalate	U	375	ug/kg	75.1	375	
86-73-7	Fluorene	J	26.2	ug/kg	11.3	37.5	
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.1	375	
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.1	375	
100-01-6	4-Nitroaniline	U	375	ug/kg	113	375	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	375	ug/kg	75.1	375	
122-66-7	Azobenzene	U	375	ug/kg	75.1	375	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.1	375	
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.1	375	
85-01-8	Phenanthrene		247	ug/kg	11.3	37.5	
120-12-7	Anthracene		56.8	ug/kg	7.51	37.5	
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.1	375	
206-44-0	Fluoranthene		408	ug/kg	11.3	37.5	
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.1	375	
56-55-3	Benzo(a)anthracene		156	ug/kg	11.3	37.5	
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	113	375	
218-01-9	Chrysene		187	ug/kg	11.3	37.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.1	375	
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.1	375	
205-99-2	Benzo(b)fluoranthene		335	ug/kg	11.3	37.5	
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.3	37.5	
50-32-8	Benzo(a)pyrene		143	ug/kg	11.3	37.5	
193-39-5	Indeno(1,2,3-cd)pyrene		71.5	ug/kg	11.3	37.5	
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.3	37.5	
191-24-2	Benzo(ghi)perylene		107	ug/kg	11.3	37.5	
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.1	375	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	257	ug/kg		J
	Unknown Aldol Condensate	2.92	462	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540003	Date Received:	11/20/2009 08:50	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13868	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:04	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s110412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	10.33	191	ug/kg	98	NJ
	Unknown	11.77	187	ug/kg		J
	Unknown	12.44	158	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540008	Date Received:	11/20/2009 08:50	%Moisture:	16.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13869	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:00	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110417.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.1	400	
108-95-2	Phenol	U	400	ug/kg	80.1	400	
95-57-8	2-Chlorophenol	U	400	ug/kg	80.1	400	
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.1	400	
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.1	400	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.1	400	
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0	
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400	
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400	
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400	
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0	
110-86-1	Pyridine	U	400	ug/kg	80.1	400	UJ,SV7c
62-53-3	Aniline	U	400	ug/kg	120	400	
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.1	400	
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.1	400	
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400	
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.1	400	
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.1	400	UJ,SV7c
95-48-7	o-Cresol	U	400	ug/kg	80.1	400	
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400	
67-72-1	Hexachloroethane	U	400	ug/kg	80.1	400	
98-95-3	Nitrobenzene	U	400	ug/kg	80.1	400	
78-59-1	Isophorone	U	400	ug/kg	80.1	400	
88-75-5	2-Nitrophenol	U	400	ug/kg	80.1	400	
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400	
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.1	400	
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.1	400	
65-85-0	Benzoic acid	U	801	ug/kg	200	801	
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0	
106-47-8	4-Chloroaniline	U	400	ug/kg	80.1	400	
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.1	400	
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.01	40.0	
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.1	400	
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.1	400	
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.1	400	
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	400	ug/kg	80.1	400	
99-09-2	3-Nitroaniline	U	400	ug/kg	80.1	400	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540008	Date Received:	11/20/2009 08:50	%Moisture:	16.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13869	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:00	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110417.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	400	ug/kg	80.1	400	
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400	
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0	
51-28-5	2,4-Dinitrophenol	U	801	ug/kg	152	801	
132-64-9	Dibenzofuran	U	400	ug/kg	80.1	400	
84-66-2	Diethylphthalate	U	400	ug/kg	80.1	400	
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0	
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.1	400	
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.1	400	
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	400	ug/kg	80.1	400	
122-66-7	Azobenzene	U	400	ug/kg	80.1	400	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.1	400	
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.1	400	
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0	
120-12-7	Anthracene	U	40.0	ug/kg	8.01	40.0	
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.1	400	
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0	
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.1	400	
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0	
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400	
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.1	400	
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.1	400	
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0	
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0	
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0	
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0	
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0	
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.1	400	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	250	ug/kg		J
	Unknown Aldol Condensate	2.92	582	ug/kg		JA

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540008	Date Received:	11/20/2009 08:50	%Moisture:	16.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13869	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:00	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1l0417.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.14	253	ug/kg	98	NJ
1000140-07-7	1,4-Dimethyl-8-isopropylidenetricyclo[5.	11.76	715	ug/kg	80	NJ
	Unknown	11.95	241	ug/kg		J

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540009	Date Received:	11/20/2009 08:50	%Moisture:	13.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13870	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	10
Run Date:	12/04/2009 18:28	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s110426.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	3860	ug/kg	771	3860	
108-95-2	Phenol	U	3860	ug/kg	771	3860	
95-57-8	2-Chlorophenol	U	3860	ug/kg	771	3860	
106-46-7	1,4-Dichlorobenzene	U	3860	ug/kg	771	3860	
621-64-7	N-Nitrosodipropylamine	U	3860	ug/kg	771	3860	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	3860	ug/kg	771	3860	
83-32-9	Acenaphthene		539	ug/kg	127	386	
121-14-2	2,4-Dinitrotoluene	U	3860	ug/kg	386	3860	
100-02-7	4-Nitrophenol	U	3860	ug/kg	1270	3860	
87-86-5	Pentachlorophenol	U	3860	ug/kg	964	3860	
129-00-0	Pyrene		5560	ug/kg	116	386	
110-86-1	Pyridine	U	3860	ug/kg	771	3860	UJ,SV7c
62-53-3	Aniline	U	3860	ug/kg	1160	3860	
111-44-4	bis(2-Chloroethyl) ether	U	3860	ug/kg	771	3860	
541-73-1	1,3-Dichlorobenzene	U	3860	ug/kg	771	3860	
100-51-6	Benzyl alcohol	U	3860	ug/kg	1160	3860	
95-50-1	1,2-Dichlorobenzene	U	3860	ug/kg	771	3860	
108-60-1	bis(2-Chloroisopropyl)ether	U	3860	ug/kg	771	3860	UJ,SV7c
95-48-7	o-Cresol	U	3860	ug/kg	771	3860	
65794-96-9	m,p-Cresols	U	3860	ug/kg	1160	3860	
67-72-1	Hexachloroethane	U	3860	ug/kg	771	3860	
98-95-3	Nitrobenzene	U	3860	ug/kg	771	3860	
78-59-1	Isophorone	U	3860	ug/kg	771	3860	
88-75-5	2-Nitrophenol	U	3860	ug/kg	771	3860	
105-67-9	2,4-Dimethylphenol	U	3860	ug/kg	1350	3860	
111-91-1	bis(2-Chloroethoxy)methane	U	3860	ug/kg	771	3860	
120-83-2	2,4-Dichlorophenol	U	3860	ug/kg	771	3860	
65-85-0	Benzoic acid	U	7710	ug/kg	1930	7710	
91-20-3	Naphthalene	J	344	ug/kg	116	386	
106-47-8	4-Chloroaniline	U	3860	ug/kg	771	3860	
87-68-3	Hexachlorobutadiene	U	3860	ug/kg	771	3860	
91-57-6	2-Methylnaphthalene	J	111	ug/kg	77.1	386	
77-47-4	Hexachlorocyclopentadiene	U	3860	ug/kg	771	3860	
88-06-2	2,4,6-Trichlorophenol	U	3860	ug/kg	771	3860	
95-95-4	2,4,5-Trichlorophenol	U	3860	ug/kg	771	3860	
91-58-7	2-Chloronaphthalene	U	386	ug/kg	127	386	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	3860	ug/kg	771	3860	
99-09-2	3-Nitroaniline	U	3860	ug/kg	771	3860	UJ,SV7c

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540009	Date Received:	11/20/2009 08:50	%Moisture:	13.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13870	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	10
Run Date:	12/04/2009 18:28	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s110426.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	3860	ug/kg	771	3860	
606-20-2	2,6-Dinitrotoluene	U	3860	ug/kg	386	3860	
208-96-8	Acenaphthylene	U	386	ug/kg	116	386	
51-28-5	2,4-Dinitrophenol	U	7710	ug/kg	1470	7710	
132-64-9	Dibenzofuran	U	3860	ug/kg	771	3860	
84-66-2	Diethylphthalate	U	3860	ug/kg	771	3860	
86-73-7	Fluorene		508	ug/kg	116	386	
7005-72-3	4-Chlorophenylphenylether	U	3860	ug/kg	771	3860	
534-52-1	2-Methyl-4,6-dinitrophenol	U	3860	ug/kg	771	3860	
100-01-6	4-Nitroaniline	U	3860	ug/kg	1160	3860	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	3860	ug/kg	771	3860	
122-66-7	Azobenzene	U	3860	ug/kg	771	3860	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	3860	ug/kg	771	3860	
118-74-1	Hexachlorobenzene	U	3860	ug/kg	771	3860	
85-01-8	Phenanthrene		4550	ug/kg	116	386	
120-12-7	Anthracene		892	ug/kg	77.1	386	
84-74-2	Di-n-butylphthalate	U	3860	ug/kg	771	3860	
206-44-0	Fluoranthene		6750	ug/kg	116	386	
85-68-7	Butylbenzylphthalate	U	3860	ug/kg	771	3860	
56-55-3	Benzo(a)anthracene		2610	ug/kg	116	386	
91-94-1	3,3'-Dichlorobenzidine	U	3860	ug/kg	1160	3860	
218-01-9	Chrysene		2850	ug/kg	116	386	
117-81-7	bis(2-Ethylhexyl)phthalate	U	3860	ug/kg	771	3860	
117-84-0	Di-n-octylphthalate	U	3860	ug/kg	771	3860	
205-99-2	Benzo(b)fluoranthene		4790	ug/kg	116	386	
207-08-9	Benzo(k)fluoranthene	U	386	ug/kg	116	386	
50-32-8	Benzo(a)pyrene		2360	ug/kg	116	386	
193-39-5	Indeno(1,2,3-cd)pyrene		1220	ug/kg	116	386	
53-70-3	Dibenzo(a,h)anthracene	U	386	ug/kg	116	386	
191-24-2	Benzo(ghi)perylene		1580	ug/kg	116	386	
120-82-1	1,2,4-Trichlorobenzene	U	3860	ug/kg	771	3860	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Flt	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540006	Date Received:	11/20/2009 08:50	%Moisture:	16.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13871	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s110414.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	398	ug/kg	79.5	398	
108-95-2	Phenol	U	398	ug/kg	79.5	398	
95-57-8	2-Chlorophenol	U	398	ug/kg	79.5	398	
106-46-7	1,4-Dichlorobenzene	U	398	ug/kg	79.5	398	
621-64-7	N-Nitrosodipropylamine	U	398	ug/kg	79.5	398	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	398	ug/kg	79.5	398	
83-32-9	Acenaphthene	J	24.9	ug/kg	13.1	39.8	
121-14-2	2,4-Dinitrotoluene	U	398	ug/kg	39.8	398	
100-02-7	4-Nitrophenol	U	398	ug/kg	131	398	
87-86-5	Pentachlorophenol	U	398	ug/kg	99.4	398	
129-00-0	Pyrene		200	ug/kg	11.9	39.8	
110-86-1	Pyridine	U	398	ug/kg	79.5	398	UJ,SV7c
62-53-3	Aniline	U	398	ug/kg	119	398	
111-44-4	bis(2-Chloroethyl) ether	U	398	ug/kg	79.5	398	
541-73-1	1,3-Dichlorobenzene	U	398	ug/kg	79.5	398	
100-51-6	Benzyl alcohol	U	398	ug/kg	119	398	
95-50-1	1,2-Dichlorobenzene	U	398	ug/kg	79.5	398	
108-60-1	bis(2-Chloroisopropyl)ether	U	398	ug/kg	79.5	398	UJ,SV7c
95-48-7	o-Cresol	U	398	ug/kg	79.5	398	
65794-96-9	m,p-Cresols	U	398	ug/kg	119	398	
67-72-1	Hexachloroethane	U	398	ug/kg	79.5	398	
98-95-3	Nitrobenzene	U	398	ug/kg	79.5	398	
78-59-1	Isophorone	U	398	ug/kg	79.5	398	
88-75-5	2-Nitrophenol	U	398	ug/kg	79.5	398	
105-67-9	2,4-Dimethylphenol	U	398	ug/kg	139	398	
111-91-1	bis(2-Chloroethoxy)methane	U	398	ug/kg	79.5	398	
120-83-2	2,4-Dichlorophenol	U	398	ug/kg	79.5	398	
65-85-0	Benzoic acid	U	795	ug/kg	199	795	
91-20-3	Naphthalene	J	17.4	ug/kg	11.9	39.8	
106-47-8	4-Chloroaniline	U	398	ug/kg	79.5	398	
87-68-3	Hexachlorobutadiene	U	398	ug/kg	79.5	398	
91-57-6	2-Methylnaphthalene	U	39.8	ug/kg	7.95	39.8	
77-47-4	Hexachlorocyclopentadiene	U	398	ug/kg	79.5	398	
88-06-2	2,4,6-Trichlorophenol	U	398	ug/kg	79.5	398	
95-95-4	2,4,5-Trichlorophenol	U	398	ug/kg	79.5	398	
91-58-7	2-Chloronaphthalene	U	39.8	ug/kg	13.1	39.8	
88-74-4	2-Nitroaniline	U	398	ug/kg	79.5	398	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	398	ug/kg	79.5	398	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540006	Date Received:	11/20/2009 08:50	%Moisture:	16.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13871	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s110414.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	398	ug/kg	79.5	398	
606-20-2	2,6-Dinitrotoluene	U	398	ug/kg	39.8	398	
208-96-8	Acenaphthylene	U	39.8	ug/kg	11.9	39.8	
51-28-5	2,4-Dinitrophenol	U	795	ug/kg	151	795	
132-64-9	Dibenzofuran	U	398	ug/kg	79.5	398	
84-66-2	Diethylphthalate	U	398	ug/kg	79.5	398	
86-73-7	Fluorene	J	22.2	ug/kg	11.9	39.8	
7005-72-3	4-Chlorophenylphenylether	U	398	ug/kg	79.5	398	
534-52-1	2-Methyl-4,6-dinitrophenol	U	398	ug/kg	79.5	398	
100-01-6	4-Nitroaniline	U	398	ug/kg	119	398	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	398	ug/kg	79.5	398	
122-66-7	Azobenzene	U	398	ug/kg	79.5	398	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	398	ug/kg	79.5	398	
118-74-1	Hexachlorobenzene	U	398	ug/kg	79.5	398	
85-01-8	Phenanthrene		187	ug/kg	11.9	39.8	
120-12-7	Anthracene		40.2	ug/kg	7.95	39.8	
84-74-2	Di-n-butylphthalate	U	398	ug/kg	79.5	398	
206-44-0	Fluoranthene		230	ug/kg	11.9	39.8	
85-68-7	Butylbenzylphthalate	U	398	ug/kg	79.5	398	
56-55-3	Benzo(a)anthracene		84.4	ug/kg	11.9	39.8	
91-94-1	3,3'-Dichlorobenzidine	U	398	ug/kg	119	398	
218-01-9	Chrysene		90.7	ug/kg	11.9	39.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	398	ug/kg	79.5	398	
117-84-0	Di-n-octylphthalate	U	398	ug/kg	79.5	398	
205-99-2	Benzo(b)fluoranthene		229	ug/kg	11.9	39.8	
207-08-9	Benzo(k)fluoranthene	U	39.8	ug/kg	11.9	39.8	
50-32-8	Benzo(a)pyrene		78.9	ug/kg	11.9	39.8	
193-39-5	Indeno(1,2,3-cd)pyrene	J	35.4	ug/kg	11.9	39.8	
53-70-3	Dibenzo(a,h)anthracene	U	39.8	ug/kg	11.9	39.8	
191-24-2	Benzo(ghi)perylene		66.7	ug/kg	11.9	39.8	
120-82-1	1,2,4-Trichlorobenzene	U	398	ug/kg	79.5	398	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	473	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	288	ug/kg	98	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540006	Date Received:	11/20/2009 08:50	%Moisture:	16.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13871	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s1l0414.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-84-5	13-Docosenamide, (Z)-	9.19	192	ug/kg	86	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540016	Date Received:	11/20/2009 08:50	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13872	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	10
Run Date:	12/04/2009 17:42	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110424.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	3680	ug/kg	736	3680	
108-95-2	Phenol	U	3680	ug/kg	736	3680	
95-57-8	2-Chlorophenol	U	3680	ug/kg	736	3680	
106-46-7	1,4-Dichlorobenzene	U	3680	ug/kg	736	3680	
621-64-7	N-Nitrosodipropylamine	U	3680	ug/kg	736	3680	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	3680	ug/kg	736	3680	
83-32-9	Acenaphthene	U	368	ug/kg	121	368	
121-14-2	2,4-Dinitrotoluene	U	3680	ug/kg	368	3680	
100-02-7	4-Nitrophenol	U	3680	ug/kg	1210	3680	
87-86-5	Pentachlorophenol	U	3680	ug/kg	920	3680	
129-00-0	Pyrene	J	204	ug/kg	110	368	
110-86-1	Pyridine	U	3680	ug/kg	736	3680	UJ,SV7c
62-53-3	Aniline	U	3680	ug/kg	1100	3680	
111-44-4	bis(2-Chloroethyl) ether	U	3680	ug/kg	736	3680	
541-73-1	1,3-Dichlorobenzene	U	3680	ug/kg	736	3680	
100-51-6	Benzyl alcohol	U	3680	ug/kg	1100	3680	
95-50-1	1,2-Dichlorobenzene	U	3680	ug/kg	736	3680	
108-60-1	bis(2-Chloroisopropyl)ether	U	3680	ug/kg	736	3680	UJ,SV7c
95-48-7	o-Cresol	U	3680	ug/kg	736	3680	
65794-96-9	m,p-Cresols	U	3680	ug/kg	1100	3680	
67-72-1	Hexachloroethane	U	3680	ug/kg	736	3680	
98-95-3	Nitrobenzene	U	3680	ug/kg	736	3680	
78-59-1	Isophorone	U	3680	ug/kg	736	3680	
88-75-5	2-Nitrophenol	U	3680	ug/kg	736	3680	
105-67-9	2,4-Dimethylphenol	U	3680	ug/kg	1290	3680	
111-91-1	bis(2-Chloroethoxy)methane	U	3680	ug/kg	736	3680	
120-83-2	2,4-Dichlorophenol	U	3680	ug/kg	736	3680	
65-85-0	Benzoic acid	U	7360	ug/kg	1840	7360	
91-20-3	Naphthalene	U	368	ug/kg	110	368	
106-47-8	4-Chloroaniline	U	3680	ug/kg	736	3680	
87-68-3	Hexachlorobutadiene	U	3680	ug/kg	736	3680	
91-57-6	2-Methylnaphthalene	U	368	ug/kg	73.6	368	
77-47-4	Hexachlorocyclopentadiene	U	3680	ug/kg	736	3680	
88-06-2	2,4,6-Trichlorophenol	U	3680	ug/kg	736	3680	
95-95-4	2,4,5-Trichlorophenol	U	3680	ug/kg	736	3680	
91-58-7	2-Chloronaphthalene	U	368	ug/kg	121	368	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	3680	ug/kg	736	3680	
99-09-2	3-Nitroaniline	U	3680	ug/kg	736	3680	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540016	Date Received:	11/20/2009 08:50	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13872	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	10
Run Date:	12/04/2009 17:42	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1l0424.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	3680	ug/kg	736	3680	
606-20-2	2,6-Dinitrotoluene	U	3680	ug/kg	368	3680	
208-96-8	Acenaphthylene	U	368	ug/kg	110	368	
51-28-5	2,4-Dinitrophenol	U	7360	ug/kg	1400	7360	
132-64-9	Dibenzofuran	U	3680	ug/kg	736	3680	
84-66-2	Diethylphthalate	U	3680	ug/kg	736	3680	
86-73-7	Fluorene	U	368	ug/kg	110	368	
7005-72-3	4-Chlorophenylphenylether	U	3680	ug/kg	736	3680	
534-52-1	2-Methyl-4,6-dinitrophenol	U	3680	ug/kg	736	3680	
100-01-6	4-Nitroaniline	U	3680	ug/kg	1100	3680	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	3680	ug/kg	736	3680	
122-66-7	Azobenzene	U	3680	ug/kg	736	3680	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	3680	ug/kg	736	3680	
118-74-1	Hexachlorobenzene	U	3680	ug/kg	736	3680	
85-01-8	Phenanthrene	J	124	ug/kg	110	368	
120-12-7	Anthracene	U	368	ug/kg	73.6	368	
84-74-2	Di-n-butylphthalate	U	3680	ug/kg	736	3680	
206-44-0	Fluoranthene	J	217	ug/kg	110	368	
85-68-7	Butylbenzylphthalate	U	3680	ug/kg	736	3680	
56-55-3	Benzo(a)anthracene	J	135	ug/kg	110	368	
91-94-1	3,3'-Dichlorobenzidine	U	3680	ug/kg	1100	3680	
218-01-9	Chrysene	U	368	ug/kg	110	368	
117-81-7	bis(2-Ethylhexyl)phthalate	U	3680	ug/kg	736	3680	
117-84-0	Di-n-octylphthalate	U	3680	ug/kg	736	3680	
205-99-2	Benzo(b)fluoranthene		1130	ug/kg	110	368	
207-08-9	Benzo(k)fluoranthene	U	368	ug/kg	110	368	
50-32-8	Benzo(a)pyrene	U	368	ug/kg	110	368	
193-39-5	Indeno(1,2,3-cd)pyrene	U	368	ug/kg	110	368	
53-70-3	Dibenzo(a,h)anthracene	U	368	ug/kg	110	368	
191-24-2	Benzo(ghi)perylene	U	368	ug/kg	110	368	
120-82-1	1,2,4-Trichlorobenzene	U	3680	ug/kg	736	3680	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.97	1900	ug/kg		J
621-82-9	2-Propenoic acid, 3-phenyl-	5.66	1950	ug/kg	95	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540016	Date Received:	11/20/2009 08:50	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13872	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	10
Run Date:	12/04/2009 17:42	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110424.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	7.66	1790	ug/kg		J
	Unknown	8.02	2570	ug/kg		J
	Unknown	8.24	3630	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.45	12700	ug/kg	96	NJ
514-10-3	Abietic acid	8.59	7130	ug/kg	95	NJ
	Unknown	8.66	2350	ug/kg		J
	Unknown	8.74	1700	ug/kg		J
	Unknown	10.86	2250	ug/kg		J
	Unknown	12.49	1550	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540010	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13873	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:23	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110418.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.2	366	
108-95-2	Phenol	U	366	ug/kg	73.2	366	
95-57-8	2-Chlorophenol	U	366	ug/kg	73.2	366	
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.2	366	
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.2	366	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.2	366	
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6	
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366	
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366	
87-86-5	Pentachlorophenol	U	366	ug/kg	91.5	366	
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6	
110-86-1	Pyridine	U	366	ug/kg	73.2	366	UJ,SV7c
62-53-3	Aniline	U	366	ug/kg	110	366	
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.2	366	
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.2	366	
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366	
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.2	366	
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.2	366	UJ,SV7c
95-48-7	o-Cresol	U	366	ug/kg	73.2	366	
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366	
67-72-1	Hexachloroethane	U	366	ug/kg	73.2	366	
98-95-3	Nitrobenzene	U	366	ug/kg	73.2	366	
78-59-1	Isophorone	U	366	ug/kg	73.2	366	
88-75-5	2-Nitrophenol	U	366	ug/kg	73.2	366	
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366	
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.2	366	
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.2	366	
65-85-0	Benzoic acid	U	732	ug/kg	183	732	
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6	
106-47-8	4-Chloroaniline	U	366	ug/kg	73.2	366	
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.2	366	
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.32	36.6	
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.2	366	
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.2	366	
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.2	366	
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6	
88-74-4	2-Nitroaniline	U	366	ug/kg	73.2	366	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	366	ug/kg	73.2	366	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540010	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13873	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:23	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110418.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	366	ug/kg	73.2	366	
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366	
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6	
51-28-5	2,4-Dinitrophenol	U	732	ug/kg	139	732	
132-64-9	Dibenzofuran	U	366	ug/kg	73.2	366	
84-66-2	Diethylphthalate	U	366	ug/kg	73.2	366	
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6	
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.2	366	
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.2	366	
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	366	ug/kg	73.2	366	
122-66-7	Azobenzene	U	366	ug/kg	73.2	366	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.2	366	
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.2	366	
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6	
120-12-7	Anthracene	U	36.6	ug/kg	7.32	36.6	
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.2	366	
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6	
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.2	366	
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6	
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366	
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.2	366	
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.2	366	
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6	
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6	
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6	
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6	
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6	
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.2	366	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.01	997	ug/kg		J
	Unknown Aldol Condensate	2.92	575	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540010	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13873	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:23	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110418.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.46	502	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.85	500	ug/kg	97	NJ
53939-27-8	9-Tetradecenal, (Z)-	7.65	313	ug/kg	90	NJ
2326-89-8	(5a.alpha.,9a.beta.,9b.beta.)-5,5a,6,7,8	7.79	177	ug/kg	91	NJ
	Unknown	8.02	430	ug/kg		J
506-30-9	Eicosanoic acid	8.12	202	ug/kg	99	NJ
	Unknown	8.14	166	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.15	300	ug/kg	95	NJ
	Unknown	8.25	431	ug/kg		J
	Unknown	8.39	667	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.46	1440	ug/kg	98	NJ
112-85-6	Docosanoic acid	8.57	213	ug/kg	83	NJ
	Unknown	8.6	993	ug/kg		J
	Unknown	8.75	200	ug/kg		J
	Unknown	9.2	215	ug/kg		J
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	11.78	767	ug/kg	80	NJ
	Unknown	11.97	482	ug/kg		J
83-46-5	.beta.-Sitosterol	12.45	346	ug/kg	97	NJ
83-47-6	.gamma.-Sitosterol	12.49	213	ug/kg	90	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540012	Date Received:	11/20/2009 08:50	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13874	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	359	ug/kg	71.7	359	
108-95-2	Phenol	U	359	ug/kg	71.7	359	
95-57-8	2-Chlorophenol	U	359	ug/kg	71.7	359	
106-46-7	1,4-Dichlorobenzene	U	359	ug/kg	71.7	359	
621-64-7	N-Nitrosodipropylamine	U	359	ug/kg	71.7	359	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	359	ug/kg	71.7	359	
83-32-9	Acenaphthene	U	35.9	ug/kg	11.8	35.9	
121-14-2	2,4-Dinitrotoluene	U	359	ug/kg	35.9	359	
100-02-7	4-Nitrophenol	U	359	ug/kg	118	359	
87-86-5	Pentachlorophenol	U	359	ug/kg	89.7	359	
129-00-0	Pyrene	J	13.4	ug/kg	10.8	35.9	
110-86-1	Pyridine	U	359	ug/kg	71.7	359	UJ,SV7c
62-53-3	Aniline	U	359	ug/kg	108	359	
111-44-4	bis(2-Chloroethyl) ether	U	359	ug/kg	71.7	359	
541-73-1	1,3-Dichlorobenzene	U	359	ug/kg	71.7	359	
100-51-6	Benzyl alcohol	U	359	ug/kg	108	359	
95-50-1	1,2-Dichlorobenzene	U	359	ug/kg	71.7	359	
108-60-1	bis(2-Chloroisopropyl)ether	U	359	ug/kg	71.7	359	UJ,SV7c
95-48-7	o-Cresol	U	359	ug/kg	71.7	359	
65794-96-9	m,p-Cresols	U	359	ug/kg	108	359	
67-72-1	Hexachloroethane	U	359	ug/kg	71.7	359	
98-95-3	Nitrobenzene	U	359	ug/kg	71.7	359	
78-59-1	Isophorone	U	359	ug/kg	71.7	359	
88-75-5	2-Nitrophenol	U	359	ug/kg	71.7	359	
105-67-9	2,4-Dimethylphenol	U	359	ug/kg	126	359	
111-91-1	bis(2-Chloroethoxy)methane	U	359	ug/kg	71.7	359	
120-83-2	2,4-Dichlorophenol	U	359	ug/kg	71.7	359	
65-85-0	Benzoic acid	U	717	ug/kg	179	717	
91-20-3	Naphthalene	U	35.9	ug/kg	10.8	35.9	
106-47-8	4-Chloroaniline	U	359	ug/kg	71.7	359	
87-68-3	Hexachlorobutadiene	U	359	ug/kg	71.7	359	
91-57-6	2-Methylnaphthalene	U	35.9	ug/kg	7.17	35.9	
77-47-4	Hexachlorocyclopentadiene	U	359	ug/kg	71.7	359	
88-06-2	2,4,6-Trichlorophenol	U	359	ug/kg	71.7	359	
95-95-4	2,4,5-Trichlorophenol	U	359	ug/kg	71.7	359	
91-58-7	2-Chloronaphthalene	U	35.9	ug/kg	11.8	35.9	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	359	ug/kg	71.7	359	
99-09-2	3-Nitroaniline	U	359	ug/kg	71.7	359	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540012	Date Received:	11/20/2009 08:50	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13874	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	359	ug/kg	71.7	359	
606-20-2	2,6-Dinitrotoluene	U	359	ug/kg	35.9	359	
208-96-8	Acenaphthylene	U	35.9	ug/kg	10.8	35.9	
51-28-5	2,4-Dinitrophenol	U	717	ug/kg	136	717	
132-64-9	Dibenzofuran	U	359	ug/kg	71.7	359	
84-66-2	Diethylphthalate	U	359	ug/kg	71.7	359	
86-73-7	Fluorene	U	35.9	ug/kg	10.8	35.9	
7005-72-3	4-Chlorophenylphenylether	U	359	ug/kg	71.7	359	
534-52-1	2-Methyl-4,6-dinitrophenol	U	359	ug/kg	71.7	359	
100-01-6	4-Nitroaniline	U	359	ug/kg	108	359	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	359	ug/kg	71.7	359	
122-66-7	Azobenzene	U	359	ug/kg	71.7	359	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	359	ug/kg	71.7	359	
118-74-1	Hexachlorobenzene	U	359	ug/kg	71.7	359	
85-01-8	Phenanthrene	U	35.9	ug/kg	10.8	35.9	
120-12-7	Anthracene	U	35.9	ug/kg	7.17	35.9	
84-74-2	Di-n-butylphthalate	U	359	ug/kg	71.7	359	
206-44-0	Fluoranthene	J	16.5	ug/kg	10.8	35.9	
85-68-7	Butylbenzylphthalate	U	359	ug/kg	71.7	359	
56-55-3	Benzo(a)anthracene	U	35.9	ug/kg	10.8	35.9	
91-94-1	3,3'-Dichlorobenzidine	U	359	ug/kg	108	359	
218-01-9	Chrysene	U	35.9	ug/kg	10.8	35.9	
117-81-7	bis(2-Ethylhexyl)phthalate	U	359	ug/kg	71.7	359	
117-84-0	Di-n-octylphthalate	U	359	ug/kg	71.7	359	
205-99-2	Benzo(b)fluoranthene		107	ug/kg	10.8	35.9	
207-08-9	Benzo(k)fluoranthene	U	35.9	ug/kg	10.8	35.9	
50-32-8	Benzo(a)pyrene	U	35.9	ug/kg	10.8	35.9	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.9	ug/kg	10.8	35.9	
53-70-3	Dibenzo(a,h)anthracene	U	35.9	ug/kg	10.8	35.9	
191-24-2	Benzo(ghi)perylene	U	35.9	ug/kg	10.8	35.9	
120-82-1	1,2,4-Trichlorobenzene	U	359	ug/kg	71.7	359	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.75	156	ug/kg		J
	Unknown	2	233	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540012	Date Received:	11/20/2009 08:50	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13874	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:10	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110420.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	716	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	272	ug/kg	94	NJ
112-84-5	13-Docosenamide, (Z)-	9.19	189	ug/kg	94	NJ
112-95-8	Eicosane	10.32	170	ug/kg	98	NJ
	Unknown	11.76	334	ug/kg		J
	Unknown	11.95	180	ug/kg		J

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13875	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 12:18	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110410.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.4	372	
108-95-2	Phenol	U	372	ug/kg	74.4	372	
95-57-8	2-Chlorophenol	U	372	ug/kg	74.4	372	
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.4	372	
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.4	372	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.4	372	
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2	
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372	
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372	
87-86-5	Pentachlorophenol	U	372	ug/kg	93.1	372	
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2	
110-86-1	Pyridine	U	372	ug/kg	74.4	372	UJ,SV7c
62-53-3	Aniline	U	372	ug/kg	112	372	
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.4	372	
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.4	372	
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372	
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.4	372	
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.4	372	UJ,SV7c
95-48-7	o-Cresol	U	372	ug/kg	74.4	372	
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372	
67-72-1	Hexachloroethane	U	372	ug/kg	74.4	372	
98-95-3	Nitrobenzene	U	372	ug/kg	74.4	372	
78-59-1	Isophorone	U	372	ug/kg	74.4	372	
88-75-5	2-Nitrophenol	U	372	ug/kg	74.4	372	
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372	
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.4	372	
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.4	372	
65-85-0	Benzoic acid	U	744	ug/kg	186	744	
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2	
106-47-8	4-Chloroaniline	U	372	ug/kg	74.4	372	
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.4	372	
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.44	37.2	
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.4	372	
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.4	372	
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.4	372	
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	372	ug/kg	74.4	372	
99-09-2	3-Nitroaniline	U	372	ug/kg	74.4	372	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13875	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 12:18	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110410.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	372	ug/kg	74.4	372	
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372	
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2	
51-28-5	2,4-Dinitrophenol	U	744	ug/kg	141	744	
132-64-9	Dibenzofuran	U	372	ug/kg	74.4	372	
84-66-2	Diethylphthalate	U	372	ug/kg	74.4	372	
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2	
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.4	372	
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.4	372	
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	372	ug/kg	74.4	372	
122-66-7	Azobenzene	U	372	ug/kg	74.4	372	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.4	372	
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.4	372	
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2	
120-12-7	Anthracene	U	37.2	ug/kg	7.44	37.2	
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.4	372	
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2	
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.4	372	
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2	
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372	
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.4	372	
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.4	372	
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2	
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2	
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2	
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2	
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2	
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.4	372	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.88	160	ug/kg		J
	Unknown	1.98	284	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13875	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 12:18	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110410.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	429	ug/kg		JA
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	11.77	2680	ug/kg	83	NJ
	Unknown	11.96	1310	ug/kg		J
	Unknown	12.14	230	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540015	Date Received:	11/20/2009 08:50	%Moisture:	10.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13876	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 17:18	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110423.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.2	371	
108-95-2	Phenol	U	371	ug/kg	74.2	371	
95-57-8	2-Chlorophenol	U	371	ug/kg	74.2	371	
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.2	371	
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.2	371	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.2	371	
83-32-9	Acenaphthene	U	37.1	ug/kg	12.2	37.1	
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371	
100-02-7	4-Nitrophenol	U	371	ug/kg	122	371	
87-86-5	Pentachlorophenol	U	371	ug/kg	92.8	371	
129-00-0	Pyrene	J	16.4	ug/kg	11.1	37.1	
110-86-1	Pyridine	U	371	ug/kg	74.2	371	UJ,SV7c
62-53-3	Aniline	U	371	ug/kg	111	371	
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.2	371	
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.2	371	
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371	
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.2	371	
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.2	371	UJ,SV7c
95-48-7	o-Cresol	U	371	ug/kg	74.2	371	
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371	
67-72-1	Hexachloroethane	U	371	ug/kg	74.2	371	
98-95-3	Nitrobenzene	U	371	ug/kg	74.2	371	
78-59-1	Isophorone	U	371	ug/kg	74.2	371	
88-75-5	2-Nitrophenol	U	371	ug/kg	74.2	371	
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371	
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.2	371	
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.2	371	
65-85-0	Benzoic acid	U	742	ug/kg	186	742	
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1	
106-47-8	4-Chloroaniline	U	371	ug/kg	74.2	371	
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.2	371	
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.42	37.1	
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.2	371	
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.2	371	
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.2	371	
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.2	37.1	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	371	ug/kg	74.2	371	
99-09-2	3-Nitroaniline	U	371	ug/kg	74.2	371	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540015	Date Received:	11/20/2009 08:50	%Moisture:	10.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13876	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 17:18	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110423.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	371	ug/kg	74.2	371	
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371	
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1	
51-28-5	2,4-Dinitrophenol	U	742	ug/kg	141	742	
132-64-9	Dibenzofuran	U	371	ug/kg	74.2	371	
84-66-2	Diethylphthalate	U	371	ug/kg	74.2	371	
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1	
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.2	371	
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.2	371	
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	371	ug/kg	74.2	371	
122-66-7	Azobenzene	U	371	ug/kg	74.2	371	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.2	371	
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.2	371	
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1	
120-12-7	Anthracene	U	37.1	ug/kg	7.42	37.1	
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.2	371	
206-44-0	Fluoranthene	J	18.7	ug/kg	11.1	37.1	
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.2	371	
56-55-3	Benzo(a)anthracene	J	11.5	ug/kg	11.1	37.1	
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371	
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1	
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.2	371	
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.2	371	
205-99-2	Benzo(b)fluoranthene		112	ug/kg	11.1	37.1	
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1	
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1	
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1	
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1	
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.2	371	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.64	1050	ug/kg		J
	Unknown	1.98	325	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540015	Date Received:	11/20/2009 08:50	%Moisture:	10.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13876	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 17:18	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110423.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	324	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.73	176	ug/kg	99	NJ
	Unknown	8.06	276	ug/kg		J
	Unknown	8.19	217	ug/kg		J
	Unknown	8.39	149	ug/kg		J
112-95-8	Eicosane	10.33	324	ug/kg	96	NJ
	Unknown	10.56	414	ug/kg		J
638-67-5	Tricosane	11.51	705	ug/kg	97	NJ
	Unknown	11.77	185	ug/kg		J
	Unknown	12.46	192	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540007	Date Received:	11/20/2009 08:50	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13877	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/07/2009 12:48	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s110710.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.3	372	
108-95-2	Phenol	U	372	ug/kg	74.3	372	
95-57-8	2-Chlorophenol	U	372	ug/kg	74.3	372	
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.3	372	
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.3	372	
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.3	372	
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2	
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372	
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372	
87-86-5	Pentachlorophenol	U	372	ug/kg	92.9	372	
129-00-0	Pyrene	U	37.2	ug/kg	11.1	37.2	
110-86-1	Pyridine	U	372	ug/kg	74.3	372	UJ,SV7c
62-53-3	Aniline	U	372	ug/kg	111	372	
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.3	372	
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.3	372	
100-51-6	Benzyl alcohol	U	372	ug/kg	111	372	
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.3	372	
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.3	372	UJ,SV7c
95-48-7	o-Cresol	U	372	ug/kg	74.3	372	
65794-96-9	m,p-Cresols	U	372	ug/kg	111	372	
67-72-1	Hexachloroethane	U	372	ug/kg	74.3	372	
98-95-3	Nitrobenzene	U	372	ug/kg	74.3	372	
78-59-1	Isophorone	U	372	ug/kg	74.3	372	
88-75-5	2-Nitrophenol	U	372	ug/kg	74.3	372	
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372	
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.3	372	
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.3	372	
65-85-0	Benzoic acid	U	743	ug/kg	186	743	
91-20-3	Naphthalene	U	37.2	ug/kg	11.1	37.2	
106-47-8	4-Chloroaniline	U	372	ug/kg	74.3	372	
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.3	372	
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.43	37.2	
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.3	372	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.3	372	
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.3	372	
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2	
88-74-4	2-Nitroaniline	U	372	ug/kg	74.3	372	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	372	ug/kg	74.3	372	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540007	Date Received:	11/20/2009 08:50	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13877	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/07/2009 12:48	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s110710.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	372	ug/kg	74.3	372	
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372	
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.1	37.2	
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743	
132-64-9	Dibenzofuran	U	372	ug/kg	74.3	372	
84-66-2	Diethylphthalate	U	372	ug/kg	74.3	372	
86-73-7	Fluorene	U	37.2	ug/kg	11.1	37.2	
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.3	372	
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.3	372	
100-01-6	4-Nitroaniline	U	372	ug/kg	111	372	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	372	ug/kg	74.3	372	
122-66-7	Azobenzene	U	372	ug/kg	74.3	372	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.3	372	
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.3	372	
85-01-8	Phenanthrene	U	37.2	ug/kg	11.1	37.2	
120-12-7	Anthracene	U	37.2	ug/kg	7.43	37.2	
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.3	372	
206-44-0	Fluoranthene	U	37.2	ug/kg	11.1	37.2	
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.3	372	
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.1	37.2	
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	111	372	
218-01-9	Chrysene	U	37.2	ug/kg	11.1	37.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.3	372	
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.3	372	
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.1	37.2	
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.1	37.2	
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.1	37.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.1	37.2	
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.1	37.2	
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.1	37.2	
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.3	372	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.68	163	ug/kg		J
	Unknown	1.91	527	ug/kg		J

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540007	Date Received:	11/20/2009 08:50	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13877	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/07/2009 12:48	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s110710.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.8	462	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.59	194	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	7.12	90.6	ug/kg	98	NJ
112-79-8	9-Octadecenoic acid, (E)-	7.53	84.9	ug/kg	97	NJ
57-11-4	Octadecanoic acid	7.57	98.9	ug/kg	96	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.03	326	ug/kg	98	NJ
	Unknown	8.05	482	ug/kg		J
	Unknown	8.07	198	ug/kg		J
	Unknown	8.25	156	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.29	182	ug/kg	94	NJ
514-10-3	Abietic acid	8.43	162	ug/kg	97	NJ
	Unknown	10.19	158	ug/kg		J
112-95-8	Eicosane	11.13	154	ug/kg	97	NJ
	Unknown	11.39	238	ug/kg		J
	Unknown	12.05	197	ug/kg		J

ETM
1/26/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-604 VALIDATION DATE: 1/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: MLD **Level I** **Date:** 01/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/26/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 **TPH GRO and DRO Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13875	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 13:39	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.16 g	Final Volume:	1 mL
Data File:	007f0701.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.41	mg/kg	2.41	7.41

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	5
Run Date:	11/30/2009 14:16	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	008f0801.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	38.3	mg/kg	12.4	38.3

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540003	Date Received:	11/20/2009 08:50	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13868	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7J	Dilution:	1
Run Date:	11/30/2009 14:53	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.05	mg/kg	2.44	7.52

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540004	Date Received:	11/20/2009 08:50	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13867	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 16:43	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.06	mg/kg	2.46	7.57

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540005	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13864	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	20
Run Date:	11/30/2009 18:34	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	015f1501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	146	mg/kg	47.6	146

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540006	Date Received:	11/20/2009 08:50	%Moisture:	16.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13871	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 19:10	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	016f1601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		8.58	mg/kg	2.58	7.93

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540007	Date Received:	11/20/2009 08:50	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13877	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 19:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.16 g	Final Volume:	1 mL
Data File:	017f1701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		13.7	mg/kg	2.40	7.39

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540008	Date Received:	11/20/2009 08:50	%Moisture:	16.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13869	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 20:23	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	018f1801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	8.01	mg/kg	2.60	8.01

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540009	Date Received:	11/20/2009 08:50	%Moisture:	13.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13870	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 21:00	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	019f1901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		89.8	mg/kg	2.51	7.71

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540010	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13873	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 21:37	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	020f2001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		24.5	mg/kg	2.38	7.31

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13863	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 22:14	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	021f2101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.21	mg/kg	2.37	7.29

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540012	Date Received:	11/20/2009 08:50	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13874	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 00:05	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	024f2401.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.06	mg/kg	2.32	7.15

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540013	Date Received:	11/20/2009 08:50	%Moisture:	14
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13866	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 00:42	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	025f2501.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		9.32	mg/kg	2.51	7.72

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13862	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 01:19	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	026f2601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.39	mg/kg	2.49	7.67

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540015	Date Received:	11/20/2009 08:50	%Moisture:	10.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13876	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 01:55	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	027f2701.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.1	mg/kg	2.40	7.38

ETM
1/26/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540016	Date Received:	11/20/2009 08:50	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13872	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	10
Run Date:	12/01/2009 13:59	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	005f0501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		271	mg/kg	23.9	73.6

ETM
1/26/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-604 VALIDATION DATE: 1/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: MLD **Level I** **Date:** 01/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/26/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	5
Run Date:	12/04/2009 15:23	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	053f5301.d	**Column:**	1 CLP1	**Level:**	LOW
	053b5301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.2	ug/kg	6.39	19.2	1
11104-28-2	Aroclor-1221	U	19.2	ug/kg	6.39	19.2	1
11141-16-5	Aroclor-1232	U	19.2	ug/kg	6.39	19.2	1
53469-21-9	Aroclor-1242	U	19.2	ug/kg	6.39	19.2	1
12672-29-6	Aroclor-1248	U	19.2	ug/kg	6.39	19.2	1
11097-69-1	Aroclor-1254	U	19.2	ug/kg	6.39	19.2	1
11096-82-5	Aroclor-1260	U	19.2	ug/kg	6.39	19.2	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13863	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:45	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	050f5001.d	**Column:**	1 CLP1	**Level:**	LOW
	050b5001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.64	ug/kg	1.21	3.64	1
11104–28–2	Aroclor–1221	U	3.64	ug/kg	1.21	3.64	1
11141–16–5	Aroclor–1232	U	3.64	ug/kg	1.21	3.64	1
53469–21–9	Aroclor–1242	U	3.64	ug/kg	1.21	3.64	1
12672–29–6	Aroclor–1248	U	3.64	ug/kg	1.21	3.64	1
11097–69–1	Aroclor–1254	U	3.64	ug/kg	1.21	3.64	1
11096–82–5	Aroclor–1260	U	3.64	ug/kg	1.21	3.64	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540005	Date Received:	11/20/2009 08:50	%Moisture:	8.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13864	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	927083	Inst:	ECD1A.I	Dilution:	25
Run Date:	12/04/2009 13:09	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	11/29/2009 16:38	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	042f4201.d	Column:	1 CLP1	Level:	LOW
	042b4201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	91.4	ug/kg	30.4	91.4	1
11104-28-2	Aroclor-1221	U	91.4	ug/kg	30.4	91.4	1
11141-16-5	Aroclor-1232	U	91.4	ug/kg	30.4	91.4	1
53469-21-9	Aroclor-1242	U	91.4	ug/kg	30.4	91.4	1
12672-29-6	Aroclor-1248	U	91.4	ug/kg	30.4	91.4	1
11097-69-1	Aroclor-1254	U	91.4	ug/kg	30.4	91.4	1
11096-82-5	Aroclor-1260	U	91.4	ug/kg	30.4	91.4	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13865**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:06**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**037f3701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	037b3701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.83	ug/kg	1.28	3.83	1
11104–28–2	Aroclor–1221	U	3.83	ug/kg	1.28	3.83	1
11141–16–5	Aroclor–1232	U	3.83	ug/kg	1.28	3.83	1
53469–21–9	Aroclor–1242	U	3.83	ug/kg	1.28	3.83	1
12672–29–6	Aroclor–1248	U	3.83	ug/kg	1.28	3.83	1
11097–69–1	Aroclor–1254		39.2	ug/kg	1.28	3.83	1
11096–82–5	Aroclor–1260		25.5	ug/kg	1.28	3.83	2

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540013**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13866**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:11**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**052f5201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	052b5201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.87	ug/kg	1.29	3.87	1
11104–28–2	Aroclor–1221	U	3.87	ug/kg	1.29	3.87	1
11141–16–5	Aroclor–1232	U	3.87	ug/kg	1.29	3.87	1
53469–21–9	Aroclor–1242	U	3.87	ug/kg	1.29	3.87	1
12672–29–6	Aroclor–1248	U	3.87	ug/kg	1.29	3.87	1
11097–69–1	Aroclor–1254	U	3.87	ug/kg	1.29	3.87	1
11096–82–5	Aroclor–1260		17.4	ug/kg	1.29	3.87	2

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13867	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A,I	**Dilution:**	1
Run Date:	12/04/2009 12:31	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	039f3901.d	**Column:**	1 CLP1	**Level:**	LOW
	039b3901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.80	ug/kg	1.27	3.80	1
11104-28-2	Aroclor-1221	U	3.80	ug/kg	1.27	3.80	1
11141-16-5	Aroclor-1232	U	3.80	ug/kg	1.27	3.80	1
53469-21-9	Aroclor-1242	U	3.80	ug/kg	1.27	3.80	1
12672-29-6	Aroclor-1248	U	3.80	ug/kg	1.27	3.80	1
11097-69-1	Aroclor-1254	U	3.80	ug/kg	1.27	3.80	1
11096-82-5	Aroclor-1260		6.80	ug/kg	1.27	3.80	2

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	5
Run Date:	12/04/2009 12:18	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	038f3801.d	**Column:**	1 CLP1	**Level:**	LOW
	038b3801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	18.8	ug/kg	6.25	18.8	1
11104-28-2	Aroclor-1221	U	18.8	ug/kg	6.25	18.8	1
11141-16-5	Aroclor-1232	U	18.8	ug/kg	6.25	18.8	1
53469-21-9	Aroclor-1242	U	18.8	ug/kg	6.25	18.8	1
12672-29-6	Aroclor-1248	U	18.8	ug/kg	6.25	18.8	1
11097-69-1	Aroclor-1254	U	18.8	ug/kg	6.25	18.8	1
11096-82-5	Aroclor-1260	U	18.8	ug/kg	6.25	18.8	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:08	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	047f4701.d	**Column:**	1 CLP1	**Level:**	LOW
	047b4701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.00	ug/kg	1.33	4.00	1
11104-28-2	Aroclor-1221	U	4.00	ug/kg	1.33	4.00	1
11141-16-5	Aroclor-1232	U	4.00	ug/kg	1.33	4.00	1
53469-21-9	Aroclor-1242	U	4.00	ug/kg	1.33	4.00	1
12672-29-6	Aroclor-1248	U	4.00	ug/kg	1.33	4.00	1
11097-69-1	Aroclor-1254	U	4.00	ug/kg	1.33	4.00	1
11096-82-5	Aroclor-1260	U	4.00	ug/kg	1.33	4.00	1

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	25
Run Date:	12/04/2009 16:47	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	060f6001.d	**Column:**	1 CLP1	**Level:**	LOW
	060b6001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	96.4	ug/kg	32.1	96.4	1
11104-28-2	Aroclor-1221	U	96.4	ug/kg	32.1	96.4	1
11141-16-5	Aroclor-1232	U	96.4	ug/kg	32.1	96.4	1
53469-21-9	Aroclor-1242	U	96.4	ug/kg	32.1	96.4	1
12672-29-6	Aroclor-1248	U	96.4	ug/kg	32.1	96.4	1
11097-69-1	Aroclor-1254		1280	ug/kg	32.1	96.4	1
11096-82-5	Aroclor-1260		487	ug/kg	32.1	96.4	2

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540006	Date Received:	11/20/2009 08:50	%Moisture:	16.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13871	Method:	SW846 8082	SOP Ref:	GL–OA–E–040
Batch ID:	927083	Inst:	ECD1A.I	Dilution:	5
Run Date:	12/04/2009 13:22	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	11/29/2009 16:38	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	043f4301.d	Column:	1 CLP1	Level:	LOW
	043b4301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	19.8	ug/kg	6.59	19.8	1
11104–28–2	Aroclor–1221	U	19.8	ug/kg	6.59	19.8	1
11141–16–5	Aroclor–1232	U	19.8	ug/kg	6.59	19.8	1
53469–21–9	Aroclor–1242	U	19.8	ug/kg	6.59	19.8	1
12672–29–6	Aroclor–1248	U	19.8	ug/kg	6.59	19.8	1
11097–69–1	Aroclor–1254		225	ug/kg	6.59	19.8	1
11096–82–5	Aroclor–1260		103	ug/kg	6.59	19.8	2

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13872	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	5
Run Date:	12/04/2009 15:48	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	055f5501.d	**Column:**	1 CLP1	**Level:**	LOW
	055b5501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	18.3	ug/kg	6.09	18.3	1
11104-28-2	Aroclor-1221	U	18.3	ug/kg	6.09	18.3	1
11141-16-5	Aroclor-1232	U	18.3	ug/kg	6.09	18.3	1
53469-21-9	Aroclor-1242	U	18.3	ug/kg	6.09	18.3	1
12672-29-6	Aroclor-1248	U	18.3	ug/kg	6.09	18.3	1
11097-69-1	Aroclor-1254	U	18.3	ug/kg	6.09	18.3	1
11096-82-5	Aroclor-1260	U	18.3	ug/kg	6.09	18.3	1

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13873	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:33	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	049f4901.d	**Column:**	1 CLP1	**Level:**	LOW
	049b4901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.65	ug/kg	1.22	3.65	1
11104–28–2	Aroclor–1221	U	3.65	ug/kg	1.22	3.65	1
11141–16–5	Aroclor–1232	U	3.65	ug/kg	1.22	3.65	1
53469–21–9	Aroclor–1242	U	3.65	ug/kg	1.22	3.65	1
12672–29–6	Aroclor–1248	U	3.65	ug/kg	1.22	3.65	1
11097–69–1	Aroclor–1254	U	3.65	ug/kg	1.22	3.65	1
11096–82–5	Aroclor–1260	U	3.65	ug/kg	1.22	3.65	1

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:58	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	051f5101.d	**Column:**	1 CLP1	**Level:**	LOW
	051b5101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254	U	3.57	ug/kg	1.19	3.57	1
11096-82-5	Aroclor-1260	J	1.80	ug/kg	1.19	3.57	1

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 11:53	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	1 CLP1	**Level:**	LOW
	036b3601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.72	ug/kg	1.24	3.72	1
11104-28-2	Aroclor-1221	U	3.72	ug/kg	1.24	3.72	1
11141-16-5	Aroclor-1232	U	3.72	ug/kg	1.24	3.72	1
53469-21-9	Aroclor-1242	U	3.72	ug/kg	1.24	3.72	1
12672-29-6	Aroclor-1248	U	3.72	ug/kg	1.24	3.72	1
11097-69-1	Aroclor-1254	U	3.72	ug/kg	1.24	3.72	1
11096-82-5	Aroclor-1260	U	3.72	ug/kg	1.24	3.72	1

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 15:36	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.11 g	**Final Volume:**	1 mL
Data File:	054f5401.d	**Column:**	1 CLP1	**Level:**	LOW
	054b5401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.70	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254	U	3.70	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260	J	3.50	ug/kg	1.23	3.70	2

ETM
1/26/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540007	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13877	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 13:55	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	046f4601.d	**Column:**	1 CLP1	**Level:**	LOW
	046b4601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.71	ug/kg	1.24	3.71	1
11104–28–2	Aroclor–1221	U	3.71	ug/kg	1.24	3.71	1
11141–16–5	Aroclor–1232	U	3.71	ug/kg	1.24	3.71	1
53469–21–9	Aroclor–1242	U	3.71	ug/kg	1.24	3.71	1
12672–29–6	Aroclor–1248	U	3.71	ug/kg	1.24	3.71	1
11097–69–1	Aroclor–1254	U	3.71	ug/kg	1.24	3.71	1
11096–82–5	Aroclor–1260	U	3.71	ug/kg	1.24	3.71	1

ETM
1/26/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-604

REQUEST NUMBER: 10-604

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241540%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13875	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13865	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13865	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13868	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13868	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13867	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13867	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13864	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13864	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13871	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13871	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13877	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13877	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13869	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13869	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13870	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13870	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13873	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13873	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13863	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13863	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13874	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13874	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13866	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13866	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13862	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13862	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13876	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13876	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13872	1	SEPTUM AMBER GLASS	8260B	Ice	S

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-604

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13930	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-13931	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/19/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-604
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	SW-846:8082	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13930	S	11/18/2009	
		1	RE03-09-13931	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Final Page of REQUEST NUMBER 10-604

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241540
SDG: 10-604

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-604
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241540
SDG: 10-604

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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241540
SDG # : 10-604

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241540001	RE03-09-13875
241540002	RE03-09-13865
241540003	RE03-09-13868
241540004	RE03-09-13867
241540005	RE03-09-13864
241540006	RE03-09-13871
241540007	RE03-09-13877
241540008	RE03-09-13869
241540009	RE03-09-13870
241540010	RE03-09-13873
241540011	RE03-09-13863
241540012	RE03-09-13874
241540013	RE03-09-13866
241540014	RE03-09-13862
241540015	RE03-09-13876
241540016	RE03-09-13872
241540017	RE03-09-13930
241540018	RE03-09-13931

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for D Francis

Valerie Davis

Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-604

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 10-604

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241540%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13875	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13865	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13865	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13868	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13868	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13867	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13867	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13864	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13864	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13871	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13871	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13877	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13877	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13869	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13869	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13870	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13870	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13873	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13873	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13863	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13863	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13874	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13874	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13866	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13866	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13862	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13862	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13876	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-13876	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-13872	1	SEPTUM AMBER GLASS	8260B	Ice	S
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-604

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13930	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-13931	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/19/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-604
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	SW-846:8082	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	SW-846:8260B	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-604

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-13930	S	11/18/2009	
		1	RE03-09-13931	S	11/18/2009	
	SW-846:8270C	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Final Page of REQUEST NUMBER 10-604

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-604**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags BLUE ICE dry ice NONE other (describe) 1-5,15
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 2C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PMA) review: Initials _____ Date 11/23/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9855
Mstr# 7209 7848 9844 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 3
TRK# 0201 7209 7848 9796
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

2c

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1 of 2
TRK# 0201 7209 7848 9844
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NAIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 46.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AWEPR1315W200

2c

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RadioActive Samples

TRK# 0201 7209 7848 9877

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NAIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

3c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9822
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4c

FedEx Express

TRK# 0201 7209 7848 9752

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

5c

FedEx Express

TRK# 0201 7209 7848 9866

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
VALDEZ
AMOS NATL LAB
BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-604

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	926743
Prep Batch Number:	926741

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241540001	RE03-09-13875
241540002	RE03-09-13865
241540003	RE03-09-13868
241540004	RE03-09-13867
241540005	RE03-09-13864
241540006	RE03-09-13871
241540007	RE03-09-13877
241540008	RE03-09-13869
241540009	RE03-09-13870
241540010	RE03-09-13873
241540011	RE03-09-13863
241540012	RE03-09-13874
241540013	RE03-09-13866
241540014	RE03-09-13862
241540015	RE03-09-13876
241540016	RE03-09-13872
241540017	RE03-09-13930
241540018	RE03-09-13931
1201981437	Method Blank (MB)
1201981441	Laboratory Control Sample (LCS)
1201981442	Laboratory Control Sample (LCS)
1201981438	Method Blank (MB)
1201981443	Laboratory Control Sample (LCS)
1201981444	Laboratory Control Sample (LCS)
1201997426	Method Blank (MB)
1201997427	Laboratory Control Sample (LCS)
1201997428	Laboratory Control Sample (LCS)

1201981439	241540001(RE03-09-13875) Post Spike (PS)
1201981440	241540001(RE03-09-13875) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
Samples 241540 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015 and 016 in this SDG were analyzed on an "dry weight" basis. Samples 241540 017 and 018 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS recoveries were not all within the acceptance limits. See NCR# 768535.

QC Sample Designation
Sample 241540001 (RE03-09-13875) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
In the following sample, internal standard response was outside the required acceptance criteria. Sample reanalysis confirmed matrix interference: 241540016 (RE03-09-13872). See NCR# 768535.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. The following samples were analyzed outside the holding time due to an instrumentation malfunction that occurred during the initial analysis: 1201981439 (RE03-09-13875) and 1201981440 (RE03-09-13875). See NCR# 768535.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
The samples in this SDG were re-analyzed due to unacceptable recoveries in the initial analysis: 1201981439 (RE03-09-13875), 1201981440 (RE03-09-13875)

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and

dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 768535

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 60m x 0.25mm x 1.4um	Trap 10
VOA9.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/17/09

Roadmap for LANL 10-604 VOA

This roadmap was analyzed by ron01469 on 12-10-2009, 14:29.
This roadmap was reviewed by ron01469 on 12-16-2009, 08:49.
This roadmap was reviewed by kel00587 on 12-16-2009, 13:31.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112509v1/1n331.d	241540001	RE03-09-13875	26-NOV-2009	00:00	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n332.d	241540002	RE03-09-13865	26-NOV-2009	00:30	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n333.d	241540003	RE03-09-13868	26-NOV-2009	01:01	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n334.d	241540004	RE03-09-13867	26-NOV-2009	01:31	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n335.d	241540005	RE03-09-13864	26-NOV-2009	02:01	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n336.d	241540006	RE03-09-13871	26-NOV-2009	02:31	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n338.d	241540008	RE03-09-13869	26-NOV-2009	03:32	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n339.d	241540009	RE03-09-13870	26-NOV-2009	04:02	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n340.d	241540010	RE03-09-13873	26-NOV-2009	04:32	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n341.d	241540011	RE03-09-13863	26-NOV-2009	05:03	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n342.d	241540012	RE03-09-13874	26-NOV-2009	05:32	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n343.d	241540013	RE03-09-13866	26-NOV-2009	06:03	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n344.d	241540014	RE03-09-13862	26-NOV-2009	06:33	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n345.d	241540015	RE03-09-13876	26-NOV-2009	07:03	10-604.sub	1	926743	
■	N	/chem/VOA1.i/112509v1/1n346.d	241540016	RE03-09-13872CF	26-NOV-2009	07:33	10-604.sub	1	926743	Confirmation
☐	N	/chem/VOA1.i/112509v1/1n347.d	241540017	RE03-09-13930	26-NOV-2009	08:03	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n348.d	241540018	RE03-09-13931	26-NOV-2009	08:34	10-604.sub	1	926743	
☐	N	/chem/VOA1.i/112709v1/1n505.d	241540007	RE03-09-13877	27-NOV-2009	07:43	10-604.sub	1	926743	

☐	N	/chem/VOA1.i/112709v1/1n506.d	241540016	RE03-09-13872	27-NOV-2009	08:13	10-604.sub	1	926743	
■	N	/chem/VOA9.i/121509v9/9p220.d	241540001	RE03-09-13875	15-DEC-2009	19:44	10-604.sub	1	926743	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA1.i/112509v1/1n326LB.d	1201981441	LCS	lcs	25-NOV-2009	21:29	all.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n327sLB.d	1201981442	LCS	lcs	25-NOV-2009	21:59	all.sub	1	926743	
☐	N	/chem/VOA1.i/112509v1/1n328BB.d	1201981437	MB	mb	25-NOV-2009	22:30	all.sub	1	926743	
☐	N	/chem/VOA1.i/112709v1/1n502LA.d	1201981443	LCS	lcs	27-NOV-2009	05:41	all.sub	1	926743	
☐	N	/chem/VOA1.i/112709v1/1n503sLA.d	1201981444	LCS	lcs	27-NOV-2009	06:40	all.sub	1	926743	
☐	N	/chem/VOA1.i/112709v1/1n504BA.d	1201981438	BLANK	mb	27-NOV-2009	07:10	all.sub	1	926743	
■	N	/chem/VOA1.i/112709v1/1n507.d	1201981439	RE03-09-13875MS	ms	27-NOV-2009	08:43	10-604.sub	1	926743	
■	N	/chem/VOA1.i/112709v1/1n508.d	1201981440	RE03-09-13875MSD	msd	27-NOV-2009	09:14	10-604.sub	1	926743	
■	N	/chem/VOA1.i/121409v1/1r108.d	1201981439	1	ms	14-DEC-2009	12:57	CALsubL+.sub	SDGa04161		
☐	N	/chem/VOA9.i/121509v9/9p202LA.d	1201997427	LCS	lcs	15-DEC-2009	11:25	all.sub	1	926743	
☐	N	/chem/VOA9.i/121509v9/9p205sLA.d	1201997428	LCS	lcs	15-DEC-2009	12:48	all.sub	1	926743	
☐	N	/chem/VOA9.i/121509v9/9p208BA.d	1201997426	BLANK	mb	15-DEC-2009	14:11	all.sub	1	926743	
☐	N	/chem/VOA9.i/121509v9/9p213.d	1201981439	RE03-09-13875MS	ms	15-DEC-2009	16:30	10-604.sub	1	926743	
☐	N	/chem/VOA9.i/121509v9/9p214.d	1201981440	RE03-09-13875MSD	msd	15-DEC-2009	16:58	10-604.sub	1	926743	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 06:33	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n344.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.391	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15
67-64-1	Acetone	U	5.76	ug/kg	1.91	5.76
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
74-88-4	Iodomethane	U	5.76	ug/kg	1.84	5.76
75-09-2	Methylene chloride	U	5.76	ug/kg	2.30	5.76
75-15-0	Carbon disulfide	U	5.76	ug/kg	1.44	5.76
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15
78-93-3	2-Butanone	U	5.76	ug/kg	1.73	5.76
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.380	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.380	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	U	5.76	ug/kg	1.44	5.76
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15
591-78-6	2-Hexanone	U	5.76	ug/kg	1.73	5.76
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 06:33	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n344.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.76	ug/kg	1.84	5.76
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 05:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n341.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 05:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n341.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 02:01	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n335.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540005**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13864**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 02:01**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n335.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.329	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 00:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n332.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.393	1.16
74-87-3	Chloromethane	U	1.16	ug/kg	0.347	1.16
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.347	1.16
74-83-9	Bromomethane	U	1.16	ug/kg	0.347	1.16
75-00-3	Chloroethane	U	1.16	ug/kg	0.347	1.16
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.347	1.16
67-64-1	Acetone	U	5.78	ug/kg	1.92	5.78
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.347	1.16
74-88-4	Iodomethane	U	5.78	ug/kg	1.85	5.78
75-09-2	Methylene chloride	U	5.78	ug/kg	2.31	5.78
75-15-0	Carbon disulfide	U	5.78	ug/kg	1.44	5.78
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.347	1.16
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.347	1.16
78-93-3	2-Butanone	U	5.78	ug/kg	1.73	5.78
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.347	1.16
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.347	1.16
67-66-3	Chloroform	U	1.16	ug/kg	0.347	1.16
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.381	1.16
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.347	1.16
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.347	1.16
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.347	1.16
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.347	1.16
71-43-2	Benzene	U	1.16	ug/kg	0.347	1.16
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.381	1.16
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.347	1.16
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.347	1.16
74-95-3	Dibromomethane	U	1.16	ug/kg	0.347	1.16
108-10-1	4-Methyl-2-pentanone	U	5.78	ug/kg	1.44	5.78
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.347	1.16
108-88-3	Toluene	U	1.16	ug/kg	0.347	1.16
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.347	1.16
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.347	1.16
591-78-6	2-Hexanone	U	5.78	ug/kg	1.73	5.78
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.347	1.16
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.347	1.16
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.347	1.16
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.347	1.16
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.347	1.16

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 00:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n332.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.347	1.16
179601-23-1	m,p-Xylenes	U	2.31	ug/kg	0.347	2.31
95-47-6	o-Xylene	U	1.16	ug/kg	0.347	1.16
100-42-5	Styrene	U	1.16	ug/kg	0.347	1.16
75-25-2	Bromoform	U	1.16	ug/kg	0.347	1.16
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.347	1.16
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.347	1.16
108-86-1	Bromobenzene	U	1.16	ug/kg	0.347	1.16
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.347	1.16
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.347	1.16
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.347	1.16
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.347	1.16
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.347	1.16
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.347	1.16
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.347	1.16
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.347	1.16
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.347	1.16
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.347	1.16
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.347	1.16
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.78	ug/kg	1.85	5.78
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.347	1.16
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13866	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 06:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:22	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n343.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.395	1.16
74-87-3	Chloromethane	U	1.16	ug/kg	0.349	1.16
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.349	1.16
74-83-9	Bromomethane	U	1.16	ug/kg	0.349	1.16
75-00-3	Chloroethane	U	1.16	ug/kg	0.349	1.16
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.349	1.16
67-64-1	Acetone	U	5.82	ug/kg	1.93	5.82
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.349	1.16
74-88-4	Iodomethane	U	5.82	ug/kg	1.86	5.82
75-09-2	Methylene chloride	U	5.82	ug/kg	2.33	5.82
75-15-0	Carbon disulfide	U	5.82	ug/kg	1.45	5.82
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.349	1.16
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.349	1.16
78-93-3	2-Butanone	U	5.82	ug/kg	1.74	5.82
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.349	1.16
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.349	1.16
67-66-3	Chloroform	U	1.16	ug/kg	0.349	1.16
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.384	1.16
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.349	1.16
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.349	1.16
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.349	1.16
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.349	1.16
71-43-2	Benzene	U	1.16	ug/kg	0.349	1.16
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.384	1.16
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.349	1.16
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.349	1.16
74-95-3	Dibromomethane	U	1.16	ug/kg	0.349	1.16
108-10-1	4-Methyl-2-pentanone	U	5.82	ug/kg	1.45	5.82
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.349	1.16
108-88-3	Toluene	U	1.16	ug/kg	0.349	1.16
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.349	1.16
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.349	1.16
591-78-6	2-Hexanone	U	5.82	ug/kg	1.74	5.82
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.349	1.16
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.349	1.16
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.349	1.16
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.349	1.16
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.349	1.16

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540013**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13866**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 06:03**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:22**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n343.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.349	1.16
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.349	2.33
95-47-6	o-Xylene	U	1.16	ug/kg	0.349	1.16
100-42-5	Styrene	U	1.16	ug/kg	0.349	1.16
75-25-2	Bromoform	U	1.16	ug/kg	0.349	1.16
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.349	1.16
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.349	1.16
108-86-1	Bromobenzene	U	1.16	ug/kg	0.349	1.16
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.349	1.16
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.349	1.16
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.349	1.16
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.349	1.16
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.349	1.16
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.349	1.16
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.349	1.16
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.349	1.16
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.349	1.16
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.349	1.16
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.349	1.16
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.82	ug/kg	1.86	5.82
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.349	1.16
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13867	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 01:31	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n334.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.83	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13867	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 01:31	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n334.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.83	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13868**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 01:01**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n333.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.64	ug/kg	1.87	5.64
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.64	ug/kg	1.81	5.64
75-09-2	Methylene chloride	U	5.64	ug/kg	2.26	5.64
75-15-0	Carbon disulfide	U	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13868**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 01:01**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n333.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.338	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.64	ug/kg	1.81	5.64
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 03:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n338.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	6.01	ug/kg	1.99	6.01
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	6.01	ug/kg	1.92	6.01
75-09-2	Methylene chloride	U	6.01	ug/kg	2.40	6.01
75-15-0	Carbon disulfide	U	6.01	ug/kg	1.50	6.01
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	6.01	ug/kg	1.80	6.01
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	6.01	ug/kg	1.50	6.01
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	6.01	ug/kg	1.80	6.01
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 03:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n338.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.01	ug/kg	1.92	6.01
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 04:02	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n339.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.394	1.16
74-87-3	Chloromethane	U	1.16	ug/kg	0.348	1.16
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.348	1.16
74-83-9	Bromomethane	U	1.16	ug/kg	0.348	1.16
75-00-3	Chloroethane	U	1.16	ug/kg	0.348	1.16
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.348	1.16
67-64-1	Acetone	U	5.80	ug/kg	1.92	5.80
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.348	1.16
74-88-4	Iodomethane	U	5.80	ug/kg	1.85	5.80
75-09-2	Methylene chloride	U	5.80	ug/kg	2.32	5.80
75-15-0	Carbon disulfide	U	5.80	ug/kg	1.45	5.80
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.348	1.16
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.348	1.16
78-93-3	2-Butanone	U	5.80	ug/kg	1.74	5.80
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.348	1.16
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.348	1.16
67-66-3	Chloroform	U	1.16	ug/kg	0.348	1.16
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.383	1.16
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.348	1.16
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.348	1.16
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.348	1.16
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.348	1.16
71-43-2	Benzene	U	1.16	ug/kg	0.348	1.16
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.383	1.16
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.348	1.16
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.348	1.16
74-95-3	Dibromomethane	U	1.16	ug/kg	0.348	1.16
108-10-1	4-Methyl-2-pentanone	U	5.80	ug/kg	1.45	5.80
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.348	1.16
108-88-3	Toluene	U	1.16	ug/kg	0.348	1.16
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.348	1.16
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.348	1.16
591-78-6	2-Hexanone	U	5.80	ug/kg	1.74	5.80
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.348	1.16
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.348	1.16
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.348	1.16
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.348	1.16
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.348	1.16

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 04:02	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n339.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.348	1.16
179601-23-1	m,p-Xylenes	U	2.32	ug/kg	0.348	2.32
95-47-6	o-Xylene	U	1.16	ug/kg	0.348	1.16
100-42-5	Styrene	U	1.16	ug/kg	0.348	1.16
75-25-2	Bromoform	U	1.16	ug/kg	0.348	1.16
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.348	1.16
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.348	1.16
108-86-1	Bromobenzene	U	1.16	ug/kg	0.348	1.16
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.348	1.16
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.348	1.16
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.348	1.16
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.348	1.16
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.348	1.16
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.348	1.16
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.348	1.16
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.348	1.16
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.348	1.16
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.348	1.16
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.348	1.16
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.80	ug/kg	1.85	5.80
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.348	1.16
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540006**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13871**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 02:31**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n336.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.406	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19
67-64-1	Acetone	U	5.97	ug/kg	1.98	5.97
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
74-88-4	Iodomethane	U	5.97	ug/kg	1.91	5.97
75-09-2	Methylene chloride	U	5.97	ug/kg	2.39	5.97
75-15-0	Carbon disulfide	U	5.97	ug/kg	1.49	5.97
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19
78-93-3	2-Butanone	U	5.97	ug/kg	1.79	5.97
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.394	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.394	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19
108-10-1	4-Methyl-2-pentanone	U	5.97	ug/kg	1.49	5.97
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19
591-78-6	2-Hexanone	U	5.97	ug/kg	1.79	5.97
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540006**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13871**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 02:31**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n336.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.358	2.39
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.97	ug/kg	1.91	5.97
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13872	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/27/2009 08:13	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/27/2009 06:31	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n506.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	J	5.22	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13872	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/27/2009 08:13	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/27/2009 06:31	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n506.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene		1.25	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	16.54	7.49	ug/kg		J
508-32-7	Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	17.97	6.33	ug/kg	95	NJ
7785-70-8	1R-.alpha.-Pinene	18.1	12.6	ug/kg	97	NJ
79-92-5	Camphene	18.44	37.3	ug/kg	91	NJ
13466-78-9	3-Carene	19.13	21.2	ug/kg	97	NJ
138-86-3	Limonene	19.37	9.98	ug/kg	93	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540010**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13873**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 04:32**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:19**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n340.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540010**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13873**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 04:32**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:19**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n340.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.329	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540012**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13874**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 05:32**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:21**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n342.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.39	ug/kg	1.79	5.39
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.39	ug/kg	1.72	5.39
75-09-2	Methylene chloride	U	5.39	ug/kg	2.15	5.39
75-15-0	Carbon disulfide	U	5.39	ug/kg	1.35	5.39
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.39	ug/kg	1.62	5.39
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.39	ug/kg	1.35	5.39
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.39	ug/kg	1.62	5.39
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540012**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13874**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 05:32**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:21**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n342.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 00:00	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n331.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12
67-64-1	Acetone	U	5.58	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
74-88-4	Iodomethane	U	5.58	ug/kg	1.79	5.58
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.40	5.58
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12
78-93-3	2-Butanone	U	5.58	ug/kg	1.68	5.58
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.40	5.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12
591-78-6	2-Hexanone	U	5.58	ug/kg	1.68	5.58
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13875**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:00**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n331.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.79	5.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 07:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n345.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57
75-09-2	Methylene chloride	U	5.57	ug/kg	2.23	5.57
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 07:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n345.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.57	ug/kg	1.78	5.57
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13877**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 07:43**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 06:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n505.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57
75-09-2	Methylene chloride	J	4.18	ug/kg	2.23	5.57
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene		2.62	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13877**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 07:43**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 06:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n505.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.57	ug/kg	1.78	5.57
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	18.1	5.88	ug/kg	95	NJ
1000150-36-1	4-Carene	19.13	20.2	ug/kg	94	NJ
5989-54-8	Cyclohexene, 1-methyl-4-(1-methylethenyl	19.37	7.52	ug/kg	93	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540017	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13930	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 08:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:26	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n347.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone		14.2	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540017	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13930	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 08:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:26	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n347.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	16.51	6.75	ug/kg	97	NJ
	Unknown	16.53	6.18	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540018	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13931	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 08:34	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:27	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n348.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	2.34	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540018**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13931**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 08:34**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:27**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n348.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-604

Matrix Type: SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201981441	LCS for batch 926741	125	109	98
1201981442	LCS for batch 926741	104	106	93
1201981437	MB for batch 926741	107	109	96
241540001	RE03-09-13875	117	107	98
241540002	RE03-09-13865	116	115	109
241540003	RE03-09-13868	112	111	104
241540004	RE03-09-13867	118	110	103
241540005	RE03-09-13864	120	112	105
241540006	RE03-09-13871	115	109	105
241540008	RE03-09-13869	126	109	102
241540009	RE03-09-13870	115	107	104
241540010	RE03-09-13873	121	114	107
241540011	RE03-09-13863	116	108	100
241540012	RE03-09-13874	119	113	106
241540013	RE03-09-13866	121	113	108
241540014	RE03-09-13862	127	113	105
241540015	RE03-09-13876	127	114	108
241540017	RE03-09-13930	123	106	97
241540018	RE03-09-13931	122	109	99
1201981443	LCS for batch 926741	119	107	94
1201981444	LCS for batch 926741	96	102	82
1201981438	MB for batch 926741	100	104	92
241540007	RE03-09-13877	110	105	101
241540016	RE03-09-13872	118	111	123

DCED4 = 1,2-Dichloroethane-d4 (68%-131%)
TOL = Toluene-d8 (75%-129%)
BFB = Bromofluorobenzene (68%-133%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Volatile

Surrogate Recovery Report

SDG Number: 10-604

Matrix Type: SOLID

CAP Column (1) : RTX-Volatiles

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201997427	LCS for batch 926741	105	103	94
1201997428	LCS for batch 926741	91	87	84
1201997426	MB for batch 926741	103	101	91
1201981439	RE03-09-13875PS	91	87	83
1201981440	RE03-09-13875PSD	88	90	85

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-604**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-13875PS**	**Matrix:**	**S**
Lab Sample ID:	**1201981439**	**%Moisture:**	**10.5**
Instrument:	**VOA9.I**	**Analysis Date:**	**12/15/2009 16:30**
Analyst:	**RXY1**	**Prep Batch ID**	**926741**
Purge Vol:	**5 mL**	**Batch ID:**	**926743**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	34.6	69	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	42.2	84	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	46.9	94	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	43.0	86	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	43.1	86	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	41.9	84	51-151
67-64-1	PS	Acetone	250	0.00	U	162	65	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	40.3	81	61-125
74-88-4	PS	Iodomethane	250	0.00	U	184	74	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	34.2	68	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	209	83	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	39.1	78	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	40.1	80	62-125
78-93-3	PS	2-Butanone	250	0.00	U	203	81	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	37.5	75	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	36.7	73	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	37.5	75	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	38.4	77	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	37.6	75	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	40.8	82	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	38.5	77	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	38.4	77	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13875PS
Lab Sample ID: 1201981439
Instrument: VOA9.I
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 10.5
Analysis Date: 12/15/2009 16:30
Prep Batch ID 926741
Batch ID: 926743
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	37.8	76	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	38.3	77	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	39.2	78	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	36.1	72	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	39.0	78	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	236	94	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	33.5	67	54-133
108-88-3	PS	Toluene	50.0	0.00	U	38.3	77	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	35.7	71	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	40.3	81	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	172	69	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	41.6	83	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	38.5	77	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	38.5	77	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	40.2	80	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	38.6	77	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	38.2	76	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	74.2	74	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	37.0	74	52-127
100-42-5	PS	Styrene	50.0	0.00	U	35.5	71	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	40.6	81	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	45.9	92	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13875PS
Lab Sample ID: 1201981439
Instrument: VOA9.I
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 10.5
Analysis Date: 12/15/2009 16:30
Prep Batch ID: 926741
Batch ID: 926743

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	45.0	90	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	36.9	74	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	38.2	76	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	37.1	74	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	38.1	76	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	36.2	72	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	35.3	71	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	35.5	71	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	34.8	70	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	36.1	72	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	30.4	61	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	35.3	71	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	35.3	71	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	33.4	67	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	43.9	88	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	36.8	74	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	35.6	71	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13875PSD
Lab Sample ID: 1201981440
Instrument: VOA9.I
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 10.5
Analysis Date: 12/15/2009 16:58
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	31.6	63	25-149	9	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	42.1	84	39-140	0	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	45.0	90	47-129	4	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	44.0	88	31-135	2	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	43.8	88	53-128	2	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	40.7	81	51-151	3	0-25
67-64-1	PSD	Acetone	250	0.00	U	115	46	21-153	34 *	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	39.3	79	61-125	2	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	185	74	53-142	1	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	36.8	74	59-136	7	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	200	80	46-129	4	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	39.7	79	56-126	2	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	41.7	83	62-125	4	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	160	64	26-152	24	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	40.4	81	60-130	7	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	37.8	76	55-135	3	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	40.3	81	60-127	7	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	41.3	83	61-131	7	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	39.1	78	59-131	4	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	41.7	83	57-128	2	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	39.7	79	58-136	3	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	41.0	82	58-126	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13875PSD
Lab Sample ID: 1201981440
Instrument: VOA9.I
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 10.5
Analysis Date: 12/15/2009 16:58
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	40.3	81	56-123	7	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	40.5	81	51-137	6	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	42.5	85	60-126	8	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	39.9	80	55-138	10	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	42.2	84	60-132	8	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	206	83	58-136	13	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	36.3	73	54-133	8	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	39.9	80	52-128	4	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	38.0	76	53-137	6	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	41.9	84	59-130	4	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	133	53	31-148	25	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	43.3	87	57-127	4	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	39.3	79	51-128	2	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	39.8	80	59-139	3	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	40.0	80	57-133	1	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	41.3	83	53-122	7	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	40.3	81	51-125	5	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	79.6	80	50-126	7	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	40.0	80	52-127	8	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	38.1	76	49-135	7	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	40.2	80	57-149	1	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	45.0	90	63-127	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13875PSD
Lab Sample ID: 1201981440
Instrument: VOA9.1
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 10.5
Analysis Date: 12/15/2009 16:58
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	42.5	85	57-149	6	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	40.4	81	49-131	9	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	41.1	82	40-136	7	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	40.5	81	44-135	9	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	40.7	81	44-140	7	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	39.4	79	42-140	9	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	38.7	77	44-132	9	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	38.6	77	42-142	8	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	37.8	76	43-137	8	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	38.6	77	39-139	7	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	30.1	60	38-145	1	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	38.0	76	43-129	7	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	39.3	79	44-125	11	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	36.4	73	36-141	9	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	38.6	77	47-151	13	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	40.8	82	59-131	10	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	38.2	76	43-129	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926741
Lab Sample ID: 1201981441
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 21:29
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	45.3	91	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	51.2	102	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	49.0	98	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	59.6	119	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	59.9	120	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	57.2	114	67-151
67-64-1	LCS	Acetone	250	0.0	207	83	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	51.1	102	70-125
74-88-4	LCS	Iodomethane	250	0.0	293	117	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	55.7	111	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	300	120	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	55.0	110	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	51.6	103	75-120
78-93-3	LCS	2-Butanone	250	0.0	219	88	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	56.4	113	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	51.4	103	74-135
67-66-3	LCS	Chloroform	50.0	0.0	52.5	105	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	61.2	122	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	52.7	105	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	53.4	107	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	54.4	109	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	50.7	101	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926741 **Matrix:** SOIL

Lab Sample ID: 1201981441

Instrument: VOA1.I **Analysis Date:** 11/25/2009 21:29 **Dilution:** 1

Analyst: RXM4 **Prep Batch ID** 926741

Purge Vol: 5 mL **Batch ID:** 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	54.5	109	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	54.8	110	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	55.6	111	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	54.6	109	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	54.8	110	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	248	99	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	56.1	112	80-125
108-88-3	LCS	Toluene	50.0	0.0	53.3	107	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.7	107	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	54.3	109	76-120
591-78-6	LCS	2-Hexanone	250	0.0	213	85	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	53.3	107	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	56.7	113	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	56.6	113	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	56.2	112	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	55.2	110	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	51.2	102	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	110	110	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	55.8	112	74-120
100-42-5	LCS	Styrene	50.0	0.0	55.0	110	76-125
75-25-2	LCS	Bromoform	50.0	0.0	60.1	120	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	55.4	111	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 926741 **Matrix:** SOIL
Lab Sample ID: 1201981441
Instrument: VOA1.I **Analysis Date:** 11/25/2009 21:29 **Dilution:** 1
Analyst: RXM4 **Prep Batch ID** 926741
Purge Vol: 5 mL **Batch ID:** 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	51.1	102	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	58.2	116	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	52.3	105	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	52.3	105	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	53.1	106	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	53.2	106	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	52.3	105	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	53.4	107	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	52.1	104	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	53.8	108	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	54.3	109	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	55.6	111	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	55.3	111	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	52.4	105	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	61.9	124	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	55.6	111	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	57.4	115	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **10-604**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 926741**
Matrix: **SOIL**
Lab Sample ID: **1201981442**
Instrument: **VOA1.I**
Analysis Date: **11/25/2009 21:59**
Dilution: 1
Analyst: **RXM4**
Prep Batch ID: **926741**
Purge Vol: **5 mL**
Batch ID: **926743**

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	245	98	52-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926741
Lab Sample ID: 1201981443
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/27/2009 05:41
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	35.5	71	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	40.5	81	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	40.2	80	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	48.3	97	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	48.4	97	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	48.5	97	67-151
67-64-1	LCS	Acetone	250	0.0	171	68	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	42.1	84	70-125
74-88-4	LCS	Iodomethane	250	0.0	238	95	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	49.0	98	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	248	99	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	45.8	92	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	42.9	86	75-120
78-93-3	LCS	2-Butanone	250	0.0	179	72	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	46.5	93	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	43.6	87	74-135
67-66-3	LCS	Chloroform	50.0	0.0	42.8	86	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	50.1	100	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	42.3	85	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	44.6	89	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	44.4	89	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	40.7	81	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926741
Lab Sample ID: 1201981443
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/27/2009 05:41
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	45.0	90	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	45.0	90	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	45.5	91	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	45.7	91	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	46.4	93	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	204	81	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	47.2	94	80-125
108-88-3	LCS	Toluene	50.0	0.0	42.9	86	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	45.0	90	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	44.3	89	76-120
591-78-6	LCS	2-Hexanone	250	0.0	172	69	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	43.0	86	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	46.6	93	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	47.9	96	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	45.3	91	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	44.1	88	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	41.4	83	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	88.4	88	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	44.1	88	74-120
100-42-5	LCS	Styrene	50.0	0.0	46.5	93	76-125
75-25-2	LCS	Bromoform	50.0	0.0	49.5	99	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	45.9	92	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926741
Lab Sample ID: 1201981443
Instrument: VOA1.I
Analyst: RXM4
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/27/2009 05:41
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	41.0	82	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	47.7	95	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	44.3	89	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	43.1	86	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	44.2	88	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	44.0	88	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	43.5	87	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	45.3	91	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	43.7	87	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	45.1	90	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	47.1	94	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	48.5	97	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	45.9	92	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	45.6	91	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	49.5	99	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	45.2	90	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	47.7	95	74-120

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-604 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926741 **Matrix:** SOIL

Lab Sample ID: 1201981444

Instrument: VOA1.I **Analysis Date:** 11/27/2009 06:40 **Dilution:** 1

Analyst: RXM4 **Prep Batch ID** 926741

Purge Vol: 5 mL **Batch ID:** 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	249	100	52-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926741
Lab Sample ID: 1201997427
Instrument: VOA9.I
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/15/2009 11:25
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	38.3	77	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	47.4	95	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	50.7	101	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	51.5	103	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	50.5	101	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	48.8	98	67-151
67-64-1	LCS	Acetone	250	0.0	319	128	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	45.7	91	70-125
74-88-4	LCS	Iodomethane	250	0.0	219	88	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	41.3	83	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	241	96	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	45.0	90	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	46.5	93	75-120
78-93-3	LCS	2-Butanone	250	0.0	302	121	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	45.1	90	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	44.6	89	74-135
67-66-3	LCS	Chloroform	50.0	0.0	45.4	91	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	46.6	93	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	45.0	90	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	48.8	98	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	45.6	91	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	46.3	93	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926741
Lab Sample ID: 1201997427
Instrument: VOA9.I
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/15/2009 11:25
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	45.2	90	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	46.8	94	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	47.7	95	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	44.7	89	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	48.1	96	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	268	107	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	45.8	92	80-125
108-88-3	LCS	Toluene	50.0	0.0	44.8	90	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	46.1	92	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	47.6	95	76-120
591-78-6	LCS	2-Hexanone	250	0.0	279	112	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	49.1	98	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	46.4	93	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	45.6	91	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	47.0	94	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	46.3	93	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	45.5	91	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	90.9	91	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	45.5	91	74-120
100-42-5	LCS	Styrene	50.0	0.0	44.5	89	76-125
75-25-2	LCS	Bromoform	50.0	0.0	44.0	88	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	49.2	98	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 926741
Matrix: SOIL
Lab Sample ID: 1201997427
Instrument: VOA9.I
Analysis Date: 12/15/2009 11:25
Dilution: 1
Analyst: RXY1
Prep Batch ID: 926741
Purge Vol: 5 mL
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	46.9	94	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	43.6	87	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	44.2	88	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	43.4	87	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	42.8	86	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	42.5	85	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	42.1	84	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	42.4	85	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	42.1	84	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	43.6	87	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	43.1	86	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	43.4	87	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	44.7	89	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	44.9	90	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	47.3	95	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	44.8	90	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	44.3	89	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926741
Lab Sample ID: 1201997428
Instrument: VOA9.I
Analyst: RXY1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/15/2009 12:48
Dilution: 1
Prep Batch ID: 926741
Batch ID: 926743

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	214	86	52-139

Method Blank Summary

SDG Number:	10-604	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926741	Instrument ID:	VOA1.I	Data File:	1n328BB.d
Lab Sample ID:	1201981437	Prep Date:	11/25/2009 07:00	Analyzed:	11/25/09 22:30
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926741	1201981441	1n326LB.d	11/25/09	2129
02	LCS for batch 926741	1201981442	1n327sLB.d	11/25/09	2159
03	RE03-09-13875	241540001	1n331.d	11/26/09	0000
04	RE03-09-13865	241540002	1n332.d	11/26/09	0030
05	RE03-09-13868	241540003	1n333.d	11/26/09	0101
06	RE03-09-13867	241540004	1n334.d	11/26/09	0131
07	RE03-09-13864	241540005	1n335.d	11/26/09	0201
08	RE03-09-13871	241540006	1n336.d	11/26/09	0231
09	RE03-09-13869	241540008	1n338.d	11/26/09	0332
10	RE03-09-13870	241540009	1n339.d	11/26/09	0402
11	RE03-09-13873	241540010	1n340.d	11/26/09	0432
12	RE03-09-13863	241540011	1n341.d	11/26/09	0503
13	RE03-09-13874	241540012	1n342.d	11/26/09	0532
14	RE03-09-13866	241540013	1n343.d	11/26/09	0603
15	RE03-09-13862	241540014	1n344.d	11/26/09	0633
16	RE03-09-13876	241540015	1n345.d	11/26/09	0703
17	RE03-09-13930	241540017	1n347.d	11/26/09	0803
18	RE03-09-13931	241540018	1n348.d	11/26/09	0834

Method Blank Summary

SDG Number:	10-604	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926741	Instrument ID:	VOA1.I	Data File:	1n504BA.d
Lab Sample ID:	1201981438	Prep Date:	11/27/2009 04:30	Analyzed:	11/27/09 07:10
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926741	1201981443	1n502LA.d	11/27/09	0541
02 LCS for batch 926741	1201981444	1n503sLA.d	11/27/09	0640
03 RE03-09-13877	241540007	1n505.d	11/27/09	0743
04 RE03-09-13872	241540016	1n506.d	11/27/09	0813

Method Blank Summary

SDG Number:	10-604	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926741	Instrument ID:	VOA9.I	Data File:	9p208BA.d
Lab Sample ID:	1201997426	Prep Date:	12/15/2009 11:00	Analyzed:	12/15/09 14:11
Column:	RTX-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926741	1201997427	9p202LA.d	12/15/09	1125
02 LCS for batch 926741	1201997428	9p205sLA.d	12/15/09	1248
03 RE03-09-13875PS	1201981439	9p213.d	12/15/09	1630
04 RE03-09-13875PSD	1201981440	9p214.d	12/15/09	1658

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA1.I **Injection Date/Time:** 13-NOV-09 22:17

Column Description: RTX-Volatiles **Lab File ID** /111309v1/11507.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	59
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	68.1
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W1VM091113-05	/111309v1/11509.d	13-NOV-09 23:18
VSTD001	W1VM091113-07	/111309v1/11511.d	14-NOV-09 00:18
VSTD002	W1VM091113-08	/111309v1/11512.d	14-NOV-09 00:48
VSTD005	W1VM091113-09	/111309v1/11513.d	14-NOV-09 01:19
VSTD010	W1VM091113-10	/111309v1/11514.d	14-NOV-09 01:49
VSTD020	W1VM091113-11	/111309v1/11515.d	14-NOV-09 02:19
VSTD050	W1VM091113-12	/111309v1/11516.d	14-NOV-09 02:49
VSTD100	W1VM091113-13	/111309v1/11517.d	14-NOV-09 03:19
VSTD005S	W1VM091113-14	/111309v1/11519.d	14-NOV-09 04:20
VSTD010S	W1VM091113-15	/111309v1/11520.d	14-NOV-09 04:50
VSTD025S	W1VM091113-16	/111309v1/11521.d	14-NOV-09 05:20
VSTD050S	W1VM091113-17	/111309v1/11522.d	14-NOV-09 05:50
VSTD100S	W1VM091113-18	/111309v1/11523.d	14-NOV-09 06:20
VSTD250S	W1VM091113-19	/111309v1/11524.d	14-NOV-09 06:51
VSTD500S	W1VM091113-20	/111309v1/11525.d	14-NOV-09 07:21
SHORTICV	W1VM091113-19	/111309v1/11528.d	14-NOV-09 08:52

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA1.I **Injection Date/Time:** 16-NOV-09 14:01

Column Description: RTX-Volatiles **Lab File ID** /111609v1/1m108BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	55
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050/LICV	W1VM091116-05	/111609v1/1m108.d	16-NOV-09 14:01

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA1.I **Injection Date/Time:** 25-NOV-09 20:59

Column Description: RTX-Volatiles **Lab File ID** /112509v1/1n325.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	54.3
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.8
174	50.0 - 100.0% of mass 95	71.3
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	96.3
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091125-03	/112509v1/1n326.d	25-NOV-09 21:29
LCS	1201981441	/112509v1/1n326LB.d	25-NOV-09 21:29
VSTD250S	UVM091118-08A	/112509v1/1n327.d	25-NOV-09 21:59
LCS	1201981442	/112509v1/1n327sLB.d	25-NOV-09 21:59
MB	1201981437	/112509v1/1n328BB.d	25-NOV-09 22:30
RE03-09-13875	241540001	/112509v1/1n331.d	26-NOV-09 00:00
RE03-09-13865	241540002	/112509v1/1n332.d	26-NOV-09 00:30
RE03-09-13868	241540003	/112509v1/1n333.d	26-NOV-09 01:01
RE03-09-13867	241540004	/112509v1/1n334.d	26-NOV-09 01:31
RE03-09-13864	241540005	/112509v1/1n335.d	26-NOV-09 02:01
RE03-09-13871	241540006	/112509v1/1n336.d	26-NOV-09 02:31
RE03-09-13869	241540008	/112509v1/1n338.d	26-NOV-09 03:32
RE03-09-13870	241540009	/112509v1/1n339.d	26-NOV-09 04:02
RE03-09-13873	241540010	/112509v1/1n340.d	26-NOV-09 04:32
RE03-09-13863	241540011	/112509v1/1n341.d	26-NOV-09 05:03
RE03-09-13874	241540012	/112509v1/1n342.d	26-NOV-09 05:32
RE03-09-13866	241540013	/112509v1/1n343.d	26-NOV-09 06:03
RE03-09-13862	241540014	/112509v1/1n344.d	26-NOV-09 06:33
RE03-09-13876	241540015	/112509v1/1n345.d	26-NOV-09 07:03

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA1.I **Injection Date/Time:** 25-NOV-09 20:59

Column Description: RTX-Volatiles **Lab File ID** /112509v1/1n325.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	54.3
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.8
174	50.0 - 100.0% of mass 95	71.3
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	96.3
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE03-09-13930	241540017	/112509v1/1n347.d	26-NOV-09 08:03
RE03-09-13931	241540018	/112509v1/1n348.d	26-NOV-09 08:34

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA1.I **Injection Date/Time:** 27-NOV-09 05:04

Column Description: RTX-Volatiles **Lab File ID** /112709v1/1n501.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	55.8
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	1.1
174	50.0 - 100.0% of mass 95	72.7
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	96.1
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W1VM091125-01	/112709v1/1n502.d	27-NOV-09 05:41
LCS	1201981443	/112709v1/1n502LA.d	27-NOV-09 05:41
VSTD250S	UVM091118-08A	/112709v1/1n503.d	27-NOV-09 06:40
LCS	1201981444	/112709v1/1n503sLA.d	27-NOV-09 06:40
BLANK	1201981438	/112709v1/1n504BA.d	27-NOV-09 07:10
RE03-09-13877	241540007	/112709v1/1n505.d	27-NOV-09 07:43
RE03-09-13872	241540016	/112709v1/1n506.d	27-NOV-09 08:13

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA9.I **Injection Date/Time:** 15-DEC-09 11:25

Column Description: RTX-Volatiles **Lab File ID** /121509v9/9p202BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	25.5
75	30.0 - 60.0% of mass 95	50.7
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	61.5
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	98.6
177	5.0 - 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W9VM091215-02	/121509v9/9p202.d	15-DEC-09 11:25
LCS	1201997427	/121509v9/9p202LA.d	15-DEC-09 11:25
VSTD250	UVM091118-08B	/121509v9/9p204.d	15-DEC-09 12:21
LCS	1201997428	/121509v9/9p205sLA.d	15-DEC-09 12:48
BLANK	1201997426	/121509v9/9p208BA.d	15-DEC-09 14:11
RE03-09-13875MS	1201981439	/121509v9/9p213.d	15-DEC-09 16:30
RE03-09-13875MSD	1201981440	/121509v9/9p214.d	15-DEC-09 16:58

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA9.I **Injection Date/Time:** 19-NOV-09 10:47

Column Description: RTX-Volatiles **Lab File ID** /111909v9/9I404.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	23.4
75	30.0 - 60.0% of mass 95	49.2
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	61.4
175	5.0 -9.0% of mass 174	7.3
176	95.0 - 101.0% of mass 174	98.3
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W9VM091119-01	/111909v9/9I405.d	19-NOV-09 11:14
VSTD001	W9VM091119-02	/111909v9/9I406.d	19-NOV-09 11:42
VSTD002	W9VM091119-03	/111909v9/9I407.d	19-NOV-09 12:10
VSTD005	W9VM091119-04	/111909v9/9I408.d	19-NOV-09 12:37
VSTD010	W9VM091119-05	/111909v9/9I409.d	19-NOV-09 13:05
VSTD020	W9VM091119-06	/111909v9/9I410.d	19-NOV-09 13:33
VSTD050	W9VM091119-07	/111909v9/9I411.d	19-NOV-09 14:01
VSTD100	W9VM091119-08	/111909v9/9I412.d	19-NOV-09 14:29
VSTD005S	W9VM091119-09	/111909v9/9I414.d	19-NOV-09 15:24
VSTD010S	W9VM091119-10	/111909v9/9I415.d	19-NOV-09 15:52
VSTD025S	W9VM091119-11	/111909v9/9I416.d	19-NOV-09 16:20
VSTD050S	W9VM091119-12	/111909v9/9I417.d	19-NOV-09 16:48
VSTD100S	W9VM091119-13	/111909v9/9I418.d	19-NOV-09 17:16
VSTD250S	W9VM091119-14	/111909v9/9I419.d	19-NOV-09 17:43
VSTD500S	W9VM091119-15	/111909v9/9I420.d	19-NOV-09 18:11
SICV	W9VM091119-16	/111909v9/9I422.d	19-NOV-09 19:06

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: VOA9.I **Injection Date/Time:** 20-NOV-09 08:43

Column Description: RTX-Volatiles **Lab File ID** /112009v9/91501BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 60.0% of mass 95	48.1
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	68.7
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	97.6
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
LICV	W9VM091120-01	/112009v9/91501.d	20-NOV-09 08:43

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-604

STD Analysis Time: 25-NOV-09 21:29

Data File: 1n326.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	843693		13.7	715370		17.2	404551		19.6
Upper Limit	1687386		14.2	1430740		17.7	809102		20.1
Lower Limit	421847		13.2	357685		16.7	202276		19.1
Sample ID									
BLK01LCS	843693		13.7	715370		17.2	404551		19.6
BLK01SLCS	953791		13.7	788014		17.2	446241		19.6
BLK01	918725		13.7	752644		17.2	415755		19.6
RE03-09-13875	519391		13.7	424100		17.2	218892		19.6
RE03-09-13865	770450		13.7	600888		17.2	285177		19.6
RE03-09-13868	797126		13.7	623718		17.2	290792		19.6
RE03-09-13867	760927		13.7	617445		17.2	316405		19.6
RE03-09-13864	750760		13.7	594556		17.2	295249		19.6
RE03-09-13871	778423		13.7	624067		17.2	308519		19.6
RE03-09-13869	762658		13.7	626112		17.2	353477		19.6
RE03-09-13870	769709		13.7	616391		17.2	307559		19.6
RE03-09-13873	734464		13.7	574173		17.2	285051		19.6
RE03-09-13863	755429		13.7	606412		17.2	316886		19.6
RE03-09-13874	739792		13.7	575804		17.2	289852		19.6
RE03-09-13866	703232		13.7	572770		17.2	283065		19.6
RE03-09-13862	683046		13.7	557530		17.2	296035		19.6
RE03-09-13876	695551		13.7	538010		17.2	260297		19.6
RE03-09-13930	726140		13.7	603434		17.2	329467		19.6
RE03-09-13931	714676		13.7	593047		17.2	330321		19.6

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA1.I

GC Column: RTX-Volatiles

Client SDG: 10-604

STD Analysis Time: 27-NOV-09 05:41

Data File: In502.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	947018		13.7	791701		17.2	441128		19.6
Upper Limit	1894036		14.2	1583402		17.7	882256		20.1
Lower Limit	473509		13.2	395851		16.7	220564		19.1
Sample ID									
BLK02LCS	947018		13.7	791701		17.2	441128		19.6
BLK02SLCS	1014164		13.7	804277		17.2	480442		19.6
BLK02	970526		13.7	778950		17.2	428373		19.6
RE03-09-13877	659921		13.7	518747		17.2	252446		19.6
RE03-09-13872	375180	*	13.7	286485	*	17.2	115799	*	19.6

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA9.I

GC Column: RTX-Volatiles

Client SDG: 10-604

STD Analysis Time: 15-DEC-09 11:25

Data File: 9p202.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1540519		10.8	1067203		13.9	551370		16.4
Upper Limit	3081038		11.3	2134406		14.4	1102740		16.9
Lower Limit	770260		10.3	533602		13.4	275685		15.9
Sample ID									
BLK03LCS	1540519		10.8	1067203		13.9	551370		16.4
BLK03SLCS	1839364		10.8	1238877		13.9	597871		16.4
BLK03	1407307		10.8	961554		13.9	463347		16.4
RE03-09-13875MS	1265632		10.8	831779		13.9	391018		16.4
RE03-09-13875MSD	1750397		10.8	1180641		13.9	561741		16.4

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540014**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13862**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 06:33**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:23**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n344.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.391	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.345	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.345	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.345	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.345	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.345	1.15
67-64-1	Acetone	U	5.76	ug/kg	1.91	5.76
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
74-88-4	Iodomethane	U	5.76	ug/kg	1.84	5.76
75-09-2	Methylene chloride	U	5.76	ug/kg	2.30	5.76
75-15-0	Carbon disulfide	U	5.76	ug/kg	1.44	5.76
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.345	1.15
78-93-3	2-Butanone	U	5.76	ug/kg	1.73	5.76
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.345	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.345	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.380	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.345	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.345	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.345	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.345	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.345	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.380	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.345	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.345	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.345	1.15
108-10-1	4-Methyl-2-pentanone	U	5.76	ug/kg	1.44	5.76
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.345	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.345	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.345	1.15
591-78-6	2-Hexanone	U	5.76	ug/kg	1.73	5.76
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.345	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.345	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.345	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.345	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.345	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 06:33	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n344.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.345	1.15
179601-23-1	m,p-Xylenes	U	2.30	ug/kg	0.345	2.30
95-47-6	o-Xylene	U	1.15	ug/kg	0.345	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.345	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.345	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.345	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.345	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.345	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.345	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.345	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.345	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.345	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.345	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.345	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.345	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.345	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.76	ug/kg	1.84	5.76
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.345	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.345	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n344.d
Lab Smp Id: 241540014 Client Smp ID: RE03-09-13862
Inj Date : 26-NOV-2009 06:33
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540014|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	13.14370	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	683046	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	557530	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	296035	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	538956	63.4358	73.0
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1276646	56.2613	64.8
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	520346	52.3502	60.3

ION RATIO REPORT

VOA REPORT

Data file: 1n344.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 06:33
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	12943	13.68	13.44	80-120	100	(T)
64	2405	13.68	13.44	2- 62	19	(T)
47 Benzene			CAS#: 71-43-2			
78	430	13.34	13.33	80-120	100	( )
77	15181	13.69	13.34	0- 53	3522	(QT)
51	163366	13.34	13.34	4- 64	37905	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	13099	15.51	15.36	80-120	100	(T)
43	6958	15.52	15.36	218-278	53	(QT)
100	792947	15.52	15.36	1- 61	6053	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n344.d
Lab Smp Id: 241540014 Client Smp ID: RE03-09-13862
Inj Date : 26-NOV-2009 06:33
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540014|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n344.d
Date : 26-NOV-2009 06:33
Client ID: RE03-09-13862
Sample Info: |2415400141926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

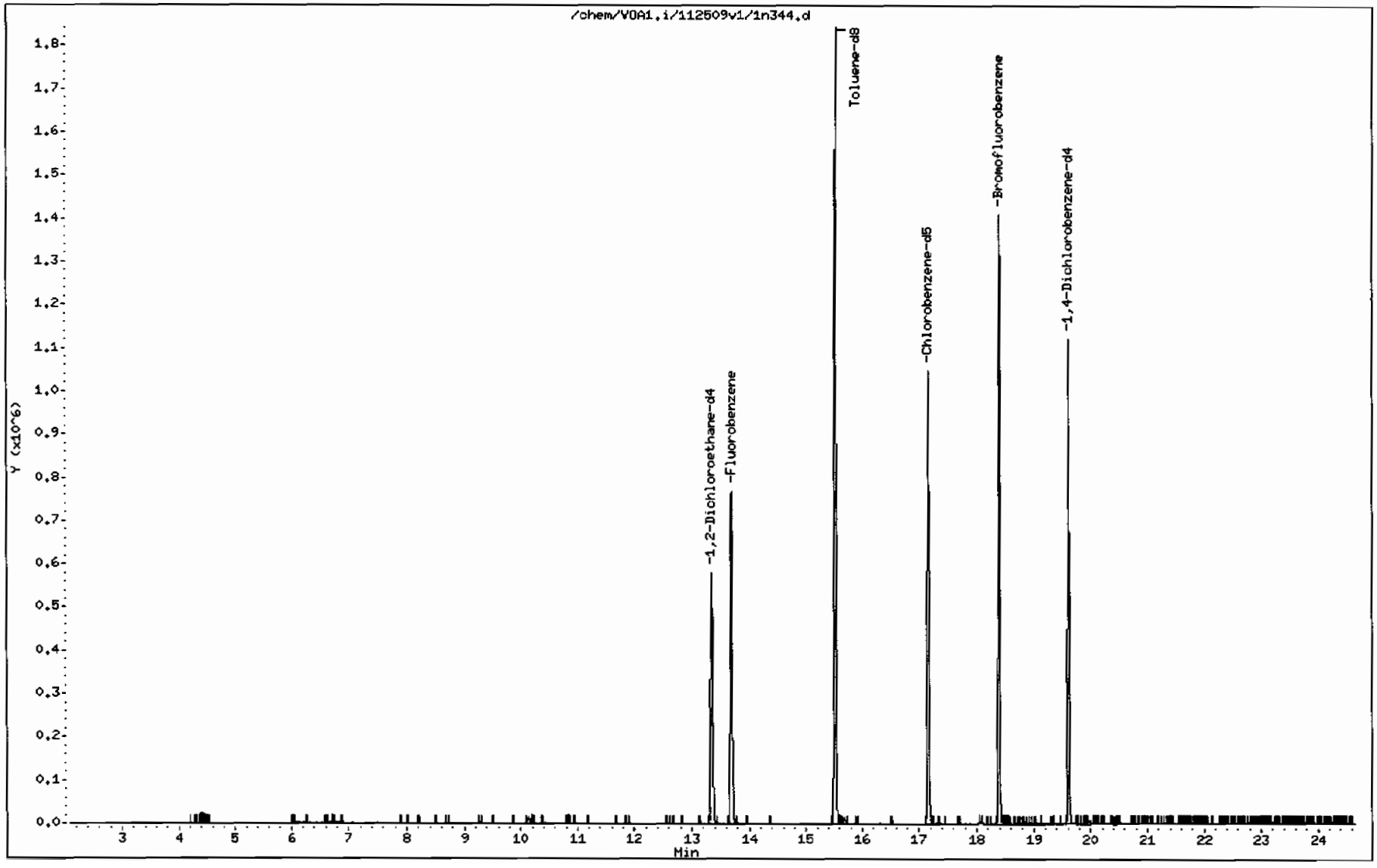

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 05:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n341.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 05:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n341.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n341.d
Lab Smp Id: 241540011 Client Smp ID: RE03-09-13863
Inj Date : 26-NOV-2009 05:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540011|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.62330	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	755429	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	606412	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	316886	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	543292	57.8190	63.3
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1334598	54.0742	59.2
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	534520	50.2377	55.0

ION RATIO REPORT

VOA REPORT

Data file: 1n341.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 05:03
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane				CAS#: 107-06-2		
62	14139	13.68	13.44	80-120	100	(T)
64	2286	13.69	13.44	2- 62	16	(T)
47 Benzene				CAS#: 71-43-2		
78	426	13.34	13.33	80-120	100	( )
77	15335	13.69	13.34	0- 53	3592	(QT)
51	166424	13.34	13.34	4- 64	38985	(Q)
64 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	12883	15.52	15.36	80-120	100	(T)
43	7522	15.52	15.36	218-278	58	(QT)
100	833507	15.52	15.36	1- 61	6469	(QT)
74 1,2-Dibromoethane				CAS#: 106-93-4		
107	2867	16.53	16.73	80-120	100	(T)
109	1184	16.53	16.73	63-123	41	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n341.d
Lab Smp Id: 241540011 Client Smp ID: RE03-09-13863
Inj Date : 26-NOV-2009 05:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540011|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n341.d
Date : 26-NOV-2009 05:03
Client ID: RE03-09-13863
Sample Info: |241540011|926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

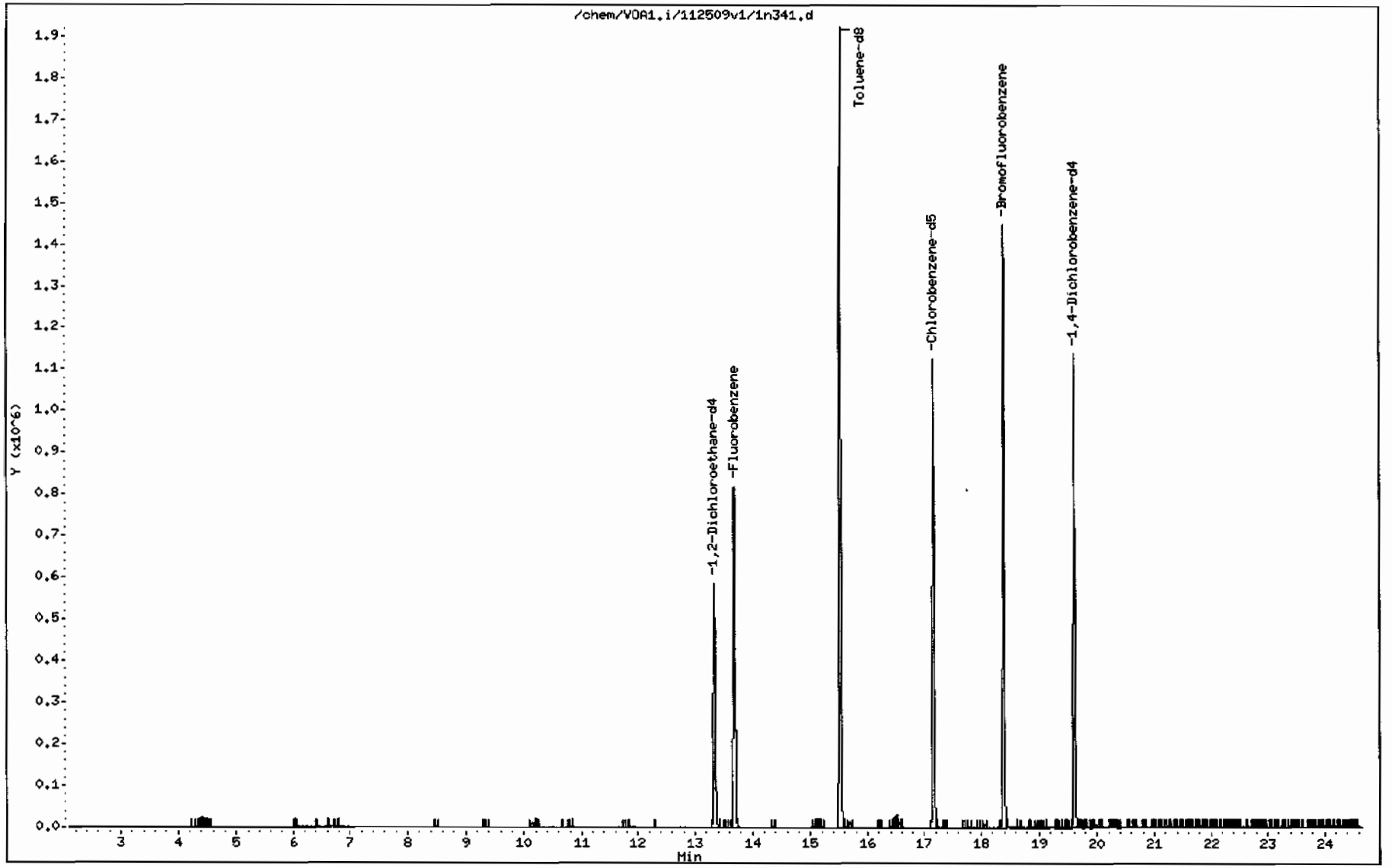

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 02:01	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n335.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.1	**Dilution:**	1
Run Date:	11/26/2009 02:01	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n335.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.329	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n335.d
Lab Smp Id: 241540005 Client Smp ID: RE03-09-13864
Inj Date : 26-NOV-2009 02:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540005|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.94060	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	750760	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.162	(1.000)	594556	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	295249	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	561057	60.0809	66.0
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1352254	55.8822	61.4
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	518513	52.3046	57.4

ION RATIO REPORT

VOA REPORT

Data file: 1n335.d
Report Date: 11/27/2009 05:02
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 02:01
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	13476	13.68	13.44	80-120	100	(T)
64	2411	13.69	13.44	2- 62	18	(T)
47 Benzene			CAS#: 71-43-2			
78	533	13.32	13.33	80-120	100	( )
77	16452	13.68	13.34	0- 53	3084	(QT)
51	170295	13.34	13.34	4- 64	31924	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14345	15.51	15.36	80-120	100	(T)
43	7665	15.51	15.36	218-278	53	(QT)
100	830156	15.52	15.36	1- 61	5787	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n335.d
Lab Smp Id: 241540005 Client Smp ID: RE03-09-13864
Inj Date : 26-NOV-2009 02:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540005|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n335.d
Date : 26-NOV-2009 02:01
Client ID: RE03-09-13864
Sample Info: |241540005|926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

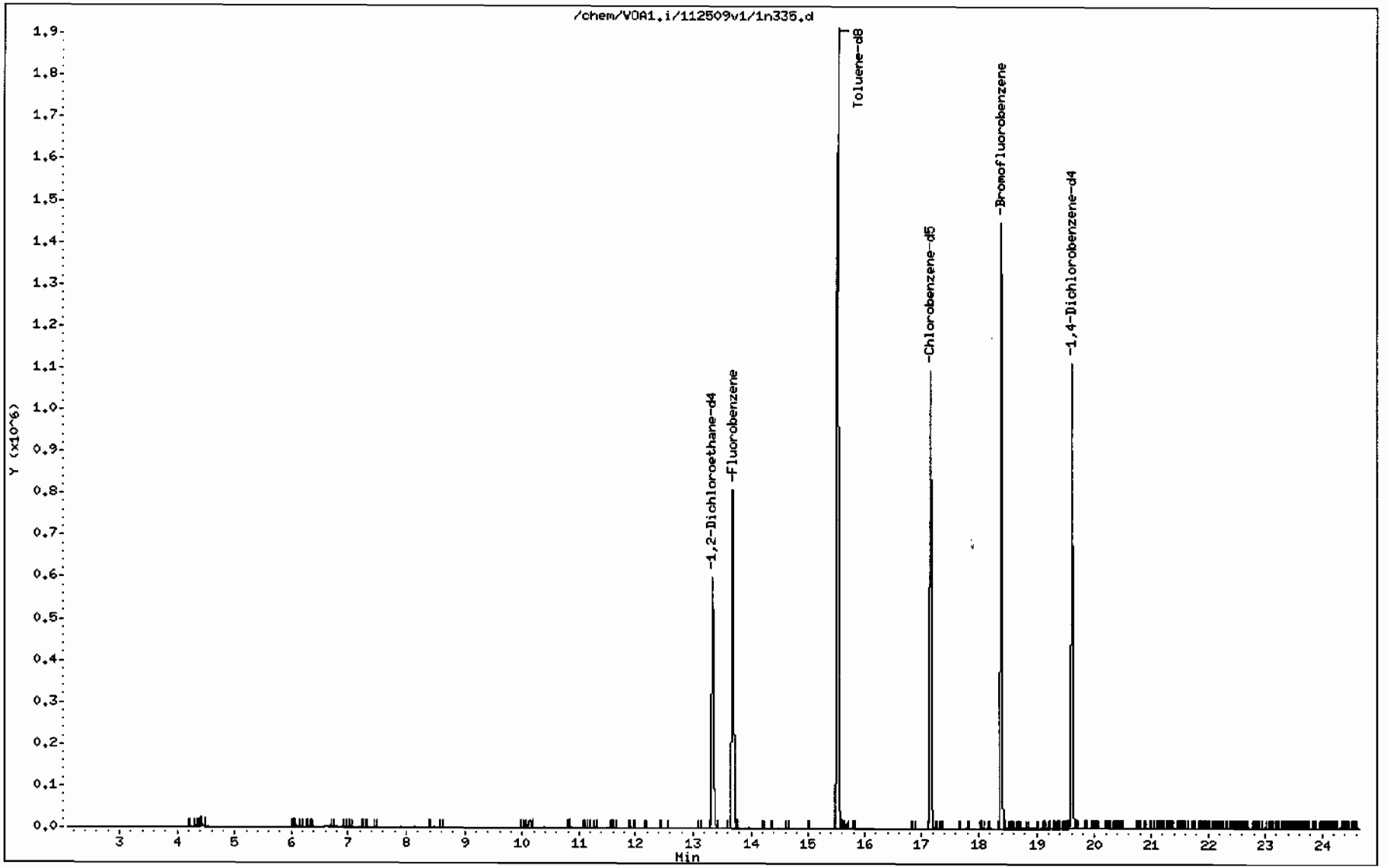

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 00:30	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n332.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.393	1.16
74-87-3	Chloromethane	U	1.16	ug/kg	0.347	1.16
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.347	1.16
74-83-9	Bromomethane	U	1.16	ug/kg	0.347	1.16
75-00-3	Chloroethane	U	1.16	ug/kg	0.347	1.16
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.347	1.16
67-64-1	Acetone	U	5.78	ug/kg	1.92	5.78
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.347	1.16
74-88-4	Iodomethane	U	5.78	ug/kg	1.85	5.78
75-09-2	Methylene chloride	U	5.78	ug/kg	2.31	5.78
75-15-0	Carbon disulfide	U	5.78	ug/kg	1.44	5.78
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.347	1.16
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.347	1.16
78-93-3	2-Butanone	U	5.78	ug/kg	1.73	5.78
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.347	1.16
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.347	1.16
67-66-3	Chloroform	U	1.16	ug/kg	0.347	1.16
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.381	1.16
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.347	1.16
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.347	1.16
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.347	1.16
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.347	1.16
71-43-2	Benzene	U	1.16	ug/kg	0.347	1.16
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.381	1.16
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.347	1.16
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.347	1.16
74-95-3	Dibromomethane	U	1.16	ug/kg	0.347	1.16
108-10-1	4-Methyl-2-pentanone	U	5.78	ug/kg	1.44	5.78
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.347	1.16
108-88-3	Toluene	U	1.16	ug/kg	0.347	1.16
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.347	1.16
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.347	1.16
591-78-6	2-Hexanone	U	5.78	ug/kg	1.73	5.78
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.347	1.16
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.347	1.16
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.347	1.16
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.347	1.16
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.347	1.16

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13865**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:30**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n332.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.347	1.16
179601-23-1	m,p-Xylenes	U	2.31	ug/kg	0.347	2.31
95-47-6	o-Xylene	U	1.16	ug/kg	0.347	1.16
100-42-5	Styrene	U	1.16	ug/kg	0.347	1.16
75-25-2	Bromoform	U	1.16	ug/kg	0.347	1.16
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.347	1.16
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.347	1.16
108-86-1	Bromobenzene	U	1.16	ug/kg	0.347	1.16
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.347	1.16
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.347	1.16
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.347	1.16
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.347	1.16
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.347	1.16
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.347	1.16
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.347	1.16
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.347	1.16
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.347	1.16
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.347	1.16
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.347	1.16
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.78	ug/kg	1.85	5.78
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.347	1.16
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.347	1.16

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n332.d
Lab Smp Id: 241540002 Client Smp ID: RE03-09-13865
Inj Date : 26-NOV-2009 00:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540002|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	13.46180	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	770450	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	600888	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	285177	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	557339	58.1575	67.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1403827	57.4021	66.3
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	520380	54.3469	62.8

ION RATIO REPORT

VOA REPORT

Data file: 1n332.d
Report Date: 11/27/2009 05:02
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 00:30
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14445	13.68	13.44	80-120	100	(T)
64	2042	13.69	13.44	2- 62	14	(T)
47 Benzene			CAS#: 71-43-2			
78	197	13.34	13.33	80-120	100	( )
77	16196	13.68	13.34	0- 53	8202	(QT)
51	171061	13.34	13.34	4- 64	86631	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14116	15.52	15.36	80-120	100	(T)
43	7364	15.51	15.36	218-278	52	(QT)
100	868532	15.52	15.36	1- 61	6152	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n332.d
Lab Smp Id: 241540002 Client Smp ID: RE03-09-13865
Inj Date : 26-NOV-2009 00:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540002|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n332.d

Date : 26-NOV-2009 00:30

Client ID: RE03-09-13865

Sample Info: |241540002|926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

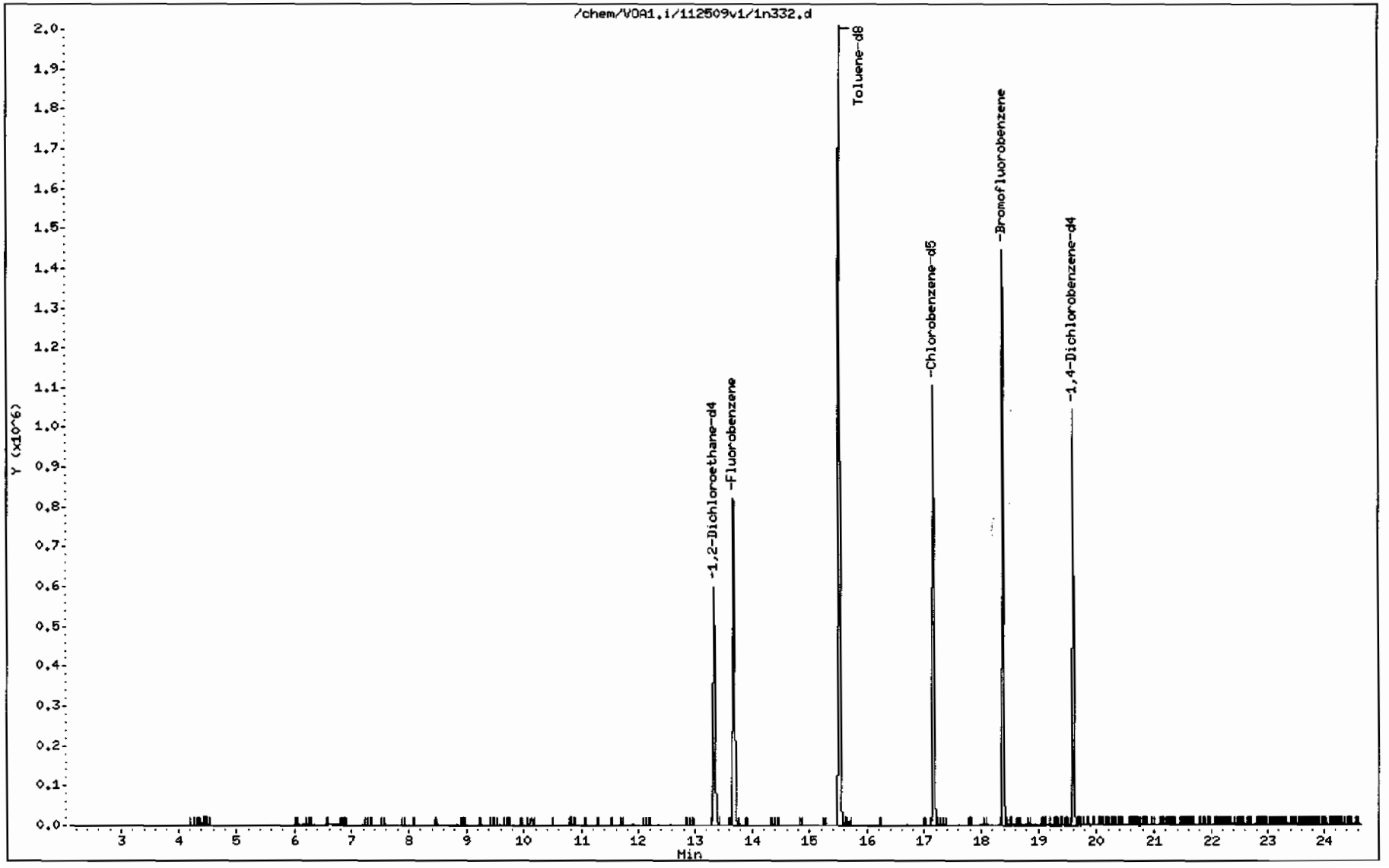

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13866	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 06:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:22	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n343.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.395	1.16
74-87-3	Chloromethane	U	1.16	ug/kg	0.349	1.16
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.349	1.16
74-83-9	Bromomethane	U	1.16	ug/kg	0.349	1.16
75-00-3	Chloroethane	U	1.16	ug/kg	0.349	1.16
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.349	1.16
67-64-1	Acetone	U	5.82	ug/kg	1.93	5.82
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.349	1.16
74-88-4	Iodomethane	U	5.82	ug/kg	1.86	5.82
75-09-2	Methylene chloride	U	5.82	ug/kg	2.33	5.82
75-15-0	Carbon disulfide	U	5.82	ug/kg	1.45	5.82
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.349	1.16
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.349	1.16
78-93-3	2-Butanone	U	5.82	ug/kg	1.74	5.82
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.349	1.16
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.349	1.16
67-66-3	Chloroform	U	1.16	ug/kg	0.349	1.16
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.384	1.16
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.349	1.16
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.349	1.16
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.349	1.16
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.349	1.16
71-43-2	Benzene	U	1.16	ug/kg	0.349	1.16
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.384	1.16
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.349	1.16
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.349	1.16
74-95-3	Dibromomethane	U	1.16	ug/kg	0.349	1.16
108-10-1	4-Methyl-2-pentanone	U	5.82	ug/kg	1.45	5.82
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.349	1.16
108-88-3	Toluene	U	1.16	ug/kg	0.349	1.16
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.349	1.16
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.349	1.16
591-78-6	2-Hexanone	U	5.82	ug/kg	1.74	5.82
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.349	1.16
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.349	1.16
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.349	1.16
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.349	1.16
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.349	1.16

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13866	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 06:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:22	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n343.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.349	1.16
179601-23-1	m,p-Xylenes	U	2.33	ug/kg	0.349	2.33
95-47-6	o-Xylene	U	1.16	ug/kg	0.349	1.16
100-42-5	Styrene	U	1.16	ug/kg	0.349	1.16
75-25-2	Bromoform	U	1.16	ug/kg	0.349	1.16
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.349	1.16
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.349	1.16
108-86-1	Bromobenzene	U	1.16	ug/kg	0.349	1.16
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.349	1.16
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.349	1.16
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.349	1.16
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.349	1.16
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.349	1.16
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.349	1.16
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.349	1.16
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.349	1.16
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.349	1.16
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.349	1.16
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.349	1.16
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.82	ug/kg	1.86	5.82
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.349	1.16
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.349	1.16

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n343.d
Lab Smp Id: 241540013 Client Smp ID: RE03-09-13866
Inj Date : 26-NOV-2009 06:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540013|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.02330	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	703232	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	572770	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	283065	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	529866	60.5757	70.4
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1311515	56.2601	65.4
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	513336	54.0113	62.8

ION RATIO REPORT

VOA REPORT

Data file: 1n343.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 06:03
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane				CAS#: 107-06-2		
62	13884	13.69	13.44	80-120	100	(T)
64	2213	13.68	13.44	2- 62	16	(T)
47 Benzene				CAS#: 71-43-2		
78	393	13.33	13.33	80-120	100	( )
77	15034	13.69	13.34	0- 53	3822	(QT)
51	161438	13.34	13.34	4- 64	41044	(Q)
64 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	12872	15.52	15.36	80-120	100	(T)
43	6923	15.51	15.36	218-278	54	(QT)
100	804089	15.52	15.36	1- 61	6247	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n343.d
Lab Smp Id: 241540013 Client Smp ID: RE03-09-13866
Inj Date : 26-NOV-2009 06:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540013|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n343.d

Date : 26-NOV-2009 06:03

Client ID: RE03-09-13866

Sample Info: |2415400131926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

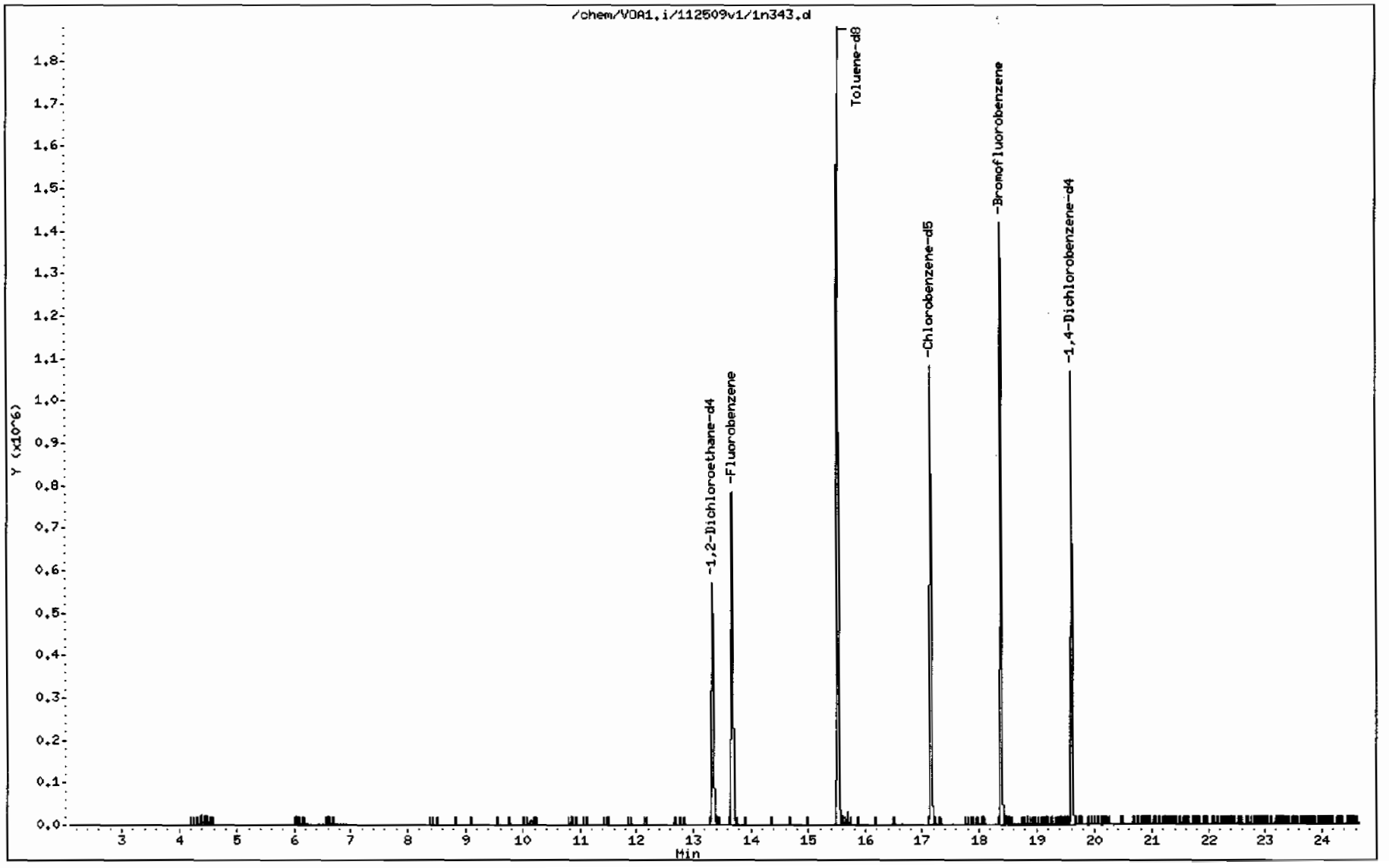

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13867**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 01:31**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n334.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.83	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13867**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 01:31**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n334.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.83	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n334.d
Lab Smp Id: 241540004 Client Smp ID: RE03-09-13867
Inj Date : 26-NOV-2009 01:31
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540004|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.33560	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	760927	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.162	(1.000)	617445	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	316405	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	560168	59.1842	67.5
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1379942	54.9124	62.6
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	544694	51.2718	58.5

ION RATIO REPORT

VOA REPORT

Data file: 1n334.d
Report Date: 11/27/2009 05:02
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 01:31
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14518	13.68	13.44	80-120	100	(T)
64	2428	13.69	13.44	2- 62	17	(T)
47 Benzene			CAS#: 71-43-2			
78	1325	13.68	13.33	80-120	100	(T)
77	16698	13.68	13.34	0- 53	1260	(QT)
51	54888	13.68	13.34	4- 64	4142	(QT)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14014	15.52	15.36	80-120	100	(T)
43	7828	15.52	15.36	218-278	56	(QT)
100	872594	15.52	15.36	1- 61	6226	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n334.d
Lab Smp Id: 241540004 Client Smp ID: RE03-09-13867
Inj Date : 26-NOV-2009 01:31
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540004|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n334.d
Date : 26-NOV-2009 01:31
Client ID: RE03-09-13867
Sample Info: |2415400041926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

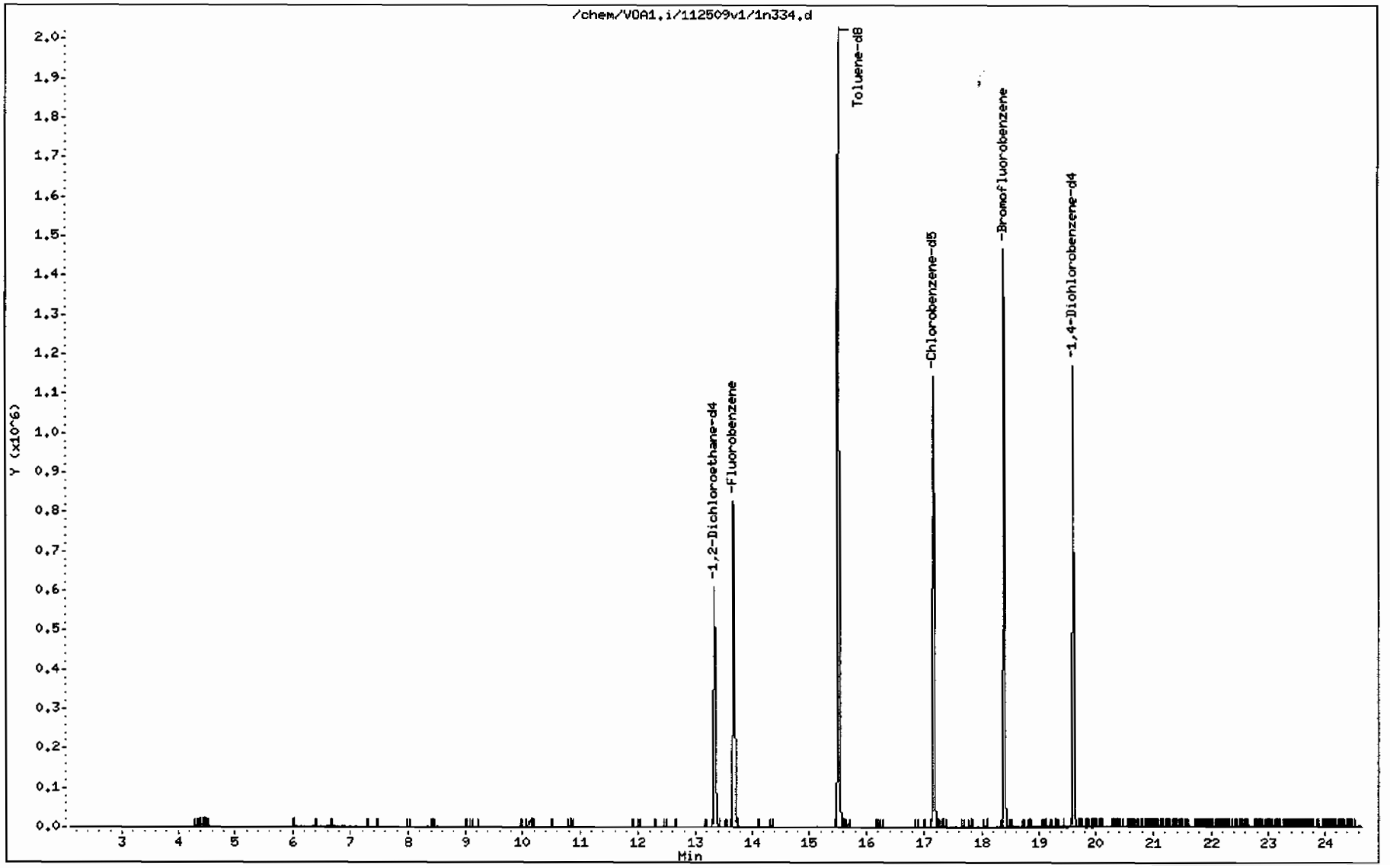

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 01:01	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n333.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.64	ug/kg	1.87	5.64
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.64	ug/kg	1.81	5.64
75-09-2	Methylene chloride	U	5.64	ug/kg	2.26	5.64
75-15-0	Carbon disulfide	U	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 01:01	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n333.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.338	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.64	ug/kg	1.81	5.64
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n333.d
Lab Smp Id: 241540003 Client Smp ID: RE03-09-13868
Inj Date : 26-NOV-2009 01:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540003|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	11.36220	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	797126	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	623718	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	290792	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.974)	557470	56.2245	63.4
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1406902	55.4221	62.5
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	508553	52.0862	58.8

ION RATIO REPORT

VOA REPORT

Data file: 1n333.d
Report Date: 11/27/2009 05:02
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 01:01
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14948	13.69	13.44	80-120	100	(T)
64	2228	13.68	13.44	2- 62	15	(T)
47 Benzene			CAS#: 71-43-2			
78	348	13.34	13.33	80-120	100	( )
77	16616	13.68	13.34	0- 53	4764	(QT)
51	173851	13.34	13.34	4- 64	49843	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14045	15.52	15.36	80-120	100	(T)
43	7161	15.52	15.36	218-278	51	(QT)
100	877259	15.52	15.36	1- 61	6246	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n333.d
Lab Smp Id: 241540003 Client Smp ID: RE03-09-13868
Inj Date : 26-NOV-2009 01:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540003|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n333.d
Date : 26-NOV-2009 01:01
Client ID: RE03-09-13868
Sample Info: |2415400031926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

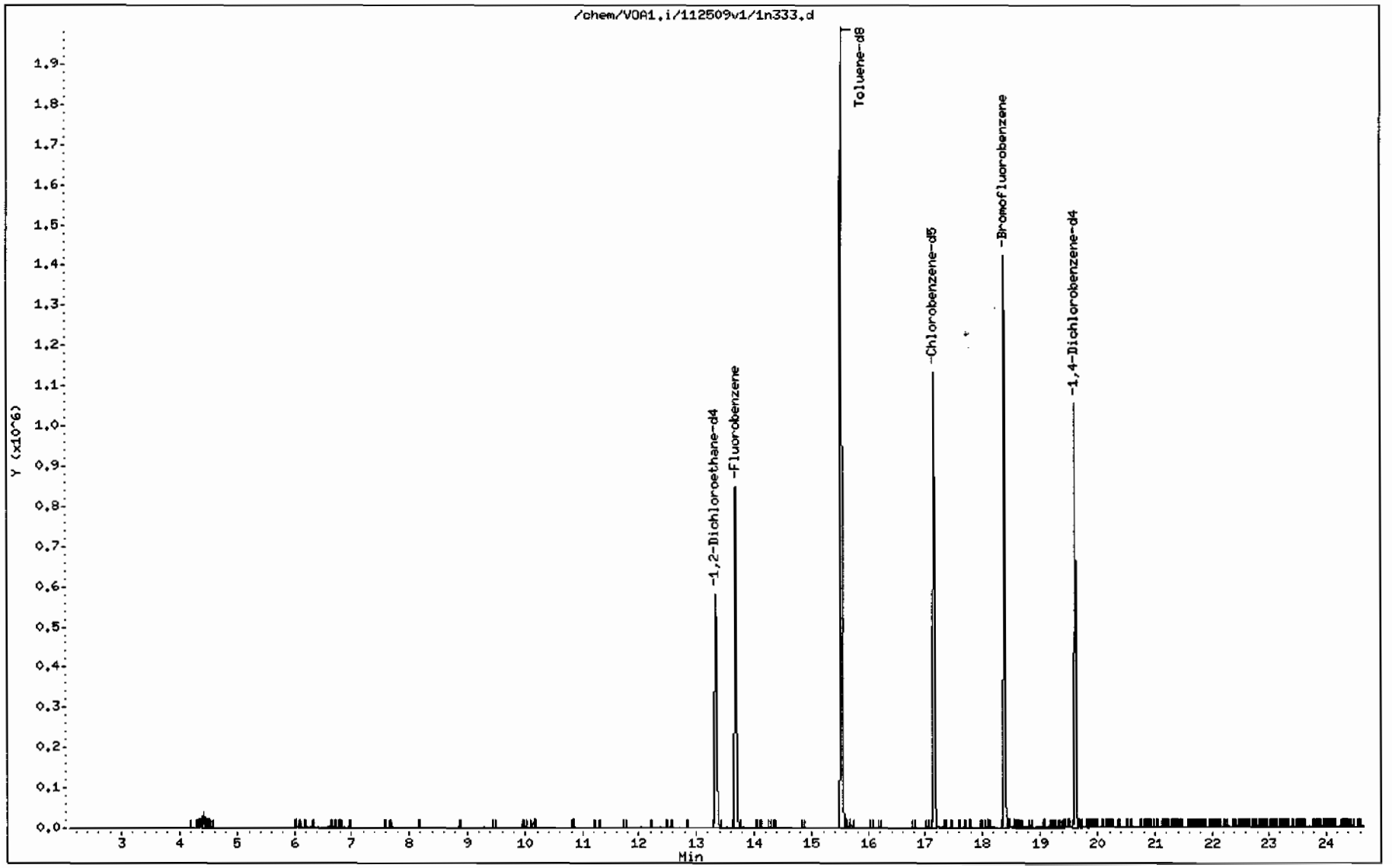

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 03:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n338.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	6.01	ug/kg	1.99	6.01
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	6.01	ug/kg	1.92	6.01
75-09-2	Methylene chloride	U	6.01	ug/kg	2.40	6.01
75-15-0	Carbon disulfide	U	6.01	ug/kg	1.50	6.01
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	6.01	ug/kg	1.80	6.01
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	6.01	ug/kg	1.50	6.01
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	6.01	ug/kg	1.80	6.01
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 03:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n338.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.01	ug/kg	1.92	6.01
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n338.d
Lab Smp Id: 241540008 Client Smp ID: RE03-09-13869
Inj Date : 26-NOV-2009 03:32
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540008|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.75080	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	762658	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.162	(1.000)	626112	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.610	(1.000)	353477	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	598551	63.0960	75.8
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1393547	54.6862	65.7
$ 87 Bromofluorobenzene	95	18.390	18.391	(0.938)	605101	50.9842	61.2

ION RATIO REPORT

VOA REPORT

Data file: 1n338.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 03:32
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14103	13.69	13.44	80-120	100	(T)
64	2147	13.68	13.44	2- 62	15	(T)
47 Benzene			CAS#: 71-43-2			
78	1177	13.69	13.33	80-120	100	(T)
77	16620	13.69	13.34	0- 53	1411	(QT)
51	54187	13.68	13.34	4- 64	4602	(QT)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14097	15.52	15.36	80-120	100	(T)
43	7649	15.51	15.36	218-278	54	(QT)
100	870831	15.52	15.36	1- 61	6177	(QT)
74 1,2-Dibromoethane			CAS#: 106-93-4			
107	6785	16.51	16.73	80-120	100	(T)
109	5746	16.51	16.73	63-123	85	(T)
89 n-Propylbenzene			CAS#: 103-65-1			
91	18426	18.10	18.56	80-120	100	(T)
120	111	18.37	18.56	0- 50	1	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n338.d
Lab Smp Id: 241540008 Client Smp ID: RE03-09-13869
Inj Date : 26-NOV-2009 03:32
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540008|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n338.d
Date : 26-NOV-2009 03:32
Client ID: RE03-09-13869
Sample Info: |2415400081926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

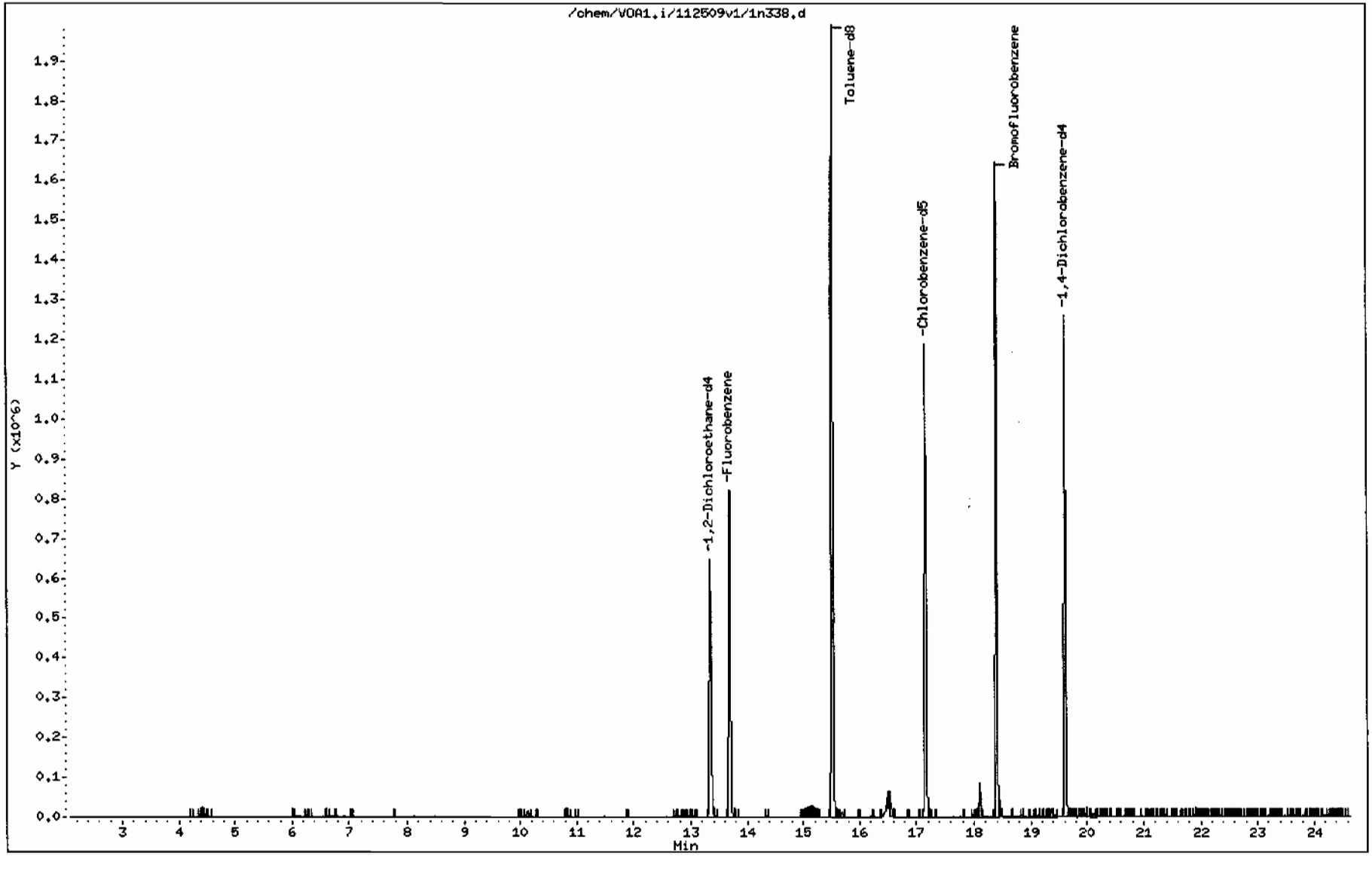

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 04:02	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n339.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.16	ug/kg	0.394	1.16
74-87-3	Chloromethane	U	1.16	ug/kg	0.348	1.16
75-01-4	Vinyl chloride	U	1.16	ug/kg	0.348	1.16
74-83-9	Bromomethane	U	1.16	ug/kg	0.348	1.16
75-00-3	Chloroethane	U	1.16	ug/kg	0.348	1.16
75-69-4	Trichlorofluoromethane	U	1.16	ug/kg	0.348	1.16
67-64-1	Acetone	U	5.80	ug/kg	1.92	5.80
75-35-4	1,1-Dichloroethylene	U	1.16	ug/kg	0.348	1.16
74-88-4	Iodomethane	U	5.80	ug/kg	1.85	5.80
75-09-2	Methylene chloride	U	5.80	ug/kg	2.32	5.80
75-15-0	Carbon disulfide	U	5.80	ug/kg	1.45	5.80
156-60-5	trans-1,2-Dichloroethylene	U	1.16	ug/kg	0.348	1.16
75-34-3	1,1-Dichloroethane	U	1.16	ug/kg	0.348	1.16
78-93-3	2-Butanone	U	5.80	ug/kg	1.74	5.80
156-59-2	cis-1,2-Dichloroethylene	U	1.16	ug/kg	0.348	1.16
594-20-7	2,2-Dichloropropane	U	1.16	ug/kg	0.348	1.16
67-66-3	Chloroform	U	1.16	ug/kg	0.348	1.16
74-97-5	Bromochloromethane	U	1.16	ug/kg	0.383	1.16
71-55-6	1,1,1-Trichloroethane	U	1.16	ug/kg	0.348	1.16
563-58-6	1,1-Dichloropropene	U	1.16	ug/kg	0.348	1.16
56-23-5	Carbon tetrachloride	U	1.16	ug/kg	0.348	1.16
107-06-2	1,2-Dichloroethane	U	1.16	ug/kg	0.348	1.16
71-43-2	Benzene	U	1.16	ug/kg	0.348	1.16
79-01-6	Trichloroethylene	U	1.16	ug/kg	0.383	1.16
78-87-5	1,2-Dichloropropane	U	1.16	ug/kg	0.348	1.16
75-27-4	Bromodichloromethane	U	1.16	ug/kg	0.348	1.16
74-95-3	Dibromomethane	U	1.16	ug/kg	0.348	1.16
108-10-1	4-Methyl-2-pentanone	U	5.80	ug/kg	1.45	5.80
10061-01-5	cis-1,3-Dichloropropylene	U	1.16	ug/kg	0.348	1.16
108-88-3	Toluene	U	1.16	ug/kg	0.348	1.16
10061-02-6	trans-1,3-Dichloropropylene	U	1.16	ug/kg	0.348	1.16
79-00-5	1,1,2-Trichloroethane	U	1.16	ug/kg	0.348	1.16
591-78-6	2-Hexanone	U	5.80	ug/kg	1.74	5.80
142-28-9	1,3-Dichloropropane	U	1.16	ug/kg	0.348	1.16
127-18-4	Tetrachloroethylene	U	1.16	ug/kg	0.348	1.16
124-48-1	Dibromochloromethane	U	1.16	ug/kg	0.348	1.16
106-93-4	1,2-Dibromoethane	U	1.16	ug/kg	0.348	1.16
108-90-7	Chlorobenzene	U	1.16	ug/kg	0.348	1.16

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540009**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13870**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 04:02**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n339.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.16	ug/kg	0.348	1.16
179601-23-1	m,p-Xylenes	U	2.32	ug/kg	0.348	2.32
95-47-6	o-Xylene	U	1.16	ug/kg	0.348	1.16
100-42-5	Styrene	U	1.16	ug/kg	0.348	1.16
75-25-2	Bromoform	U	1.16	ug/kg	0.348	1.16
79-34-5	1,1,2,2-Tetrachloroethane	U	1.16	ug/kg	0.348	1.16
96-18-4	1,2,3-Trichloropropane	U	1.16	ug/kg	0.348	1.16
108-86-1	Bromobenzene	U	1.16	ug/kg	0.348	1.16
103-65-1	n-Propylbenzene	U	1.16	ug/kg	0.348	1.16
95-49-8	2-Chlorotoluene	U	1.16	ug/kg	0.348	1.16
98-82-8	Isopropylbenzene	U	1.16	ug/kg	0.348	1.16
108-67-8	1,3,5-Trimethylbenzene	U	1.16	ug/kg	0.348	1.16
106-43-4	4-Chlorotoluene	U	1.16	ug/kg	0.348	1.16
98-06-6	tert-Butylbenzene	U	1.16	ug/kg	0.348	1.16
95-63-6	1,2,4-Trimethylbenzene	U	1.16	ug/kg	0.348	1.16
135-98-8	sec-Butylbenzene	U	1.16	ug/kg	0.348	1.16
99-87-6	4-Isopropyltoluene	U	1.16	ug/kg	0.348	1.16
541-73-1	1,3-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16
106-46-7	1,4-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16
104-51-8	n-Butylbenzene	U	1.16	ug/kg	0.348	1.16
96-12-8	1,2-Dibromo-3-chloropropane	U	1.16	ug/kg	0.348	1.16
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.80	ug/kg	1.85	5.80
630-20-6	1,1,1,2-Tetrachloroethane	U	1.16	ug/kg	0.348	1.16
95-50-1	1,2-Dichlorobenzene	U	1.16	ug/kg	0.348	1.16

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n339.d
Lab Smp Id: 241540009 Client Smp ID: RE03-09-13870
Inj Date : 26-NOV-2009 04:02
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540009|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	13.73130	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.682	13.686	(1.000)	769709	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	616391	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	307559	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	550304	57.4787	66.6
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1347602	53.7172	62.3
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	536867	51.9885	60.3

ION RATIO REPORT

VOA REPORT

Data file: 1n339.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 04:02
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14139	13.68	13.44	80-120	100	(T)
64	2759	13.68	13.44	2- 62	20	(T)
47 Benzene			CAS#: 71-43-2			
78	160	13.33	13.33	80-120	100	( )
77	16109	13.69	13.34	0- 53	10064	(QT)
51	167639	13.34	13.34	4- 64	104722	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	14147	15.52	15.36	80-120	100	(T)
43	7194	15.52	15.36	218-278	51	(QT)
100	835053	15.52	15.36	1- 61	5903	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n339.d
Lab Smp Id: 241540009 Client Smp ID: RE03-09-13870
Inj Date : 26-NOV-2009 04:02
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540009|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n339.d
Date : 26-NOV-2009 04:02
Client ID: RE03-09-13870
Sample Info: !2415400091926743!1!VOAF!1!

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

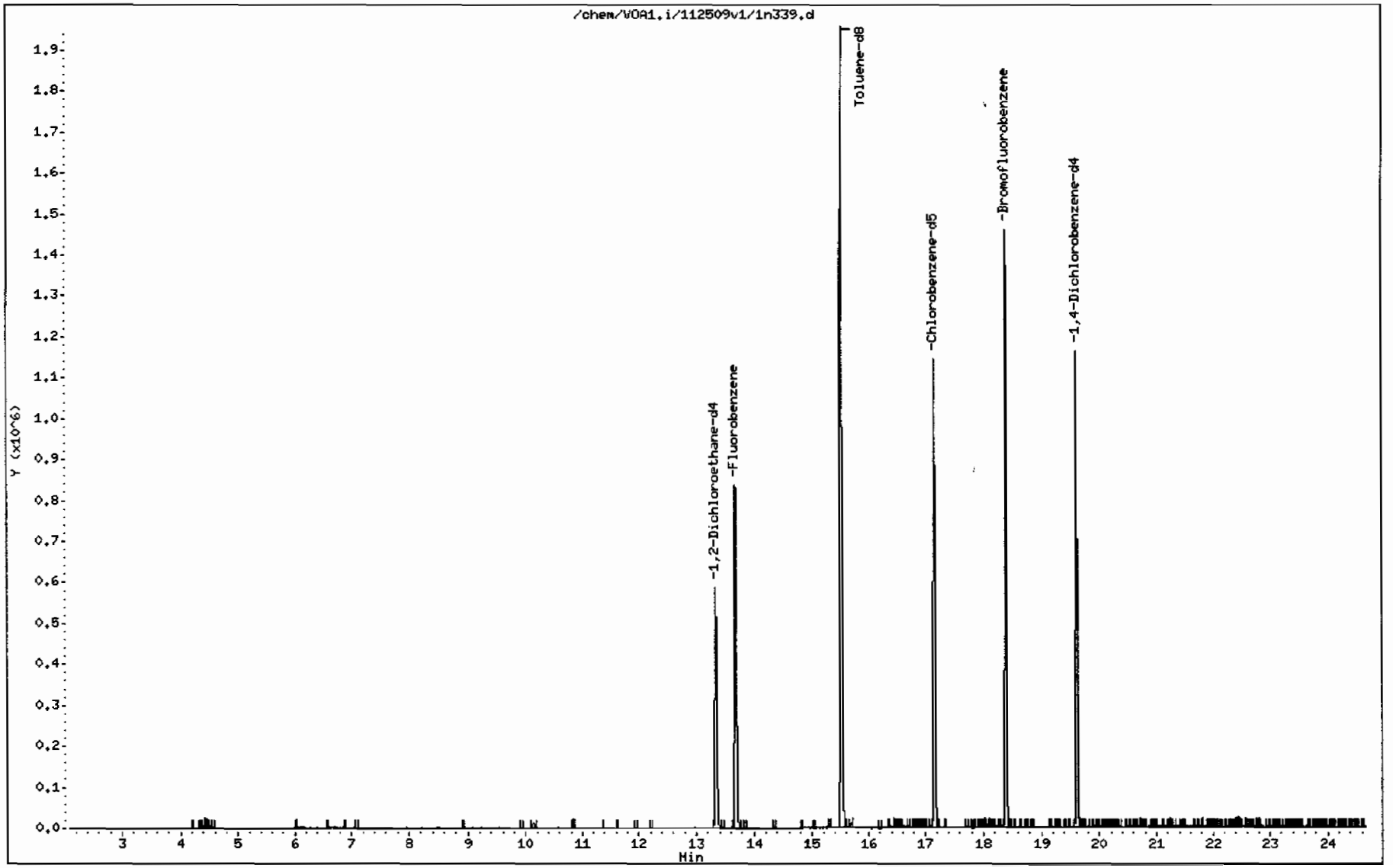

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1J	**Dilution:**	1
Run Date:	11/26/2009 02:31	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n336.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.406	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.358	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.358	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.358	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.358	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.358	1.19
67-64-1	Acetone	U	5.97	ug/kg	1.98	5.97
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
74-88-4	Iodomethane	U	5.97	ug/kg	1.91	5.97
75-09-2	Methylene chloride	U	5.97	ug/kg	2.39	5.97
75-15-0	Carbon disulfide	U	5.97	ug/kg	1.49	5.97
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.358	1.19
78-93-3	2-Butanone	U	5.97	ug/kg	1.79	5.97
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.358	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.358	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.394	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.358	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.358	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.358	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.358	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.358	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.394	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.358	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.358	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.358	1.19
108-10-1	4-Methyl-2-pentanone	U	5.97	ug/kg	1.49	5.97
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.358	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.358	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.358	1.19
591-78-6	2-Hexanone	U	5.97	ug/kg	1.79	5.97
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.358	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.358	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.358	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.358	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.358	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 02:31	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n336.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.358	1.19
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.358	2.39
95-47-6	o-Xylene	U	1.19	ug/kg	0.358	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.358	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.358	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.358	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.358	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.358	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.358	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.358	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.358	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.358	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.358	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.358	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.358	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.358	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.97	ug/kg	1.91	5.97
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.358	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.358	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n336.d
Lab Smp Id: 241540006 Client Smp ID: RE03-09-13871
Inj Date : 26-NOV-2009 02:31
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540006|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.18000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	778423	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	624067	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	308519	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	555770	57.3998	68.5
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1380467	54.3504	64.8
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	543698	52.4862	62.6

ION RATIO REPORT

VOA REPORT

Data file: 1n336.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 02:31
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	15443	13.69	13.44	80-120	100	(T)
64	2294	13.69	13.44	2- 62	15	(T)
47 Benzene			CAS#: 71-43-2			
78	381	13.35	13.33	80-120	100	( )
77	16105	13.68	13.34	0- 53	4223	(QT)
51	169010	13.34	13.34	4- 64	44315	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	13573	15.52	15.36	80-120	100	(T)
43	7302	15.52	15.36	218-278	54	(QT)
100	849398	15.52	15.36	1- 61	6258	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n336.d
Lab Smp Id: 241540006 Client Smp ID: RE03-09-13871
Inj Date : 26-NOV-2009 02:31
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540006|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n336.d
Date : 26-NOV-2009 02:31
Client ID: RE03-09-13871
Sample Info: |2415400061926743:1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

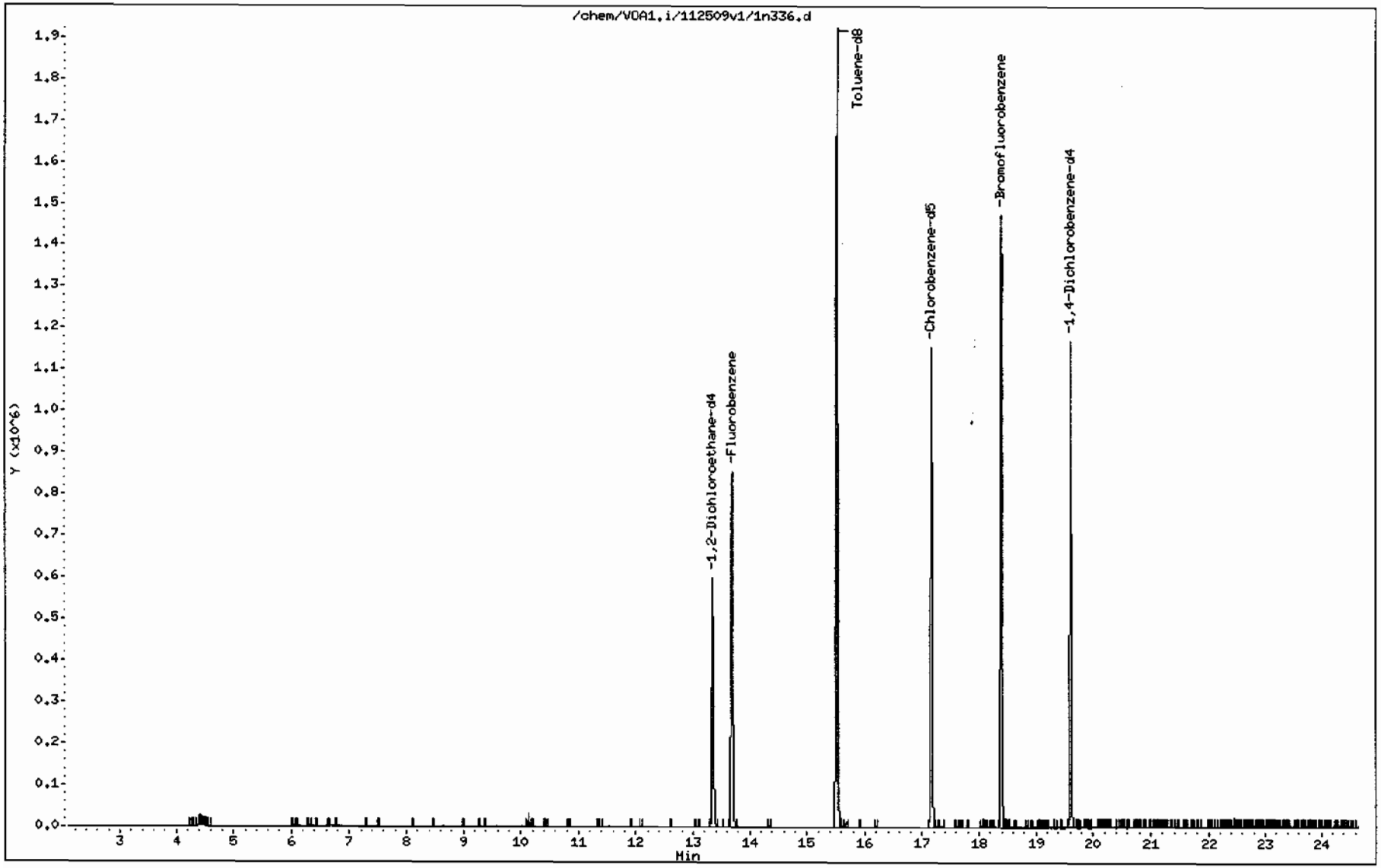

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13872	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/27/2009 08:13	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/27/2009 06:31	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n506.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	J	5.22	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540016**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13872**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.1**	**Dilution:**	**1**
Run Date:	**11/27/2009 08:13**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 06:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n506.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene		1.25	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	16.54	7.49	ug/kg		J
508-32-7	Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	17.97	6.33	ug/kg	95	NJ
7785-70-8	1R-.alpha.-Pinene	18.1	12.6	ug/kg	97	NJ
79-92-5	Camphene	18.44	37.3	ug/kg	91	NJ
13466-78-9	3-Carene	19.13	21.2	ug/kg	97	NJ
138-86-3	Limonene	19.37	9.98	ug/kg	93	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n506.d
Lab Smp Id: 241540016 Client Smp ID: RE03-09-13872
Inj Date : 27-NOV-2009 08:13
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540016|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 10-Dec-2009 15:28 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.43260	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.682	13.677	(1.000)	375180	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	286485	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.611	(1.000)	115799	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.332	(0.975)	274793	58.8839	65.0
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	644747	55.2962	61.0
$ 87 Bromofluorobenzene	95	18.386	18.386	(0.938)	239187	61.5179	67.9
23 Methylene chloride	84	10.133	10.128	(0.741)	16512	4.73097	5.2(a)
100 4-Isopropyltoluene	119	19.426	19.422	(0.991)	8858	1.13648	1.2

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 1n506.d
Report Date: 11/27/2009 08:29
Lab. ID: 241540016 SampleType: SAMPLE
Injection Date: 27-NOV-2009 08:13
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540016|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
23 Methylene chloride				CAS#: 75-09-2		
84	16512	10.13	10.13	80-120	100	( )
86	10183	10.13	10.12	35- 95	62	( )
49	23789	10.13	10.13	120-180	144	( )
51 1,2-Dichloroethane				CAS#: 107-06-2		
62	6922	13.68	13.43	80-120	100	(T)
64	729	13.68	13.43	2- 62	11	(T)
47 Benzene				CAS#: 71-43-2		
78	531	13.68	13.32	80-120	100	(T)
77	7710	13.68	13.33	0- 53	1451	(QT)
51	24082	13.68	13.33	6- 66	4532	(QT)
64 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	6482	15.52	15.36	80-120	100	(T)
43	2578	15.51	15.36	210-270	40	(QT)
100	405551	15.52	15.36	1- 61	6256	(QT)
74 1,2-Dibromoethane				CAS#: 106-93-4		
107	8153	16.49	16.72	80-120	100	(T)
109	3270	16.53	16.72	66-126	40	(QT)
81 o-Xylene				CAS#: 95-47-6		
106	1620	18.10	17.78	80-120	100	(T)
91	23627	18.10	17.78	221-281	1458	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
84 Isopropylbenzene			CAS#: 98-82-8			
105	6310	18.09	18.13	80-120	100	( )
120	276	18.10	18.13	0- 52	4	( )
89 n-Propylbenzene			CAS#: 103-65-1			
91	32640	18.44	18.56	80-120	100	(T)
120	116	18.43	18.56	0- 49	0	(T)
93 1,3,5-Trimethylbenzene			CAS#: 108-67-8			
105	7059	18.44	18.71	80-120	100	(T)
120	116	18.43	18.72	11- 71	2	(QT)
97 1,2,4-Trimethylbenzene			CAS#: 95-63-6			
105	8829	19.13	19.14	80-120	100	( )
120	384	19.12	19.14	8- 68	4	(Q)
96 tert-Butylbenzene			CAS#: 98-06-6			
119	5523	19.14	19.08	80-120	100	( )
91	32046	19.13	19.08	54-114	580	(Q)
134	1197	19.13	19.08	0- 51	22	( )
99 sec-Butylbenzene			CAS#: 135-98-8			
105	8829	19.13	19.30	80-120	100	(T)
134	1197	19.13	19.30	0- 47	14	(T)
100 4-Isopropyltoluene			CAS#: 99-87-6			
119	8858	19.43	19.42	80-120	100	( )
134	2168	19.42	19.42	0- 54	24	( )
91	3431	19.43	19.42	0- 60	39	( )
105 n-Butylbenzene			CAS#: 104-51-8			
91	3634	20.11	19.87	80-120	100	(T)
92	877	20.11	19.87	25- 85	24	(QT)
134	202	20.10	19.87	0- 51	6	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n506.d
Lab Smp Id: 241540016 Client Smp ID: RE03-09-13872
Inj Date : 27-NOV-2009 08:13
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540016|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 10-Dec-2009 15:28 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.43260	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 76 Chlorobenzene-d5	17.162	968007	50.000
* 102 1,4-Dichlorobenzene-d4	19.610	766311	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
16.535	131379	6.78606272	7.5	0		0	76

RT	AREA	CONCENTRATIONS ON-COL (ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri				CAS #: 508-32-7			
17.972	110945	5.73056642	6.3	95	NIST05.L	15346	76
1R-.alpha.-Pinene				CAS #: 7785-70-8			
18.096	220755	11.4025480	12.6	97	NIST05.L	15188	76
Camphene				CAS #: 79-92-5			
18.437	518268	33.8157859	37.3	91	NIST05.L	15161	102
3-Carene				CAS #: 13466-78-9			
19.132	293652	19.1601175	21.2	97	NIST05.L	15156	102
Limonene				CAS #: 138-86-3			
19.371	138534	9.03901024	10	93	NIST05.L	15154	102

Data File: /chem/VOA1.i/112709v1/1n506.d
Date : 27-NOV-2009 08:13
Client ID: RE03-09-13872
Sample Info: |24154001619267431|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

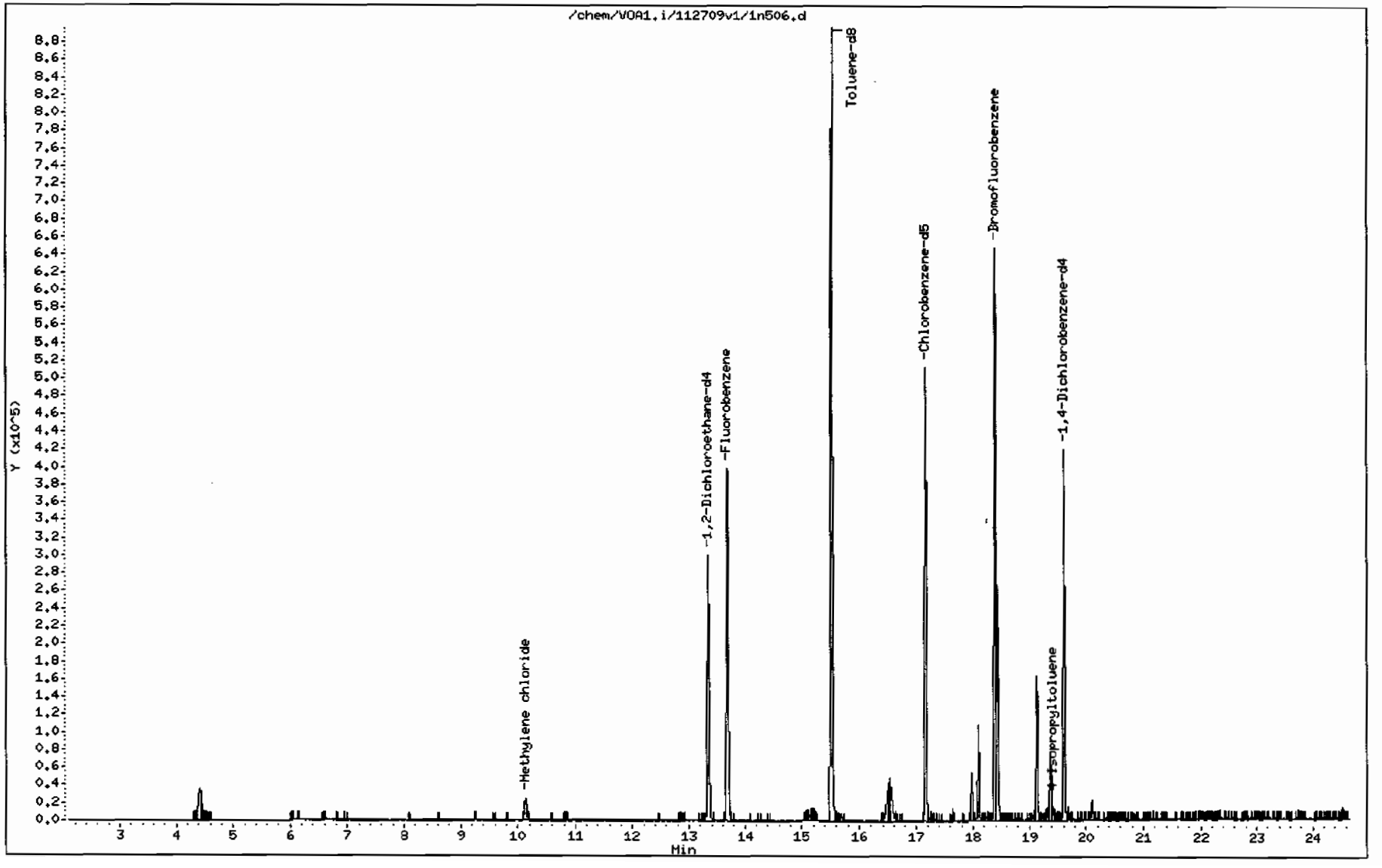

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872

Instrument: VOA1.i

Sample Info: |2415400161926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

23 Methylene chloride

Concentration: 5.2 ug/Kg

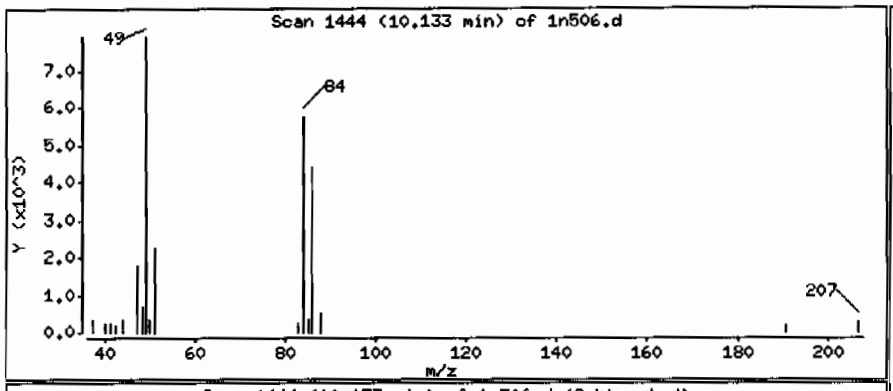

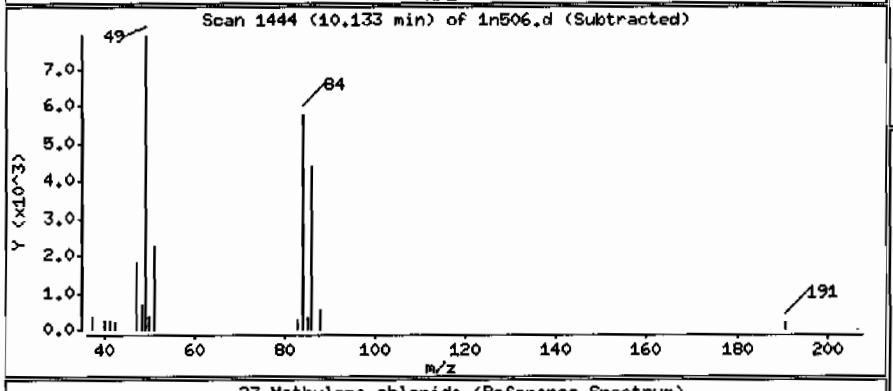

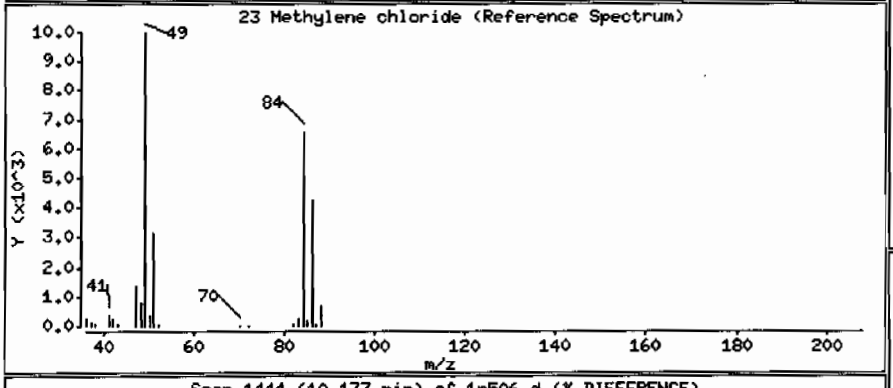

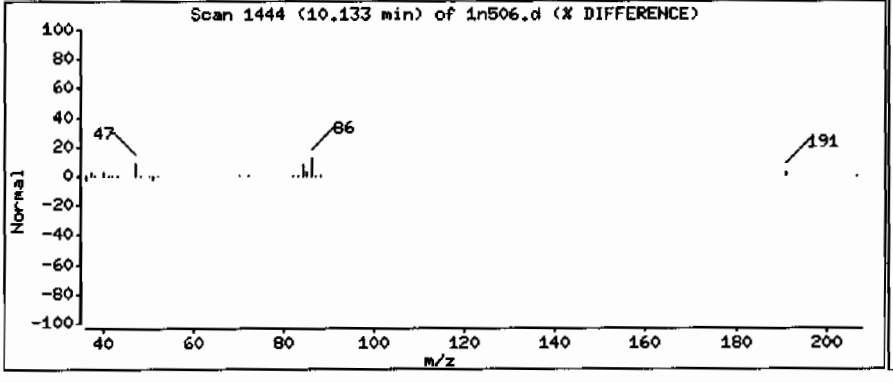

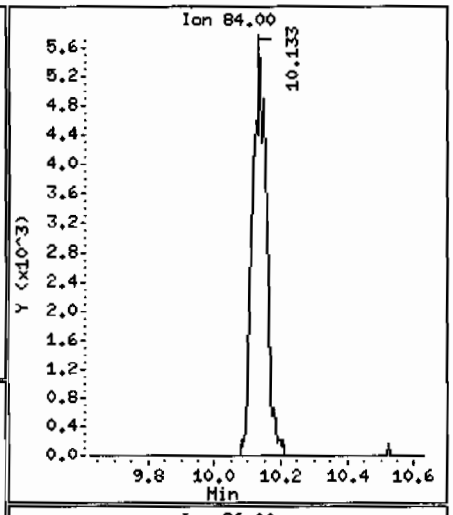

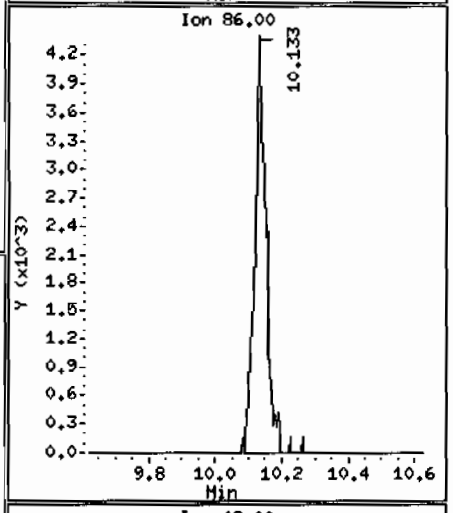

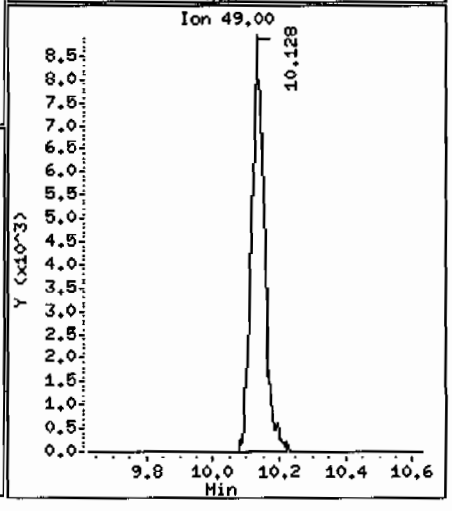

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872

Instrument: VOA1.i

Sample Info: |2415400161926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

100 4-Isopropyltoluene

Concentration: 1.2 ug/Kg

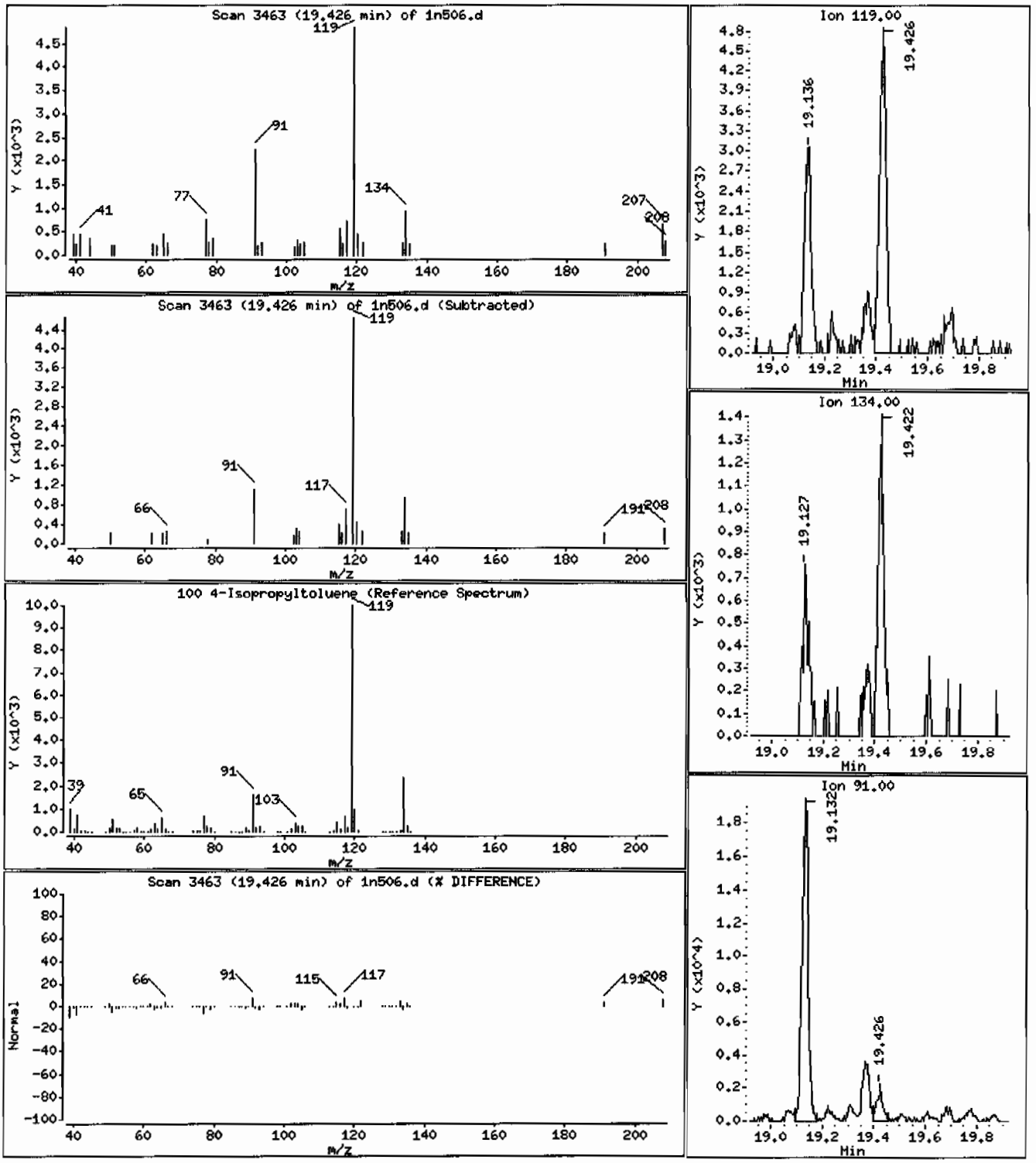

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872

Instrument: VOA1.i

Sample Info: |2416400161926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1H-Imidazole, 1-(2-propenyl)-	31410-01-2	NIST05.L	5207	49	C6H8N2	108
2-(Cyclooct-1-enyl)-furan	115754-82-0	NIST05.L	40287	47	C12H16O	176
Cyclopentanone, 3,4-bis(methylene)-	27646-73-7	NIST05.L	5250	38	C7H8O	108

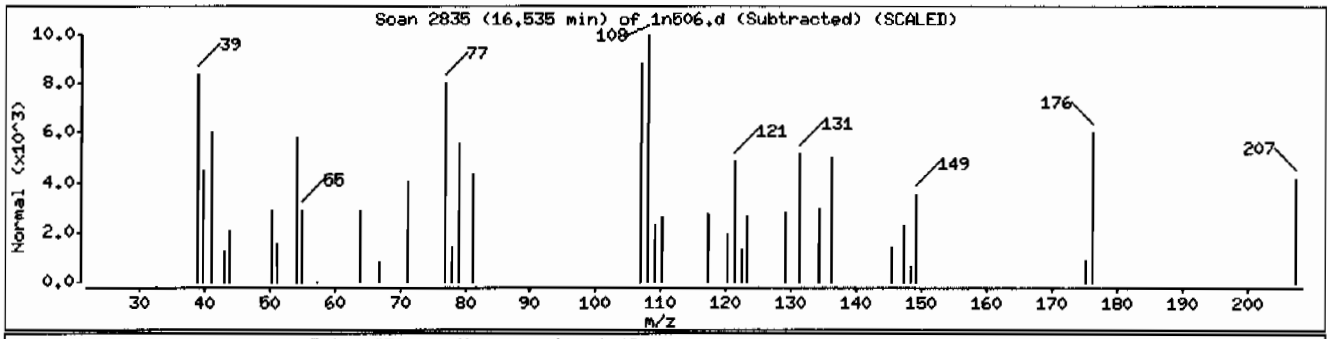

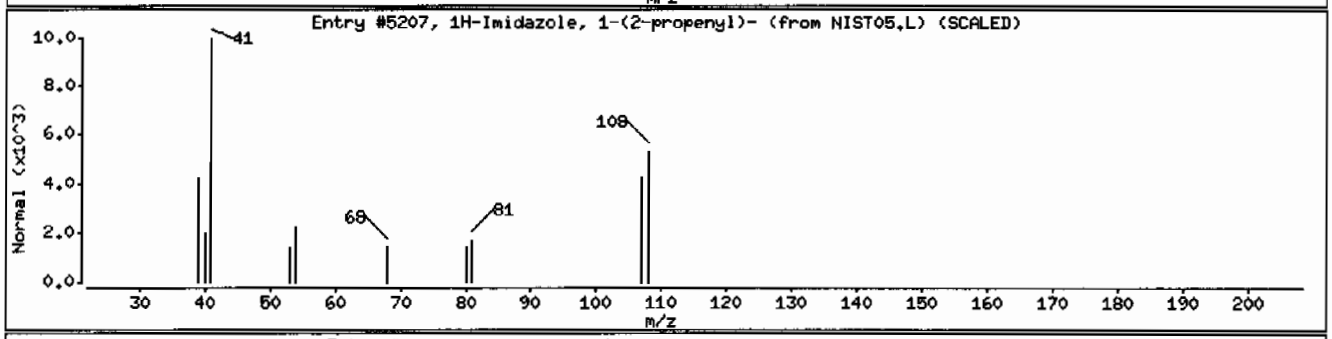

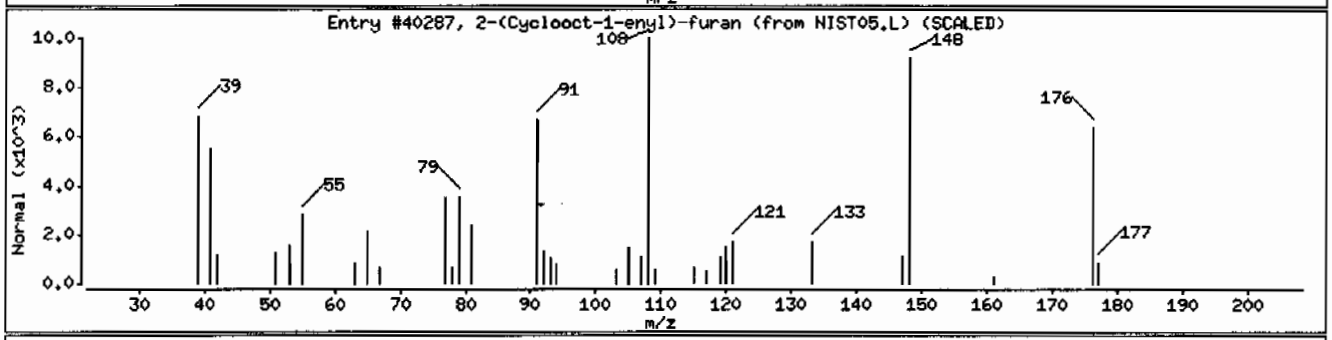

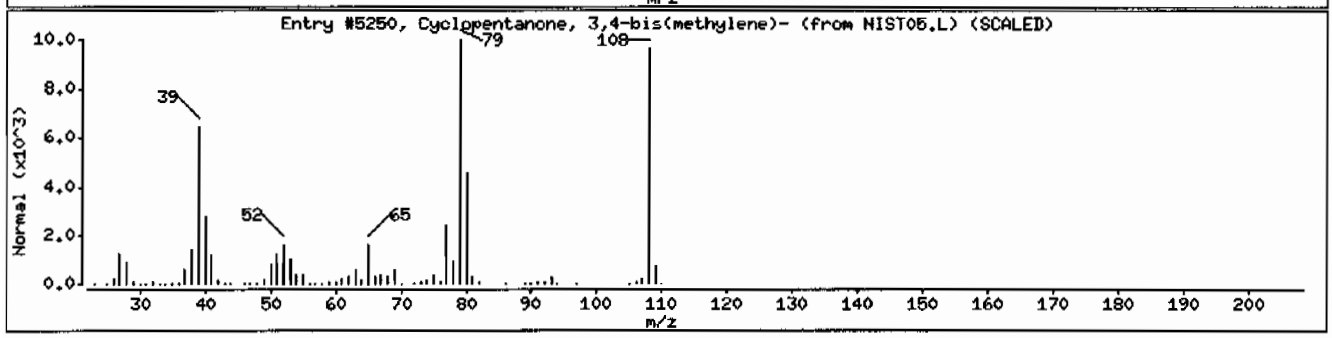

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872

Instrument: VOA1.i

Sample Info: |24154001619267431|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	508-32-7	NIST05.L	15346	95	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	94	C10H16	136
Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	508-32-7	NIST05.L	15350	91	C10H16	136

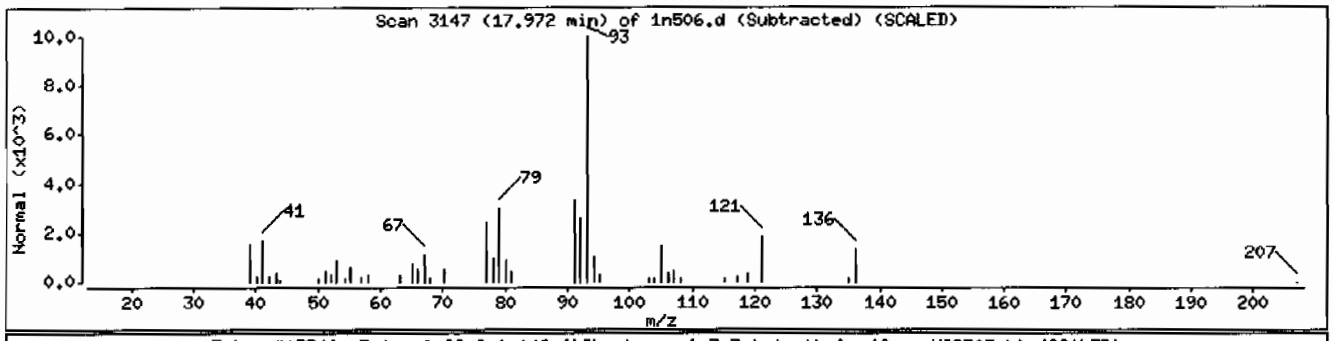

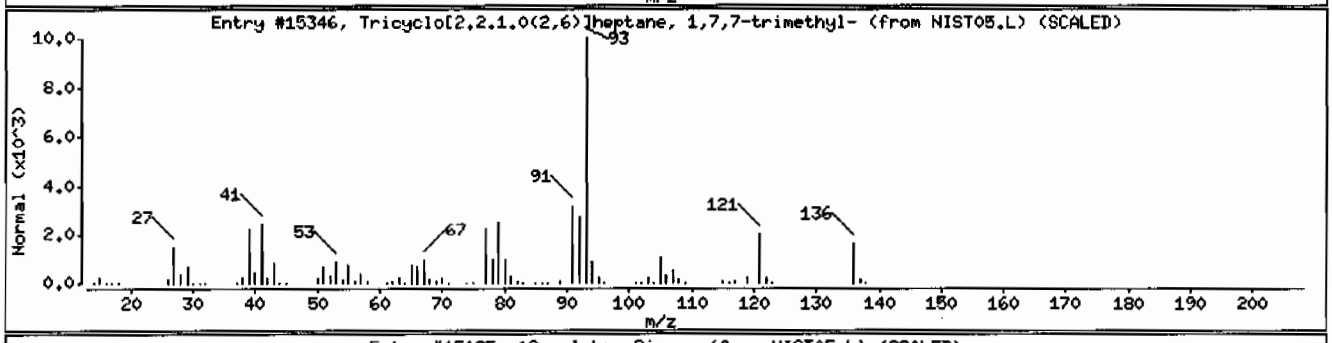

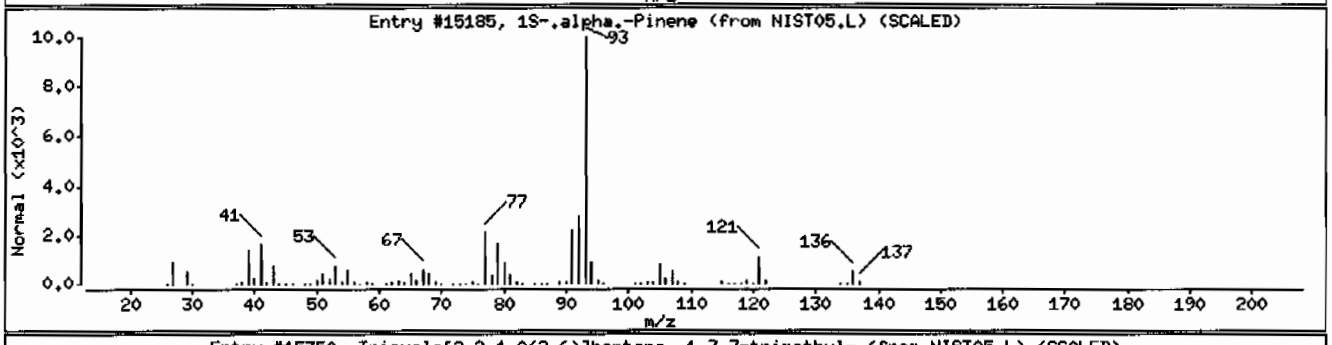

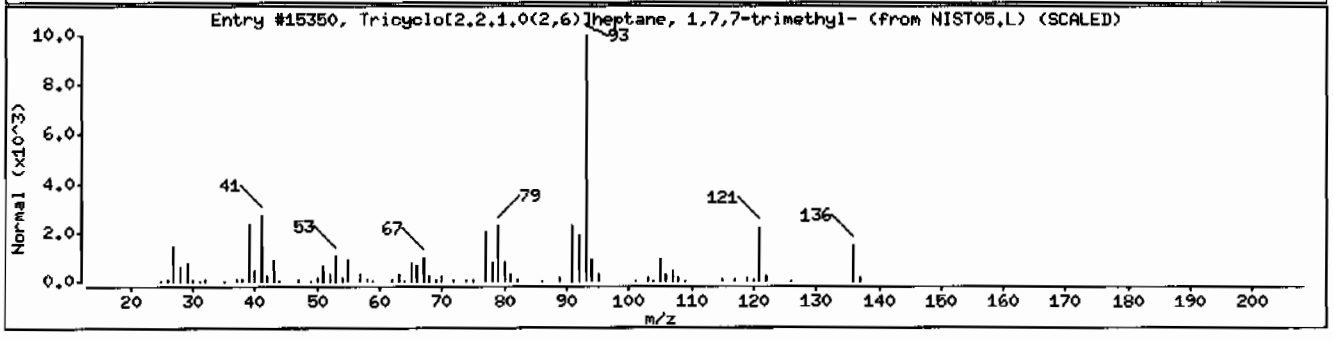

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872

Instrument: VOA1.i

Sample Info: |2415400161926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST05.L	15376	95	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15182	94	C10H16	136

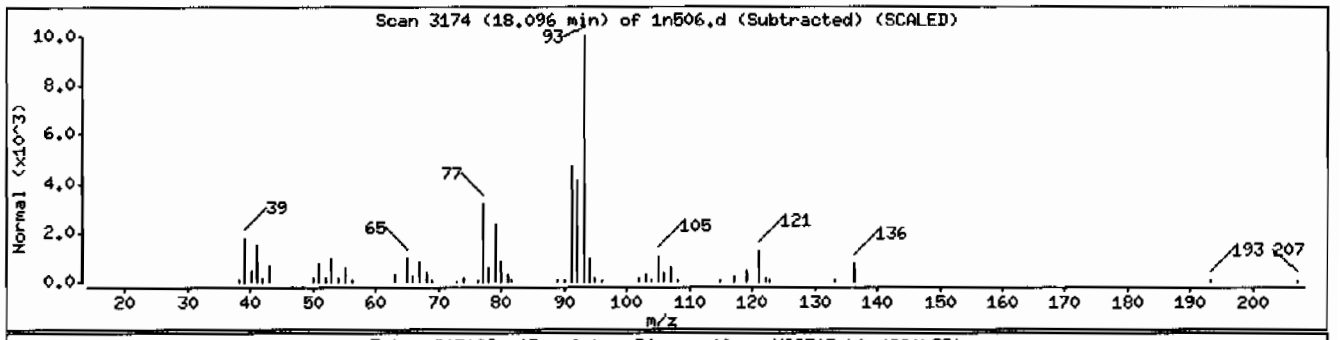

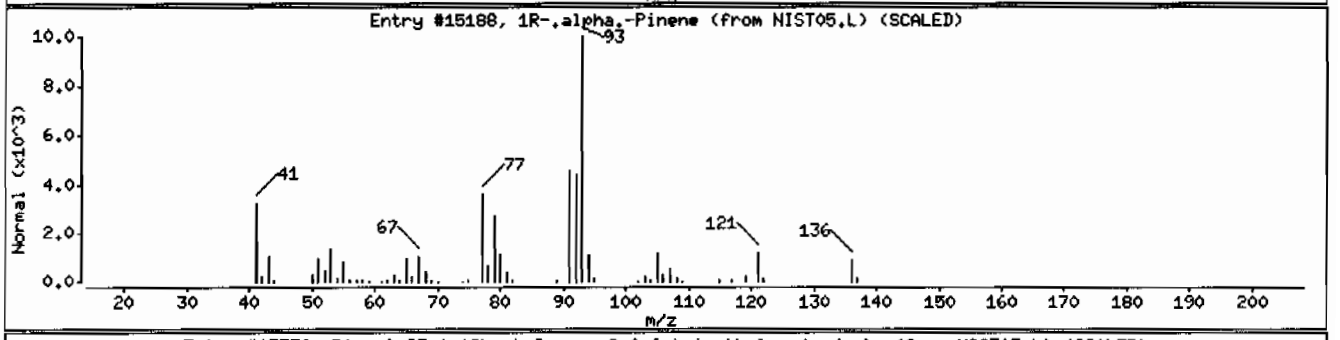

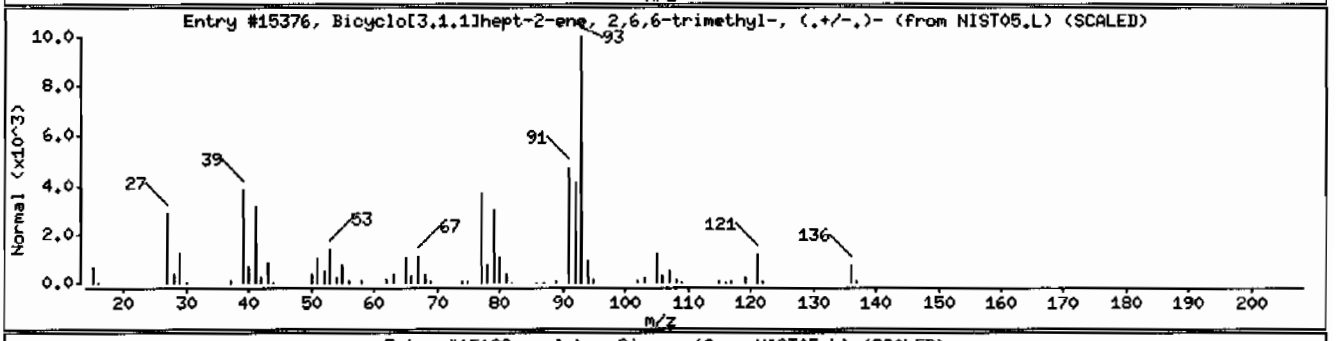

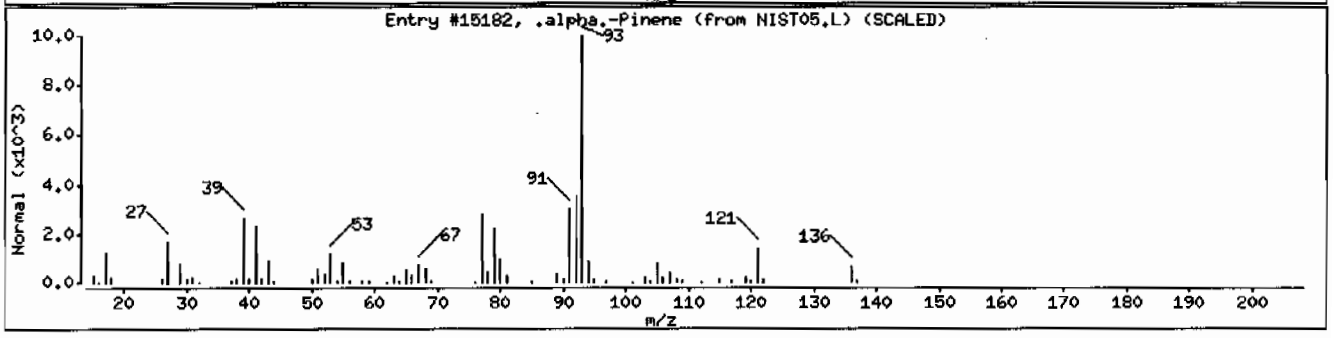

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872 Instrument: VOA1.i

Sample Info: |24154001619267431|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15161	91	C10H16	136
1,3,6-Heptatriene, 2,5,5-trimethyl-	29548-02-5	NIST05.L	15274	91	C10H16	136
Camphene	79-92-5	NIST05.L	15159	90	C10H16	136

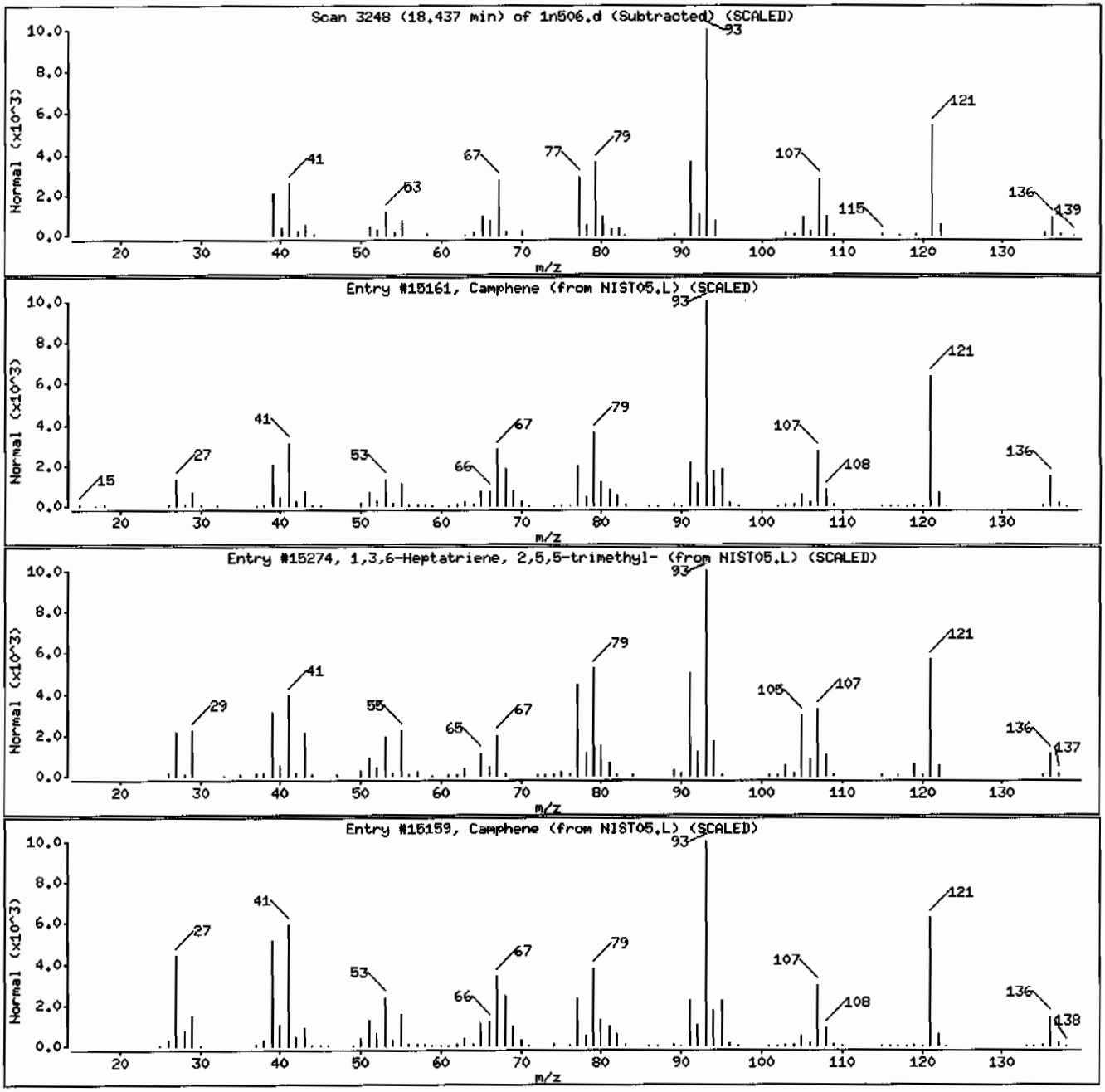

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872

Instrument: VOA1.i

Sample Info: |2415400161926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15156	97	C10H16	136
4-Carene	1000150-36-1	NIST05.L	15150	94	C10H16	136
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NIST05.L	15355	93	C10H16	136

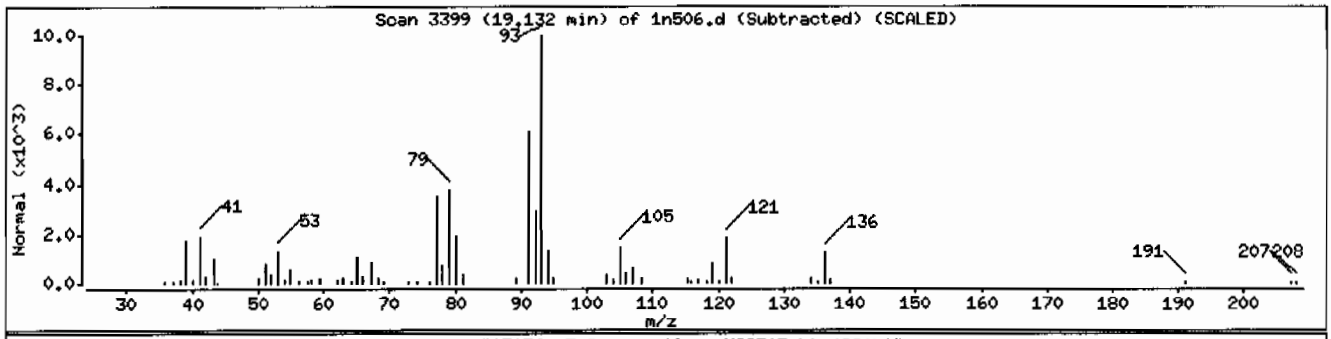

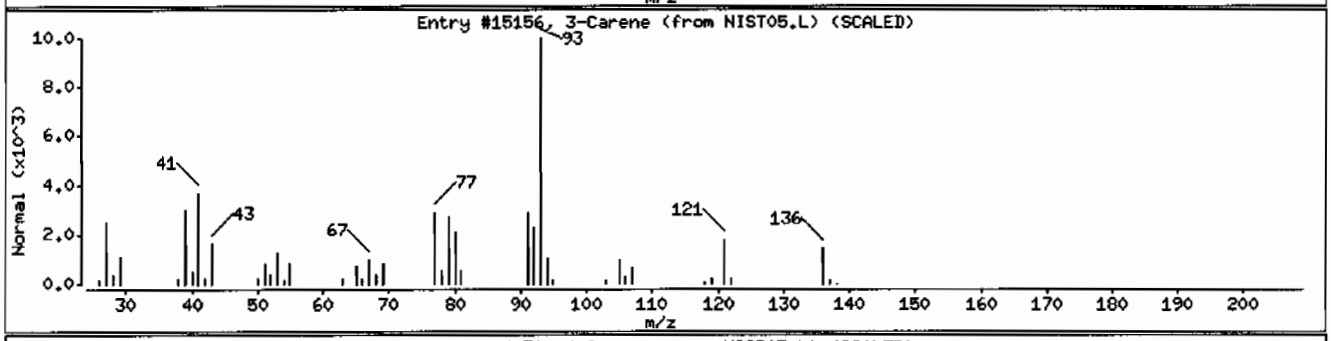

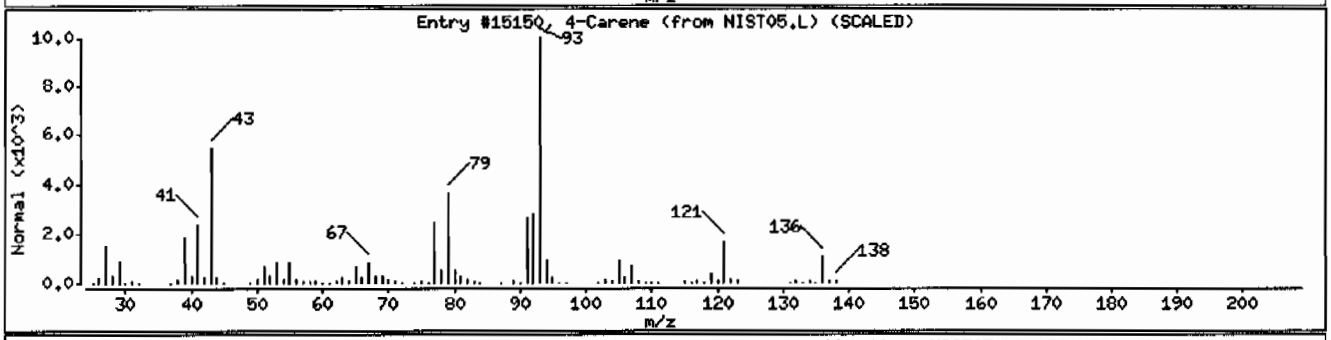

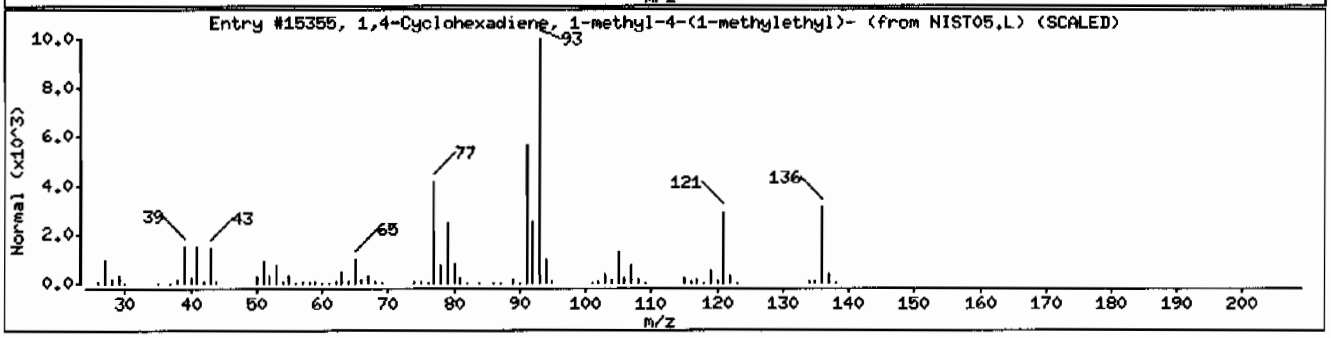

Data File: /chem/VOA1.i/112709v1/1n506.d

Date : 27-NOV-2009 08:13

Client ID: RE03-09-13872 Instrument: VOA1.i

Sample Info: |2415400161926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Limonene	138-86-3	NIST05.L	15154	93	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethenyl	5989-54-8	NIST05.L	15365	91	C10H16	136
Limonene	138-86-3	NIST05.L	15155	72	C10H16	136

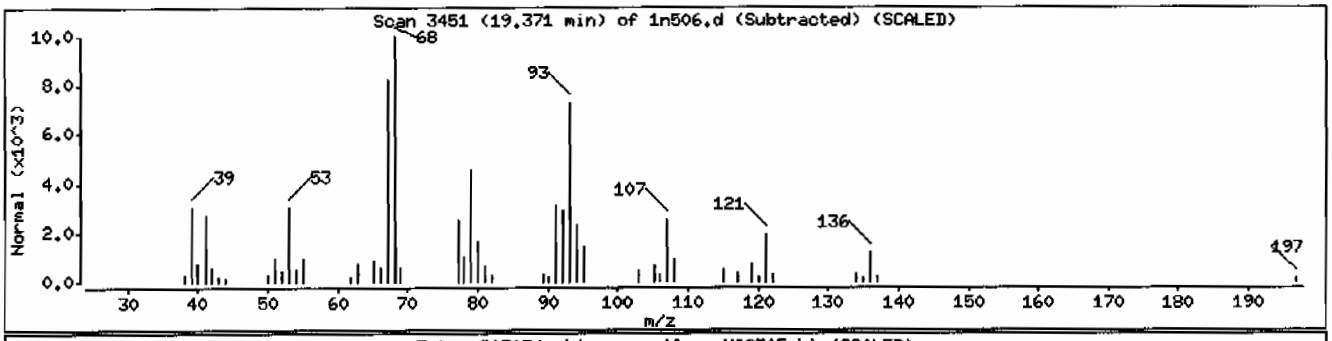

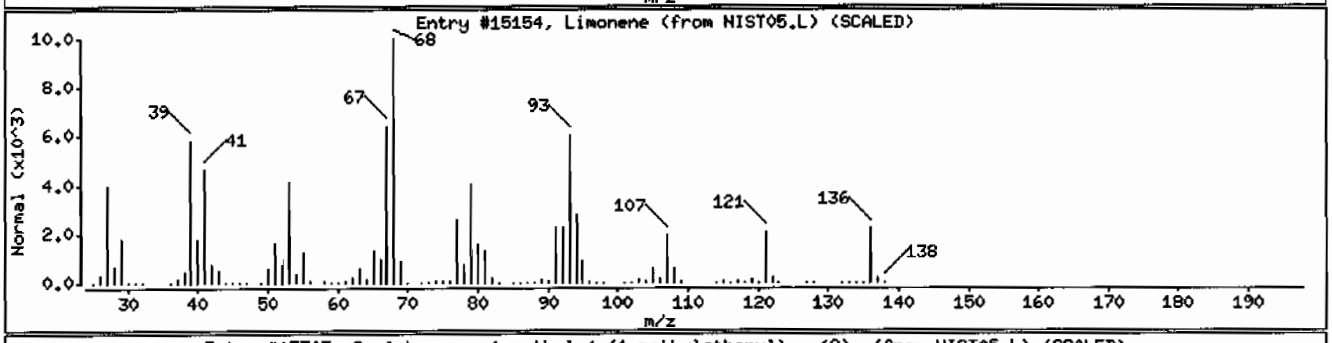

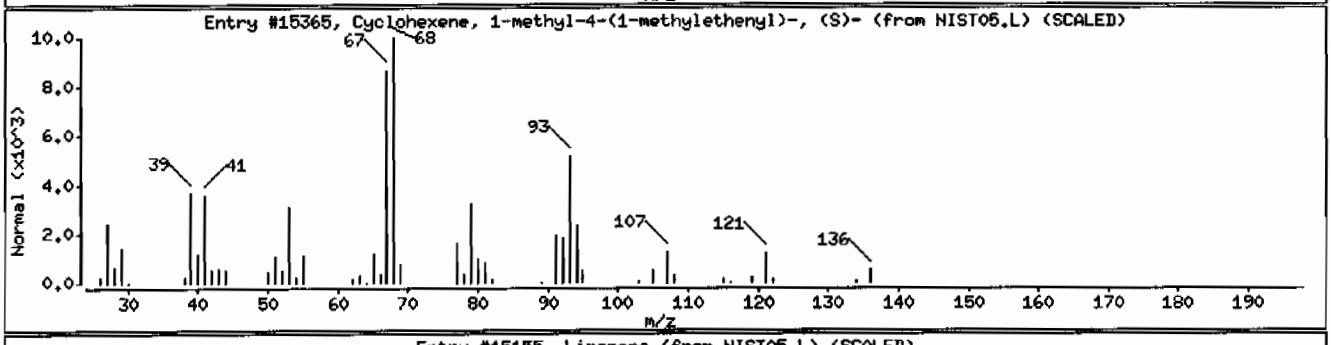

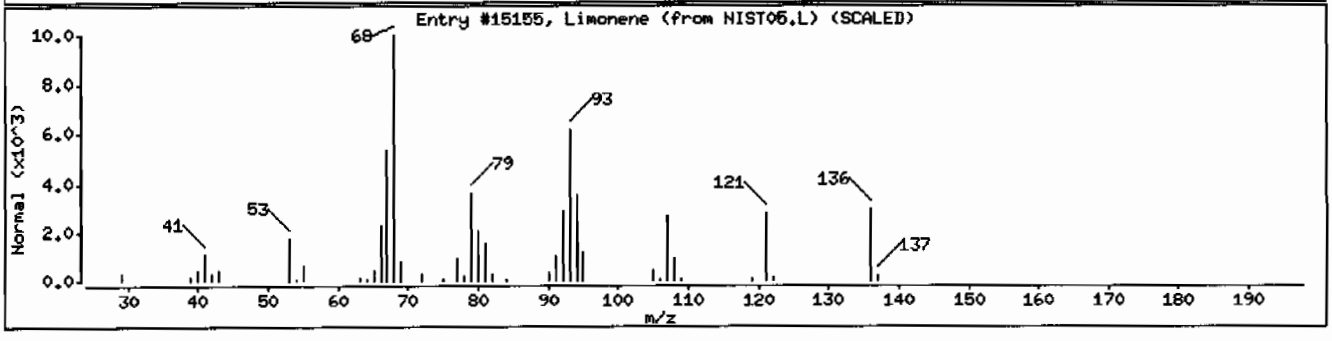

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13873	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 04:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:19	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n340.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.49	ug/kg	1.82	5.49
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.49	ug/kg	1.76	5.49
75-09-2	Methylene chloride	U	5.49	ug/kg	2.20	5.49
75-15-0	Carbon disulfide	U	5.49	ug/kg	1.37	5.49
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.49	ug/kg	1.65	5.49
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.49	ug/kg	1.37	5.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.49	ug/kg	1.65	5.49
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13873	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 04:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:19	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n340.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.329	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.49	ug/kg	1.76	5.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n340.d
Lab Smp Id: 241540010 Client Smp ID: RE03-09-13873
Inj Date : 26-NOV-2009 04:32
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540010|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.88620	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	734464	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	574173	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	285051	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	554491	60.6953	66.6
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1331081	56.9599	62.5
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	511200	53.4118	58.6

ION RATIO REPORT

VOA REPORT

Data file: 1n340.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 04:32
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14623	13.69	13.44	80-120	100	(T)
64	1617	13.68	13.44	2- 62	11	(T)
47 Benzene			CAS#: 71-43-2			
78	316	13.33	13.33	80-120	100	( )
77	15129	13.68	13.34	0- 53	4783	(QT)
51	170519	13.34	13.34	4- 64	53910	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	13909	15.52	15.36	80-120	100	(T)
43	7329	15.52	15.36	218-278	53	(QT)
100	826835	15.52	15.36	1- 61	5944	(QT)
83 Bromoform			CAS#: 75-25-2			
173	1248	18.38	18.11	80-120	100	(T)
171	112	18.40	18.11	21- 81	9	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n340.d
Lab Smp Id: 241540010 Client Smp ID: RE03-09-13873
Inj Date : 26-NOV-2009 04:32
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540010|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n340.d
Date : 26-NOV-2009 04:32
Client ID: RE03-09-13873
Sample Info: |2415400101926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

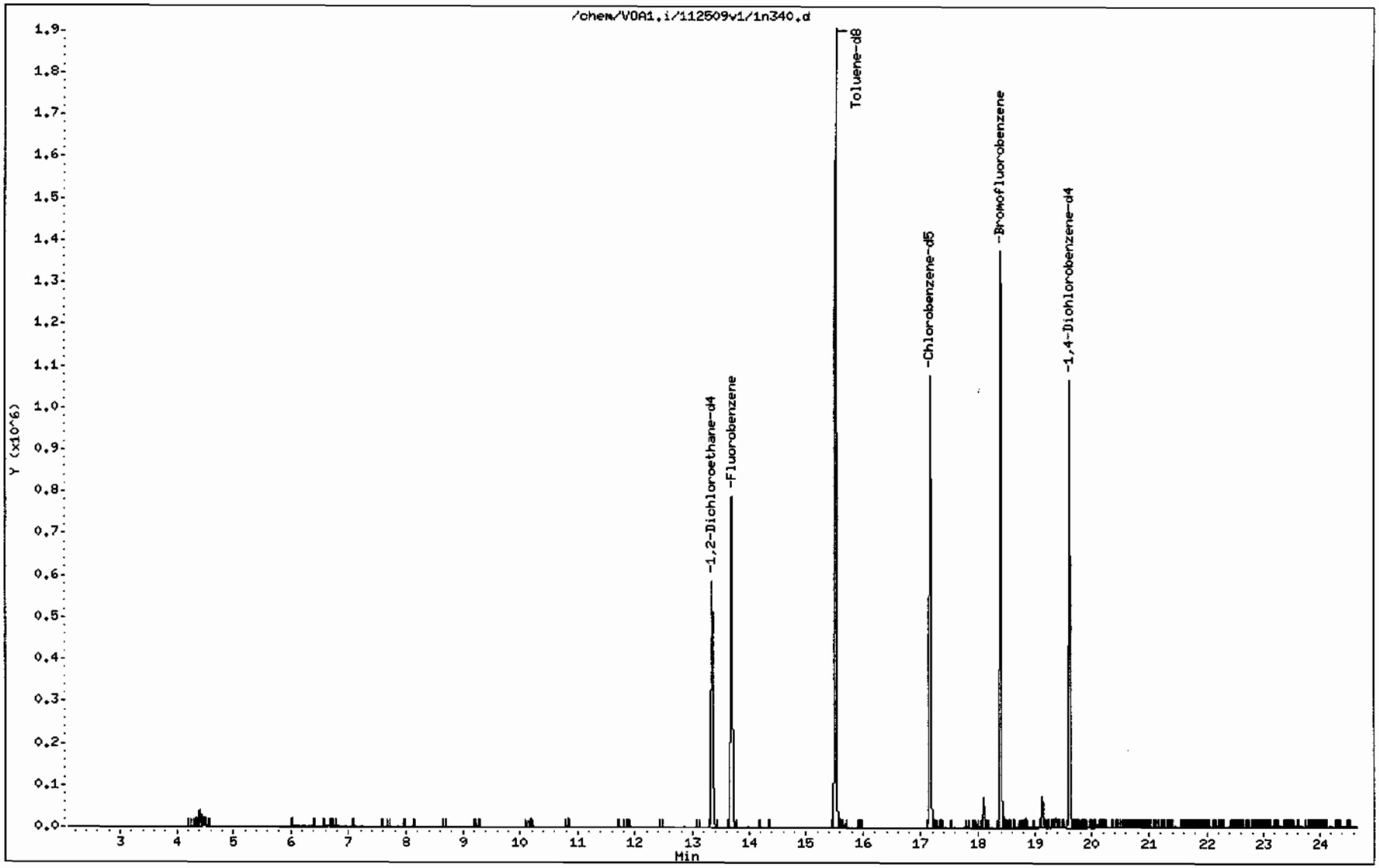

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 05:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n342.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.39	ug/kg	1.79	5.39
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.39	ug/kg	1.72	5.39
75-09-2	Methylene chloride	U	5.39	ug/kg	2.15	5.39
75-15-0	Carbon disulfide	U	5.39	ug/kg	1.35	5.39
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.39	ug/kg	1.62	5.39
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.39	ug/kg	1.35	5.39
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.39	ug/kg	1.62	5.39
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 05:32	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n342.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n342.d
Lab Smp Id: 241540012 Client Smp ID: RE03-09-13874
Inj Date : 26-NOV-2009 05:32
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540012|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 42
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.16130	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	739792	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	575804	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	289852	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	549810	59.7494	64.4
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1328915	56.7062	61.1
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	514005	52.8153	56.9

ION RATIO REPORT

VOA REPORT

Data file: 1n342.d
Report Date: 11/27/2009 05:03
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 05:32
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	13755	13.69	13.44	80-120	100	(T)
64	2308	13.69	13.44	2- 62	17	(T)
47 Benzene			CAS#: 71-43-2			
78	152	13.32	13.33	80-120	100	( )
77	15616	13.68	13.34	0- 53	10223	(QT)
51	165975	13.34	13.34	4- 64	108647	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	13293	15.52	15.36	80-120	100	(T)
43	7283	15.51	15.36	218-278	55	(QT)
100	827581	15.52	15.36	1- 61	6225	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n342.d
Lab Smp Id: 241540012 Client Smp ID: RE03-09-13874
Inj Date : 26-NOV-2009 05:32
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540012|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 42
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n342.d
Date : 26-NOV-2009 05:32
Client ID: RE03-09-13874
Sample Info: |2415400121926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

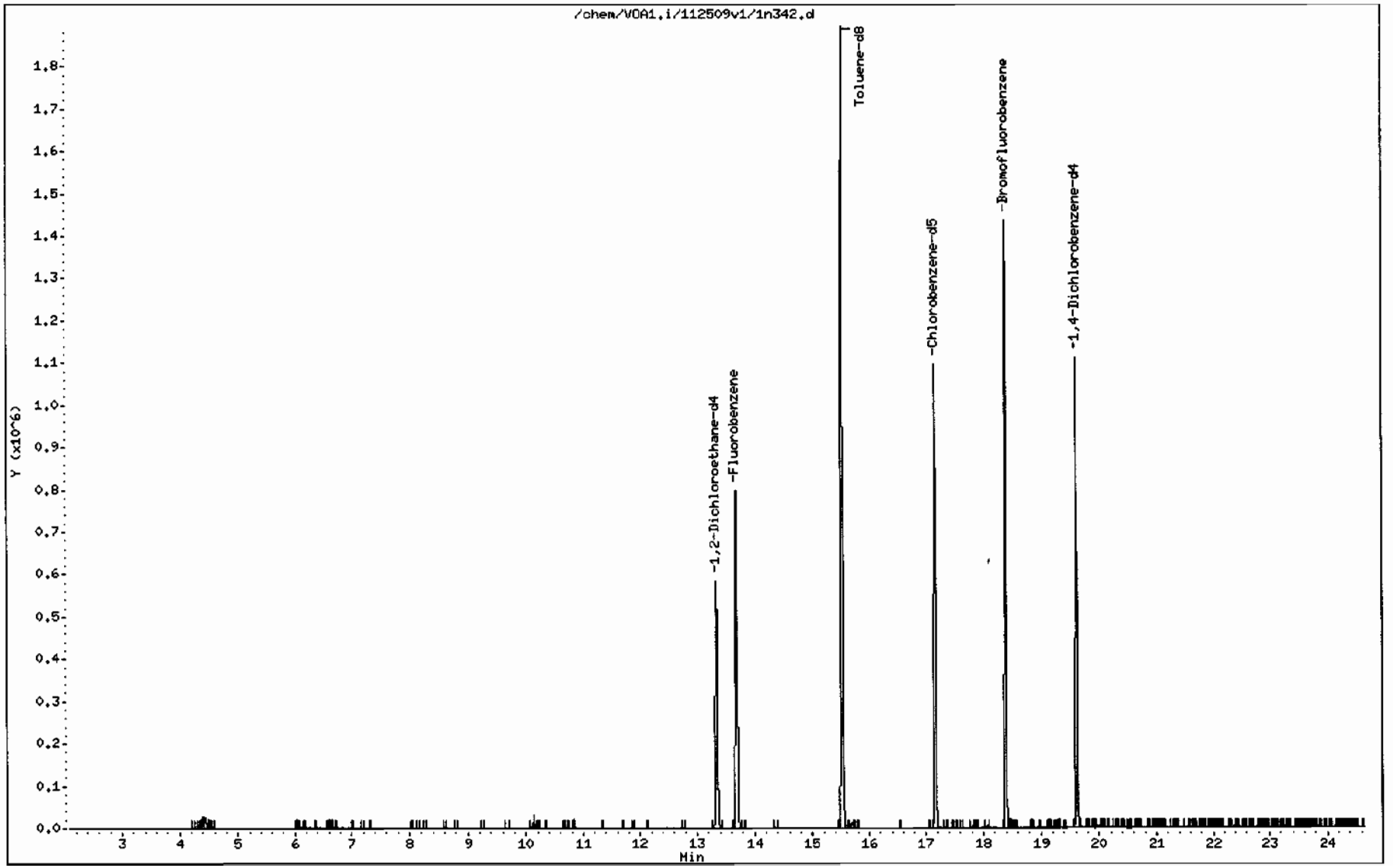

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 00:00	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n331.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12
67-64-1	Acetone	U	5.58	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
74-88-4	Iodomethane	U	5.58	ug/kg	1.79	5.58
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.40	5.58
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12
78-93-3	2-Butanone	U	5.58	ug/kg	1.68	5.58
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.40	5.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12
591-78-6	2-Hexanone	U	5.58	ug/kg	1.68	5.58
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 00:00	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n331.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.79	5.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n331.d
Lab Smp Id: 241540001 Client Smp ID: RE03-09-13875
Inj Date : 26-NOV-2009 00:00
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540001|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.45410	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.682	13.686	(1.000)	519391	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	424100	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.610	(1.000)	218892	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.975)	378307	58.5573	65.4
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	924997	53.5895	59.8
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.937)	361044	49.1246	54.8

ION RATIO REPORT

VOA REPORT

Data file: 1n331.d
Report Date: 11/27/2009 05:02
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 00:00
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	9515	13.69	13.44	80-120	100	(T)
64	1422	13.68	13.44	2- 62	15	(T)
47 Benzene			CAS#: 71-43-2			
78	210	13.32	13.33	80-120	100	( )
77	10267	13.68	13.34	0- 53	4884	(QT)
51	115683	13.34	13.34	4- 64	55028	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	9321	15.52	15.36	80-120	100	(T)
43	4944	15.52	15.36	218-278	53	(QT)
100	573627	15.52	15.36	1- 61	6154	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n331.d
Lab Smp Id: 241540001 Client Smp ID: RE03-09-13875
Inj Date : 26-NOV-2009 00:00
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540001|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n331.d

Date : 26-NOV-2009 00:00

Client ID: RE03-09-13875

Sample Info: |241540001|926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

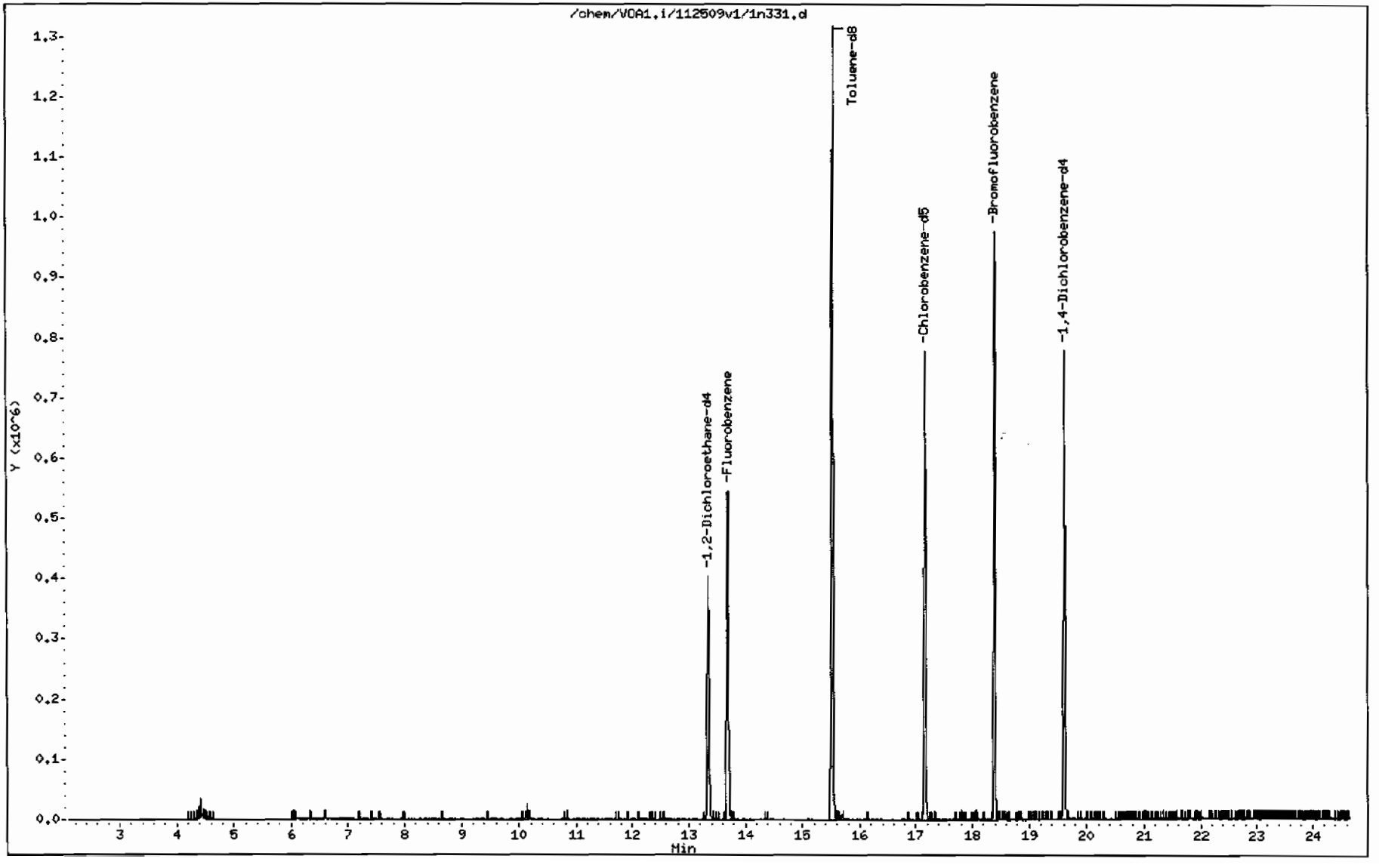

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 07:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n345.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57
75-09-2	Methylene chloride	U	5.57	ug/kg	2.23	5.57
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 07:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n345.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.57	ug/kg	1.78	5.57
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n345.d
Lab Smp Id: 241540015 Client Smp ID: RE03-09-13876
Inj Date : 26-NOV-2009 07:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540015|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.22200	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.682	13.686	(1.000)	695551	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	538010	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	260297	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	550757	63.6593	70.9
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1243480	56.7880	63.2
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	473610	54.1902	60.4

ION RATIO REPORT

VOA REPORT

Data file: 1n345.d
Report Date: 11/27/2009 05:04
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 07:03
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	13643	13.68	13.44	80-120	100	(T)
64	2088	13.68	13.44	2- 62	15	(T)
47 Benzene			CAS#: 71-43-2			
78	411	13.35	13.33	80-120	100	( )
77	14681	13.68	13.34	0- 53	3569	(QT)
51	165645	13.34	13.34	4- 64	40270	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	12762	15.51	15.36	80-120	100	(T)
43	6852	15.51	15.36	218-278	54	(QT)
100	759510	15.51	15.36	1- 61	5951	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n345.d
Lab Smp Id: 241540015 Client Smp ID: RE03-09-13876
Inj Date : 26-NOV-2009 07:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540015|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n345.d
Date : 26-NOV-2009 07:03
Client ID: RE03-09-13876
Sample Info: |2415400151926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

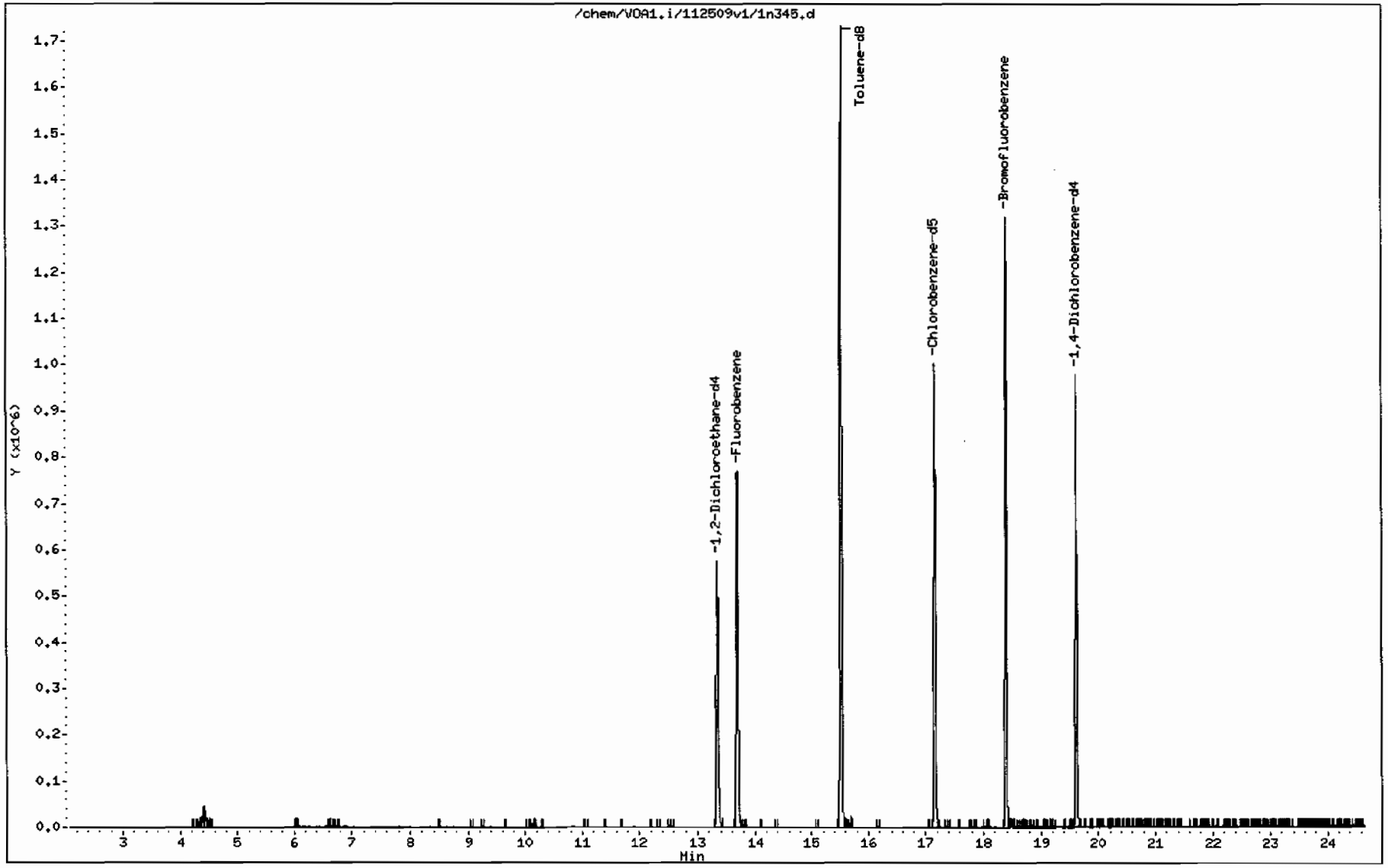

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540007	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13877	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/27/2009 07:43	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/27/2009 06:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n505.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57
75-09-2	Methylene chloride	J	4.18	ug/kg	2.23	5.57
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene		2.62	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540007	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13877	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/27/2009 07:43	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/27/2009 06:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n505.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.57	ug/kg	1.78	5.57
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	18.1	5.88	ug/kg	95	NJ
1000150-36-1	4-Carene	19.13	20.2	ug/kg	94	NJ
5989-54-8	Cyclohexene, 1-methyl-4-(1-methylethenyl	19.37	7.52	ug/kg	93	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n505.d
Lab Smp Id: 241540007 Client Smp ID: RE03-09-13877
Inj Date : 27-NOV-2009 07:43
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540007|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 09-Dec-2009 14:48 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.30460	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.677	13.677	(1.000)	659921	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	518747	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.611	(1.000)	252446	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.332	13.332	(0.975)	452141	55.0824	61.4
$ 65 Toluene-d8	98	15.514	15.514	(0.904)	1107895	52.4748	58.5
$ 87 Bromofluorobenzene	95	18.391	18.386	(0.938)	429468	50.6677	56.5
23 Methylene chloride	84	10.128	10.128	(0.741)	24501	3.74993	4.2(a)
66 Toluene	92	15.592	15.592	(0.909)	26740	2.34714	2.6

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 1n505.d
Report Date: 11/27/2009 08:28
Lab. ID: 241540007 SampleType: SAMPLE
Injection Date: 27-NOV-2009 07:43
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540007|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
23 Methylene chloride			CAS#: 75-09-2			
84	24501	10.13	10.13	80-120	100	( )
86	15796	10.12	10.12	35- 95	64	( )
49	37078	10.12	10.13	120-180	151	( )
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	11185	13.67	13.43	80-120	100	(T)
64	2065	13.68	13.43	2- 62	18	(T)
47 Benzene			CAS#: 71-43-2			
78	401	13.34	13.32	80-120	100	( )
77	13382	13.68	13.33	0- 53	3330	(QT)
51	138668	13.33	13.33	6- 66	34506	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	10856	15.52	15.36	80-120	100	(T)
43	6055	15.51	15.36	210-270	56	(QT)
100	710591	15.51	15.36	1- 61	6546	(QT)
66 Toluene			CAS#: 108-88-3			
92	26740	15.59	15.59	80-120	100	( )
91	44106	15.59	15.60	139-199	165	( )
89 n-Propylbenzene			CAS#: 103-65-1			
91	12110	18.44	18.56	80-120	100	(T)
120	134	18.56	18.56	0- 49	1	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
94 2-Chlorotoluene			CAS#: 95-49-8			
91	12110	18.44	18.74	80-120	100	(T)
126	269	18.86	18.74	0- 53	2	(T)
93 1,3,5-Trimethylbenzene			CAS#: 108-67-8			
105	19132	19.13	18.71	80-120	100	(T)
120	1782	19.14	18.72	11- 71	9	(QT)
97 1,2,4-Trimethylbenzene			CAS#: 95-63-6			
105	19132	19.13	19.14	80-120	100	( )
120	1782	19.14	19.14	8- 68	9	( )
95 4-Chlorotoluene			CAS#: 106-43-4			
91	66148	19.13	18.85	80-120	100	(T)
126	269	18.86	18.85	0- 56	0	( )
96 tert-Butylbenzene			CAS#: 98-06-6			
119	9786	19.13	19.08	80-120	100	( )
91	66148	19.13	19.08	54-114	676	(Q)
134	1683	19.14	19.08	0- 51	17	( )
99 sec-Butylbenzene			CAS#: 135-98-8			
105	19132	19.13	19.30	80-120	100	(T)
134	1683	19.14	19.30	0- 47	9	(T)
100 4-Isopropyltoluene			CAS#: 99-87-6			
119	17405	19.43	19.42	80-120	100	( )
134	3937	19.42	19.42	0- 54	23	( )
91	5368	19.42	19.42	0- 60	31	( )
105 n-Butylbenzene			CAS#: 104-51-8			
91	5770	20.05	19.87	80-120	100	(T)
92	1642	20.06	19.87	25- 85	28	(T)
134	291	20.10	19.87	0- 51	5	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n505.d
Lab Smp Id: 241540007 Client Smp ID: RE03-09-13877
Inj Date : 27-NOV-2009 07:43
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540007|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 09-Dec-2009 14:48 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.30460	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 76 Chlorobenzene-d5	17.157	1729747	50.000
* 102 1,4-Dichlorobenzene-d4	19.610	1666220	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy				CAS #: 2437-95-8			
18.096	182508	5.27558093	5.9	95	NIST05.L	15376	76

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
4-Carene					CAS #: 1000150-36-1		
19.132	602368	18.0758750	20.2	94	NIST05.L	15150	102
Cyclohexene, 1-methyl-4-(1-methylethenyl					CAS #: 5989-54-8		
19.366	224866	6.74779075	7.5	93	NIST05.L	15365	102

Data File: /chem/VOA1.i/112709v1/1n505.d

Date : 27-NOV-2009 07:43

Client ID: RE03-09-13877

Sample Info: |2415400071926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

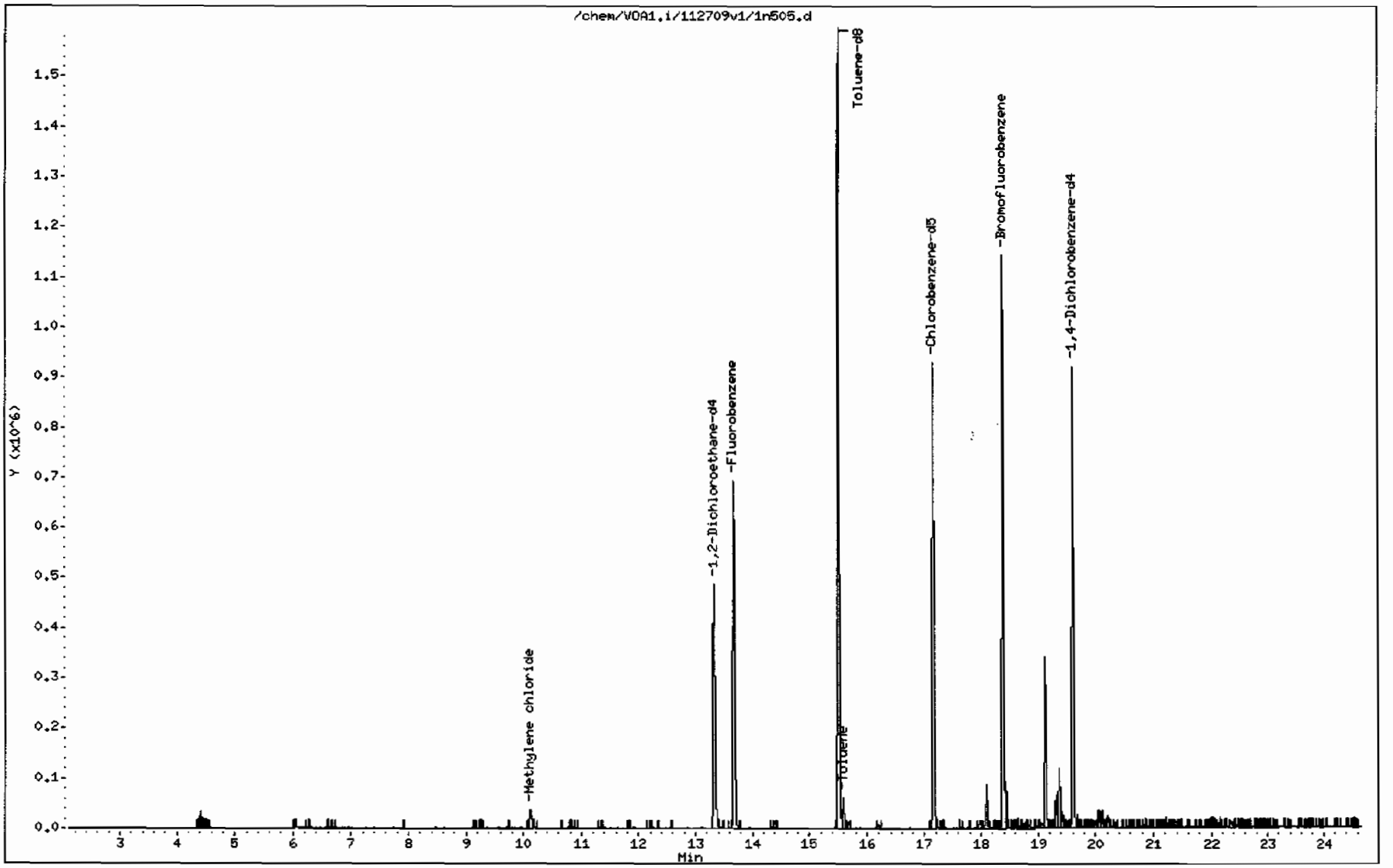

Data File: /chem/VOA1.i/112709v1/1n505.d

Date : 27-NOV-2009 07:43

Client ID: RE03-09-13877

Instrument: VOA1.i

Sample Info: |2415400071926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

23 Methylene chloride

Concentration: 4.2 ug/Kg

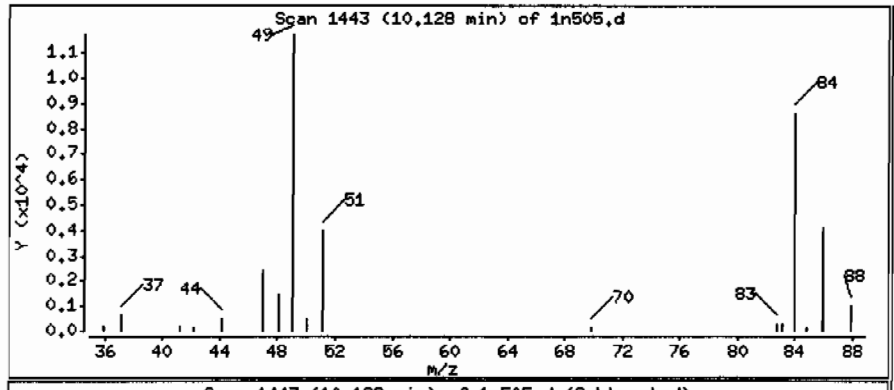

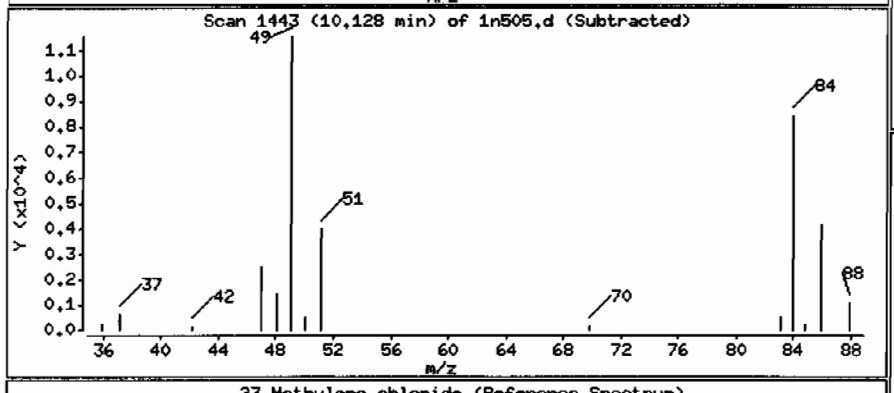

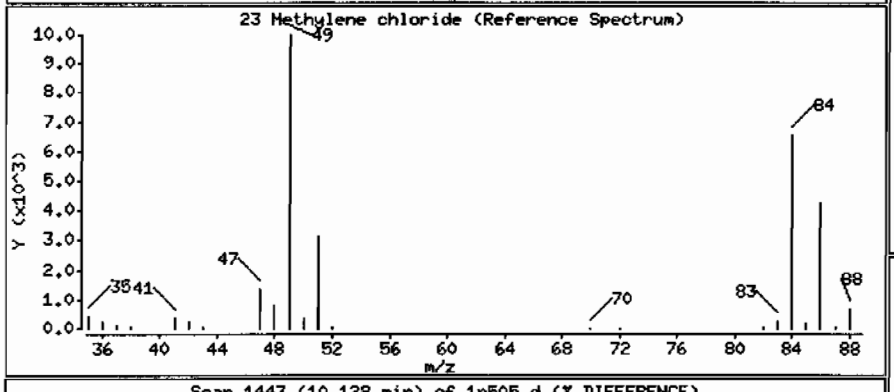

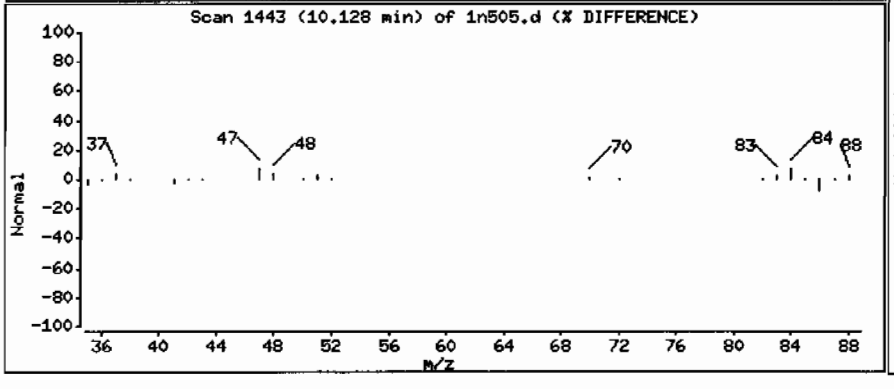

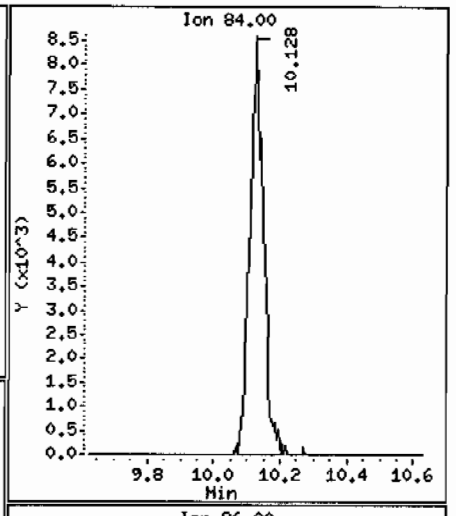

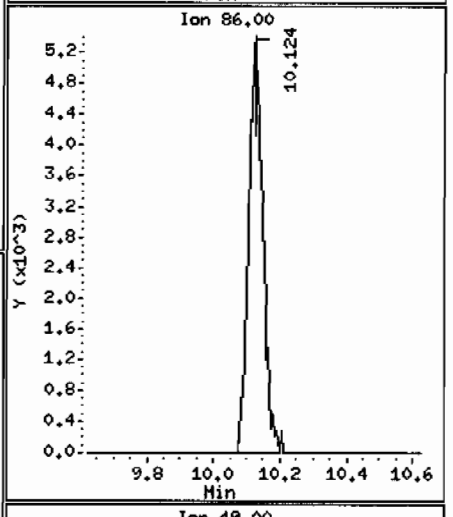

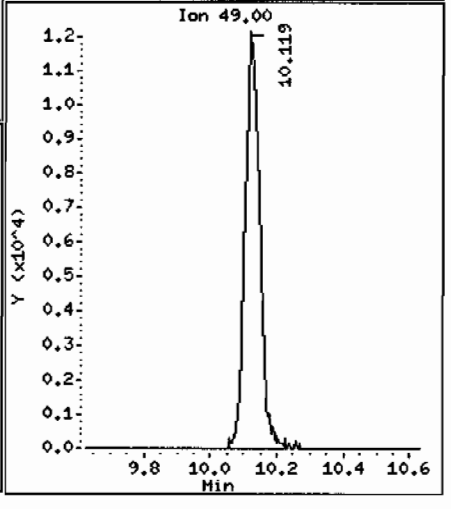

Data File: /chem/VOA1.i/112709v1/1n505.d

Date : 27-NOV-2009 07:43

Client ID: RE03-09-13877

Instrument: VOA1.i

Sample Info: |2415400071926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

66 Toluene

Concentration: 2.6 ug/Kg

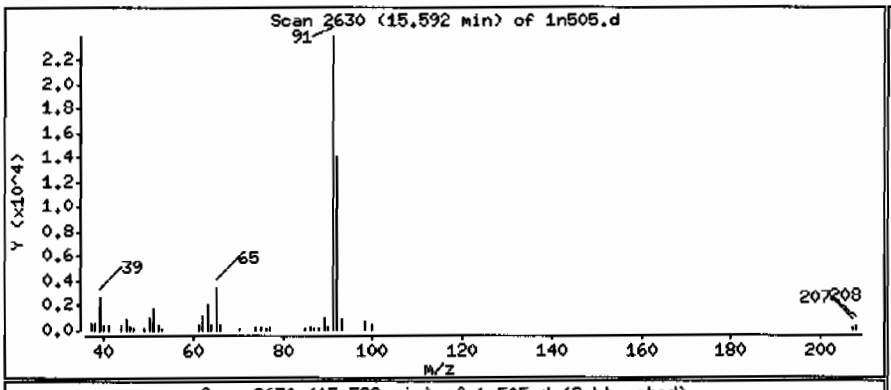

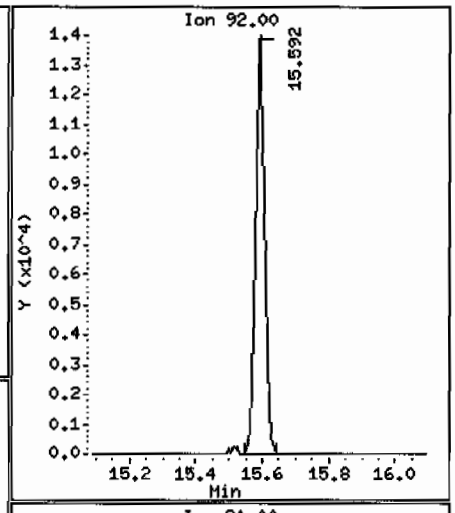

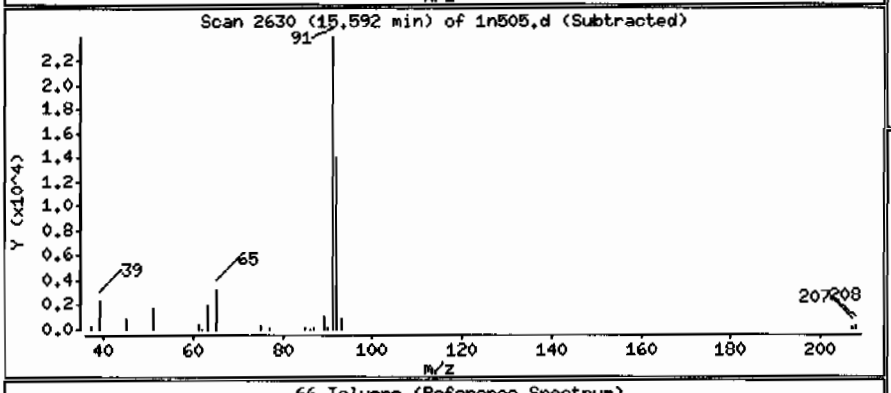

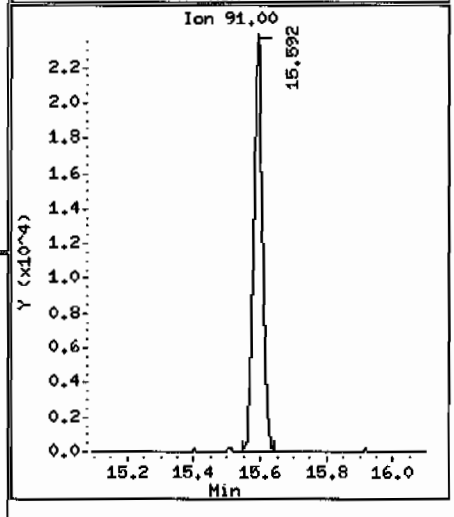

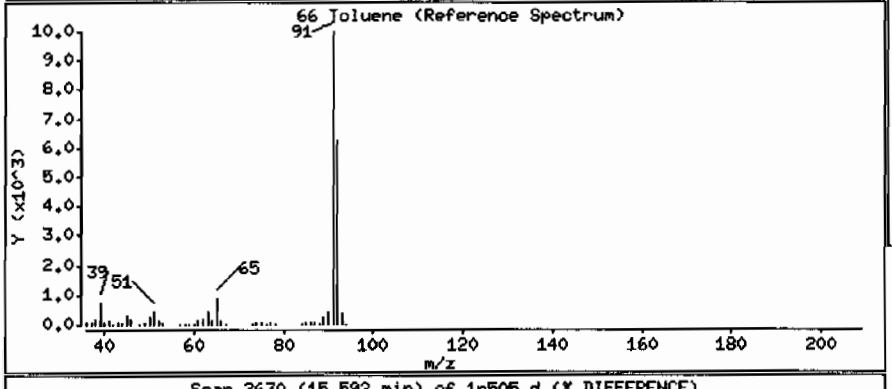

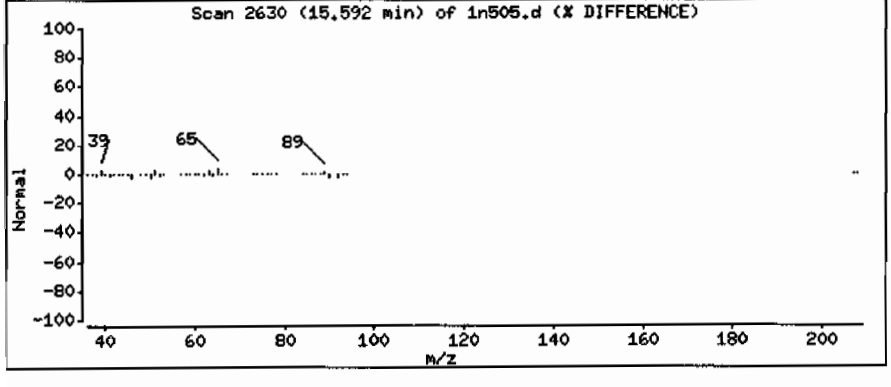

Data File: /chem/VOA1.i/112709v1/1n505.d

Date : 27-NOV-2009 07:43

Client ID: RE03-09-13877

Instrument: VOA1.i

Sample Info: |2415400071926743111VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST05.L	15376	95	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 3,6,6-trimethy	4889-83-2	NIST05.L	15314	94	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	92	C10H16	136

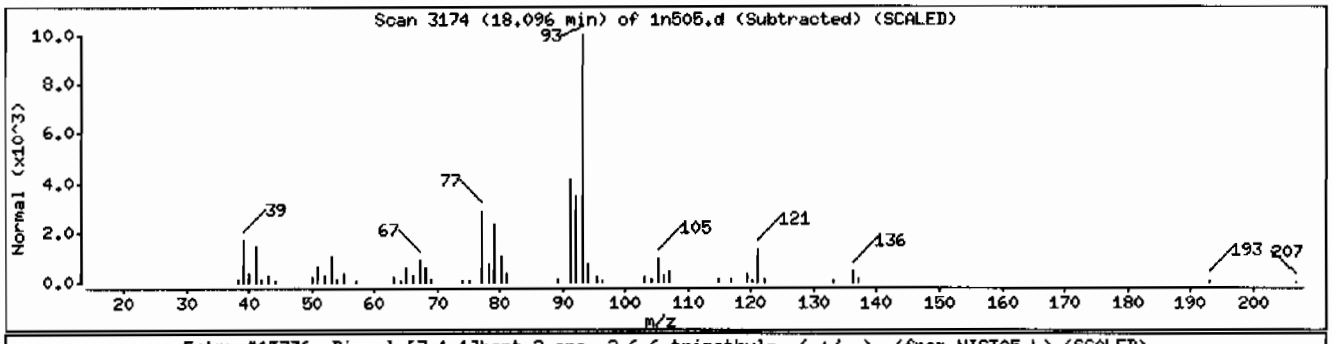

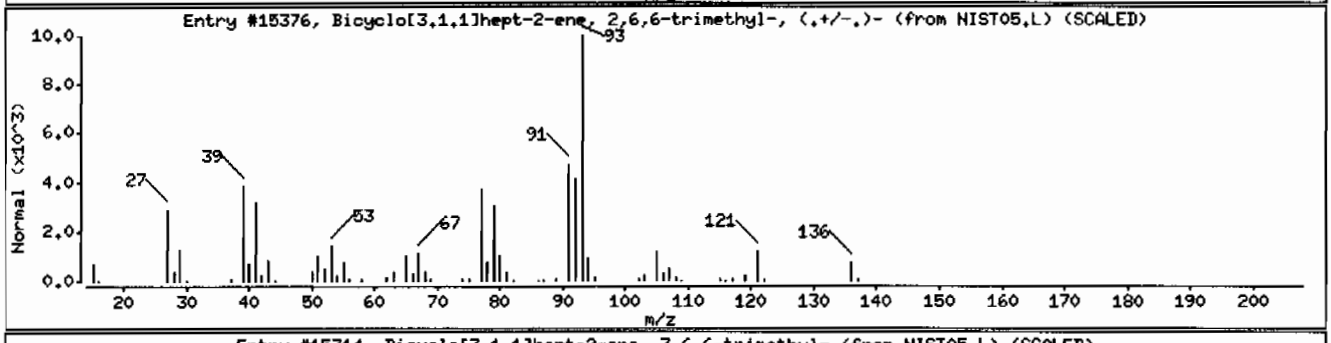

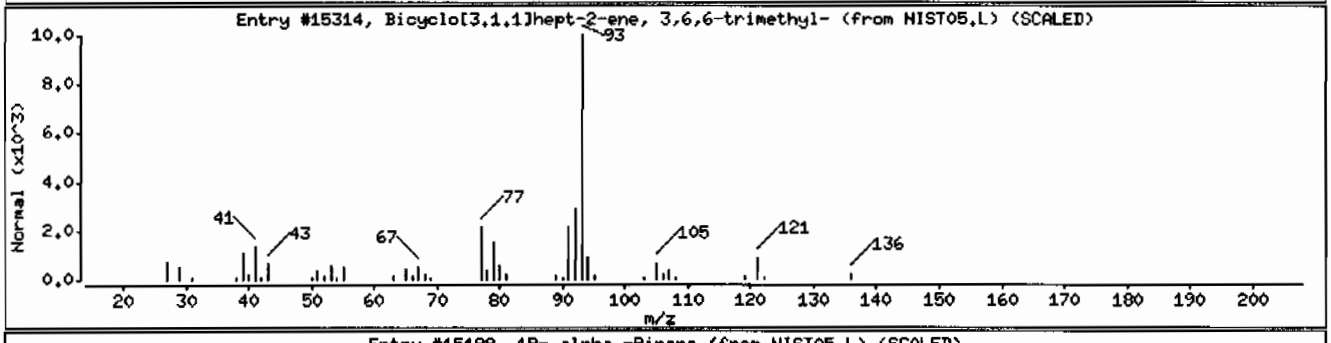

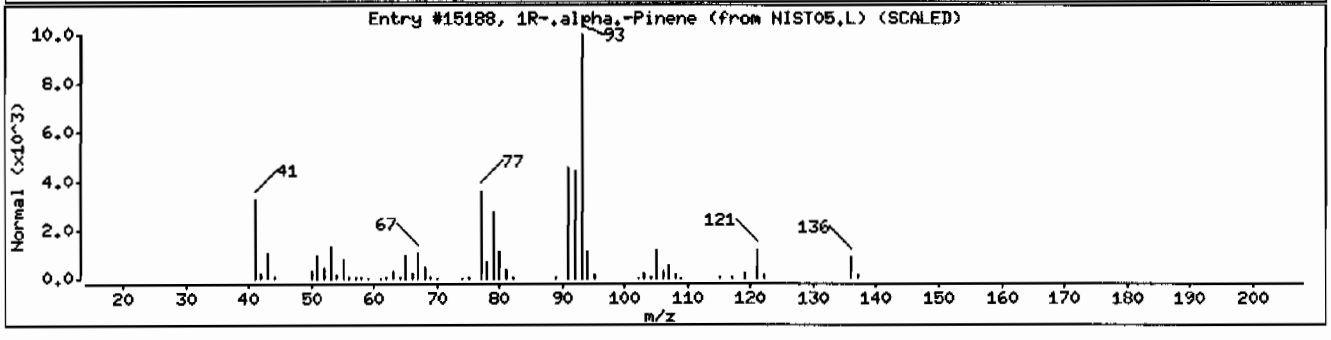

Data File: /chem/VOA1.i/112709v1/1n505.d

Date : 27-NOV-2009 07:43

Client ID: RE03-09-13877

Instrument: VOA1.i

Sample Info: |2415400071926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4-Carene	1000150-36-1	NIST05.L	15150	94	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	91	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	90	C10H16	136

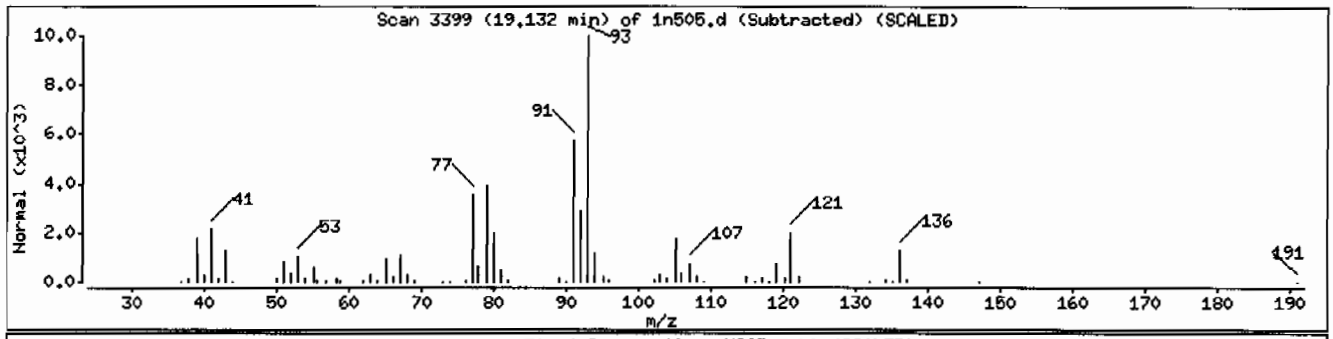

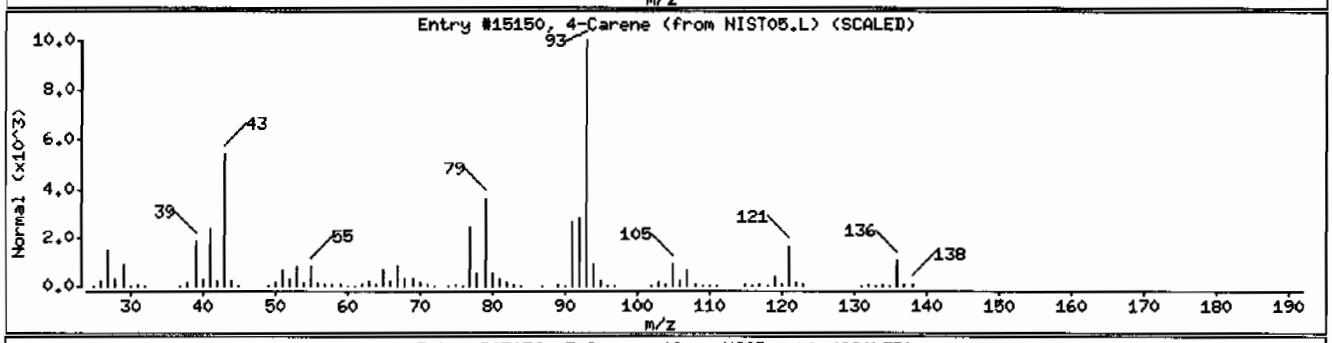

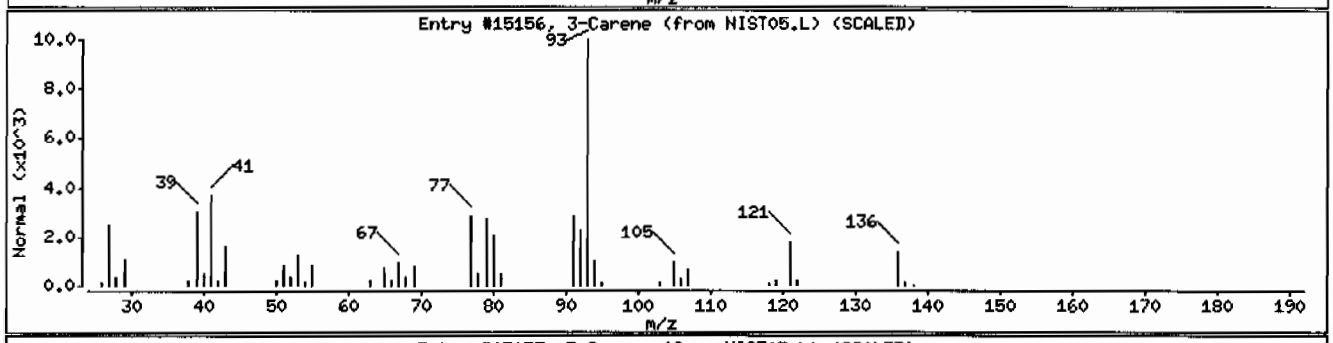

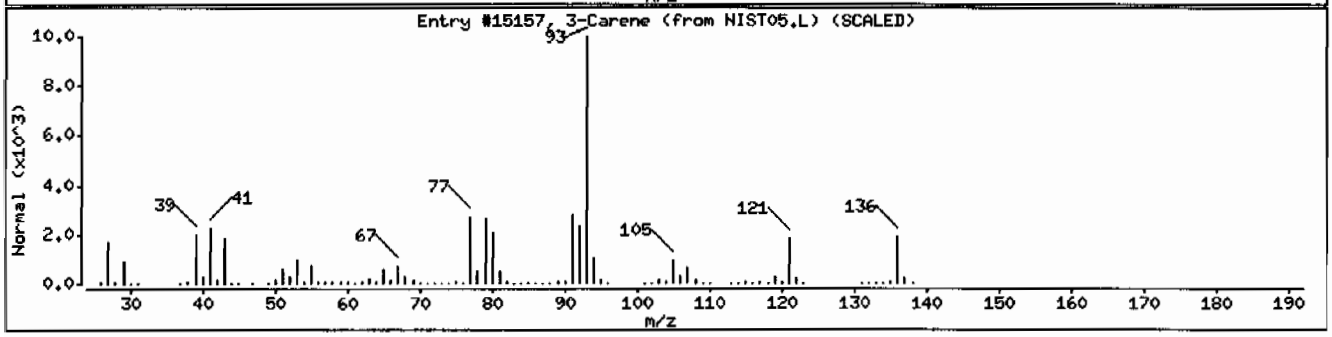

Data File: /chem/VOA1.i/112709v1/1n505.d

Date : 27-NOV-2009 07:43

Client ID: RE03-09-13877

Instrument: VOA1.i

Sample Info: |2415400071926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 1-methyl-4-(1-methylethenyl	5989-54-8	NIST05.L	15365	93	C10H16	136
Limonene	138-86-3	NIST05.L	15154	76	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15165	70	C10H16	136

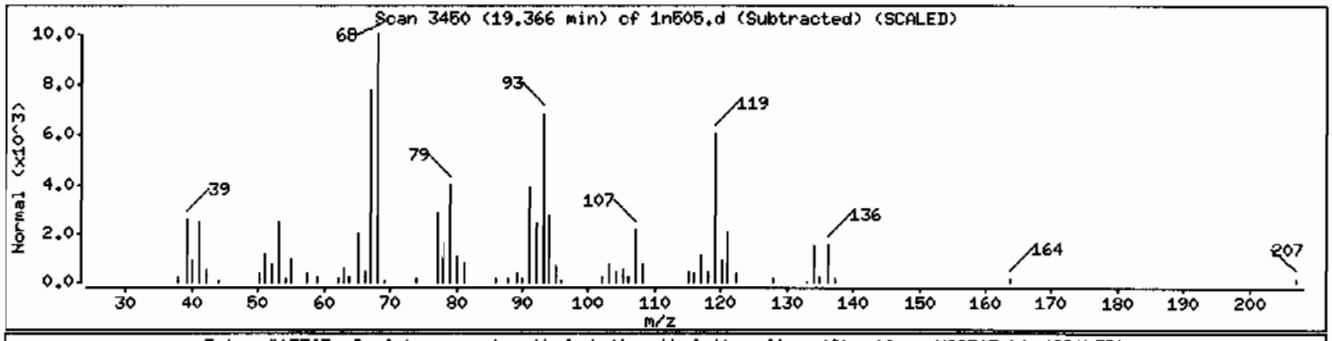

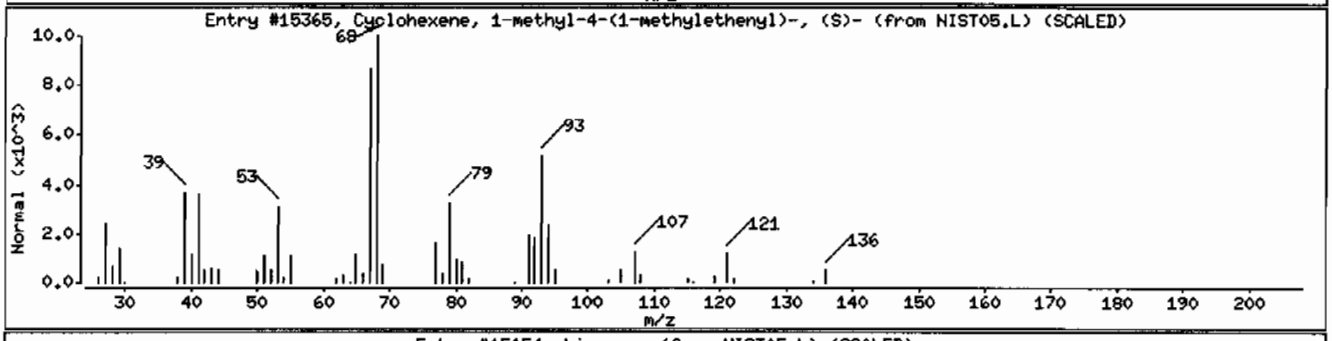

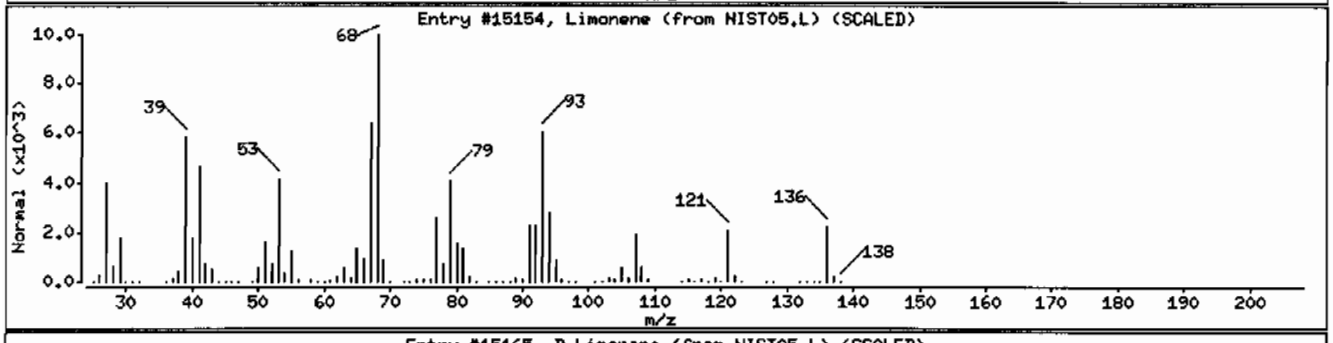

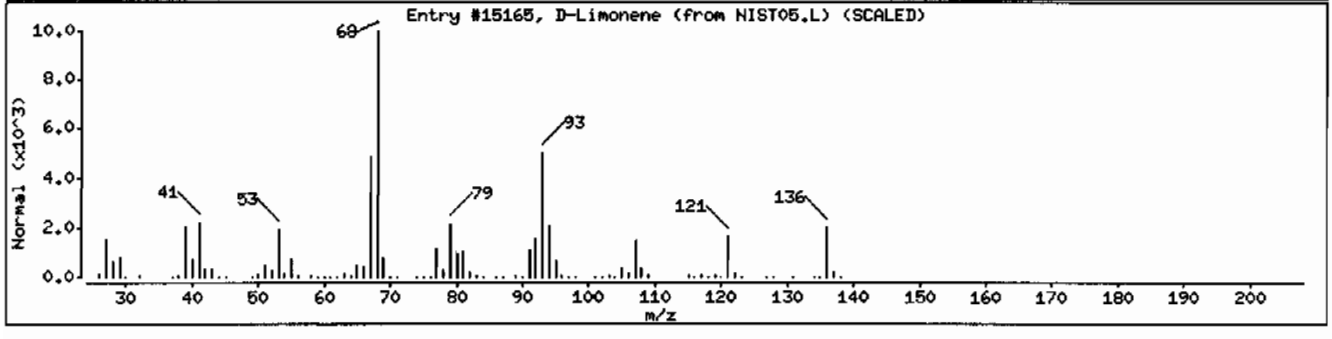

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540017	**Date Received:**	11/20/2009 08:50		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13930	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA1.I	**Dilution:**	1
Run Date:	11/26/2009 08:03	**Analyst:**	RXM4	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 14:26	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	1n347.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone		14.2	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540017**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13930**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 08:03**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:26**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n347.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	16.51	6.75	ug/kg	97	NJ
	Unknown	16.53	6.18	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n347.d
Lab Smp Id: 241540017 Client Smp ID: RE03-09-13930
Inj Date : 26-NOV-2009 08:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540017|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	726140	50.0000	
* 76 Chlorobenzene-d5	117	17.157	17.162	(1.000)	603434	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.606	19.610	(1.000)	329467	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	557337	61.7061	61.7
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1306813	53.2098	53.2
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	538799	48.7061	48.7
16 Acetone	43	9.254	9.254	(0.676)	59974	14.2326	14.2

ION RATIO REPORT

VOA REPORT

Data file: 1n347.d
Report Date: 11/27/2009 05:04
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 08:03
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
16 Acetone			CAS#: 67-64-1			
43	59974	9.25	9.25	80-120	100	( )
58	16374	9.27	9.25	0- 59	27	( )
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	14568	13.68	13.44	80-120	100	(T)
64	2419	13.69	13.44	2- 62	17	(T)
47 Benzene			CAS#: 71-43-2			
78	8885	13.33	13.33	80-120	100	( )
77	2168	13.33	13.34	0- 53	24	( )
51	169317	13.34	13.34	4- 64	1906	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	13828	15.51	15.36	80-120	100	(T)
43	7132	15.52	15.36	218-278	52	(QT)
100	799790	15.52	15.36	1- 61	5784	(QT)
74 1,2-Dibromoethane			CAS#: 106-93-4			
107	16993	16.52	16.73	80-120	100	(T)
109	8506	16.53	16.73	63-123	50	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n347.d
Lab Smp Id: 241540017 Client Smp ID: RE03-09-13930
Inj Date : 26-NOV-2009 08:03
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540017|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 76 Chlorobenzene-d5	17.157	2100992	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
16.513	283717	6.75197709	6.8	97	NIST05.L	60023	76
Unknown				CAS #:			
16.531	259561	6.17710553	6.2	0		0	76

Data File: /chem/VOA1.i/112509v1/1n347.d
Date : 26-NOV-2009 08:03
Client ID: RE03-09-13930
Sample Info: |2415400171926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

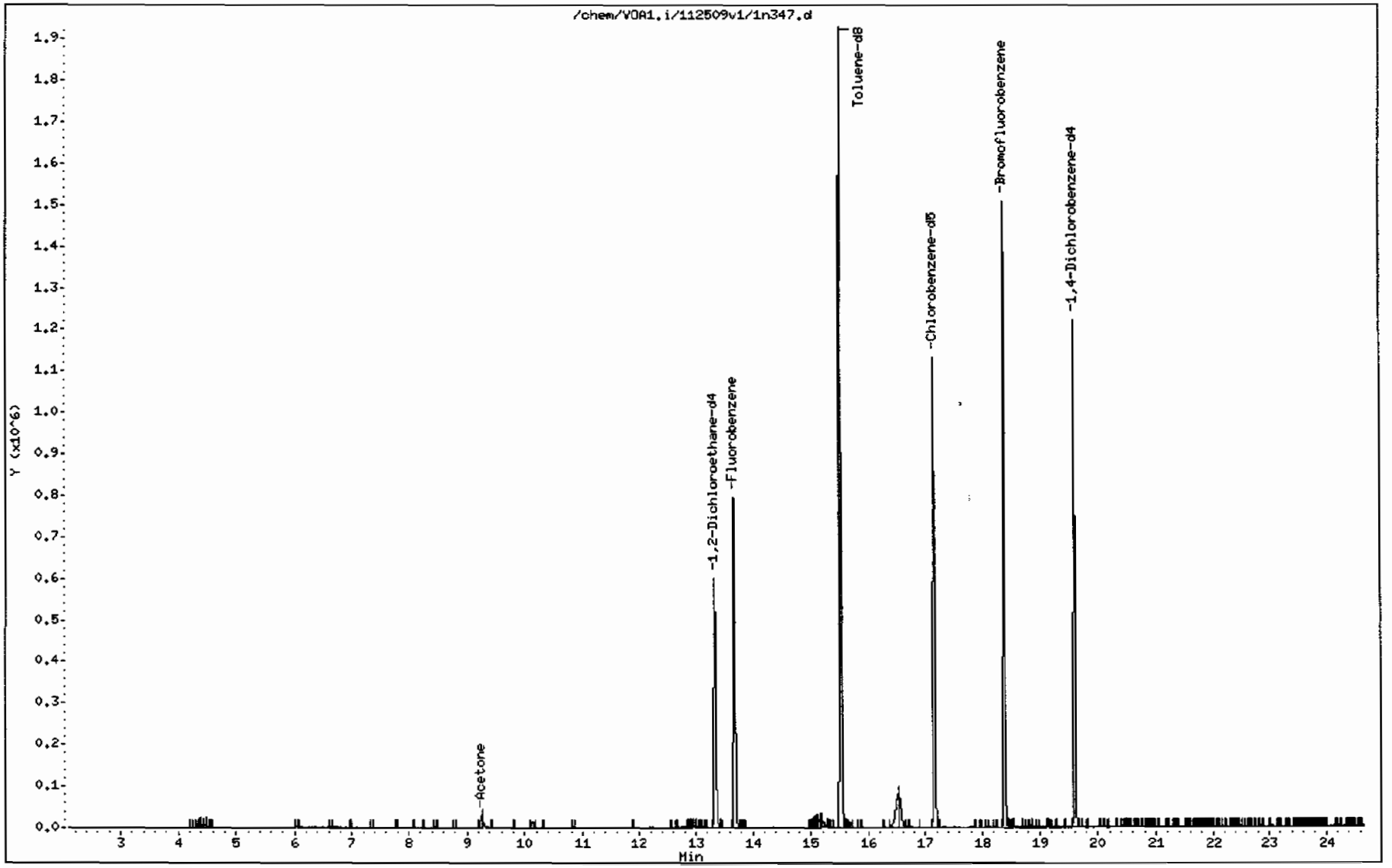

Data File: /chem/VOA1.i/112509v1/1n347.d

Date : 26-NOV-2009 08:03

Client ID: RE03-09-13930

Instrument: VOA1.i

Sample Info: |2415400171926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 14.2 ug/Kg

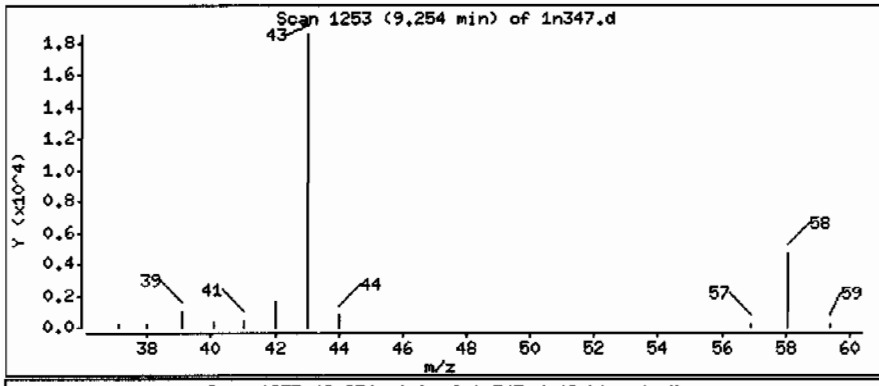

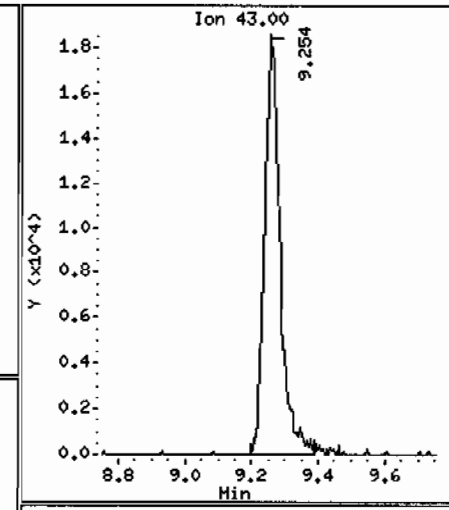

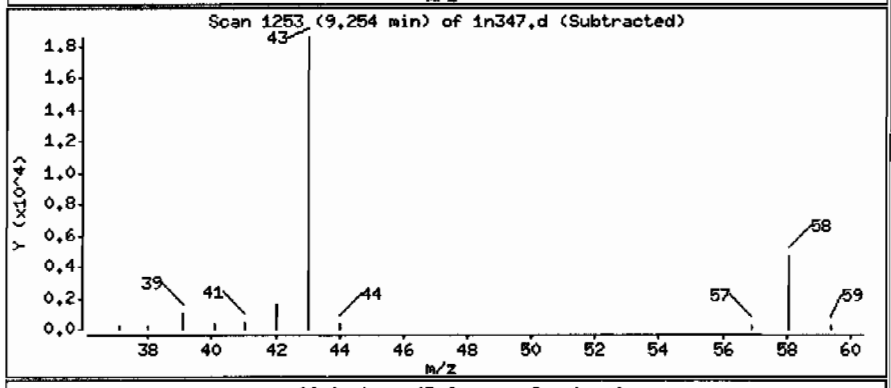

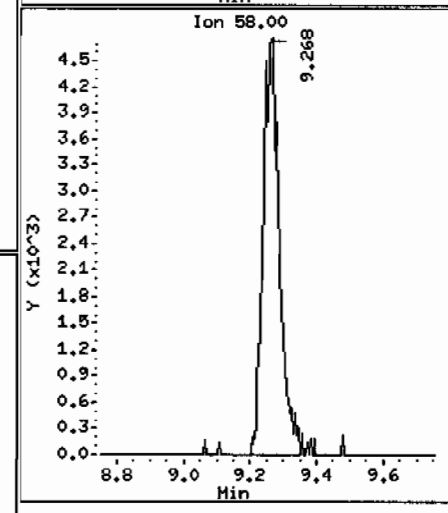

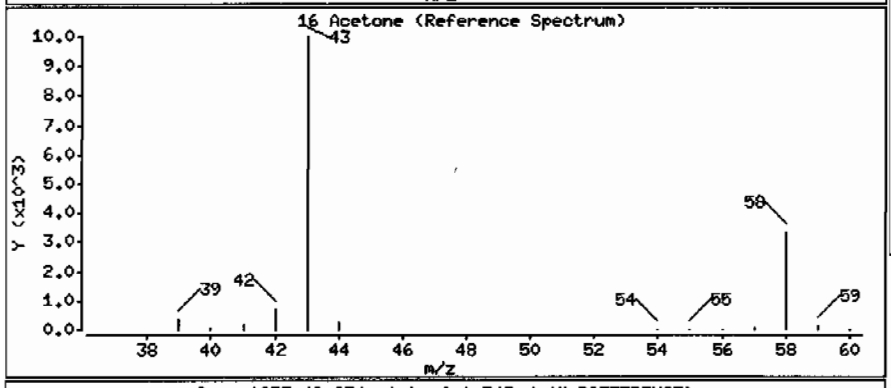

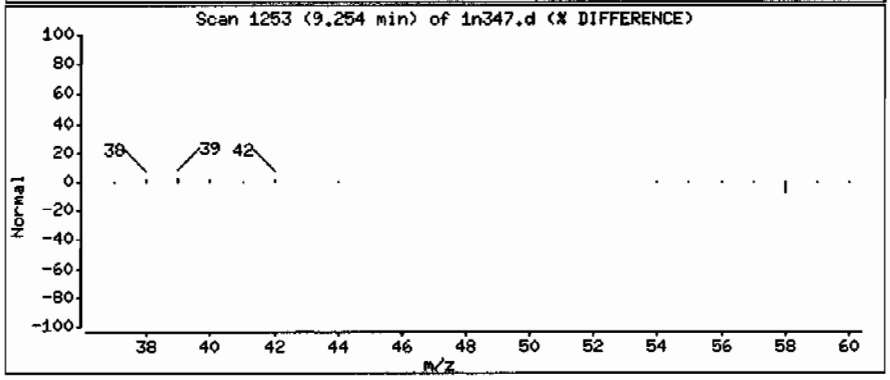

Data File: /chem/VOA1.i/112509v1/1n347.d

Date : 26-NOV-2009 08:03

Client ID: RE03-09-13930

Instrument: VOA1.i

Sample Info: |2415400171926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	97	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	96	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60068	83	C15H24	204

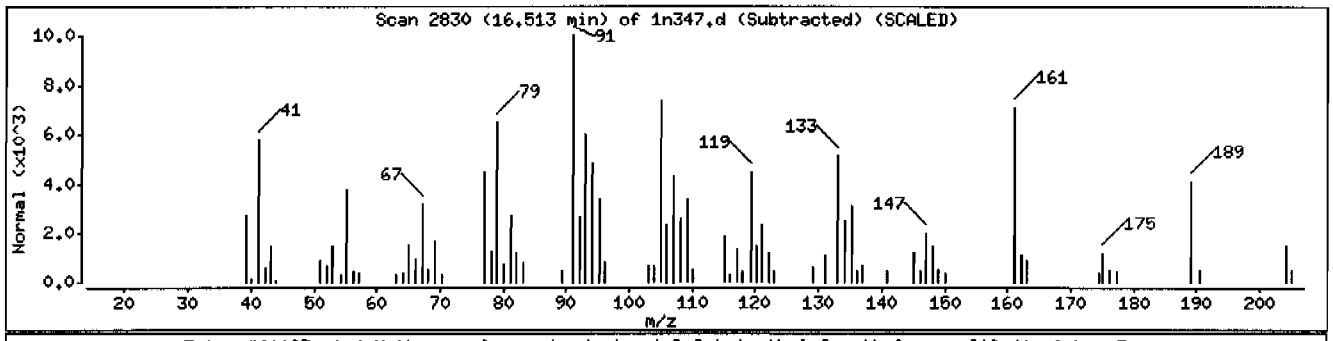

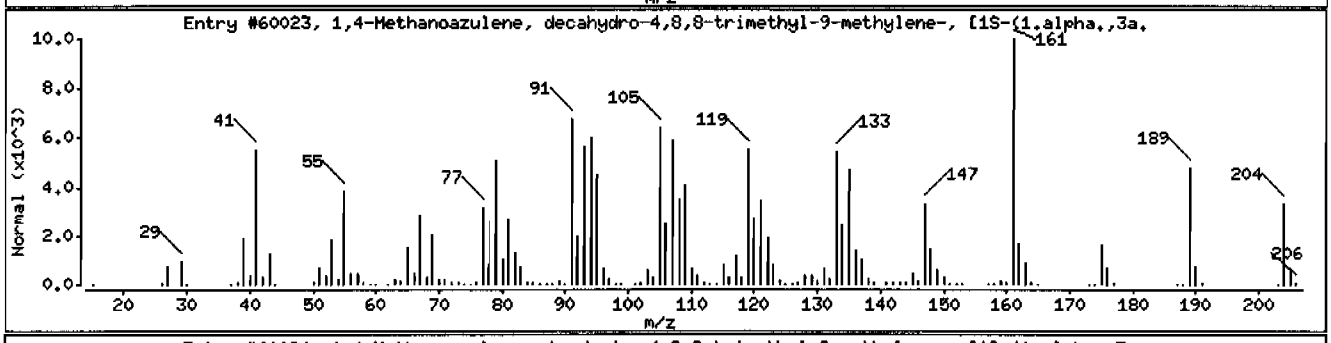

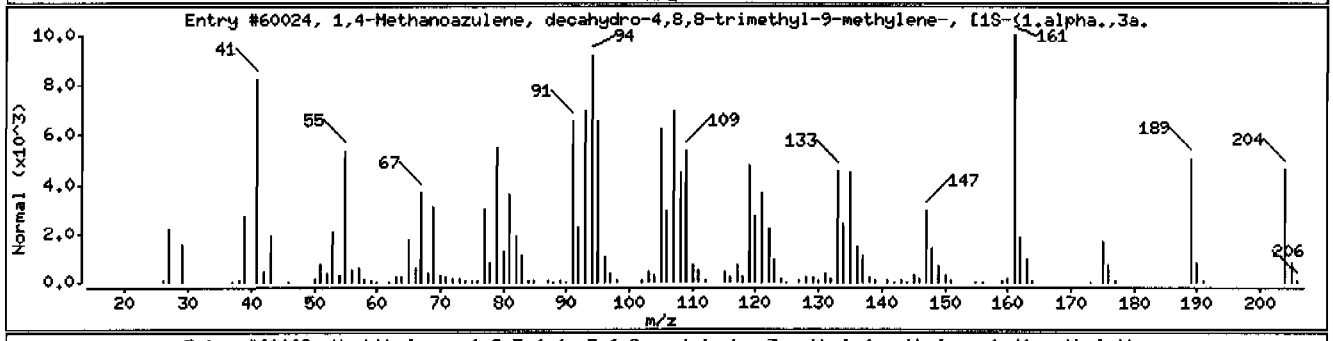

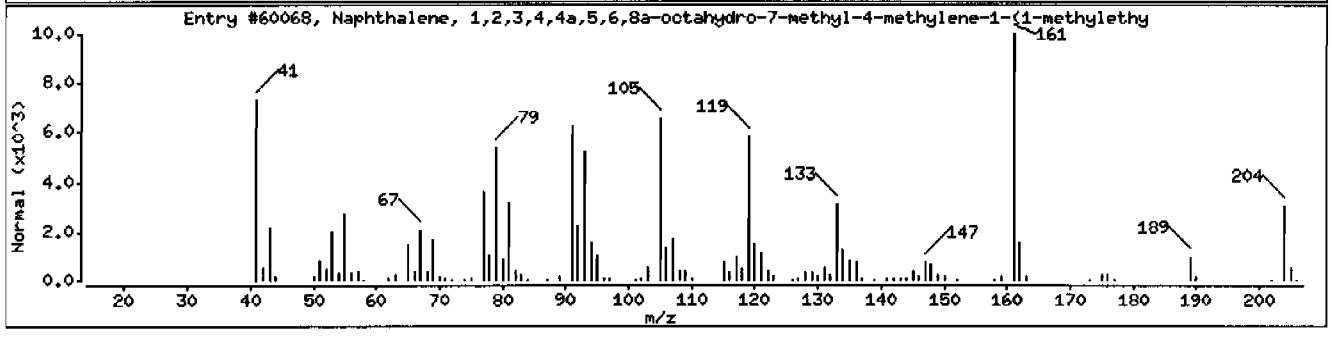

Data File: /chem/VOA1.i/112509v1/1n347.d

Date : 26-NOV-2009 08:03

Client ID: RE03-09-13930

Instrument: VOA1.i

Sample Info: |2415400171926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,4,6-Cycloheptatrien-1-one, 2-methoxy-	2161-40-2	NIST05.L	15809	27	C8H8O2	136
Vinylfuran	1487-18-9	NIST05.L	2534	25	C6H6O	94
2-Norbornaneacetic acid	1007-01-8	NIST05.L	26471	22	C9H14O2	154

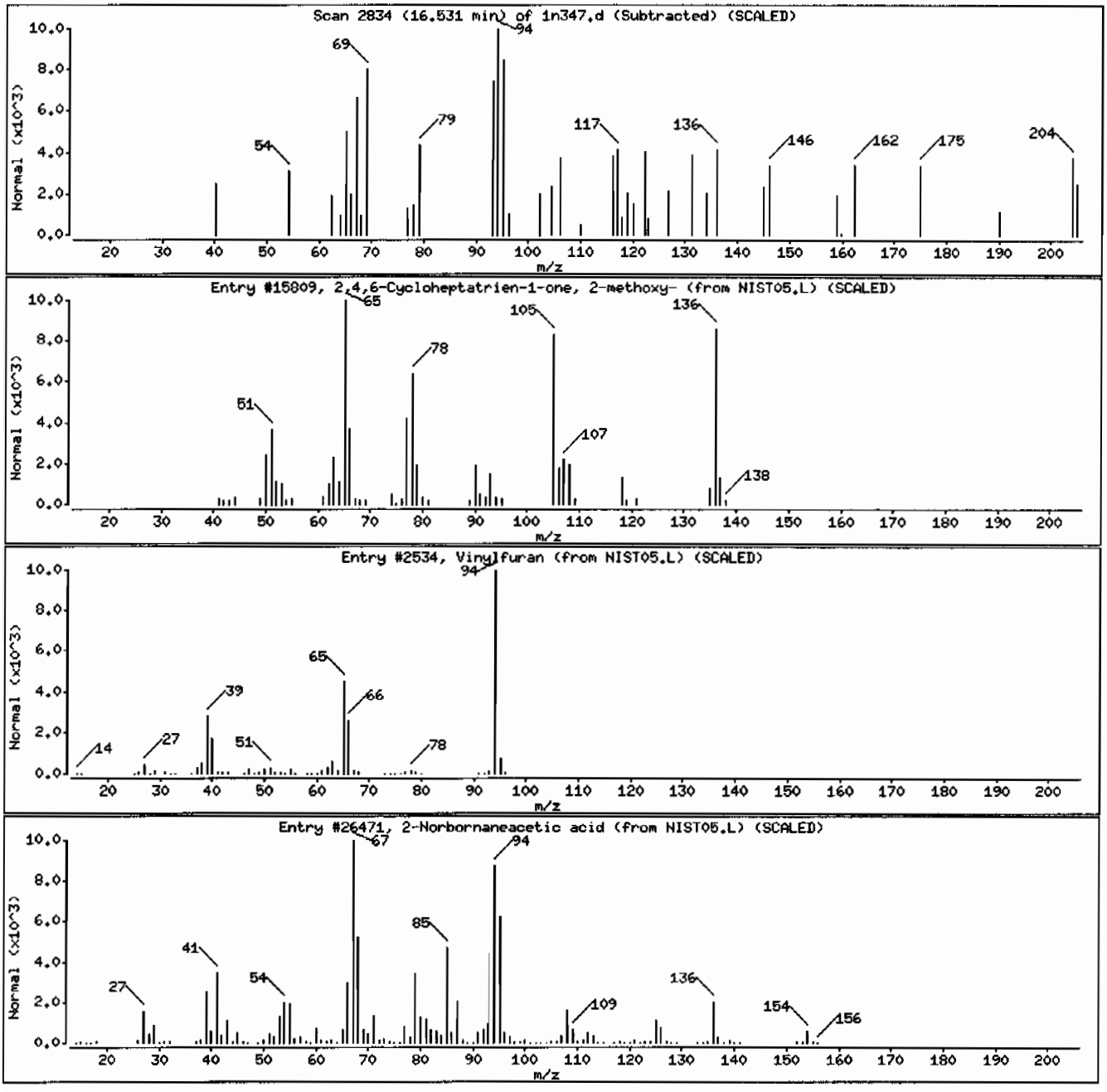

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540018**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13931**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 08:34**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:27**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n348.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	2.34	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540018**	**Date Received:**	**11/20/2009 08:50**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13931**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 08:34**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 14:27**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n348.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n348.d
Lab Smp Id: 241540018 Client Smp ID: RE03-09-13931
Inj Date : 26-NOV-2009 08:34
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540018|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	714676	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	593047	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	330321	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.336	13.337	(0.974)	544355	61.2356	61.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1313100	54.4022	54.4
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	548246	49.4320	49.4
16 Acetone	43	9.263	9.254	(0.677)	9708	2.34079	2.3(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 1n348.d
Report Date: 11/27/2009 05:04
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 08:34
Operator: RXM4 Instrument: VOA1.i
Sample Info: |241540001|926743|1|VOAF|1|
Miscellaneous Info: GEL 5G N/A
Comment:
Method used: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
16 Acetone			CAS#: 67-64-1			
43	9708	9.26	9.25	80-120	100	( )
58	1779	9.27	9.25	0- 59	18	( )
51 1,2-Dichloroethane			CAS#: 107-06-2			
62	13406	13.68	13.44	80-120	100	(T)
64	2442	13.68	13.44	2- 62	18	(T)
47 Benzene			CAS#: 71-43-2			
78	120604	13.33	13.33	80-120	100	( )
77	27257	13.33	13.34	0- 53	23	( )
51	187797	13.34	13.34	4- 64	156	(Q)
64 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	13840	15.52	15.36	80-120	100	(T)
43	7496	15.52	15.36	218-278	54	(QT)
100	812317	15.52	15.36	1- 61	5869	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n348.d
Lab Smp Id: 241540018 Client Smp ID: RE03-09-13931
Inj Date : 26-NOV-2009 08:34
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |241540018|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n348.d
Date : 26-NOV-2009 08:34
Client ID: RE03-09-13931
Sample Info: |2415400181926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

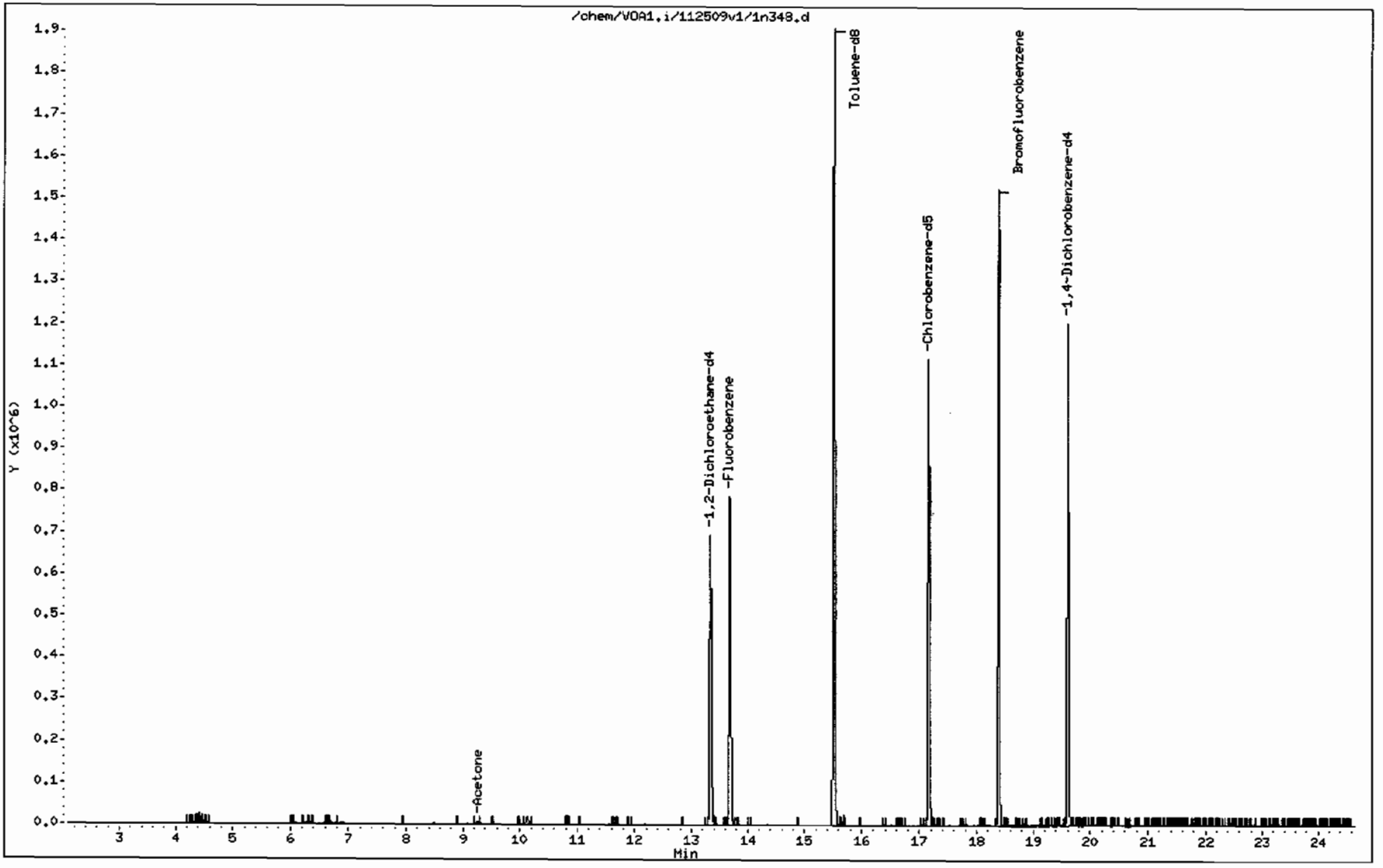

Data File: /chem/VOA1.i/112509v1/1n348.d

Date : 26-NOV-2009 08:34

Client ID: RE03-09-13931

Instrument: VOA1.i

Sample Info: |2415400181926743|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 2.3 ug/Kg

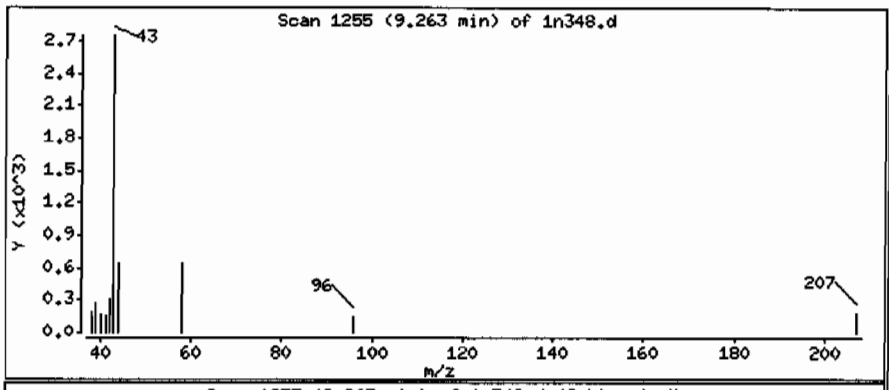

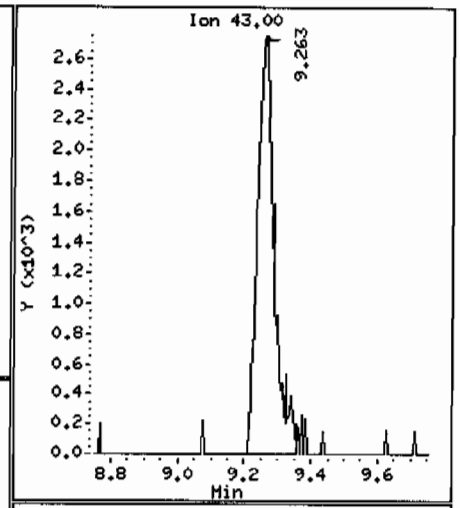

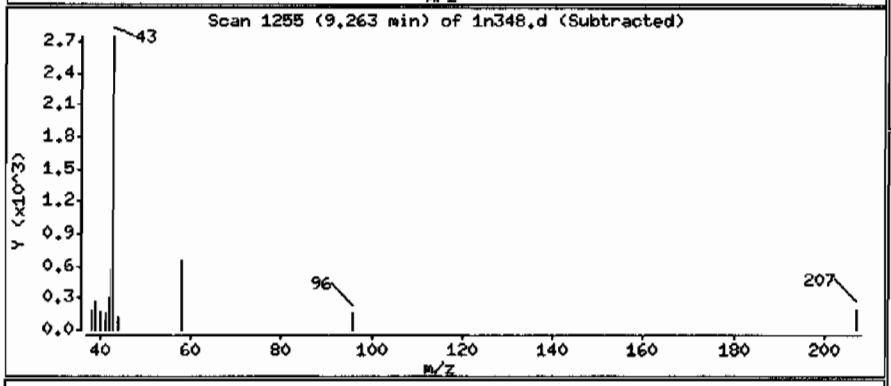

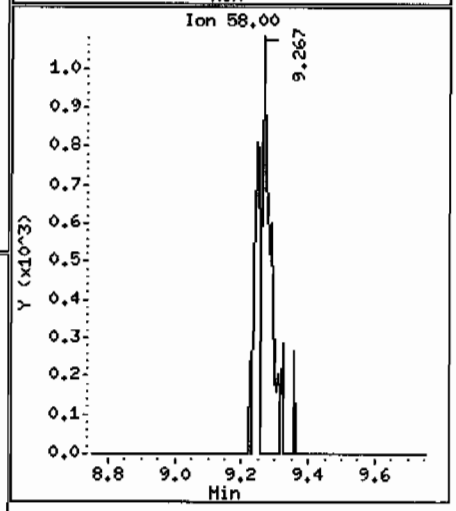

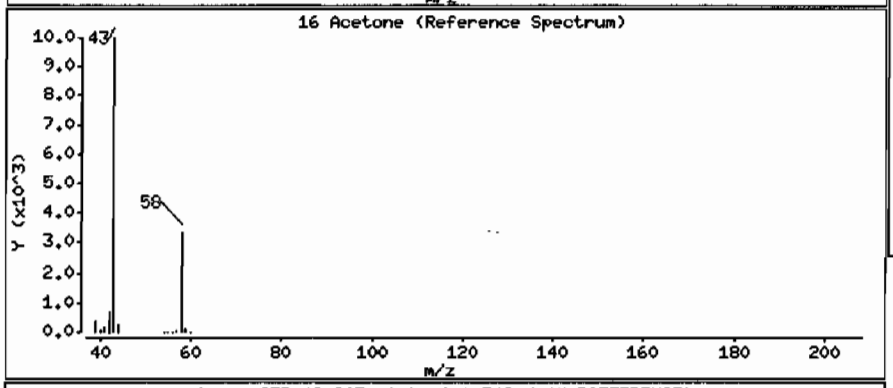

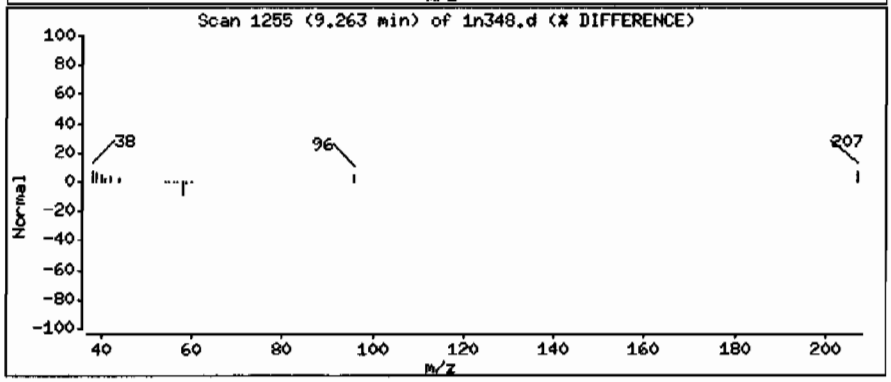

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 27-Nov-2009 09:28

Calibration History

Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Start Cal Date: 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 04:20	ICALsubS	/chem/VOA1.i/111309v1/11519.d
14-NOV-2009 00:18	CALsubL+	/chem/VOA1.i/111309v1/11511.d
Cal Level: 2 , Cal Amount: 2.00000		
14-NOV-2009 04:50	ICALsubS	/chem/VOA1.i/111309v1/11520.d
14-NOV-2009 00:48	CALsubL+	/chem/VOA1.i/111309v1/11512.d
Cal Level: 3 , Cal Amount: 5.00000		
14-NOV-2009 05:20	ICALsubS	/chem/VOA1.i/111309v1/11521.d
14-NOV-2009 01:19	CALsubL+	/chem/VOA1.i/111309v1/11513.d
Cal Level: 4 , Cal Amount: 10.00000		
14-NOV-2009 05:50	ICALsubS	/chem/VOA1.i/111309v1/11522.d
14-NOV-2009 01:49	CALsubL+	/chem/VOA1.i/111309v1/11514.d
Cal Level: 5 , Cal Amount: 20.00000		
14-NOV-2009 06:20	ICALsubS	/chem/VOA1.i/111309v1/11523.d
14-NOV-2009 02:19	CALsubL+	/chem/VOA1.i/111309v1/11515.d
Cal Level: 6 , Cal Amount: 50.00000		
14-NOV-2009 06:51	ICALsubS	/chem/VOA1.i/111309v1/11524.d
14-NOV-2009 02:49	CALsubL+	/chem/VOA1.i/111309v1/11516.d
Cal Level: 7 , Cal Amount: 100.00000		
14-NOV-2009 07:21	ICALsubS	/chem/VOA1.i/111309v1/11525.d
14-NOV-2009 03:19	CALsubL+	/chem/VOA1.i/111309v1/11517.d
Cal Level: 8 , Cal Amount: 200.00000		
13-NOV-2009 23:18	BENZENE+	/chem/VOA1.i/111309v1/11509.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

| Ccal Level: 6 , Ccal Amount: 50.0 |

27-NOV-2009 05:41	CALsubL+	/chem/VOA1.i/112709v1/1n502.d
Ccal Level: 6 , Ccal Amount: 50.0		
27-NOV-2009 06:40	CALsubS+SS	/chem/VOA1.i/112709v1/1n503.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Cal Date : 27-Nov-2009 09:28 ron01469

Calibration File Names:
Level 1: /chem/VOA1.i/111309v1/11519.d
Level 2: /chem/VOA1.i/111309v1/11520.d
Level 3: /chem/VOA1.i/111309v1/11521.d
Level 4: /chem/VOA1.i/111309v1/11522.d
Level 5: /chem/VOA1.i/111309v1/11523.d
Level 6: /chem/VOA1.i/111309v1/11524.d
Level 7: /chem/VOA1.i/111309v1/11525.d
Level 8: /chem/VOA1.i/111309v1/11509.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.81227	0.73137	0.78894	0.72498	0.74753	0.76443					
	0.83207	+++++					AVRG		0.77166		5.29958
M 2 1,2-Dichloroethylene (total)	0.34833	0.34223	0.35784	0.33479	0.33448	0.33077					
	0.34829	+++++					AVRG		0.34239		2.83215
M 3 1,3-Dichloropropylene	0.70586	0.72835	0.78706	0.78242	0.78994	0.81396					
	0.86766	+++++					AVRG		0.78218		6.82978
4 Chlorotrifluoroethylene	0.13485	0.14655	0.15206	0.14935	0.17832	0.16711					
	0.16995	+++++					AVRG		0.15688		9.76231
5 Dichlorodifluoromethane	0.38136	0.29154	0.34309	0.34840	0.34284	0.32399					
	0.30590	+++++					AVRG		0.33388		8.90427

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INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Cal Date : 27-Nov-2009 09:28 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
6 Chloromethane	0.36352	0.41180	0.43566	0.42653	0.42921	0.41976					
	0.40514	+++++					AVRG		0.41309		5.86079
7 Vinyl chloride	0.37166	0.41882	0.39367	0.36887	0.36084	0.34024					
	0.32820	+++++					AVRG		0.36890		8.32266
8 2-Chloro-1,1,1-trifluoroethan	+++++	0.33998	0.31048	0.30901	0.32578	0.34040					
	0.34703	+++++					AVRG		0.32878		4.95745
9 Bromomethane	0.21690	0.22761	0.23531	0.22897	0.22468	0.21559					
	0.20365	+++++					AVRG		0.22182		4.75715
10 Chloroethane	0.19204	0.24536	0.23794	0.23300	0.23259	0.23061					
	0.22732	+++++					AVRG		0.22841		7.46771
11 Trichlorofluoromethane	0.43608	0.52008	0.53827	0.53954	0.53870	0.53853					
	0.52430	+++++					AVRG		0.51936		7.23277
12 Ethyl Ether	13883	16946	33985	58858	108474	271086					
	556612	+++++					WLINR	-0.01699	0.31004		0.99399
13 Acrolein	0.05333	0.04888	0.04523	0.05392	0.05442	+++++					
	+++++	+++++					AVRG		0.05116		7.77888
14 Trichlorotrifluoroethane	0.38443	0.29919	0.26333	0.27368	0.28733	0.26637					
	0.27318	+++++					AVRG		0.29250		14.49372

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Cal Date : 27-Nov-2009 09:28 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
15 1,1-Dichloroethylene	0.66544	0.72486	0.72849	0.75349	0.72602	0.70860					
	0.70169	+++++					AVRG		0.71551		3.85053
16 Acetone	0.27960	0.29041	0.29028	0.29519	0.28855	0.29877					
	0.28827	+++++					AVRG		0.29015		2.07413
17 Isopropyl Alcohol	+++++	0.01880	0.01931	0.02045	0.01791	0.02228					
	0.02251	+++++					AVRG		0.02021		9.32492
18 Iodomethane	0.47134	0.45473	0.46938	0.46784	0.46221	0.46114					
	0.45366	+++++					AVRG		0.46290		1.51011
19 Carbon disulfide	0.96269	0.92797	0.89305	0.94299	0.92514	0.93790					
	0.86070	+++++					AVRG		0.92149		3.70371
20 Allyl chloride	0.09501	0.09361	0.09290	0.10507	0.12042	0.13013					
	+++++	+++++					AVRG		0.10619		14.81176
21 Methyl acetate	0.26593	0.25494	0.25595	0.25694	0.24207	0.22786					
	0.23511	+++++					AVRG		0.24840		5.49716
22 Acetonitrile	0.03907	0.03505	0.03613	0.03588	0.03452	0.03371					
	0.03550	+++++					AVRG		0.03569		4.76986
23 Methylene chloride	+++++	24051	41818	70969	131447	316200					
	681164	+++++					LINR	-0.03083	0.35083		0.99980

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Cal Date : 27-Nov-2009 09:28 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
24 tert-Butyl Alcohol	0.03736	0.03924	0.03623	0.04125	0.03045	0.04033					
	0.04086	+++++					AVRG		0.03796		9.99389
25 tert-Butyl methyl ether	1.02944	1.16134	1.14779	1.21755	1.11739	1.12980					
	1.16499	+++++					AVRG		1.13833		5.06877
26 trans-1,2-Dichloroethylene	0.34072	0.33605	0.34935	0.32977	0.32190	0.31967					
	0.32891	+++++					AVRG		0.33234		3.15938
27 Acrylonitrile	0.11445	0.10516	0.09582	0.09726	0.11027	0.10992					
	0.11442	+++++					AVRG		0.10676		7.18031
28 Isopropyl ether	+++++	1.14017	1.11343	1.15572	1.20439	1.22887					
	1.32967	+++++					AVRG		1.19537		6.54156
29 Vinyl acetate	0.47200	0.53409	0.59574	0.55445	0.52377	0.60780					
	0.57002	+++++					AVRG		0.55113		8.40353
30 1,1-Dichloroethane	0.71917	0.72889	0.80378	0.74289	0.72120	0.71174					
	0.74337	+++++					AVRG		0.73872		4.20348
31 2-Chloro-1,3-butadiene	0.65721	0.59215	0.56354	0.55911	0.62777	0.61361					
	0.65818	+++++					AVRG		0.61022		6.67178
32 Ethyl tert-butyl ether	+++++	1.12815	1.09366	1.08936	1.06318	1.18087					
	1.29073	+++++					AVRG		1.14099		7.34719

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Cal Date : 27-Nov-2009 09:28 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
33 2,2-Dichloropropane	0.48989	0.52491	0.58120	0.54053	0.55119	0.53778					
	0.55150	+++++					AVRG		0.53957		5.18583
34 Ethyl acetate	0.33965	0.28932	0.26285	0.29260	0.27580	0.29649					
	0.28868	+++++					AVRG		0.29220		8.17282
35 2-Butanone	0.25793	0.27740	0.26965	0.27914	0.28942	0.30924					
	0.30740	+++++					AVRG		0.28431		6.68266
36 cis-1,2-Dichloroethylene	0.35593	0.34838	0.36631	0.33981	0.34705	0.34186					
	0.36768	+++++					AVRG		0.35243		3.18020
37 Propionitrile	0.04783	0.04230	0.03731	0.04306	0.04379	0.04424					
	0.04431	+++++					AVRG		0.04326		7.28248
38 Tetrahydrofuran	0.23152	0.20954	0.20440	0.19096	0.19197	0.21633					
	0.18821	+++++					AVRG		0.20471		7.72518
39 Bromochloromethane	0.13887	0.13222	0.13837	0.14209	0.13930	0.14049					
	0.14893	+++++					AVRG		0.14004		3.56145
40 Methacrylonitrile	0.24963	0.22678	0.21065	0.22890	0.23535	0.24087					
	0.23039	+++++					AVRG		0.23180		5.27167
41 Chloroform	0.74775	0.77887	0.82572	0.78772	0.78034	0.77383					
	0.81096	+++++					AVRG		0.78646		3.24006

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
42 Cyclohexane	0.66345	0.64389	0.63890	0.66407	0.64404	0.63011					
	0.64678	+++++					AVRG		0.64732		1.92383
43 1,1,1-Trichloroethane	0.54517	0.62302	0.63779	0.62522	0.62893	0.61320					
	0.63805	+++++					AVRG		0.61591		5.25541
44 Carbon tetrachloride	0.56294	0.58644	0.63641	0.63628	0.63185	0.62091					
	0.64429	+++++					AVRG		0.61702		4.94513
45 1,1-Dichloropropene	0.55100	0.55607	0.56975	0.55980	0.55465	0.55195					
	0.58405	+++++					AVRG		0.56104		2.12886
46 Isobutyl alcohol	0.01033	0.01111	0.01036	0.01037	0.00985	0.01223					
	0.01175	+++++					AVRG		0.01086		7.98726
47 Benzene	36755	49089	122794	236505	464924	1202457					
	2698240	23667					LINR	0.00708	1.40915		0.99937
49 Methyl tert-amyl ether	+++++	0.88273	0.85934	0.84815	0.87620	0.96177					
	1.02973	+++++					AVRG		0.90966		7.81866
50 Cyclohexene	0.53615	0.51960	0.53427	0.54352	0.53716	0.52183					
	0.54823	+++++					AVRG		0.53439		1.96596
51 1,2-Dichloroethane	0.63028	0.70033	0.72243	0.70806	0.70200	0.69617					
	0.69894	+++++					AVRG		0.69403		4.24176

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
53 n-Butyl alcohol	0.00840	0.00793	0.00871	0.00963	0.00810	0.00978					
	0.01083	+++++					AVRG		0.00905		11.70077
54 Trichloroethylene	0.38407	0.37942	0.39497	0.37726	0.38205	0.37012					
	0.39468	+++++					AVRG		0.38323		2.36496
55 Methylcyclohexane	0.61415	0.59438	0.58177	0.58292	0.58847	0.57365					
	0.60973	+++++					AVRG		0.59215		2.53002
56 Methyl methacrylate	0.21424	0.18730	0.18064	0.19254	0.19905	0.20650					
	0.20620	+++++					AVRG		0.19807		6.00920
57 1,2-Dichloropropane	0.39078	0.35768	0.35900	0.35500	0.35022	0.35218					
	0.37196	+++++					AVRG		0.36240		3.96416
58 1,4-Dioxane	0.00305	0.00245	0.00266	0.00286	0.00318	0.00288					
	0.00289	+++++					AVRG		0.00285		8.49652
59 Dibromomethane	0.20277	0.23410	0.23268	0.22085	0.21845	0.22248					
	0.23307	+++++					AVRG		0.22349		5.00706
60 Bromodichloromethane	0.51667	0.56051	0.62592	0.60782	0.59837	0.61544					
	0.63717	+++++					AVRG		0.59456		7.08633
61 2-Chloroethylvinyl ether	2224	2878	11313	21547	54379	210498					
	505362	+++++					LINR	0.39134	0.05430		0.99355

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Cal Date : 27-Nov-2009 09:28 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
62 2-Nitropropane	0.10211	0.09608	0.09548	0.10761	0.11835	0.11732					
	0.11890	+++++					AVRG		0.10798		9.61347
63 cis-1,3-Dichloropropylene	0.56705	0.57716	0.62105	0.61985	0.62451	0.64527					
	0.67992	+++++					AVRG		0.61926		6.21449
64 4-Methyl-2-pentanone	0.15705	0.17262	0.17271	0.18512	0.18978	0.21108					
	0.20813	+++++					AVRG		0.18521		10.62392
66 Toluene	1.14017	1.06414	1.10843	1.06181	1.07135	1.08649					
	1.15420	+++++					AVRG		1.09808		3.39614
67 Ethyl methacrylate	0.52322	0.48434	0.48427	0.53223	0.51154	0.52546					
	0.51582	+++++					AVRG		0.51098		3.79655
68 trans-1,3-Dichloropropylene	0.69838	0.72713	0.78298	0.78308	0.78831	0.81706					
	0.87099	+++++					AVRG		0.78113		7.23969
69 1,1,2-Trichloroethane	0.31590	0.30169	0.29945	0.29278	0.30402	0.30261					
	0.32301	+++++					AVRG		0.30563		3.37459
70 Tetrachloroethylene	0.34151	0.33330	0.33889	0.32547	0.32471	0.32346					
	0.34458	+++++					AVRG		0.33313		2.62174
71 2-Hexanone	0.42866	0.44990	0.45866	0.46921	0.50138	0.56178					
	0.55722	+++++					AVRG		0.48954		10.73922

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
72 1,3-Dichloropropane	0.67890	0.68207	0.69734	0.65590	0.66618	0.66440					
	0.71069	+++++					AVRG		0.67935		2.85695
73 Dibromochloromethane	0.38469	0.38394	0.44512	0.43782	0.44944	0.47113					
	0.49706	+++++					AVRG		0.43846		9.55461
74 1,2-Dibromoethane	0.34045	0.34527	0.36316	0.35106	0.36203	0.36864					
	0.38538	+++++					AVRG		0.35943		4.26461
75 1-Chlorohexane	+++++	0.39312	0.39282	0.32524	0.40104	0.42060					
	0.43305	+++++					AVRG		0.39431		9.49685
77 Chlorobenzene	1.21373	1.15844	1.14111	1.07587	1.08040	1.10429					
	1.17692	+++++					AVRG		1.13582		4.54042
78 Ethylbenzene	2.40687	2.33669	2.47268	2.23463	2.29813	2.32214					
	2.46303	+++++					AVRG		2.36203		3.74714
79 1,1,1,2-Tetrachloroethane	0.42049	0.43141	0.45326	0.42496	0.43613	0.44494					
	0.47082	+++++					AVRG		0.44029		3.98244
80 m,p-Xylenes	0.80780	0.74989	0.79953	0.72779	0.75646	0.76931					
	0.84008	+++++					AVRG		0.77870		4.98818
81 o-Xylene	0.82120	0.69429	0.76774	0.71936	0.72965	0.75467					
	0.81606	+++++					AVRG		0.75757		6.33656

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
82 Styrene	1.30914	1.18192	1.31601	1.23212	1.27501	1.34034					
	1.43319	+++++					AVRG		1.29825		6.19894
83 Bromoform	0.42221	0.45244	0.46276	0.49988	0.51775	0.53547					
	0.59142	+++++					AVRG		0.49742		11.48564
84 Isopropylbenzene	3.92962	3.81106	4.36021	3.96245	4.03248	4.02489					
	4.35218	+++++					AVRG		4.06756		5.17225
85 cis-1,4-Dichloro-2-butene	0.30225	0.29462	0.29877	0.29084	0.32781	0.32850					
	0.31209	+++++					AVRG		0.30784		4.99910
86 Cyclohexanone	12846	23538	58910	150579	381845	+++++					
	+++++	+++++					LINR	0.49988	0.04909		0.99135
88 1,1,2,2-Tetrachloroethane	0.75610	0.74369	0.81649	0.79419	0.78783	0.79158					
	0.86202	+++++					AVRG		0.79313		4.92083
89 n-Propylbenzene	4.79404	4.78851	5.23968	4.82134	4.89570	4.92964					
	5.21295	+++++					AVRG		4.95455		3.89310
90 trans-1,4-Dichloro-2-butene	0.29812	0.31352	0.28782	0.26998	0.31695	0.31835					
	0.29727	+++++					AVRG		0.30029		5.87400
91 Bromobenzene	0.85156	0.84147	0.85882	0.81020	0.81428	0.82700					
	0.88455	+++++					AVRG		0.84112		3.13963

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
92 1,2,3-Trichloropropane	0.28022	0.26897	0.25372	0.25204	0.25423	0.25360					
	0.26290	+++++					AVRG		0.26081		4.05216
93 1,3,5-Trimethylbenzene	3.43446	3.49218	3.68233	3.44662	3.56449	3.59826					
	3.86366	+++++					AVRG		3.58314		4.23441
94 2-Chlorotoluene	3.47821	3.57761	3.79930	3.46640	3.52829	3.52154					
	3.75641	+++++					AVRG		3.58968		3.73610
95 4-Chlorotoluene	3.35203	3.17426	3.34752	3.10435	3.16879	3.17490					
	3.33681	+++++					AVRG		3.23695		3.22667
96 tert-Butylbenzene	2.87089	2.74977	2.84522	2.66297	2.72776	2.70387					
	2.96377	+++++					AVRG		2.78918		3.84011
97 1,2,4-Trimethylbenzene	3.70191	3.60410	3.79540	3.52090	3.56225	3.61987					
	3.87066	+++++					AVRG		3.66787		3.47855
98 Pentachloroethane	0.32060	0.31703	0.32398	0.24876	0.30297	0.37777					
	0.29193	+++++					AVRG		0.31186		12.45420
99 sec-Butylbenzene	4.44800	4.34644	4.60966	4.23567	4.42485	4.37976					
	4.71803	+++++					AVRG		4.45177		3.66292
100 4-Isopropyltoluene	3.36328	3.22054	3.51684	3.17589	3.32966	3.36325					
	3.58839	+++++					AVRG		3.36541		4.38795

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Cal Date : 27-Nov-2009 09:28 ron01469

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
101 1,3-Dichlorobenzene	1.67374	1.55428	1.66831	1.53164	1.55944	1.58328					
	1.67251	+++++					AVRG		1.60617		3.91972
103 1,4-Dichlorobenzene	1.76616	1.66887	1.68200	1.51979	1.57239	1.60865					
	1.70636	+++++					AVRG		1.64632		5.12085
104 Benzyl chloride	1.62969	1.55776	1.60390	1.34298	1.74375	1.69429					
	1.59116	+++++					AVRG		1.59479		8.02116
105 n-Butylbenzene	3.64538	3.69207	3.98159	3.55254	3.74217	3.76878					
	3.99375	+++++					AVRG		3.76804		4.39399
106 1,2-Dichlorobenzene	1.66043	1.49940	1.55636	1.46965	1.48387	1.49852					
	1.59506	+++++					AVRG		1.53761		4.53952
107 bis(2-Chloroisopropyl)ether	0.37106	0.36662	0.32099	0.32780	0.38946	0.39192					
	0.35359	+++++					AVRG		0.36021		7.73065
108 1,2-Dibromo-3-chloropropane	0.14172	0.13191	0.14045	0.15188	0.15917	0.15194					
	0.18132	+++++					AVRG		0.15120		10.62760
109 1,2,4-Trichlorobenzene	1.16045	1.14150	1.16560	1.09295	1.12242	1.11980					
	1.19388	+++++					AVRG		1.14237		2.96216
110 Hexachlorobutadiene	0.84192	0.81403	0.87311	0.75366	0.80851	0.77001					
	0.79946	+++++					AVRG		0.80867		5.02102

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Cal Date : 27-Nov-2009 09:28 ron01469

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
111 Naphthalene	2.12943	2.03059	1.99480	2.09592	2.16328	2.08234					
	2.33666	+++++					AVRG		2.11900		5.26088
112 1,2,3-Trichlorobenzene	0.93318	0.98133	0.98253	0.97572	0.96237	0.91436					
	0.97897	+++++					AVRG		0.96121		2.80673
$ 48 1,2-Dichloroethane-d4	0.52359	0.62803	0.63025	0.66045	0.64311	0.66027					
	0.60778	+++++					AVRG		0.62193		7.59277
$ 65 Toluene-d8	1.93610	2.03435	2.05225	2.06640	2.00752	2.08350					
	2.06482	+++++					AVRG		2.03499		2.46206
$ 87 Bromofluorobenzene	1.60564	1.67611	1.67667	1.73493	1.66503	1.69222					
	1.70106	+++++					AVRG		1.67881		2.35520

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 13-NOV-2009 23:18
End Cal Date : 14-NOV-2009 07:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Cal Date : 27-Nov-2009 09:28 ron01469

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Report Date: 15-Dec-2009 10:38

Calibration History

Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Start Cal Date: 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
19-NOV-2009 15:24	ICALsubS	/chem/VOA9.i/111909v9/91414.d
19-NOV-2009 11:42	ICALsubL+	/chem/VOA9.i/111909v9/91406.d
Cal Level: 2 , Cal Amount: 2.00000		
19-NOV-2009 15:52	ICALsubS	/chem/VOA9.i/111909v9/91415.d
19-NOV-2009 12:10	ICALsubL+	/chem/VOA9.i/111909v9/91407.d
Cal Level: 3 , Cal Amount: 5.00000		
19-NOV-2009 16:20	ICALsubS	/chem/VOA9.i/111909v9/91416.d
19-NOV-2009 12:37	ICALsubL+	/chem/VOA9.i/111909v9/91408.d
Cal Level: 4 , Cal Amount: 10.00000		
19-NOV-2009 16:48	ICALsubS	/chem/VOA9.i/111909v9/91417.d
19-NOV-2009 13:05	ICALsubL+	/chem/VOA9.i/111909v9/91409.d
Cal Level: 5 , Cal Amount: 20.00000		
19-NOV-2009 17:16	ICALsubS	/chem/VOA9.i/111909v9/91418.d
19-NOV-2009 13:33	ICALsubL+	/chem/VOA9.i/111909v9/91410.d
Cal Level: 6 , Cal Amount: 50.00000		
19-NOV-2009 17:43	ICALsubS	/chem/VOA9.i/111909v9/91419.d
19-NOV-2009 14:01	ICALsubL+	/chem/VOA9.i/111909v9/91411.d
Cal Level: 7 , Cal Amount: 100.00000		
19-NOV-2009 18:11	ICALsubS	/chem/VOA9.i/111909v9/91420.d
19-NOV-2009 14:29	ICALsubL+	/chem/VOA9.i/111909v9/91412.d
Cal Level: 8 , Cal Amount: 200.00000		
19-NOV-2009 11:14	BENZENE+	/chem/VOA9.i/111909v9/91405.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Calibration File Names:
Level 1: /chem/VOA9.i/111909v9/91414.d
Level 2: /chem/VOA9.i/111909v9/91415.d
Level 3: /chem/VOA9.i/111909v9/91416.d
Level 4: /chem/VOA9.i/111909v9/91417.d
Level 5: /chem/VOA9.i/111909v9/91418.d
Level 6: /chem/VOA9.i/111909v9/91419.d
Level 7: /chem/VOA9.i/111909v9/91420.d
Level 8: /chem/VOA9.i/111909v9/91405.d

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M 27 Xylenes (total)	0.56217	0.54648	0.58510	0.56071	0.56616	0.52039					
	0.48225	++++++					AVRG		0.54618		6.31269
M 42 1,2-Dichloroethylene (total)	0.21605	0.20851	0.22498	0.21776	0.22215	0.20735					
	0.19885	++++++					AVRG		0.21367		4.30885
M 45 1,3-Dichloropropylene	0.34717	0.33308	0.37069	0.35489	0.35898	0.34424					
	0.32409	++++++					AVRG		0.34759		4.53538
146 Chlorotrifluoroethylene	++++++	0.10806	0.10839	0.10790	0.10526	0.10176					
	0.10134	++++++					AVRG		0.10545		3.05964
1 Dichlorodifluoromethane	0.16957	0.13678	0.16210	0.14992	0.15977	0.14120					
	0.13817	++++++					AVRG		0.15107		8.58297

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
2 Chloromethane	0.30332	0.27312	0.29398	0.27619	0.28692	0.26769					
	0.25470	+++++					AVRG		0.27941		5.91473
3 Vinyl chloride	0.24153	0.20962	0.23201	0.22408	0.23444	0.22506					
	0.22187	+++++					AVRG		0.22694		4.52242
147 2-Chloro-1,1,1-trifluoroethan	+++++	0.20008	0.18707	0.18685	0.15552	0.17837					
	0.16783	+++++					AVRG		0.17929		8.80795
4 Bromomethane	0.14163	0.13722	0.15792	0.15565	0.16430	0.15563					
	0.15521	+++++					AVRG		0.15251		6.26286
5 Chloroethane	0.15133	0.15557	0.16488	0.16094	0.16543	0.15881					
	0.15790	+++++					AVRG		0.15927		3.15053
6 Trichlorofluoromethane	0.24038	0.23410	0.26332	0.25956	0.26983	0.25504					
	0.25007	+++++					AVRG		0.25319		4.99948
7 Ethyl Ether	0.21430	0.20170	0.22361	0.21948	0.21887	0.21621					
	0.21048	+++++					AVRG		0.21495		3.33554
8 Acrolein	0.05099	0.05108	0.04661	0.04706	0.04044	0.04768					
	0.04061	+++++					AVRG		0.04635		9.40734
9 Trichlorotrifluoroethane	0.08102	0.07756	0.07285	0.07285	0.06076	0.06965					
	0.05946	+++++					AVRG		0.07059		11.40246

GEL Laboratories LLC

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Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
10 Acetone	0.19153	0.15900	0.16290	0.16771	0.14509	0.16911					
	0.13458	+++++					AVRG		0.16142		11.31213
11 1,1-Dichloroethylene	0.37045	0.35013	0.39149	0.37860	0.38335	0.35698					
	0.34302	+++++					AVRG		0.36772		4.92794
12 Isopropyl Alcohol	0.01925	0.02093	0.01865	0.02030	0.01702	0.01797					
	0.01581	+++++					AVRG		0.01856		9.68761
13 Iodomethane	0.28793	0.27749	0.30581	0.29345	0.29134	0.26999					
	0.24817	+++++					AVRG		0.28203		6.67953
14 Acetonitrile	0.03709	0.03517	0.03573	0.03582	0.03301	0.04140					
	0.02904	+++++					AVRG		0.03532		10.67706
15 Methyl acetate	0.23081	0.19973	0.20975	0.21150	0.18991	0.18916					
	0.16369	+++++					AVRG		0.19922		10.66661
16 Carbon disulfide	0.65226	0.62178	0.67276	0.65053	0.64338	0.57985					
	0.52087	+++++					AVRG		0.62020		8.51770
17 Allyl chloride	0.12994	0.12814	0.11694	0.11598	0.09629	0.11174					
	0.09652	+++++					AVRG		0.11365		11.85950
18 tert-Butyl Alcohol	0.03191	0.03304	0.03014	0.03202	0.02691	0.02784					
	0.02375	+++++					AVRG		0.02938		11.42019

GEL Laboratories LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
19 Methylene chloride	+++++	0.31406	0.28582	0.26118	0.25201	0.23685					
	0.22570	+++++					AVRG		0.26260		12.42948
20 Acrylonitrile	0.09763	0.10408	0.09792	0.10441	0.08699	0.10195					
	0.08525	+++++					AVRG		0.09689		8.09235
21 tert-Butyl methyl ether	0.68066	0.70304	0.68794	0.69523	0.67283	0.64601					
	0.59981	+++++					AVRG		0.66936		5.34208
22 trans-1,2-Dichloroethylene	0.20495	0.19346	0.21123	0.20550	0.21149	0.19676					
	0.18870	+++++					AVRG		0.20173		4.40012
23 Vinyl acetate	0.46931	0.47454	0.52770	0.49652	0.47511	0.46433					
	0.37492	+++++					AVRG		0.46892		9.98092
24 Isopropyl ether	+++++	0.97546	0.93716	0.96027	0.82448	0.88435					
	0.83358	+++++					AVRG		0.90255		7.18543
25 1,1-Dichloroethane	0.43751	0.41577	0.45062	0.44344	0.44579	0.41551					
	0.39740	+++++					AVRG		0.42943		4.64232
26 2-Chloro-1,3-butadiene	0.41779	0.40139	0.38559	0.39261	0.33373	0.39415					
	0.34661	+++++					AVRG		0.38170		7.94063
28 Ethyl tert-butyl ether	+++++	0.88951	0.87579	0.88574	0.76449	0.82510					
	0.77027	+++++					AVRG		0.83515		6.87221

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
29 2-Butanone	0.20966	0.17238	0.18783	0.18428	0.17059	0.18945					
	0.15739	+++++					AVRG		0.18165		9.23117
30 Ethyl acetate	0.27223	0.28406	0.25790	0.26164	0.22112	0.24260					
	0.19005	+++++					AVRG		0.24709		13.08800
31 cis-1,2-Dichloroethylene	0.22715	0.22356	0.23874	0.23003	0.23282	0.21794					
	0.20900	+++++					AVRG		0.22561		4.37784
32 Propionitrile	0.03921	0.04074	0.03817	0.03862	0.03312	0.03900					
	0.03280	+++++					AVRG		0.03738		8.35761
33 2,2-Dichloropropane	0.31470	0.30073	0.31131	0.30227	0.30640	0.28195					
	0.26844	+++++					AVRG		0.29797		5.62250
34 Methacrylonitrile	0.16499	0.17205	0.16052	0.16438	0.13997	0.15410					
	0.12370	+++++					AVRG		0.15425		10.94907
35 Bromochloromethane	0.09774	0.09313	0.09955	0.10358	0.10099	0.09925					
	0.09346	+++++					AVRG		0.09824		3.89858
36 Chloroform	0.39392	0.36905	0.40197	0.38960	0.39053	0.36380					
	0.34047	+++++					AVRG		0.37848		5.71618
37 Tetrahydrofuran	0.26231	0.27228	0.24057	0.24491	0.20787	0.24479					
	0.19463	+++++					AVRG		0.23819		11.69268

GEL Laboratories LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
39 1,1,1-Trichloroethane	0.28295	0.26924	0.29323	0.29446	0.30159	0.28061					
	0.26827	+++++					AVRG		0.28434		4.49721
40 Isobutyl alcohol	0.01047	0.01047	0.01001	0.01064	0.00911	0.00952					
	0.00771	+++++					AVRG		0.00970		10.70633
41 Cyclohexane	0.29819	0.29938	0.31780	0.31235	0.32362	0.29971					
	0.28602	+++++					AVRG		0.30530		4.29167
43 1,1-Dichloropropene	0.26004	0.26809	0.29177	0.28185	0.28974	0.26580					
	0.25068	+++++					AVRG		0.27257		5.70659
44 Carbon tetrachloride	0.24691	0.22945	0.24801	0.24518	0.25529	0.23711					
	0.22795	+++++					AVRG		0.24142		4.22299
47 1,2-Dichloroethane	0.34081	0.32169	0.34754	0.33843	0.33480	0.31641					
	0.29440	+++++					AVRG		0.32773		5.57606
48 Benzene	0.86646	0.81725	0.89013	0.84591	0.86378	0.79351					
	0.74178	0.92787					AVRG		0.84334		6.90984
49 Methyl tert-amyl ether	+++++	0.69224	0.68341	0.69687	0.59861	0.63868					
	0.59189	+++++					AVRG		0.65028		7.29229
50 Cyclohexene	0.45044	0.43642	0.47011	0.45324	0.47222	0.42465					
	0.40706	+++++					AVRG		0.44488		5.34744

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Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
52 n-Butyl alcohol	0.00609	0.00570	0.00591	0.00615	0.00561	0.00568					
	0.00487	0.00601					AVRG		0.00575		7.09039
53 Trichloroethylene	0.19761	0.19795	0.21654	0.20718	0.21493	0.19889					
	0.18941	+++++					AVRG		0.20322		4.91702
54 Methyl methacrylate	0.16109	0.16785	0.15553	0.15650	0.13210	0.14558					
	0.11574	+++++					AVRG		0.14777		12.33528
55 1,2-Dichloropropane	0.24533	0.23619	0.26473	0.25417	0.25049	0.23688					
	0.22038	+++++					AVRG		0.24402		5.90650
56 Methylcyclohexane	0.38056	0.35622	0.38635	0.37956	0.38832	0.35095					
	0.33496	+++++					AVRG		0.36813		5.61341
57 1,4-Dioxane	6276	10859	23271	46100	84326	215148					
	+++++	+++++					LINR	-0.14408	0.00227		0.99750
58 Dibromomethane	0.13497	0.11736	0.13229	0.12686	0.12841	0.12783					
	0.12083	+++++					AVRG		0.12694		4.82536
59 Bromodichloromethane	0.29695	0.28367	0.30945	0.30345	0.30609	0.29379					
	0.27807	+++++					AVRG		0.29592		3.94479
60 2-Nitropropane	0.09201	0.08722	0.08140	0.08575	0.07466	0.08589					
	0.07096	+++++					AVRG		0.08256		8.99228

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
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Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
61 2-Chloroethylvinyl ether	0.15106	0.13615	0.15230	0.14740	0.14295	0.13802					
	0.12225	+++++					AVRG		0.14145		7.39363
62 cis-1,3-Dichloropropylene	0.36037	0.34234	0.38171	0.37343	0.37505	0.35563					
	0.33592	+++++					AVRG		0.36063		4.78412
63 4-Methyl-2-pentanone	0.17289	0.15764	0.16743	0.16622	0.15448	0.16917					
	0.14632	+++++					AVRG		0.16202		5.84779
65 Toluene	0.77581	0.74051	0.78155	0.74864	0.76574	0.71342					
	0.68696	+++++					AVRG		0.74466		4.62404
66 Ethyl methacrylate	0.44281	0.47041	0.43764	0.43799	0.35898	0.38414					
	+++++	+++++					AVRG		0.42200		9.87464
67 trans-1,3-Dichloropropylene	0.49174	0.47330	0.52354	0.49362	0.49892	0.49047					
	0.46262	+++++					AVRG		0.49060		3.94454
68 1,1,2-Trichloroethane	0.25277	0.23039	0.24872	0.24340	0.23986	0.23588					
	0.22097	+++++					AVRG		0.23886		4.56368
69 2-Hexanone	0.45819	0.41620	0.44942	0.43358	0.40551	0.42163					
	0.34084	+++++					AVRG		0.41791		9.25312
70 1,3-Dichloropropane	0.51605	0.44072	0.49838	0.48402	0.47154	0.45251					
	0.41061	+++++					AVRG		0.46769		7.69819

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
71 Tetrachloroethylene	0.21066	0.18962	0.21343	0.20419	0.20240	0.19070					
	0.18143	+++++					AVRG		0.19892		5.97661
72 Dibromochloromethane	0.30154	0.27022	0.29537	0.29767	0.29737	0.30207					
	0.28960	+++++					AVRG		0.29341		3.76179
73 1,2-Dibromoethane	0.26578	0.26730	0.29324	0.28426	0.28317	0.28547					
	0.26948	+++++					AVRG		0.27839		3.85018
74 1-Chlorohexane	+++++	0.27393	0.24606	0.25954	0.22055	0.23179					
	0.22686	+++++					AVRG		0.24312		8.48860
76 Chlorobenzene	0.76631	0.69415	0.77612	0.75998	0.75864	0.71365					
	0.66643	+++++					AVRG		0.73361		5.74761
77 1,1,1,2-Tetrachloroethane	0.28358	0.25175	0.27733	0.27379	0.27325	0.25945					
	0.24624	+++++					AVRG		0.26648		5.27526
78 Ethylbenzene	1.52316	1.37535	1.48810	1.41203	1.40342	1.23681					
	1.10728	+++++					AVRG		1.36374		10.65999
79 m,p-Xylenes	0.56025	0.54101	0.58400	0.55352	0.56262	0.51395					
	0.47328	+++++					AVRG		0.54123		6.81425
80 o-Xylene	0.56601	0.55742	0.58730	0.57509	0.57324	0.53328					
	0.50020	+++++					AVRG		0.55608		5.38182

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
81 Styrene	0.99664	0.94604	1.00452	0.96302	0.96806	0.88491					
	0.79976	+++++					AVRG		0.93756		7.71403
82 Bromoform	0.37637	0.31766	0.36342	0.36947	0.36337	0.38502					
	0.36335	+++++					AVRG		0.36267		5.91472
83 Isopropylbenzene	2.96020	2.81133	3.03956	2.91587	2.96983	2.62537					
	2.38167	+++++					AVRG		2.81483		8.32406
84 cis-1,4-Dichloro-2-butene	0.30861	0.31644	0.29619	0.30753	0.25795	0.29238					
	0.23636	+++++					AVRG		0.28792		10.29421
85 Cyclohexanone	0.05052	0.04961	0.04401	0.04539	0.03850	0.03988					
	0.03554	+++++					AVRG		0.04335		13.04423
87 1,1,2,2-Tetrachloroethane	0.78947	0.75443	0.81686	0.80020	0.77488	0.78945					
	0.71595	+++++					AVRG		0.77732		4.29195
88 trans-1,4-Dichloro-2-butene	0.28440	0.29390	0.27281	0.27925	0.24182	0.26814					
	0.21973	+++++					AVRG		0.26572		9.79953
89 1,2,3-Trichloropropane	0.20514	0.17966	0.19600	0.20448	0.19303	0.20028					
	0.18712	+++++					AVRG		0.19510		4.78417
90 Bromobenzene	0.68721	0.62230	0.67660	0.65110	0.64712	0.60194					
	0.56486	+++++					AVRG		0.63587		6.74317

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
91 n-Propylbenzene	3.66018	3.38057	3.63804	3.47894	3.47938	3.02338					
	2.65674	+++++					AVRG		3.33103		10.94998
92 2-Chlorotoluene	2.47586	2.38263	2.51535	2.39582	2.34173	2.09615					
	1.89889	+++++					AVRG		2.30092		9.67731
93 1,3,5-Trimethylbenzene	2.60755	2.39237	2.56708	2.49566	2.50564	2.20635					
	1.95979	+++++					AVRG		2.39063		9.69080
94 4-Chlorotoluene	2.37655	2.18335	2.28139	2.22874	2.22139	2.03855					
	1.87743	+++++					AVRG		2.17249		7.61409
95 tert-Butylbenzene	2.44004	2.23493	2.35296	2.32876	2.33922	2.12499					
	1.96509	+++++					AVRG		2.25514		7.18959
96 1,2,4-Trimethylbenzene	2.70662	2.48003	2.67200	2.60054	2.57035	2.30053					
	2.08607	+++++					AVRG		2.48802		8.95510
97 Pentachloroethane	0.25576	0.29310	0.28210	0.24733	0.21195	0.21910					
	+++++	+++++					AVRG		0.25156		12.96268
98 sec-Butylbenzene	3.39930	3.17279	3.37583	3.32577	3.36450	2.96982					
	2.68308	+++++					AVRG		3.18444		8.43349
99 4-Isopropyltoluene	2.50931	2.41745	2.59032	2.54288	2.56495	2.28318					
	2.08684	+++++					AVRG		2.42785		7.56471

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
100 1,3-Dichlorobenzene	1.30164	1.23377	1.34224	1.30245	1.28793	1.20574					
	1.12886	+++++					AVRG		1.25752		5.79520
102 1,4-Dichlorobenzene	1.28066	1.17250	1.29318	1.25142	1.25508	1.18015					
	1.10348	+++++					AVRG		1.21950		5.66852
103 Benzyl chloride	1.43635	1.50257	1.40260	1.36964	1.13046	1.16136					
	+++++	+++++					AVRG		1.33383		11.42443
104 n-Butylbenzene	1.52747	1.37680	1.56923	1.51318	1.54444	1.38748					
	1.30344	+++++					AVRG		1.46029		7.02441
105 1,2-Dichlorobenzene	1.25268	1.14720	1.28712	1.26338	1.25822	1.18461					
	1.10546	+++++					AVRG		1.21410		5.66101
106 bis(2-Chloroisopropyl)ether	0.45435	0.47365	0.44169	0.44900	0.38563	0.41896					
	0.34098	+++++					AVRG		0.42347		10.86982
107 1,2-Dibromo-3-chloropropane	0.15473	0.12059	0.13683	0.14257	0.13331	0.14600					
	0.13644	+++++					AVRG		0.13864		7.73908
108 1,2,4-Trichlorobenzene	0.78613	0.73029	0.81635	0.81161	0.82807	0.76322					
	0.70884	+++++					AVRG		0.77779		5.85663
109 Hexachlorobutadiene	0.41249	0.40221	0.44674	0.44435	0.46337	0.41540					
	0.38987	+++++					AVRG		0.42492		6.31614

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
110 Naphthalene	1.97592	1.82364	2.04608	2.06658	2.05176	1.96578					
	1.74405	+++++					AVRG		1.95340		6.35293
111 1,2,3-Trichlorobenzene	0.60729	0.59953	0.68220	0.68062	0.68998	0.64356					
	0.57991	+++++					AVRG		0.64044		7.05807
$ 46 1,2-Dichloroethane-d4	0.26555	0.24792	0.28510	0.27020	0.27383	0.27212					
	0.26845	+++++					AVRG		0.26902		4.15631
$ 64 Toluene-d8	0.11797	0.11085	0.12556	0.12140	0.12543	0.12102					
	0.12491	+++++					AVRG		0.12102		4.37262
$ 86 Bromofluorobenzene	0.94253	0.87675	0.99727	0.98141	1.00302	0.98616					
	0.99090	+++++					AVRG		0.96829		4.63600

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 11:14
End Cal Date : 19-NOV-2009 18:11
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Cal Date : 20-Nov-2009 07:59 ram01192

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 14-NOV-2009 08:52
Lab File ID: 11528.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091113-19 Quant Type: ISTD
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.14763	0.14763	0.010	-5.90175	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.36322	0.36322	0.010	10.47439	30.00000	Averaged
13 Acrolein	0.05116	0.04667	0.04667	0.001	-8.77636	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.27186	0.27186	0.030	-7.05527	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02305	0.02305	0.000	14.05893	40.00000	Averaged
20 Allyl chloride	0.10619	0.13404	0.13404	0.010	26.22620	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.04061	0.04061	0.010	6.98257	40.00000	Averaged
27 Acrylonitrile	0.10676	0.10533	0.10533	0.010	-1.33680	30.00000	Averaged
28 Isopropyl ether	1.19537	1.28737	1.28737	0.010	7.69603	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.60811	0.60811	0.010	-0.34717	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.22940	1.22940	0.010	7.74850	30.00000	Averaged
37 Propionitrile	0.04326	0.04095	0.04095	0.010	-5.34093	30.00000	Averaged
34 Ethyl acetate	0.29220	0.26253	0.26253	0.010	-10.15296	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.22054	0.22054	0.010	-4.85685	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.19333	0.19333	0.010	-5.55867	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01041	0.01041	0.001	-4.14907	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	0.98494	0.98494	0.010	8.27576	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.19115	0.19115	0.010	-3.48960	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.48311	0.48311	0.010	-5.45482	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.40080	0.40080	0.000	1.64453	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00267	0.00267	0.001	-6.48301	40.00000	Averaged
62 2-Nitropropane	0.10798	0.10490	0.10490	0.000	-2.85062	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.29808	0.29808	0.010	-3.17173	30.00000	Averaged
86 Cyclohexanone	555	1250	0.02080	0.010	-55.62459	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.28505	0.28505	0.010	-5.07396	30.00000	Averaged
98 Pentachloroethane	0.31186	0.25219	0.25219	0.010	-19.13515	30.00000	Averaged
104 Benzyl chloride	1.59479	1.35725	1.35725	0.010	-14.89504	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.35032	0.35032	0.010	-2.74499	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.54180	0.54180	0.010	-12.88362	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.03543	2.03543	0.010	0.02147	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.62823	1.62823	0.010	-3.01305	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 14-NOV-2009 08:52
Lab File ID: 11528.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091113-19 Quant Type: ISTD
Method: /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	8.75563
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111309v1/11528.d
Lab Smp Id: W1VM091113-19 Client Smp ID: SHORTICV
Inj Date : 14-NOV-2009 08:52
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091113-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091023-08A/UVM091105-02A
Comment :
Method : /chem/VOA1.i/111309v1/VOA1-8260ox-111309.m
Meth Date : 18-Nov-2009 11:01 eh1 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	493699	150.000	141
8 2-Chloro-1,1,1-trifluoroethane	118	6.298	6.298	(0.460)	1214708	150.000	166
13 Acrolein	56	8.959	8.959	(0.655)	260116	250.000	228
14 Trichlorotrifluoroethane	101	8.982	8.982	(0.656)	1515317	250.000	232
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1284719	2500.00	2850
20 Allyl chloride	76	9.856	9.856	(0.720)	747101	250.000	316
24 tert-Butyl Alcohol	59	10.202	10.202	(0.745)	2263586	2500.00	2670
27 Acrylonitrile	53	10.671	10.671	(0.780)	587086	250.000	247
28 Isopropyl ether	45	11.201	11.201	(0.818)	1435106	50.0000	53.8
31 2-Chloro-1,3-butadiene	53	11.399	11.399	(0.833)	677890	50.0000	49.8
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1370484	50.0000	53.9
37 Propionitrile	54	12.407	12.407	(0.906)	228260	250.000	237
34 Ethyl acetate	43	12.167	12.167	(0.889)	1463298	250.000	225
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1229233	250.000	238
38 Tetrahydrofuran	42	12.545	12.545	(0.640)	489608	250.000	236

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
46 Isobutyl alcohol	41	13.111	13.111	(0.958)	580033	2500.00	2400
49 Methyl tert-amyl ether	73	13.350	13.350	(0.975)	1097966	50.0000	54.1
56 Methyl methacrylate	69	14.441	14.441	(1.055)	1065456	250.000	241
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2164928	250.000	236
75 1-Chlorohexane	55	17.033	17.033	(1.244)	446791	50.0000	50.8
58 1,4-Dioxane	88	14.547	14.547	(1.063)	148599	2500.00	2340
62 2-Nitropropane	43	15.081	15.081	(1.102)	584679	250.000	243
85 cis-1,4-Dichloro-2-butene	53	18.275	18.275	(0.932)	754892	250.000	242
86 Cyclohexanone	55	18.386	18.386	(1.071)	466077	1250.00	555
90 trans-1,4-Dichloro-2-butene	53	18.570	18.570	(0.947)	721901	250.000	237
98 Pentachloroethane	167	19.201	19.201	(0.979)	638677	250.000	202
104 Benzyl chloride	91	19.776	19.776	(1.008)	3437283	250.000	213
107 bis(2-Chloroisopropyl)ether	45	20.167	20.167	(1.028)	887198	250.000	243
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	1114758	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	896248	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	506508	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	603976	50.0000	43.6
$ 65 Toluene-d8	98	15.523	15.523	(0.904)	1824247	50.0000	50.0
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	824709	50.0000	48.5

Data File: /chem/VOA1.i/111309v1/11528.d
Date : 14-NOV-2009 08:52
Client ID: SHORTICV
Sample Info: IW1VHC91113-19|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

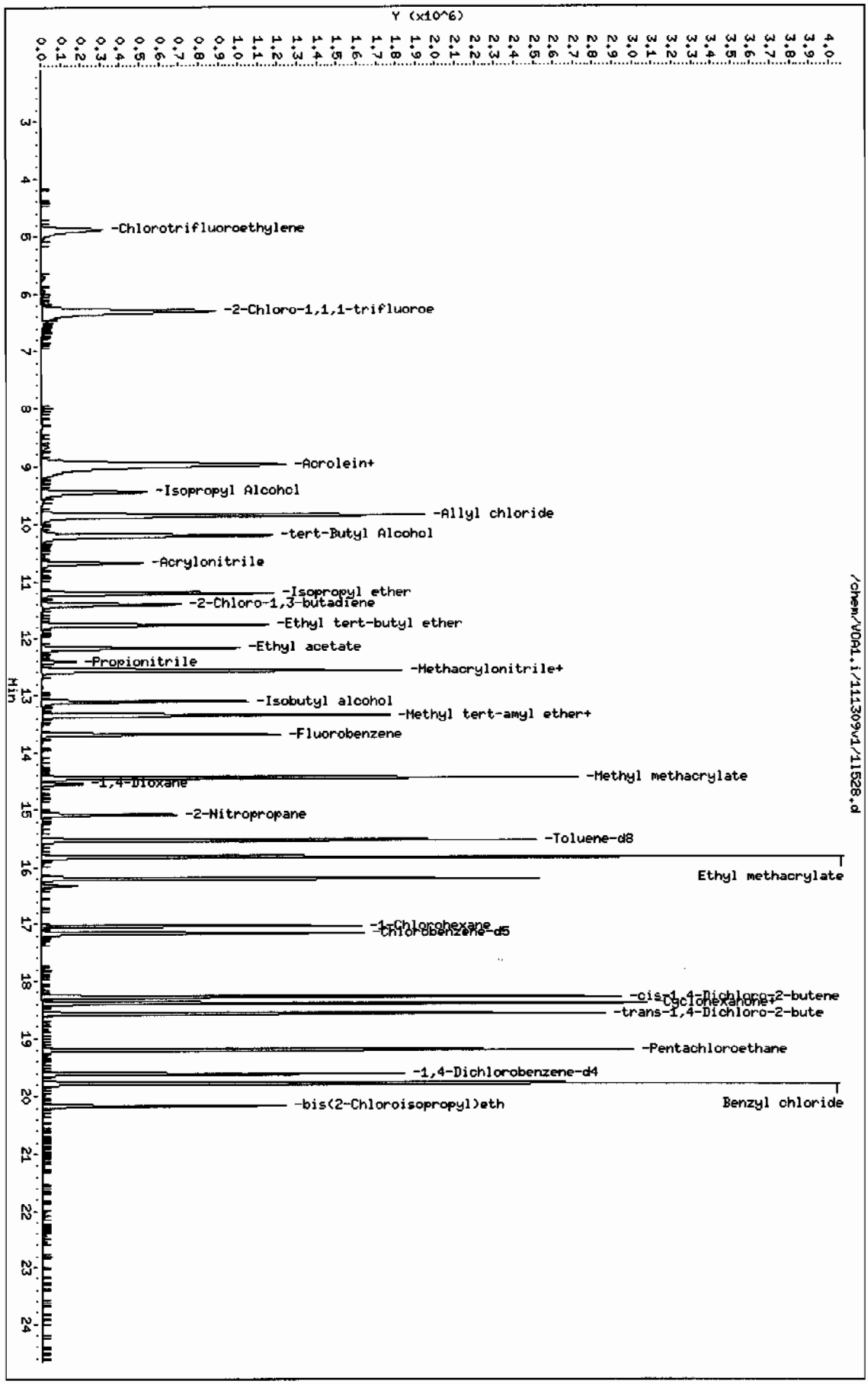

Page 1

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Report Date: 01-Dec-2009 16:53

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.78659	0.78659	0.050	1.93501	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.34829	0.34829	0.050	1.72438	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.76082	0.76082	0.050	-2.73046	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.28961	0.28961	0.050	-13.25713	30.00000	Averaged	
	6 Chloromethane	0.41309	0.34567	0.34567	0.100	-16.32056	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.30586	0.30586	0.050	-17.08914	20.00000	Averaged	ccc
	9 Bromomethane	0.22174	0.21949	0.21949	0.050	-1.01260	30.00000	Averaged	
	10 Chloroethane	0.22841	0.24501	0.24501	0.050	7.27015	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.53920	0.53920	0.050	3.81924	30.00000	Averaged	
	12 Ethyl Ether	45.83993	50.00000	0.28952	0.010	-8.32014	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19861	0.19861	0.000	-31.55015	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03488	0.03488	0.010	-2.28372	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.66262	0.66262	0.050	-7.39264	20.00000	Averaged	ccc
	21 Methyl acetate	0.24838	0.21471	0.21471	0.010	-13.55590	40.00000	Averaged	
	18 Iodomethane	0.46290	0.47705	0.47705	0.050	3.05775	30.00000	Averaged	
	23 Methylene chloride	49.69453	50.00000	0.35951	0.000	-0.61094	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.06038	1.06038	0.050	15.07243	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.01424	1.01424	0.050	-10.90101	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.34226	0.34226	0.050	2.98628	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.66089	0.66089	0.010	19.91591	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.68036	0.68036	0.100	-7.89939	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.21356	0.21356	0.030	-24.88572	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.35432	0.35432	0.050	0.53641	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.52117	0.52117	0.050	-3.41129	30.00000	Averaged	
	41 Chloroform	0.78646	0.70224	0.70224	0.010	-10.70855	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.14700	0.14700	0.010	4.97038	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.56828	0.56828	0.010	-7.73277	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.70592	0.70592	0.010	9.05253	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.55571	0.55571	0.010	-0.95042	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00962	0.00962	0.001	6.25892	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.57859	0.57859	0.010	-6.22742	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62106	0.48336	0.48336	0.010	-22.17142	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.55944	0.55944	0.010	-19.39207	30.00000	Averaged	
	47 Benzene	50.28606	50.00000	1.40724	0.010	0.57211	30.00000	Linear	
	50 Cyclohexene	0.53439	0.52276	0.52276	0.010	-2.17678	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1m108ICV.d
Analysis Type: WATER
Lab Sample ID: W1VM091116-05
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

Injection Date: 16-NOV-2009 14:01
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.37928	0.37928	0.010	-1.03062	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.35751	0.35751	0.010	-1.35037	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.64311	0.64311	0.010	8.60482	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.53560	0.53560	0.010	-9.91614	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20094	0.20094	0.010	-10.08947	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	197	250	0.03848	0.000	-21.31056	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.16731	0.16731	0.010	-9.66493	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.60977	0.60977	0.010	-1.53290	30.00000	Averaged	
$	65 Toluene-d8	2.03499	1.97166	1.97166	0.010	-3.11196	30.00000	Averaged	
	66 Toluene	1.09808	1.09311	1.09311	0.010	-0.45345	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.75103	0.75103	0.010	-3.85367	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.29722	0.29722	0.010	-2.75287	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.37565	0.37565	0.010	-23.26575	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.63720	0.63720	0.010	-6.20551	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.34435	0.34435	0.010	3.36940	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.42649	0.42649	0.010	-2.73068	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.35320	0.35320	0.010	-1.73152	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.16153	1.16153	0.300	2.26365	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.42501	0.42501	0.010	-3.47076	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.28751	2.28751	0.010	-3.15483	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.80163	0.80163	0.010	2.94558	30.00000	Averaged	
	81 o-Xylene	0.75757	0.75650	0.75650	0.010	-0.14143	30.00000	Averaged	
	82 Styrene	1.29825	1.33826	1.33826	0.010	3.08236	30.00000	Averaged	
	83 Bromoform	0.49742	0.51659	0.51659	0.100	3.85450	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	4.09104	4.09104	0.010	0.57739	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.80201	0.80201	0.300	1.11984	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.59852	1.59852	0.010	-4.78243	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.22267	0.22267	0.010	-14.62239	30.00000	Averaged	
	91 Bromobenzene	0.84113	0.86234	0.86234	0.010	2.52236	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.95567	4.95567	0.010	0.02259	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.47589	3.47589	0.010	-3.16985	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.53161	3.53161	0.010	-1.43822	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.13706	3.13706	0.010	-3.08595	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.83816	2.83816	0.010	1.75609	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.59991	3.59991	0.010	-1.85290	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.49320	4.49320	0.010	0.93061	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 16-NOV-2009 14:01
Lab File ID: 1m108ICV.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091116-05 Quant Type: ISTD
Method: /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.51635	3.51635	0.010	4.48521	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.71300	1.71300	0.010	6.65131	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.70171	1.70171	0.010	3.36466	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.75570	3.75570	0.010	-0.32761	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.59378	1.59378	0.010	3.65299	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.16033	0.16033	0.010	6.03864	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.20851	1.20851	0.010	5.78950	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.82340	0.82340	0.010	1.82157	30.00000	Averaged
111 Naphthalene	2.11900	2.27355	2.27355	0.010	7.29312	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.98434	0.98434	0.010	2.40643	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.36236
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/111609v1/1m108ICV.d
Lab Smp Id: W1VM091116-05 Client Smp ID: ICV
Inj Date : 16-NOV-2009 14:01
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091116-05|CCV/LCS/ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA1.i/111609v1/VOA1-8260ox-111309.m
Meth Date : 01-Dec-2009 16:53 slg Quant Type: ISTD
Cal Date : 14-NOV-2009 07:21 Cal File: 11525.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2088100	150.000	153
M 2 1,2-Dichloroethylene (total)	96				778988	100.000	102
M 3 1,3-Dichloropropylene	75				1346471	100.000	97.3
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	323873	50.0000	43.4
6 Chloromethane	50	5.550	5.550	(0.405)	386561	50.0000	41.8
7 Vinyl chloride	62	5.923	5.923	(0.433)	342039	50.0000	41.4
9 Bromomethane	96	6.948	6.948	(0.508)	245458	50.0000	49.5
10 Chloroethane	64	7.215	7.215	(0.527)	273997	50.0000	53.6
11 Trichlorofluoromethane	101	7.836	7.836	(0.573)	602979	50.0000	51.9
12 Ethyl Ether	59	8.476	8.476	(0.619)	323763	50.0000	45.8
16 Acetone	43	9.254	9.254	(0.676)	1110521	250.000	171
22 Acetonitrile	41	9.976	9.976	(0.729)	975078	1250.00	1220
15 1,1-Dichloroethylene	61	9.093	9.093	(0.664)	741002	50.0000	46.3
21 Methyl acetate	43	9.838	9.838	(0.719)	1200537	250.000	216
18 Iodomethane	142	9.470	9.470	(0.692)	2667438	250.000	258

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	23 Methylene chloride	84	10.137	10.137	(0.741)	402034	50.0000	49.7
	19 Carbon disulfide	76	9.571	9.571	(0.699)	5929090	250.000	288
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	1134219	50.0000	44.5
	26 trans-1,2-Dichloroethylene	96	10.547	10.547	(0.771)	382752	50.0000	51.5
	29 Vinyl acetate	43	11.297	11.297	(0.825)	3695328	250.000	300
	30 1,1-Dichloroethane	63	11.320	11.320	(0.827)	760846	50.0000	46.0
	35 2-Butanone	43	12.186	12.186	(0.890)	1194107	250.000	188
	36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	396236	50.0000	50.3
	33 2,2-Dichloropropane	77	12.158	12.158	(0.888)	582817	50.0000	48.3
	41 Chloroform	83	12.614	12.614	(0.922)	785308	50.0000	44.6
	39 Bromochloromethane	128	12.559	12.559	(0.918)	164387	50.0000	52.5
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	635509	50.0000	46.1
	42 Cyclohexane	56	12.839	12.839	(0.938)	789422	50.0000	54.5
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	621443	50.0000	49.5
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	1075626	5000.00	5310
	44 Carbon tetrachloride	117	13.024	13.024	(0.952)	647037	50.0000	46.9
$	48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	540540	50.0000	38.9
	51 1,2-Dichloroethane	62	13.442	13.442	(0.982)	625621	50.0000	40.3
	47 Benzene	78	13.337	13.337	(0.974)	1573713	50.0000	50.3
	50 Cyclohexene	54	13.396	13.396	(0.979)	584602	50.0000	48.9
*	52 Fluorobenzene	96	13.686	13.686	(1.000)	1118294	50.0000	
	54 Trichloroethylene	95	14.119	14.119	(1.032)	424142	50.0000	49.5
	57 1,2-Dichloropropane	63	14.460	14.460	(1.056)	399800	50.0000	49.3
	55 Methylcyclohexane	83	14.285	14.285	(1.044)	719182	50.0000	54.3
	60 Bromodichloromethane	83	14.754	14.754	(1.078)	598959	50.0000	45.0
	59 Dibromomethane	93	14.621	14.621	(1.068)	224707	50.0000	45.0
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	215138	250.000	197
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	740258	250.000	226
	63 cis-1,3-Dichloropropylene	75	15.261	15.261	(1.115)	681900	50.0000	49.2
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1744680	50.0000	48.4
	66 Toluene	92	15.597	15.597	(0.909)	967265	50.0000	49.8
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	664571	50.0000	48.1
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	263004	50.0000	48.6
	71 2-Hexanone	43	16.269	16.269	(0.948)	1662015	250.000	192
	72 1,3-Dichloropropane	76	16.310	16.310	(0.950)	563840	50.0000	46.9
	70 Tetrachloroethylene	164	16.195	16.195	(0.944)	304712	50.0000	51.7
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	377389	50.0000	48.6
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	312543	50.0000	49.1
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	884878	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	1027816	50.0000	51.1
	79 1,1,1,2-Tetrachloroethane	131	17.263	17.263	(1.006)	376079	50.0000	48.3
	78 Ethylbenzene	91	17.222	17.222	(1.003)	2024165	50.0000	48.4
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1418694	100.000	103
	81 o-Xylene	106	17.783	17.783	(1.036)	669406	50.0000	49.9
	82 Styrene	104	17.806	17.806	(1.038)	1184200	50.0000	51.5
	83 Bromoform	173	18.105	18.105	(0.923)	253734	50.0000	51.9
	84 Isopropylbenzene	105	18.133	18.133	(0.924)	2009401	50.0000	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 1,1,2,2-Tetrachloroethane	83	18.510	18.510	(0.944)	393924	50.0000	50.6
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	785147	50.0000	47.6
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	109371	50.0000	42.7
91 Bromobenzene	156	18.593	18.593	(0.948)	423557	50.0000	51.3
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2434081	50.0000	50.0
94 2-Chlorotoluene	91	18.745	18.745	(0.956)	1707258	50.0000	48.4
93 1,3,5-Trimethylbenzene	105	18.722	18.722	(0.954)	1734624	50.0000	49.3
95 4-Chlorotoluene	91	18.856	18.856	(0.961)	1540833	50.0000	48.4
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1394021	50.0000	50.9
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1768170	50.0000	49.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	2206931	50.0000	50.5
100 4-Isopropyltoluene	119	19.426	19.426	(0.990)	1727131	50.0000	52.2
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.996)	841377	50.0000	53.3
* 102 1,4-Dichlorobenzene-d4	152	19.615	19.615	(1.000)	491171	50.0000	
103 1,4-Dichlorobenzene	146	19.643	19.643	(1.001)	835831	50.0000	51.7
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1844689	50.0000	49.8
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	782819	50.0000	51.8
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	78748	50.0000	53.0
109 1,2,4-Trichlorobenzene	180	22.027	22.027	(1.123)	593584	50.0000	52.9
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	404431	50.0000	50.9
111 Naphthalene	128	22.441	22.441	(1.144)	1116700	50.0000	53.6
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	483479	50.0000	51.2

Data File: /chem/VOA1.i/111609v1/1m108ICV.d
Date : 16-NOV-2009 14:01
Client ID: ICV
Sample Info: IWIVH091116-05ICV/LCS/ICV1I1VOAFI1I
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

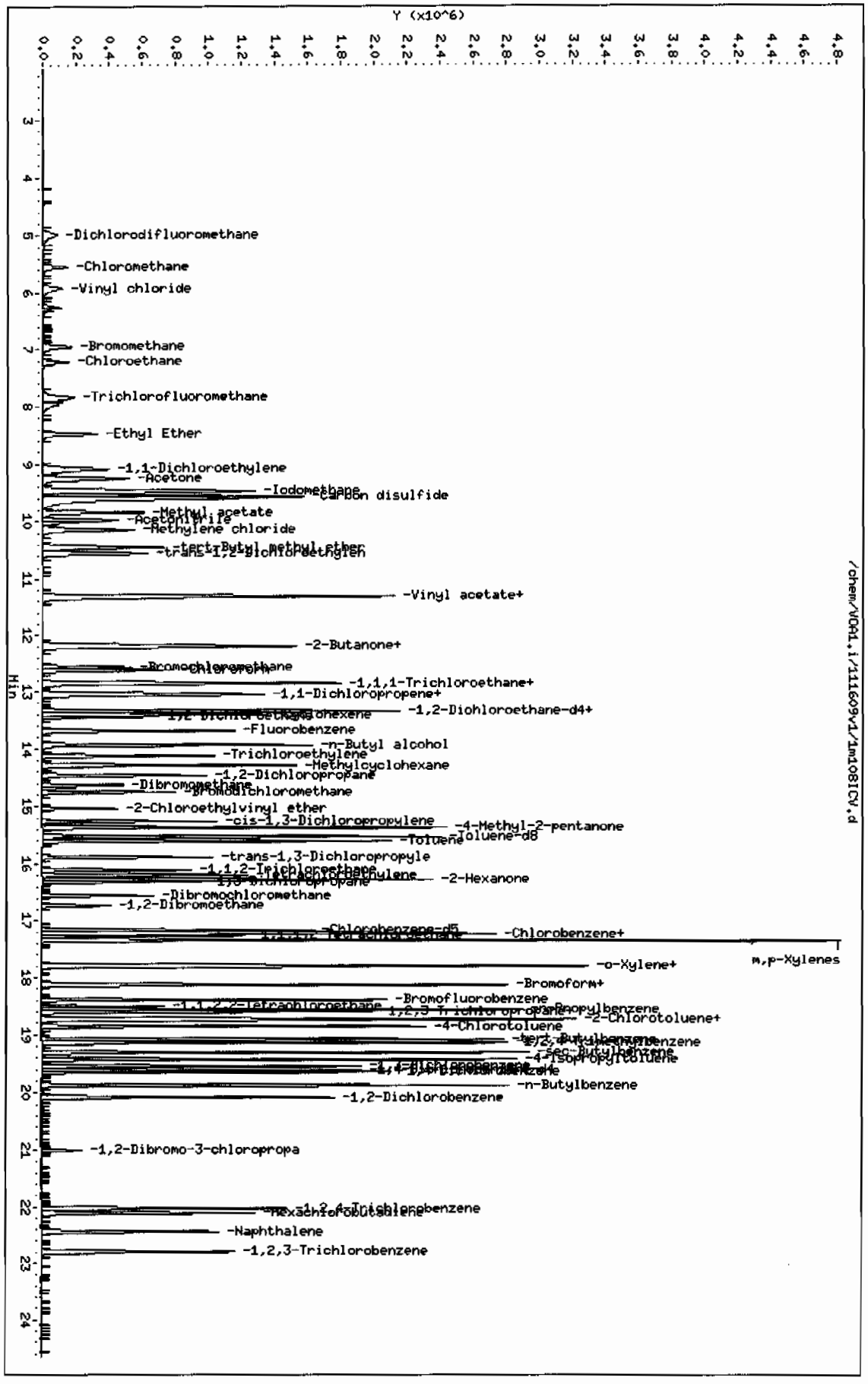

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i Injection Date: 19-NOV-2009 19:06
Lab File ID: 91422.d Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Analysis Type: WATER Init. Cal. Times: 11:14 18:11
Lab Sample ID: W9VM091119-16 Quant Type: ISTD
Method: /chem/VOA9.i/111909v9/VOA9-8260B-111909.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
146 Chlorotrifluoroethylene	0.10545	0.08183	0.08183	0.010	-22.39799	30.00000	Averaged
147 2-Chloro-1,1,1-trifluoroeth	0.17929	0.17282	0.17282	0.010	-3.60776	30.00000	Averaged
8 Acrolein	0.04635	0.04693	0.04693	0.001	1.24542	30.00000	Averaged
9 Trichlorotrifluoroethane	0.07059	0.07018	0.07018	0.030	-0.58470	30.00000	Averaged
12 Isopropyl Alcohol	0.01856	0.01936	0.01936	0.010	4.30494	40.00000	Averaged
17 Allyl chloride	0.11365	0.10870	0.10870	0.010	-4.35248	30.00000	Averaged
18 tert-Butyl Alcohol	0.02938	0.02959	0.02959	0.010	0.71619	40.00000	Averaged
20 Acrylonitrile	0.09689	0.10192	0.10192	0.010	5.19165	30.00000	Averaged
24 Isopropyl ether	0.90255	0.88338	0.88338	0.010	-2.12440	30.00000	Averaged
26 2-Chloro-1,3-butadiene	0.38170	0.37081	0.37081	0.010	-2.85197	30.00000	Averaged
28 Ethyl tert-butyl ether	0.83515	0.82569	0.82569	0.010	-1.13260	30.00000	Averaged
32 Propionitrile	0.03738	0.03812	0.03812	0.010	1.97194	30.00000	Averaged
30 Ethyl acetate	0.24709	0.22863	0.22863	0.010	-7.46825	40.00000	Averaged
34 Methacrylonitrile	0.15425	0.15022	0.15022	0.010	-2.61077	30.00000	Averaged
37 Tetrahydrofuran	0.23819	0.23598	0.23598	0.010	-0.92831	30.00000	Averaged
40 Isobutyl alcohol	0.00970	0.00904	0.00904	0.004	-6.80124	40.00000	Averaged
49 Methyl tert-amyl ether	0.65028	0.64968	0.64968	0.010	-0.09289	30.00000	Averaged
54 Methyl methacrylate	0.14777	0.13975	0.13975	0.010	-5.42823	30.00000	Averaged
66 Ethyl methacrylate	0.42200	0.36979	0.36979	0.010	-12.37172	30.00000	Averaged
74 1-Chlorohexane	0.24312	0.22700	0.22700	0.010	-6.62951	30.00000	Averaged
57 1,4-Dioxane	2535	2500	0.00230	0.001	1.40048	40.00000	Linear
60 2-Nitropropane	0.08256	0.08409	0.08409	0.010	1.85833	30.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.28792	0.28558	0.28558	0.010	-0.81395	30.00000	Averaged
85 Cyclohexanone	0.04335	0.02419	0.02419	0.002	-44.19143	40.00000	Averaged <-
88 trans-1,4-Dichloro-2-butene	0.26572	0.26596	0.26596	0.010	0.08822	30.00000	Averaged
97 Pentachloroethane	0.25156	0.18791	0.18791	0.010	-25.30208	30.00000	Averaged
103 Benzyl chloride	1.33383	1.03333	1.03333	0.010	-22.52903	30.00000	Averaged
106 bis(2-Chloroisopropyl)ether	0.42347	0.42386	0.42386	0.010	0.09296	30.00000	Averaged
$ 46 1,2-Dichloroethane-d4	0.26902	0.28250	0.28250	0.010	5.01149	30.00000	Averaged
$ 64 Toluene-d8	0.12102	0.12514	0.12514	0.010	3.40428	30.00000	Averaged
$ 86 Bromofluorobenzene	0.96829	0.94962	0.94962	0.010	-1.92765	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i Injection Date: 19-NOV-2009 19:06
Lab File ID: 91422.d Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Analysis Type: WATER Init. Cal. Times: 11:14 18:11
Lab Sample ID: W9VM091119-16 Quant Type: ISTD
Method: /chem/VOA9.i/111909v9/VOA9-8260B-111909.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	6.43332
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/111909v9/91422.d
Lab Smp Id: W9VM091119-16 Client Smp ID: SICV
Inj Date : 19-NOV-2009 19:06
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |W9VM091119-16|SICV|1|VOA|1|
Misc Info : GEL 5ml n/a UVM091118-08A/UVM091105-02B
Comment :
Method : /chem/VOA9.i/111909v9/VOA9-8260B-111909.m
Meth Date : 20-Nov-2009 07:57 ram01192 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
146 Chlorotrifluoroethylene	116	4.874	4.874	(0.452)	471408	150.000	116
147 2-Chloro-1,1,1-trifluoroethane	118	5.714	5.714	(0.530)	995526	150.000	144
8 Acrolein	56	7.313	7.313	(0.678)	450571	250.000	253
9 Trichlorotrifluoroethane	85	7.479	7.479	(0.693)	673797	250.000	248
12 Isopropyl Alcohol	45	7.562	7.562	(0.701)	1858724	2500.00	2610
17 Allyl chloride	76	7.941	7.941	(0.736)	1043650	250.000	239
18 tert-Butyl Alcohol	59	8.071	8.071	(0.748)	2840485	2500.00	2520
20 Acrylonitrile	53	8.344	8.344	(0.774)	978514	250.000	263
24 Isopropyl ether	45	8.866	8.866	(0.822)	1696247	50.0000	48.9
26 2-Chloro-1,3-butadiene	53	9.020	9.020	(0.836)	712025	50.0000	48.6
28 Ethyl tert-butyl ether	59	9.281	9.281	(0.860)	1585474	50.0000	49.4
32 Propionitrile	54	9.578	9.578	(0.888)	365964	250.000	255
30 Ethyl acetate	43	9.495	9.495	(0.880)	2195099	250.000	231
34 Methacrylonitrile	41	9.755	9.755	(0.904)	1442250	250.000	243
37 Tetrahydrofuran	42	9.874	9.874	(0.603)	784484	250.000	248

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
40 Isobutyl alcohol	41	10.170	10.170	(0.943)	868229	2500.00	2330
49 Methyl tert-amyl ether	73	10.538	10.538	(0.977)	1247502	50.0000	50.0
54 Methyl methacrylate	69	11.368	11.368	(1.054)	1341707	250.000	236
66 Ethyl methacrylate	69	12.625	12.625	(0.905)	2416682	250.000	219
74 1-Chlorohexane	55	13.823	13.823	(1.281)	435890	50.0000	46.7
57 1,4-Dioxane	88	11.499	11.499	(1.066)	221257	2500.00	2540
60 2-Nitropropane	43	11.866	11.866	(1.100)	807340	250.000	255
84 cis-1,4-Dichloro-2-butene	53	14.973	14.973	(0.915)	949362	250.000	248
85 Cyclohexanone	55	15.104	15.104	(1.082)	790526	1250.00	698
88 trans-1,4-Dichloro-2-butene	53	15.246	15.246	(0.931)	884123	250.000	250
97 Pentachloroethane	167	15.957	15.957	(0.975)	624665	250.000	187
103 Benzyl chloride	91	16.527	16.527	(1.009)	3435127	250.000	194
106 bis(2-Chloroisopropyl)ether	45	16.930	16.930	(1.034)	1409049	250.000	250
* 51 Fluorobenzene	96	10.787	10.787	(1.000)	1920184	50.0000	
* 75 Chlorobenzene-d5	117	13.953	13.953	(1.000)	1307061	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.372	16.372	(1.000)	664866	50.0000	
$ 46 1,2-Dichloroethane-d4	65	10.443	10.443	(0.968)	542460	50.0000	52.5
$ 64 Toluene-d8	99	12.424	12.424	(0.890)	163568	50.0000	51.7
$ 86 Bromofluorobenzene	95	15.127	15.127	(0.924)	631373	50.0000	49.0

Data File: /chem/VOA9.i/111909v9/91422.d
Date : 19-NOV-2009 19:06
Client ID: SICV
Sample Info: 1W9VH091119-16!SICV!1!VOA!1!
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA9.i
Operator: RXY1
Column diameter: 0.25

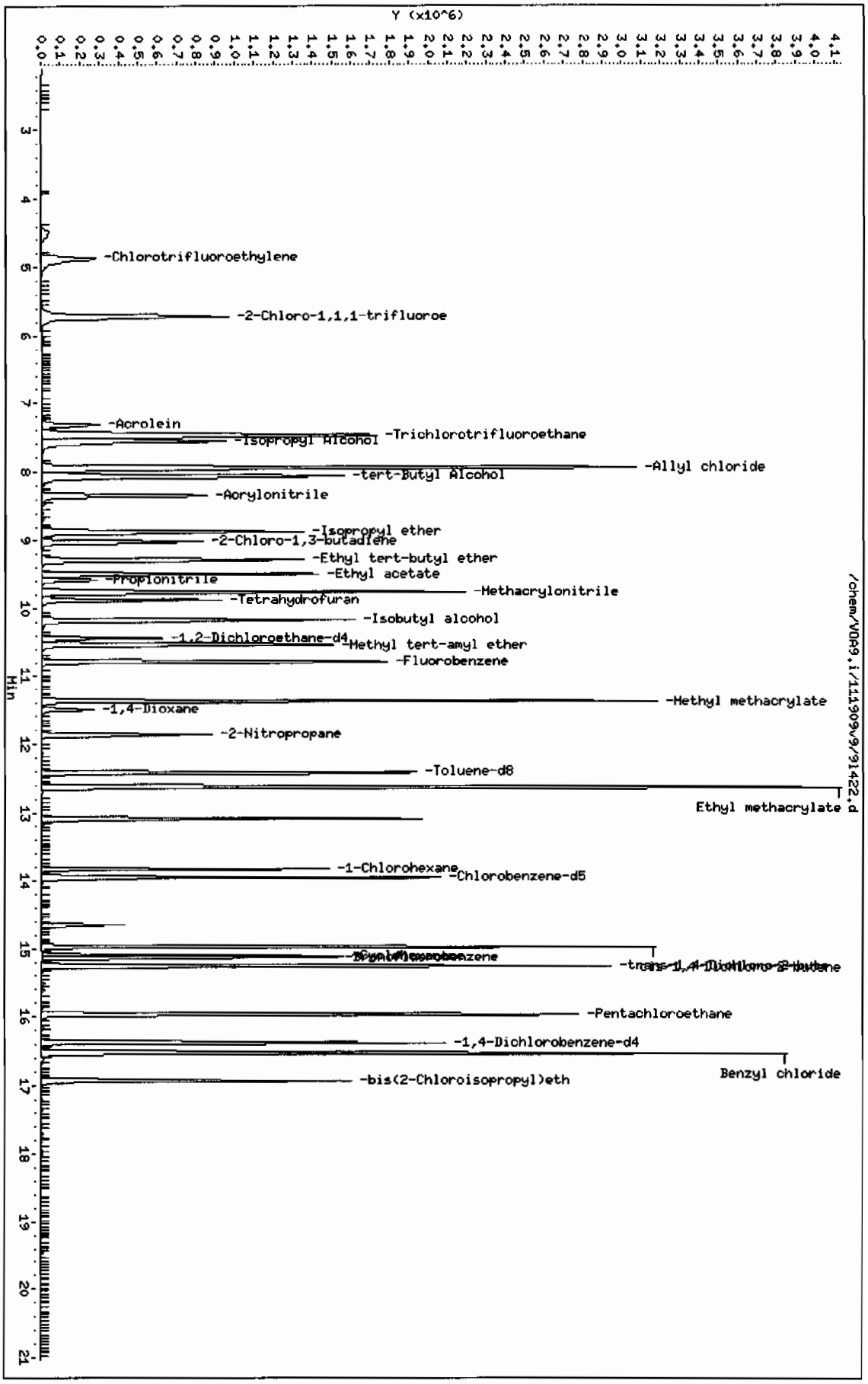

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i Injection Date: 20-NOV-2009 08:43
Lab File ID: 91501ICV.d Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Analysis Type: WATER Init. Cal. Times: 11:14 18:11
Lab Sample ID: W9VM091120-01 Quant Type: ISTD
Method: /chem/VOA9.i/111909v9/VOA9-8260B-111909.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 27 Xylenes (total)	0.54618	0.52059	0.52059	0.050	-4.68482	30.00000	Averaged	
M 42 1,2-Dichloroethylene (total	0.21367	0.21075	0.21075	0.050	-1.36598	30.00000	Averaged	
M 45 1,3-Dichloropropylene	0.34759	0.35376	0.35376	0.050	1.77418	30.00000	Averaged	
1 Dichlorodifluoromethane	0.15107	0.13957	0.13957	0.050	-7.61296	30.00000	Averaged	
2 Chloromethane	0.27941	0.25983	0.25983	0.100	-7.00995	30.00000	Averaged	spcc
3 Vinyl chloride	0.22694	0.22804	0.22804	0.050	0.48232	20.00000	Averaged	ccc
4 Bromomethane	0.15251	0.16296	0.16296	0.050	6.85719	30.00000	Averaged	
5 Chloroethane	0.15927	0.16635	0.16635	0.050	4.45097	30.00000	Averaged	
6 Trichlorofluoromethane	0.25319	0.27413	0.27413	0.050	8.27384	30.00000	Averaged	
7 Ethyl Ether	0.21495	0.22065	0.22065	0.010	2.65216	30.00000	Averaged	
10 Acetone	0.16142	0.14209	0.14209	0.040	-11.97304	40.00000	Averaged	
14 Acetonitrile	0.03532	0.04375	0.04375	0.010	23.87556	30.00000	Averaged	
11 1,1-Dichloroethylene	0.36772	0.34692	0.34692	0.050	-5.65573	20.00000	Averaged	ccc
15 Methyl acetate	0.19922	0.19313	0.19313	0.010	-3.05763	40.00000	Averaged	
13 Iodomethane	0.28203	0.26172	0.26172	0.050	-7.20027	30.00000	Averaged	
19 Methylene chloride	0.26260	0.23790	0.23790	0.050	-9.40832	30.00000	Averaged	
16 Carbon disulfide	0.62020	0.59696	0.59696	0.050	-3.74753	30.00000	Averaged	
21 tert-Butyl methyl ether	0.66936	0.66252	0.66252	0.050	-1.02200	30.00000	Averaged	
22 trans-1,2-Dichloroethylene	0.20173	0.19927	0.19927	0.050	-1.21685	30.00000	Averaged	
23 Vinyl acetate	0.46892	0.54796	0.54796	0.010	16.85678	40.00000	Averaged	
25 1,1-Dichloroethane	0.42943	0.42084	0.42084	0.100	-2.00038	30.00000	Averaged	spcc
29 2-Butanone	0.18165	0.17255	0.17255	0.030	-5.00966	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.22561	0.22222	0.22222	0.050	-1.49932	30.00000	Averaged	
33 2,2-Dichloropropane	0.29797	0.30775	0.30775	0.050	3.28071	30.00000	Averaged	
36 Chloroform	0.37848	0.37177	0.37177	0.010	-1.77180	20.00000	Averaged	ccc
35 Bromochloromethane	0.09824	0.10083	0.10083	0.010	2.62908	30.00000	Averaged	
39 1,1,1-Trichloroethane	0.28434	0.29042	0.29042	0.010	2.14123	30.00000	Averaged	
41 Cyclohexane	0.30530	0.30980	0.30980	0.010	1.47469	30.00000	Averaged	
43 1,1-Dichloropropene	0.27257	0.27905	0.27905	0.010	2.37672	30.00000	Averaged	
52 n-Butyl alcohol	0.00575	0.00633	0.00633	0.002	10.06080	40.00000	Averaged	
44 Carbon tetrachloride	0.24142	0.24662	0.24662	0.010	2.15634	30.00000	Averaged	
$ 46 1,2-Dichloroethane-d4	0.26902	0.29198	0.29198	0.010	8.53567	30.00000	Averaged	
47 1,2-Dichloroethane	0.32773	0.32167	0.32167	0.010	-1.84714	30.00000	Averaged	
48 Benzene	0.84334	0.80532	0.80532	0.010	-4.50741	30.00000	Averaged	
50 Cyclohexene	0.44488	0.42789	0.42789	0.005	-3.81810	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i Injection Date: 20-NOV-2009 08:43
Lab File ID: 91501ICV.d Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Analysis Type: WATER Init. Cal. Times: 11:14 18:11
Lab Sample ID: W9VM091120-01 Quant Type: ISTD
Method: /chem/VOA9.i/111909v9/VOA9-8260B-111909.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	53 Trichloroethylene	0.20322	0.20282	0.20282	0.010	-0.19642	30.00000	Averaged	
	55 1,2-Dichloropropane	0.24402	0.23797	0.23797	0.010	-2.47847	20.00000	Averaged	ccc
	56 Methylcyclohexane	0.36813	0.37317	0.37317	0.010	1.36847	30.00000	Averaged	
	59 Bromodichloromethane	0.29592	0.29641	0.29641	0.010	0.16562	30.00000	Averaged	
	58 Dibromomethane	0.12694	0.12841	0.12841	0.010	1.16240	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	0.14145	0.11725	0.11725	0.010	-17.10766	30.00000	Averaged	
	63 4-Methyl-2-pentanone	0.16202	0.16286	0.16286	0.010	0.52026	40.00000	Averaged	
	62 cis-1,3-Dichloropropylene	0.36063	0.36259	0.36259	0.010	0.54205	30.00000	Averaged	
$	64 Toluene-d8	0.12102	0.12945	0.12945	0.010	6.96654	30.00000	Averaged	
	65 Toluene	0.74466	0.70564	0.70564	0.010	-5.24031	20.00000	Averaged	ccc
	67 trans-1,3-Dichloropropylene	0.49060	0.50200	0.50200	0.010	2.32290	30.00000	Averaged	
	68 1,1,2-Trichloroethane	0.23886	0.23579	0.23579	0.010	-1.28452	30.00000	Averaged	
	69 2-Hexanone	0.41791	0.35869	0.35869	0.010	-14.16946	40.00000	Averaged	
	70 1,3-Dichloropropane	0.46769	0.45988	0.45988	0.010	-1.67047	30.00000	Averaged	
	71 Tetrachloroethylene	0.19892	0.19137	0.19137	0.010	-3.79430	30.00000	Averaged	
	72 Dibromochloromethane	0.29341	0.29978	0.29978	0.010	2.17400	30.00000	Averaged	
	73 1,2-Dibromoethane	0.27839	0.28785	0.28785	0.010	3.40000	30.00000	Averaged	
	76 Chlorobenzene	0.73361	0.72847	0.72847	0.300	-0.70140	30.00000	Averaged	spcc
	77 1,1,1,2-Tetrachloroethane	0.26648	0.25764	0.25764	0.010	-3.31940	30.00000	Averaged	
	78 Ethylbenzene	1.36374	1.25065	1.25065	0.010	-8.29254	20.00000	Averaged	ccc
	79 m,p-Xylenes	0.54123	0.51429	0.51429	0.010	-4.97726	30.00000	Averaged	
	80 o-Xylene	0.55608	0.53319	0.53319	0.010	-4.11556	30.00000	Averaged	
	81 Styrene	0.93756	0.88392	0.88392	0.010	-5.72141	30.00000	Averaged	
	82 Bromoform	0.36267	0.37171	0.37171	0.100	2.49292	30.00000	Averaged	spcc
	83 Isopropylbenzene	2.81483	2.62648	2.62648	0.010	-6.69157	30.00000	Averaged	
	87 1,1,2,2-Tetrachloroethane	0.77732	0.79469	0.79469	0.300	2.23446	30.00000	Averaged	spcc
$	86 Bromofluorobenzene	0.96829	1.01378	1.01378	0.010	4.69803	30.00000	Averaged	
	89 1,2,3-Trichloropropane	0.19510	0.20171	0.20171	0.010	3.38613	30.00000	Averaged	
	90 Bromobenzene	0.63587	0.59425	0.59425	0.010	-6.54530	30.00000	Averaged	
	91 n-Propylbenzene	3.33103	3.04406	3.04406	0.010	-8.61511	30.00000	Averaged	
	92 2-Chlorotoluene	2.30092	2.12208	2.12208	0.010	-7.77229	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	2.39063	2.19760	2.19760	0.010	-8.07473	30.00000	Averaged	
	94 4-Chlorotoluene	2.17249	2.04691	2.04691	0.010	-5.78058	30.00000	Averaged	
	95 tert-Butylbenzene	2.25514	2.10642	2.10642	0.010	-6.59473	30.00000	Averaged	
	96 1,2,4-Trimethylbenzene	2.48802	2.25674	2.25674	0.010	-9.29564	30.00000	Averaged	
	98 sec-Butylbenzene	3.18444	2.99778	2.99778	0.010	-5.86168	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i
Lab File ID: 91501ICV.d
Analysis Type: WATER
Lab Sample ID: W9VM091120-01
Method: /chem/VOA9.i/111909v9/VOA9-8260B-111909.m

Injection Date: 20-NOV-2009 08:43
Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Init. Cal. Times: 11:14 18:11
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.42785	2.28140	2.28140	0.010	-6.03183	30.00000	Averaged
100 1,3-Dichlorobenzene	1.25752	1.19553	1.19553	0.010	-4.92985	30.00000	Averaged
102 1,4-Dichlorobenzene	1.21950	1.17615	1.17615	0.010	-3.55474	30.00000	Averaged
104 n-Butylbenzene	1.46029	1.41832	1.41832	0.010	-2.87386	30.00000	Averaged
105 1,2-Dichlorobenzene	1.21410	1.15154	1.15154	0.010	-5.15283	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	0.13864	0.13707	0.13707	0.010	-1.13292	30.00000	Averaged
108 1,2,4-Trichlorobenzene	0.77779	0.75078	0.75078	0.010	-3.47185	30.00000	Averaged
109 Hexachlorobutadiene	0.42492	0.41463	0.41463	0.010	-2.42152	30.00000	Averaged
110 Naphthalene	1.95340	1.86767	1.86767	0.010	-4.38868	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.64044	0.62946	0.62946	0.010	-1.71435	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.78635
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/112009v9/91501ICV.d
Lab Smp Id: W9VM091120-01 Client Smp ID: LICV
Inj Date : 20-NOV-2009 08:43
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |W9VM091120-01|LICV|1|VOA|1|
Misc Info : GEL 5ml n/a UVM091111-01C/IVM091116-01
Comment :
Method : /chem/VOA9.i/111909v9/VOA9-8260B-111909.m
Meth Date : 20-Nov-2009 09:06 ram01192 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 27 Xylenes (total)	106				1951282	150.000	143
M 42 1,2-Dichloroethylene (total)	96				766420	100.000	98.6
M 45 1,3-Dichloropropylene	75				1286505	100.000	102
1 Dichlorodifluoromethane	85	4.958	4.958	(0.460)	253787	50.0000	46.2
2 Chloromethane	50	5.322	5.322	(0.493)	472454	50.0000	46.5
3 Vinyl chloride	62	5.574	5.574	(0.517)	414649	50.0000	50.2
4 Bromomethane	94	6.198	6.198	(0.575)	296324	50.0000	53.4
5 Chloroethane	64	6.352	6.352	(0.589)	302489	50.0000	52.2
6 Trichlorofluoromethane	101	6.779	6.779	(0.628)	498469	50.0000	54.1
7 Ethyl Ether	59	7.099	7.099	(0.658)	401215	50.0000	51.3
10 Acetone	43	7.490	7.490	(0.694)	1291855	250.000	220
14 Acetonitrile	41	7.858	7.858	(0.728)	1591198	1000.00	1240
11 1,1-Dichloroethylene	61	7.514	7.514	(0.697)	630818	50.0000	47.2
15 Methyl acetate	43	7.882	7.882	(0.731)	1755871	250.000	242
13 Iodomethane	142	7.775	7.775	(0.721)	2379466	250.000	232

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	19 Methylene chloride	84	8.095	8.095	(0.750)	432578	50.0000	45.3
	16 Carbon disulfide	76	7.917	7.917	(0.734)	5427381	250.000	241
	21 tert-Butyl methyl ether	73	8.380	8.380	(0.777)	1204683	50.0000	49.5
	22 trans-1,2-Dichloroethylene	96	8.427	8.427	(0.781)	362344	50.0000	49.4
	23 Vinyl acetate	43	8.854	8.854	(0.821)	4981903	250.000	292
	25 1,1-Dichloroethane	63	8.914	8.914	(0.826)	765232	50.0000	49.0
	29 2-Butanone	43	9.495	9.495	(0.880)	1568803	250.000	237
	31 cis-1,2-Dichloroethylene	96	9.554	9.554	(0.886)	404075	50.0000	49.2
	33 2,2-Dichloropropane	77	9.589	9.589	(0.889)	559587	50.0000	51.6
	36 Chloroform	83	9.862	9.862	(0.914)	676003	50.0000	49.1
	35 Bromochloromethane	128	9.838	9.838	(0.912)	183334	50.0000	51.3
	39 1,1,1-Trichloroethane	97	10.147	10.147	(0.941)	528088	50.0000	51.1
	41 Cyclohexane	84	10.230	10.230	(0.948)	563315	50.0000	50.7
	43 1,1-Dichloropropene	75	10.289	10.289	(0.954)	507400	50.0000	51.2
	52 n-Butyl alcohol	41	10.858	10.858	(1.007)	1151150	5000.00	5500
	44 Carbon tetrachloride	117	10.337	10.337	(0.958)	448439	50.0000	51.1
$	46 1,2-Dichloroethane-d4	65	10.443	10.443	(0.968)	530926	50.0000	54.3
	47 1,2-Dichloroethane	62	10.514	10.514	(0.975)	584909	50.0000	49.1
	48 Benzene	78	10.538	10.538	(0.977)	1464348	50.0000	47.7
	50 Cyclohexene	67	10.645	10.645	(0.987)	778049	50.0000	48.1
*	51 Fluorobenzene	96	10.787	10.787	(1.000)	1818335	50.0000	
	53 Trichloroethylene	95	11.167	11.167	(1.035)	368789	50.0000	49.9
	55 1,2-Dichloropropane	63	11.416	11.416	(1.058)	432717	50.0000	48.8
	56 Methylcyclohexane	83	11.416	11.416	(1.058)	678544	50.0000	50.7
	59 Bromodichloromethane	83	11.665	11.665	(1.081)	538979	50.0000	50.1
	58 Dibromomethane	93	11.558	11.558	(1.071)	233495	50.0000	50.6
	61 2-Chloroethylvinyl ether	63	11.866	11.866	(1.100)	1065996	250.000	207
	63 4-Methyl-2-pentanone	58	12.186	12.186	(0.873)	1017413	250.000	251
	62 cis-1,3-Dichloropropylene	75	12.103	12.103	(1.122)	659309	50.0000	50.3
$	64 Toluene-d8	99	12.424	12.424	(0.890)	161738	50.0000	53.5
	65 Toluene	92	12.495	12.495	(0.895)	881622	50.0000	47.4
	67 trans-1,3-Dichloropropylene	75	12.637	12.637	(0.906)	627195	50.0000	51.2
	68 1,1,2-Trichloroethane	83	12.862	12.862	(0.922)	294593	50.0000	49.4
	69 2-Hexanone	43	13.028	13.028	(0.934)	2240762	250.000	214
	70 1,3-Dichloropropane	76	13.064	13.064	(0.936)	574572	50.0000	49.2
	71 Tetrachloroethylene	164	13.088	13.088	(0.938)	239097	50.0000	48.1
	72 Dibromochloromethane	129	13.337	13.337	(0.956)	374549	50.0000	51.1
	73 1,2-Dibromoethane	107	13.503	13.503	(0.968)	359641	50.0000	51.7
*	75 Chlorobenzene-d5	117	13.953	13.953	(1.000)	1249397	50.0000	
	76 Chlorobenzene	112	13.977	13.977	(1.002)	910144	50.0000	49.6
	77 1,1,1,2-Tetrachloroethane	131	14.036	14.036	(1.006)	321893	50.0000	48.3
	78 Ethylbenzene	91	14.036	14.036	(1.006)	1562555	50.0000	45.8
	79 m,p-Xylenes	106	14.143	14.143	(1.014)	1285116	100.000	95.0
	80 o-Xylene	106	14.570	14.570	(1.044)	666165	50.0000	47.9
	81 Styrene	104	14.582	14.582	(1.045)	1104370	50.0000	47.1
	82 Bromoform	173	14.855	14.855	(0.907)	231983	50.0000	51.2
	83 Isopropylbenzene	105	14.926	14.926	(0.912)	1639192	50.0000	46.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
87 1,1,2,2-Tetrachloroethane	83	15.210	15.210	(0.929)	495969	50.0000	51.1
$ 86 Bromofluorobenzene	95	15.127	15.127	(0.924)	632703	50.0000	52.3
89 1,2,3-Trichloropropane	110	15.305	15.305	(0.935)	125886	50.0000	51.7
90 Bromobenzene	156	15.353	15.353	(0.938)	370875	50.0000	46.7
91 n-Propylbenzene	91	15.353	15.353	(0.938)	1899808	50.0000	45.7
92 2-Chlorotoluene	91	15.507	15.507	(0.947)	1324399	50.0000	46.1
93 1,3,5-Trimethylbenzene	105	15.495	15.495	(0.946)	1371527	50.0000	46.0
94 4-Chlorotoluene	91	15.614	15.614	(0.954)	1277481	50.0000	47.1
95 tert-Butylbenzene	119	15.874	15.874	(0.970)	1314624	50.0000	46.7
96 1,2,4-Trimethylbenzene	105	15.922	15.922	(0.972)	1408440	50.0000	45.4
98 sec-Butylbenzene	105	16.112	16.112	(0.984)	1870924	50.0000	47.1
99 4-Isopropyltoluene	119	16.230	16.230	(0.991)	1423831	50.0000	47.0
100 1,3-Dichlorobenzene	146	16.313	16.313	(0.996)	746132	50.0000	47.5
* 101 1,4-Dichlorobenzene-d4	152	16.373	16.373	(1.000)	624103	50.0000	
102 1,4-Dichlorobenzene	146	16.408	16.408	(1.002)	734036	50.0000	48.2
104 n-Butylbenzene	92	16.693	16.693	(1.020)	885181	50.0000	48.6
105 1,2-Dichlorobenzene	146	16.859	16.859	(1.030)	718676	50.0000	47.4
107 1,2-Dibromo-3-chloropropane	157	17.784	17.784	(1.086)	85543	50.0000	49.4
108 1,2,4-Trichlorobenzene	180	18.922	18.922	(1.156)	468566	50.0000	48.3
109 Hexachlorobutadiene	225	19.100	19.100	(1.167)	258771	50.0000	48.8
110 Naphthalene	128	19.349	19.349	(1.182)	1165620	50.0000	47.8
111 1,2,3-Trichlorobenzene	180	19.717	19.717	(1.204)	392850	50.0000	49.1

Data File: /chem/VOA9.i/112009v9/91501ICV.d
Date : 20-NOV-2009 08:43
Client ID: LICV
Sample Info: IN9VM091120-01|LICV|1|VOA|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA9.i
Operator: RXY1
Column diameter: 0.25

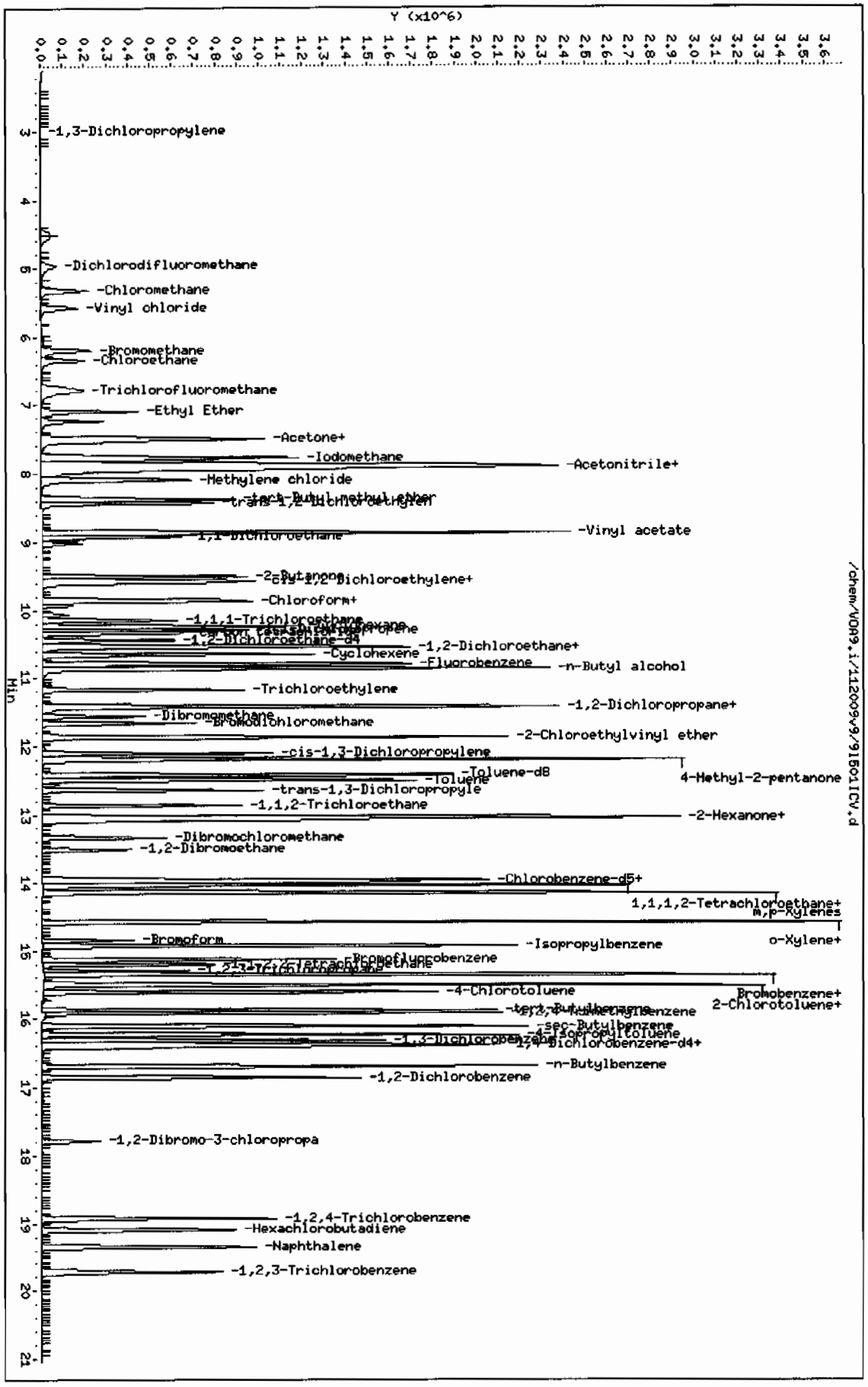

Page 1

Data File: /chem/VOA1.i/112509v1/1n326.d
Report Date: 02-Dec-2009 14:03

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 21:29
Lab File ID: 1n326.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091125-03 Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.85095	0.85095	0.050	10.27635	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.38155	0.38155	0.050	11.43646	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.82965	0.82965	0.050	6.06900	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.30238	0.30238	0.050	-9.43335	30.00000	Averaged	
	6 Chloromethane	0.41309	0.42333	0.42333	0.100	2.47883	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.36183	0.36183	0.050	-1.91528	20.00000	Averaged	ccc
	9 Bromomethane	0.22182	0.26448	0.26448	0.050	19.23426	30.00000	Averaged	
	10 Chloroethane	0.22841	0.27369	0.27369	0.050	19.82687	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.59447	0.59447	0.050	14.46302	30.00000	Averaged	
	12 Ethyl Ether	53.93183	50.00000	0.33969	0.010	7.86366	30.00000	Wt Linear	
	16 Acetone	0.29015	0.24068	0.24068	0.000	-17.05072	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.04158	0.04158	0.010	16.50539	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.73124	0.73124	0.050	2.19739	20.00000	Averaged	ccc
	21 Methyl acetate	0.24840	0.26241	0.26241	0.010	5.64062	40.00000	Averaged	
	18 Iodomethane	0.46290	0.54274	0.54274	0.050	17.24705	30.00000	Averaged	
	23 Methylene chloride	55.71024	50.00000	0.40172	0.000	11.42048	30.00000	Linear	
	19 Carbon disulfide	0.92149	1.10586	1.10586	0.050	20.00830	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	1.18293	1.18293	0.050	3.91814	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.36549	0.36549	0.050	9.97583	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.67630	0.67630	0.010	22.71200	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.76177	0.76177	0.100	3.12032	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.24940	0.24940	0.030	-12.27906	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.39760	0.39760	0.050	12.81597	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.55424	0.55424	0.050	2.71743	30.00000	Averaged	
	41 Chloroform	0.78646	0.82509	0.82509	0.010	4.91225	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.17154	0.17154	0.010	22.49703	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.64878	0.64878	0.010	5.33599	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.72594	0.72594	0.010	12.14591	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.59965	0.59965	0.010	6.88156	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.01110	0.01110	0.001	22.66045	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.67137	0.67137	0.010	8.80905	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62193	0.77771	0.77771	0.010	25.04845	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.70364	0.70364	0.010	1.38507	30.00000	Averaged	
	47 Benzene	54.48742	50.00000	1.52565	0.010	8.97484	30.00000	Linear	
	50 Cyclohexene	0.53439	0.55235	0.55235	0.010	3.35991	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n326.d
Analysis Type: SOIL
Lab Sample ID: W1VM091125-03 Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

Injection Date: 25-NOV-2009 21:29
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.41965	0.41965	0.010	9.50482	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.40305	0.40305	0.010	11.21650	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.66018	0.66018	0.010	11.48808	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.64963	0.64963	0.010	9.26279	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.24480	0.24480	0.010	9.53780	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	267	250	0.05367	0.000	6.67769	30.00000	Linear	
	64 4-Methyl-2-pentanone	0.18521	0.18369	0.18369	0.010	-0.82516	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.69517	0.69517	0.010	12.25884	30.00000	Averaged	
$	65 Toluene-d8	2.03499	2.22463	2.22463	0.010	9.31916	30.00000	Averaged	
	66 Toluene	1.09808	1.17007	1.17007	0.010	6.55517	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.83943	0.83943	0.010	7.46241	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.33179	0.33179	0.010	8.55879	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.41743	0.41743	0.010	-14.73064	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.72405	0.72405	0.010	6.57996	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.37799	0.37799	0.010	13.46711	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.49601	0.49601	0.010	13.12562	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.40411	0.40411	0.010	12.43111	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.25430	1.25430	0.300	10.43060	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.48965	0.48965	0.010	11.21082	30.00000	Averaged	
	78 Ethylbenzene	2.36203	2.41785	2.41785	0.010	2.36346	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.85385	0.85385	0.010	9.65160	30.00000	Averaged	
	81 o-Xylene	0.75757	0.84516	0.84516	0.010	11.56181	30.00000	Averaged	
	82 Styrene	1.29825	1.42748	1.42748	0.010	9.95456	30.00000	Averaged	
	83 Bromoform	0.49742	0.59790	0.59790	0.100	20.20105	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	4.31764	4.31764	0.010	6.14815	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.87939	0.87939	0.300	10.87641	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.64689	1.64689	0.010	-1.90154	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.26653	0.26653	0.010	2.19171	30.00000	Averaged	
	91 Bromobenzene	0.84112	0.97879	0.97879	0.010	16.36638	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	5.18147	5.18147	0.010	4.58003	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.75140	3.75140	0.010	4.50503	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.81369	3.81369	0.010	6.43436	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	3.38843	3.38843	0.010	4.67974	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.97709	2.97709	0.010	6.73734	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.82455	3.82455	0.010	4.27174	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.79391	4.79391	0.010	7.68538	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 21:29
Lab File ID: 1n326.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091125-03 Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.65416	3.65416	0.010	8.57995	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.78637	1.78637	0.010	11.21924	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.81935	1.81935	0.010	10.51038	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.94714	3.94714	0.010	4.75316	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.76484	1.76484	0.010	14.77796	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.18714	0.18714	0.010	23.76942	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.22916	1.22916	0.010	7.59776	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.84873	0.84873	0.010	4.95348	30.00000	Averaged
111 Naphthalene	2.11900	2.42917	2.42917	0.010	14.63720	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	1.07914	1.07914	0.010	12.26880	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 10.00539
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n326.d
Lab Smp Id: W1VM091125-03 Client Smp ID: VSTD050
Inj Date : 25-NOV-2009 21:29
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091125-03|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 02-Dec-2009 14:03 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1826239	150.000	165
M 2 1,2-Dichloroethylene (total)	96				643816	100.000	111
M 3 1,3-Dichloropropylene	75				1187014	100.000	110
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	255116	50.0000	45.3
6 Chloromethane	50	5.542	5.542	(0.405)	357159	50.0000	51.2
7 Vinyl chloride	62	5.922	5.922	(0.433)	305277	50.0000	49.0
9 Bromomethane	96	6.948	6.948	(0.508)	223141	50.0000	59.6
10 Chloroethane	64	7.219	7.219	(0.527)	230914	50.0000	59.9
11 Trichlorofluoromethane	101	7.845	7.845	(0.573)	501553	50.0000	57.2
12 Ethyl Ether	59	8.480	8.480	(0.620)	286596	50.0000	53.9
16 Acetone	43	9.254	9.254	(0.676)	1015303	250.000	207
22 Acetonitrile	41	9.976	9.976	(0.729)	877096	1250.00	1460

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	15 1,1-Dichloroethylene	61	9.083	9.083	(0.664)	616939	50.0000	51.1
	21 Methyl acetate	43	9.834	9.834	(0.718)	1106970	250.000	264
	18 Iodomethane	142	9.465	9.465	(0.692)	2289520	250.000	293
	23 Methylene chloride	84	10.142	10.142	(0.741)	338926	50.0000	55.7
	19 Carbon disulfide	76	9.576	9.576	(0.700)	4665056	250.000	300
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	998031	50.0000	52.0
	26 trans-1,2-Dichloroethylene	96	10.542	10.542	(0.770)	308364	50.0000	55.0
	29 Vinyl acetate	43	11.293	11.293	(0.825)	2852936	250.000	307
	30 1,1-Dichloroethane	63	11.325	11.325	(0.827)	642698	50.0000	51.6
	35 2-Butanone	43	12.186	12.186	(0.890)	1052090	250.000	219
	36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	335451	50.0000	56.4
	33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	467604	50.0000	51.4
	41 Chloroform	83	12.609	12.609	(0.921)	696121	50.0000	52.4
	39 Bromochloromethane	128	12.559	12.559	(0.918)	144728	50.0000	61.2
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	547368	50.0000	52.7
	42 Cyclohexane	56	12.839	12.839	(0.938)	612471	50.0000	56.1
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	505918	50.0000	53.4
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	936762	5000.00	6130
	44 Carbon tetrachloride	117	13.028	13.028	(0.952)	566431	50.0000	54.4
$	48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.974)	656149	50.0000	62.5
	51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	593658	50.0000	50.7
	47 Benzene	78	13.332	13.332	(0.974)	1287183	50.0000	54.5
	50 Cyclohexene	54	13.396	13.396	(0.979)	466014	50.0000	51.7
*	52 Fluorobenzene	96	13.686	13.686	(1.000)	843693	50.0000	
	54 Trichloroethylene	95	14.114	14.114	(1.031)	354056	50.0000	54.8
	57 1,2-Dichloropropane	63	14.455	14.455	(1.056)	340052	50.0000	55.6
	55 Methylcyclohexane	83	14.280	14.280	(1.043)	556989	50.0000	55.7
	60 Bromodichloromethane	83	14.750	14.750	(1.078)	548089	50.0000	54.6
	59 Dibromomethane	93	14.625	14.625	(1.069)	206537	50.0000	54.8
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	226421	250.000	267
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	657015	250.000	248
	63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	586514	50.0000	56.1
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1591436	50.0000	54.6
	66 Toluene	92	15.597	15.597	(0.909)	837030	50.0000	53.3
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	600499	50.0000	53.7
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	237354	50.0000	54.3
	71 2-Hexanone	43	16.269	16.269	(0.948)	1493090	250.000	213
	72 1,3-Dichloropropane	76	16.305	16.305	(0.950)	517966	50.0000	53.3
	70 Tetrachloroethylene	164	16.190	16.190	(0.943)	270405	50.0000	56.7
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	354831	50.0000	56.6
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	289087	50.0000	56.2
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	715370	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	897286	50.0000	55.2
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	350279	50.0000	55.6
	78 Ethylbenzene	91	17.221	17.221	(1.003)	1729658	50.0000	51.2
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1221640	100.000	110
	81 o-Xylene	106	17.783	17.783	(1.036)	604598	50.0000	55.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
82 Styrene	104	17.806	17.806	(1.038)	1021178	50.0000	55.0
83 Bromoform	173	18.105	18.105	(0.923)	241881	50.0000	60.1
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1746705	50.0000	53.1
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	355759	50.0000	55.4
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	666249	50.0000	49.0
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	107823	50.0000	51.1
91 Bromobenzene	156	18.593	18.593	(0.948)	395969	50.0000	58.2
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2096170	50.0000	52.3
94 2-Chlorotoluene	91	18.741	18.741	(0.956)	1517632	50.0000	52.2
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1542835	50.0000	53.2
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1370794	50.0000	52.3
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1204387	50.0000	53.4
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1547226	50.0000	52.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1939382	50.0000	53.8
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1478294	50.0000	54.3
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.997)	722678	50.0000	55.6
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	404551	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	736021	50.0000	55.2
105 n-Butylbenzene	91	19.873	19.873	(1.013)	1596821	50.0000	52.4
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	713968	50.0000	57.4
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	75706	50.0000	61.9
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	497260	50.0000	53.8
110 Hexachlorobutadiene	225	22.105	22.105	(1.127)	343354	50.0000	52.5
111 Naphthalene	128	22.437	22.437	(1.144)	982722	50.0000	57.3
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	436566	50.0000	56.1

Data File: /chem/VOA1.i/112509v1/1n326.d
Date : 25-NOV-2009 21:29
Client ID: VSTD050
Sample Info: IW1VH091125-03|CCV/LCS|1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

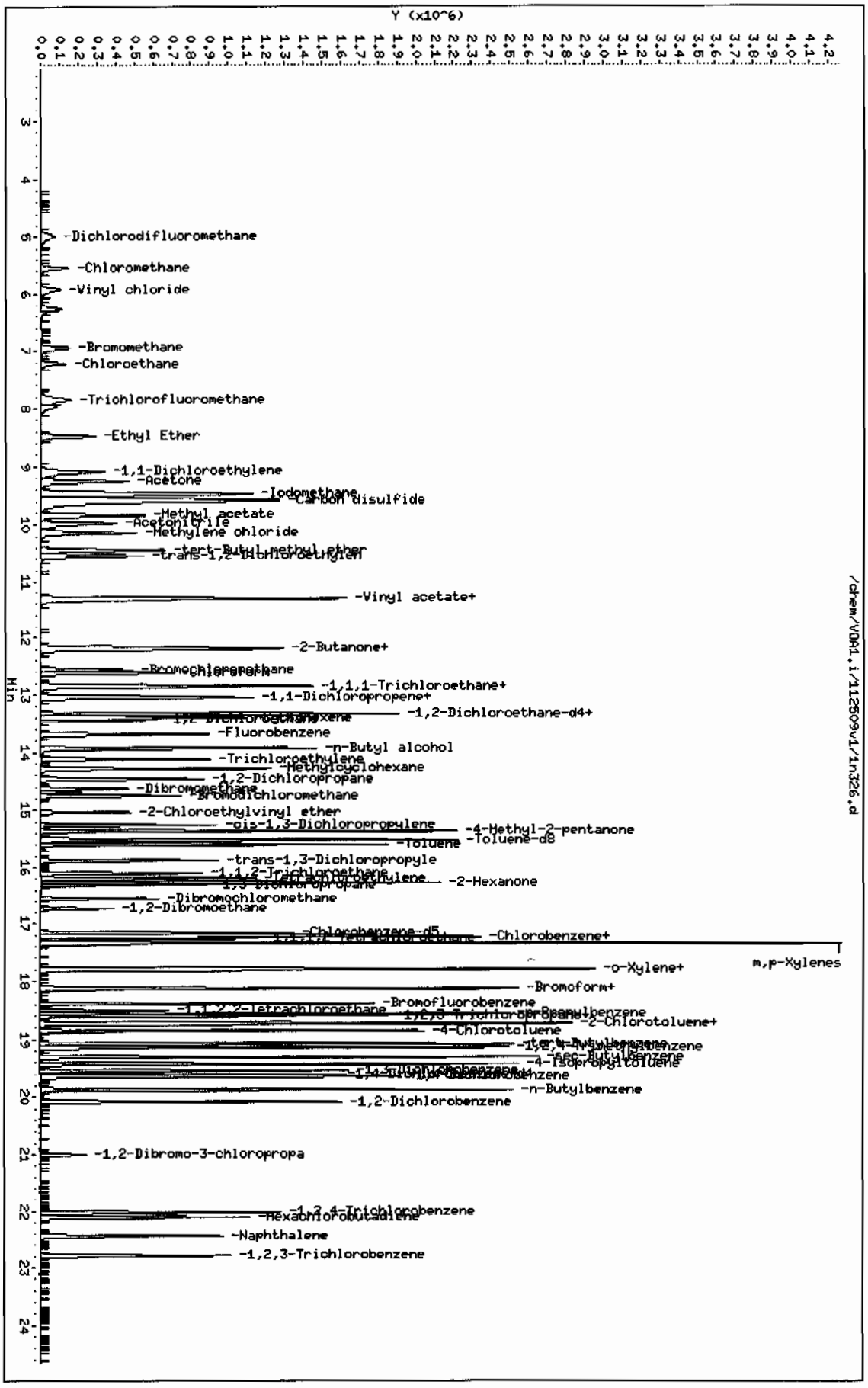

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 21:59
Lab File ID: 1n327.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.13858	0.13858	0.010	-11.66861	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.31196	0.31196	0.010	-5.11696	30.00000	Averaged
13 Acrolein	0.05116	0.06154	0.06154	0.001	20.29995	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.28628	0.28628	0.030	-2.12632	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02392	0.02392	0.000	18.36149	40.00000	Averaged
20 Allyl chloride	0.10619	0.13526	0.13526	0.010	27.37955	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.04274	0.04274	0.010	12.59066	40.00000	Averaged
27 Acrylonitrile	0.10676	0.11744	0.11744	0.010	10.00458	30.00000	Averaged
28 Isopropyl ether	1.19537	1.16413	1.16413	0.010	-2.61404	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.60616	0.60616	0.010	-0.66522	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.17279	1.17279	0.010	2.78721	30.00000	Averaged
37 Propionitrile	0.04326	0.04557	0.04557	0.010	5.34149	30.00000	Averaged
34 Ethyl acetate	0.29220	0.29414	0.29414	0.010	0.66596	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.24733	0.24733	0.010	6.69986	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.20987	0.20987	0.010	2.52253	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.01151	0.01151	0.001	6.01251	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	1.01007	1.01007	0.010	11.03910	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.21706	0.21706	0.010	9.59116	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.52890	0.52890	0.010	3.50672	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.34978	0.34978	0.000	-11.29250	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00286	0.00286	0.001	0.25017	40.00000	Averaged
62 2-Nitropropane	0.10798	0.11524	0.11524	0.000	6.72394	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.31957	0.31957	0.010	3.80994	30.00000	Averaged
86 Cyclohexanone	753	1250	0.02859	0.010	-39.76143	40.00000	Linear
90 trans-1,4-Dichloro-2-butene	0.30029	0.30471	0.30471	0.010	1.47253	30.00000	Averaged
98 Pentachloroethane	0.31186	0.33631	0.33631	0.010	7.83875	30.00000	Averaged
104 Benzyl chloride	1.59479	1.60878	1.60878	0.010	0.87720	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.38850	0.38850	0.010	7.85585	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.64951	0.64951	0.010	4.43515	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.16065	2.16065	0.010	6.17477	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.56763	1.56763	0.010	-6.62229	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 25-NOV-2009 21:59
Lab File ID: 1n327.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m

Average %D / Drift Results.
Calculated Average %D/Drift = 8.26156
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n327.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 25-NOV-2009 21:59
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 27-Nov-2009 09:16 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	396523	150.000	132
8 2-Chloro-1,1,1-trifluoroethane	118	6.289	6.289	(0.460)	892630	150.000	142
13 Acrolein	56	8.954	8.954	(0.654)	293493	250.000	301
14 Trichlorotrifluoroethane	101	8.978	8.978	(0.656)	1365266	250.000	245
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1140675	2500.00	2960
20 Allyl chloride	76	9.848	9.848	(0.720)	645063	250.000	318
24 tert-Butyl Alcohol	59	10.197	10.197	(0.745)	2038257	2500.00	2810
27 Acrylonitrile	53	10.671	10.671	(0.780)	560054	250.000	275
28 Isopropyl ether	45	11.196	11.196	(0.818)	1110333	50.0000	48.7
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	578154	50.0000	49.7
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1118599	50.0000	51.4
37 Propionitrile	54	12.402	12.402	(0.906)	217340	250.000	263
34 Ethyl acetate	43	12.167	12.167	(0.889)	1402763	250.000	252

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1179487	250.000	267
38 Tetrahydrofuran	42	12.540	12.540	(0.639)	468262	250.000	256
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	548891	2500.00	2650
49 Methyl tert-amyl ether	73	13.350	13.350	(0.976)	963399	50.0000	55.5
56 Methyl methacrylate	69	14.437	14.437	(1.055)	1035165	250.000	274
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2083907	250.000	259
75 1-Chlorohexane	55	17.028	17.028	(1.245)	333621	50.0000	44.4(H)
58 1,4-Dioxane	88	14.543	14.543	(1.063)	136296	2500.00	2510
62 2-Nitropropane	43	15.081	15.081	(1.102)	549556	250.000	267
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	713025	250.000	260
86 Cyclohexanone	55	18.386	18.386	(1.071)	563195	1250.00	753
90 trans-1,4-Dichloro-2-butene	53	18.566	18.566	(0.947)	679867	250.000	254
98 Pentachloroethane	167	19.196	19.196	(0.979)	750377	250.000	270(A)
104 Benzyl chloride	91	19.772	19.772	(1.008)	3589522	250.000	252
107 bis(2-Chloroisopropyl)ether	45	20.163	20.163	(1.028)	866833	250.000	270
* 52 Fluorobenzene	96	13.682	13.682	(1.000)	953791	50.0000	
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	788014	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.611	(1.000)	446241	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.341	13.341	(0.975)	619497	50.0000	52.2
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1702619	50.0000	53.1
$ 87 Bromofluorobenzene	95	18.386	18.386	(0.938)	699542	50.0000	46.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: /chem/VOA1.i/112509v1/1nJ27.d
Date : 25-NOV-2009 21:59
Client ID: VSTD250S
Sample Info: IUVH091118-08A|SHORT|1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

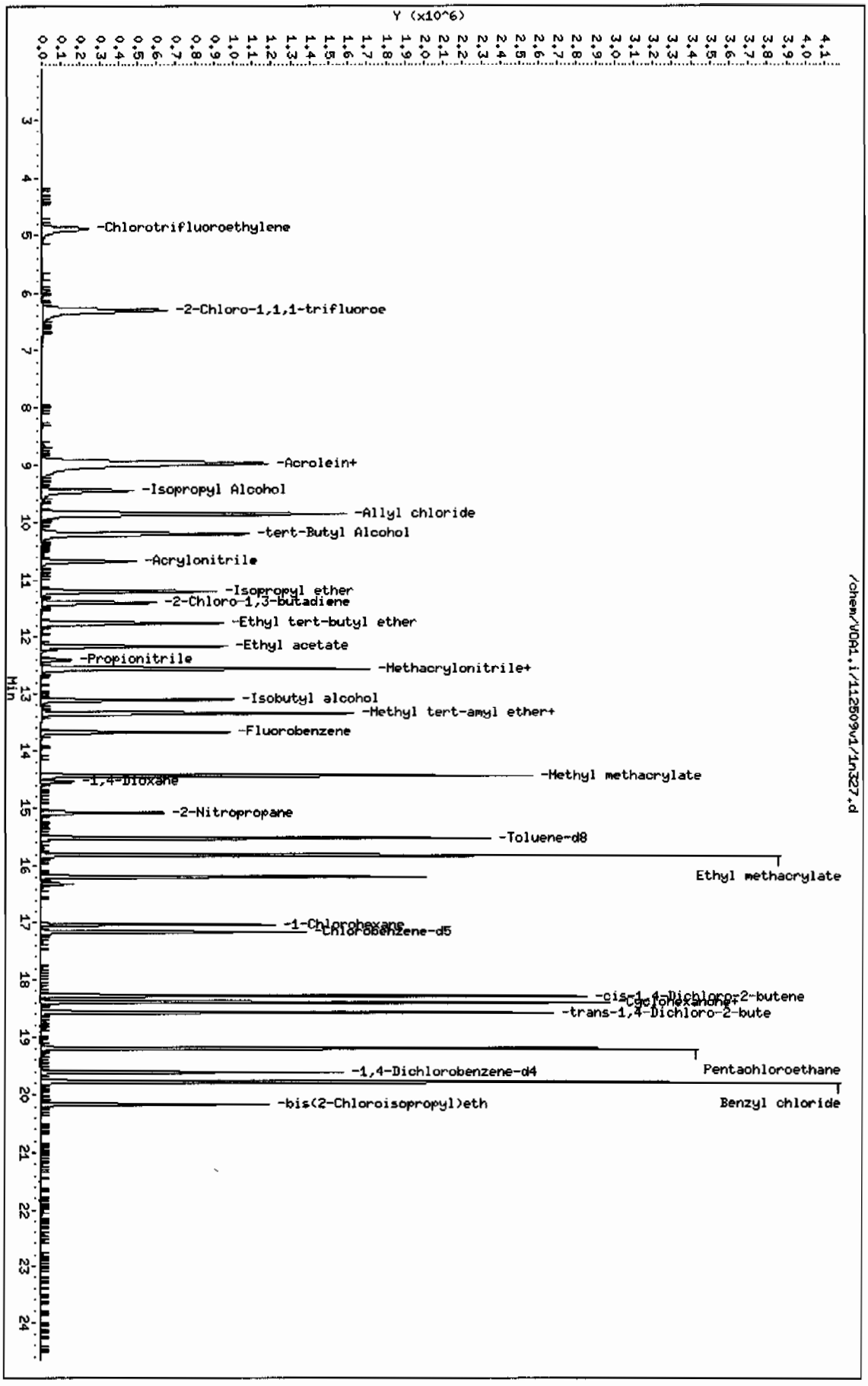

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 27-NOV-2009 05:41
Lab File ID: 1n502.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: W1VM091125-01 Quant Type: ISTD
Method: /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.77166	0.68127	0.68127	0.050	-11.71326	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.34239	0.31601	0.31601	0.050	-7.70577	30.00000	Averaged	
M	3 1,3-Dichloropropylene	0.78218	0.70134	0.70134	0.050	-10.33503	30.00000	Averaged	
	5 Dichlorodifluoromethane	0.33388	0.23726	0.23726	0.050	-28.93650	30.00000	Averaged	
	6 Chloromethane	0.41309	0.33460	0.33460	0.100	-19.00159	30.00000	Averaged	spcc
	7 Vinyl chloride	0.36890	0.29696	0.29696	0.050	-19.50227	20.00000	Averaged	ccc
	9 Bromomethane	0.22182	0.21408	0.21408	0.050	-3.48735	30.00000	Averaged	
	10 Chloroethane	0.22841	0.22107	0.22107	0.050	-3.21149	30.00000	Averaged	
	11 Trichlorofluoromethane	0.51936	0.50350	0.50350	0.050	-3.05324	30.00000	Averaged	
	12 Ethyl Ether	42.81520	50.00000	0.27076	0.010	-14.36959	30.00000	Wt Linear	
	16 Acetone	0.29015	0.19789	0.19789	0.000	-31.79773	40.00000	Averaged	
	22 Acetonitrile	0.03569	0.03449	0.03449	0.010	-3.36020	30.00000	Averaged	
	15 1,1-Dichloroethylene	0.71551	0.60267	0.60267	0.050	-15.77101	20.00000	Averaged	ccc
	21 Methyl acetate	0.24840	0.20691	0.20691	0.010	-16.70355	40.00000	Averaged	
	18 Iodomethane	0.46290	0.44102	0.44102	0.050	-4.72778	30.00000	Averaged	
	23 Methylene chloride	48.97638	50.00000	0.35447	0.000	-2.04725	30.00000	Linear	
	19 Carbon disulfide	0.92149	0.91539	0.91539	0.050	-0.66148	30.00000	Averaged	
	25 tert-Butyl methyl ether	1.13833	0.96759	0.96759	0.050	-14.99924	30.00000	Averaged	
	26 trans-1,2-Dichloroethylene	0.33234	0.30433	0.30433	0.050	-8.42693	30.00000	Averaged	
	29 Vinyl acetate	0.55113	0.65917	0.65917	0.010	19.60403	40.00000	Averaged	
	30 1,1-Dichloroethane	0.73872	0.63355	0.63355	0.100	-14.23683	30.00000	Averaged	spcc
	35 2-Butanone	0.28431	0.20352	0.20352	0.030	-28.41821	40.00000	Averaged	
	36 cis-1,2-Dichloroethylene	0.35243	0.32768	0.32768	0.050	-7.02394	30.00000	Averaged	
	33 2,2-Dichloropropane	0.53957	0.47000	0.47000	0.050	-12.89365	30.00000	Averaged	
	41 Chloroform	0.78646	0.67349	0.67349	0.010	-14.36386	20.00000	Averaged	ccc
	39 Bromochloromethane	0.14004	0.14038	0.14038	0.010	0.24657	30.00000	Averaged	
	43 1,1,1-Trichloroethane	0.61591	0.52132	0.52132	0.010	-15.35872	30.00000	Averaged	
	42 Cyclohexane	0.64732	0.59990	0.59990	0.010	-7.32491	30.00000	Averaged	
	45 1,1-Dichloropropene	0.56104	0.50015	0.50015	0.010	-10.85281	30.00000	Averaged	
	53 n-Butyl alcohol	0.00905	0.00886	0.00886	0.001	-2.09654	40.00000	Averaged	
	44 Carbon tetrachloride	0.61702	0.54761	0.54761	0.010	-11.24848	30.00000	Averaged	
$	48 1,2-Dichloroethane-d4	0.62193	0.74209	0.74209	0.010	19.32142	30.00000	Averaged	
	51 1,2-Dichloroethane	0.69403	0.56473	0.56473	0.010	-18.63072	30.00000	Averaged	
	47 Benzene	45.01898	50.00000	1.25880	0.010	-9.96205	30.00000	Linear	
	50 Cyclohexene	0.53439	0.45788	0.45788	0.010	-14.31713	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n502.d
Analysis Type: SOIL
Lab Sample ID: W1VM091125-01
Method: /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m

Injection Date: 27-NOV-2009 05:41
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	54 Trichloroethylene	0.38323	0.34518	0.34518	0.010	-9.92896	30.00000	Averaged	
	57 1,2-Dichloropropane	0.36240	0.33006	0.33006	0.010	-8.92533	20.00000	Averaged	ccc
	55 Methylcyclohexane	0.59215	0.57010	0.57010	0.010	-3.72337	30.00000	Averaged	
	60 Bromodichloromethane	0.59456	0.54327	0.54327	0.010	-8.62694	30.00000	Averaged	
	59 Dibromomethane	0.22349	0.20728	0.20728	0.010	-7.25083	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	160	250	0.03047	0.000	-36.05455	30.00000	Linear	<-
	64 4-Methyl-2-pentanone	0.18521	0.15082	0.15082	0.010	-18.56894	40.00000	Averaged	
	63 cis-1,3-Dichloropropylene	0.61926	0.58492	0.58492	0.010	-5.54623	30.00000	Averaged	
$	65 Toluene-d8	2.03499	2.18656	2.18656	0.010	7.44817	30.00000	Averaged	
	66 Toluene	1.09808	0.94151	0.94151	0.010	-14.25861	20.00000	Averaged	ccc
	68 trans-1,3-Dichloropropylene	0.78113	0.70302	0.70302	0.010	-10.00023	30.00000	Averaged	
	69 1,1,2-Trichloroethane	0.30563	0.27098	0.27098	0.010	-11.33900	30.00000	Averaged	
	71 2-Hexanone	0.48954	0.33629	0.33629	0.010	-31.30485	40.00000	Averaged	
	72 1,3-Dichloropropane	0.67935	0.58488	0.58488	0.010	-13.90645	30.00000	Averaged	
	70 Tetrachloroethylene	0.33313	0.31066	0.31066	0.010	-6.74387	30.00000	Averaged	
	73 Dibromochloromethane	0.43846	0.42044	0.42044	0.010	-4.11064	30.00000	Averaged	
	74 1,2-Dibromoethane	0.35943	0.32590	0.32590	0.010	-9.32886	30.00000	Averaged	
	77 Chlorobenzene	1.13582	1.00270	1.00270	0.300	-11.72069	30.00000	Averaged	spcc
	79 1,1,1,2-Tetrachloroethane	0.44029	0.39836	0.39836	0.010	-9.52235	30.00000	Averaged	
	78 Ethylbenzene	2.36203	1.95718	1.95718	0.010	-17.13987	20.00000	Averaged	ccc
	80 m,p-Xylenes	0.77870	0.68807	0.68807	0.010	-11.63863	30.00000	Averaged	
	81 o-Xylene	0.75757	0.66768	0.66768	0.010	-11.86579	30.00000	Averaged	
	82 Styrene	1.29825	1.20840	1.20840	0.010	-6.92038	30.00000	Averaged	
	83 Bromoform	0.49742	0.49218	0.49218	0.100	-1.05234	30.00000	Averaged	spcc
	84 Isopropylbenzene	4.06756	3.59696	3.59696	0.010	-11.56955	30.00000	Averaged	
	88 1,1,2,2-Tetrachloroethane	0.79313	0.72734	0.72734	0.300	-8.29504	30.00000	Averaged	spcc
$	87 Bromofluorobenzene	1.67881	1.58527	1.58527	0.010	-5.57173	30.00000	Averaged	
	92 1,2,3-Trichloropropane	0.26081	0.21361	0.21361	0.010	-18.09647	30.00000	Averaged	
	91 Bromobenzene	0.84112	0.80221	0.80221	0.010	-4.62643	30.00000	Averaged	
	89 n-Propylbenzene	4.95455	4.38781	4.38781	0.010	-11.43872	30.00000	Averaged	
	94 2-Chlorotoluene	3.58968	3.09608	3.09608	0.010	-13.75052	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	3.58314	3.15659	3.15659	0.010	-11.90445	30.00000	Averaged	
	95 4-Chlorotoluene	3.23695	2.81850	2.81850	0.010	-12.92731	30.00000	Averaged	
	96 tert-Butylbenzene	2.78918	2.52460	2.52460	0.010	-9.48585	30.00000	Averaged	
	97 1,2,4-Trimethylbenzene	3.66787	3.20662	3.20662	0.010	-12.57528	30.00000	Averaged	
	99 sec-Butylbenzene	4.45177	4.01631	4.01631	0.010	-9.78185	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n502.d
Analysis Type: SOIL
Lab Sample ID: W1VM091125-01
Method: /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m

Injection Date: 27-NOV-2009 05:41
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	3.36541	3.16898	3.16898	0.010	-5.83679	30.00000	Averaged
101 1,3-Dichlorobenzene	1.60617	1.55754	1.55754	0.010	-3.02771	30.00000	Averaged
103 1,4-Dichlorobenzene	1.64632	1.51050	1.51050	0.010	-8.24969	30.00000	Averaged
105 n-Butylbenzene	3.76804	3.43444	3.43444	0.010	-8.85333	30.00000	Averaged
106 1,2-Dichlorobenzene	1.53761	1.46681	1.46681	0.010	-4.60470	30.00000	Averaged
108 1,2-Dibromo-3-chloropropane	0.15120	0.14983	0.14983	0.010	-0.90317	30.00000	Averaged
109 1,2,4-Trichlorobenzene	1.14237	1.13663	1.13663	0.010	-0.50286	30.00000	Averaged
110 Hexachlorobutadiene	0.80867	0.76789	0.76789	0.010	-5.04324	30.00000	Averaged
111 Naphthalene	2.11900	1.97824	1.97824	0.010	-6.64277	30.00000	Averaged
112 1,2,3-Trichlorobenzene	0.96121	0.95724	0.95724	0.010	-0.41301	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 10.82392
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n502.d
Lab Smp Id: W1VM091125-01 Client Smp ID: VSTD050
Inj Date : 27-NOV-2009 05:41
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |W1VM091125-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 10-Dec-2009 15:28 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				1618086	150.000	132
M 2 1,2-Dichloroethylene (total)	96				598525	100.000	92.3
M 3 1,3-Dichloropropylene	75				1110506	100.000	92.2
5 Dichlorodifluoromethane	85	4.998	4.998	(0.365)	224693	50.0000	35.5
6 Chloromethane	50	5.543	5.543	(0.405)	316868	50.0000	40.5
7 Vinyl chloride	62	5.915	5.915	(0.432)	281222	50.0000	40.2
9 Bromomethane	96	6.938	6.938	(0.507)	202739	50.0000	48.2
10 Chloroethane	64	7.205	7.205	(0.527)	209359	50.0000	48.4
11 Trichlorofluoromethane	101	7.831	7.831	(0.573)	476825	50.0000	48.5
12 Ethyl Ether	59	8.462	8.462	(0.619)	256414	50.0000	42.8
16 Acetone	43	9.240	9.240	(0.676)	937035	250.000	170
22 Acetonitrile	41	9.963	9.963	(0.728)	816640	1250.00	1210

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	15 1,1-Dichloroethylene	61	9.074	9.074	(0.663)	570739	50.0000	42.1
	21 Methyl acetate	43	9.829	9.829	(0.719)	979727	250.000	208
	18 Iodomethane	142	9.456	9.456	(0.691)	2088250	250.000	238
	23 Methylene chloride	84	10.128	10.128	(0.741)	335687	50.0000	49.0
	19 Carbon disulfide	76	9.567	9.567	(0.699)	4334480	250.000	248
	25 tert-Butyl methyl ether	73	10.427	10.427	(0.762)	916325	50.0000	42.5
	26 trans-1,2-Dichloroethylene	96	10.538	10.538	(0.770)	288209	50.0000	45.8
	29 Vinyl acetate	43	11.284	11.284	(0.825)	3121222	250.000	299
	30 1,1-Dichloroethane	63	11.311	11.311	(0.827)	599981	50.0000	42.9
	35 2-Butanone	43	12.177	12.177	(0.890)	963664	250.000	179
	36 cis-1,2-Dichloroethylene	96	12.190	12.190	(0.891)	310316	50.0000	46.5
	33 2,2-Dichloropropane	77	12.154	12.154	(0.889)	445100	50.0000	43.6
	41 Chloroform	83	12.600	12.600	(0.921)	637807	50.0000	42.8
	39 Bromochloromethane	128	12.549	12.549	(0.918)	132945	50.0000	50.1
	43 1,1,1-Trichloroethane	97	12.839	12.839	(0.939)	493695	50.0000	42.3
	42 Cyclohexane	56	12.830	12.830	(0.938)	568118	50.0000	46.3
	45 1,1-Dichloropropene	75	13.042	13.042	(0.954)	473651	50.0000	44.6
	53 n-Butyl alcohol	56	13.921	13.921	(1.018)	839260	5000.00	4900
	44 Carbon tetrachloride	117	13.014	13.014	(0.952)	518599	50.0000	44.4
$	48 1,2-Dichloroethane-d4	65	13.332	13.332	(0.975)	702775	50.0000	59.7
	51 1,2-Dichloroethane	62	13.433	13.433	(0.982)	534806	50.0000	40.7
	47 Benzene	78	13.323	13.323	(0.974)	1192109	50.0000	45.0
	50 Cyclohexene	54	13.387	13.387	(0.979)	433625	50.0000	42.8
*	52 Fluorobenzene	96	13.677	13.677	(1.000)	947018	50.0000	
	54 Trichloroethylene	95	14.110	14.110	(1.032)	326887	50.0000	45.0
	57 1,2-Dichloropropane	63	14.451	14.451	(1.057)	312570	50.0000	45.5
	55 Methylcyclohexane	83	14.276	14.276	(1.044)	539900	50.0000	48.1
	60 Bromodichloromethane	83	14.745	14.745	(1.078)	514482	50.0000	45.7
	59 Dibromomethane	93	14.621	14.621	(1.069)	196299	50.0000	46.4
	61 2-Chloroethylvinyl ether	63	15.026	15.026	(1.099)	144283	250.000	160
	64 4-Methyl-2-pentanone	58	15.357	15.357	(0.895)	597028	250.000	204
	63 cis-1,3-Dichloropropylene	75	15.251	15.251	(1.115)	553925	50.0000	47.2
$	65 Toluene-d8	98	15.514	15.514	(0.904)	1731103	50.0000	53.7
	66 Toluene	92	15.592	15.592	(0.909)	745397	50.0000	42.9
	68 trans-1,3-Dichloropropylene	75	15.873	15.873	(0.925)	556581	50.0000	45.0
	69 1,1,2-Trichloroethane	83	16.098	16.098	(0.938)	214534	50.0000	44.3
	71 2-Hexanone	43	16.269	16.269	(0.948)	1331220	250.000	172
	72 1,3-Dichloropropane	76	16.306	16.306	(0.950)	463049	50.0000	43.0
	70 Tetrachloroethylene	164	16.186	16.186	(0.943)	245953	50.0000	46.6
	73 Dibromochloromethane	129	16.545	16.545	(0.964)	332860	50.0000	47.9
	74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	258013	50.0000	45.3
*	76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	791701	50.0000	
	77 Chlorobenzene	112	17.189	17.189	(1.002)	793836	50.0000	44.1
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	315384	50.0000	45.2
	78 Ethylbenzene	91	17.217	17.217	(1.003)	1549501	50.0000	41.4
	80 m,p-Xylenes	106	17.332	17.332	(1.010)	1089486	100.000	88.4
	81 o-Xylene	106	17.783	17.783	(1.036)	528599	50.0000	44.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
82 Styrene	104	17.802	17.802	(1.038)	956695	50.0000	46.5
83 Bromoform	173	18.101	18.101	(0.923)	217115	50.0000	49.5
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1586721	50.0000	44.2
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	320849	50.0000	45.8
$ 87 Bromofluorobenzene	95	18.386	18.386	(0.938)	699308	50.0000	47.2
92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	94231	50.0000	41.0
91 Bromobenzene	156	18.589	18.589	(0.948)	353878	50.0000	47.7
89 n-Propylbenzene	91	18.556	18.556	(0.946)	1935590	50.0000	44.3
94 2-Chlorotoluene	91	18.741	18.741	(0.956)	1365770	50.0000	43.1
93 1,3,5-Trimethylbenzene	105	18.713	18.713	(0.954)	1392462	50.0000	44.0
95 4-Chlorotoluene	91	18.851	18.851	(0.961)	1243321	50.0000	43.5
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1113674	50.0000	45.2
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1414534	50.0000	43.7
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1771709	50.0000	45.1
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1397926	50.0000	47.1
101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	687076	50.0000	48.5
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.611	(1.000)	441128	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	666325	50.0000	45.9
105 n-Butylbenzene	91	19.868	19.868	(1.013)	1515031	50.0000	45.6
106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	647052	50.0000	47.7
108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	66095	50.0000	49.5
109 1,2,4-Trichlorobenzene	180	22.023	22.023	(1.123)	501398	50.0000	49.7
110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	338737	50.0000	47.5
111 Naphthalene	128	22.437	22.437	(1.144)	872660	50.0000	46.7
112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	422265	50.0000	49.8

Data File: /chem/VOA1.i/112709v1/1n502.d
Date : 27-NOV-2009 05:41
Client ID: VSTD050
Sample Info: IN1VM091125-01CCV/LCS1|VOAF|1|
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

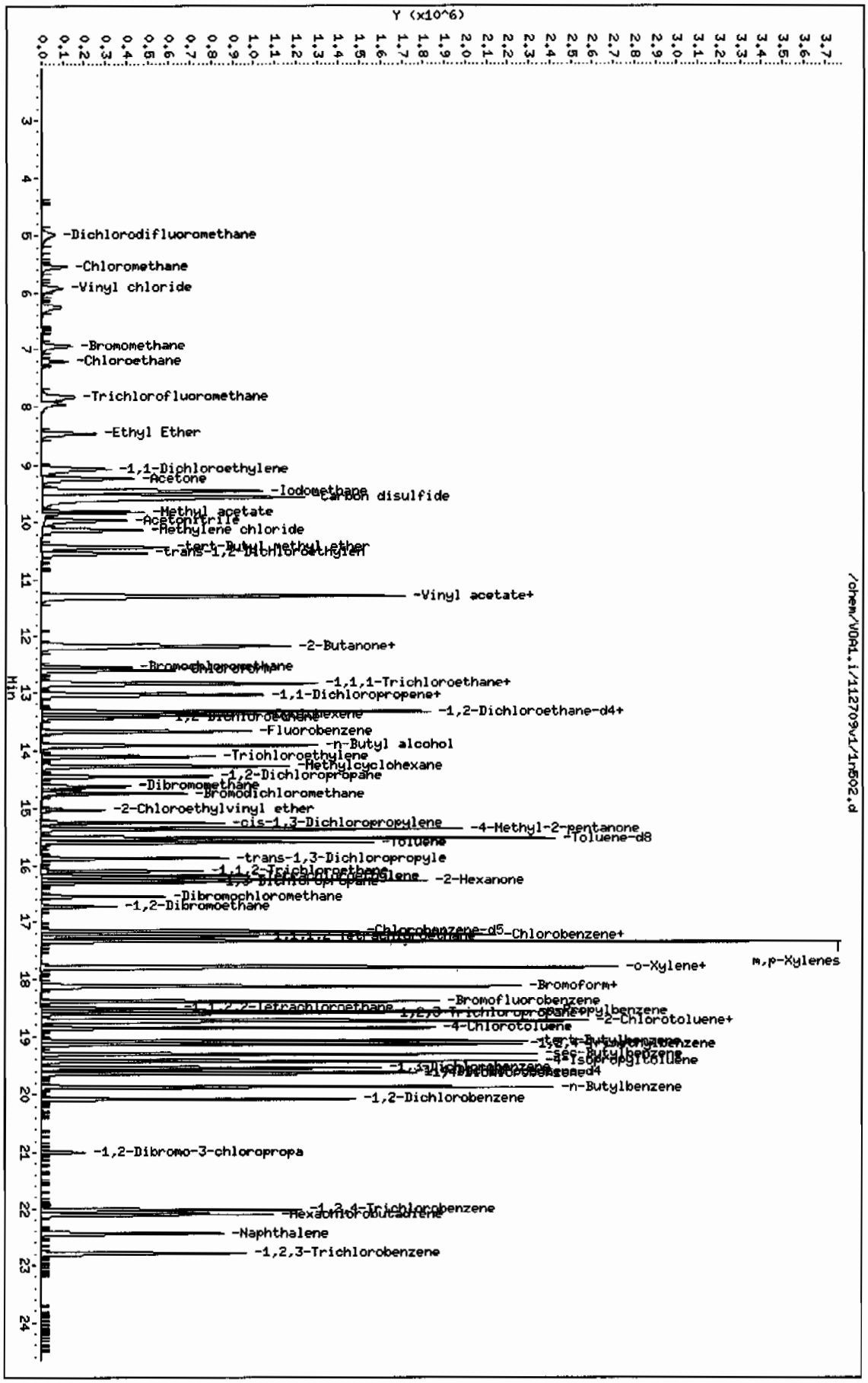

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i
Lab File ID: 1n503.d
Analysis Type: SOIL
Lab Sample ID: UVM091118-08A
Method: /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m

Injection Date: 27-NOV-2009 06:40
Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Init. Cal. Times: 23:18 07:21
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	0.15688	0.17751	0.17751	0.010	13.14919	30.00000	Averaged
8 2-Chloro-1,1,1-trifluoroeth	0.32878	0.40580	0.40580	0.010	23.42541	30.00000	Averaged
13 Acrolein	0.05116	0.05798	0.05798	0.001	13.34023	30.00000	Averaged
14 Trichlorotrifluoroethane	0.29250	0.29110	0.29110	0.030	-0.48079	30.00000	Averaged
17 Isopropyl Alcohol	0.02021	0.02104	0.02104	0.000	4.09483	40.00000	Averaged
20 Allyl chloride	0.10619	0.13273	0.13273	0.010	24.99298	30.00000	Averaged
24 tert-Butyl Alcohol	0.03796	0.03724	0.03724	0.010	-1.89720	40.00000	Averaged
27 Acrylonitrile	0.10676	0.10367	0.10367	0.010	-2.88739	30.00000	Averaged
28 Isopropyl ether	1.19537	1.21961	1.21961	0.010	2.02711	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.61022	0.57830	0.57830	0.010	-5.23129	30.00000	Averaged
32 Ethyl tert-butyl ether	1.14099	1.18898	1.18898	0.010	4.20617	30.00000	Averaged
37 Propionitrile	0.04326	0.03716	0.03716	0.010	-14.10898	30.00000	Averaged
34 Ethyl acetate	0.29220	0.24159	0.24159	0.010	-17.31943	40.00000	Averaged
40 Methacrylonitrile	0.23180	0.19556	0.19556	0.010	-15.63189	30.00000	Averaged
38 Tetrahydrofuran	0.20471	0.16166	0.16166	0.010	-21.02643	30.00000	Averaged
46 Isobutyl alcohol	0.01086	0.00924	0.00924	0.001	-14.88519	40.00000	Averaged
49 Methyl tert-amyl ether	0.90966	0.97739	0.97739	0.010	7.44624	30.00000	Averaged
56 Methyl methacrylate	0.19807	0.18103	0.18103	0.010	-8.60312	30.00000	Averaged
67 Ethyl methacrylate	0.51098	0.47381	0.47381	0.010	-7.27479	30.00000	Averaged
75 1-Chlorohexane	0.39431	0.42065	0.42065	0.000	6.68060	30.00000	Averaged
58 1,4-Dioxane	0.00285	0.00252	0.00252	0.001	-11.67429	40.00000	Averaged
62 2-Nitropropane	0.10798	0.09746	0.09746	0.000	-9.74135	30.00000	Averaged
85 cis-1,4-Dichloro-2-butene	0.30784	0.27926	0.27926	0.010	-9.28292	30.00000	Averaged
86 Cyclohexanone	673	1250	0.02544	0.010	-46.18121	40.00000	Linear <-
90 trans-1,4-Dichloro-2-butene	0.30029	0.26801	0.26801	0.010	-10.75004	30.00000	Averaged
98 Pentachloroethane	0.31186	0.46815	0.46815	0.010	50.11489	30.00000	Averaged <-
104 Benzyl chloride	1.59479	1.68833	1.68833	0.010	5.86498	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.36021	0.32465	0.32465	0.010	-9.87244	30.00000	Averaged
$ 48 1,2-Dichloroethane-d4	0.62193	0.59857	0.59857	0.010	-3.75601	30.00000	Averaged
$ 65 Toluene-d8	2.03499	2.07604	2.07604	0.010	2.01733	30.00000	Averaged
$ 87 Bromofluorobenzene	1.67881	1.38379	1.38379	0.010	-17.57310	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 27-NOV-2009 06:40
Lab File ID: 1n503.d Init. Cal. Date(s): 13-NOV-2009 14-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 23:18 07:21
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	12.43670
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n503.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 27-NOV-2009 06:40
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 27-Nov-2009 06:56 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
4 Chlorotrifluoroethylene	116	4.890	4.890	(0.358)	540082	150.000	170
8 2-Chloro-1,1,1-trifluoroethane	118	6.289	6.289	(0.460)	1234646	150.000	185
13 Acrolein	56	8.936	8.936	(0.654)	294016	250.000	283
14 Trichlorotrifluoroethane	101	8.968	8.968	(0.656)	1476091	250.000	249
17 Isopropyl Alcohol	45	9.424	9.424	(0.689)	1066683	2500.00	2600
20 Allyl chloride	76	9.829	9.829	(0.719)	673043	250.000	312
24 tert-Butyl Alcohol	59	10.179	10.179	(0.744)	1888395	2500.00	2450
27 Acrylonitrile	53	10.653	10.653	(0.779)	525714	250.000	243
28 Isopropyl ether	45	11.182	11.182	(0.818)	1236880	50.0000	51.0
31 2-Chloro-1,3-butadiene	53	11.376	11.376	(0.832)	586492	50.0000	47.4
32 Ethyl tert-butyl ether	59	11.739	11.739	(0.859)	1205823	50.0000	52.1
37 Propionitrile	54	12.393	12.393	(0.906)	188426	250.000	215

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
34 Ethyl acetate	43	12.154	12.154	(0.889)	1225067	250.000	207
40 Methacrylonitrile	41	12.549	12.549	(0.918)	991659	250.000	211
38 Tetrahydrofuran	42	12.526	12.526	(0.639)	388350	250.000	197
46 Isobutyl alcohol	41	13.097	13.097	(0.958)	468585	2500.00	2130
49 Methyl tert-amyl ether	73	13.341	13.341	(0.976)	991234	50.0000	53.7
56 Methyl methacrylate	69	14.432	14.432	(1.056)	917953	250.000	228
67 Ethyl methacrylate	69	15.804	15.804	(0.921)	1905371	250.000	232
75 1-Chlorohexane	55	17.028	17.028	(1.245)	426612	50.0000	53.3
58 1,4-Dioxane	88	14.538	14.538	(1.063)	127685	2500.00	2210
62 2-Nitropropane	43	15.072	15.072	(1.102)	494190	250.000	226
85 cis-1,4-Dichloro-2-butene	53	18.271	18.271	(0.932)	670852	250.000	227
86 Cyclohexanone	55	18.381	18.381	(1.072)	511455	1250.00	673
90 trans-1,4-Dichloro-2-butene	53	18.566	18.566	(0.947)	643807	250.000	223
98 Pentachloroethane	167	19.196	19.196	(0.979)	1124607	250.000	375(A)
104 Benzyl chloride	91	19.772	19.772	(1.008)	4055723	250.000	265
107 bis(2-Chloroisopropyl)ether	45	20.163	20.163	(1.028)	779869	250.000	225
* 52 Fluorobenzene	96	13.673	13.673	(1.000)	1014164	50.0000	
* 76 Chlorobenzene-d5	117	17.152	17.152	(1.000)	804277	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	480442	50.0000	
$ 48 1,2-Dichloroethane-d4	65	13.323	13.323	(0.974)	607045	50.0000	48.1
$ 65 Toluene-d8	98	15.509	15.509	(0.904)	1669713	50.0000	51.0
$ 87 Bromofluorobenzene	95	18.381	18.381	(0.937)	664832	50.0000	41.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA1.i/112709v1/1n503.d
Date : 27-NOV-2009 06:40
Client ID: VSTD250S
Sample Info: !UWH091118-08A!SHORT!1!VOAF!1!
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

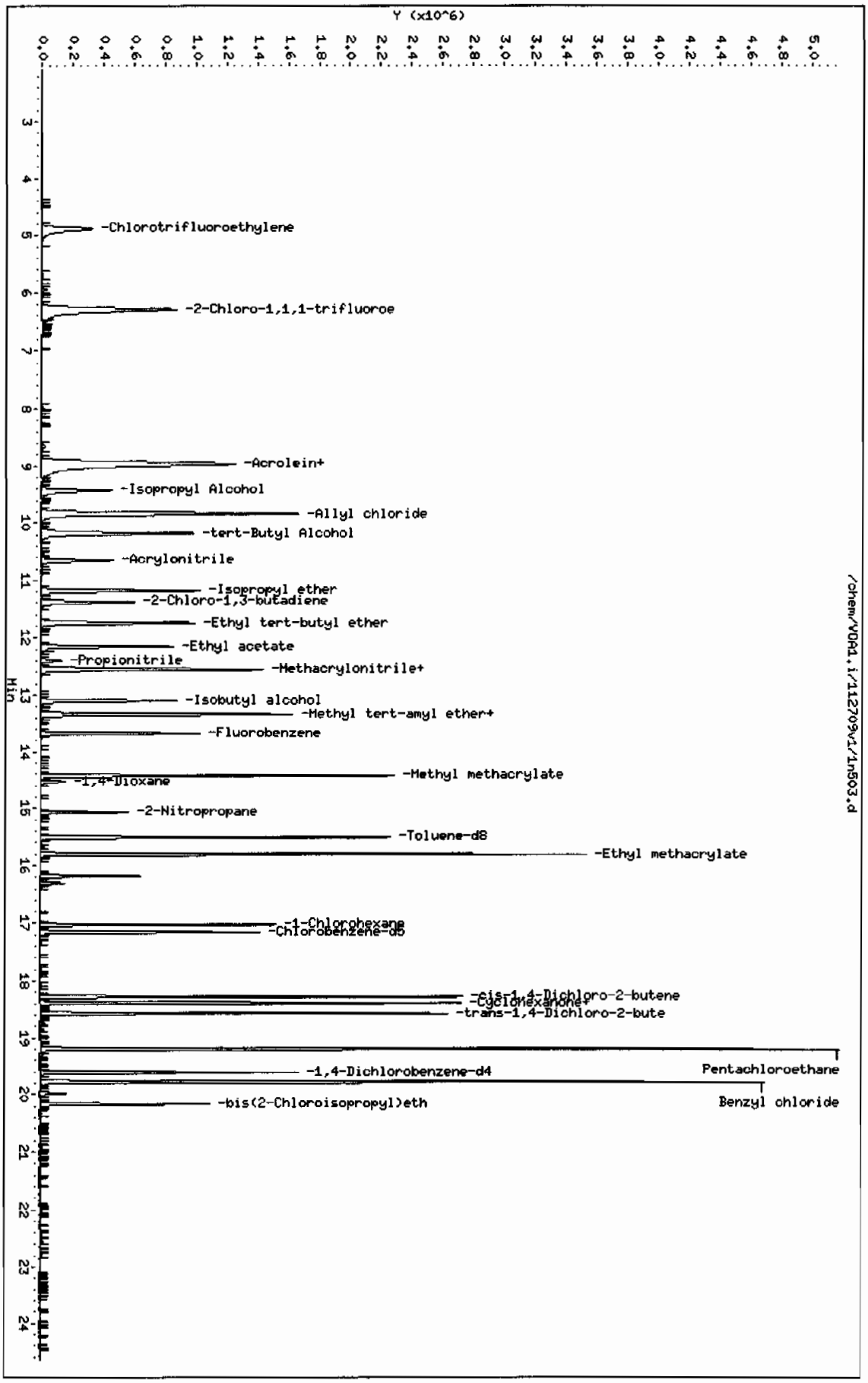

Page 1

Data File: /chem/VOA9.i/121509v9/9p202.d
Report Date: 15-Dec-2009 12:51

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i Injection Date: 15-DEC-2009 11:25
Lab File ID: 9p202.d Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 11:14 18:11
Lab Sample ID: W9VM091215-02 Quant Type: ISTD
Method: /chem/VOA9.i/121509v9/VOA9-8260B-111909.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	27 Xylenes (total)	0.54618	0.49692	0.49692	0.050	-9.01831	30.00000	Averaged	
M	42 1,2-Dichloroethylene (total	0.21367	0.19254	0.19254	0.050	-9.88926	30.00000	Averaged	
M	45 1,3-Dichloropropylene	0.34759	0.32155	0.32155	0.050	-7.49094	30.00000	Averaged	
	1 Dichlorodifluoromethane	0.15107	0.11566	0.11566	0.050	-23.43941	30.00000	Averaged	
	2 Chloromethane	0.27941	0.26514	0.26514	0.100	-5.10892	30.00000	Averaged	spcc
	3 Vinyl chloride	0.22694	0.23006	0.23006	0.050	1.37166	20.00000	Averaged	ccc
	4 Bromomethane	0.15251	0.15721	0.15721	0.050	3.08653	30.00000	Averaged	
	5 Chloroethane	0.15927	0.16074	0.16074	0.050	0.92706	30.00000	Averaged	
	6 Trichlorofluoromethane	0.25319	0.24703	0.24703	0.050	-2.43018	30.00000	Averaged	
	7 Ethyl Ether	0.21495	0.19675	0.19675	0.010	-8.46871	30.00000	Averaged	
	10 Acetone	0.16142	0.20584	0.20584	0.040	27.51800	40.00000	Averaged	
	14 Acetonitrile	0.03532	0.04959	0.04959	0.010	40.40791	30.00000	Averaged	<-
	11 1,1-Dichloroethylene	0.36772	0.33576	0.33576	0.050	-8.69209	20.00000	Averaged	ccc
	15 Methyl acetate	0.19922	0.21259	0.21259	0.010	6.71300	40.00000	Averaged	
	13 Iodomethane	0.28203	0.24743	0.24743	0.050	-12.26725	30.00000	Averaged	
	19 Methylene chloride	0.26260	0.21716	0.21716	0.050	-17.30662	30.00000	Averaged	
	16 Carbon disulfide	0.62020	0.59752	0.59752	0.050	-3.65817	30.00000	Averaged	
	21 tert-Butyl methyl ether	0.66936	0.55983	0.55983	0.050	-16.36411	30.00000	Averaged	
	22 trans-1,2-Dichloroethylene	0.20173	0.18161	0.18161	0.050	-9.97412	30.00000	Averaged	
	23 Vinyl acetate	0.46892	0.55332	0.55332	0.010	17.99935	40.00000	Averaged	
	25 1,1-Dichloroethane	0.42943	0.39898	0.39898	0.100	-7.09127	30.00000	Averaged	spcc
	29 2-Butanone	0.18165	0.21919	0.21919	0.030	20.66479	40.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.22561	0.20347	0.20347	0.050	-9.81337	30.00000	Averaged	
	33 2,2-Dichloropropane	0.29797	0.26579	0.26579	0.050	-10.79988	30.00000	Averaged	
	36 Chloroform	0.37848	0.34347	0.34347	0.010	-9.24813	20.00000	Averaged	ccc
	35 Bromochloromethane	0.09824	0.09153	0.09153	0.010	-6.83436	30.00000	Averaged	
	39 1,1,1-Trichloroethane	0.28434	0.25563	0.25563	0.010	-10.09504	30.00000	Averaged	
	41 Cyclohexane	0.30530	0.28525	0.28525	0.010	-6.56695	30.00000	Averaged	
	43 1,1-Dichloropropene	0.27257	0.26613	0.26613	0.010	-2.36380	30.00000	Averaged	
	52 n-Butyl alcohol	0.00575	0.00660	0.00660	0.002	14.72664	40.00000	Averaged	
	44 Carbon tetrachloride	0.24142	0.21998	0.21998	0.010	-8.87824	30.00000	Averaged	
$	46 1,2-Dichloroethane-d4	0.26902	0.28299	0.28299	0.010	5.19076	30.00000	Averaged	
	47 1,2-Dichloroethane	0.32773	0.30374	0.30374	0.010	-7.31972	30.00000	Averaged	
	48 Benzene	0.84334	0.76198	0.76198	0.010	-9.64677	30.00000	Averaged	
	50 Cyclohexene	0.44488	0.41300	0.41300	0.005	-7.16484	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i Injection Date: 15-DEC-2009 11:25
Lab File ID: 9p202.d Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Analysis Type: SOIL Init. Cal. Times: 11:14 18:11
Lab Sample ID: W9VM091215-02 Quant Type: ISTD
Method: /chem/VOA9.i/121509v9/VOA9-8260B-111909.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	53 Trichloroethylene	0.20322	0.19031	0.19031	0.010	-6.35042	30.00000	Averaged	
	55 1,2-Dichloropropane	0.24402	0.23284	0.23284	0.010	-4.58224	20.00000	Averaged	ccc
	56 Methylcyclohexane	0.36813	0.34942	0.34942	0.010	-5.08141	30.00000	Averaged	
	59 Bromodichloromethane	0.29592	0.26439	0.26439	0.010	-10.65596	30.00000	Averaged	
	58 Dibromomethane	0.12694	0.12200	0.12200	0.010	-3.88948	30.00000	Averaged	
	61 2-Chloroethylvinyl ether	0.14145	0.13879	0.13879	0.010	-1.88034	30.00000	Averaged	
	63 4-Methyl-2-pentanone	0.16202	0.17366	0.17366	0.010	7.18322	40.00000	Averaged	
	62 cis-1,3-Dichloropropylene	0.36063	0.33009	0.33009	0.010	-8.46992	30.00000	Averaged	
$	64 Toluene-d8	0.12102	0.12424	0.12424	0.010	2.65887	30.00000	Averaged	
	65 Toluene	0.74466	0.66793	0.66793	0.010	-10.30445	20.00000	Averaged	ccc
	67 trans-1,3-Dichloropropylene	0.49060	0.45185	0.45185	0.010	-7.89965	30.00000	Averaged	
	68 1,1,2-Trichloroethane	0.23886	0.22761	0.22761	0.010	-4.70964	30.00000	Averaged	
	69 2-Hexanone	0.41791	0.46678	0.46678	0.010	11.69463	40.00000	Averaged	
	70 1,3-Dichloropropane	0.46769	0.45921	0.45921	0.010	-1.81311	30.00000	Averaged	
	71 Tetrachloroethylene	0.19892	0.18479	0.18479	0.010	-7.10015	30.00000	Averaged	
	72 Dibromochloromethane	0.29341	0.26758	0.26758	0.010	-8.80100	30.00000	Averaged	
	73 1,2-Dibromoethane	0.27839	0.26163	0.26163	0.010	-6.01912	30.00000	Averaged	
	76 Chlorobenzene	0.73361	0.67982	0.67982	0.300	-7.33300	30.00000	Averaged	spcc
	77 1,1,1,2-Tetrachloroethane	0.26648	0.23873	0.23873	0.010	-10.41524	30.00000	Averaged	
	78 Ethylbenzene	1.36374	1.23984	1.23984	0.010	-9.08507	20.00000	Averaged	ccc
	79 m,p-Xylenes	0.54123	0.49223	0.49223	0.010	-9.05400	30.00000	Averaged	
	80 o-Xylene	0.55608	0.50631	0.50631	0.010	-8.94881	30.00000	Averaged	
	81 Styrene	0.93756	0.83500	0.83500	0.010	-10.93963	30.00000	Averaged	
	82 Bromoform	0.36267	0.31890	0.31890	0.100	-12.06665	30.00000	Averaged	spcc
	83 Isopropylbenzene	2.81483	2.40716	2.40716	0.010	-14.48293	30.00000	Averaged	
	87 1,1,2,2-Tetrachloroethane	0.77732	0.76444	0.76444	0.300	-1.65777	30.00000	Averaged	spcc
$	86 Bromofluorobenzene	0.96829	0.91270	0.91270	0.010	-5.74090	30.00000	Averaged	
	89 1,2,3-Trichloropropane	0.19510	0.18285	0.18285	0.010	-6.27936	30.00000	Averaged	
	90 Bromobenzene	0.63587	0.55457	0.55457	0.010	-12.78542	30.00000	Averaged	
	91 n-Propylbenzene	3.33103	2.94665	2.94665	0.010	-11.53940	30.00000	Averaged	
	92 2-Chlorotoluene	2.30092	1.99499	1.99499	0.010	-13.29598	30.00000	Averaged	
	93 1,3,5-Trimethylbenzene	2.39063	2.03391	2.03391	0.010	-14.92181	30.00000	Averaged	
	94 4-Chlorotoluene	2.17249	1.82859	1.82859	0.010	-15.82962	30.00000	Averaged	
	95 tert-Butylbenzene	2.25514	1.91378	1.91378	0.010	-15.13697	30.00000	Averaged	
	96 1,2,4-Trimethylbenzene	2.48802	2.09472	2.09472	0.010	-15.80789	30.00000	Averaged	
	98 sec-Butylbenzene	3.18444	2.77385	2.77385	0.010	-12.89373	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i
Lab File ID: 9p202.d
Analysis Type: SOIL
Lab Sample ID: W9VM091215-02
Method: /chem/VOA9.i/121509v9/VOA9-8260B-111909.m

Injection Date: 15-DEC-2009 11:25
Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Init. Cal. Times: 11:14 18:11
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.42785	2.09376	2.09376	0.010	-13.76084	30.00000	Averaged
100 1,3-Dichlorobenzene	1.25752	1.09228	1.09228	0.010	-13.13998	30.00000	Averaged
102 1,4-Dichlorobenzene	1.21950	1.09070	1.09070	0.010	-10.56138	30.00000	Averaged
104 n-Butylbenzene	1.46029	1.31203	1.31203	0.010	-10.15286	30.00000	Averaged
105 1,2-Dichlorobenzene	1.21410	1.07642	1.07642	0.010	-11.33972	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	0.13864	0.13101	0.13101	0.010	-5.49918	30.00000	Averaged
108 1,2,4-Trichlorobenzene	0.77779	0.69257	0.69257	0.010	-10.95698	30.00000	Averaged
109 Hexachlorobutadiene	0.42492	0.35990	0.35990	0.010	-15.30181	30.00000	Averaged
110 Naphthalene	1.95340	1.88159	1.88159	0.010	-3.67641	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.64044	0.62072	0.62072	0.010	-3.08006	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.67053
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p202.d
Lab Smp Id: W9VM091215-02 Client Smp ID: VSTD050
Inj Date : 15-DEC-2009 11:25
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |W9VM091215-02|CCV|1|VOA|1|
Misc Info : GEL 5g n/a UVM091129-01E/IVM091214-01
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 15-Dec-2009 12:51 ram01192 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 27 Xylenes (total)	106				1590957	150.000	136
M 42 1,2-Dichloroethylene (total)	96				593212	100.000	90.1
M 45 1,3-Dichloropropylene	75				990721	100.000	92.5
1 Dichlorodifluoromethane	85	4.958	4.958	(0.460)	178179	50.0000	38.3
2 Chloromethane	50	5.308	5.308	(0.492)	408453	50.0000	47.4
3 Vinyl chloride	62	5.560	5.560	(0.515)	354406	50.0000	50.7
4 Bromomethane	94	6.186	6.186	(0.573)	242191	50.0000	51.5
5 Chloroethane	64	6.340	6.340	(0.588)	247627	50.0000	50.5
6 Trichlorofluoromethane	101	6.779	6.779	(0.628)	380560	50.0000	48.8
7 Ethyl Ether	59	7.099	7.099	(0.658)	303090	50.0000	45.8
10 Acetone	43	7.490	7.490	(0.694)	1585487	250.000	319
14 Acetonitrile	41	7.858	7.858	(0.728)	1528000	1000.00	1400

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	11 1,1-Dichloroethylene	61	7.514	7.514	(0.697)	517238	50.0000	45.6
	15 Methyl acetate	43	7.882	7.882	(0.731)	1637530	250.000	267
	13 Iodomethane	142	7.775	7.775	(0.721)	1905845	250.000	219
	19 Methylene chloride	84	8.095	8.095	(0.750)	334534	50.0000	41.3
	16 Carbon disulfide	76	7.917	7.917	(0.734)	4602420	250.000	241
	21 tert-Butyl methyl ether	73	8.368	8.368	(0.776)	862422	50.0000	41.8
	22 trans-1,2-Dichloroethylene	96	8.427	8.427	(0.781)	279769	50.0000	45.0
	23 Vinyl acetate	43	8.854	8.854	(0.821)	4262005	250.000	295
	25 1,1-Dichloroethane	63	8.913	8.913	(0.826)	614637	50.0000	46.4
	29 2-Butanone	43	9.494	9.494	(0.880)	1688350	250.000	302
	31 cis-1,2-Dichloroethylene	96	9.554	9.554	(0.886)	313443	50.0000	45.1
	33 2,2-Dichloropropane	77	9.577	9.577	(0.888)	409456	50.0000	44.6
	36 Chloroform	83	9.862	9.862	(0.914)	529129	50.0000	45.4
	35 Bromochloromethane	128	9.826	9.826	(0.911)	141001	50.0000	46.6
	39 1,1,1-Trichloroethane	97	10.135	10.135	(0.940)	393806	50.0000	45.0
	41 Cyclohexane	84	10.230	10.230	(0.948)	439428	50.0000	46.7
	43 1,1-Dichloropropene	75	10.289	10.289	(0.954)	409971	50.0000	48.8
	52 n-Butyl alcohol	41	10.846	10.846	(1.005)	1016615	5000.00	5740
	44 Carbon tetrachloride	117	10.336	10.336	(0.958)	338886	50.0000	45.6
$	46 1,2-Dichloroethane-d4	65	10.431	10.431	(0.967)	435946	50.0000	52.6
	47 1,2-Dichloroethane	62	10.514	10.514	(0.975)	467914	50.0000	46.3
	48 Benzene	78	10.538	10.538	(0.977)	1173847	50.0000	45.2
	50 Cyclohexene	67	10.645	10.645	(0.987)	636238	50.0000	46.4
*	51 Fluorobenzene	96	10.787	10.787	(1.000)	1540519	50.0000	
	53 Trichloroethylene	95	11.166	11.166	(1.035)	293178	50.0000	46.8
	55 1,2-Dichloropropane	63	11.415	11.415	(1.058)	358696	50.0000	47.7
	56 Methylcyclohexane	83	11.415	11.415	(1.058)	538294	50.0000	47.4
	59 Bromodichloromethane	83	11.664	11.664	(1.081)	407298	50.0000	44.7
	58 Dibromomethane	93	11.558	11.558	(1.071)	187942	50.0000	48.0
	61 2-Chloroethylvinyl ether	63	11.866	11.866	(1.100)	1069031	250.000	245
	63 4-Methyl-2-pentanone	58	12.186	12.186	(0.874)	926653	250.000	268
	62 cis-1,3-Dichloropropylene	75	12.103	12.103	(1.122)	508509	50.0000	45.8
$	64 Toluene-d8	99	12.423	12.423	(0.891)	132589	50.0000	51.3
	65 Toluene	92	12.495	12.495	(0.896)	712814	50.0000	44.8
	67 trans-1,3-Dichloropropylene	75	12.637	12.637	(0.906)	482212	50.0000	46.0
	68 1,1,2-Trichloroethane	83	12.862	12.862	(0.923)	242903	50.0000	47.6
	69 2-Hexanone	43	13.028	13.028	(0.934)	2490765	250.000	279
	70 1,3-Dichloropropane	76	13.064	13.064	(0.937)	490073	50.0000	49.1
	71 Tetrachloroethylene	164	13.087	13.087	(0.939)	197213	50.0000	46.4
	72 Dibromochloromethane	129	13.336	13.336	(0.957)	285565	50.0000	45.6
	73 1,2-Dibromoethane	107	13.503	13.503	(0.969)	279213	50.0000	47.0
*	75 Chlorobenzene-d5	117	13.941	13.941	(1.000)	1067203	50.0000	
	76 Chlorobenzene	112	13.977	13.977	(1.003)	725502	50.0000	46.3
	77 1,1,1,2-Tetrachloroethane	131	14.024	14.024	(1.006)	254773	50.0000	44.8
	78 Ethylbenzene	91	14.024	14.024	(1.006)	1323160	50.0000	45.4
	79 m,p-Xylenes	106	14.131	14.131	(1.014)	1050618	100.000	90.9
	80 o-Xylene	106	14.570	14.570	(1.045)	540339	50.0000	45.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
81 Styrene	104	14.570	14.570	(1.045)	891113	50.0000	44.5
82 Bromoform	173	14.854	14.854	(0.907)	175834	50.0000	44.0
83 Isopropylbenzene	105	14.926	14.926	(0.912)	1327237	50.0000	42.8
87 1,1,2,2-Tetrachloroethane	83	15.210	15.210	(0.929)	421487	50.0000	49.2
$ 86 Bromofluorobenzene	95	15.127	15.127	(0.924)	503236	50.0000	47.1
89 1,2,3-Trichloropropane	110	15.293	15.293	(0.934)	100818	50.0000	46.9
90 Bromobenzene	156	15.352	15.352	(0.938)	305776	50.0000	43.6
91 n-Propylbenzene	91	15.352	15.352	(0.938)	1624696	50.0000	44.2
92 2-Chlorotoluene	91	15.507	15.507	(0.947)	1099977	50.0000	43.4
93 1,3,5-Trimethylbenzene	105	15.495	15.495	(0.946)	1121436	50.0000	42.5
94 4-Chlorotoluene	91	15.613	15.613	(0.954)	1008231	50.0000	42.1
95 tert-Butylbenzene	119	15.874	15.874	(0.970)	1055202	50.0000	42.4
96 1,2,4-Trimethylbenzene	105	15.922	15.922	(0.972)	1154964	50.0000	42.1
98 sec-Butylbenzene	105	16.111	16.111	(0.984)	1529417	50.0000	43.6
99 4-Isopropyltoluene	119	16.230	16.230	(0.991)	1154434	50.0000	43.1
100 1,3-Dichlorobenzene	146	16.313	16.313	(0.996)	602252	50.0000	43.4
* 101 1,4-Dichlorobenzene-d4	152	16.372	16.372	(1.000)	551370	50.0000	
102 1,4-Dichlorobenzene	146	16.408	16.408	(1.002)	601379	50.0000	44.7
104 n-Butylbenzene	92	16.692	16.692	(1.020)	723414	50.0000	44.9
105 1,2-Dichlorobenzene	146	16.858	16.858	(1.030)	593506	50.0000	44.3
107 1,2-Dibromo-3-chloropropane	157	17.783	17.783	(1.086)	72237	50.0000	47.2
108 1,2,4-Trichlorobenzene	180	18.922	18.922	(1.156)	381860	50.0000	44.5
109 Hexachlorobutadiene	225	19.100	19.100	(1.167)	198437	50.0000	42.3
110 Naphthalene	128	19.349	19.349	(1.182)	1037450	50.0000	48.2
111 1,2,3-Trichlorobenzene	180	19.716	19.716	(1.204)	342245	50.0000	48.4

Data File: /chem/VOA9.i/121509v9/9p202.d
Date : 15-DEC-2009 11:25
Client ID: VSTD050
Sample Info: IW9VH091215-02ICV1I1VOA1I1
Column phase: RTX-Volatiles

Instrument: VOA9.i
Operator: RXY1
Column diameter: 0.25

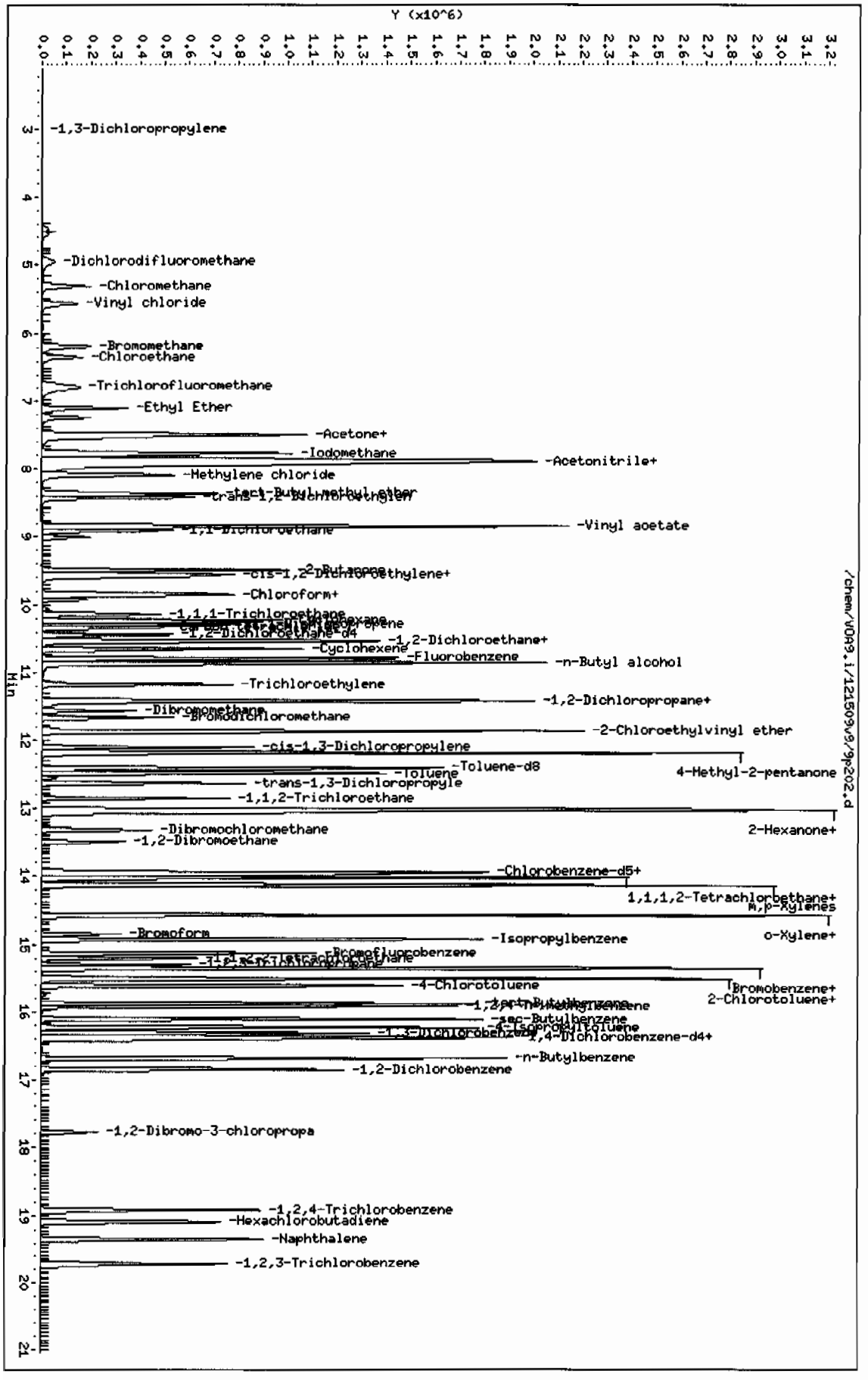

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA9.i Injection Date: 15-DEC-2009 12:21
Lab File ID: 9p204.d Init. Cal. Date(s): 19-NOV-2009 19-NOV-2009
Analysis Type: WATER Init. Cal. Times: 11:14 18:11
Lab Sample ID: UVM091118-08B Quant Type: ISTD
Method: /chem/VOA9.i/121509v9/VOA9-8260B-111909.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
8 Acrolein	0.04635	0.03942	0.03942	0.001	-14.95748	30.00000	Averaged
9 Trichlorotrifluoroethane	0.07059	0.06307	0.06307	0.030	-10.66387	30.00000	Averaged
17 Allyl chloride	0.11365	0.09285	0.09285	0.010	-18.29806	30.00000	Averaged
20 Acrylonitrile	0.09689	0.08028	0.08028	0.010	-17.13886	30.00000	Averaged
26 2-Chloro-1,3-butadiene	0.38170	0.30590	0.30590	0.010	-19.85856	30.00000	Averaged
32 Propionitrile	0.03738	0.02979	0.02979	0.010	-20.30708	30.00000	Averaged
30 Ethyl acetate	0.24709	0.19105	0.19105	0.010	-22.67988	40.00000	Averaged
34 Methacrylonitrile	0.15425	0.12780	0.12780	0.010	-17.14653	30.00000	Averaged
37 Tetrahydrofuran	0.23819	0.20342	0.20342	0.010	-14.59909	30.00000	Averaged
40 Isobutyl alcohol	0.00970	0.00797	0.00797	0.004	-17.90571	40.00000	Averaged
54 Methyl methacrylate	0.14777	0.11608	0.11608	0.010	-21.44817	30.00000	Averaged
66 Ethyl methacrylate	0.42200	0.31641	0.31641	0.010	-25.02147	30.00000	Averaged
57 1,4-Dioxane	2111	2500	0.00192	0.001	-15.55044	40.00000	Linear
60 2-Nitropropane	0.08256	0.06642	0.06642	0.010	-19.55045	30.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.28792	0.25255	0.25255	0.010	-12.28506	30.00000	Averaged
85 Cyclohexanone	0.04335	0.02028	0.02028	0.002	-53.21141	40.00000	Averaged <-
88 trans-1,4-Dichloro-2-butene	0.26572	0.23178	0.23178	0.010	-12.77441	30.00000	Averaged
97 Pentachloroethane	0.25156	0.24411	0.24411	0.010	-2.96174	30.00000	Averaged
103 Benzyl chloride	1.33383	1.04507	1.04507	0.010	-21.64862	30.00000	Averaged
106 bis(2-Chloroisopropyl)ether	0.42347	0.34739	0.34739	0.010	-17.96446	30.00000	Averaged
$ 46 1,2-Dichloroethane-d4	0.26902	0.25971	0.25971	0.010	-3.46146	30.00000	Averaged
$ 64 Toluene-d8	0.12102	0.11929	0.11929	0.010	-1.42908	30.00000	Averaged
$ 86 Bromofluorobenzene	0.96829	0.87957	0.87957	0.010	-9.16280	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 31.60256
Maximun Average %D/Drift = 20.00000
* Failed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p204.d
Lab Smp Id: UVM091118-08B Client Smp ID: VSTD250
Inj Date : 15-DEC-2009 12:21
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |UVM091118-08B|SHORT|1|VOA|1|
Misc Info : GEL 5ml n/a
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 15-Dec-2009 12:50 ram01192 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
8 Acrolein	56	7.312	7.312	(0.678)	331045	250.000	213
9 Trichlorotrifluoroethane	85	7.467	7.467	(0.692)	529622	250.000	223
17 Allyl chloride	76	7.941	7.941	(0.736)	779788	250.000	204
20 Acrylonitrile	53	8.344	8.344	(0.774)	674217	250.000	207
26 2-Chloro-1,3-butadiene	53	9.020	9.020	(0.836)	513785	50.0000	40.1
32 Propionitrile	54	9.577	9.577	(0.888)	250173	250.000	199
30 Ethyl acetate	43	9.483	9.483	(0.879)	1604423	250.000	193
34 Methacrylonitrile	41	9.755	9.755	(0.904)	1073256	250.000	207
37 Tetrahydrofuran	42	9.874	9.874	(0.603)	556904	250.000	214
40 Isobutyl alcohol	41	10.170	10.170	(0.943)	668960	2500.00	2050
54 Methyl methacrylate	69	11.368	11.368	(1.054)	974800	250.000	196
66 Ethyl methacrylate	69	12.625	12.625	(0.906)	1792562	250.000	187
57 1,4-Dioxane	88	11.499	11.499	(1.066)	161274	2500.00	2110
60 2-Nitropropane	43	11.866	11.866	(1.100)	557759	250.000	201
84 cis-1,4-Dichloro-2-butene	53	14.973	14.973	(0.915)	691414	250.000	219
85 Cyclohexanone	55	15.104	15.104	(1.083)	574536	1250.00	585

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
88 trans-1,4-Dichloro-2-butene	53	15.246	15.246	(0.931)	634537	250.000	218
97 Pentachloroethane	167	15.957	15.957	(0.975)	668290	250.000	242
103 Benzyl chloride	91	16.527	16.527	(1.009)	2861105	250.000	196
106 bis(2-Chloroisopropyl)ether	45	16.930	16.930	(1.034)	951060	250.000	205
* 51 Fluorobenzene	96	10.787	10.787	(1.000)	1679600	50.0000	
* 75 Chlorobenzene-d5	117	13.941	13.941	(1.000)	1133073	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.372	16.372	(1.000)	547542	50.0000	
$ 46 1,2-Dichloroethane-d4	65	10.431	10.431	(0.967)	436209	50.0000	48.3
$ 64 Toluene-d8	99	12.424	12.424	(0.891)	135167	50.0000	49.3
$ 86 Bromofluorobenzene	95	15.127	15.127	(0.924)	481600	50.0000	45.4

Data File: /chem/VOA9.i/121509v9/9p204.d
Date : 15-DEC-2009 12:21
Client ID: VST0250
Sample Info: IUVH091118-08B|SHORT|1|VOA|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA9.i
Operator: RXY1
Column diameter: 0.25

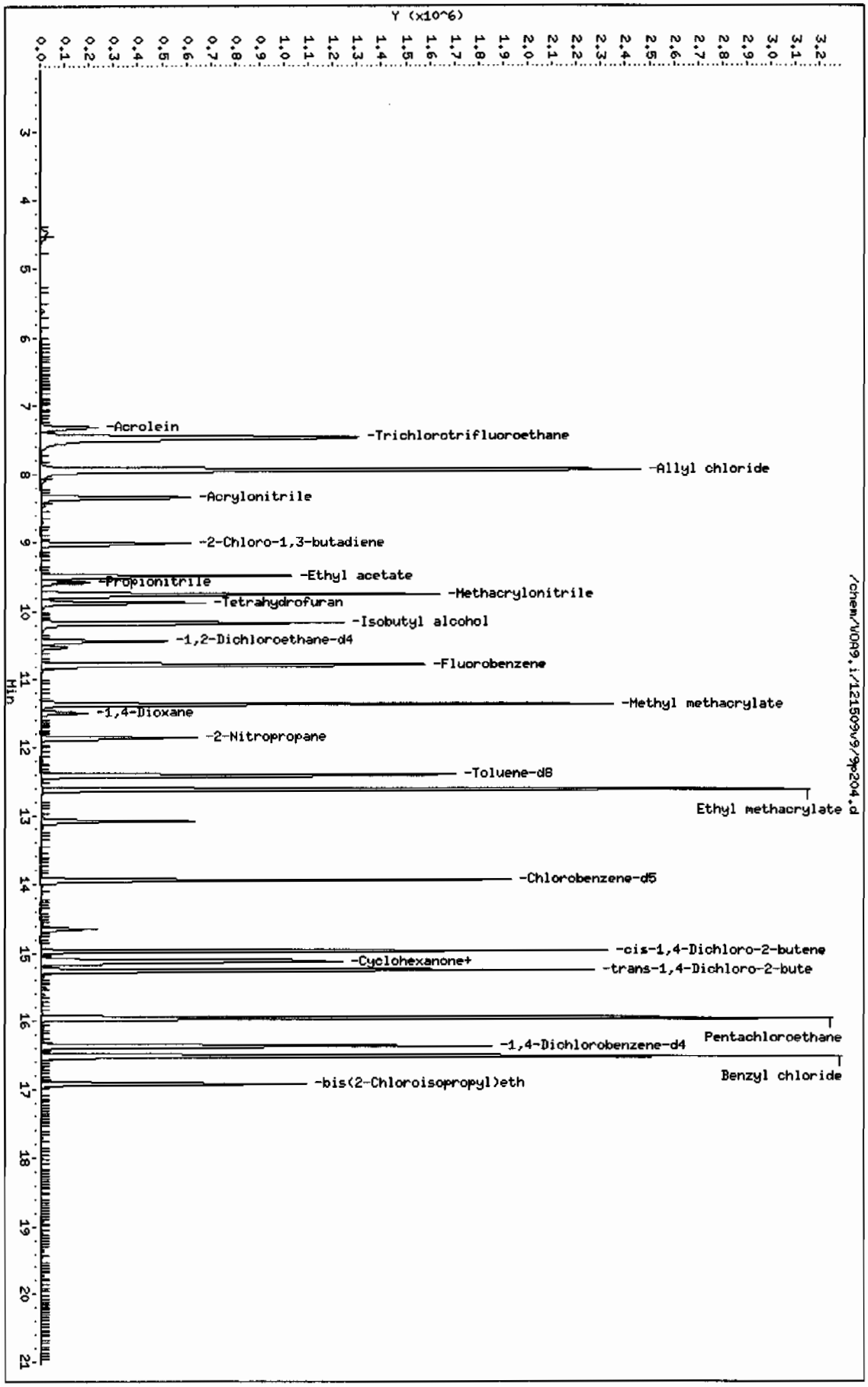

Page 1

QC Data

Data File: /chem/VOA1.i/111309v1/11507.d

Page 1

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: IUVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

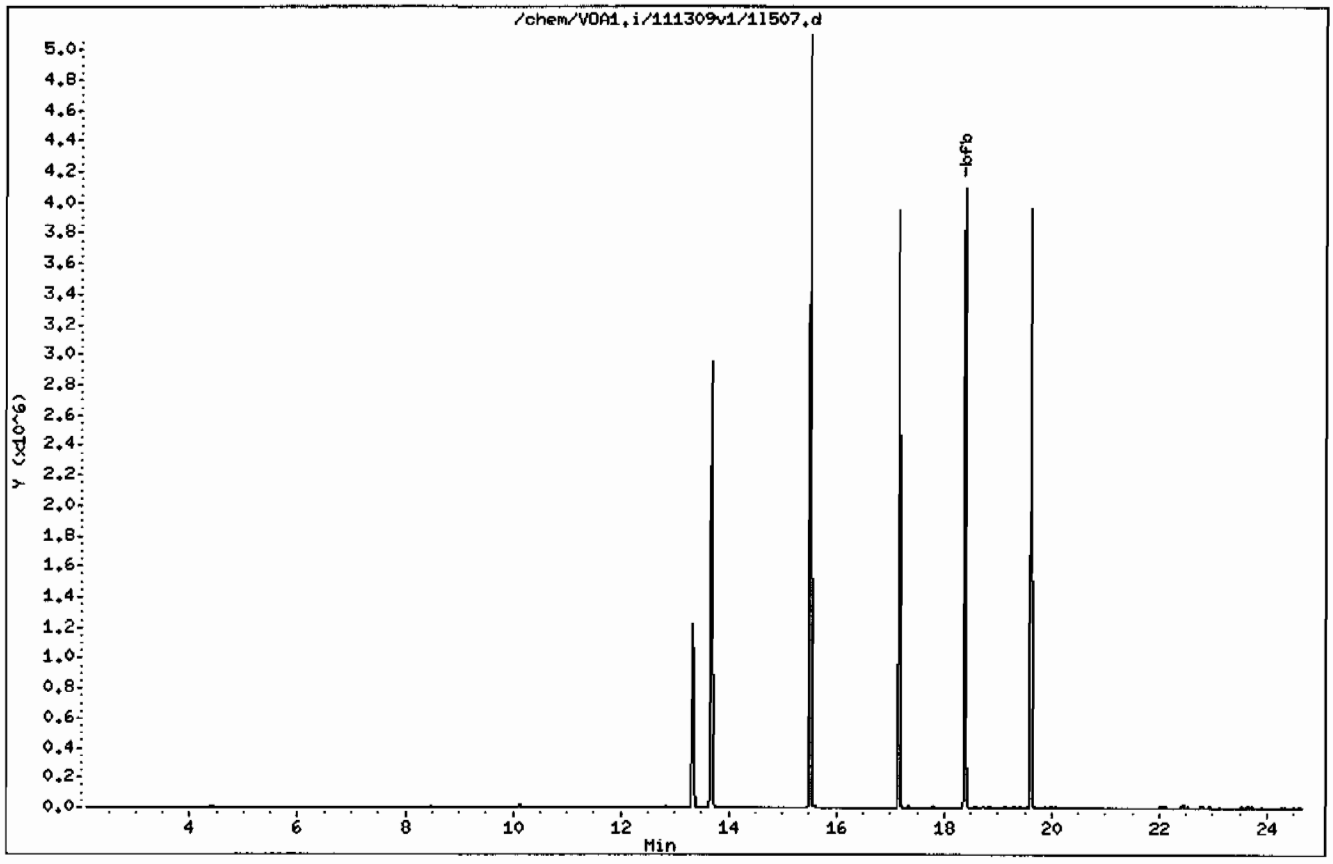

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

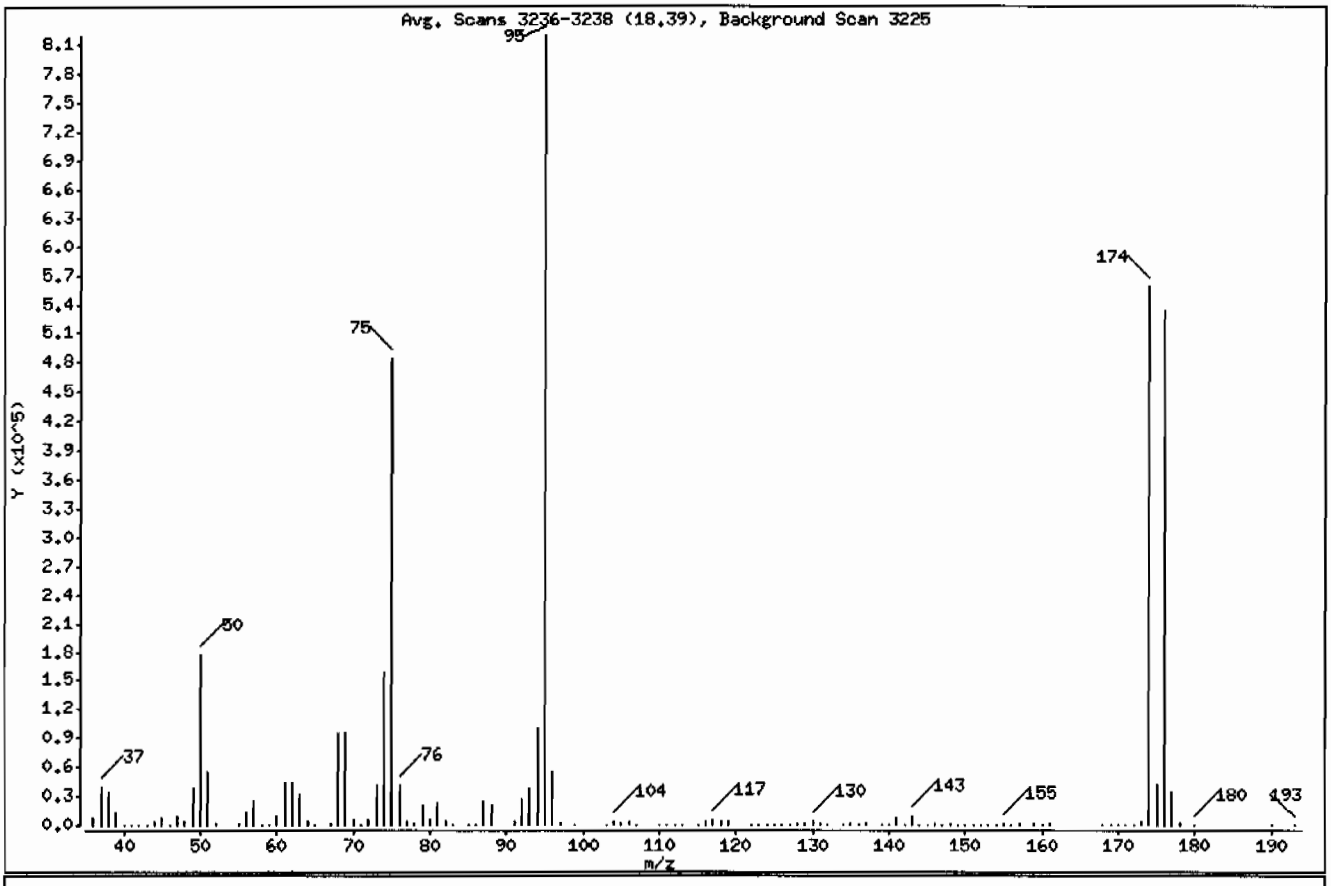

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.72
75	30.00 - 60.00% of mass 95	59.02
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.49 (0.72)
174	50.00 - 100.00% of mass 95	68.14
175	5.00 - 9.00% of mass 174	4.99 (7.33)
176	95.00 - 101.00% of mass 174	65.07 (95.50)
177	5.00 - 9.00% of mass 176	4.22 (6.48)

Data File: /chem/VOA1.i/111309v1/11507.d

Date : 13-NOV-2009 22:17

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB2|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 11507.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7225	70.00	6120	110.00	479	146.00	1188
37.00	39360	71.00	217	111.00	606	147.00	494
38.00	33392	72.00	5094	112.00	379	148.00	1977
39.00	13646	73.00	41472	113.00	584	149.00	463
40.00	251	74.00	158400	115.00	797	150.00	811
41.00	50	75.00	483904	116.00	2966	151.00	74
42.00	138	76.00	42152	117.00	5025	152.00	425
43.00	423	77.00	4070	118.00	2850	153.00	568
44.00	4049	78.00	2614	119.00	3829	154.00	504
45.00	7085	79.00	20536	122.00	323	155.00	1883
46.00	389	80.00	5933	123.00	301	156.00	430
47.00	8871	81.00	21704	124.00	508	157.00	1202
48.00	4657	82.00	3708	125.00	172	159.00	1015
49.00	37544	83.00	554	126.00	282	160.00	117
50.00	178048	85.00	50	127.00	21	161.00	1118
51.00	55256	86.00	546	128.00	2650	168.00	58
52.00	2192	87.00	24184	129.00	1544	169.00	60
55.00	2170	88.00	20208	130.00	3040	170.00	440
56.00	12658	91.00	3132	131.00	1311	171.00	182
57.00	24424	92.00	25640	132.00	121	172.00	596
58.00	905	93.00	38600	134.00	219	173.00	4037
59.00	131	94.00	99912	135.00	1394	174.00	558656
60.00	8890	95.00	819904	136.00	360	175.00	40952
61.00	42584	96.00	54800	137.00	1272	176.00	533504
62.00	42856	97.00	1967	139.00	373	177.00	34584
63.00	32200	99.00	52	140.00	657	178.00	987
64.00	3117	103.00	491	141.00	8405	180.00	56
65.00	197	104.00	3451	142.00	877	190.00	52
67.00	2068	105.00	1217	143.00	9022	193.00	80
68.00	94512	106.00	3389	144.00	613		
69.00	96344	107.00	757	145.00	540		

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Page 1

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VH091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

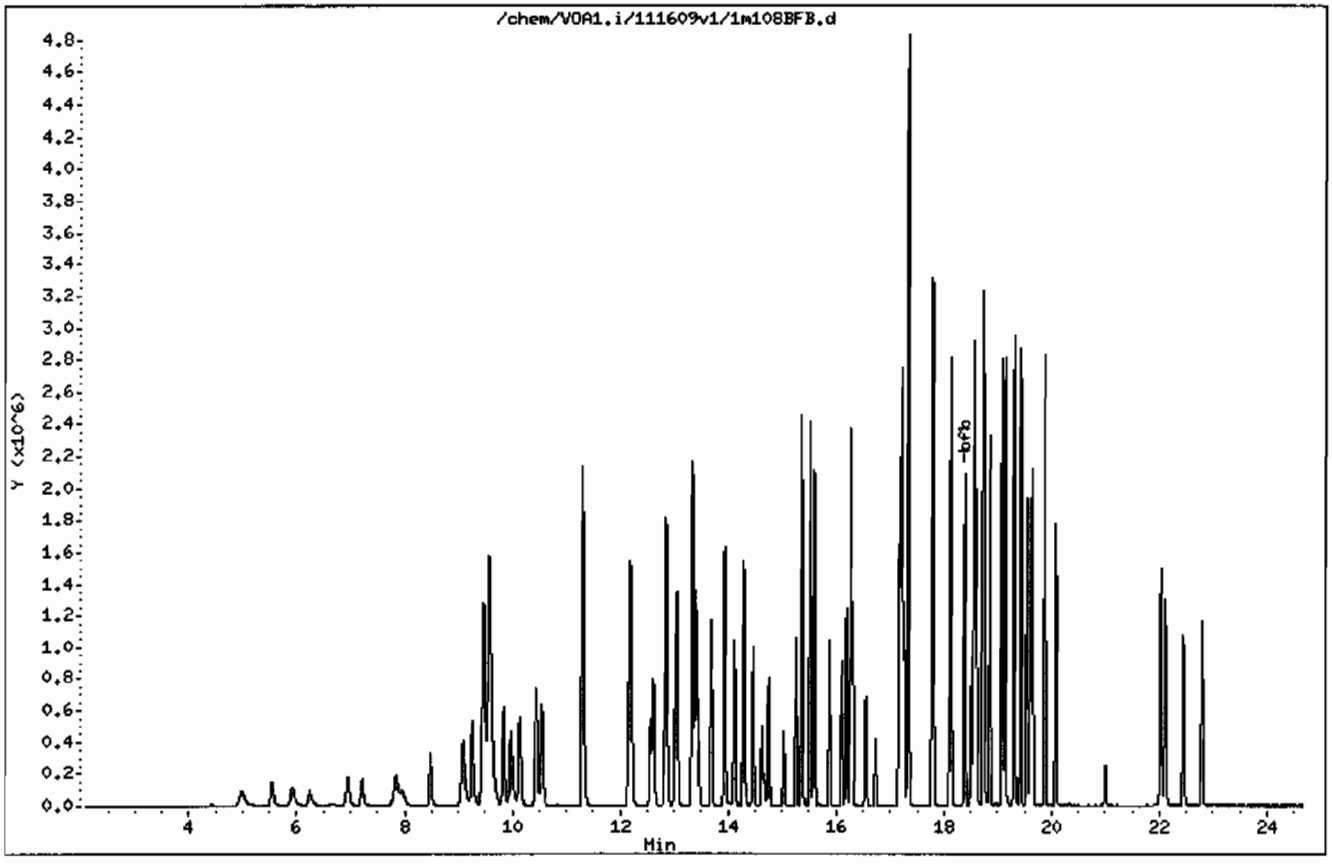

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

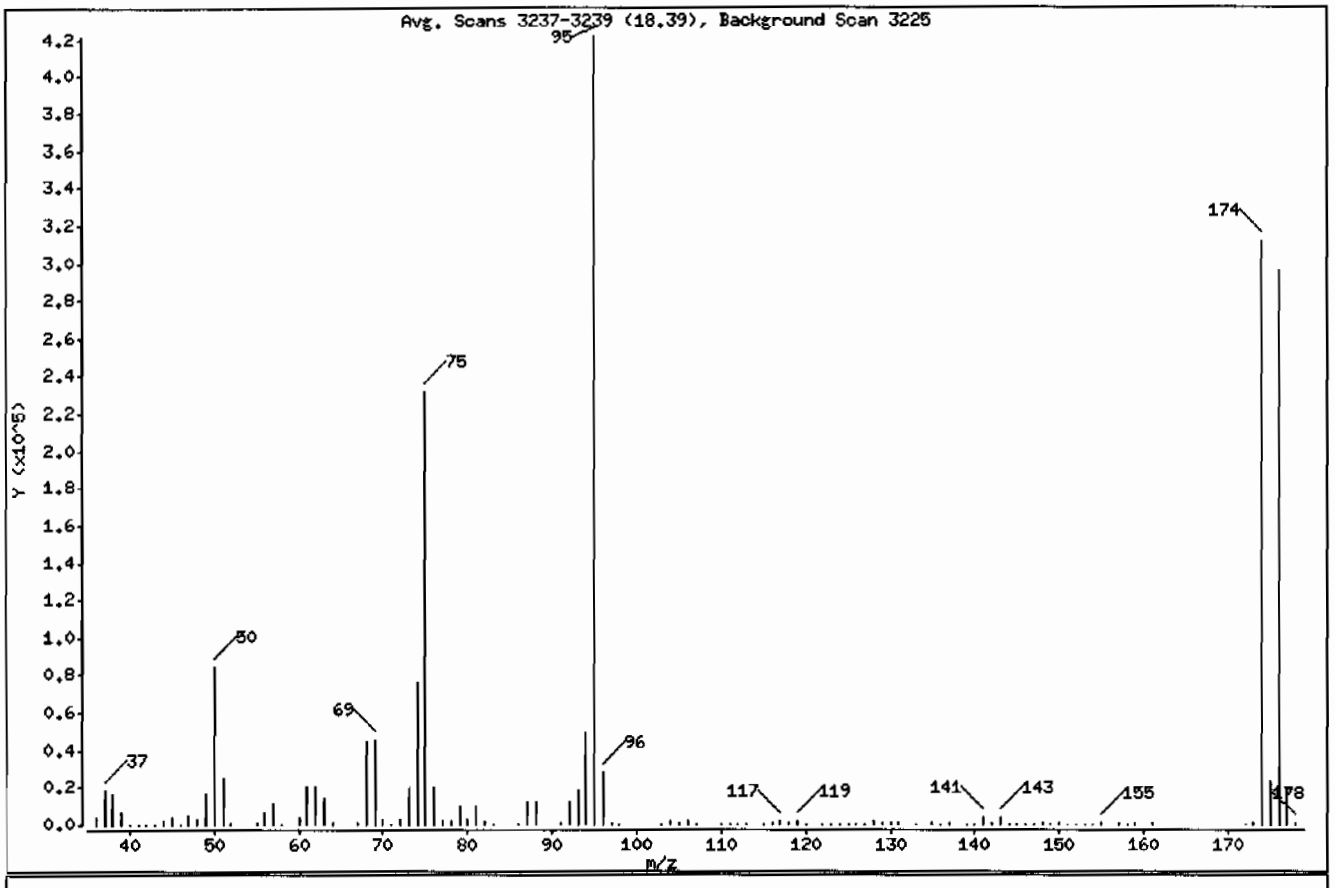

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.05
75	30.00 - 60.00% of mass 95	55.05
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.24 (0.33)
174	50.00 - 100.00% of mass 95	73.77
175	5.00 - 9.00% of mass 174	5.55 (7.52)
176	95.00 - 101.00% of mass 174	70.16 (95.10)
177	5.00 - 9.00% of mass 176	4.80 (6.85)

Data File: /chem/VOA1.i/111609v1/1m108BFB.d

Date : 16-NOV-2009 14:01

Client ID: BFB

Instrument: VOA1.i

Sample Info: |W1VM091116-05|CCV/LCS/ICV/BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1m108BFB.d

Spectrum: Avg. Scans 3237-3239 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3659	69.00	45424	105.00	693	140.00	369
37.00	18736	70.00	3367	106.00	1646	141.00	4255
38.00	16169	71.00	52	107.00	372	142.00	516
39.00	6393	72.00	2726	110.00	174	143.00	4228
40.00	197	73.00	19232	111.00	270	144.00	219
41.00	211	74.00	76640	112.00	131	145.00	352
42.00	88	75.00	232128	113.00	343	146.00	482
43.00	101	76.00	20048	115.00	393	147.00	319
44.00	1967	77.00	2016	116.00	1253	148.00	958
45.00	3625	78.00	1571	117.00	2412	149.00	257
46.00	225	79.00	9321	118.00	1200	150.00	553
47.00	4876	80.00	2693	119.00	2051	151.00	69
48.00	2650	81.00	10141	120.00	65	152.00	268
49.00	16864	82.00	1900	122.00	51	153.00	303
50.00	84536	83.00	304	123.00	52	154.00	398
51.00	25456	86.00	357	124.00	134	155.00	1157
52.00	1092	87.00	13023	125.00	172	157.00	819
55.00	1440	88.00	12376	126.00	137	158.00	66
56.00	6484	91.00	1301	127.00	134	159.00	539
57.00	11568	92.00	12794	128.00	1472	161.00	538
58.00	395	93.00	18184	129.00	873	172.00	156
60.00	4192	94.00	49672	130.00	1342	173.00	1032
61.00	20288	95.00	421696	131.00	645	174.00	311104
62.00	19928	96.00	28576	133.00	54	175.00	23400
63.00	14761	97.00	689	135.00	775	176.00	295872
64.00	1430	98.00	65	136.00	53	177.00	20256
67.00	1159	103.00	156	137.00	650	178.00	602
68.00	44552	104.00	1551	139.00	58		

Data File: /chem/VOA9.i/111909v9/91404.d

Page 1

Date : 19-NOV-2009 10:47

Client ID: BFB01

Instrument: VOA9.i

Sample Info: |UVM090910-02|BFB|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

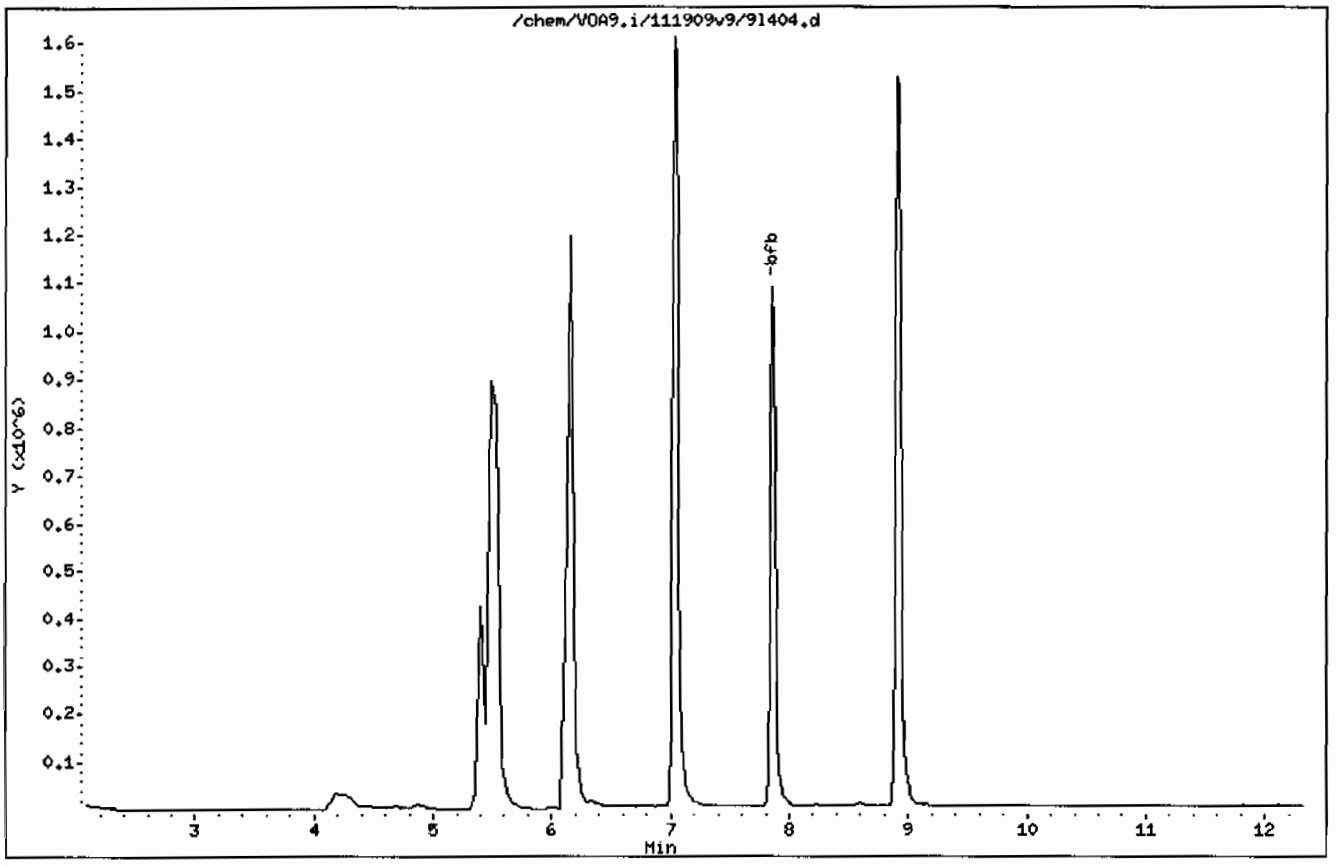

Data File: /chem/VOA9.i/111909v9/91404.d

Date : 19-NOV-2009 10:47

Client ID: BFB01

Instrument: VOA9.i

Sample Info: |UVM090910-02|BFB|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

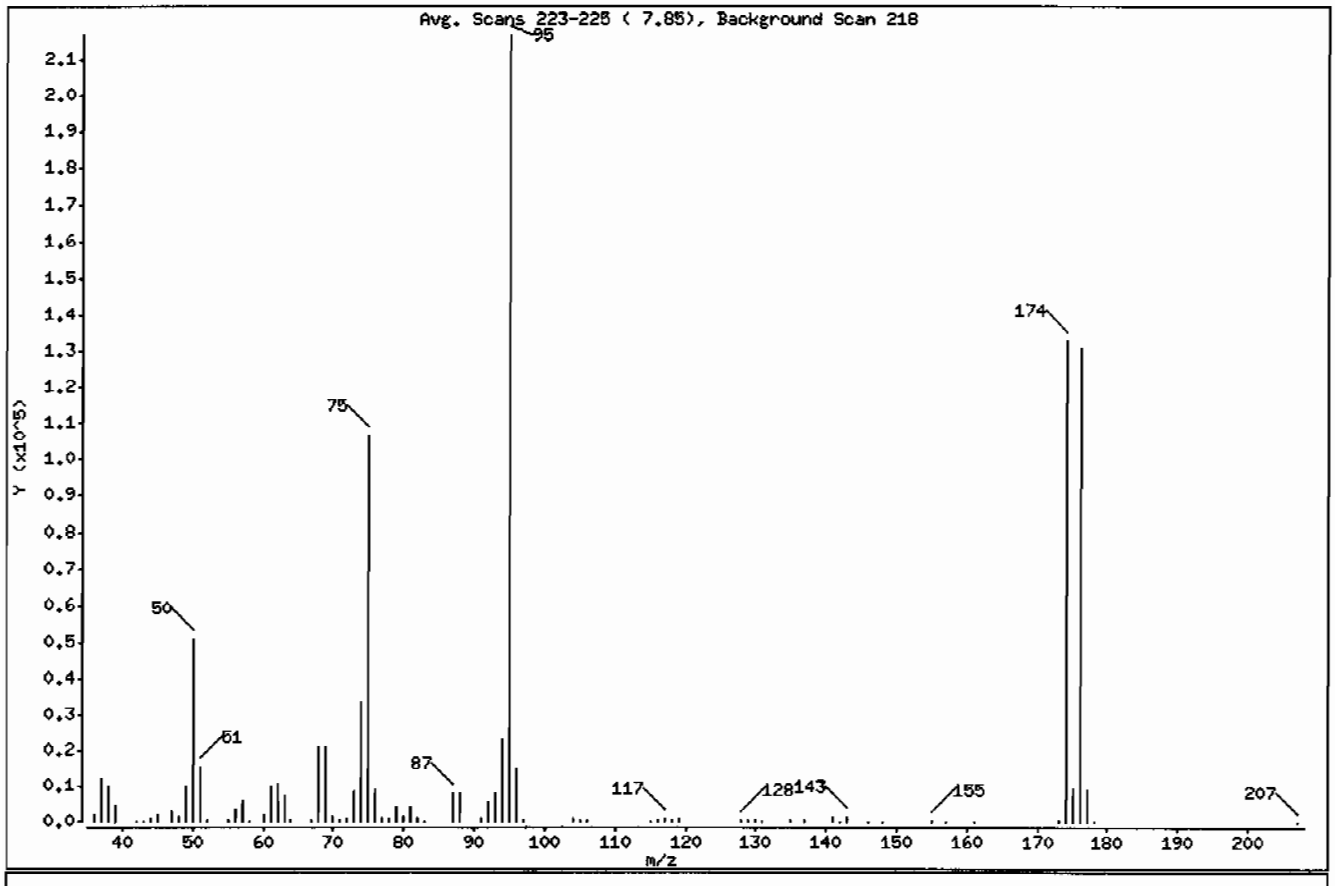

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.43
75	30.00 - 60.00% of mass 95	49.21
96	5.00 - 9.00% of mass 95	6.85
173	Less than 2.00% of mass 174	0.34 (0.55)
174	50.00 - 100.00% of mass 95	61.36
175	5.00 - 9.00% of mass 174	4.46 (7.27)
176	95.00 - 101.00% of mass 174	60.35 (98.35)
177	5.00 - 9.00% of mass 176	4.03 (6.67)

Data File: /chem/VOA9.i/111909v9/91404.d

Date : 19-NOV-2009 10:47

Client ID: BFB01 Instrument: VOA9.i

Sample Info: |UVH090910-02|BFB|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 91404.d
Spectrum: Avg. Scans 223-226 (7.85), Background Scan 218
Location of Maximum: 95.00
Number of points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2068	62.00	10315	87.00	8177	131.00	204
37.00	11885	63.00	7373	88.00	7860	136.00	254
38.00	10148	64.00	697	91.00	763	137.00	262
39.00	4420	67.00	580	92.00	5458	141.00	1542
42.00	200	68.00	21032	93.00	8006	142.00	88
43.00	133	69.00	21008	94.00	22832	143.00	1574
44.00	1178	70.00	1582	95.00	216832	146.00	170
45.00	2039	71.00	344	96.00	14847	148.00	249
47.00	3071	72.00	1005	97.00	533	155.00	384
48.00	1403	73.00	8586	104.00	794	157.00	180
49.00	10069	74.00	33528	105.00	393	161.00	102
50.00	50800	75.00	106712	106.00	720	173.00	731
51.00	15667	76.00	9102	115.00	102	174.00	133056
52.00	642	77.00	1157	116.00	610	175.00	9678
55.00	679	78.00	772	117.00	1106	176.00	130856
56.00	3456	79.00	4221	118.00	680	177.00	8732
57.00	6076	80.00	1327	119.00	1028	178.00	105
58.00	211	81.00	4191	128.00	693	207.00	47
60.00	1966	82.00	1017	129.00	357		
61.00	10083	83.00	112	130.00	588		

Data File: /chem/VOA9.i/112009v9/91501BFB.d

Date : 20-NOV-2009 08:43

Client ID: BFB

Instrument: VOA9.i

Sample Info: |W9VH091120-01|BFB/CCV/LCS|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

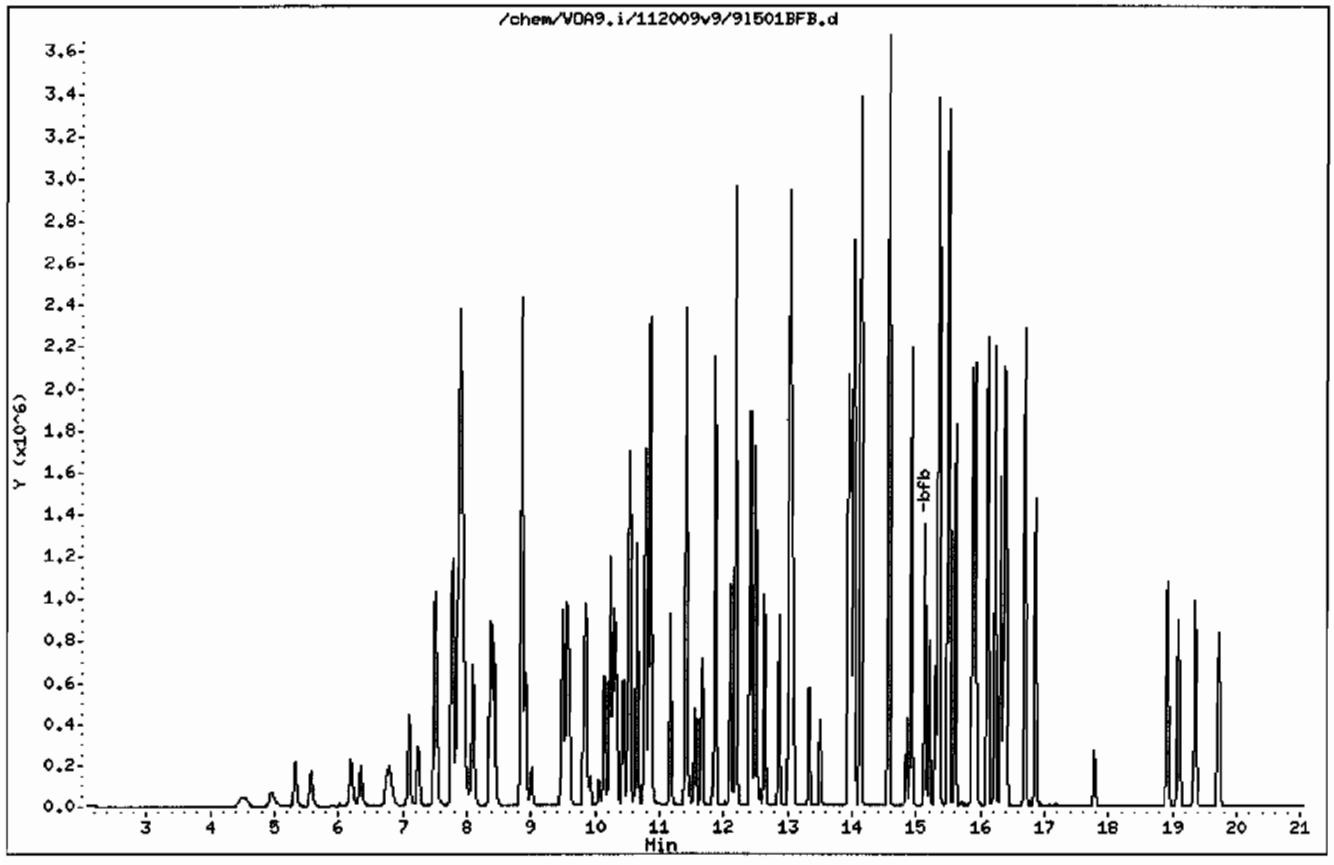

Data File: /chem/VOA9.i/112009v9/91501BFB.d

Date : 20-NOV-2009 08:43

Client ID: BFB

Instrument: VOA9.i

Sample Info: |W9VM091120-01|BFB/CCV/LCS|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

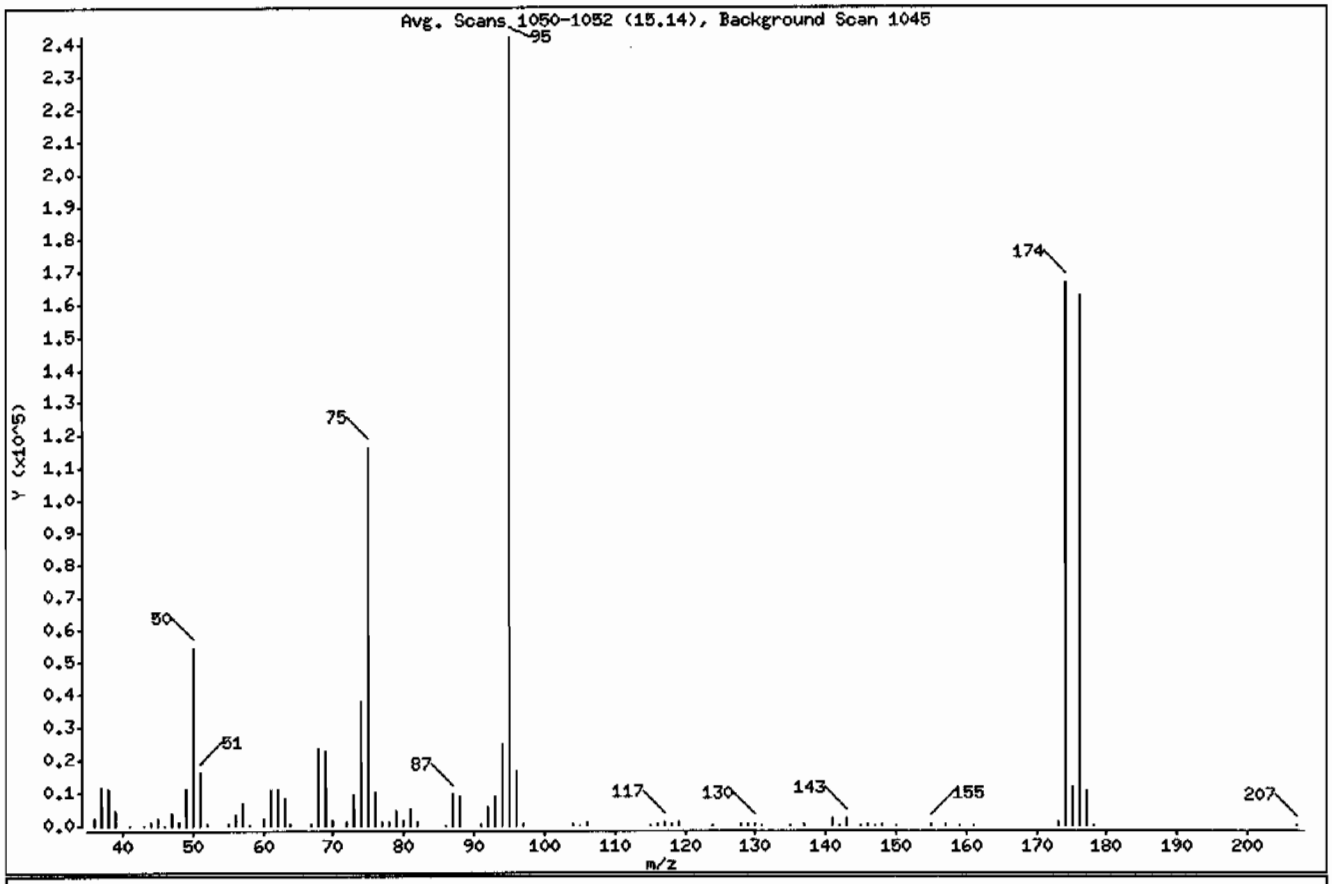

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.52
75	30.00 - 60.00% of mass 95	48.09
96	5.00 - 9.00% of mass 95	6.79
173	Less than 2.00% of mass 174	0.36 (0.52)
174	50.00 - 100.00% of mass 95	68.68
175	5.00 - 9.00% of mass 174	4.72 (6.87)
176	95.00 - 101.00% of mass 174	67.02 (97.58)
177	5.00 - 9.00% of mass 176	4.39 (6.55)

Data File: /chem/VOA9.i/112009v9/91501BFB.d

Date : 20-NOV-2009 08:43

Client ID: BFB

Instrument: VOA9.i

Sample Info: IW9VM091120-01|BFB/CCV/LCS|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 91501BFB.d
Spectrum: Avg. Scans 1050-1052 (15,14), Background Scan 1045
Location of Maximum: 95.00
Number of points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2118	62.00	11053	91.00	753	137.00	351
37.00	11759	63.00	8181	92.00	5812	141.00	1995
38.00	11022	64.00	694	93.00	8955	142.00	120
39.00	4198	67.00	629	94.00	25240	143.00	2064
41.00	241	68.00	23192	95.00	242176	145.00	207
43.00	40	69.00	22896	96.00	16432	146.00	323
44.00	1345	70.00	1771	97.00	597	147.00	103
45.00	2259	72.00	1003	104.00	809	148.00	554
46.00	93	73.00	9649	105.00	140	150.00	179
47.00	3922	74.00	37760	106.00	940	155.00	508
48.00	1339	75.00	116464	115.00	203	157.00	357
49.00	10915	76.00	9913	116.00	721	159.00	93
50.00	54544	77.00	1367	117.00	1144	161.00	170
51.00	16197	78.00	981	118.00	750	173.00	860
52.00	718	79.00	4710	119.00	1056	174.00	166336
55.00	418	80.00	1718	124.00	103	175.00	11428
56.00	3541	81.00	4929	128.00	696	176.00	162304
57.00	6842	82.00	1041	129.00	335	177.00	10624
58.00	267	86.00	178	130.00	779	178.00	105
60.00	1957	87.00	9560	131.00	242	207.00	16
61.00	10723	88.00	9060	135.00	237		

Data File: /chem/VOA1.i/112509v1/1n325.d

Page 1

Date : 25-NOV-2009 20:59

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

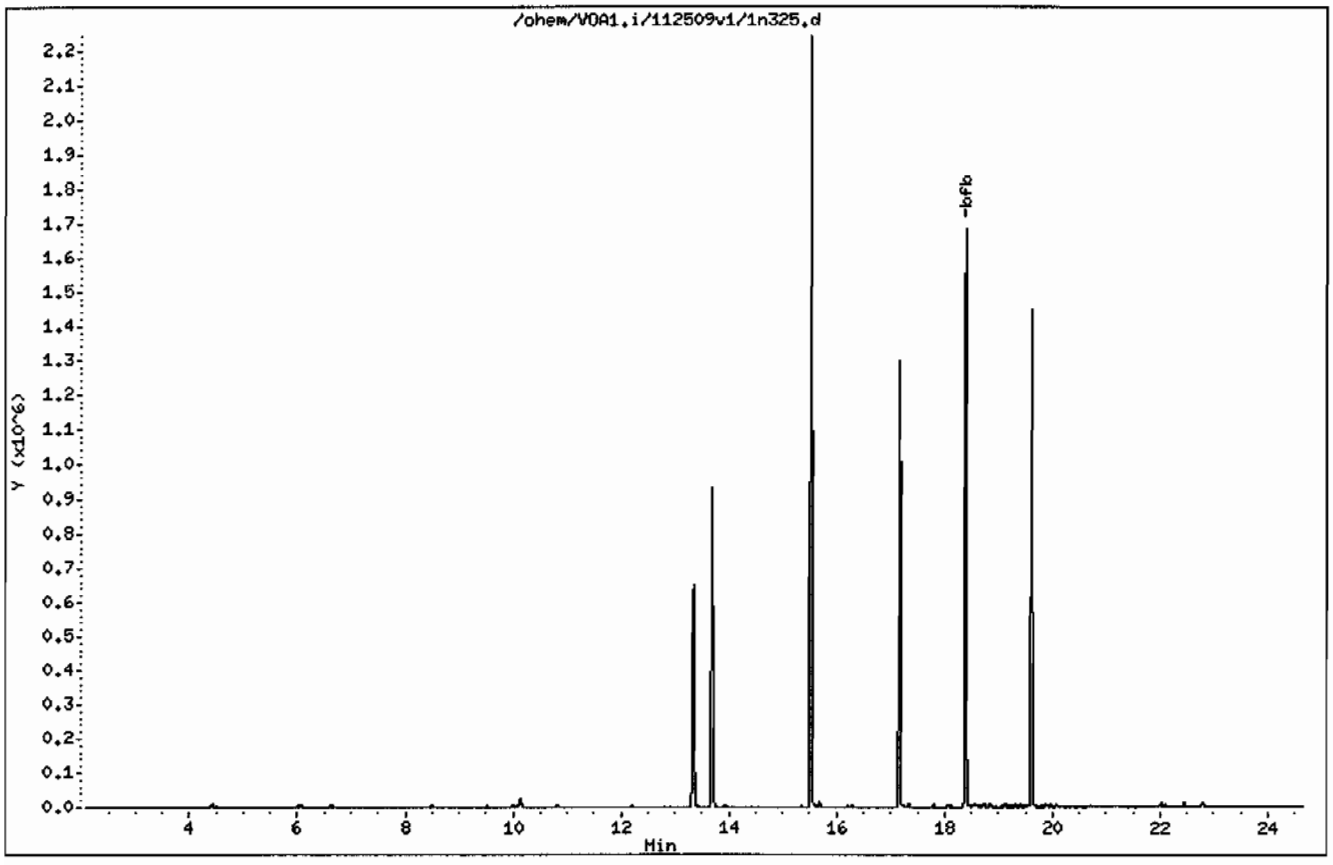

Data File: /chem/VOA1.i/112509v1/1n325.d

Date : 25-NOV-2009 20:59

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

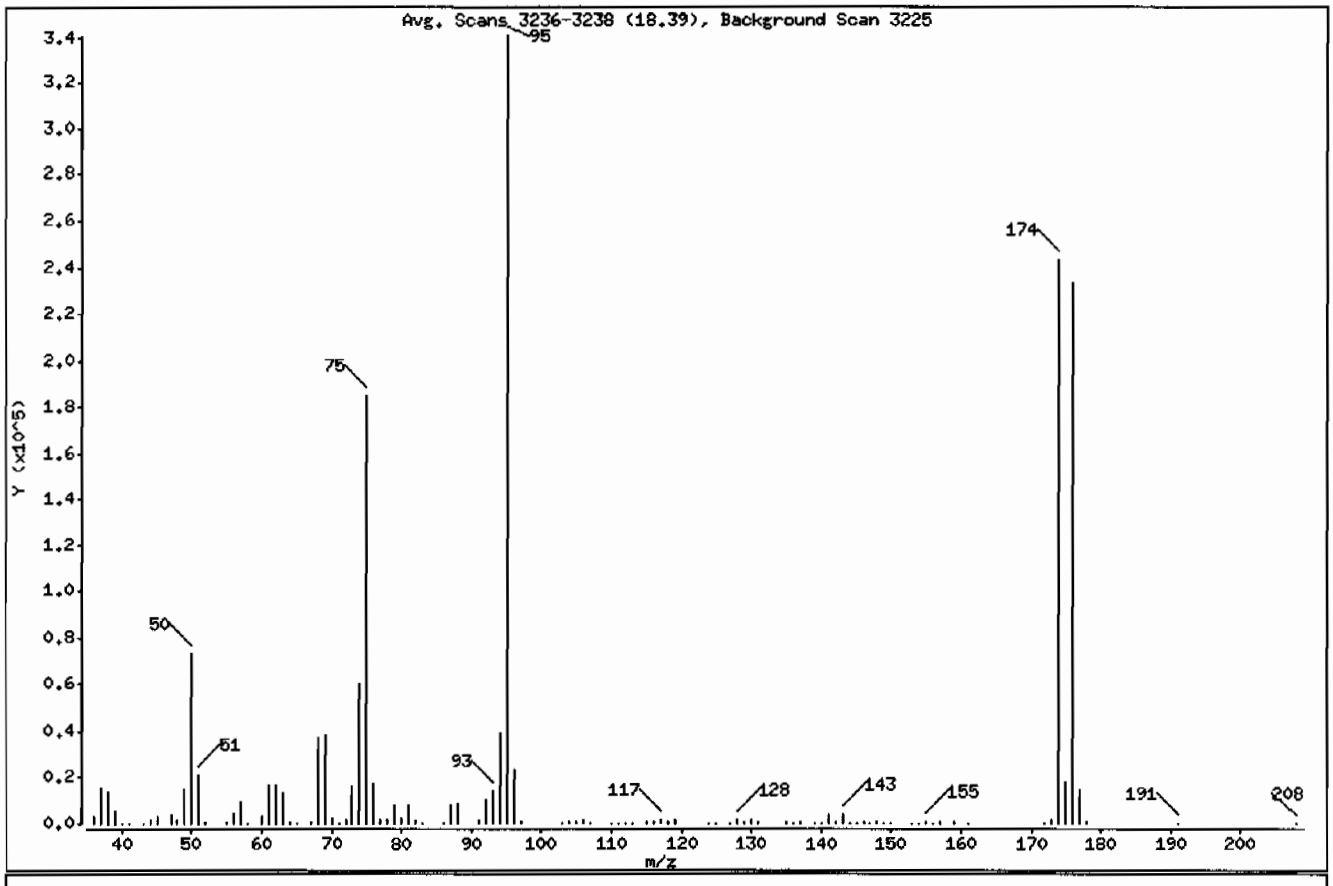

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.30
75	30.00 - 60.00% of mass 95	54.26
96	5.00 - 9.00% of mass 95	6.94
173	Less than 2.00% of mass 174	0.56 (0.79)
174	50.00 - 100.00% of mass 95	71.26
175	5.00 - 9.00% of mass 174	5.21 (7.31)
176	95.00 - 101.00% of mass 174	68.59 (96.26)
177	5.00 - 9.00% of mass 176	4.45 (6.49)

Data File: /chem/VOA1.i/112509v1/1n325.d

Date : 25-NOV-2009 20:59

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1n325.d

Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3225

Location of Maximum: 95.00

Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2759	69.00	38208	105.00	430	144.00	192
37.00	15396	70.00	2468	106.00	1373	145.00	338
38.00	13827	71.00	50	107.00	334	146.00	392
39.00	5196	72.00	1815	110.00	118	147.00	302
40.00	317	73.00	16259	111.00	285	148.00	887
41.00	53	74.00	59952	112.00	183	149.00	175
43.00	131	75.00	184832	113.00	257	150.00	373
44.00	1656	76.00	17216	115.00	406	153.00	233
45.00	3268	77.00	1594	116.00	1109	154.00	318
47.00	3540	78.00	1181	117.00	1936	155.00	740
48.00	1820	79.00	8076	118.00	1162	156.00	124
49.00	15077	80.00	2408	119.00	1325	157.00	640
50.00	72568	81.00	7927	124.00	138	159.00	664
51.00	20920	82.00	1650	125.00	124	161.00	384
52.00	932	83.00	218	127.00	124	172.00	327
55.00	944	86.00	157	128.00	1232	173.00	1918
56.00	4816	87.00	8068	129.00	487	174.00	242752
57.00	9482	88.00	8521	130.00	1194	175.00	17752
58.00	211	91.00	1316	131.00	549	176.00	233664
60.00	3454	92.00	10073	135.00	572	177.00	15164
61.00	16296	93.00	14303	136.00	50	178.00	503
62.00	16792	94.00	38968	137.00	598	191.00	84
63.00	13135	95.00	340672	139.00	57	208.00	55
64.00	1161	96.00	23632	140.00	197		
65.00	137	97.00	596	141.00	3563		
67.00	914	103.00	205	142.00	455		
68.00	37368	104.00	1156	143.00	3676		

Data File: /chem/VOA1.i/112709v1/1n501.d

Page 1

Date : 27-NOV-2009 05:04

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

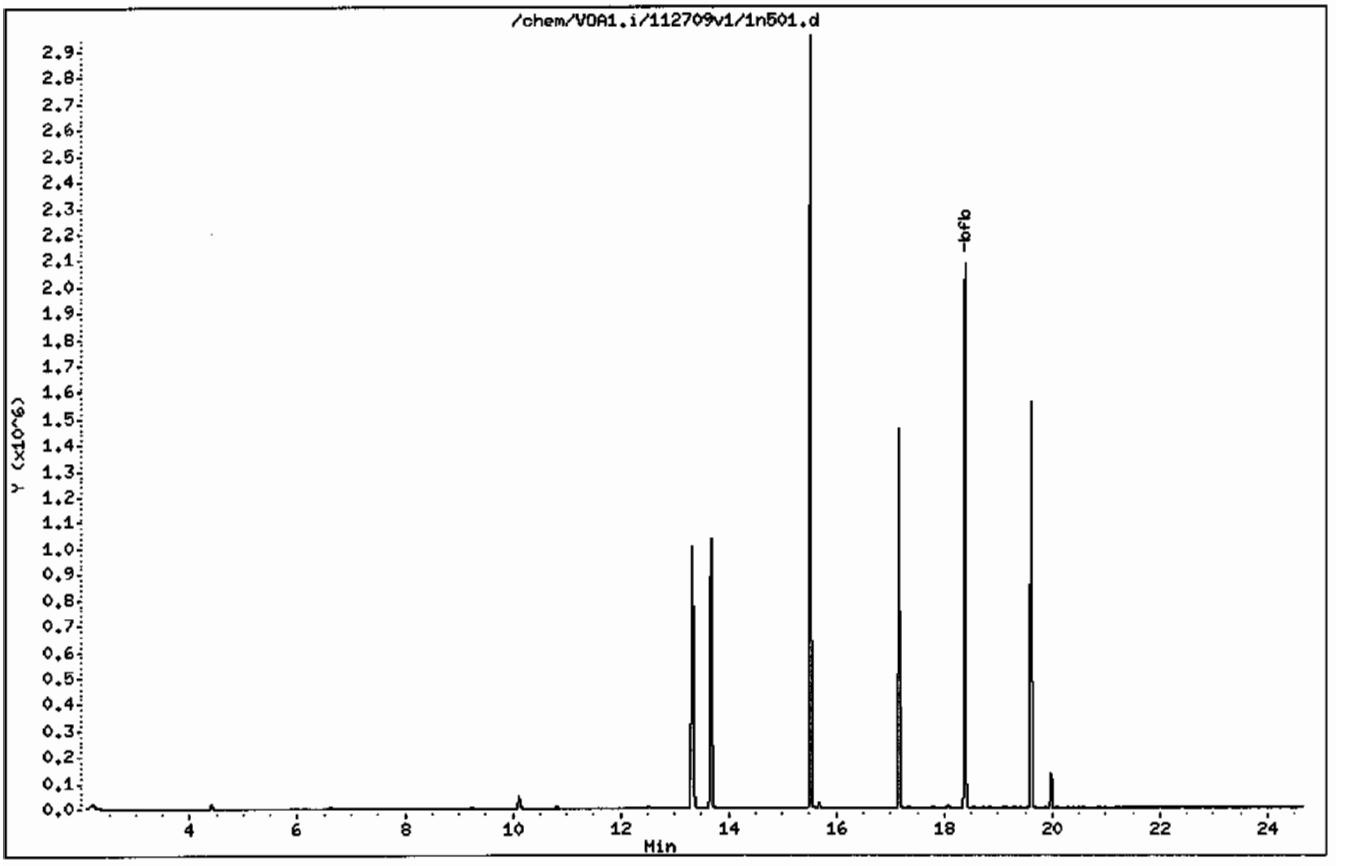

Data File: /chem/VOA1.i/112709v1/1n501.d

Date : 27-NOV-2009 05:04

Client ID: BFB01

Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

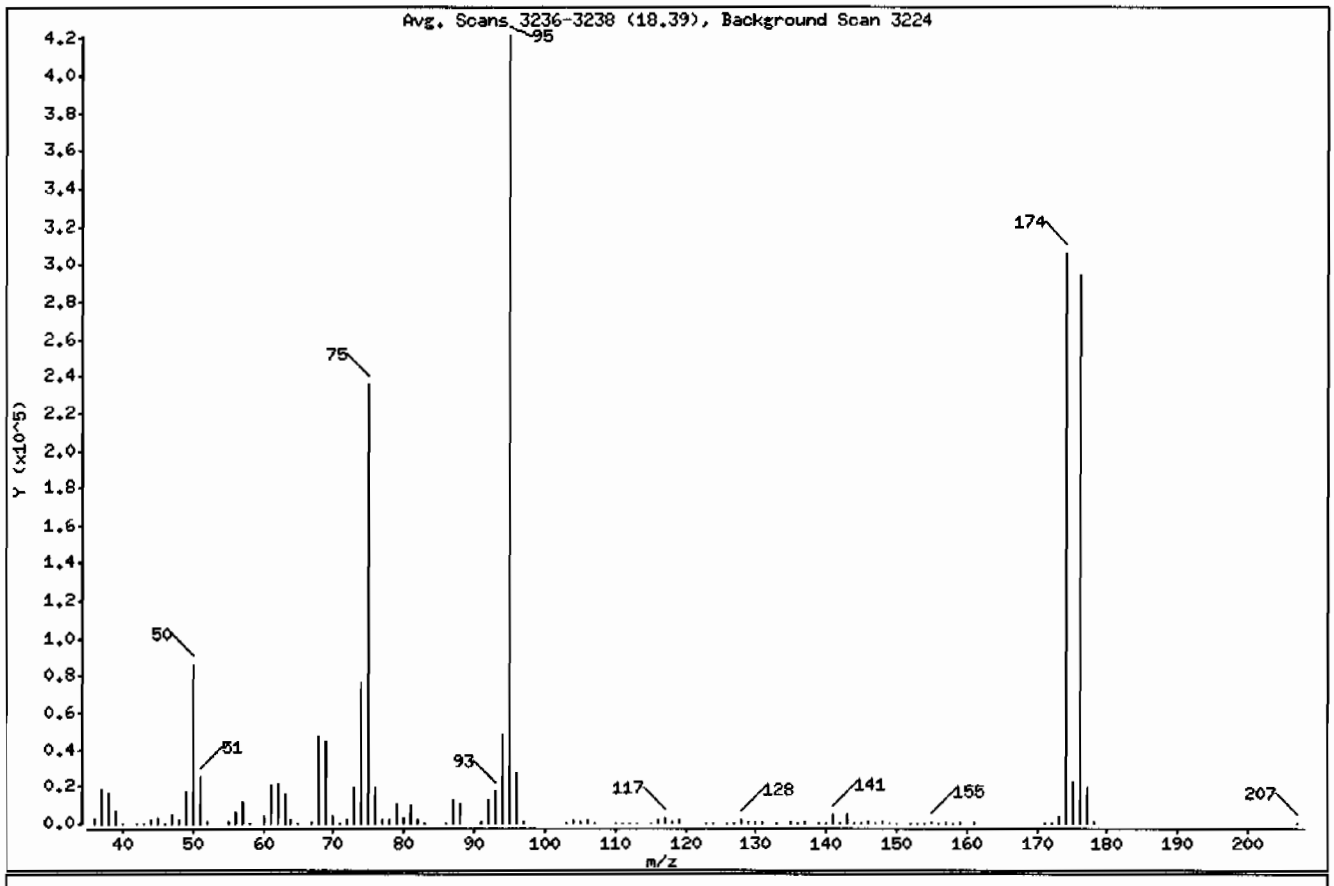

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.35
75	30.00 - 60.00% of mass 95	55.82
96	5.00 - 9.00% of mass 95	6.44
173	Less than 2.00% of mass 174	0.81 (1.12)
174	50.00 - 100.00% of mass 95	72.67
175	5.00 - 9.00% of mass 174	5.22 (7.19)
176	95.00 - 101.00% of mass 174	69.86 (96.13)
177	5.00 - 9.00% of mass 176	4.53 (6.49)

Data File: /chem/VOA1.i/112709v1/1n501.d

Date : 27-NOV-2009 05:04

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: RXM4

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1n501.d
Spectrum: Avg. Scans 3236-3238 (18.39), Background Scan 3224
Location of Maximum: 95.00
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3084	69.00	44856	106.00	2015	144.00	309
37.00	18584	70.00	3470	107.00	345	145.00	372
38.00	16352	71.00	62	110.00	271	146.00	567
39.00	6539	72.00	2215	111.00	233	147.00	270
40.00	188	73.00	19176	112.00	324	148.00	898
42.00	60	74.00	76328	113.00	160	149.00	291
43.00	329	75.00	235264	115.00	459	150.00	470
44.00	1693	76.00	19152	116.00	1541	152.00	175
45.00	3164	77.00	2010	117.00	2470	153.00	344
46.00	105	78.00	1474	118.00	1262	154.00	315
47.00	4711	79.00	10545	119.00	2000	155.00	1220
48.00	2260	80.00	2909	123.00	67	156.00	163
49.00	17424	81.00	9768	124.00	374	157.00	815
50.00	85784	82.00	1710	126.00	64	158.00	108
51.00	25560	83.00	166	127.00	131	159.00	592
52.00	1137	86.00	463	128.00	1544	161.00	654
55.00	1047	87.00	12309	129.00	1004	171.00	158
56.00	5960	88.00	10472	130.00	1415	172.00	344
57.00	11662	91.00	1378	131.00	664	173.00	3420
58.00	441	92.00	12786	133.00	51	174.00	306304
60.00	4097	93.00	17680	135.00	679	175.00	22016
61.00	20456	94.00	48776	136.00	84	176.00	294464
62.00	20912	95.00	421440	137.00	797	177.00	19096
63.00	15031	96.00	27136	139.00	106	178.00	510
64.00	1687	97.00	856	140.00	370	207.00	406
65.00	243	103.00	264	141.00	4702		
67.00	980	104.00	1649	142.00	458		
68.00	47000	105.00	675	143.00	4447		

Data File: /chem/VOA9.i/121509v9/9p202BFB.d

Date : 15-DEC-2009 11:25

Client ID: BFB

Instrument: VOA9.i

Sample Info: IW9VM091215-02|BFB|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

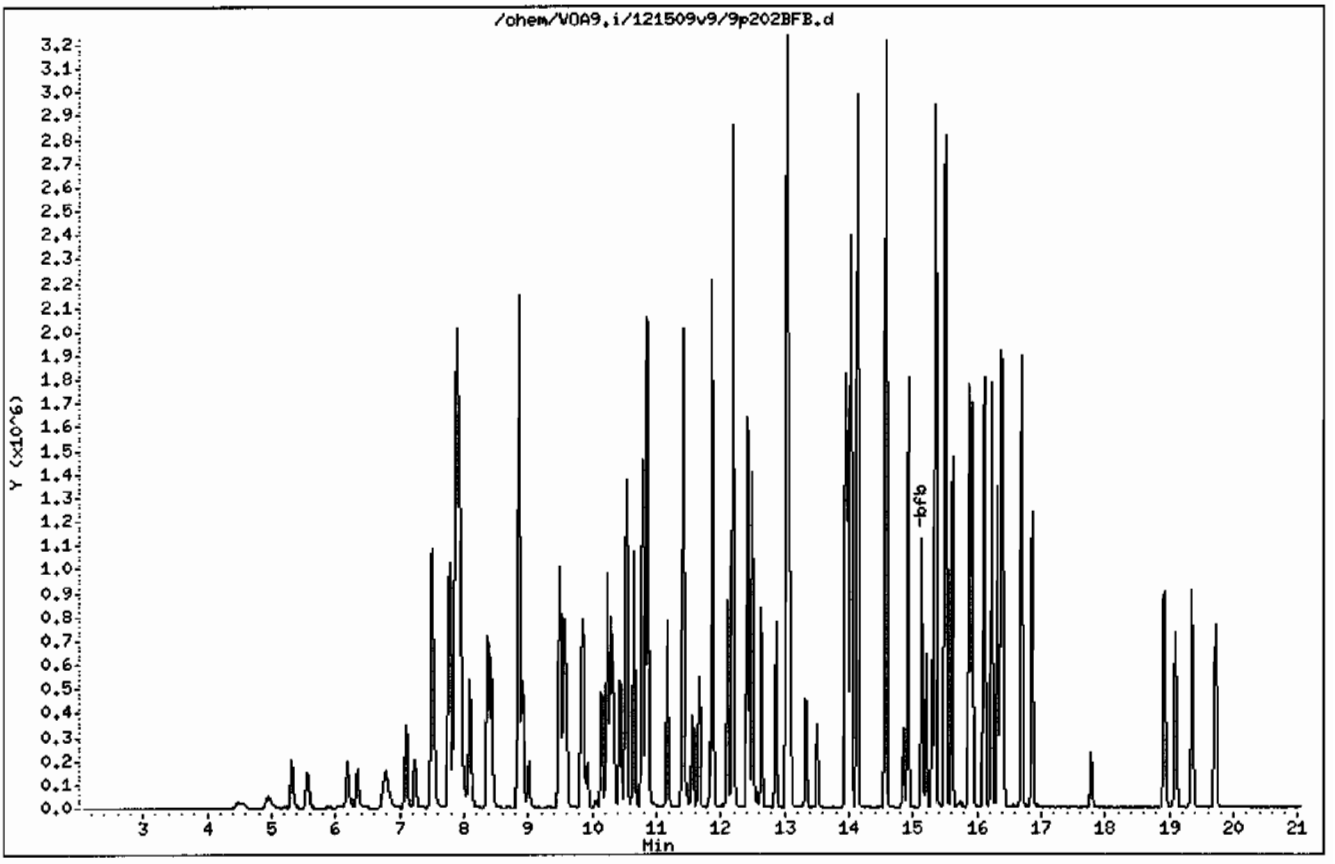

Data File: /chem/VOA9.i/121509v9/9p202BFB.d

Date : 15-DEC-2009 11:25

Client ID: BFB

Instrument: VOA9.i

Sample Info: |W9VM091215-02|BFB|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb

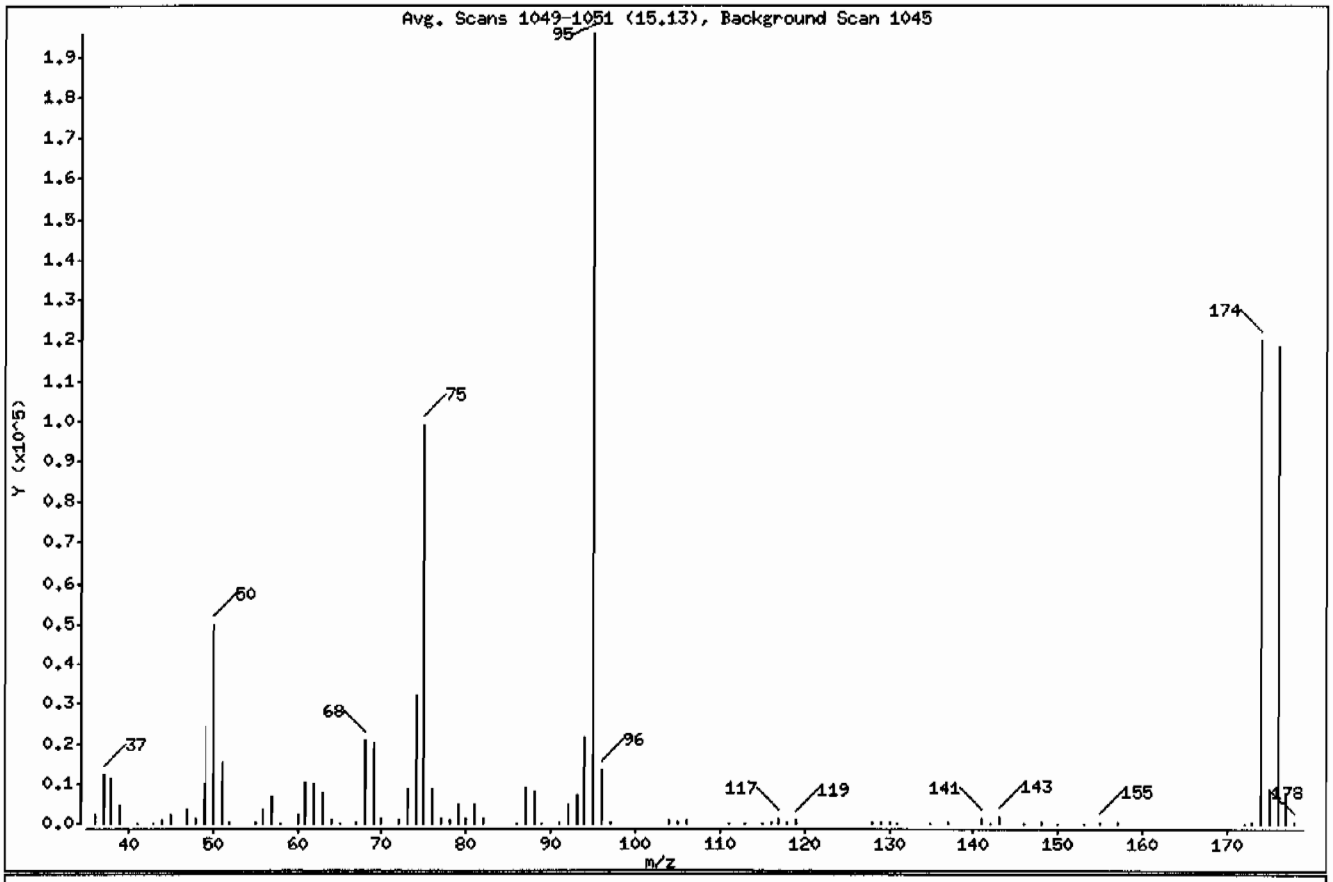

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.48
75	30.00 - 60.00% of mass 95	50.67
96	5.00 - 9.00% of mass 95	6.92
173	Less than 2.00% of mass 174	0.24 (0.38)
174	50.00 - 100.00% of mass 95	61.49
175	5.00 - 9.00% of mass 174	4.27 (6.94)
176	95.00 - 101.00% of mass 174	60.64 (98.62)
177	5.00 - 9.00% of mass 176	3.98 (6.56)

Data File: /chem/VOA9.i/121509v9/9p202BFB.d

Date : 15-DEC-2009 11:25

Client ID: BFB

Instrument: VOA9.i

Sample Info: |W9VH091215-02|BFB|1|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 9p202BFB.d

Spectrum: Avg. Scans 1049-1051 (15.13), Background Scan 1045

Location of Maximum: 95.00

Number of points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2027	63.00	7742	89.00	121	131.00	208
37.00	12081	64.00	772	91.00	667	135.00	201
38.00	11446	65.00	99	92.00	5115	137.00	277
39.00	4599	67.00	482	93.00	7405	141.00	1469
41.00	106	68.00	20640	94.00	21760	142.00	107
43.00	97	69.00	20152	95.00	195712	143.00	1599
44.00	1106	70.00	1503	96.00	13550	146.00	201
45.00	2273	72.00	1004	97.00	408	148.00	270
47.00	3643	73.00	8438	104.00	915	150.00	86
48.00	1430	74.00	32072	105.00	368	153.00	88
49.00	10103	75.00	99168	106.00	816	155.00	430
50.00	49872	76.00	8427	111.00	90	157.00	244
51.00	15331	77.00	1287	113.00	87	172.00	91
52.00	660	78.00	852	115.00	112	173.00	460
55.00	633	79.00	4823	116.00	604	174.00	120344
56.00	3573	80.00	1508	117.00	1128	175.00	8348
57.00	6545	81.00	4930	118.00	653	176.00	118680
58.00	109	82.00	1259	119.00	944	177.00	7786
60.00	2034	86.00	95	128.00	570	178.00	226
61.00	10345	87.00	8822	129.00	258		
62.00	10123	88.00	7993	130.00	601		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981438**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 07:10**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 04:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n504BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981438**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 07:10**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 04:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n504BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n504BA.d
Lab Smp Id: 1201981438 Client Smp ID: BLANK
Inj Date : 27-NOV-2009 07:10
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981438|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 10-Dec-2009 15:28 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.332	(0.975)	602310	49.8935	49.9
* 52 Fluorobenzene	96	13.686	13.677	(1.000)	970526	50.0000	
$ 65 Toluene-d8	98	15.518	15.514	(0.904)	1653232	52.1473	52.1
* 76 Chlorobenzene-d5	117	17.162	17.157	(1.000)	778950	50.0000	
$ 87 Bromofluorobenzene	95	18.391	18.386	(0.938)	665070	46.2396	46.2
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.611	(1.000)	428373	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n504BA.d
Lab Smp Id: 1201981438 Client Smp ID: BLANK
Inj Date : 27-NOV-2009 07:10
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981438|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 10-Dec-2009 15:28 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112709v1/1n504BA.d
Date : 27-NOV-2009 07:10
Client ID: BLANK
Sample Info: |120198143819267431|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

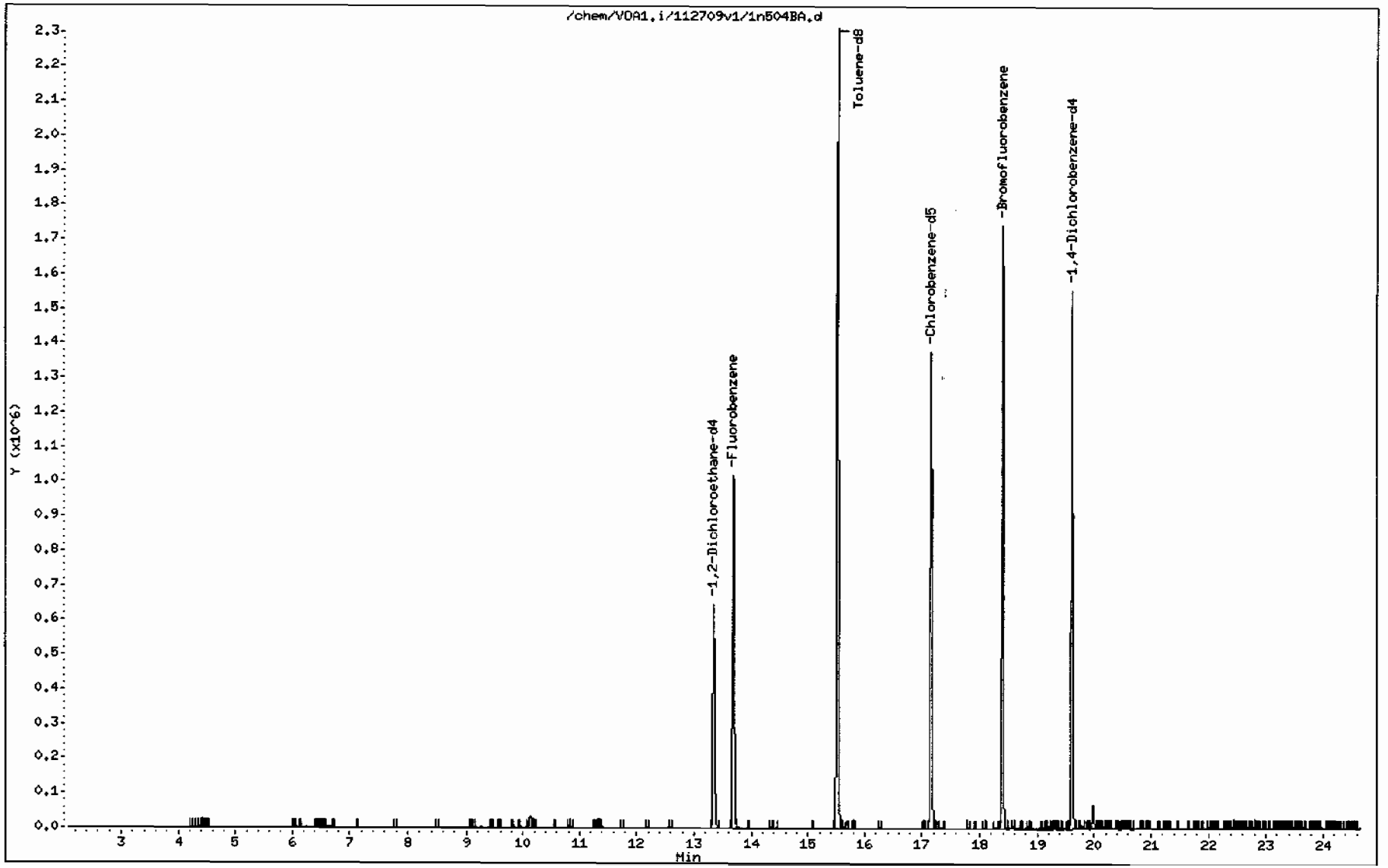

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201997426**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 14:11**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 11:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p208BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201997426**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 14:11**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 11:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p208BA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
811-97-2	Norflurane	4.68	6.85	ug/kg	64	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p208BA.d
Lab Smp Id: 1201997426 Client Smp ID: BLANK
Inj Date : 15-DEC-2009 14:11
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |1201997426|926743|1|VOA|1|
Misc Info : GEL 5g n/a
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 16-Dec-2009 08:13 ron01469 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 46 1,2-Dichloroethane-d4	65	10.431	10.431	(0.967)	391088	51.6497	51.6
* 51 Fluorobenzene	96	10.787	10.787	(1.000)	1407307	50.0000	
$ 64 Toluene-d8	99	12.424	12.423	(0.891)	117607	50.5319	50.5
* 75 Chlorobenzene-d5	117	13.942	13.941	(1.000)	961554	50.0000	
$ 86 Bromofluorobenzene	95	15.127	15.127	(0.924)	406450	45.2966	45.3
* 101 1,4-Dichlorobenzene-d4	152	16.373	16.372	(1.000)	463347	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p208BA.d
Lab Smp Id: 1201997426 Client Smp ID: BLANK
Inj Date : 15-DEC-2009 14:11
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |1201997426|926743|1|VOA|1|
Misc Info : GEL 5g n/a
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 16-Dec-2009 08:13 ron01469 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 51 Fluorobenzene	10.787	3159956	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Norflurane				CAS #: 811-97-2			
4.678	432626	6.84544734	6.8	64	NIST05.L	4081	51

Data File: /chem/VOA9.i/121509v9/9p208BA.d
Date : 15-DEC-2009 14:11
Client ID: BLANK
Sample Info: |120199742619267431|VOA|1|

Column phase: RTX-Volatiles

Instrument: VOA9.i

Operator: RXY1
Column diameter: 0.25

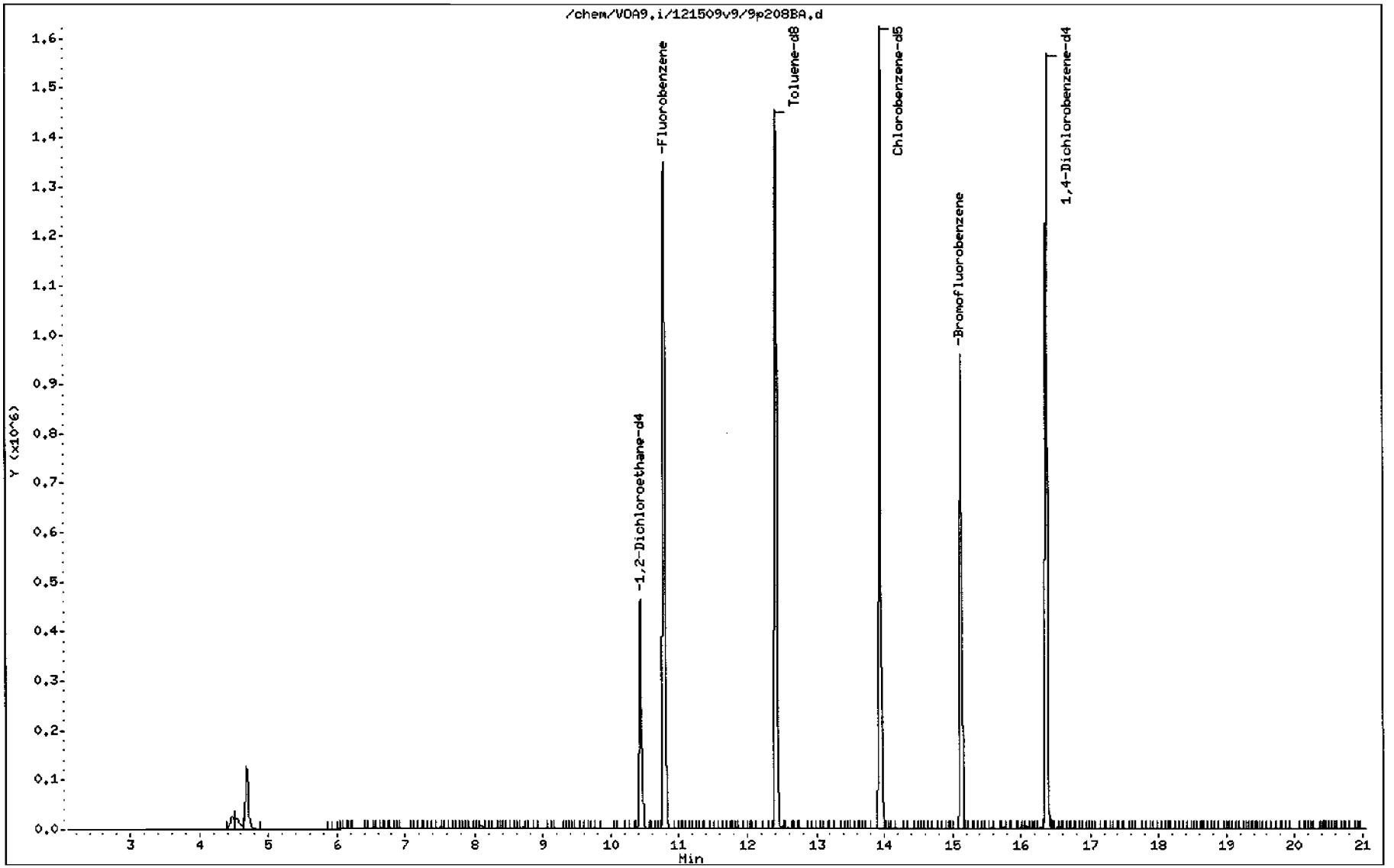

Data File: /chem/VOA9.i/121509v9/9p208BA.d

Date : 15-DEC-2009 14:11

Client ID: BLANK

Instrument: VOA9.i

Sample Info: |120199742619267431|VOA|1|

Operator: RXY1

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Norflurane	811-97-2	NIST05.L	4081	64	C2H2F4	102
Norflurane	811-97-2	NIST05.L	4082	58	C2H2F4	102

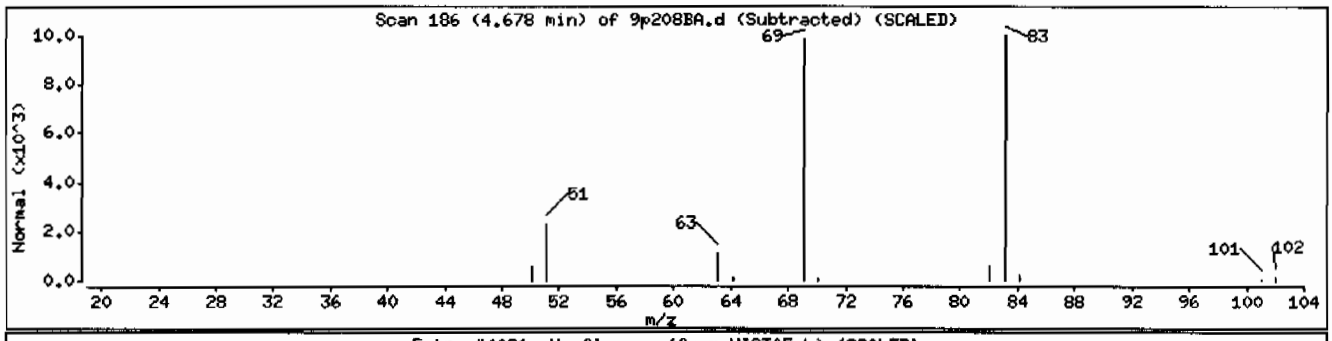

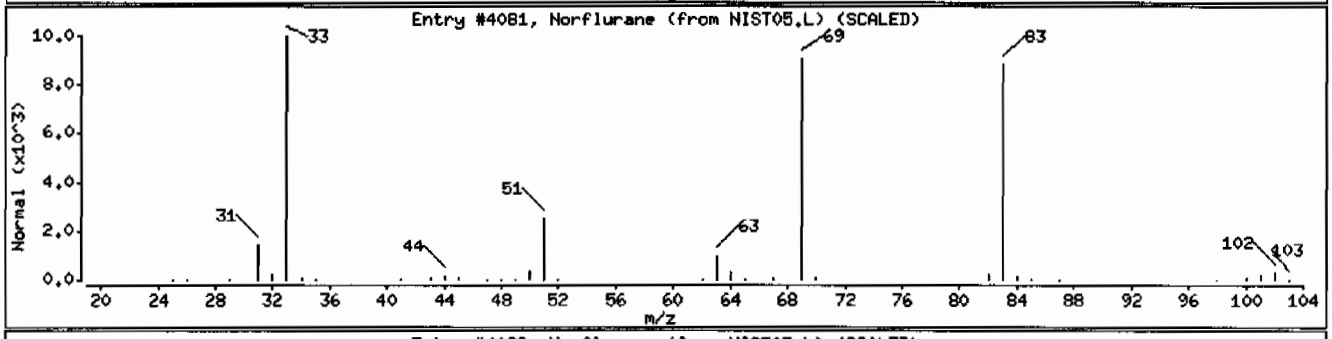

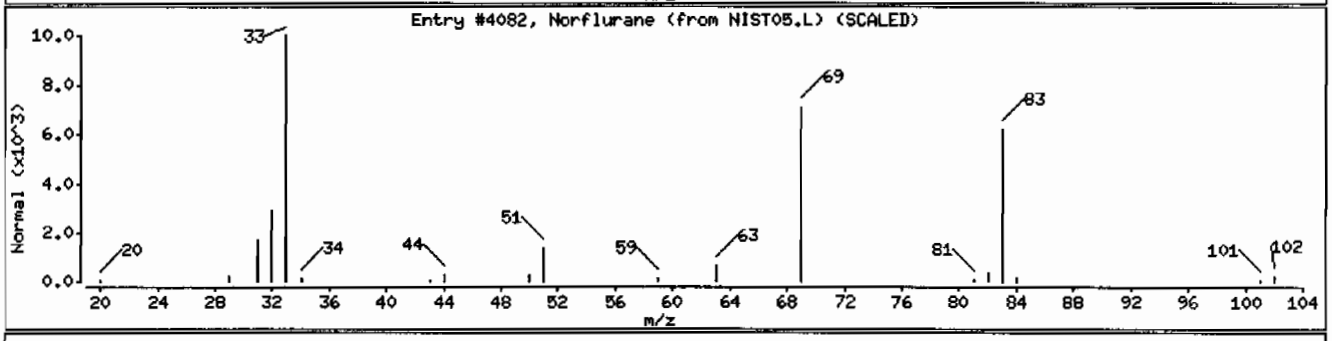

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981437**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 22:30**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n328BB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981437**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 22:30**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n328BB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n328BB.d
Lab Smp Id: 1201981437 Client Smp ID: MB
Inj Date : 25-NOV-2009 22:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981437|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 28 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	611927	53.5482	53.5
* 52 Fluorobenzene	96	13.686	13.686	(1.000)	918725	50.0000	
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1675769	54.7057	54.7
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	752644	50.0000	
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	672053	48.1432	48.1
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	415755	50.0000	
111 Naphthalene	128	22.432	22.437	(1.144)	5778	0.32793	0.33(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n328BB.d
Lab Smp Id: 1201981437 Client Smp ID: MB
Inj Date : 25-NOV-2009 22:30
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981437|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 28 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/112509v1/1n328BB.d
Date : 25-NOV-2009 22:30
Client ID: MB
Sample Info: |1201981437|926743|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4
Column diameter: 0.25

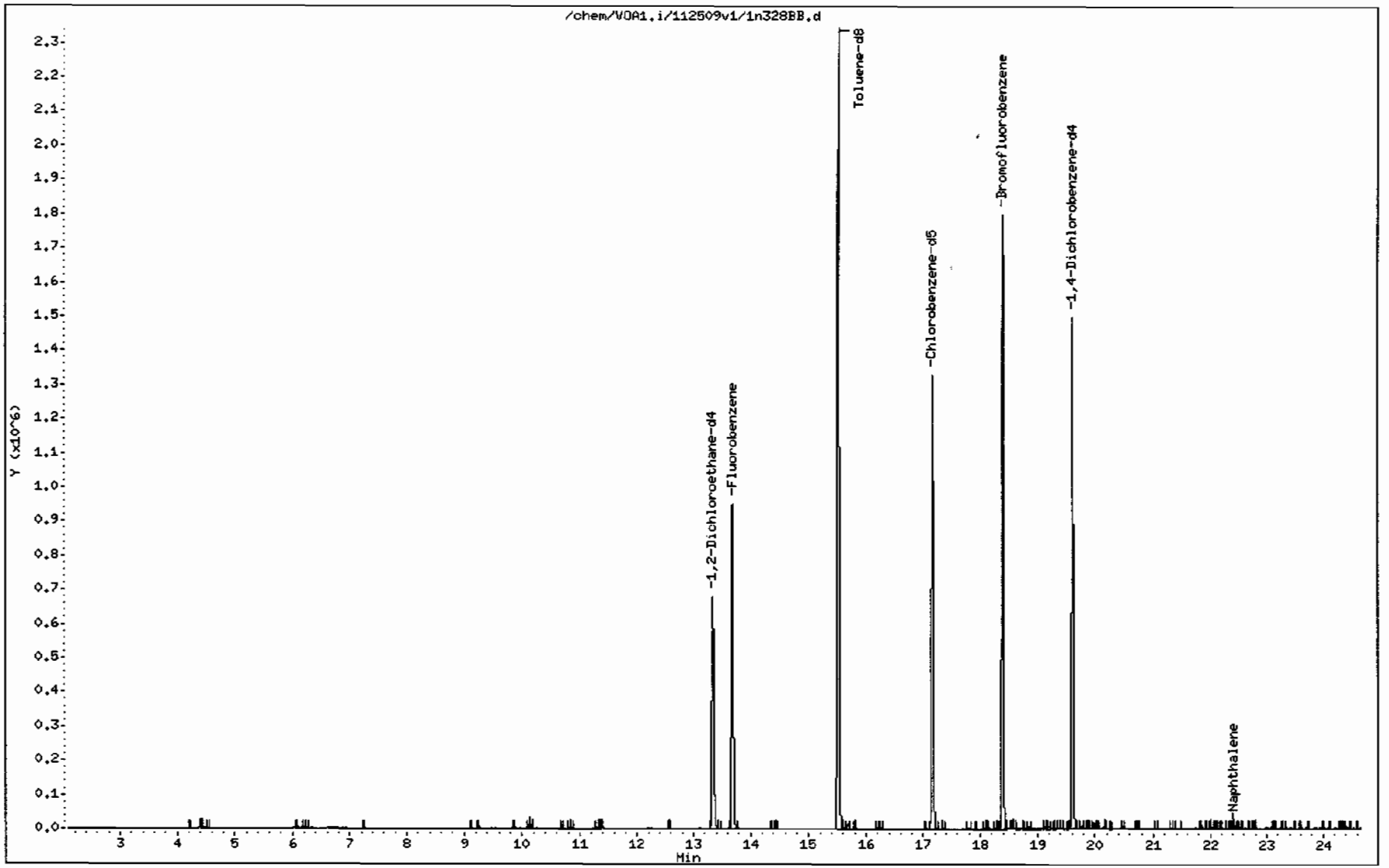

Data File: /chem/VOA1.i/112509v1/1n328BB.d

Date : 25-NOV-2009 22:30

Client ID: MB

Instrument: VOA1.i

Sample Info: |120198143719267431|VOAF|1|

Operator: RXH4

Column phase: RTX-Volatiles

Column diameter: 0.25

111 Naphthalene

Concentration: 0.33 ug/Kg

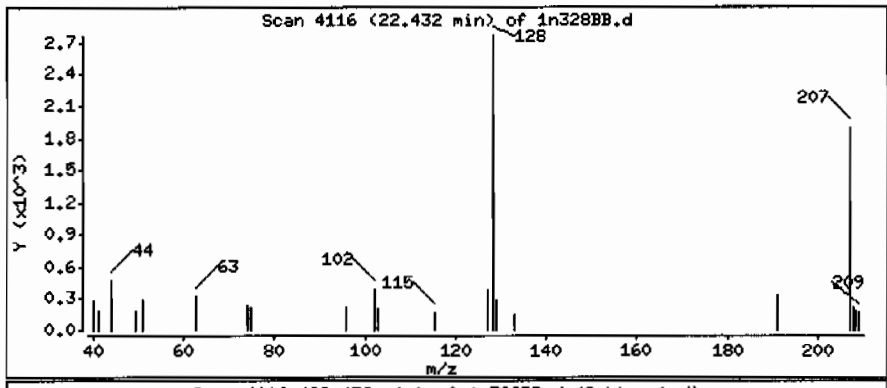

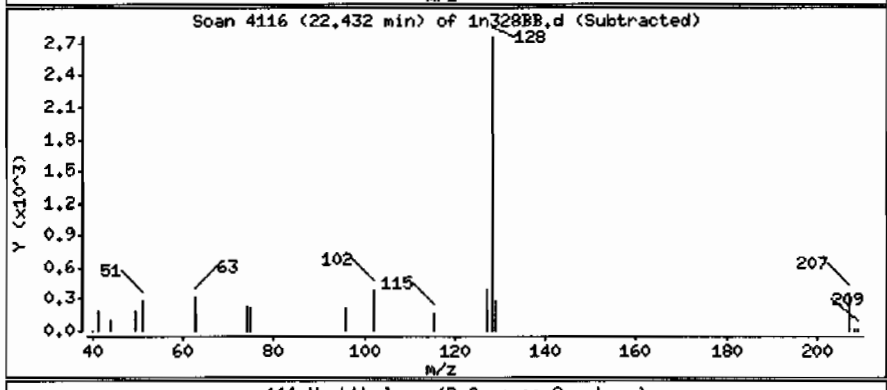

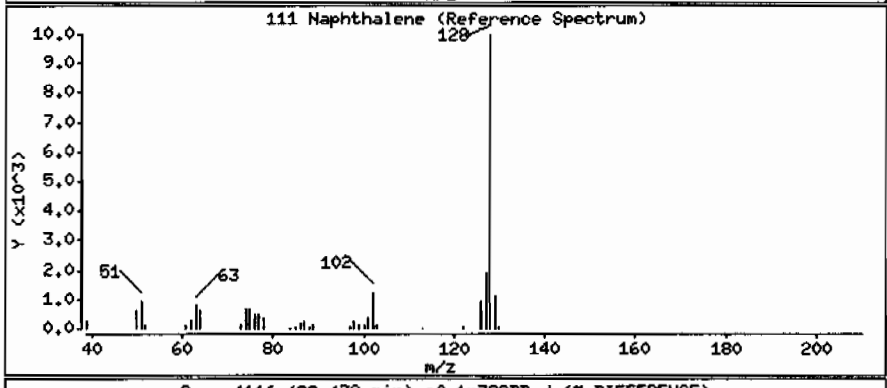

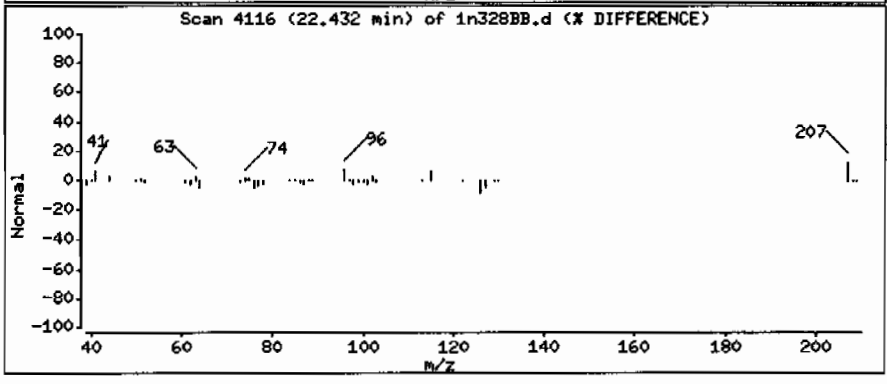

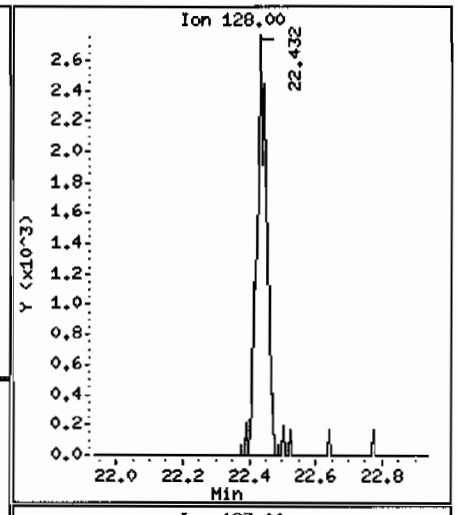

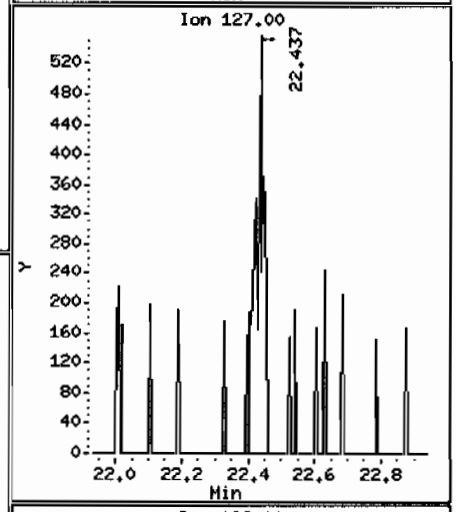

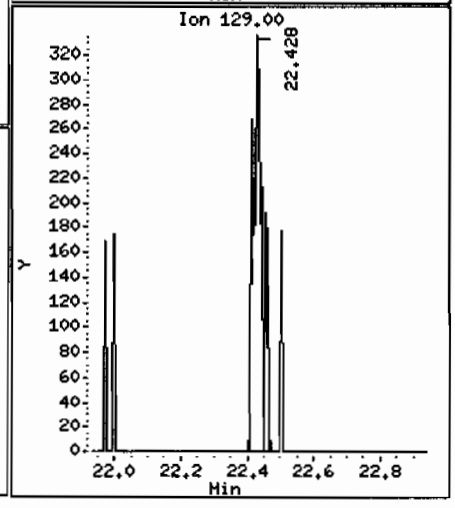

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981441**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.1**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:29**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n326LB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		45.3	ug/kg	0.340	1.00
74-87-3	Chloromethane		51.2	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		49.0	ug/kg	0.300	1.00
74-83-9	Bromomethane		59.6	ug/kg	0.300	1.00
75-00-3	Chloroethane		59.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		57.2	ug/kg	0.300	1.00
67-64-1	Acetone		207	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		51.1	ug/kg	0.300	1.00
74-88-4	Iodomethane		293	ug/kg	1.60	5.00
75-09-2	Methylene chloride		55.7	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		300	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		55.0	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		51.6	ug/kg	0.300	1.00
78-93-3	2-Butanone		219	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		56.4	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		51.4	ug/kg	0.300	1.00
67-66-3	Chloroform		52.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		61.2	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		52.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		53.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		54.4	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		50.7	ug/kg	0.300	1.00
71-43-2	Benzene		54.5	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		54.8	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		55.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		54.6	ug/kg	0.300	1.00
74-95-3	Dibromomethane		54.8	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		248	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		56.1	ug/kg	0.300	1.00
108-88-3	Toluene		53.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.7	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		54.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		213	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		53.3	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		56.7	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		56.6	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		56.2	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		55.2	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981441**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:29**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n326LB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.2	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		110	ug/kg	0.300	2.00
95-47-6	o-Xylene		55.8	ug/kg	0.300	1.00
100-42-5	Styrene		55.0	ug/kg	0.300	1.00
75-25-2	Bromoform		60.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		55.4	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		51.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		58.2	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		52.3	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		52.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		53.1	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		53.2	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		52.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		53.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		52.1	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		53.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		54.3	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		55.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		55.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		52.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		61.9	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		55.6	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		57.4	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n326LB.d
Lab Smp Id: 1201981441 Client Smp ID: LCS
Inj Date : 25-NOV-2009 21:29
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981441|926743|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 26 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				1826238	165.432	165
M 2 1,2-Dichloroethylene (total)	96				643815	111.396	111
M 3 1,3-Dichloropropylene	75				1187013	109.861	110
5 Dichlorodifluoromethane	85	4.990	4.990	(0.365)	255116	45.2833	45.3
6 Chloromethane	50	5.542	5.542	(0.405)	357159	51.2394	51.2
7 Vinyl chloride	62	5.922	5.922	(0.433)	305277	49.0424	49.0
9 Bromomethane	96	6.948	6.948	(0.508)	223141	59.6170	59.6
10 Chloroethane	64	7.219	7.219	(0.527)	230914	59.9135	59.9
11 Trichlorofluoromethane	101	7.845	7.845	(0.573)	501553	57.2315	57.2
12 Ethyl Ether	59	8.480	8.480	(0.620)	286596	53.9318	53.9
15 1,1-Dichloroethylene	61	9.083	9.083	(0.664)	616939	51.0987	51.1
16 Acetone	43	9.254	9.254	(0.676)	1015303	207.373	207

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	18 Iodomethane	142	9.465	9.465	(0.692)	2289520	293.118	293
	19 Carbon disulfide	76	9.576	9.576	(0.700)	4665056	300.021	300
	21 Methyl acetate	43	9.834	9.834	(0.718)	1106970	264.102	264
	22 Acetonitrile	41	9.976	9.976	(0.729)	877096	1456.32	1460
	23 Methylene chloride	84	10.142	10.142	(0.741)	338926	55.7103	55.7
	25 tert-Butyl methyl ether	73	10.441	10.441	(0.763)	998031	51.9591	52.0
	26 trans-1,2-Dichloroethylene	96	10.542	10.542	(0.770)	308364	54.9879	55.0
	29 Vinyl acetate	43	11.293	11.293	(0.825)	2852936	306.780	307
	30 1,1-Dichloroethane	63	11.325	11.325	(0.827)	642698	51.5602	51.6
	33 2,2-Dichloropropane	77	12.163	12.163	(0.889)	467604	51.3587	51.4
	35 2-Butanone	43	12.186	12.186	(0.890)	1052090	219.303	219
	36 cis-1,2-Dichloroethylene	96	12.200	12.200	(0.891)	335451	56.4079	56.4
	39 Bromochloromethane	128	12.559	12.559	(0.918)	144728	61.2482	61.2(R)
	41 Chloroform	83	12.609	12.609	(0.921)	696121	52.4561	52.4
	42 Cyclohexane	56	12.839	12.839	(0.938)	612471	56.0730	56.1
	43 1,1,1-Trichloroethane	97	12.844	12.844	(0.938)	547368	52.6680	52.7
	44 Carbon tetrachloride	117	13.028	13.028	(0.952)	566431	54.4046	54.4
	45 1,1-Dichloropropene	75	13.051	13.051	(0.954)	505918	53.4408	53.4
	47 Benzene	78	13.332	13.332	(0.974)	1287183	54.4875	54.5
$	48 1,2-Dichloroethane-d4	65	13.337	13.337	(0.974)	656149	62.5243	62.5
	50 Cyclohexene	54	13.396	13.396	(0.979)	466014	51.6800	51.7
	51 1,2-Dichloroethane	62	13.438	13.438	(0.982)	593658	50.6926	50.7
*	52 Fluorobenzene	96	13.686	13.686	(1.000)	843693	50.0000	
	53 n-Butyl alcohol	56	13.930	13.930	(1.018)	936762	6133.03	6130
	54 Trichloroethylene	95	14.114	14.114	(1.031)	354056	54.7524	54.8
	55 Methylcyclohexane	83	14.280	14.280	(1.043)	556989	55.7440	55.7
	57 1,2-Dichloropropane	63	14.455	14.455	(1.056)	340052	55.6083	55.6
	59 Dibromomethane	93	14.625	14.625	(1.069)	206537	54.7688	54.8
	60 Bromodichloromethane	83	14.750	14.750	(1.078)	548089	54.6314	54.6
	61 2-Chloroethylvinyl ether	63	15.030	15.030	(1.098)	226421	266.694	267
	63 cis-1,3-Dichloropropylene	75	15.256	15.256	(1.115)	586514	56.1294	56.1
	64 4-Methyl-2-pentanone	58	15.362	15.362	(0.895)	657015	247.937	248
$	65 Toluene-d8	98	15.518	15.518	(0.904)	1591436	54.6596	54.6
	66 Toluene	92	15.597	15.597	(0.909)	837030	53.2776	53.3
	68 trans-1,3-Dichloropropylene	75	15.877	15.877	(0.925)	600499	53.7312	53.7
	69 1,1,2-Trichloroethane	83	16.103	16.103	(0.938)	237354	54.2792	54.3
	70 Tetrachloroethylene	164	16.190	16.190	(0.943)	270405	56.7335	56.7
	71 2-Hexanone	43	16.269	16.269	(0.948)	1493090	213.173	213
	72 1,3-Dichloropropane	76	16.305	16.305	(0.950)	517966	53.2900	53.3
	73 Dibromochloromethane	129	16.549	16.549	(0.964)	354831	56.5628	56.6
	74 1,2-Dibromoethane	107	16.729	16.729	(0.975)	289087	56.2154	56.2
*	76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	715370	50.0000	
	77 Chlorobenzene	112	17.194	17.194	(1.002)	897286	55.2153	55.2
	78 Ethylbenzene	91	17.221	17.221	(1.003)	1729658	51.1817	51.2
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	350279	55.6053	55.6
	80 m,p-Xylenes	106	17.337	17.337	(1.010)	1221640	109.652	110
	81 o-Xylene	106	17.783	17.783	(1.036)	604598	55.7808	55.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
82 Styrene	104	17.806	17.806	(1.038)	1021178	54.9773	55.0
83 Bromoform	173	18.105	18.105	(0.923)	241881	60.1005	60.1
84 Isopropylbenzene	105	18.128	18.128	(0.924)	1746705	53.0741	53.1
$ 87 Bromofluorobenzene	95	18.391	18.391	(0.938)	666249	49.0492	49.0
88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	355759	55.4382	55.4
89 n-Propylbenzene	91	18.561	18.561	(0.946)	2096170	52.2901	52.3
91 Bromobenzene	156	18.593	18.593	(0.948)	395969	58.1832	58.2
92 1,2,3-Trichloropropane	110	18.607	18.607	(0.949)	107823	51.0955	51.1
93 1,3,5-Trimethylbenzene	105	18.717	18.717	(0.954)	1542835	53.2172	53.2
94 2-Chlorotoluene	91	18.741	18.741	(0.956)	1517632	52.2525	52.2
95 4-Chlorotoluene	91	18.856	18.856	(0.962)	1370794	52.3399	52.3
96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1204387	53.3687	53.4
97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1547226	52.1359	52.1
99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1939382	53.8427	53.8
100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1478294	54.2900	54.3
101 1,3-Dichlorobenzene	146	19.546	19.546	(0.997)	722678	55.6096	55.6
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.610	(1.000)	404551	50.0000	
103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	736021	55.2552	55.2
105 n-Butylbenzene	91	19.873	19.873	(1.013)	1596821	52.3766	52.4
106 1,2-Dichlorobenzene	146	20.080	20.080	(1.024)	713968	57.3890	57.4
108 1,2-Dibromo-3-chloropropane	157	21.001	21.001	(1.071)	75706	61.8847	61.9
109 1,2,4-Trichlorobenzene	180	22.022	22.022	(1.123)	497260	53.7989	53.8
110 Hexachlorobutadiene	225	22.105	22.105	(1.127)	343354	52.4767	52.5
111 Naphthalene	128	22.437	22.437	(1.144)	982722	57.3186	57.3
112 1,2,3-Trichlorobenzene	180	22.787	22.787	(1.162)	436566	56.1344	56.1

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112509v1/1n326LB.d
Date : 25-NOV-2009 21:29
Client ID: LCS
Sample Info: 1120198144119267431|1|VOAF11|

Instrument: VOA1.i
Operator: RXH4
Column diameter: 0.25

Column phase: RTX-Volatiles

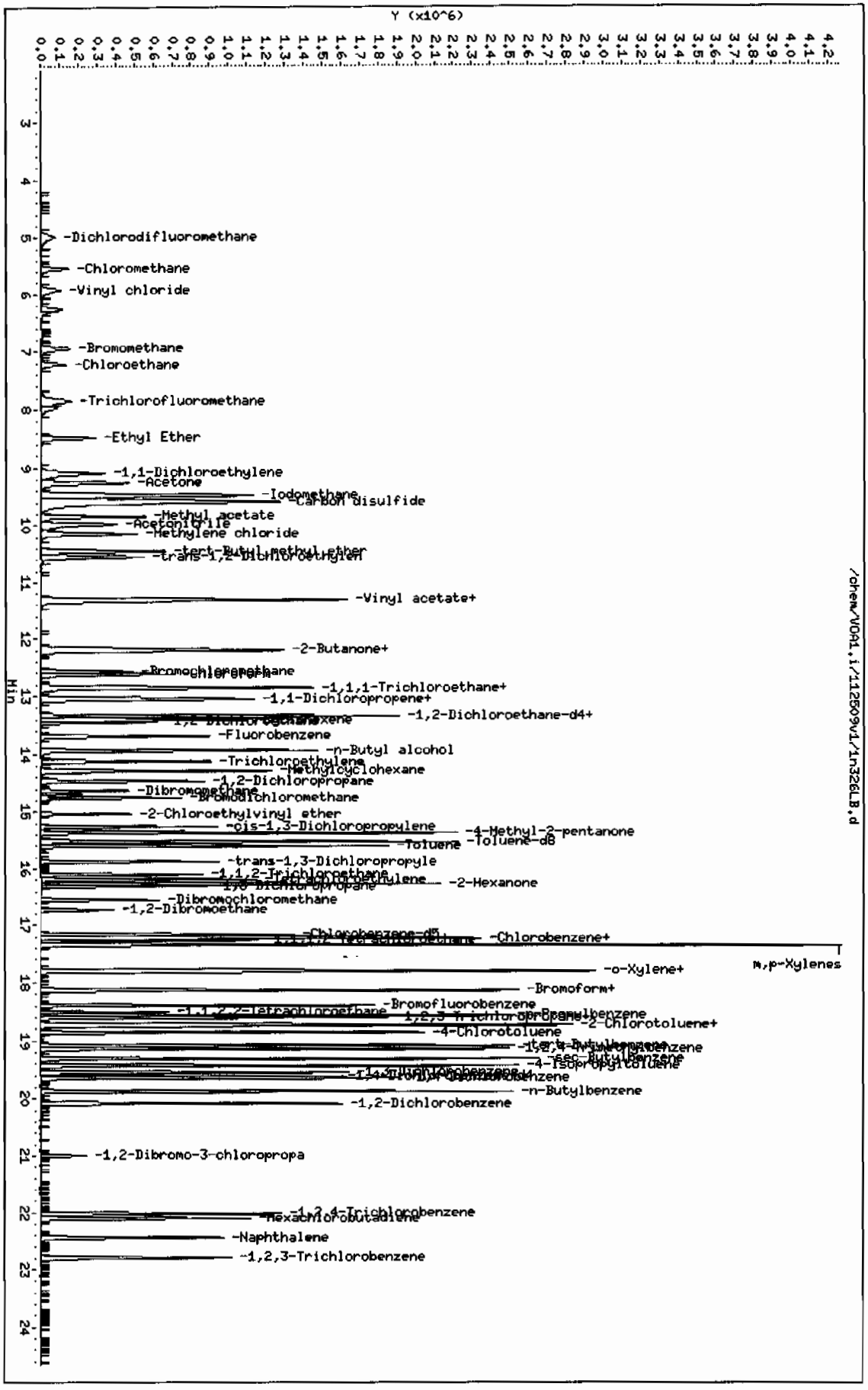

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981442**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:59**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n327sLB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981442**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:59**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 07:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n327sLB.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		245	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112509v1/1n327sLB.d
Lab Smp Id: 1201981442 Client Smp ID: LCS
Inj Date : 25-NOV-2009 21:59
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981442|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112509v1/VOA1-8260ox-111309PM.m
Meth Date : 07-Dec-2009 15:25 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 27 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
4 Chlorotrifluoroethylene	116	4.883	4.883	(0.357)	396523	132.497	132
8 2-Chloro-1,1,1-trifluoroethane	118	6.289	6.289	(0.460)	892630	142.325	142
13 Acrolein	56	8.954	8.954	(0.654)	293493	300.750	301(A)
14 Trichlorotrifluoroethane	101	8.978	8.978	(0.656)	1365266	244.684	245
17 Isopropyl Alcohol	45	9.447	9.447	(0.690)	1140675	2959.04	2960
20 Allyl chloride	76	9.848	9.848	(0.720)	645063	318.449	318(AR)
24 tert-Butyl Alcohol	59	10.197	10.197	(0.745)	2038257	2814.77	2810
27 Acrylonitrile	53	10.671	10.671	(0.780)	560054	275.011	275
28 Isopropyl ether	45	11.196	11.196	(0.818)	1110333	48.6930	48.7
31 2-Chloro-1,3-butadiene	53	11.394	11.394	(0.833)	578154	49.6674	49.7
32 Ethyl tert-butyl ether	59	11.758	11.758	(0.859)	1118599	51.3936	51.4
34 Ethyl acetate	43	12.167	12.167	(0.889)	1402763	251.665	252

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
37 Propionitrile	54	12.402	12.402	(0.906)	217340	263.354	263
38 Tetrahydrofuran	42	12.540	12.540	(0.639)	468262	256.306	256
40 Methacrylonitrile	41	12.563	12.563	(0.918)	1179487	266.750	267
46 Isobutyl alcohol	41	13.106	13.106	(0.958)	548891	2650.31	2650
$ 48 1,2-Dichloroethane-d4	65	13.341	13.337	(0.975)	619497	52.2176	52.2
49 Methyl tert-amyl ether	73	13.350	13.350	(0.976)	963399	55.5195	55.5
* 52 Fluorobenzene	96	13.682	13.686	(1.000)	953791	50.0000	
56 Methyl methacrylate	69	14.437	14.437	(1.055)	1035165	273.978	274
58 1,4-Dioxane	88	14.543	14.543	(1.063)	136296	2506.25	2510
62 2-Nitropropane	43	15.081	15.081	(1.102)	549556	266.810	267
$ 65 Toluene-d8	98	15.518	15.518	(0.904)	1702619	53.0874	53.1
67 Ethyl methacrylate	69	15.813	15.813	(0.921)	2083907	258.767	259
75 1-Chlorohexane	55	17.028	17.028	(1.245)	333621	44.3538	44.4(QH)
* 76 Chlorobenzene-d5	117	17.162	17.162	(1.000)	788014	50.0000	
85 cis-1,4-Dichloro-2-butene	53	18.276	18.276	(0.932)	713025	259.525	260
86 Cyclohexanone	55	18.386	18.386	(1.071)	563195	752.982	753
$ 87 Bromofluorobenzene	95	18.386	18.391	(0.938)	699542	46.6889	46.7
90 trans-1,4-Dichloro-2-butene	53	18.566	18.566	(0.947)	679867	253.681	254
98 Pentachloroethane	167	19.196	19.196	(0.979)	750377	269.597	270(A)
* 102 1,4-Dichlorobenzene-d4	152	19.611	19.610	(1.000)	446241	50.0000	
104 Benzyl chloride	91	19.772	19.772	(1.008)	3589522	252.193	252
107 bis(2-Chloroisopropyl)ether	45	20.163	20.163	(1.028)	866833	269.640	270

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: /chem/VOA1.i/112509v1/1n327sLB.d

Date : 25-NOV-2009 21:59

Client ID: LCS

Sample Info: |120198144219267431|1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: RXM4

Column diameter: 0.25

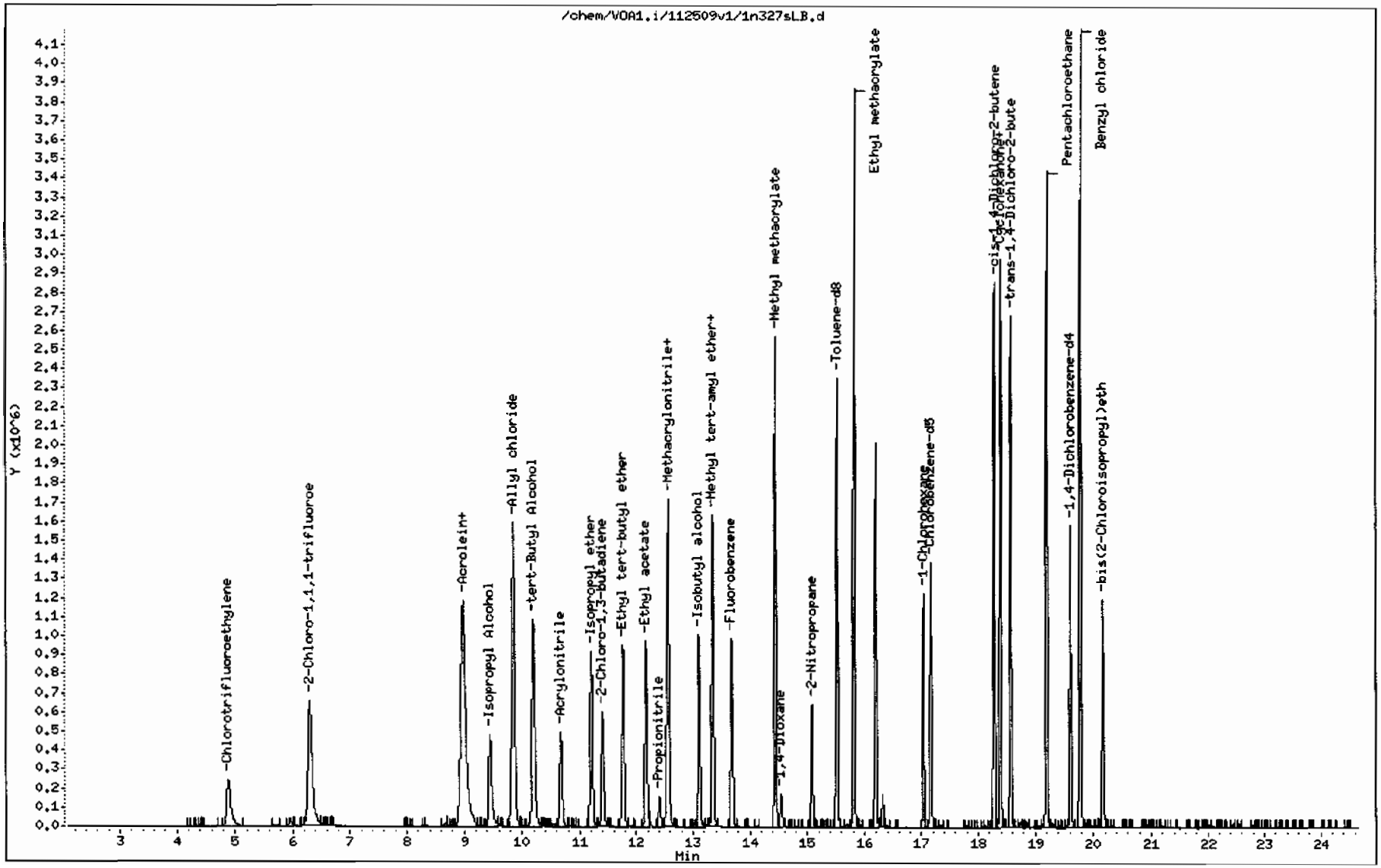

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981443**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 05:41**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 04:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n502LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		35.5	ug/kg	0.340	1.00
74-87-3	Chloromethane		40.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		40.2	ug/kg	0.300	1.00
74-83-9	Bromomethane		48.3	ug/kg	0.300	1.00
75-00-3	Chloroethane		48.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		48.5	ug/kg	0.300	1.00
67-64-1	Acetone		171	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		42.1	ug/kg	0.300	1.00
74-88-4	Iodomethane		238	ug/kg	1.60	5.00
75-09-2	Methylene chloride		49.0	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		248	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		45.8	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		42.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		179	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		43.6	ug/kg	0.300	1.00
67-66-3	Chloroform		42.8	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		50.1	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		42.3	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		44.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		44.4	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		40.7	ug/kg	0.300	1.00
71-43-2	Benzene		45.0	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		45.0	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		45.5	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		45.7	ug/kg	0.300	1.00
74-95-3	Dibromomethane		46.4	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		204	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		47.2	ug/kg	0.300	1.00
108-88-3	Toluene		42.9	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		45.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		44.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		172	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		43.0	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		46.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		47.9	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		45.3	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		44.1	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981443**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 05:41**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 04:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n502LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		41.4	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		88.4	ug/kg	0.300	2.00
95-47-6	o-Xylene		44.1	ug/kg	0.300	1.00
100-42-5	Styrene		46.5	ug/kg	0.300	1.00
75-25-2	Bromoform		49.5	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		45.9	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		41.0	ug/kg	0.300	1.00
108-86-1	Bromobenzene		47.7	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		44.3	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		43.1	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		44.2	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		44.0	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		43.5	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		45.3	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		43.7	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.1	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		47.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		48.5	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		45.9	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		45.6	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		49.5	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		45.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		47.7	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n502LA.d
Lab Smp Id: 1201981443 Client Smp ID: LCS
Inj Date : 27-NOV-2009 05:41
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981443|926743|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 10-Dec-2009 15:28 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				1618085	132.429	132
M 2 1,2-Dichloroethylene (total)	96				598525	92.2745	92.3
M 3 1,3-Dichloropropylene	75				1110506	92.2268	92.2
5 Dichlorodifluoromethane	85	4.998	4.998	(0.365)	224693	35.5317	35.5
6 Chloromethane	50	5.543	5.543	(0.405)	316868	40.4992	40.5
7 Vinyl chloride	62	5.915	5.915	(0.432)	281222	40.2488	40.2
9 Bromomethane	96	6.938	6.938	(0.507)	202739	48.2563	48.2
10 Chloroethane	64	7.205	7.205	(0.527)	209359	48.3941	48.4
11 Trichlorofluoromethane	101	7.831	7.831	(0.573)	476825	48.4734	48.5
12 Ethyl Ether	59	8.462	8.462	(0.619)	256414	42.8152	42.8
15 1,1-Dichloroethylene	61	9.074	9.074	(0.663)	570739	42.1145	42.1
16 Acetone	43	9.240	9.240	(0.676)	937035	170.506	170

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	18 Iodomethane	142	9.456	9.456	(0.691)	2088250	238.181	238
	19 Carbon disulfide	76	9.567	9.567	(0.699)	4334480	248.347	248
	21 Methyl acetate	43	9.829	9.829	(0.719)	979727	208.241	208
	22 Acetonitrile	41	9.963	9.963	(0.728)	816640	1208.00	1210
	23 Methylene chloride	84	10.128	10.128	(0.741)	335687	48.9764	49.0
	25 tert-Butyl methyl ether	73	10.427	10.427	(0.762)	916325	42.5004	42.5
	26 trans-1,2-Dichloroethylene	96	10.538	10.538	(0.770)	288209	45.7865	45.8
	29 Vinyl acetate	43	11.284	11.284	(0.825)	3121222	299.010	299
	30 1,1-Dichloroethane	63	11.311	11.311	(0.827)	599981	42.8816	42.9
	33 2,2-Dichloropropane	77	12.154	12.154	(0.889)	445100	43.5531	43.6
	35 2-Butanone	43	12.177	12.177	(0.890)	963664	178.955	179
	36 cis-1,2-Dichloroethylene	96	12.190	12.190	(0.891)	310316	46.4880	46.5
	39 Bromochloromethane	128	12.549	12.549	(0.918)	132945	50.1232	50.1
	41 Chloroform	83	12.600	12.600	(0.921)	637807	42.8181	42.8
	42 Cyclohexane	56	12.830	12.830	(0.938)	568118	46.3375	46.3
	43 1,1,1-Trichloroethane	97	12.839	12.839	(0.939)	493695	42.3206	42.3
	44 Carbon tetrachloride	117	13.014	13.014	(0.952)	518599	44.3758	44.4
	45 1,1-Dichloropropene	75	13.042	13.042	(0.954)	473651	44.5736	44.6
	47 Benzene	78	13.323	13.323	(0.974)	1192109	45.0190	45.0
$	48 1,2-Dichloroethane-d4	65	13.332	13.332	(0.975)	702775	59.6608	59.7
	50 Cyclohexene	54	13.387	13.387	(0.979)	433625	42.8414	42.8
	51 1,2-Dichloroethane	62	13.433	13.433	(0.982)	534806	40.6846	40.7
*	52 Fluorobenzene	96	13.677	13.677	(1.000)	947018	50.0000	
	53 n-Butyl alcohol	56	13.921	13.921	(1.018)	839260	4895.18	4900
	54 Trichloroethylene	95	14.110	14.110	(1.032)	326887	45.0355	45.0
	55 Methylcyclohexane	83	14.276	14.276	(1.044)	539900	48.1384	48.1
	57 1,2-Dichloropropane	63	14.451	14.451	(1.057)	312570	45.5373	45.5
	59 Dibromomethane	93	14.621	14.621	(1.069)	196299	46.3745	46.4
	60 Bromodichloromethane	83	14.745	14.745	(1.078)	514482	45.6865	45.7
	61 2-Chloroethylvinyl ether	63	15.026	15.026	(1.099)	144283	159.863	160
	63 cis-1,3-Dichloropropylene	75	15.251	15.251	(1.115)	553925	47.2269	47.2
	64 4-Methyl-2-pentanone	58	15.357	15.357	(0.895)	597028	203.578	204
$	65 Toluene-d8	98	15.514	15.514	(0.904)	1731103	53.7241	53.7
	66 Toluene	92	15.592	15.592	(0.909)	745397	42.8707	42.9
	68 trans-1,3-Dichloropropylene	75	15.873	15.873	(0.925)	556581	44.9999	45.0
	69 1,1,2-Trichloroethane	83	16.098	16.098	(0.938)	214534	44.3305	44.3
	70 Tetrachloroethylene	164	16.186	16.186	(0.943)	245953	46.6280	46.6
	71 2-Hexanone	43	16.269	16.269	(0.948)	1331220	171.738	172
	72 1,3-Dichloropropane	76	16.306	16.306	(0.950)	463049	43.0468	43.0
	73 Dibromochloromethane	129	16.545	16.545	(0.964)	332860	47.9447	47.9
	74 1,2-Dibromoethane	107	16.724	16.724	(0.975)	258013	45.3355	45.3
*	76 Chlorobenzene-d5	117	17.157	17.157	(1.000)	791701	50.0000	
	77 Chlorobenzene	112	17.189	17.189	(1.002)	793836	44.1397	44.1
	78 Ethylbenzene	91	17.217	17.217	(1.003)	1549501	41.4301	41.4
	79 1,1,1,2-Tetrachloroethane	131	17.258	17.258	(1.006)	315384	45.2389	45.2
	80 m,p-Xylenes	106	17.332	17.332	(1.010)	1089486	88.3615	88.4
	81 o-Xylene	106	17.783	17.783	(1.036)	528599	44.0671	44.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	82 Styrene	104	17.802	17.802	(1.038)	956695	46.5399	46.5
	83 Bromoform	173	18.101	18.101	(0.923)	217115	49.4737	49.5
	84 Isopropylbenzene	105	18.128	18.128	(0.924)	1586721	44.2153	44.2
$	87 Bromofluorobenzene	95	18.386	18.386	(0.938)	699308	47.2142	47.2
	88 1,1,2,2-Tetrachloroethane	83	18.506	18.506	(0.944)	320849	45.8525	45.8
	89 n-Propylbenzene	91	18.556	18.556	(0.946)	1935590	44.2807	44.3
	91 Bromobenzene	156	18.589	18.589	(0.948)	353878	47.6868	47.7
	92 1,2,3-Trichloropropane	110	18.602	18.602	(0.949)	94231	40.9518	41.0
	93 1,3,5-Trimethylbenzene	105	18.713	18.713	(0.954)	1392462	44.0478	44.0
	94 2-Chlorotoluene	91	18.741	18.741	(0.956)	1365770	43.1248	43.1
	95 4-Chlorotoluene	91	18.851	18.851	(0.961)	1243321	43.5364	43.5
	96 tert-Butylbenzene	119	19.077	19.077	(0.973)	1113674	45.2572	45.2
	97 1,2,4-Trimethylbenzene	105	19.136	19.136	(0.976)	1414534	43.7124	43.7
	99 sec-Butylbenzene	105	19.302	19.302	(0.984)	1771709	45.1092	45.1
	100 4-Isopropyltoluene	119	19.422	19.422	(0.990)	1397926	47.0817	47.1
	101 1,3-Dichlorobenzene	146	19.541	19.541	(0.996)	687076	48.4862	48.5
*	102 1,4-Dichlorobenzene-d4	152	19.611	19.611	(1.000)	441128	50.0000	
	103 1,4-Dichlorobenzene	146	19.638	19.638	(1.001)	666325	45.8752	45.9
	105 n-Butylbenzene	91	19.868	19.868	(1.013)	1515031	45.5734	45.6
	106 1,2-Dichlorobenzene	146	20.075	20.075	(1.024)	647052	47.6977	47.7
	108 1,2-Dibromo-3-chloropropane	157	21.005	21.005	(1.071)	66095	49.5485	49.5
	109 1,2,4-Trichlorobenzene	180	22.023	22.023	(1.123)	501398	49.7486	49.7
	110 Hexachlorobutadiene	225	22.110	22.110	(1.127)	338737	47.4784	47.5
	111 Naphthalene	128	22.437	22.437	(1.144)	872660	46.6787	46.7
	112 1,2,3-Trichlorobenzene	180	22.791	22.791	(1.162)	422265	49.7935	49.8

Data File: /chem/VOA1.i/112709v1/1n502LA.d
Date : 27-NOV-2009 05:41
Client ID: LCS
Sample Info: 1120198144319267431 1|VOAF|1|

Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

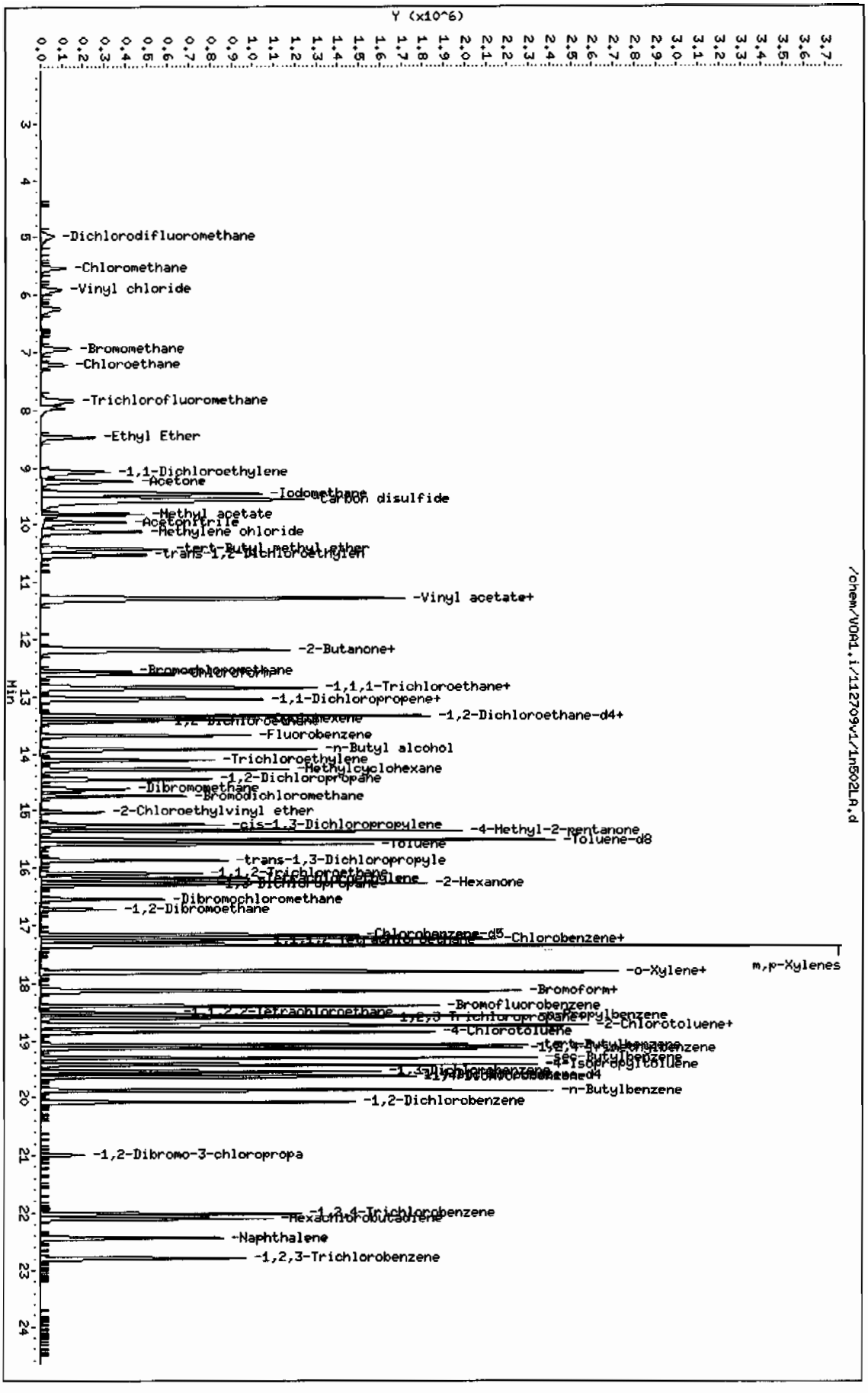

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981444**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 06:40**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 04:32**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n503sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981444**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA1.I**	**Dilution:**	**1**
Run Date:	**11/27/2009 06:40**	**Analyst:**	**RXM4**	**Purge Vol:**	**5 mL**
Prep Date:	**11/27/2009 04:32**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**1n503sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		249	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/112709v1/1n503sLA.d
Lab Smp Id: 1201981444 Client Smp ID: LCS
Inj Date : 27-NOV-2009 06:40
Operator : RXM4 Inst ID: VOA1.i
Smp Info : |1201981444|926743|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA1.i/112709v1/VOA1-8260ox-111309.m
Meth Date : 09-Dec-2009 14:48 ron01469 Quant Type: ISTD
Cal Date : 14-NOV-2009 06:51 Cal File: 11524.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
4 Chlorotrifluoroethylene	116	4.890	4.890	(0.358)	540082	169.724	170
8 2-Chloro-1,1,1-trifluoroethane	118	6.289	6.289	(0.460)	1234646	185.138	185
13 Acrolein	56	8.936	8.936	(0.654)	294016	283.350	283(A)
14 Trichlorotrifluoroethane	101	8.968	8.968	(0.656)	1476091	248.798	249
17 Isopropyl Alcohol	45	9.424	9.424	(0.689)	1066683	2602.37	2600
20 Allyl chloride	76	9.829	9.829	(0.719)	673043	312.482	312(AR)
24 tert-Butyl Alcohol	59	10.179	10.179	(0.744)	1888395	2452.57	2450
27 Acrylonitrile	53	10.653	10.653	(0.779)	525714	242.781	243
28 Isopropyl ether	45	11.182	11.182	(0.818)	1236880	51.0136	51.0
31 2-Chloro-1,3-butadiene	53	11.376	11.376	(0.832)	586492	47.3843	47.4
32 Ethyl tert-butyl ether	59	11.739	11.739	(0.859)	1205823	52.1031	52.1
34 Ethyl acetate	43	12.154	12.154	(0.889)	1225067	206.701	207

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
37 Propionitrile	54	12.393	12.393	(0.906)	188426	214.727	215
38 Tetrahydrofuran	42	12.526	12.526	(0.639)	388350	197.434	197
40 Methacrylonitrile	41	12.549	12.549	(0.918)	991659	210.920	211
46 Isobutyl alcohol	41	13.097	13.097	(0.958)	468585	2127.87	2130
$ 48 1,2-Dichloroethane-d4	65	13.323	13.332	(0.974)	607045	48.1220	48.1
49 Methyl tert-amyl ether	73	13.341	13.341	(0.976)	991234	53.7231	53.7
* 52 Fluorobenzene	96	13.673	13.677	(1.000)	1014164	50.0000	
56 Methyl methacrylate	69	14.432	14.432	(1.056)	917953	228.492	228
58 1,4-Dioxane	88	14.538	14.538	(1.063)	127685	2208.14	2210
62 2-Nitropropane	43	15.072	15.072	(1.102)	494190	225.647	226
$ 65 Toluene-d8	98	15.509	15.514	(0.904)	1669713	51.0087	51.0
67 Ethyl methacrylate	69	15.804	15.804	(0.921)	1905371	231.813	232
75 1-Chlorohexane	55	17.028	17.028	(1.245)	426612	53.3403	53.3
* 76 Chlorobenzene-d5	117	17.152	17.157	(1.000)	804277	50.0000	
85 cis-1,4-Dichloro-2-butene	53	18.271	18.271	(0.932)	670852	226.793	227
86 Cyclohexanone	55	18.381	18.381	(1.072)	511455	672.735	673
$ 87 Bromofluorobenzene	95	18.381	18.386	(0.937)	664832	41.2135	41.2
90 trans-1,4-Dichloro-2-butene	53	18.566	18.566	(0.947)	643807	223.125	223
98 Pentachloroethane	167	19.196	19.196	(0.979)	1124607	375.288	375(AR)
* 102 1,4-Dichlorobenzene-d4	152	19.610	19.611	(1.000)	480442	50.0000	
104 Benzyl chloride	91	19.772	19.772	(1.008)	4055723	264.663	265
107 bis(2-Chloroisopropyl)ether	45	20.163	20.163	(1.028)	779869	225.319	225

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/112709v1/1n503sLA.d
Date : 27-NOV-2009 06:40
Client ID: LCS
Sample Info: 1120198144419267431111VOAF111
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: RXM4
Column diameter: 0.25

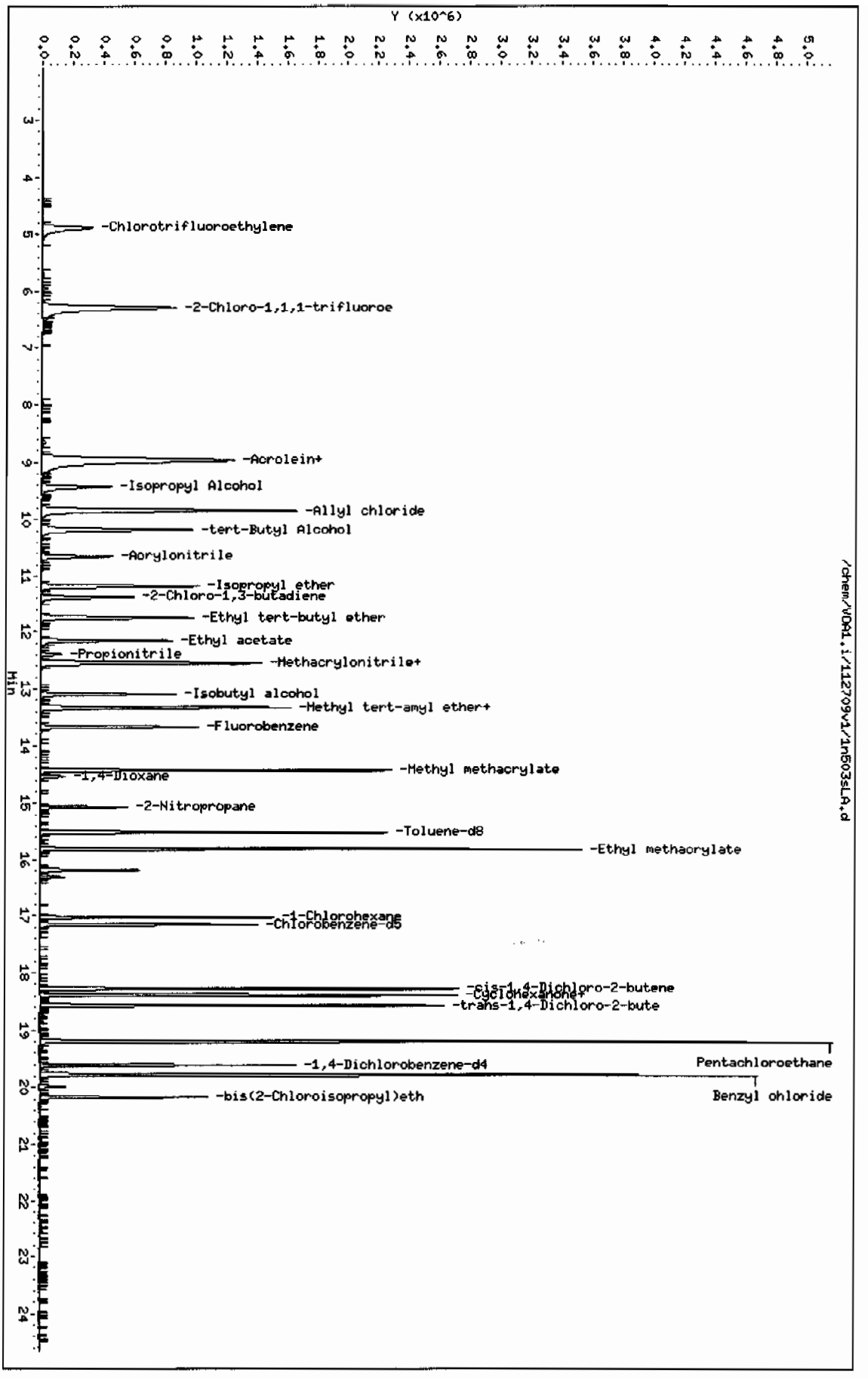

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201997427**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 11:25**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 11:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p202LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		38.3	ug/kg	0.340	1.00
74-87-3	Chloromethane		47.4	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		50.7	ug/kg	0.300	1.00
74-83-9	Bromomethane		51.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		50.5	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		48.8	ug/kg	0.300	1.00
67-64-1	Acetone		319	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		45.7	ug/kg	0.300	1.00
74-88-4	Iodomethane		219	ug/kg	1.60	5.00
75-09-2	Methylene chloride		41.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		241	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		45.0	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		46.5	ug/kg	0.300	1.00
78-93-3	2-Butanone		302	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		45.1	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		44.6	ug/kg	0.300	1.00
67-66-3	Chloroform		45.4	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		46.6	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		45.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		48.8	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		45.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		46.3	ug/kg	0.300	1.00
71-43-2	Benzene		45.2	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		46.8	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		47.7	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		44.7	ug/kg	0.300	1.00
74-95-3	Dibromomethane		48.1	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		268	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		45.8	ug/kg	0.300	1.00
108-88-3	Toluene		44.8	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.1	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		47.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		279	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.1	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		46.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		45.6	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		47.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		46.3	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201997427**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 11:25**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 11:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p202LA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		45.5	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		90.9	ug/kg	0.300	2.00
95-47-6	o-Xylene		45.5	ug/kg	0.300	1.00
100-42-5	Styrene		44.5	ug/kg	0.300	1.00
75-25-2	Bromoform		44.0	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		49.2	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		46.9	ug/kg	0.300	1.00
108-86-1	Bromobenzene		43.6	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		44.2	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		43.4	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		42.8	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		42.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		42.1	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		42.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		42.1	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		43.6	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		43.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		43.4	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		44.7	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		44.9	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.3	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		44.8	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		44.3	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p202LA.d
Lab Smp Id: 1201997427 Client Smp ID: LCS
Inj Date : 15-DEC-2009 11:25
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |1201997427|926743|1|VOA|1|
Misc Info : GEL 5g n/a UVM091129-01E/IVM091214-01
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 16-Dec-2009 08:13 ron01469 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 27 Xylenes (total)	106				1590957	136.473	136
M 42 1,2-Dichloroethylene (total)	96				593212	90.1107	90.1
M 45 1,3-Dichloropropylene	75				990721	92.5091	92.5
1 Dichlorodifluoromethane	85	4.958	4.958	(0.460)	178179	38.2803	38.3
2 Chloromethane	50	5.308	5.308	(0.492)	408453	47.4455	47.4
3 Vinyl chloride	62	5.560	5.560	(0.515)	354406	50.6858	50.7
4 Bromomethane	94	6.186	6.186	(0.573)	242191	51.5433	51.5
5 Chloroethane	64	6.340	6.340	(0.588)	247627	50.4635	50.5
6 Trichlorofluoromethane	101	6.779	6.779	(0.628)	380560	48.7849	48.8
7 Ethyl Ether	59	7.099	7.099	(0.658)	303090	45.7656	45.8
10 Acetone	43	7.490	7.490	(0.694)	1585487	318.795	319
11 1,1-Dichloroethylene	61	7.514	7.514	(0.697)	517238	45.6540	45.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	13 Iodomethane	142	7.775	7.775	(0.721)	1905845	219.332	219
	14 Acetonitrile	41	7.858	7.858	(0.728)	1528000	1404.08	1400
	15 Methyl acetate	43	7.882	7.882	(0.731)	1637530	266.782	267
	16 Carbon disulfide	76	7.917	7.917	(0.734)	4602420	240.855	241
	19 Methylene chloride	84	8.095	8.095	(0.750)	334534	41.3467	41.3
	21 tert-Butyl methyl ether	73	8.368	8.368	(0.776)	862422	41.8179	41.8
	22 trans-1,2-Dichloroethylene	96	8.427	8.427	(0.781)	279769	45.0129	45.0
	23 Vinyl acetate	43	8.854	8.854	(0.821)	4262005	294.998	295
	25 1,1-Dichloroethane	63	8.913	8.913	(0.826)	614637	46.4544	46.4
	29 2-Butanone	43	9.494	9.494	(0.880)	1688350	301.662	302
	31 cis-1,2-Dichloroethylene	96	9.554	9.554	(0.886)	313443	45.0933	45.1
	33 2,2-Dichloropropane	77	9.577	9.577	(0.888)	409456	44.6001	44.6
	35 Bromochloromethane	128	9.826	9.826	(0.911)	141001	46.5828	46.6
	36 Chloroform	83	9.862	9.862	(0.914)	529129	45.3759	45.4
	39 1,1,1-Trichloroethane	97	10.135	10.135	(0.940)	393806	44.9525	45.0
	41 Cyclohexane	84	10.230	10.230	(0.948)	439428	46.7165	46.7
	43 1,1-Dichloropropene	75	10.289	10.289	(0.954)	409971	48.8181	48.8
	44 Carbon tetrachloride	117	10.336	10.336	(0.958)	338886	45.5609	45.6
$	46 1,2-Dichloroethane-d4	65	10.431	10.431	(0.967)	435946	52.5954	52.6
	47 1,2-Dichloroethane	62	10.514	10.514	(0.975)	467914	46.3401	46.3
	48 Benzene	78	10.538	10.538	(0.977)	1173847	45.1766	45.2
	50 Cyclohexene	67	10.645	10.645	(0.987)	636238	46.4176	46.4
*	51 Fluorobenzene	96	10.787	10.787	(1.000)	1540519	50.0000	
	52 n-Butyl alcohol	41	10.846	10.846	(1.005)	1016615	5736.33	5740
	53 Trichloroethylene	95	11.166	11.166	(1.035)	293178	46.8248	46.8
	55 1,2-Dichloropropane	63	11.415	11.415	(1.058)	358696	47.7089	47.7
	56 Methylcyclohexane	83	11.415	11.415	(1.058)	538294	47.4593	47.4
	58 Dibromomethane	93	11.558	11.558	(1.071)	187942	48.0553	48.0
	59 Bromodichloromethane	83	11.664	11.664	(1.081)	407298	44.6720	44.7
	61 2-Chloroethylvinyl ether	63	11.866	11.866	(1.100)	1069031	245.299	245
	62 cis-1,3-Dichloropropylene	75	12.103	12.103	(1.122)	508509	45.7650	45.8
	63 4-Methyl-2-pentanone	58	12.186	12.186	(0.874)	926653	267.958	268
$	64 Toluene-d8	99	12.423	12.423	(0.891)	132589	51.3294	51.3
	65 Toluene	92	12.495	12.495	(0.896)	712814	44.8478	44.8
	67 trans-1,3-Dichloropropylene	75	12.637	12.637	(0.906)	482212	46.0502	46.0
	68 1,1,2-Trichloroethane	83	12.862	12.862	(0.923)	242903	47.6452	47.6
	69 2-Hexanone	43	13.028	13.028	(0.934)	2490765	279.237	279
	70 1,3-Dichloropropane	76	13.064	13.064	(0.937)	490073	49.0934	49.1
	71 Tetrachloroethylene	164	13.087	13.087	(0.939)	197213	46.4499	46.4
	72 Dibromochloromethane	129	13.336	13.336	(0.957)	285565	45.5995	45.6
	73 1,2-Dibromoethane	107	13.503	13.503	(0.969)	279213	46.9904	47.0
*	75 Chlorobenzene-d5	117	13.941	13.941	(1.000)	1067203	50.0000	
	76 Chlorobenzene	112	13.977	13.977	(1.003)	725502	46.3335	46.3
	77 1,1,1,2-Tetrachloroethane	131	14.024	14.024	(1.006)	254773	44.7924	44.8
	78 Ethylbenzene	91	14.024	14.024	(1.006)	1323160	45.4575	45.4
	79 m,p-Xylenes	106	14.131	14.131	(1.014)	1050618	90.9460	90.9
	80 o-Xylene	106	14.570	14.570	(1.045)	540339	45.5256	45.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	81 Styrene	104	14.570	14.570	(1.045)	891113	44.5302	44.5
	82 Bromoform	173	14.854	14.854	(0.907)	175834	43.9667	44.0
	83 Isopropylbenzene	105	14.926	14.926	(0.912)	1327237	42.7585	42.8
$	86 Bromofluorobenzene	95	15.127	15.127	(0.924)	503236	47.1295	47.1
	87 1,1,2,2-Tetrachloroethane	83	15.210	15.210	(0.929)	421487	49.1711	49.2
	89 1,2,3-Trichloropropane	110	15.293	15.293	(0.934)	100818	46.8603	46.9
	90 Bromobenzene	156	15.352	15.352	(0.938)	305776	43.6073	43.6
	91 n-Propylbenzene	91	15.352	15.352	(0.938)	1624696	44.2303	44.2
	92 2-Chlorotoluene	91	15.507	15.507	(0.947)	1099977	43.3520	43.4
	93 1,3,5-Trimethylbenzene	105	15.495	15.495	(0.946)	1121436	42.5391	42.5
	94 4-Chlorotoluene	91	15.613	15.613	(0.954)	1008231	42.0852	42.1
	95 tert-Butylbenzene	119	15.874	15.874	(0.970)	1055202	42.4315	42.4
	96 1,2,4-Trimethylbenzene	105	15.922	15.922	(0.972)	1154964	42.0961	42.1
	98 sec-Butylbenzene	105	16.111	16.111	(0.984)	1529417	43.5531	43.6
	99 4-Isopropyltoluene	119	16.230	16.230	(0.991)	1154434	43.1196	43.1
	100 1,3-Dichlorobenzene	146	16.313	16.313	(0.996)	602252	43.4300	43.4
*	101 1,4-Dichlorobenzene-d4	152	16.372	16.372	(1.000)	551370	50.0000	
	102 1,4-Dichlorobenzene	146	16.408	16.408	(1.002)	601379	44.7193	44.7
	104 n-Butylbenzene	92	16.692	16.692	(1.020)	723414	44.9236	44.9
	105 1,2-Dichlorobenzene	146	16.858	16.858	(1.030)	593506	44.3301	44.3
	107 1,2-Dibromo-3-chloropropane	157	17.783	17.783	(1.086)	72237	47.2504	47.2
	108 1,2,4-Trichlorobenzene	180	18.922	18.922	(1.156)	381860	44.5215	44.5
	109 Hexachlorobutadiene	225	19.100	19.100	(1.167)	198437	42.3491	42.3
	110 Naphthalene	128	19.349	19.349	(1.182)	1037450	48.1618	48.2
	111 1,2,3-Trichlorobenzene	180	19.716	19.716	(1.204)	342245	48.4600	48.4

Data File: /chem/VOA9.i/121509v9/9p202LA.d
Date : 15-DEC-2009 11:25
Client ID: LCS
Sample Info: 1120199742719267431 1 1 VOA1 1 1
Column phase: RTX-Volatiles

Instrument: VOA9.i
Operator: RXY1
Column diameter: 0.25

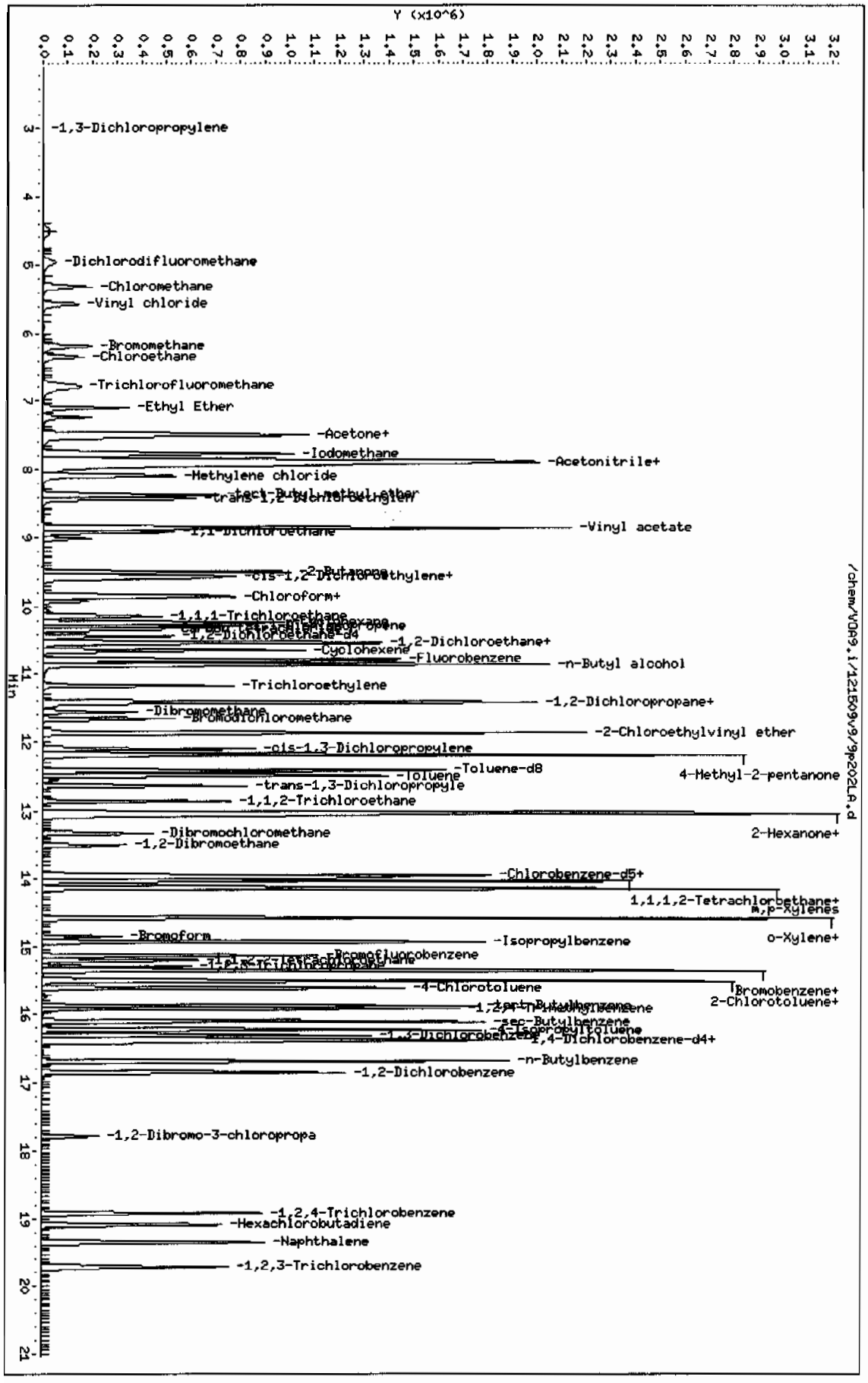

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201997428**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 12:48**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 11:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p205sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201997428**				
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926741**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 12:48**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 11:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p205sLA.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		214	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p205sLA.d
Lab Smp Id: 1201997428 Client Smp ID: LCS
Inj Date : 15-DEC-2009 12:48
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |1201997428|926743|1|VOA|1|
Misc Info : GEL 5g n/a
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 16-Dec-2009 08:13 ron01469 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
8 Acrolein	56	7.324	7.312	(0.679)	360282	211.286	211
9 Trichlorotrifluoroethane	85	7.467	7.467	(0.692)	556315	214.220	214
17 Allyl chloride	76	7.941	7.941	(0.736)	785331	187.839	188
20 Acrylonitrile	53	8.344	8.344	(0.774)	772041	216.606	217
26 2-Chloro-1,3-butadiene	53	9.020	9.020	(0.836)	538121	38.3234	38.3
30 Ethyl acetate	43	9.483	9.483	(0.879)	1837398	202.141	202
32 Propionitrile	54	9.578	9.577	(0.888)	292896	212.996	213
34 Methacrylonitrile	41	9.755	9.755	(0.904)	1215330	214.180	214
37 Tetrahydrofuran	42	9.874	9.874	(0.603)	659548	231.568	232
40 Isobutyl alcohol	41	10.170	10.170	(0.943)	807205	2261.39	2260
$ 46 1,2-Dichloroethane-d4	65	10.431	10.431	(0.967)	448569	45.3256	45.3
* 51 Fluorobenzene	96	10.787	10.787	(1.000)	1839364	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	54 Methyl methacrylate	69	11.368	11.368	(1.054)	1081715	198.990	199
	57 1,4-Dioxane	88	11.499	11.499	(1.066)	182599	2183.02	2180
	60 2-Nitropropane	43	11.866	11.866	(1.100)	635369	209.209	209
$	64 Toluene-d8	99	12.424	12.423	(0.891)	129813	43.2908	43.3
	66 Ethyl methacrylate	69	12.625	12.625	(0.906)	1946751	186.184	186
*	75 Chlorobenzene-d5	117	13.941	13.941	(1.000)	1238877	50.0000	
	84 cis-1,4-Dichloro-2-butene	53	14.973	14.973	(0.915)	758505	220.315	220
	85 Cyclohexanone	55	15.104	15.104	(1.083)	691514	643.818	644
$	86 Bromofluorobenzene	95	15.127	15.127	(0.924)	484165	41.8168	41.8
	88 trans-1,4-Dichloro-2-butene	53	15.246	15.246	(0.931)	719183	226.348	226
	97 Pentachloroethane	167	15.957	15.957	(0.975)	520452	173.025	173
*	101 1,4-Dichlorobenzene-d4	152	16.372	16.372	(1.000)	597871	50.0000	
	103 Benzyl chloride	91	16.527	16.527	(1.009)	3070201	192.500	192
	106 bis(2-Chloroisopropyl)ether	45	16.930	16.930	(1.034)	1139959	225.130	225

Data File: /chem/VOA9.i/121509v9/9p205sLA.d

Date : 15-DEC-2009 12:48

Client ID: LCS

Sample Info: |1201997428|926743|1|VOA|1|

Column phase: RTX-Volatiles

Instrument: VOA9.i

Operator: RXY1

Column diameter: 0.25

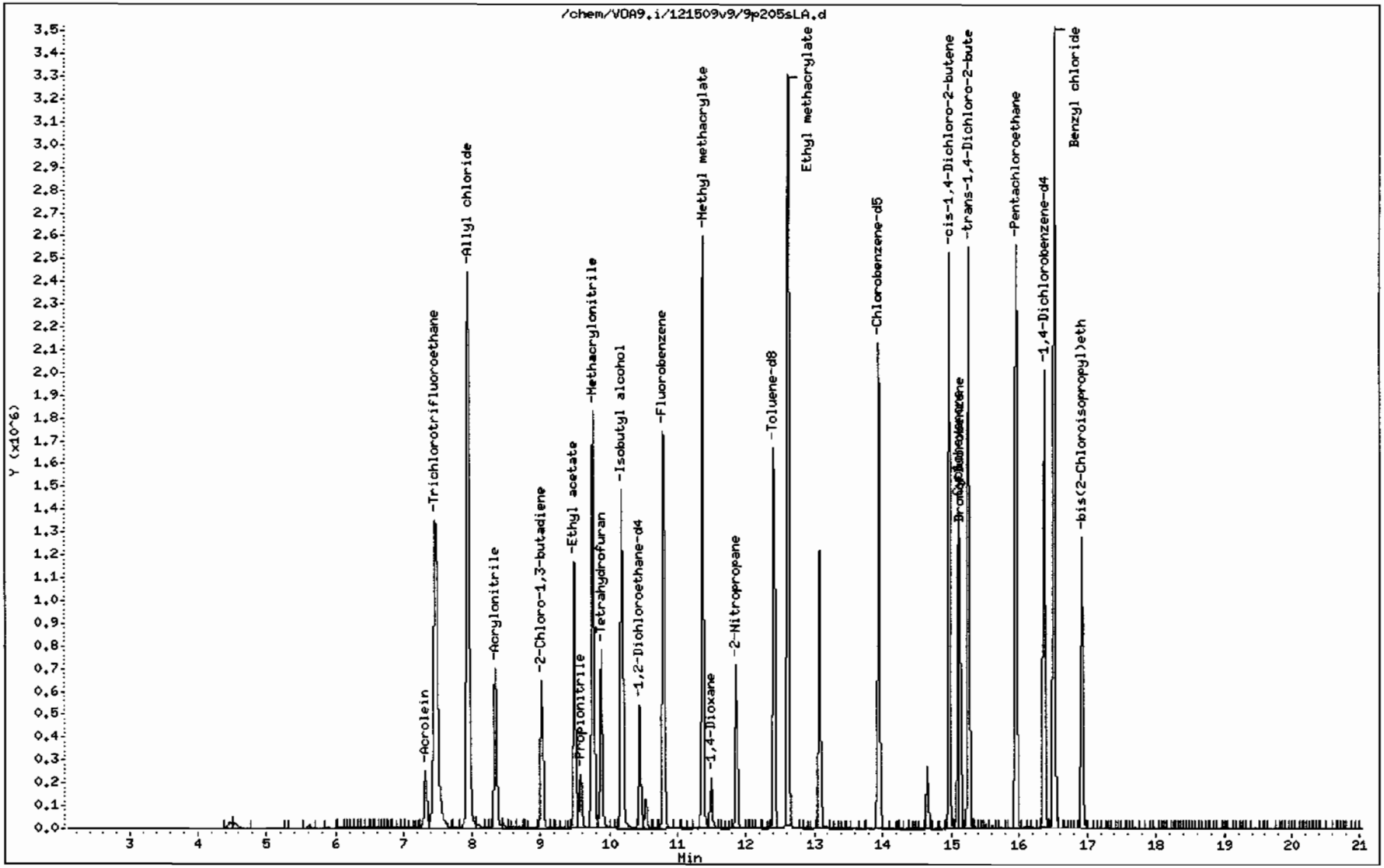

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981439	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
Client Sample:	QC for batch 926741	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13875PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA9.I	**Dilution:**	1
Run Date:	12/15/2009 16:30	**Analyst:**	RXY1	**Purge Vol:**	5 mL
Prep Date:	12/15/2009 14:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	9p213.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	Hh	38.6	ug/kg	0.380	1.12
74-87-3	Chloromethane	Hh	47.1	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	Hh	52.4	ug/kg	0.335	1.12
74-83-9	Bromomethane	Hh	48.0	ug/kg	0.335	1.12
75-00-3	Chloroethane	Hh	48.1	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	Hh	46.8	ug/kg	0.335	1.12
67-64-1	Acetone	Hh	181	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	Hh	45.1	ug/kg	0.335	1.12
74-88-4	Iodomethane	Hh	205	ug/kg	1.79	5.58
75-09-2	Methylene chloride	Hh	38.2	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	Hh	233	ug/kg	1.40	5.58
156-60-5	trans-1,2-Dichloroethylene	Hh	43.6	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	Hh	44.8	ug/kg	0.335	1.12
78-93-3	2-Butanone	Hh	227	ug/kg	1.68	5.58
156-59-2	cis-1,2-Dichloroethylene	Hh	41.9	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	Hh	41.0	ug/kg	0.335	1.12
67-66-3	Chloroform	Hh	41.9	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	Hh	42.9	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	Hh	42.0	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	Hh	45.6	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	Hh	43.0	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	Hh	42.9	ug/kg	0.335	1.12
71-43-2	Benzene	Hh	42.2	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	Hh	42.8	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	Hh	43.8	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	Hh	40.4	ug/kg	0.335	1.12
74-95-3	Dibromomethane	Hh	43.6	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	Hh	263	ug/kg	1.40	5.58
10061-01-5	cis-1,3-Dichloropropylene	Hh	37.4	ug/kg	0.335	1.12
108-88-3	Toluene	Hh	42.7	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	Hh	39.9	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	Hh	45.0	ug/kg	0.335	1.12
591-78-6	2-Hexanone	Hh	192	ug/kg	1.68	5.58
142-28-9	1,3-Dichloropropane	Hh	46.5	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	Hh	43.0	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	Hh	43.0	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	Hh	44.9	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	Hh	43.2	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201981439**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.5**
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13875PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 16:30**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 14:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p213.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	Hh	42.7	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	Hh	82.8	ug/kg	0.335	2.23
95-47-6	o-Xylene	Hh	41.3	ug/kg	0.335	1.12
100-42-5	Styrene	Hh	39.7	ug/kg	0.335	1.12
75-25-2	Bromoform	Hh	45.3	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	Hh	51.3	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	Hh	50.3	ug/kg	0.335	1.12
108-86-1	Bromobenzene	Hh	41.2	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	Hh	42.7	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	Hh	41.5	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	Hh	42.6	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	Hh	40.4	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	Hh	39.5	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	Hh	39.6	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	Hh	38.9	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	Hh	40.3	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	Hh	34.0	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	Hh	39.4	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	Hh	39.4	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	Hh	37.3	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	Hh	49.1	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	HUh	5.58	ug/kg	1.79	5.58
630-20-6	1,1,1,2-Tetrachloroethane	Hh	41.1	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	Hh	39.8	ug/kg	0.335	1.12

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p213.d
Lab Smp Id: 1201981439 Client Smp ID: RE03-09-13875MS
Inj Date : 15-DEC-2009 16:30
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |1201981439|926743|1|VOA|1|
Misc Info : LANL 5.0g n/a ms 241540001
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 16-Dec-2009 07:27 ron01469 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.45410	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	10.787	10.787	(1.000)	1265632	50.0000	
* 75 Chlorobenzene-d5	117	13.941	13.941	(1.000)	831779	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.372	16.372	(1.000)	391018	50.0000	
$ 46 1,2-Dichloroethane-d4	65	10.431	10.431	(0.967)	308819	45.3501	50.6
$ 64 Toluene-d8	99	12.423	12.423	(0.891)	87216	43.3206	48.4(Q)
$ 86 Bromofluorobenzene	95	15.127	15.127	(0.924)	315188	41.6234	46.5
1 Dichlorodifluoromethane	85	4.958	4.958	(0.460)	132129	34.5523	38.6
2 Chloromethane	50	5.308	5.308	(0.492)	298525	42.2079	47.1
3 Vinyl chloride	62	5.574	5.560	(0.517)	269539	46.9209	52.4
4 Bromomethane	94	6.198	6.186	(0.575)	165853	42.9632	48.0
5 Chloroethane	64	6.352	6.340	(0.589)	173641	43.0717	48.1
6 Trichlorofluoromethane	101	6.779	6.779	(0.628)	268485	41.8931	46.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.490	7.490	(0.694)	660967	161.766	181
11 1,1-Dichloroethylene	61	7.514	7.514	(0.697)	375491	40.3410	45.0
102 1,4-Dichlorobenzene	146	16.408	16.408	(1.002)	336370	35.2704	39.4
13 Iodomethane	142	7.775	7.775	(0.721)	1312603	183.868	205
19 Methylene chloride	84	8.095	8.095	(0.750)	227376	34.2062	38.2
16 Carbon disulfide	76	7.917	7.917	(0.734)	3276505	208.708	233
22 trans-1,2-Dichloroethylene	96	8.427	8.427	(0.781)	199474	39.0646	43.6
25 1,1-Dichloroethane	63	8.913	8.913	(0.826)	435882	40.0993	44.8
29 2-Butanone	43	9.494	9.494	(0.880)	934122	203.152	227
31 cis-1,2-Dichloroethylene	96	9.554	9.554	(0.886)	214099	37.4911	41.9
100 1,3-Dichlorobenzene	146	16.313	16.313	(0.996)	346819	35.2664	39.4
33 2,2-Dichloropropane	77	9.577	9.577	(0.888)	276792	36.6979	41.0
36 Chloroform	83	9.862	9.862	(0.914)	359337	37.5081	41.9
105 1,2-Dichlorobenzene	146	16.858	16.858	(1.030)	338081	35.6075	39.8
35 Bromochloromethane	128	9.826	9.826	(0.911)	95541	38.4196	42.9
39 1,1,1-Trichloroethane	97	10.135	10.135	(0.940)	270809	37.6265	42.0
43 1,1-Dichloropropene	75	10.289	10.289	(0.954)	281683	40.8270	45.6
44 Carbon tetrachloride	117	10.336	10.336	(0.958)	235303	38.5057	43.0
47 1,2-Dichloroethane	62	10.514	10.514	(0.975)	318782	38.4277	42.9
48 Benzene	78	10.538	10.538	(0.977)	806858	37.7971	42.2
53 Trichloroethylene	95	11.166	11.166	(1.035)	197099	38.3167	42.8
55 1,2-Dichloropropane	63	11.415	11.415	(1.058)	242336	39.2329	43.8
59 Bromodichloromethane	83	11.664	11.664	(1.081)	270784	36.1498	40.4
58 Dibromomethane	93	11.558	11.558	(1.071)	125436	39.0390	43.6
63 4-Methyl-2-pentanone	58	12.186	12.186	(0.874)	634798	235.518	263
62 cis-1,3-Dichloropropylene	75	12.103	12.103	(1.122)	305730	33.4914	37.4
65 Toluene	92	12.495	12.495	(0.896)	473935	38.2580	42.7
67 trans-1,3-Dichloropropylene	75	12.637	12.637	(0.906)	291632	35.7328	39.9
68 1,1,2-Trichloroethane	83	12.862	12.862	(0.923)	160049	40.2790	45.0
69 2-Hexanone	43	13.028	13.028	(0.934)	1193618	171.690	192
70 1,3-Dichloropropane	76	13.052	13.064	(0.936)	323635	41.5965	46.4
71 Tetrachloroethylene	164	13.088	13.087	(0.939)	127293	38.4674	43.0
72 Dibromochloromethane	129	13.325	13.336	(0.956)	187761	38.4680	43.0
73 1,2-Dibromoethane	107	13.503	13.503	(0.969)	186088	40.1820	44.9
76 Chlorobenzene	112	13.977	13.977	(1.003)	471659	38.6477	43.2
77 1,1,1,2-Tetrachloroethane	131	14.024	14.024	(1.006)	162997	36.7680	41.1
78 Ethylbenzene	91	14.024	14.024	(1.006)	867594	38.2427	42.7
79 m,p-Xylenes	106	14.131	14.131	(1.014)	667902	74.1806	82.8
80 o-Xylene	106	14.570	14.570	(1.045)	342190	36.9910	41.3
81 Styrene	104	14.570	14.570	(1.045)	554040	35.5224	39.7
82 Bromoform	173	14.854	14.854	(0.907)	115125	40.5917	45.3
87 1,1,2,2-Tetrachloroethane	83	15.198	15.210	(0.928)	279141	45.9194	51.3
89 1,2,3-Trichloropropane	110	15.293	15.293	(0.934)	68718	45.0385	50.3
90 Bromobenzene	156	15.352	15.352	(0.938)	183555	36.9121	41.2
91 n-Propylbenzene	91	15.352	15.352	(0.938)	995814	38.2272	42.7
92 2-Chlorotoluene	91	15.507	15.507	(0.947)	668307	37.1405	41.5
83 Isopropylbenzene	105	14.926	14.926	(0.912)	839188	38.1224	42.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	15.495	15.495	(0.946)	675939	36.1549	40.4
94 4-Chlorotoluene	91	15.613	15.613	(0.954)	600205	35.3277	39.4
95 tert-Butylbenzene	119	15.874	15.874	(0.970)	625879	35.4887	39.6
96 1,2,4-Trimethylbenzene	105	15.922	15.922	(0.972)	677924	34.8418	38.9
98 sec-Butylbenzene	105	16.111	16.111	(0.984)	897948	36.0571	40.3
99 4-Isopropyltoluene	119	16.230	16.230	(0.991)	577837	30.4339	34.0
104 n-Butylbenzene	92	16.692	16.692	(1.020)	381080	33.3695	37.3
107 1,2-Dibromo-3-chloropropane	157	17.783	17.783	(1.086)	47642	43.9422	49.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA9.i/121509v9/9p213.d
Date : 15-DEC-2009 16:30
Client ID: RE03-09-13875MS
Sample Info: 1120198143919267431|VOA1|1
Column phase: RTX-Volatiles

Instrument: VOA9.i
Operator: RXY1
Column diameter: 0.25

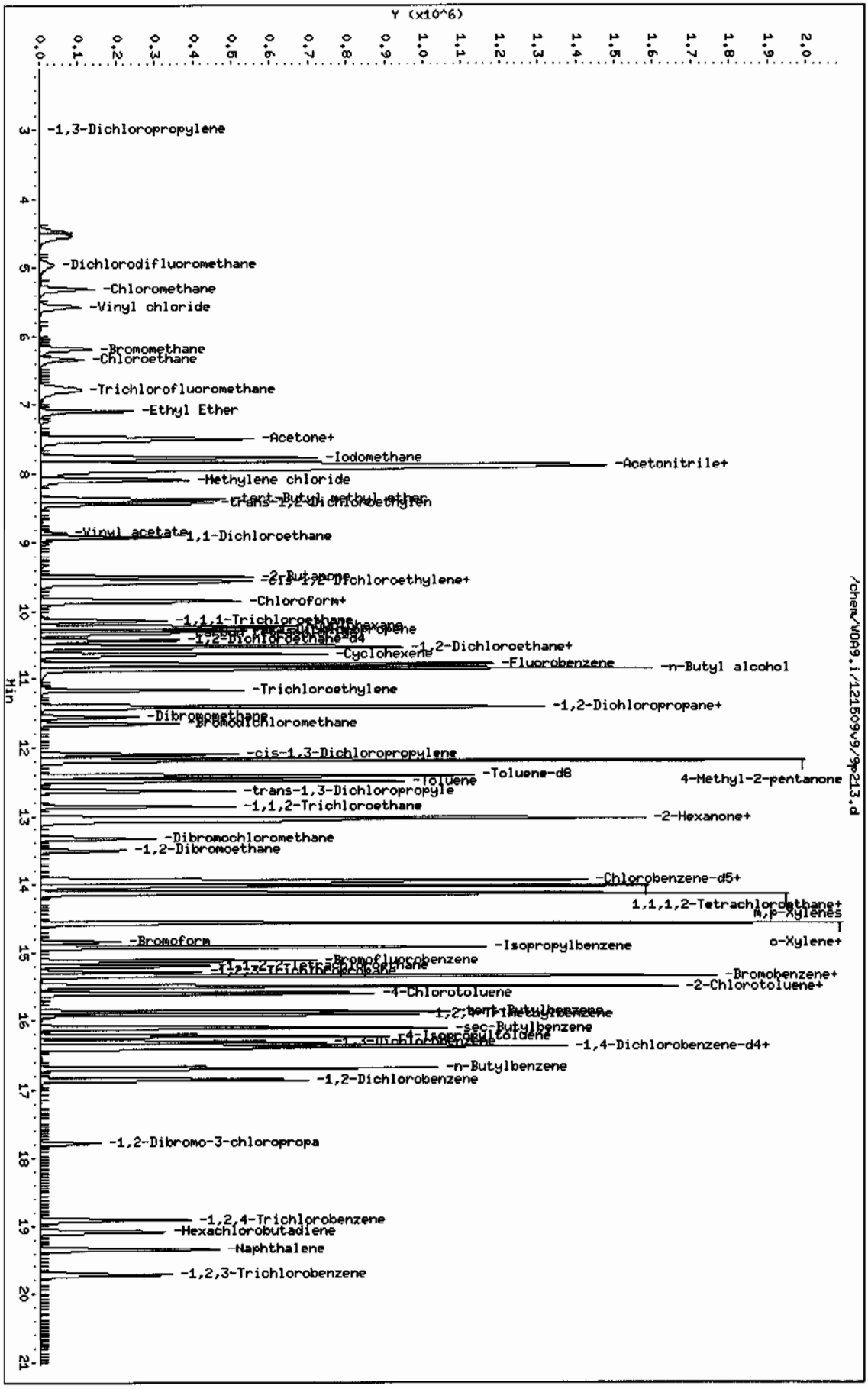

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981440	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
Client Sample:	QC for batch 926741	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13875PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	926743	**Inst:**	VOA9.I	**Dilution:**	1
Run Date:	12/15/2009 16:58	**Analyst:**	RXY1	**Purge Vol:**	5 mL
Prep Date:	12/15/2009 14:02	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	9p214.d	**Column:**	RTX-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	Hh	35.3	ug/kg	0.380	1.12
74-87-3	Chloromethane	Hh	47.0	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	Hh	50.2	ug/kg	0.335	1.12
74-83-9	Bromomethane	Hh	49.1	ug/kg	0.335	1.12
75-00-3	Chloroethane	Hh	48.9	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	Hh	45.5	ug/kg	0.335	1.12
67-64-1	Acetone	Hh	128	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	Hh	43.9	ug/kg	0.335	1.12
74-88-4	Iodomethane	Hh	207	ug/kg	1.79	5.58
75-09-2	Methylene chloride	Hh	41.1	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	Hh	223	ug/kg	1.40	5.58
156-60-5	trans-1,2-Dichloroethylene	Hh	44.4	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	Hh	46.6	ug/kg	0.335	1.12
78-93-3	2-Butanone	Hh	178	ug/kg	1.68	5.58
156-59-2	cis-1,2-Dichloroethylene	Hh	45.1	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	Hh	42.2	ug/kg	0.335	1.12
67-66-3	Chloroform	Hh	45.0	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	Hh	46.1	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	Hh	43.6	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	Hh	46.6	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	Hh	44.3	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	Hh	45.8	ug/kg	0.335	1.12
71-43-2	Benzene	Hh	45.1	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	Hh	45.3	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	Hh	47.5	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	Hh	44.6	ug/kg	0.335	1.12
74-95-3	Dibromomethane	Hh	47.1	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	Hh	231	ug/kg	1.40	5.58
10061-01-5	cis-1,3-Dichloropropylene	Hh	40.5	ug/kg	0.335	1.12
108-88-3	Toluene	Hh	44.5	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	Hh	42.4	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	Hh	46.8	ug/kg	0.335	1.12
591-78-6	2-Hexanone	Hh	149	ug/kg	1.68	5.58
142-28-9	1,3-Dichloropropane	Hh	48.3	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	Hh	43.9	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	Hh	44.4	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	Hh	44.6	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	Hh	46.1	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201981440**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.5**
Client Sample:	**QC for batch 926741**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13875PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**926743**	**Inst:**	**VOA9.I**	**Dilution:**	**1**
Run Date:	**12/15/2009 16:58**	**Analyst:**	**RXY1**	**Purge Vol:**	**5 mL**
Prep Date:	**12/15/2009 14:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**9p214.d**	**Column:**	**RTX-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	Hh	45.0	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	Hh	88.9	ug/kg	0.335	2.23
95-47-6	o-Xylene	Hh	44.7	ug/kg	0.335	1.12
100-42-5	Styrene	Hh	42.6	ug/kg	0.335	1.12
75-25-2	Bromoform	Hh	44.9	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	Hh	50.2	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	Hh	47.5	ug/kg	0.335	1.12
108-86-1	Bromobenzene	Hh	45.2	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	Hh	45.9	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	Hh	45.3	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	Hh	45.5	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	Hh	44.0	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	Hh	43.2	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	Hh	43.1	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	Hh	42.2	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	Hh	43.2	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	Hh	33.6	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	Hh	42.4	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	Hh	43.8	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	Hh	40.7	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	Hh	43.1	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	HUh	5.58	ug/kg	1.79	5.58
630-20-6	1,1,1,2-Tetrachloroethane	Hh	45.5	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	Hh	42.6	ug/kg	0.335	1.12

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA9.i/121509v9/9p214.d
Lab Smp Id: 1201981440 Client Smp ID: RE03-09-13875MSD
Inj Date : 15-DEC-2009 16:58
Operator : RXY1 Inst ID: VOA9.i
Smp Info : |1201981440|926743|1|VOA|1|
Misc Info : LANL 5.0g n/a msd 241540001
Comment :
Method : /chem/VOA9.i/121509v9/VOA9-8260B-111909.m
Meth Date : 16-Dec-2009 07:27 ron01469 Quant Type: ISTD
Cal Date : 19-NOV-2009 17:43 Cal File: 91419.d
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.45410	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	10.787	10.787	(1.000)	1750397	50.0000	
* 75 Chlorobenzene-d5	117	13.941	13.941	(1.000)	1180641	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.372	16.372	(1.000)	561741	50.0000	
$ 46 1,2-Dichloroethane-d4	65	10.431	10.431	(0.967)	415226	44.0890	49.2
$ 64 Toluene-d8	99	12.423	12.423	(0.891)	127950	44.7743	50.0
$ 86 Bromofluorobenzene	95	15.127	15.127	(0.924)	461429	42.4164	47.4
1 Dichlorodifluoromethane	85	4.958	4.958	(0.460)	167270	31.6277	35.3
2 Chloromethane	50	5.308	5.308	(0.492)	411915	42.1106	47.0
3 Vinyl chloride	62	5.574	5.560	(0.517)	357318	44.9750	50.2
4 Bromomethane	94	6.198	6.186	(0.575)	234766	43.9723	49.1
5 Chloroethane	64	6.352	6.340	(0.589)	244257	43.8084	48.9
6 Trichlorofluoromethane	101	6.779	6.779	(0.628)	361170	40.7478	45.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.490	7.490	(0.694)	649531	114.942	128
11 1,1-Dichloroethylene	61	7.514	7.514	(0.697)	506519	39.3472	43.9
102 1,4-Dichlorobenzene	146	16.408	16.408	(1.002)	537901	39.2605	43.8
13 Iodomethane	142	7.775	7.775	(0.721)	1829219	185.272	207
19 Methylene chloride	84	8.095	8.095	(0.750)	338272	36.7957	41.1
16 Carbon disulfide	76	7.917	7.917	(0.734)	4332498	199.543	223
22 trans-1,2-Dichloroethylene	96	8.427	8.427	(0.781)	280524	39.7227	44.4
25 1,1-Dichloroethane	63	8.913	8.913	(0.826)	627085	41.7124	46.6
29 2-Butanone	43	9.494	9.494	(0.880)	1015654	159.711	178
31 cis-1,2-Dichloroethylene	96	9.554	9.554	(0.886)	318793	40.3639	45.1
100 1,3-Dichlorobenzene	146	16.313	16.313	(0.996)	536535	37.9767	42.4
33 2,2-Dichloropropane	77	9.577	9.577	(0.888)	394451	37.8139	42.2
36 Chloroform	83	9.862	9.862	(0.914)	533440	40.2606	45.0
105 1,2-Dichlorobenzene	146	16.859	16.858	(1.030)	520410	38.1528	42.6
35 Bromochloromethane	128	9.826	9.826	(0.911)	141999	41.2876	46.1
39 1,1,1-Trichloroethane	97	10.135	10.135	(0.940)	389005	39.0802	43.6
43 1,1-Dichloropropene	75	10.289	10.289	(0.954)	398044	41.7147	46.6
44 Carbon tetrachloride	117	10.336	10.336	(0.958)	335603	39.7095	44.3
47 1,2-Dichloroethane	62	10.514	10.514	(0.975)	470483	41.0077	45.8
48 Benzene	78	10.538	10.538	(0.977)	1191033	40.3419	45.0
53 Trichloroethylene	95	11.166	11.166	(1.035)	288377	40.5355	45.3
55 1,2-Dichloropropane	63	11.415	11.415	(1.058)	363205	42.5163	47.5
59 Bromodichloromethane	83	11.665	11.664	(1.081)	413471	39.9116	44.6
58 Dibromomethane	93	11.558	11.558	(1.071)	187357	42.1616	47.1
63 4-Methyl-2-pentanone	58	12.186	12.186	(0.874)	789684	206.411	230
62 cis-1,3-Dichloropropylene	75	12.103	12.103	(1.122)	458048	36.2808	40.5
65 Toluene	92	12.495	12.495	(0.896)	700740	39.8521	44.5
67 trans-1,3-Dichloropropylene	75	12.637	12.637	(0.906)	439796	37.9642	42.4
68 1,1,2-Trichloroethane	83	12.862	12.862	(0.923)	236469	41.9266	46.8
69 2-Hexanone	43	13.028	13.028	(0.934)	1314123	133.169	149
70 1,3-Dichloropropane	76	13.052	13.064	(0.936)	477830	43.2679	48.3
71 Tetrachloroethylene	164	13.088	13.087	(0.939)	184556	39.2922	43.9
72 Dibromochloromethane	129	13.325	13.336	(0.956)	275560	39.7741	44.4
73 1,2-Dibromoethane	107	13.503	13.503	(0.969)	262694	39.9626	44.6
76 Chlorobenzene	112	13.977	13.977	(1.003)	715185	41.2861	46.1
77 1,1,1,2-Tetrachloroethane	131	14.024	14.024	(1.006)	256452	40.7555	45.5
78 Ethylbenzene	91	14.024	14.024	(1.006)	1296473	40.2611	45.0
79 m,p-Xylenes	106	14.131	14.131	(1.014)	1017349	79.6045	88.9
80 o-Xylene	106	14.570	14.570	(1.045)	525668	40.0341	44.7
81 Styrene	104	14.570	14.570	(1.045)	843640	38.1073	42.6
82 Bromoform	173	14.854	14.854	(0.907)	163923	40.2316	44.9
87 1,1,2,2-Tetrachloroethane	83	15.198	15.210	(0.928)	392781	44.9763	50.2
89 1,2,3-Trichloropropane	110	15.305	15.293	(0.935)	93178	42.5097	47.5
90 Bromobenzene	156	15.352	15.352	(0.938)	288906	40.4408	45.2
91 n-Propylbenzene	91	15.352	15.352	(0.938)	1539021	41.1244	45.9
92 2-Chlorotoluene	91	15.507	15.507	(0.947)	1048018	40.5416	45.3
83 Isopropylbenzene	105	14.926	14.926	(0.912)	1287514	40.7130	45.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
93 1,3,5-Trimethylbenzene	105	15.495	15.495	(0.946)	1058332	39.4042	44.0
94 4-Chlorotoluene	91	15.613	15.613	(0.954)	944012	38.6771	43.2
95 tert-Butylbenzene	119	15.874	15.874	(0.970)	978164	38.6075	43.1
96 1,2,4-Trimethylbenzene	105	15.922	15.922	(0.972)	1056820	37.8078	42.2
98 sec-Butylbenzene	105	16.111	16.111	(0.984)	1382632	38.6462	43.2
99 4-Isopropyltoluene	119	16.230	16.230	(0.991)	820499	30.0809	33.6
104 n-Butylbenzene	92	16.693	16.692	(1.020)	597375	36.4117	40.7
107 1,2-Dibromo-3-chloropropane	157	17.784	17.783	(1.086)	60171	38.6314	43.1

Data File: /chem/VOA9.i/121509v9/9p214.d
Date : 15-DEC-2009 16:58
Client ID: RE03-09-13875HSD
Sample Info: 1120198144019267431|VOA|1|
Column phase: RTX-Volatiles

Instrument: VOA9.i
Operator: RXY1
Column diameter: 0.25

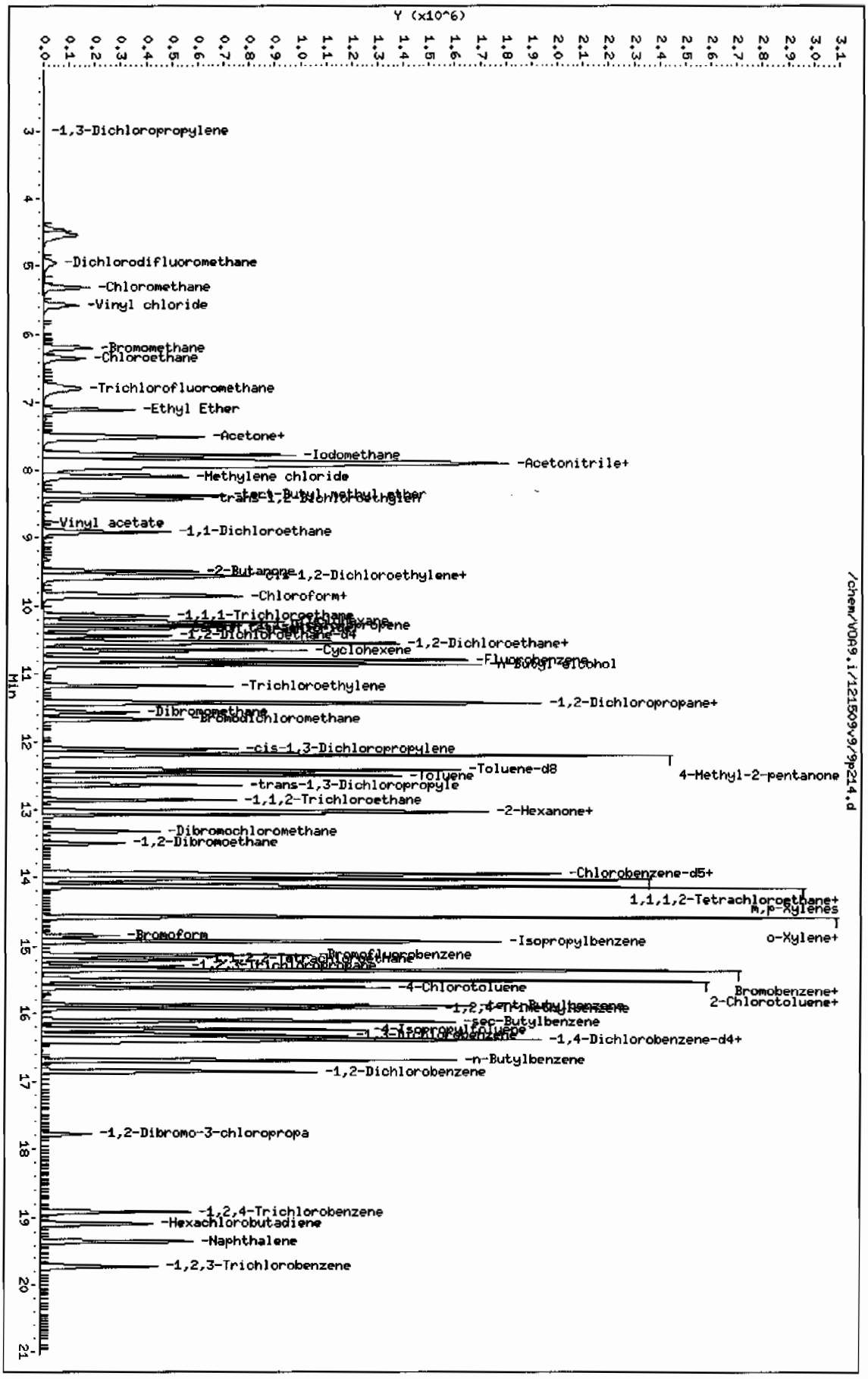

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926741** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Ronda Eagle
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201997426 MB	15-DEC-2009 11:00:00	Soil	5	5	1	
1201997427 LCS	15-DEC-2009 11:01:00	Soil	5	5	1	
1201997428 LCS	15-DEC-2009 11:02:00	Soil	5	5	1	
1201981439 PS (241540001)	15-DEC-2009 14:01:00	Soil	5	5	1	
1201981440 PSD (241540001)	15-DEC-2009 14:02:00	Soil	5	5	1	
1201981437 MB	25-NOV-2009 07:00:00	Soil	5	5	1	
1201981441 LCS	25-NOV-2009 07:00:00	Soil	5	5	1	
1201981442 LCS	25-NOV-2009 07:00:00	Soil	5	5	1	
241540001	25-NOV-2009 14:10:00	Soil	5	5	1	
241540002	25-NOV-2009 14:11:00	Soil	5	5	1	
241540003	25-NOV-2009 14:12:00	Soil	5	5	1	
241540004	25-NOV-2009 14:13:00	Soil	5	5	1	
241540005	25-NOV-2009 14:14:00	Soil	5	5	1	
241540006	25-NOV-2009 14:15:00	Soil	5	5	1	
241540008	25-NOV-2009 14:17:00	Soil	5	5	1	
241540009	25-NOV-2009 14:18:00	Soil	5	5	1	
241540010	25-NOV-2009 14:19:00	Soil	5	5	1	
241540011	25-NOV-2009 14:20:00	Soil	5	5	1	
241540012	25-NOV-2009 14:21:00	Soil	5	5	1	
241540013	25-NOV-2009 14:22:00	Soil	5	5	1	
241540014	25-NOV-2009 14:23:00	Soil	5	5	1	
241540015	25-NOV-2009 14:24:00	Soil	5	5	1	
241540017	25-NOV-2009 14:26:00	Soil	5	5	1	
241540018	25-NOV-2009 14:27:00	Soil	5	5	1	
1201981438 MB	27-NOV-2009 04:30:00	Soil	5	5	1	
1201981443 LCS	27-NOV-2009 04:31:00	Soil	5	5	1	

Prep Logbook

Batch ID: **926741** Verified by: _____

Analyst: Ronda Eagle

Method: SW846 5030

Lab SOP: GL-OA-E-038 REV# 12

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201981444 LCS	27-NOV-2009 04:32:00	Soil	5	5	1	
241540007	27-NOV-2009 06:30:00	Soil	5	5	1	
241540016	27-NOV-2009 06:31:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/13/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111309v1

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
ICV	W1VM091113-18		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
BFB	UVM090821-02				1
SHORT ICV	W1VM091113-19		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/13/2009 22:17	1L507.D	UVM090821-02	GEL	BFB2	5ML	1	N/A	1	W	ACJ	N/A	O	Passed.
11/13/2009 22:47	1L508.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
11/13/2009 23:18	1L509.D	W1VM091113-05	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM090911-01B/UVM091012-01D
11/13/2009 23:48	1L510.D	W1VM091113-06	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	N/A	X	UVM090911-02B/UVM091012-02D: See 1L511
11/14/2009 0:18	1L511.D	W1VM091113-07	GEL	VSTD001	5ML	1	N/A	5	W	ACJ	N/A	O	UVM090911-02B/UVM091012-02D
11/14/2009 0:48	1L512.D	W1VM091113-08	GEL	VSTD002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM090911-03B/UVM091012-03D
11/14/2009 1:19	1L513.D	W1VM091113-09	GEL	VSTD005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM090911-04B/UVM091012-04D
11/14/2009 1:49	1L514.D	W1VM091113-10	GEL	VSTD010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM090911-05B/UVM091012-05D
11/14/2009 2:19	1L515.D	W1VM091113-11	GEL	VSTD020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM090911-06B/UVM091012-06D
11/14/2009 2:49	1L516.D	W1VM091113-12	GEL	VSTD050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM090911-07B/UVM091012-07D
11/14/2009 3:19	1L517.D	W1VM091113-13	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM090911-08B/UVM091012-08D
11/14/2009 3:50	1L518.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	Rinse
11/14/2009 4:20	1L519.D	W1VM091113-14	GEL	VSTD005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091023-01/UVM091110-01E
11/14/2009 4:50	1L520.D	W1VM091113-15	GEL	VSTD010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091023-02/UVM091110-02E
11/14/2009 5:20	1L521.D	W1VM091113-16	GEL	VSTD025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091023-03/UVM091110-03E
11/14/2009 5:50	1L522.D	W1VM091113-17	GEL	VSTD050S	5ML	1	N/A	16	W	ACJ	N/A	O	UVM091023-04/UVM091110-04E
11/14/2009 6:20	1L523.D	W1VM091113-18	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091023-05/UVM091110-05E
11/14/2009 6:51	1L524.D	W1VM091113-19	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091023-06/UVM091110-06E
11/14/2009 7:21	1L525.D	W1VM091113-20	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091023-07/UVM091110-07E
11/14/2009 7:51	1L526.D	12019---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	Rinse
11/14/2009 8:21	1L527.D	W1VM091113-18	GEL	ICV	5ML	1	N/A	21	W	ACJ	N/A	X	UVM091111-01A/IVM091111-01; Vinyl Chloride low. See 11/16/09
11/14/2009 8:52	1L528.D	W1VM091113-19	GEL	SHORT ICV	5ML	1	N/A	22	W	ACJ	N/A	O	UVM091023-08A/UVM091105-02B

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for iCAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/16/2009 9:04	1M101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	X	Passed. See 1M108
11/16/2009 9:35	1M102.D	12019---	GEL	BLANK	5ML	1	N/A	2	W	RXM4	N/A	X	
11/16/2009 10:14	1M103.D	W1VM091116-01	GEL	CCV/LCS/ICV	5ML	1	N/A	3	W	RXM4	N/A	X	
11/16/2009 10:45	1M104.D	W1VM091116-02	GEL	LCSD	5ML	1	N/A	4	W	RXM4	N/A	X	
11/16/2009 12:25	1M105.D	W1VM091116-03	GEL	SHORTICV	5ML	1	N/A	5	W	RXM4	N/A	X	Decreased multiplier
11/16/2009 13:00	1M106.D	UVM090821-02	GEL	BFB	5ML	1	N/A	6	W	RXM4	N/A	X	See 1M108
11/16/2009 13:30	1M107.D	W1VM091116-04	GEL	CCV/LCS/ICV	5ML	1	N/A	7	W	RXM4	N/A	X	UVM091111-01A/IVM0901111-01
11/16/2009 14:01	**1M108.D**	**W1VM091116-05**	**GEL**	**BFB/CCV/LCS/ICV**	**5ML**	**1**	**N/A**	**8**	**W**	**RXM4**	**N/A**	**O**	UVM091111-01B/IVM0901111-01
11/16/2009 14:48	1M109.D	W1VM091116-06	GEL	SHORT	5ML	1	N/A	9	W	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 15:20	1M110.D	W1VM091116-07	GEL	LCS	5G	1	N/A	10	S	RXM4	N/A	O	UVM091111-01B/IVM0901111-01
11/16/2009 15:51	1M111.D	W1VM091116-08	GEL	SHORT	5G	1	N/A	11	S	RXM4	N/A	O	UVM091023-08A/UVM091105-02A
11/16/2009 16:21	1M112.D	12019---	GEL	BLANK	5ML	1	N/A	12	W	RXM4	N/A	X	waters were not analyzed. Not needed.
11/16/2009 16:51	1M113.D	12019---	GEL	BLANK	5G	1	N/A	13	S	RXM4	N/A	O	
11/16/2009 17:22	1M114.D	240630001	LANL	923274	5G	1	N/A	14	S	RXM4	N/A	O	
11/16/2009 17:52	1M115.D	240630002	LANL	923274	5G	1	N/A	15	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 18:22	1M116.D	240630003	LANL	923274	5G	1	N/A	16	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 18:52	1M117.D	240630004	LANL	923274	5G	1	N/A	17	S	RXM4	N/A	O	
11/16/2009 19:23	1M118.D	240630005	LANL	923274	5G	1	N/A	18	S	RXM4	N/A	O	
11/16/2009 19:53	1M119.D	240630006	LANL	923274	5G	1	N/A	19	S	RXM4	N/A	O	
11/16/2009 20:23	1M120.D	240630007	LANL	923274	5G	1	N/A	20	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 20:53	1M121.D	240630008	LANL	923274	5G	1	N/A	21	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:23	1M122.D	240630009	LANL	923274	5G	1	N/A	22	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 21:54	1M123.D	240630010	LANL	923274	5G	1	N/A	23	S	RXM4	N/A	O	IS Failure. See RA 11/17/09
11/16/2009 22:24	1M124.D	240630011	LANL	923274	5G	1	N/A	24	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 22:55	1M125.D	240634001	LANL	923274	5G	1	N/A	25	S	RXM4	N/A	O	
11/16/2009 23:25	1M126.D	240634002	LANL	923274	5G	1	N/A	26	S	RXM4	N/A	X	IS Failure. See RA 11/17/09
11/16/2009 23:55	1M127.D	240634003	LANL	923274	5G	1	N/A	27	S	RXM4	N/A	O	
11/17/2009 0:25	1M128.D	240634004	LANL	923274	5G	1	N/A	28	S	RXM4	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/16/2009 Method 8260B/624 Operator: RXM4

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111609v1

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091116-05		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091116-05/07			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091116-06/08		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/17/2009 0:55	1M129.D	240634005	LANL	923274	5G	1	N/A	29	S	RXM4	N/A	O	
11/17/2009 1:25	1M130.D	240634006	LANL	923274	5G	1	N/A	30	S	RXM4	N/A	O	
11/17/2009 1:56	1M131.D	1201973574	LANL	923274	5G	1	N/A	31	S	RXM4	N/A	X	MS 240630001; See 11/17/09
11/17/2009 2:26	1M132.D	1201973575	LANL	923274	5G	1	N/A	32	S	RXM4	N/A	X	MSD 240630001; out of tune. See 11/17/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/25/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 112509v1 PM

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091125-03		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091125-03			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091125-04		5+5	5+5	

Purge Amount

5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/25/2009 20:59	1N325.D	UVM090821-02	GEL	BFB	5ML	1	N/A	25	W	RXM4	N/A	O	
11/25/2009 21:29	1N326.D	W1VM091125-03	GEL	CCV/LCS	5G	1	N/A	26	S	RXM4	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009 21:59	1N327.D	W1VM091125-04	GEL	SHORT	5G	1	N/A	27	S	RXM4	N/A	O	UVM091118-08A/UVM091105-02C
11/25/2009 22:30	1N328.D	12019---	GEL	BLANK	5G	1	N/A	28	S	RXM4	N/A	O	
11/25/2009 23:00	1N329.D	241524001	LANL	926739	5G	1	N/A	29	S	RXM4	N/A	O	
11/25/2009 23:30	1N330.D	241524002	LANL	926739	5G	1	N/A	30	S	RXM4	N/A	O	
11/26/2009 0:00	1N331.D	241540001	LANL	926743	5G	1	N/A	31	S	RXM4	N/A	O	
11/26/2009 0:30	1N332.D	241540002	LANL	926743	5G	1	N/A	32	S	RXM4	N/A	O	
11/26/2009 1:01	1N333.D	241540003	LANL	926743	5G	1	N/A	33	S	RXM4	N/A	O	
11/26/2009 1:31	1N334.D	241540004	LANL	926743	5G	1	N/A	34	S	RXM4	N/A	O	
11/26/2009 2:01	1N335.D	241540005	LANL	926743	5G	1	N/A	35	S	RXM4	N/A	O	
11/26/2009 2:31	1N336.D	241540006	LANL	926743	5G	1	N/A	36	S	RXM4	N/A	O	
11/26/2009 3:02	1N337.D	241540007	LANL	926743	5G	1	N/A	37	S	RXM4	N/A	X	ISTD failure. See 11/27/09
11/26/2009 3:32	1N338.D	241540008	LANL	926743	5G	1	N/A	38	S	RXM4	N/A	O	
11/26/2009 4:02	1N339.D	241540009	LANL	926743	5G	1	N/A	39	S	RXM4	N/A	O	
11/26/2009 4:32	1N340.D	241540010	LANL	926743	5G	1	N/A	40	S	RXM4	N/A	O	
11/26/2009 5:03	1N341.D	241540011	LANL	926743	5G	1	N/A	41	S	RXM4	N/A	O	
11/26/2009 5:32	1N342.D	241540012	LANL	926743	5G	1	N/A	42	S	RXM4	N/A	O	
11/26/2009 6:03	1N343.D	241540013	LANL	926743	5G	1	N/A	43	S	RXM4	N/A	O	
11/26/2009 6:33	1N344.D	241540014	LANL	926743	5G	1	N/A	44	S	RXM4	N/A	O	
11/26/2009 7:03	1N345.D	241540015	LANL	926743	5G	1	N/A	45	S	RXM4	N/A	O	
11/26/2009 7:33	1N346.D	241540016	LANL	926743	5G	1	N/A	46	S	RXM4	N/A	X	IS/SS failure. See CF 11/27/09
11/26/2009 8:03	1N347.D	241540017	LANL	926743	5G	1	N/A	47	S	RXM4	N/A	O	
11/26/2009 8:34	1N348.D	241540018	LANL	926743	5G	1	N/A	48	S	RXM4	N/A	O	
11/26/2009 9:04	1N349.D	1201981439	LANL	926743	5G	1	N/A	49	S	RXM4	N/A	X	MS 241540001 high SS rec. See 11/27/09
11/26/2009 9:34	1N350.D	1201981440	LANL	926743	5G	1	N/A	50	S	RXM4	N/A	X	MSD 241540001 See 11/27/09

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 11/27/2009 Method 8260B/624 Operator: RJM

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

Daily Instrument Readings:
Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/13/2009

(See pg. 258 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 112709v1 AM

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W1VM091127-01		5+5		
IS	UVM090821-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W1VM091127-01			5+5	
BFB	UVM090821-02				1
SHORT	W1VM091127-02		5+5	5+5	

Purge Amount	
5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol: ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable O/X	Comments
11/27/2009 5:04	1N501.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	RXM4	N/A	O	
11/27/2009 5:41	1N502.D	W1VM091127-01	GEL	CCV/LCS	5G	1	N/A	2	S	RXM4	N/A	O	UVM091111-01D/IVM091122-01
11/27/2009 6:40	1N503.D	W1VM091127-02	GEL	SHORT	5G	1	N/A	3	S	RXM4	N/A	O	UVM091118-08A/UVM091105-02C
11/27/2009 7:10	1N504.D	12019---	GEL	BLANK	5G	1	N/A	4	S	RXM4	N/A	O	
11/27/2009 7:43	1N505.D	241540007	LANL	926743	5G	1	N/A	5	S	RXM4	N/A	O	
11/27/2009 8:13	1N506.D	241540016	LANL	926743	5G	1	N/A	6	S	RXM4	N/A	O	
11/27/2009 8:43	1N507.D	1201981439	LANL	926743	5G	1	N/A	7	S	RXM4	N/A	O	MS 241540001
11/27/2009 9:14	1N508.D	1201981440	LANL	926743	5G	1	N/A	8	S	RXM4	N/A	O	MSD 241540001
11/27/2009 9:44	1N509.D	1201982011	LANL	927024	5G	1	N/A	9	S	RXM4	N/A	O	MS 241609001
11/27/2009 10:14	1N510.D	1201982012	LANL	927024	5G	1	N/A	10	S	RXM4	N/A	O	MSD 241609001
11/27/2009 10:44	1N511.D	12019---	GEL	BLANK	5ML	1	N/A	11	W	RXM4	N/A	X	
11/27/2009 11:14	1N512.D	241609001	LANL	927024	5G	1	N/A	12	S	RXM4	N/A	O	
11/27/2009 11:45	1N513.D	241609002	LANL	927024	5G	1	N/A	13	S	RXM4	N/A	O	
11/27/2009 12:15	1N514.D	241609003	LANL	927024	5G	1	N/A	14	S	RXM4	N/A	O	
11/27/2009 12:46	1N515.D	241609004	LANL	927024	5G	1	N/A	15	S	RXM4	N/A	O	
11/27/2009 13:17	1N516.D	241609005	LANL	927024	5G	1	N/A	16	S	RXM4	N/A	O	
11/27/2009 13:48	1N517.D	241609006	LANL	927024	5G	1	N/A	17	S	RXM4	N/A	X	ISTD Failure. See 11/30/09
11/27/2009 14:19	1N518.D	241609007	LANL	927024	5G	1	N/A	18	S	RXM4	N/A	X	ISTD Failure. See 11/30/09
11/27/2009 14:50	1N519.D	241609008	LANL	927024	5G	1	N/A	19	S	RXM4	N/A	O	
11/27/2009 15:21	1N520.D	241609009	LANL	927024	5G	1	N/A	20	S	RXM4	N/A	O	
11/27/2009 15:51	1N521.D	241609010	LANL	927024	5G	1	N/A	21	S	RXM4	N/A	O	

GEL Laboratories, LLC.
Revision:03/22/07

ORGANIC RUN LOG - INSTRUMENT ID#VOA9

Date: 11/19/2009 Method 8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings:

Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009 & 11/20/2009

(See pg. 345/346 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 111909V9

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
IS	UVM091117-01	1	1	1	
SS	UVM090910-02	1	1	1	
BFB	UVM090910-02				1

Purge Amount	
5	Water Purge Vol:
N/A	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
11/19/2009	8:24	9L401.D	UVM090910-02	--------	BFB	5ml	1	--------	1	w	RXY1	N/A	X	
11/19/2009	9:49	9L402.D	UVM090910-02	--------	BFB	5ml	1	--------	2	w	RXY1	N/A	X	
11/19/2009	10:19	9L403.D	UVM090910-02	--------	BFB	5ml	1	--------	3	w	RXY1	N/A	X	
11/19/2009	**10:47**	9L404.D	UVM090910-02	--------	BFB	5ml	1	--------	4	w	RXY1	N/A	O	
11/19/2009	11:14	9L405.D	W9VM091119-01	GEL	VSTD0005	5ml	1	n/a	5	w	RXY1	N/A	O	UVM090911-01C/UVM091116-01A
11/19/2009	11:42	9L406.D	W9VM091119-02	GEL	VSTD001	5ml	1	n/a	6	w	RXY1	N/A	O	UVM090911-02C/UVM091116-02A
11/19/2009	12:10	9L407.D	W9VM091119-03	GEL	VSTD002	5ml	1	n/a	7	w	RXY1	N/A	O	UVM090911-03C/UVM091116-03A
11/19/2009	12:37	9L408.D	W9VM091119-04	GEL	VSTD005	5ml	1	n/a	8	w	RXY1	N/A	O	UVM090911-04C/UVM091116-04A
11/19/2009	13:05	9L409.D	W9VM091119-05	GEL	VSTD010	5ml	1	n/a	9	w	RXY1	N/A	O	UVM090911-05C/UVM091116-05A
11/19/2009	13:33	9L410.D	W9VM091119-06	GEL	VSTD020	5ml	1	n/a	10	w	RXY1	N/A	O	UVM090911-06C/UVM091116-06A
11/19/2009	14:01	9L411.D	W9VM091119-07	GEL	VSTD050	5ml	1	n/a	11	w	RXY1	N/A	O	UVM090911-07C/UVM091116-07A
11/19/2009	14:29	9L412.D	W9VM091119-08	GEL	VSTD100	5ml	1	n/a	12	w	RXY1	N/A	O	UVM090911-08C/UVM091116-08A
11/19/2009	14:57	9L413.D	12019----------	GEL	BLANK	5ml	1	n/a	13	w	RXY1	N/A	X	Instrument blank
11/19/2009	15:24	9L414.D	W9VM091119-09	GEL	VSTD005S	5ml	1	n/a	14	w	RXY1	N/A	O	UVM091118-01/UVM091110-01A
11/19/2009	15:52	9L415.D	W9VM091119-10	GEL	VSTD010S	5ml	1	n/a	15	w	RXY1	N/A	O	UVM091118-02/UVM091110-02A
11/19/2009	16:20	9L416.D	W9VM091119-11	GEL	VSTD025S	5ml	1	n/a	16	w	RXY1	N/A	O	UVM091118-03/UVM091110-03A
11/19/2009	16:48	9L417.D	W9VM091119-12	GEL	VSTD050S	5ml	1	n/a	17	w	RXY1	N/A	O	UVM091118-04/UVM091110-04A
11/19/2009	17:16	9L418.D	W9VM091119-13	GEL	VSTD100S	5ml	1	n/a	18	w	RXY1	N/A	O	UVM091118-05/UVM091110-05A
11/19/2009	17:43	9L419.D	W9VM091119-14	GEL	VSTD250S	5ml	1	n/a	19	w	RXY1	N/A	O	UVM091118-06/UVM091110-06A
11/19/2009	18:11	9L420.D	W9VM091119-15	GEL	VSTD500S	5ml	1	n/a	20	w	RXY1	N/A	O	UVM091118-07/UVM091110-07A
11/19/2009	18:39	9L421.D	12019----------	GEL	BLANK	5ml	1	n/a	21	w	RXY1	N/A	X	Instrument blank
11/19/2009	19:06	9L422.D	W9VM091119-16	GEL	SICV	5ml	1	n/a	22	w	RXY1	N/A	O	UVM091118-08A/UVM091105-02B
11/19/2009	19:34	9L423.D	W9VM091119-17	GEL	LICV	5ml	1	n/a	23	w	RXY1	N/A	X	UVM091111-01B/IVM091116-01: Report 9L501 as ICV
11/19/2009	20:02	9L424.D	W9VM091119-18	GEL	LICV	5ml	1	n/a	24	w	RXY1	N/A	X	UVM091105-01A/IVM091116-01
11/19/2009	20:29	9L425.D	12019----------	GEL	BLANK	5ml	1	n/a	25	w	RXY1	N/A	X	Instrument blank
11/19/2009	20:57	9L426.D	12019----------	GEL	BLANK	5ml	1	n/a	26	w	RXY1	N/A	X	Instrument blank

GEL Laboratories, LLC.
Revision:03/22/07

ORGANIC RUN LOG - INSTRUMENT ID#VOA9

Date: 11/20/2009 Method 8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings:

Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009 & 11/20/2009

(See pg. 345/346 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 112009V9

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV/ICV	W9VM091120-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM090910-02	1	1	1	
LCS/MS	W9VM091120-01			5+5	
BFB	UVM090910-02				1
SHORT	UVM091118-08A		5		
N/A					

Purge Amount

5	Water Purge Vol:
N/A	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
11/20/2009 8:43	9L501.D	W9VM091120-01	--------	BFB/CCV/ICV/LCS	5ml	1	--------	1	w	RXY1	N/A	O	UVM091111-01C/IVM091116-01
11/20/2009 9:10	9L502.D	W9VM091120-02	--------	LCS	5g	1	--------	2	s	RXY1	N/A	X	UVM091111-01C/IVM091116-01
11/20/2009 9:38	9L503.D	UVM091118-08A	--------	SHORT	5ml	1	--------	3	w	RXY1	N/A	O	
11/20/2009 10:05	9L504.D	12019----------	GEL	BLANK	5g	1	n/a	4	s	RXY1	N/A	X	
11/20/2009 10:34	9L505.D	12019----------	GEL	BLANK	5ml	1	n/a	5	w	RXY1	N/A	O	
11/20/2009 11:01	9L506.D	240916027	LAID	924567	5ml	1	pH2	6	w	RXY1	N	O	
11/20/2009 11:29	9L507.D	240916016	LAID	924567	5ml	1	pH2	7	w	RXY1	N	O	
11/20/2009 11:57	9L508.D	240916017	LAID	924567	5ml	1	pH2	8	w	RXY1	N	O	
11/20/2009 12:25	9L509.D	240916018	LAID	924567	5ml	1	pH2	9	w	RXY1	N	O	
11/20/2009 12:52	9L510.D	240916019	LAID	924567	5ml	1	pH2	10	w	RXY1	N	O	
11/20/2009 13:20	9L511.D	240916020	LAID	924567	5ml	1	pH2	11	w	RXY1	N	O	
11/20/2009 13:48	9L512.D	240916021	LAID	924567	5ml	1	pH2	12	w	RXY1	N	O	
11/20/2009 14:16	9L513.D	240916022	LAID	924567	5ml	1	pH2	13	w	RXY1	N	O	
11/20/2009 14:44	9L514.D	240916023	LAID	924567	5ml	1	pH2	14	w	RXY1	N	O	
11/20/2009 15:12	9L515.D	240916024	LAID	924567	5ml	1	pH2	15	w	RXY1	N	O	
11/20/2009 15:39	9L516.D	240916025	LAID	924567	5ml	1	pH2	16	w	RXY1	N	O	
11/20/2009 16:07	9L517.D	240916026	LAID	924567	5ml	1	pH2	17	w	RXY1	N	O	
11/20/2009 16:35	9L518.D	240916028	LAID	924567	5ml	1	pH2	18	w	RXY1	N	O	
11/20/2009 17:02	9L519.D	240916029	LAID	924567	5ml	1	pH2	19	w	RXY1	N	O	
11/20/2009 17:29	9L520.D	240916030	LAID	924567	5ml	1	pH2	20	w	RXY1	N	O	
11/20/2009 17:57	9L521.D	240916031	LAID	924567	5ml	1	pH2	21	w	RXY1	N	O	
11/20/2009 18:25	9L522.D	240916032	LAID	924567	5ml	1	pH2	22	w	RXY1	N	O	
11/20/2009 18:52	9L523.D	1201976490	LAID	924567	5ml	1	pH2	23	w	RXY1	N	O	ms 240916016
11/20/2009 19:19	9L524.D	1201976491	LAID	924567	5ml	1	pH2	24	w	RXY1	N	O	msd 240916016
11/20/2009 19:47	9L525.D	12019----------	GEL	BLANK	5ml	1	n/a	25	w	RXY1	N/A	X	Instrument blank
11/21/2009 3:43	9L526.D	12019----------	GEL	BLANK	5ml	1	n/a	26	w	RXY1	N/A	X	Instrument blank

GEL Laboratories, LLC.
Revision:03/22/07

ORGANIC RUN LOG - INSTRUMENT ID#VOA9

Date: 12/15/2009 Method 8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings:

Multiplier Voltage: 1635

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009 & 11/20/2009

(See pg. 345/346 for ICAL Std. Scl. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 121509v9

Daily Standard

	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W9VM091215-02		5+5		
IS	UVM091203-01	1	1	1	
SS	UVM090910-02	1	1	1	
LCS/MS	W9VM091215-02/03			5+5	
BFB	UVM090910-02				1
SHORT	UVM091118-08B		5	5	
N/A					

Purge Amount

5	Water Purge Vol:
Varied	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
100	ul
CZ 937	Methanol Lot #
X	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
12/15/2009	10:57	9P201.D	W9VM091215-01	--------	BFB/CCV/LCS	5ml	1	--------	1	w	RXY1	N/A	X	UVM091129-01E/IVM091214-01
12/15/2009	11:25	9P202.D	W9VM091215-02	--------	BFB/CCV/LCS	5g	1	--------	2	s	RXY1	N/A	O	UVM091129-01E/IVM091214-01
12/15/2009	11:53	9P203.D	W9VM091215-03	--------	LCS	5ml	1	--------	3	w	RXY1	N/A	O	UVM091129-01E/IVM091214-01
12/15/2009	12:21	9P204.D	UVM091118-08B	--------	SHORT	5ml	1	--------	4	w	RXY1	N/A	O	
12/15/2009	12:48	9P205.D	UVM091118-08B	--------	SHORT	5g	1	--------	5	s	RXY1	N/A	O	
12/15/2009	13:16	9P206.D	12019----------	GEL	BLANK	5g	1	n/a	6	s	RXY1	N/A	X	See 9P208
12/15/2009	13:43	9P207.D	12019----------	GEL	BLANK	5ml	1	n/a	7	w	RXY1	N/A	O	
12/15/2009	14:11	9P208.D	12019----------	GEL	BLANK	5g	1	n/a	8	s	RXY1	N/A	O	
12/15/2009	14:39	9P209.D	1201994568	GEL	933300	500ul	10	n/a	9	w	RXY1	N/A	O	TB 932459/933300
12/15/2009	15:07	9P210.D	242541004	MCLI	933300	500ul	10	n/a	10	w	RXY1	N/A	O	
12/15/2009	15:35	9P211.D	1201996771	MCLI	933300	500ul	10	n/a	11	w	RXY1	N/A	O	ms 242541004
12/15/2009	16:02	9P212.D	1201996772	MCLI	933300	500ul	10	n/a	12	w	RXY1	N/A	O	msd 242541004
12/15/2009	16:30	9P213.D	1201981439	LANL	926743	5.0g	1	n/a	13	s	RXY1	N/A	O	ms 241540001
12/15/2009	16:58	9P214.D	1201981440	LANL	926743	5.0g	1	n/a	14	s	RXY1	N/A	O	msd 241540001
12/15/2009	17:25	9P215.D	1201994463	MVAL	932406	5ml	1	pH2	15	w	RXY1	N	TBD	ms 242598001
12/15/2009	17:53	9P216.D	1201994464	MVAL	932406	5ml	1	pH2	16	w	RXY1	N	TBD	msd 242598001
12/15/2009	18:21	9P217.D	1201994449	SONO	932400	2.5ul	20000	pH5	17	w	RXY1	N	O	ms 242527001 From10x
12/15/2009	18:49	9P218.D	1201994450	SONO	932400	2.5ul	20000	pH5	18	w	RXY1	N	O	msd 242527001 From10x
12/15/2009	19:16	9P219.D	12019----------	GEL	BLANK	5ml	1	n/a	19	w	RXY1	N/A	X	Instrument blank
12/15/2009	19:44	9P220.D	241540001	LANL	926743	5.0g	1	n/a	20	s	RXY1	N/A	X	CF
12/15/2009	20:12	9P221.D	242598001	MVAL	932406	5ml	1	pH2	21	w	RXY1	N	TBD	
12/15/2009	20:40	9P222.D	242566001	CARE	932737	100ul	50	n/a	22	s	RXY1	N/A	TBD	5.1g
12/15/2009	21:07	9P223.D	242729001	CARE	932737	100ul	50	n/a	23	s	RXY1	N/A	TBD	5.0g
12/15/2009	21:35	9P224.D	242567001	CARE	932737	100ul	50	n/a	24	s	RXY1	N/A	TBD	5.1g
12/15/2009	22:03	9P225.D	242565001	CARE	932737	10ul	500	n/a	25	s	RXY1	N/A	TBD	5.0g
12/15/2009	22:30	9P226.D	242568001	CARE	932737	25ul	200	n/a	26	s	RXY1	N/A	TBD	5.0g
12/15/2009	22:58	9P227.D	242568001	CARE	932737	100ul	50	n/a	27	s	RXY1	N/A	TBD	5.0g
12/15/2009	23:25	9P228.D	12019----------	GEL	BLANK	5ml	1	n/a	28	w	RXY1	N/A	X	Instrument blank
12/15/2009	23:52	9P229.D	12019----------	GEL	BLANK	5ml	1	n/a	29	w	RXY1	N/A	X	Instrument blank

GEL Laboratories, LLC.
Revision:03/22/07

ORGANIC RUN LOG - INSTRUMENT ID#VOA9

Date: 12/15/2009 Method 8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings:

Multiplier Voltage: 1635

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009 & 11/20/2009

(See pg. 345/346 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 121509v9

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W9VM091215-02		5+5		
IS	UVM091203-01	1	1	1	
SS	UVM090910-02	1	1	1	
LCS/MS	W9VM091215-02/03			5+5	
BFB	UVM090910-02				1
SHORT	UVM091118-08B		5	5	
N/A					

Purge Amount

5	Water Purge Vol:
Varied	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
100	ul
CZ 937	Methanol Lot #
X	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
12/16/2009	0:20	9P230.D	242818001	ALBR	933301	5ml	1	pH7	30	w	RXY1	N	TBD	624 sample
12/16/2009	0:47	9P231.D	1201996775	ALBR	933301	5ml	1	pH7	31	w	RXY1	N	TBD	dup 242818001 624 sample
12/16/2009	1:15	9P232.D	242818002	ALBR	933301	5ml	1	pH7	32	w	RXY1	N	TBD	624 sample
12/16/2009	1:42	9P233.D	242818003	ALBR	933301	5ml	1	pH7	33	w	RXY1	N	TBD	624 sample
12/16/2009	2:10	9P234.D	242818004	ALBR	933301	5ml	1	pH7	34	w	RXY1	N	TBD	624 sample
12/16/2009	2:37	9P235.D	242823001	DTYN	933301	5ml	1	pH2	35	w	RXY1	N	TBD	624 sample
12/16/2009	3:05	9P236.D	1201996776	DTYN	933301	5ml	1	pH2	36	w	RXY1	N	TBD	dup 242823001 624 sample
12/16/2009	3:33	9P237.D	242823002	DTYN	933301	5ml	1	pH2	37	w	RXY1	N	TBD	624 sample
12/16/2009	4:01	9P238.D	242823003	DTYN	933301	5ml	1	pH2	38	w	RXY1	N	TBD	624 sample
12/16/2009	4:28	9P239.D	242823004	DTYN	933301	5ml	1	pH2	39	w	RXY1	N	TBD	624 sample
12/16/2009	4:56	9P240.D	242954001	RCHL	933301	5ml	1	pH2	40	w	RXY1	N	TBD	624 sample
12/16/2009	5:23	9P241.D	242954002	RCHL	933301	5ml	1	pH2	41	w	RXY1	N	TBD	624 sample
12/16/2009	5:51	9P242.D	1201997078	RCHL	933301	5ml	1	pH2	42	w	RXY1	N	TBD	dup 242954002 624 sample
12/16/2009	6:18	9P243.D	1201996777	ALBR	933301	5ml	1	pH7	43	w	RXY1	N	TBD	ms 242818001 624 sample
12/16/2009	6:46	9P244.D	1201996776	DTYN	933301	5ml	1	pH2	44	w	RXY1	N	TBD	ms 242823001 624 sample
12/16/2009	7:13	9P245.D	1201997079	RCHL	933301	5ml	1	pH2	45	w	RXY1	N	TBD	ms 242954002 624 sample
12/16/2009	7:41	9P246.D	12019----------	GEL	BLANK	5ml	1	n/a	46	w	RXY1	N/A	X	Instrument blank
12/16/2009	8:09	9P247.D	12019----------	GEL	BLANK	5ml	1	n/a	47	w	RXY1	N/A	X	Instrument blank

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
10-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
926743	See Below		

Potentially affected work order(s)(SDG): 241540(10-604)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Other

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS recovered outside of acceptance criteria for Bromochloromethane. Bromochloromethane recovered at 123%. The limits are 76%-122%.	1. The LCS recoveries were not within the acceptance limits. The unacceptable recoveries were less than 5% of the requested analyte list. This satisfies the client criteria. The results are reported.
2. Sample 241540016 recovered outside of acceptance limits for Internal standard responses.	2. The sample was reanalyzed with similar results. This confirmed sample matrix interference. The results are reported.
3. The MS/MSD was re-analyzed outside of the recommended holding time.	3. The matrix spike and duplicate were initially analyzed within holding time. The matrix spike duplicate did not meet acceptance criteria for internal standard recoveries. The spikes were re-analyzed outside the holding time but within 2 times the holding time allowed by the client.

Originator's Name:

Ronda Eagle 10-DEC-09

Data Validator/Group Leader:

Kelle Bellamy 16-DEC-09

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-604

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	926610
Prep Batch Number:	926606

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241540001	RE03-09-13875
241540002	RE03-09-13865
241540003	RE03-09-13868
241540004	RE03-09-13867
241540005	RE03-09-13864
241540006	RE03-09-13871
241540007	RE03-09-13877
241540008	RE03-09-13869
241540009	RE03-09-13870
241540010	RE03-09-13873
241540011	RE03-09-13863
241540012	RE03-09-13874
241540013	RE03-09-13866
241540014	RE03-09-13862
241540015	RE03-09-13876
241540016	RE03-09-13872
1201981197	Method Blank (MB)
1201981198	241540004(RE03-09-13867) Matrix Spike (MS)
1201981199	241540004(RE03-09-13867) Matrix Spike Duplicate (MSD)
1201981200	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

The surrogate recoveries reported in this SDG were acceptable.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 241540004 (RE03-09-13867) was selected for analysis as the matrix spike/matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recovered Hexachloroethane at 29%. The MSD displayed a similar low but passing recovery for that analyte. Therefore the low recovery in the MS was attributed to sampl3e matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 241540009 (RE03-09-13870) and 241540016 (RE03-09-13872) were diluted because the extracts were very dark and viscous.

Parmname	**241540**	
	009	**016**
All	10X	10X

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 768414. It is located in the Miscellaneous Section of the data report.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to

eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD1.I	HP 5973 Mass Spectrometer	HP6890/HP5973	ZB-5ms	25m x 0.2mm, 0.33um (5% Polysilarylene-95% Polydimethylsiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beecham **Date:** 12-17-09

Roadmap for LANL 10-604 SVOA

This roadmap was analyzed by amy01291 on 12-10-2009, 08:48.
This roadmap was reviewed by bar00895 on 12-10-2009, 15:41.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s120409.b/s110410.d	241540001	04-DEC-2009	12:18	10-604.sub	RE03-09-13875	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110411.d	241540002	04-DEC-2009	12:41	10-604.sub	RE03-09-13865	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110412.d	241540003	04-DEC-2009	13:04	10-604.sub	RE03-09-13868	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110413.d	241540004	04-DEC-2009	13:27	10-604.sub	RE03-09-13867	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110414.d	241540006	04-DEC-2009	13:50	10-604.sub	RE03-09-13871	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110417.d	241540008	04-DEC-2009	15:00	10-604.sub	RE03-09-13869	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110418.d	241540010	04-DEC-2009	15:23	10-604.sub	RE03-09-13873	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110419.d	241540011	04-DEC-2009	15:46	10-604.sub	RE03-09-13863	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110420.d	241540012	04-DEC-2009	16:10	10-604.sub	RE03-09-13874	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110421.d	241540013	04-DEC-2009	16:33	10-604.sub	RE03-09-13866	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110422.d	241540014	04-DEC-2009	16:55	10-604.sub	RE03-09-13862	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110423.d	241540015	04-DEC-2009	17:18	10-604.sub	RE03-09-13876	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110424.d	241540016	04-DEC-2009	17:42	10-604.sub	RE03-09-13872	10	926610	REPORT
■	N	/chem/MSD1.i/s120409.b/s110425.d	241540005	04-DEC-2009	18:05	10-604.sub	RE03-09-13864	10	926610	DUSE-RR neat s110711
■	N	/chem/MSD1.i/s120409.b/s110425.d	241540015	04-DEC-2009	18:05	all.sub	RE03-09-13876	10	926610	DUSE-RR neat s110711
☐	N	/chem/MSD1.i/s120409.b/s110426.d	241540009	04-DEC-2009	18:28	10-604.sub	RE03-09-13870	10	926610	REPORT
■	N	/chem/MSD1.i/s120509.b/s110519.d	241540005	05-DEC-2009	18:02	10-604.sub	RE03-09-13864	1	926610	DUSE-wrong sample was run.
☐	N	/chem/MSD1.i/s120709.b/s110710.d	241540007	07-DEC-2009	12:48	10-604.sub	RE03-09-13877	1	926610	REPORT
☐	N	/chem/MSD1.i/s120709.b/s110711.d	241540005	07-DEC-2009	13:12	10-604.sub	RE03-09-13864	1	926610	REPORT

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s120409.b/s110408.d	1201981197	mb	04-DEC-2009	11:32	10-604.sub	SBLK01	1	926610	REPORT

☐	N	/chem/MSD1.i/s120409.b/s110409.d	1201981200	lcs	04-DEC-2009	11:56	10-604.sub	SBLK01LCS	1	926610	REPORT
☐	N	/chem/MSD1.i/s120409.b/s110415.d	1201981198	ms	04-DEC-2009	14:14	10-604.sub	RE03-09-13867MS	1	926610	REPORT-c. 16 low, MSD confirms
☐	N	/chem/MSD1.i/s120409.b/s110416.d	1201981199	msd	04-DEC-2009	14:37	10-604.sub	RE03-09-13867MSD	1	926610	REPORT-c. 16 low, MSD confirms

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13862	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:55	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s1l0422.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	383	ug/kg	76.7	383
108-95-2	Phenol	U	383	ug/kg	76.7	383
95-57-8	2-Chlorophenol	U	383	ug/kg	76.7	383
106-46-7	1,4-Dichlorobenzene	U	383	ug/kg	76.7	383
621-64-7	N-Nitrosodipropylamine	U	383	ug/kg	76.7	383
59-50-7	4-Chloro-3-methylphenol	U	383	ug/kg	76.7	383
83-32-9	Acenaphthene	U	38.3	ug/kg	12.7	38.3
121-14-2	2,4-Dinitrotoluene	U	383	ug/kg	38.3	383
100-02-7	4-Nitrophenol	U	383	ug/kg	127	383
87-86-5	Pentachlorophenol	U	383	ug/kg	95.8	383
129-00-0	Pyrene		93.8	ug/kg	11.5	38.3
110-86-1	Pyridine	U	383	ug/kg	76.7	383
62-53-3	Aniline	U	383	ug/kg	115	383
111-44-4	bis(2-Chloroethyl) ether	U	383	ug/kg	76.7	383
541-73-1	1,3-Dichlorobenzene	U	383	ug/kg	76.7	383
100-51-6	Benzyl alcohol	U	383	ug/kg	115	383
95-50-1	1,2-Dichlorobenzene	U	383	ug/kg	76.7	383
108-60-1	bis(2-Chloroisopropyl)ether	U	383	ug/kg	76.7	383
95-48-7	o-Cresol	U	383	ug/kg	76.7	383
65794-96-9	m,p-Cresols	U	383	ug/kg	115	383
67-72-1	Hexachloroethane	U	383	ug/kg	76.7	383
98-95-3	Nitrobenzene	U	383	ug/kg	76.7	383
78-59-1	Isophorone	U	383	ug/kg	76.7	383
88-75-5	2-Nitrophenol	U	383	ug/kg	76.7	383
105-67-9	2,4-Dimethylphenol	U	383	ug/kg	134	383
111-91-1	bis(2-Chloroethoxy)methane	U	383	ug/kg	76.7	383
120-83-2	2,4-Dichlorophenol	U	383	ug/kg	76.7	383
65-85-0	Benzoic acid	U	767	ug/kg	192	767
91-20-3	Naphthalene	U	38.3	ug/kg	11.5	38.3
106-47-8	4-Chloroaniline	U	383	ug/kg	76.7	383
87-68-3	Hexachlorobutadiene	U	383	ug/kg	76.7	383
91-57-6	2-Methylnaphthalene	U	38.3	ug/kg	7.67	38.3
77-47-4	Hexachlorocyclopentadiene	U	383	ug/kg	76.7	383
88-06-2	2,4,6-Trichlorophenol	U	383	ug/kg	76.7	383
95-95-4	2,4,5-Trichlorophenol	U	383	ug/kg	76.7	383
91-58-7	2-Chloronaphthalene	U	38.3	ug/kg	12.7	38.3
88-74-4	2-Nitroaniline	U	383	ug/kg	76.7	383
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	383	ug/kg	76.7	383

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540014**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13862**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:55**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s110422.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	383	ug/kg	76.7	383
606-20-2	2,6-Dinitrotoluene	U	383	ug/kg	38.3	383
208-96-8	Acenaphthylene	U	38.3	ug/kg	11.5	38.3
51-28-5	2,4-Dinitrophenol	U	767	ug/kg	146	767
132-64-9	Dibenzofuran	U	383	ug/kg	76.7	383
84-66-2	Diethylphthalate	U	383	ug/kg	76.7	383
86-73-7	Fluorene	U	38.3	ug/kg	11.5	38.3
7005-72-3	4-Chlorophenylphenylether	U	383	ug/kg	76.7	383
534-52-1	2-Methyl-4,6-dinitrophenol	U	383	ug/kg	76.7	383
100-01-6	4-Nitroaniline	U	383	ug/kg	115	383
	p-Nitroaniline					
122-39-4	Diphenylamine	U	383	ug/kg	76.7	383
122-66-7	Azobenzene	U	383	ug/kg	76.7	383
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	383	ug/kg	76.7	383
118-74-1	Hexachlorobenzene	U	383	ug/kg	76.7	383
85-01-8	Phenanthrene		65.0	ug/kg	11.5	38.3
120-12-7	Anthracene	J	9.98	ug/kg	7.67	38.3
84-74-2	Di-n-butylphthalate	U	383	ug/kg	76.7	383
206-44-0	Fluoranthene		115	ug/kg	11.5	38.3
85-68-7	Butylbenzylphthalate	U	383	ug/kg	76.7	383
56-55-3	Benzo(a)anthracene		46.8	ug/kg	11.5	38.3
91-94-1	3,3'-Dichlorobenzidine	U	383	ug/kg	115	383
218-01-9	Chrysene		66.0	ug/kg	11.5	38.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	383	ug/kg	76.7	383
117-84-0	Di-n-octylphthalate	U	383	ug/kg	76.7	383
205-99-2	Benzo(b)fluoranthene		179	ug/kg	11.5	38.3
207-08-9	Benzo(k)fluoranthene	U	38.3	ug/kg	11.5	38.3
50-32-8	Benzo(a)pyrene	J	38.1	ug/kg	11.5	38.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.3	ug/kg	11.5	38.3
53-70-3	Dibenzo(a,h)anthracene	U	38.3	ug/kg	11.5	38.3
191-24-2	Benzo(ghi)perylene	J	29.3	ug/kg	11.5	38.3
120-82-1	1,2,4-Trichlorobenzene	U	383	ug/kg	76.7	383

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	596	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	276	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:55	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-84-5	13-Docosenamide, (Z)-	9.19	188	ug/kg	95	NJ
112-95-8	Eicosane	10.32	191	ug/kg	98	NJ
	Unknown	11.76	241	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13863	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 15:46	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s1l0419.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.9	364
108-95-2	Phenol	U	364	ug/kg	72.9	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364
129-00-0	Pyrene	J	13.2	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.9	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.9	364
95-48-7	o-Cresol	U	364	ug/kg	72.9	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364
78-59-1	Isophorone	U	364	ug/kg	72.9	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.9	364
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	364	ug/kg	72.9	364

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:46	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	364	ug/kg	72.9	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	p-Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364
122-66-7	Azobenzene	U	364	ug/kg	72.9	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364
206-44-0	Fluoranthene	J	12.7	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364
205-99-2	Benzo(b)fluoranthene		106	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	590	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.15	286	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:46	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.19	181	ug/kg		J
	Unknown	10.17	672	ug/kg		J
	Unknown	10.87	866	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/07/2009 13:12	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s1l0711.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	73.0	365
108-95-2	Phenol	U	365	ug/kg	73.0	365
95-57-8	2-Chlorophenol	U	365	ug/kg	73.0	365
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	73.0	365
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	73.0	365
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	73.0	365
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365
87-86-5	Pentachlorophenol	U	365	ug/kg	91.3	365
129-00-0	Pyrene	U	36.5	ug/kg	11.0	36.5
110-86-1	Pyridine	U	365	ug/kg	73.0	365
62-53-3	Aniline	U	365	ug/kg	110	365
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	73.0	365
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	73.0	365
100-51-6	Benzyl alcohol	U	365	ug/kg	110	365
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	73.0	365
108-60-1	bis(2-Chloroisopropyl)ether	U	365	ug/kg	73.0	365
95-48-7	o-Cresol	U	365	ug/kg	73.0	365
65794-96-9	m,p-Cresols	U	365	ug/kg	110	365
67-72-1	Hexachloroethane	U	365	ug/kg	73.0	365
98-95-3	Nitrobenzene	U	365	ug/kg	73.0	365
78-59-1	Isophorone	U	365	ug/kg	73.0	365
88-75-5	2-Nitrophenol	U	365	ug/kg	73.0	365
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	73.0	365
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	73.0	365
65-85-0	Benzoic acid	U	730	ug/kg	183	730
91-20-3	Naphthalene	U	36.5	ug/kg	11.0	36.5
106-47-8	4-Chloroaniline	U	365	ug/kg	73.0	365
87-68-3	Hexachlorobutadiene	U	365	ug/kg	73.0	365
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.30	36.5
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	73.0	365
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	73.0	365
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	73.0	365
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5
88-74-4	2-Nitroaniline	U	365	ug/kg	73.0	365
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	365	ug/kg	73.0	365

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/07/2009 13:12	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s1l0711.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	365	ug/kg	73.0	365
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365
208-96-8	Acenaphthylene	U	36.5	ug/kg	11.0	36.5
51-28-5	2,4-Dinitrophenol	U	730	ug/kg	139	730
132-64-9	Dibenzofuran	U	365	ug/kg	73.0	365
84-66-2	Diethylphthalate	U	365	ug/kg	73.0	365
86-73-7	Fluorene	U	36.5	ug/kg	11.0	36.5
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	73.0	365
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	73.0	365
100-01-6	4-Nitroaniline	U	365	ug/kg	110	365
	p-Nitroaniline					
122-39-4	Diphenylamine	U	365	ug/kg	73.0	365
122-66-7	Azobenzene	U	365	ug/kg	73.0	365
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	73.0	365
118-74-1	Hexachlorobenzene	U	365	ug/kg	73.0	365
85-01-8	Phenanthrene	U	36.5	ug/kg	11.0	36.5
120-12-7	Anthracene	U	36.5	ug/kg	7.30	36.5
84-74-2	Di-n-butylphthalate	U	365	ug/kg	73.0	365
206-44-0	Fluoranthene	U	36.5	ug/kg	11.0	36.5
85-68-7	Butylbenzylphthalate	U	365	ug/kg	73.0	365
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	11.0	36.5
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	110	365
218-01-9	Chrysene	U	36.5	ug/kg	11.0	36.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	73.0	365
117-84-0	Di-n-octylphthalate	U	365	ug/kg	73.0	365
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	11.0	36.5
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	11.0	36.5
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	11.0	36.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	11.0	36.5
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	11.0	36.5
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	11.0	36.5
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	73.0	365

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.8	412	ug/kg		JA
	Unknown	6.1	216	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/07/2009 13:12	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s1l0711.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	6.78	22.7	ug/kg		J
57-10-3	n-Hexadecanoic acid	7.12	45.8	ug/kg	99	NJ
74685-33-9	3-Eicosene, (E)-	7.53	19.8	ug/kg	84	NJ
	Unknown	7.6	22.5	ug/kg		J
1120-16-7	Dodecanamide	7.64	21.2	ug/kg	89	NJ
301-02-0	9-Octadecenamide, (Z)-	8.02	316	ug/kg	95	NJ
	Unknown	9.01	152	ug/kg		J
	Unknown	10.11	1150	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13865**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:41**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	385	ug/kg	77.0	385
108-95-2	Phenol	U	385	ug/kg	77.0	385
95-57-8	2-Chlorophenol	U	385	ug/kg	77.0	385
106-46-7	1,4-Dichlorobenzene	U	385	ug/kg	77.0	385
621-64-7	N-Nitrosodipropylamine	U	385	ug/kg	77.0	385
59-50-7	4-Chloro-3-methylphenol	U	385	ug/kg	77.0	385
83-32-9	Acenaphthene	U	38.5	ug/kg	12.7	38.5
121-14-2	2,4-Dinitrotoluene	U	385	ug/kg	38.5	385
100-02-7	4-Nitrophenol	U	385	ug/kg	127	385
87-86-5	Pentachlorophenol	U	385	ug/kg	96.3	385
129-00-0	Pyrene	U	38.5	ug/kg	11.6	38.5
110-86-1	Pyridine	U	385	ug/kg	77.0	385
62-53-3	Aniline	U	385	ug/kg	116	385
111-44-4	bis(2-Chloroethyl) ether	U	385	ug/kg	77.0	385
541-73-1	1,3-Dichlorobenzene	U	385	ug/kg	77.0	385
100-51-6	Benzyl alcohol	U	385	ug/kg	116	385
95-50-1	1,2-Dichlorobenzene	U	385	ug/kg	77.0	385
108-60-1	bis(2-Chloroisopropyl)ether	U	385	ug/kg	77.0	385
95-48-7	o-Cresol	U	385	ug/kg	77.0	385
65794-96-9	m,p-Cresols	U	385	ug/kg	116	385
67-72-1	Hexachloroethane	U	385	ug/kg	77.0	385
98-95-3	Nitrobenzene	U	385	ug/kg	77.0	385
78-59-1	Isophorone	U	385	ug/kg	77.0	385
88-75-5	2-Nitrophenol	U	385	ug/kg	77.0	385
105-67-9	2,4-Dimethylphenol	U	385	ug/kg	135	385
111-91-1	bis(2-Chloroethoxy)methane	U	385	ug/kg	77.0	385
120-83-2	2,4-Dichlorophenol	U	385	ug/kg	77.0	385
65-85-0	Benzoic acid	U	770	ug/kg	193	770
91-20-3	Naphthalene	U	38.5	ug/kg	11.6	38.5
106-47-8	4-Chloroaniline	U	385	ug/kg	77.0	385
87-68-3	Hexachlorobutadiene	U	385	ug/kg	77.0	385
91-57-6	2-Methylnaphthalene	U	38.5	ug/kg	7.70	38.5
77-47-4	Hexachlorocyclopentadiene	U	385	ug/kg	77.0	385
88-06-2	2,4,6-Trichlorophenol	U	385	ug/kg	77.0	385
95-95-4	2,4,5-Trichlorophenol	U	385	ug/kg	77.0	385
91-58-7	2-Chloronaphthalene	U	38.5	ug/kg	12.7	38.5
88-74-4	2-Nitroaniline	U	385	ug/kg	77.0	385
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	385	ug/kg	77.0	385

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:41	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s1l0411.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	385	ug/kg	77.0	385
606-20-2	2,6-Dinitrotoluene	U	385	ug/kg	38.5	385
208-96-8	Acenaphthylene	U	38.5	ug/kg	11.6	38.5
51-28-5	2,4-Dinitrophenol	U	770	ug/kg	146	770
132-64-9	Dibenzofuran	U	385	ug/kg	77.0	385
84-66-2	Diethylphthalate	U	385	ug/kg	77.0	385
86-73-7	Fluorene	U	38.5	ug/kg	11.6	38.5
7005-72-3	4-Chlorophenylphenylether	U	385	ug/kg	77.0	385
534-52-1	2-Methyl-4,6-dinitrophenol	U	385	ug/kg	77.0	385
100-01-6	4-Nitroaniline	U	385	ug/kg	116	385
	p-Nitroaniline					
122-39-4	Diphenylamine	U	385	ug/kg	77.0	385
122-66-7	Azobenzene	U	385	ug/kg	77.0	385
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	385	ug/kg	77.0	385
118-74-1	Hexachlorobenzene	U	385	ug/kg	77.0	385
85-01-8	Phenanthrene	U	38.5	ug/kg	11.6	38.5
120-12-7	Anthracene	U	38.5	ug/kg	7.70	38.5
84-74-2	Di-n-butylphthalate	U	385	ug/kg	77.0	385
206-44-0	Fluoranthene	U	38.5	ug/kg	11.6	38.5
85-68-7	Butylbenzylphthalate	U	385	ug/kg	77.0	385
56-55-3	Benzo(a)anthracene	U	38.5	ug/kg	11.6	38.5
91-94-1	3,3'-Dichlorobenzidine	U	385	ug/kg	116	385
218-01-9	Chrysene	U	38.5	ug/kg	11.6	38.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	385	ug/kg	77.0	385
117-84-0	Di-n-octylphthalate	U	385	ug/kg	77.0	385
205-99-2	Benzo(b)fluoranthene	U	38.5	ug/kg	11.6	38.5
207-08-9	Benzo(k)fluoranthene	U	38.5	ug/kg	11.6	38.5
50-32-8	Benzo(a)pyrene	U	38.5	ug/kg	11.6	38.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.5	ug/kg	11.6	38.5
53-70-3	Dibenzo(a,h)anthracene	U	38.5	ug/kg	11.6	38.5
191-24-2	Benzo(ghi)perylene	U	38.5	ug/kg	11.6	38.5
120-82-1	1,2,4-Trichlorobenzene	U	385	ug/kg	77.0	385

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	474	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	213	ug/kg	93	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:41	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110411.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.77	412	ug/kg		J
	Unknown	11.96	172	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13866	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:33	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.5	388
108-95-2	Phenol	U	388	ug/kg	77.5	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.5	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.5	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.5	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.5	388
83-32-9	Acenaphthene		61.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	96.9	388
129-00-0	Pyrene		415	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.5	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.5	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.5	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.5	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.5	388
95-48-7	o-Cresol	U	388	ug/kg	77.5	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.5	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.5	388
78-59-1	Isophorone	U	388	ug/kg	77.5	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.5	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.5	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.5	388
65-85-0	Benzoic acid	U	775	ug/kg	194	775
91-20-3	Naphthalene	J	30.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.5	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.5	388
91-57-6	2-Methylnaphthalene	J	13.2	ug/kg	7.75	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.5	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.5	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.5	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.5	388
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	388	ug/kg	77.5	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540013**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13866**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:33**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110421.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.5	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	775	ug/kg	147	775
132-64-9	Dibenzofuran	U	388	ug/kg	77.5	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.5	388
86-73-7	Fluorene		56.6	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.5	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.5	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.5	388
122-66-7	Azobenzene	U	388	ug/kg	77.5	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.5	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.5	388
85-01-8	Phenanthrene		411	ug/kg	11.6	38.8
120-12-7	Anthracene		108	ug/kg	7.75	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.5	388
206-44-0	Fluoranthene		513	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.5	388
56-55-3	Benzo(a)anthracene		193	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene		208	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.5	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.5	388
205-99-2	Benzo(b)fluoranthene		352	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene		169	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene		84.3	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene		114	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.5	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.75	215	ug/kg		J
	Unknown Aldol Condensate	2.92	632	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13866	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:33	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
559-74-0	Friedelan-3-one	8.45	179	ug/kg	84	NJ
112-95-8	Eicosane	10.32	200	ug/kg	98	NJ
	Unknown	10.83	232	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13867	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110413.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	76.0	380
108-95-2	Phenol	U	380	ug/kg	76.0	380
95-57-8	2-Chlorophenol	U	380	ug/kg	76.0	380
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	76.0	380
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	76.0	380
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	76.0	380
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380
87-86-5	Pentachlorophenol	U	380	ug/kg	95.1	380
129-00-0	Pyrene		66.9	ug/kg	11.4	38.0
110-86-1	Pyridine	U	380	ug/kg	76.0	380
62-53-3	Aniline	U	380	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	76.0	380
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	76.0	380
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	76.0	380
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	76.0	380
95-48-7	o-Cresol	U	380	ug/kg	76.0	380
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380
67-72-1	Hexachloroethane	U	380	ug/kg	76.0	380
98-95-3	Nitrobenzene	U	380	ug/kg	76.0	380
78-59-1	Isophorone	U	380	ug/kg	76.0	380
88-75-5	2-Nitrophenol	U	380	ug/kg	76.0	380
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	76.0	380
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	76.0	380
65-85-0	Benzoic acid	U	760	ug/kg	190	760
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline	U	380	ug/kg	76.0	380
87-68-3	Hexachlorobutadiene	U	380	ug/kg	76.0	380
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.60	38.0
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	76.0	380
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	76.0	380
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	76.0	380
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline	U	380	ug/kg	76.0	380
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	380	ug/kg	76.0	380

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13867**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 13:27**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110413.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	380	ug/kg	76.0	380
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	U	760	ug/kg	144	760
132-64-9	Dibenzofuran	U	380	ug/kg	76.0	380
84-66-2	Diethylphthalate	U	380	ug/kg	76.0	380
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	76.0	380
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	76.0	380
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380
	p-Nitroaniline					
122-39-4	Diphenylamine	U	380	ug/kg	76.0	380
122-66-7	Azobenzene	U	380	ug/kg	76.0	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	76.0	380
118-74-1	Hexachlorobenzene	U	380	ug/kg	76.0	380
85-01-8	Phenanthrene		49.3	ug/kg	11.4	38.0
120-12-7	Anthracene	J	11.3	ug/kg	7.60	38.0
84-74-2	Di-n-butylphthalate	U	380	ug/kg	76.0	380
206-44-0	Fluoranthene		75.6	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate	U	380	ug/kg	76.0	380
56-55-3	Benzo(a)anthracene	J	34.7	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380
218-01-9	Chrysene	J	31.8	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	380	ug/kg	76.0	380
117-84-0	Di-n-octylphthalate	U	380	ug/kg	76.0	380
205-99-2	Benzo(b)fluoranthene		141	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene	J	21.5	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene	J	18.4	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	76.0	380

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
75-09-2	Methylene Chloride	1.71	7370	ug/kg	91	NJ
75-09-2	Methylene Chloride	1.76	20300	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13867	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110413.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1000132-10-9	5,9-Dodecadien-2-one, 6,10-dimethyl-, (E	1.79	175	ug/kg	53	NJ
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.92	625	ug/kg	56	NJ
301-02-0	9-Octadecenamide, (Z)-	8.14	199	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540003	Date Received:	11/20/2009 08:50	%Moisture:	11.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13868	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 13:04	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s110412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.1	375
108-95-2	Phenol	U	375	ug/kg	75.1	375
95-57-8	2-Chlorophenol	U	375	ug/kg	75.1	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.1	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.1	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.1	375
83-32-9	Acenaphthene	J	29.8	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.9	375
129-00-0	Pyrene		339	ug/kg	11.3	37.5
110-86-1	Pyridine	U	375	ug/kg	75.1	375
62-53-3	Aniline	U	375	ug/kg	113	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.1	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.1	375
100-51-6	Benzyl alcohol	U	375	ug/kg	113	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.1	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.1	375
95-48-7	o-Cresol	U	375	ug/kg	75.1	375
65794-96-9	m,p-Cresols	U	375	ug/kg	113	375
67-72-1	Hexachloroethane	U	375	ug/kg	75.1	375
98-95-3	Nitrobenzene	U	375	ug/kg	75.1	375
78-59-1	Isophorone	U	375	ug/kg	75.1	375
88-75-5	2-Nitrophenol	U	375	ug/kg	75.1	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.1	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.1	375
65-85-0	Benzoic acid	U	751	ug/kg	188	751
91-20-3	Naphthalene	U	37.5	ug/kg	11.3	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	75.1	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.1	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.51	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.1	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.1	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.1	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	75.1	375
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	375	ug/kg	75.1	375

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:04	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110412.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	375	ug/kg	75.1	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.3	37.5
51-28-5	2,4-Dinitrophenol	U	751	ug/kg	143	751
132-64-9	Dibenzofuran	U	375	ug/kg	75.1	375
84-66-2	Diethylphthalate	U	375	ug/kg	75.1	375
86-73-7	Fluorene	J	26.2	ug/kg	11.3	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.1	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.1	375
100-01-6	4-Nitroaniline	U	375	ug/kg	113	375
	p-Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	75.1	375
122-66-7	Azobenzene	U	375	ug/kg	75.1	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.1	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.1	375
85-01-8	Phenanthrene		247	ug/kg	11.3	37.5
120-12-7	Anthracene		56.8	ug/kg	7.51	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.1	375
206-44-0	Fluoranthene		408	ug/kg	11.3	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.1	375
56-55-3	Benzo(a)anthracene		156	ug/kg	11.3	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	113	375
218-01-9	Chrysene		187	ug/kg	11.3	37.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.1	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.1	375
205-99-2	Benzo(b)fluoranthene		335	ug/kg	11.3	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.3	37.5
50-32-8	Benzo(a)pyrene		143	ug/kg	11.3	37.5
193-39-5	Indeno(1,2,3-cd)pyrene		71.5	ug/kg	11.3	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.3	37.5
191-24-2	Benzo(ghi)perylene		107	ug/kg	11.3	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.1	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	257	ug/kg		J
	Unknown Aldol Condensate	2.92	462	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:04	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110412.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	10.33	191	ug/kg	98	NJ
	Unknown	11.77	187	ug/kg		J
	Unknown	12.44	158	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:00	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s1l0417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.1	400
108-95-2	Phenol	U	400	ug/kg	80.1	400
95-57-8	2-Chlorophenol	U	400	ug/kg	80.1	400
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.1	400
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.1	400
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.1	400
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0
110-86-1	Pyridine	U	400	ug/kg	80.1	400
62-53-3	Aniline	U	400	ug/kg	120	400
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.1	400
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.1	400
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.1	400
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.1	400
95-48-7	o-Cresol	U	400	ug/kg	80.1	400
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400
67-72-1	Hexachloroethane	U	400	ug/kg	80.1	400
98-95-3	Nitrobenzene	U	400	ug/kg	80.1	400
78-59-1	Isophorone	U	400	ug/kg	80.1	400
88-75-5	2-Nitrophenol	U	400	ug/kg	80.1	400
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.1	400
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.1	400
65-85-0	Benzoic acid	U	801	ug/kg	200	801
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0
106-47-8	4-Chloroaniline	U	400	ug/kg	80.1	400
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.1	400
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.01	40.0
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.1	400
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.1	400
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.1	400
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0
88-74-4	2-Nitroaniline	U	400	ug/kg	80.1	400
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	400	ug/kg	80.1	400

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540008**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13869**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:00**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	400	ug/kg	80.1	400
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0
51-28-5	2,4-Dinitrophenol	U	801	ug/kg	152	801
132-64-9	Dibenzofuran	U	400	ug/kg	80.1	400
84-66-2	Diethylphthalate	U	400	ug/kg	80.1	400
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.1	400
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.1	400
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400
	p-Nitroaniline					
122-39-4	Diphenylamine	U	400	ug/kg	80.1	400
122-66-7	Azobenzene	U	400	ug/kg	80.1	400
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.1	400
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.1	400
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0
120-12-7	Anthracene	U	40.0	ug/kg	8.01	40.0
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.1	400
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.1	400
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.1	400
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.1	400
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.1	400

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	250	ug/kg		J
	Unknown Aldol Condensate	2.92	582	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:00	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.14	253	ug/kg	98	NJ
1000140-07-7	1,4-Dimethyl-8-isopropylidenetricyclo[5.	11.76	715	ug/kg	80	NJ
	Unknown	11.95	241	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	10
Run Date:	12/04/2009 18:28	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	3860	ug/kg	771	3860
108-95-2	Phenol	U	3860	ug/kg	771	3860
95-57-8	2-Chlorophenol	U	3860	ug/kg	771	3860
106-46-7	1,4-Dichlorobenzene	U	3860	ug/kg	771	3860
621-64-7	N-Nitrosodipropylamine	U	3860	ug/kg	771	3860
59-50-7	4-Chloro-3-methylphenol	U	3860	ug/kg	771	3860
83-32-9	Acenaphthene		539	ug/kg	127	386
121-14-2	2,4-Dinitrotoluene	U	3860	ug/kg	386	3860
100-02-7	4-Nitrophenol	U	3860	ug/kg	1270	3860
87-86-5	Pentachlorophenol	U	3860	ug/kg	964	3860
129-00-0	Pyrene		5560	ug/kg	116	386
110-86-1	Pyridine	U	3860	ug/kg	771	3860
62-53-3	Aniline	U	3860	ug/kg	1160	3860
111-44-4	bis(2-Chloroethyl) ether	U	3860	ug/kg	771	3860
541-73-1	1,3-Dichlorobenzene	U	3860	ug/kg	771	3860
100-51-6	Benzyl alcohol	U	3860	ug/kg	1160	3860
95-50-1	1,2-Dichlorobenzene	U	3860	ug/kg	771	3860
108-60-1	bis(2-Chloroisopropyl)ether	U	3860	ug/kg	771	3860
95-48-7	o-Cresol	U	3860	ug/kg	771	3860
65794-96-9	m,p-Cresols	U	3860	ug/kg	1160	3860
67-72-1	Hexachloroethane	U	3860	ug/kg	771	3860
98-95-3	Nitrobenzene	U	3860	ug/kg	771	3860
78-59-1	Isophorone	U	3860	ug/kg	771	3860
88-75-5	2-Nitrophenol	U	3860	ug/kg	771	3860
105-67-9	2,4-Dimethylphenol	U	3860	ug/kg	1350	3860
111-91-1	bis(2-Chloroethoxy)methane	U	3860	ug/kg	771	3860
120-83-2	2,4-Dichlorophenol	U	3860	ug/kg	771	3860
65-85-0	Benzoic acid	U	7710	ug/kg	1930	7710
91-20-3	Naphthalene	J	344	ug/kg	116	386
106-47-8	4-Chloroaniline	U	3860	ug/kg	771	3860
87-68-3	Hexachlorobutadiene	U	3860	ug/kg	771	3860
91-57-6	2-Methylnaphthalene	J	111	ug/kg	77.1	386
77-47-4	Hexachlorocyclopentadiene	U	3860	ug/kg	771	3860
88-06-2	2,4,6-Trichlorophenol	U	3860	ug/kg	771	3860
95-95-4	2,4,5-Trichlorophenol	U	3860	ug/kg	771	3860
91-58-7	2-Chloronaphthalene	U	386	ug/kg	127	386
88-74-4	2-Nitroaniline	U	3860	ug/kg	771	3860
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	3860	ug/kg	771	3860

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	10
Run Date:	12/04/2009 18:28	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	3860	ug/kg	771	3860
606-20-2	2,6-Dinitrotoluene	U	3860	ug/kg	386	3860
208-96-8	Acenaphthylene	U	386	ug/kg	116	386
51-28-5	2,4-Dinitrophenol	U	7710	ug/kg	1470	7710
132-64-9	Dibenzofuran	U	3860	ug/kg	771	3860
84-66-2	Diethylphthalate	U	3860	ug/kg	771	3860
86-73-7	Fluorene		508	ug/kg	116	386
7005-72-3	4-Chlorophenylphenylether	U	3860	ug/kg	771	3860
534-52-1	2-Methyl-4,6-dinitrophenol	U	3860	ug/kg	771	3860
100-01-6	4-Nitroaniline	U	3860	ug/kg	1160	3860
	p-Nitroaniline					
122-39-4	Diphenylamine	U	3860	ug/kg	771	3860
122-66-7	Azobenzene	U	3860	ug/kg	771	3860
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	3860	ug/kg	771	3860
118-74-1	Hexachlorobenzene	U	3860	ug/kg	771	3860
85-01-8	Phenanthrene		4550	ug/kg	116	386
120-12-7	Anthracene		892	ug/kg	77.1	386
84-74-2	Di-n-butylphthalate	U	3860	ug/kg	771	3860
206-44-0	Fluoranthene		6750	ug/kg	116	386
85-68-7	Butylbenzylphthalate	U	3860	ug/kg	771	3860
56-55-3	Benzo(a)anthracene		2610	ug/kg	116	386
91-94-1	3,3'-Dichlorobenzidine	U	3860	ug/kg	1160	3860
218-01-9	Chrysene		2850	ug/kg	116	386
117-81-7	bis(2-Ethylhexyl)phthalate	U	3860	ug/kg	771	3860
117-84-0	Di-n-octylphthalate	U	3860	ug/kg	771	3860
205-99-2	Benzo(b)fluoranthene		4790	ug/kg	116	386
207-08-9	Benzo(k)fluoranthene	U	386	ug/kg	116	386
50-32-8	Benzo(a)pyrene		2360	ug/kg	116	386
193-39-5	Indeno(1,2,3-cd)pyrene		1220	ug/kg	116	386
53-70-3	Dibenzo(a,h)anthracene	U	386	ug/kg	116	386
191-24-2	Benzo(ghi)perylene		1580	ug/kg	116	386
120-82-1	1,2,4-Trichlorobenzene	U	3860	ug/kg	771	3860

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:50	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110414.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	398	ug/kg	79.5	398
108-95-2	Phenol	U	398	ug/kg	79.5	398
95-57-8	2-Chlorophenol	U	398	ug/kg	79.5	398
106-46-7	1,4-Dichlorobenzene	U	398	ug/kg	79.5	398
621-64-7	N-Nitrosodipropylamine	U	398	ug/kg	79.5	398
59-50-7	4-Chloro-3-methylphenol	U	398	ug/kg	79.5	398
83-32-9	Acenaphthene	J	24.9	ug/kg	13.1	39.8
121-14-2	2,4-Dinitrotoluene	U	398	ug/kg	39.8	398
100-02-7	4-Nitrophenol	U	398	ug/kg	131	398
87-86-5	Pentachlorophenol	U	398	ug/kg	99.4	398
129-00-0	Pyrene		200	ug/kg	11.9	39.8
110-86-1	Pyridine	U	398	ug/kg	79.5	398
62-53-3	Aniline	U	398	ug/kg	119	398
111-44-4	bis(2-Chloroethyl) ether	U	398	ug/kg	79.5	398
541-73-1	1,3-Dichlorobenzene	U	398	ug/kg	79.5	398
100-51-6	Benzyl alcohol	U	398	ug/kg	119	398
95-50-1	1,2-Dichlorobenzene	U	398	ug/kg	79.5	398
108-60-1	bis(2-Chloroisopropyl)ether	U	398	ug/kg	79.5	398
95-48-7	o-Cresol	U	398	ug/kg	79.5	398
65794-96-9	m,p-Cresols	U	398	ug/kg	119	398
67-72-1	Hexachloroethane	U	398	ug/kg	79.5	398
98-95-3	Nitrobenzene	U	398	ug/kg	79.5	398
78-59-1	Isophorone	U	398	ug/kg	79.5	398
88-75-5	2-Nitrophenol	U	398	ug/kg	79.5	398
105-67-9	2,4-Dimethylphenol	U	398	ug/kg	139	398
111-91-1	bis(2-Chloroethoxy)methane	U	398	ug/kg	79.5	398
120-83-2	2,4-Dichlorophenol	U	398	ug/kg	79.5	398
65-85-0	Benzoic acid	U	795	ug/kg	199	795
91-20-3	Naphthalene	J	17.4	ug/kg	11.9	39.8
106-47-8	4-Chloroaniline	U	398	ug/kg	79.5	398
87-68-3	Hexachlorobutadiene	U	398	ug/kg	79.5	398
91-57-6	2-Methylnaphthalene	U	39.8	ug/kg	7.95	39.8
77-47-4	Hexachlorocyclopentadiene	U	398	ug/kg	79.5	398
88-06-2	2,4,6-Trichlorophenol	U	398	ug/kg	79.5	398
95-95-4	2,4,5-Trichlorophenol	U	398	ug/kg	79.5	398
91-58-7	2-Chloronaphthalene	U	39.8	ug/kg	13.1	39.8
88-74-4	2-Nitroaniline	U	398	ug/kg	79.5	398
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	398	ug/kg	79.5	398

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:50	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110414.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	398	ug/kg	79.5	398
606-20-2	2,6-Dinitrotoluene	U	398	ug/kg	39.8	398
208-96-8	Acenaphthylene	U	39.8	ug/kg	11.9	39.8
51-28-5	2,4-Dinitrophenol	U	795	ug/kg	151	795
132-64-9	Dibenzofuran	U	398	ug/kg	79.5	398
84-66-2	Diethylphthalate	U	398	ug/kg	79.5	398
86-73-7	Fluorene	J	22.2	ug/kg	11.9	39.8
7005-72-3	4-Chlorophenylphenylether	U	398	ug/kg	79.5	398
534-52-1	2-Methyl-4,6-dinitrophenol	U	398	ug/kg	79.5	398
100-01-6	4-Nitroaniline	U	398	ug/kg	119	398
	p-Nitroaniline					
122-39-4	Diphenylamine	U	398	ug/kg	79.5	398
122-66-7	Azobenzene	U	398	ug/kg	79.5	398
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	398	ug/kg	79.5	398
118-74-1	Hexachlorobenzene	U	398	ug/kg	79.5	398
85-01-8	Phenanthrene		187	ug/kg	11.9	39.8
120-12-7	Anthracene		40.2	ug/kg	7.95	39.8
84-74-2	Di-n-butylphthalate	U	398	ug/kg	79.5	398
206-44-0	Fluoranthene		230	ug/kg	11.9	39.8
85-68-7	Butylbenzylphthalate	U	398	ug/kg	79.5	398
56-55-3	Benzo(a)anthracene		84.4	ug/kg	11.9	39.8
91-94-1	3,3'-Dichlorobenzidine	U	398	ug/kg	119	398
218-01-9	Chrysene		90.7	ug/kg	11.9	39.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	398	ug/kg	79.5	398
117-84-0	Di-n-octylphthalate	U	398	ug/kg	79.5	398
205-99-2	Benzo(b)fluoranthene		229	ug/kg	11.9	39.8
207-08-9	Benzo(k)fluoranthene	U	39.8	ug/kg	11.9	39.8
50-32-8	Benzo(a)pyrene		78.9	ug/kg	11.9	39.8
193-39-5	Indeno(1,2,3-cd)pyrene	J	35.4	ug/kg	11.9	39.8
53-70-3	Dibenzo(a,h)anthracene	U	39.8	ug/kg	11.9	39.8
191-24-2	Benzo(ghi)perylene		66.7	ug/kg	11.9	39.8
120-82-1	1,2,4-Trichlorobenzene	U	398	ug/kg	79.5	398

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	473	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	288	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540006**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13871**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 13:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s110414.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-84-5	13-Docosenamide, (Z)-	9.19	192	ug/kg	86	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540016**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13872**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**10**
Run Date:	**12/04/2009 17:42**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110424.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	3680	ug/kg	736	3680
108-95-2	Phenol	U	3680	ug/kg	736	3680
95-57-8	2-Chlorophenol	U	3680	ug/kg	736	3680
106-46-7	1,4-Dichlorobenzene	U	3680	ug/kg	736	3680
621-64-7	N-Nitrosodipropylamine	U	3680	ug/kg	736	3680
59-50-7	4-Chloro-3-methylphenol	U	3680	ug/kg	736	3680
83-32-9	Acenaphthene	U	368	ug/kg	121	368
121-14-2	2,4-Dinitrotoluene	U	3680	ug/kg	368	3680
100-02-7	4-Nitrophenol	U	3680	ug/kg	1210	3680
87-86-5	Pentachlorophenol	U	3680	ug/kg	920	3680
129-00-0	Pyrene	J	204	ug/kg	110	368
110-86-1	Pyridine	U	3680	ug/kg	736	3680
62-53-3	Aniline	U	3680	ug/kg	1100	3680
111-44-4	bis(2-Chloroethyl) ether	U	3680	ug/kg	736	3680
541-73-1	1,3-Dichlorobenzene	U	3680	ug/kg	736	3680
100-51-6	Benzyl alcohol	U	3680	ug/kg	1100	3680
95-50-1	1,2-Dichlorobenzene	U	3680	ug/kg	736	3680
108-60-1	bis(2-Chloroisopropyl)ether	U	3680	ug/kg	736	3680
95-48-7	o-Cresol	U	3680	ug/kg	736	3680
65794-96-9	m,p-Cresols	U	3680	ug/kg	1100	3680
67-72-1	Hexachloroethane	U	3680	ug/kg	736	3680
98-95-3	Nitrobenzene	U	3680	ug/kg	736	3680
78-59-1	Isophorone	U	3680	ug/kg	736	3680
88-75-5	2-Nitrophenol	U	3680	ug/kg	736	3680
105-67-9	2,4-Dimethylphenol	U	3680	ug/kg	1290	3680
111-91-1	bis(2-Chloroethoxy)methane	U	3680	ug/kg	736	3680
120-83-2	2,4-Dichlorophenol	U	3680	ug/kg	736	3680
65-85-0	Benzoic acid	U	7360	ug/kg	1840	7360
91-20-3	Naphthalene	U	368	ug/kg	110	368
106-47-8	4-Chloroaniline	U	3680	ug/kg	736	3680
87-68-3	Hexachlorobutadiene	U	3680	ug/kg	736	3680
91-57-6	2-Methylnaphthalene	U	368	ug/kg	73.6	368
77-47-4	Hexachlorocyclopentadiene	U	3680	ug/kg	736	3680
88-06-2	2,4,6-Trichlorophenol	U	3680	ug/kg	736	3680
95-95-4	2,4,5-Trichlorophenol	U	3680	ug/kg	736	3680
91-58-7	2-Chloronaphthalene	U	368	ug/kg	121	368
88-74-4	2-Nitroaniline	U	3680	ug/kg	736	3680
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	3680	ug/kg	736	3680

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540016**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13872**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**10**
Run Date:	**12/04/2009 17:42**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110424.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	3680	ug/kg	736	3680
606-20-2	2,6-Dinitrotoluene	U	3680	ug/kg	368	3680
208-96-8	Acenaphthylene	U	368	ug/kg	110	368
51-28-5	2,4-Dinitrophenol	U	7360	ug/kg	1400	7360
132-64-9	Dibenzofuran	U	3680	ug/kg	736	3680
84-66-2	Diethylphthalate	U	3680	ug/kg	736	3680
86-73-7	Fluorene	U	368	ug/kg	110	368
7005-72-3	4-Chlorophenylphenylether	U	3680	ug/kg	736	3680
534-52-1	2-Methyl-4,6-dinitrophenol	U	3680	ug/kg	736	3680
100-01-6	4-Nitroaniline	U	3680	ug/kg	1100	3680
	p-Nitroaniline					
122-39-4	Diphenylamine	U	3680	ug/kg	736	3680
122-66-7	Azobenzene	U	3680	ug/kg	736	3680
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	3680	ug/kg	736	3680
118-74-1	Hexachlorobenzene	U	3680	ug/kg	736	3680
85-01-8	Phenanthrene	J	124	ug/kg	110	368
120-12-7	Anthracene	U	368	ug/kg	73.6	368
84-74-2	Di-n-butylphthalate	U	3680	ug/kg	736	3680
206-44-0	Fluoranthene	J	217	ug/kg	110	368
85-68-7	Butylbenzylphthalate	U	3680	ug/kg	736	3680
56-55-3	Benzo(a)anthracene	J	135	ug/kg	110	368
91-94-1	3,3'-Dichlorobenzidine	U	3680	ug/kg	1100	3680
218-01-9	Chrysene	U	368	ug/kg	110	368
117-81-7	bis(2-Ethylhexyl)phthalate	U	3680	ug/kg	736	3680
117-84-0	Di-n-octylphthalate	U	3680	ug/kg	736	3680
205-99-2	Benzo(b)fluoranthene		1130	ug/kg	110	368
207-08-9	Benzo(k)fluoranthene	U	368	ug/kg	110	368
50-32-8	Benzo(a)pyrene	U	368	ug/kg	110	368
193-39-5	Indeno(1,2,3-cd)pyrene	U	368	ug/kg	110	368
53-70-3	Dibenzo(a,h)anthracene	U	368	ug/kg	110	368
191-24-2	Benzo(ghi)perylene	U	368	ug/kg	110	368
120-82-1	1,2,4-Trichlorobenzene	U	3680	ug/kg	736	3680

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.97	1900	ug/kg		J
621-82-9	2-Propenoic acid, 3-phenyl-	5.66	1950	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13872	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	10
Run Date:	12/04/2009 17:42	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110424.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	7.66	1790	ug/kg		J
	Unknown	8.02	2570	ug/kg		J
	Unknown	8.24	3630	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.45	12700	ug/kg	96	NJ
514-10-3	Abietic acid	8.59	7130	ug/kg	95	NJ
	Unknown	8.66	2350	ug/kg		J
	Unknown	8.74	1700	ug/kg		J
	Unknown	10.86	2250	ug/kg		J
	Unknown	12.49	1550	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540010**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13873**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:23**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.2	366
108-95-2	Phenol	U	366	ug/kg	73.2	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.2	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.2	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.2	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.2	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.5	366
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.2	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.2	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.2	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.2	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.2	366
95-48-7	o-Cresol	U	366	ug/kg	73.2	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.2	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.2	366
78-59-1	Isophorone	U	366	ug/kg	73.2	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.2	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.2	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.2	366
65-85-0	Benzoic acid	U	732	ug/kg	183	732
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.2	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.2	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.32	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.2	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.2	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.2	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline	U	366	ug/kg	73.2	366
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	366	ug/kg	73.2	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13873	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110418.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.2	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	732	ug/kg	139	732
132-64-9	Dibenzofuran	U	366	ug/kg	73.2	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.2	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.2	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.2	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.2	366
122-66-7	Azobenzene	U	366	ug/kg	73.2	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.2	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.2	366
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.32	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.2	366
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.2	366
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.2	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.2	366
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.2	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.01	997	ug/kg		J
	Unknown Aldol Condensate	2.92	575	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13873	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110418.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.46	502	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.85	500	ug/kg	97	NJ
53939-27-8	9-Tetradecenal, (Z)-	7.65	313	ug/kg	90	NJ
2326-89-8	(5a.alpha.,9a.beta.,9b.beta.)-5,5a,6,7,8	7.79	177	ug/kg	91	NJ
	Unknown	8.02	430	ug/kg		J
506-30-9	Eicosanoic acid	8.12	202	ug/kg	99	NJ
	Unknown	8.14	166	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.15	300	ug/kg	95	NJ
	Unknown	8.25	431	ug/kg		J
	Unknown	8.39	667	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.46	1440	ug/kg	98	NJ
112-85-6	Docosanoic acid	8.57	213	ug/kg	83	NJ
	Unknown	8.6	993	ug/kg		J
	Unknown	8.75	200	ug/kg		J
	Unknown	9.2	215	ug/kg		J
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	11.78	767	ug/kg	80	NJ
	Unknown	11.97	482	ug/kg		J
83-46-5	.beta.-Sitosterol	12.45	346	ug/kg	97	NJ
83-47-6	.gamma.-Sitosterol	12.49	213	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540012**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13874**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:10**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s110420.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	359	ug/kg	71.7	359
108-95-2	Phenol	U	359	ug/kg	71.7	359
95-57-8	2-Chlorophenol	U	359	ug/kg	71.7	359
106-46-7	1,4-Dichlorobenzene	U	359	ug/kg	71.7	359
621-64-7	N-Nitrosodipropylamine	U	359	ug/kg	71.7	359
59-50-7	4-Chloro-3-methylphenol	U	359	ug/kg	71.7	359
83-32-9	Acenaphthene	U	35.9	ug/kg	11.8	35.9
121-14-2	2,4-Dinitrotoluene	U	359	ug/kg	35.9	359
100-02-7	4-Nitrophenol	U	359	ug/kg	118	359
87-86-5	Pentachlorophenol	U	359	ug/kg	89.7	359
129-00-0	Pyrene	J	13.4	ug/kg	10.8	35.9
110-86-1	Pyridine	U	359	ug/kg	71.7	359
62-53-3	Aniline	U	359	ug/kg	108	359
111-44-4	bis(2-Chloroethyl) ether	U	359	ug/kg	71.7	359
541-73-1	1,3-Dichlorobenzene	U	359	ug/kg	71.7	359
100-51-6	Benzyl alcohol	U	359	ug/kg	108	359
95-50-1	1,2-Dichlorobenzene	U	359	ug/kg	71.7	359
108-60-1	bis(2-Chloroisopropyl)ether	U	359	ug/kg	71.7	359
95-48-7	o-Cresol	U	359	ug/kg	71.7	359
65794-96-9	m,p-Cresols	U	359	ug/kg	108	359
67-72-1	Hexachloroethane	U	359	ug/kg	71.7	359
98-95-3	Nitrobenzene	U	359	ug/kg	71.7	359
78-59-1	Isophorone	U	359	ug/kg	71.7	359
88-75-5	2-Nitrophenol	U	359	ug/kg	71.7	359
105-67-9	2,4-Dimethylphenol	U	359	ug/kg	126	359
111-91-1	bis(2-Chloroethoxy)methane	U	359	ug/kg	71.7	359
120-83-2	2,4-Dichlorophenol	U	359	ug/kg	71.7	359
65-85-0	Benzoic acid	U	717	ug/kg	179	717
91-20-3	Naphthalene	U	35.9	ug/kg	10.8	35.9
106-47-8	4-Chloroaniline	U	359	ug/kg	71.7	359
87-68-3	Hexachlorobutadiene	U	359	ug/kg	71.7	359
91-57-6	2-Methylnaphthalene	U	35.9	ug/kg	7.17	35.9
77-47-4	Hexachlorocyclopentadiene	U	359	ug/kg	71.7	359
88-06-2	2,4,6-Trichlorophenol	U	359	ug/kg	71.7	359
95-95-4	2,4,5-Trichlorophenol	U	359	ug/kg	71.7	359
91-58-7	2-Chloronaphthalene	U	35.9	ug/kg	11.8	35.9
88-74-4	2-Nitroaniline	U	359	ug/kg	71.7	359
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	359	ug/kg	71.7	359

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540012**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13874**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:10**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s110420.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	359	ug/kg	71.7	359
606-20-2	2,6-Dinitrotoluene	U	359	ug/kg	35.9	359
208-96-8	Acenaphthylene	U	35.9	ug/kg	10.8	35.9
51-28-5	2,4-Dinitrophenol	U	717	ug/kg	136	717
132-64-9	Dibenzofuran	U	359	ug/kg	71.7	359
84-66-2	Diethylphthalate	U	359	ug/kg	71.7	359
86-73-7	Fluorene	U	35.9	ug/kg	10.8	35.9
7005-72-3	4-Chlorophenylphenylether	U	359	ug/kg	71.7	359
534-52-1	2-Methyl-4,6-dinitrophenol	U	359	ug/kg	71.7	359
100-01-6	4-Nitroaniline	U	359	ug/kg	108	359
	p-Nitroaniline					
122-39-4	Diphenylamine	U	359	ug/kg	71.7	359
122-66-7	Azobenzene	U	359	ug/kg	71.7	359
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	359	ug/kg	71.7	359
118-74-1	Hexachlorobenzene	U	359	ug/kg	71.7	359
85-01-8	Phenanthrene	U	35.9	ug/kg	10.8	35.9
120-12-7	Anthracene	U	35.9	ug/kg	7.17	35.9
84-74-2	Di-n-butylphthalate	U	359	ug/kg	71.7	359
206-44-0	Fluoranthene	J	16.5	ug/kg	10.8	35.9
85-68-7	Butylbenzylphthalate	U	359	ug/kg	71.7	359
56-55-3	Benzo(a)anthracene	U	35.9	ug/kg	10.8	35.9
91-94-1	3,3'-Dichlorobenzidine	U	359	ug/kg	108	359
218-01-9	Chrysene	U	35.9	ug/kg	10.8	35.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	359	ug/kg	71.7	359
117-84-0	Di-n-octylphthalate	U	359	ug/kg	71.7	359
205-99-2	Benzo(b)fluoranthene		107	ug/kg	10.8	35.9
207-08-9	Benzo(k)fluoranthene	U	35.9	ug/kg	10.8	35.9
50-32-8	Benzo(a)pyrene	U	35.9	ug/kg	10.8	35.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.9	ug/kg	10.8	35.9
53-70-3	Dibenzo(a,h)anthracene	U	35.9	ug/kg	10.8	35.9
191-24-2	Benzo(ghi)perylene	U	35.9	ug/kg	10.8	35.9
120-82-1	1,2,4-Trichlorobenzene	U	359	ug/kg	71.7	359

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.75	156	ug/kg		J
	Unknown	2	233	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	716	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	272	ug/kg	94	NJ
112-84-5	13-Docosenamide, (Z)-	9.19	189	ug/kg	94	NJ
112-95-8	Eicosane	10.32	170	ug/kg	98	NJ
	Unknown	11.76	334	ug/kg		J
	Unknown	11.95	180	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13875	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 12:18	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s1l0410.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.4	372
108-95-2	Phenol	U	372	ug/kg	74.4	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.4	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.4	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.4	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.4	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	93.1	372
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2
110-86-1	Pyridine	U	372	ug/kg	74.4	372
62-53-3	Aniline	U	372	ug/kg	112	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.4	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.4	372
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.4	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.4	372
95-48-7	o-Cresol	U	372	ug/kg	74.4	372
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.4	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.4	372
78-59-1	Isophorone	U	372	ug/kg	74.4	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.4	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.4	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.4	372
65-85-0	Benzoic acid	U	744	ug/kg	186	744
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.4	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.4	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.44	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.4	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.4	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.4	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline	U	372	ug/kg	74.4	372
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	372	ug/kg	74.4	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:18	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.4	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2
51-28-5	2,4-Dinitrophenol	U	744	ug/kg	141	744
132-64-9	Dibenzofuran	U	372	ug/kg	74.4	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.4	372
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.4	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.4	372
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.4	372
122-66-7	Azobenzene	U	372	ug/kg	74.4	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.4	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.4	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.44	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.4	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.4	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.4	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.4	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.4	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.88	160	ug/kg		J
	Unknown	1.98	284	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:18	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	429	ug/kg		JA
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	11.77	2680	ug/kg	83	NJ
	Unknown	11.96	1310	ug/kg		J
	Unknown	12.14	230	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 17:18	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110423.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.2	371
108-95-2	Phenol	U	371	ug/kg	74.2	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.2	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.2	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.2	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.2	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.2	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	122	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.8	371
129-00-0	Pyrene	J	16.4	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.2	371
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.2	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.2	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.2	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.2	371
95-48-7	o-Cresol	U	371	ug/kg	74.2	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.2	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.2	371
78-59-1	Isophorone	U	371	ug/kg	74.2	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.2	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.2	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.2	371
65-85-0	Benzoic acid	U	742	ug/kg	186	742
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.2	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.2	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.42	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.2	371
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.2	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.2	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.2	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.2	371
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	371	ug/kg	74.2	371

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.1	**Dilution:**	1
Run Date:	12/04/2009 17:18	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110423.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	371	ug/kg	74.2	371
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
51-28-5	2,4-Dinitrophenol	U	742	ug/kg	141	742
132-64-9	Dibenzofuran	U	371	ug/kg	74.2	371
84-66-2	Diethylphthalate	U	371	ug/kg	74.2	371
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.2	371
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.2	371
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371
	p-Nitroaniline					
122-39-4	Diphenylamine	U	371	ug/kg	74.2	371
122-66-7	Azobenzene	U	371	ug/kg	74.2	371
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.2	371
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.2	371
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1
120-12-7	Anthracene	U	37.1	ug/kg	7.42	37.1
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.2	371
206-44-0	Fluoranthene	J	18.7	ug/kg	11.1	37.1
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.2	371
56-55-3	Benzo(a)anthracene	J	11.5	ug/kg	11.1	37.1
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.2	371
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.2	371
205-99-2	Benzo(b)fluoranthene		112	ug/kg	11.1	37.1
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.2	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.64	1050	ug/kg		J
	Unknown	1.98	325	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 17:18	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110423.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	324	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.73	176	ug/kg	99	NJ
	Unknown	8.06	276	ug/kg		J
	Unknown	8.19	217	ug/kg		J
	Unknown	8.39	149	ug/kg		J
112-95-8	Eicosane	10.33	324	ug/kg	96	NJ
	Unknown	10.56	414	ug/kg		J
638-67-5	Tricosane	11.51	705	ug/kg	97	NJ
	Unknown	11.77	185	ug/kg		J
	Unknown	12.46	192	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540007	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13877	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/07/2009 12:48	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110710.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.3	372
108-95-2	Phenol	U	372	ug/kg	74.3	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.3	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.3	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.3	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.3	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	92.9	372
129-00-0	Pyrene	U	37.2	ug/kg	11.1	37.2
110-86-1	Pyridine	U	372	ug/kg	74.3	372
62-53-3	Aniline	U	372	ug/kg	111	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.3	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.3	372
100-51-6	Benzyl alcohol	U	372	ug/kg	111	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.3	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.3	372
95-48-7	o-Cresol	U	372	ug/kg	74.3	372
65794-96-9	m,p-Cresols	U	372	ug/kg	111	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.3	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.3	372
78-59-1	Isophorone	U	372	ug/kg	74.3	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.3	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.3	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.3	372
65-85-0	Benzoic acid	U	743	ug/kg	186	743
91-20-3	Naphthalene	U	37.2	ug/kg	11.1	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.3	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.3	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.43	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.3	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.3	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.3	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline	U	372	ug/kg	74.3	372
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	372	ug/kg	74.3	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13877**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 12:48**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s110710.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.3	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.1	37.2
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	372	ug/kg	74.3	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.3	372
86-73-7	Fluorene	U	37.2	ug/kg	11.1	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.3	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.3	372
100-01-6	4-Nitroaniline	U	372	ug/kg	111	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.3	372
122-66-7	Azobenzene	U	372	ug/kg	74.3	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.3	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.3	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.1	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.43	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.3	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.1	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.3	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.1	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	111	372
218-01-9	Chrysene	U	37.2	ug/kg	11.1	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.3	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.3	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.1	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.1	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.1	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.1	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.1	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.1	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.3	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.68	163	ug/kg		J
	Unknown	1.91	527	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13877**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 12:48**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s110710.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (T1C)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.8	462	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.59	194	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	7.12	90.6	ug/kg	98	NJ
112-79-8	9-Octadecenoic acid, (E)-	7.53	84.9	ug/kg	97	NJ
57-11-4	Octadecanoic acid	7.57	98.9	ug/kg	96	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.03	326	ug/kg	98	NJ
	Unknown	8.05	482	ug/kg		J
	Unknown	8.07	198	ug/kg		J
	Unknown	8.25	156	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.29	182	ug/kg	94	NJ
514-10-3	Abietic acid	8.43	162	ug/kg	97	NJ
	Unknown	10.19	158	ug/kg		J
112-95-8	Eicosane	11.13	154	ug/kg	97	NJ
	Unknown	11.39	238	ug/kg		J
	Unknown	12.05	197	ug/kg		J

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-604

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC		PHL %REC		NBZ %REC		FBP %REC		TBP %REC		TPH %REC	
1201981197	MB for batch 926606	64		60		63		75		91		100	
1201981200	LCS for batch 926606	73		69		70		86		98		101	
241540001	RE03-09-13875	64		62		66		73		94		91	
241540002	RE03-09-13865	54		57		49		54		82		81	
241540003	RE03-09-13868	63		64		70		79		90		89	
241540004	RE03-09-13867	68		71		69		75		99		100	
241540006	RE03-09-13871	50		52		51		61		93		95	
1201981198	RE03-09-13867MS	65		63		62		72		84		77	
1201981199	RE03-09-13867MSD	63		62		60		70		83		77	
241540008	RE03-09-13869	62		65		58		61		91		98	
241540010	RE03-09-13873	69		69		75		81		90		89	
241540011	RE03-09-13863	72		72		75		86		96		101	
241540012	RE03-09-13874	76		75		75		85		106		95	
241540013	RE03-09-13866	67		65		65		75		95		87	
241540014	RE03-09-13862	64		65		63		70		93		95	
241540015	RE03-09-13876	49		48		53		60		66		62	
241540016	RE03-09-13872	69	D	52	D	79	D	95	D	102	D	98	D
241540009	RE03-09-13870	55	D	42	D	64	D	85	D	93	D	97	D
241540007	RE03-09-13877	64		66		70		77		91		93	
241540005	RE03-09-13864	53		58		62		71		75		81	

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(35%-96%)
PHL	=	Phenol-d5	(36%-96%)
NBZ	=	Nitrobenzene-d5	(34%-104%)
FBP	=	2-Fluorobiphenyl	(36%-100%)
TBP	=	2,4,6-Tribromophenol	(37%-106%)
TPH	=	p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MS
Lab Sample ID: 1201981198
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 14:14
Prep Batch ID: 926606
Batch ID: 926610
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1900	0.00	U	1030	54	32-90
108-95-2	MS	Phenol	1900	0.00	U	1140	60	32-105
95-57-8	MS	2-Chlorophenol	1900	0.00	U	1170	61	33-106
106-46-7	MS	1,4-Dichlorobenzene	1900	0.00	U	645	34	33-95
621-64-7	MS	N-Nitrosodipropylamine	1900	0.00	U	1010	53	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1900	0.00	U	1160	61	38-119
83-32-9	MS	Acenaphthene	1900	0.00	U	1170	62	39-100
121-14-2	MS	2,4-Dinitrotoluene	1900	0.00	U	1170	62	42-107
100-02-7	MS	4-Nitrophenol	1900	0.00	U	1040	55	24-120
87-86-5	MS	Pentachlorophenol	1900	0.00	U	1230	65	26-121
129-00-0	MS	Pyrene	1900	66.9		1280	64	34-120
110-86-1	MS	Pyridine	1900	0.00	U	727	38	30-95
62-53-3	MS	Aniline	1900	0.00	U	976	51	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1900	0.00	U	987	52	34-101
541-73-1	MS	1,3-Dichlorobenzene	1900	0.00	U	597	31	31-97
100-51-6	MS	Benzyl alcohol	1900	0.00	U	1070	56	17-120
95-50-1	MS	1,2-Dichlorobenzene	1900	0.00	U	746	39	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1900	0.00	U	882	46	32-113
95-48-7	MS	o-Cresol	1900	0.00	U	1230	65	31-119
65794-96-9	MS	m,p-Cresols	1900	0.00	U	1290	68	35-125
67-72-1	MS	Hexachloroethane	1900	0.00	U	558	29 *	30-100
98-95-3	MS	Nitrobenzene	1900	0.00	U	1140	60	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	10-604	Sample Type:	Matrix Spike
Client ID:	RE03-09-13867MS	Matrix:	S
Lab Sample ID:	1201981198	%Moisture:	12.3
Instrument:	MSD1.I	Analysis Date:	12/04/2009 14:14
Analyst:	AMY	Prep Batch ID:	926606
Inj. Vol:	.5 uL	Batch ID:	926610

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1900	0.00	U	1250	66	34-110
88-75-5	MS	2-Nitrophenol	1900	0.00	U	1180	62	32-108
105-67-9	MS	2,4-Dimethylphenol	1900	0.00	U	926	49	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1900	0.00	U	1070	57	35-108
120-83-2	MS	2,4-Dichlorophenol	1900	0.00	U	1110	58	38-110
65-85-0	MS	Benzoic acid	3800	0.00	U	1490	39	18-134
91-20-3	MS	Naphthalene	1900	0.00	U	1010	53	31-105
106-47-8	MS	4-Chloroaniline	1900	0.00	U	1030	54	29-123
87-68-3	MS	Hexachlorobutadiene	1900	0.00	U	839	44	31-109
91-57-6	MS	2-Methylnaphthalene	1900	0.00	U	1110	59	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1900	0.00	U	1190	63	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1900	0.00	U	1260	66	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1900	0.00	U	1350	71	37-116
91-58-7	MS	2-Chloronaphthalene	1900	0.00	U	1090	57	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1900	0.00	U	1030	54	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1900	0.00	U	1000	53	39-117
131-11-3	MS	Dimethylphthalate	1900	0.00	U	1290	68	41-105
606-20-2	MS	2,6-Dinitrotoluene	1900	0.00	U	1190	63	41-103
208-96-8	MS	Acenaphthylene	1900	0.00	U	1210	64	41-103
51-28-5	MS	2,4-Dinitrophenol	1900	0.00	U	675	36	25-104
132-64-9	MS	Dibenzofuran	1900	0.00	U	1410	74	40-114
84-66-2	MS	Diethylphthalate	1900	0.00	U	1380	73	43-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MS
Lab Sample ID: 1201981198
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 14:14
Prep Batch ID: 926606
Batch ID: 926610
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1900	0.00	U	1260	66	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1900	0.00	U	1340	71	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1900	0.00	U	853	45	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1900	0.00	U	1010	53	35-139
122-39-4	MS	Diphenylamine	1900	0.00	U	1060	56	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1900	0.00	U	1170	62	37-118
101-55-3	MS	4-Bromophenylphenylether	1900	0.00	U	1460	77	39-112
118-74-1	MS	Hexachlorobenzene	1900	0.00	U	1270	67	38-113
85-01-8	MS	Phenanthrene	1900	49.3		1270	64	38-110
120-12-7	MS	Anthracene	1900	11.3	J	1220	64	38-112
84-74-2	MS	Di-n-butylphthalate	1900	0.00	U	1460	77	42-119
206-44-0	MS	Fluoranthene	1900	75.6		1350	67	38-119
85-68-7	MS	Butylbenzylphthalate	1900	0.00	U	1430	75	39-126
56-55-3	MS	Benzo(a)anthracene	1900	34.7	J	1200	62	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1900	0.00	U	872	46	35-106
218-01-9	MS	Chrysene	1900	31.8	J	1200	62	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1900	0.00	U	1360	72	40-125
117-84-0	MS	Di-n-octylphthalate	1900	0.00	U	1330	70	30-147
205-99-2	MS	Benzo(b)fluoranthene	1900	141		1270	60	38-117
207-08-9	MS	Benzo(k)fluoranthene	1900	0.00	U	1180	62	39-120
50-32-8	MS	Benzo(a)pyrene	1900	21.5	J	1230	63	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1900	0.00	U	1190	63	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MS
Lab Sample ID: 1201981198
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 14:14
Prep Batch ID: 926606
Batch ID: 926610
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1900	0.00	U	1210	64	32-124
191-24-2	MS	Benzo(ghi)perylene	1900	18.4	J	1200	62	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1900	0.00	U	917	48	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MSD
Lab Sample ID: 1201981199
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 14:37
Prep Batch ID: 926606
Batch ID: 926610
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1900	0.00	U	1080	57	32-90	5	0-30
108-95-2	MSD Phenol	1900	0.00	U	1150	60	32-105	0	0-30
95-57-8	MSD 2-Chlorophenol	1900	0.00	U	1160	61	33-106	1	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1900	0.00	U	659	35	33-95	2	0-30
621-64-7	MSD N-Nitrosodipropylamine	1900	0.00	U	1040	55	31-109	3	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1900	0.00	U	1190	63	38-119	3	0-30
83-32-9	MSD Acenaphthene	1900	0.00	U	1170	61	39-100	0	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1900	0.00	U	1190	62	42-107	1	0-30
100-02-7	MSD 4-Nitrophenol	1900	0.00	U	953	50	24-120	9	0-30
87-86-5	MSD Pentachlorophenol	1900	0.00	U	1210	63	26-121	2	0-30
129-00-0	MSD Pyrene	1900	66.9		1280	64	34-120	0	0-30
110-86-1	MSD Pyridine	1900	0.00	U	852	45	30-95	16	0-30
62-53-3	MSD Aniline	1900	0.00	U	927	49	34-111	5	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1900	0.00	U	988	52	34-101	0	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1900	0.00	U	615	32	31-97	3	0-30
100-51-6	MSD Benzyl alcohol	1900	0.00	U	1040	55	17-120	3	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1900	0.00	U	770	41	32-102	3	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1900	0.00	U	892	47	32-113	1	0-30
95-48-7	MSD o-Cresol	1900	0.00	U	1230	65	31-119	0	0-30
65794-96-9	MSD m,p-Cresols	1900	0.00	U	1270	67	35-125	2	0-30
67-72-1	MSD Hexachloroethane	1900	0.00	U	567	30	30-100	2	0-30
98-95-3	MSD Nitrobenzene	1900	0.00	U	1160	61	33-108	2	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MSD
Lab Sample ID: 1201981199
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 14:37
Dilution: 1
Prep Batch ID: 926606
Batch ID: 926610

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD	Isophorone	1900	0.00	U	1280	67	34-110	2	0-30
88-75-5	MSD	2-Nitrophenol	1900	0.00	U	1100	58	32-108	6	0-30
105-67-9	MSD	2,4-Dimethylphenol	1900	0.00	U	951	50	32-115	3	0-30
111-91-1	MSD	bis(2-Chloroethoxy)methane	1900	0.00	U	1080	57	35-108	0	0-30
120-83-2	MSD	2,4-Dichlorophenol	1900	0.00	U	1140	60	38-110	3	0-30
65-85-0	MSD	Benzoic acid	3800	0.00	U	1280	34	18-134	15	0-30
91-20-3	MSD	Naphthalene	1900	0.00	U	1020	54	31-105	1	0-30
106-47-8	MSD	4-Chloroaniline	1900	0.00	U	1040	54	29-123	1	0-30
87-68-3	MSD	Hexachlorobutadiene	1900	0.00	U	846	45	31-109	1	0-30
91-57-6	MSD	2-Methylnaphthalene	1900	0.00	U	1110	59	32-110	0	0-30
77-47-4	MSD	Hexachlorocyclopentadiene	1900	0.00	U	1140	60	21-122	5	0-30
88-06-2	MSD	2,4,6-Trichlorophenol	1900	0.00	U	1270	67	37-108	1	0-30
95-95-4	MSD	2,4,5-Trichlorophenol	1900	0.00	U	1350	71	37-116	0	0-30
91-58-7	MSD	2-Chloronaphthalene	1900	0.00	U	1100	58	37-103	1	0-30
88-74-4	MSD	2-Nitroaniline *o-Nitroaniline*	1900	0.00	U	1050	55	36-115	2	0-30
99-09-2	MSD	3-Nitroaniline *m-Nitroaniline*	1900	0.00	U	1010	53	39-117	1	0-30
131-11-3	MSD	Dimethylphthalate	1900	0.00	U	1300	68	41-105	1	0-30
606-20-2	MSD	2,6-Dinitrotoluene	1900	0.00	U	1200	63	41-103	1	0-30
208-96-8	MSD	Acenaphthylene	1900	0.00	U	1220	64	41-103	1	0-30
51-28-5	MSD	2,4-Dinitrophenol	1900	0.00	U	652	34	25-104	3	0-30
132-64-9	MSD	Dibenzofuran	1900	0.00	U	1430	75	40-114	1	0-30
84-66-2	MSD	Diethylphthalate	1900	0.00	U	1370	72	43-110	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MSD
Lab Sample ID: 1201981199
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 14:37
Prep Batch ID: 926606
Batch ID: 926610
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1900	0.00	U	1260	66	48-99	1	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1900	0.00	U	1350	71	42-111	0	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1900	0.00	U	867	46	19-118	2	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1900	0.00	U	1000	53	35-139	1	0-30
122-39-4	MSD	Diphenylamine	1900	0.00	U	1070	56	41-112	1	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1900	0.00	U	1180	62	37-118	1	0-30
101-55-3	MSD	4-Bromophenylphenylether	1900	0.00	U	1500	79	39-112	3	0-30
118-74-1	MSD	Hexachlorobenzene	1900	0.00	U	1280	68	38-113	1	0-30
85-01-8	MSD	Phenanthrene	1900	49.3		1250	63	38-110	1	0-30
120-12-7	MSD	Anthracene	1900	11.3	J	1240	64	38-112	1	0-30
84-74-2	MSD	Di-n-butylphthalate	1900	0.00	U	1470	77	42-119	1	0-30
206-44-0	MSD	Fluoranthene	1900	75.6		1330	66	38-119	1	0-30
85-68-7	MSD	Butylbenzylphthalate	1900	0.00	U	1450	76	39-126	1	0-30
56-55-3	MSD	Benzo(a)anthracene	1900	34.7	J	1170	60	39-110	3	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1900	0.00	U	933	49	35-106	7	0-30
218-01-9	MSD	Chrysene	1900	31.8	J	1180	60	39-109	2	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1900	0.00	U	1380	73	40-125	1	0-30
117-84-0	MSD	Di-n-octylphthalate	1900	0.00	U	1330	70	30-147	0	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1900	141		1140	53	38-117	11	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1900	0.00	U	1300	69	39-120	10	0-30
50-32-8	MSD	Benzo(a)pyrene	1900	21.5	J	1220	63	40-115	0	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1900	0.00	U	1190	63	32-120	0	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-604**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13867MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201981199**	**%Moisture:**	**12.3**
Instrument:	**MSD1.I**	**Analysis Date:**	**12/04/2009 14:37**
Analyst:	**AMY**	**Prep Batch ID:**	**926606**
Inj. Vol:	**.5 uL**	**Batch ID:**	**926610**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1900	0.00	U	1220	64	32-124	0	0-30
191-24-2	MSD Benzo(ghi)perylene	1900	18.4	J	1200	62	28-119	0	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1900	0.00	U	940	49	31-105	2	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926606
Lab Sample ID: 1201981200
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:56
Dilution: 1
Prep Batch ID: 926606
Batch ID: 926610

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	867	52	31-95
108-95-2	LCS	Phenol	1670	0.0	1070	64	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1120	67	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	908	54	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	909	55	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1160	69	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1210	72	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1230	74	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1040	62	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1310	79	38-116
129-00-0	LCS	Pyrene	1670	0.0	1380	83	43-108
110-86-1	LCS	Pyridine	1670	0.0	718	43	13-129
62-53-3	LCS	Aniline	1670	0.0	1010	61	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	951	57	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	851	51	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1250	75	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	978	59	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	869	52	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1140	68	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1290	77	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	868	52	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1090	66	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926606
Lab Sample ID: 1201981200
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:56
Dilution: 1
Prep Batch ID: 926606
Batch ID: 926610

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1220	73	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1040	62	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1090	66	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1010	61	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1120	67	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	2240	67	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1050	63	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1000	60	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1090	65	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1150	69	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1700	102	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1300	78	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1330	80	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1120	67	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	994	60	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	982	59	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1290	77	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1230	74	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1210	73	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1130	68	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1440	86	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1410	85	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926606
Lab Sample ID: 1201981200
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:56
Dilution: 1
Prep Batch ID: 926606
Batch ID: 926610

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1240	75	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1360	82	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1130	68	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	987	59	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1190	71	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1170	70	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1500	90	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1340	80	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1250	75	45-107
120-12-7	LCS	Anthracene	1670	0.0	1240	74	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1540	93	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1360	81	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1630	98	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1250	75	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1150	69	45-98
218-01-9	LCS	Chrysene	1670	0.0	1310	79	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1610	96	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1740	105	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1270	76	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1460	87	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1290	77	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1190	72	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: LCS for batch 926606
Lab Sample ID: 1201981200
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:56
Dilution: 1
Prep Batch ID: 926606
Batch ID: 926610

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1160	70	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1250	75	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1060	64	36-109

Method Blank Summary

SDG Number:	10-604	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926606	Instrument ID:	MSD1.I	Data File:	s110408.d
Lab Sample ID:	1201981197	Prep Date:	11/27/2009 11:05	Analyzed:	12/04/09 11:32
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926606	1201981200	s110409.d	12/04/09	1156
02	RE03-09-13875	241540001	s110410.d	12/04/09	1218
03	RE03-09-13865	241540002	s110411.d	12/04/09	1241
04	RE03-09-13868	241540003	s110412.d	12/04/09	1304
05	RE03-09-13867	241540004	s110413.d	12/04/09	1327
06	RE03-09-13871	241540006	s110414.d	12/04/09	1350
07	RE03-09-13867MS	1201981198	s110415.d	12/04/09	1414
08	RE03-09-13867MSD	1201981199	s110416.d	12/04/09	1437
09	RE03-09-13869	241540008	s110417.d	12/04/09	1500
10	RE03-09-13873	241540010	s110418.d	12/04/09	1523
11	RE03-09-13863	241540011	s110419.d	12/04/09	1546
12	RE03-09-13874	241540012	s110420.d	12/04/09	1610
13	RE03-09-13866	241540013	s110421.d	12/04/09	1633
14	RE03-09-13862	241540014	s110422.d	12/04/09	1655
15	RE03-09-13876	241540015	s110423.d	12/04/09	1718
16	RE03-09-13872	241540016	s110424.d	12/04/09	1742
17	RE03-09-13870	241540009	s110426.d	12/04/09	1828
18	RE03-09-13877	241540007	s110710.d	12/07/09	1248
19	RE03-09-13864	241540005	s110711.d	12/07/09	1312

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: MSD1.I **Injection Date/Time:** 04-DEC-09 08:56

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s120409.b/s110402.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.1
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	41
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	50.1
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	24.5
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	74.4
442	Greater than 40% of mass 198	77.5
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-17.2	/chem/MSD1.i/s120409.b/s110404	04-DEC-09 09:48
APCVS	WBN091201-08.2	/chem/MSD1.i/s120409.b/s110405	04-DEC-09 10:24
SBLK01	1201981197	/chem/MSD1.i/s120409.b/s110408	04-DEC-09 11:32
SBLK01LCS	1201981200	/chem/MSD1.i/s120409.b/s110409	04-DEC-09 11:56
RE03-09-13875	241540001	/chem/MSD1.i/s120409.b/s110410	04-DEC-09 12:18
RE03-09-13865	241540002	/chem/MSD1.i/s120409.b/s110411	04-DEC-09 12:41
RE03-09-13868	241540003	/chem/MSD1.i/s120409.b/s110412	04-DEC-09 13:04
RE03-09-13867	241540004	/chem/MSD1.i/s120409.b/s110413	04-DEC-09 13:27
RE03-09-13871	241540006	/chem/MSD1.i/s120409.b/s110414	04-DEC-09 13:50
RE03-09-13867MS	1201981198	/chem/MSD1.i/s120409.b/s110415	04-DEC-09 14:14
RE03-09-13867MSD	1201981199	/chem/MSD1.i/s120409.b/s110416	04-DEC-09 14:37
RE03-09-13869	241540008	/chem/MSD1.i/s120409.b/s110417	04-DEC-09 15:00
RE03-09-13873	241540010	/chem/MSD1.i/s120409.b/s110418	04-DEC-09 15:23
RE03-09-13863	241540011	/chem/MSD1.i/s120409.b/s110419	04-DEC-09 15:46
RE03-09-13874	241540012	/chem/MSD1.i/s120409.b/s110420	04-DEC-09 16:10
RE03-09-13866	241540013	/chem/MSD1.i/s120409.b/s110421	04-DEC-09 16:33

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: MSD1.I **Injection Date/Time:** 04-DEC-09 08:56

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s120409.b/s110402.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.1
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	41
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	50.1
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	24.5
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	74.4
442	Greater than 40% of mass 198	77.5
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE03-09-13862	241540014	/chem/MSD1.i/s120409.b/s110422	04-DEC-09 16:55
RE03-09-13876	241540015	/chem/MSD1.i/s120409.b/s110423	04-DEC-09 17:18
RE03-09-13872	241540016	/chem/MSD1.i/s120409.b/s110424	04-DEC-09 17:42
RE03-09-13870	241540009	/chem/MSD1.i/s120409.b/s110426	04-DEC-09 18:28

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: MSD1.I **Injection Date/Time:** 07-DEC-09 09:20

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s120709.b/s110702.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.8
68	Less than 2% of mass 69	2
69	Mass 69 Relative Abundance	40.7
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.8
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	25.4
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	76.2
442	Greater than 40% of mass 198	85.8
443	17 - 23% of mass 442	18.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-17.2	/chem/MSD1.i/s120709.b/s110704	07-DEC-09 10:13
APCVS	WBN091201-03.4	/chem/MSD1.i/s120709.b/s110705	07-DEC-09 10:53
RE03-09-13877	241540007	/chem/MSD1.i/s120709.b/s110710	07-DEC-09 12:48
RE03-09-13864	241540005	/chem/MSD1.i/s120709.b/s110711	07-DEC-09 13:12

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: MSD1.I **Injection Date/Time:** 14-NOV-09 17:38

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.3
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	36.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	77.4
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091111-16	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:22
MEGA010	WBN091111-15	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:51
MEGA020	WBN091111-14	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:21
MEGA040	WBN091111-13.1	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:50
MEGA050	WBN091111-12	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:19
MEGA080	WBN091111-11	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:47
MEGA100	WBN091111-10	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 21:16
MEGA120	WBN091111-09	/chem/MSD1.i/s111409.b/s1k121	14-NOV-09 21:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: MSD1.I **Injection Date/Time:** 15-NOV-09 14:50

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1213.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	39.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.2
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	72.7
442	Greater than 40% of mass 198	70.7
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP010	WBN091111-01	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:28
AP020	WBN091111-02	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:51
AP040	WBN091111-03.1	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:14
AP050	WBN091111-04	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:38
AP080	WBN091111-05	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 17:01
AP100	WBN091111-06	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:24
AP120	WBN091111-07	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:47
APICV	WBN091111-08.1	/chem/MSD1.i/s111409.b/s1k123	15-NOV-09 23:17

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-604

Instrument ID: MSD1.I **Injection Date/Time:** 17-NOV-09 15:48

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1259.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.2
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.5
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	72.4
442	Greater than 40% of mass 198	78.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091027-09.3	/chem/MSD1.i/s111409.b/s1k126	17-NOV-09 16:27

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD1.I

GC Column: J&W DB-5MS

Client SDG: 10-604

STD Analysis Time: 04-DEC-09 09:48

Data File: s110404.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	308643		3.89	1342063		4.75	708285		6	1232459		6.98	1089894		8.63	970911		10.1
Upper Limit	617286		4.39	2684126		5.25	1416570		6.5	2464918		7.48	2179788		9.13	1941822		10.6
Lower Limit	154322		3.39	671032		4.25	354143		5.5	616230		6.48	544947		8.13	485456		9.57
Sample ID																		
BLK01	312666		3.89	1261413		4.75	707137		6	1205802		6.98	1057955		8.63	976654		10.1
BLK01LCS	398904		3.89	1723383		4.76	907273		6	1540144		6.98	1290514		8.64	1047891		10.1
RE03-09-13875	297717		3.89	1151056		4.75	648008		5.99	1157047		6.98	1023685		8.63	938689		10.1
RE03-09-13865	487701		3.89	1988638		4.75	1124809		6	1957059		6.98	1740269		8.64	1620024		10.1
RE03-09-13868	383935		3.89	1529552		4.75	876530		6	1550954		6.98	1399501		8.64	1308963		10.1
RE03-09-13867	551737		3.89	2172800		4.75	1207190		6	2094022		6.98	1774014		8.63	1551644		10.1
RE03-09-13871	437621		3.89	1748568		4.75	970180		6	1661472		6.98	1425013		8.63	1310004		10.1
RE03-09-13867MS	415831		3.89	1803081		4.76	950931		6	1625306		6.98	1480128		8.64	1340229		10.1
RE03-09-13867MSD	407764		3.89	1738492		4.75	922737		6	1557133		6.98	1390361		8.64	1251026		10.1
RE03-09-13869	442633		3.89	1811704		4.75	1017207		6	1727901		6.98	1487455		8.63	1327758		10.1
RE03-09-13873	484809		3.89	1959860		4.75	1128176		6	1948670		6.98	1687987		8.65	1482597		10.1
RE03-09-13863	465510		3.89	1892142		4.75	1027386		6	1779964		6.98	1470417		8.64	1300262		10.1
RE03-09-13874	445759		3.89	1858733		4.75	1046200		6	1826580		6.98	1659547		8.63	1474580		10.1
RE03-09-13866	487968		3.89	1998017		4.75	1090564		6	1892843		6.98	1758287		8.63	1600672		10.1
RE03-09-13862	500910		3.89	1996595		4.75	1123063		6	1957054		6.98	1671058		8.63	1447143		10.1
RE03-09-13876	480438		3.89	2024670		4.76	1156820		6	2024159		6.98	1886124		8.65	1706491		10.1
RE03-09-13872	357468		3.89	1476301		4.76	854800		6	1588321		6.98	1431172		8.64	1302358		10.1
RE03-09-13870	387864		3.89	1569287		4.75	897732		6	1618215		6.98	1455025		8.63	1272545		10.1

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-604

Instrument: MSD1.I

STD Analysis Time: 07-DEC-09 10:13

GC Column: J&W DB-5MS

Data File: s110704.d

	1,4-Dichlorobenzene-d4				Naphthalene-d8				Acenaphthene-d10				Phenanthrene-d10				Chrysene-d12				Perylene-d12			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	559398		3.76		2347392		4.62		1201624		5.87		2108502		6.86		1937578		8.49		1671991		9.83	
Upper Limit	1118796		4.26		4694784		5.12		2403248		6.37		4217004		7.36		3875156		8.99		3343982		10.3	
Lower Limit	279699		3.26		1173696		4.12		600812		5.37		1054251		6.36		968789		7.99		835996		9.33	
Sample ID																								
RE03-09-13877	556487		3.76		2152921		4.62		1194159		5.86		2106092		6.86		1887447		8.48		1666717		9.83	
RE03-09-13864	606240		3.76		2379203		4.62		1302700		5.86		2252953		6.86		1712630		8.49		1100295		9.83	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:55	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	383	ug/kg	76.7	383
108-95-2	Phenol	U	383	ug/kg	76.7	383
95-57-8	2-Chlorophenol	U	383	ug/kg	76.7	383
106-46-7	1,4-Dichlorobenzene	U	383	ug/kg	76.7	383
621-64-7	N-Nitrosodipropylamine	U	383	ug/kg	76.7	383
59-50-7	4-Chloro-3-methylphenol	U	383	ug/kg	76.7	383
83-32-9	Acenaphthene	U	38.3	ug/kg	12.7	38.3
121-14-2	2,4-Dinitrotoluene	U	383	ug/kg	38.3	383
100-02-7	4-Nitrophenol	U	383	ug/kg	127	383
87-86-5	Pentachlorophenol	U	383	ug/kg	95.8	383
129-00-0	Pyrene		93.8	ug/kg	11.5	38.3
110-86-1	Pyridine	U	383	ug/kg	76.7	383
62-53-3	Aniline	U	383	ug/kg	115	383
111-44-4	bis(2-Chloroethyl) ether	U	383	ug/kg	76.7	383
541-73-1	1,3-Dichlorobenzene	U	383	ug/kg	76.7	383
100-51-6	Benzyl alcohol	U	383	ug/kg	115	383
95-50-1	1,2-Dichlorobenzene	U	383	ug/kg	76.7	383
108-60-1	bis(2-Chloroisopropyl)ether	U	383	ug/kg	76.7	383
95-48-7	o-Cresol	U	383	ug/kg	76.7	383
65794-96-9	m,p-Cresols	U	383	ug/kg	115	383
67-72-1	Hexachloroethane	U	383	ug/kg	76.7	383
98-95-3	Nitrobenzene	U	383	ug/kg	76.7	383
78-59-1	Isophorone	U	383	ug/kg	76.7	383
88-75-5	2-Nitrophenol	U	383	ug/kg	76.7	383
105-67-9	2,4-Dimethylphenol	U	383	ug/kg	134	383
111-91-1	bis(2-Chloroethoxy)methane	U	383	ug/kg	76.7	383
120-83-2	2,4-Dichlorophenol	U	383	ug/kg	76.7	383
65-85-0	Benzoic acid	U	767	ug/kg	192	767
91-20-3	Naphthalene	U	38.3	ug/kg	11.5	38.3
106-47-8	4-Chloroaniline	U	383	ug/kg	76.7	383
87-68-3	Hexachlorobutadiene	U	383	ug/kg	76.7	383
91-57-6	2-Methylnaphthalene	U	38.3	ug/kg	7.67	38.3
77-47-4	Hexachlorocyclopentadiene	U	383	ug/kg	76.7	383
88-06-2	2,4,6-Trichlorophenol	U	383	ug/kg	76.7	383
95-95-4	2,4,5-Trichlorophenol	U	383	ug/kg	76.7	383
91-58-7	2-Chloronaphthalene	U	38.3	ug/kg	12.7	38.3
88-74-4	2-Nitroaniline	U	383	ug/kg	76.7	383
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	383	ug/kg	76.7	383

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:55	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	383	ug/kg	76.7	383
606-20-2	2,6-Dinitrotoluene	U	383	ug/kg	38.3	383
208-96-8	Acenaphthylene	U	38.3	ug/kg	11.5	38.3
51-28-5	2,4-Dinitrophenol	U	767	ug/kg	146	767
132-64-9	Dibenzofuran	U	383	ug/kg	76.7	383
84-66-2	Diethylphthalate	U	383	ug/kg	76.7	383
86-73-7	Fluorene	U	38.3	ug/kg	11.5	38.3
7005-72-3	4-Chlorophenylphenylether	U	383	ug/kg	76.7	383
534-52-1	2-Methyl-4,6-dinitrophenol	U	383	ug/kg	76.7	383
100-01-6	4-Nitroaniline	U	383	ug/kg	115	383
	p-Nitroaniline					
122-39-4	Diphenylamine	U	383	ug/kg	76.7	383
122-66-7	Azobenzene	U	383	ug/kg	76.7	383
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	383	ug/kg	76.7	383
118-74-1	Hexachlorobenzene	U	383	ug/kg	76.7	383
85-01-8	Phenanthrene		65.0	ug/kg	11.5	38.3
120-12-7	Anthracene	J	9.98	ug/kg	7.67	38.3
84-74-2	Di-n-butylphthalate	U	383	ug/kg	76.7	383
206-44-0	Fluoranthene		115	ug/kg	11.5	38.3
85-68-7	Butylbenzylphthalate	U	383	ug/kg	76.7	383
56-55-3	Benzo(a)anthracene		46.8	ug/kg	11.5	38.3
91-94-1	3,3'-Dichlorobenzidine	U	383	ug/kg	115	383
218-01-9	Chrysene		66.0	ug/kg	11.5	38.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	383	ug/kg	76.7	383
117-84-0	Di-n-octylphthalate	U	383	ug/kg	76.7	383
205-99-2	Benzo(b)fluoranthene		179	ug/kg	11.5	38.3
207-08-9	Benzo(k)fluoranthene	U	38.3	ug/kg	11.5	38.3
50-32-8	Benzo(a)pyrene	J	38.1	ug/kg	11.5	38.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.3	ug/kg	11.5	38.3
53-70-3	Dibenzo(a,h)anthracene	U	38.3	ug/kg	11.5	38.3
191-24-2	Benzo(ghi)perylene	J	29.3	ug/kg	11.5	38.3
120-82-1	1,2,4-Trichlorobenzene	U	383	ug/kg	76.7	383

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	596	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	276	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13862	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:55	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110422.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-84-5	13-Docosenamide, (Z)-	9.19	188	ug/kg	95	NJ
112-95-8	Eicosane	10.32	191	ug/kg	98	NJ
	Unknown	11.76	241	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110422.d
Lab Smp Id: 241540014 Client Smp ID: RE03-09-13862
Inj Date : 04-DEC-2009 16:55
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540014|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	13.14370	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	500910	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1996595	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1123063	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1957054	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1671058	40.0000	
* 98 Perylene-d12	264	10.074	10.069	(1.000)	1447143	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	841260	64.2989	2460
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	1031458	64.8641	2490
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	417065	31.6973	1220
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	943504	35.0780	1340
$ 60 2,4,6-Tribromophenol	329	6.533	6.534	(1.089)	292958	93.4180	3580
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	1242984	47.3873	1820

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.845	7.845	(0.909)	108622	2.44614	93.8
68 Phenanthrene	178	6.992	6.992	(1.002)	75384	1.69495	65.0
69 Anthracene	178	7.028	7.028	(1.007)	11777	0.26038	10(a)
76 Fluoranthene	202	7.704	7.704	(1.104)	128749	2.99898	115
89 Benzo(a)anthracene	228	8.622	8.628	(0.999)	48926	1.22102	46.8
92 Chrysene	228	8.651	8.657	(1.002)	64468	1.72138	66.0
95 Benzo(b)fluoranthene	252	9.610	9.610	(0.954)	78971	4.67244	179
97 Benzo(a)pyrene	252	9.998	10.004	(0.992)	36168	0.99473	38.1(a)
101 Benzo(ghi)perylene	276	12.157	12.163	(1.207)	20761	0.76345	29.3(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s110422.d
Report Date: 12/05/2009 08:14
Lab. ID: 241540014 SampleType: SAMPLE
Injection Date: 04-DEC-2009 16:55
Operator: nag1 Instrument: MSD1.i
Sample Info: |241540014|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	50735	3.62	3.68	80-120	100	(T)
93	103	3.66	3.69	418-478	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	57544	4.25	4.13	80-120	100	(T)
42	32786	4.25	4.13	44-104	57	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	201182	6.00	5.77	80-120	100	(T)
164	1123063	6.00	5.77	0- 40	558	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	143631	6.00	5.82	80-120	100	(T)
63	1826	6.00	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	143631	6.00	6.10	80-120	100	(T)
89	1606	6.00	6.10	32- 92	1	(QT)
63	1826	6.00	6.10	15- 75	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	17018	6.53	6.37	80-120	100	(T)
165	19033	6.53	6.37	64-124	112	(T)
167	6172	6.53	6.37	0- 43	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	16821	6.53	6.67	80-120	100	(T)
141	113748	6.53	6.67	50-110	676	(QT)
250	35440	6.53	6.67	68-128	211	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	75384	6.99	6.99	80-120	100	( )
179	13216	6.99	6.99	0- 45	18	( )
176	13107	6.99	6.99	0- 48	17	( )
69 Anthracene				CAS#: 120-12-7		
178	11777	7.03	7.03	80-120	100	( )
179	3340	7.02	7.03	0- 46	28	( )
176	2755	7.03	7.03	0- 48	23	( )
76 Fluoranthene				CAS#: 206-44-0		
202	128749	7.70	7.70	80-120	100	( )
203	22519	7.70	7.70	0- 47	17	( )
101	18224	7.70	7.70	0- 43	14	( )
79 Pyrene				CAS#: 129-00-0		
202	108622	7.85	7.85	80-120	100	( )
200	23111	7.85	7.85	0- 51	21	( )
101	19060	7.85	7.85	0- 46	18	( )
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	48926	8.62	8.63	80-120	100	( )
226	11635	8.62	8.63	0- 55	24	( )
229	16232	8.62	8.63	0- 49	33	( )
92 Chrysene				CAS#: 218-01-9		
228	64468	8.65	8.66	80-120	100	( )
229	15410	8.65	8.66	0- 49	24	( )
226	16864	8.65	8.66	0- 58	26	( )
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	78971	9.61	9.61	80-120	100	( )
253	13719	9.61	9.61	0- 51	17	( )
125	11210	9.60	9.61	0- 44	14	( )
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	78971	9.61	9.64	80-120	100	( )
253	13382	9.61	9.64	0- 52	17	( )
125	11174	9.60	9.64	0- 44	14	( )
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	36168	10.00	10.00	80-120	100	( )
253	8712	10.00	10.00	0- 51	24	( )
125	5571	10.00	10.00	0- 48	15	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
101	Benzo(ghi)perylene			CAS#: 191-24-2		
276	20761	12.16	12.16	80-120	100	( )
138	6371	12.16	12.16	7- 67	31	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110422.d
Lab Smp Id: 241540014 Client Smp ID: RE03-09-13862
Inj Date : 04-DEC-2009 16:55
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540014|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	13.14370	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2965088	40.000
* 91 Chrysene-d12	8.633	4848650	40.000
* 98 Perylene-d12	10.074	3951102	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.922	1152713	15.5504717	596	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.139	872914	7.20129630	276	98	NIST05.L	112657	91
13-Docosenamide, (Z)-				CAS #: 112-84-5			
9.186	595810	4.91526185	188	95	NIST05.L	146308	91
Eicosane				CAS #: 112-95-8			
10.321	492577	4.98672665	191	98	NIST05.L	113492	98
Unknown				CAS #:			
11.763	620913	6.28596908	241	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Sample Info: |2415400141926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: nag1

Column diameter: 0.20

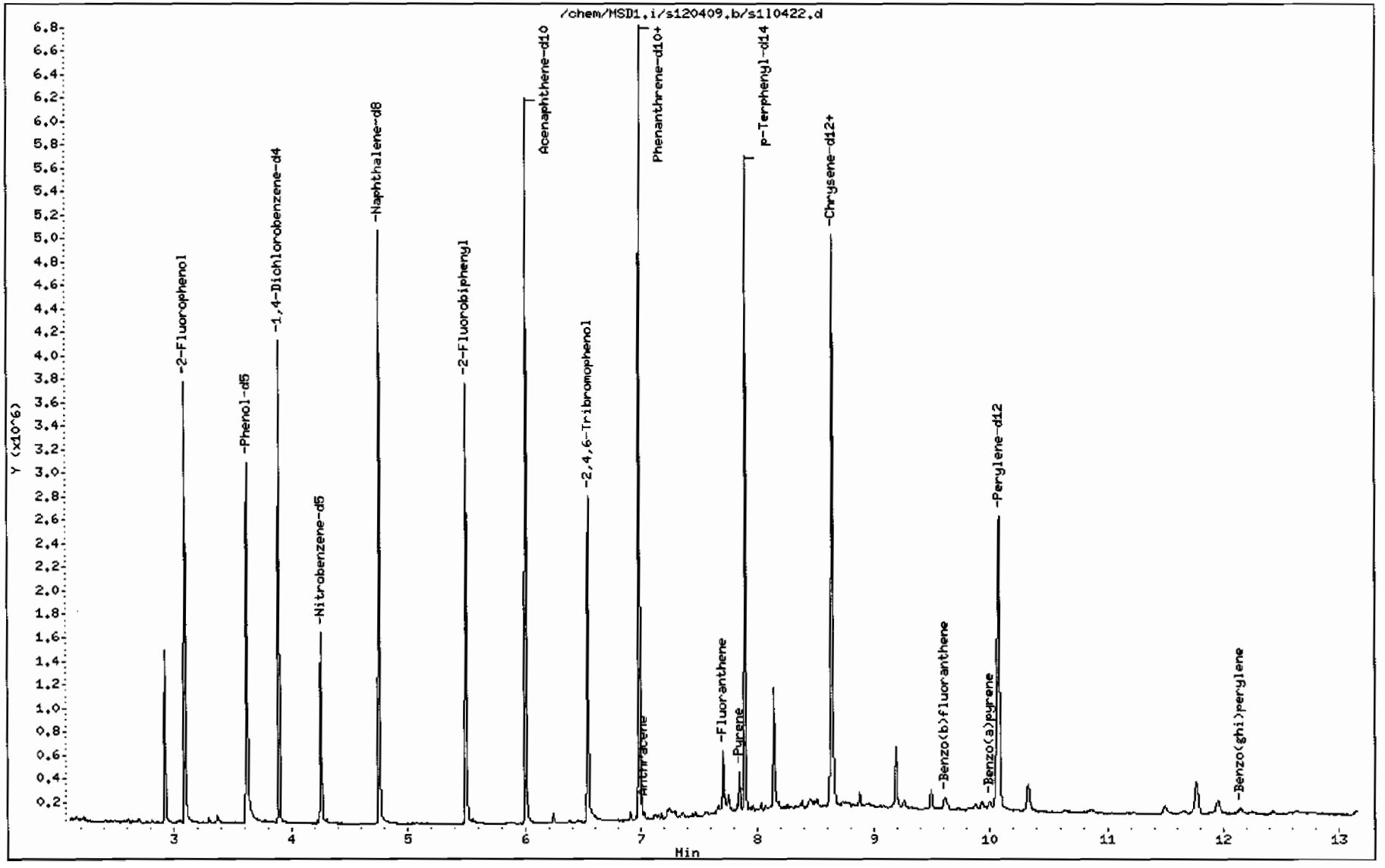

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |2415400141926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 93.8 ug/Kg

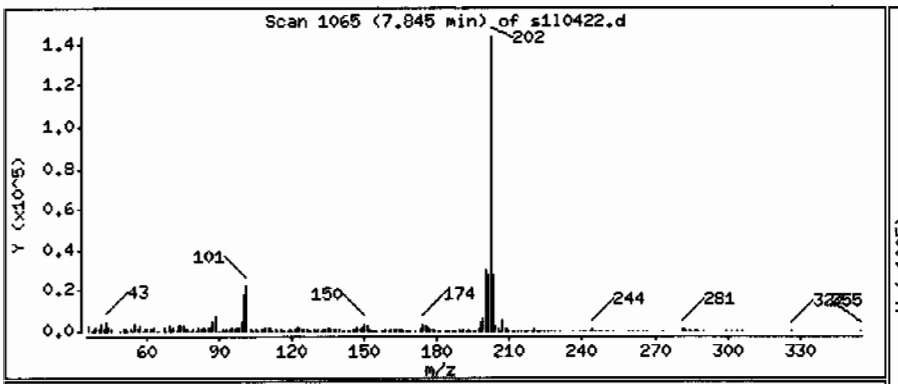

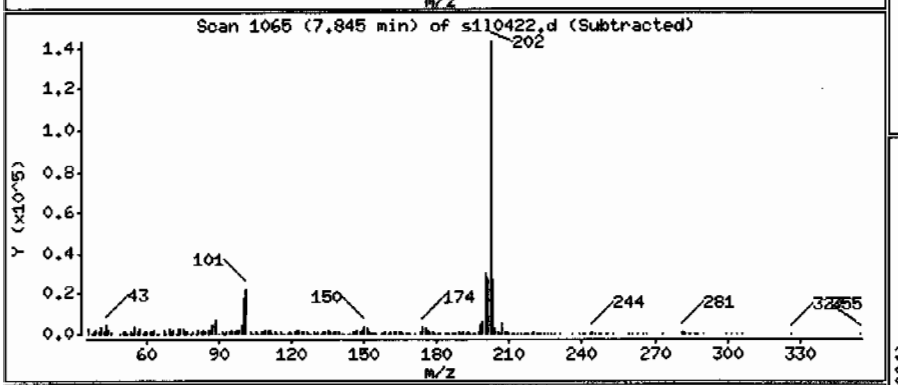

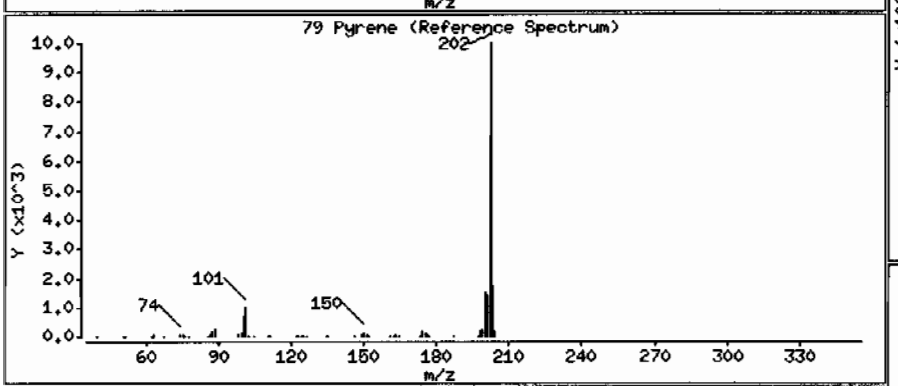

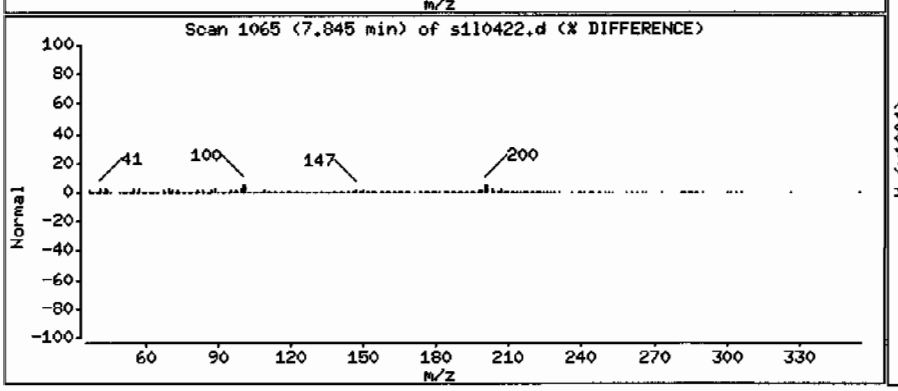

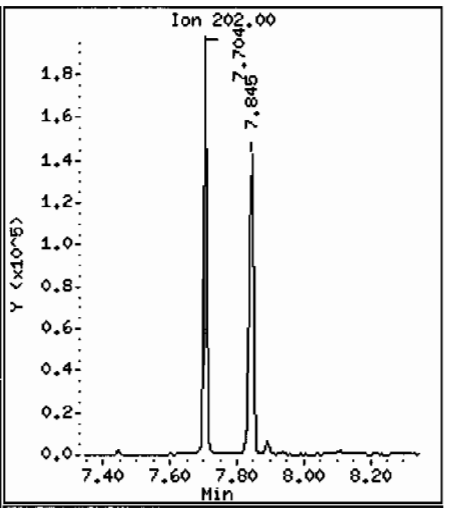

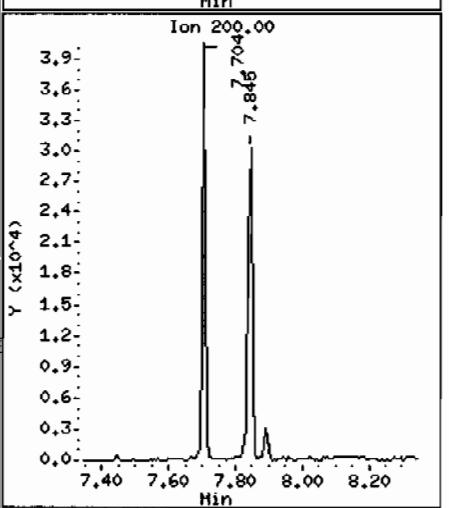

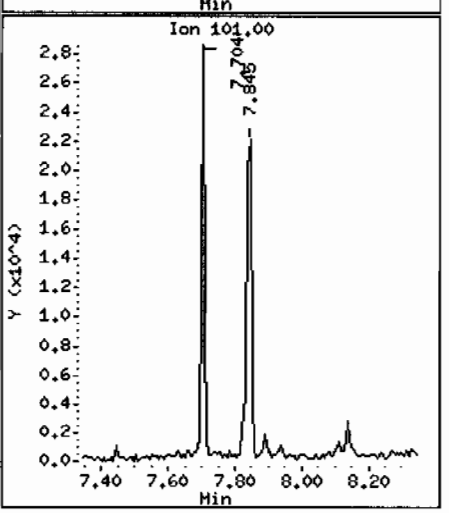

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |2415400141926610111SVHF111LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 65.0 ug/Kg

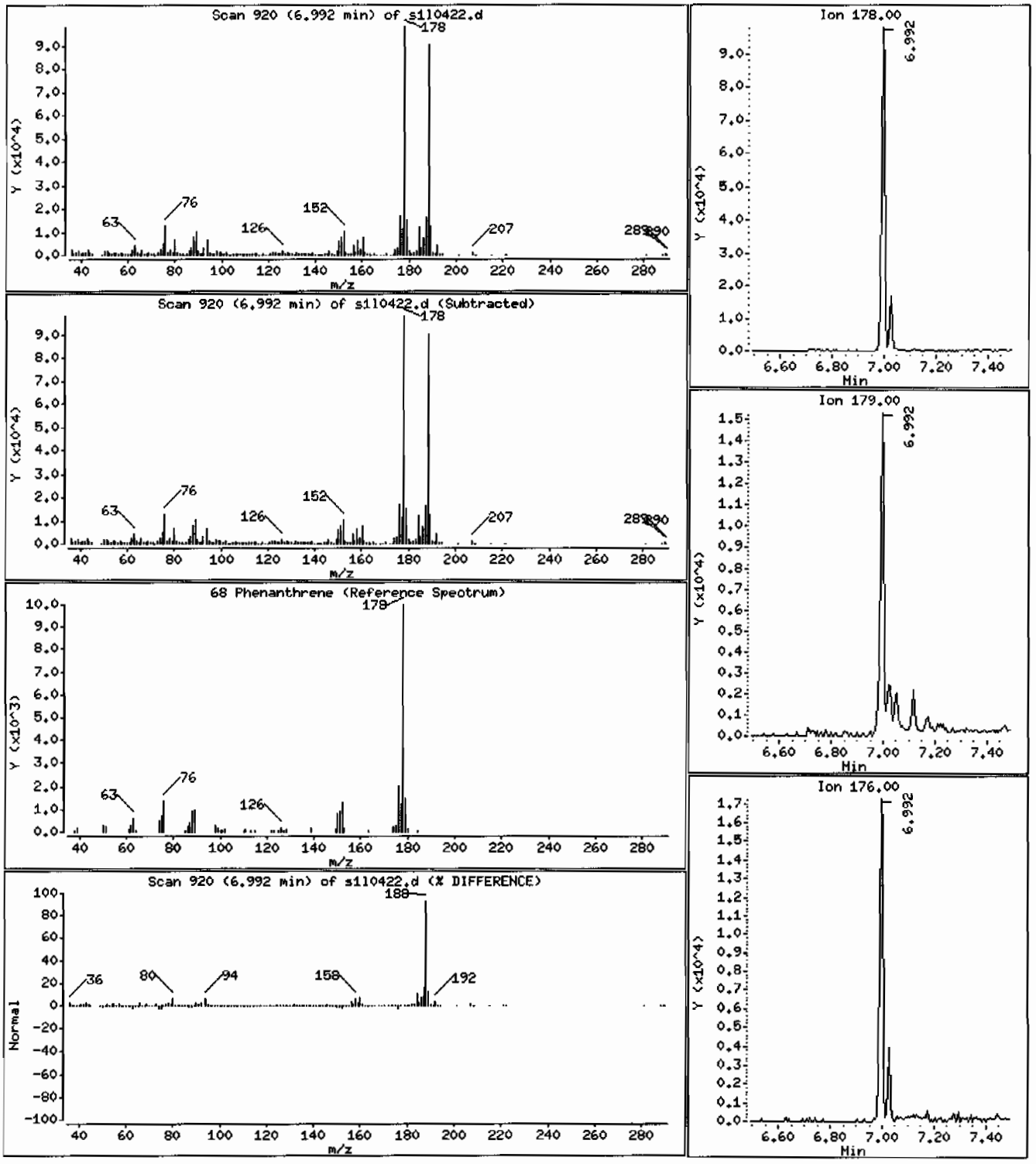

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862 Instrument: MSD1.i

Sample Info: 1241540014192661011SVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

69 Anthracene Concentration: 10 ug/Kg

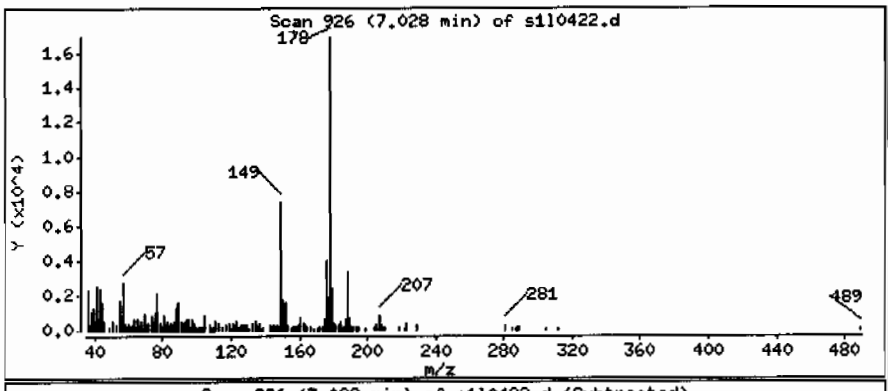

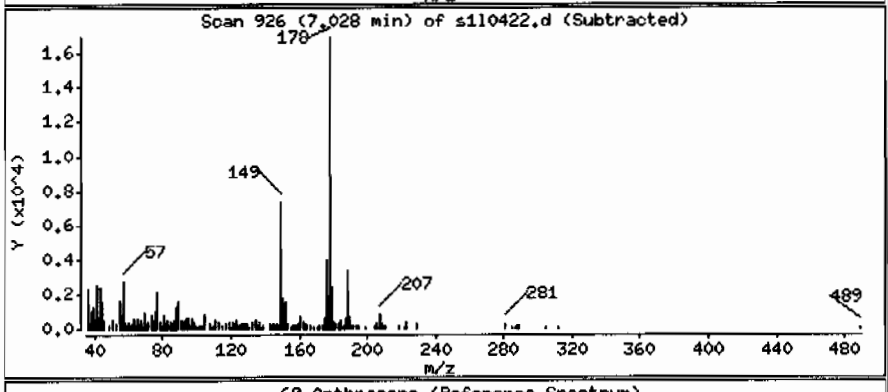

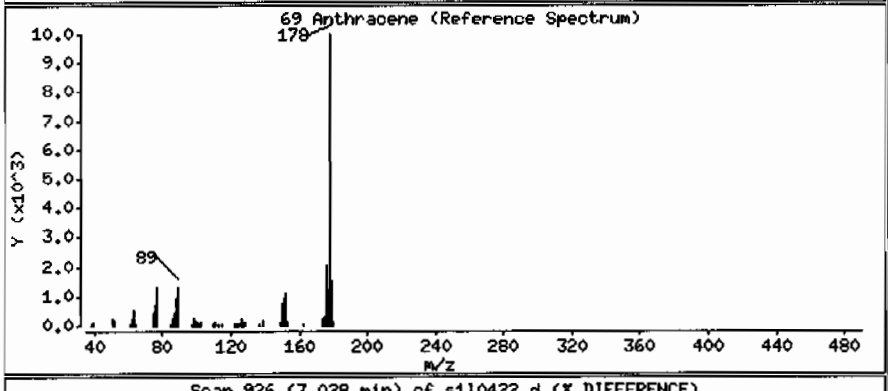

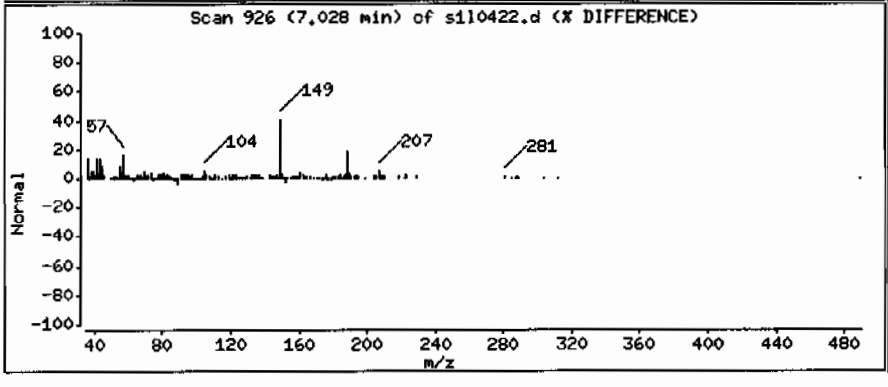

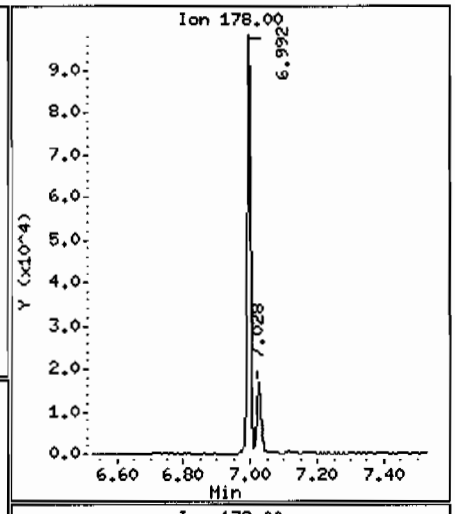

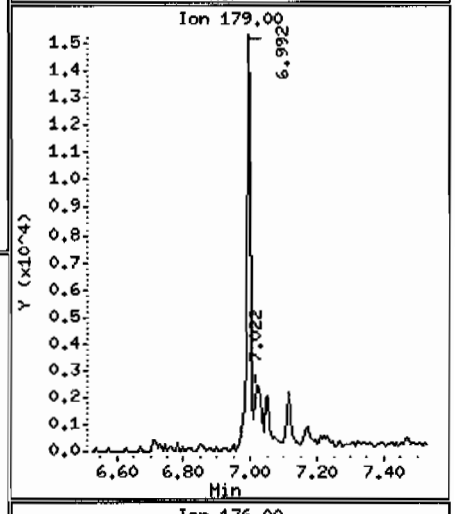

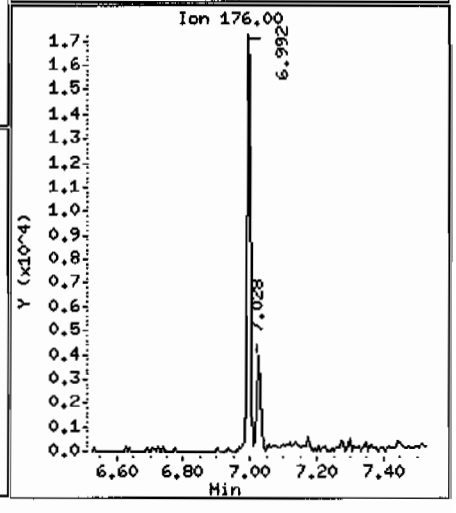

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |2415400141926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 115 ug/Kg

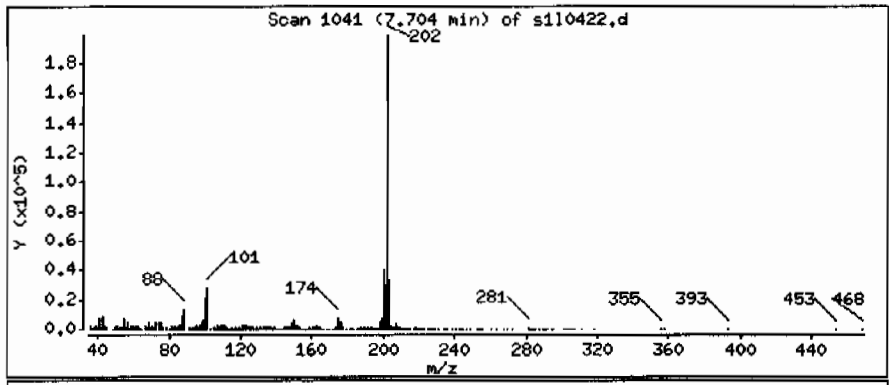

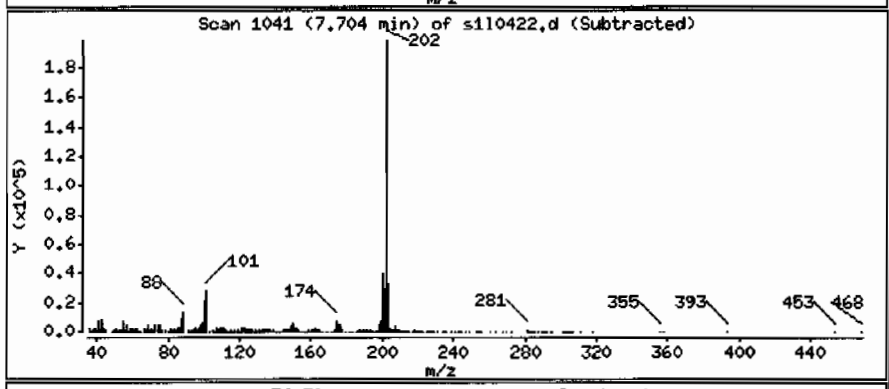

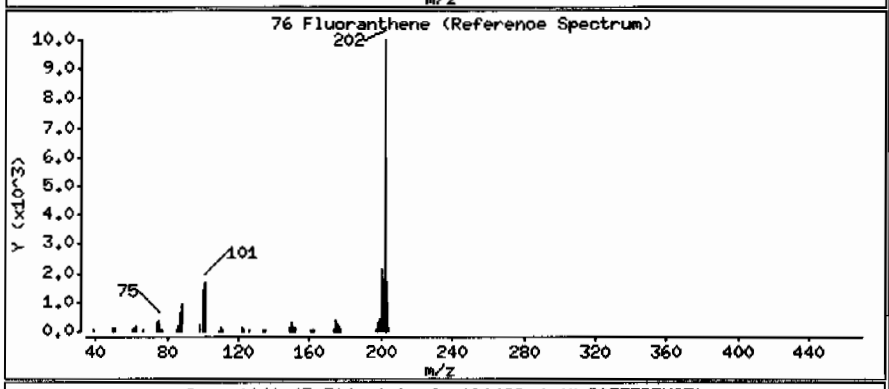

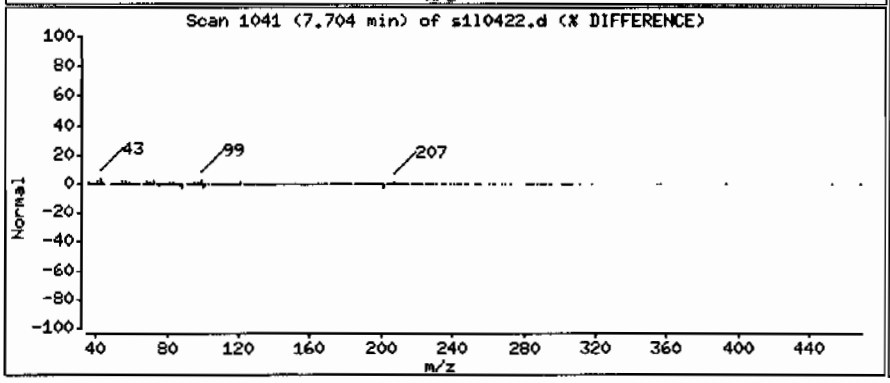

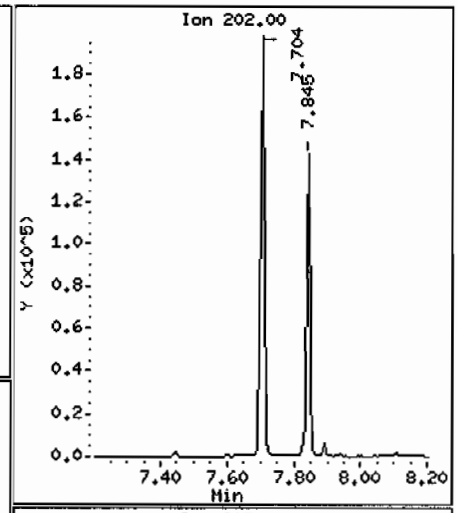

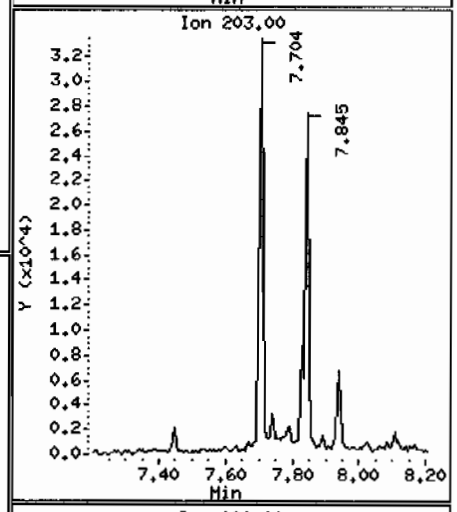

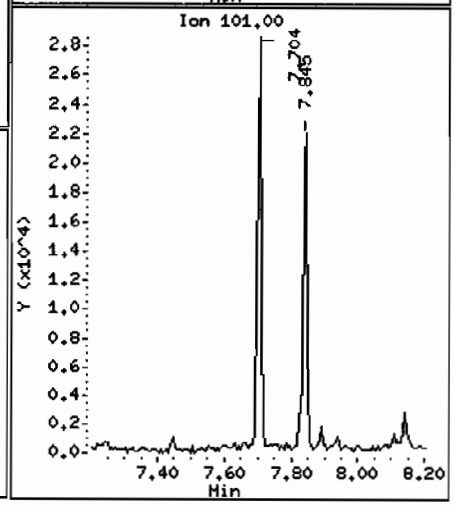

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862 Instrument: MSD1.i

Sample Info: 1241540014192661011SVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

89 Benzo(a)anthracene Concentration: 46.8 ug/Kg

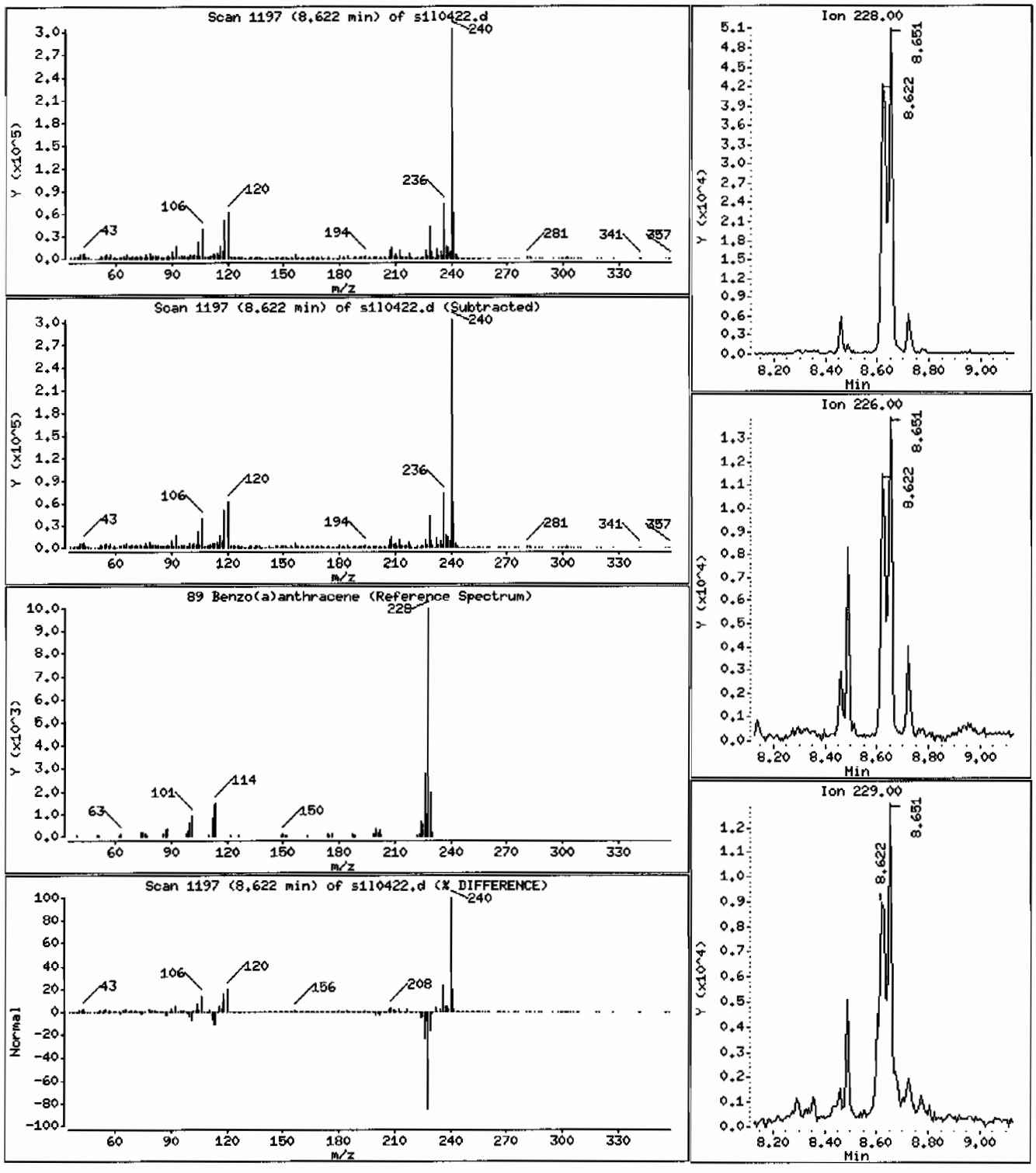

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |2415400141926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 66.0 ug/Kg

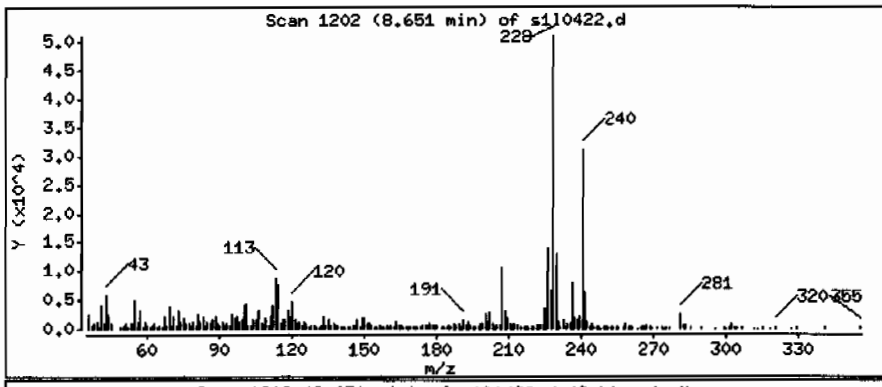

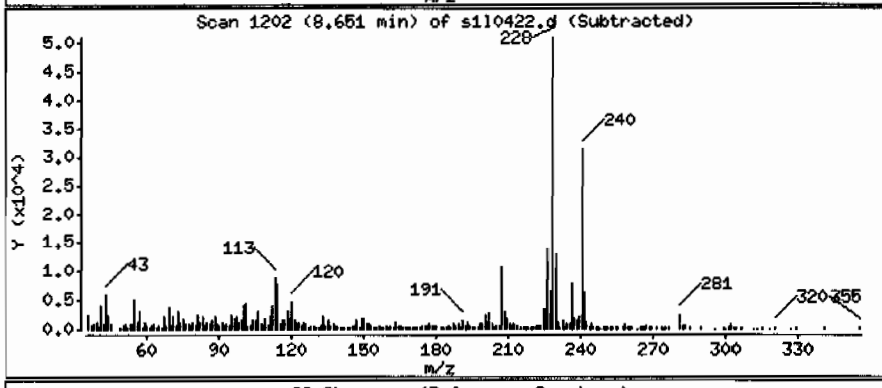

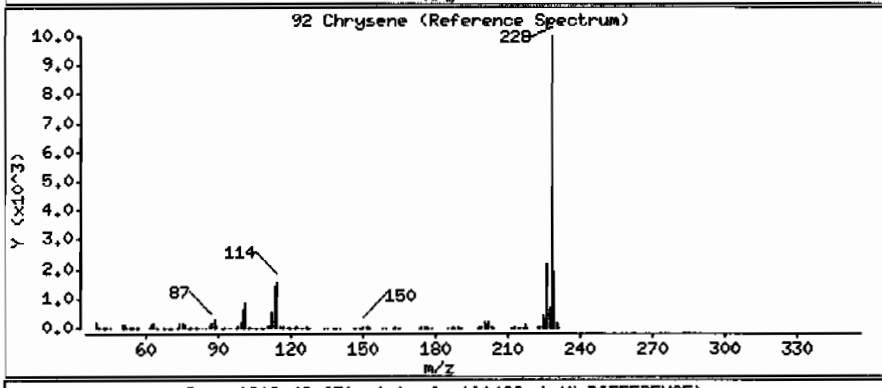

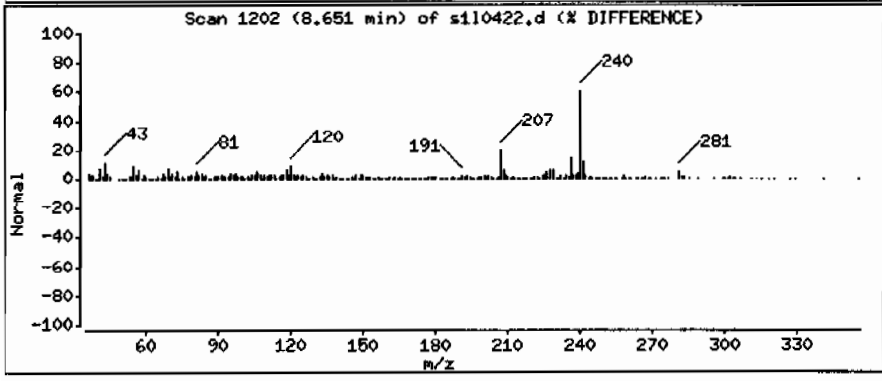

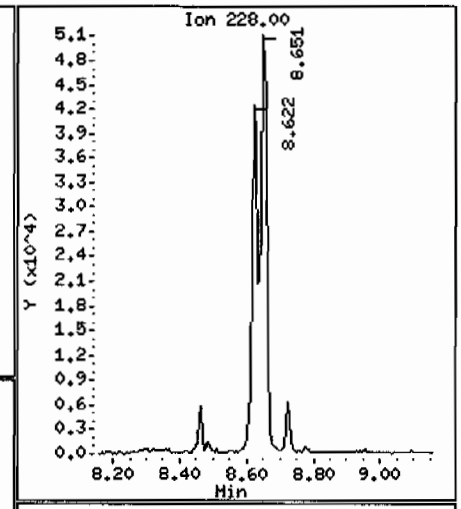

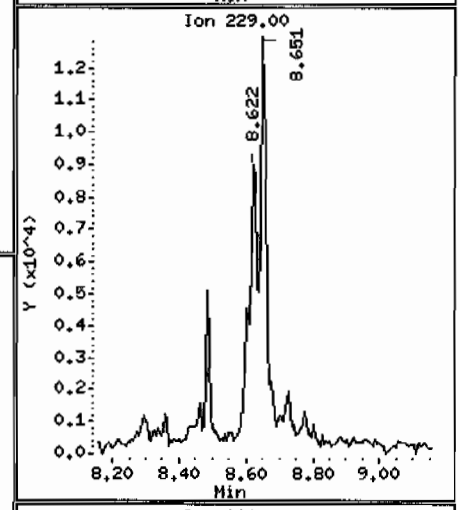

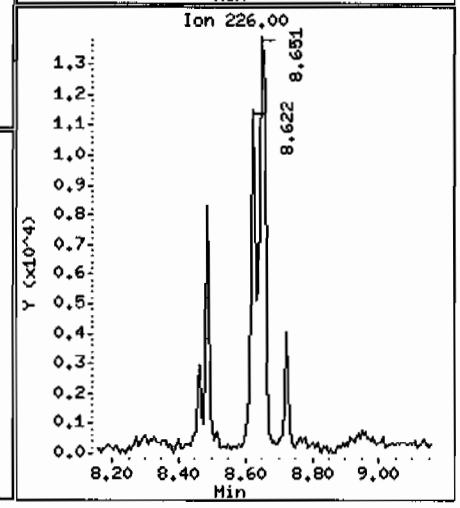

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |24154001|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 179 ug/Kg

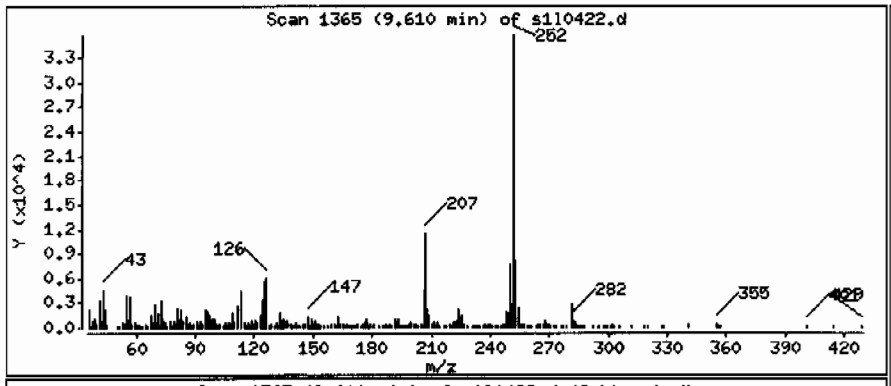

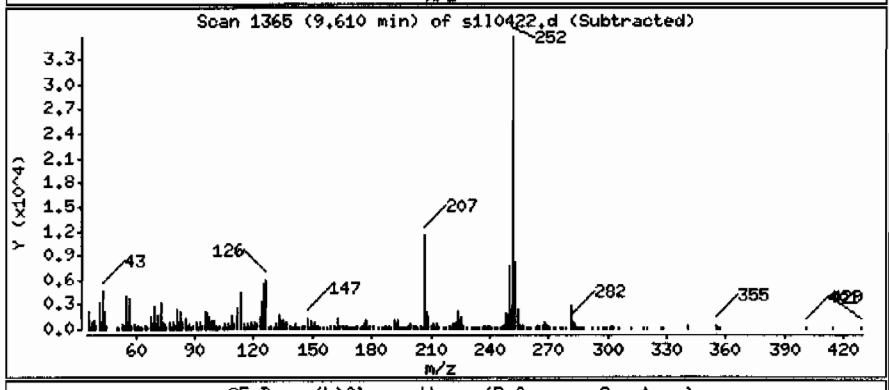

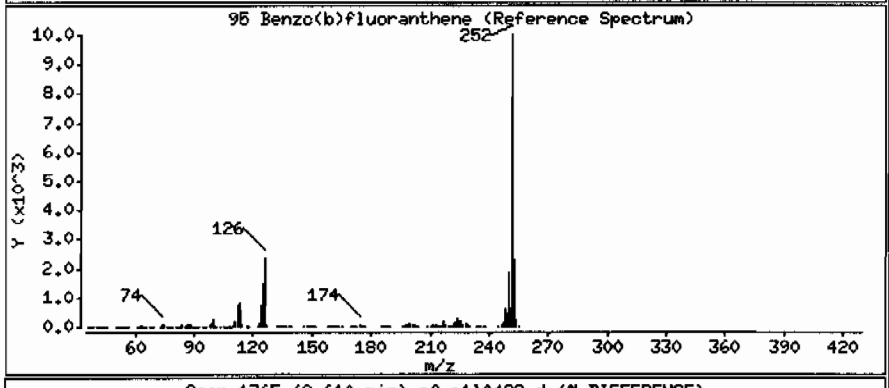

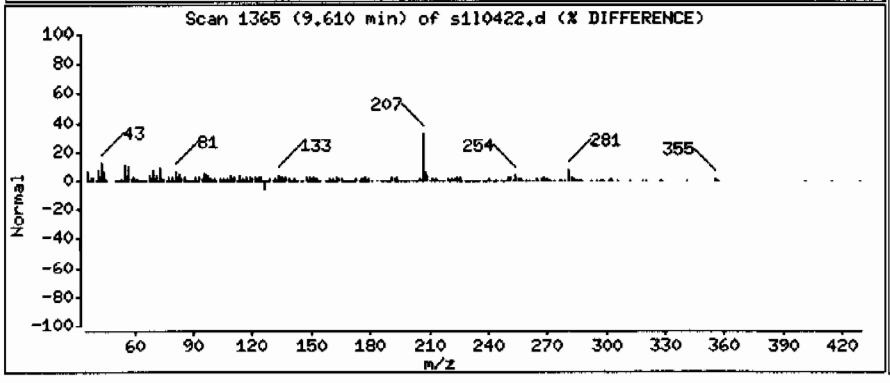

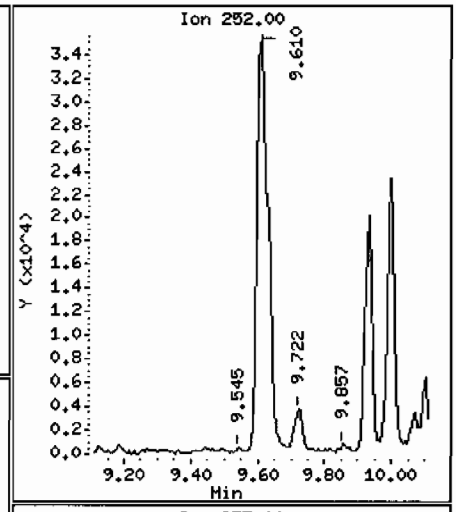

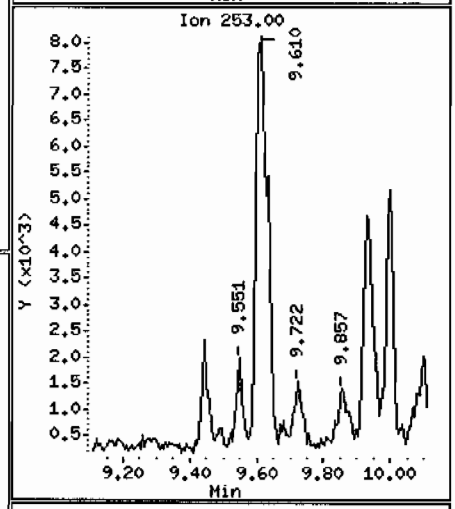

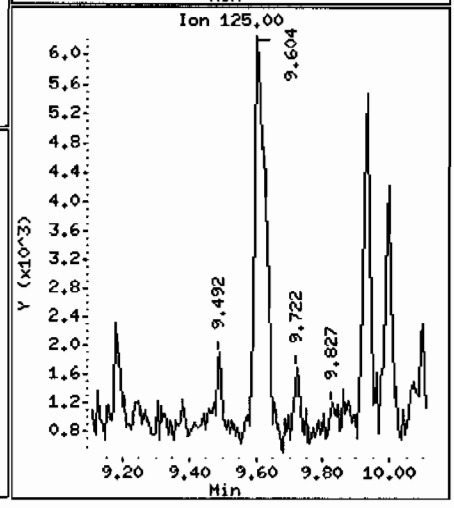

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |2415400141926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 38.1 ug/Kg

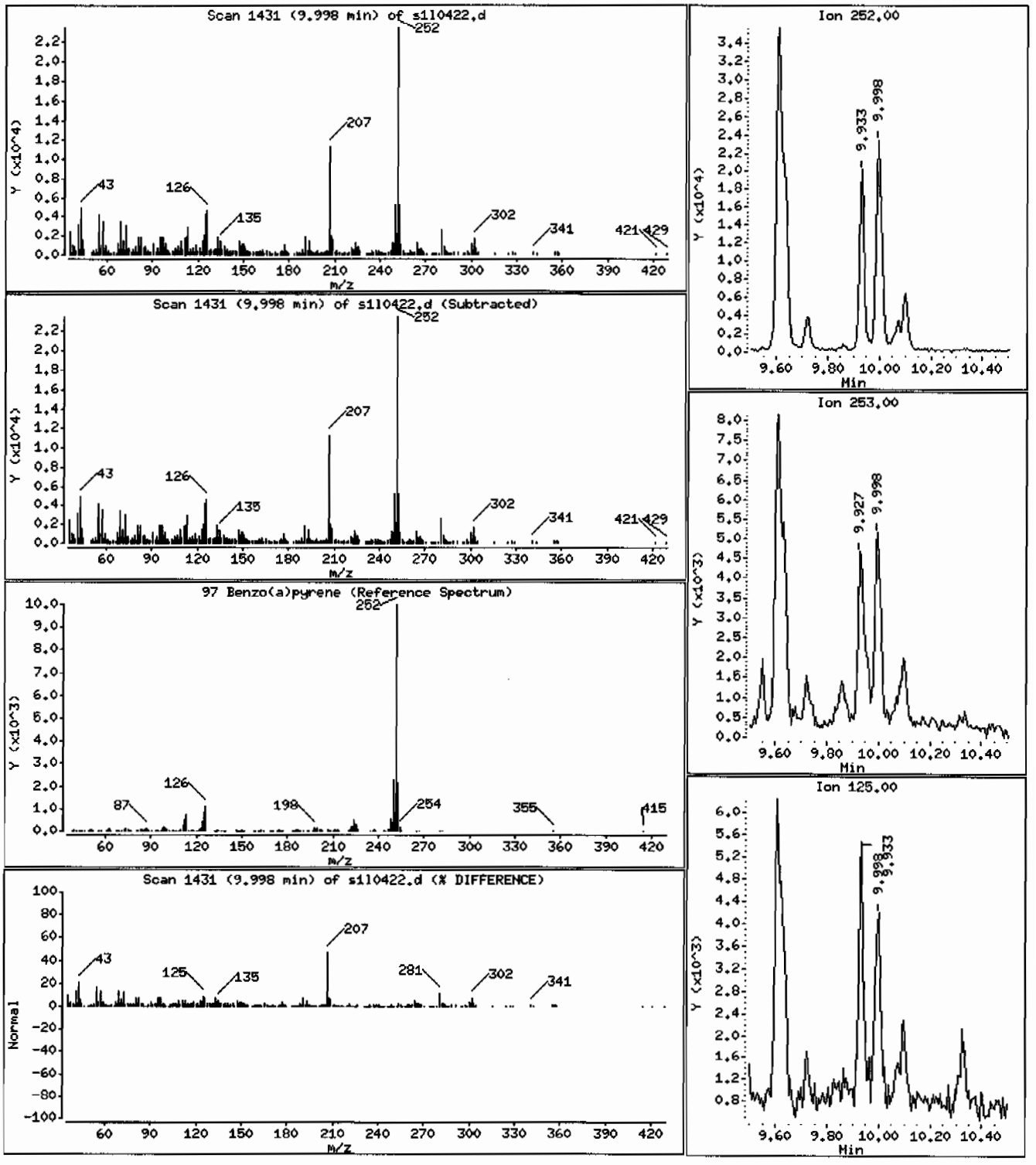

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |241540014|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 29.3 ug/Kg

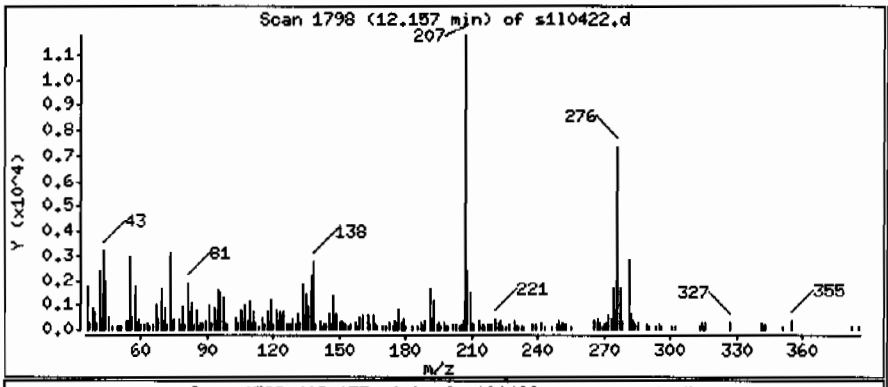

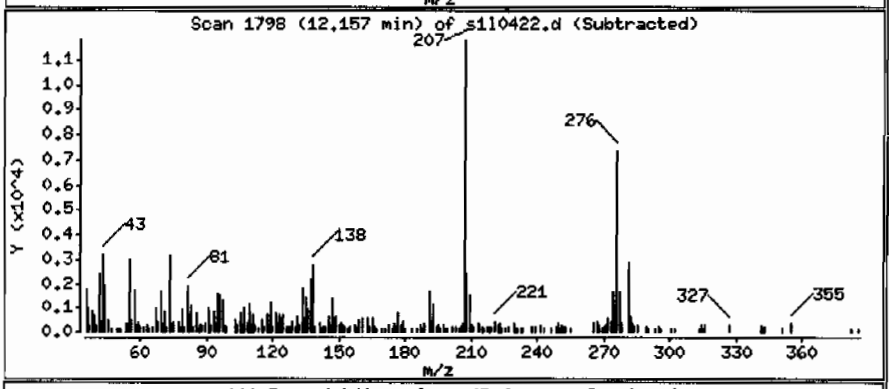

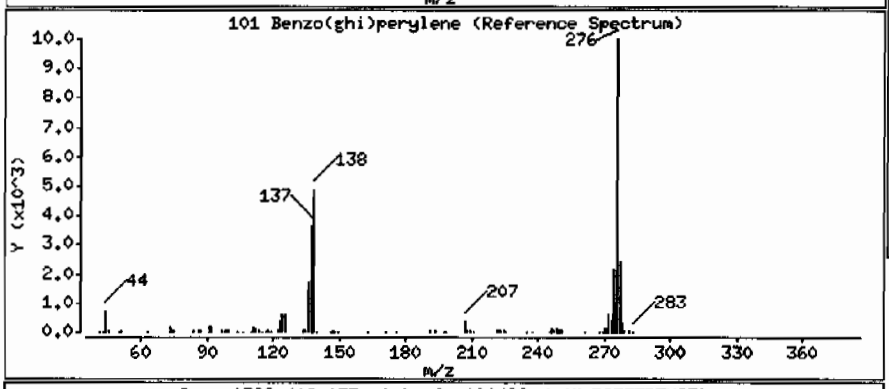

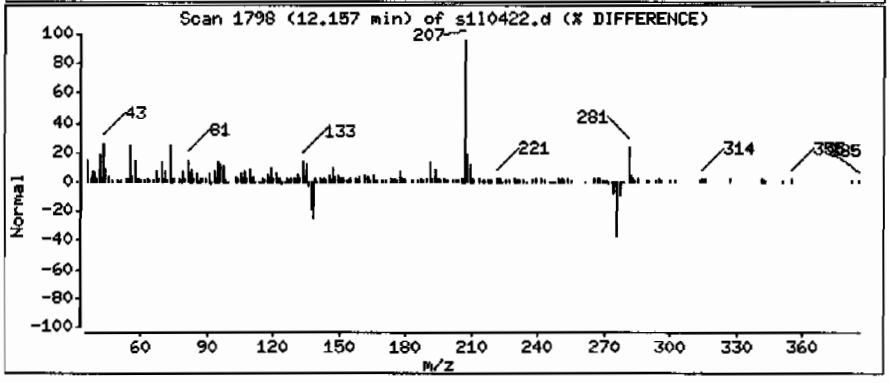

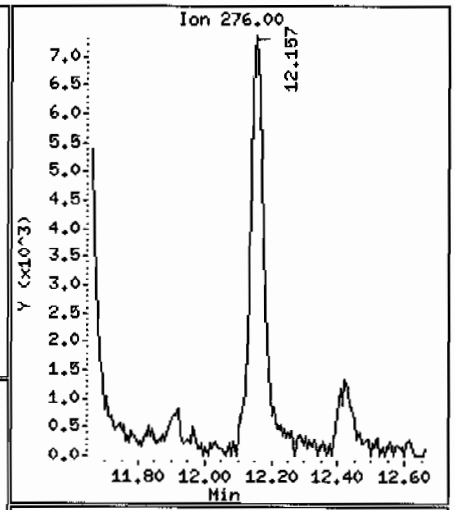

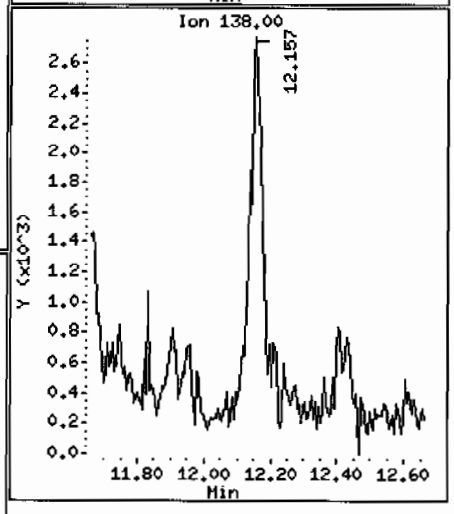

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862

Instrument: MSD1.i

Sample Info: |2415400141926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	33	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	25	C4H7NO2	101

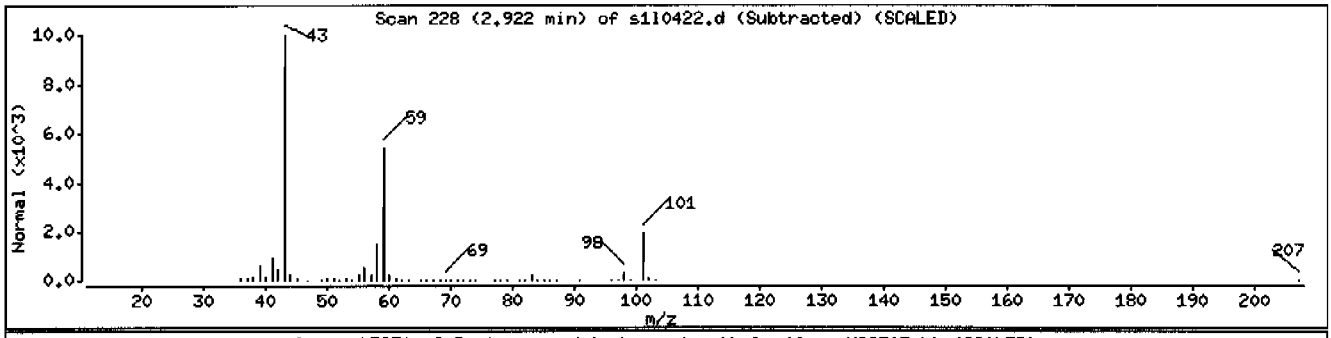

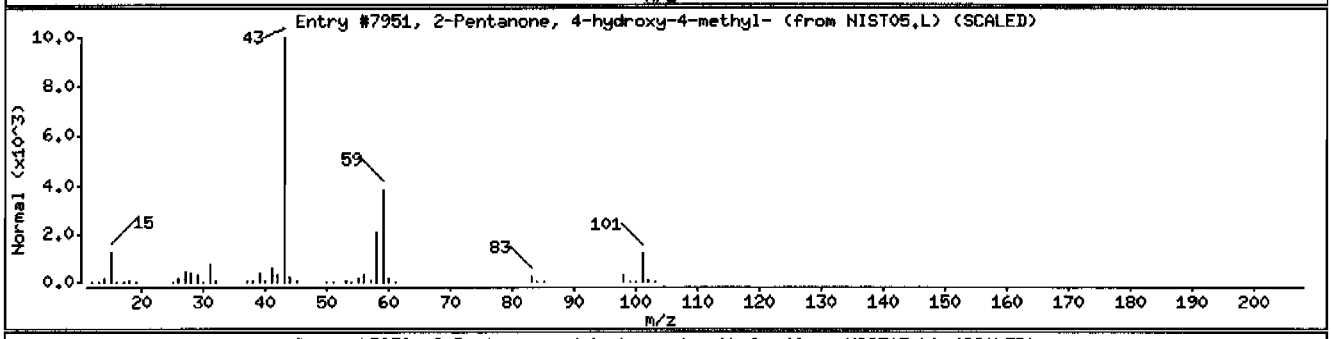

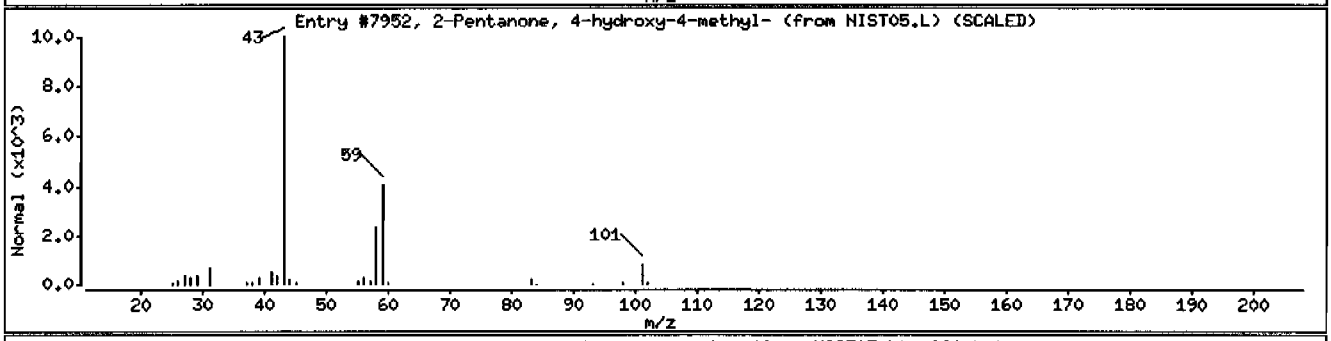

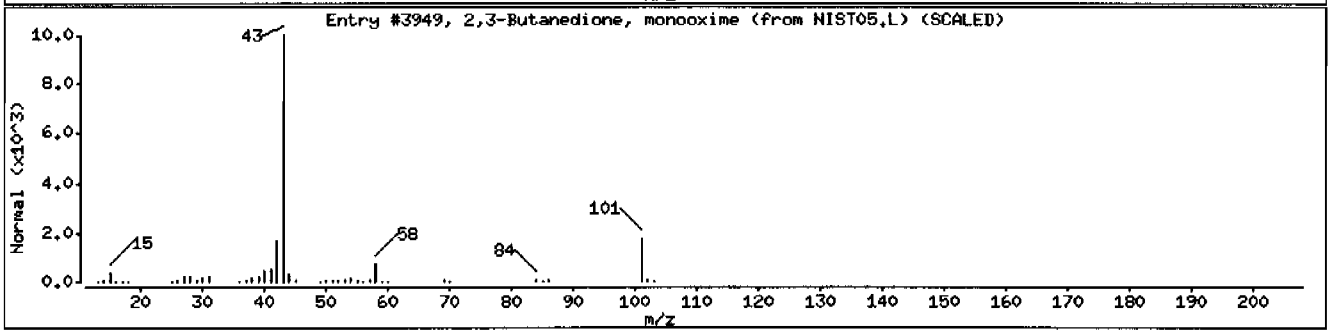

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862 Instrument: MSD1.i

Sample Info: 1241540014192661011|SVHF11|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	98	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
Tetradecanamide	638-58-4	NIST05.L	76597	91	C14H29NO	227

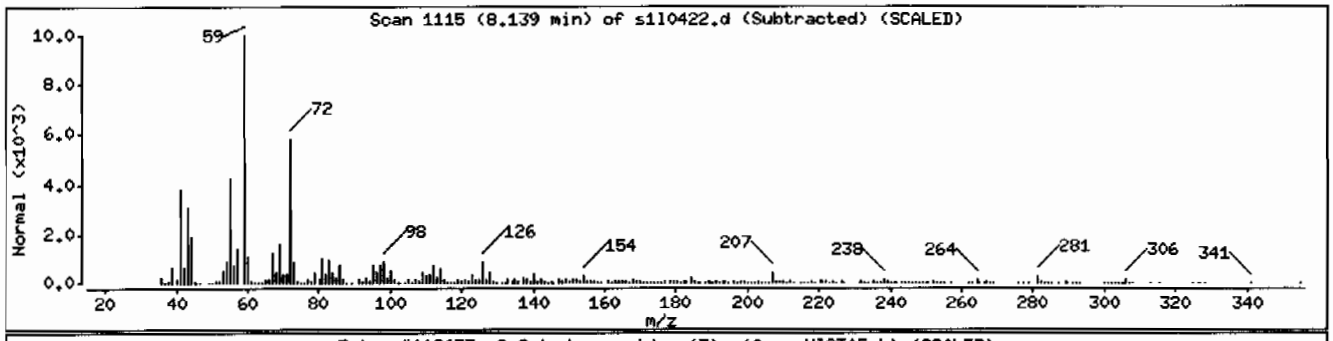

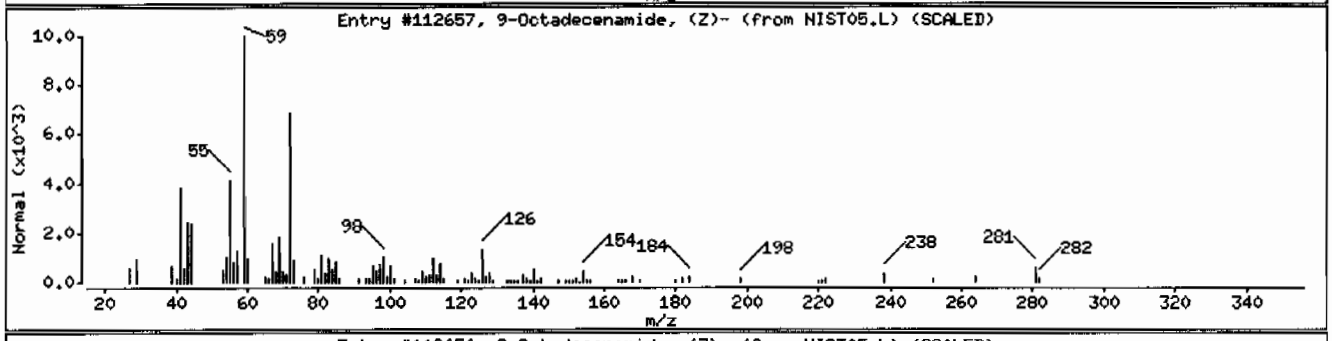

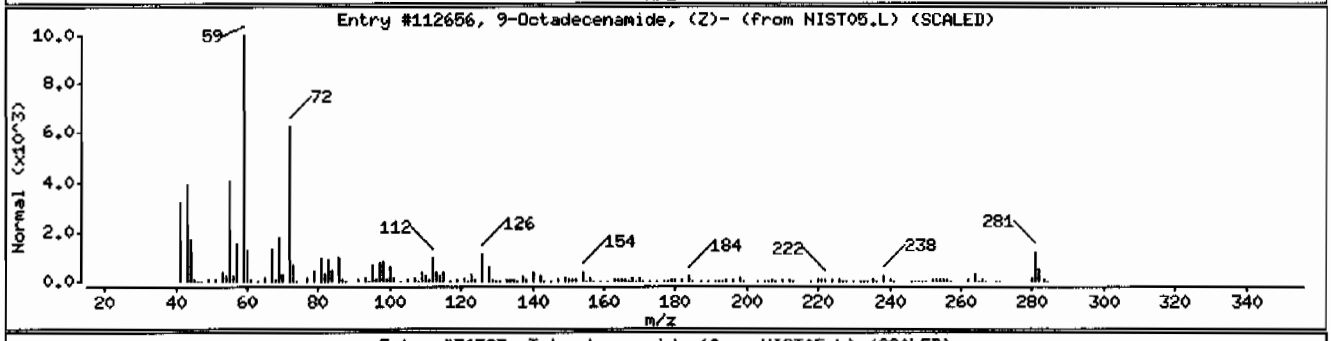

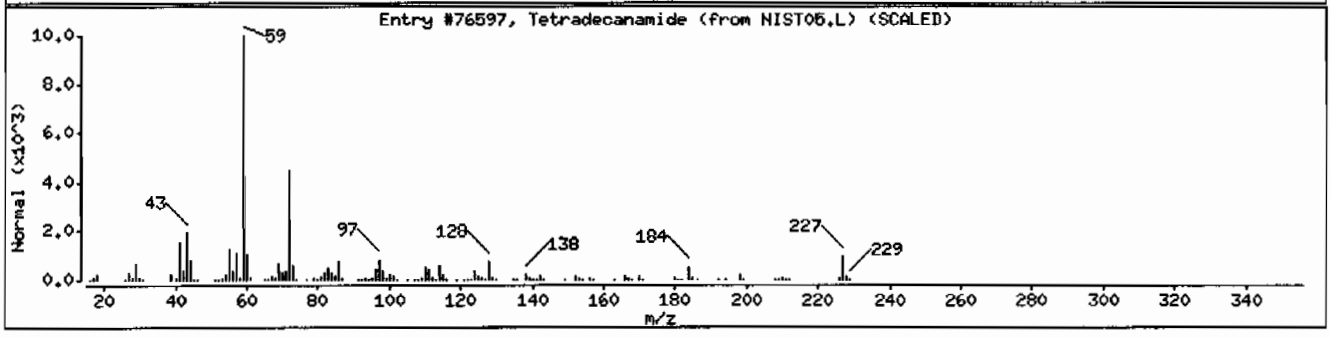

Data File: /chem/HSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862 Instrument: HSD1.i

Sample Info: |2415400141926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Dooosenamide, (Z)-	112-84-5	NIST05.L	146308	95	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	91	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	90	C22H43NO	337

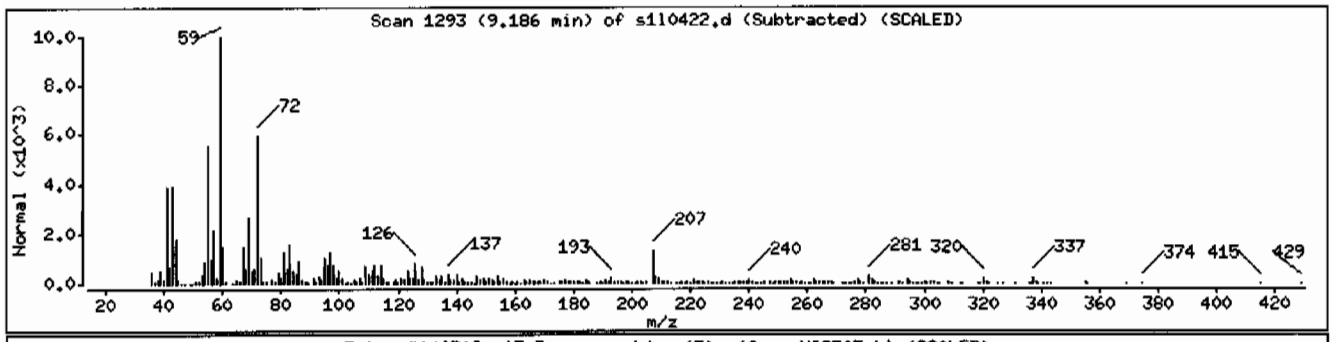

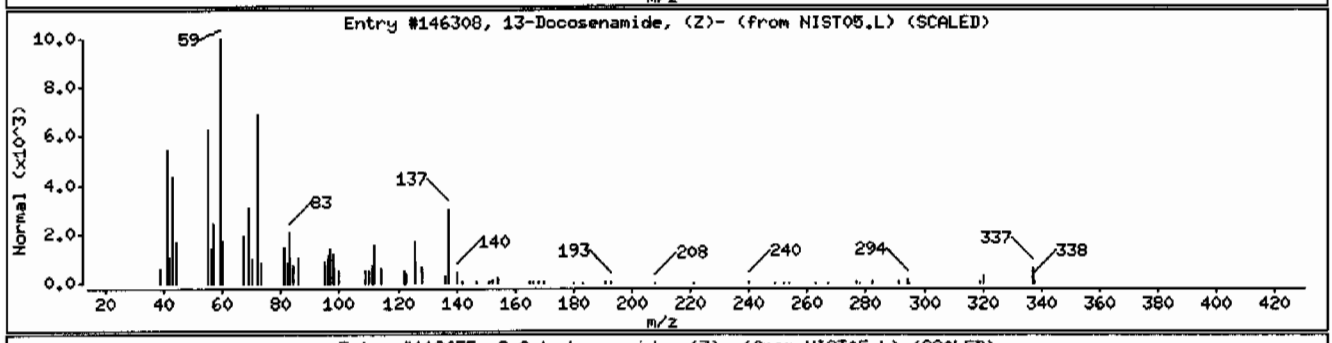

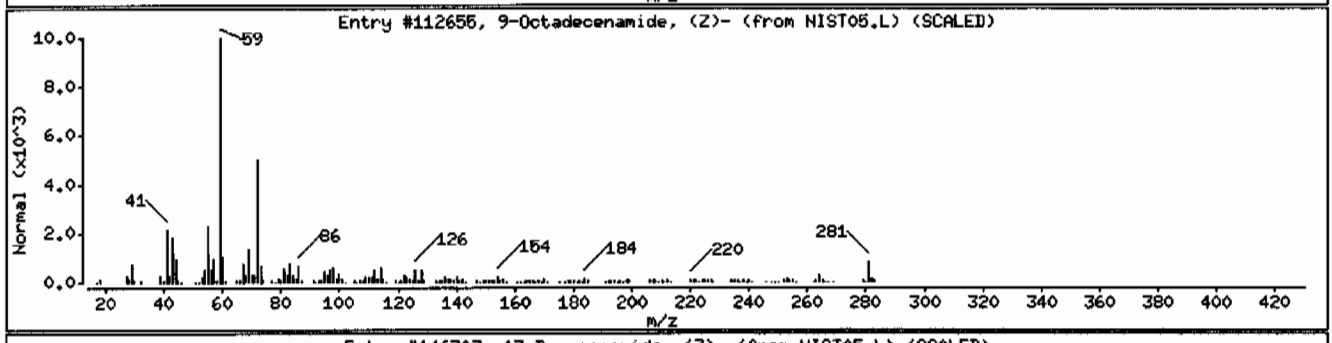

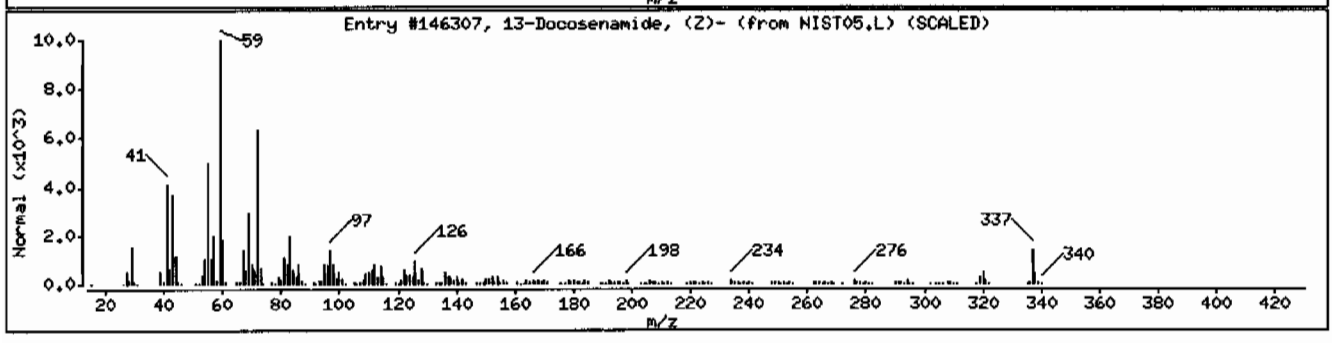

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862 Instrument: MSD1.i

Sample Info: |2415400141926610111SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113492	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282

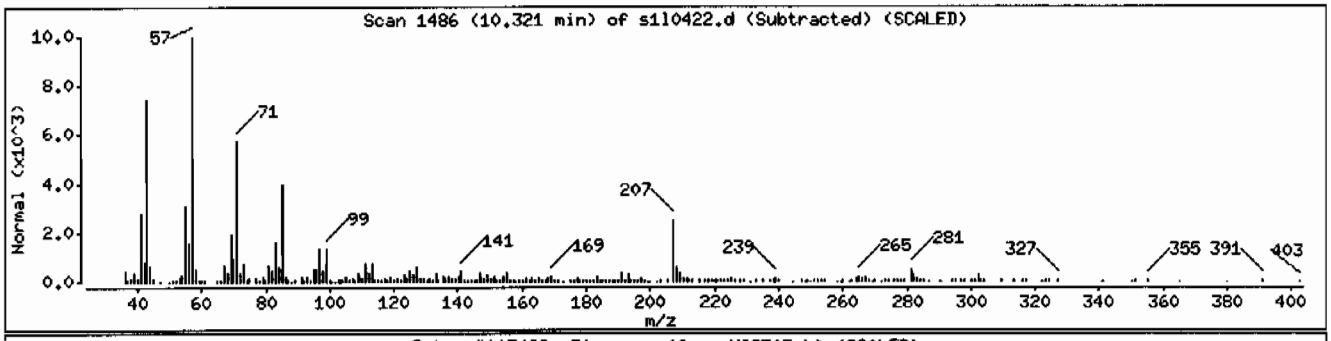

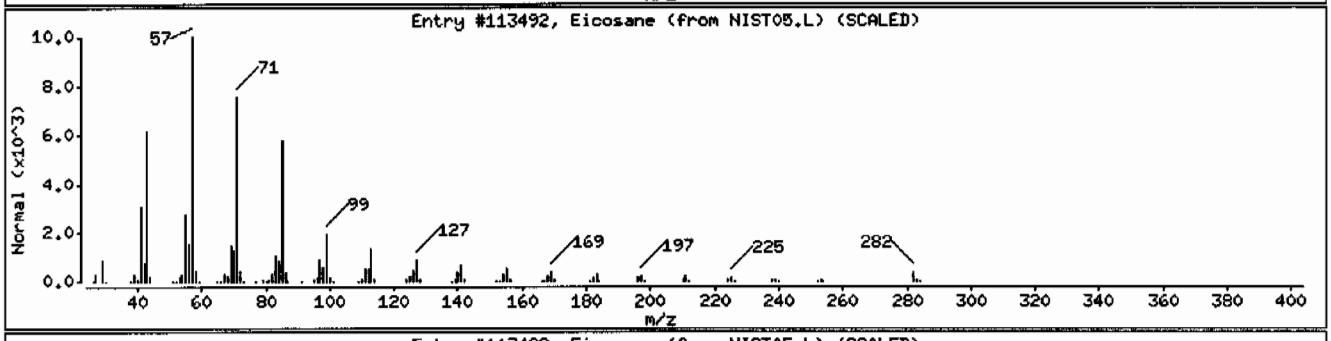

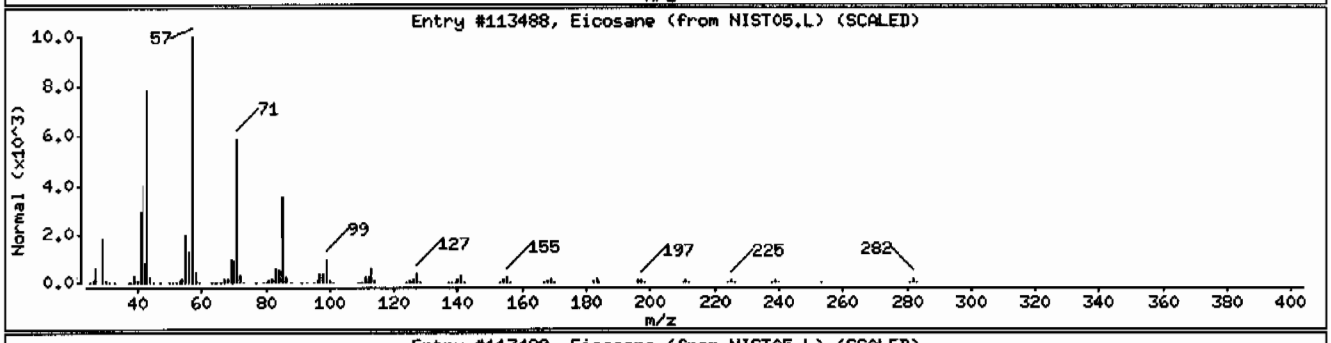

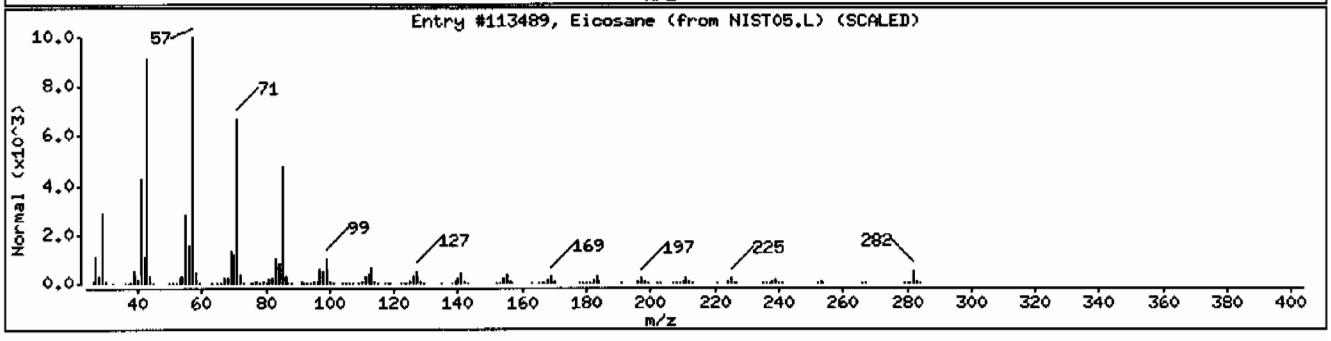

Data File: /chem/MSD1.i/s120409.b/s110422.d

Date : 04-DEC-2009 16:55

Client ID: RE03-09-13862 Instrument: MSD1.i

Sample Info: |2415400141926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	49	C15H24	204
Farnesyl bromide	6874-67-5	NIST05.L	114486	46	C15H25Br	284
1H-3a,7-Methanoazulene, octahydro-1,9,9-	508-55-4	NIST05.L	60016	38	C15H24	204

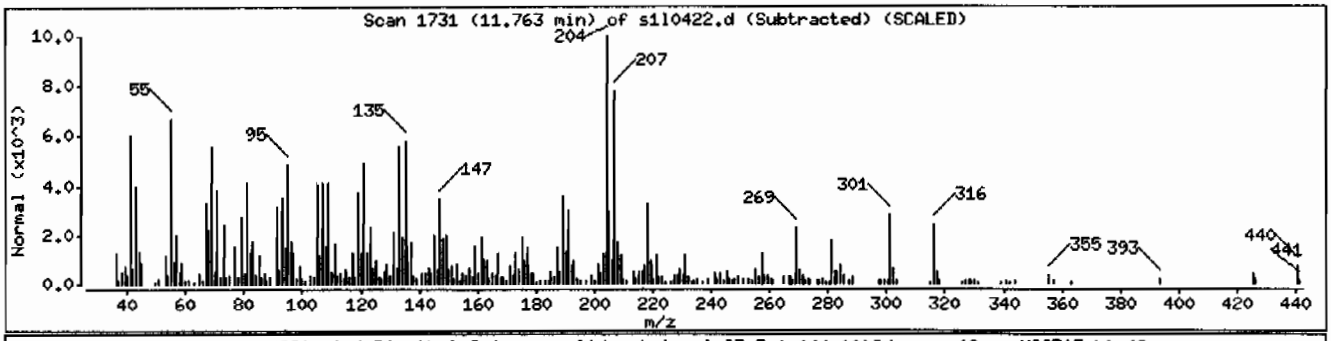

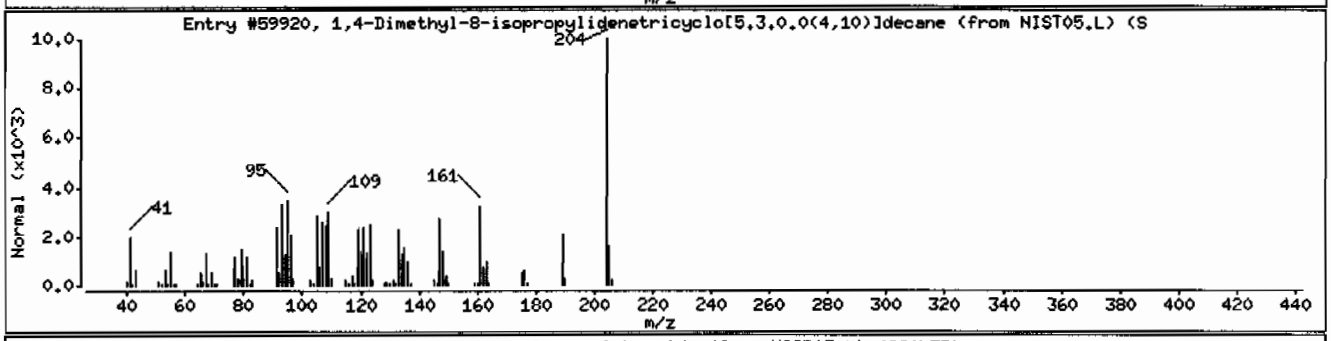

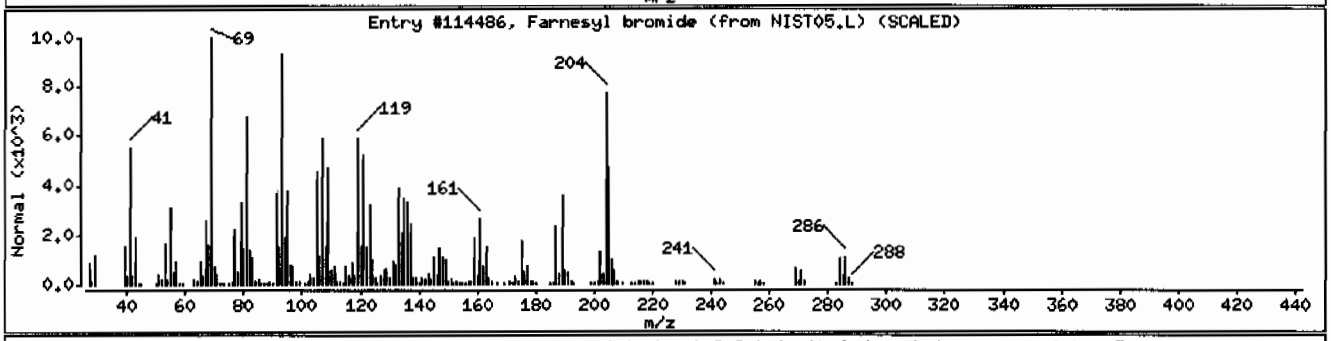

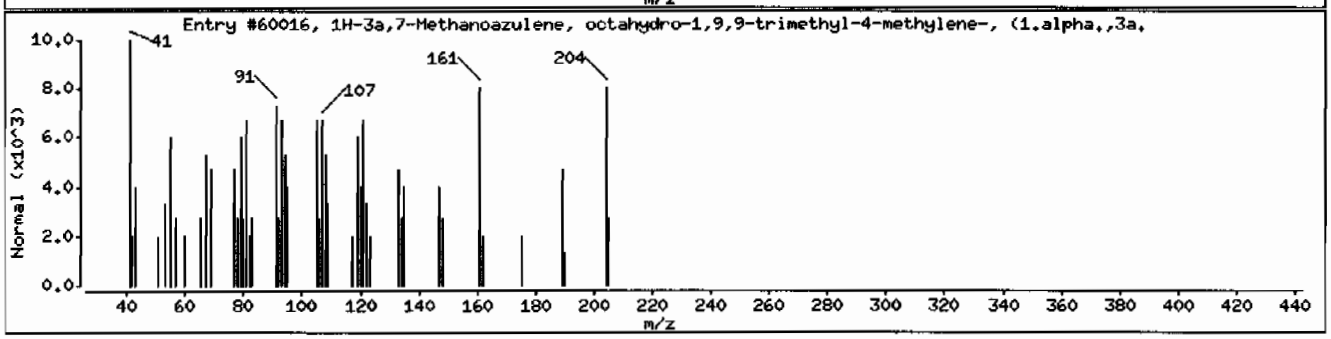

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:46	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.9	364
108-95-2	Phenol	U	364	ug/kg	72.9	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364
129-00-0	Pyrene	J	13.2	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.9	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.9	364
95-48-7	o-Cresol	U	364	ug/kg	72.9	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364
78-59-1	Isophorone	U	364	ug/kg	72.9	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.9	364
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	364	ug/kg	72.9	364

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:46	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	364	ug/kg	72.9	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	p-Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364
122-66-7	Azobenzene	U	364	ug/kg	72.9	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364
206-44-0	Fluoranthene	J	12.7	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364
205-99-2	Benzo(b)fluoranthene		106	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	590	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.15	286	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:46	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110419.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.19	181	ug/kg		J
	Unknown	10.17	672	ug/kg		J
	Unknown	10.87	866	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110419.d
Lab Smp Id: 241540011 Client Smp ID: RE03-09-13863
Inj Date : 04-DEC-2009 15:46
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540011|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	8.62330	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	465510	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1892142	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1027386	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1779964	40.0000	
* 91 Chrysene-d12	240	8.639	8.633	(1.000)	1470417	40.0000	
* 98 Perylene-d12	264	10.081	10.069	(1.000)	1300262	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	873739	71.8598	2620
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	1061206	71.8097	2620
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	467951	37.5280	1370
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.916)	1054966	42.8746	1560
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	274870	95.8126	3490
$ 81 p-Terphenyl-d14	244	7.898	7.892	(0.914)	1162610	50.3711	1840

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.845	7.845	(0.908)	14100	0.36086	13.2(a)
76 Fluoranthene	202	7.710	7.704	(1.104)	13561	0.34731	12.6(a)
95 Benzo(b)fluoranthene	252	9.610	9.610	(0.953)	9084	2.92134	106

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s110419.d
Report Date: 12/05/2009 08:13
Lab. ID: 241540011 SampleType: SAMPLE
Injection Date: 04-DEC-2009 15:46
Operator: nagl Instrument: MSD1.i
Sample Info: |241540011|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	52018	3.62	3.68	80-120	100	(T)
93	436	3.66	3.69	418-478	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	63593	4.25	4.13	80-120	100	(T)
42	39102	4.25	4.13	44-104	61	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	182930	6.00	5.77	80-120	100	(T)
164	1027386	6.00	5.77	0- 40	562	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	131781	6.00	5.82	80-120	100	(T)
63	1721	6.00	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	131781	6.00	6.10	80-120	100	(T)
89	1628	6.00	6.10	32- 92	1	(QT)
63	1721	6.00	6.10	15- 75	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	16733	6.53	6.37	80-120	100	(T)
165	16497	6.53	6.37	64-124	99	(T)
167	5589	6.53	6.37	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	16776	6.53	6.67	80-120	100	(T)
141	109577	6.53	6.67	50-110	653	(QT)
250	33669	6.53	6.67	68-128	201	(QT)
69 Anthracene				CAS#: 120-12-7		
178	8859	6.99	7.03	80-120	100	( )
179	2359	6.99	7.03	0- 46	27	( )
176	1537	6.99	7.03	0- 48	17	( )
76 Fluoranthene				CAS#: 206-44-0		
202	13561	7.71	7.70	80-120	100	( )
203	2629	7.71	7.70	0- 47	19	( )
101	2637	7.71	7.70	0- 43	19	( )
79 Pyrene				CAS#: 129-00-0		
202	14100	7.85	7.85	80-120	100	( )
200	2894	7.85	7.85	0- 51	21	( )
101	2863	7.85	7.85	0- 46	20	( )
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	9084	9.61	9.61	80-120	100	( )
253	1194	9.62	9.61	0- 51	13	( )
125	1115	9.62	9.61	0- 44	12	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110419.d
Lab Smp Id: 241540011 Client Smp ID: RE03-09-13863
Inj Date : 04-DEC-2009 15:46
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540011|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	8.62330	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2761976	40.000
* 91 Chrysene-d12	8.639	4091406	40.000
* 98 Perylene-d12	10.081	3551473	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.916	1118191	16.1940703	590	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.145	803792	7.85834308	286	98	NIST05.L	112657	91
Unknown				CAS #:			
9.186	507086	4.95756671	181	0		0	91
Unknown				CAS #:			
10.175	1637171	18.4393418	672	0		0	98
Unknown				CAS #:			
10.869	2108779	23.7510242	866	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110419.d
Date : 04-DEC-2009 15:46
Client ID: RE03-09-13863
Sample Info: !241540011!926610!1!SVMF!1!LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: nag1
Column diameter: 0.20

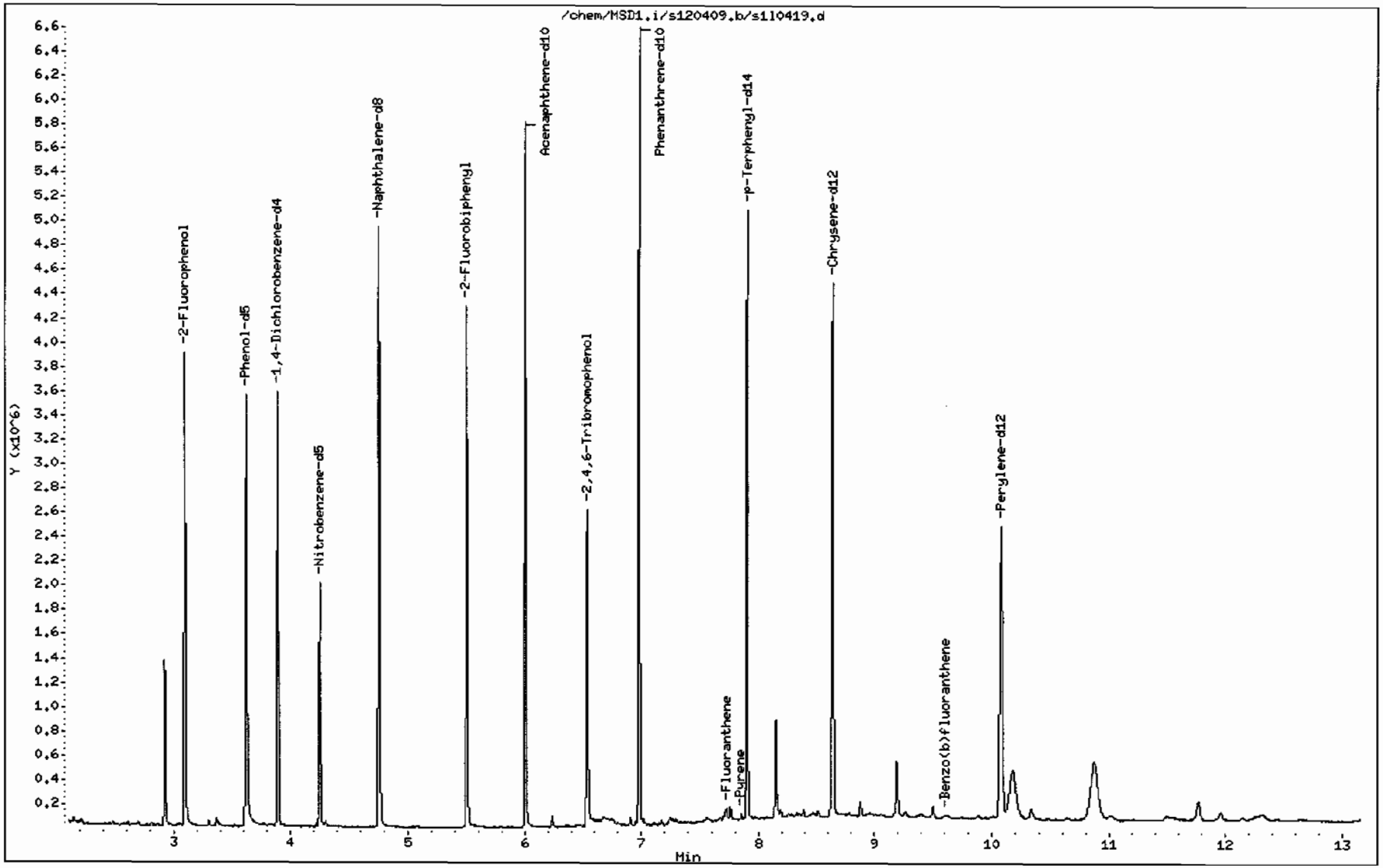

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863

Instrument: MSD1.i

Sample Info: |2415400111926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 13.2 ug/Kg

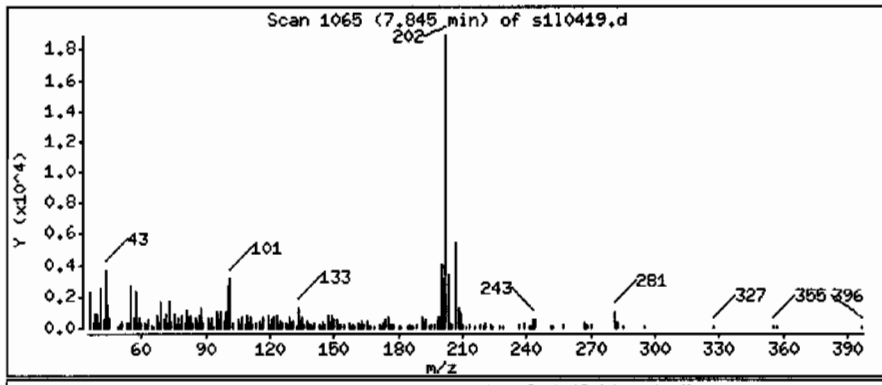

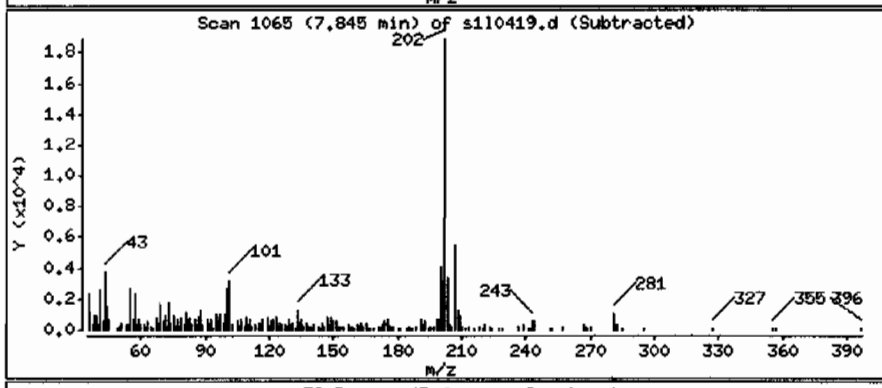

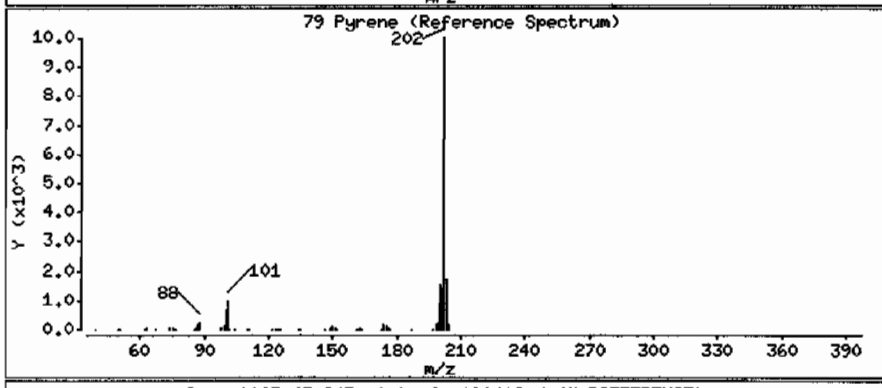

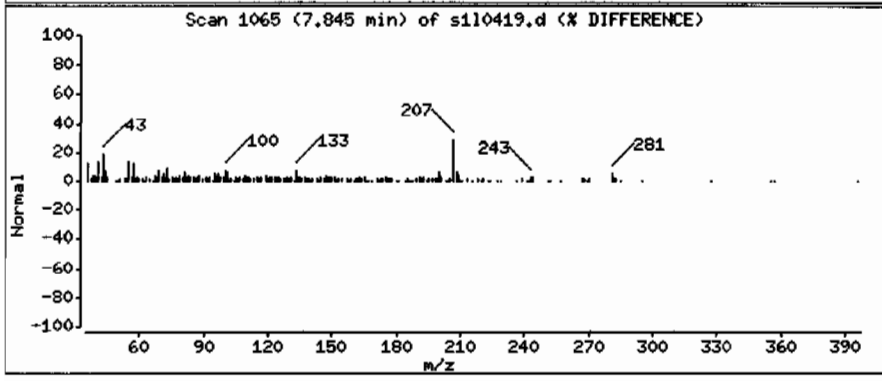

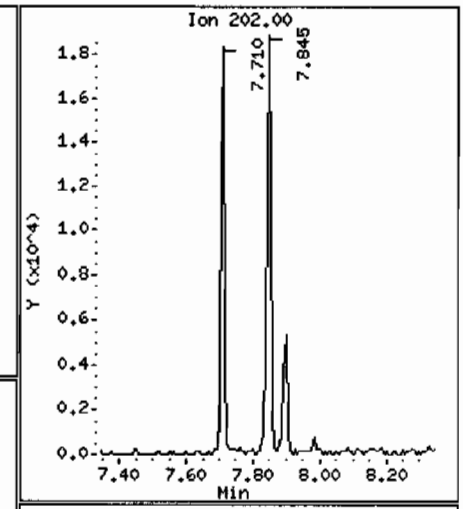

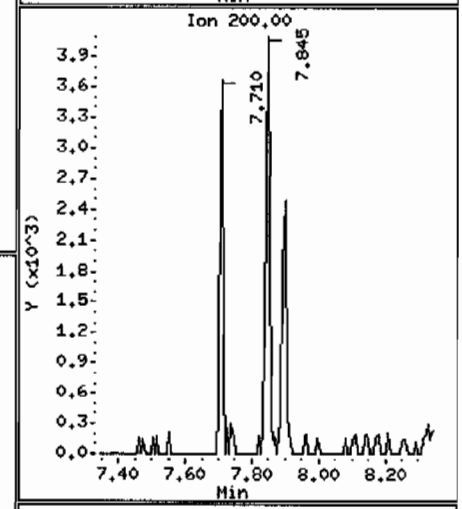

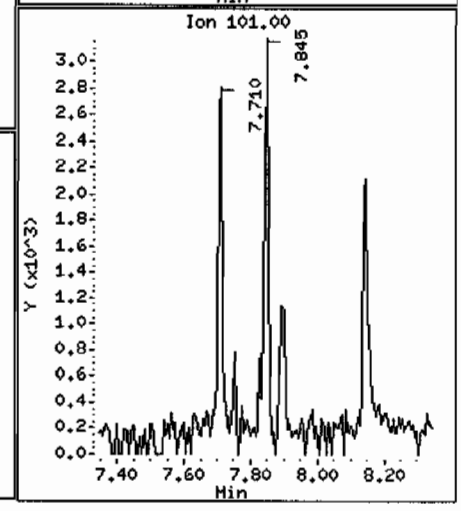

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863

Instrument: MSD1.i

Sample Info: |24154001|1926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 12.6 ug/Kg

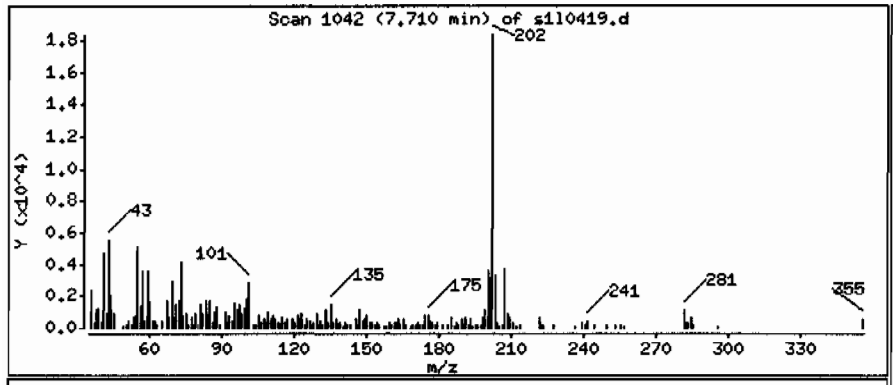

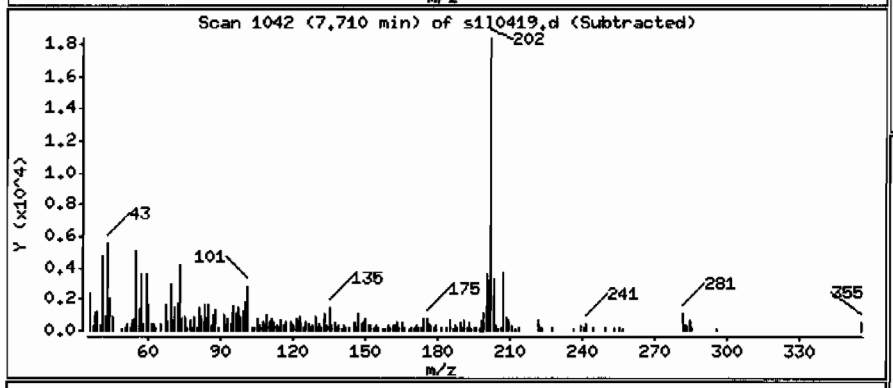

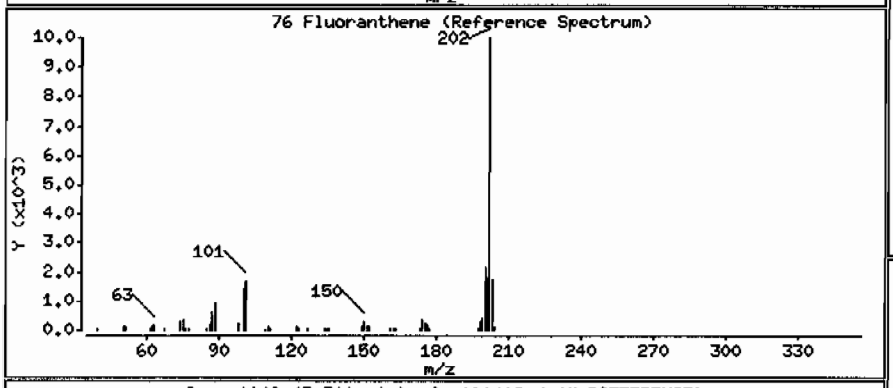

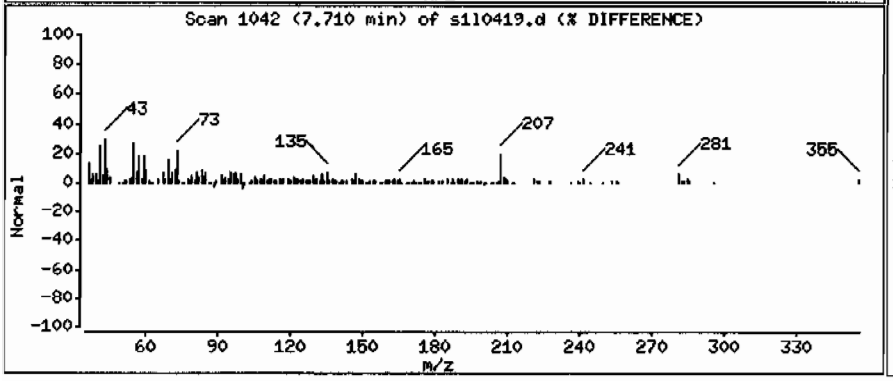

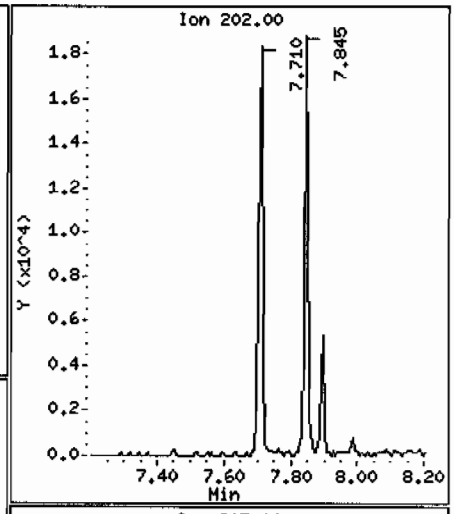

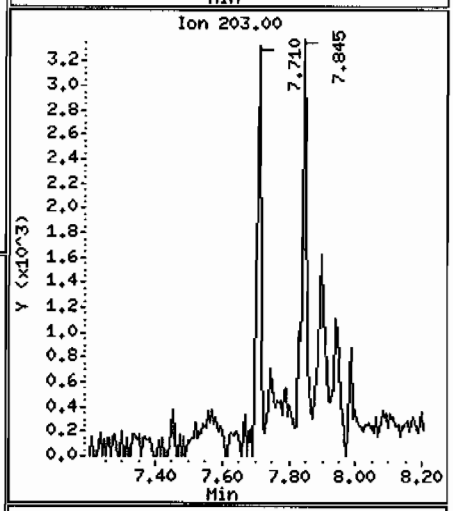

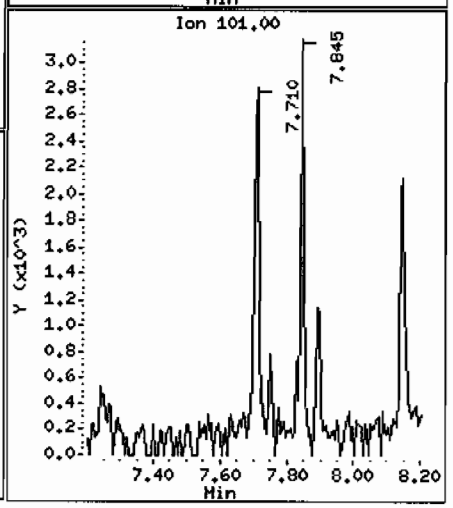

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863

Instrument: MSD1.i

Sample Info: |2415400111926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 106 ug/Kg

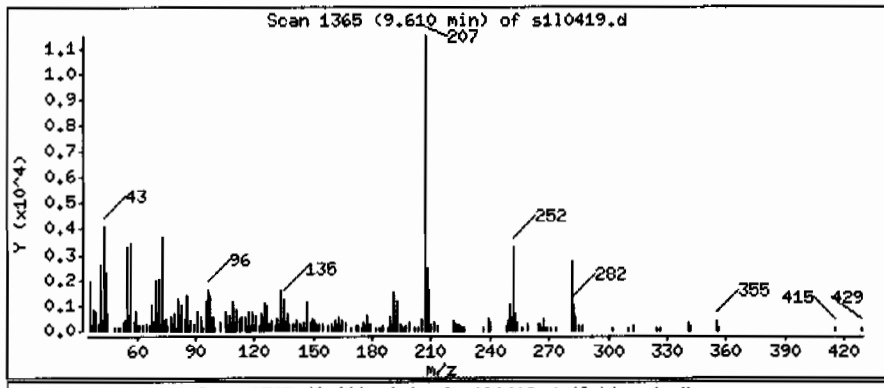

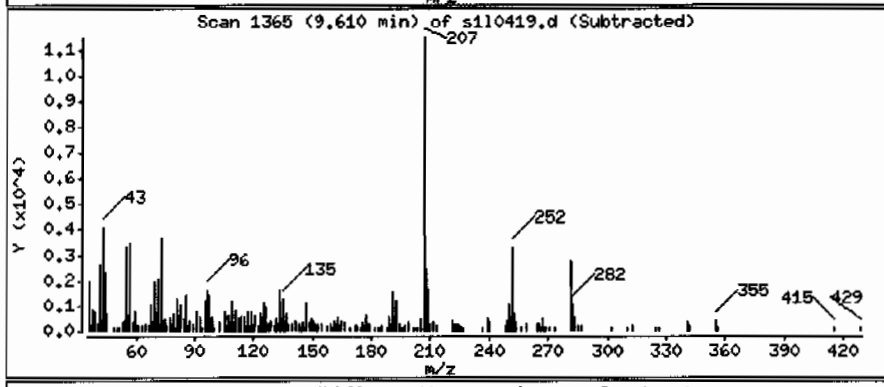

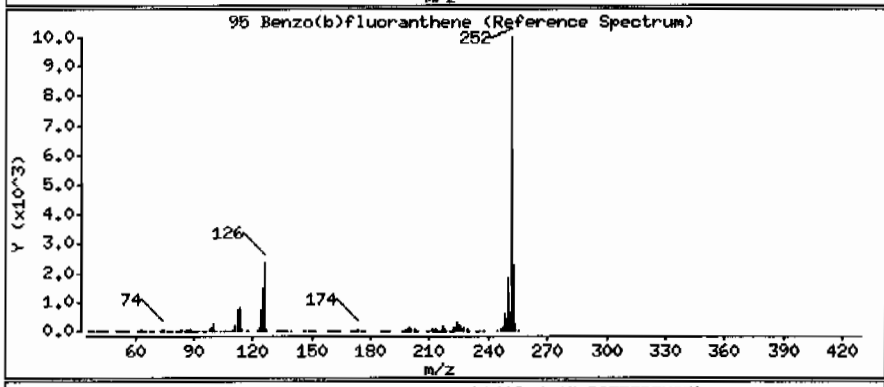

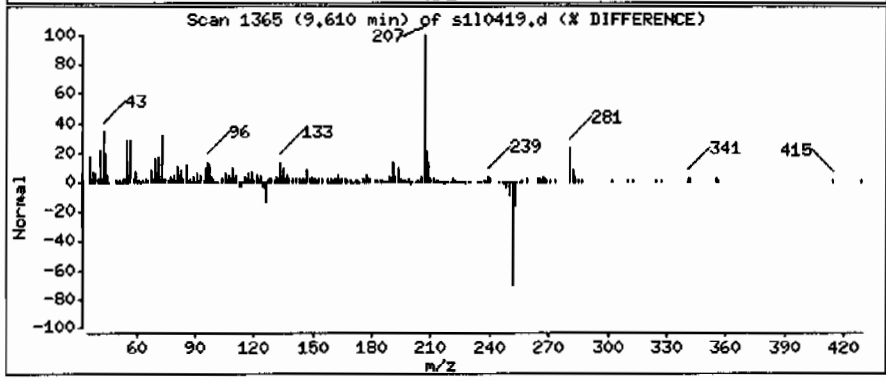

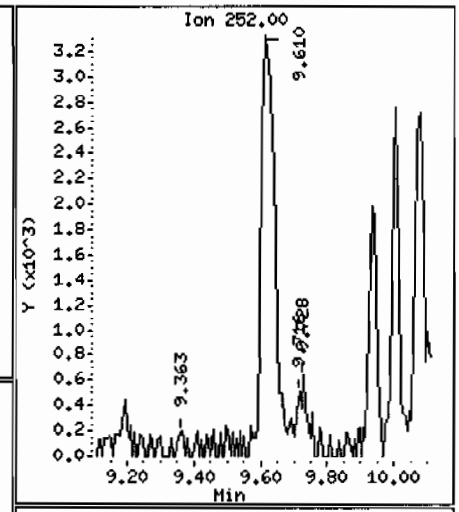

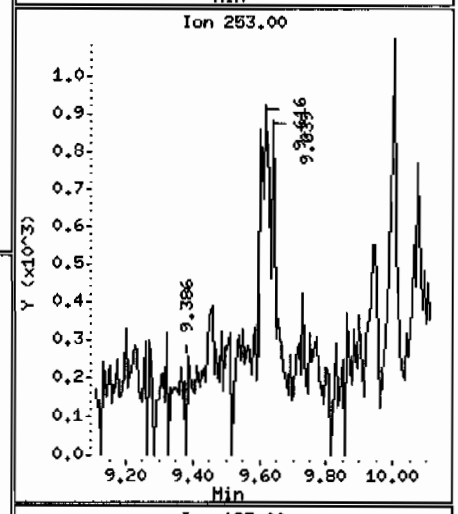

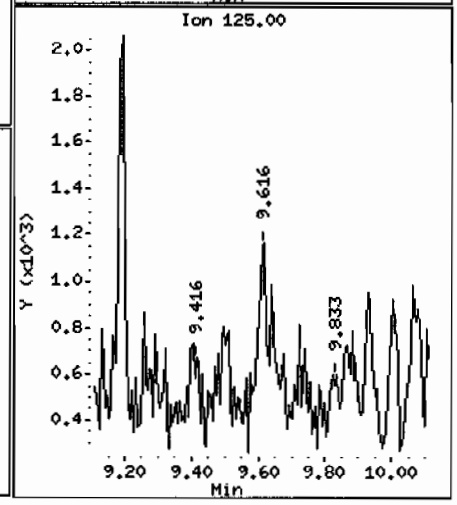

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863

Instrument: MSD1.i

Sample Info: |2415400111926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

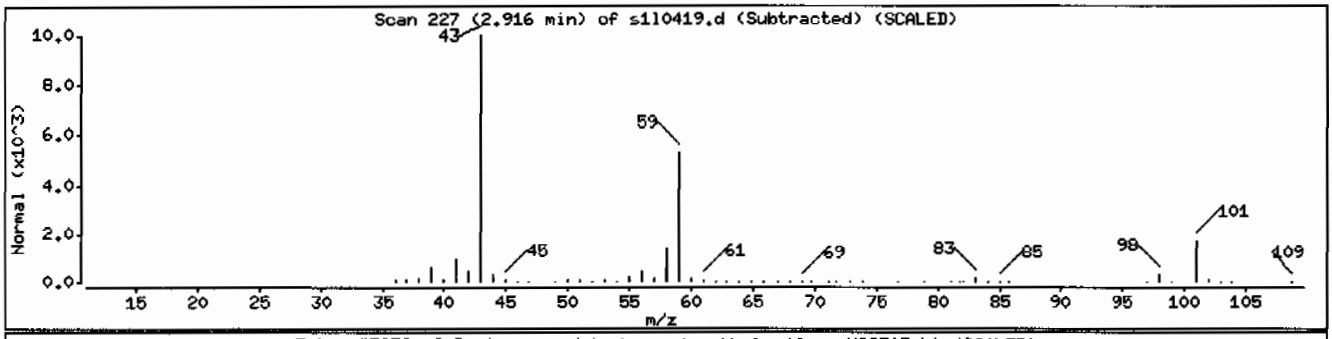

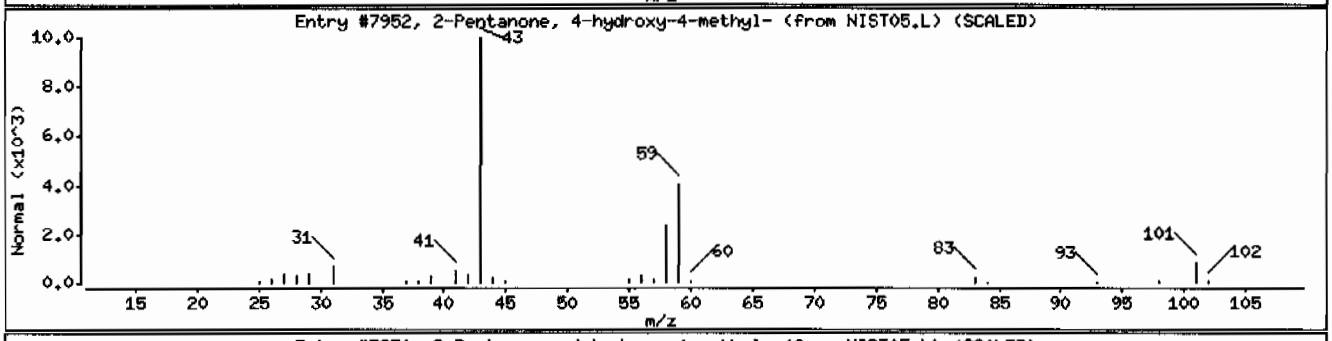

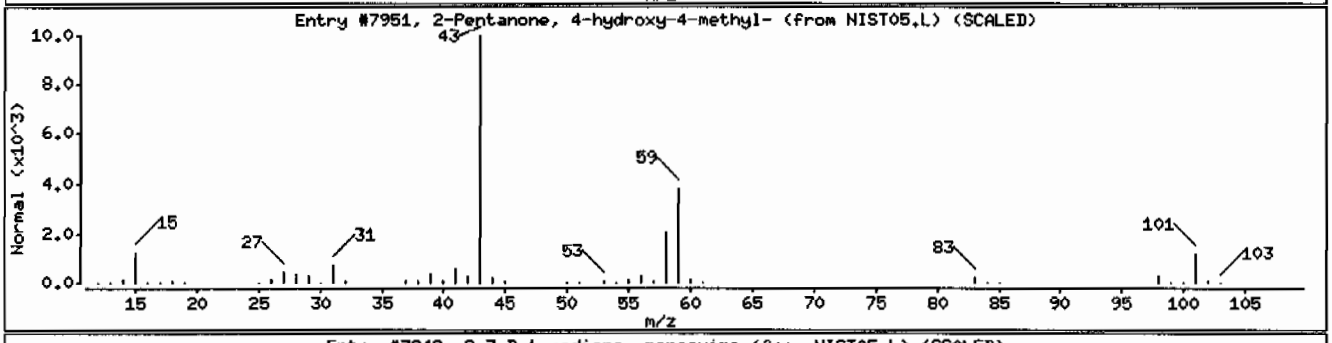

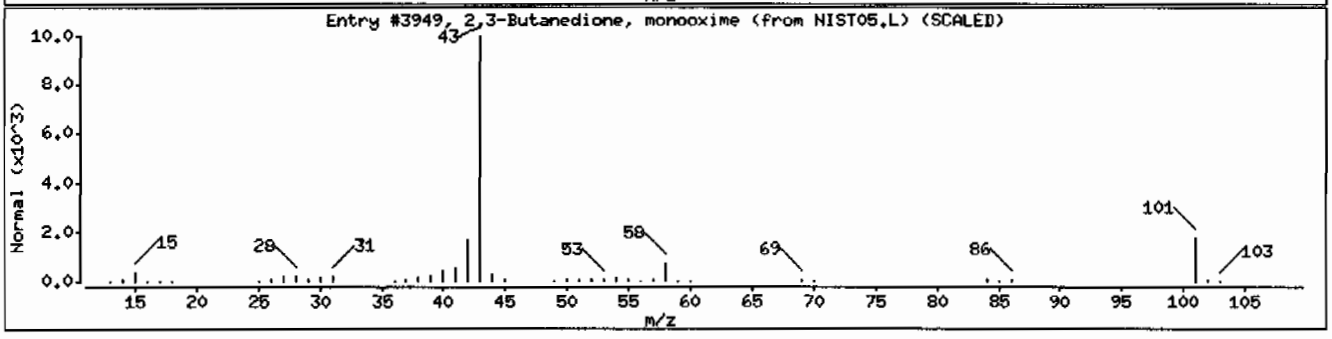

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863 Instrument: MSD1.i

Sample Info: |2415400111926610111SVMF111LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	98	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	83	C18H35NO	281

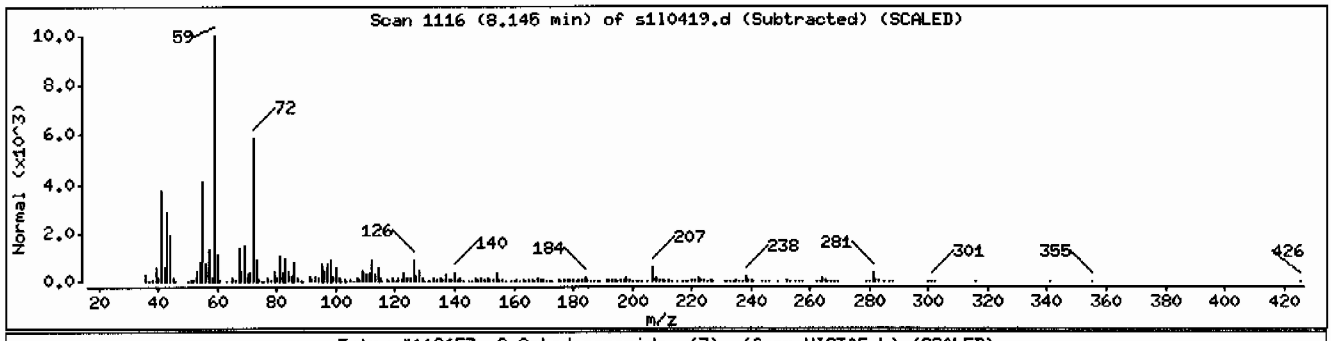

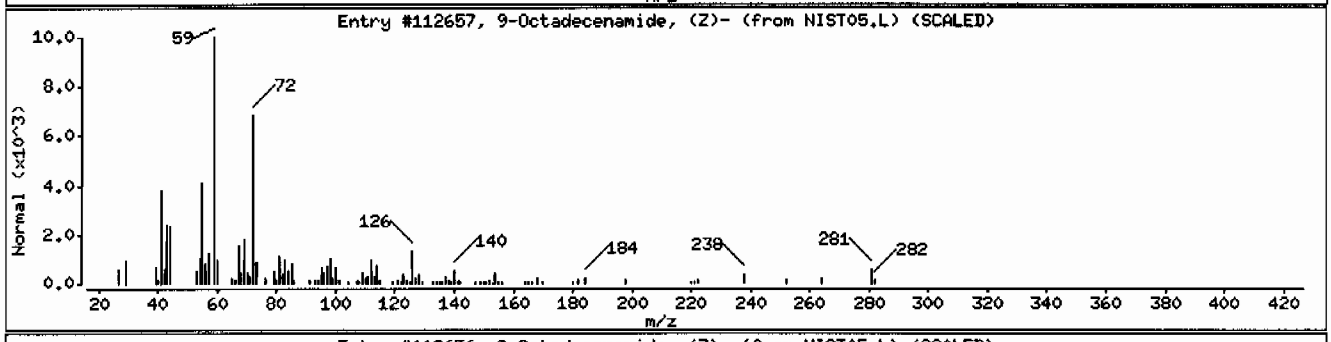

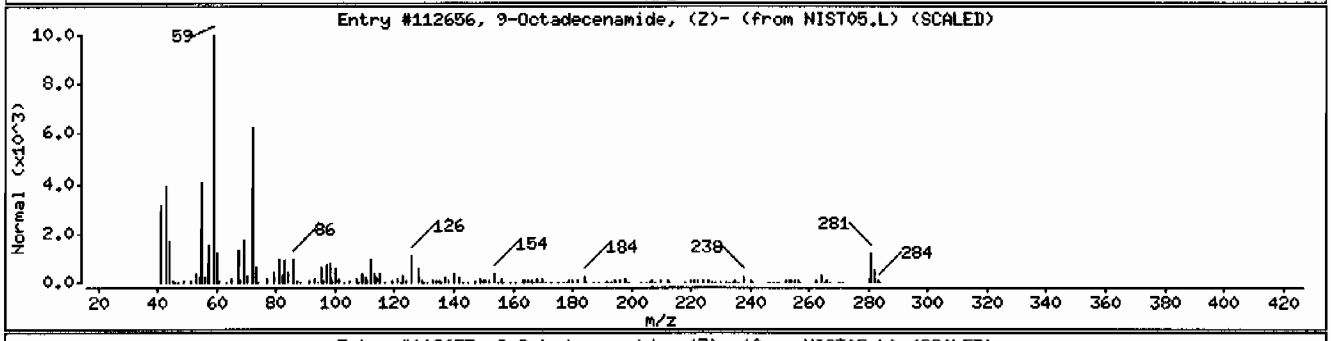

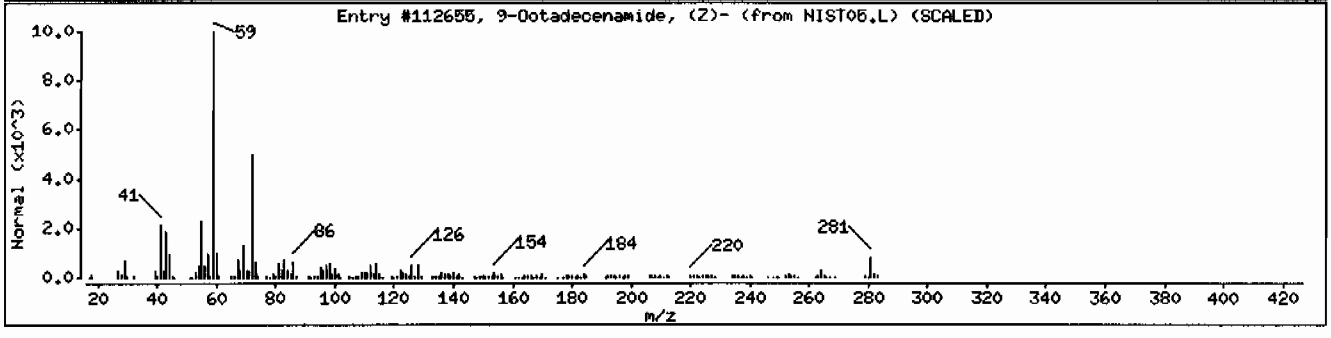

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863 Instrument: MSD1.i

Sample Info: 12415400111926610111SVHF111LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	94	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	89	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	78	C18H35NO	281

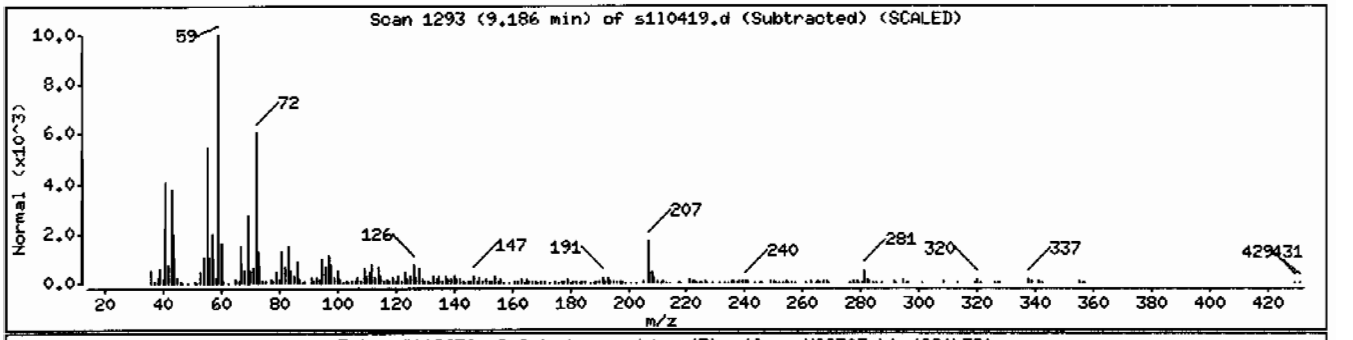

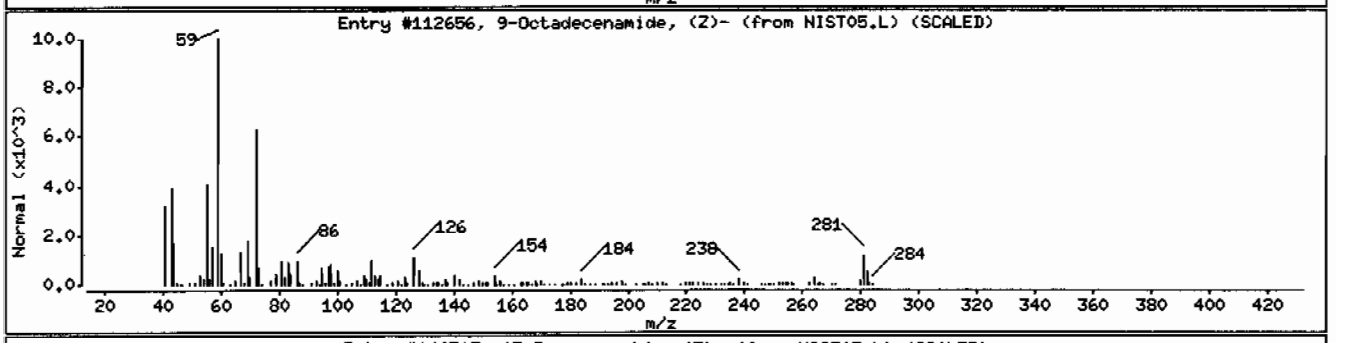

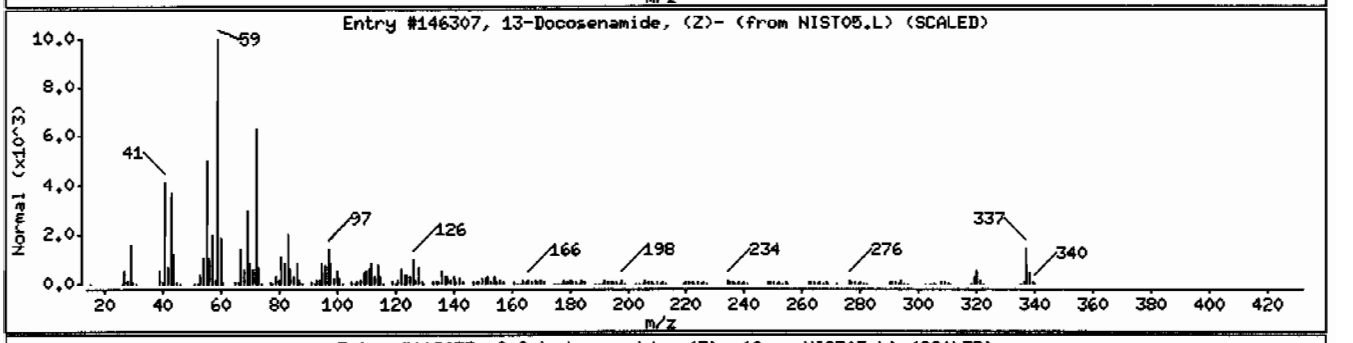

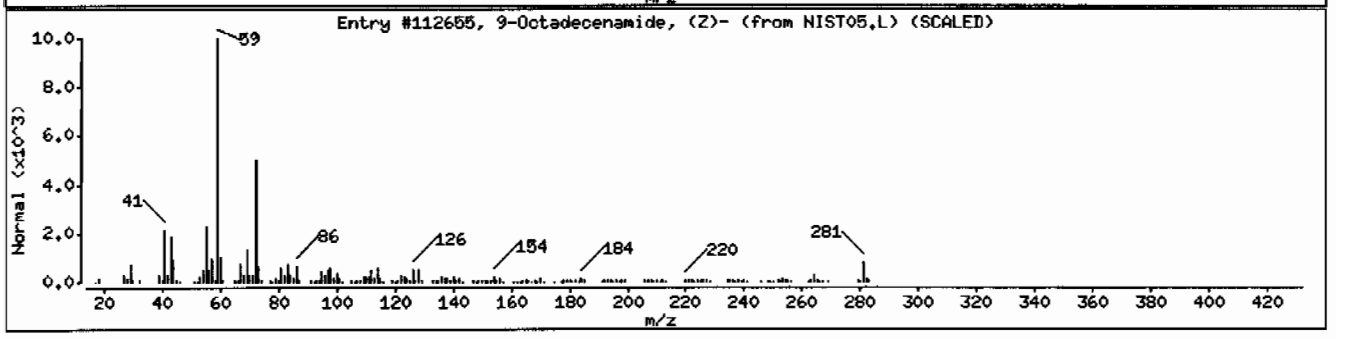

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863 Instrument: MSD1.i

Sample Info: |2415400111926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-(2-propyl-1-benzimidazoly	331736-92-6	NIST05.L	69668	56	C12H14N2O2	218
Formamidine, N'-(m-acetylphenyl)-N,N-dim	29366-19-6	NIST05.L	49773	26	C11H14N2O	190
Megastigmatrienone	38818-55-2	NIST05.L	49924	25	C13H18O	190

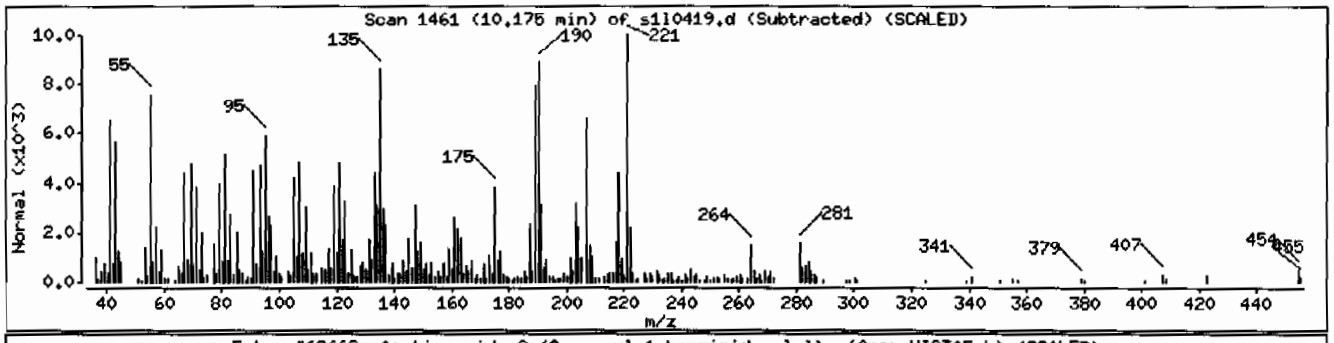

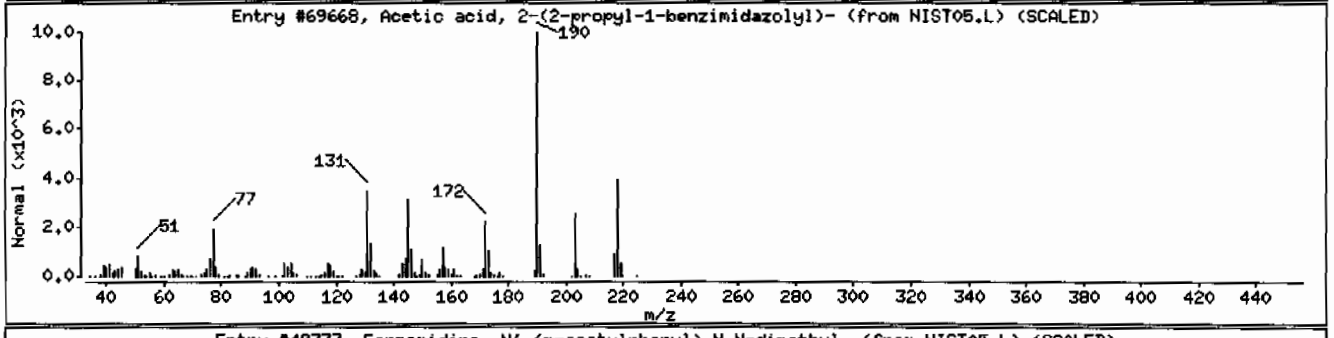

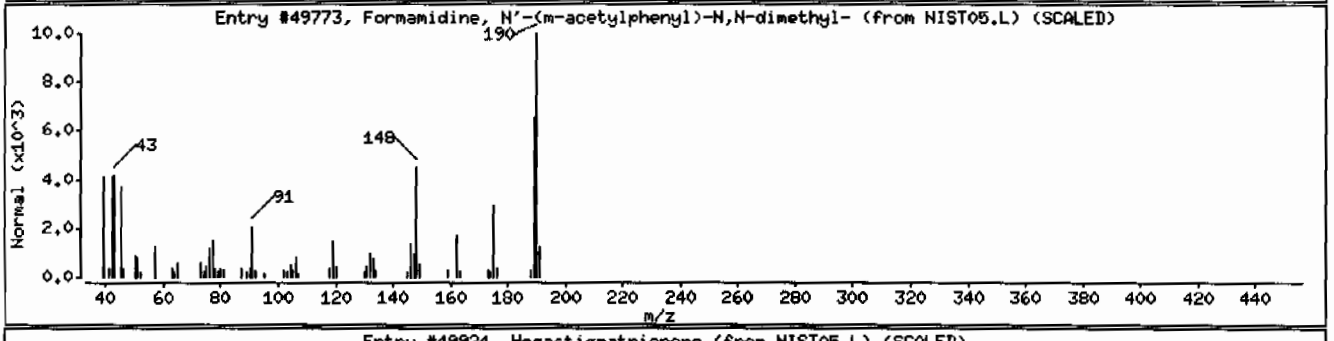

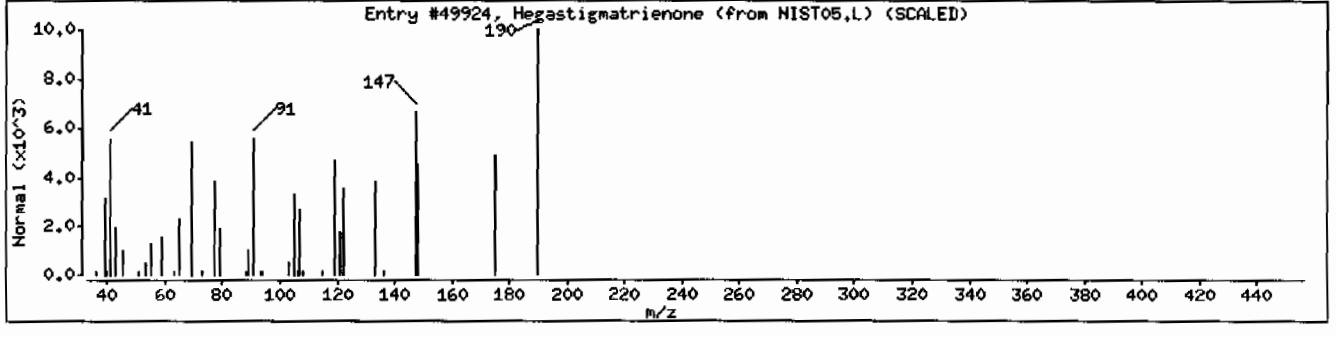

Data File: /chem/MSD1.i/s120409.b/s110419.d

Date : 04-DEC-2009 15:46

Client ID: RE03-09-13863 Instrument: MSD1.i

Sample Info: |241540011|926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5HS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	45	C15H22O	218
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	35	C12H15NO3	221
Benzo[b]naphtho[2,3-d]furan	243-42-5	NIST05.L	70000	30	C16H10O	218

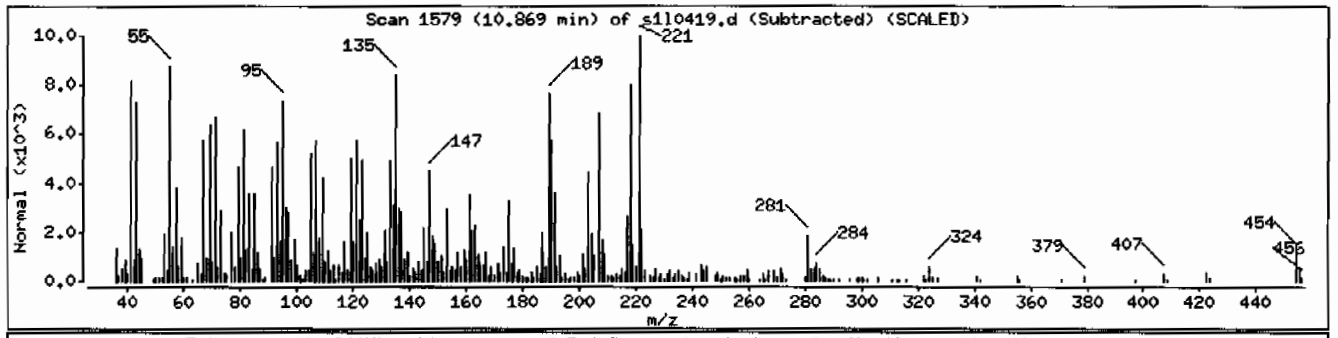

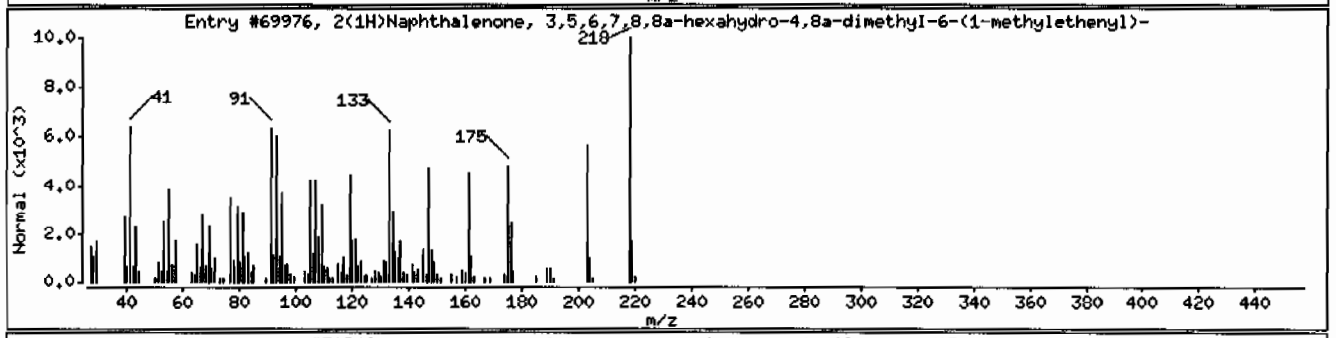

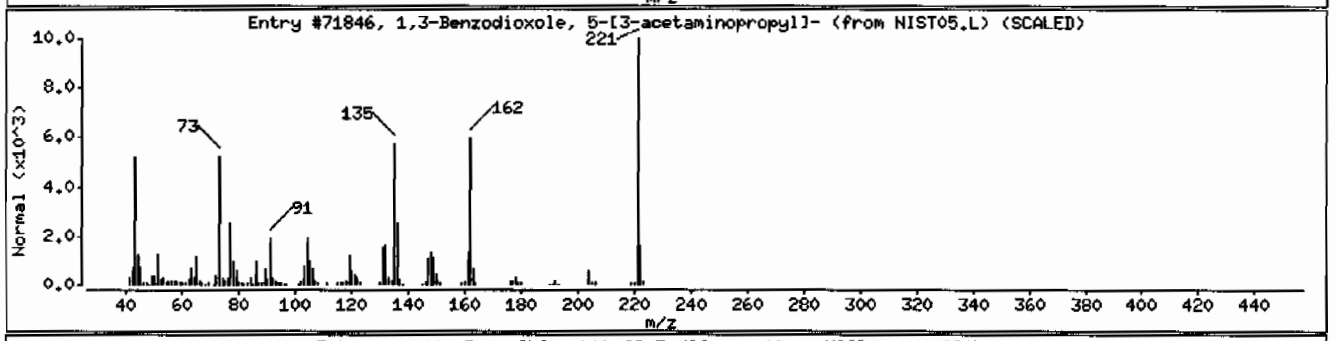

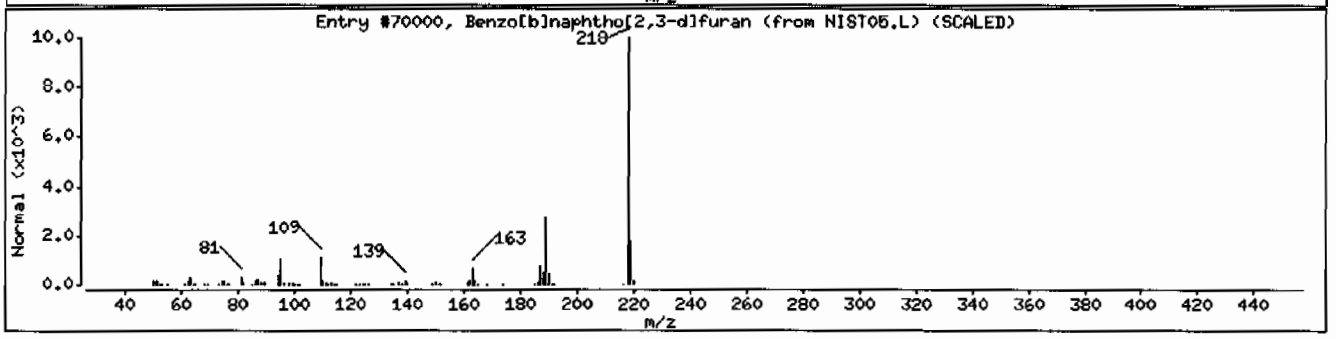

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/07/2009 13:12	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s110711.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	365	ug/kg	73.0	365
108-95-2	Phenol	U	365	ug/kg	73.0	365
95-57-8	2-Chlorophenol	U	365	ug/kg	73.0	365
106-46-7	1,4-Dichlorobenzene	U	365	ug/kg	73.0	365
621-64-7	N-Nitrosodipropylamine	U	365	ug/kg	73.0	365
59-50-7	4-Chloro-3-methylphenol	U	365	ug/kg	73.0	365
83-32-9	Acenaphthene	U	36.5	ug/kg	12.0	36.5
121-14-2	2,4-Dinitrotoluene	U	365	ug/kg	36.5	365
100-02-7	4-Nitrophenol	U	365	ug/kg	120	365
87-86-5	Pentachlorophenol	U	365	ug/kg	91.3	365
129-00-0	Pyrene	U	36.5	ug/kg	11.0	36.5
110-86-1	Pyridine	U	365	ug/kg	73.0	365
62-53-3	Aniline	U	365	ug/kg	110	365
111-44-4	bis(2-Chloroethyl) ether	U	365	ug/kg	73.0	365
541-73-1	1,3-Dichlorobenzene	U	365	ug/kg	73.0	365
100-51-6	Benzyl alcohol	U	365	ug/kg	110	365
95-50-1	1,2-Dichlorobenzene	U	365	ug/kg	73.0	365
108-60-1	bis(2-Chloroisopropyl)ether	U	365	ug/kg	73.0	365
95-48-7	o-Cresol	U	365	ug/kg	73.0	365
65794-96-9	m,p-Cresols	U	365	ug/kg	110	365
67-72-1	Hexachloroethane	U	365	ug/kg	73.0	365
98-95-3	Nitrobenzene	U	365	ug/kg	73.0	365
78-59-1	Isophorone	U	365	ug/kg	73.0	365
88-75-5	2-Nitrophenol	U	365	ug/kg	73.0	365
105-67-9	2,4-Dimethylphenol	U	365	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane	U	365	ug/kg	73.0	365
120-83-2	2,4-Dichlorophenol	U	365	ug/kg	73.0	365
65-85-0	Benzoic acid	U	730	ug/kg	183	730
91-20-3	Naphthalene	U	36.5	ug/kg	11.0	36.5
106-47-8	4-Chloroaniline	U	365	ug/kg	73.0	365
87-68-3	Hexachlorobutadiene	U	365	ug/kg	73.0	365
91-57-6	2-Methylnaphthalene	U	36.5	ug/kg	7.30	36.5
77-47-4	Hexachlorocyclopentadiene	U	365	ug/kg	73.0	365
88-06-2	2,4,6-Trichlorophenol	U	365	ug/kg	73.0	365
95-95-4	2,4,5-Trichlorophenol	U	365	ug/kg	73.0	365
91-58-7	2-Chloronaphthalene	U	36.5	ug/kg	12.0	36.5
88-74-4	2-Nitroaniline	U	365	ug/kg	73.0	365
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	365	ug/kg	73.0	365

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13864	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/07/2009 13:12	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	s110711.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	365	ug/kg	73.0	365
606-20-2	2,6-Dinitrotoluene	U	365	ug/kg	36.5	365
208-96-8	Acenaphthylene	U	36.5	ug/kg	11.0	36.5
51-28-5	2,4-Dinitrophenol	U	730	ug/kg	139	730
132-64-9	Dibenzofuran	U	365	ug/kg	73.0	365
84-66-2	Diethylphthalate	U	365	ug/kg	73.0	365
86-73-7	Fluorene	U	36.5	ug/kg	11.0	36.5
7005-72-3	4-Chlorophenylphenylether	U	365	ug/kg	73.0	365
534-52-1	2-Methyl-4,6-dinitrophenol	U	365	ug/kg	73.0	365
100-01-6	4-Nitroaniline	U	365	ug/kg	110	365
	p-Nitroaniline					
122-39-4	Diphenylamine	U	365	ug/kg	73.0	365
122-66-7	Azobenzene	U	365	ug/kg	73.0	365
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	365	ug/kg	73.0	365
118-74-1	Hexachlorobenzene	U	365	ug/kg	73.0	365
85-01-8	Phenanthrene	U	36.5	ug/kg	11.0	36.5
120-12-7	Anthracene	U	36.5	ug/kg	7.30	36.5
84-74-2	Di-n-butylphthalate	U	365	ug/kg	73.0	365
206-44-0	Fluoranthene	U	36.5	ug/kg	11.0	36.5
85-68-7	Butylbenzylphthalate	U	365	ug/kg	73.0	365
56-55-3	Benzo(a)anthracene	U	36.5	ug/kg	11.0	36.5
91-94-1	3,3'-Dichlorobenzidine	U	365	ug/kg	110	365
218-01-9	Chrysene	U	36.5	ug/kg	11.0	36.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	365	ug/kg	73.0	365
117-84-0	Di-n-octylphthalate	U	365	ug/kg	73.0	365
205-99-2	Benzo(b)fluoranthene	U	36.5	ug/kg	11.0	36.5
207-08-9	Benzo(k)fluoranthene	U	36.5	ug/kg	11.0	36.5
50-32-8	Benzo(a)pyrene	U	36.5	ug/kg	11.0	36.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.5	ug/kg	11.0	36.5
53-70-3	Dibenzo(a,h)anthracene	U	36.5	ug/kg	11.0	36.5
191-24-2	Benzo(ghi)perylene	U	36.5	ug/kg	11.0	36.5
120-82-1	1,2,4-Trichlorobenzene	U	365	ug/kg	73.0	365

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.8	412	ug/kg		JA
	Unknown	6.1	216	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540005**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13864**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.1**	**Dilution:**	**1**
Run Date:	**12/07/2009 13:12**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**s110711.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	6.78	22.7	ug/kg		J
57-10-3	n-Hexadecanoic acid	7.12	45.8	ug/kg	99	NJ
74685-33-9	3-Eicosene, (E)-	7.53	19.8	ug/kg	84	NJ
	Unknown	7.6	22.5	ug/kg		J
1120-16-7	Dodecanamide	7.64	21.2	ug/kg	89	NJ
301-02-0	9-Octadecenamide, (Z)-	8.02	316	ug/kg	95	NJ
	Unknown	9.01	152	ug/kg		J
	Unknown	10.11	1150	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120709.b/s110711.d
Lab Smp Id: 241540005 Client Smp ID: RE03-09-13864
Inj Date : 07-DEC-2009 13:12
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540005|926610|1|SVMF|1|LANLRR
Misc Info : |MSD8270_S|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120709.b/MSD1-M8270AQA-111409.m
Meth Date : 08-Dec-2009 08:39 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	8.94060	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)	
* 10 1,4-Dichlorobenzene-d4	152	3.757	3.763	(1.000)	606240	40.0000		
* 29 Naphthalene-d8	136	4.616	4.622	(1.000)	2379203	40.0000		
* 46 Acenaphthene-d10	164	5.863	5.869	(1.000)	1302700	40.0000		
* 67 Phenanthrene-d10	188	6.857	6.857	(1.000)	2252953	40.0000		(H)
* 91 Chrysene-d12	240	8.486	8.486	(1.000)	1712630	40.0000		
* 98 Perylene-d12	264	9.833	9.833	(1.000)	1100295	40.0000		
$ 3 2-Fluorophenol	112	2.969	2.963	(0.790)	845231	53.3782	1950	
$ 5 Phenol-d5	99	3.487	3.493	(0.928)	1114719	57.9206	2110	
$ 20 Nitrobenzene-d5	82	4.122	4.128	(0.893)	488621	31.1637	1140	
$ 39 2-Fluorobiphenyl	172	5.357	5.363	(0.914)	1103126	35.3570	1290	
$ 60 2,4,6-Tribromophenol	329	6.404	6.404	(1.092)	271323	74.5884	2720	
$ 81 p-Terphenyl-d14	244	7.781	7.775	(0.917)	1091676	40.6086	1480	

QC Flag Legend

H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s110711.d
Report Date: 12/08/2009 08:31
Lab. ID: 241540005 SampleType: SAMPLE
Injection Date: 07-DEC-2009 13:12
Operator: AMY Instrument: MSD1.i
Sample Info: |241540005|926610|1|SVMF|1|LANLRR
Miscellaneous Info: |MSD8270_S|WBN091128-02|
Comment:
Method used: /chem/MSD1.i/s120709.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	55083	3.49	3.57	80-120	100	(T)
93	140	3.49	3.57	197-257	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	67136	4.12	4.02	80-120	100	(T)
42	41982	4.12	4.02	42-102	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	231840	5.86	5.66	80-120	100	(T)
164	1302700	5.86	5.66	0- 40	562	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	166320	5.86	5.72	80-120	100	(T)
63	2360	5.86	5.72	45-105	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	166320	5.86	6.00	80-120	100	(T)
89	2185	5.86	6.00	35- 95	1	(QT)
63	2360	5.86	6.00	16- 76	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	17262	6.40	6.26	80-120	100	(T)
165	18007	6.40	6.26	64-124	104	(T)
167	6150	6.40	6.26	0- 43	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	806	6.40	6.29	80-120	100	(T)
105	1831	6.40	6.28	11- 71	227	(QT)
51	2107	6.40	6.28	33- 93	261	(QT)
133 Diphenylamine				CAS#: 122-39-4		
169	10227	6.40	6.32	80-120	100	(T)
168	875	6.40	6.32	33- 93	9	(QT)
167	6150	6.40	6.32	3- 63	60	(T)
58 1,2-Diphenylhydrazine				CAS#: 122-66-7		
77	1660	6.40	6.35	80-120	100	( )
105	1812	6.40	6.35	0- 46	109	(Q)
182	314	6.40	6.35	0- 59	19	( )
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	16960	6.40	6.57	80-120	100	(T)
141	115628	6.40	6.57	52-112	682	(QT)
250	34237	6.40	6.57	68-128	202	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	2388	6.90	6.89	80-120	100	( )
179	489	6.90	6.89	0- 45	20	( )
176	631	6.90	6.89	0- 48	26	( )
69 Anthracene				CAS#: 120-12-7		
178	2388	6.90	6.93	80-120	100	( )
179	489	6.90	6.93	0- 45	20	( )
176	631	6.90	6.93	0- 48	26	( )
72 Di-n-butylphthalate				CAS#: 84-74-2		
149	5918	7.15	7.17	80-120	100	( )
150	755	7.15	7.17	0- 39	13	( )
104	535	7.15	7.17	0- 35	9	( )
76 Fluoranthene				CAS#: 206-44-0		
202	11446	7.59	7.60	80-120	100	( )
203	2335	7.59	7.60	0- 47	20	( )
101	2694	7.59	7.60	0- 43	24	( )
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	305	9.45	9.43	80-120	100	( )
253	1069	9.42	9.43	0- 52	350	(Q)
125	3654	9.45	9.43	0- 44	1195	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120709.b/s110711.d
Lab Smp Id: 241540005 Client Smp ID: RE03-09-13864
Inj Date : 07-DEC-2009 13:12
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540005|926610|1|SVMF|1|LANLRR
Misc Info : |MSD8270_S|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120709.b/MSD1-M8270AQA-111409.m
Meth Date : 08-Dec-2009 08:39 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	8.94060	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.757	3658610	40.000
* 46 Acenaphthene-d10	5.863	5376835	40.000
* 67 Phenanthrene-d10	6.857	5505391	40.000
* 91 Chrysene-d12	8.486	4629771	40.000
* 98 Perylene-d12	9.833	2998043	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.804	1032239	11.2855911	412	0		0	10
Unknown					CAS #:		
6.104	794794	5.91272515	216	0		0	46
Unknown					CAS #:		
6.781	85697	0.62264245	22.7	0		0	67
n-Hexadecanoic acid					CAS #: 57-10-3		
7.116	172651	1.25441050	45.8	99	NIST05.L	96235	67
3-Eicosene, (E)-					CAS #: 74685-33-9		
7.534	74726	0.54292690	19.8	84	NIST05.L	112107	67
Unknown					CAS #:		
7.604	84884	0.61673568	22.5	0		0	67
Dodecanamide					CAS #: 1120-16-7		
7.639	80000	0.58124606	21.2	89	NIST05.L	56472	67
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.016	1001876	8.65594107	316	95	NIST05.L	112657	91
Unknown					CAS #:		
9.010	483070	4.17359850	152	0		0	91
Unknown					CAS #:		
10.110	2353408	31.3992464	1150	0		0	98

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864

Sample Info: |241540005|926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20

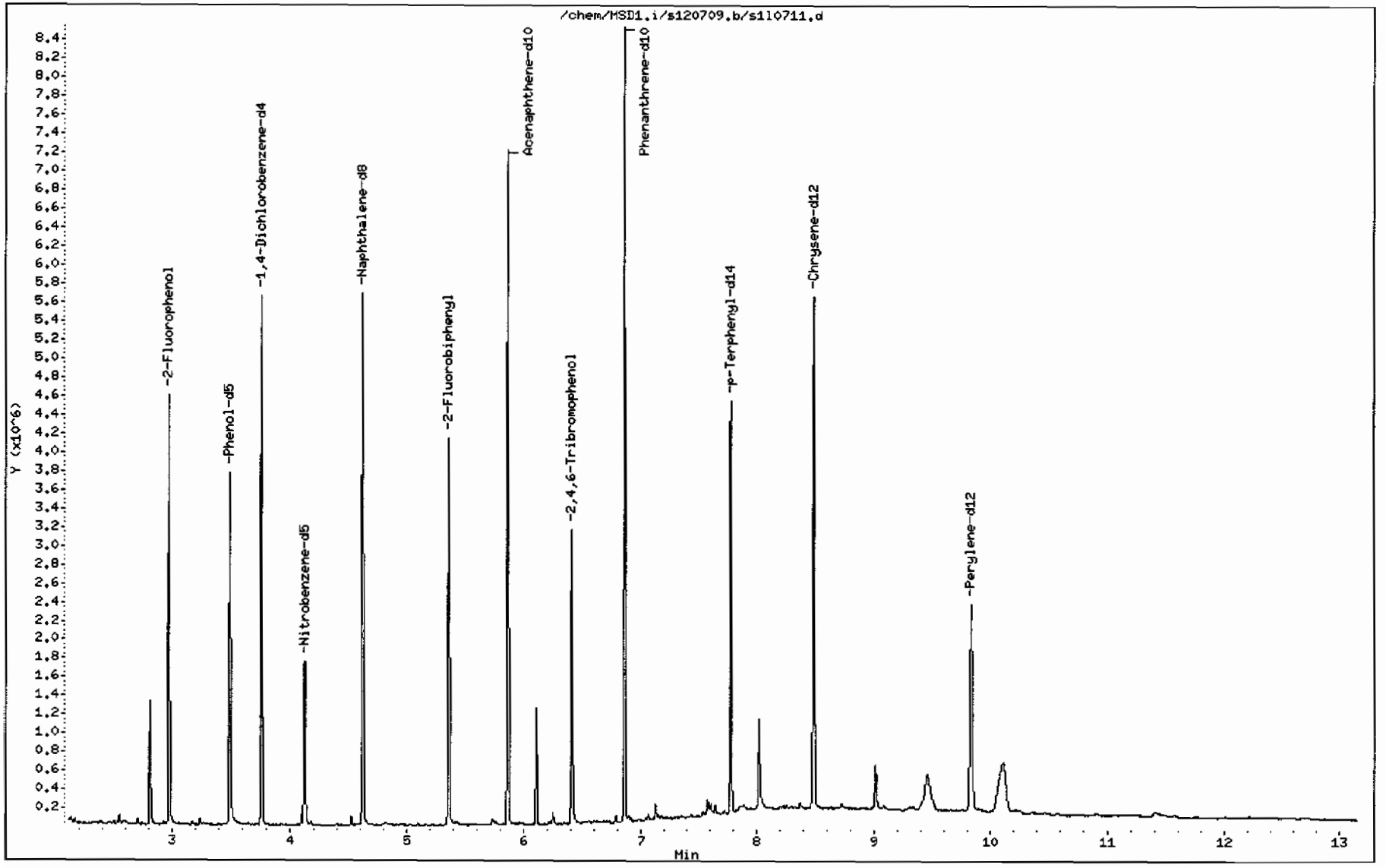

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864

Instrument: MSD1.i

Sample Info: 1241540005|926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	42	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101

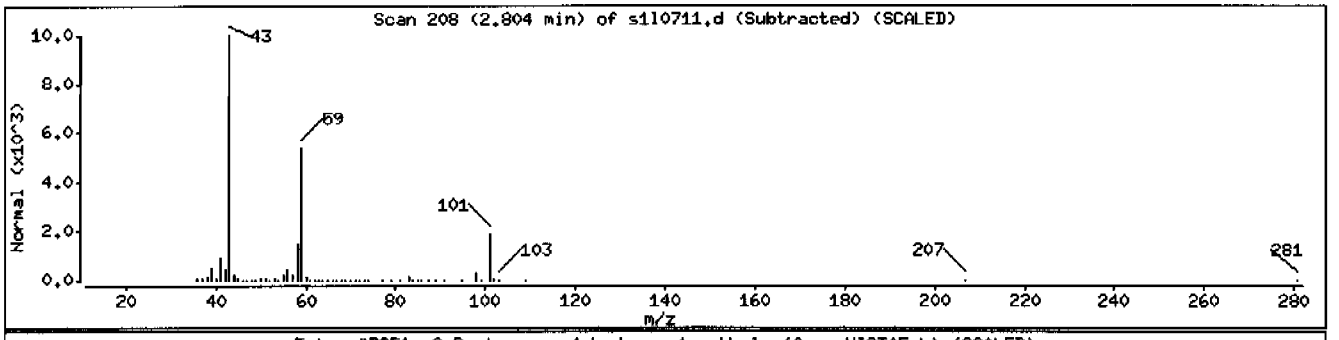

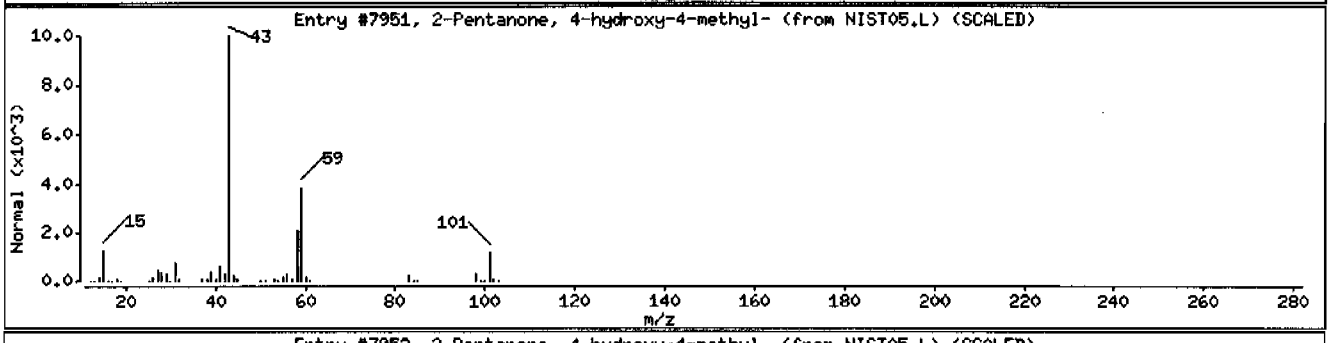

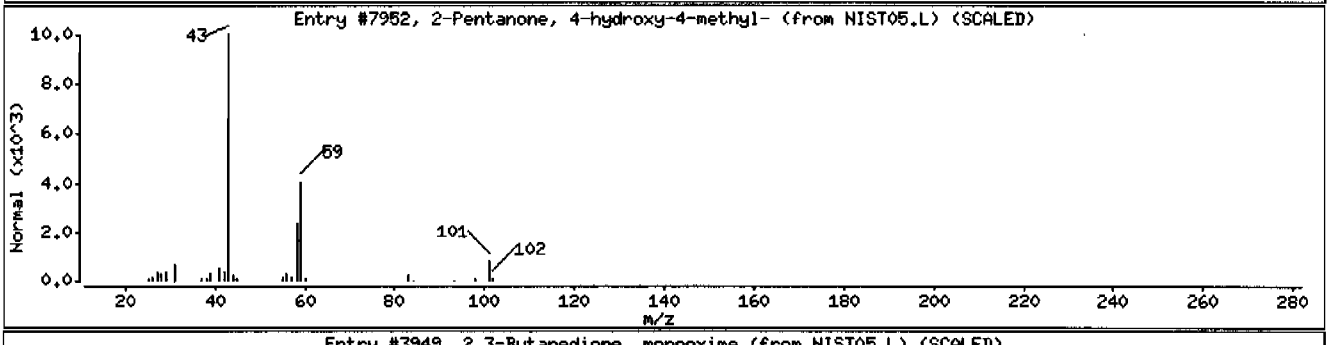

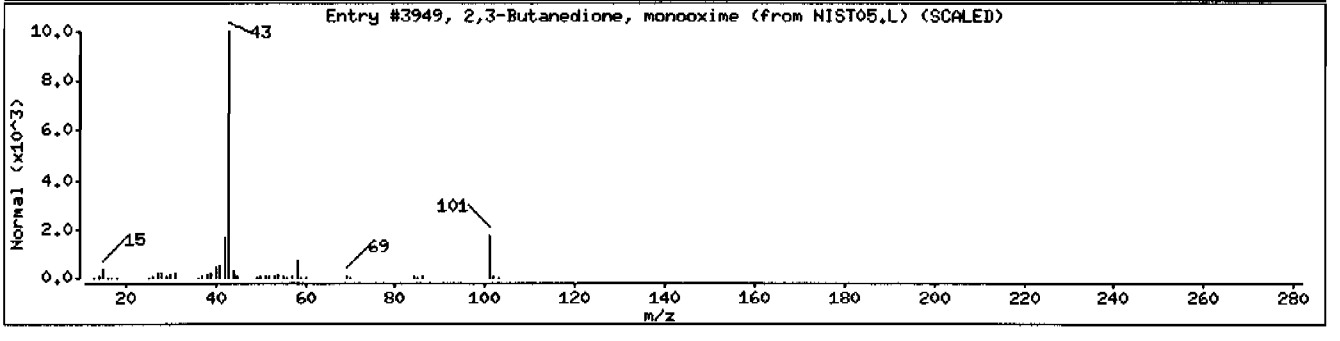

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: |2415400005|926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butane, 2-iodo-3-methyl-	18295-27-7	NIST05.L	56054	53	C5H11I	198
4-Hexen-3-ol, 2-methyl-	4798-60-1	NIST05.L	7335	53	C7H14O	114
Methylamine, N-(1-methylhexylidene)-	22058-71-5	NIST05.L	11557	53	C8H17N	127

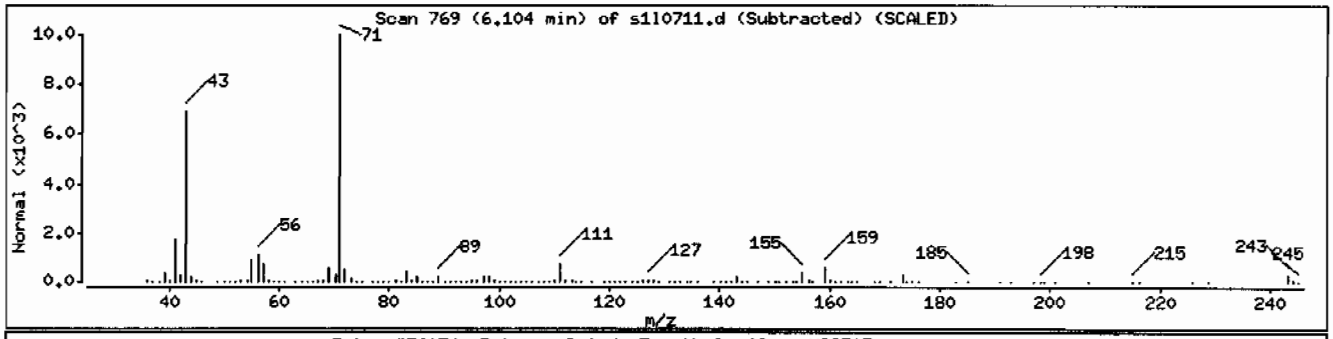

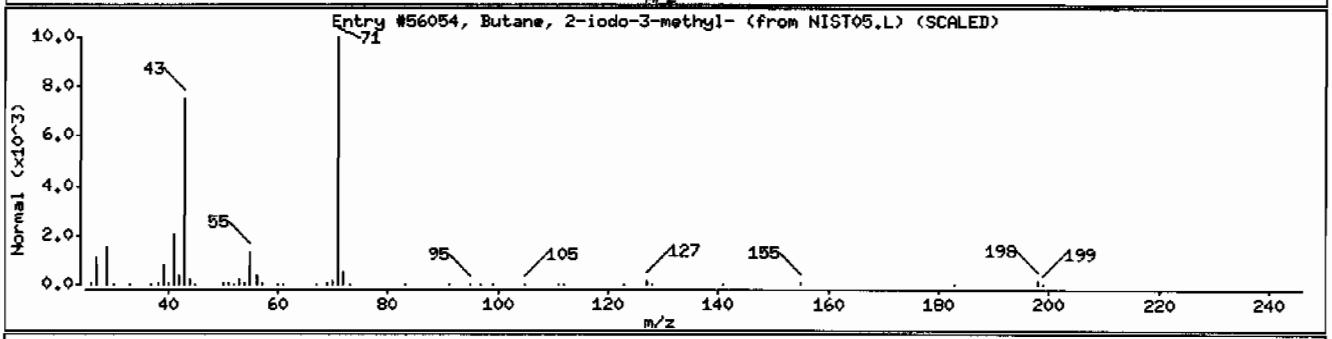

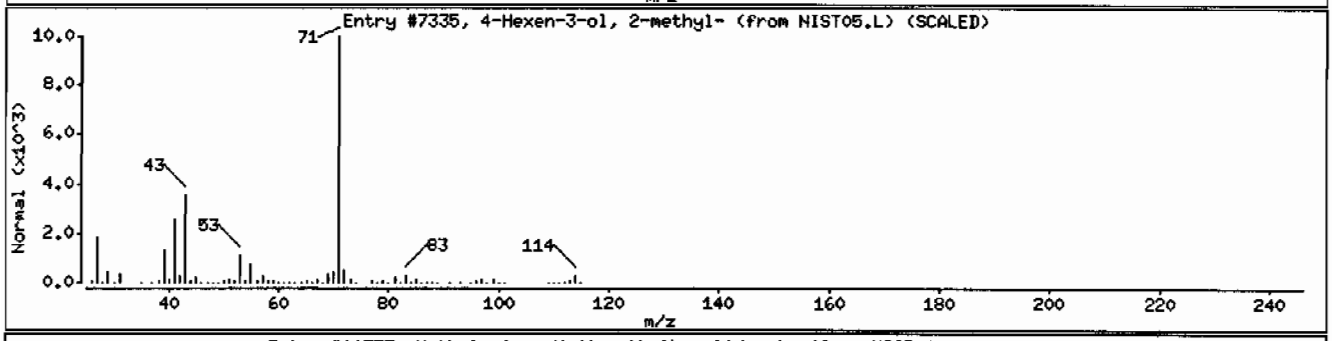

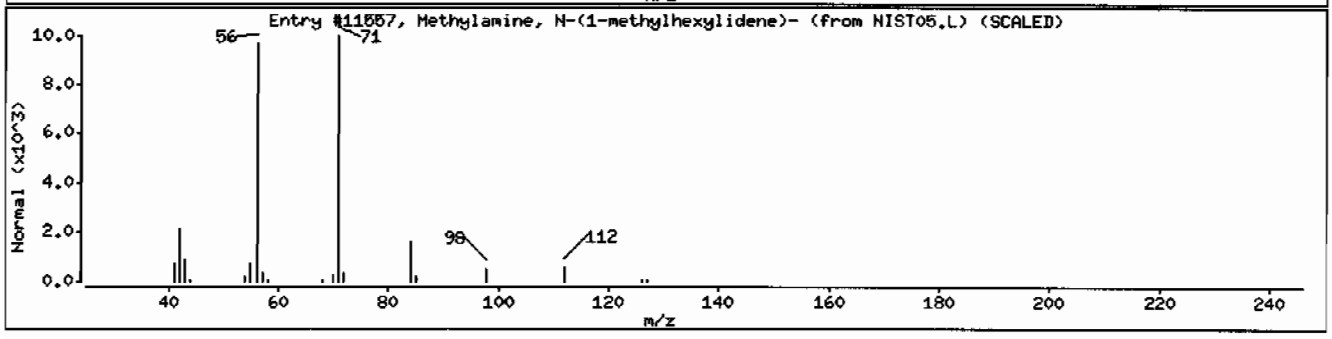

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: |241540005|926610|1|SVHF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-(2,6,6-Trimethyl-cyclohex-1-enyl)-but-	39190-05-1	NIST05.L	62193	59	C13H21NO	207
3-Methylthio-1-phenyl-4,5-dihydro-1H-pyr	1000305-46-9	NIST05.L	50843	58	C10H12N2S	192
1H-Indene, 1-phenyl-	1961-96-2	NIST05.L	51390	58	C15H12	192

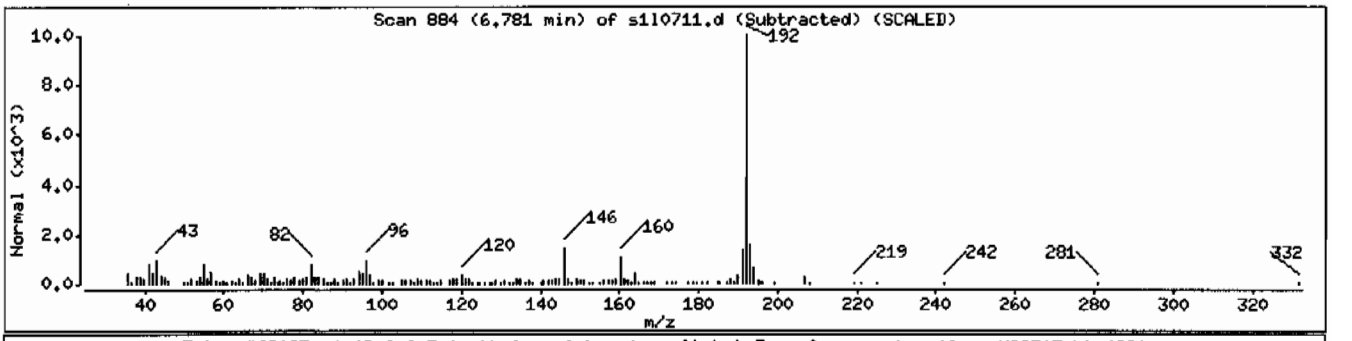

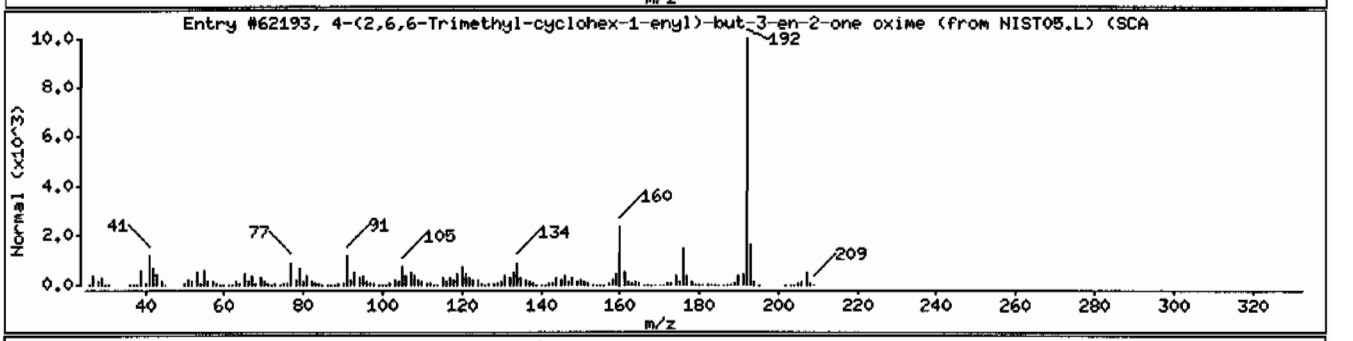

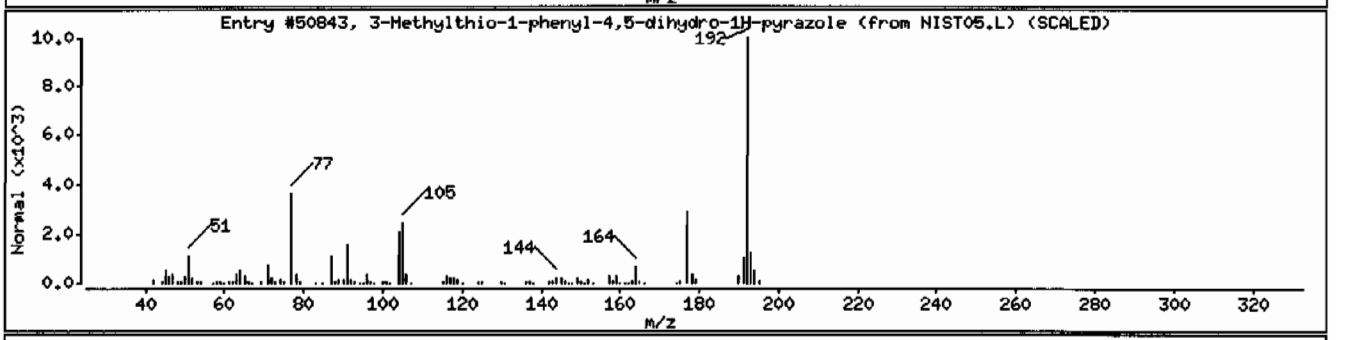

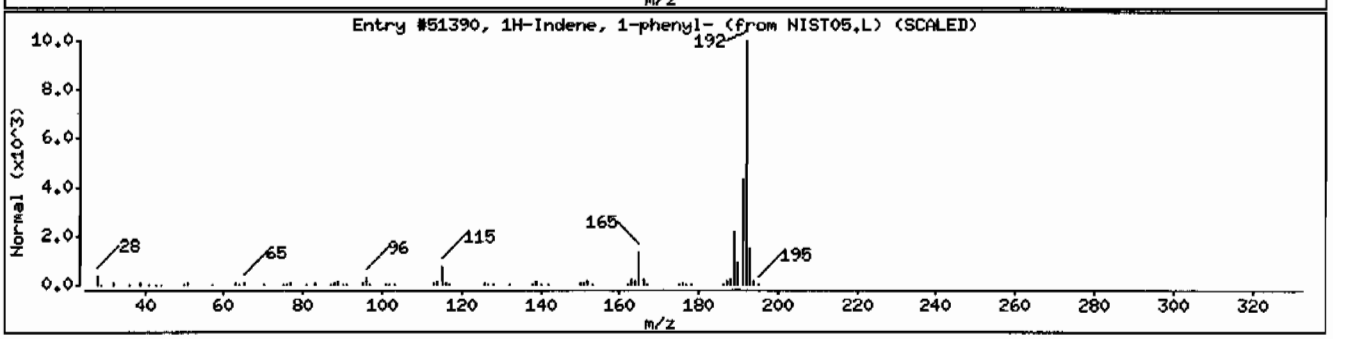

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: |2415400051926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	99	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	89	C16H32O2	256
Tridecanoic acid	638-53-9	NIST05.L	67137	80	C13H26O2	214

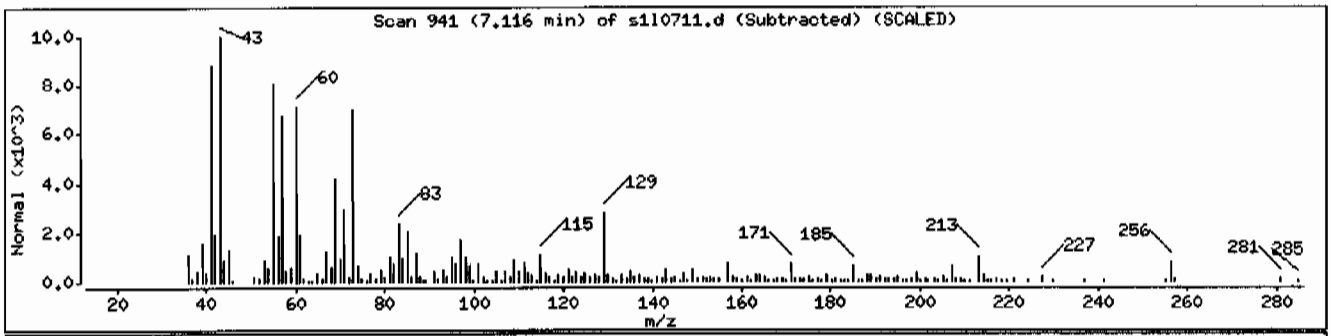

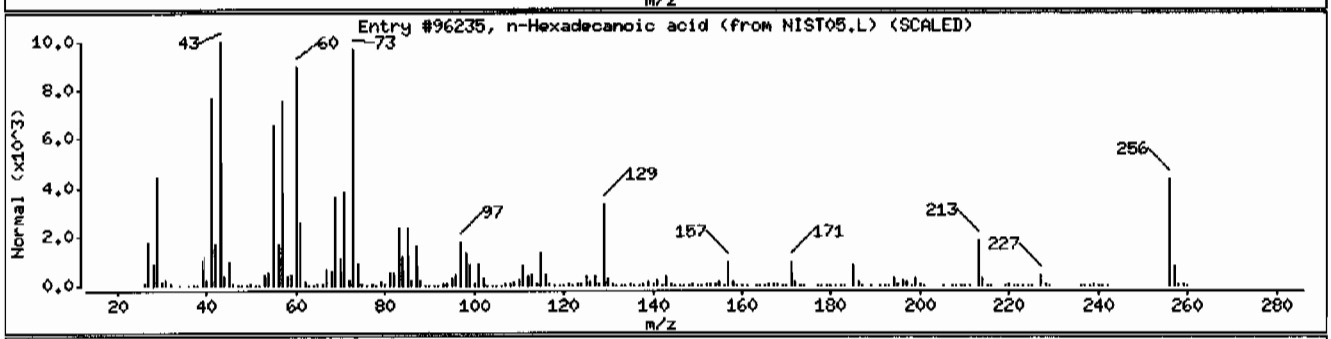

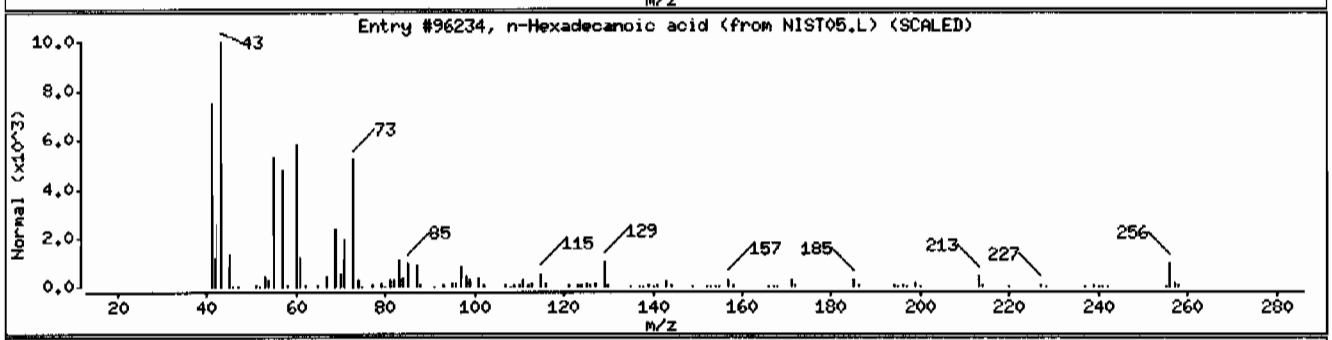

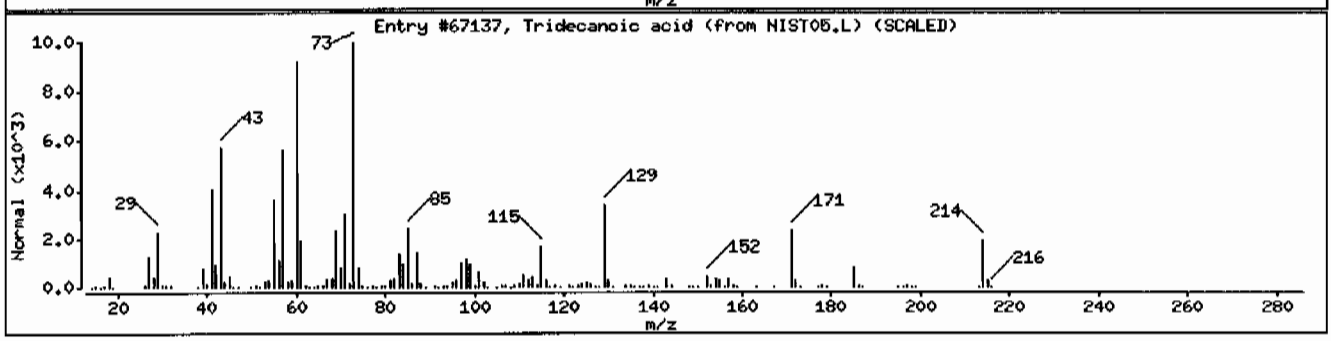

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: 1241540005192661011ISVHF11ILANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Eicosene, (E)-	74685-33-9	NIST05.L	112107	84	C20H40	280
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	80	C16H30O2	254
Cyclododecanone, 2-methylene-	3045-76-9	NIST05.L	52812	80	C13H22O	194

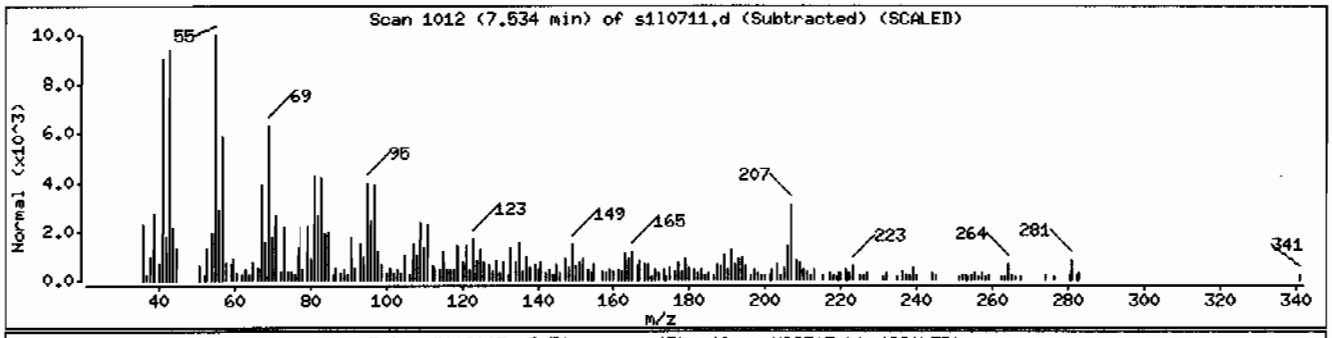

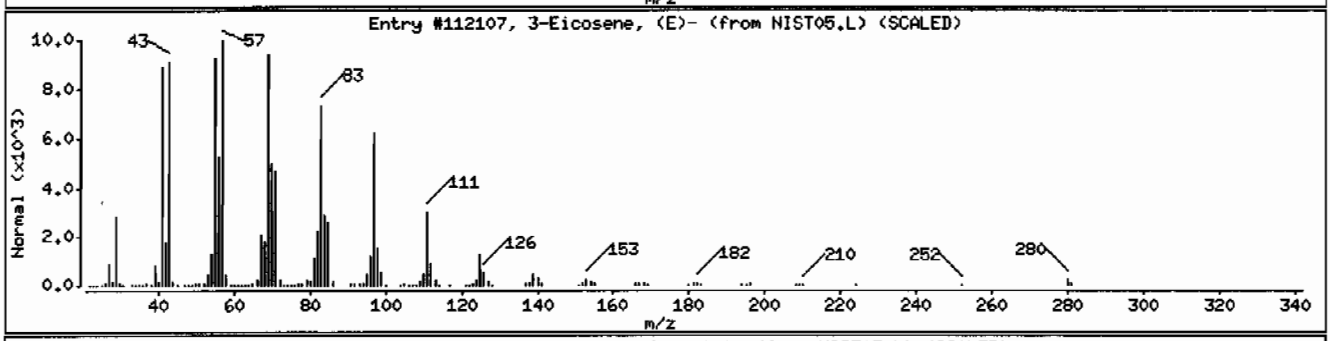

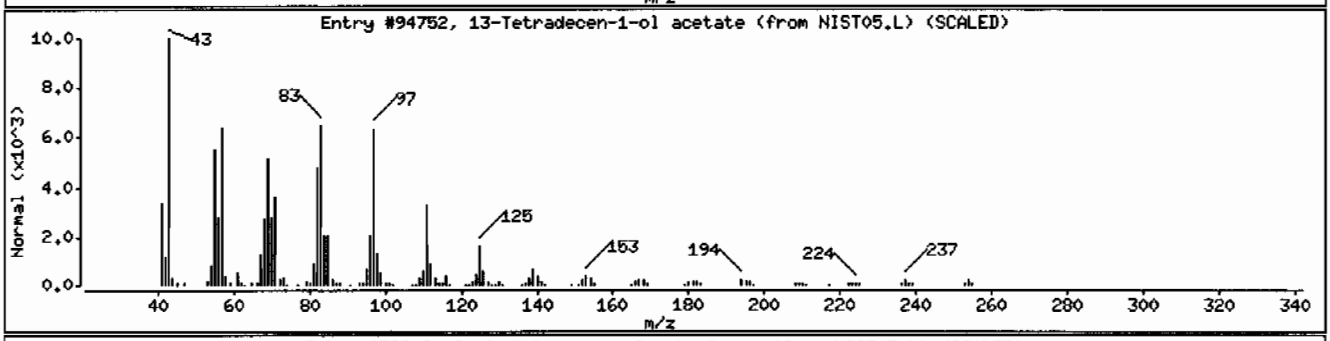

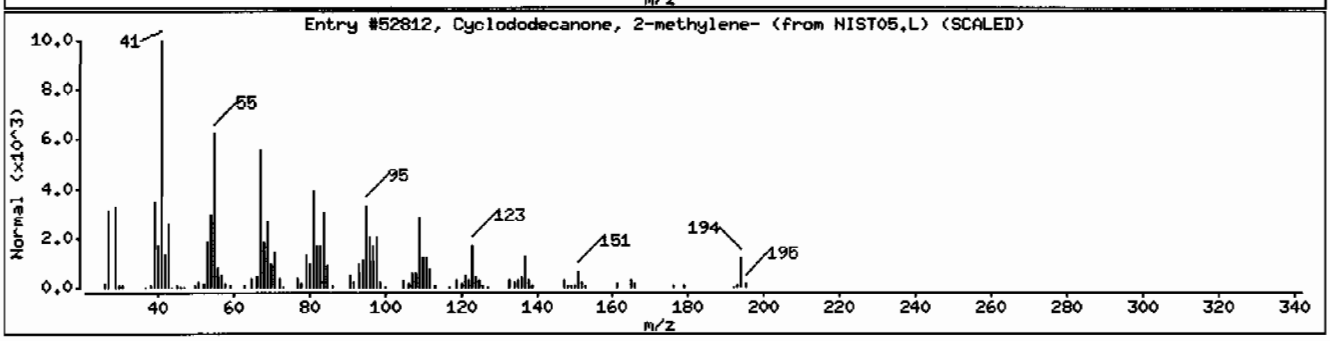

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: |2415400051926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	83	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	58	C18H35NO	281
Benzeneethanamine, 2-fluoro-.beta.,3,4-t	61338-98-5	NIST05.L	77768	47	C11H16FNO3	229

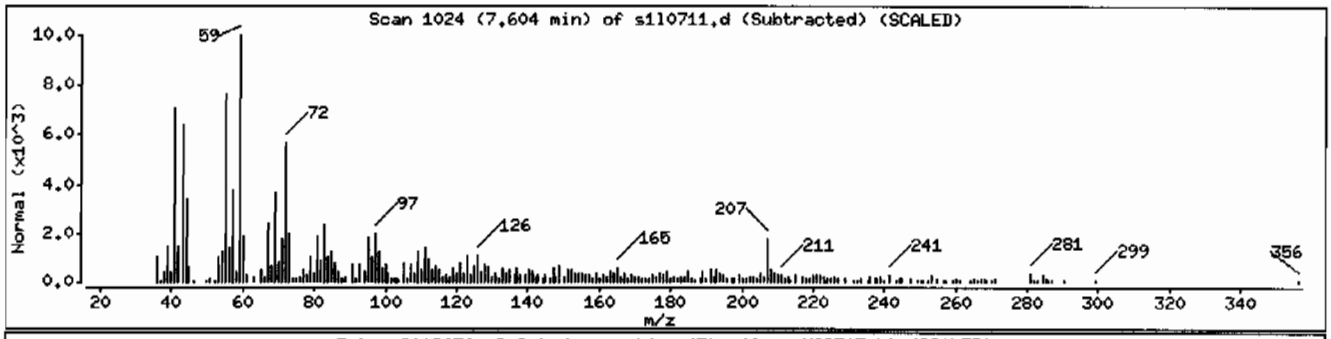

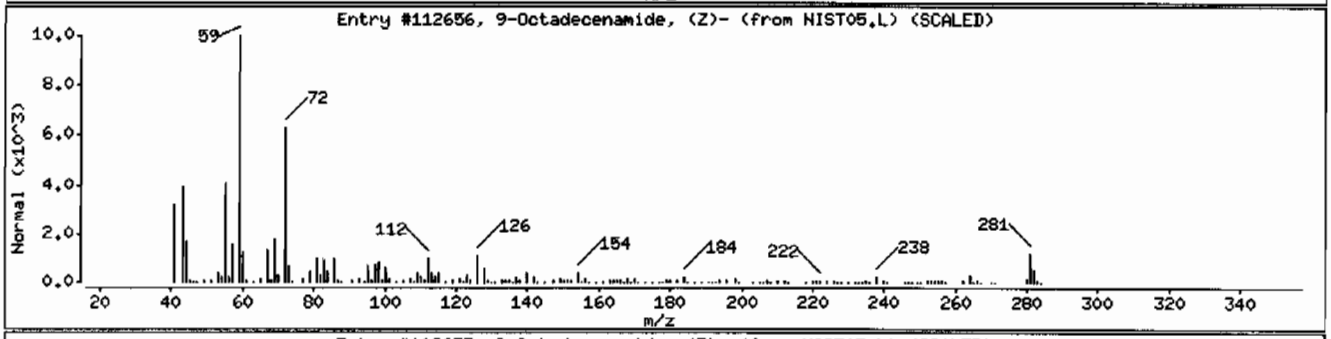

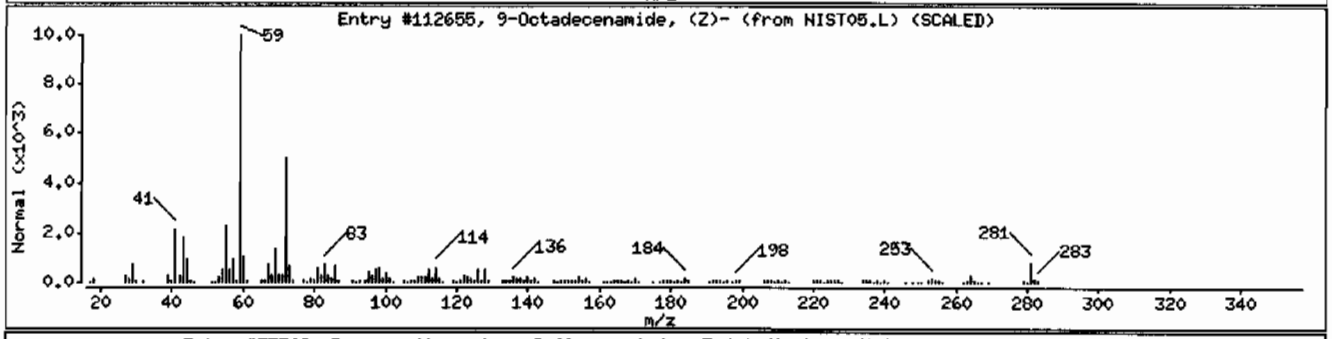

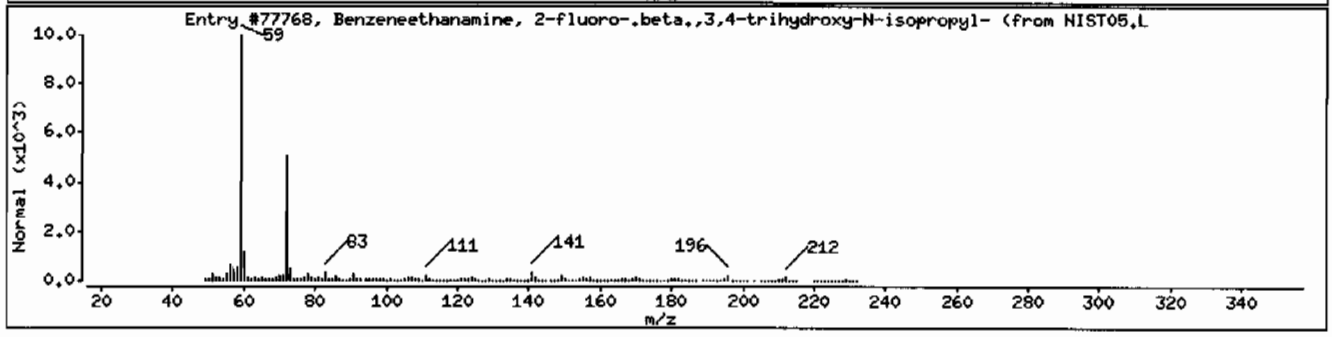

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: |2415400051926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Dodecanamide	1120-16-7	NIST05.L	56472	89	C12H25NO	199
Octadecanamide	124-26-5	NIST05.L	114054	76	C18H37NO	283
Tetradecanamide	638-58-4	NIST05.L	76597	64	C14H29NO	227

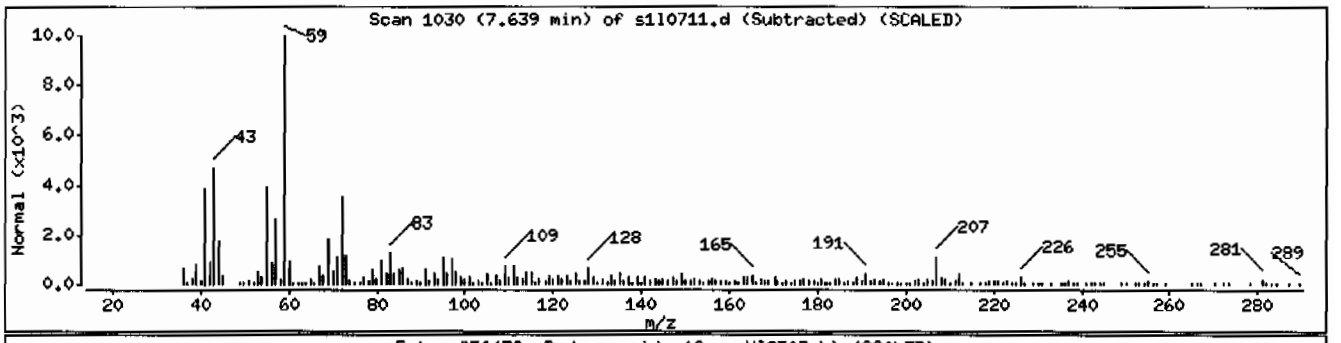

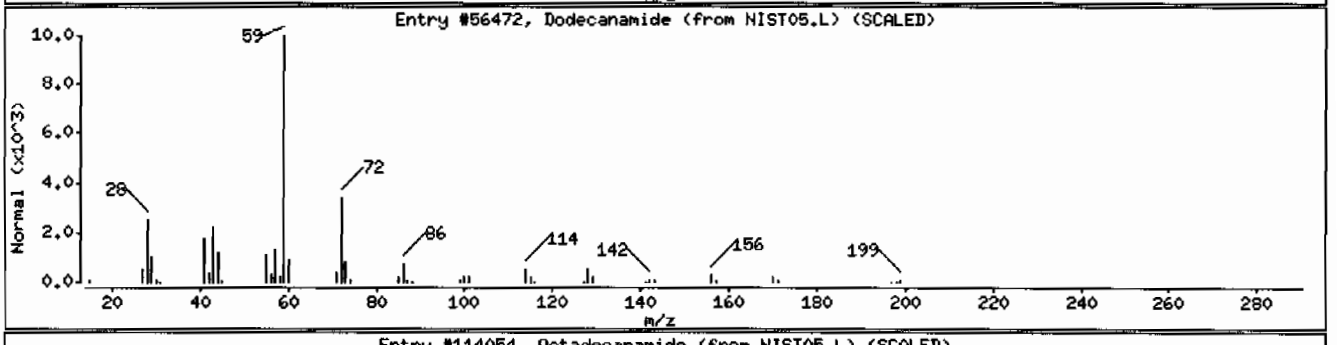

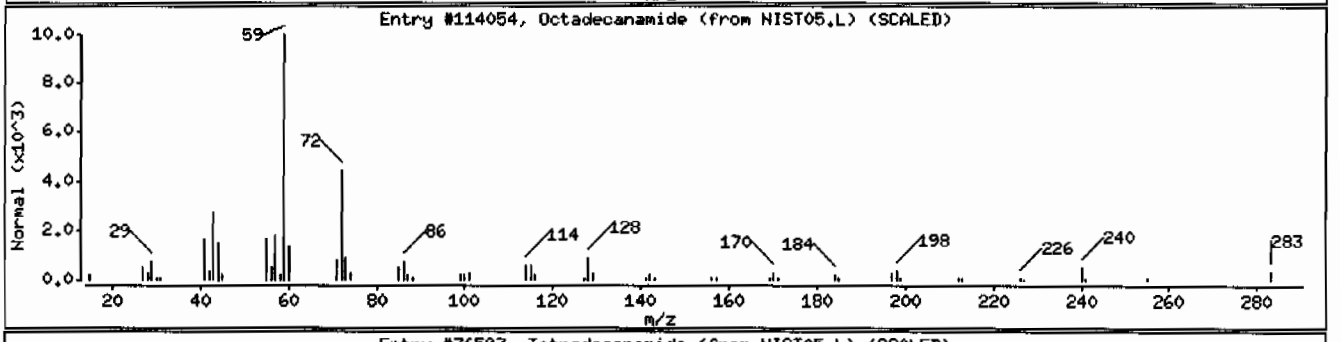

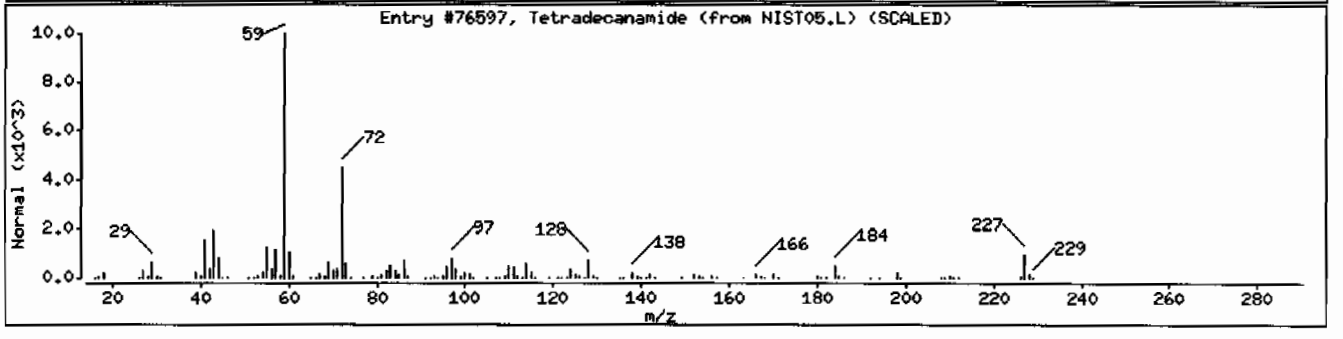

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: |2415400051926610|1|SVHF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	95	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
Dodecanamide	1120-16-7	NIST05.L	56472	68	C12H25NO	199

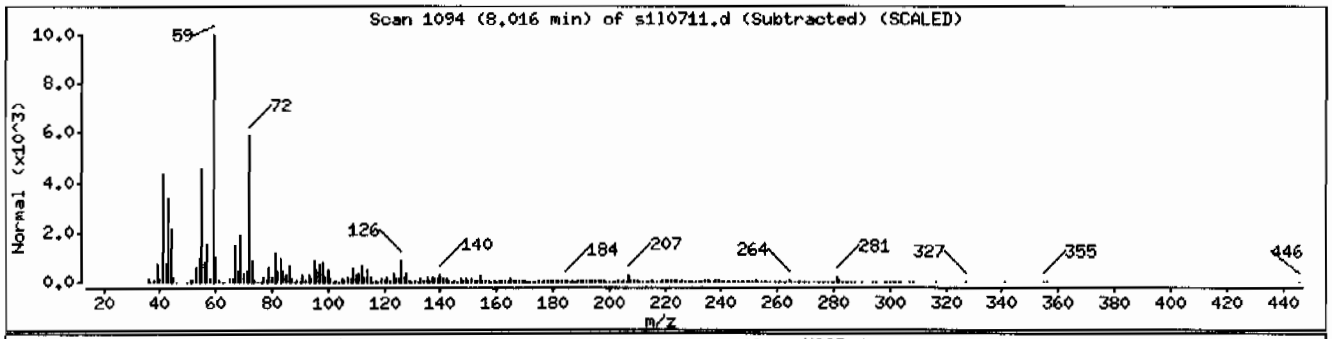

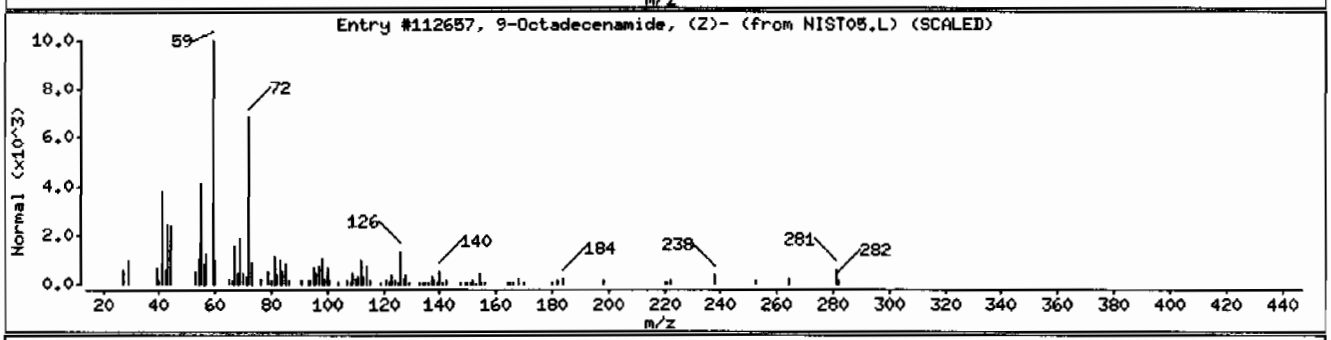

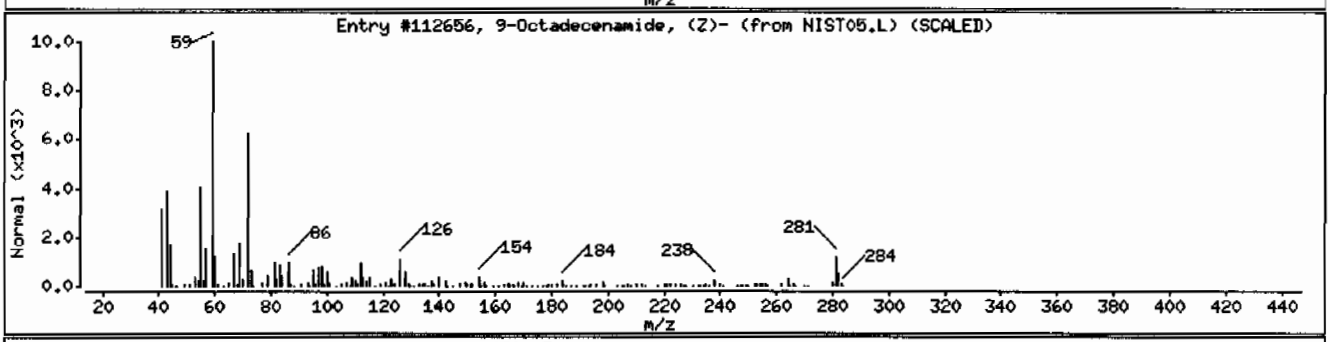

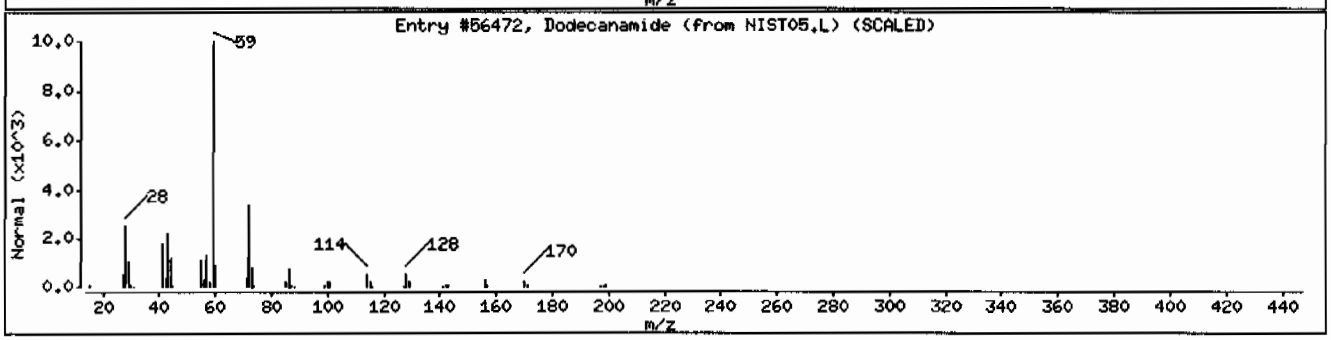

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864

Instrument: MSD1.i

Sample Info: |24154000519266101|SVHF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	94	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	93	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	91	C18H35NO	281

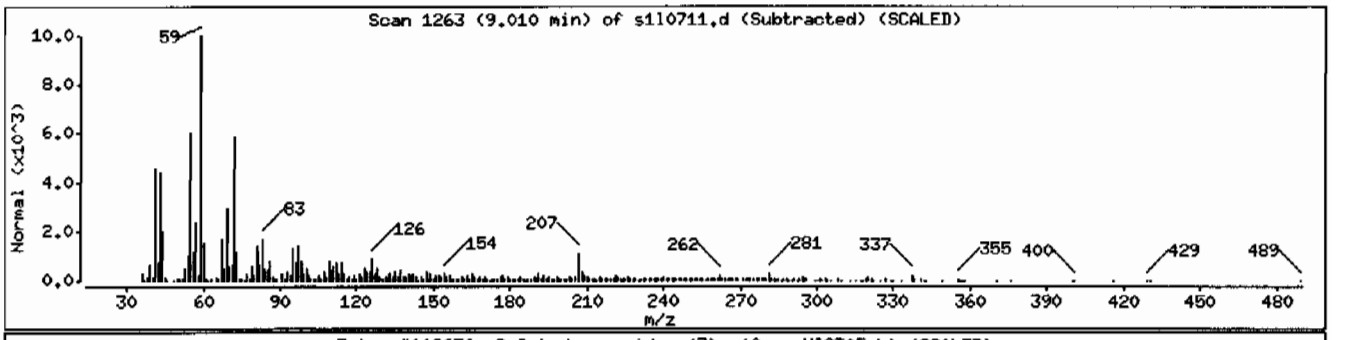

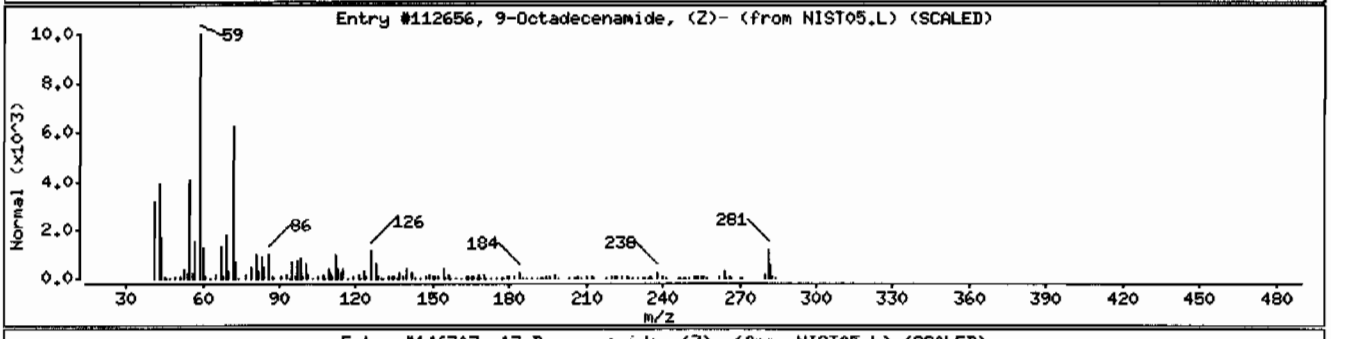

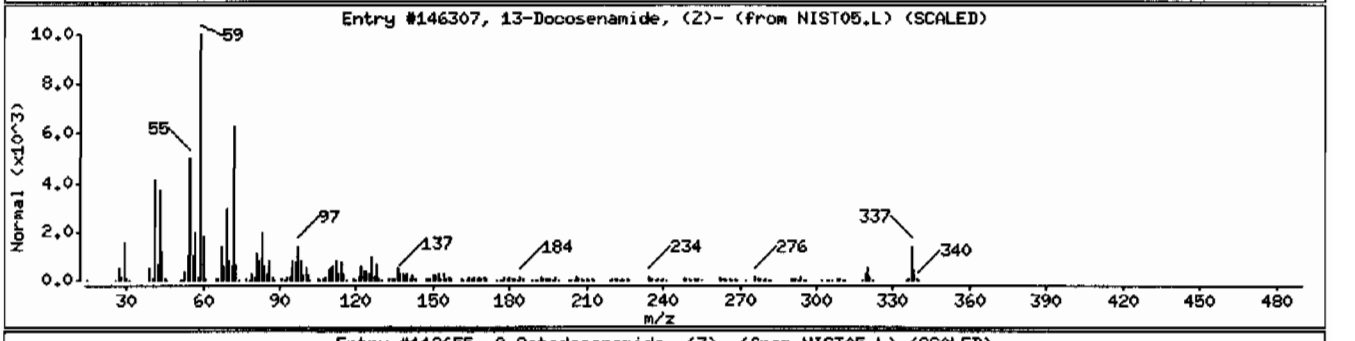

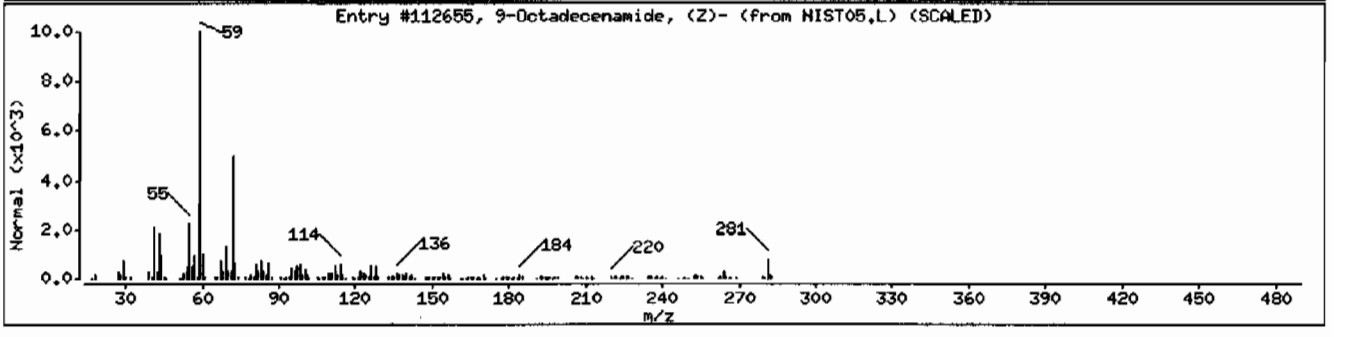

Data File: /chem/MSD1.i/s120709.b/s110711.d

Date : 07-DEC-2009 13:12

Client ID: RE03-09-13864 Instrument: MSD1.i

Sample Info: |2415400051926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	38	C15H22O	218
6-(1,3-Dimethyl-buta-1,3-dienyl)-1,5,5-t	1000189-26-4	NIST05.L	69978	38	C15H22O	218
1-(5-Chloro-2-methylphenyl)-2,5-dihydro-	58670-26-1	NIST05.L	71808	35	C11H8ClNO2	221

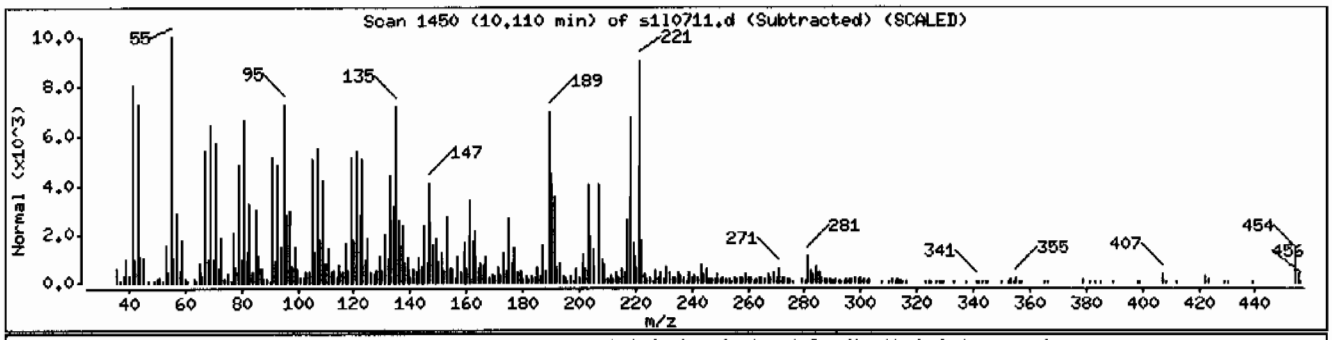

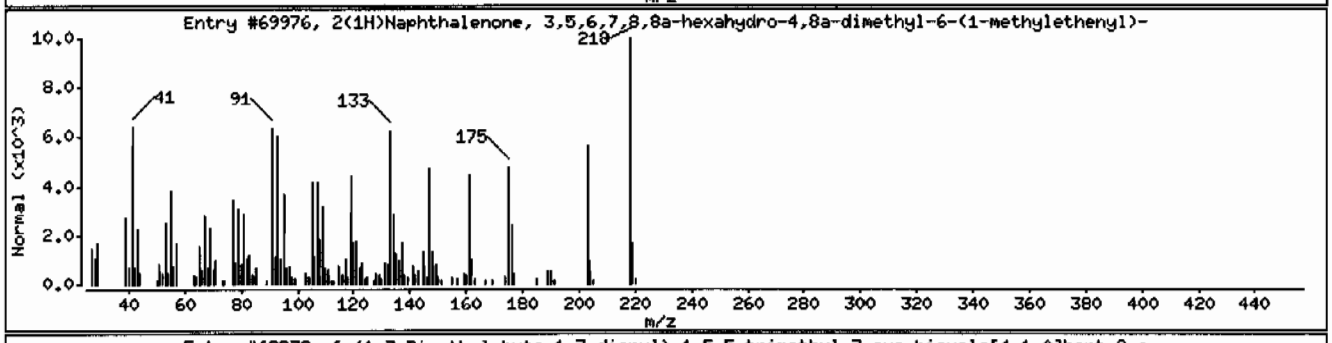

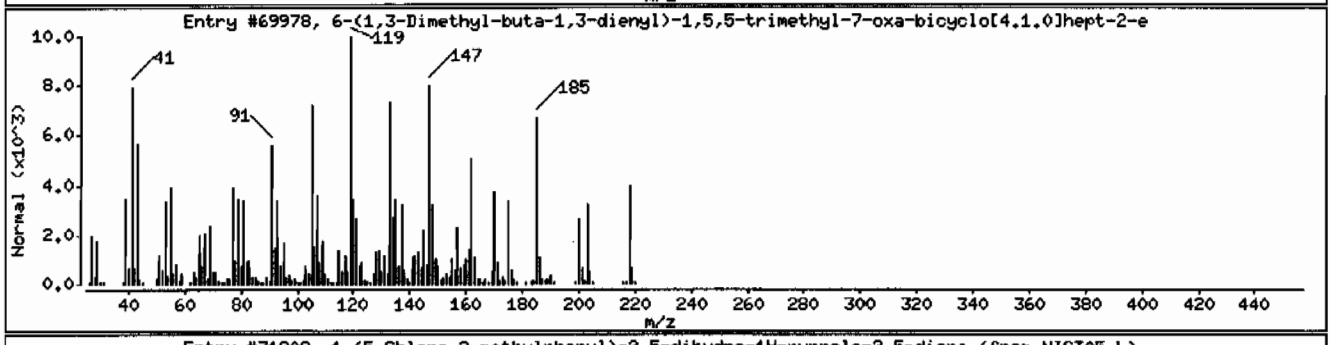

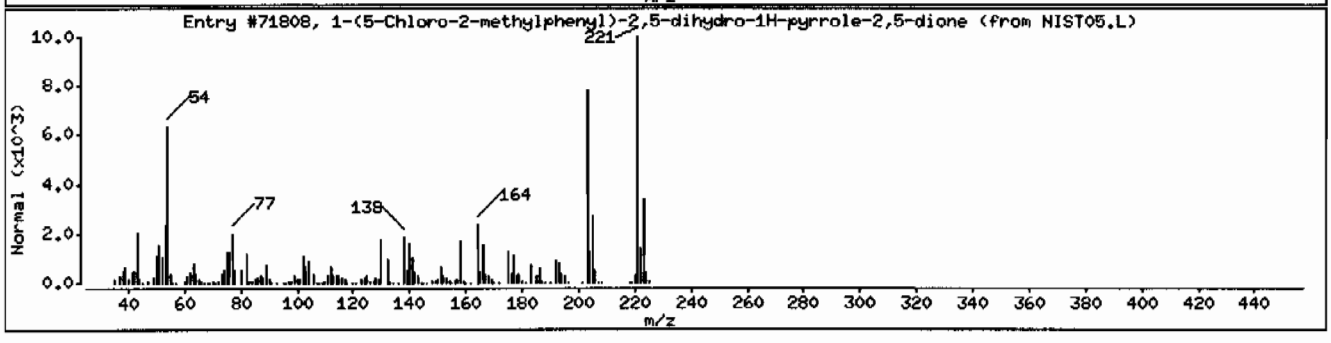

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13865**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:41**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	385	ug/kg	77.0	385
108-95-2	Phenol	U	385	ug/kg	77.0	385
95-57-8	2-Chlorophenol	U	385	ug/kg	77.0	385
106-46-7	1,4-Dichlorobenzene	U	385	ug/kg	77.0	385
621-64-7	N-Nitrosodipropylamine	U	385	ug/kg	77.0	385
59-50-7	4-Chloro-3-methylphenol	U	385	ug/kg	77.0	385
83-32-9	Acenaphthene	U	38.5	ug/kg	12.7	38.5
121-14-2	2,4-Dinitrotoluene	U	385	ug/kg	38.5	385
100-02-7	4-Nitrophenol	U	385	ug/kg	127	385
87-86-5	Pentachlorophenol	U	385	ug/kg	96.3	385
129-00-0	Pyrene	U	38.5	ug/kg	11.6	38.5
110-86-1	Pyridine	U	385	ug/kg	77.0	385
62-53-3	Aniline	U	385	ug/kg	116	385
111-44-4	bis(2-Chloroethyl) ether	U	385	ug/kg	77.0	385
541-73-1	1,3-Dichlorobenzene	U	385	ug/kg	77.0	385
100-51-6	Benzyl alcohol	U	385	ug/kg	116	385
95-50-1	1,2-Dichlorobenzene	U	385	ug/kg	77.0	385
108-60-1	bis(2-Chloroisopropyl)ether	U	385	ug/kg	77.0	385
95-48-7	o-Cresol	U	385	ug/kg	77.0	385
65794-96-9	m,p-Cresols	U	385	ug/kg	116	385
67-72-1	Hexachloroethane	U	385	ug/kg	77.0	385
98-95-3	Nitrobenzene	U	385	ug/kg	77.0	385
78-59-1	Isophorone	U	385	ug/kg	77.0	385
88-75-5	2-Nitrophenol	U	385	ug/kg	77.0	385
105-67-9	2,4-Dimethylphenol	U	385	ug/kg	135	385
111-91-1	bis(2-Chloroethoxy)methane	U	385	ug/kg	77.0	385
120-83-2	2,4-Dichlorophenol	U	385	ug/kg	77.0	385
65-85-0	Benzoic acid	U	770	ug/kg	193	770
91-20-3	Naphthalene	U	38.5	ug/kg	11.6	38.5
106-47-8	4-Chloroaniline	U	385	ug/kg	77.0	385
87-68-3	Hexachlorobutadiene	U	385	ug/kg	77.0	385
91-57-6	2-Methylnaphthalene	U	38.5	ug/kg	7.70	38.5
77-47-4	Hexachlorocyclopentadiene	U	385	ug/kg	77.0	385
88-06-2	2,4,6-Trichlorophenol	U	385	ug/kg	77.0	385
95-95-4	2,4,5-Trichlorophenol	U	385	ug/kg	77.0	385
91-58-7	2-Chloronaphthalene	U	38.5	ug/kg	12.7	38.5
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	385	ug/kg	77.0	385
99-09-2	3-Nitroaniline	U	385	ug/kg	77.0	385

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:41	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110411.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	385	ug/kg	77.0	385
606-20-2	2,6-Dinitrotoluene	U	385	ug/kg	38.5	385
208-96-8	Acenaphthylene	U	38.5	ug/kg	11.6	38.5
51-28-5	2,4-Dinitrophenol	U	770	ug/kg	146	770
132-64-9	Dibenzofuran	U	385	ug/kg	77.0	385
84-66-2	Diethylphthalate	U	385	ug/kg	77.0	385
86-73-7	Fluorene	U	38.5	ug/kg	11.6	38.5
7005-72-3	4-Chlorophenylphenylether	U	385	ug/kg	77.0	385
534-52-1	2-Methyl-4,6-dinitrophenol	U	385	ug/kg	77.0	385
100-01-6	4-Nitroaniline	U	385	ug/kg	116	385
	p-Nitroaniline					
122-39-4	Diphenylamine	U	385	ug/kg	77.0	385
122-66-7	Azobenzene	U	385	ug/kg	77.0	385
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	385	ug/kg	77.0	385
118-74-1	Hexachlorobenzene	U	385	ug/kg	77.0	385
85-01-8	Phenanthrene	U	38.5	ug/kg	11.6	38.5
120-12-7	Anthracene	U	38.5	ug/kg	7.70	38.5
84-74-2	Di-n-butylphthalate	U	385	ug/kg	77.0	385
206-44-0	Fluoranthene	U	38.5	ug/kg	11.6	38.5
85-68-7	Butylbenzylphthalate	U	385	ug/kg	77.0	385
56-55-3	Benzo(a)anthracene	U	38.5	ug/kg	11.6	38.5
91-94-1	3,3'-Dichlorobenzidine	U	385	ug/kg	116	385
218-01-9	Chrysene	U	38.5	ug/kg	11.6	38.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	385	ug/kg	77.0	385
117-84-0	Di-n-octylphthalate	U	385	ug/kg	77.0	385
205-99-2	Benzo(b)fluoranthene	U	38.5	ug/kg	11.6	38.5
207-08-9	Benzo(k)fluoranthene	U	38.5	ug/kg	11.6	38.5
50-32-8	Benzo(a)pyrene	U	38.5	ug/kg	11.6	38.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.5	ug/kg	11.6	38.5
53-70-3	Dibenzo(a,h)anthracene	U	38.5	ug/kg	11.6	38.5
191-24-2	Benzo(ghi)perylene	U	38.5	ug/kg	11.6	38.5
120-82-1	1,2,4-Trichlorobenzene	U	385	ug/kg	77.0	385

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	474	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	213	ug/kg	93	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:41	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s1l0411.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.77	412	ug/kg		J
	Unknown	11.96	172	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110411.d
Lab Smp Id: 241540002 Client Smp ID: RE03-09-13865
Inj Date : 04-DEC-2009 12:41
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540002|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	13.46180	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	487701	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1988638	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1124809	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1957059	40.0000	
* 91 Chrysene-d12	240	8.639	8.633	(1.000)	1740269	40.0000	
* 98 Perylene-d12	264	10.075	10.069	(1.000)	1620024	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	693869	54.4700	2100
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	887709	57.3363	2210
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	318550	24.3069	936
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.916)	726677	26.9748	1040
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	257649	82.0311	3160
$ 81 p-Terphenyl-d14	244	7.898	7.892	(0.914)	1101940	40.3394	1550

ION RATIO REPORT

SV REPORT

Data file: s110411.d
Report Date: 12/04/2009 16:41
Lab. ID: 241540002 SampleType: SAMPLE
Injection Date: 04-DEC-2009 12:41
Operator: AMY Instrument: MSD1.i
Sample Info: |241540002|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	44746	3.62	3.68	80-120	100	(T)
93	483	3.46	3.69	418-478	1	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	43066	4.25	4.13	80-120	100	(T)
42	26281	4.25	4.13	44-104	61	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	199754	6.00	5.77	80-120	100	(T)
164	1124809	6.00	5.77	0- 40	563	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	143667	6.00	5.82	80-120	100	(T)
63	1786	6.00	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	143667	6.00	6.10	80-120	100	(T)
89	1689	6.00	6.10	32- 92	1	(QT)
63	1786	6.00	6.10	15- 75	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	15281	6.53	6.37	80-120	100	(T)
165	16931	6.53	6.37	64-124	111	(T)
167	5032	6.53	6.37	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	15571	6.53	6.67	80-120	100	(T)
141	98042	6.53	6.67	50-110	630	(QT)
250	30461	6.53	6.67	68-128	196	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	453	9.62	9.61	80-120	100	( )
253	189	9.65	9.61	0- 51	42	( )
125	374	9.62	9.61	0- 44	83	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110411.d
Lab Smp Id: 241540002 Client Smp ID: RE03-09-13865
Inj Date : 04-DEC-2009 12:41
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540002|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	13.46180	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2890262	40.000
* 91 Chrysene-d12	8.639	4727611	40.000
* 98 Perylene-d12	10.075	4439680	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

		CONCENTRATIONS		QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.916	888438	12.2956007	474	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.139	652887	5.52403693	213	93	NIST05.L	112656	91
Unknown				CAS #:			
11.769	1186052	10.6859224	412	0		0	98
Unknown				CAS #:			
11.957	494967	4.45948767	172	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110411.d

Date : 04-DEC-2009 12:41

Client ID: RE03-09-13865

Sample Info: 1241540002|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20

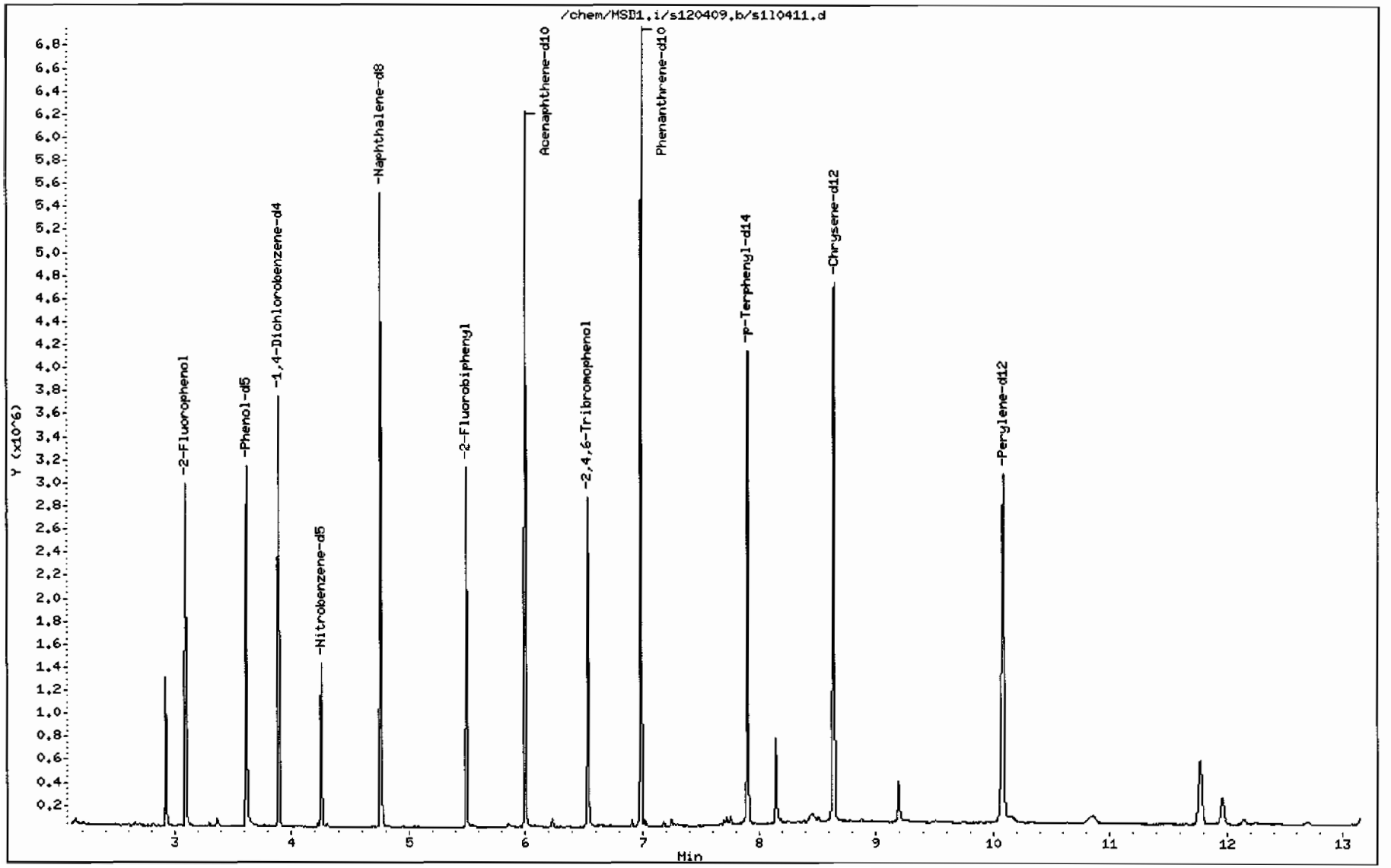

Data File: /chem/MSD1.i/s120409.b/s110411.d

Date : 04-DEC-2009 12:41

Client ID: RE03-09-13865 Instrument: MSD1.i

Sample Info: |2415400021926610111SVMF11LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	46	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	38	C6H12O2	116

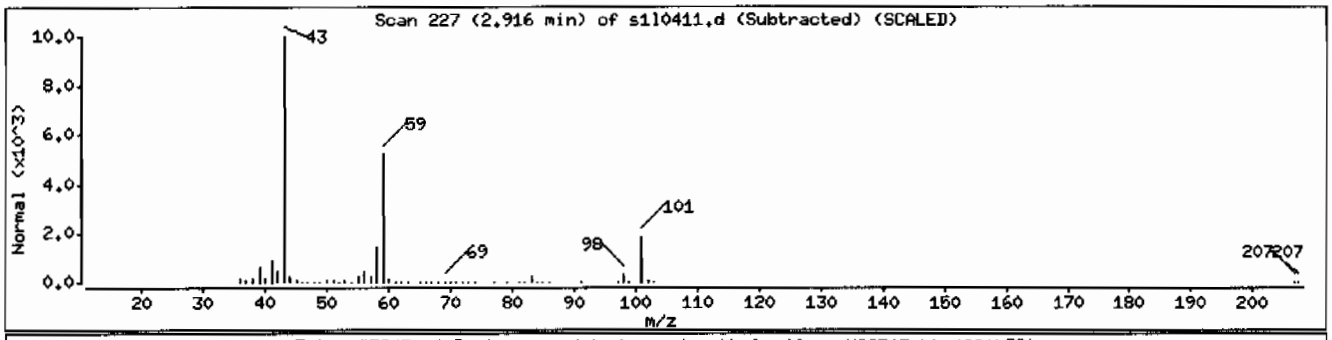

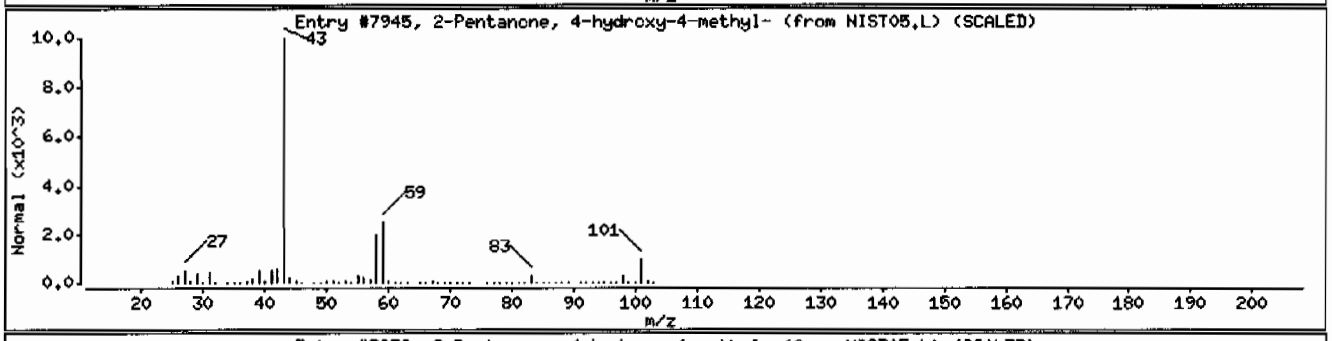

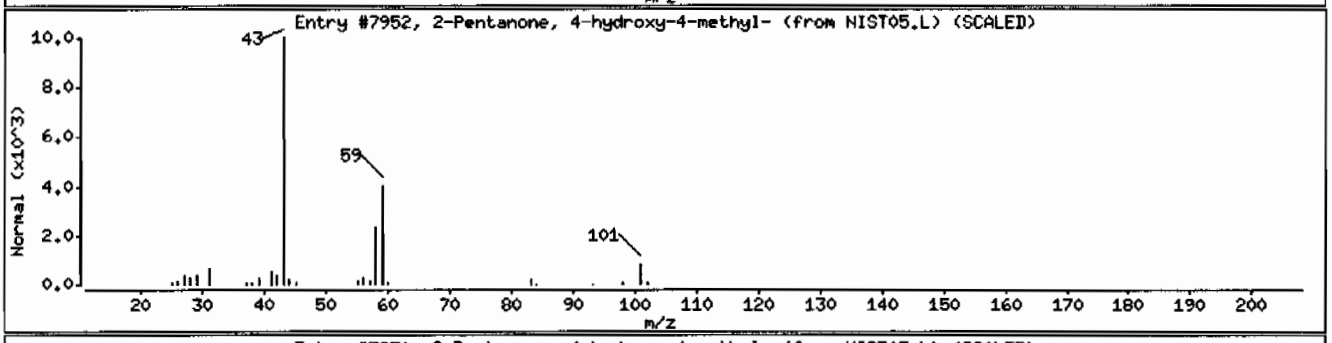

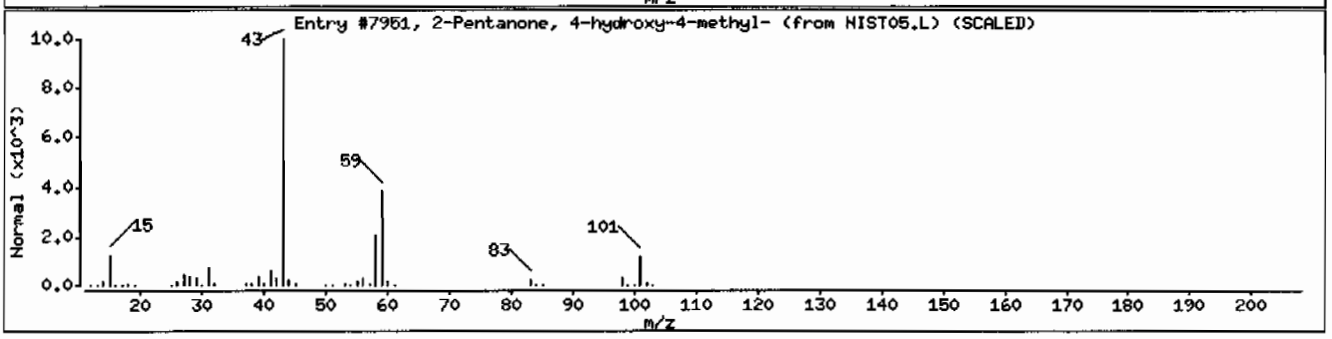

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Date : 04-DEC-2009 12:41

Client ID: RE03-09-13865

Instrument: MSD1.i

Sample Info: |24154000219266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	76	C18H35NO	281

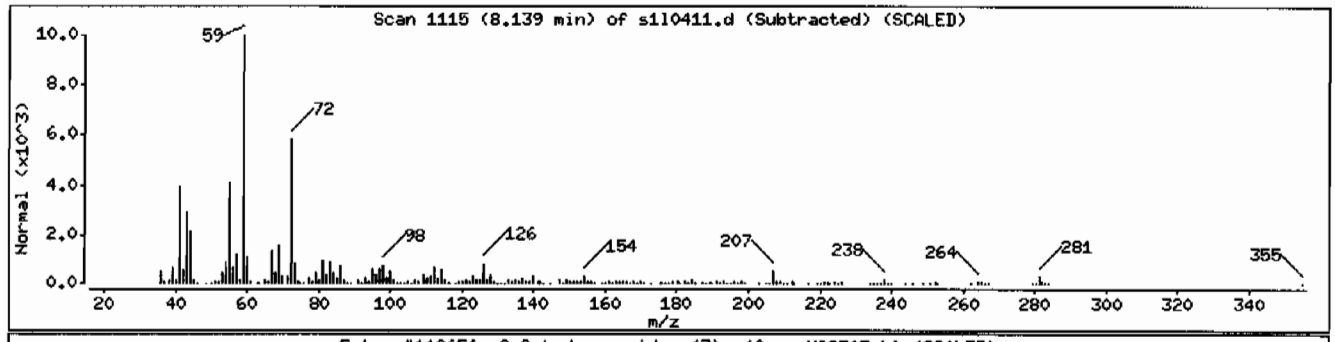

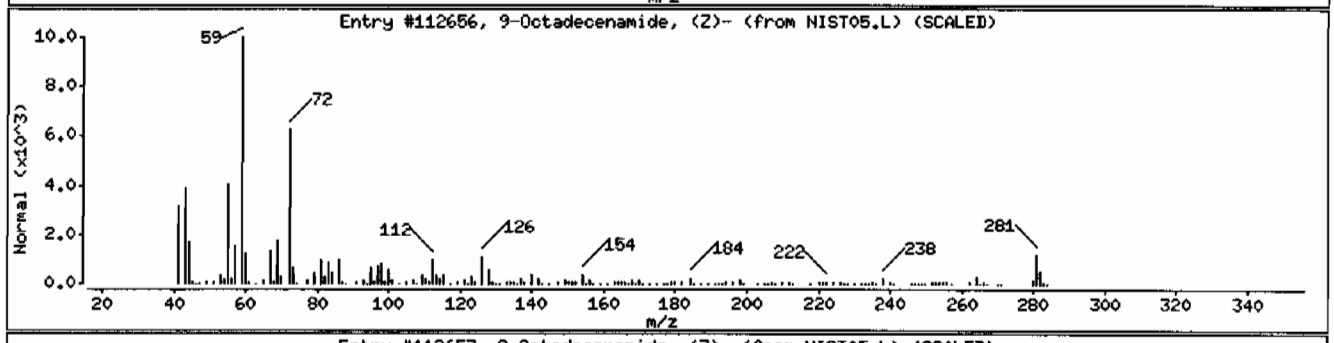

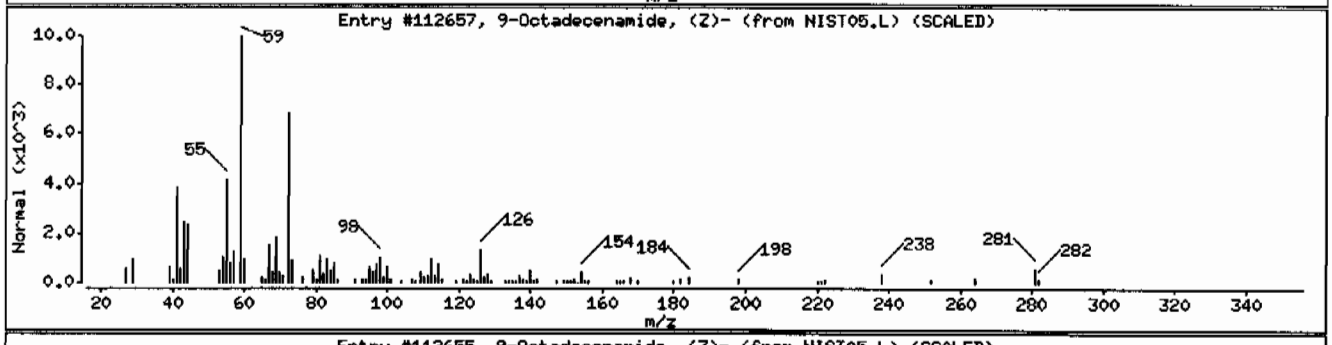

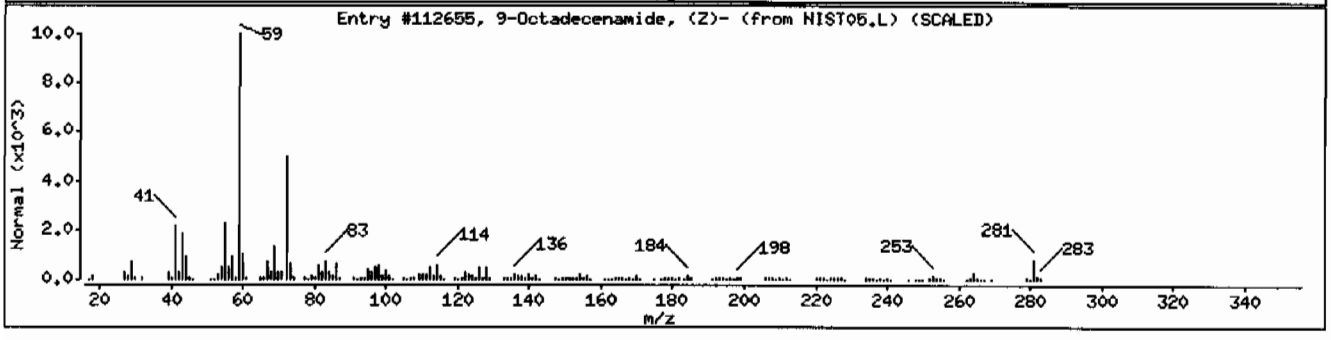

Data File: /chem/MSD1.i/s120409.b/s110411.d

Date : 04-DEC-2009 12:41

Client ID: RE03-09-13865

Instrument: MSD1.i

Sample Info: |24154000219266101|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Friedoolean-14-ene, 3-methoxy-, (3.bet	14021-23-9	NIST05.L	178753	70	C31H52O	440
1,4-Dimethyl-8-isopropylidenetrioyclo[5.	1000140-07-7	NIST05.L	59920	56	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	46	C15H24	204

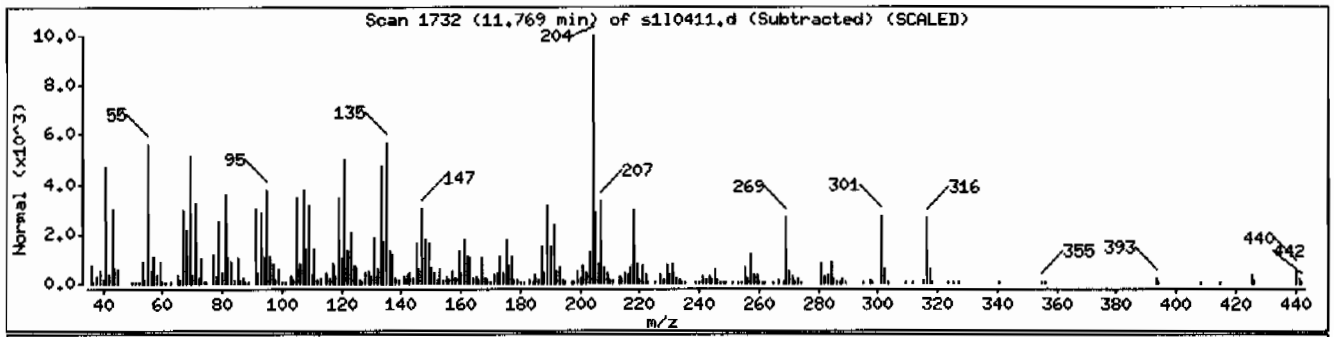

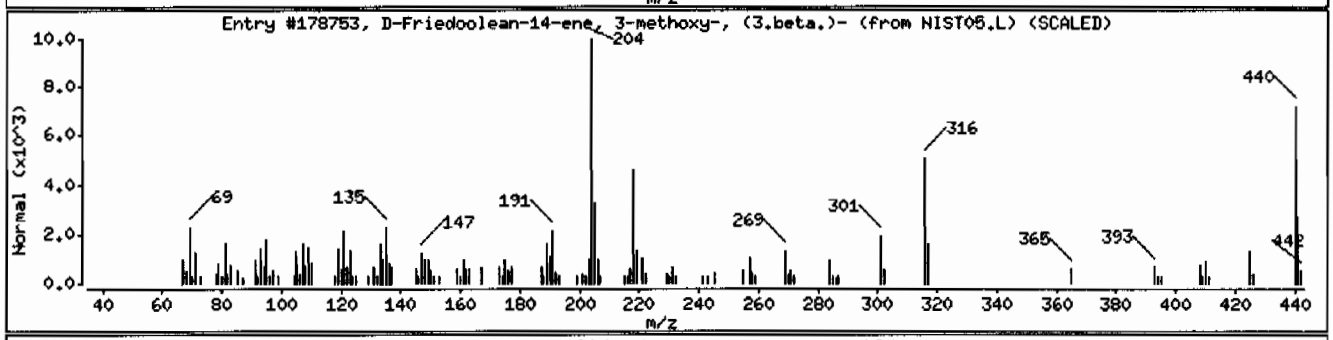

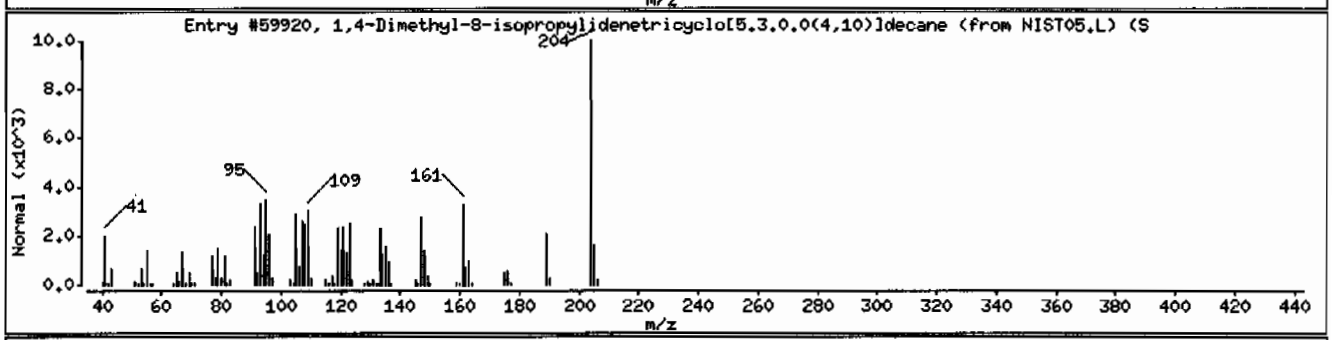

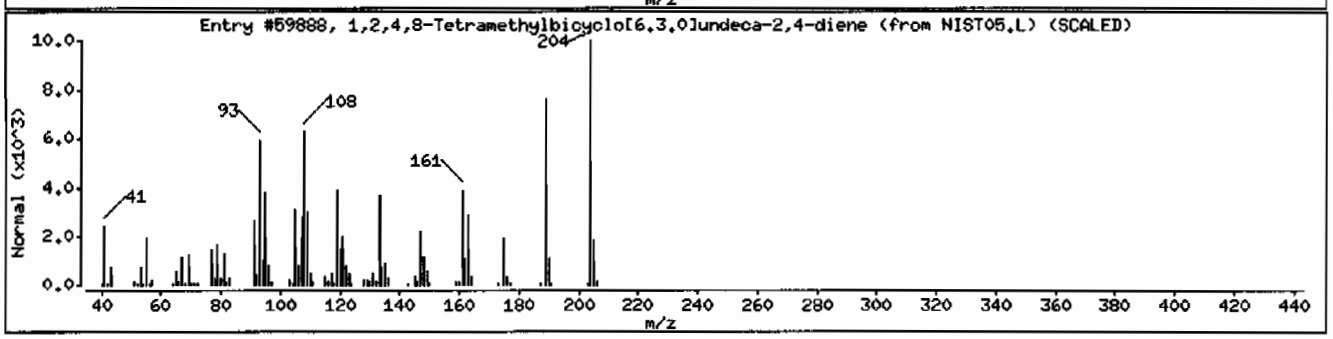

Data File: /chem/MSD1.i/s120409.b/s110411.d

Date : 04-DEC-2009 12:41

Client ID: RE03-09-13865 Instrument: MSD1.i

Sample Info: |2415400021926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Isopropenyl-4a,8-dimethyl-1,2,3,4,4a,5	1000193-57-0	NIST05.L	59944	45	C15H24	204
1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60089	44	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	473-13-2	NIST05.L	60063	43	C15H24	204

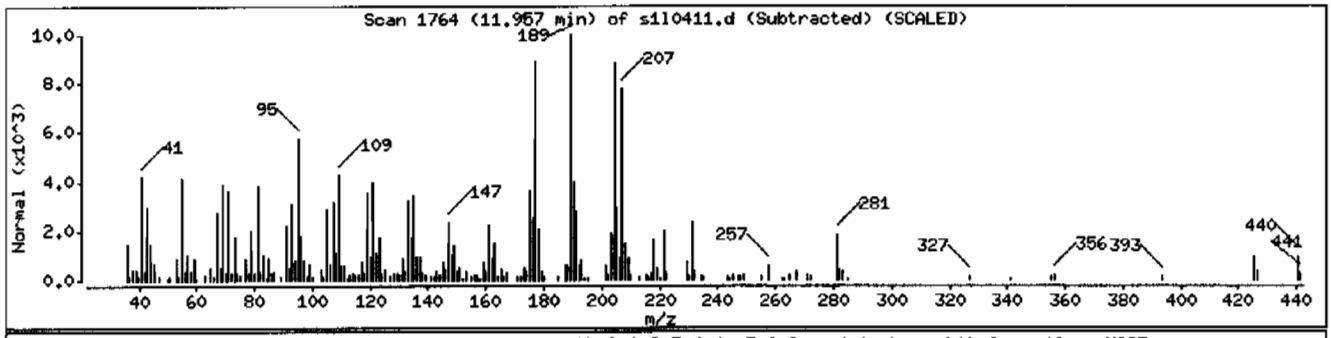

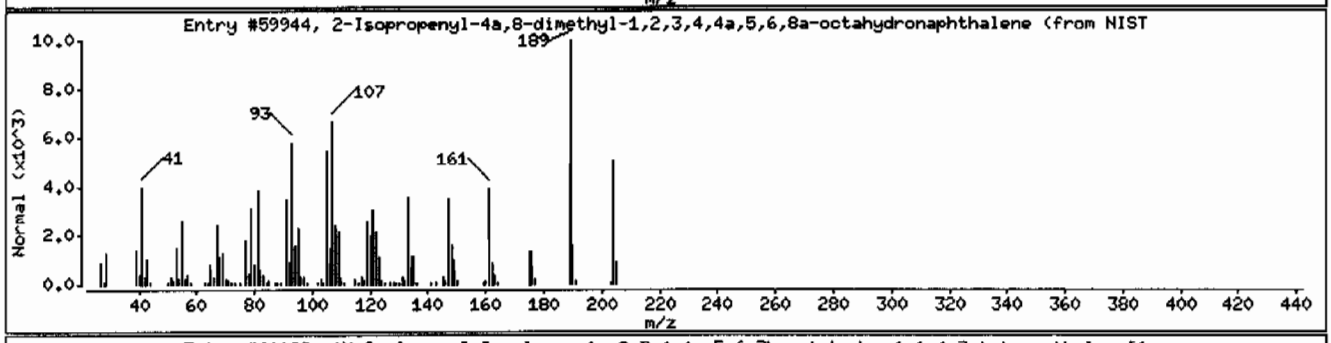

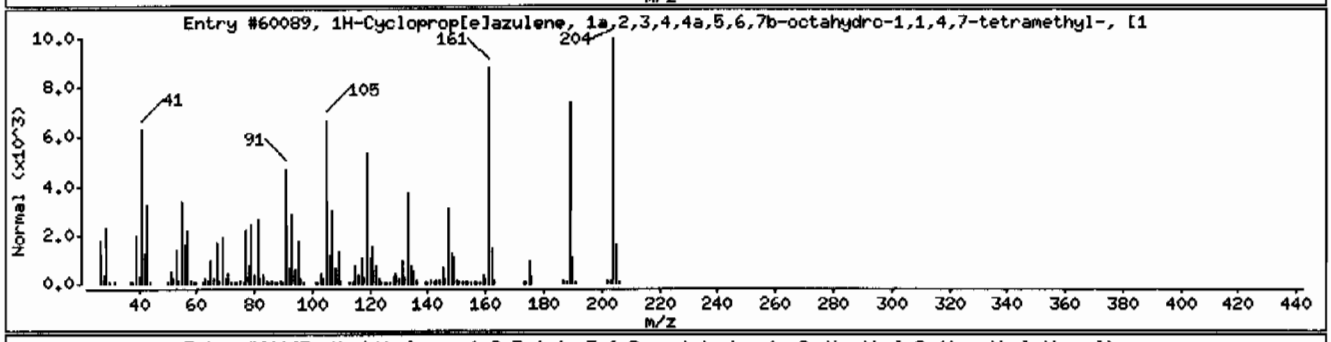

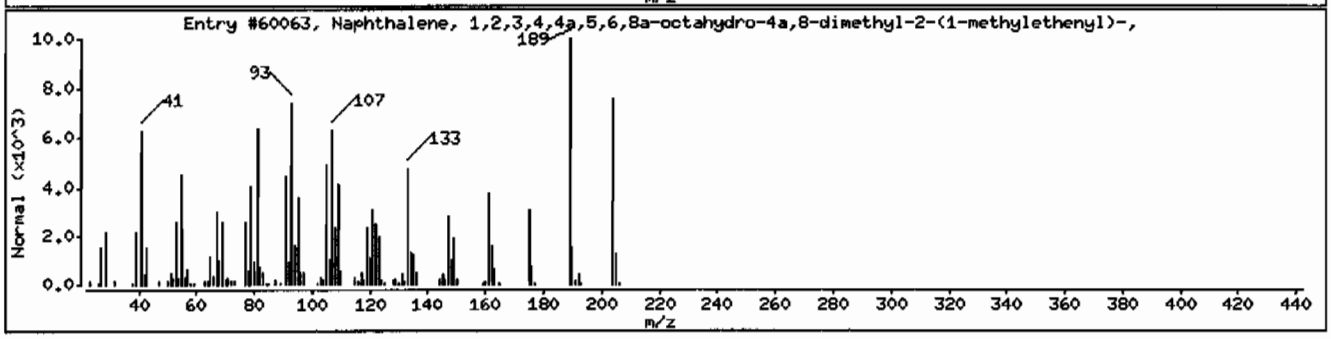

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540013	Date Received:	11/20/2009 08:50	%Moisture:	14
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13866	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.I	Dilution:	1
Run Date:	12/04/2009 16:33	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s110421.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.5	388
108-95-2	Phenol	U	388	ug/kg	77.5	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.5	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.5	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.5	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.5	388
83-32-9	Acenaphthene		61.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	96.9	388
129-00-0	Pyrene		415	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.5	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.5	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.5	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.5	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.5	388
95-48-7	o-Cresol	U	388	ug/kg	77.5	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.5	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.5	388
78-59-1	Isophorone	U	388	ug/kg	77.5	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.5	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.5	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.5	388
65-85-0	Benzoic acid	U	775	ug/kg	194	775
91-20-3	Naphthalene	J	30.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.5	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.5	388
91-57-6	2-Methylnaphthalene	J	13.2	ug/kg	7.75	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.5	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.5	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.5	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.5	388
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	388	ug/kg	77.5	388

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13866	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:33	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.5	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	775	ug/kg	147	775
132-64-9	Dibenzofuran	U	388	ug/kg	77.5	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.5	388
86-73-7	Fluorene		56.6	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.5	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.5	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	p-Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.5	388
122-66-7	Azobenzene	U	388	ug/kg	77.5	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.5	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.5	388
85-01-8	Phenanthrene		411	ug/kg	11.6	38.8
120-12-7	Anthracene		108	ug/kg	7.75	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.5	388
206-44-0	Fluoranthene		513	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.5	388
56-55-3	Benzo(a)anthracene		193	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene		208	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.5	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.5	388
205-99-2	Benzo(b)fluoranthene		352	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene		169	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene		84.3	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene		114	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.5	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.75	215	ug/kg		J
	Unknown Aldol Condensate	2.92	632	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13866	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:33	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110421.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
559-74-0	Friedelan-3-one	8.45	179	ug/kg	84	NJ
112-95-8	Eicosane	10.32	200	ug/kg	98	NJ
	Unknown	10.83	232	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110421.d
Lab Smp Id: 241540013 Client Smp ID: RE03-09-13866
Inj Date : 04-DEC-2009 16:33
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540013|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	14.02330	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	487968	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1998017	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1090564	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1892843	40.0000	
* 91 Chrysene-d12	240	8.634	8.633	(1.000)	1758287	40.0000	
* 98 Perylene-d12	264	10.069	10.069	(1.000)	1600672	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	859969	67.4722	2620
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	1012166	65.3391	2530
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	427404	32.4600	1260
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.916)	973379	37.2671	1440
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	289208	94.9704	3680
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	1194863	43.2928	1680

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
47 Acenaphthene	154	6.022	6.022	(1.004)	40112	1.59469	61.8
79 Pyrene	202	7.845	7.845	(0.909)	499586	10.6924	414
30 Naphthalene	128	4.769	4.769	(1.004)	33110	0.79402	30.8(aQ)
34 2-Methylnaphthalene	142	5.246	5.245	(1.104)	9349	0.34105	13.2(a)
53 Fluorene	166	6.369	6.369	(1.062)	42812	1.45965	56.6
68 Phenanthrene	178	6.992	6.992	(1.002)	456387	10.6096	411
69 Anthracene	178	7.028	7.028	(1.007)	122174	2.79275	108
76 Fluoranthene	202	7.704	7.704	(1.104)	549897	13.2434	513
89 Benzo(a)anthracene	228	8.622	8.628	(0.999)	209676	4.97316	193
92 Chrysene	228	8.651	8.657	(1.002)	211184	5.35914	208
95 Benzo(b)fluoranthene	252	9.604	9.610	(0.954)	278650	9.07055	352
97 Benzo(a)pyrene	252	9.998	10.004	(0.993)	156728	4.34615	168
99 Indeno(1,2,3-cd)pyrene	276	11.651	11.663	(1.157)	93663	2.17392	84.3
101 Benzo(ghi)perylene	276	12.157	12.163	(1.207)	88555	2.94412	114

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s110421.d
Report Date: 12/05/2009 08:14
Lab. ID: 241540013 SampleType: SAMPLE
Injection Date: 04-DEC-2009 16:33
Operator: nagl Instrument: MSD1.i
Sample Info: |241540013|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	47197	3.62	3.68	80-120	100	(T)
93	351	3.66	3.69	418-478	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	56894	4.25	4.13	80-120	100	(T)
42	36039	4.25	4.13	44-104	63	(T)
30 Naphthalene			CAS#: 91-20-3			
128	33110	4.77	4.77	80-120	100	( )
129	3619	4.77	4.77	0- 41	11	( )
127	4082	4.77	4.77	15- 75	12	(Q)
34 2-Methylnaphthalene				CAS#: 91-57-6		
142	9349	5.25	5.25	80-120	100	( )
141	7515	5.25	5.25	55-115	80	( )
43 Dimethylphthalate				CAS#: 131-11-3		
163	194451	6.00	5.77	80-120	100	(T)
164	1090564	6.00	5.77	0- 40	561	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	139110	6.00	5.82	80-120	100	(T)
63	2195	6.00	5.82	45-105	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
45 Acenaphthylene			CAS#: 208-96-8			
152	20922	6.02	5.90	80-120	100	(T)
151	7938	6.02	5.90	0- 50	38	(T)
153	43895	6.02	5.90	0- 43	210	(QT)
47 Acenaphthene			CAS#: 83-32-9			
154	40112	6.02	6.02	80-120	100	( )
153	43944	6.02	6.02	73-133	110	( )
152	20922	6.02	6.02	18- 78	52	( )
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	139110	6.00	6.10	80-120	100	(T)
89	1741	6.00	6.10	32- 92	1	(QT)
63	2195	6.00	6.10	15- 75	2	(QT)
53 Fluorene			CAS#: 86-73-7			
166	42812	6.37	6.37	80-120	100	( )
165	38295	6.37	6.37	64-124	89	( )
167	6359	6.37	6.37	0- 43	15	( )
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	17059	6.53	6.67	80-120	100	(T)
141	114645	6.53	6.67	50-110	672	(QT)
250	34626	6.53	6.67	68-128	203	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	456387	6.99	6.99	80-120	100	( )
179	75492	6.99	6.99	0- 45	17	( )
176	82021	6.99	6.99	0- 48	18	( )
69 Anthracene			CAS#: 120-12-7			
178	122174	7.03	7.03	80-120	100	( )
179	28175	7.03	7.03	0- 46	23	( )
176	20801	7.03	7.03	0- 48	17	( )
76 Fluoranthene			CAS#: 206-44-0			
202	549897	7.70	7.70	80-120	100	( )
203	96846	7.70	7.70	0- 47	18	( )
101	76318	7.70	7.70	0- 43	14	( )
79 Pyrene			CAS#: 129-00-0			
202	499586	7.85	7.85	80-120	100	( )
200	104115	7.85	7.85	0- 51	21	( )
101	85171	7.84	7.85	0- 46	17	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	209676	8.62	8.63	80-120	100	( )
226	53706	8.62	8.63	0- 55	26	( )
229	60901	8.62	8.63	0- 49	29	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
92 Chrysene			CAS#: 218-01-9			
228	211184	8.65	8.66	80-120	100	( )
229	53221	8.65	8.66	0- 49	25	( )
226	58262	8.65	8.66	0- 58	28	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	278650	9.60	9.61	80-120	100	( )
253	60611	9.61	9.61	0- 51	22	( )
125	42702	9.61	9.61	0- 44	15	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	278650	9.60	9.64	80-120	100	( )
253	60611	9.61	9.64	0- 52	22	( )
125	42702	9.61	9.64	0- 44	15	( )
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	156728	10.00	10.00	80-120	100	( )
253	38074	10.00	10.00	0- 51	24	( )
125	25206	9.99	10.00	0- 48	16	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	93663	11.65	11.66	80-120	100	( )
138	28238	11.65	11.66	7- 67	30	( )
100 Dibenzo(a,h)anthracene			CAS#: 53-70-3			
278	23043	11.65	11.66	80-120	100	( )
139	3489	11.63	11.66	0- 58	15	( )
101 Benzo(ghi)perylene			CAS#: 191-24-2			
276	88555	12.16	12.16	80-120	100	( )
138	28172	12.15	12.16	7- 67	32	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110421.d
Lab Smp Id: 241540013 Client Smp ID: RE03-09-13866
Inj Date : 04-DEC-2009 16:33
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540013|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	14.02330	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2884292	40.000
* 91 Chrysene-d12	8.634	5922502	40.000
* 98 Perylene-d12	10.069	4343421	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.752	399823	5.54483237	215	0		0	10
Unknown Aldol Condensate				CAS #:			
2.916	1174834	16.2928576	632	0		0	10
Friedelan-3-one				CAS #: 559-74-0			
8.445	684032	4.61988659	179	84	NIST05.L	176566	91
Eicosane				CAS #: 112-95-8			
10.322	559924	5.15652447	200	98	NIST05.L	113492	98
Unknown				CAS #:			
10.833	648993	5.97679450	232	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110421.d
Date : 04-DEC-2009 16:33
Client ID: RE03-09-13666
Sample Info: 1241540013192661011ISVHF11ILANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: nagl
Column diameter: 0.20

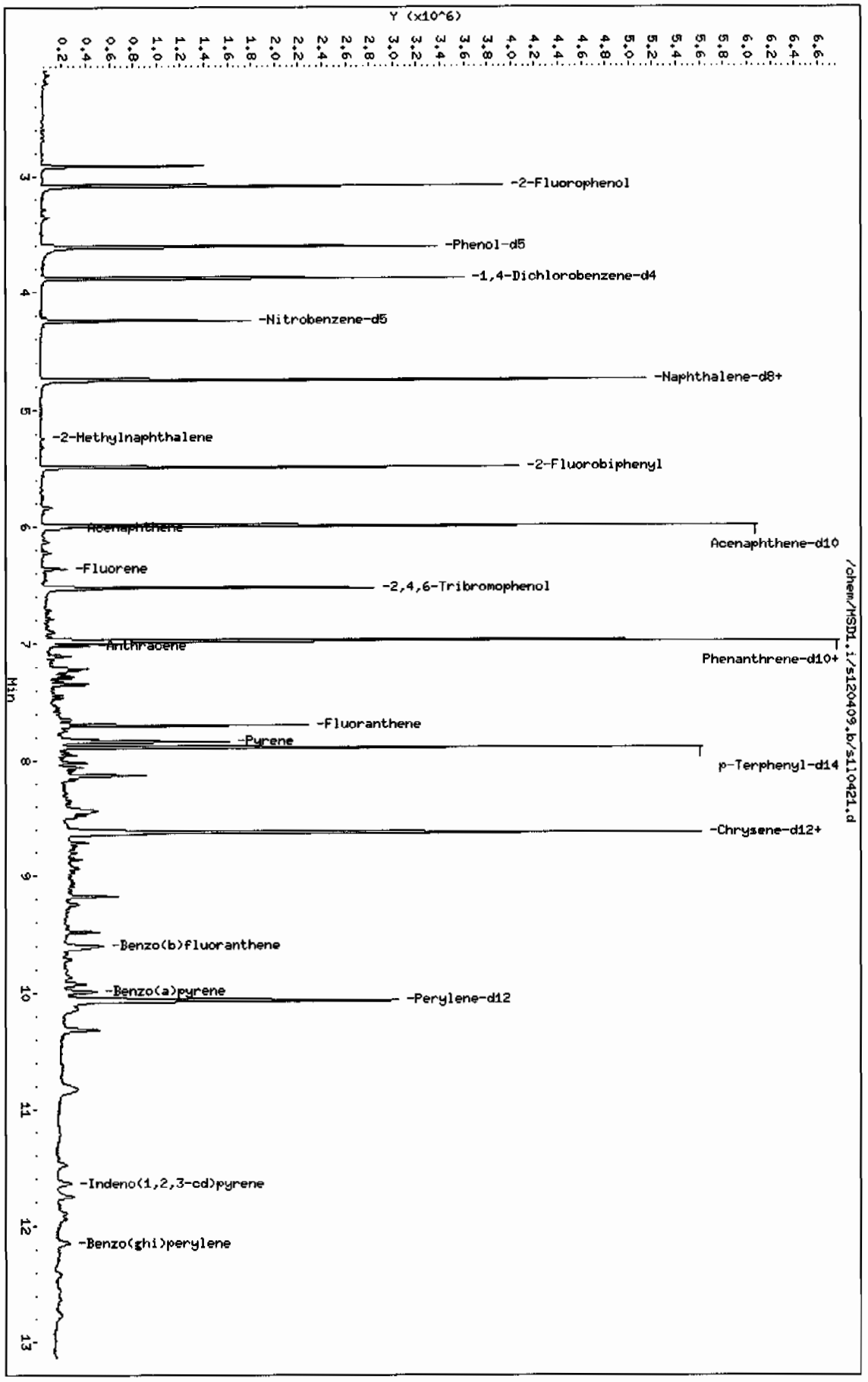

Page 1

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 61.8 ug/Kg

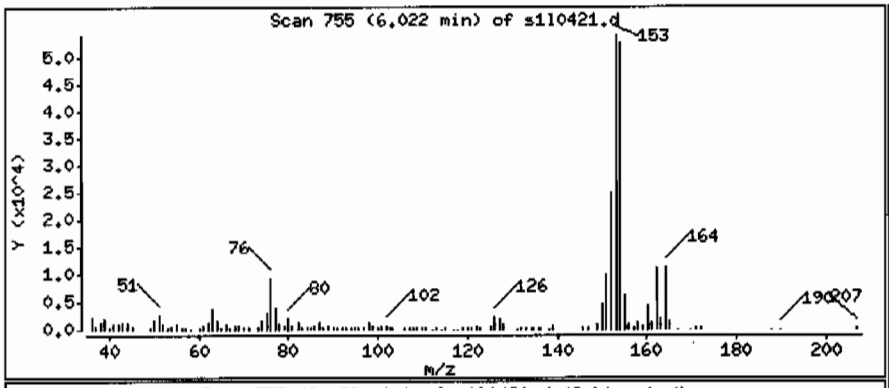

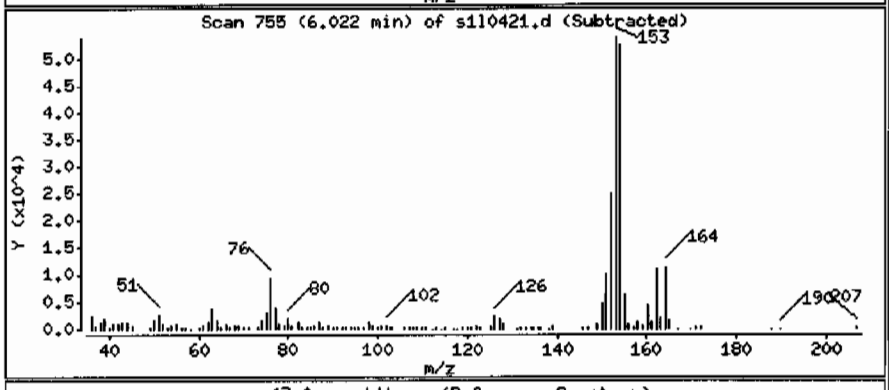

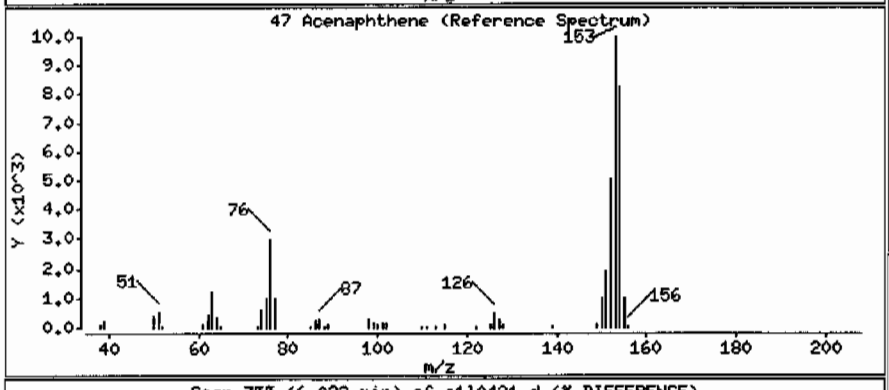

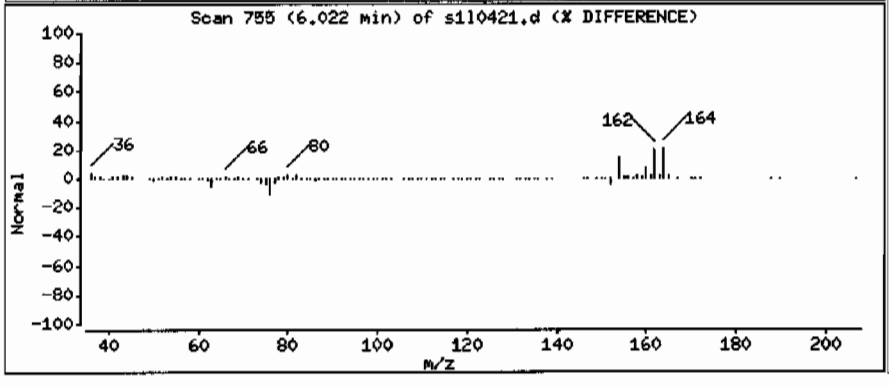

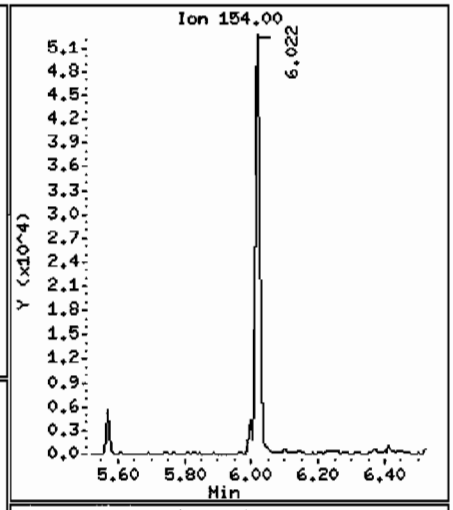

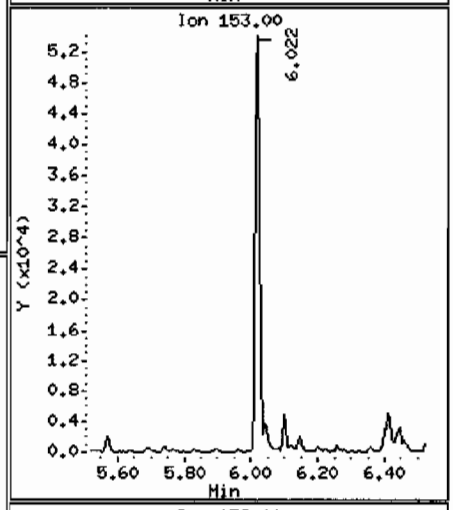

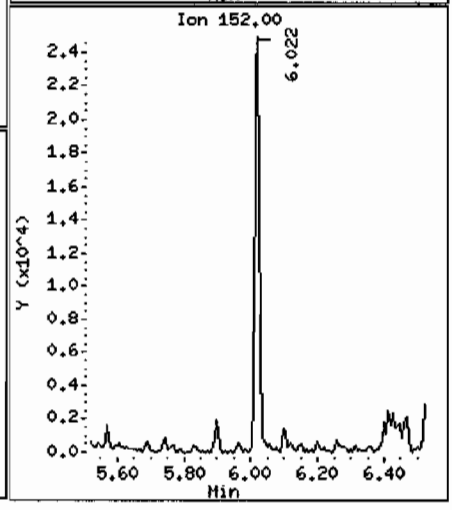

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: 1241540013192661011SVMF11LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 414 ug/Kg

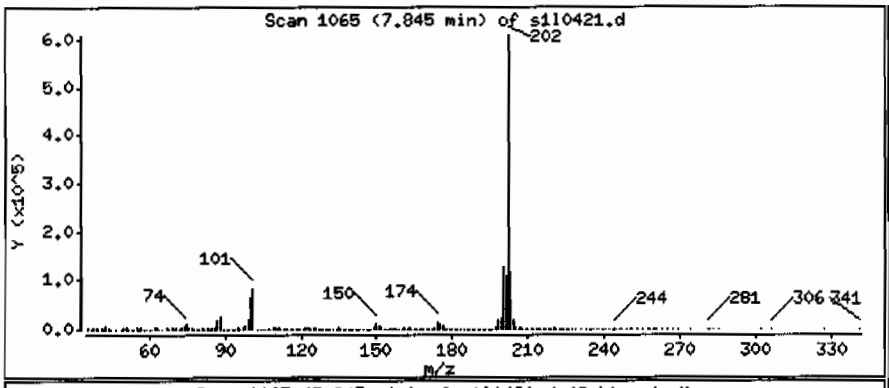

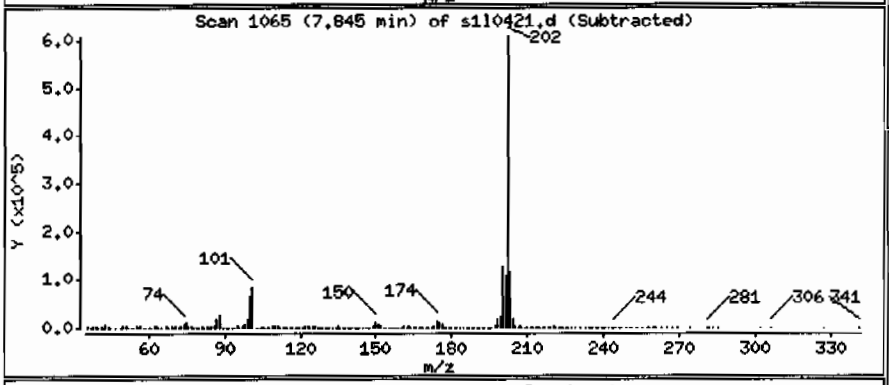

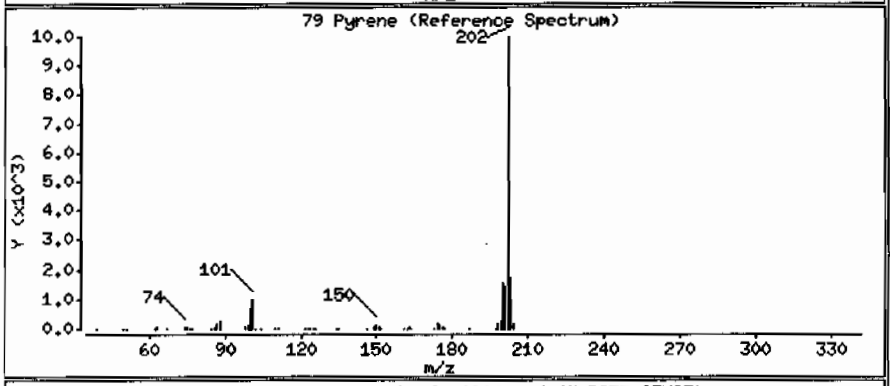

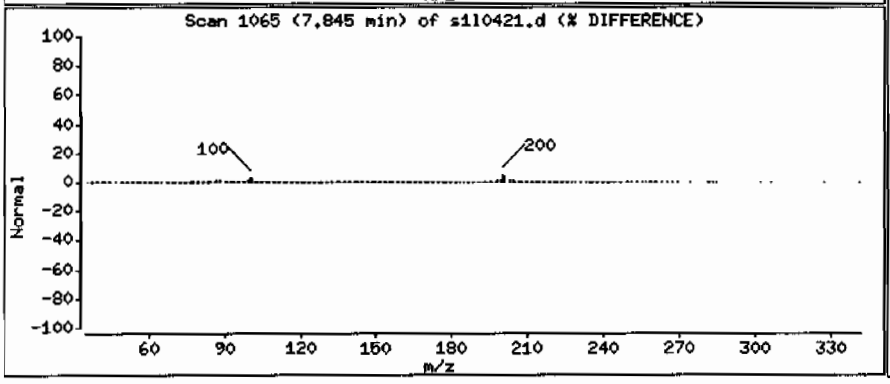

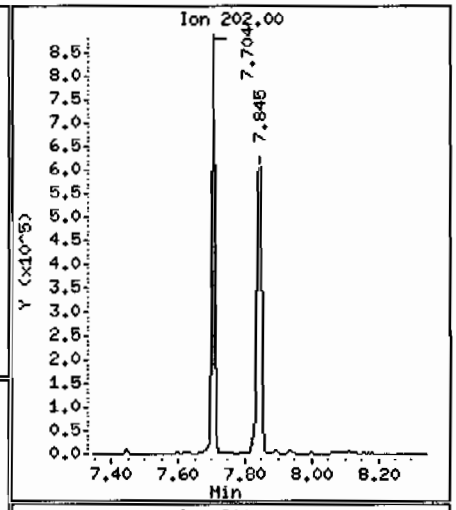

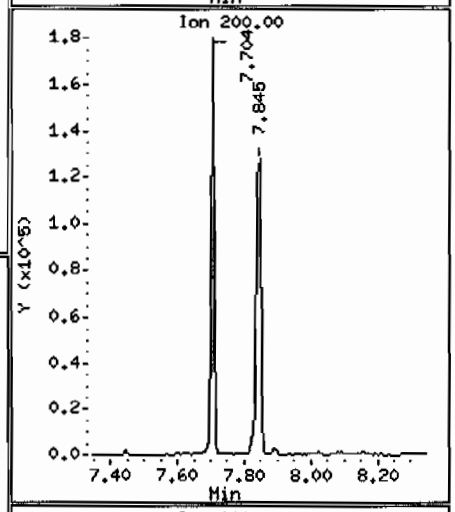

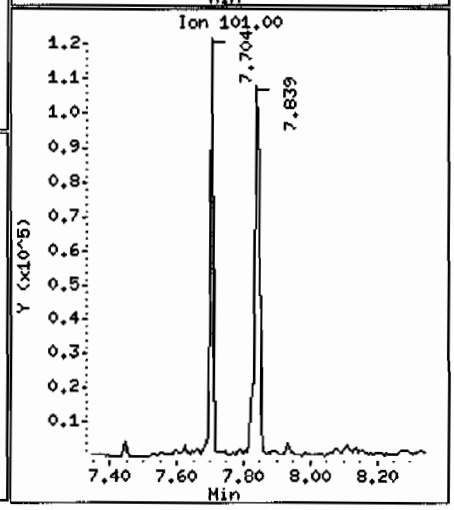

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866 Instrument: MSD1.i

Sample Info: 1241540013|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

30 Naphthalene Concentration: 30.8 ug/Kg

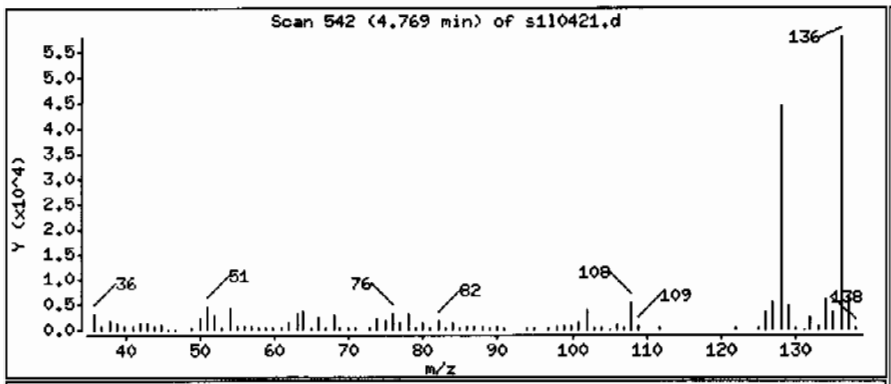

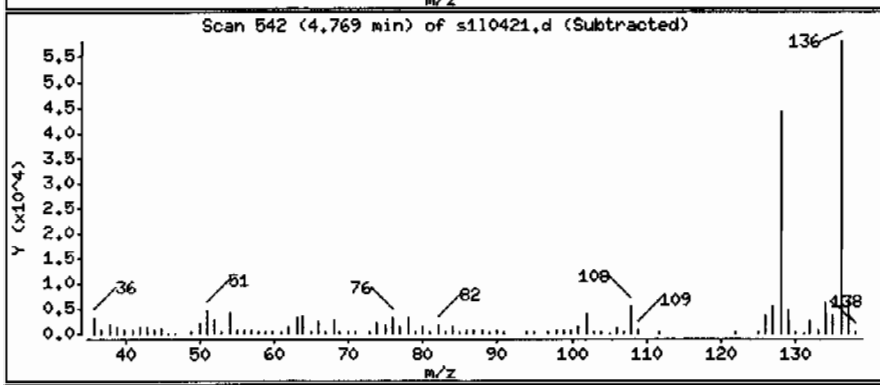

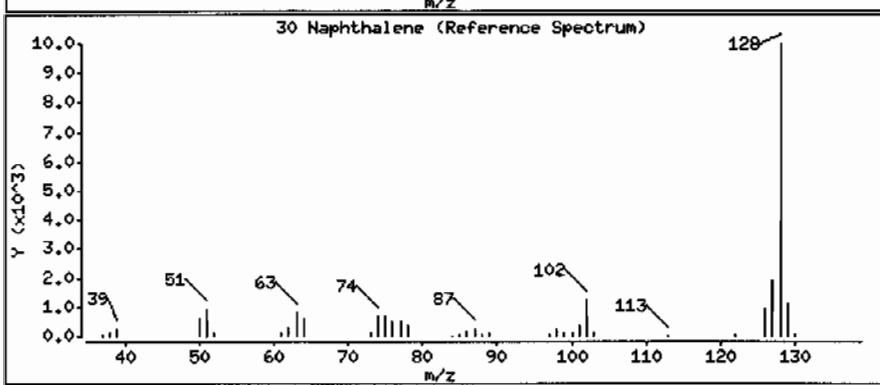

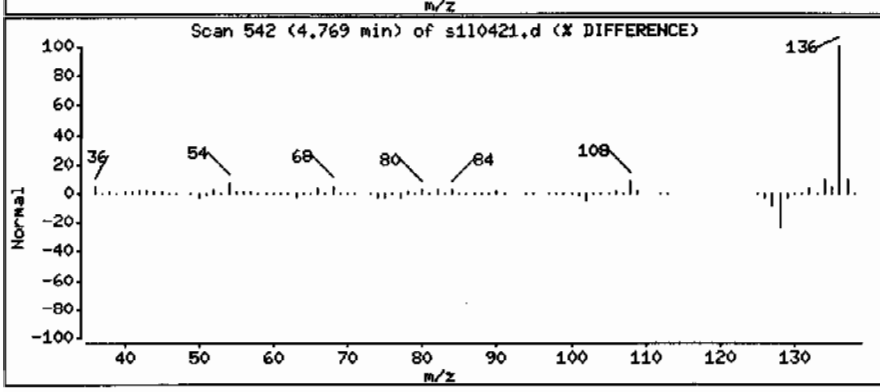

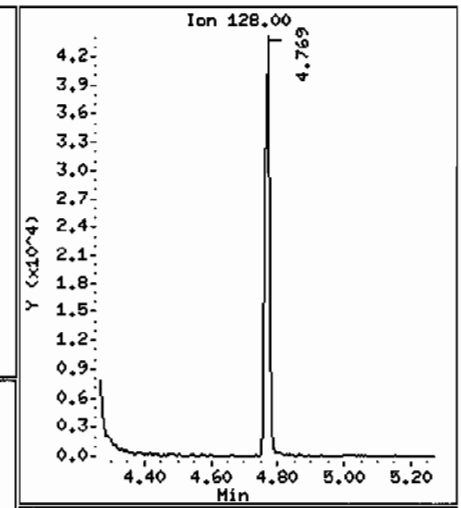

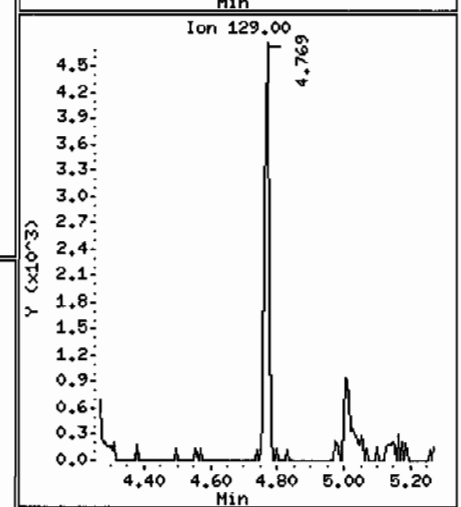

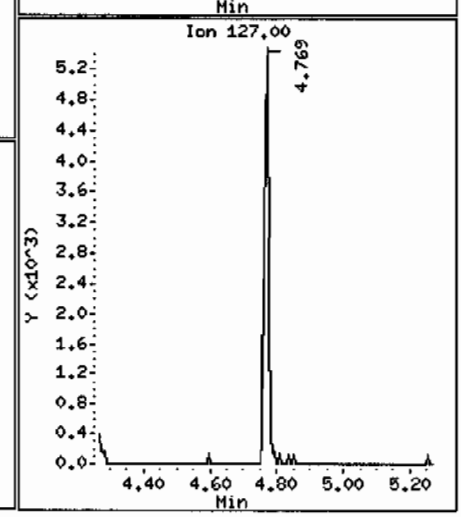

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: 1241540013192661011SVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

34 2-Methylnaphthalene

Concentration: 13.2 ug/Kg

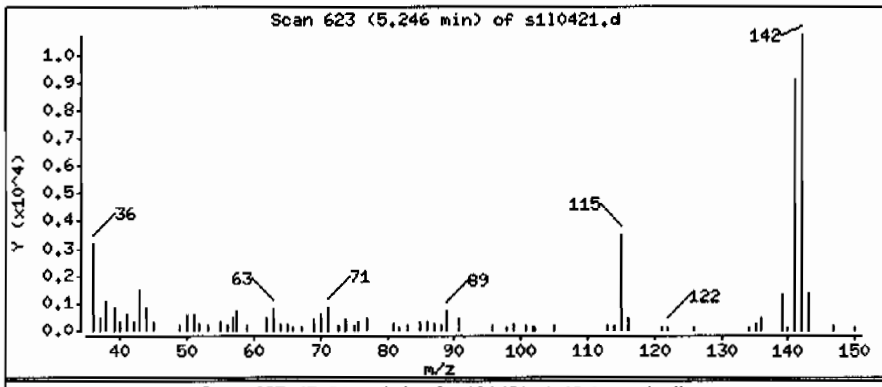

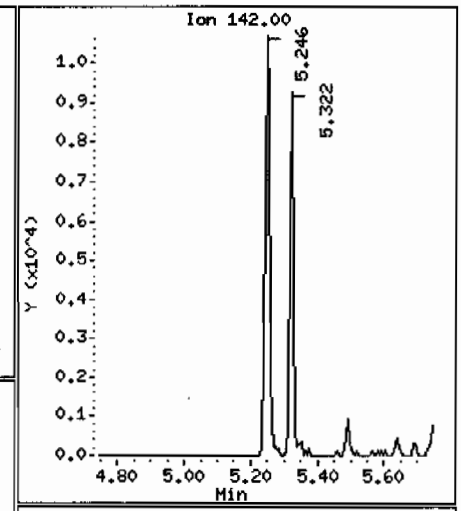

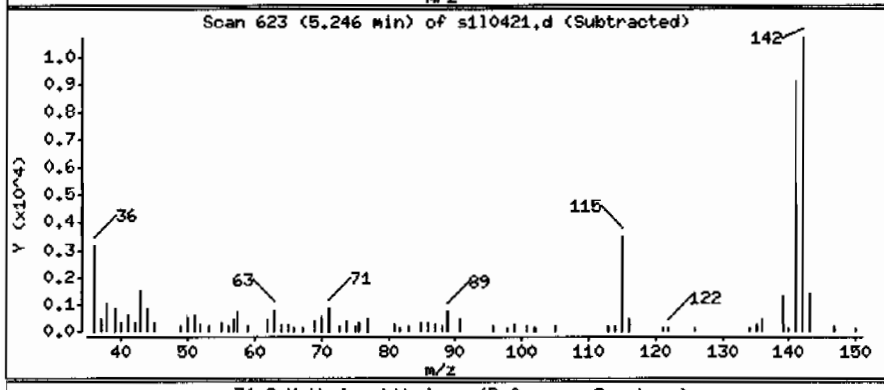

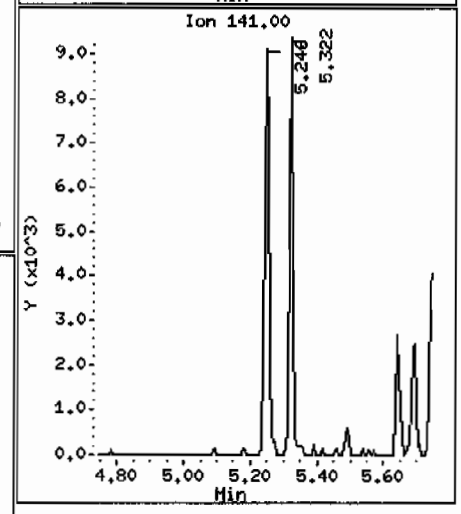

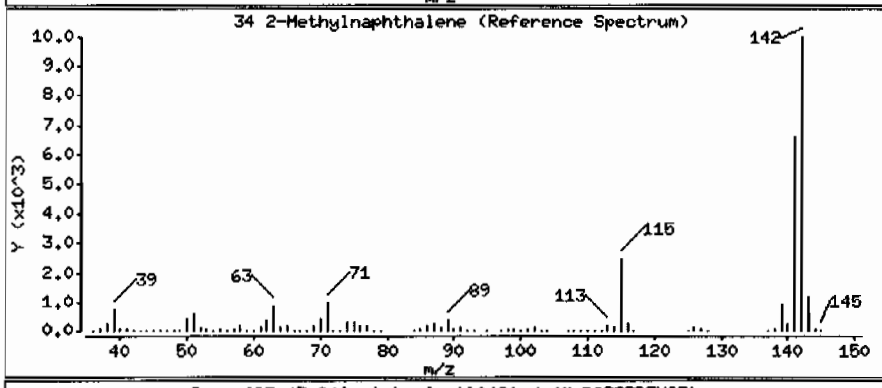

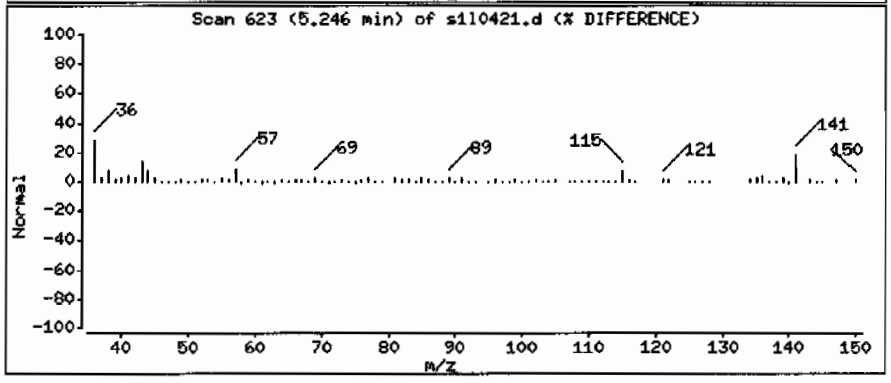

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

53 Fluorene

Concentration: 56.6 ug/Kg

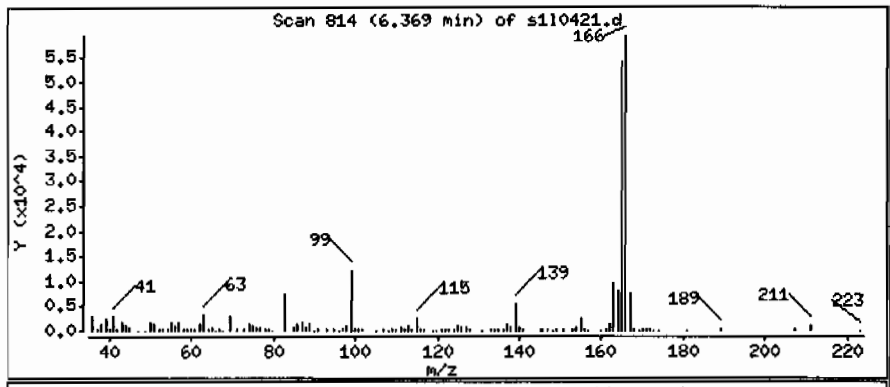

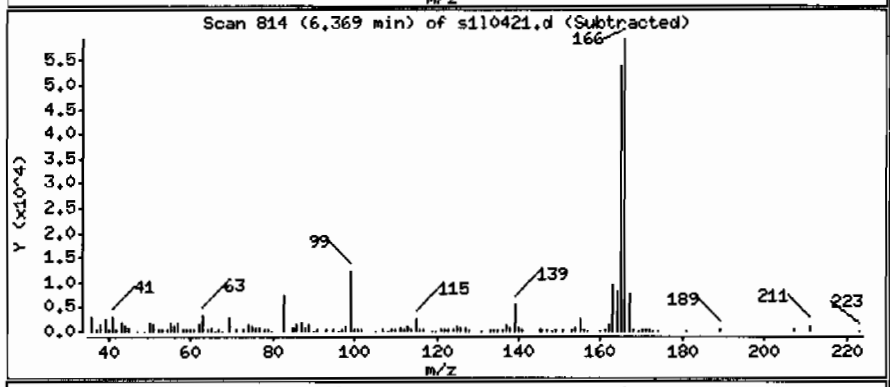

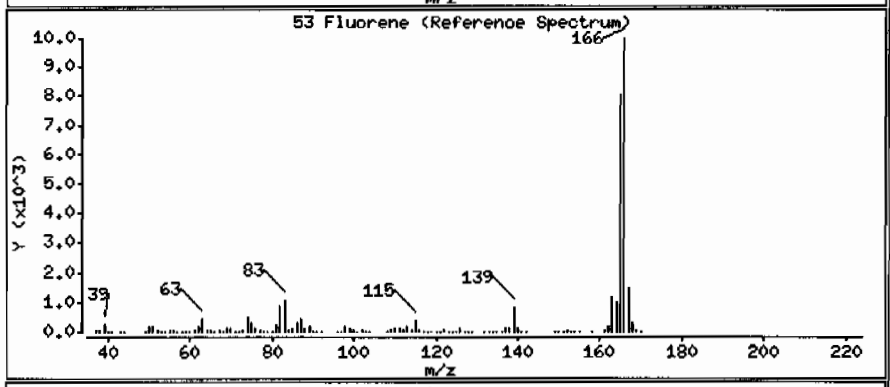

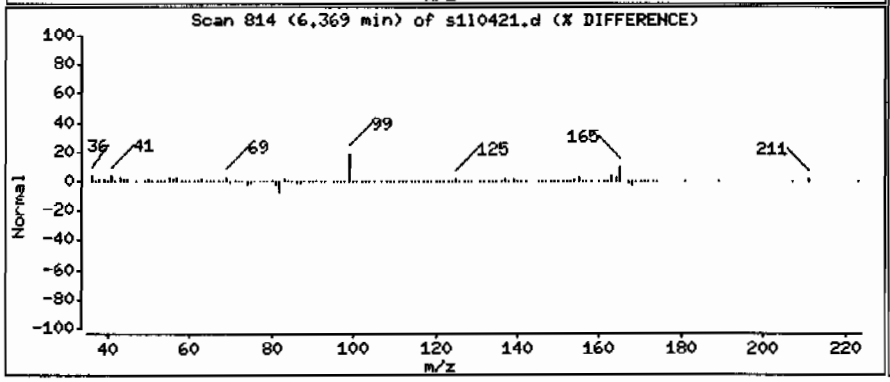

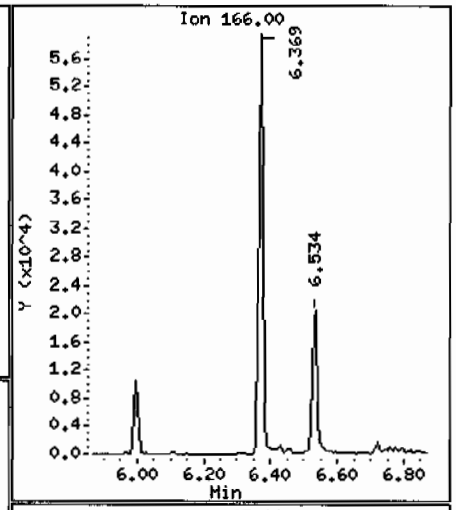

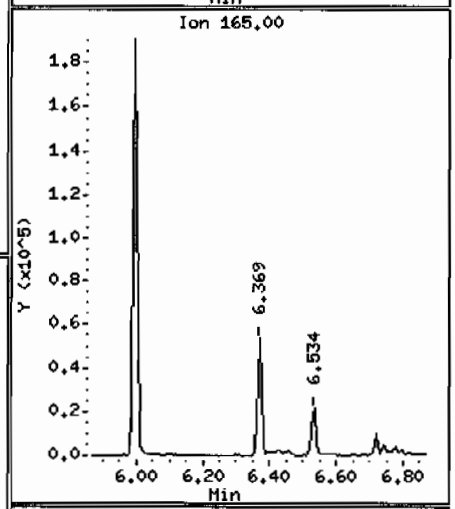

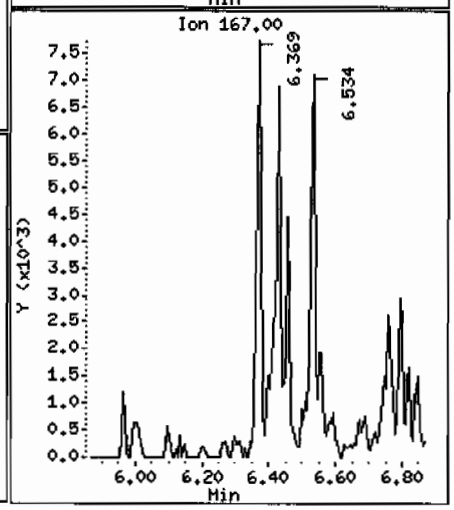

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866 Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

68 Phenanthrene Concentration: 411 ug/Kg

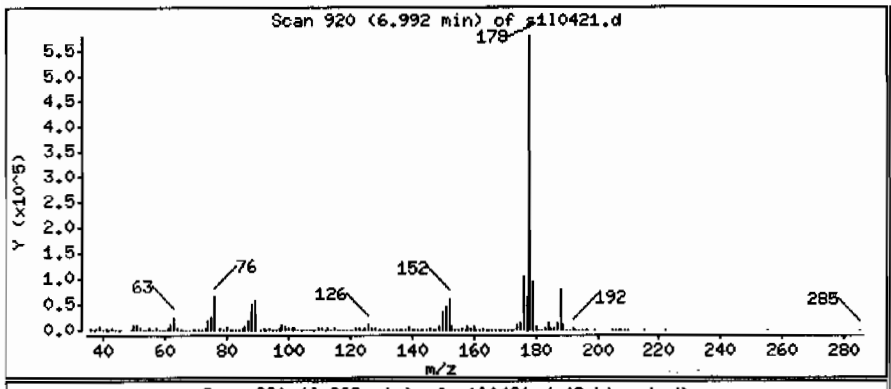

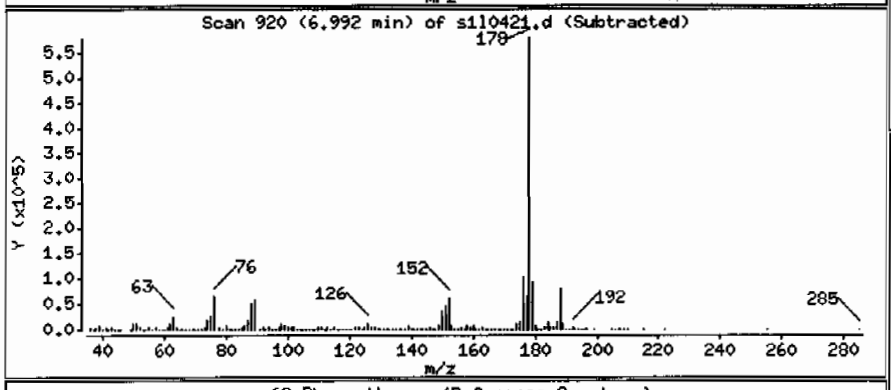

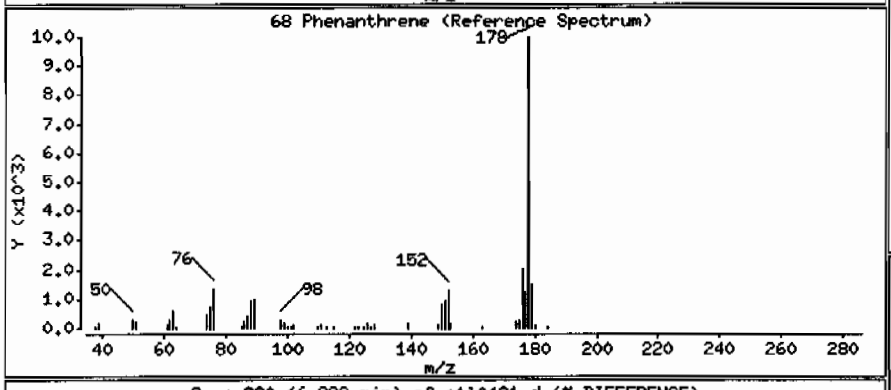

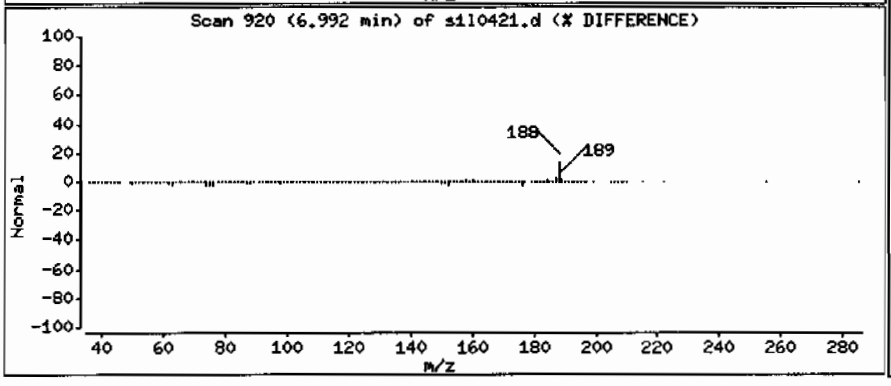

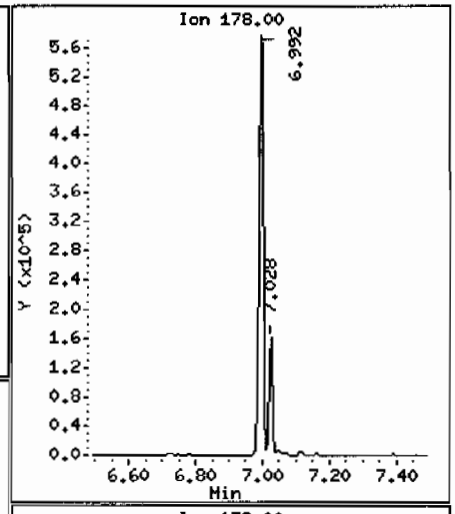

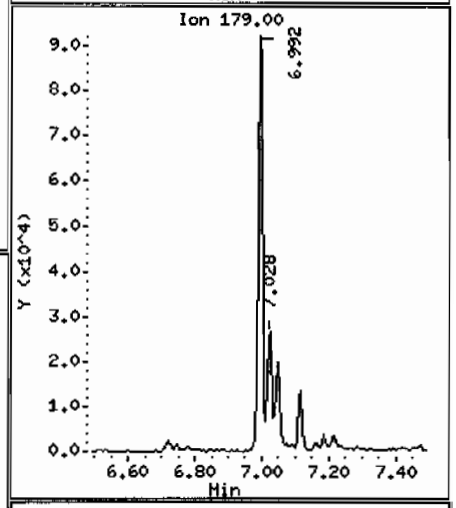

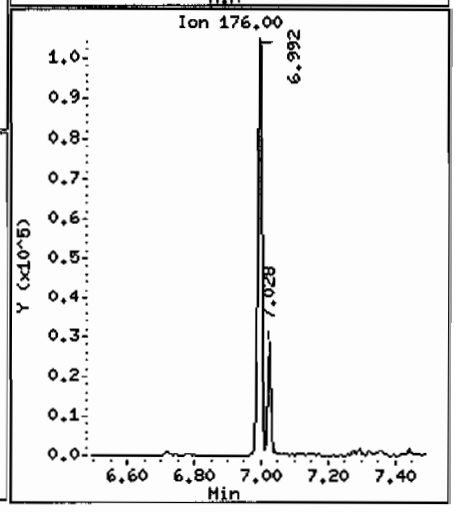

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: 1241540013|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 108 ug/Kg

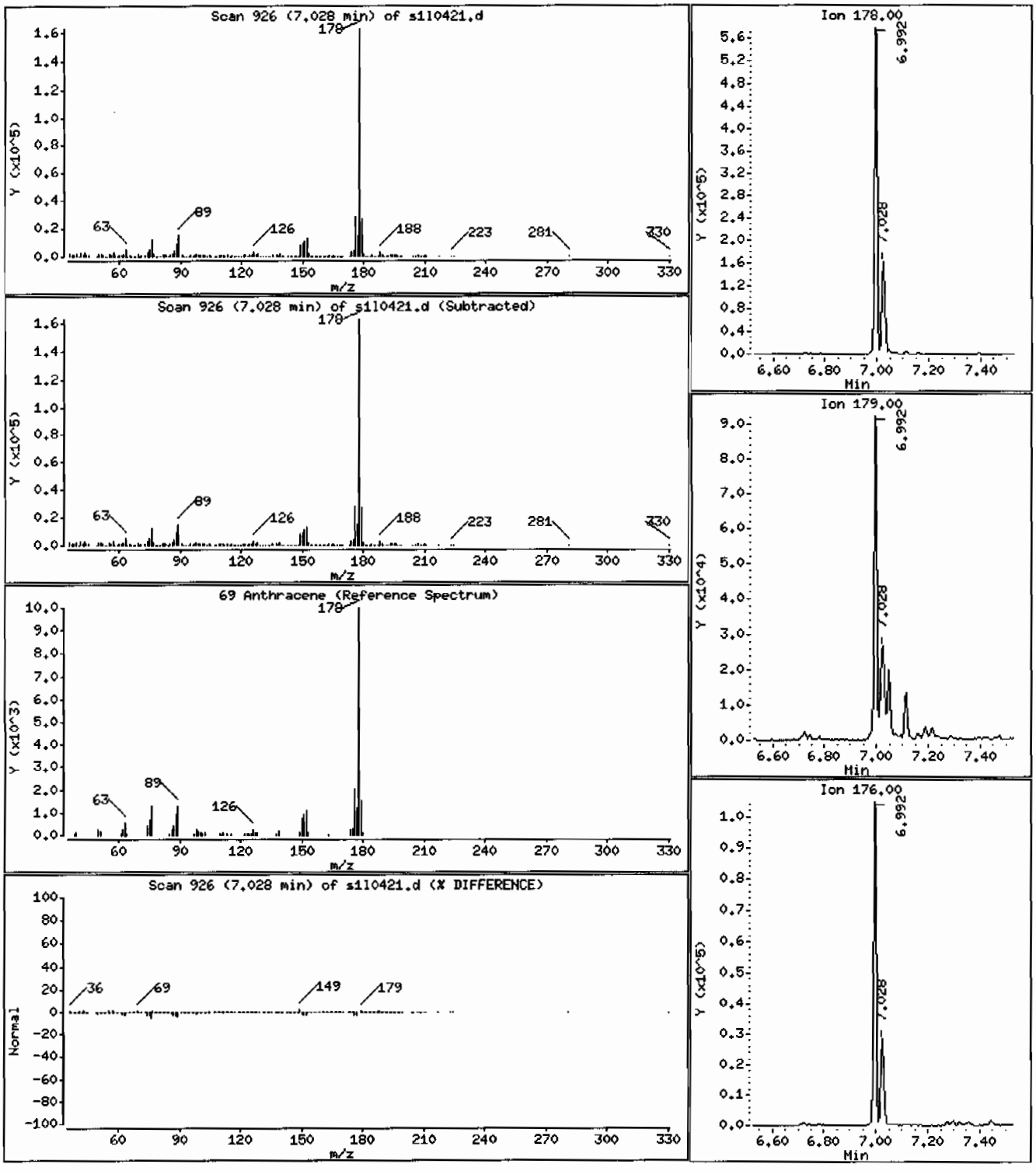

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 513 ug/Kg

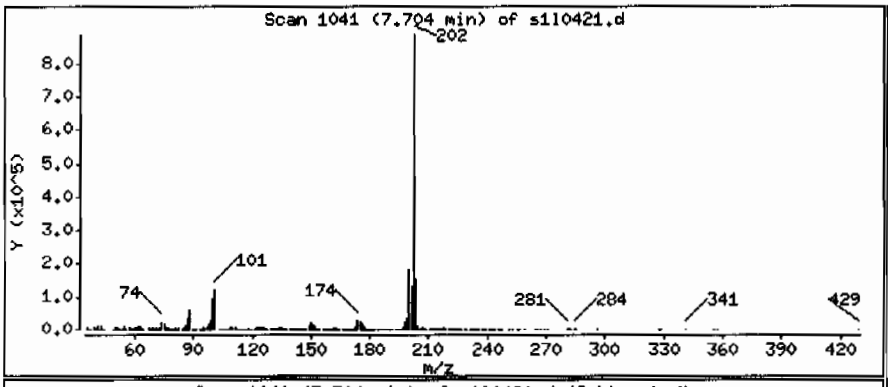

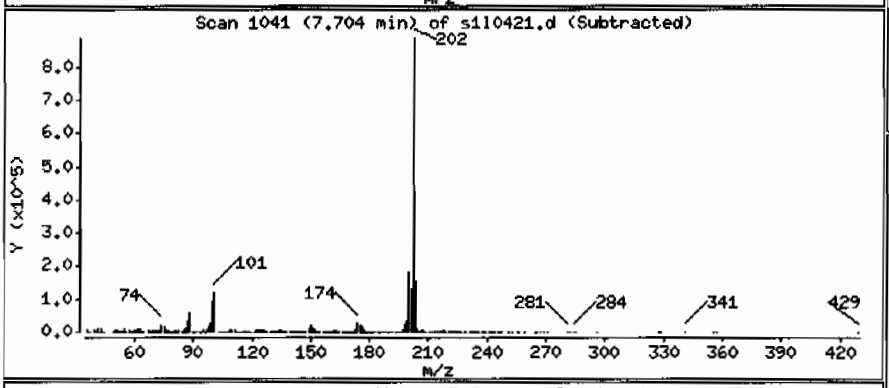

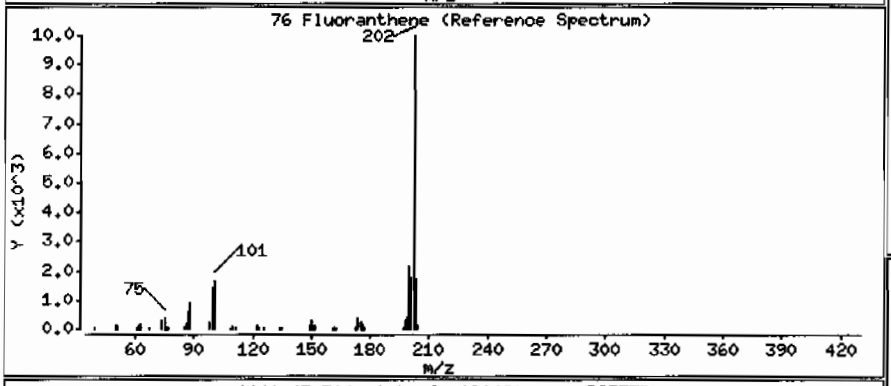

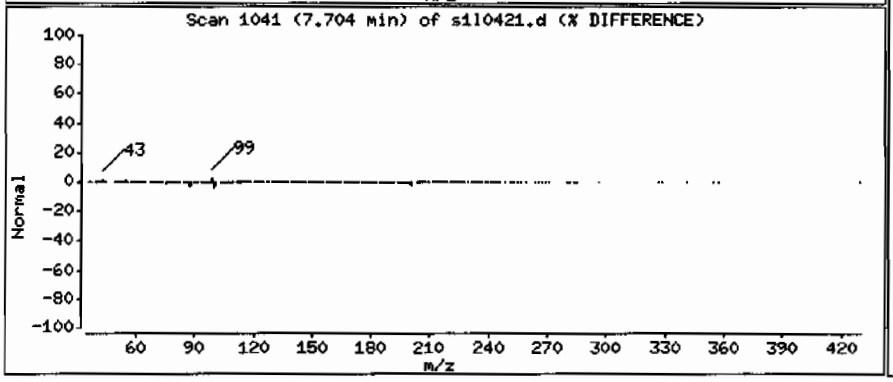

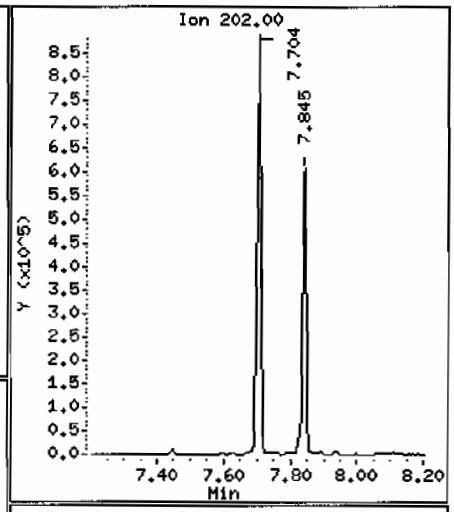

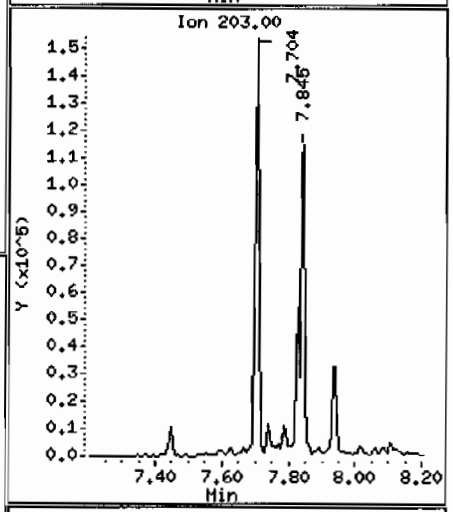

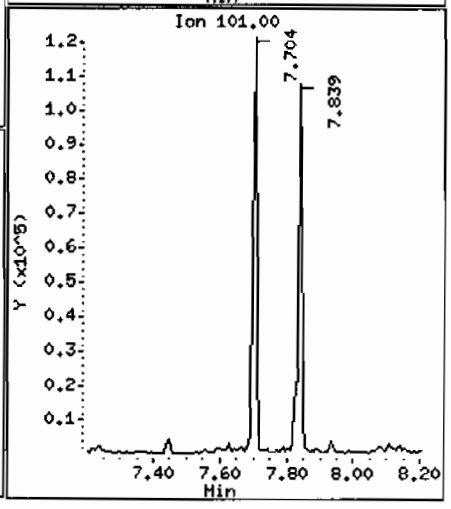

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866 | Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 | Operator: nagl

Column phase: J&W DB-5MS | Column diameter: 0.20

89 Benzo(a)anthracene | Concentration: 193 ug/Kg

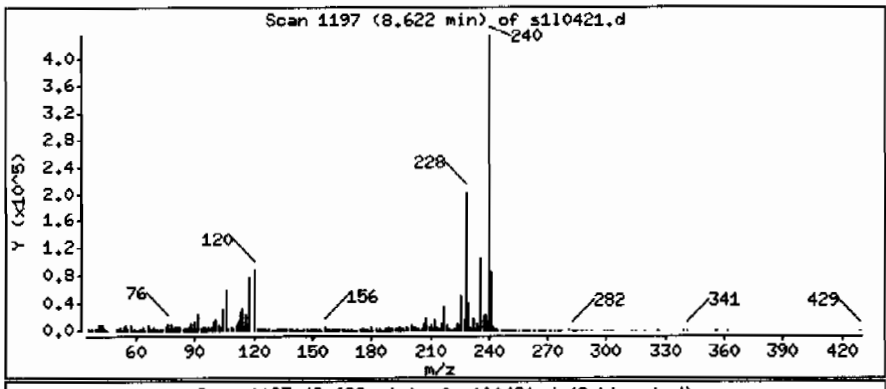

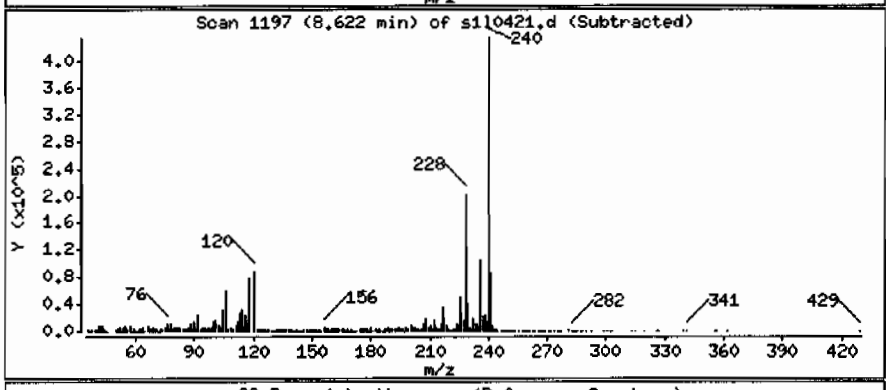

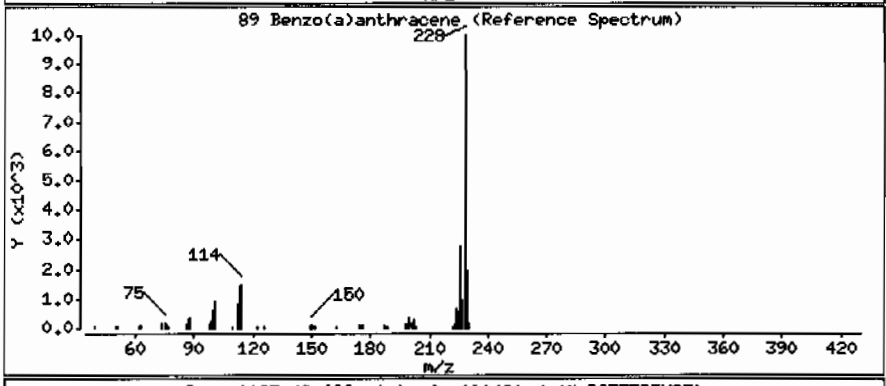

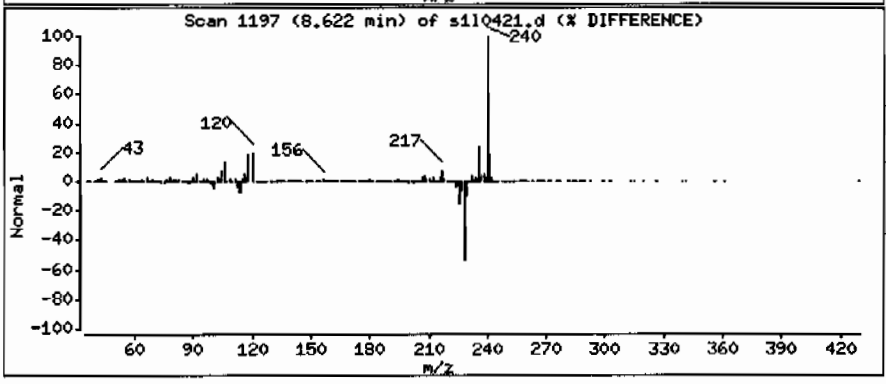

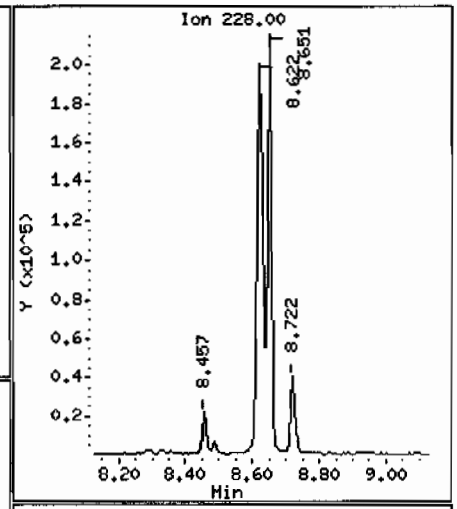

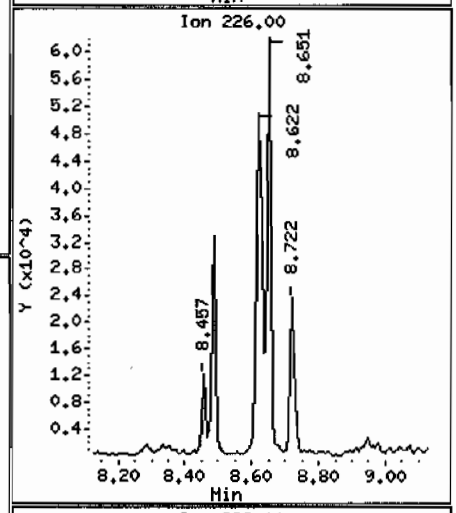

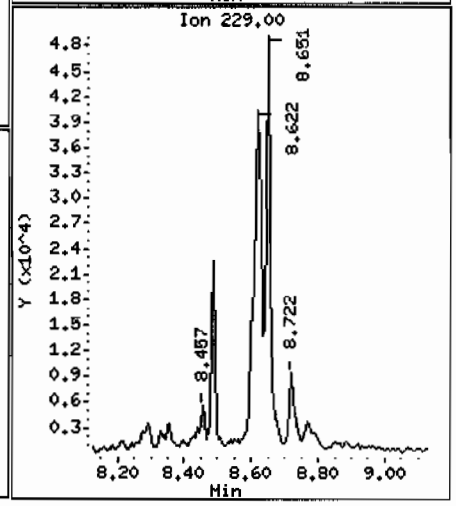

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866 Instrument: MSD1.i

Sample Info: |241540013|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

92 Chrysene Concentration: 208 ug/Kg

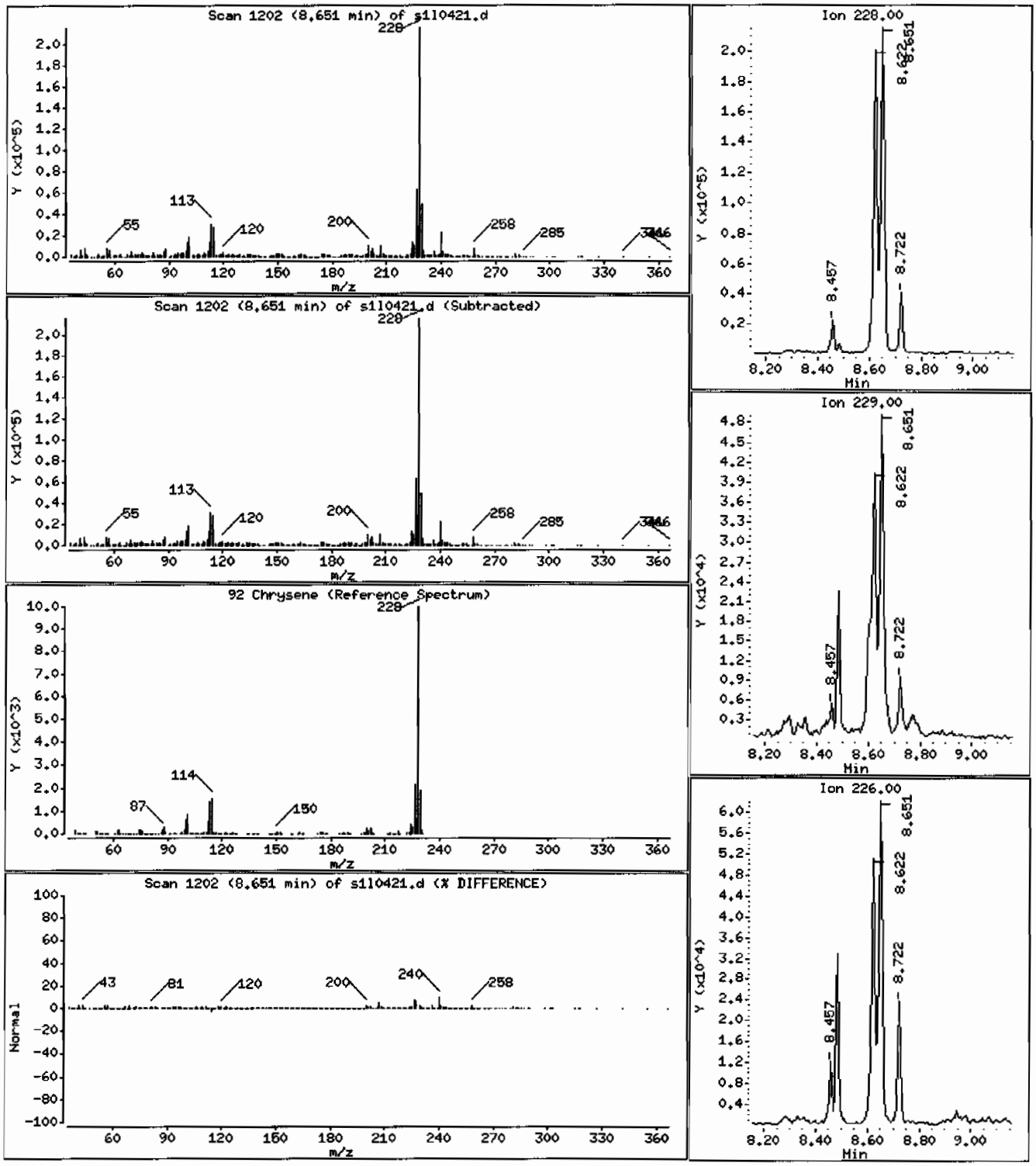

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 352 ug/Kg

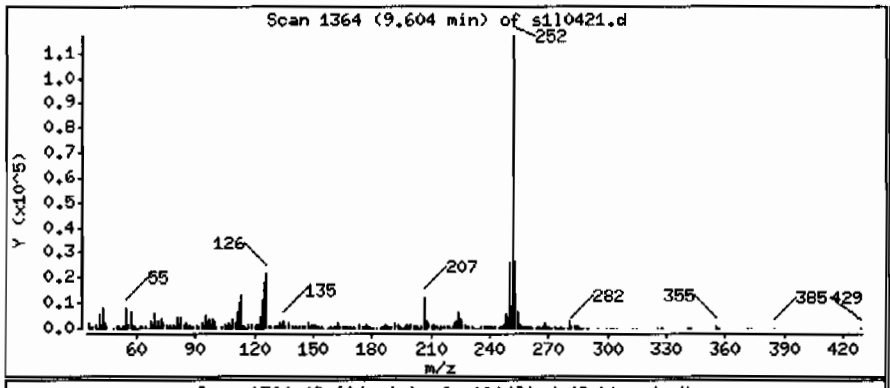

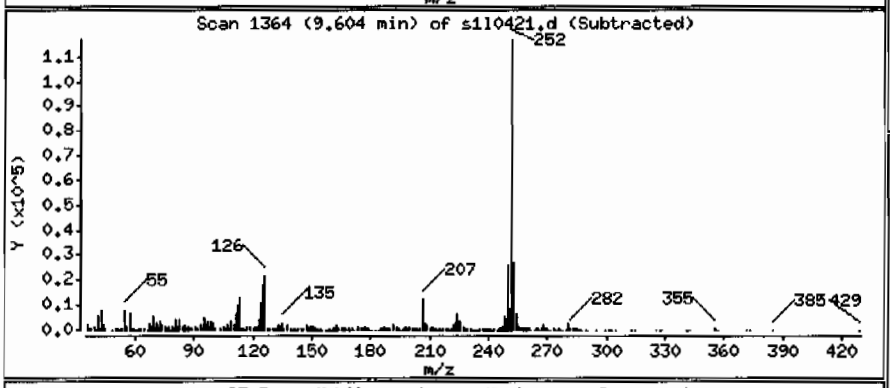

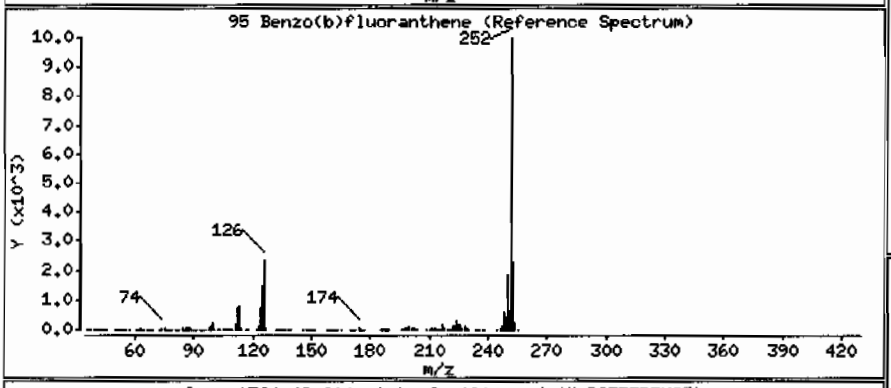

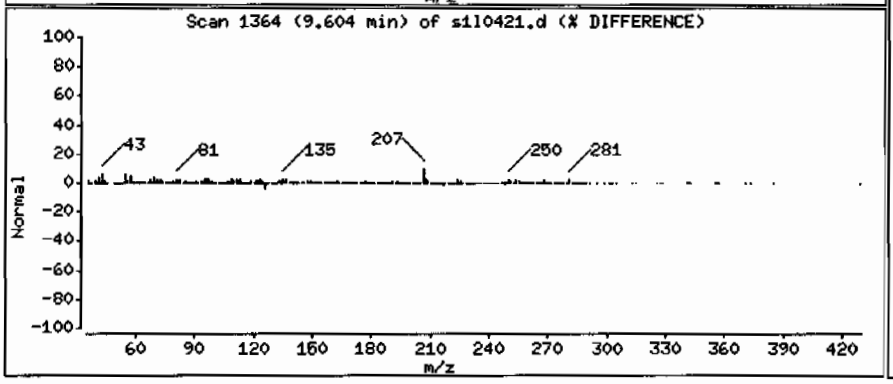

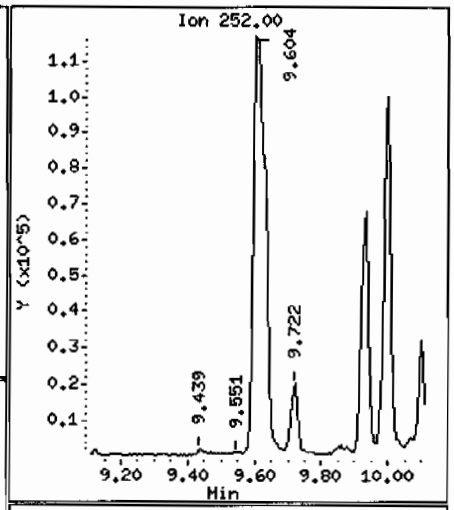

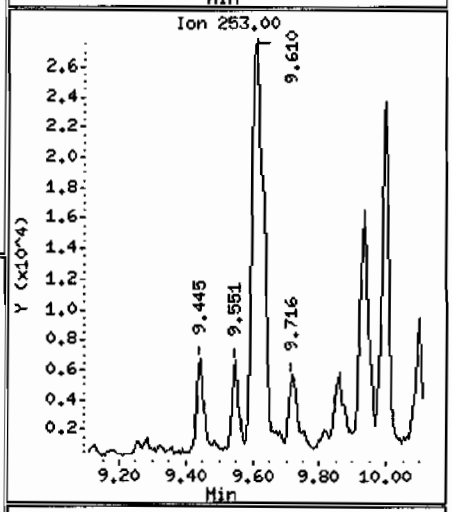

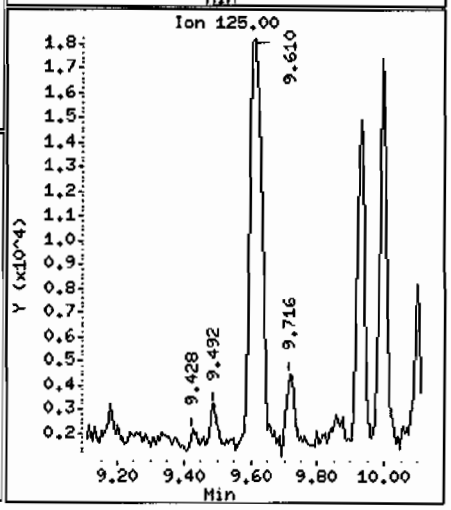

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |24154001319266101|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 168 ug/Kg

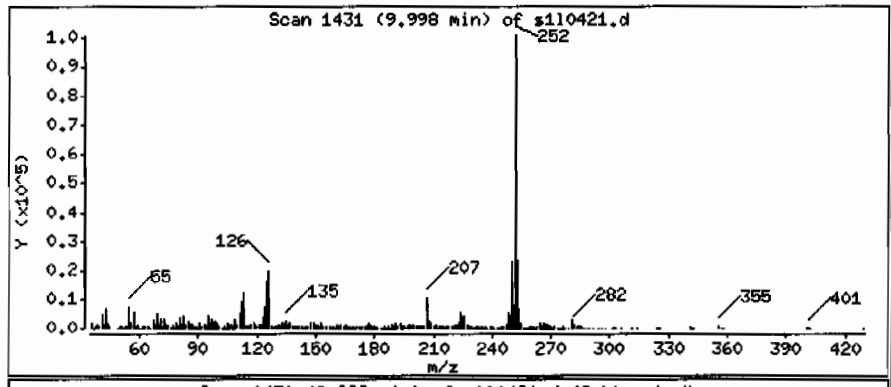

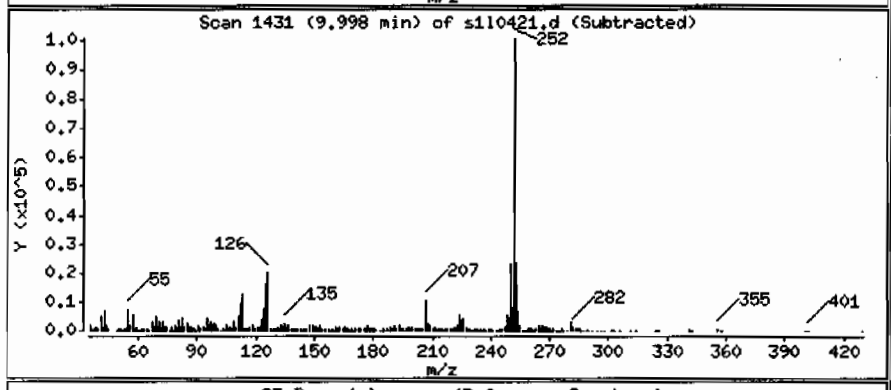

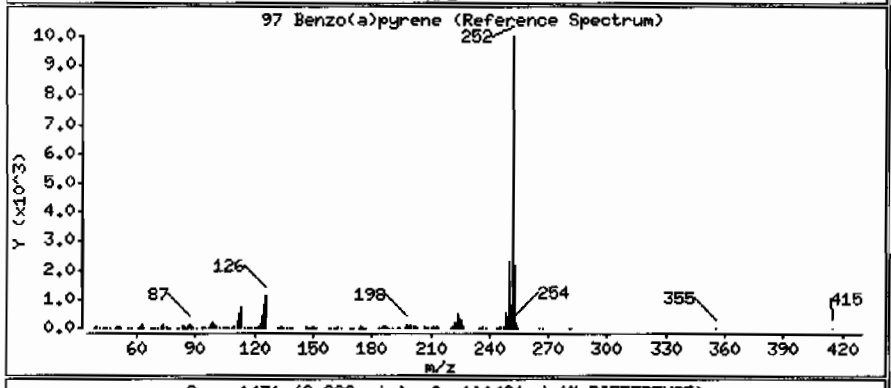

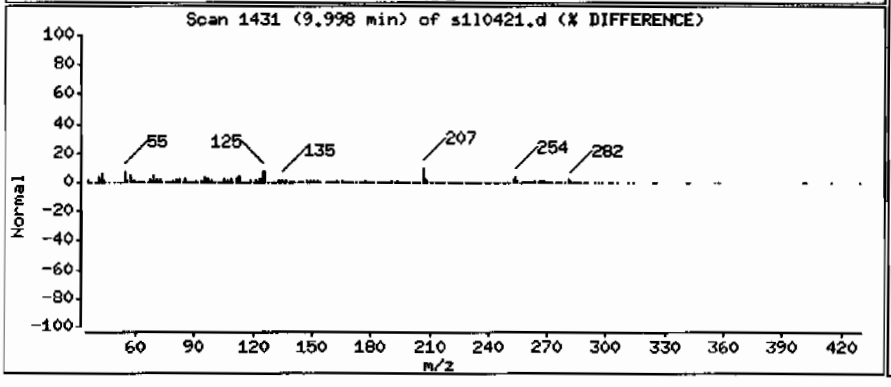

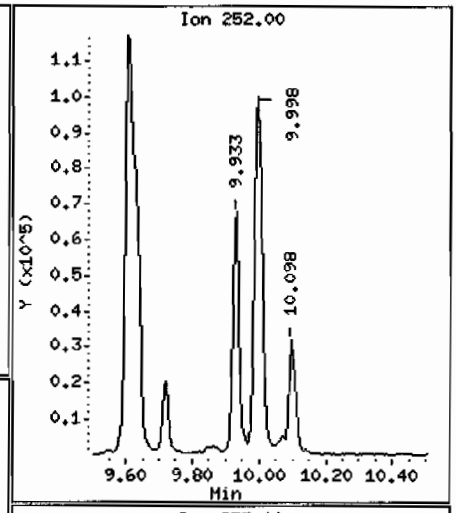

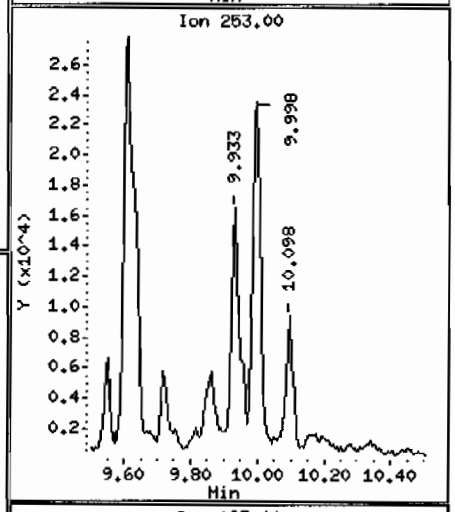

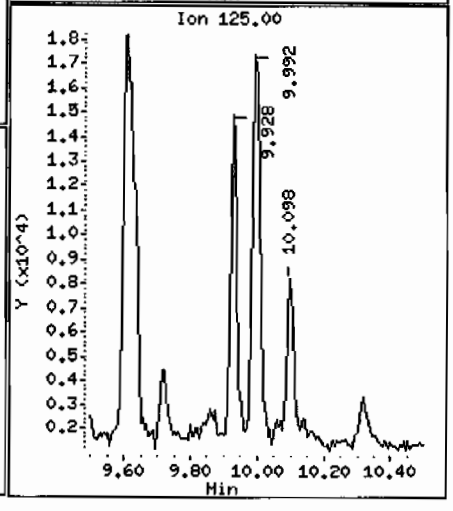

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 84.3 ug/Kg

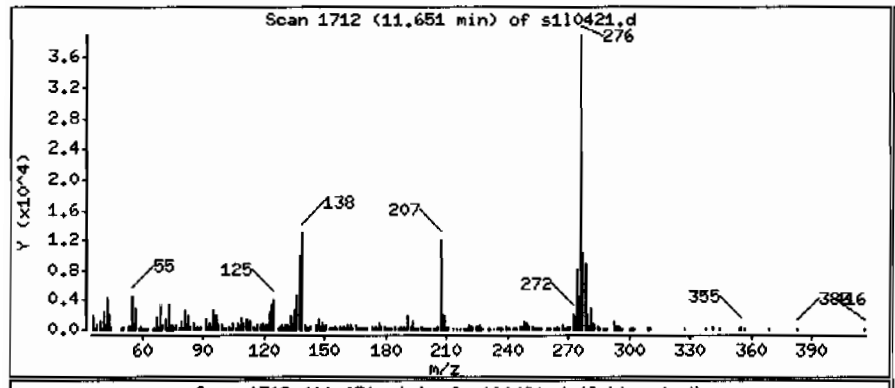

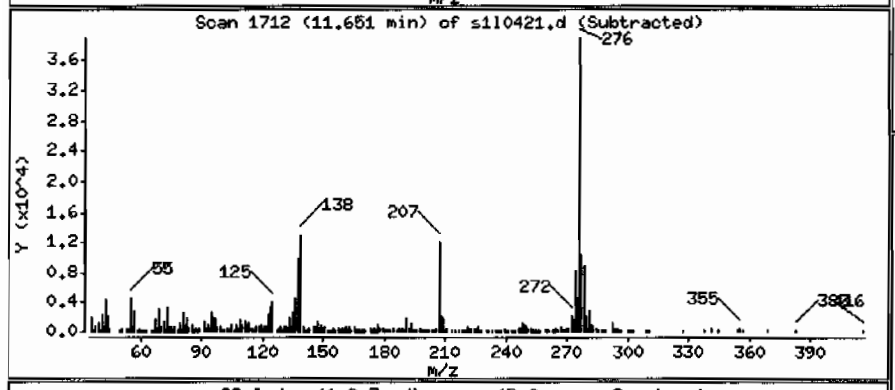

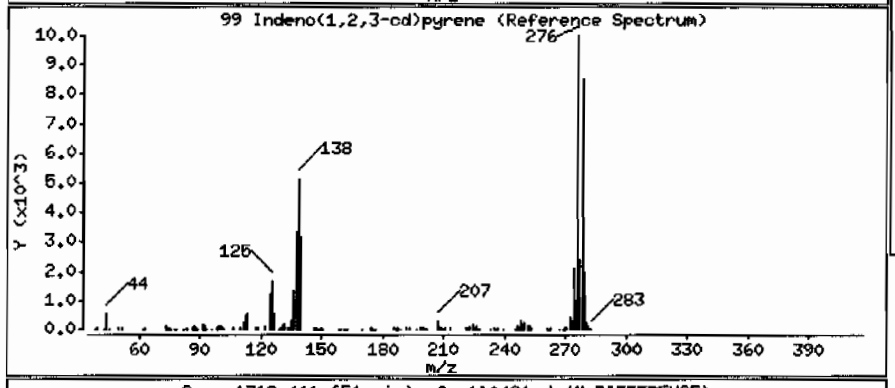

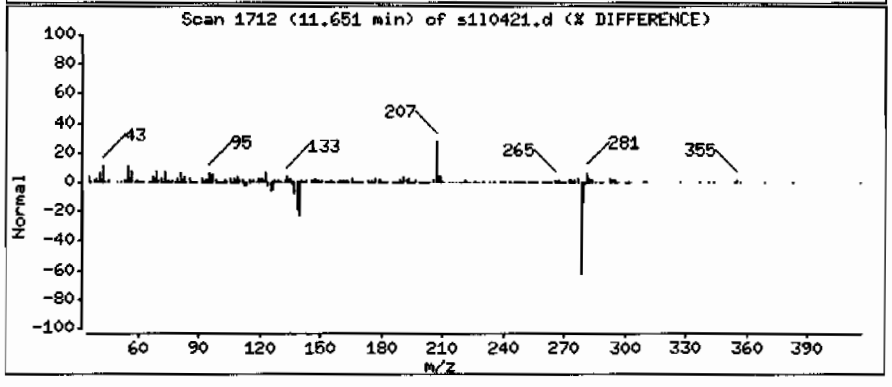

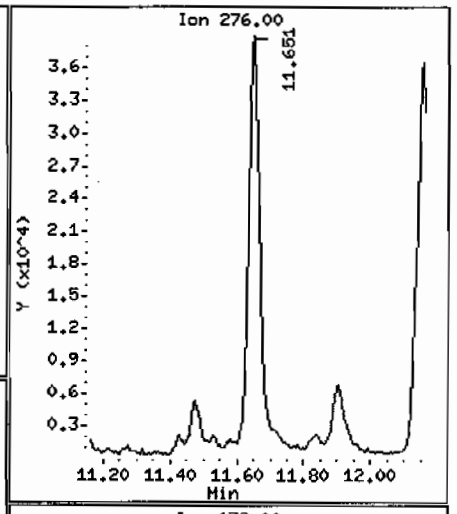

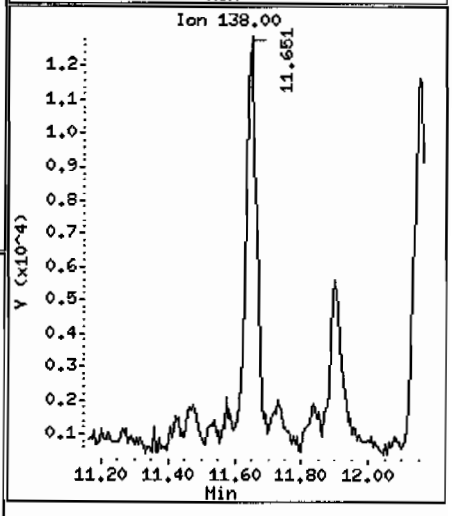

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866 Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

101 Benzo(ghi)perylene Concentration: 114 ug/Kg

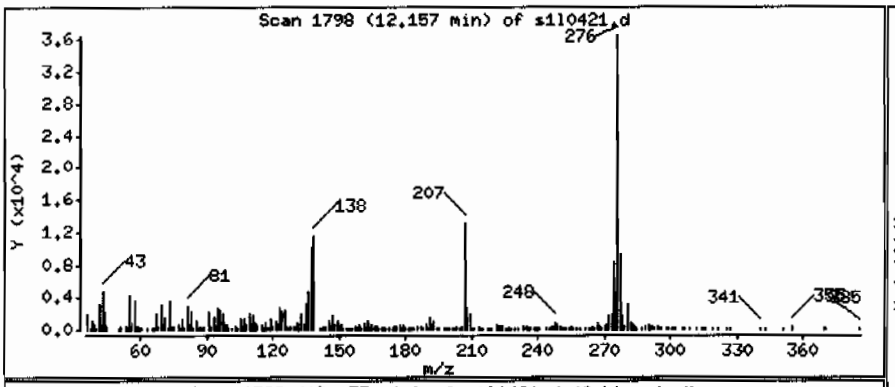

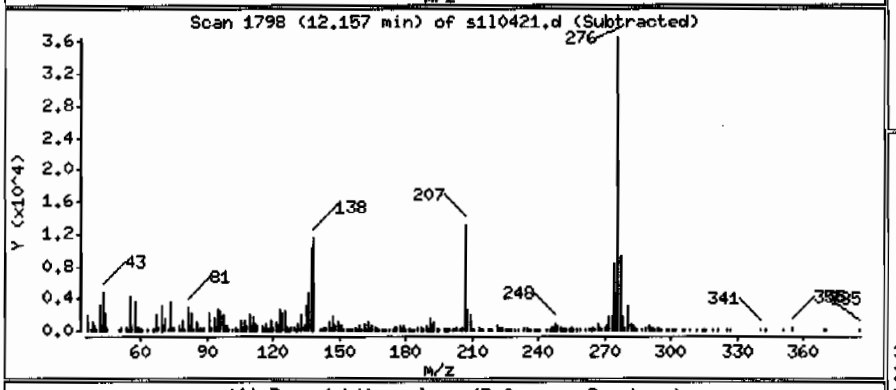

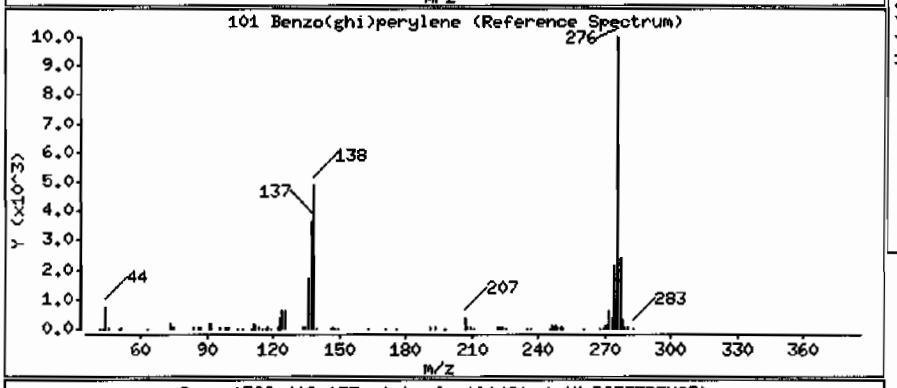

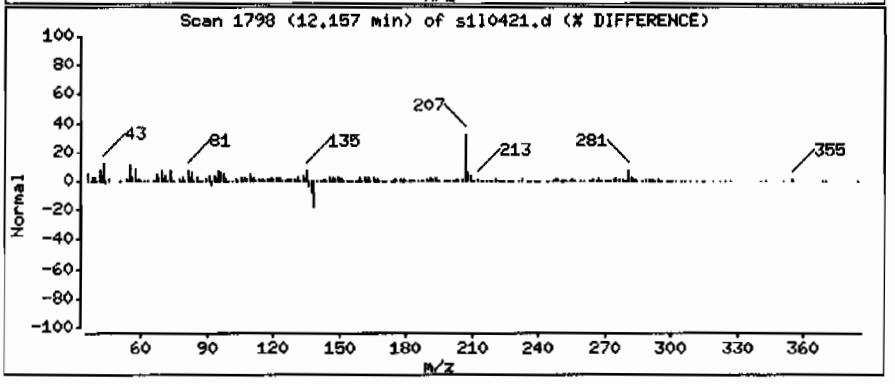

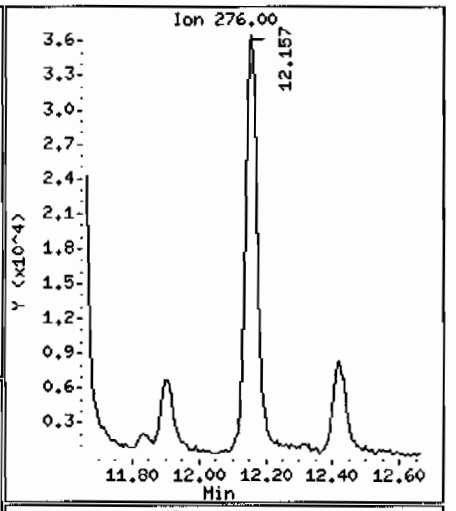

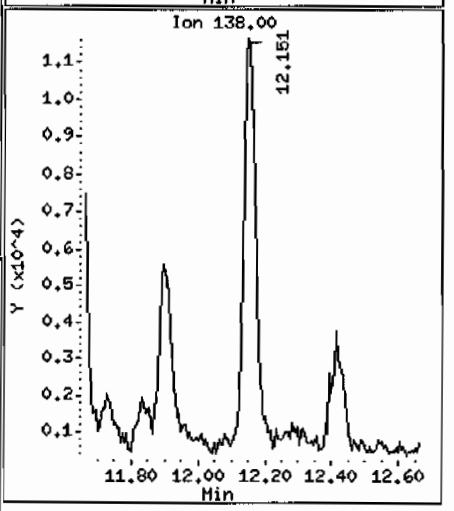

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl Chloride	75-00-3	NIST05.L	342	9	C2H5Cl	64
5,9-Dodecadien-2-one, 6,10-dimethyl-, (E	1000132-10-9	NIST05.L	62957	7	C14H24O	208
Acetic acid, 2-ethylbutyl ester	10031-87-5	NIST05.L	20139	4	C8H16O2	144

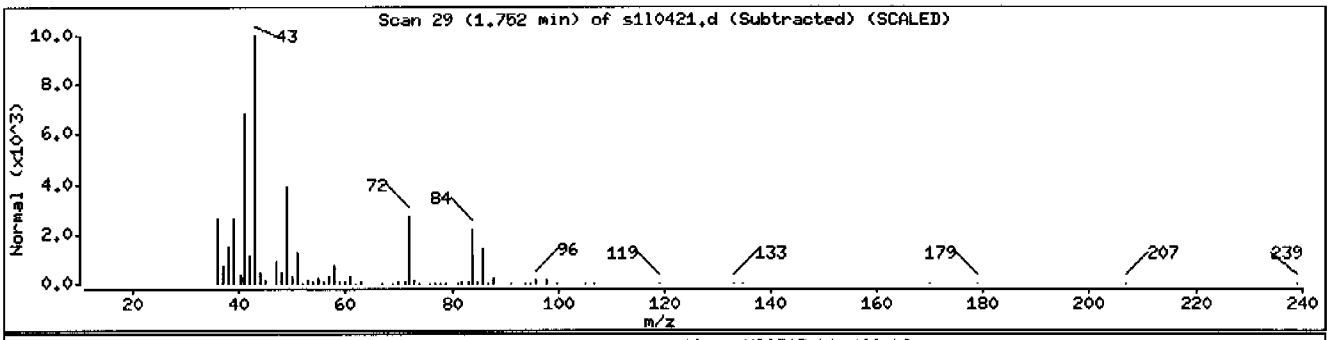

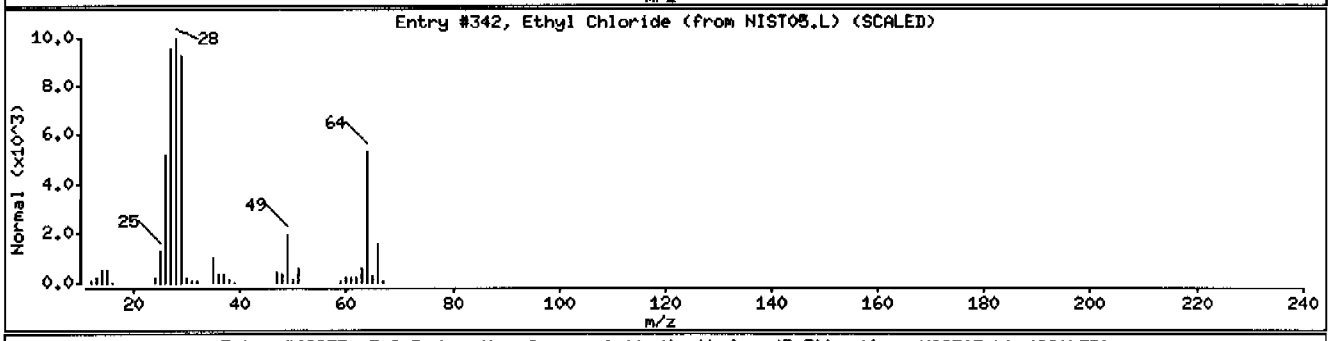

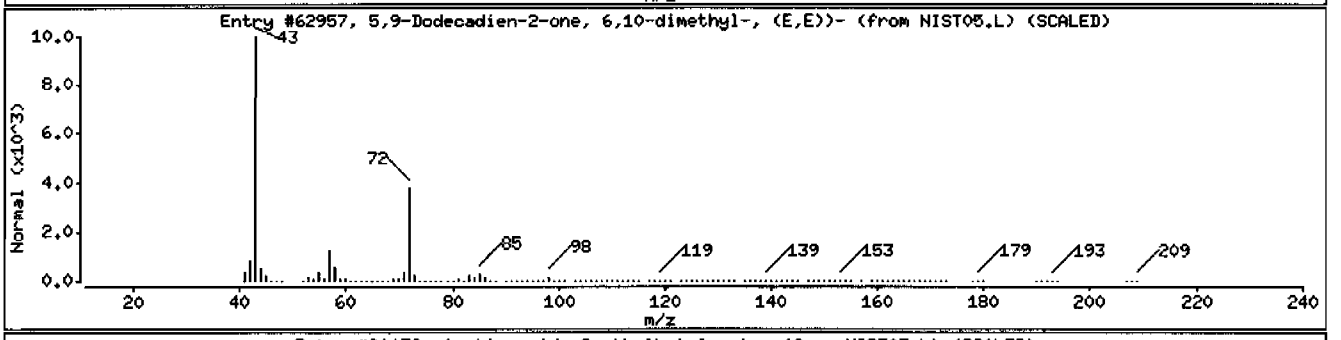

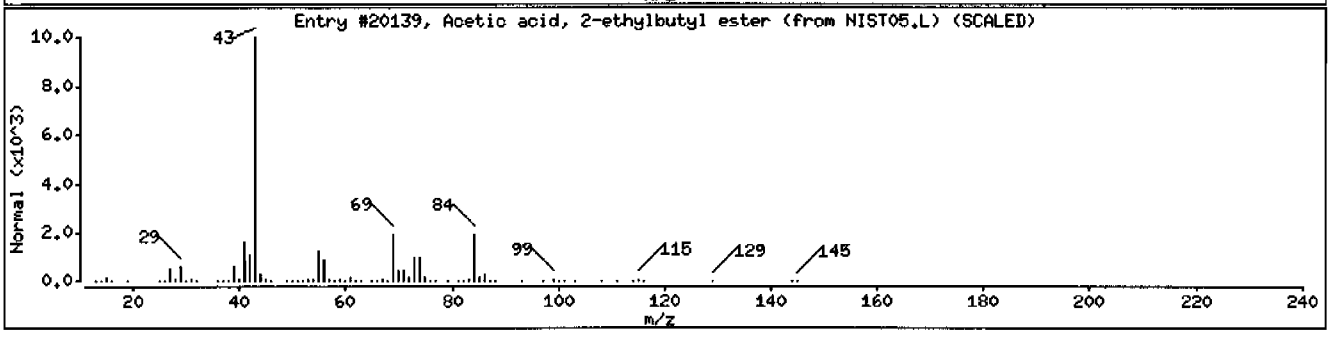

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Butyl aldoxime, 3-methyl-, syn-	5780-40-5	NIST05.L	4029	32	C5H11NO	101

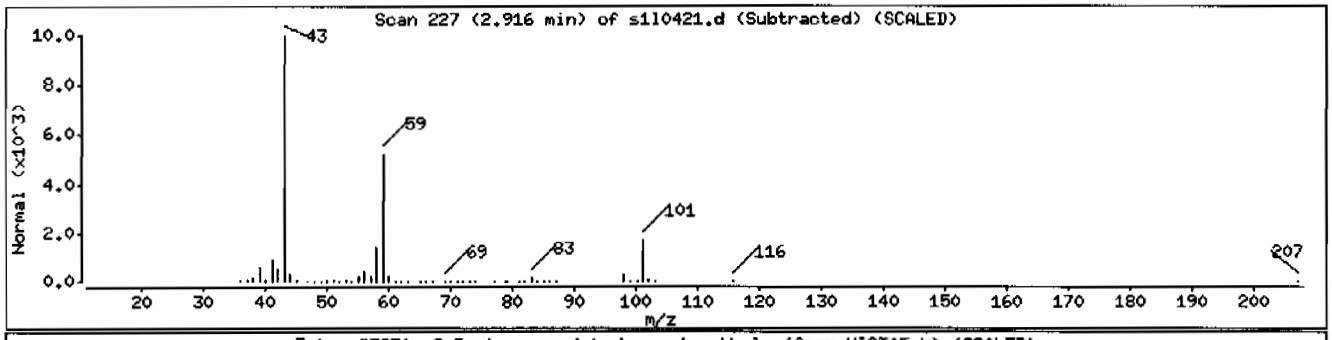

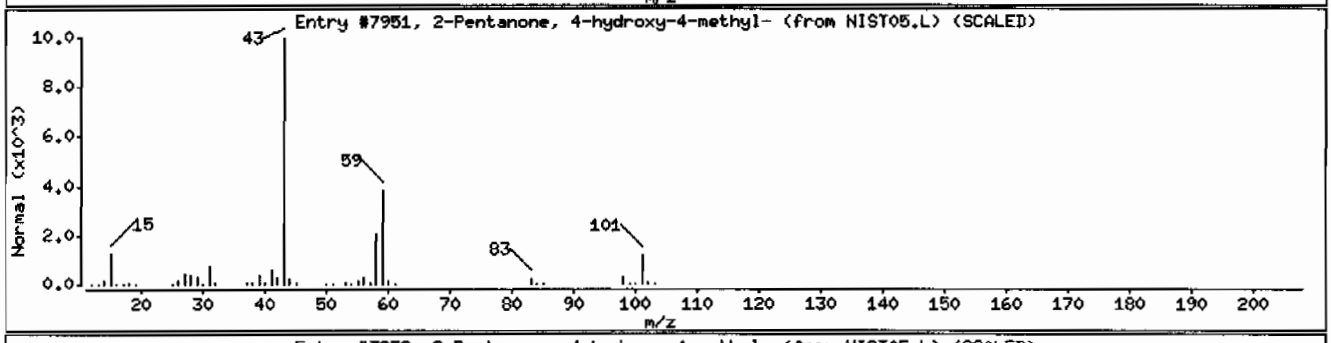

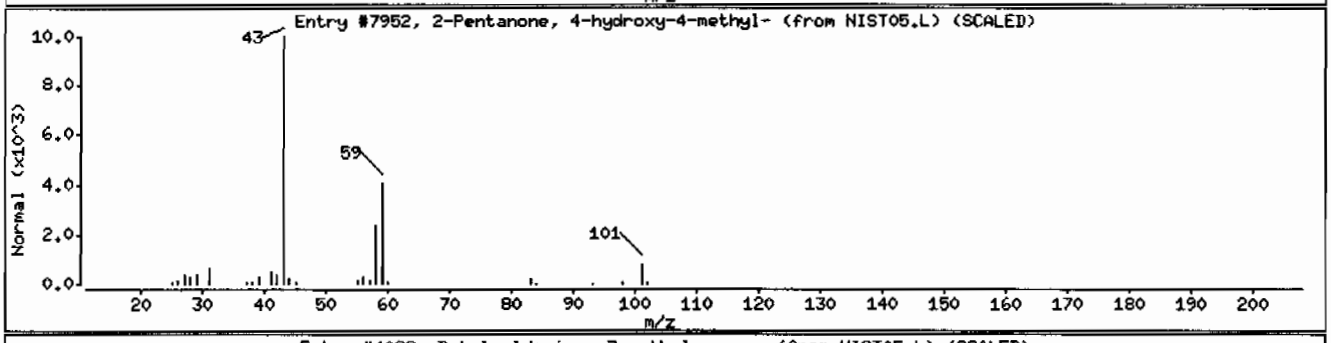

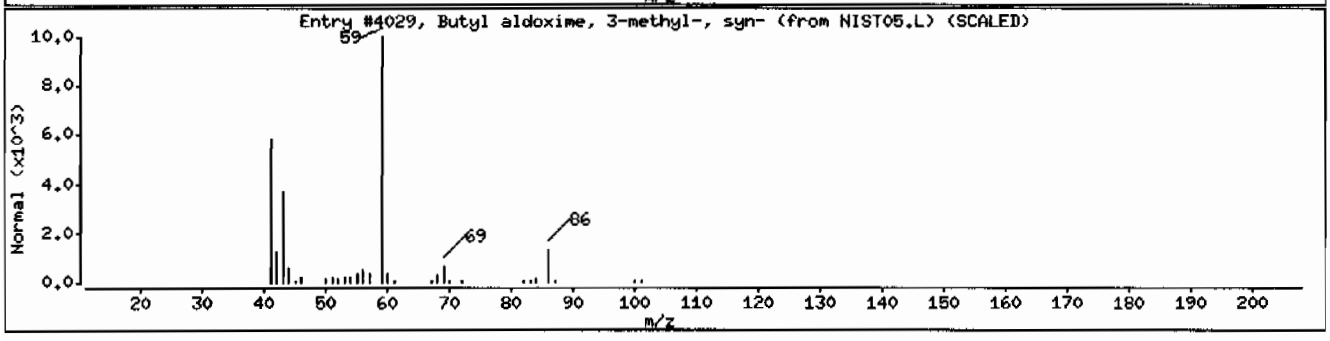

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |24154001319266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	84	C30H500	426
Dispiro[5.2.5.2]hexadecan-1-one	1781-84-6	NIST05.L	81214	50	C16H260	234
Phosphinothioic acid, diphenyl-	14278-72-9	NIST05.L	80837	38	C12H110PS	234

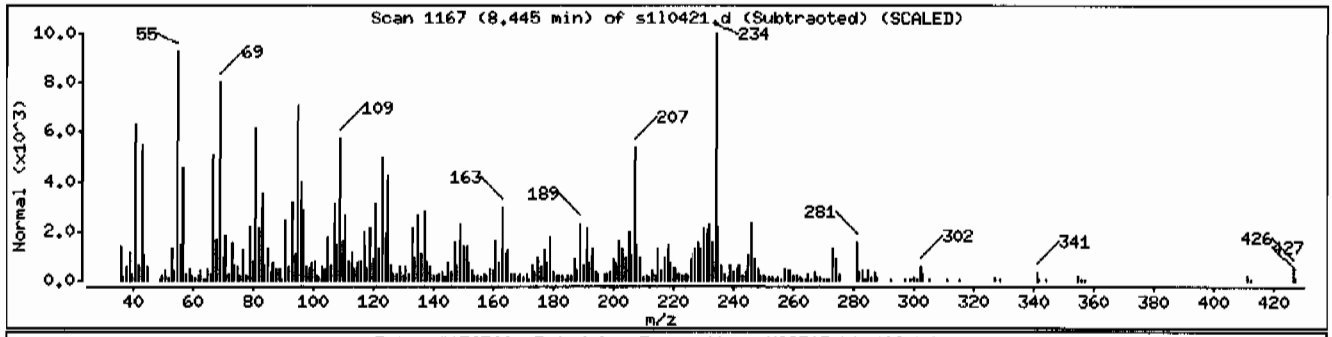

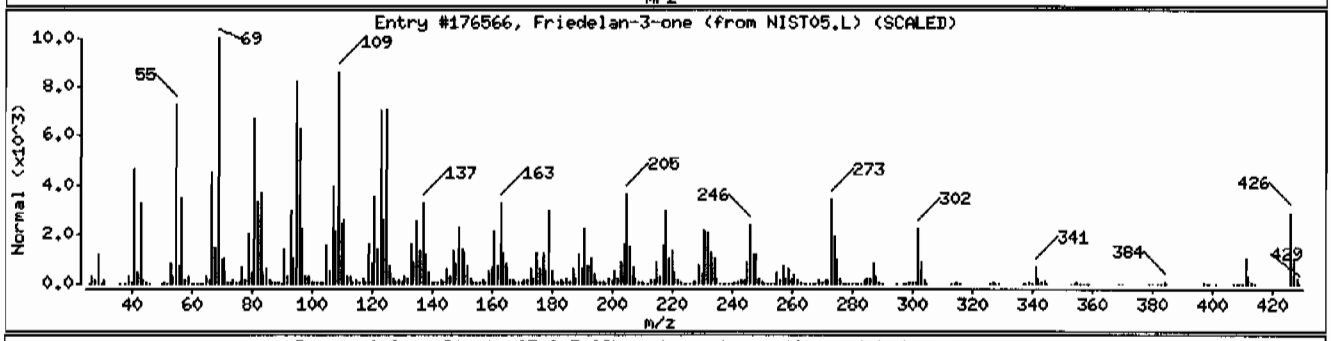

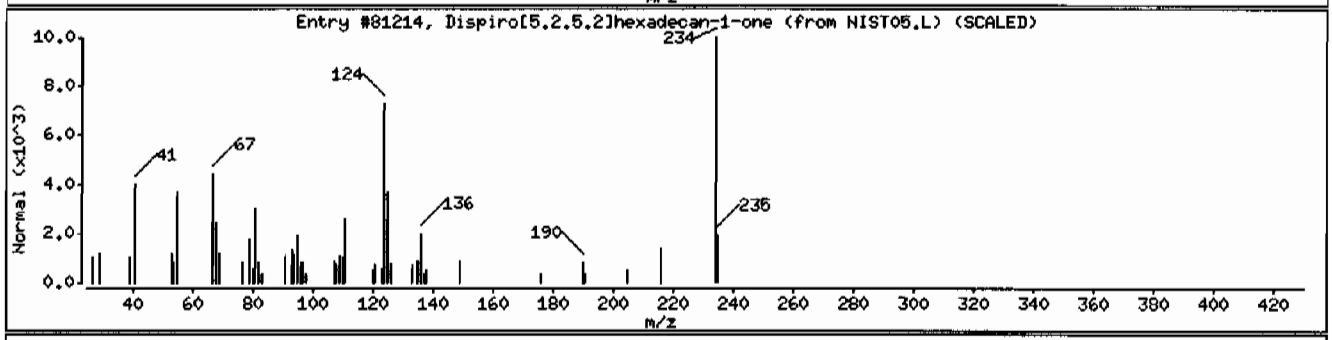

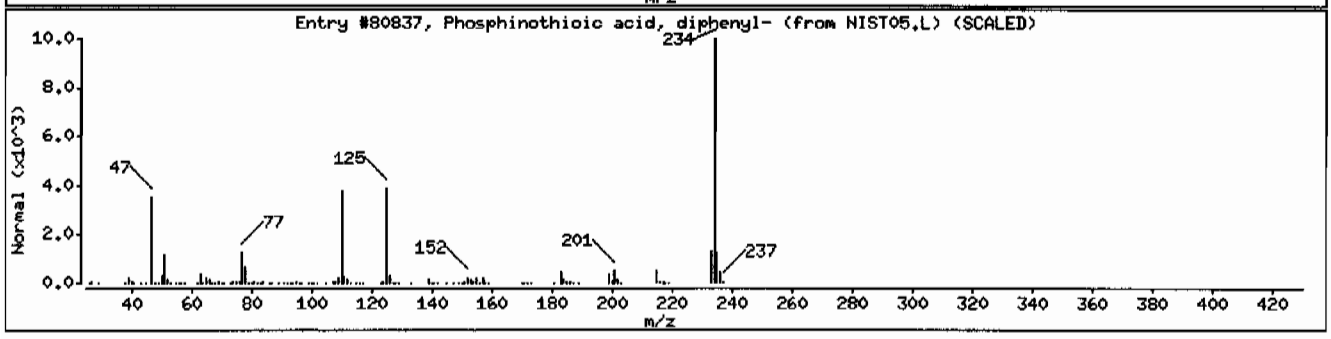

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866

Instrument: MSD1.i

Sample Info: |2415400131926610111SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113492	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	97	C20H42	282
Nonadecane	629-92-5	NIST05.L	104270	95	C19H40	268

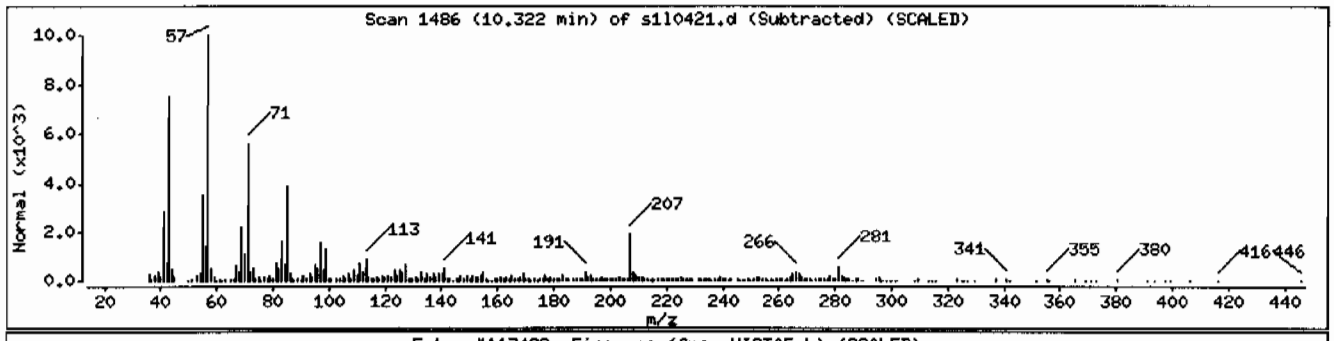

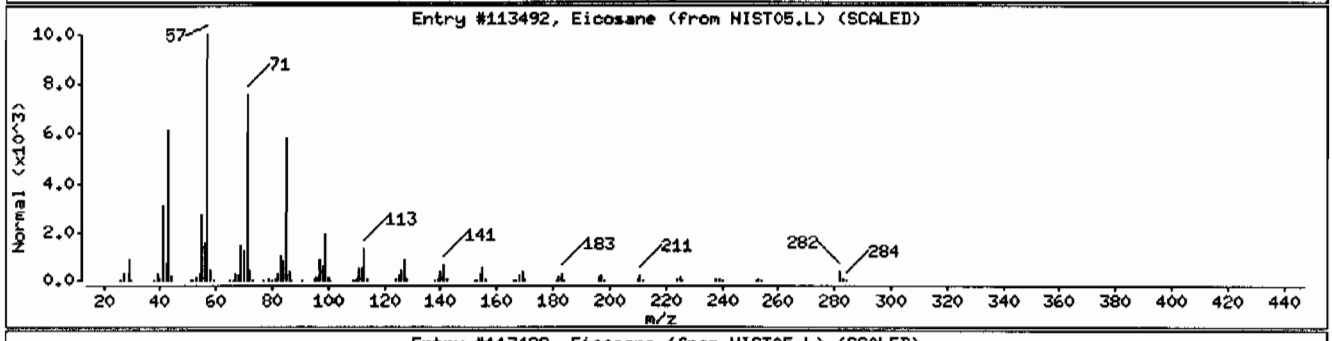

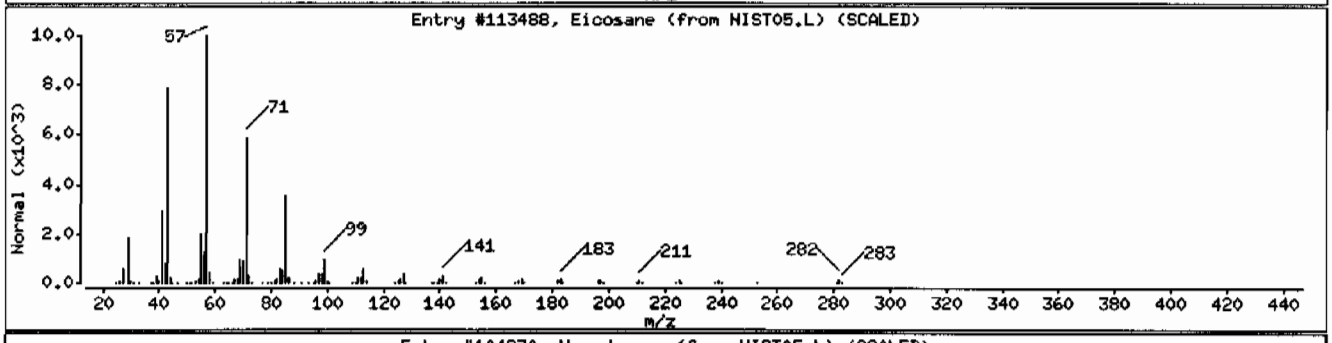

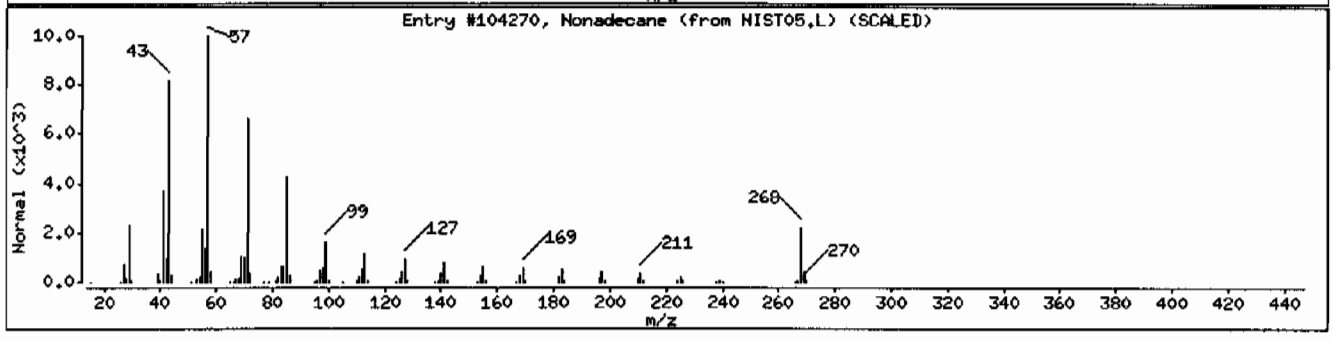

Data File: /chem/MSD1.i/s120409.b/s110421.d

Date : 04-DEC-2009 16:33

Client ID: RE03-09-13866 Instrument: MSD1.i

Sample Info: |2415400131926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NIST05.L	101525	44	C19H36	264
Phosphinous chloride, phenyl(1,7,7-trime	74630-27-6	NIST05.L	111767	25	C16H22ClP	280
Indole-2-one, 2,3-dihydro-N-hydroxy-4-me	1000129-52-1	NIST05.L	62024	20	C11H13NO3	207

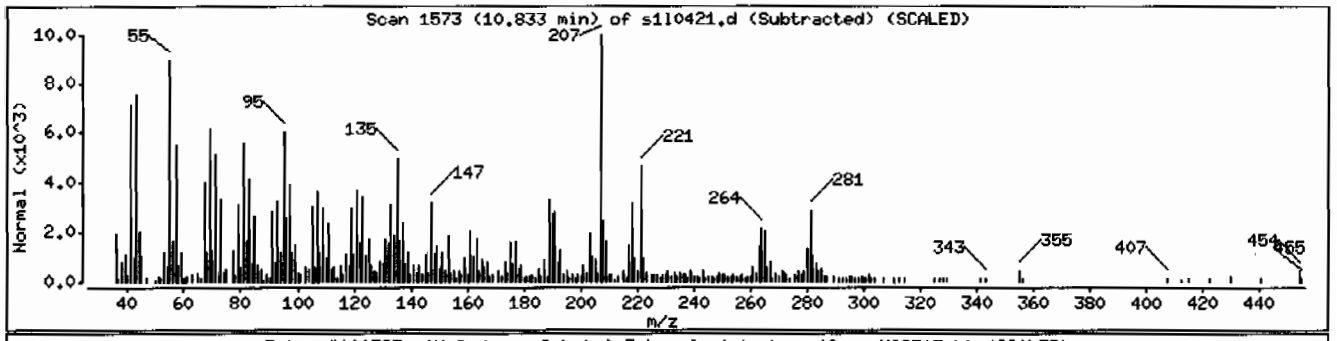

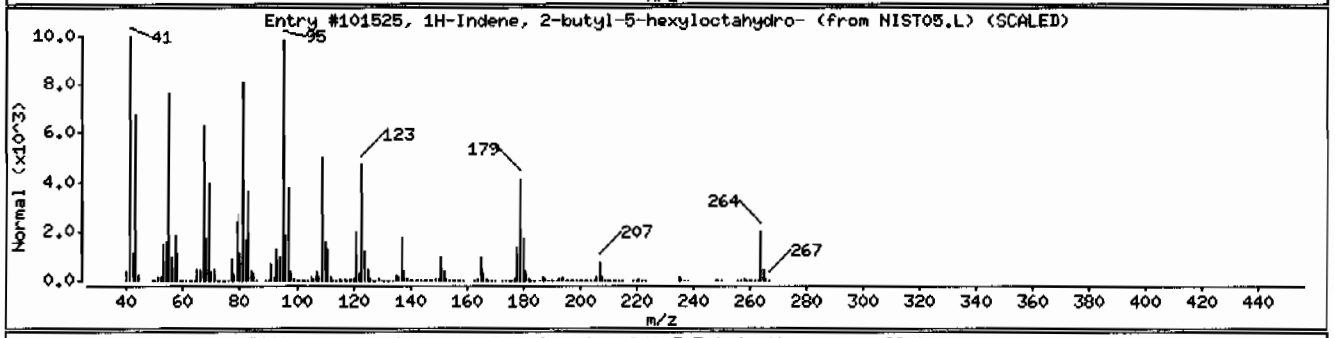

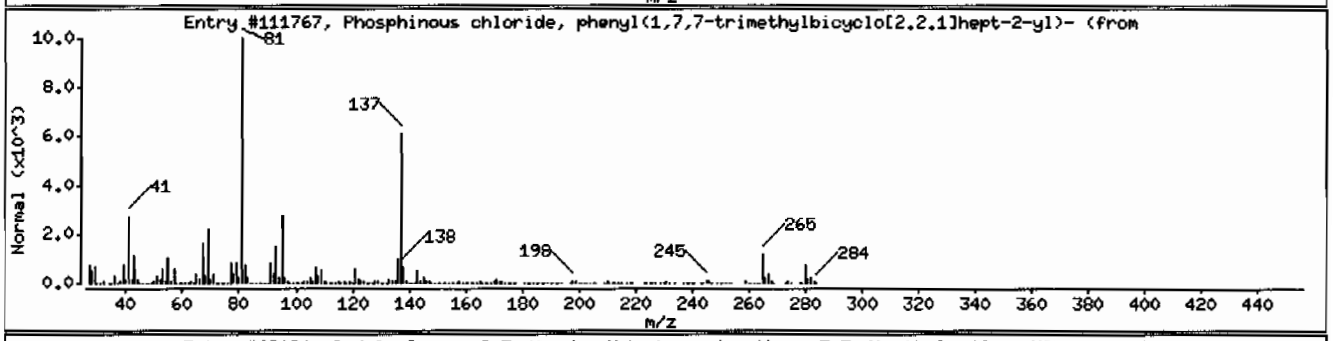

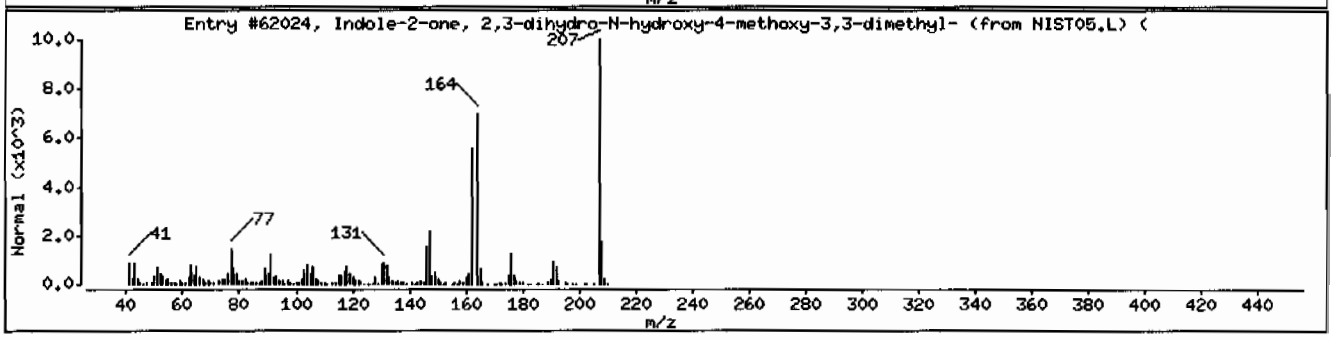

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540004**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13867**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 13:27**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110413.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	76.0	380
108-95-2	Phenol	U	380	ug/kg	76.0	380
95-57-8	2-Chlorophenol	U	380	ug/kg	76.0	380
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	76.0	380
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	76.0	380
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	76.0	380
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380
87-86-5	Pentachlorophenol	U	380	ug/kg	95.1	380
129-00-0	Pyrene		66.9	ug/kg	11.4	38.0
110-86-1	Pyridine	U	380	ug/kg	76.0	380
62-53-3	Aniline	U	380	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	76.0	380
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	76.0	380
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	76.0	380
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	76.0	380
95-48-7	o-Cresol	U	380	ug/kg	76.0	380
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380
67-72-1	Hexachloroethane	U	380	ug/kg	76.0	380
98-95-3	Nitrobenzene	U	380	ug/kg	76.0	380
78-59-1	Isophorone	U	380	ug/kg	76.0	380
88-75-5	2-Nitrophenol	U	380	ug/kg	76.0	380
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	76.0	380
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	76.0	380
65-85-0	Benzoic acid	U	760	ug/kg	190	760
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline	U	380	ug/kg	76.0	380
87-68-3	Hexachlorobutadiene	U	380	ug/kg	76.0	380
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.60	38.0
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	76.0	380
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	76.0	380
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	76.0	380
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline	U	380	ug/kg	76.0	380
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	380	ug/kg	76.0	380

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13867	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110413.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	380	ug/kg	76.0	380
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	U	760	ug/kg	144	760
132-64-9	Dibenzofuran	U	380	ug/kg	76.0	380
84-66-2	Diethylphthalate	U	380	ug/kg	76.0	380
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	76.0	380
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	76.0	380
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380
	p-Nitroaniline					
122-39-4	Diphenylamine	U	380	ug/kg	76.0	380
122-66-7	Azobenzene	U	380	ug/kg	76.0	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	76.0	380
118-74-1	Hexachlorobenzene	U	380	ug/kg	76.0	380
85-01-8	Phenanthrene		49.3	ug/kg	11.4	38.0
120-12-7	Anthracene	J	11.3	ug/kg	7.60	38.0
84-74-2	Di-n-butylphthalate	U	380	ug/kg	76.0	380
206-44-0	Fluoranthene		75.6	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate	U	380	ug/kg	76.0	380
56-55-3	Benzo(a)anthracene	J	34.7	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380
218-01-9	Chrysene	J	31.8	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	380	ug/kg	76.0	380
117-84-0	Di-n-octylphthalate	U	380	ug/kg	76.0	380
205-99-2	Benzo(b)fluoranthene		141	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene	J	21.5	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene	J	18.4	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	76.0	380

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
75-09-2	Methylene Chloride	1.71	7370	ug/kg	91	NJ
75-09-2	Methylene Chloride	1.76	20300	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13867	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110413.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1000132-10-9	5,9-Dodecadien-2-one, 6,10-dimethyl-, (E	1.79	175	ug/kg	53	NJ
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.92	625	ug/kg	56	NJ
301-02-0	9-Octadecenamide, (Z)-	8.14	199	ug/kg	98	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110413.d
Lab Smp Id: 241540004 Client Smp ID: RE03-09-13867
Inj Date : 04-DEC-2009 13:27
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540004|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	12.33560	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	551737	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	2172800	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1207190	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	2094022	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1774014	40.0000	
* 98 Perylene-d12	264	10.075	10.069	(1.000)	1551644	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	981622	68.1154	2590
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	1235336	70.5286	2680
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	496163	34.6508	1320
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	1085431	37.5424	1430
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	334872	99.3419	3780
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	1389486	49.8982	1900

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.845	7.845	(0.909)	82885	1.75823	66.8(H)
68 Phenanthrene	178	6.992	6.992	(1.002)	61717	1.29689	49.3
69 Anthracene	178	7.028	7.028	(1.007)	14360	0.29672	11.3(a)
76 Fluoranthene	202	7.704	7.704	(1.104)	91365	1.98898	75.6
89 Benzo(a)anthracene	228	8.622	8.628	(0.999)	38871	0.91378	34.7(a)
92 Chrysene	228	8.651	8.657	(1.002)	33258	0.83649	31.8(a)
95 Benzo(b)fluoranthene	252	9.604	9.610	(0.953)	44121	3.71066	141
97 Benzo(a)pyrene	252	9.998	10.004	(0.992)	24318	0.56638	21.5(a)
101 Benzo(ghi)perylene	276	12.151	12.163	(1.206)	14116	0.48413	18.4(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s110413.d
Report Date: 12/04/2009 16:42
Lab. ID: 241540004 SampleType: SAMPLE
Injection Date: 04-DEC-2009 13:27
Operator: AMY Instrument: MSD1.i
Sample Info: |241540004|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	60563	3.61	3.68	80-120	100	(T)
93	147	3.62	3.69	418-478	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	67777	4.25	4.13	80-120	100	(T)
42	42944	4.25	4.13	44-104	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	214036	6.00	5.77	80-120	100	(T)
164	1207190	6.00	5.77	0- 40	564	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	155489	6.00	5.82	80-120	100	(T)
63	1882	6.00	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	155489	6.00	6.10	80-120	100	(T)
89	2017	6.00	6.10	32- 92	1	(QT)
63	1882	6.00	6.10	15- 75	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	20159	6.53	6.37	80-120	100	(T)
165	20855	6.53	6.37	64-124	103	(T)
167	6433	6.53	6.37	0- 43	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	20761	6.53	6.67	80-120	100	(T)
141	135101	6.53	6.67	50-110	651	(QT)
250	39909	6.53	6.67	68-128	192	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	61717	6.99	6.99	80-120	100	( )
179	11428	6.99	6.99	0- 45	19	( )
176	10710	6.99	6.99	0- 48	17	( )
69 Anthracene				CAS#: 120-12-7		
178	14360	7.03	7.03	80-120	100	( )
179	3450	7.02	7.03	0- 46	24	( )
176	3093	7.03	7.03	0- 48	22	( )
76 Fluoranthene				CAS#: 206-44-0		
202	91365	7.70	7.70	80-120	100	( )
203	16879	7.70	7.70	0- 47	18	( )
101	13301	7.70	7.70	0- 43	15	( )
79 Pyrene				CAS#: 129-00-0		
202	82885	7.85	7.85	80-120	100	( )
200	17702	7.85	7.85	0- 51	21	( )
101	13975	7.84	7.85	0- 46	17	( )
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	38871	8.62	8.63	80-120	100	( )
226	9760	8.62	8.63	0- 55	25	( )
229	10743	8.62	8.63	0- 49	28	( )
92 Chrysene				CAS#: 218-01-9		
228	33258	8.65	8.66	80-120	100	( )
229	8015	8.65	8.66	0- 49	24	( )
226	9890	8.65	8.66	0- 58	30	( )
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	44121	9.60	9.61	80-120	100	( )
253	10903	9.60	9.61	0- 51	25	( )
125	7137	9.61	9.61	0- 44	16	( )
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	44121	9.60	9.64	80-120	100	( )
253	10903	9.60	9.64	0- 52	25	( )
125	7226	9.61	9.64	0- 44	16	( )
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	24318	10.00	10.00	80-120	100	( )
253	5650	10.00	10.00	0- 51	23	( )
125	4518	10.00	10.00	0- 48	19	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
101	Benzo(ghi)perylene			CAS#: 191-24-2		
276	14116	12.15	12.16	80-120	100	( )
138	4363	12.14	12.16	7- 67	31	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110413.d
Lab Smp Id: 241540004 Client Smp ID: RE03-09-13867
Inj Date : 04-DEC-2009 13:27
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540004|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	12.33560	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	3244799	40.000
* 91 Chrysene-d12	8.633	4997647	40.000

	CONCENTRATIONS				QUANT			
	RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Methylene Chloride					CAS #: 75-09-2			
	1.710	15732449	193.940489	7370	91	NIST05.L	1499	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Methylene Chloride					CAS #: 75-09-2		
1.757	43256818	533.244914	20300	95	NIST05.L	1498	10
5,9-Dodecadien-2-one, 6,10-dimethyl-, (E					CAS #: 1000132-10-9		
1.793	373227	4.60092432	175	53	NIST05.L	62957	10
2-Pentanone, 4-hydroxy-4-methyl-					CAS #: 123-42-2		
2.922	1333905	16.4436035	625	56	NIST05.L	7951	10
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.139	652413	5.22176225	198	98	NIST05.L	112657	91

Data File: /chem/MSD1.i/s120409.b/s110413.d
Date : 04-DEC-2009 13:27
Client ID: RE03-09-13867
Sample Info: 1241540004|926610|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

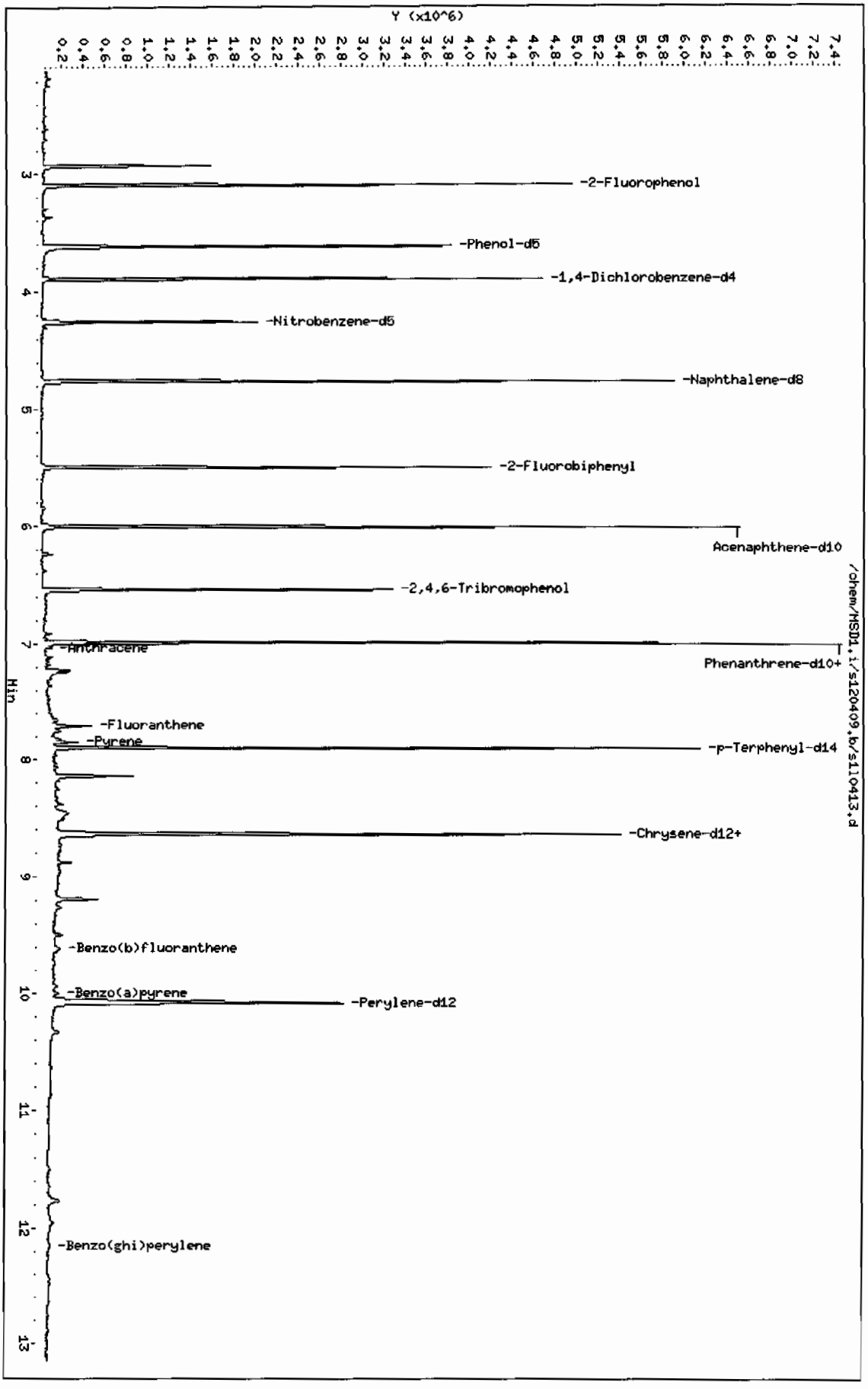

Page 1

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: |2415400041926610111SVMF111LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 66.8 ug/Kg

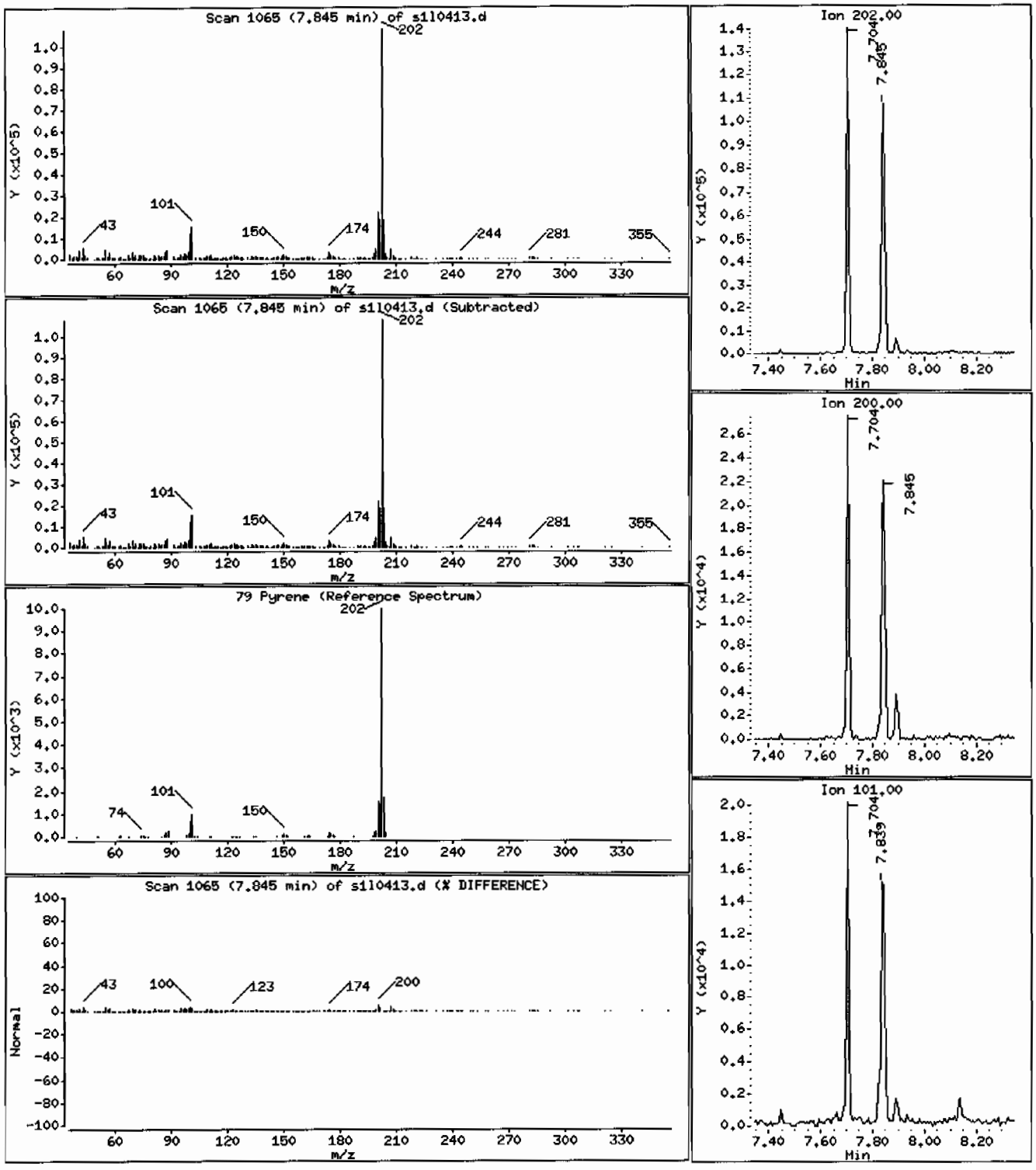

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: |24154000419266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 49.3 ug/Kg

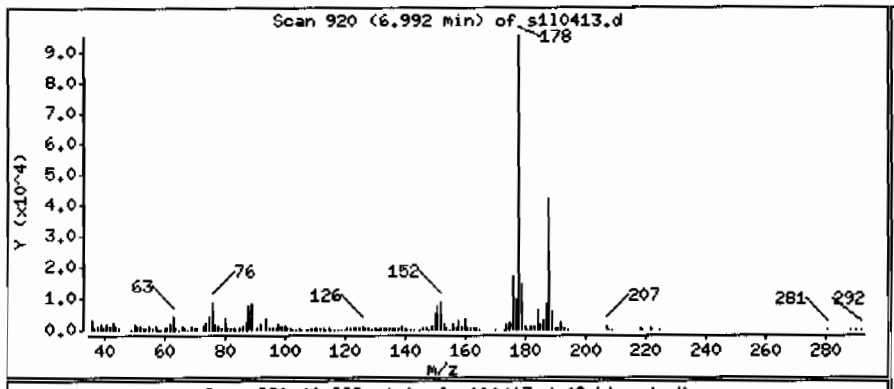

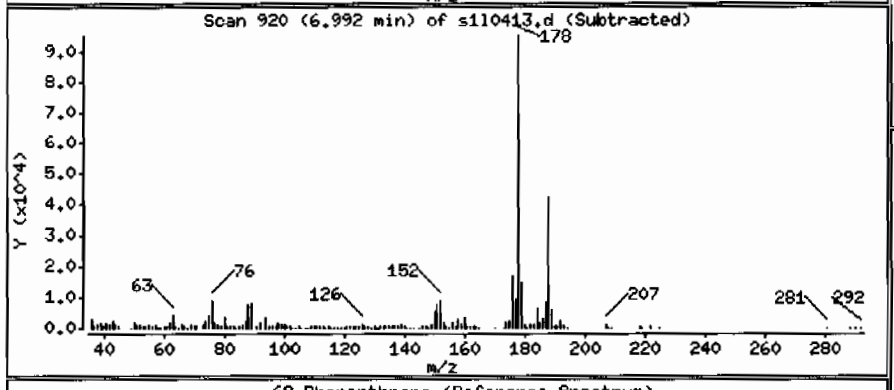

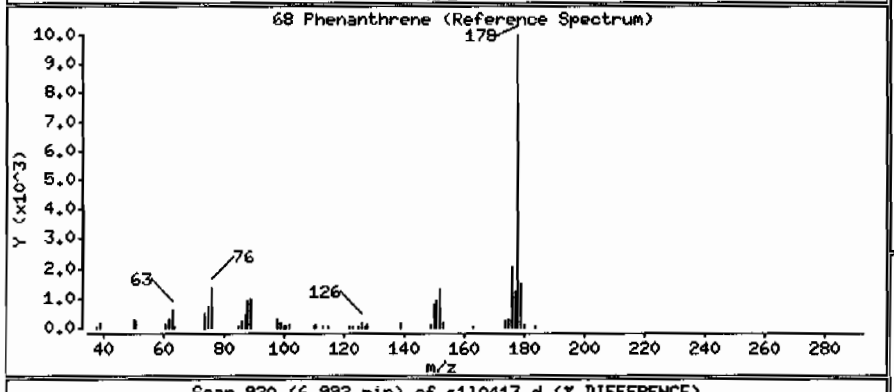

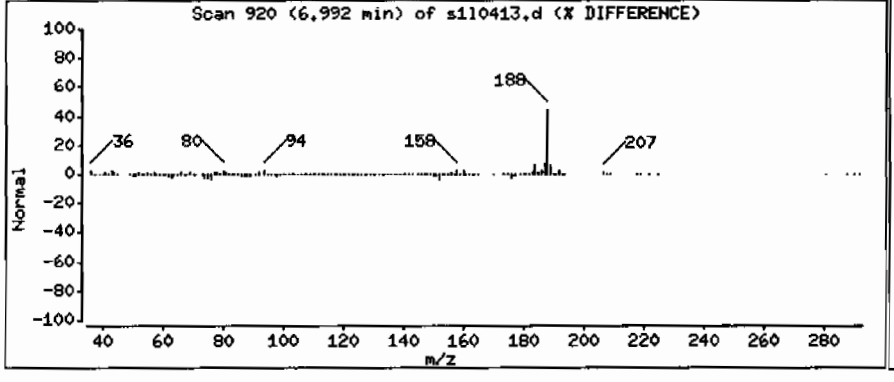

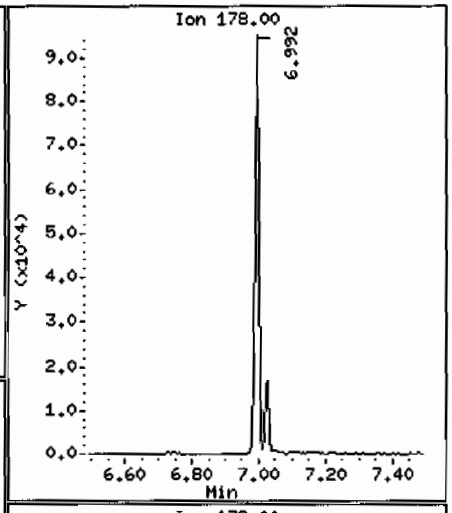

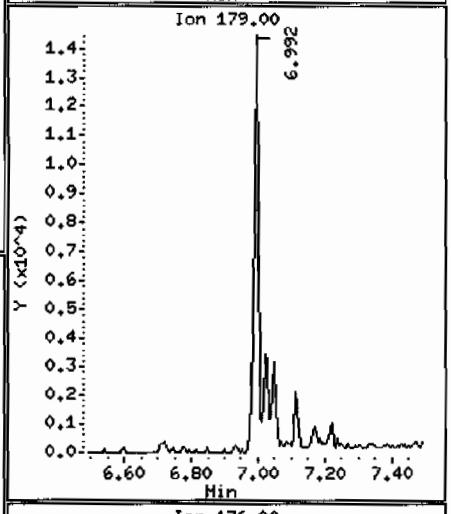

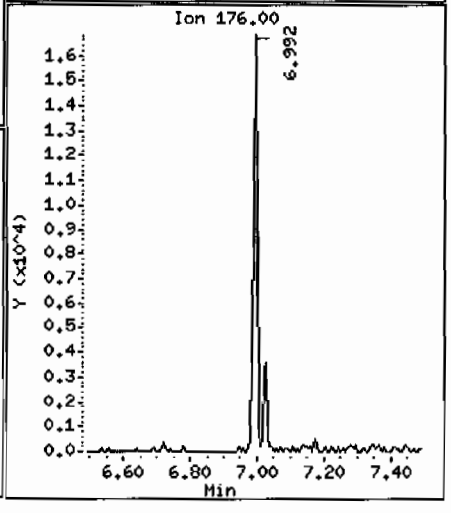

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: |2415400041926610111SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 11.3 ug/Kg

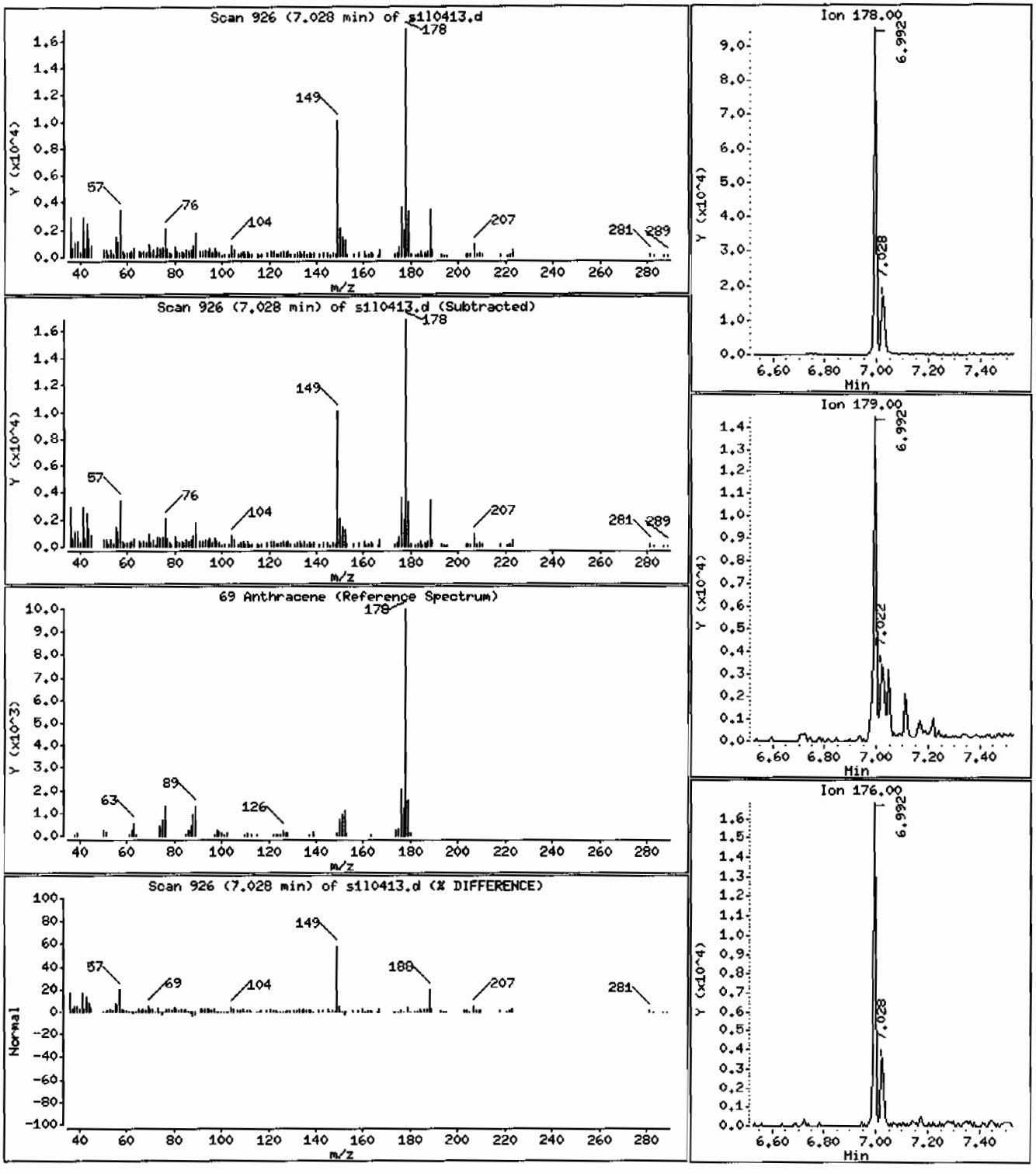

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867 Instrument: MSD1.i

Sample Info: 1241540004|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

76 Fluoranthene Concentration: 76.6 ug/Kg

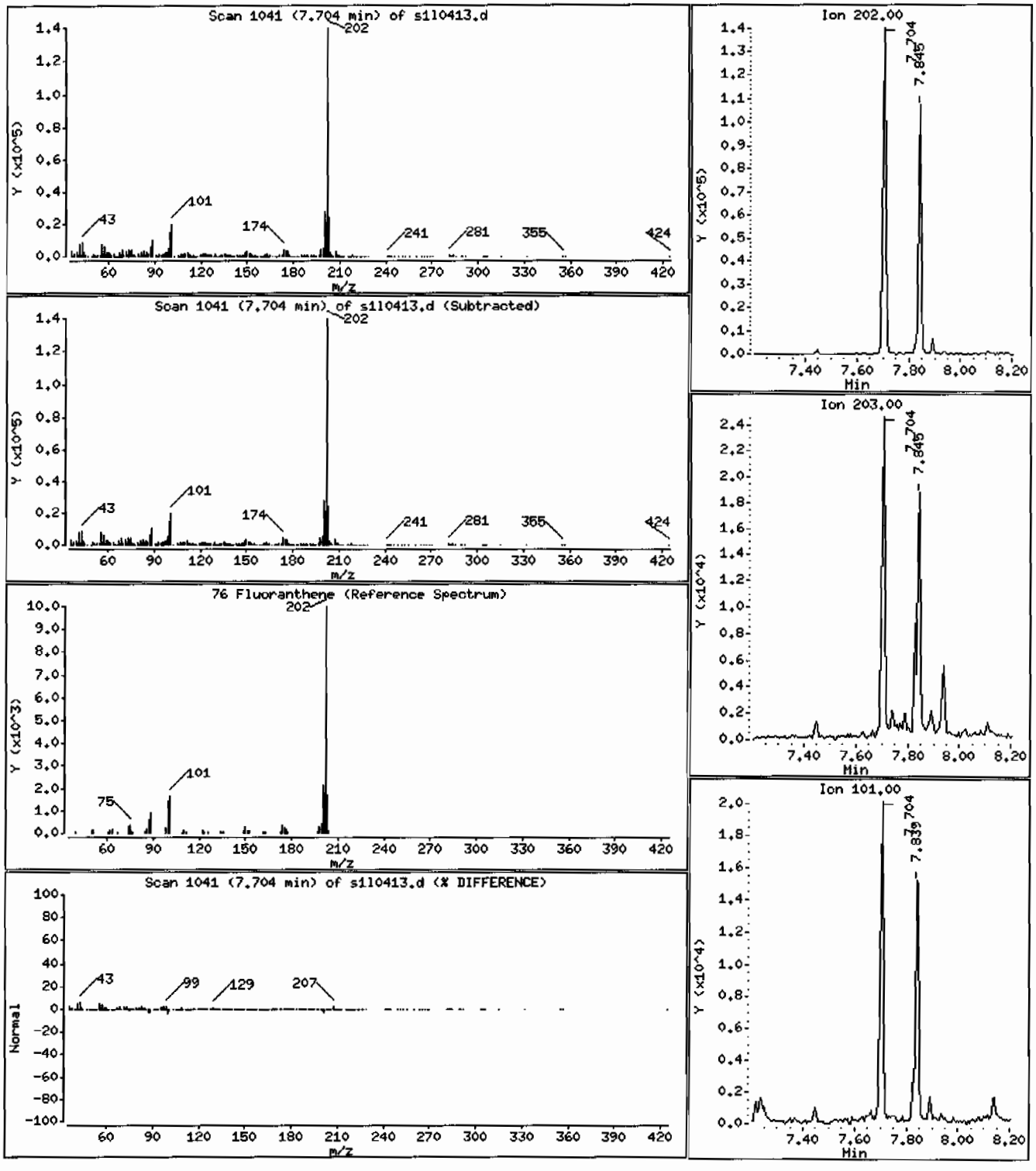

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: |2415400041926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 34.7 ug/Kg

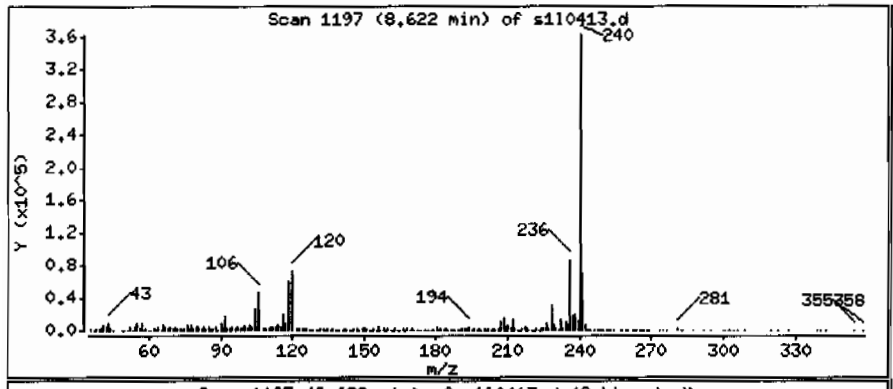

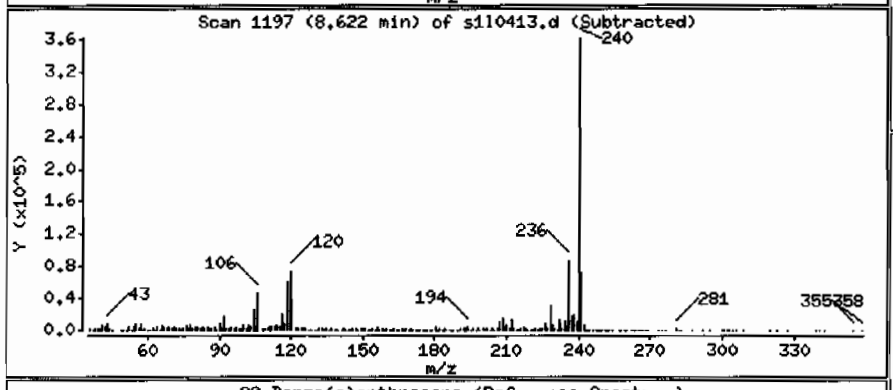

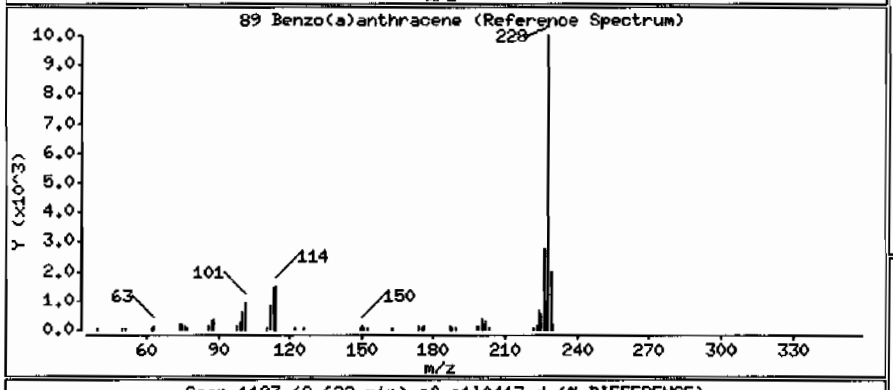

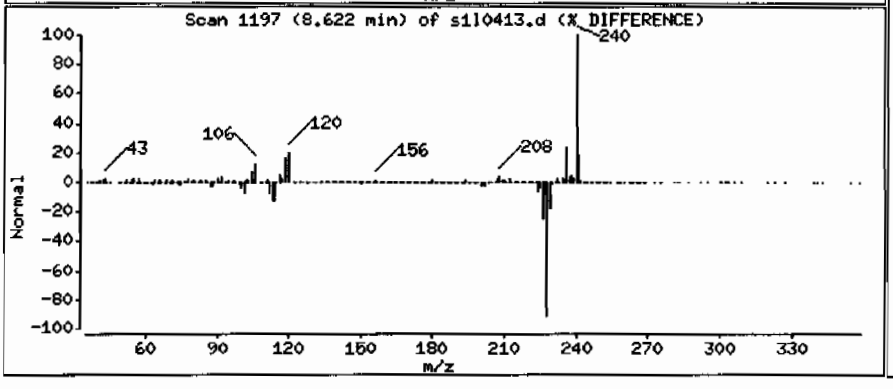

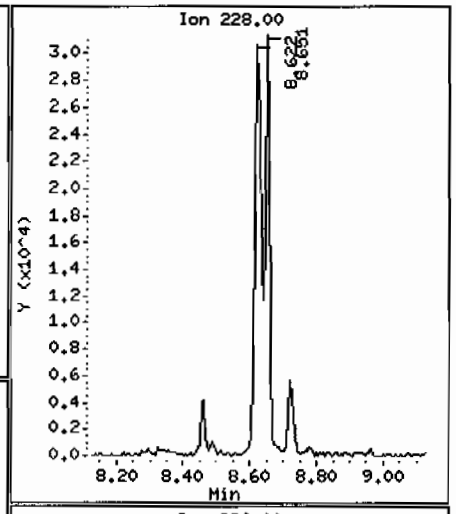

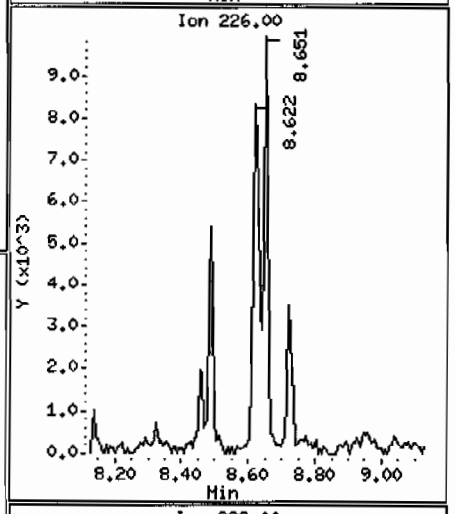

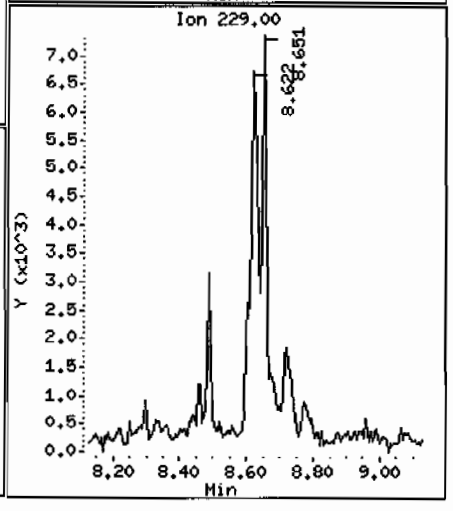

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: 1241540004192661011SVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 31.8 ug/Kg

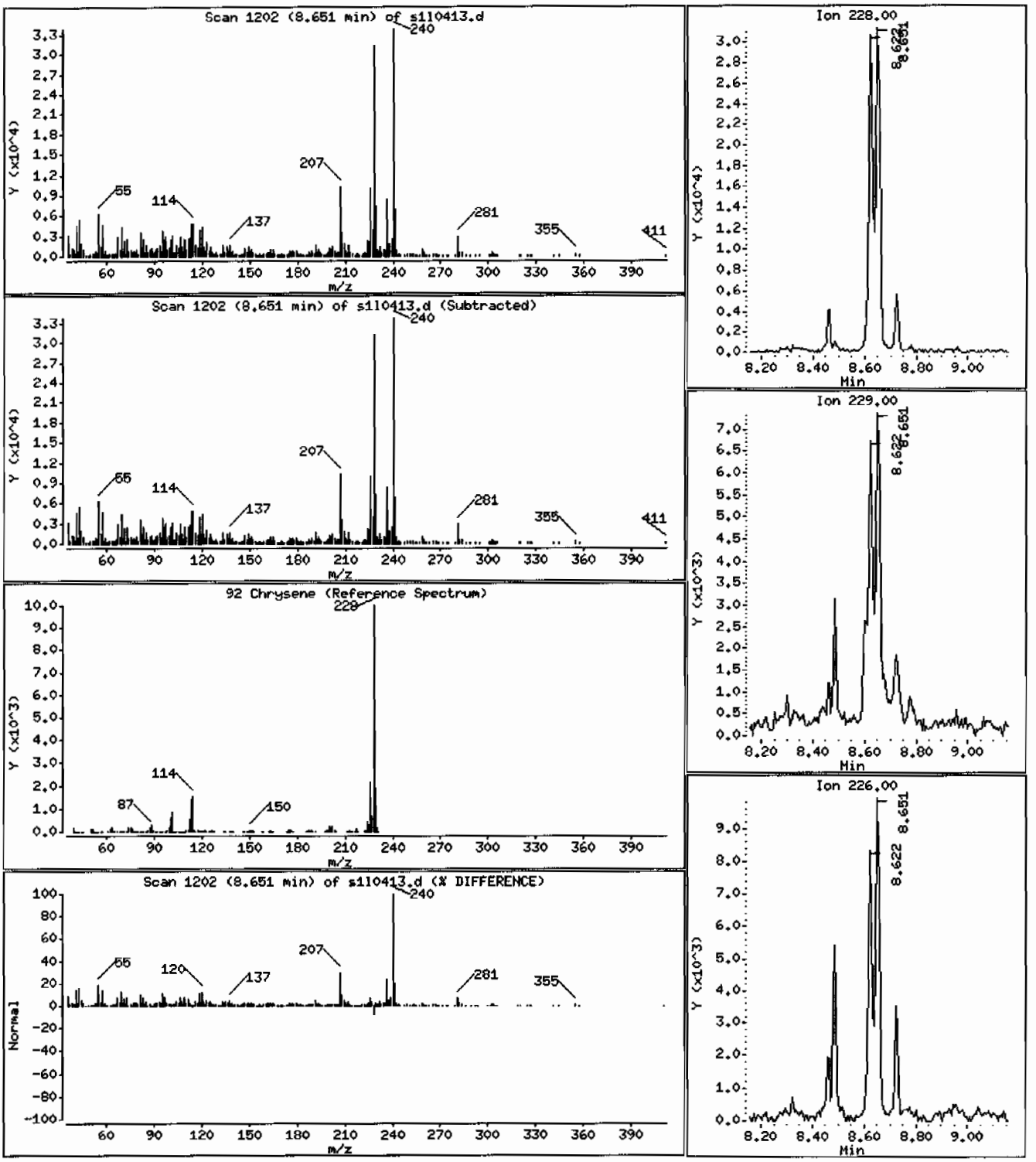

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: |2415400041926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 141 ug/Kg

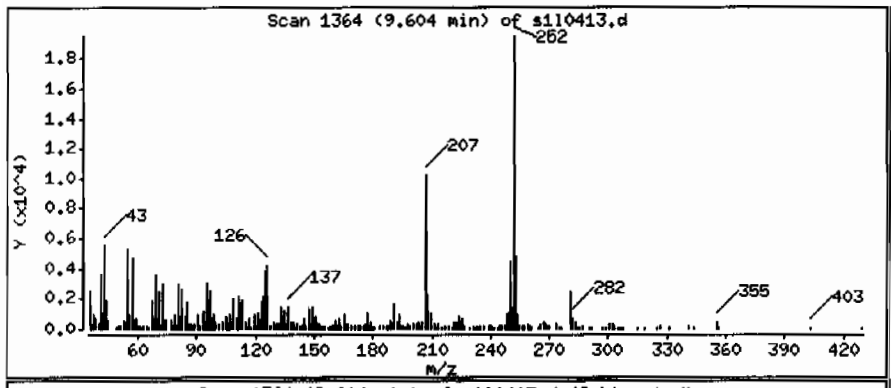

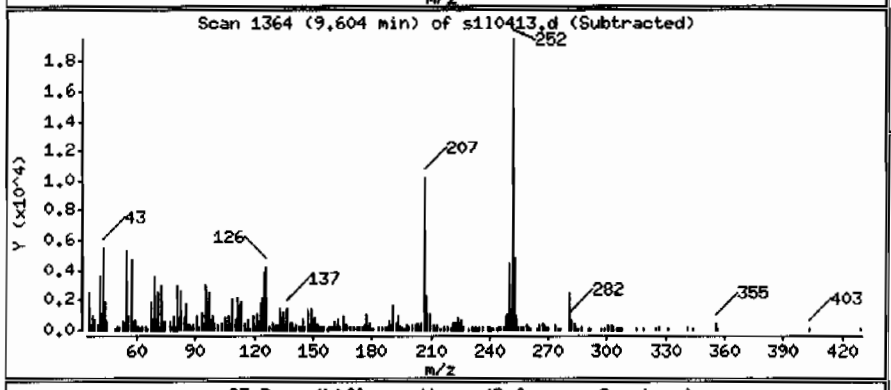

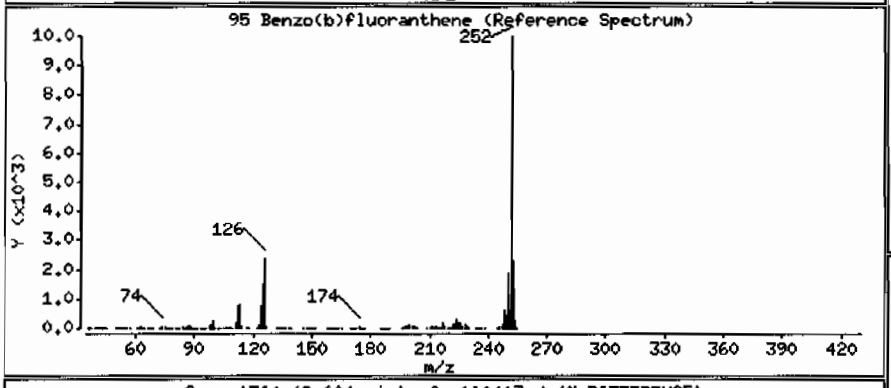

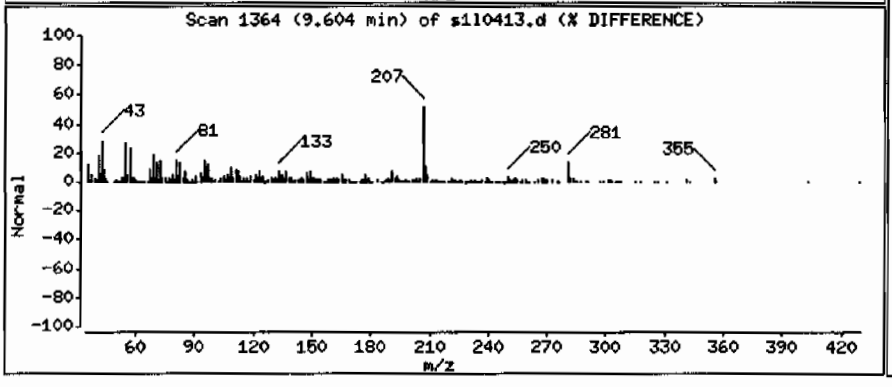

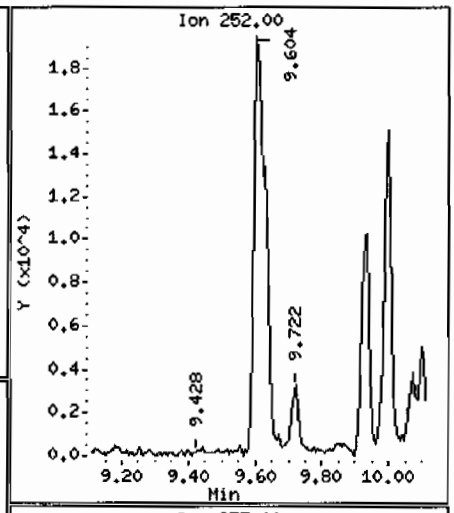

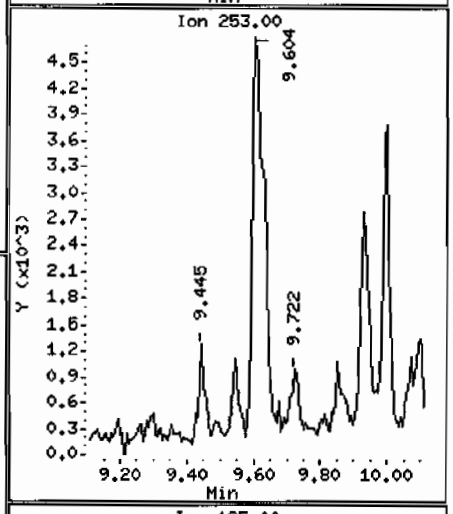

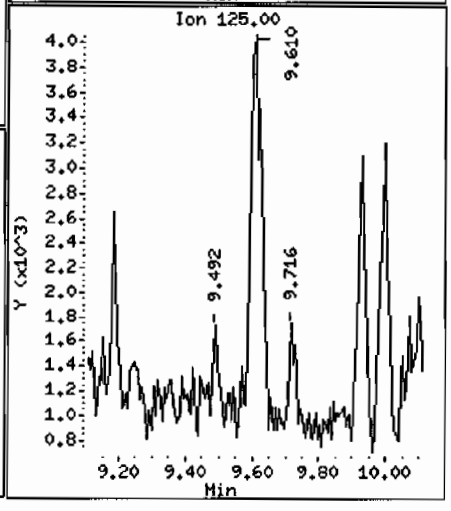

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: 1241540004|926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 21.5 ug/Kg

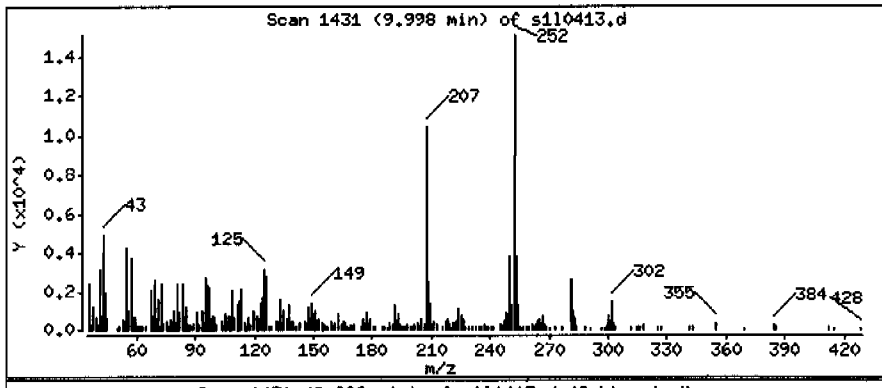

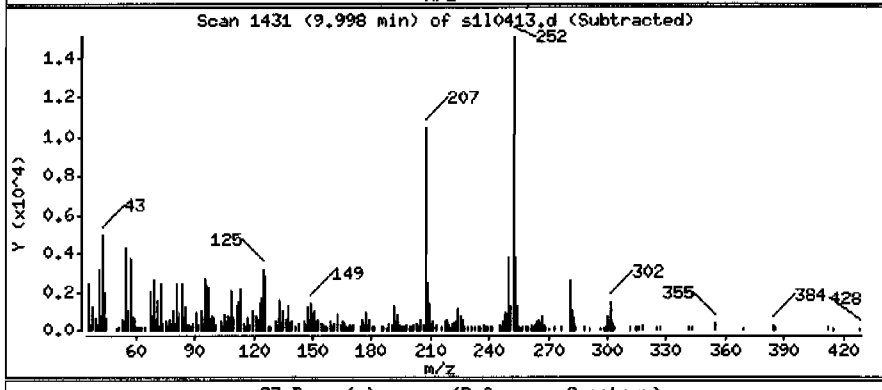

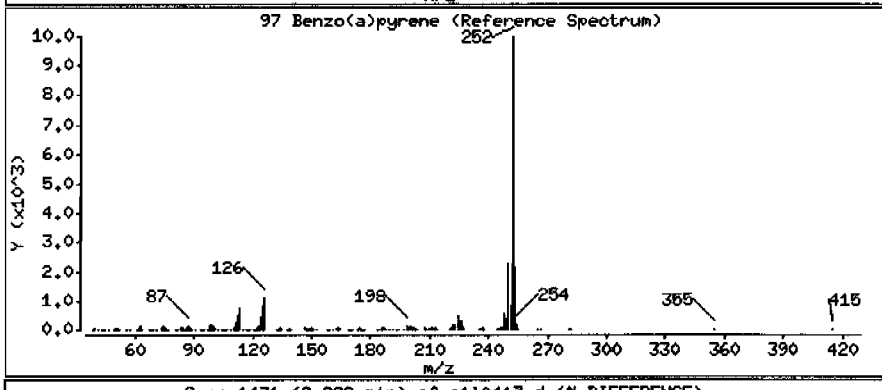

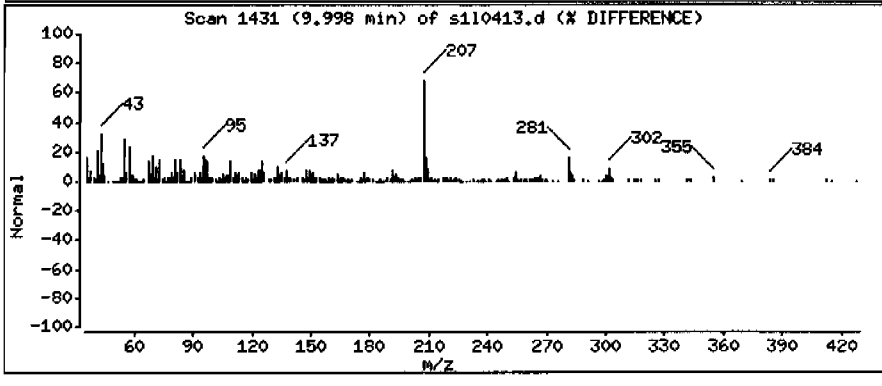

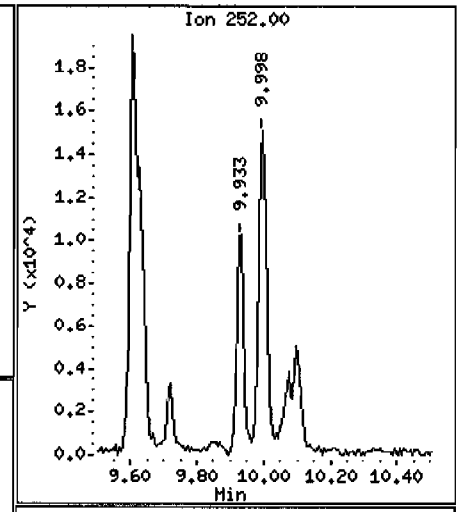

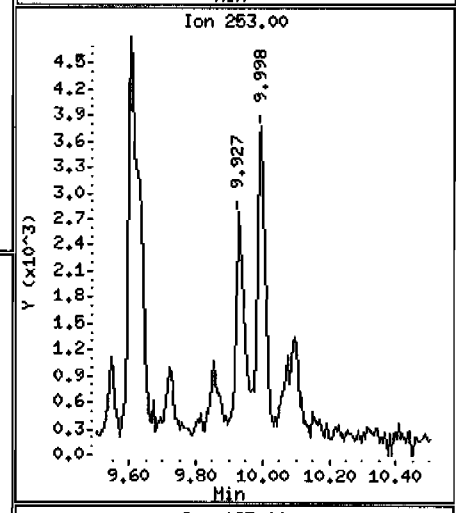

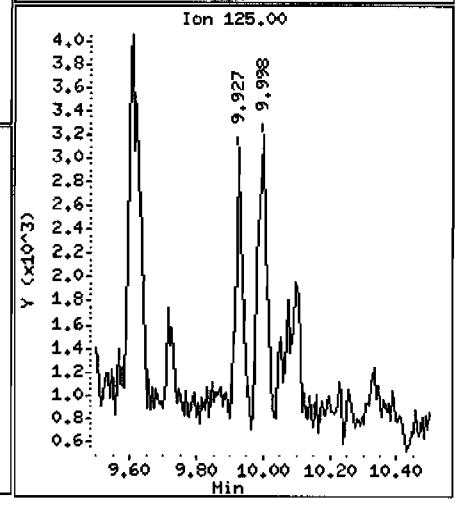

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: 1241540004|92661011|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 18.4 ug/Kg

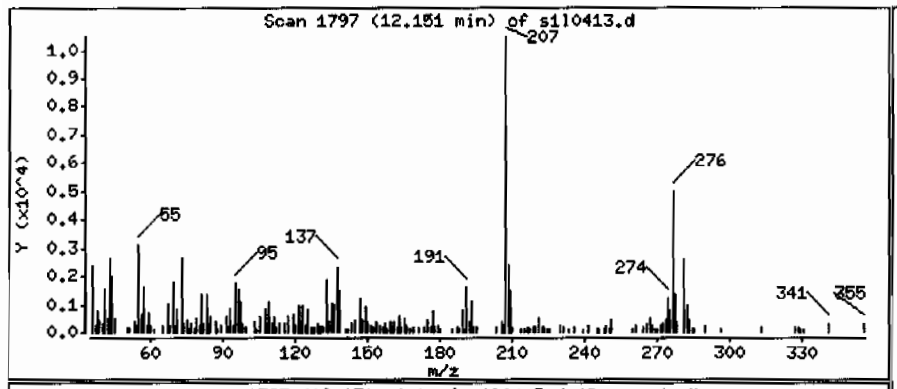

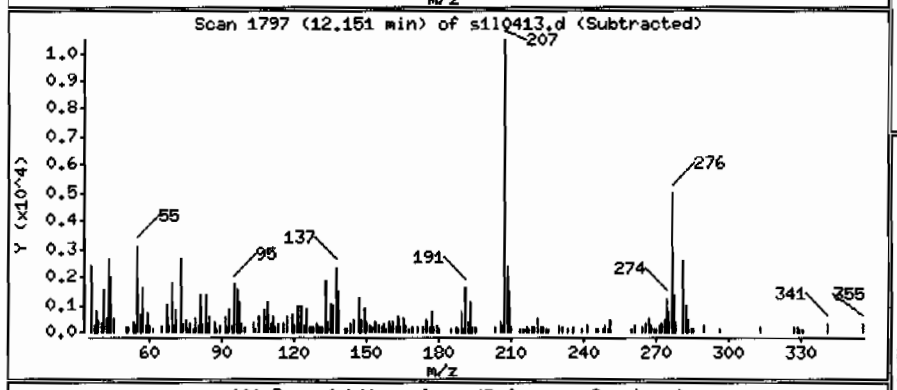

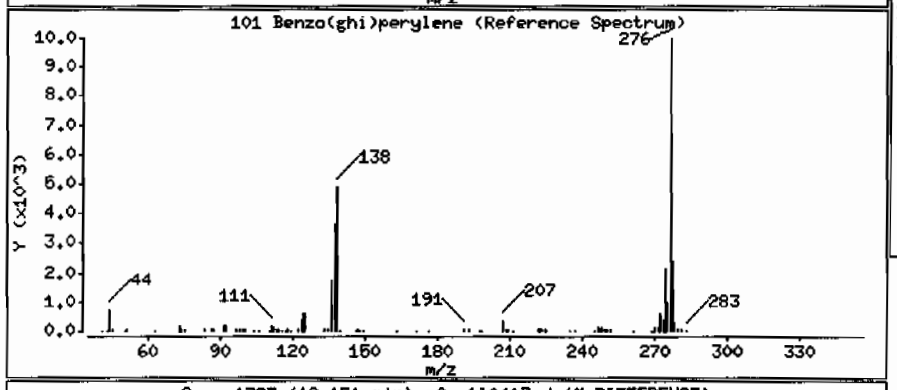

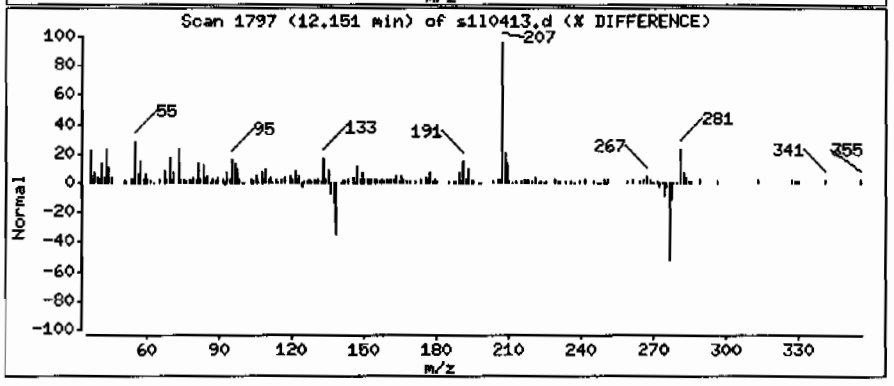

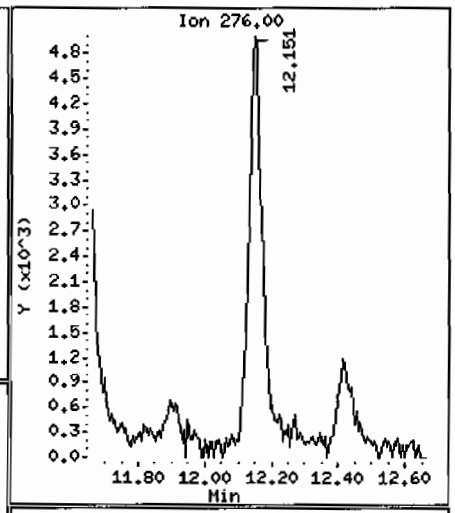

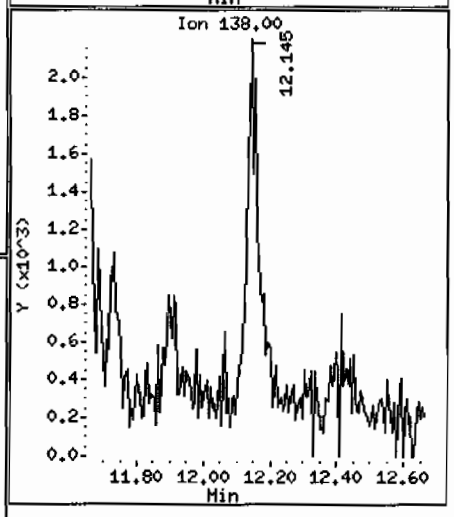

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: |2415400041926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Methylene Chloride	75-09-2	NIST05.L	1499	91	CH2Cl2	84
Methylene Chloride	75-09-2	NIST05.L	1497	91	CH2Cl2	84
Methylene Chloride	75-09-2	NIST05.L	1498	90	CH2Cl2	84

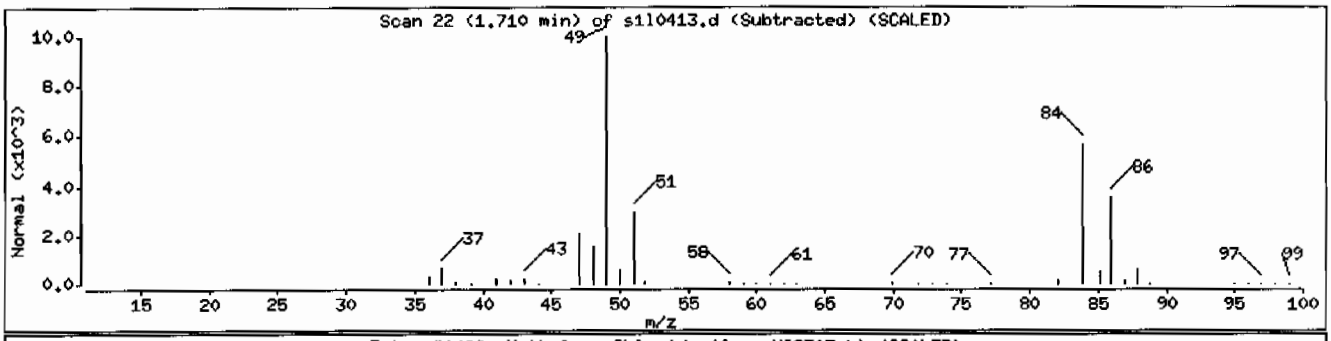

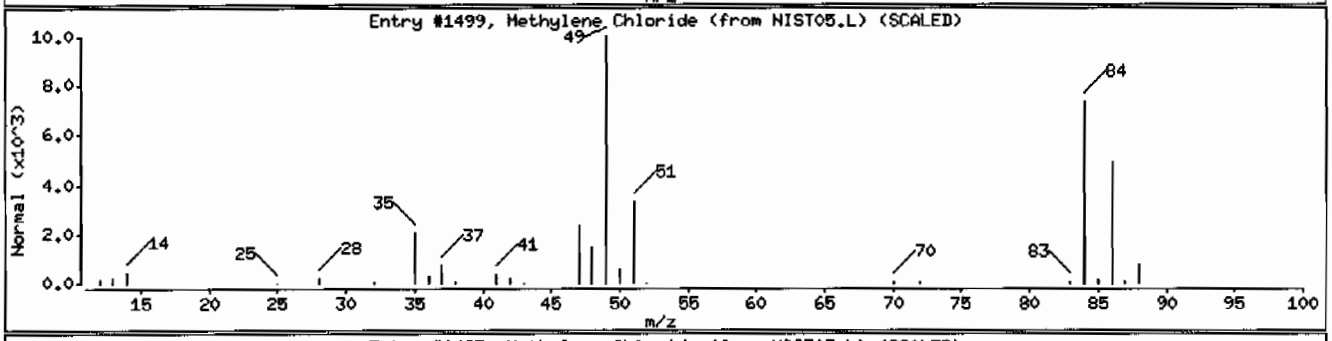

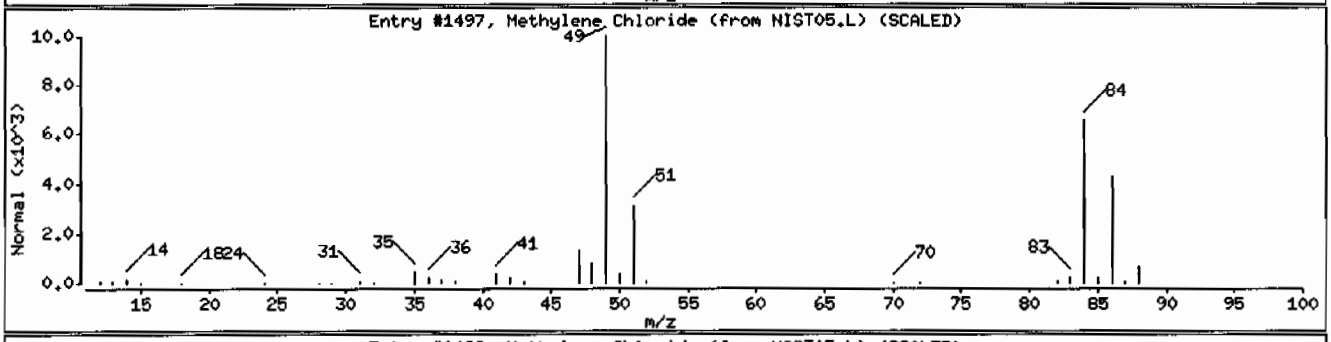

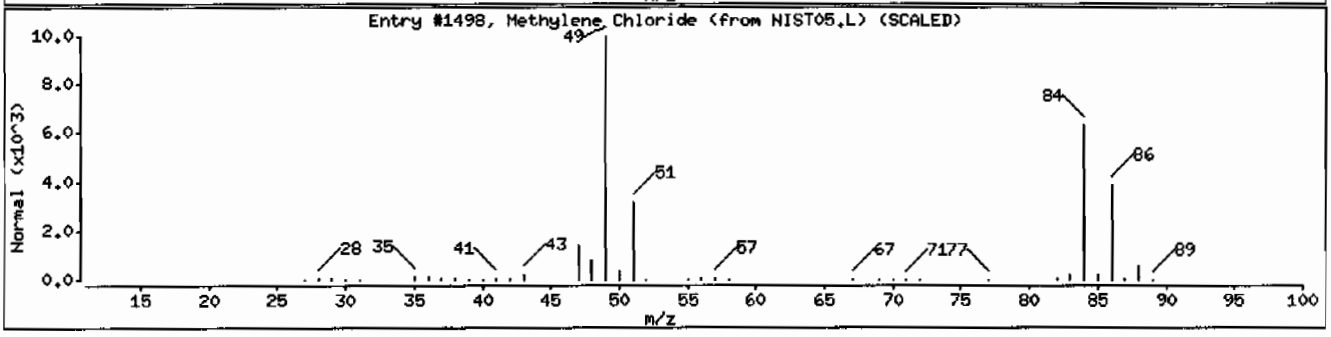

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867 Instrument: MSD1.i

Sample Info: |2415400041926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Methylene Chloride	75-09-2	NIST05.L	1498	95	CH2Cl2	84
Methylene Chloride	75-09-2	NIST05.L	1499	94	CH2Cl2	84
Methylene Chloride	75-09-2	NIST05.L	1497	91	CH2Cl2	84

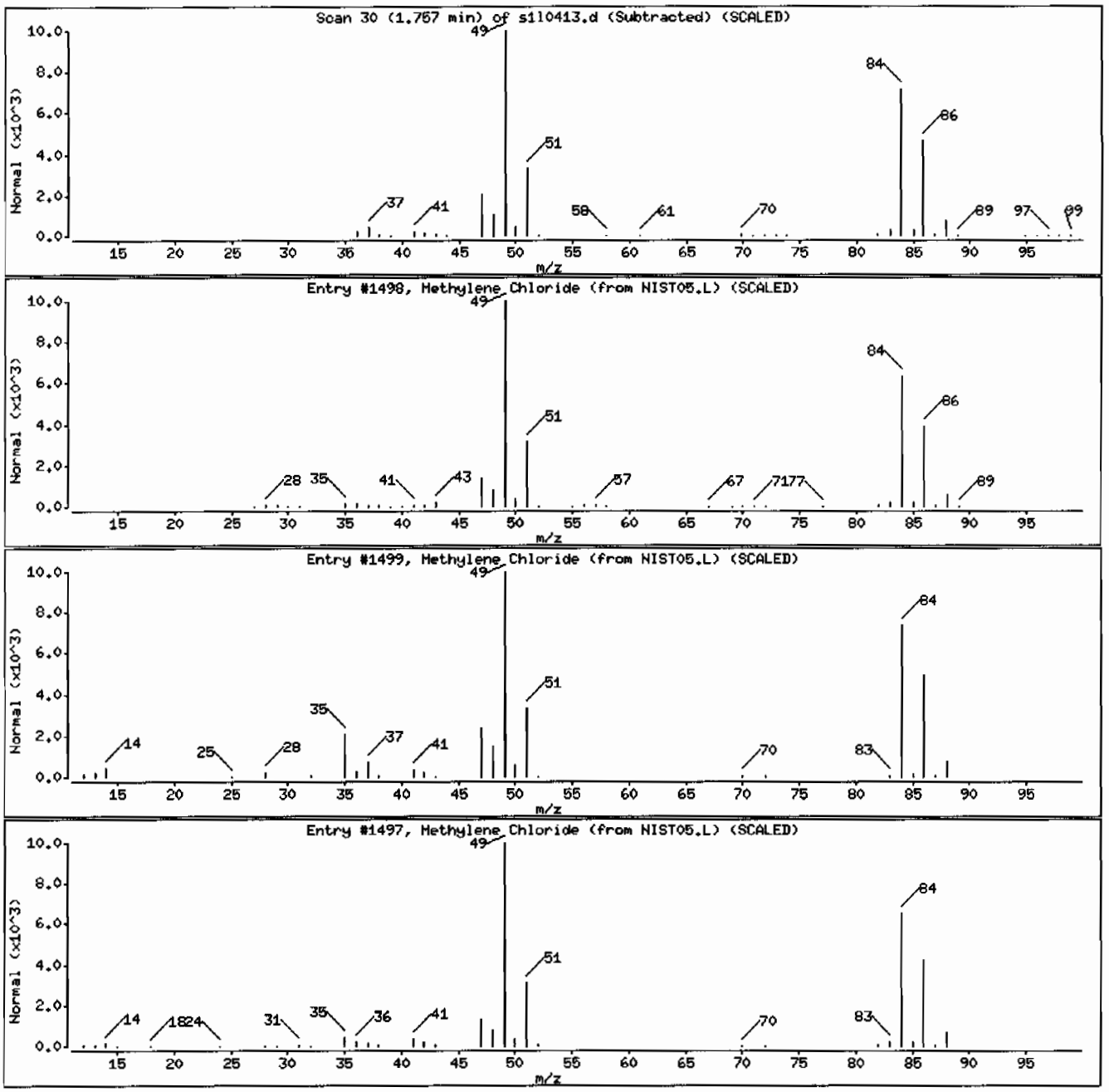

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867 Instrument: MSD1.i

Sample Info: |2415400041926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5,9-Dodecadien-2-one, 6,10-dimethyl-, (E	1000132-10-9	NIST05.L	62957	53	C14H240	208
Propanal, 2-methyl-	78-84-2	NIST05.L	669	30	C4H80	72
Propanal, 2-methyl-	78-84-2	NIST05.L	672	30	C4H80	72

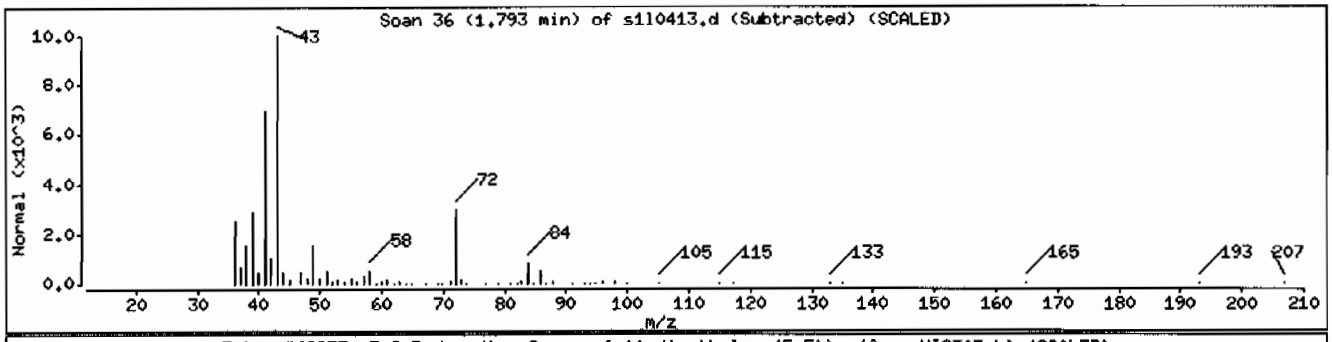

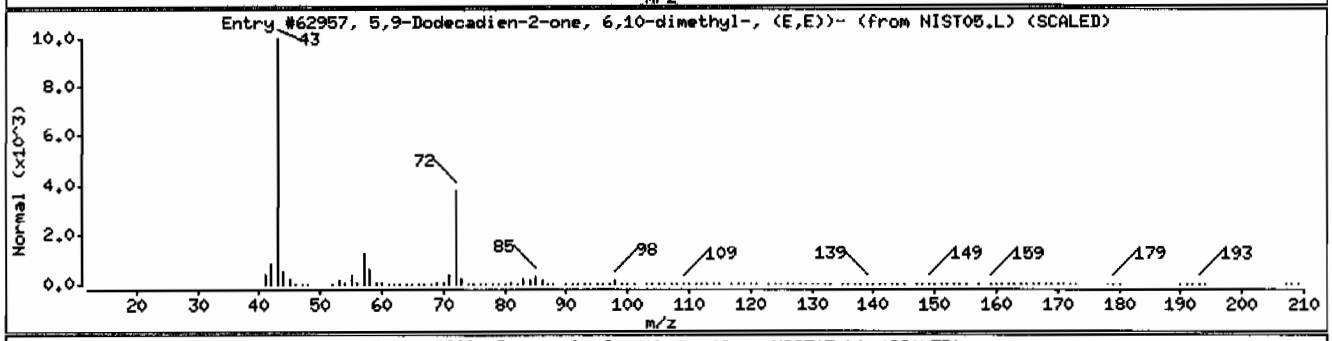

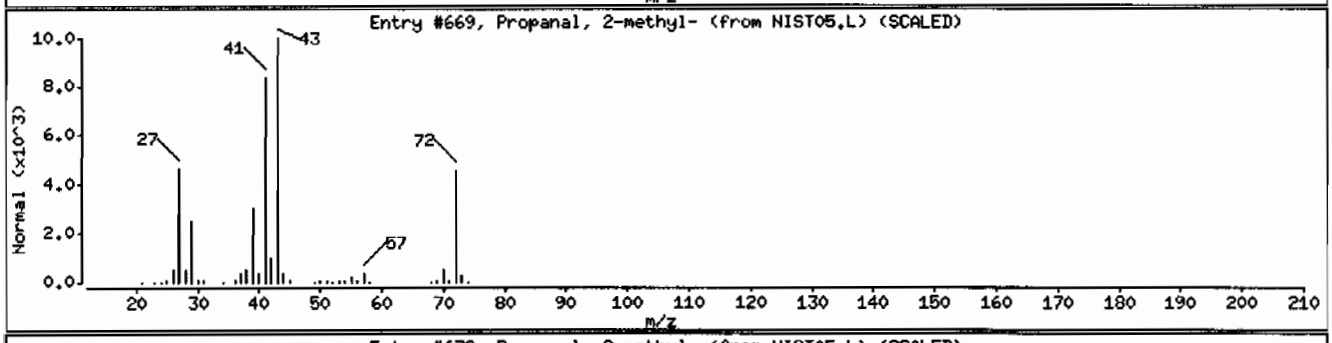

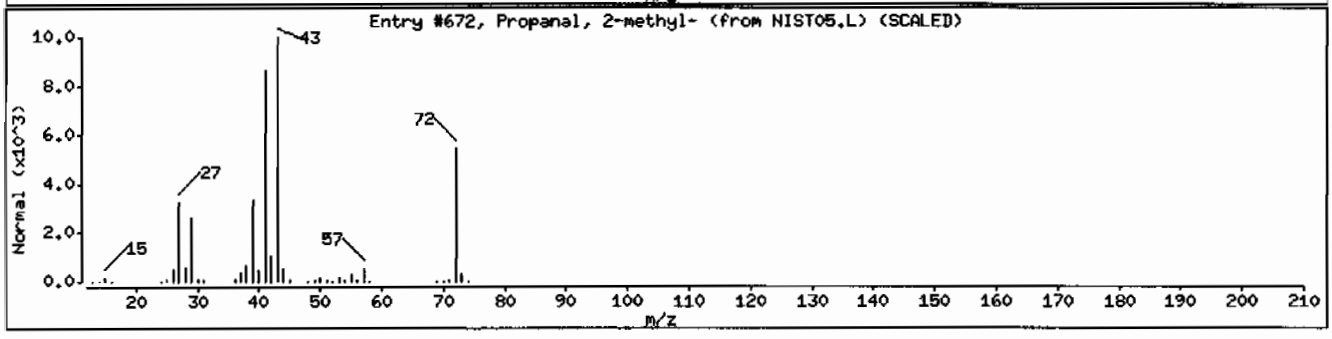

Data File: /chem/MSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867

Instrument: MSD1.i

Sample Info: |2415400041926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

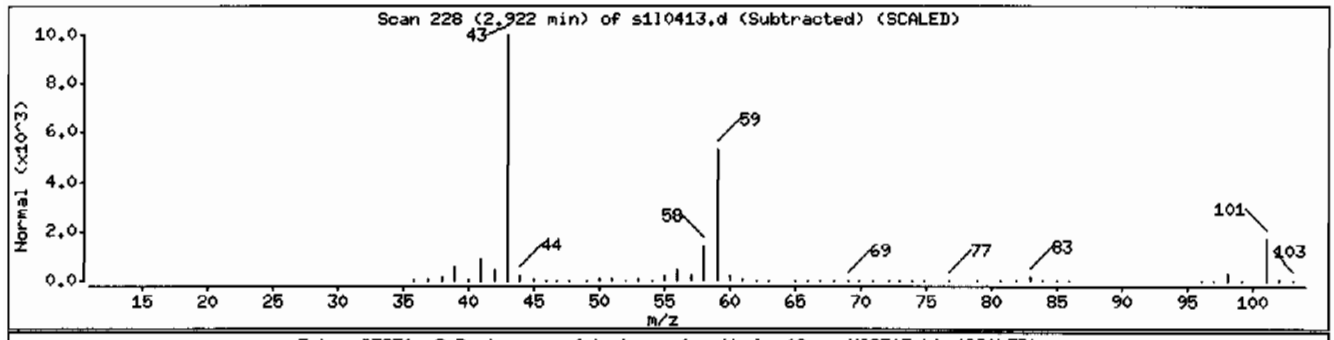

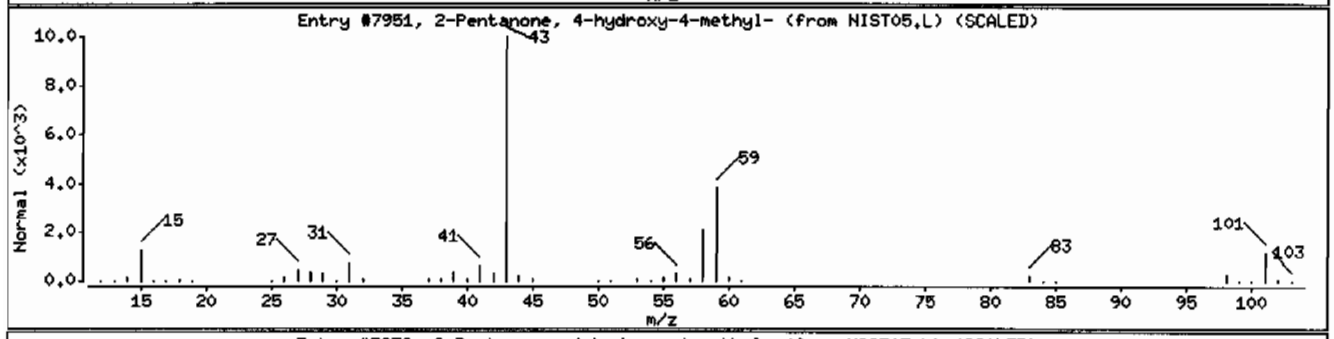

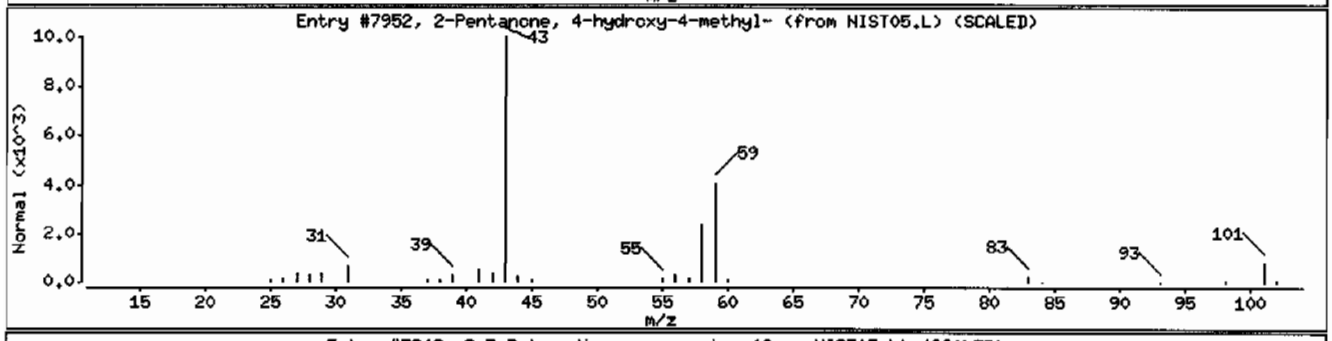

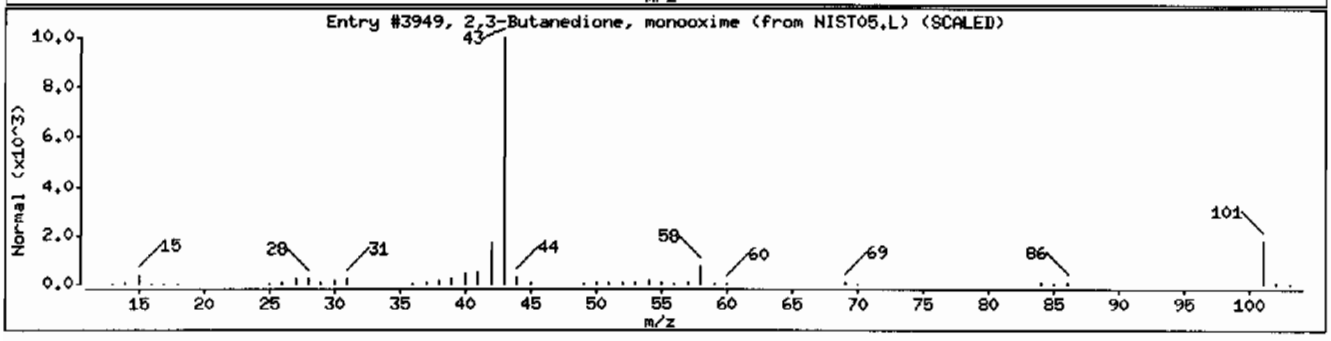

Data File: /chem/HSD1.i/s120409.b/s110413.d

Date : 04-DEC-2009 13:27

Client ID: RE03-09-13867 Instrument: HSD1.i

Sample Info: 1241540004192661011SVMF11LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	98	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	91	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	90	C18H35NO	281

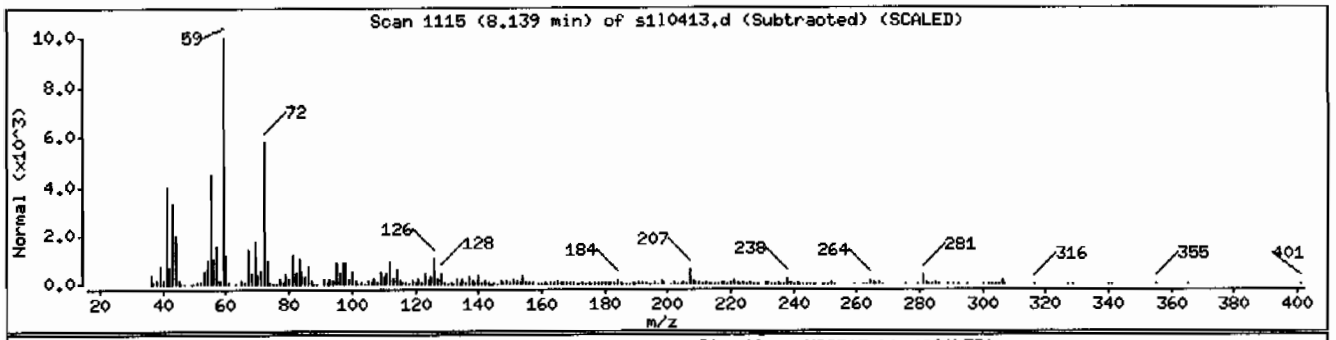

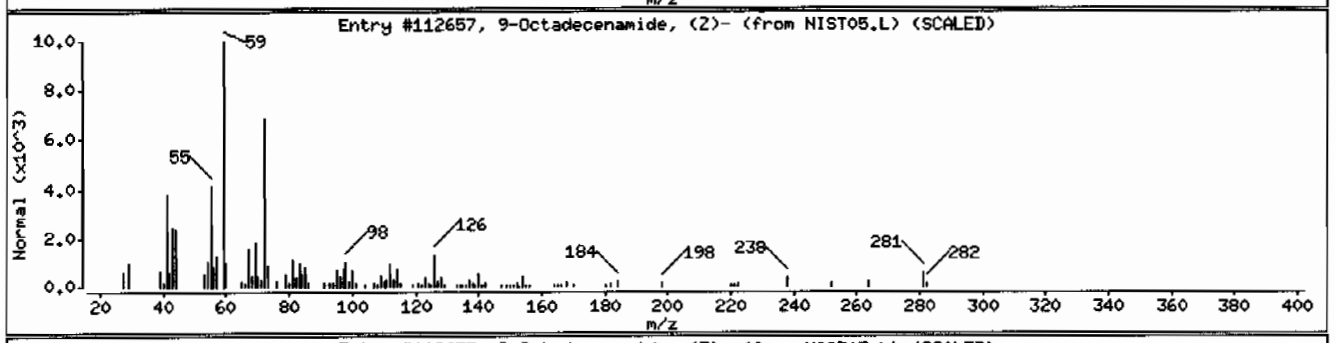

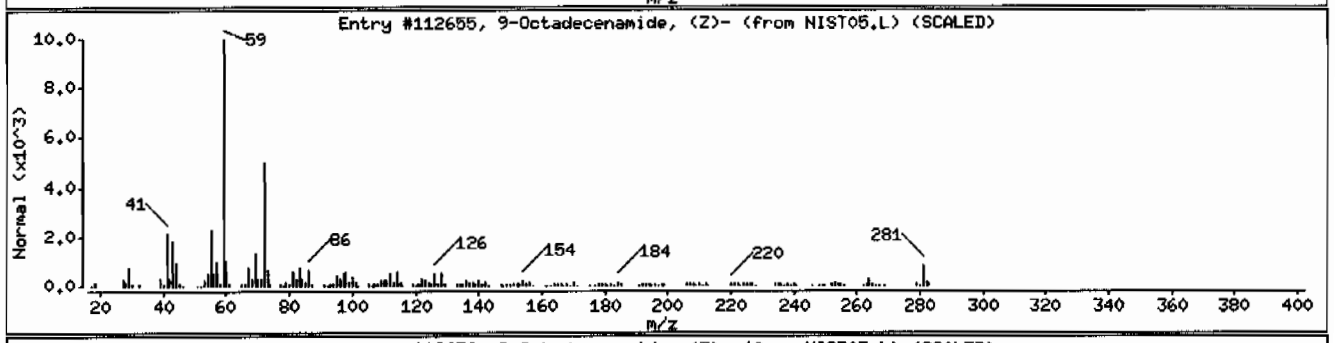

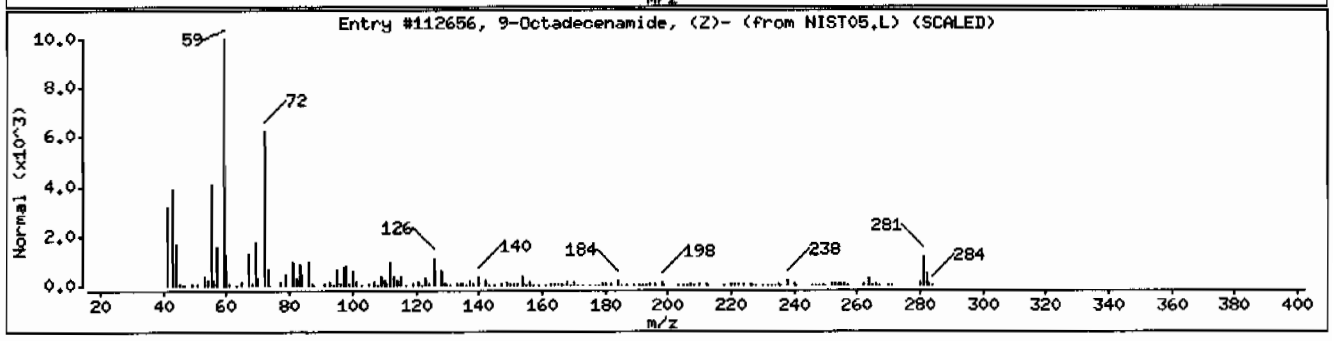

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:04	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110412.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.1	375
108-95-2	Phenol	U	375	ug/kg	75.1	375
95-57-8	2-Chlorophenol	U	375	ug/kg	75.1	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.1	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.1	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.1	375
83-32-9	Acenaphthene	J	29.8	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.9	375
129-00-0	Pyrene		339	ug/kg	11.3	37.5
110-86-1	Pyridine	U	375	ug/kg	75.1	375
62-53-3	Aniline	U	375	ug/kg	113	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.1	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.1	375
100-51-6	Benzyl alcohol	U	375	ug/kg	113	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.1	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.1	375
95-48-7	o-Cresol	U	375	ug/kg	75.1	375
65794-96-9	m,p-Cresols	U	375	ug/kg	113	375
67-72-1	Hexachloroethane	U	375	ug/kg	75.1	375
98-95-3	Nitrobenzene	U	375	ug/kg	75.1	375
78-59-1	Isophorone	U	375	ug/kg	75.1	375
88-75-5	2-Nitrophenol	U	375	ug/kg	75.1	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.1	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.1	375
65-85-0	Benzoic acid	U	751	ug/kg	188	751
91-20-3	Naphthalene	U	37.5	ug/kg	11.3	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	75.1	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.1	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.51	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.1	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.1	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.1	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	375	ug/kg	75.1	375
99-09-2	3-Nitroaniline	U	375	ug/kg	75.1	375

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:04	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110412.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	375	ug/kg	75.1	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.3	37.5
51-28-5	2,4-Dinitrophenol	U	751	ug/kg	143	751
132-64-9	Dibenzofuran	U	375	ug/kg	75.1	375
84-66-2	Diethylphthalate	U	375	ug/kg	75.1	375
86-73-7	Fluorene	J	26.2	ug/kg	11.3	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.1	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.1	375
100-01-6	4-Nitroaniline	U	375	ug/kg	113	375
	p-Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	75.1	375
122-66-7	Azobenzene	U	375	ug/kg	75.1	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.1	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.1	375
85-01-8	Phenanthrene		247	ug/kg	11.3	37.5
120-12-7	Anthracene		56.8	ug/kg	7.51	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.1	375
206-44-0	Fluoranthene		408	ug/kg	11.3	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.1	375
56-55-3	Benzo(a)anthracene		156	ug/kg	11.3	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	113	375
218-01-9	Chrysene		187	ug/kg	11.3	37.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.1	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.1	375
205-99-2	Benzo(b)fluoranthene		335	ug/kg	11.3	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.3	37.5
50-32-8	Benzo(a)pyrene		143	ug/kg	11.3	37.5
193-39-5	Indeno(1,2,3-cd)pyrene		71.5	ug/kg	11.3	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.3	37.5
191-24-2	Benzo(ghi)perylene		107	ug/kg	11.3	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.1	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	257	ug/kg		J
	Unknown Aldol Condensate	2.92	462	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13868	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.1	**Dilution:**	1
Run Date:	12/04/2009 13:04	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110412.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	10.33	191	ug/kg	98	NJ
	Unknown	11.77	187	ug/kg		J
	Unknown	12.44	158	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110412.d
Lab Smp Id: 241540003 Client Smp ID: RE03-09-13868
Inj Date : 04-DEC-2009 13:04
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540003|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	11.36220	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	383935	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1529552	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	876530	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1550954	40.0000	
* 91 Chrysene-d12	240	8.639	8.633	(1.000)	1399501	40.0000	
* 98 Perylene-d12	264	10.081	10.069	(1.000)	1308963	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	635090	63.3302	2380
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	781906	64.1519	2410
$ 20 Nitrobenzene-d5	82	4.252	4.251	(0.895)	355065	35.2251	1320
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.916)	834084	39.7318	1490
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	219898	89.8429	3370
$ 81 p-Terphenyl-d14	244	7.898	7.892	(0.914)	979649	44.5949	1670

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
47 Acenaphthene	154	6.016	6.022	(1.003)	16049	0.79384	29.8(a)
79 Pyrene	202	7.845	7.845	(0.908)	335340	9.01712	338
53 Fluorene	166	6.369	6.369	(1.062)	16467	0.69853	26.2(a)
68 Phenanthrene	178	6.992	6.992	(1.002)	231749	6.57505	247
69 Anthracene	178	7.022	7.028	(1.006)	54183	1.51158	56.8
76 Fluoranthene	202	7.710	7.704	(1.104)	370129	10.8789	408
89 Benzo(a)anthracene	228	8.628	8.628	(0.999)	139031	4.14298	156
92 Chrysene	228	8.657	8.657	(1.002)	156310	4.98354	187
95 Benzo(b)fluoranthene	252	9.616	9.610	(0.954)	222886	8.93048	335
97 Benzo(a)pyrene	252	10.004	10.004	(0.992)	113064	3.81592	143
99 Indeno(1,2,3-cd)pyrene	276	11.657	11.663	(1.156)	68706	1.90506	71.5
101 Benzo(ghi)perylene	276	12.157	12.163	(1.206)	70353	2.86023	107

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s110412.d
Report Date: 12/04/2009 16:42
Lab. ID: 241540003 SampleType: SAMPLE
Injection Date: 04-DEC-2009 13:04
Operator: AMY Instrument: MSD1.i
Sample Info: |241540003|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	39411	3.62	3.68	80-120	100	(T)
93	396	3.66	3.69	418-478	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	46591	4.25	4.13	80-120	100	(T)
42	29540	4.25	4.13	44-104	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	155960	6.00	5.77	80-120	100	(T)
164	876530	6.00	5.77	0- 40	562	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	113260	6.00	5.82	80-120	100	(T)
63	1571	6.00	5.82	45-105	1	(QT)
47 Acenaphthene				CAS#: 83-32-9		
154	16049	6.02	6.02	80-120	100	( )
153	17989	6.02	6.02	73-133	112	( )
152	8565	6.02	6.02	18- 78	53	( )
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	112700	6.00	6.10	80-120	100	(T)
89	1673	6.00	6.10	32- 92	1	(QT)
63	1571	6.00	6.10	15- 75	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	16467	6.37	6.37	80-120	100	( )
165	13981	6.37	6.37	64-124	85	( )
167	2529	6.37	6.37	0- 43	15	( )
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	13401	6.53	6.67	80-120	100	(T)
141	86164	6.53	6.67	50-110	643	(QT)
250	27466	6.53	6.67	68-128	205	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	231749	6.99	6.99	80-120	100	( )
179	36517	6.99	6.99	0- 45	16	( )
176	42292	6.99	6.99	0- 48	18	( )
69 Anthracene			CAS#: 120-12-7			
178	54183	7.02	7.03	80-120	100	( )
179	11493	7.02	7.03	0- 46	21	( )
176	9849	7.02	7.03	0- 48	18	( )
76 Fluoranthene			CAS#: 206-44-0			
202	370129	7.71	7.70	80-120	100	( )
203	65008	7.71	7.70	0- 47	18	( )
101	49723	7.70	7.70	0- 43	13	( )
79 Pyrene			CAS#: 129-00-0			
202	335340	7.85	7.85	80-120	100	( )
200	69208	7.85	7.85	0- 51	21	( )
101	58985	7.85	7.85	0- 46	18	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	139031	8.63	8.63	80-120	100	( )
226	34507	8.63	8.63	0- 55	25	( )
229	45450	8.63	8.63	0- 49	33	( )
92 Chrysene			CAS#: 218-01-9			
228	156310	8.66	8.66	80-120	100	( )
229	34710	8.66	8.66	0- 49	22	( )
226	45050	8.66	8.66	0- 58	29	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	222886	9.62	9.61	80-120	100	( )
253	47908	9.62	9.61	0- 51	21	( )
125	34048	9.61	9.61	0- 44	15	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	222886	9.62	9.64	80-120	100	( )
253	47908	9.62	9.64	0- 52	21	( )
125	34048	9.61	9.64	0- 44	15	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	113064	10.00	10.00	80-120	100	( )
253	27661	10.00	10.00	0- 51	24	( )
125	18043	10.00	10.00	0- 48	16	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	68706	11.66	11.66	80-120	100	( )
138	21970	11.66	11.66	7- 67	32	( )
100 Dibenzo(a,h)anthracene			CAS#: 53-70-3			
278	16096	11.66	11.66	80-120	100	( )
139	1195	11.63	11.66	0- 58	7	( )
101 Benzo(ghi)perylene			CAS#: 191-24-2			
276	70353	12.16	12.16	80-120	100	( )
138	23401	12.16	12.16	7- 67	33	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110412.d
Lab Smp Id: 241540003 Client Smp ID: RE03-09-13868
Inj Date : 04-DEC-2009 13:04
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540003|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	11.36220	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2253626	40.000
* 98 Perylene-d12	10.081	3523013	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.993	385336	6.83939953	257	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.916	693408	12.3074252	462	0		0	10
Eicosane				CAS #: 112-95-8			
10.333	446960	5.07474260	190	98	NIST05.L	113488	98
Unknown				CAS #:			
11.775	438062	4.97371591	187	0		0	98
Unknown				CAS #:			
12.439	369569	4.19605400	158	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110412.d
Date : 04-DEC-2009 13:04
Client ID: RE03-09-13868
Sample Info: 1241540003192661011|SVHF11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

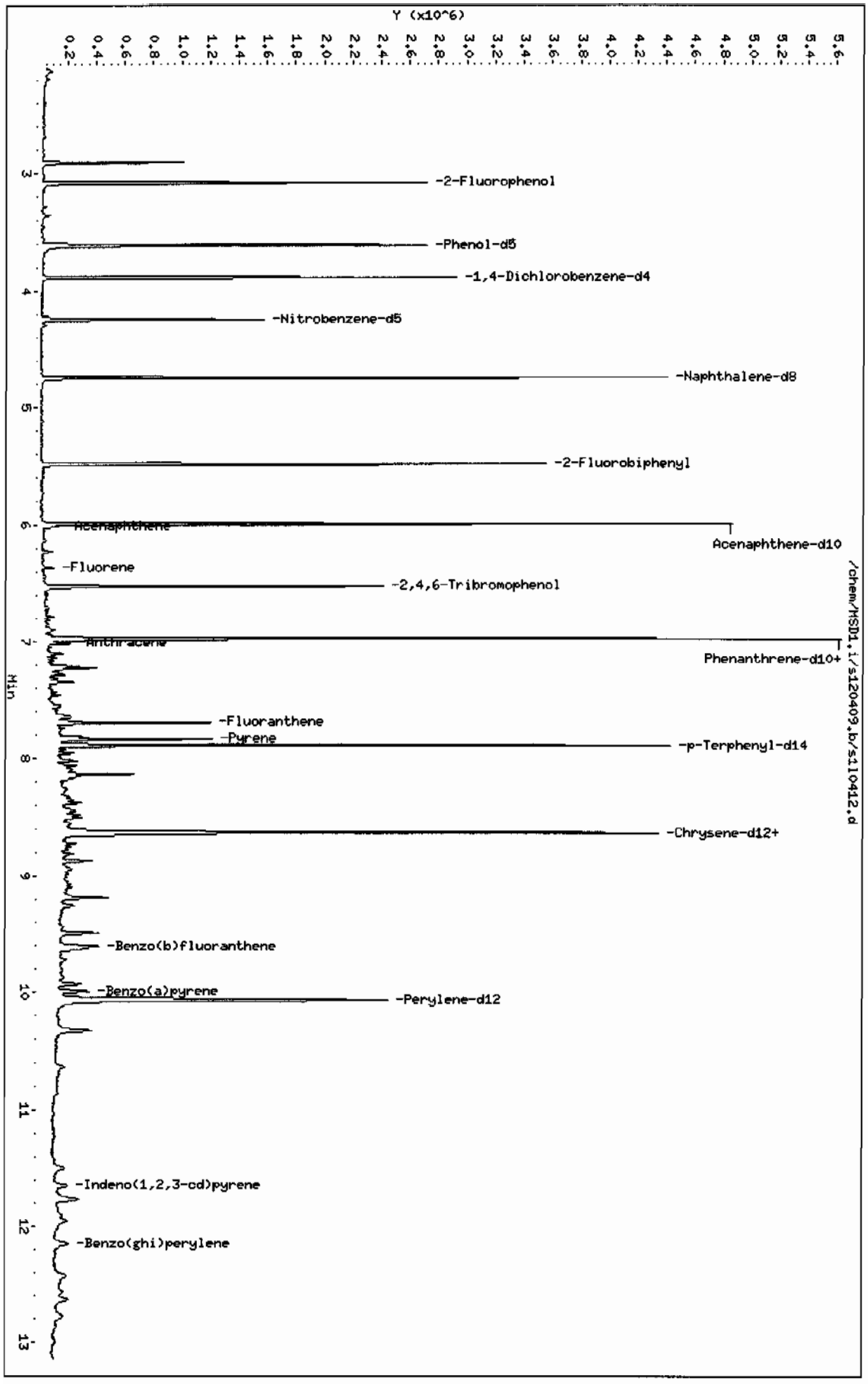

Page 1

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: 1241540003192661011|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 29.8 ug/Kg

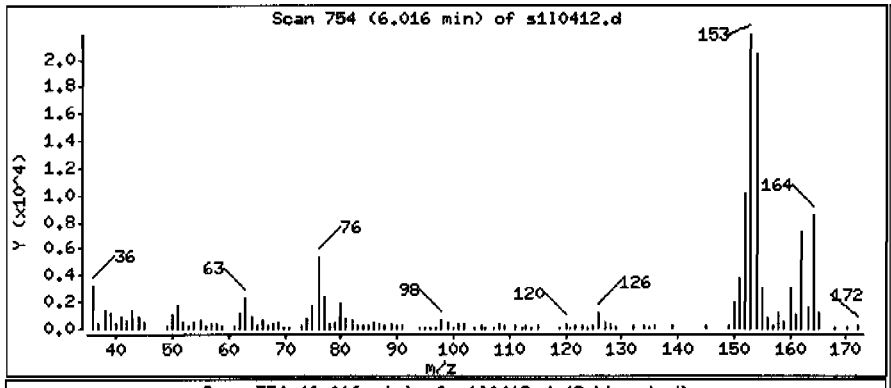

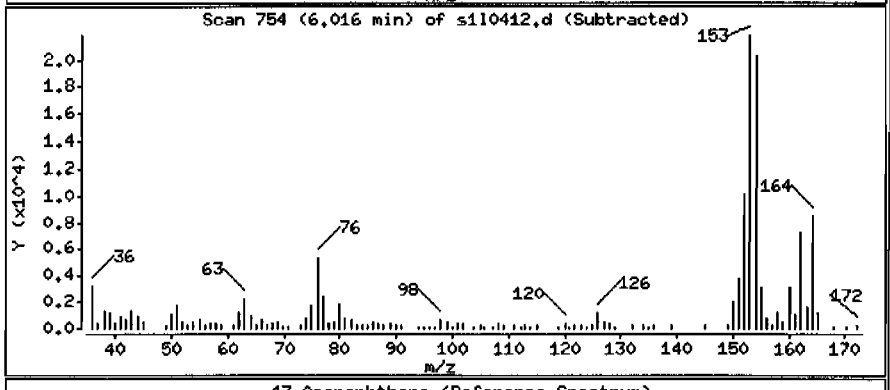

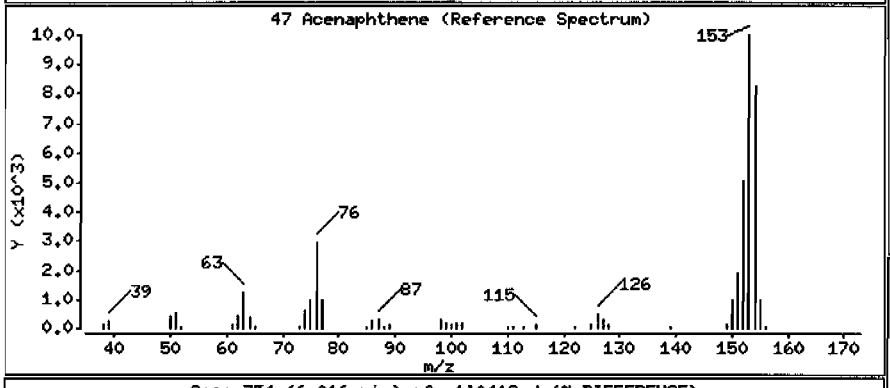

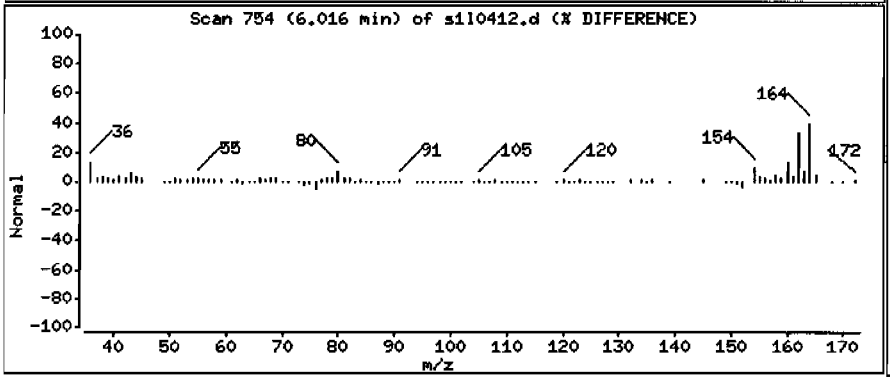

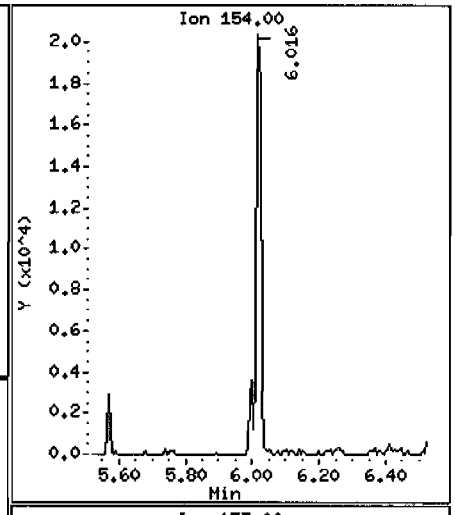

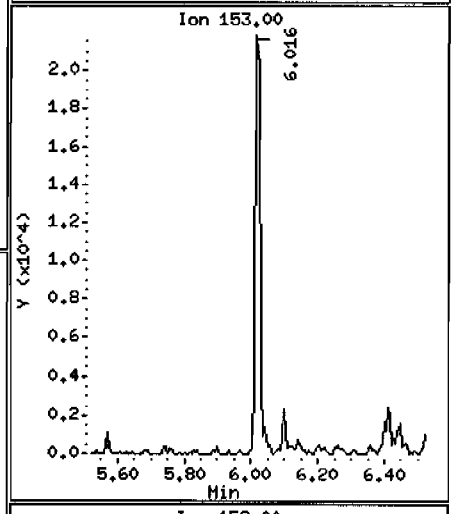

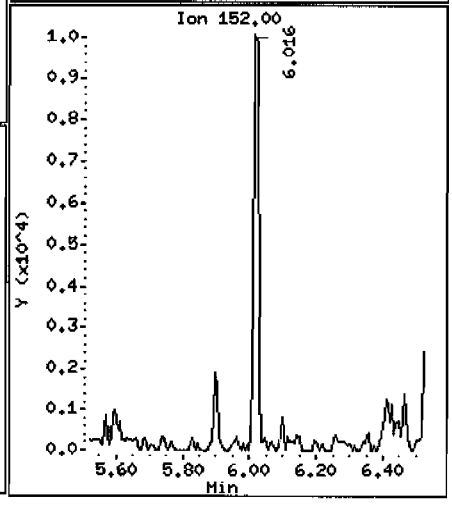

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |2415400003|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 338 ug/Kg

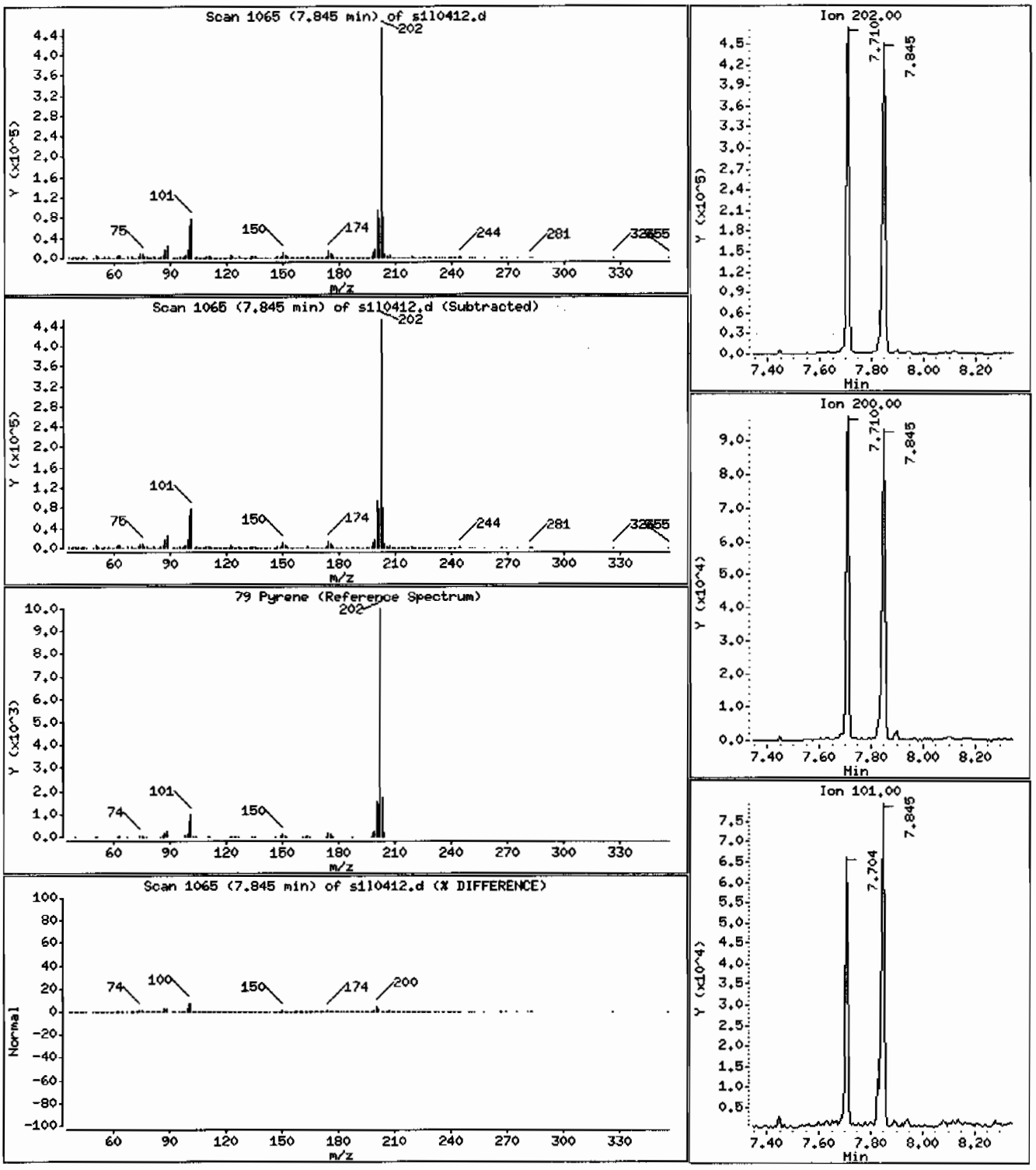

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868 Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

53 Fluorene Concentration: 26.2 ug/Kg

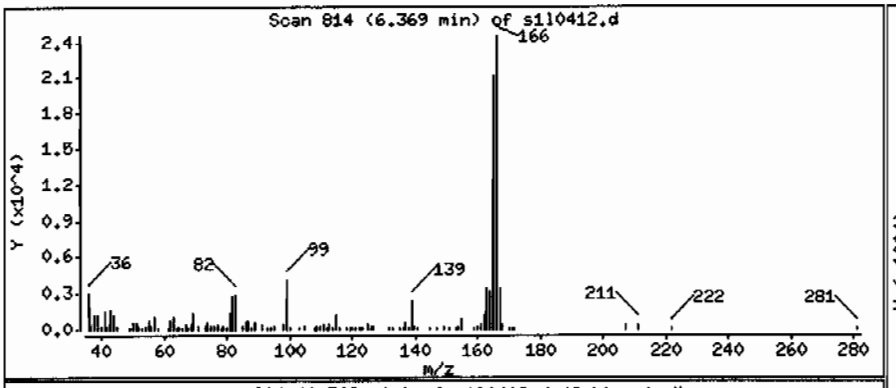

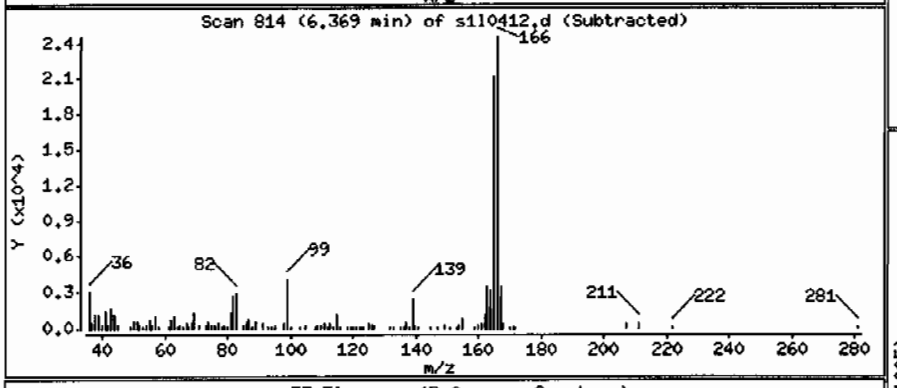

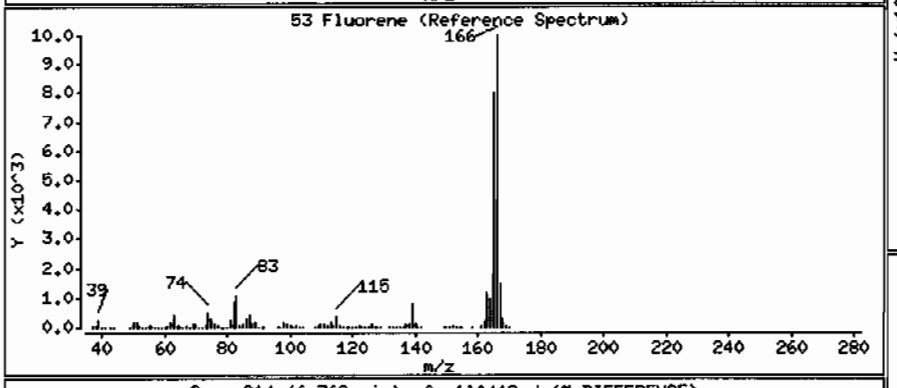

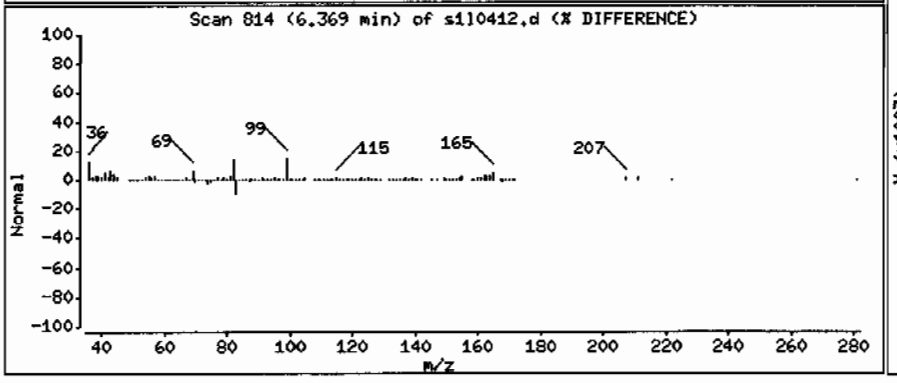

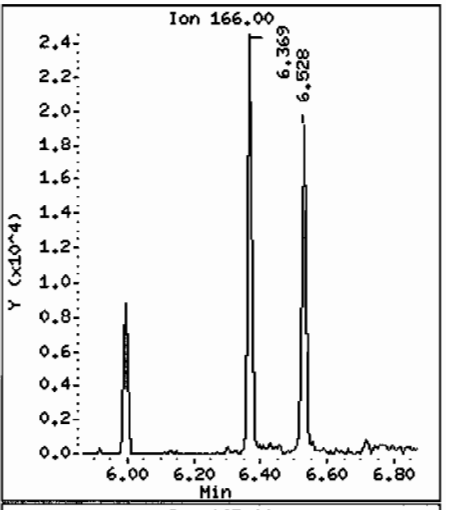

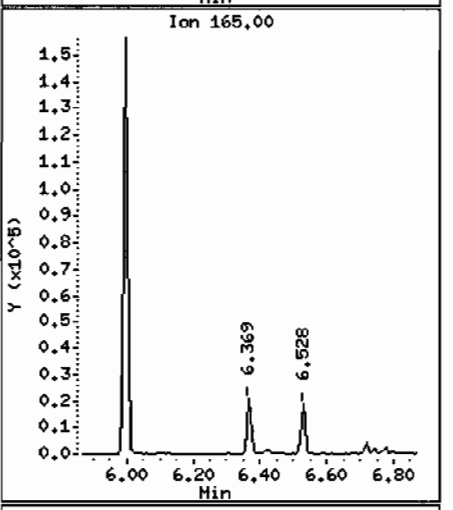

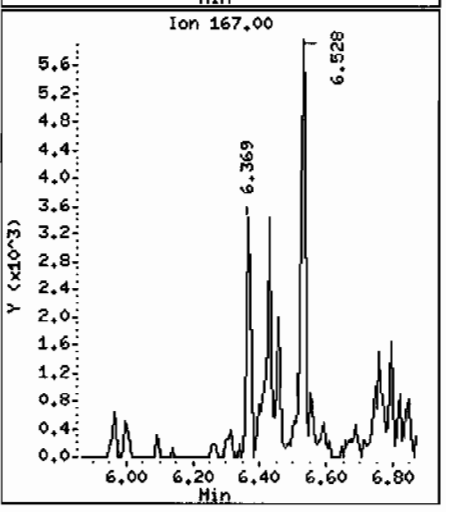

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 247 ug/Kg

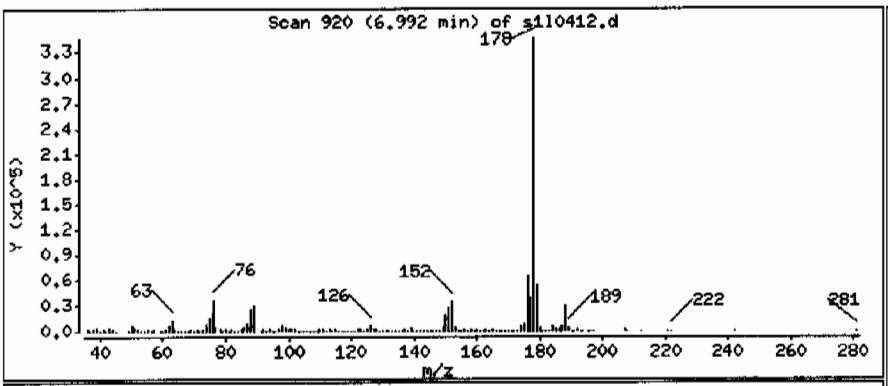

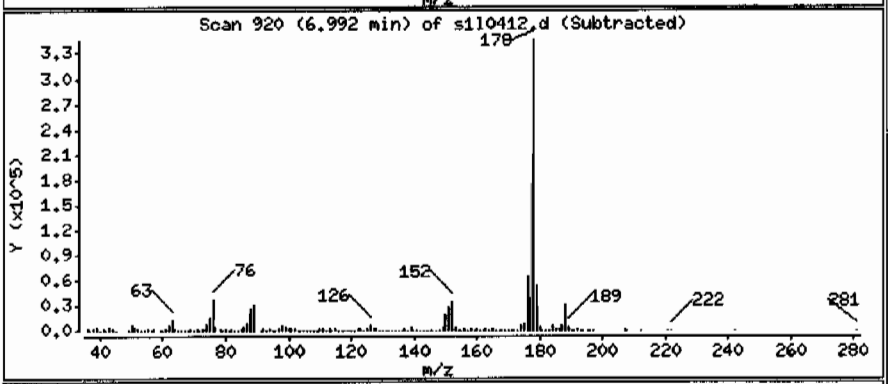

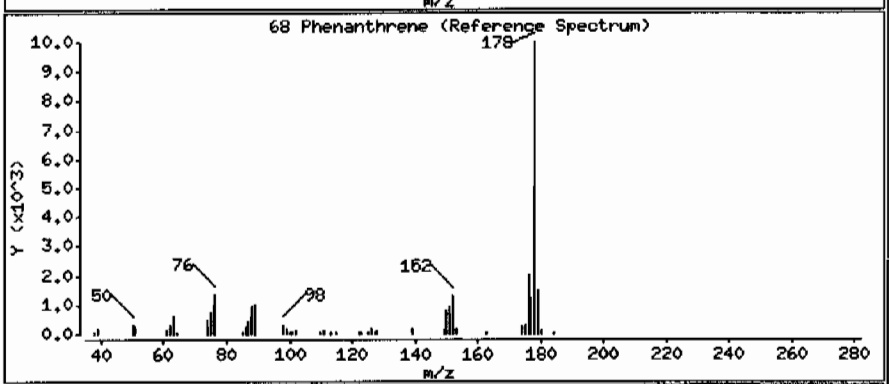

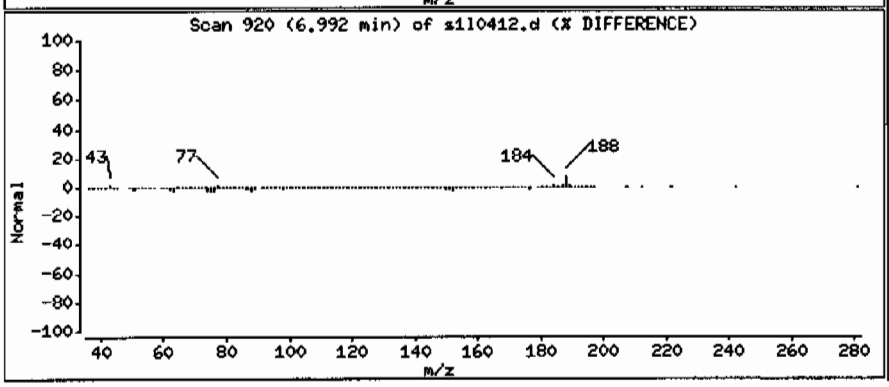

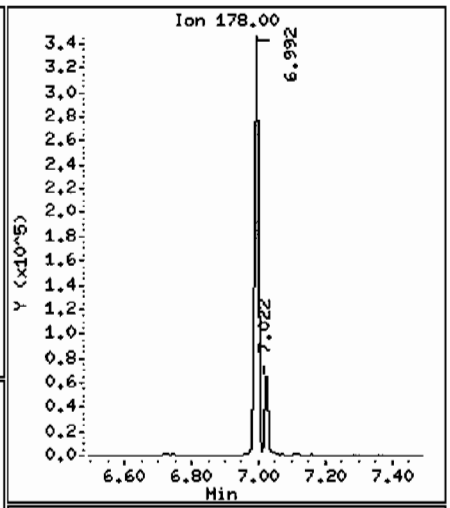

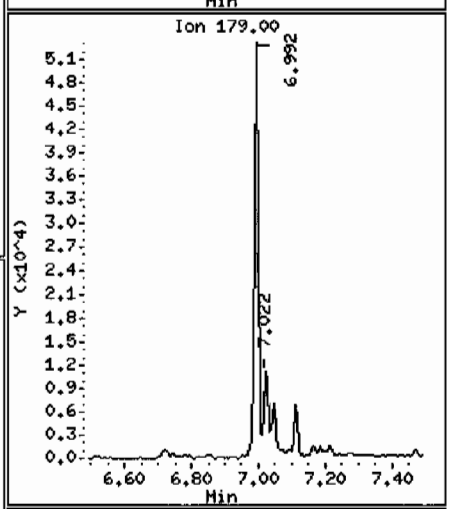

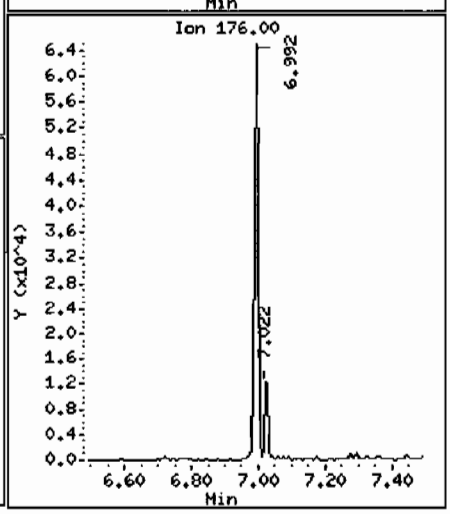

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 56.8 ug/Kg

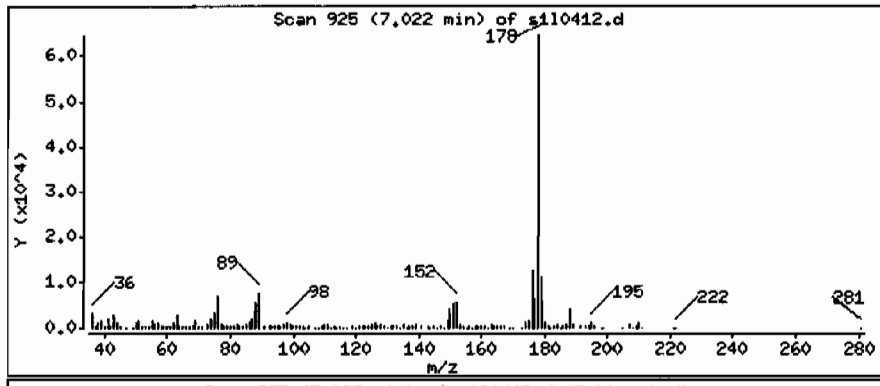

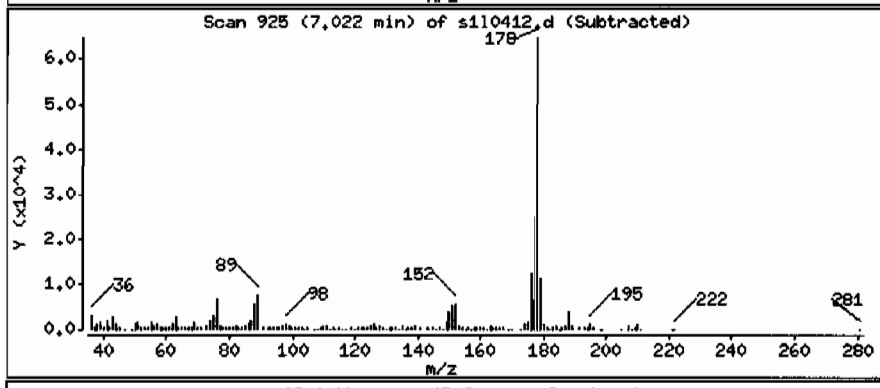

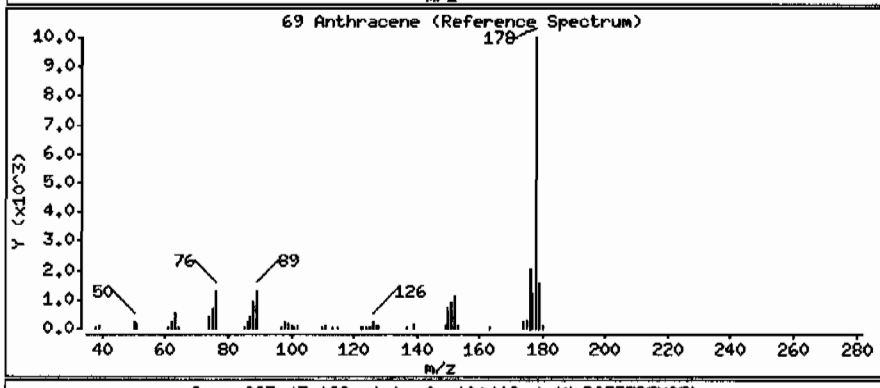

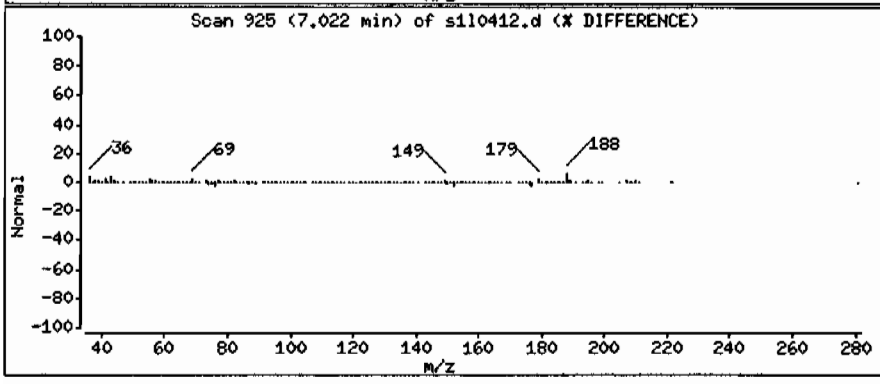

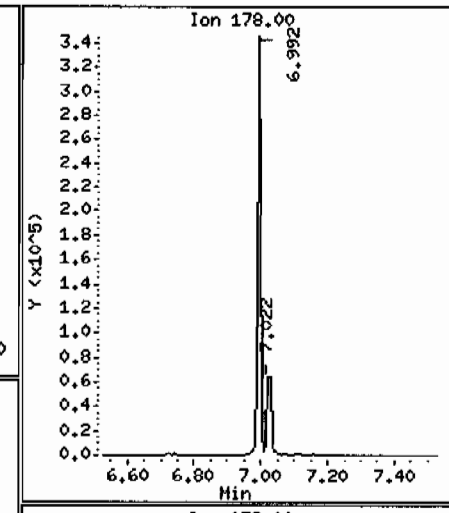

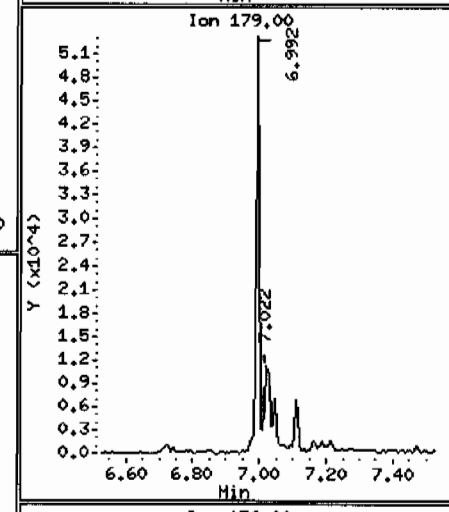

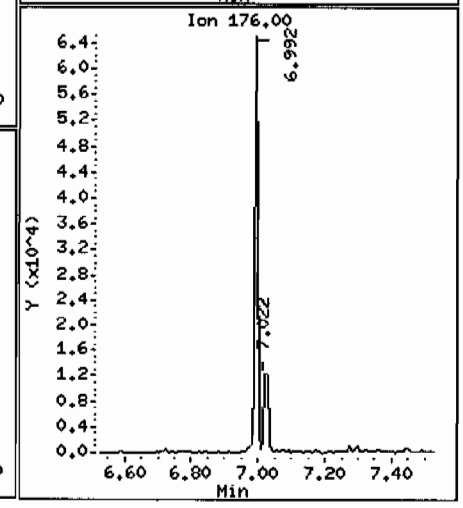

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868 Instrument: MSD1.i

Sample Info: 1241540003192661011ISVHF11LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

76 Fluoranthene Concentration: 408 ug/Kg

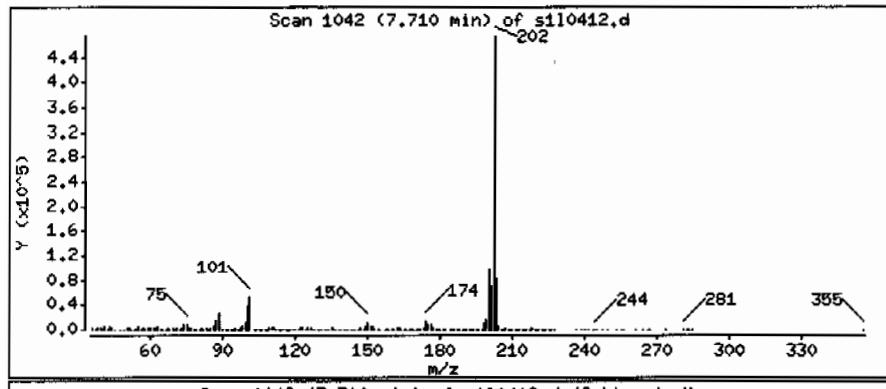

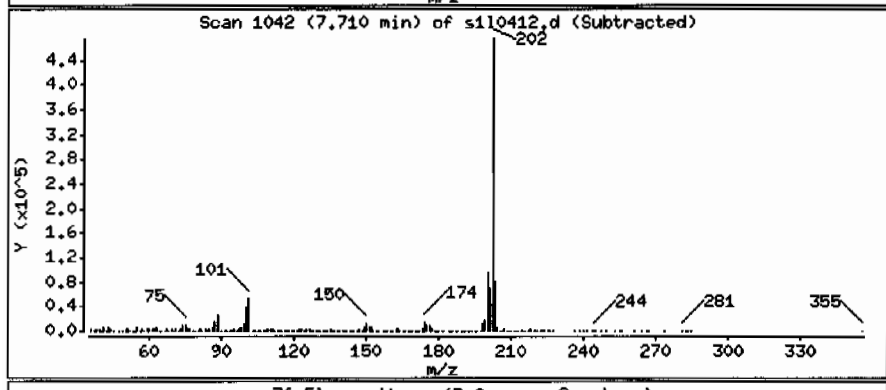

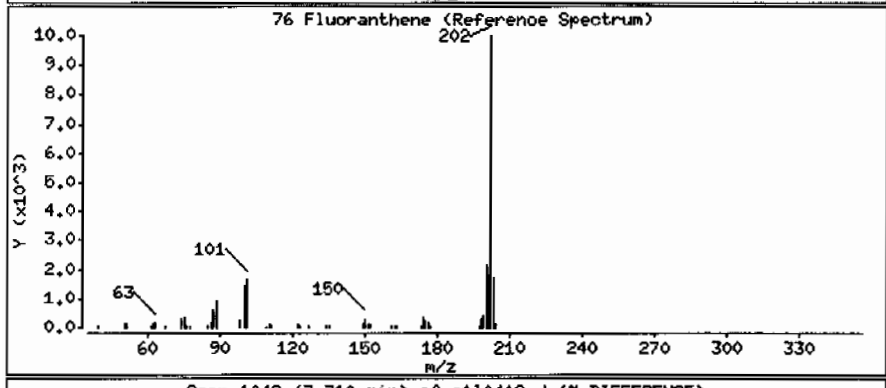

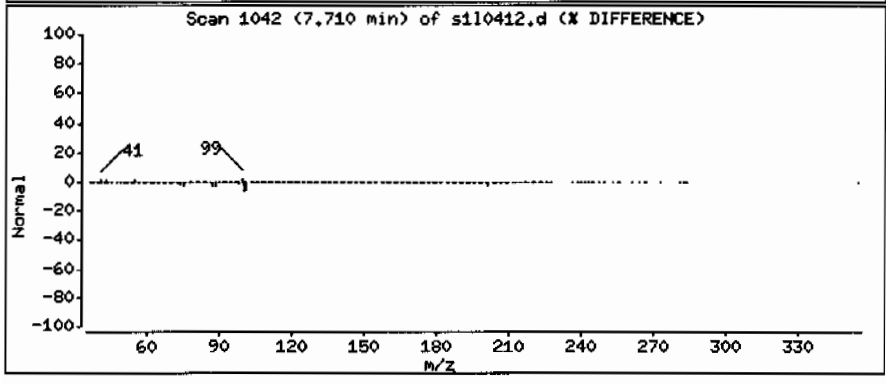

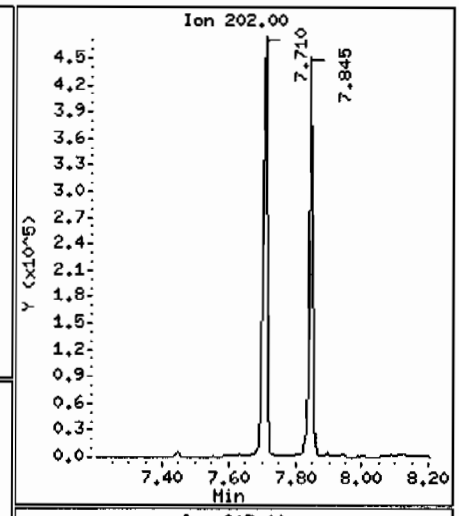

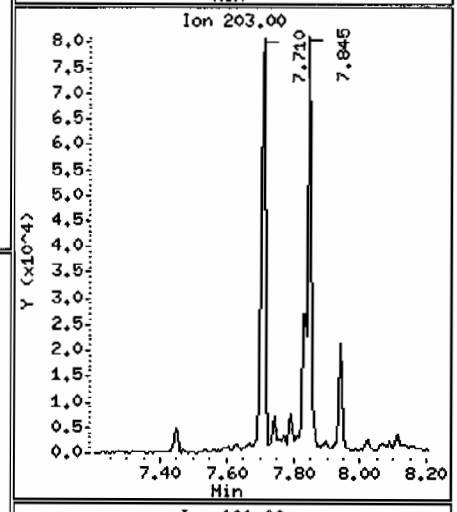

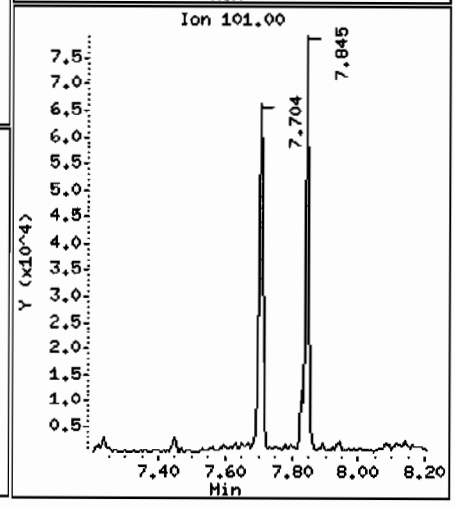

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 156 ug/Kg

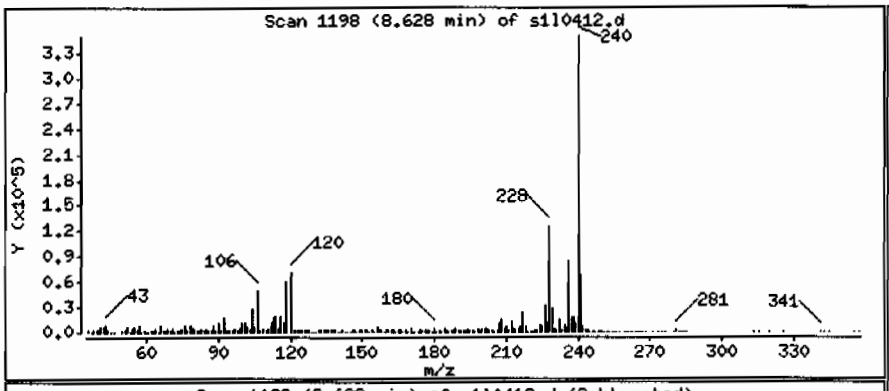

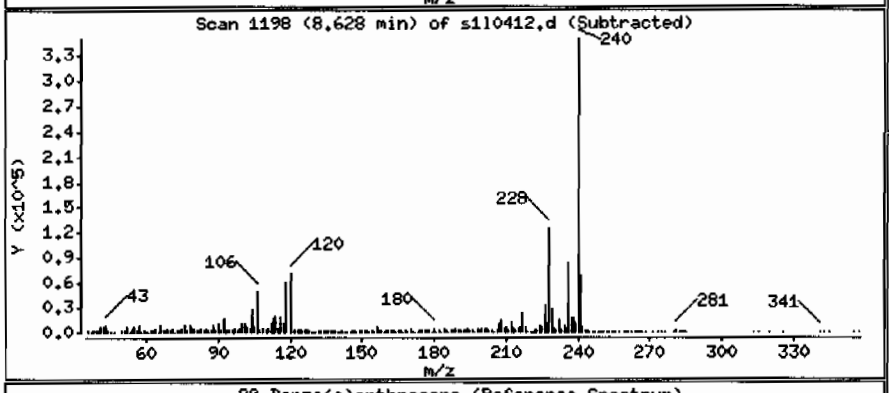

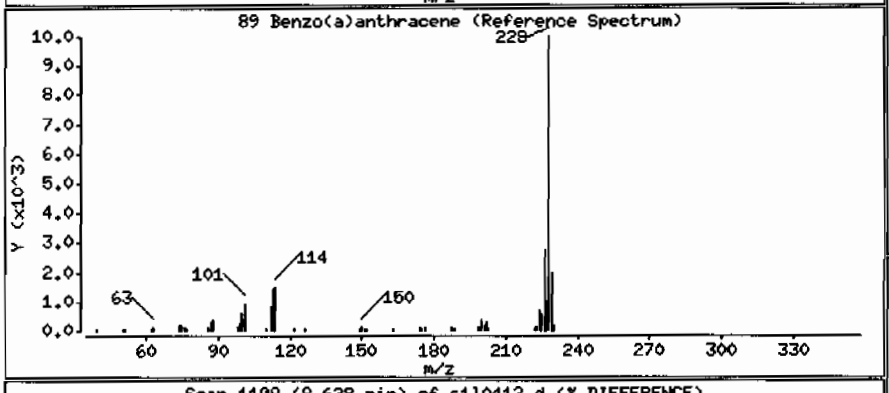

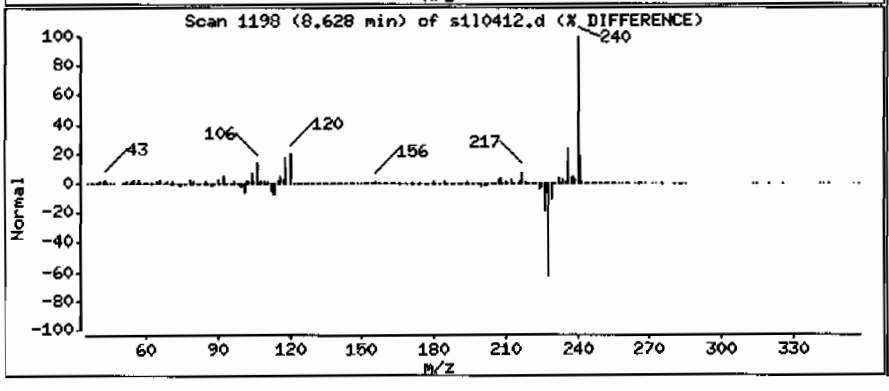

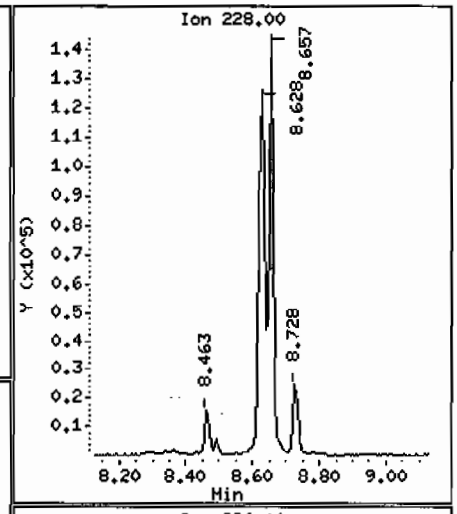

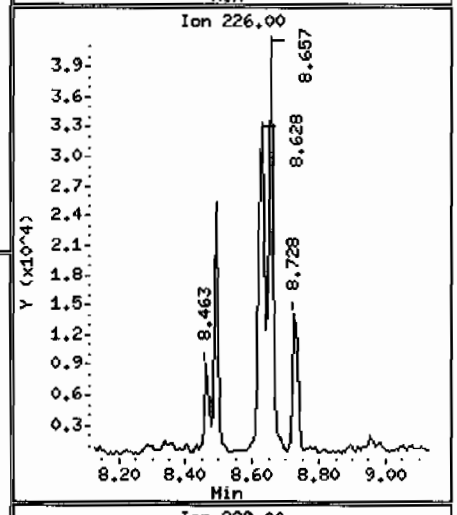

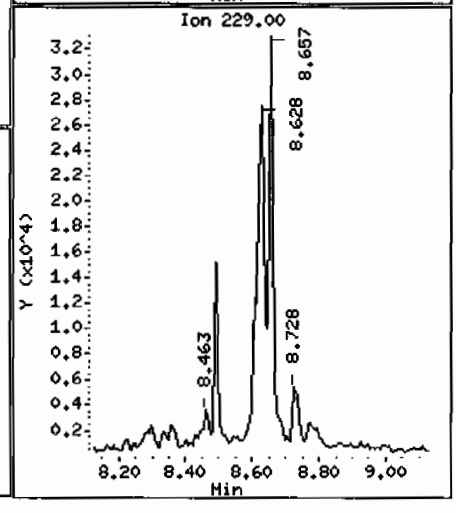

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 187 ug/Kg

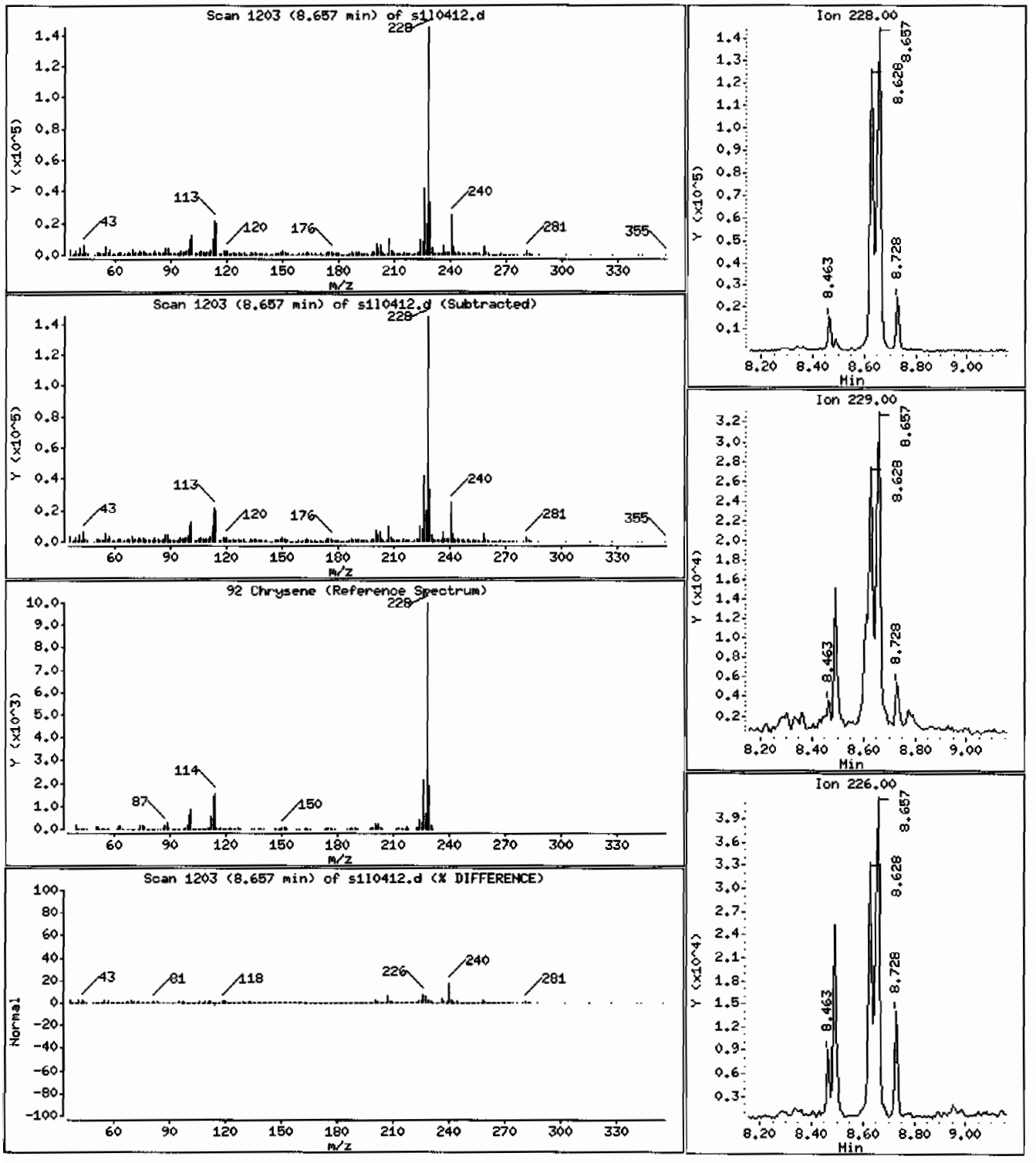

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 335 ug/Kg

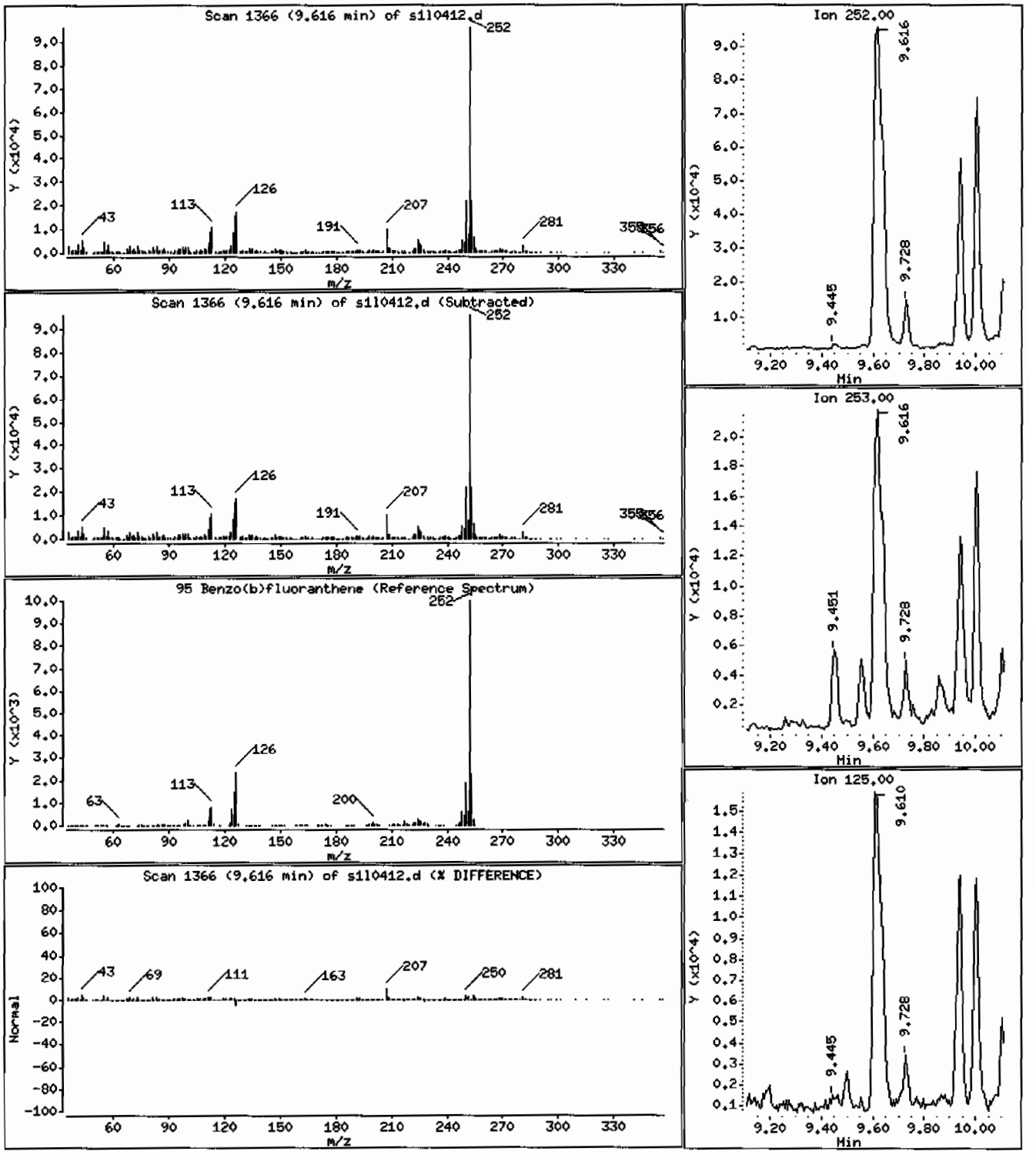

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868 Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AHY

Column phase: J&W DB-5MS Column diameter: 0.20

97 Benzo(a)pyrene Concentration: 143 ug/Kg

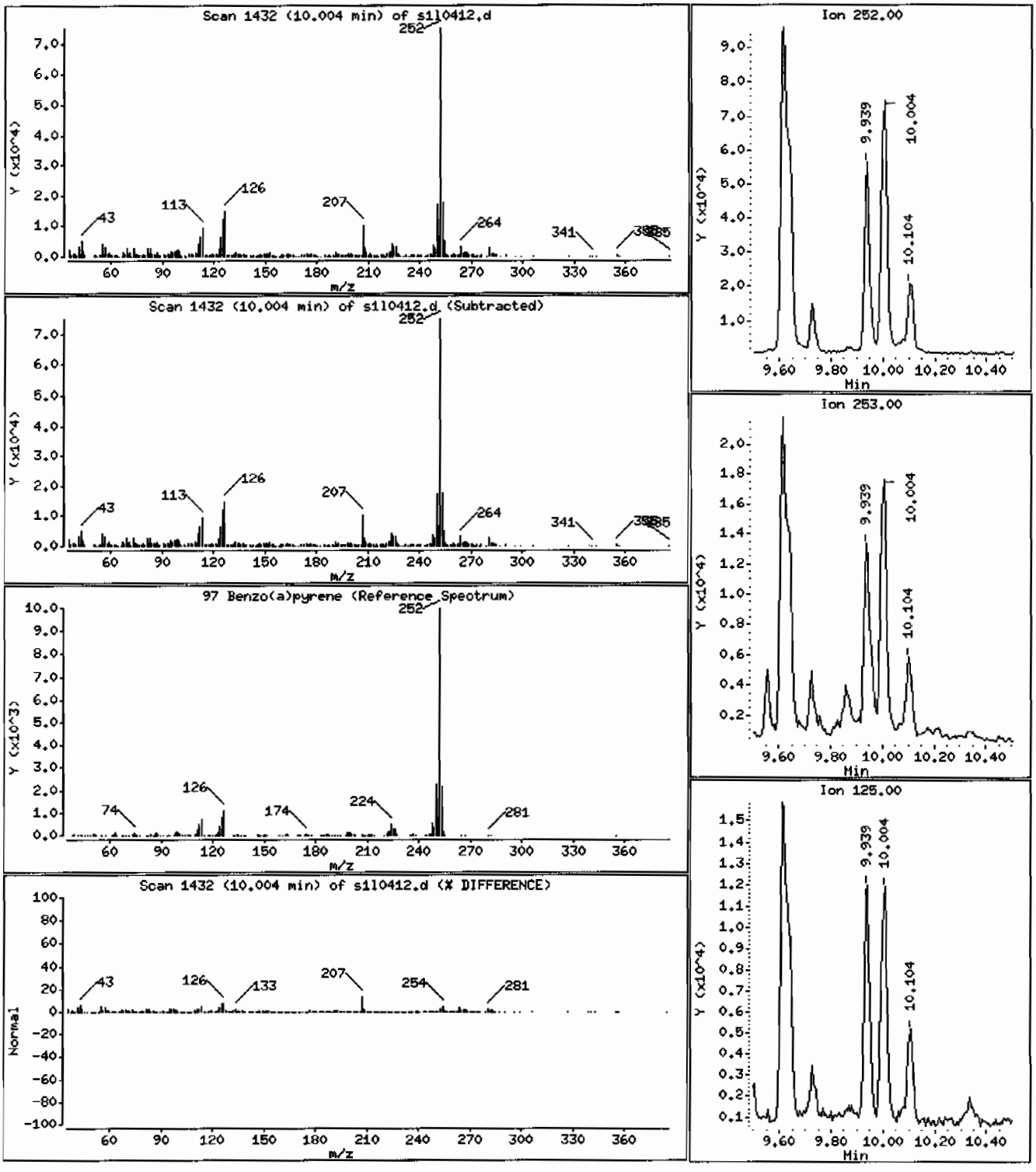

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 71.5 ug/Kg

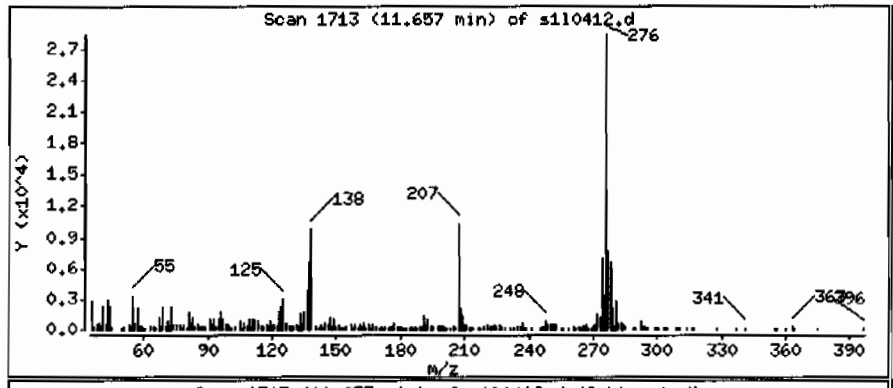

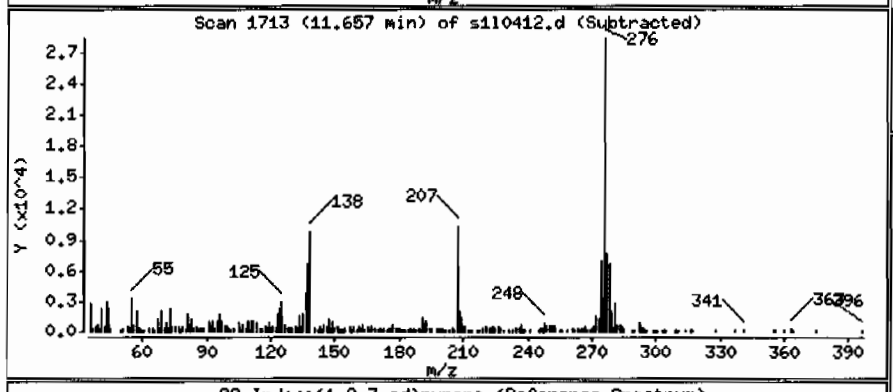

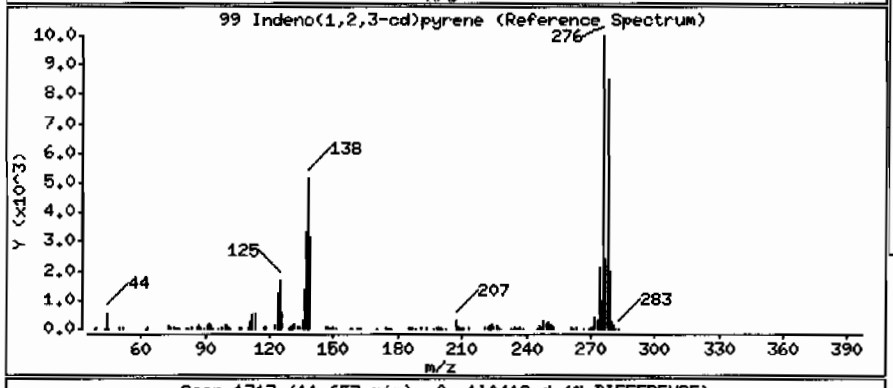

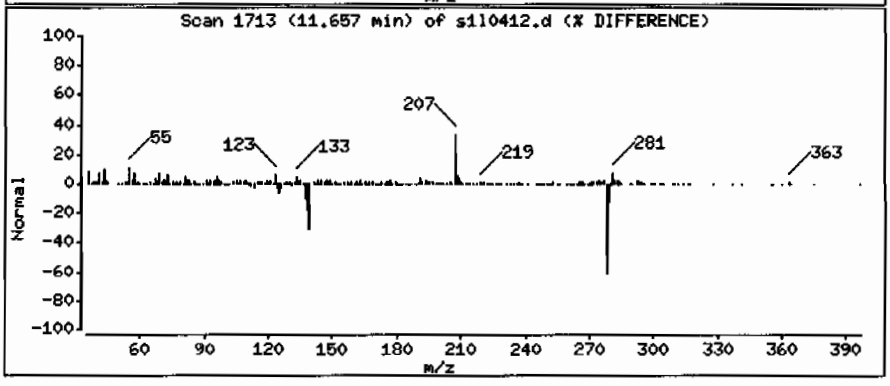

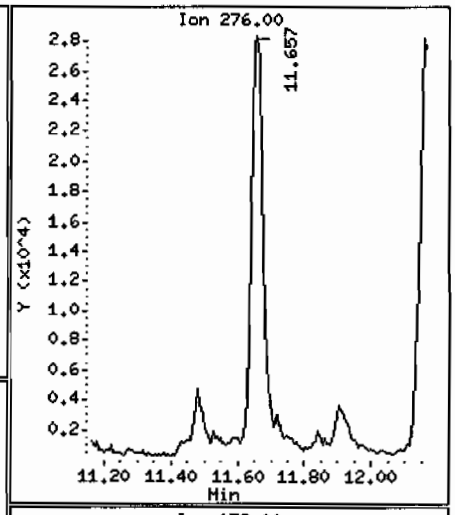

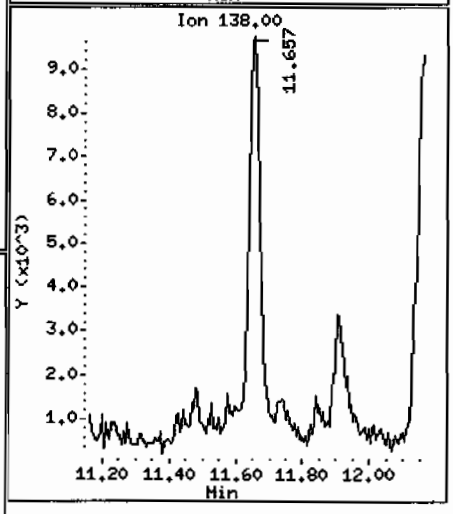

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: |24154000319266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 107 ug/Kg

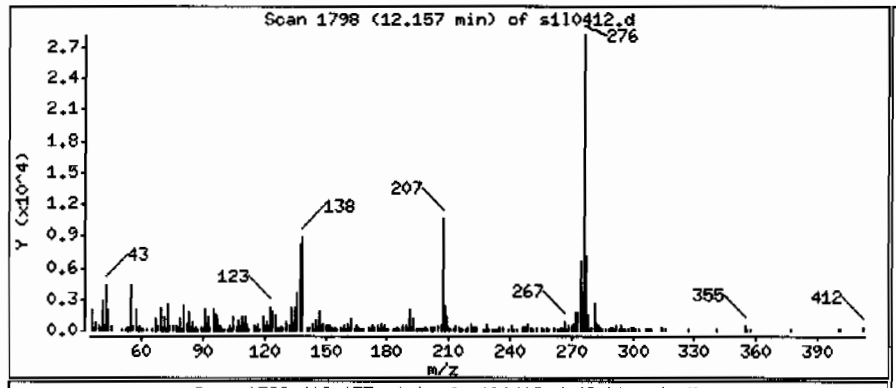

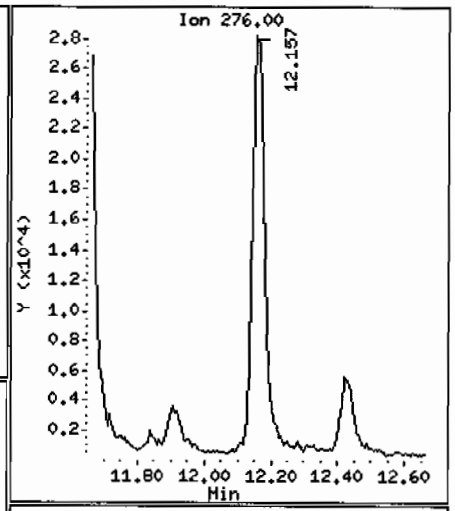

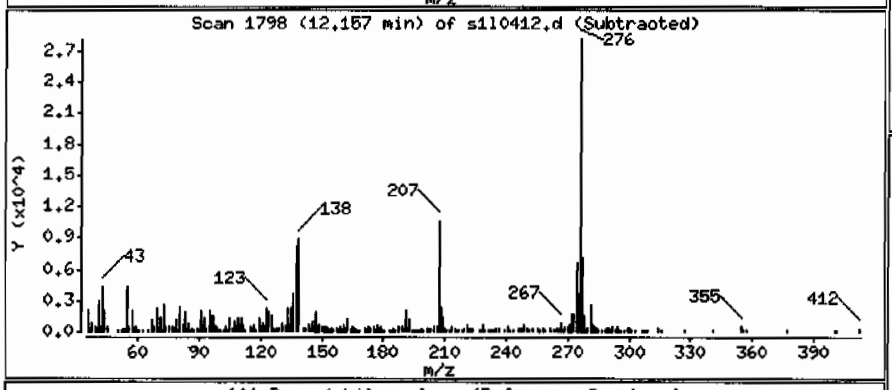

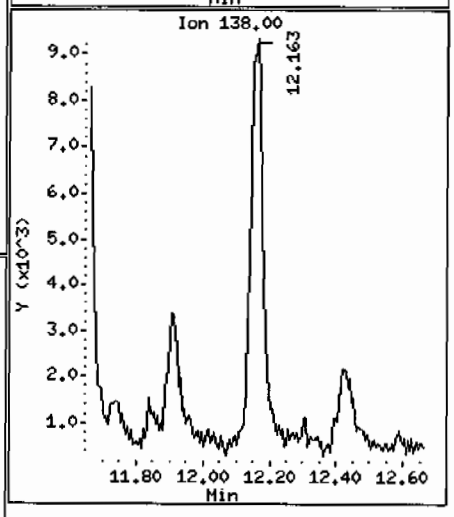

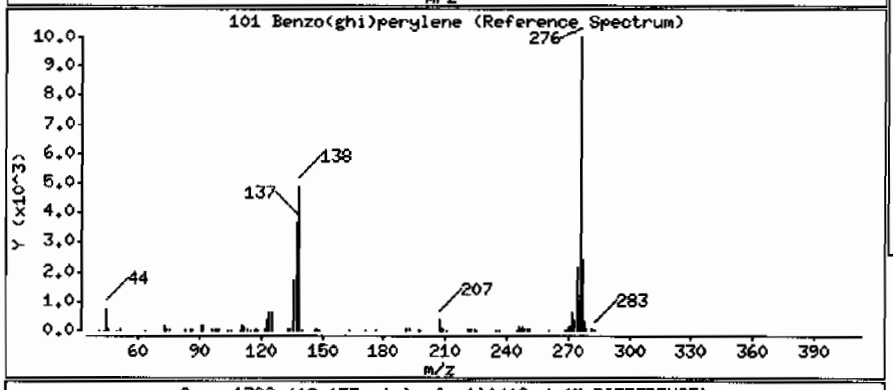

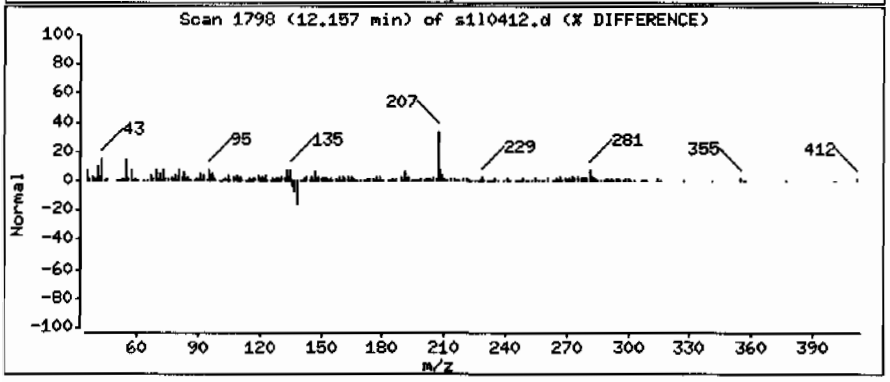

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: 1241540003|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	40	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	28	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	23	C7H14O2	130

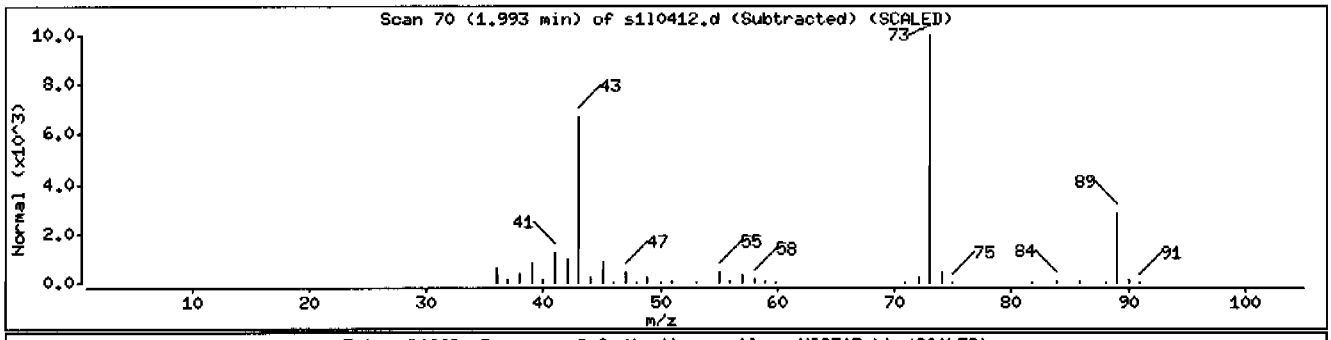

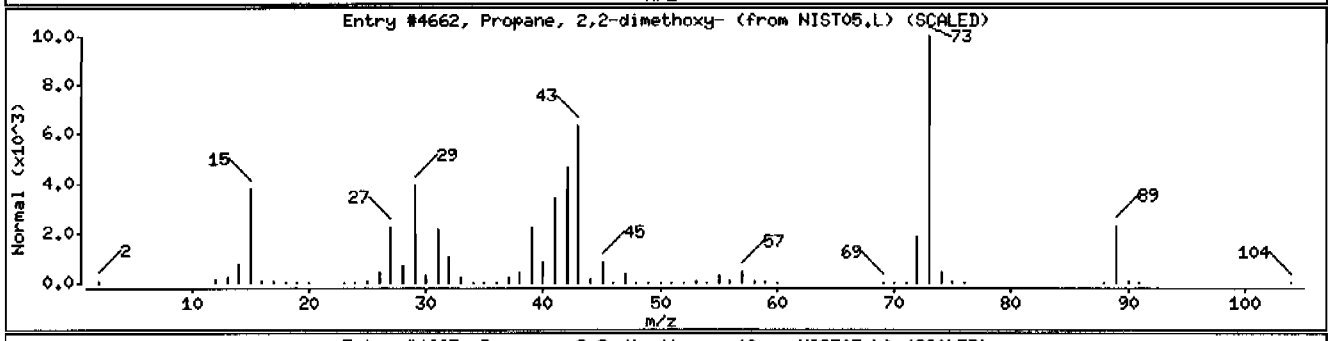

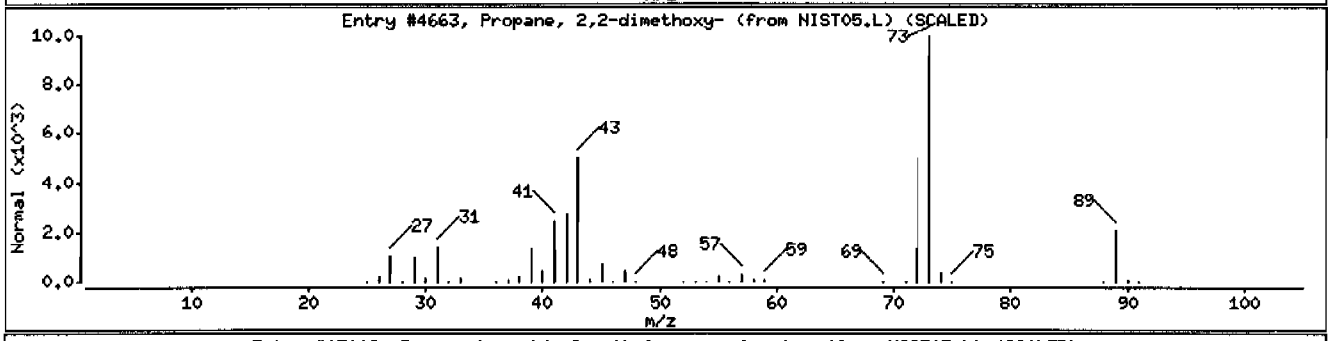

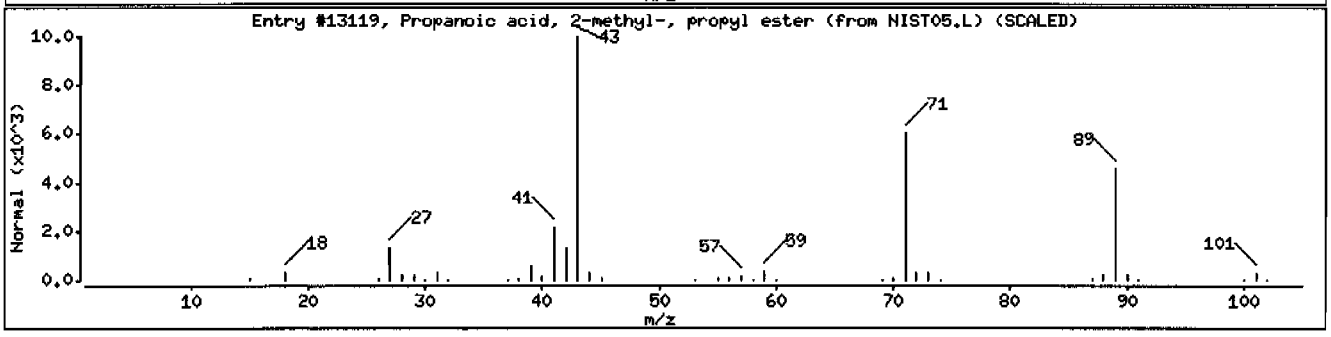

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: 1241540003192661011SVHF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

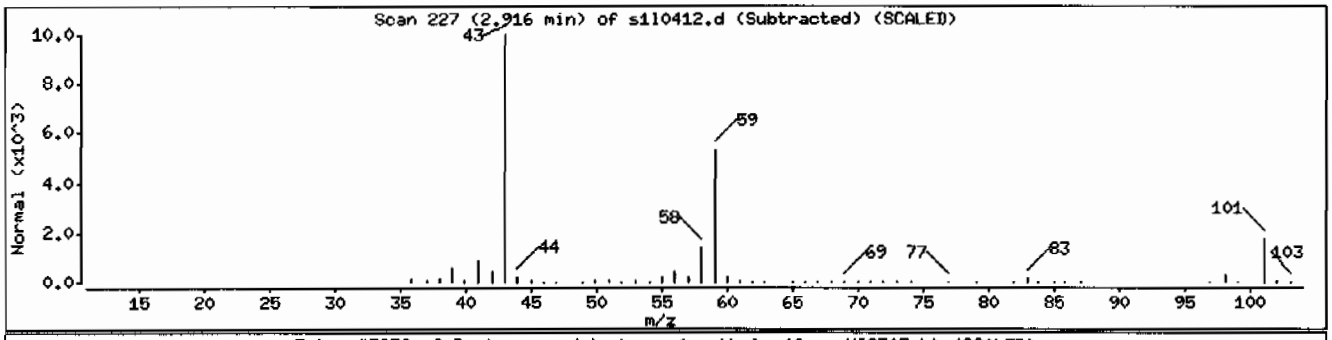

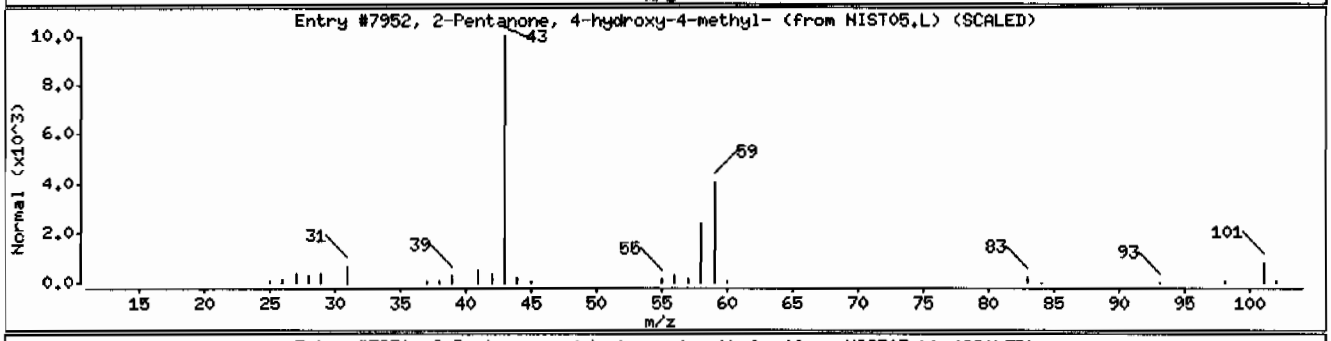

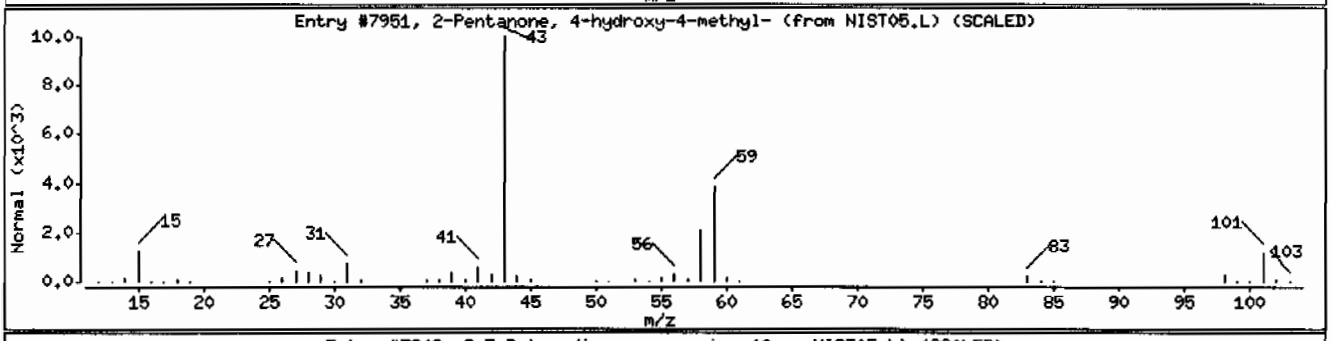

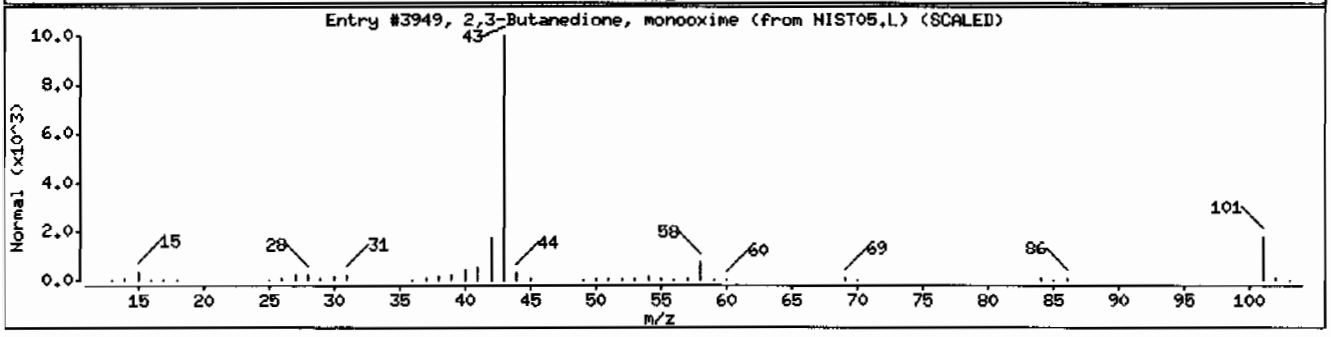

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868

Instrument: MSD1.i

Sample Info: 1241540003192661011ISVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	98	C20H42	282

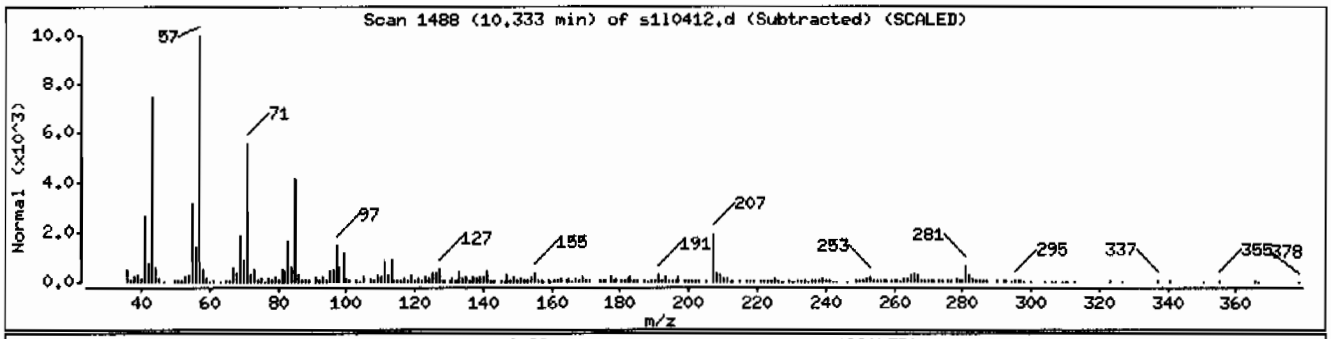

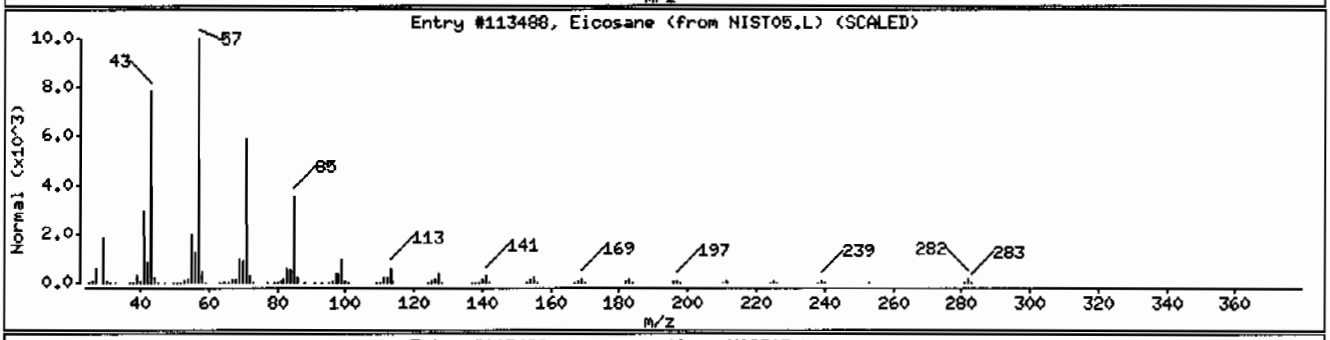

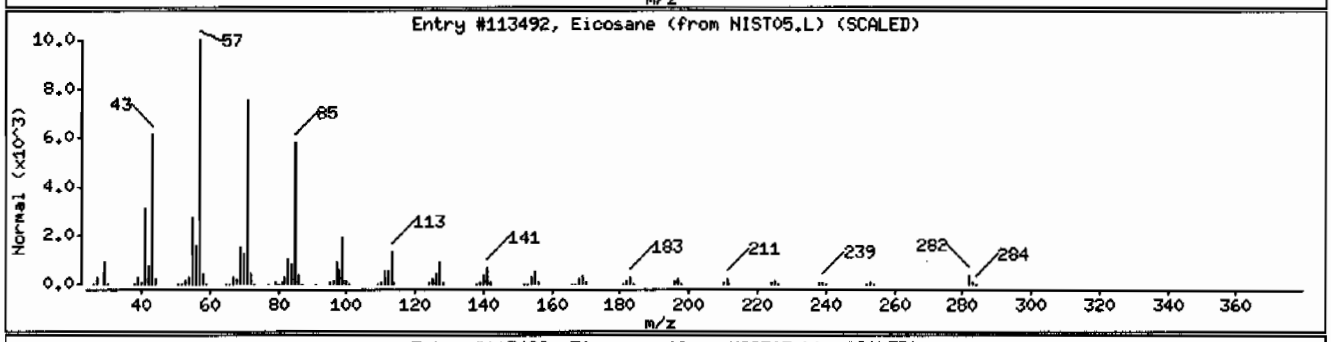

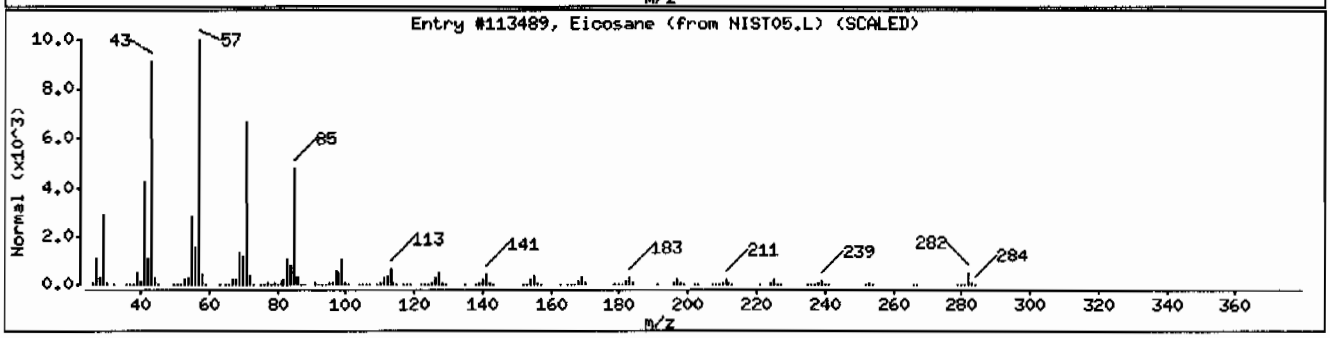

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868 Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Dimethyl-8-isopropylidenetricyclo[5,	1000140-07-7	NIST05.L	59920	50	C15H24	204
Naphthalene, decahydro-4a-methyl-1-methy	17066-67-0	NIST05.L	60015	46	C15H24	204
1H-Cyclopropl[e]azulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60083	42	C15H24	204

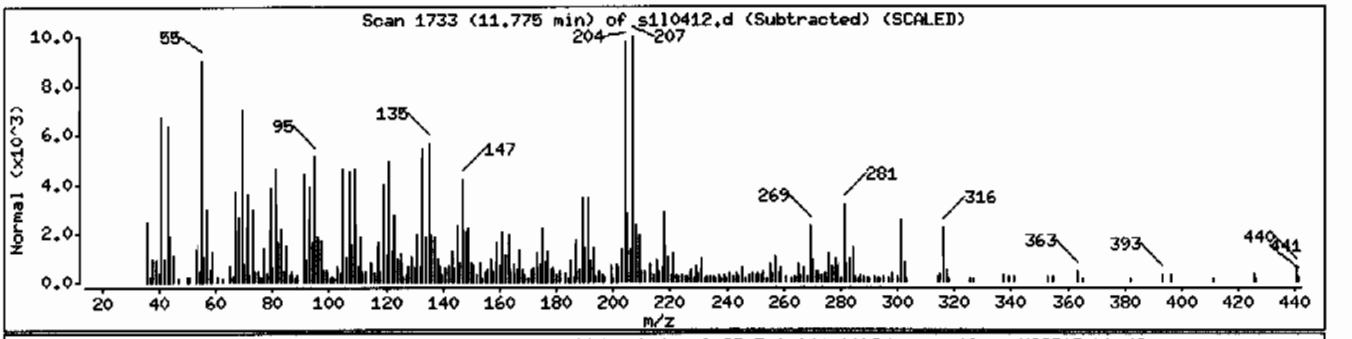

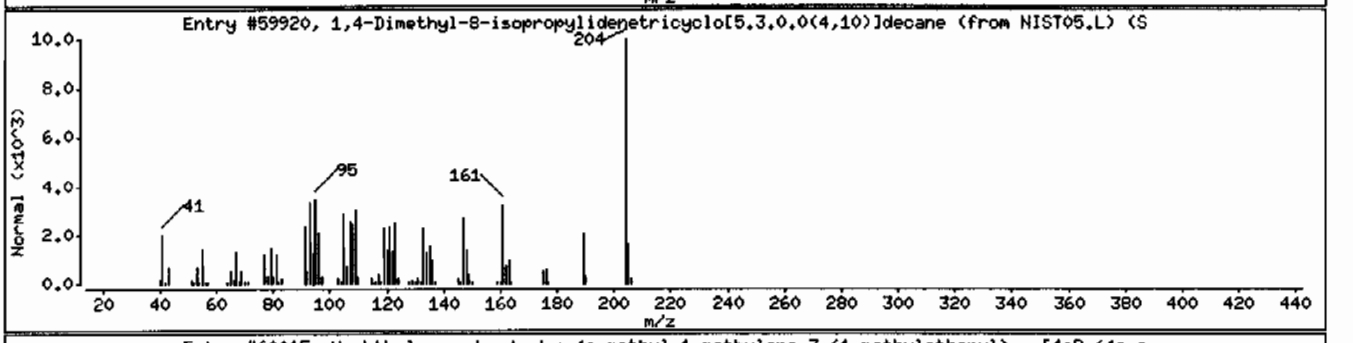

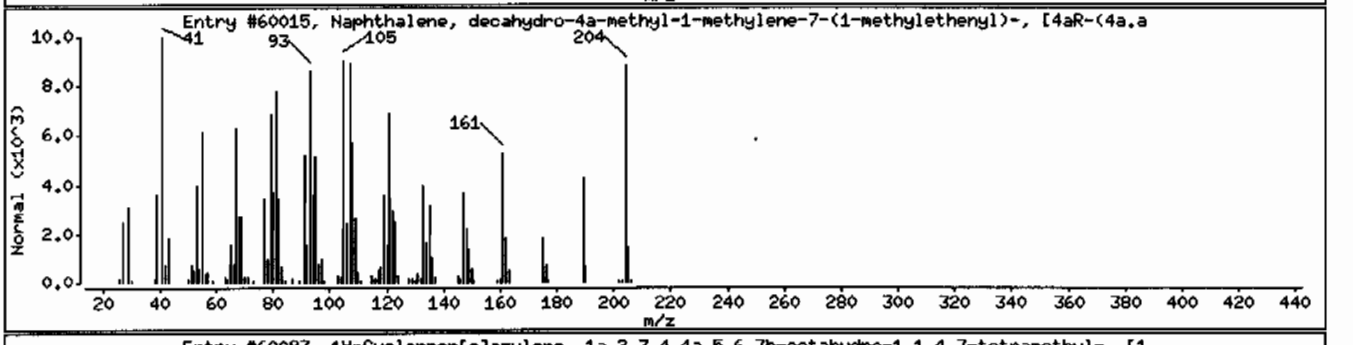

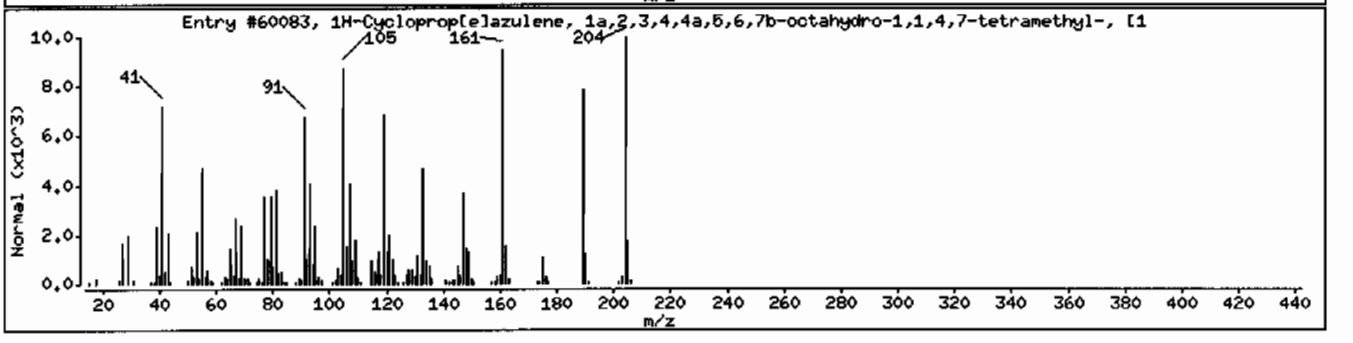

Data File: /chem/MSD1.i/s120409.b/s110412.d

Date : 04-DEC-2009 13:04

Client ID: RE03-09-13868 Instrument: MSD1.i

Sample Info: |2415400031926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanone, 2-(2-benzothiazolylthio)-1-(3,	155670-84-1	NIST05.L	126423	38	C14H13N3OS2	303
2-Ethylacridine	55761-83-2	NIST05.L	62222	38	C15H13N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	35	C6H18O3Si3	222

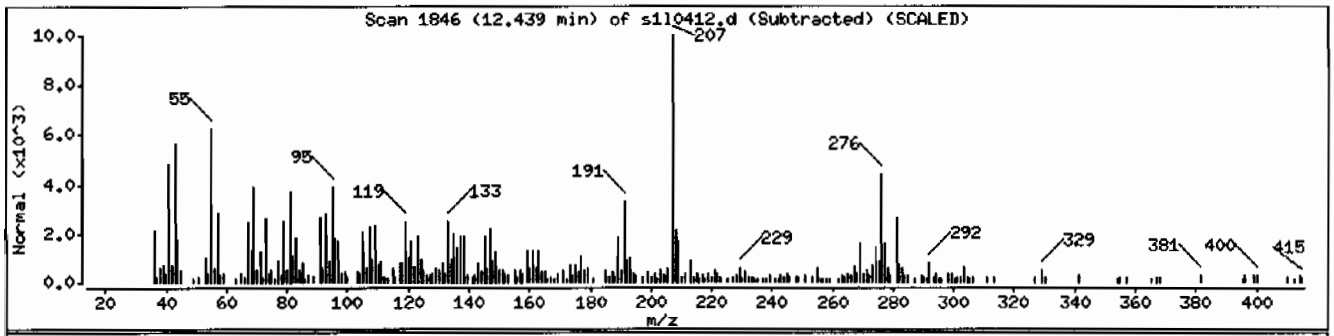

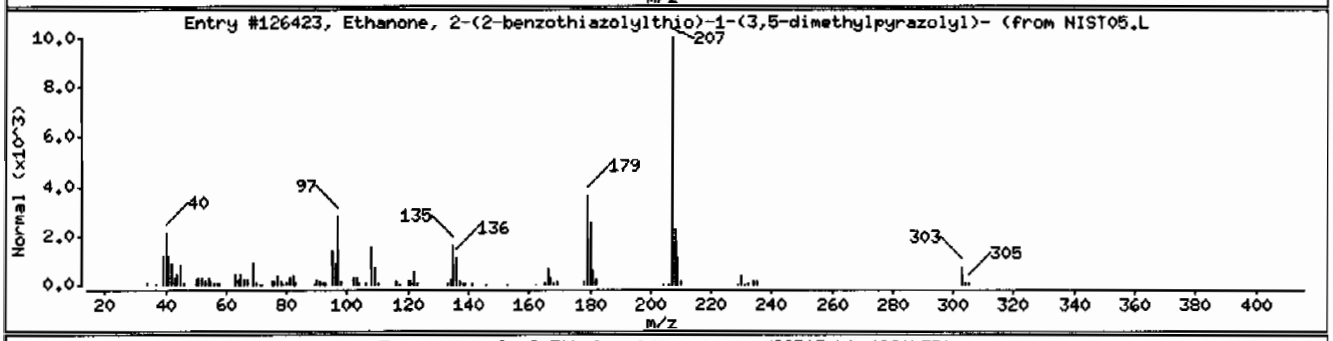

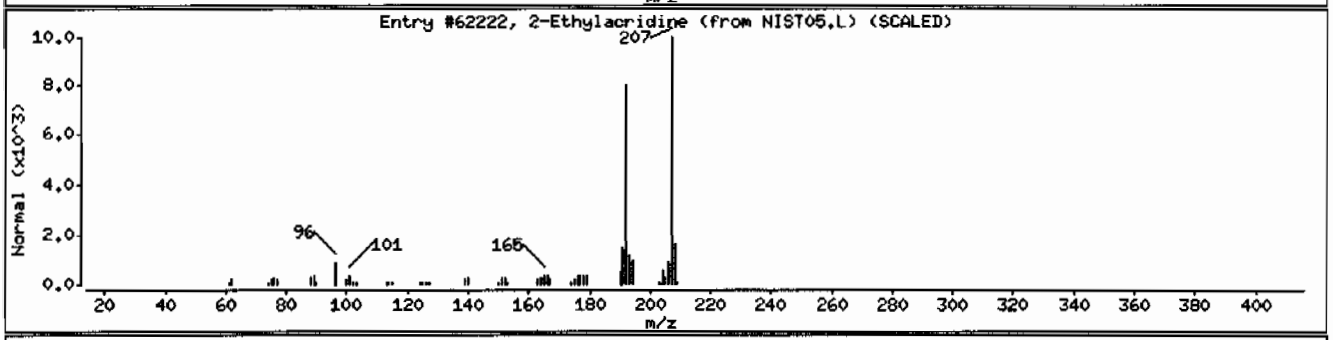

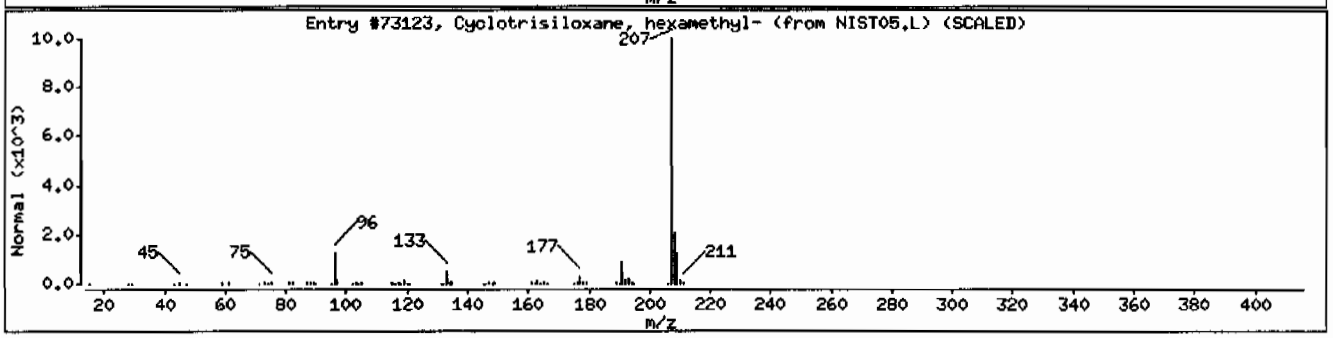

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:00	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.1	400
108-95-2	Phenol	U	400	ug/kg	80.1	400
95-57-8	2-Chlorophenol	U	400	ug/kg	80.1	400
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.1	400
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.1	400
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.1	400
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0
110-86-1	Pyridine	U	400	ug/kg	80.1	400
62-53-3	Aniline	U	400	ug/kg	120	400
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.1	400
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.1	400
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.1	400
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.1	400
95-48-7	o-Cresol	U	400	ug/kg	80.1	400
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400
67-72-1	Hexachloroethane	U	400	ug/kg	80.1	400
98-95-3	Nitrobenzene	U	400	ug/kg	80.1	400
78-59-1	Isophorone	U	400	ug/kg	80.1	400
88-75-5	2-Nitrophenol	U	400	ug/kg	80.1	400
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.1	400
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.1	400
65-85-0	Benzoic acid	U	801	ug/kg	200	801
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0
106-47-8	4-Chloroaniline	U	400	ug/kg	80.1	400
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.1	400
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.01	40.0
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.1	400
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.1	400
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.1	400
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0
88-74-4	2-Nitroaniline	U	400	ug/kg	80.1	400
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	400	ug/kg	80.1	400

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540008**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13869**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:00**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110417.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	400	ug/kg	80.1	400
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0
51-28-5	2,4-Dinitrophenol	U	801	ug/kg	152	801
132-64-9	Dibenzofuran	U	400	ug/kg	80.1	400
84-66-2	Diethylphthalate	U	400	ug/kg	80.1	400
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.1	400
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.1	400
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400
	p-Nitroaniline					
122-39-4	Diphenylamine	U	400	ug/kg	80.1	400
122-66-7	Azobenzene	U	400	ug/kg	80.1	400
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.1	400
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.1	400
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0
120-12-7	Anthracene	U	40.0	ug/kg	8.01	40.0
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.1	400
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.1	400
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.1	400
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.1	400
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.1	400

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	250	ug/kg		J
	Unknown Aldol Condensate	2.92	582	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:00	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110417.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.14	253	ug/kg	98	NJ
1000140-07-7	1,4-Dimethyl-8-isopropylidenetricyclo[5.	11.76	715	ug/kg	80	NJ
	Unknown	11.95	241	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110417.d
Lab Smp Id: 241540008 Client Smp ID: RE03-09-13869
Inj Date : 04-DEC-2009 15:00
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540008|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	16.75080	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	442633	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1811704	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1017207	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1727901	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1487455	40.0000	
* 98 Perylene-d12	264	10.074	10.069	(1.000)	1327758	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.794)	716160	61.9441	2480
$ 5 Phenol-d5	99	3.616	3.610	(0.929)	909244	64.7067	2590
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	345820	28.9649	1160
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	740703	30.4039	1220
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	257168	90.5392	3620
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	1138331	48.7542	1950

ION RATIO REPORT

SV REPORT

Data file: s110417.d
Report Date: 12/04/2009 16:44
Lab. ID: 241540008 SampleType: SAMPLE
Injection Date: 04-DEC-2009 15:00
Operator: AMY Instrument: MSD1.i
Sample Info: |241540008|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	43811	3.62	3.68	80-120	100	(T)
93	122	3.67	3.69	418-478	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	47464	4.25	4.13	80-120	100	(T)
42	27649	4.25	4.13	44-104	58	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	180508	6.00	5.77	80-120	100	(T)
164	1017207	6.00	5.77	0- 40	564	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	128414	6.00	5.82	80-120	100	(T)
63	1539	6.00	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	128414	6.00	6.10	80-120	100	(T)
89	1525	6.00	6.10	32- 92	1	(QT)
63	1539	6.00	6.10	15- 75	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	15026	6.53	6.37	80-120	100	(T)
165	16569	6.53	6.37	64-124	110	(T)
167	5117	6.53	6.37	0- 43	34	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	14805	6.53	6.67	80-120	100	(T)
141	101557	6.53	6.67	50-110	686	(QT)
250	30566	6.53	6.67	68-128	206	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	2791	9.60	9.61	80-120	100	( )
253	793	9.60	9.61	0- 51	28	( )
125	421	9.61	9.61	0- 44	15	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110417.d
Lab Smp Id: 241540008 Client Smp ID: RE03-09-13869
Inj Date : 04-DEC-2009 15:00
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540008|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	16.75080	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.893	2613064	40.000
* 91 Chrysene-d12	8.633	4074220	40.000
* 98 Perylene-d12	10.074	3705008	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.999	408387	6.25146720	250	0		0	10
Unknown Aldol Condensate				CAS #:			
2.916	949944	14.5414616	582	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.139	643123	6.31407368	253	98	NIST05.L	112657	91
1,4-Dimethyl-8-isopropylidenetricyclo[5.				CAS #: 1000140-07-7			
11.763	1654636	17.8637797	715	80	NIST05.L	59920	98
Unknown				CAS #:			
11.951	558282	6.02732489	241	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110417.d
Date : 04-DEC-2009 15:00
Client ID: RE03-09-13869
Sample Info: |2415400081926610|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

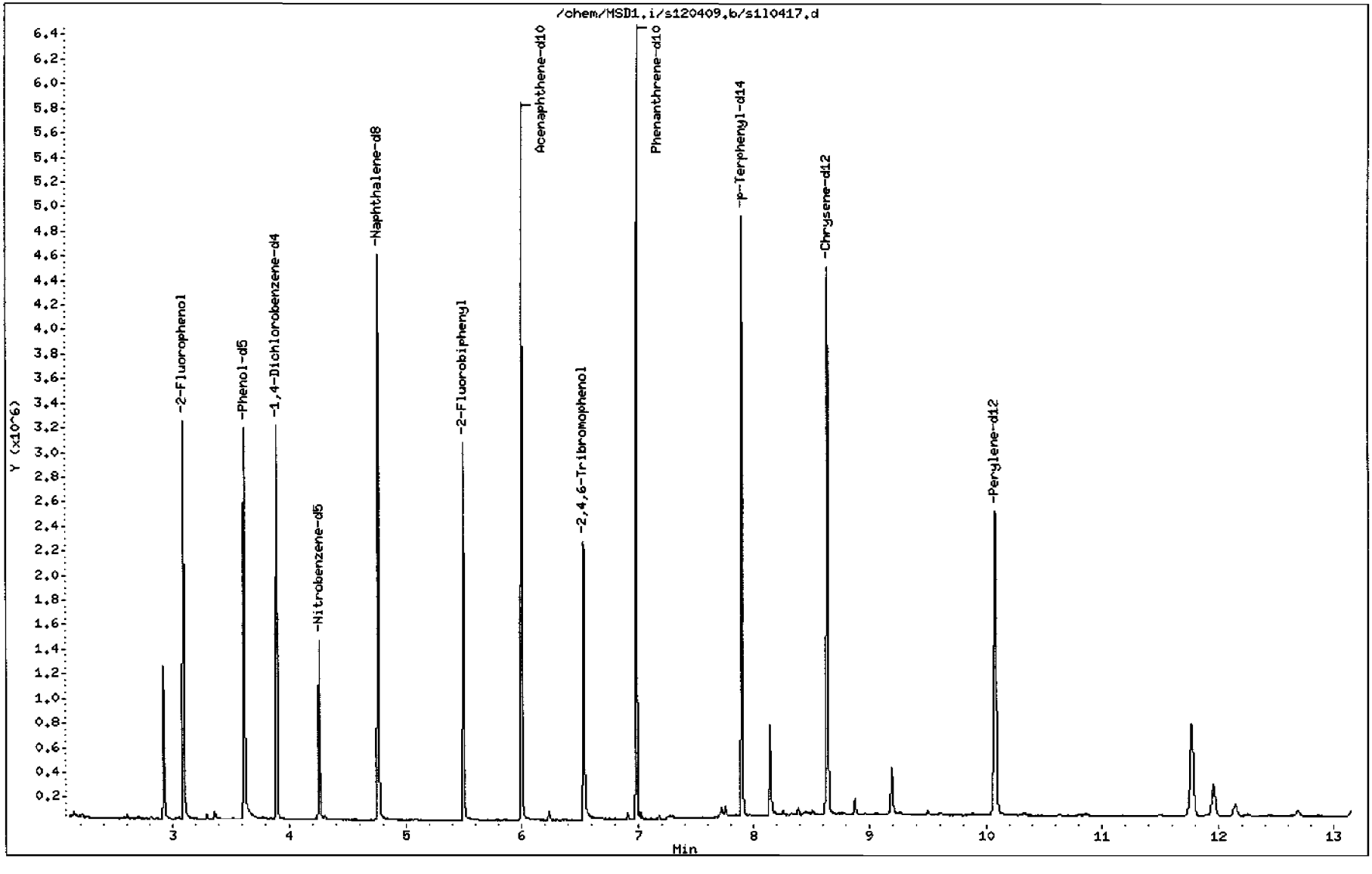

Data File: /chem/MSD1.i/s120409.b/s110417.d

Date : 04-DEC-2009 15:00

Client ID: RE03-09-13869

Instrument: MSD1.i

Sample Info: |2415400081926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	36	C5H12O2	104

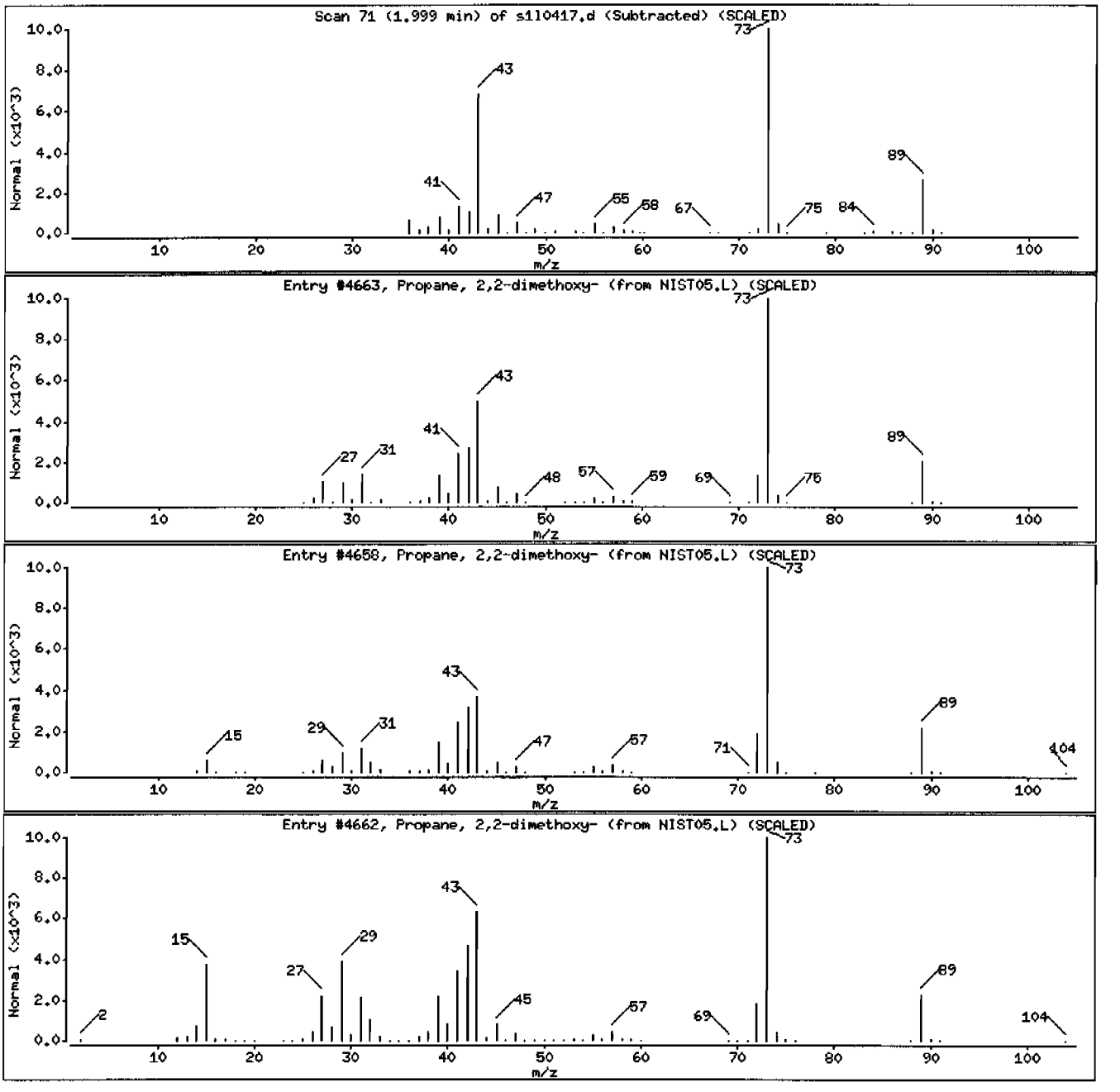

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Date : 04-DEC-2009 15:00

Client ID: RE03-09-13869

Instrument: MSD1.i

Sample Info: |2415400008|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141

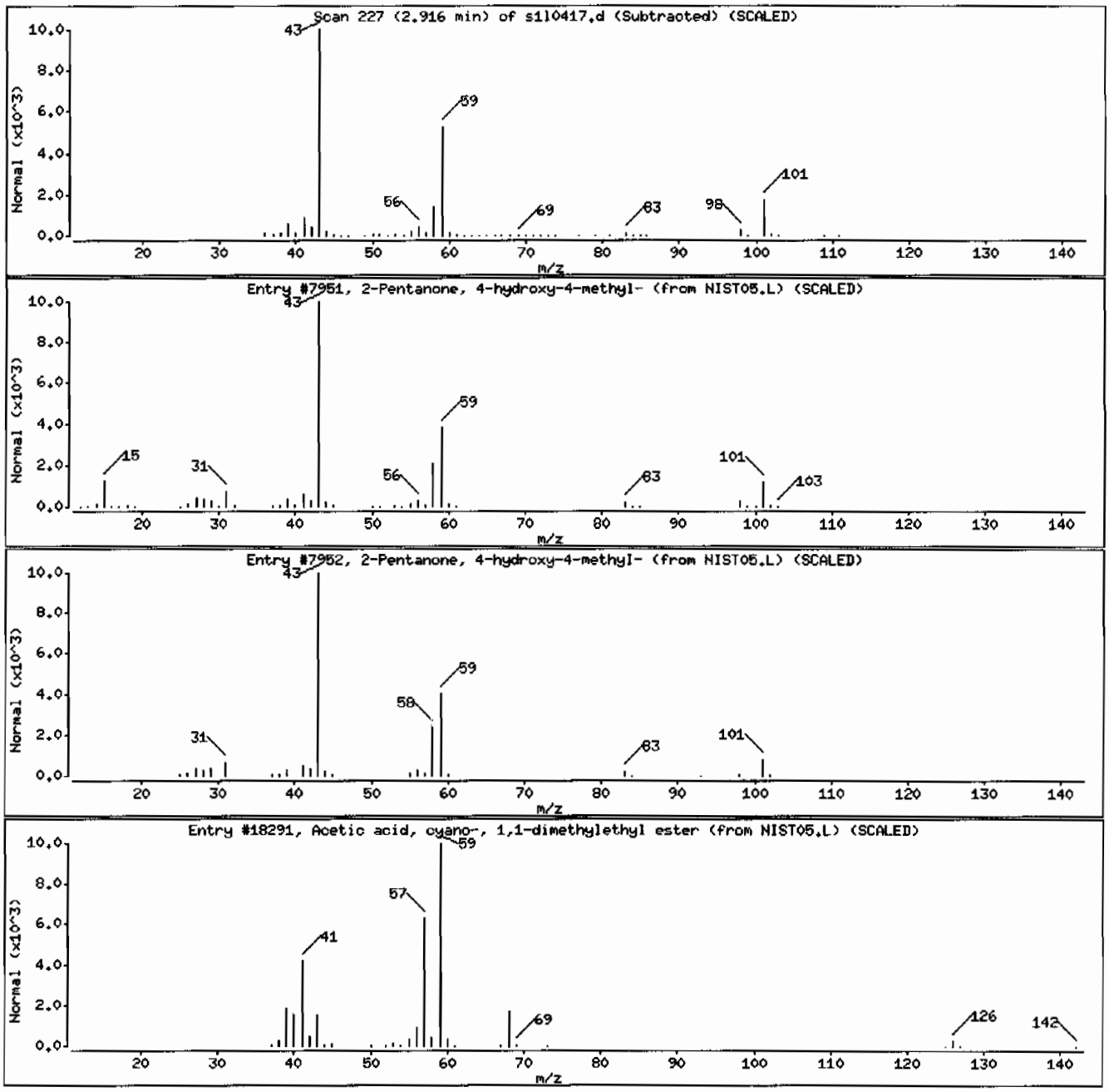

Data File: /chem/MSD1.i/s120409.b/s110417.d

Date : 04-DEC-2009 15:00

Client ID: RE03-09-13869

Instrument: MSD1.i

Sample Info: |2415400008|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	98	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	90	C18H35NO	281
Tetradecanamide	638-58-4	NIST05.L	76596	59	C14H29NO	227

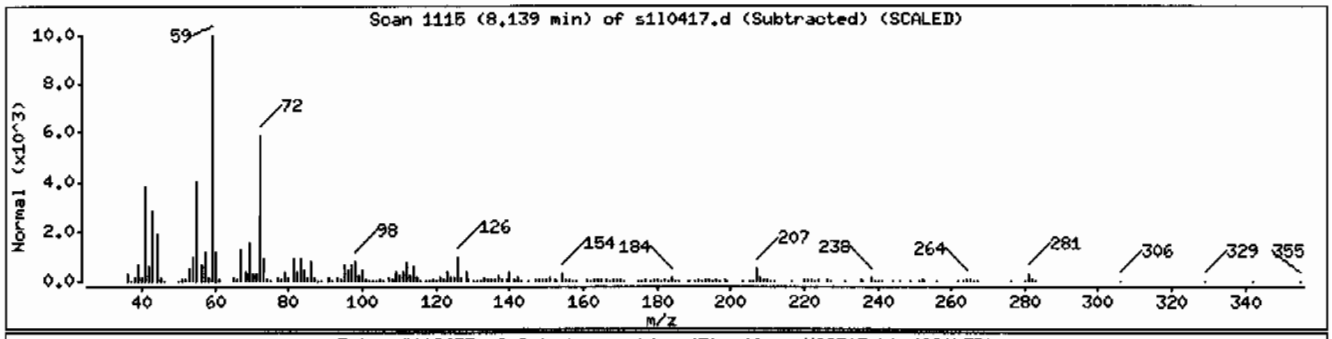

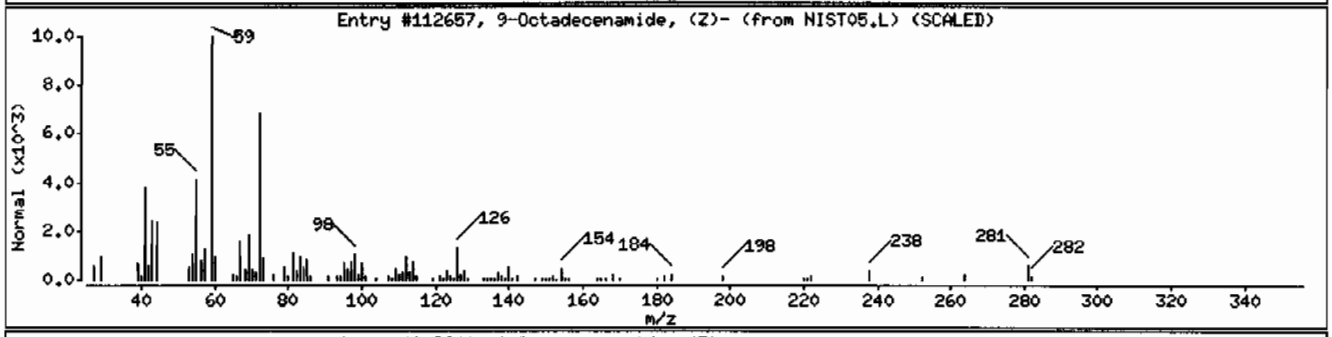

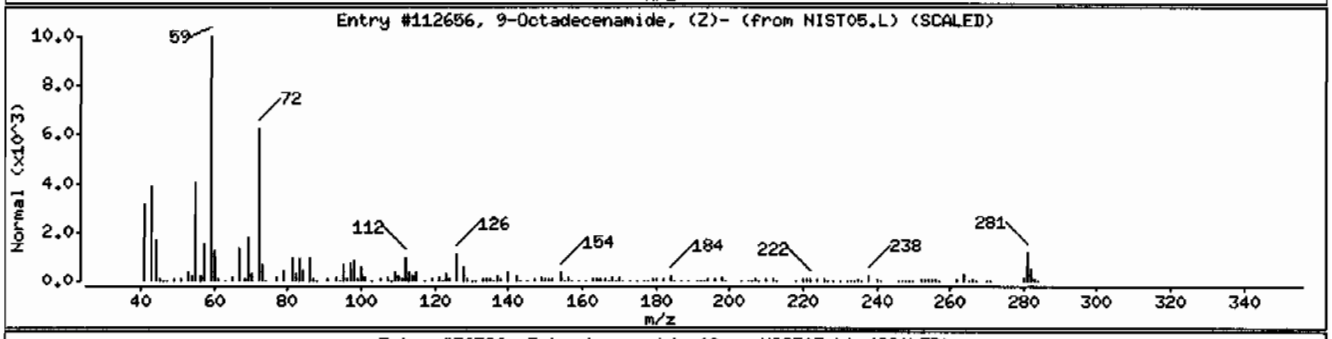

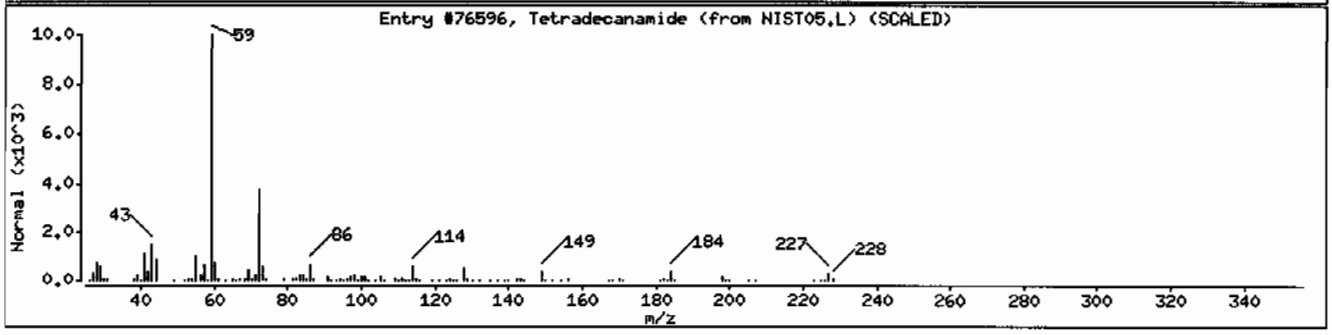

Data File: /chem/MSD1.i/s120409.b/s110417.d

Date : 04-DEC-2009 15:00

Client ID: RE03-09-13869

Instrument: MSD1.i

Sample Info: |2415400008|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Dimethyl-8-isopropylidenetricyclo[5,	1000140-07-7	NIST05.L	59920	80	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	56	C15H24	204
2,5,5,8a-Tetramethyl-6,7,8,8a-tetrahydro	124957-09-1	NIST05.L	59756	50	C14H200	204

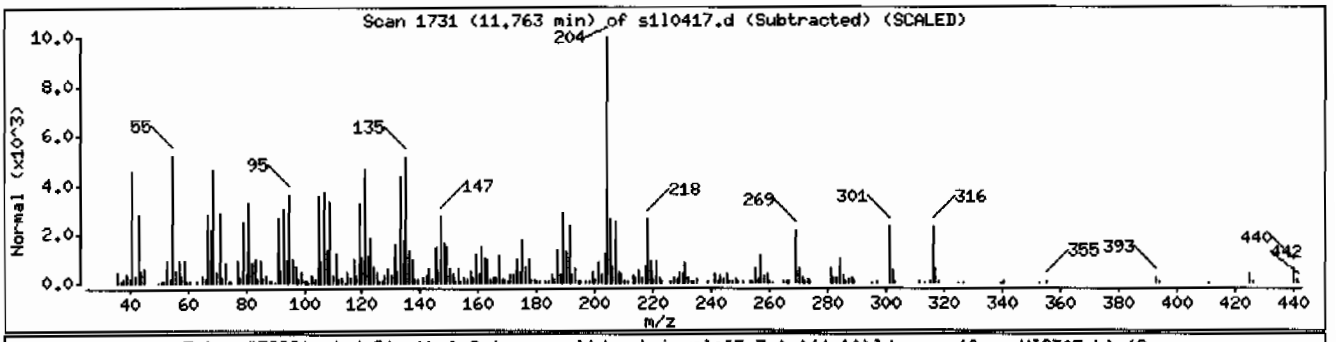

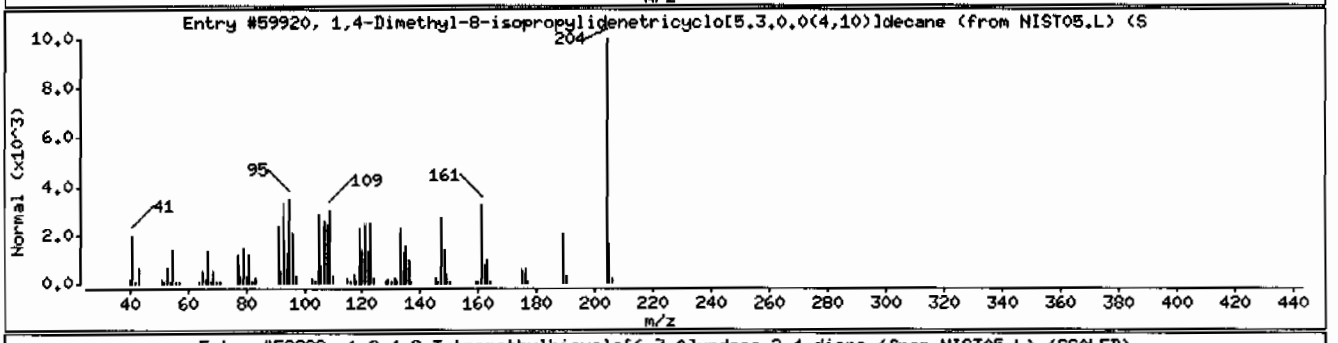

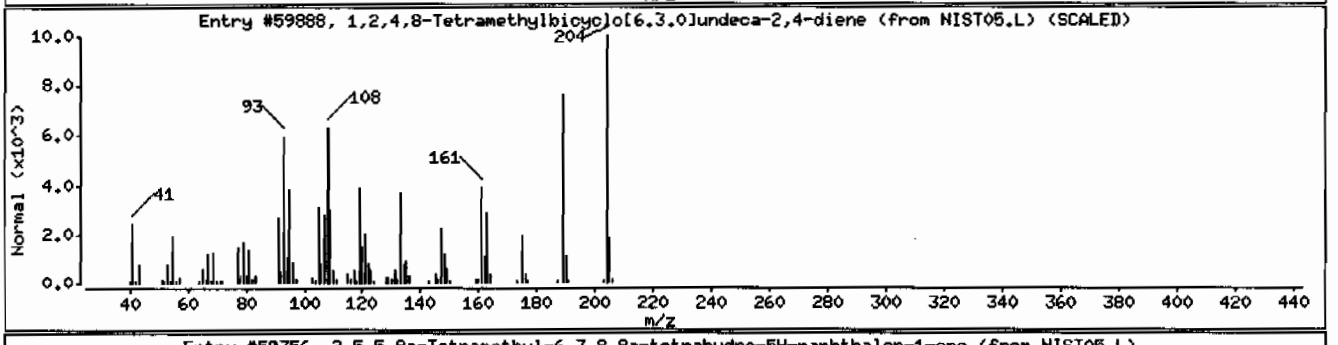

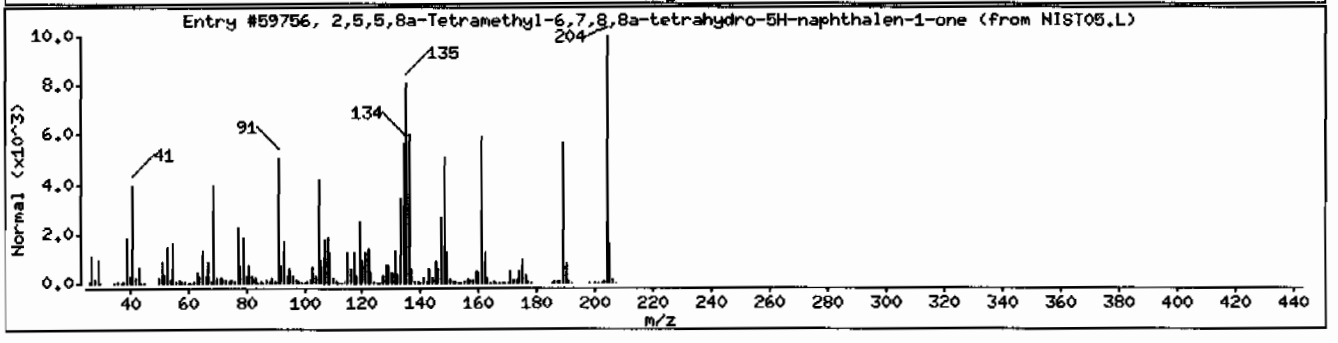

Data File: /chem/MSD1.i/s120409.b/s110417.d

Date : 04-DEC-2009 15:00

Client ID: RE03-09-13869 Instrument: MSD1.i

Sample Info: |2415400081926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedrene-V6	1000162-76-8	NIST05.L	59786	45	C15H24	204
Naphthalene, decahydro-4a-methyl-1-methy	515-17-3	NIST05.L	59990	38	C15H24	204
2-Isopropenyl-4a,8-dimethyl-1,2,3,4,4a,5	1000192-43-5	NIST05.L	59939	30	C15H24	204

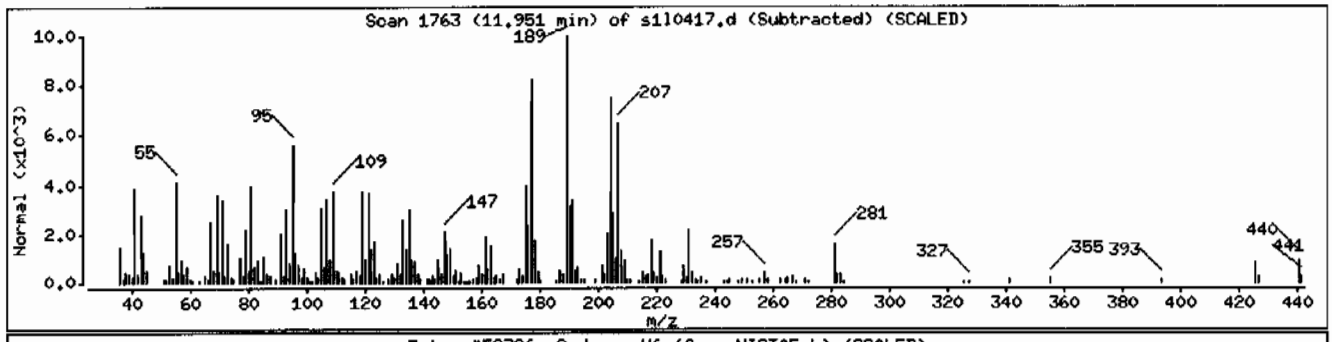

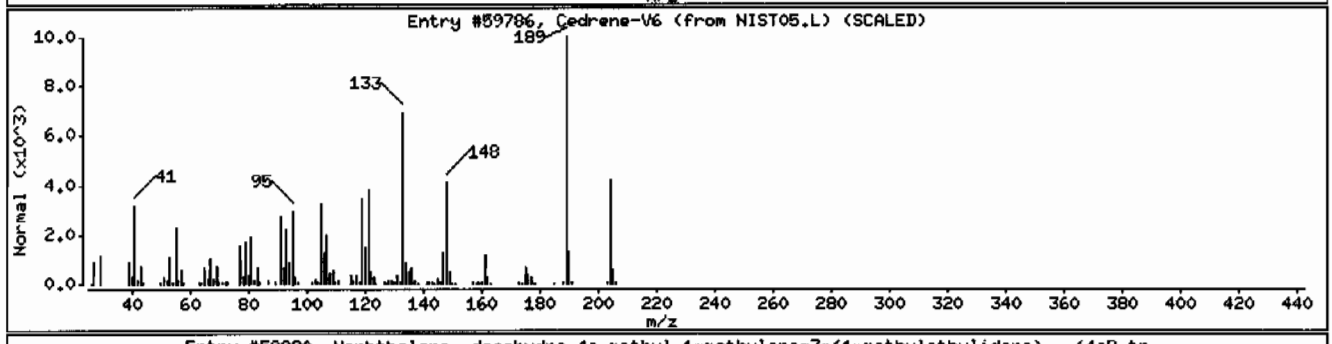

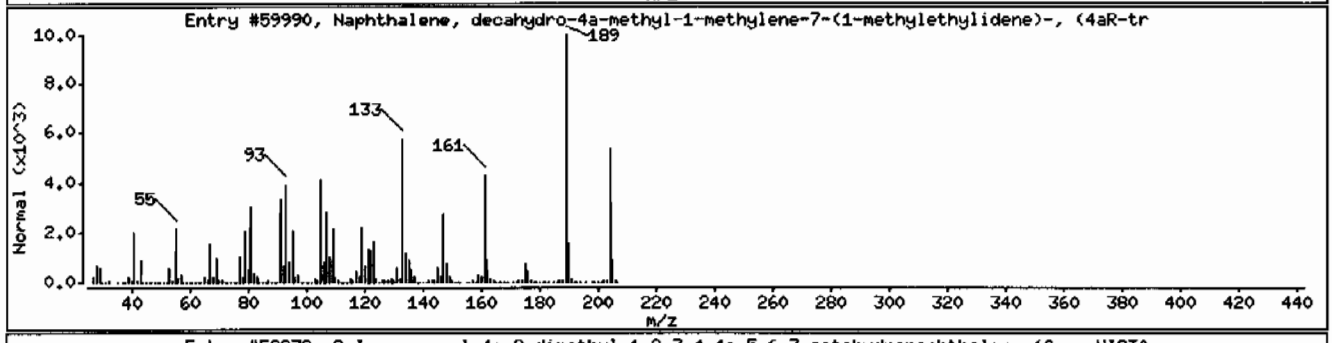

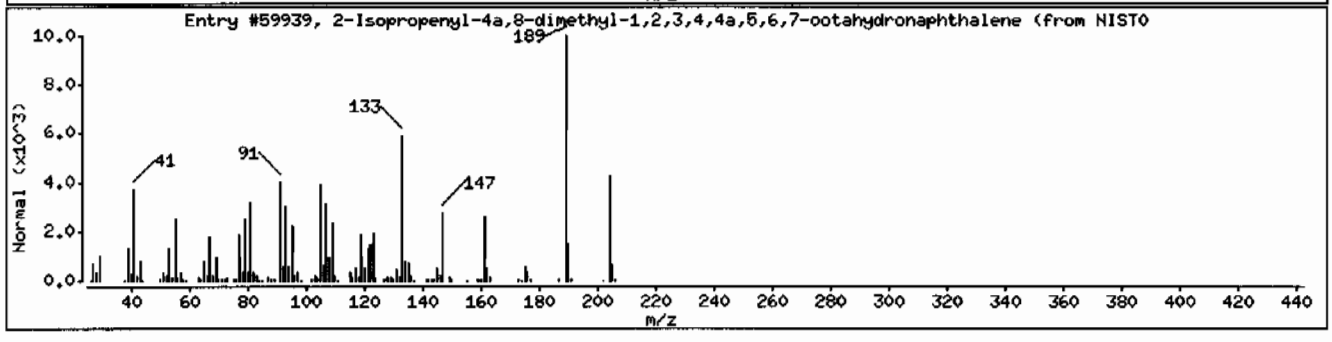

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	10
Run Date:	12/04/2009 18:28	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	3860	ug/kg	771	3860
108-95-2	Phenol	U	3860	ug/kg	771	3860
95-57-8	2-Chlorophenol	U	3860	ug/kg	771	3860
106-46-7	1,4-Dichlorobenzene	U	3860	ug/kg	771	3860
621-64-7	N-Nitrosodipropylamine	U	3860	ug/kg	771	3860
59-50-7	4-Chloro-3-methylphenol	U	3860	ug/kg	771	3860
83-32-9	Acenaphthene		539	ug/kg	127	386
121-14-2	2,4-Dinitrotoluene	U	3860	ug/kg	386	3860
100-02-7	4-Nitrophenol	U	3860	ug/kg	1270	3860
87-86-5	Pentachlorophenol	U	3860	ug/kg	964	3860
129-00-0	Pyrene		5560	ug/kg	116	386
110-86-1	Pyridine	U	3860	ug/kg	771	3860
62-53-3	Aniline	U	3860	ug/kg	1160	3860
111-44-4	bis(2-Chloroethyl) ether	U	3860	ug/kg	771	3860
541-73-1	1,3-Dichlorobenzene	U	3860	ug/kg	771	3860
100-51-6	Benzyl alcohol	U	3860	ug/kg	1160	3860
95-50-1	1,2-Dichlorobenzene	U	3860	ug/kg	771	3860
108-60-1	bis(2-Chloroisopropyl)ether	U	3860	ug/kg	771	3860
95-48-7	o-Cresol	U	3860	ug/kg	771	3860
65794-96-9	m,p-Cresols	U	3860	ug/kg	1160	3860
67-72-1	Hexachloroethane	U	3860	ug/kg	771	3860
98-95-3	Nitrobenzene	U	3860	ug/kg	771	3860
78-59-1	Isophorone	U	3860	ug/kg	771	3860
88-75-5	2-Nitrophenol	U	3860	ug/kg	771	3860
105-67-9	2,4-Dimethylphenol	U	3860	ug/kg	1350	3860
111-91-1	bis(2-Chloroethoxy)methane	U	3860	ug/kg	771	3860
120-83-2	2,4-Dichlorophenol	U	3860	ug/kg	771	3860
65-85-0	Benzoic acid	U	7710	ug/kg	1930	7710
91-20-3	Naphthalene	J	344	ug/kg	116	386
106-47-8	4-Chloroaniline	U	3860	ug/kg	771	3860
87-68-3	Hexachlorobutadiene	U	3860	ug/kg	771	3860
91-57-6	2-Methylnaphthalene	J	111	ug/kg	77.1	386
77-47-4	Hexachlorocyclopentadiene	U	3860	ug/kg	771	3860
88-06-2	2,4,6-Trichlorophenol	U	3860	ug/kg	771	3860
95-95-4	2,4,5-Trichlorophenol	U	3860	ug/kg	771	3860
91-58-7	2-Chloronaphthalene	U	386	ug/kg	127	386
88-74-4	2-Nitroaniline	U	3860	ug/kg	771	3860
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	3860	ug/kg	771	3860

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	10
Run Date:	12/04/2009 18:28	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s110426.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	3860	ug/kg	771	3860
606-20-2	2,6-Dinitrotoluene	U	3860	ug/kg	386	3860
208-96-8	Acenaphthylene	U	386	ug/kg	116	386
51-28-5	2,4-Dinitrophenol	U	7710	ug/kg	1470	7710
132-64-9	Dibenzofuran	U	3860	ug/kg	771	3860
84-66-2	Diethylphthalate	U	3860	ug/kg	771	3860
86-73-7	Fluorene		508	ug/kg	116	386
7005-72-3	4-Chlorophenylphenylether	U	3860	ug/kg	771	3860
534-52-1	2-Methyl-4,6-dinitrophenol	U	3860	ug/kg	771	3860
100-01-6	4-Nitroaniline	U	3860	ug/kg	1160	3860
	p-Nitroaniline					
122-39-4	Diphenylamine	U	3860	ug/kg	771	3860
122-66-7	Azobenzene	U	3860	ug/kg	771	3860
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	3860	ug/kg	771	3860
118-74-1	Hexachlorobenzene	U	3860	ug/kg	771	3860
85-01-8	Phenanthrene		4550	ug/kg	116	386
120-12-7	Anthracene		892	ug/kg	77.1	386
84-74-2	Di-n-butylphthalate	U	3860	ug/kg	771	3860
206-44-0	Fluoranthene		6750	ug/kg	116	386
85-68-7	Butylbenzylphthalate	U	3860	ug/kg	771	3860
56-55-3	Benzo(a)anthracene		2610	ug/kg	116	386
91-94-1	3,3'-Dichlorobenzidine	U	3860	ug/kg	1160	3860
218-01-9	Chrysene		2850	ug/kg	116	386
117-81-7	bis(2-Ethylhexyl)phthalate	U	3860	ug/kg	771	3860
117-84-0	Di-n-octylphthalate	U	3860	ug/kg	771	3860
205-99-2	Benzo(b)fluoranthene		4790	ug/kg	116	386
207-08-9	Benzo(k)fluoranthene	U	386	ug/kg	116	386
50-32-8	Benzo(a)pyrene		2360	ug/kg	116	386
193-39-5	Indeno(1,2,3-cd)pyrene		1220	ug/kg	116	386
53-70-3	Dibenzo(a,h)anthracene	U	386	ug/kg	116	386
191-24-2	Benzo(ghi)perylene		1580	ug/kg	116	386
120-82-1	1,2,4-Trichlorobenzene	U	3860	ug/kg	771	3860

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110426.d
Lab Smp Id: 241540009 Client Smp ID: RE03-09-13870
Inj Date : 04-DEC-2009 18:28
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540009|926610|10|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 24
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	13.73130	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	387864	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1569287	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	897732	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1618215	40.0000	
* 91 Chrysene-d12	240	8.634	8.633	(1.000)	1455025	40.0000	
* 98 Perylene-d12	264	10.075	10.069	(1.000)	1272545	40.0000	
$ 3 2-Fluorophenol	112	3.087	3.081	(0.793)	55478	5.47614	2110
$ 5 Phenol-d5	99	3.622	3.610	(0.930)	51709	4.19951	1620
$ 20 Nitrobenzene-d5	82	4.257	4.251	(0.896)	32905	3.18176	1230
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.916)	90983	4.23164	1630
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	23257	9.27761	3580
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	111072	4.86320	1880

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
47 Acenaphthene	154	6.022	6.022	(1.004)	28948	1.39805	539
79 Pyrene	202	7.845	7.845	(0.909)	557334	14.4145	5560
30 Naphthalene	128	4.769	4.769	(1.004)	29168	0.89058	344(aQ)
34 2-Methylnaphthalene	142	5.251	5.245	(1.105)	6208	0.28833	111(a)
53 Fluorene	166	6.369	6.369	(1.062)	31782	1.31634	508
68 Phenanthrene	178	6.998	6.992	(1.003)	433774	11.7952	4550
69 Anthracene	178	7.028	7.028	(1.007)	86446	2.31141	892
76 Fluoranthene	202	7.710	7.704	(1.104)	621402	17.5052	6750
89 Benzo(a)anthracene	228	8.628	8.628	(0.999)	235772	6.75765	2610
92 Chrysene	228	8.657	8.657	(1.003)	240931	7.38833	2850
95 Benzo(b)fluoranthene	252	9.616	9.610	(0.954)	337513	12.4247	4790
97 Benzo(a)pyrene	252	10.004	10.004	(0.993)	173842	6.12460	2360
99 Indeno(1,2,3-cd)pyrene	276	11.657	11.663	(1.157)	102988	3.17404	1220
101 Benzo(ghi)perylene	276	12.163	12.163	(1.207)	98228	4.10778	1580

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s110426.d
Report Date: 12/05/2009 08:16
Lab. ID: 241540009 SampleType: SAMPLE
Injection Date: 04-DEC-2009 18:28
Operator: nag1 Instrument: MSD1.i
Sample Info: |241540009|926610|10|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 10.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
30 Naphthalene			CAS#: 91-20-3			
128	29168	4.77	4.77	80-120	100	( )
129	3352	4.77	4.77	0- 41	11	( )
127	3557	4.77	4.77	15- 75	12	(Q)
34 2-Methylnaphthalene			CAS#: 91-57-6			
142	6208	5.25	5.25	80-120	100	( )
141	5348	5.25	5.25	55-115	86	( )
43 Dimethylphthalate			CAS#: 131-11-3			
163	161223	6.00	5.77	80-120	100	(T)
164	897732	6.00	5.77	0- 40	557	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	114122	6.00	5.82	80-120	100	(T)
63	1700	6.00	5.82	45-105	1	(QT)
45 Acenaphthylene			CAS#: 208-96-8			
152	16060	6.02	5.90	80-120	100	(T)
151	5907	6.02	5.90	0- 50	37	(T)
153	32450	6.02	5.90	0- 43	202	(QT)
47 Acenaphthene			CAS#: 83-32-9			
154	28948	6.02	6.02	80-120	100	( )
153	32735	6.02	6.02	73-133	113	( )
152	16060	6.02	6.02	18- 78	55	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	113688	6.00	6.10	80-120	100	(T)
89	1223	6.00	6.10	32- 92	1	(QT)
63	1700	6.00	6.10	15- 75	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	31782	6.37	6.37	80-120	100	( )
165	29524	6.37	6.37	64-124	93	( )
167	4700	6.37	6.37	0- 43	15	( )
68 Phenanthrene			CAS#: 85-01-8			
178	433774	7.00	6.99	80-120	100	( )
179	68113	7.00	6.99	0- 45	16	( )
176	78735	7.00	6.99	0- 48	18	( )
69 Anthracene			CAS#: 120-12-7			
178	86446	7.03	7.03	80-120	100	( )
179	23606	7.03	7.03	0- 46	27	( )
176	16225	7.03	7.03	0- 48	19	( )
76 Fluoranthene			CAS#: 206-44-0			
202	621402	7.71	7.70	80-120	100	( )
203	105540	7.70	7.70	0- 47	17	( )
101	84124	7.70	7.70	0- 43	14	( )
79 Pyrene			CAS#: 129-00-0			
202	557334	7.85	7.85	80-120	100	( )
200	117947	7.85	7.85	0- 51	21	( )
101	90391	7.85	7.85	0- 46	16	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	235772	8.63	8.63	80-120	100	( )
226	58401	8.63	8.63	0- 55	25	( )
229	69072	8.63	8.63	0- 49	29	( )
92 Chrysene			CAS#: 218-01-9			
228	240931	8.66	8.66	80-120	100	( )
229	59332	8.66	8.66	0- 49	25	( )
226	68405	8.66	8.66	0- 58	28	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	337513	9.62	9.61	80-120	100	( )
253	76964	9.62	9.61	0- 51	23	( )
125	51632	9.61	9.61	0- 44	15	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	337513	9.62	9.64	80-120	100	( )
253	76956	9.62	9.64	0- 52	23	( )
125	51632	9.61	9.64	0- 44	15	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	173842	10.00	10.00	80-120	100	( )
253	46213	10.00	10.00	0- 51	27	( )
125	28968	10.00	10.00	0- 48	17	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	102988	11.66	11.66	80-120	100	( )
138	32471	11.66	11.66	7- 67	32	( )
100 Dibenzo(a,h)anthracene			CAS#: 53-70-3			
278	25518	11.66	11.66	80-120	100	( )
139	1607	11.63	11.66	0- 58	6	( )
101 Benzo(ghi)perylene			CAS#: 191-24-2			
276	98228	12.16	12.16	80-120	100	( )
138	31541	12.16	12.16	7- 67	32	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110426.d
Lab Smp Id: 241540009 Client Smp ID: RE03-09-13870
Inj Date : 04-DEC-2009 18:28
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540009|926610|10|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 24
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/MSD1.i/s120409.b/s110426.d

Date : 04-DEC-2009 18:28

Client ID: RE03-09-13870

Sample Info: |241540009|926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: nag1

Column diameter: 0.20

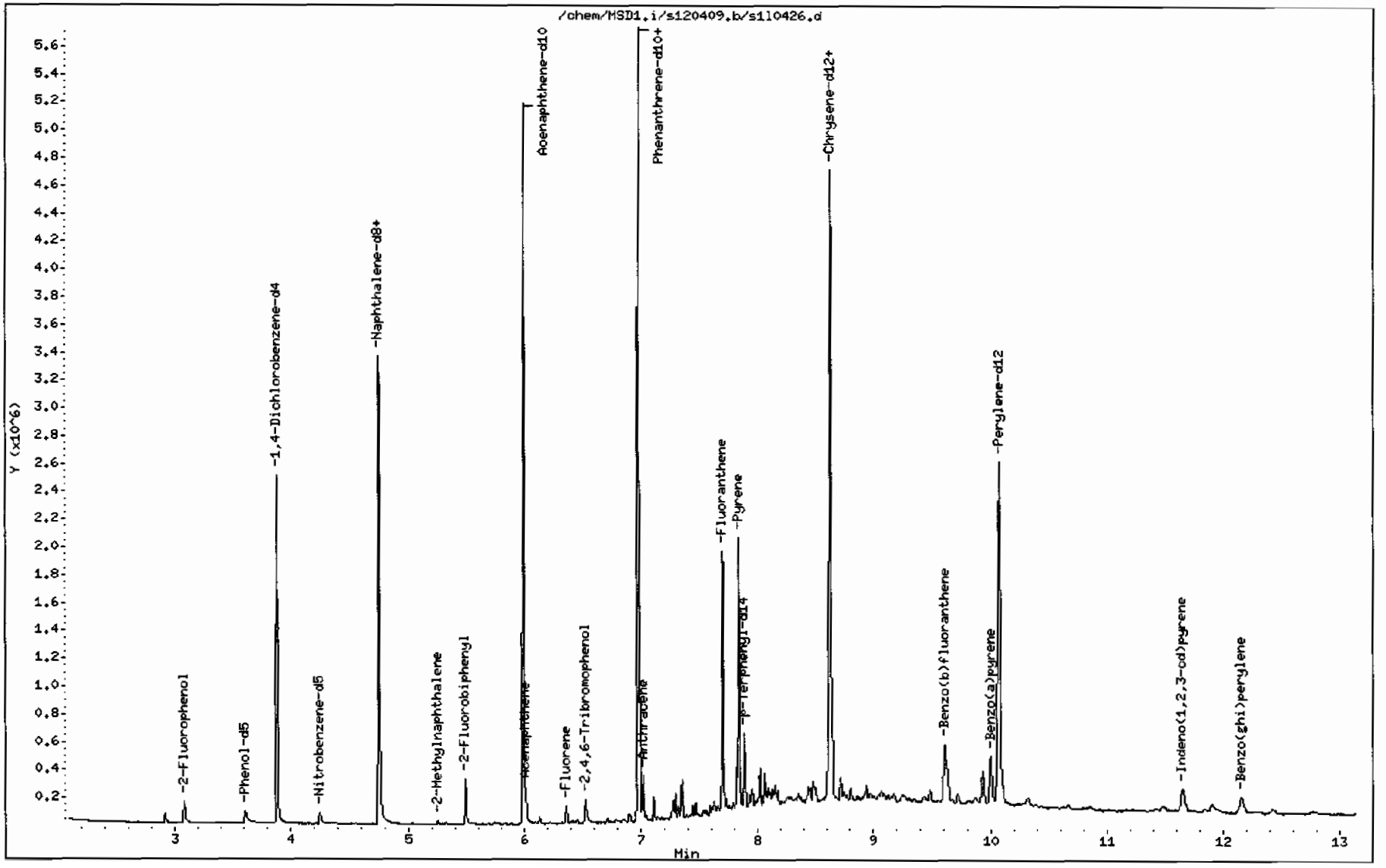

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:50	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110414.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	398	ug/kg	79.5	398
108-95-2	Phenol	U	398	ug/kg	79.5	398
95-57-8	2-Chlorophenol	U	398	ug/kg	79.5	398
106-46-7	1,4-Dichlorobenzene	U	398	ug/kg	79.5	398
621-64-7	N-Nitrosodipropylamine	U	398	ug/kg	79.5	398
59-50-7	4-Chloro-3-methylphenol	U	398	ug/kg	79.5	398
83-32-9	Acenaphthene	J	24.9	ug/kg	13.1	39.8
121-14-2	2,4-Dinitrotoluene	U	398	ug/kg	39.8	398
100-02-7	4-Nitrophenol	U	398	ug/kg	131	398
87-86-5	Pentachlorophenol	U	398	ug/kg	99.4	398
129-00-0	Pyrene		200	ug/kg	11.9	39.8
110-86-1	Pyridine	U	398	ug/kg	79.5	398
62-53-3	Aniline	U	398	ug/kg	119	398
111-44-4	bis(2-Chloroethyl) ether	U	398	ug/kg	79.5	398
541-73-1	1,3-Dichlorobenzene	U	398	ug/kg	79.5	398
100-51-6	Benzyl alcohol	U	398	ug/kg	119	398
95-50-1	1,2-Dichlorobenzene	U	398	ug/kg	79.5	398
108-60-1	bis(2-Chloroisopropyl)ether	U	398	ug/kg	79.5	398
95-48-7	o-Cresol	U	398	ug/kg	79.5	398
65794-96-9	m,p-Cresols	U	398	ug/kg	119	398
67-72-1	Hexachloroethane	U	398	ug/kg	79.5	398
98-95-3	Nitrobenzene	U	398	ug/kg	79.5	398
78-59-1	Isophorone	U	398	ug/kg	79.5	398
88-75-5	2-Nitrophenol	U	398	ug/kg	79.5	398
105-67-9	2,4-Dimethylphenol	U	398	ug/kg	139	398
111-91-1	bis(2-Chloroethoxy)methane	U	398	ug/kg	79.5	398
120-83-2	2,4-Dichlorophenol	U	398	ug/kg	79.5	398
65-85-0	Benzoic acid	U	795	ug/kg	199	795
91-20-3	Naphthalene	J	17.4	ug/kg	11.9	39.8
106-47-8	4-Chloroaniline	U	398	ug/kg	79.5	398
87-68-3	Hexachlorobutadiene	U	398	ug/kg	79.5	398
91-57-6	2-Methylnaphthalene	U	39.8	ug/kg	7.95	39.8
77-47-4	Hexachlorocyclopentadiene	U	398	ug/kg	79.5	398
88-06-2	2,4,6-Trichlorophenol	U	398	ug/kg	79.5	398
95-95-4	2,4,5-Trichlorophenol	U	398	ug/kg	79.5	398
91-58-7	2-Chloronaphthalene	U	39.8	ug/kg	13.1	39.8
88-74-4	2-Nitroaniline	U	398	ug/kg	79.5	398
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	398	ug/kg	79.5	398

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:50	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110414.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	398	ug/kg	79.5	398
606-20-2	2,6-Dinitrotoluene	U	398	ug/kg	39.8	398
208-96-8	Acenaphthylene	U	39.8	ug/kg	11.9	39.8
51-28-5	2,4-Dinitrophenol	U	795	ug/kg	151	795
132-64-9	Dibenzofuran	U	398	ug/kg	79.5	398
84-66-2	Diethylphthalate	U	398	ug/kg	79.5	398
86-73-7	Fluorene	J	22.2	ug/kg	11.9	39.8
7005-72-3	4-Chlorophenylphenylether	U	398	ug/kg	79.5	398
534-52-1	2-Methyl-4,6-dinitrophenol	U	398	ug/kg	79.5	398
100-01-6	4-Nitroaniline	U	398	ug/kg	119	398
	p-Nitroaniline					
122-39-4	Diphenylamine	U	398	ug/kg	79.5	398
122-66-7	Azobenzene	U	398	ug/kg	79.5	398
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	398	ug/kg	79.5	398
118-74-1	Hexachlorobenzene	U	398	ug/kg	79.5	398
85-01-8	Phenanthrene		187	ug/kg	11.9	39.8
120-12-7	Anthracene		40.2	ug/kg	7.95	39.8
84-74-2	Di-n-butylphthalate	U	398	ug/kg	79.5	398
206-44-0	Fluoranthene		230	ug/kg	11.9	39.8
85-68-7	Butylbenzylphthalate	U	398	ug/kg	79.5	398
56-55-3	Benzo(a)anthracene		84.4	ug/kg	11.9	39.8
91-94-1	3,3'-Dichlorobenzidine	U	398	ug/kg	119	398
218-01-9	Chrysene		90.7	ug/kg	11.9	39.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	398	ug/kg	79.5	398
117-84-0	Di-n-octylphthalate	U	398	ug/kg	79.5	398
205-99-2	Benzo(b)fluoranthene		229	ug/kg	11.9	39.8
207-08-9	Benzo(k)fluoranthene	U	39.8	ug/kg	11.9	39.8
50-32-8	Benzo(a)pyrene		78.9	ug/kg	11.9	39.8
193-39-5	Indeno(1,2,3-cd)pyrene	J	35.4	ug/kg	11.9	39.8
53-70-3	Dibenzo(a,h)anthracene	U	39.8	ug/kg	11.9	39.8
191-24-2	Benzo(ghi)perylene		66.7	ug/kg	11.9	39.8
120-82-1	1,2,4-Trichlorobenzene	U	398	ug/kg	79.5	398

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	473	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	288	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 13:50	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110414.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-84-5	13-Docosenamide, (Z)-	9.19	192	ug/kg	86	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110414.d
Lab Smp Id: 241540006 Client Smp ID: RE03-09-13871
Inj Date : 04-DEC-2009 13:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540006|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	16.18000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	437621	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1748568	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	970180	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1661472	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1425013	40.0000	
* 98 Perylene-d12	264	10.075	10.069	(1.000)	1310004	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	573369	50.1614	1990
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	719689	51.8035	2060
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	291963	25.3369	1010
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	708952	30.5112	1210
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	252770	93.3044	3710
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	1065651	47.6413	1890

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
47 Acenaphthene	154	6.016	6.022	(1.003)	14012	0.62618	24.9(a)
79 Pyrene	202	7.845	7.845	(0.909)	190193	5.02263	200
30 Naphthalene	128	4.769	4.769	(1.004)	15996	0.43833	17.4(aQ)
53 Fluorene	166	6.369	6.369	(1.062)	14546	0.55748	22.2(a)
68 Phenanthrene	178	6.992	6.992	(1.002)	177285	4.69525	187
69 Anthracene	178	7.028	7.028	(1.007)	38873	1.01233	40.2
76 Fluoranthene	202	7.704	7.704	(1.104)	210420	5.77332	230
89 Benzo(a)anthracene	228	8.628	8.628	(0.999)	72523	2.12242	84.4
92 Chrysene	228	8.657	8.657	(1.003)	72855	2.28121	90.7
95 Benzo(b)fluoranthene	252	9.610	9.610	(0.954)	109793	5.74852	228
97 Benzo(a)pyrene	252	10.004	10.004	(0.993)	60975	1.98530	78.9
99 Indeno(1,2,3-cd)pyrene	276	11.651	11.663	(1.156)	38971	0.89048	35.4(a)
101 Benzo(ghi)perylene	276	12.151	12.163	(1.206)	41318	1.67846	66.7

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s110414.d
Report Date: 12/04/2009 16:43
Lab. ID: 241540006 SampleType: SAMPLE
Injection Date: 04-DEC-2009 13:50
Operator: AMY Instrument: MSD1.i
Sample Info: |241540006|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	33834	3.62	3.68	80-120	100	(T)
93	279	3.66	3.69	418-478	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	39254	4.25	4.13	80-120	100	(T)
42	24468	4.25	4.13	44-104	62	(T)
30 Naphthalene			CAS#: 91-20-3			
128	15996	4.77	4.77	80-120	100	( )
129	2013	4.77	4.77	0- 41	13	( )
127	2068	4.77	4.77	15- 75	13	(Q)
43 Dimethylphthalate				CAS#: 131-11-3		
163	171711	6.00	5.77	80-120	100	(T)
164	970180	6.00	5.77	0- 40	565	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	122909	6.00	5.82	80-120	100	(T)
63	1508	6.00	5.82	45-105	1	(QT)
47 Acenaphthene			CAS#: 83-32-9			
154	14012	6.02	6.02	80-120	100	( )
153	13291	6.02	6.02	73-133	95	( )
152	6904	6.02	6.02	18- 78	49	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	122909	6.00	6.10	80-120	100	(T)
89	1444	6.00	6.10	32- 92	1	(QT)
63	1508	6.00	6.10	15- 75	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	14546	6.37	6.37	80-120	100	( )
165	14809	6.37	6.37	64-124	102	( )
167	2518	6.37	6.37	0- 43	17	( )
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	15068	6.53	6.67	80-120	100	(T)
141	95753	6.53	6.67	50-110	635	(QT)
250	29646	6.53	6.67	68-128	197	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	177285	6.99	6.99	80-120	100	( )
179	27879	6.99	6.99	0- 45	16	( )
176	32791	6.99	6.99	0- 48	18	( )
69 Anthracene			CAS#: 120-12-7			
178	38873	7.03	7.03	80-120	100	( )
179	9978	7.02	7.03	0- 46	26	( )
176	6607	7.03	7.03	0- 48	17	( )
76 Fluoranthene			CAS#: 206-44-0			
202	210420	7.70	7.70	80-120	100	( )
203	36933	7.70	7.70	0- 47	18	( )
101	28517	7.70	7.70	0- 43	14	( )
79 Pyrene			CAS#: 129-00-0			
202	190193	7.85	7.85	80-120	100	( )
200	39581	7.85	7.85	0- 51	21	( )
101	31652	7.85	7.85	0- 46	17	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	72523	8.63	8.63	80-120	100	( )
226	17776	8.62	8.63	0- 55	25	( )
229	8125	8.63	8.63	0- 49	11	( )
92 Chrysene			CAS#: 218-01-9			
228	72855	8.66	8.66	80-120	100	( )
229	16879	8.66	8.66	0- 49	23	( )
226	21789	8.66	8.66	0- 58	30	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	109793	9.61	9.61	80-120	100	( )
253	24024	9.61	9.61	0- 51	22	( )
125	12533	9.61	9.61	0- 44	11	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	109793	9.61	9.64	80-120	100	( )
253	24024	9.61	9.64	0- 52	22	( )
125	12533	9.61	9.64	0- 44	11	( )
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	60975	10.00	10.00	80-120	100	( )
253	16972	10.00	10.00	0- 51	28	( )
125	9065	10.00	10.00	0- 48	15	( )
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	38971	11.65	11.66	80-120	100	( )
138	12188	11.66	11.66	7- 67	31	( )
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	28465	11.91	11.66	80-120	100	(T)
139	7228	11.90	11.66	0- 58	25	(T)
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	41318	12.15	12.16	80-120	100	( )
138	13191	12.15	12.16	7- 67	32	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110414.d
Lab Smp Id: 241540006 Client Smp ID: RE03-09-13871
Inj Date : 04-DEC-2009 13:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540006|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	16.18000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2600571	40.000
* 91 Chrysene-d12	8.633	4262564	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.916	773351	11.8950846	473	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	========	======
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.139	772906	7.25297070	288	98	NIST05.L	112657	91
13-Docosenamide, (Z)-				CAS #: 112-84-5			
9.186	515562	4.83804854	192	86	NIST05.L	146308	91

Data File: /chem/MSD1.i/s120409.b/s110414.d
Date : 04-DEC-2009 13:50
Client ID: REQ3-09-13871
Sample Info: I241540006|926610|1|SVMF1|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

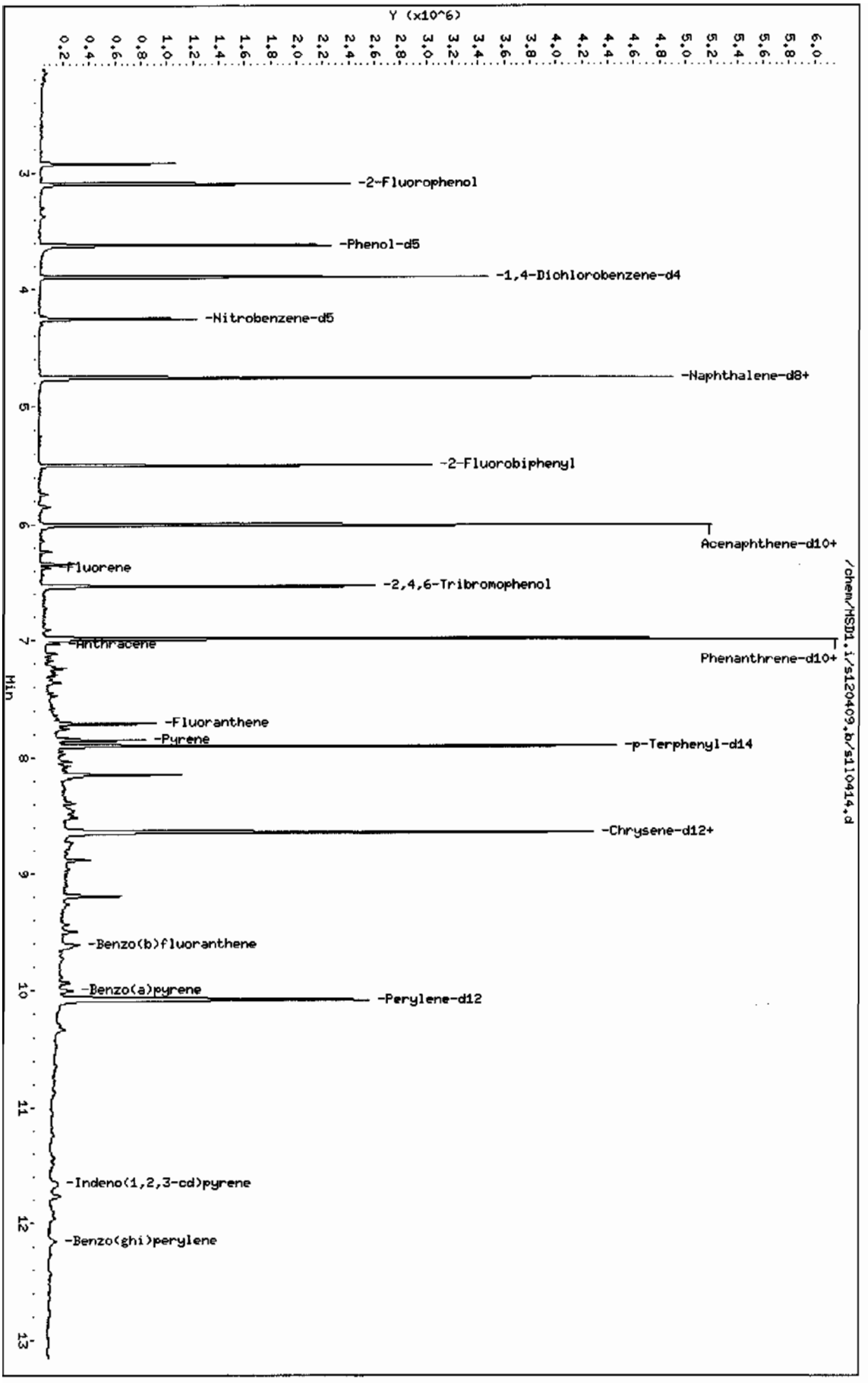

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: |2415400061926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 24.9 ug/Kg

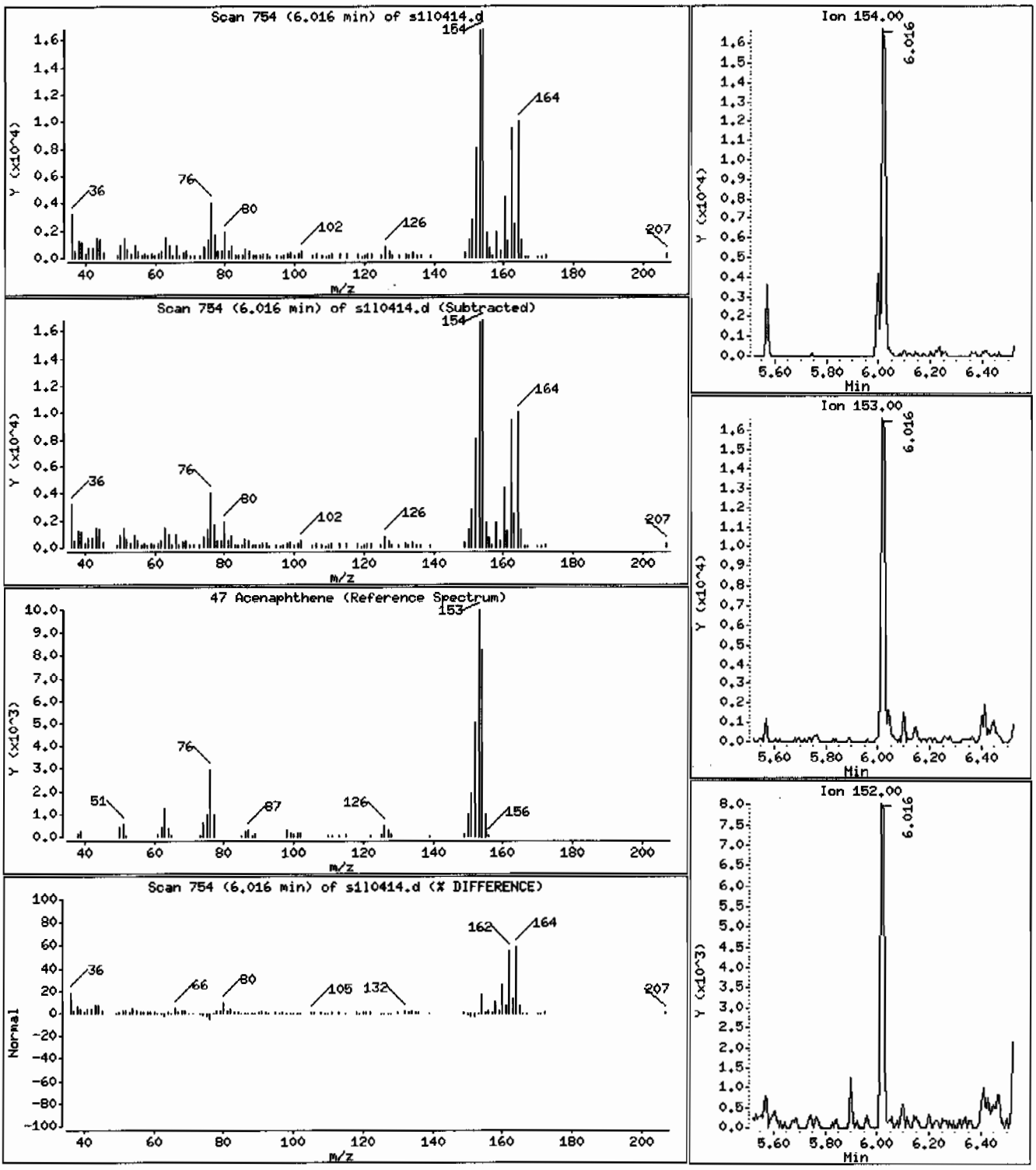

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: 1241540006|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 200 ug/Kg

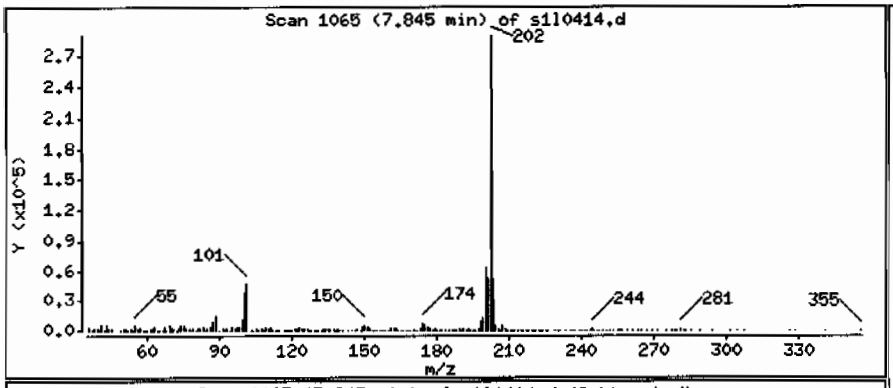

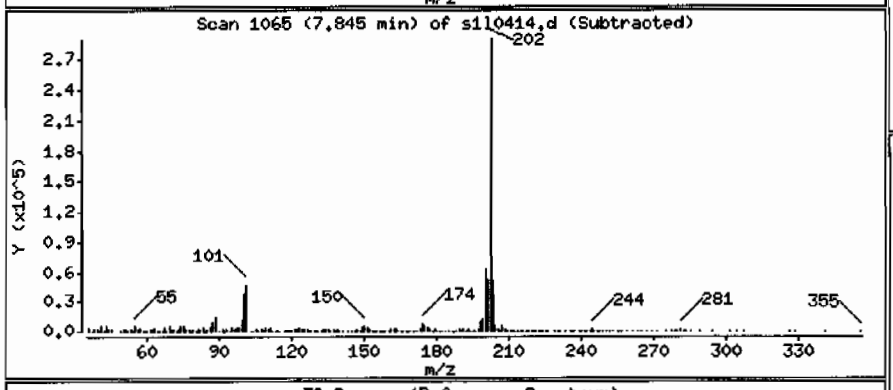

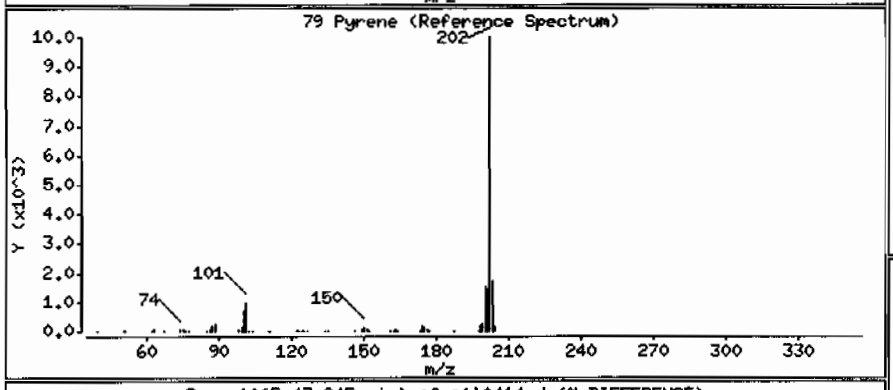

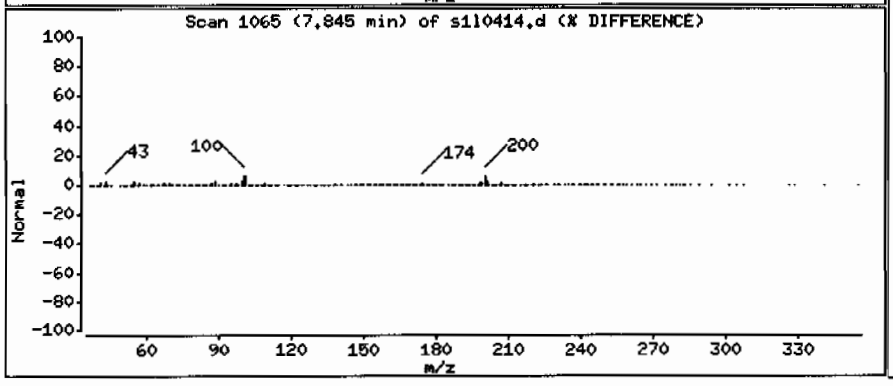

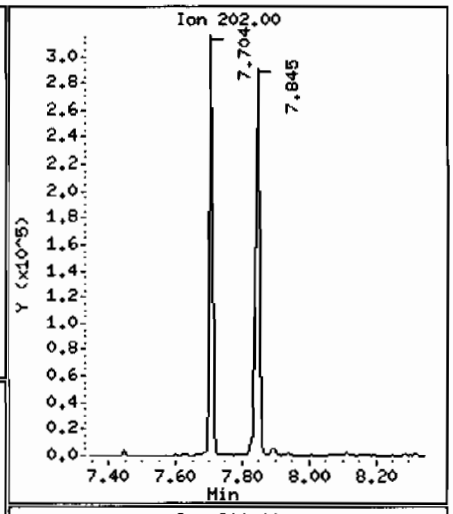

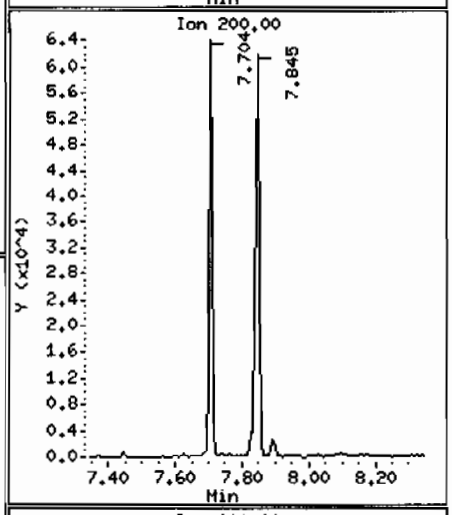

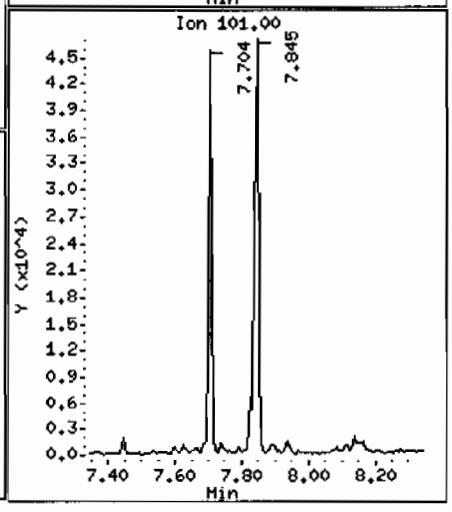

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871 Instrument: MSD1.i

Sample Info: 1241540006|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

30 Naphthalene Concentration: 17.4 ug/Kg

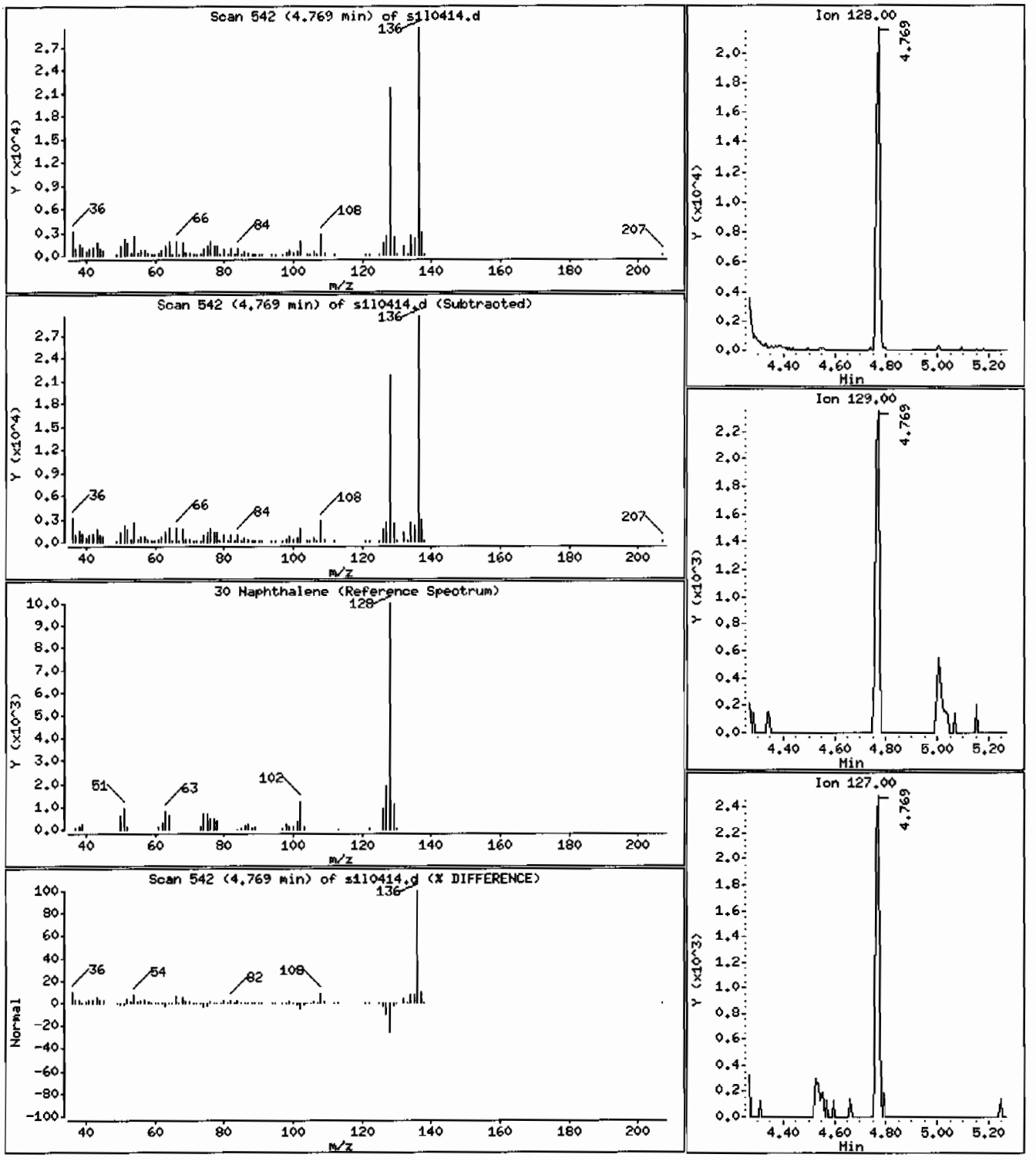

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: |2415400061926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

53 Fluorene

Concentration: 22.2 ug/Kg

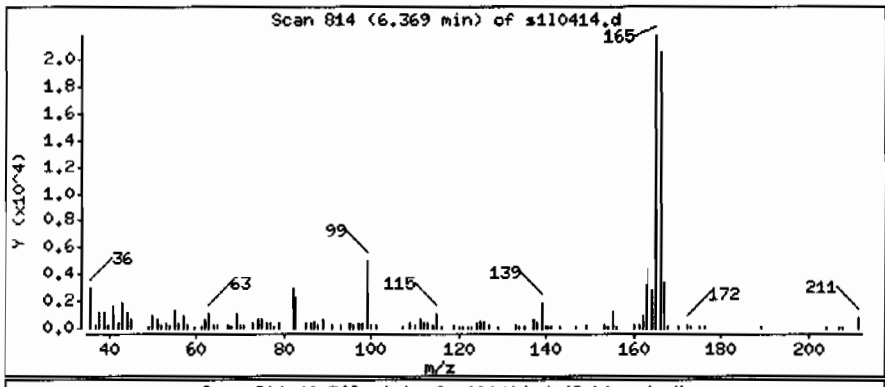

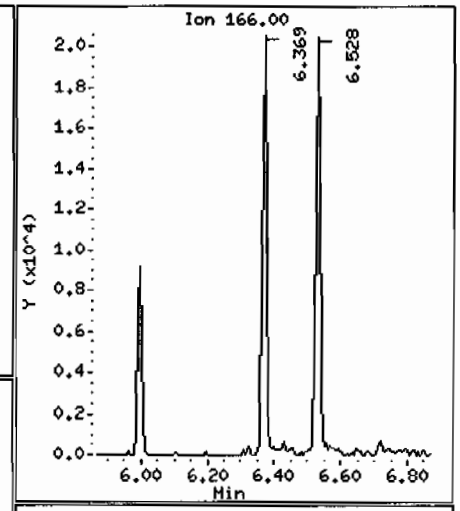

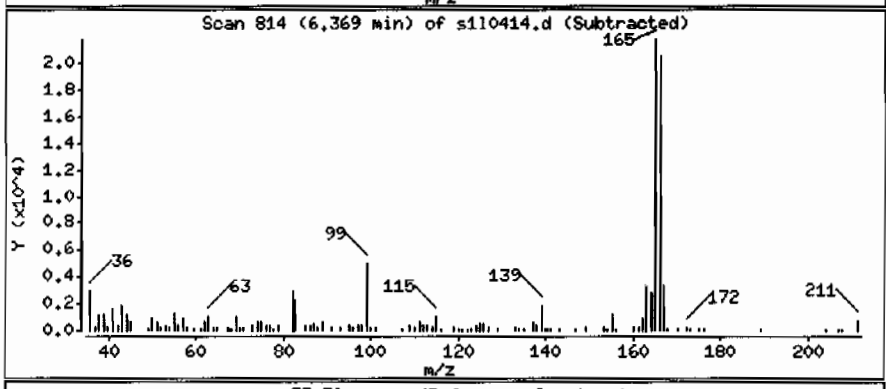

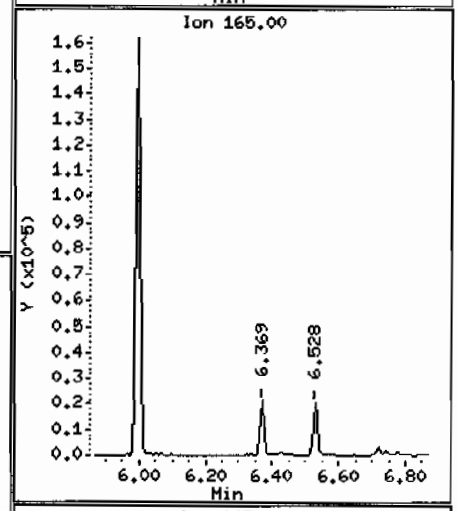

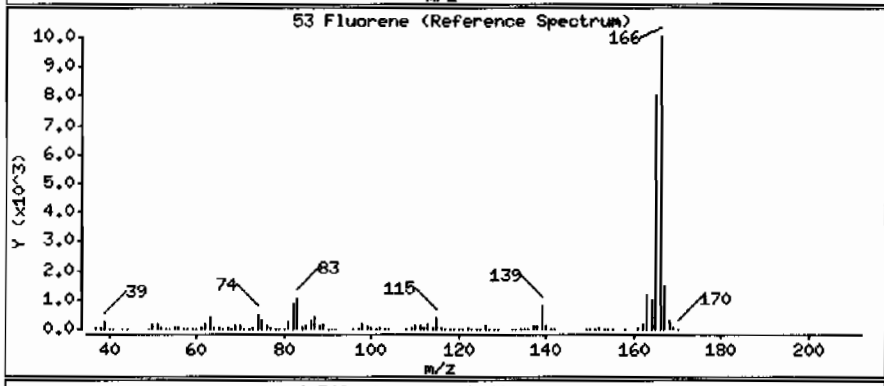

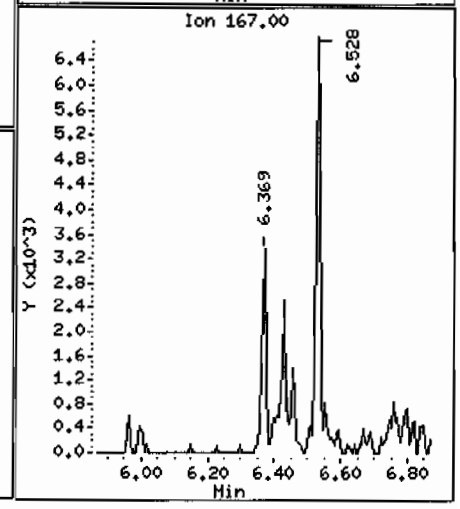

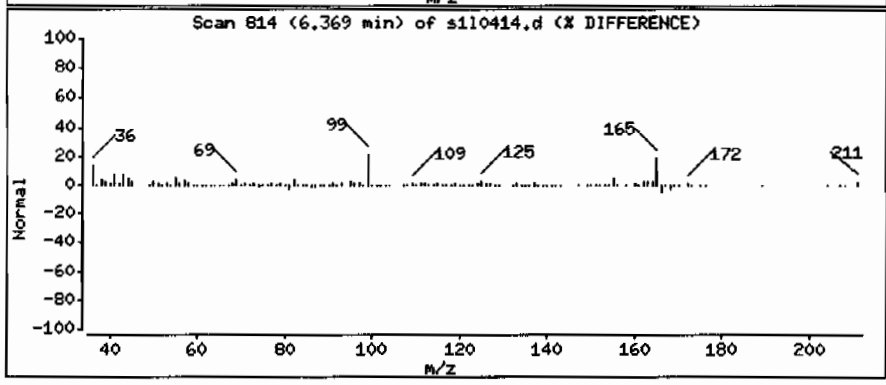

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: 1241540006192661011SVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 187 ug/Kg

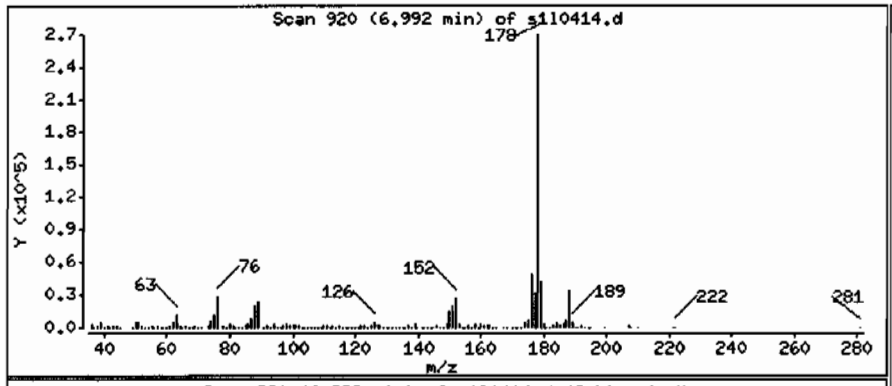

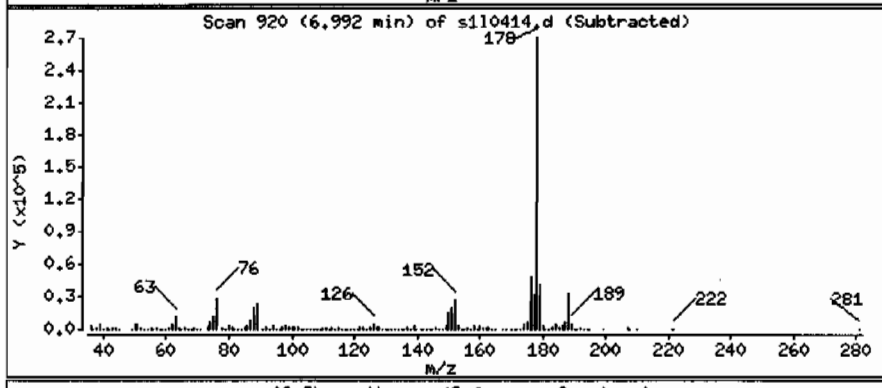

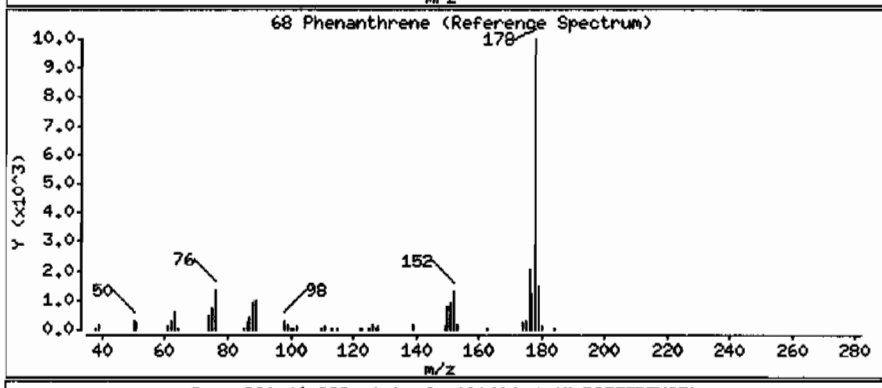

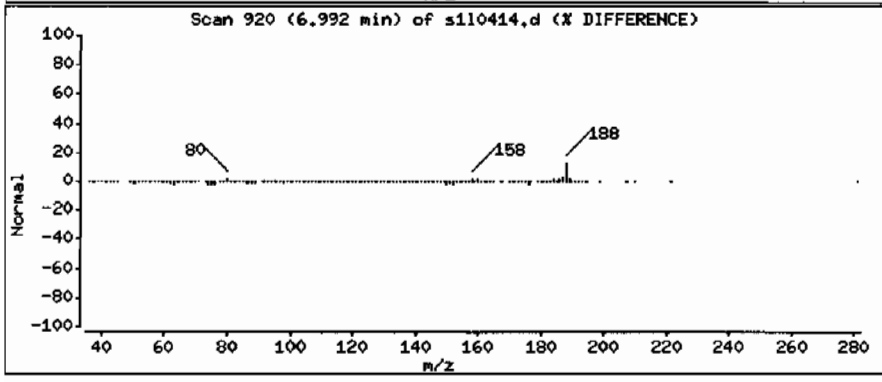

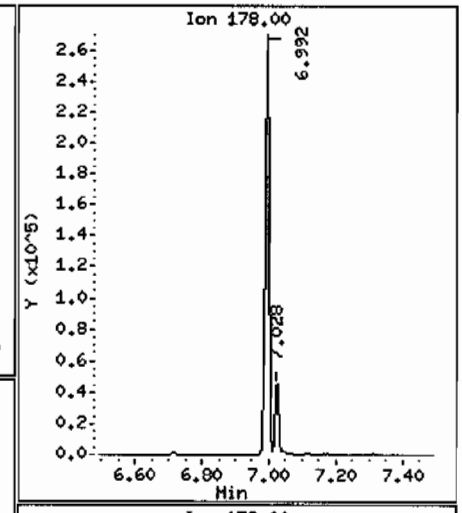

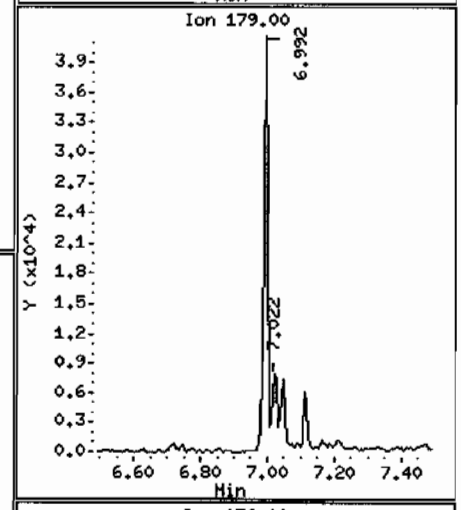

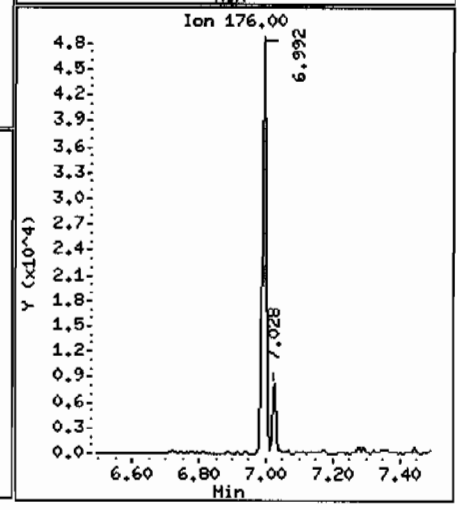

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: 1241540006|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 40.2 ug/Kg

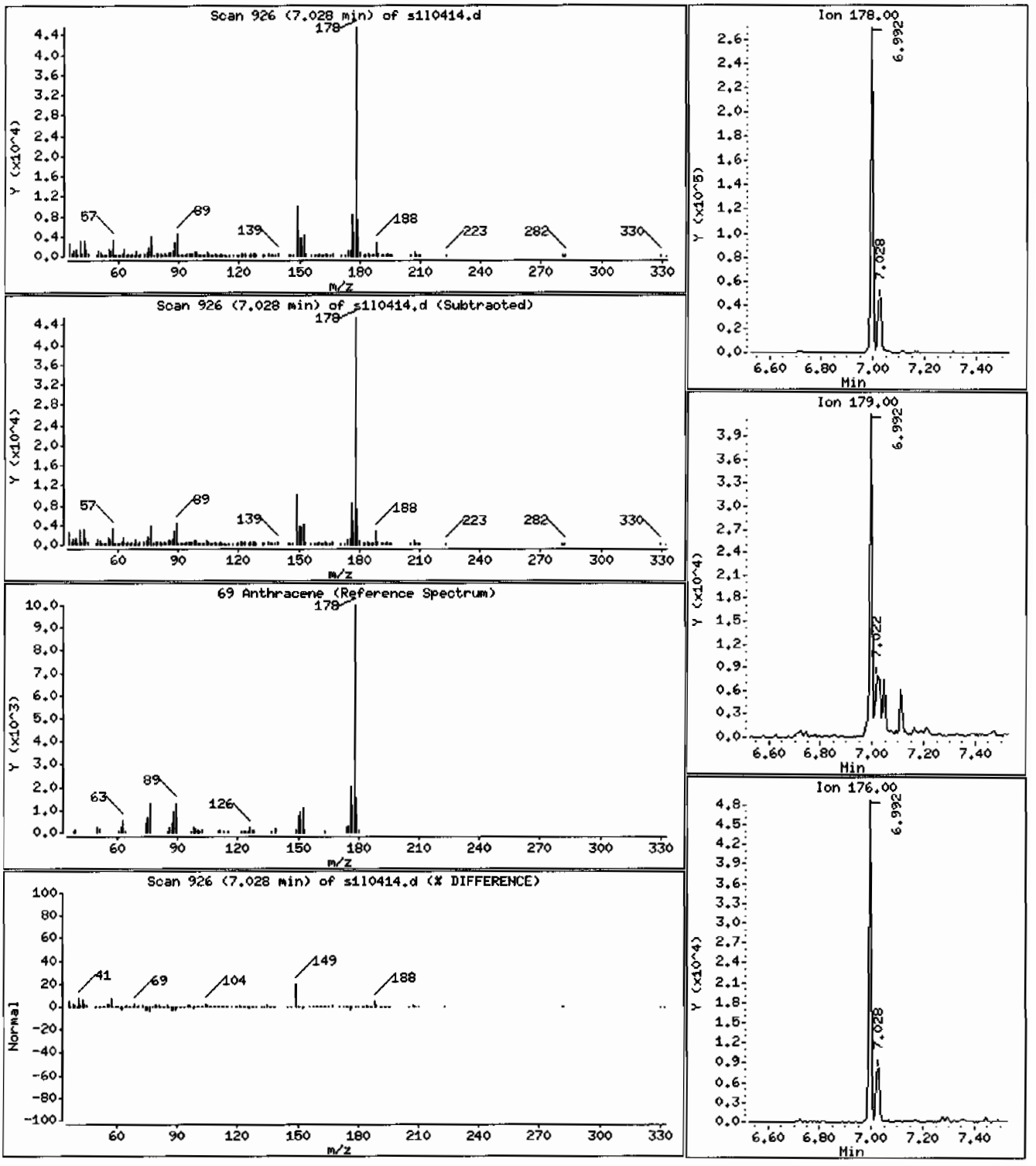

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: 1241540006|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 230 ug/Kg

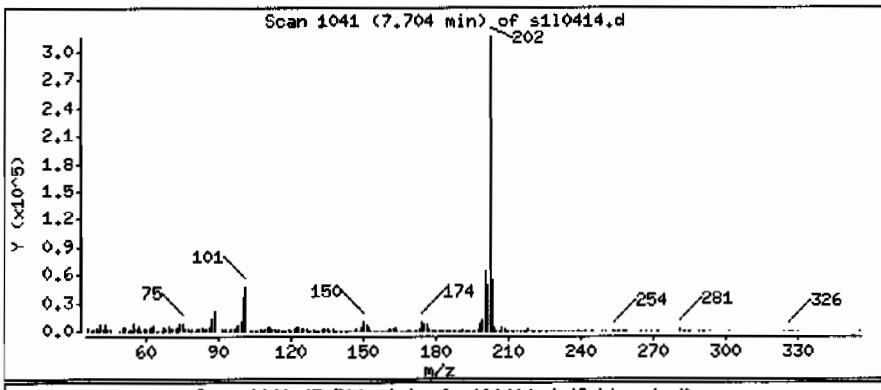

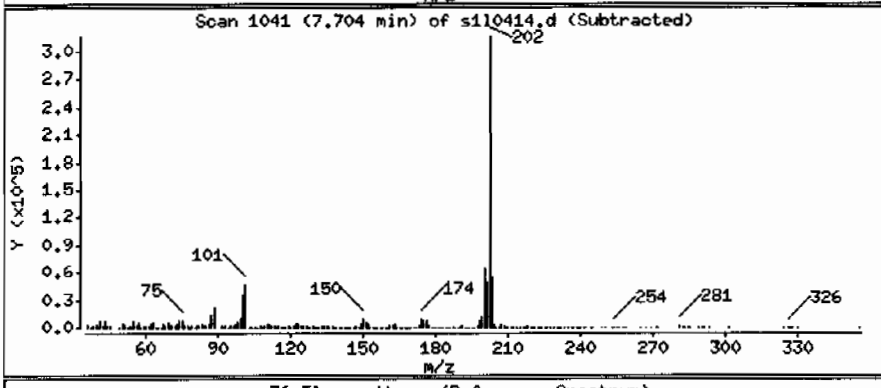

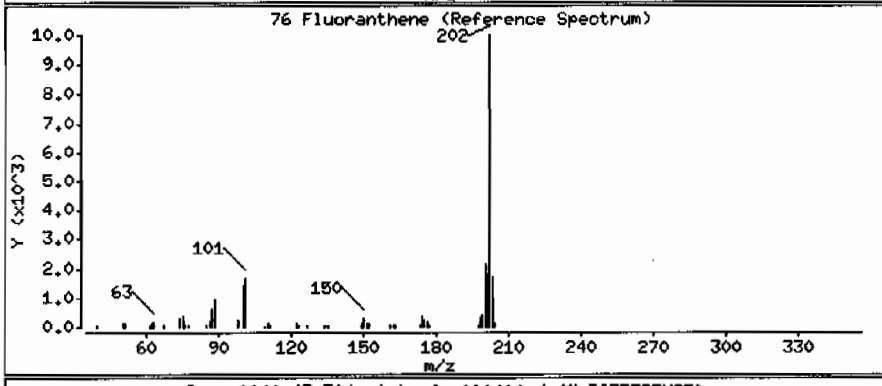

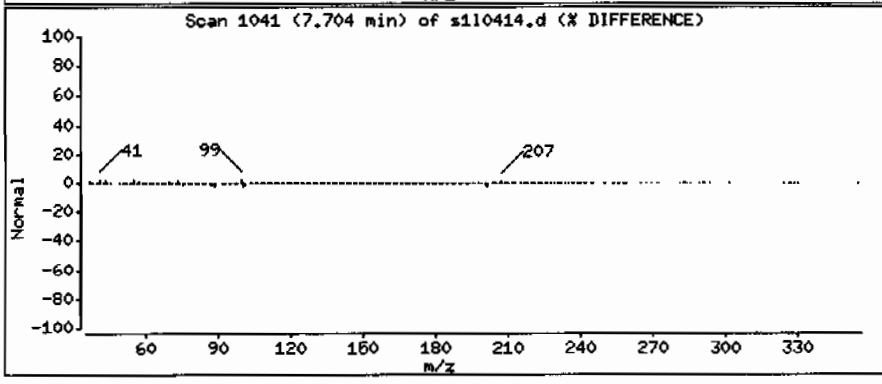

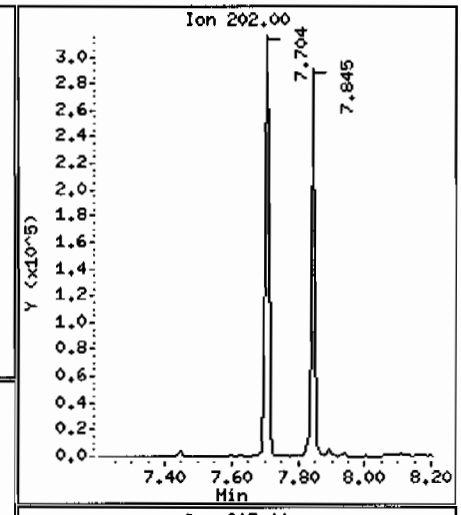

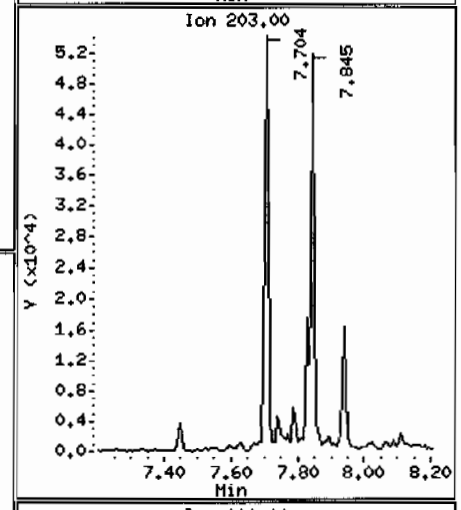

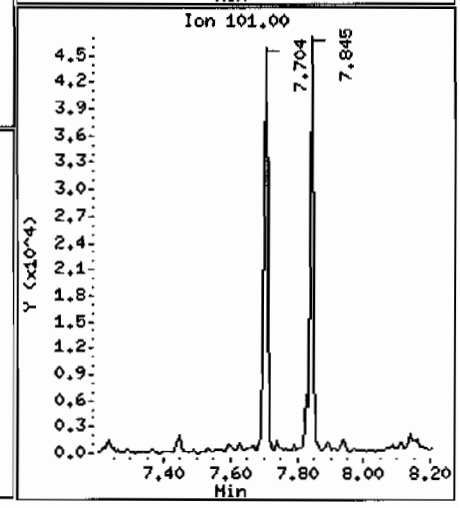

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: |2415400061926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 84.4 ug/Kg

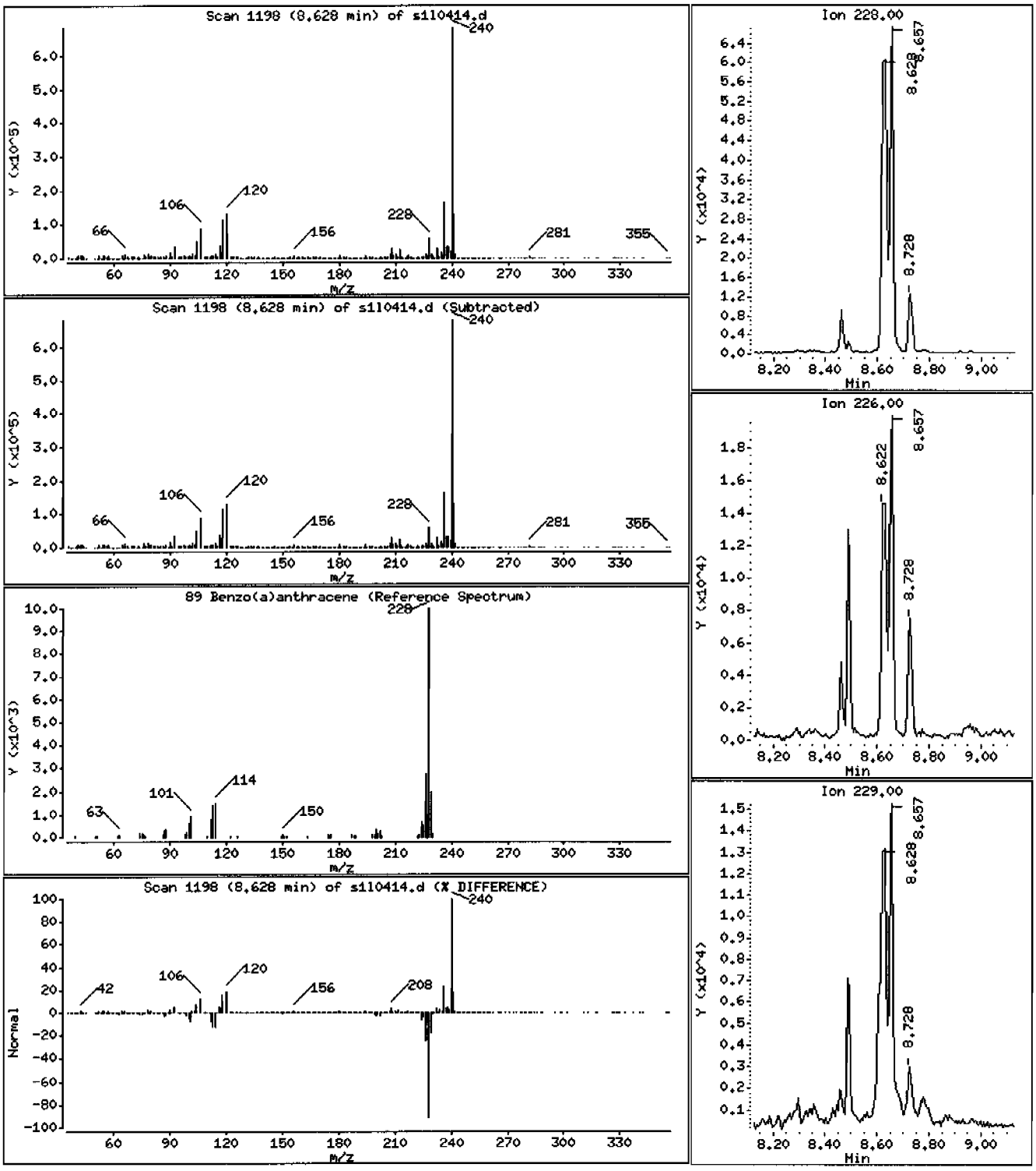

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: 1241540006|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5HS

Column diameter: 0.20

92 Chrysene

Concentration: 90.7 ug/Kg

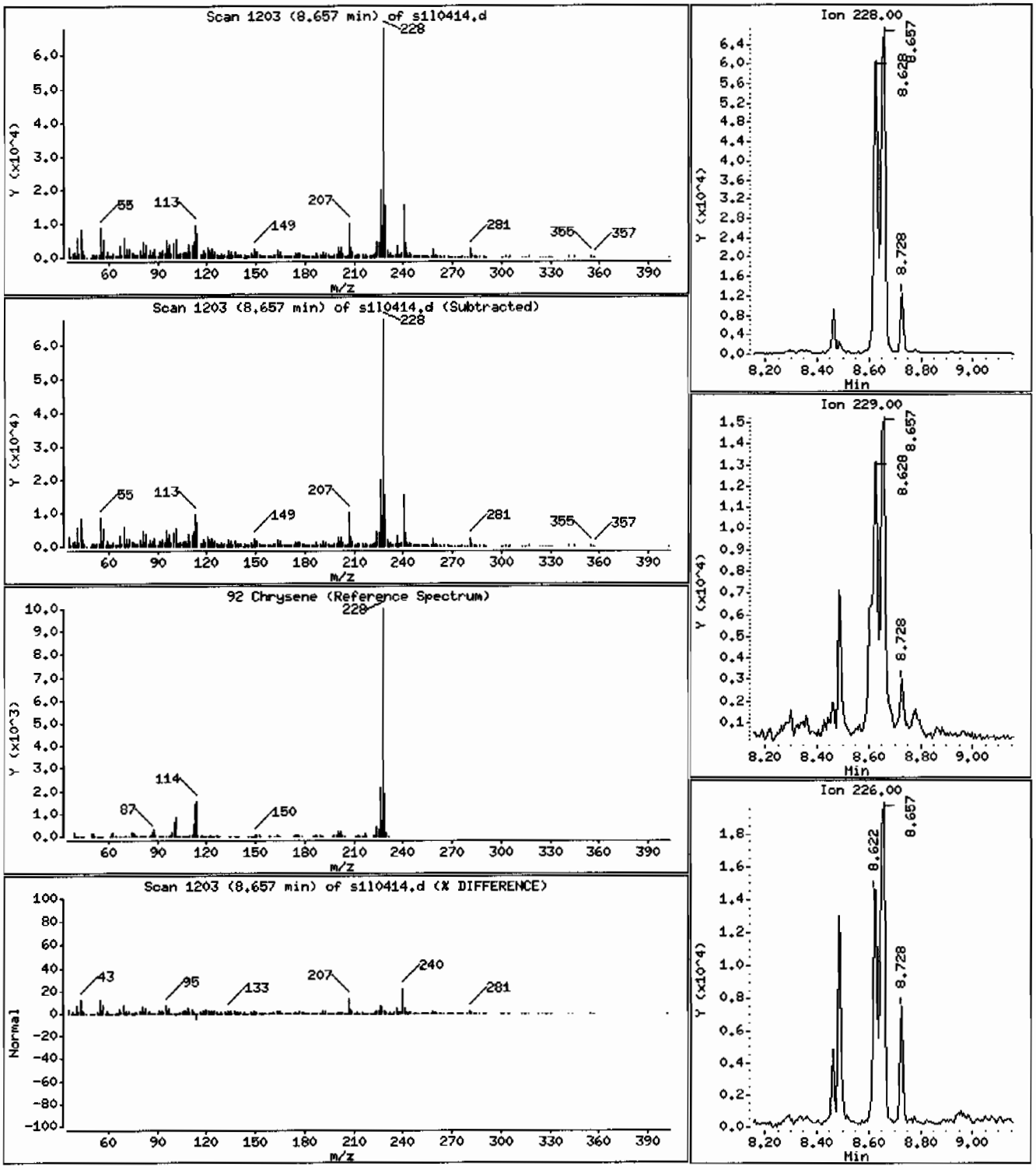

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: |2415400061926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 228 ug/Kg

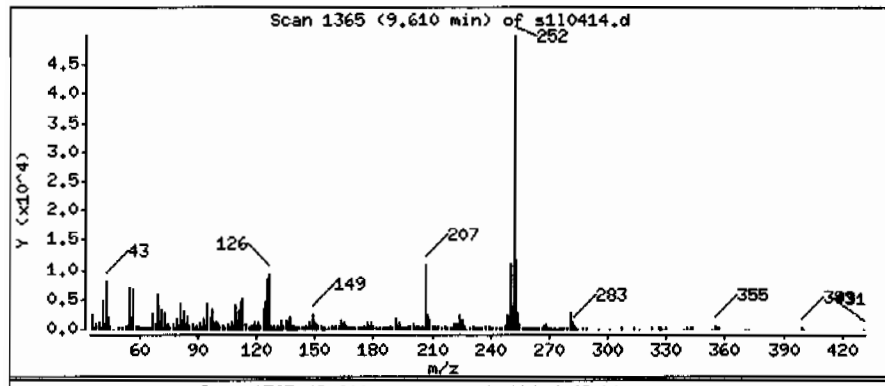

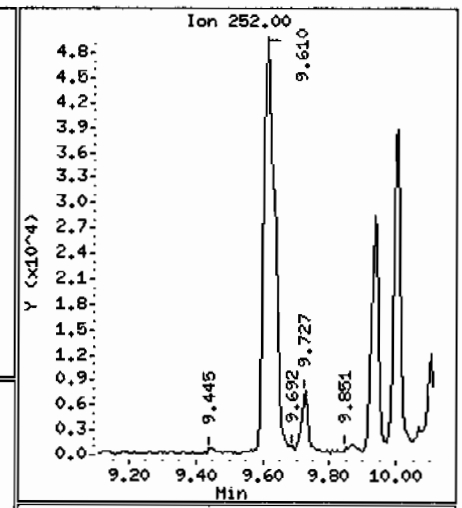

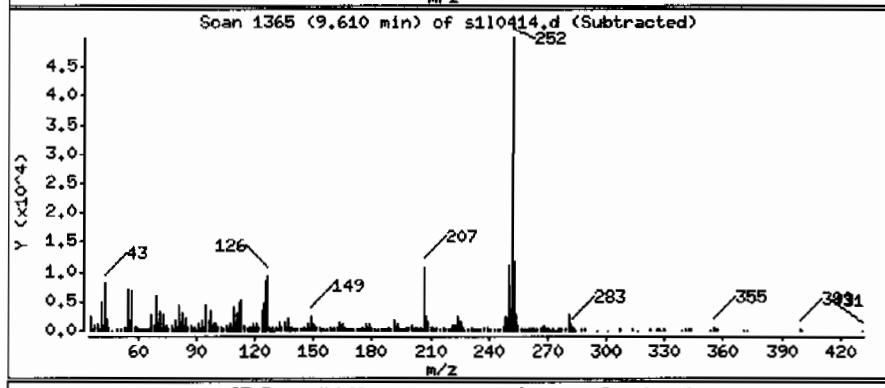

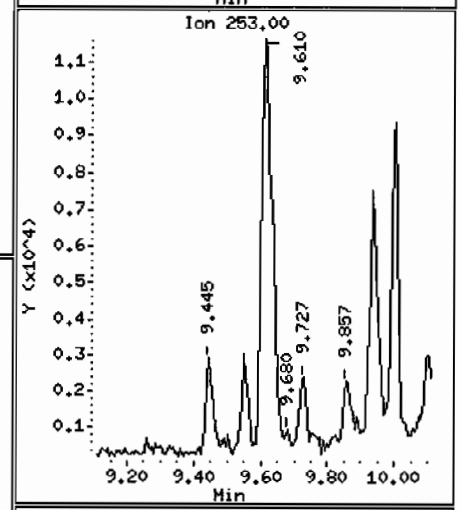

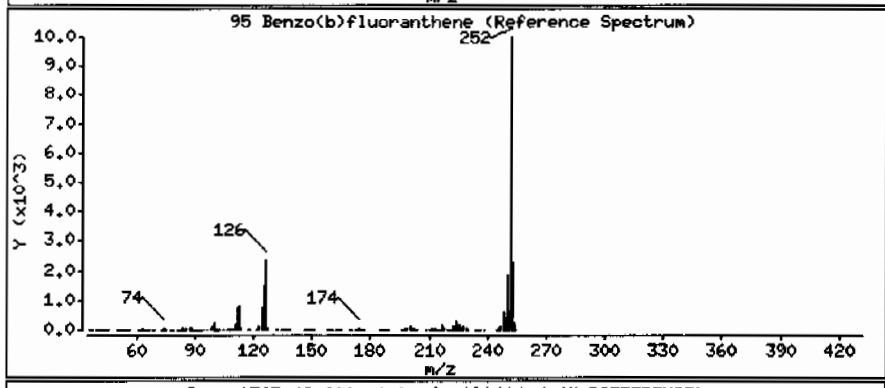

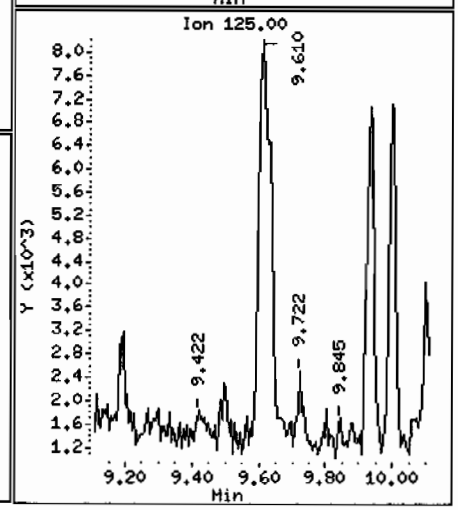

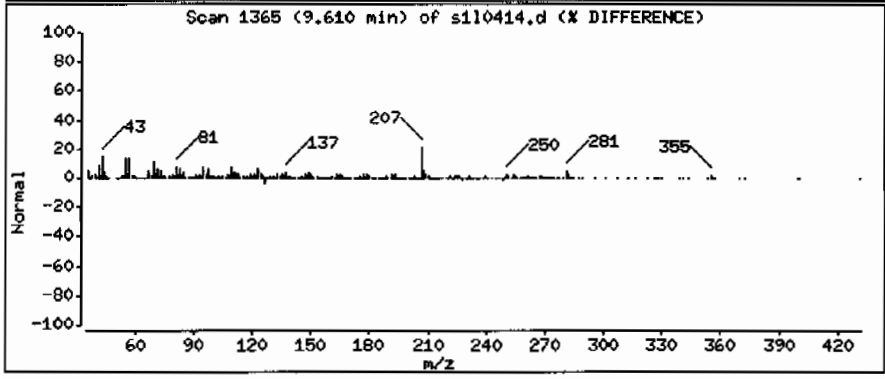

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: |2415400061926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 78.9 ug/Kg

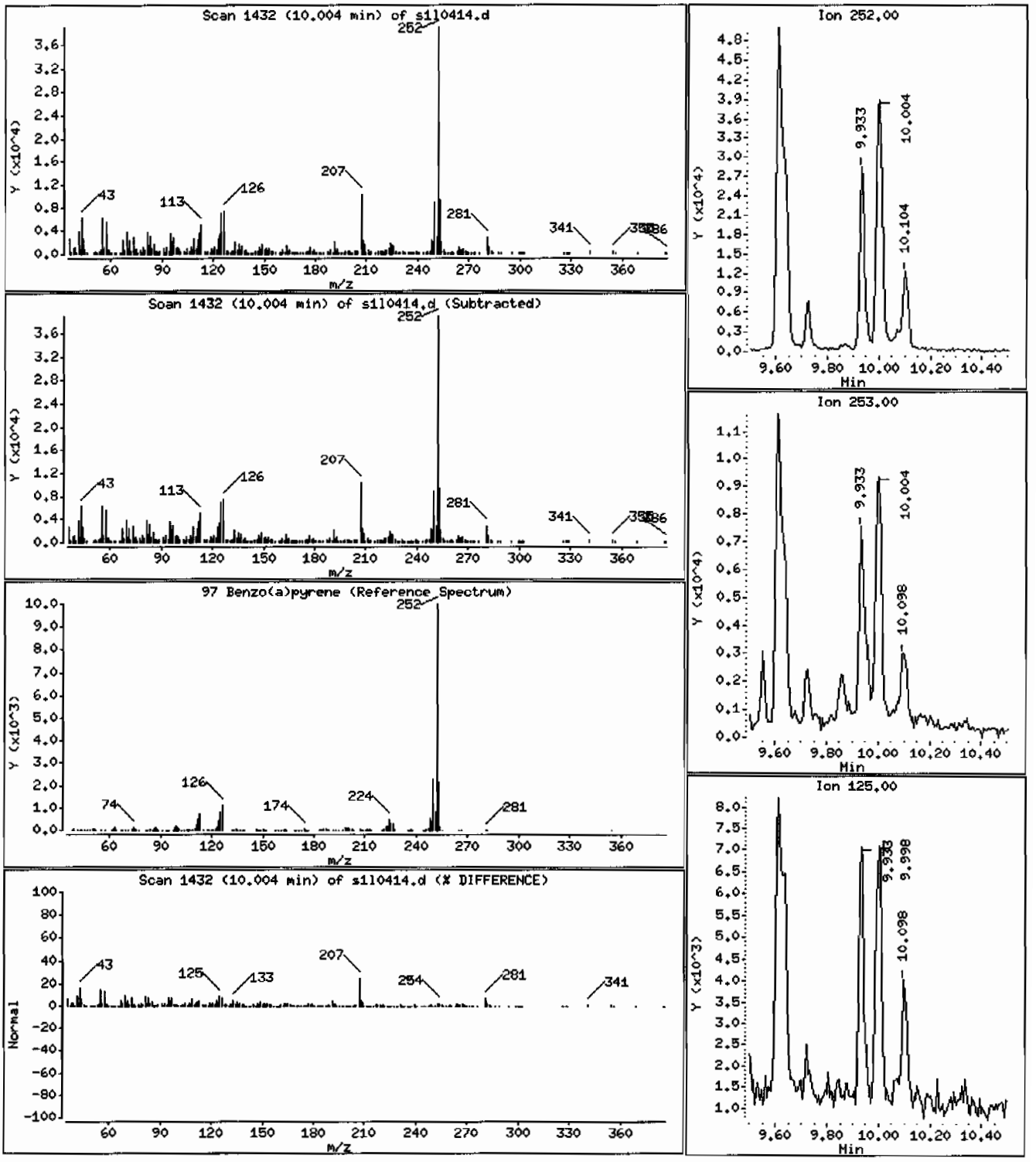

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871 Instrument: MSD1.i

Sample Info: |2415400061926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene Concentration: 35.4 ug/Kg

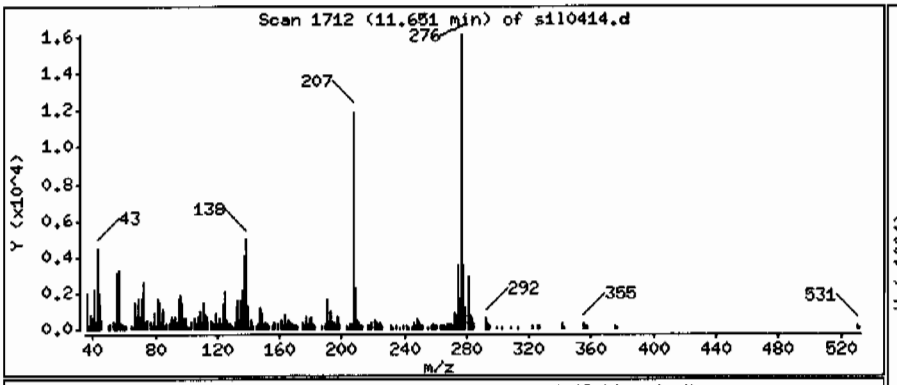

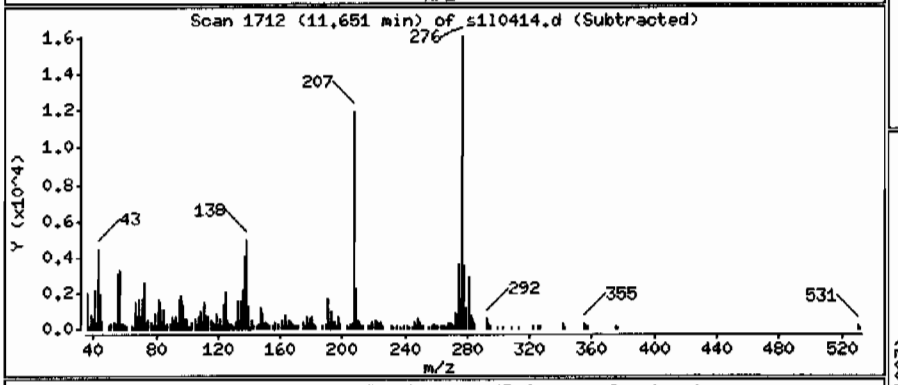

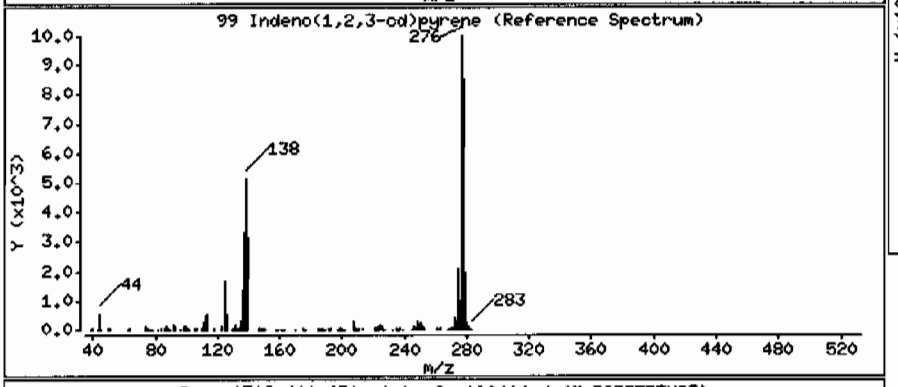

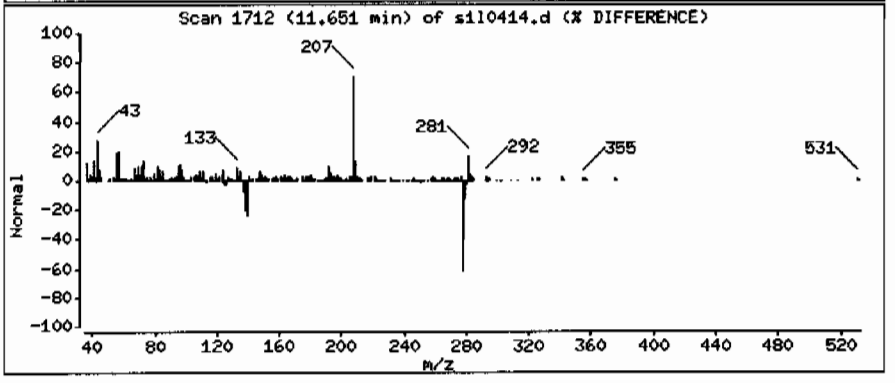

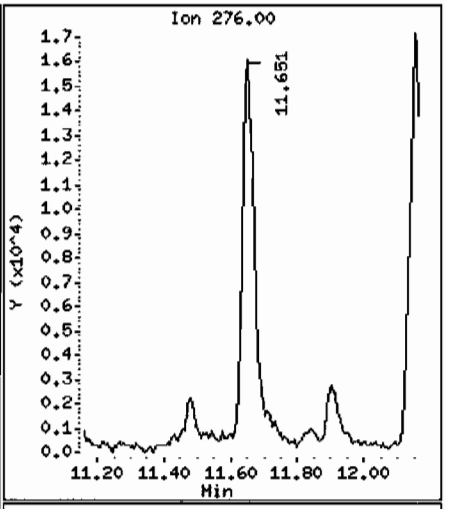

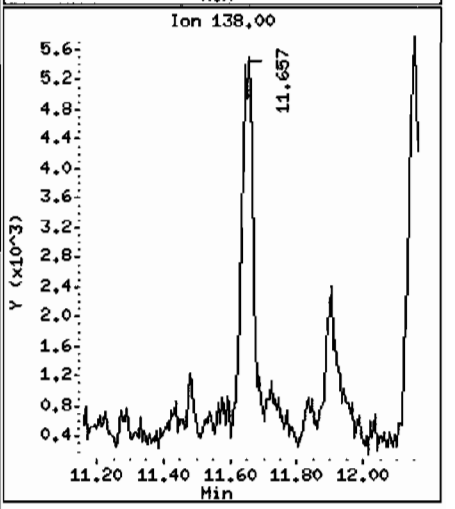

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871 Instrument: MSD1.i

Sample Info: 1241540006|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

101 Benzo(ghi)perylene Concentration: 66.7 ug/Kg

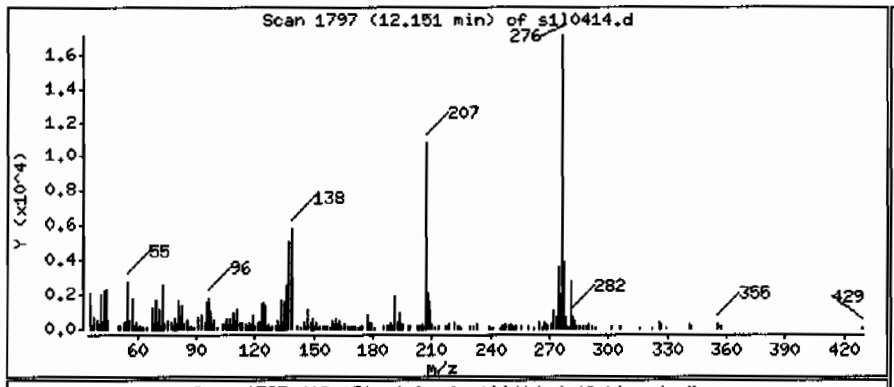

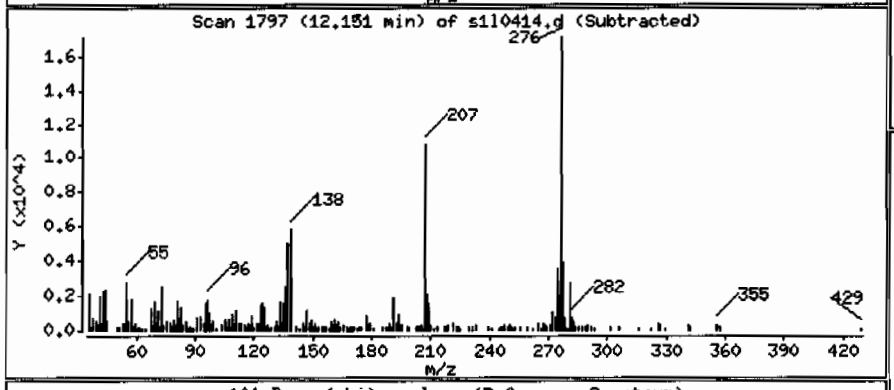

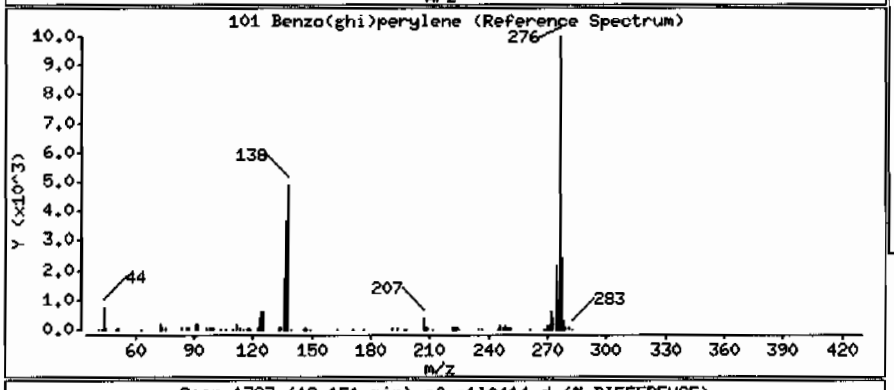

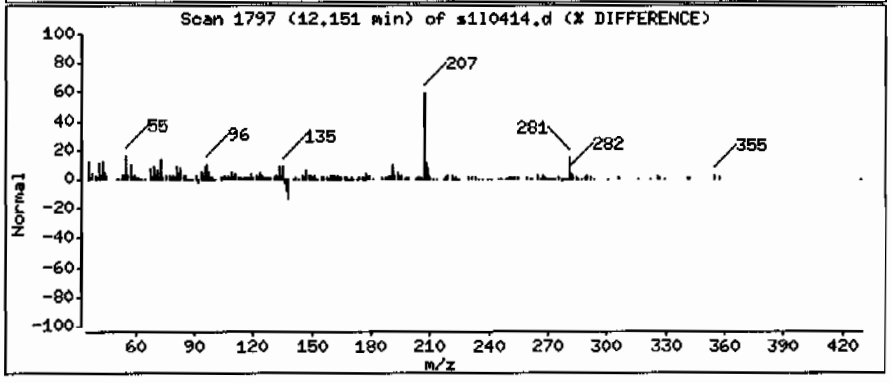

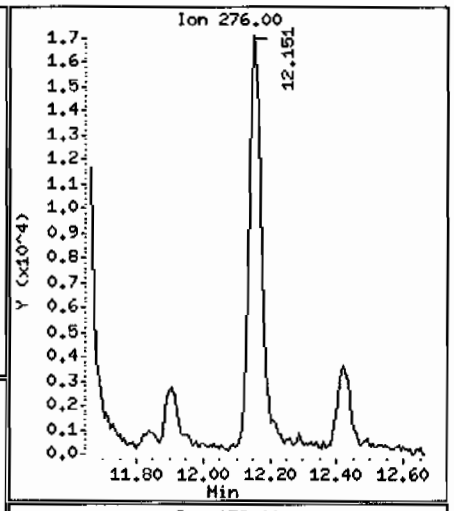

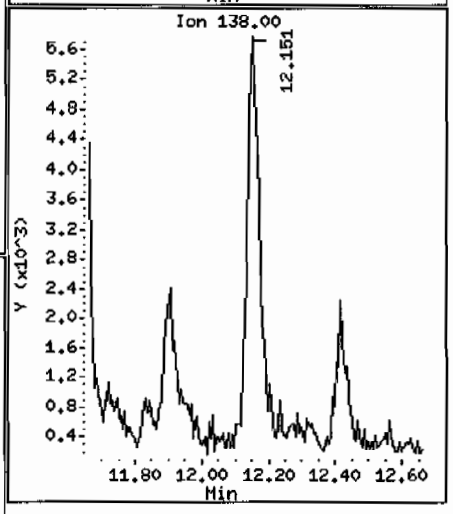

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871

Instrument: MSD1.i

Sample Info: |2415400061926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116

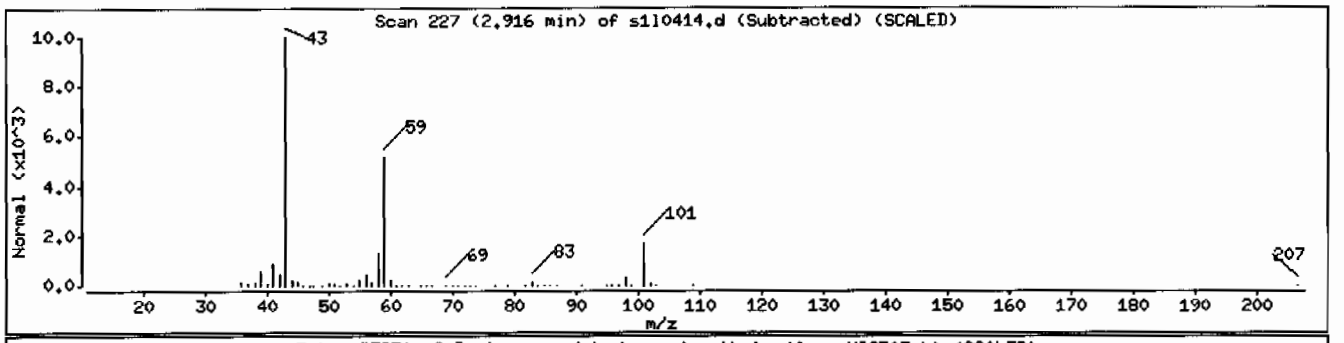

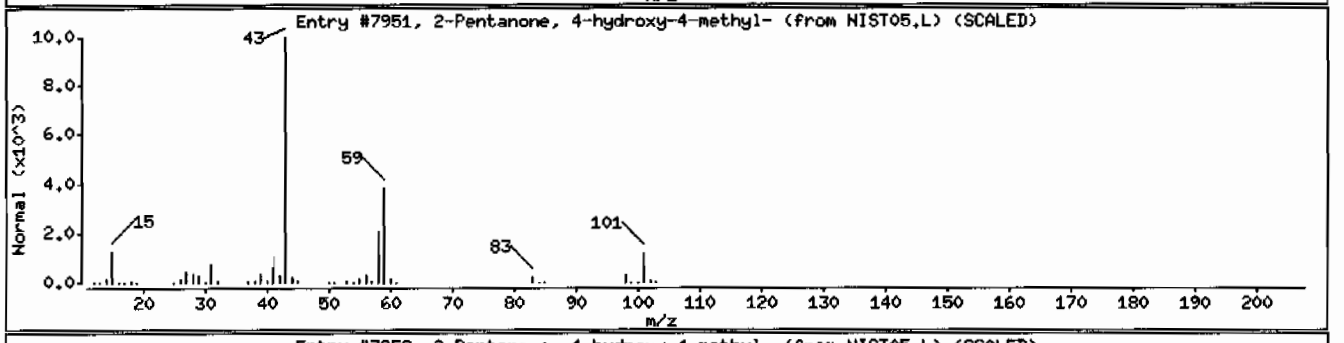

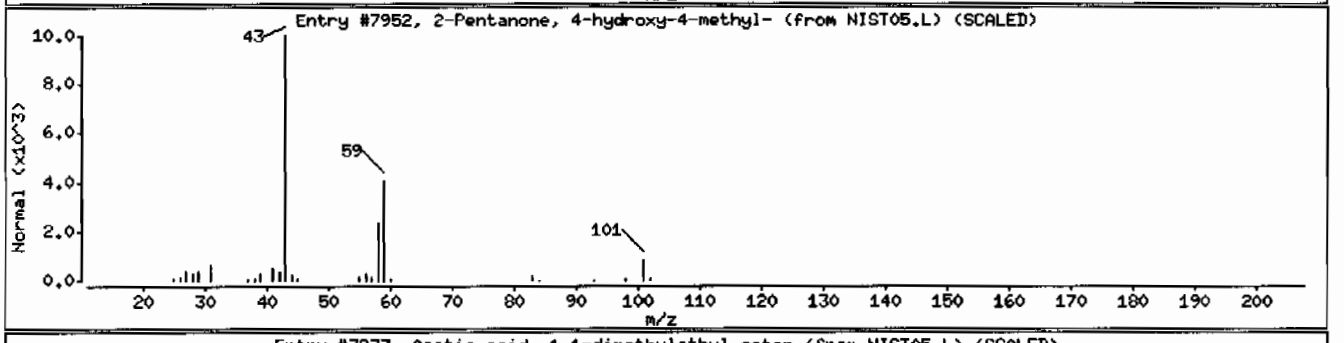

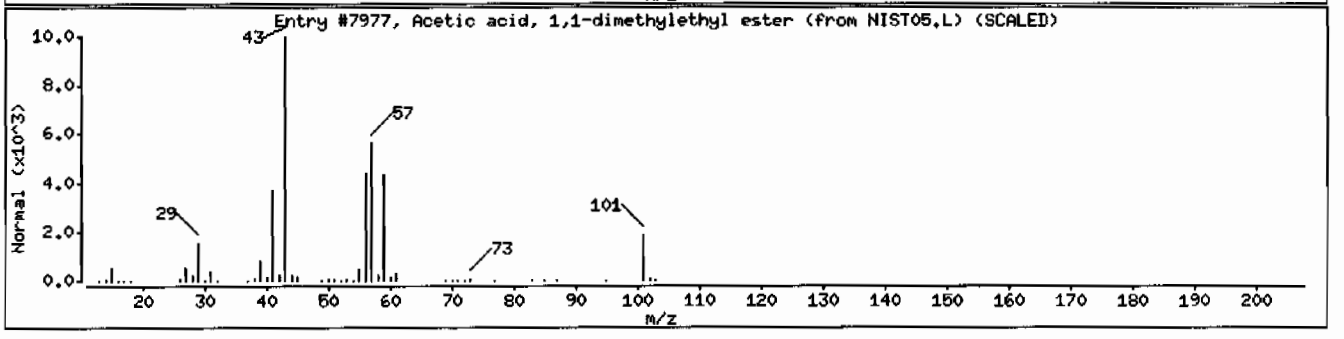

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871 Instrument: MSD1.i

Sample Info: 1241540006192661011SVMF11LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	98	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	72	C18H35NO	281

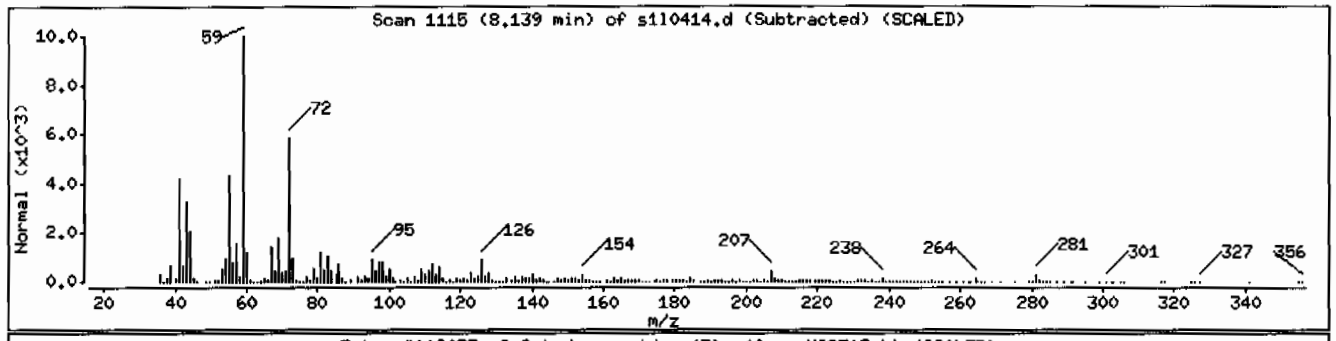

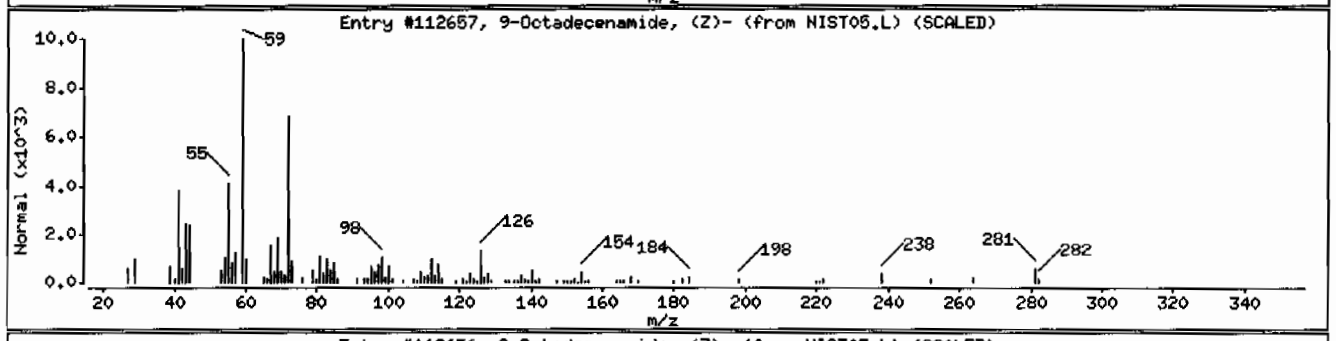

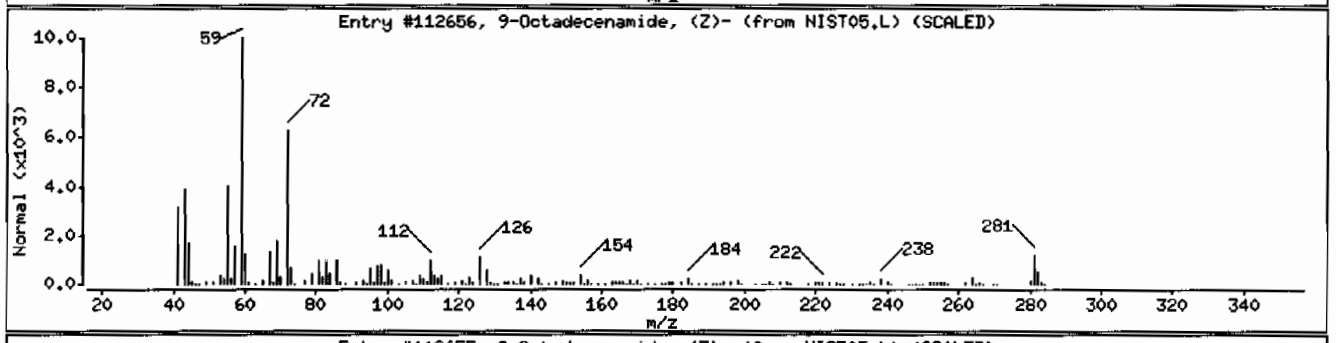

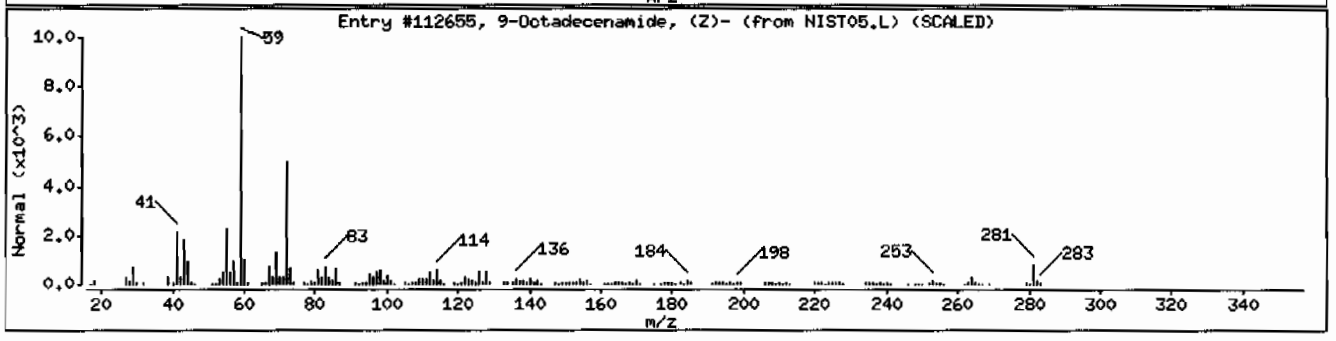

Data File: /chem/MSD1.i/s120409.b/s110414.d

Date : 04-DEC-2009 13:50

Client ID: RE03-09-13871 Instrument: MSD1.i

Sample Info: |24154000619266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	86	C22H43NO	337
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	86	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	60	C18H35NO	281

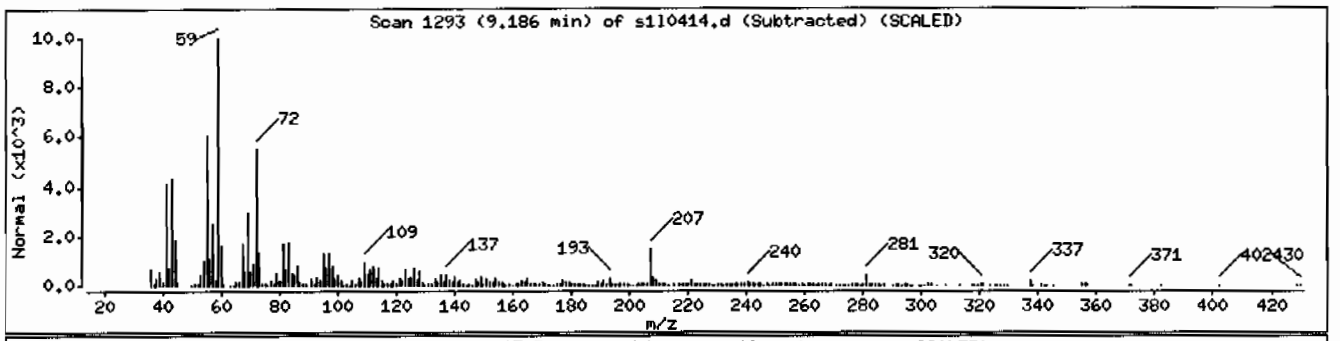

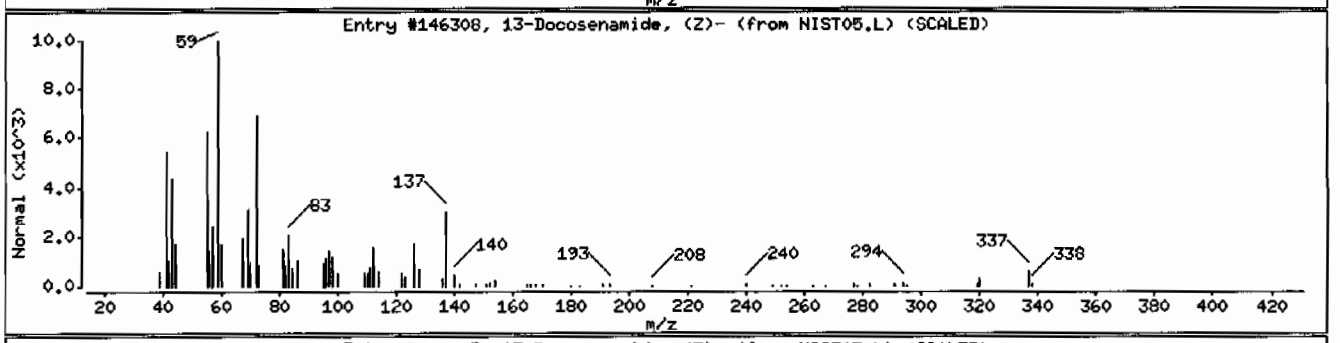

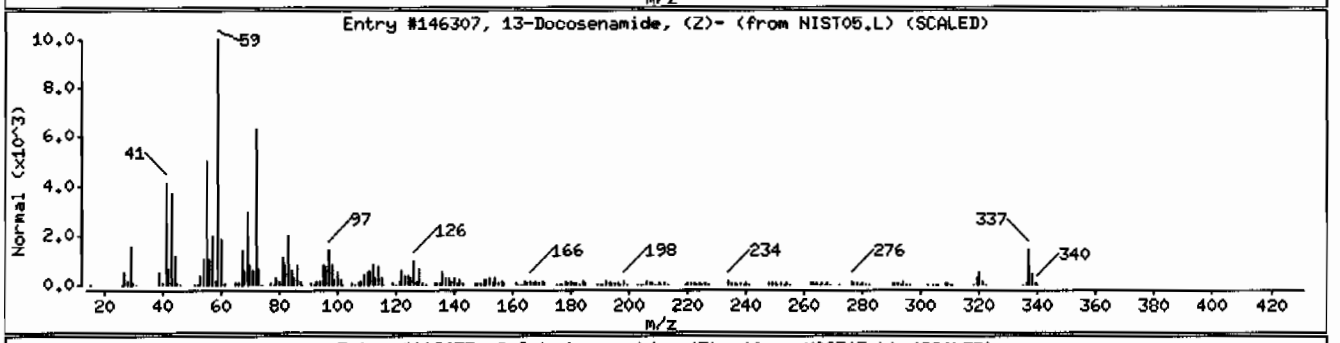

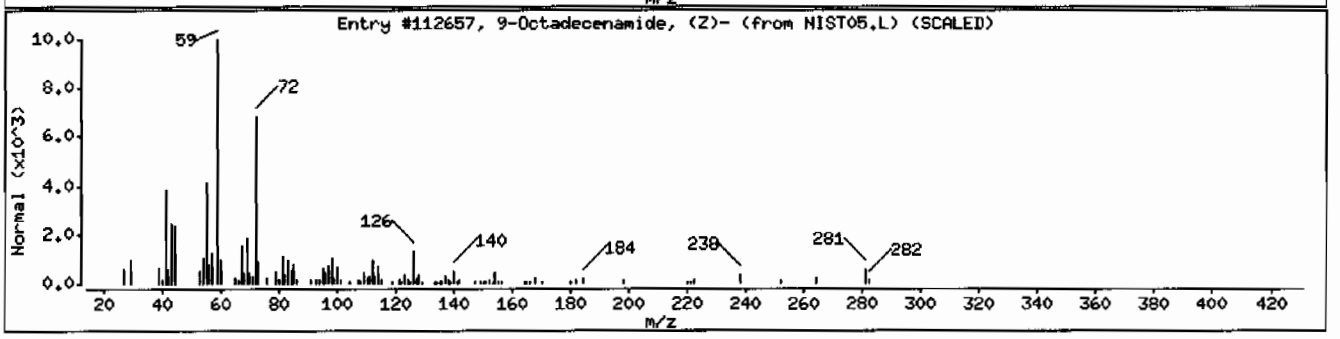

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540016**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13872**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**10**
Run Date:	**12/04/2009 17:42**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110424.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	3680	ug/kg	736	3680
108-95-2	Phenol	U	3680	ug/kg	736	3680
95-57-8	2-Chlorophenol	U	3680	ug/kg	736	3680
106-46-7	1,4-Dichlorobenzene	U	3680	ug/kg	736	3680
621-64-7	N-Nitrosodipropylamine	U	3680	ug/kg	736	3680
59-50-7	4-Chloro-3-methylphenol	U	3680	ug/kg	736	3680
83-32-9	Acenaphthene	U	368	ug/kg	121	368
121-14-2	2,4-Dinitrotoluene	U	3680	ug/kg	368	3680
100-02-7	4-Nitrophenol	U	3680	ug/kg	1210	3680
87-86-5	Pentachlorophenol	U	3680	ug/kg	920	3680
129-00-0	Pyrene	J	204	ug/kg	110	368
110-86-1	Pyridine	U	3680	ug/kg	736	3680
62-53-3	Aniline	U	3680	ug/kg	1100	3680
111-44-4	bis(2-Chloroethyl) ether	U	3680	ug/kg	736	3680
541-73-1	1,3-Dichlorobenzene	U	3680	ug/kg	736	3680
100-51-6	Benzyl alcohol	U	3680	ug/kg	1100	3680
95-50-1	1,2-Dichlorobenzene	U	3680	ug/kg	736	3680
108-60-1	bis(2-Chloroisopropyl)ether	U	3680	ug/kg	736	3680
95-48-7	o-Cresol	U	3680	ug/kg	736	3680
65794-96-9	m,p-Cresols	U	3680	ug/kg	1100	3680
67-72-1	Hexachloroethane	U	3680	ug/kg	736	3680
98-95-3	Nitrobenzene	U	3680	ug/kg	736	3680
78-59-1	Isophorone	U	3680	ug/kg	736	3680
88-75-5	2-Nitrophenol	U	3680	ug/kg	736	3680
105-67-9	2,4-Dimethylphenol	U	3680	ug/kg	1290	3680
111-91-1	bis(2-Chloroethoxy)methane	U	3680	ug/kg	736	3680
120-83-2	2,4-Dichlorophenol	U	3680	ug/kg	736	3680
65-85-0	Benzoic acid	U	7360	ug/kg	1840	7360
91-20-3	Naphthalene	U	368	ug/kg	110	368
106-47-8	4-Chloroaniline	U	3680	ug/kg	736	3680
87-68-3	Hexachlorobutadiene	U	3680	ug/kg	736	3680
91-57-6	2-Methylnaphthalene	U	368	ug/kg	73.6	368
77-47-4	Hexachlorocyclopentadiene	U	3680	ug/kg	736	3680
88-06-2	2,4,6-Trichlorophenol	U	3680	ug/kg	736	3680
95-95-4	2,4,5-Trichlorophenol	U	3680	ug/kg	736	3680
91-58-7	2-Chloronaphthalene	U	368	ug/kg	121	368
88-74-4	2-Nitroaniline	U	3680	ug/kg	736	3680
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	3680	ug/kg	736	3680

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13872	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	10
Run Date:	12/04/2009 17:42	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110424.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	3680	ug/kg	736	3680
606-20-2	2,6-Dinitrotoluene	U	3680	ug/kg	368	3680
208-96-8	Acenaphthylene	U	368	ug/kg	110	368
51-28-5	2,4-Dinitrophenol	U	7360	ug/kg	1400	7360
132-64-9	Dibenzofuran	U	3680	ug/kg	736	3680
84-66-2	Diethylphthalate	U	3680	ug/kg	736	3680
86-73-7	Fluorene	U	368	ug/kg	110	368
7005-72-3	4-Chlorophenylphenylether	U	3680	ug/kg	736	3680
534-52-1	2-Methyl-4,6-dinitrophenol	U	3680	ug/kg	736	3680
100-01-6	4-Nitroaniline	U	3680	ug/kg	1100	3680
	p-Nitroaniline					
122-39-4	Diphenylamine	U	3680	ug/kg	736	3680
122-66-7	Azobenzene	U	3680	ug/kg	736	3680
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	3680	ug/kg	736	3680
118-74-1	Hexachlorobenzene	U	3680	ug/kg	736	3680
85-01-8	Phenanthrene	J	124	ug/kg	110	368
120-12-7	Anthracene	U	368	ug/kg	73.6	368
84-74-2	Di-n-butylphthalate	U	3680	ug/kg	736	3680
206-44-0	Fluoranthene	J	217	ug/kg	110	368
85-68-7	Butylbenzylphthalate	U	3680	ug/kg	736	3680
56-55-3	Benzo(a)anthracene	J	135	ug/kg	110	368
91-94-1	3,3'-Dichlorobenzidine	U	3680	ug/kg	1100	3680
218-01-9	Chrysene	U	368	ug/kg	110	368
117-81-7	bis(2-Ethylhexyl)phthalate	U	3680	ug/kg	736	3680
117-84-0	Di-n-octylphthalate	U	3680	ug/kg	736	3680
205-99-2	Benzo(b)fluoranthene		1130	ug/kg	110	368
207-08-9	Benzo(k)fluoranthene	U	368	ug/kg	110	368
50-32-8	Benzo(a)pyrene	U	368	ug/kg	110	368
193-39-5	Indeno(1,2,3-cd)pyrene	U	368	ug/kg	110	368
53-70-3	Dibenzo(a,h)anthracene	U	368	ug/kg	110	368
191-24-2	Benzo(ghi)perylene	U	368	ug/kg	110	368
120-82-1	1,2,4-Trichlorobenzene	U	3680	ug/kg	736	3680

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.97	1900	ug/kg		J
621-82-9	2-Propenoic acid, 3-phenyl-	5.66	1950	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13872	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	10
Run Date:	12/04/2009 17:42	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s1l0424.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	7.66	1790	ug/kg		J
	Unknown	8.02	2570	ug/kg		J
	Unknown	8.24	3630	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.45	12700	ug/kg	96	NJ
514-10-3	Abietic acid	8.59	7130	ug/kg	95	NJ
	Unknown	8.66	2350	ug/kg		J
	Unknown	8.74	1700	ug/kg		J
	Unknown	10.86	2250	ug/kg		J
	Unknown	12.49	1550	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110424.d
Lab Smp Id: 241540016 Client Smp ID: RE03-09-13872
Inj Date : 04-DEC-2009 17:42
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540016|926610|10|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 22
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.43260	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	357468	40.0000	
* 29 Naphthalene-d8	136	4.757	4.751	(1.000)	1476301	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	854800	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1588321	40.0000	
* 91 Chrysene-d12	240	8.639	8.633	(1.000)	1431172	40.0000	
* 98 Perylene-d12	264	10.074	10.069	(1.000)	1302358	40.0000	
$ 3 2-Fluorophenol	112	3.087	3.081	(0.793)	64596	6.91834	2550
$ 5 Phenol-d5	99	3.622	3.610	(0.930)	59398	5.23416	1930
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.894)	38613	3.96887	1460
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	97274	4.75146	1750
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	24351	10.2019	3750
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	109808	4.88798	1800

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.845	7.845	(0.908)	21064	0.55387	204(a)
68 Phenanthrene	178	6.992	6.992	(1.002)	12144	0.33644	124(a)
76 Fluoranthene	202	7.704	7.704	(1.104)	20565	0.59023	217(a)
89 Benzo(a)anthracene	228	8.627	8.628	(0.999)	12566	0.36617	135(a)
95 Benzo(b)fluoranthene	252	9.610	9.610	(0.954)	14061	3.06156	1130

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s110424.d
Report Date: 12/05/2009 08:15
Lab. ID: 241540016 SampleType: SAMPLE
Injection Date: 04-DEC-2009 17:42
Operator: nagl Instrument: MSD1.i
Sample Info: |241540016|926610|10|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 10.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
6 Phenol		CAS#: 108-95-2				
94	33037	3.46	3.62	80-120	100	(T)
66	6522	3.46	3.62	13- 73	20	(T)
65	25299	3.46	3.62	0- 58	77	(QT)
15 o-Cresol		CAS#: 95-48-7				
107	26390	3.85	4.01	80-120	100	(T)
108	6050	3.85	4.01	80-140	23	(QT)
77	126701	3.85	4.01	21- 81	480	(QT)
40 2-Chloronaphthalene		CAS#: 91-58-7				
162	24675	5.73	5.60	80-120	100	(T)
164	1589	5.73	5.60	2- 62	6	(T)
127	1718	5.73	5.60	6- 66	7	(T)
42 o-Nitroaniline		CAS#: 88-74-4				
65	27896	5.73	5.66	80-120	100	(T)
92	33445	5.73	5.66	35- 95	120	(QT)
138	2754	5.73	5.66	90-150	10	(QT)
43 Dimethylphthalate		CAS#: 131-11-3				
163	155972	6.00	5.77	80-120	100	(T)
164	854800	6.00	5.77	0- 40	548	(QT)
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	111100	6.00	5.82	80-120	100	(T)
63	1530	6.00	5.82	45-105	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	111100	6.00	6.10	80-120	100	(T)
89	1399	6.00	6.10	32- 92	1	(QT)
63	1530	6.00	6.10	15- 75	1	(QT)
68 Phenanthrene				CAS#: 85-01-8		
178	12144	6.99	6.99	80-120	100	( )
179	3031	6.99	6.99	0- 45	25	( )
176	2375	7.00	6.99	0- 48	20	( )
69 Anthracene				CAS#: 120-12-7		
178	12144	6.99	7.03	80-120	100	( )
179	3031	6.99	7.03	0- 46	25	( )
176	2375	7.00	7.03	0- 48	20	( )
76 Fluoranthene				CAS#: 206-44-0		
202	20565	7.70	7.70	80-120	100	( )
203	3533	7.70	7.70	0- 47	17	( )
101	3689	7.70	7.70	0- 43	18	( )
79 Pyrene				CAS#: 129-00-0		
202	21064	7.85	7.85	80-120	100	( )
200	3832	7.85	7.85	0- 51	18	( )
101	4055	7.85	7.85	0- 46	19	( )
85 Butylbenzylphthalate				CAS#: 85-68-7		
149	57366	8.37	8.16	80-120	100	(T)
91	55796	8.37	8.16	36- 96	97	(QT)
206	1645	8.37	8.16	0- 50	3	(T)
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	12566	8.63	8.63	80-120	100	( )
226	3460	8.63	8.63	0- 55	28	( )
229	3348	8.63	8.63	0- 49	27	( )
92 Chrysene				CAS#: 218-01-9		
228	12570	8.63	8.66	80-120	100	( )
229	3351	8.63	8.66	0- 49	27	( )
226	3322	8.63	8.66	0- 58	26	( )
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	54048	8.39	8.50	80-120	100	(T)
167	4137	8.39	8.50	0- 60	8	(T)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	14061	9.61	9.61	80-120	100	( )
253	2074	9.62	9.61	0- 51	15	( )
125	2300	9.62	9.61	0- 44	16	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	14061	9.61	9.64	80-120	100	( )
253	2074	9.62	9.64	0- 52	15	( )
125	2300	9.62	9.64	0- 44	16	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110424.d
Lab Smp Id: 241540016 Client Smp ID: RE03-09-13872
Inj Date : 04-DEC-2009 17:42
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540016|926610|10|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 22
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.43260	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.893	2098854	40.000
* 46 Acenaphthene-d10	5.998	3529044	40.000
* 67 Phenanthrene-d10	6.981	3853289	40.000
* 91 Chrysene-d12	8.639	3629200	40.000
* 98 Perylene-d12	10.074	3545087	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.969	270600	5.15709841	1900	0		0	10
2-Propenoic acid, 3-phenyl-				CAS #: 621-82-9			
5.663	468094	5.30561308	1950	95	NIST05.L	22330	46
Unknown				CAS #:			
7.663	469134	4.86995927	1790	0		0	67
Unknown				CAS #:			
8.022	634477	6.99302827	2570	0		0	91
Unknown				CAS #:			
8.239	894337	9.85712911	3630	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 1740-19-8			
8.451	3119416	34.3813014	12600	96	NIST05.L	125034	91
Abietic acid				CAS #: 514-10-3			
8.592	1758601	19.3827938	7130	95	NIST05.L	126141	91
Unknown				CAS #:			
8.657	578816	6.37954778	2350	0		0	91
Unknown				CAS #:			
8.739	420176	4.63105885	1700	0		0	91
Unknown				CAS #:			
10.857	541687	6.11197908	2250	0		0	98
Unknown				CAS #:			
12.492	372131	4.19883111	1540	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Sample Info: |241540016|926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: nagi

Column diameter: 0.20

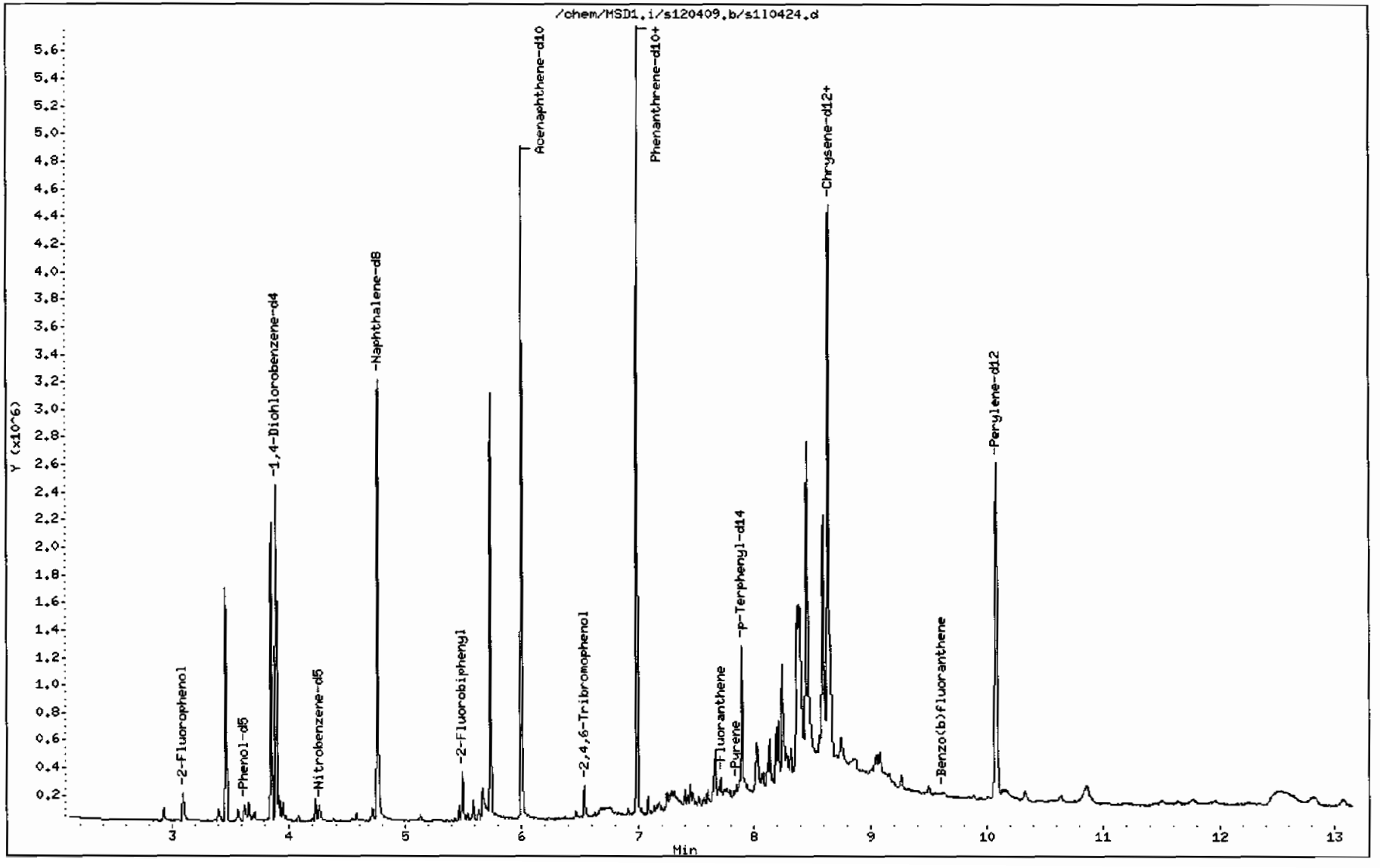

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 204 ug/Kg

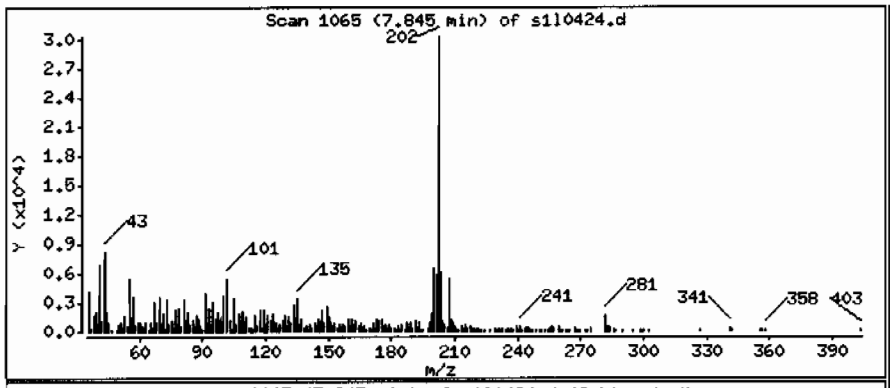

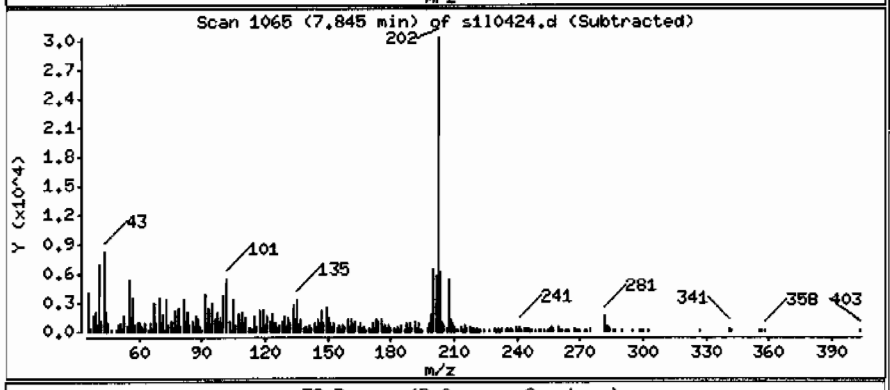

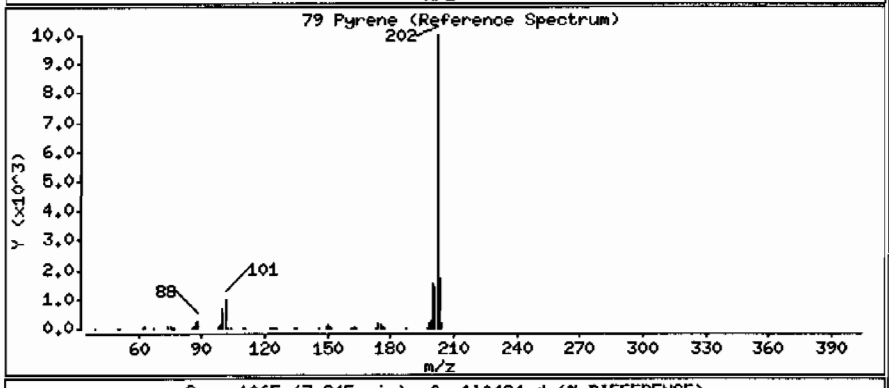

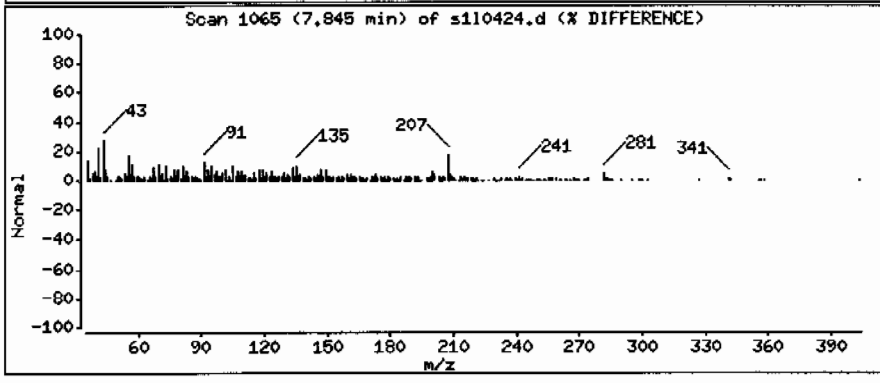

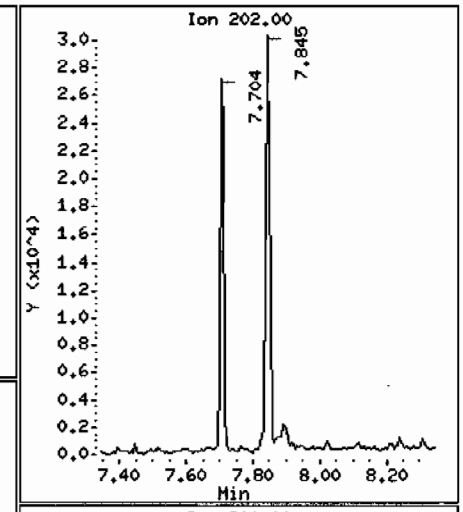

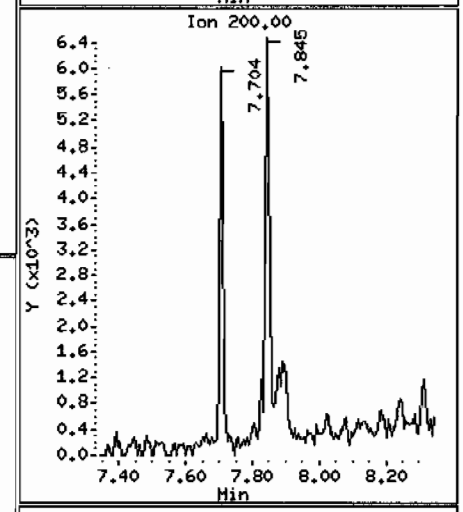

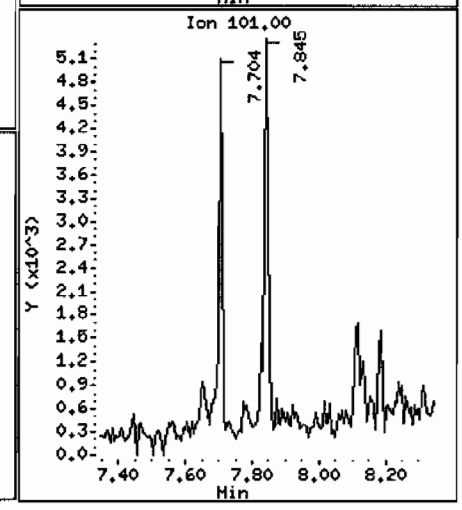

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 124 ug/Kg

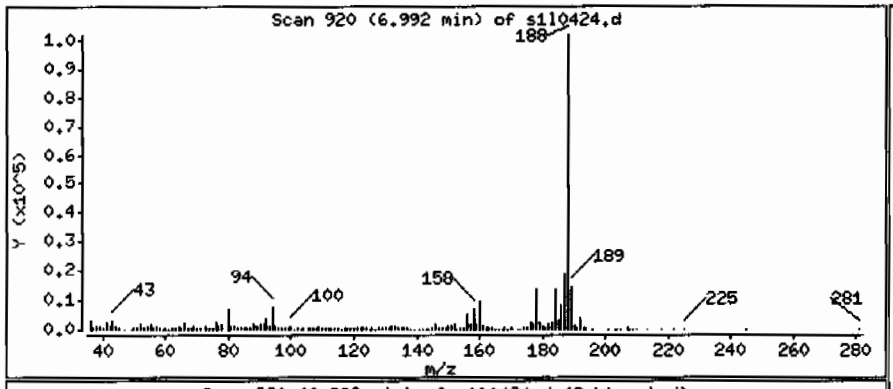

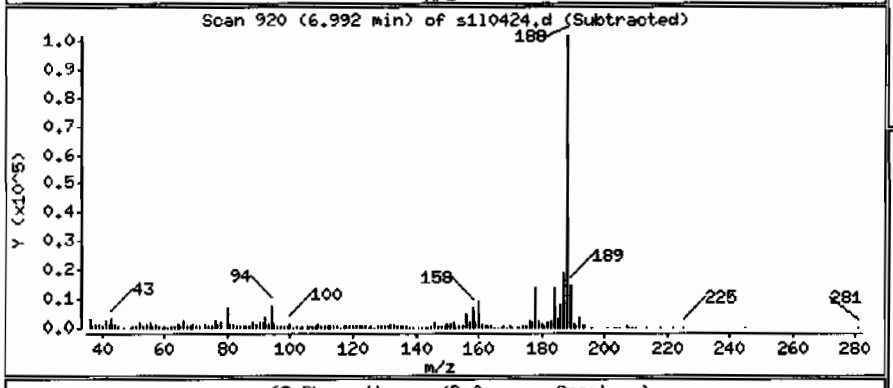

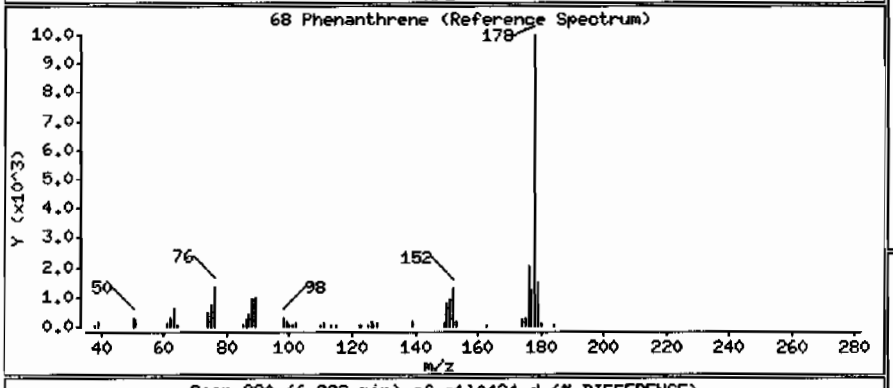

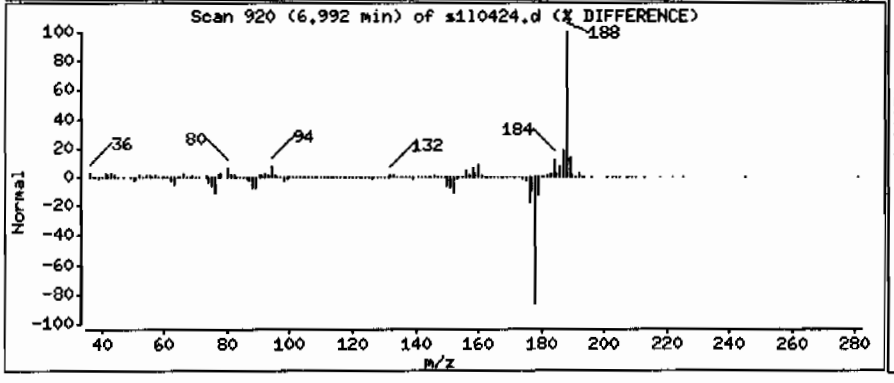

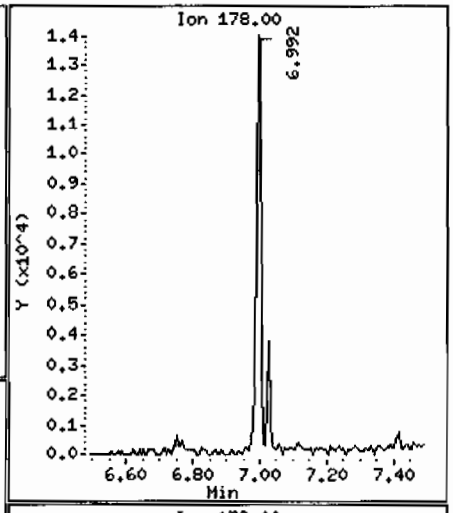

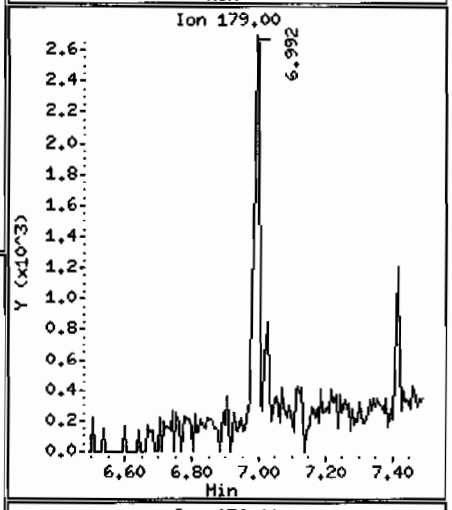

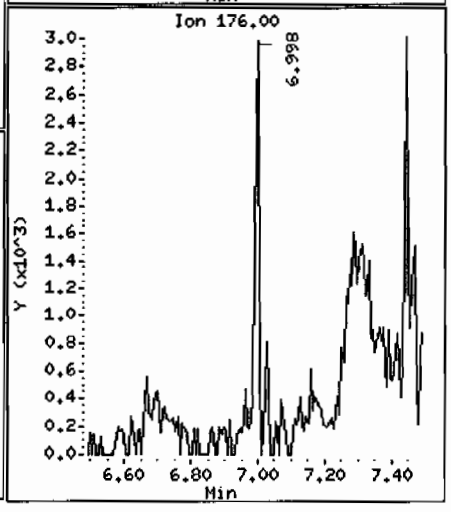

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 217 ug/Kg

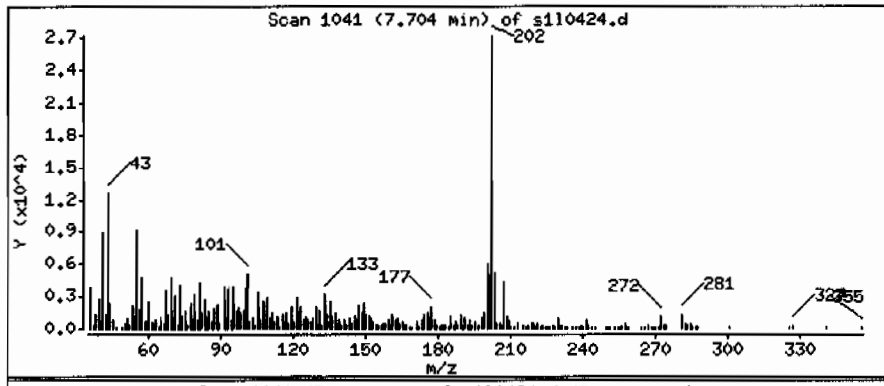

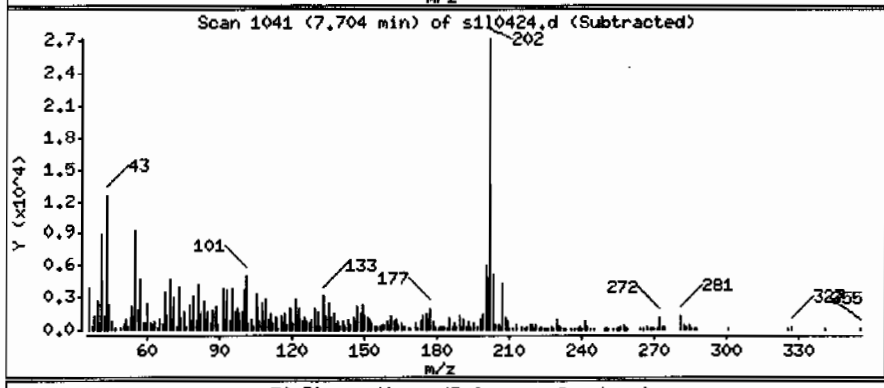

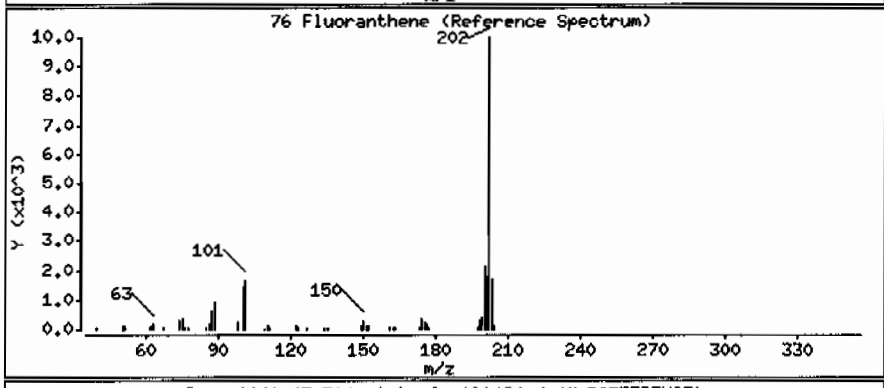

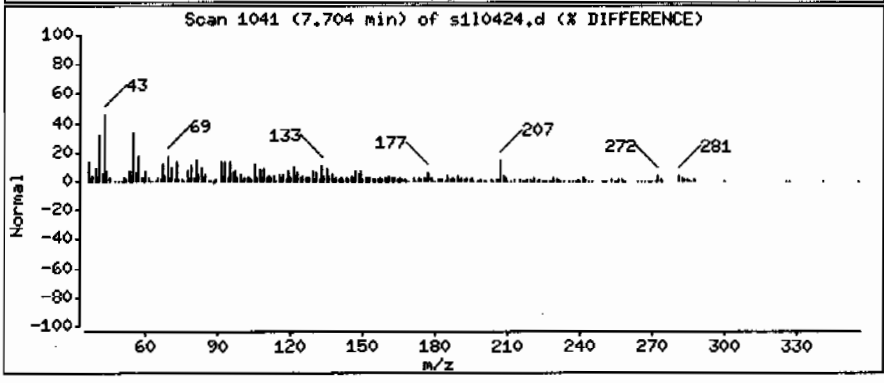

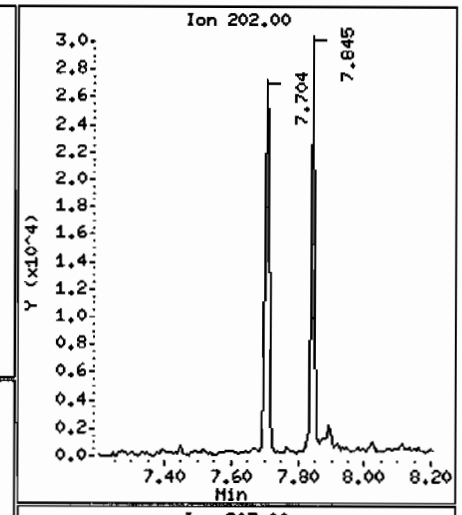

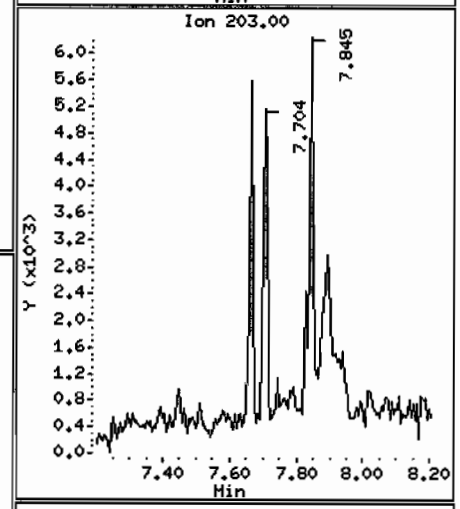

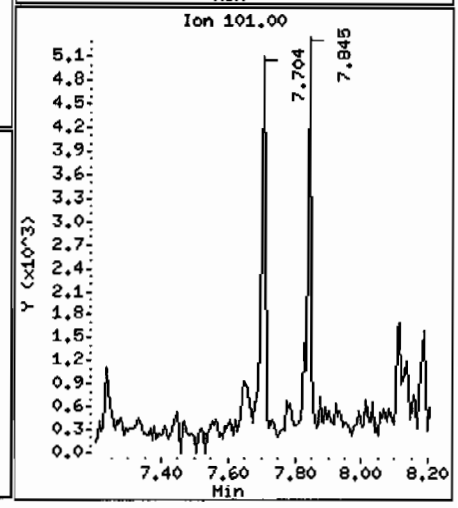

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: MSD1.i

Sample Info: |24154001619266101101SVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 135 ug/Kg

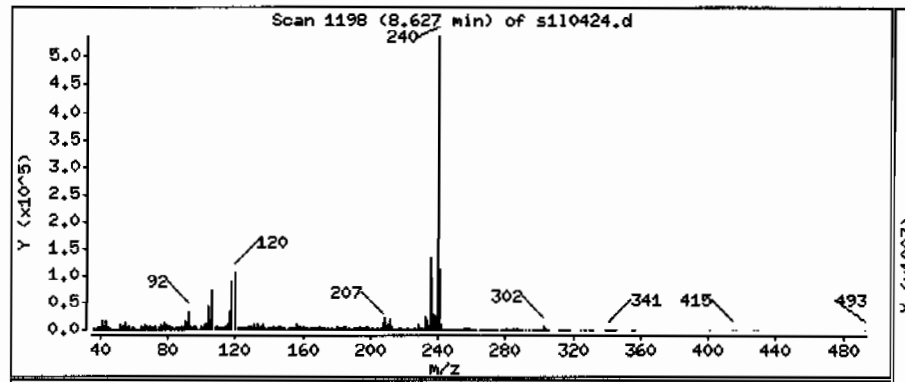

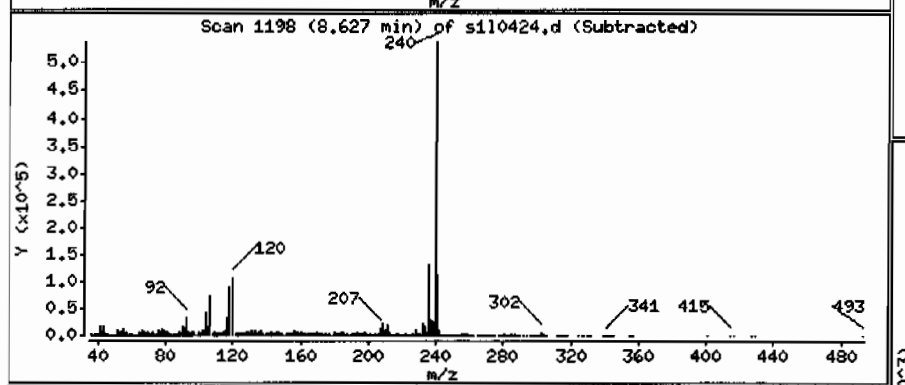

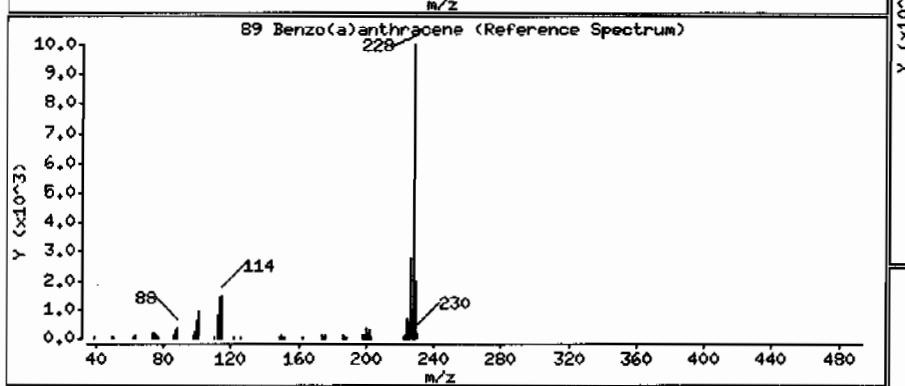

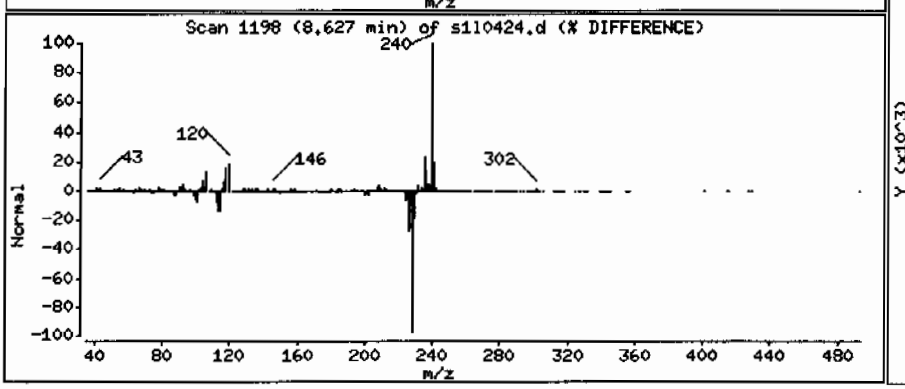

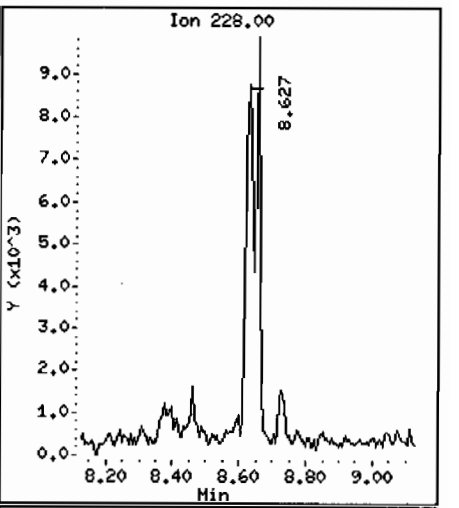

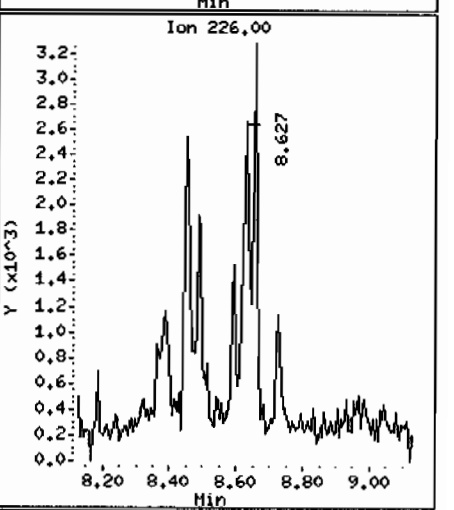

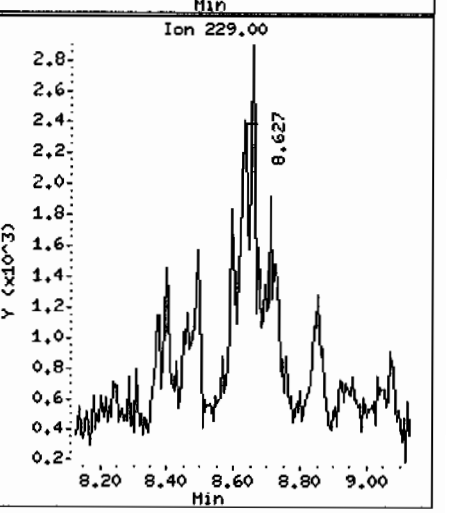

Data File: /chem/HSD1.i/s120409.b/s110424.d

Page 6

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: HSD1.i

Sample Info: |2415400161926610|10|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 1130 ug/Kg

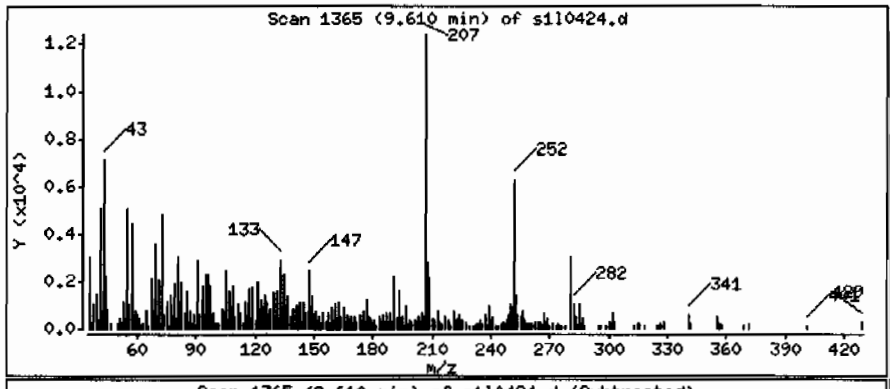

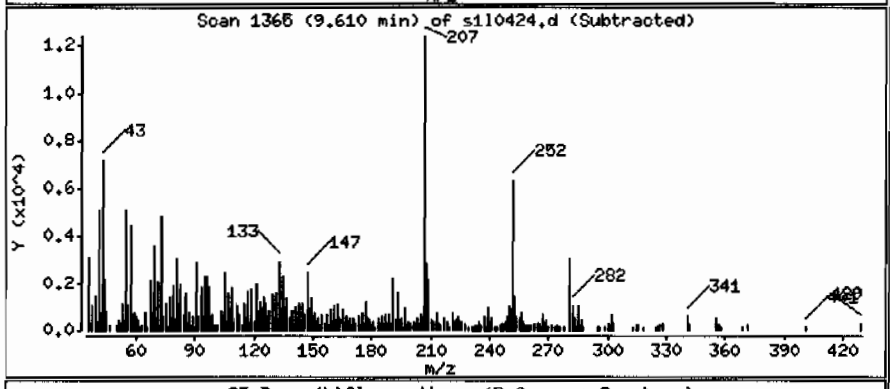

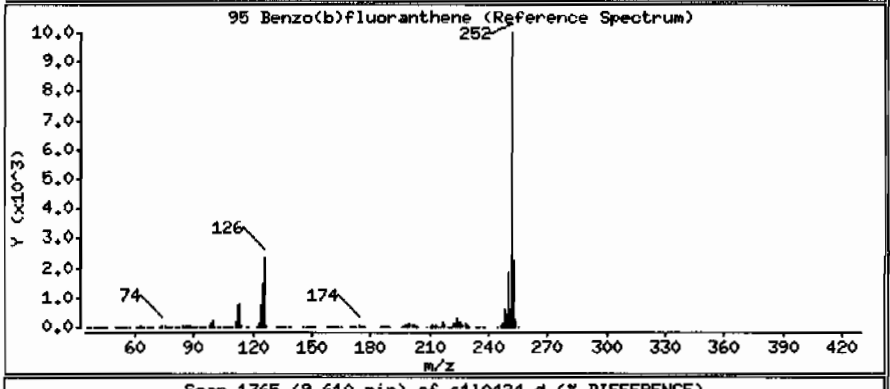

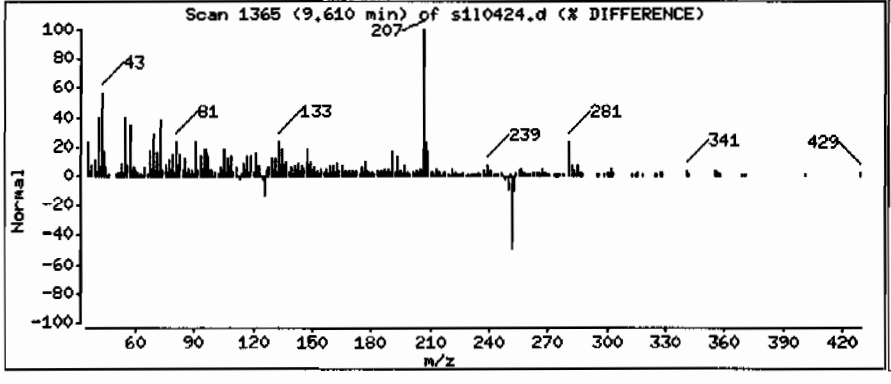

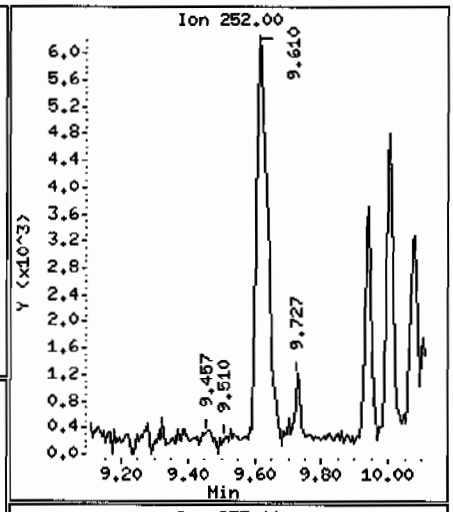

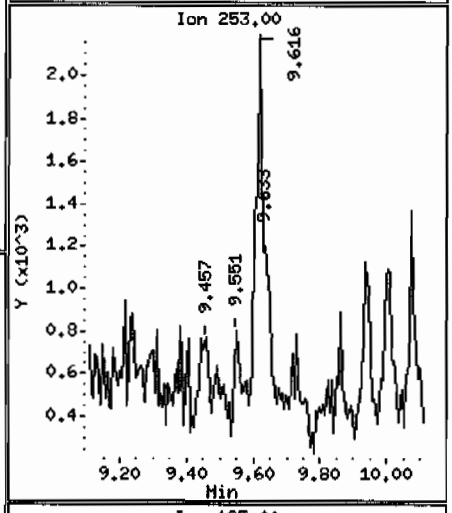

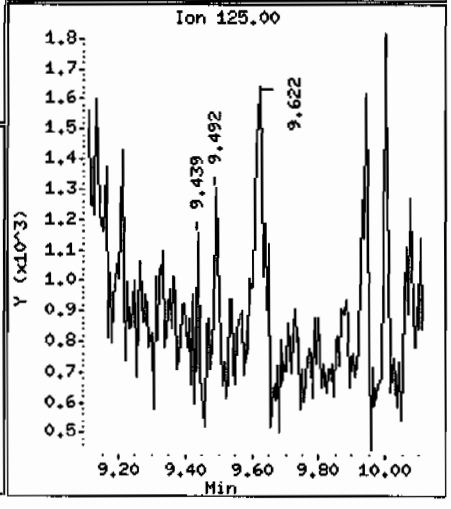

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	25	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	25	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	12	C5H12O2	104

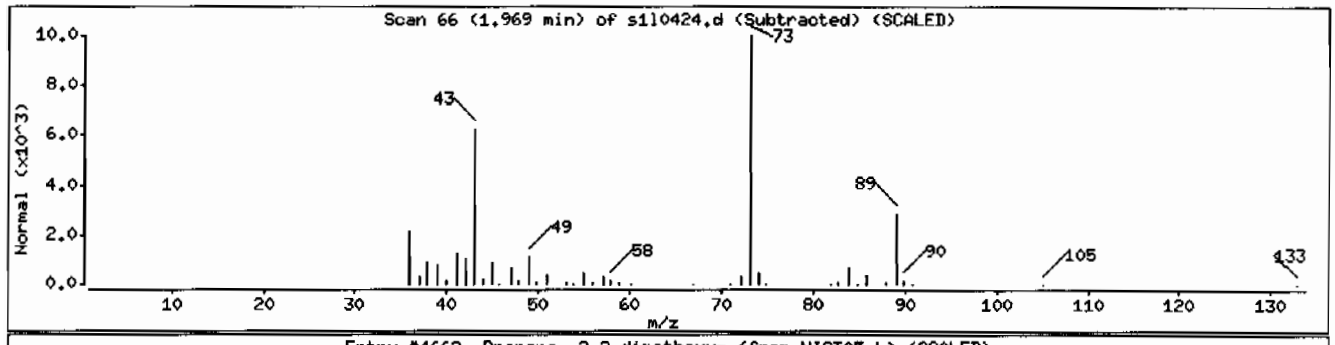

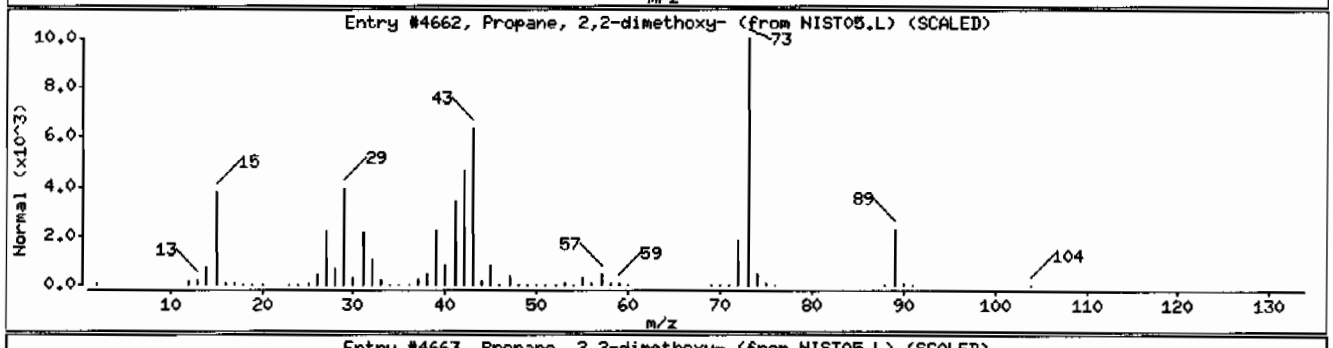

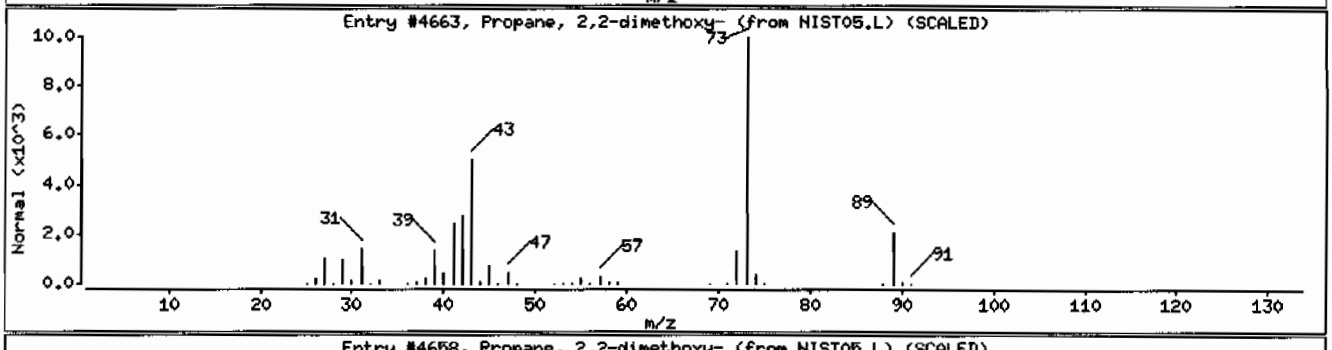

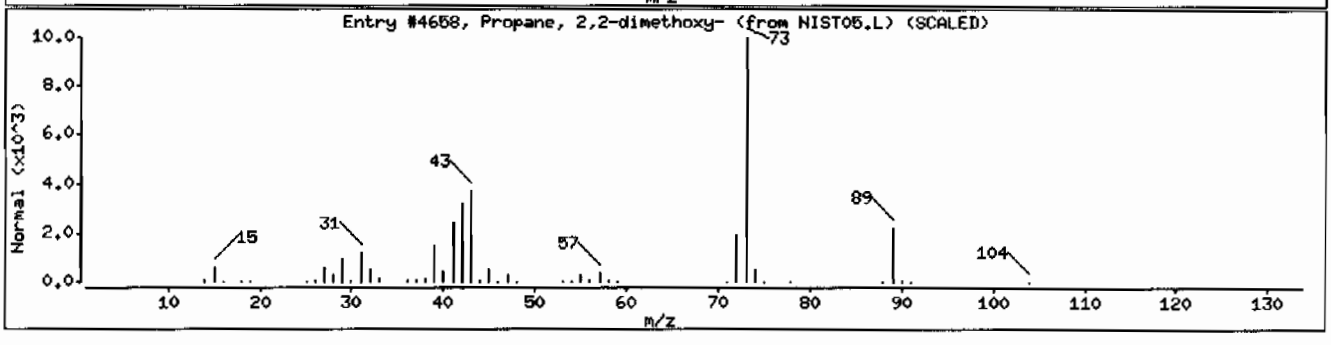

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: MSD1.i

Sample Info: |24154001619266101101SVMF11LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propenoic acid, 3-phenyl-	621-82-9	NIST05.L	22330	96	C9H8O2	148
2-Propenoic acid, 3-phenyl-	621-82-9	NIST05.L	22336	95	C9H8O2	148
(Z)-Cinnamic acid	102-94-3	NIST05.L	22312	94	C9H8O2	148

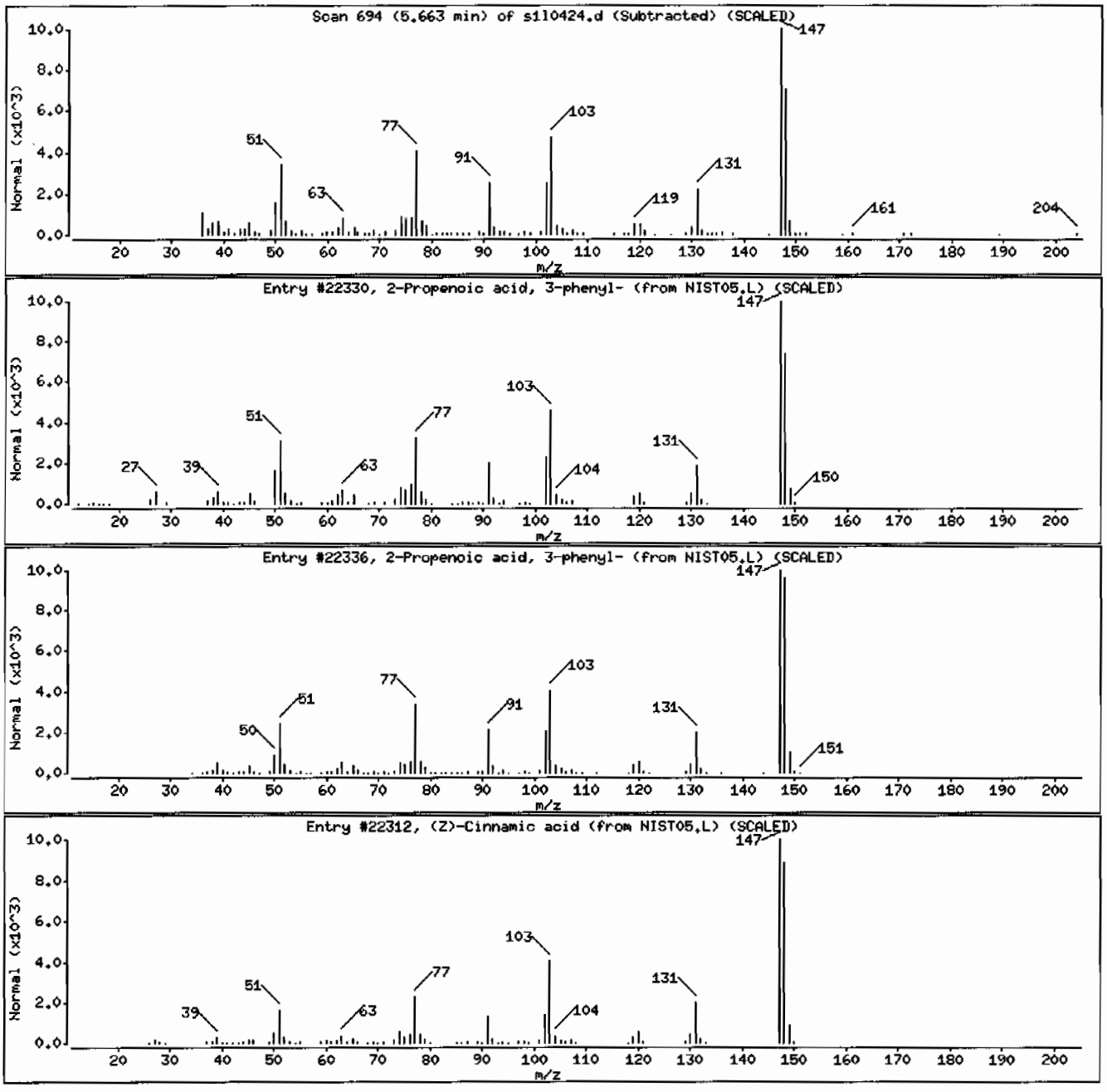

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872 Instrument: MSD1.i

Sample Info: |24154001619266101101SVMF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[3.2.1.02,7]oct-3-ene, 2,3,4,5-t	62338-44-7	NIST05.L	30912	50	C12H18	162
Benzene, 1,4-bis(1-methylethyl)-	100-18-5	NIST05.L	30841	46	C12H18	162
Benzene, 1-(1,1-dimethylethyl)-4-ethyl-	7364-19-4	NIST05.L	30875	41	C12H18	162

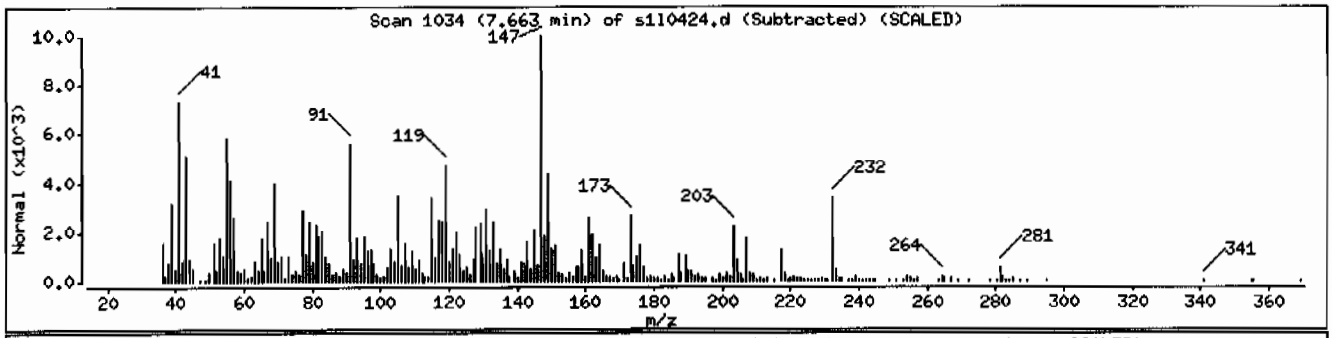

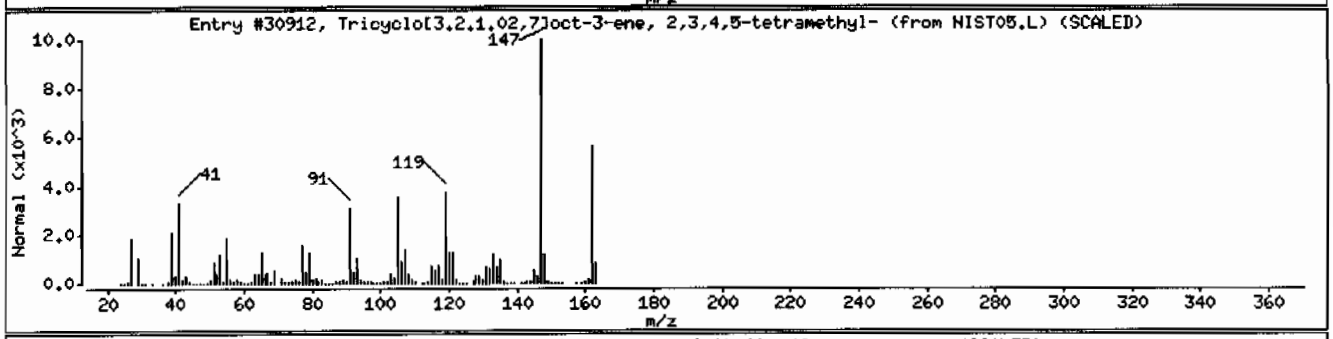

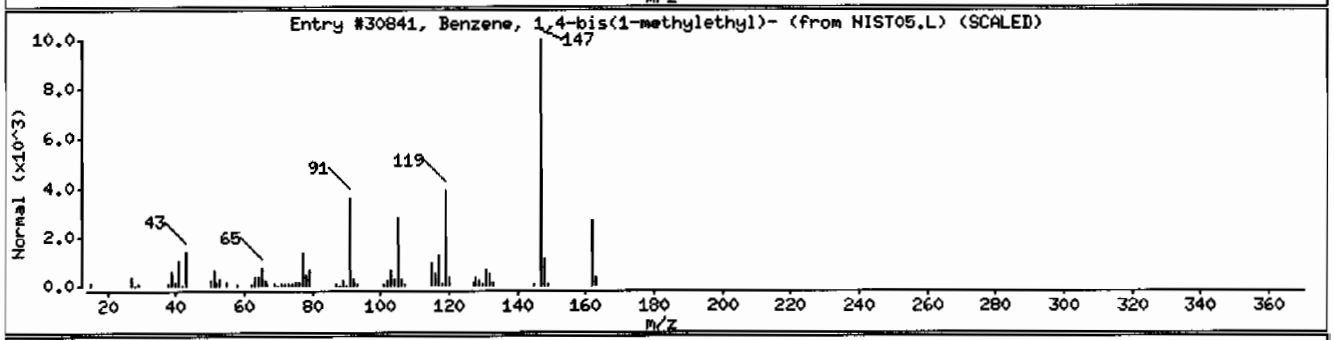

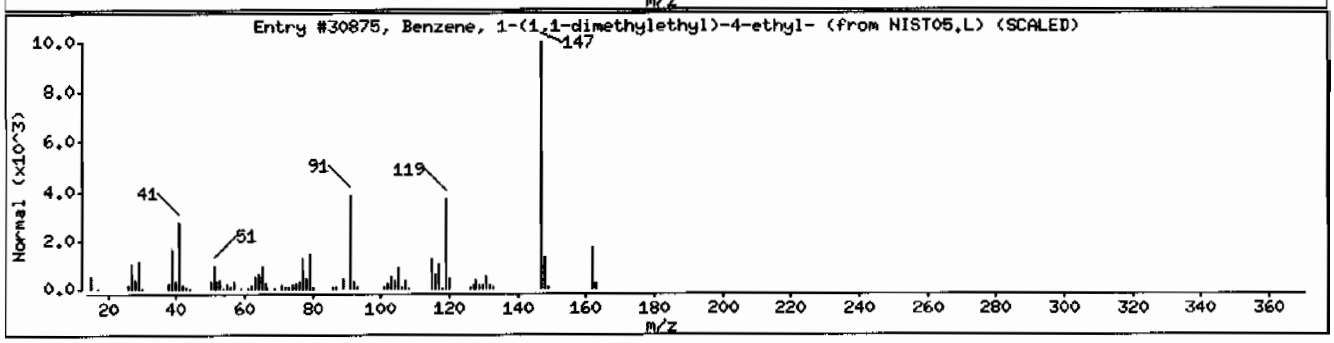

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872 Instrument: MSD1.i

Sample Info: 1241540016192661011 0 1SVMF 1 1LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(4-Benzyl-piperazin-1-yl)-(1H-[1,2,4]tri	1000274-59-9	NIST05.L	106054	25	C14H17N5O	271
Piperazine, 1-benzyl-4-cyclohexanoyl-	81486-90-0	NIST05.L	116128	25	C18H26N2O	286
Cyanoacetic acid, (5-bromothiophen-2-ylm	1000259-33-2	NIST05.L	106353	25	C8H6BrN3OS	271

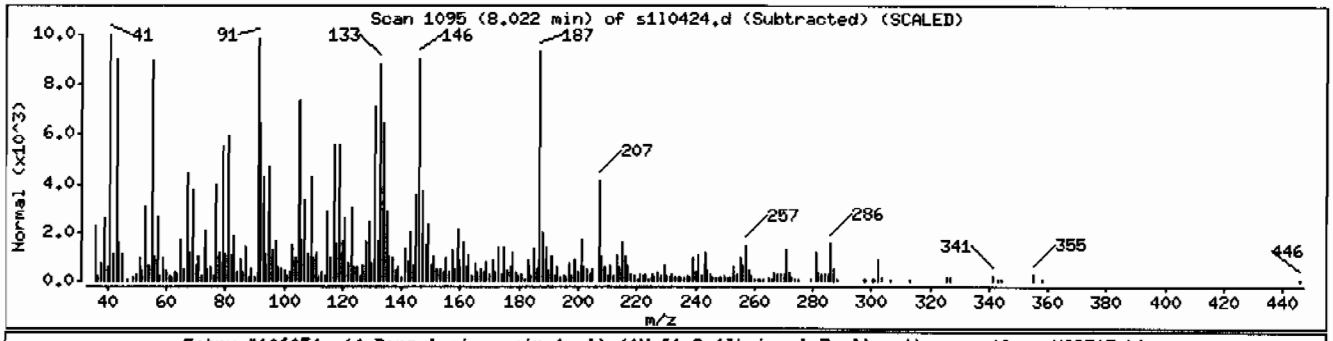

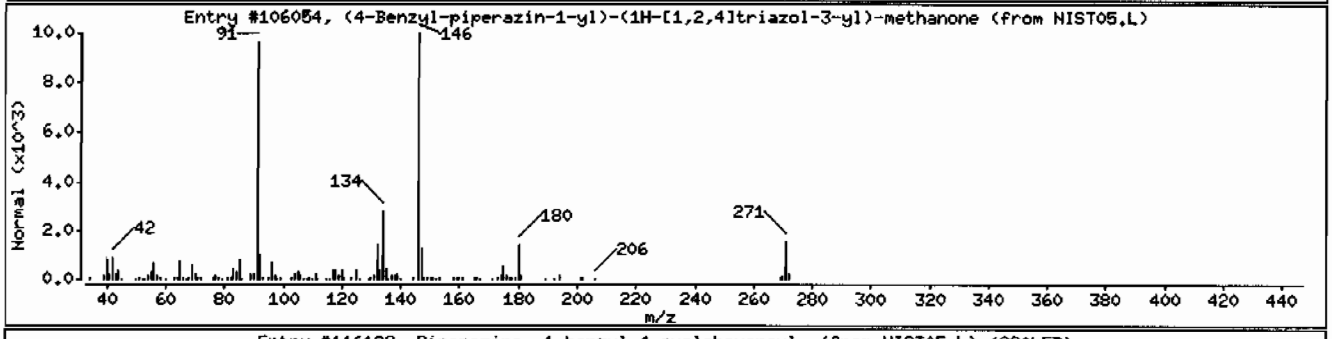

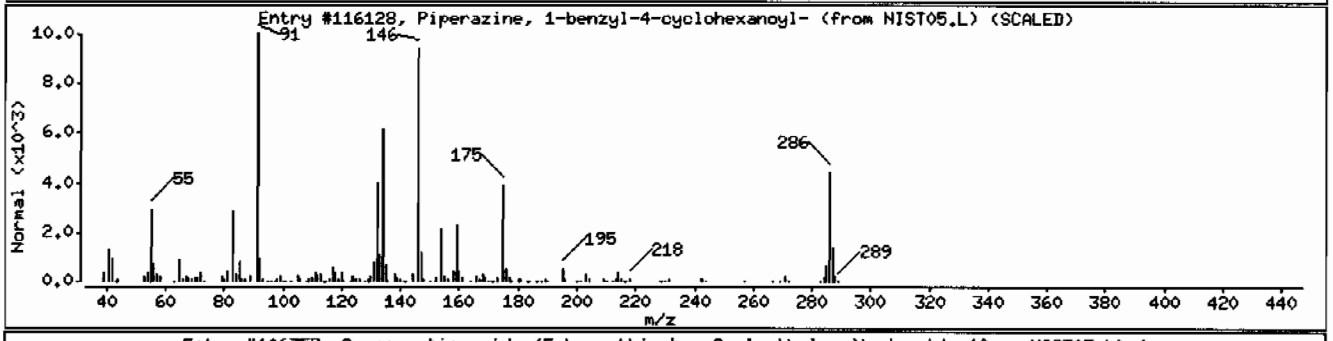

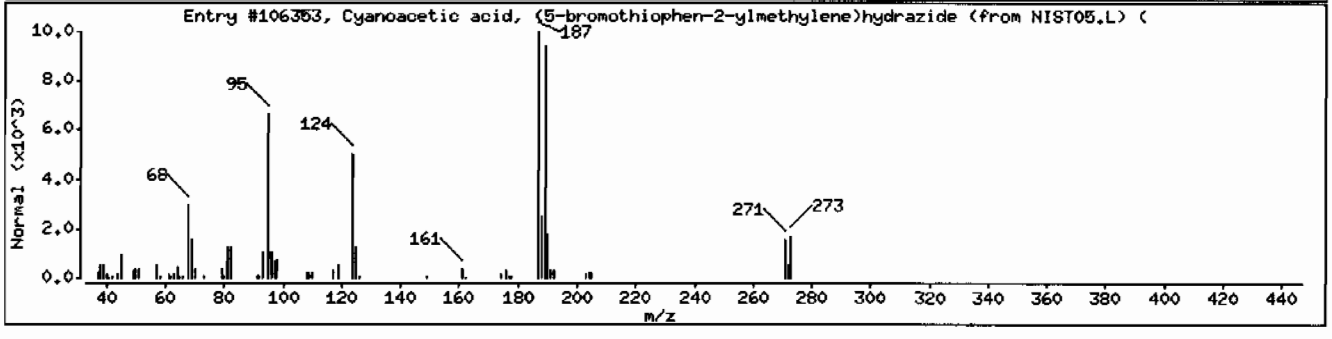

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872 Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-e	1000189-14-9	NIST05.L	72783	43	C14H2202	222
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	38	C10H16	136
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15244	38	C10H16	136

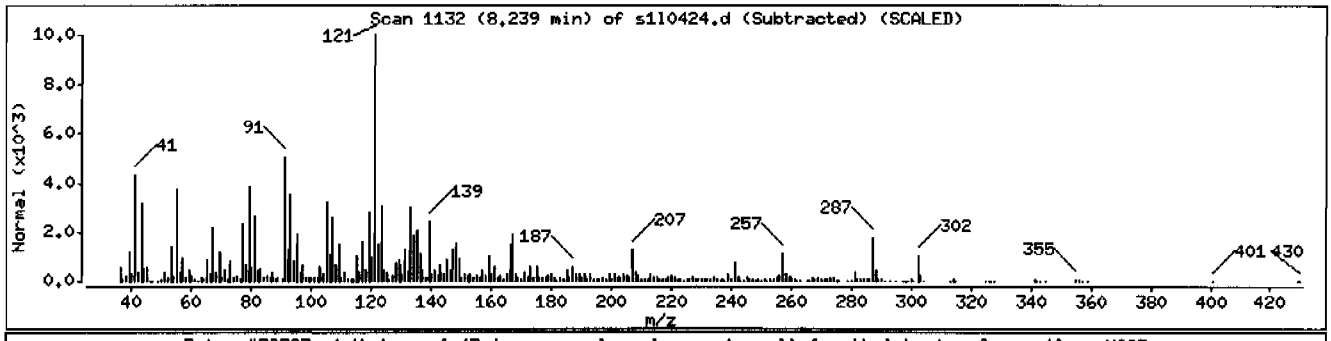

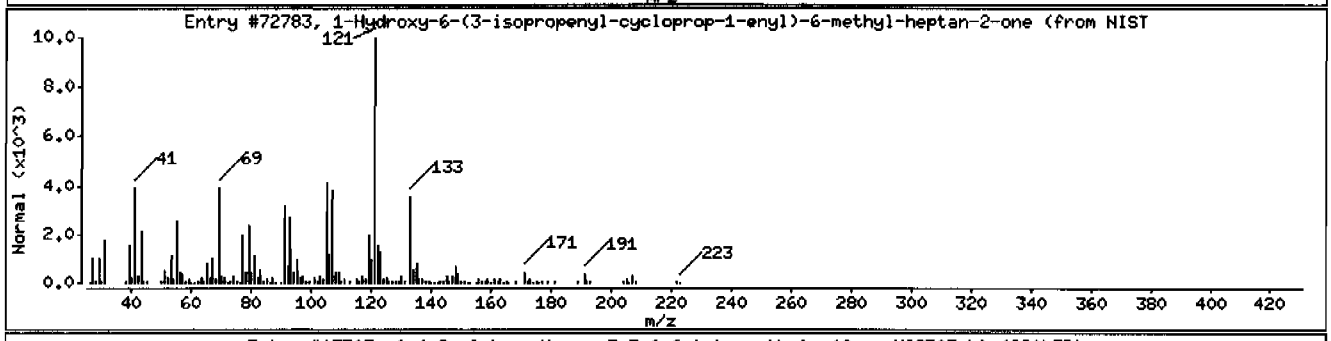

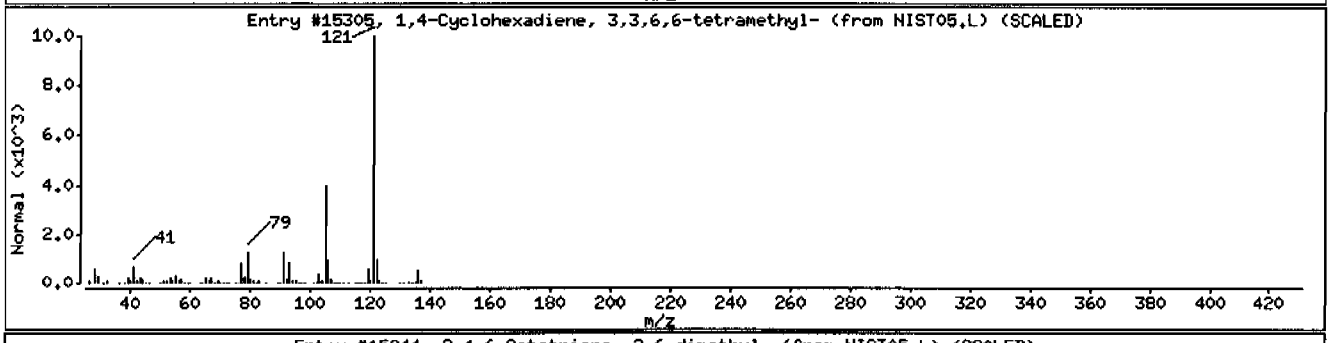

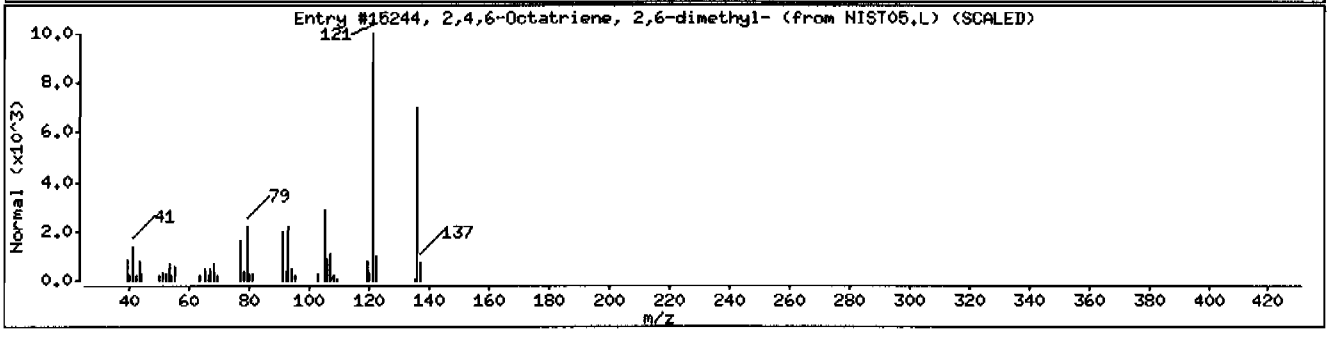

Data File: /chem/HSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: HSD1.i

Sample Info: |24154001619266101101SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	96	C20H2802	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	92	C20H2802	300
Kaura-9(11),16-dien-18-oic acid, (4,alph	22338-67-6	NIST05.L	125012	78	C20H2802	300

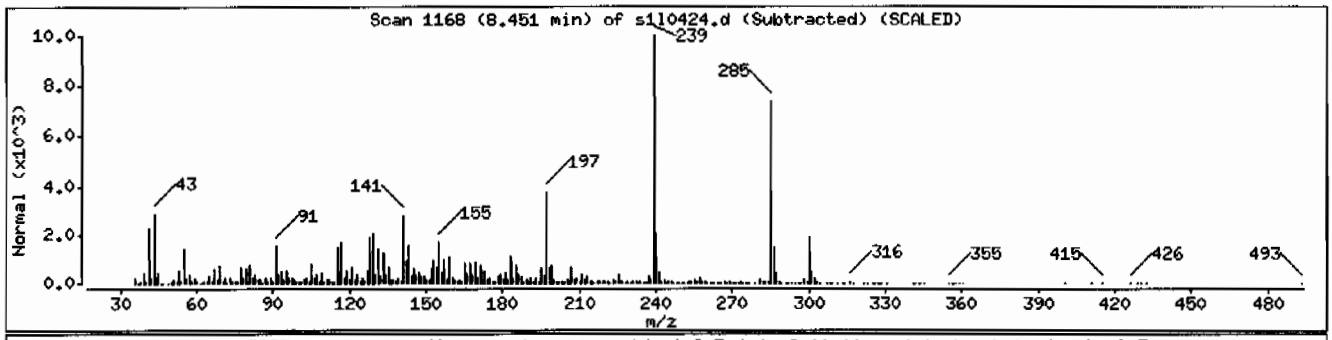

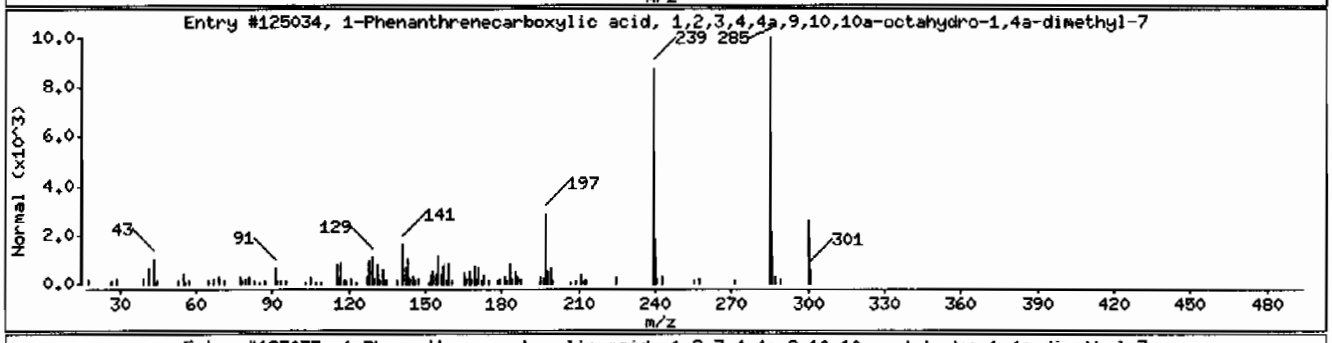

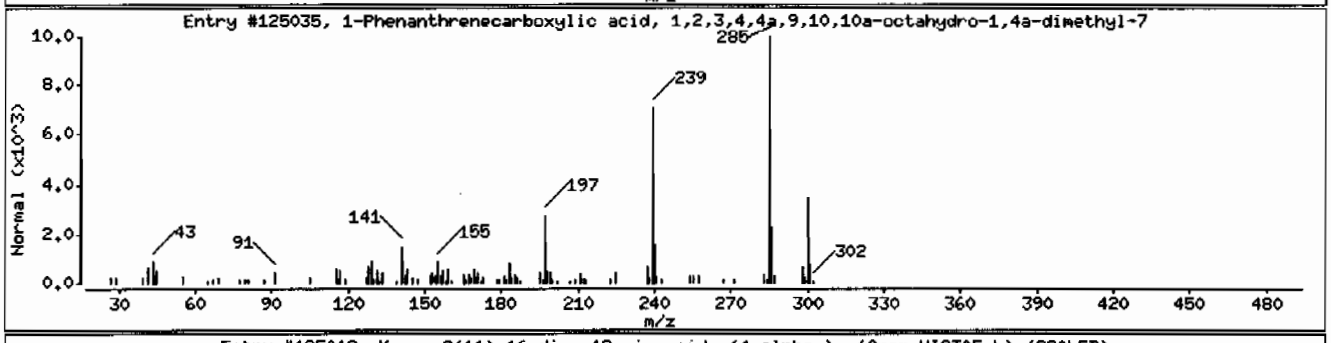

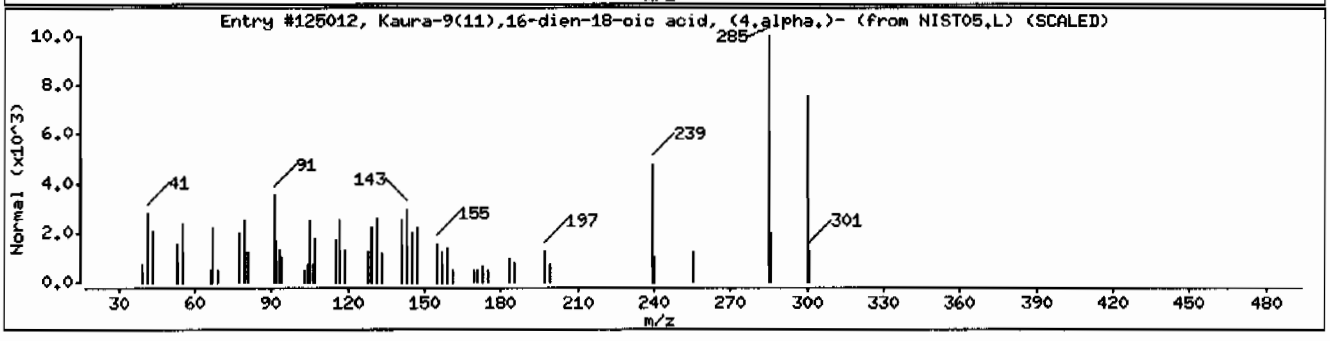

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Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872 Instrument: MSD1.i

Sample Info: 1241540016|926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Abietic acid	514-10-3	NIST05.L	126141	95	C20H3002	302
Abietic acid	514-10-3	NIST05.L	126143	78	C20H3002	302
.beta.-Pimaric acid	79-54-9	NIST05.L	126148	50	C20H3002	302

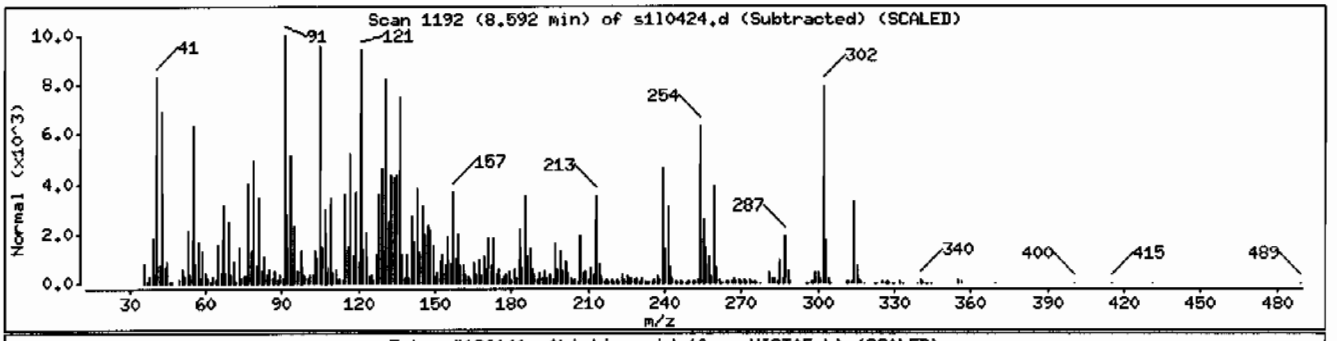

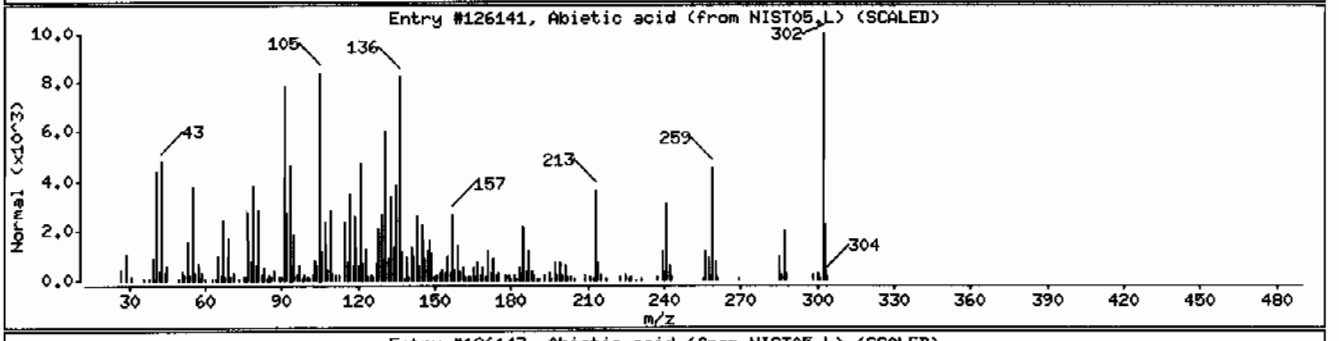

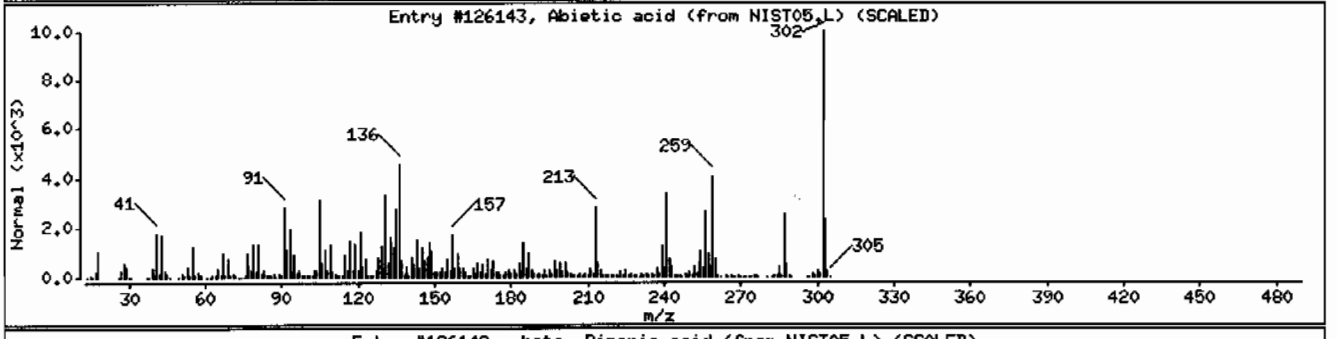

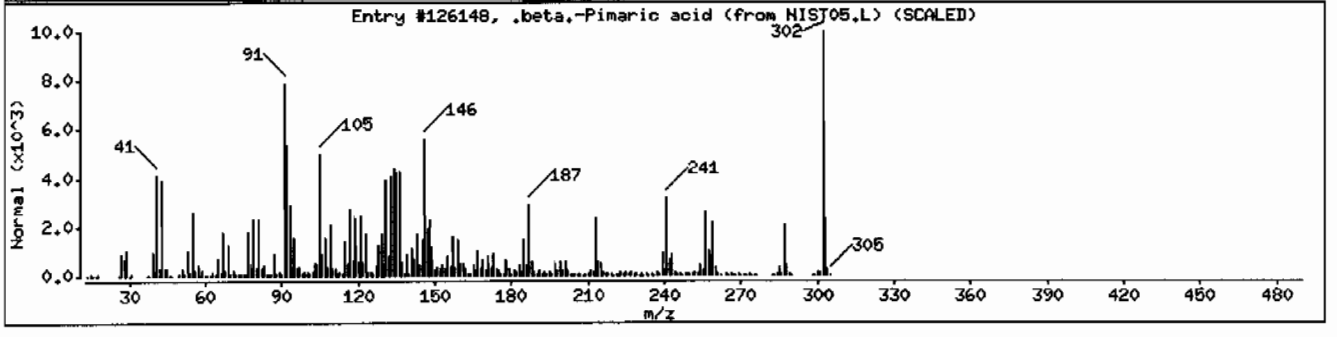

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872 Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dihydromorphine, 3,6-dideoxy-	69663-72-5	NIST05.L	95484	25	C17H21NO	255
Benzenamine, 3,4-dimethyl-N-(4-methylthi	315670-90-7	NIST05.L	95451	25	C16H17NS	255
Phenanthrene, 1,2,3,4,4a,9,10,10a-octahy	19407-28-4	NIST05.L	105800	25	C20H30	270

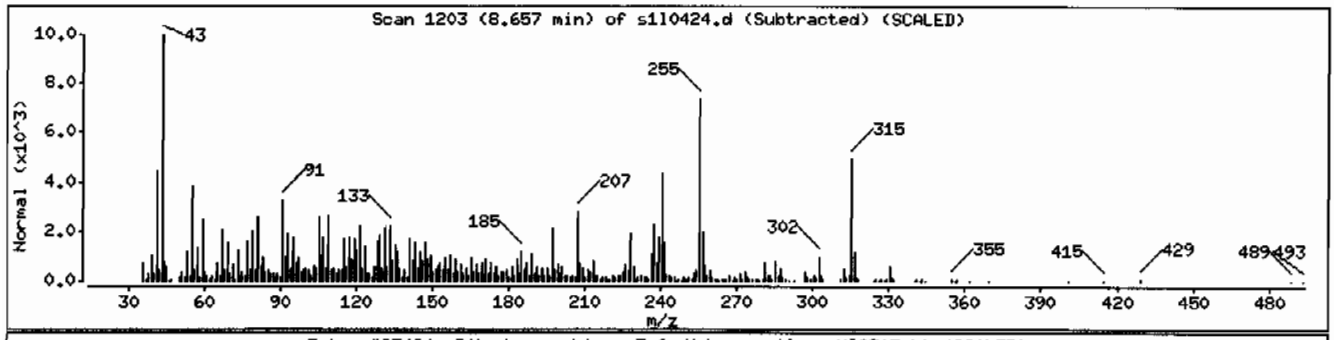

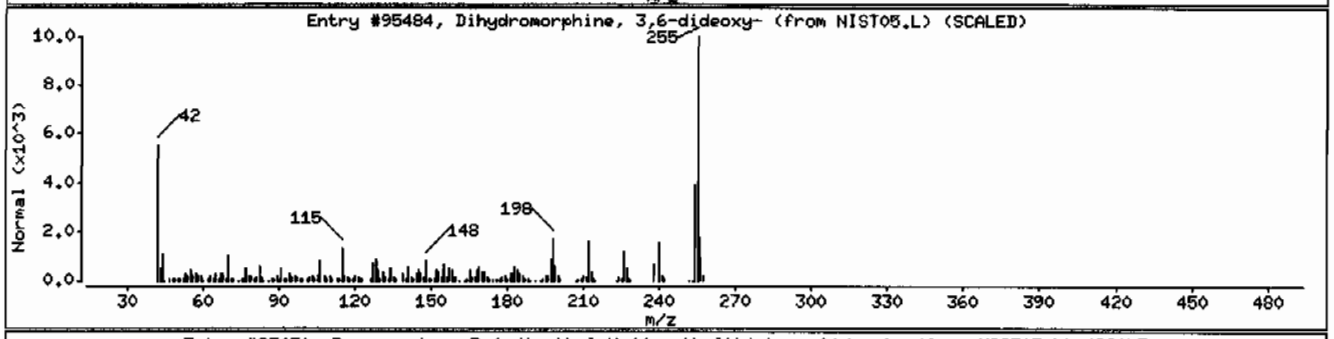

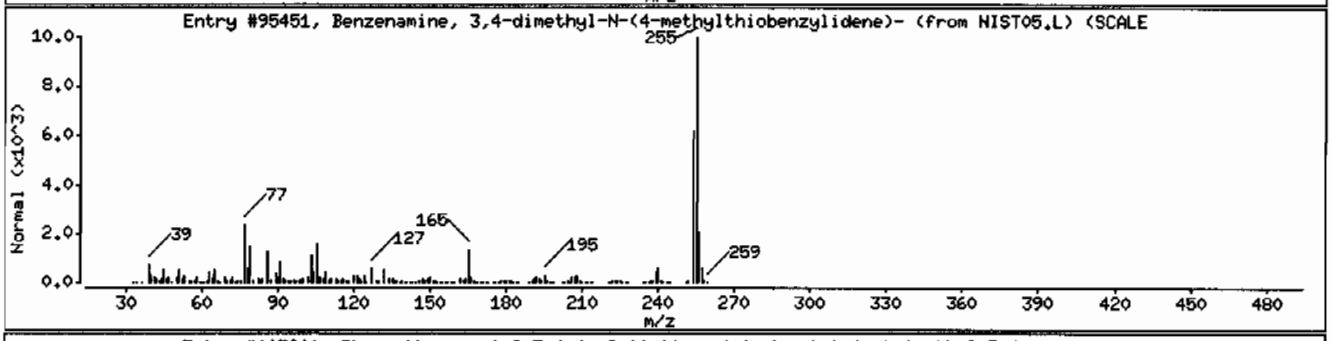

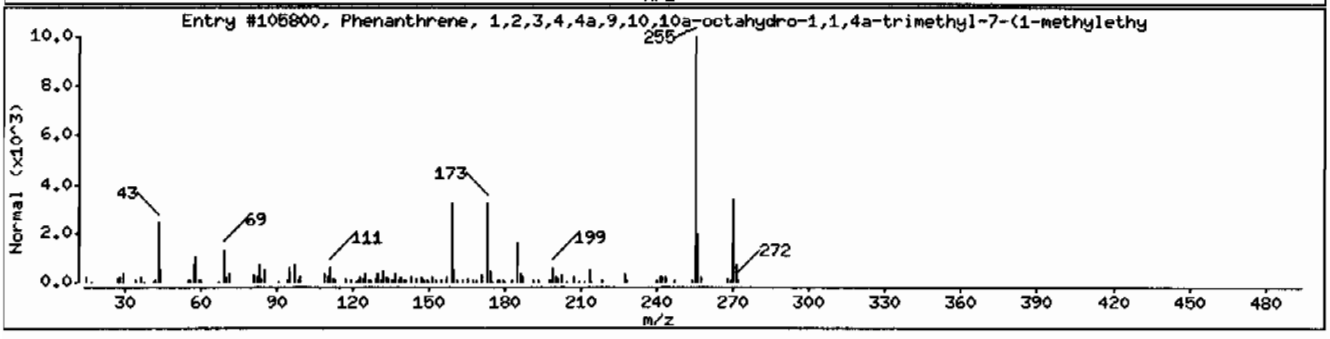

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872 Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	70	C20H3002	302
1-Adamantyl m-tolyloxyacetate	306278-20-6	NIST05.L	124939	53	C19H2403	300
Benzamide, N-(6-fluorobenzothiazol-2-yl)	1000304-71-2	NIST05.L	125774	50	C15H11FN202S	302

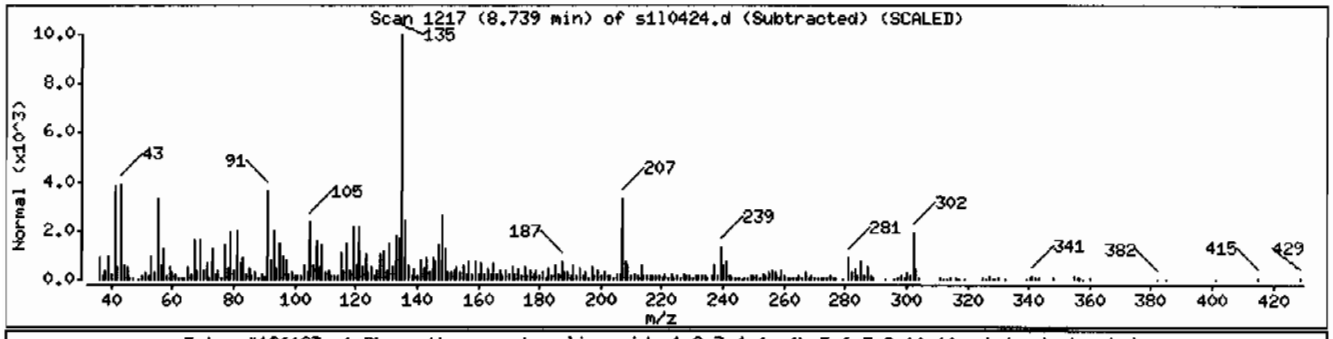

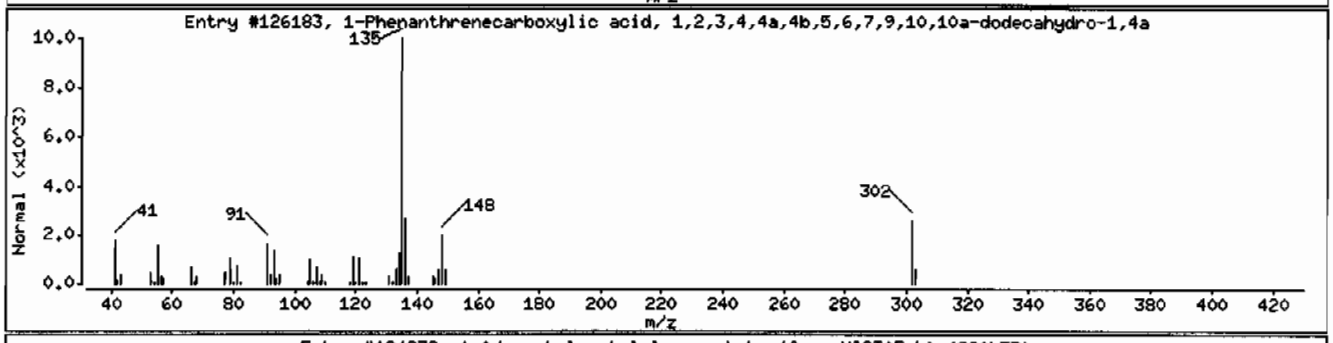

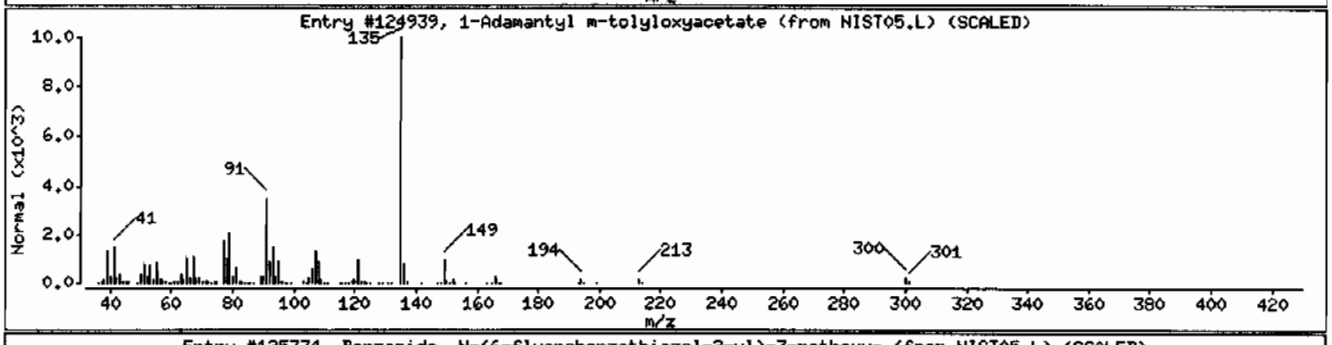

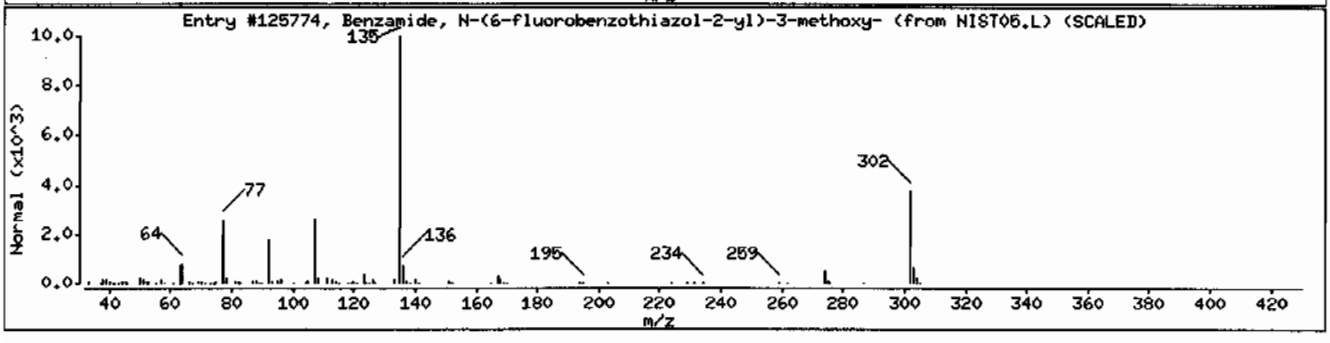

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872 Instrument: MSD1.i

Sample Info: |2415400161926610|10|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indole-2-carboxylic acid, 6-(4-ethoxy	1000316-17-5	NIST05.L	154967	46	C21H25N04	355
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
9,10-Methanoanthracen-11-ol, 9,10-dihydr	126615-74-5	NIST05.L	92233	38	C18H180	250

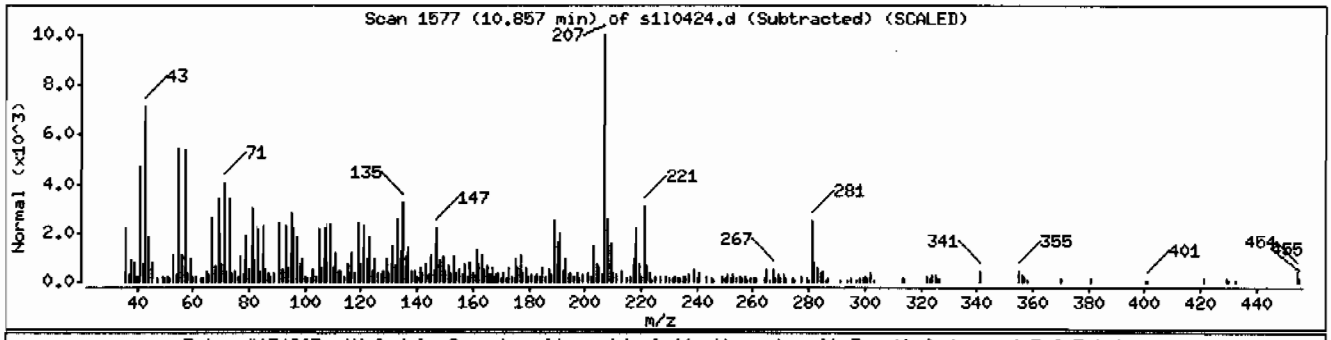

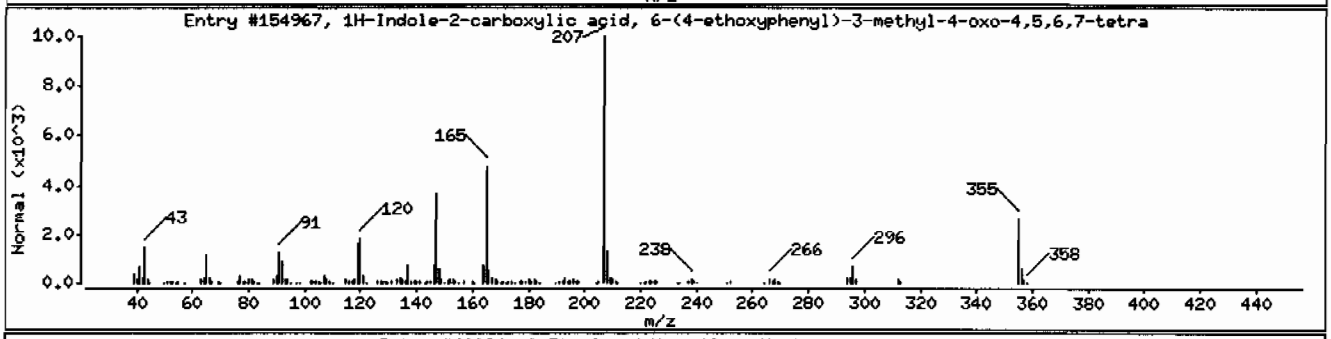

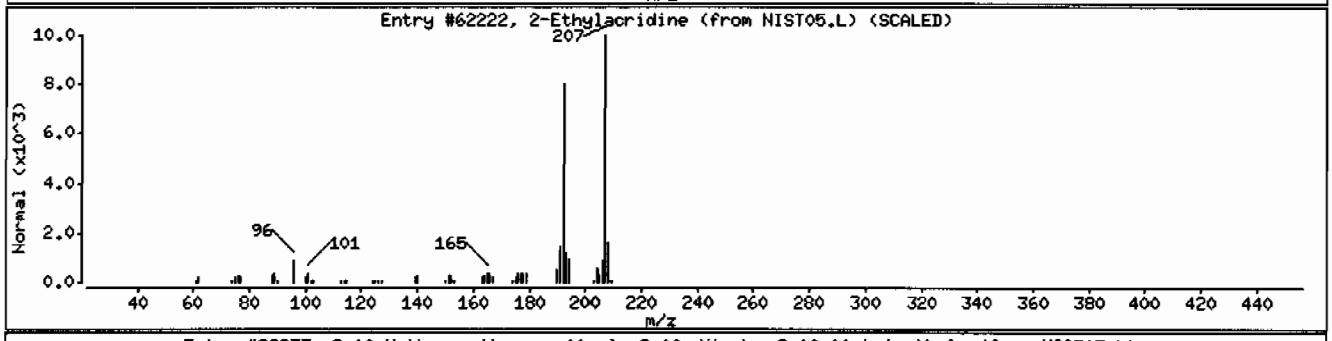

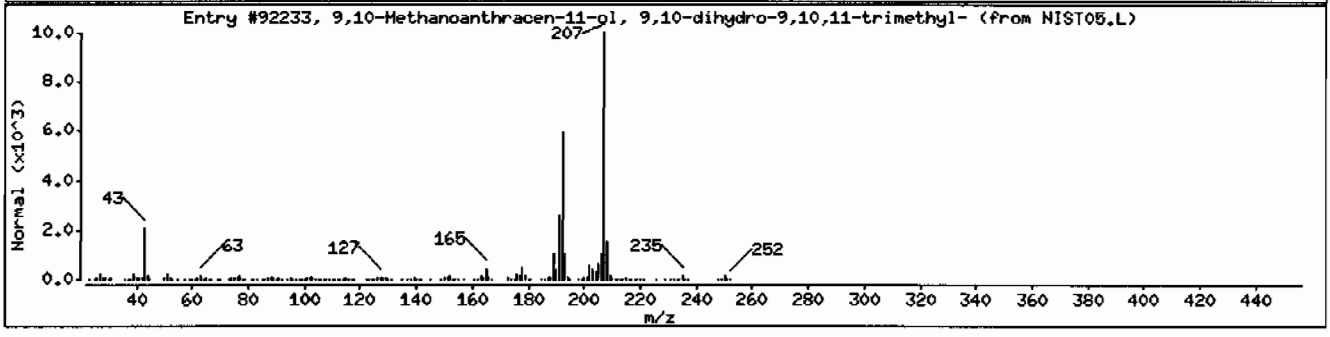

Data File: /chem/MSD1.i/s120409.b/s110424.d

Date : 04-DEC-2009 17:42

Client ID: RE03-09-13872

Instrument: MSD1.i

Sample Info: |2415400161926610110|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethane, 1-(4,4,4-trifluoro-1,3-dithiobut	1000226-87-3	NIST05.L	129912	38	C5H6F6S4	308
2-(Acridin-9-ylamino)-3-(3H-imidazol-4-y	1000285-93-8	NIST05.L	143571	38	C19H16N4O2	332
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C6H18O3Si3	222

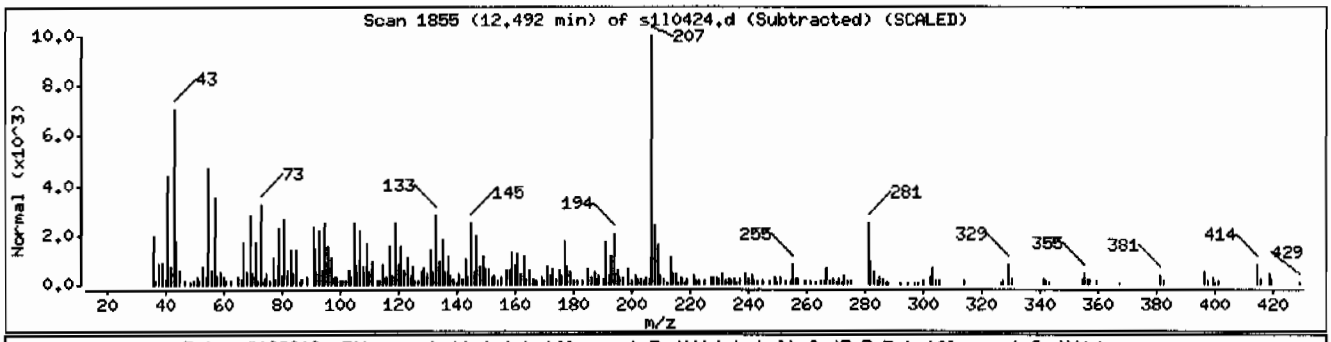

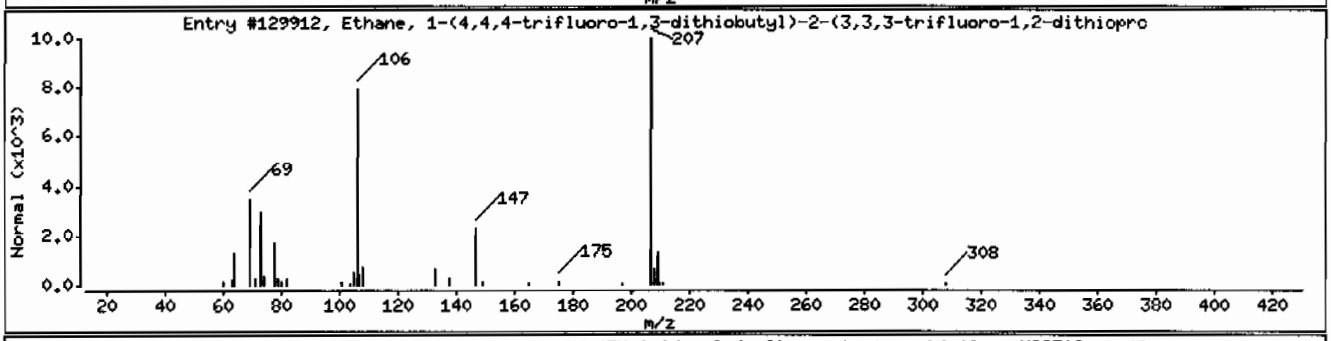

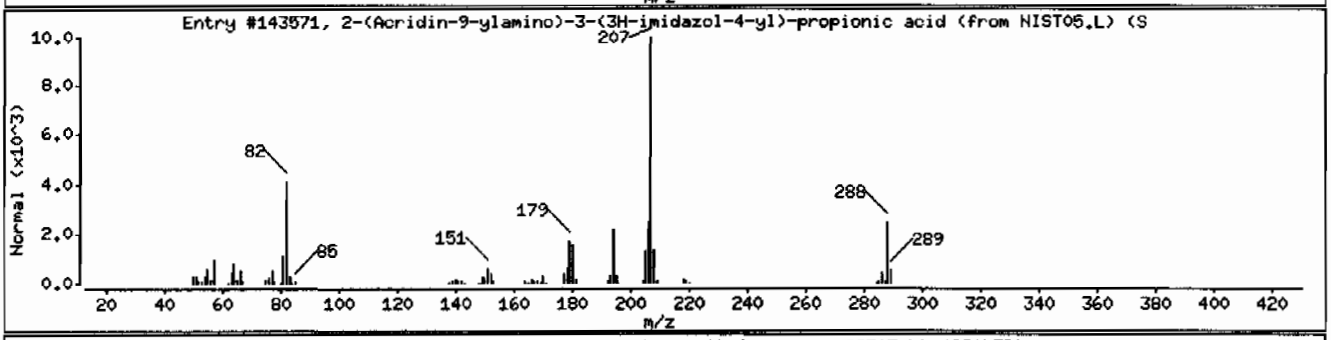

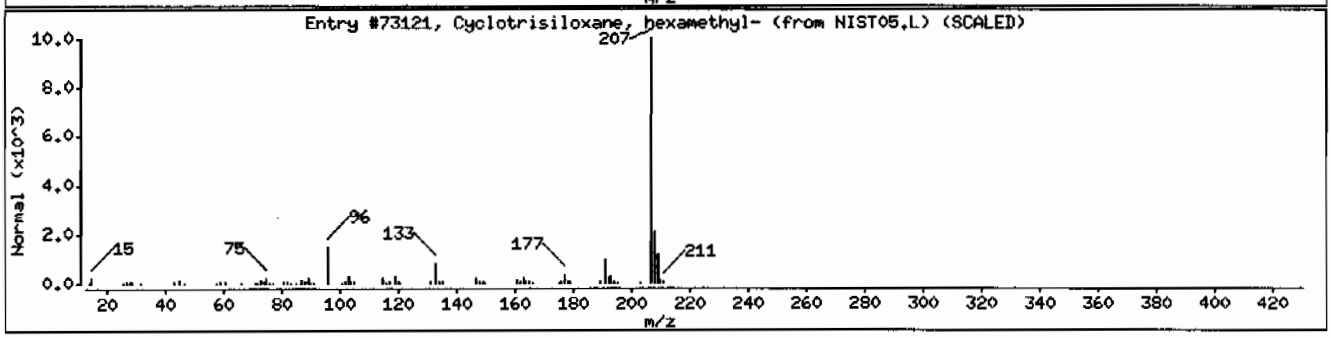

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540010**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13873**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:23**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.2	366
108-95-2	Phenol	U	366	ug/kg	73.2	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.2	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.2	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.2	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.2	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.5	366
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.2	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.2	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.2	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.2	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.2	366
95-48-7	o-Cresol	U	366	ug/kg	73.2	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.2	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.2	366
78-59-1	Isophorone	U	366	ug/kg	73.2	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.2	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.2	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.2	366
65-85-0	Benzoic acid	U	732	ug/kg	183	732
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.2	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.2	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.32	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.2	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.2	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.2	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline	U	366	ug/kg	73.2	366
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	366	ug/kg	73.2	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13873	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 15:23	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110418.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.2	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	732	ug/kg	139	732
132-64-9	Dibenzofuran	U	366	ug/kg	73.2	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.2	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.2	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.2	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.2	366
122-66-7	Azobenzene	U	366	ug/kg	73.2	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.2	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.2	366
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.32	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.2	366
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.2	366
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.2	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.2	366
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.2	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.01	997	ug/kg		J
	Unknown Aldol Condensate	2.92	575	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540010**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13873**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:23**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0418.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.46	502	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.85	500	ug/kg	97	NJ
53939-27-8	9-Tetradecenal, (Z)-	7.65	313	ug/kg	90	NJ
2326-89-8	(5a.alpha.,9a.beta.,9b.beta.)-5,5a,6,7,8	7.79	177	ug/kg	91	NJ
	Unknown	8.02	430	ug/kg		J
506-30-9	Eicosanoic acid	8.12	202	ug/kg	99	NJ
	Unknown	8.14	166	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.15	300	ug/kg	95	NJ
	Unknown	8.25	431	ug/kg		J
	Unknown	8.39	667	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.46	1440	ug/kg	98	NJ
112-85-6	Docosanoic acid	8.57	213	ug/kg	83	NJ
	Unknown	8.6	993	ug/kg		J
	Unknown	8.75	200	ug/kg		J
	Unknown	9.2	215	ug/kg		J
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	11.78	767	ug/kg	80	NJ
	Unknown	11.97	482	ug/kg		J
83-46-5	.beta.-Sitosterol	12.45	346	ug/kg	97	NJ
83-47-6	.gamma.-Sitosterol	12.49	213	ug/kg	90	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110418.d
Lab Smp Id: 241540010 Client Smp ID: RE03-09-13873
Inj Date : 04-DEC-2009 15:23
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540010|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	8.88620	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	484809	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1959860	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1128176	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1948670	40.0000	
* 91 Chrysene-d12	240	8.645	8.633	(1.000)	1687987	40.0000	
* 98 Perylene-d12	264	10.086	10.069	(1.000)	1482597	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	879617	69.4634	2540
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	1065067	69.2020	2530
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	482216	37.3358	1360
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	1088084	40.2699	1470
$ 60 2,4,6-Tribromophenol	329	6.533	6.534	(1.089)	283046	89.8482	3290
$ 81 p-Terphenyl-d14	244	7.898	7.892	(0.914)	1183921	44.6829	1630

ION RATIO REPORT

SV REPORT

Data file: s110418.d
Report Date: 12/05/2009 08:13
Lab. ID: 241540010 SampleType: SAMPLE
Injection Date: 04-DEC-2009 15:23
Operator: nagl Instrument: MSD1.i
Sample Info: |241540010|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	49714	3.62	3.68	80-120	100	(T)
93	42321	3.66	3.69	418-478	85	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	65101	4.25	4.13	80-120	100	(T)
42	41023	4.25	4.13	44-104	63	(T)
22 Isophorone			CAS#: 78-59-1			
82	482216	4.25	4.42	80-120	100	(T)
138	113	4.22	4.42	0- 51	0	(T)
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	31385	5.73	5.60	80-120	100	(T)
164	1992	5.73	5.60	2- 62	6	(T)
127	2269	5.73	5.60	6- 66	7	(T)
42 o-Nitroaniline			CAS#: 88-74-4			
65	35437	5.73	5.66	80-120	100	(T)
92	40860	5.73	5.66	35- 95	115	(QT)
138	3556	5.73	5.66	90-150	10	(QT)
43 Dimethylphthalate			CAS#: 131-11-3			
163	199034	6.00	5.77	80-120	100	(T)
164	1128176	6.00	5.77	0- 40	567	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	142135	6.00	5.82	80-120	100	(T)
63	1972	6.00	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	141891	6.00	6.10	80-120	100	(T)
89	1861	6.00	6.10	32- 92	1	(QT)
63	1963	6.00	6.10	15- 75	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	17471	6.53	6.37	80-120	100	(T)
165	19033	6.53	6.37	64-124	109	(T)
167	5728	6.53	6.37	0- 43	33	(T)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	17881	6.53	6.67	80-120	100	(T)
141	109951	6.53	6.67	50-110	615	(QT)
250	33194	6.53	6.67	68-128	186	(QT)
85 Butylbenzylphthalate			CAS#: 85-68-7			
149	94990	8.37	8.16	80-120	100	(T)
91	70804	8.37	8.16	36- 96	75	(T)
206	1770	8.37	8.16	0- 50	2	(T)
93 bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7			
149	104464	8.37	8.50	80-120	100	(T)
167	6745	8.37	8.50	0- 60	6	(T)
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	8732	9.62	9.61	80-120	100	( )
253	1414	9.62	9.61	0- 51	16	( )
125	1111	9.63	9.61	0- 44	13	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110418.d
Lab Smp Id: 241540010 Client Smp ID: RE03-09-13873
Inj Date : 04-DEC-2009 15:23
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540010|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	8.88620	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2910130	40.000
* 67 Phenanthrene-d10	6.981	4728965	40.000
* 91 Chrysene-d12	8.645	3916058	40.000
* 98 Perylene-d12	10.086	4028593	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.010	1982822	27.2540647	997	0		0	10
Unknown Aldol Condensate					CAS #:		
2.922	1143608	15.7189935	575	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.463	999245	13.7347076	502	97	NIST05.L	15188	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
3.845	995164	13.6786124	500	97	NIST05.L	15369	10
9-Tetradecenal, (Z)-					CAS #: 53939-27-8		
7.651	1011317	8.55423357	313	90	NIST05.L	64380	67
(5a.alpha.,9a.beta.,9b.beta.)-5,5a,6,7,8					CAS #: 2326-89-8		
7.792	572628	4.84357595	177	91	NIST05.L	81146	67
Unknown					CAS #:		
8.022	1151147	11.7582203	430	0		0	91
Eicosanoic acid					CAS #: 506-30-9		
8.116	539381	5.50942976	202	99	NIST05.L	132301	91
Unknown					CAS #:		
8.139	445241	4.54784535	166	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.151	801652	8.18835631	300	95	NIST05.L	112657	91
Unknown					CAS #:		
8.245	1153154	11.7787265	431	0		0	91
Unknown					CAS #:		
8.392	1783913	18.2215158	667	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
8.463	3861168	39.4393381	1440	98	NIST05.L	125034	91
Docosanoic acid					CAS #: 112-85-6		
8.569	570155	5.82376096	213	83	NIST05.L	147936	91
Unknown					CAS #:		
8.598	2656120	27.1305525	992	0		0	91

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
8.751	533902	5.45346816	200	0		0	91
Unknown				CAS #:			
9.198	575162	5.87490735	215	0		0	91
D-Friedoolean-14-ene, 3-methoxy-, (3.bet				CAS #: 14021-23-9			
11.780	2111234	20.9624917	767	80	NIST05.L	178753	98
Unknown				CAS #:			
11.968	1326010	13.1659808	482	0		0	98
.beta.-Sitosterol				CAS #: 83-46-5			
12.451	953065	9.46300798	346	97	NIST05.L	174399	98
.gamma.-Sitosterol				CAS #: 83-47-6			
12.486	586527	5.82364438	213	90	NIST05.L	174402	98

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Sample Info: |241540010|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: nag1

Column diameter: 0.20

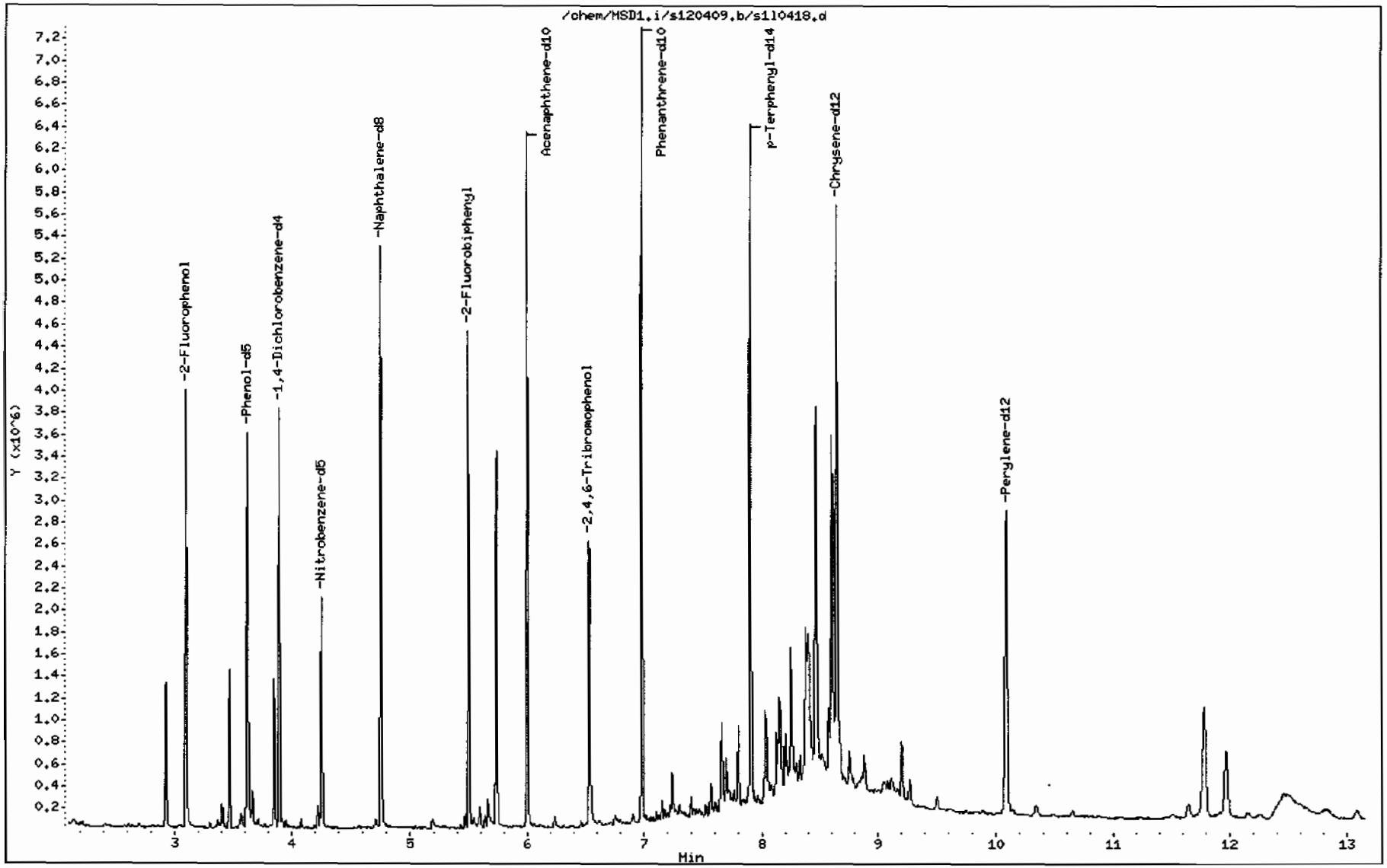

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	78	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	39	C5H12O2	104

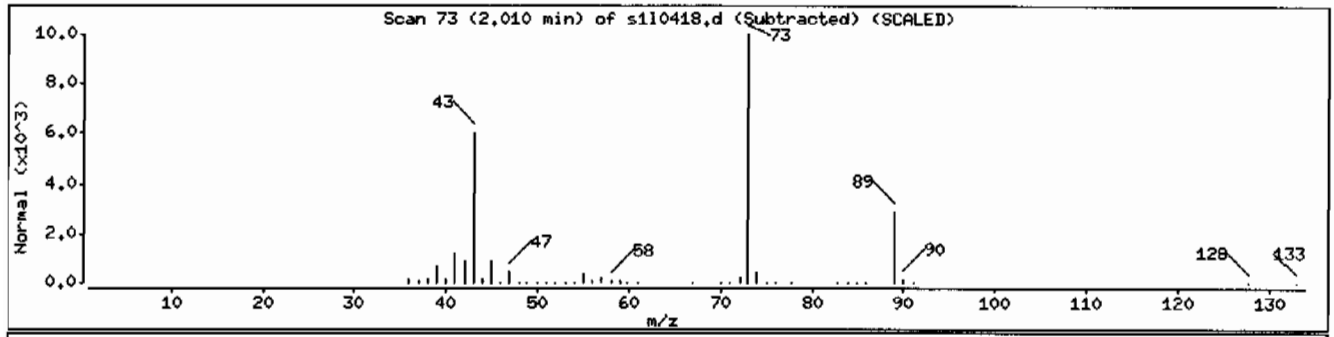

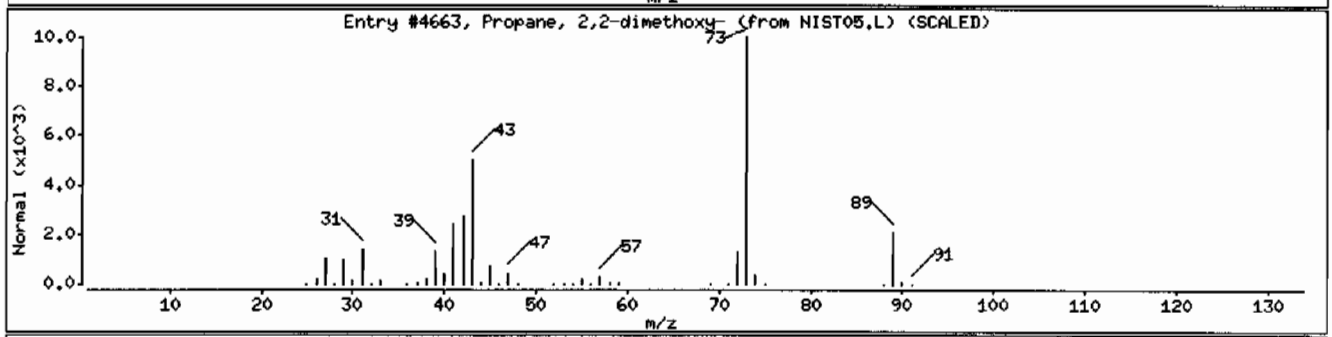

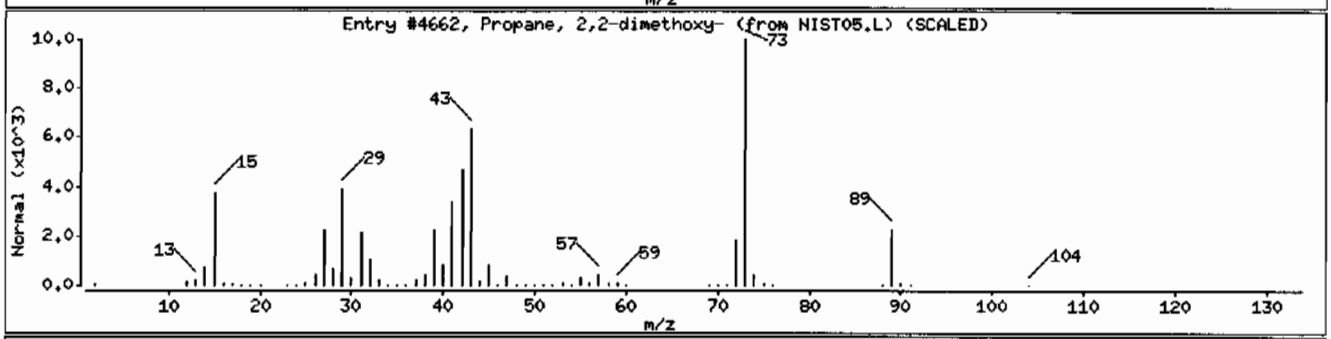

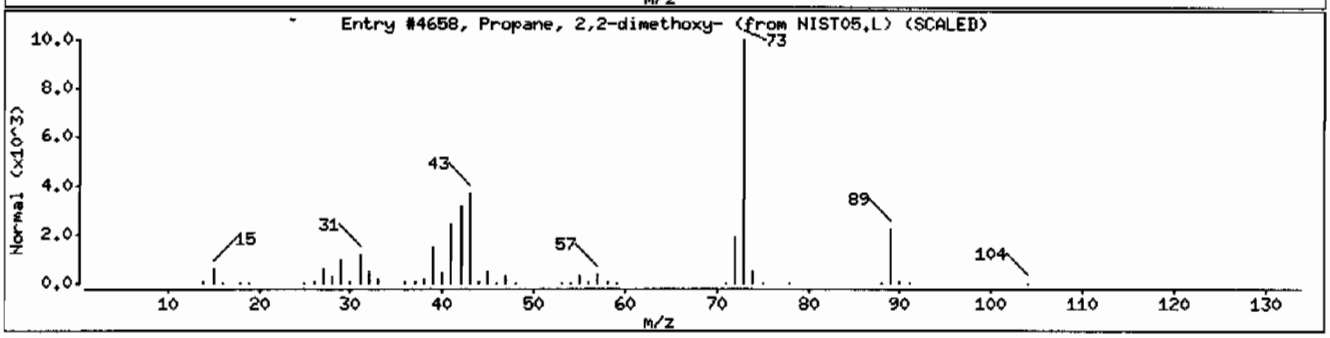

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H1202	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H1202	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	40	C6H1202	116

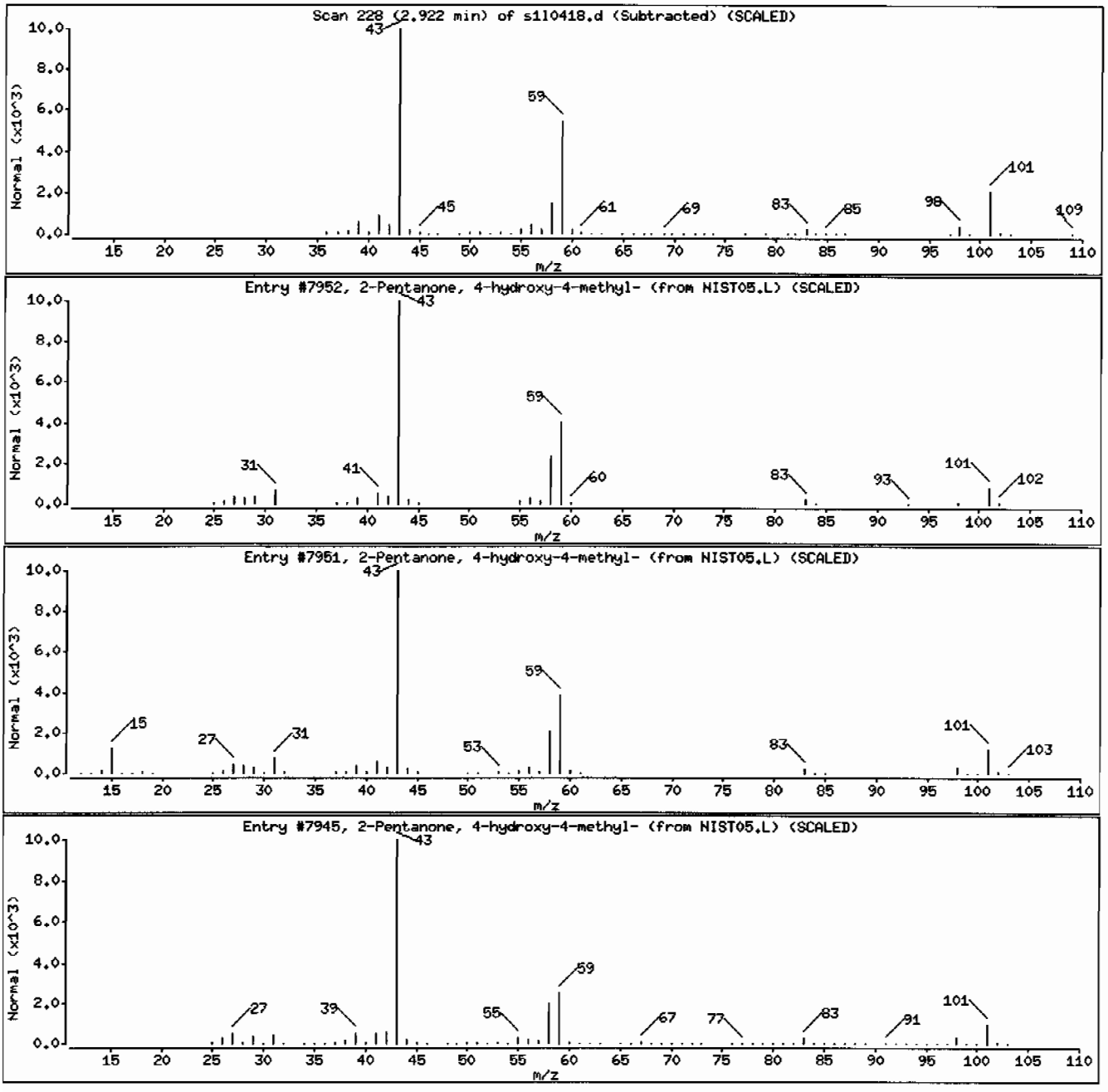

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Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	97	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136

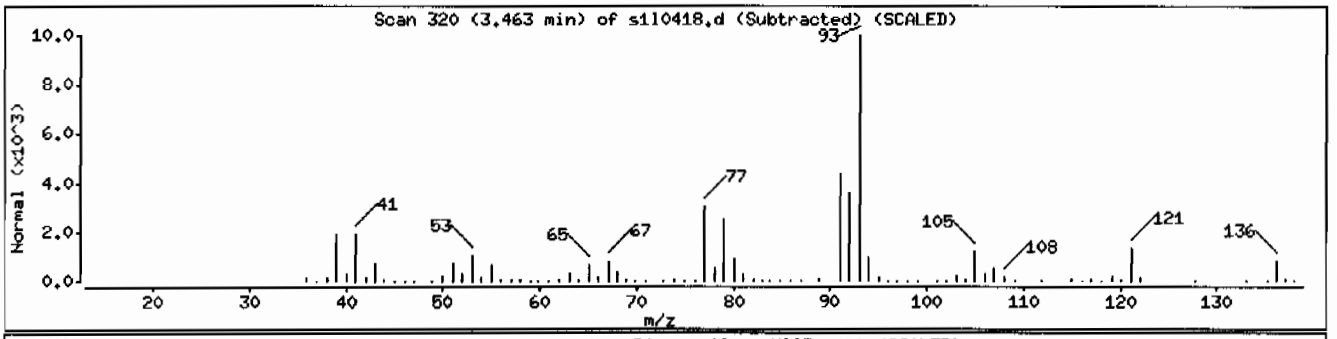

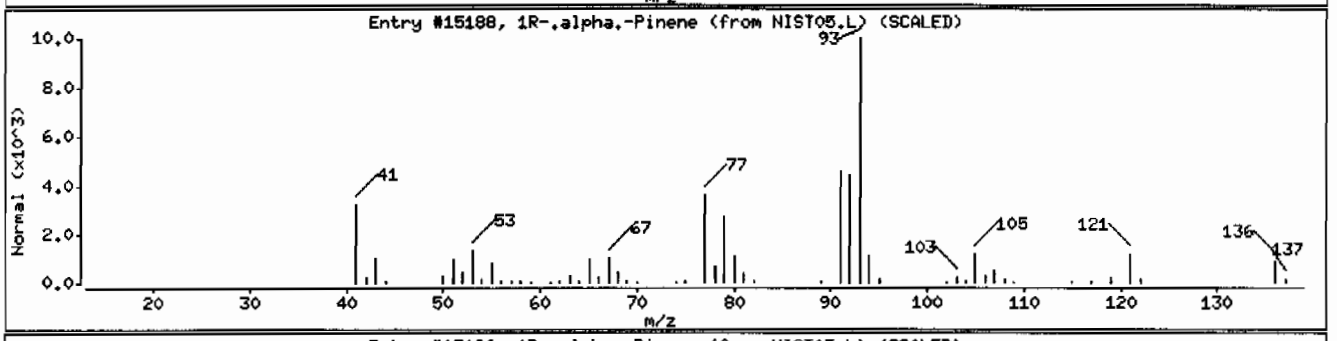

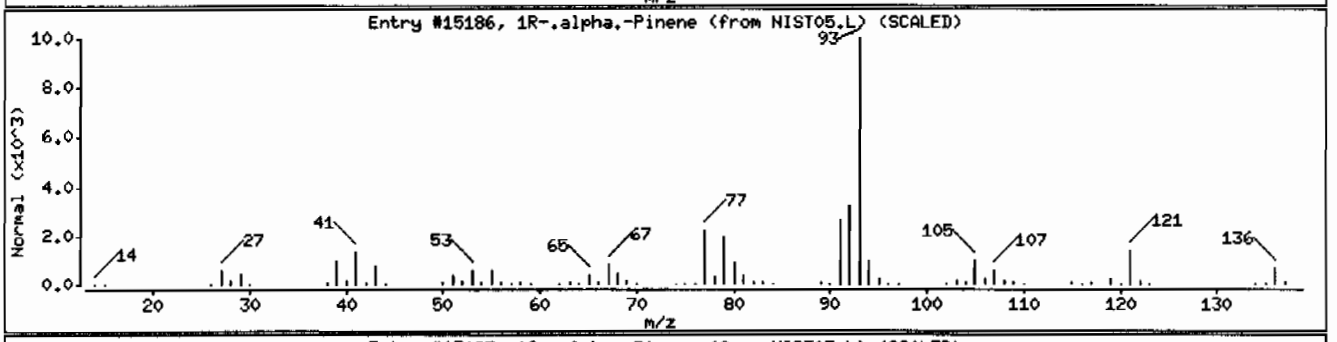

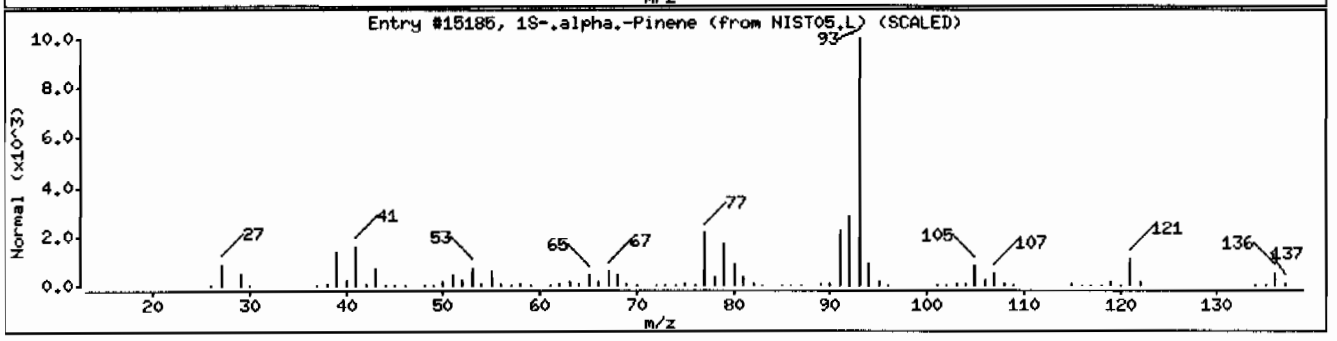

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: MSD1.i

Sample Info: 1241540010|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136

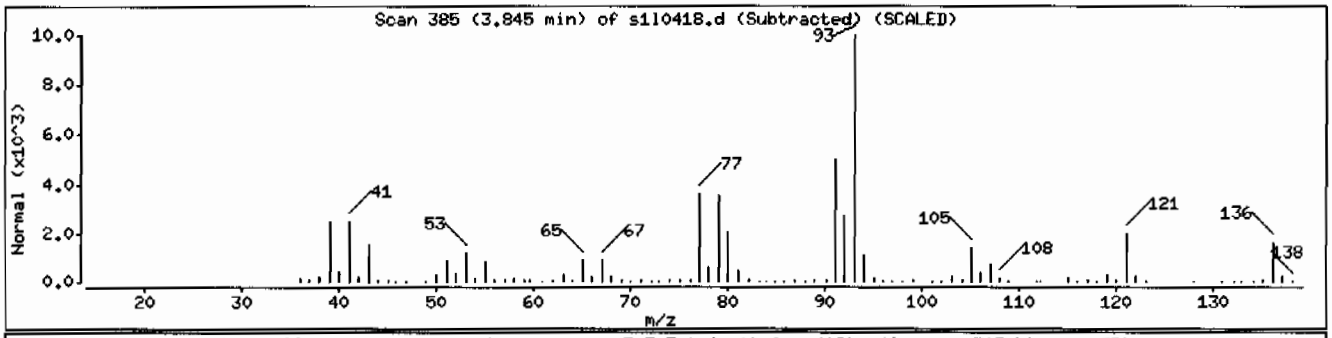

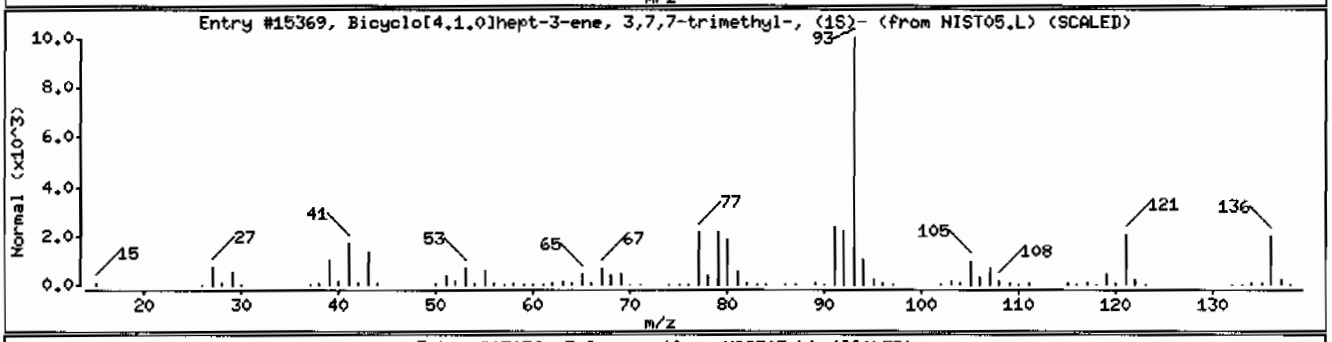

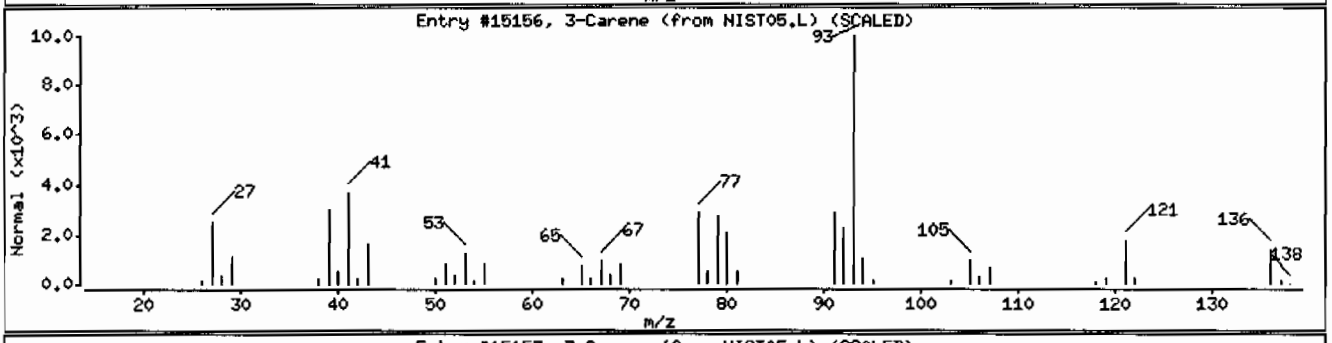

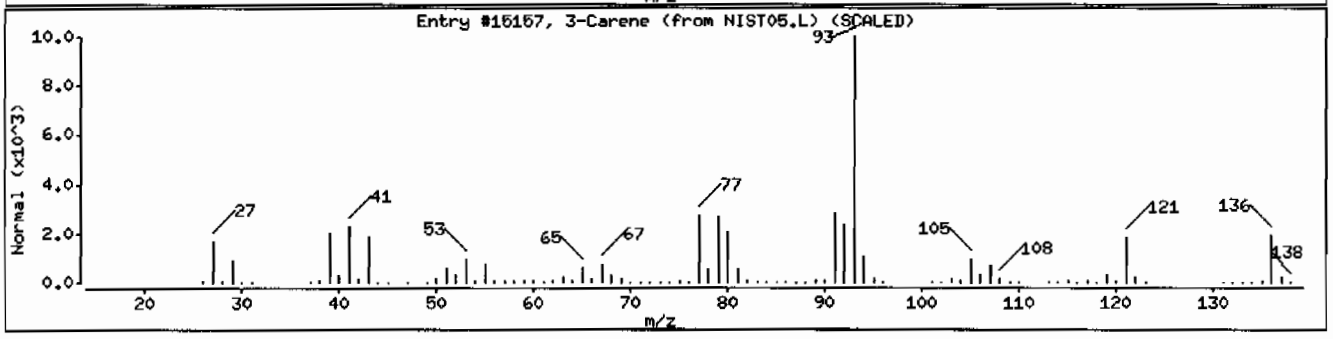

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Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Tetradecenal, (Z)-	53939-27-8	NIST05.L	64380	90	C14H26O	210
Oxirane, tetradecyl-	7320-37-8	NIST05.L	85503	89	C16H32O	240
1-Tridecene	2437-56-1	NIST05.L	44618	86	C13H26	182

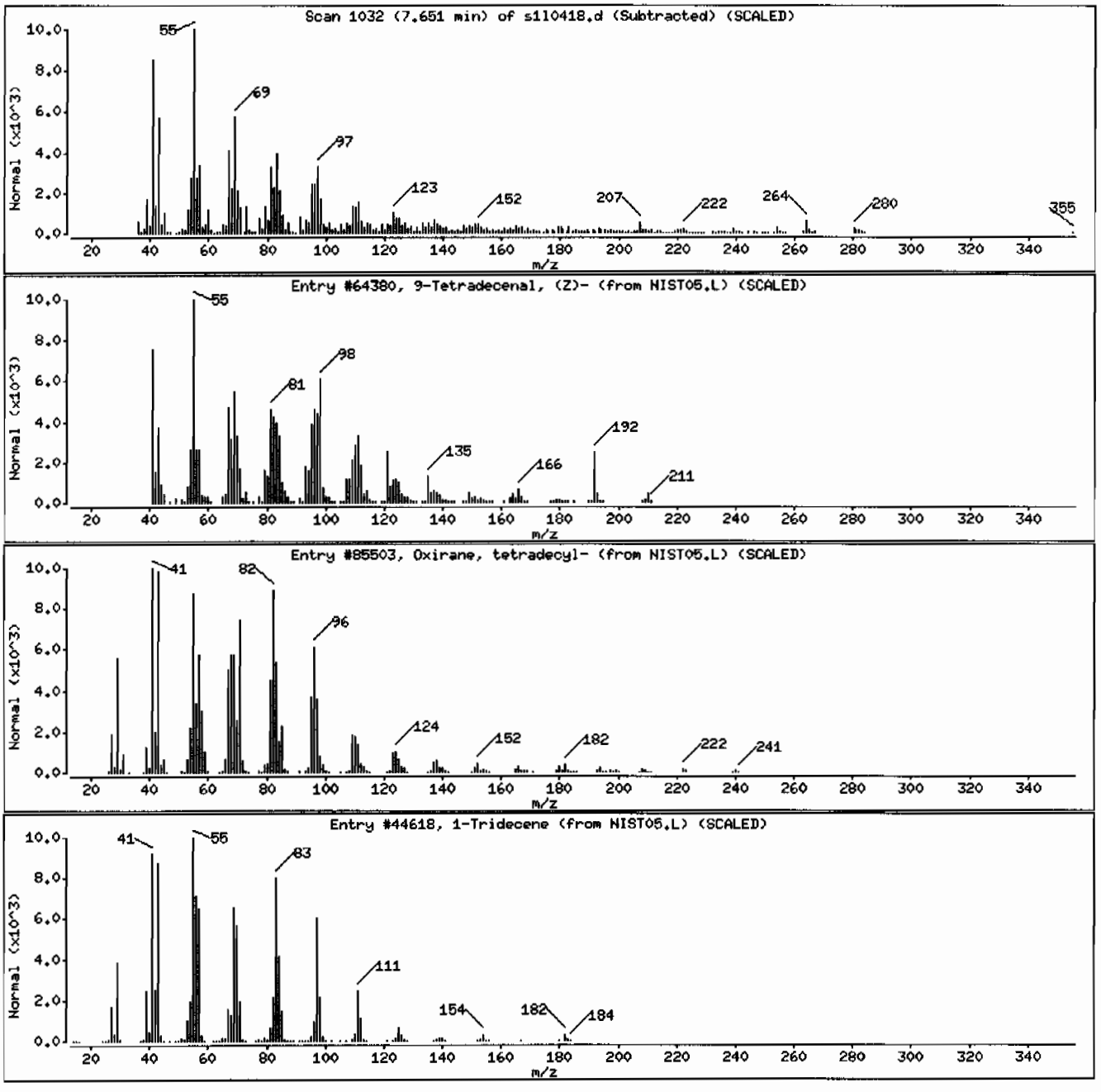

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Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |24154001019266101|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(5a.alpha.,9a.beta.,9b.beta.)-5,5a,6,7,8	2326-89-8	NIST05.L	81146	91	C15H22O2	234
Cyclopropane, 1,1-dimethyl-2-(2-methyl-1	33422-32-1	NIST05.L	10397	76	C9H16	124
1,3-Heptadiene, 2,3-dimethyl-	74779-65-0	NIST05.L	10357	76	C9H16	124

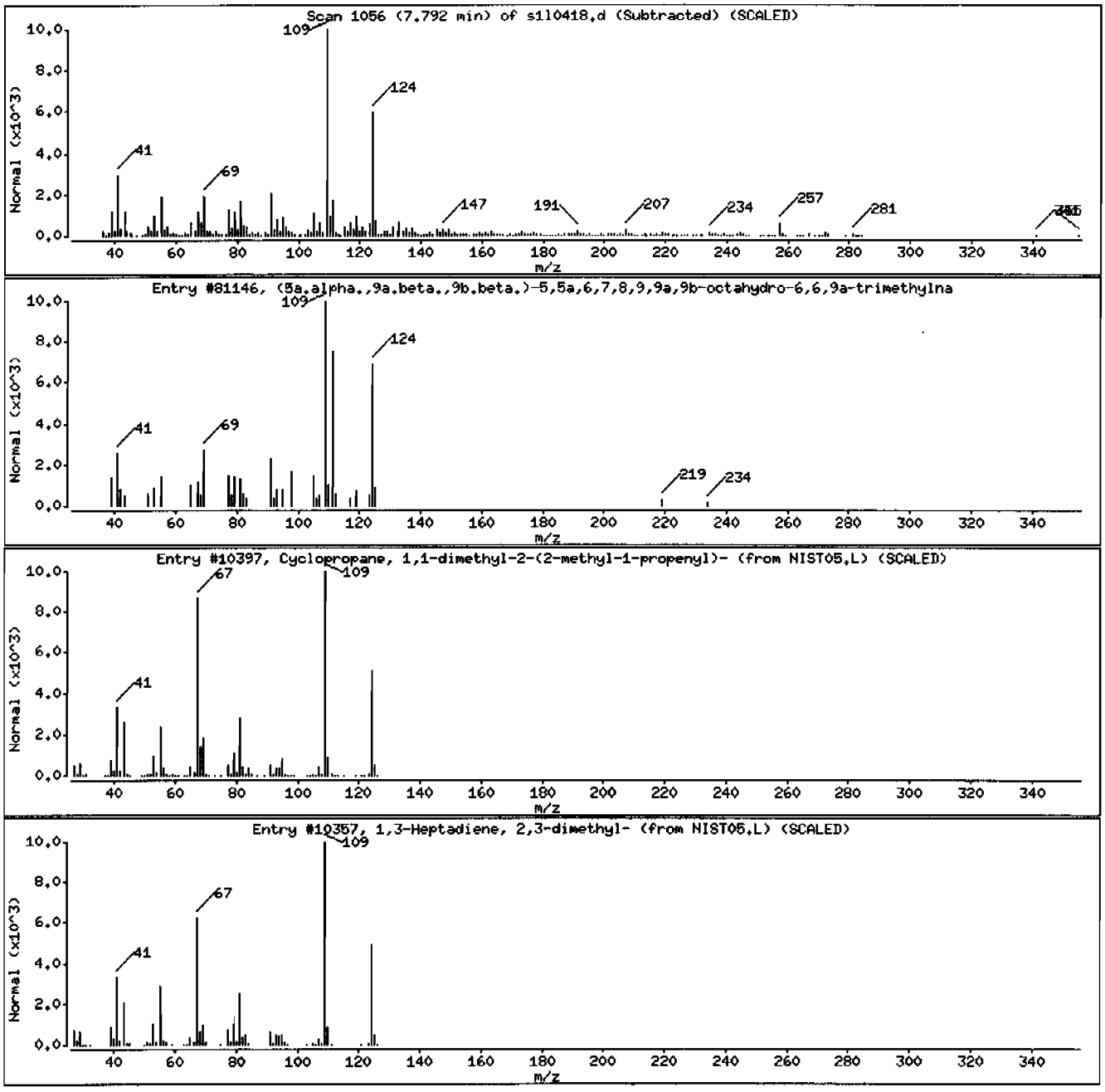

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610111SVMF111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenepropanal	104-53-0	NIST05.L	14788	38	C9H100	134
1-Methoxymethyl-2,3,5,6-tetramethylbenze	18922-11-7	NIST05.L	41665	35	C12H180	178
Benzocycloheptene	1075-16-7	NIST05.L	20777	35	C11H14	146

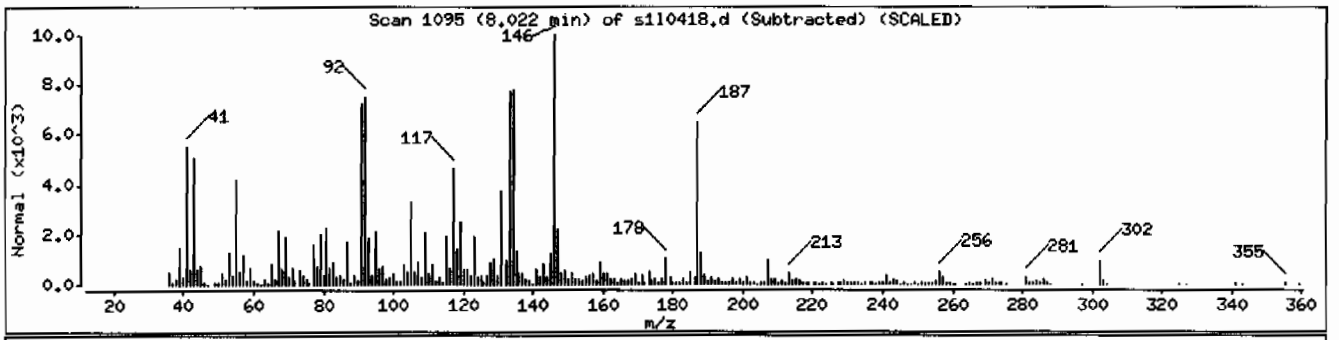

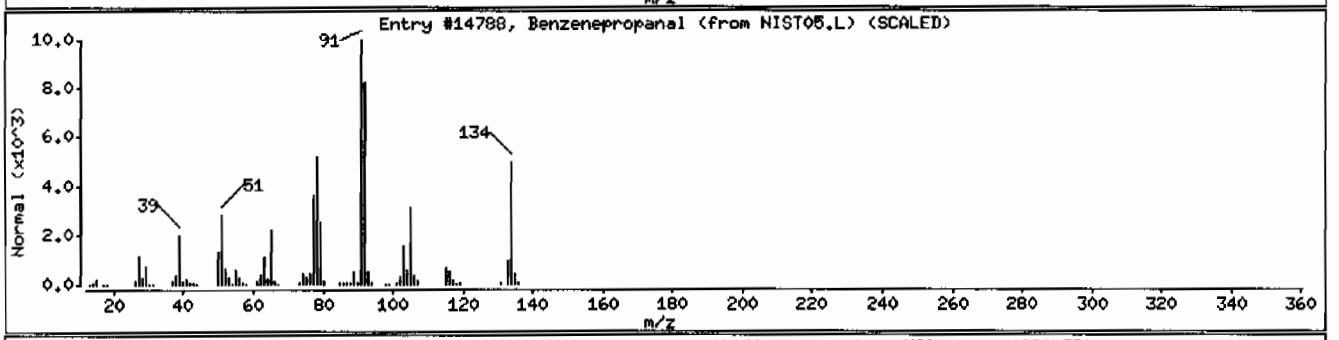

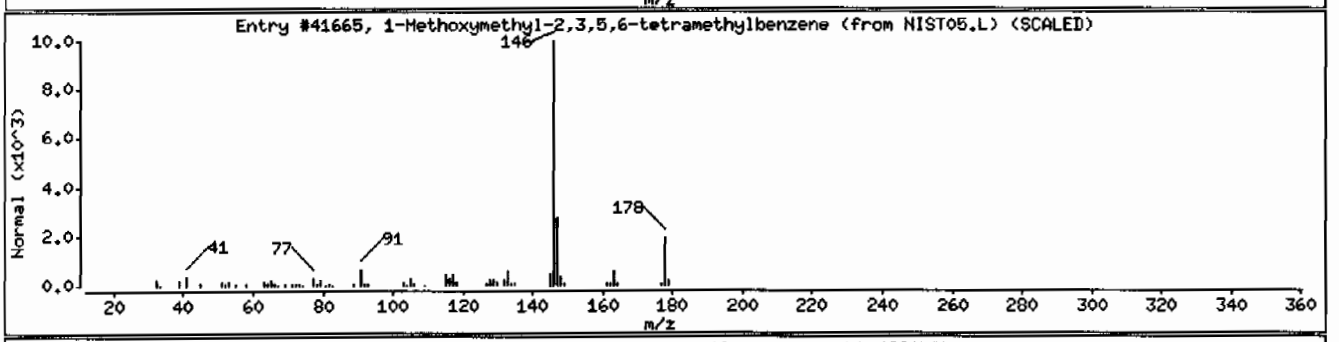

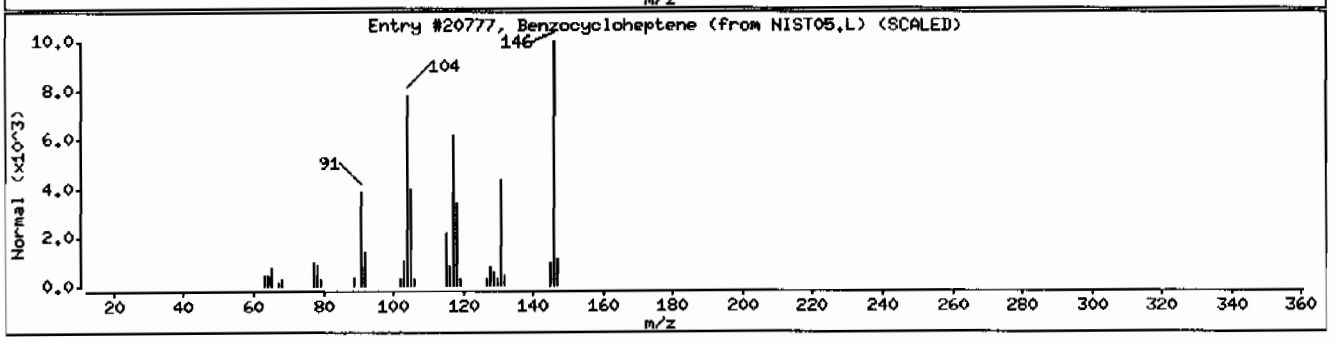

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Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosanoic acid	506-30-9	NIST05.L	132301	99	C20H40O2	312
Eicosanoic acid	506-30-9	NIST05.L	132302	96	C20H40O2	312
n-Decanoic acid	334-48-5	NIST05.L	37498	83	C10H20O2	172

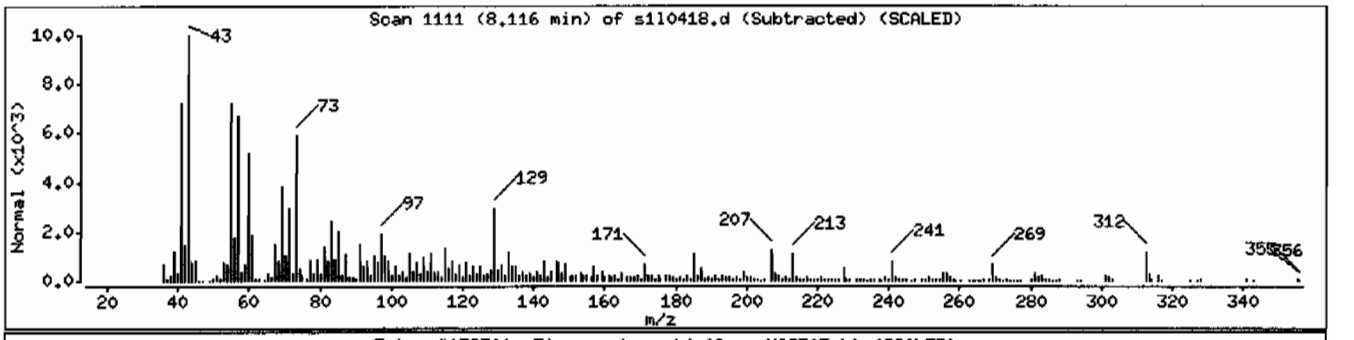

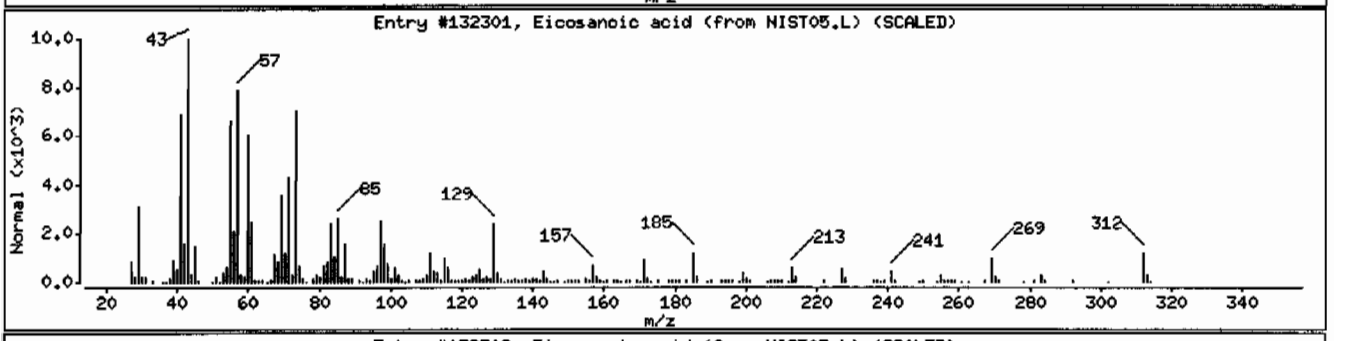

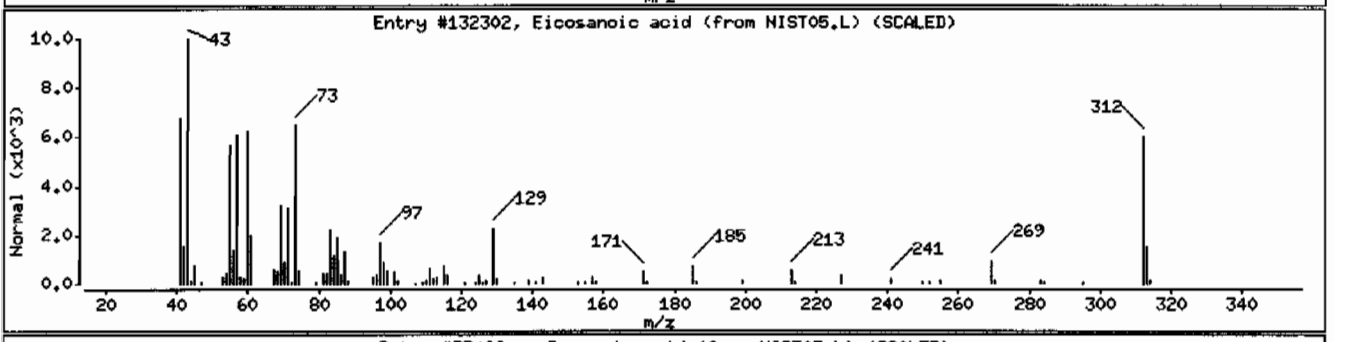

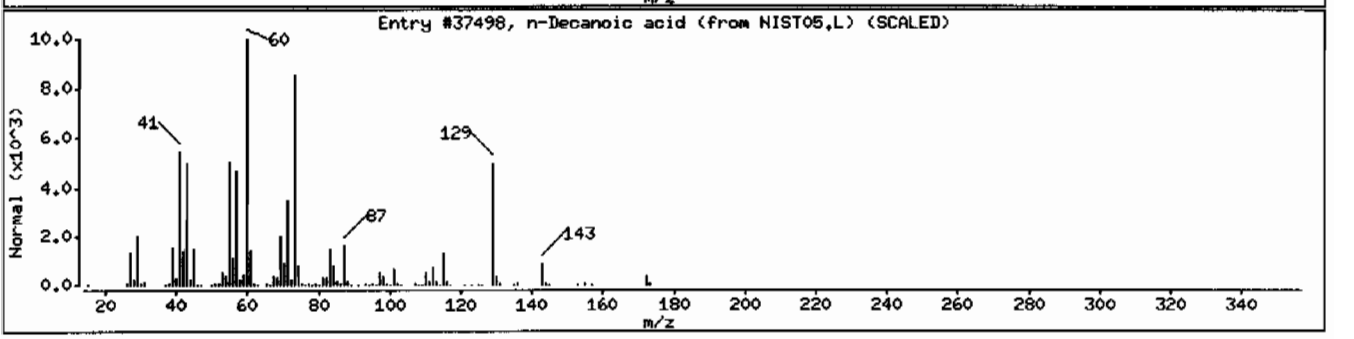

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,5-Dimethylhex-5-en-3-yn-2-ol	1000302-74-9	NIST05.L	10204	60	C8H12O	124
3-Hexyne-2,5-diol, 2,5-dimethyl-	142-30-3	NIST05.L	19038	47	C8H14O2	142
7-(2,6-Dimethyl-hepta-1,5-dienyl)-3,8,8-	1000190-62-8	NIST05.L	107093	43	C20H32	272

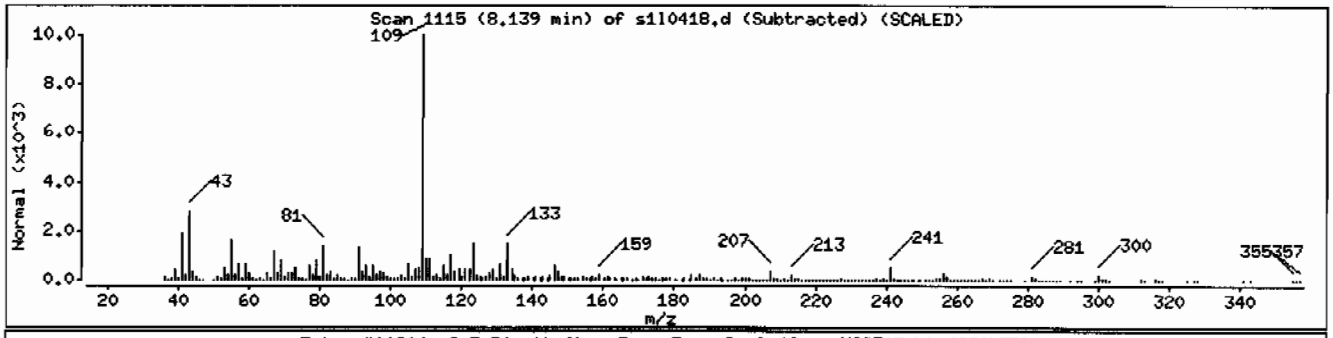

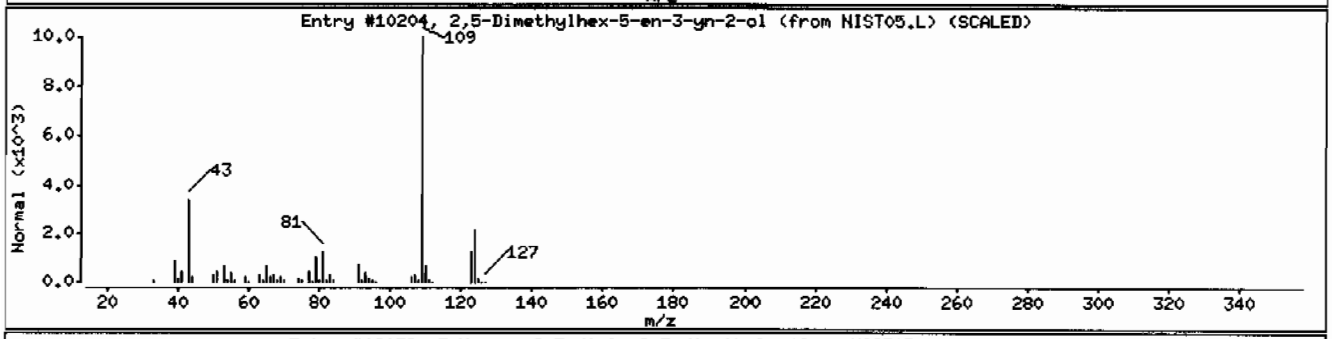

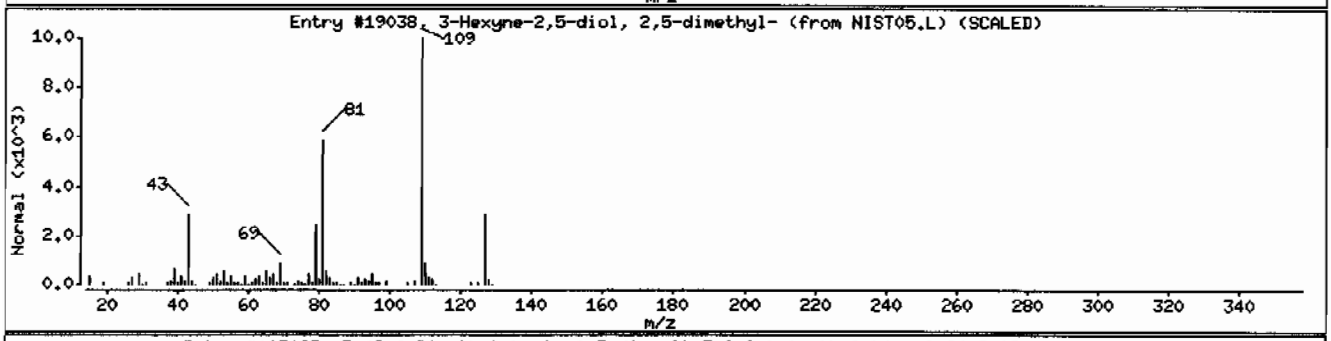

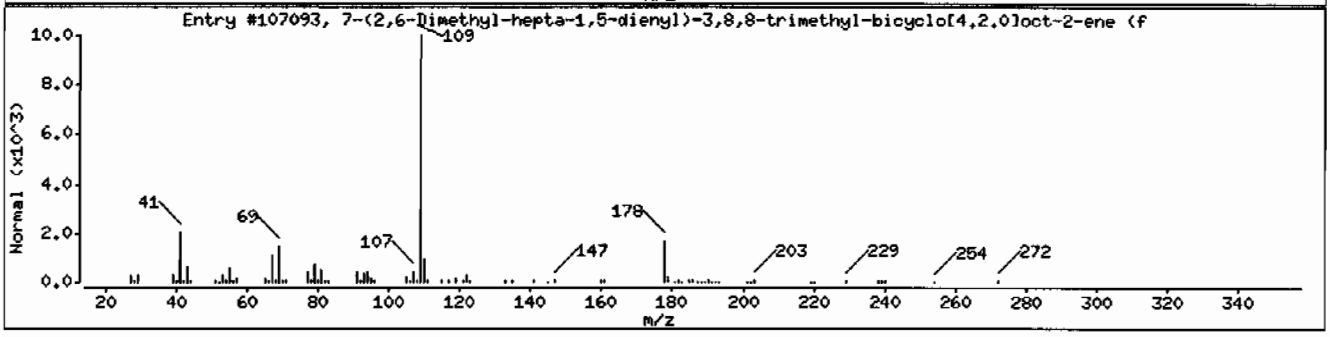

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Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610111SVHF111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	95	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	86	C18H35NO	281
Heptanamide, 4-ethyl-5-methyl-	54789-40-1	NIST05.L	37060	74	C10H21NO	171

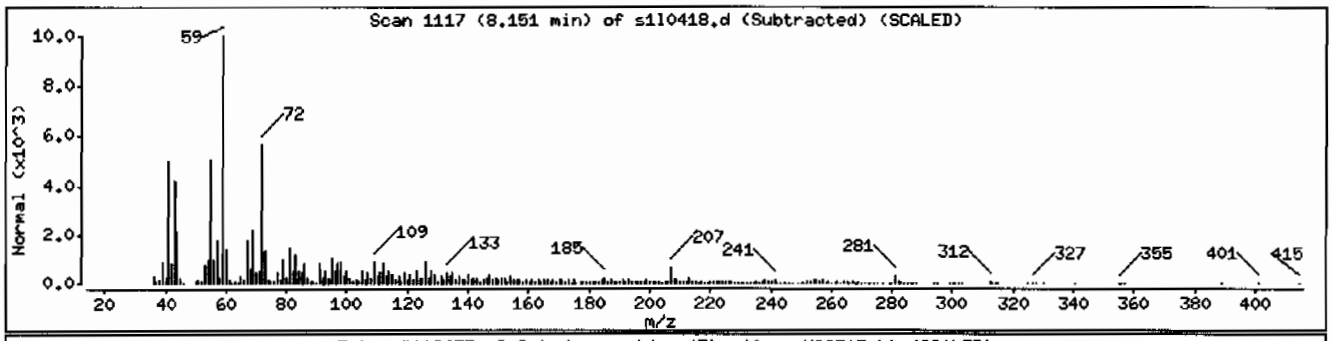

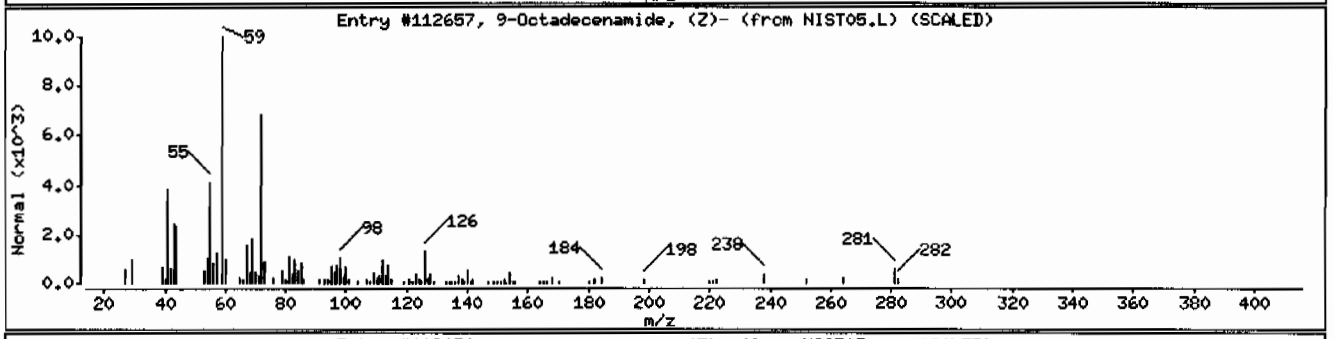

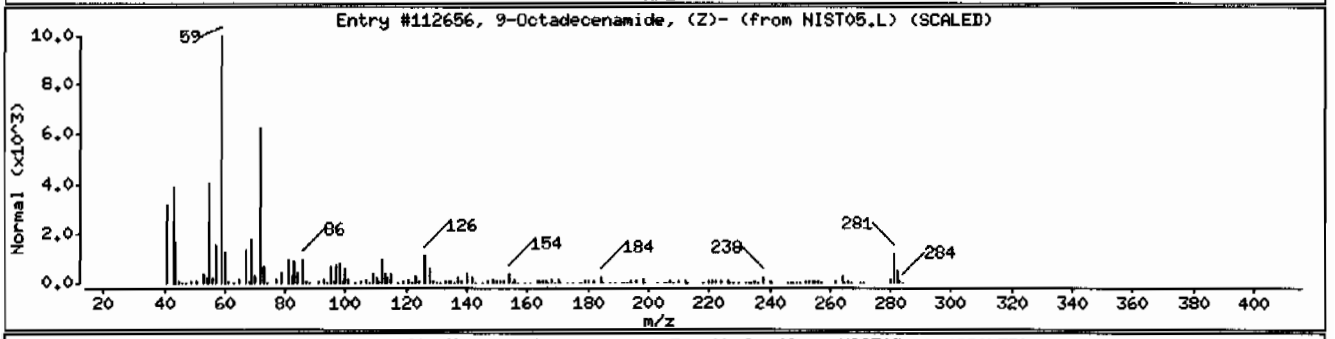

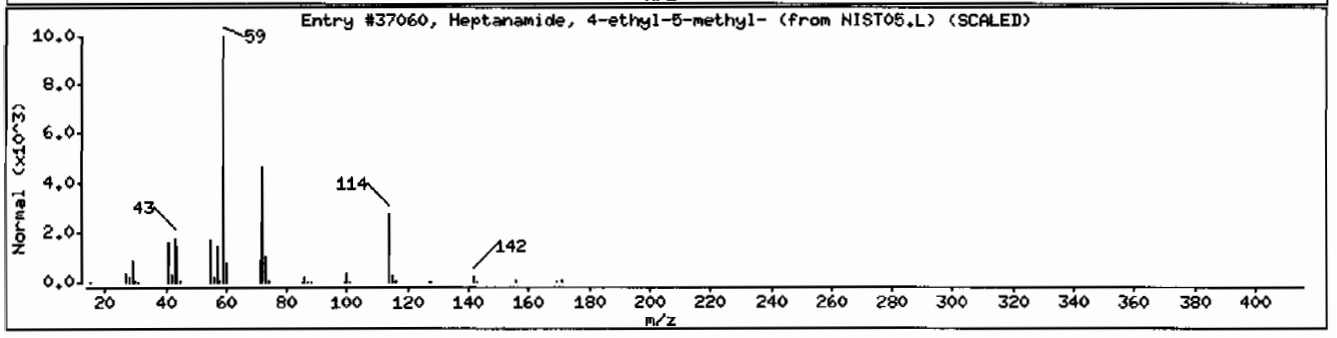

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |241540010|926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15244	42	C10H16	136
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	38	C10H16	136
p-Methoxybenzylazidoformate	25474-85-5	NIST05.L	62357	27	C9H9N3O3	207

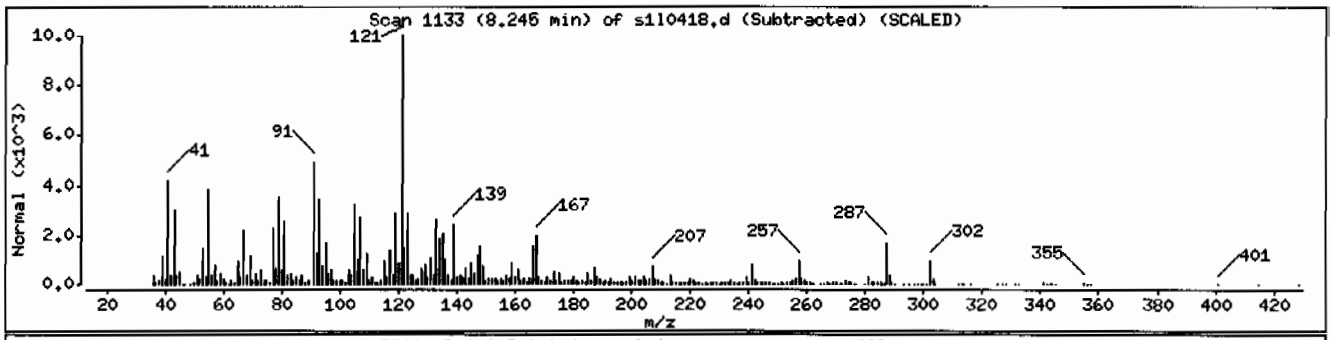

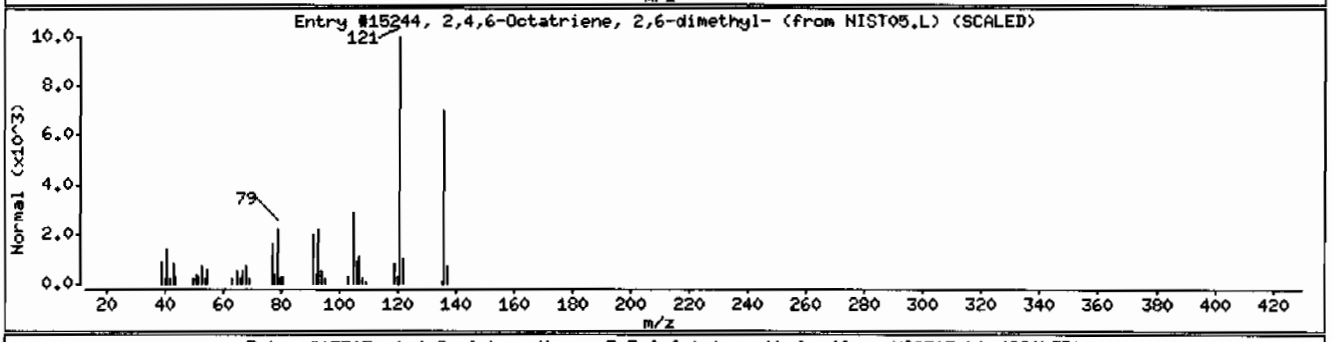

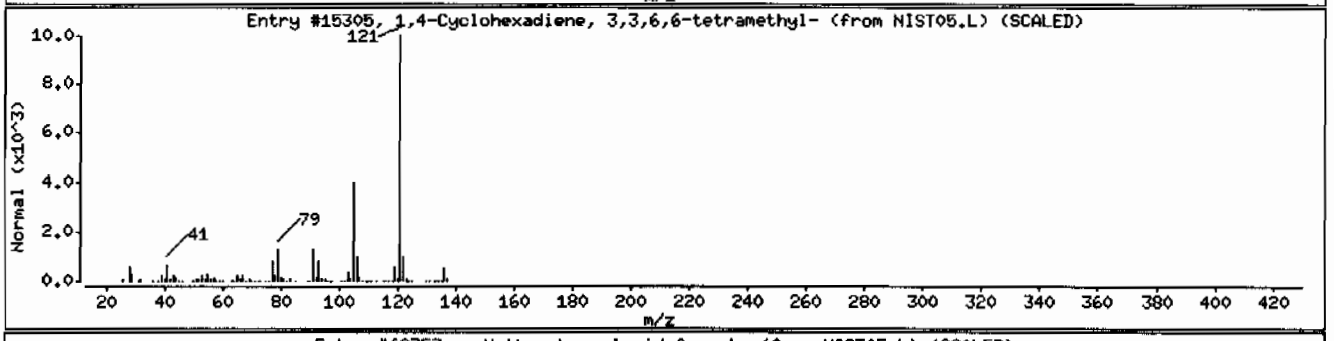

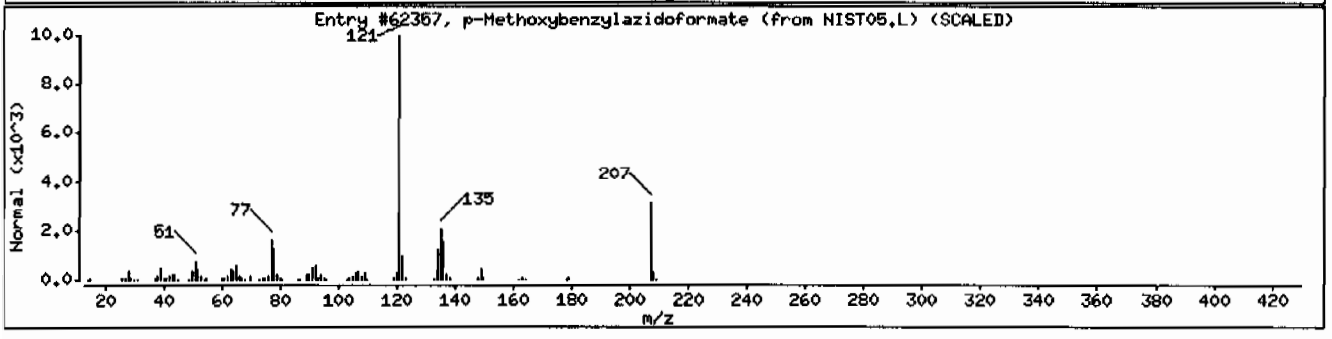

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Crinan, 1-methoxy-, (1.alpha.)-	41928-92-1	NIST05.L	116641	38	C17H21NO3	287
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	35	C22H22O	302
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	125840	35	C16H14O6	302

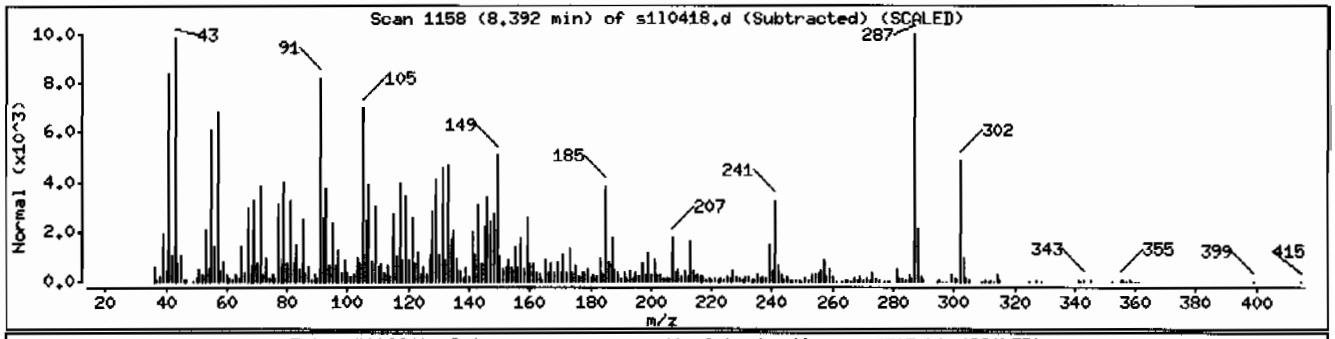

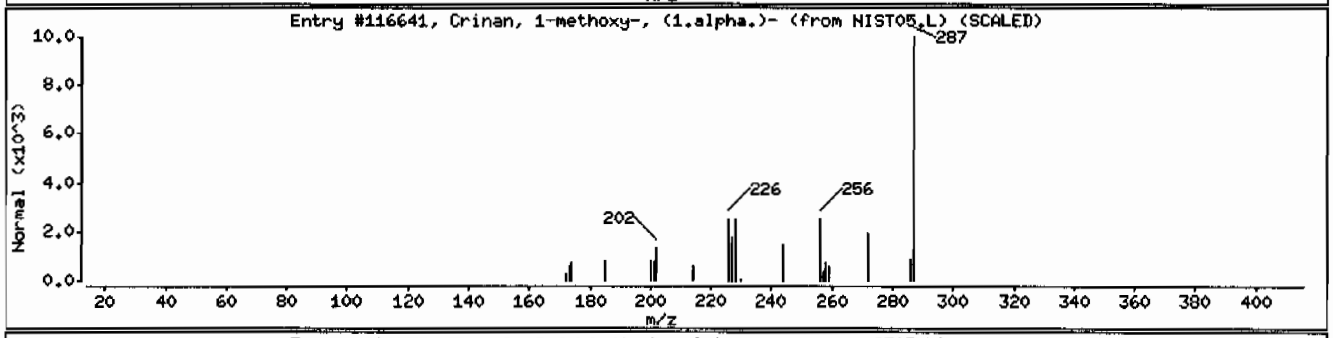

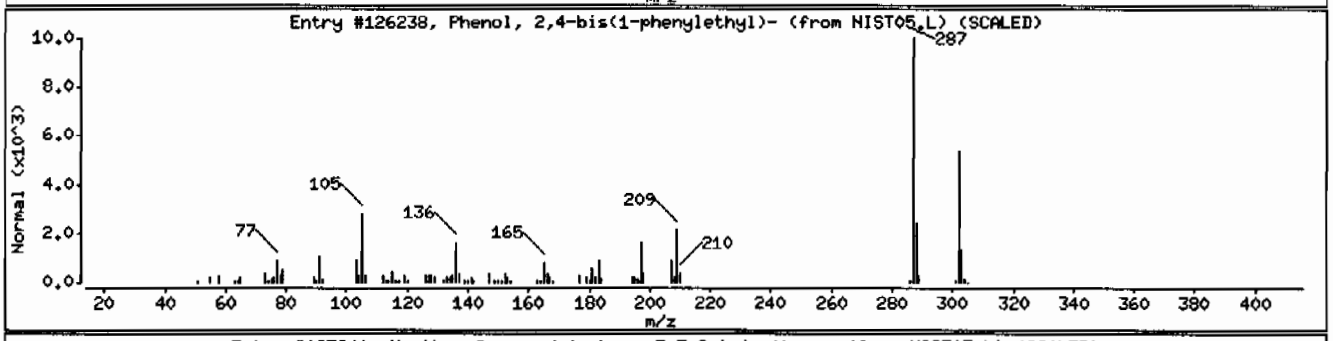

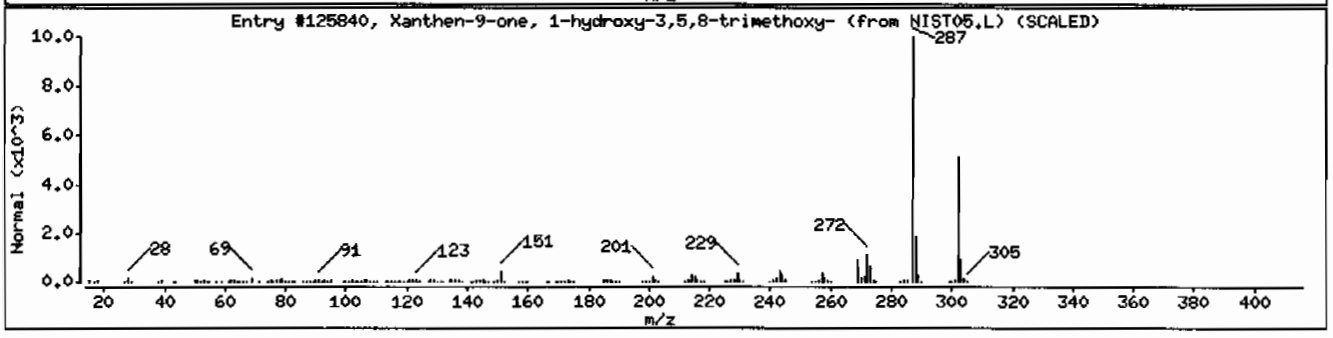

Data File: /chem/HSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: HSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	98	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	94	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	91	C20H28O2	300

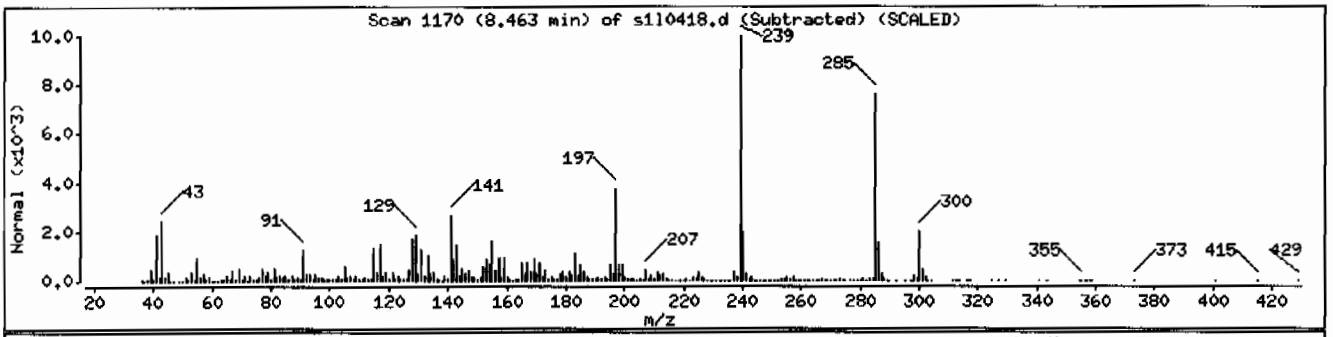

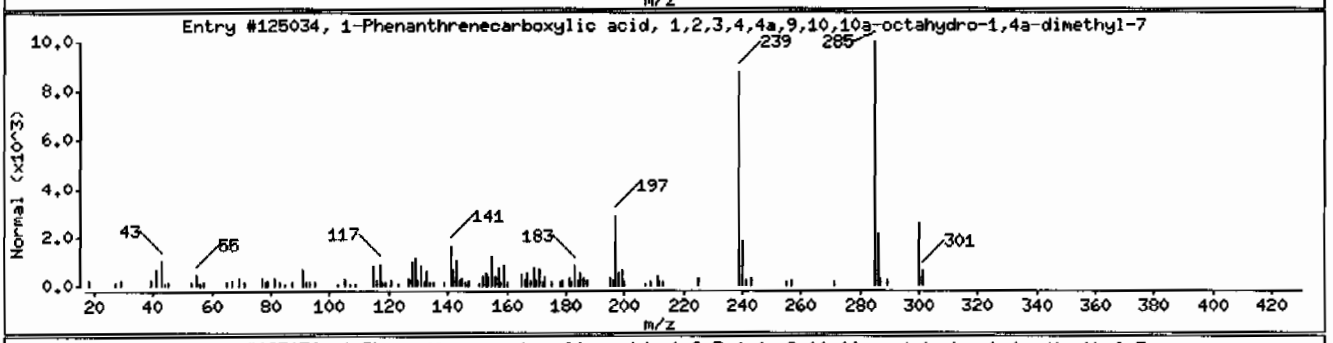

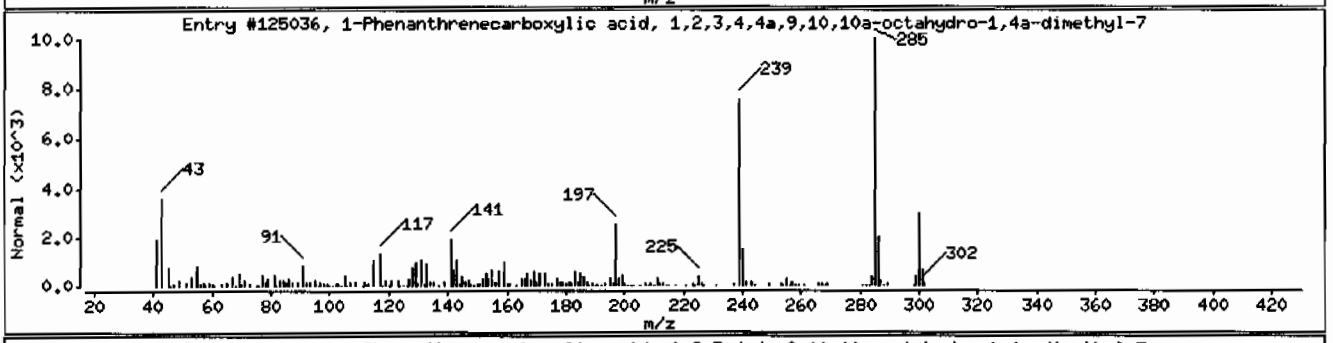

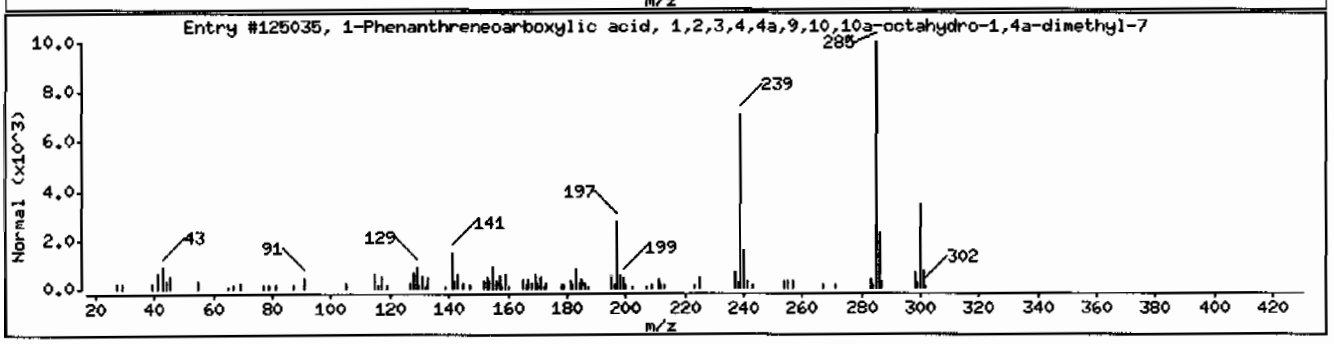

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosanoic acid	112-85-6	NIST05.L	147936	83	C22H4402	340
Octadecanoic acid, 2-methylpropyl ester	646-13-9	NIST05.L	147957	64	C22H4402	340
Docosanoic acid	112-85-6	NIST05.L	147935	60	C22H4402	340

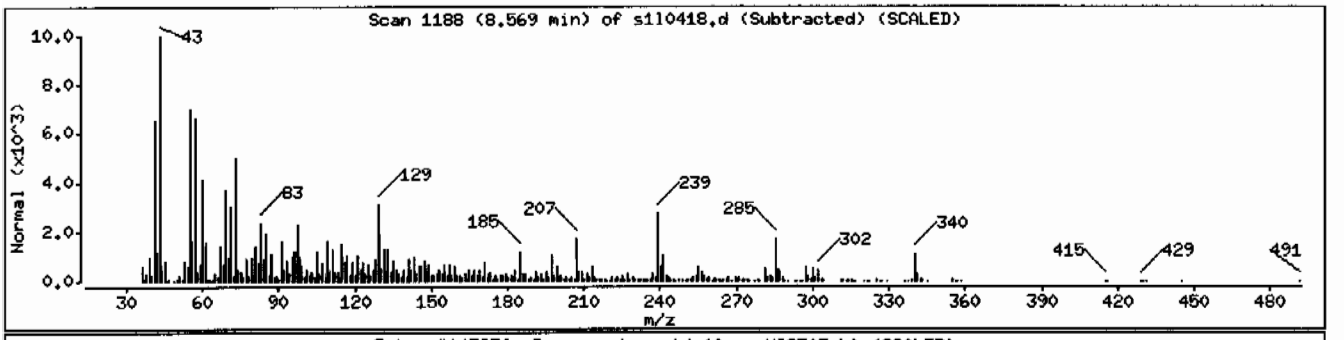

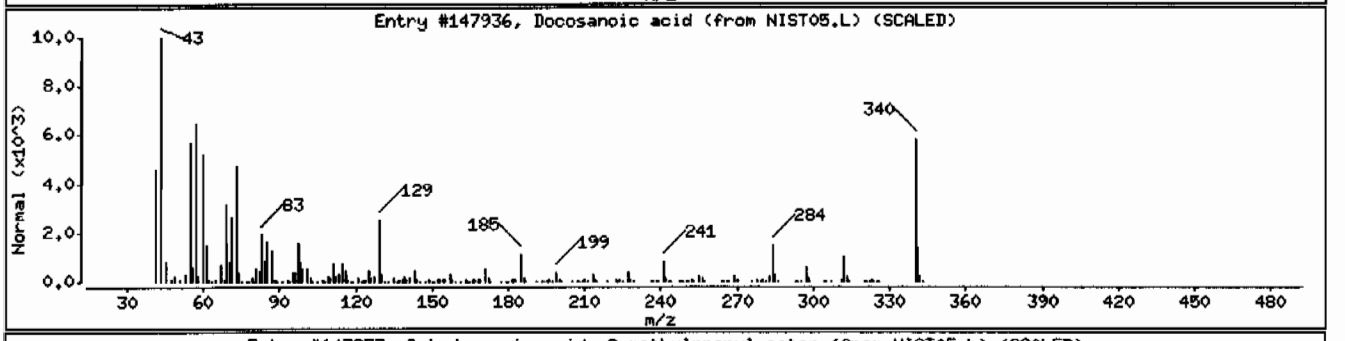

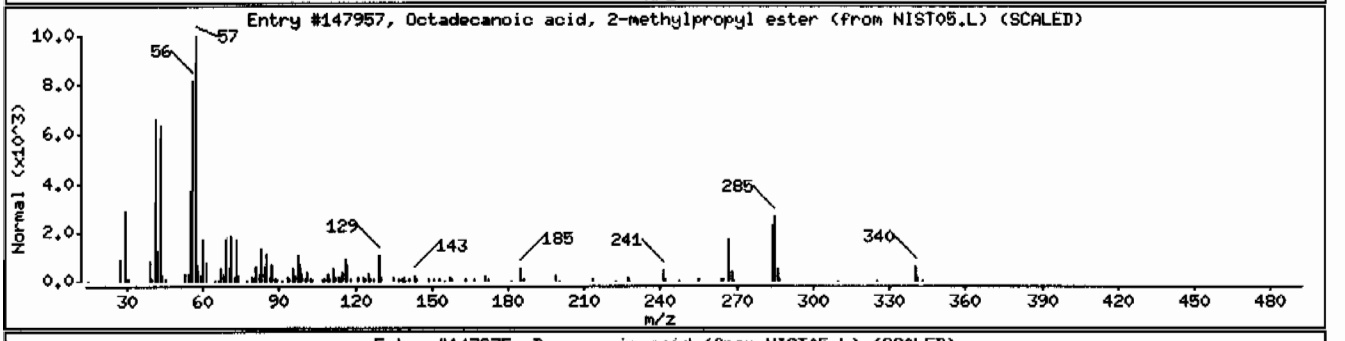

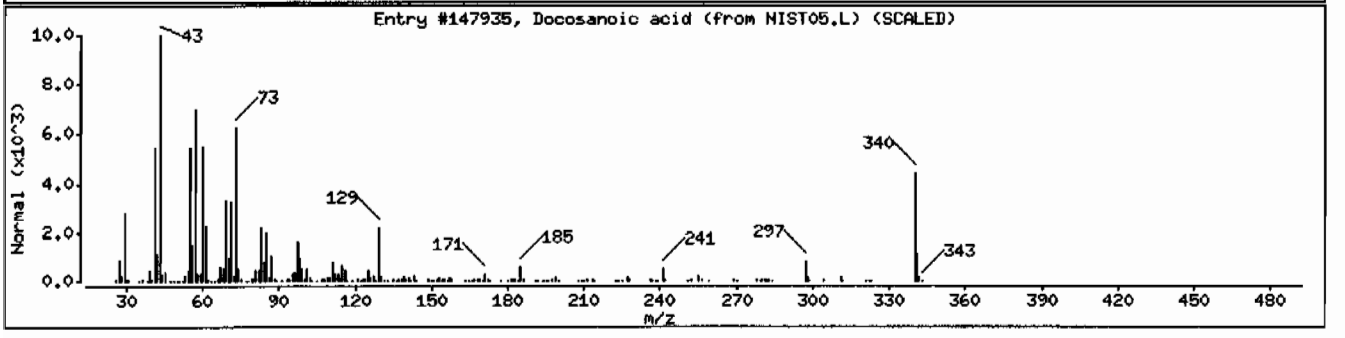

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: I2415400101926610111SVHF111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Abietic acid	514-10-3	NIST05.L	126143	55	C20H30O2	302
Abietic acid	514-10-3	NIST05.L	126141	46	C20H30O2	302
2,3-Dimethylanisole	2944-49-2	NIST05.L	15841	35	C9H12O	136

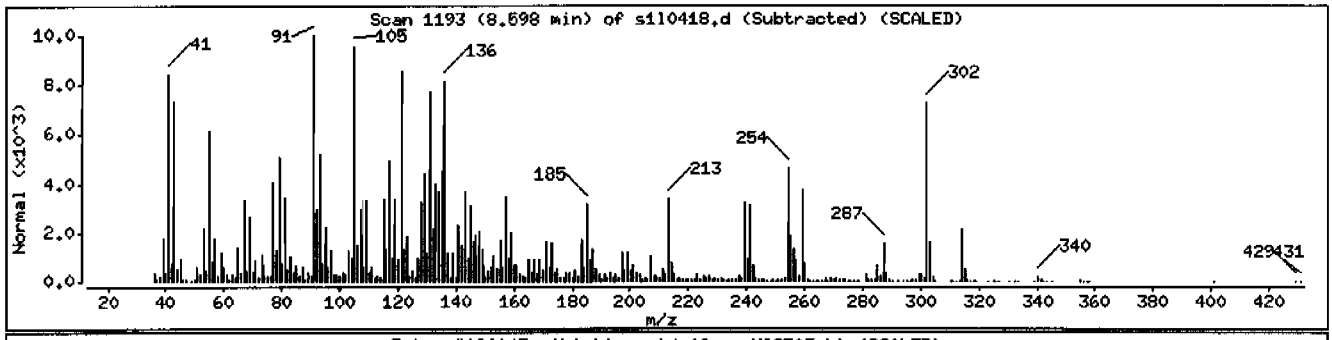

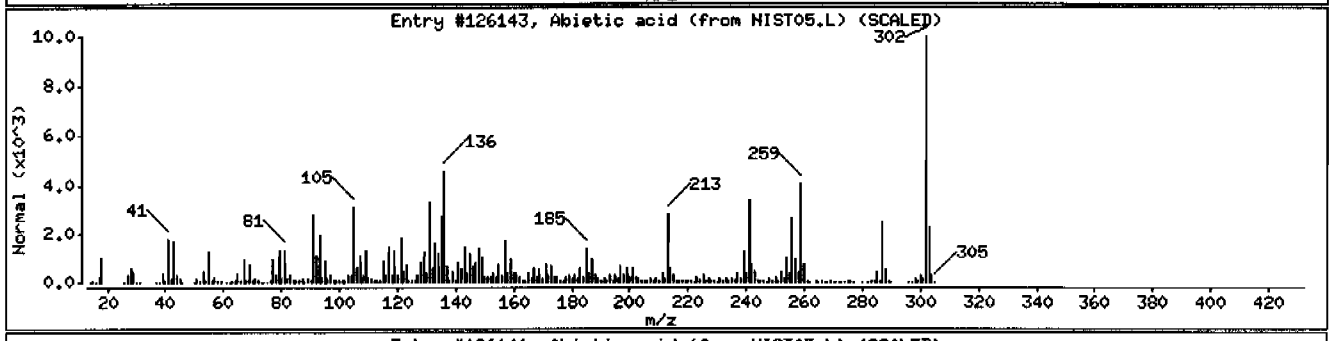

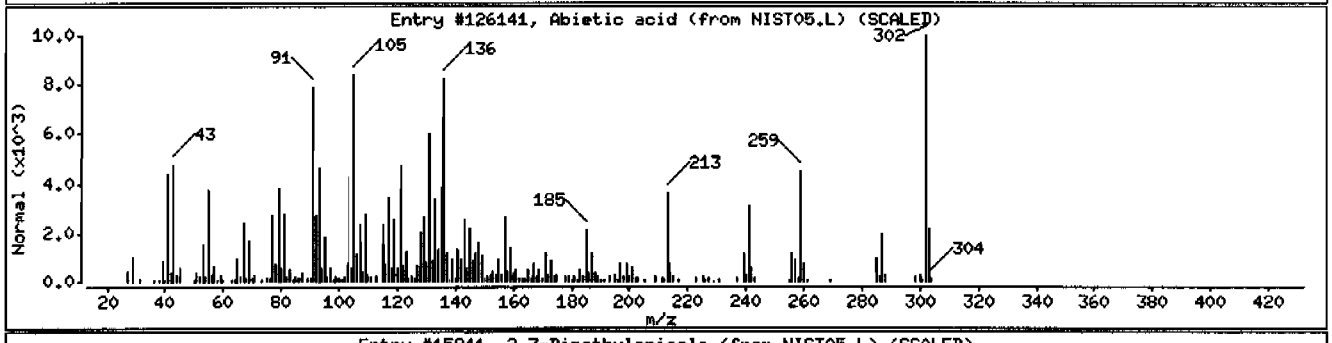

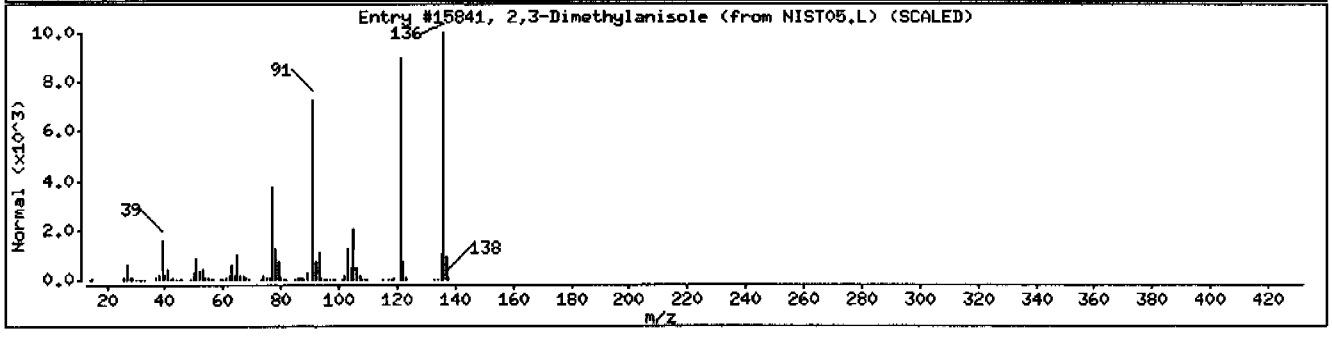

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: MSD1.i

Sample Info: |24154001019266101|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	86	C20H3002	302
1-Adamantyl m-tolyloxyacetate	306278-20-6	NIST05.L	124939	46	C19H2403	300
2-Aziridinone, 1-(1-adamantyl)-3-(1-meth	26905-18-0	NIST05.L	107638	46	C18H27NO	273

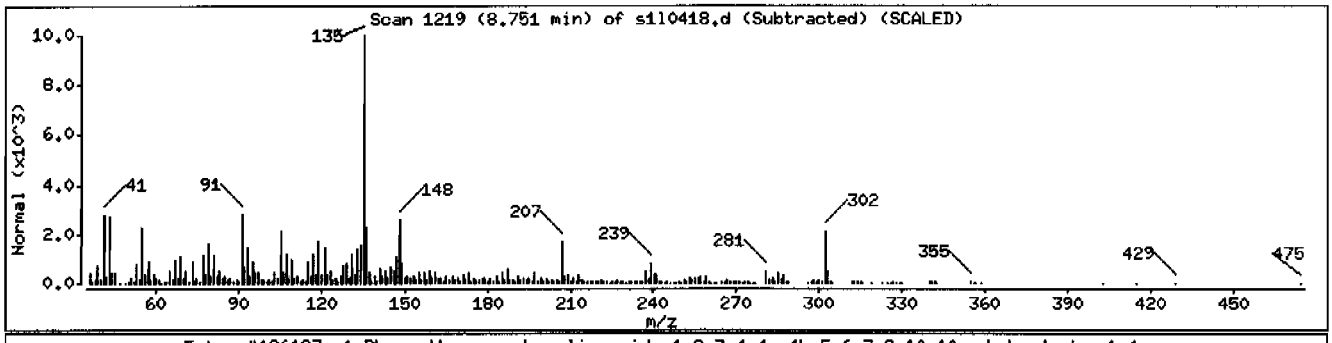

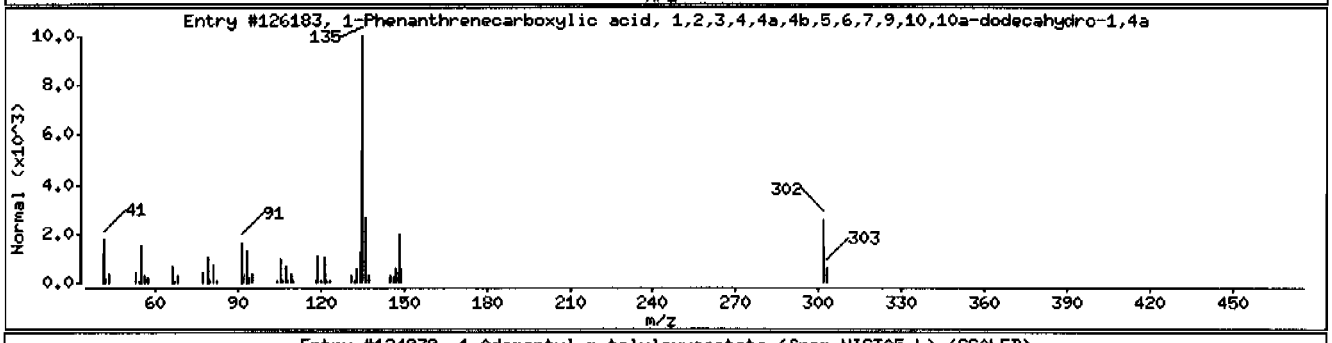

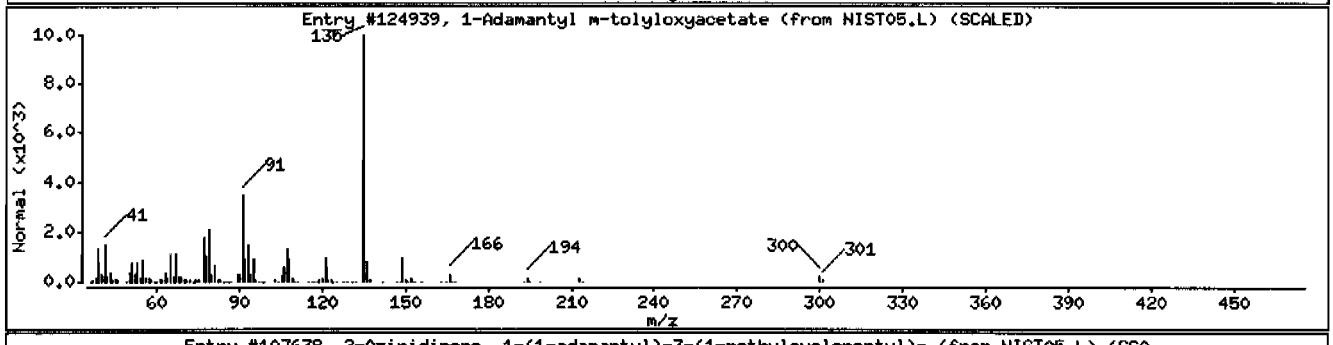

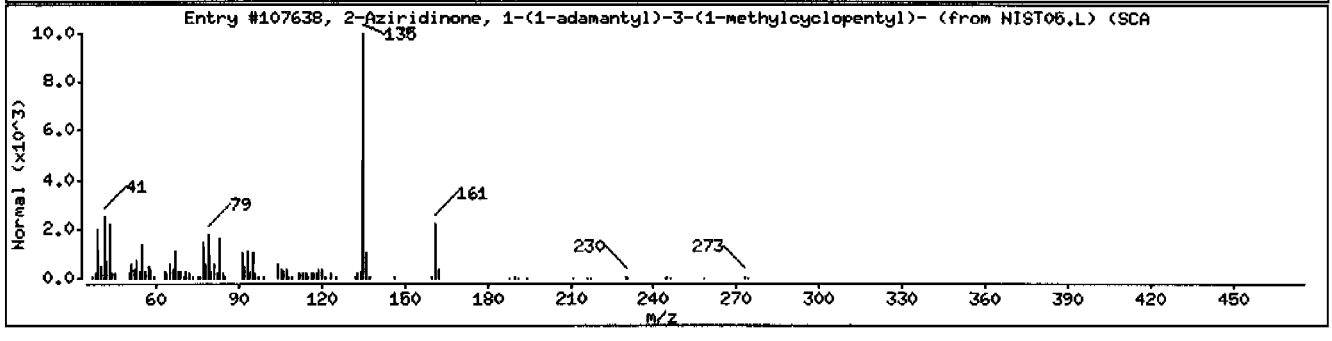

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |24154001019266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	91	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	89	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	89	C18H35NO	281

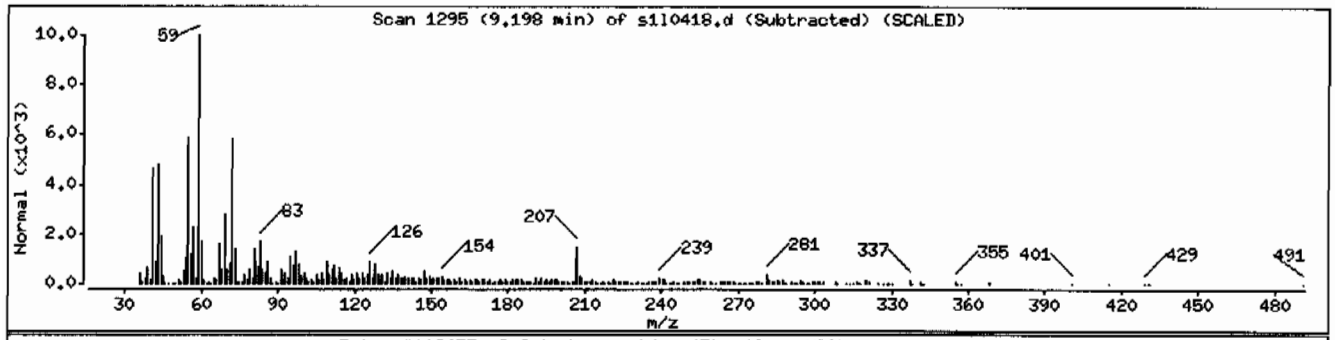

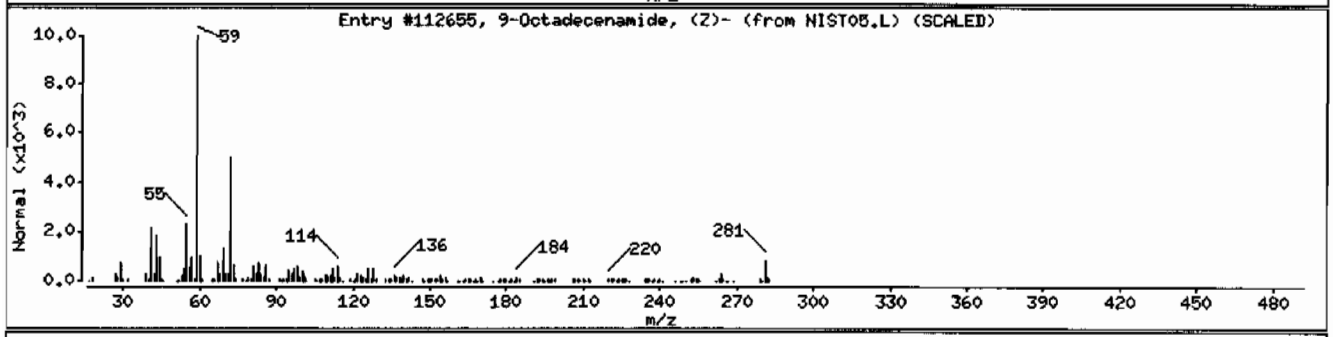

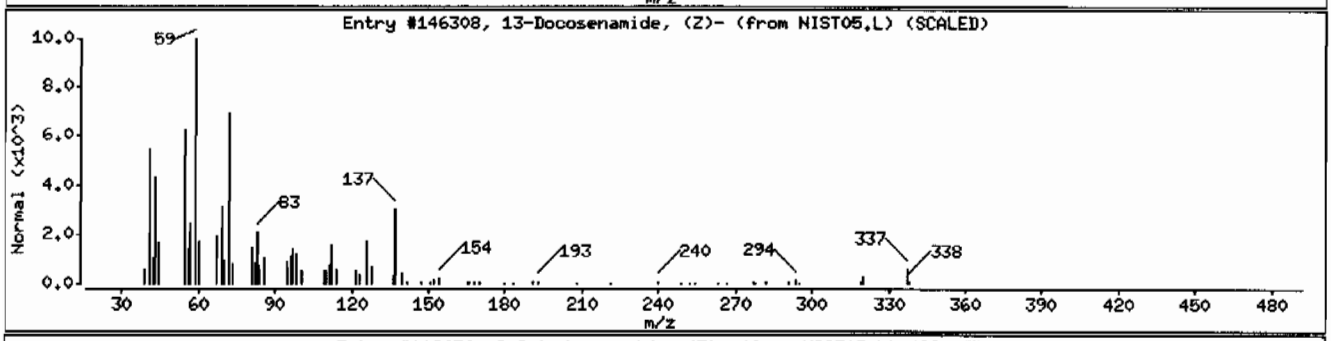

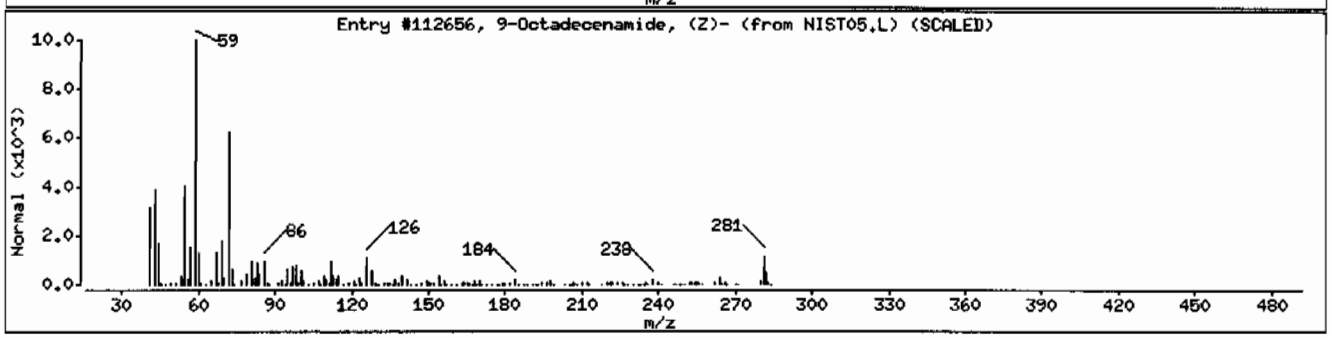

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873

Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
D-Friedoolean-14-ene, 3-methoxy-, (3.bet	14021-23-9	NIST05.L	178753	80	C31H520	440
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	46	C15H24	204
2,5,5,8a-Tetramethyl-6,7,8,8a-tetrahydro	124957-09-1	NIST05.L	59756	43	C14H200	204

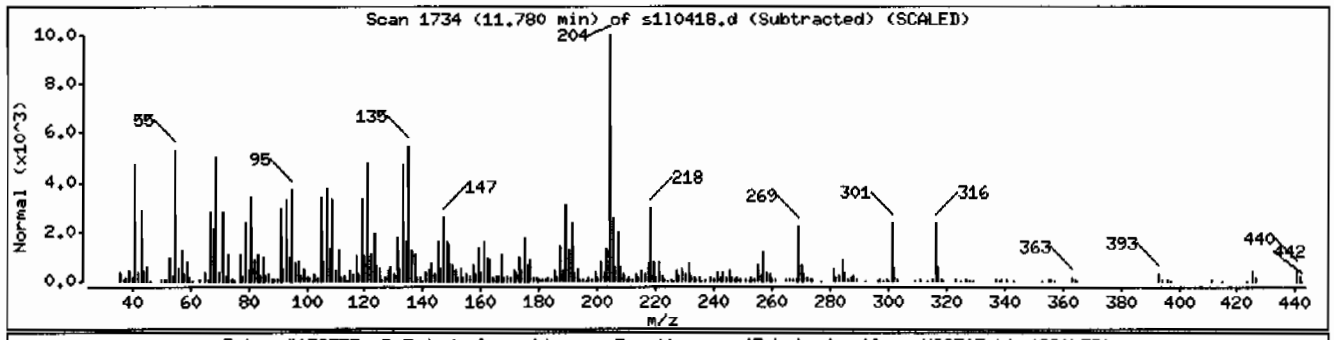

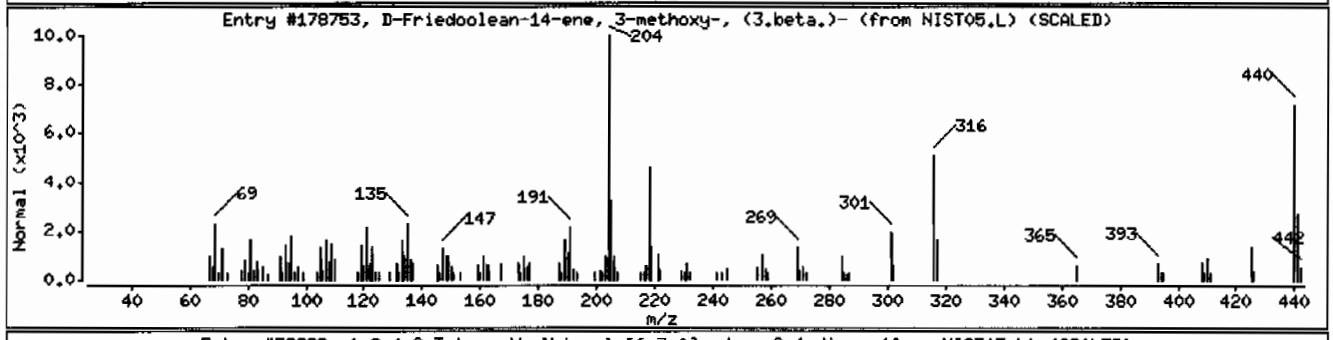

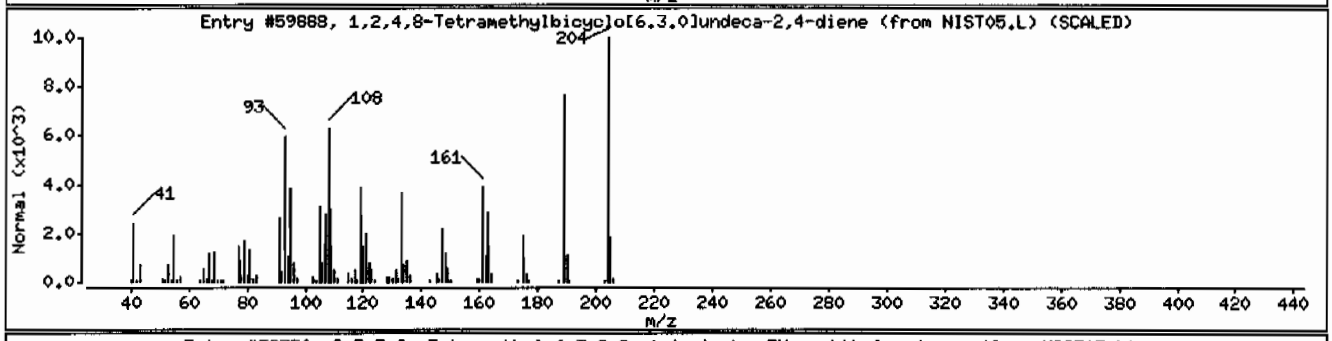

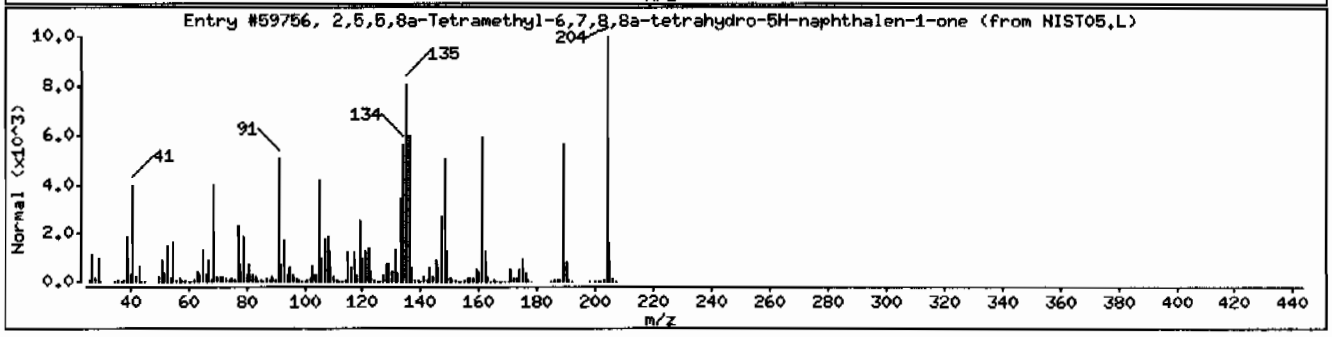

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: MSD1.i

Sample Info: |2415400101926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cyclopropa[a]naphthalene, 1a,2,3,3a,4	489-29-2	NIST05.L	60074	45	C15H24	204
Cedrene-V6	1000162-76-8	NIST05.L	59786	45	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	44	C15H24	204

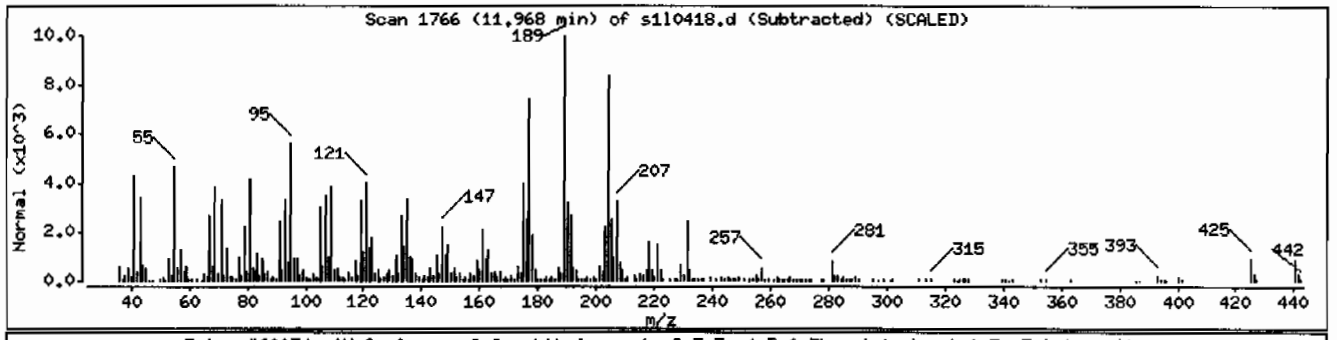

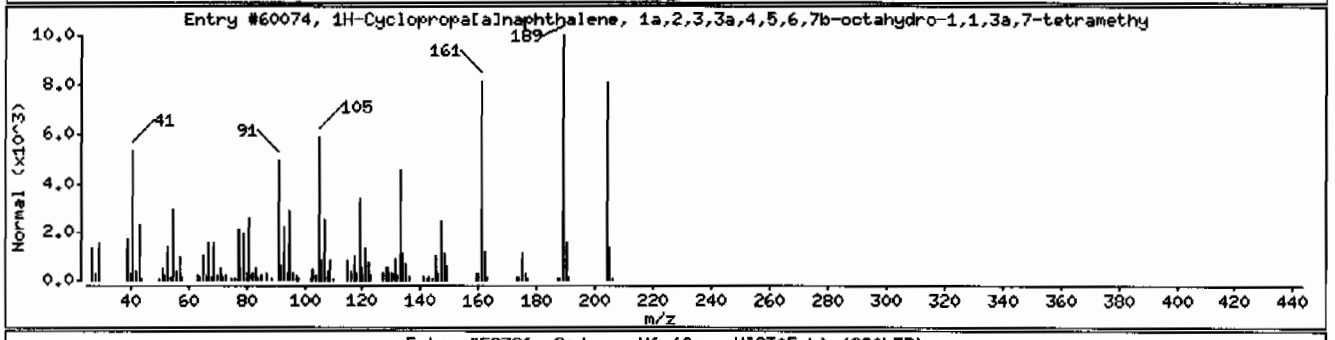

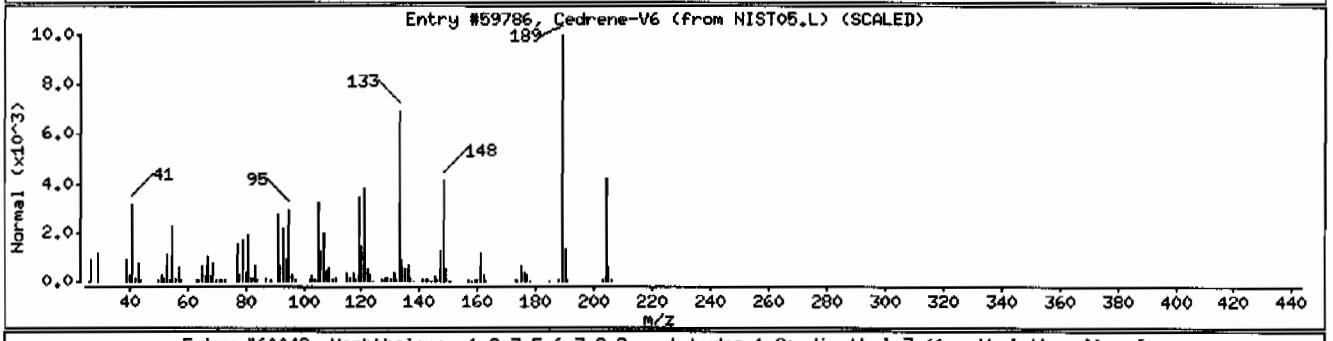

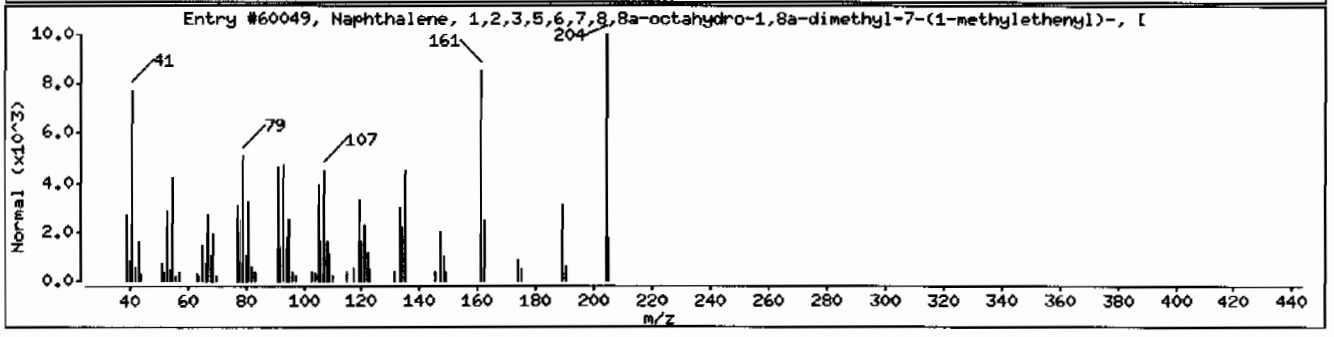

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: MSD1.i

Sample Info: I241540010192661011ISVMFI1ILANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	97	C29H500	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C29H500	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	93	C29H500	414

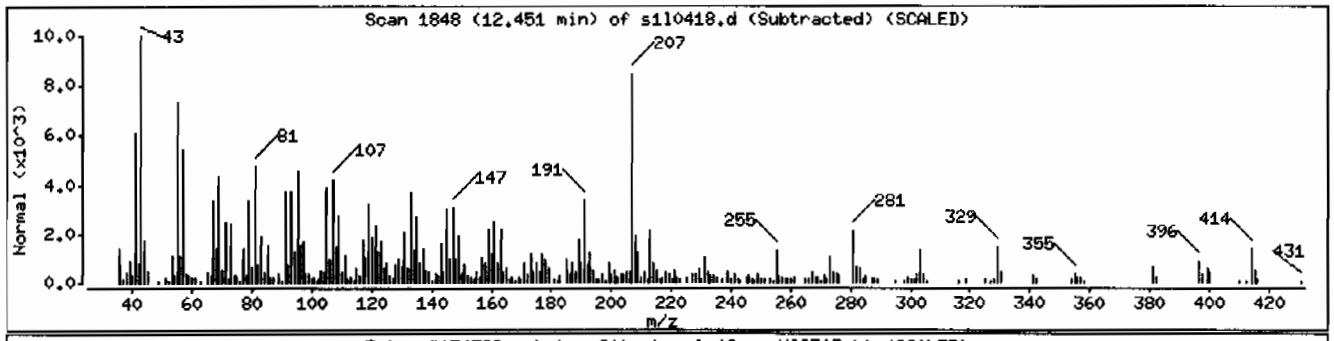

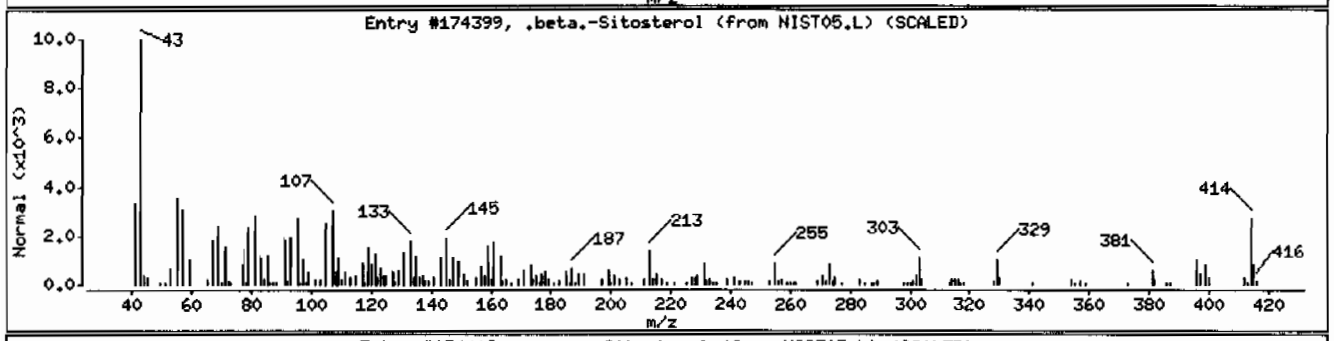

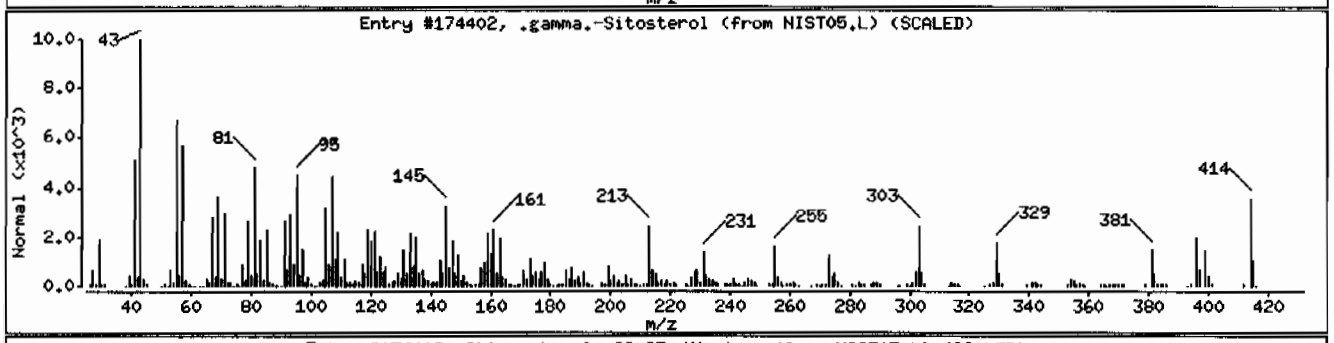

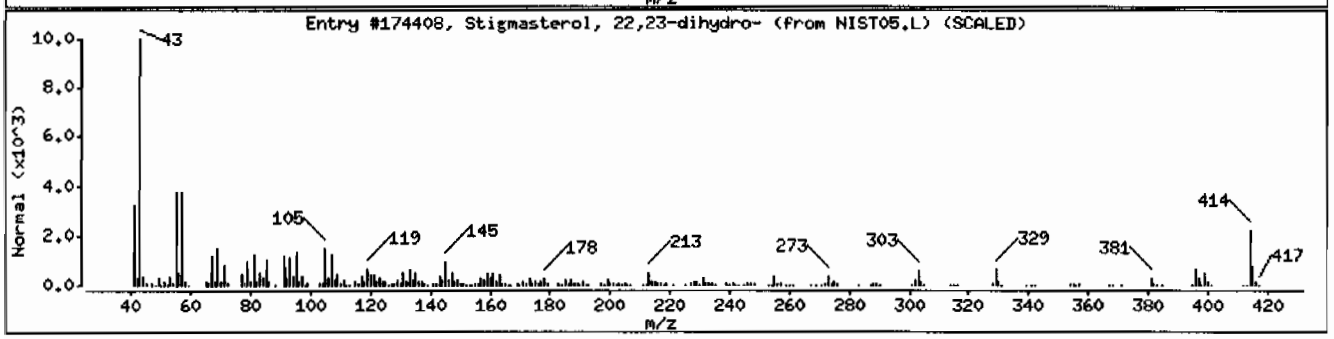

Data File: /chem/MSD1.i/s120409.b/s110418.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13873 Instrument: MSD1.i

Sample Info: |24154001019266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	90	C29H500	414
Ethanone, 2-(2-benzothiazolylthio)-1-(3,	155670-84-1	NIST05.L	126423	50	C14H13N3OS2	303
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	38	C17H1404	282

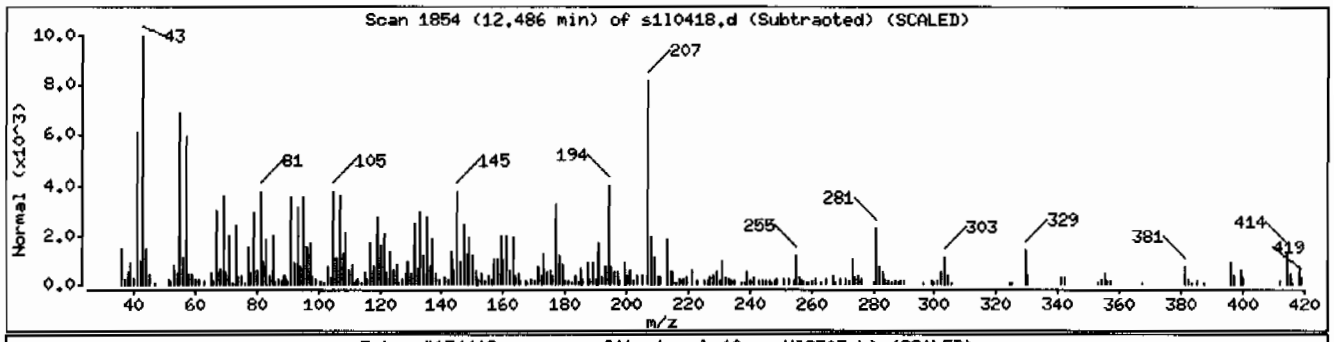

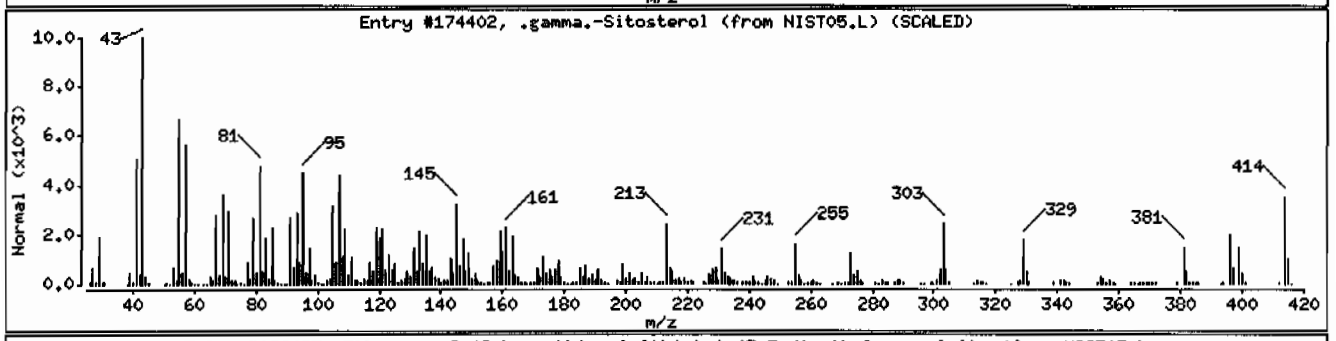

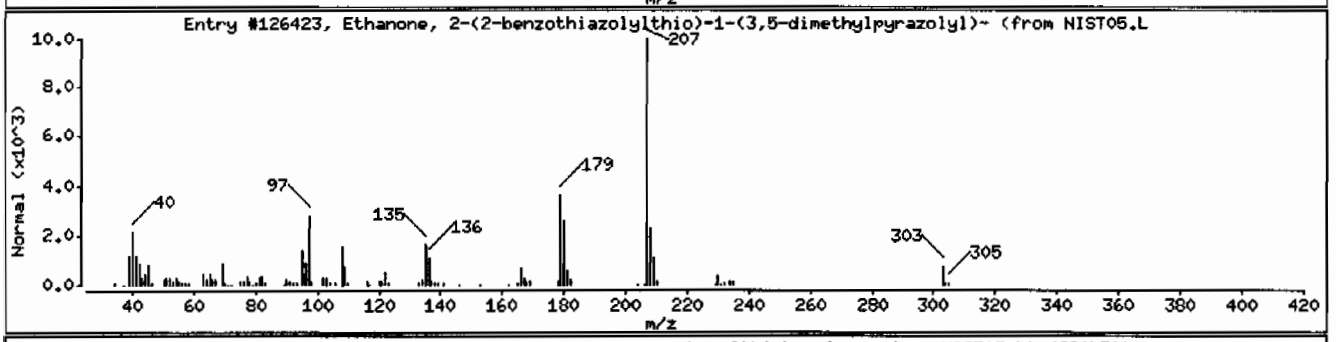

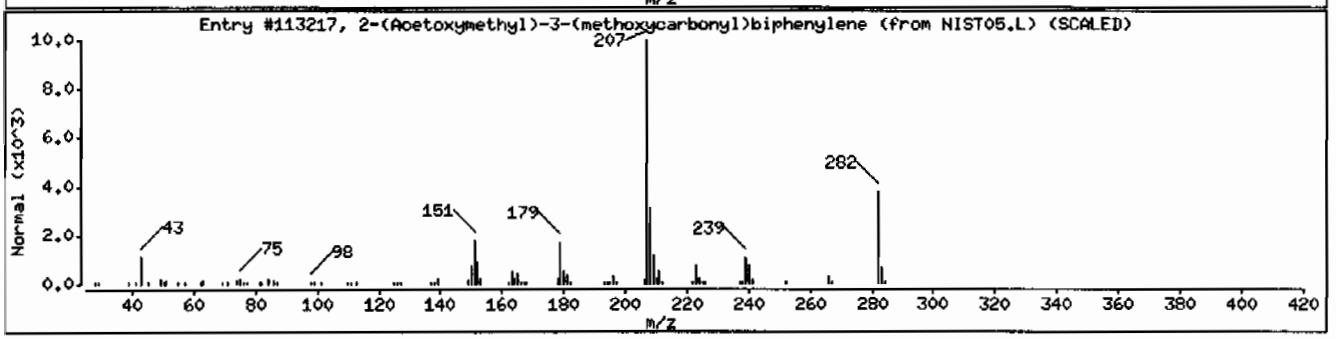

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s1l0420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	359	ug/kg	71.7	359
108-95-2	Phenol	U	359	ug/kg	71.7	359
95-57-8	2-Chlorophenol	U	359	ug/kg	71.7	359
106-46-7	1,4-Dichlorobenzene	U	359	ug/kg	71.7	359
621-64-7	N-Nitrosodipropylamine	U	359	ug/kg	71.7	359
59-50-7	4-Chloro-3-methylphenol	U	359	ug/kg	71.7	359
83-32-9	Acenaphthene	U	35.9	ug/kg	11.8	35.9
121-14-2	2,4-Dinitrotoluene	U	359	ug/kg	35.9	359
100-02-7	4-Nitrophenol	U	359	ug/kg	118	359
87-86-5	Pentachlorophenol	U	359	ug/kg	89.7	359
129-00-0	Pyrene	J	13.4	ug/kg	10.8	35.9
110-86-1	Pyridine	U	359	ug/kg	71.7	359
62-53-3	Aniline	U	359	ug/kg	108	359
111-44-4	bis(2-Chloroethyl) ether	U	359	ug/kg	71.7	359
541-73-1	1,3-Dichlorobenzene	U	359	ug/kg	71.7	359
100-51-6	Benzyl alcohol	U	359	ug/kg	108	359
95-50-1	1,2-Dichlorobenzene	U	359	ug/kg	71.7	359
108-60-1	bis(2-Chloroisopropyl)ether	U	359	ug/kg	71.7	359
95-48-7	o-Cresol	U	359	ug/kg	71.7	359
65794-96-9	m,p-Cresols	U	359	ug/kg	108	359
67-72-1	Hexachloroethane	U	359	ug/kg	71.7	359
98-95-3	Nitrobenzene	U	359	ug/kg	71.7	359
78-59-1	Isophorone	U	359	ug/kg	71.7	359
88-75-5	2-Nitrophenol	U	359	ug/kg	71.7	359
105-67-9	2,4-Dimethylphenol	U	359	ug/kg	126	359
111-91-1	bis(2-Chloroethoxy)methane	U	359	ug/kg	71.7	359
120-83-2	2,4-Dichlorophenol	U	359	ug/kg	71.7	359
65-85-0	Benzoic acid	U	717	ug/kg	179	717
91-20-3	Naphthalene	U	35.9	ug/kg	10.8	35.9
106-47-8	4-Chloroaniline	U	359	ug/kg	71.7	359
87-68-3	Hexachlorobutadiene	U	359	ug/kg	71.7	359
91-57-6	2-Methylnaphthalene	U	35.9	ug/kg	7.17	35.9
77-47-4	Hexachlorocyclopentadiene	U	359	ug/kg	71.7	359
88-06-2	2,4,6-Trichlorophenol	U	359	ug/kg	71.7	359
95-95-4	2,4,5-Trichlorophenol	U	359	ug/kg	71.7	359
91-58-7	2-Chloronaphthalene	U	35.9	ug/kg	11.8	35.9
88-74-4	2-Nitroaniline	U	359	ug/kg	71.7	359
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	359	ug/kg	71.7	359

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	359	ug/kg	71.7	359
606-20-2	2,6-Dinitrotoluene	U	359	ug/kg	35.9	359
208-96-8	Acenaphthylene	U	35.9	ug/kg	10.8	35.9
51-28-5	2,4-Dinitrophenol	U	717	ug/kg	136	717
132-64-9	Dibenzofuran	U	359	ug/kg	71.7	359
84-66-2	Diethylphthalate	U	359	ug/kg	71.7	359
86-73-7	Fluorene	U	35.9	ug/kg	10.8	35.9
7005-72-3	4-Chlorophenylphenylether	U	359	ug/kg	71.7	359
534-52-1	2-Methyl-4,6-dinitrophenol	U	359	ug/kg	71.7	359
100-01-6	4-Nitroaniline	U	359	ug/kg	108	359
	p-Nitroaniline					
122-39-4	Diphenylamine	U	359	ug/kg	71.7	359
122-66-7	Azobenzene	U	359	ug/kg	71.7	359
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	359	ug/kg	71.7	359
118-74-1	Hexachlorobenzene	U	359	ug/kg	71.7	359
85-01-8	Phenanthrene	U	35.9	ug/kg	10.8	35.9
120-12-7	Anthracene	U	35.9	ug/kg	7.17	35.9
84-74-2	Di-n-butylphthalate	U	359	ug/kg	71.7	359
206-44-0	Fluoranthene	J	16.5	ug/kg	10.8	35.9
85-68-7	Butylbenzylphthalate	U	359	ug/kg	71.7	359
56-55-3	Benzo(a)anthracene	U	35.9	ug/kg	10.8	35.9
91-94-1	3,3'-Dichlorobenzidine	U	359	ug/kg	108	359
218-01-9	Chrysene	U	35.9	ug/kg	10.8	35.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	359	ug/kg	71.7	359
117-84-0	Di-n-octylphthalate	U	359	ug/kg	71.7	359
205-99-2	Benzo(b)fluoranthene		107	ug/kg	10.8	35.9
207-08-9	Benzo(k)fluoranthene	U	35.9	ug/kg	10.8	35.9
50-32-8	Benzo(a)pyrene	U	35.9	ug/kg	10.8	35.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.9	ug/kg	10.8	35.9
53-70-3	Dibenzo(a,h)anthracene	U	35.9	ug/kg	10.8	35.9
191-24-2	Benzo(ghi)perylene	U	35.9	ug/kg	10.8	35.9
120-82-1	1,2,4-Trichlorobenzene	U	359	ug/kg	71.7	359

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.75	156	ug/kg		J
	Unknown	2	233	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 16:10	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110420.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	716	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.14	272	ug/kg	94	NJ
112-84-5	13-Docosenamide, (Z)-	9.19	189	ug/kg	94	NJ
112-95-8	Eicosane	10.32	170	ug/kg	98	NJ
	Unknown	11.76	334	ug/kg		J
	Unknown	11.95	180	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110420.d
Lab Smp Id: 241540012 Client Smp ID: RE03-09-13874
Inj Date : 04-DEC-2009 16:10
Operator : nag1 Inst ID: MSD1.i
Smp Info : |241540012|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 10-Dec-2009 08:45 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	7.16130	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	445759	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1858733	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1046200	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1826580	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1659547	40.0000	
* 98 Perylene-d12	264	10.069	10.069	(1.000)	1474580	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	883294	75.8645	2720
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	1055364	74.5787	2680
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	461997	37.7164	1350
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	1060201	42.3125	1520
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	309963	106.102	3800
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	1236482	47.4663	1700

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.845	7.845	(0.909)	16486	0.37384	13.4(a)
76 Fluoranthene	202	7.704	7.704	(1.104)	18436	0.46011	16.5(a)
95 Benzo(b)fluoranthene	252	9.610	9.610	(0.954)	13309	2.99638	107

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s110420.d
Report Date: 12/05/2009 08:13
Lab. ID: 241540012 SampleType: SAMPLE
Injection Date: 04-DEC-2009 16:10
Operator: nagl Instrument: MSD1.i
Sample Info: |241540012|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	52899	3.62	3.68	80-120	100	(T)
93	1075	3.66	3.69	418-478	2	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	62995	4.25	4.13	80-120	100	(T)
42	36695	4.25	4.13	44-104	58	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	183841	6.00	5.77	80-120	100	(T)
164	1046200	6.00	5.77	0- 40	569	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	134897	6.00	5.82	80-120	100	(T)
63	1904	5.99	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	134704	6.00	6.10	80-120	100	(T)
89	1648	6.00	6.10	32- 92	1	(QT)
63	1904	5.99	6.10	15- 75	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	17635	6.53	6.37	80-120	100	(T)
165	17544	6.53	6.37	64-124	99	(T)
167	6320	6.53	6.37	0- 43	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	18208	6.53	6.67	80-120	100	(T)
141	120712	6.53	6.67	50-110	663	(QT)
250	35535	6.53	6.67	68-128	195	(QT)
69 Anthracene				CAS#: 120-12-7		
178	9354	6.99	7.03	80-120	100	( )
179	2807	6.99	7.03	0- 46	30	( )
176	1654	6.99	7.03	0- 48	18	( )
76 Fluoranthene				CAS#: 206-44-0		
202	18436	7.70	7.70	80-120	100	( )
203	2983	7.70	7.70	0- 47	16	( )
101	3119	7.70	7.70	0- 43	17	( )
79 Pyrene				CAS#: 129-00-0		
202	16486	7.85	7.85	80-120	100	( )
200	3600	7.85	7.85	0- 51	22	( )
101	2649	7.84	7.85	0- 46	16	( )
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	13309	9.61	9.61	80-120	100	( )
253	1793	9.61	9.61	0- 51	13	( )
125	1812	9.62	9.61	0- 44	14	( )
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	13309	9.61	9.64	80-120	100	( )
253	1793	9.61	9.64	0- 52	13	( )
125	1898	9.62	9.64	0- 44	14	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110420.d
Lab Smp Id: 241540012 Client Smp ID: RE03-09-13874
Inj Date : 04-DEC-2009 16:10
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540012|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 10-Dec-2009 08:45 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	7.16130	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	2659775	40.000
* 91 Chrysene-d12	8.633	4508972	40.000
* 98 Perylene-d12	10.069	4092972	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.746	288425	4.33758518	156	0		0	10
Unknown				CAS #:			
1.999	432392	6.50268785	233	0		0	10
Unknown Aldol Condensate				CAS #:			
2.916	1326901	19.9550817	716	0		0	10
9-Octadecenamide, (Z)-				CAS #:	301-02-0		
8.139	854204	7.57781552	272	94	NIST05.L	112657	91
13-Docosenamide, (Z)-				CAS #:	112-84-5		
9.186	594445	5.27344078	189	94	NIST05.L	146308	91
Eicosane				CAS #:	112-95-8		
10.322	484320	4.73318495	170	98	NIST05.L	113488	98
Unknown				CAS #:			
11.763	952470	9.30834173	334	0		0	98
Unknown				CAS #:			
11.951	512598	5.00954342	180	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110420.d
Date : 04-DEC-2009 16:10
Client ID: RE03-09-13874
Sample Info: |2415400121926610|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: nag1
Column diameter: 0.20

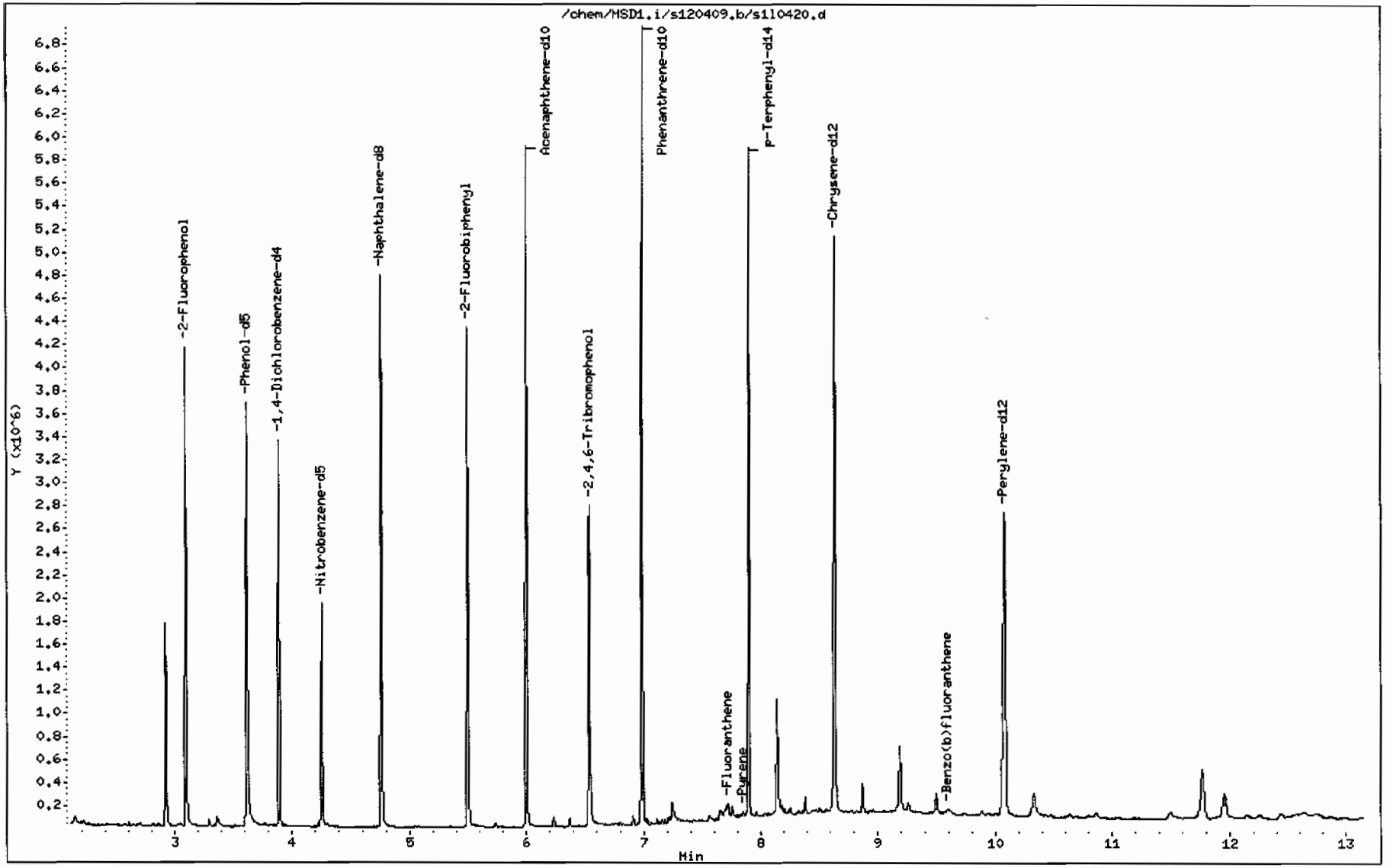

Data File: /chem/HSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874 Instrument: HSD1.i

Sample Info: 1241540012192661011ISVHF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

79 Pyrene Concentration: 13.4 ug/Kg

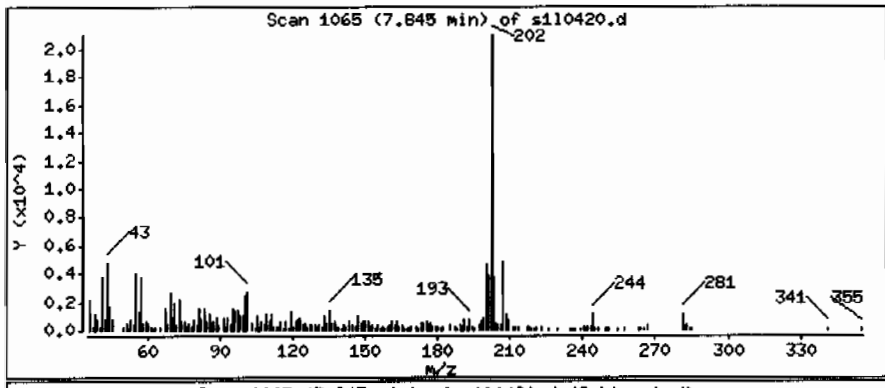

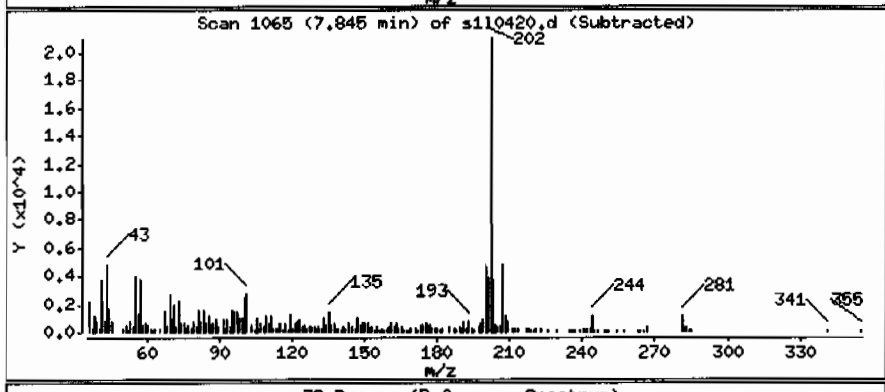

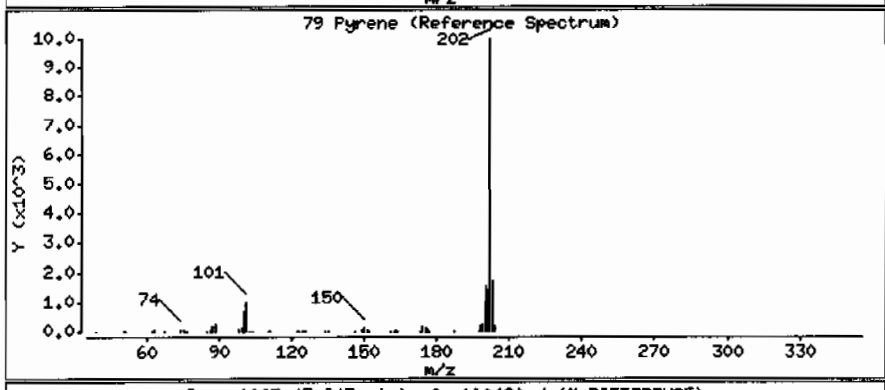

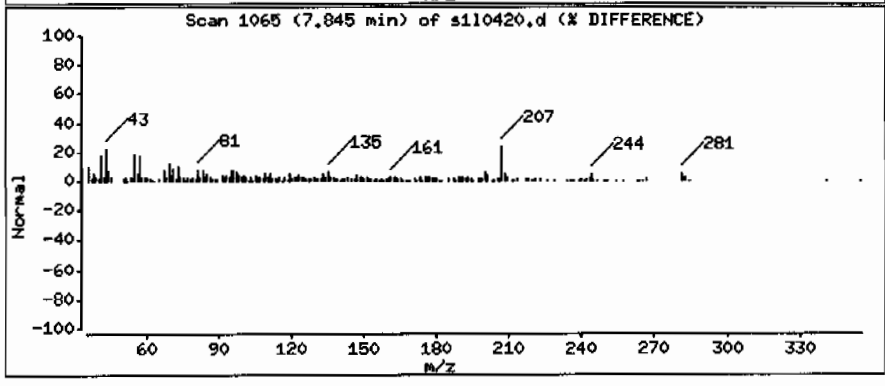

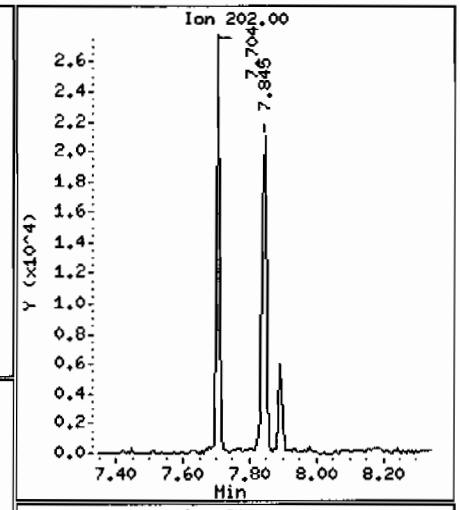

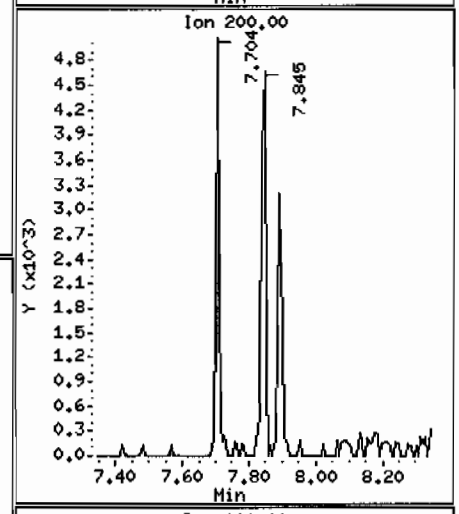

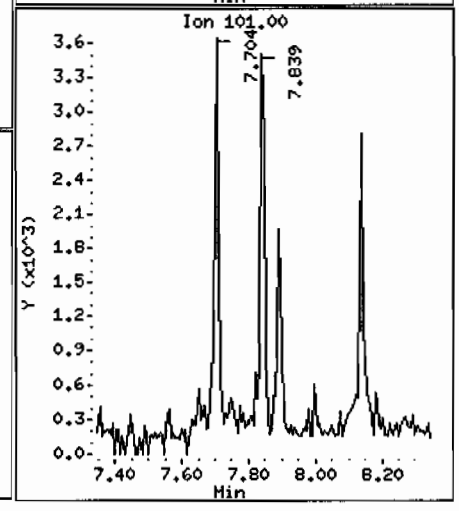

Data File: /chem/MSD1.i/s120409.b/s110420.d

Page 3

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874

Instrument: MSD1.i

Sample Info: 1241540012192661011SVHF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 16.5 ug/Kg

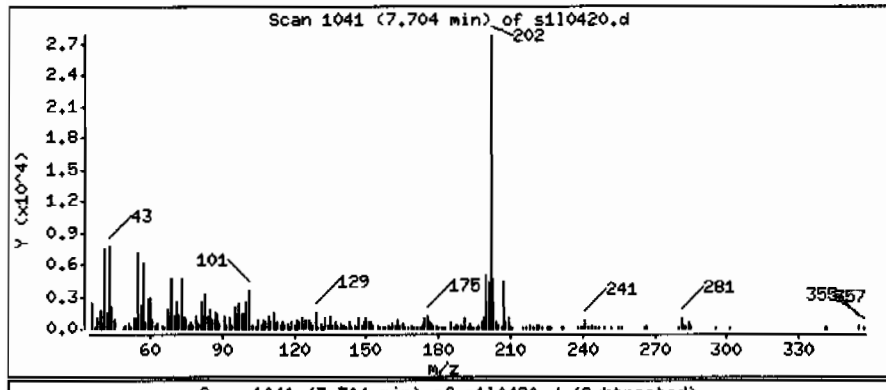

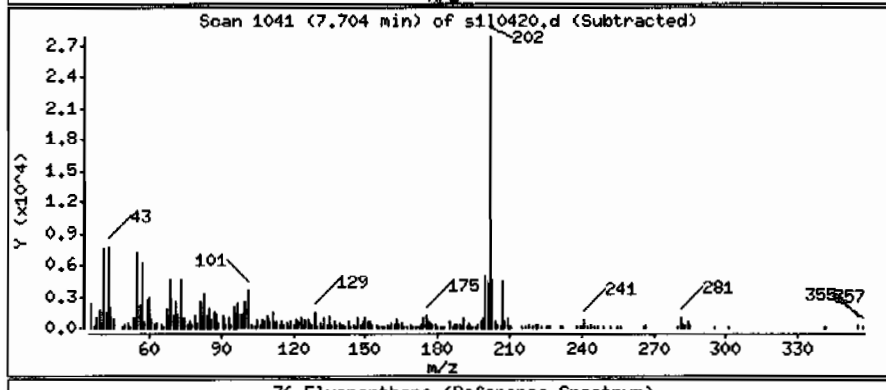

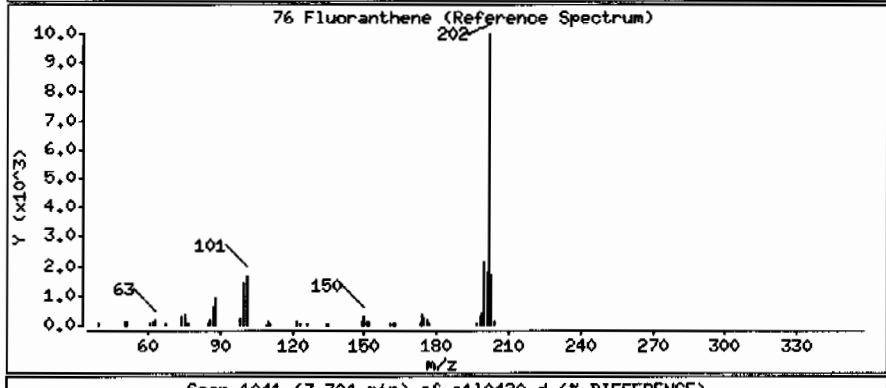

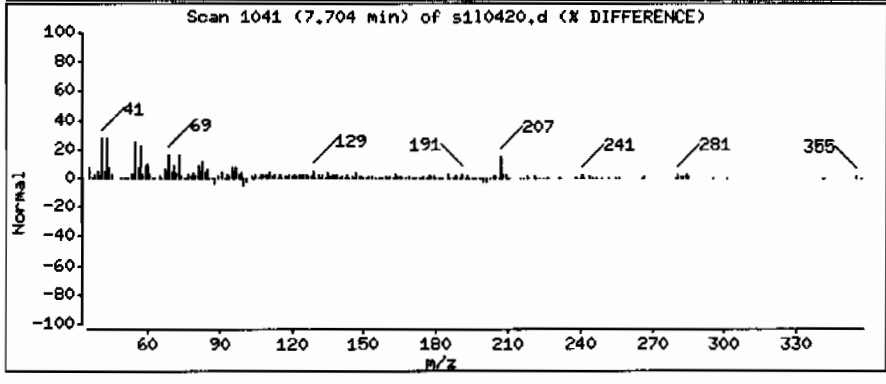

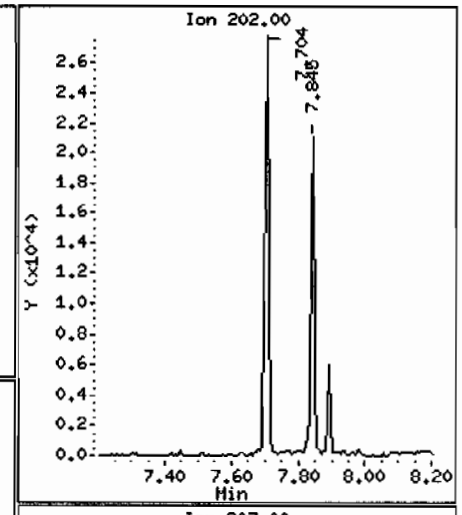

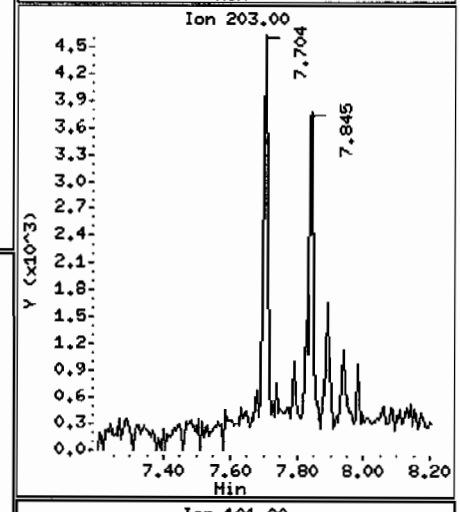

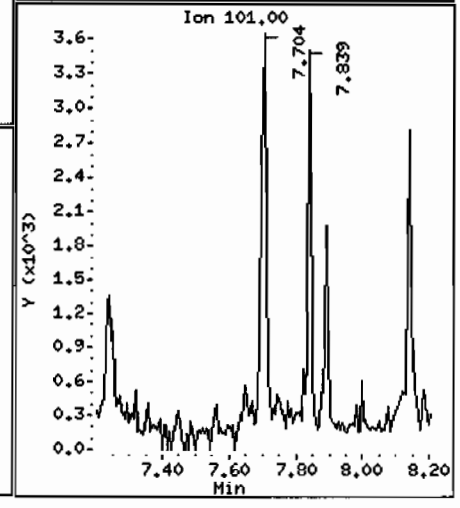

Data File: /chem/HSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874

Instrument: HSD1.i

Sample Info: |2415400121926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 107 ug/Kg

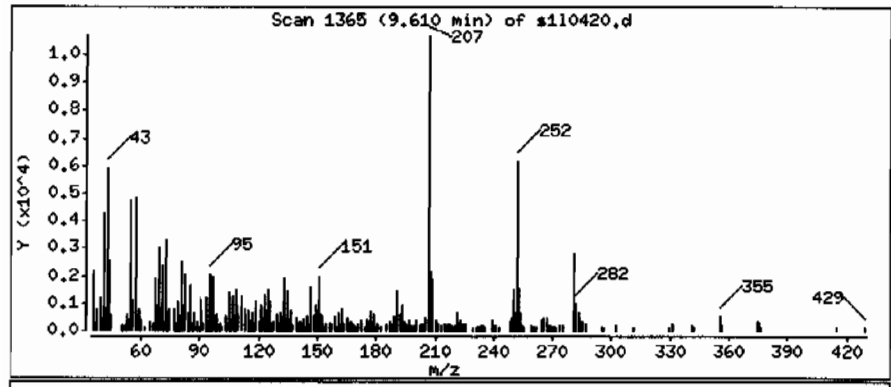

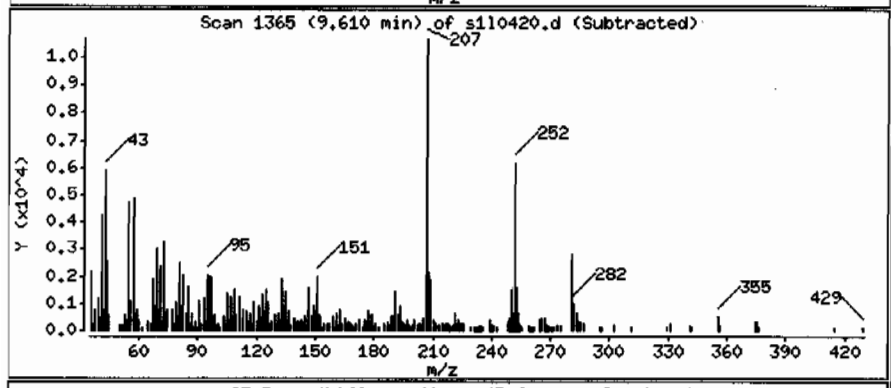

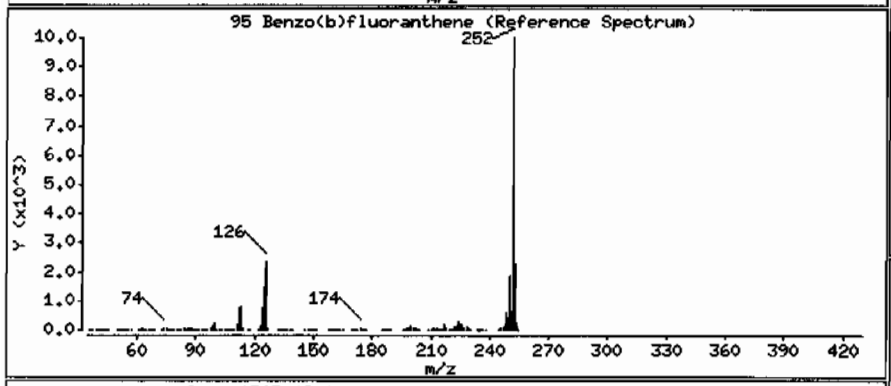

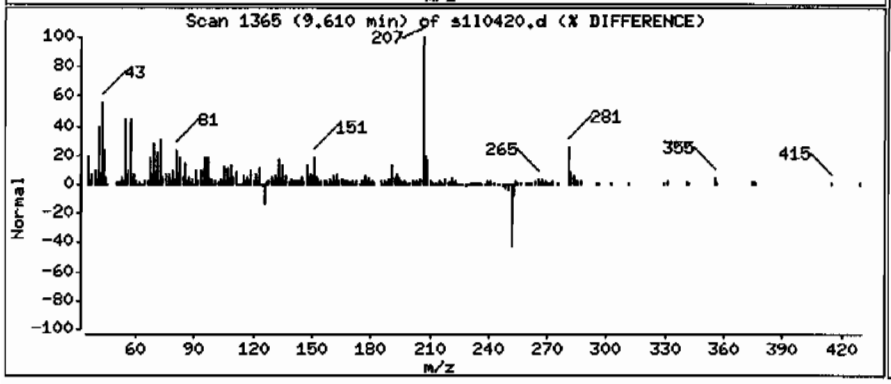

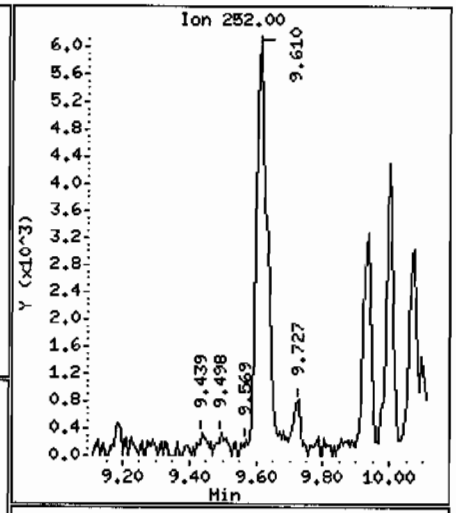

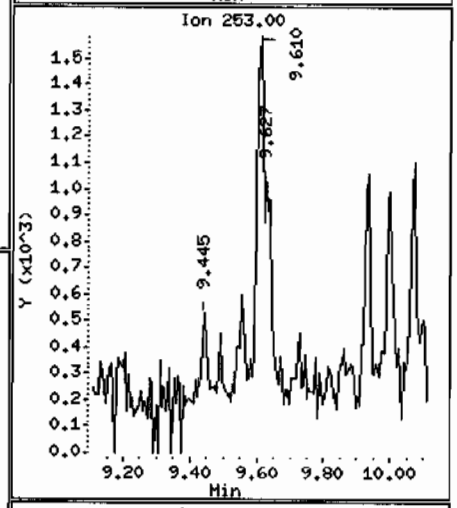

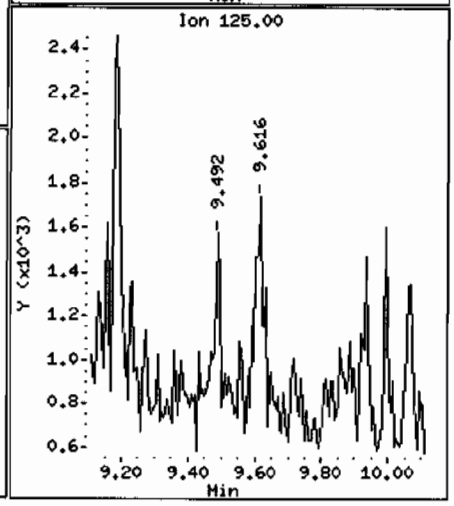

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874

Instrument: MSD1.i

Sample Info: |2415400121926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanenitrile, 4-chloro-	628-20-6	NIST05.L	4424	23	C4H6ClN	103
2-Pentanone	107-87-9	NIST05.L	1683	11	C5H10O	86
2,3-Butanedione	431-03-8	NIST05.L	1634	9	C4H6O2	86

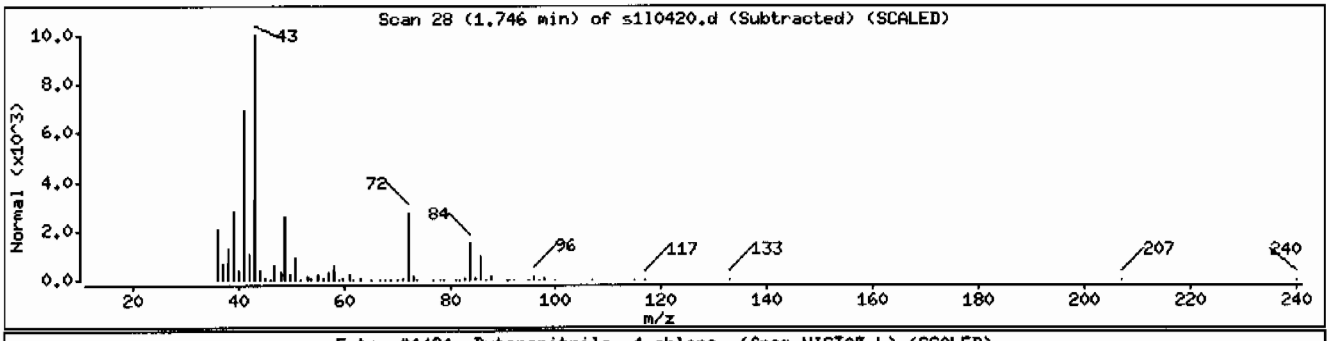

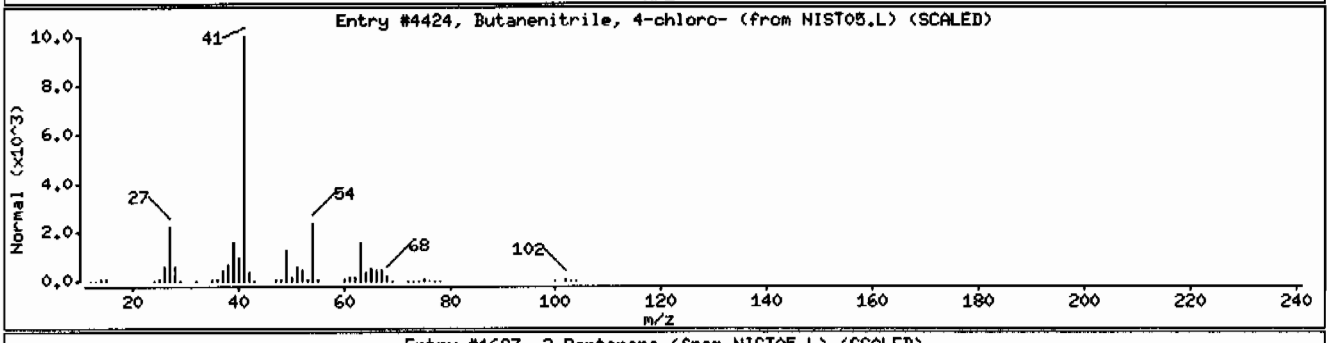

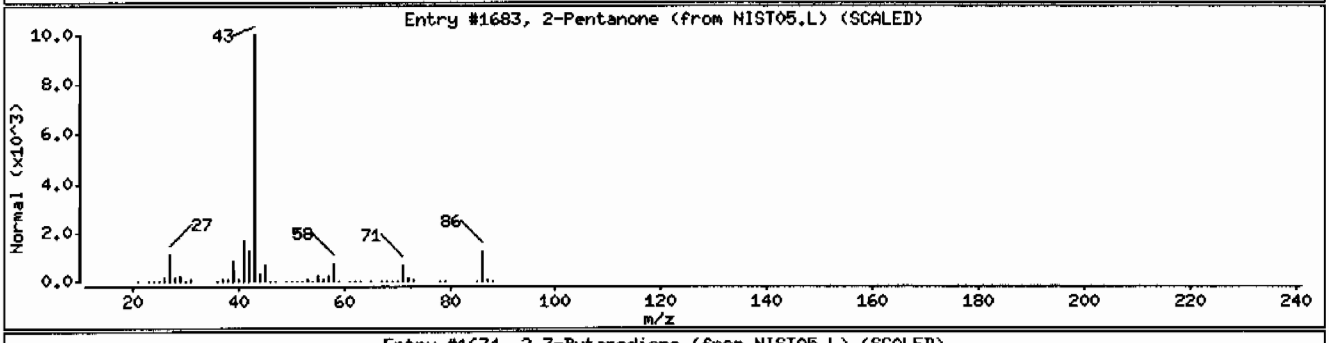

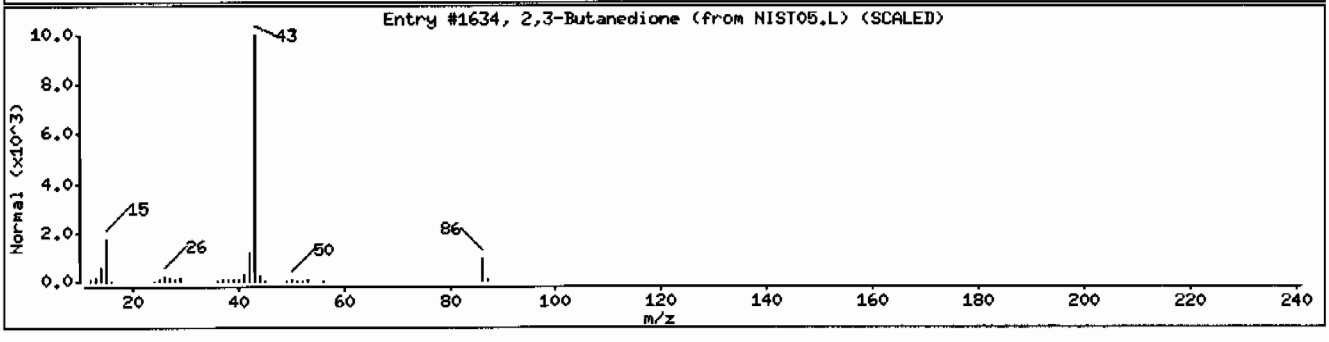

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874 Instrument: MSD1.i

Sample Info: 1241540012|92661011|SVHF11LANL

Volume Injected (uL): 0.5 Operator: nagi

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	40	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	10	C7H14O2	130

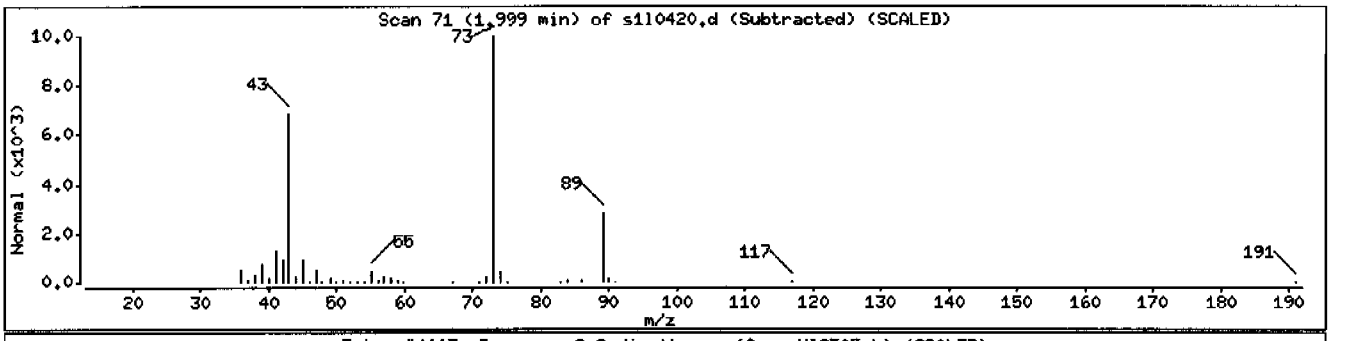

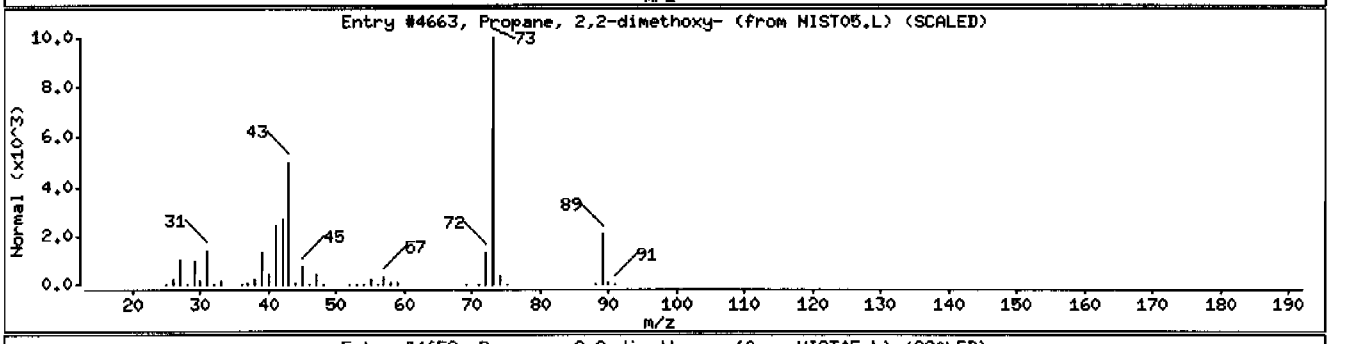

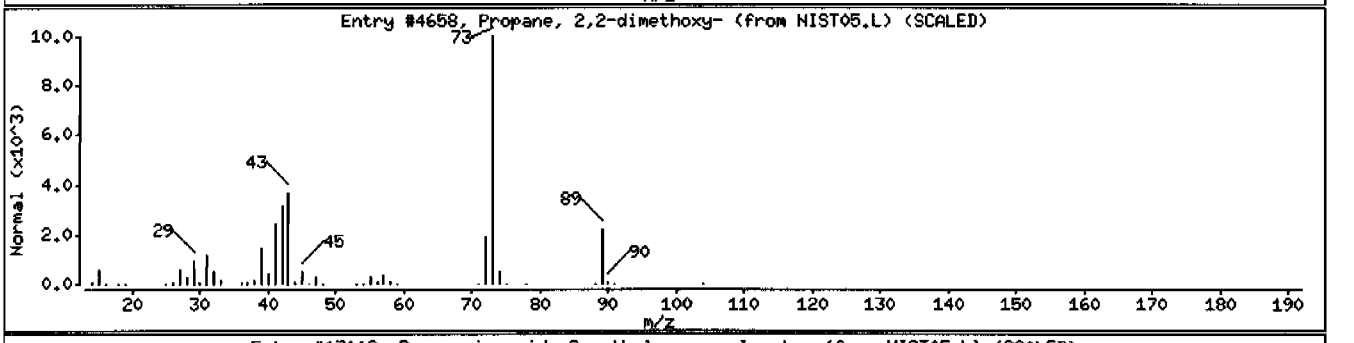

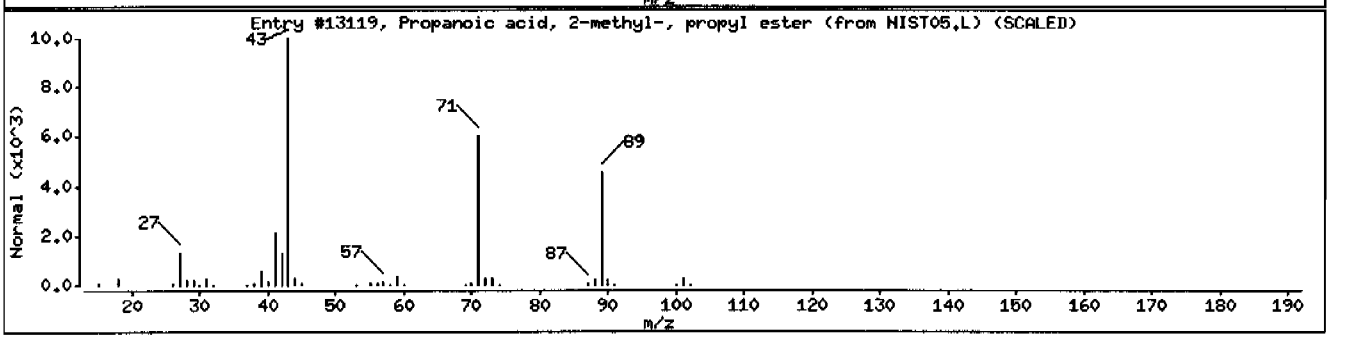

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874

Instrument: MSD1.i

Sample Info: |2415400121926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	25	C6H12O2	116

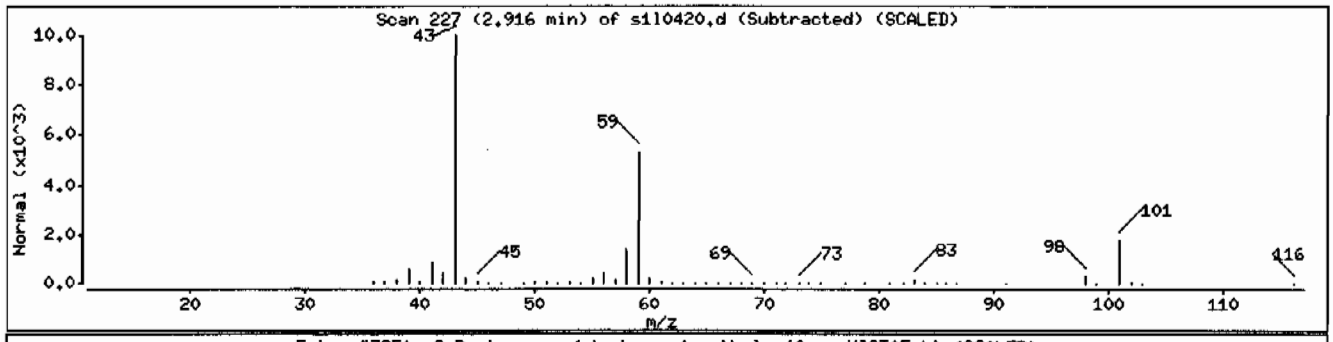

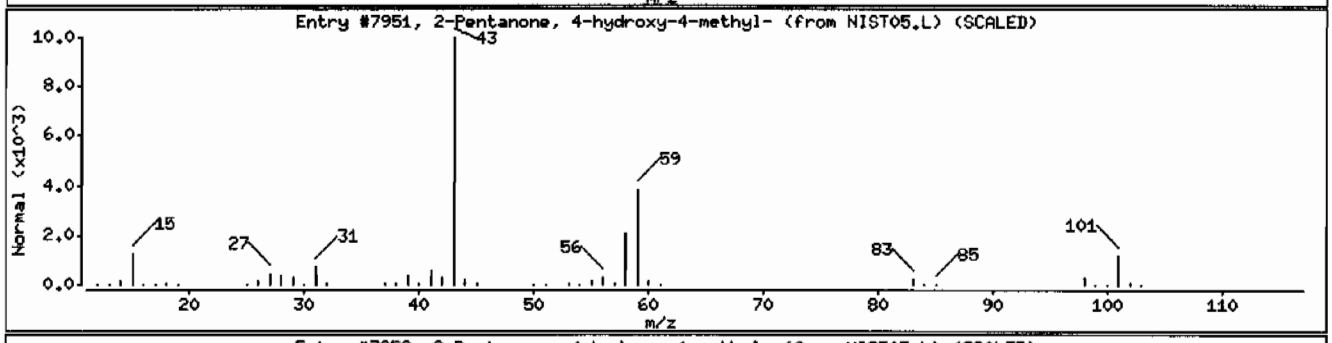

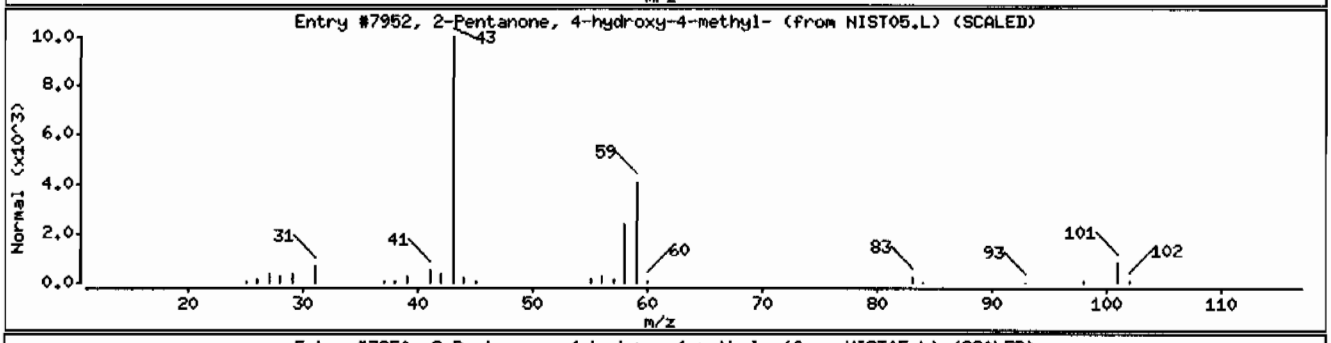

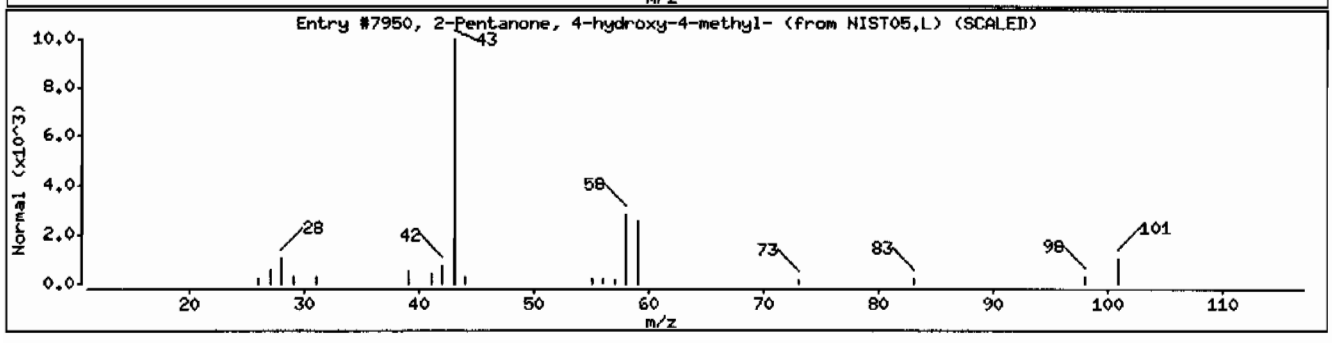

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874

Instrument: MSD1.i

Sample Info: |24154001219266101|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	94	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	91	C18H35NO	281
Decanamide-	2319-29-1	NIST05.L	37042	64	C10H21NO	171

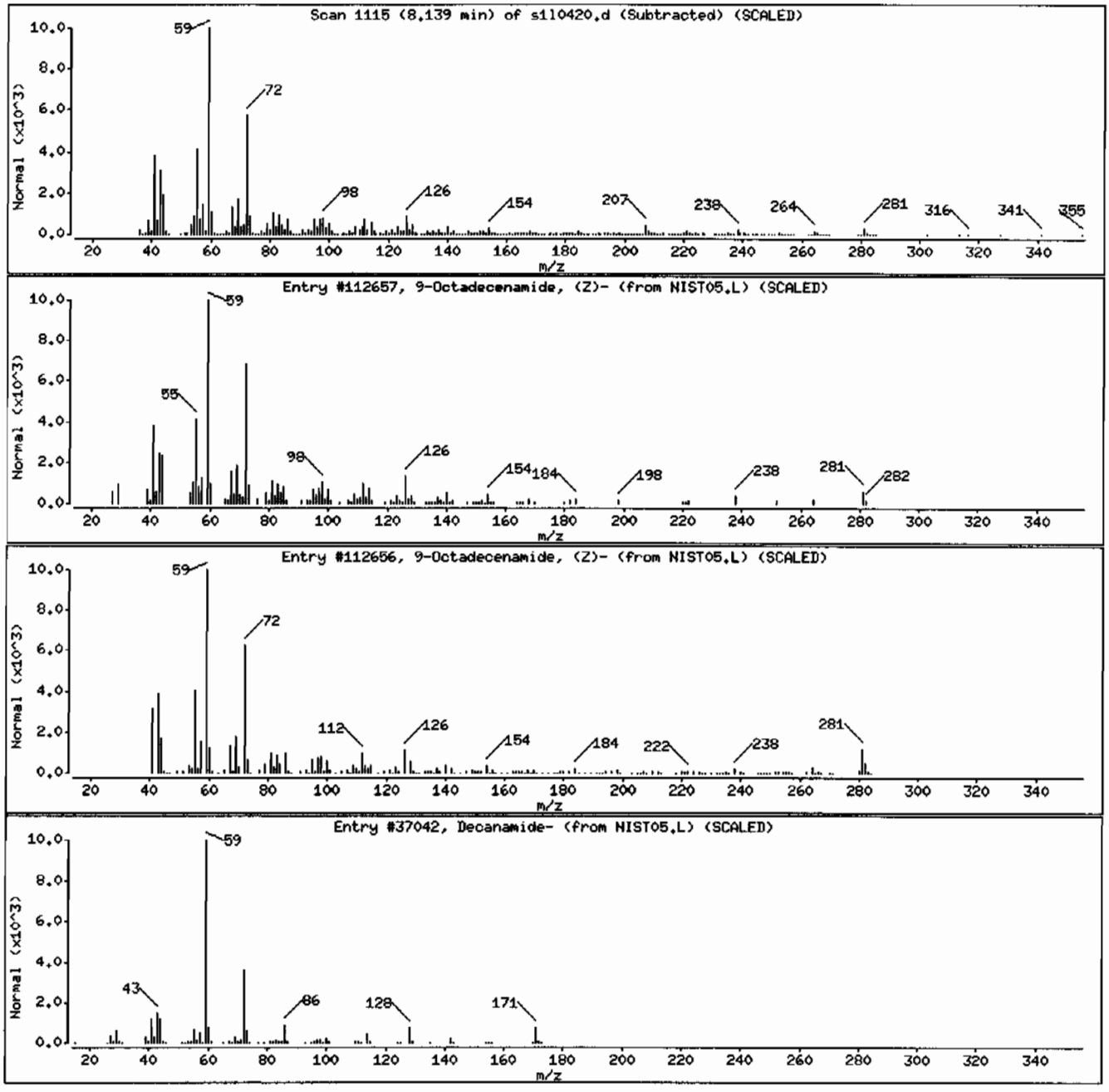

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874

Instrument: MSD1.i

Sample Info: 1241540012|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	94	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	91	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281

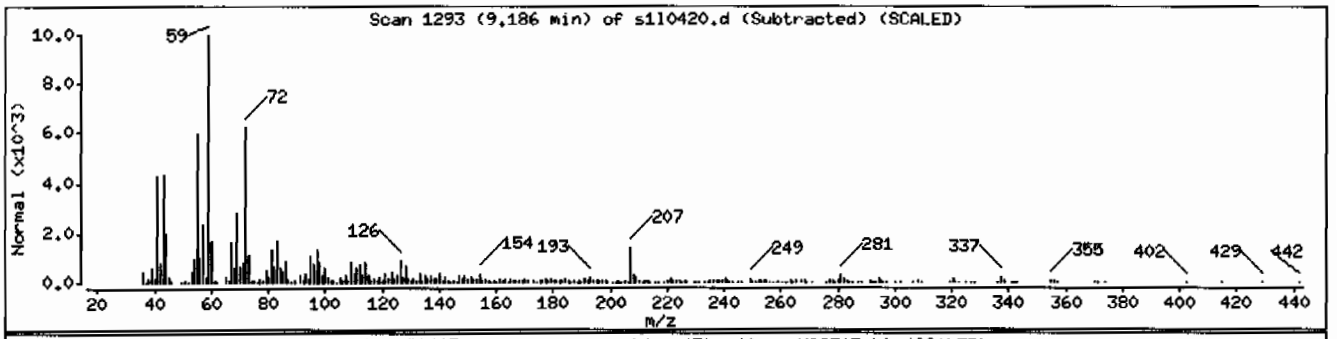

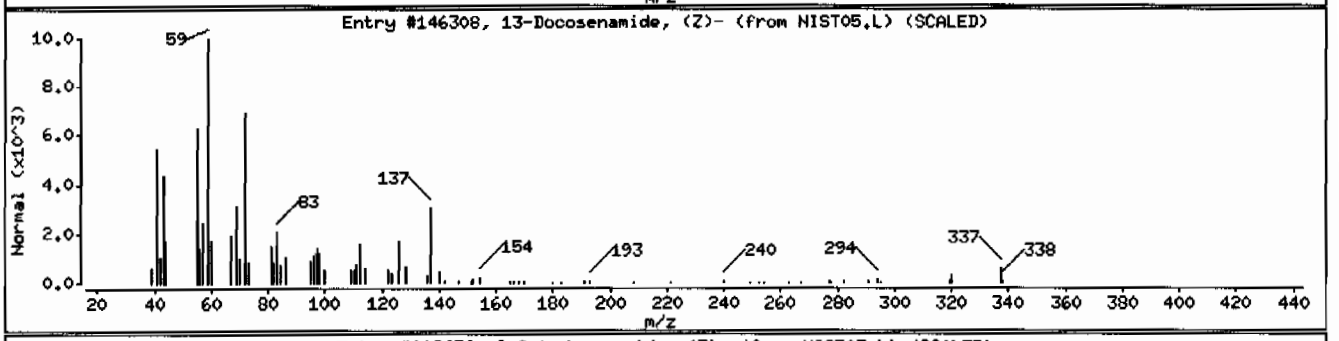

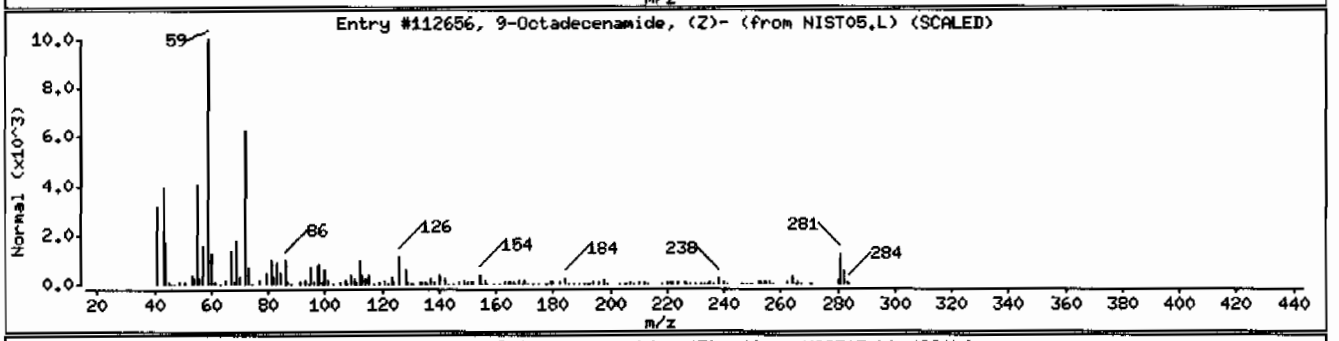

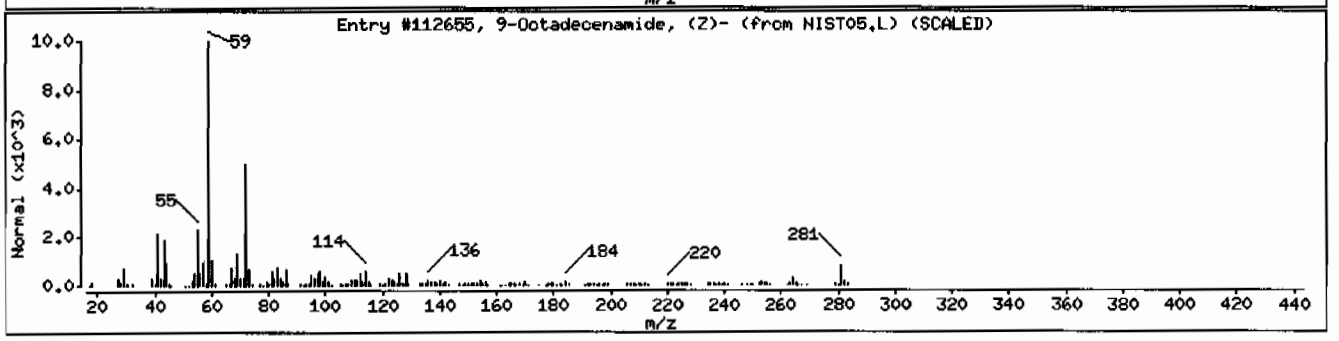

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874 Instrument: MSD1.i

Sample Info: |2415400121926610111SVHF111LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	96	C20H42	282

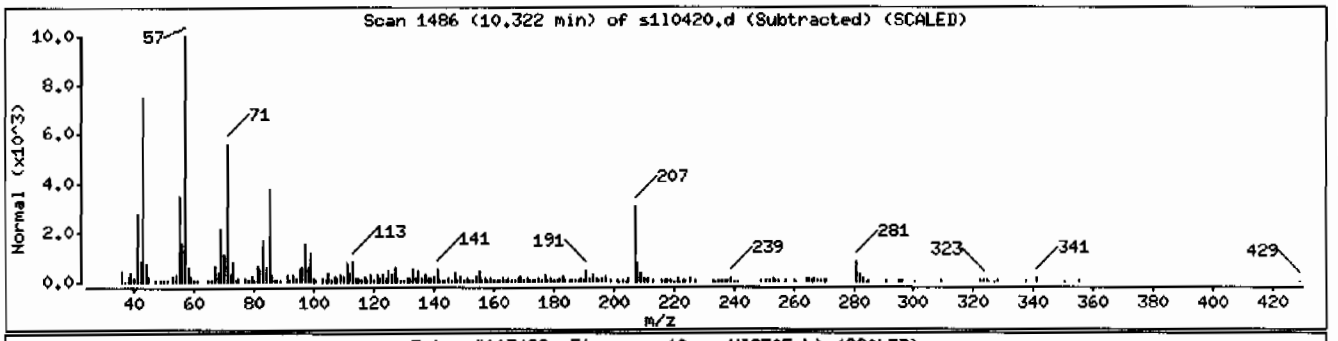

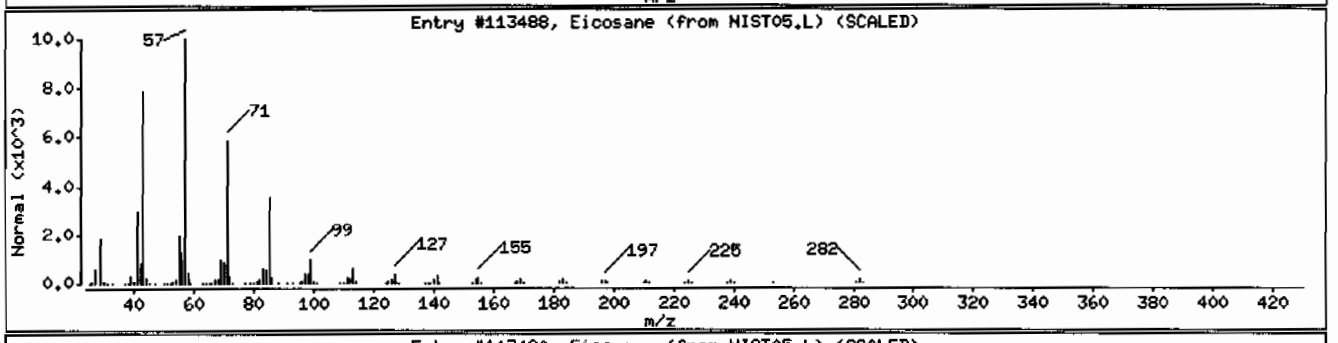

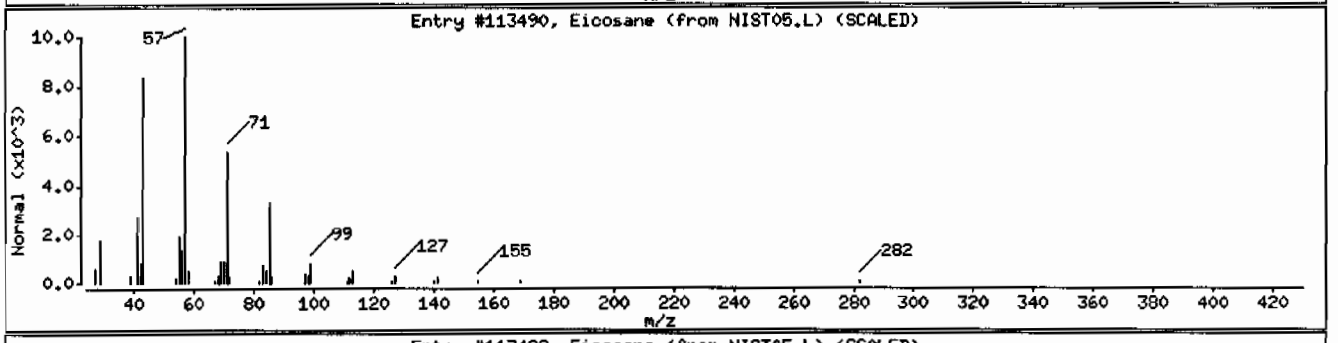

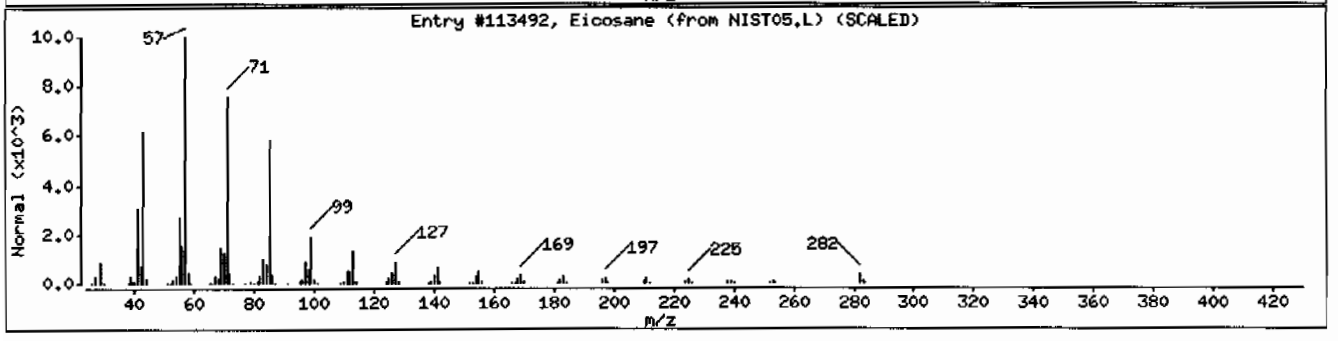

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874 Instrument: MSD1.i

Sample Info: 1241540012192661011SVHF11LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	46	C15H24	204
2H-Cyclopentacyclooctene, 4,5,6,7,8,9-he	1000221-85-8	NIST05.L	59950	43	C15H24	204
2,5,5,8a-Tetramethyl-6,7,8,8a-tetrahydro	124957-09-1	NIST05.L	59756	41	C14H200	204

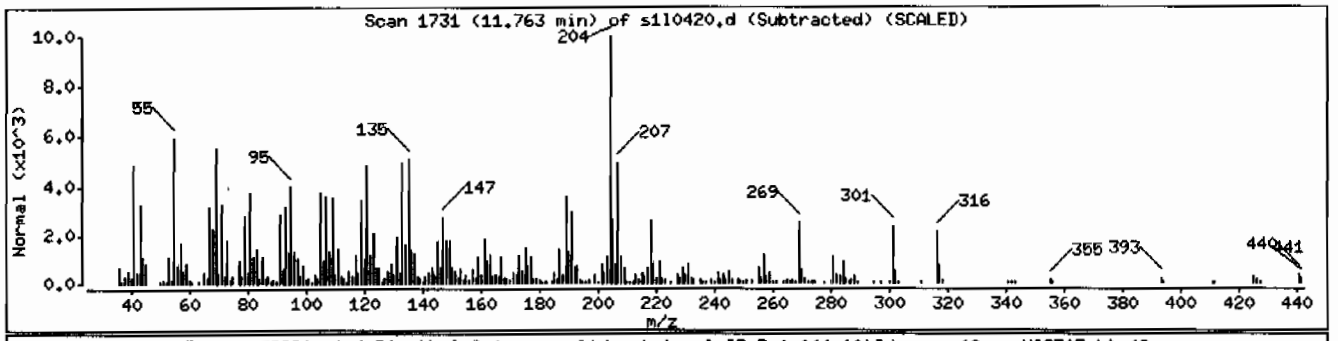

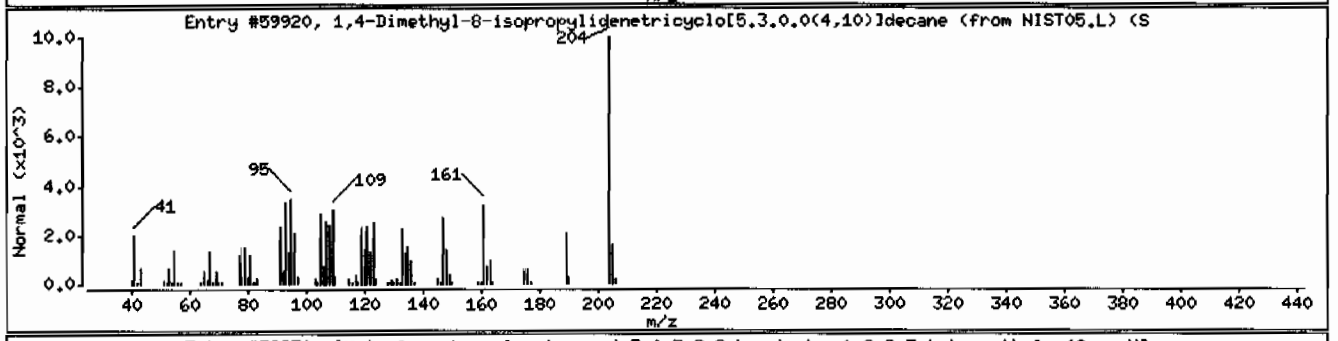

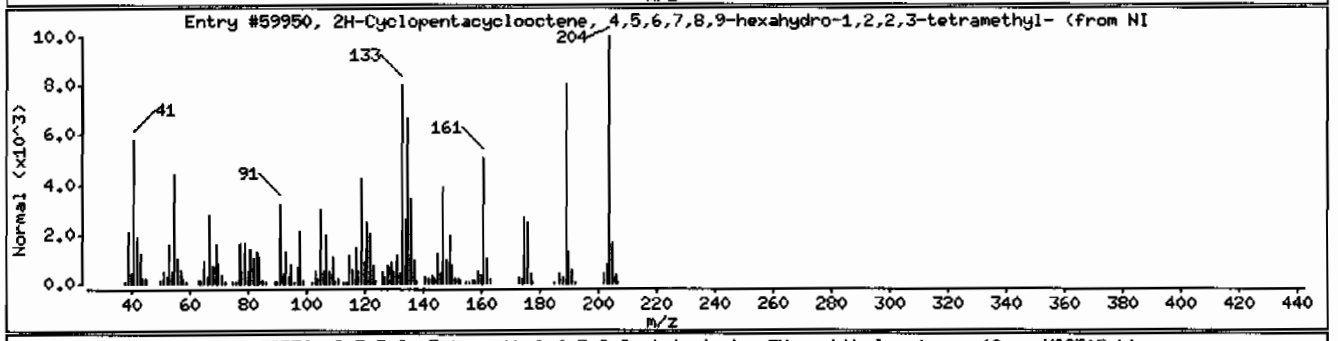

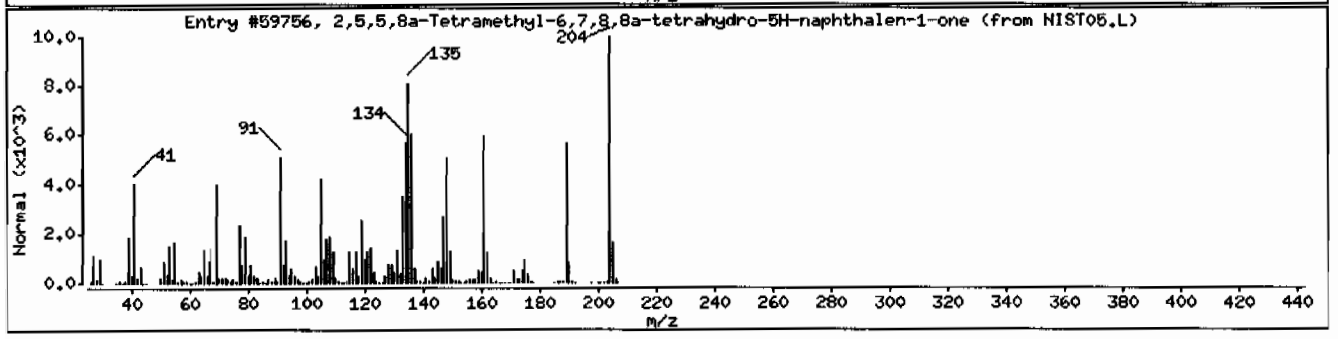

Data File: /chem/MSD1.i/s120409.b/s110420.d

Date : 04-DEC-2009 16:10

Client ID: RE03-09-13874

Instrument: MSD1.i

Sample Info: |2415400121926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cyclopropl[e]azulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60089	51	C15H24	204
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60039	50	C15H24	204
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60037	50	C15H24	204

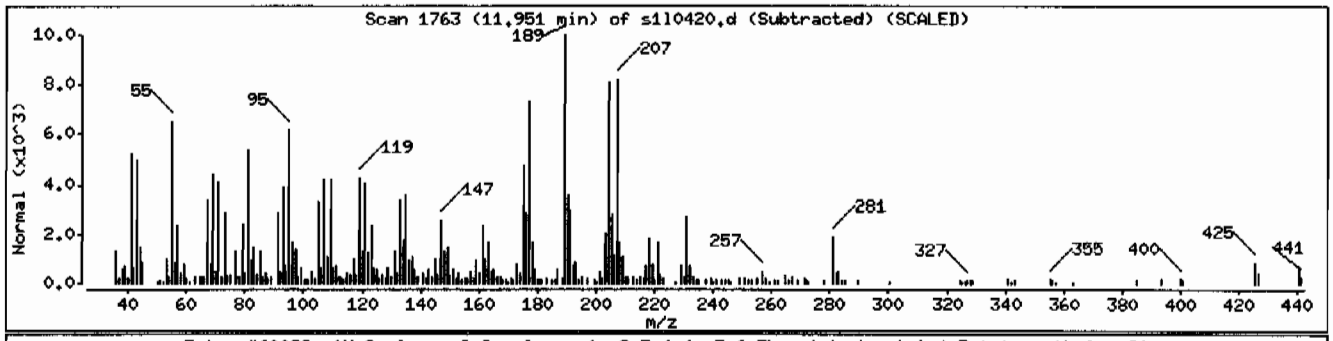

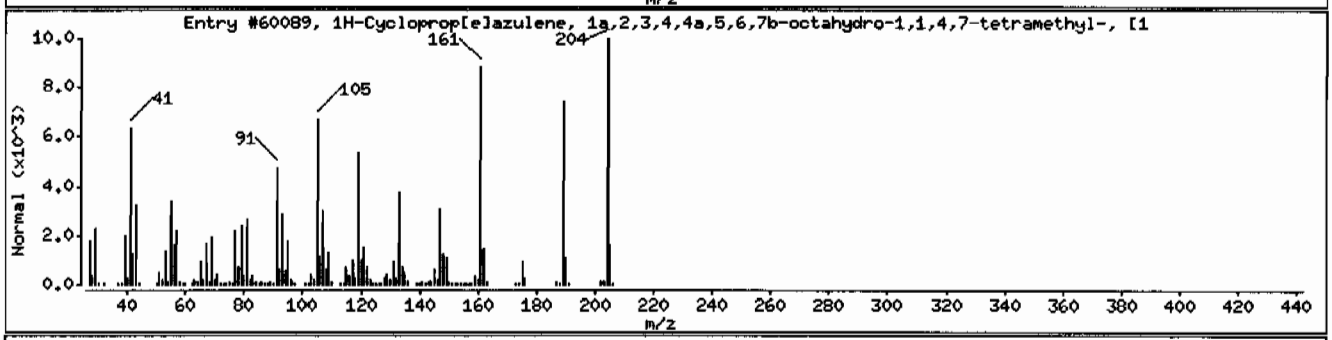

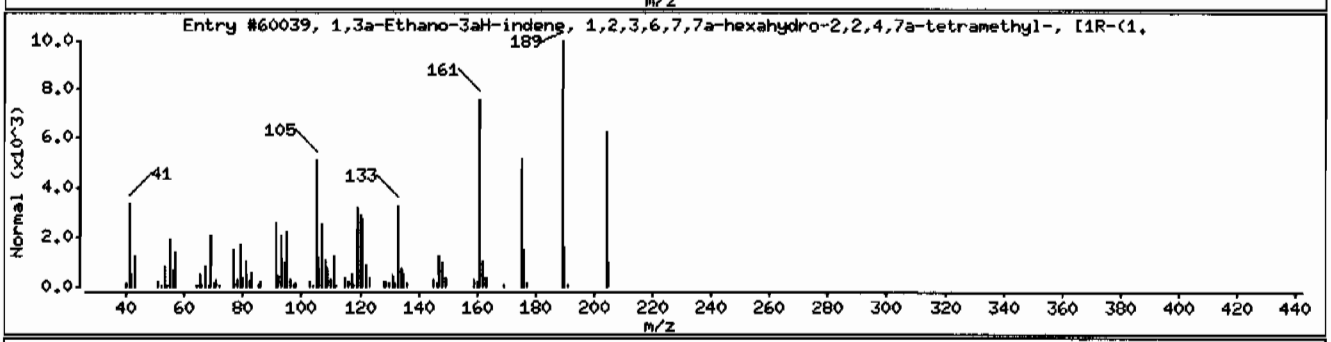

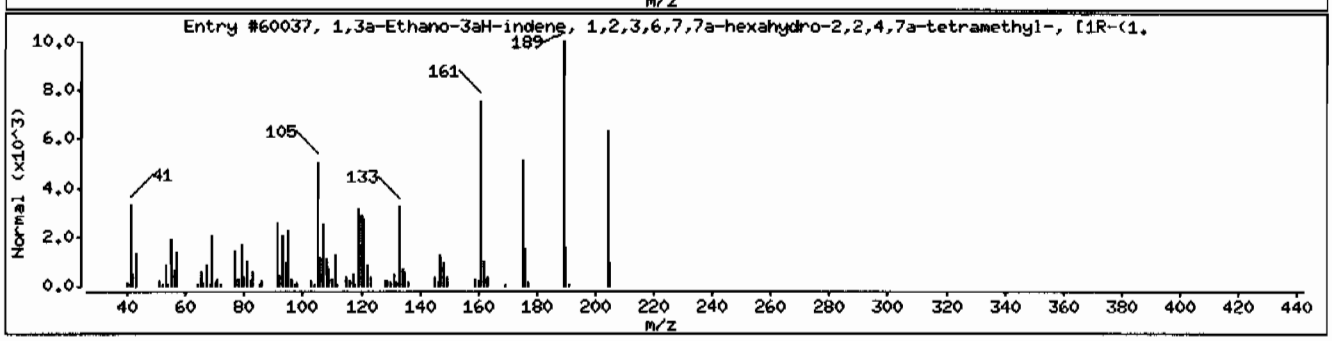

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:18	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.4	372
108-95-2	Phenol	U	372	ug/kg	74.4	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.4	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.4	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.4	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.4	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	93.1	372
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2
110-86-1	Pyridine	U	372	ug/kg	74.4	372
62-53-3	Aniline	U	372	ug/kg	112	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.4	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.4	372
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.4	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.4	372
95-48-7	o-Cresol	U	372	ug/kg	74.4	372
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.4	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.4	372
78-59-1	Isophorone	U	372	ug/kg	74.4	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.4	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.4	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.4	372
65-85-0	Benzoic acid	U	744	ug/kg	186	744
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.4	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.4	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.44	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.4	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.4	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.4	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline	U	372	ug/kg	74.4	372
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	372	ug/kg	74.4	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13875**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:18**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110410.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.4	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2
51-28-5	2,4-Dinitrophenol	U	744	ug/kg	141	744
132-64-9	Dibenzofuran	U	372	ug/kg	74.4	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.4	372
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.4	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.4	372
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.4	372
122-66-7	Azobenzene	U	372	ug/kg	74.4	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.4	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.4	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.44	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.4	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.4	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.4	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.4	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.4	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.88	160	ug/kg		J
	Unknown	1.98	284	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 12:18	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	429	ug/kg		JA
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	11.77	2680	ug/kg	83	NJ
	Unknown	11.96	1310	ug/kg		J
	Unknown	12.14	230	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110410.d
Lab Smp Id: 241540001 Client Smp ID: RE03-09-13875
Inj Date : 04-DEC-2009 12:18
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540001|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	10.45410	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	297717	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1151056	40.0000	
* 46 Acenaphthene-d10	164	5.992	5.998	(1.000)	648008	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1157047	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1023685	40.0000	
* 98 Perylene-d12	264	10.069	10.069	(1.000)	938689	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	497149	63.9317	2380
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	584254	61.8174	2300
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	250589	33.0350	1230
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.917)	563086	36.2819	1350
$ 60 2,4,6-Tribromophenol	329	6.528	6.534	(1.089)	169747	93.8104	3490
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	730152	45.4396	1690

ION RATIO REPORT

SV REPORT

Data file: s110410.d
Report Date: 12/04/2009 16:40
Lab. ID: 241540001 SampleType: SAMPLE
Injection Date: 04-DEC-2009 12:18
Operator: AMY Instrument: MSD1.i
Sample Info: |241540001|926610|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	29320	3.62	3.68	80-120	100	(T)
93	658	3.66	3.69	418-478	2	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	33962	4.25	4.13	80-120	100	(T)
42	20947	4.25	4.13	44-104	62	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	115547	6.00	5.77	80-120	100	(T)
164	648008	5.99	5.77	0- 40	561	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	81567	5.99	5.82	80-120	100	(T)
63	932	5.99	5.82	45-105	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	81567	5.99	6.10	80-120	100	(T)
89	974	6.00	6.10	32- 92	1	(QT)
63	932	5.99	6.10	15- 75	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	10144	6.53	6.37	80-120	100	(T)
165	10545	6.53	6.37	64-124	104	(T)
167	3350	6.53	6.37	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	10124	6.53	6.67	80-120	100	(T)
141	65740	6.53	6.67	50-110	649	(QT)
250	19970	6.53	6.67	68-128	197	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110410.d
Lab Smp Id: 241540001 Client Smp ID: RE03-09-13875
Inj Date : 04-DEC-2009 12:18
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540001|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	10.45410	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	1744901	40.000
* 98 Perylene-d12	10.069	2608077	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.881	187285	4.29330192	160	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.981	333106	7.63610947	284	0		0	10
Unknown Aldol Condensate				CAS #:			
2.916	502722	11.5243693	429	0		0	10
D-Friedoolean-14-ene, 3-methoxy-, (3.bet				CAS #: 14021-23-9			
11.774	4698484	72.0604929	2680	83	NIST05.L	178753	98
Unknown				CAS #:			
11.957	2293050	35.1684345	1310	0		0	98
Unknown				CAS #:			
12.139	402049	6.16621549	230	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110410.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13875

Sample Info: |241540001|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AHY

Column diameter: 0.20

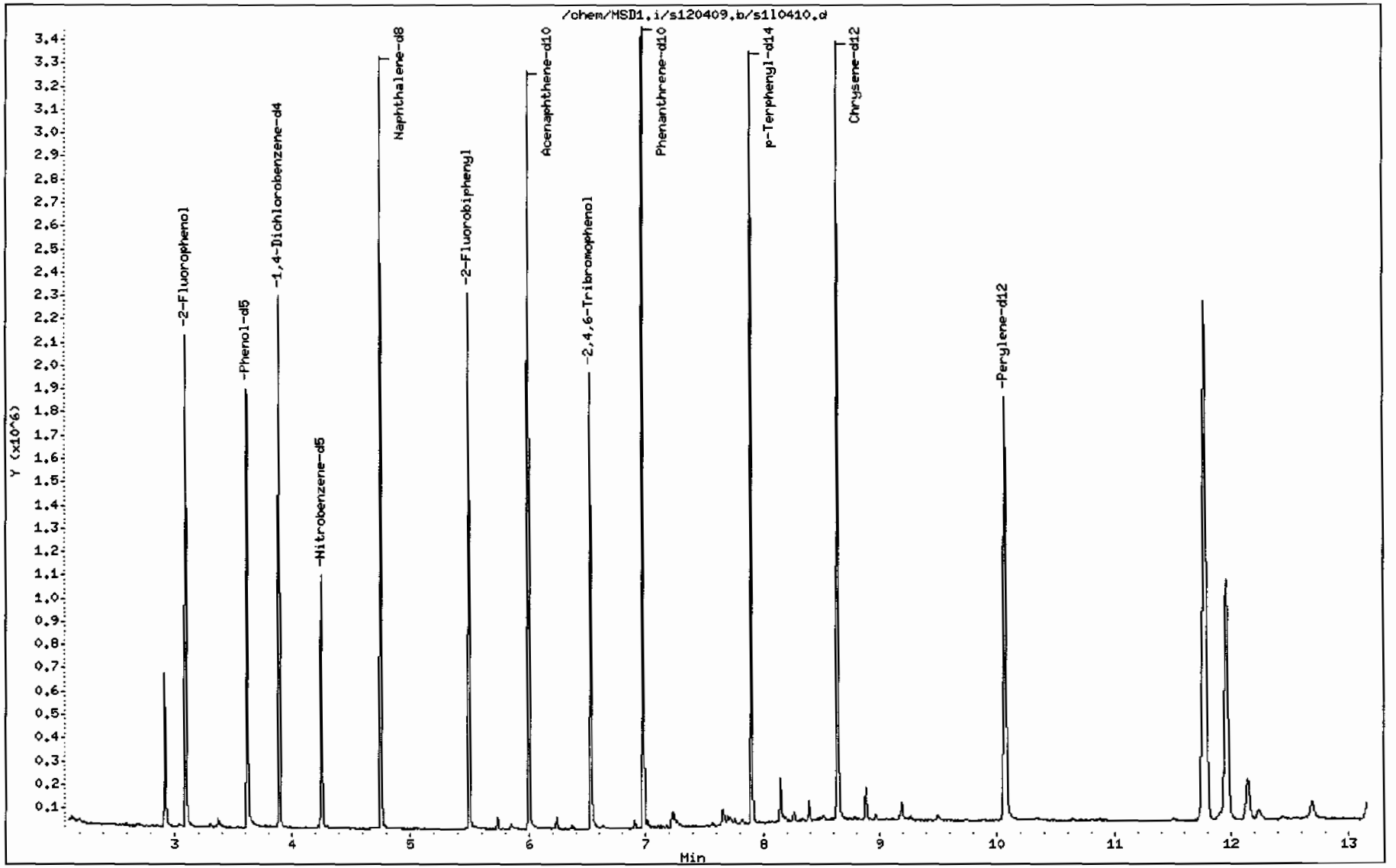

Data File: /chem/HSD1.i/s120409.b/s110410.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13875 Instrument: HSD1.i

Sample Info: |2415400001|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methane, bromochloro-	74-97-5	NIST05.L	12356	64	CH2BrCl	128
Methane, bromochloro-	74-97-5	NIST05.L	12355	60	CH2BrCl	128
Methane, bromochloro-	74-97-5	NIST05.L	12354	60	CH2BrCl	128

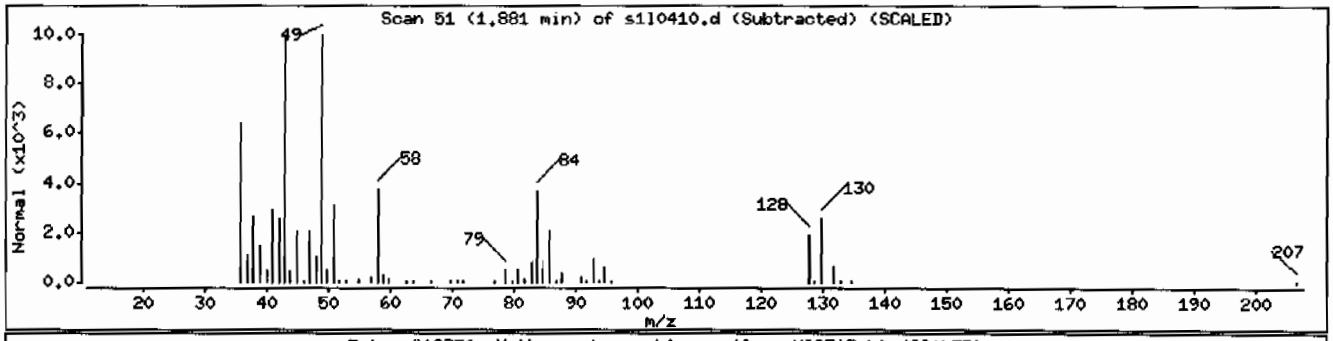

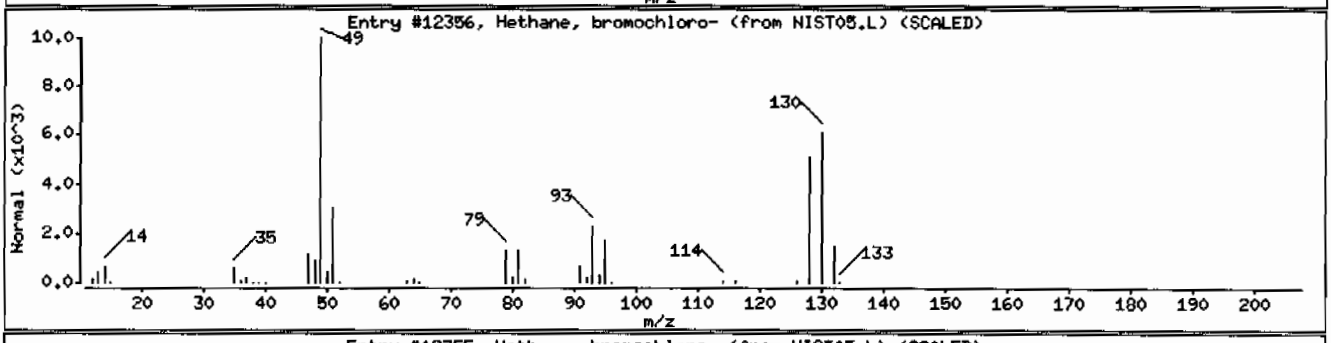

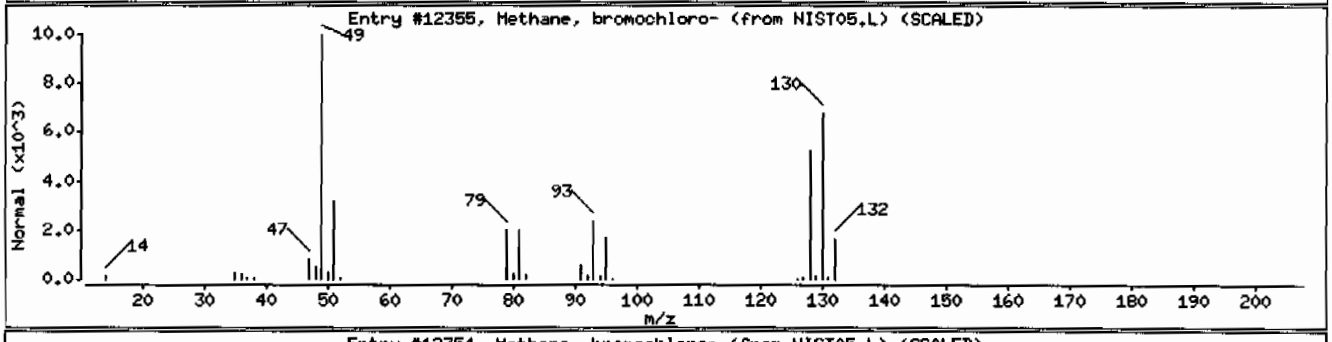

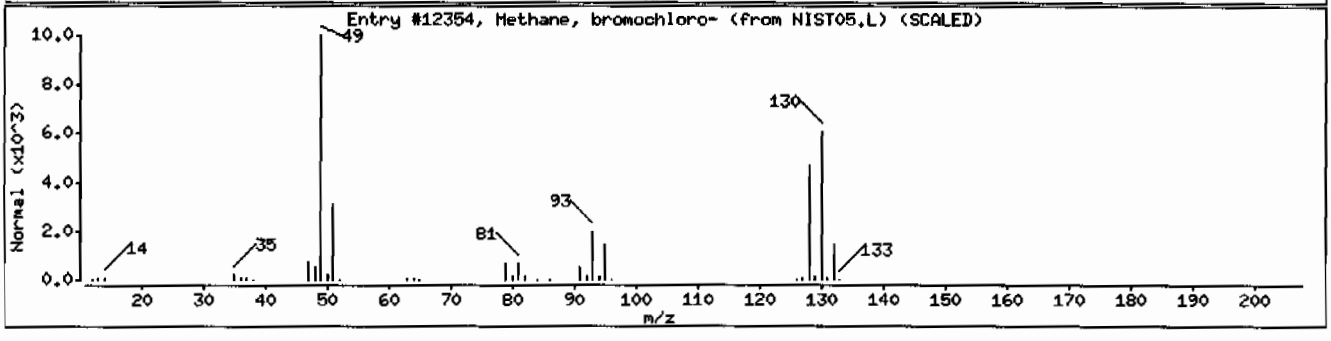

Data File: /chem/MSD1.i/s120409.b/s110410.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13875

Instrument: MSD1.i

Sample Info: 1241540001192661011ISVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	59	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	45	C5H12O2	104
N-Hydroxymethylacetamide	625-51-4	NIST05.L	2135	13	C3H7NO2	89

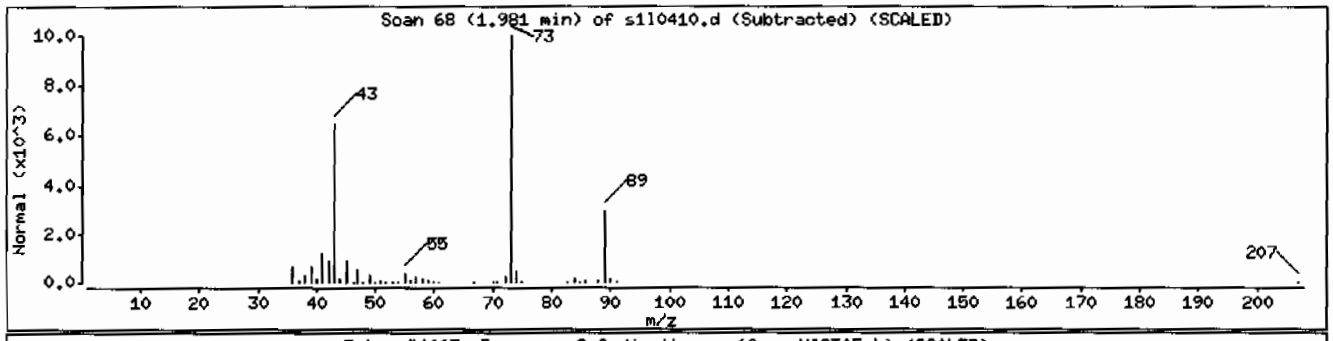

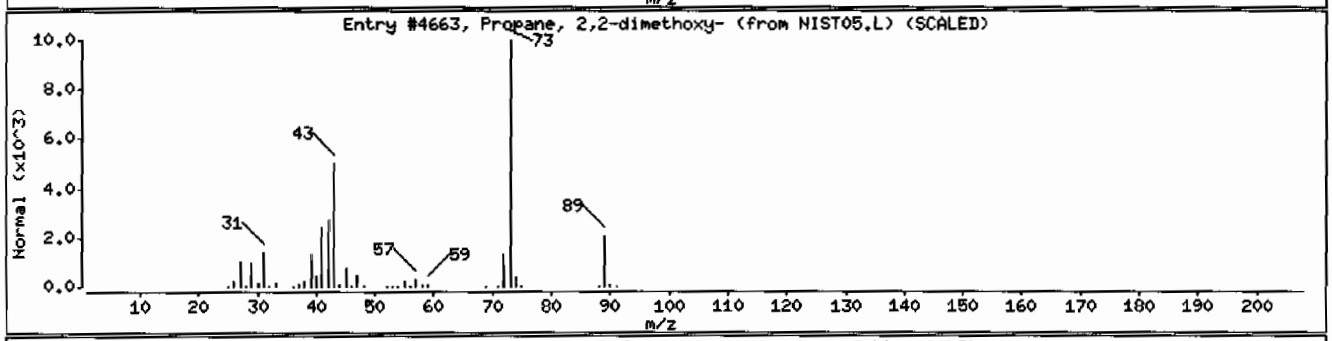

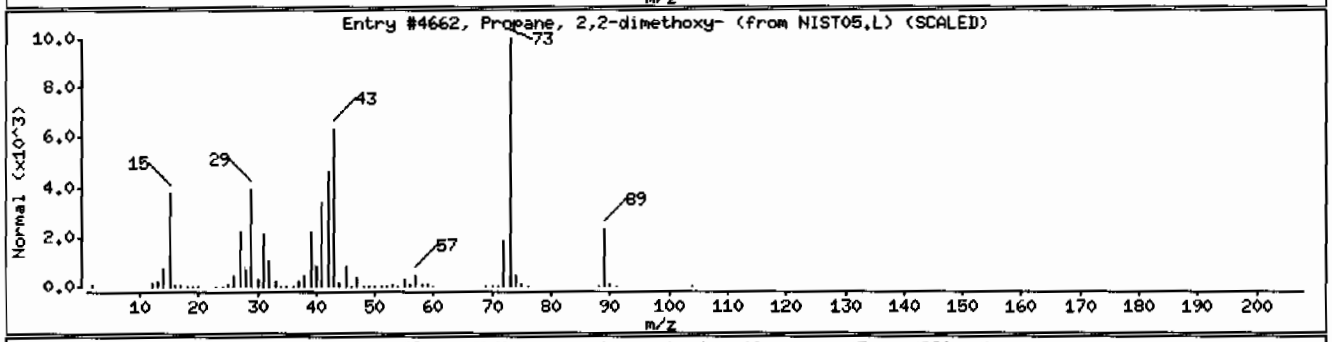

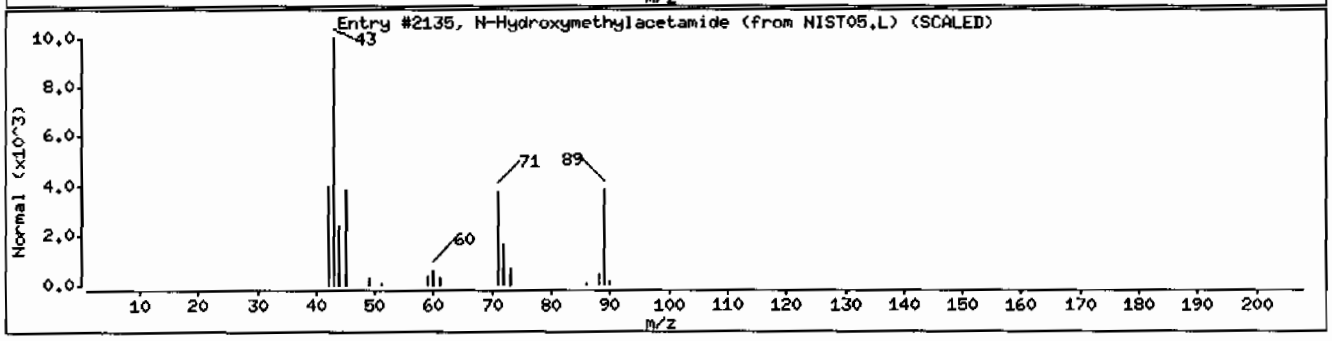

Data File: /chem/HSD1.i/s120409.b/s110410.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13875

Instrument: HSD1.i

Sample Info: 1241540001|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141

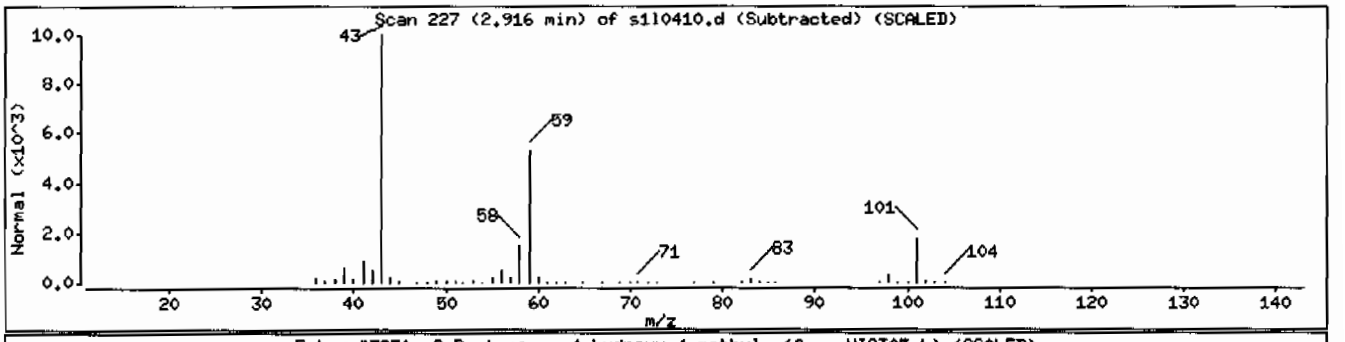

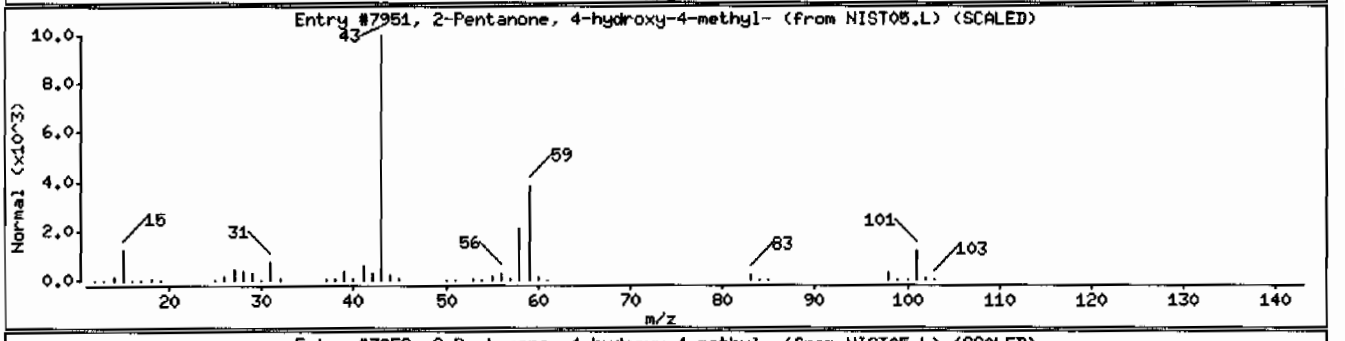

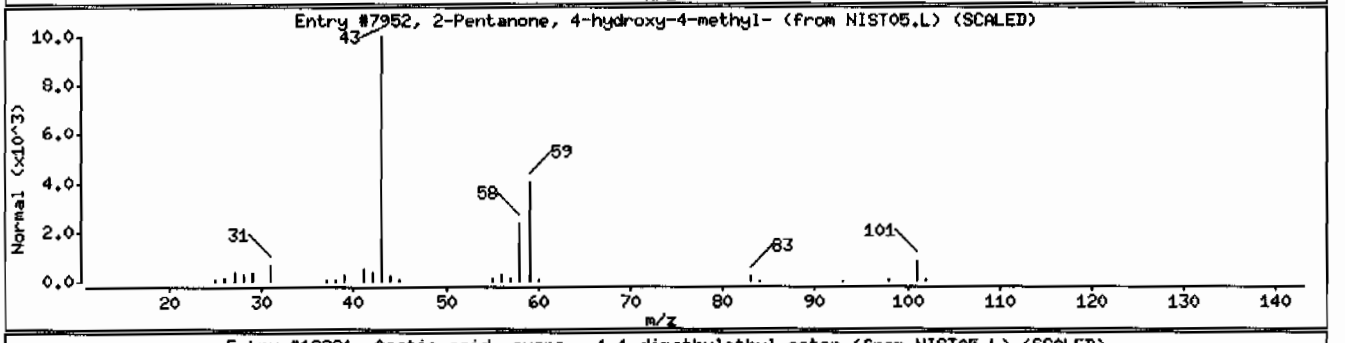

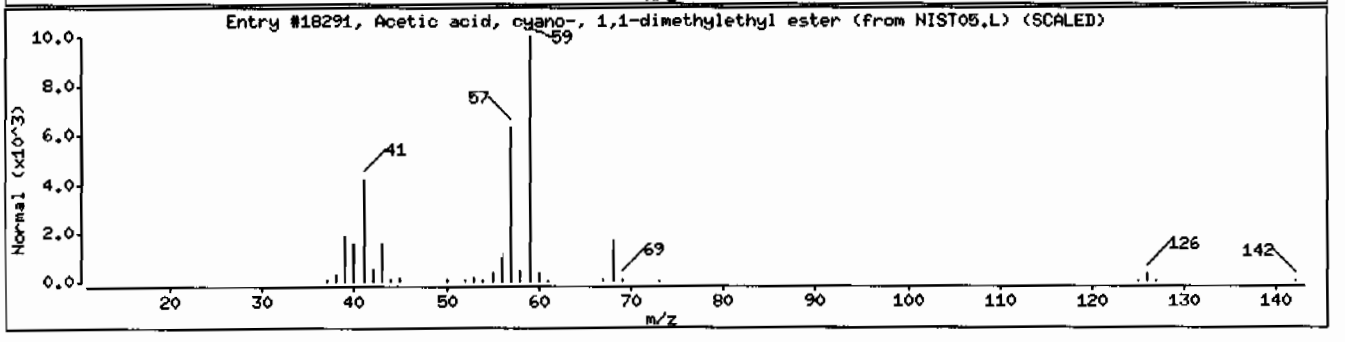

Data File: /chem/MSD1.i/s120409.b/s110410.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13875 Instrument: MSD1.i

Sample Info: |241540001|926610|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
D-Friedoolean-14-ene, 3-methoxy-, (3.bet	14021-23-9	NIST05.L	178753	83	C31H52O	440
2H-Cyclopentacyclooctene, 4,5,6,7,8,9-he	1000221-85-8	NIST05.L	59950	60	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	46	C15H24	204

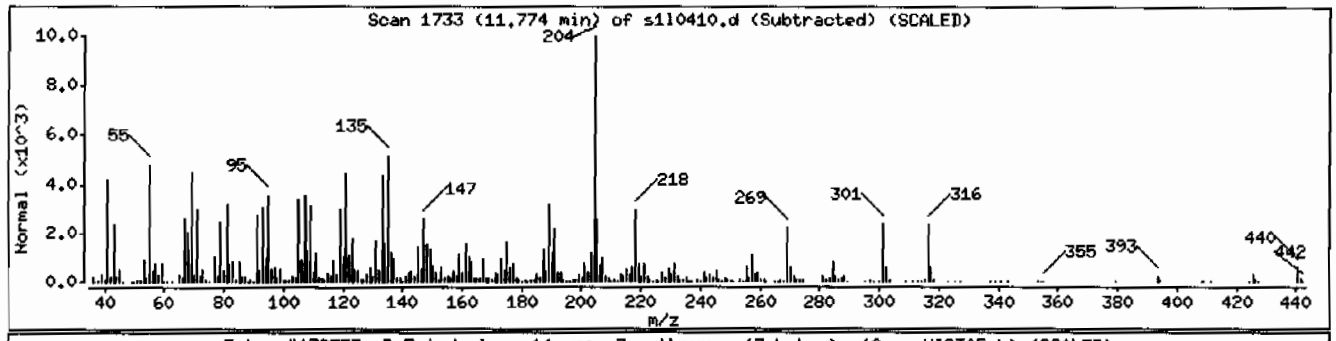

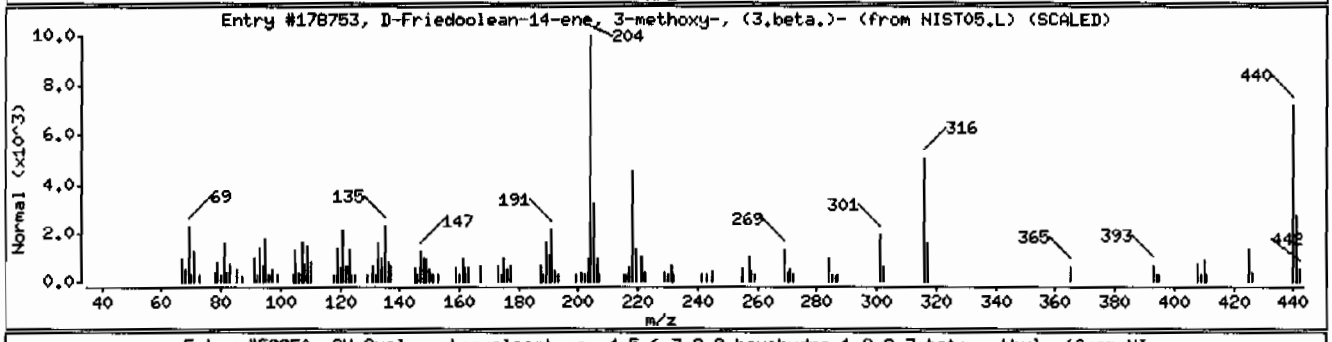

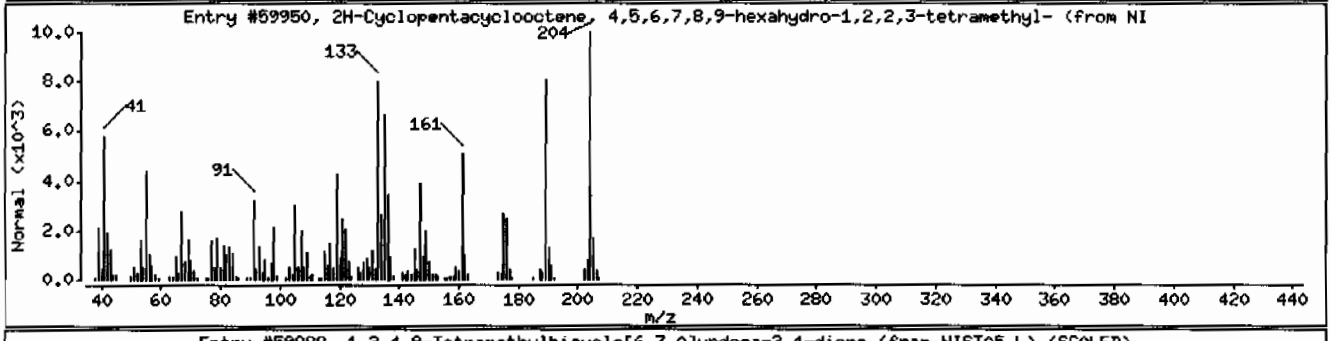

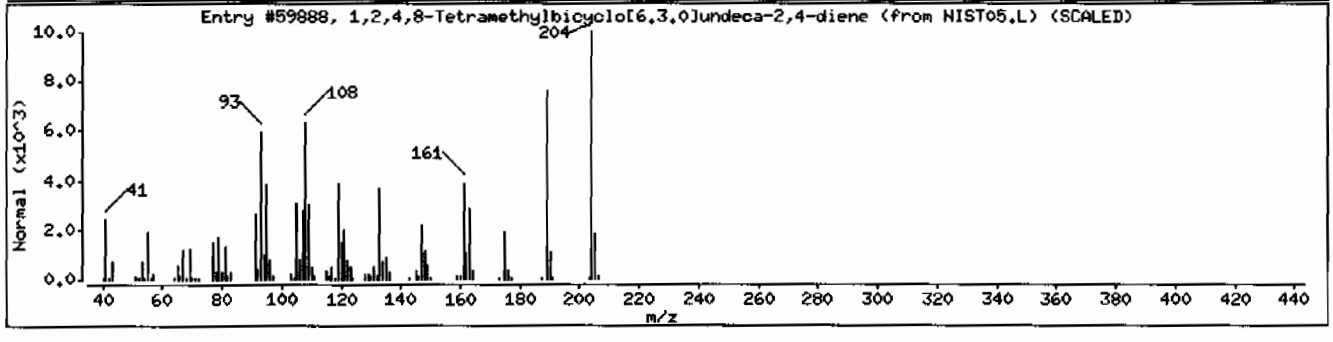

Data File: /chem/MSD1.i/s120409.b/s110410.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13875

Instrument: MSD1.i

Sample Info: |241540001|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Buten-2-one, 4-(2,6,6-trimethyl-1-cycl	79-77-6	NIST05.L	51318	48	C13H20O	192
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	44	C15H24	204
.delta.-Selinene	28624-23-9	NIST05.L	59825	43	C15H24	204

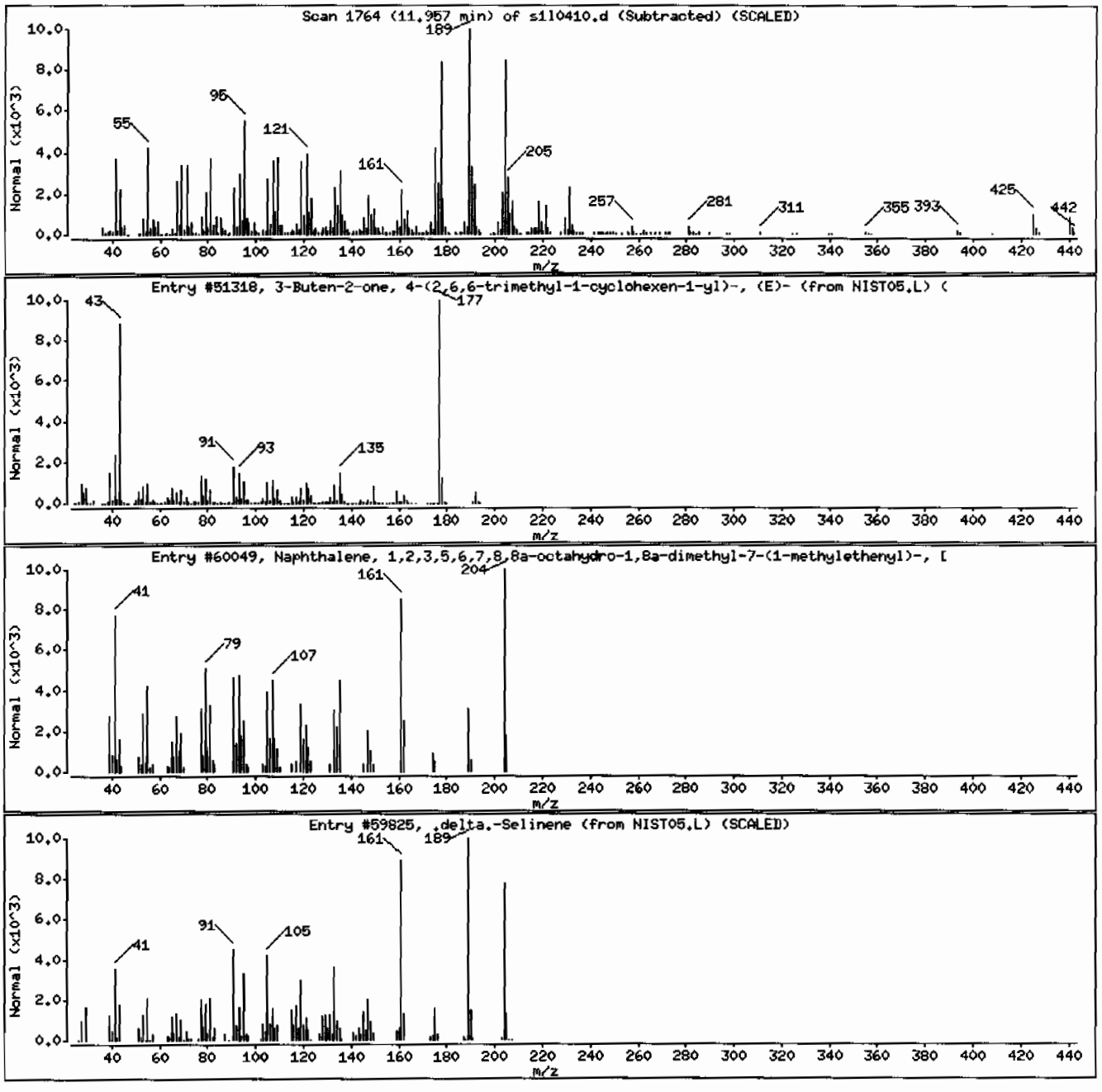

Data File: /chem/MSD1.i/s120409.b/s110410.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13875

Instrument: MSD1.i

Sample Info: 1241540001|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Formic acid, 1-(4,7-dihydro-2-methyl-7-o	1000267-28-6	NIST05.L	62365	22	C9H9N3O3	207
Anthracene, 9-ethyl-9,10-dihydro-9,10-di	54947-86-3	NIST05.L	82678	16	C18H20	236
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	16	C17H18	222

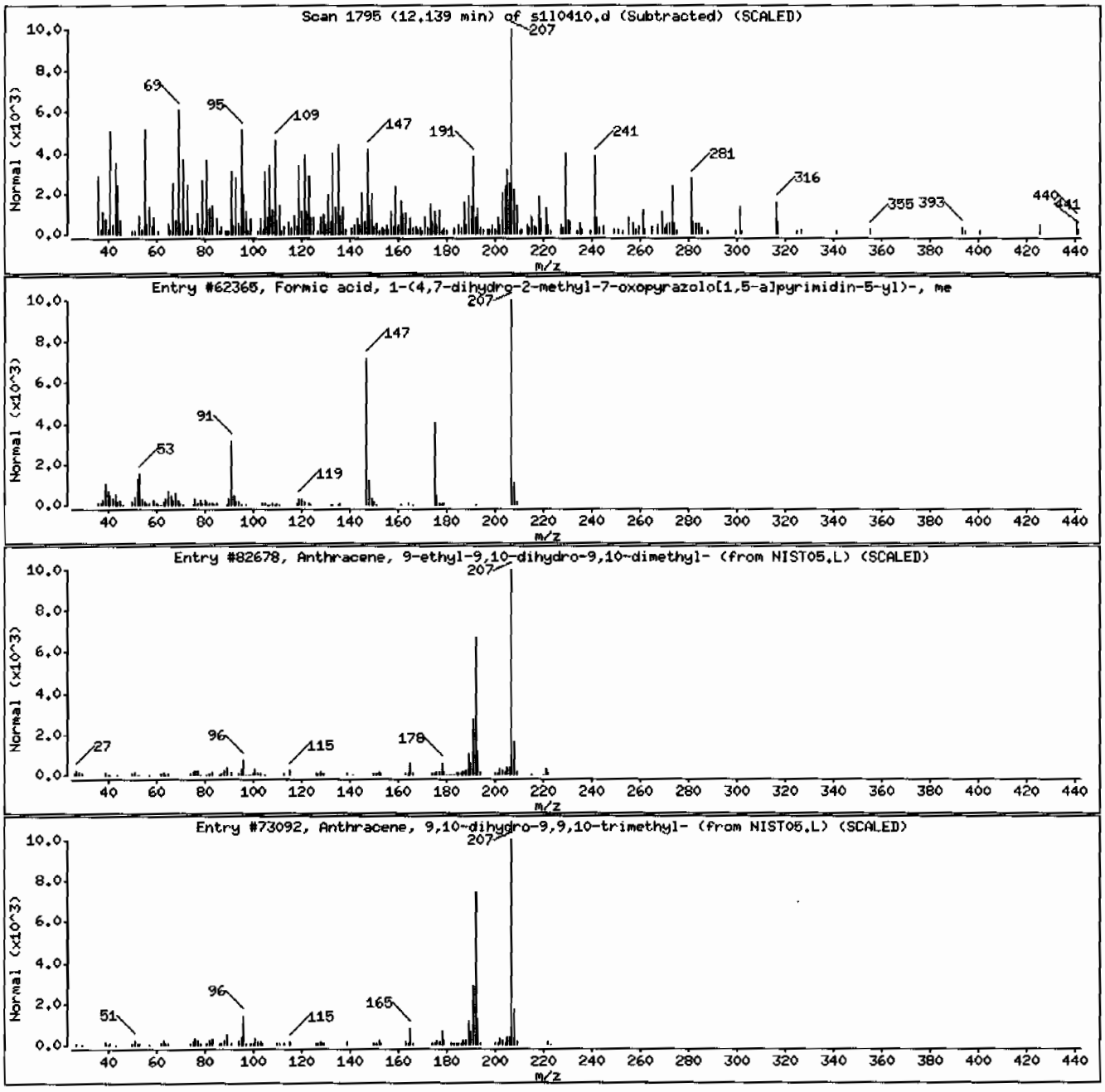

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540015**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13876**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s110423.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	371	ug/kg	74.2	371
108-95-2	Phenol	U	371	ug/kg	74.2	371
95-57-8	2-Chlorophenol	U	371	ug/kg	74.2	371
106-46-7	1,4-Dichlorobenzene	U	371	ug/kg	74.2	371
621-64-7	N-Nitrosodipropylamine	U	371	ug/kg	74.2	371
59-50-7	4-Chloro-3-methylphenol	U	371	ug/kg	74.2	371
83-32-9	Acenaphthene	U	37.1	ug/kg	12.2	37.1
121-14-2	2,4-Dinitrotoluene	U	371	ug/kg	37.1	371
100-02-7	4-Nitrophenol	U	371	ug/kg	122	371
87-86-5	Pentachlorophenol	U	371	ug/kg	92.8	371
129-00-0	Pyrene	J	16.4	ug/kg	11.1	37.1
110-86-1	Pyridine	U	371	ug/kg	74.2	371
62-53-3	Aniline	U	371	ug/kg	111	371
111-44-4	bis(2-Chloroethyl) ether	U	371	ug/kg	74.2	371
541-73-1	1,3-Dichlorobenzene	U	371	ug/kg	74.2	371
100-51-6	Benzyl alcohol	U	371	ug/kg	111	371
95-50-1	1,2-Dichlorobenzene	U	371	ug/kg	74.2	371
108-60-1	bis(2-Chloroisopropyl)ether	U	371	ug/kg	74.2	371
95-48-7	o-Cresol	U	371	ug/kg	74.2	371
65794-96-9	m,p-Cresols	U	371	ug/kg	111	371
67-72-1	Hexachloroethane	U	371	ug/kg	74.2	371
98-95-3	Nitrobenzene	U	371	ug/kg	74.2	371
78-59-1	Isophorone	U	371	ug/kg	74.2	371
88-75-5	2-Nitrophenol	U	371	ug/kg	74.2	371
105-67-9	2,4-Dimethylphenol	U	371	ug/kg	130	371
111-91-1	bis(2-Chloroethoxy)methane	U	371	ug/kg	74.2	371
120-83-2	2,4-Dichlorophenol	U	371	ug/kg	74.2	371
65-85-0	Benzoic acid	U	742	ug/kg	186	742
91-20-3	Naphthalene	U	37.1	ug/kg	11.1	37.1
106-47-8	4-Chloroaniline	U	371	ug/kg	74.2	371
87-68-3	Hexachlorobutadiene	U	371	ug/kg	74.2	371
91-57-6	2-Methylnaphthalene	U	37.1	ug/kg	7.42	37.1
77-47-4	Hexachlorocyclopentadiene	U	371	ug/kg	74.2	371
88-06-2	2,4,6-Trichlorophenol	U	371	ug/kg	74.2	371
95-95-4	2,4,5-Trichlorophenol	U	371	ug/kg	74.2	371
91-58-7	2-Chloronaphthalene	U	37.1	ug/kg	12.2	37.1
88-74-4	2-Nitroaniline	U	371	ug/kg	74.2	371
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	371	ug/kg	74.2	371

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540015	Date Received:	11/20/2009 08:50	%Moisture:	10.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13876	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.1	Dilution:	1
Run Date:	12/04/2009 17:18	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110423.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	371	ug/kg	74.2	371
606-20-2	2,6-Dinitrotoluene	U	371	ug/kg	37.1	371
208-96-8	Acenaphthylene	U	37.1	ug/kg	11.1	37.1
51-28-5	2,4-Dinitrophenol	U	742	ug/kg	141	742
132-64-9	Dibenzofuran	U	371	ug/kg	74.2	371
84-66-2	Diethylphthalate	U	371	ug/kg	74.2	371
86-73-7	Fluorene	U	37.1	ug/kg	11.1	37.1
7005-72-3	4-Chlorophenylphenylether	U	371	ug/kg	74.2	371
534-52-1	2-Methyl-4,6-dinitrophenol	U	371	ug/kg	74.2	371
100-01-6	4-Nitroaniline	U	371	ug/kg	111	371
	p-Nitroaniline					
122-39-4	Diphenylamine	U	371	ug/kg	74.2	371
122-66-7	Azobenzene	U	371	ug/kg	74.2	371
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	371	ug/kg	74.2	371
118-74-1	Hexachlorobenzene	U	371	ug/kg	74.2	371
85-01-8	Phenanthrene	U	37.1	ug/kg	11.1	37.1
120-12-7	Anthracene	U	37.1	ug/kg	7.42	37.1
84-74-2	Di-n-butylphthalate	U	371	ug/kg	74.2	371
206-44-0	Fluoranthene	J	18.7	ug/kg	11.1	37.1
85-68-7	Butylbenzylphthalate	U	371	ug/kg	74.2	371
56-55-3	Benzo(a)anthracene	J	11.5	ug/kg	11.1	37.1
91-94-1	3,3'-Dichlorobenzidine	U	371	ug/kg	111	371
218-01-9	Chrysene	U	37.1	ug/kg	11.1	37.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	371	ug/kg	74.2	371
117-84-0	Di-n-octylphthalate	U	371	ug/kg	74.2	371
205-99-2	Benzo(b)fluoranthene		112	ug/kg	11.1	37.1
207-08-9	Benzo(k)fluoranthene	U	37.1	ug/kg	11.1	37.1
50-32-8	Benzo(a)pyrene	U	37.1	ug/kg	11.1	37.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.1	ug/kg	11.1	37.1
53-70-3	Dibenzo(a,h)anthracene	U	37.1	ug/kg	11.1	37.1
191-24-2	Benzo(ghi)perylene	U	37.1	ug/kg	11.1	37.1
120-82-1	1,2,4-Trichlorobenzene	U	371	ug/kg	74.2	371

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.64	1050	ug/kg		J
	Unknown	1.98	325	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540015**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13876**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:18**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s110423.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	324	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.73	176	ug/kg	99	NJ
	Unknown	8.06	276	ug/kg		J
	Unknown	8.19	217	ug/kg		J
	Unknown	8.39	149	ug/kg		J
112-95-8	Eicosane	10.33	324	ug/kg	96	NJ
	Unknown	10.56	414	ug/kg		J
638-67-5	Tricosane	11.51	705	ug/kg	97	NJ
	Unknown	11.77	185	ug/kg		J
	Unknown	12.46	192	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110423.d
Lab Smp Id: 241540015 Client Smp ID: RE03-09-13876
Inj Date : 04-DEC-2009 17:18
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540015|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	10.22200	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	480438	40.0000	
* 29 Naphthalene-d8	136	4.757	4.751	(1.000)	2024670	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	1156820	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	2024159	40.0000	
* 91 Chrysene-d12	240	8.645	8.633	(1.000)	1886124	40.0000	
* 98 Perylene-d12	264	10.086	10.069	(1.000)	1706491	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.794)	611726	48.7476	1810
$ 5 Phenol-d5	99	3.616	3.610	(0.929)	736742	48.3048	1790
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.894)	350725	26.2858	975
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	829582	29.9425	1110
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	211734	65.5472	2430
$ 81 p-Terphenyl-d14	244	7.898	7.892	(0.914)	916382	30.9524	1150

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.851	7.845	(0.908)	22181	0.44255	16.4(a)
76 Fluoranthene	202	7.710	7.704	(1.104)	22411	0.50472	18.7(a)
89 Benzo(a)anthracene	228	8.639	8.628	(0.999)	14039	0.31041	11.5(a)
95 Benzo(b)fluoranthene	252	9.616	9.610	(0.953)	16181	3.01318	112

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s110423.d
Report Date: 12/05/2009 08:14
Lab. ID: 241540015 SampleType: SAMPLE
Injection Date: 04-DEC-2009 17:18
Operator: nagl Instrument: MSD1.i
Sample Info: |241540015|926610|10|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Dilution Factor= 10.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	36389	3.62	3.68	80-120	100	(T)
93	4738	3.66	3.69	418-478	13	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45787	4.25	4.13	80-120	100	(T)
42	29078	4.25	4.13	44-104	64	(T)
22 Isophorone		CAS#: 78-59-1				
82	350725	4.25	4.42	80-120	100	(T)
138	463	4.50	4.42	0- 51	0	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	204898	6.00	5.77	80-120	100	(T)
164	1156820	6.00	5.77	0- 40	565	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	147521	6.00	5.82	80-120	100	(T)
63	3888	6.00	5.82	45-105	3	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	147521	6.00	6.10	80-120	100	(T)
89	3186	6.00	6.10	32- 92	2	(QT)
63	3888	6.00	6.10	15- 75	3	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	13744	6.53	6.37	80-120	100	(T)
165	13526	6.53	6.37	64-124	98	(T)
167	4940	6.53	6.37	0- 43	36	(T)
69 Anthracene			CAS#: 120-12-7			
178	13043	7.00	7.03	80-120	100	( )
179	3182	7.00	7.03	0- 46	24	( )
176	2675	7.00	7.03	0- 48	21	( )
76 Fluoranthene			CAS#: 206-44-0			
202	22411	7.71	7.70	80-120	100	( )
203	4029	7.71	7.70	0- 47	18	( )
101	3550	7.71	7.70	0- 43	16	( )
79 Pyrene			CAS#: 129-00-0			
202	22181	7.85	7.85	80-120	100	( )
200	4346	7.85	7.85	0- 51	20	( )
101	3621	7.85	7.85	0- 46	16	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	14039	8.64	8.63	80-120	100	( )
226	2487	8.63	8.63	0- 55	18	( )
229	3160	8.63	8.63	0- 49	23	( )
92 Chrysene			CAS#: 218-01-9			
228	14322	8.64	8.66	80-120	100	( )
229	3122	8.63	8.66	0- 49	22	( )
226	2445	8.63	8.66	0- 58	17	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	16181	9.62	9.61	80-120	100	( )
253	4499	9.62	9.61	0- 51	28	( )
125	1038	9.62	9.61	0- 44	6	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	16181	9.62	9.64	80-120	100	( )
253	4001	9.62	9.64	0- 52	25	( )
125	1038	9.62	9.64	0- 44	6	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110423.d
Lab Smp Id: 241540015 Client Smp ID: RE03-09-13876
Inj Date : 04-DEC-2009 17:18
Operator : nagl Inst ID: MSD1.i
Smp Info : |241540015|926610|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	10.22200	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.893	2859696	40.000
* 46 Acenaphthene-d10	5.998	4892636	40.000
* 91 Chrysene-d12	8.645	4841161	40.000
* 98 Perylene-d12	10.086	4415633	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.640	2017795	28.2239080	1050	0		0	10
Unknown				CAS #:			
1.981	626949	8.76944571	325	0		0	10
Unknown Aldol Condensate				CAS #:			
2.916	623891	8.72667287	324	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
5.728	578580	4.73020994	176	99	NIST05.L	60023	46
Unknown				CAS #:			
8.063	901700	7.45028057	276	0		0	91
Unknown				CAS #:			
8.192	707640	5.84686220	217	0		0	91
Unknown				CAS #:			
8.392	484475	4.00296724	148	0		0	91
Eicosane				CAS #: 112-95-8			
10.333	962794	8.72168123	324	96	NIST05.L	113490	98
Unknown				CAS #:			
10.557	1232415	11.1641072	414	0		0	98
Tricosane				CAS #: 638-67-5			
11.510	2096905	18.9952854	705	97	NIST05.L	139233	98
Unknown				CAS #:			
11.768	550195	4.98406726	185	0		0	98
Unknown				CAS #:			
12.457	572334	5.18461230	192	0		0	98

Data File: /chem/MSD1.i/s120409.b/s110423.d
Date : 04-DEC-2009 17:18
Client ID: RE03-09-13876
Sample Info: |2415400151926610111SVMF11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: nag1
Column diameter: 0.20

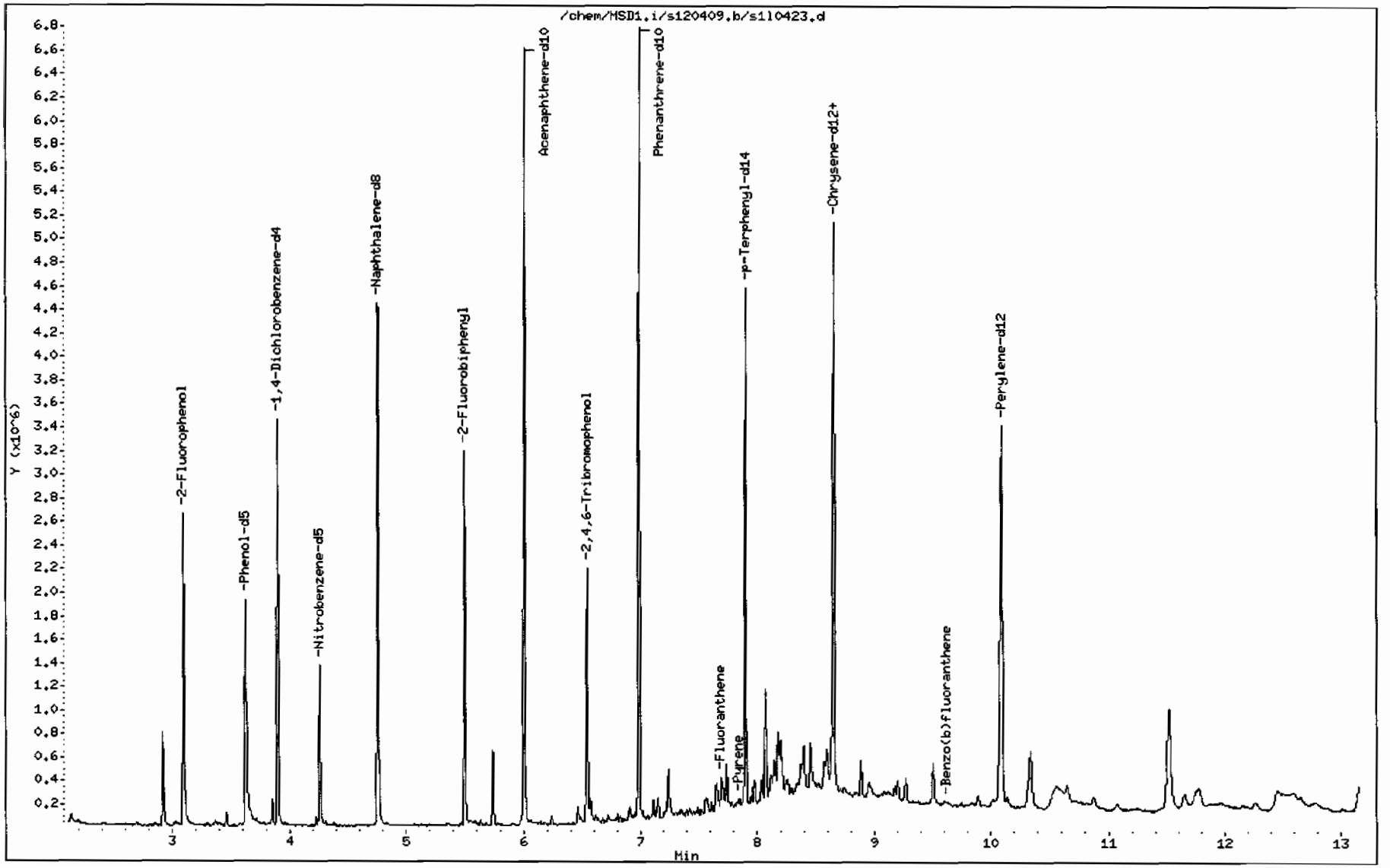

Data File: /chem/MSD1.i/s120409.b/s110423.d

Page 2

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: 1241540015192661011SVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 16.4 ug/Kg

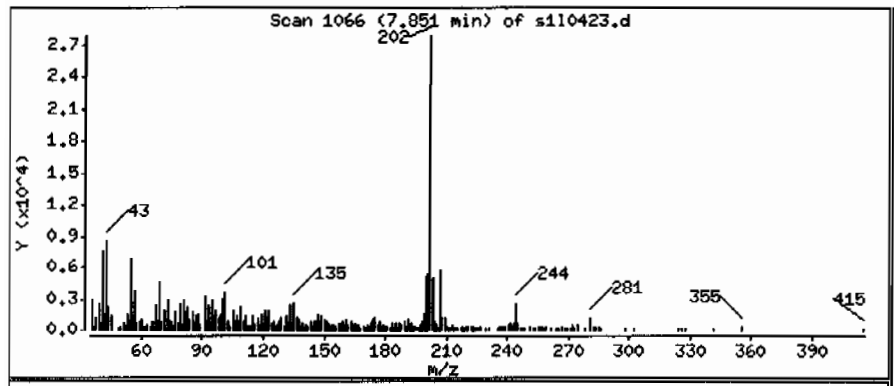

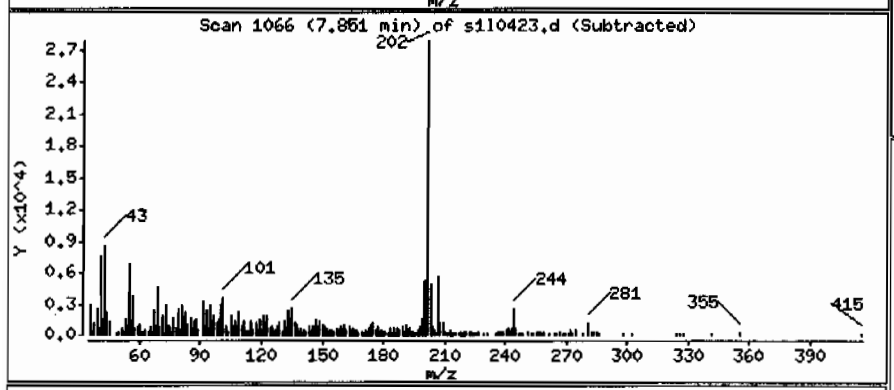

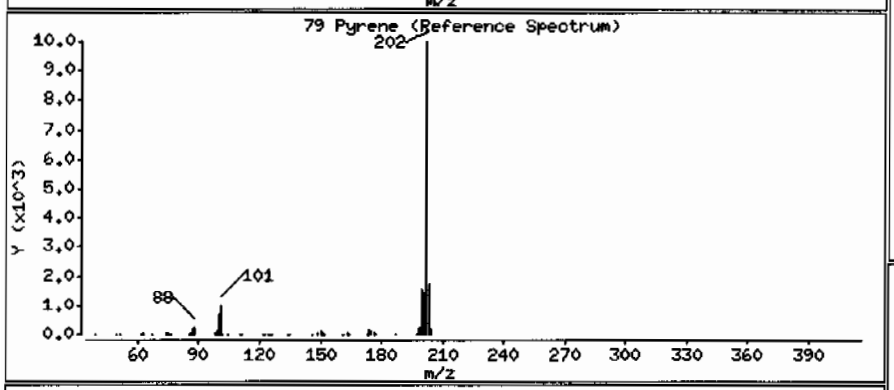

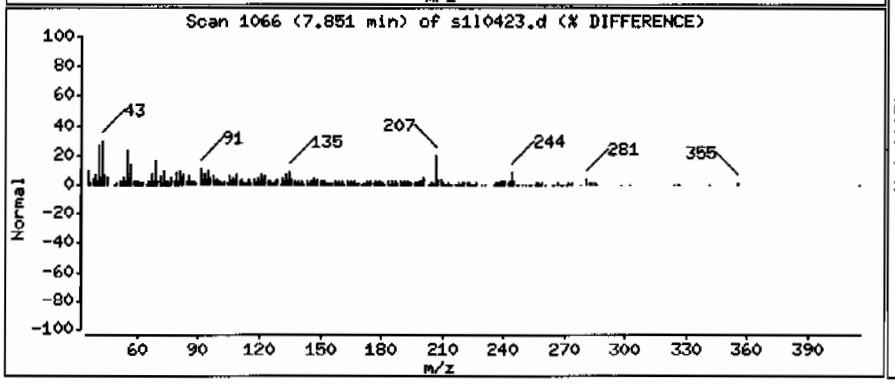

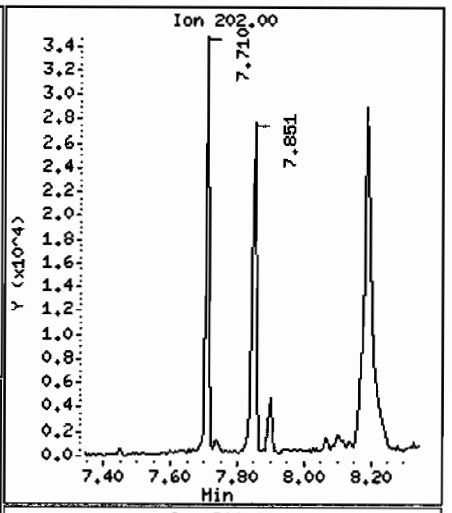

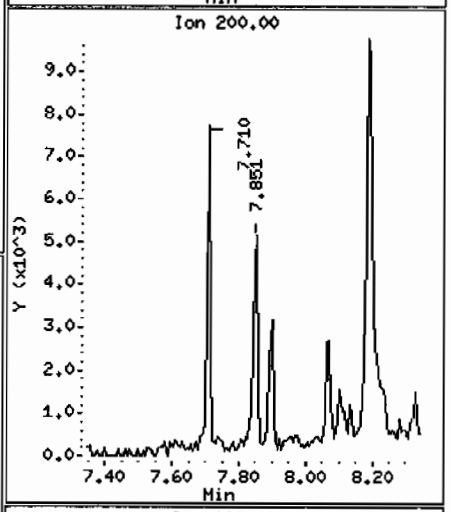

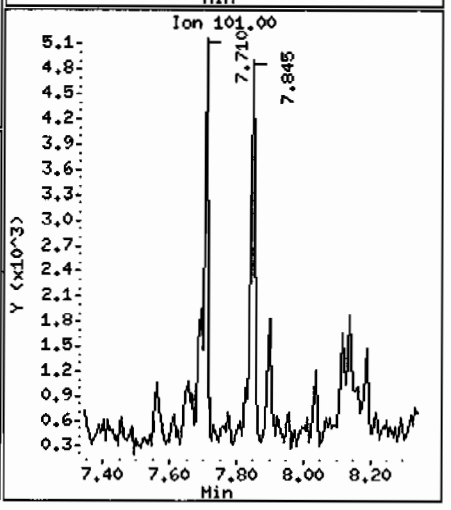

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: |2415400151926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 18.7 ug/Kg

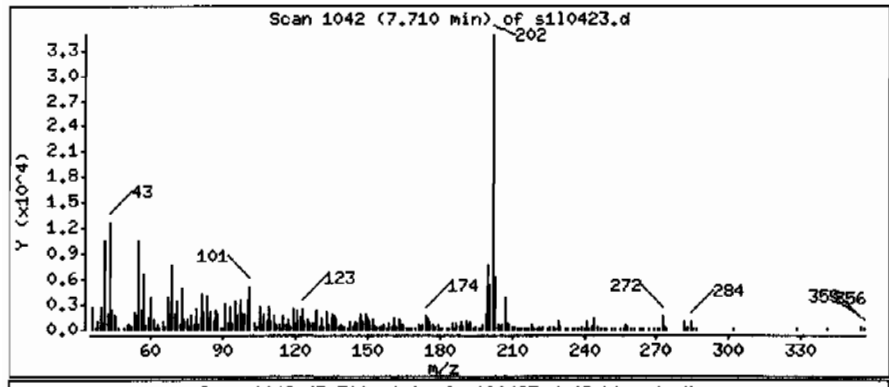

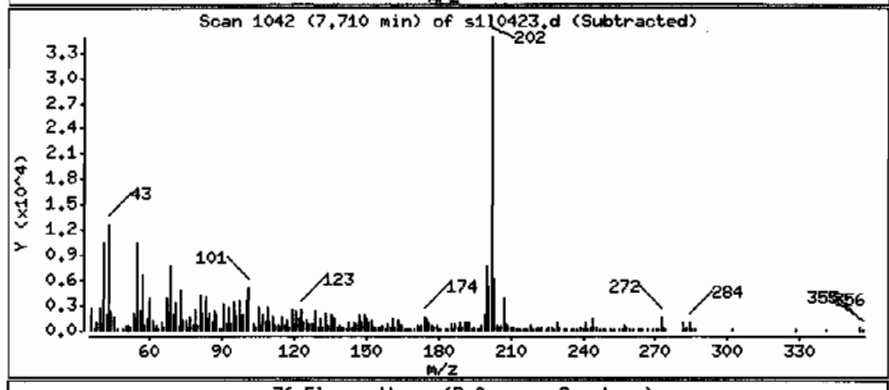

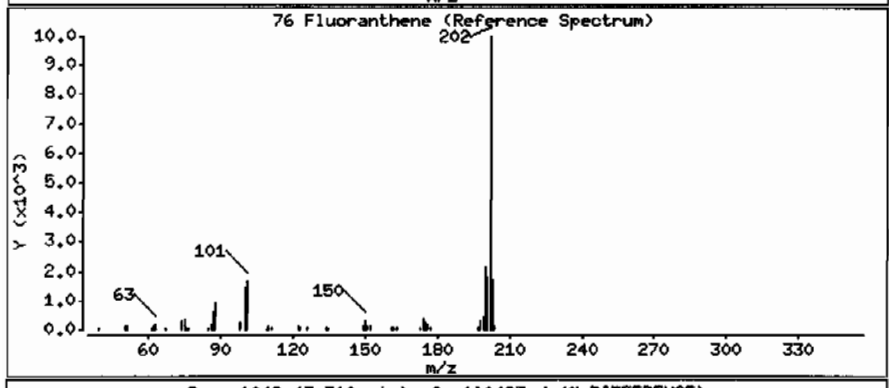

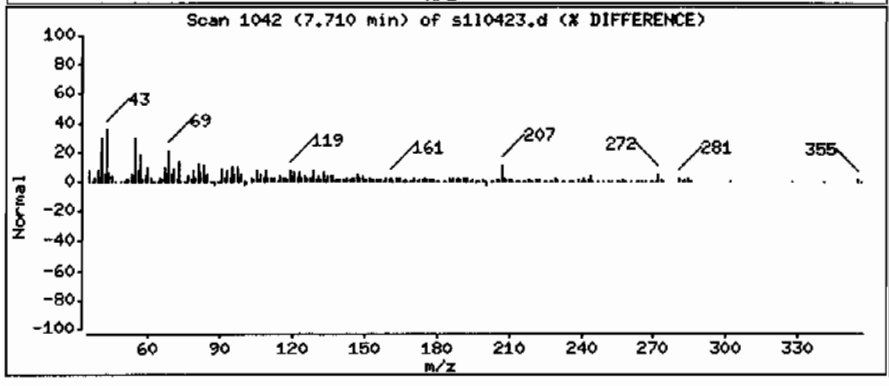

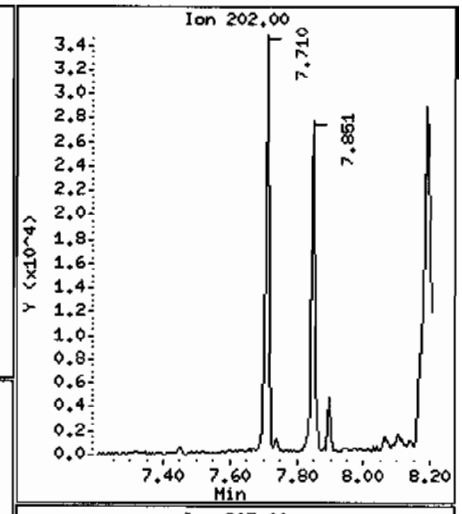

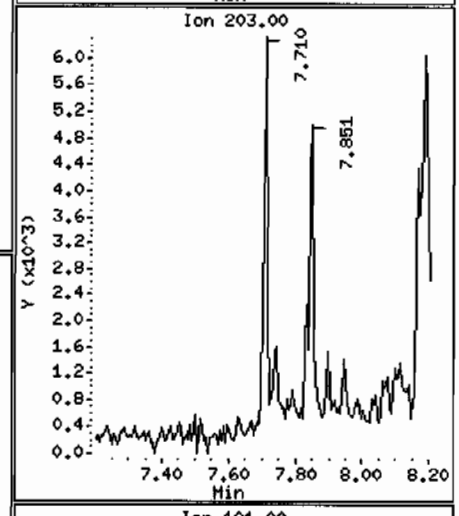

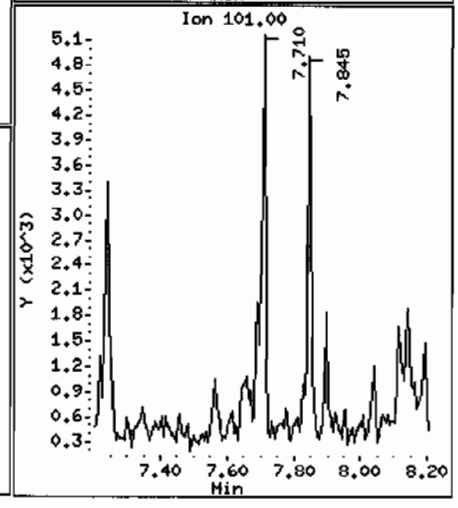

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: 1241540015|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 11.5 ug/Kg

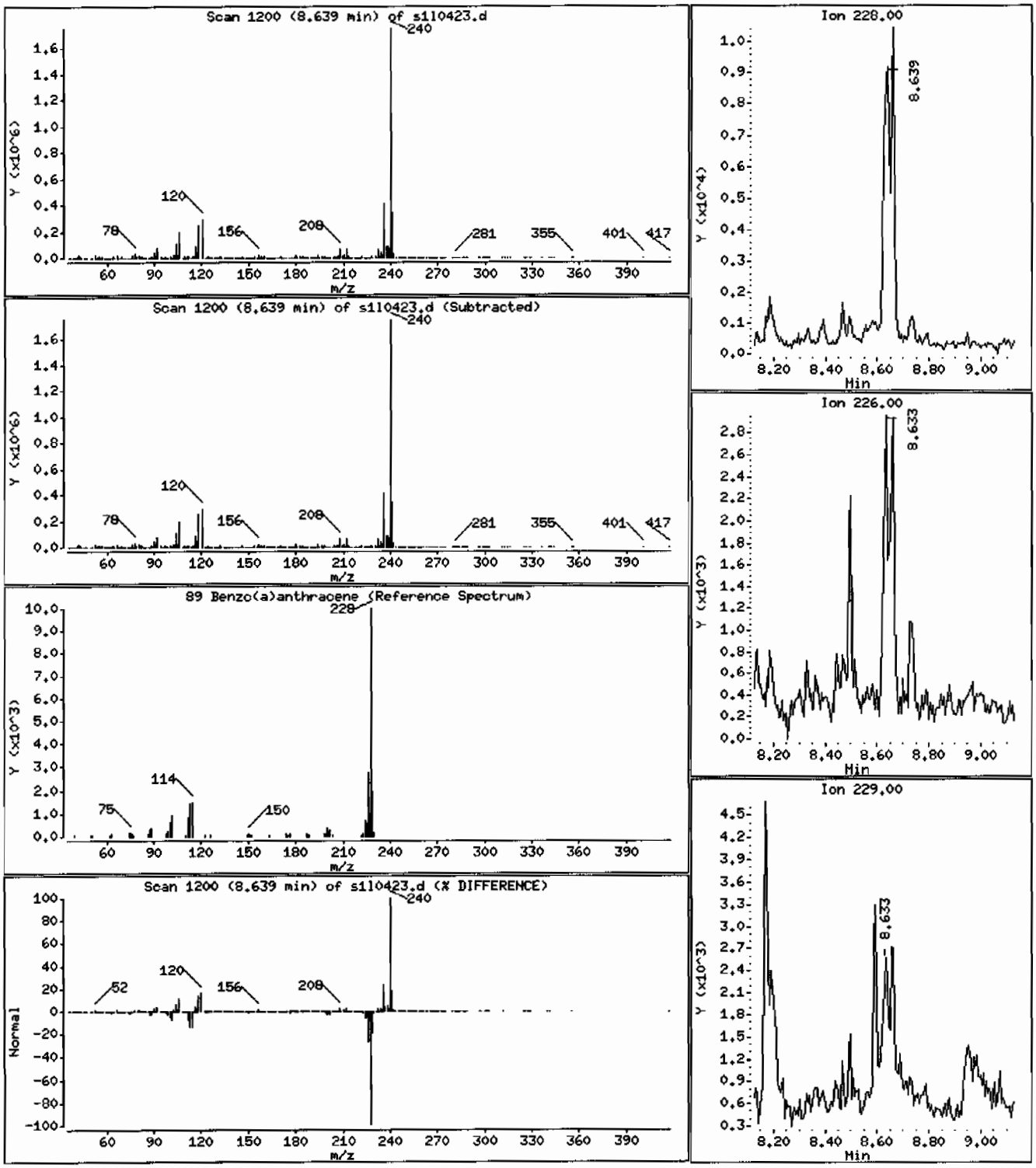

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: |241540015|926610111|SVHF11|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 112 ug/Kg

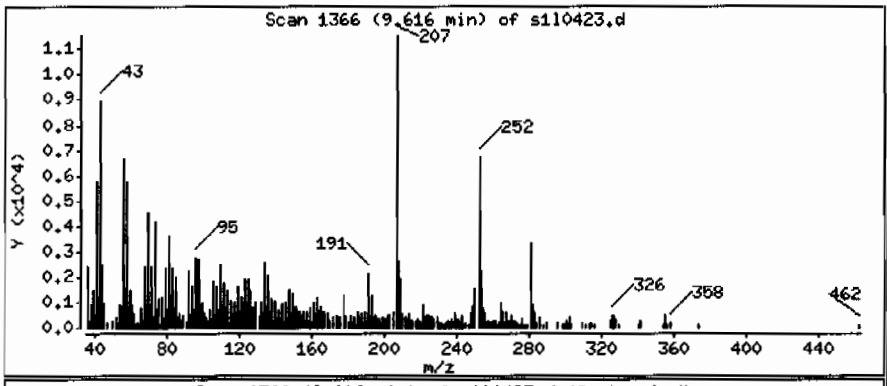

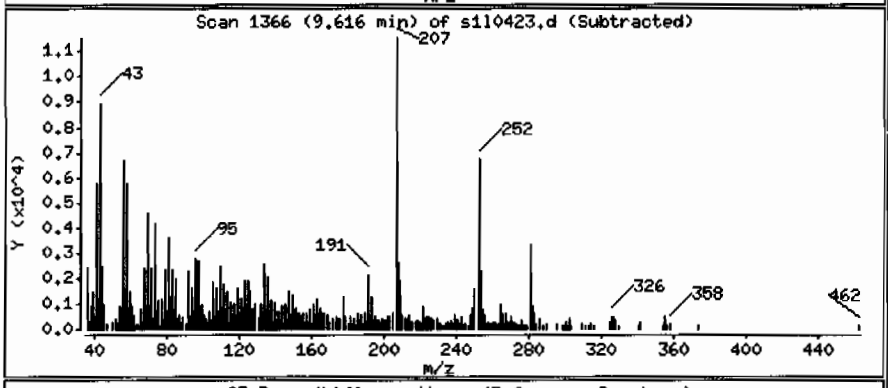

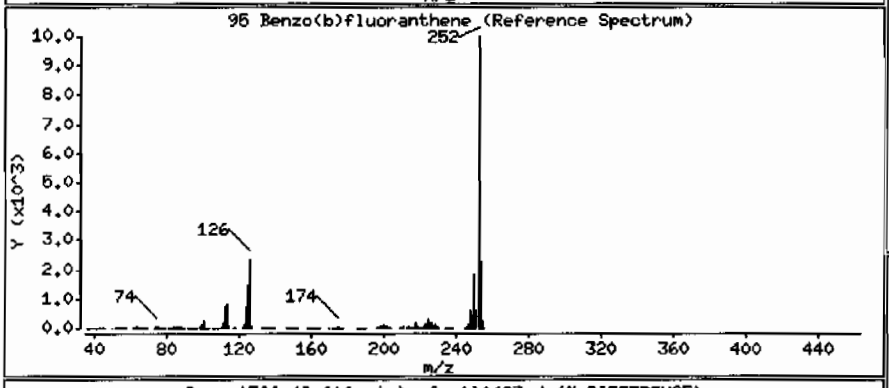

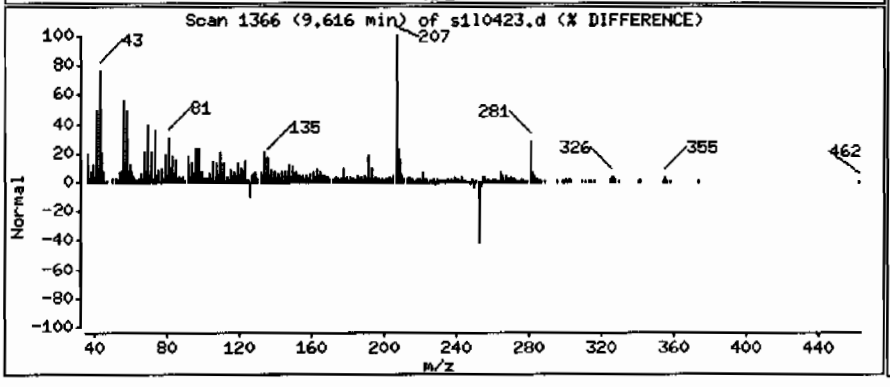

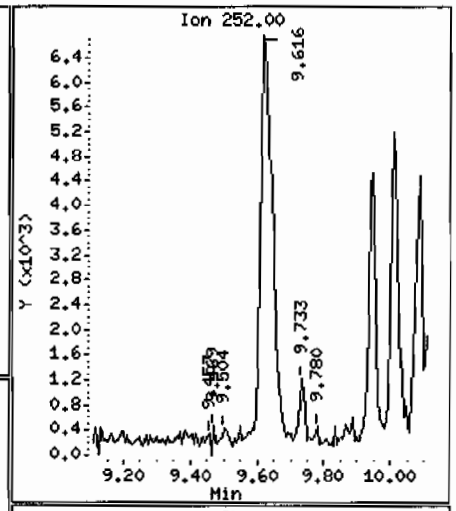

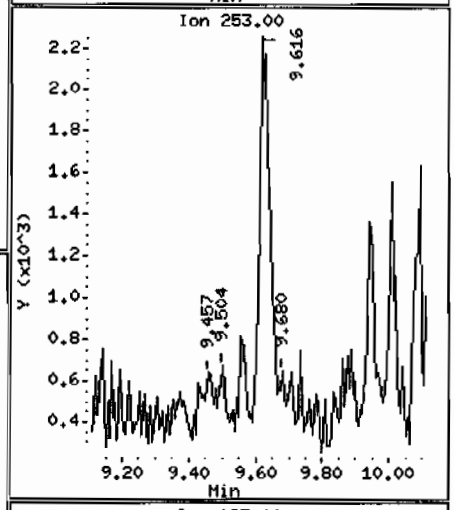

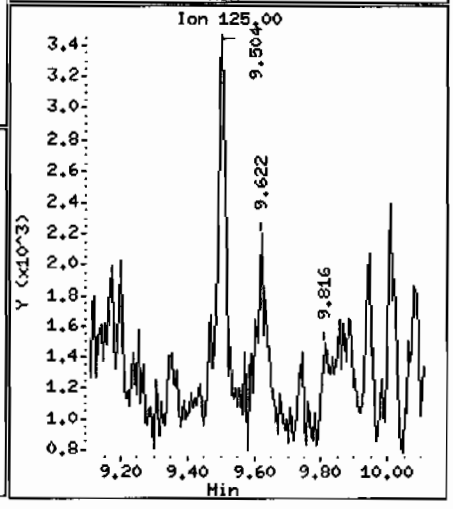

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: 1241540015192661011SVMF11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dichloroacetaldehyde	79-02-7	NIST05.L	6013	43	C2H2Cl2O	112
Methylene Chloride	75-09-2	NIST05.L	1499	38	CH2Cl2	84
Acetic acid, bromochloro-	5589-96-8	NIST05.L	37900	9	C2H2BrClO2	172

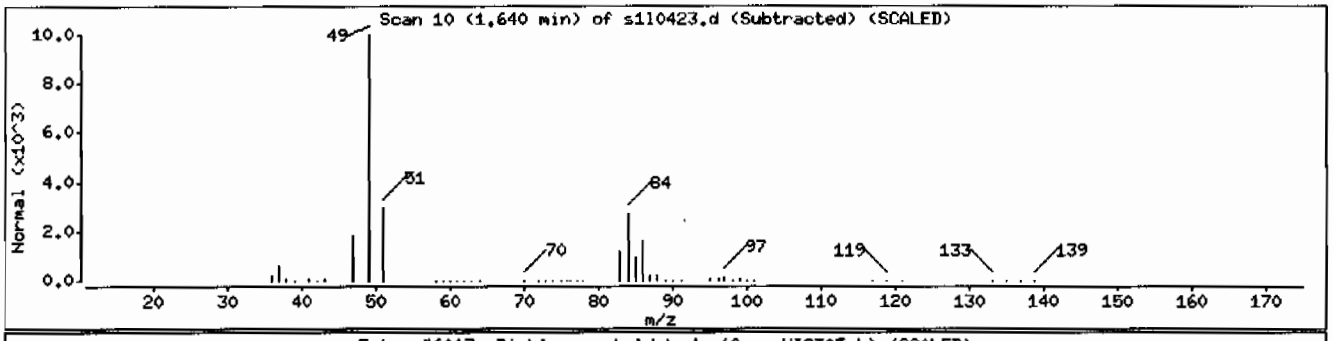

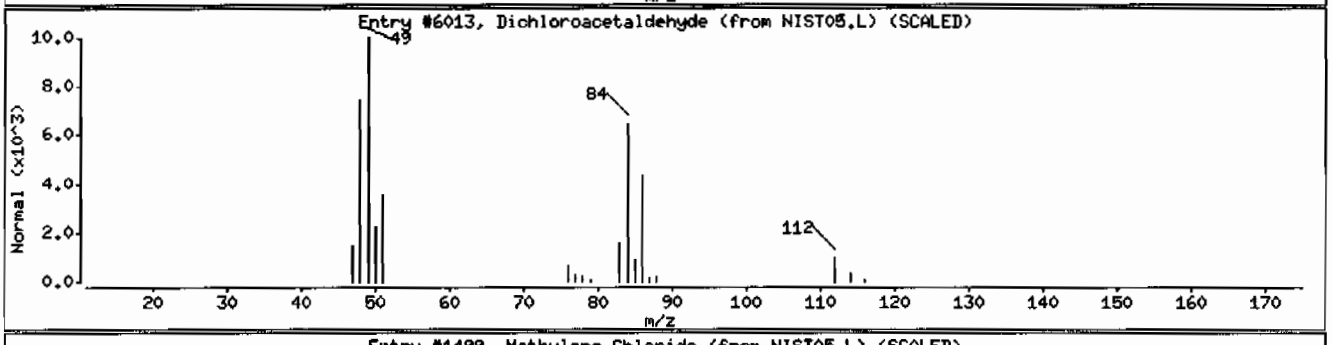

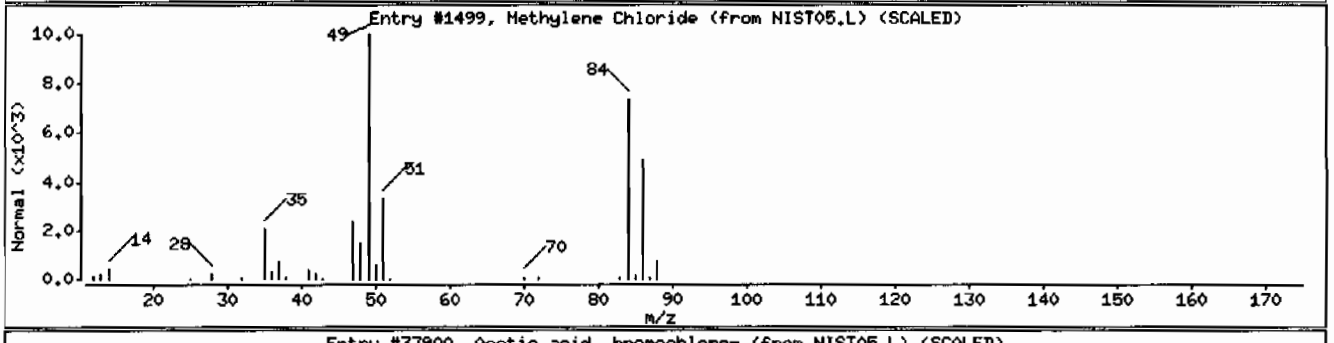

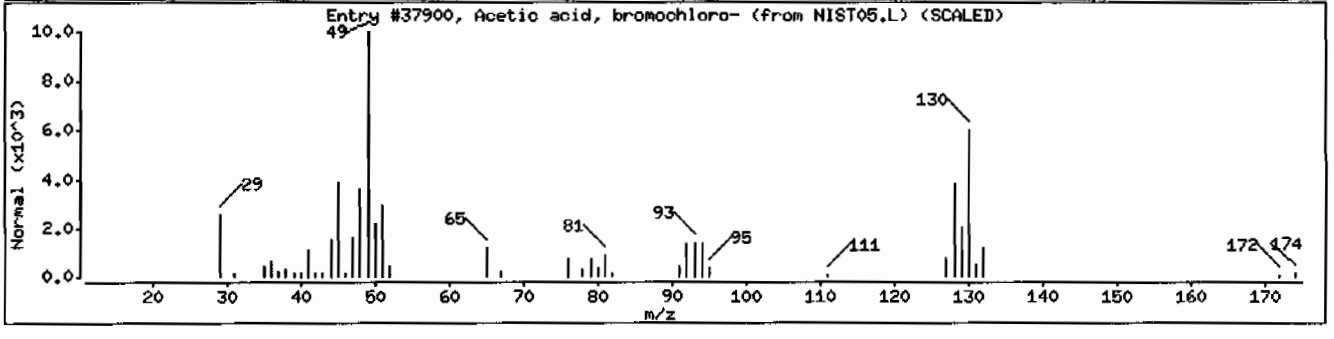

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: 1241540015|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	59	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2098	17	C5H12O	88

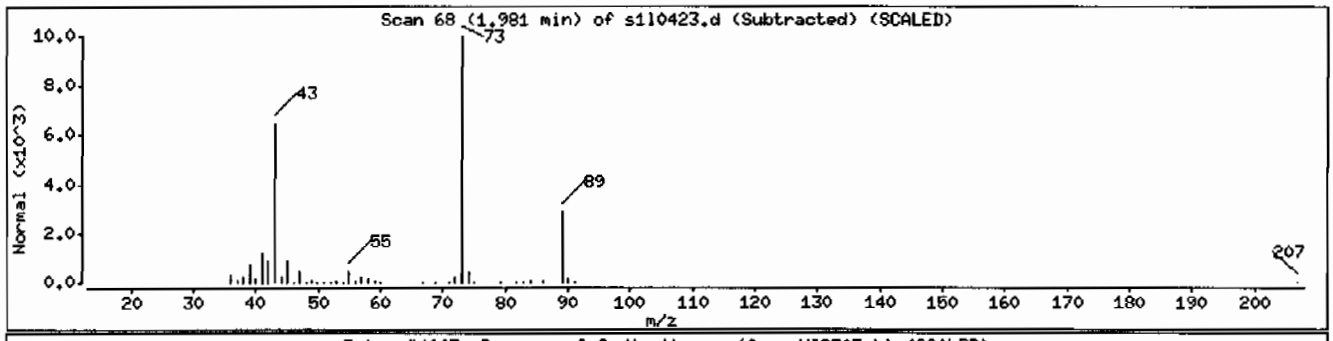

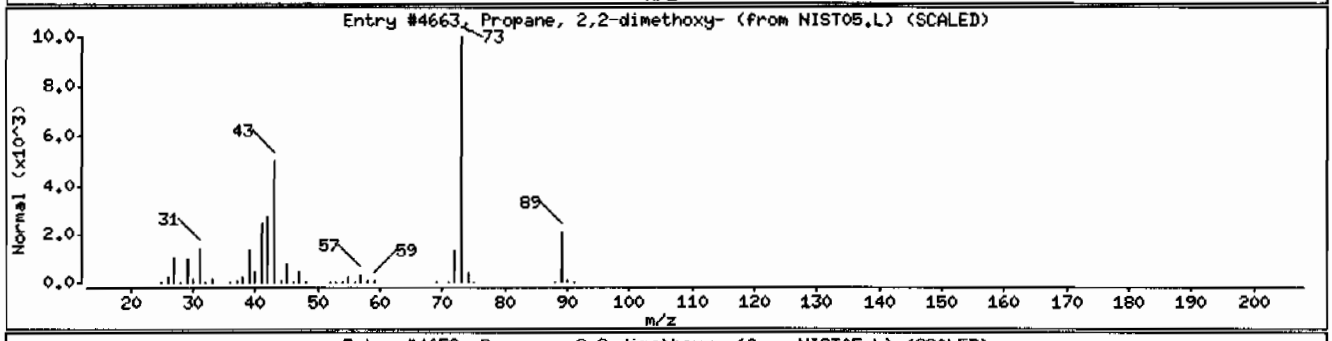

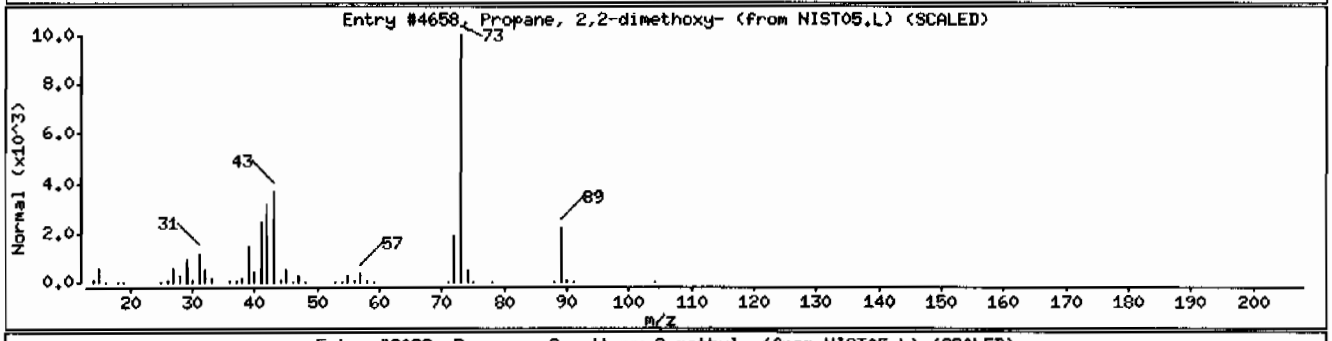

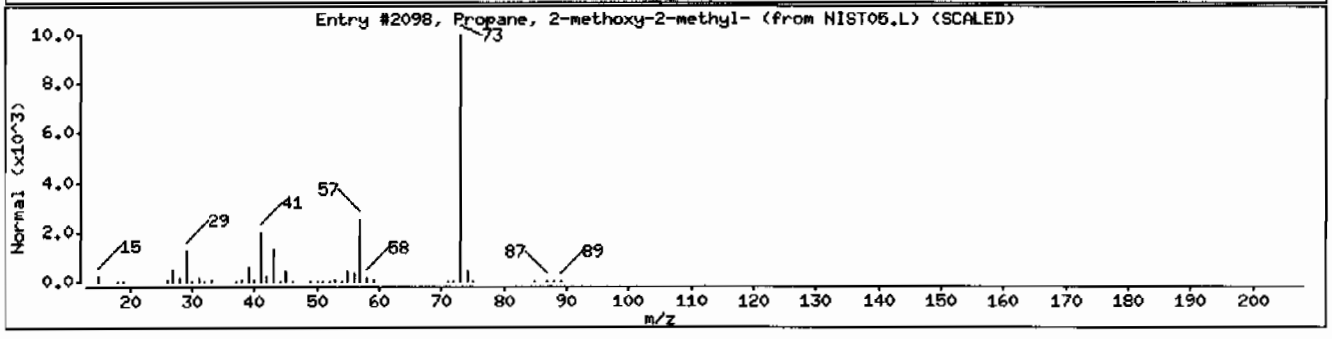

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: |2415400151926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

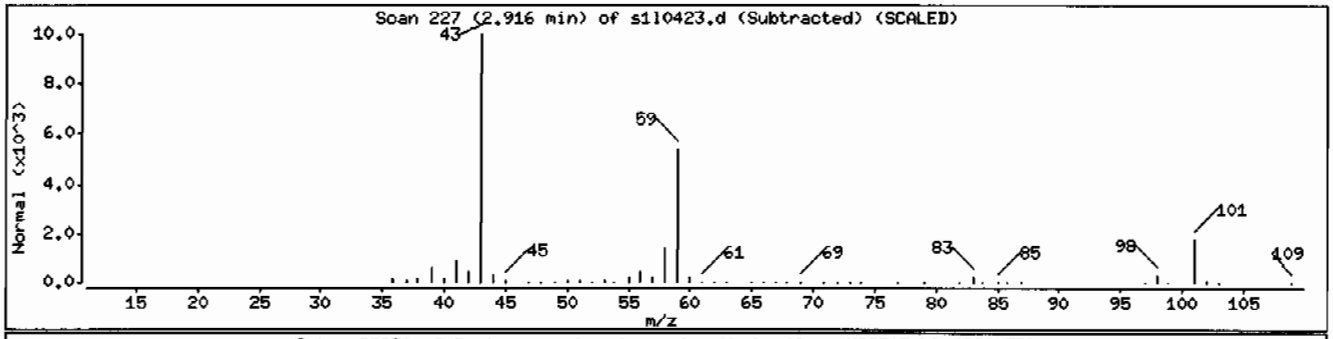

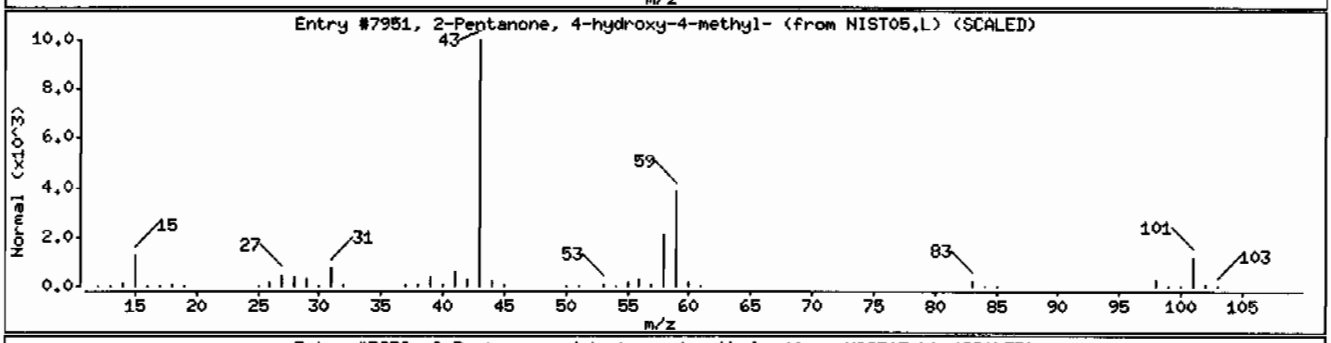

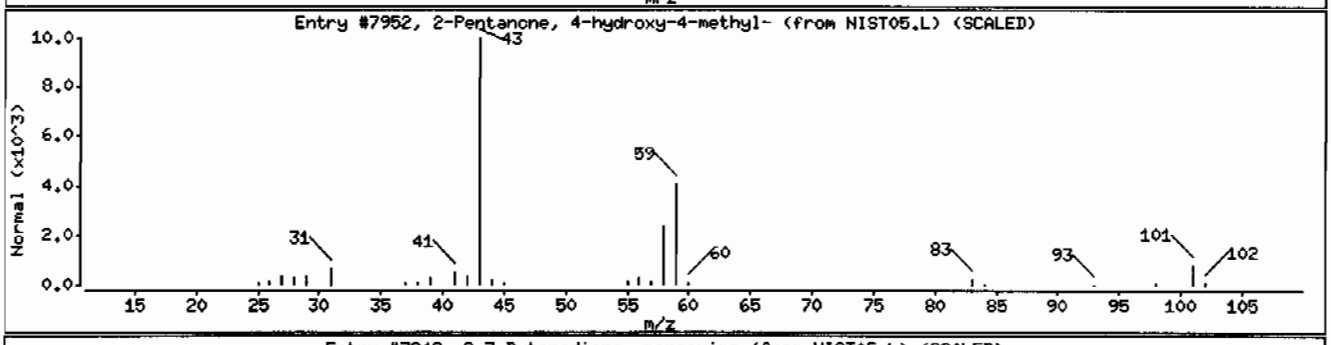

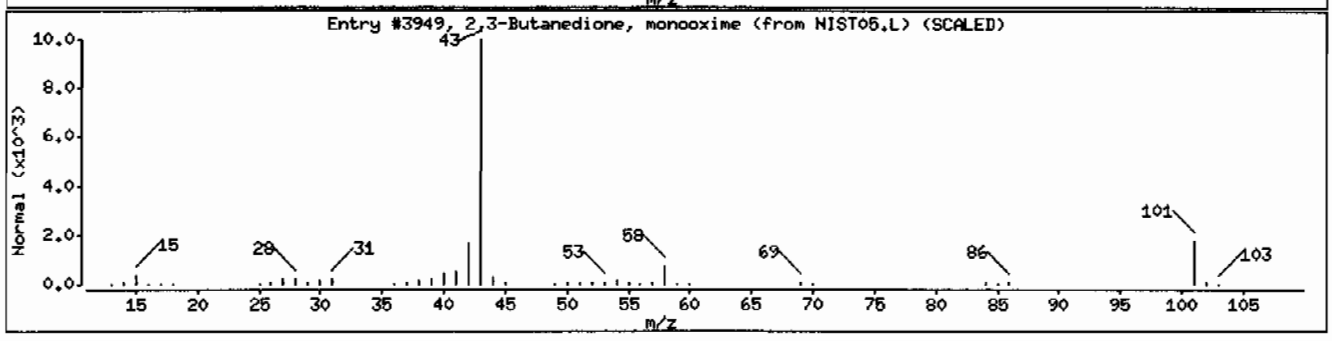

Data File: /chem/HSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876 Instrument: HSD1.i

Sample Info: |2415400151926610111SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	98	C15H24	204

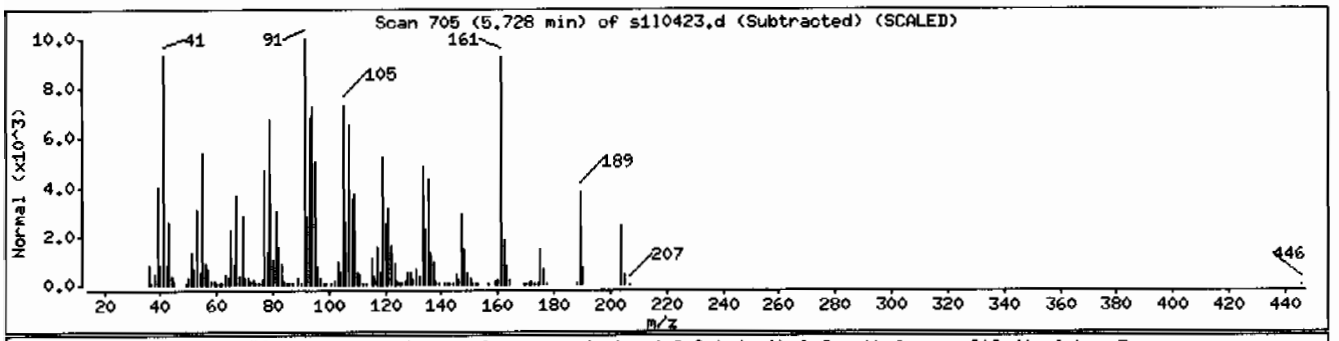

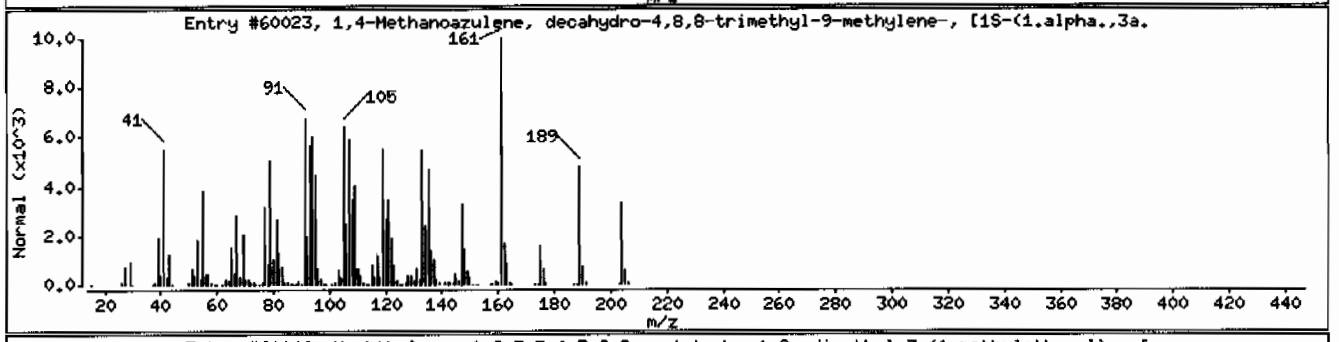

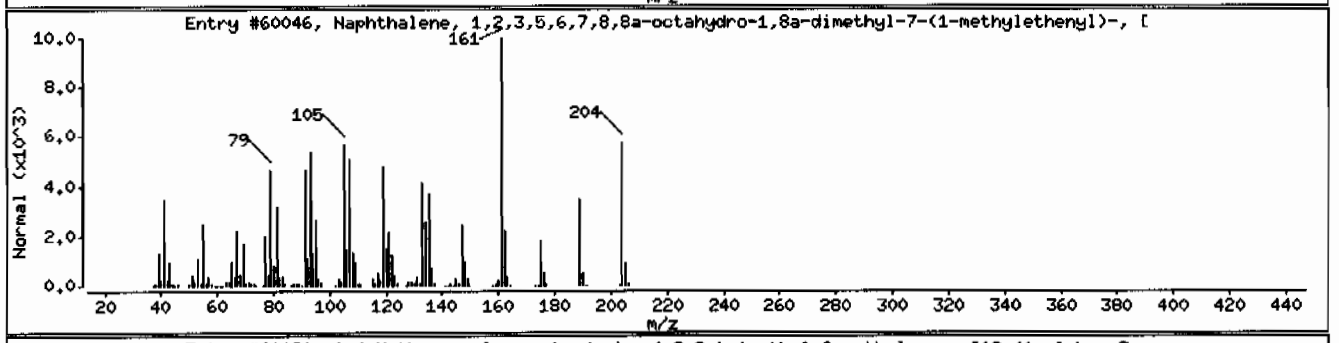

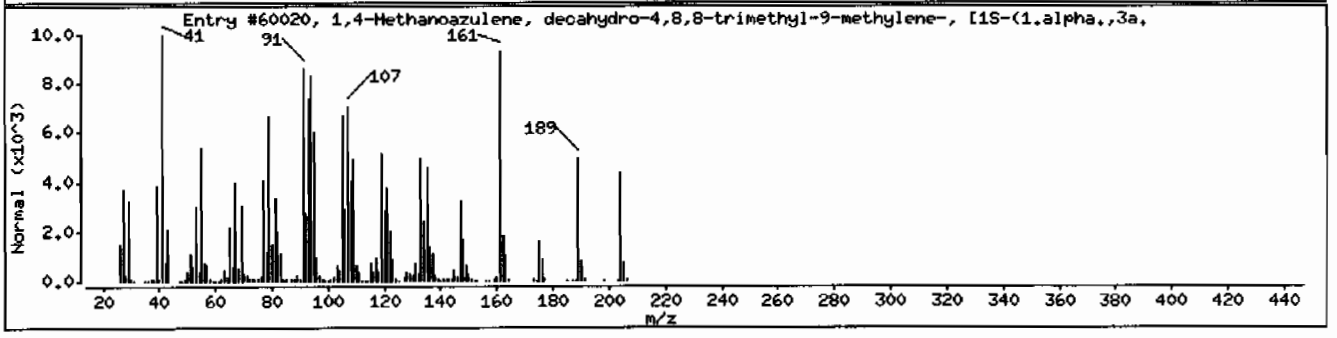

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: |2415400151926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3,3-Trimethyl-2-hydroxymethyl-3,3-dime	1000144-10-7	NIST05.L	72990	41	C15H26O	222
7,8-Dibromo-4,4,7-trimethyl-hexahydro-be	1000189-57-7	NIST05.L	154149	38	C11H16Br2O3	354
2-Octene, 2-methyl-6-methylene-	10054-09-8	NIST05.L	16350	38	C10H18	138

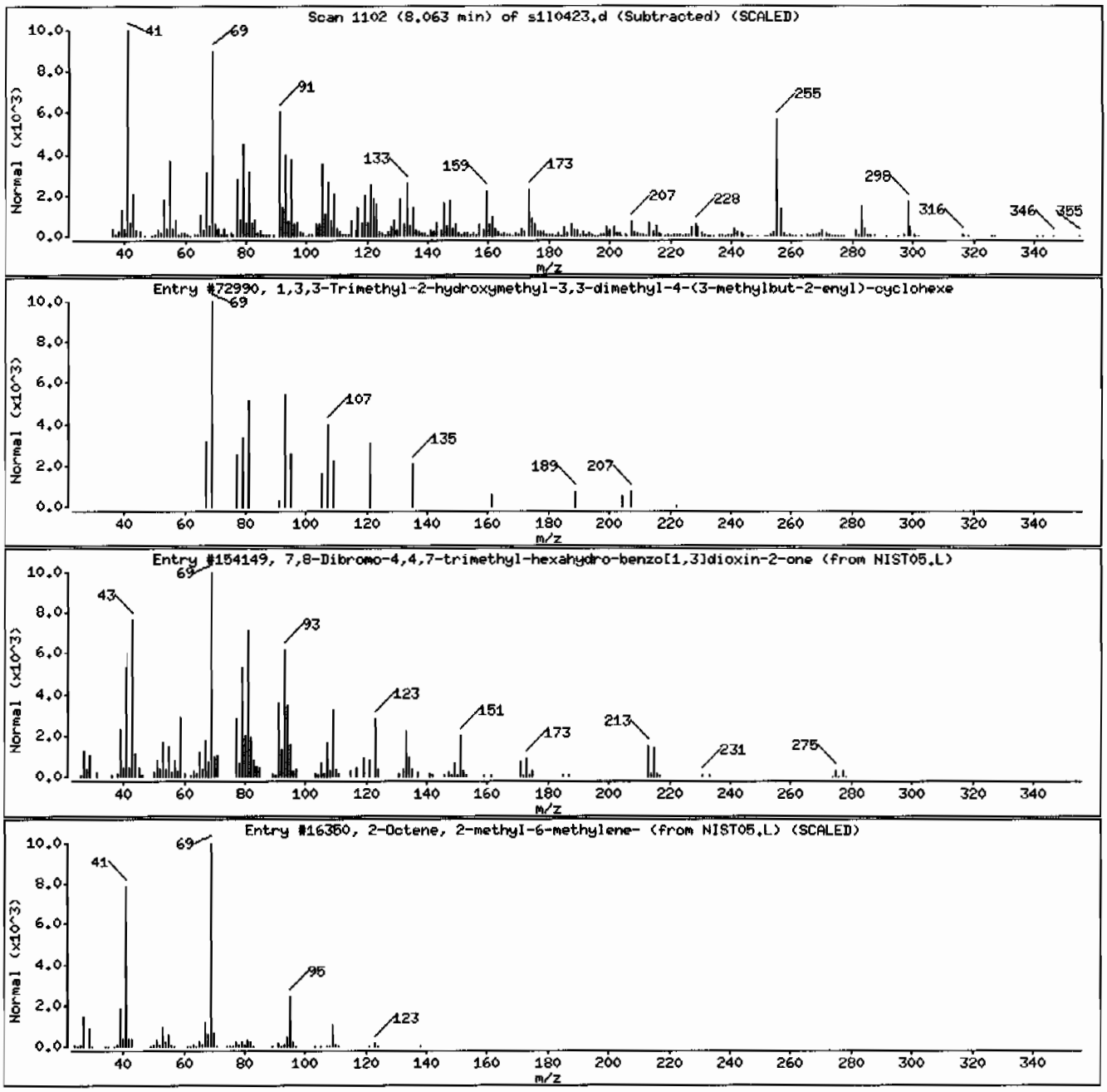

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876 Instrument: MSD1.i

Sample Info: |24154001519266101|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.alpha.-[4-(Adamantyl-1)phenyl]propionic	1000140-75-3	NIST05.L	114901	44	C19H2402	284
1-Naphthalenecarboxylic acid, 2-methoxy-	947-62-6	NIST05.L	58305	44	C12H1003	202
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	41	C12H14N2O	202

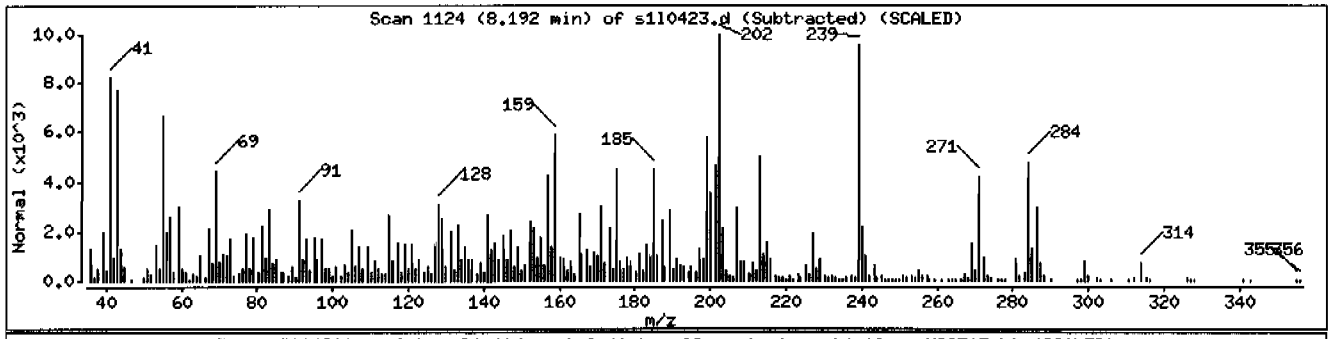

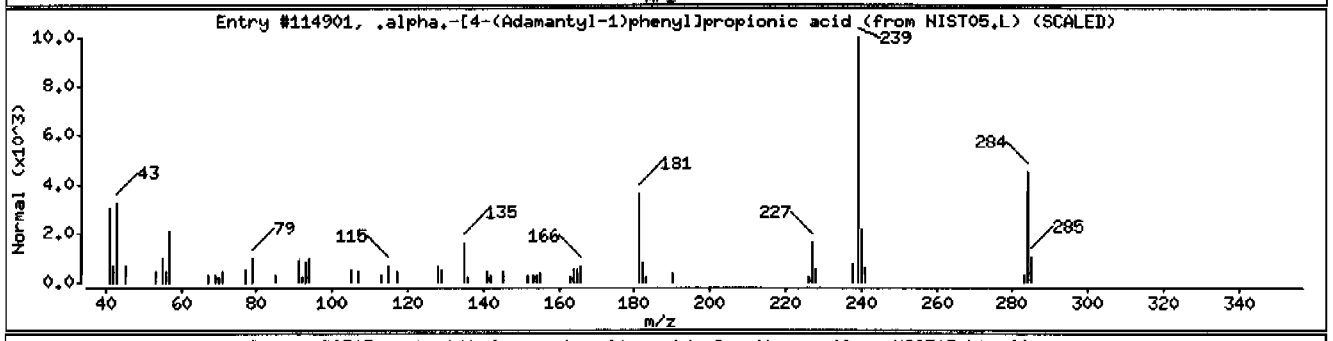

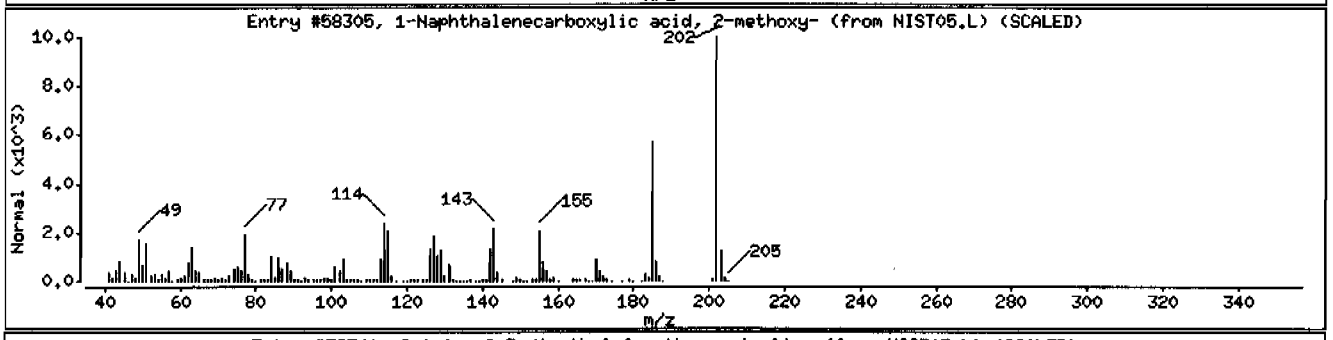

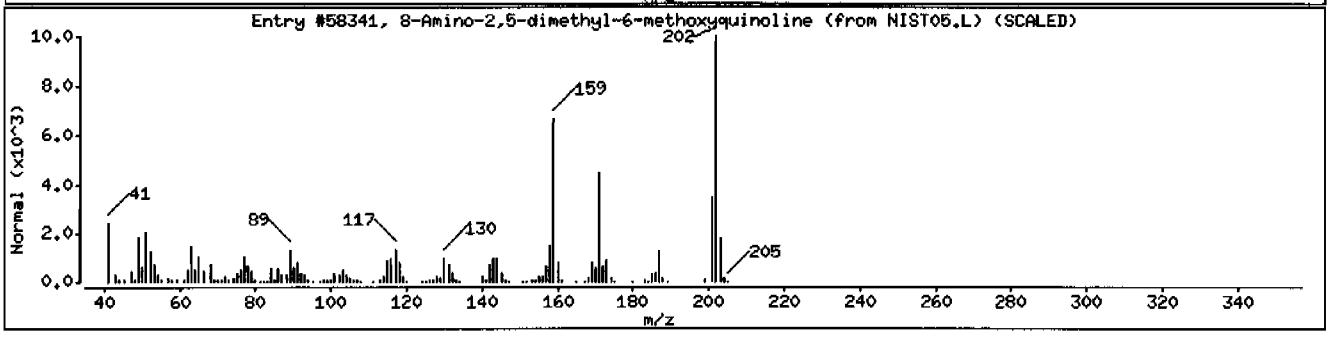

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: |2415400151926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Benzylamino-as-triazino(6,5-c)quinolin	81547-18-4	NIST05.L	116615	25	C17H13N5	287
Andrographolide	5508-58-7	NIST05.L	152634	15	C20H30O5	350
Pregnan-20-one, (5.alpha.)-	848-62-4	NIST05.L	126216	11	C21H340	302

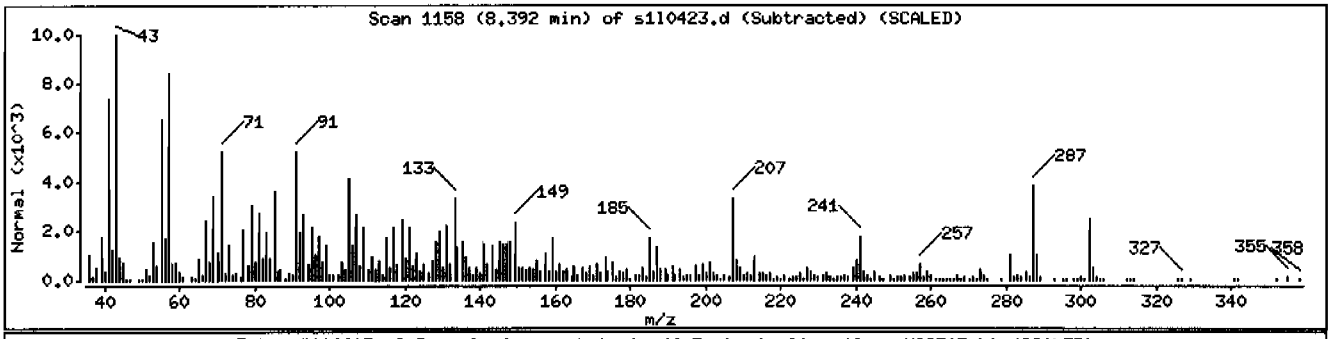

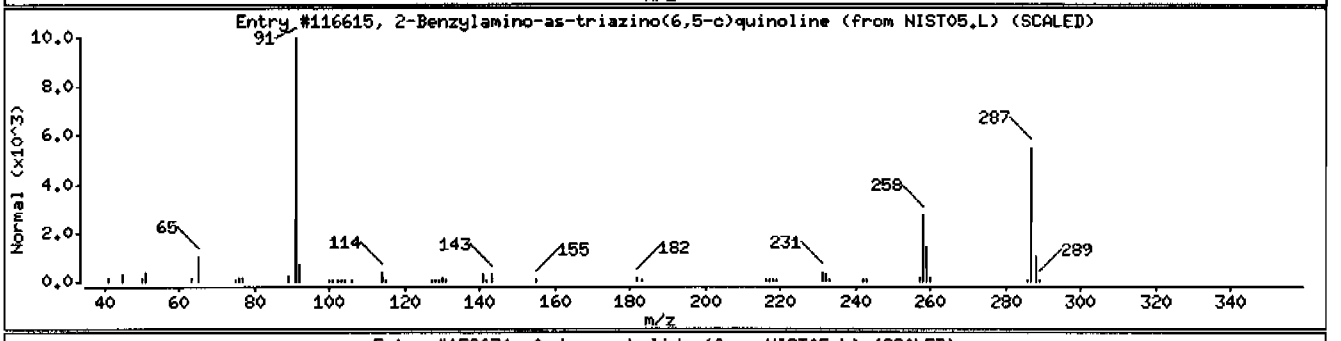

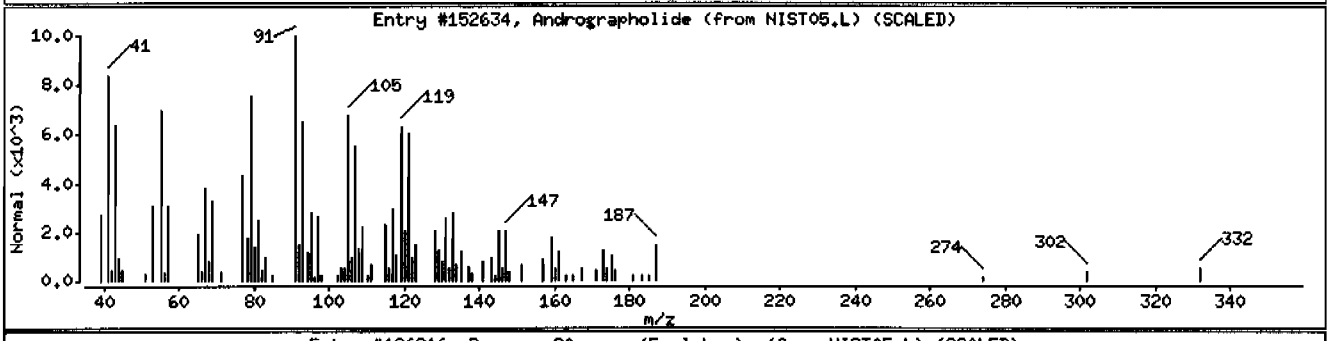

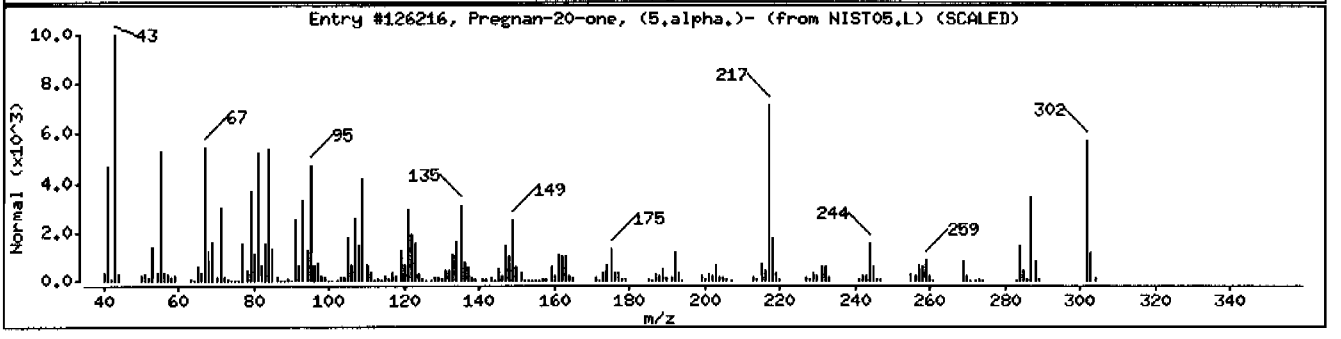

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876 Instrument: MSD1.i

Sample Info: |2415400151926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Docosane	629-97-0	NIST05.L	131155	96	C22H46	310
Heptadecane, 2,6,10,15-tetramethyl-	54833-48-6	NIST05.L	122447	96	C21H44	296

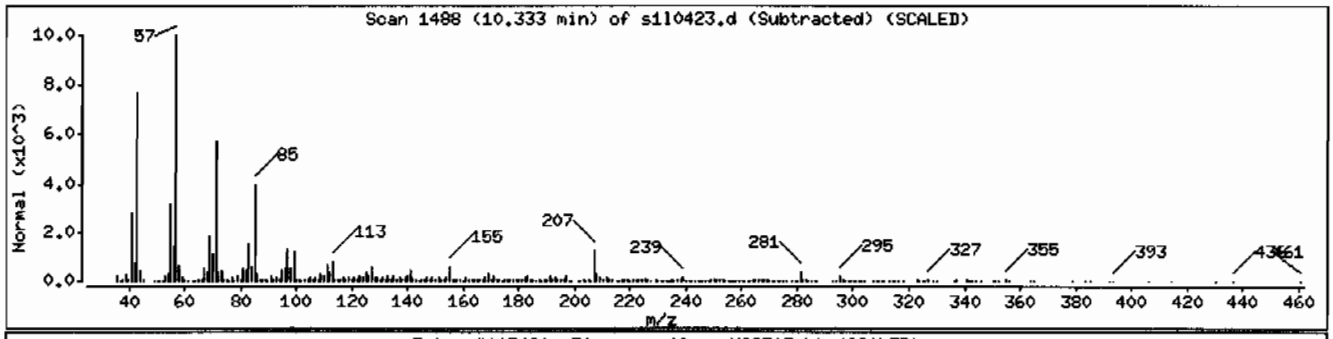

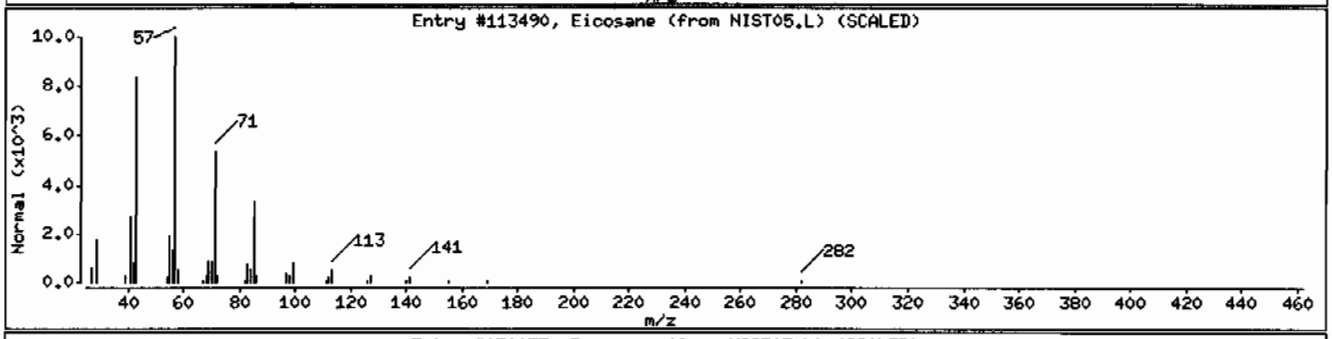

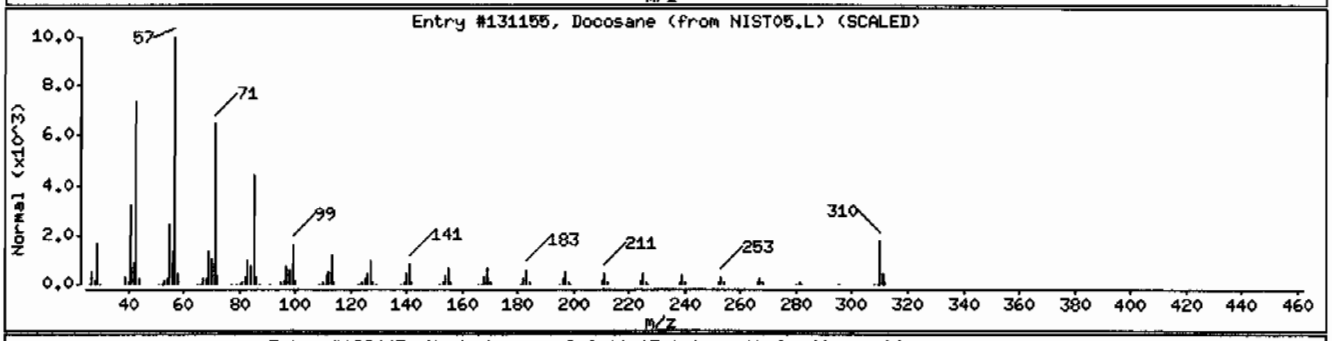

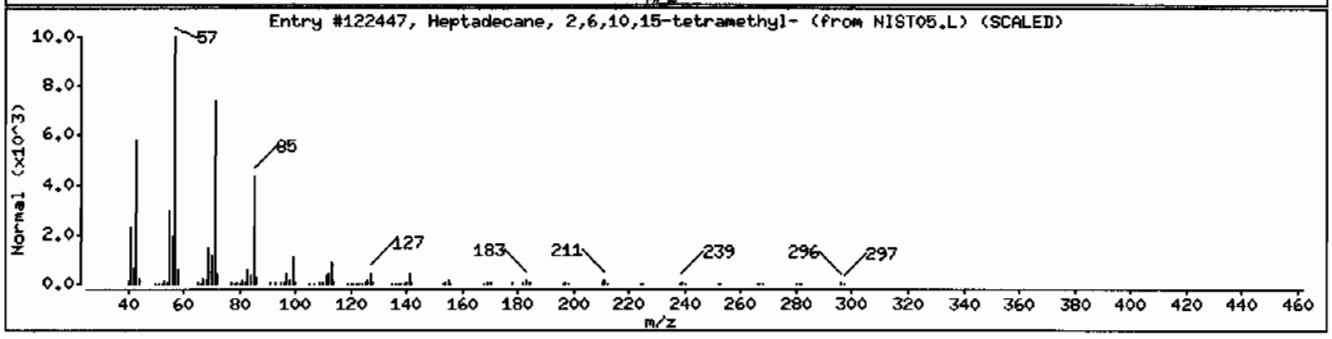

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: |24154001519266101|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Octadecene, (E)-	7206-21-5	NIST05.L	93546	78	C18H36	252
1-Pentadecene	13360-61-7	NIST05.L	64457	78	C15H30	210
Cyclohexane, 1,1'-(2-methyl-1,3-propaned	2883-08-1	NIST05.L	73082	64	C16H30	222

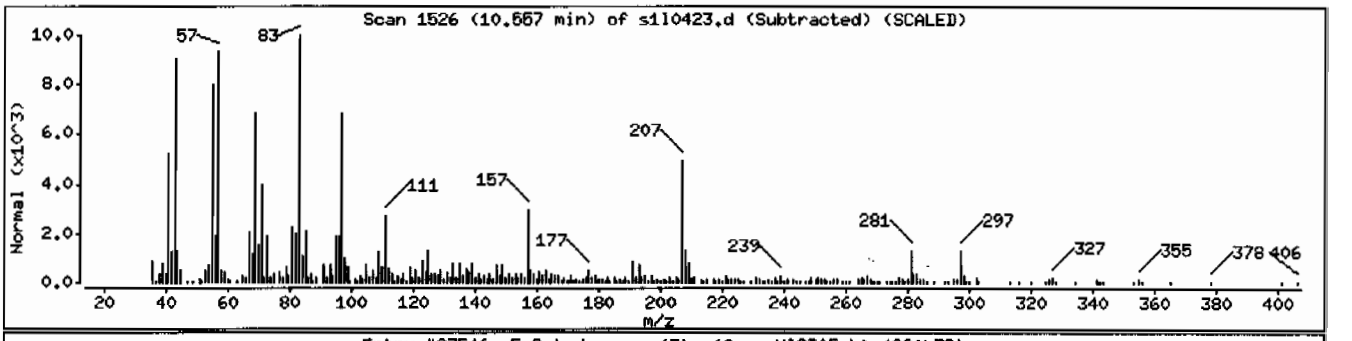

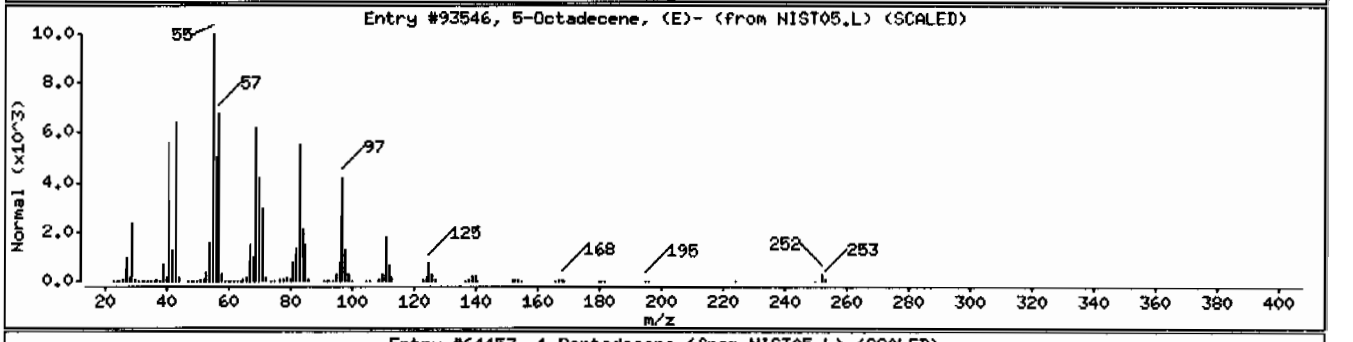

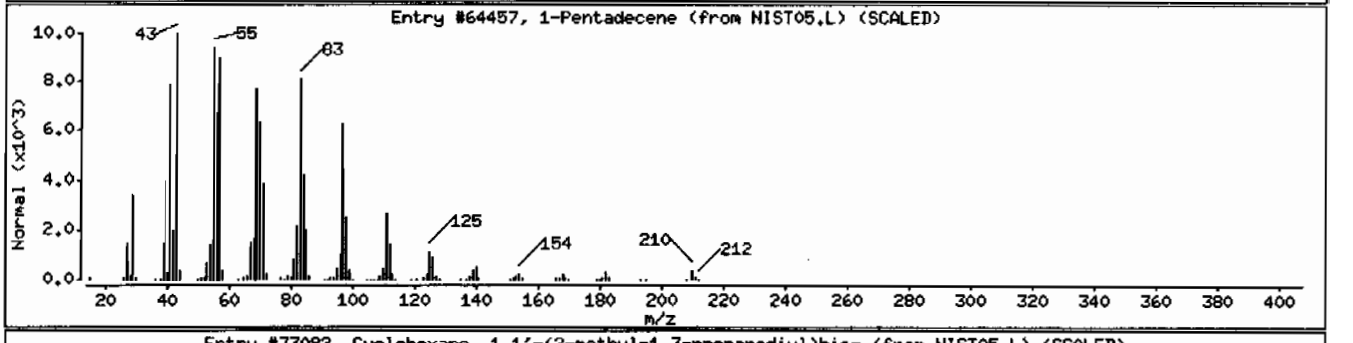

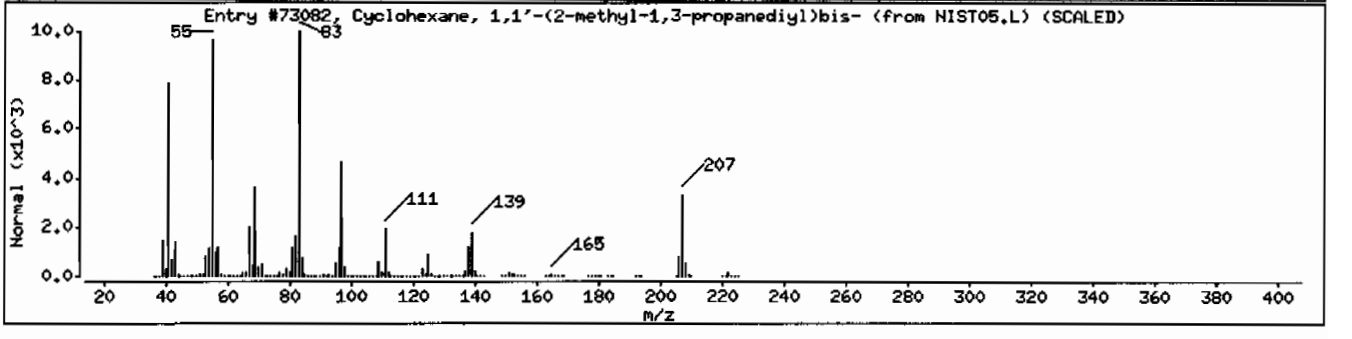

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876 Instrument: MSD1.i

Sample Info: |2415400151926610111SVMF11|LANL

Volume Injected (uL): 0.5 Operator: nagl

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricosane	638-67-5	NIST05.L	139233	97	C23H48	324
Nonadecane	629-92-5	NIST05.L	104270	95	C19H40	268
Heptacosane	593-49-7	NIST05.L	165301	95	C27H56	380

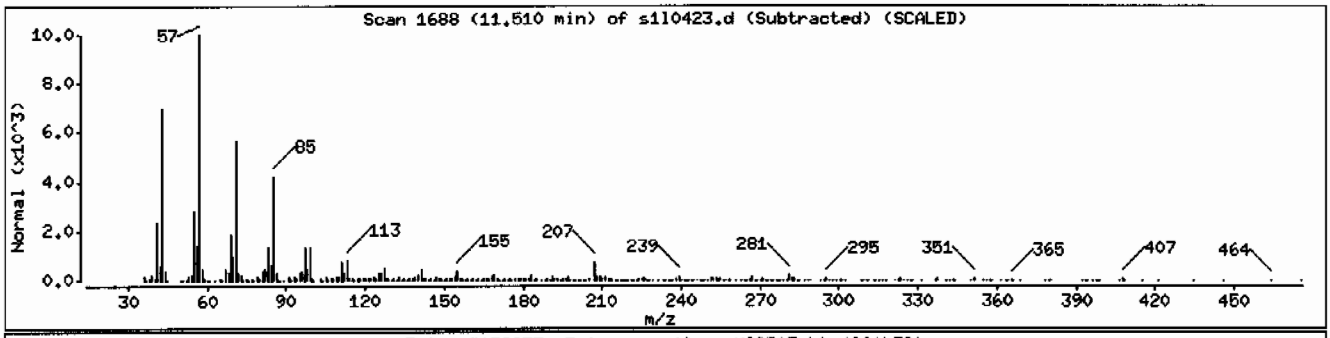

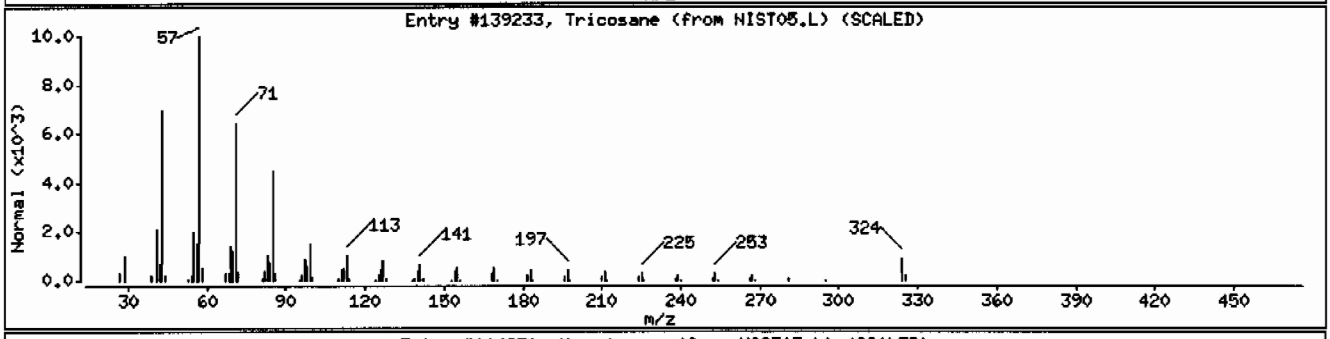

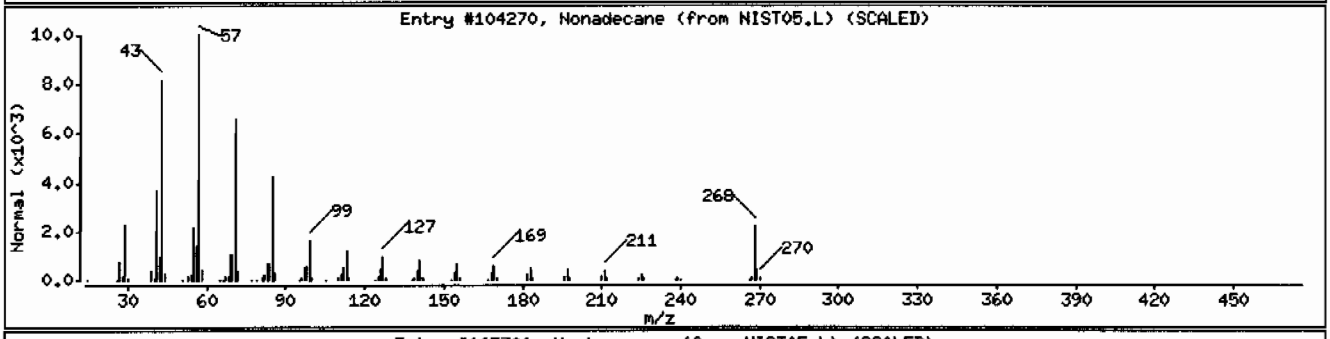

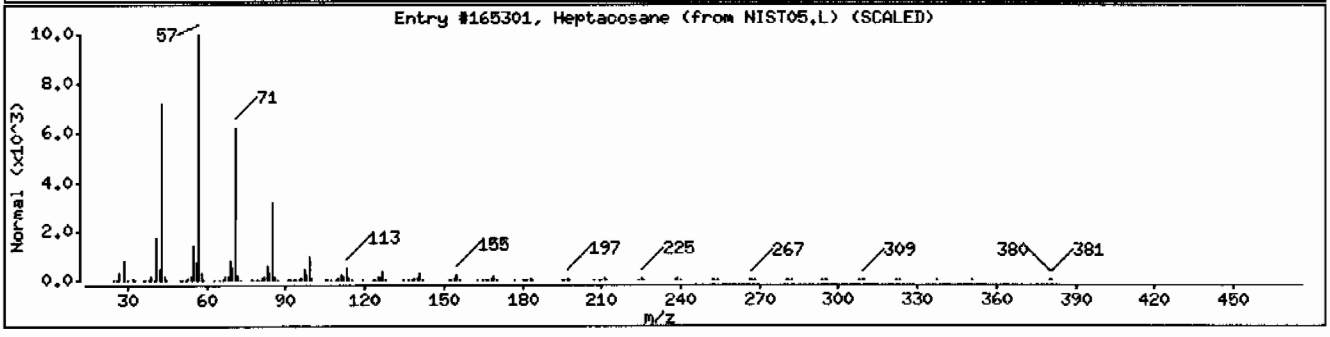

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: |2415400151926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	56	C13H10F3N3O	281
Lanosterol	79-63-0	NIST05.L	176558	52	C30H50O	426
Farnesyl bromide	6874-67-5	NIST05.L	114486	30	C15H25Br	284

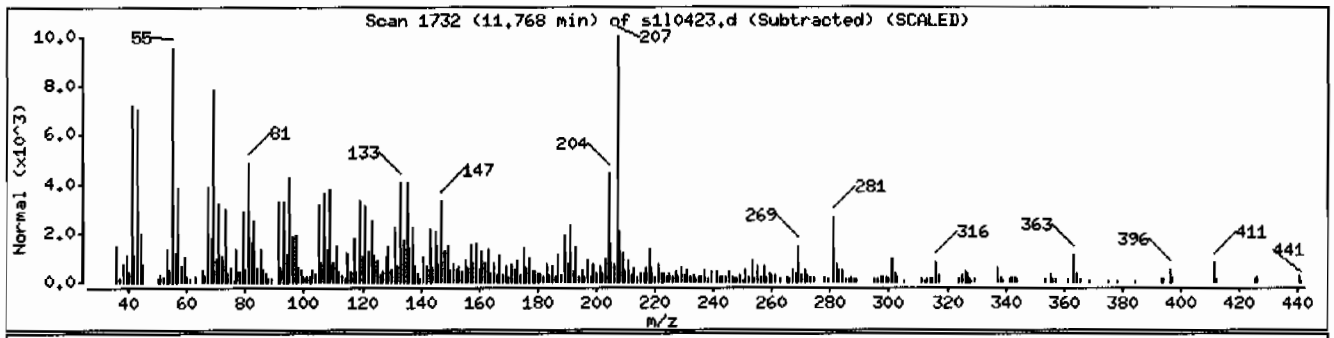

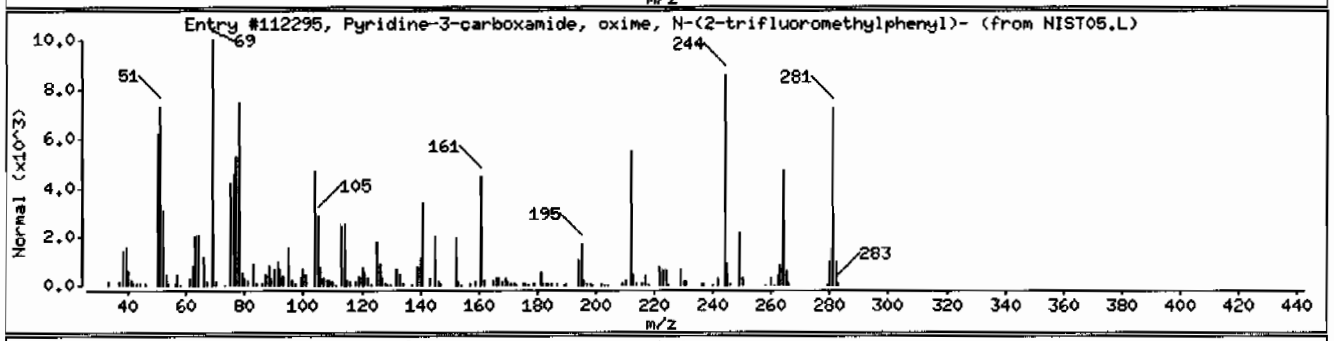

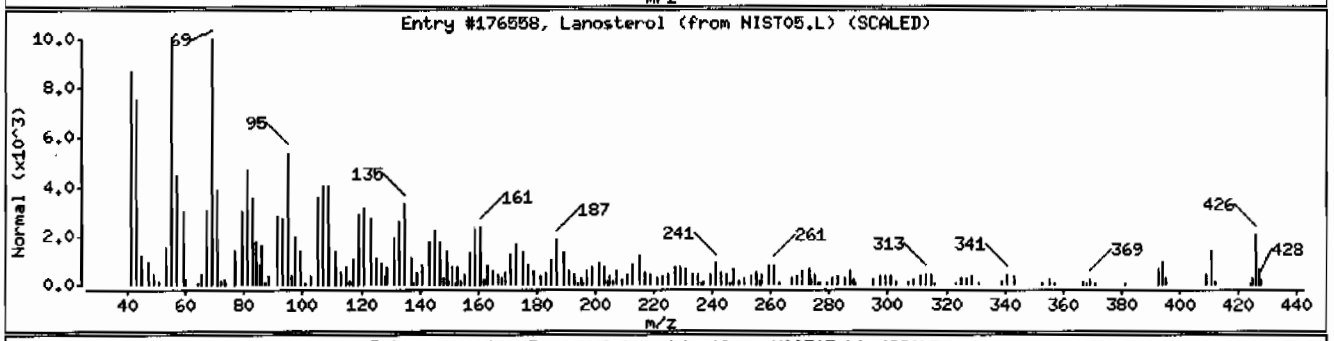

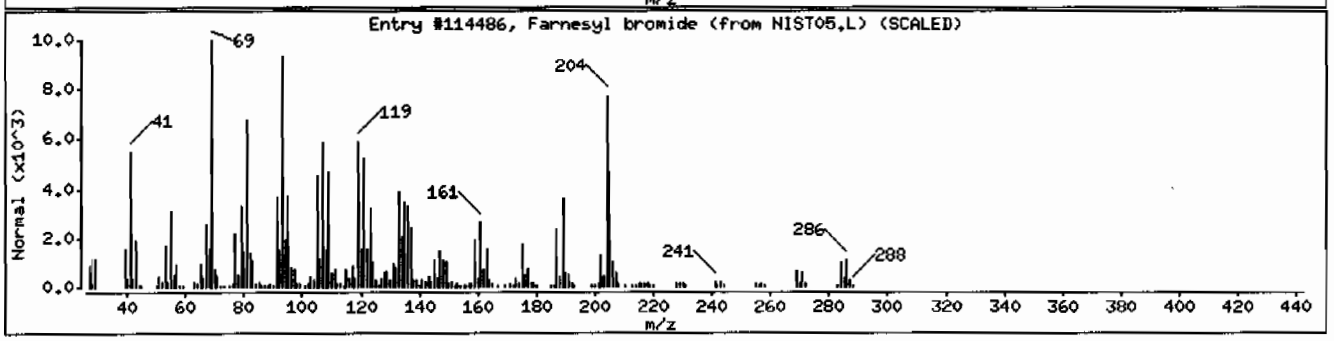

Data File: /chem/MSD1.i/s120409.b/s110423.d

Date : 04-DEC-2009 17:18

Client ID: RE03-09-13876

Instrument: MSD1.i

Sample Info: 1241540015|926610|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,4a,5,8a-Tetramethyl-1,2,3,4,4a,7,8,8a-	20558-22-9	NIST05.L	62979	38	C14H24O	208
2-Butenenitrile, 2-chloro-3-(4-methoxyph	1000305-66-7	NIST05.L	61953	30	C11H10ClNO	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	30	C15H13N	207

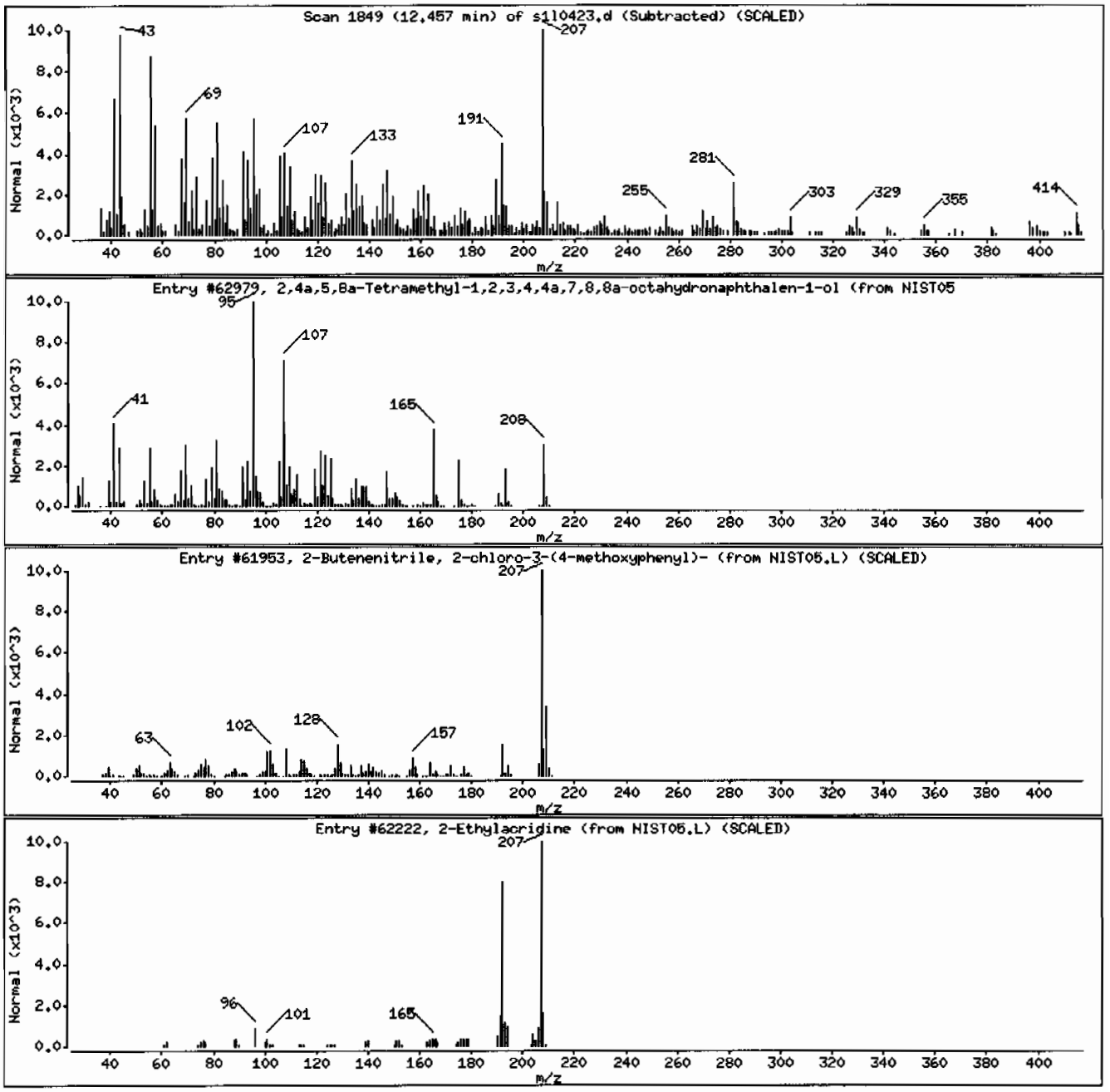

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13877**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 12:48**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0710.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.3	372
108-95-2	Phenol	U	372	ug/kg	74.3	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.3	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.3	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.3	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.3	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	92.9	372
129-00-0	Pyrene	U	37.2	ug/kg	11.1	37.2
110-86-1	Pyridine	U	372	ug/kg	74.3	372
62-53-3	Aniline	U	372	ug/kg	111	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.3	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.3	372
100-51-6	Benzyl alcohol	U	372	ug/kg	111	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.3	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.3	372
95-48-7	o-Cresol	U	372	ug/kg	74.3	372
65794-96-9	m,p-Cresols	U	372	ug/kg	111	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.3	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.3	372
78-59-1	Isophorone	U	372	ug/kg	74.3	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.3	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.3	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.3	372
65-85-0	Benzoic acid	U	743	ug/kg	186	743
91-20-3	Naphthalene	U	37.2	ug/kg	11.1	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.3	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.3	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.43	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.3	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.3	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.3	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline	U	372	ug/kg	74.3	372
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	372	ug/kg	74.3	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13877**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 12:48**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s110710.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.3	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.1	37.2
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	372	ug/kg	74.3	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.3	372
86-73-7	Fluorene	U	37.2	ug/kg	11.1	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.3	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.3	372
100-01-6	4-Nitroaniline	U	372	ug/kg	111	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.3	372
122-66-7	Azobenzene	U	372	ug/kg	74.3	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.3	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.3	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.1	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.43	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.3	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.1	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.3	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.1	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	111	372
218-01-9	Chrysene	U	37.2	ug/kg	11.1	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.3	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.3	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.1	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.1	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.1	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.1	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.1	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.1	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.3	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.68	163	ug/kg		J
	Unknown	1.91	527	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540007	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13877	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/07/2009 12:48	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110710.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.8	462	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.59	194	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	7.12	90.6	ug/kg	98	NJ
112-79-8	9-Octadecenoic acid, (E)-	7.53	84.9	ug/kg	97	NJ
57-11-4	Octadecanoic acid	7.57	98.9	ug/kg	96	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.03	326	ug/kg	98	NJ
	Unknown	8.05	482	ug/kg		J
	Unknown	8.07	198	ug/kg		J
	Unknown	8.25	156	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.29	182	ug/kg	94	NJ
514-10-3	Abietic acid	8.43	162	ug/kg	97	NJ
	Unknown	10.19	158	ug/kg		J
112-95-8	Eicosane	11.13	154	ug/kg	97	NJ
	Unknown	11.39	238	ug/kg		J
	Unknown	12.05	197	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120709.b/s110710.d
Lab Smp Id: 241540007 Client Smp ID: RE03-09-13877
Inj Date : 07-DEC-2009 12:48
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540007|926610|1|SVMF|1|LANLRR
Misc Info : |MSD8270_S|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120709.b/MSD1-M8270AQA-111409.m
Meth Date : 08-Dec-2009 08:39 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	10.30460	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.757	3.763	(1.000)	556487	40.0000	
* 29 Naphthalene-d8	136	4.616	4.622	(1.000)	2152921	40.0000	
* 46 Acenaphthene-d10	164	5.863	5.869	(1.000)	1194159	40.0000	
* 67 Phenanthrene-d10	188	6.857	6.857	(1.000)	2106092	40.0000	(H)
* 91 Chrysene-d12	240	8.481	8.486	(1.000)	1887447	40.0000	
* 98 Perylene-d12	264	9.828	9.833	(1.000)	1666717	40.0000	
$ 3 2-Fluorophenol	112	2.969	2.963	(0.790)	931400	64.0788	2380
$ 5 Phenol-d5	99	3.493	3.493	(0.930)	1168631	66.1508	2460
$ 20 Nitrobenzene-d5	82	4.122	4.128	(0.893)	497054	35.0335	1300 (H)
$ 39 2-Fluorobiphenyl	172	5.357	5.363	(0.914)	1106270	38.6807	1440
$ 60 2,4,6-Tribromophenol	329	6.404	6.404	(1.092)	304472	91.3091	3390
$ 81 p-Terphenyl-d14	244	7.775	7.775	(0.917)	1379619	46.5663	1730

QC Flag Legend

H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s110710.d
Report Date: 12/08/2009 08:31
Lab. ID: 241540007 SampleType: SAMPLE
Injection Date: 07-DEC-2009 12:48
Operator: AMY Instrument: MSD1.i
Sample Info: |241540007|926610|1|SVMF|1|LANLRR
Miscellaneous Info: |MSD8270_S|WBN091128-02|
Comment:
Method used: /chem/MSD1.i/s120709.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-604
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	58697	3.49	3.57	80-120	100	(T)
93	4023	3.53	3.57	197-257	7	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	69307	4.12	4.02	80-120	100	(T)
42	41840	4.12	4.02	42-102	60	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	211805	5.86	5.66	80-120	100	(T)
164	1194159	5.86	5.66	0- 40	564	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	154200	5.86	5.72	80-120	100	(T)
63	2045	5.86	5.72	45-105	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	154200	5.86	6.00	80-120	100	(T)
89	1802	5.86	6.00	35- 95	1	(QT)
63	2045	5.86	6.00	16- 76	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	18404	6.40	6.26	80-120	100	(T)
165	19423	6.40	6.26	64-124	106	(T)
167	6049	6.40	6.26	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	693	6.40	6.29	80-120	100	(T)
105	1754	6.40	6.28	11- 71	253	(QT)
51	1793	6.40	6.28	33- 93	259	(QT)
133 Diphenylamine				CAS#: 122-39-4		
169	11035	6.40	6.32	80-120	100	(T)
168	896	6.40	6.32	33- 93	8	(QT)
167	6049	6.40	6.32	3- 63	55	(T)
58 1,2-Diphenylhydrazine				CAS#: 122-66-7		
77	3982	6.32	6.35	80-120	100	( )
105	4003	6.32	6.35	0- 46	101	(Q)
182	347	6.34	6.35	0- 59	9	( )
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	468	6.43	6.57	80-120	100	(T)
141	2023	6.45	6.57	52-112	432	(QT)
250	342	6.46	6.57	68-128	73	(T)
68 Phenanthrene				CAS#: 85-01-8		
178	432	6.90	6.89	80-120	100	( )
179	239	6.90	6.89	0- 45	55	(Q)
176	666	6.87	6.89	0- 48	154	(Q)
69 Anthracene				CAS#: 120-12-7		
178	432	6.90	6.93	80-120	100	( )
179	262	6.92	6.93	0- 45	61	(Q)
176	666	6.87	6.93	0- 48	154	(Q)
72 Di-n-butylphthalate				CAS#: 84-74-2		
149	5413	7.15	7.17	80-120	100	( )
150	487	7.15	7.17	0- 39	9	( )
104	436	7.15	7.17	0- 35	8	( )
76 Fluoranthene				CAS#: 206-44-0		
202	469	7.62	7.60	80-120	100	( )
203	540	7.62	7.60	0- 47	115	(Q)
101	2151	7.57	7.60	0- 43	458	(Q)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	1674	9.41	9.43	80-120	100	( )
253	1595	9.40	9.43	0- 52	95	(Q)
125	947	9.39	9.43	0- 44	57	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120709.b/s110710.d
Lab Smp Id: 241540007 Client Smp ID: RE03-09-13877
Inj Date : 07-DEC-2009 12:48
Operator : AMY Inst ID: MSD1.i
Smp Info : |241540007|926610|1|SVMF|1|LANLRR
Misc Info : |MSD8270_S|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120709.b/MSD1-M8270AQA-111409.m
Meth Date : 08-Dec-2009 08:39 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	10.30460	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.757	3302799	40.000
* 46 Acenaphthene-d10	5.863	4935930	40.000
* 67 Phenanthrene-d10	6.857	5160910	40.000
* 91 Chrysene-d12	8.481	5076456	40.000
* 98 Perylene-d12	9.828	4599968	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.675	363386	4.40094432	163	0		0	10
Unknown					CAS #:		
1.910	1171185	14.1841484	527	0		0	10
Unknown Aldol Condensate					CAS #:		
2.805	1027399	12.4427666	462	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.593	645647	5.23221736	194	98	NIST05.L	60018	46
n-Hexadecanoic acid					CAS #: 57-10-3		
7.116	314790	2.43980172	90.6	98	NIST05.L	96234	67
9-Octadecenoic acid, (E)-					CAS #: 112-79-8		
7.534	294708	2.28415845	84.8	97	NIST05.L	113363	67
Octadecanoic acid					CAS #: 57-11-4		
7.575	343510	2.66240151	98.9	96	NIST05.L	114820	67
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.028	1112562	8.76644558	326	98	NIST05.L	116239	91
Unknown					CAS #:		
8.045	1646122	12.9706392	482	0		0	91
Unknown					CAS #:		
8.075	675403	5.32184430	198	0		0	91
Unknown					CAS #:		
8.245	534131	4.20869129	156	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
8.292	622304	4.90345145	182	94	NIST05.L	125037	91
Abietic acid					CAS #: 514-10-3		
8.428	553506	4.36135957	162	97	NIST05.L	126141	91
Unknown					CAS #:		
10.192	488975	4.25198879	158	0		0	98
Eicosane					CAS #: 112-95-8		
11.133	476022	4.13934913	154	97	NIST05.L	113489	98

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
11.386	737814	6.41582210	238	0		0	98
Unknown				CAS #:			
12.045	610154	5.30572512	197	0		0	98

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Sample Info: |241540007|926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20

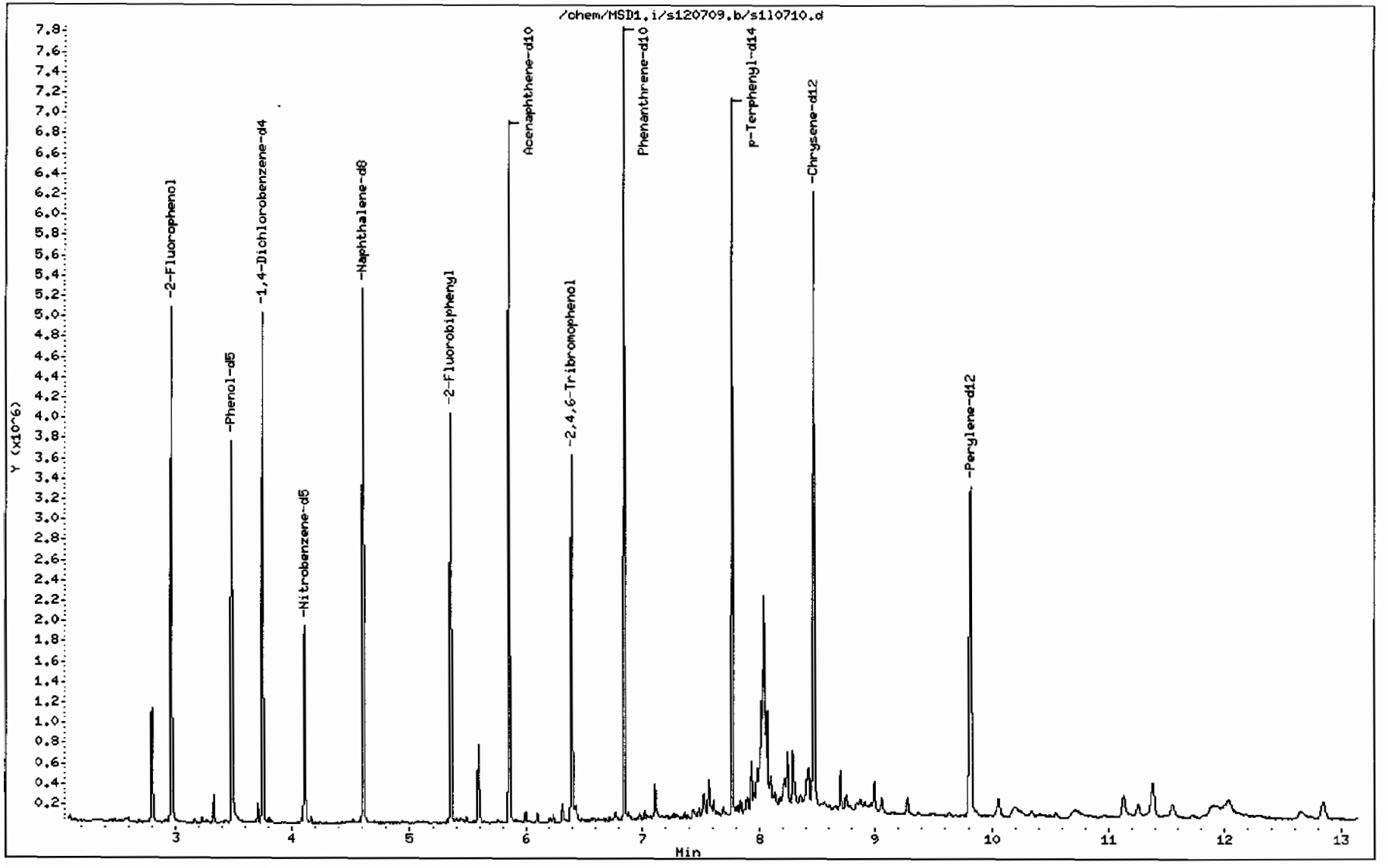

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5,9-Dodecadien-2-one, 6,10-dimethyl-, (E	1000132-10-9	NIST05.L	62957	35	C14H240	208
Propanal, 2-methyl-	78-84-2	NIST05.L	669	32	C4H8O	72
Propanal, 2-methyl-	78-84-2	NIST05.L	671	32	C4H8O	72

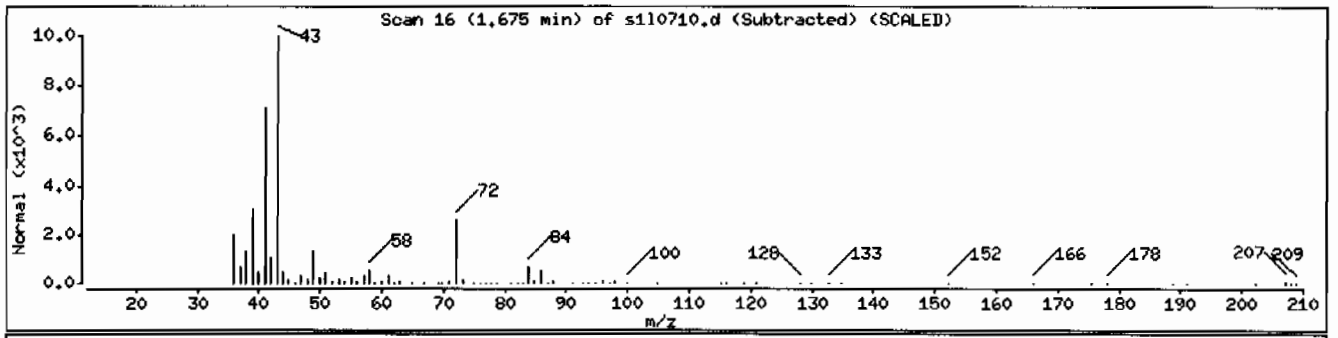

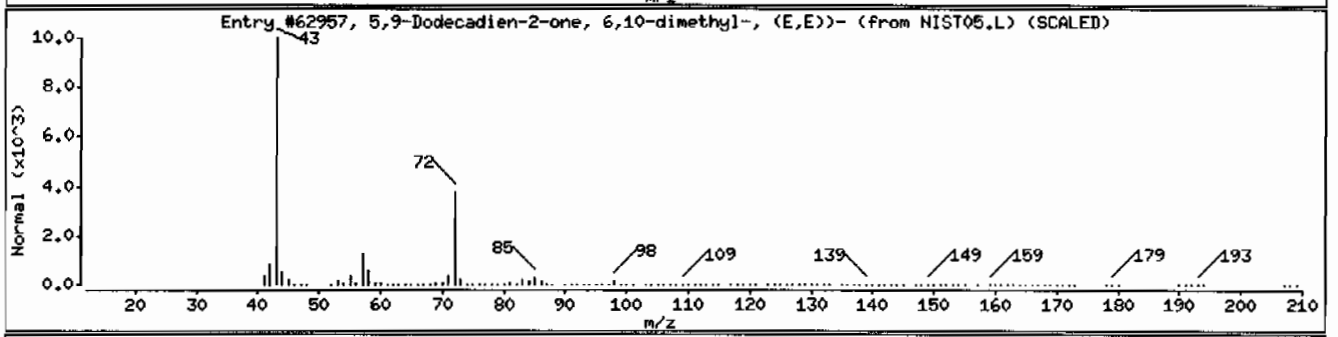

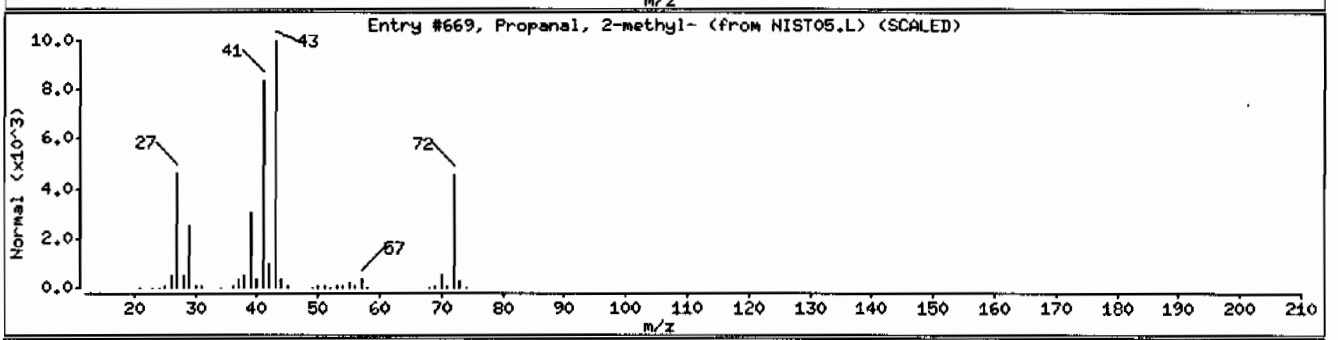

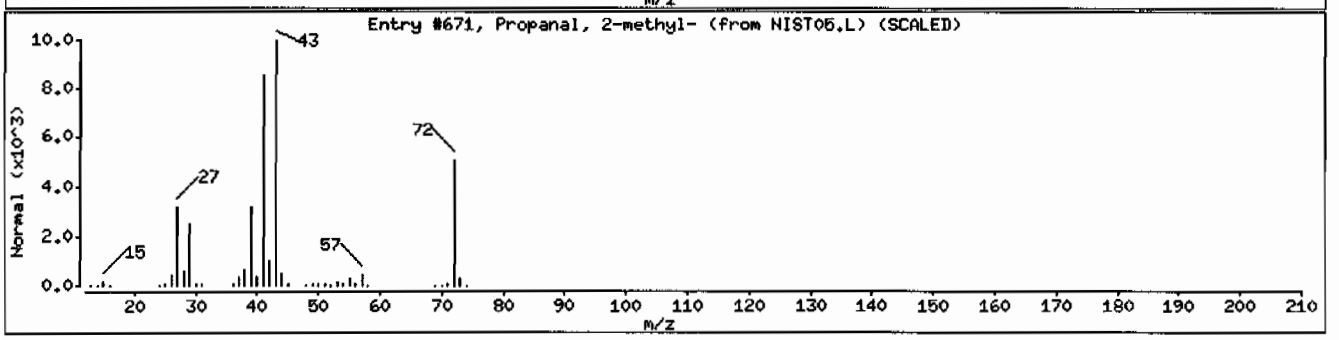

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: 1241540007192661011SVMF11LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	59	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	17	C7H14O2	130

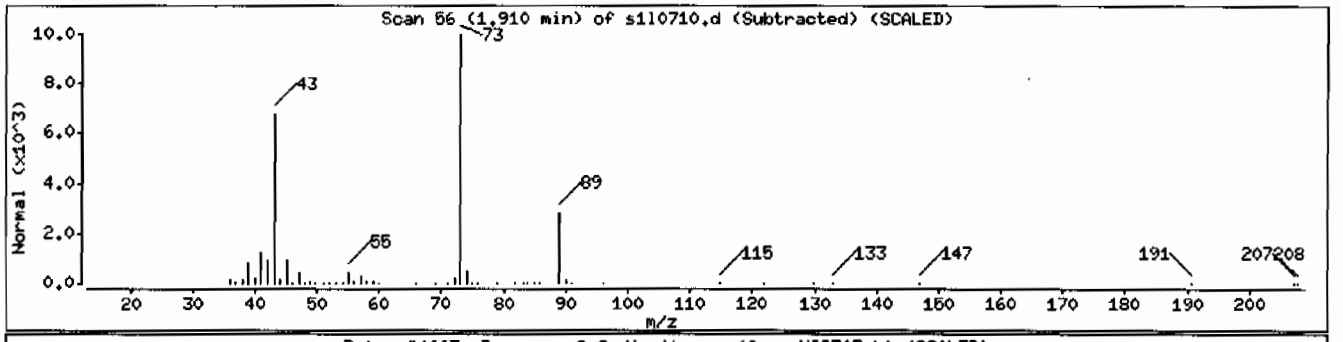

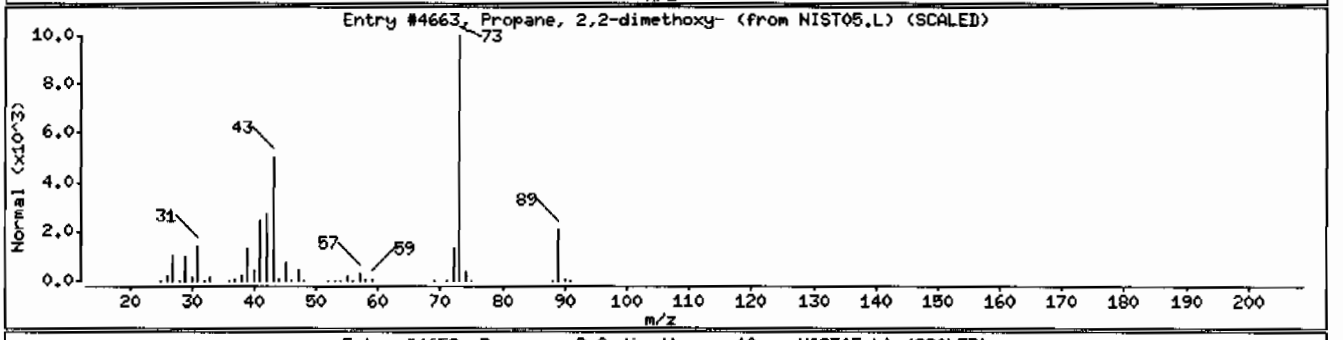

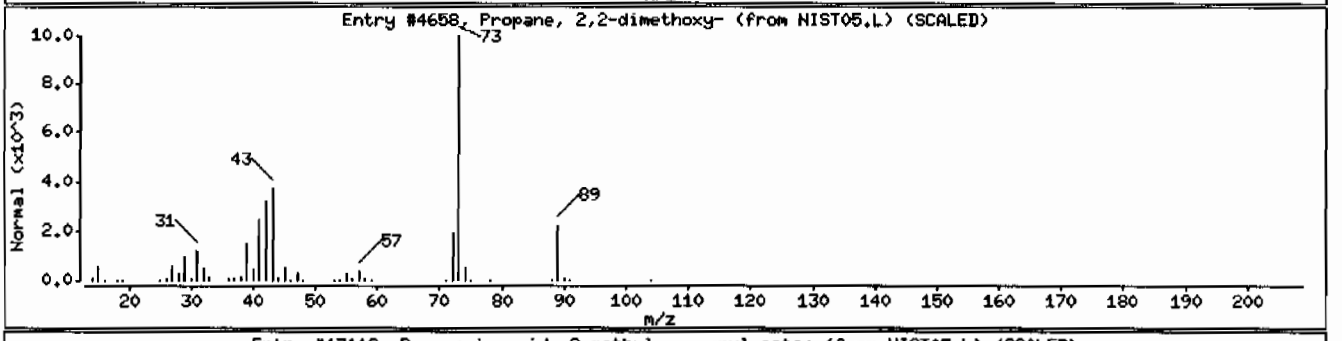

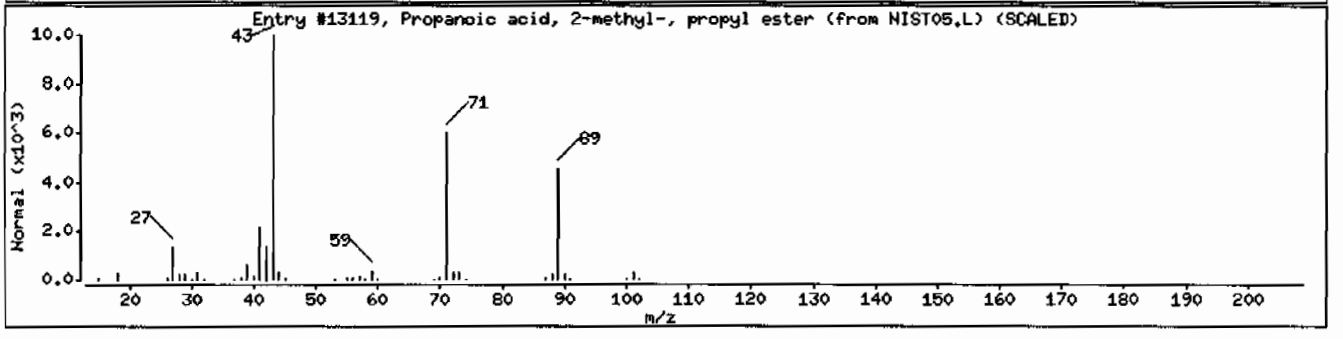

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVHF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	33	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	25	C4H7NO2	101

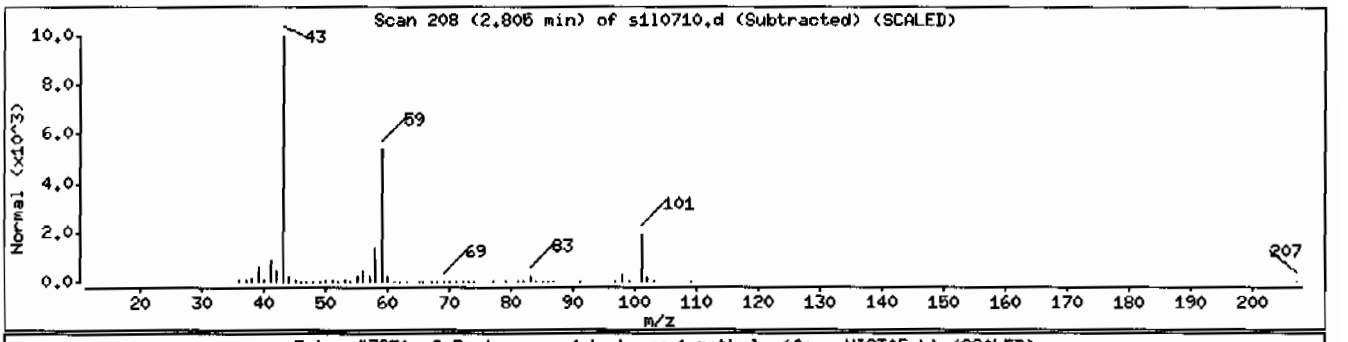

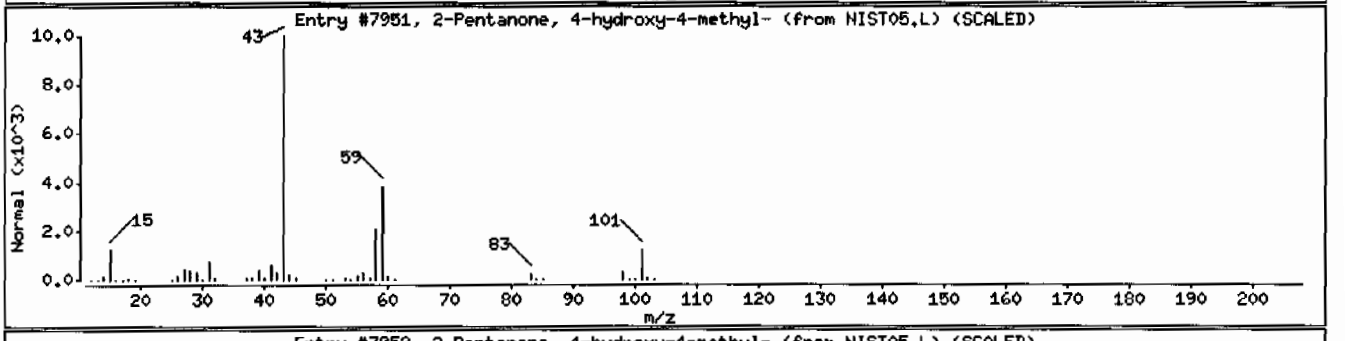

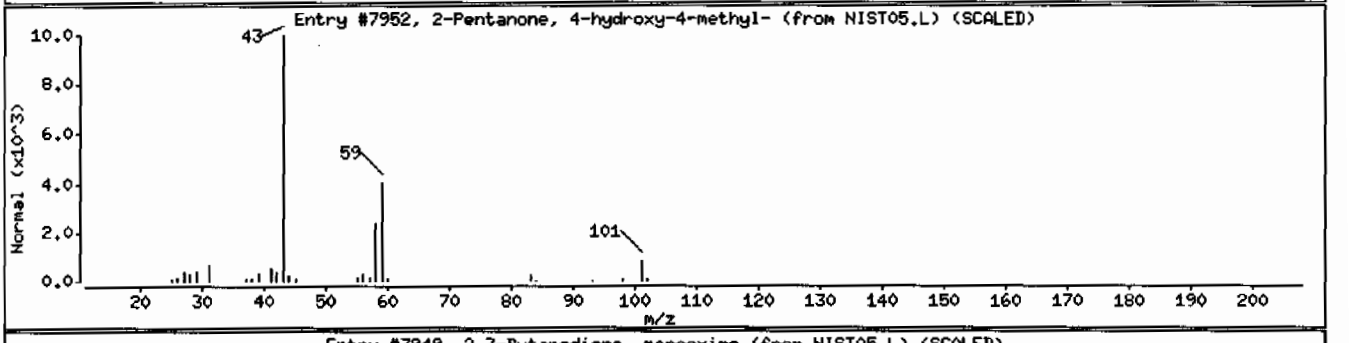

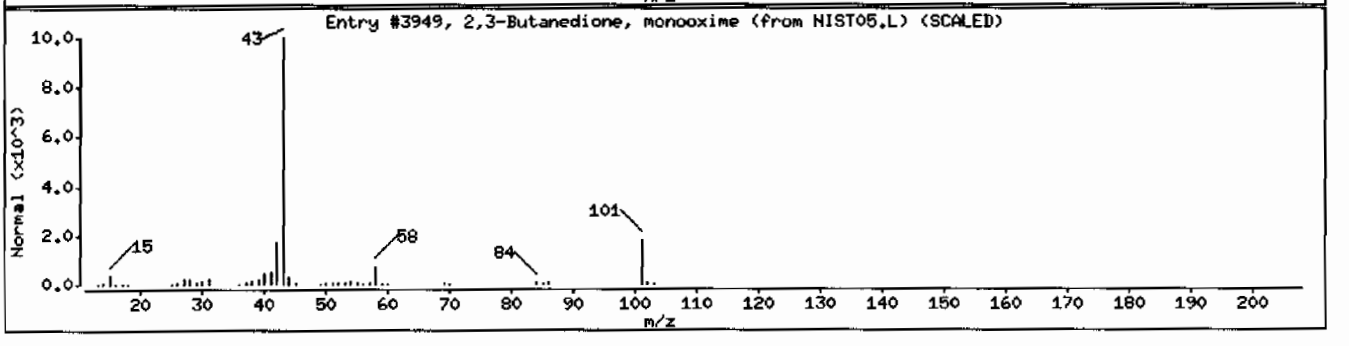

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: |24154000719266101|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	95	C15H24	204
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	3853-83-6	NIST05.L	59998	95	C15H24	204

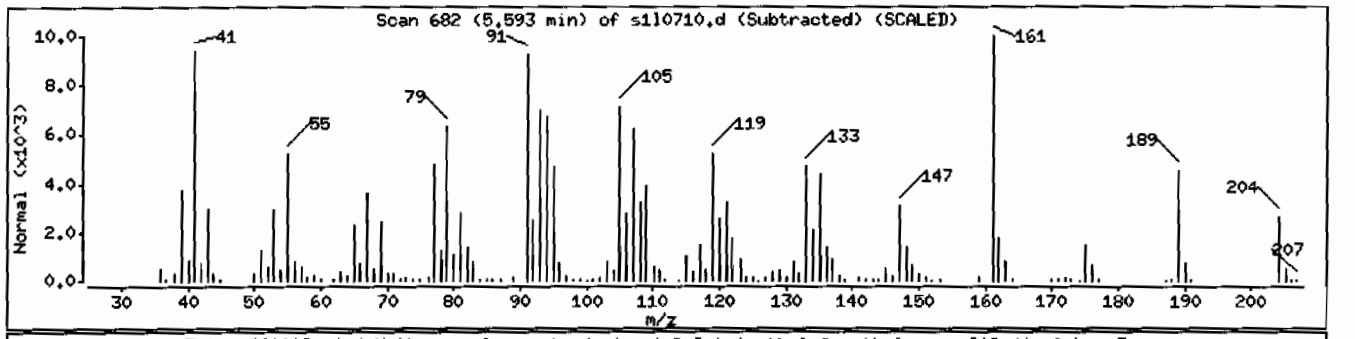

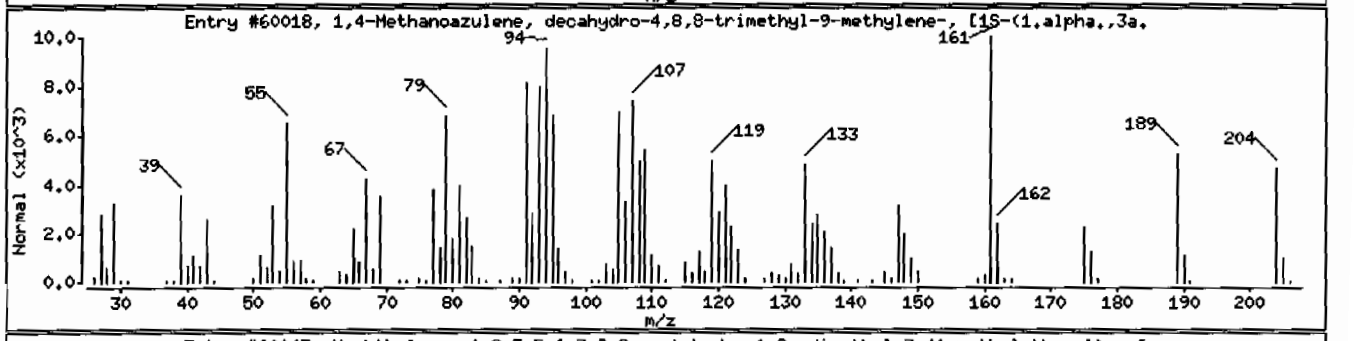

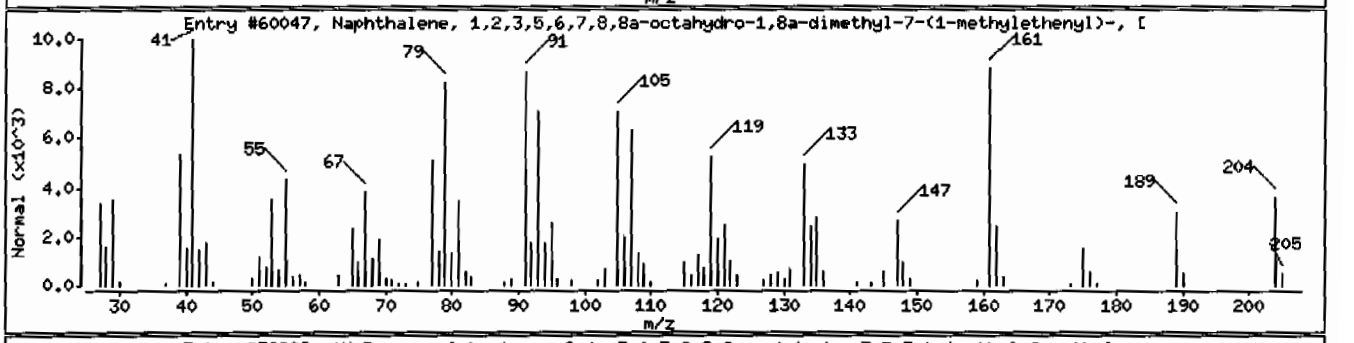

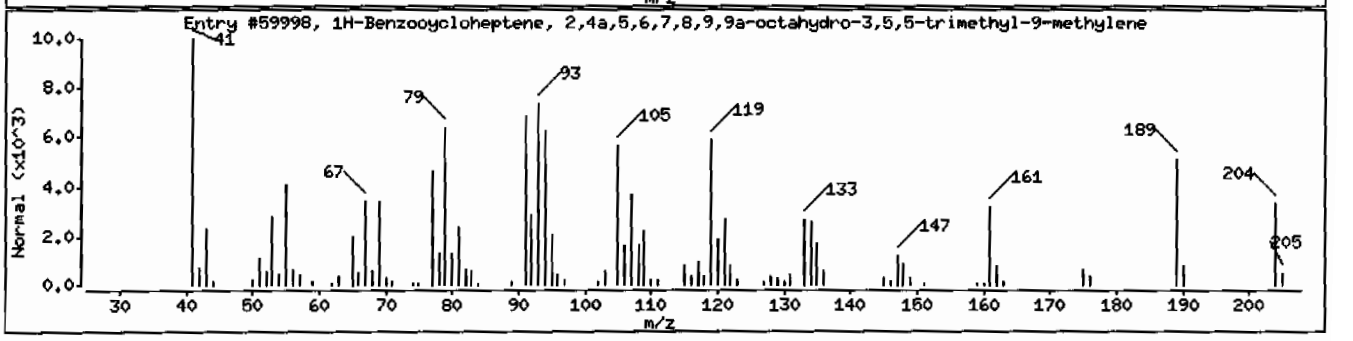

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	98	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	98	C16H32O2	256
Tridecanoic acid	638-53-9	NIST05.L	67136	96	C13H26O2	214

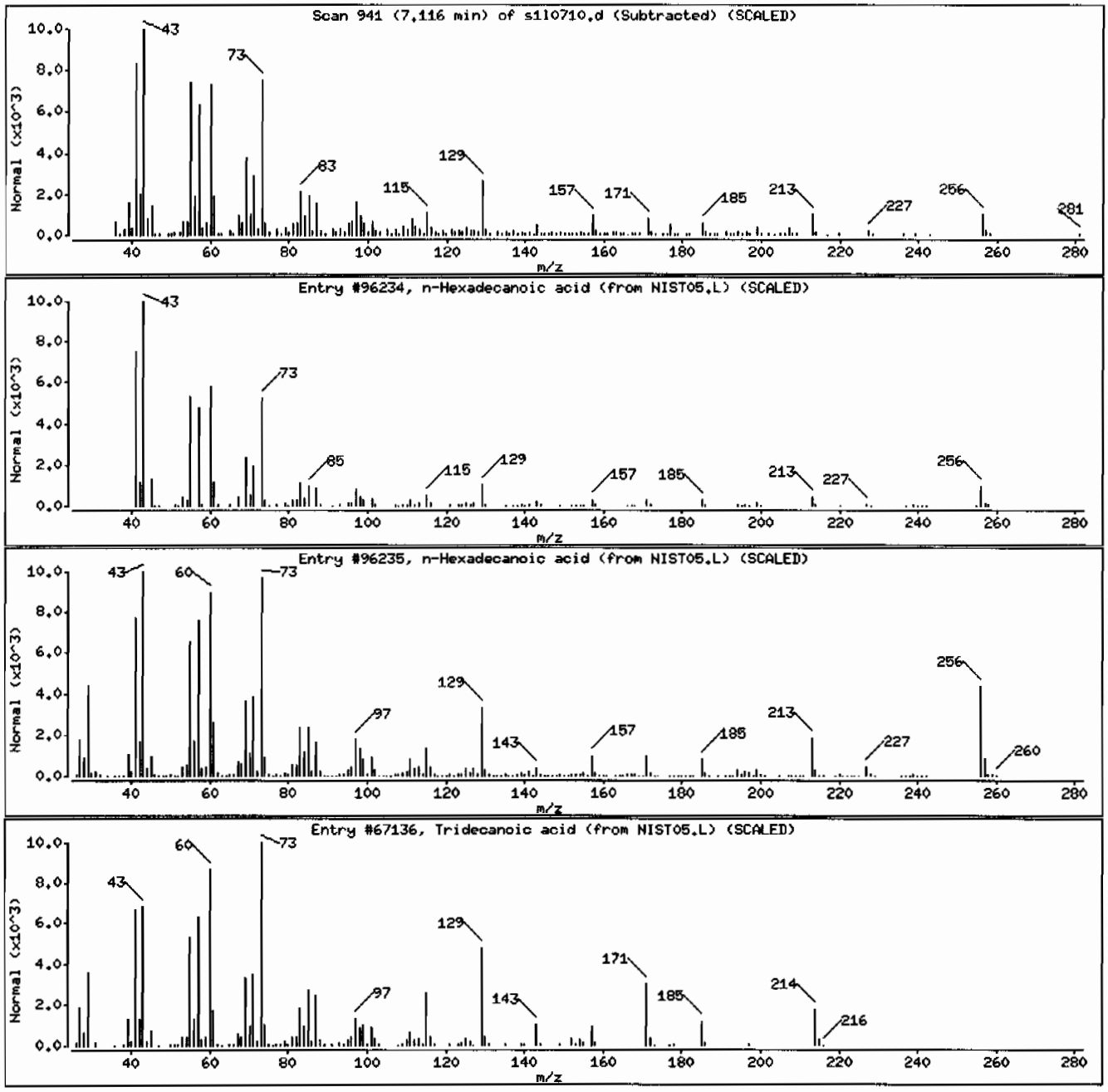

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: |24154000719266101|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenoic acid, (E)-	112-79-8	NIST05.L	113363	97	C18H3402	282
Oleic Acid	112-80-1	NIST05.L	113353	90	C18H3402	282
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	89	C18H3402	282

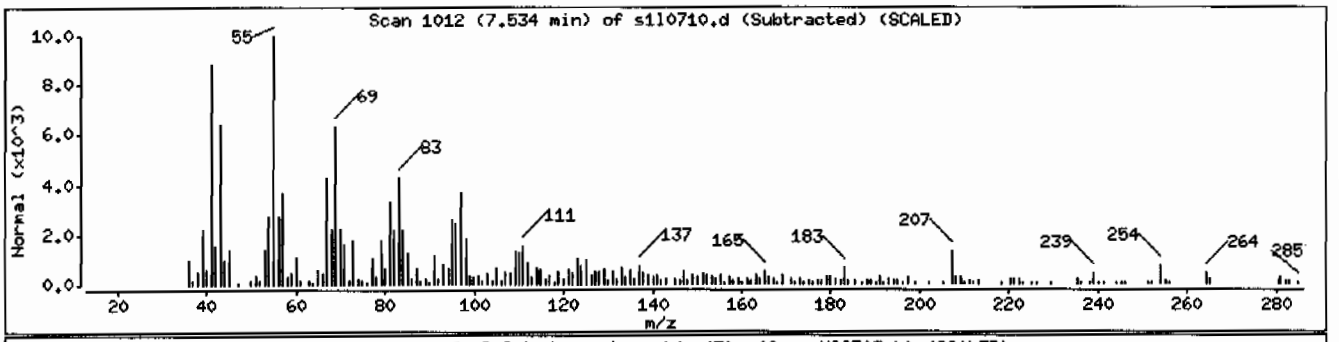

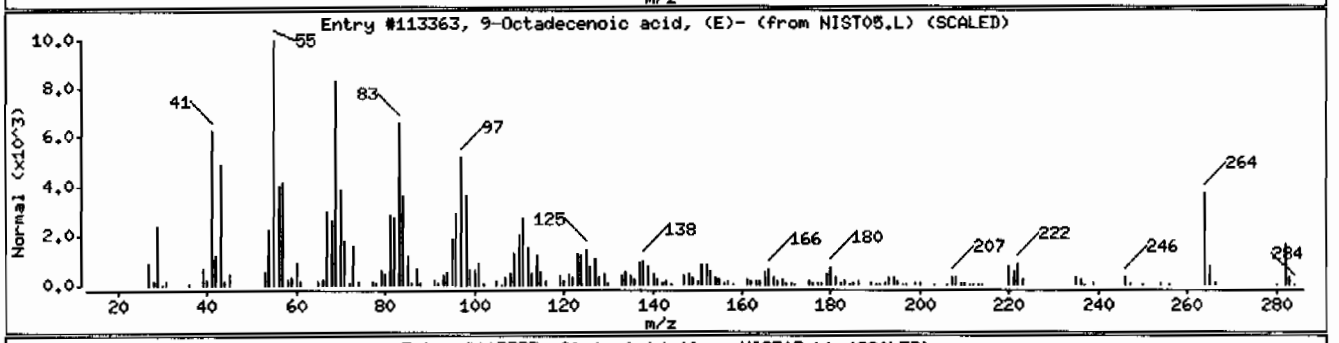

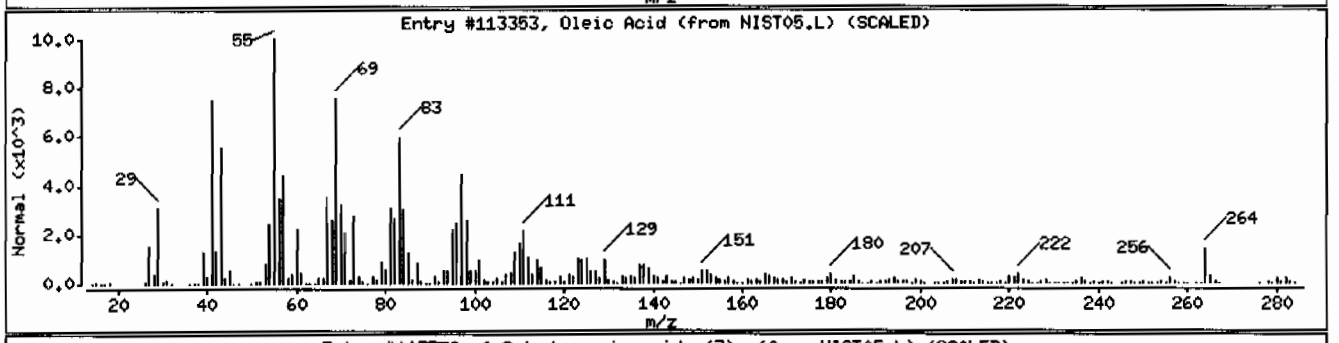

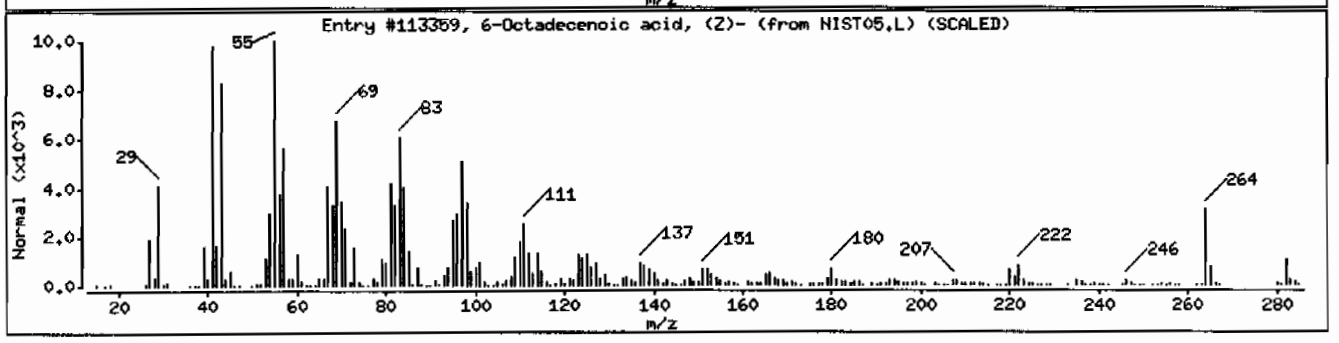

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIST05.L	114820	96	C18H3602	284
Octadecanoic acid	57-11-4	NIST05.L	114821	91	C18H3602	284
Octadecanoic acid	57-11-4	NIST05.L	114818	89	C18H3602	284

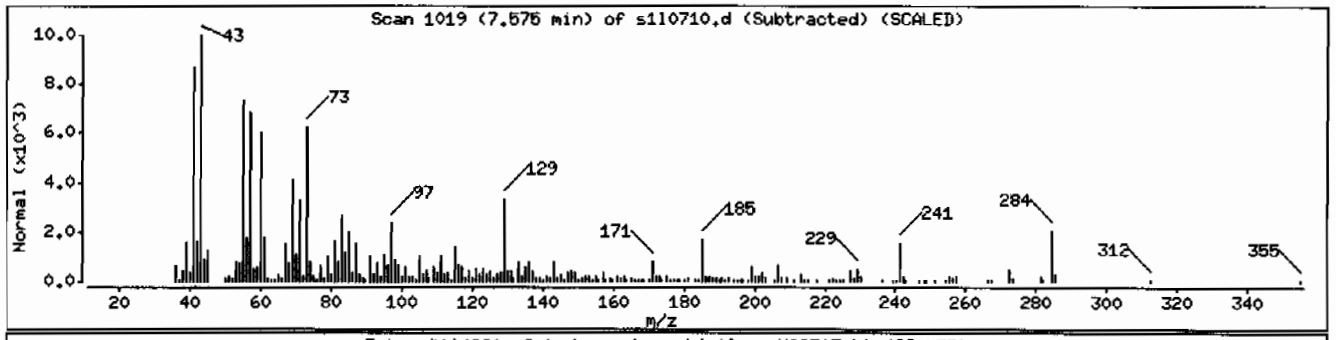

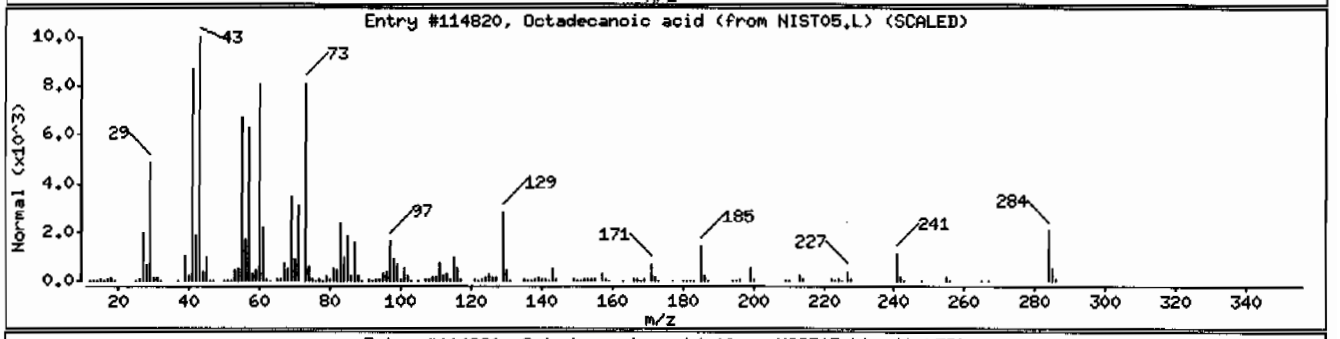

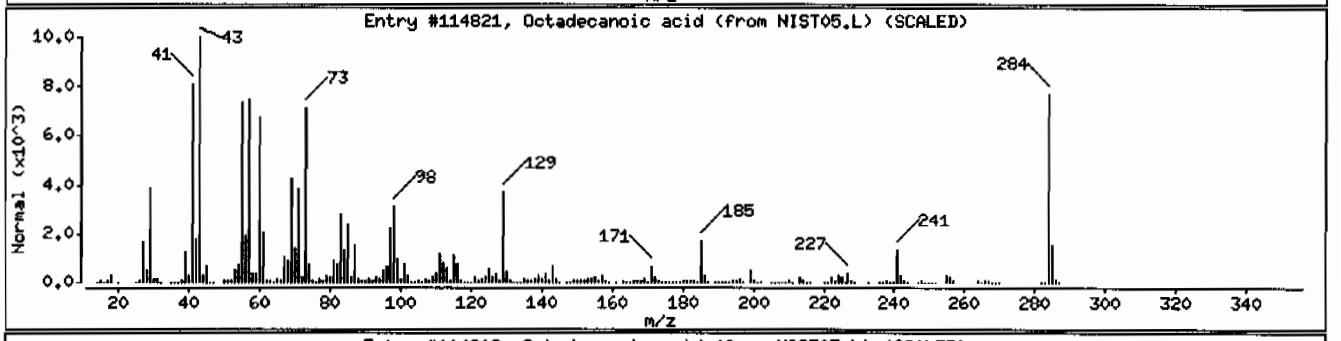

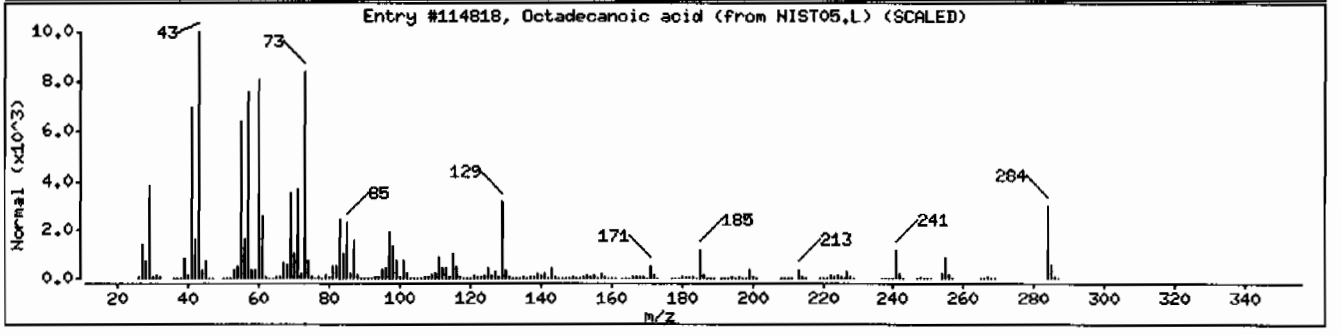

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	98	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	93	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	15340-82-6	NIST05.L	141542	91	C22H32O2	328

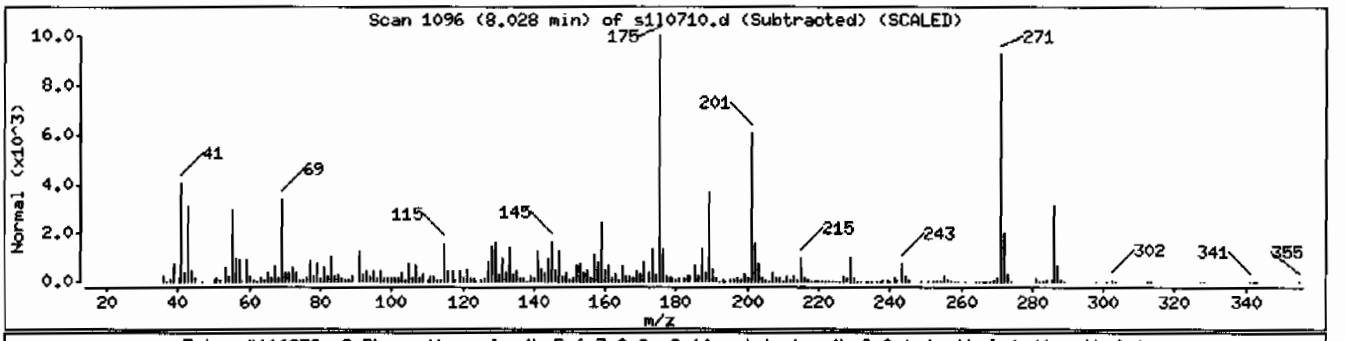

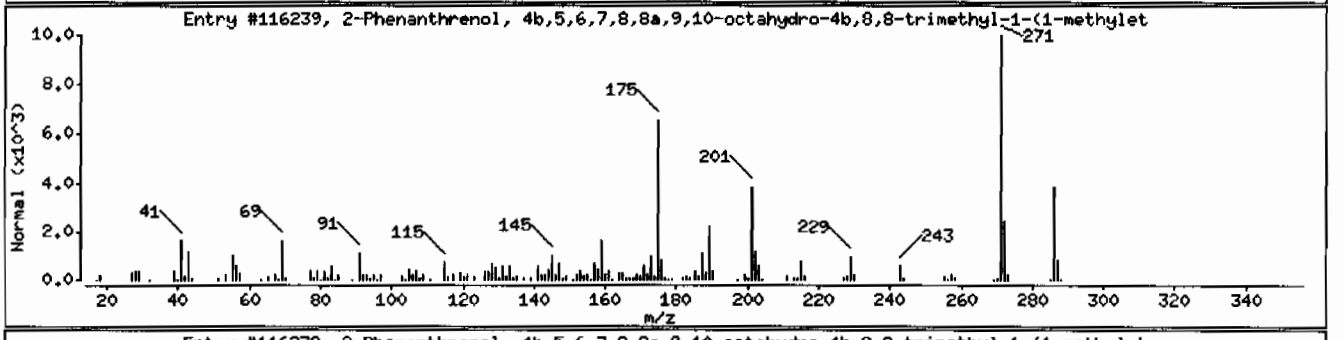

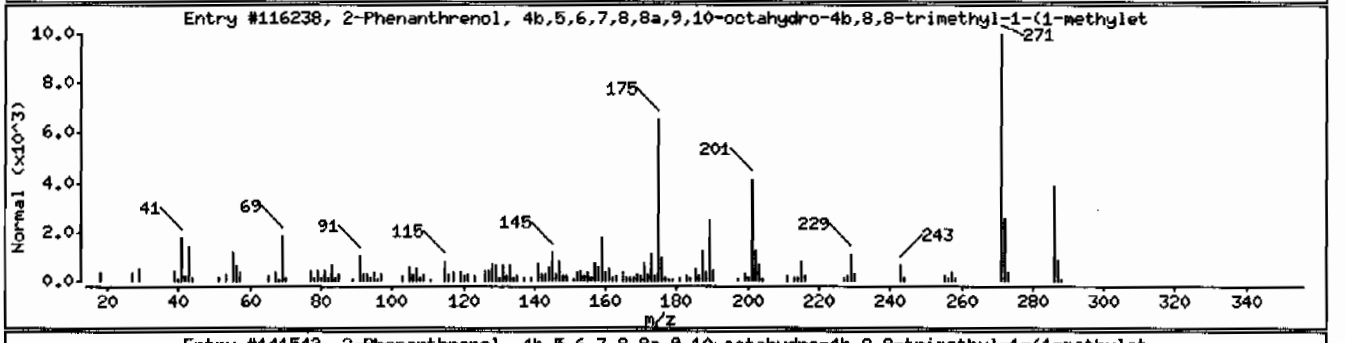

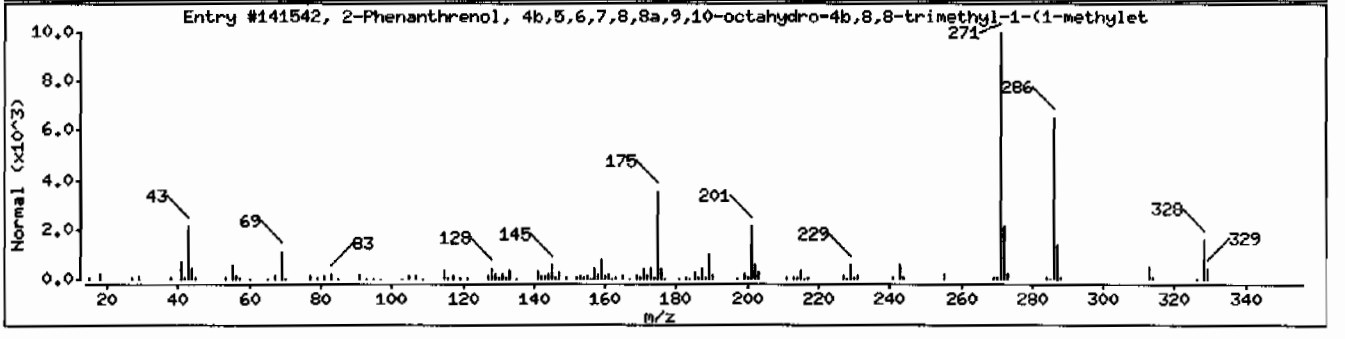

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: 1241540007192661011SVMF11LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	42	C12H14N2O	202
3-Methoxy-5-naphthoic acid	7498-58-0	NIST05.L	58280	42	C12H10O3	202
n-Heptanoic acid,methyl(tetramethylene)s	1000217-03-6	NIST05.L	77000	35	C12H24O2Si	228

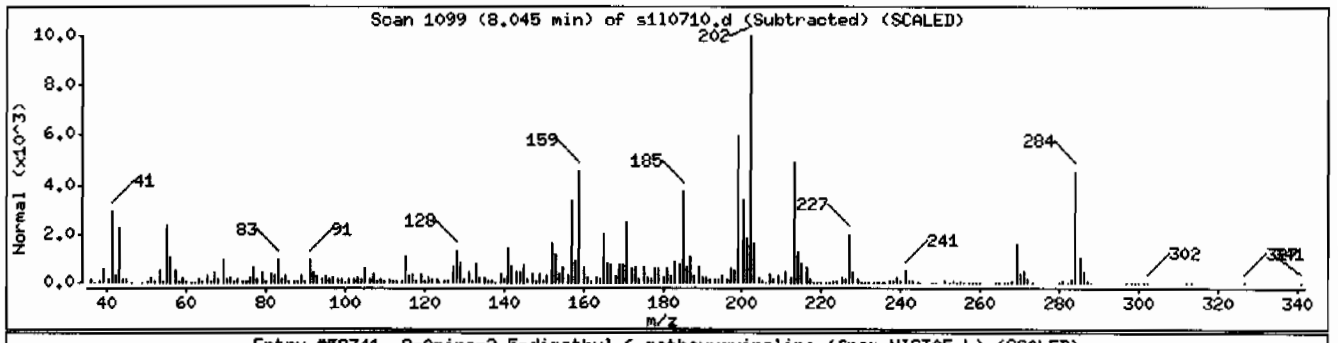

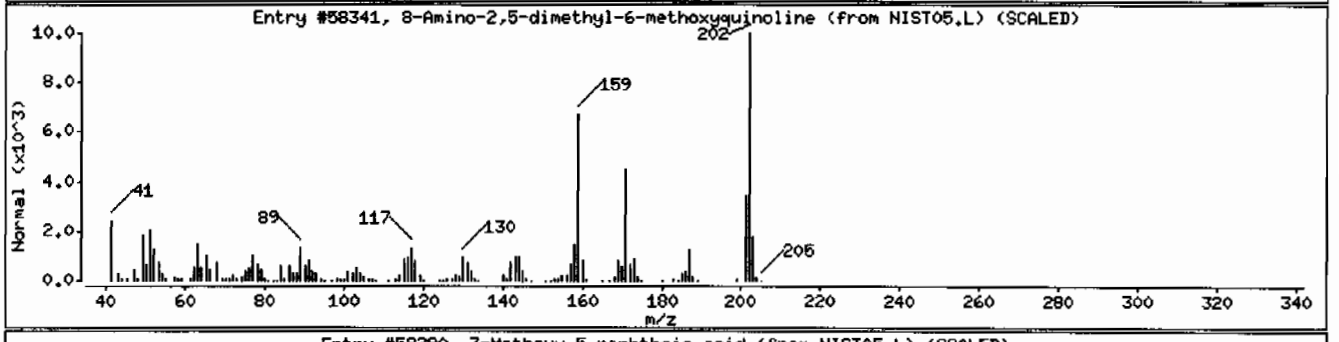

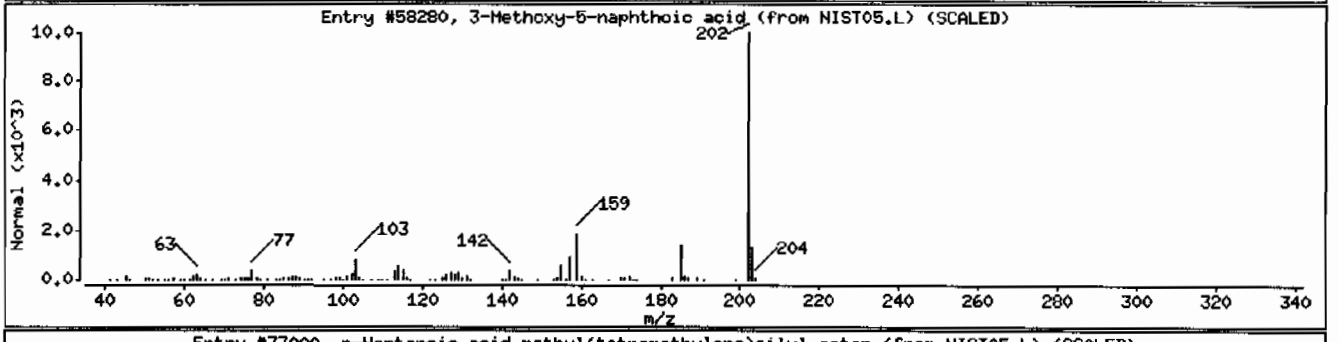

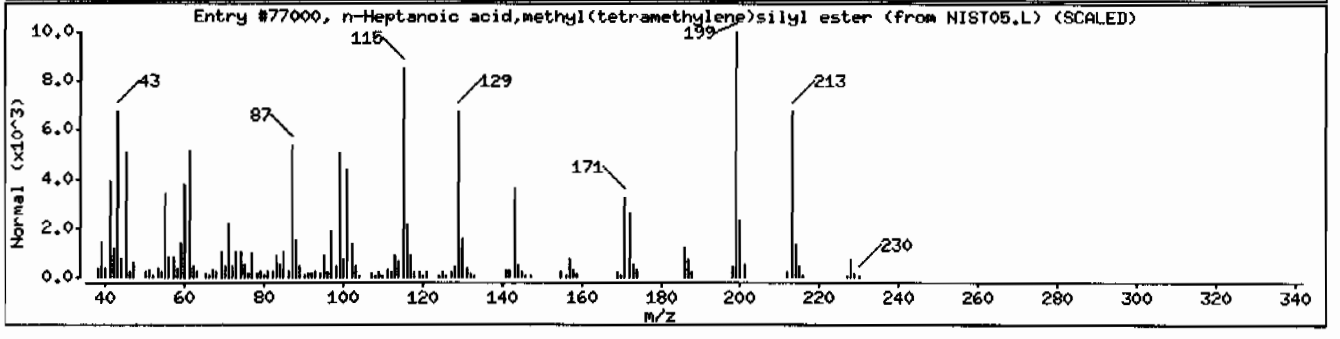

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: |24154000719266101|ISVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-.alpha.-Bergamotene	1000293-01-5	NIST05.L	59863	43	C15H24	204
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	38	C10H14	134
Bicyclopentyl-1,1'-diene	934-02-1	NIST05.L	14359	30	C10H14	134

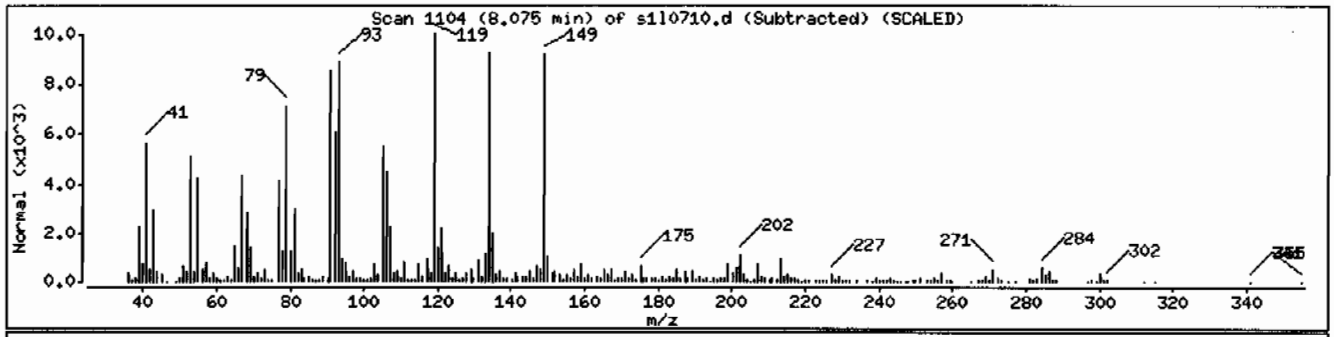

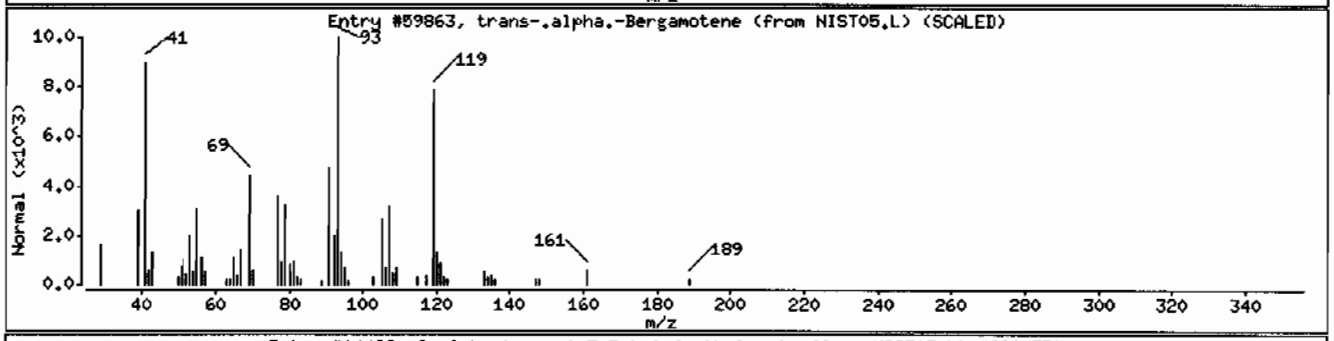

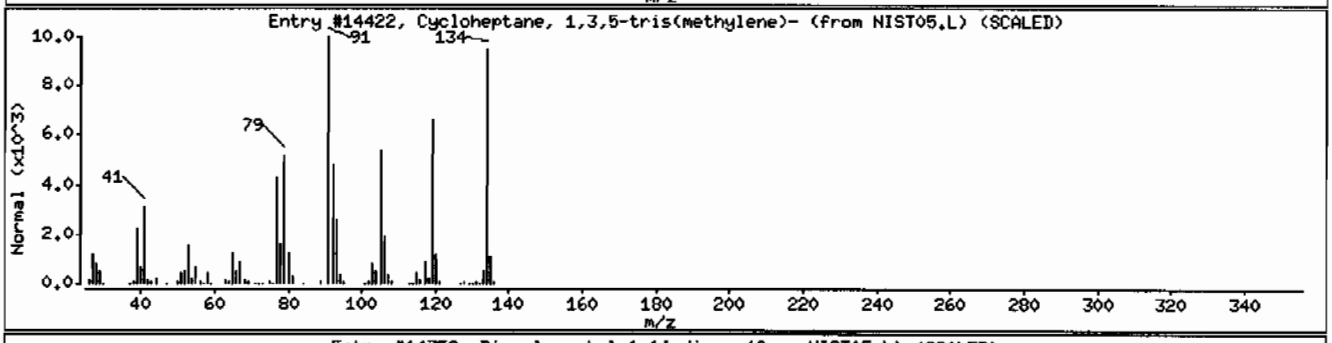

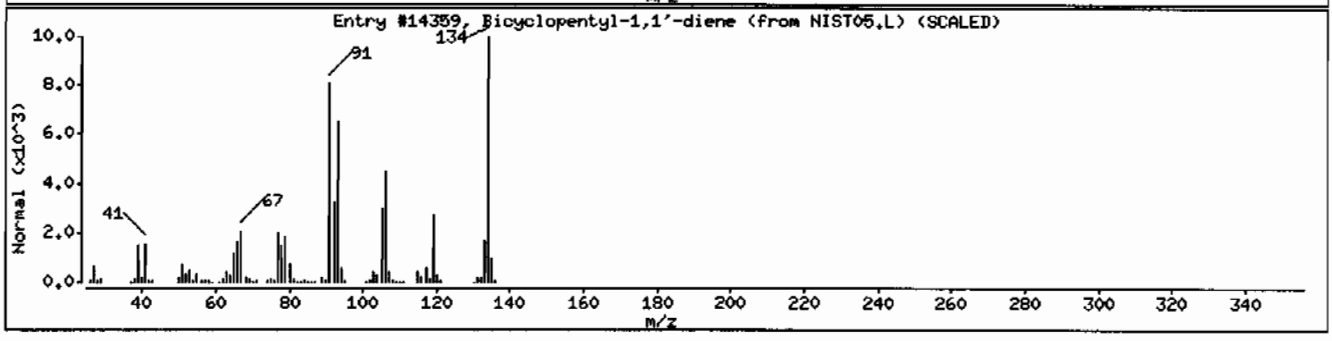

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	95	C20H42	282
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98777	80	C16H33Cl	260
Tetradecane, 2-methyl-	1560-95-8	NIST05.L	66071	64	C15H32	212

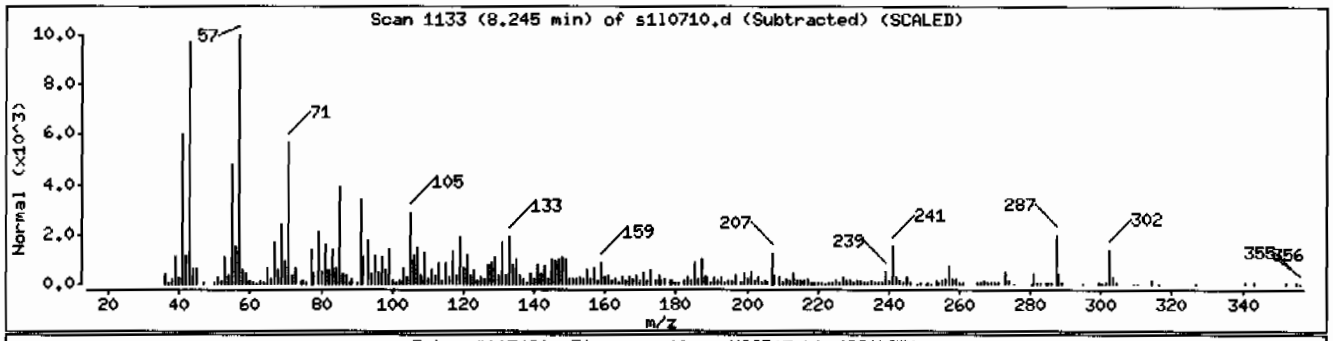

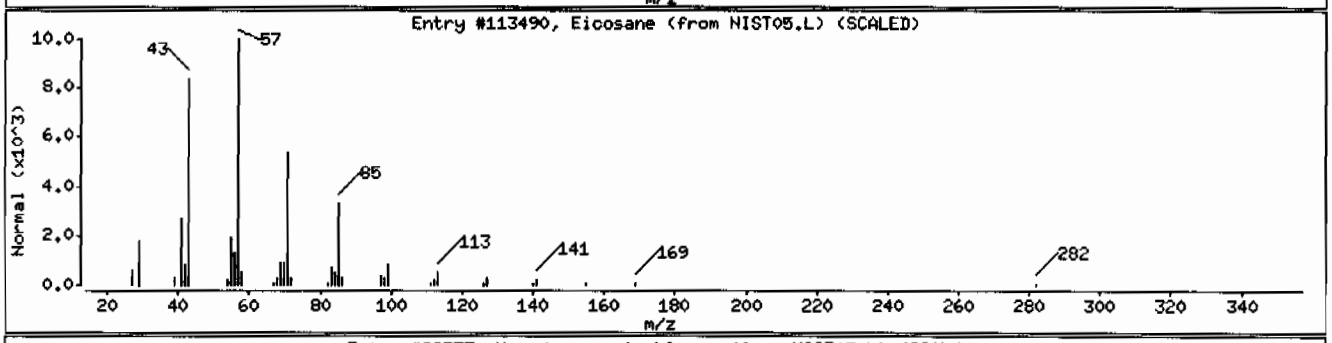

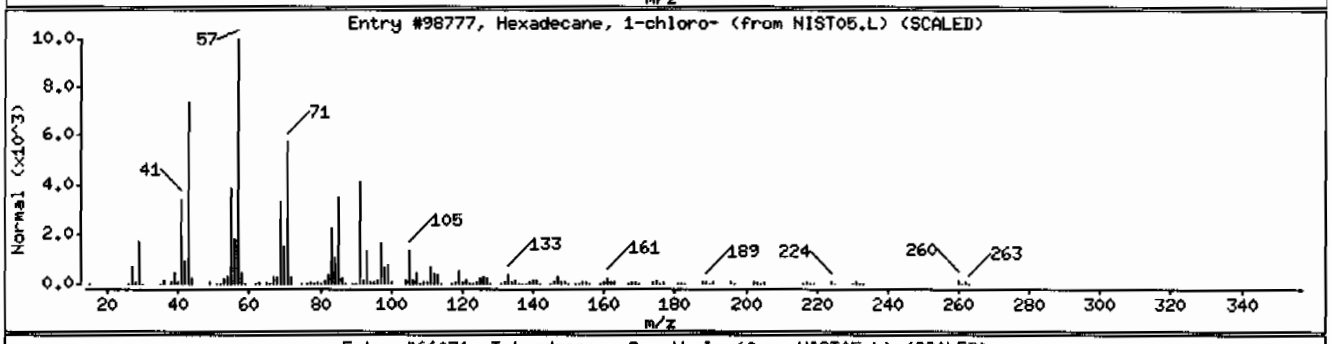

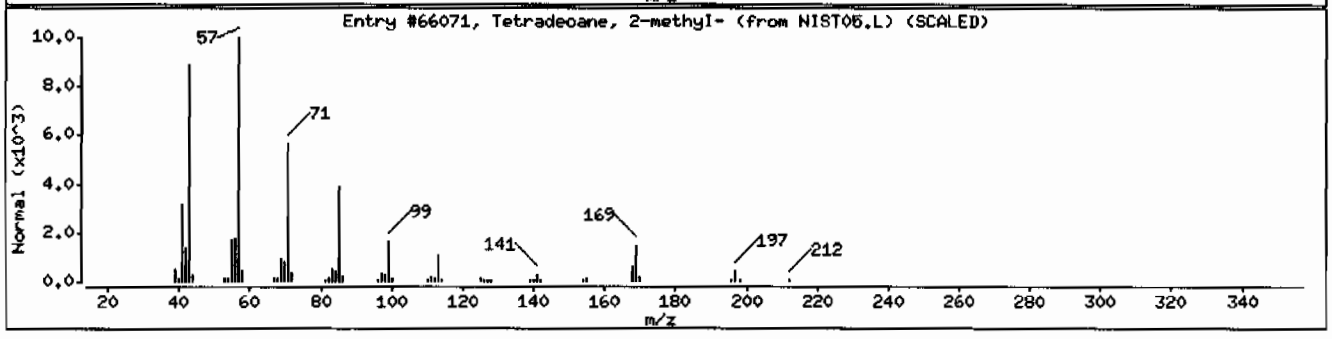

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: |24154000719266101|ISVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	94	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	91	C20H28O2	300
Kaura-9(11),16-dien-18-oic acid, (4.alph	22338-67-6	NIST05.L	125012	64	C20H28O2	300

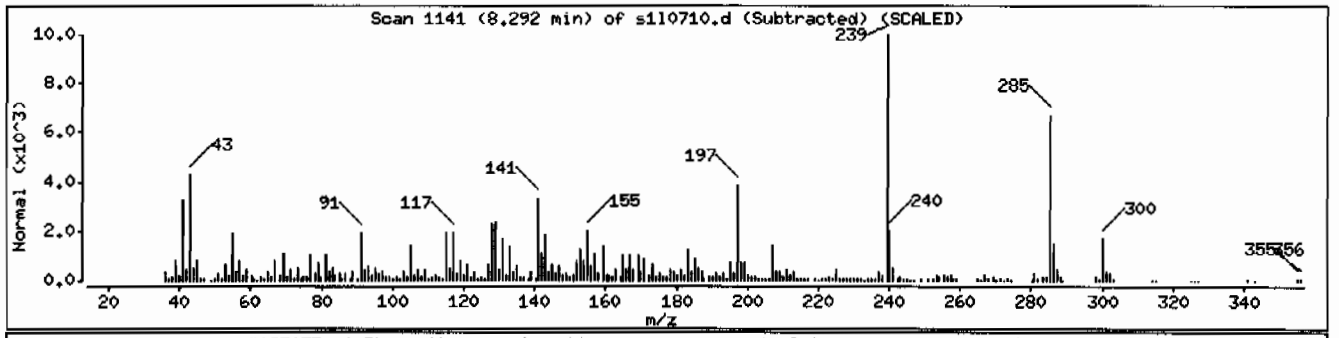

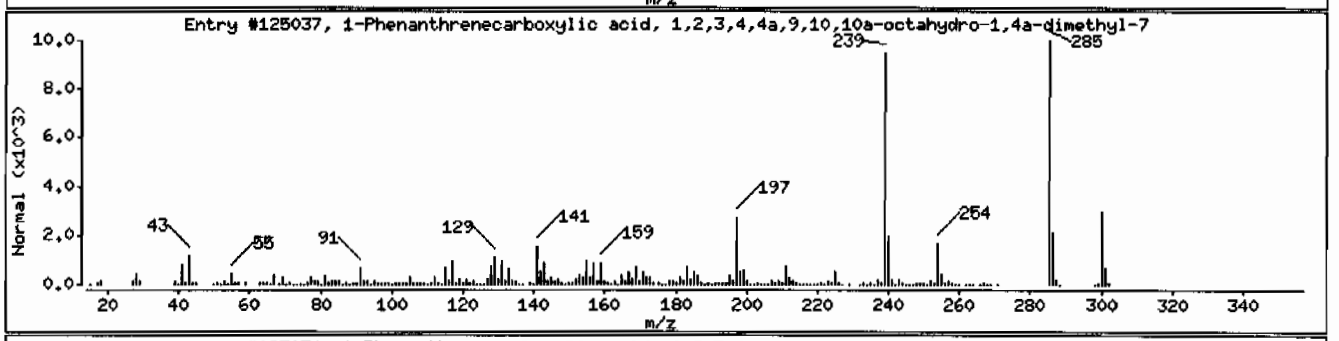

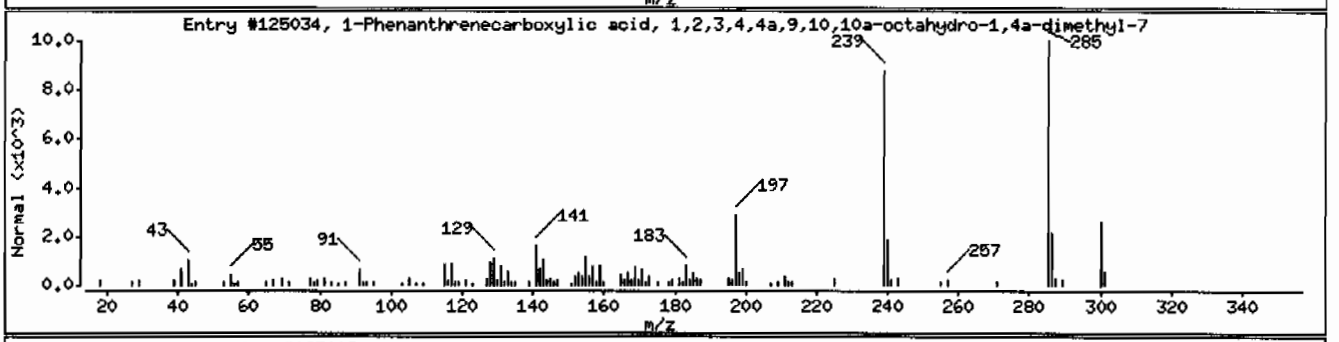

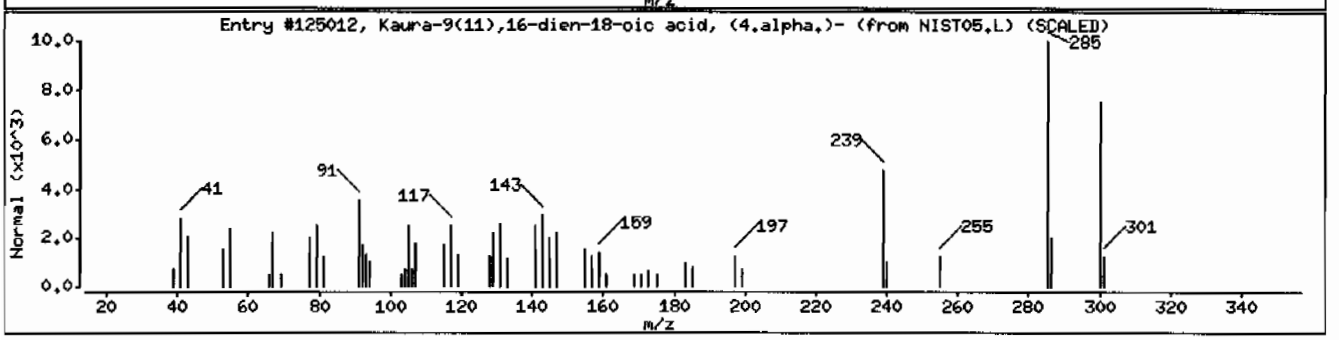

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Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVHF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Abietic acid	514-10-3	NIST05.L	126141	97	C20H3002	302
Abietic acid	514-10-3	NIST05.L	126143	83	C20H3002	302
Palustric acid	1945-53-5	NIST05.L	126144	49	C20H3002	302

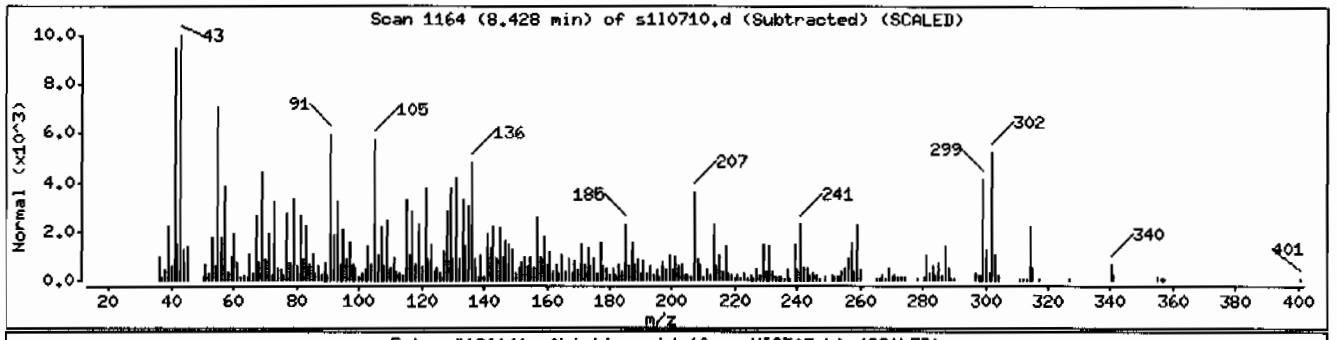

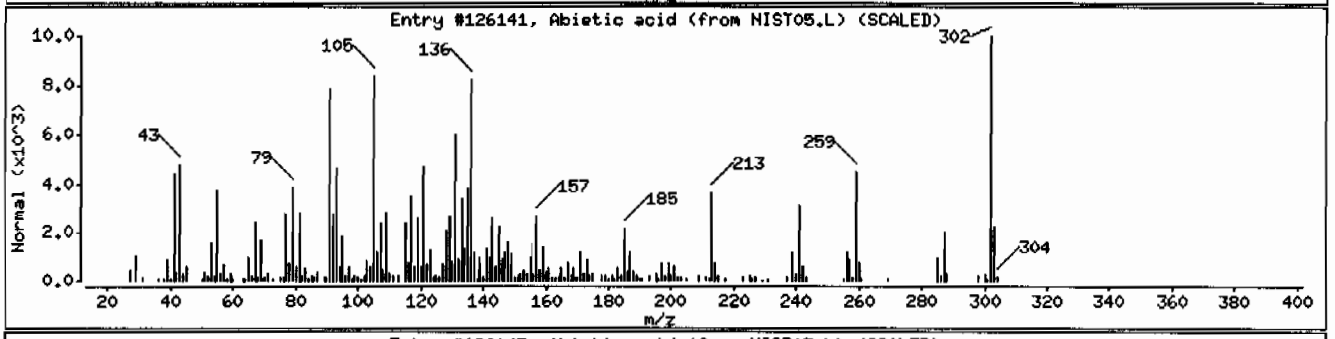

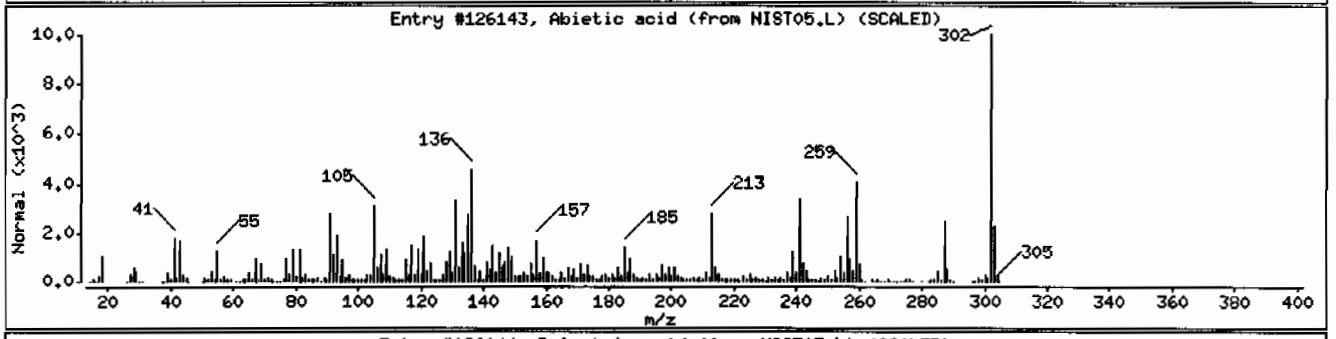

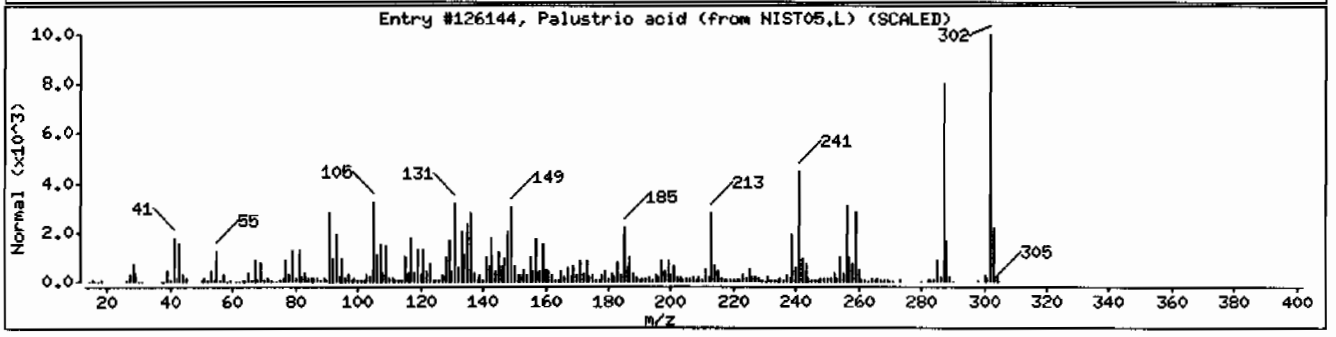

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Octadecene	112-88-9	NIST05.L	93542	49	C18H36	252
3-Octadecene, (E)-	7206-19-1	NIST05.L	93548	49	C18H36	252
Bromoacetic acid, tetradecyl ester	18992-01-3	NIST05.L	144558	49	C16H31BrO2	334

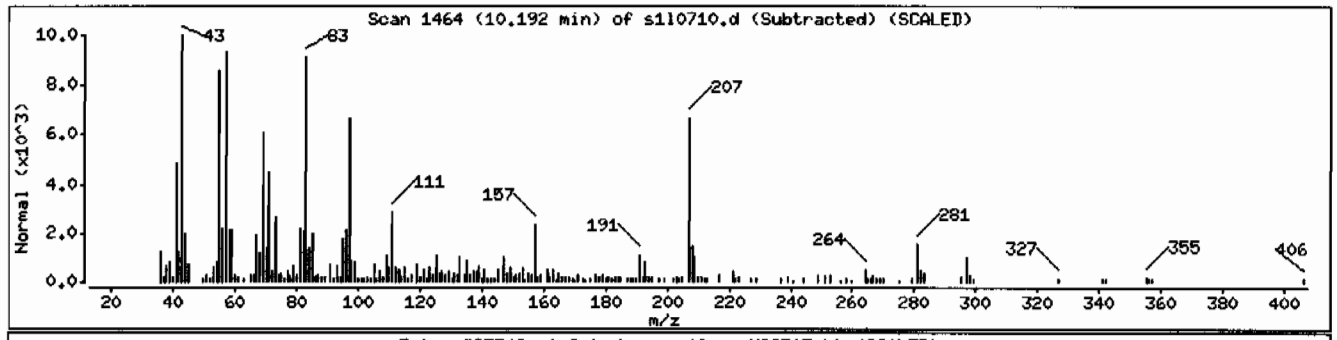

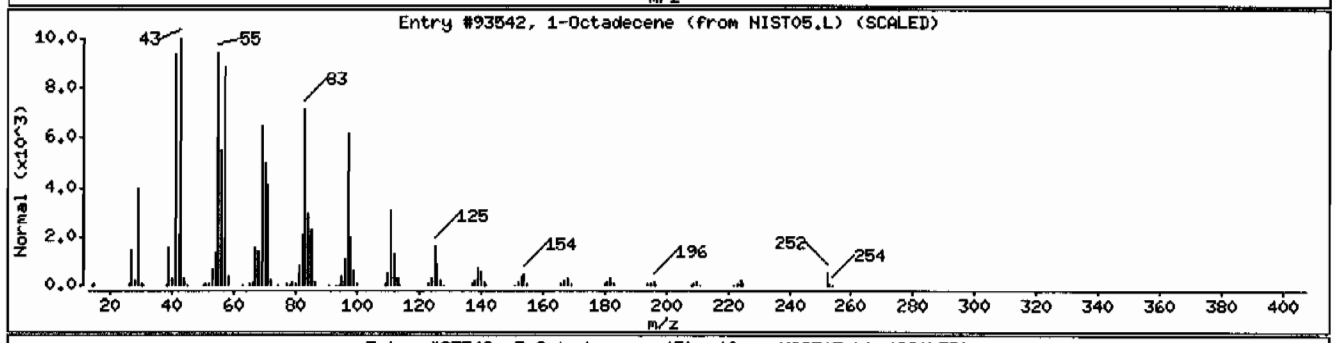

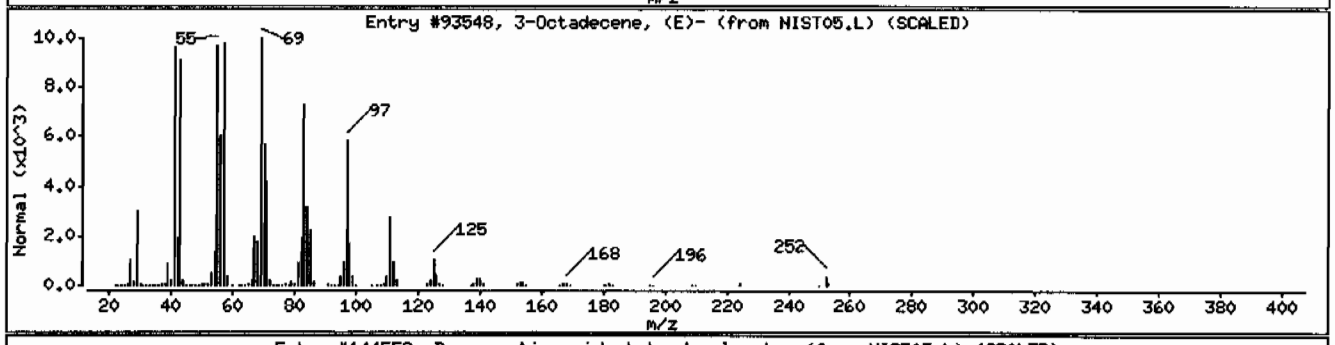

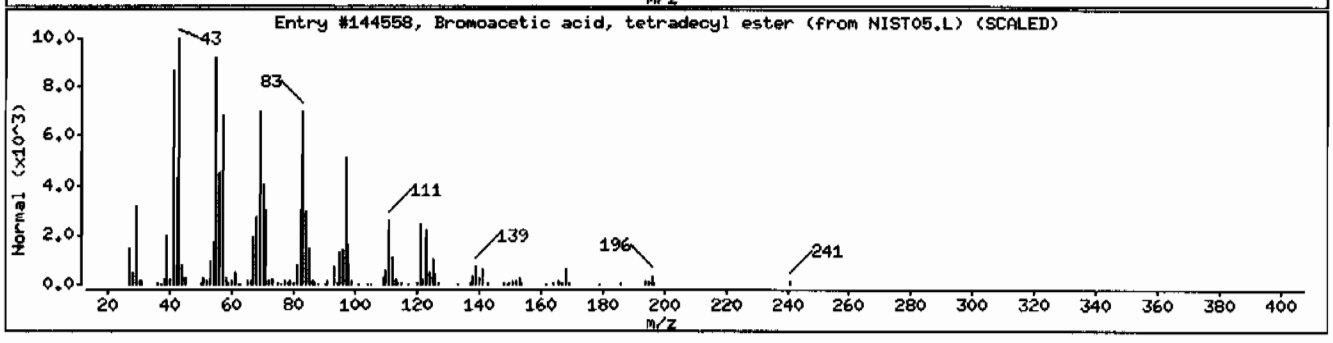

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Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877

Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113489	97	C20H42	282
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	96	C20H42	282

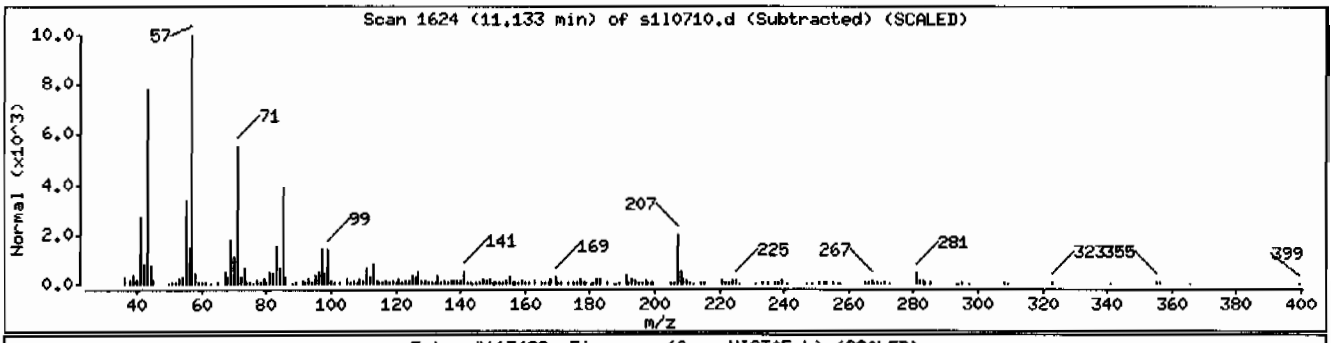

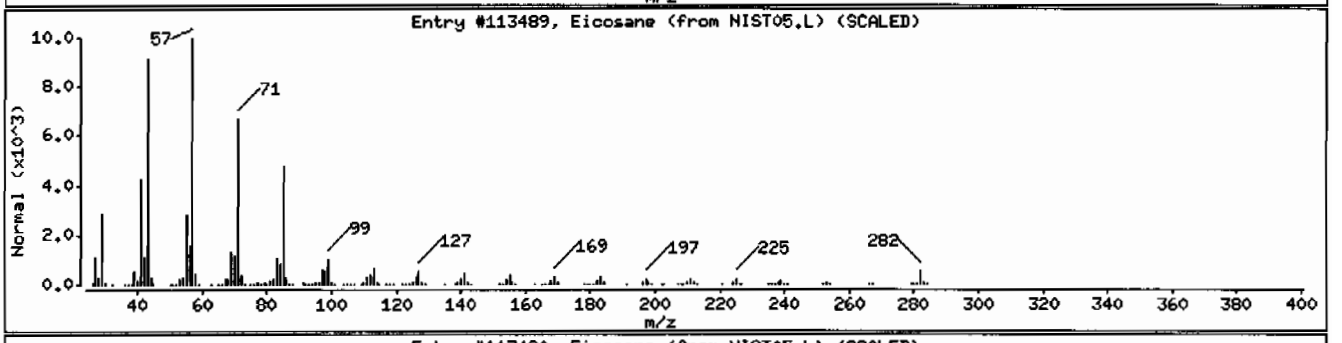

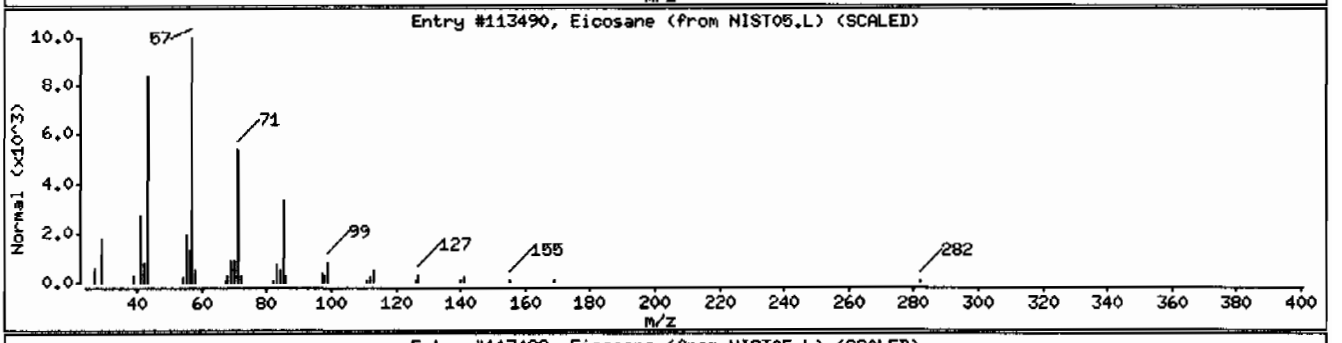

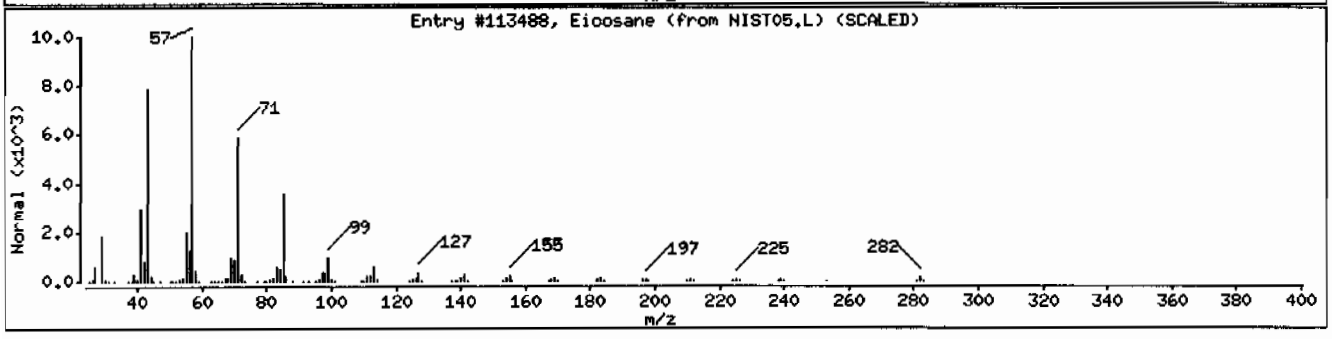

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Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: 1241540007|926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Dimethyl-8-isopropylidenetricyclo[5,	1000140-07-7	NIST05.L	59920	86	C15H24	204
1-Naphthalenecarboxylic acid, decahydro-	1235-39-8	NIST05.L	134771	62	C21H32O2	316
1,1,4a-Trimethyl-5,6-dimethylenedecahydr	1000193-60-8	NIST05.L	59893	62	C15H24	204

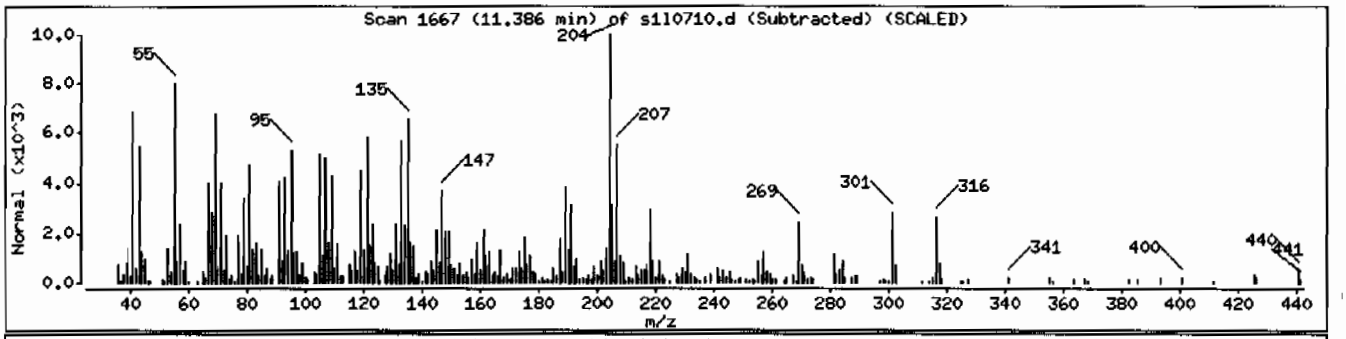

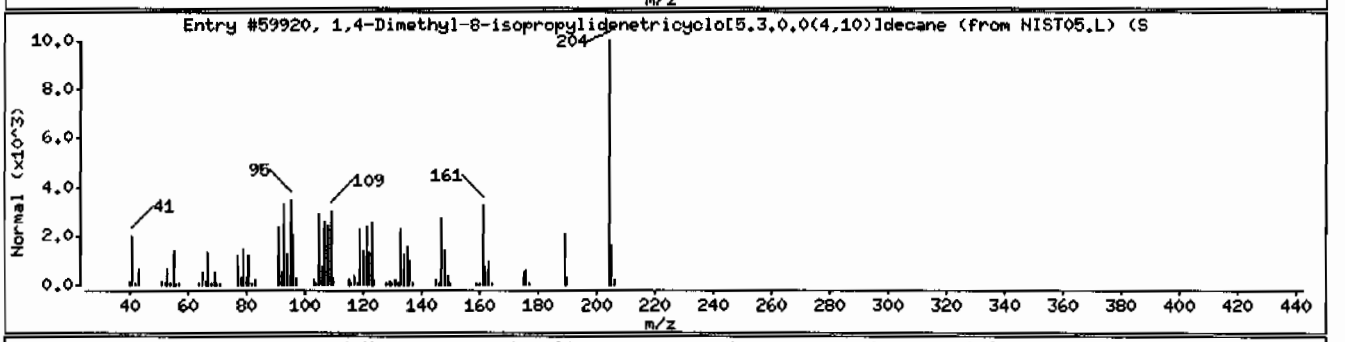

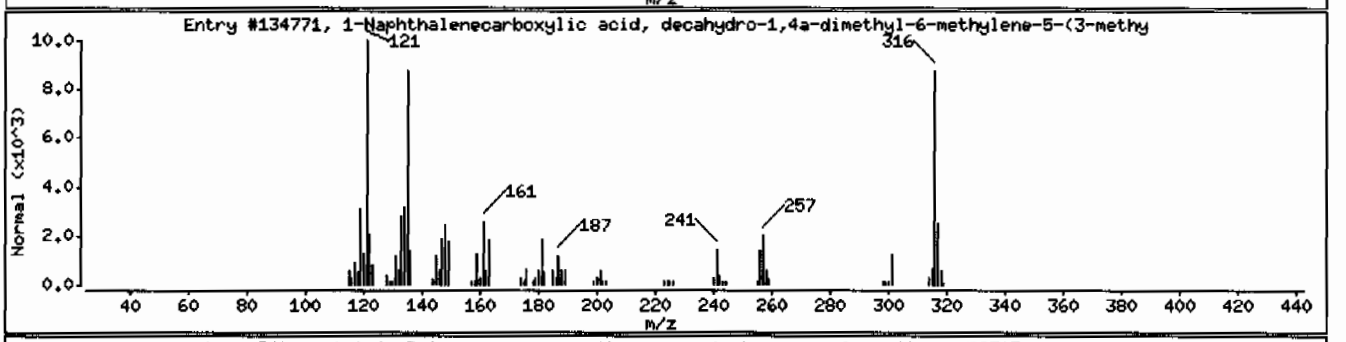

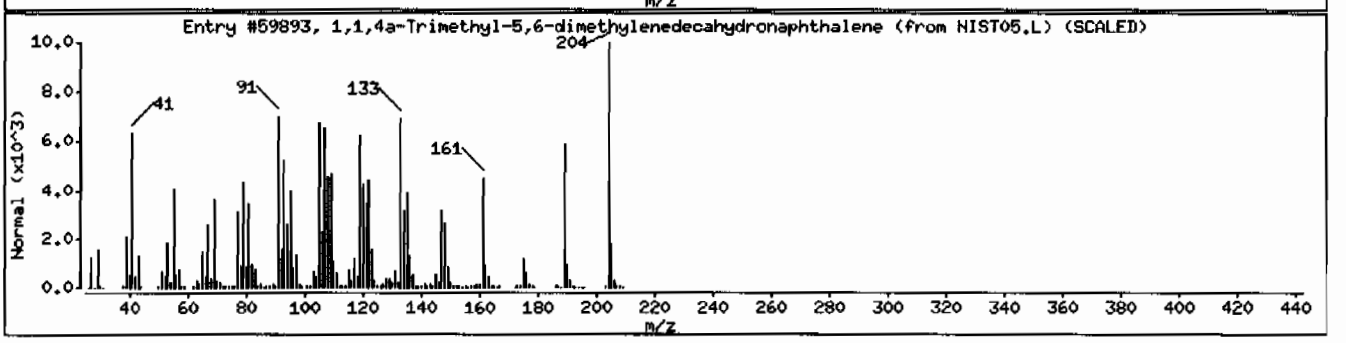

Data File: /chem/MSD1.i/s120709.b/s110710.d

Date : 07-DEC-2009 12:48

Client ID: RE03-09-13877 Instrument: MSD1.i

Sample Info: |2415400071926610|1|SVMF|1|LANLRR

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3,5,6-Tetrafluorobenzoic acid	652-18-6	NIST05.L	53125	38	C7H2F4O2	194
2-Hydroxy-4-isopropyl-7-methoxytropone	89647-85-8	NIST05.L	52474	38	C11H14O3	194
p-[Methylthio]cinnamic acid	1000227-29-8	NIST05.L	52232	38	C10H10O2S	194

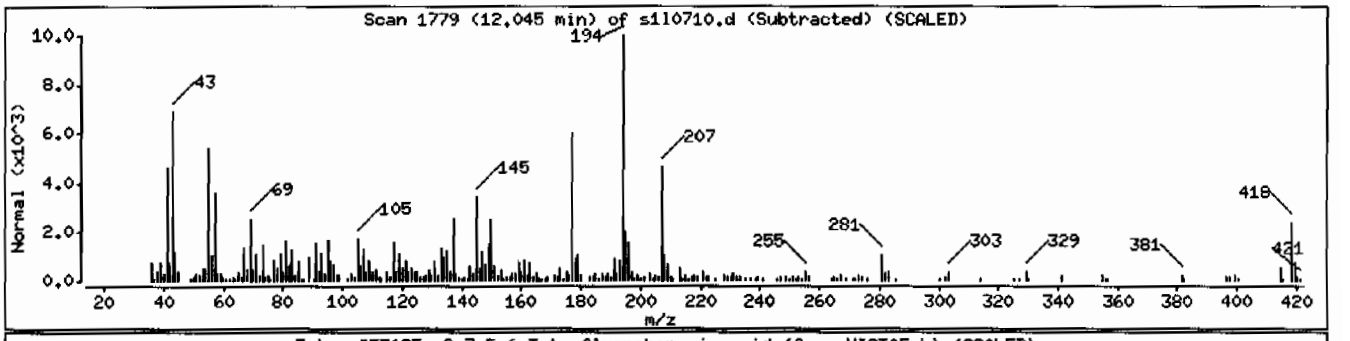

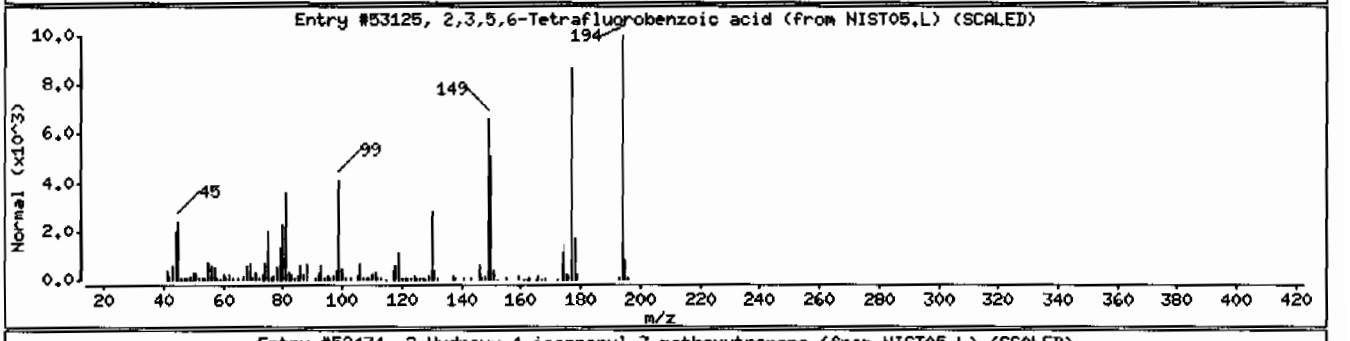

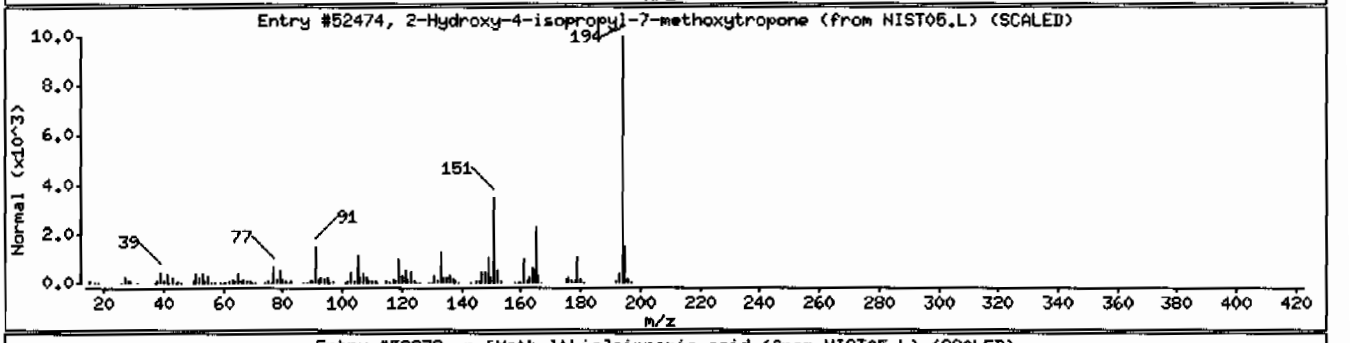

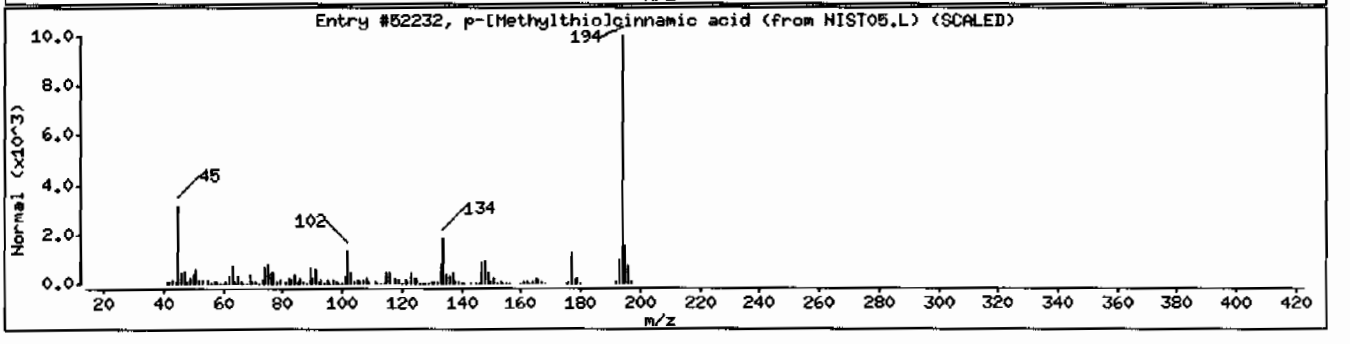

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 04-Dec-2009 16:33

Calibration History

Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Start Cal Date: 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 18:22	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1203.d
Cal Level: 2 , Cal Amount: 10.00000		
17-NOV-2009 16:56	nev	/chem/MSD1.i/s111409.b/s1k1262.d
15-NOV-2009 20:55	hex	/chem/MSD1.i/s111409.b/s1k1229.d
15-NOV-2009 18:11	pest	/chem/MSD1.i/s111409.b/s1k1222.d
15-NOV-2009 15:28	ap12	/chem/MSD1.i/s111409.b/s1k1215.d
14-NOV-2009 18:51	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1204.d
Cal Level: 3 , Cal Amount: 20.00000		
17-NOV-2009 17:19	nev	/chem/MSD1.i/s111409.b/s1k1263.d
15-NOV-2009 21:18	hex	/chem/MSD1.i/s111409.b/s1k1230.d
15-NOV-2009 18:35	pest	/chem/MSD1.i/s111409.b/s1k1223.d
15-NOV-2009 15:51	ap12	/chem/MSD1.i/s111409.b/s1k1216.d
14-NOV-2009 19:21	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1205.d
Cal Level: 4 , Cal Amount: 40.00000		
17-NOV-2009 17:42	nev	/chem/MSD1.i/s111409.b/s1k1264.d
15-NOV-2009 21:42	hex	/chem/MSD1.i/s111409.b/s1k1231.d
15-NOV-2009 18:58	pest	/chem/MSD1.i/s111409.b/s1k1224.d
15-NOV-2009 16:14	ap12	/chem/MSD1.i/s111409.b/s1k1217.d
14-NOV-2009 19:50	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1206.d
Cal Level: 5 , Cal Amount: 50.00000		
17-NOV-2009 18:05	nev	/chem/MSD1.i/s111409.b/s1k1265.d
15-NOV-2009 22:06	hex	/chem/MSD1.i/s111409.b/s1k1232.d
15-NOV-2009 19:21	pest	/chem/MSD1.i/s111409.b/s1k1225.d
15-NOV-2009 16:38	ap12	/chem/MSD1.i/s111409.b/s1k1218.d
14-NOV-2009 20:19	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1207.d
Cal Level: 6 , Cal Amount: 80.00000		
17-NOV-2009 18:28	nev	/chem/MSD1.i/s111409.b/s1k1266.d
15-NOV-2009 22:30	hex	/chem/MSD1.i/s111409.b/s1k1233.d
15-NOV-2009 19:45	pest	/chem/MSD1.i/s111409.b/s1k1226.d
15-NOV-2009 17:01	ap12	/chem/MSD1.i/s111409.b/s1k1219.d
14-NOV-2009 20:47	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1208.d
Cal Level: 7 , Cal Amount: 100.00000		

17-NOV-2009 18:52	nev	/chem/MSD1.i/s111409.b/s1k1267.d
15-NOV-2009 22:53	hex	/chem/MSD1.i/s111409.b/s1k1234.d
15-NOV-2009 20:09	pest	/chem/MSD1.i/s111409.b/s1k1227.d
15-NOV-2009 17:24	ap12	/chem/MSD1.i/s111409.b/s1k1220.d
14-NOV-2009 21:16	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1209.d

Cal Level: 8 , Cal Amount: 120.00000

17-NOV-2009 19:15	nev	/chem/MSD1.i/s111409.b/s1k1268.d
15-NOV-2009 20:31	pest	/chem/MSD1.i/s111409.b/s1k1228.d
15-NOV-2009 17:47	ap12	/chem/MSD1.i/s111409.b/s1k1221.d
14-NOV-2009 21:45	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1210.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

04-DEC-2009 11:09	pest	/chem/MSD1.i/s120409.b/s110407.d

Ccal Level: 4 , Ccal Amount: 40.0

04-DEC-2009 10:47	nev	/chem/MSD1.i/s120409.b/s110406.d

Ccal Level: 4 , Ccal Amount: 40.0

04-DEC-2009 10:24	ap12	/chem/MSD1.i/s120409.b/s110405.d

Ccal Level: 4 , Ccal Amount: 40.0

04-DEC-2009 09:48	MEGAIICARE	/chem/MSD1.i/s120409.b/s110404.d

Ccal Level: 4 , Ccal Amount: 40.0

04-DEC-2009 09:11	MEGAIICARE	/chem/MSD1.i/s120409.b/s110403.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Cal Date : 04-Dec-2009 16:28 amy01291

Calibration File Names:
Level 1: /chem/MSD1.i/s111409.b/s1k1203.d
Level 2: /chem/MSD1.i/s111409.b/s1k1262.d
Level 3: /chem/MSD1.i/s111409.b/s1k1263.d
Level 4: /chem/MSD1.i/s111409.b/s1k1264.d
Level 5: /chem/MSD1.i/s111409.b/s1k1265.d
Level 6: /chem/MSD1.i/s111409.b/s1k1266.d
Level 7: /chem/MSD1.i/s111409.b/s1k1267.d
Level 8: /chem/MSD1.i/s111409.b/s1k1268.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.54039	0.59425	0.56483	0.56773	0.57115					
	0.58358	0.54985					AVRG		0.56740		3.25055
2 Pyridine	+++++	0.93895	1.06231	1.03607	0.88870	0.86312					
	1.01434	0.86615					AVRG		0.95281		8.83991
4 Aniline	+++++	0.52437	0.56877	0.55954	0.56752	0.56439					
	0.57920	0.54312					AVRG		0.55813		3.31324
209 Benzaldehyde	+++++	0.85863	0.89515	0.82459	0.84178	+++++					
	0.78498	0.73887					AVRG		0.82400		6.72378
6 Phenol	+++++	1.30044	1.37922	1.37450	1.34330	1.33206					
	1.36293	1.27353					AVRG		1.33800		2.93989

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Cal Date : 04-Dec-2009 16:28 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.97066	0.92013	0.97374	0.95071	0.94120	0.92474					
	0.92138	0.84393					AVRG		0.93081		4.39644
8 2-Chlorophenol	+++++	1.10018	1.18374	1.15316	1.14675	1.13425					
	1.15576	1.08633					AVRG		1.13717		2.96542
203 n-Decane	+++++	1.60577	1.68138	1.52755	1.45137	1.35767					
	1.27260	1.12485					AVRG		1.43160		13.59167
9 1,3-Dichlorobenzene	+++++	1.34153	1.44138	1.36782	1.35778	1.32788					
	1.29449	1.20929					AVRG		1.33431		5.33878
11 1,4-Dichlorobenzene	+++++	1.33212	1.41388	1.35420	1.32607	1.29299					
	1.26993	1.16675					AVRG		1.30799		5.91221
12 Benzyl alcohol	+++++	0.65002	0.69243	0.70051	0.67929	0.68651					
	0.73179	0.69932					AVRG		0.69141		3.57264
13 1,2-Dichlorobenzene	+++++	1.29605	1.34639	1.26381	1.21944	1.15866					
	1.13607	1.03545					AVRG		1.20798		8.78247
14 bis(2-Chloroisopropyl)ether	+++++	2.32509	2.42028	2.31148	2.26329	2.15456					
	2.11135	1.93355					AVRG		2.21709		7.35350
15 o-Cresol	+++++	0.90774	0.91911	0.87727	0.85502	0.81471					
	0.80779	0.74384					AVRG		0.84650		7.32849

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.16435	1.20208	1.12556	1.15316	+++++					
	1.08411	1.04352					AVRG		1.12880		5.09017
17 N-Nitrosodipropylamine	0.81293	0.75653	0.80116	0.77693	0.78822	0.71050					
	0.77452	0.67823					AVRG		0.76238		6.05014
18 m,p-Cresols	+++++	1.13181	1.16963	1.17353	1.13669	1.14618					
	1.18516	1.11948					AVRG		1.15179		2.12873
19 Hexachloroethane	+++++	0.47556	0.50281	0.48245	0.48088	0.46955					
	0.46206	0.42193					AVRG		0.47075		5.31168
21 Nitrobenzene	+++++	0.28437	0.30442	0.28298	0.28351	0.27052					
	0.25822	0.23858					AVRG		0.27466		7.74785
22 Isophorone	+++++	0.49709	0.51707	0.49540	0.49196	0.47802					
	0.46730	0.41658					AVRG		0.48049		6.70733
23 2-Nitrophenol	+++++	0.14839	0.15989	0.15609	0.15578	0.14421					
	0.13558	0.12065					AVRG		0.14580		9.49803
24 2,4-Dimethylphenol	+++++	0.25377	0.24260	0.23030	0.24361	0.23323					
	0.21824	0.21248					AVRG		0.23346		6.25831
25 bis(2-Chloroethoxy)methane	+++++	0.32659	0.33857	0.32017	0.31630	0.30271					
	0.29085	0.27012					AVRG		0.30933		7.51487

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.21991	0.23451	0.22671	0.22578	0.22138					
	0.21025	0.19507					AVRG		0.21909		5.89795
27 Benzoic acid	+++++	+++++	0.12652	0.15647	0.17043	0.17939					
	0.17420	0.15820					AVRG		0.16087		11.85426
28 1,2,4-Trichlorobenzene	+++++	0.25324	0.26639	0.25283	0.25336	0.23817					
	0.22476	0.20597					AVRG		0.24210		8.56147
30 Naphthalene	1.00192	0.89427	0.93446	0.86563	0.83102	0.76369					
	0.73215	0.65539					AVRG		0.83482		13.59329
204 alpha-Terpineol	+++++	0.21791	0.22387	0.20802	0.18690	0.18694					
	0.18377	0.16707					AVRG		0.19635		10.50339
31 4-Chloroaniline	+++++	0.39677	0.40757	0.39487	0.39324	0.37614					
	0.36195	0.33806					AVRG		0.38123		6.35973
189 Caprolactam	+++++	0.06846	0.07656	0.07363	0.07653	+++++					
	0.06782	0.06711					AVRG		0.07169		6.15581
32 Hexachlorobutadiene	+++++	0.13511	0.14100	0.13045	0.12864	0.12021					
	0.11205	0.10277					AVRG		0.12432		10.80535
33 4-Chloro-3-methylphenol	+++++	0.21530	0.22699	0.22627	0.22610	0.21202					
	0.21204	0.17967					AVRG		0.21406		7.75567

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.63189	0.59091	0.61031	0.56805	0.55492	0.51261					
	0.47801	0.44368					AVRG		0.54880		11.97650
35 1-Methylnaphthalene	0.57039	0.52594	0.54774	0.50754	0.49716	0.46294					
	0.43668	0.39804					AVRG		0.49330		11.71827
36 Hexachlorocyclopentadiene	+++++	0.10604	0.13033	0.13014	0.13942	0.12687					
	0.11688	0.10523					AVRG		0.12213		10.70285
208 1,1'-Biphenyl	+++++	1.17951	1.24377	1.14549	1.13585	+++++					
	1.04839	0.97002					AVRG		1.12050		8.68804
205 2,3-Dichloroaniline	+++++	0.46645	0.48933	0.47427	0.46997	0.44649					
	0.43405	0.39749					AVRG		0.45401		6.79831
37 2,4,6-Trichlorophenol	+++++	0.26977	0.29094	0.27785	0.27904	0.25743					
	0.25024	0.23713					AVRG		0.26606		7.03474
38 2,4,5-Trichlorophenol	+++++	0.26905	0.31036	0.32159	0.23043	0.31171					
	0.26900	0.26816					AVRG		0.28290		11.57703
40 2-Chloronaphthalene	1.06866	1.01017	1.06218	1.02382	1.00740	0.95458					
	0.92971	0.84336					AVRG		0.98748		7.61587
42 o-Nitroaniline	+++++	0.29397	0.31274	0.31408	0.31185	0.30784					
	0.31350	0.28932					AVRG		0.30619		3.33957

GEL Laboratories LLC

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.27156	0.28234	0.28082	0.27143	0.25979					
	0.28219	0.24573					AVRG		0.27055		5.03620
43 Dimethylphthalate	+++++	1.09522	1.14427	1.12702	1.11254	1.08188					
	1.07235	0.99634					AVRG		1.08995		4.43176
44 2,6-Dinitrotoluene	+++++	0.26660	0.28518	0.28098	0.27933	0.27123					
	0.26992	0.24768					AVRG		0.27156		4.59036
45 Acenaphthylene	1.62784	1.60004	1.67564	1.59865	1.57380	1.47905					
	1.44269	1.32968					AVRG		1.54092		7.42836
47 Acenaphthene	1.00456	0.99034	1.02942	0.97302	0.94853	0.86787					
	0.82882	0.73816					AVRG		0.92259		10.97291
48 2,4-Dinitrophenol	+++++	+++++	0.08843	0.11349	0.11534	0.11082					
	0.11305	0.10198					AVRG		0.10718		9.63049
49 Dibenzofuran	+++++	1.40383	1.45777	1.40759	1.36431	1.30285					
	1.24923	1.15395					AVRG		1.33422		7.92638
50 2,4-Dinitrotoluene	+++++	0.34056	0.36497	0.37079	0.37131	0.36633					
	0.36565	0.33990					AVRG		0.35993		3.80091
51 Diethylphthalate	+++++	1.04278	1.09197	1.06193	1.04018	0.99480					
	0.99307	0.88837					AVRG		1.01616		6.53371

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Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Cal Date : 04-Dec-2009 16:28 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	0.13809	0.17287	0.18777	0.19477	0.20369					
	0.21665	0.20716					AVRG		0.18871		14.01343
53 Fluorene	1.22796	1.15355	1.19493	1.10753	1.06188	0.99894					
	0.97721	0.88428					AVRG		1.07578		10.93658
54 4-Chlorophenylphenylether	+++++	0.47537	0.49720	0.47503	0.46785	0.44264					
	0.43218	0.38915					AVRG		0.45420		7.92169
55 2-Methyl-4,6-dinitrophenol	+++++	0.08375	0.09608	0.10582	0.10320	0.10771					
	0.10908	0.10272					AVRG		0.10120		8.67983
56 p-Nitroaniline	+++++	0.24392	0.26348	0.26430	0.28144	0.26774					
	0.27465	0.25651					AVRG		0.26458		4.60021
133 Diphenylamine	+++++	0.55588	0.57977	0.55886	0.54789	0.52659					
	0.50269	0.46310					AVRG		0.53354		7.43632
58 1,2-Diphenylhydrazine	+++++	0.69850	0.71486	0.68099	0.66427	0.63670					
	0.61324	0.54832					AVRG		0.65098		8.77582
59 Tributylphosphate	+++++	1.22698	1.16066	1.10479	1.12684	1.06119					
	1.01440	0.96114					AVRG		1.09371		8.21068
61 4-Bromophenylphenylether	+++++	0.13960	0.14381	0.14105	0.13893	0.13903					
	0.13474	0.12486					AVRG		0.13743		4.49074

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	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.18056	0.18610	0.17775	0.16888	0.16686					
	0.15868	0.14199					AVRG		0.16869		8.86819
207 Atrazine	+++++	0.04275	0.04402	0.04191	0.04036	+++++					
	0.03698	0.03447					AVRG		0.04008		9.14364
65 Pentachlorophenol	+++++	0.08713	0.10123	0.10564	0.10198	0.10716					
	0.10688	0.09814					AVRG		0.10117		6.93558
206 n-Octadecane	+++++	0.49445	0.50531	0.45683	0.42873	0.36788					
	0.34975	+++++					AVRG		0.43383		14.85243
68 Phenanthrene	1.08140	0.97577	0.96718	0.91676	0.90684	0.85016					
	0.82329	0.75087					AVRG		0.90903		11.26824
69 Anthracene	1.05572	0.98071	1.00934	0.97561	0.92329	0.88140					
	0.83261	0.73707					AVRG		0.92447		11.24280
72 Di-n-butylphthalate	+++++	1.06714	1.12314	1.06117	1.02135	0.94081					
	0.88726	0.80148					AVRG		0.98605		11.57265
76 Fluoranthene	0.94603	0.94387	0.96313	0.92832	0.88364	0.83514					
	0.79976	0.71979					AVRG		0.87746		9.80038
77 Benzidine	+++++	0.28582	0.36970	0.35152	0.36897	+++++					
	0.43187	0.36504					AVRG		0.36215		12.90005

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	1.12921	1.08043	1.13184	1.09423	1.03887	1.05677					
	1.02924	0.94284					AVRG		1.06293		5.79953
85 Butylbenzylphthalate	+++++	0.53253	0.56219	0.50335	0.46569	0.43331					
	0.40529	+++++					AVRG		0.48372		12.38419
89 Benzo(a)anthracene	1.00602	0.91134	0.98073	0.96992	0.98002	0.96903					
	0.95763	0.89850					AVRG		0.95915		3.79585
90 3,3'-Dichlorobenzidine	+++++	0.24634	0.28908	0.28847	0.28710	+++++					
	0.28231	0.25909					AVRG		0.27540		6.60230
92 Chrysene	0.98731	0.93210	0.94599	0.88032	0.86729	0.85456					
	0.87955	0.82465					AVRG		0.89647		6.00506
93 bis(2-Ethylhexyl)phthalate	0.57061	0.72394	0.78180	0.75934	0.74451	0.72196					
	0.68855	0.63132					AVRG		0.70275		10.02985
94 Di-n-octylphthalate	+++++	1.17035	1.39716	1.40560	1.36840	1.34274					
	1.30766	1.16752					AVRG		1.30849		7.70640
95 Benzo(b)fluoranthene	21625	340509	730849	1739197	2305837	3304287					
	3978698	5127789					LINR	0.06661	1.08695		0.99870
96 Benzo(k)fluoranthene	1.03711	1.06722	1.12263	1.01575	1.02623	1.00211					
	0.97020	0.78256					AVRG		1.00298		9.96839

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	20918	319721	688146	1504125	2094282	2912657					
	3398226	3934490					LINR	-0.00385	0.87033		0.99612
99 Indeno(1,2,3-cd)pyrene	21578	336515	700258	1580353	2201480	3025334					
	3523403	4020592					LINR	-0.01092	0.89653		0.99431
100 Dibenzo(a,h)anthracene	16162	268427	581631	1325626	1846286	2532762					
	2946699	3397425					LINR	-0.00445	0.75511		0.99519
101 Benzo(ghi)perylene	0.56462	0.70452	0.77602	0.81299	0.83023	0.80394					
	0.79303	0.72783					AVRG		0.75165		11.54879
102 1,4-Dioxane	+++++	0.32550	0.33716	0.30934	0.31455	+++++					
	0.30805	0.28861					AVRG		0.31387		5.27573
103 Methyl methacrylate	+++++	0.17774	0.19107	0.17805	0.17495	+++++					
	0.17326	0.16336					AVRG		0.17640		5.08144
104 Ethyl methacrylate	+++++	0.73346	0.76622	0.70794	0.70643	+++++					
	0.69714	0.66675					AVRG		0.71299		4.73943
105 2-Picoline	+++++	1.18802	1.23130	1.15065	1.15312	+++++					
	1.12223	1.07774					AVRG		1.15384		4.58113
106 N-Nitrosomethylethylamine	+++++	0.42951	0.48460	0.44623	0.45222	+++++					
	0.46395	0.44906					AVRG		0.45426		4.08577

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.43204	0.45674	0.42468	0.43227	+++++					
	0.41648	0.39202					AVRG		0.42570		5.00242
108 N-Nitrosodiethylamine	+++++	0.47915	0.50719	0.47065	0.48068	+++++					
	0.47830	0.46128					AVRG		0.47954		3.20356
109 Ethyl Methanesulfonate	+++++	0.59343	0.63202	0.58286	0.59990	+++++					
	0.59568	0.57362					AVRG		0.59625		3.34808
110 Pentachloroethane	+++++	0.30094	0.30775	0.28811	0.28717	+++++					
	0.28774	0.27522					AVRG		0.29115		3.95122
111 N-Nitrosopyrrolidine	+++++	0.47773	0.52978	0.49561	0.51566	+++++					
	0.41369	0.41806					AVRG		0.47509		10.34926
113 N-Nitrosomorpholine	+++++	0.63587	0.69755	0.63481	0.65791	+++++					
	0.54487	0.53392					AVRG		0.61749		10.47980
114 o-Toluidine	+++++	1.64551	1.76888	1.61850	1.65178	+++++					
	1.65679	1.57817					AVRG		1.65327		3.85302
115 N-Nitrosopiperidine	+++++	0.12931	0.13922	0.12850	0.13280	+++++					
	0.13244	0.12709					AVRG		0.13156		3.32124
116 a,a-Dimethylphenethylamine	+++++	0.70597	0.78545	0.76293	0.79408	+++++					
	0.79335	0.76628					AVRG		0.76801		4.32000

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.12812	0.12428	0.12751	0.12901	0.12488					
	0.12021	0.11633					AVRG		0.12433		3.70966
118 2,6-Dichlorophenol	+++++	0.18796	0.20530	0.19528	0.20193	+++++					
	0.20014	0.19147					AVRG		0.19701		3.35416
119 Hexachloropropene	+++++	0.07891	0.09539	0.09133	0.09091	+++++					
	0.09225	0.08492					AVRG		0.08895		6.72708
120 p-Phenylenediamine	+++++	0.17417	0.23091	0.21919	0.22009	+++++					
	0.19257	0.17231					AVRG		0.20154		12.55674
121 N-Nitrosodi-n-butylamine	+++++	0.16926	0.19309	0.16843	0.17454	+++++					
	0.16640	0.15862					AVRG		0.17172		6.79719
122 Safrole	+++++	0.18021	0.18852	0.17847	0.18253	+++++					
	0.17443	0.16766					AVRG		0.17864		3.98501
123 1,2,4,5-Tetrachlorobenzene	+++++	0.38048	0.40351	0.37295	0.37017	+++++					
	0.35065	0.32500					AVRG		0.36713		7.29953
124 Isosafrole	+++++	0.32136	0.34935	0.32718	0.32927	+++++					
	0.32898	0.30952					AVRG		0.32761		3.96520
125 1,4-Naphthoquinone	+++++	0.37346	0.38046	0.31457	0.30180	+++++					
	0.18844	0.22186					AVRG		0.29676		26.34996 <-

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
126 m-Dinitrobenzene	+++++	0.17349	0.18721	0.19120	0.19440	0.19057					
	0.19238	0.17644					AVRG		0.18653		4.41251
127 Pentachlorobenzene	+++++	0.32992	0.34557	0.31675	0.31835	+++++					
	0.29677	0.27972					AVRG		0.31451		7.45207
128 1-Naphthylamine	+++++	0.82636	0.98891	0.93384	0.93443	+++++					
	0.87178	0.80990					AVRG		0.89420		7.80762
129 2-Naphthylamine	+++++	0.96588	1.05556	1.00159	1.00599	+++++					
	0.94403	0.87535					AVRG		0.97473		6.34557
130 2,3,4,6-Tetrachlorophenol	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
131 5-Nitro-o-toluidine	+++++	0.25535	0.29363	0.28574	0.29496	+++++					
	0.29982	0.28219					AVRG		0.28528		5.60973
132 Thionazin	+++++	0.16358	0.16364	0.16630	0.16880	0.16339					
	0.15554	0.14821					AVRG		0.16135		4.38820
134 Sulfotepp	+++++	0.08562	0.08304	0.08303	0.08467	0.07953					
	0.07427	0.07214					AVRG		0.08033		6.54838
135 Phorate	+++++	0.36567	0.35586	0.35721	0.36683	0.34385					
	0.32742	0.31541					AVRG		0.34747		5.65187

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	0.10196	0.12348	0.12395	0.12006	+++++					
	0.11894	0.10898					AVRG		0.11623		7.60291
137 Phenacetin	+++++	0.22684	0.26317	0.26291	0.26441	+++++					
	0.26599	0.25918					AVRG		0.25708		5.83046
138 Diallate	+++++	0.24760	0.24927	0.23322	0.23010	+++++					
	0.21802	0.20853					AVRG		0.23112		6.94549
139 Dimethoate	+++++	0.21461	0.21994	0.23007	0.23724	0.23858					
	0.23513	0.22967					AVRG		0.22932		3.92960
140 4-Aminobiphenyl	+++++	0.53696	0.55369	0.57677	0.59426	+++++					
	0.49840	0.45674					AVRG		0.53614		9.53476
141 Pentachloronitrobenzene	+++++	0.05720	0.06067	0.05490	0.05533	+++++					
	0.04673	0.04463					AVRG		0.05324		11.71339
142 Pronamide	+++++	0.24822	0.26125	0.24154	0.23765	+++++					
	0.17973	+++++					AVRG		0.23368		13.46482
143 Dinoseb	+++++	0.10297	0.12216	0.13126	0.12950	0.13024					
	0.13017	0.12500					AVRG		0.12447		8.06727
144 Disulfoton	+++++	0.32280	0.31415	0.31231	0.32231	0.30214					
	0.27306	0.26345					AVRG		0.30146		7.92046

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	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.18413	0.18908	0.19611	0.20206	0.20472					
	0.19613	0.19053					AVRG		0.19468		3.74715
146 4-Nitroquinoline-1-oxide	+++++	0.00831	0.00998	0.00800	0.01074	+++++					
	0.01133	0.01046					AVRG		0.00980		13.77700
147 Methapyrilene	+++++	0.36466	0.38869	0.39386	0.38311	+++++					
	0.36077	0.31821					AVRG		0.36822		7.55340
148 Isodrin	+++++	0.09085	0.09372	0.08925	0.08743	+++++					
	0.07960	0.07570					AVRG		0.08609		8.09255
149 Aramite	+++++	0.04141	0.04570	0.04371	0.04272	+++++					
	0.04204	0.03972					AVRG		0.04255		4.79399
150 Kepone	+++++	0.06055	0.06732	0.06349	0.06380	+++++					
	0.06458	0.05876					AVRG		0.06308		4.80408
151 p-(Dimethylamino)azobenzene	+++++	0.28782	0.31583	0.29702	0.29097	+++++					
	0.26535	0.24656					AVRG		0.28392		8.62091
152 Chlorobenzilate	+++++	0.21991	0.23787	0.22800	0.23044	+++++					
	0.20814	0.19524					AVRG		0.21994		7.17760
153 3,3'-Dimethylbenzidine	+++++	0.45675	0.51768	0.48413	0.48879	+++++					
	0.49372	0.43564					AVRG		0.47945		6.05117

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154 Famphur	+++++	0.29819	0.30032	0.31780	0.33430	0.32440					
	0.30595	0.30061					AVRG		0.31165		4.49495
155 2-Acetylaminofluorene	+++++	0.23107	0.30345	0.31881	0.32045	+++++					
	0.34822	0.32608					AVRG		0.30801		13.11206
157 7,12Dimethylbenz(a)anthracene	+++++	0.41118	0.44192	0.42666	0.43253	+++++					
	0.40970	0.40537					AVRG		0.42123		3.47443
158 3-Methylcholanthrene	+++++	0.29680	0.36865	0.37932	0.38459	+++++					
	0.39125	0.38204					AVRG		0.36711		9.59696
26 Phthalic anhydride	+++++	30283	90214	245905	320454	497228					
	555160	687649					LINR	0.08413	0.10332		0.99692
173 Carbazole	0.90246	0.82255	0.80875	0.81414	0.83946	0.78812					
	0.78058	0.70109					AVRG		0.80714		7.06036
174 Hexachlorophene	+++++	0.03640	0.04820	0.05180	0.05353	0.05136					
	0.04905	+++++					AVRG		0.04839		12.77621
179 Dibenzo(a,e)pyrene	+++++	117900	312429	817402	1225621	1557621					
	1812574	+++++					LINR	0.07449	0.50549		0.99368
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Cal Date : 04-Dec-2009 16:28 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
184 p-Benzoquinone	+++++	2462	14132	46568	48315	83536					
	96111	113764					LINR	0.17192	0.08067		0.99223
191 Parathion	+++++	0.06169	0.06089	0.06449	0.06621	0.06308					
	0.06173	0.06112					AVRG		0.06274		3.14637
192 Methoxychlor	+++++	0.32535	0.36631	0.33959	0.33867	0.27894					
	0.25594	+++++					AVRG		0.31747		13.10686
210 m-Toluidine	+++++	0.77272	0.88703	0.90355	0.94226	1.01524					
	0.94351	+++++					AVRG		0.91072		8.87324
211 p-Toluidine	+++++	0.69169	0.70617	0.72166	0.71562	0.68688					
	+++++	+++++					AVRG		0.70440		2.12367
212 Cis Diallate	+++++	0.23437	0.24880	0.23465	0.23944	+++++					
	0.24434	0.23833					AVRG		0.23999		2.35508
213 Trans Diallate	+++++	0.29129	0.29326	0.27438	0.27070	+++++					
	0.25649	0.24533					AVRG		0.27191		6.94549
214 1,4-Dinitrobenzene	+++++	0.16000	0.17119	0.17754	0.17866	0.17639					
	0.17966	0.16860					AVRG		0.17315		4.08379
215 2-Ethoxyethanol	+++++	0.57555	0.62918	0.65385	0.56961	0.58718					
	0.62071	0.58595					AVRG		0.60315		5.24047

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Cal Date : 04-Dec-2009 16:28 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.11447	0.12909	0.13171	0.13536	0.13420					
	0.13376	0.12587					AVRG		0.12921		5.63660
229 2,2'-Dichlorobenzil	+++++	0.67948	0.77608	0.71487	+++++	0.73565					
	+++++	0.63422					AVRG		0.70806		7.63914
230 4-Chlorothioanisole	+++++	0.23155	0.23520	0.23685	+++++	0.23140					
	+++++	0.22159					AVRG		0.23132		2.56050
231 4-Chlorothiophenol	+++++	0.15409	0.17482	0.19368	+++++	0.19893					
	+++++	0.19703					AVRG		0.18371		10.41669
232 bis(p-Chlorophenyl)sulfone	+++++	0.39430	0.43698	0.38579	+++++	0.39600					
	+++++	0.34721					AVRG		0.39206		8.15529
233 bis(p-Chlorophenyl)disulfide	+++++	0.10045	0.11150	0.11707	+++++	0.12020					
	+++++	0.10635					AVRG		0.11111		7.18003
234 Diphenyl disulfide	+++++	0.17804	0.18209	0.18631	+++++	0.17491					
	+++++	0.16341					AVRG		0.17695		4.91531
235 Diphenyl sulfide	+++++	0.71955	0.73103	0.70874	+++++	0.65333					
	+++++	0.61709					AVRG		0.68595		7.09988
236 Phenyl sulfone	+++++	0.43275	0.44078	0.42799	+++++	0.41905					
	+++++	0.39177					AVRG		0.42247		4.46830

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Cal Date : 04-Dec-2009 16:28 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
237 Hydroxymethyl phthalimide	+++++	0.12384	0.15720	0.10384	+++++	0.13032						
	+++++	0.12669					AVRG		0.12838		14.88299	
238 Phthalic acid	+++++	24604	70600	163991	+++++	411903						
	+++++	634014					LINR	0.25540	0.11087		0.99102	
239 Thiophenol	+++++	0.94048	1.03561	1.08365	+++++	1.12900						
	+++++	1.09332					AVRG		1.05641		6.89893	
240 bis(Chloromethyl)ether	+++++	0.78790	0.79417	0.76917	+++++	0.75455						
	+++++	0.73576					AVRG		0.76831		3.12263	
241 Octachlorostyrene	+++++	0.06103	0.06315	0.05827	+++++	0.05420						
	+++++	0.04861					AVRG		0.05705		10.14342	
M 225 Trichlorophenols	+++++	0.26941	0.30065	0.29972	0.25473	0.28457						
	0.25962	0.25265					AVRG		0.27448		7.49129	
M 226 Tetrachlorophenols	+++++	0.20567	0.22518	0.22987	0.20102	0.22712						
	0.21818	0.20523					AVRG		0.21604		5.51582	
M 227 Benzo(b,k)fluoranthene	0.78278	0.93887	1.02131	1.01324	1.00976	1.01479						
	1.00963	0.93381					AVRG		0.96552		8.47131	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Cal Date : 04-Dec-2009 16:28 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
$ 3 2-Fluorophenol	+++++	0.97776	1.06271	1.06423	1.06306	1.07281						
	1.07136	1.00157					AVRG		1.04478		3.68308	
$ 5 Phenol-d5	+++++	1.21974	1.33050	1.28249	1.27680	1.26954						
	1.29216	1.21764					AVRG		1.26984		3.15351	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27426	0.28571	0.27066	0.27231	0.25884						
	0.24945	0.23400					AVRG		0.26360		6.62019	
$ 39 2-Fluorobiphenyl	+++++	0.99823	1.04801	1.00239	0.98618	0.93991						
	0.91199	0.81928					AVRG		0.95800		7.87748	
$ 60 2,4,6-Tribromophenol	+++++	0.10924	0.11530	0.11503	0.10898	0.11186						
	0.11271	0.10874					AVRG		0.11169		2.51418	
$ 81 p-Terphenyl-d14	+++++	0.64452	0.67675	0.65301	0.63863	0.61256						
	0.60853	0.56112					AVRG		0.62787		5.98666	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Cal Date : 04-Dec-2009 16:28 amy01291

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 15-NOV-2009 23:17
Lab File ID: s1k1235.d Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 22:53
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.71239	0.71239	0.000	-13.54468	60.00000	Averaged
16 Acetophenone	1.12880	1.15012	1.15012	0.000	1.88924	60.00000	Averaged
189 Caprolactam	0.07169	0.08295	0.08295	0.000	15.71078	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.24126	1.24126	0.000	10.77724	60.00000	Averaged
207 Atrazine	0.04008	0.04737	0.04737	0.000	18.18184	60.00000	Averaged
77 Benzidine	0.36215	0.33951	0.33951	0.000	-6.25196	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.29917	0.29917	0.000	8.63115	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.37981	0.37981	0.000	21.00923	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.20821	0.20821	0.000	18.03005	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.86659	0.86659	0.000	21.54329	60.00000	Averaged
105 2-Picoline	1.15384	1.13306	1.13306	0.000	-1.80140	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.46463	0.46463	0.000	2.28123	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48978	0.48978	0.000	15.05276	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.49102	0.49102	0.000	2.39384	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.74183	0.74183	0.000	24.41607	60.00000	Averaged
110 Pentachloroethane	0.29115	0.40985	0.40985	0.000	40.76840	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.50932	0.50932	0.000	7.20593	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.67896	0.67896	0.000	9.95518	60.00000	Averaged
114 o-Toluidine	1.65327	1.64031	1.64031	0.000	-0.78415	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.13273	0.13273	0.000	0.88789	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.79273	0.79273	0.000	3.21891	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.21797	0.21797	0.000	10.63653	60.00000	Averaged
119 Hexachloropropene	0.08895	0.13367	0.13367	0.000	50.27176	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.18980	0.18980	0.000	-5.82557	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.17829	0.17829	0.000	3.82057	60.00000	Averaged
122 Safrole	0.17864	0.21665	0.21665	0.000	21.27785	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.42376	0.42376	0.000	15.42574	60.00000	Averaged
124 Isosafrole	0.32761	0.46202	0.46202	0.000	41.02664	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.32067	0.32067	0.000	8.05637	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.35074	0.35074	0.000	11.51805	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.98926	0.98926	0.000	10.62991	60.00000	Averaged
129 2-Naphthylamine	0.97473	1.09077	1.09077	0.000	11.90459	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.30775	0.30775	0.000	7.87638	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.15168	0.15168	0.000	30.50015	60.00000	Averaged
137 Phenacetin	0.25708	0.29576	0.29576	0.000	15.04579	60.00000	Averaged
138 Diallate	0.23112	0.23284	0.23284	0.000	0.74457	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1235.d
Analysis Type:
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 15-NOV-2009 23:17
Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Init. Cal. Times: 18:22 22:53

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.31739	0.31739	0.000	32.25095	60.00000	Averaged
213 Trans Diallate	0.27191	0.27393	0.27393	0.000	0.74457	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.62569	0.62569	0.000	16.70322	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06215	0.06215	0.000	16.73283	60.00000	Averaged
142 Pronamide	0.23368	0.26726	0.26726	0.000	14.37225	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.00923	0.00923	0.000	-5.86960	60.00000	Averaged
147 Methapyrilene	0.36822	0.29090	0.29090	0.000	-20.99905	60.00000	Averaged
148 Isodrin	0.08609	0.08812	0.08812	0.000	2.35297	60.00000	Averaged
149 Aramite	0.04255	0.04327	0.04327	0.000	1.67534	60.00000	Averaged
150 Kepone	0.06308	0.07178	0.07178	0.000	13.77677	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.29411	0.29411	0.000	3.58893	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.24578	0.24578	0.000	11.75217	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.47257	0.47257	0.000	-1.43591	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.33042	0.33042	0.000	7.27461	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.42978	0.42978	0.000	2.03140	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40048	0.40048	0.000	9.08958	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1235.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: APICV
Inj Date : 15-NOV-2009 23:17
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091111-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 10:44 nat00999 Quant Type: ISTD
Cal Date : 15-NOV-2009 21:42 Cal File: s1k1231.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.957	3.940	(1.000)	601939	40.0000	
* 29 Naphthalene-d8	136	4.828	4.810	(1.000)	2374945	40.0000	
* 46 Acenaphthene-d10	164	6.075	6.057	(1.000)	1270499	40.0000	
* 67 Phenanthrene-d10	188	7.057	7.040	(1.000)	2114263	40.0000	
* 91 Chrysene-d12	240	8.739	8.722	(1.000)	1927170	40.0000	
* 98 Perylene-d12	264	10.251	10.222	(1.000)	1696025	40.0000	(H)
209 Benzaldehyde	77	3.681	3.681	(0.930)	428816	40.0000	34.6
16 Acetophenone	105	4.210	4.210	(1.064)	692304	40.0000	40.8
189 Caprolactam	113	5.104	5.122	(1.057)	197001	40.0000	46.3
208 1,1'-Biphenyl	154	5.646	5.651	(0.929)	1577025	40.0000	44.3
207 Atrazine	173	6.822	6.834	(0.967)	100151	40.0000	47.3
77 Benzidine	184	7.828	7.834	(0.896)	654298	40.0000	37.5
90 3,3'-Dichlorobenzidine	252	8.663	8.669	(0.991)	576557	40.0000	43.4
102 1,4-Dioxane	88	2.281	2.287	(0.576)	228622	40.0000	48.4
103 Methyl methacrylate	100	2.275	2.275	(0.575)	125330	40.0000	47.2
104 Ethyl methacrylate	69	2.652	2.652	(0.670)	521635	40.0000	48.6
105 2-Picoline	93	2.846	2.846	(0.719)	682032	40.0000	39.3
106 N-Nitrosomethylethylamine	88	2.887	2.893	(0.729)	279676	40.0000	40.9
107 Methyl methanesulfonate	80	3.046	3.052	(0.770)	294820	40.0000	46.0
108 N-Nitrosodiethylamine	102	3.281	3.287	(0.829)	295564	40.0000	41.0
109 Ethyl Methanesulfonate	79	3.440	3.446	(0.869)	446538	40.0000	49.8
110 Pentachloroethane	167	3.781	3.781	(0.955)	246707	40.0000	56.3
111 N-Nitrosopyrrolidine	100	4.199	4.216	(1.061)	306582	40.0000	42.9
113 N-Nitrosomorpholine	56	4.216	4.228	(1.065)	408692	40.0000	44.0
114 o-Toluidine	106	4.234	4.246	(1.070)	987365	40.0000	39.7
115 N-Nitrosopiperidine	114	4.434	4.446	(0.918)	315224	40.0000	40.4
116 a,a-Dimethylphenethylamine	58	4.681	4.681	(0.970)	1882697	40.0000	41.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.869	4.875	(1.009)	517655	40.0000	44.2
119 Hexachloropropene	213	4.899	4.898	(1.015)	317465	40.0000	60.1
120 p-Phenylenediamine	108	5.104	5.116	(1.057)	450756	40.0000	37.7
121 N-Nitrosodi-n-butylamine	84	5.069	5.075	(1.050)	423419	40.0000	41.5(T)
122 Safrole	162	5.234	5.240	(1.084)	514526	40.0000	48.5
123 1,2,4,5-Tetrachlorobenzene	216	5.440	5.446	(0.895)	538386	40.0000	46.2
124 Isosafrole	162	5.604	5.610	(0.923)	586994	40.0000	56.4
125 1,4-Naphthoquinone	158	5.793	5.793	(0.954)	407413	40.0000	43.2
127 Pentachlorobenzene	250	6.181	6.187	(1.017)	445615	40.0000	44.6
128 1-Naphthylamine	143	6.263	6.269	(1.031)	1256848	40.0000	44.2
129 2-Naphthylamine	143	6.316	6.322	(1.040)	1385825	40.0000	44.8
131 5-Nitro-o-toluidine	152	6.434	6.445	(1.059)	390998	40.0000	43.2
136 1,3,5-Trinitrobenzene	75	6.645	6.651	(0.942)	320686	40.0000	52.2
137 Phenacetin	108	6.687	6.698	(0.947)	625324	40.0000	46.0
138 Diallate	86	6.669	6.675	(0.945)	492291	40.0000	40.3
212 Cis Diallate	86	6.734	6.734	(0.954)	100656	6.00000	7.9
213 Trans Diallate	86	6.669	6.675	(0.945)	492291	34.0000	34.2
140 4-Aminobiphenyl	169	6.910	6.916	(0.979)	1322873	40.0000	46.7
141 Pentachloronitrobenzene	237	6.934	6.940	(0.982)	131405	40.0000	46.7
142 Pronamide	173	6.922	6.928	(0.981)	565063	40.0000	45.7
146 4-Nitroquinoline-1-oxide	101	7.516	7.522	(1.065)	19512	40.0000	37.6
147 Methapyrilene	58	7.534	7.539	(1.067)	615031	40.0000	31.6
148 Isodrin	193	7.692	7.692	(1.090)	186303	40.0000	40.9
149 Aramite	185	7.916	7.916	(1.122)	91474	40.0000	40.7
150 Kepone	272	8.351	8.363	(1.183)	151752	40.0000	45.5
151 p-(Dimethylamino)azobenzene	120	8.045	8.051	(0.921)	566806	40.0000	41.4
152 Chlorobenzilate	251	8.057	8.063	(0.922)	473667	40.0000	44.7
153 3,3'-Dimethylbenzidine	212	8.257	8.263	(0.945)	910722	40.0000	39.4
155 2-Acetylaminofluorene	181	8.445	8.457	(0.966)	636774	40.0000	42.9
157 7,12Dimethylbenz(a)anthracene	256	9.733	9.745	(0.945)	728922	40.0000	40.8
158 3-Methylcholanthrene	268	10.622	10.639	(1.031)	679223	40.0000	43.6

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1235.d
Date : 15-NOV-2009 23:17
Client ID: APICV
Sample Info: IWEN091111-08,1140 PPM111SVHF11APICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

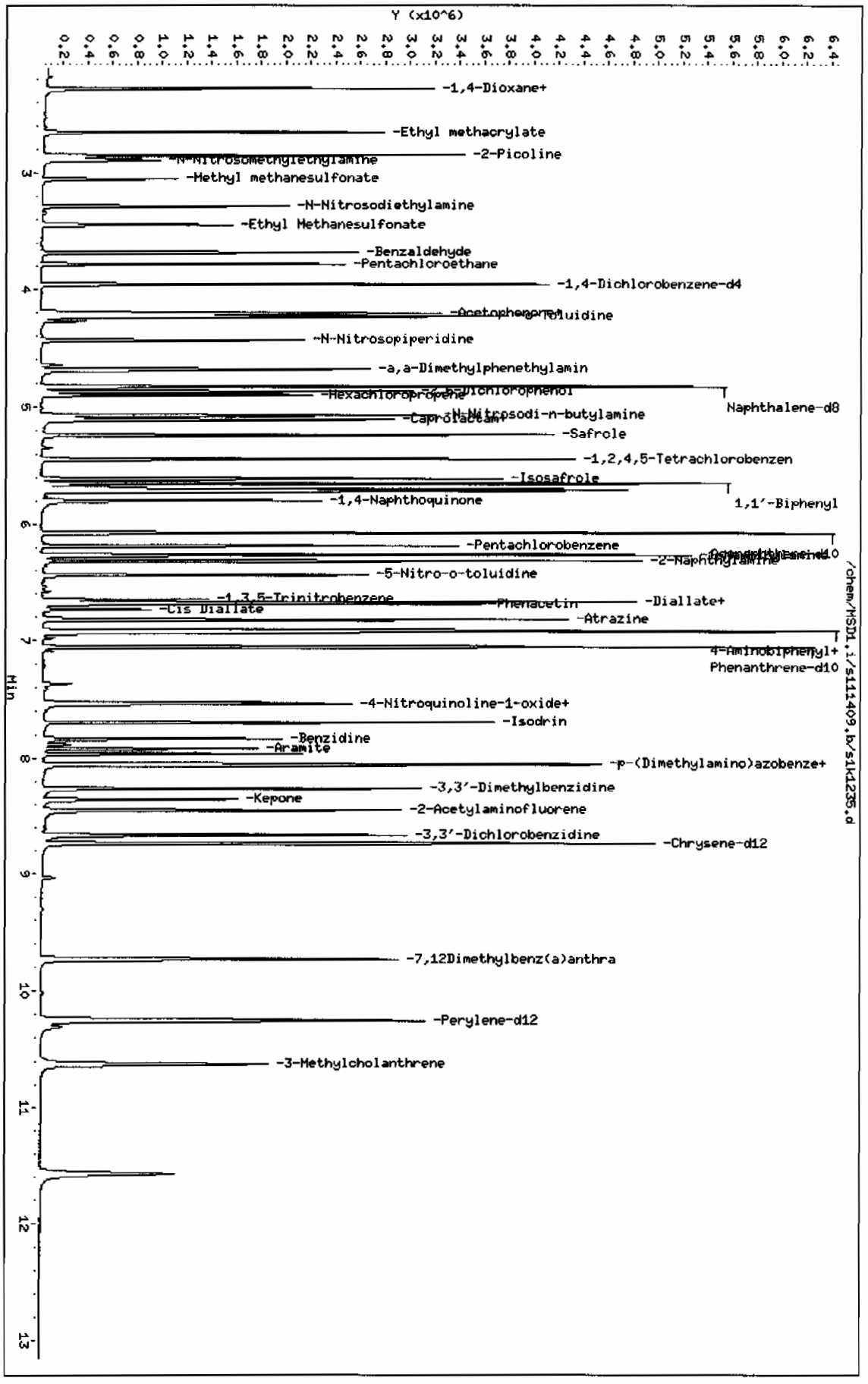

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	1.04478	0.92701	0.92701	0.000	-11.27306	60.00000	Averaged	
$	5 Phenol-d5	1.26984	1.11829	1.11829	0.000	-11.93416	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.26360	0.25882	0.25882	0.000	-1.81289	60.00000	Averaged	
$	39 2-Fluorobiphenyl	0.95800	0.95545	0.95545	0.000	-0.26619	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.11169	0.11397	0.11397	0.000	2.04032	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.62787	0.61091	0.61091	0.000	-2.70233	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.56740	0.52259	0.52259	0.000	-7.89719	60.00000	Averaged	
	2 Pyridine	0.95281	0.72054	0.72054	0.000	-24.37721	60.00000	Averaged	
	4 Aniline	0.55813	0.46069	0.46069	0.000	-17.45935	60.00000	Averaged	
	6 Phenol	1.33800	1.13102	1.13102	0.001	-15.46941	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.93081	0.78725	0.78725	0.000	-15.42323	60.00000	Averaged	
	8 2-Chlorophenol	1.13717	0.96631	0.96631	0.000	-15.02517	60.00000	Averaged	
	203 n-Decane	1.43160	1.33489	1.33489	0.000	-6.75532	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.33431	1.14485	1.14485	0.000	-14.19930	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.30799	1.12905	1.12905	0.001	-13.68038	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.20798	1.02631	1.02631	0.000	-15.03923	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	2.21709	1.93928	1.93928	0.000	-12.53006	60.00000	Averaged	
	12 Benzyl alcohol	0.69141	0.59629	0.59629	0.000	-13.75808	60.00000	Averaged	
	15 o-Cresol	0.84650	0.72216	0.72216	0.000	-14.68816	60.00000	Averaged	
	18 m,p-Cresols	1.15179	1.00178	1.00178	0.000	-13.02332	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.76238	0.61385	0.61385	0.050	-19.48192	60.00000	Averaged	spcc
	19 Hexachloroethane	0.47075	0.38923	0.38923	0.000	-17.31682	60.00000	Averaged	
	21 Nitrobenzene	0.27466	0.23975	0.23975	0.000	-12.70858	60.00000	Averaged	
	22 Isophorone	0.48049	0.42824	0.42824	0.000	-10.87384	60.00000	Averaged	
	23 2-Nitrophenol	0.14580	0.12443	0.12443	0.001	-14.65471	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.23346	0.23407	0.23407	0.000	0.25935	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.30933	0.25445	0.25445	0.000	-17.74126	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.21909	0.18847	0.18847	0.001	-13.97781	20.00000	Averaged	ccc
	27 Benzoic acid	0.16087	0.16553	0.16553	0.000	2.89975	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24210	0.21218	0.21218	0.000	-12.36169	60.00000	Averaged	
	30 Naphthalene	0.83482	0.76679	0.76679	0.000	-8.14910	60.00000	Averaged	
	204 alpha-Terpineol	0.19635	0.19249	0.19249	0.000	-1.96852	60.00000	Averaged	
	31 4-Chloroaniline	0.38123	0.34324	0.34324	0.000	-9.96471	60.00000	Averaged	
	32 Hexachlorobutadiene	0.12432	0.10582	0.10582	0.001	-14.87841	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.21406	0.17276	0.17276	0.001	-19.29025	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.54880	0.51972	0.51972	0.000	-5.29812	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.47920	0.47920	0.000	-2.85884	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.12462	0.12462	0.050	2.03810	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.44519	0.44519	0.000	-1.94238	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.24935	0.24935	0.001	-6.28041	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.25595	0.25595	0.000	-9.52679	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.82050	0.82050	0.000	-16.91018	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.24946	0.24946	0.000	-18.52571	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.22438	0.22438	0.000	-17.06469	60.00000	Averaged
43 Dimethylphthalate	1.08995	0.95932	0.95932	0.000	-11.98438	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.22271	0.22271	0.000	-17.99006	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.29440	0.29440	0.000	-18.20706	60.00000	Averaged
45 Acenaphthylene	1.54092	1.46812	1.46812	0.000	-4.72441	60.00000	Averaged
47 Acenaphthene	0.92259	0.85781	0.85781	0.001	-7.02192	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.09229	0.09229	0.050	-13.89853	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.12564	1.12564	0.000	-15.63294	60.00000	Averaged
51 Diethylphthalate	1.01616	0.93320	0.93320	0.000	-8.16403	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.18660	0.18660	0.050	-1.12202	60.00000	Averaged spcc
53 Fluorene	1.07578	0.99783	0.99783	0.000	-7.24582	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.42578	0.42578	0.000	-6.25867	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.09844	0.09844	0.000	-2.71965	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.21819	0.21819	0.000	-17.53206	60.00000	Averaged
133 Diphenylamine	0.53354	0.46493	0.46493	0.001	-12.85961	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.55777	0.55777	0.000	-14.31896	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.14126	0.14126	0.000	2.79050	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.14433	0.14433	0.000	-14.43782	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.09042	0.09042	0.001	-10.61921	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.42570	0.42570	0.000	-1.87309	60.00000	Averaged
68 Phenanthrene	0.90903	0.83581	0.83581	0.000	-8.05558	60.00000	Averaged
69 Anthracene	0.92447	0.85110	0.85110	0.000	-7.93592	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	0.95396	0.95396	0.000	-3.25457	60.00000	Averaged
76 Fluoranthene	0.87746	0.81704	0.81704	0.001	-6.88555	20.00000	Averaged ccc
79 Pyrene	1.06293	0.98267	0.98267	0.000	-7.55079	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.46739	0.46739	0.000	-3.37649	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.87571	0.87571	0.000	-8.69930	60.00000	Averaged
92 Chrysene	0.89647	0.82199	0.82199	0.000	-8.30767	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.65271	0.65271	0.000	-7.12169	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.19375	1.19375	0.001	-8.76858	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	34.69168	40.00000	0.87030	0.000	-13.27080	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	0.95633	0.95633	0.000	-4.65112	60.00000	Averaged	
	97 Benzo(a)pyrene	37.92700	40.00000	0.82858	0.001	-5.18249	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	35.83759	40.00000	0.81303	0.000	-10.40601	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	35.09981	40.00000	0.66597	0.000	-12.25048	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.69836	0.69836	0.000	-7.08991	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15696	0.15696	0.000	-15.84920	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
	143 Dinoseb	0.12447	0.10965	0.10965	0.000	-11.90708	60.00000	Averaged	
	173 Carbazole	0.80714	0.69773	0.69773	0.000	-13.55506	60.00000	Averaged	
	184 p-Benzoquinone	40.49777	40.00000	0.06781	0.000	1.24442	60.00000	Linear	
	192 Methoxychlor	0.31747	0.36177	0.36177	0.000	13.95477	60.00000	Averaged	
	211 p-Toluidine	0.70440	0.95402	0.95402	0.000	35.43664	60.00000	Averaged	
	210 m-Toluidine	0.91072	0.95200	0.95200	0.000	4.53333	60.00000	Averaged	
	26 Phthalic anhydride	42.71723	40.00000	0.10164	0.000	6.79306	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	24.88814	40.00000	0.27687	0.000	-37.77964	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14504	0.14504	0.000	-16.23762	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.59707	0.59707	0.000	-1.00765	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.12373	0.12373	0.000	-4.23543	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.25265	0.25265	0.000	-7.95340	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	0.91331	0.91331	0.000	-5.40733	60.00000	Averaged	

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Data file : /chem/MSD1.i/s111409.b/s1k1261.d
Lab Smp Id: WBN091027-09.3 Client Smp ID: MEGAICV
Inj Date : 17-NOV-2009 16:27
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091027-09.3|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 16:47 llo00884 Quant Type: ISTD
Cal Date : 17-NOV-2009 12:38 Cal File: s1k1256.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.928	3.928	(1.000)	530038	40.0000		
* 29 Naphthalene-d8	136	4.793	4.793	(1.000)	2205306	40.0000		
* 46 Acenaphthene-d10	164	6.040	6.040	(1.000)	1135267	40.0000		
* 67 Phenanthrene-d10	188	7.022	7.022	(1.000)	1874551	40.0000		(H)
* 91 Chrysene-d12	240	8.704	8.704	(1.000)	1621760	40.0000		
* 98 Perylene-d12	264	10.198	10.198	(1.000)	1481649	40.0000		
$ 3 2-Fluorophenol	112	3.104	3.104	(0.790)	491348	40.0000	35.5	
$ 5 Phenol-d5	99	3.640	3.640	(0.927)	592737	40.0000	35.2	
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	570788	40.0000	39.3	
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.916)	1084689	40.0000	39.9	
$ 60 2,4,6-Tribromophenol	329	6.575	6.575	(1.089)	129390	40.0000	40.8	
$ 81 p-Terphenyl-d14	244	7.939	7.939	(0.912)	990744	40.0000	38.9	
1 N-Methyl-N-nitrosomethylamine	74	2.410	2.410	(0.614)	276992	40.0000	36.8	
2 Pyridine	79	2.446	2.446	(0.623)	381913	40.0000	30.2	
4 Aniline	66	3.710	3.710	(0.945)	244181	40.0000	33.0	
6 Phenol	94	3.646	3.646	(0.928)	599483	40.0000	33.8	
7 bis(2-Chloroethyl) ether	63	3.722	3.722	(0.948)	417273	40.0000	33.8	
8 2-Chlorophenol	128	3.787	3.787	(0.964)	512179	40.0000	34.0	
203 n-Decane	43	3.775	3.775	(0.961)	707542	40.0000	37.3	
9 1,3-Dichlorobenzene	146	3.893	3.893	(0.991)	606813	40.0000	34.3	
11 1,4-Dichlorobenzene	146	3.934	3.934	(1.001)	598440	40.0000	34.5	
13 1,2-Dichlorobenzene	146	4.040	4.040	(1.028)	543984	40.0000	34.0	
14 bis(2-Chloroisopropyl)ether	45	4.069	4.069	(1.036)	1027894	40.0000	35.0	
12 Benzyl alcohol	108	3.993	3.993	(1.016)	316054	40.0000	34.5	
15 o-Cresol	107	4.040	4.040	(1.028)	382773	40.0000	34.1	
18 m,p-Cresols	107	4.146	4.146	(1.055)	530984	40.0000	34.8	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.163	4.163	(1.060)	325364	40.0000	32.2
19 Hexachloroethane	117	4.269	4.269	(1.087)	206306	40.0000	33.1
21 Nitrobenzene	77	4.304	4.304	(0.898)	528723	40.0000	34.9
22 Isophorone	82	4.457	4.457	(0.930)	944401	40.0000	35.6
23 2-Nitrophenol	139	4.516	4.516	(0.942)	274410	40.0000	34.1
24 2,4-Dimethylphenol	122	4.504	4.504	(0.940)	516190	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.575	4.575	(0.955)	561140	40.0000	32.9
26 2,4-Dichlorophenol	162	4.681	4.681	(0.977)	415624	40.0000	34.4
27 Benzoic acid	105	4.575	4.575	(0.955)	365053	40.0000	41.2
28 1,2,4-Trichlorobenzene	180	4.745	4.745	(0.990)	467914	40.0000	35.0
30 Naphthalene	128	4.810	4.810	(1.004)	1690998	40.0000	36.7
204 alpha-Terpineol	59	4.787	4.787	(0.999)	424496	40.0000	39.2
31 4-Chloroaniline	127	4.822	4.822	(1.006)	756952	40.0000	36.0
32 Hexachlorobutadiene	225	4.875	4.875	(1.017)	233369	40.0000	34.0
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	380998	40.0000	32.3
34 2-Methylnaphthalene	142	5.293	5.293	(1.104)	1146146	40.0000	37.9
35 1-Methylnaphthalene	142	5.363	5.363	(1.119)	1056787	40.0000	38.8
36 Hexachlorocyclopentadiene	237	5.393	5.393	(0.893)	141475	40.0000	40.8
205 2,3-Dichloroaniline	161	5.487	5.487	(0.908)	505408	40.0000	39.2
37 2,4,6-Trichlorophenol	196	5.475	5.475	(0.906)	283075	40.0000	37.5(H)
38 2,4,5-Trichlorophenol	196	5.504	5.504	(0.911)	290570	40.0000	36.2
40 2-Chloronaphthalene	162	5.645	5.645	(0.935)	931485	40.0000	33.2
42 o-Nitroaniline	65	5.698	5.698	(0.944)	283207	40.0000	32.6
41 m-Nitroaniline	138	5.992	5.992	(0.992)	254734	40.0000	33.2
43 Dimethylphthalate	163	5.810	5.810	(0.962)	1089088	40.0000	35.2
44 2,6-Dinitrotoluene	165	5.863	5.863	(0.971)	252831	40.0000	32.8
50 2,4-Dinitrotoluene	165	6.145	6.145	(1.018)	334220	40.0000	32.7
45 Acenaphthylene	152	5.945	5.945	(0.984)	1666713	40.0000	38.1
47 Acenaphthene	154	6.063	6.063	(1.004)	973838	40.0000	37.2
48 2,4-Dinitrophenol	184	6.057	6.057	(1.003)	104771	40.0000	34.4(Q)
49 Dibenzofuran	168	6.181	6.181	(1.023)	1277902	40.0000	33.7
51 Diethylphthalate	149	6.287	6.287	(1.041)	1059428	40.0000	36.7
52 4-Nitrophenol	139	6.075	6.075	(1.006)	211838	40.0000	39.6
53 Fluorene	166	6.416	6.416	(1.062)	1132809	40.0000	37.1
54 4-Chlorophenylphenylether	204	6.392	6.392	(1.058)	483371	40.0000	37.5
55 2-Methyl-4,6-dinitrophenol	198	6.428	6.428	(0.911)	184539	40.0000	38.9
56 p-Nitroaniline	138	6.410	6.410	(1.061)	247705	40.0000	33.0
133 Diphenylamine	169	6.469	6.469	(0.917)	871532	40.0000	34.8
58 1,2-Diphenylhydrazine	77	6.498	6.498	(0.921)	1045567	40.0000	34.3
61 4-Bromophenylphenylether	248	6.716	6.716	(0.952)	264808	40.0000	41.1(H)
63 Hexachlorobenzene	284	6.775	6.775	(0.960)	270561	40.0000	34.2
65 Pentachlorophenol	266	6.892	6.892	(0.977)	169503	40.0000	35.8
206 n-Octadecane	57	6.869	6.869	(0.973)	797995	40.0000	39.2
68 Phenanthrene	178	7.039	7.039	(0.997)	1566761	40.0000	36.8
69 Anthracene	178	7.069	7.069	(1.002)	1595437	40.0000	36.8
72 Di-n-butylphthalate	149	7.310	7.310	(1.036)	1788243	40.0000	38.7
76 Fluoranthene	202	7.751	7.751	(1.098)	1531590	40.0000	37.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.892	7.892	(0.907)	1593654	40.0000	37.0
85 Butylbenzylphthalate	149	8.204	8.204	(0.943)	757996	40.0000	38.6
89 Benzo(a)anthracene	228	8.692	8.692	(0.999)	1420191	40.0000	36.5(H)
92 Chrysene	228	8.728	8.728	(1.003)	1333078	40.0000	36.7
93 bis(2-Ethylhexyl)phthalate	149	8.569	8.569	(0.984)	1058534	40.0000	37.2(H)
94 Di-n-octylphthalate	149	9.110	9.110	(0.893)	1768724	40.0000	36.5
95 Benzo(b)fluoranthene	252	9.716	9.716	(0.953)	1289484	40.0000	34.7(H)
96 Benzo(k)fluoranthene	252	9.745	9.745	(0.956)	1416940	40.0000	38.1
97 Benzo(a)pyrene	252	10.122	10.122	(0.992)	1227658	40.0000	37.9
99 Indeno(1,2,3-cd)pyrene	276	11.863	11.863	(1.163)	1204623	40.0000	35.8(H)
100 Dibenzo(a,h)anthracene	278	11.863	11.863	(1.163)	986733	40.0000	35.1
101 Benzo(ghi)perylene	276	12.380	12.380	(1.214)	1034720	40.0000	37.2
126 m-Dinitrobenzene	168	5.845	5.845	(0.968)	178196	40.0000	33.7
130 2,3,4,6-Tetrachlorophenol	232	6.251	6.251	(1.035)	223733	40.0000	36.5
143 Dinoseb	211	6.981	6.981	(0.989)	205546	40.0000	35.2
173 Carbazole	167	7.151	7.151	(1.013)	1307938	40.0000	34.6
184 p-Benzoquinone	54	3.404	3.404	(0.867)	35940	40.0000	40.5
192 Methoxychlor	227	8.557	8.557	(0.983)	586700	40.0000	45.6
211 p-Toluidine	106	4.204	4.204	(1.070)	505668	40.0000	54.2(H)
210 m-Toluidine	106	4.228	4.228	(1.076)	504598	40.0000	41.8
26 Phthalic anhydride	104	5.322	5.322	(1.110)	224154	40.0000	42.7
179 Dibenzo(a,e)pyrene	302	16.327	16.327	(1.601)	410219	40.0000	24.9(H)
214 1,4-Dinitrobenzene	168	5.787	5.787	(0.958)	164654	40.0000	33.5
215 2-Ethoxyethanol	59	2.257	2.257	(0.575)	316469	40.0000	39.6
216 Methylenebis(2-chloroaniline)	231	8.622	8.622	(0.991)	200666	40.0000	38.3
M 225 Trichlorophenols	196				573645	80.0000	73.6
M 226 Tetrachlorophenols	232				223733	40.0000	36.5
M 227 Benzo(b,k)fluoranthene	252				2706424	80.0000	75.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1261.d
Date : 17-NOV-2009 16:27
Client ID: MEGAICV
Sample Info: IWBN091027-09,3140 PPM|1|SVMF11|MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

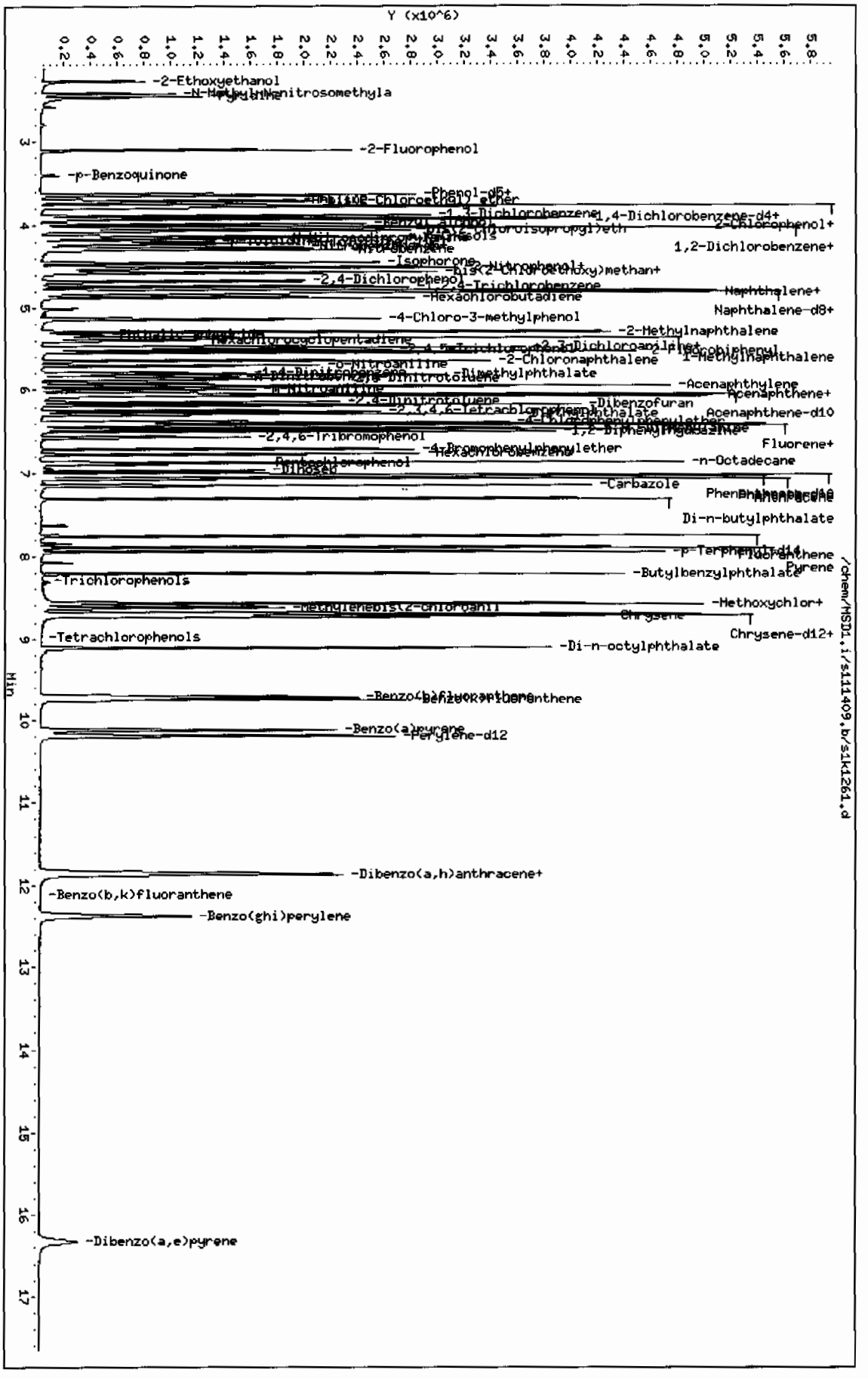

Data File: /chem/MSD1.i/s120409.b/s110404.d
Report Date: 10-Dec-2009 08:45

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s110404.d
Analysis Type:
Lab Sample ID: WBN091111-17.2
Method: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m

Injection Date: 04-DEC-2009 09:48
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
|$ 3	2-Fluorophenol	1.04478	0.94396	0.94396	0.000	-9.65015	60.00000	Averaged
|$ 5	Phenol-d5	1.26984	1.14695	1.14695	0.000	-9.67757	60.00000	Averaged
|$ 20	Nitrobenzene-d5	0.26360	0.25542	0.25542	0.000	-3.10391	60.00000	Averaged
|$ 39	2-Fluorobiphenyl	0.95800	1.11677	1.11677	0.000	16.57348	60.00000	Averaged
|$ 60	2,4,6-Tribromophenol	0.11169	0.14134	0.14134	0.000	26.54311	60.00000	Averaged
|$ 81	p-Terphenyl-d14	0.62787	0.72968	0.72968	0.000	16.21518	60.00000	Averaged
| 1	N-Methyl-N-nitrosomethylami	0.56740	0.45649	0.45649	0.000	-19.54637	60.00000	Averaged
| 2	Pyridine	0.95281	0.73738	0.73738	0.000	-22.61009	60.00000	Averaged
| 4	Aniline	0.55813	0.46503	0.46503	0.000	-16.68058	60.00000	Averaged
| 6	Phenol	1.33800	1.18706	1.18706	0.001	-11.28117	20.00000	Averaged|ccc
| 7	bis(2-Chloroethyl) ether	0.93081	0.78223	0.78223	0.000	-15.96260	60.00000	Averaged
| 8	2-Chlorophenol	1.13717	1.07342	1.07342	0.000	-5.60541	60.00000	Averaged
| 203	n-Decane	1.43160	1.31248	1.31248	0.000	-8.32060	60.00000	Averaged
| 9	1,3-Dichlorobenzene	1.33431	1.26519	1.26519	0.000	-5.18053	60.00000	Averaged
| 11	1,4-Dichlorobenzene	1.30799	1.27913	1.27913	0.001	-2.20600	20.00000	Averaged|ccc
| 13	1,2-Dichlorobenzene	1.20798	1.20306	1.20306	0.000	-0.40779	60.00000	Averaged
| 14	bis(2-Chloroisopropyl)ether	2.21709	1.70594	1.70594	0.000	-23.05506	60.00000	Averaged
| 12	Benzyl alcohol	0.69141	0.61977	0.61977	0.000	-10.36085	60.00000	Averaged
| 15	o-Cresol	0.84650	0.81606	0.81606	0.000	-3.59562	60.00000	Averaged
| 18	m,p-Cresols	1.15179	1.08521	1.08521	0.000	-5.77977	60.00000	Averaged
| 17	N-Nitrosodipropylamine	0.76238	0.55934	0.55934	0.050	-26.63214	60.00000	Averaged|spcc
| 19	Hexachloroethane	0.47075	0.44029	0.44029	0.000	-6.47094	60.00000	Averaged
| 21	Nitrobenzene	0.27466	0.25810	0.25810	0.000	-6.02802	60.00000	Averaged
| 22	Isophorone	0.48049	0.45144	0.45144	0.000	-6.04516	60.00000	Averaged
| 23	2-Nitrophenol	0.14580	0.13420	0.13420	0.001	-7.95731	20.00000	Averaged|ccc
| 24	2,4-Dimethylphenol	0.23346	0.21773	0.21773	0.000	-6.73766	60.00000	Averaged
| 25	bis(2-Chloroethoxy)methane	0.30933	0.26326	0.26326	0.000	-14.89158	60.00000	Averaged
| 26	2,4-Dichlorophenol	0.21909	0.20361	0.20361	0.001	-7.06410	20.00000	Averaged|ccc
| 27	Benzoic acid	0.16087	0.15231	0.15231	0.000	-5.32363	60.00000	Averaged
| 28	1,2,4-Trichlorobenzene	0.24210	0.24060	0.24060	0.000	-0.62253	60.00000	Averaged
| 30	Naphthalene	0.83482	0.85306	0.85306	0.000	2.18500	60.00000	Averaged
| 204	alpha-Terpineol	0.19635	0.19870	0.19870	0.000	1.19608	60.00000	Averaged
| 31	4-Chloroaniline	0.38123	0.31052	0.31052	0.000	-18.54826	60.00000	Averaged
| 32	Hexachlorobutadiene	0.12432	0.13029	0.13029	0.001	4.80224	20.00000	Averaged|ccc
| 33	4-Chloro-3-methylphenol	0.21406	0.20142	0.20142	0.001	-5.90090	20.00000	Averaged|ccc
| 34	2-Methylnaphthalene	0.54880	0.58399	0.58399	0.000	6.41198	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 04-DEC-2009 09:48
Lab File ID: s110404.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-17.2 Quant Type: ISTD
Method: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.55004	0.55004	0.000	11.50145	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.13989	0.13989	0.050	14.53923	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.48778	0.48778	0.000	7.43780	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.27762	0.27762	0.001	4.34587	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.31366	0.31366	0.000	10.87231	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.93155	0.93155	0.000	-5.66441	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.25930	0.25930	0.000	-15.31214	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.16386	0.16386	0.000	-39.43506	60.00000	Averaged
43 Dimethylphthalate	1.08995	1.11771	1.11771	0.000	2.54720	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.25121	0.25121	0.000	-7.49285	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.33250	0.33250	0.000	-7.62134	60.00000	Averaged
45 Acenaphthylene	1.54092	1.65551	1.65551	0.000	7.43631	60.00000	Averaged
47 Acenaphthene	0.92259	0.99918	0.99918	0.001	8.30191	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.09305	0.09305	0.050	-13.18576	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.29256	1.29256	0.000	-3.12255	60.00000	Averaged
51 Diethylphthalate	1.01616	1.12341	1.12341	0.000	10.55447	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.15355	0.15355	0.050	-18.63626	60.00000	Averaged spcc
53 Fluorene	1.07578	1.18536	1.18536	0.000	10.18583	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.49530	0.49530	0.000	9.04855	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.11431	0.11431	0.000	12.95967	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.13979	0.13979	0.000	-47.16635	60.00000	Averaged
133 Diphenylamine	0.53354	0.47827	0.47827	0.001	-10.35814	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.57360	0.57360	0.000	-11.88708	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.15927	0.15927	0.000	15.88851	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.17101	0.17101	0.000	1.37856	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.10220	0.10220	0.001	1.01831	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.41938	0.41938	0.000	-3.32929	60.00000	Averaged
68 Phenanthrene	0.90903	0.94089	0.94089	0.000	3.50488	60.00000	Averaged
69 Anthracene	0.92447	0.94373	0.94373	0.000	2.08363	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	1.15317	1.15317	0.000	16.94889	60.00000	Averaged
76 Fluoranthene	0.87746	0.96402	0.96402	0.001	9.86479	20.00000	Averaged ccc
79 Pyrene	1.06293	1.13724	1.13724	0.000	6.99072	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.54933	0.54933	0.000	13.56207	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.92940	0.92940	0.000	-3.10184	60.00000	Averaged
92 Chrysene	0.89647	0.94120	0.94120	0.000	4.98898	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.80592	0.80592	0.000	14.68043	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 04-DEC-2009 09:48
Lab File ID: s110404.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-17.2 Quant Type: ISTD
Method: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.46191	1.46191	0.001	11.72503	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	40.45011	40.00000	1.02678	0.000	1.12528	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	1.06524	1.06524	0.000	6.20842	60.00000	Averaged	
	97 Benzo(a)pyrene	42.16594	40.00000	0.92081	0.001	5.41484	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	41.93799	40.00000	0.94976	0.000	4.84497	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	40.07876	40.00000	0.75996	0.000	0.19691	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.81815	0.81815	0.000	8.84803	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.16838	0.16838	0.000	-9.72814	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.23771	0.23771	0.000	10.03163	60.00000	Averaged	
	143 Dinoseb	0.12447	0.13848	0.13848	0.000	11.25682	60.00000	Averaged	
	173 Carbazole	0.80714	0.64889	0.64889	0.000	-19.60657	60.00000	Averaged	
	184 p-Benzoquinone	33.21714	40.00000	0.05312	0.000	-16.95716	60.00000	Linear	
	192 Methoxychlor	0.31747	0.53805	0.53805	0.000	69.48267	60.00000	Averaged	<-
	211 p-Toluidine	0.70440	0.81758	0.81758	0.000	16.06663	60.00000	Averaged	
	210 m-Toluidine	0.91072	1.19780	1.19780	0.000	31.52245	60.00000	Averaged	
	26 Phthalic anhydride	35.87064	40.00000	0.08396	0.000	-10.32339	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	29.06717	40.00000	0.32968	0.000	-27.33207	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.15022	0.15022	0.000	-13.24306	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.51388	0.51388	0.000	-14.80087	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.07198	0.07198	0.000	-44.29016	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.29564	0.29564	0.000	7.70922	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.23771	0.23771	0.000	10.03163	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	1.04601	1.04601	0.000	8.33631	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110404.d
Lab Smp Id: WBN091111-17.2 Client Smp ID: MEGACVS
Inj Date : 04-DEC-2009 09:48
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-17.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 10-Dec-2009 08:45 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	308643	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1342063	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	708285	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1232459	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1089894	40.0000	
* 98 Perylene-d12	264	10.069	10.069	(1.000)	970911	40.0000	
$ 3 2-Fluorophenol	112	3.081	3.081	(0.791)	291347	40.0000	36.1
$ 5 Phenol-d5	99	3.610	3.610	(0.927)	353997	40.0000	36.1
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	342792	40.0000	38.8
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	790993	40.0000	46.6
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	100110	40.0000	50.6
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	795279	40.0000	46.5
1 N-Methyl-N-nitrosomethylamine	74	2.393	2.393	(0.615)	140893	40.0000	32.2
2 Pyridine	79	2.428	2.428	(0.624)	227586	40.0000	31.0
4 Aniline	66	3.681	3.681	(0.946)	143529	40.0000	33.3
6 Phenol	94	3.622	3.622	(0.930)	366377	40.0000	35.5
7 bis(2-Chloroethyl) ether	63	3.693	3.693	(0.949)	241430	40.0000	33.6
8 2-Chlorophenol	128	3.757	3.757	(0.965)	331305	40.0000	37.8
203 n-Decane	43	3.734	3.734	(0.959)	405088	40.0000	36.7
9 1,3-Dichlorobenzene	146	3.857	3.857	(0.991)	390491	40.0000	37.9
11 1,4-Dichlorobenzene	146	3.898	3.898	(1.002)	394796	40.0000	39.1
13 1,2-Dichlorobenzene	146	4.004	4.004	(1.029)	371315	40.0000	39.8
14 bis(2-Chloroisopropyl)ether	45	4.034	4.034	(1.036)	526525	40.0000	30.8
12 Benzyl alcohol	108	3.957	3.957	(1.017)	191289	40.0000	35.8
15 o-Cresol	107	4.010	4.010	(1.030)	251871	40.0000	38.6
18 m,p-Cresols	107	4.116	4.116	(1.057)	334944	40.0000	37.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.128	4.128	(1.060)	172636	40.0000	29.3
19 Hexachloroethane	117	4.234	4.234	(1.088)	135891	40.0000	37.4
21 Nitrobenzene	77	4.269	4.269	(0.898)	346385	40.0000	37.6
22 Isophorone	82	4.416	4.416	(0.929)	605863	40.0000	37.6
23 2-Nitrophenol	139	4.481	4.481	(0.943)	180100	40.0000	36.8
24 2,4-Dimethylphenol	122	4.475	4.475	(0.942)	292210	40.0000	37.3
25 bis(2-Chloroethoxy)methane	93	4.540	4.540	(0.955)	353318	40.0000	34.0
26 2,4-Dichlorophenol	162	4.640	4.640	(0.976)	273261	40.0000	37.2
27 Benzoic acid	105	4.534	4.534	(0.954)	204403	40.0000	37.9
28 1,2,4-Trichlorobenzene	180	4.704	4.704	(0.990)	322897	40.0000	39.8
30 Naphthalene	128	4.769	4.769	(1.004)	1144856	40.0000	40.9(Q)
204 alpha-Terpineol	59	4.745	4.745	(0.999)	266671	40.0000	40.5
31 4-Chloroaniline	127	4.787	4.787	(1.007)	416735	40.0000	32.6
32 Hexachlorobutadiene	225	4.834	4.834	(1.017)	174855	40.0000	41.9
33 4-Chloro-3-methylphenol	107	5.104	5.104	(1.074)	270325	40.0000	37.6
34 2-Methylnaphthalene	142	5.245	5.245	(1.104)	783747	40.0000	42.6
35 1-Methylnaphthalene	142	5.322	5.322	(1.120)	738191	40.0000	44.6
36 Hexachlorocyclopentadiene	237	5.351	5.351	(0.892)	99079	40.0000	45.8
205 2,3-Dichloroaniline	161	5.445	5.445	(0.908)	345484	40.0000	43.0
37 2,4,6-Trichlorophenol	196	5.440	5.440	(0.907)	196633	40.0000	41.7
38 2,4,5-Trichlorophenol	196	5.469	5.469	(0.912)	222159	40.0000	44.3
40 2-Chloronaphthalene	162	5.598	5.598	(0.933)	659802	40.0000	37.7
42 o-Nitroaniline	65	5.663	5.663	(0.944)	183660	40.0000	33.9
41 m-Nitroaniline	138	5.957	5.957	(0.993)	116059	40.0000	24.2
43 Dimethylphthalate	163	5.769	5.769	(0.962)	791657	40.0000	41.0
44 2,6-Dinitrotoluene	165	5.822	5.822	(0.971)	177930	40.0000	37.0
50 2,4-Dinitrotoluene	165	6.104	6.104	(1.018)	235504	40.0000	37.0
45 Acenaphthylene	152	5.904	5.904	(0.984)	1172574	40.0000	43.0
47 Acenaphthene	154	6.022	6.022	(1.004)	707705	40.0000	43.3
48 2,4-Dinitrophenol	184	6.022	6.022	(1.004)	65907	40.0000	34.7(Q)
49 Dibenzofuran	168	6.139	6.139	(1.024)	915498	40.0000	38.8
51 Diethylphthalate	149	6.245	6.245	(1.041)	795692	40.0000	44.2
52 4-Nitrophenol	139	6.045	6.045	(1.008)	108754	40.0000	32.5
53 Fluorene	166	6.369	6.369	(1.062)	839574	40.0000	44.1
54 4-Chlorophenylphenylether	204	6.351	6.351	(1.059)	350816	40.0000	43.6
55 2-Methyl-4,6-dinitrophenol	198	6.387	6.387	(0.915)	140884	40.0000	45.2
56 p-Nitroaniline	138	6.375	6.375	(1.063)	99008	40.0000	21.1
133 Diphenylamine	169	6.428	6.428	(0.921)	589454	40.0000	35.8
58 1,2-Diphenylhydrazine	77	6.457	6.457	(0.925)	706939	40.0000	35.2
61 4-Bromophenylphenylether	248	6.675	6.675	(0.956)	196288	40.0000	46.4
63 Hexachlorobenzene	284	6.734	6.734	(0.965)	210768	40.0000	40.6
65 Pentachlorophenol	266	6.851	6.851	(0.981)	125953	40.0000	40.4
206 n-Octadecane	57	6.828	6.828	(0.978)	516871	40.0000	38.7
68 Phenanthrene	178	6.992	6.992	(1.002)	1159614	40.0000	41.4
69 Anthracene	178	7.028	7.028	(1.007)	1163110	40.0000	40.8
72 Di-n-butylphthalate	149	7.269	7.269	(1.041)	1421240	40.0000	46.8
76 Fluoranthene	202	7.704	7.704	(1.104)	1188117	40.0000	43.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.845	7.845	(0.909)	1239466	40.0000	42.8
85 Butylbenzylphthalate	149	8.157	8.157	(0.945)	598708	40.0000	45.4
89 Benzo(a)anthracene	228	8.628	8.628	(0.999)	1012945	40.0000	38.8
92 Chrysene	228	8.657	8.657	(1.003)	1025803	40.0000	42.0
93 bis(2-Ethylhexyl)phthalate	149	8.504	8.504	(0.985)	878370	40.0000	45.9
94 Di-n-octylphthalate	149	9.028	9.028	(0.897)	1419385	40.0000	44.7
95 Benzo(b)fluoranthene	252	9.610	9.610	(0.954)	996913	40.0000	40.4
96 Benzo(k)fluoranthene	252	9.639	9.639	(0.957)	1034258	40.0000	42.5
97 Benzo(a)pyrene	252	10.004	10.004	(0.994)	894022	40.0000	42.2
99 Indeno(1,2,3-cd)pyrene	276	11.663	11.663	(1.158)	922131	40.0000	41.9
100 Dibenzo(a,h)anthracene	278	11.663	11.663	(1.158)	737855	40.0000	40.1
101 Benzo(ghi)perylene	276	12.163	12.163	(1.208)	794355	40.0000	43.5
126 m-Dinitrobenzene	168	5.810	5.810	(0.969)	119262	40.0000	36.1
130 2,3,4,6-Tetrachlorophenol	232	6.216	6.216	(1.036)	168367	40.0000	44.0
143 Dinoseb	211	6.939	6.939	(0.994)	170675	40.0000	44.5
173 Carbazole	167	7.116	7.116	(1.019)	799730	40.0000	32.2
184 p-Benzoquinone	54	3.387	3.387	(0.870)	16396	40.0000	33.2
192 Methoxychlor	227	8.498	8.498	(0.984)	586417	40.0000	67.8
211 p-Toluidine	106	4.169	4.169	(1.071)	252340	40.0000	46.4
210 m-Toluidine	106	4.193	4.193	(1.077)	369692	40.0000	52.6
26 Phthalic anhydride	104	5.281	5.281	(1.111)	112678	40.0000	35.9
179 Dibenzo(a,e)pyrene	302	15.939	15.939	(1.583)	320088	40.0000	29.1
214 1,4-Dinitrobenzene	168	5.751	5.751	(0.959)	106399	40.0000	34.7
215 2-Ethoxyethanol	59	2.234	2.234	(0.574)	158604	40.0000	34.1
216 Methylenebis(2-chloroaniline)	231	8.563	8.563	(0.992)	78451	40.0000	22.3
M 225 Trichlorophenols	196				418792	80.0000	86.2
M 226 Tetrachlorophenols	232				168367	40.0000	44.0
M 227 Benzo(b,k)fluoranthene	252				2031171	80.0000	86.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s120409.b/s110404.d
Date : 04-DEC-2009 09:48
Client ID: MEGACVS
Sample Info: IWBN091111-17,2140 PPM!!SVHF1!!MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

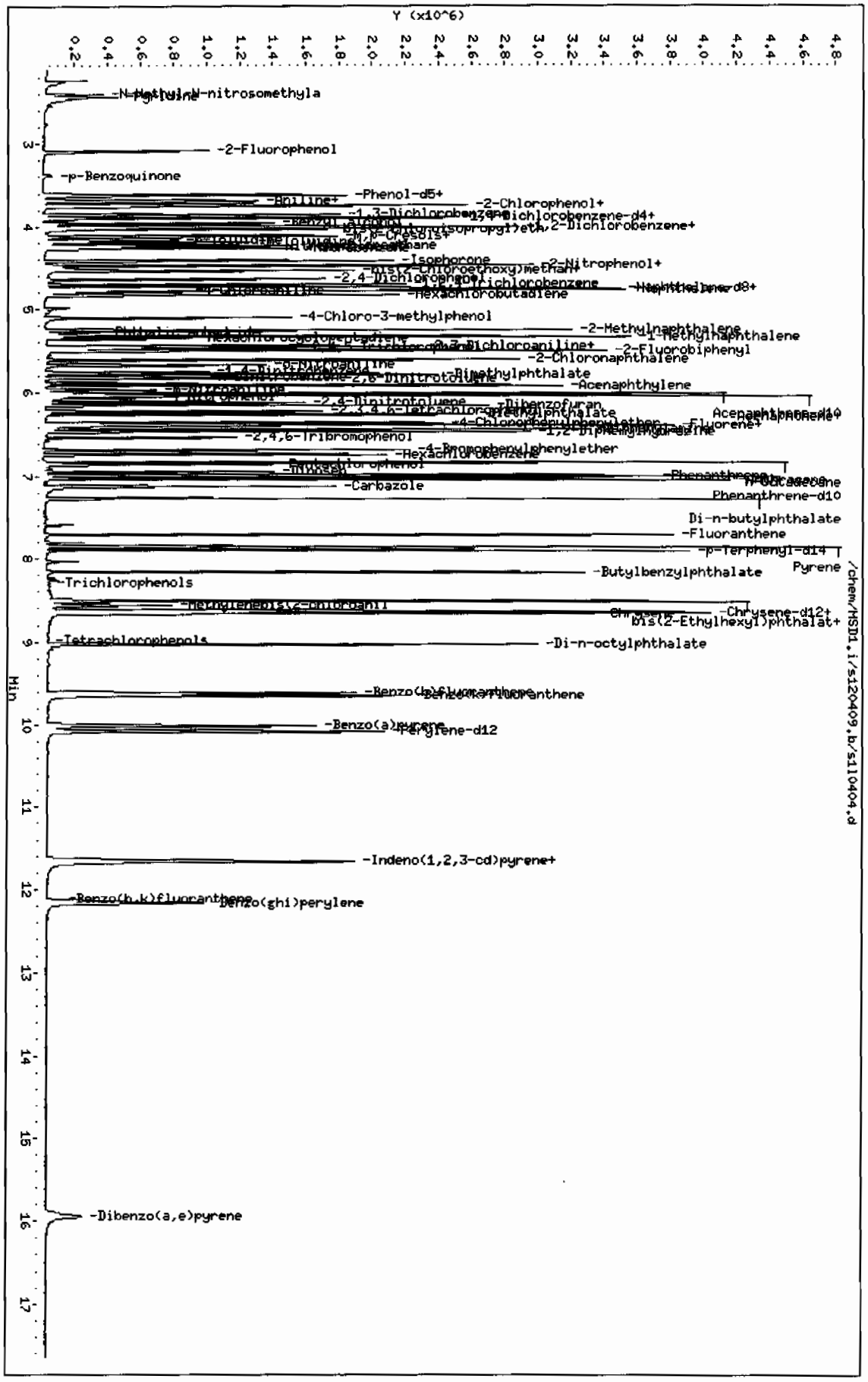

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 04-DEC-2009 10:24
Lab File ID: s110405.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091201-08.2 Quant Type: ISTD
Method: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.74721	0.74721	0.000	-9.31857	60.00000	Averaged
16 Acetophenone	1.12880	1.27422	1.27422	0.000	12.88327	60.00000	Averaged
189 Caprolactam	0.07169	0.08085	0.08085	0.000	12.78070	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.34886	1.34886	0.000	20.37949	60.00000	Averaged
207 Atrazine	0.04008	0.03681	0.03681	0.000	-8.15110	60.00000	Averaged
77 Benzidine	0.36215	0.19761	0.19761	0.000	-45.43384	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.29299	0.29299	0.000	6.38620	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.38153	0.38153	0.000	21.55838	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.22431	0.22431	0.000	27.15929	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.85822	0.85822	0.000	20.36921	60.00000	Averaged
105 2-Picoline	1.15384	1.11813	1.11813	0.000	-3.09493	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.42090	0.42090	0.000	-7.34376	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48838	0.48838	0.000	14.72248	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.43757	0.43757	0.000	-8.75223	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.71793	0.71793	0.000	20.40725	60.00000	Averaged
110 Pentachloroethane	0.29115	0.46936	0.46936	0.000	61.20505	60.00000	Averaged <-
111 N-Nitrosopyrrolidine	0.47509	0.44632	0.44632	0.000	-6.05647	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.58315	0.58315	0.000	-5.56020	60.00000	Averaged
114 o-Toluidine	1.65327	1.70471	1.70471	0.000	3.11127	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.12717	0.12717	0.000	-3.33762	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.46891	0.46891	0.000	-38.94442	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.23403	0.23403	0.000	18.78860	60.00000	Averaged
119 Hexachloropropene	0.08895	0.16668	0.16668	0.000	87.38088	60.00000	Averaged <-
120 p-Phenylenediamine	0.20154	0.08878	0.08878	0.000	-55.94912	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.15322	0.15322	0.000	-10.77343	60.00000	Averaged
122 Safrole	0.17864	0.24256	0.24256	0.000	35.78366	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.47666	0.47666	0.000	29.83477	60.00000	Averaged
124 Isosafrole	0.32761	0.47991	0.47991	0.000	46.48860	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.34195	0.34195	0.000	15.22503	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.40489	0.40489	0.000	28.73514	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.90040	0.90040	0.000	0.69286	60.00000	Averaged
129 2-Naphthylamine	0.97473	0.71669	0.71669	0.000	-26.47301	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.29049	0.29049	0.000	1.82606	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.16504	0.16504	0.000	41.99702	60.00000	Averaged
137 Phenacetin	0.25708	0.27297	0.27297	0.000	6.17728	60.00000	Averaged
138 Diallate	0.23112	0.22035	0.22035	0.000	-4.66052	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 04-DEC-2009 10:24
Lab File ID: s110405.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091201-08.2 Quant Type: ISTD
Method: /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.28989	0.28989	0.000	20.79179	60.00000	Averaged
213 Trans Diallate	0.27191	0.25924	0.25924	0.000	-4.66052	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.47899	0.47899	0.000	-10.65837	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.07315	0.07315	0.000	37.38703	60.00000	Averaged
142 Pronamide	0.23368	0.30543	0.30543	0.000	30.70697	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.01869	0.01869	0.000	90.60561	60.00000	Averaged <-
147 Methapyrilene	0.36822	0.43898	0.43898	0.000	19.21602	60.00000	Averaged
148 Isodrin	0.08609	0.09699	0.09699	0.000	12.65413	60.00000	Averaged
149 Aramite	0.04255	0.04474	0.04474	0.000	5.14583	60.00000	Averaged
150 Kepone	0.06308	0.07716	0.07716	0.000	22.31411	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.30014	0.30014	0.000	5.71238	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.33108	0.33108	0.000	50.53463	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.44498	0.44498	0.000	-7.19093	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.34837	0.34837	0.000	13.10114	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.49358	0.49358	0.000	17.17608	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.47826	0.47826	0.000	30.27611	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110405.d
Lab Smp Id: WBN091201-08.2 Client Smp ID: APCVS
Inj Date : 04-DEC-2009 10:24
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091201-08.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 16:28 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	372521	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1498555	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	858467	40.0000	
* 67 Phenanthrene-d10	188	6.980	6.980	(1.000)	1494056	40.0000	
* 91 Chrysene-d12	240	8.639	8.639	(1.000)	1309733	40.0000	
* 98 Perylene-d12	264	10.074	10.074	(1.000)	1124196	40.0000	
209 Benzaldehyde	77	3.616	3.616	(0.930)	278353	40.0000	36.3
16 Acetophenone	105	4.139	4.139	(1.065)	474675	40.0000	45.2
189 Caprolactam	113	5.034	5.034	(1.059)	121157	40.0000	45.1
208 1,1'-Biphenyl	154	5.569	5.569	(0.928)	1157950	40.0000	48.2
207 Atrazine	173	6.751	6.751	(0.967)	55003	40.0000	36.7
77 Benzidine	184	7.763	7.763	(0.899)	258821	40.0000	21.8
90 3,3'-Dichlorobenzidine	252	8.569	8.569	(0.992)	383739	40.0000	42.6
102 1,4-Dioxane	88	2.234	2.234	(0.575)	142129	40.0000	48.6
103 Methyl methacrylate	100	2.222	2.222	(0.572)	83562	40.0000	50.9
104 Ethyl methacrylate	69	2.598	2.598	(0.669)	319705	40.0000	48.1
105 2-Picoline	93	2.798	2.798	(0.720)	416528	40.0000	38.8
106 N-Nitrosomethylethylamine	88	2.840	2.840	(0.731)	156795	40.0000	37.1
107 Methyl methanesulfonate	80	2.998	2.998	(0.771)	181931	40.0000	45.9
108 N-Nitrosodiethylamine	102	3.228	3.228	(0.830)	163004	40.0000	36.5
109 Ethyl Methanesulfonate	79	3.387	3.387	(0.871)	267444	40.0000	48.2
110 Pentachloroethane	167	3.716	3.716	(0.956)	174845	40.0000	64.5
111 N-Nitrosopyrrolidine	100	4.134	4.134	(1.064)	166262	40.0000	37.6
113 N-Nitrosomorpholine	56	4.151	4.151	(1.068)	217237	40.0000	37.8
114 o-Toluidine	106	4.169	4.169	(1.073)	635040	40.0000	41.2
115 N-Nitrosopiperidine	114	4.369	4.369	(0.920)	190571	40.0000	38.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.610	4.610	(0.970)	702693	40.0000	24.4
118 2,6-Dichlorophenol	162	4.798	4.798	(1.010)	350700	40.0000	47.5
119 Hexachloropropene	213	4.822	4.822	(1.015)	249783	40.0000	75.0
120 p-Phenylenediamine	108	4.751	4.751	(1.000)	133040	40.0000	17.6
121 N-Nitrosodi-n-butylamine	84	4.998	4.998	(1.052)	229615	40.0000	35.7(T)
122 Safrole	162	5.163	5.163	(1.087)	363490	40.0000	54.3
123 1,2,4,5-Tetrachlorobenzene	216	5.363	5.363	(0.894)	409196	40.0000	51.9
124 Isosafrole	162	5.534	5.534	(0.923)	411989	40.0000	58.6
125 1,4-Naphthoquinone	158	5.722	5.722	(0.954)	293549	40.0000	46.1
127 Pentachlorobenzene	250	6.110	6.110	(1.019)	347585	40.0000	51.5
128 1-Naphthylamine	143	6.192	6.192	(1.032)	772962	40.0000	40.3
129 2-Naphthylamine	143	6.245	6.245	(1.041)	615257	40.0000	29.4
131 5-Nitro-o-toluidine	152	6.369	6.369	(1.062)	249377	40.0000	40.7
136 1,3,5-Trinitrobenzene	75	6.581	6.581	(0.943)	246579	40.0000	56.8
137 Phenacetin	108	6.616	6.616	(0.948)	407825	40.0000	42.5
138 Diallate	86	6.598	6.598	(0.945)	329216	40.0000	38.1
212 Cis Diallate	86	6.663	6.663	(0.954)	64966	6.00000	7.2
213 Trans Diallate	86	6.598	6.598	(0.945)	329216	34.0000	32.4
140 4-Aminobiphenyl	169	6.839	6.839	(0.980)	715644	40.0000	35.7
141 Pentachloronitrobenzene	237	6.857	6.857	(0.982)	109288	40.0000	55.0
142 Pronamide	173	6.851	6.851	(0.981)	456334	40.0000	52.3
146 4-Nitroquinoline-1-oxide	101	7.451	7.451	(1.067)	27920	40.0000	76.2
147 Methapyrilene	58	7.463	7.463	(1.069)	655854	40.0000	47.7
148 Isodrin	193	7.622	7.622	(1.092)	144902	40.0000	45.1
149 Aramite	185	7.851	7.851	(1.125)	66847	40.0000	42.0
150 Kepone	272	8.269	8.269	(1.185)	115283	40.0000	48.9
151 p-(Dimethylamino)azobenzene	120	7.975	7.975	(0.923)	393106	40.0000	42.3
152 Chlorobenzilate	251	7.986	7.986	(0.924)	433627	40.0000	60.2
153 3,3'-Dimethylbenzidine	212	8.186	8.186	(0.948)	582801	40.0000	37.1
155 2-Acetylaminofluorene	181	8.363	8.363	(0.968)	456266	40.0000	45.2
157 7,12Dimethylbenz(a)anthracene	256	9.586	9.586	(0.952)	554876	40.0000	46.9
158 3-Methylcholanthrene	268	10.421	10.421	(1.034)	537655	40.0000	52.1

QC Flag Legend

T - Target compound detected outside RT window.

Data File: /chem/MSD1.i/s120409.b/s110405.d
Date : 04-DEC-2009 10:24
Client ID: APCVS
Sample Info: IWBN091204-08,2140 PPM|1|SVMF|1|APCVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

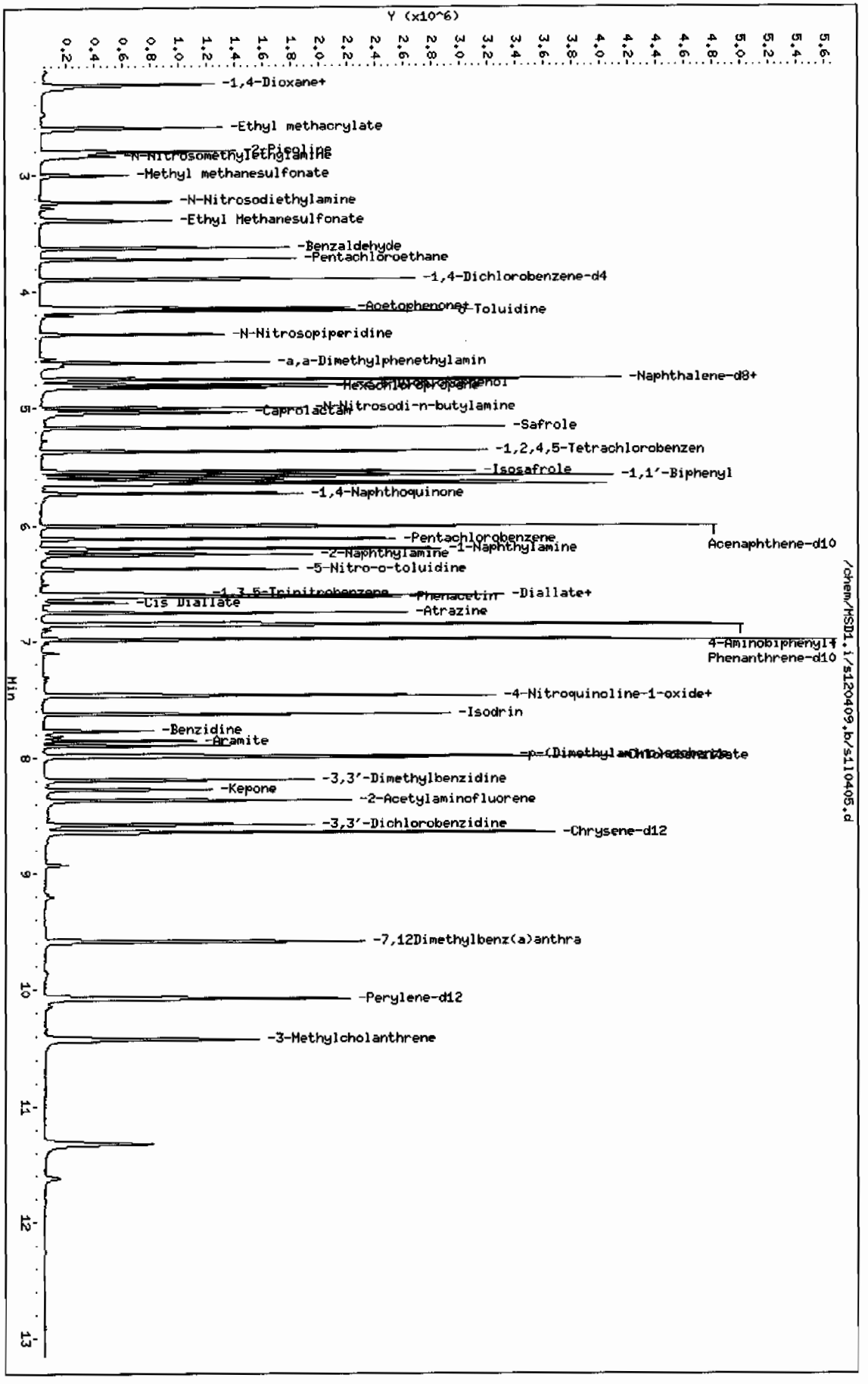

Page 1

Data File: /chem/MSD1.i/s120709.b/s110704.d
Report Date: 14-Dec-2009 14:46

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s110704.d
Analysis Type:
Lab Sample ID: WBN091111-17.2 Quant Type: ISTD
Method: /chem/MSD1.i/s121109.b/MSD1-M8270AQA-111409.m

Injection Date: 07-DEC-2009 10:13
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	1.04478	0.98068	0.98068	0.000	-6.13556	60.00000	Averaged	
$	5 Phenol-d5	1.26984	1.18334	1.18334	0.000	-6.81143	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.26360	0.26186	0.26186	0.000	-0.66215	60.00000	Averaged	
$	39 2-Fluorobiphenyl	0.95800	1.10194	1.10194	0.000	15.02492	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.11169	0.14150	0.14150	0.000	26.68302	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.62787	0.69647	0.69647	0.000	10.92457	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.56740	0.49972	0.49972	0.000	-11.92718	60.00000	Averaged	
	2 Pyridine	0.95281	0.76369	0.76369	0.000	-19.84887	60.00000	Averaged	
	4 Aniline	0.55813	0.49398	0.49398	0.000	-11.49324	60.00000	Averaged	
	6 Phenol	1.33800	1.20879	1.20879	0.001	-9.65662	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.93081	0.82470	0.82470	0.000	-11.39951	60.00000	Averaged	
	8 2-Chlorophenol	1.13717	1.07136	1.07136	0.000	-5.78659	60.00000	Averaged	
	203 n-Decane	1.43160	1.38150	1.38150	0.000	-3.49913	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.33431	1.26966	1.26966	0.000	-4.84544	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.30799	1.26362	1.26362	0.001	-3.39181	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.20798	1.19912	1.19912	0.000	-0.73372	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	2.21709	1.75034	1.75034	0.000	-21.05203	60.00000	Averaged	
	12 Benzyl alcohol	0.69141	0.66330	0.66330	0.000	-4.06531	60.00000	Averaged	
	15 o-Cresol	0.84650	0.80881	0.80881	0.000	-4.45258	60.00000	Averaged	
	18 m,p-Cresols	1.15179	1.09647	1.09647	0.000	-4.80276	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.76238	0.67397	0.67397	0.050	-11.59550	60.00000	Averaged	spcc
	19 Hexachloroethane	0.47075	0.44241	0.44241	0.000	-6.01895	60.00000	Averaged	
	21 Nitrobenzene	0.27466	0.26989	0.26989	0.000	-1.73367	60.00000	Averaged	
	22 Isophorone	0.48049	0.46213	0.46213	0.000	-3.82033	60.00000	Averaged	
	23 2-Nitrophenol	0.14580	0.13464	0.13464	0.001	-7.65037	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.23346	0.23018	0.23018	0.000	-1.40657	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.30933	0.26472	0.26472	0.000	-14.41986	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.21909	0.20504	0.20504	0.001	-6.41227	20.00000	Averaged	ccc
	27 Benzoic acid	0.16087	0.17011	0.17011	0.000	5.74569	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24210	0.23738	0.23738	0.000	-1.95237	60.00000	Averaged	
	30 Naphthalene	0.83482	0.84905	0.84905	0.000	1.70543	60.00000	Averaged	
	204 alpha-Terpineol	0.19635	0.20381	0.20381	0.000	3.79801	60.00000	Averaged	
	31 4-Chloroaniline	0.38123	0.35680	0.35680	0.000	-6.40717	60.00000	Averaged	
	32 Hexachlorobutadiene	0.12432	0.13047	0.13047	0.001	4.94564	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.21406	0.20819	0.20819	0.001	-2.73981	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.54880	0.58200	0.58200	0.000	6.04925	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s110704.d
Analysis Type:
Lab Sample ID: WBN091111-17.2 Quant Type: ISTD
Method: /chem/MSD1.i/s121109.b/MSD1-M8270AQA-111409.m

Injection Date: 07-DEC-2009 10:13
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.54436	0.54436	0.000	10.34891	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.17662	0.17662	0.050	44.61412	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.49115	0.49115	0.000	8.18135	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.28283	0.28283	0.001	6.30552	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.30635	0.30635	0.000	8.28992	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.91973	0.91973	0.000	-6.86099	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.27146	0.27146	0.000	-11.34307	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.21609	0.21609	0.000	-20.13031	60.00000	Averaged
43 Dimethylphthalate	1.08995	1.10478	1.10478	0.000	1.36070	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.25072	0.25072	0.000	-7.67424	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.33150	0.33150	0.000	-7.89780	60.00000	Averaged
45 Acenaphthylene	1.54092	1.64451	1.64451	0.000	6.72264	60.00000	Averaged
47 Acenaphthene	0.92259	0.99086	0.99086	0.001	7.39996	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.12448	0.12448	0.050	16.13981	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.27445	1.27445	0.000	-4.47951	60.00000	Averaged
51 Diethylphthalate	1.01616	1.12228	1.12228	0.000	10.44373	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.19136	0.19136	0.050	1.40084	60.00000	Averaged spcc
53 Fluorene	1.07578	1.17811	1.17811	0.000	9.51133	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.48889	0.48889	0.000	7.63745	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.11976	0.11976	0.000	18.34056	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.20654	0.20654	0.000	-21.93581	60.00000	Averaged
133 Diphenylamine	0.53354	0.47120	0.47120	0.001	-11.68468	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.58616	0.58616	0.000	-9.95765	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.15277	0.15277	0.000	11.16054	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.16230	0.16230	0.000	-3.78670	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.10410	0.10410	0.001	2.90171	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.42460	0.42460	0.000	-2.12757	60.00000	Averaged
68 Phenanthrene	0.90903	0.93165	0.93165	0.000	2.48755	60.00000	Averaged
69 Anthracene	0.92447	0.94892	0.94892	0.000	2.64467	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	1.09300	1.09300	0.000	10.84630	60.00000	Averaged
76 Fluoranthene	0.87746	0.94672	0.94672	0.001	7.89254	20.00000	Averaged ccc
79 Pyrene	1.06293	1.07471	1.07471	0.000	1.10877	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.51483	0.51483	0.000	6.43149	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.97244	0.97244	0.000	1.38569	60.00000	Averaged
92 Chrysene	0.89647	0.85223	0.85223	0.000	-4.93548	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.75054	0.75054	0.000	6.79969	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 07-DEC-2009 10:13
Lab File ID: s110704.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-17.2 Quant Type: ISTD
Method: /chem/MSD1.i/s121109.b/MSD1-M8270AQA-111409.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.43455	1.43455	0.001	9.63427	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	40.57315	40.00000	1.03012	0.000	1.43289	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	1.06344	1.06344	0.000	6.02869	60.00000	Averaged	
	97 Benzo(a)pyrene	41.97936	40.00000	0.91675	0.001	4.94840	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	40.93615	40.00000	0.92730	0.000	2.34038	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	40.51060	40.00000	0.76811	0.000	1.27649	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.76866	0.76866	0.000	2.26346	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.16706	0.16706	0.000	-10.43624	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.23826	0.23826	0.000	10.28587	60.00000	Averaged	
	143 Dinoseb	0.12447	0.13925	0.13925	0.000	11.87548	60.00000	Averaged	
	173 Carbazole	0.80714	0.72842	0.72842	0.000	-9.75285	60.00000	Averaged	
	184 p-Benzoquinone	27.55604	40.00000	0.04171	0.000	-31.10991	60.00000	Linear	
	192 Methoxychlor	0.31747	0.52271	0.52271	0.000	64.65219	60.00000	Averaged	<-
	211 p-Toluidine	0.70440	0.83792	0.83792	0.000	18.95489	60.00000	Averaged	
	210 m-Toluidine	0.91072	1.34571	1.34571	0.000	47.76419	60.00000	Averaged	
	26 Phthalic anhydride	44.71519	40.00000	0.10680	0.000	11.78797	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	27.61532	40.00000	0.31133	0.000	-30.96169	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.15159	0.15159	0.000	-12.45324	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.61085	0.61085	0.000	1.27779	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.09788	0.09788	0.000	-24.24220	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.29459	0.29459	0.000	7.32816	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.23826	0.23826	0.000	10.28587	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	1.04678	1.04678	0.000	8.41611	60.00000	Averaged	

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Data file : /chem/MSD1.i/s120709.b/s110704.d
Lab Smp Id: WBN091111-17.2 Client Smp ID: MEGACVS
Inj Date : 07-DEC-2009 10:13
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-17.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s121109.b/MSD1-M8270AQA-111409.m
Meth Date : 14-Dec-2009 14:46 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.763	3.763	(1.000)	559398	40.0000	
* 29 Naphthalene-d8	136	4.622	4.622	(1.000)	2347392	40.0000	
* 46 Acenaphthene-d10	164	5.869	5.869	(1.000)	1201624	40.0000	
* 67 Phenanthrene-d10	188	6.857	6.857	(1.000)	2108502	40.0000	
* 91 Chrysene-d12	240	8.486	8.486	(1.000)	1937578	40.0000	
* 98 Perylene-d12	264	9.833	9.833	(1.000)	1671991	40.0000	
$ 3 2-Fluorophenol	112	2.963	2.963	(0.787)	548591	40.0000	37.5
$ 5 Phenol-d5	99	3.493	3.493	(0.928)	661959	40.0000	37.3
$ 20 Nitrobenzene-d5	82	4.128	4.128	(0.893)	614684	40.0000	39.7
$ 39 2-Fluorobiphenyl	172	5.363	5.363	(0.914)	1324114	40.0000	46.0
$ 60 2,4,6-Tribromophenol	329	6.404	6.404	(1.091)	170027	40.0000	50.7
$ 81 p-Terphenyl-d14	244	7.775	7.775	(0.916)	1349458	40.0000	44.4
1 N-Methyl-N-nitrosomethylamine	74	2.275	2.275	(0.605)	279544	40.0000	35.2
2 Pyridine	79	2.310	2.310	(0.614)	427204	40.0000	32.1
4 Aniline	66	3.551	3.551	(0.944)	276334	40.0000	35.4
6 Phenol	94	3.504	3.504	(0.931)	676197	40.0000	36.1
7 bis(2-Chloroethyl) ether	63	3.569	3.569	(0.948)	461338	40.0000	35.4
8 2-Chlorophenol	128	3.628	3.628	(0.964)	599319	40.0000	37.7
203 n-Decane	43	3.610	3.610	(0.959)	772811	40.0000	38.6
9 1,3-Dichlorobenzene	146	3.728	3.728	(0.991)	710244	40.0000	38.1
11 1,4-Dichlorobenzene	146	3.769	3.769	(1.002)	706869	40.0000	38.6
13 1,2-Dichlorobenzene	146	3.875	3.875	(1.030)	670785	40.0000	39.7
14 bis(2-Chloroisopropyl)ether	45	3.904	3.904	(1.038)	979139	40.0000	31.6
12 Benzyl alcohol	108	3.834	3.834	(1.019)	371050	40.0000	38.4
15 o-Cresol	107	3.887	3.887	(1.033)	452444	40.0000	38.2
18 m,p-Cresols	107	3.993	3.993	(1.061)	613362	40.0000	38.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.004	4.004	(1.064)	377020	40.0000	35.4
19 Hexachloroethane	117	4.098	4.098	(1.089)	247485	40.0000	37.6
21 Nitrobenzene	77	4.140	4.140	(0.896)	633546	40.0000	39.3
22 Isophorone	82	4.292	4.292	(0.929)	1084804	40.0000	38.5
23 2-Nitrophenol	139	4.351	4.351	(0.941)	316062	40.0000	36.9
24 2,4-Dimethylphenol	122	4.351	4.351	(0.941)	540318	40.0000	39.4
25 bis(2-Chloroethoxy)methane	93	4.410	4.410	(0.954)	621411	40.0000	34.2
26 2,4-Dichlorophenol	162	4.510	4.510	(0.976)	481311	40.0000	37.4
27 Benzoic acid	105	4.428	4.428	(0.958)	399320	40.0000	42.3
28 1,2,4-Trichlorobenzene	180	4.575	4.575	(0.990)	557219	40.0000	39.2
30 Naphthalene	128	4.640	4.640	(1.004)	1993061	40.0000	40.7(Q)
204 alpha-Terpineol	59	4.616	4.616	(0.999)	478425	40.0000	41.5
31 4-Chloroaniline	127	4.657	4.657	(1.008)	837558	40.0000	37.4
32 Hexachlorobutadiene	225	4.704	4.704	(1.018)	306256	40.0000	42.0
33 4-Chloro-3-methylphenol	107	4.975	4.975	(1.076)	488707	40.0000	38.9
34 2-Methylnaphthalene	142	5.116	5.116	(1.107)	1366173	40.0000	42.4
35 1-Methylnaphthalene	142	5.187	5.187	(1.122)	1277818	40.0000	44.1
36 Hexachlorocyclopentadiene	237	5.222	5.222	(0.890)	212226	40.0000	57.8
205 2,3-Dichloroaniline	161	5.316	5.316	(0.906)	590179	40.0000	43.3
37 2,4,6-Trichlorophenol	196	5.310	5.310	(0.905)	339858	40.0000	42.5
38 2,4,5-Trichlorophenol	196	5.339	5.339	(0.910)	368120	40.0000	43.3
40 2-Chloronaphthalene	162	5.469	5.469	(0.932)	1105173	40.0000	37.2
42 o-Nitroaniline	65	5.534	5.534	(0.943)	326187	40.0000	35.5
41 m-Nitroaniline	138	5.828	5.828	(0.993)	259657	40.0000	31.9
43 Dimethylphthalate	163	5.639	5.639	(0.961)	1327527	40.0000	40.5
44 2,6-Dinitrotoluene	165	5.692	5.692	(0.970)	301271	40.0000	36.9
50 2,4-Dinitrotoluene	165	5.981	5.981	(1.019)	398343	40.0000	36.8
45 Acenaphthylene	152	5.769	5.769	(0.983)	1976088	40.0000	42.7
47 Acenaphthene	154	5.892	5.892	(1.004)	1190641	40.0000	43.0
48 2,4-Dinitrophenol	184	5.892	5.892	(1.004)	149583	40.0000	46.4(Q)
49 Dibenzofuran	168	6.010	6.010	(1.024)	1531411	40.0000	38.2
51 Diethylphthalate	149	6.128	6.128	(1.044)	1348560	40.0000	44.2
52 4-Nitrophenol	139	5.928	5.928	(1.010)	229941	40.0000	40.6
53 Fluorene	166	6.245	6.245	(1.064)	1415640	40.0000	43.8
54 4-Chlorophenylphenylether	204	6.222	6.222	(1.060)	587467	40.0000	43.0
55 2-Methyl-4,6-dinitrophenol	198	6.269	6.269	(0.914)	252507	40.0000	47.3
56 p-Nitroaniline	138	6.257	6.257	(1.066)	248183	40.0000	31.2
133 Diphenylamine	169	6.304	6.304	(0.919)	993520	40.0000	35.3
58 1,2-Diphenylhydrazine	77	6.334	6.334	(0.924)	1235921	40.0000	36.0
61 4-Bromophenylphenylether	248	6.551	6.551	(0.955)	322111	40.0000	44.5
63 Hexachlorobenzene	284	6.610	6.610	(0.964)	342212	40.0000	38.5
65 Pentachlorophenol	266	6.728	6.728	(0.981)	219499	40.0000	41.2
206 n-Octadecane	57	6.710	6.710	(0.979)	895260	40.0000	39.1
68 Phenanthrene	178	6.875	6.875	(1.003)	1964379	40.0000	41.0
69 Anthracene	178	6.904	6.904	(1.007)	2000795	40.0000	41.0
72 Di-n-butylphthalate	149	7.151	7.151	(1.043)	2304592	40.0000	44.3
76 Fluoranthene	202	7.586	7.586	(1.106)	1996152	40.0000	43.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.728	7.728	(0.911)	2082343	40.0000	40.4
85 Butylbenzylphthalate	149	8.028	8.028	(0.946)	997532	40.0000	42.6
89 Benzo(a)anthracene	228	8.475	8.475	(0.999)	1884178	40.0000	40.6
92 Chrysene	228	8.504	8.504	(1.002)	1651253	40.0000	38.0
93 bis(2-Ethylhexyl)phthalate	149	8.369	8.369	(0.986)	1454230	40.0000	42.7
94 Di-n-octylphthalate	149	8.857	8.857	(0.901)	2398560	40.0000	43.8
95 Benzo(b)fluoranthene	252	9.404	9.404	(0.956)	1722359	40.0000	40.6
96 Benzo(k)fluoranthene	252	9.433	9.433	(0.959)	1778066	40.0000	42.4
97 Benzo(a)pyrene	252	9.769	9.769	(0.993)	1532794	40.0000	42.0
99 Indeno(1,2,3-cd)pyrene	276	11.321	11.321	(1.151)	1550444	40.0000	40.9
100 Dibenzo(a,h)anthracene	278	11.321	11.321	(1.151)	1284279	40.0000	40.5
101 Benzo(ghi)perylene	276	11.780	11.780	(1.198)	1285195	40.0000	40.9
126 m-Dinitrobenzene	168	5.681	5.681	(0.968)	200744	40.0000	35.8
130 2,3,4,6-Tetrachlorophenol	232	6.086	6.086	(1.037)	286299	40.0000	44.1
143 Dinoseb	211	6.822	6.822	(0.995)	293616	40.0000	44.8
173 Carbazole	167	6.992	6.992	(1.020)	1535882	40.0000	36.1
184 p-Benzoquinone	54	3.263	3.263	(0.867)	23330	40.0000	27.6
192 Methoxychlor	227	8.357	8.357	(0.985)	1012800	40.0000	65.9
211 p-Toluidine	106	4.040	4.040	(1.073)	468733	40.0000	47.6
210 m-Toluidine	106	4.063	4.063	(1.080)	752790	40.0000	59.1
26 Phthalic anhydride	104	5.157	5.157	(1.116)	250710	40.0000	44.7
179 Dibenzo(a,e)pyrene	302	15.280	15.280	(1.554)	520542	40.0000	27.6
214 1,4-Dinitrobenzene	168	5.622	5.622	(0.958)	182152	40.0000	35.0
215 2-Ethoxyethanol	59	2.122	2.122	(0.564)	341710	40.0000	40.5
216 Methylenebis(2-chloroaniline)	231	8.416	8.416	(0.992)	189657	40.0000	30.3
M 225 Trichlorophenols	196				707978	80.0000	85.9
M 226 Tetrachlorophenols	232				286299	40.0000	44.1
M 227 Benzo(b,k)fluoranthene	252				3500425	80.0000	86.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s120709.b/s110704.d
Date : 07-DEC-2009 10:13
Client ID: MEGACVS
Sample Info: IWBN091111-17,2|40 PPM|1|SVMF|1|MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

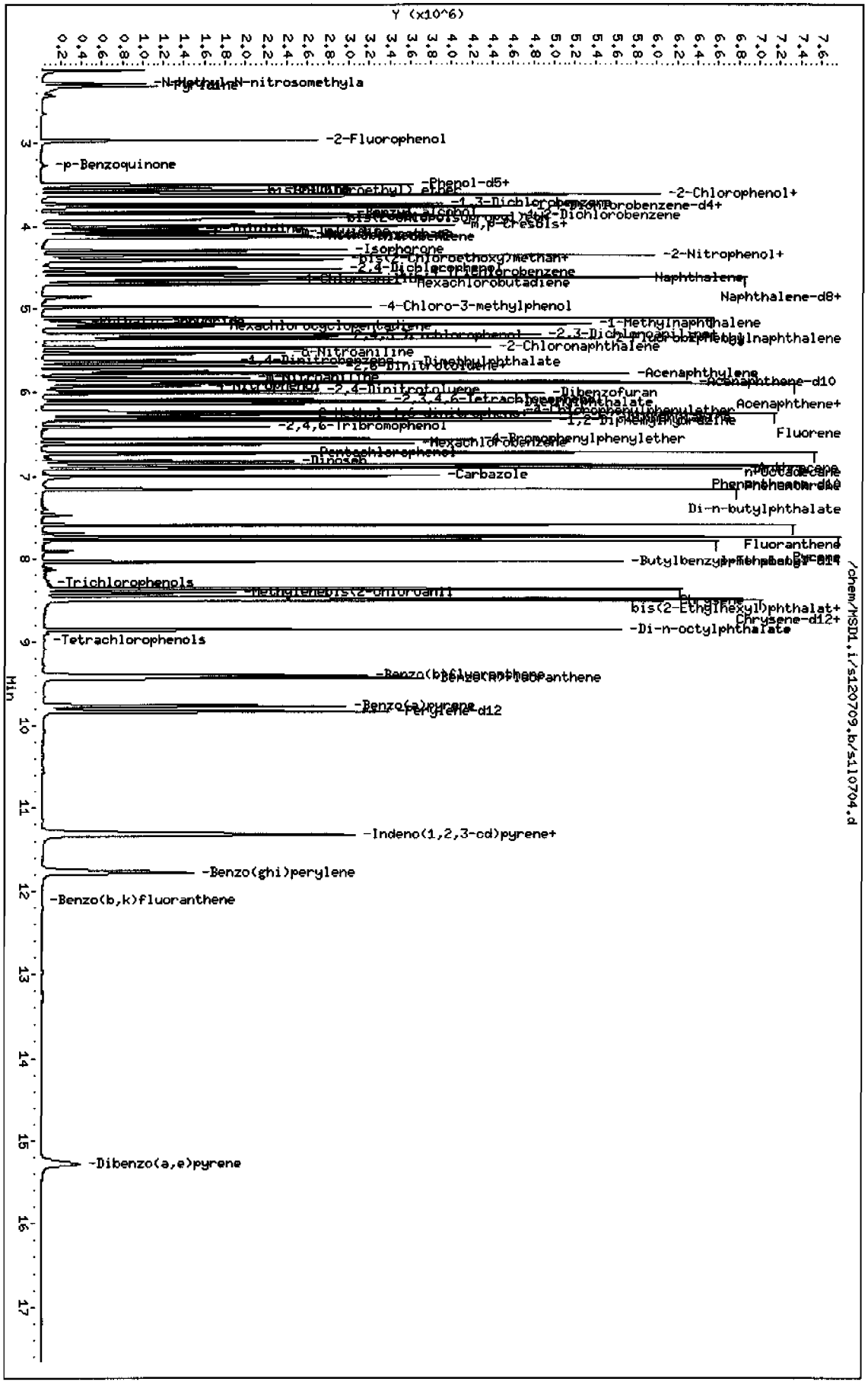

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120709.b/s110705.d
Lab Smp Id: WBN091201-03.4 Client Smp ID: APCVS
Inj Date : 07-DEC-2009 10:53
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091201-03.4|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120709.b/MSD1-M8270AQA-111409.m
Meth Date : 07-Dec-2009 11:28 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.757	3.757	(1.000)	583827	40.0000	
* 29 Naphthalene-d8	136	4.622	4.622	(1.000)	2293661	40.0000	
* 46 Acenaphthene-d10	164	5.863	5.863	(1.000)	1262490	40.0000	
* 67 Phenanthrene-d10	188	6.857	6.857	(1.000)	2145634	40.0000	
* 91 Chrysene-d12	240	8.480	8.480	(1.000)	1880012	40.0000	
* 98 Perylene-d12	264	9.827	9.827	(1.000)	1585572	40.0000	
209 Benzaldehyde	77	3.487	3.487	(0.928)	497176	40.0000	41.3
16 Acetophenone	105	4.016	4.016	(1.069)	696041	40.0000	42.2
189 Caprolactam	113	4.910	4.910	(1.062)	164651	40.0000	40.0
208 1,1'-Biphenyl	154	5.439	5.439	(0.928)	1539835	40.0000	43.5
207 Atrazine	173	6.634	6.634	(0.967)	76974	40.0000	35.8
77 Benzidine	184	7.645	7.645	(0.902)	432996	40.0000	25.4
90 3,3'-Dichlorobenzidine	252	8.422	8.422	(0.993)	526899	40.0000	40.7
102 1,4-Dioxane	88	2.122	2.122	(0.565)	185072	40.0000	40.4
103 Methyl methacrylate	100	2.116	2.116	(0.563)	106828	40.0000	41.5
104 Ethyl methacrylate	69	2.481	2.481	(0.660)	423658	40.0000	40.7
105 2-Picoline	93	2.675	2.675	(0.712)	678927	40.0000	40.3
106 N-Nitrosomethylethylamine	88	2.716	2.716	(0.723)	243864	40.0000	36.8
107 Methyl methanesulfonate	80	2.875	2.875	(0.765)	266624	40.0000	42.9
108 N-Nitrosodiethylamine	102	3.098	3.098	(0.825)	258436	40.0000	36.9
109 Ethyl Methanesulfonate	79	3.257	3.257	(0.867)	329346	40.0000	37.8
110 Pentachloroethane	167	3.587	3.587	(0.955)	185809	40.0000	43.7
111 N-Nitrosopyrrolidine	100	4.004	4.004	(1.066)	271144	40.0000	39.1
113 N-Nitrosomorpholine	56	4.028	4.028	(1.072)	372075	40.0000	41.3
114 o-Toluidine	106	4.040	4.040	(1.075)	971019	40.0000	40.2
115 N-Nitrosopiperidine	114	4.240	4.240	(0.917)	287349	40.0000	38.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.481	4.481	(0.969)	1569706	40.0000	35.6
118 2,6-Dichlorophenol	162	4.669	4.669	(1.010)	471257	40.0000	41.7
119 Hexachloropropene	213	4.692	4.692	(1.015)	234731	40.0000	46.0
120 p-Phenylenediamine	108	4.622	4.622	(1.000)	216464	40.0000	18.7
121 N-Nitrosodi-n-butylamine	84	4.869	4.869	(1.053)	362976	40.0000	36.9(T)
122 Safrole	162	5.034	5.034	(1.089)	434599	40.0000	42.4
123 1,2,4,5-Tetrachlorobenzene	216	5.234	5.234	(0.893)	526446	40.0000	45.4
124 Isosafrole	162	5.404	5.404	(0.922)	421422	40.0000	40.8
125 1,4-Naphthoquinone	158	5.587	5.587	(0.953)	385164	40.0000	41.1
127 Pentachlorobenzene	250	5.975	5.975	(1.019)	452848	40.0000	45.6
128 1-Naphthylamine	143	6.063	6.063	(1.034)	1119097	40.0000	39.6
129 2-Naphthylamine	143	6.116	6.116	(1.043)	937498	40.0000	30.5
131 5-Nitro-o-toluidine	152	6.245	6.245	(1.065)	349793	40.0000	38.8
136 1,3,5-Trinitrobenzene	75	6.463	6.463	(0.943)	262315	40.0000	42.1
137 Phenacetin	108	6.498	6.498	(0.948)	575014	40.0000	41.7
138 Diallate	86	6.475	6.475	(0.944)	483174	40.0000	39.0
212 Cis Diallate	86	6.539	6.539	(0.954)	68816	6.00000	5.3
213 Trans Diallate	86	6.475	6.475	(0.944)	483174	34.0000	33.1
140 4-Aminobiphenyl	169	6.722	6.722	(0.980)	1038396	40.0000	36.1
141 Pentachloronitrobenzene	237	6.734	6.734	(0.982)	143622	40.0000	50.3
142 Pronamide	173	6.734	6.734	(0.982)	596608	40.0000	47.6
146 4-Nitroquinoline-1-oxide	101	7.333	7.333	(1.069)	27570	40.0000	52.4
147 Methapyrilene	58	7.345	7.345	(1.071)	886825	40.0000	44.9
148 Isodrin	193	7.498	7.498	(1.093)	212986	40.0000	46.1
149 Aramite	185	7.733	7.733	(1.128)	99122	40.0000	43.4
150 Kepone	272	8.128	8.128	(1.185)	145524	40.0000	43.0
151 p-(Dimethylamino)azobenzene	120	7.851	7.851	(0.926)	569287	40.0000	42.7
152 Chlorobenzilate	251	7.869	7.869	(0.928)	570718	40.0000	55.2
153 3,3'-Dimethylbenzidine	212	8.051	8.051	(0.949)	883802	40.0000	39.2
155 2-Acetylaminofluorene	181	8.222	8.222	(0.969)	687797	40.0000	47.5
157 7,12Dimethylbenz(a)anthracene	256	9.375	9.375	(0.954)	775954	40.0000	46.5
158 3-Methylcholanthrene	268	10.151	10.151	(1.033)	690221	40.0000	47.4

QC Flag Legend

T - Target compound detected outside RT window.

Data File: /chem/MSD1.i/s120709.b/s110705.d
Date : 07-DEC-2009 10:53
Client ID: APCVS
Sample Info: IWBN091201-03,4|40 PPM|1|SVMF1|1|APCVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

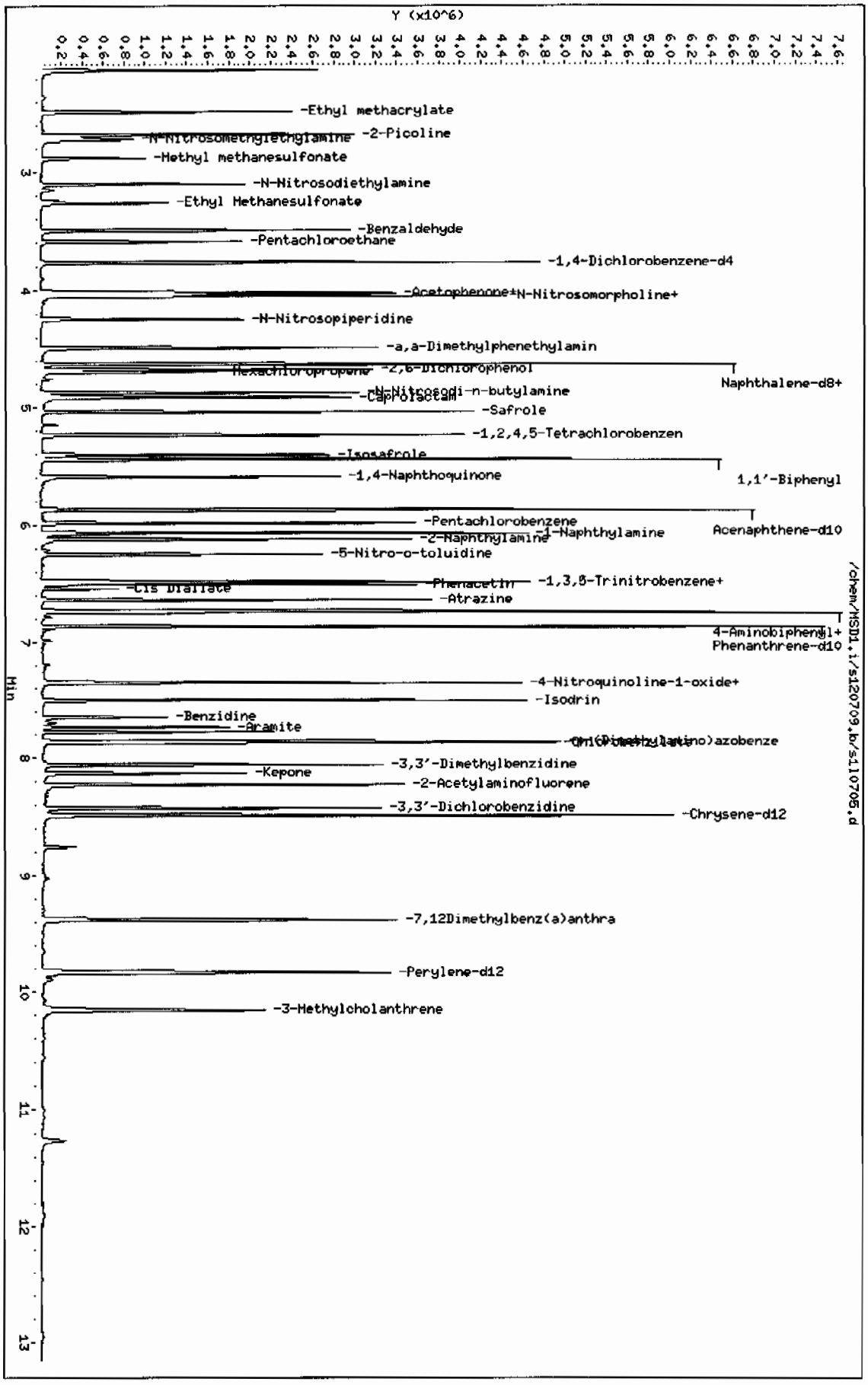

QC Data

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

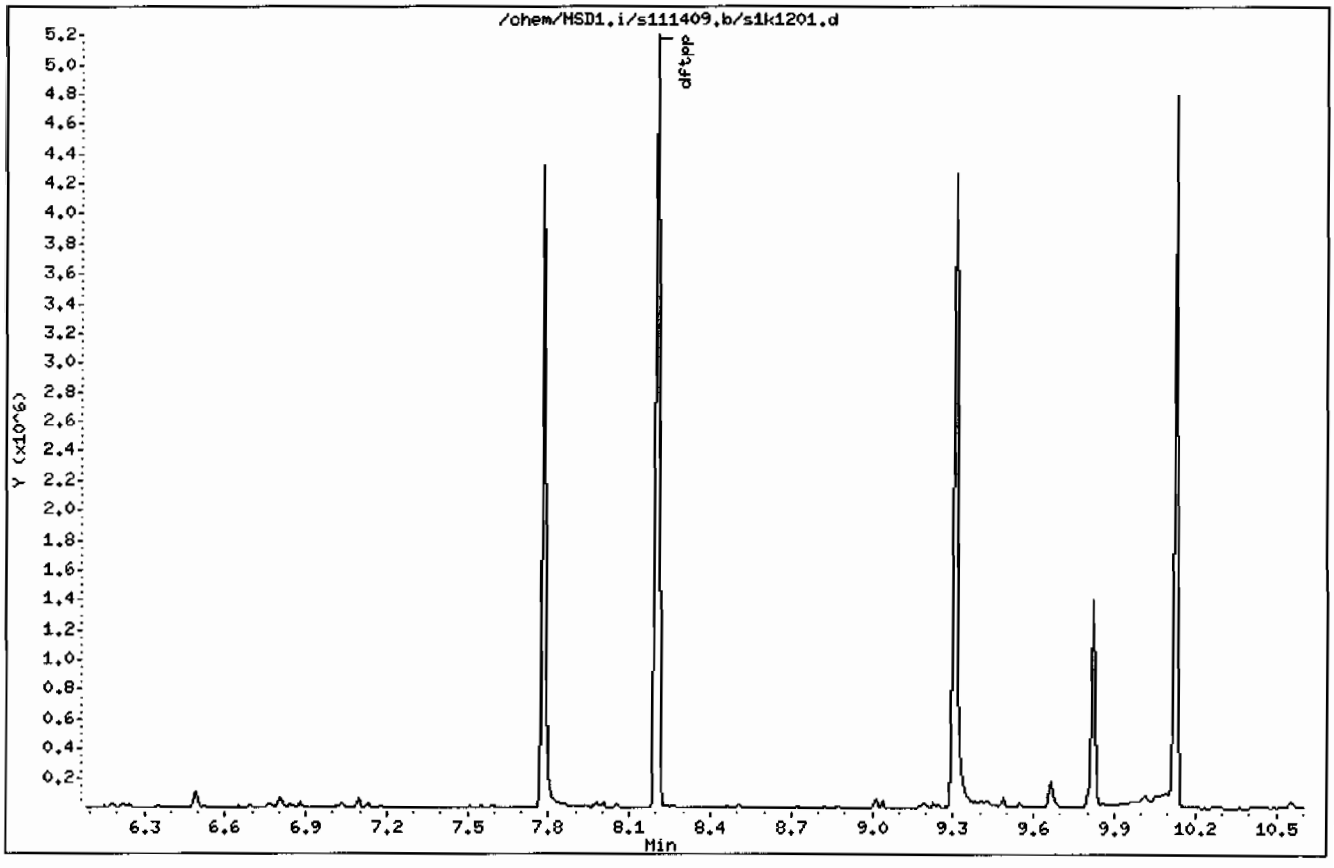

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

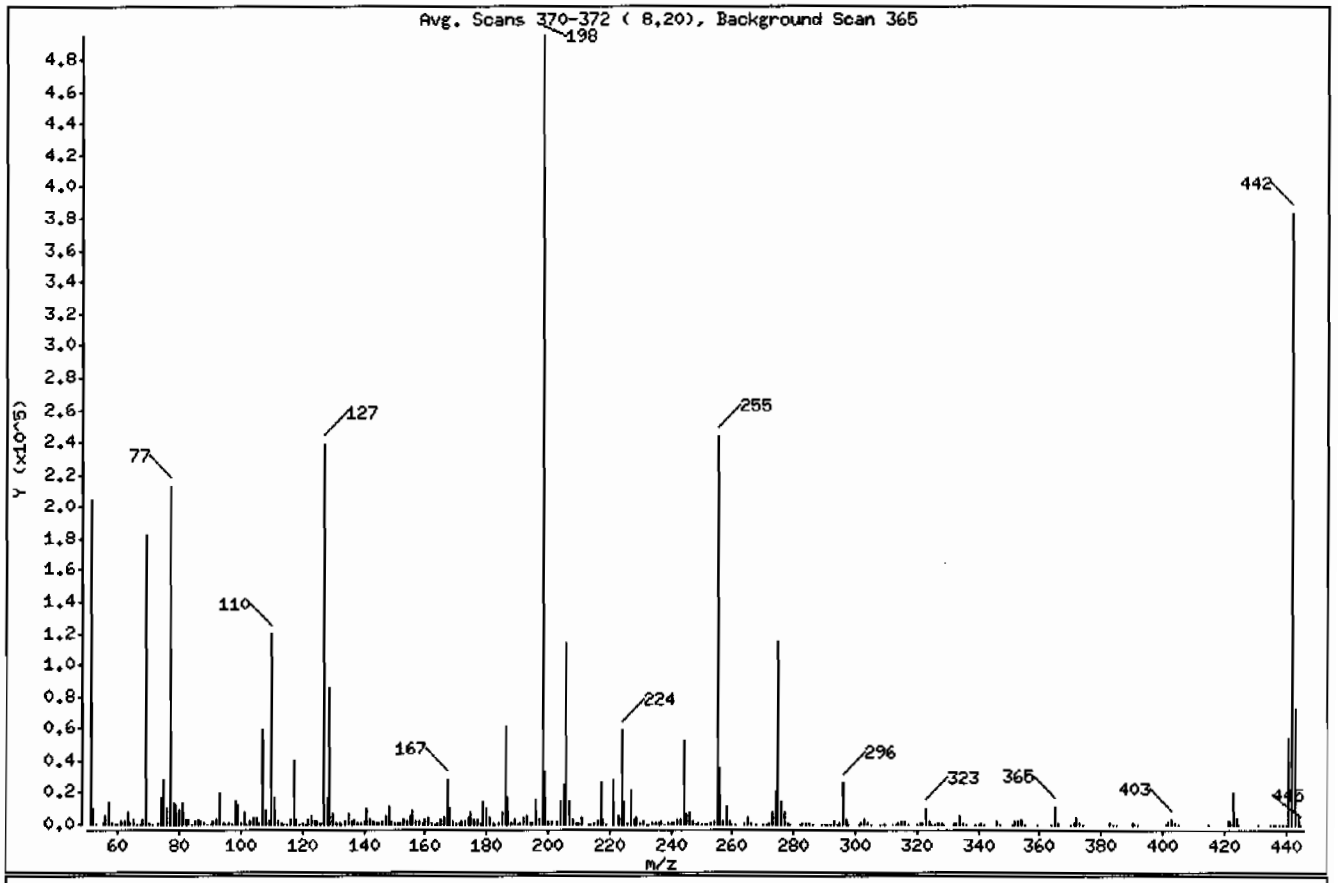

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.33
68	Less than 2.00% of mass 69	0.66 (1.81)
69	Mass 69 relative abundance	36.68
70	Less than 2.00% of mass 69	0.20 (0.55)
127	40.00 - 60.00% of mass 198	48.32
197	Less than 1.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.23
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	77.37
443	17.00 - 23.00% of mass 442	14.83 (19.16)

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVHF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	204544	132.00	849	213.00	322	304.00	857
52.00	10058	133.00	398	214.00	81	305.00	126
53.00	476	134.00	2213	215.00	1065	308.00	339
55.00	808	135.00	6445	216.00	2209	309.00	249
56.00	5675	136.00	2682	217.00	25976	310.00	361
57.00	13163	137.00	3409	218.00	3600	312.00	52
58.00	676	138.00	864	219.00	390	313.00	288
59.00	142	139.00	1285	221.00	28416	314.00	1372
60.00	58	140.00	1711	223.00	5970	315.00	2833
61.00	2414	141.00	10495	224.00	59288	316.00	1731
62.00	2627	142.00	3783	225.00	15318	317.00	279
63.00	7561	143.00	2378	226.00	1533	320.00	54
64.00	1048	144.00	706	227.00	21184	321.00	903
65.00	3902	145.00	666	228.00	3165	322.00	596
66.00	253	146.00	1908	229.00	4804	323.00	9908
67.00	264	147.00	5356	230.00	759	324.00	1942
68.00	3280	148.00	10849	231.00	2133	325.00	119
69.00	181568	149.00	2326	232.00	408	326.00	93
70.00	999	150.00	640	233.00	450	327.00	1701
71.00	119	151.00	1554	234.00	1483	328.00	891
73.00	1219	152.00	808	235.00	1658	329.00	88
74.00	17536	153.00	3187	236.00	1183	332.00	578
75.00	28056	154.00	2701	237.00	1728	333.00	855
76.00	9746	155.00	5991	238.00	324	334.00	5817
77.00	212736	156.00	9066	239.00	813	335.00	1475
78.00	13840	157.00	1942	240.00	775	336.00	75
79.00	12099	158.00	1971	241.00	1214	339.00	62
80.00	9416	159.00	1574	242.00	3186	340.00	77
81.00	13432	160.00	3233	243.00	3508	341.00	1027
82.00	3448	161.00	4832	244.00	51832	342.00	243
83.00	3440	162.00	1519	245.00	6691	346.00	2015
84.00	276	163.00	414	246.00	8221	347.00	283
85.00	2469	164.00	763	247.00	1725	351.00	182
86.00	3499	165.00	3823	248.00	403	352.00	2745
87.00	1914	166.00	4542	249.00	1698	353.00	2043

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	945	167.00	28056	250.00	338	354.00	3347
89.00	408	168.00	9882	251.00	378	355.00	568
90.00	81	169.00	1949	252.00	461	359.00	68
91.00	2811	170.00	666	253.00	965	364.00	82
92.00	3305	171.00	868	254.00	2194	365.00	11049
93.00	19392	172.00	1736	255.00	243712	366.00	1525
94.00	1530	173.00	2151	256.00	34792	370.00	312
95.00	401	174.00	4365	257.00	2654	371.00	749
96.00	1021	175.00	8331	258.00	11699	372.00	5103
97.00	481	176.00	2950	259.00	1976	373.00	1317
98.00	14829	177.00	3734	260.00	354	374.00	211
99.00	12143	178.00	1429	261.00	488	383.00	1475
100.00	1081	179.00	14903	264.00	588	384.00	413
101.00	7582	180.00	10676	265.00	4651	385.00	112
102.00	501	181.00	5074	266.00	630	390.00	664
103.00	2806	182.00	848	268.00	97	391.00	481
104.00	4764	183.00	484	270.00	316	392.00	349
105.00	4470	184.00	1118	271.00	565	401.00	323
106.00	1531	185.00	7578	272.00	574	402.00	2059
107.00	58720	186.00	61632	273.00	7763	403.00	3027
108.00	9198	187.00	16824	274.00	20360	404.00	981
109.00	1983	188.00	1678	275.00	115400	405.00	157
110.00	119360	189.00	3368	276.00	14998	415.00	61
111.00	17336	190.00	542	277.00	8371	421.00	2728
112.00	2224	191.00	1652	278.00	1328	422.00	2498
113.00	793	192.00	4637	279.00	337	423.00	19928
114.00	277	193.00	5425	282.00	172	424.00	3991
115.00	405	194.00	1196	283.00	908	425.00	403
116.00	3276	195.00	960	284.00	671	431.00	50
117.00	39312	196.00	15938	285.00	1513	435.00	182
118.00	2868	197.00	3428	286.00	245	436.00	64
119.00	376	198.00	494976	289.00	275	437.00	123
120.00	724	199.00	32528	290.00	365	438.00	300
121.00	279	200.00	2387	291.00	237	439.00	370
122.00	3763	201.00	2747	292.00	481	440.00	354

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	6008	203.00	2693	293.00	2054	441.00	54440
124.00	2602	204.00	14604	294.00	532	442.00	382976
125.00	2647	205.00	25208	295.00	657	443.00	73384
126.00	904	206.00	113680	296.00	26240	444.00	6543
127.00	239168	207.00	14454	297.00	3789	445.00	363
128.00	17576	208.00	3160	298.00	253		
129.00	85072	209.00	1021	301.00	417		
130.00	7156	210.00	801	302.00	580		
131.00	1445	211.00	4362	303.00	3041		

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Page 1

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

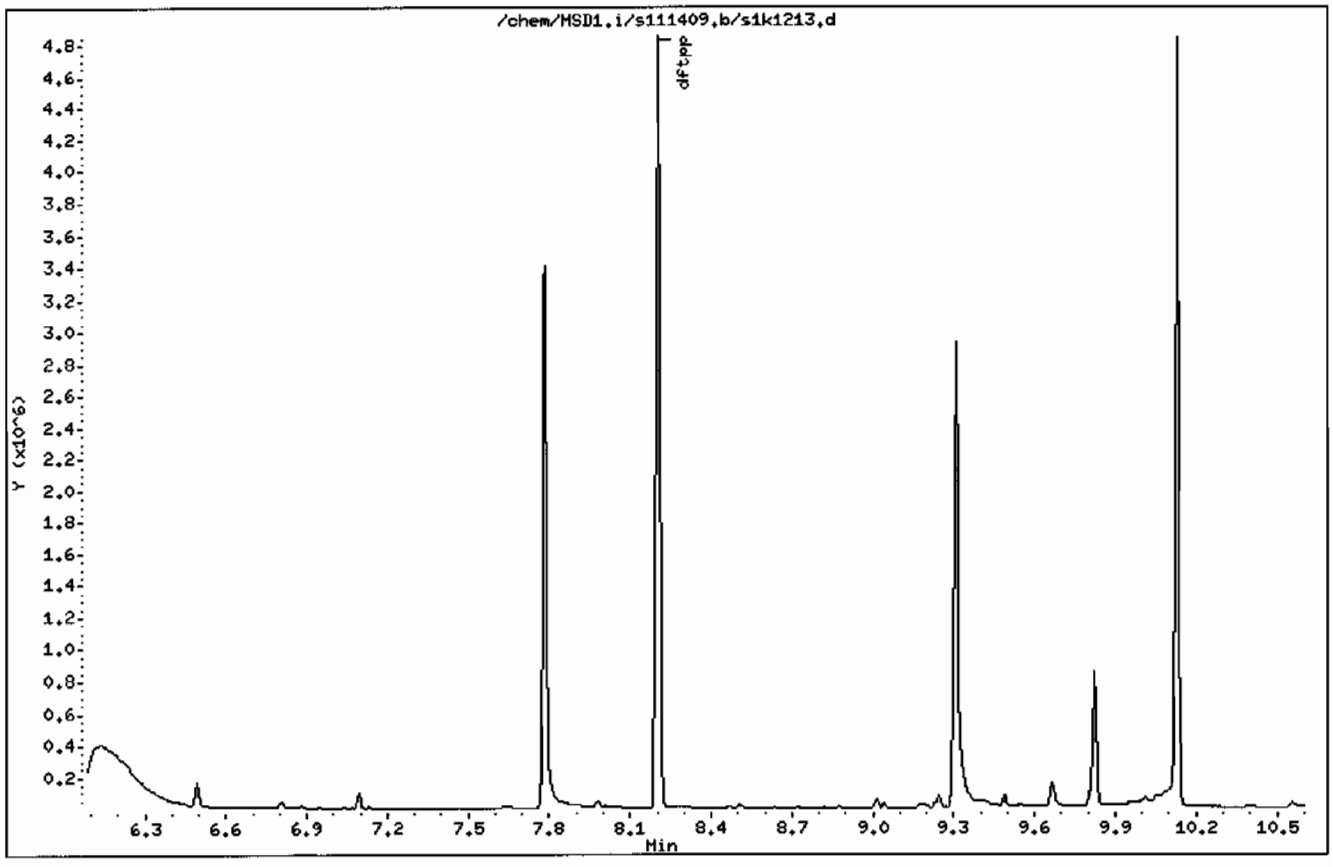

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

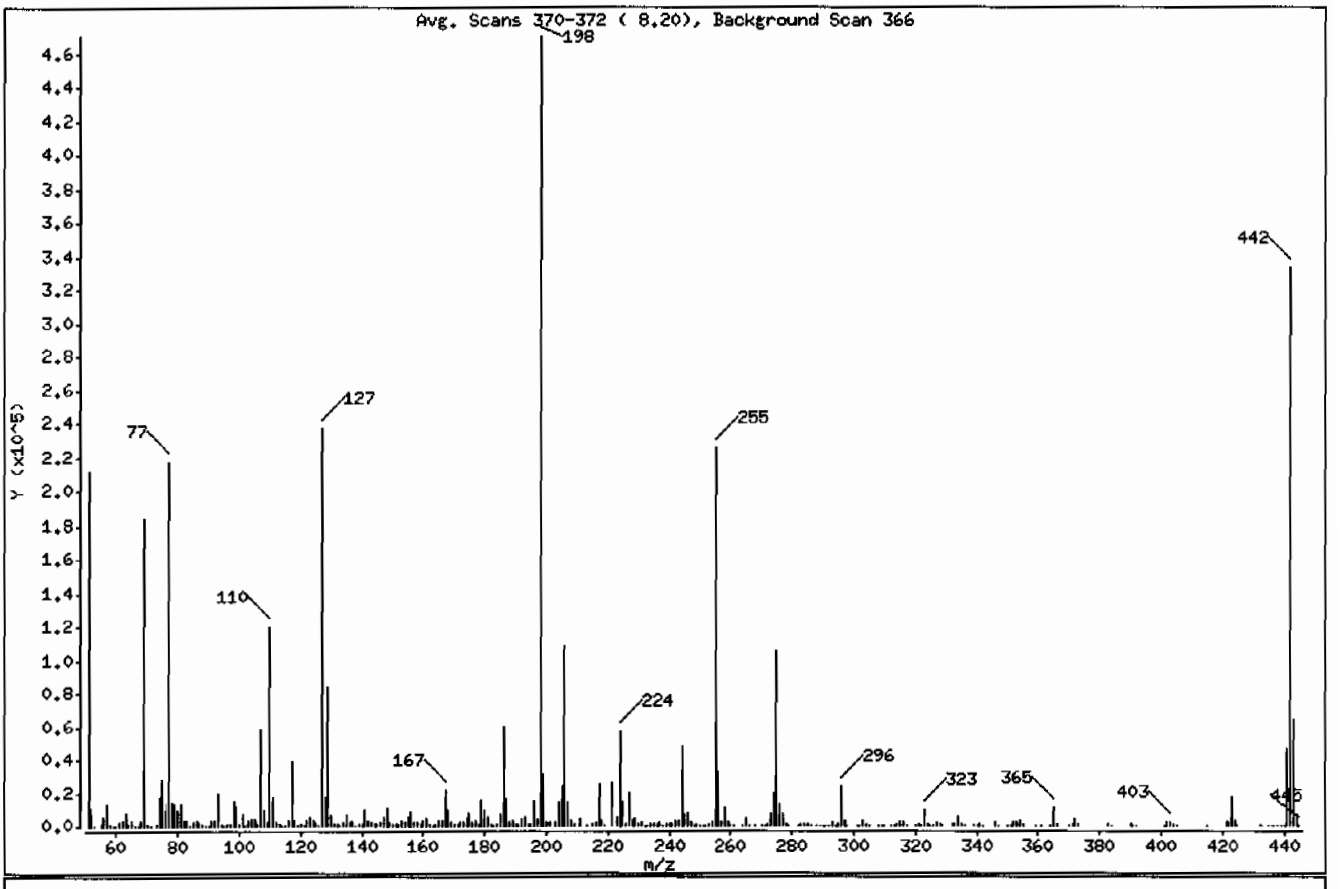

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.07
68	Less than 2.00% of mass 69	0.69 (1.77)
69	Mass 69 relative abundance	39.06
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	50.24
197	Less than 1.00% of mass 198	0.94
199	5.00 - 9.00% of mass 198	6.64
275	10.00 - 30.00% of mass 198	22.36
365	Greater than 1.00% of mass 198	2.27
441	Present, but less than mass 443	9.91
442	Greater than 40.00% of mass 198	70.70
443	17.00 - 23.00% of mass 442	13.63 (19.28)

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg, Scans 370-372 (8,20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	212096	132.00	898	215.00	1069	305.00	54
52.00	10563	133.00	158	216.00	2175	308.00	369
53.00	539	134.00	2246	217.00	25096	309.00	234
55.00	827	135.00	6673	218.00	3427	310.00	330
56.00	5710	136.00	2589	219.00	310	312.00	53
57.00	13040	137.00	3388	221.00	26264	313.00	225
58.00	622	138.00	481	223.00	5732	314.00	1148
59.00	197	139.00	738	224.00	57128	315.00	2673
60.00	264	140.00	1183	225.00	14268	316.00	1636
61.00	2458	141.00	10022	226.00	1583	317.00	257
62.00	2719	142.00	3500	227.00	19912	320.00	120
63.00	7568	143.00	2527	228.00	3016	321.00	868
64.00	1100	144.00	604	229.00	4436	322.00	443
65.00	3684	145.00	642	230.00	645	323.00	9345
66.00	306	146.00	1966	231.00	2162	324.00	1574
67.00	172	147.00	5499	232.00	373	325.00	117
68.00	3245	148.00	10590	233.00	410	326.00	63
69.00	183808	149.00	2267	234.00	1277	327.00	1667
70.00	937	150.00	711	235.00	1617	328.00	859
71.00	201	151.00	1389	236.00	1067	329.00	66
73.00	1312	152.00	1009	237.00	1713	332.00	666
74.00	16976	153.00	3123	238.00	252	333.00	761
75.00	27896	154.00	2582	239.00	815	334.00	5270
76.00	9904	155.00	5732	240.00	635	335.00	1342
77.00	217344	156.00	8806	241.00	1337	336.00	127
78.00	14484	157.00	1860	242.00	2922	339.00	65
79.00	12543	158.00	1872	243.00	3255	340.00	61
80.00	9582	159.00	1459	244.00	47840	341.00	1023
81.00	13483	160.00	3146	245.00	6361	342.00	289
82.00	3494	161.00	4861	246.00	7662	346.00	1844
83.00	3404	162.00	1440	247.00	1632	347.00	399
84.00	268	163.00	441	248.00	425	350.00	54
85.00	2429	164.00	756	249.00	1557	351.00	146
86.00	3717	165.00	3644	250.00	323	352.00	2683
87.00	1777	166.00	3330	251.00	376	353.00	1903

Date : 15-NOV-2009 14:50

Client ID: DFTPP Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	858	167.00	21384	252.00	497	354.00	2848
89.00	353	168.00	9329	253.00	1026	355.00	645
90.00	52	169.00	1925	254.00	2307	359.00	128
91.00	2960	170.00	698	255.00	224896	361.00	54
92.00	3280	171.00	771	256.00	32856	364.00	139
93.00	19472	172.00	1741	257.00	2457	365.00	10703
94.00	1413	173.00	2444	258.00	11321	366.00	1552
95.00	284	174.00	4219	259.00	1877	370.00	274
96.00	1152	175.00	8099	260.00	305	371.00	720
97.00	591	176.00	2630	261.00	356	372.00	4645
98.00	14679	177.00	3711	264.00	230	373.00	1151
99.00	12313	178.00	1199	265.00	4470	383.00	1268
100.00	1108	179.00	14622	266.00	429	384.00	380
101.00	7679	180.00	10168	268.00	129	390.00	651
102.00	505	181.00	5015	270.00	325	391.00	487
103.00	2879	182.00	784	271.00	443	392.00	279
104.00	4625	183.00	540	272.00	688	401.00	276
105.00	4311	184.00	1176	273.00	7045	402.00	1862
106.00	1512	185.00	7084	274.00	19240	403.00	2656
107.00	58544	186.00	59904	275.00	105256	404.00	848
108.00	9265	187.00	16158	276.00	13094	405.00	140
109.00	1897	188.00	1716	277.00	7627	415.00	133
110.00	119952	189.00	3108	278.00	1312	421.00	2323
111.00	16904	190.00	572	279.00	308	422.00	2190
112.00	2240	191.00	1592	282.00	136	423.00	16944
113.00	758	192.00	4599	283.00	867	424.00	3191
114.00	126	193.00	5084	284.00	734	425.00	414
115.00	267	194.00	1198	285.00	1299	432.00	51
116.00	3229	195.00	880	286.00	172	433.00	63
117.00	38800	196.00	15085	288.00	53	435.00	138
118.00	2837	197.00	4415	289.00	263	436.00	193
119.00	448	198.00	470656	290.00	271	437.00	144
120.00	769	199.00	31248	291.00	161	438.00	208
121.00	319	200.00	2323	292.00	403	439.00	422
122.00	3761	201.00	2603	293.00	1958	440.00	420

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	5880	203.00	2606	294.00	491	441.00	46632
124.00	2783	204.00	13871	295.00	593	442.00	332736
125.00	2563	205.00	24136	296.00	24248	443.00	64136
126.00	365	206.00	107936	297.00	3568	444.00	5493
127.00	236480	207.00	13718	298.00	201	445.00	305
128.00	17448	208.00	3264	301.00	372		
129.00	84656	209.00	932	302.00	462		
130.00	6942	211.00	4014	303.00	2821		
131.00	1354	213.00	308	304.00	785		

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

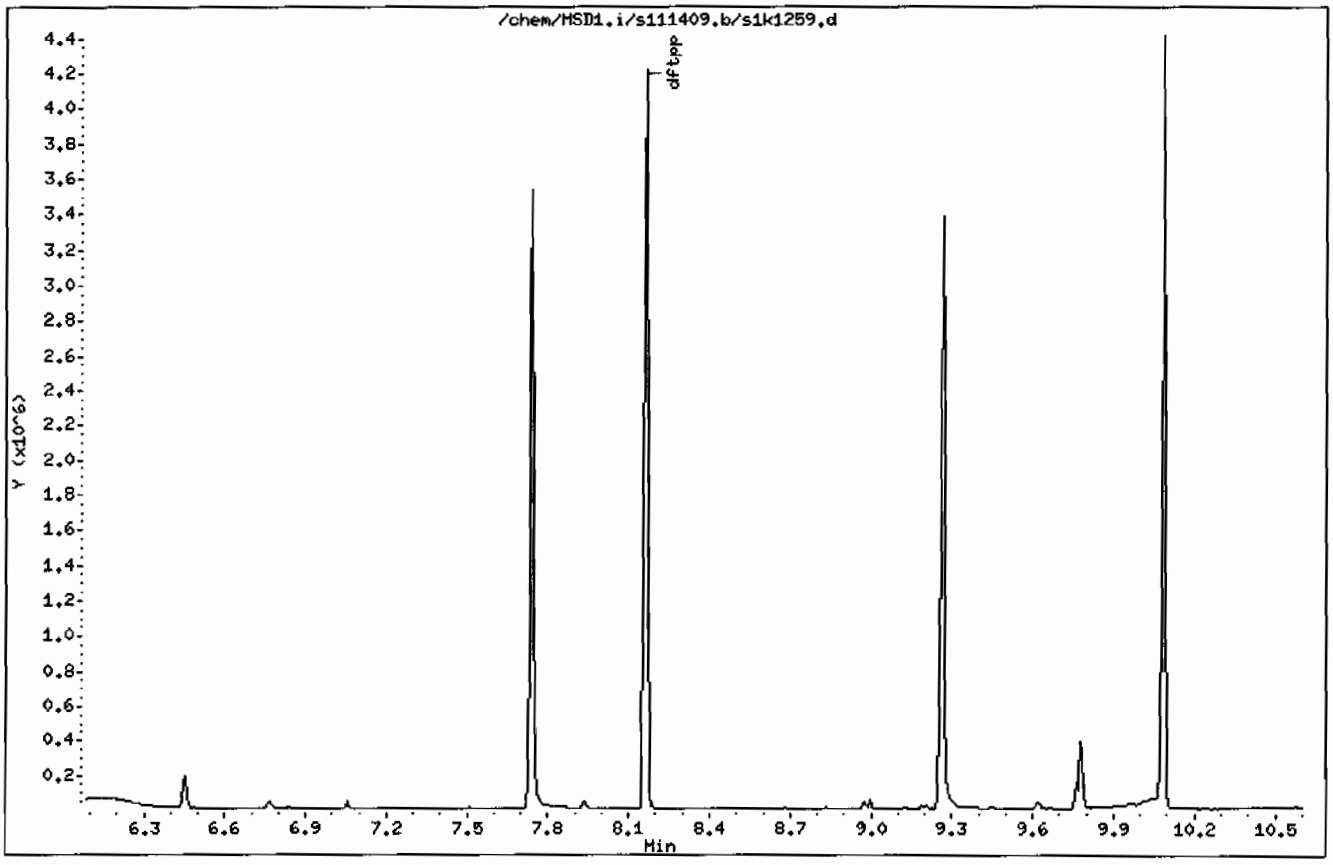

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

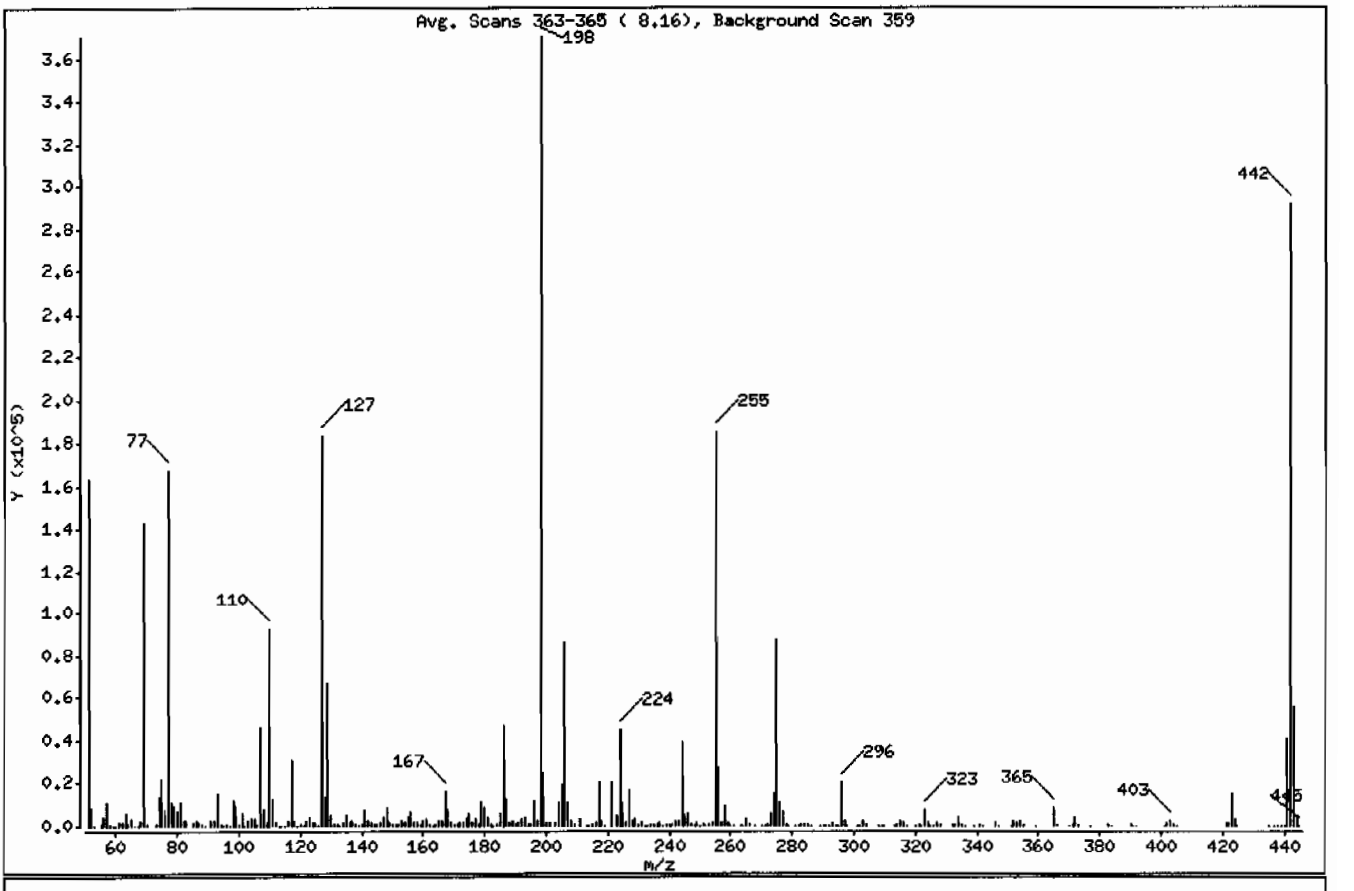

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.19
68	Less than 2.00% of mass 69	0.70 (1.82)
69	Mass 69 relative abundance	38.52
70	Less than 2.00% of mass 69	0.22 (0.58)
127	40.00 - 60.00% of mass 198	49.61
197	Less than 1.00% of mass 198	0.73
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	23.76
365	Greater than 1.00% of mass 198	2.39
441	Present, but less than mass 443	10.94
442	Greater than 40.00% of mass 198	78.91
443	17.00 - 23.00% of mass 442	15.11 (19.15)

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: !WBN091101-01!50 PPM!1!SVMF!1!DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	163520	132.00	696	209.00	894	295.00	409
52.00	8218	133.00	165	211.00	3176	296.00	20504
53.00	278	134.00	1736	213.00	157	297.00	2961
55.00	768	135.00	5284	214.00	60	298.00	242
56.00	4517	136.00	1990	215.00	896	301.00	228
57.00	10646	137.00	2882	216.00	1633	302.00	377
58.00	485	138.00	608	217.00	20280	303.00	2440
59.00	173	139.00	322	218.00	2791	304.00	779
60.00	130	140.00	728	219.00	287	308.00	333
61.00	1880	141.00	8017	221.00	20640	309.00	180
62.00	1926	142.00	2864	223.00	4752	310.00	288
63.00	5930	143.00	1765	224.00	45496	313.00	172
64.00	771	144.00	446	225.00	11459	314.00	1000
65.00	3009	145.00	462	226.00	1320	315.00	2189
66.00	190	146.00	1638	227.00	16640	316.00	1304
67.00	147	147.00	4131	228.00	2433	317.00	255
68.00	2590	148.00	8419	229.00	3596	320.00	58
69.00	142592	149.00	1752	230.00	541	321.00	701
70.00	823	150.00	512	231.00	1631	322.00	395
73.00	1236	151.00	1272	232.00	323	323.00	7827
74.00	13875	152.00	886	233.00	236	324.00	1465
75.00	21824	153.00	2474	234.00	1059	325.00	55
76.00	7905	154.00	2034	235.00	1215	326.00	117
77.00	167296	155.00	4599	236.00	846	327.00	1319
78.00	11034	156.00	6876	237.00	1279	328.00	683
79.00	9492	157.00	1450	238.00	168	332.00	545
80.00	7131	158.00	1509	239.00	670	333.00	652
81.00	10804	159.00	1113	240.00	518	334.00	4627
82.00	2610	160.00	2655	241.00	1019	335.00	1148
83.00	2719	161.00	3658	242.00	2369	336.00	50
85.00	1896	162.00	1109	243.00	2744	339.00	57
86.00	2616	163.00	339	244.00	39256	341.00	855
87.00	1519	164.00	493	245.00	4982	342.00	192
88.00	684	165.00	2904	246.00	6349	346.00	1554
89.00	219	166.00	2427	247.00	1255	347.00	356

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	2379	167.00	16175	248.00	341	351.00	56
92.00	2447	168.00	7387	249.00	1305	352.00	2339
93.00	14969	169.00	1311	250.00	210	353.00	1624
94.00	1153	170.00	539	251.00	450	354.00	2500
95.00	287	171.00	706	252.00	278	355.00	434
96.00	810	172.00	1473	253.00	769	359.00	83
97.00	388	173.00	1748	254.00	1972	365.00	8863
98.00	11810	174.00	3414	255.00	185216	366.00	1195
99.00	9686	175.00	6350	256.00	27176	370.00	215
100.00	914	176.00	2063	257.00	2039	371.00	581
101.00	5933	177.00	3047	258.00	9022	372.00	4002
102.00	375	178.00	995	259.00	1444	373.00	996
103.00	2163	179.00	11274	260.00	214	377.00	51
104.00	3736	180.00	8159	261.00	279	383.00	974
105.00	3394	181.00	4009	263.00	55	384.00	323
106.00	1190	182.00	670	264.00	157	390.00	592
107.00	46232	183.00	413	265.00	3712	391.00	375
108.00	7538	184.00	909	266.00	481	392.00	323
109.00	1503	185.00	5852	268.00	53	401.00	231
110.00	92872	186.00	47008	270.00	282	402.00	1478
111.00	12963	187.00	12615	271.00	380	403.00	2390
112.00	1503	188.00	1316	272.00	540	404.00	821
113.00	406	189.00	2602	273.00	5676	405.00	134
114.00	121	190.00	427	274.00	15599	421.00	2054
115.00	133	191.00	1281	275.00	87936	422.00	1867
116.00	2637	192.00	3712	276.00	11240	423.00	15373
117.00	30336	193.00	4225	277.00	6439	424.00	3047
118.00	2397	194.00	901	278.00	950	425.00	291
119.00	332	195.00	603	279.00	182	435.00	71
120.00	620	196.00	12028	281.00	60	437.00	71
121.00	175	197.00	2717	282.00	68	438.00	134
122.00	2801	198.00	370176	283.00	713	439.00	238
123.00	4622	199.00	24728	284.00	493	440.00	191
124.00	2083	200.00	1826	285.00	1250	441.00	40480
125.00	1949	201.00	2072	286.00	254	442.00	292096

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	135	203.00	2082	289.00	243	443.00	55944
127.00	183616	204.00	10956	290.00	235	444.00	5034
128.00	13544	205.00	19552	291.00	131	445.00	311
129.00	66872	206.00	85904	292.00	339		
130.00	5516	207.00	10725	293.00	1482		
131.00	1048	208.00	2576	294.00	389		

Data File: /chem/MSD1.i/s120409.b/s110402.d

Date : 04-DEC-2009 08:56

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

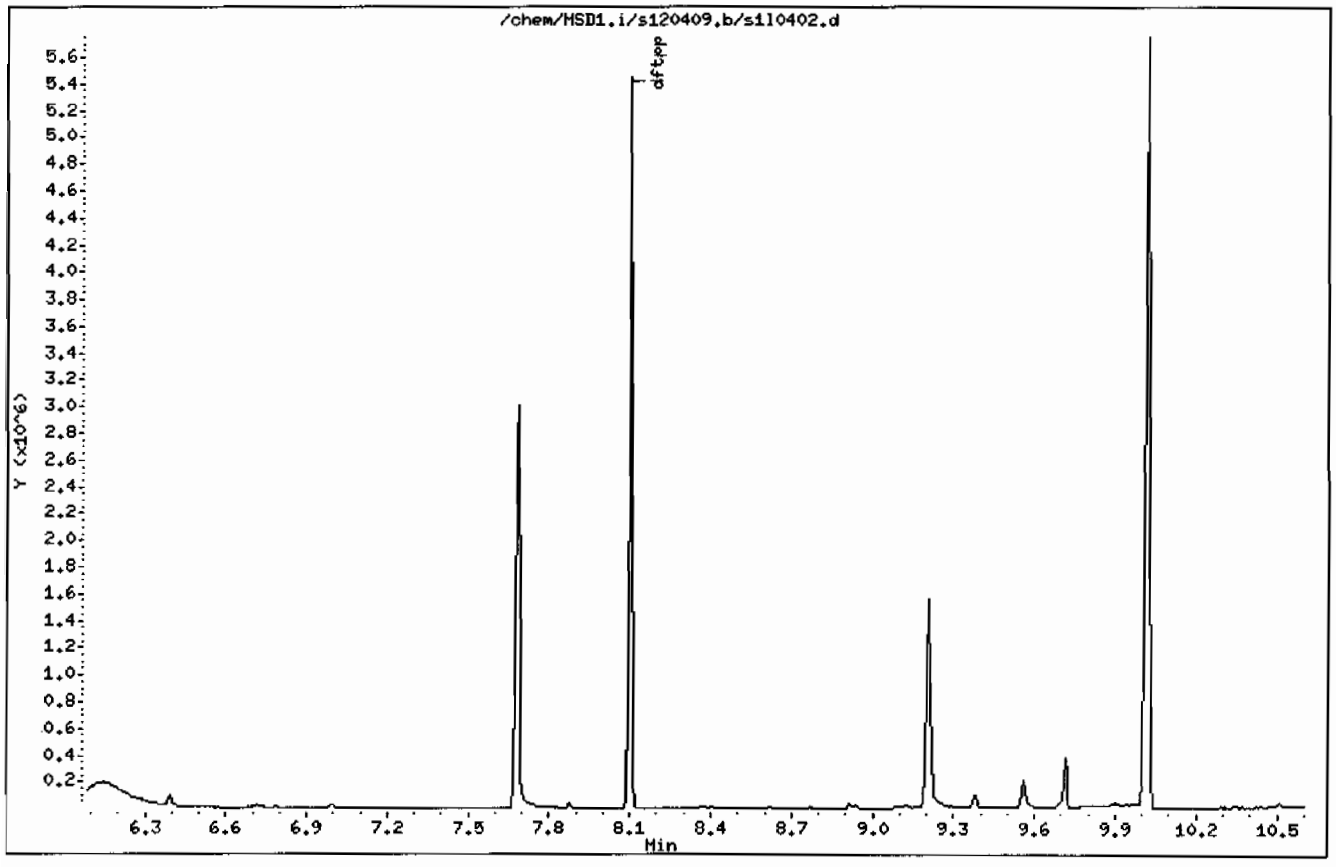

Data File: /chem/MSD1.i/s120409.b/s110402.d

Date : 04-DEC-2009 08:56

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

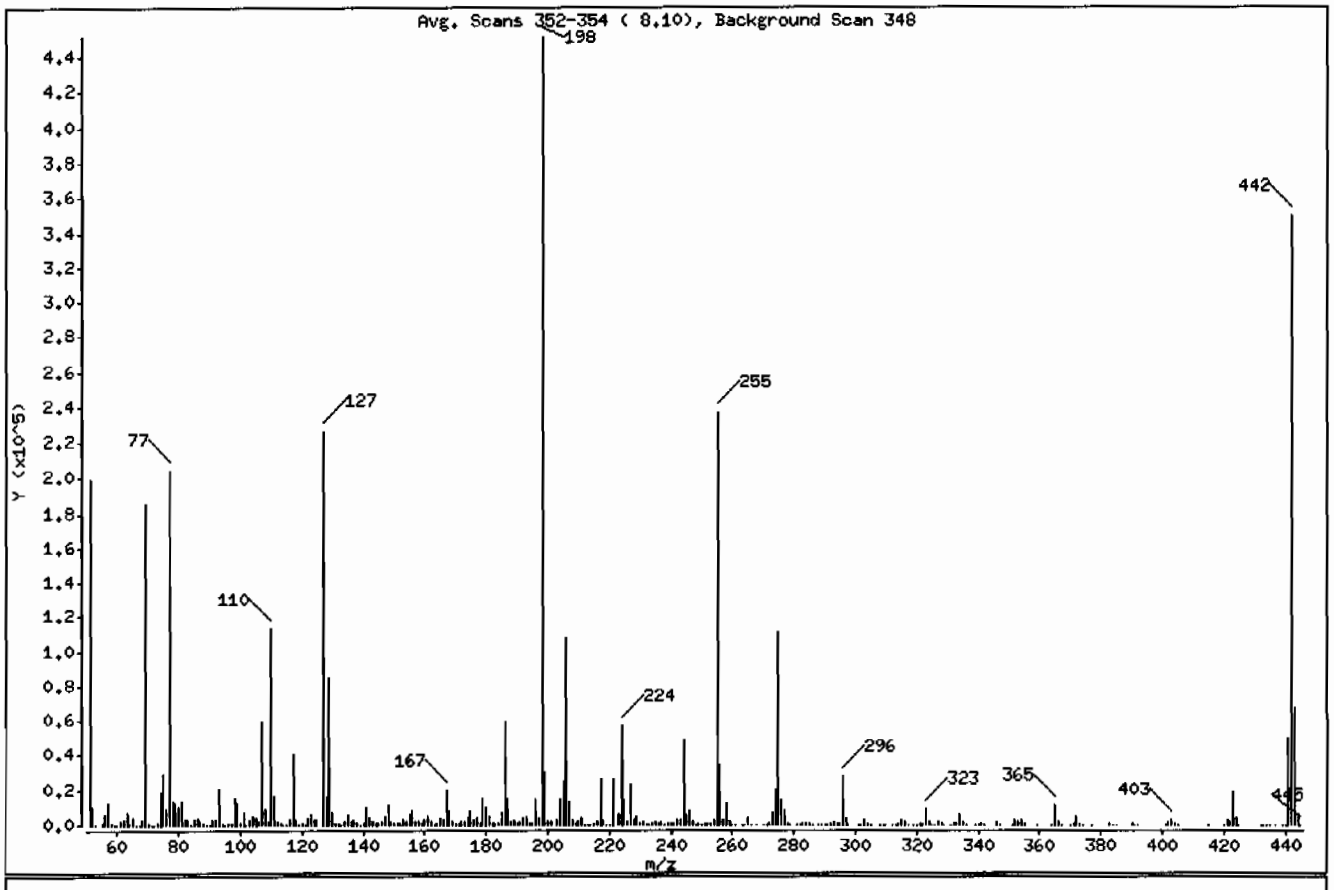

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.15
68	Less than 2.00% of mass 69	0.77 (1.87)
69	Mass 69 relative abundance	41.04
70	Less than 2.00% of mass 69	0.23 (0.56)
127	40.00 - 60.00% of mass 198	50.12
197	Less than 1.00% of mass 198	0.91
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	24.49
365	Greater than 1.00% of mass 198	2.64
441	Present, but less than mass 443	11.14
442	Greater than 40.00% of mass 198	77.53
443	17.00 - 23.00% of mass 442	14.97 (19.30)

Data File: /chem/MSD1.i/s120409.b/s110402.d

Date : 04-DEC-2009 08:56

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110402.d

Spectrum: Avg. Scans 352-354 (8.10), Background Scan 348

Location of Maximum: 198.00

Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	199360	134.00	2499	216.00	1956	305.00	78
52.00	9915	135.00	6665	217.00	25976	308.00	393
53.00	457	136.00	2476	218.00	3575	309.00	253
55.00	915	137.00	3249	219.00	339	310.00	314
56.00	6035	138.00	745	220.00	157	312.00	110
57.00	12909	139.00	462	221.00	25464	313.00	281
58.00	590	140.00	1245	223.00	5905	314.00	1190
59.00	206	141.00	10569	224.00	57464	315.00	3151
60.00	211	142.00	3726	225.00	14095	316.00	1868
61.00	2323	143.00	2167	226.00	1624	317.00	310
62.00	2669	144.00	730	227.00	22648	319.00	50
63.00	7546	145.00	729	228.00	3282	320.00	79
64.00	1121	146.00	1810	229.00	4775	321.00	1012
65.00	3709	147.00	5551	230.00	728	322.00	617
66.00	270	148.00	11056	231.00	2105	323.00	9856
67.00	365	149.00	2342	232.00	401	324.00	1708
68.00	3458	150.00	696	233.00	478	325.00	152
69.00	185344	151.00	1458	234.00	1282	326.00	198
70.00	1036	152.00	841	235.00	1573	327.00	1746
71.00	234	153.00	3241	236.00	1140	328.00	938
72.00	70	154.00	2561	237.00	1880	329.00	71
73.00	1186	155.00	6118	238.00	352	331.00	52
74.00	18208	156.00	8790	239.00	1000	332.00	670
75.00	28976	157.00	1804	240.00	633	333.00	840
76.00	9812	158.00	2252	241.00	1351	334.00	5874
77.00	204288	159.00	1494	242.00	2792	335.00	1576
78.00	13265	160.00	3227	243.00	3375	336.00	158
79.00	12799	161.00	4972	244.00	48504	339.00	76
80.00	9864	162.00	1558	245.00	6276	340.00	62
81.00	13938	163.00	417	246.00	8347	341.00	1041
82.00	3290	164.00	608	247.00	1618	342.00	282
83.00	3232	165.00	3765	248.00	449	346.00	1996
84.00	180	166.00	3226	249.00	1438	347.00	371
85.00	2686	167.00	19672	250.00	432	351.00	116
86.00	3712	168.00	8794	251.00	521	352.00	2968

Data File: /chem/MSD1.i/s120409.b/s110402.d

Date : 04-DEC-2009 08:56

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110402.d
Spectrum: Avg. Scans 352-354 (8.10), Background Scan 348
Location of Maximum: 198.00
Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	1840	169.00	1700	252.00	521	353.00	2101
88.00	714	170.00	754	253.00	1145	354.00	3183
89.00	290	171.00	878	254.00	2912	355.00	587
90.00	68	172.00	1764	255.00	236352	359.00	134
91.00	3376	173.00	2373	256.00	34456	364.00	56
92.00	3331	174.00	4228	257.00	2715	365.00	11937
93.00	20600	175.00	7863	258.00	12565	366.00	1610
94.00	1437	176.00	2693	259.00	1931	367.00	60
95.00	477	177.00	3911	260.00	450	370.00	250
96.00	1043	178.00	1318	261.00	375	371.00	956
97.00	602	179.00	15304	263.00	52	372.00	5375
98.00	15114	180.00	10220	264.00	389	373.00	1208
99.00	12016	181.00	4966	265.00	4577	374.00	145
100.00	1205	182.00	845	266.00	483	377.00	89
101.00	7574	183.00	669	268.00	233	383.00	1499
102.00	466	184.00	1147	270.00	355	384.00	349
103.00	2813	185.00	7404	271.00	515	385.00	58
104.00	4836	186.00	59032	272.00	619	390.00	626
105.00	4321	187.00	16003	273.00	7465	391.00	463
106.00	1590	188.00	1575	274.00	20160	392.00	323
107.00	58784	189.00	3607	275.00	110608	401.00	273
108.00	9414	190.00	629	276.00	14434	402.00	1892
109.00	1941	191.00	1571	277.00	8414	403.00	2750
110.00	112744	192.00	4493	278.00	1489	404.00	956
111.00	16334	193.00	5189	279.00	238	405.00	125
112.00	2158	194.00	1077	281.00	246	415.00	204
113.00	539	195.00	646	282.00	263	420.00	54
114.00	158	196.00	14037	283.00	1010	421.00	2662
115.00	373	197.00	4124	284.00	776	422.00	2359
116.00	3311	198.00	451648	285.00	1448	423.00	18488
117.00	40664	199.00	30072	286.00	323	424.00	3742
118.00	3004	200.00	2239	288.00	66	425.00	392
119.00	433	201.00	2257	289.00	347	432.00	66
120.00	831	203.00	2927	290.00	464	433.00	52
121.00	249	204.00	14428	291.00	294	434.00	64

Data File: /chem/MSD1.i/s120409.b/s110402.d

Date : 04-DEC-2009 08:56

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110402.d
Spectrum: Avg. Scans 352-354 (8.10), Background Scan 348
Location of Maximum: 198.00
Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	3976	205.00	24968	292.00	614	435.00	120
123.00	5972	206.00	108392	293.00	2173	437.00	129
124.00	2700	207.00	13441	294.00	593	439.00	371
125.00	2598	208.00	3291	295.00	660	440.00	455
127.00	226368	209.00	950	296.00	27824	441.00	50312
128.00	16528	210.00	1579	297.00	3922	442.00	350144
129.00	84864	211.00	4106	298.00	317	443.00	67592
130.00	6999	212.00	445	301.00	420	444.00	6266
131.00	1544	213.00	298	302.00	383	445.00	297
132.00	687	214.00	56	303.00	3301		
133.00	171	215.00	1091	304.00	1071		

Data File: /chem/MSD1.i/s120709.b/s110702.d

Date : 07-DEC-2009 09:20

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

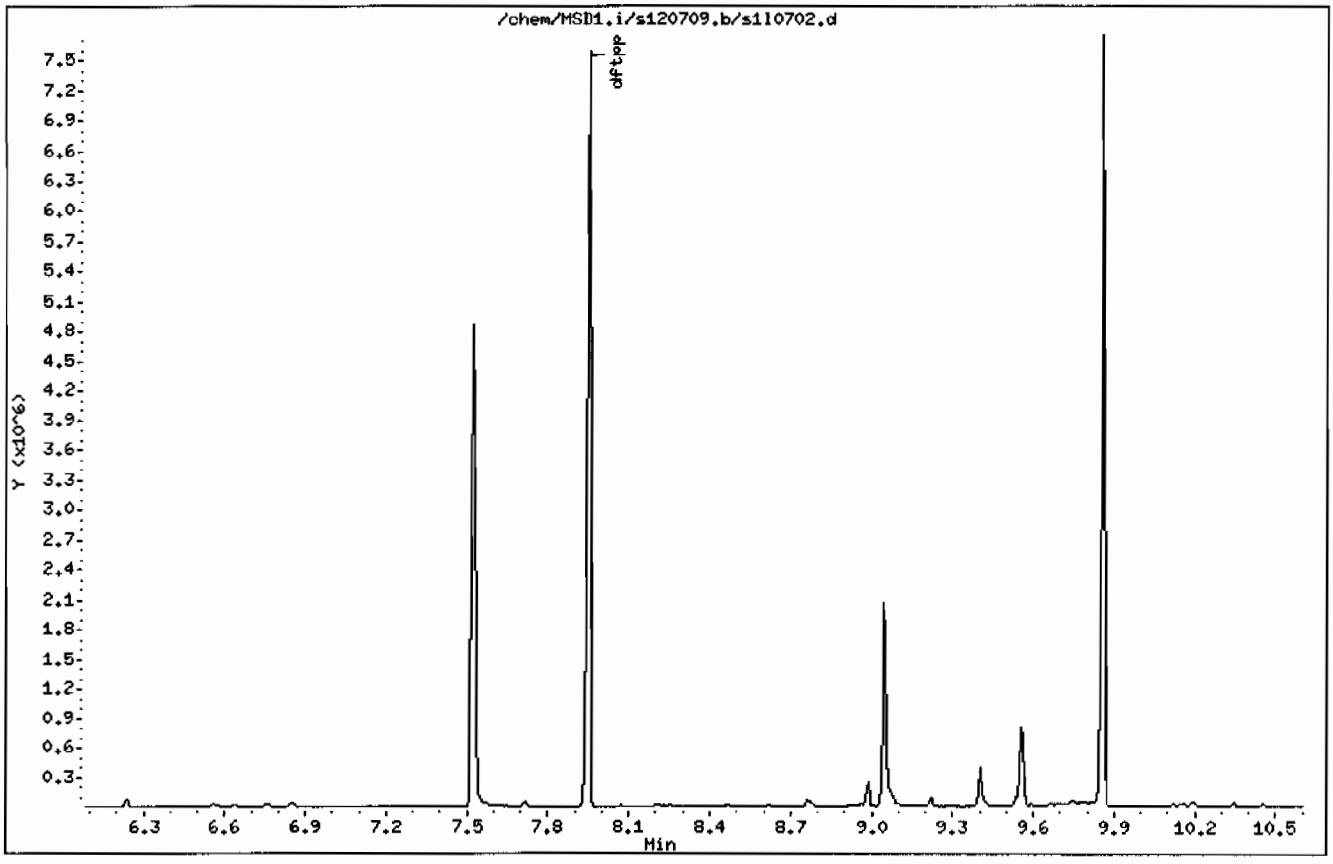

Data File: /chem/MSD1.i/s120709.b/s110702.d

Date : 07-DEC-2009 09:20

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

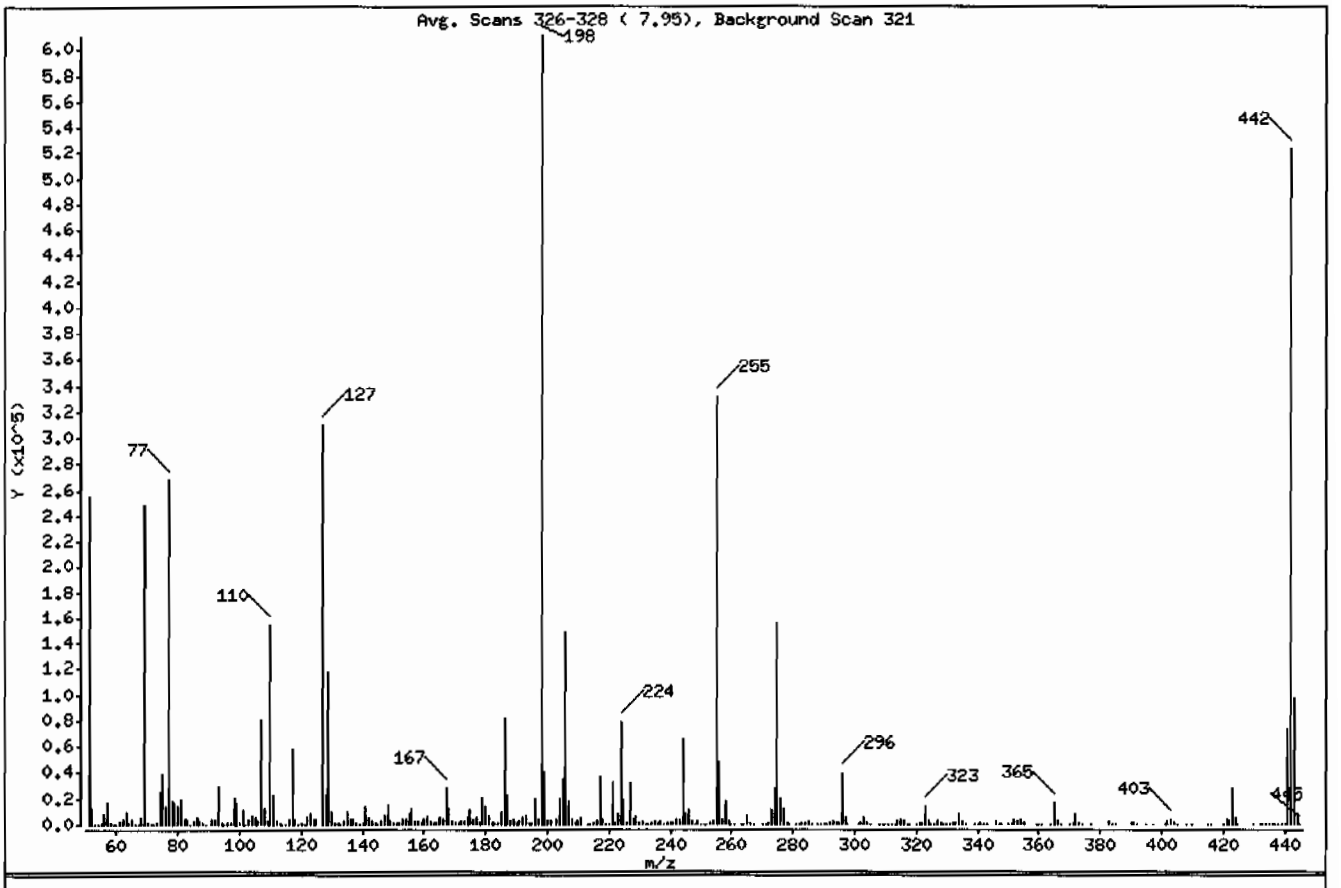

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.78
68	Less than 2.00% of mass 69	0.81 (1.99)
69	Mass 69 relative abundance	40.72
70	Less than 2.00% of mass 69	0.22 (0.53)
127	40.00 - 60.00% of mass 198	50.86
197	Less than 1.00% of mass 198	0.79
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	25.41
365	Greater than 1.00% of mass 198	2.86
441	Present, but less than mass 443	12.05
442	Greater than 40.00% of mass 198	85.77
443	17.00 - 23.00% of mass 442	15.82 (18.44)

Data File: /chem/MSD1.i/s120709.b/s110702.d

Date : 07-DEC-2009 09:20

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110702.d
Spectrum: Avg. Scans 326-328 (7.95), Background Scan 321
Location of Maximum: 198.00
Number of points: 337

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	254976	138.00	999	225.00	20256	320.00	158
52.00	12774	139.00	682	226.00	1865	321.00	1325
53.00	677	140.00	1383	227.00	32168	322.00	859
54.00	66	141.00	14632	228.00	4353	323.00	14086
55.00	1356	142.00	5388	229.00	6866	324.00	2656
56.00	7729	143.00	3245	230.00	911	325.00	206
57.00	17504	144.00	909	231.00	2942	326.00	215
58.00	735	145.00	682	232.00	556	327.00	2545
59.00	203	146.00	2860	233.00	638	328.00	1251
60.00	149	147.00	7361	234.00	1896	329.00	299
61.00	3145	148.00	15091	235.00	2363	330.00	59
62.00	3613	149.00	3107	236.00	1512	331.00	79
63.00	10275	150.00	870	237.00	2848	332.00	1111
64.00	1286	151.00	1950	238.00	360	333.00	1160
65.00	4751	152.00	1183	239.00	1234	334.00	8657
66.00	355	153.00	4527	240.00	975	335.00	2425
67.00	434	154.00	3527	241.00	1966	336.00	261
68.00	4934	155.00	7783	242.00	4032	339.00	170
69.00	248512	156.00	12293	243.00	4780	340.00	260
70.00	1317	157.00	2625	244.00	65544	341.00	1895
71.00	132	158.00	2608	245.00	8631	342.00	380
72.00	71	159.00	2076	246.00	11740	343.00	64
73.00	1855	160.00	4636	247.00	2302	346.00	2879
74.00	24608	161.00	6722	248.00	642	347.00	563
75.00	39880	162.00	2122	249.00	2407	348.00	56
76.00	13443	163.00	704	250.00	460	350.00	190
77.00	268544	164.00	786	251.00	619	351.00	432
78.00	17624	165.00	5378	252.00	683	352.00	4053
79.00	17080	166.00	4534	253.00	1645	353.00	3132
80.00	13347	167.00	27688	254.00	2795	354.00	4763
81.00	19080	168.00	12542	255.00	331456	355.00	869
82.00	4786	169.00	2414	256.00	48224	359.00	293
83.00	4227	170.00	981	257.00	3681	360.00	60
84.00	528	171.00	1522	258.00	17592	361.00	58
85.00	3398	172.00	2483	259.00	2765	364.00	93

Data File: /chem/MSD1.i/s120709.b/s110702.d

Date : 07-DEC-2009 09:20

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110702.d
Spectrum: Avg. Scans 326-328 (7.95), Background Scan 321
Location of Maximum: 198.00
Number of points: 337

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	5354	173.00	3190	260.00	581	365.00	17472
87.00	2721	174.00	6128	261.00	526	366.00	2772
88.00	903	175.00	10886	263.00	159	367.00	101
89.00	406	176.00	3878	264.00	487	370.00	429
91.00	4298	177.00	5452	265.00	7514	371.00	1081
92.00	4794	178.00	1634	266.00	998	372.00	7833
93.00	29256	179.00	20832	267.00	182	373.00	1733
94.00	1845	180.00	14673	270.00	288	374.00	238
95.00	417	181.00	7078	271.00	695	377.00	143
96.00	1621	182.00	1045	272.00	1136	383.00	2253
97.00	720	183.00	769	273.00	10862	384.00	695
98.00	21648	184.00	1712	274.00	28232	385.00	171
99.00	17152	185.00	9581	275.00	155072	390.00	1030
100.00	1792	186.00	81184	276.00	20184	391.00	723
101.00	10850	187.00	22600	277.00	11995	392.00	466
102.00	453	188.00	2229	278.00	2076	395.00	66
103.00	3805	189.00	4609	279.00	449	397.00	62
104.00	6698	190.00	792	281.00	243	401.00	506
105.00	6293	191.00	2456	282.00	359	402.00	2982
106.00	2208	192.00	6067	283.00	1170	403.00	4051
107.00	80280	193.00	6981	284.00	1119	404.00	1269
108.00	12765	194.00	1526	285.00	2180	405.00	190
109.00	2825	195.00	1176	286.00	399	408.00	63
110.00	154368	196.00	19760	288.00	126	410.00	62
111.00	22464	197.00	4838	289.00	471	415.00	259
112.00	2845	198.00	610304	290.00	333	416.00	65
113.00	916	199.00	40664	291.00	248	420.00	51
114.00	209	200.00	2911	292.00	707	421.00	3712
115.00	373	201.00	3042	293.00	2716	422.00	3319
116.00	4679	203.00	4090	294.00	804	423.00	27616
117.00	57384	204.00	19552	295.00	1125	424.00	5600
118.00	4234	205.00	35224	296.00	39464	425.00	575
119.00	528	206.00	148544	297.00	5682	430.00	109
120.00	1024	207.00	18808	298.00	370	432.00	268
121.00	393	208.00	4874	301.00	606	433.00	232

Data File: /chem/MSD1.i/s120709.b/s110702.d

Date : 07-DEC-2009 09:20

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091128-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110702.d

Spectrum: Avg. Scans 326-328 (7.95), Background Scan 321

Location of Maximum: 198.00

Number of points: 337

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	5392	209.00	1583	302.00	853	434.00	194
123.00	8093	210.00	2271	303.00	5008	435.00	368
124.00	3730	211.00	5404	304.00	1139	436.00	385
125.00	3512	213.00	521	305.00	146	437.00	240
127.00	310400	214.00	174	308.00	599	438.00	202
128.00	22768	215.00	1378	309.00	396	439.00	444
129.00	117264	216.00	2917	310.00	529	440.00	475
130.00	9952	217.00	36496	311.00	173	441.00	73520
131.00	1940	218.00	4885	312.00	99	442.00	523520
132.00	1033	219.00	431	313.00	355	443.00	96528
133.00	461	220.00	161	314.00	2201	444.00	8980
134.00	3251	221.00	32488	315.00	4534	445.00	517
135.00	9297	222.00	881	316.00	2492		
136.00	3562	223.00	8085	317.00	459		
137.00	4416	224.00	79088	318.00	54		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981197**				
Client Sample:	**QC for batch 926606**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926606**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:32**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110408.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	333	ug/kg	66.7	333
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981197**				
Client Sample:	**QC for batch 926606**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926606**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:32**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s110408.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.92	392	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110408.d
Lab Smp Id: 1201981197 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201981197|926610|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.887	3.893	(1.000)	312666	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1261413	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	707137	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1205802	40.0000	
* 91 Chrysene-d12	240	8.633	8.633	(1.000)	1057955	40.0000	
* 98 Perylene-d12	264	10.069	10.069	(1.000)	976654	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.796)	521780	63.8911	2130
$ 5 Phenol-d5	99	3.616	3.610	(0.930)	591356	59.5773	1980
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.895)	260254	31.3075	1040
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	635178	37.5048	1250
$ 60 2,4,6-Tribromophenol	329	6.528	6.534	(1.088)	179441	90.8756	3030
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	827617	49.8368	1660

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110408.d
Lab Smp Id: 1201981197 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201981197|926610|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.887	1837647	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.916	539741	11.7485136	392	0		0	10

Data File: /chem/MSD1.i/s120409.b/s110408.d

Date : 04-DEC-2009 11:32

Client ID: SBLK01

Sample Info: |120198119719266101|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20

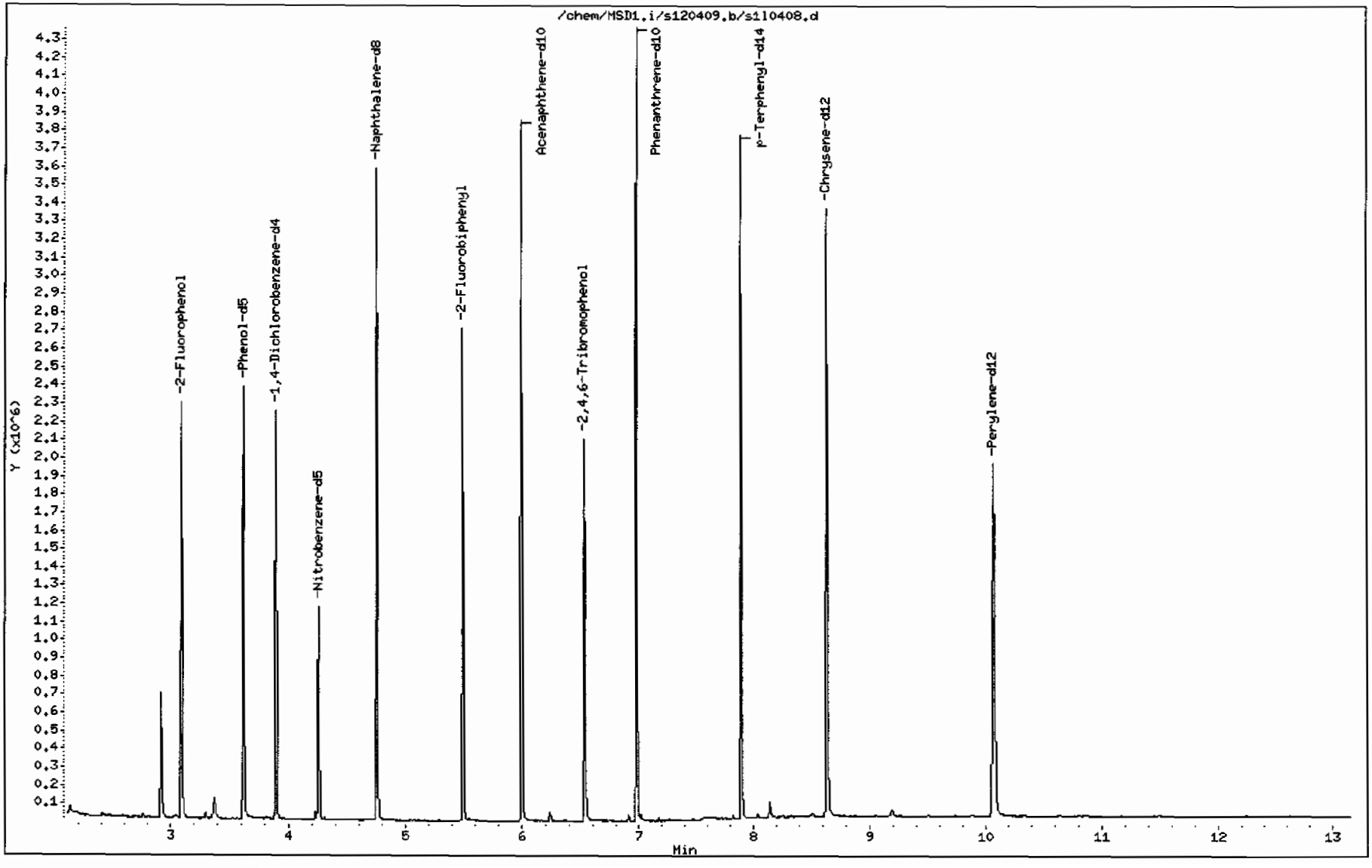

Data File: /chem/MSD1.i/s120409.b/s110408.d

Date : 04-DEC-2009 11:32

Client ID: SBLK01

Instrument: MSD1.i

Sample Info: |120198119719266101|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	33	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	25	C4H7NO2	101

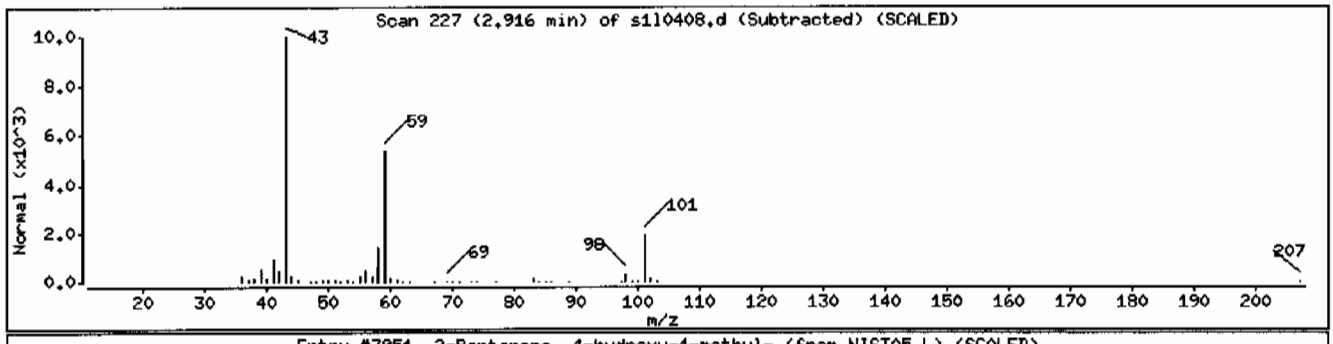

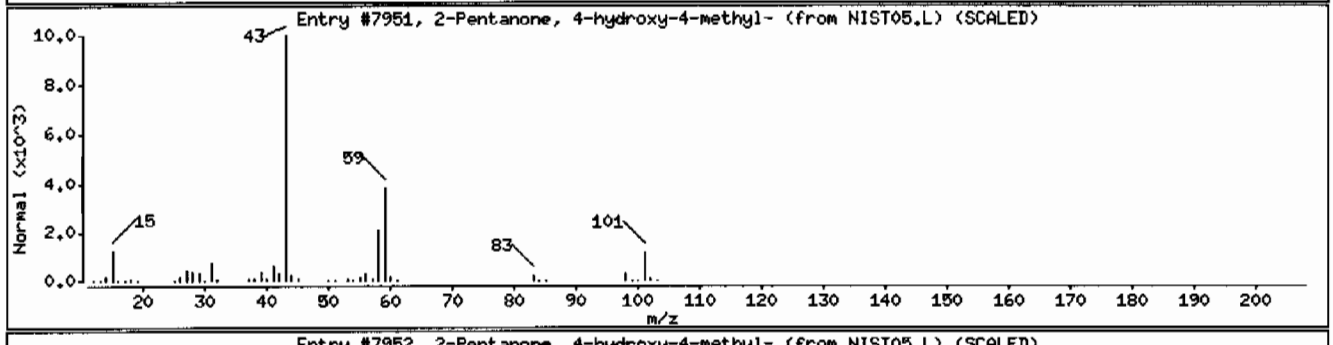

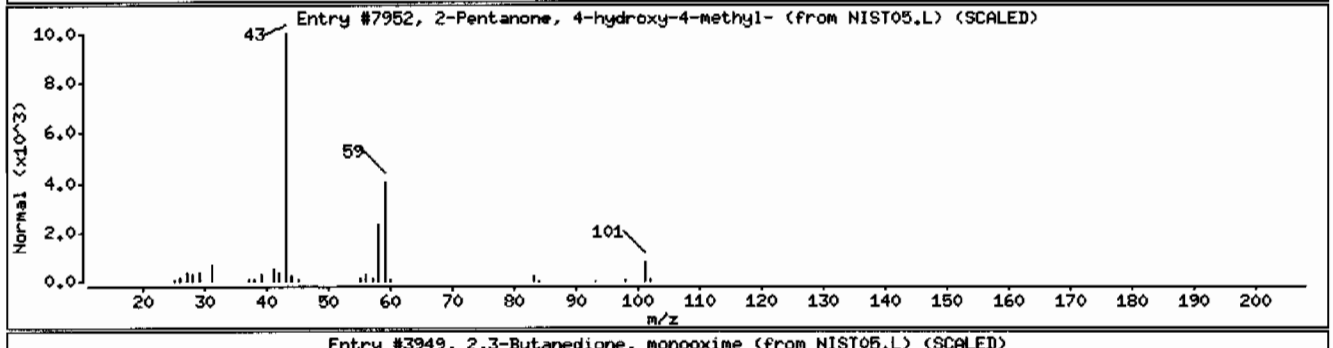

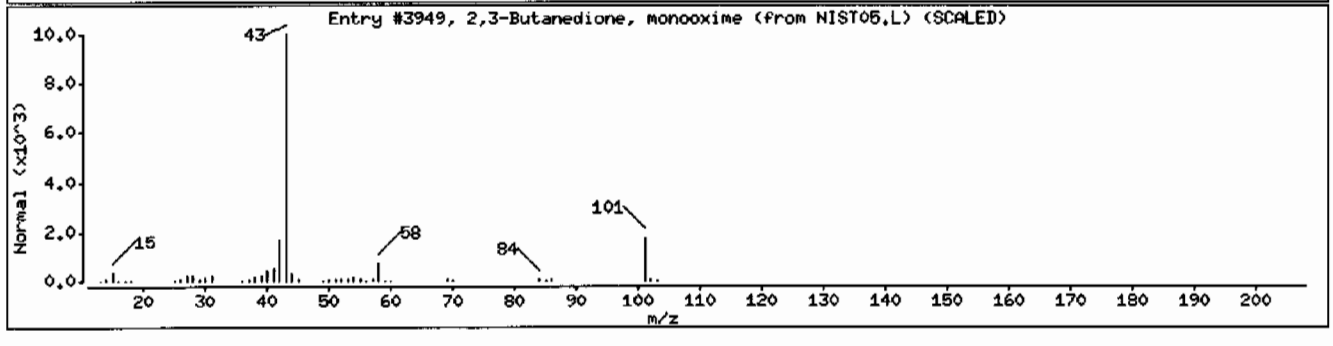

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604			**Matrix:**	SOIL
Lab Sample ID:	1201981200				
Client Sample:	QC for batch 926606	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926606	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 11:56	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s110409.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		867	ug/kg	66.7	333
108-95-2	Phenol		1070	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1120	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		908	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		909	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1160	ug/kg	66.7	333
83-32-9	Acenaphthene		1210	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1230	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1040	ug/kg	110	333
87-86-5	Pentachlorophenol		1310	ug/kg	83.3	333
129-00-0	Pyrene		1380	ug/kg	10.0	33.3
110-86-1	Pyridine		718	ug/kg	66.7	333
62-53-3	Aniline		1010	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		951	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		851	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1250	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		978	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		869	ug/kg	66.7	333
95-48-7	o-Cresol		1140	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1290	ug/kg	100	333
67-72-1	Hexachloroethane		868	ug/kg	66.7	333
98-95-3	Nitrobenzene		1090	ug/kg	66.7	333
78-59-1	Isophorone		1220	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1040	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1090	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1010	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1120	ug/kg	66.7	333
65-85-0	Benzoic acid		2240	ug/kg	167	667
91-20-3	Naphthalene		1050	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1000	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1090	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1150	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1700	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1300	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1330	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1120	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline *o-Nitroaniline*		994	ug/kg	66.7	333
99-09-2	3-Nitroaniline		982	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981200**				
Client Sample:	**QC for batch 926606**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926606**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:56**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0409.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1290	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1230	ug/kg	33.3	333
208-96-8	Acenaphthylene		1210	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1130	ug/kg	127	667
132-64-9	Dibenzofuran		1440	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1240	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1360	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1130	ug/kg	66.7	333
100-01-6	4-Nitroaniline		987	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1190	ug/kg	66.7	333
122-66-7	Azobenzene		1170	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1500	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1340	ug/kg	66.7	333
85-01-8	Phenanthrene		1250	ug/kg	10.0	33.3
120-12-7	Anthracene		1240	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1540	ug/kg	66.7	333
206-44-0	Fluoranthene		1360	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1630	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1250	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1150	ug/kg	100	333
218-01-9	Chrysene		1310	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1610	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1740	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1270	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1460	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1290	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1190	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1160	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1250	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1060	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110409.d
Lab Smp Id: 1201981200 Client Smp ID: SBLK01LCS
Inj Date : 04-DEC-2009 11:56
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201981200|926610|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 10-Dec-2009 08:45 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	398904	40.0000	
* 29 Naphthalene-d8	136	4.757	4.751	(1.000)	1723383	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	907273	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1540144	40.0000	
* 91 Chrysene-d12	240	8.639	8.633	(1.000)	1290514	40.0000	
* 98 Perylene-d12	264	10.075	10.069	(1.000)	1047891	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.794)	756978	72.6521	2420
$ 5 Phenol-d5	99	3.616	3.610	(0.929)	869522	68.6633	2290
$ 20 Nitrobenzene-d5	82	4.251	4.251	(0.894)	400234	35.2404	1170
$ 39 2-Fluorobiphenyl	172	5.492	5.492	(0.916)	931049	42.8479	1430
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	249404	98.4452	3280
$ 81 p-Terphenyl-d14	244	7.898	7.892	(0.914)	1026657	50.6816	1690

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.628	3.622	(0.932)	429342	32.1765	1070
8 2-Chlorophenol	128	3.763	3.757	(0.967)	380637	33.5643	1120
11 1,4-Dichlorobenzene	146	3.904	3.898	(1.003)	355316	27.2397	908
17 N-Nitrosodipropylamine	70	4.128	4.128	(1.060)	207366	27.2747	909(Q)
28 1,2,4-Trichlorobenzene	180	4.704	4.704	(0.989)	332088	31.8367	1060
33 4-Chloro-3-methylphenol	107	5.110	5.104	(1.074)	319883	34.6850	1160
47 Acenaphthene	154	6.022	6.022	(1.004)	758492	36.2464	1210
50 2,4-Dinitrotoluene	165	6.110	6.104	(1.019)	301628	36.9466	1230
52 4-Nitrophenol	139	6.051	6.045	(1.009)	133284	31.1382	1040
65 Pentachlorophenol	266	6.851	6.851	(0.981)	153598	39.4320	1310
79 Pyrene	202	7.845	7.845	(0.908)	1417276	41.3283	1380
2 Pyridine	79	2.434	2.428	(0.625)	204564	21.5286	718
4 Aniline	66	3.675	3.681	(0.944)	168515	30.2756	1010(Q)
7 bis(2-Chloroethyl) ether	63	3.693	3.693	(0.949)	264956	28.5432	951(Q)
9 1,3-Dichlorobenzene	146	3.857	3.857	(0.991)	339639	25.5242	851
12 Benzyl alcohol	108	3.963	3.957	(1.018)	258119	37.4348	1250
13 1,2-Dichlorobenzene	146	4.004	4.004	(1.029)	353383	29.3344	978
14 bis(2-Chloroisopropyl)ether	45	4.034	4.034	(1.036)	576400	26.0695	869
15 o-Cresol	107	4.016	4.010	(1.032)	288664	34.1947	1140
18 m,p-Cresols	107	4.116	4.116	(1.057)	444828	38.7268	1290
19 Hexachloroethane	117	4.234	4.234	(1.088)	122220	26.0343	868
21 Nitrobenzene	77	4.269	4.269	(0.897)	388495	32.8304	1090
22 Isophorone	82	4.416	4.416	(0.928)	758518	36.6405	1220
23 2-Nitrophenol	139	4.481	4.481	(0.942)	195364	31.1008	1040
24 2,4-Dimethylphenol	122	4.475	4.475	(0.941)	330218	32.8294	1090
25 bis(2-Chloroethoxy)methane	93	4.540	4.540	(0.954)	405046	30.3922	1010
26 2,4-Dichlorophenol	162	4.645	4.640	(0.976)	318013	33.6901	1120
27 Benzoic acid	105	4.551	4.534	(0.957)	466185	67.2611	2240
30 Naphthalene	128	4.769	4.769	(1.002)	1134797	31.5504	1050(Q)
31 4-Chloroaniline	127	4.793	4.787	(1.007)	493767	30.0617	1000
32 Hexachlorobutadiene	225	4.834	4.834	(1.016)	174536	32.5858	1090
34 2-Methylnaphthalene	142	5.245	5.245	(1.103)	812570	34.3658	1140
36 Hexachlorocyclopentadiene	237	5.351	5.351	(0.892)	141301	51.0091	1700
37 2,4,6-Trichlorophenol	196	5.440	5.440	(0.907)	235948	39.0990	1300
38 2,4,5-Trichlorophenol	196	5.469	5.469	(0.912)	256036	39.9016	1330
40 2-Chloronaphthalene	162	5.598	5.598	(0.933)	754147	33.6704	1120
42 o-Nitroaniline	65	5.663	5.663	(0.944)	207049	29.8133	994
41 m-Nitroaniline	138	5.957	5.957	(0.993)	180720	29.4496	982
43 Dimethylphthalate	163	5.763	5.769	(0.961)	956358	38.6845	1290
44 2,6-Dinitrotoluene	165	5.822	5.822	(0.971)	226583	36.7861	1230
45 Acenaphthylene	152	5.904	5.904	(0.984)	1271759	36.3870	1210
48 2,4-Dinitrophenol	184	6.022	6.022	(1.004)	82713	34.0223	1130(Q)
49 Dibenzofuran	168	6.139	6.139	(1.024)	1303005	43.0568	1440
51 Diethylphthalate	149	6.251	6.245	(1.042)	978085	42.4363	1410
53 Fluorene	166	6.369	6.369	(1.062)	910010	37.2943	1240
54 4-Chlorophenylphenylether	204	6.351	6.351	(1.059)	421310	40.8952	1360
55 2-Methyl-4,6-dinitrophenol	198	6.387	6.387	(0.915)	132624	34.0373	1130

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.375	6.375	(1.063)	177675	29.6072	987
133 Diphenylamine	169	6.428	6.428	(0.921)	733718	35.7159	1190
58 1,2-Diphenylhydrazine	77	6.457	6.457	(0.925)	878302	35.0407	1170
61 4-Bromophenylphenylether	248	6.675	6.675	(0.956)	238867	45.1413	1500
63 Hexachlorobenzene	284	6.734	6.734	(0.965)	260775	40.1494	1340
68 Phenanthrene	178	6.998	6.992	(1.003)	1310623	37.4452	1250
69 Anthracene	178	7.028	7.028	(1.007)	1324309	37.2045	1240
72 Di-n-butylphthalate	149	7.269	7.269	(1.041)	1756374	46.2612	1540
76 Fluoranthene	202	7.710	7.704	(1.104)	1374774	40.6913	1360
85 Butylbenzylphthalate	149	8.157	8.157	(0.944)	762586	48.8640	1630
89 Benzo(a)anthracene	228	8.628	8.628	(0.999)	1161705	37.5411	1250
90 3,3'-Dichlorobenzidine	252	8.575	8.569	(0.992)	305596	34.3936	1150
92 Chrysene	228	8.663	8.657	(1.003)	1140301	39.4258	1310
93 bis(2-Ethylhexyl)phthalate	149	8.510	8.504	(0.985)	1092326	48.1777	1600
94 Di-n-octylphthalate	149	9.028	9.028	(0.896)	1792001	52.2771	1740
95 Benzo(b)fluoranthene	252	9.616	9.610	(0.954)	1005257	37.9673	1260
96 Benzo(k)fluoranthene	252	9.645	9.639	(0.957)	1147908	43.6878	1460
97 Benzo(a)pyrene	252	10.010	10.004	(0.994)	884429	38.6363	1290
99 Indeno(1,2,3-cd)pyrene	276	11.669	11.663	(1.158)	851222	35.8059	1190
100 Dibenzo(a,h)anthracene	278	11.674	11.663	(1.159)	693722	34.8905	1160
101 Benzo(ghi)perylene	276	12.163	12.163	(1.207)	741132	37.6379	1250
1 N-Methyl-N-nitrosomethylamine	74	2.399	2.393	(0.616)	147108	25.9980	867

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s120409.b/s110409.d
Date : 04-DEC-2009 11:56
Client ID: SBLK01LCS
Sample Info: 1120198120019266101115VMF11ISBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

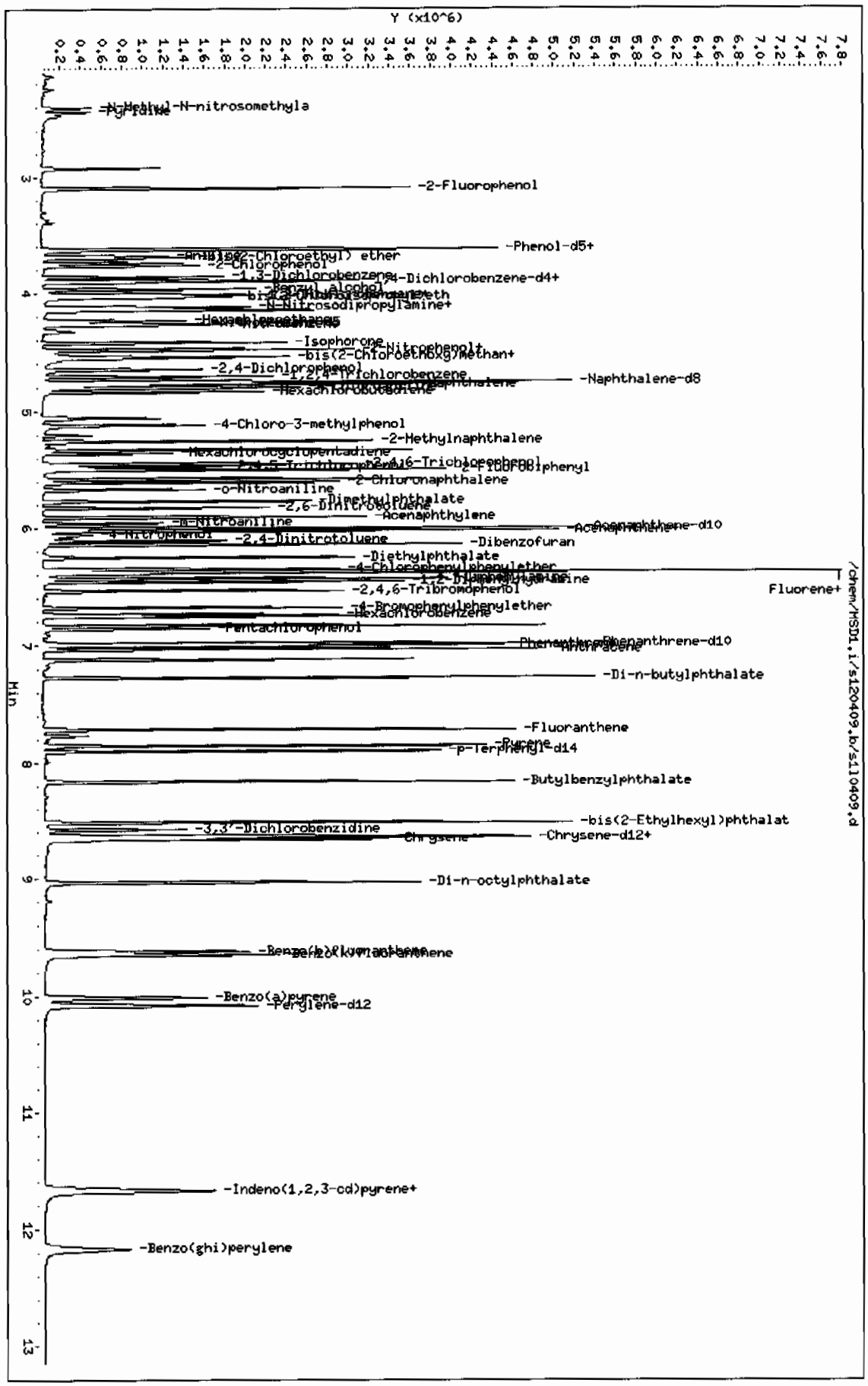

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201981198**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**12.3**
Client Sample:	**QC for batch 926606**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-13867MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926610**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:14**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 11:05**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s110415.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1030	ug/kg	75.9	380
108-95-2	Phenol		1140	ug/kg	75.9	380
95-57-8	2-Chlorophenol		1170	ug/kg	75.9	380
106-46-7	1,4-Dichlorobenzene		645	ug/kg	75.9	380
621-64-7	N-Nitrosodipropylamine		1010	ug/kg	75.9	380
59-50-7	4-Chloro-3-methylphenol		1160	ug/kg	75.9	380
83-32-9	Acenaphthene		1170	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene		1170	ug/kg	38.0	380
100-02-7	4-Nitrophenol		1040	ug/kg	125	380
87-86-5	Pentachlorophenol		1230	ug/kg	94.9	380
129-00-0	Pyrene		1280	ug/kg	11.4	38.0
110-86-1	Pyridine		727	ug/kg	75.9	380
62-53-3	Aniline		976	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether		987	ug/kg	75.9	380
541-73-1	1,3-Dichlorobenzene		597	ug/kg	75.9	380
100-51-6	Benzyl alcohol		1070	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene		746	ug/kg	75.9	380
108-60-1	bis(2-Chloroisopropyl)ether		882	ug/kg	75.9	380
95-48-7	o-Cresol		1230	ug/kg	75.9	380
65794-96-9	m,p-Cresols		1290	ug/kg	114	380
67-72-1	Hexachloroethane		558	ug/kg	75.9	380
98-95-3	Nitrobenzene		1140	ug/kg	75.9	380
78-59-1	Isophorone		1250	ug/kg	75.9	380
88-75-5	2-Nitrophenol		1180	ug/kg	75.9	380
105-67-9	2,4-Dimethylphenol		926	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane		1070	ug/kg	75.9	380
120-83-2	2,4-Dichlorophenol		1110	ug/kg	75.9	380
65-85-0	Benzoic acid		1490	ug/kg	190	759
91-20-3	Naphthalene		1010	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline		1030	ug/kg	75.9	380
87-68-3	Hexachlorobutadiene		839	ug/kg	75.9	380
91-57-6	2-Methylnaphthalene		1110	ug/kg	7.59	38.0
77-47-4	Hexachlorocyclopentadiene		1190	ug/kg	75.9	380
88-06-2	2,4,6-Trichlorophenol		1260	ug/kg	75.9	380
95-95-4	2,4,5-Trichlorophenol		1350	ug/kg	75.9	380
91-58-7	2-Chloronaphthalene		1090	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline		1030	ug/kg	75.9	380
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1000	ug/kg	75.9	380

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981198	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
Client Sample:	QC for batch 926606	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13867MS	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 14:14	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s110415.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1290	ug/kg	75.9	380
606-20-2	2,6-Dinitrotoluene		1190	ug/kg	38.0	380
208-96-8	Acenaphthylene		1210	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	J	675	ug/kg	144	759
132-64-9	Dibenzofuran		1410	ug/kg	75.9	380
84-66-2	Diethylphthalate		1380	ug/kg	75.9	380
86-73-7	Fluorene		1260	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether		1340	ug/kg	75.9	380
534-52-1	2-Methyl-4,6-dinitrophenol		853	ug/kg	75.9	380
100-01-6	4-Nitroaniline		1010	ug/kg	114	380
	p-Nitroaniline					
122-39-4	Diphenylamine		1060	ug/kg	75.9	380
122-66-7	Azobenzene		1170	ug/kg	75.9	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1460	ug/kg	75.9	380
118-74-1	Hexachlorobenzene		1270	ug/kg	75.9	380
85-01-8	Phenanthrene		1270	ug/kg	11.4	38.0
120-12-7	Anthracene		1220	ug/kg	7.59	38.0
84-74-2	Di-n-butylphthalate		1460	ug/kg	75.9	380
206-44-0	Fluoranthene		1350	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate		1430	ug/kg	75.9	380
56-55-3	Benzo(a)anthracene		1200	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine		872	ug/kg	114	380
218-01-9	Chrysene		1200	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate		1360	ug/kg	75.9	380
117-84-0	Di-n-octylphthalate		1330	ug/kg	75.9	380
205-99-2	Benzo(b)fluoranthene		1270	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene		1180	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene		1230	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene		1190	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene		1210	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene		1200	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene		917	ug/kg	75.9	380

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110415.d
Lab Smp Id: 1201981198 Client Smp ID: RE03-09-13867MS
Inj Date : 04-DEC-2009 14:14
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201981198|926610|1|SVMF|1|SMS
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	12.33560	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	415831	40.0000	
* 29 Naphthalene-d8	136	4.757	4.751	(1.000)	1803081	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	950931	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1625306	40.0000	
* 91 Chrysene-d12	240	8.639	8.633	(1.000)	1480128	40.0000	
* 98 Perylene-d12	264	10.081	10.069	(1.000)	1340229	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.794)	705322	64.9387	2460
$ 5 Phenol-d5	99	3.616	3.610	(0.929)	828619	62.7698	2380
$ 20 Nitrobenzene-d5	82	4.252	4.251	(0.894)	366828	30.8714	1170
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.916)	818208	35.9261	1360
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	224277	84.4627	3210
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	894043	38.4810	1460

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.628	3.622	(0.932)	417886	30.0431	1140
8 2-Chlorophenol	128	3.763	3.757	(0.967)	363195	30.7226	1170
11 1,4-Dichlorobenzene	146	3.899	3.898	(1.002)	230898	16.9808	645
17 N-Nitrosodipropylamine	70	4.128	4.128	(1.060)	211061	26.6307	1010(Q)
28 1,2,4-Trichlorobenzene	180	4.704	4.704	(0.989)	263551	24.1494	917
33 4-Chloro-3-methylphenol	107	5.110	5.104	(1.074)	294098	30.4796	1160
47 Acenaphthene	154	6.022	6.022	(1.004)	675285	30.7886	1170
50 2,4-Dinitrotoluene	165	6.110	6.104	(1.019)	264725	30.9377	1170
52 4-Nitrophenol	139	6.063	6.045	(1.011)	123320	27.4877	1040
65 Pentachlorophenol	266	6.857	6.851	(0.982)	132979	32.3498	1230
79 Pyrene	202	7.845	7.845	(0.908)	1322158	33.6155	1280
2 Pyridine	79	2.440	2.428	(0.627)	189613	19.1428	727
4 Aniline	66	3.675	3.681	(0.944)	149073	25.6924	976(Q)
7 bis(2-Chloroethyl) ether	63	3.693	3.693	(0.949)	251613	26.0024	987(Q)
9 1,3-Dichlorobenzene	146	3.857	3.857	(0.991)	217926	15.7107	596
12 Benzyl alcohol	108	3.963	3.957	(1.018)	203043	28.2485	1070
13 1,2-Dichlorobenzene	146	4.004	4.004	(1.029)	246576	19.6351	746
14 bis(2-Chloroisopropyl)ether	45	4.034	4.034	(1.036)	535137	23.2180	882
15 o-Cresol	107	4.022	4.010	(1.033)	284285	32.3052	1230
18 m,p-Cresols	107	4.116	4.116	(1.057)	407743	34.0532	1290
19 Hexachloroethane	117	4.234	4.234	(1.088)	71924	14.6970	558(R)
21 Nitrobenzene	77	4.269	4.269	(0.897)	370652	29.9380	1140
22 Isophorone	82	4.416	4.416	(0.928)	715211	33.0215	1250
23 2-Nitrophenol	139	4.481	4.481	(0.942)	203672	30.9902	1180
24 2,4-Dimethylphenol	122	4.475	4.475	(0.941)	256716	24.3939	926
25 bis(2-Chloroethoxy)methane	93	4.540	4.540	(0.954)	393952	28.2532	1070
26 2,4-Dichlorophenol	162	4.646	4.640	(0.976)	287538	29.1151	1100
27 Benzoic acid	105	4.540	4.534	(0.954)	285326	39.3472	1490
30 Naphthalene	128	4.769	4.769	(1.002)	997187	26.4991	1010(Q)
31 4-Chloroaniline	127	4.793	4.787	(1.007)	464863	27.0510	1030
32 Hexachlorobutadiene	225	4.834	4.834	(1.016)	123831	22.0973	839
34 2-Methylnaphthalene	142	5.251	5.245	(1.104)	725906	29.3436	1110
36 Hexachlorocyclopentadiene	237	5.351	5.351	(0.892)	91175	31.4027	1190
37 2,4,6-Trichlorophenol	196	5.440	5.440	(0.907)	210080	33.2141	1260
38 2,4,5-Trichlorophenol	196	5.475	5.469	(0.913)	238939	35.5276	1350
40 2-Chloronaphthalene	162	5.598	5.598	(0.933)	672703	28.6553	1090
42 o-Nitroaniline	65	5.663	5.663	(0.944)	197003	27.0644	1030
41 m-Nitroaniline	138	5.957	5.957	(0.993)	169718	26.3870	1000
43 Dimethylphthalate	163	5.763	5.769	(0.961)	879929	33.9589	1290
44 2,6-Dinitrotoluene	165	5.822	5.822	(0.971)	202714	31.3999	1190
45 Acenaphthylene	152	5.904	5.904	(0.984)	1164466	31.7875	1210
48 2,4-Dinitrophenol	184	6.028	6.022	(1.005)	45303	17.7789	675(aQ)
49 Dibenzofuran	168	6.140	6.139	(1.024)	1180994	37.2333	1410
51 Diethylphthalate	149	6.246	6.245	(1.041)	875734	36.2512	1380
53 Fluorene	166	6.369	6.369	(1.062)	845839	33.0730	1260
54 4-Chlorophenylphenylether	204	6.351	6.351	(1.059)	381601	35.3402	1340
55 2-Methyl-4,6-dinitrophenol	198	6.387	6.387	(0.915)	92330	22.4544	853

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.375	6.375	(1.063)	168051	26.7178	1010
133 Diphenylamine	169	6.428	6.428	(0.921)	605188	27.9157	1060
58 1,2-Diphenylhydrazine	77	6.457	6.457	(0.925)	815199	30.8190	1170
61 4-Bromophenylphenylether	248	6.675	6.675	(0.956)	215296	38.5549	1460
63 Hexachlorobenzene	284	6.734	6.734	(0.965)	228721	33.3691	1270
68 Phenanthrene	178	6.998	6.992	(1.003)	1238259	33.5240	1270
69 Anthracene	178	7.028	7.028	(1.007)	1207545	32.1467	1220
72 Di-n-butylphthalate	149	7.269	7.269	(1.041)	1539092	38.4141	1460
76 Fluoranthene	202	7.710	7.704	(1.104)	1265985	35.5079	1350
85 Butylbenzylphthalate	149	8.157	8.157	(0.944)	674607	37.6890	1430
89 Benzo(a)anthracene	228	8.628	8.628	(0.999)	1124415	31.6812	1200
90 3,3'-Dichlorobenzidine	252	8.575	8.569	(0.992)	234093	22.9711	872
92 Chrysene	228	8.663	8.657	(1.003)	1052185	31.7188	1200
93 bis(2-Ethylhexyl)phthalate	149	8.510	8.504	(0.985)	934062	35.9197	1360
94 Di-n-octylphthalate	149	9.028	9.028	(0.896)	1535513	35.0239	1330
95 Benzo(b)fluoranthene	252	9.616	9.610	(0.954)	1123617	33.5168	1270
96 Benzo(k)fluoranthene	252	9.645	9.639	(0.957)	1046811	31.1500	1180
97 Benzo(a)pyrene	252	10.010	10.004	(0.993)	946369	32.2992	1230
99 Indeno(1,2,3-cd)pyrene	276	11.675	11.663	(1.158)	955567	31.3741	1190
100 Dibenzo(a,h)anthracene	278	11.675	11.663	(1.158)	812026	31.9171	1210
101 Benzo(ghi)perylene	276	12.175	12.163	(1.208)	792730	31.4769	1200
1 N-Methyl-N-nitrosomethylamine	74	2.399	2.393	(0.616)	159922	27.1122	1030

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD1.i/s120409.b/s110415.d
Date : 04-DEC-2009 14:14
Client ID: REQ3-09-13867MS
Sample Info: I120198119819266410|1|SVHF11|SMS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

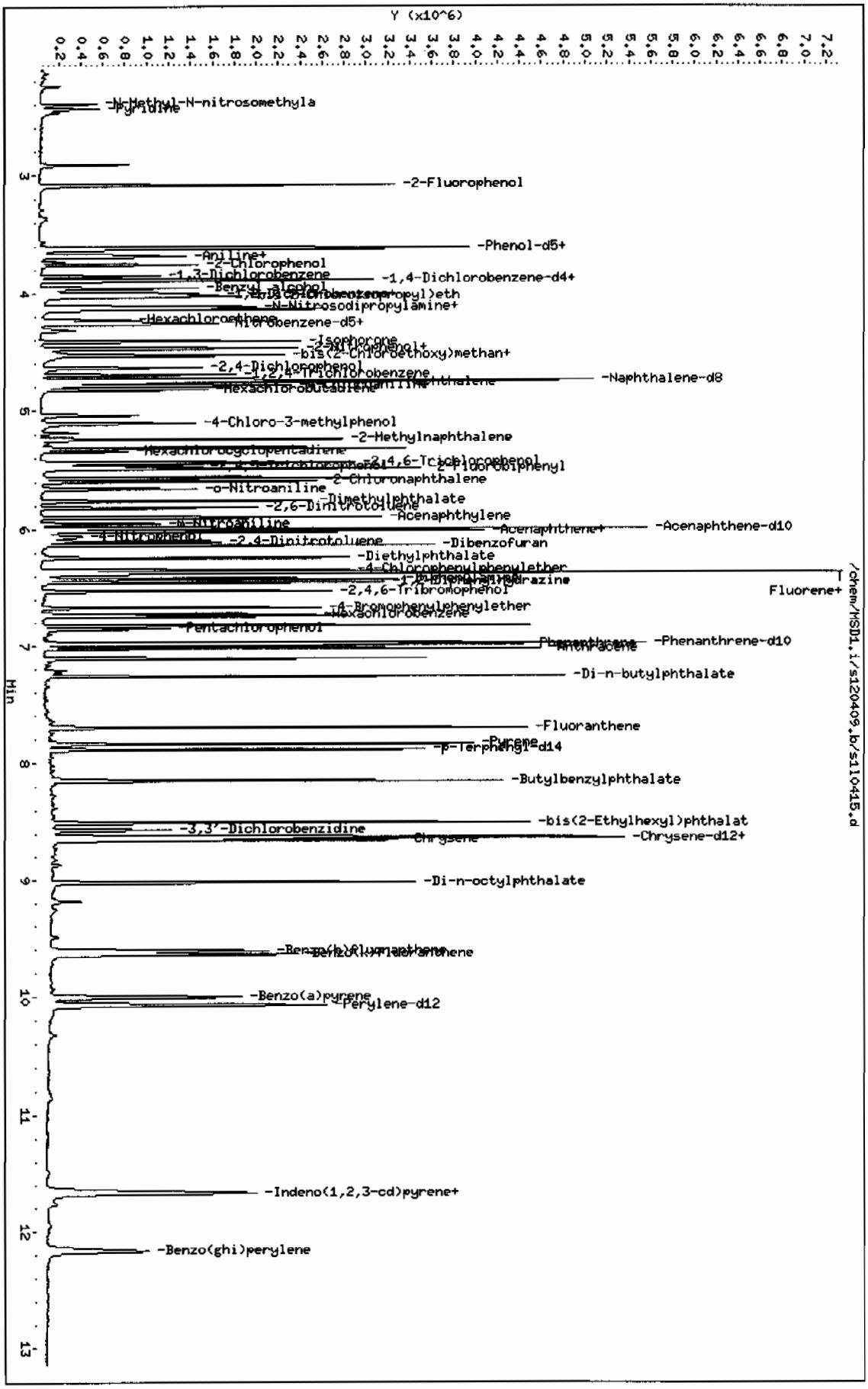

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981199	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
Client Sample:	QC for batch 926606	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-13867MSD	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926610	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/04/2009 14:37	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 11:05	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110416.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1080	ug/kg	76.0	380
108-95-2	Phenol		1150	ug/kg	76.0	380
95-57-8	2-Chlorophenol		1160	ug/kg	76.0	380
106-46-7	1,4-Dichlorobenzene		659	ug/kg	76.0	380
621-64-7	N-Nitrosodipropylamine		1040	ug/kg	76.0	380
59-50-7	4-Chloro-3-methylphenol		1190	ug/kg	76.0	380
83-32-9	Acenaphthene		1170	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene		1190	ug/kg	38.0	380
100-02-7	4-Nitrophenol		953	ug/kg	125	380
87-86-5	Pentachlorophenol		1210	ug/kg	95.0	380
129-00-0	Pyrene		1280	ug/kg	11.4	38.0
110-86-1	Pyridine		852	ug/kg	76.0	380
62-53-3	Aniline		927	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether		988	ug/kg	76.0	380
541-73-1	1,3-Dichlorobenzene		615	ug/kg	76.0	380
100-51-6	Benzyl alcohol		1040	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene		770	ug/kg	76.0	380
108-60-1	bis(2-Chloroisopropyl)ether		892	ug/kg	76.0	380
95-48-7	o-Cresol		1230	ug/kg	76.0	380
65794-96-9	m,p-Cresols		1270	ug/kg	114	380
67-72-1	Hexachloroethane		567	ug/kg	76.0	380
98-95-3	Nitrobenzene		1160	ug/kg	76.0	380
78-59-1	Isophorone		1280	ug/kg	76.0	380
88-75-5	2-Nitrophenol		1100	ug/kg	76.0	380
105-67-9	2,4-Dimethylphenol		951	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane		1080	ug/kg	76.0	380
120-83-2	2,4-Dichlorophenol		1140	ug/kg	76.0	380
65-85-0	Benzoic acid		1280	ug/kg	190	760
91-20-3	Naphthalene		1020	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline		1040	ug/kg	76.0	380
87-68-3	Hexachlorobutadiene		846	ug/kg	76.0	380
91-57-6	2-Methylnaphthalene		1110	ug/kg	7.60	38.0
77-47-4	Hexachlorocyclopentadiene		1140	ug/kg	76.0	380
88-06-2	2,4,6-Trichlorophenol		1270	ug/kg	76.0	380
95-95-4	2,4,5-Trichlorophenol		1350	ug/kg	76.0	380
91-58-7	2-Chloronaphthalene		1100	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline		1050	ug/kg	76.0	380
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1010	ug/kg	76.0	380

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	1201981199	Date Received:	11/20/2009 08:50	%Moisture:	12.3
Client Sample:	QC for batch 926606	Client:	LANL010	Project:	QC
Client ID:	RE03-09-13867MSD	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926610	Inst:	MSD1.1	Dilution:	1
Run Date:	12/04/2009 14:37	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 11:05	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110416.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1300	ug/kg	76.0	380
606-20-2	2,6-Dinitrotoluene		1200	ug/kg	38.0	380
208-96-8	Acenaphthylene		1220	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	J	652	ug/kg	144	760
132-64-9	Dibenzofuran		1430	ug/kg	76.0	380
84-66-2	Diethylphthalate		1370	ug/kg	76.0	380
86-73-7	Fluorene		1260	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether		1350	ug/kg	76.0	380
534-52-1	2-Methyl-4,6-dinitrophenol		867	ug/kg	76.0	380
100-01-6	4-Nitroaniline		1000	ug/kg	114	380
	p-Nitroaniline					
122-39-4	Diphenylamine		1070	ug/kg	76.0	380
122-66-7	Azobenzene		1180	ug/kg	76.0	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1500	ug/kg	76.0	380
118-74-1	Hexachlorobenzene		1280	ug/kg	76.0	380
85-01-8	Phenanthrene		1250	ug/kg	11.4	38.0
120-12-7	Anthracene		1240	ug/kg	7.60	38.0
84-74-2	Di-n-butylphthalate		1470	ug/kg	76.0	380
206-44-0	Fluoranthene		1330	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate		1450	ug/kg	76.0	380
56-55-3	Benzo(a)anthracene		1170	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine		933	ug/kg	114	380
218-01-9	Chrysene		1180	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate		1380	ug/kg	76.0	380
117-84-0	Di-n-octylphthalate		1330	ug/kg	76.0	380
205-99-2	Benzo(b)fluoranthene		1140	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene		1300	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene		1220	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene		1190	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene		1220	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene		1200	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene		940	ug/kg	76.0	380

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120409.b/s110416.d
Lab Smp Id: 1201981199 Client Smp ID: RE03-09-13867MSD
Inj Date : 04-DEC-2009 14:37
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201981199|926610|1|SVMF|1|MSD
Misc Info : |MSD8270_SF|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120409.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 12:13 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-604.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	12.33560	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.893	3.893	(1.000)	407764	40.0000	
* 29 Naphthalene-d8	136	4.751	4.751	(1.000)	1738492	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	922737	40.0000	
* 67 Phenanthrene-d10	188	6.981	6.981	(1.000)	1557133	40.0000	
* 91 Chrysene-d12	240	8.639	8.633	(1.000)	1390361	40.0000	
* 98 Perylene-d12	264	10.075	10.069	(1.000)	1251026	40.0000	
$ 3 2-Fluorophenol	112	3.093	3.081	(0.794)	671841	63.0799	2400
$ 5 Phenol-d5	99	3.616	3.610	(0.929)	804385	62.1395	2360
$ 20 Nitrobenzene-d5	82	4.252	4.251	(0.895)	345559	30.1619	1150
$ 39 2-Fluorobiphenyl	172	5.493	5.492	(0.916)	777506	35.1820	1340
$ 60 2,4,6-Tribromophenol	329	6.534	6.534	(1.089)	213680	82.9306	3150
$ 81 p-Terphenyl-d14	244	7.892	7.892	(0.914)	838985	38.4427	1460

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.628	3.622	(0.932)	411172	30.1452	1140
8 2-Chlorophenol	128	3.757	3.757	(0.965)	353701	30.5115	1160
11 1,4-Dichlorobenzene	146	3.899	3.898	(1.002)	231393	17.3539	659
17 N-Nitrosodipropylamine	70	4.128	4.128	(1.060)	212464	27.3380	1040(Q)
28 1,2,4-Trichlorobenzene	180	4.704	4.704	(0.990)	260350	24.7424	940
33 4-Chloro-3-methylphenol	107	5.110	5.104	(1.075)	291420	31.3241	1190
47 Acenaphthene	154	6.022	6.022	(1.004)	654285	30.7426	1170
50 2,4-Dinitrotoluene	165	6.110	6.104	(1.019)	258957	31.1883	1180
52 4-Nitrophenol	139	6.063	6.045	(1.011)	109234	25.0919	953
65 Pentachlorophenol	266	6.857	6.851	(0.982)	124981	31.7353	1200
79 Pyrene	202	7.845	7.845	(0.908)	1241843	33.6120	1280
2 Pyridine	79	2.440	2.428	(0.627)	217791	22.4226	852
4 Aniline	66	3.675	3.681	(0.944)	138738	24.3843	926
7 bis(2-Chloroethyl) ether	63	3.693	3.693	(0.949)	246721	26.0013	988
9 1,3-Dichlorobenzene	146	3.857	3.857	(0.991)	220126	16.1832	615
12 Benzyl alcohol	108	3.963	3.957	(1.018)	192893	27.3673	1040
13 1,2-Dichlorobenzene	146	4.004	4.004	(1.029)	249554	20.2654	770
14 bis(2-Chloroisopropyl)ether	45	4.034	4.034	(1.036)	530438	23.4695	892
15 o-Cresol	107	4.016	4.010	(1.032)	278373	32.2592	1220
18 m,p-Cresols	107	4.116	4.116	(1.057)	393487	33.5127	1270
19 Hexachloroethane	117	4.234	4.234	(1.088)	71639	14.9284	567(R)
21 Nitrobenzene	77	4.269	4.269	(0.898)	365871	30.6498	1160
22 Isophorone	82	4.416	4.416	(0.929)	702782	33.6531	1280
23 2-Nitrophenol	139	4.481	4.481	(0.943)	184057	29.0461	1100
24 2,4-Dimethylphenol	122	4.475	4.475	(0.942)	254064	25.0389	951
25 bis(2-Chloroethoxy)methane	93	4.540	4.540	(0.955)	381473	28.3747	1080
26 2,4-Dichlorophenol	162	4.646	4.640	(0.978)	286560	30.0941	1140
27 Benzoic acid	105	4.540	4.534	(0.955)	236108	33.7695	1280
30 Naphthalene	128	4.769	4.769	(1.004)	970779	26.7557	1020(Q)
31 4-Chloroaniline	127	4.793	4.787	(1.009)	451356	27.2408	1040
32 Hexachlorobutadiene	225	4.834	4.834	(1.017)	120318	22.2681	846
34 2-Methylnaphthalene	142	5.246	5.245	(1.104)	698964	29.3042	1110
36 Hexachlorocyclopentadiene	237	5.351	5.351	(0.892)	84320	29.9291	1140
37 2,4,6-Trichlorophenol	196	5.440	5.440	(0.907)	205086	33.4153	1270
38 2,4,5-Trichlorophenol	196	5.475	5.469	(0.913)	232431	35.6159	1350
40 2-Chloronaphthalene	162	5.604	5.598	(0.934)	660974	29.0159	1100
42 o-Nitroaniline	65	5.663	5.663	(0.944)	195143	27.6280	1050
41 m-Nitroaniline	138	5.957	5.957	(0.993)	166159	26.6230	1010
43 Dimethylphthalate	163	5.763	5.769	(0.961)	860618	34.2285	1300
44 2,6-Dinitrotoluene	165	5.822	5.822	(0.971)	198025	31.6109	1200
45 Acenaphthylene	152	5.904	5.904	(0.984)	1140424	32.0824	1220
48 2,4-Dinitrophenol	184	6.028	6.022	(1.005)	42424	17.1578	652(aQ)
49 Dibenzofuran	168	6.140	6.139	(1.024)	1158759	37.6486	1430
51 Diethylphthalate	149	6.245	6.245	(1.041)	843093	35.9664	1370
53 Fluorene	166	6.369	6.369	(1.062)	824760	33.2341	1260
54 4-Chlorophenylphenylether	204	6.351	6.351	(1.059)	371585	35.4641	1350
55 2-Methyl-4,6-dinitrophenol	198	6.387	6.387	(0.915)	89890	22.8181	867

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.375	6.375	(1.063)	161131	26.4003	1000
133 Diphenylamine	169	6.428	6.428	(0.921)	585855	28.2071	1070
58 1,2-Diphenylhydrazine	77	6.457	6.457	(0.925)	789620	31.1589	1180
61 4-Bromophenylphenylether	248	6.675	6.675	(0.956)	211735	39.5773	1500
63 Hexachlorobenzene	284	6.734	6.734	(0.965)	222065	33.8165	1280
68 Phenanthrene	178	6.998	6.992	(1.003)	1168134	33.0101	1250
69 Anthracene	178	7.028	7.028	(1.007)	1170645	32.5287	1240
72 Di-n-butylphthalate	149	7.269	7.269	(1.041)	1482035	38.6095	1470
76 Fluoranthene	202	7.710	7.704	(1.104)	1198440	35.0851	1330
85 Butylbenzylphthalate	149	8.157	8.157	(0.944)	642604	38.2189	1450
89 Benzo(a)anthracene	228	8.628	8.628	(0.999)	1028164	30.8396	1170
90 3,3'-Dichlorobenzidine	252	8.575	8.569	(0.992)	234949	24.5436	933
92 Chrysene	228	8.663	8.657	(1.003)	968038	31.0663	1180
93 bis(2-Ethylhexyl)phthalate	149	8.510	8.504	(0.985)	887684	36.3402	1380
94 Di-n-octylphthalate	149	9.028	9.028	(0.896)	1435946	35.0882	1330
95 Benzo(b)fluoranthene	252	9.616	9.610	(0.954)	932900	30.1065	1140
96 Benzo(k)fluoranthene	252	9.645	9.639	(0.957)	1075693	34.2919	1300
97 Benzo(a)pyrene	252	10.010	10.004	(0.994)	879307	32.1496	1220
99 Indeno(1,2,3-cd)pyrene	276	11.675	11.663	(1.159)	890192	31.3109	1190
100 Dibenzo(a,h)anthracene	278	11.675	11.663	(1.159)	759991	32.0023	1220
101 Benzo(ghi)perylene	276	12.169	12.163	(1.208)	739787	31.4692	1200
1 N-Methyl-N-nitrosomethylamine	74	2.399	2.393	(0.616)	164841	28.4990	1080

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD1.i/s120409.b/s110416.d
Date : 04-DEC-2009 14:37
Client ID: RE03-09-13867MSD
Sample Info: 1120198119919266101|1|SVMF14|MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

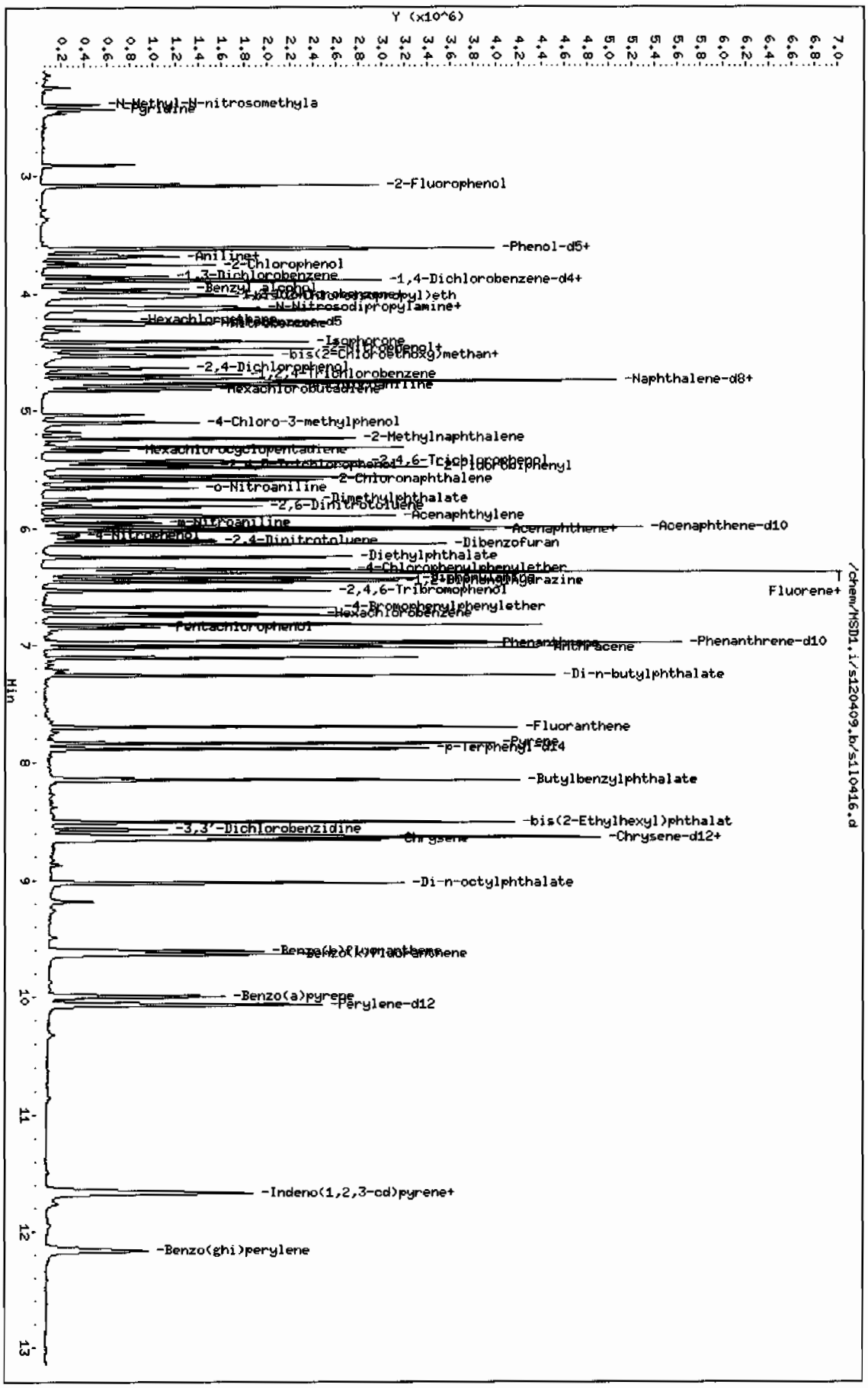

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926606 **Verified by:** _____

Analyst: Joshua McCartney

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981197 MB	27-NOV-2009 11:05:04	30	1	0.03333
1201981200 LCS	27-NOV-2009 11:05:04	30	1	0.03333
241540001	27-NOV-2009 11:05:04	30	1	0.03333
241540002	27-NOV-2009 11:05:04	30	1	0.03333
241540003	27-NOV-2009 11:05:04	30.05	1	0.03328
241540004	27-NOV-2009 11:05:04	30	1	0.03333
1201981198 MS (241540004)	27-NOV-2009 11:05:04	30.04	1	0.03329
1201981199 MSD (241540004)	27-NOV-2009 11:05:04	30.02	1	0.03331
241540005	27-NOV-2009 11:05:04	30.08	1	0.03324
241540006	27-NOV-2009 11:05:04	30.01	1	0.03332
241540007	27-NOV-2009 11:05:04	30.01	1	0.03332
241540008	27-NOV-2009 11:05:04	30	1	0.03333
241540009	27-NOV-2009 11:05:04	30.05	1	0.03328
241540010	27-NOV-2009 11:05:04	30	1	0.03333
241540011	27-NOV-2009 11:05:04	30.03	1	0.0333
241540012	27-NOV-2009 11:05:04	30.03	1	0.0333
241540013	27-NOV-2009 11:05:04	30	1	0.03333
241540014	27-NOV-2009 11:05:04	30.03	1	0.0333
241540015	27-NOV-2009 11:05:04	30.02	1	0.03331
241540016	27-NOV-2009 11:05:04	30	1	0.03333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981200	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201981200	BENZIDINE LCS	UE091117-20	1	mL
MS	1201981198	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201981198	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201981199	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201981199	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Methylene Chloride	1231728-D	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: RWH

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 12/04/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1318 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s110401.d	WBN091101-01	AMY	04-DEC-2009 07:34	50 PPM	s120409	1.0	DFTPP	DUSE-tune failed
s110402.d	WBN091101-01	AMY	04-DEC-2009 08:56	50 PPM	s120409	1.0	DFTPP	PASSING
s110403.d	WBN091201-17.2	AMY	04-DEC-2009 09:11	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-mega fails
s110404.d	WBN091111-17.2	AMY	04-DEC-2009 09:48	40 PPM	MEGAIICARE	1.0	MEGACVS	PASSING (308643)
s110405.d	WBN091201-08.2	AMY	04-DEC-2009 10:24	40 PPM	ap12	1.0	APCVS	PASSING
s110406.d	WBN091117-08.1	AMY	04-DEC-2009 10:47	40 PPM	nev	1.0	NEVCVS	DUSE-not needed
s110407.d	WBN091202-26.2	AMY	04-DEC-2009 11:09	40 PPM	PESTCVS	1.0	PESTCVS	DUSE-not needed
s110408.d	1201981197	AMY	04-DEC-2009 11:32	926610	10-604	1.0	SBLK01	REPORT
s110409.d	1201981197	AMY	04-DEC-2009 11:56	926610	10-604	1.0	SBLK01LCS	REPORT
s110410.d	241540001	AMY	04-DEC-2009 12:18	926610	10-604	1.0	LANL	REPORT
s110411.d	241540002	AMY	04-DEC-2009 12:41	926610	10-604	1.0	LANL	REPORT
s110412.d	241540003	AMY	04-DEC-2009 13:04	926610	10-604	1.0	LANL	REPORT
s110413.d	241540004	AMY	04-DEC-2009 13:27	926610	10-604	1.0	LANL	REPORT
s110414.d	241540006	AMY	04-DEC-2009 13:50	926610	10-604	1.0	LANL	REPORT
s110415.d	1201981198	AMY	04-DEC-2009 14:14	926610	10-604	1.0	MS	REPORT-c. 16 low, MSD confirms
s110416.d	1201981199	AMY	04-DEC-2009 14:37	926610	10-604	1.0	MSD	REPORT-c. 16 low, MSD confirms
s110417.d	241540008	AMY	04-DEC-2009 15:00	926610	10-604	1.0	LANL	REPORT
s110418.d	241540010	nagl	04-DEC-2009 15:23	926610	10-604	1.0	LANL	REPORT
s110419.d	241540011	nagl	04-DEC-2009 15:46	926610	10-604	1.0	LANL	REPORT

s110420.d	241540012	nagl	04-DEC-2009 16:10	926610	10-604		1.0	LANL	REPORT
s110421.d	241540013	nagl	04-DEC-2009 16:33	926610	10-604		1.0	LANL	REPORT
s110422.d	241540014	nagl	04-DEC-2009 16:55	926610	10-604		1.0	LANL	REPORT
s110423.d	241540015	nagl	04-DEC-2009 17:18	926610	10-604		1.0	LANL	REPORT
s110424.d	241540016	nagl	04-DEC-2009 17:42	926610	10-604		10.0	LANL	REPORT
s110425.d	241540005	nagl	04-DEC-2009 18:05	926610	10-604		10.0	LANL	DUSE-RR neat s110711
s110426.d	241540009	nagl	04-DEC-2009 18:28	926610	10-604		10.0	LANL	REPORT

Instrument Batch: /chem/MSD1.i/s120409.b

Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 12/07/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1318 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s120709.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s110701.d	WBN091128-01	AMY	07-DEC-2009 08:54	50 PPM	s120709	1.0	DFTPP	DUSE-tune fails
s110702.d	WBN091128-01	AMY	07-DEC-2009 09:20	50 PPM	s120709	1.0	DFTPP	PASSING
s110703.d	WBN091106-05.4	AMY	07-DEC-2009 09:35	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE
s110704.d	WBN091111-17.2	AMY	07-DEC-2009 10:13	40 PPM	MEGAIICARE	1.0	MEGACVS	PASSING - 559398
s110705.d	WBN091201-03.4	AMY	07-DEC-2009 10:53	40 PPM	ap12	1.0	APCVS	PASSING
s110706.d	WBN01117-08.1	AMY	07-DEC-2009 11:16	40 PPM	nev	1.0	NEVCVS	PASSING
s110707.d	WBN09202-23.2	AMY	07-DEC-2009 11:39	40 PPM	pest	1.0	PESTVS	PASSING
s110708-1.d	1201986766	AMY	07-DEC-2009 12:03	929036	242123	1.0	SBLK01	REPORT
s110708.d	1201986766	AMY	07-DEC-2009 12:03	929036	242075	1.0	SBLK01	REPORT
s110709-1.d	1201986772	AMY	07-DEC-2009 12:25	929036	242123	1.0	SBLK01LCS	REPORT- c. 77 low
s110709.d	1201986772	AMY	07-DEC-2009 12:25	929036	242075	1.0	SBLK01LCS	REPORT- c. 77 low
s110710.d	241540007	AMY	07-DEC-2009 12:48	926610	10-604	1.0	LANLRR	REPORT
s110711.d	241540005	AMY	07-DEC-2009 13:12	926610	10-604	1.0	LANLRR	REPORT
s110712.d	INSTBLK	AMY	07-DEC-2009 13:35		all	1.0	INSTBLK	DUSE-instrument blank
s110713.d	242075001	AMY	07-DEC-2009 13:59	929036	242075	1.0	BRCM	REPORT
s110714.d	1201986768	AMY	07-DEC-2009 14:22	929036	242075	1.0	BRCMMS	REPORT
s110715.d	1201986770	AMY	07-DEC-2009 14:46	929036	242075	1.0	BRCMMSD	REPORT
s110716.d	242075002	AMY	07-DEC-2009 15:09	929036	242075	1.0	BRCM	REPORT
s110717.d	242075003	AMY	07-DEC-2009 15:32	929036	242075	1.0	BRCM	REPORT

s110718.d	1201986767	AMY	07-DEC-2009 15:55	929036	242075		1.0	003DUP	REPORT. manual integration on $ c60.
s110719.d	242075005	AMY	07-DEC-2009 16:18	929036	242075		1.0	BRCM	REPORT
s110720.d	242075006	AMY	07-DEC-2009 16:41	929036	242075		1.0	BRCM	REPORT
s110721.d	242123001	AMY	07-DEC-2009 17:04	929036	242123		1.0	BRCM	REPORT. RR s110820 @ 10X for OR hit of c238
s110722.d	242123002	AMY	07-DEC-2009 17:27	929036	242123		1.0	BRCM	DUSE. RR s110821 @ 10X, s110822 neat
s110723.d	242123003	AMY	07-DEC-2009 17:50	929036	242123		1.0	BRCM	DUSE-RR s1108204
s110724.d	242123004	AMY	07-DEC-2009 18:13	929036	242123		1.0	BRCM	REPORT
s110725.d	242123005	AMY	07-DEC-2009 18:36	929036	242123		1.0	BRCM	REPORT
s110726.d	1201987342	AMY	07-DEC-2009 18:59	929280			1.0	SBLK01LCS	DUSE-screen

Instrument Batch: /chem/MSD1.i/s120709.b

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GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/14/2009 METHOD: See raw data OPERATOR: AMY REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:116462-D
Multiplier Voltage: 1400 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091006-01 Internal Std ID: WBN091024-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s111409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k1201-D.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1201.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1202.d	INST BLK	amy	14-NOV-2009 17:53	-----	s111409	1.0	INST BLK	
s1k1203.d	WBN091111-16	amy	14-NOV-2009 18:22	1 PPM	s111409	1.0	MEGA001	
s1k1204.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	
s1k1204MRQ.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	pass linearity for c26 and c184
s1k1205.d	WBN091111-14	amy	14-NOV-2009 19:21	20 PPM	s111409	1.0	MEGA020	
s1k1206.d	WBN091111-13.1	amy	14-NOV-2009 19:50	40 PPM	s111409	1.0	MEGA040	
s1k1207.d	WBN091111-12	amy	14-NOV-2009 20:19	50 PPM	s111409	1.0	MEGA050	
s1k1208.d	WBN091111-11	amy	14-NOV-2009 20:47	80 PPM	s111409	1.0	MEGA080	
s1k1209.d	WBN091111-10	amy	14-NOV-2009 21:16	100 PPM	s111409	1.0	MEGA100	
s1k1210.d	WBN091111-09	amy	14-NOV-2009 21:45	120 PPM	s111409	1.0	MEGA120	
s1k1211.d	INST BLK	amy	14-NOV-2009 22:14	-----	s111409	1.0	INST BLK	
s1k1212-BOE.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212-D.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE: fails c65
s1k1213-D.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1213.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1214.d	INST BLK	amy	15-NOV-2009 15:05	-----	s111409	1.0	INST BLK	

s1k1215.d	WBN091111-01	amy	15-NOV-2009 15:28	10 PPM	s111409	1.0	AP010	
s1k1216.d	WBN091111-02	amy	15-NOV-2009 15:51	20 PPM	s111409	1.0	AP020	
s1k1217.d	WBN091111-03.1	amy	15-NOV-2009 16:14	40 PPM	s111409	1.0	AP040	
s1k1218.d	WBN091111-04	amy	15-NOV-2009 16:38	50 PPM	s111409	1.0	AP050	
s1k1219.d	WBN091111-05	amy	15-NOV-2009 17:01	80 PPM	s111409	1.0	AP080	
s1k1220.d	WBN091111-06	amy	15-NOV-2009 17:24	100 PPM	s111409	1.0	AP100	
s1k1221.d	WBN091111-07	amy	15-NOV-2009 17:47	120 PPM	s111409	1.0	AP120	
s1k1222.d	WBN091029-25	amy	15-NOV-2009 18:11	10 PPM	s111409	1.0	PEST010	
s1k1223.d	WBN091029-24	amy	15-NOV-2009 18:35	20 PPM	s111409	1.0	PEST020	
s1k1224.d	WBN091029-23.1	amy	15-NOV-2009 18:58	40 PPM	s111409	1.0	PEST040	
s1k1225.d	WBN091029-22	amy	15-NOV-2009 19:21	50 PPM	s111409	1.0	PEST050	
s1k1226.d	WBN091029-21	amy	15-NOV-2009 19:45	80 PPM	s111409	1.0	PEST080	
s1k1227.d	WBN091029-20	amy	15-NOV-2009 20:09	100 PPM	s111409	1.0	PEST100	
s1k1228.d	WBN091029-19	amy	15-NOV-2009 20:31	120 PPM	s111409	1.0	PEST120	
s1k1229.d	WBN091016-16	amy	15-NOV-2009 20:55	500 PPM	s111409	1.0	HEX500	
s1k1230.d	WBN091016-15	amy	15-NOV-2009 21:18	1000 PPM	s111409	1.0	HEX1000	
s1k1231.d	WBN091016-14	amy	15-NOV-2009 21:42	1250 PPM	s111409	1.0	HEX1250	
s1k1232.d	WBN091016-13	amy	15-NOV-2009 22:06	1500 PPM	s111409	1.0	HEX503	
s1k1233.d	WBN091016-12	amy	15-NOV-2009 22:30	1750 PPM	s111409	1.0	HEX504	
s1k1234.d	UBN090825-02.4	amy	15-NOV-2009 22:53	2000 PPM	s111409	1.0	HEX2000	
s1k1235-D.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1235.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1236-D.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1236.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1237-D.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1237.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1238-D.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown

s1k1238.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown
s1k1239.d	INST BLK	amy	16-NOV-2009 00:43	-----	s111409	1.0	INST BLK	
s1k1240.d	UBN090924-01	amy	16-NOV-2009 01:05	10 PPM	s111409	1.0	NEV010	DUSE
s1k1241.d	UBN090924-02	amy	16-NOV-2009 01:28	20 PPM	s111409	1.0	NEV020	DUSE
s1k1242.d	UBN090924-03	amy	16-NOV-2009 01:51	40 PPM	s111409	1.0	NEV040	DUSE
s1k1243.d	UBN090924-04	amy	16-NOV-2009 02:14	50 PPM	s111409	1.0	NEV050	DUSE
s1k1244.d	UBN090924-05	amy	16-NOV-2009 02:38	80 PPM	s111409	1.0	NEV080	DUSE
s1k1245.d	UBN090924-06	amy	16-NOV-2009 03:01	100 PPM	s111409	1.0	NEV100	DUSE
s1k1246.d	UBN090924-07	amy	16-NOV-2009 03:23	120 PPM	s111409	1.0	NEV120	DUSE
s1k1247-D.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1247.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1248.d	INST BLK	amy	17-NOV-2009 09:20	-----	s111409	1.0	INST BLK	
s1k1249.d	WBN091027-09.2	amy	17-NOV-2009 09:48	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails
s1k1250.d	UBN090924-01	amy	17-NOV-2009 10:17	10 PPM	s111409	1.0	NEV010	DUSE
s1k1251.d	UBN090924-02	amy	17-NOV-2009 10:41	20 PPM	s111409	1.0	NEV020	DUSE
s1k1252.d	UBN090924-03	amy	17-NOV-2009 11:04	40 PPM	s111409	1.0	NEV040	DUSE
s1k1253.d	UBN090924-04	amy	17-NOV-2009 11:27	50 PPM	s111409	1.0	NEV050	DUSE
s1k1254.d	UBN090924-05	amy	17-NOV-2009 11:50	80 PPM	s111409	1.0	NEV080	DUSE
s1k1255.d	UBN090924-06	amy	17-NOV-2009 12:14	100 PPM	s111409	1.0	NEV100	DUSE
s1k1256.d	UBN090924-07	amy	17-NOV-2009 12:38	120 PPM	s111409	1.0	NEV120	DUSE
s1k1257.d	WBN091027-09.1	amy	17-NOV-2009 13:02	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails /clean inj port
s1k1259-D.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1259.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1260.d	INST BLK	amy	17-NOV-2009 16:04	-----	s111409	1.0	INST BLK	
s1k1261-BOE.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261-D.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	pass 530038

s1k1262.d	UBN091117-01	amy	17-NOV-2009 16:56	10 PPM	s111409	1.0	NEV010	
s1k1263.d	UBN091117-02	amy	17-NOV-2009 17:19	20 PPM	s111409	1.0	NEV020	
s1k1264.d	UBN091117-03	amy	17-NOV-2009 17:42	40 PPM	s111409	1.0	NEV040	
s1k1265.d	UBN091117-04	amy	17-NOV-2009 18:05	50 PPM	s111409	1.0	NEV050	DUSE
s1k1266.d	UBN091117-05	amy	17-NOV-2009 18:28	80 PPM	s111409	1.0	NEV080	
s1k1267.d	UBN091117-06	amy	17-NOV-2009 18:52	100 PPM	s111409	1.0	NEV100	DUSE
s1k1268.d	UBN091117-07	amy	17-NOV-2009 19:15	120 PPM	s111409	1.0	NEV120	

NCR Report No.: 768414
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
10-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
926610	See Below		

Potentially affected work order(s)(SDG): 241540(10-604)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The MS(1201981198) recovered Hexachloroethane at 29%. The limits are 30%-100%.	1. Since the MSD displayed a similar low (but passing) recovery for Hexachloroethane to the MS, the failures was attributed to matrix interference and the data results have been reported.

Originator's Name:

Amy Carroll 10-DEC-09

Data Validator/Group Leader:

Barbara Bailey 10-DEC-09

GC SEMIVOLATILE DRO ANALYSIS

FID Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-604

Method/Analysis Information

Procedure:	**Analysis of Non-Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	926874
Prep Batch Number:	926873

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	**Client ID**
241540001	RE03-09-13875
241540002	RE03-09-13865
241540003	RE03-09-13868
241540004	RE03-09-13867
241540005	RE03-09-13864
241540006	RE03-09-13871
241540007	RE03-09-13877
241540008	RE03-09-13869
241540009	RE03-09-13870
241540010	RE03-09-13873
241540011	RE03-09-13863
241540012	RE03-09-13874
241540013	RE03-09-13866
241540014	RE03-09-13862
241540015	RE03-09-13876
241540016	RE03-09-13872
1201981725	Method Blank (MB)
1201981726	241540003(RE03-09-13868) Matrix Spike (MS)
1201981727	241540003(RE03-09-13868) Matrix Spike Duplicate (MSD)

1201981728 Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241540003 (RE03-09-13868) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample

collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 241540002 (RE03-09-13865) (1:5) and 241540005 (RE03-09-13864) (1:20) were diluted prior to analysis due to thick and oily matrix of the extracts.

Sample 241540016 (RE03-09-13872) was diluted at 1:10 due to the presence of overrange target analytes.

Sample Re-extraction/Re-analysis
Re-extractions were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID7.I	Agilent GC FID	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock **Date:** 12-14-2009

Roadmap for LANL 10-604 DRO

This roadmap was analyzed by kev01577 on 12-03-2009, 10:51.
This roadmap was reviewed by jcb on 12-07-2009, 10:33.
This roadmap was packaged by jim01140 on 12-11-2009, 15:19.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid7.i/113009dr/007f0701.d	241540001	30-NOV-2009	13:39	10-604.sub	RE03-09-13875	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/008f0801.d	241540002	30-NOV-2009	14:16	10-604.sub	RE03-09-13865	5.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/009f0901.d	241540003	30-NOV-2009	14:53	10-604.sub	RE03-09-13868	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/012f1201.d	241540004	30-NOV-2009	16:43	10-604.sub	RE03-09-13867	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/015f1501.d	241540005	30-NOV-2009	18:34	10-604.sub	RE03-09-13864	20.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/016f1601.d	241540006	30-NOV-2009	19:10	10-604.sub	RE03-09-13871	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/017f1701.d	241540007	30-NOV-2009	19:47	10-604.sub	RE03-09-13877	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/018f1801.d	241540008	30-NOV-2009	20:23	10-604.sub	RE03-09-13869	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/019f1901.d	241540009	30-NOV-2009	21:00	10-604.sub	RE03-09-13870	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/020f2001.d	241540010	30-NOV-2009	21:37	10-604.sub	RE03-09-13873	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/021f2101.d	241540011	30-NOV-2009	22:14	10-604.sub	RE03-09-13863	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/024f2401.d	241540012	01-DEC-2009	00:05	10-604.sub	RE03-09-13874	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/025f2501.d	241540013	01-DEC-2009	00:42	10-604.sub	RE03-09-13866	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/026f2601.d	241540014	01-DEC-2009	01:19	10-604.sub	RE03-09-13862	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/027f2701.d	241540015	01-DEC-2009	01:55	10-604.sub	RE03-09-13876	1.00000	926874	USE
■	N	/chem/fid7.i/113009dr/028f2801.d	241540016	01-DEC-2009	02:33	10-604.sub	RE03-09-13872	1.00000	926874	DUSE, OVERRANGE RERUN AT 10X
☐	N	/chem/fid7.i/120109dr/005f0501.d	241540016	01-DEC-2009	13:59	10-604.sub	RE03-09-13872	10.00000	926874	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid7.i/113009dr/005f0501.d	1201981725	mb	30-NOV-2009	12:26	10-604.sub	DBLK01	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/006f0601.d	1201981728	lcs	30-NOV-2009	13:02	10-604.sub	DBLK01LCS	1.00000	926874	USE
☐	N	/chem/fid7.i/113009dr/010f1001.d	1201981726	ms	30-NOV-2009	15:30	10-604.sub	RE03-09-13868MS	1.00000	926874	USE

☐	N	/chem/5d7.i/113009dr/011f1101.d	1201981727	msd	30-NOV-2009	16:06	10-604.sub	RE03-09-13868MSD	1.00000	926874	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13875	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 13:39	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	007f0701.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.41	mg/kg	2.41	7.41

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13865	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	5
Run Date:	11/30/2009 14:16	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	008f0801.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	38.3	mg/kg	12.4	38.3

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13868	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 14:53	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	009f0901.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.05	mg/kg	2.44	7.52

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13867	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 16:43	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.06	mg/kg	2.46	7.57

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13864	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	20
Run Date:	11/30/2009 18:34	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	015f1501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	146	mg/kg	47.6	146

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13871	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 19:10	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	016f1601.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		8.58	mg/kg	2.58	7.93

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13877**	**Method:**	**SW846 8015A/B SVOC**	**SOP Ref:**	**GL–OA–E–003**
Batch ID:	**926874**	**Inst:**	**FID7.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 19:47**	**Analyst:**	**KXR2**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 20:09**	**Aliquot:**	**30.16 g**	**Final Volume:**	**1 mL**
Data File:	**017f1701.d**	**Column:**	**DB–5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		13.7	mg/kg	2.40	7.39

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540008	Date Received:	11/20/2009 08:50	%Moisture:	16.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13869	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 20:23	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	018f1801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	8.01	mg/kg	2.60	8.01

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540009	Date Received:	11/20/2009 08:50	%Moisture:	13.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13870	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 21:00	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	019f1901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		89.8	mg/kg	2.51	7.71

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13873	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 21:37	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	020f2001.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		24.5	mg/kg	2.38	7.31

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540011	Date Received:	11/20/2009 08:50	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–13863	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.1	Dilution:	1
Run Date:	11/30/2009 22:14	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	021f2101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.21	mg/kg	2.37	7.29

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13874	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/01/2009 00:05	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	024f2401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.06	mg/kg	2.32	7.15

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13866	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/01/2009 00:42	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	025f2501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		9.32	mg/kg	2.51	7.72

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540014	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13862	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/01/2009 01:19	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	026f2601.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.39	mg/kg	2.49	7.67

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13876	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/01/2009 01:55	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	027f2701.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.1	mg/kg	2.40	7.38

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13872	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	10
Run Date:	12/01/2009 13:59	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		271	mg/kg	23.9	73.6

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10-604

Matrix Type: SOLID

CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC	
1201981725	MB for batch 926873	53	
1201981728	LCS for batch 926873	85	
241540001	RE03-09-13875	49	
241540002	RE03-09-13865	60	D
241540003	RE03-09-13868	56	
1201981726	RE03-09-13868MS	92	
1201981727	RE03-09-13868MSD	92	
241540004	RE03-09-13867	65	
241540005	RE03-09-13864	62	D
241540006	RE03-09-13871	61	
241540007	RE03-09-13877	61	
241540008	RE03-09-13869	48	
241540009	RE03-09-13870	83	
241540010	RE03-09-13873	69	
241540011	RE03-09-13863	55	
241540012	RE03-09-13874	56	
241540013	RE03-09-13866	60	
241540014	RE03-09-13862	57	
241540015	RE03-09-13876	51	
241540016	RE03-09-13872	107	D

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number: 10-604 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 926873 **Matrix:** SOIL

Lab Sample ID: 1201981728

Instrument: FID7.I **Analysis Date:** 11/30/2009 13:02 **Dilution:** 1

Analyst: KXR2 **Prep Batch ID:** 926873

Inj. Vol: 1 uL **Batch ID:** 926874

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	25.3	76	53-114

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10–604**	**Sample Type:**	**Matrix Spike**		
Client ID:	**RE03–09–13868MS**	**Matrix:**	**S**		
Lab Sample ID:	**1201981726**	**%Moisture:**	**11.4**		
Instrument:	**FID7.I**	**Analysis Date:**	**11/30/2009 15:30**	**Dilution: 1**	
Analyst:	**KXR2**	**Prep Batch ID:**	**926873**		
Inj. Vol:	**1 uL**	**Batch ID:**	**926874**		

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	37.6	6.05	J	36.7	81	21–122

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10–604**	**Sample Type:**	**Matrix Spike Duplicate**	
Client ID:	**RE03–09–13868MSD**	**Matrix:**	**S**	
Lab Sample ID:	**1201981727**	**%Moisture:**	**11.4**	
Instrument:	**FID7.I**	**Analysis Date:**	**11/30/2009 16:06**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID:**	**926873**	
Inj. Vol:	**1 uL**	**Batch ID:**	**926874**	

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	37.4	6.05	J	35.4	79	21–122	3	0–30

Method Blank Summary

SDG Number:	10-604	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926873	Instrument ID:	FID7.I	Data File:	005f0501.d
Lab Sample ID:	1201981725	Prep Date:	11/29/2009 20:09	Analyzed:	11/30/09 12:26
Column:	DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926873	1201981728	006f0601.d	11/30/09	1302
02	RE03-09-13875	241540001	007f0701.d	11/30/09	1339
03	RE03-09-13865	241540002	008f0801.d	11/30/09	1416
04	RE03-09-13868	241540003	009f0901.d	11/30/09	1453
05	RE03-09-13868MS	1201981726	010f1001.d	11/30/09	1530
06	RE03-09-13868MSD	1201981727	011f1101.d	11/30/09	1606
07	RE03-09-13867	241540004	012f1201.d	11/30/09	1643
08	RE03-09-13864	241540005	015f1501.d	11/30/09	1834
09	RE03-09-13871	241540006	016f1601.d	11/30/09	1910
10	RE03-09-13877	241540007	017f1701.d	11/30/09	1947
11	RE03-09-13869	241540008	018f1801.d	11/30/09	2023
12	RE03-09-13870	241540009	019f1901.d	11/30/09	2100
13	RE03-09-13873	241540010	020f2001.d	11/30/09	2137
14	RE03-09-13863	241540011	021f2101.d	11/30/09	2214
15	RE03-09-13874	241540012	024f2401.d	12/01/09	0005
16	RE03-09-13866	241540013	025f2501.d	12/01/09	0042
17	RE03-09-13862	241540014	026f2601.d	12/01/09	0119
18	RE03-09-13876	241540015	027f2701.d	12/01/09	0155
19	RE03-09-13872	241540016	005f0501.d	12/01/09	1359

SAMPLE DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540001	Date Received:	11/20/2009 08:50	%Moisture:	10.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13875	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 13:39	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.16 g	Final Volume:	1 mL
Data File:	007f0701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.41	mg/kg	2.41	7.41

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DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/007f0701.d
Lab Smp Id: 241540001 Client Smp ID: RE03-09-13875
Inj Date : 30-NOV-2009 13:39
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540001|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weigth of sample extracted (g)
M	10.45410	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.610	13.616	-0.006	244742	9.74862	0.36

Data File: /chem/fid7.i/113009dr/007f0701.d
Date : 30-NOV-2009 13:39
Client ID: RE03-09-13875
Sample Info: |241540001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

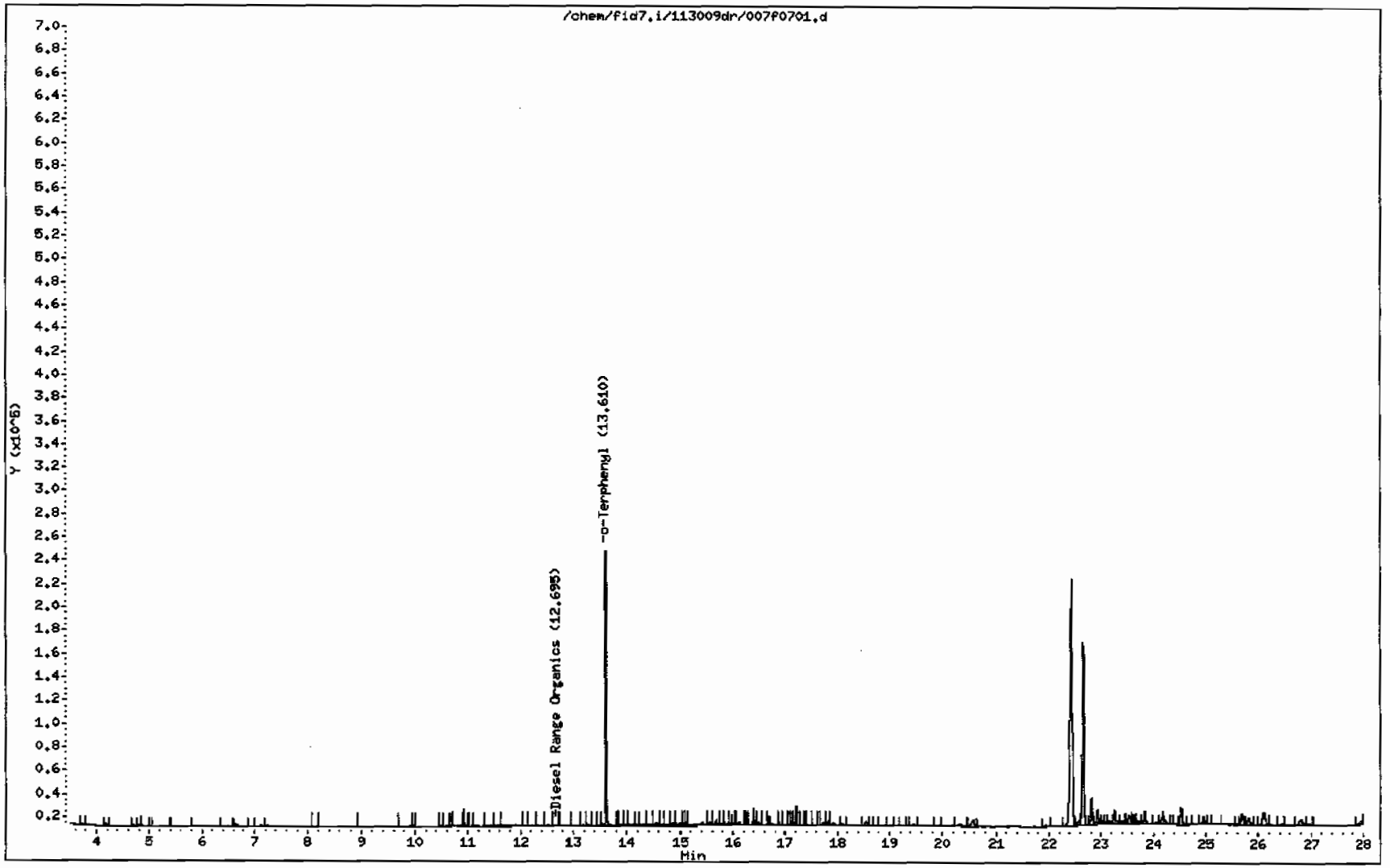

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13865	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	5
Run Date:	11/30/2009 14:16	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	008f0801.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	38.3	mg/kg	12.4	38.3

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/008f0801.d
Lab Smp Id: 241540002 Client Smp ID: RE03-09-13865
Inj Date : 30-NOV-2009 14:16
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540002|5|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 8
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	13.46180	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.609	13.616	-0.007	59960	2.38834	0.46

Data File: /chem/fid7.i/113009dr/008f0801.d

Date : 30-NOV-2009 14:16

Client ID: RE03-09-13865

Sample Info: |241540002|5|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

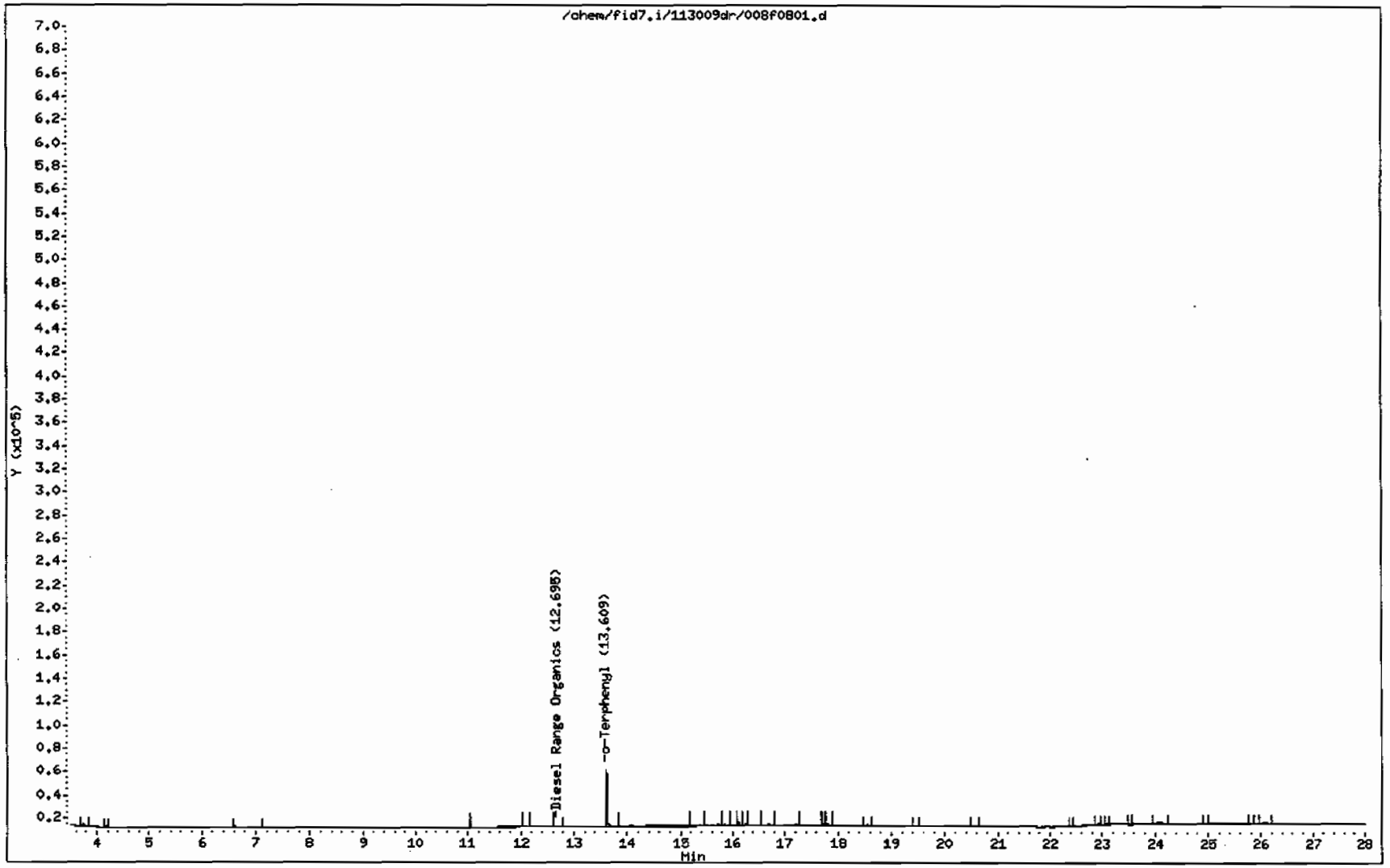

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540003	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13868	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 14:53	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	009f0901.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.05	mg/kg	2.44	7.52

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DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/009f0901.d
Lab Smp Id: 241540003 Client Smp ID: RE03-09-13868
Inj Date : 30-NOV-2009 14:53
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540003|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	11.36220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			2282312	161.031	6.0	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.612	13.616	-0.004	283329	11.2856	0.42	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/009f0901.d
Date : 30-NOV-2009 14:53
Client ID: RE03-09-13868
Sample Info: |241540003|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

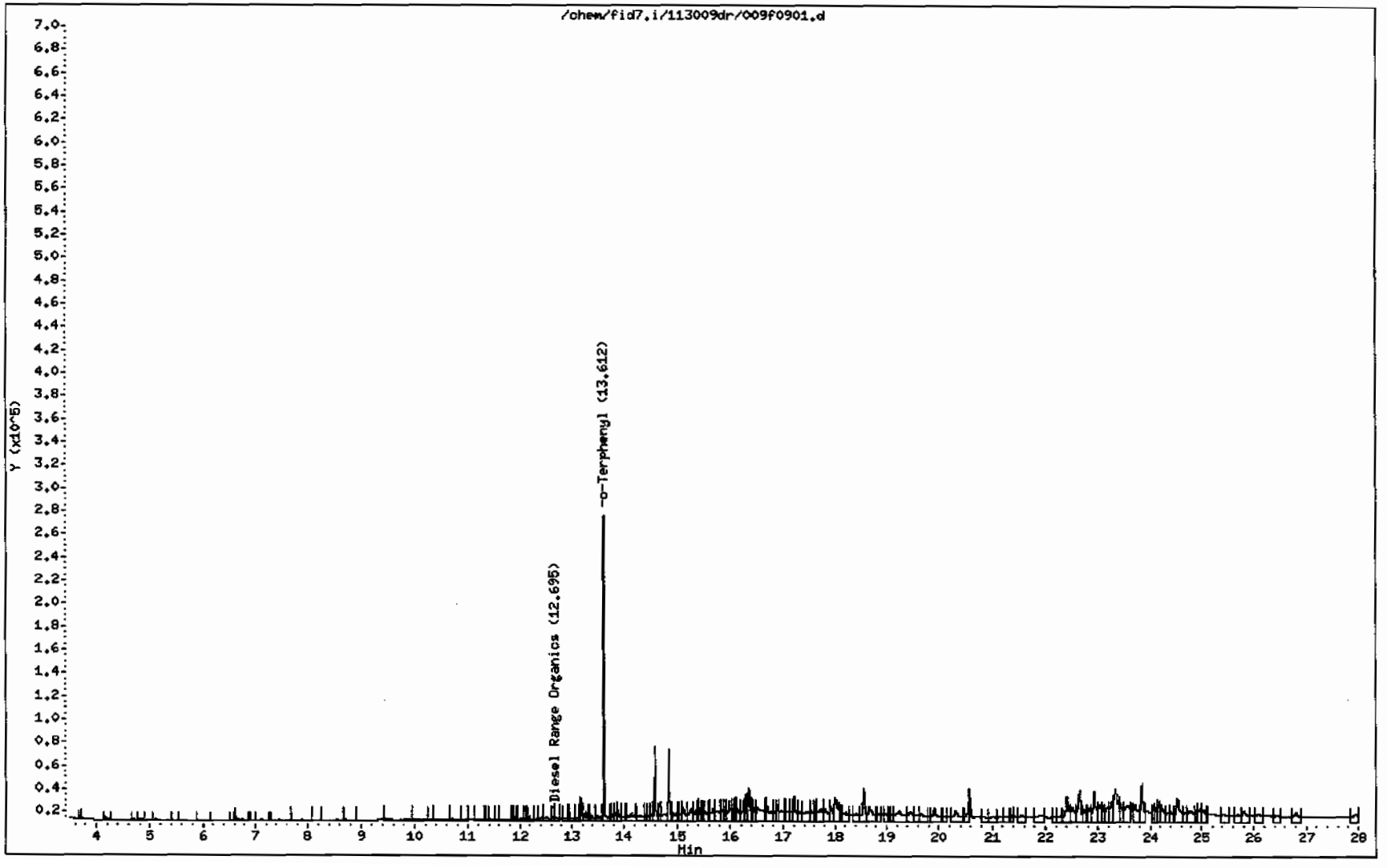

Data File: /chem/fid7.i/113009dr/009f0901.d
Injection Date: 30-NOV-2009 14:53
Instrument: fid7.i
Client Sample ID: RE03-09-13868

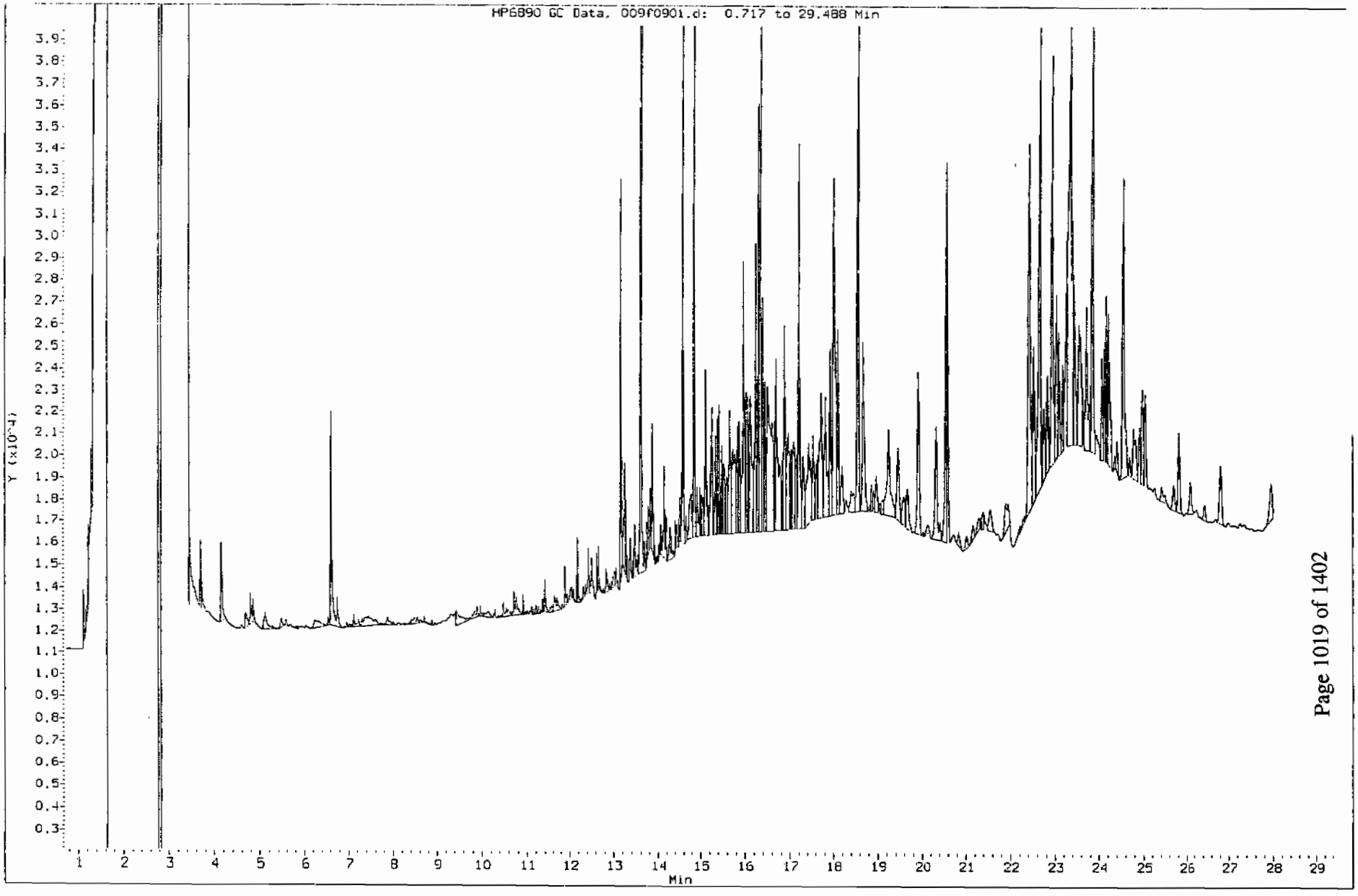

Data File: /chem/fid7.i/113009dr/009f0901.d
Injection Date: 30-NOV-2009 14:53
Instrument: fid7.i
Client Sample ID: RE03-09-13868

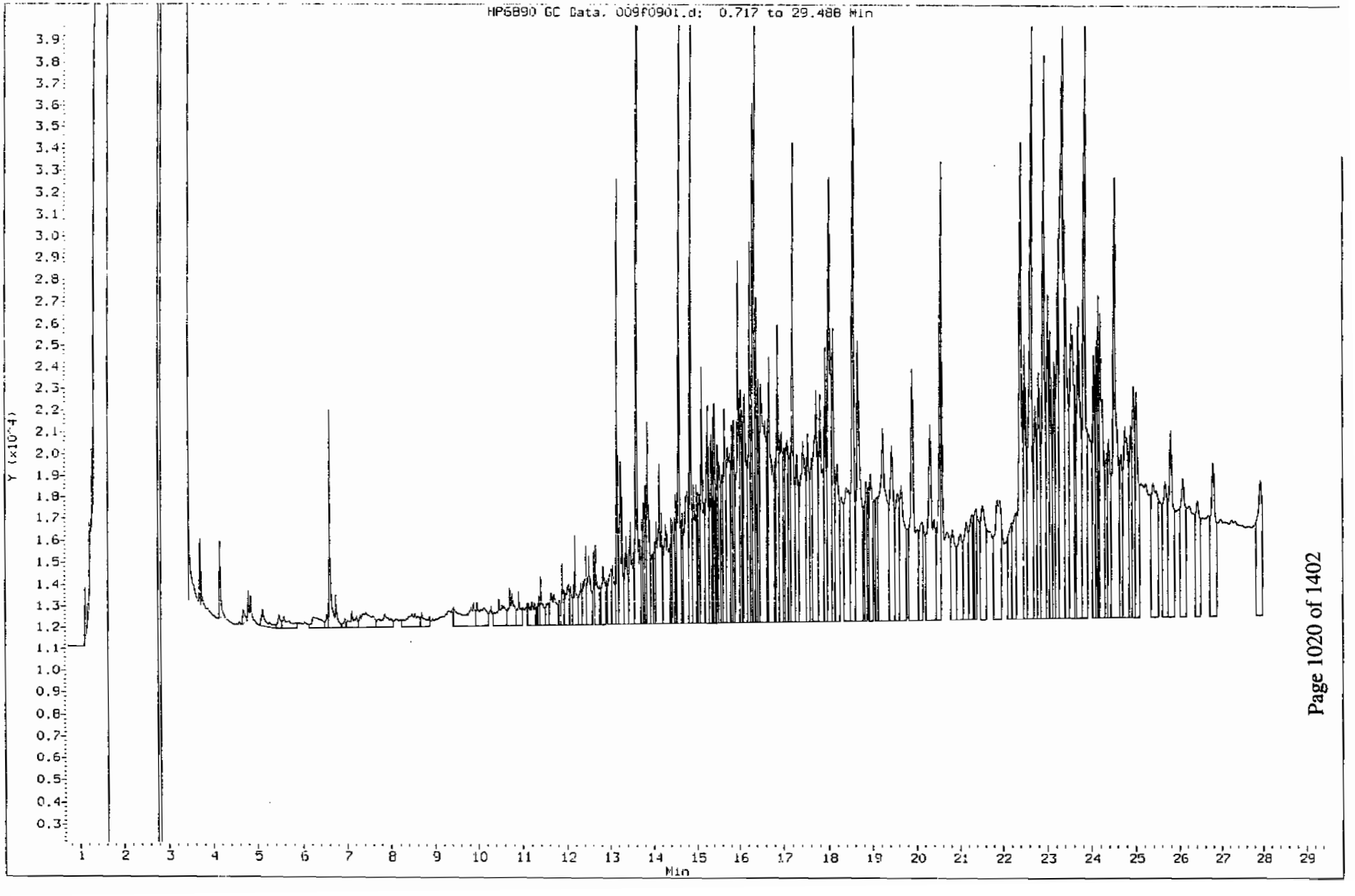

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540004	Date Received:	11/20/2009 08:50	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13867	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 16:43	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.06	mg/kg	2.46	7.57

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/012f1201.d
Lab Smp Id: 241540004 Client Smp ID: RE03-09-13867
Inj Date : 30-NOV-2009 16:43
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540004|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weigth of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1895816	133.761	5.1	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.613	13.616	-0.003	328381	13.0801	0.49	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/012f1201.d
Date : 30-NOV-2009 16:43
Client ID: RE03-09-13867
Sample Info: |2415400041|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

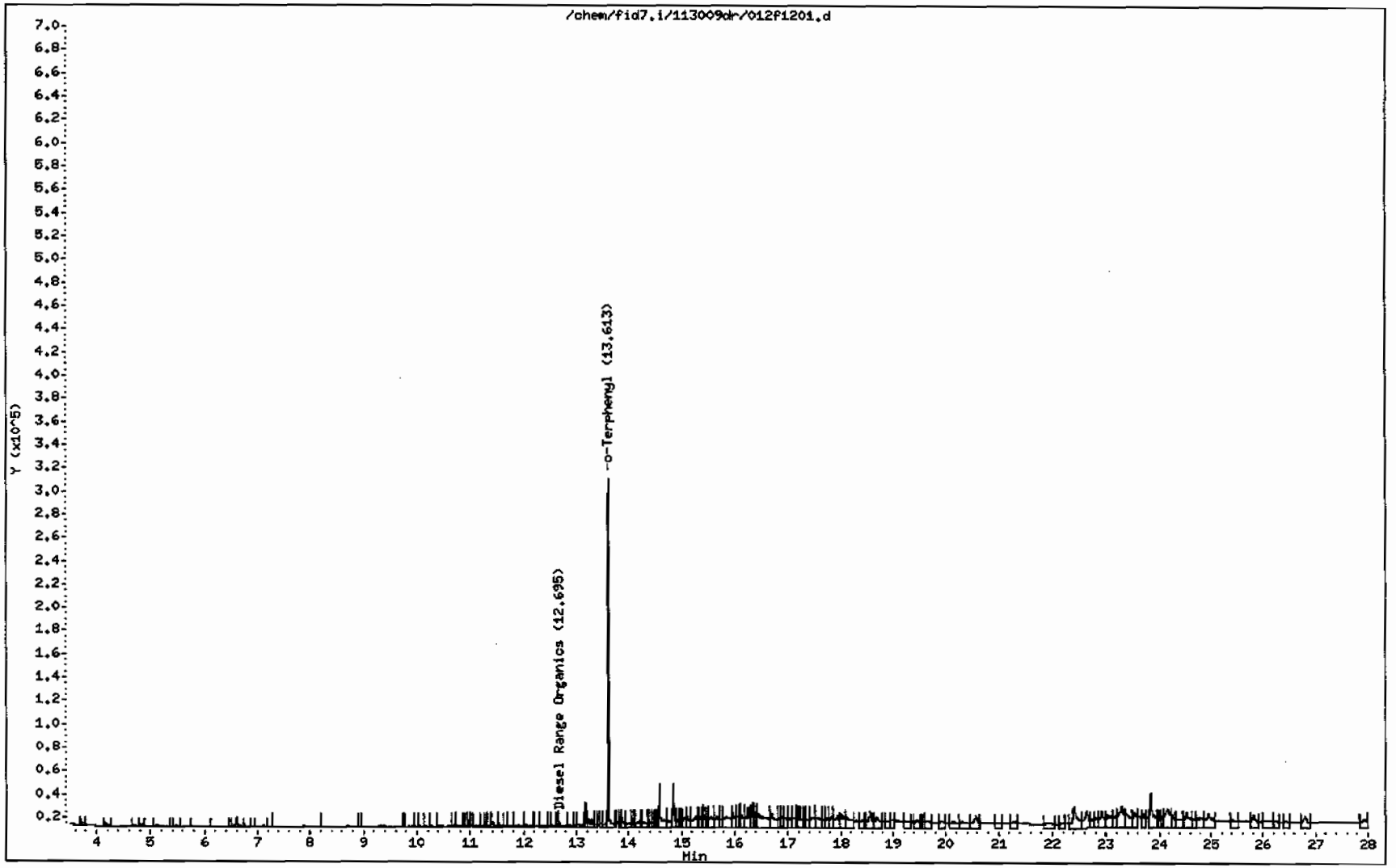

Data File: /chem/fid7.i/113009dr/012f1201.d
Injection Date: 30-NOV-2009 16:43
Instrument: fid7.i
Client Sample ID: RE03-09-13867

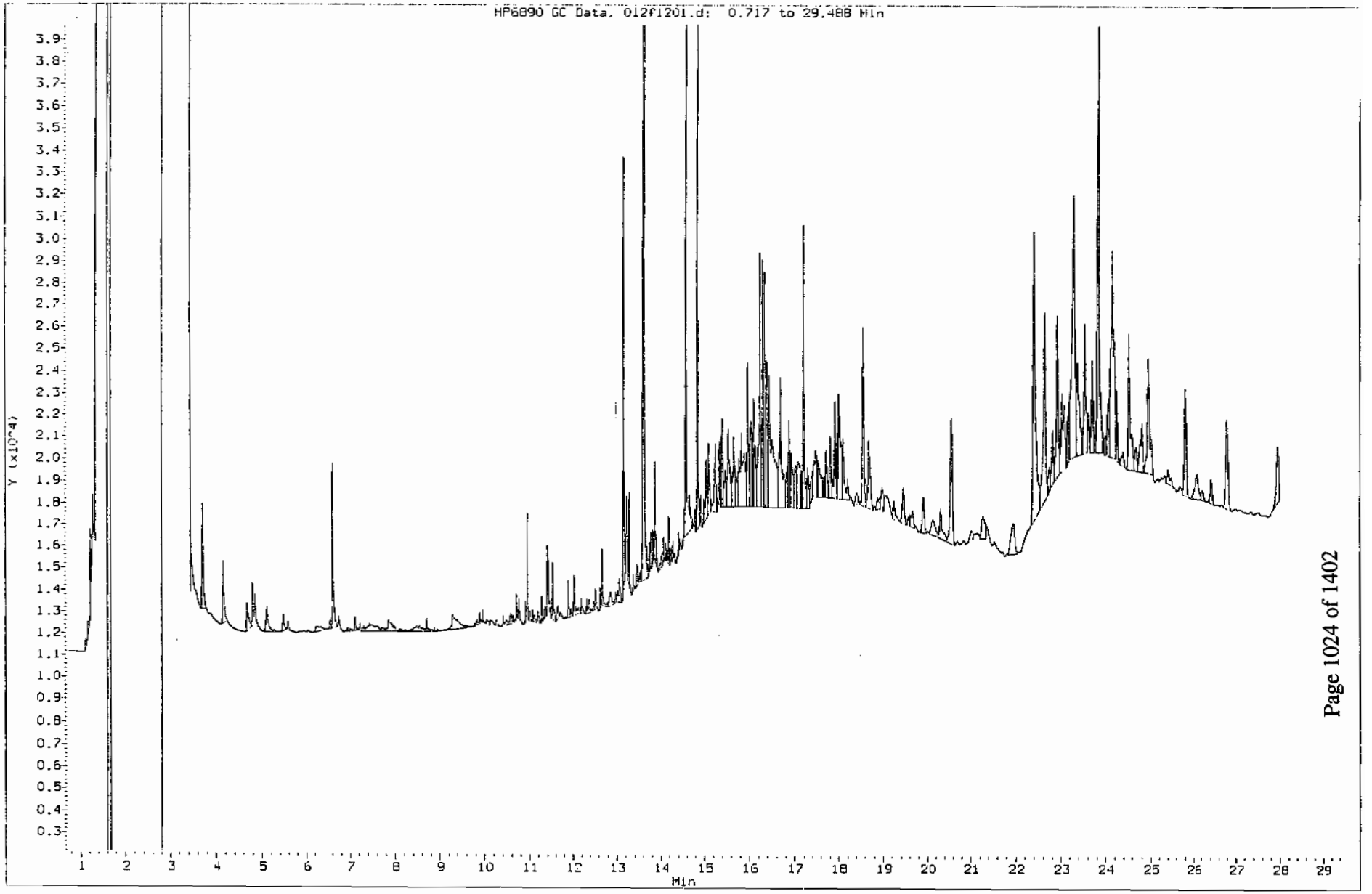

Data File: /chem/fid7.i/113009dr/012f1201.d
Injection Date: 30-NOV-2009 16:43
Instrument: fid7.i
Client Sample ID: RE03-09-13867

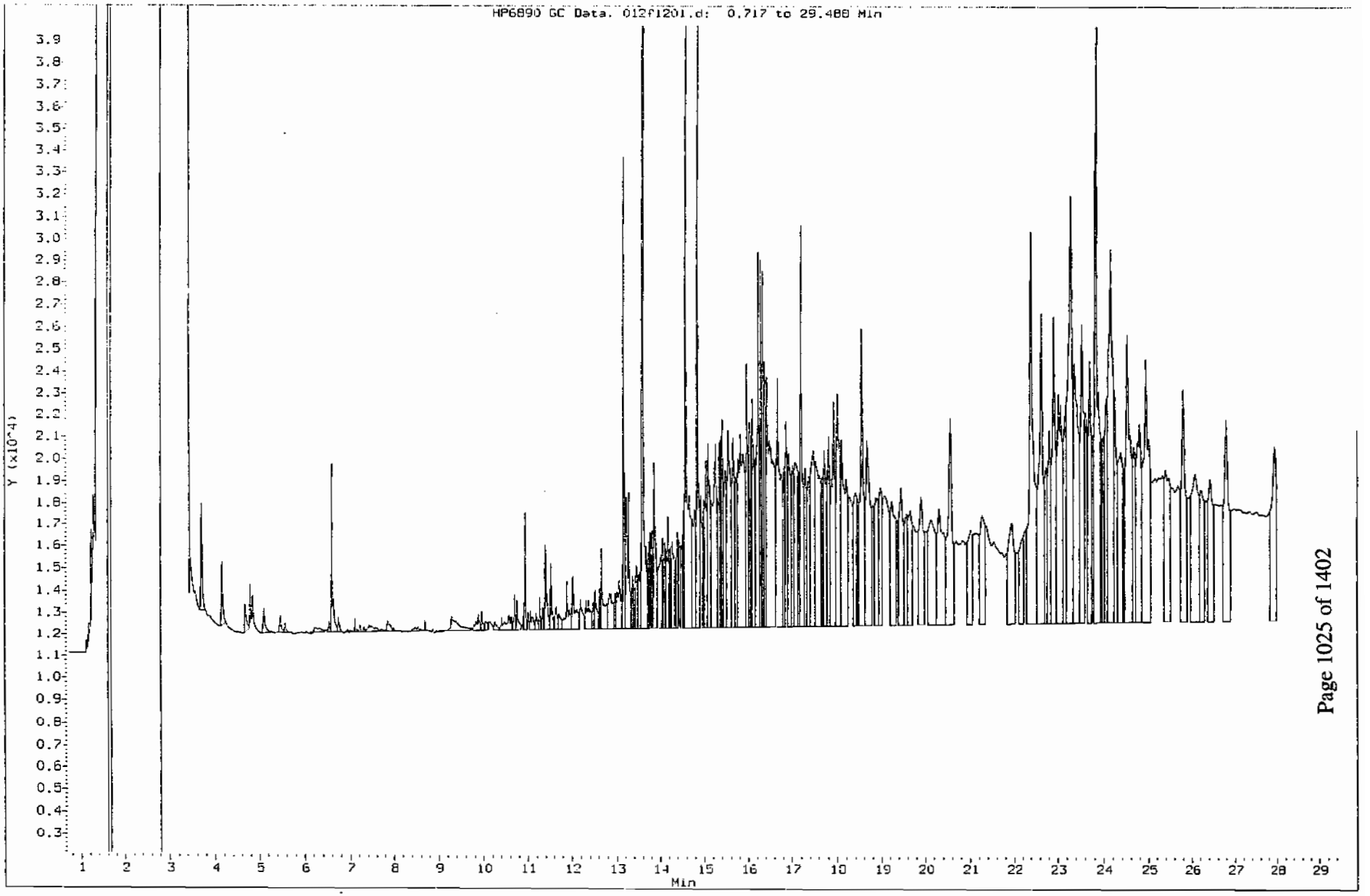

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13864	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	20
Run Date:	11/30/2009 18:34	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	015f1501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	146	mg/kg	47.6	146

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/015f1501.d
Lab Smp Id: 241540005 Client Smp ID: RE03-09-13864
Inj Date : 30-NOV-2009 18:34
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540005|20|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 15
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	20.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	8.94060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.610	13.616	-0.006	15595	0.62120	0.45

Data File: /chem/fid7.i/113009dr/015f1501.d
Date : 30-NOV-2009 18:34
Client ID: RE03-09-13864
Sample Info: |241540005|20|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

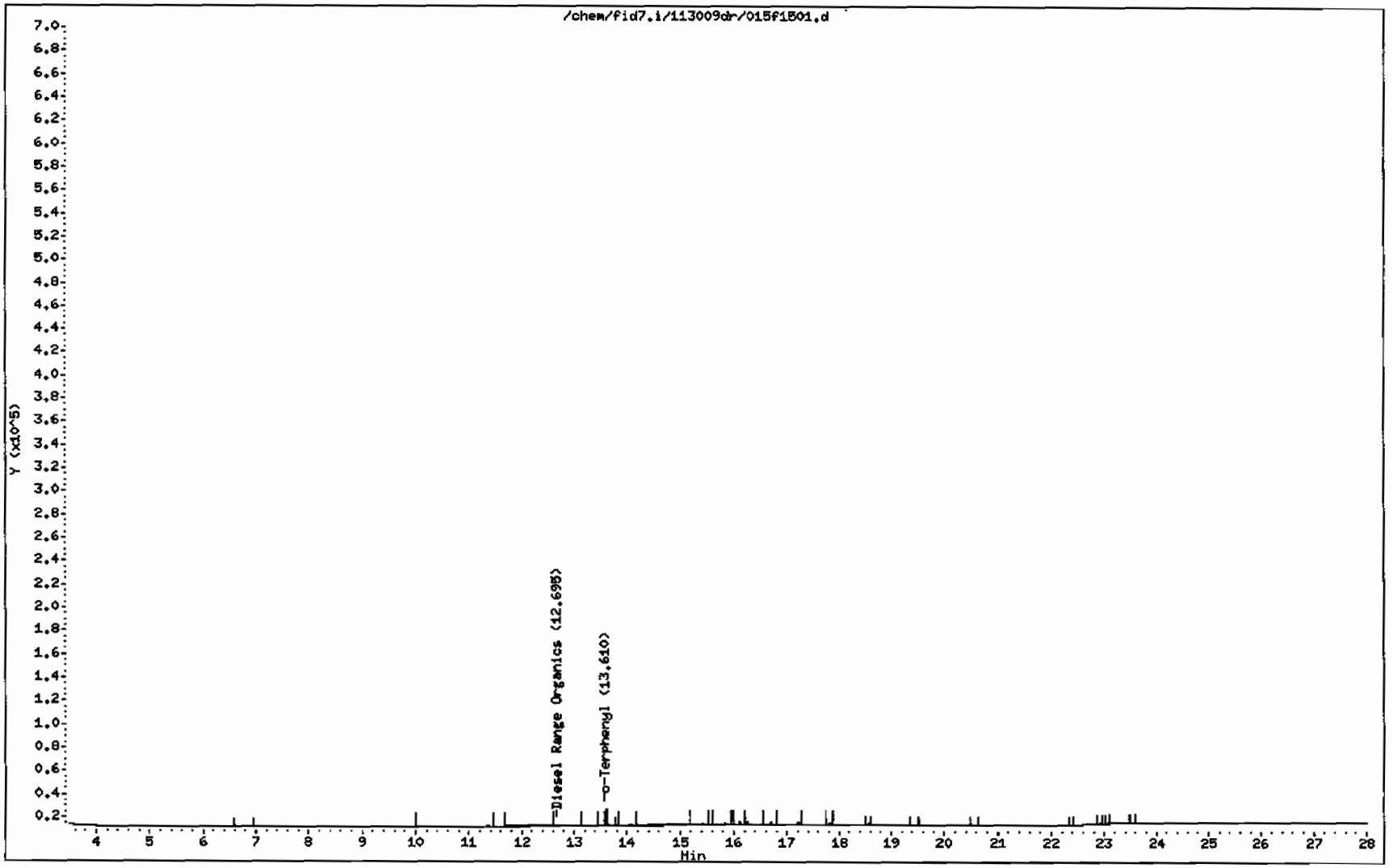

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 19:10	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	016f1601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		8.58	mg/kg	2.58	7.93

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DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/016f1601.d
Lab Smp Id: 241540006 Client Smp ID: RE03-09-13871
Inj Date : 30-NOV-2009 19:10
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540006|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weigth of sample extracted (g)
M	16.18000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			3065797	216.310	8.6	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.612	13.616	-0.004	307603	12.2525	0.48	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/016f1601.d
Date : 30-NOV-2009 19:10
Client ID: RE03-09-13871
Sample Info: |2415400061|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

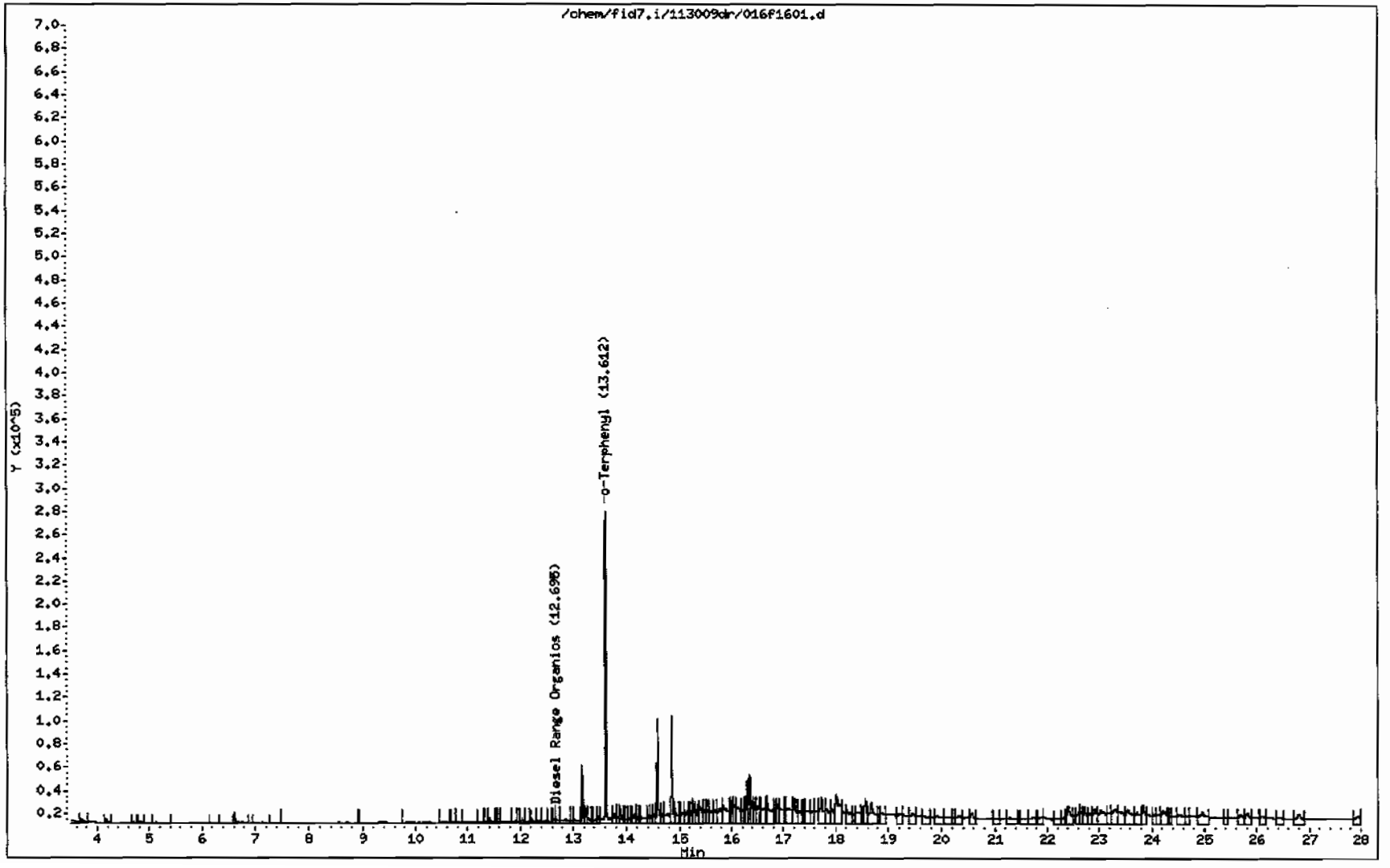

Data File: /chem/fid7.i/113009dr/016f1601.d
Injection Date: 30-NOV-2009 19:10
Instrument: fid7.i
Client Sample ID: RE03-09-13871

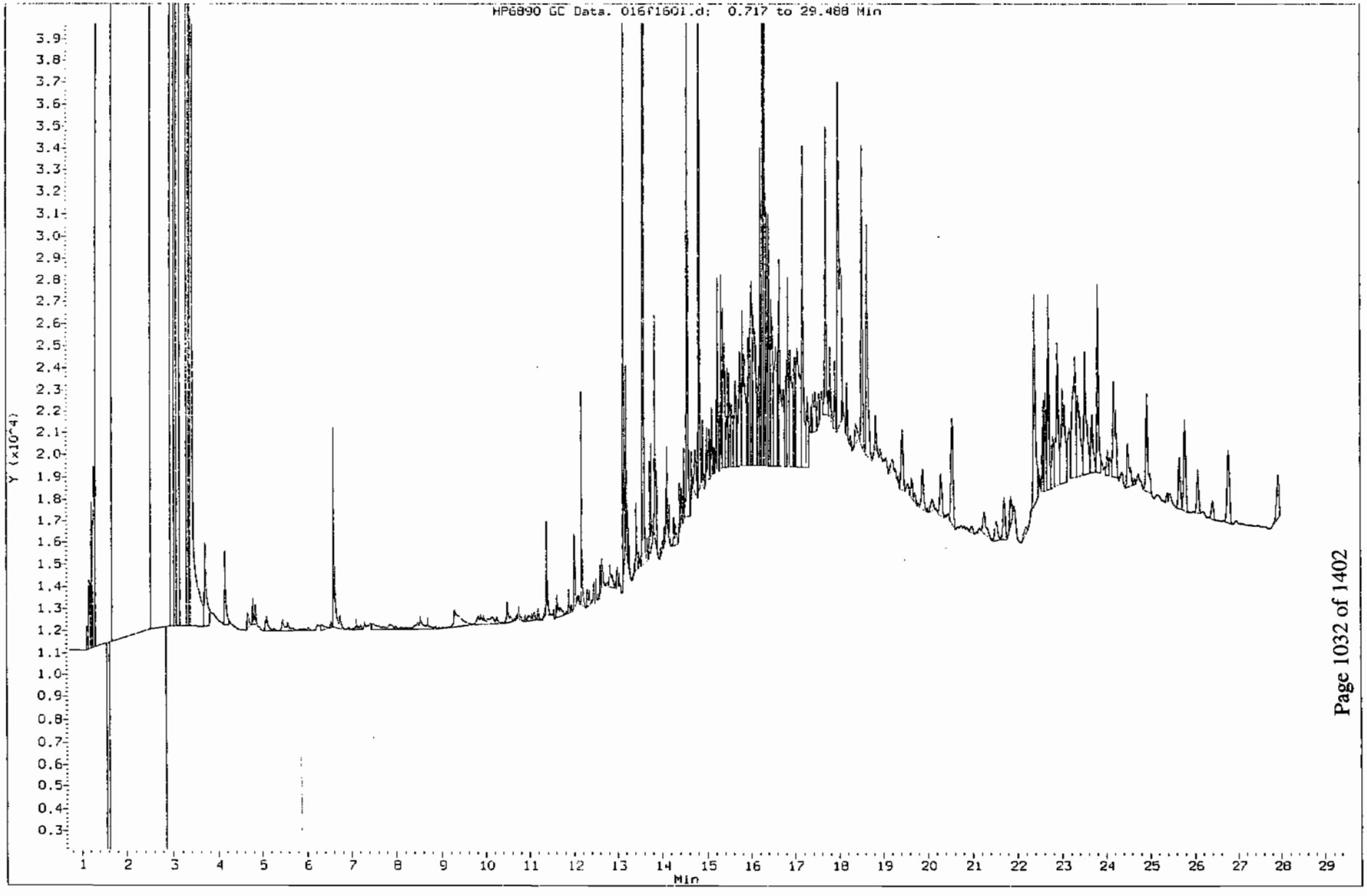

Data File: /chem/fid7.i/113009dr/016f1601.d
Injection Date: 30-NOV-2009 19:10
Instrument: fid7.i
Client Sample ID: RE03-09-13871

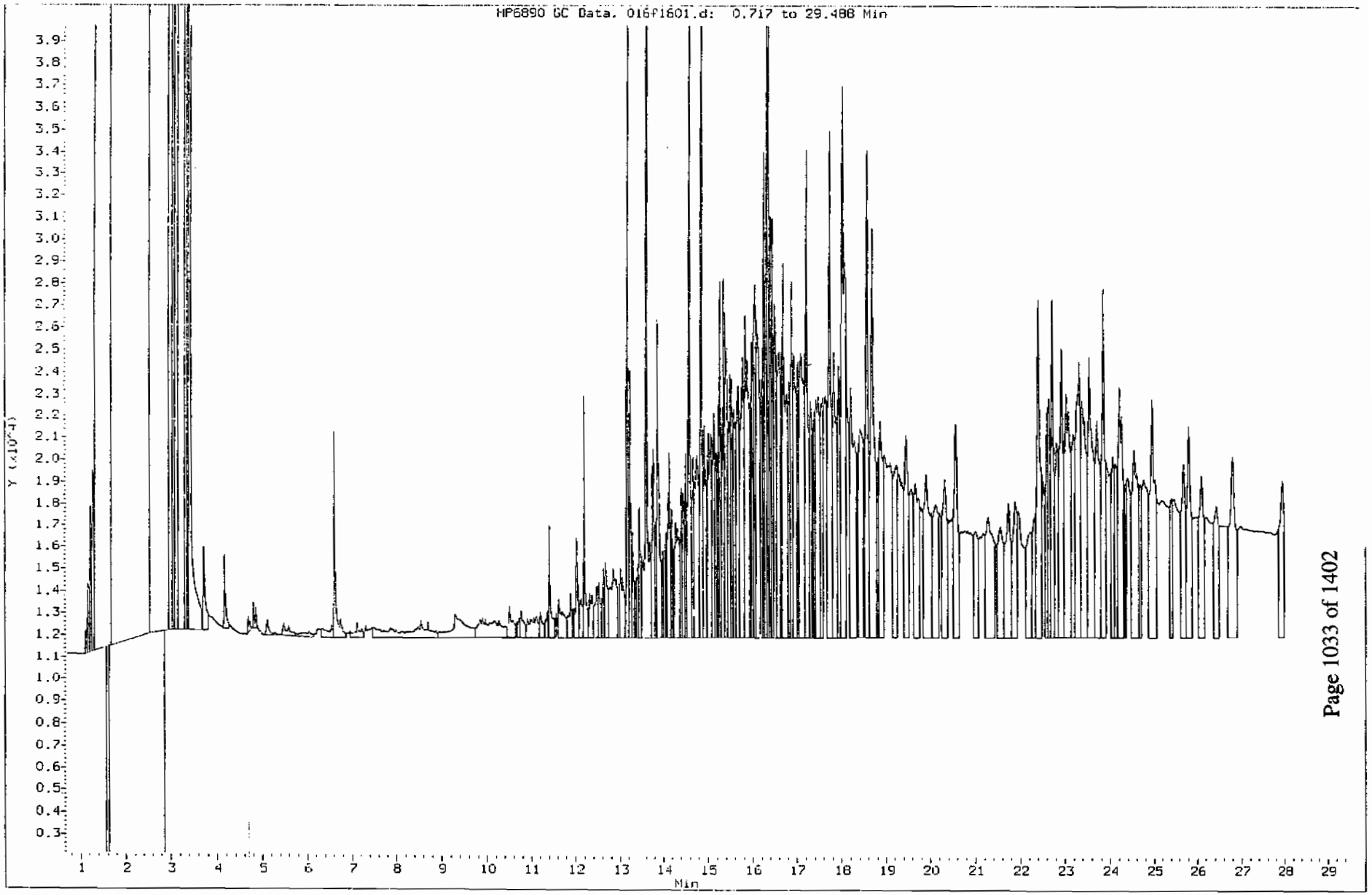

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540007	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13877	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 19:47	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	017f1701.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		13.7	mg/kg	2.40	7.39

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/017f1701.d
Lab Smp Id: 241540007 Client Smp ID: RE03-09-13877
Inj Date : 30-NOV-2009 19:47
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540007|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weigth of sample extracted (g)
M	10.30460	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			5251310	370.512	13.7	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.611	13.616	-0.005	308719	12.2969	0.45	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/017f1701.d
Date : 30-NOV-2009 19:47
Client ID: RE03-09-13877
Sample Info: |241540007|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

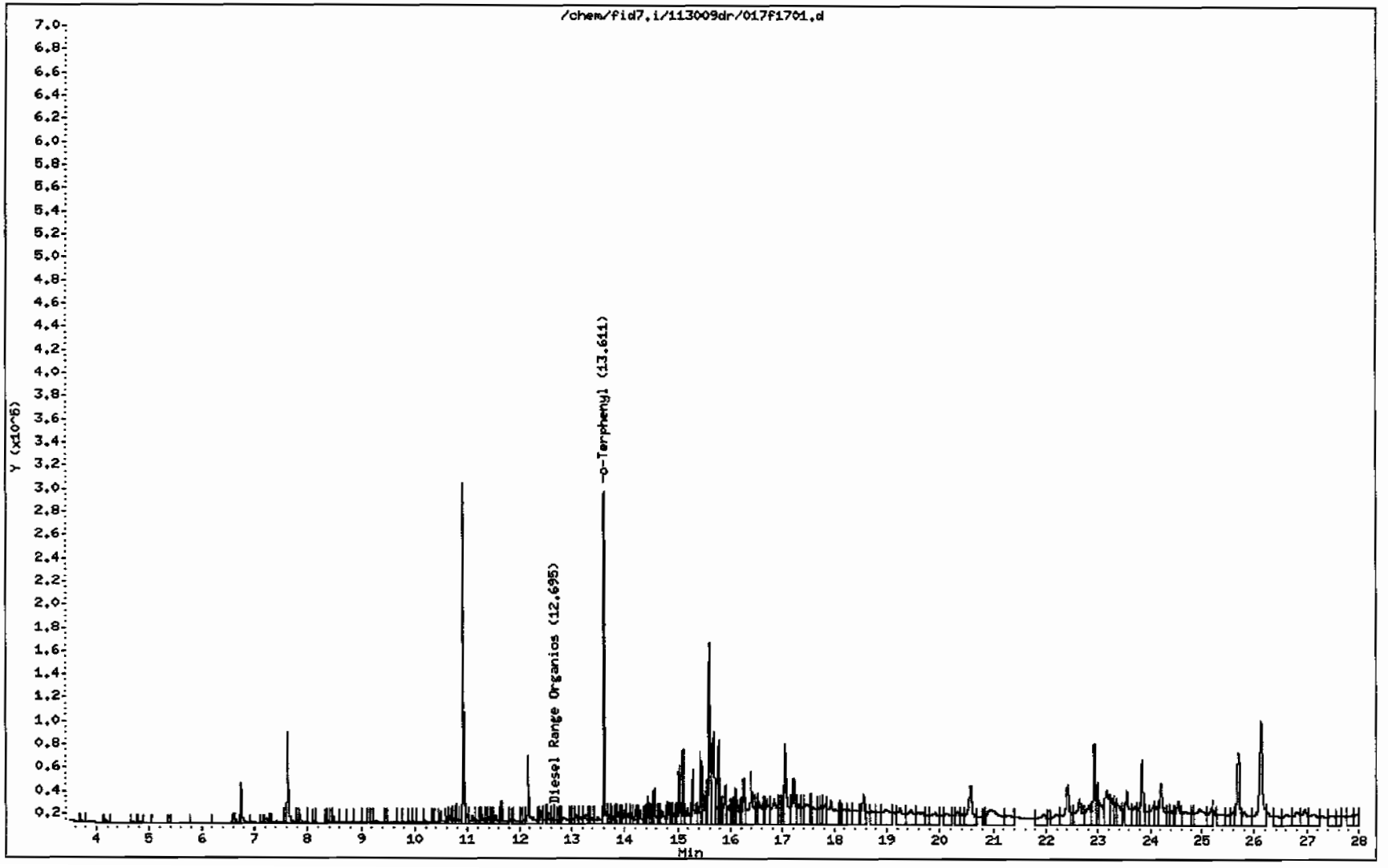

Data File: /chem/fid7.i/113009dr/017f1701.d
Injection Date: 30-NOV-2009 19:47
Instrument: fid7.i
Client Sample ID: RE03-09-13877

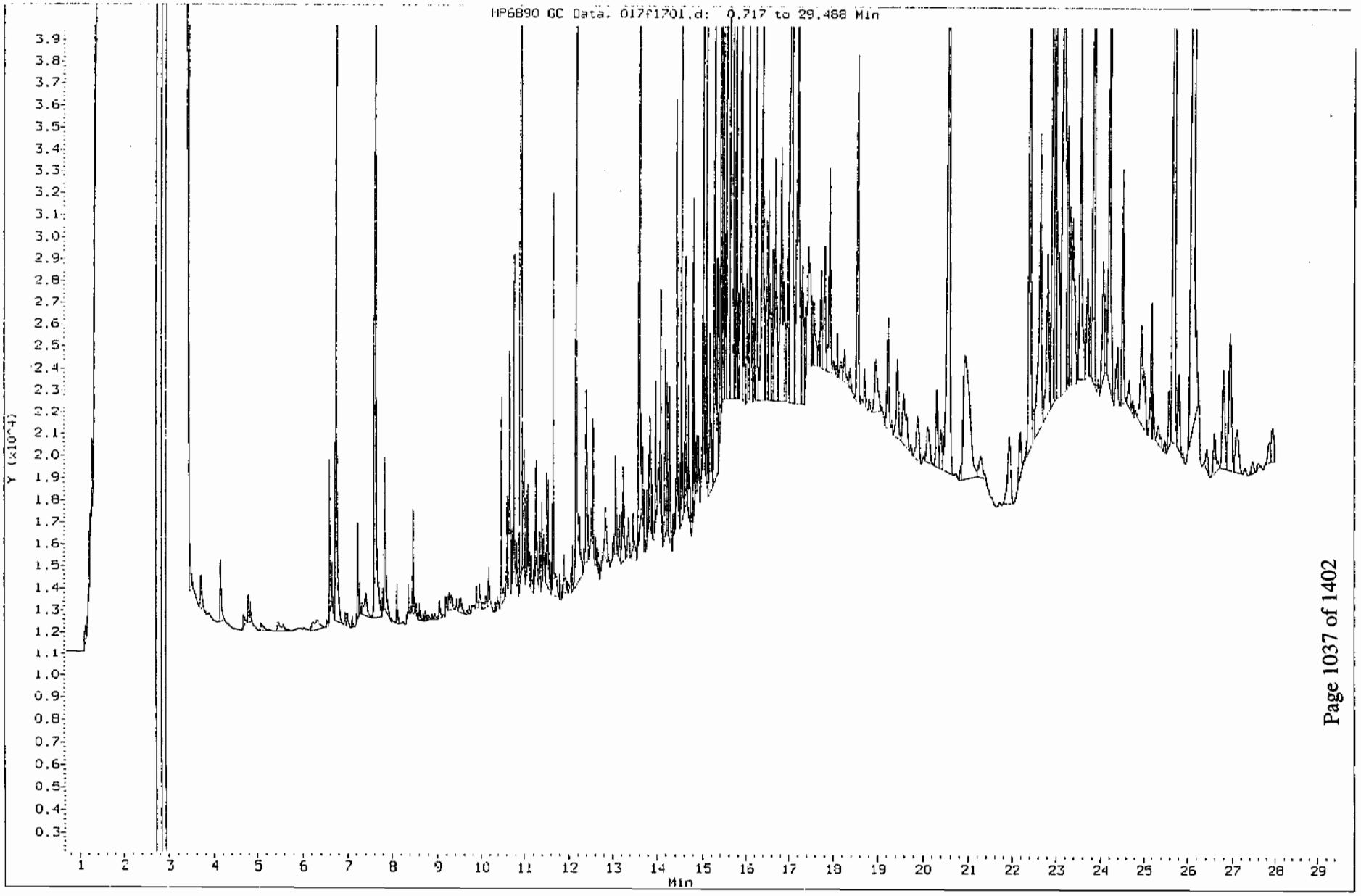

Data File: /chem/fid7.i/113009dr/017f1701.d
Injection Date: 30-NOV-2009 19:47
Instrument: fid7.i
Client Sample ID: RE03-09-13877

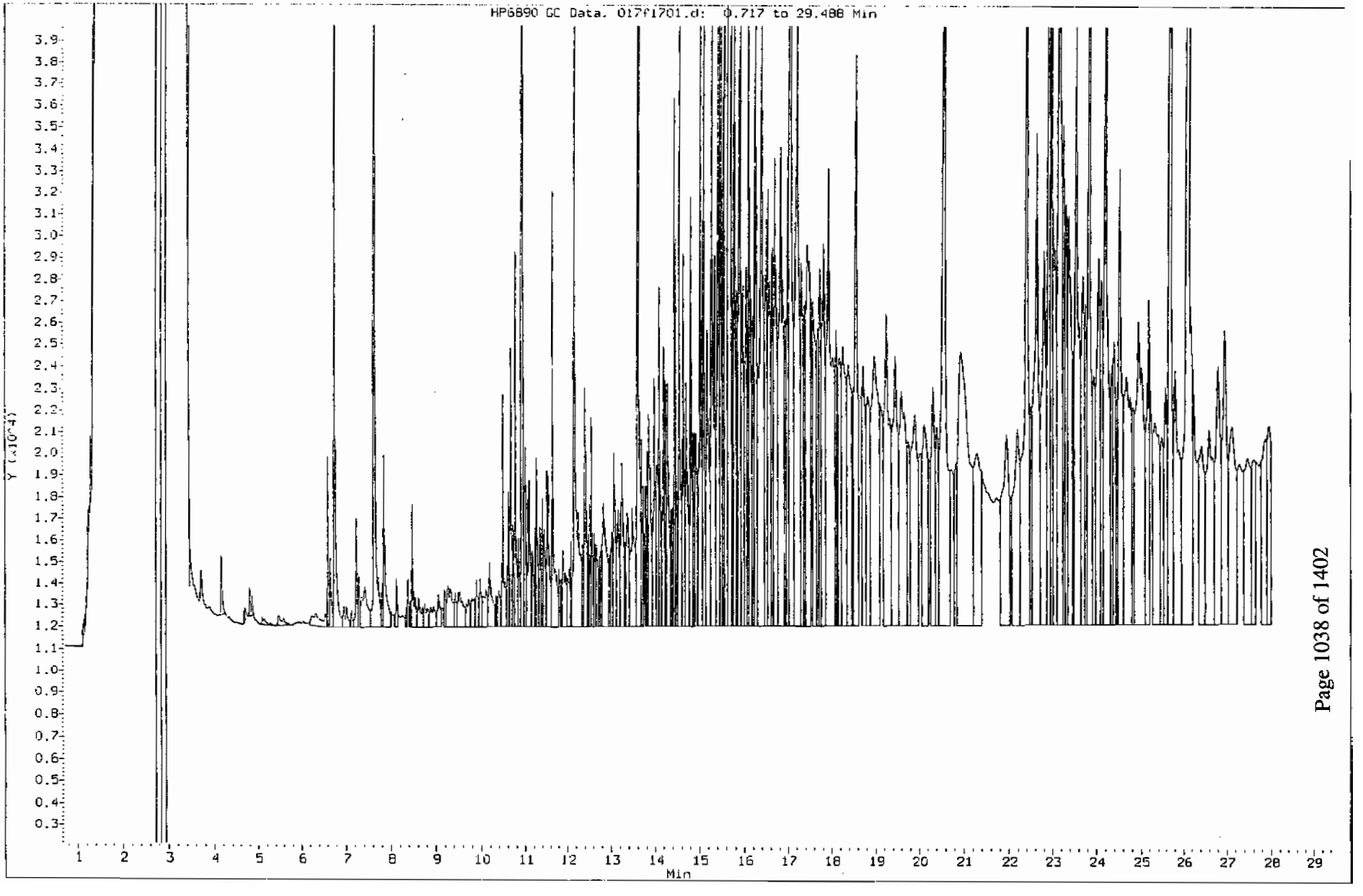

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540008	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13869	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 20:23	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	018f1801.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	8.01	mg/kg	2.60	8.01

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/018f1801.d
Lab Smp Id: 241540008 Client Smp ID: RE03-09-13869
Inj Date : 30-NOV-2009 20:23
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540008|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weigth of sample extracted (g)
M	16.75080	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.611	13.616	-0.005	241954	9.63756	0.38

Data File: /chem/fid7.i/113009dr/018f1801.d
Date : 30-NOV-2009 20:23
Client ID: RE03-09-13869
Sample Info: |241540008|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

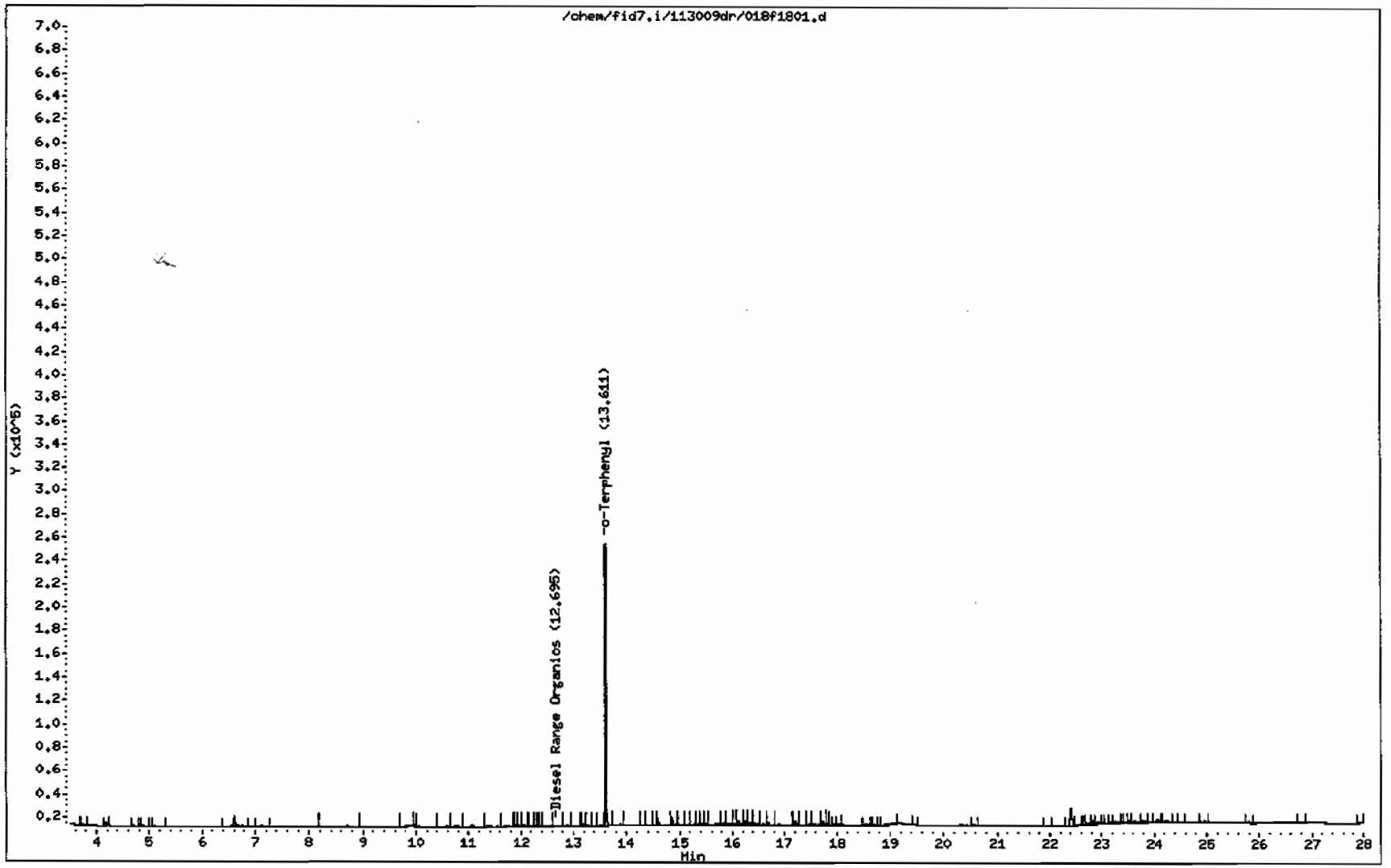

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13870	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 21:00	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	019f1901.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		89.8	mg/kg	2.51	7.71

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/019f1901.d
Lab Smp Id: 241540009 Client Smp ID: RE03-09-13870
Inj Date : 30-NOV-2009 21:00
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540009|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weigth of sample extracted (g)
M	13.73130	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			33015465	2329.44	89.8	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.615	13.616	-0.001	415585	16.5536	0.64	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/019f1901.d
Date : 30-NOV-2009 21:00
Client ID: RE03-09-13870
Sample Info: |241540009|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

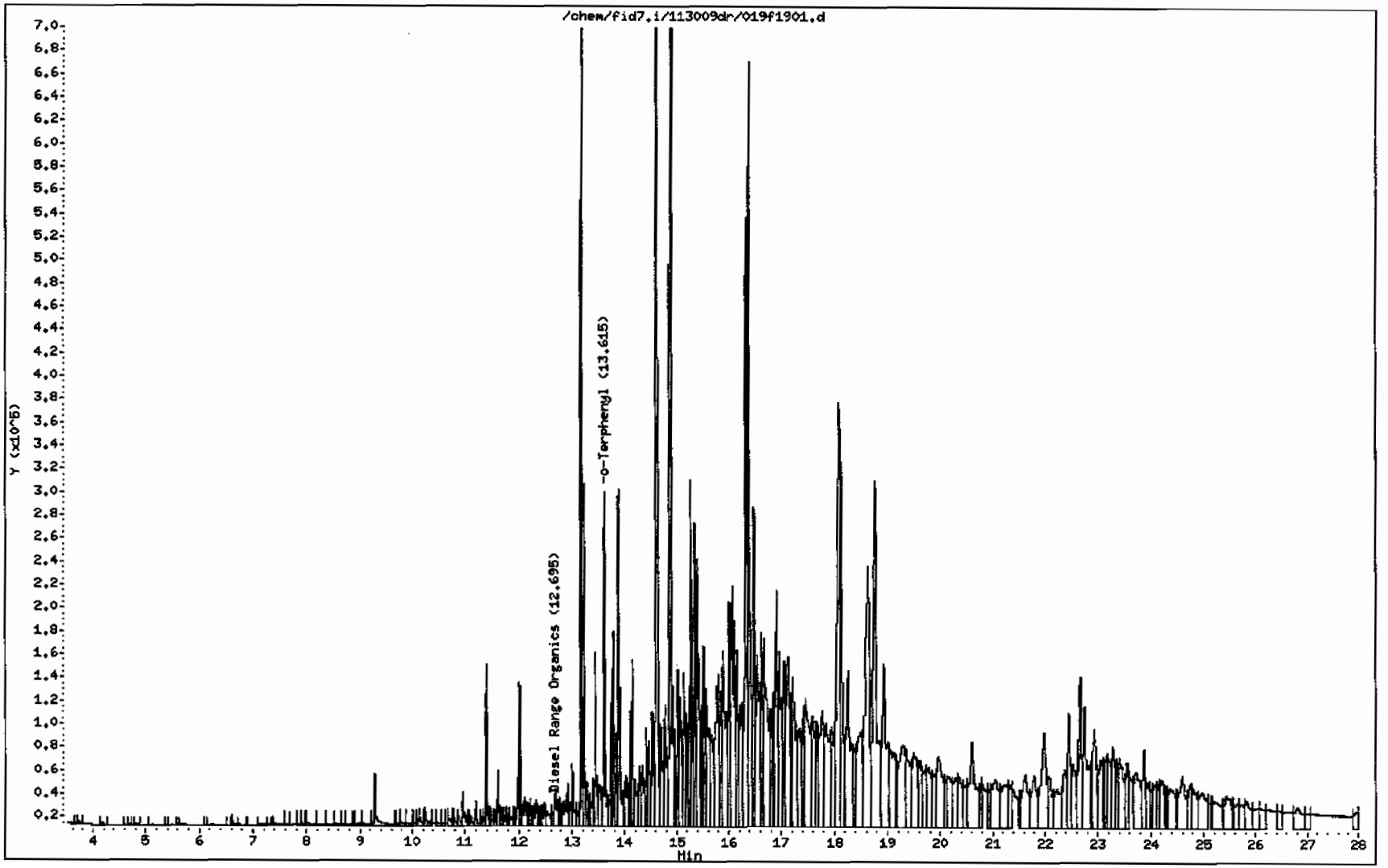

Data File: /chem/fid7.i/113009dr/019f1901.d
Injection Date: 30-NOV-2009 21:00
Instrument: fid7.i
Client Sample ID: RE03-09-13870

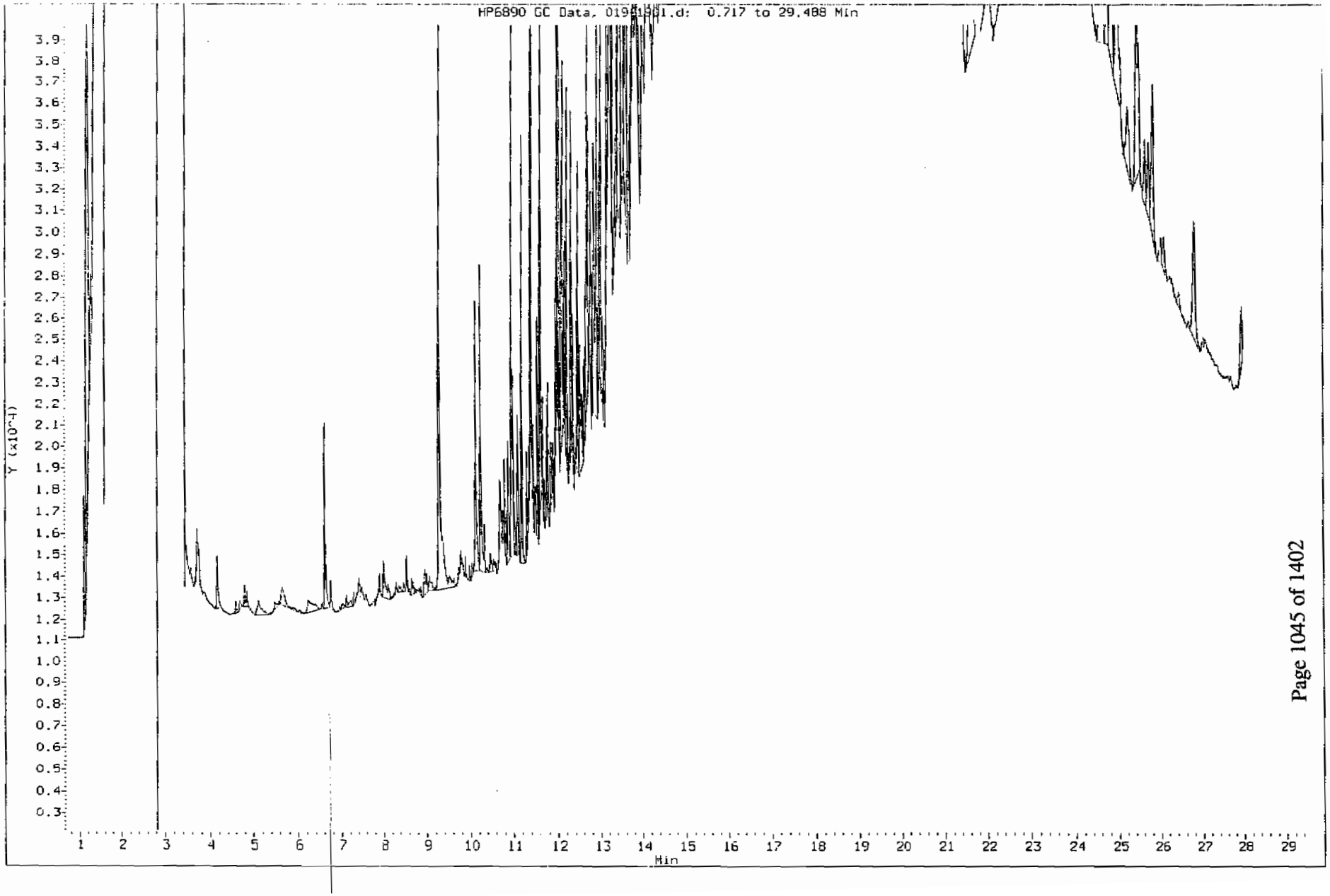

Data File: /chem/fid7.i/113009dr/019f1901.d
Injection Date: 30-NOV-2009 21:00
Instrument: fid7.i
Client Sample ID: RE03-09-13870

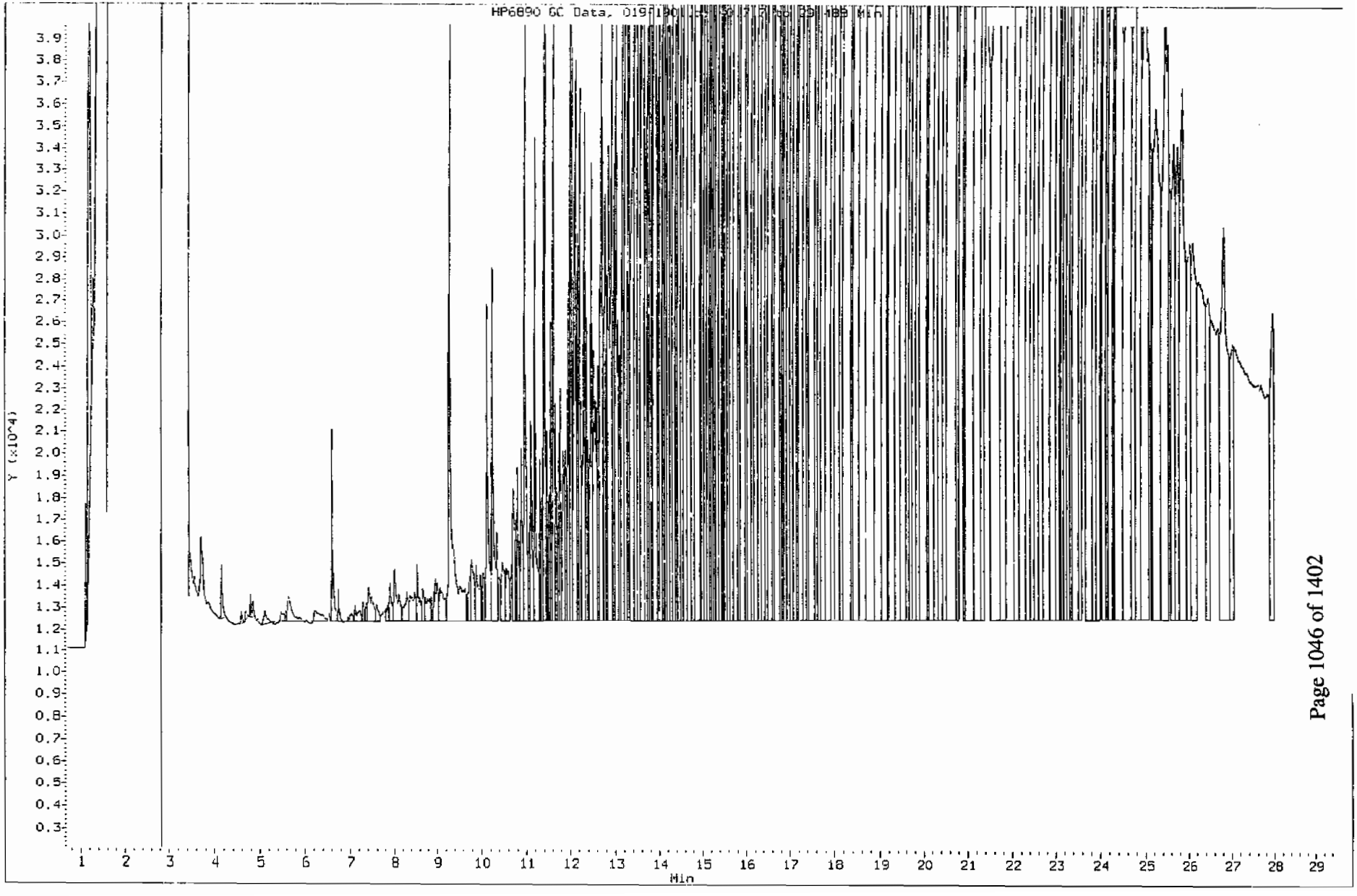

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13873	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 21:37	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	020f2001.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		24.5	mg/kg	2.38	7.31

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/020f2001.d
Lab Smp Id: 241540010 Client Smp ID: RE03-09-13873
Inj Date : 30-NOV-2009 21:37
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540010|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	8.88620	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			9486061	669.299	24.5	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.612	13.616	-0.004	346305	13.7941	0.50	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/020f2001.d

Date : 30-NOV-2009 21:37

Client ID: RE03-09-13873

Sample Info: |241540010|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

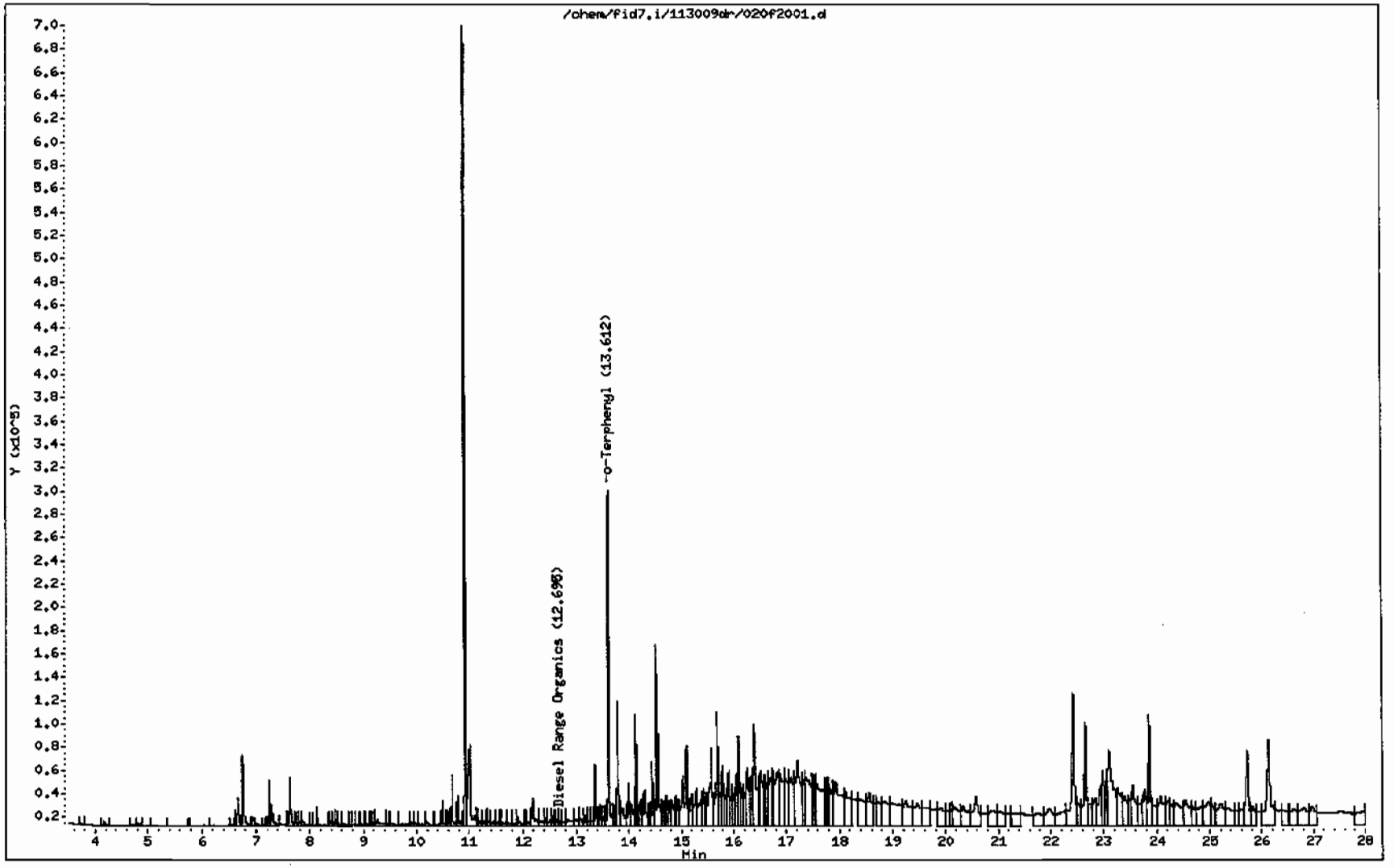

Data File: /chem/fid7.i/113009dr/020f2001.d
Injection Date: 30-NOV-2009 21:37
Instrument: fid7.i
Client Sample ID: RE03-09-13873

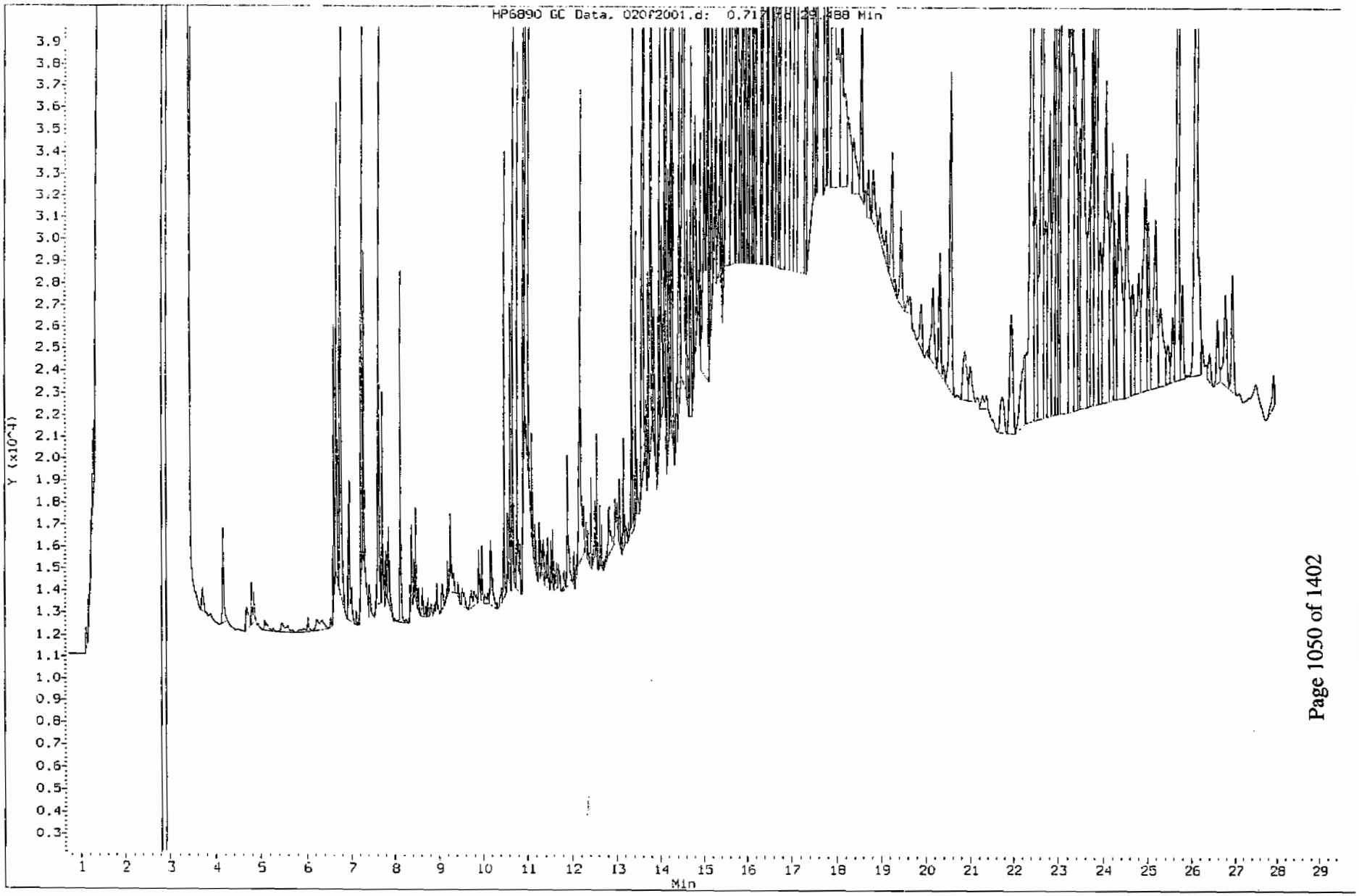

Data File: /chem/fid7.i/113009dr/020f2001.d
Injection Date: 30-NOV-2009 21:37
Instrument: fid7.i
Client Sample ID: RE03-09-13873

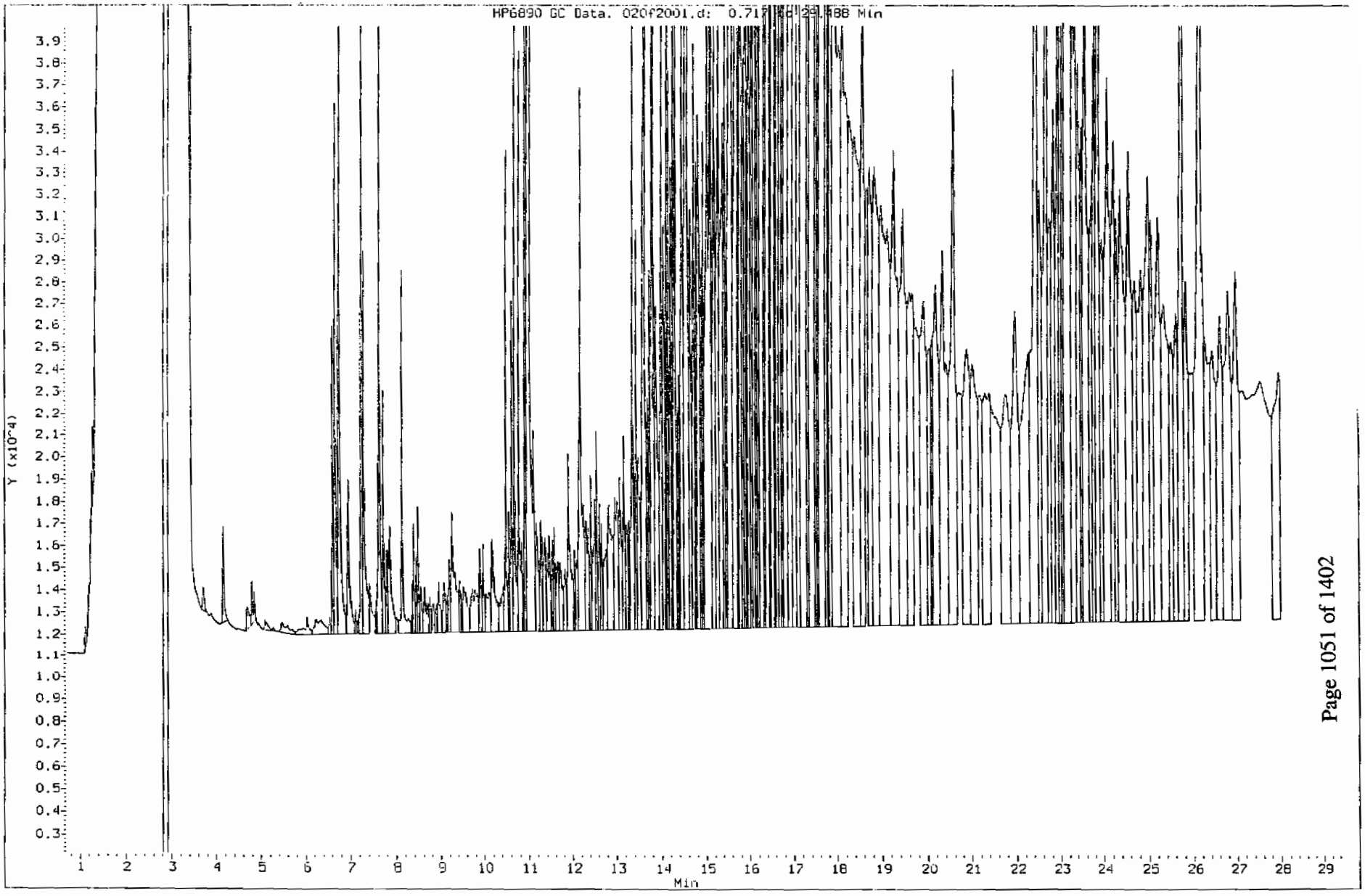

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13863	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 22:14	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	021f2101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.21	mg/kg	2.37	7.29

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/021f2101.d
Lab Smp Id: 241540011 Client Smp ID: RE03-09-13863
Inj Date : 30-NOV-2009 22:14
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540011|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	8.62330	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1249314	88.1467	3.2	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.611	13.616	-0.005	278488	11.0928	0.40	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/021f2101.d
Date : 30-NOV-2009 22:14
Client ID: RE03-09-13863
Sample Info: |241540011|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

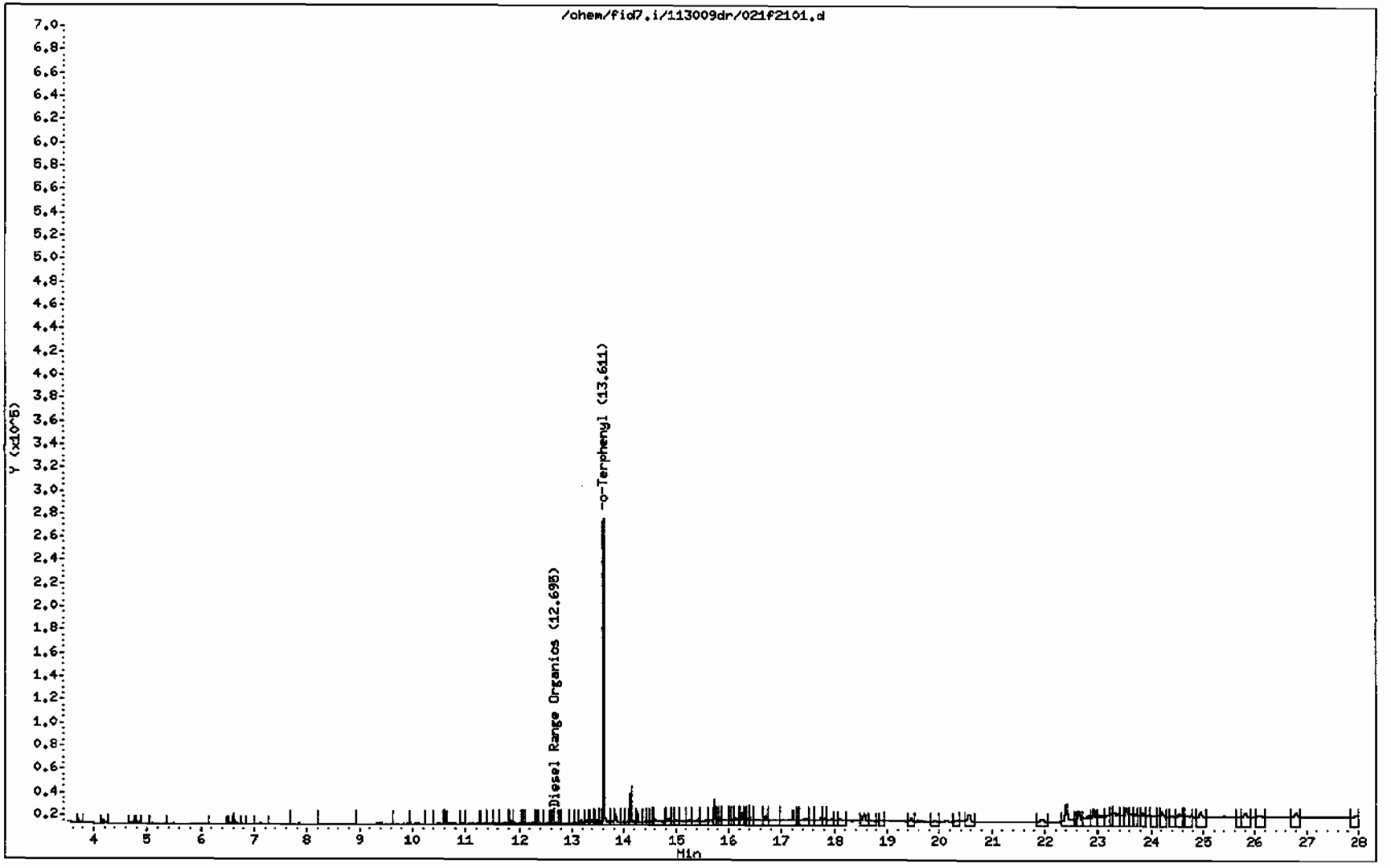

Data File: /chem/fid7.i/113009dr/021f2101.d
Injection Date: 30-NOV-2009 22:14
Instrument: fid7.i
Client Sample ID: RE03-09-13863

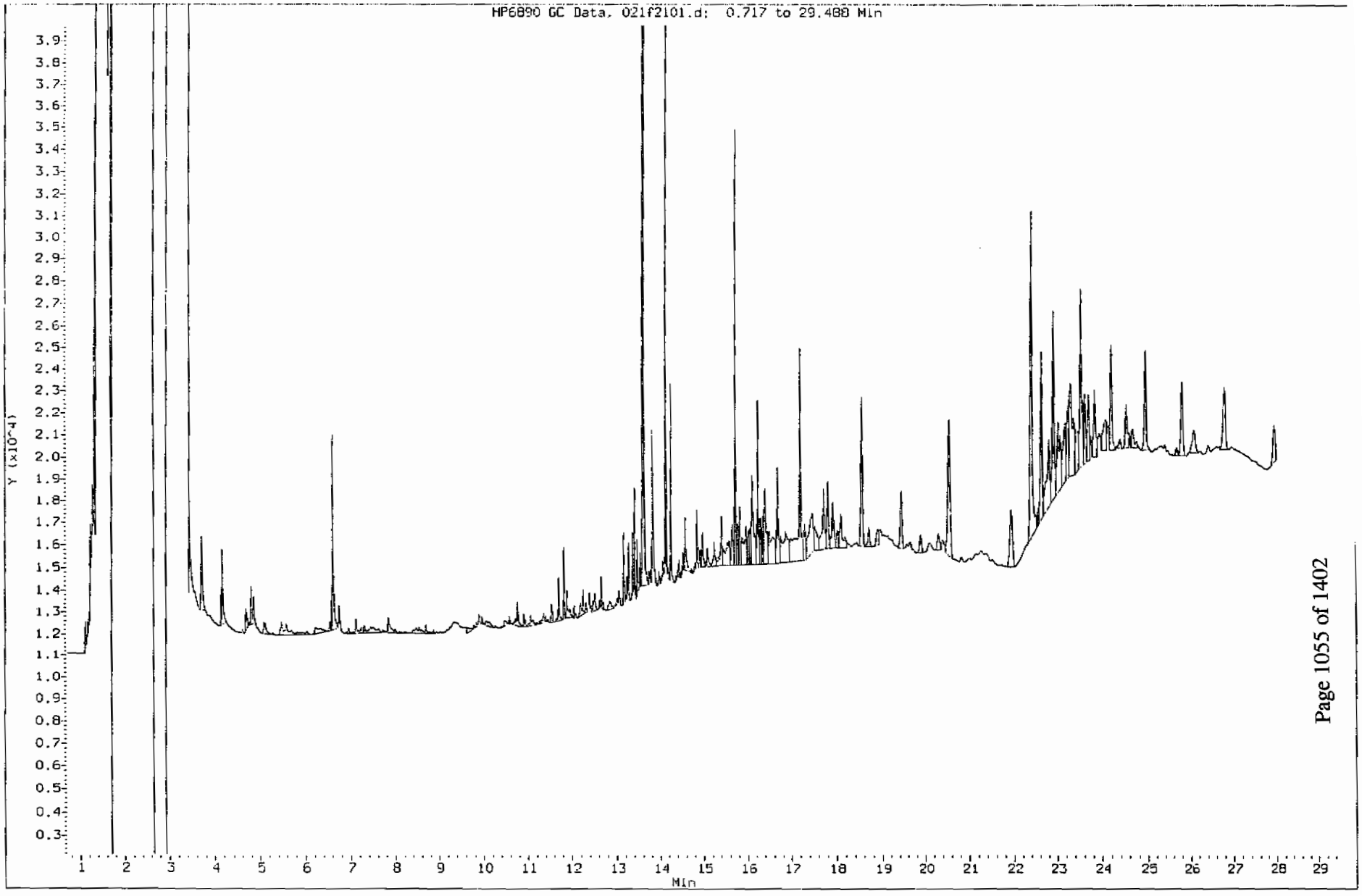

Data File: /chem/fid7.i/113009dr/021f2101.d
Injection Date: 30-NOV-2009 22:14
Instrument: fid7.i
Client Sample ID: RE03-09-13863

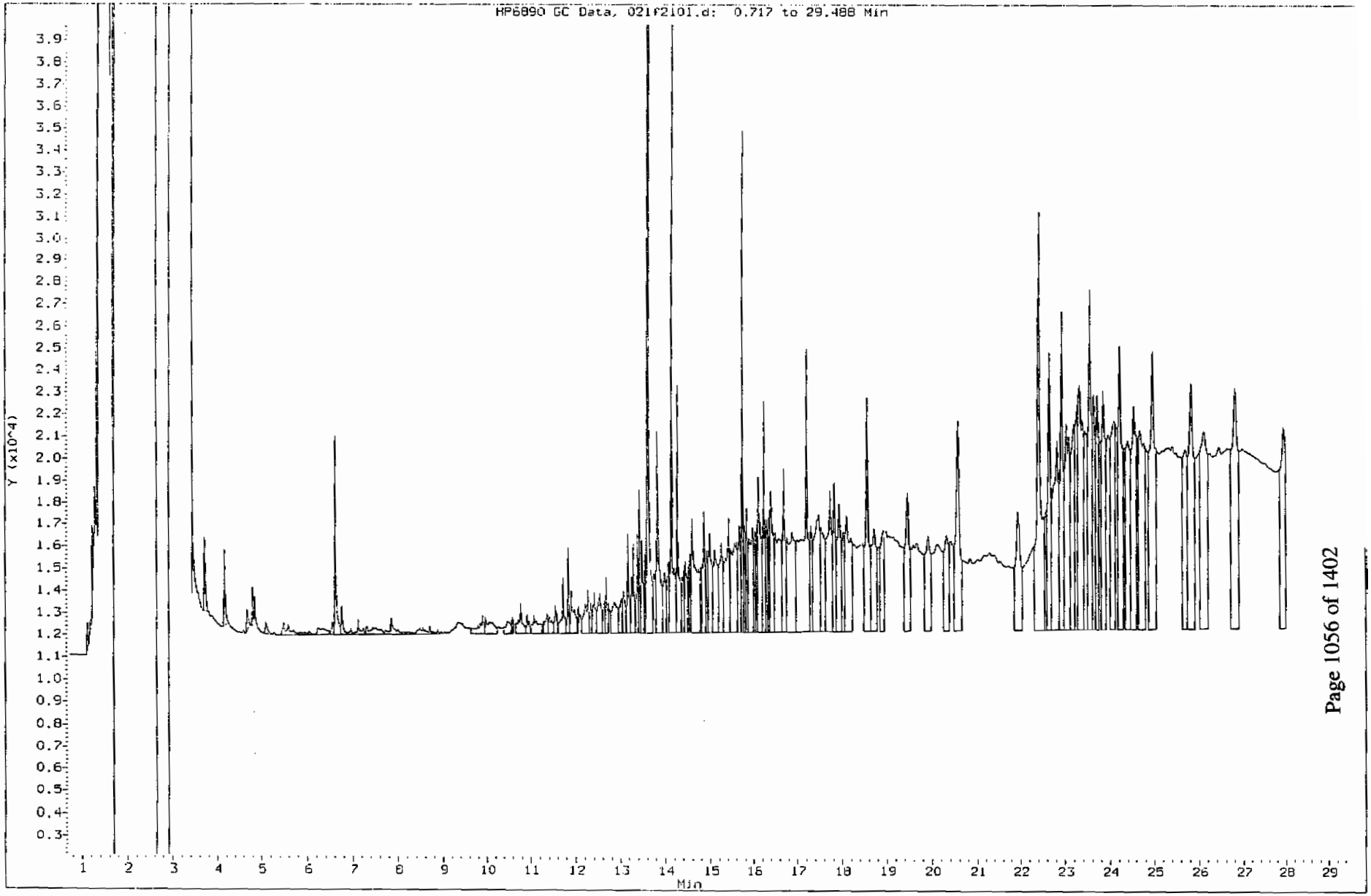

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13874	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/01/2009 00:05	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	024f2401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.06	mg/kg	2.32	7.15

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DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/024f2401.d
Lab Smp Id: 241540012 Client Smp ID: RE03-09-13874
Inj Date : 01-DEC-2009 00:05
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540012|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weigth of sample extracted (g)
M	7.16130	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			1211317	85.4658	3.0	(a)
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.611	13.616	-0.005	280011	11.1535	0.40	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/024f2401.d
Date : 01-DEC-2009 00:05
Client ID: RE03-09-13874
Sample Info: !241540012!1!
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

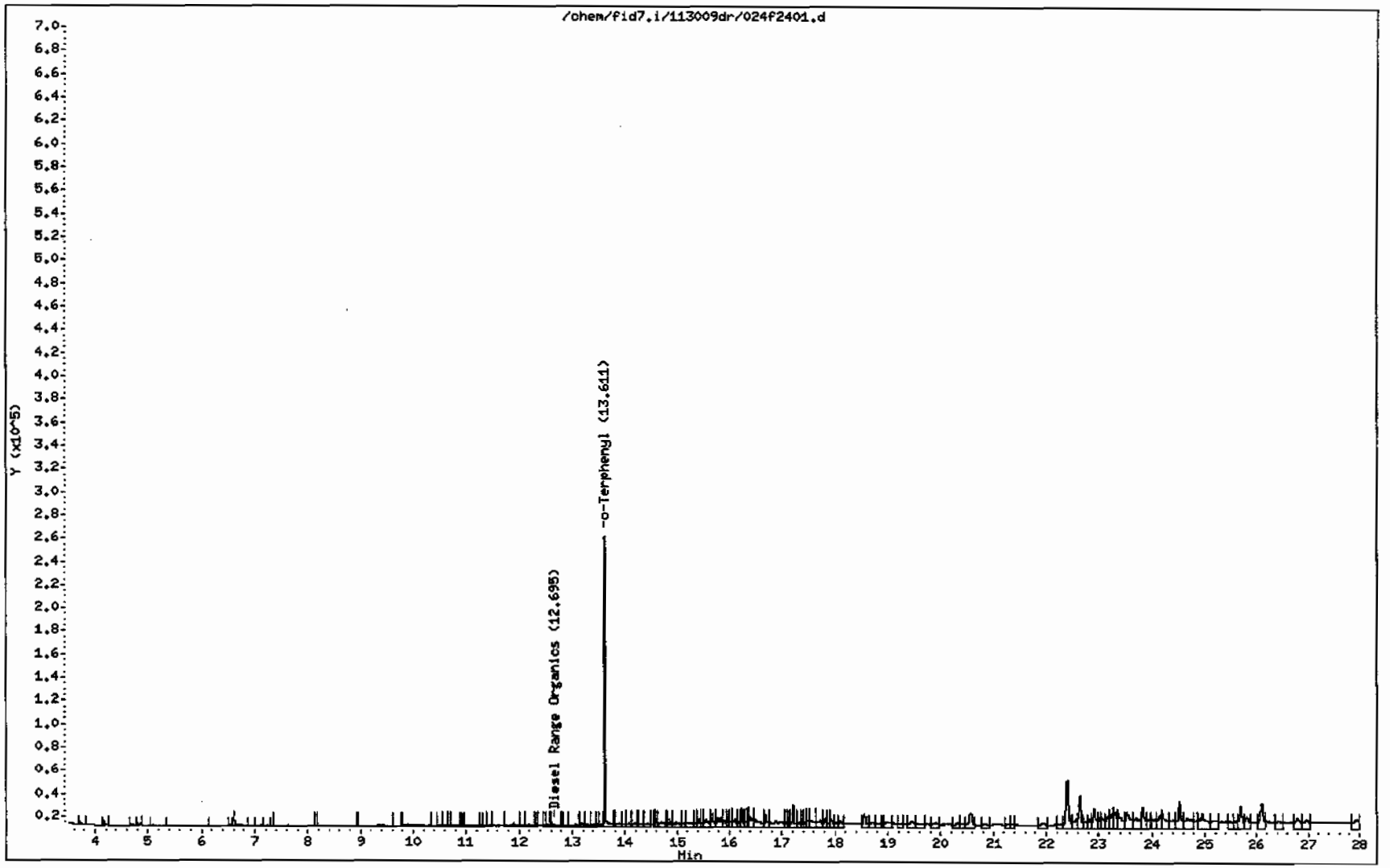

Data File: /chem/fid7.i/113009dr/024f2401.d
Injection Date: 01-DEC-2009 00:05
Instrument: fid7.i
Client Sample ID: RE03-09-13874

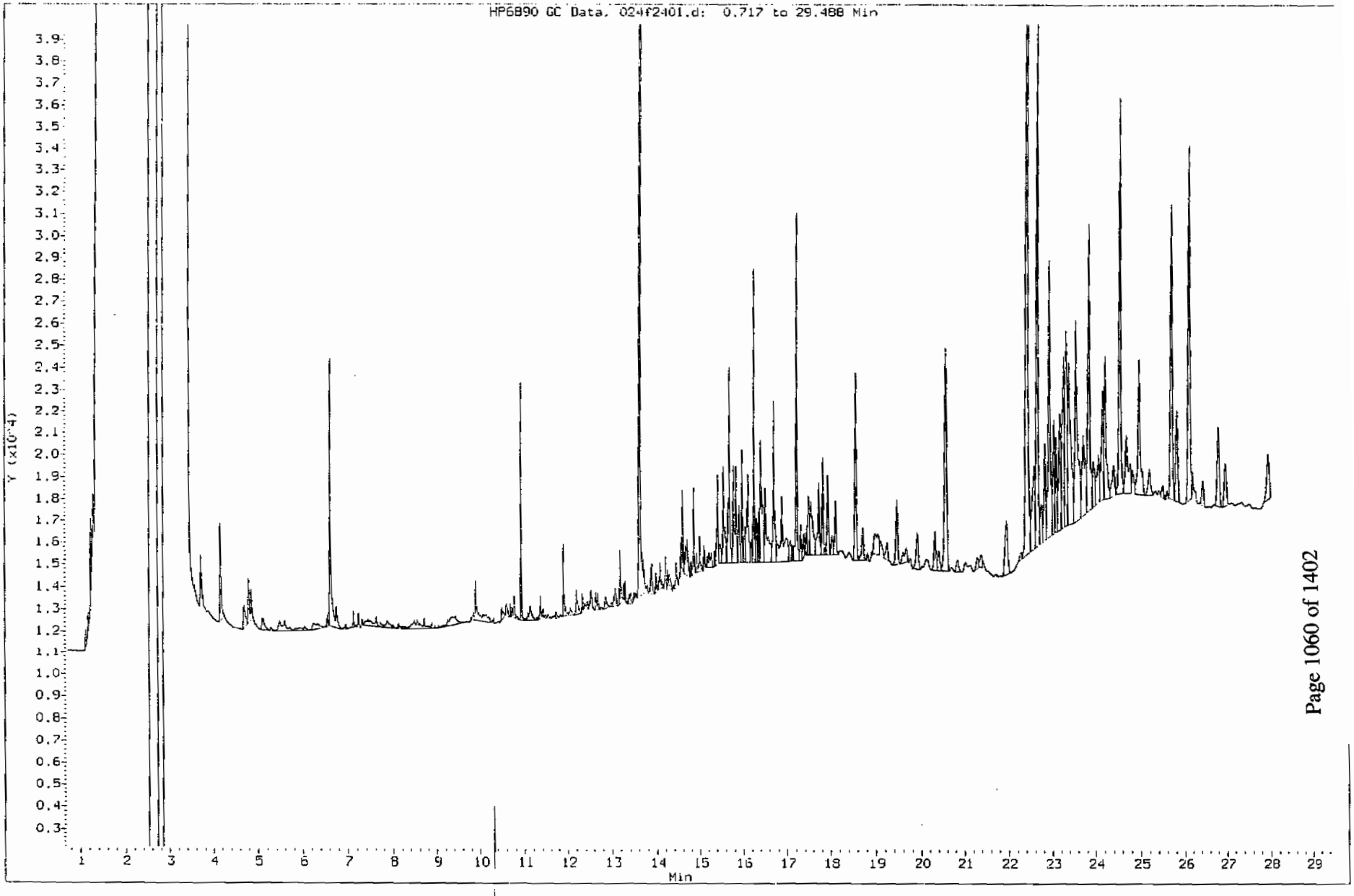

Data File: /chem/fid7.i/113009dr/024f2401.d
Injection Date: 01-DEC-2009 00:05
Instrument: fid7.i
Client Sample ID: RE03-09-13874

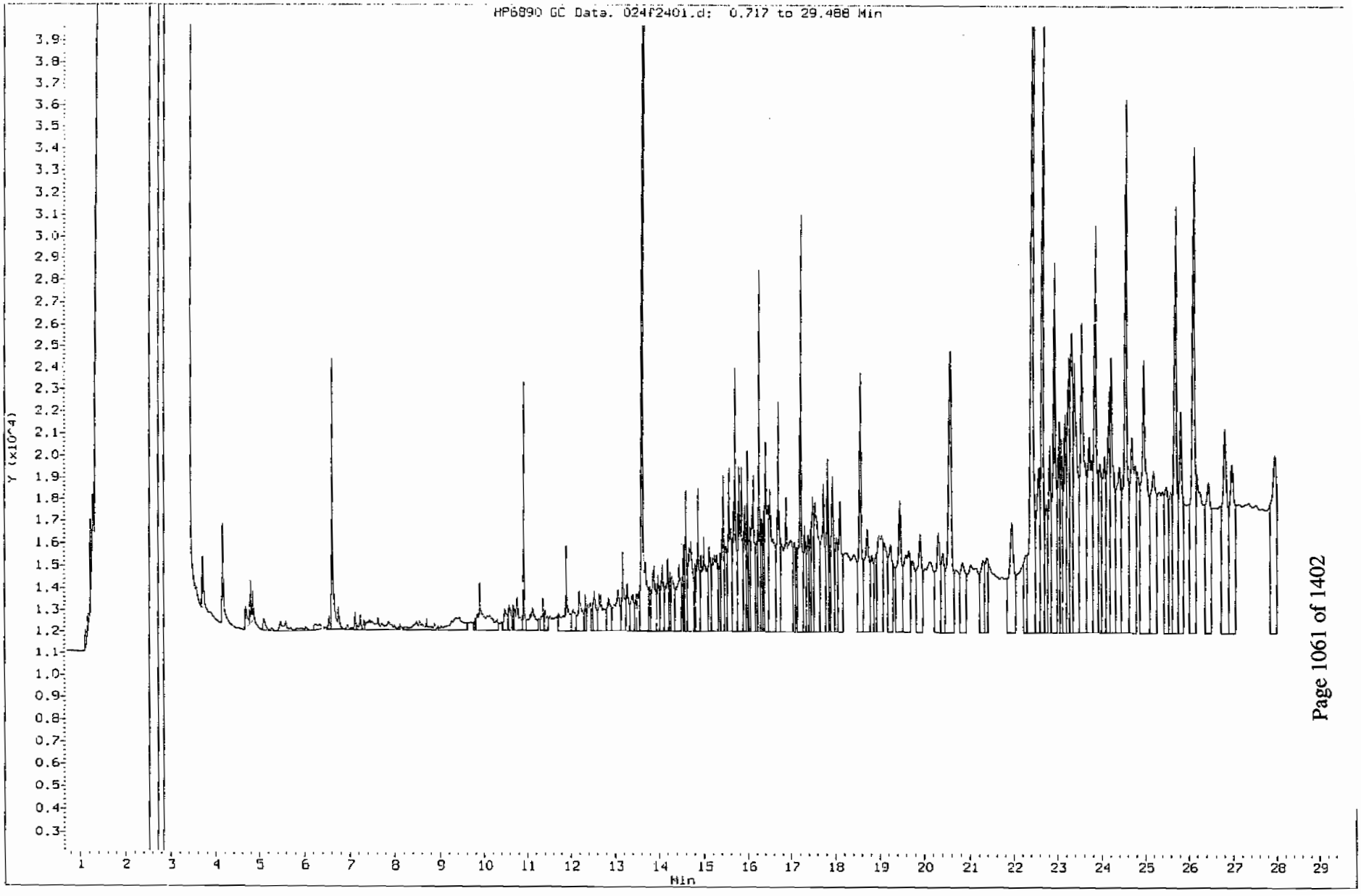

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540013	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13866	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/01/2009 00:42	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	025f2501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		9.32	mg/kg	2.51	7.72

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DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/025f2501.d
Lab Smp Id: 241540013 Client Smp ID: RE03-09-13866
Inj Date : 01-DEC-2009 00:42
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540013|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weigth of sample extracted (g)
M	14.02330	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			3423905	241.577	9.3	
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.611	13.616	-0.005	299413	11.9263	0.46	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/025f2501.d
Date : 01-DEC-2009 00:42
Client ID: RE03-09-13866
Sample Info: |241540013|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

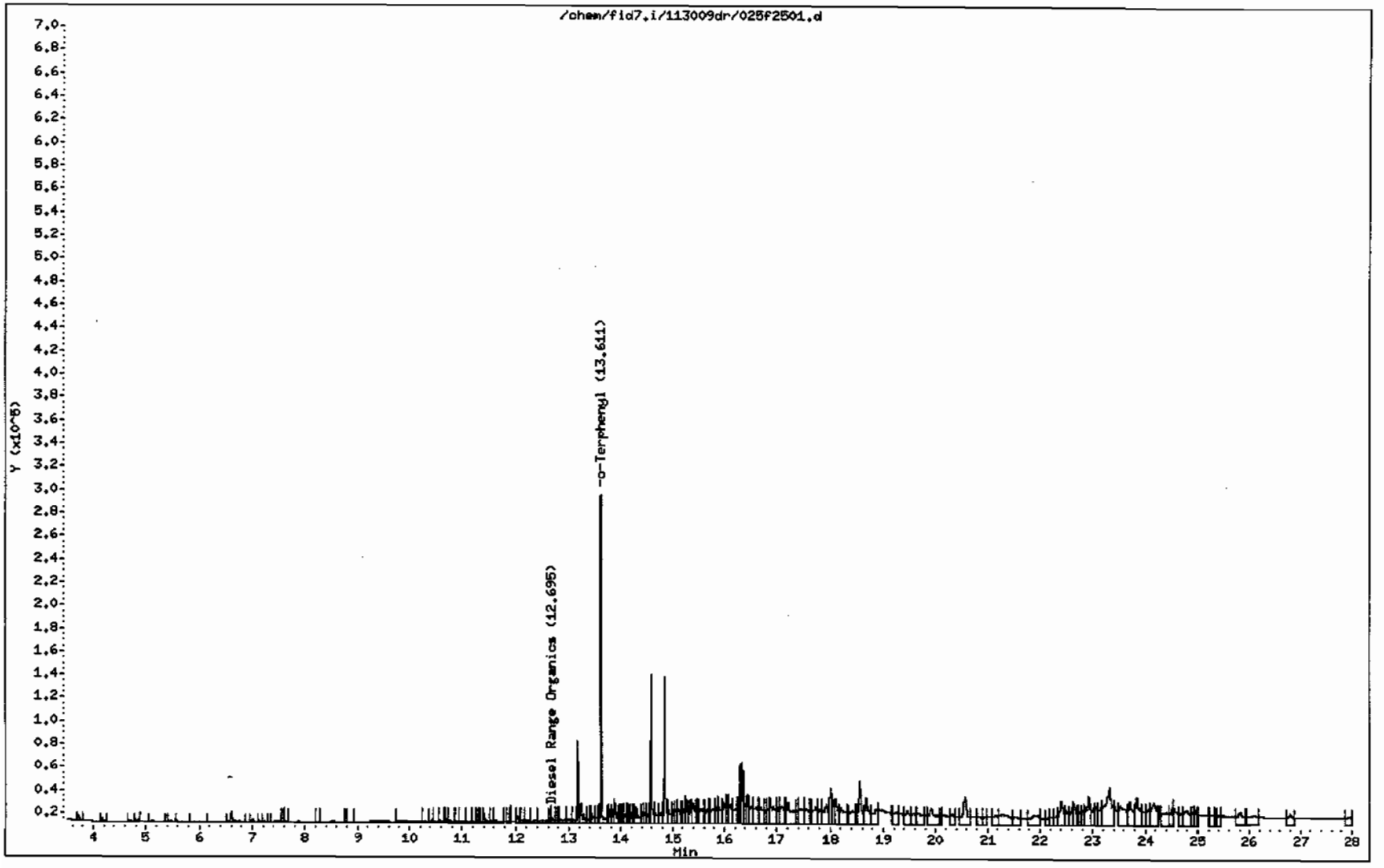

Data File: /chem/fid7.i/113009dr/025f2501.d
Injection Date: 01-DEC-2009 00:42
Instrument: fid7.i
Client Sample ID: RE03-09-13866

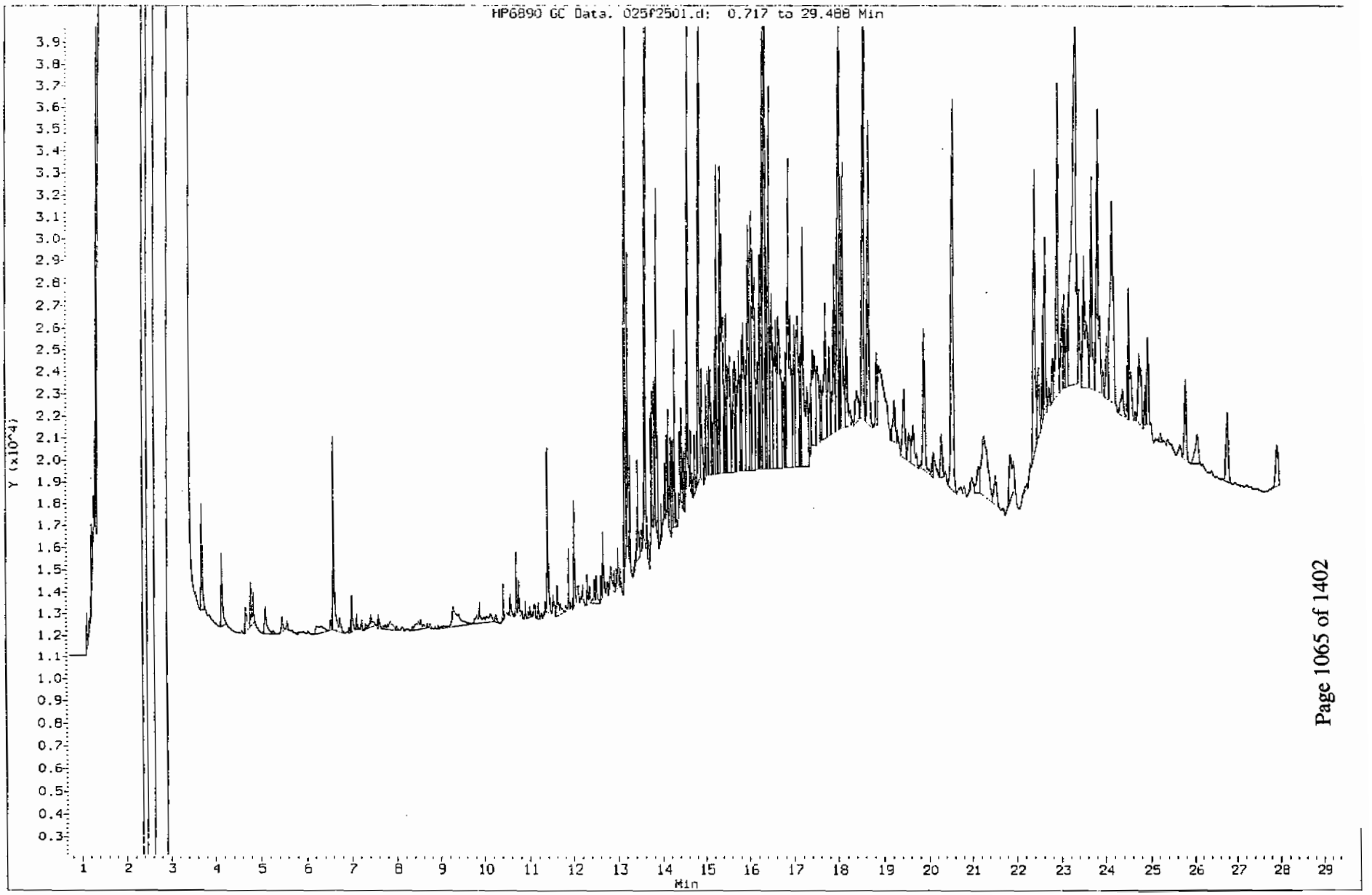

Data File: /chem/fid7.i/113009dr/025f2501.d
Injection Date: 01-DEC-2009 00:42
Instrument: fid7.i
Client Sample ID: RE03-09-13866

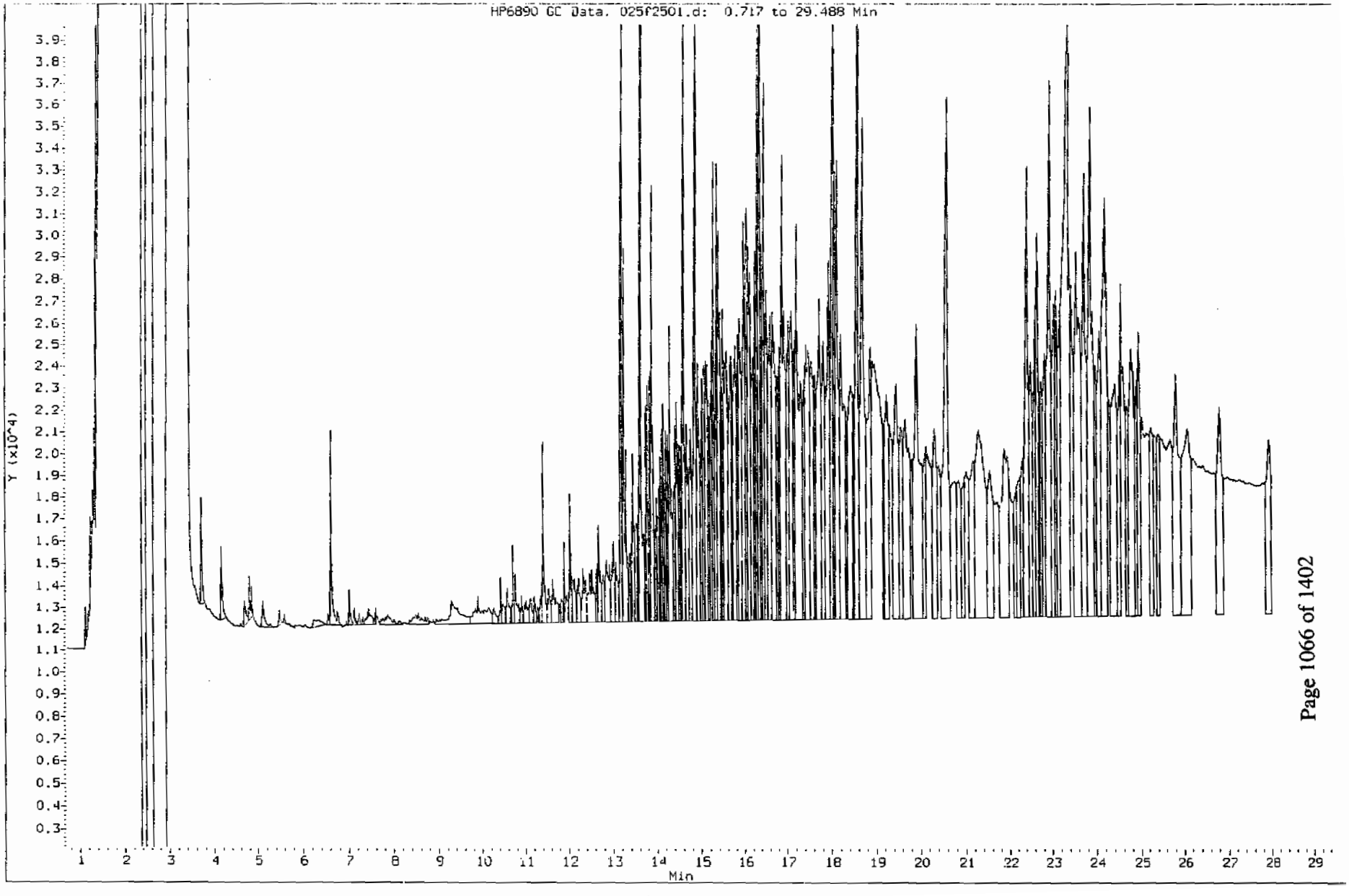

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241540014	Date Received:	11/20/2009 08:50	%Moisture:	13.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-13862	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 01:19	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	026f2601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.39	mg/kg	2.49	7.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/026f2601.d
Lab Smp Id: 241540014 Client Smp ID: RE03-09-13862
Inj Date : 01-DEC-2009 01:19
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540014|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weigth of sample extracted (g)
M	13.14370	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1253183	88.4197	3.4	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.611	13.616	-0.005	284361	11.3267	0.43	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/026f2601.d

Date : 01-DEC-2009 01:19

Client ID: RE03-09-13862

Sample Info: |241540014|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

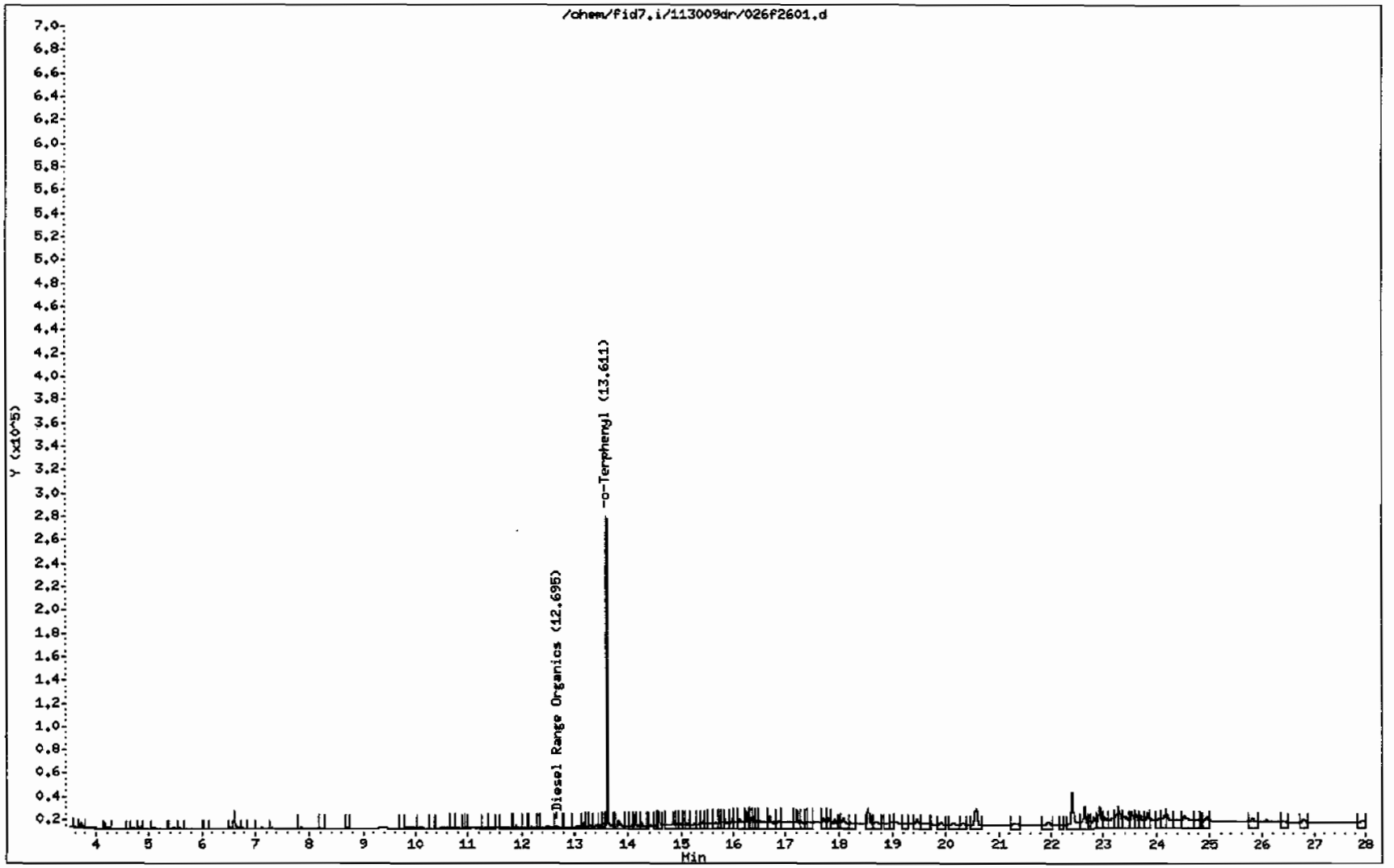

Before KTM 12/9/09

Data File: /chem/fid7.i/113009dr/026f2601.d
Injection Date: 01-DEC-2009 01:19
Instrument: fid7.i
Client Sample ID: RE03-09-13862

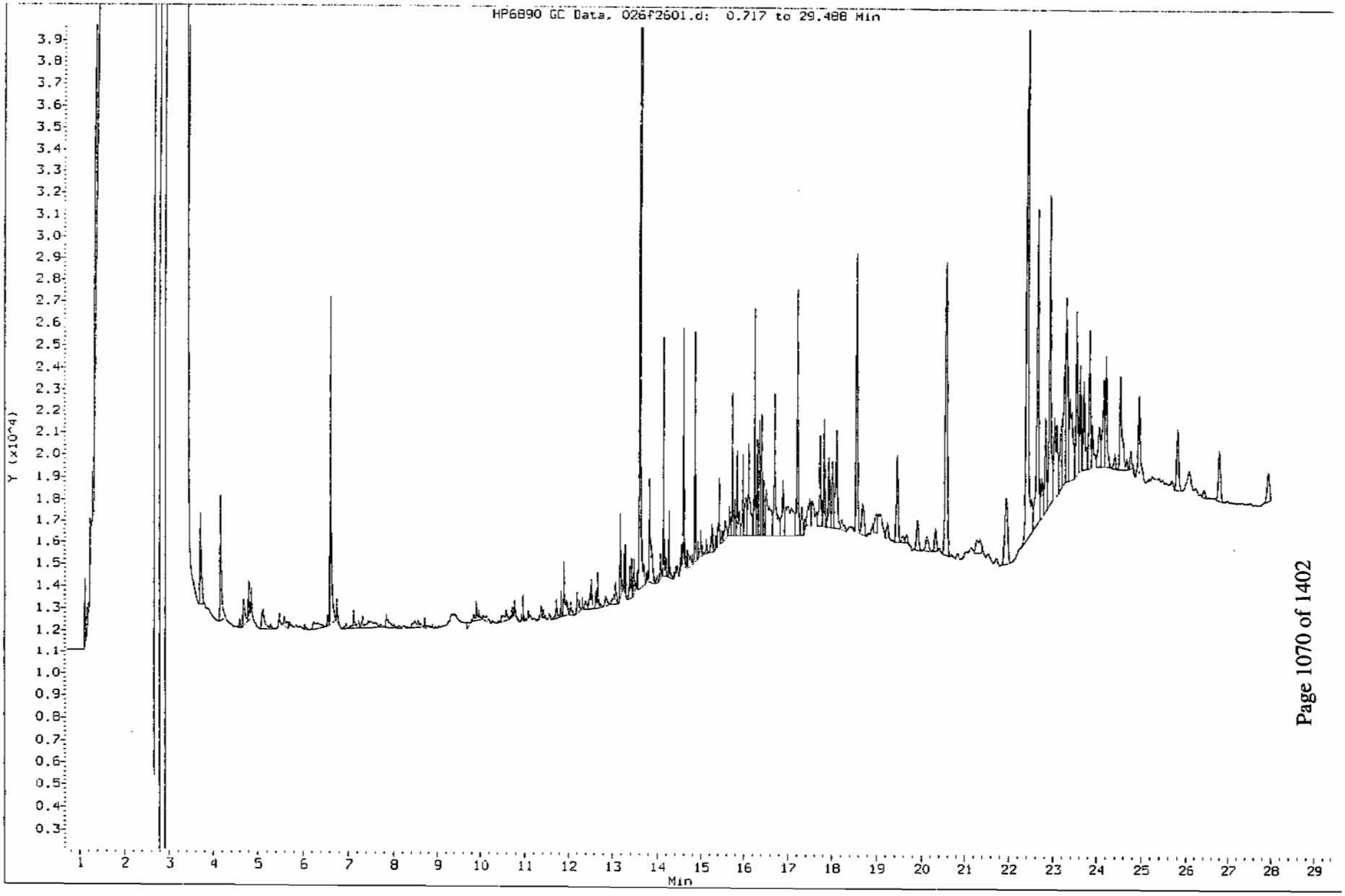

Data File: /chem/fid7.i/113009dr/026f2601.d
Injection Date: 01-DEC-2009 01:19
Instrument: fid7.i
Client Sample ID: RE03-09-13862

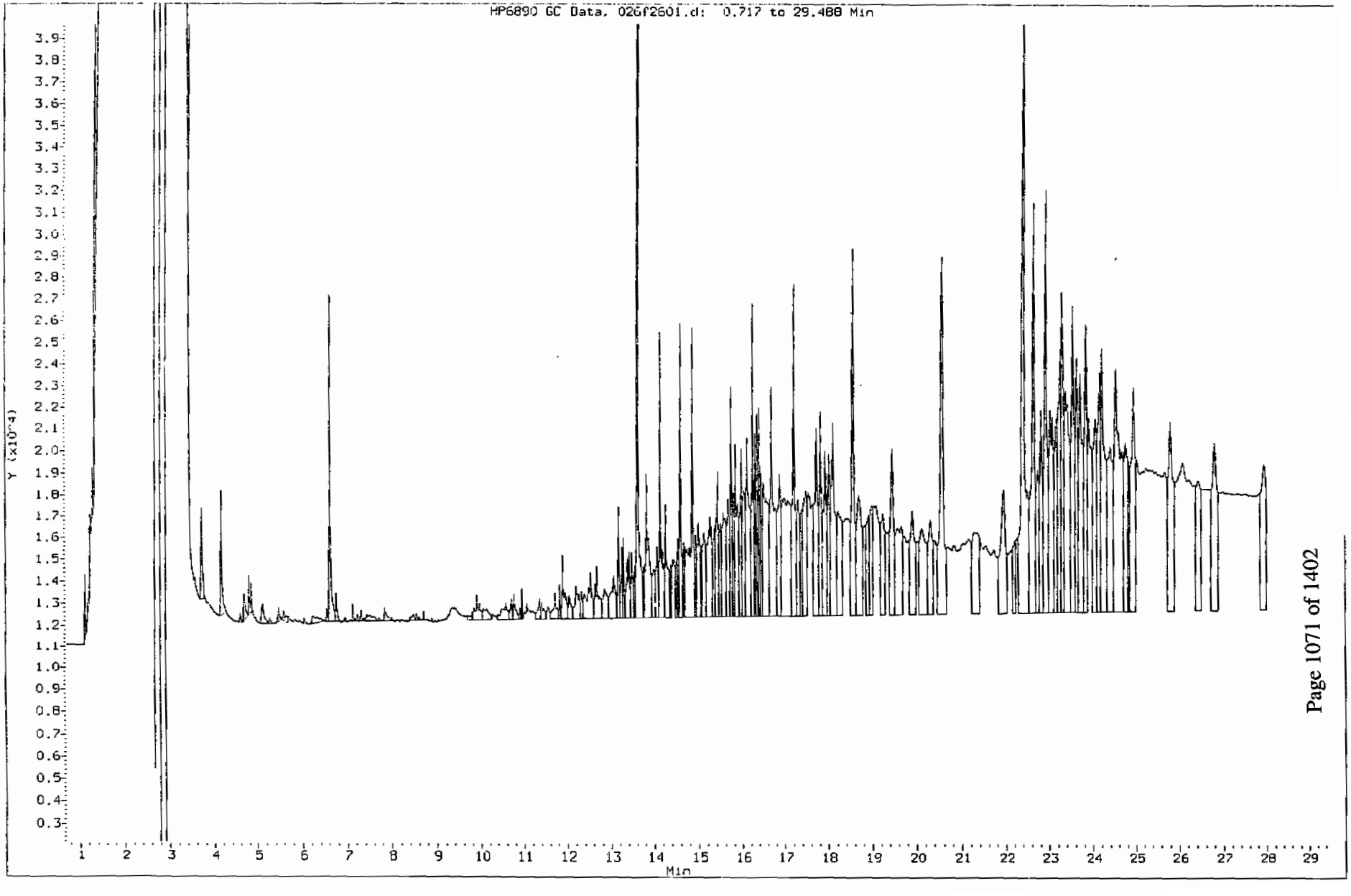

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540015	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13876	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/01/2009 01:55	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	027f2701.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		11.1	mg/kg	2.40	7.38

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/027f2701.d
Lab Smp Id: 241540015 Client Smp ID: RE03-09-13876
Inj Date : 01-DEC-2009 01:55
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540015|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weigth of sample extracted (g)
M	10.22200	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			4270088	301.280	11.1	
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.610	13.616	-0.006	255397	10.1730	0.38	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/027f2701.d

Date : 01-DEC-2009 01:55

Client ID: RE03-09-13876

Sample Info: |241540015|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

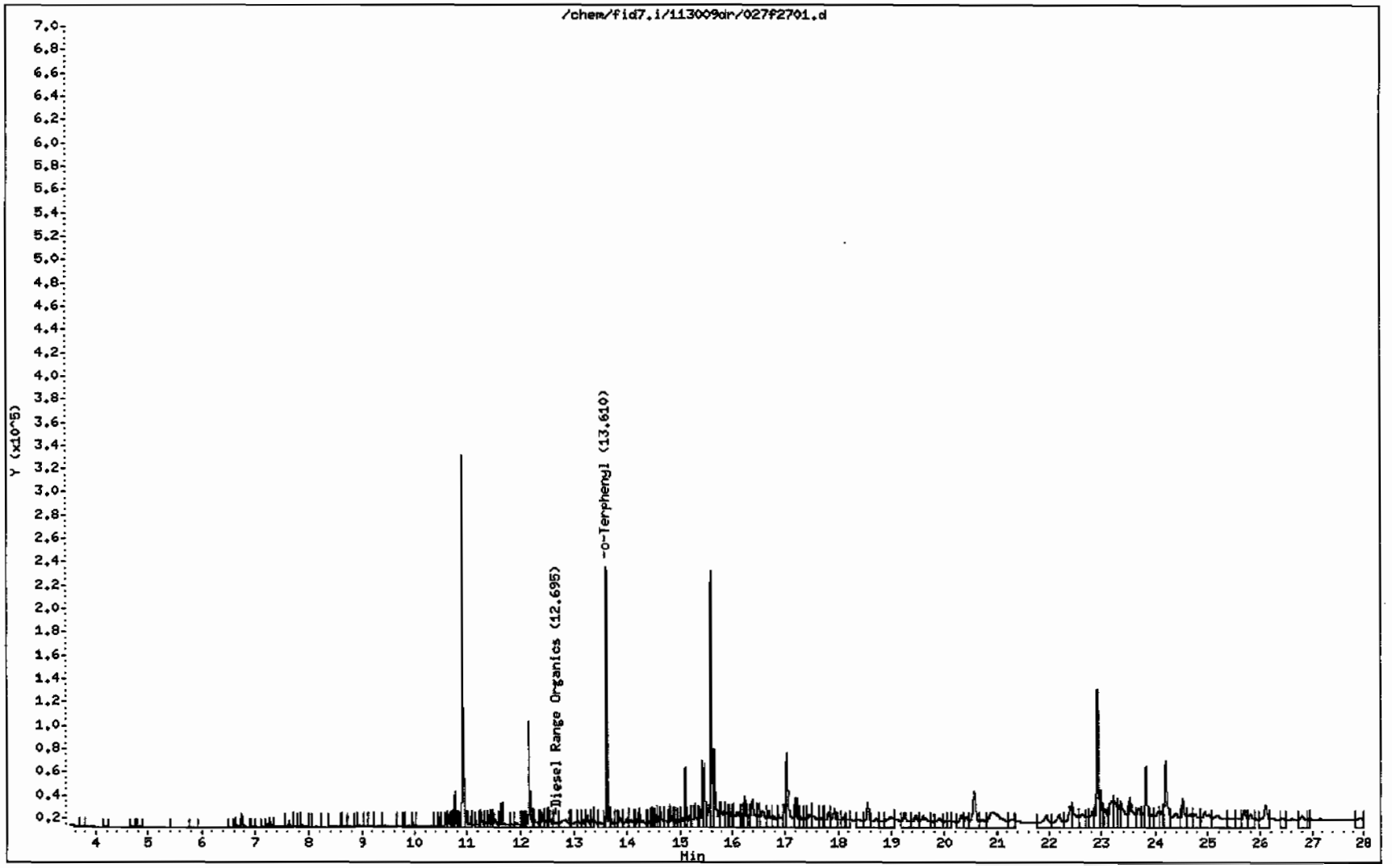

Data File: /chem/fid7.i/113009dr/027f2701.d
Injection Date: 01-DEC-2009 01:55
Instrument: fid7.i
Client Sample ID: RE03-09-13876

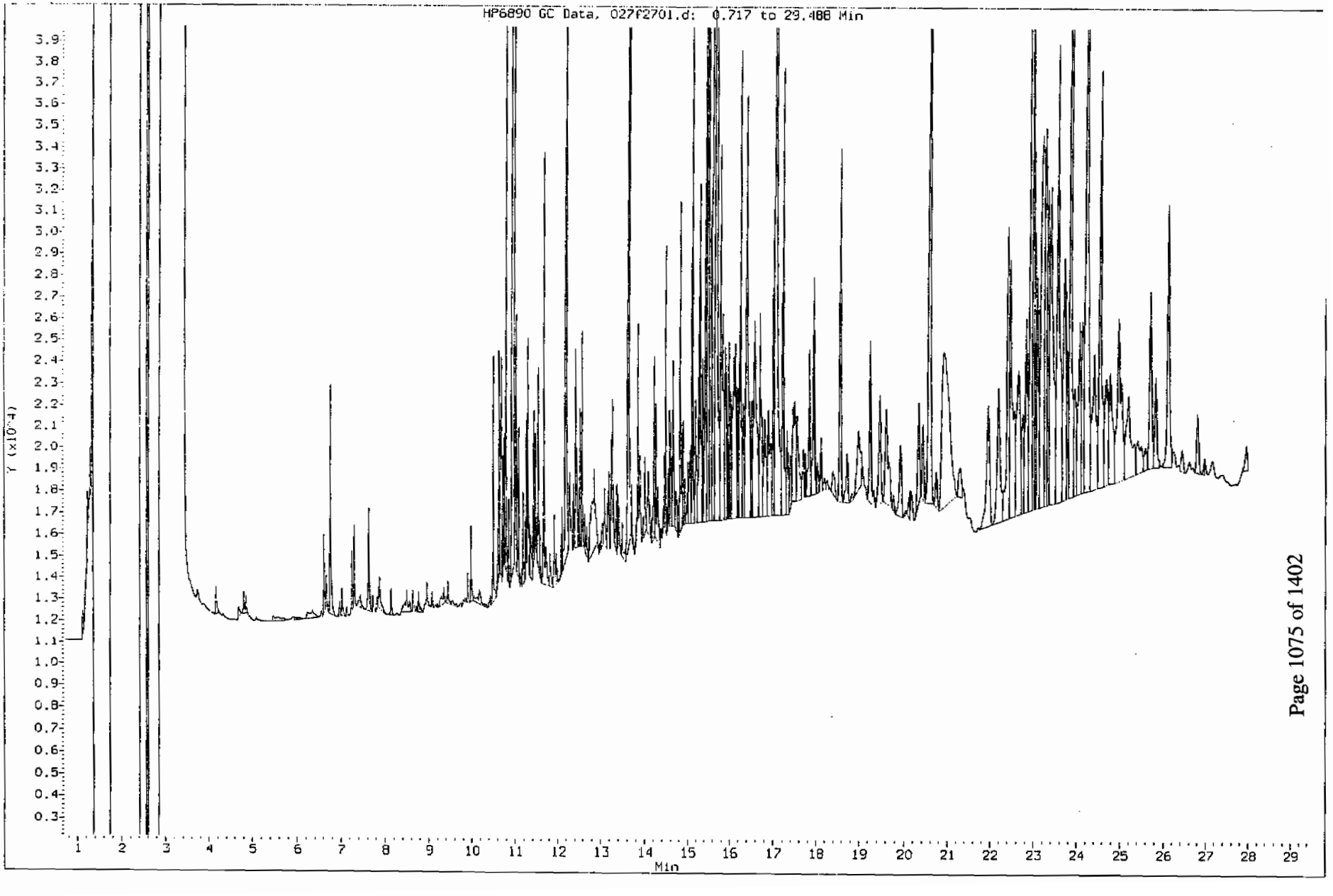

Data File: /chem/fid7.i/113009dr/027f2701.d
Injection Date: 01-DEC-2009 01:55
Instrument: fid7.i
Client Sample ID: RE03-09-13876

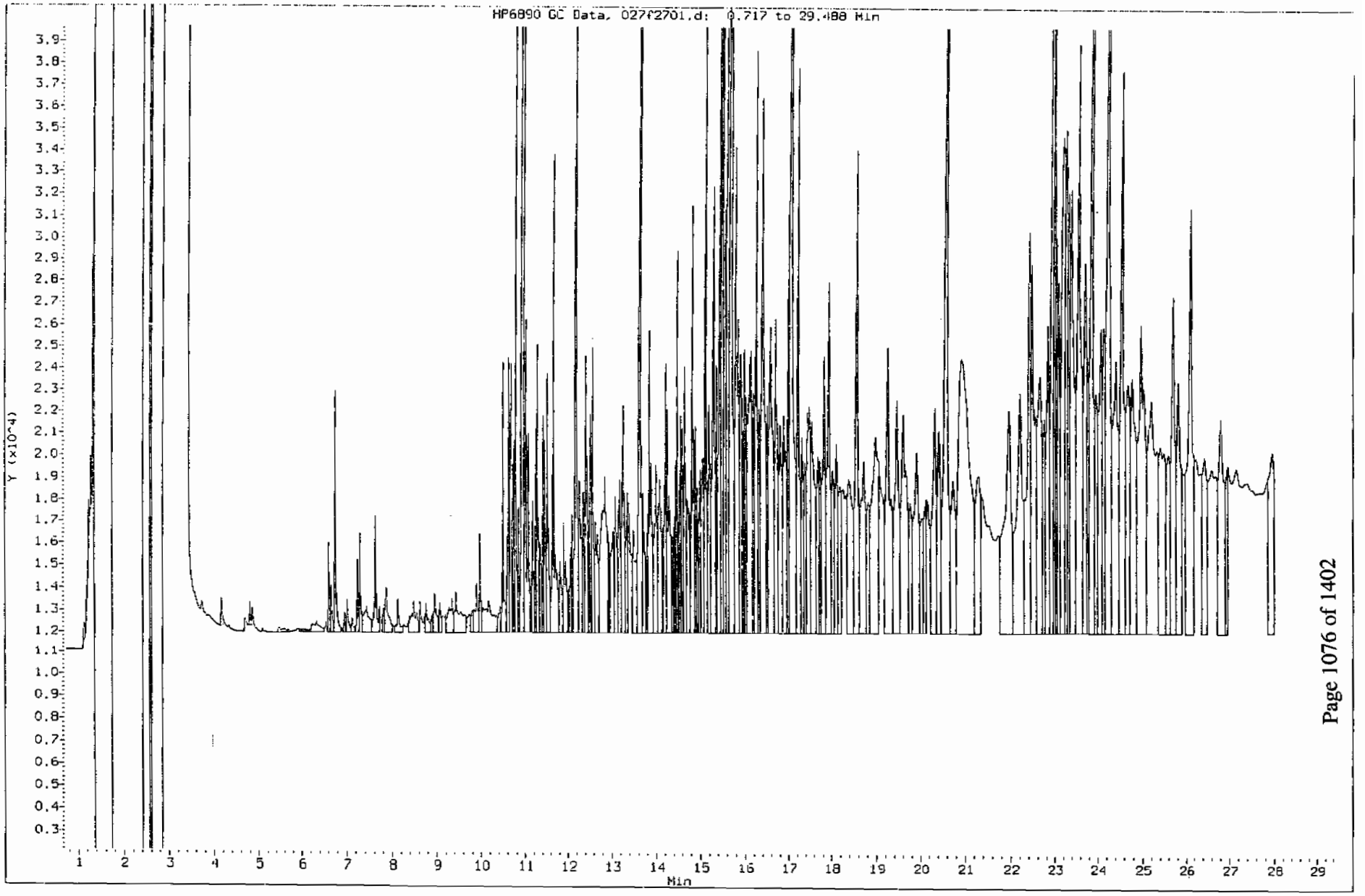

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540016	**Date Received:**	11/20/2009 08:50	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13872	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	10
Run Date:	12/01/2009 13:59	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		271	mg/kg	23.9	73.6

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/005f0501.d
Lab Smp Id: 241540016 Client Smp ID: RE03-09-13872
Inj Date : 01-DEC-2009 13:59
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241540016|10|
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 5
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	9.43260	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			10460375	738.043	271	
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.607	13.616	-0.009	53622	2.13592	0.78	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/005f0501.d
Date : 01-DEC-2009 13:59
Client ID: RE03-09-13872
Sample Info: |241540016|10|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

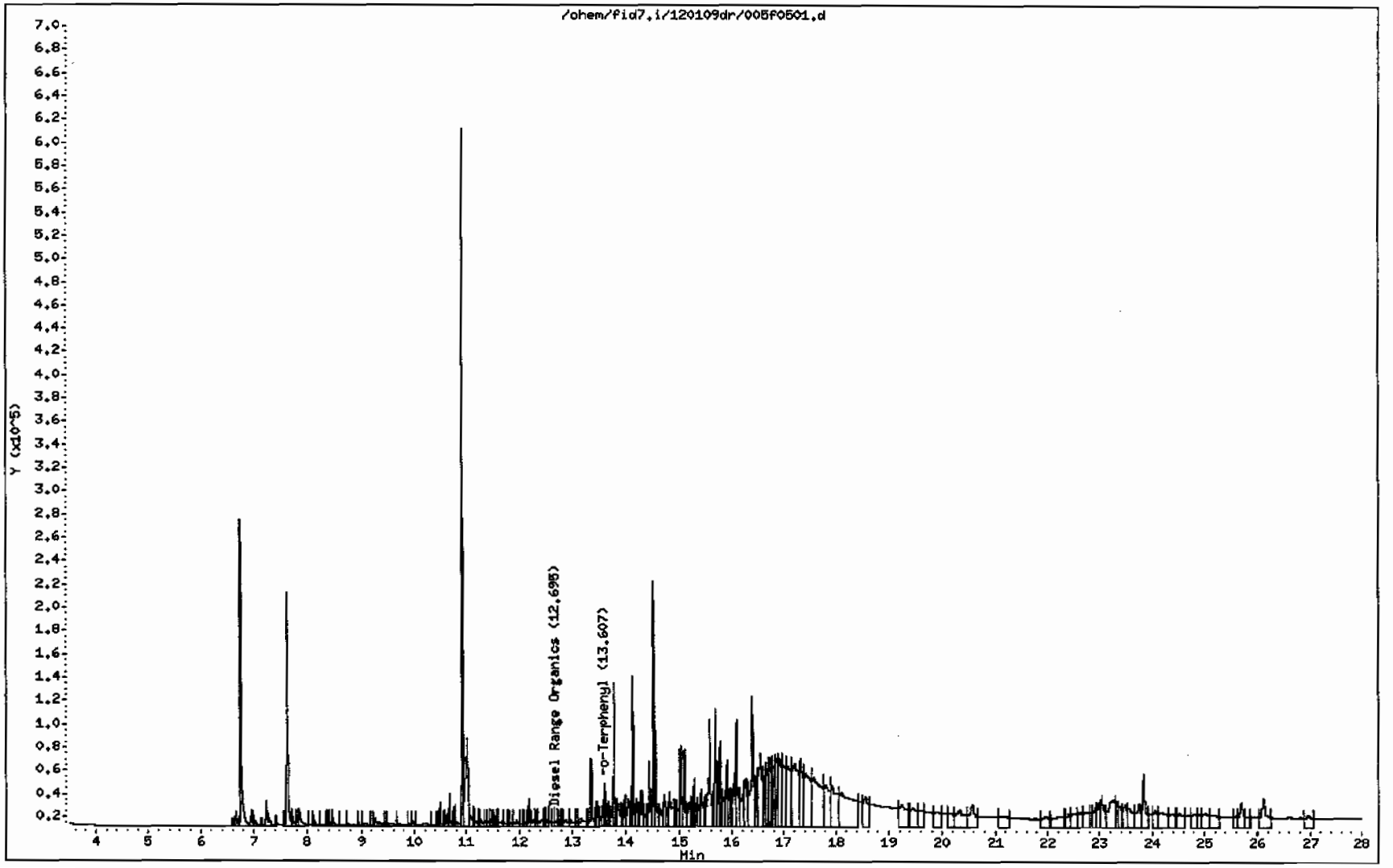

Data File: /chem/fid7.i/120109dr/005f0501.d
Injection Date: 01-DEC-2009 13:59
Instrument: fid7.i
Client Sample ID: RE03-09-13872

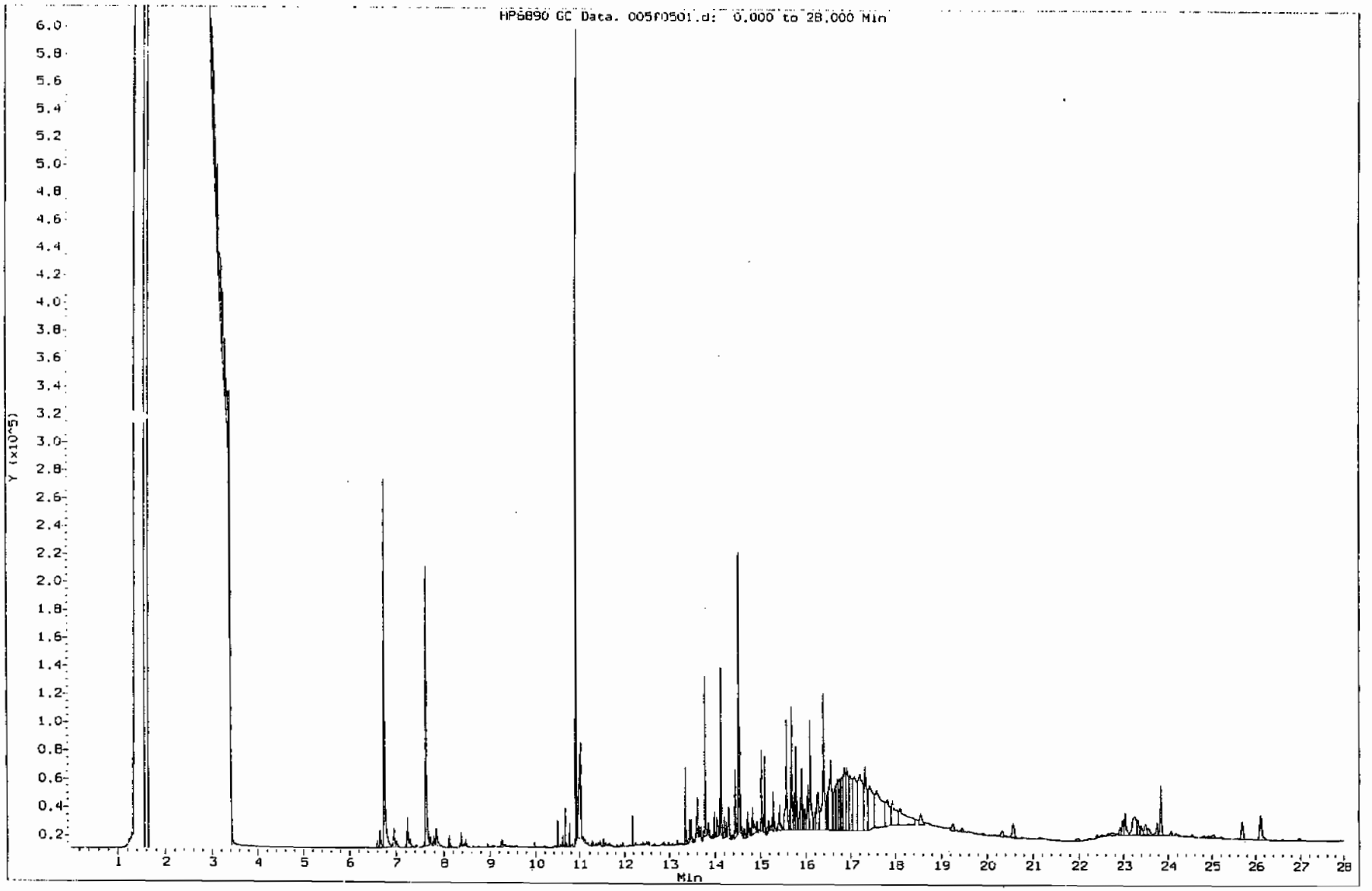

Data File: /chem/fid7.i/120109dr/005f0501.d
Injection Date: 01-DEC-2009 13:59
Instrument: fid7.i
Client Sample ID: RE03-09-13872

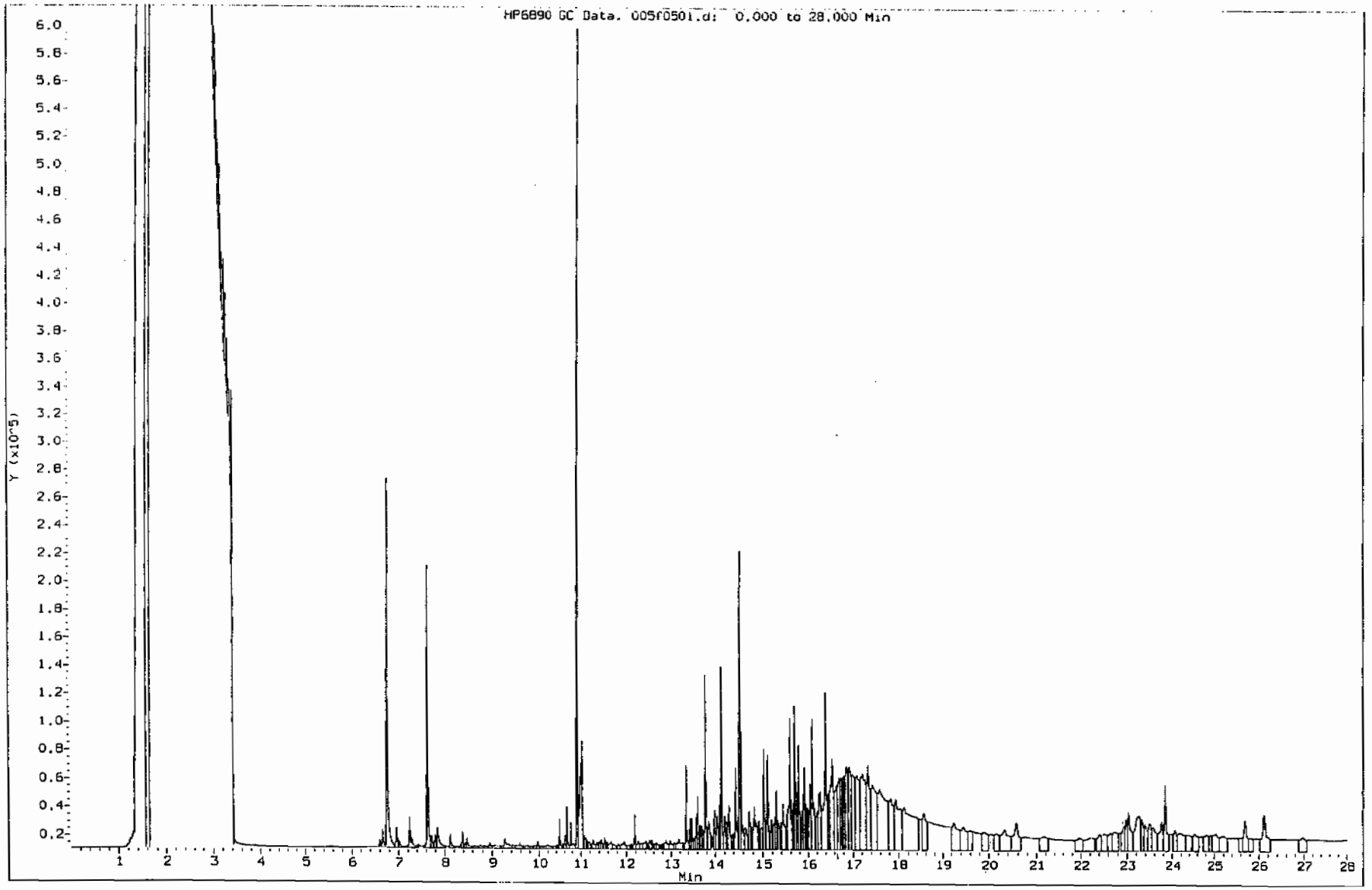

STANDARDS DATA

Report Date: 03-Dec-2009 08:53

Calibration History

Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Start Cal Date: 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
18-NOV-2009 21:40	dro	/chem/fid7.i/111809dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
18-NOV-2009 22:17	dro	/chem/fid7.i/111809dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
18-NOV-2009 22:54	dro	/chem/fid7.i/111809dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
18-NOV-2009 23:31	dro	/chem/fid7.i/111809dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
19-NOV-2009 00:07	dro	/chem/fid7.i/111809dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 04:24	dro	/chem/fid7.i/113009dr/031f3101.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 22:51	dro	/chem/fid7.i/113009dr/022f2201.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 17:19	dro	/chem/fid7.i/113009dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 11:12	dro	/chem/fid7.i/113009dr/003f0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 01-Dec-2009 10:35 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	100.000000
Initial:End Threshold	50.000000
Initial:Area Threshold	100.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	11.000000
Initial:Negative Peaks	OFF
Initial:Tension	7.000000
5.000:Force Cluster ON	n/a
17.000:Force Cluster OFF	n/a
17.371:Tension	1.000000

	Compound	RT	RT Window	RF
	3 Decane (C10)	7.526	7.496-7.556	
S	1 Diesel Range Organics	12.695	7.501-17.890	1.417e+04
$	2 o-Terphenyl	13.616	13.586-13.646	2.511e+04
	4 Octacosane (C28)	17.861	17.831-17.891	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Cal Date : 01-Dec-2009 10:35 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid7.i/111809dr/003f0301.d
Level 4: /chem/fid7.i/111809dr/004f0401.d
Level 5: /chem/fid7.i/111809dr/005f0501.d
Level 6: /chem/fid7.i/111809dr/006f0601.d
Level 7: /chem/fid7.i/111809dr/007f0701.d

Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	___ RRF	% RSD
3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 1 Diesel Range Organics	14564	14133	13971	14374	13824	14173	2.108
4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 o-Terphenyl	26761	28259	25829	22405	22273	25105	10.638

Report Date: 03-Dec-2009 16:34

Calibration History

Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Start Cal Date: 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
18-NOV-2009 21:40	dro	/chem/fid7.i/111809dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
18-NOV-2009 22:17	dro	/chem/fid7.i/111809dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
18-NOV-2009 22:54	dro	/chem/fid7.i/111809dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
18-NOV-2009 23:31	dro	/chem/fid7.i/111809dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
19-NOV-2009 00:07	dro	/chem/fid7.i/111809dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 02:17	dro	/chem/fid7.i/120109dr/064f6401.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 23:12	dro	/chem/fid7.i/120109dr/059f5901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 17:01	dro	/chem/fid7.i/120109dr/049f4901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 10:53	dro	/chem/fid7.i/120109dr/039f3901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 04:45	dro	/chem/fid7.i/120109dr/029f2901.d
Ccal Level: 5 , Ccal Amount: 1000		

```
|01-DEC-2009 21:58 |dro              |/chem/fid7.i/120109dr/018f1801.d        |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 1000                                           |
+=============================================================================+
|01-DEC-2009 15:12 |dro              |/chem/fid7.i/120109dr/007f0701.d        |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 1000                                           |
+=============================================================================+
|01-DEC-2009 12:45 |dro              |/chem/fid7.i/120109dr/003f0301.d        |
+------------------+-----------------+----------------------------------------+
```

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 08:42 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	100.000000
Initial:End Threshold	50.000000
Initial:Area Threshold	100.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	11.000000
Initial:Negative Peaks	OFF
Initial:Tension	7.000000
5.000:Force Cluster ON	n/a
17.000:Force Cluster OFF	n/a
17.371:Tension	1.000000

	Compound	RT	RT Window	RF
	3 Decane (C10)	7.525	7.495-7.555	
S	1 Diesel Range Organics	12.695	7.501-17.890	1.417e+04
$	2 o-Terphenyl	13.616	13.586-13.646	2.511e+04
	4 Octacosane (C28)	17.861	17.831-17.891	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Cal Date : 08-Dec-2009 08:33 jc
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid7.i/111809dr/003f0301.d
Level 4: /chem/fid7.i/111809dr/004f0401.d
Level 5: /chem/fid7.i/111809dr/005f0501.d
Level 6: /chem/fid7.i/111809dr/006f0601.d
Level 7: /chem/fid7.i/111809dr/007f0701.d

Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 1 Diesel Range Organics	14564	14133	13971	14374	13824	14173	2.108
4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 o-Terphenyl	26761	28259	25829	22405	22273	25105	10.638

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: FID7 Calibration Date: 11/30/09 Time: 1112

Lab File ID: 003F0301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14284.419	0.01	0.8	15.0
o-Terphenyl	25105.366	25500.619	0.01	1.6	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: FID7 Calibration Date: 11/30/09 Time: 1719

Lab File ID: 013F1301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14836.049	0.01	4.7	15.0
o-Terphenyl	25105.366	21961.430	0.01	-12.5	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: FID7 Calibration Date: 11/30/09 Time: 2251

Lab File ID: 022F2201 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14659.076	0.01	3.4	15.0
o-Terphenyl	25105.366	26323.377	0.01	4.8	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: FID7 Calibration Date: 12/01/09 Time: 0424

Lab File ID: 031F3101 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	15664.514	0.01	10.5	15.0
o-Terphenyl	25105.366	28651.207	0.01	14.1	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: FID7 Calibration Date: 12/01/09 Time: 1245

Lab File ID: 003F0301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13229.911	-0.01	6.6	15.0
o-Terphenyl	25105.366	23768.181	-0.01	5.3	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: FID7 Calibration Date: 12/01/09 Time: 1512

Lab File ID: 007F0701 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13076.694	0.01	-7.7	15.0
o-Terphenyl	25105.366	23591.371	0.01	-6.0	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/003f0301.d
Lab Smp Id: WFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 30-NOV-2009 11:12
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			14284418	1000.00	1010
$	2 o-Terphenyl					CAS #: 84-15-1
	13.616	13.616	0.000	637515	25.0000	25.4

Data File: /chem/fid7.i/113009dr/003f0301.d
Date : 30-NOV-2009 11:12
Client ID: DSTD01
Sample Info: IWFI091118-01 D1

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

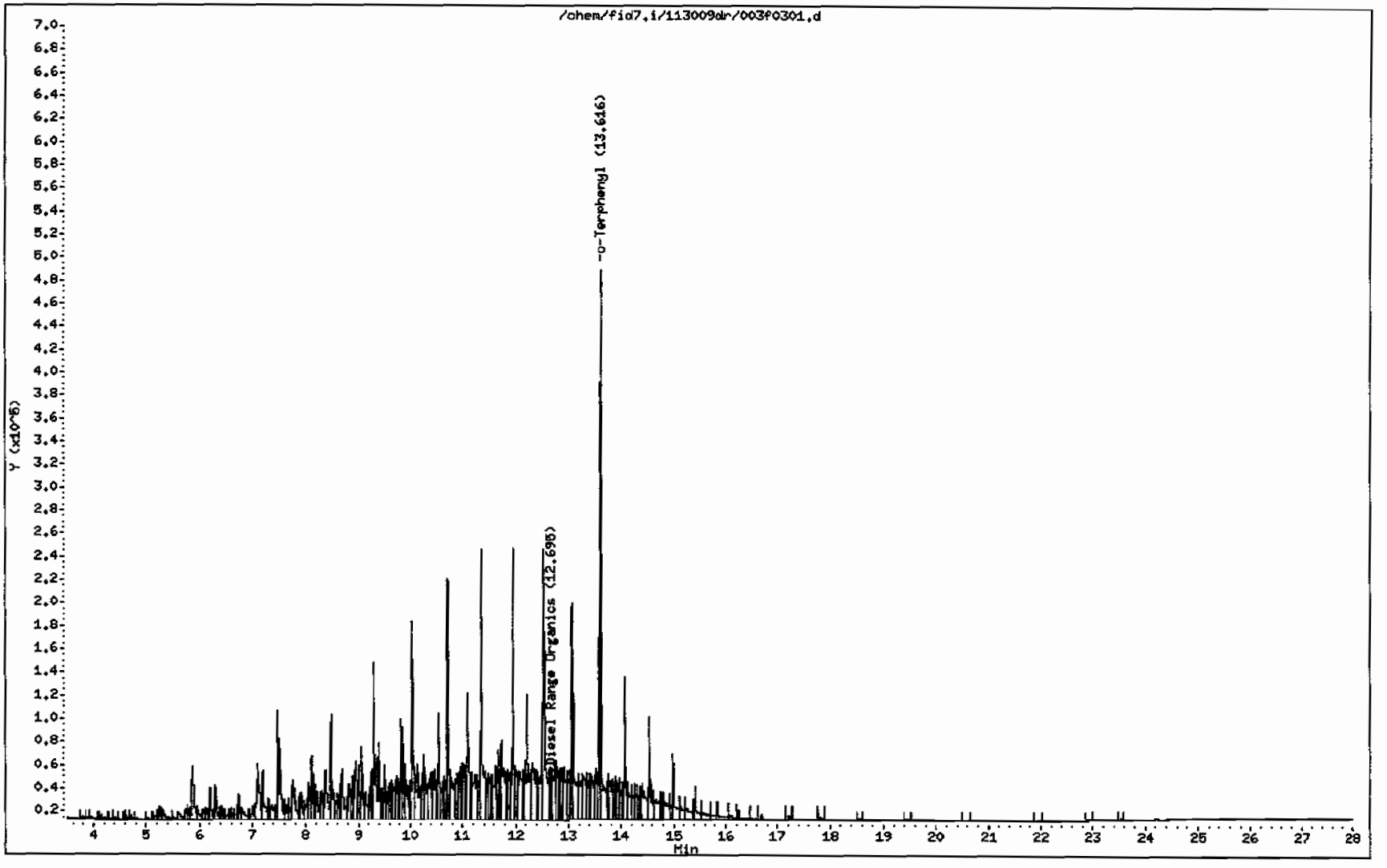

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/013f1301.d
Lab Smp Id: WFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 30-NOV-2009 17:19
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	7.501- 17.890			14836049	1000.00	1050	
$	2 o-Terphenyl						CAS #: 84-15-1
	13.617	13.616	0.001	549035	25.0000	21.9	

Data File: /chem/fid7.i/113009dr/013f1301.d

Date : 30-NOV-2009 17:19

Client ID: DSTD02

Sample Info: IWFI091118-01 D2

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

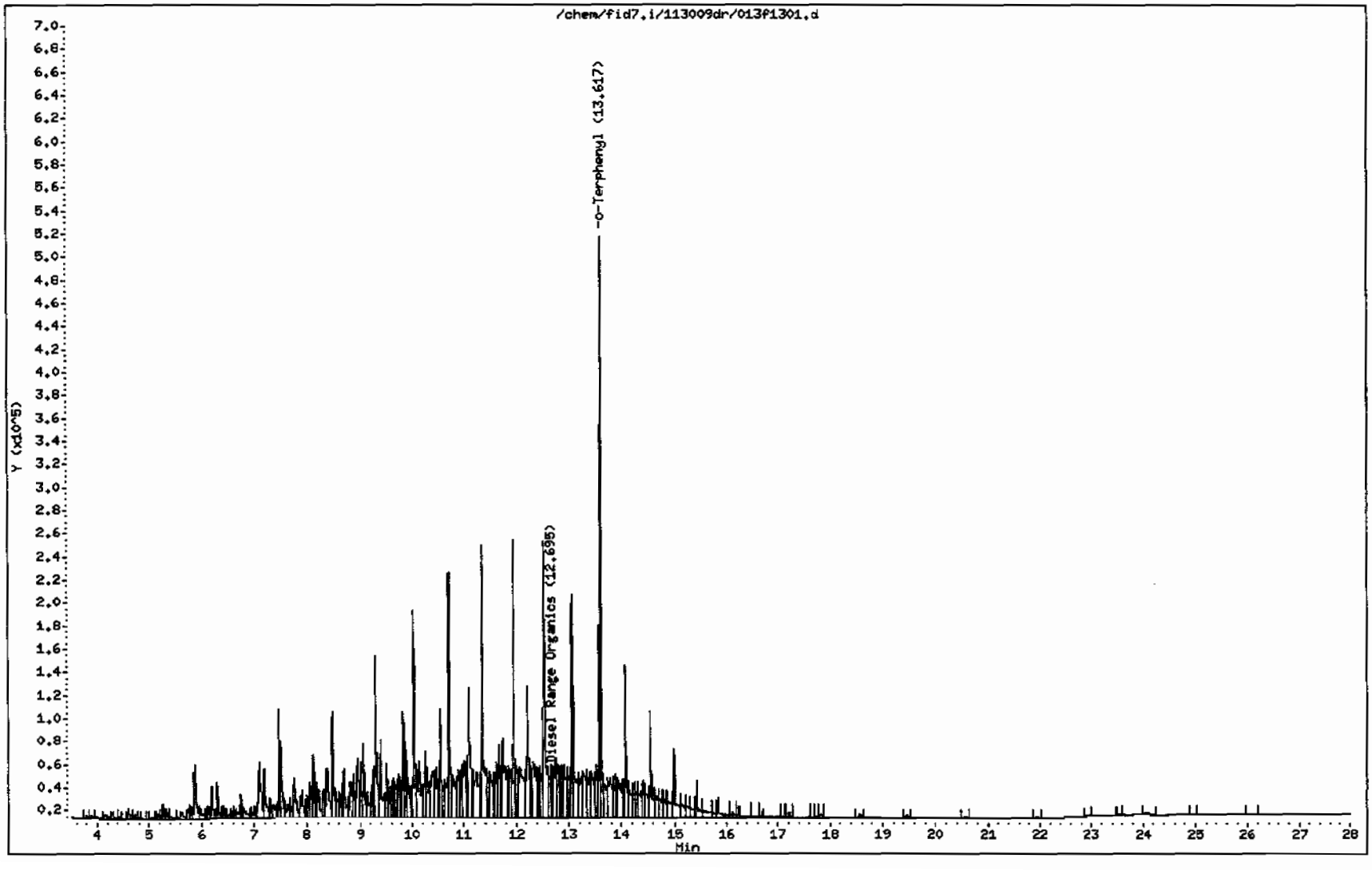

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/022f2201.d
Lab Smp Id: WFI091118-01 D3 Client Smp ID: DSTD03
Inj Date : 30-NOV-2009 22:51
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-01 D3
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	7.501- 17.890			14659076	1000.00	1030	
$	2 o-Terphenyl						CAS #: 84-15-1
	13.616	13.616	0.000	658084	25.0000	26.2	

Data File: /chem/fid7.i/113009dr/022f2201.d
Date : 30-NOV-2009 22:51
Client ID: DSTD03
Sample Info: IWFI091118-01 D3

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

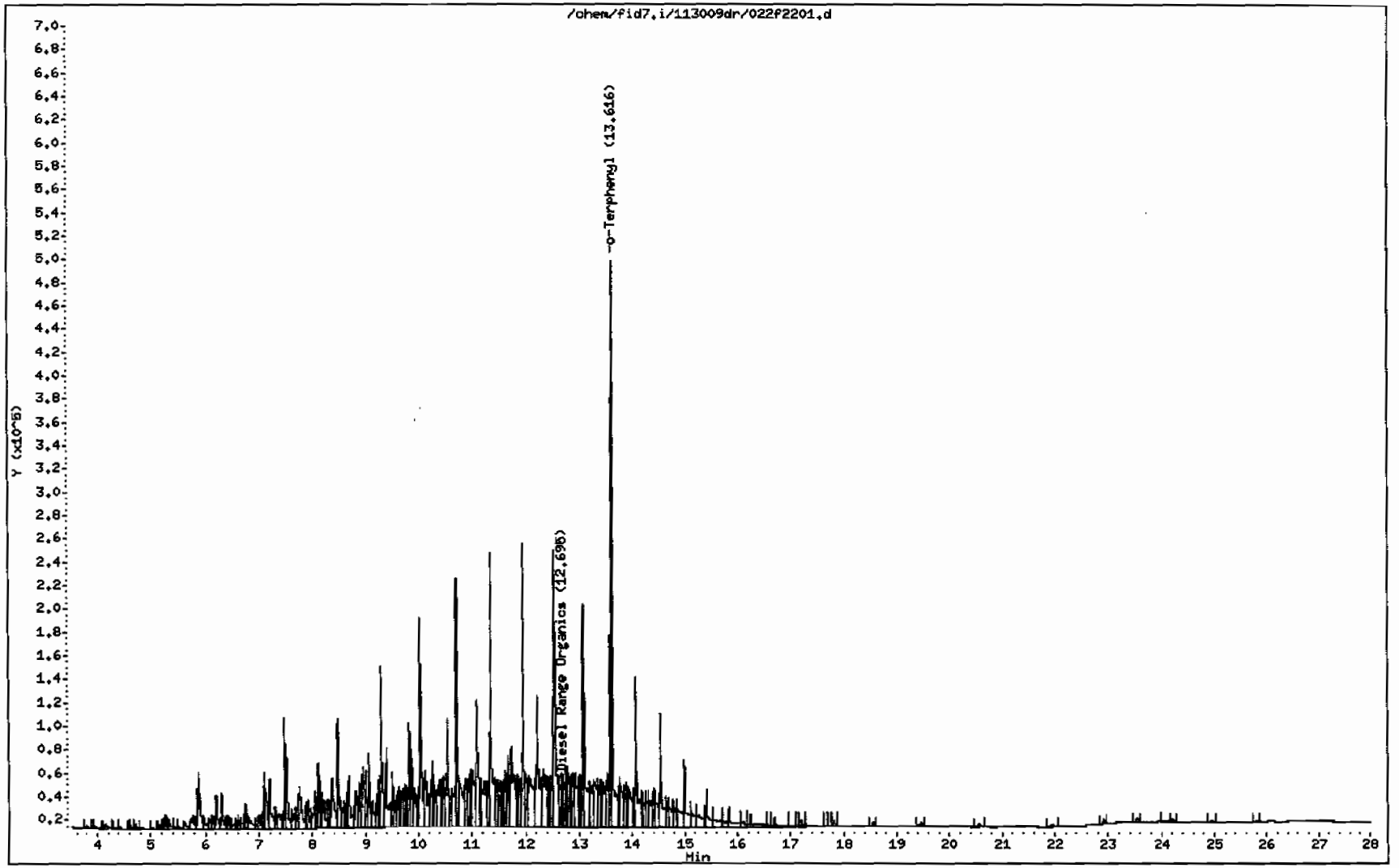

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/031f3101.d
Lab Smp Id: WFI091118-01 D4 Client Smp ID: DSTD04
Inj Date : 01-DEC-2009 04:24
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-01 D4
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			15664513	1000.00	1100
$	2 o-Terphenyl					CAS #: 84-15-1
	13.619	13.616	0.003	716280	25.0000	28.5

Data File: /chem/fid7.i/113009dr/031f3101.d
Date : 01-DEC-2009 04:24
Client ID: DSTD04
Sample Info: IWFI091118-01 D4

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

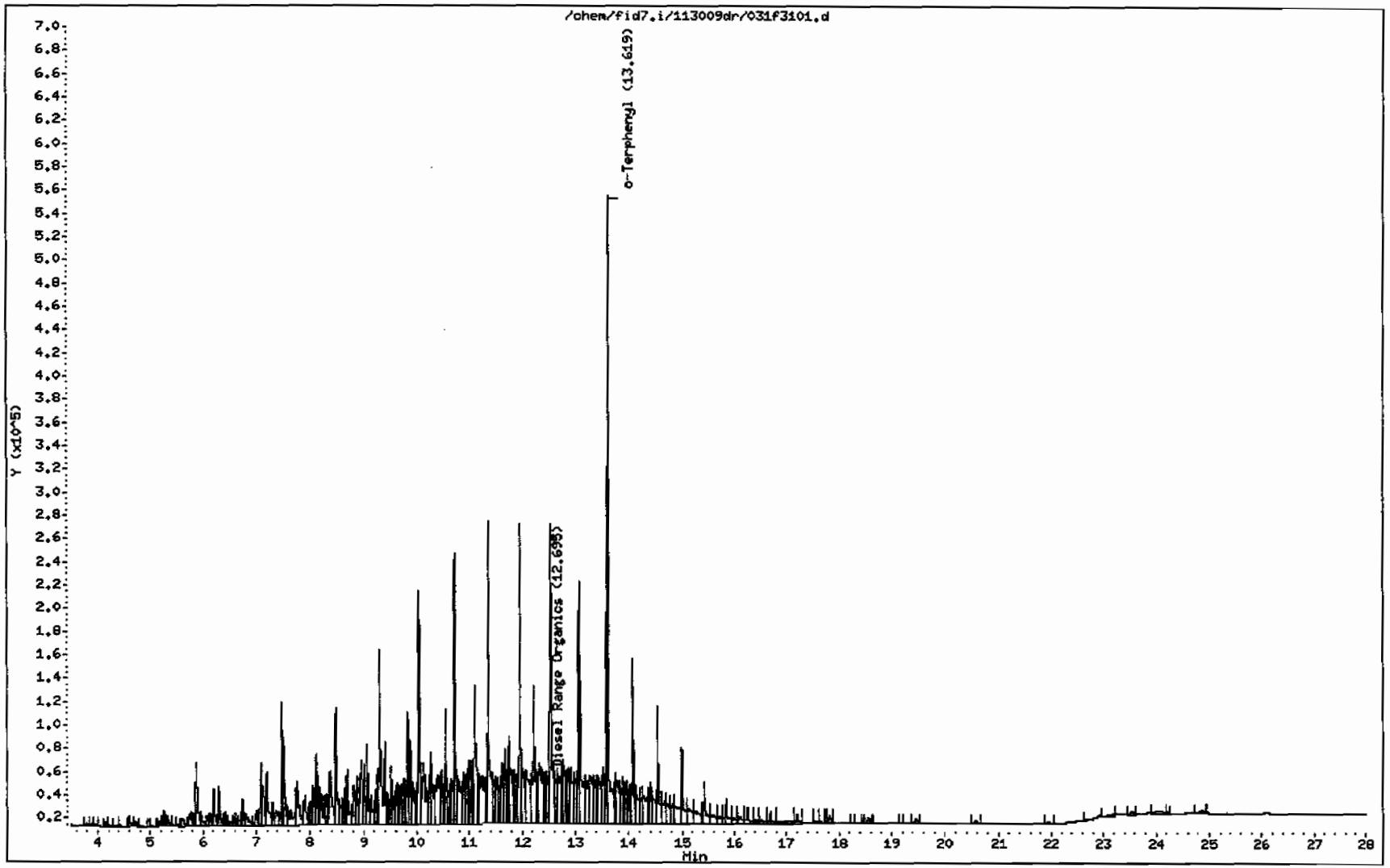

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/003f0301.d
Lab Smp Id: WFI091118-02 D1 Client Smp ID: DSTD01
Inj Date : 01-DEC-2009 12:45
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			13229911	1000.00	933
$	2 o-Terphenyl					CAS #: 84-15-1
	13.616	13.616	0.000	594204	25.0000	23.7

Data File: /chem/fid7.i/120109dr/003f0301.d
Date : 01-DEC-2009 12:45
Client ID: DSTD01
Sample Info: IWFI091118-02 D1

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

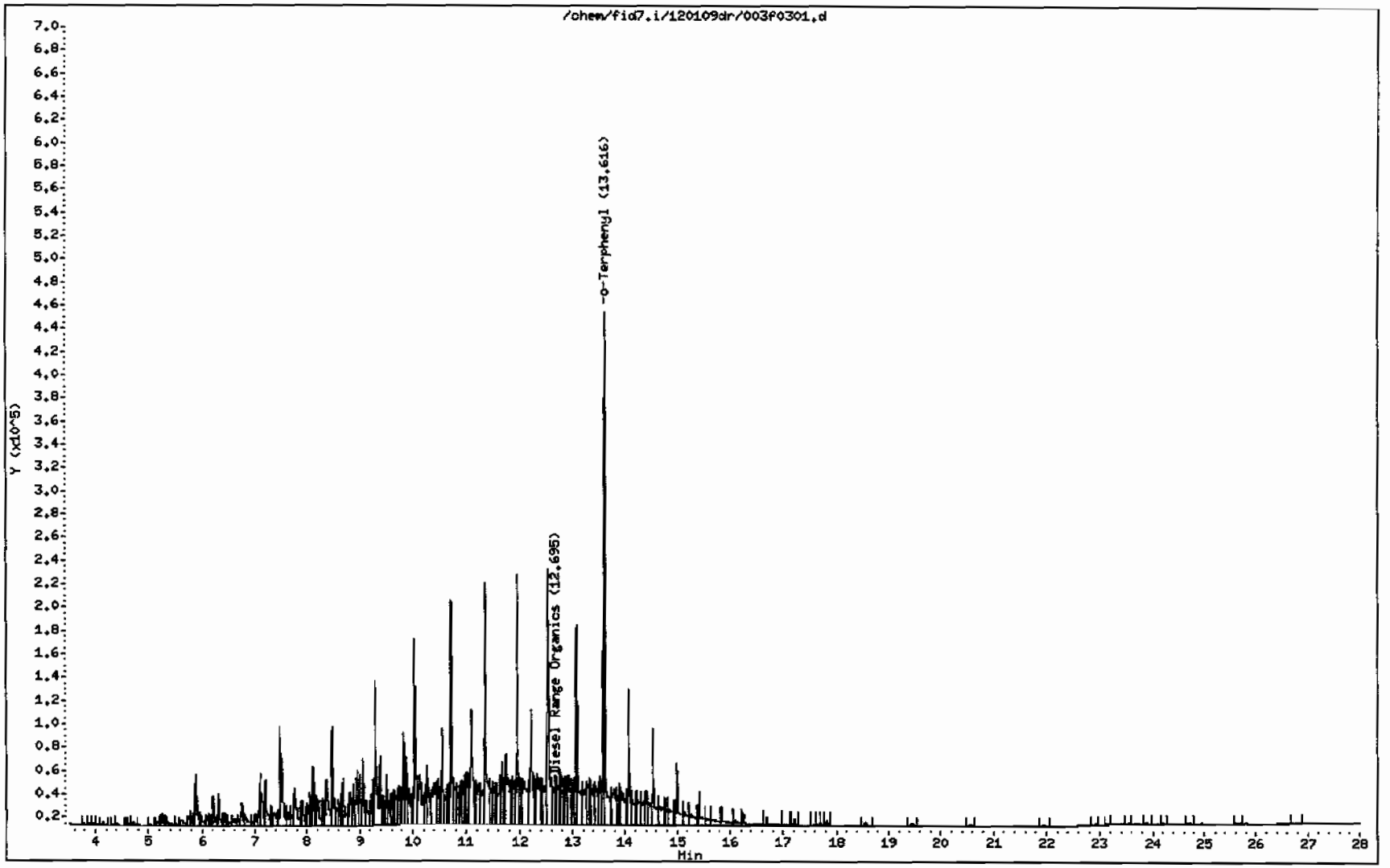

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/007f0701.d
Lab Smp Id: WFI091118-02 D2 Client Smp ID: DSTD02
Inj Date : 01-DEC-2009 15:12
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			13076694	1000.00	923
$	2 o-Terphenyl					CAS #: 84-15-1
	13.614	13.616	-0.002	589784	25.0000	23.5

Data File: /chem/fid7.i/120109dr/007f0701.d
Date : 01-DEC-2009 15:12
Client ID: DSTD02
Sample Info: IWFI091118-02 D2

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

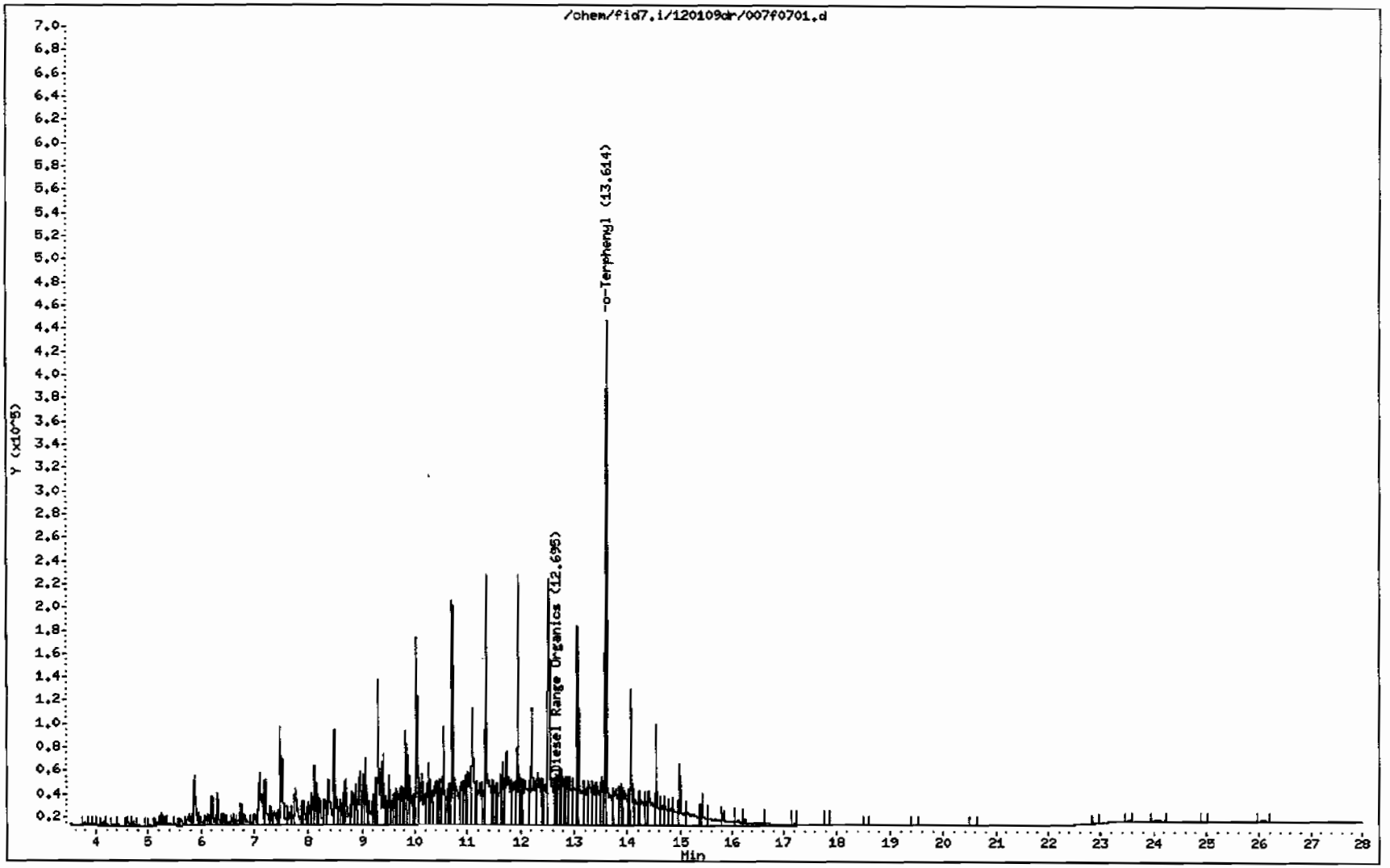

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/18/09	2026	13.61	
02	RTMARKER	UFI091013-03	11/18/09	2103		
03	CSTD01	UFI090827-10	11/18/09	2140	13.61	
04	CSTD02	UFI090827-11	11/18/09	2217	13.61	
05	CSTD03	UFI090827-12	11/18/09	2254	13.62	
06	CSTD04	UFI090827-13	11/18/09	2331	13.63	
07	CSTD05	UFI090827-14	11/19/09	0007	13.64	
08	DSTD01	WFI090928-01	11/19/09	0044	13.62	
09	DIBLK02	WFI090723-06	11/19/09	0121	13.61	
10	ZZZZZ	ZZZZZ	11/19/09	0158	13.61	
11	ZZZZZ	ZZZZZ	11/19/09	0236	13.61	
12	ZZZZZ	ZZZZZ	11/19/09	0313	13.61	
13	ZZZZZ	ZZZZZ	11/19/09	0350	13.61	
14	ZZZZZ	ZZZZZ	11/19/09	0427	13.62	
15	ZZZZZ	ZZZZZ	11/19/09	0504	13.62	
16	ZZZZZ	ZZZZZ	11/19/09	0541	13.61	
17	ZZZZZ	ZZZZZ	11/19/09	0618	13.61	
18	ZZZZZ	ZZZZZ	11/19/09	0655	13.62	
19	ZZZZZ	ZZZZZ	11/19/09	0731	13.62	
20	ZZZZZ	ZZZZZ	11/19/09	0809	13.62	
21	DSTD02	UFI090911-02	11/19/09	0846	13.62	
22	DIBLK03	WFI090723-06	11/19/09	0923	13.62	
23	ZZZZZ	ZZZZZ	11/19/09	1000	13.58*	
24	ZZZZZ	ZZZZZ	11/19/09	1037	13.62	
25	ZZZZZ	ZZZZZ	11/19/09	1114	13.61	
26	ZZZZZ	ZZZZZ	11/19/09	1150	13.61	
27	ZZZZZ	ZZZZZ	11/19/09	1227	13.61	
28	ZZZZZ	ZZZZZ	11/19/09	1304	13.61	
29	ZZZZZ	ZZZZZ	11/19/09	1341	13.61	
30	ZZZZZ	ZZZZZ	11/19/09	1418	13.62	
31	ZZZZZ	ZZZZZ	11/19/09	1455	13.62	
32	ZZZZZ	ZZZZZ	11/19/09	1531	13.62	

S1 = o-Terphenyl

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	11/30/09	0959	13.61	
02	RTMARKER	UFI091013-03	11/30/09	1036		
03	DSTD01	WFI091118-01	11/30/09	1112	13.62	
04	DIBLK02	WFI091130-06	11/30/09	1149	13.61	
05	DBLK01	1201981725	11/30/09	1226	13.61	
06	DBLK01LCS	1201981728	11/30/09	1302	13.61	
07	RE03-09-13875	241540001	11/30/09	1339	13.61	
08	RE03-09-13865	241540002	11/30/09	1416	13.61	
09	RE03-09-13868	241540003	11/30/09	1453	13.61	
10	RE03-09-13868MS	1201981726	11/30/09	1530	13.61	
11	RE03-09-13868MSD	1201981727	11/30/09	1606	13.61	
12	RE03-09-13867	241540004	11/30/09	1643	13.61	
13	DSTD02	WFI091118-01	11/30/09	1719	13.62	
14	DIBLK03	WFI091130-06	11/30/09	1757	13.61	
15	RE03-09-13864	241540005	11/30/09	1834	13.61	
16	RE03-09-13871	241540006	11/30/09	1910	13.61	
17	RE03-09-13877	241540007	11/30/09	1947	13.61	
18	RE03-09-13869	241540008	11/30/09	2023	13.61	
19	RE03-09-13870	241540009	11/30/09	2100	13.61	
20	RE03-09-13873	241540010	11/30/09	2137	13.61	
21	RE03-09-13863	241540011	11/30/09	2214	13.61	
22	DSTD03	WFI091118-01	11/30/09	2251	13.62	
23	DIBLK04	WFI091130-06	11/30/09	2328	13.61	
24	RE03-09-13874	241540012	12/01/09	0005	13.61	
25	RE03-09-13866	241540013	12/01/09	0042	13.61	
26	RE03-09-13862	241540014	12/01/09	0119	13.61	
27	RE03-09-13876	241540015	12/01/09	0155	13.61	
28	ZZZZZ	ZZZZZ	12/01/09	0233	13.62	
29	ZZZZZ	ZZZZZ	12/01/09	0310	13.62	
30	ZZZZZ	ZZZZZ	12/01/09	0347	13.62	
31	DSTD04	WFI091118-01	12/01/09	0424	13.62	
32	DIBLK05	WFI091130-06	12/01/09	0500	13.61	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	12/01/09	1132	13.61	
02	RTMARKER	UFI091013-03	12/01/09	1208		
03	DSTD01	WFI091118-02	12/01/09	1245	13.62	
04	DIBLK02	WFI091130-06	12/01/09	1322	13.61	
05	RE03-09-13872	241540016	12/01/09	1359	13.61	
06	ZZZZZ	ZZZZZ	12/01/09	1435	13.61	
07	DSTD02	WFI091118-02	12/01/09	1512	13.61	
08	DIBLK03	WFI091130-06	12/01/09	1549	13.61	
09	ZZZZZ	ZZZZZ	12/01/09	1626	13.61	
10	ZZZZZ	ZZZZZ	12/01/09	1703	13.61	
11	ZZZZZ	ZZZZZ	12/01/09	1740	13.61	
12	ZZZZZ	ZZZZZ	12/01/09	1817	13.61	
13	ZZZZZ	ZZZZZ	12/01/09	1854	13.61	
14	ZZZZZ	ZZZZZ	12/01/09	1931	13.61	
15	ZZZZZ	ZZZZZ	12/01/09	2008	13.61	
16	ZZZZZ	ZZZZZ	12/01/09	2044	13.61	
17	ZZZZZ	ZZZZZ	12/01/09	2121	13.61	
18	DSTD03	WFI091118-02	12/01/09	2158	13.61	
19	DIBLK04	WFI091130-06	12/01/09	2235	13.61	
20	ZZZZZ	ZZZZZ	12/01/09	2312	13.61	
21	ZZZZZ	ZZZZZ	12/01/09	2349	13.61	
22	ZZZZZ	ZZZZZ	12/02/09	0026	13.61	
23	ZZZZZ	ZZZZZ	12/02/09	0103	13.61	
24	ZZZZZ	ZZZZZ	12/02/09	0140	13.61	
25	ZZZZZ	ZZZZZ	12/02/09	0216	13.61	
26	ZZZZZ	ZZZZZ	12/02/09	0253	13.62	
27	ZZZZZ	ZZZZZ	12/02/09	0331	13.62	
28	ZZZZZ	ZZZZZ	12/02/09	0408	13.61	
29	DSTD04	WFI091118-02	12/02/09	0445	13.61	
30	DIBLK05	WFI091130-06	12/02/09	0522	13.61	
31	ZZZZZ	ZZZZZ	12/02/09	0558	13.61	
32	ZZZZZ	ZZZZZ	12/02/09	0636	13.61	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-604			**Matrix:**	SOIL
Lab Sample ID:	1201981725				
Client Sample:	QC for batch 926873	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926873	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 12:26	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/005f0501.d
Lab Smp Id: 1201981725 Client Smp ID: DBLK01
Inj Date : 30-NOV-2009 12:26
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981725|1|
Misc Info : |FIDDRO_SF|926874|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.610	13.616	-0.006	267699	10.6630	0.36

Data File: /chem/fid7.i/113009dr/005f0501.d
Date : 30-NOV-2009 12:26
Client ID: DBLK01
Sample Info: |1201981725|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KKR2
Column diameter: 0.25

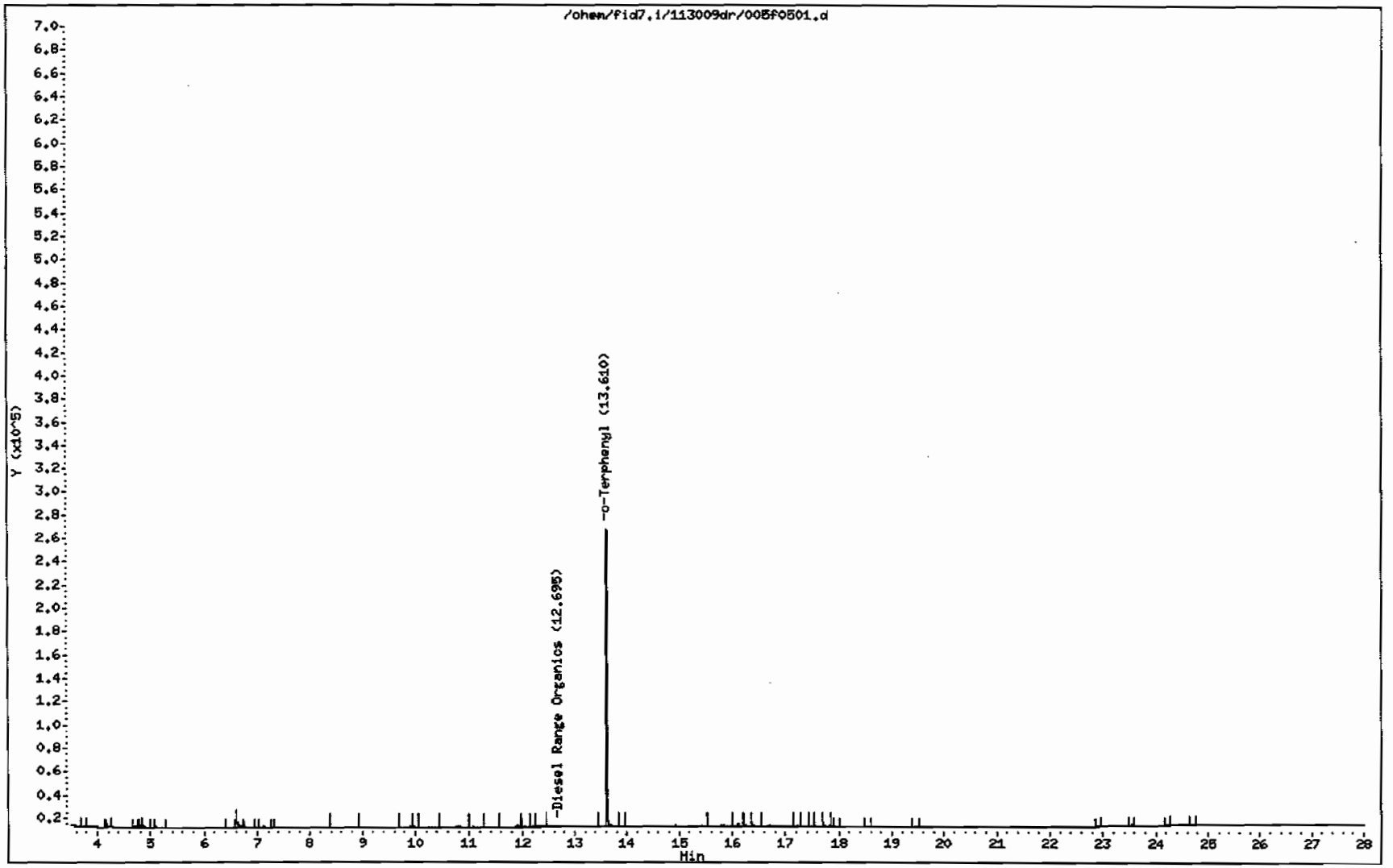

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604			**Matrix:**	SOIL
Lab Sample ID:	1201981728				
Client Sample:	QC for batch 926873	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926873	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 13:02	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	006f0601.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		25.3	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/006f0601.d
Lab Smp Id: 1201981728 Client Smp ID: DBLK01LCS
Inj Date : 30-NOV-2009 13:02
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981728|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
7.501- 17.890			10748579	758.377	25.3
$ 2 o-Terphenyl					CAS #: 84-15-1
13.612	13.616	-0.004	428083	17.0515	0.57

Data File: /chem/fid7.i/113009dr/006f0601.d
Date : 30-NOV-2009 13:02
Client ID: DBLK01LCS
Sample Info: |1201981728|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

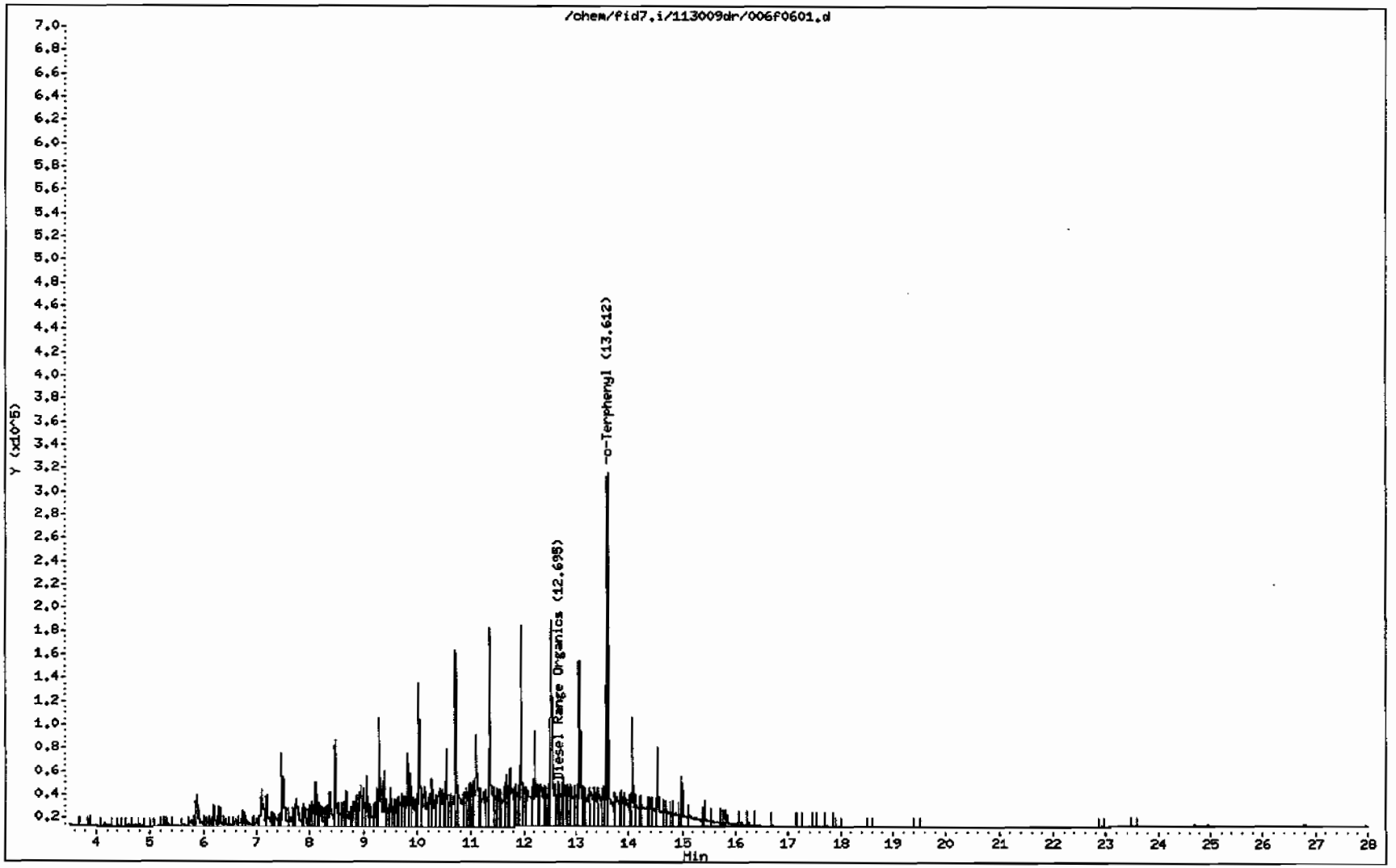

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981726	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
Client Sample:	QC for batch 926873	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–13868MS	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 15:30	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	010f1001.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		36.7	mg/kg	2.44	7.51

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/010f1001.d
Lab Smp Id: 1201981726 Client Smp ID: RE03-09-13868MS
Inj Date : 30-NOV-2009 15:30
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981726|1|
Misc Info : |FIDDRO_SF|926874|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	11.36220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			13827718	975.629	36.6	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.613	13.616	-0.003	460757	18.3530	0.69	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/010f1001.d
Date : 30-NOV-2009 15:30
Client ID: RE03-09-13868MS
Sample Info: |120198172611|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

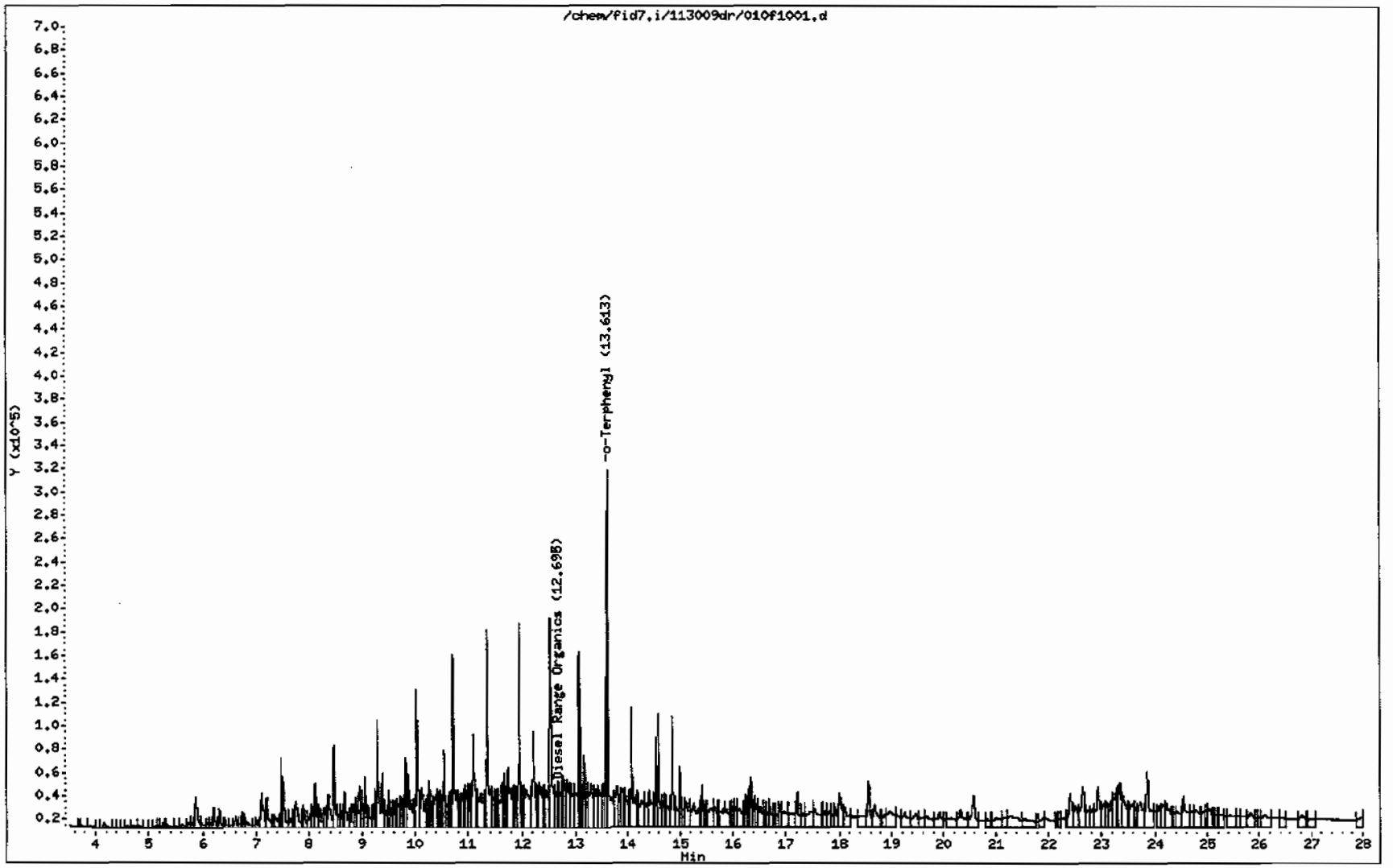

Data File: /chem/fid7.i/113009dc/010f1001.d
Injection Date: 30-NOV-2009 15:30
Instrument: fid7.i
Client Sample ID: RE03-09-13868MS

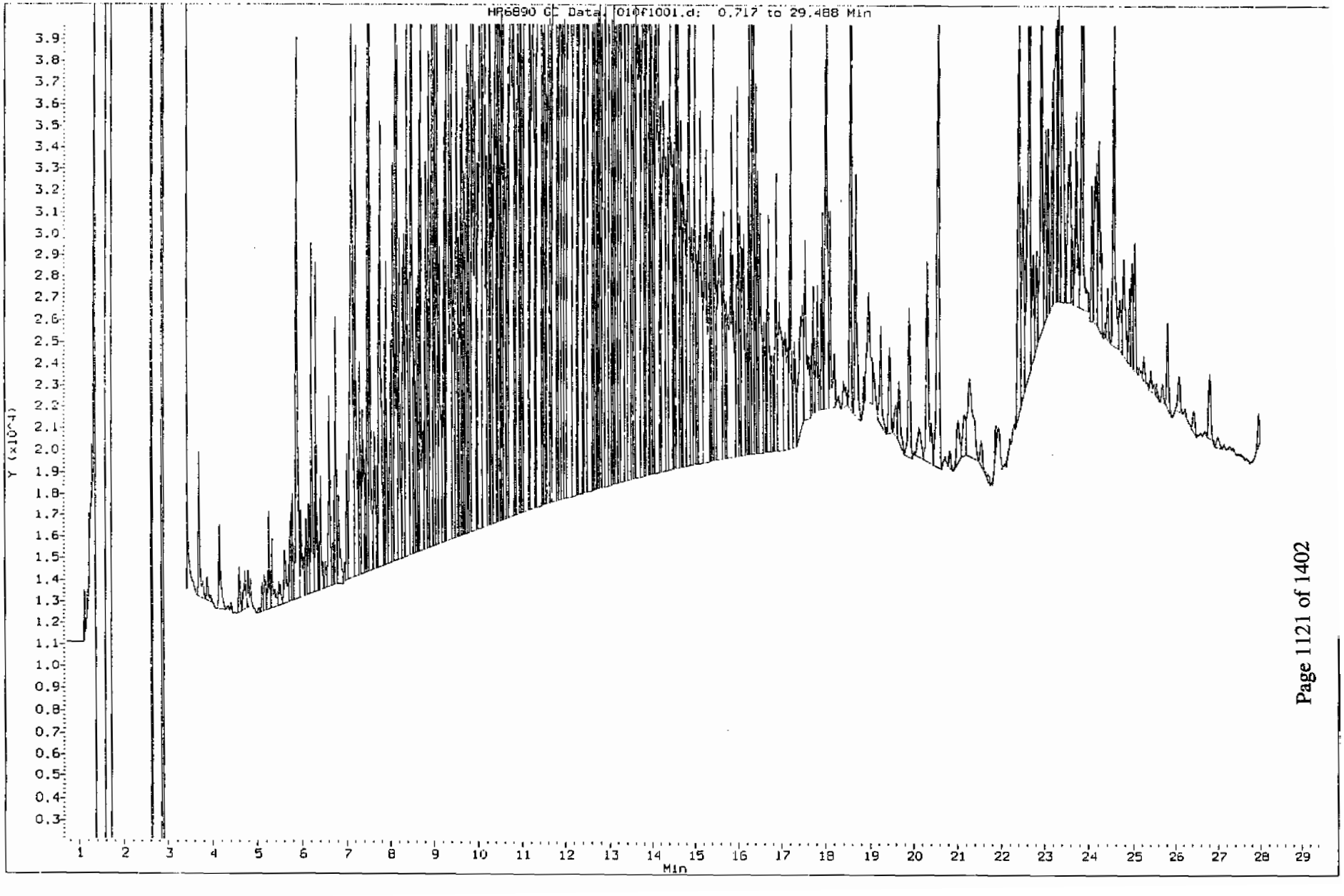

Data File: /chem/fid7.i/113009dr/010f1001.d
Injection Date: 30-NOV-2009 15:30
Instrument: fid7.i
Client Sample ID: RE03-09-13868MS

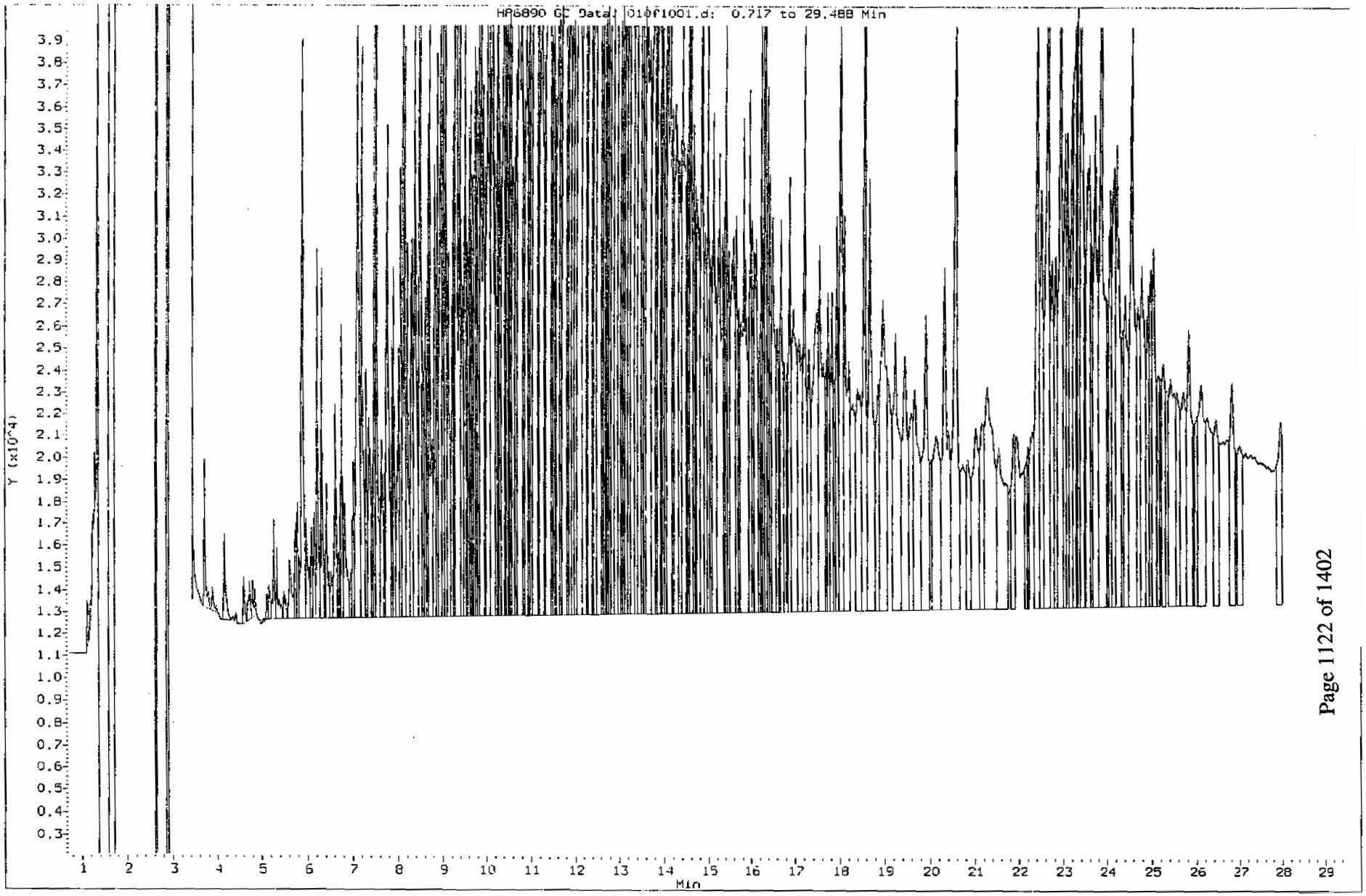

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981727	**Date Received:**	11/20/2009 08:50	**%Moisture:**	11.4
Client Sample:	QC for batch 926873	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–13868MSD	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 16:06	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	011f1101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		35.4	mg/kg	2.43	7.48

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/011f1101.d
Lab Smp Id: 1201981727 Client Smp ID: RE03-09-13868MSD
Inj Date : 30-NOV-2009 16:06
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981727|1|
Misc Info : |FIDDRO_SF|926874|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 11 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	11.36220	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			13431354	947.663	35.4	
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.614	13.616	-0.002	461126	18.3676	0.69	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/011f1101.d
Date : 30-NOV-2009 16:06
Client ID: RE03-09-13868MSD
Sample Info: |1201981727|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

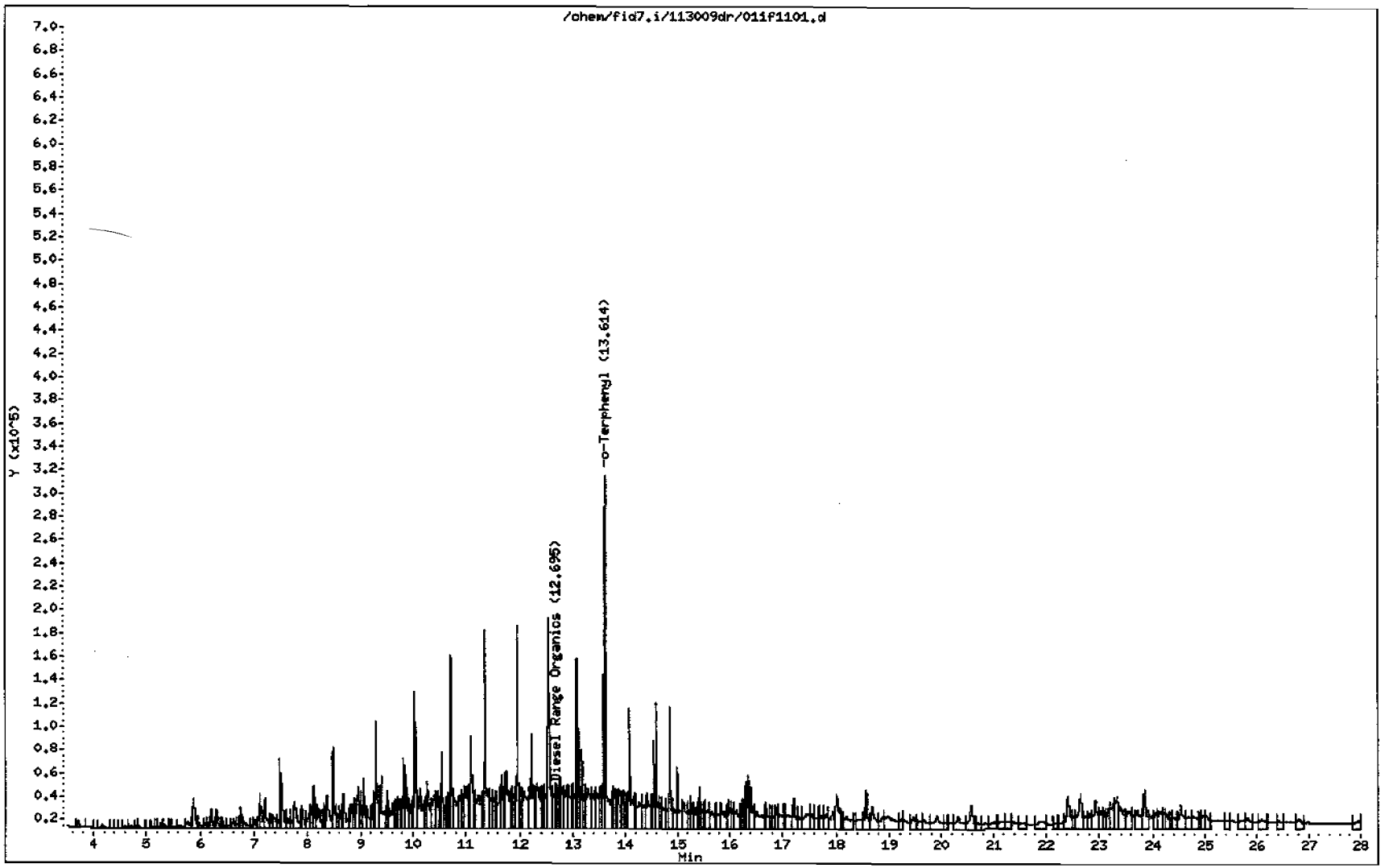

Data File: /chem/fid7.i/113009dr/011f1101.d
Injection Date: 30-NOV-2009 16:06
Instrument: fid7.i
Client Sample ID: RE03-09-13868MSD

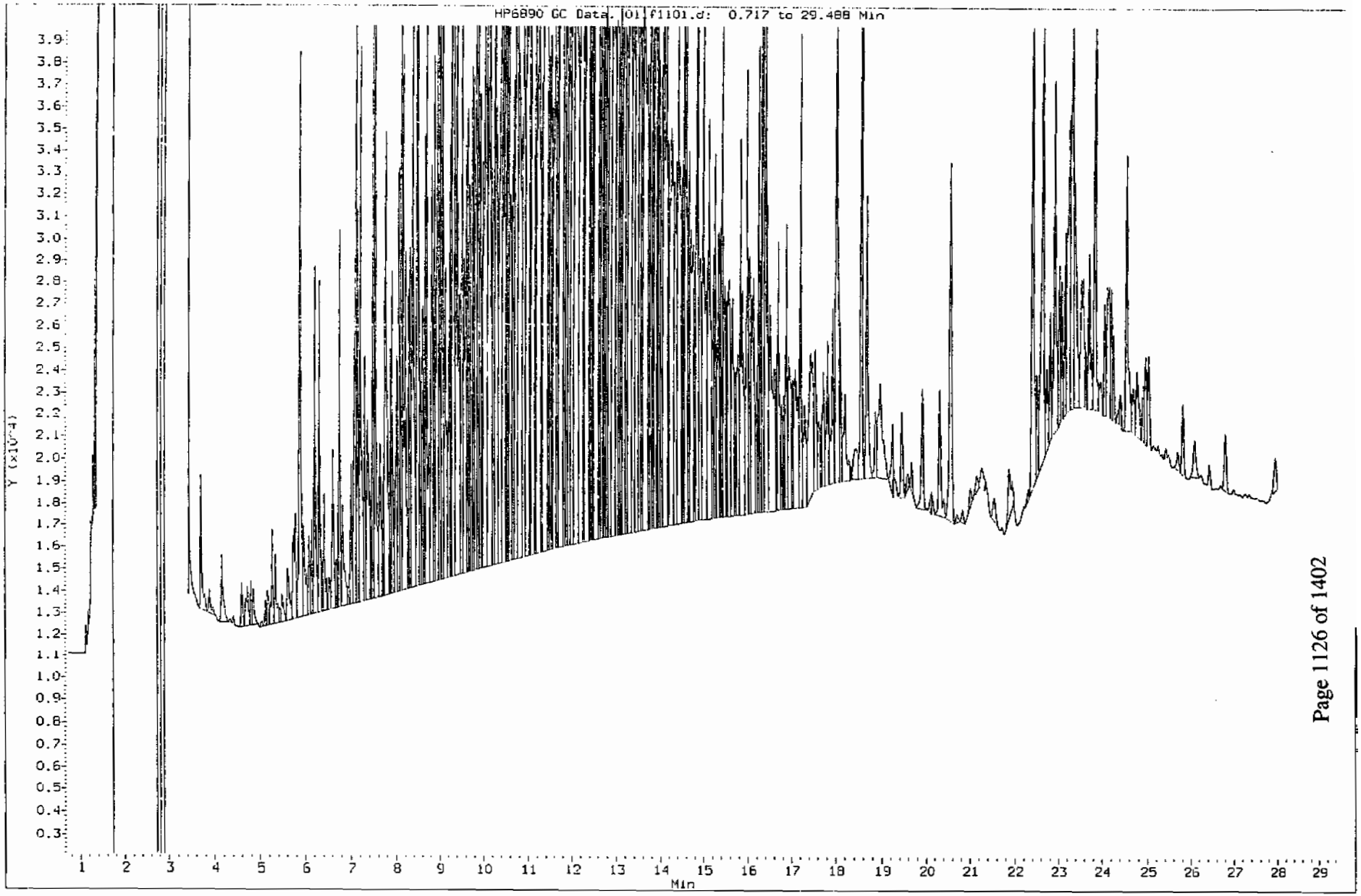

Data File: /chem/fid7.i/113009dr/011f1101.d
Injection Date: 30-NOV-2009 16:06
Instrument: fid7.i
Client Sample ID: RE03-09-13868MSD

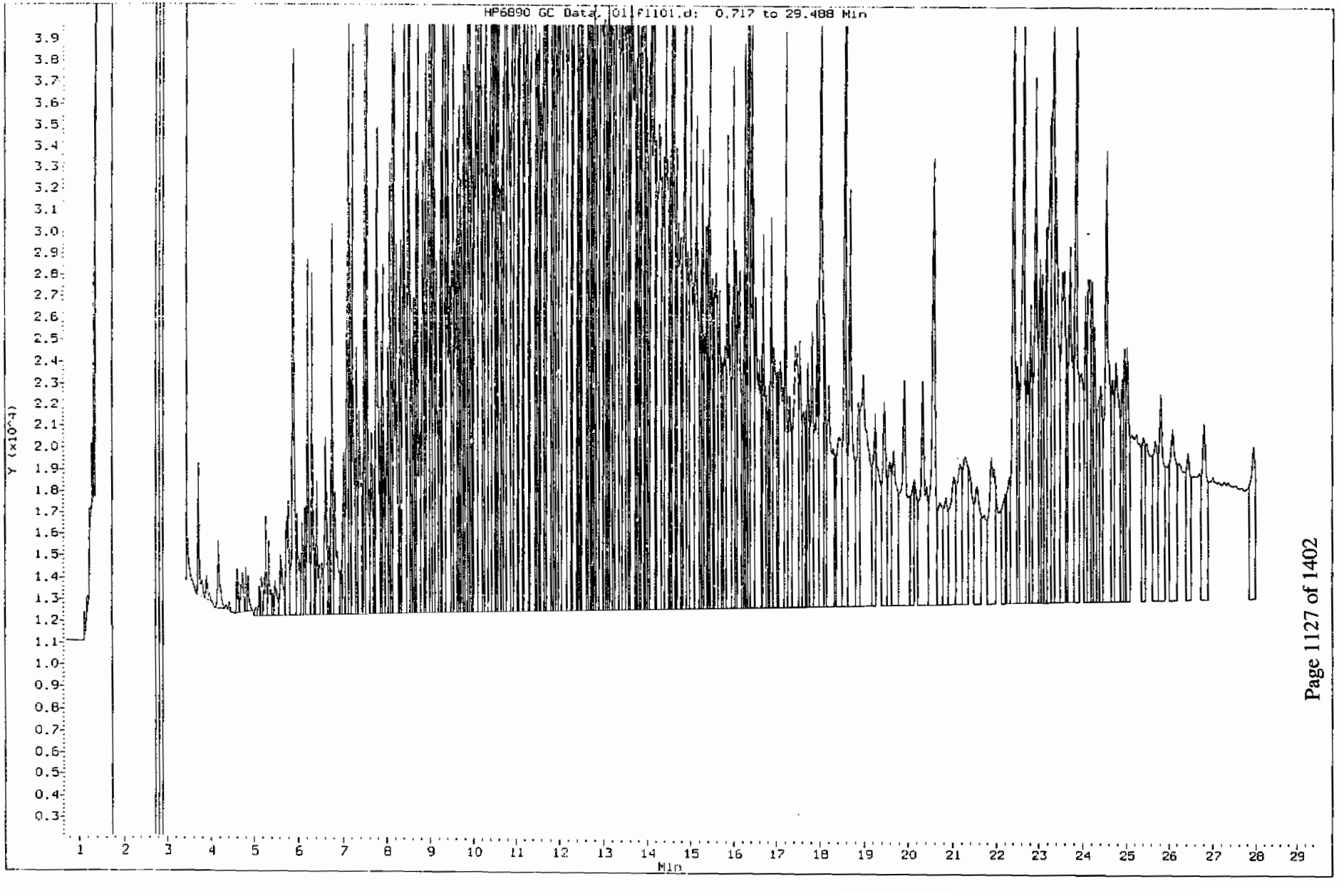

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 11/20/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111809DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	18-NOV-2009 20:26		SDGa07719	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	18-NOV-2009 21:03		SDGa00208	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	18-NOV-2009 21:40		SDGa07719	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	18-NOV-2009 22:17		SDGa07719	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	18-NOV-2009 22:54		SDGa07719	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	18-NOV-2009 23:31		SDGa07719	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	19-NOV-2009 00:07		SDGa07719	1.0		CAL. LEVEL 5
008f0801.d	WFI090928-01 D1	KXR2	19-NOV-2009 00:44		SDGa07719	1.0		PASSES, SECOND VENDOR ICV
009f0901.d	WFI090723-06 B2	KXR2	19-NOV-2009 01:21		SDGa07719	1.0		CLEAN
010f1001.d	1201974631	KXR2	19-NOV-2009 01:58	923777	10-435	1.0	MB	USE
011f1101.d	1201974632	KXR2	19-NOV-2009 02:36	923777	10-435	1.0	LCS	USE
012f1201.d	240828001	KXR2	19-NOV-2009 03:13	923777	10-435	1.0	LANL	USE
013f1301.d	240828002	KXR2	19-NOV-2009 03:50	923777	10-435	1.0	LANL	USE
014f1401.d	240828003	KXR2	19-NOV-2009 04:27	923777	10-435	1.0	LANL	USE
015f1501.d	240828004	KXR2	19-NOV-2009 05:04	923777	10-435	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	240828005	KXR2	19-NOV-2009 05:41	923777	10-435	1.0	LANL	USE

017f1701.d	240828006	KXR2	19-NOV-2009 06:18	923777	10-435	1.0	LANL	USE
018f1801.d	240828007	KXR2	19-NOV-2009 06:55	923777	10-435	1.0	LANL	USE
019f1901.d	240828008	KXR2	19-NOV-2009 07:31	923777	10-435	1.0	LANL	DUSE,OVERRANGE RERUN @10X SEE FILE 35
020f2001.d	240828009	KXR2	19-NOV-2009 08:09	923777	10-435	1.0	LANL	DUSE,SEE FILE 36
021f2101.d	UFI090911-02 D2	KXR2	19-NOV-2009 08:46		SDGa07719	1.0		PASSES
022f2201.d	WFI090723-06 B3	KXR2	19-NOV-2009 09:23		SDGa07719	1.0		CLEAN
023f2301.d	240828010	KXR2	19-NOV-2009 10:00	923777	10-435	20.0	LANL	USE
024f2401.d	240828011	KXR2	19-NOV-2009 10:37	923777	10-435	1.0	LANL	USE
025f2501.d	240865001	KXR2	19-NOV-2009 11:14	923777	10-444	1.0	LANL	USE
026f2601.d	240865002	KXR2	19-NOV-2009 11:50	923777	10-444	1.0	LANL	USE
027f2701.d	240865003	KXR2	19-NOV-2009 12:27	923777	10-444	1.0	LANL	USE
028f2801.d	240866001	KXR2	19-NOV-2009 13:04	923777	10-445	1.0	LANL	USE
029f2901.d	240866002	KXR2	19-NOV-2009 13:41	923777	10-445	1.0	LANL	USE
030f3001.d	241038002	KXR2	19-NOV-2009 14:18	923777	10-462	1.0	LANL	USE
031f3101.d	1201974633	KXR2	19-NOV-2009 14:55	923777	10-462	1.0	MS	USE
032f3201.d	1201974634	KXR2	19-NOV-2009 15:31	923777	10-462	1.0	MSD	USE
033f3301.d	UFI090911-02 D3	KXR2	19-NOV-2009 16:08		SDGa07719	1.0		PASSES
034f3401.d	WFI090723-06 B4	KXR2	19-NOV-2009 16:44		SDGa07719	1.0		CLEAN
035f3501.d	240828008	KXR2	19-NOV-2009 17:21	923777	10-435	10.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	240828009	KXR2	19-NOV-2009 17:59	923777	10-435	1.0	LANL	USE
037f3701.d	UFI091118-01 D4	KXR2	19-NOV-2009 18:36		SDGa07719	1.0		PASSES
038f3801.d	WFI090723-06 B5	KXR2	19-NOV-2009 19:13		SDGa07719	1.0		CLEAN
039f3901.d	1201975287	KXR2	19-NOV-2009 19:49	924008	241212	1.0	MB	USE
040f4001.d	1201975288	KXR2	19-NOV-2009 20:27	924008	241212	1.0	LCS	USE
041f4101.d	1201975292	KXR2	19-NOV-2009 21:04	924008	241212	1.0	LCSD	USE

042f4201.d	241212001	KXR2	19-NOV-2009 21:40	924008	241212		1.0	CONT	USE
043f4301.d	UFI091118-01 D5	KXR2	19-NOV-2009 22:18		SDGa07719		1.0		PASSES
044f4401.d	WFI090723-06 B6	KXR2	19-NOV-2009 22:54		SDGa07719		1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 12/02/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:113009DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	30-NOV-2009 09:59		SDGa20170	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	30-NOV-2009 10:36		SDGa20170	1.0		RTMARKER
003f0301.d	WFI091118-01 D1	KXR2	30-NOV-2009 11:12		SDGa20170	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	30-NOV-2009 11:49		SDGa20170	1.0		CLEAN
005f0501.d	1201981725	KXR2	30-NOV-2009 12:26	926874	10-604	1.0	MB	USE
006f0601.d	1201981728	KXR2	30-NOV-2009 13:02	926874	10-604	1.0	LCS	USE
007f0701.d	241540001	KXR2	30-NOV-2009 13:39	926874	10-604	1.0	LANL	USE
008f0801.d	241540002	KXR2	30-NOV-2009 14:16	926874	10-604	5.0	LANL	USE
009f0901.d	241540003	KXR2	30-NOV-2009 14:53	926874	10-604	1.0	LANL	USE
010f1001.d	1201981726	KXR2	30-NOV-2009 15:30	926874	10-604	1.0	MS	USE
011f1101.d	1201981727	KXR2	30-NOV-2009 16:06	926874	10-604	1.0	MSD	USE
012f1201.d	241540004	KXR2	30-NOV-2009 16:43	926874	10-604	1.0	LANL	USE
013f1301.d	WFI091118-01 D2	KXR2	30-NOV-2009 17:19		SDGa20170	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	30-NOV-2009 17:57		SDGa20170	1.0		CLEAN
015f1501.d	241540005	KXR2	30-NOV-2009 18:34	926874	10-604	20.0	LANL	USE

Instrument Batch: /chem/fid7.i/113009dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241540006	KXR2	30-NOV-2009 19:10	926874	10-604	1.0	LANL	USE

017f1701.d	241540007	KXR2	30-NOV-2009 19:47	926874	10-604	1.0	LANL	USE
018f1801.d	241540008	KXR2	30-NOV-2009 20:23	926874	10-604	1.0	LANL	USE
019f1901.d	241540009	KXR2	30-NOV-2009 21:00	926874	10-604	1.0	LANL	USE
020f2001.d	241540010	KXR2	30-NOV-2009 21:37	926874	10-604	1.0	LANL	USE
021f2101.d	241540011	KXR2	30-NOV-2009 22:14	926874	10-604	1.0	LANL	USE
022f2201.d	WFI091118-01 D3	KXR2	30-NOV-2009 22:51		SDGa20170	1.0		PASSES
023f2301.d	WFI091130-06 B4	KXR2	30-NOV-2009 23:28		SDGa20170	1.0		CLEAN
024f2401.d	241540012	KXR2	01-DEC-2009 00:05	926874	10-604	1.0	LANL	USE
025f2501.d	241540013	KXR2	01-DEC-2009 00:42	926874	10-604	1.0	LANL	USE
026f2601.d	241540014	KXR2	01-DEC-2009 01:19	926874	10-604	1.0	LANL	USE
027f2701.d	241540015	KXR2	01-DEC-2009 01:55	926874	10-604	1.0	LANL	USE
028f2801.d	241540016	KXR2	01-DEC-2009 02:33	926874	10-604	1.0	LANL	DUSE,OVERRANGE RERUN AT 10X
029f2901.d	241559001	KXR2	01-DEC-2009 03:10	926874	10-608-1	1.0	LANL	DUSE,OVERRANGE RERUN
030f3001.d	241559002	KXR2	01-DEC-2009 03:47	926874	10-608-1	1.0	LANL	USE
031f3101.d	WFI091118-01 D4	KXR2	01-DEC-2009 04:24		SDGa20170	1.0		PASSES
032f3201.d	WFI091130-06 B5	KXR2	01-DEC-2009 05:00		SDGa20170	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 12/03/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:120109DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	01-DEC-2009 11:32		SDGa14584	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	01-DEC-2009 12:08		SDGa14584	1.0		RTMARKER
003f0301.d	WFI091118-02 D1	KXR2	01-DEC-2009 12:45		SDGa14584	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	01-DEC-2009 13:22		SDGa14584	1.0		CLEAN
005f0501.d	241540016	KXR2	01-DEC-2009 13:59	926874	10-604	10.0	LANL	USE
006f0601.d	241559001	KXR2	01-DEC-2009 14:35	926874	10-608-1	1.0	LANL	USE
007f0701.d	WFI091118-02 D2	KXR2	01-DEC-2009 15:12		SDGa14584	1.0		PASSES
008f0801.d	WFI091130-06 B3	KXR2	01-DEC-2009 15:49		SDGa14584	1.0		CLEAN
009f0901.d	1201983217	KXR2	01-DEC-2009 16:26	927561	10-650	1.0	MB	USE
010f1001.d	1201983218	KXR2	01-DEC-2009 17:03	927561	10-650	1.0	LCS	USE
011f1101.d	241714002	KXR2	01-DEC-2009 17:40	927561	10-650	1.0	LANL	USE
012f1201.d	241718001	KXR2	01-DEC-2009 18:17	927561	10-653	1.0	LANL	USE
013f1301.d	241728002	KXR2	01-DEC-2009 18:54	927561	10-654	1.0	LANL	USE
014f1401.d	241750002	KXR2	01-DEC-2009 19:31	927561	10-655	1.0	LANL	USE
015f1501.d	241750003	KXR2	01-DEC-2009 20:08	927561	10-655	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241750004	KXR2	01-DEC-2009 20:44	927561	10-655	1.0	LANL	USE

017f1701.d	241750005	KXR2	01-DEC-2009 21:21	927561	10-655		1.0	LANL	USE
018f1801.d	WFI091118-02 D3	KXR2	01-DEC-2009 21:58		SDGa14584		1.0		PASSES
019f1901.d	WFI091130-06 B4	KXR2	01-DEC-2009 22:35		SDGa14584		1.0		CLEAN
020f2001.d	241750006	KXR2	01-DEC-2009 23:12	927561	10-655		1.0	LANL	USE
021f2101.d	241750007	KXR2	01-DEC-2009 23:49	927561	10-655		1.0	LANL	USE
022f2201.d	241750008	KXR2	02-DEC-2009 00:26	927561	10-655		1.0	LANL	USE
023f2301.d	241750009	KXR2	02-DEC-2009 01:03	927561	10-655		1.0	LANL	USE
024f2401.d	241750010	KXR2	02-DEC-2009 01:40	927561	10-655		1.0	LANL	USE
025f2501.d	241750011	KXR2	02-DEC-2009 02:16	927561	10-655		1.0	LANL	USE
026f2601.d	241899001	KXR2	02-DEC-2009 02:53	927561	10-687		20.0	LANL	DUSE,OVERRANGE RERUN @ 200X
027f2701.d	1201983219	KXR2	02-DEC-2009 03:31	927561	10-687		20.0	MS	DUSE,OVERRANGE RERUN @ 200X
028f2801.d	1201983220	KXR2	02-DEC-2009 04:08	927561	10-687		20.0	MSD	DUSE,OVERRANGE RERUN @ 200X
029f2901.d	WFI091118-02 D4	KXR2	02-DEC-2009 04:45		SDGa14584		1.0		PASSES
030f3001.d	WFI091130-06 B5	KXR2	02-DEC-2009 05:22		SDGa14584		1.0		CLEAN
031f3101.d	1201982260	KXR2	02-DEC-2009 05:58	927152	10-644		1.0	MB	USE
032f3201.d	1201982263	KXR2	02-DEC-2009 06:36	927152	10-644		1.0	LCS	USE
033f3301.d	241615001	KXR2	02-DEC-2009 07:13	927152	10-644		1.0	LANL	USE
034f3401.d	241615002	KXR2	02-DEC-2009 07:49	927152	10-644		1.0	LANL	USE
035f3501.d	241615003	KXR2	02-DEC-2009 08:26	927152	10-644		1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241615004	KXR2	02-DEC-2009 09:02	927152	10-644	1.0	LANL	USE
037f3701.d	241615005	KXR2	02-DEC-2009 09:39	927152	10-644	1.0	LANL	USE
038f3801.d	241615006	KXR2	02-DEC-2009 10:16	927152	10-644	1.0	LANL	USE
039f3901.d	WFI091118-02 D5	KXR2	02-DEC-2009 10:53		SDGa14584	1.0		PASSES
040f4001.d	WFI091130-06 B6	KXR2	02-DEC-2009 11:29		SDGa14584	1.0		CLEAN
041f4101.d	241615007	KXR2	02-DEC-2009 12:07	927152	10-644	1.0	LANL	USE

042f4201.d	241615008	KXR2	02-DEC-2009 12:43	927152	10-644		1.0	LANL	USE
043f4301.d	241615009	KXR2	02-DEC-2009 13:20	927152	10-644		1.0	LANL	USE
044f4401.d	241615010	KXR2	02-DEC-2009 13:56	927152	10-644		1.0	LANL	USE
045f4501.d	241615011	KXR2	02-DEC-2009 14:34	927152	10-644		1.0	LANL	USE
046f4601.d	241615012	KXR2	02-DEC-2009 15:11	927152	10-644		1.0	LANL	USE
047f4701.d	1201982261	KXR2	02-DEC-2009 15:47	927152	10-644		1.0	MS	USE
048f4801.d	1201982262	KXR2	02-DEC-2009 16:25	927152	10-644		1.0	MSD	USE
049f4901.d	WFI091118-02 D6	KXR2	02-DEC-2009 17:01		SDGa14584		1.0		PASSES
050f5001.d	WFI091130-06 B7	KXR2	02-DEC-2009 17:38		SDGa14584		1.0		CLEAN
051f5101.d	241615013	KXR2	02-DEC-2009 18:15	927152	10-644		1.0	LANL	USE
052f5201.d	241615014	KXR2	02-DEC-2009 18:53	927152	10-644		1.0	LANL	USE
053f5301.d	241615015	KXR2	02-DEC-2009 19:30	927152	10-644		1.0	LANL	USE
054f5401.d	241615016	KXR2	02-DEC-2009 20:07	927152	10-644		1.0	LANL	USE
055f5501.d	241615018	KXR2	02-DEC-2009 20:44	927152	10-644		1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241615020	KXR2	02-DEC-2009 21:21	927152	10-644	1.0	LANL	USE
057f5701.d	241697003	KXR2	02-DEC-2009 21:58	927152	10-648	1.0	LANL	USE
058f5801.d	241697004	KXR2	02-DEC-2009 22:35	927152	10-648	1.0	LANL	USE
059f5901.d	WFI091118-02 D7	KXR2	02-DEC-2009 23:12		SDGa14584	1.0		PASSES
060f6001.d	WFI091130-06 B8	KXR2	02-DEC-2009 23:49		SDGa14584	1.0		CLEAN
061f6101.d	241899001	KXR2	03-DEC-2009 00:26	927561	10-687	200.0	LANL	USE
062f6201.d	1201983219	KXR2	03-DEC-2009 01:03	927561	10-687	200.0	MS	USE
063f6301.d	1201983220	KXR2	03-DEC-2009 01:40	927561	10-687	200.0	MSD	USE
064f6401.d	WFI091118-02 D8	KXR2	03-DEC-2009 02:17		SDGa14584	1.0		PASSES
065f6501.d	WFI091130-06 B9	KXR2	03-DEC-2009 02:54		SDGa14584	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926873 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981725 MB	29-NOV-2009 20:09:19	30	1	0.03333
1201981728 LCS	29-NOV-2009 20:09:19	30	1	0.03333
241540001	29-NOV-2009 20:09:19	30.16	1	0.03316
241540002	29-NOV-2009 20:09:19	30.17	1	0.03315
241540003	29-NOV-2009 20:09:19	30.02	1	0.03331
1201981726 MS (241540003)	29-NOV-2009 20:09:19	30.03	1	0.0333
1201981727 MSD (241540003)	29-NOV-2009 20:09:19	30.17	1	0.03315
241540004	29-NOV-2009 20:09:19	30.15	1	0.03317
241540005	29-NOV-2009 20:09:19	30.02	1	0.03331
241540006	29-NOV-2009 20:09:19	30.09	1	0.03323
241540007	29-NOV-2009 20:09:19	30.16	1	0.03316
241540008	29-NOV-2009 20:09:19	30.01	1	0.03332
241540009	29-NOV-2009 20:09:19	30.07	1	0.03326
241540010	29-NOV-2009 20:09:19	30.02	1	0.03331
241540011	29-NOV-2009 20:09:19	30.02	1	0.03331
241540012	29-NOV-2009 20:09:19	30.12	1	0.0332
241540013	29-NOV-2009 20:09:19	30.15	1	0.03317
241540014	29-NOV-2009 20:09:19	30.01	1	0.03332
241540015	29-NOV-2009 20:09:19	30.19	1	0.03312
241540016	29-NOV-2009 20:09:19	30.02	1	0.03331
241559001	29-NOV-2009 20:09:19	30.08	1	0.03324
241559002	29-NOV-2009 20:09:19	30.03	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981728	TPH DRO LCS	UE091030-08	1	mL
MS	1201981726	TPH DRO LCS	UE091030-08	1	mL
MSD	1201981727	TPH DRO LCS	UE091030-08	1	mL
SURR	All	20 ppm surrogate	WE091121-04	1	mL
REGNT	All	Methylene Chloride	1234878-D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-604

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927083
Prep Batch Number:	927082

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241540001	RE03-09-13875
241540002	RE03-09-13865
241540003	RE03-09-13868
241540004	RE03-09-13867
241540005	RE03-09-13864
241540006	RE03-09-13871
241540007	RE03-09-13877
241540008	RE03-09-13869
241540009	RE03-09-13870
241540010	RE03-09-13873
241540011	RE03-09-13863
241540012	RE03-09-13874
241540013	RE03-09-13866
241540014	RE03-09-13862
241540015	RE03-09-13876
241540016	RE03-09-13872
1201982139	Method Blank (MB)
1201982142	Laboratory Control Sample (LCS)
1201982140	241540004(RE03-09-13867) Matrix Spike (MS)
1201982141	241540004(RE03-09-13867) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria for the Aroclors.

One or more of the five quantified peaks failed to meet the acceptance criteria in Aroclor-1254 standard analyzed for this SDG; however the average concentration of the five peaks met the acceptance criteria.

Surrogate recovery did not meet the acceptance criteria in the standards analyzed for this SDG; however this had no adverse effects on the data as all samples in this SDG met surrogate recovery acceptance criteria very well.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241540004 (RE03-09-13867) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina.

Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
Sample 241540009 (RE03-09-13870) was diluted at 1:25 due to the presence of over range target analytes.

Samples 241540003 (RE03-09-13868) (1:5) , 241540005 (RE03-09-13864) (1:25), 241540006 (RE03-09-13871) (1:5), 241540014 (RE03-09-13862) (1:5) and 241540016 (RE03-09-13872) (1:5) were diluted due to dark and thick matrix of the extracts.

Sample Re-extraction/Re-analysis
Re-extractions were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve

of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/17/09

Roadmap for LANL 10-604 PCB

This roadmap was analyzed by yip00818 on 12-05-2009, 11:16.
This roadmap was reviewed by jos00786 on 12-07-2009, 11:19.
This roadmap was packaged by sha01289 on 12-15-2009, 19:44.
This roadmap was reviewed by yml on 12-17-2009, 13:30.
This roadmap was packaged by yml on 12-17-2009, 13:59.
This roadmap was validated by jim01140 on 12-17-2009, 14:08.

From Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/036f3601.d	241540001	sample	04-DEC-2009	11:53	10-604.sub	RE03-09-13875	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/037f3701.d	241540002	sample	04-DEC-2009	12:06	10-604.sub	RE03-09-13865	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/038f3801.d	241540003	sample	04-DEC-2009	12:18	10-604.sub	RE03-09-13868	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/039f3901.d	241540004	sample	04-DEC-2009	12:31	10-604.sub	RE03-09-13867	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/042f4201.d	241540005	sample	04-DEC-2009	13:09	10-604.sub	RE03-09-13864	25.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/043f4301.d	241540006	sample	04-DEC-2009	13:22	10-604.sub	RE03-09-13871	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/046f4601.d	241540007	sample	04-DEC-2009	13:55	10-604.sub	RE03-09-13877	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/047f4701.d	241540008	sample	04-DEC-2009	14:08	10-604.sub	RE03-09-13869	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
■	N	/chem/ecd1a.i/120409.b/048f4801.d	241540009	sample	04-DEC-2009	14:20	10-604.sub	RE03-09-13870	5.00000	927083	DUSE RR 25X
☐	N	/chem/ecd1a.i/120409.b/060f6001.d	241540009	sample	04-DEC-2009	16:47	10-604.sub	RE03-09-13870	25.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/049f4901.d	241540010	sample	04-DEC-2009	14:33	10-604.sub	RE03-09-13873	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/050f5001.d	241540011	sample	04-DEC-2009	14:45	10-604.sub	RE03-09-13863	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/051f5101.d	241540012	sample	04-DEC-2009	14:58	10-604.sub	RE03-09-13874	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/052f5201.d	241540013	sample	04-DEC-2009	15:11	10-604.sub	RE03-09-13866	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/053f5301.d	241540014	sample	04-DEC-2009	15:23	10-604.sub	RE03-09-13862	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/054f5401.d	241540015	sample	04-DEC-2009	15:36	10-604.sub	RE03-09-13876	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/055f5501.d	241540016	sample	04-DEC-2009	15:48	10-604.sub	RE03-09-13872	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/036b3601.d	241540001	sample	04-DEC-2009	11:53	10-604.sub	RE03-09-13875	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/037b3701.d	241540002	sample	04-DEC-2009	12:06	10-604.sub	RE03-09-13865	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/038b3801.d	241540003	sample	04-DEC-2009	12:18	10-604.sub	RE03-09-13868	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/039b3901.d	241540004	sample	04-DEC-2009	12:31	10-604.sub	RE03-09-13867	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

☐	N	/chem/ecd1a.i/120409.b/042b4201.d	241540005	sample	04-DEC-2009	13:09	10-604.sub	RE03-09-13864	25.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/043b4301.d	241540006	sample	04-DEC-2009	13:22	10-604.sub	RE03-09-13871	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/046b4601.d	241540007	sample	04-DEC-2009	13:55	10-604.sub	RE03-09-13877	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/047b4701.d	241540008	sample	04-DEC-2009	14:08	10-604.sub	RE03-09-13869	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
■	N	/chem/ecd1a.i/120409.b/048b4801.d	241540009	sample	04-DEC-2009	14:20	10-604.sub	RE03-09-13870	5.00000	927083	DUSE RR 25X
☐	N	/chem/ecd1a.i/120409.b/060b6001.d	241540009	sample	04-DEC-2009	16:47	10-604.sub	RE03-09-13870	25.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/049b4901.d	241540010	sample	04-DEC-2009	14:33	10-604.sub	RE03-09-13873	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/050b5001.d	241540011	sample	04-DEC-2009	14:45	10-604.sub	RE03-09-13863	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/051b5101.d	241540012	sample	04-DEC-2009	14:58	10-604.sub	RE03-09-13874	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/052b5201.d	241540013	sample	04-DEC-2009	15:11	10-604.sub	RE03-09-13866	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/053b5301.d	241540014	sample	04-DEC-2009	15:23	10-604.sub	RE03-09-13862	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/054b5401.d	241540015	sample	04-DEC-2009	15:36	10-604.sub	RE03-09-13876	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/055b5501.d	241540016	sample	04-DEC-2009	15:48	10-604.sub	RE03-09-13872	5.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/034f3401.d	1201982139	mb	04-DEC-2009	11:28	10-604.sub	PBLK01	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/035f3501.d	1201982142	lcs	04-DEC-2009	11:41	10-604.sub	PBLK01LCS	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/040f4001.d	1201982140	ms	04-DEC-2009	12:44	10-604.sub	RE03-09-13867MS	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

☐	N	/chem/ecd1a.i/120409.b/041f4101.d	1201982141	msd	04-DEC-2009	12:56	10-604.sub	RE03-09-13867MSD	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/034b3401.d	1201982139	mb	04-DEC-2009	11:28	10-604.sub	PBLK01	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/035b3501.d	1201982142	lcs	04-DEC-2009	11:41	10-604.sub	PBLK01LCS	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/040b4001.d	1201982140	ms	04-DEC-2009	12:44	10-604.sub	RE03-09-13867MS	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/041b4101.d	1201982141	msd	04-DEC-2009	12:56	10-604.sub	RE03-09-13867MSD	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540014**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13862**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/04/2009 15:23**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**053f5301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	053b5301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	19.2	ug/kg	6.39	19.2	1
11104–28–2	Aroclor–1221	U	19.2	ug/kg	6.39	19.2	1
11141–16–5	Aroclor–1232	U	19.2	ug/kg	6.39	19.2	1
53469–21–9	Aroclor–1242	U	19.2	ug/kg	6.39	19.2	1
12672–29–6	Aroclor–1248	U	19.2	ug/kg	6.39	19.2	1
11097–69–1	Aroclor–1254	U	19.2	ug/kg	6.39	19.2	1
11096–82–5	Aroclor–1260	U	19.2	ug/kg	6.39	19.2	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540011	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13863	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:45	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	050f5001.d	**Column:**	1 CLP1	**Level:**	LOW
	050b5001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.64	ug/kg	1.21	3.64	1
11104-28-2	Aroclor-1221	U	3.64	ug/kg	1.21	3.64	1
11141-16-5	Aroclor-1232	U	3.64	ug/kg	1.21	3.64	1
53469-21-9	Aroclor-1242	U	3.64	ug/kg	1.21	3.64	1
12672-29-6	Aroclor-1248	U	3.64	ug/kg	1.21	3.64	1
11097-69-1	Aroclor-1254	U	3.64	ug/kg	1.21	3.64	1
11096-82-5	Aroclor-1260	U	3.64	ug/kg	1.21	3.64	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13864	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	25
Run Date:	12/04/2009 13:09	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	042f4201.d	**Column:**	1 CLP1	**Level:**	LOW
	042b4201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	91.4	ug/kg	30.4	91.4	1
11104–28–2	Aroclor–1221	U	91.4	ug/kg	30.4	91.4	1
11141–16–5	Aroclor–1232	U	91.4	ug/kg	30.4	91.4	1
53469–21–9	Aroclor–1242	U	91.4	ug/kg	30.4	91.4	1
12672–29–6	Aroclor–1248	U	91.4	ug/kg	30.4	91.4	1
11097–69–1	Aroclor–1254	U	91.4	ug/kg	30.4	91.4	1
11096–82–5	Aroclor–1260	U	91.4	ug/kg	30.4	91.4	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13865**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:06**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**037f3701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	037b3701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.83	ug/kg	1.28	3.83	1
11104–28–2	Aroclor–1221	U	3.83	ug/kg	1.28	3.83	1
11141–16–5	Aroclor–1232	U	3.83	ug/kg	1.28	3.83	1
53469–21–9	Aroclor–1242	U	3.83	ug/kg	1.28	3.83	1
12672–29–6	Aroclor–1248	U	3.83	ug/kg	1.28	3.83	1
11097–69–1	Aroclor–1254		39.2	ug/kg	1.28	3.83	1
11096–82–5	Aroclor–1260		25.5	ug/kg	1.28	3.83	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540013**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13866**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:11**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**052f5201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	052b5201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.87	ug/kg	1.29	3.87	1
11104–28–2	Aroclor–1221	U	3.87	ug/kg	1.29	3.87	1
11141–16–5	Aroclor–1232	U	3.87	ug/kg	1.29	3.87	1
53469–21–9	Aroclor–1242	U	3.87	ug/kg	1.29	3.87	1
12672–29–6	Aroclor–1248	U	3.87	ug/kg	1.29	3.87	1
11097–69–1	Aroclor–1254	U	3.87	ug/kg	1.29	3.87	1
11096–82–5	Aroclor–1260		17.4	ug/kg	1.29	3.87	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13867	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 12:31	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	039f3901.d	**Column:**	1 CLP1	**Level:**	LOW
	039b3901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.80	ug/kg	1.27	3.80	1
11104–28–2	Aroclor–1221	U	3.80	ug/kg	1.27	3.80	1
11141–16–5	Aroclor–1232	U	3.80	ug/kg	1.27	3.80	1
53469–21–9	Aroclor–1242	U	3.80	ug/kg	1.27	3.80	1
12672–29–6	Aroclor–1248	U	3.80	ug/kg	1.27	3.80	1
11097–69–1	Aroclor–1254	U	3.80	ug/kg	1.27	3.80	1
11096–82–5	Aroclor–1260		6.80	ug/kg	1.27	3.80	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13868**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/04/2009 12:18**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**038f3801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	038b3801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.8	ug/kg	6.25	18.8	1
11104–28–2	Aroclor–1221	U	18.8	ug/kg	6.25	18.8	1
11141–16–5	Aroclor–1232	U	18.8	ug/kg	6.25	18.8	1
53469–21–9	Aroclor–1242	U	18.8	ug/kg	6.25	18.8	1
12672–29–6	Aroclor–1248	U	18.8	ug/kg	6.25	18.8	1
11097–69–1	Aroclor–1254	U	18.8	ug/kg	6.25	18.8	1
11096–82–5	Aroclor–1260	U	18.8	ug/kg	6.25	18.8	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540008**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13869**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:08**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**047f4701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	047b4701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.00	ug/kg	1.33	4.00	1
11104–28–2	Aroclor–1221	U	4.00	ug/kg	1.33	4.00	1
11141–16–5	Aroclor–1232	U	4.00	ug/kg	1.33	4.00	1
53469–21–9	Aroclor–1242	U	4.00	ug/kg	1.33	4.00	1
12672–29–6	Aroclor–1248	U	4.00	ug/kg	1.33	4.00	1
11097–69–1	Aroclor–1254	U	4.00	ug/kg	1.33	4.00	1
11096–82–5	Aroclor–1260	U	4.00	ug/kg	1.33	4.00	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540009	**Date Received:**	11/20/2009 08:50	**%Moisture:**	13.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13870	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	25
Run Date:	12/04/2009 16:47	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	060f6001.d	**Column:**	1 CLP1	**Level:**	LOW
	060b6001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	96.4	ug/kg	32.1	96.4	1
11104–28–2	Aroclor–1221	U	96.4	ug/kg	32.1	96.4	1
11141–16–5	Aroclor–1232	U	96.4	ug/kg	32.1	96.4	1
53469–21–9	Aroclor–1242	U	96.4	ug/kg	32.1	96.4	1
12672–29–6	Aroclor–1248	U	96.4	ug/kg	32.1	96.4	1
11097–69–1	Aroclor–1254		1280	ug/kg	32.1	96.4	1
11096–82–5	Aroclor–1260		487	ug/kg	32.1	96.4	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540006**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13871**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/04/2009 13:22**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**043f4301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	043b4301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	19.8	ug/kg	6.59	19.8	1
11104–28–2	Aroclor–1221	U	19.8	ug/kg	6.59	19.8	1
11141–16–5	Aroclor–1232	U	19.8	ug/kg	6.59	19.8	1
53469–21–9	Aroclor–1242	U	19.8	ug/kg	6.59	19.8	1
12672–29–6	Aroclor–1248	U	19.8	ug/kg	6.59	19.8	1
11097–69–1	Aroclor–1254		225	ug/kg	6.59	19.8	1
11096–82–5	Aroclor–1260		103	ug/kg	6.59	19.8	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540016**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13872**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/04/2009 15:48**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**055f5501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	055b5501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.3	ug/kg	6.09	18.3	1
11104–28–2	Aroclor–1221	U	18.3	ug/kg	6.09	18.3	1
11141–16–5	Aroclor–1232	U	18.3	ug/kg	6.09	18.3	1
53469–21–9	Aroclor–1242	U	18.3	ug/kg	6.09	18.3	1
12672–29–6	Aroclor–1248	U	18.3	ug/kg	6.09	18.3	1
11097–69–1	Aroclor–1254	U	18.3	ug/kg	6.09	18.3	1
11096–82–5	Aroclor–1260	U	18.3	ug/kg	6.09	18.3	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540010	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13873	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:33	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	049f4901.d	**Column:**	1 CLP1	**Level:**	LOW
	049b4901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.65	ug/kg	1.22	3.65	1
11104–28–2	Aroclor–1221	U	3.65	ug/kg	1.22	3.65	1
11141–16–5	Aroclor–1232	U	3.65	ug/kg	1.22	3.65	1
53469–21–9	Aroclor–1242	U	3.65	ug/kg	1.22	3.65	1
12672–29–6	Aroclor–1248	U	3.65	ug/kg	1.22	3.65	1
11097–69–1	Aroclor–1254	U	3.65	ug/kg	1.22	3.65	1
11096–82–5	Aroclor–1260	U	3.65	ug/kg	1.22	3.65	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13874	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:58	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	051f5101.d	**Column:**	1 CLP1	**Level:**	LOW
	051b5101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254	U	3.57	ug/kg	1.19	3.57	1
11096-82-5	Aroclor-1260	J	1.80	ug/kg	1.19	3.57	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13875	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 11:53	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	1 CLP1	**Level:**	LOW
	036b3601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.72	ug/kg	1.24	3.72	1
11104-28-2	Aroclor-1221	U	3.72	ug/kg	1.24	3.72	1
11141-16-5	Aroclor-1232	U	3.72	ug/kg	1.24	3.72	1
53469-21-9	Aroclor-1242	U	3.72	ug/kg	1.24	3.72	1
12672-29-6	Aroclor-1248	U	3.72	ug/kg	1.24	3.72	1
11097-69-1	Aroclor-1254	U	3.72	ug/kg	1.24	3.72	1
11096-82-5	Aroclor-1260	U	3.72	ug/kg	1.24	3.72	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540015**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13876**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:36**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**054f5401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	054b5401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.70	ug/kg	1.23	3.70	1
11104–28–2	Aroclor–1221	U	3.70	ug/kg	1.23	3.70	1
11141–16–5	Aroclor–1232	U	3.70	ug/kg	1.23	3.70	1
53469–21–9	Aroclor–1242	U	3.70	ug/kg	1.23	3.70	1
12672–29–6	Aroclor–1248	U	3.70	ug/kg	1.23	3.70	1
11097–69–1	Aroclor–1254	U	3.70	ug/kg	1.23	3.70	1
11096–82–5	Aroclor–1260	J	3.50	ug/kg	1.23	3.70	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13877**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 13:55**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**046f4601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	046b4601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.71	ug/kg	1.24	3.71	1
11104–28–2	Aroclor–1221	U	3.71	ug/kg	1.24	3.71	1
11141–16–5	Aroclor–1232	U	3.71	ug/kg	1.24	3.71	1
53469–21–9	Aroclor–1242	U	3.71	ug/kg	1.24	3.71	1
12672–29–6	Aroclor–1248	U	3.71	ug/kg	1.24	3.71	1
11097–69–1	Aroclor–1254	U	3.71	ug/kg	1.24	3.71	1
11096–82–5	Aroclor–1260	U	3.71	ug/kg	1.24	3.71	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10–604

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201982139	MB for batch 927082	77		75		79		81	
1201982142	LCS for batch 927082	72		70		77		84	
241540001	RE03–09–13875	66		67		72		74	
241540002	RE03–09–13865	67		65		63		60	
241540003	RE03–09–13868	62	D	65	D	68	D	71	D
241540004	RE03–09–13867	66		66		68		69	
1201982140	RE03–09–13867MS	69		68		71		72	
1201982141	RE03–09–13867MSD	69		68		68		73	
241540005	RE03–09–13864	64	D	69	D	68	D	78	D
241540006	RE03–09–13871	66	D	68	D	67	D	84	D
241540007	RE03–09–13877	65		65		66		73	
241540008	RE03–09–13869	75		75		77		80	
241540010	RE03–09–13873	66		67		65		64	
241540011	RE03–09–13863	69		69		70		70	
241540012	RE03–09–13874	64		65		65		68	
241540013	RE03–09–13866	64		63		61		64	
241540014	RE03–09–13862	56	D	59	D	62	D	62	D
241540015	RE03–09–13876	57		54		53		54	
241540016	RE03–09–13872	42	D	49	D	52	D	51	D
241540009	RE03–09–13870	77	D	64	D	94	D	84	D

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%–105%)
DCB = Decachlorobiphenyl	(33%–115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–604
Client ID: LCS for batch 927082
Lab Sample ID: 1201982142
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:41
Dilution: 1
Prep Batch ID: 927082
Batch ID: 927083

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	LCS	Aroclor–1016	33.3	0.0	25.0	75	41–110
11096–82–5	LCS	Aroclor–1260	33.3	0.0	28.6	86	48–110

Quality Control Summary
Spike Recovery Report

SDG Number: 10–604
Client ID: RE03–09–13867MS
Lab Sample ID: 1201982140
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 12:44
Prep Batch ID: 927082
Batch ID: 927083
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	MS	Aroclor–1016	38.0	0.00	U	26.2	69	23–117
11096–82–5	MS	Aroclor–1260	38.0	6.80		32.9	69	27–116

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-604**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03-09-13867MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201982141**	**%Moisture:**	**12.3**
Instrument:	**ECD1A.I**	**Analysis Date:**	**12/04/2009 12:56**
Analyst:	**YS1**	**Prep Batch ID:**	**927082**
Inj. Vol:	**1 uL**	**Batch ID:**	**927083**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	38.0	0.00	U	26.9	71	23-117	3	0-30
11096-82-5	MSD Aroclor-1260	38.0	6.80		34.2	72	27-116	4	0-30

Method Blank Summary

SDG Number:	10-604	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927082	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	034b3401-1.d 034f3401-1.d
Lab Sample ID:	1201982139				
Column:	CLP2 CLP1	Prep Date:	11/29/2009 16:38	Analyzed:	12/04/09 11:28
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927082	1201982142	035f3501-1.d 035b3501-1.d	12/04/09	1141
02 RE03-09-13875	241540001	036f3601.d 036b3601.d	12/04/09	1153
03 RE03-09-13865	241540002	037f3701.d 037b3701.d	12/04/09	1206
04 RE03-09-13868	241540003	038f3801.d 038b3801.d	12/04/09	1218
05 RE03-09-13867	241540004	039f3901.d 039b3901.d	12/04/09	1231
06 RE03-09-13867MS	1201982140	040f4001.d 040b4001.d	12/04/09	1244
07 RE03-09-13867MSD	1201982141	041f4101.d 041b4101.d	12/04/09	1256
08 RE03-09-13864	241540005	042f4201.d 042b4201.d	12/04/09	1309
09 RE03-09-13871	241540006	043f4301.d 043b4301.d	12/04/09	1322
10 RE03-09-13877	241540007	046f4601.d 046b4601.d	12/04/09	1355
11 RE03-09-13869	241540008	047f4701.d 047b4701.d	12/04/09	1408
12 RE03-09-13873	241540010	049f4901.d 049b4901.d	12/04/09	1433
13 RE03-09-13863	241540011	050f5001.d 050b5001.d	12/04/09	1445
14 RE03-09-13874	241540012	051f5101.d 051b5101.d	12/04/09	1458
15 RE03-09-13866	241540013	052f5201.d 052b5201.d	12/04/09	1511
16 RE03-09-13862	241540014	053f5301.d 053b5301.d	12/04/09	1523
17 RE03-09-13876	241540015	054f5401.d 054b5401.d	12/04/09	1536

Method Blank Summary

SDG Number:	10–604	**Client:**	LANL010	**Matrix:**	SOIL
Client ID:	MB for batch 927082	**Instrument ID:**	ECD1A.I_2 ECD1A.I_1	**Data File:**	034b3401–1.d 034f3401–1.d
Lab Sample ID:	1201982139				
Column:	CLP2 CLP1	**Prep Date:**	11/29/2009 16:38	**Analyzed:**	12/04/09 11:28
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
18 RE03–09–13872	241540016	055f5501.d 055b5501.d	12/04/09	1548
19 RE03–09–13870	241540009	060f6001.d 060b6001.d	12/04/09	1647

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540014**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13862**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/04/2009 15:23**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**053f5301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	053b5301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	19.2	ug/kg	6.39	19.2	1
11104–28–2	Aroclor–1221	U	19.2	ug/kg	6.39	19.2	1
11141–16–5	Aroclor–1232	U	19.2	ug/kg	6.39	19.2	1
53469–21–9	Aroclor–1242	U	19.2	ug/kg	6.39	19.2	1
12672–29–6	Aroclor–1248	U	19.2	ug/kg	6.39	19.2	1
11097–69–1	Aroclor–1254	U	19.2	ug/kg	6.39	19.2	1
11096–82–5	Aroclor–1260	U	19.2	ug/kg	6.39	19.2	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/053f5301.d
Lab Smp Id: 241540014 Client Smp ID: RE03-09-13862
Inj Date : 04-DEC-2009 15:23
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540014|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13862|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 53
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	13.14370	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	9992339	22.3906	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	10132377	24.7883	4.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/053f5301.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13862

Sample Info: |241540014151

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

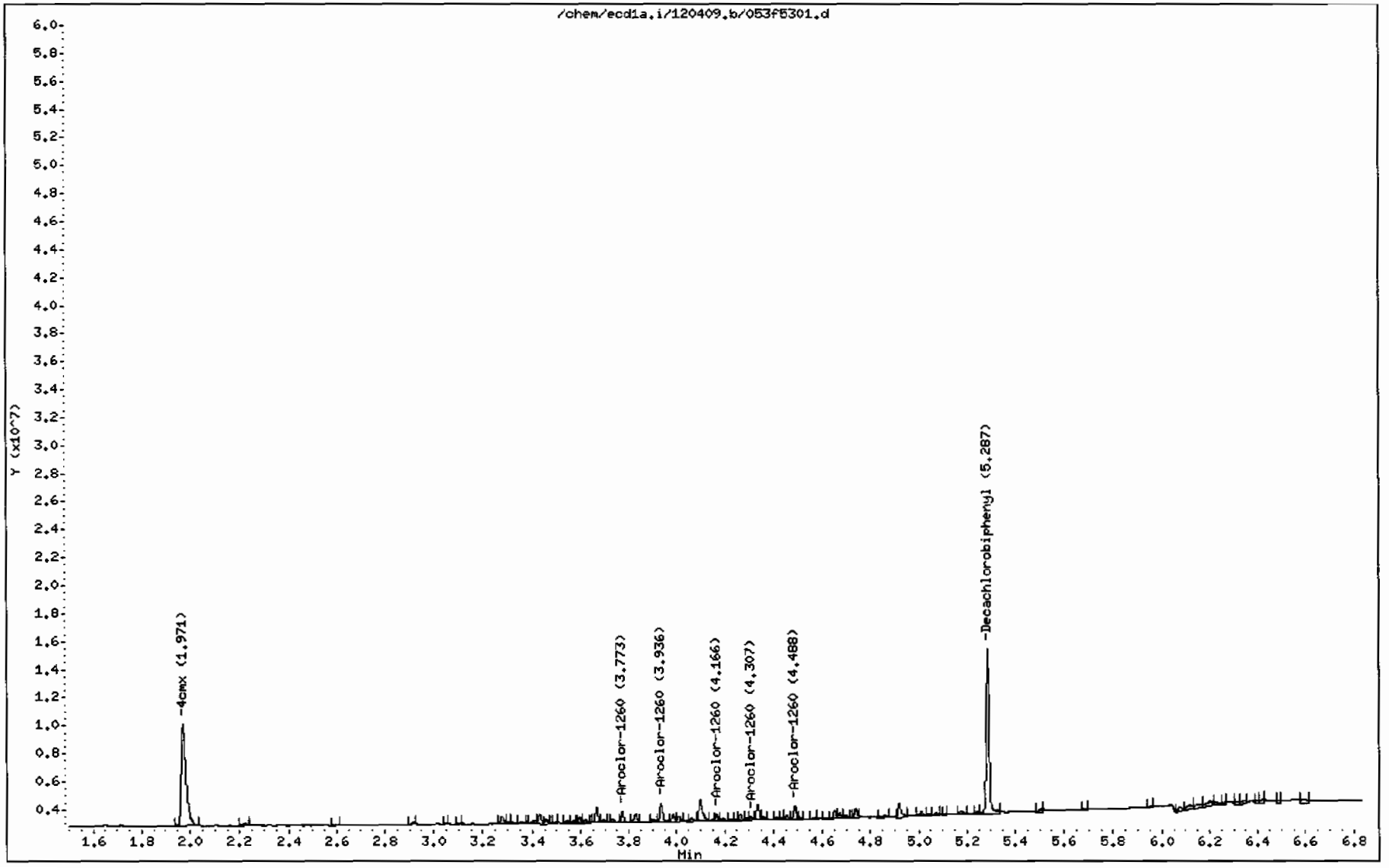

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/053b5301.d
Lab Smp Id: 241540014 Client Smp ID: RE03-09-13862
Inj Date : 04-DEC-2009 15:23
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540014|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13862|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 53
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	13.14370	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	8749941	23.5659	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	7418855	24.6819	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/053b5301.d

Date : 04-DEC-2009 15:23

Client ID: RE03-09-13862

Sample Info: |241540014|5|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

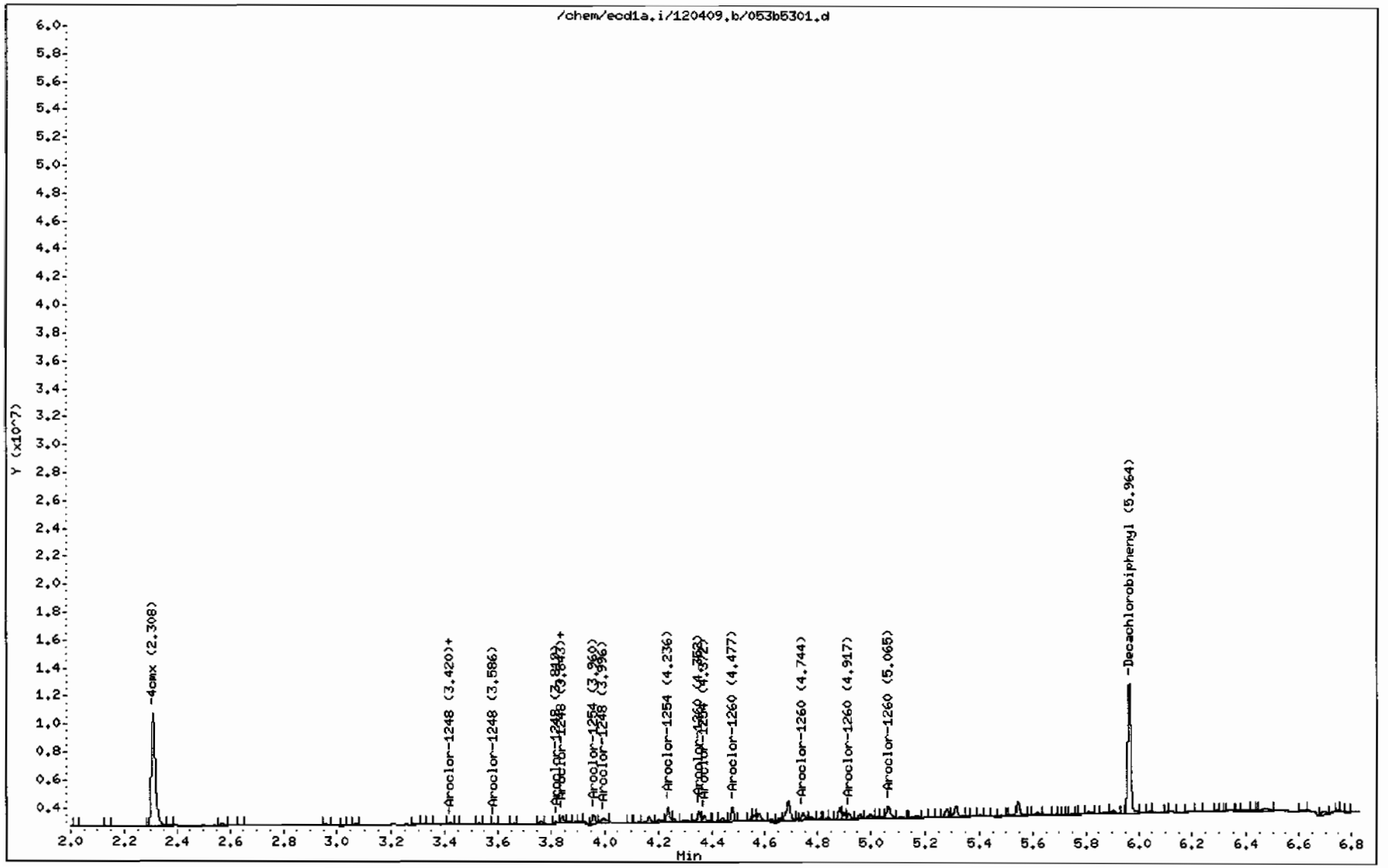

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540011**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13863**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:45**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**050f5001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	050b5001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.64	ug/kg	1.21	3.64	1
11104–28–2	Aroclor–1221	U	3.64	ug/kg	1.21	3.64	1
11141–16–5	Aroclor–1232	U	3.64	ug/kg	1.21	3.64	1
53469–21–9	Aroclor–1242	U	3.64	ug/kg	1.21	3.64	1
12672–29–6	Aroclor–1248	U	3.64	ug/kg	1.21	3.64	1
11097–69–1	Aroclor–1254	U	3.64	ug/kg	1.21	3.64	1
11096–82–5	Aroclor–1260	U	3.64	ug/kg	1.21	3.64	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/050f5001.d
Lab Smp Id: 241540011 Client Smp ID: RE03-09-13863
Inj Date : 04-DEC-2009 14:45
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540011|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13863|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	8.62330	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	61785621	138.448	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	57462751	140.580	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/050f5001.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13863

Sample Info: |241540011|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

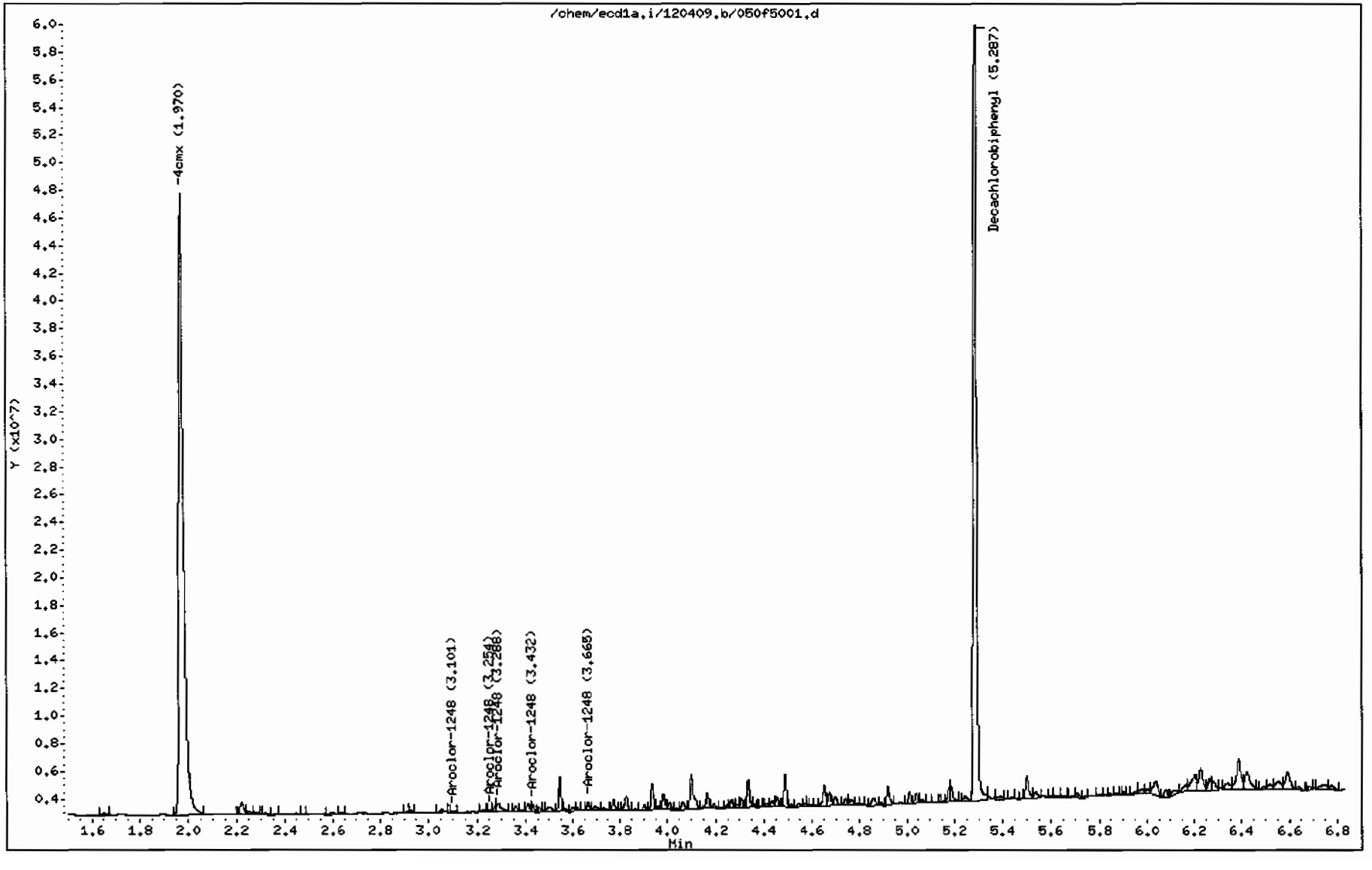

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/050b5001.d
Lab Smp Id: 241540011 Client Smp ID: RE03-09-13863
Inj Date : 04-DEC-2009 14:45
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540011|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13863|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	8.62330	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	51398033	138.429	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	41809011	139.095	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/050b5001.d

Date : 04-DEC-2009 14:45

Client ID: RE03-09-13863

Sample Info: |241540011|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

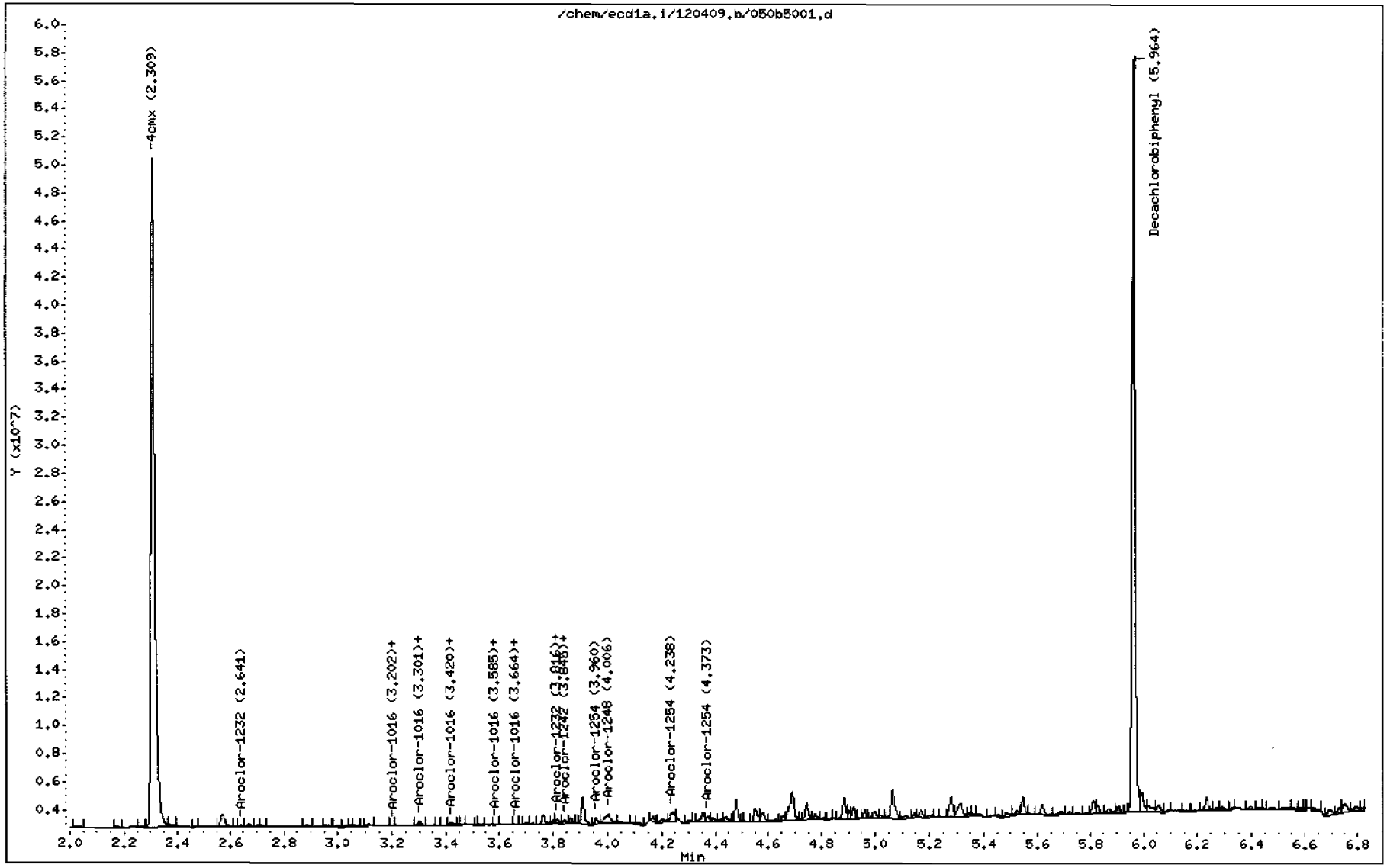

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540005	**Date Received:**	11/20/2009 08:50	**%Moisture:**	8.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13864	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	25
Run Date:	12/04/2009 13:09	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	042f4201.d	**Column:**	1 CLP1	**Level:**	LOW
	042b4201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	91.4	ug/kg	30.4	91.4	1
11104–28–2	Aroclor–1221	U	91.4	ug/kg	30.4	91.4	1
11141–16–5	Aroclor–1232	U	91.4	ug/kg	30.4	91.4	1
53469–21–9	Aroclor–1242	U	91.4	ug/kg	30.4	91.4	1
12672–29–6	Aroclor–1248	U	91.4	ug/kg	30.4	91.4	1
11097–69–1	Aroclor–1254	U	91.4	ug/kg	30.4	91.4	1
11096–82–5	Aroclor–1260	U	91.4	ug/kg	30.4	91.4	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/120409.b/042f4201.d
Lab Smp Id: 241540005 Client Smp ID: RE03-09-13864
Inj Date : 04-DEC-2009 13:09
Operator : YS1 Inst ID: ecdla.i
Smp Info : |241540005|25|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13864|||
Comment :
Method : /chem/ecdla.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 42
Dil Factor: 25.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	25.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	8.94060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	2276660	5.10149	4.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	2227690	5.44992	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/042f4201.d

Date : 04-DEC-2009 13:09

Client ID: RE03-09-13864

Sample Info: |2415400051251

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

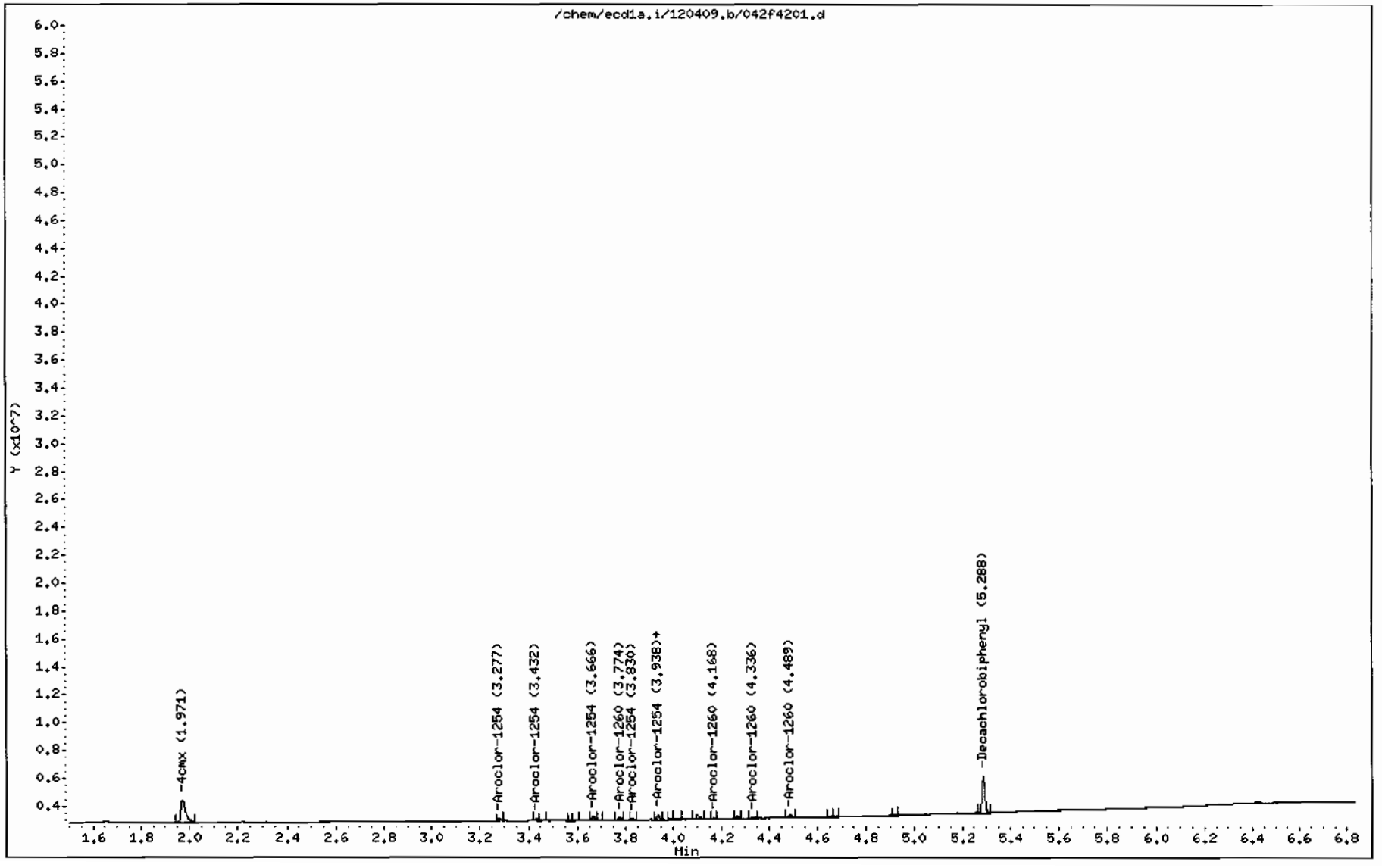

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/042b4201.d
Lab Smp Id: 241540005 Client Smp ID: RE03-09-13864
Inj Date : 04-DEC-2009 13:09
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540005|25|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13864|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 42
Dil Factor: 25.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	25.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	8.94060	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	2046562	5.51194	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	1873481	6.23292	5.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/042b4201.d

Page 1

Date : 04-DEC-2009 13:09

Client ID: RE03-09-13864

Instrument: ecd1a.i

Sample Info: 12415400051251

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

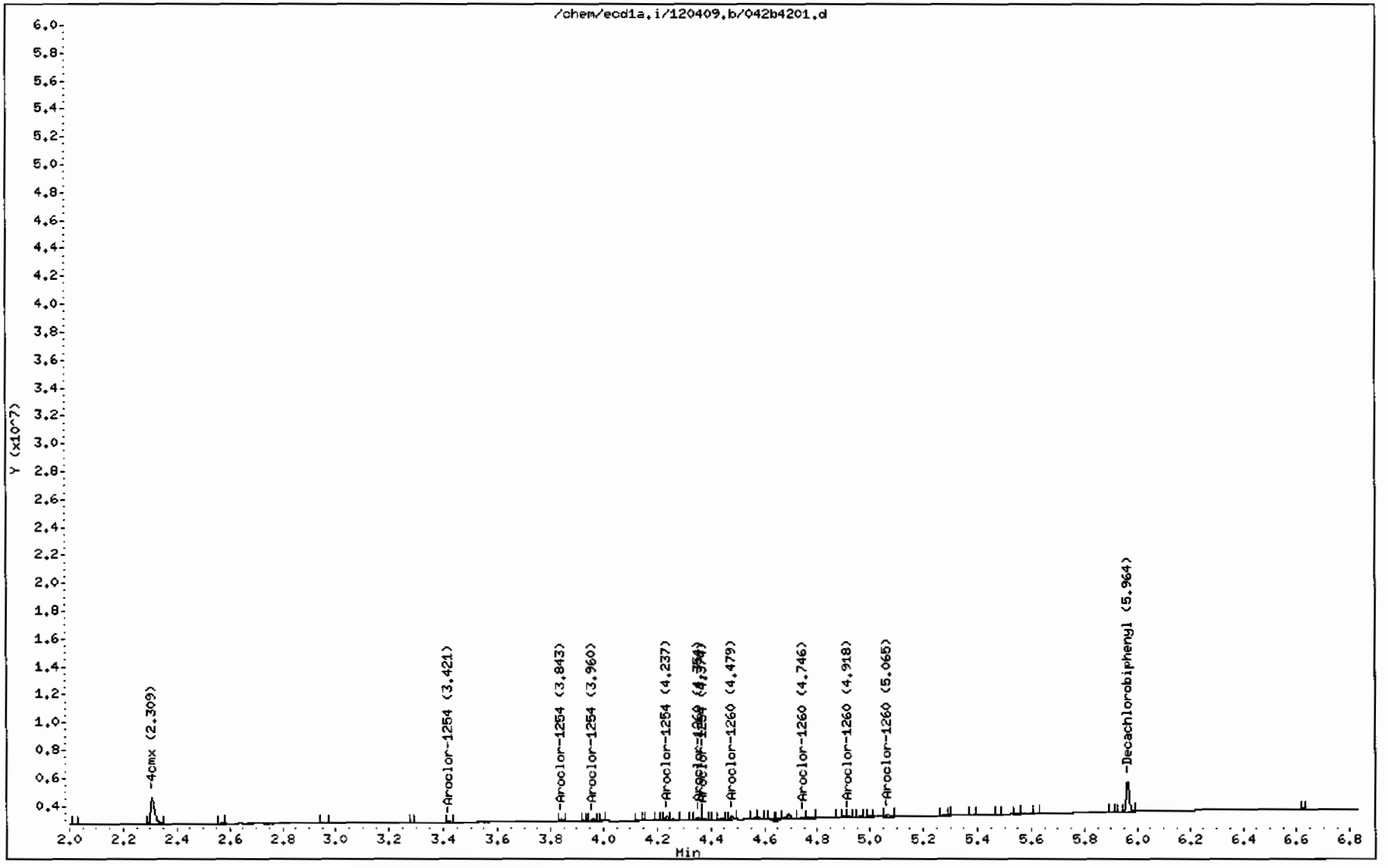

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13865**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:06**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**037f3701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	037b3701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.83	ug/kg	1.28	3.83	1
11104–28–2	Aroclor–1221	U	3.83	ug/kg	1.28	3.83	1
11141–16–5	Aroclor–1232	U	3.83	ug/kg	1.28	3.83	1
53469–21–9	Aroclor–1242	U	3.83	ug/kg	1.28	3.83	1
12672–29–6	Aroclor–1248	U	3.83	ug/kg	1.28	3.83	1
11097–69–1	Aroclor–1254		39.2	ug/kg	1.28	3.83	1
11096–82–5	Aroclor–1260		25.5	ug/kg	1.28	3.83	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/037f3701.d
Lab Smp Id: 241540002 Client Smp ID: RE03-09-13865
Inj Date : 04-DEC-2009 12:06
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540002|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13865|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.46180	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	59417431	133.141	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	51167032	125.177	4.8	80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1		
3.276	3.279	-0.003	16439355	1072.58	41.1	80.00- 120.00	100.00(M)
3.431	3.435	-0.004	18982229	906.932	34.8	115.37- 155.37	115.47
3.665	3.668	-0.003	22197424	837.142	32.1	158.76- 198.76	135.03
3.829	3.832	-0.003	19801024	970.671	37.2	115.09- 155.09	120.45

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
3.936	3.940	-0.004	26883182	1328.77	50.9	114.76- 154.76	163.53
Average of Peak Concentrations =					39.2		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	17983262	838.482	32.1	80.00- 120.00	100.00(M)
3.936	3.938	-0.002	26883182	835.007	32.0	130.49- 170.49	149.49
4.166	4.168	-0.002	10563079	516.340	19.8	73.32- 113.32	58.74
4.309	4.312	-0.003	8767493	436.590	16.7	75.32- 115.32	48.75
4.489	4.491	-0.002	23456482	506.630	19.4	202.00- 242.00	130.44
Average of Peak Concentrations =					24.0		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/037f3701.d

Date : 04-DEC-2009 12:06

Client ID: RE03-09-13865

Sample Info: |241540002|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

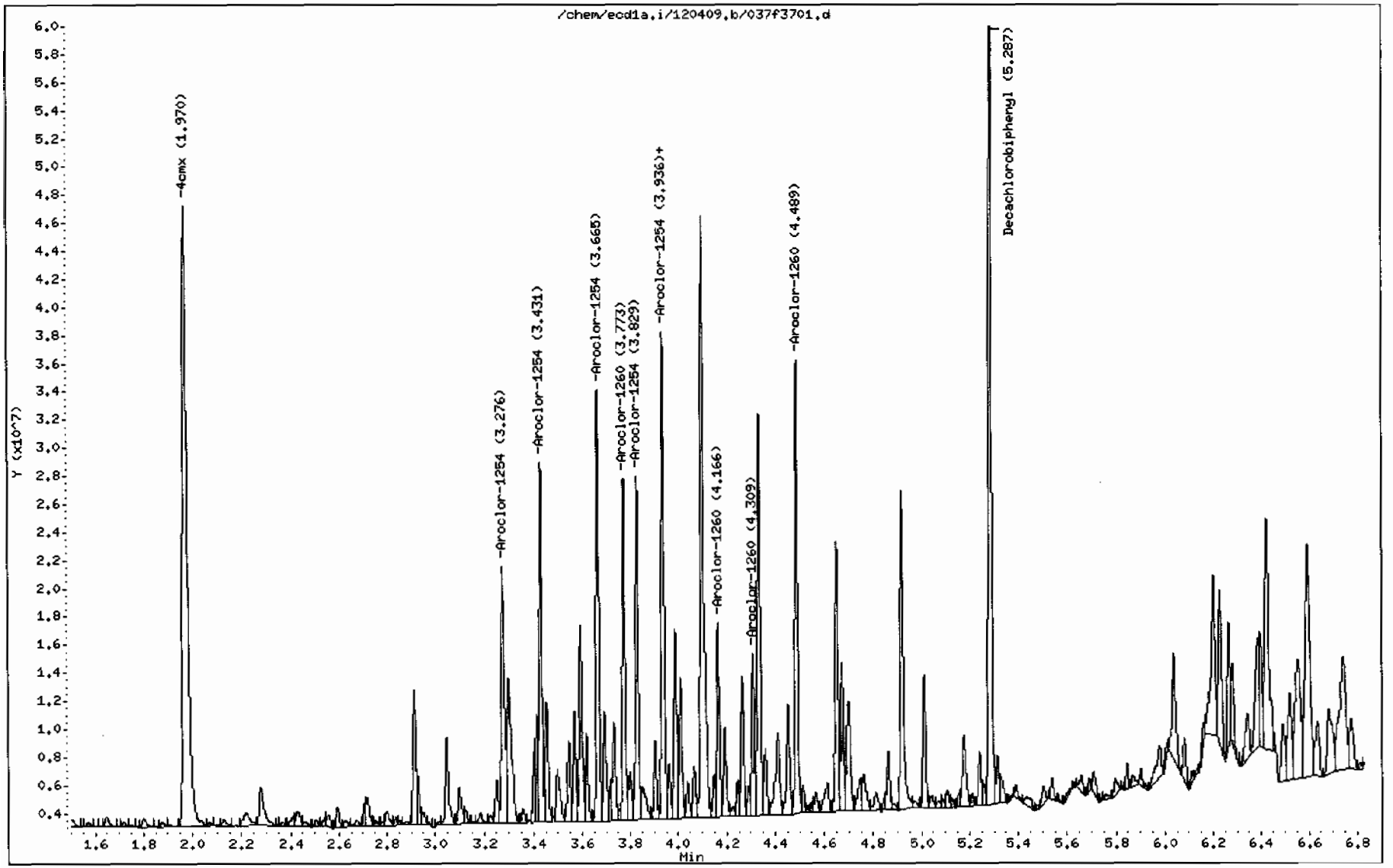

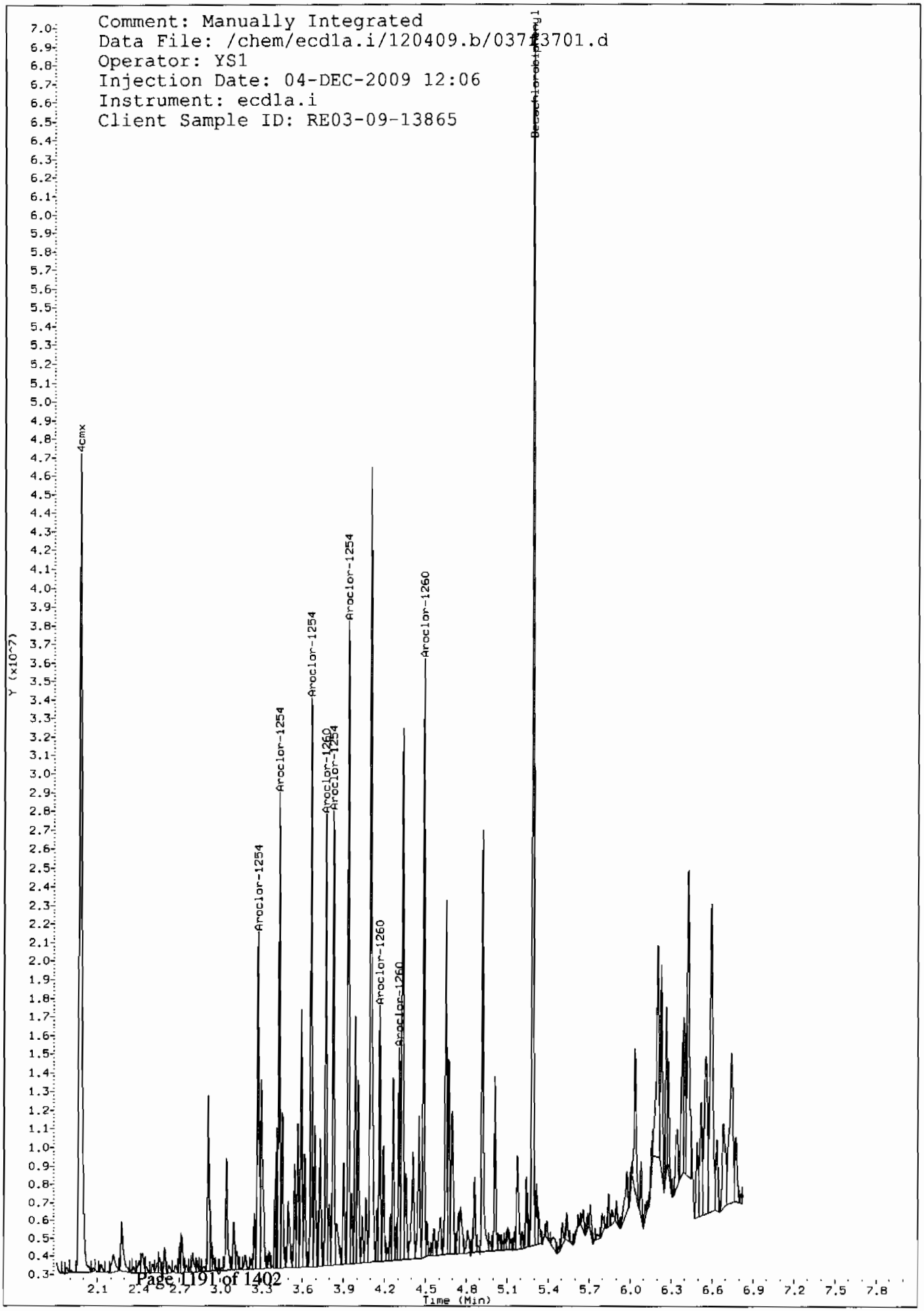
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/03713701.d
Operator: YS1
Injection Date: 04-DEC-2009 12:06
Instrument: ecd1a.i
Client Sample ID: RE03-09-13865
4cmx
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

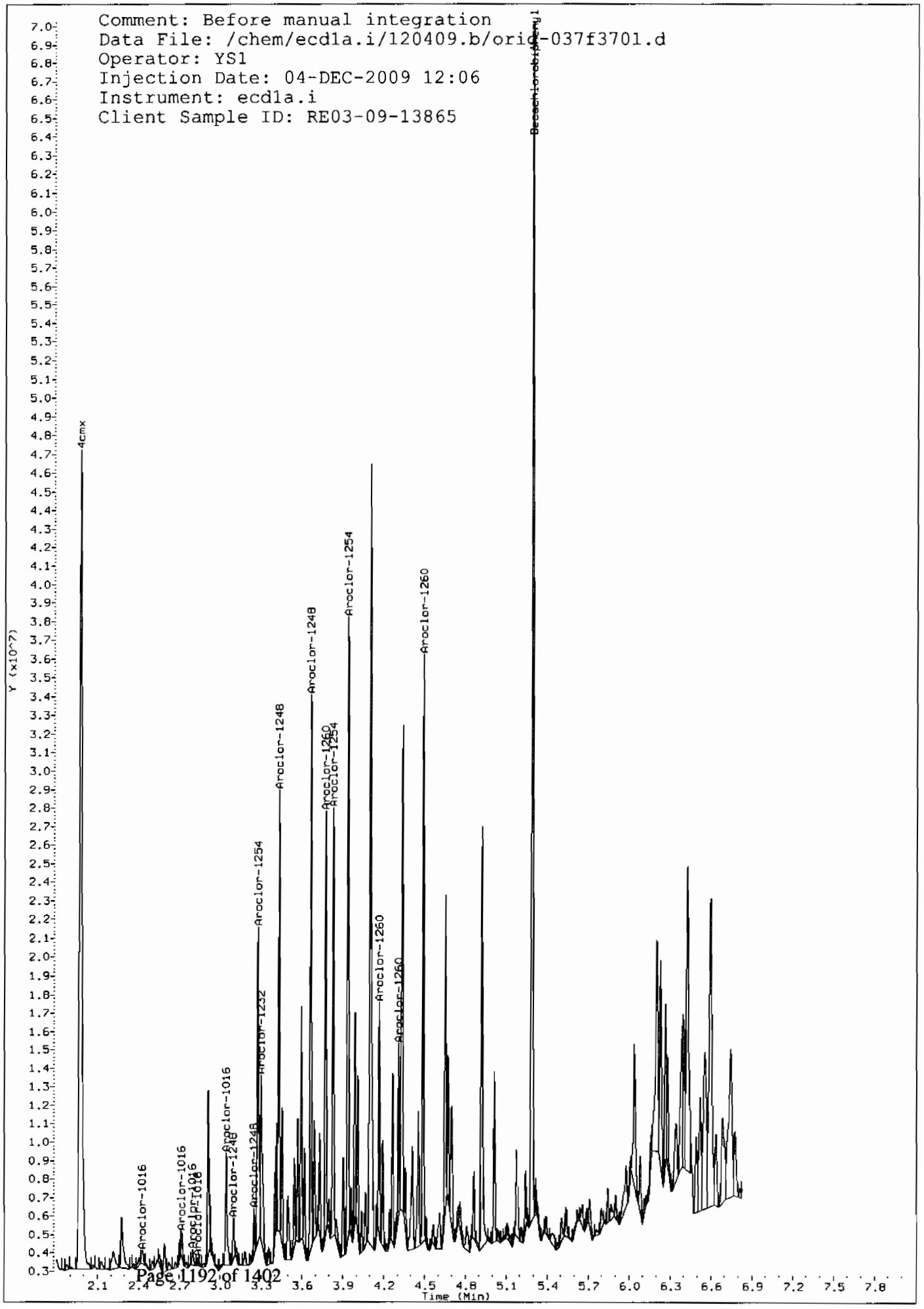
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-037f3701.d
Operator: YS1
Injection Date: 04-DEC-2009 12:06
Instrument: ecd1a.i
Client Sample ID: RE03-09-13865
Y (x10^7)
Time (Min)
4cmx
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1260
Decachlorobiphenyl

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/037b3701.d
Lab Smp Id: 241540002 Client Smp ID: RE03-09-13865
Inj Date : 04-DEC-2009 12:06
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540002|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13865|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.46180	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	48439940	130.462	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	36031990	119.876	4.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.420	3.422	-0.002	6919307	830.299	31.8	80.00- 120.00	100.00
3.844	3.846	-0.002	12733908	851.584	32.6	161.63- 201.63	184.03
3.960	3.962	-0.002	13881105	847.471	32.5	181.54- 221.54	200.61
4.237	4.239	-0.002	20487820	925.141	35.5	260.06- 300.06	296.10

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.373	4.375	-0.002	13147697	779.201	29.9	195.48- 235.48	190.01
Average of Peak Concentrations =					32.5		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	16357037	905.359	34.7	80.00- 120.00	100.00
4.478	4.479	-0.001	16371836	738.900	28.3	106.15- 146.15	100.09
4.744	4.745	-0.001	10417875	589.322	22.6	79.67- 119.67	63.69
4.918	4.919	-0.001	8725846	506.907	19.4	78.94- 118.94	53.35
5.065	5.067	-0.002	22716000	588.054	22.5	208.07- 248.07	138.88
Average of Peak Concentrations =					25.5		

Data File: /chem/ecd1a.i/120409.b/037b3701.d

Date : 04-DEC-2009 12:06

Client ID: RE03-09-13865

Sample Info: |24154000211|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

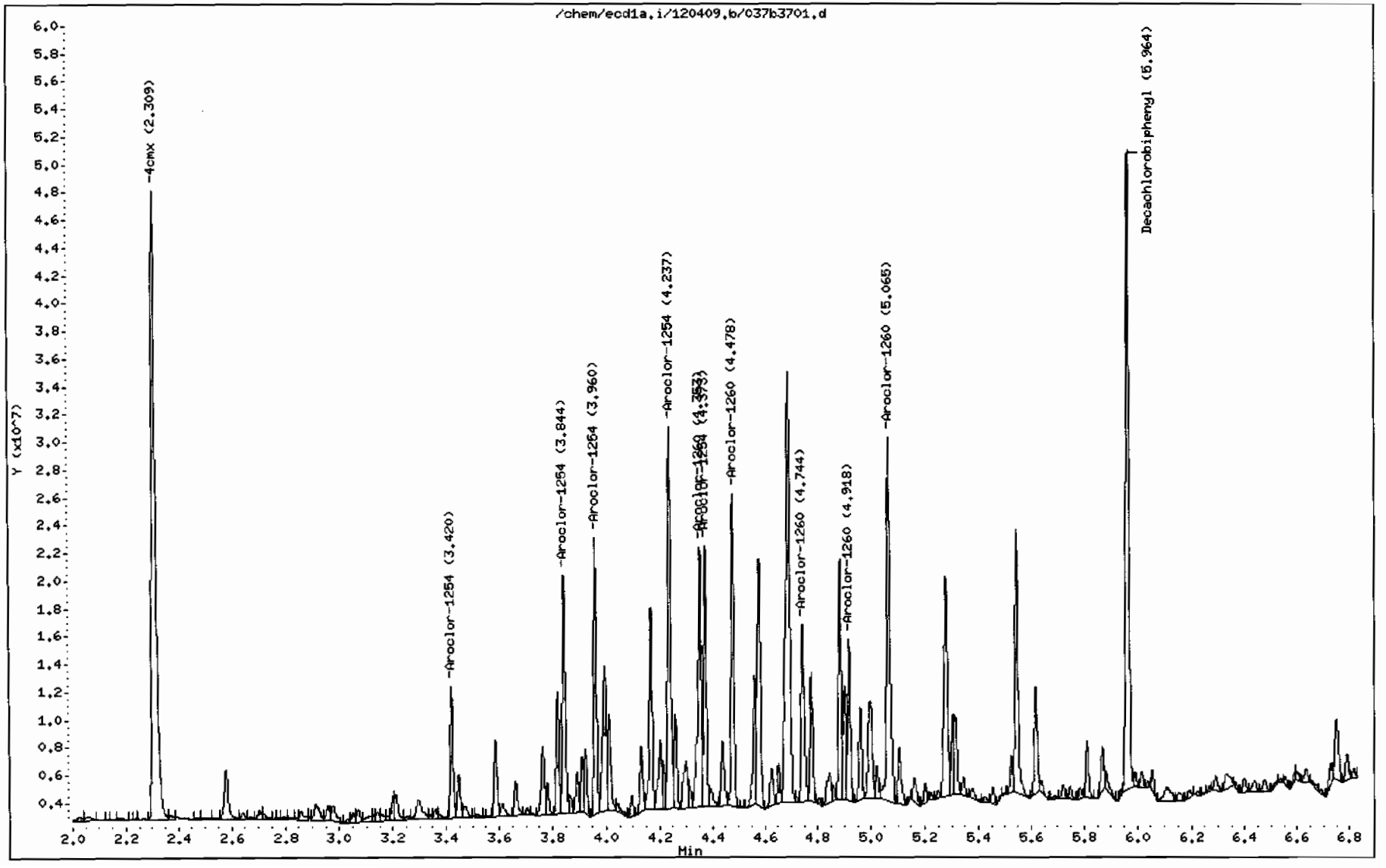

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540013**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13866**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:11**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**052f5201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	052b5201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.87	ug/kg	1.29	3.87	1
11104–28–2	Aroclor–1221	U	3.87	ug/kg	1.29	3.87	1
11141–16–5	Aroclor–1232	U	3.87	ug/kg	1.29	3.87	1
53469–21–9	Aroclor–1242	U	3.87	ug/kg	1.29	3.87	1
12672–29–6	Aroclor–1248	U	3.87	ug/kg	1.29	3.87	1
11097–69–1	Aroclor–1254	U	3.87	ug/kg	1.29	3.87	1
11096–82–5	Aroclor–1260		17.4	ug/kg	1.29	3.87	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/052f5201.d
Lab Smp Id: 241540013 Client Smp ID: RE03-09-13866
Inj Date : 04-DEC-2009 15:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540013|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13866|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 52
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	14.02330	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	56959731	127.634	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	49483604	121.059	4.7	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	6653903	310.243	12.0	80.00- 120.00	100.00
3.935	3.938	-0.003	11883464	369.107	14.3	131.51- 171.51	178.59
4.166	4.168	-0.002	9409690	459.961	17.8	73.81- 113.81	141.42
4.308	4.312	-0.004	6348657	316.140	12.2	75.82- 115.82	95.41

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
4.488	4.491	-0.003	17716090	382.645	14.8	202.56- 242.56	266.25
			Average of Peak Concentrations =		14.2		

Data File: /chem/ecd1a.i/120409.b/052f5201.d

Date : 04-DEC-2009 15:11

Client ID: RE03-09-13866

Sample Info: |241540013|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

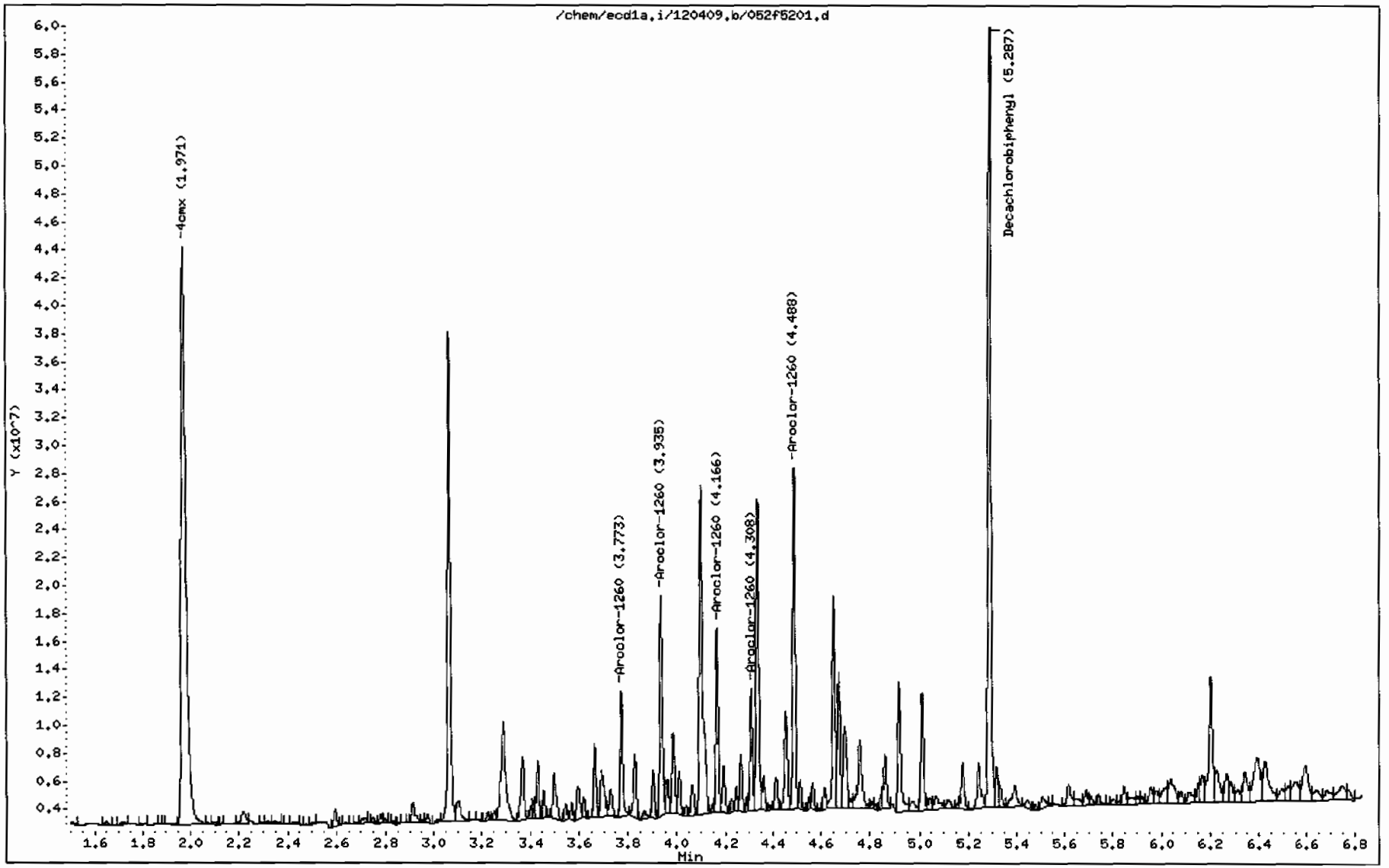

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/052b5201.d
Lab Smp Id: 241540013 Client Smp ID: RE03-09-13866
Inj Date : 04-DEC-2009 15:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540013|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13866|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 52
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	14.02330	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	46578455	125.448	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	38436442	127.875	5.0	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.352	4.354	-0.002	7171548	396.944	15.4	80.00- 120.00	100.00
4.477	4.479	-0.002	8749677	394.894	15.3	106.50- 146.50	122.01
4.743	4.745	-0.002	9564950	541.074	21.0	80.04- 120.04	133.37
4.918	4.919	-0.001	7337817	426.273	16.5	79.68- 119.68	102.32

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
5.065	5.067	-0.002	18564924	480.594	18.6	209.23- 249.23	258.87
Average of Peak Concentrations =					17.4		

Data File: /chem/ecd1a.i/120409.b/052b5201.d

Date : 04-DEC-2009 15:11

Client ID: RE03-09-13866

Sample Info: |2415400131|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

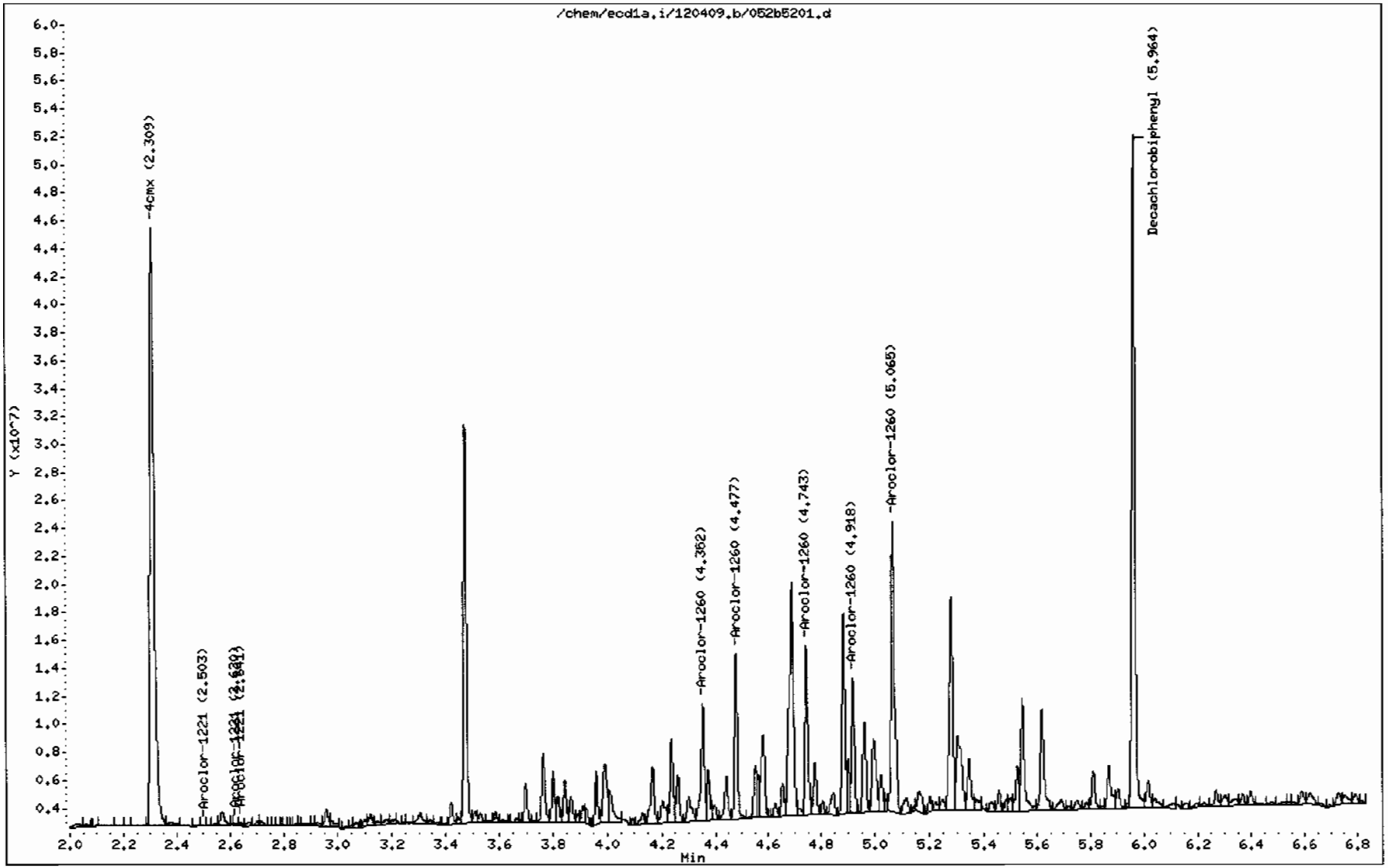

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540004	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13867	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 12:31	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	039f3901.d	**Column:**	1 CLP1	**Level:**	LOW
	039b3901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.80	ug/kg	1.27	3.80	1
11104–28–2	Aroclor–1221	U	3.80	ug/kg	1.27	3.80	1
11141–16–5	Aroclor–1232	U	3.80	ug/kg	1.27	3.80	1
53469–21–9	Aroclor–1242	U	3.80	ug/kg	1.27	3.80	1
12672–29–6	Aroclor–1248	U	3.80	ug/kg	1.27	3.80	1
11097–69–1	Aroclor–1254	U	3.80	ug/kg	1.27	3.80	1
11096–82–5	Aroclor–1260		6.80	ug/kg	1.27	3.80	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/039f3901.d
Lab Smp Id: 241540004 Client Smp ID: RE03-09-13867
Inj Date : 04-DEC-2009 12:31
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540004|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13867|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 39
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	58892445	131.965	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	55406713	135.550	5.2	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	2571305	119.889	4.6	80.00- 120.00	100.00(M)
3.936	3.938	-0.002	3778889	117.374	4.5	131.51- 171.51	146.96
4.167	4.168	-0.001	3855657	188.471	7.2	73.81- 113.81	149.95
4.309	4.312	-0.003	2997089	149.244	5.7	75.82- 115.82	116.56

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
4.489	4.491	-0.002	7777766	167.990	6.4	202.56- 242.56	302.48
			Average of Peak Concentrations =		5.6		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/039f3901.d

Page 1

Date : 04-DEC-2009 12:31

Client ID: RE03-09-13867

Instrument: ecd1a.i

Sample Info: |241540004|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

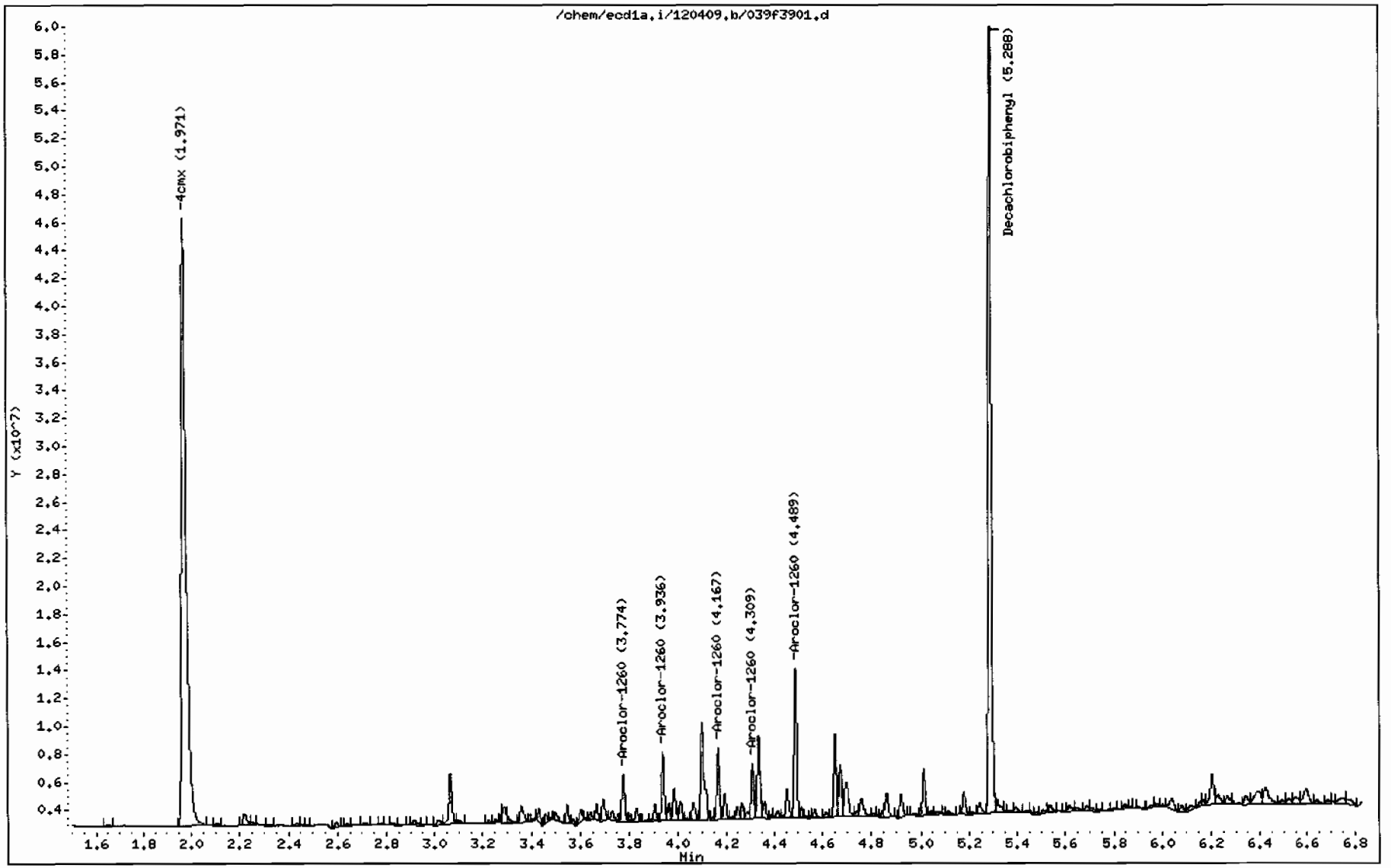

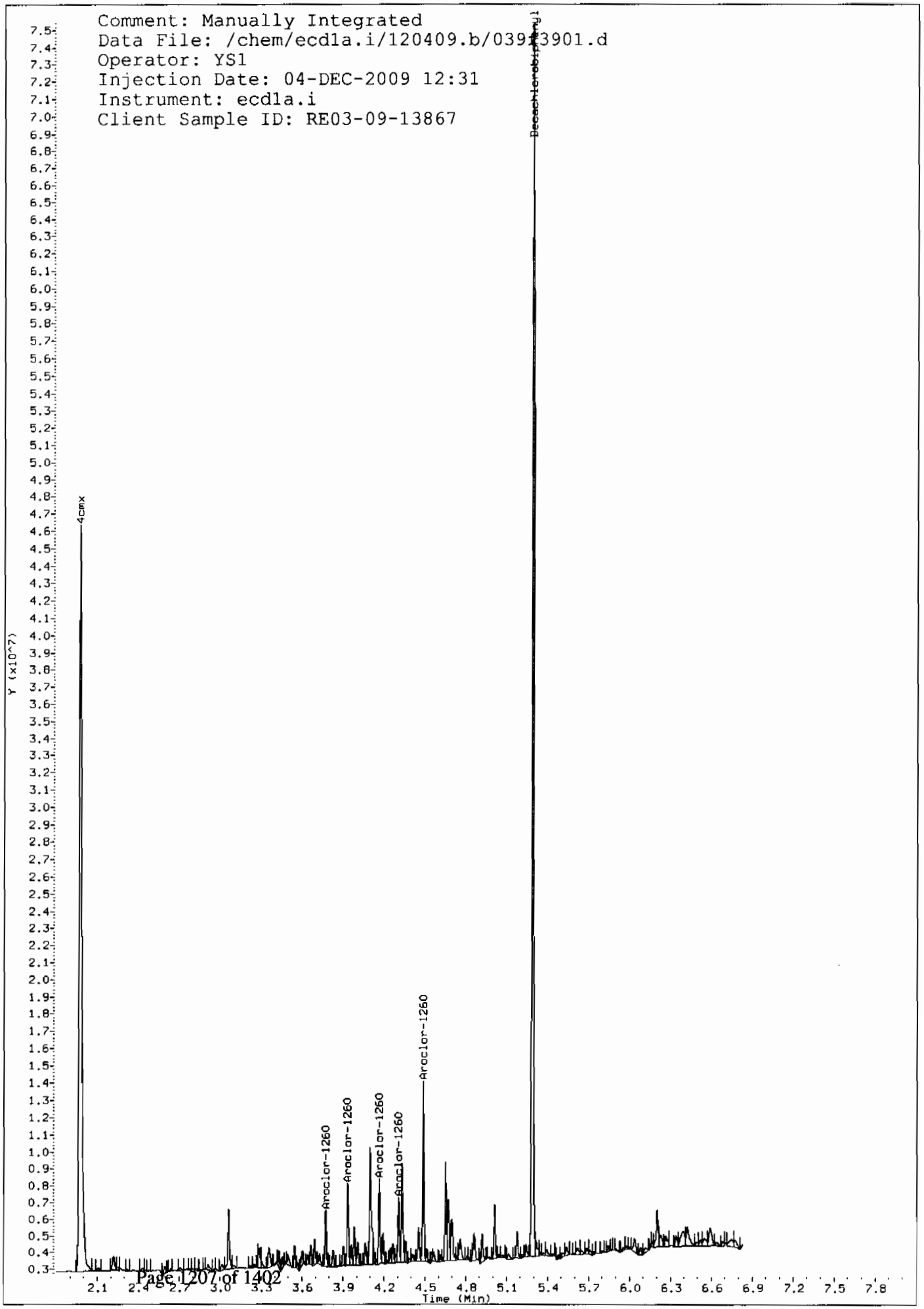
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/03913901.d
Operator: YS1
Injection Date: 04-DEC-2009 12:31
Instrument: ecd1a.i
Client Sample ID: RE03-09-13867
Decachlorobiphenyl
4cmx
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^7)
Time (Min)

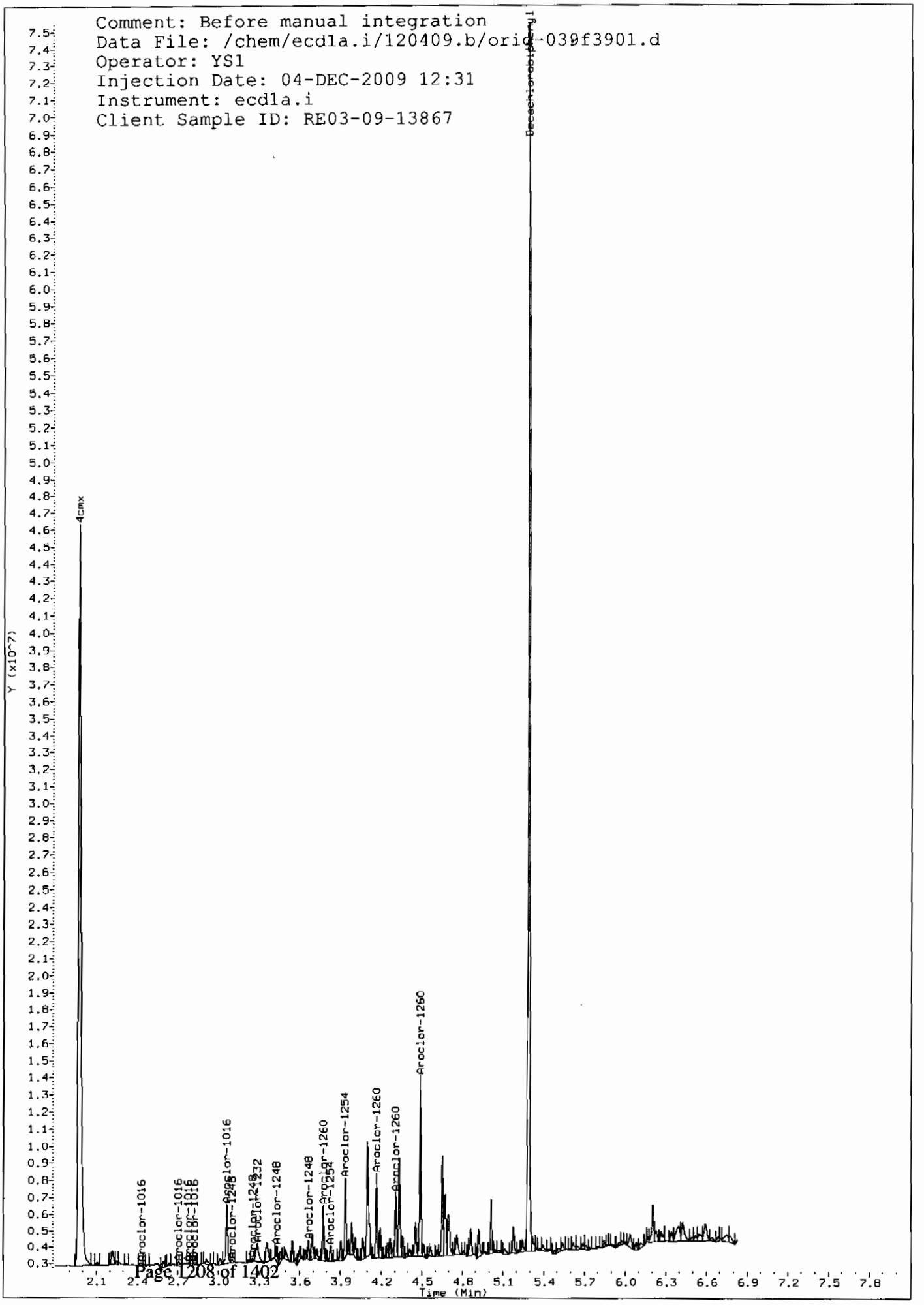
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-039f3901.d
Operator: YS1
Injection Date: 04-DEC-2009 12:31
Instrument: ecd1a.i
Client Sample ID: RE03-09-13867
Decachlorobiphenyl
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1248
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Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/039b3901.d
Lab Smp Id: 241540004 Client Smp ID: RE03-09-13867
Inj Date : 04-DEC-2009 12:31
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540004|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13867|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 39
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	48815168	131.472	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	41689833	138.699	5.3	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	2634683	145.829	5.5	80.00- 120.00	100.00
4.479	4.479	0.000	2997298	135.275	5.1	106.50- 146.50	113.76
4.744	4.745	-0.001	3907169	221.022	8.4	80.04- 120.04	148.30
4.919	4.919	0.000	3132361	181.967	6.9	79.68- 119.68	118.89

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
5.065	5.067	-0.002	8066868	208.829	7.9	209.23- 249.23	306.18

Average of Peak Concentrations = 6.8

Data File: /chem/ecd1a.i/120409.b/039b3901.d

Date : 04-DEC-2009 12:31

Client ID: RE03-09-13867

Sample Info: 1241540004111

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

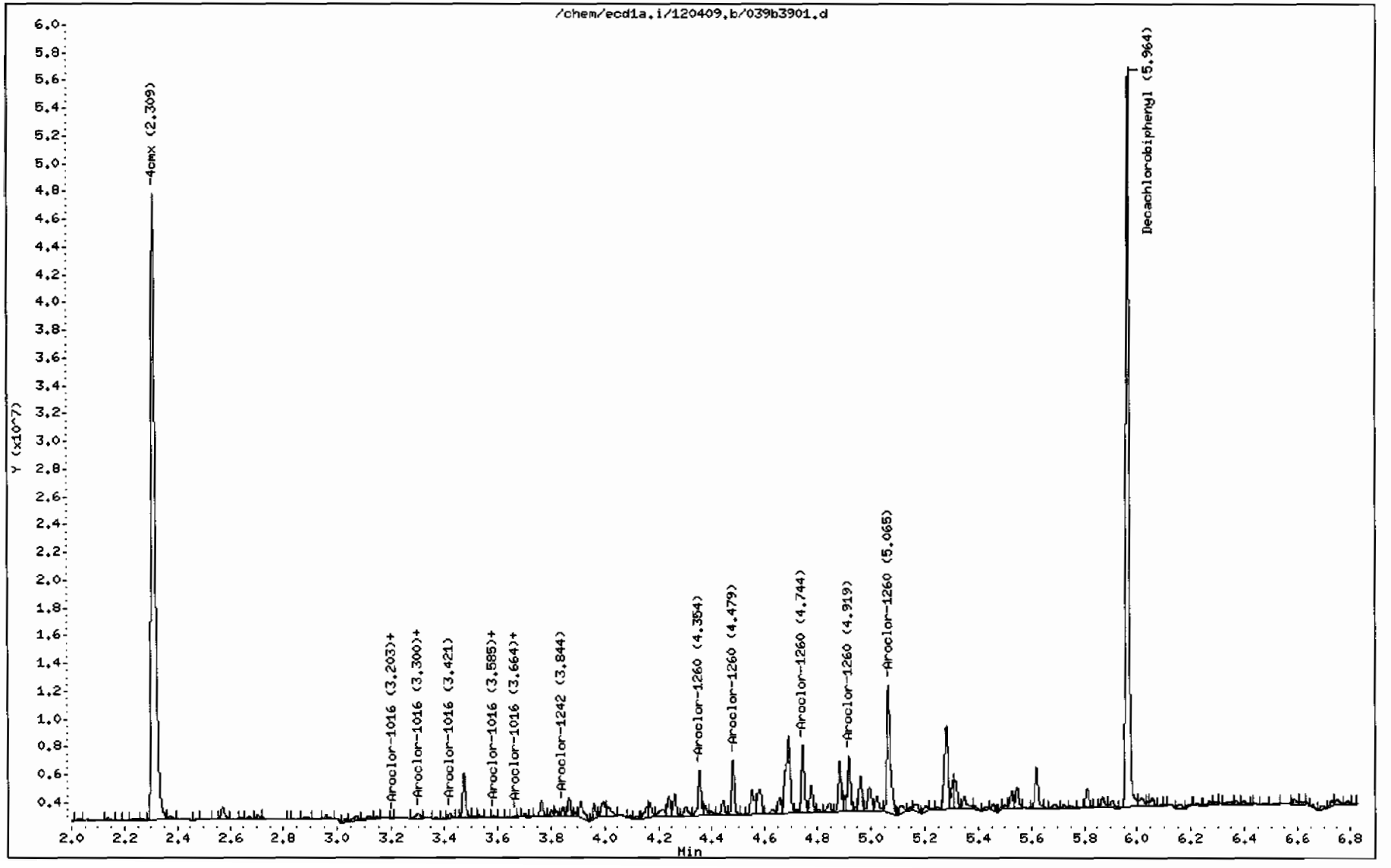

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540003**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**11.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13868**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/04/2009 12:18**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**038f3801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	038b3801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.8	ug/kg	6.25	18.8	1
11104–28–2	Aroclor–1221	U	18.8	ug/kg	6.25	18.8	1
11141–16–5	Aroclor–1232	U	18.8	ug/kg	6.25	18.8	1
53469–21–9	Aroclor–1242	U	18.8	ug/kg	6.25	18.8	1
12672–29–6	Aroclor–1248	U	18.8	ug/kg	6.25	18.8	1
11097–69–1	Aroclor–1254	U	18.8	ug/kg	6.25	18.8	1
11096–82–5	Aroclor–1260	U	18.8	ug/kg	6.25	18.8	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/038f3801.d
Lab Smp Id: 241540003 Client Smp ID: RE03-09-13868
Inj Date : 04-DEC-2009 12:18
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540003|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13868|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 38
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	11.36220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	11053442	24.7683	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	11198405	27.3963	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/038f3801.d

Date : 04-DEC-2009 12:18

Client ID: RE03-09-13868

Sample Info: 1241540003151

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

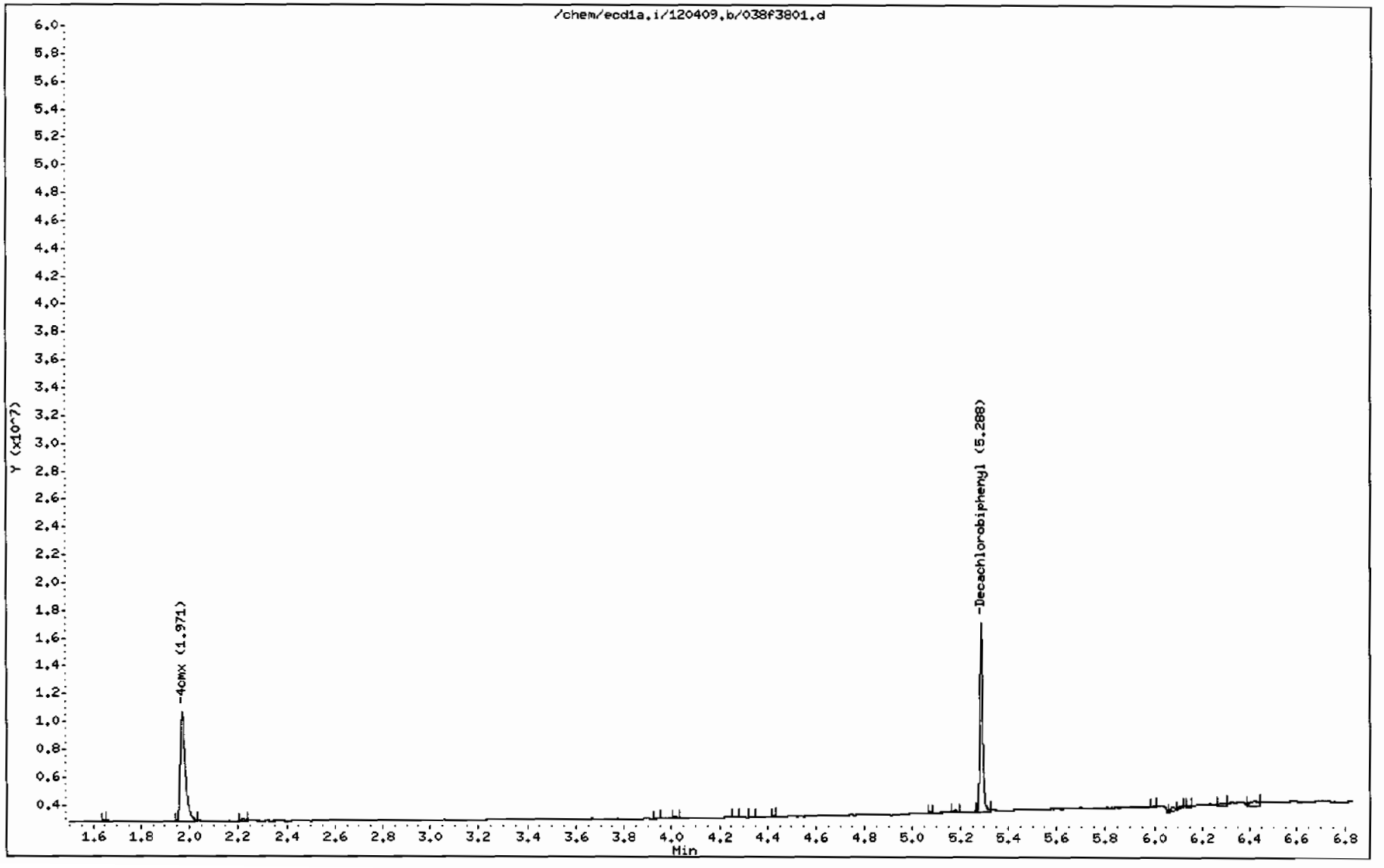

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/038b3801.d
Lab Smp Id: 241540003 Client Smp ID: RE03-09-13868
Inj Date : 04-DEC-2009 12:18
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540003|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13868|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 38
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	11.36220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	9640347	25.9641	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	8514658	28.3276	5.3	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/038b3801.d

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Date : 04-DEC-2009 12:18

Client ID: RE03-09-13868

Instrument: ecd1a.i

Sample Info: |241540003|5|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

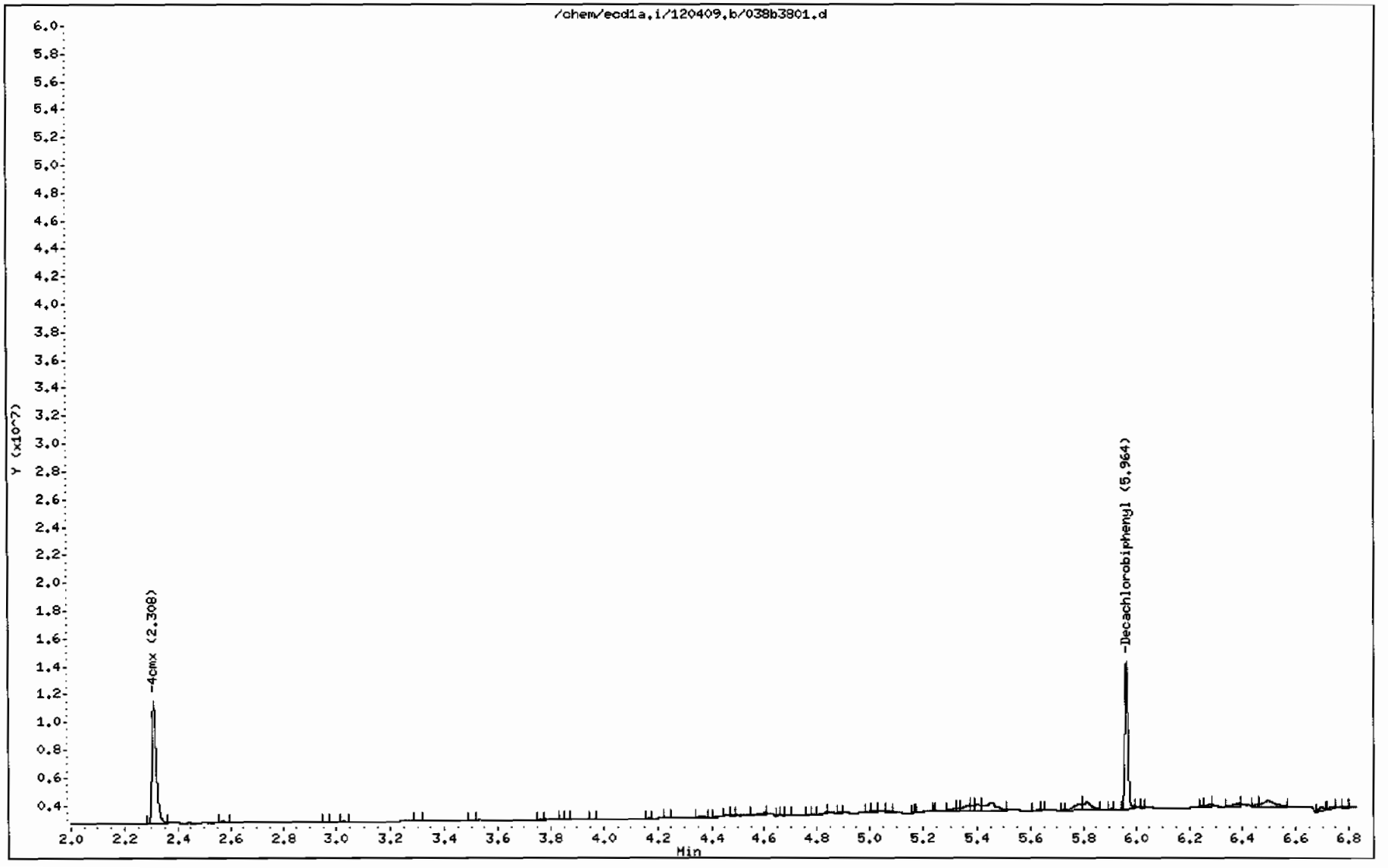

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540008**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**16.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13869**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:08**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**047f4701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	047b4701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.00	ug/kg	1.33	4.00	1
11104–28–2	Aroclor–1221	U	4.00	ug/kg	1.33	4.00	1
11141–16–5	Aroclor–1232	U	4.00	ug/kg	1.33	4.00	1
53469–21–9	Aroclor–1242	U	4.00	ug/kg	1.33	4.00	1
12672–29–6	Aroclor–1248	U	4.00	ug/kg	1.33	4.00	1
11097–69–1	Aroclor–1254	U	4.00	ug/kg	1.33	4.00	1
11096–82–5	Aroclor–1260	U	4.00	ug/kg	1.33	4.00	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/047f4701.d
Lab Smp Id: 241540008 Client Smp ID: RE03-09-13869
Inj Date : 04-DEC-2009 14:08
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540008|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13869|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	16.75080	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	66570897	149.171	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	62700585	153.394	6.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/047f4701.d

Date : 04-DEC-2009 14:08

Client ID: RE03-09-13869

Sample Info: |241540008|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

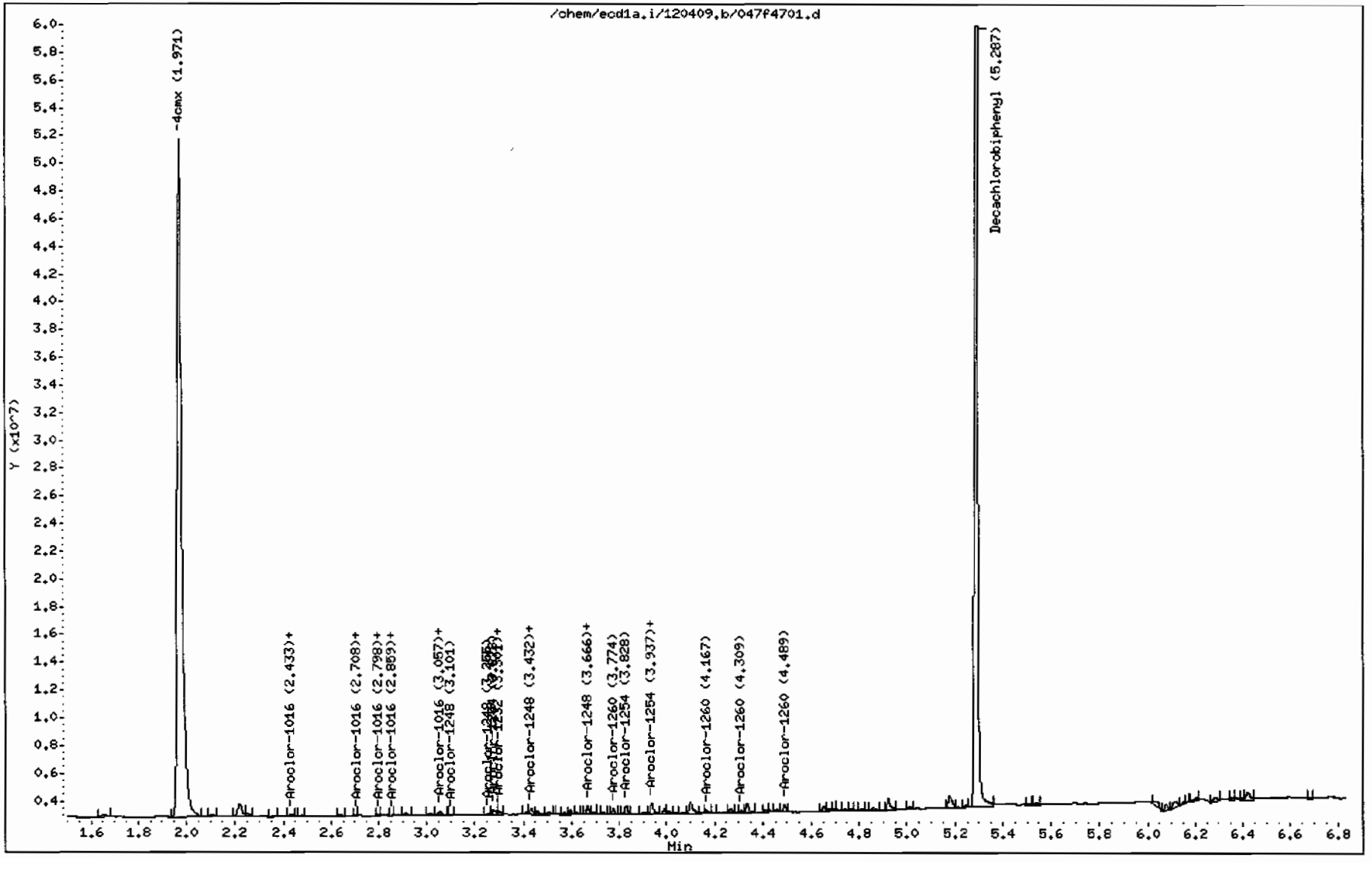

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/047b4701.d
Lab Smp Id: 241540008 Client Smp ID: RE03-09-13869
Inj Date : 04-DEC-2009 14:08
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540008|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13869|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	16.75080	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	55574104	149.676	6.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	48102596	160.033	6.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/047b4701.d
Date : 04-DEC-2009 14:08
Client ID: RE03-09-13869
Sample Info: 1241540008|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSL
Column diameter: 0.25

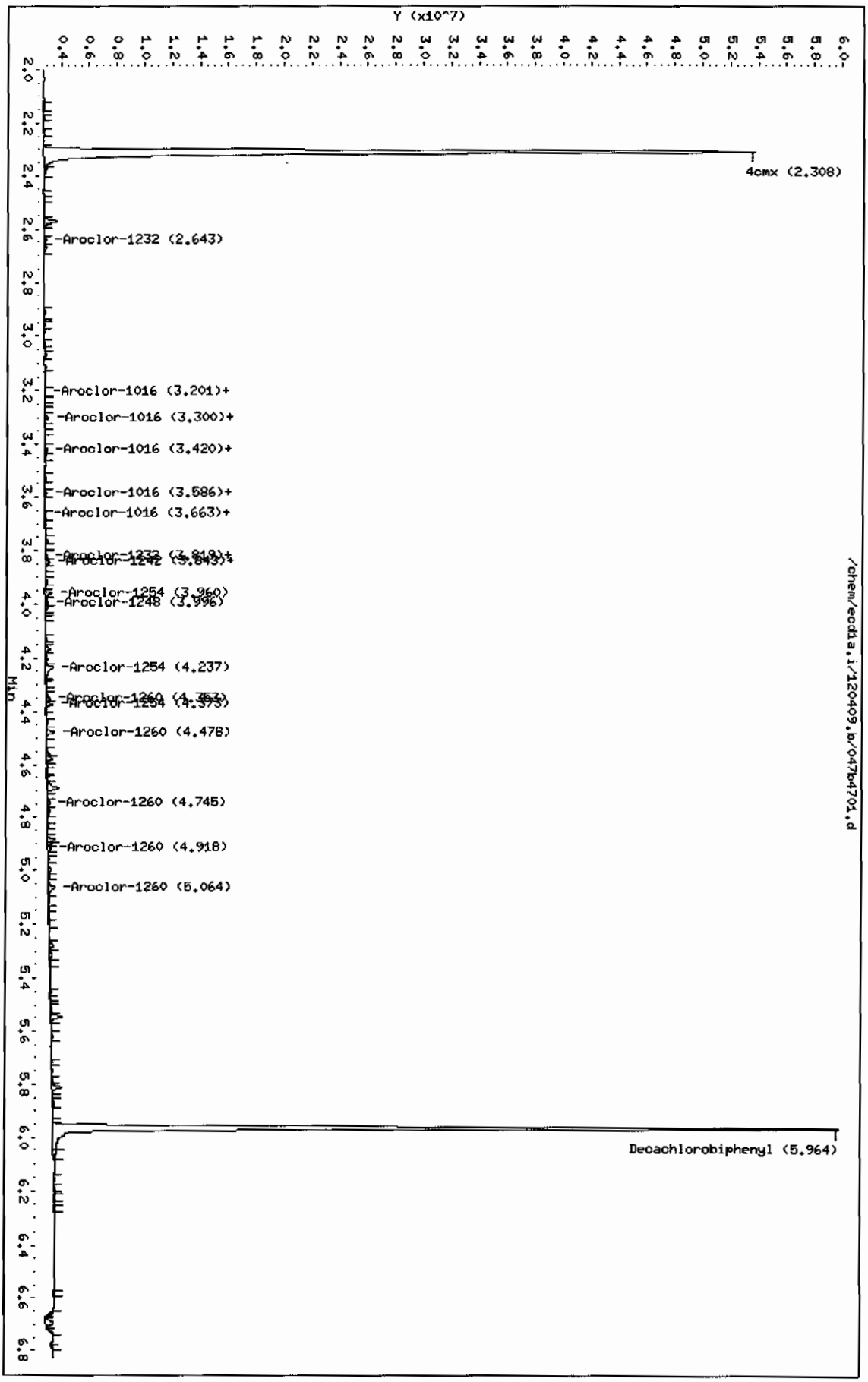

Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540009**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**13.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13870**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**25**
Run Date:	**12/04/2009 16:47**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**060f6001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	060b6001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	96.4	ug/kg	32.1	96.4	1
11104–28–2	Aroclor–1221	U	96.4	ug/kg	32.1	96.4	1
11141–16–5	Aroclor–1232	U	96.4	ug/kg	32.1	96.4	1
53469–21–9	Aroclor–1242	U	96.4	ug/kg	32.1	96.4	1
12672–29–6	Aroclor–1248	U	96.4	ug/kg	32.1	96.4	1
11097–69–1	Aroclor–1254		1280	ug/kg	32.1	96.4	1
11096–82–5	Aroclor–1260		487	ug/kg	32.1	96.4	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/060f6001.d
Lab Smp Id: 241540009 Client Smp ID: RE03-09-13870
Inj Date : 04-DEC-2009 16:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540009|25|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13870|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 60
Dil Factor: 25.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	25.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	13.73130	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	2735299	6.12920	5.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.286	5.289	-0.003	3063558	7.49483	7.2	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.276	3.279	-0.003	20301851	1324.59	1280	80.00- 120.00	100.00
3.431	3.435	-0.004	25525487	1219.55	1180	90.43- 130.43	125.73
3.666	3.668	-0.002	34278985	1292.78	1250	30.38- 70.38	168.85
3.829	3.832	-0.003	27536988	1349.90	1300	11.32- 51.32	135.64

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
3.937	3.940	-0.003	28971383	1431.99	1380	423.12- 463.12	142.70
Average of Peak Concentrations =					1280		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	16864401	786.314	758	80.00- 120.00	100.00
3.937	3.938	-0.001	28971383	899.868	868	131.51- 171.51	171.79
4.167	4.168	-0.001	2817361	137.717	133	73.81- 113.81	16.71
4.310	4.312	-0.002	2777012	138.285	133	75.82- 115.82	16.47
4.489	4.491	-0.002	6808322	147.051	142	202.56- 242.56	40.37
Average of Peak Concentrations =					407		

Data File: /chem/ecd1a.i/120409.b/060f6001.d

Date : 04-DEC-2009 16:47

Client ID: RE03-09-13870

Sample Info: |2415400091251

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

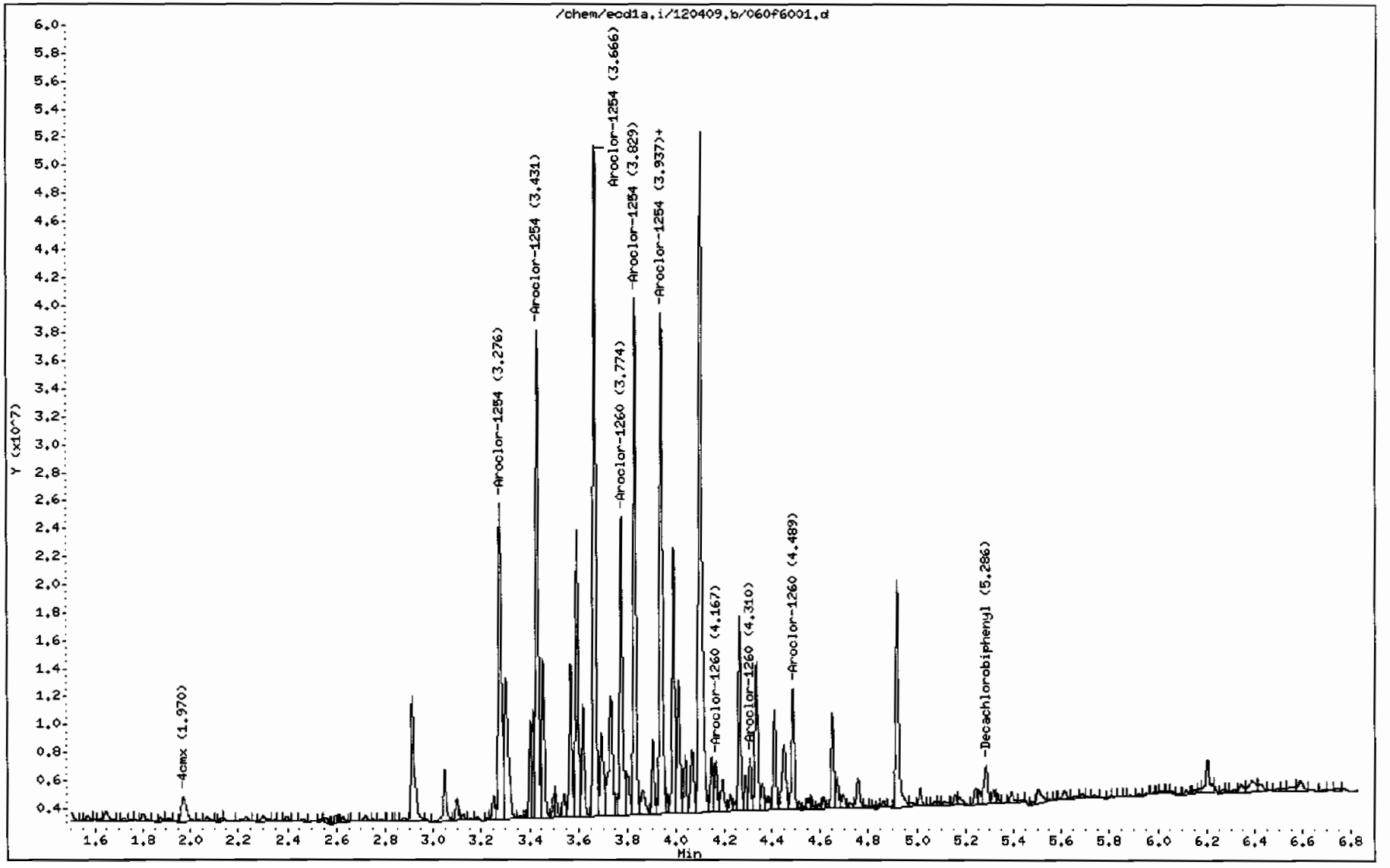

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/060b6001.d
Lab Smp Id: 241540009 Client Smp ID: RE03-09-13870
Inj Date : 04-DEC-2009 16:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540009|25|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13870|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 60
Dil Factor: 25.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	25.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	13.73130	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	1899226	5.11513	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	2026251	6.74117	6.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.420	3.422	-0.002	6298664	755.824	729	80.00- 120.00	100.00
3.844	3.846	-0.002	15796075	1056.37	1020	161.63- 201.63	250.78
3.961	3.962	-0.001	20196686	1233.05	1190	181.54- 221.54	320.65
4.236	4.239	-0.003	30355919	1370.74	1320	260.06- 300.06	481.94

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.373	4.375	-0.002	21377223	1266.93	1220	195.48- 235.48	339.39
Average of Peak Concentrations =					1100		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	18562560	1027.43	991	80.00- 120.00	100.00
4.478	4.479	-0.001	16906049	763.011	736	106.71- 146.71	91.08
4.748	4.745	0.003	5792743	327.686	316	80.51- 120.51	31.21
4.919	4.919	0.000	3563438	207.009	200	79.62- 119.62	19.20
5.065	5.067	-0.002	7643901	197.879	191	209.66- 249.66	41.18
Average of Peak Concentrations =					487		

Data File: /chem/ecd1a.i/120409.b/060b6001.d

Date : 04-DEC-2009 16:47

Client ID: RE03-09-13870

Sample Info: 12415400091251

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

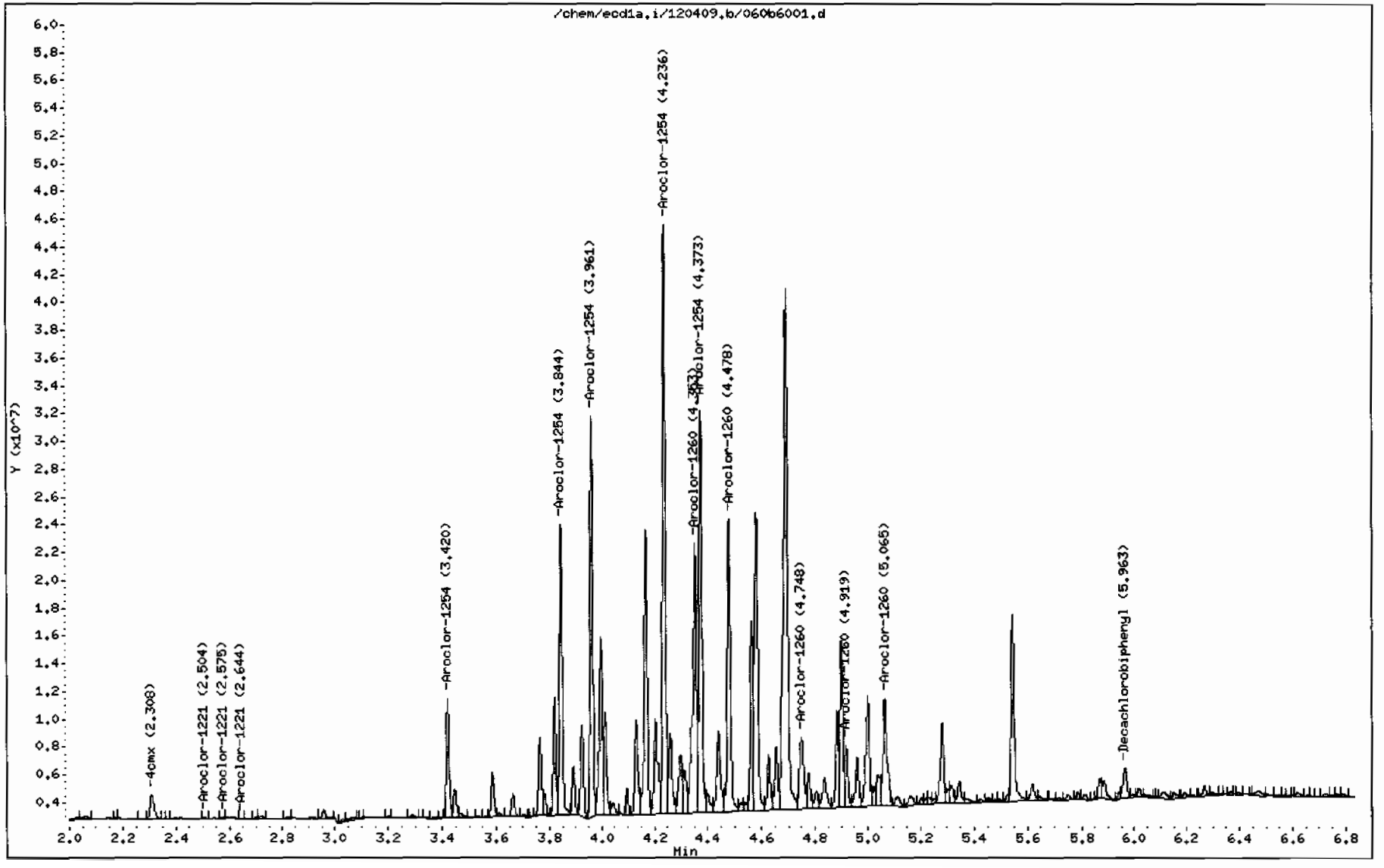

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540006	**Date Received:**	11/20/2009 08:50	**%Moisture:**	16.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13871	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	5
Run Date:	12/04/2009 13:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	043f4301.d	**Column:**	1 CLP1	**Level:**	LOW
	043b4301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	19.8	ug/kg	6.59	19.8	1
11104-28-2	Aroclor-1221	U	19.8	ug/kg	6.59	19.8	1
11141-16-5	Aroclor-1232	U	19.8	ug/kg	6.59	19.8	1
53469-21-9	Aroclor-1242	U	19.8	ug/kg	6.59	19.8	1
12672-29-6	Aroclor-1248	U	19.8	ug/kg	6.59	19.8	1
11097-69-1	Aroclor-1254		225	ug/kg	6.59	19.8	1
11096-82-5	Aroclor-1260		103	ug/kg	6.59	19.8	2

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/043f4301.d
Lab Smp Id: 241540006 Client Smp ID: RE03-09-13871
Inj Date : 04-DEC-2009 13:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540006|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13871|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 43
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	16.18000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	11803201	26.4483	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	11019468	26.9585	5.3	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.276	3.279	-0.003	16481208	1075.32	213	80.00- 120.00	100.00
3.431	3.435	-0.004	21833241	1043.15	206	115.37- 155.37	132.47
3.666	3.668	-0.002	30735146	1159.13	229	158.76- 198.76	186.49
3.829	3.832	-0.003	21069462	1032.85	204	115.09- 155.09	127.84

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
3.936	3.940	-0.004	28142892	1391.04	275	114.76- 154.76	170.76
Average of Peak Concentrations =					225		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	16679966	777.714	154	80.00- 120.00	100.00
3.936	3.938	-0.002	28142892	874.135	173	130.49- 170.49	168.72
4.166	4.168	-0.002	3519358	172.032	34.0	73.32- 113.32	21.10
4.309	4.312	-0.003	3363185	167.475	33.2	75.32- 115.32	20.16
4.488	4.491	-0.003	8349163	180.331	35.7	202.00- 242.00	50.06
Average of Peak Concentrations =					86.0		

Data File: /chem/ecd1a.i/120409.b/043f4301.d

Date : 04-DEC-2009 13:22

Client ID: RE03-09-13871

Sample Info: |241540006|5|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

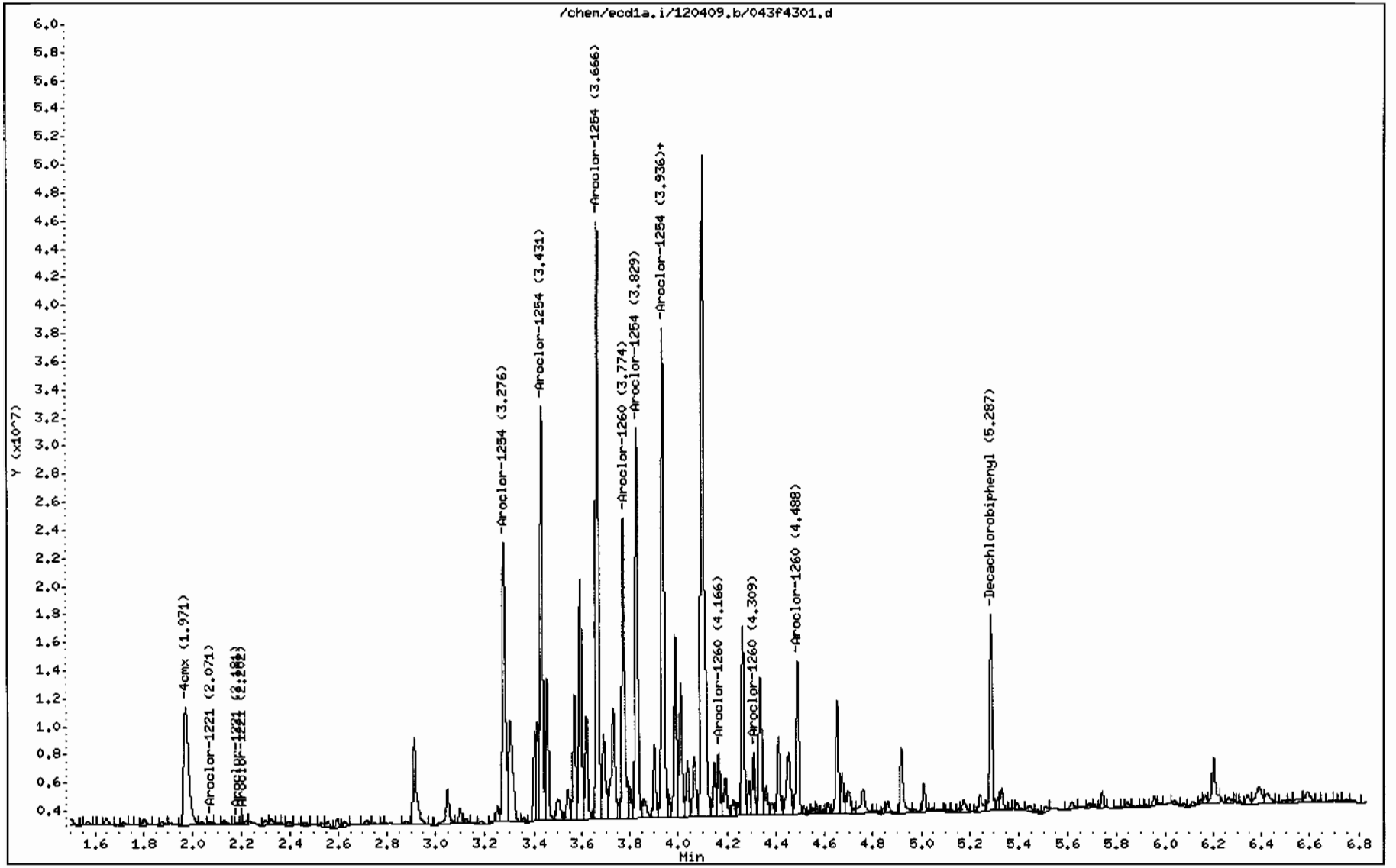

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/043b4301.d
Lab Smp Id: 241540006 Client Smp ID: RE03-09-13871
Inj Date : 04-DEC-2009 13:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540006|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13871|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 43
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	16.18000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	10026325	27.0036	5.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	10072617	33.5108	6.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.421	3.422	-0.001	4485742	538.278	106	80.00- 120.00	100.00
3.844	3.846	-0.002	13844193	925.834	183	161.63- 201.63	308.63
3.961	3.962	-0.001	17668850	1078.72	214	181.54- 221.54	393.89
4.236	4.239	-0.003	27908792	1260.24	250	260.06- 300.06	622.17

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.373	4.375	-0.002	16430715	973.769	193	195.48- 235.48	366.29
Average of Peak Concentrations =					189		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	18317408	1013.87	201	80.00- 120.00	100.00
4.477	4.479	-0.002	16535219	746.274	148	106.15- 146.15	90.27
4.746	4.745	0.001	6336003	358.417	71.0	79.67- 119.67	34.59
4.918	4.919	-0.001	4301134	249.864	49.5	78.94- 118.94	23.48
5.065	5.067	-0.002	8948279	231.646	45.9	208.07- 248.07	48.85
Average of Peak Concentrations =					103		

Data File: /chem/ecd1a.i/120409.b/043b4301.d

Date : 04-DEC-2009 13:22

Client ID: RE03-09-13871

Sample Info: 1241540006151

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

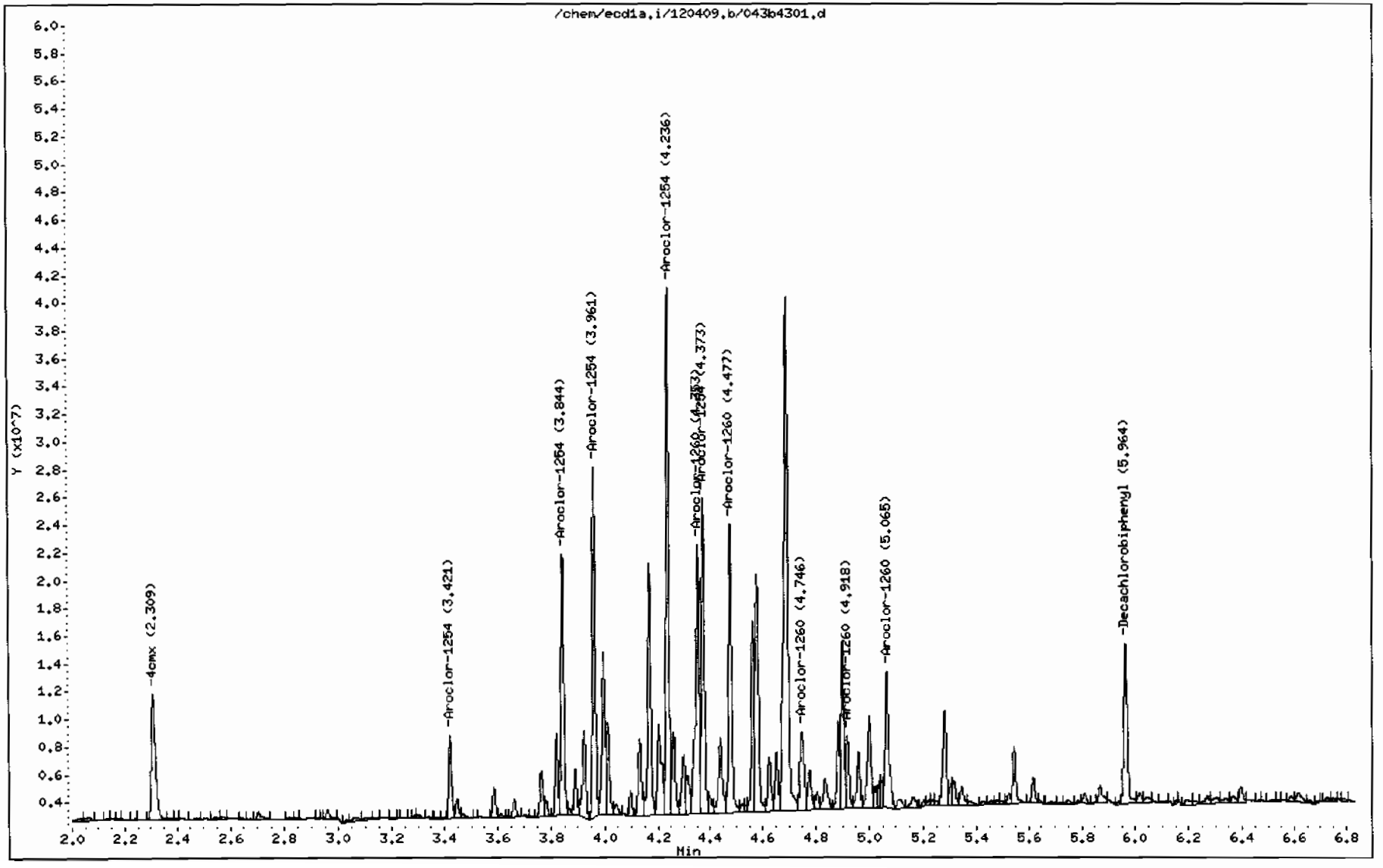

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540016**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13872**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/04/2009 15:48**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**055f5501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	055b5501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.3	ug/kg	6.09	18.3	1
11104–28–2	Aroclor–1221	U	18.3	ug/kg	6.09	18.3	1
11141–16–5	Aroclor–1232	U	18.3	ug/kg	6.09	18.3	1
53469–21–9	Aroclor–1242	U	18.3	ug/kg	6.09	18.3	1
12672–29–6	Aroclor–1248	U	18.3	ug/kg	6.09	18.3	1
11097–69–1	Aroclor–1254	U	18.3	ug/kg	6.09	18.3	1
11096–82–5	Aroclor–1260	U	18.3	ug/kg	6.09	18.3	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/055f5501.d
Lab Smp Id: 241540016 Client Smp ID: RE03-09-13872
Inj Date : 04-DEC-2009 15:48
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540016|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13872|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 17-Dec-2009 13:22 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 55
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	9.43260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	7569171	16.9608	3.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	8463295	20.7050	3.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/055f5501.d
Date : 04-DEC-2009 15:48
Client ID: RE03-09-13872
Sample Info: |241540016|5|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

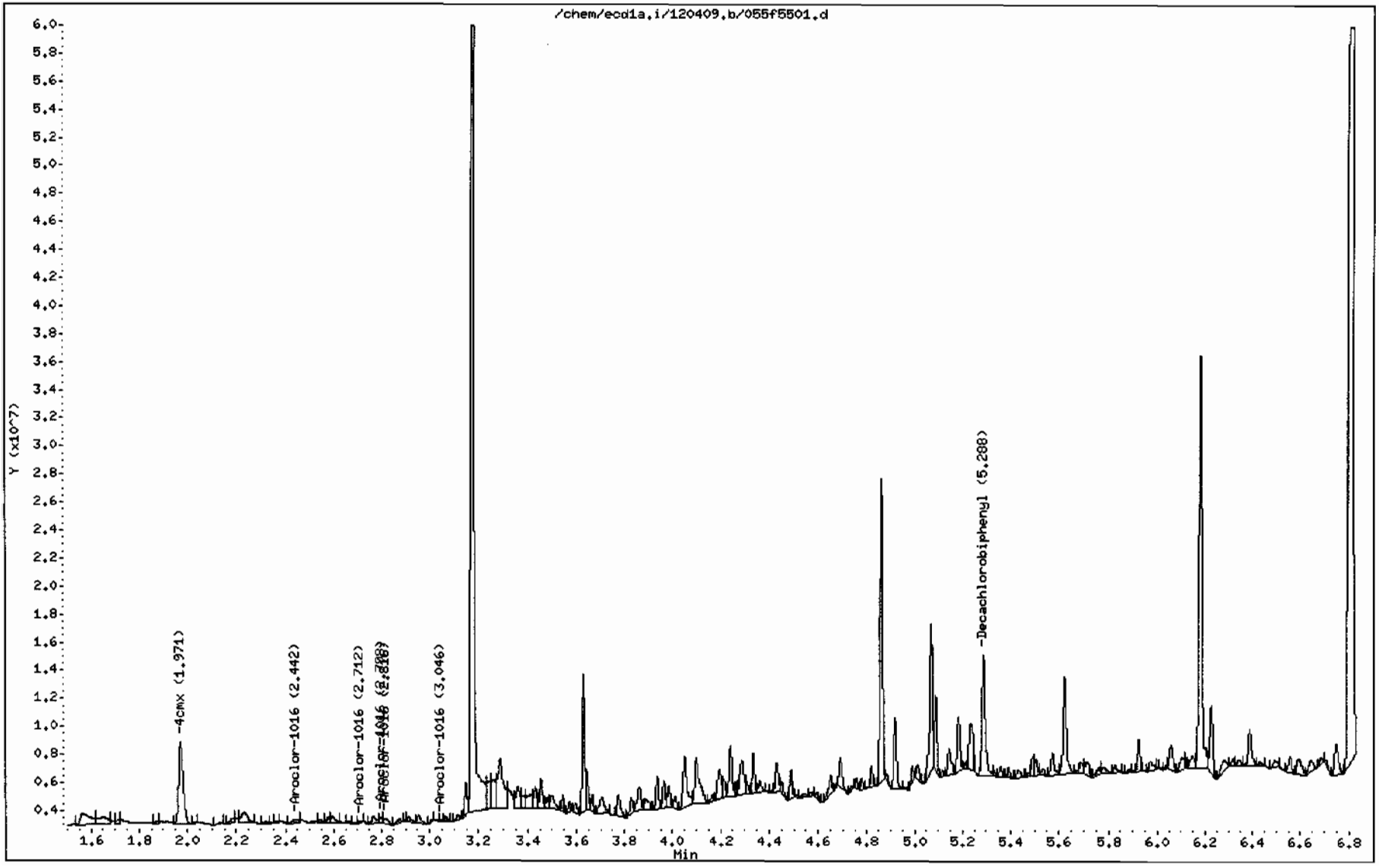

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/055b5501.d
Lab Smp Id: 241540016 Client Smp ID: RE03-09-13872
Inj Date : 04-DEC-2009 15:48
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540016|5|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13872|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 55
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	9.43260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	7278460	19.6029	3.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	6129919	20.3937	3.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/055b5501.d

Page 1

Date : 04-DEC-2009 15:48

Client ID: RE03-09-13872

Instrument: ecd1a.i

Sample Info: |24154001615|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

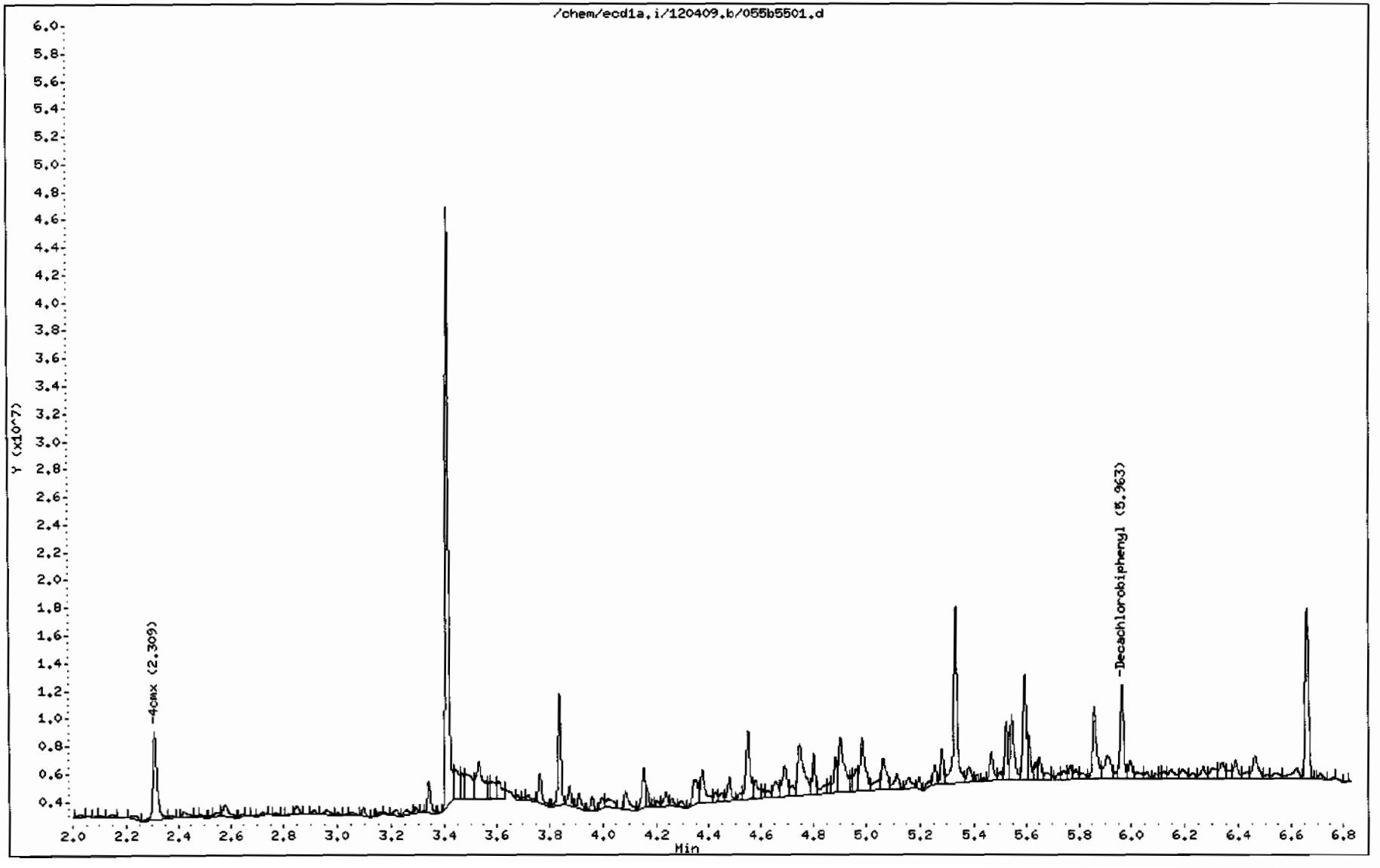

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540010**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**8.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-13873**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:33**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**049f4901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	049b4901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/049f4901.d
Lab Smp Id: 241540010 Client Smp ID: RE03-09-13873
Inj Date : 04-DEC-2009 14:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540010|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13873|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	8.88620	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	58775519	131.703	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	53184592	130.113	4.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/049f4901.d

Date : 04-DEC-2009 14:33

Client ID: RE03-09-13873

Sample Info: |241540010|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

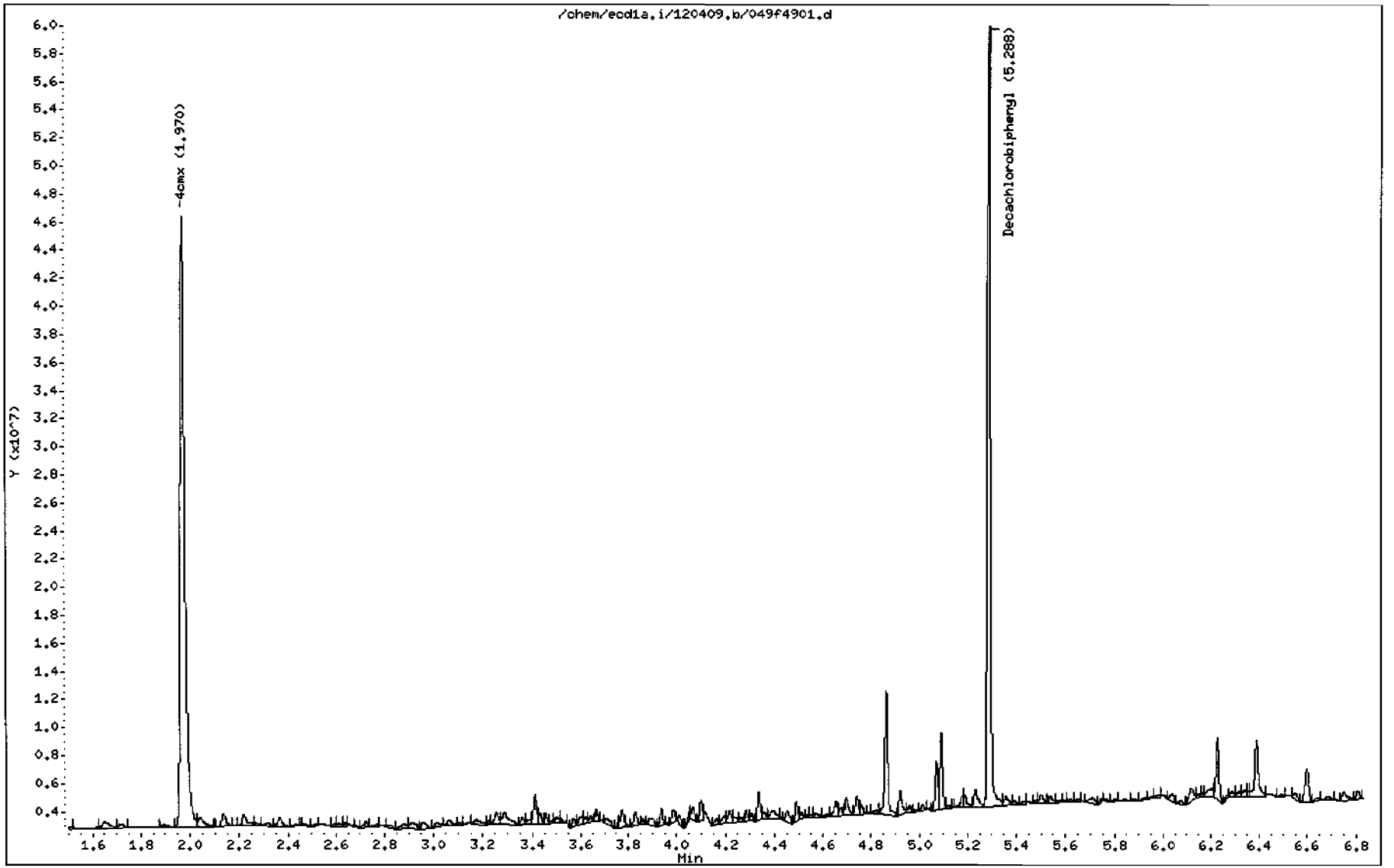

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/049b4901.d
Lab Smp Id: 241540010 Client Smp ID: RE03-09-13873
Inj Date : 04-DEC-2009 14:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540010|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13873|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	8.88620	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	49515376	133.358	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	38510665	128.122	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/049b4901.d
Date : 04-DEC-2009 14:33
Client ID: RE03-09-13873
Sample Info: |241540010|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

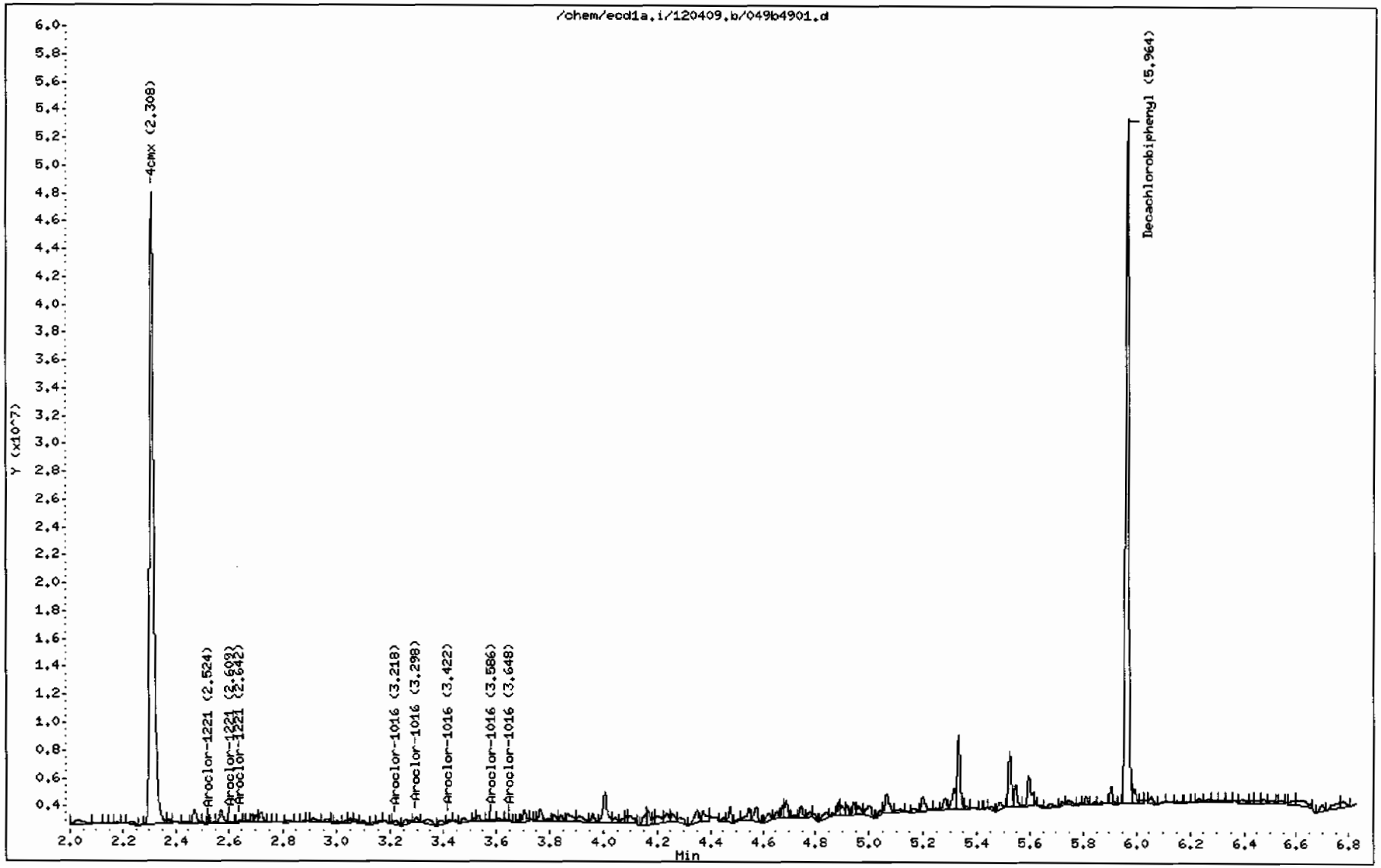

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540012	**Date Received:**	11/20/2009 08:50	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13874	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 14:58	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	051f5101.d	**Column:**	1 CLP1	**Level:**	LOW
	051b5101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.57	ug/kg	1.19	3.57	1
11104–28–2	Aroclor–1221	U	3.57	ug/kg	1.19	3.57	1
11141–16–5	Aroclor–1232	U	3.57	ug/kg	1.19	3.57	1
53469–21–9	Aroclor–1242	U	3.57	ug/kg	1.19	3.57	1
12672–29–6	Aroclor–1248	U	3.57	ug/kg	1.19	3.57	1
11097–69–1	Aroclor–1254	U	3.57	ug/kg	1.19	3.57	1
11096–82–5	Aroclor–1260	J	1.80	ug/kg	1.19	3.57	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/051f5101.d
Lab Smp Id: 241540012 Client Smp ID: RE03-09-13874
Inj Date : 04-DEC-2009 14:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540012|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13874|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	7.16130	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.969	1.973	-0.004	57325629	128.454	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	53404532	130.651	4.7	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
3.772	3.776	-0.004	2647416	123.438	4.4	80.00- 120.00	100.00(a)
3.937	3.938	-0.001	1603845	49.8164	1.8	131.13- 171.13	60.58
4.167	4.168	-0.001	591881	28.9321	1.0	72.27- 112.27	22.36
4.310	4.312	-0.002	413946	20.6130	0.74	73.34- 113.34	15.64

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
4.489	4.491	-0.002	1739665	37.5746	1.3	197.13- 237.13	65.71
			Average of Peak Concentrations =		1.8		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd1a.i/120409.b/051f5101.d
Date : 04-DEC-2009 14:58
Client ID: RE03-09-13874
Sample Info: |241540012|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

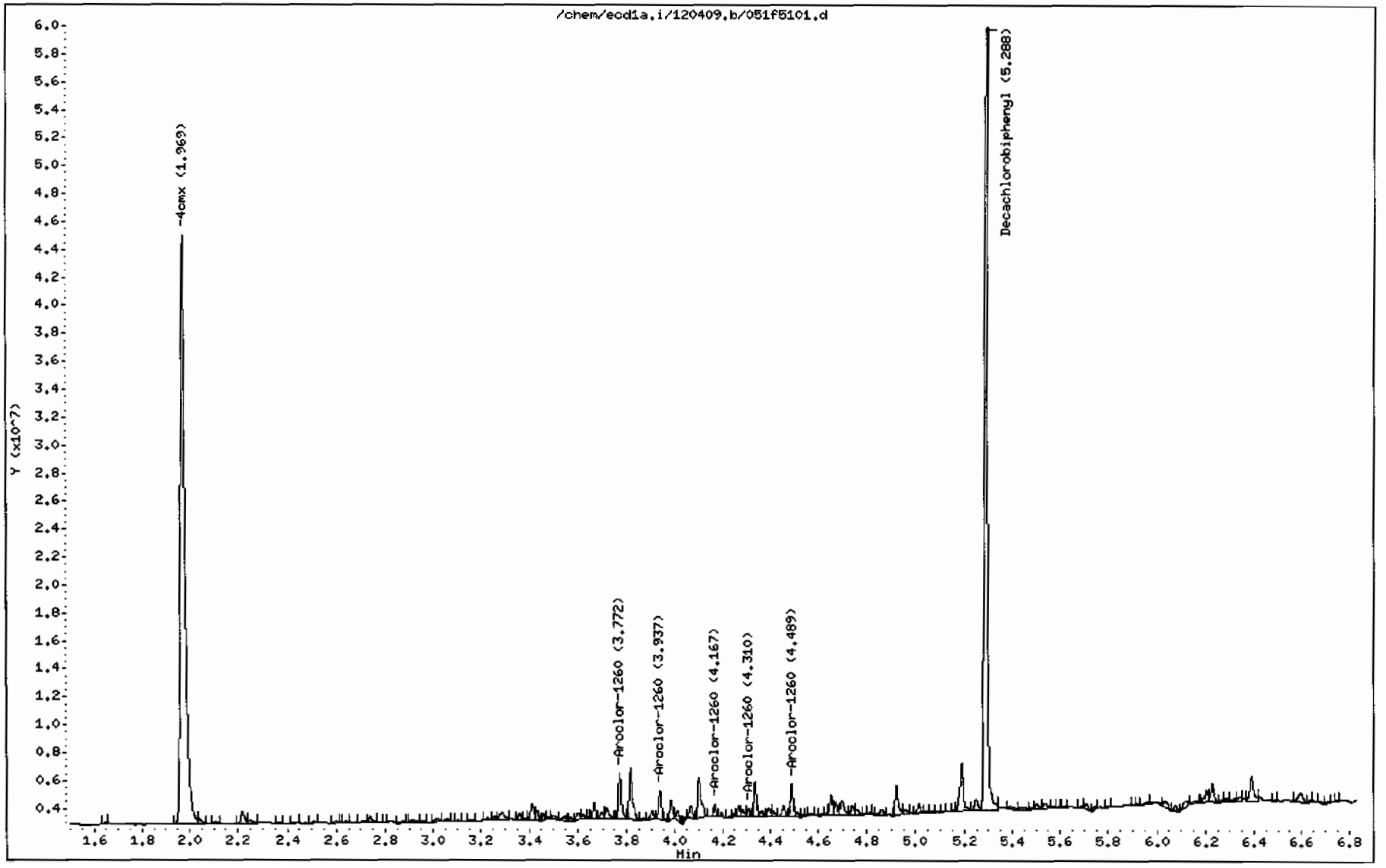

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/051b5101.d
Lab Smp Id: 241540012 Client Smp ID: RE03-09-13874
Inj Date : 04-DEC-2009 14:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540012|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13874|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	7.16130	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	47906638	129.025	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	40757793	135.598	4.8	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	743318	41.1425	1.5	80.00- 120.00	100.00(a)
4.479	4.479	0.000	1418645	64.0269	2.3	106.15- 146.15	190.85
4.745	4.745	0.000	945253	53.4714	1.9	79.67- 119.67	127.17
4.919	4.919	0.000	625622	36.3440	1.3	78.94- 118.94	84.17

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
5.065	5.067	-0.002	2040290	52.8174	1.9	208.07- 248.07	274.48
Average of Peak Concentrations =					1.8		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd1a.i/120409.b/051b5101.d
Date : 04-DEC-2009 14:58
Client ID: RE03-09-13874
Sample Info: 1241540012111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

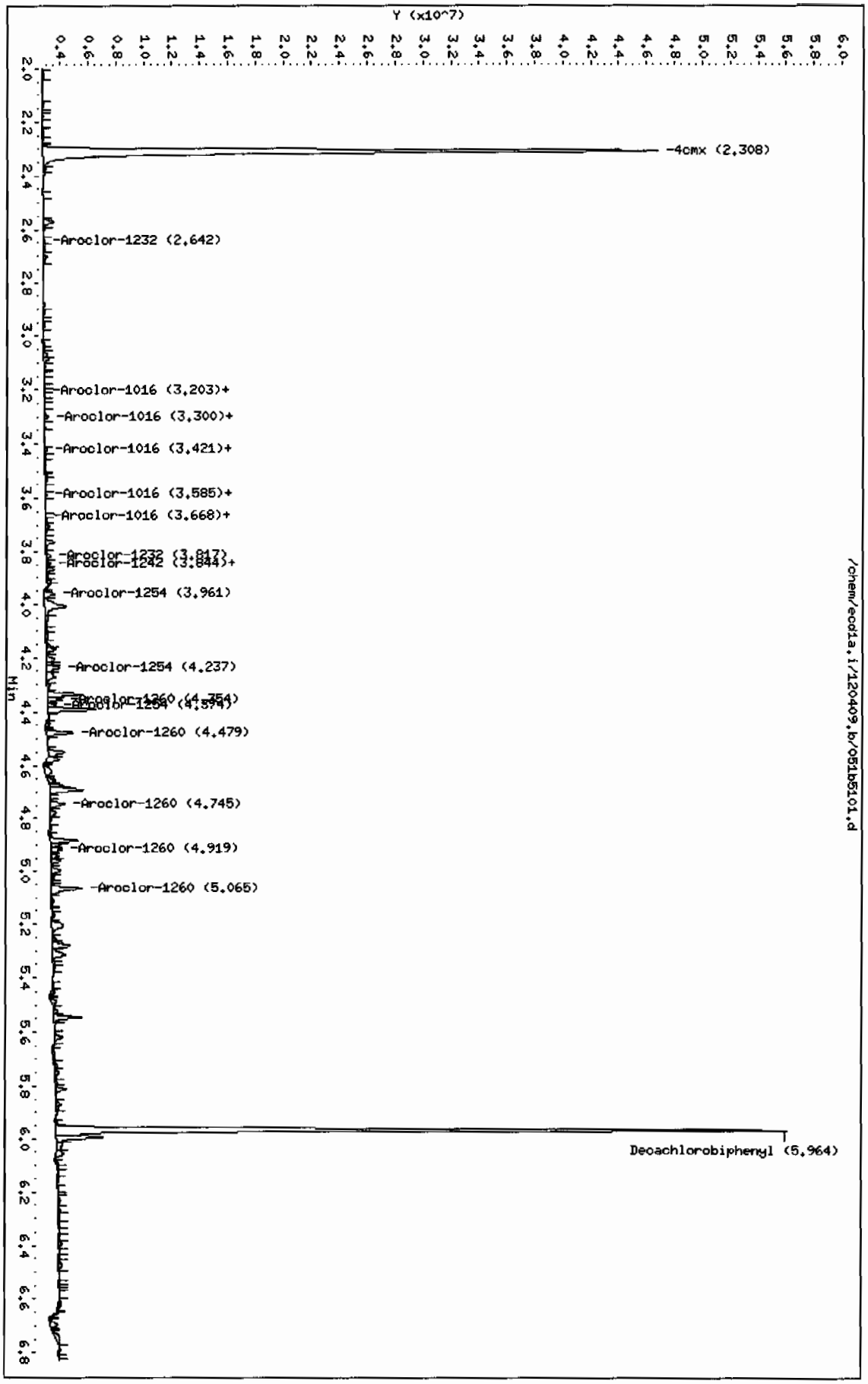

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241540001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13875	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 11:53	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	1 CLP1	**Level:**	LOW
	036b3601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.72	ug/kg	1.24	3.72	1
11104–28–2	Aroclor–1221	U	3.72	ug/kg	1.24	3.72	1
11141–16–5	Aroclor–1232	U	3.72	ug/kg	1.24	3.72	1
53469–21–9	Aroclor–1242	U	3.72	ug/kg	1.24	3.72	1
12672–29–6	Aroclor–1248	U	3.72	ug/kg	1.24	3.72	1
11097–69–1	Aroclor–1254	U	3.72	ug/kg	1.24	3.72	1
11096–82–5	Aroclor–1260	U	3.72	ug/kg	1.24	3.72	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/036f3601.d
Lab Smp Id: 241540001 Client Smp ID: RE03-09-13875
Inj Date : 04-DEC-2009 11:53
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540001|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13875|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	10.45410	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.969	1.973	-0.004	58589896	131.287	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	58693948	143.592	5.3	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/036f3601.d

Date : 04-DEC-2009 11:53

Client ID: RE03-09-13875

Sample Info: !241540001!1!

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

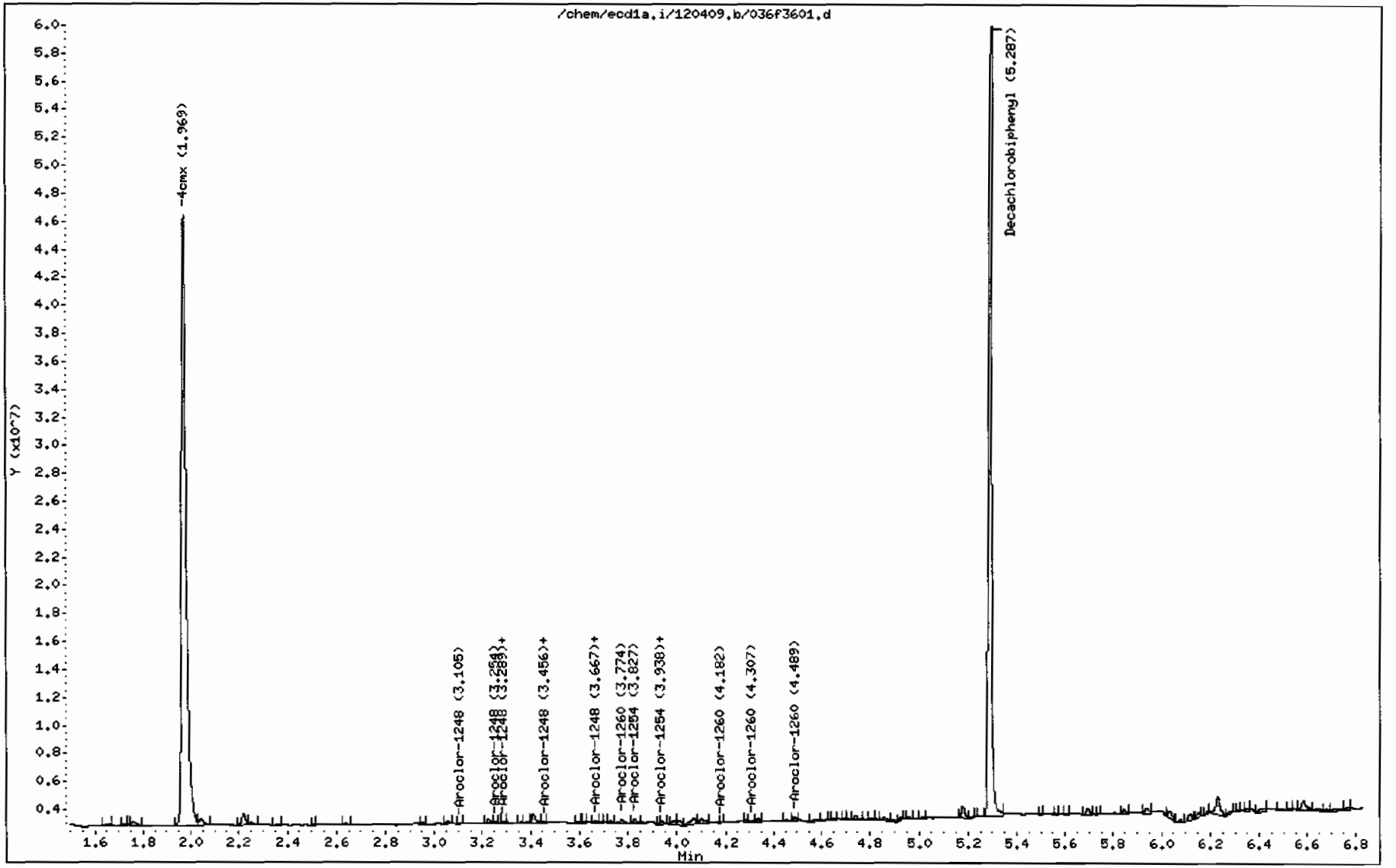

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/036b3601.d
Lab Smp Id: 241540001 Client Smp ID: RE03-09-13875
Inj Date : 04-DEC-2009 11:53
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540001|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13875|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	10.45410	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	49571471	133.509	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	44557415	148.239	5.5	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/036b3601.d

Date : 04-DEC-2009 11:53

Client ID: RE03-09-13875

Sample Info: |241540001|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

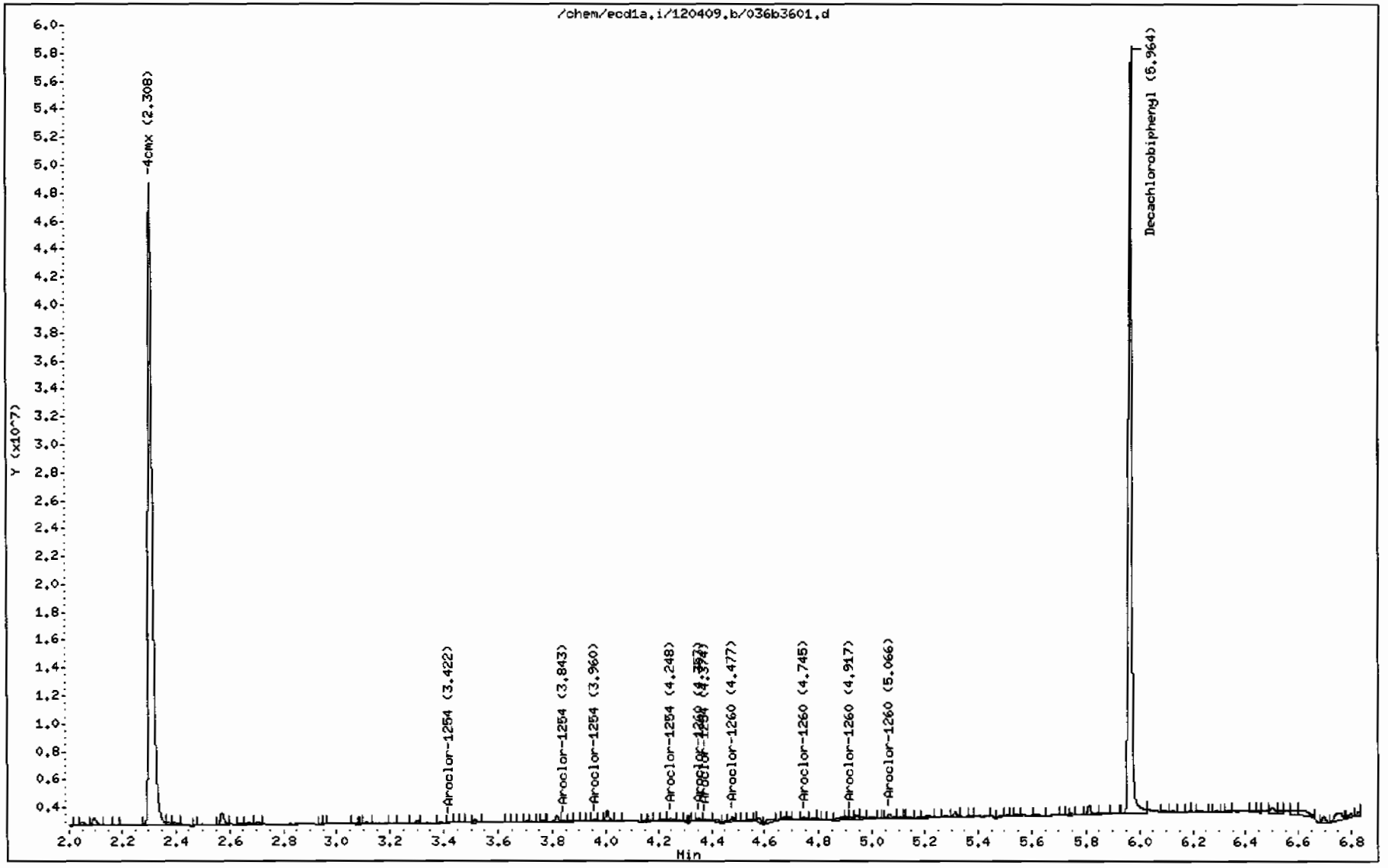

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540015**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13876**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 15:36**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**054f5401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	054b5401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.70	ug/kg	1.23	3.70	1
11104–28–2	Aroclor–1221	U	3.70	ug/kg	1.23	3.70	1
11141–16–5	Aroclor–1232	U	3.70	ug/kg	1.23	3.70	1
53469–21–9	Aroclor–1242	U	3.70	ug/kg	1.23	3.70	1
12672–29–6	Aroclor–1248	U	3.70	ug/kg	1.23	3.70	1
11097–69–1	Aroclor–1254	U	3.70	ug/kg	1.23	3.70	1
11096–82–5	Aroclor–1260	J	3.50	ug/kg	1.23	3.70	2

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/054f5401.d
Lab Smp Id: 241540015 Client Smp ID: RE03-09-13876
Inj Date : 04-DEC-2009 15:36
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540015|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13876|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	10.22200	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	51128401	114.567	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	43160097	105.589	3.9	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	2308699	107.645	4.0	80.00- 120.00	100.00(a)
3.936	3.938	-0.002	3866664	120.101	4.4	131.13- 171.13	167.48
4.167	4.168	-0.001	1260417	61.6112	2.3	72.27- 112.27	54.59
4.309	4.312	-0.003	924404	46.0320	1.7	73.34- 113.34	40.04

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
4.489	4.491	-0.002	3337567	72.0872	2.7	197.13- 237.13	144.56
Average of Peak Concentrations =					3.0		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd1a.i/120409.b/054f5401.d

Date : 04-DEC-2009 15:36

Client ID: RE03-09-13876

Sample Info: |241540015|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

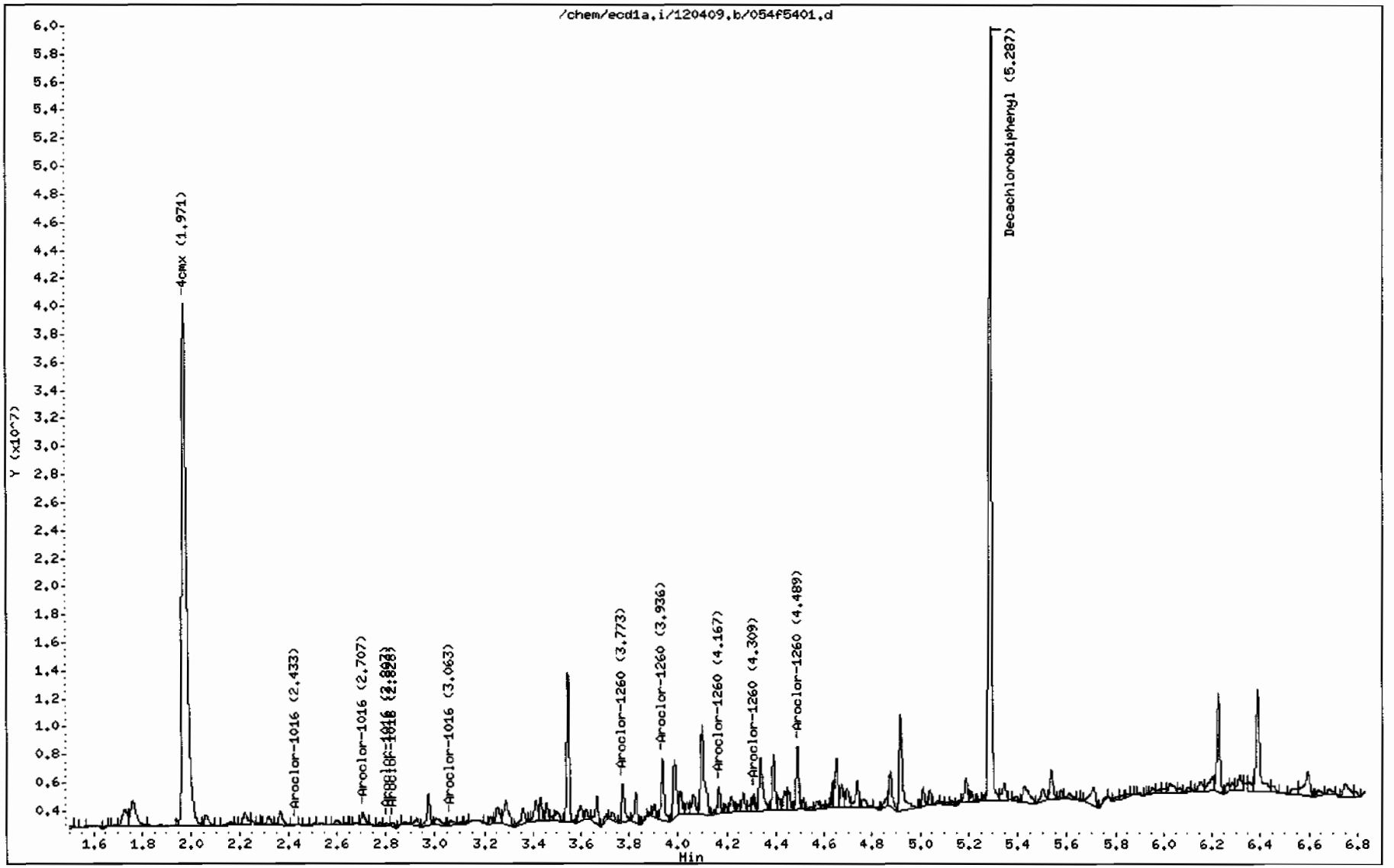

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/054b5401.d
Lab Smp Id: 241540015 Client Smp ID: RE03-09-13876
Inj Date : 04-DEC-2009 15:36
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540015|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13876|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	10.22200	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40072356	107.926	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	32724673	108.872	4.0	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	1247026	69.0227	2.6	80.00- 120.00	100.00(a)
4.477	4.479	-0.002	3172557	143.185	5.3	105.57- 145.57	254.41
4.745	4.745	0.000	1775493	100.437	3.7	77.24- 117.24	142.38
4.918	4.919	-0.001	1120949	65.1188	2.4	75.76- 115.76	89.89

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
5.066	5.067	-0.001	3789878	98.1094	3.6	200.07- 240.07	303.91
Average of Peak Concentrations =					3.5		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd1a.i/120409.b/054b5401.d

Date : 04-DEC-2009 15:36

Client ID: RE03-09-13876

Sample Info: |241540015|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

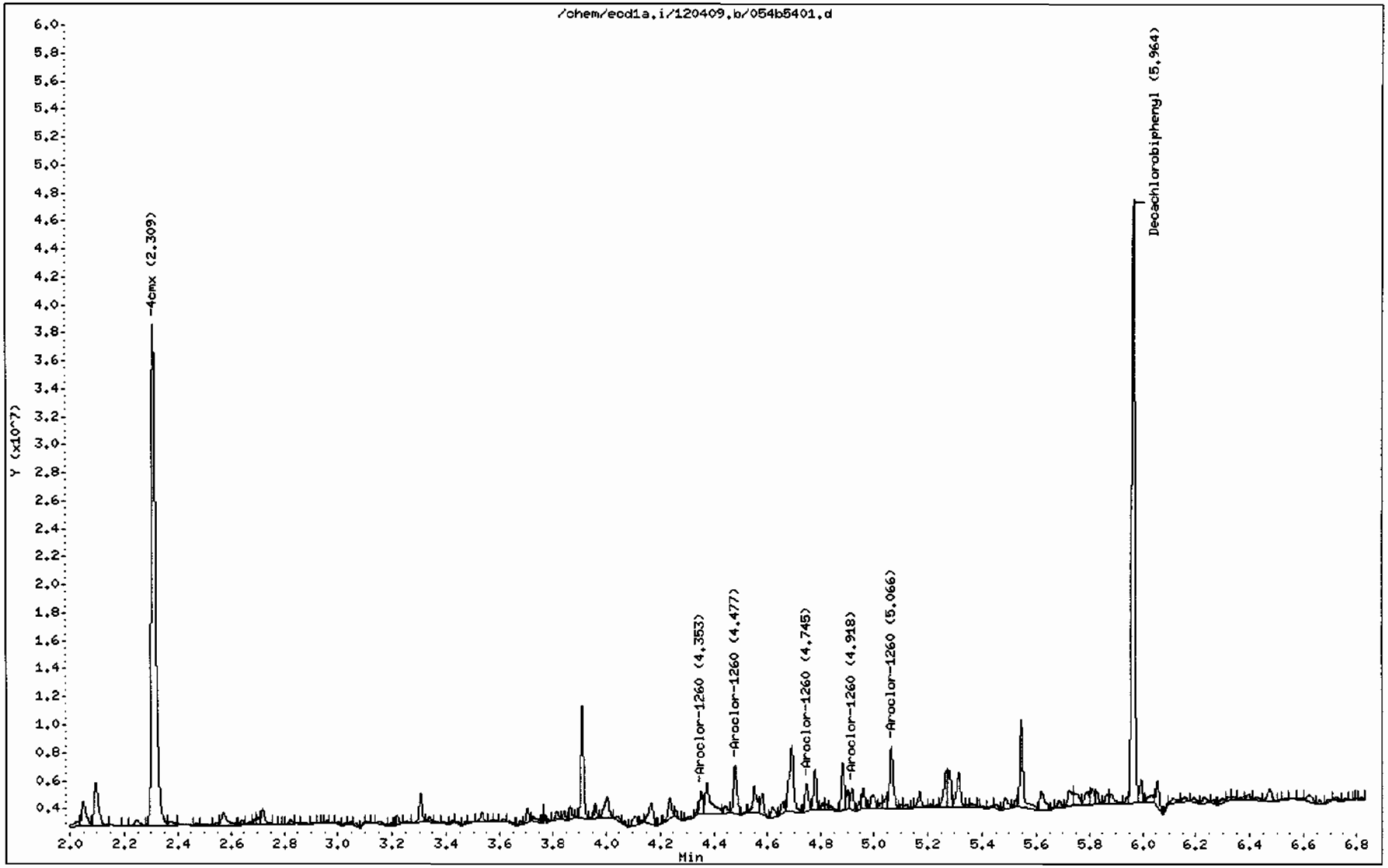

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241540007**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13877**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 13:55**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**046f4601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	046b4601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.71	ug/kg	1.24	3.71	1
11104–28–2	Aroclor–1221	U	3.71	ug/kg	1.24	3.71	1
11141–16–5	Aroclor–1232	U	3.71	ug/kg	1.24	3.71	1
53469–21–9	Aroclor–1242	U	3.71	ug/kg	1.24	3.71	1
12672–29–6	Aroclor–1248	U	3.71	ug/kg	1.24	3.71	1
11097–69–1	Aroclor–1254	U	3.71	ug/kg	1.24	3.71	1
11096–82–5	Aroclor–1260	U	3.71	ug/kg	1.24	3.71	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/046f4601.d
Lab Smp Id: 241540007 Client Smp ID: RE03-09-13877
Inj Date : 04-DEC-2009 13:55
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540007|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13877|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	10.30460	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	57701887	129.297	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	54182040	132.553	4.9	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/046f4601.d

Date : 04-DEC-2009 13:55

Client ID: RE03-09-13877

Sample Info: !241540007!1!

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

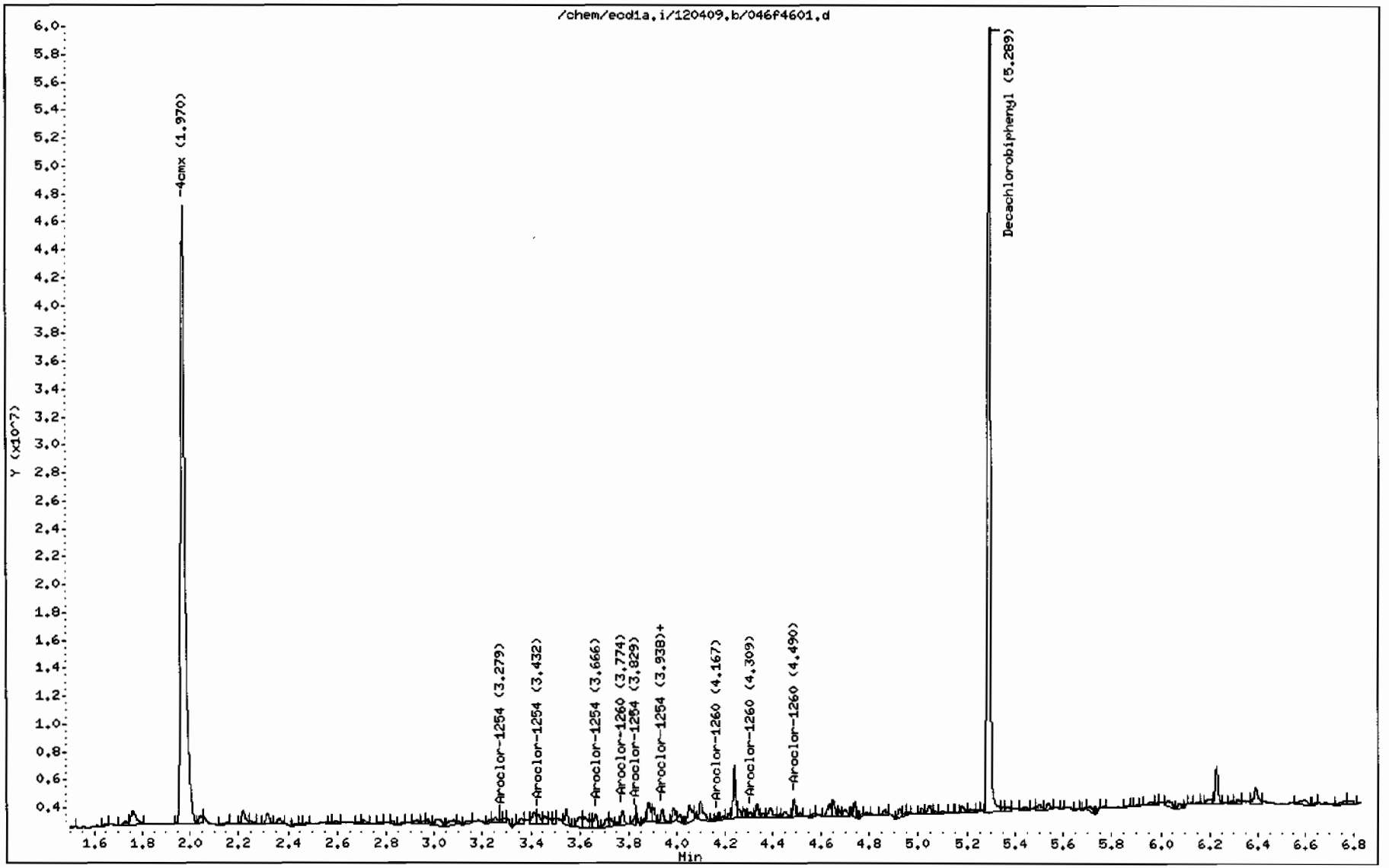

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/046b4601.d
Lab Smp Id: 241540007 Client Smp ID: RE03-09-13877
Inj Date : 04-DEC-2009 13:55
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241540007|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-09-13877|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	10.30460	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	48562141	130.791	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	43794461	145.701	5.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/046b4601.d
Date : 04-DEC-2009 13:55
Client ID: RE03-09-13877
Sample Info: 1241540007141
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

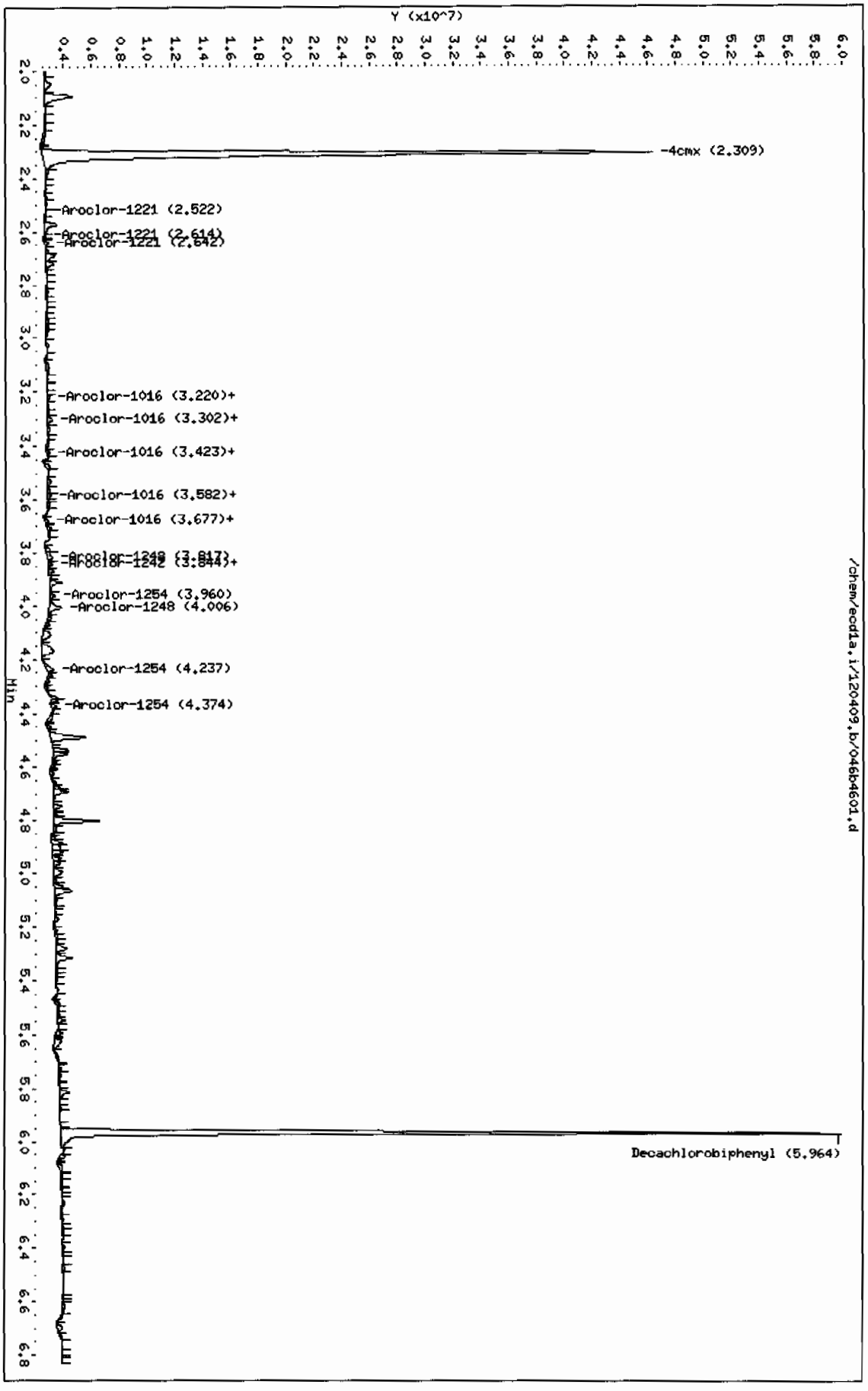

STANDARDS DATA

Report Date: 05-Dec-2009 10:57

Calibration History

Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Start Cal Date: 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010f1001.d
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029f2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023f2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017f1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011f1101.d
Cal Level: 2 , Cal Amount: 200.00000		
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011f1101.d
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030f3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024f2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018f1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012f1201.d
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031f3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025f2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019f1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014f1401.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032f3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026f2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020f2001.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010f1001.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013f1301.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008f0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007f0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006f0601.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013f1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014f1401.d
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033f3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027f2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021f2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:10	AR1660	/chem/ecd1a.i/120409.b/091f9101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:58	AR1660	/chem/ecd1a.i/120409.b/085f8501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:27	AR1660	/chem/ecd1a.i/120409.b/073f7301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:00	PCB	/chem/ecd1a.i/120409.b/061f6101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 16:01	AR1660	/chem/ecd1a.i/120409.b/056f5601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 13:34	AR1660	/chem/ecd1a.i/120409.b/044f4401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 11:07	AR1660	/chem/ecd1a.i/120409.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:33	AR1660	/chem/ecd1a.i/120409.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:13	AR1660	/chem/ecd1a.i/120409.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:57	AR1254	/chem/ecd1a.i/120409.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:47	AR1268	/chem/ecd1a.i/120409.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:36	AR1262	/chem/ecd1a.i/120409.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:26	AR1221	/chem/ecd1a.i/120409.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:15	AR1232	/chem/ecd1a.i/120409.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:05	AR1248	/chem/ecd1a.i/120409.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:54	AR1242	/chem/ecd1a.i/120409.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:33	AR1660	/chem/ecd1a.i/120409.b/002f0201.d

Report Date: 05-Dec-2009 10:57

Calibration History

Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Start Cal Date: 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029b2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023b2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017b1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011b1101.d
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010b1001.d
Cal Level: 2 , Cal Amount: 200.00000		
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030b3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024b2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018b1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012b1201.d
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011b1101.d
Cal Level: 3 , Cal Amount: 500.00000		
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031b3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025b2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019b1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014b1401.d
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012b1201.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032b3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026b2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020b2001.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013b1301.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010b1001.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008b0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007b0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006b0601.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013b1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033b3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027b2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021b2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015b1501.d
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014b1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:58	AR1660	/chem/ecd1a.i/120409.b/085b8501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:00	AR1660	/chem/ecd1a.i/120409.b/061b6101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:10	AR1660	/chem/ecd1a.i/120409.b/091b9101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:27	AR1660	/chem/ecd1a.i/120409.b/073b7301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 16:01	AR1660	/chem/ecd1a.i/120409.b/056b5601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 13:34	AR1660	/chem/ecd1a.i/120409.b/044b4401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 11:07	AR1660	/chem/ecd1a.i/120409.b/032b3201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:33	AR1660	/chem/ecd1a.i/120409.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:13	AR1660	/chem/ecd1a.i/120409.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:57	AR1254	/chem/ecd1a.i/120409.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:47	AR1268	/chem/ecd1a.i/120409.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:36	AR1262	/chem/ecd1a.i/120409.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:26	AR1221	/chem/ecd1a.i/120409.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:15	AR1232	/chem/ecd1a.i/120409.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:05	AR1248	/chem/ecd1a.i/120409.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:54	AR1242	/chem/ecd1a.i/120409.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:33	AR1660	/chem/ecd1a.i/120409.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 08:33 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.430	2.400-2.460	1.709e+04
	2.719	2.689-2.749	2.124e+04
	2.800	2.770-2.830	1.403e+04
	2.838	2.808-2.868	8.417e+03
	3.049	3.019-3.079	1.079e+04
63 4,4-DDD	3.956	3.936-3.976	4.873e+05
64 4,4-DDE	3.607	3.587-3.627	4.621e+05
62 4,4-DDT	4.119	4.099-4.139	1.399e+05
2 Aroclor-1221	2.084	2.054-2.114	5.950e+03
	2.179	2.148-2.208	3.282e+03
	2.204	2.174-2.234	1.440e+04
3 Aroclor-1232	2.431	2.401-2.461	7.786e+03
	2.720	2.690-2.750	1.025e+04
	2.801	2.771-2.831	6.616e+03
	3.050	3.020-3.080	4.921e+03
	3.305	3.275-3.335	4.520e+03
4 Aroclor-1242	2.430	2.400-2.460	1.503e+04
	2.720	2.690-2.750	1.854e+04
	2.839	2.809-2.869	7.392e+03
	3.050	3.020-3.080	9.592e+03
	3.303	3.273-3.333	9.387e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.101	3.071-3.131	9.766e+03
	3.253	3.223-3.283	8.699e+03
	3.304	3.274-3.334	1.693e+04
	3.436	3.406-3.466	1.387e+04
	3.668	3.638-3.698	9.663e+03
6 Aroclor-1254	3.279	3.249-3.309	1.533e+04
	3.435	3.405-3.465	2.093e+04
	3.668	3.638-3.698	2.652e+04
	3.832	3.802-3.862	2.040e+04
	3.940	3.910-3.970	2.023e+04
7 Aroclor-1260	3.776	3.746-3.806	2.145e+04
	3.938	3.908-3.968	3.220e+04
	4.168	4.138-4.198	2.046e+04
	4.312	4.282-4.342	2.008e+04
	4.491	4.461-4.521	4.630e+04
8 Aroclor-1262	3.776	3.746-3.806	1.805e+04
	3.939	3.909-3.969	2.434e+04
	4.169	4.139-4.199	3.192e+04
	4.312	4.282-4.342	2.761e+04
	4.491	4.461-4.521	5.903e+04
9 Aroclor-1268	4.676	4.646-4.706	6.476e+04
	4.700	4.670-4.730	6.428e+04
	4.811	4.781-4.841	4.874e+04
	5.015	4.985-5.045	2.069e+04
	5.180	5.150-5.210	1.402e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.973	1.943-2.003	4.463e+05
$ 12 Decachlorobiphenyl	5.289	5.259-5.319	4.088e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 08:33 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.213	3.183-3.243	1.686e+04
	3.296	3.266-3.326	1.154e+04
	3.422	3.392-3.452	6.951e+03
	3.587	3.557-3.617	9.181e+03
	3.663	3.633-3.693	8.509e+03
62 4,4-DDT	4.695	4.675-4.715	8.846e+04
63 4,4-DDE	4.163	4.143-4.183	3.629e+05
64 4,4-DDD	4.509	4.489-4.529	3.599e+05
2 Aroclor-1221	2.509	2.478-2.538	5.108e+03
	2.603	2.574-2.634	3.283e+03
	2.644	2.614-2.674	1.145e+04
3 Aroclor-1232	2.645	2.615-2.675	7.297e+03
	3.213	3.183-3.243	8.233e+03
	3.297	3.267-3.327	5.504e+03
	3.588	3.558-3.618	4.272e+03
	3.822	3.792-3.852	4.143e+03
4 Aroclor-1242	3.212	3.182-3.242	1.482e+04
	3.296	3.266-3.326	1.016e+04
	3.587	3.557-3.617	8.262e+03
	3.663	3.633-3.693	7.732e+03
	3.849	3.819-3.879	9.404e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.422	3.392-3.452	1.037e+04
	3.588	3.558-3.618	1.280e+04
	3.822	3.792-3.852	1.461e+04
	3.849	3.819-3.879	1.623e+04
	3.987	3.957-4.017	1.566e+04
6 Aroclor-1254	3.422	3.392-3.452	8.334e+03
	3.846	3.816-3.876	1.495e+04
	3.962	3.932-3.992	1.638e+04
	4.239	4.209-4.269	2.215e+04
	4.375	4.345-4.405	1.687e+04
7 Aroclor-1260	4.354	4.324-4.384	1.807e+04
	4.479	4.449-4.509	2.216e+04
	4.745	4.715-4.775	1.768e+04
	4.919	4.889-4.949	1.721e+04
	5.067	5.037-5.097	3.863e+04
8 Aroclor-1262	4.480	4.450-4.510	1.838e+04
	4.745	4.715-4.775	2.607e+04
	4.920	4.890-4.950	2.257e+04
	5.066	5.036-5.096	4.615e+04
	5.280	5.250-5.310	3.242e+04
9 Aroclor-1268	5.279	5.249-5.309	5.681e+04
	5.306	5.276-5.336	5.436e+04
	5.456	5.426-5.486	4.114e+04
	5.620	5.590-5.650	1.776e+04
	5.814	5.784-5.844	1.099e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.309	2.279-2.339	3.713e+05
$ 12 Decachlorobiphenyl	5.966	5.936-5.996	3.006e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/110909.b/010f1001.d
Level 2: /chem/ecd1a.i/110909.b/011f1101.d
Level 3: /chem/ecd1a.i/110909.b/012f1201.d
Level 4: /chem/ecd1a.i/111009b.b/032f3201.d
Level 5: /chem/ecd1a.i/110909.b/014f1401.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20658	18482	17001	15583	13722	17089	15.563
(2)	24543	22131	20883	20176	18452	21237	10.722
(3)	16548	15095	13829	12774	11916	14032	13.123
(4)	9698	9043	8332	7728	7282	8417	11.585
(5)	12784	11504	10586	9800	9293	10793	12.897
63 4,4-DDD	+++++	+++++	+++++	487303	+++++	487303	0.000
64 4,4-DDE	+++++	+++++	+++++	462145	+++++	462145	0.000
62 4,4-DDT	+++++	+++++	+++++	139891	+++++	139891	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5950	+++++	5950	0.000
(2)	+++++	+++++	+++++	3282	+++++	3282	0.000
(3)	+++++	+++++	+++++	14405	+++++	14405	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7786	+++++	7786	0.000
(2)	+++++	+++++	+++++	10255	+++++	10255	0.000
(3)	+++++	+++++	+++++	6616	+++++	6616	0.000
(4)	+++++	+++++	+++++	4921	+++++	4921	0.000
(5)	+++++	+++++	+++++	4520	+++++	4520	0.000
4 Aroclor-1242(1)	17412	15553	15178	14343	12670	15031	11.528
(2)	20986	19324	18457	17508	16436	18542	9.380
(3)	8533	7719	7363	6848	6494	7392	10.720
(4)	11366	9954	9518	8750	8373	9592	12.199
(5)	10712	9680	9208	8779	8557	9387	9.120
5 Aroclor-1248(1)	11448	10174	9548	8978	8682	9766	11.261
(2)	10027	9078	8468	8103	7821	8699	10.098
(3)	19335	17548	16321	15814	15622	16928	9.102
(4)	16098	14147	13625	13026	12432	13866	10.125
(5)	11252	10016	9528	9039	8481	9663	10.921

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	17517	15970	14901	14485	13761	15327	9.541
(2)	23476	21771	20197	19941	19266	20930	8.092
(3)	28419	27206	25987	25832	25135	26516	4.901
(4)	21904	21069	19942	19739	19343	20399	5.185
(5)	21473	21181	19923	19591	18991	20232	5.235
7 Aroclor-1260(1)	24604	22318	20876	20266	19173	21447	9.785
(2)	35844	33345	31633	30611	29543	32195	7.686
(3)	22847	21262	20066	19413	18699	20458	7.992
(4)	22180	20845	19753	19032	18598	20082	7.215
(5)	49574	47568	45834	44759	43761	46299	4.992
8 Aroclor-1262(1)	+++++	+++++	+++++	18047	+++++	18047	0.000
(2)	+++++	+++++	+++++	24345	+++++	24345	0.000
(3)	+++++	+++++	+++++	31917	+++++	31917	0.000
(4)	+++++	+++++	+++++	27612	+++++	27612	0.000
(5)	+++++	+++++	+++++	59026	+++++	59026	0.000
9 Aroclor-1268(1)	68327	66126	65237	63266	60847	64761	4.392
(2)	68601	64443	65877	62667	59795	64277	5.158
(3)	52175	49424	49256	47362	45464	48736	5.146
(4)	22181	21170	20804	20096	19178	20686	5.461
(5)	146769	142521	141652	137032	132906	140176	3.807
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	466250	545108	422258	406785	390967	446274	13.887
$ 12 Decachlorobiphenyl	430420	504395	383103	370310	355553	408756	14.772

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/111009b.b/029b2901.d
Level 2: /chem/ecd1a.i/111009b.b/030b3001.d
Level 3: /chem/ecd1a.i/111009b.b/031b3101.d
Level 4: /chem/ecd1a.i/111009b.b/032b3201.d
Level 5: /chem/ecd1a.i/111009b.b/033b3301.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	$\overline{RRF}$	% RSD
1 Aroclor-1016(1)	20143	17832	16713	15449	14165	16860	13.590
(2)	14035	12488	11357	10499	9300	11536	15.783
(3)	8596	7569	6813	6230	5549	6951	17.011
(4)	11079	9913	9060	8322	7528	9181	15.037
(5)	10190	9095	8398	7765	7096	8509	14.067
62 4,4-DDT	+++++	+++++	+++++	88461	+++++	88461	0.000
63 4,4-DDE	+++++	+++++	+++++	362852	+++++	362852	0.000
64 4,4-DDD	+++++	+++++	+++++	359922	+++++	359922	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5108	+++++	5108	0.000
(2)	+++++	+++++	+++++	3283	+++++	3283	0.000
(3)	+++++	+++++	+++++	11452	+++++	11452	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7297	+++++	7297	0.000
(2)	+++++	+++++	+++++	8233	+++++	8233	0.000
(3)	+++++	+++++	+++++	5504	+++++	5504	0.000
(4)	+++++	+++++	+++++	4272	+++++	4272	0.000
(5)	+++++	+++++	+++++	4143	+++++	4143	0.000
4 Aroclor-1242(1)	17172	15118	14593	14231	12964	14816	10.382
(2)	12255	10735	10080	9299	8450	10164	14.252
(3)	9734	8902	8100	7577	6997	8262	13.081
(4)	9161	8279	7511	7126	6585	7732	13.052
(5)	11158	9837	9355	8577	8092	9404	12.659
5 Aroclor-1248(1)	12701	11102	10208	9399	8419	10366	15.810
(2)	15478	13606	12645	11722	10563	12803	14.618
(3)	17430	15245	14486	13522	12342	14605	13.123
(4)	19368	17007	16145	14983	13634	16227	13.342
(5)	18762	16275	15487	14453	13334	15662	13.124

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	10034	8978	8141	7651	6863	8334	14.663
(2)	17568	15909	14674	13904	12711	14953	12.491
(3)	19039	17387	16070	15329	14072	16379	11.670
(4)	24937	23339	21906	20911	19635	22146	9.335
(5)	19077	18105	16810	15765	14609	16873	10.573
7 Aroclor-1260(1)	22503	19003	17476	16529	14825	18067	16.085
(2)	25650	23506	21850	21066	18712	22157	11.763
(3)	20595	18951	17412	16547	14884	17678	12.422
(4)	20138	18349	16944	16067	14572	17214	12.395
(5)	44064	40843	38492	36572	33174	38629	10.709
8 Aroclor-1262(1)	+++++	+++++	+++++	18376	+++++	18376	0.000
(2)	+++++	+++++	+++++	26068	+++++	26068	0.000
(3)	+++++	+++++	+++++	22571	+++++	22571	0.000
(4)	+++++	+++++	+++++	46151	+++++	46151	0.000
(5)	+++++	+++++	+++++	32422	+++++	32422	0.000
9 Aroclor-1268(1)	64233	59607	57611	53879	48726	56811	10.321
(2)	60168	56519	56119	51372	47642	54364	8.990
(3)	46456	42771	41694	38901	35867	41138	9.727
(4)	19817	18449	17847	16818	15872	17760	8.524
(5)	122099	114124	111138	104603	97770	109947	8.427
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	404105	466906	350017	331939	303513	371296	17.462
$ 12 Decachlorobiphenyl	328640	378740	282742	266616	246153	300578	17.707

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0533

Lab File ID: 002F0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	14970.481	0.01	-12.4	15.0
(2)	21236.796	20135.606	0.01	-5.2	15.0
(3)	14032.402	12547.766	0.01	-10.6	15.0
(4)	8416.650	7602.078	0.01	-9.7	15.0
(5)	10793.469	9796.814	0.01	-9.2	15.0
Aroclor-1260	21447.416	20044.215	0.01	-6.5	15.0
(2)	32195.147	30463.079	0.01	-5.4	15.0
(3)	20457.594	19227.240	0.01	-6.0	15.0
(4)	20081.764	19479.682	0.01	-3.0	15.0
(5)	46299.014	45369.023	0.01	-2.0	15.0
4cmx	446273.70	434622.62	0.01	-2.6	15.0
Decachlorobiphenyl	408756.19	397828.40	0.01	-2.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0533

Lab File ID: 002B0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16807.912	0.01	-0.3	15.0
(2)	11535.631	10552.164	0.01	-8.5	15.0
(3)	6951.234	6359.866	0.01	-8.5	15.0
(4)	9180.580	8689.648	0.01	-5.3	15.0
(5)	8508.868	8099.265	0.01	-4.8	15.0
Aroclor-1260	18066.901	17233.768	0.01	-4.6	15.0
(2)	22157.029	21873.356	0.01	-1.3	15.0
(3)	17677.720	17288.221	0.01	-2.2	15.0
(4)	17213.904	17030.080	0.01	-1.1	15.0
(5)	38629.119	39351.006	0.01	1.9	15.0
4cmx	371295.92	364879.64	0.01	-1.7	15.0
Decachlorobiphenyl	300578.33	303887.95	0.01	1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0657

Lab File ID: 010F1001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 1052 1134

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	15326.864	12966.828	0.01	-15.4	15.0	<-
(2)	20930.167	17552.929	0.01	-16.1	15.0	<-
(3)	26515.714	23179.232	0.01	-12.6	15.0	
(4)	20399.308	17516.529	0.01	-14.1	15.0	
(5)	20231.586	17473.669	0.01	-13.6	15.0	
4cmx	446273.70	402963.45	0.01	-9.7	15.0	
Decachlorobiphenyl	408756.19	377350.30	0.01	-7.7	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0657

Lab File ID: 010B1001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 1052 1134

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	8333.507	7024.457	0.01	-15.7	15.0	<-
(2)	14953.207	12758.805	0.01	-14.7	15.0	
(3)	16379.447	14156.860	0.01	-13.6	15.0	
(4)	22145.610	19672.431	0.01	-11.2	15.0	
(5)	16873.312	15136.600	0.01	-10.3	15.0	
4cmx	371295.92	340221.03	0.01	-8.4	15.0	
Decachlorobiphenyl	300578.33	287120.47	0.01	-4.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1107

Lab File ID: 032F3201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16529.920	0.01	-3.3	15.0
(2)	21236.796	21539.753	0.01	1.4	15.0
(3)	14032.402	13174.200	0.01	-6.1	15.0
(4)	8416.650	8050.003	0.01	-4.4	15.0
(5)	10793.469	10263.065	0.01	-4.9	15.0
Aroclor-1260	21447.416	21244.595	0.01	-0.9	15.0
(2)	32195.147	32175.050	0.01	-0.1	15.0
(3)	20457.594	20076.720	0.01	-1.9	15.0
(4)	20081.764	20485.102	0.01	2.0	15.0
(5)	46299.014	47647.097	0.01	2.9	15.0
4cmx	446273.70	457452.17	0.01	2.5	15.0
Decachlorobiphenyl	408756.19	414255.91	0.01	1.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1107

Lab File ID: 032B3201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16676.840	0.01	-1.1	15.0
(2)	11535.631	10982.454	0.01	-4.8	15.0
(3)	6951.234	6587.435	0.01	-5.2	15.0
(4)	9180.580	8853.851	0.01	-3.6	15.0
(5)	8508.868	8277.180	0.01	-2.7	15.0
Aroclor-1260	18066.901	17966.560	0.01	-0.6	15.0
(2)	22157.029	22743.313	0.01	2.6	15.0
(3)	17677.720	18096.633	0.01	2.4	15.0
(4)	17213.904	17955.776	0.01	4.3	15.0
(5)	38629.119	41172.560	0.01	6.6	15.0
4cmx	371295.92	380837.31	0.01	2.6	15.0
Decachlorobiphenyl	300578.33	312907.61	0.01	4.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1334

Lab File ID: 044F4401 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16587.869	0.01	-2.9	15.0
(2)	21236.796	21328.534	0.01	0.4	15.0
(3)	14032.402	13234.956	0.01	-5.7	15.0
(4)	8416.650	8090.880	0.01	-3.9	15.0
(5)	10793.469	10310.909	0.01	-4.5	15.0
Aroclor-1260	21447.416	21238.635	0.01	-1.0	15.0
(2)	32195.147	31962.442	0.01	-0.7	15.0
(3)	20457.594	19820.627	0.01	-3.1	15.0
(4)	20081.764	20244.908	0.01	0.8	15.0
(5)	46299.014	47150.417	0.01	1.8	15.0
4cmx	446273.70	459015.16	0.01	2.8	15.0
Decachlorobiphenyl	408756.19	406080.12	0.01	-0.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1334

Lab File ID: 044B4401 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16723.886	0.01	-0.8	15.0
(2)	11535.631	11020.916	0.01	-4.5	15.0
(3)	6951.234	6643.260	0.01	-4.4	15.0
(4)	9180.580	9099.233	0.01	-0.9	15.0
(5)	8508.868	8426.710	0.01	-1.0	15.0
Aroclor-1260	18066.901	17891.685	0.01	-1.0	15.0
(2)	22157.029	22570.402	0.01	1.9	15.0
(3)	17677.720	17832.218	0.01	0.9	15.0
(4)	17213.904	17702.115	0.01	2.8	15.0
(5)	38629.119	40806.311	0.01	5.6	15.0
4cmx	371295.92	382526.61	0.01	3.0	15.0
Decachlorobiphenyl	300578.33	309876.03	0.01	3.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1601

Lab File ID: 056F5601 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16943.472	0.01	-0.8	15.0
(2)	21236.796	21834.260	0.01	2.8	15.0
(3)	14032.402	13509.398	0.01	-3.7	15.0
(4)	8416.650	8208.757	0.01	-2.5	15.0
(5)	10793.469	10349.102	0.01	-4.1	15.0
Aroclor-1260	21447.416	21236.090	0.01	-1.0	15.0
(2)	32195.147	32094.524	0.01	-0.3	15.0
(3)	20457.594	19595.052	0.01	-4.2	15.0
(4)	20081.764	19822.003	0.01	-1.3	15.0
(5)	46299.014	46109.859	0.01	-0.4	15.0
4cmx	446273.70	469429.86	0.01	5.2	15.0
Decachlorobiphenyl	408756.19	386309.43	0.01	-5.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1601

Lab File ID: 056B5601 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	16860.477	16592.250	0.01	-1.6	15.0	
(2)	11535.631	10936.406	0.01	-5.2	15.0	
(3)	6951.234	6543.946	0.01	-5.8	15.0	
(4)	9180.580	8712.165	0.01	-5.1	15.0	
(5)	8508.868	8169.660	0.01	-4.0	15.0	
Aroclor-1260	18066.901	17273.804	0.01	-4.4	15.0	
(2)	22157.029	21689.978	0.01	-2.1	15.0	
(3)	17677.720	16796.594	0.01	-5.0	15.0	
(4)	17213.904	16542.240	0.01	-3.9	15.0	
(5)	38629.119	38014.671	0.01	-1.6	15.0	
4cmx	371295.92	386241.64	0.01	4.0	15.0	
Decachlorobiphenyl	300578.33	238877.07	0.01	-20.5	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1700

Lab File ID: 061F6101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16585.829	0.01	-2.9	15.0
(2)	21236.796	21268.253	0.01	0.1	15.0
(3)	14032.402	13312.591	0.01	-5.1	15.0
(4)	8416.650	8116.433	0.01	-3.6	15.0
(5)	10793.469	10365.510	0.01	-4.0	15.0
Aroclor-1260	21447.416	21115.698	0.01	-1.5	15.0
(2)	32195.147	31817.274	0.01	-1.2	15.0
(3)	20457.594	19703.673	0.01	-3.7	15.0
(4)	20081.764	20116.774	0.01	0.2	15.0
(5)	46299.014	46618.762	0.01	0.7	15.0
4cmx	446273.70	455596.85	0.01	2.1	15.0
Decachlorobiphenyl	408756.19	393105.11	0.01	-3.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1700

Lab File ID: 061B6101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16701.570	0.01	-0.9	15.0
(2)	11535.631	10974.937	0.01	-4.9	15.0
(3)	6951.234	6528.241	0.01	-6.1	15.0
(4)	9180.580	8767.726	0.01	-4.5	15.0
(5)	8508.868	8075.462	0.01	-5.1	15.0
Aroclor-1260	18066.901	17606.161	0.01	-2.6	15.0
(2)	22157.029	22261.947	0.01	0.5	15.0
(3)	17677.720	17504.600	0.01	-1.0	15.0
(4)	17213.904	17285.472	0.01	0.4	15.0
(5)	38629.119	39770.333	0.01	3.0	15.0
4cmx	371295.92	379876.64	0.01	2.3	15.0
Decachlorobiphenyl	300578.33	292924.50	0.01	-2.5	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 05:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.973	1.973	0.000	43462262	100.000	97.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	39782840	100.000	97.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.430	0.000	14970481	1000.00	876	80.00- 120.00	100.00
2.719	2.719	0.000	20135606	1000.00	948	114.50- 154.50	134.50
2.800	2.800	0.000	12547766	1000.00	894	63.82- 103.82	83.82
2.838	2.838	0.000	7602078	1000.00	903	30.78- 70.78	50.78
3.049	3.049	0.000	9796814	1000.00	908	45.44- 85.44	65.44
Average of Peak Amounts =					906		
7 Aroclor-1260					CAS #: 11096-82-5		
3.776	3.776	0.000	20044215	1000.00	934	80.00- 120.00	100.00
3.938	3.938	0.000	30463079	1000.00	946	131.98- 171.98	151.98
4.168	4.168	0.000	19227240	1000.00	940	75.92- 115.92	95.92
4.312	4.312	0.000	19479682	1000.00	970	77.18- 117.18	97.18
4.491	4.491	0.000	45369023	1000.00	980	206.34- 246.34	226.34
Average of Peak Amounts =					954		

Data File: /chem/ecd1a.i/120409.b/002f0201.d

Date : 04-DEC-2009 05:33

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

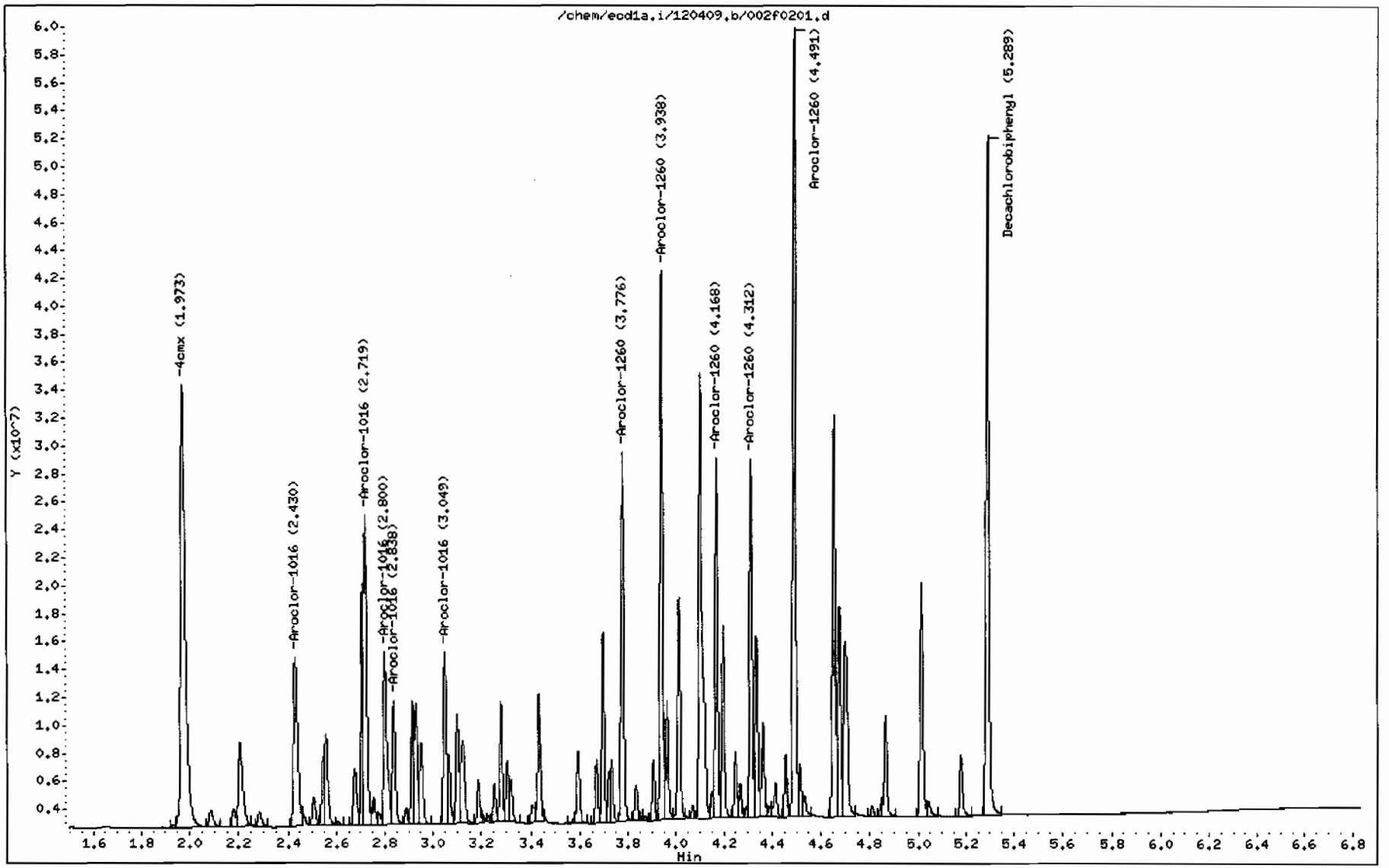

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 05:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:12 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	36487964	100.000	98.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	30388795	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.213	3.213	0.000	16807912	1000.00	997	80.00- 120.00	100.00(M)
3.296	3.296	0.000	10552164	1000.00	915	42.78- 82.78	62.78
3.422	3.422	0.000	6359866	1000.00	915	17.84- 57.84	37.84
3.587	3.587	0.000	8689648	1000.00	946	31.70- 71.70	51.70
3.663	3.663	0.000	8099265	1000.00	952	28.19- 68.19	48.19
Average of Peak Amounts =					945		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	17233768	1000.00	954	80.00- 120.00	100.00
4.479	4.479	0.000	21873356	1000.00	987	106.92- 146.92	126.92
4.745	4.745	0.000	17288221	1000.00	978	80.32- 120.32	100.32
4.919	4.919	0.000	17030080	1000.00	989	78.82- 118.82	98.82
5.067	5.067	0.000	39351006	1000.00	1020	208.34- 248.34	228.34
Average of Peak Amounts =					985		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/002b0201.d
Date : 04-DEC-2009 05:33
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

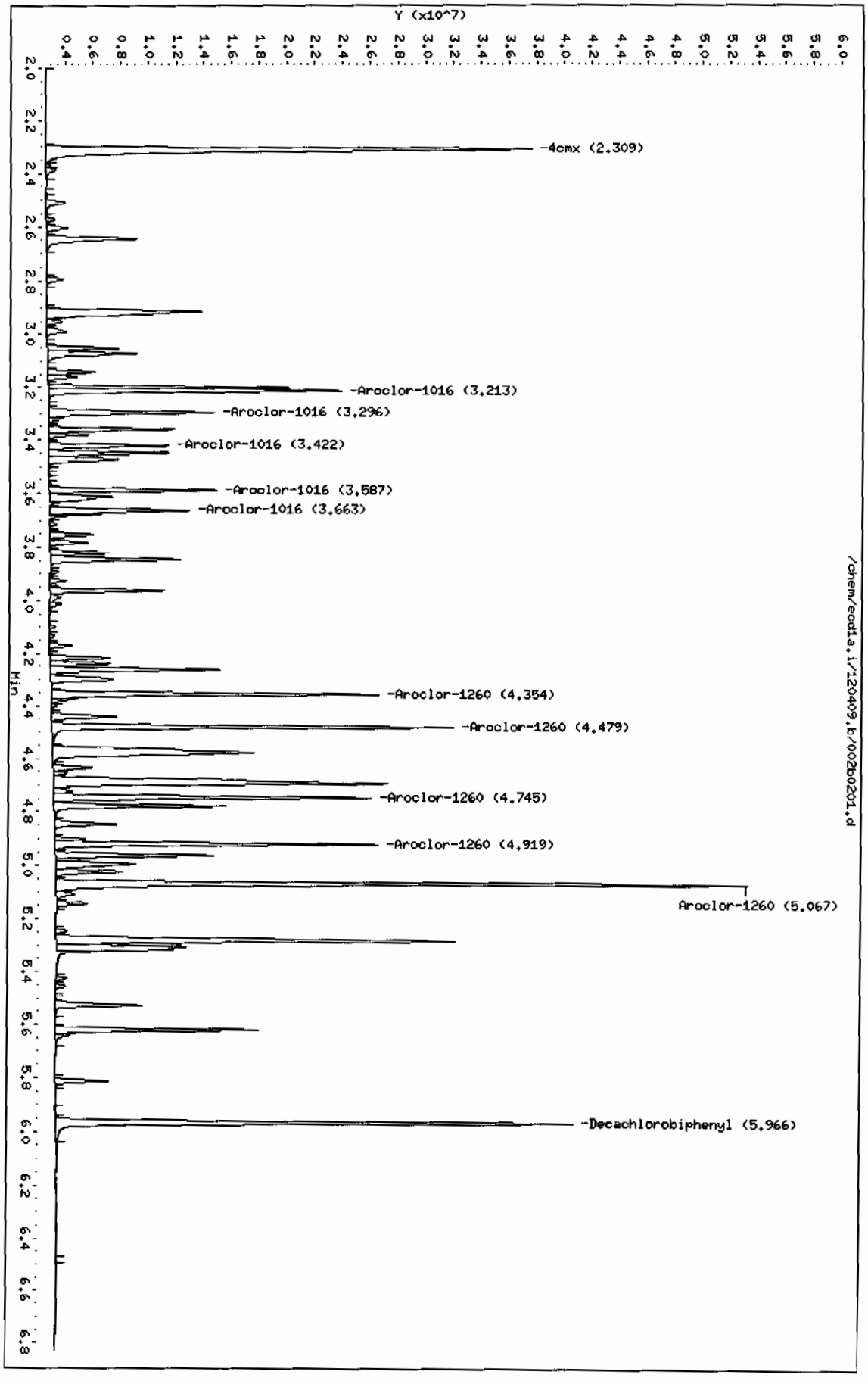

Page 1

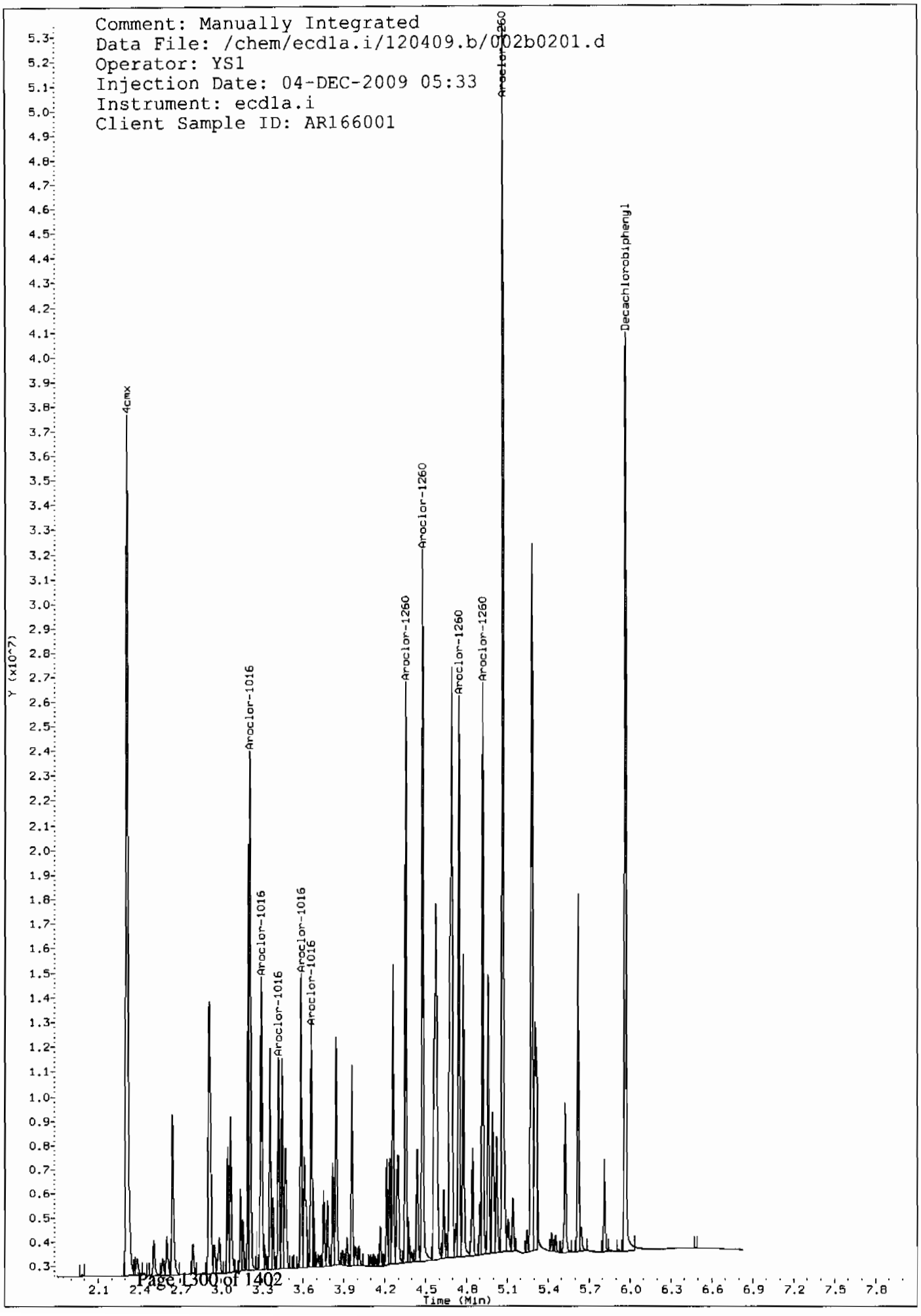
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Operator: YS1
Injection Date: 04-DEC-2009 05:33
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

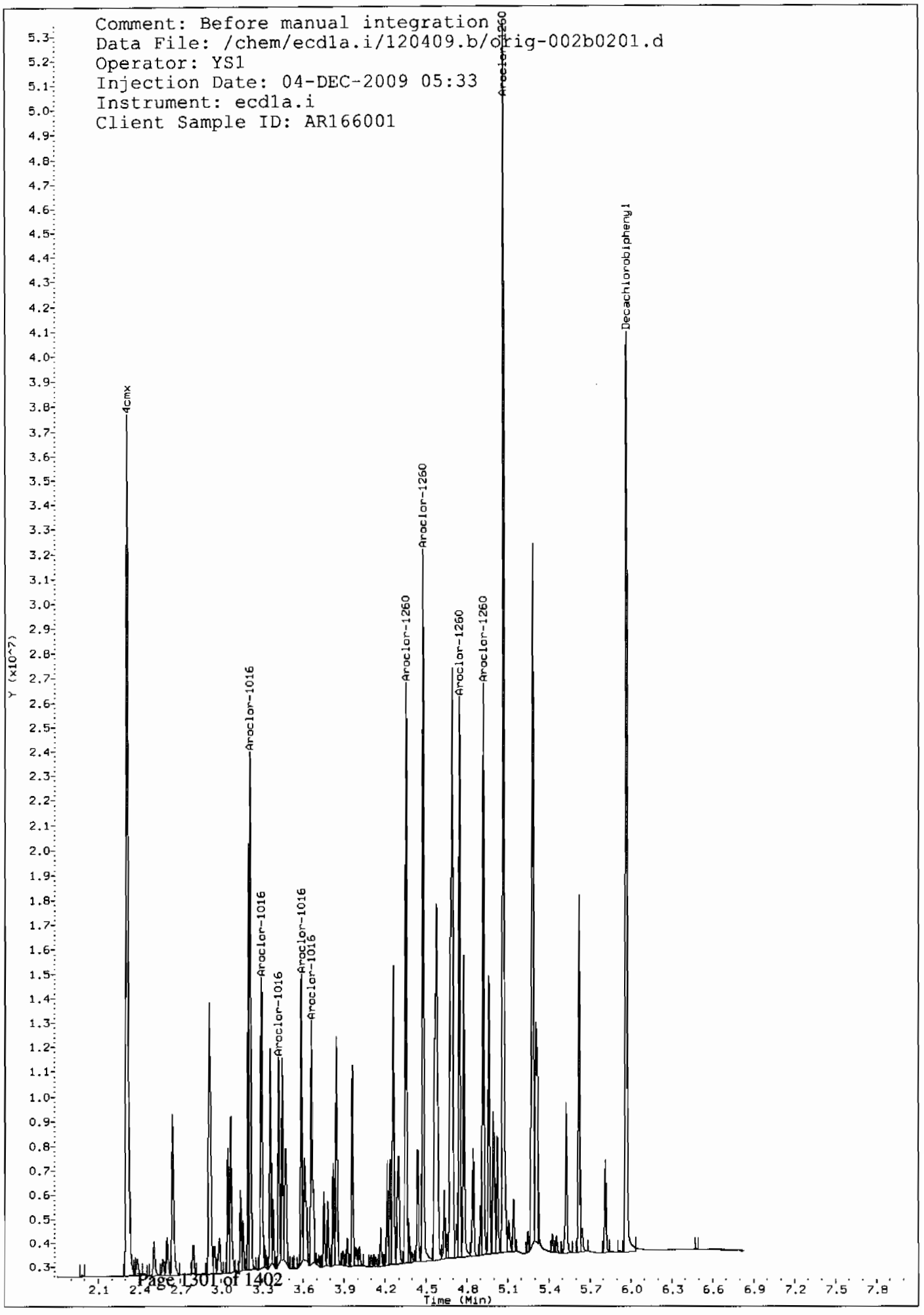
Comment: Before manual integration
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Operator: YS1
Injection Date: 04-DEC-2009 05:33
Instrument: ecd1a.i
Client Sample ID: AR166001
Y (x10^7)
Time (Min)
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 05:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	49116502	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.289	0.002	45673417	100.000	112	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.430	2.430	0.000	14500573	1000.00	965	80.00- 120.00	100.00
2.720	2.720	0.000	18525391	1000.00	999	107.76- 147.76	127.76
2.839	2.839	0.000	6894623	1000.00	933	27.55- 67.55	47.55
3.050	3.050	0.000	8997367	1000.00	938	42.05- 82.05	62.05
3.303	3.303	0.000	8660029	1000.00	922	39.72- 79.72	59.72
Average of Peak Amounts =					951		

Data File: /chem/ecd1a.i/120409.b/004f0401.d

Date : 04-DEC-2009 05:54

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

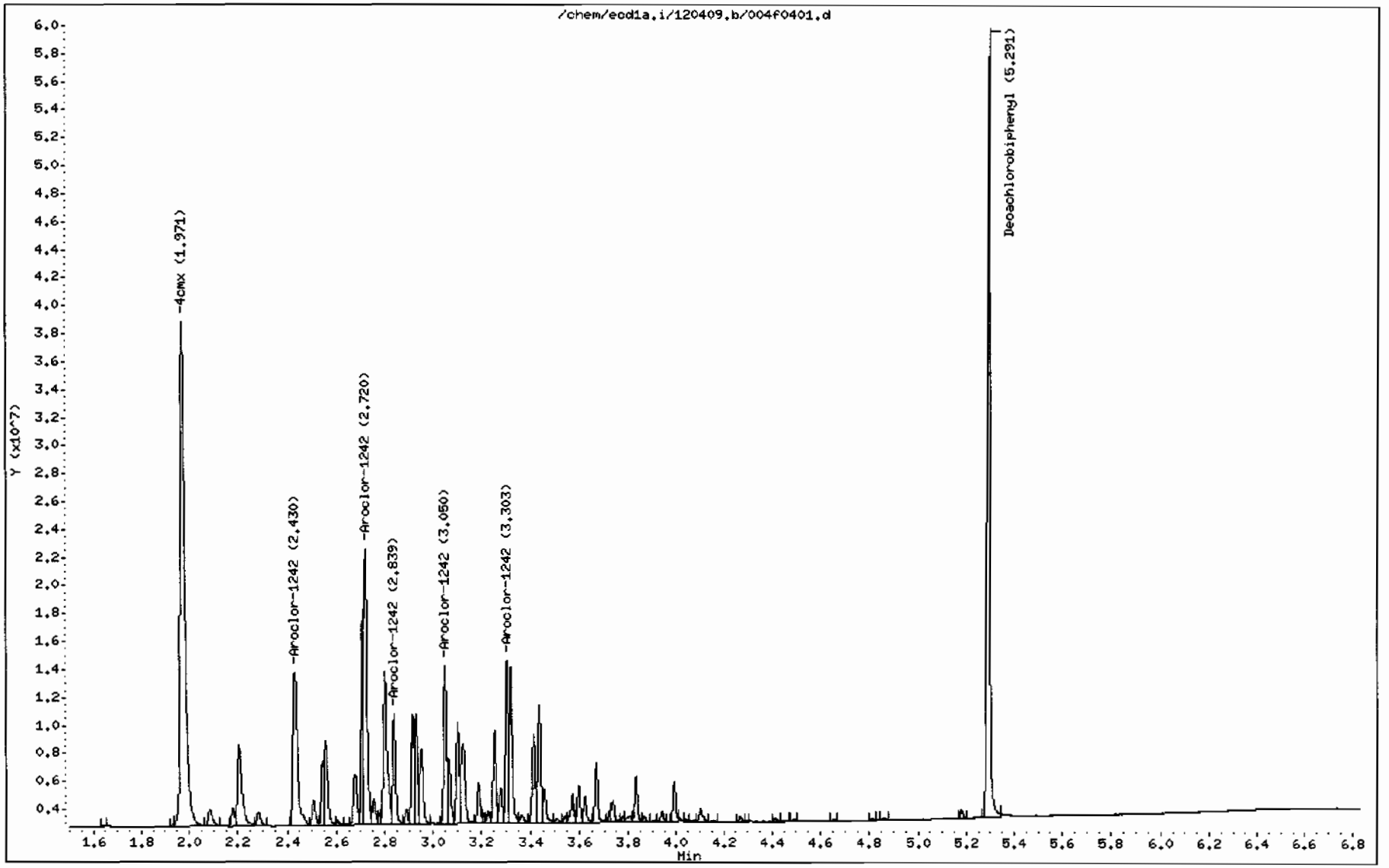

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 05:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40905353	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	34688267	100.000	115	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.212	3.212	0.000	14364525	1000.00	970	80.00- 120.00	100.00(M)
3.296	3.296	0.000	9453819	1000.00	930	45.81- 85.81	65.81
3.587	3.587	0.000	7886318	1000.00	954	34.90- 74.90	54.90
3.663	3.663	0.000	7489570	1000.00	968	32.14- 72.14	52.14
3.849	3.849	0.000	8915925	1000.00	948	42.07- 82.07	62.07
Average of Peak Amounts =					954		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/004b0401.d

Date : 04-DEC-2009 05:54

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

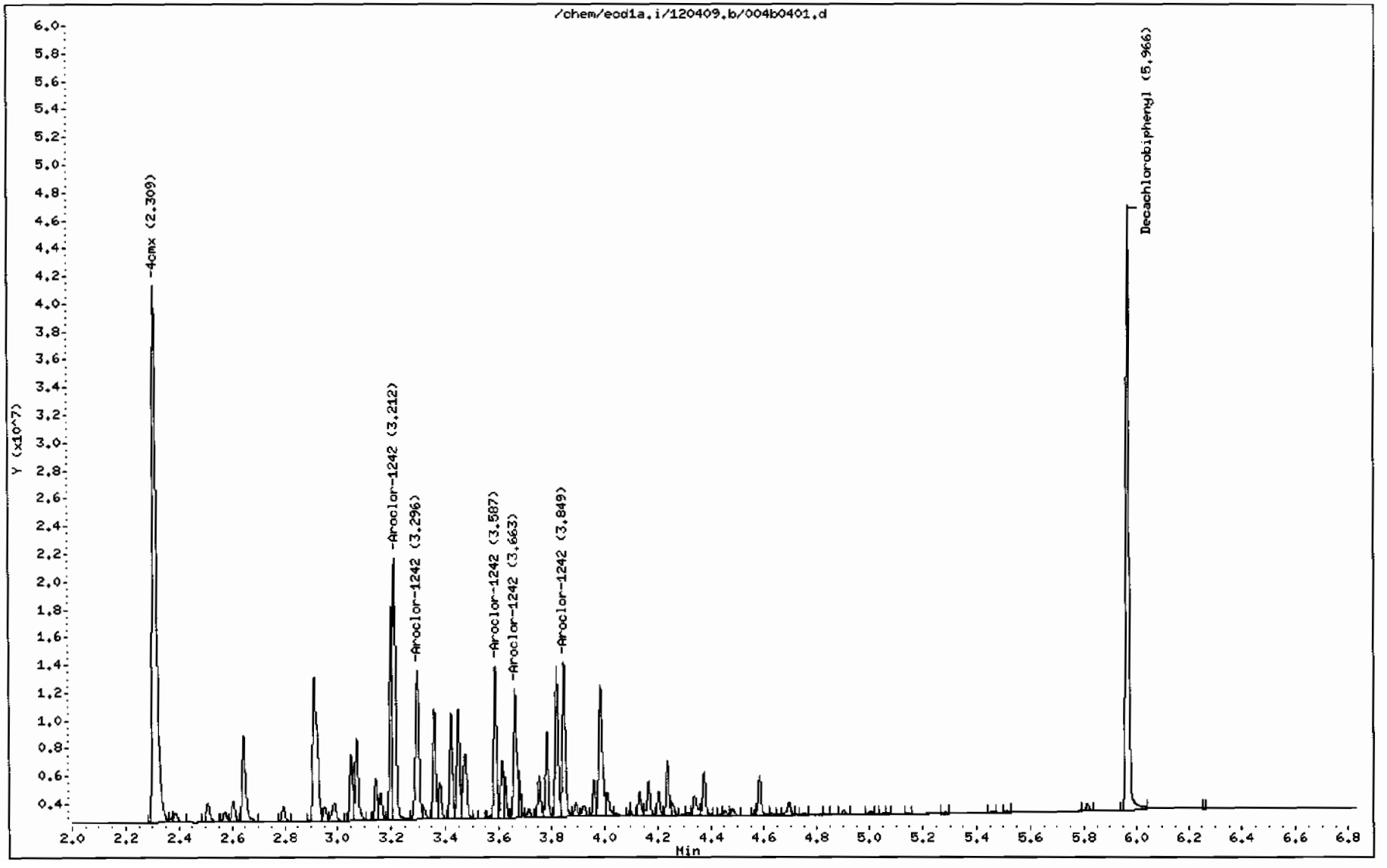

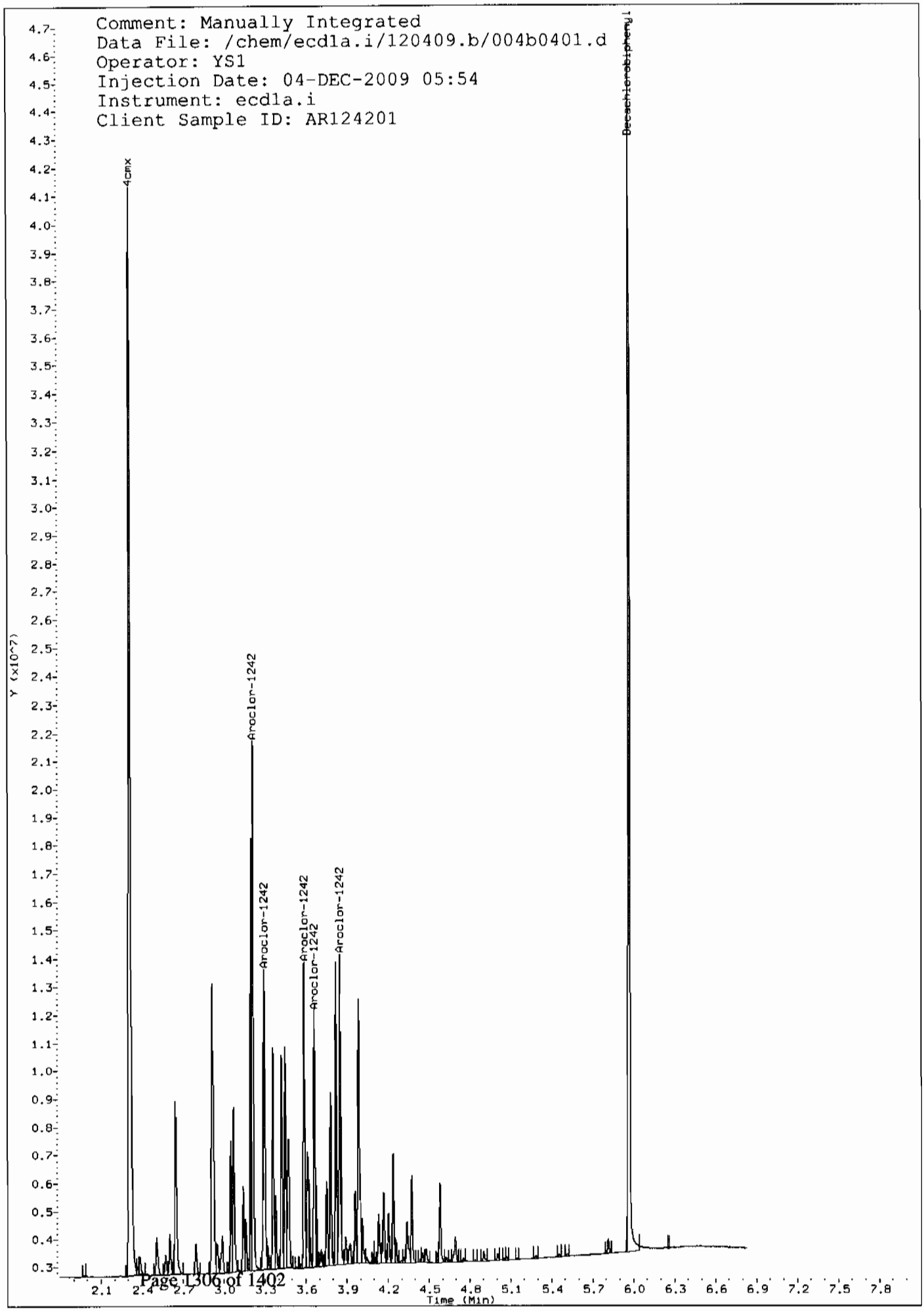
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/004b0401.d
Operator: YS1
Injection Date: 04-DEC-2009 05:54
Instrument: ecd1a.i
Client Sample ID: AR124201
4cmx
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Decachlorobiphenyl
Y (x10^7)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-004b0401.d
Operator: YS1
Injection Date: 04-DEC-2009 05:54
Instrument: ecd1a.i
Client Sample ID: AR124201

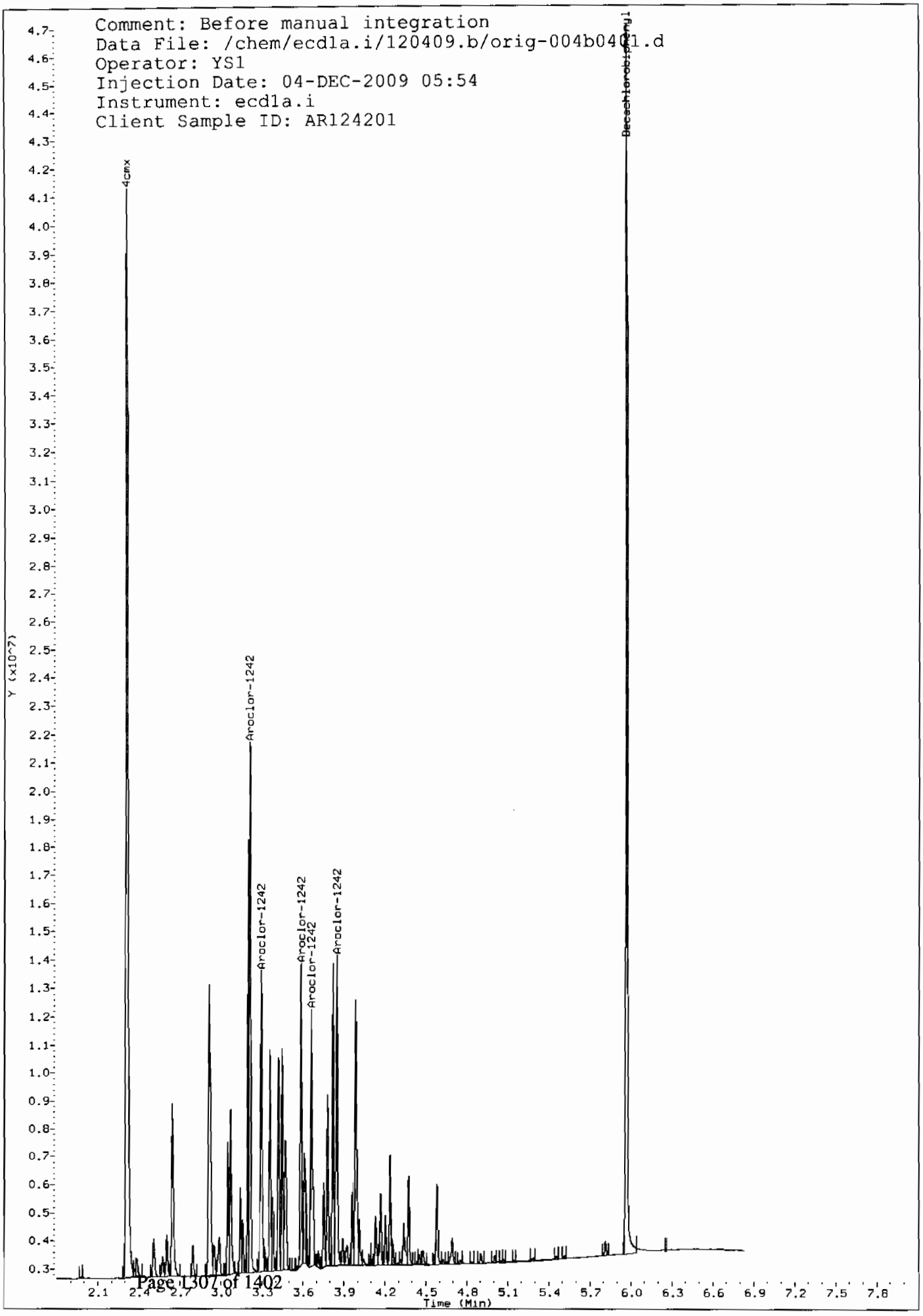

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 06:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	44770020	100.000	100	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	42629135	100.000	104	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.101	3.101	0.000	8676559	1000.00	888	80.00- 120.00	100.00
3.253	3.253	0.000	7580443	1000.00	871	67.37- 107.37	87.37
3.304	3.304	0.000	14957669	1000.00	884	152.39- 192.39	172.39
3.436	3.436	0.000	12123984	1000.00	874	119.73- 159.73	139.73
3.668	3.668	0.000	8392103	1000.00	868	76.72- 116.72	96.72
Average of Peak Amounts =					877		

Data File: /chem/ecd1a.i/120409.b/005f0501.d

Date : 04-DEC-2009 06:05

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

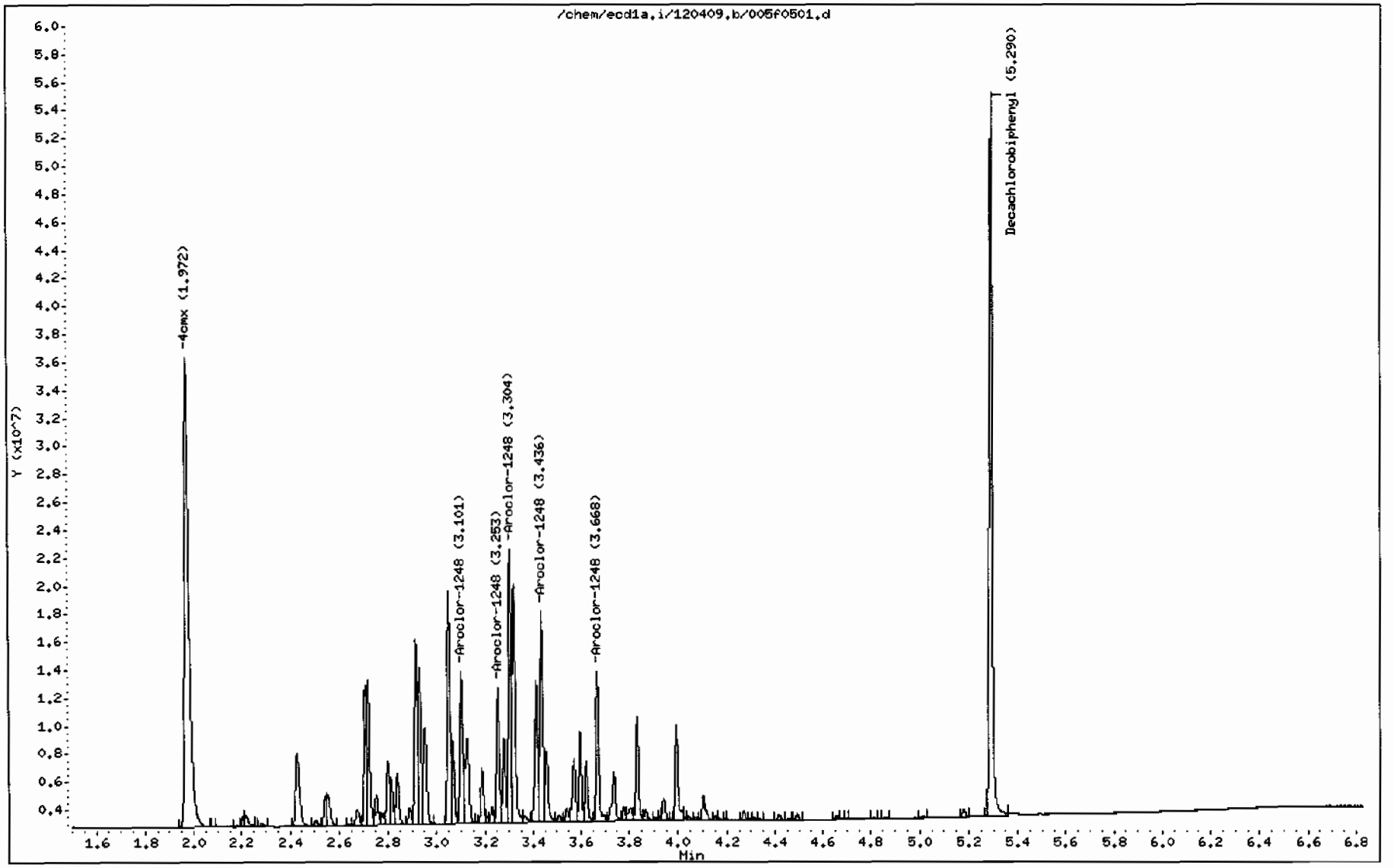

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 06:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37697200	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	32022061	100.000	106	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.422	3.422	0.000	9301057	1000.00	897	80.00- 120.00	100.00
3.588	3.588	0.000	11566108	1000.00	903	104.35- 144.35	124.35
3.822	3.822	0.000	12967440	1000.00	888	119.42- 159.42	139.42
3.849	3.849	0.000	14543667	1000.00	896	136.37- 176.37	156.37
3.987	3.987	0.000	13991089	1000.00	893	130.42- 170.42	150.42
		Average of Peak Amounts =			896		

Data File: /chem/ecd1a.i/120409.b/005b0501.d
Date : 04-DEC-2009 06:05
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

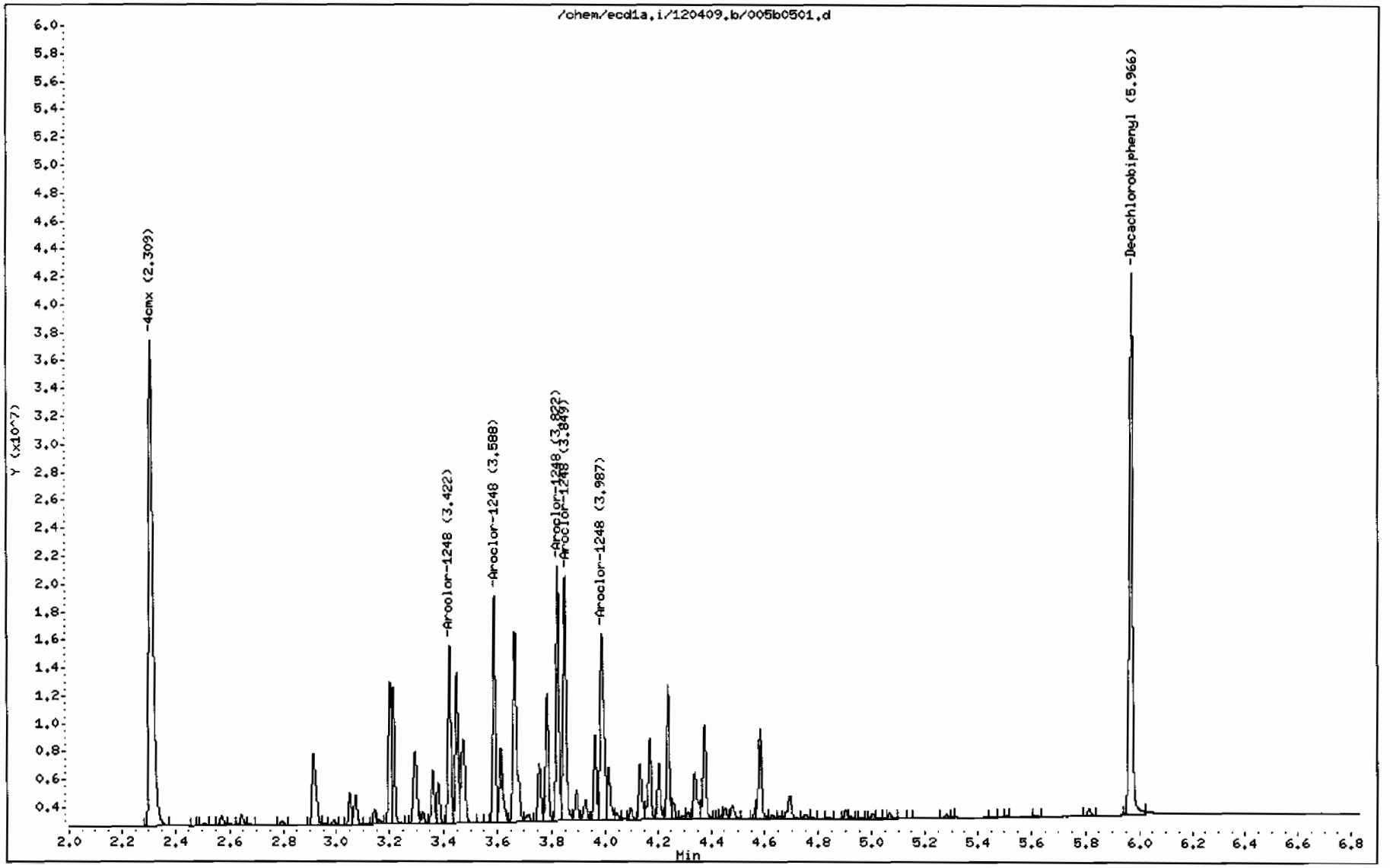

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 06:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	51530881	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	47835549	100.000	117	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.431	2.431	0.000	7153363	1000.00	919	80.00- 120.00	100.00
2.720	2.720	0.000	9314491	1000.00	908	110.21- 150.21	130.21
2.801	2.801	0.000	5975391	1000.00	903	63.53- 103.53	83.53
3.050	3.050	0.000	4433717	1000.00	901	41.98- 81.98	61.98
3.305	3.305	0.000	4066617	1000.00	900	36.85- 76.85	56.85
Average of Peak Amounts =					906		

Data File: /chem/ecd1a.i/120409.b/006f0601.d

Date : 04-DEC-2009 06:15

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

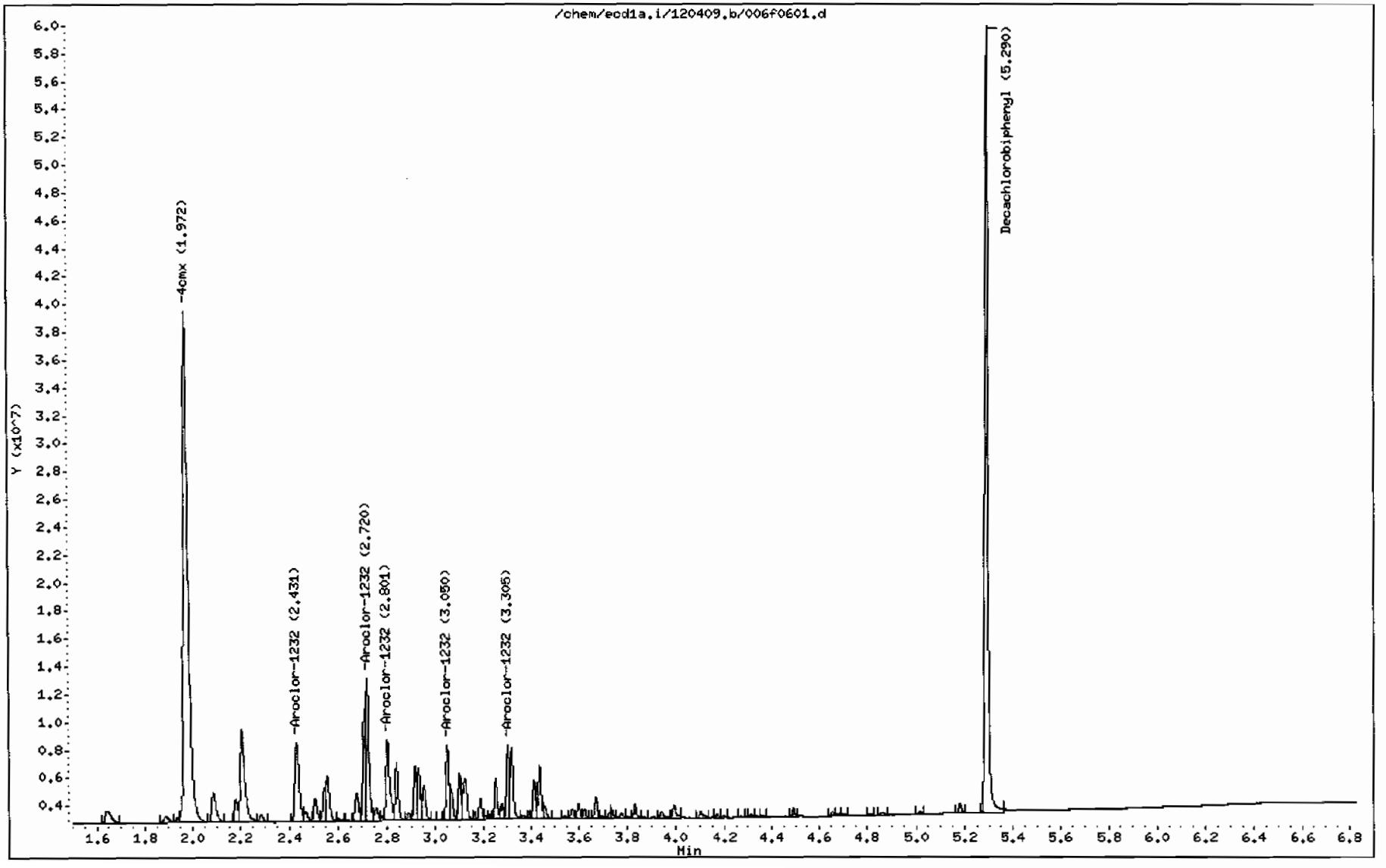

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 06:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	42721319	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	36105328	100.000	120	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.645	2.645	0.000	6884944	1000.00	944	80.00- 120.00	100.00
3.213	3.213	0.000	7655162	1000.00	930	91.19- 131.19	111.19
3.297	3.297	0.000	5114376	1000.00	929	54.28- 94.28	74.28
3.588	3.588	0.000	3872381	1000.00	906	36.24- 76.24	56.24
3.822	3.822	0.000	3796983	1000.00	916	35.15- 75.15	55.15
Average of Peak Amounts =					925		

Data File: /chem/ecdla.i/120409.b/006b0601.d
Date : 04-DEC-2009 06:15
Client ID: AR123201
Sample Info: IWAR090930-32
Column phase: CLP2

Instrument: ecdla.i
Operator: YSI
Column diameter: 0.25

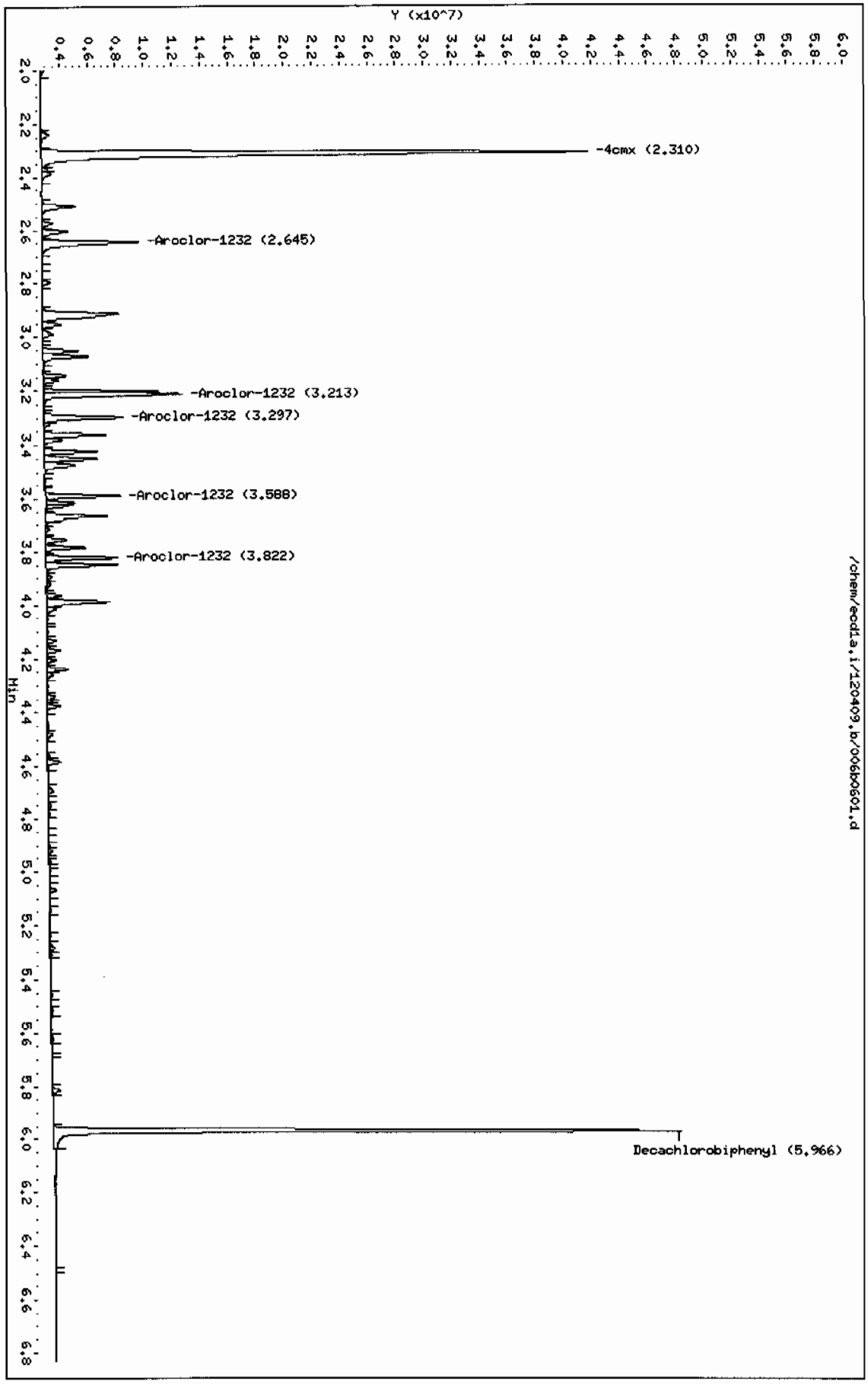

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/007f0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 06:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	40959245	100.000	91.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.289	0.002	38105593	100.000	93.2	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.084	2.084	0.000	4870864	1000.00	819	80.00- 120.00	100.00
2.179	2.179	0.000	2566454	1000.00	782	32.69- 72.69	52.69
2.204	2.204	0.000	11800443	1000.00	819	222.27- 262.27	242.27
Average of Peak Amounts =					807		

Data File: /chem/ecd1a.i/120409.b/007f0701.d

Date : 04-DEC-2009 06:26

Client ID: AR122101

Sample Info: IWAR090803-21

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

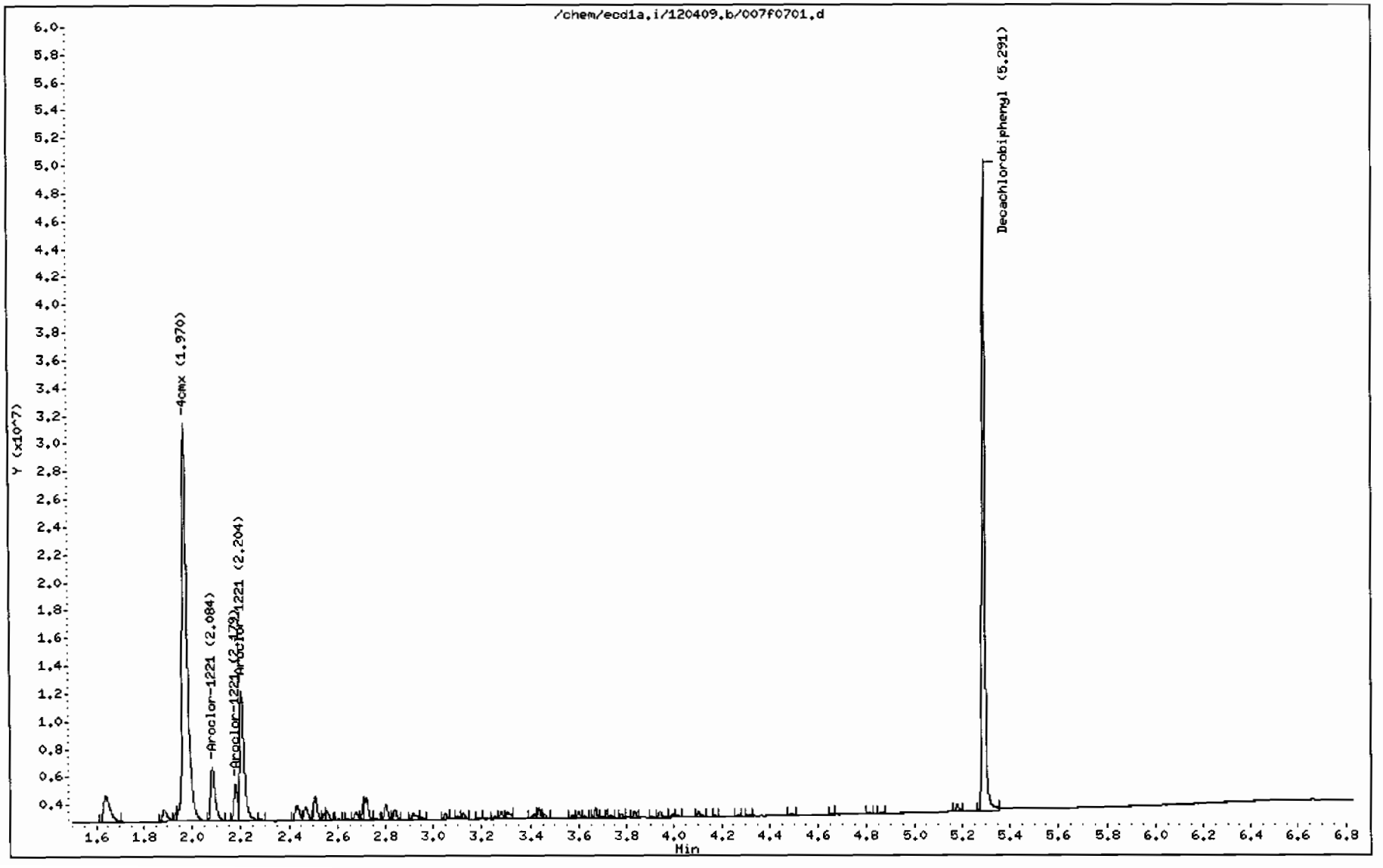

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/007b0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 06:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	33870716	100.000	91.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	29119422	100.000	96.9	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.509	2.509	0.000	4289723	1000.00	840	80.00- 120.00	100.00
2.603	2.603	0.000	2765110	1000.00	842	44.46- 84.46	64.46
2.644	2.644	0.000	9593845	1000.00	838	203.65- 243.65	223.65
Average of Peak Amounts =					840		

Data File: /chem/ecd1a.i/120409.b/007b0701.d
Date : 04-DEC-2009 06:26
Client ID: AR122101
Sample Info: WAR090803-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

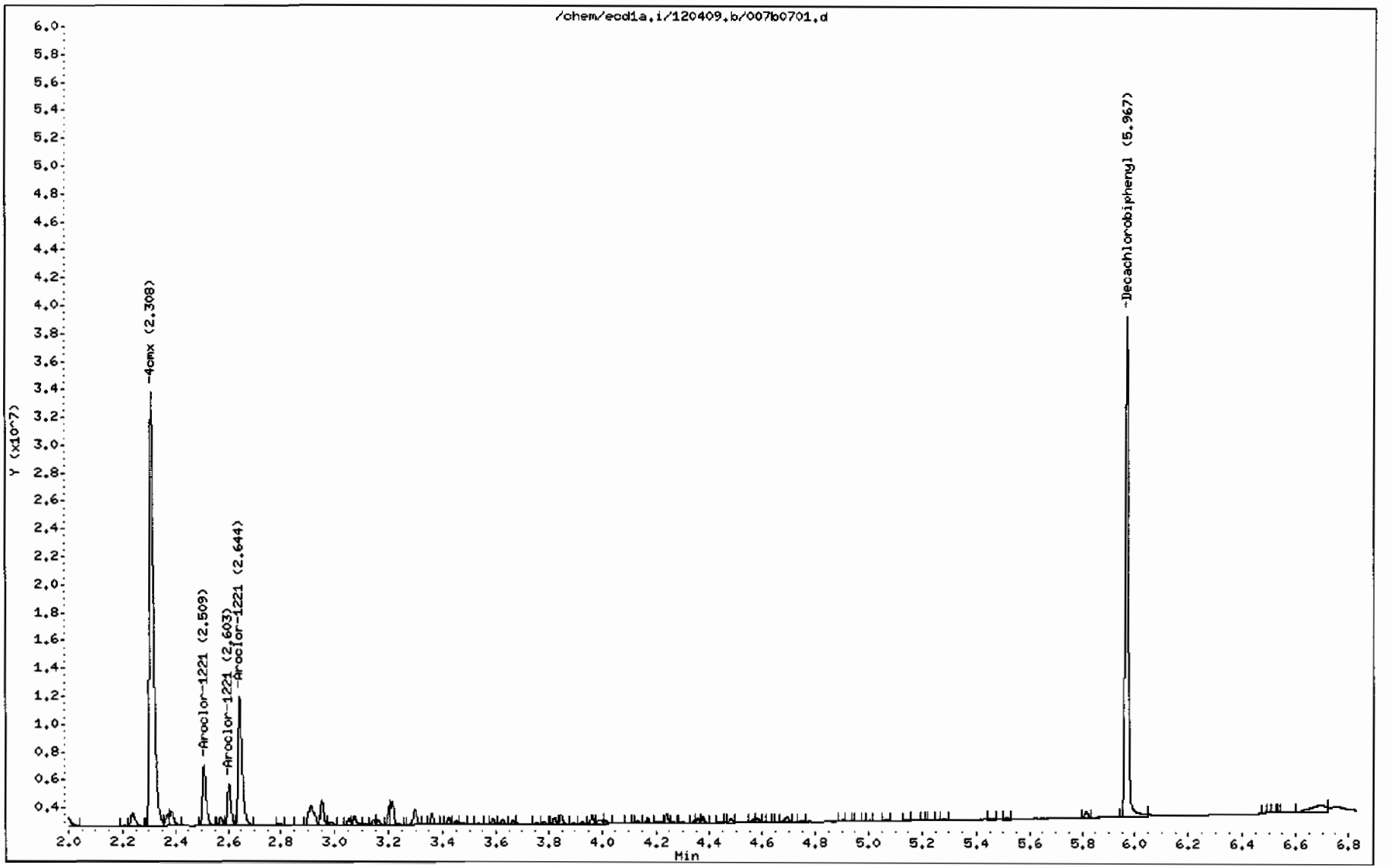

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/010f1001.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 06:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 07:16 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	40296345	100.000	90.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	37735030	100.000	92.3	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.279	3.279	0.000	12966828	1000.00	846	80.00- 120.00	100.00
3.435	3.435	0.000	17552929	1000.00	839	115.37- 155.37	135.37
3.668	3.668	0.000	23179232	1000.00	874	158.76- 198.76	178.76
3.832	3.832	0.000	17516529	1000.00	859	115.09- 155.09	135.09
3.940	3.940	0.000	17473669	1000.00	864	114.76- 154.76	134.76
Average of Peak Amounts =					856		

Data File: /chem/ecd1a.i/120409.b/010f1001.d
Date : 04-DEC-2009 06:57
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

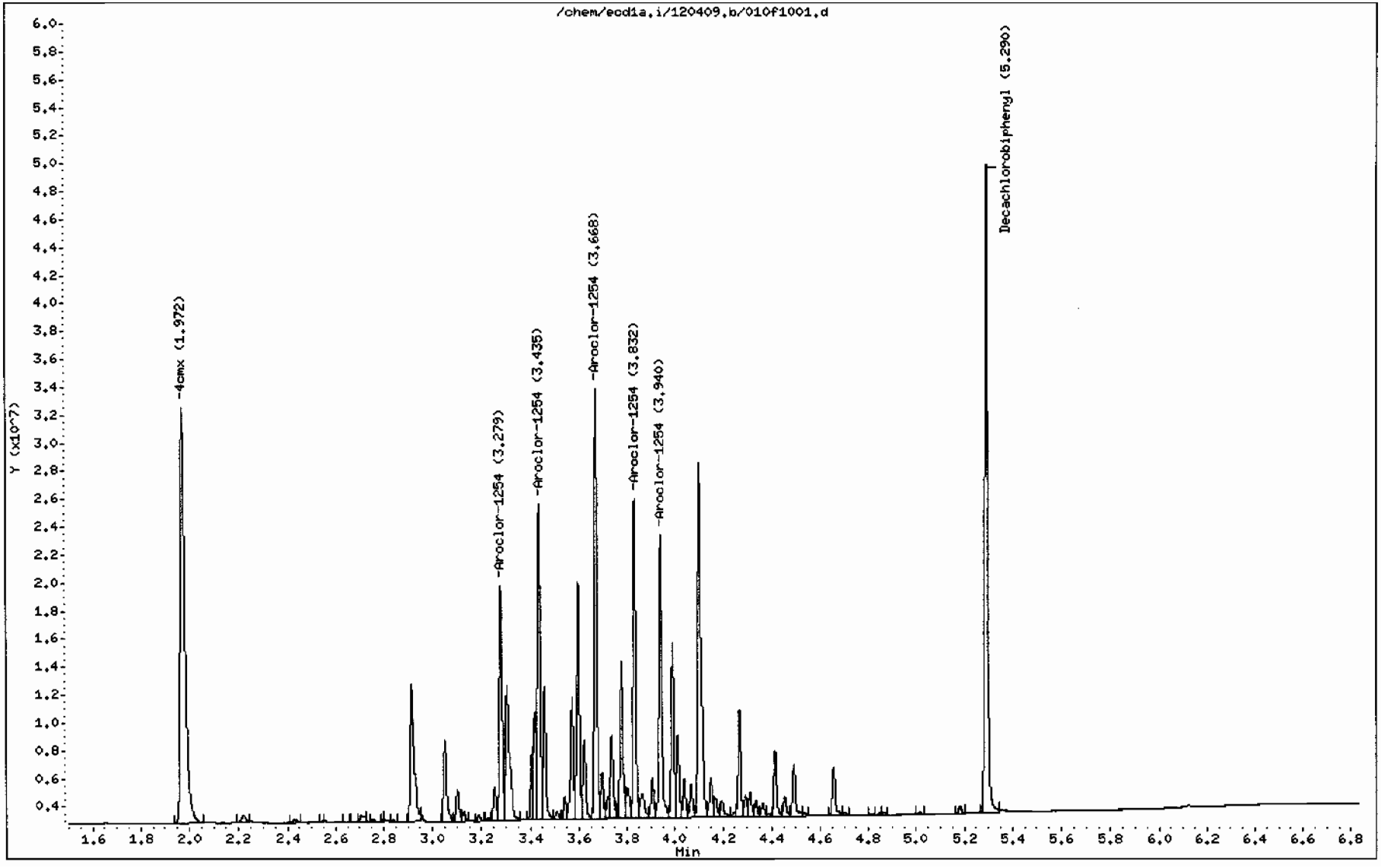

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/010b1001.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 06:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 07:16 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	34022103	100.000	91.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	28712047	100.000	95.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.422	3.422	0.000	7024457	1000.00	843	80.00- 120.00	100.00
3.846	3.846	0.000	12758805	1000.00	853	161.63- 201.63	181.63
3.962	3.962	0.000	14156860	1000.00	864	181.54- 221.54	201.54
4.239	4.239	0.000	19672431	1000.00	888	260.06- 300.06	280.06
4.375	4.375	0.000	15136600	1000.00	897	195.48- 235.48	215.48
Average of Peak Amounts =					869		

Data File: /chem/ecd1a.i/120409.b/010b1001.d

Date : 04-DEC-2009 06:57

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

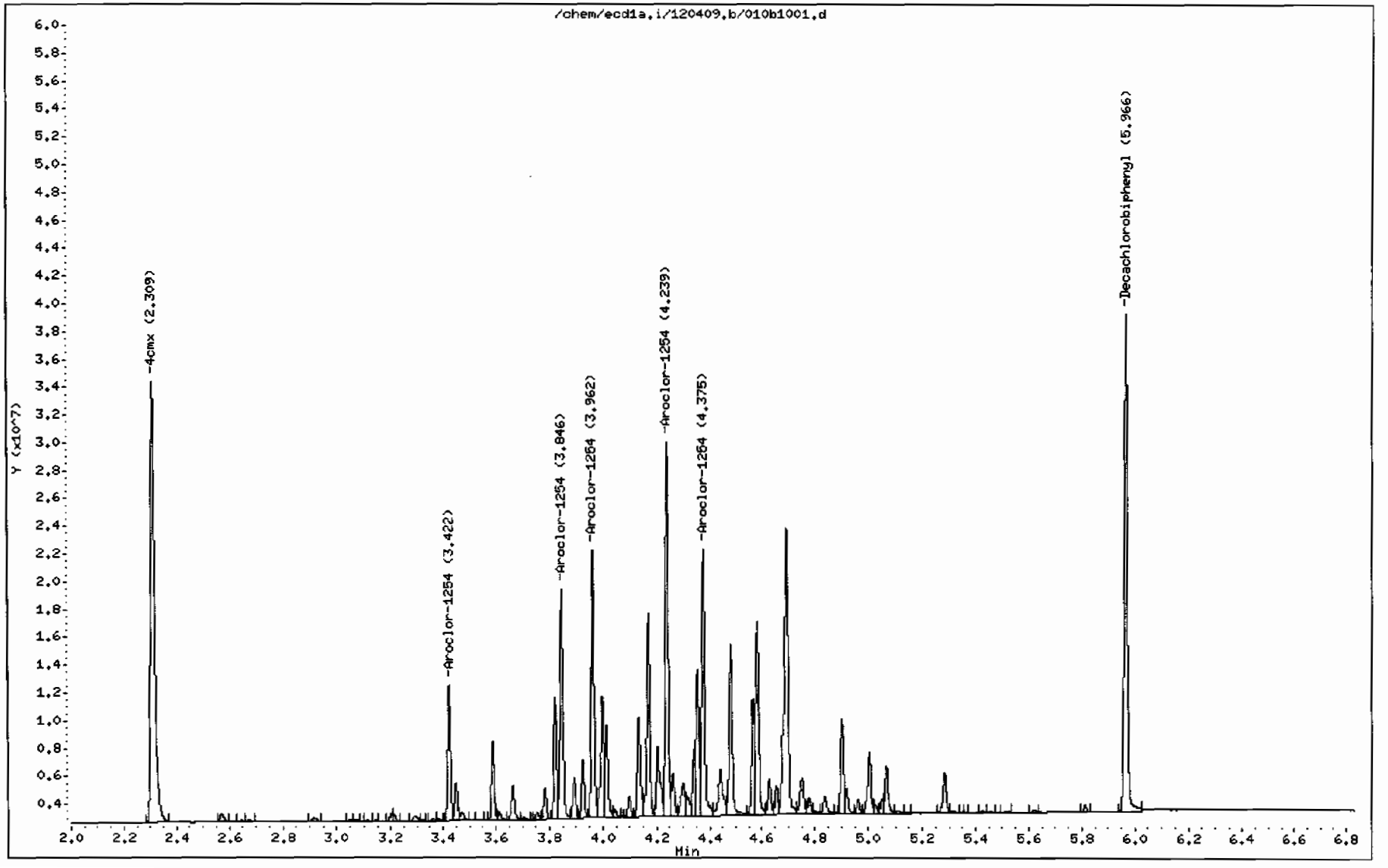

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/032f3201.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 04-DEC-2009 11:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 32 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	45745217	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	41425591	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.431	2.430	0.001	16529920	1000.00	967	80.00- 120.00	100.00
2.719	2.719	0.000	21539752	1000.00	1010	110.31- 150.31	130.31
2.800	2.800	0.000	13174199	1000.00	939	59.70- 99.70	79.70
2.837	2.838	-0.001	8050002	1000.00	956	28.70- 68.70	48.70
3.048	3.049	-0.001	10263065	1000.00	951	42.09- 82.09	62.09
Average of Peak Amounts =					966		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21244595	1000.00	990	80.00- 120.00	100.00
3.937	3.938	-0.001	32175050	1000.00	999	131.45- 171.45	151.45
4.167	4.168	-0.001	20076720	1000.00	981	74.50- 114.50	94.50
4.310	4.312	-0.002	20485101	1000.00	1020	76.43- 116.43	96.43
4.490	4.491	-0.001	47647097	1000.00	1030	204.28- 244.28	224.28
Average of Peak Amounts =					1e+03		

Data File: /chem/ecdia.i/120409.b/032f3201.d
Date : 04-DEC-2009 11:07
Client ID: AR166004
Sample Info: IWAR091119-60 04
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

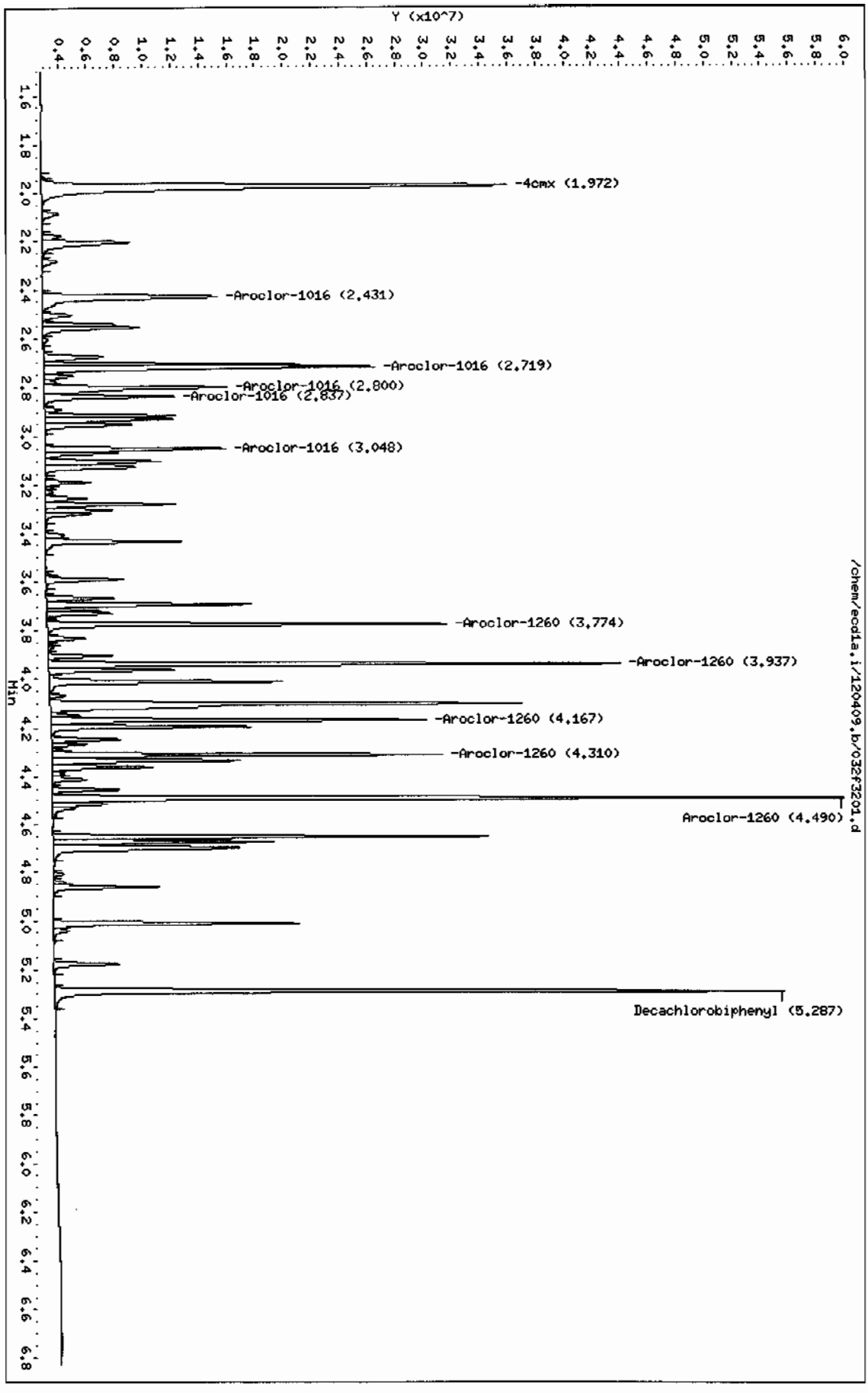

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/120409.b/032b3201.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 04-DEC-2009 11:07
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR091119-60 04
Misc Info :
Comment :
Method : /chem/ecdla.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 32 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	38083731	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	31290761	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.213	-0.001	16676839	1000.00	989	80.00- 120.00	100.00
3.295	3.296	-0.001	10982453	1000.00	952	45.85- 85.85	65.85
3.421	3.422	-0.001	6587434	1000.00	948	19.50- 59.50	39.50
3.587	3.587	0.000	8853851	1000.00	964	33.09- 73.09	53.09
3.662	3.663	-0.001	8277179	1000.00	973	29.63- 69.63	49.63
Average of Peak Amounts =					965		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	17966560	1000.00	994	80.00- 120.00	100.00
4.478	4.479	-0.001	22743312	1000.00	1030	106.59- 146.59	126.59
4.744	4.745	-0.001	18096633	1000.00	1020	80.72- 120.72	100.72
4.918	4.919	-0.001	17955775	1000.00	1040	79.94- 119.94	99.94
5.065	5.067	-0.002	41172559	1000.00	1060	209.16- 249.16	229.16
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd1a.i/120409.b/032b3201.d
Date : 04-DEC-2009 11:07
Client ID: AR166004
Sample Info: IWAR091119-60 04

Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

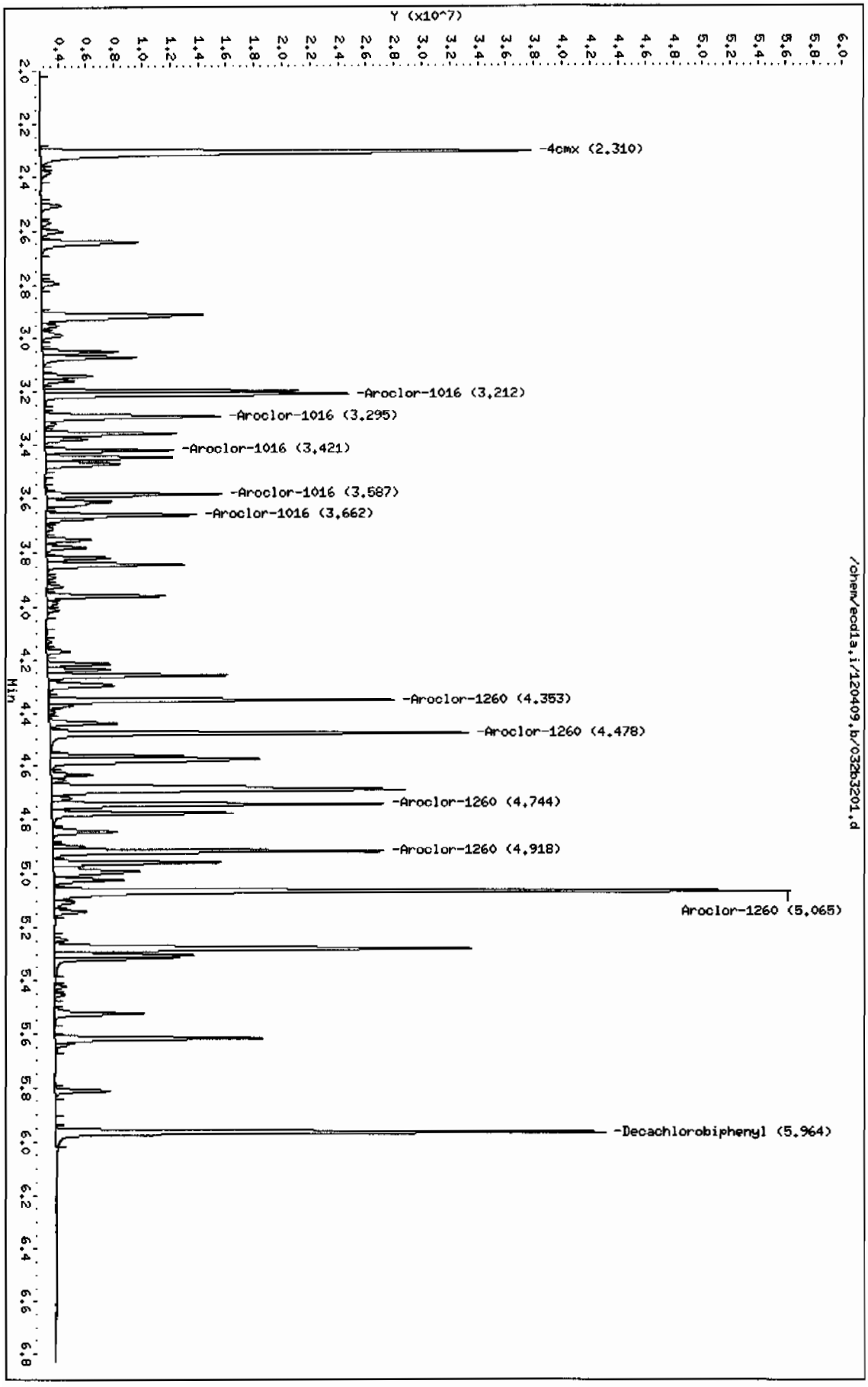

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/044f4401.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 04-DEC-2009 13:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	45901516	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	40608012	100.000	99.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16587868	1000.00	971	80.00- 120.00	100.00
2.718	2.719	-0.001	21328534	1000.00	1000	108.58- 148.58	128.58
2.799	2.800	-0.001	13234956	1000.00	943	59.79- 99.79	79.79
2.837	2.838	-0.001	8090880	1000.00	961	28.78- 68.78	48.78
3.048	3.049	-0.001	10310908	1000.00	955	42.16- 82.16	62.16
Average of Peak Amounts =					967		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21238635	1000.00	990	80.00- 120.00	100.00
3.936	3.938	-0.002	31962441	1000.00	993	130.49- 170.49	150.49
4.166	4.168	-0.002	19820626	1000.00	969	73.32- 113.32	93.32
4.309	4.312	-0.003	20244907	1000.00	1010	75.32- 115.32	95.32
4.489	4.491	-0.002	47150417	1000.00	1020	202.00- 242.00	222.00
Average of Peak Amounts =					996		

Data File: /chem/ecd1a.i/120409.b/044f4401.d

Date : 04-DEC-2009 13:34

Client ID: AR166005

Sample Info: IWAR091119-60 05

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

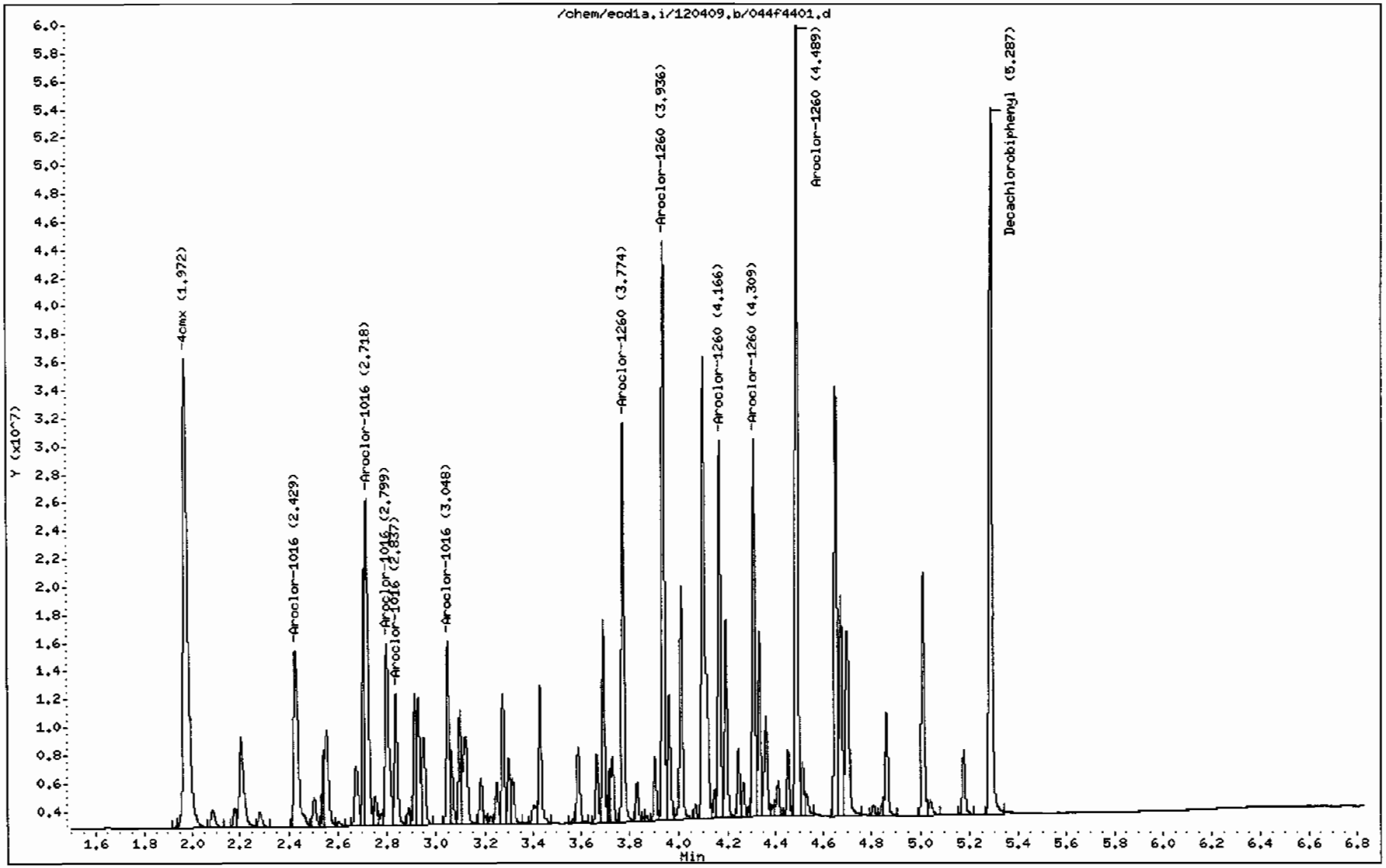

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/044b4401.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 04-DEC-2009 13:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38252661	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	30987603	100.000	103	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16723885	1000.00	992	80.00- 120.00	100.00
3.294	3.296	-0.002	11020915	1000.00	955	45.90- 85.90	65.90
3.420	3.422	-0.002	6643260	1000.00	956	19.72- 59.72	39.72
3.585	3.587	-0.002	9099232	1000.00	991	34.41- 74.41	54.41
3.661	3.663	-0.002	8426710	1000.00	990	30.39- 70.39	50.39
Average of Peak Amounts =					977		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	17891685	1000.00	990	80.00- 120.00	100.00
4.477	4.479	-0.002	22570401	1000.00	1020	106.15- 146.15	126.15
4.744	4.745	-0.001	17832217	1000.00	1010	79.67- 119.67	99.67
4.917	4.919	-0.002	17702115	1000.00	1030	78.94- 118.94	98.94
5.064	5.067	-0.003	40806311	1000.00	1060	208.07- 248.07	228.07
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd1a.i/120409.b/044b4401.d
Date : 04-DEC-2009 13:34
Client ID: AR166005
Sample Info: IWAR091119-60 05

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

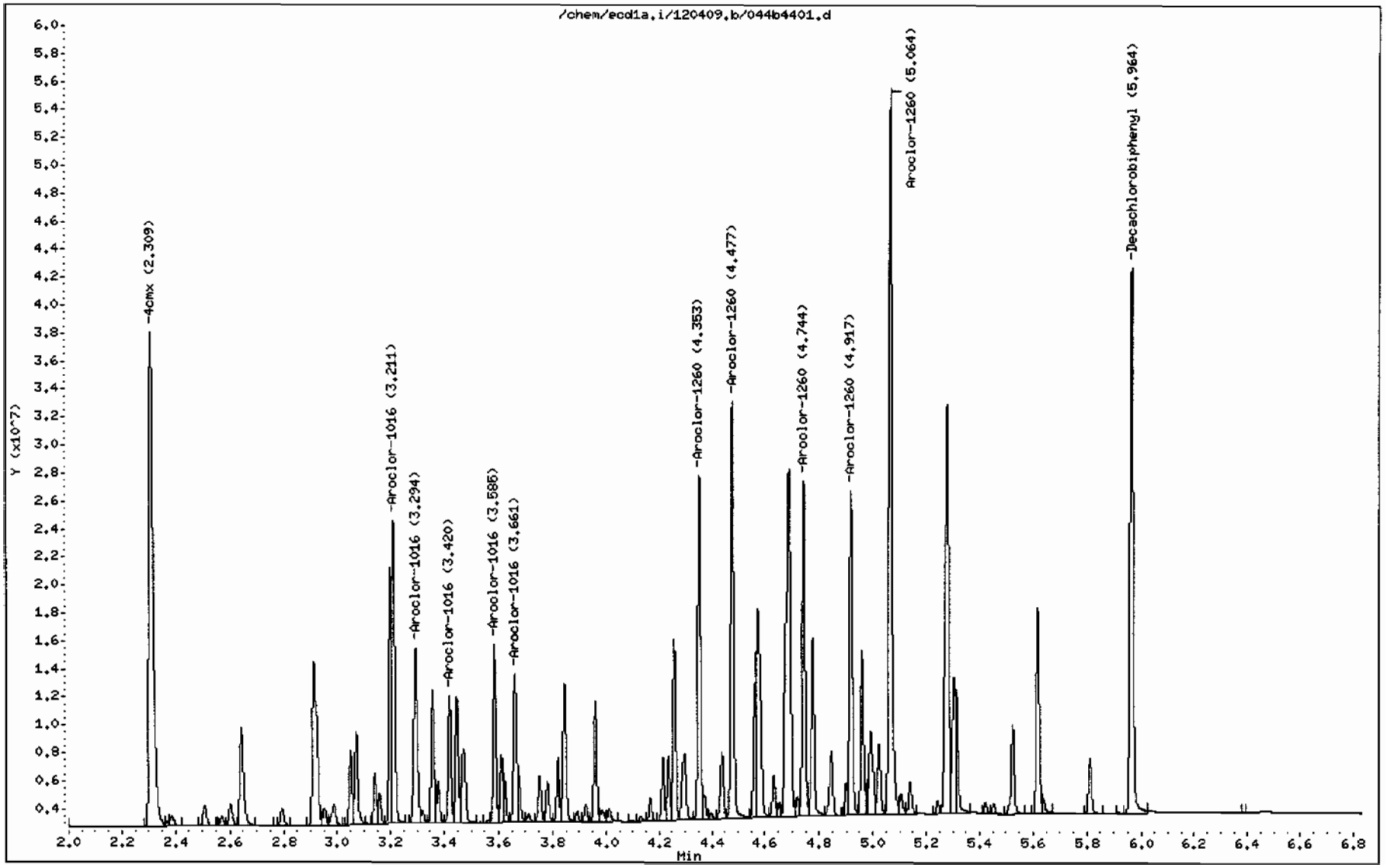

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/056f5601.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 04-DEC-2009 16:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 56 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	46942986	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	38630943	100.000	94.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.428	2.430	-0.002	16943471	1000.00	991	80.00- 120.00	100.00
2.717	2.719	-0.002	21834259	1000.00	1030	108.87- 148.87	128.87
2.798	2.800	-0.002	13509398	1000.00	963	59.73- 99.73	79.73
2.836	2.838	-0.002	8208757	1000.00	975	28.45- 68.45	48.45
3.047	3.049	-0.002	10349102	1000.00	959	41.08- 81.08	61.08
Average of Peak Amounts =					983		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	21236090	1000.00	990	80.00- 120.00	100.00
3.937	3.938	-0.001	32094523	1000.00	997	131.13- 171.13	151.13
4.166	4.168	-0.002	19595051	1000.00	958	72.27- 112.27	92.27
4.309	4.312	-0.003	19822003	1000.00	987	73.34- 113.34	93.34
4.488	4.491	-0.003	46109859	1000.00	996	197.13- 237.13	217.13
Average of Peak Amounts =					986		

Data File: /chem/ecdia.i/120409.b/056f5601.d
Date : 04-DEC-2009 16:01
Client ID: AR166006
Sample Info: IWAR091119-60 06

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP1

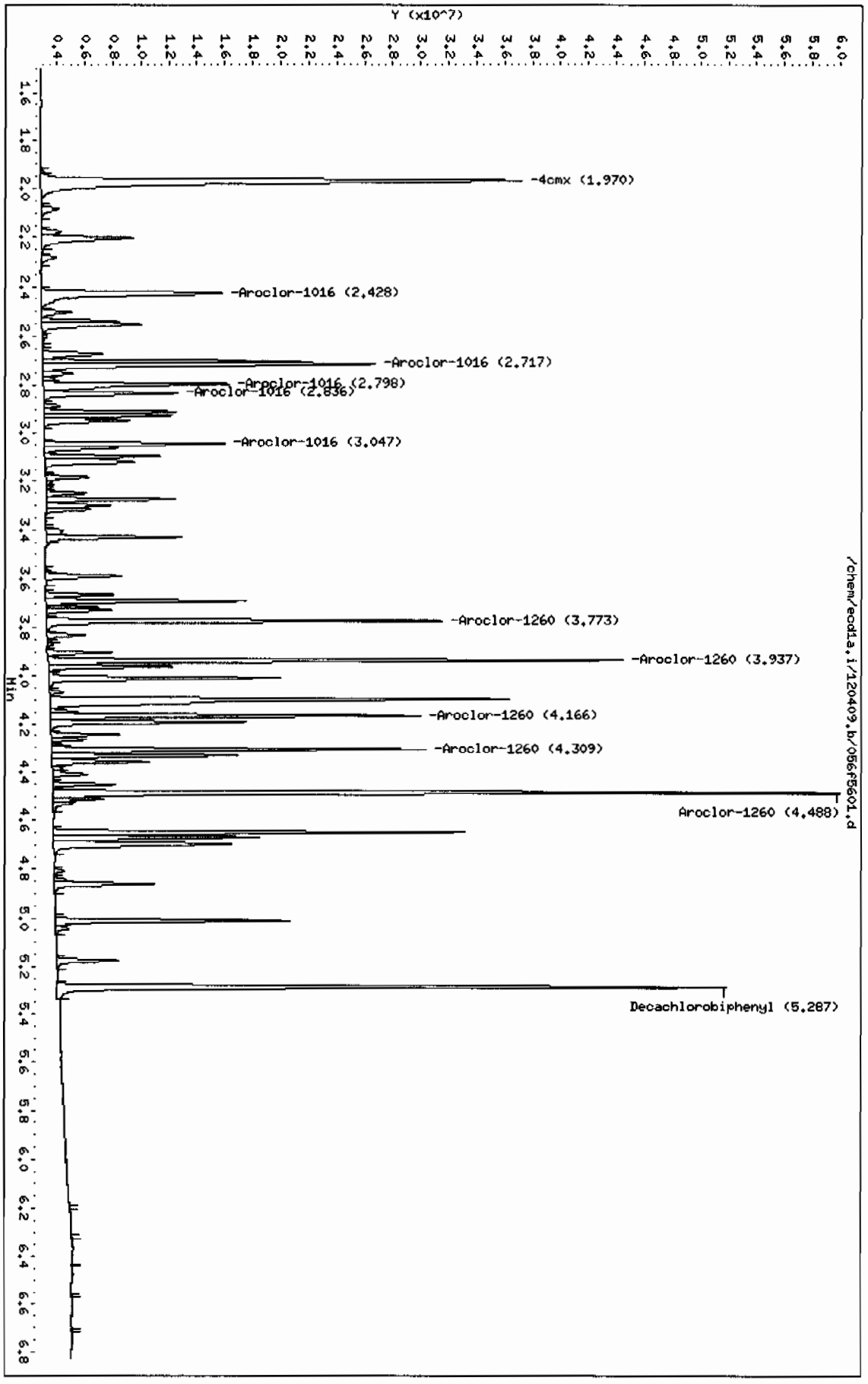

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/056b5601.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 04-DEC-2009 16:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 56 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	38624164	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	23887707	100.000	79.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16592250	1000.00	984	80.00- 120.00	100.00(M)
3.294	3.296	-0.002	10936406	1000.00	948	45.91- 85.91	65.91
3.420	3.422	-0.002	6543946	1000.00	941	19.44- 59.44	39.44
3.586	3.587	-0.001	8712165	1000.00	949	32.51- 72.51	52.51
3.661	3.663	-0.002	8169660	1000.00	960	29.24- 69.24	58.76
Average of Peak Amounts =					957		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	17273804	1000.00	956	80.00- 120.00	100.00
4.478	4.479	-0.001	21689978	1000.00	979	105.57- 145.57	125.57
4.744	4.745	-0.001	16796594	1000.00	950	77.24- 117.24	97.24
4.918	4.919	-0.001	16542240	1000.00	961	75.76- 115.76	95.76
5.064	5.067	-0.003	38014671	1000.00	984	200.07- 240.07	220.07
Average of Peak Amounts =					966		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdia.i/120409.b/056b5601.d
Date : 04-DEC-2009 16:01
Client ID: AR166006
Sample Info: IWAR091119-60 06
Column phase: CLP2

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

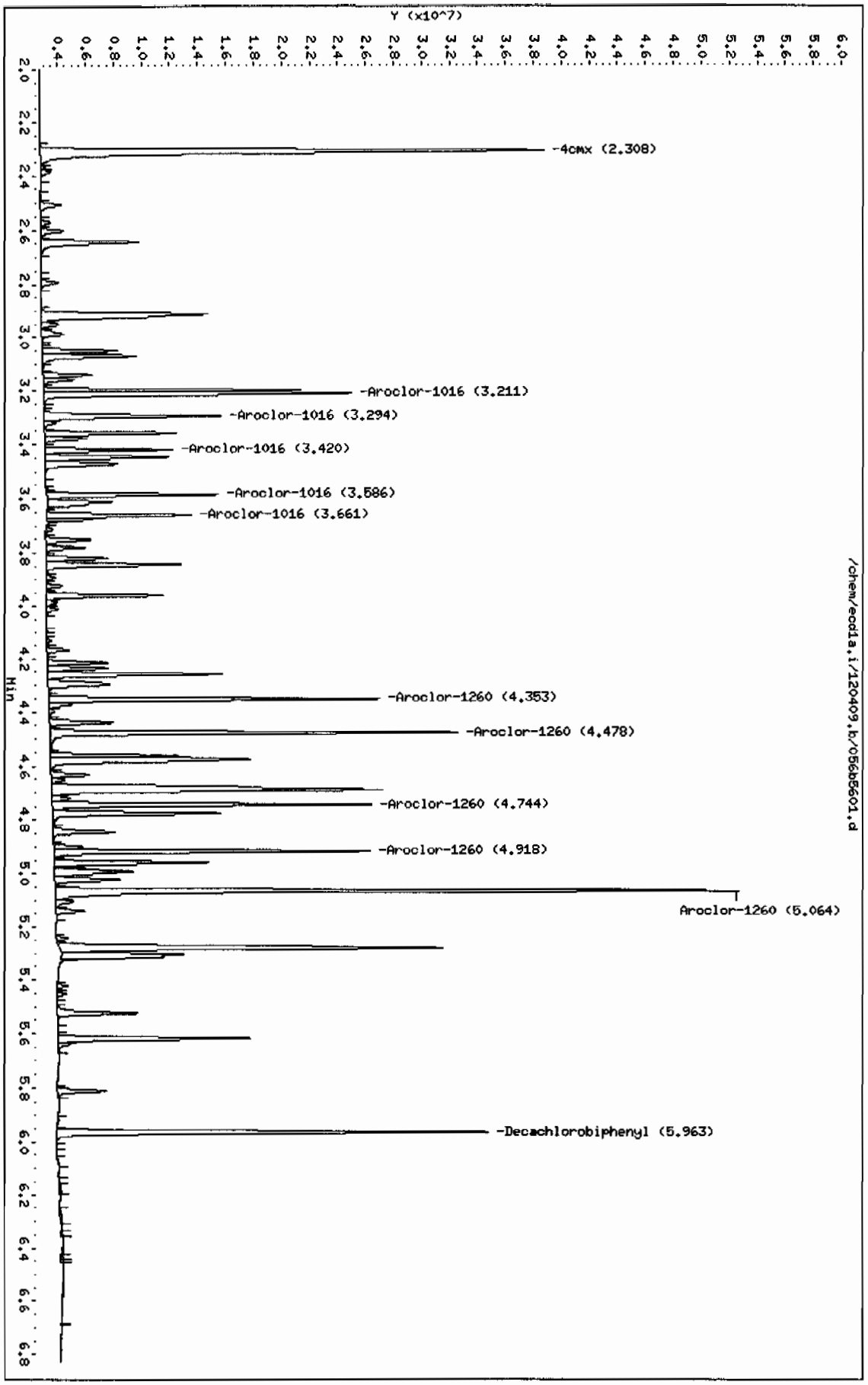

Page 1

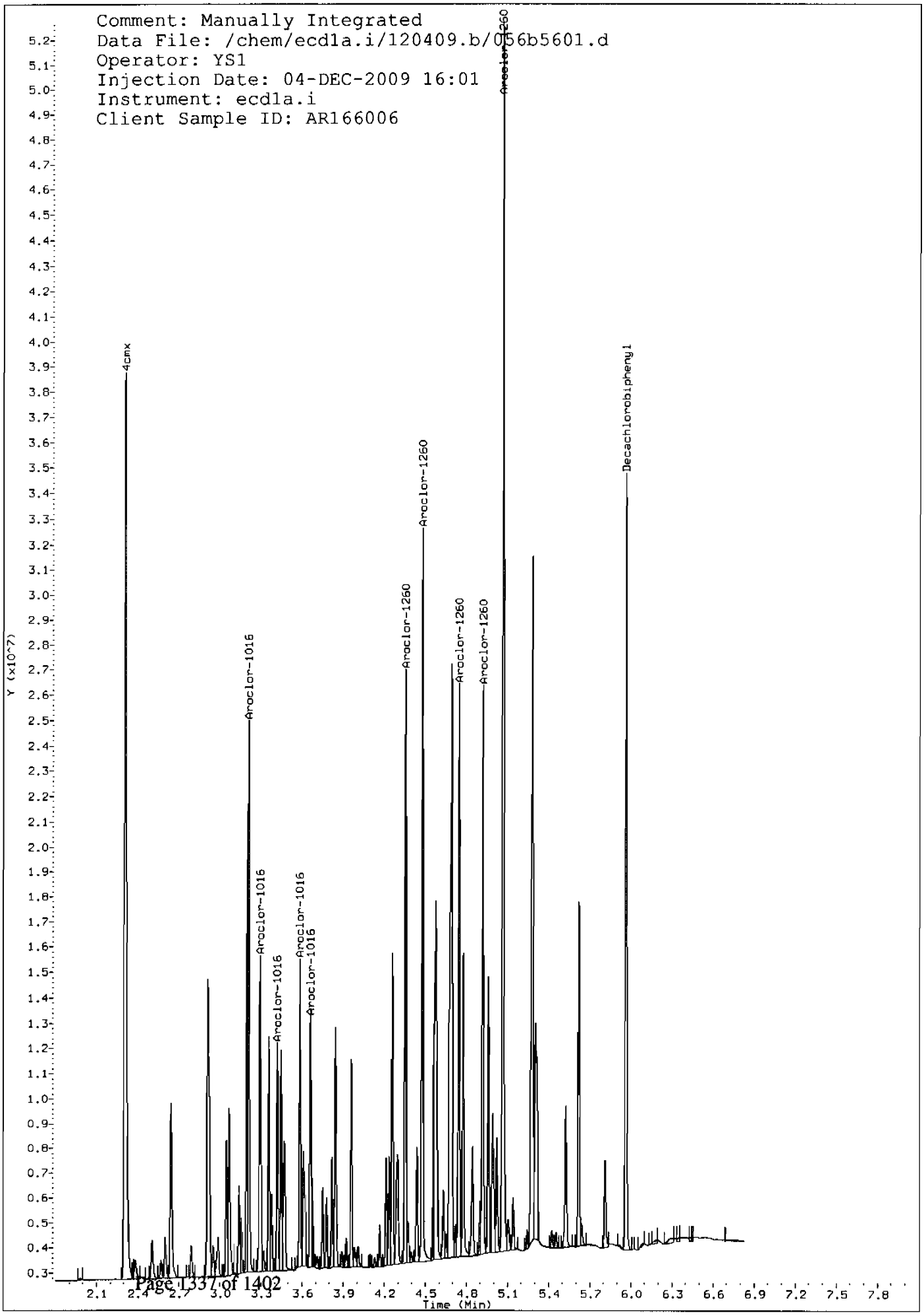
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/056b5601.d
Operator: YS1
Injection Date: 04-DEC-2009 16:01
Instrument: ecd1a.i
Client Sample ID: AR166006
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/061f6101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 61 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	45559685	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.286	5.289	-0.003	39310511	100.000	96.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16585828	1000.00	970	80.00- 120.00	100.00
2.718	2.719	-0.001	21268252	1000.00	1000	107.86- 147.86	128.23
2.799	2.800	-0.001	13312591	1000.00	949	59.89- 99.89	80.26
2.837	2.838	-0.001	8116433	1000.00	964	28.72- 68.72	48.94
3.048	3.049	-0.001	10365509	1000.00	960	41.98- 81.98	62.50
Average of Peak Amounts =					969		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21115698	1000.00	984	80.00- 120.00	100.00
3.937	3.938	-0.001	31817274	1000.00	988	131.51- 171.51	150.68
4.167	4.168	-0.001	19703672	1000.00	963	73.81- 113.81	93.31
4.309	4.312	-0.003	20116773	1000.00	1000	75.82- 115.82	95.27
4.489	4.491	-0.002	46618762	1000.00	1010	202.56- 242.56	220.78
Average of Peak Amounts =					989		

Data File: /chem/ecdia.i/120409.b/061f6101.d
Date : 04-DEC-2009 17:00
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

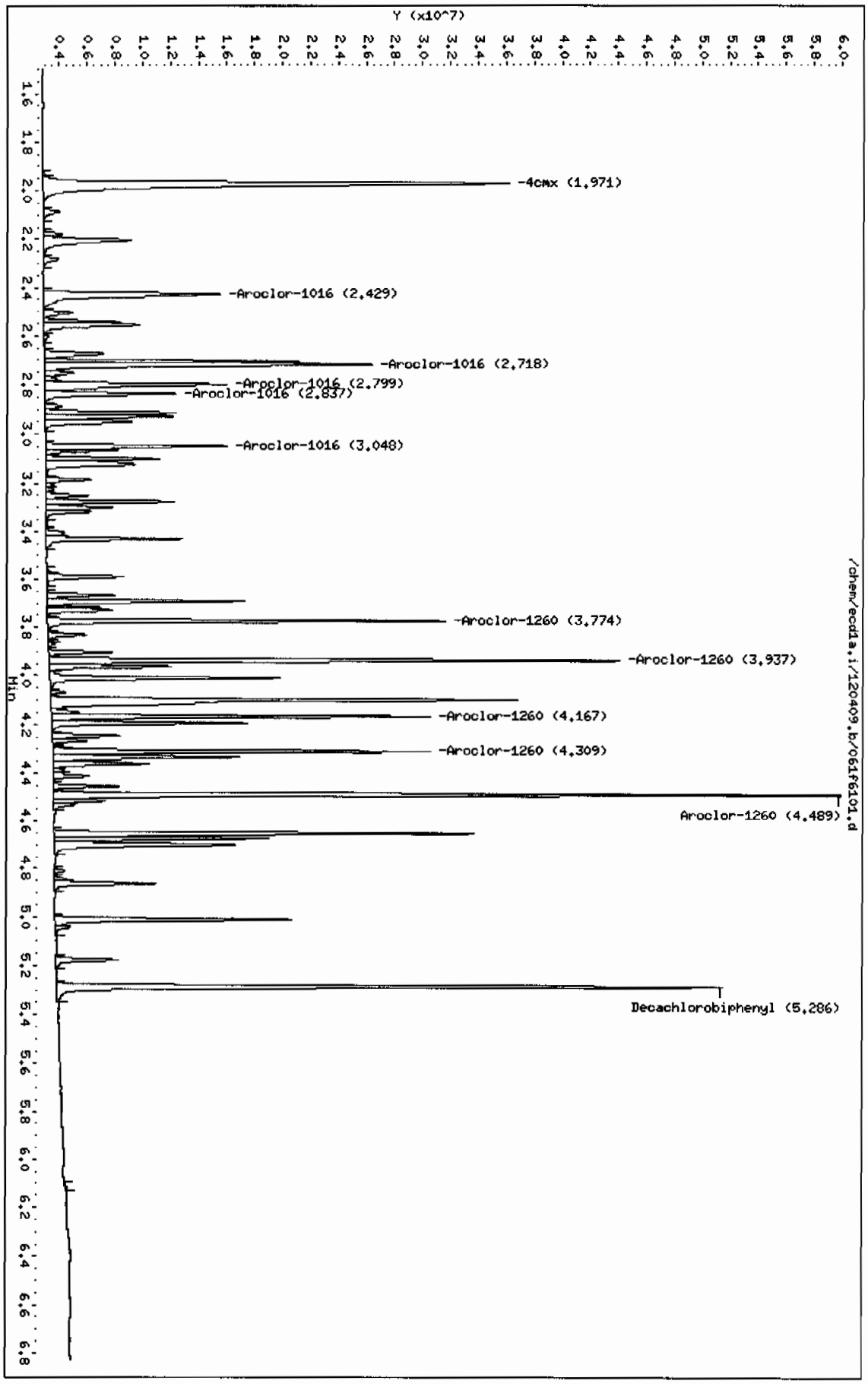

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/061b6101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 61 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37987664	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	29292450	100.000	97.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16701570	1000.00	990	80.00- 120.00	100.00(M)
3.294	3.296	-0.002	10974937	1000.00	951	45.71- 85.71	65.71
3.420	3.422	-0.002	6528241	1000.00	939	19.09- 59.09	39.09
3.586	3.587	-0.001	8767726	1000.00	955	32.50- 72.50	52.50
3.661	3.663	-0.002	8075462	1000.00	949	28.35- 68.35	48.35
Average of Peak Amounts =					957		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	17606161	1000.00	974	80.00- 120.00	100.00
4.477	4.479	-0.002	22261947	1000.00	1000	106.44- 146.44	126.44
4.744	4.745	-0.001	17504600	1000.00	990	79.42- 119.42	99.42
4.918	4.919	-0.001	17285472	1000.00	1000	78.18- 118.18	98.18
5.064	5.067	-0.003	39770333	1000.00	1030	205.89- 245.89	225.89
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/061b6101.d
Date : 04-DEC-2009 17:00
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

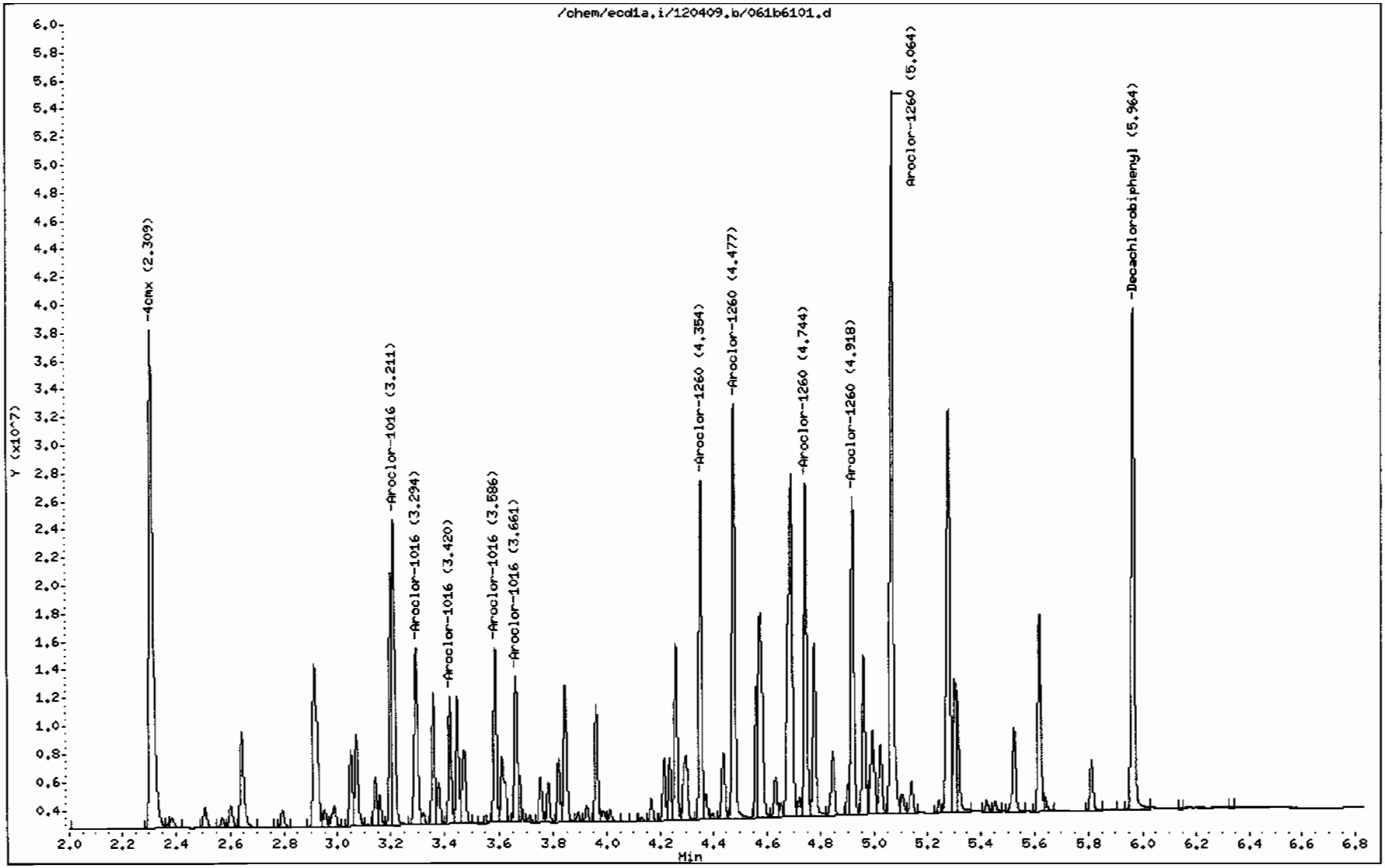

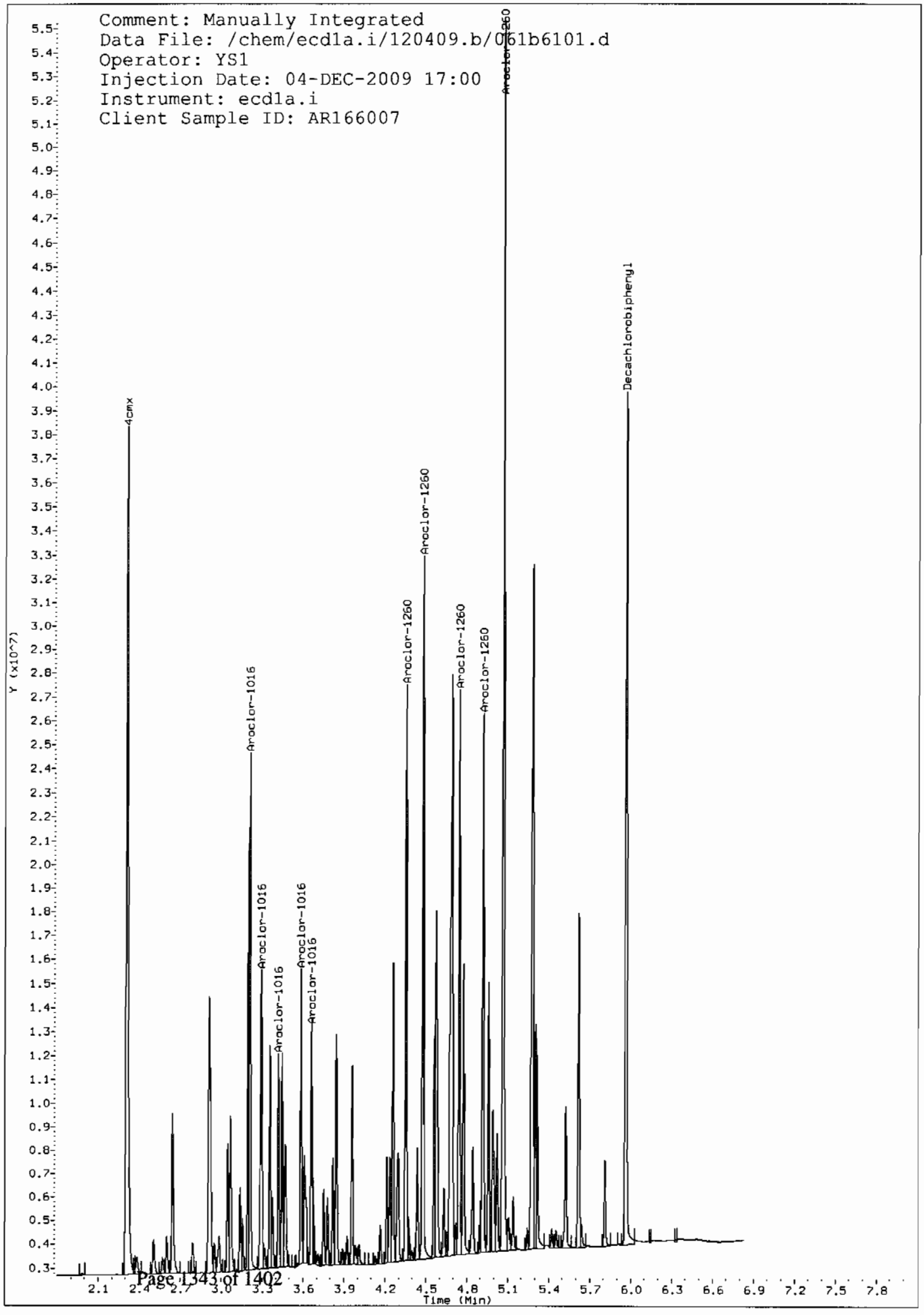
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/061b6101.d
Operator: YS1
Injection Date: 04-DEC-2009 17:00
Instrument: ecd1a.i
Client Sample ID: AR166007
Y (x10^7)
Time (Min)
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	1.97	5.29
02	ZZZZZ	ZZZZZ	11/10/09	0814	1.97	5.29
03	ZZZZZ	ZZZZZ	11/10/09	0825	1.98	5.29
04	ZZZZZ	ZZZZZ	11/10/09	0835	1.98	5.29
05	ZZZZZ	ZZZZZ	11/10/09	0846	1.98	5.30
06	AR123201	WAR090930-32	11/10/09	0856	1.98	5.29
07	AR122101	WAR090803-21	11/10/09	0907	1.97	5.30
08	AR126201	WAR090803-62	11/10/09	0917	1.98	5.29
09	AR126801	WAR091106-68	11/10/09	0928	1.98	5.29
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	1.98	5.30
12	AR166002	WAR091110-02	11/10/09	0959	1.98	5.30
13	AR166003	WAR091110-04	11/10/09	1010	1.98	5.30
14	AR166004	WAR091110-03	11/10/09	1021	1.98	5.30
15	AR166005	IAR091102-01	11/10/09	1031	1.98	5.29
16	AR166001	WAR091102-60	11/10/09	1042	1.98	5.30
17	AR125401	WAR091110-05	11/10/09	1052	1.97	5.30
18	AR125402	WAR091110-06	11/10/09	1103	1.98	5.30
19	AR125403	WAR091110-07	11/10/09	1113	1.98	5.29
20	AR125404	WAR091110-08	11/10/09	1124	1.98	5.30
21	AR125405	IAR091027-01	11/10/09	1134	1.98	5.30
22	AR125401	WAR091102-54	11/10/09	1145	1.98	5.30
23	AR124201	WAR091110-09	11/10/09	1155	1.98	5.30
24	AR124202	WAR091110-10	11/10/09	1206	1.98	5.29
25	AR124203	WAR091110-11	11/10/09	1217	1.98	5.30
26	AR124204	WAR091110-12	11/10/09	1227	1.98	5.30
27	AR124205	IAR090914-01	11/10/09	1238	1.98	5.30
28	AR124201	WAR091102-42	11/10/09	1248	1.98	5.30
29	AR124801	WAR091110-13	11/10/09	1259	1.98	5.30
30	AR124802	WAR091110-14	11/10/09	1309	1.98	5.30
31	AR124803	WAR091110-15	11/10/09	1320	1.98	5.29
32	AR124804	WAR091110-16	11/10/09	1330	1.98	5.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	1.98	5.29
02	AR124801	WAR091027-48	11/10/09	1351	1.98	5.30
03	PIBLK02	WAR090916-99	11/10/09	1402	1.98	5.30
04	ZZZZZ	ZZZZZ	11/10/09	1412	1.98	5.30
05	ZZZZZ	ZZZZZ	11/10/09	1423	1.98	5.30
06	ZZZZZ	ZZZZZ	11/10/09	1433	1.98	5.30
07	ZZZZZ	ZZZZZ	11/10/09	1444	1.98	5.30
08	ZZZZZ	ZZZZZ	11/10/09	1457	1.97	5.30
09	ZZZZZ	ZZZZZ	11/10/09	1509	1.97	5.29
10	ZZZZZ	ZZZZZ	11/10/09	1522	1.97	5.29
11	AR166002	WAR091102-60	11/10/09	1534	1.98	5.29
12	PIBLK003	WAR090916-99	11/10/09	1545	1.98	5.30
13	ZZZZZ	ZZZZZ	11/10/09	1555	1.97	5.30
14	ZZZZZ	ZZZZZ	11/10/09	1608	1.97	5.29
15	ZZZZZ	ZZZZZ	11/10/09	1620	1.98	5.29
16	ZZZZZ	ZZZZZ	11/10/09	1633	1.97	5.29
17	ZZZZZ	ZZZZZ	11/10/09	1645	1.97	5.29
18	ZZZZZ	ZZZZZ	11/10/09	1658	1.98	5.29
19	ZZZZZ	ZZZZZ	11/10/09	1711	1.97	5.29
20	ZZZZZ	ZZZZZ	11/10/09	1723	1.98	5.29
21	ZZZZZ	ZZZZZ	11/10/09	1736	1.97	5.29
22	ZZZZZ	ZZZZZ	11/10/09	1748	1.98	5.29
23	AR166003	WAR091102-60	11/10/09	1801	1.98	5.29
24	PIBLK04	WAR090916-99	11/10/09	1812	1.98	5.30
25	ZZZZZ	ZZZZZ	11/10/09	1822	1.98	5.30
26	ZZZZZ	ZZZZZ	11/10/09	1835	1.98	5.29
27	ZZZZZ	ZZZZZ	11/10/09	1847	1.98	5.29
28	ZZZZZ	ZZZZZ	11/10/09	1900	1.98	5.29
29	ZZZZZ	ZZZZZ	11/10/09	1912	1.98	5.29
30	ZZZZZ	ZZZZZ	11/10/09	1925	1.98	5.29
31	ZZZZZ	ZZZZZ	11/10/09	1938	1.97	5.29
32	ZZZZZ	ZZZZZ	11/10/09	1950	1.98	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	2.31	5.97
02	ZZZZZ	ZZZZZ	11/10/09	0814	2.31	5.97
03	ZZZZZ	ZZZZZ	11/10/09	0825	2.32	5.97
04	ZZZZZ	ZZZZZ	11/10/09	0835	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	0846	2.31	5.97
06	AR123201	WAR090930-32	11/10/09	0856	2.31	5.97
07	AR122101	WAR090803-21	11/10/09	0907	2.31	5.97
08	AR126201	WAR090803-62	11/10/09	0917	2.31	5.97
09	AR126801	WAR091106-68	11/10/09	0928	2.31	5.97
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	2.31	5.97
12	AR166002	WAR091110-02	11/10/09	0959	2.31	5.97
13	AR166003	WAR091110-04	11/10/09	1010	2.31	5.97
14	AR166004	WAR091110-03	11/10/09	1021	2.31	5.97
15	AR166005	IAR091102-01	11/10/09	1031	2.31	5.97
16	AR166001	WAR091102-60	11/10/09	1042	2.31	5.97
17	AR125401	WAR091110-05	11/10/09	1052	2.31	5.97
18	AR125402	WAR091110-06	11/10/09	1103	2.31	5.97
19	AR125403	WAR091110-07	11/10/09	1113	2.31	5.97
20	AR125404	WAR091110-08	11/10/09	1124	2.32	5.97
21	AR125405	IAR091027-01	11/10/09	1134	2.32	5.97
22	AR125401	WAR091102-54	11/10/09	1145	2.32	5.97
23	AR124201	WAR091110-09	11/10/09	1155	2.32	5.97
24	AR124202	WAR091110-10	11/10/09	1206	2.31	5.97
25	AR124203	WAR091110-11	11/10/09	1217	2.31	5.97
26	AR124204	WAR091110-12	11/10/09	1227	2.32	5.97
27	AR124205	IAR090914-01	11/10/09	1238	2.32	5.97
28	AR124201	WAR091102-42	11/10/09	1248	2.32	5.97
29	AR124801	WAR091110-13	11/10/09	1259	2.31	5.97
30	AR124802	WAR091110-14	11/10/09	1309	2.31	5.97
31	AR124803	WAR091110-15	11/10/09	1320	2.31	5.97
32	AR124804	WAR091110-16	11/10/09	1330	2.31	5.97

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	2.31	5.97
02	AR124801	WAR091027-48	11/10/09	1351	2.31	5.97
03	PIBLK02	WAR090916-99	11/10/09	1402	2.31	5.97
04	ZZZZZ	ZZZZZ	11/10/09	1412	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	1423	2.31	5.97
06	ZZZZZ	ZZZZZ	11/10/09	1433	2.31	5.97
07	ZZZZZ	ZZZZZ	11/10/09	1444	2.31	5.97
08	ZZZZZ	ZZZZZ	11/10/09	1457	2.31	5.97
09	ZZZZZ	ZZZZZ	11/10/09	1509	2.31	5.97
10	ZZZZZ	ZZZZZ	11/10/09	1522	2.31	5.97
11	AR166002	WAR091102-60	11/10/09	1534	2.31	5.97
12	PIBLK03	WAR090916-99	11/10/09	1545	2.31	5.97
13	ZZZZZ	ZZZZZ	11/10/09	1555	2.31	5.97
14	ZZZZZ	ZZZZZ	11/10/09	1608	2.31	5.97
15	ZZZZZ	ZZZZZ	11/10/09	1620	2.31	5.97
16	ZZZZZ	ZZZZZ	11/10/09	1633	2.31	5.97
17	ZZZZZ	ZZZZZ	11/10/09	1645	2.31	5.97
18	ZZZZZ	ZZZZZ	11/10/09	1658	2.31	5.97
19	ZZZZZ	ZZZZZ	11/10/09	1711	2.31	5.97
20	ZZZZZ	ZZZZZ	11/10/09	1723	2.31	5.97
21	ZZZZZ	ZZZZZ	11/10/09	1736	2.31	5.97
22	ZZZZZ	ZZZZZ	11/10/09	1748	2.31	5.97
23	AR166003	WAR091102-60	11/10/09	1801	2.31	5.97
24	PIBLK04	WAR090916-99	11/10/09	1812	2.31	5.97
25	ZZZZZ	ZZZZZ	11/10/09	1822	2.31	5.97
26	ZZZZZ	ZZZZZ	11/10/09	1835	2.31	5.97
27	ZZZZZ	ZZZZZ	11/10/09	1847	2.31	5.97
28	ZZZZZ	ZZZZZ	11/10/09	1900	2.31	5.97
29	ZZZZZ	ZZZZZ	11/10/09	1912	2.31	5.97
30	ZZZZZ	ZZZZZ	11/10/09	1925	2.31	5.97
31	ZZZZZ	ZZZZZ	11/10/09	1938	2.31	5.97
32	ZZZZZ	ZZZZZ	11/10/09	1950	2.31	5.97

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0523	1.97	5.29
02	AR166001	WAR091119-60	12/04/09	0533	1.97	5.29
03	ZZZZZ	ZZZZZ	12/04/09	0544	1.97	5.29
04	AR124201	WAR091102-42	12/04/09	0554	1.97	5.29
05	AR124801	WAR091027-48	12/04/09	0605	1.97	5.29
06	AR123201	WAR090930-32	12/04/09	0615	1.97	5.29
07	AR122101	WAR090803-21	12/04/09	0626	1.97	5.29
08	AR126201	WAR090803-62	12/04/09	0636	1.97	5.29
09	AR126801	WAR091106-68	12/04/09	0647	1.97	5.29
10	AR125401	WAR091102-54	12/04/09	0657	1.97	5.29
11	DDTANALOGSTD	WAR091020-DD	12/04/09	0708		
12	PIBLK02	WAR090916-99	12/04/09	0718	1.97	5.29
13	ZZZZZ	ZZZZZ	12/04/09	0729	1.97	5.29
14	ZZZZZ	ZZZZZ	12/04/09	0739	1.97	5.29
15	ZZZZZ	ZZZZZ	12/04/09	0750	1.97	5.29
16	ZZZZZ	ZZZZZ	12/04/09	0800	1.97	5.29
17	AR166002	WAR091119-60	12/04/09	0813	1.97	5.29
18	PIBLK03	WAR090916-99	12/04/09	0823	1.97	5.29
19	ZZZZZ	ZZZZZ	12/04/09	0834	1.97	5.29
20	ZZZZZ	ZZZZZ	12/04/09	0845	1.97	5.29
21	ZZZZZ	ZZZZZ	12/04/09	0855	1.97	5.29
22	ZZZZZ	ZZZZZ	12/04/09	0906	1.97	5.29
23	ZZZZZ	ZZZZZ	12/04/09	0918	1.97	5.29
24	ZZZZZ	ZZZZZ	12/04/09	0931	1.96	5.29
25	ZZZZZ	ZZZZZ	12/04/09	0943	1.97	5.29
26	ZZZZZ	ZZZZZ	12/04/09	0956	1.97	5.29
27	ZZZZZ	ZZZZZ	12/04/09	1008	1.97	5.29
28	ZZZZZ	ZZZZZ	12/04/09	1021	1.97	5.29
29	AR166003	WAR091119-60	12/04/09	1033	1.97	5.29
30	PIBLK04	WAR090916-99	12/04/09	1044	1.97	5.29
31	ZZZZZ	ZZZZZ	12/04/09	1055	1.97	5.29
32	AR166004	WAR091119-60	12/04/09	1107	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK03	WAR090916-99	12/04/09	1118	1.97	5.29
02	PBLK01	1201982139	12/04/09	1128	1.97	5.29
03	PBLK01LCS	1201982142	12/04/09	1141	1.97	5.29
04	RE03-09-13875	241540001	12/04/09	1153	1.97	5.29
05	RE03-09-13865	241540002	12/04/09	1206	1.97	5.29
06	RE03-09-13868	241540003	12/04/09	1218	1.97	5.29
07	RE03-09-13867	241540004	12/04/09	1231	1.97	5.29
08	RE03-09-13867MS	1201982140	12/04/09	1244	1.97	5.29
09	RE03-09-13867MSD	1201982141	12/04/09	1256	1.97	5.29
10	RE03-09-13864	241540005	12/04/09	1309	1.97	5.29
11	RE03-09-13871	241540006	12/04/09	1322	1.97	5.29
12	AR166005	WAR091119-60	12/04/09	1334	1.97	5.29
13	PIBLK06	WAR090916-99	12/04/09	1345	1.97	5.29
14	RE03-09-13877	241540007	12/04/09	1355	1.97	5.29
15	RE03-09-13869	241540008	12/04/09	1408	1.97	5.29
16	ZZZZZ	ZZZZZ	12/04/09	1420	1.97	5.29
17	RE03-09-13873	241540010	12/04/09	1433	1.97	5.29
18	RE03-09-13863	241540011	12/04/09	1445	1.97	5.29
19	RE03-09-13874	241540012	12/04/09	1458	1.97	5.29
20	RE03-09-13866	241540013	12/04/09	1511	1.97	5.29
21	RE03-09-13862	241540014	12/04/09	1523	1.97	5.29
22	RE03-09-13876	241540015	12/04/09	1536	1.97	5.29
23	RE03-09-13872	241540016	12/04/09	1548	1.97	5.29
24	AR166006	WAR091119-60	12/04/09	1601	1.97	5.29
25	PIBLK07	WAR090916-99	12/04/09	1612	1.97	5.29
26	ZZZZZ	ZZZZZ	12/04/09	1622	1.97	5.29
27	ZZZZZ	ZZZZZ	12/04/09	1635	1.97	5.29
28	RE03-09-13870	241540009	12/04/09	1647	1.97	5.29
29	AR166007	WAR091119-60	12/04/09	1700	1.97	5.29
30	PIBLK08	WAR090916-99	12/04/09	1710	1.97	5.29
31	ZZZZZ	ZZZZZ	12/04/09	1721	1.97	5.29
32	ZZZZZ	ZZZZZ	12/04/09	1733	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0523	2.31	5.96
02	AR166001	WAR091119-60	12/04/09	0533	2.31	5.97
03	ZZZZZ	ZZZZZ	12/04/09	0544	2.31	5.97
04	AR124201	WAR091102-42	12/04/09	0554	2.31	5.97
05	AR124801	WAR091027-48	12/04/09	0605	2.31	5.97
06	AR123201	WAR090930-32	12/04/09	0615	2.31	5.97
07	AR122101	WAR090803-21	12/04/09	0626	2.31	5.97
08	AR126201	WAR090803-62	12/04/09	0636	2.31	5.97
09	AR126801	WAR091106-68	12/04/09	0647	2.31	5.97
10	AR125401	WAR091102-54	12/04/09	0657	2.31	5.97
11	DDTANALOGSTD	WAR091020-DD	12/04/09	0708		
12	PIBLK02	WAR090916-99	12/04/09	0718	2.31	5.97
13	ZZZZZ	ZZZZZ	12/04/09	0729	2.31	5.97
14	ZZZZZ	ZZZZZ	12/04/09	0739	2.31	5.97
15	ZZZZZ	ZZZZZ	12/04/09	0750	2.31	5.97
16	ZZZZZ	ZZZZZ	12/04/09	0800	2.31	5.97
17	AR166002	WAR091119-60	12/04/09	0813	2.31	5.96
18	PIBLK03	WAR090916-99	12/04/09	0823	2.31	5.96
19	ZZZZZ	ZZZZZ	12/04/09	0834	2.31	5.97
20	ZZZZZ	ZZZZZ	12/04/09	0845	2.31	5.97
21	ZZZZZ	ZZZZZ	12/04/09	0855	2.31	5.97
22	ZZZZZ	ZZZZZ	12/04/09	0906	2.31	5.96
23	ZZZZZ	ZZZZZ	12/04/09	0918	2.31	5.96
24	ZZZZZ	ZZZZZ	12/04/09	0931	2.31	5.96
25	ZZZZZ	ZZZZZ	12/04/09	0943	2.31	5.96
26	ZZZZZ	ZZZZZ	12/04/09	0956	2.31	5.96
27	ZZZZZ	ZZZZZ	12/04/09	1008	2.31	5.96
28	ZZZZZ	ZZZZZ	12/04/09	1021	2.31	5.96
29	AR166003	WAR091119-60	12/04/09	1033	2.31	5.96
30	PIBLK04	WAR090916-99	12/04/09	1044	2.31	5.96
31	ZZZZZ	ZZZZZ	12/04/09	1055	2.31	5.96
32	AR166004	WAR091119-60	12/04/09	1107	2.31	5.96

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-604

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK05	WAR090916-99	12/04/09	1118	2.31	5.96
02	PBLK01	1201982139	12/04/09	1128	2.31	5.97
03	PBLK01LCS	1201982142	12/04/09	1141	2.31	5.96
04	RE03-09-13875	241540001	12/04/09	1153	2.31	5.96
05	RE03-09-13865	241540002	12/04/09	1206	2.31	5.96
06	RE03-09-13868	241540003	12/04/09	1218	2.31	5.96
07	RE03-09-13867	241540004	12/04/09	1231	2.31	5.96
08	RE03-09-13867MS	1201982140	12/04/09	1244	2.31	5.96
09	RE03-09-13867MSD	1201982141	12/04/09	1256	2.31	5.96
10	RE03-09-13864	241540005	12/04/09	1309	2.31	5.96
11	RE03-09-13871	241540006	12/04/09	1322	2.31	5.96
12	AR166005	WAR091119-60	12/04/09	1334	2.31	5.96
13	PIBLK06	WAR090916-99	12/04/09	1345	2.31	5.96
14	RE03-09-13877	241540007	12/04/09	1355	2.31	5.96
15	RE03-09-13869	241540008	12/04/09	1408	2.31	5.96
16	ZZZZZ	ZZZZZ	12/04/09	1420	2.31	5.96
17	RE03-09-13873	241540010	12/04/09	1433	2.31	5.96
18	RE03-09-13863	241540011	12/04/09	1445	2.31	5.96
19	RE03-09-13874	241540012	12/04/09	1458	2.31	5.96
20	RE03-09-13866	241540013	12/04/09	1511	2.31	5.96
21	RE03-09-13862	241540014	12/04/09	1523	2.31	5.96
22	RE03-09-13876	241540015	12/04/09	1536	2.31	5.96
23	RE03-09-13872	241540016	12/04/09	1548	2.31	5.96
24	AR166006	WAR091119-60	12/04/09	1601	2.31	5.96
25	PIBLK07	WAR090916-99	12/04/09	1612	2.31	5.96
26	ZZZZZ	ZZZZZ	12/04/09	1622	2.31	5.97
27	ZZZZZ	ZZZZZ	12/04/09	1635	2.31	5.96
28	RE03-09-13870	241540009	12/04/09	1647	2.31	5.96
29	AR166007	WAR091119-60	12/04/09	1700	2.31	5.96
30	PIBLK08	WAR090916-99	12/04/09	1710	2.31	5.97
31	ZZZZZ	ZZZZZ	12/04/09	1721	2.31	5.96
32	ZZZZZ	ZZZZZ	12/04/09	1733	2.31	5.96

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–604 **Client ID:** LCS for batch 927082

Lab Sample ID: 1201982142

Data File: 035f3501.d **Data File:** 035b3501.d

Inst: ECD1A.I_1 **Inst:** ECD1A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 04–DEC–09 11:41 **Analyzed:** 04–DEC–09 11:41

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							.965
Column 1	1	2.43	2.4 – 2.46	24.8		ug/kg	
	2	2.72	2.69 – 2.75	25.3		ug/kg	
	3	2.8	2.77 – 2.83	24.5		ug/kg	
	4	2.84	2.81 – 2.87	24.7		ug/kg	
	5	3.05	3.02 – 3.08	24.8		ug/kg	
					24.8		
Column 2	1	3.21	3.18 – 3.24	25.5		ug/kg	
	2	3.29	3.27 – 3.33	24.6		ug/kg	
	3	3.42	3.39 – 3.45	24.9		ug/kg	
	4	3.59	3.56 – 3.62	25		ug/kg	
	5	3.66	3.63 – 3.69	25.1		ug/kg	
					25		
Aroclor–1260							4.56
Column 1	1	3.77	3.75 – 3.81	26.4		ug/kg	
	2	3.94	3.91 – 3.97	26.9		ug/kg	
	3	4.17	4.14 – 4.2	26.7		ug/kg	
	4	4.31	4.28 – 4.34	27.7		ug/kg	
	5	4.49	4.46 – 4.52	28.7		ug/kg	
					27.3		
Column 2	1	4.35	4.32 – 4.38	27		ug/kg	
	2	4.48	4.45 – 4.51	28.4		ug/kg	
	3	4.74	4.72 – 4.78	28.3		ug/kg	
	4	4.92	4.89 – 4.95	29		ug/kg	
	5	5.07	5.04 – 5.1	30.1		ug/kg	
					28.5		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13865

Lab Sample ID: 241540002

Data File: 037f3701.d **Data File:** 037b3701.d
Inst: ECD1A.I_1 **Inst:** ECD1A.I_2
Column: CLP1 **Column:** CLP2
Analyzed: 04–DEC–09 12:06 **Analyzed:** 04–DEC–09 12:06

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							18.9
Column 1	1	3.28	3.25 – 3.31	41.1		ug/kg	
	2	3.43	3.4 – 3.46	34.8		ug/kg	
	3	3.67	3.64 – 3.7	32.1		ug/kg	
	4	3.83	3.8 – 3.86	37.2		ug/kg	
	5	3.94	3.91 – 3.97	50.9		ug/kg	
					39.2		
Column 2	1	3.42	3.39 – 3.45	31.8		ug/kg	
	2	3.84	3.82 – 3.88	32.7		ug/kg	
	3	3.96	3.93 – 3.99	32.5		ug/kg	
	4	4.24	4.21 – 4.27	35.5		ug/kg	
	5	4.37	4.34 – 4.4	29.9		ug/kg	
					32.5		
Aroclor–1260							6.05
Column 1	1	3.77	3.75 – 3.81	32.1		ug/kg	
	2	3.94	3.91 – 3.97	32		ug/kg	
	3	4.17	4.14 – 4.2	19.8		ug/kg	
	4	4.31	4.28 – 4.34	16.7		ug/kg	
	5	4.49	4.46 – 4.52	19.4		ug/kg	
					24		
Column 2	1	4.35	4.32 – 4.38	34.7		ug/kg	
	2	4.48	4.45 – 4.51	28.3		ug/kg	
	3	4.74	4.72 – 4.78	22.6		ug/kg	
	4	4.92	4.89 – 4.95	19.4		ug/kg	
	5	5.06	5.04 – 5.1	22.5		ug/kg	
					25.5		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13866

Lab Sample ID: 241540013

Data File:	052f5201.d	**Data File:**	052b5201.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 15:11	**Analyzed:**	04–DEC–09 15:11

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							19.7
Column 1	1	3.77	3.75 – 3.81	12		ug/kg	
	2	3.93	3.91 – 3.97	14.3		ug/kg	
	3	4.17	4.14 – 4.2	17.8		ug/kg	
	4	4.31	4.28 – 4.34	12.2		ug/kg	
	5	4.49	4.46 – 4.52	14.8		ug/kg	
					14.2		
Column 2	1	4.35	4.32 – 4.38	15.4		ug/kg	
	2	4.48	4.45 – 4.51	15.3		ug/kg	
	3	4.74	4.72 – 4.78	21		ug/kg	
	4	4.92	4.89 – 4.95	16.5		ug/kg	
	5	5.06	5.04 – 5.1	18.6		ug/kg	
					17.4		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13867

Lab Sample ID: 241540004

Data File:	039f3901.d	**Data File:**	039b3901.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 12:31	**Analyzed:**	04–DEC–09 12:31

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							18.3
Column 1	1	3.77	3.75 – 3.81	4.56		ug/kg	
	2	3.94	3.91 – 3.97	4.46		ug/kg	
	3	4.17	4.14 – 4.2	7.16		ug/kg	
	4	4.31	4.28 – 4.34	5.67		ug/kg	
	5	4.49	4.46 – 4.52	6.39		ug/kg	
					5.65		
Column 2	1	4.35	4.32 – 4.38	5.54		ug/kg	
	2	4.48	4.45 – 4.51	5.14		ug/kg	
	3	4.74	4.72 – 4.78	8.4		ug/kg	
	4	4.92	4.89 – 4.95	6.92		ug/kg	
	5	5.07	5.04 – 5.1	7.94		ug/kg	
					6.79		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13867MS

Lab Sample ID: 1201982140

Data File:	040f4001.d	**Data File:**	040b4001.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 12:44	**Analyzed:**	04–DEC–09 12:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							2.12
Column 1	1	2.43	2.4 – 2.46	26.5		ug/kg	
	2	2.72	2.69 – 2.75	27.5		ug/kg	
	3	2.8	2.77 – 2.83	25.8		ug/kg	
	4	2.84	2.81 – 2.87	25.4		ug/kg	
	5	3.05	3.02 – 3.08	25.7		ug/kg	
					26.2		
Column 2	1	3.21	3.18 – 3.24	27		ug/kg	
	2	3.3	3.27 – 3.33	26.8		ug/kg	
	3	3.42	3.39 – 3.45	26.8		ug/kg	
	4	3.59	3.56 – 3.62	26.6		ug/kg	
	5	3.66	3.63 – 3.69	26.6		ug/kg	
					26.8		
Aroclor–1260							4.59
Column 1	1	3.78	3.75 – 3.81	30.2		ug/kg	
	2	3.94	3.91 – 3.97	30.5		ug/kg	
	3	4.17	4.14 – 4.2	31.9		ug/kg	
	4	4.31	4.28 – 4.34	31.1		ug/kg	
	5	4.49	4.46 – 4.52	33.4		ug/kg	
					31.4		
Column 2	1	4.35	4.32 – 4.38	31		ug/kg	
	2	4.48	4.45 – 4.51	31.2		ug/kg	
	3	4.74	4.72 – 4.78	33.8		ug/kg	
	4	4.92	4.89 – 4.95	33.6		ug/kg	
	5	5.07	5.04 – 5.1	35.1		ug/kg	
					32.9		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13867MSD

Lab Sample ID: 1201982141

Data File:	041f4101.d	**Data File:**	041b4101.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 12:56	**Analyzed:**	04–DEC–09 12:56

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							6.84
Column 1	1	2.43	2.4 – 2.46	27.3		ug/kg	
	2	2.72	2.69 – 2.75	28.4		ug/kg	
	3	2.8	2.77 – 2.83	26.5		ug/kg	
	4	2.84	2.81 – 2.87	26.2		ug/kg	
	5	3.05	3.02 – 3.08	26.3		ug/kg	
					26.9		
Column 2	1	3.21	3.18 – 3.24	28.1		ug/kg	
	2	3.3	3.27 – 3.33	27.8		ug/kg	
	3	3.42	3.39 – 3.45	28		ug/kg	
	4	3.59	3.56 – 3.62	27.4		ug/kg	
	5	3.66	3.63 – 3.69	32.9		ug/kg	
					28.8		
Aroclor–1260							3.75
Column 1	1	3.77	3.75 – 3.81	31.9		ug/kg	
	2	3.94	3.91 – 3.97	32		ug/kg	
	3	4.17	4.14 – 4.2	33.6		ug/kg	
	4	4.31	4.28 – 4.34	32.2		ug/kg	
	5	4.49	4.46 – 4.52	35		ug/kg	
					32.9		
Column 2	1	4.35	4.32 – 4.38	32.4		ug/kg	
	2	4.48	4.45 – 4.51	32.4		ug/kg	
	3	4.74	4.72 – 4.78	35.2		ug/kg	
	4	4.92	4.89 – 4.95	34.7		ug/kg	
	5	5.07	5.04 – 5.1	36.2		ug/kg	
					34.2		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13870

Lab Sample ID: 241540009

Data File:	060f6001.d	**Data File:**	060b6001.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 16:47	**Analyzed:**	04–DEC–09 16:47

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							15.2
Column 1	1	3.28	3.25 – 3.31	1280		ug/kg	
	2	3.43	3.4 – 3.46	1180		ug/kg	
	3	3.67	3.64 – 3.7	1250		ug/kg	
	4	3.83	3.8 – 3.86	1300		ug/kg	
	5	3.94	3.91 – 3.97	1380		ug/kg	
					1280		
Column 2	1	3.42	3.39 – 3.45	729		ug/kg	
	2	3.84	3.82 – 3.88	1020		ug/kg	
	3	3.96	3.93 – 3.99	1190		ug/kg	
	4	4.24	4.21 – 4.27	1320		ug/kg	
	5	4.37	4.34 – 4.4	1220		ug/kg	
					1100		
Aroclor–1260							17.9
Column 1	1	3.77	3.75 – 3.81	758		ug/kg	
	2	3.94	3.91 – 3.97	868		ug/kg	
	3	4.17	4.14 – 4.2	133		ug/kg	
	4	4.31	4.28 – 4.34	133		ug/kg	
	5	4.49	4.46 – 4.52	142		ug/kg	
					407		
Column 2	1	4.35	4.32 – 4.38	991		ug/kg	
	2	4.48	4.45 – 4.51	736		ug/kg	
	3	4.75	4.72 – 4.78	316		ug/kg	
	4	4.92	4.89 – 4.95	200		ug/kg	
	5	5.06	5.04 – 5.1	191		ug/kg	
					487		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13871

Lab Sample ID: 241540006

Data File:	043f4301.d	**Data File:**	043b4301.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 13:22	**Analyzed:**	04–DEC–09 13:22

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							17.6
Column 1	1	3.28	3.25 – 3.31	213		ug/kg	
	2	3.43	3.4 – 3.46	207		ug/kg	
	3	3.67	3.64 – 3.7	229		ug/kg	
	4	3.83	3.8 – 3.86	204		ug/kg	
	5	3.94	3.91 – 3.97	275		ug/kg	
					226		
Column 2	1	3.42	3.39 – 3.45	107		ug/kg	
	2	3.84	3.82 – 3.88	183		ug/kg	
	3	3.96	3.93 – 3.99	214		ug/kg	
	4	4.24	4.21 – 4.27	250		ug/kg	
	5	4.37	4.34 – 4.4	193		ug/kg	
					189		
Aroclor–1260							18
Column 1	1	3.77	3.75 – 3.81	154		ug/kg	
	2	3.94	3.91 – 3.97	173		ug/kg	
	3	4.17	4.14 – 4.2	34.1		ug/kg	
	4	4.31	4.28 – 4.34	33.2		ug/kg	
	5	4.49	4.46 – 4.52	35.7		ug/kg	
					86		
Column 2	1	4.35	4.32 – 4.38	201		ug/kg	
	2	4.48	4.45 – 4.51	148		ug/kg	
	3	4.75	4.72 – 4.78	71		ug/kg	
	4	4.92	4.89 – 4.95	49.5		ug/kg	
	5	5.06	5.04 – 5.1	45.9		ug/kg	
					103		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13874

Lab Sample ID: 241540012

Data File: 051f5101.d **Data File:** 051b5101.d

Inst: ECD1A.I_1 **Inst:** ECD1A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 04–DEC–09 14:58 **Analyzed:** 04–DEC–09 14:58

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							4.95
Column 1	1	3.77	3.75 – 3.81	4.4		ug/kg	
	2	3.94	3.91 – 3.97	1.78		ug/kg	
	3	4.17	4.14 – 4.2	1.03		ug/kg	
	4	4.31	4.28 – 4.34	.736		ug/kg	
	5	4.49	4.46 – 4.52	1.34		ug/kg	
					1.86		
Column 2	1	4.35	4.32 – 4.38	1.47		ug/kg	
	2	4.48	4.45 – 4.51	2.28		ug/kg	
	3	4.75	4.72 – 4.78	1.91		ug/kg	
	4	4.92	4.89 – 4.95	1.3		ug/kg	
	5	5.07	5.04 – 5.1	1.88		ug/kg	
					1.77		

Identification Summary

SDG Number: 10–604 **Client ID:** RE03–09–13876

Lab Sample ID: 241540015

Data File:	054f5401.d	**Data File:**	054b5401.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 15:36	**Analyzed:**	04–DEC–09 15:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							15.5
Column 1	1	3.77	3.75 – 3.81	3.98		ug/kg	
	2	3.94	3.91 – 3.97	4.44		ug/kg	
	3	4.17	4.14 – 4.2	2.28		ug/kg	
	4	4.31	4.28 – 4.34	1.7		ug/kg	
	5	4.49	4.46 – 4.52	2.67		ug/kg	
					3.01		
Column 2	1	4.35	4.32 – 4.38	2.55		ug/kg	
	2	4.48	4.45 – 4.51	5.3		ug/kg	
	3	4.74	4.72 – 4.78	3.72		ug/kg	
	4	4.92	4.89 – 4.95	2.41		ug/kg	
	5	5.07	5.04 – 5.1	3.63		ug/kg	
					3.52		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982139**				
Client Sample:	**QC for batch 927082**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927082**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:28**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**034f3401-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	034b3401-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/034f3401.d
Lab Smp Id: 1201982139 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 11:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982139|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	68544634	153.593	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	64424044	157.610	5.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/034f3401.d

Page 1

Date : 04-DEC-2009 11:28

Client ID: PBLK01

Instrument: ecd1a.i

Sample Info: |120198213911|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

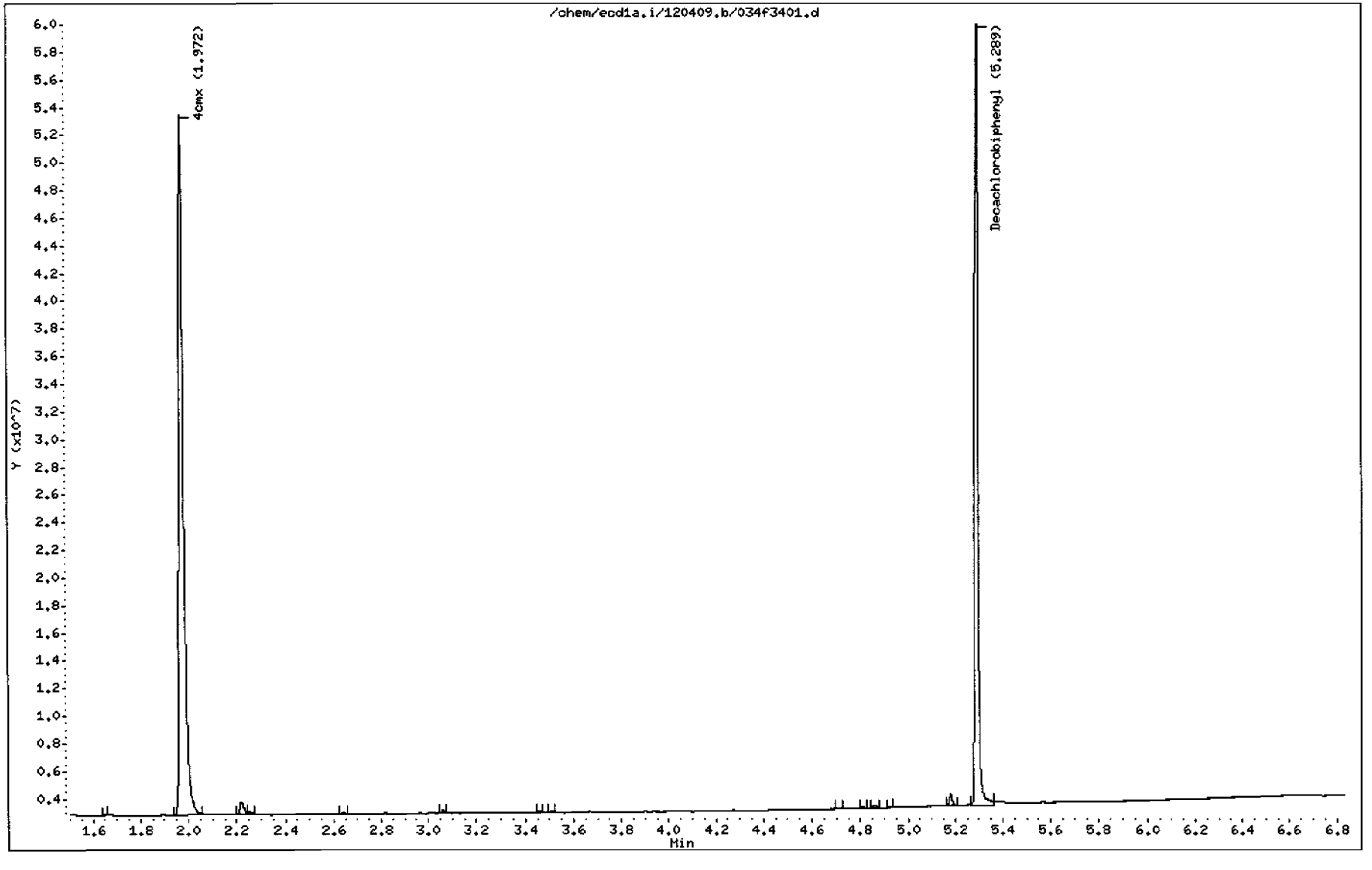

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/034b3401.d
Lab Smp Id: 1201982139 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 11:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982139|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	56051930	150.963	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	48857458	162.545	5.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/034b3401.d

Date : 04-DEC-2009 11:28

Client ID: PBLK01

Sample Info: |120198213911|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

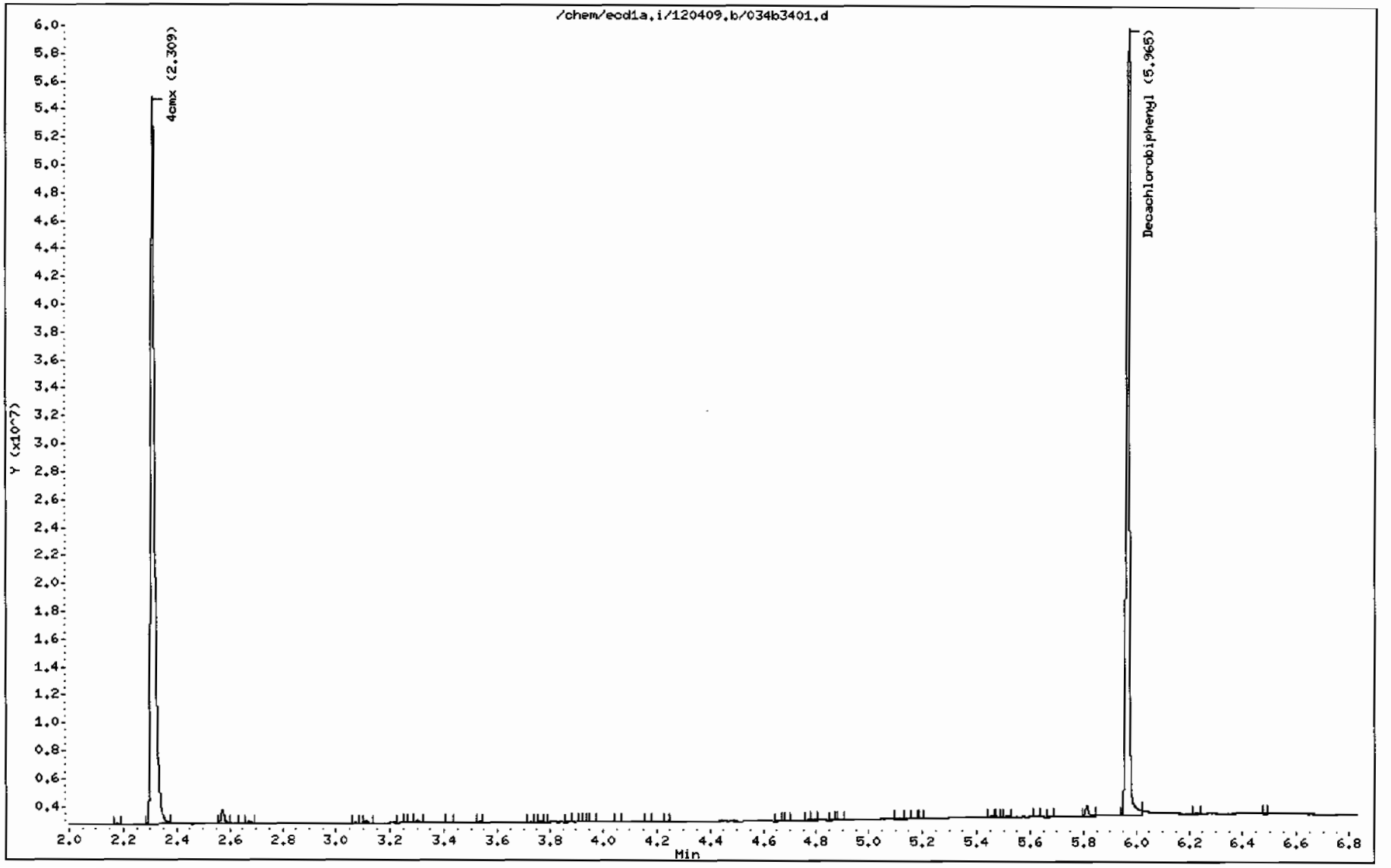

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982142**				
Client Sample:	**QC for batch 927082**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927082**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:41**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**035f3501–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	035b3501–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		25.0	ug/kg	1.11	3.33	2
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		28.6	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/035f3501.d
Lab Smp Id: 1201982142 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 11:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982142|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 35 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	64580921	144.711	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	62933256	153.963	5.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.430	0.000	12700286	743.171	24.8	80.00- 120.00	100.00
2.718	2.719	-0.001	16116478	758.894	25.3	108.58- 148.58	126.90
2.799	2.800	-0.001	10295159	733.670	24.4	59.79- 99.79	81.06
2.836	2.838	-0.002	6246690	742.182	24.7	28.78- 68.78	49.19

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	8019586	743.004	24.8	42.16- 82.16	63.14
Average of Peak Concentrations =					24.8		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	16982798	791.834	26.4	80.00- 120.00	100.00
3.937	3.938	-0.001	25990814	807.290	26.9	130.49- 170.49	153.04
4.168	4.168	0.000	16375091	800.441	26.7	73.32- 113.32	96.42
4.311	4.312	-0.001	16713166	832.256	27.7	75.32- 115.32	98.41
4.490	4.491	-0.001	39812525	859.900	28.7	202.00- 242.00	234.43
Average of Peak Concentrations =					27.3		

Data File: /chem/ecd1a.i/120409.b/035f3501.d

Date : 04-DEC-2009 11:41

Client ID: PBLK01LCS

Sample Info: |120198214211|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

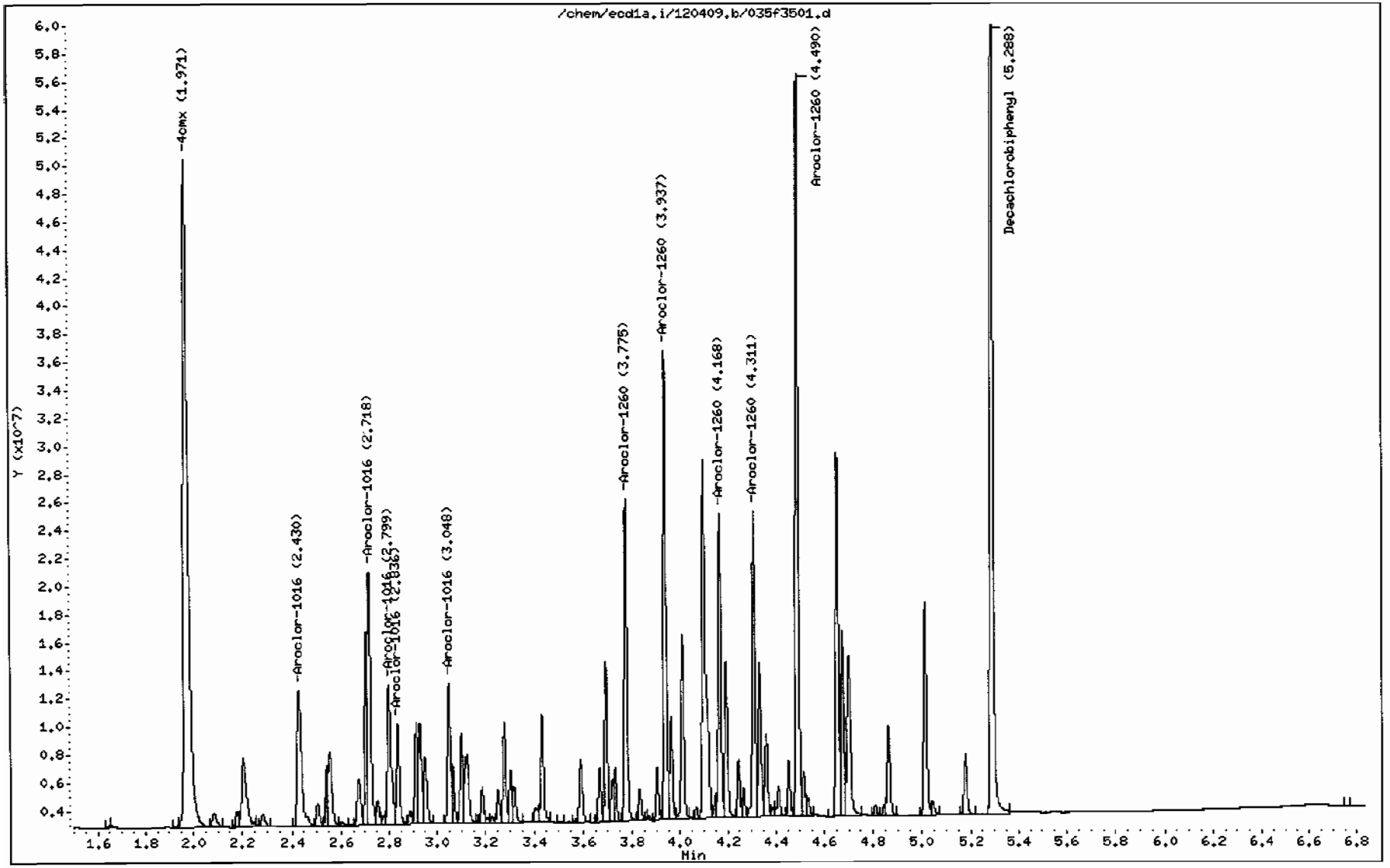

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/035b3501.d
Lab Smp Id: 1201982142 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 11:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982142|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 35 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	51684562	139.200	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	50545001	168.159	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.213	-0.001	12923273	766.483	25.5	80.00- 120.00	100.00
3.295	3.296	-0.001	8505161	737.295	24.6	45.90- 85.90	65.81
3.421	3.422	-0.001	5201674	748.309	24.9	19.72- 59.72	40.25
3.586	3.587	-0.001	6898796	751.455	25.0	34.41- 74.41	53.38

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.662	3.663	-0.001	6411139	753.466	25.1	30.39- 70.39	49.61
Average of Peak Concentrations =					25.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	14627019	809.603	27.0	80.00- 120.00	100.00
4.479	4.479	0.000	18850271	850.758	28.4	106.15- 146.15	128.87
4.745	4.745	0.000	15035515	850.535	28.4	79.67- 119.67	102.79
4.919	4.919	0.000	14970593	869.680	29.0	78.94- 118.94	102.35
5.066	5.067	-0.001	34843240	901.994	30.1	208.07- 248.07	238.21
Average of Peak Concentrations =					28.6		

Data File: /chem/ecd1a.i/120409.b/035b3501.d
Date : 04-DEC-2009 11:41
Client ID: PBLK01LCS
Sample Info: 1120198214211
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

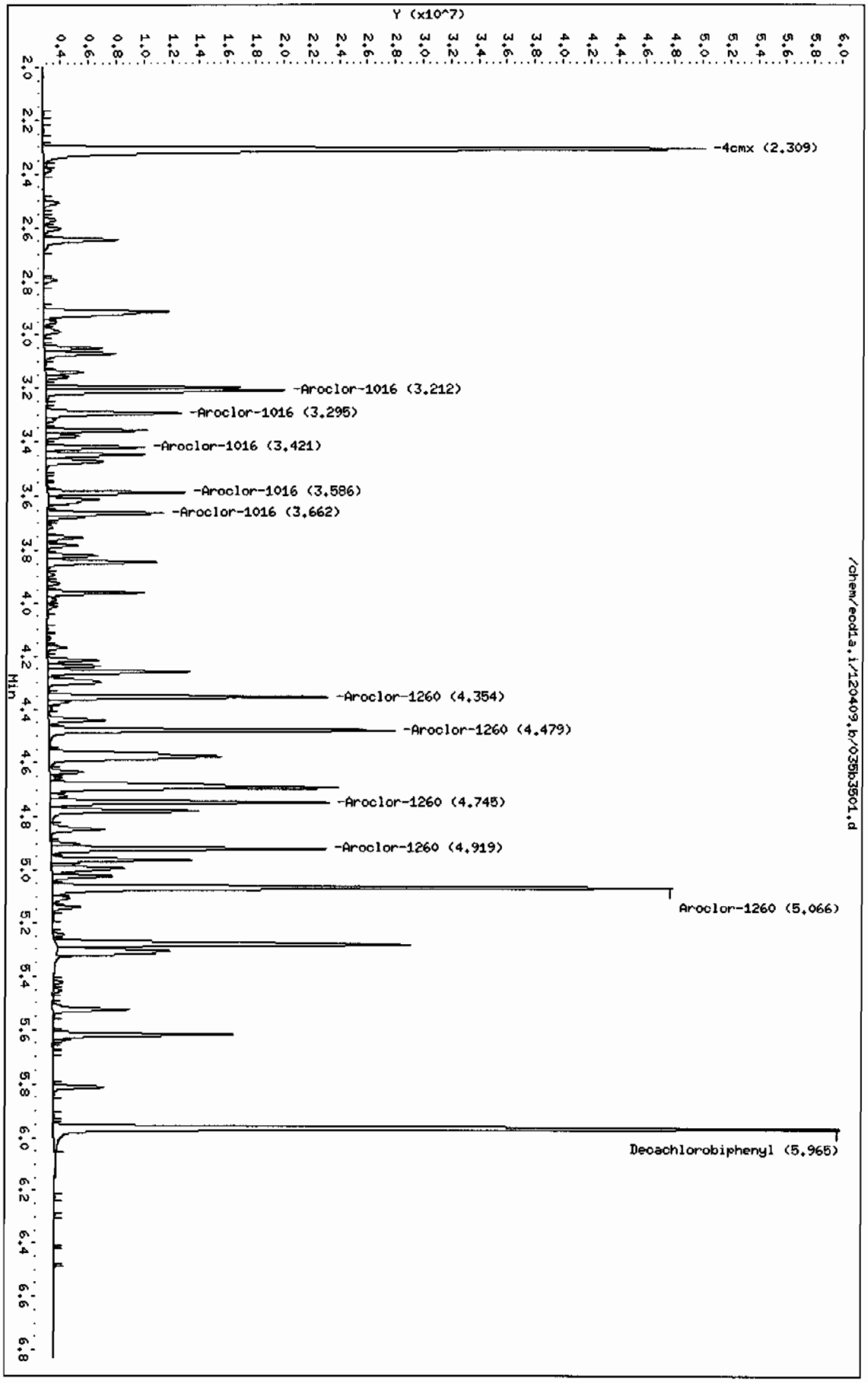

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–604	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982140	**Date Received:**	11/20/2009 08:50	**%Moisture:**	12.3
Client Sample:	QC for batch 927082	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–13867MS	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 12:44	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	040f4001.d	**Column:**	1 CLP1	**Level:**	LOW
	040b4001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		26.2	ug/kg	1.27	3.80	1
11104–28–2	Aroclor–1221	U	3.80	ug/kg	1.27	3.80	1
11141–16–5	Aroclor–1232	U	3.80	ug/kg	1.27	3.80	1
53469–21–9	Aroclor–1242	U	3.80	ug/kg	1.27	3.80	1
12672–29–6	Aroclor–1248	U	3.80	ug/kg	1.27	3.80	1
11097–69–1	Aroclor–1254	U	3.80	ug/kg	1.27	3.80	1
11096–82–5	Aroclor–1260		32.9	ug/kg	1.27	3.80	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/040f4001.d
Lab Smp Id: 1201982140 Client Smp ID: RE03-09-13867MS
Inj Date : 04-DEC-2009 12:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982140|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	61153884	137.032	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	57656877	141.054	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	11926037	697.865	26.5	80.00- 120.00	100.00
2.718	2.719	-0.001	15383770	724.392	27.5	107.86- 147.86	128.99
2.800	2.800	0.000	9539797	679.841	25.8	59.89- 99.89	79.99
2.838	2.838	0.000	5634829	669.486	25.4	28.72- 68.72	47.25

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	7308723	677.143	25.7	41.98- 81.98	61.28
Average of Peak Concentrations =					26.2		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	17067371	795.778	30.2	80.00- 120.00	100.00
3.938	3.938	0.000	25872832	803.625	30.5	131.51- 171.51	151.59
4.168	4.168	0.000	17181055	839.838	31.9	73.81- 113.81	100.67
4.310	4.312	-0.002	16430317	818.171	31.1	75.82- 115.82	96.27
4.489	4.491	-0.002	40699602	879.060	33.4	202.56- 242.56	238.46
Average of Peak Concentrations =					31.4		

Data File: /chem/ecd1a.i/120409.b/040f4001.d

Page 1

Date : 04-DEC-2009 12:44

Client ID: RE03-09-13867MS

Instrument: ecd1a.i

Sample Info: |120198214011|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

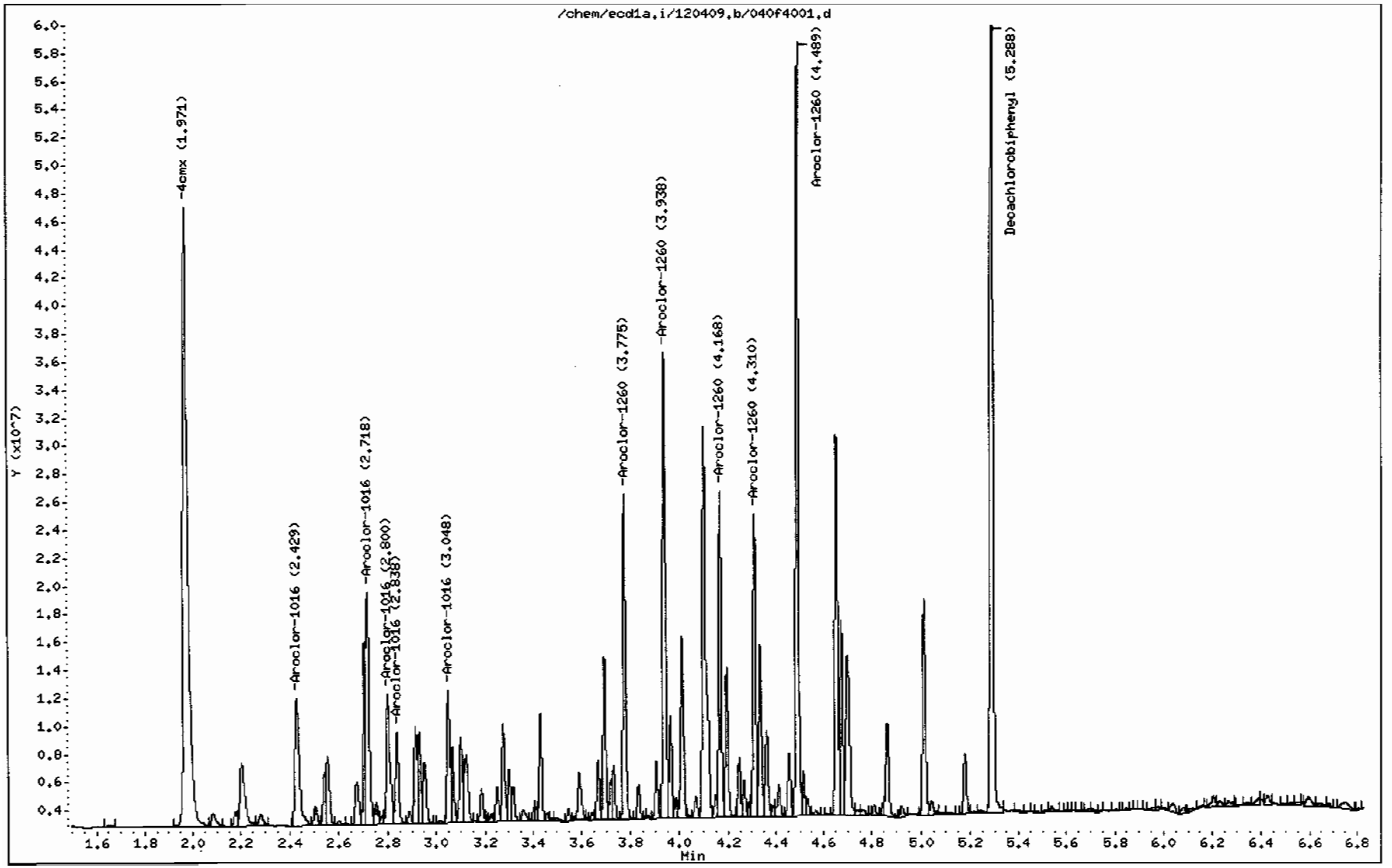

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/040b4001.d
Lab Smp Id: 1201982140 Client Smp ID: RE03-09-13867MS
Inj Date : 04-DEC-2009 12:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982140|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	50627151	136.353	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	43307088	144.079	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.213	-0.001	11984270	710.791	27.0	80.00- 120.00	100.00
3.296	3.296	0.000	8144526	706.032	26.8	45.90- 85.90	67.96
3.421	3.422	-0.001	4895252	704.228	26.8	19.72- 59.72	40.85
3.587	3.587	0.000	6432401	700.653	26.6	34.41- 74.41	53.67

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.663	3.663	0.000	5962793	700.774	26.6	30.39- 70.39	49.76
Average of Peak Concentrations =					26.8		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	14716828	814.574	31.0	80.00- 120.00	100.00(M)
4.478	4.479	-0.001	18182672	820.628	31.2	106.15- 146.15	123.55
4.744	4.745	-0.001	15706313	888.481	33.8	79.67- 119.67	106.72
4.918	4.919	-0.001	15222185	884.296	33.6	78.94- 118.94	103.43
5.065	5.067	-0.002	35644343	922.733	35.1	208.07- 248.07	242.20
Average of Peak Concentrations =					32.9		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/040b4001.d
Date : 04-DEC-2009 12:44
Client ID: RE03-09-13867MS
Sample Info: |120198214011|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

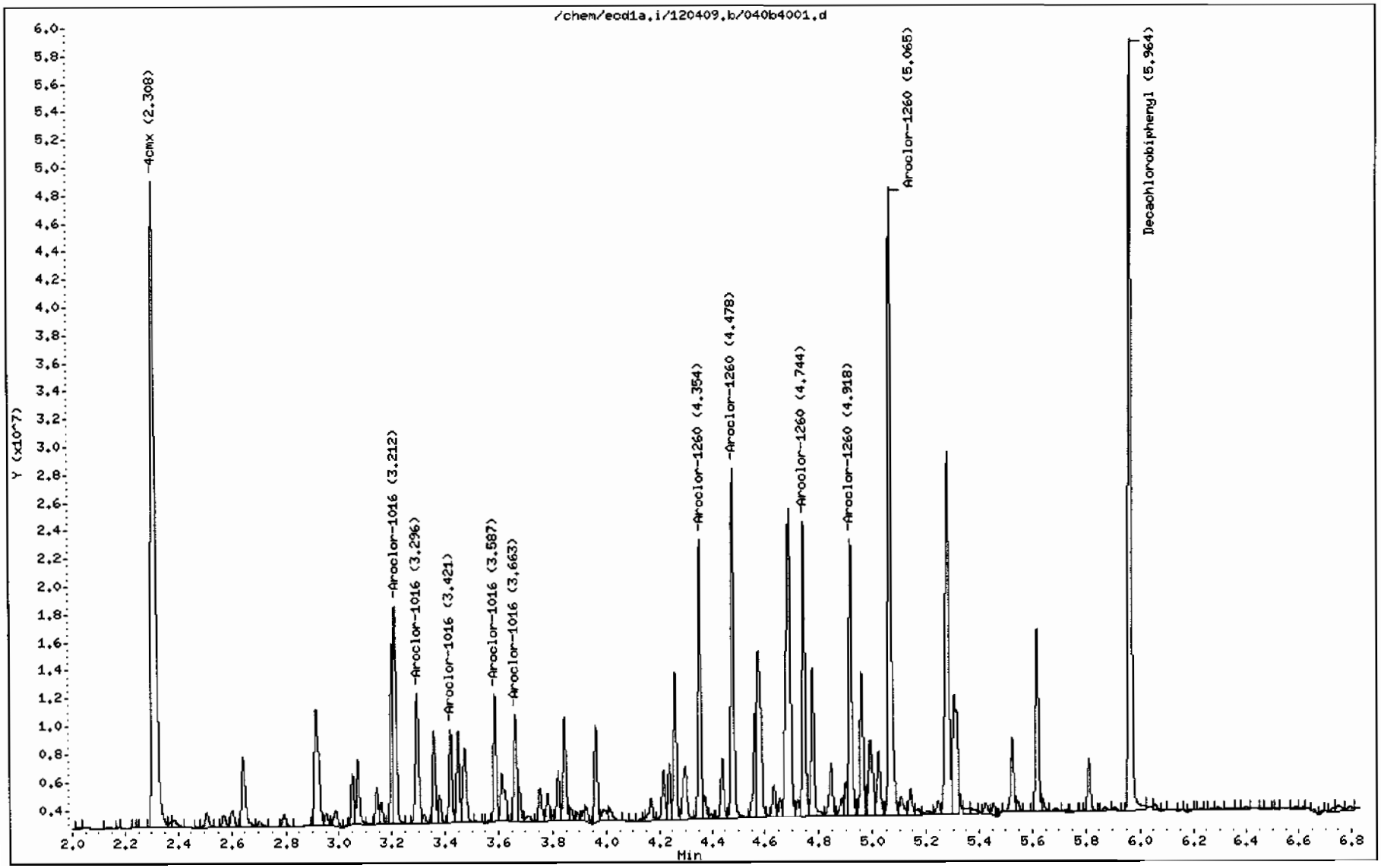

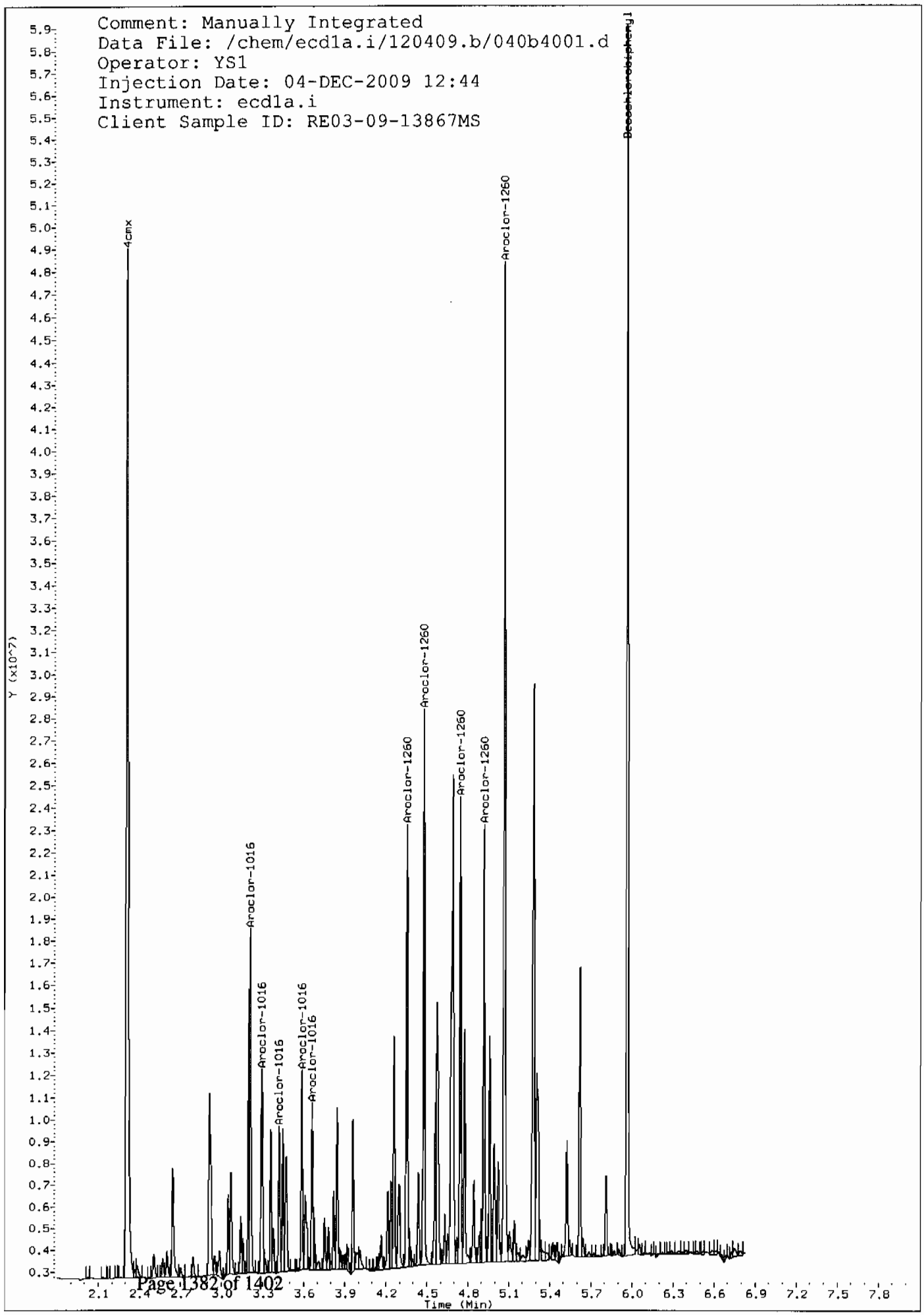
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Operator: YS1
Injection Date: 04-DEC-2009 12:44
Instrument: ecd1a.i
Client Sample ID: RE03-09-13867MS
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

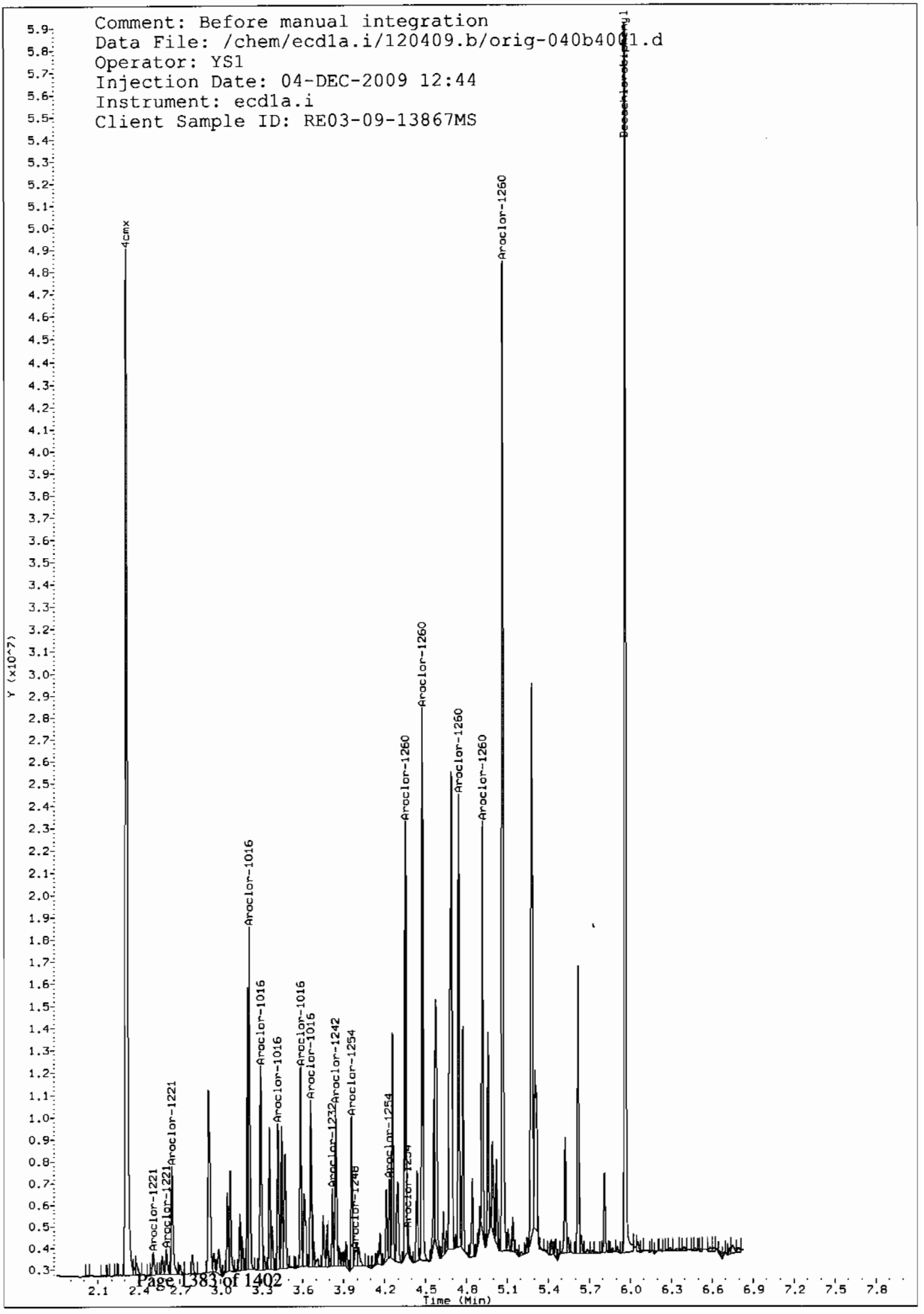
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-040b4001.d
Operator: YS1
Injection Date: 04-DEC-2009 12:44
Instrument: ecd1a.i
Client Sample ID: RE03-09-13867MS
4cmx
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1242
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–604**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201982141**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**12.3**
Client Sample:	**QC for batch 927082**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03–09–13867MSD**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 12:56**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**041f4101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	041b4101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		26.9	ug/kg	1.27	3.80	1
11104–28–2	Aroclor–1221	U	3.80	ug/kg	1.27	3.80	1
11141–16–5	Aroclor–1232	U	3.80	ug/kg	1.27	3.80	1
53469–21–9	Aroclor–1242	U	3.80	ug/kg	1.27	3.80	1
12672–29–6	Aroclor–1248	U	3.80	ug/kg	1.27	3.80	1
11097–69–1	Aroclor–1254	U	3.80	ug/kg	1.27	3.80	1
11096–82–5	Aroclor–1260		34.2	ug/kg	1.27	3.80	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/041f4101.d
Lab Smp Id: 1201982141 Client Smp ID: RE03-09-13867MSD
Inj Date : 04-DEC-2009 12:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982141|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	61653636	138.152	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	55903204	136.764	5.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	12253342	717.017	27.2	80.00- 120.00	100.00
2.718	2.719	-0.001	15865003	747.053	28.4	108.58- 148.58	129.47
2.799	2.800	-0.001	9796884	698.162	26.5	59.79- 99.79	79.95
2.837	2.838	-0.001	5797088	688.764	26.2	28.78- 68.78	47.31

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	7467060	691.813	26.3	42.16- 82.16	60.94
			Average of Peak Concentrations =		26.9		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	17994049	838.984	31.9	80.00- 120.00	100.00
3.937	3.938	-0.001	27095951	841.616	32.0	130.49- 170.49	150.58
4.167	4.168	-0.001	18077213	883.643	33.6	73.32- 113.32	100.46
4.310	4.312	-0.002	17026451	847.856	32.2	75.32- 115.32	94.62
4.490	4.491	-0.001	42611996	920.365	35.0	202.00- 242.00	236.81
			Average of Peak Concentrations =		32.9		

Data File: /chem/ecd1a.i/120409.b/041f4101.d

Date : 04-DEC-2009 12:56

Client ID: RE03-09-13867MSD

Sample Info: |120198214|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

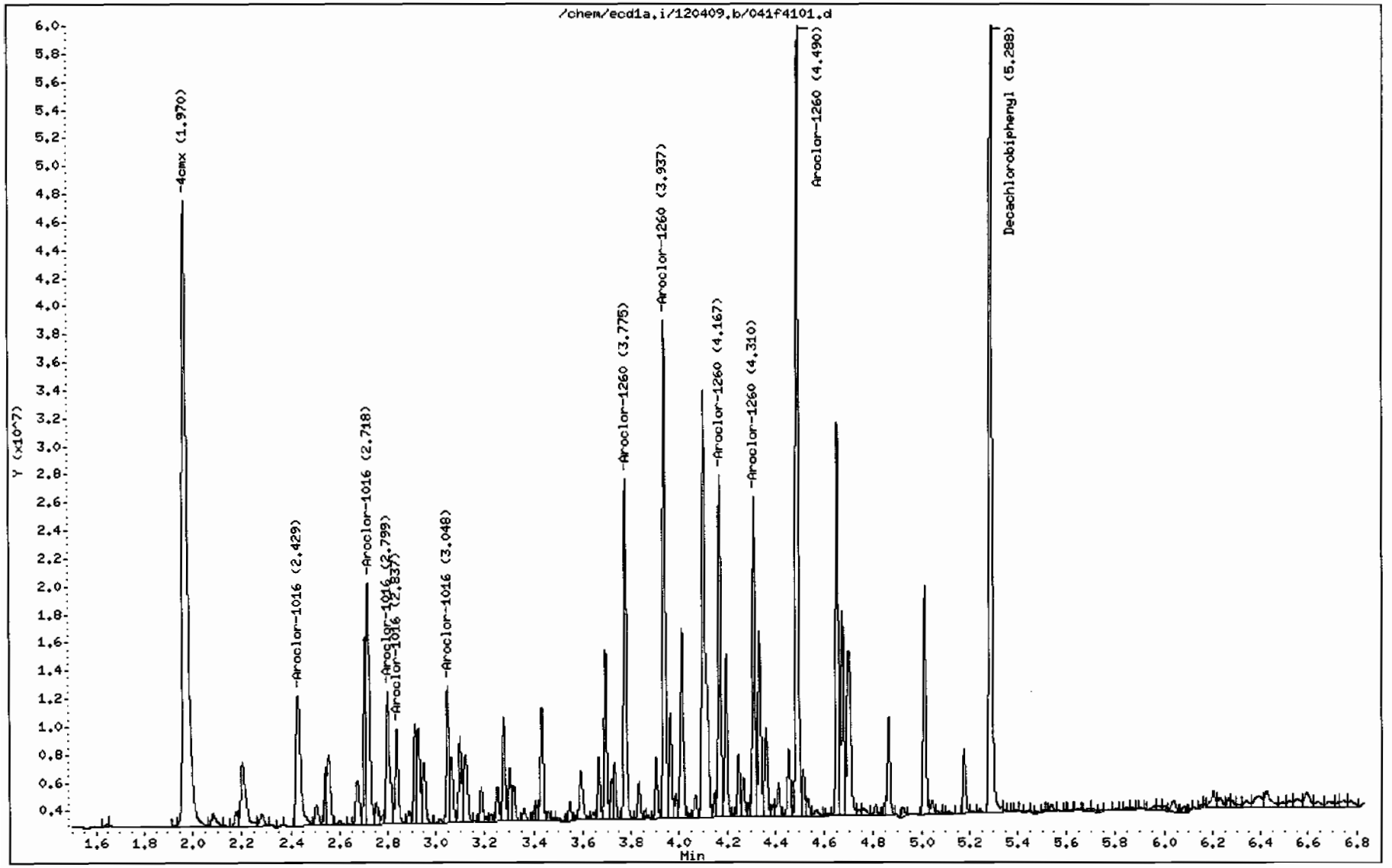

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/041b4101.d
Lab Smp Id: 1201982141 Client Smp ID: RE03-09-13867MSD
Inj Date : 04-DEC-2009 12:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982141|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	50674662	136.481	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	43792067	145.693	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	12470635	739.637	28.1	80.00- 120.00	100.00
3.296	3.296	0.000	8423810	730.243	27.8	45.90- 85.90	67.55
3.421	3.422	-0.001	5128217	737.742	28.0	19.72- 59.72	41.12
3.587	3.587	0.000	6619529	721.036	27.4	34.41- 74.41	53.08

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.662	3.663	-0.001	7360597	865.050	32.9	30.39- 70.39	59.02
Average of Peak Concentrations =					28.8		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	15407069	852.779	32.4	80.00- 120.00	100.00
4.479	4.479	0.000	18886240	852.381	32.4	106.15- 146.15	122.58
4.745	4.745	0.000	16389498	927.127	35.2	79.67- 119.67	106.38
4.919	4.919	0.000	15712453	912.777	34.7	78.94- 118.94	101.98
5.066	5.067	-0.001	36810257	952.915	36.2	208.07- 248.07	238.92
Average of Peak Concentrations =					34.2		

Data File: /chem/ecd1a.i/120409.b/041b4101.d
Date : 04-DEC-2009 12:56
Client ID: RE03-09-13867MSD
Sample Info: |120198214|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

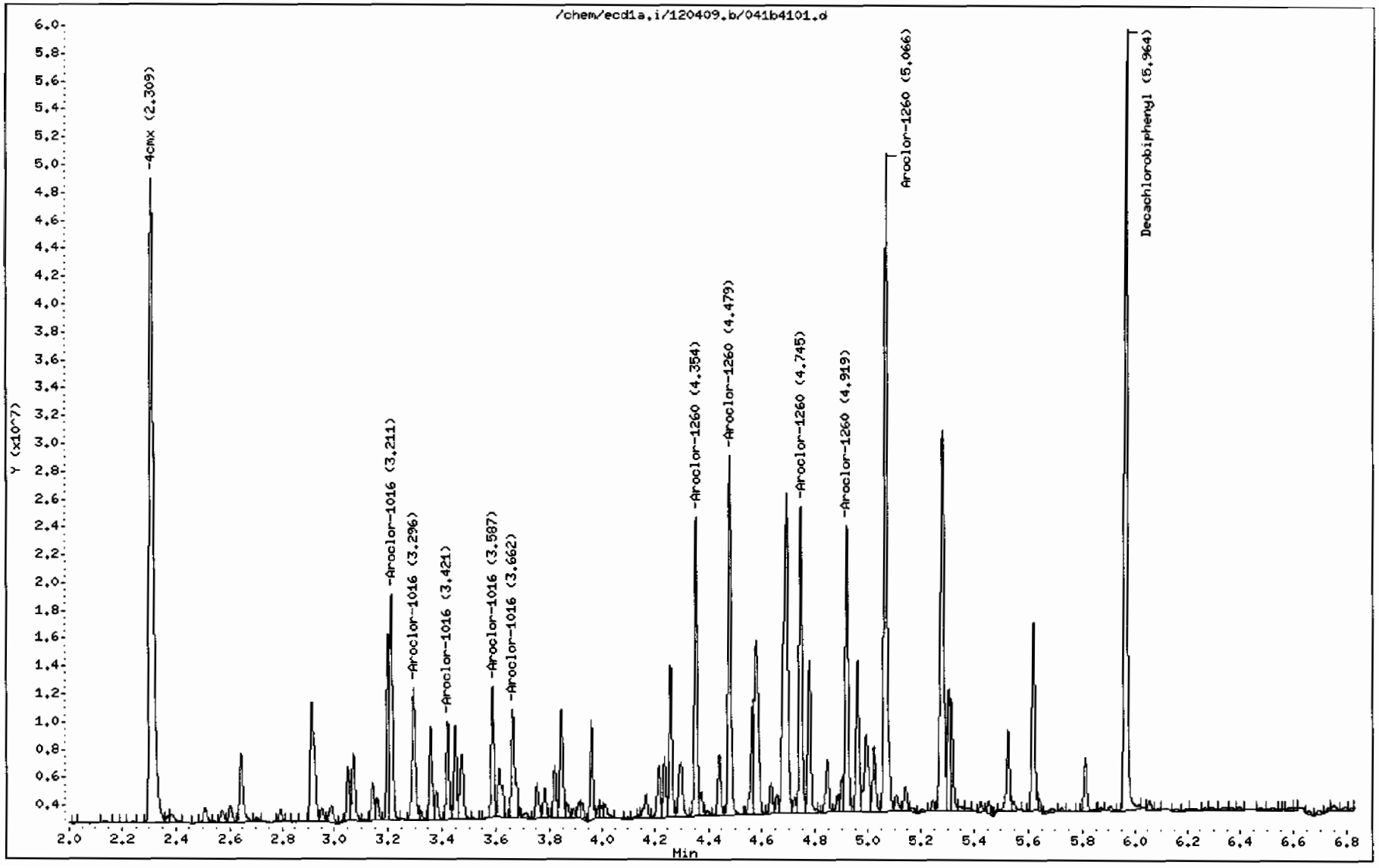

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 11/11/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ600
ALUMINA LOT 1193715-A
COPPER LOT 091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/111009b.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	10-NOV-2009 08:02		111009b	1.0		CLEAN
002f0201.d	WAR091102-60	YS1	10-NOV-2009 08:14		111009b	1.0		DUSE RE-I-CAL
003f0301.d	WAR091102-54	YS1	10-NOV-2009 08:25		111009b	1.0		DUSE RE-I-CAL
004f0401.d	WAR091102-42	YS1	10-NOV-2009 08:35		111009b	1.0		DUSE RE-I-CAL
005f0501.d	WAR091027-48	YS1	10-NOV-2009 08:46		111009b	1.0		DUSE RE-I-CAL
006f0601.d	WAR090930-32	YS1	10-NOV-2009 08:56		111009b	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	10-NOV-2009 09:07		111009b	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	10-NOV-2009 09:17		111009b	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	10-NOV-2009 09:28		111009b	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	YS1	10-NOV-2009 09:38		111009b	1.0		DDT ANALOG STANDARD
011f1101.d	WAR091110-01 60	YS1	10-NOV-2009 09:49		111009b	1.0		AR1660 I-CAL LEVEL 1
012f1201.d	WAR091110-02 60	YS1	10-NOV-2009 09:59		111009b	1.0		AR1660 I-CAL LEVEL 2
013f1301.d	WAR091110-04 60	YS1	10-NOV-2009 10:10		111009b	1.0		AR1660 I-CAL LEVEL 4
014f1401.d	WAR091110-03 60	YS1	10-NOV-2009 10:21		111009b	1.0		AR1660 I-CAL LEVEL 3
015f1501.d	IAR091102-01	YS1	10-NOV-2009 10:31		111009b	1.0		AR1660 I-CAL LEVEL 5

Instrument Batch: /chem/ecd1a.i/111009b.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	WAR091102-60	YS1	10-NOV-2009 10:42		111009b	1.0		PASSED ON BOTH COLUMNS
017f1701.d	WAR091110-05 54	YS1	10-NOV-2009 10:52		111009b	1.0		AR1254 I-CAL LEVEL 1
018f1801.d	WAR091110-06 54	YS1	10-NOV-2009 11:03		111009b	1.0		AR1254 I-CAL LEVEL 2
019f1901.d	WAR091110-07 54	YS1	10-NOV-2009 11:13		111009b	1.0		AR1254 I-CAL LEVEL 3
020f2001.d	WAR091110-08 54	YS1	10-NOV-2009 11:24		111009b	1.0		AR1254 I-CAL LEVEL 4
021f2101.d	IAR091027-01	YS1	10-NOV-2009 11:34		111009b	1.0		AR1254 I-CAL LEVEL 5
022f2201.d	WAR091102-54	YS1	10-NOV-2009 11:45		111009b	1.0		PASSED ON BOTH COLUMNS
023f2301.d	WAR091110-09 42	YS1	10-NOV-2009 11:55		111009b	1.0		AR1242 I-CAL LEVEL 1
024f2401.d	WAR091110-10 42	YS1	10-NOV-2009 12:06		111009b	1.0		AR1242 I-CAL LEVEL 2
025f2501.d	WAR091110-11 42	YS1	10-NOV-2009 12:17		111009b	1.0		AR1242 I-CAL LEVEL 3
026f2601.d	WAR091110-12 42	YS1	10-NOV-2009 12:27		111009b	1.0		AR1242 I-CAL LEVEL 4
027f2701.d	IAR090914-01	YS1	10-NOV-2009 12:38		111009b	1.0		AR1242 I-CAL LEVEL 5
028f2801.d	WAR091102-42	YS1	10-NOV-2009 12:48		111009b	1.0		PASSED ON BOTH COLUMNS
029f2901.d	WAR091110-13 48	YS1	10-NOV-2009 12:59		111009b	1.0		AR1248 I-CAL LEVEL 1
030f3001.d	WAR091110-14 48	YS1	10-NOV-2009 13:09		111009b	1.0		AR1248 I-CAL LEVEL 2
031f3101.d	WAR091110-15 48	YS1	10-NOV-2009 13:20		111009b	1.0		AR1248 I-CAL LEVEL 3
032f3201.d	WAR091110-16 48	YS1	10-NOV-2009 13:30		111009b	1.0		AR1248 I-CAL LEVEL 4
033f3301.d	IAR091027-02	YS1	10-NOV-2009 13:41		111009b	1.0		AR1248 I-CAL LEVEL 5
034f3401.d	WAR091027-48	YS1	10-NOV-2009 13:51		111009b	1.0		PASSED ON BOTH COLUMNS
035f3501.d	WAR090916-99 02	YS1	10-NOV-2009 14:02		111009b	1.0		CLEAN

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201966793	YS1	10-NOV-2009 14:12	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	1201966796	YS1	10-NOV-2009 14:23	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	1201966797	YS1	10-NOV-2009 14:33	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	240542001	YS1	10-NOV-2009 14:44	920460	EUI-7374	25.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	240610001	YS1	10-NOV-2009 14:57	920460	EUI-7377	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201966794	YS1	10-NOV-2009 15:09	920460	EUI-7377		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1201966795	YS1	10-NOV-2009 15:22	920460	EUI-7377		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	WAR091102-60 02	YS1	10-NOV-2009 15:34		111009b		1.0		PASSED ON BOTH COLUMNS
044f4401.d	WAR090916-99 03	YS1	10-NOV-2009 15:45		111009b		1.0		CLEAN
045f4501.d	1201966802	YS1	10-NOV-2009 15:55	920468	240151		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1201966803	YS1	10-NOV-2009 16:08	920468	240151		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	240151001	YS1	10-NOV-2009 16:20	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	1201966804	YS1	10-NOV-2009 16:33	920468	240151		5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201966805	YS1	10-NOV-2009 16:45	920468	240151		5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	240151002	YS1	10-NOV-2009 16:58	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	240151003	YS1	10-NOV-2009 17:11	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	240151004	YS1	10-NOV-2009 17:23	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	240151005	YS1	10-NOV-2009 17:36	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	240151006	YS1	10-NOV-2009 17:48	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	WAR091102-60 03	YS1	10-NOV-2009 18:01		111009b		1.0		PASSED ON BOTH COLUMNS

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 04	YS1	10-NOV-2009 18:12		111009b		1.0	CLEAN
057f5701.d	240151007	YS1	10-NOV-2009 18:22	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	240151008	YS1	10-NOV-2009 18:35	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	240151009	YS1	10-NOV-2009 18:47	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	240151010	YS1	10-NOV-2009 19:00	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	240151011	YS1	10-NOV-2009 19:12	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	240151012	YS1	10-NOV-2009 19:25	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	240151013	YS1	10-NOV-2009 19:38	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	240151014	YS1	10-NOV-2009 19:50	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	240151015	YS1	10-NOV-2009 20:03	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	240151016	YS1	10-NOV-2009 20:15	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	WAR091102-60 04	YS1	10-NOV-2009 20:28		111009b		1.0		PASSED ON BOTH COLUMNS
068f6801.d	WAR090916-99 05	YS1	10-NOV-2009 20:39		111009b		1.0		CLEAN
069f6901.d	240151017	YS1	10-NOV-2009 20:49	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	240151018	YS1	10-NOV-2009 21:02	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	240151019	YS1	10-NOV-2009 21:14	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	240151020	YS1	10-NOV-2009 21:27	920468	240151		5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091102-60 05	YS1	10-NOV-2009 21:40		111009b		1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 06	YS1	10-NOV-2009 21:50		111009b		1.0		CLEAN
075f7501.d	1201967438	YS1	10-NOV-2009 22:00	920740	111009b		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201967439	YS1	10-NOV-2009 22:13	920740	240688	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	240688001	YS1	10-NOV-2009 22:26	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	1201967440	YS1	10-NOV-2009 22:38	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	1201967441	YS1	10-NOV-2009 22:51	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	240688002	YS1	10-NOV-2009 23:04	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	WAR091102-60 06	YS1	10-NOV-2009 23:16		111009b	1.0		PASSED ON BOTH COLUMNS
082f8201.d	WAR090916-99 07	YS1	10-NOV-2009 23:27		111009b	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 12/05/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ454
ALUMINA LOT 1230997-A
COPPER LOT 207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/120409.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	04-DEC-2009 05:23		120409	1.0		CLEAN
002f0201.d	WAR091119-60 01	YS1	04-DEC-2009 05:33		120409	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR091102-54	YS1	04-DEC-2009 05:44		120409	1.0		DUSE PASSED RR FILE 10
004f0401.d	WAR091102-42	YS1	04-DEC-2009 05:54		120409	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091027-48	YS1	04-DEC-2009 06:05		120409	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR090930-32	YS1	04-DEC-2009 06:15		120409	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	04-DEC-2009 06:26		120409	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	04-DEC-2009 06:36		120409	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	04-DEC-2009 06:47		120409	1.0		PATTERN ONLY
010f1001.d	WAR091102-54	YS1	04-DEC-2009 06:57		120409	1.0		PASSED ON BOTH COLUMNS
011f1101.d	WAR091020-DDT	YS1	04-DEC-2009 07:08		120409	1.0		DDT ANALOG STANDARD
012f1201.d	WAR090916-99 02	YS1	04-DEC-2009 07:18		120409	1.0		CLEAN
013f1301.d	1201986700	YS1	04-DEC-2009 07:29	929002	120409	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	1201986701	YS1	04-DEC-2009 07:39	929002	241763	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1201986702	YS1	04-DEC-2009 07:50	929002	241763	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	241763005	YS1	04-DEC-2009 08:00	929002	241763		5.0	IMPA	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	WAR091119-60 02	YS1	04-DEC-2009 08:13		120409		1.0		PASSED ON BOTH COLUMNS
018f1801.d	WAR090916-99 03	YS1	04-DEC-2009 08:23		120409		1.0		CLEAN
019f1901.d	1201985520	YS1	04-DEC-2009 08:34	928531	EUI-7402		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	1201985521	YS1	04-DEC-2009 08:45	928531	EUI-7402		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	1201985524	YS1	04-DEC-2009 08:55	928531	EUI-7402		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	241701001	YS1	04-DEC-2009 09:06	928531	EUI-7402		5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	241705001	YS1	04-DEC-2009 09:18	928531	EUI-7403		1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	241706001	YS1	04-DEC-2009 09:31	928531	EUI-7404		100.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	241795001	YS1	04-DEC-2009 09:43	928531	EUI-7407		100.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	241797001	YS1	04-DEC-2009 09:56	928531	EUI-7408		5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	1201985522	YS1	04-DEC-2009 10:08	928531	EUI-7408		5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	1201985523	YS1	04-DEC-2009 10:21	928531	EUI-7408		5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	WAR091119-60 03	YS1	04-DEC-2009 10:33		120409		1.0		PASSED ON BOTH COLUMNS
030f3001.d	WAR090916-99 04	YS1	04-DEC-2009 10:44		120409		1.0		CLEAN
031f3101.d	242027001	YS1	04-DEC-2009 10:55		EUI-7409		1.0	CARE	SURROGATE LOW RE
032f3201.d	WAR091119-60 04	YS1	04-DEC-2009 11:07		120409		1.0		PASSED ON BOTH COLUMNS
033f3301.d	WAR090916-99 05	YS1	04-DEC-2009 11:18		120409		1.0		CLEAN
034f3401.d	1201982139	YS1	04-DEC-2009 11:28	927083	10-604		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	1201982142	YS1	04-DEC-2009 11:41	927083	10-604		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241540001	YS1	04-DEC-2009 11:53	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	241540002	YS1	04-DEC-2009 12:06	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	241540003	YS1	04-DEC-2009 12:18	927083	10-604	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	241540004	YS1	04-DEC-2009 12:31	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	1201982140	YS1	04-DEC-2009 12:44	927083	AR1660	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201982141	YS1	04-DEC-2009 12:56	927083	10-604		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	241540005	YS1	04-DEC-2009 13:09	927083	10-604		25.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	241540006	YS1	04-DEC-2009 13:22	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	WAR091119-60 05	YS1	04-DEC-2009 13:34		120409		1.0		PASSED ON BOTH COLUMNS
045f4501.d	WAR090916-99 06	YS1	04-DEC-2009 13:45		120409		1.0		CLEAN
046f4601.d	241540007	YS1	04-DEC-2009 13:55	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	241540008	YS1	04-DEC-2009 14:08	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	241540009	YS1	04-DEC-2009 14:20	927083	10-604		5.0	LANL	DUSE RR 25X
049f4901.d	241540010	YS1	04-DEC-2009 14:33	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	241540011	YS1	04-DEC-2009 14:45	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	241540012	YS1	04-DEC-2009 14:58	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	241540013	YS1	04-DEC-2009 15:11	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	241540014	YS1	04-DEC-2009 15:23	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	241540015	YS1	04-DEC-2009 15:36	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	241540016	YS1	04-DEC-2009 15:48	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR091119-60 06	YS1	04-DEC-2009 16:01		120409	1.0		PASSED ON BOTH COLUMNS
057f5701.d	WAR090916-99 07	YS1	04-DEC-2009 16:12		120409	1.0		CLEAN
058f5801.d	241559001	YS1	04-DEC-2009 16:22	927083	10-608-1	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	241559002	YS1	04-DEC-2009 16:35	927083	10-608-1	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	241540009	YS1	04-DEC-2009 16:47	927083	10-604	25.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	WAR091119-60 07	YS1	04-DEC-2009 17:00		120409	1.0		PASSED ON BOTH COLUMNS
062f6201.d	WAR090916-99 08	YS1	04-DEC-2009 17:10		120409	1.0		CLEAN
063f6301.d	1201982309	YS1	04-DEC-2009 17:21	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1201982312	YS1	04-DEC-2009 17:33	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	241819001	YS1	04-DEC-2009 17:46	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	241819002	YS1	04-DEC-2009 17:58	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	241819003	YS1	04-DEC-2009 18:11	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
068f6801.d	241819004	YS1	04-DEC-2009 18:24	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	241819005	YS1	04-DEC-2009 18:36	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	241819006	YS1	04-DEC-2009 18:49	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	241819007	YS1	04-DEC-2009 19:02	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	241819008	YS1	04-DEC-2009 19:14	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091119-60 08	YS1	04-DEC-2009 19:27		120409	1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 09	YS1	04-DEC-2009 19:39		120409	1.0		CLEAN
075f7501.d	241819009	YS1	04-DEC-2009 19:52	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241819010	YS1	04-DEC-2009 20:05	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	241819011	YS1	04-DEC-2009 20:17	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	241819012	YS1	04-DEC-2009 20:30	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	241819013	YS1	04-DEC-2009 20:43	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	241819014	YS1	04-DEC-2009 20:55	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	241819015	YS1	04-DEC-2009 21:08	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
082f8201.d	241819016	YS1	04-DEC-2009 21:20	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	1201982310	YS1	04-DEC-2009 21:33	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	1201982311	YS1	04-DEC-2009 21:46	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	WAR091119-60 09	YS1	04-DEC-2009 21:58		120409	1.0		PASSED ON BOTH COLUMNS
086f8601.d	WAR090916-99 10	YS1	04-DEC-2009 22:09		120409	1.0		CLEAN
087f8701.d	241819017	YS1	04-DEC-2009 22:19	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	241819018	YS1	04-DEC-2009 22:32	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
089f8901.d	241819019	YS1	04-DEC-2009 22:44	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

090f9001.d	241819020	YS1	04-DEC-2009 22:57	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
091f9101.d	WAR091119-60 10	YS1	04-DEC-2009 23:10		120409		1.0		PASSED ON BOTH COLUMNS
092f9201.d	WAR090916-99 11	YS1	04-DEC-2009 23:20		120409		1.0		CLEAN
093f9301.d	1664-4	YS1	04-DEC-2009 23:31		120409		1.0		Screen duse PASSED ON BOTH COLUMNS

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927082 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982139 MB	29-NOV-2009 16:38:35	30	H2SO4/KMn2		2	9	1	0.03333
1201982142 LCS	29-NOV-2009 16:38:35	30	H2SO4/KMn2		2	9	1	0.03333
241540001	29-NOV-2009 16:38:35	30.04	H2SO4/KMn2		2	9	1	0.03329
241540002	29-NOV-2009 16:38:35	30.14	H2SO4/KMn2		2	9	1	0.03318
241540003	29-NOV-2009 16:38:35	30.04	H2SO4/KMn2		2	9	1	0.03329
241540004	29-NOV-2009 16:38:35	30.01	H2SO4/KMn2		2	9	1	0.03332
1201982140 MS (241540004)	29-NOV-2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
1201982141 MSD (241540004)	29-NOV-2009 16:38:35	30.01	H2SO4/KMn2		2	9	1	0.03332
241540005	29-NOV-2009 16:38:35	30.03	H2SO4/KMn2		2	9	1	0.0333
241540006	29-NOV-2009 16:38:35	30.13	H2SO4/KMn2		2	9	1	0.03319
241540007	29-NOV-2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
241540008	29-NOV-2009 16:38:35	30.03	H2SO4/KMn2		2	9	1	0.0333
241540009	29-NOV-2009 16:38:35	30.05	H2SO4/KMn2		2	9	1	0.03328
241540010	29-NOV-2009 16:38:35	30.05	H2SO4/KMn2		2	9	1	0.03328
241540011	29-NOV-2009 16:38:35	30.08	H2SO4/KMn2		2	9	1	0.03324
241540012	29-NOV-2009 16:38:35	30.18	H2SO4/KMn2		2	9	1	0.03313
241540013	29-NOV-2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
241540014	29-NOV-2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
241540015	29-NOV-2009 16:38:35	30.11	H2SO4/KMn2		2	9	1	0.03321
241540016	29-NOV-2009 16:38:35	30.18	H2SO4/KMn2		2	9	1	0.03313
241559001	29-NOV-2009 16:38:35	30.15	H2SO4/KMn2		2	9	1	0.03317
241559002	29-NOV-2009 16:38:35	30.05	H2SO4/KMn2		2	9	1	0.03328

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982142	PCB Laboratory Control	WE091113-07	1	mL
MS	1201982140	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201982141	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/29/09
Clean up Initials: AJS
Verified By: AV
Final Solvent: Hexane
Clean Up SOP: GL-OA-E-037

Monday, November 23, 2009

REQUEST NUMBER: 10-649

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-649

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/23/2009

TURNAROUND/REPORT DUE: 12/23/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13908	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13909	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13910	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13911	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13912	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13913	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7041	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	

Monday, November 23, 2009

REQUEST NUMBER: 10-649

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	
	SW-846:8082	1	RE03-09-13910	S	11/20/2009	
		1	RE03-09-13911	S	11/20/2009	
	SW-846:9012A	1	RE03-09-13908	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13909	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13910	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13911	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13912	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13913	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7041	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	

Final Page of REQUEST NUMBER 10-649

Monday, November 23, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-649

REQUEST NUMBER: 10-649

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/23/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13908	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13910	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13911	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13913	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13912	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13909	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-7041	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-7042	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-7042	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-7043	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-7043	1	POLY	TCN	Sodium Hydroxide	W
RE03-09-13910	1	GLASS	8082	Ice	S
RE03-09-13911	1	GLASS	8082	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/23/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: **RE03-09-13908** **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-20-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		0924	SUB-MEDIA:	OTHER	NA
PRS ID:	03-038(c)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608307		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand, dk brn (7.5YR 4/3)

SAMPLE COMMENTS: Samples collected below asphalt. Depths are recorded below pipe, which is 2.9' below asphalt surface

LOCATION DESC: 38c-1

FIELD SCREENING/MEASUREMENT RESULTS: Background: α 58 dpm, β 1736 ↓ Samples: MDA

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-20-09	(Printed Name)	11-20-09
(Signature)	1320	(Signature)	1320
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 EVENT NAME: Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13909 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-20-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	OTHER	NA
PRS ID:	03-038(c)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608307		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, dk brown (7.5YR 4/3)

SAMPLE COMMENTS: Samples collected below asphalt. Depths are recorded below pipe which is 2.9' below asphalt surface

LOCATION DESC: 38c-1

FIELD SCREENING/MEASUREMENT RESULTS: Background: α: 58 dpm β: 1736 ↓ Samples: < MDA

COLLECTED BY (PRINT) M. Shendo REVIEWED BY (PRINT) J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-20-09	(Printed Name)	11-20-09
(Signature)	1320	(Signature)	1320
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13910 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-20-09	MEDIA:	NA	Alluv
TIME COLLECTED (HH:MM)		~~1050~~ 1100	SUB-MEDIA:	OTHER	NA
PRS ID:	03-038(c)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608308		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD GRID:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: PCB 250 mL Amber Ice Y

Sandy clay fill, dk brn (7.5YR 4/3)

SAMPLE COMMENTS: Samples collected below asphalt. Depths are recorded below pipe, which is 2.9' below asphalt surface.

LOCATION DESC: ~~38c~~ 11-20-09 38c-2

FIELD SCREENING/MEASUREMENT RESULTS: Background: α: 58 dpm β: 1736 ↓ Samples: < MDA

COLLECTED BY (PRINT) M. Shando REVIEWED BY (PRINT) J. Jurado

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jurado	11-20-09	(Printed Name)	11-20-09
(Signature)	1320	(Signature)	1320
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13911 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/20/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1104	SUB-MEDIA:	OTHER	NA
PRS ID:	03-038(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608308	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	
TOP DEPTH:	0	0 1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1' 2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		Metals+CN - GEL	125 ML POLY	Ice	Y	
1		PCB	250 ml Amber	Ice	Y	

SAMPLE DESC: Sand clay fill, dk brn (7.5YR 4/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 38c - 2

FIELD SCREENING/MEASUREMENT RESULTS: BACKGROUND: α: 58 cpm β: 1736 ↓ SAMPLES: < MDA

COLLECTED BY (PRINT) M. Nauck REVIEWED BY (PRINT) J. Josh

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-20-09	(Printed Name)	11-20-09
(Signature)	1320	(Signature)	1320
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13912 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/20/09	MEDIA:	NA	all H
TIME COLLECTED (HH:MM)		1105	SUB-MEDIA:	OTHER	NA
PRS ID:	03-038(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608309	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: ~~PCB 250ml glass ICE Y~~ JLJ 11-20-09

SAMPLE COMMENTS: & Plant Roots in sample

LOCATION DESC: 03-38c-3

FIELD SCREENING/MEASUREMENT RESULTS: Background α: 58 dpm β: 1736 ↓ SAMPLES: L MDA

COLLECTED BY (PRINT) M. Shendo REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-20-09	(Printed Name)	11-20-09
(Signature)	1320	(Signature)	1320
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 EVENT NAME: Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13913 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/20/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		11 10	SUB-MEDIA:	OTHER	Na
PRS ID:	03-038(c)	OK	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608309	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clay & silt

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS: BACKGROUND SAMPLES: LNDA
α: 58 dpm
β: 1736 dpm

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) J. J

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-20-09	(Printed Name)	11-20-09
(Signature)	1320	(Signature)	1320
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-7041 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-20-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0924	SUB-MEDIA:	OTHER	OK
PRS ID:	03-038(c)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608307	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		Metals+CN - GEL	125 ML POLY	Ice	Y	Plus, B, Li, Si, Ti, U

SAMPLE DESC: QC Sample of RE03-09-13908

SAMPLE COMMENTS: Samples collected below asphalt. Depths are recorded below pipe, which is 3.9' below asphalt surface

LOCATION DESC: 38c-1

FIELD SCREENING/MEASUREMENT RESULTS: Background: α 58 dpm, β 1736 ↓ Samples: <MDA

COLLECTED BY (PRINT) L Horne **REVIEWED BY (PRINT)** J. Jul

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jul	11-20-09 1300	(Printed Name)	11-20-09 1300
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-7042 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		20nn ~~11-14-09~~	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		~~0930~~ 0954	SUB-MEDIA:	OTHER	
PRS ID:	03-038(c)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608307	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-08-13909

SAMPLE COMMENTS: NA

LOCATION DESC: 38c-1

FIELD SCREENING/MEASUREMENT RESULTS: NA

Sample < MDA
Alpha = 58 cpm
Beta = 1736 cpm

COLLECTED BY (PRINT) M. Rains

REVIEWED BY (PRINT) J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-20-09	(Printed Name)	11-20-09
(Signature)	1320	(Signature)	1320
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-7043 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-20-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0940	SUB-MEDIA:	OTHER	
PRS ID:	03-038(c)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608307	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ____ COMPOSITE TIME INTERVAL: ____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ____ BOREHOLE DIRECTION: ____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-13909

SAMPLE COMMENTS: NA

LOCATION DESC: 38c-1

FIELD SCREENING/MEASUREMENT RESULTS: NA

Samples < MDA
Alpha = 58 dpm
Beta = 1736 dpm

COLLECTED BY (PRINT) M. Rains **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-20-09	(Printed Name)	11-20-09
(Signature) 1330 ~~1620~~	~~172~~ 11-20-09	(Signature)	1320
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-649 VALIDATION DATE: 02/01/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Mary Donivan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the parent sample for the MS/MSD was a LANL sample from another RN and that the raw data for the parent sample were not included in the data package. The analysis of an MS/MSD is not required for PCBs and, thus, no sample results were qualified.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/02/10

VALIDATOR'S SIGNATURE: Mary A. Donivan DATE: 02/01/2010

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–649	**Date Collected:**	11/20/2009 12:00	**Matrix:**	S
Lab Sample ID:	241711002	**Date Received:**	11/24/2009 09:20	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13910	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927088	**Inst:**	ECD1A.I	**Dilution:**	5
Run Date:	12/02/2009 10:44	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:23	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	035f3501.d	**Column:**	1 CLP1	**Level:**	LOW
	035b3501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.5	ug/kg	6.18	18.5	1
11104–28–2	Aroclor–1221	U	18.5	ug/kg	6.18	18.5	1
11141–16–5	Aroclor–1232	U	18.5	ug/kg	6.18	18.5	1
53469–21–9	Aroclor–1242	U	18.5	ug/kg	6.18	18.5	1
12672–29–6	Aroclor–1248	U	18.5	ug/kg	6.18	18.5	1
11097–69–1	Aroclor–1254	U	18.5	ug/kg	6.18	18.5	1
11096–82–5	Aroclor–1260	U	18.5	ug/kg	6.18	18.5	1

MAD
02/01/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-649	**Date Collected:**	11/20/2009 12:00	**Matrix:**	S
Lab Sample ID:	241711003	**Date Received:**	11/24/2009 09:20	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-13911	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927088	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/02/2009 10:56	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:23	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	1 CLP1	**Level:**	LOW
	036b3601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.88	ug/kg	1.29	3.88	1
11104-28-2	Aroclor-1221	U	3.88	ug/kg	1.29	3.88	1
11141-16-5	Aroclor-1232	U	3.88	ug/kg	1.29	3.88	1
53469-21-9	Aroclor-1242	U	3.88	ug/kg	1.29	3.88	1
12672-29-6	Aroclor-1248	U	3.88	ug/kg	1.29	3.88	1
11097-69-1	Aroclor-1254	U	3.88	ug/kg	1.29	3.88	1
11096-82-5	Aroclor-1260	U	3.88	ug/kg	1.29	3.88	1

MAD
02/01/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-649 VALIDATION DATE: 02/01/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Mary Donivan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the soil MB, B, Mn, Na and Zn were detected. All associated sample results for B were detects ≤5X the MB concentration and, thus, were qualified U,I4. The Na results for samples RE03-09-13910, -09-13911and -09-13909, and the Zn results for samples -09-13908, -09-13910, -09-13909 and -10-7041 were detects >5X but ≤50X the MB concentrations and, thus, were qualified J,I4a. All other associated sample results were detects >50X the MB concentrations and, thus, were not qualified, based on professional judgment.

2. In a CCB associated with the soil samples, U was detected. All associated sample results were detects >5X the CCB concentration and, thus, were not qualified.

   In the CCBs associated with the aqueous samples, Sb, Se and Tl were detected. The Se result for sample -10-7042 and the Tl result for sample -10-7043 were detects ≤5X the greatest associated blank concentrations and, thus, were qualified U,I4b. The remaining associated sample results were NDs and, thus, were not qualified.

3. In the FR blank, sample -10-7042, associated with all samples, Al, Ba, Ca, Cr, Fe, Mg, Mn, Ni, K, Si, Na, Ti and Zn were detected. All associated sample results were detects >5X the greatest FR blank concentrations and, thus, were not qualified.

   In the FB -10-7043, associated with all samples, Mn and Si l were detected. The associated sample results were detects >5X the FB concentrations and, thus, were not qualified.

4. The soil MS %Rs were < the laboratory LAL but ≥10% for Sb, Ba, Co, Pb and Si. The associated sample results for Sb were NDs and, thus, were qualified UJ,I6a. The remaining associated sample results were detects and, thus, were qualified J-,I6a. The soil MS %Rs were > the laboratory UAL for Mg and K. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %Rs were also > the laboratory UAL for Al and Ca and <10% for Fe. However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

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5. The soil duplicate RPDs were >35% and the parent and duplicate sample results were ≥5X the PQLs for Co, Pb and Mn. The associated sample results were detects and, thus, were qualified J,I10a.
6. It should be noted that the parent sample for the aqueous matrix QC was the FR blank, sample -10-7042. No sample data were qualified as a result.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/02/10

VALIDATOR'S SIGNATURE: Mary A. Dennison DATE: 02/01/2010

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

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Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711001 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13908 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16100000	ug/Kg		7490	22000	22000	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-36-0	Antimony UJ,I6a	1100	ug/Kg	UN	363	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-38-2	Arsenic	3.38	mg/kg		0.221	1.1	1.1	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-39-3	Barium J-,I6a	166000	ug/Kg	*N	115	574	574	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-41-7	Beryllium	1	mg/kg	*	0.0221	0.11	0.11	2	MS	BAJ	12/13/09 15:58	091213-5	926645
7440-42-8	Boron U,I4	2740	ug/Kg	J	1100	5510	5510	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-70-2	Calcium	2620000	ug/Kg	*	9180	28700	28700	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-47-3	Chromium	12500	ug/Kg		165	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-48-4	Cobalt J-,I6a	37800	ug/Kg	*N	165	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-50-8	Copper	8850	ug/Kg		330	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576
7439-89-6	Iron	21000000	ug/Kg		8810	27500	27500	1	P	HSC	12/10/09 04:25	120909A-1	926576
7439-92-1	Lead J-,I6a	42600	ug/Kg	*N	275	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576
7439-93-2	Lithium	16.4	mg/kg		0.441	2.21	2.21	2	MS	PRB	12/12/09 21:10	091212-4	926645
7439-95-4	Magnesium J+,I6b	2080000	ug/Kg	N	9760	34400	34400	1	P	HSC	12/17/09 12:40	121709-3	933552
7439-96-5	Manganese J,I10a	3280000	ug/Kg	*	1100	5510	5510	5	P	HSC	12/16/09 13:43	121609A-2	926576
7439-97-6	Mercury	22.9	ug/kg		4.1	12.1	12.1	1	AV	JXL1	12/09/09 12:10	120909S1-6	926816
7440-02-0	Nickel	10.1	mg/kg		0.11	0.441	0.441	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-09-7	Potassium J+,I6b	942000	ug/Kg	N	7350	28700	28700	1	P	HSC	12/17/09 12:40	121709-3	933552
7782-49-2	Selenium	1.1	mg/kg	UN	0.552	1.1	1.1	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-21-3	Silicon J-,I6a	520000	ug/Kg	N	1720	11500	11500	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-22-4	Silver	1170	ug/Kg		110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-23-5	Sodium	377000	ug/Kg		8030	28700	28700	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-28-0	Thallium	0.292	mg/kg		0.0662	0.221	0.221	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-32-6	Titanium	498000	ug/Kg		110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-61-1	Uranium	0.858	mg/kg		0.0146	0.0441	0.0441	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-62-2	Vanadium	47300	ug/Kg		110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-66-6	Zinc J,I4a	25000	ug/Kg		363	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.521	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.52	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.571	g	30	mL	12/08/09	TXB3

MAD
02/01/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711002 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13910 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8750000	ug/Kg		7330	21600	21600	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-36-0	Antimony UJ,I6a	1080	ug/Kg	UN	356	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-38-2	Arsenic	1.97	mg/kg		0.216	1.08	1.08	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-39-3	Barium J-,I6a	39200	ug/Kg	*N	99.9	500	500	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-41-7	Beryllium	0.557	mg/kg	*	0.0216	0.108	0.108	2	MS	BAJ	12/13/09 16:10	091213-5	926645
7440-42-8	Boron U,I4	2240	ug/Kg	J	1080	5390	5390	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-43-9	Cadmium	539	ug/Kg	U	108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-70-2	Calcium	657000	ug/Kg	*	7990	25000	25000	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-47-3	Chromium	14400	ug/Kg		162	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-48-4	Cobalt J-,I6a	4000	ug/Kg	*N	162	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-50-8	Copper	7150	ug/Kg		324	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-89-6	Iron	18500000	ug/Kg		8630	27000	27000	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-92-1	Lead J-,I6a	83700	ug/Kg	*N	270	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-93-2	Lithium	13.2	mg/kg		0.432	2.16	2.16	2	MS	PRB	12/12/09 21:50	091212-4	926645
7439-95-4	Magnesium J+,I6b	1410000	ug/Kg	N	8490	30000	30000	1	P	HSC	12/17/09 13:28	121709-3	933552
7439-96-5	Manganese J,I10a	316000	ug/Kg	*	216	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-97-6	Mercury	17.4	ug/kg		4.03	11.9	11.9	1	AV	JXL1	12/09/09 12:18	120909S1-6	926816
7440-02-0	Nickel	9.06	mg/kg		0.108	0.432	0.432	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-09-7	Potassium J+,I6b	1030000	ug/Kg	N	6400	25000	25000	1	P	HSC	12/17/09 13:28	121709-3	933552
7782-49-2	Selenium	1.08	mg/kg	UN	0.54	1.08	1.08	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-21-3	Silicon J-,I6a	651000	ug/Kg	N	1500	9990	9990	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-22-4	Silver	882	ug/Kg		108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-23-5	Sodium J,I4a	355000	ug/Kg		6990	25000	25000	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-28-0	Thallium	0.179	mg/kg	J	0.0648	0.216	0.216	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-32-6	Titanium	337000	ug/Kg		108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-61-1	Uranium	0.895	mg/kg		0.0143	0.0432	0.0432	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-62-2	Vanadium	33800	ug/Kg		108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-66-6	Zinc J,I4a	24300	ug/Kg		356	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.516	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.515	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.563	g	30	mL	12/08/09	TXB3

MAD
02/01/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711003 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13911 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17900000	ug/Kg		7670	22600	22600	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-36-0	Antimony UJ,I6a	1130	ug/Kg	UN	372	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-38-2	Arsenic	2.7	mg/kg		0.23	1.15	1.15	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-39-3	Barium J-,I6a	118000	ug/Kg	*N	117	583	583	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-41-7	Beryllium	1.02	mg/kg	*	0.023	0.115	0.115	2	MS	BAJ	12/13/09 16:12	091213-5	926645
7440-42-8	Boron U,I4	2480	ug/Kg	J	1130	5640	5640	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-43-9	Cadmium	119	ug/Kg	J	113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-70-2	Calcium	1500000	ug/Kg	*	9330	29100	29100	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-47-3	Chromium	22200	ug/Kg		169	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-48-4	Cobalt J-,I6a	8600	ug/Kg	*N	169	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-50-8	Copper	10700	ug/Kg		338	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-89-6	Iron	20000000	ug/Kg		9020	28200	28200	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-92-1	Lead J-,I6a	58600	ug/Kg	*N	282	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-93-2	Lithium	17.4	mg/kg		0.461	2.3	2.3	2	MS	PRB	12/12/09 21:56	091212-4	926645
7439-95-4	Magnesium J+,I6b	2180000	ug/Kg	N	9910	35000	35000	1	P	HSC	12/17/09 13:35	121709-3	933552
7439-96-5	Manganese J,I10a	649000	ug/Kg	*	226	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-97-6	Mercury	18.3	ug/kg		4.58	13.5	13.5	1	AV	JXL1	12/09/09 12:20	120909S1-6	926816
7440-02-0	Nickel	11.6	mg/kg		0.115	0.461	0.461	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-09-7	Potassium J+,I6b	1230000	ug/Kg	N	7460	29100	29100	1	P	HSC	12/17/09 13:35	121709-3	933552
7782-49-2	Selenium	1.15	mg/kg	UN	0.576	1.15	1.15	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-21-3	Silicon J-,I6a	1060000	ug/Kg	N	1750	11700	11700	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-22-4	Silver	576	ug/Kg		113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-23-5	Sodium J,I4a	333000	ug/Kg		8160	29100	29100	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-28-0	Thallium	0.242	mg/kg		0.0691	0.23	0.23	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-32-6	Titanium	434000	ug/Kg		113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-61-1	Uranium	1.09	mg/kg		0.0152	0.0461	0.0461	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-62-2	Vanadium	35300	ug/Kg		113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-66-6	Zinc	32900	ug/Kg		372	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.517	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.506	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.519	g	30	mL	12/08/09	TXB3

MAD
02/01/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711004 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13913 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	21200000	ug/Kg		7880	23200	23200	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-36-0	Antimony UJ,I6a	1160	ug/Kg	UN	383	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-38-2	Arsenic	3.47	mg/kg		0.233	1.16	1.16	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-39-3	Barium J-,I6a	153000	ug/Kg	*N	106	531	531	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-41-7	Beryllium	1.03	mg/kg	*	0.0233	0.116	0.116	2	MS	BAJ	12/13/09 16:13	091213-5	926645
7440-42-8	Boron U,I4	2540	ug/Kg	J	1160	5800	5800	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-43-9	Cadmium	580	ug/Kg	U	116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-70-2	Calcium	2920000	ug/Kg	*	8500	26600	26600	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-47-3	Chromium	14500	ug/Kg		174	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-48-4	Cobalt J-,I6a	5310	ug/Kg	*N	174	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-50-8	Copper	11100	ug/Kg		348	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-89-6	Iron	15900000	ug/Kg		9270	29000	29000	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-92-1	Lead J-,I6a	15800	ug/Kg	*N	290	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-93-2	Lithium	20.7	mg/kg		0.466	2.33	2.33	2	MS	PRB	12/12/09 22:02	091212-4	926645
7439-95-4	Magnesium J+,I6b	2180000	ug/Kg	N	9030	31900	31900	1	P	HSC	12/17/09 13:42	121709-3	933552
7439-96-5	Manganese J,I10a	216000	ug/Kg	*	232	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-97-6	Mercury	30	ug/kg		4.17	12.3	12.3	1	AV	JXL1	12/09/09 12:22	120909S1-6	926816
7440-02-0	Nickel	10.2	mg/kg		0.116	0.466	0.466	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-09-7	Potassium J+,I6b	1090000	ug/Kg	N	6800	26600	26600	1	P	HSC	12/17/09 13:42	121709-3	933552
7782-49-2	Selenium	1.16	mg/kg	UN	0.582	1.16	1.16	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-21-3	Silicon J-,I6a	508000	ug/Kg	N	1590	10600	10600	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-22-4	Silver	526	ug/Kg	J	116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-23-5	Sodium	794000	ug/Kg		7440	26600	26600	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-28-0	Thallium	0.234	mg/kg		0.0698	0.233	0.233	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-32-6	Titanium	469000	ug/Kg		116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-61-1	Uranium	0.976	mg/kg		0.0154	0.0466	0.0466	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-62-2	Vanadium	28800	ug/Kg		116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-66-6	Zinc	26300	ug/Kg		383	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.503	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.501	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.571	g	30	mL	12/08/09	TXB3

MAD
02/01/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711005 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13912 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9410000	ug/Kg		7620	22400	22400	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-36-0	Antimony UJ,I6a	1120	ug/Kg	UN	370	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-38-2	Arsenic	1.98	mg/kg		0.23	1.15	1.15	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-39-3	Barium J-,I6a	101000	ug/Kg	*N	115	577	577	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-41-7	Beryllium	0.728	mg/kg	*	0.023	0.115	0.115	2	MS	BAJ	12/13/09 16:15	091213-5	926645
7440-42-8	Boron U,I4	2030	ug/Kg	J	1120	5600	5600	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-43-9	Cadmium	228	ug/Kg	J	112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-70-2	Calcium	2120000	ug/Kg	*	9230	28800	28800	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-47-3	Chromium	9790	ug/Kg		168	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-48-4	Cobalt J-,I6a	5500	ug/Kg	*N	168	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-50-8	Copper	9470	ug/Kg		336	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-89-6	Iron	14800000	ug/Kg		8960	28000	28000	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-92-1	Lead J-,I6a	21600	ug/Kg	*N	280	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-93-2	Lithium	11.5	mg/kg		0.46	2.3	2.3	2	MS	PRB	12/12/09 22:08	091212-4	926645
7439-95-4	Magnesium J+,I6b	1590000	ug/Kg	N	9810	34600	34600	1	P	HSC	12/17/09 13:49	121709-3	933552
7439-96-5	Manganese J,I10a	466000	ug/Kg	*	224	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-97-6	Mercury	18.1	ug/kg		4.17	12.3	12.3	1	AV	JXL1	12/09/09 12:23	120909S1-6	926816
7440-02-0	Nickel	8.23	mg/kg		0.115	0.46	0.46	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-09-7	Potassium J+,I6b	1220000	ug/Kg	N	7380	28800	28800	1	P	HSC	12/17/09 13:49	121709-3	933552
7782-49-2	Selenium	1.15	mg/kg	UN	0.574	1.15	1.15	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-21-3	Silicon J-,I6a	693000	ug/Kg	N	1730	11500	11500	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-22-4	Silver	410	ug/Kg	J	112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-23-5	Sodium	969000	ug/Kg		8070	28800	28800	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-28-0	Thallium	0.154	mg/kg	J	0.0689	0.23	0.23	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-32-6	Titanium	343000	ug/Kg		112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-61-1	Uranium	0.958	mg/kg		0.0152	0.046	0.046	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-62-2	Vanadium	24600	ug/Kg		112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-66-6	Zinc	39800	ug/Kg		370	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.515	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.502	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.564	g	30	mL	12/08/09	TXB3

MAD
02/01/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711006 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13909 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12700000	ug/Kg		7290	21400	21400	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-36-0	Antimony UJ,I6a	1070	ug/Kg	UN	354	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-38-2	Arsenic	1.74	mg/kg		0.213	1.06	1.06	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-39-3	Barium J-,I6a	135000	ug/Kg	*N	104	520	520	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-41-7	Beryllium	0.720	mg/kg	*	0.0213	0.106	0.106	2	MS	BAJ	12/13/09 16:17	091213-5	926645
7440-42-8	Boron U,I4	1680	ug/Kg	J	1070	5360	5360	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-43-9	Cadmium	536	ug/Kg	U	107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-70-2	Calcium	2310000	ug/Kg	*	8320	26000	26000	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-47-3	Chromium	9440	ug/Kg		161	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-48-4	Cobalt J-,I6a	4110	ug/Kg	*N	161	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-50-8	Copper	5690	ug/Kg		322	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-89-6	Iron	11500000	ug/Kg		8580	26800	26800	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-92-1	Lead J-,I6a	20800	ug/Kg	*N	268	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-93-2	Lithium	13.8	mg/kg		0.426	2.13	2.13	2	MS	PRB	12/12/09 22:14	091212-4	926645
7439-95-4	Magnesium J+,I6b	1890000	ug/Kg	N	8840	31200	31200	1	P	HSC	12/17/09 13:56	121709-3	933552
7439-96-5	Manganese J,I10a	186000	ug/Kg	*	214	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-97-6	Mercury	21.5	ug/kg		4.5	13.2	13.2	1	AV	JXL1	12/09/09 12:28	120909S1-6	926816
7440-02-0	Nickel	7.01	mg/kg		0.106	0.426	0.426	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-09-7	Potassium J+,I6b	853000	ug/Kg	N	6660	26000	26000	1	P	HSC	12/17/09 13:56	121709-3	933552
7782-49-2	Selenium	1.06	mg/kg	UN	0.532	1.06	1.06	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-21-3	Silicon J-,I6a	521000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-22-4	Silver	352	ug/Kg	J	107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-23-5	Sodium J,I4a	235000	ug/Kg		7280	26000	26000	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-28-0	Thallium	0.202	mg/kg	J	0.0638	0.213	0.213	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-32-6	Titanium	410000	ug/Kg		107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-61-1	Uranium	0.667	mg/kg		0.014	0.0426	0.0426	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-62-2	Vanadium	21100	ug/Kg		107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-66-6	Zinc J,I4a	18500	ug/Kg		354	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.516	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.52	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.502	g	30	mL	12/08/09	TXB3

MAD
02/01/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711007 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-10-7041 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum		13400000	ug/Kg		7220	21200	21200	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-36-0	Antimony	UJ,I6a	1060	ug/Kg	UN	350	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-38-2	Arsenic		3.12	mg/kg		0.213	1.07	1.07	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-39-3	Barium	J-,I6a	140000	ug/Kg	*N	105	523	523	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-41-7	Beryllium		0.874	mg/kg	*	0.0213	0.107	0.107	2	MS	BAJ	12/13/09 16:19	091213-5	926645
7440-42-8	Boron	U,I4	1810	ug/Kg	J	1060	5310	5310	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-43-9	Cadmium		531	ug/Kg	U	106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-70-2	Calcium		2880000	ug/Kg	*	8360	26100	26100	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-47-3	Chromium		10400	ug/Kg		159	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-48-4	Cobalt	J-,I6a	6320	ug/Kg	*N	159	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-50-8	Copper		7270	ug/Kg		318	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-89-6	Iron		14000000	ug/Kg		8490	26500	26500	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-92-1	Lead	J-,I6a	25800	ug/Kg	*N	265	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-93-2	Lithium		15.9	mg/kg		0.427	2.13	2.13	2	MS	PRB	12/12/09 22:19	091212-4	926645
7439-95-4	Magnesium	J+,I6b	2170000	ug/Kg	N	8890	31400	31400	1	P	HSC	12/17/09 14:03	121709-3	933552
7439-96-5	Manganese	J,I10a	403000	ug/Kg	*	212	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-97-6	Mercury		23.4	ug/kg		4.18	12.3	12.3	1	AV	JXL1	12/09/09 12:30	120909S1-6	926816
7440-02-0	Nickel		9.98	mg/kg		0.107	0.427	0.427	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-09-7	Potassium	J+,I6b	936000	ug/Kg	N	6690	26100	26100	1	P	HSC	12/17/09 14:03	121709-3	933552
7782-49-2	Selenium		1.07	mg/kg	UN	0.534	1.07	1.07	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-21-3	Silicon	J-,I6a	469000	ug/Kg	N	1570	10500	10500	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-22-4	Silver		434	ug/Kg	J	106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-23-5	Sodium		381000	ug/Kg		7320	26100	26100	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-28-0	Thallium		0.225	mg/kg		0.064	0.213	0.213	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-32-6	Titanium		434000	ug/Kg		106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-61-1	Uranium		0.808	mg/kg		0.0141	0.0427	0.0427	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-62-2	Vanadium		27500	ug/Kg		106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-66-6	Zinc	J,I4a	22300	ug/Kg		350	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.525	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.522	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.544	g	30	mL	12/08/09	TXB3

MAD
02/01/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241713001 **BASIS:** As Received **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-10-7042 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	344	ug/L		68	200	200	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/20/09 09:05	091219-5	934523
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-39-3	Barium	3.19	ug/L	J	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/15/09 13:22	091215-4	926630
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/15/09 02:30	091214-2	926630
7440-70-2	Calcium	155	ug/L	J	50	200	200	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-47-3	Chromium	4.75	ug/L	J	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/08/09 13:22	120809-1	927388
7439-89-6	Iron	316	ug/L		30	100	100	1	P	HSC	12/08/09 13:22	120809-1	927388
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/15/09 02:30	091214-2	926630
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/15/09 02:30	091214-2	926630
7439-95-4	Magnesium	145	ug/L	J	85	300	300	1	P	HSC	12/08/09 13:22	120809-1	927388
7439-96-5	Manganese	8.59	ug/L		1	5	5	1	MS	PRB	12/15/09 02:30	091214-2	926630
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:56	100809W4-6	926820
7440-02-0	Nickel	1.98	ug/L	J	1.5	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-09-7	Potassium	63.6	ug/L	J	50	150	150	1	P	HSC	12/08/09 13:22	120809-1	927388
7782-49-2	Selenium U,I4b	5.71	ug/L	J	5	30	30	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-21-3	Silicon	735	ug/L		25	100	100	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-23-5	Sodium	286	ug/L	J	100	300	300	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/15/09 02:30	091214-2	926630
7440-32-6	Titanium	8.31	ug/L		1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/15/09 02:30	091214-2	926630
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-66-6	Zinc	5.6	ug/L	J	3.3	10	10	1	P	HSC	12/08/09 13:22	120809-1	927388

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926630	926629	SW846 3005A	25	mL	25	mL	12/14/09	BCD1
926820	926819	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
927388	927387	SW846 3005A	50	mL	50	mL	12/04/09	AXG2

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METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241713002 **BASIS:** As Received **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-10-7043 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/20/09 09:14	091219-5	934523
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/15/09 13:29	091215-4	926630
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/15/09 02:53	091214-2	926630
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/08/09 13:56	120809-1	927388
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/08/09 13:56	120809-1	927388
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/15/09 02:53	091214-2	926630
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/15/09 02:53	091214-2	926630
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/08/09 13:56	120809-1	927388
7439-96-5	Manganese	3.74	ug/L	J	1	5	5	1	MS	PRB	12/15/09 02:53	091214-2	926630
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:08	100809W4-6	926820
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/08/09 13:56	120809-1	927388
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-21-3	Silicon	57.6	ug/L	J	25	100	100	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-28-0	Thallium U,I4b	0.705	ug/L	J	0.3	1	1	1	MS	PRB	12/15/09 02:53	091214-2	926630
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/15/09 02:53	091214-2	926630
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/08/09 13:56	120809-1	927388

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926630	926629	SW846 3005A	25	mL	25	mL	12/14/09	BCD1
926820	926819	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
927388	927387	SW846 3005A	50	mL	50	mL	12/04/09	AXG2

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DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-649 VALIDATION DATE: 02/02/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Mary Donivan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): total CN only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the ICBs and/or CCBs associated with the analysis of all samples, total CN was detected. The associated sample result for RE03-10-7041 was a detect ≤5X the greatest associated blank concentration and, thus, was qualified U,I4b. The remaining associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the parent sample for the matrix QC for the analyses of all soil samples except -09-13909 and -10-7041was from another LANL RN. No sample data were qualified as a result.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/02/10

VALIDATOR'S SIGNATURE: Mary A. Donivan DATE: 02/02/2010

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject If MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13908	Project:	LANL01004
Sample ID:	241711001	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	12.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	78.0	287	ug/kg	1	AXC2 12/01/09	1356	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Company : Los Alamos National Laboratory
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13910	Project:	LANL01004
Sample ID:	241711002	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	10.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	66.4	244	ug/kg	1	AXC2 12/01/09	1357	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13911	Project:	LANL01004
Sample ID:	241711003	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	14.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.3	291	ug/kg	1	AXC2 12/01/09	1357	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13913	Project:	LANL01004
Sample ID:	241711004	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	14.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.4	270	ug/kg	1	AXC2 12/01/09	1358	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13912	Project:	LANL01004
Sample ID:	241711005	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	13.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.8	253	ug/kg	1	AXC2 12/01/09	1359	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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02/02/10

GEL LABORATORIES LLC

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Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13909	Project:	LANL01004
Sample ID:	241711006	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	9.63%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2 12/03/09	1138	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
02/02/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-10-7041	Project:	LANL01004
Sample ID:	241711007	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	J	174	U,I4b	68.9	253	ug/kg	1	AXC2 12/03/09	1142	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
02/02/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 4, 2009

Client SDG: 10-649-1

Client Sample ID:	RE03-10-7042	Project:	LANL01004
Sample ID:	241713001	Client ID:	LANL010
Matrix:	W		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1341	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
02/02/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 4, 2009

Client SDG: 10-649-1

Client Sample ID: RE03-10-7043
Sample ID: 241713002
Matrix: W
Collect Date: 20-NOV-09 12:00
Receive Date: 24-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1344	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
02/02/10

Monday, November 23, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-649

REQUEST NUMBER: 10-649

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/23/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 241711, 241713

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13908	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13910	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13911	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13913	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13912	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13909	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-7041	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-7042	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-7042	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-7043	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-7043	1	POLY	TCN	Sodium Hydroxide	W
RE03-09-13910	1	GLASS	8082	Ice	S
RE03-09-13911	1	GLASS	8082	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/23/09	1400	Patricia Dover-Dent	[illegible]	11-24-09	09:20
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:	Date	Time	Remarks:
Printed Name	Signature		

Monday, November 23, 2009

REQUEST NUMBER: 10-649

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-649
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/23/2009
TURNAROUND/REPORT DUE: 12/23/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13908	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13909	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13910	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13911	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13912	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13913	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7041	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	

Monday, November 23, 2009

REQUEST NUMBER: 10-649

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	
	SW-846:8082	1	RE03-09-13910	S	11/20/2009	
		1	RE03-09-13911	S	11/20/2009	
	SW-846:9012A	1	RE03-09-13908	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13909	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13910	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13911	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13912	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13913	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7041	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	

Final Page of REQUEST NUMBER 10-649

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 30, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241711 241713
SDG: 10-649

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 24, 2009, and analyzed for GC Semivolatile PCB, General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-649
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241711 and 241713
SDG: 10-649

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- Quality Control Summary 181
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- Sample Data Summary 874
- Quality Control Summary 879
- Standards 934
- Raw Data 947
- Miscellaneous 1249

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- Case Narrative 1299
- Sample Data Summary 1304
- Quality Control Summary 1313
- Instrument QC Data Summary 1316
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- Miscellaneous 1338

General Chemistry Analysis **1340**
- Case Narrative 1341
- Sample Data Summary 1346

Quality Control Summary..... 1350
Instrument QC Data Summary 1353
Cyanide, Total 1355

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241711 and 241713
SDG # : 10-649

November 30, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 24, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. The TCN container was preserved prior to analysis. There are no additional comments concerning sample receipt. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241711001	RE03-09-13908
241711002	RE03-09-13910
241711003	RE03-09-13911
241711004	RE03-09-13913
241711005	RE03-09-13912
241711006	RE03-09-13909
241711007	RE03-10-7041
241713001	RE03-10-7042
241713002	RE03-10-7043

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC Semivolatile PCB, General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for Francis

Valerie Davis
Project Manager

List of current GEL Certifications as of 30 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Monday, November 23, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-649

REQUEST NUMBER: 10-649

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/23/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241711, 241713

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13908	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13910	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13911	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13913	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13912	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-13909	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-7041	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-7042	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-7042	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-7043	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-7043	1	POLY	TCN	Sodium Hydroxide	W
RE03-09-13910	1	GLASS	8082	Ice	S
RE03-09-13911	1	GLASS	8082	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/23/09	14:00	Patricia Dover-Dent	[illegible]	11-24-09	09:20
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, November 23, 2009

REQUEST NUMBER: 10-649

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-649

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/23/2009

TURNAROUND/REPORT DUE: 12/23/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13908	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13909	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13910	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13911	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13912	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13913	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7041	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	

Monday, November 23, 2009

REQUEST NUMBER: 10-649

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	
	SW-846:8082	1	RE03-09-13910	S	11/20/2009	
		1	RE03-09-13911	S	11/20/2009	
	SW-846:9012A	1	RE03-09-13908	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13909	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13910	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13911	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13912	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13913	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7041	S	11/20/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-7042	W	11/20/2009	
		1	RE03-10-7043	W	11/20/2009	

Final Page of REQUEST NUMBER 10-649

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-649**
Received By:Patricia Dover-Dent	**Date Received:November 24, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **2-5,14**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?			X	Sample ID's, containers affected and observed pH:**RE03-10-7042 for TCN** If Preservative added, Lot#: **C090917**
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time on Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S
7209 7849 0046 2C
7209 7849 0057 2C
7209 7849 0068 2C
7209 7849 0079 3C
7209 7849 0090 4C
7209 7849 0080 5C
7209 7849 0035 14C

PM (or PMA) review: Initials NF Date 11/25/09

Subject: Sample Receipt for 11/25/09
From: Dionne Francis <Dionne.Francis@gel.com>
Date: Wed, 25 Nov 2009 10:16:51 -0500
To: "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylenev@lanl.gov>, Valerie Davis <vsd@gel.com>

Keith,

RN 10-649, the TCN container for sample RE03-10-7042 was received unpreserved. The lab will preserve prior to analysis.

RN 10-650, the lab rec'd (1) 40ml vial 8260B container for sample WST54-10-4989 instead of (2) as indicated on the COC.

RN 10-648, the lab rec'd (1) 40ml vial 8260B container for sample WST03-10-2187 instead of (2) as indicated on the COC.

Thanks,
Dionne

--
Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

Let the Bible fill the memory, rule the heart, and guide the feet.

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23NOV09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

2C

FedEx Express

3 of 3
MPS# 0263 7209 7849 0046
Mstr# 7209 7849 0024 0201

TUE - 24NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRTT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23NOV09
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

2C

FedEx Express

1 of 2
TRK# 0201 7209 7849 0057
MM MASTER MM

TUE - 24NOV A1
PRIORITY OVERNIGH

XX CHSA

29407
SC-U
CHS

Part # 156148-434 NRTT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23NOV09
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

2C

FedEx Express

2 of 2
MPS# 0263 7209 7849 0068
Mstr# 7209 7849 0057 0201

TUE - 24NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23NOV09
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

3C

FedEx Express

TRK# 0201 7209 7849 0079

TUE - 24NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9060
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23NOV09
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
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TUE - 24NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9060
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

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2 of 3

MPS# 0263 7209 7849 0035

Mstr# 7209 7849 0024 0201

TUE - 24NOV A1
PRIORITY OVERNIGHT

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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-649

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927088
Prep Batch Number:	927085

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241711002	RE03-09-13910
241711003	RE03-09-13911
1201982151	Method Blank (MB)
1201982154	Laboratory Control Sample (LCS)
1201982152	241609007(RE03-09-13921) Matrix Spike (MS)
1201982153	241609007(RE03-09-13921) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-640) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
Sample 241711002 (RE03-09-13910) was diluted at 1:5 due to sample matrix.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually

generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock Date: 12-21-2009

Roadmap for LANL 10-649 PCB

This roadmap was analyzed by yip00818 on 12-03-2009, 07:35.
This roadmap was reviewed by jcb on 12-03-2009, 10:27.
This roadmap was packaged by yml on 12-20-2009, 06:29.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120209.b/035f3501.d	241711002	sample	02-DEC-2009	10:44	10-649.sub	RE03-09-13910	5.00000	927088	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120209.b/036f3601.d	241711003	sample	02-DEC-2009	10:56	10-649.sub	RE03-09-13911	1.00000	927088	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120209.b/035b3501.d	241711002	sample	02-DEC-2009	10:44	10-649.sub	RE03-09-13910	5.00000	927088	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120209.b/036b3601.d	241711003	sample	02-DEC-2009	10:56	10-649.sub	RE03-09-13911	1.00000	927088	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120209.b/020f2001-1.d	1201982151	mb	02-DEC-2009	07:43	10-649.sub	PBLK01	1.00000	927088	
☐	N	/chem/ecd1a.i/120209.b/021f2101-1.d	1201982154	lcs	02-DEC-2009	07:54	10-649.sub	PBLK01LCS	1.00000	927088	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120209.b/020b2001-1.d	1201982151	mb	02-DEC-2009	07:43	10-649.sub	PBLK01	1.00000	927088	
☐	N	/chem/ecd1a.i/120209.b/021b2101-1.d	1201982154	lcs	02-DEC-2009	07:54	10-649.sub	PBLK01LCS	1.00000	927088	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–649	**Date Collected:**	11/20/2009 12:00	**Matrix:**	S
Lab Sample ID:	241711002	**Date Received:**	11/24/2009 09:20	**%Moisture:**	10.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13910	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927088	**Inst:**	ECD1A.I	**Dilution:**	5
Run Date:	12/02/2009 10:44	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:23	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	035f3501.d	**Column:**	1 CLP1	**Level:**	LOW
	035b3501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.5	ug/kg	6.18	18.5	1
11104–28–2	Aroclor–1221	U	18.5	ug/kg	6.18	18.5	1
11141–16–5	Aroclor–1232	U	18.5	ug/kg	6.18	18.5	1
53469–21–9	Aroclor–1242	U	18.5	ug/kg	6.18	18.5	1
12672–29–6	Aroclor–1248	U	18.5	ug/kg	6.18	18.5	1
11097–69–1	Aroclor–1254	U	18.5	ug/kg	6.18	18.5	1
11096–82–5	Aroclor–1260	U	18.5	ug/kg	6.18	18.5	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–649	**Date Collected:**	11/20/2009 12:00	**Matrix:**	S
Lab Sample ID:	241711003	**Date Received:**	11/24/2009 09:20	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13911	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927088	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/02/2009 10:56	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:23	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	1 CLP1	**Level:**	LOW
	036b3601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.88	ug/kg	1.29	3.88	1
11104–28–2	Aroclor–1221	U	3.88	ug/kg	1.29	3.88	1
11141–16–5	Aroclor–1232	U	3.88	ug/kg	1.29	3.88	1
53469–21–9	Aroclor–1242	U	3.88	ug/kg	1.29	3.88	1
12672–29–6	Aroclor–1248	U	3.88	ug/kg	1.29	3.88	1
11097–69–1	Aroclor–1254	U	3.88	ug/kg	1.29	3.88	1
11096–82–5	Aroclor–1260	U	3.88	ug/kg	1.29	3.88	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-649

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1201982151	MB for batch 927085	57		57		76		77	
1201982154	LCS for batch 927085	48		49		70		72	
241711002	RE03-09-13910	41	D	43	D	42	D	46	D
241711003	RE03-09-13911	50		50		50		52	

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-649
Client ID: LCS for batch 927085
Lab Sample ID: 1201982154
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/02/2009 07:54
Dilution: 1
Prep Batch ID 927085
Batch ID: 927088

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	20.4	61	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	24.1	72	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–640
Client ID: RE03–09–13921MS
Lab Sample ID: 1201982152
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 18.6
Analysis Date: 12/02/2009 09:53
Prep Batch ID: 927085
Batch ID: 927088
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	MS	Aroclor–1016	40.9	0.00	U	19.5	48	23–117
11096–82–5	MS	Aroclor–1260	40.9	0.00	U	22.5	55	27–116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–640**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03–09–13921MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201982153**	**%Moisture:**	**18.6**
Instrument:	**ECD1A.I**	**Analysis Date:**	**12/02/2009 10:06**
Analyst:	**YS1**	**Prep Batch ID:**	**927085**
Inj. Vol:	**1 uL**	**Batch ID:**	**927088**

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	40.8	0.00	U	20.9	51	23–117	7	0–30
11096–82–5	MSD Aroclor–1260	40.8	0.00	U	24.6	60	27–116	9	0–30

Method Blank Summary

SDG Number:	10-649	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927085	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	020b2001-1.d 020f2001-1.d
Lab Sample ID:	1201982151				
Column:	CLP2 CLP1	Prep Date:	11/30/2009 11:23	Analyzed:	12/02/09 07:43
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927085	1201982154	021f2101-1.d 021b2101-1.d	12/02/09	0754
04 RE03-09-13910	241711002	035f3501.d 035b3501.d	12/02/09	1044
05 RE03-09-13911	241711003	036f3601.d 036b3601.d	12/02/09	1056

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–649**	**Date Collected:**	**11/20/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241711002**	**Date Received:**	**11/24/2009 09:20**	**%Moisture:**	**10.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–13910**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927088**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**12/02/2009 10:44**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:23**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**035f3501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	035b3501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.5	ug/kg	6.18	18.5	1
11104–28–2	Aroclor–1221	U	18.5	ug/kg	6.18	18.5	1
11141–16–5	Aroclor–1232	U	18.5	ug/kg	6.18	18.5	1
53469–21–9	Aroclor–1242	U	18.5	ug/kg	6.18	18.5	1
12672–29–6	Aroclor–1248	U	18.5	ug/kg	6.18	18.5	1
11097–69–1	Aroclor–1254	U	18.5	ug/kg	6.18	18.5	1
11096–82–5	Aroclor–1260	U	18.5	ug/kg	6.18	18.5	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/035f3501.d
Lab Smp Id: 241711002 Client Smp ID: RE03-09-13910
Inj Date : 02-DEC-2009 10:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241711002|5|
Misc Info : |ECD82P_1SF|927088|SVAF|LANL|SOIL|RE03-09-13910|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 12:32 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 35
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	10.16750	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.971	0.000	7322730	16.4086	3.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	6824478	16.6957	3.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120209.b/035f3501.d

Date : 02-DEC-2009 10:44

Client ID: RE03-09-13910

Sample Info: |241711002|5|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

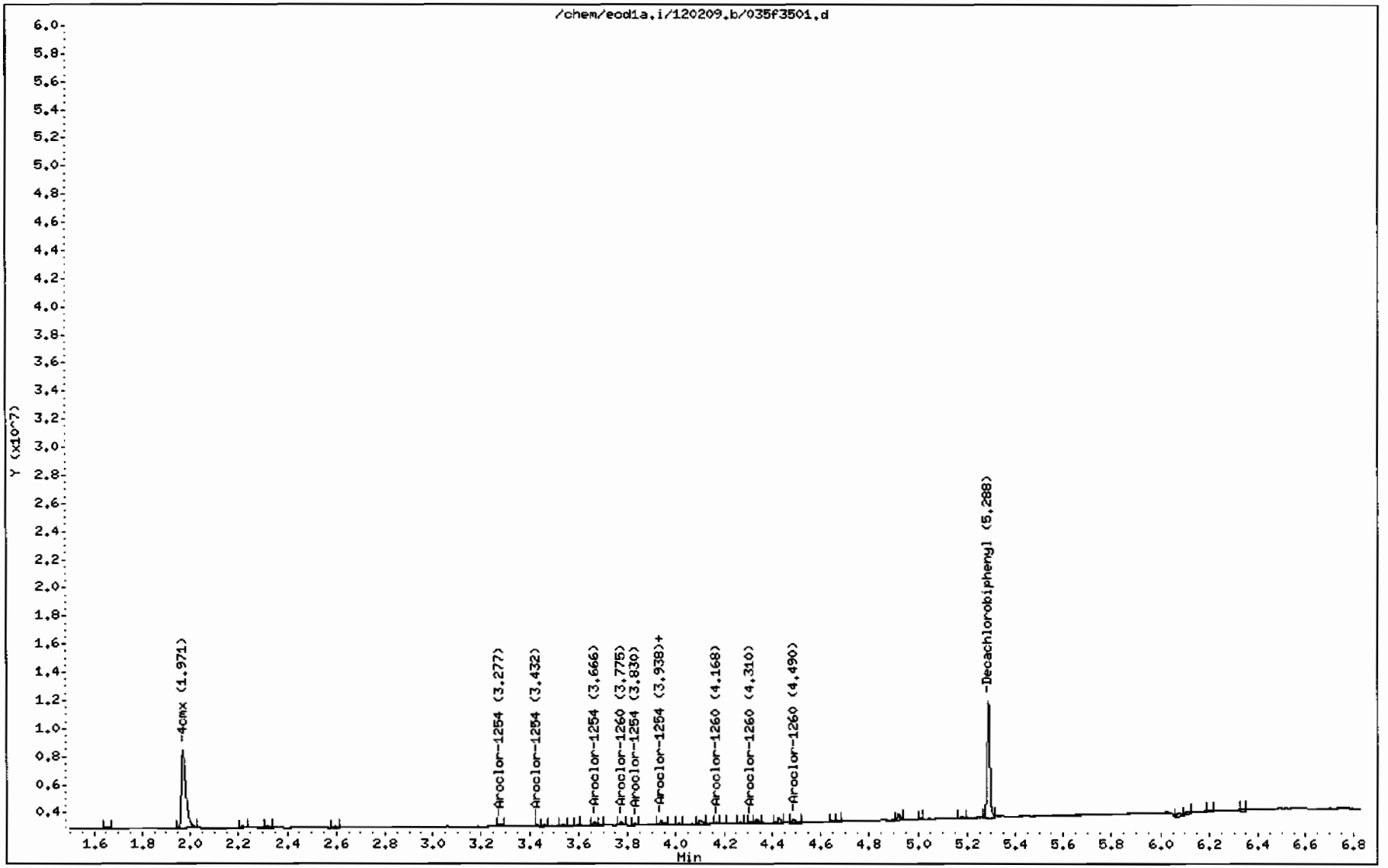

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/035b3501.d
Lab Smp Id: 241711002 Client Smp ID: RE03-09-13910
Inj Date : 02-DEC-2009 10:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241711002|5|
Misc Info : |ECD82P_1SF|927088|SVAF|LANL|SOIL|RE03-09-13910|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 12:31 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 35
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	10.16750	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	6408995	17.2612	3.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	5497796	18.2907	3.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120209.b/035b3501.d

Date : 02-DEC-2009 10:44

Client ID: RE03-09-13910

Sample Info: |241711002151

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

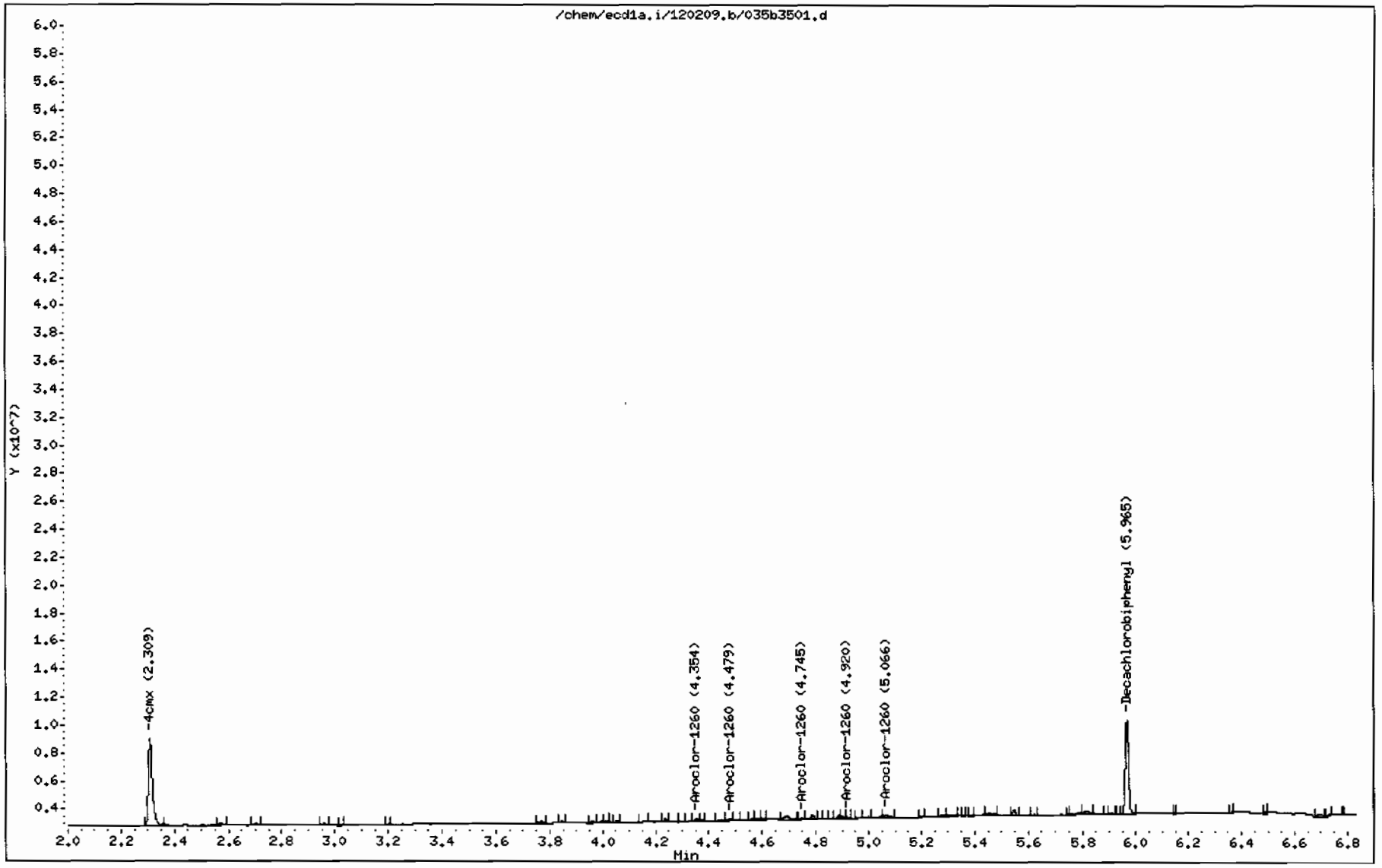

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–649	**Date Collected:**	11/20/2009 12:00	**Matrix:**	S
Lab Sample ID:	241711003	**Date Received:**	11/24/2009 09:20	**%Moisture:**	14.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–13911	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927088	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/02/2009 10:56	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:23	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	1 CLP1	**Level:**	LOW
	036b3601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.88	ug/kg	1.29	3.88	1
11104–28–2	Aroclor–1221	U	3.88	ug/kg	1.29	3.88	1
11141–16–5	Aroclor–1232	U	3.88	ug/kg	1.29	3.88	1
53469–21–9	Aroclor–1242	U	3.88	ug/kg	1.29	3.88	1
12672–29–6	Aroclor–1248	U	3.88	ug/kg	1.29	3.88	1
11097–69–1	Aroclor–1254	U	3.88	ug/kg	1.29	3.88	1
11096–82–5	Aroclor–1260	U	3.88	ug/kg	1.29	3.88	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/036f3601.d
Lab Smp Id: 241711003 Client Smp ID: RE03-09-13911
Inj Date : 02-DEC-2009 10:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241711003|1|
Misc Info : |ECD82P_1SF|927088|SVAF|LANL|SOIL|RE03-09-13911|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 12:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	14.22460	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.971	0.000	44474429	99.6573	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	40789178	99.7885	3.9	80.00- 120.00	100.00

Data File: /chem/ecdia.i/120209.b/036f3601.d
Date : 02-DEC-2009 10:56
Client ID: RE03-09-13911
Sample Info: 1241711003111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

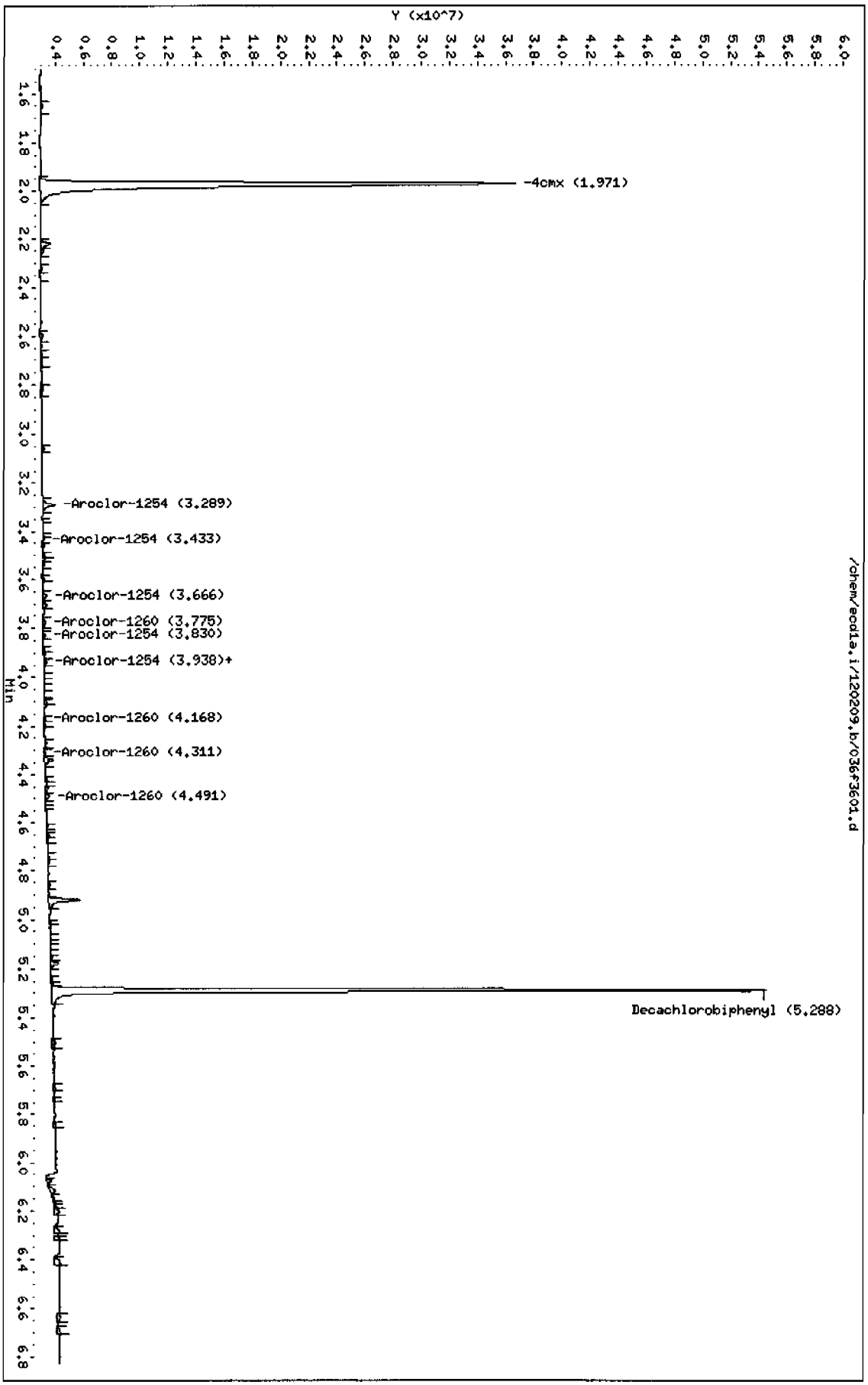

Page 1

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/036b3601.d
Lab Smp Id: 241711003 Client Smp ID: RE03-09-13911
Inj Date : 02-DEC-2009 10:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241711003|1|
Misc Info : |ECD82P_1SF|927088|SVAF|LANL|SOIL|RE03-09-13911|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 12:31 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	14.22460	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	37295402	100.447	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	31265727	104.019	4.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120209.b/036b3601.d

Date : 02-DEC-2009 10:56

Client ID: RE03-09-13911

Sample Info: |241711003|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

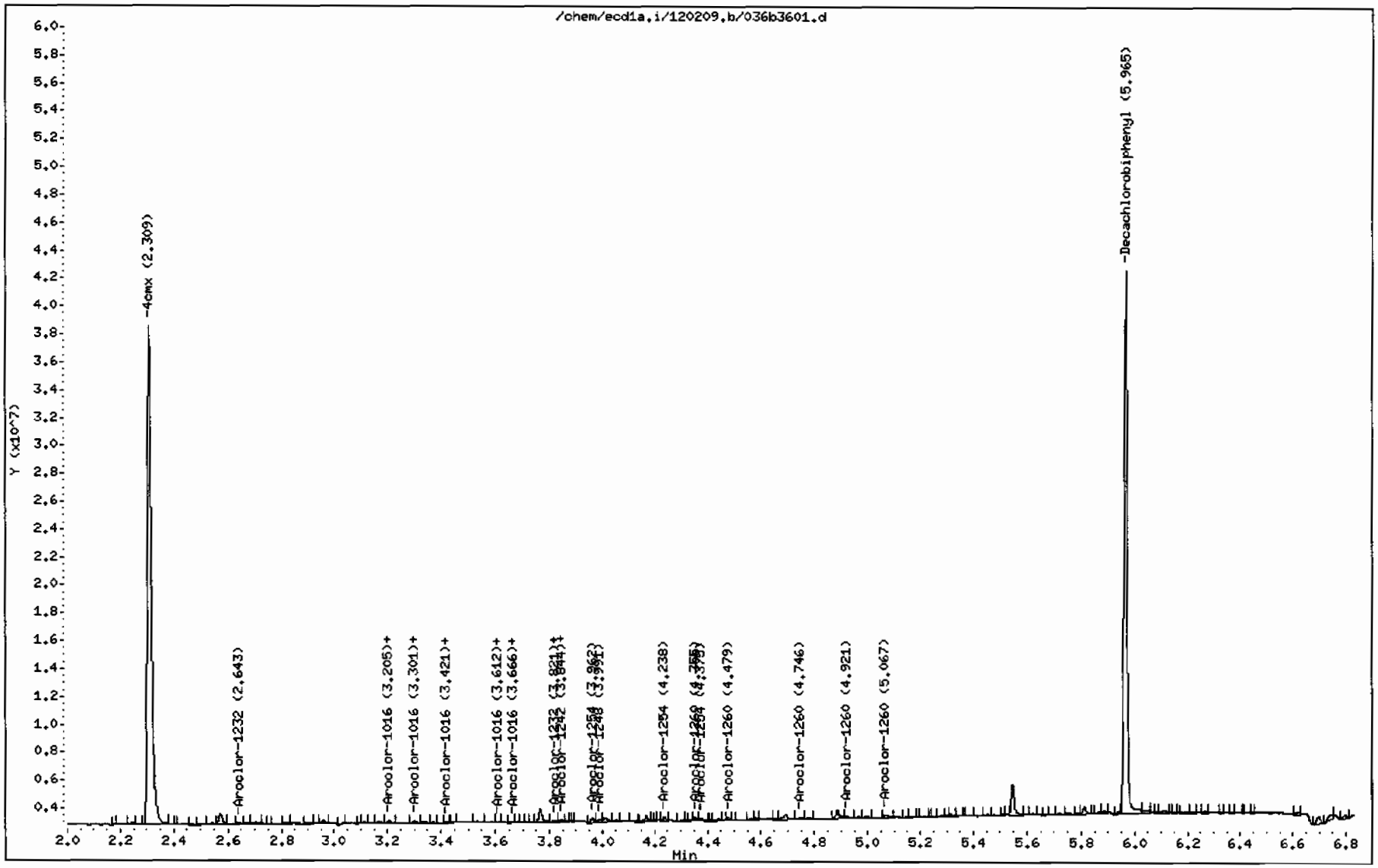

STANDARDS DATA

Report Date: 03-Dec-2009 06:20

Calibration History

Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Start Cal Date: 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010f1001.d
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029f2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023f2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017f1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011f1101.d
Cal Level: 2 , Cal Amount: 200.00000		
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011f1101.d
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030f3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024f2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018f1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012f1201.d
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031f3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025f2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019f1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014f1401.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032f3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026f2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020f2001.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010f1001.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013f1301.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008f0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007f0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006f0601.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013f1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014f1401.d
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033f3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027f2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021f2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 18:39	AR1660	/chem/ecd1a.i/120209.b/074f7401.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 23:42	AR1660	/chem/ecd1a.i/120209.b/098f9801.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 22:14	AR1660	/chem/ecd1a.i/120209.b/091f9101.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 21:11	AR1660	/chem/ecd1a.i/120209.b/086f8601.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 17:23	AR1660	/chem/ecd1a.i/120209.b/068f6801.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 15:21	AR1660	/chem/ecd1a.i/120209.b/058f5801.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 14:10	AR1660	/chem/ecd1a.i/120209.b/052f5201.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 11:47	AR1660	/chem/ecd1a.i/120209.b/040f4001.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 09:20	AR1660	/chem/ecd1a.i/120209.b/028f2801.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 07:22	AR1660	/chem/ecd1a.i/120209.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 05:37	AR1268	/chem/ecd1a.i/120209.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 05:26	AR1262	/chem/ecd1a.i/120209.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 05:16	AR1221	/chem/ecd1a.i/120209.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 05:05	AR1232	/chem/ecd1a.i/120209.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 04:55	AR1248	/chem/ecd1a.i/120209.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 04:44	AR1242	/chem/ecd1a.i/120209.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
02-DEC-2009 04:34	AR1254	/chem/ecd1a.i/120209.b/003f0301.d

| Ccal Level: 4 , Ccal Amount: 1000 |

| 02-DEC-2009 04:23 | AR1660 | /chem/ecd1a.i/120209.b/002f0201.d |

Report Date: 03-Dec-2009 06:19

Calibration History

Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Start Cal Date: 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029b2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023b2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017b1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011b1101.d
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010b1001.d
Cal Level: 2 , Cal Amount: 200.00000		
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030b3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024b2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018b1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012b1201.d
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011b1101.d
Cal Level: 3 , Cal Amount: 500.00000		
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031b3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025b2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019b1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014b1401.d
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012b1201.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032b3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026b2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020b2001.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013b1301.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010b1001.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008b0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007b0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006b0601.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013b1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033b3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027b2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021b2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015b1501.d
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014b1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 23:42 | AR1660 | /chem/ecd1a.i/120209.b/098b9801.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 18:39 | AR1660 | /chem/ecd1a.i/120209.b/074b7401.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 17:23 | AR1660 | /chem/ecd1a.i/120209.b/068b6801.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 22:14 | AR1660 | /chem/ecd1a.i/120209.b/091b9101.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 21:11 | AR1660 | /chem/ecd1a.i/120209.b/086b8601.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 15:21 | AR1660 | /chem/ecd1a.i/120209.b/058b5801.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 14:10 | AR1660 | /chem/ecd1a.i/120209.b/052b5201.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 11:47 | AR1660 | /chem/ecd1a.i/120209.b/040b4001.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 09:20 | AR1660 | /chem/ecd1a.i/120209.b/028b2801.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 07:22 | AR1660 | /chem/ecd1a.i/120209.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 05:37 | AR1268 | /chem/ecd1a.i/120209.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 05:26 | AR1262 | /chem/ecd1a.i/120209.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 05:16 | AR1221 | /chem/ecd1a.i/120209.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 05:05 | AR1232 | /chem/ecd1a.i/120209.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 04:55 | AR1248 | /chem/ecd1a.i/120209.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 04:44 | AR1242 | /chem/ecd1a.i/120209.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 04:34 | AR1254 | /chem/ecd1a.i/120209.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000
02-DEC-2009 04:23 | AR1660 | /chem/ecd1a.i/120209.b/002b0201.d

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COMPOUND LISTING

Method file : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 05:07 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.431	2.401-2.461	1.709e+04
	2.720	2.690-2.750	2.124e+04
	2.801	2.771-2.831	1.403e+04
	2.838	2.808-2.868	8.417e+03
	3.050	3.020-3.080	1.079e+04
63 4,4-DDD	3.961	3.941-3.981	4.873e+05
64 4,4-DDE	3.611	3.591-3.631	4.621e+05
62 4,4-DDT	4.125	4.105-4.145	1.399e+05
2 Aroclor-1221	2.085	2.055-2.115	5.950e+03
	2.179	2.149-2.209	3.282e+03
	2.205	2.175-2.235	1.440e+04
3 Aroclor-1232	2.431	2.401-2.461	7.786e+03
	2.720	2.690-2.750	1.025e+04
	2.801	2.771-2.831	6.616e+03
	3.050	3.020-3.080	4.921e+03
	3.304	3.274-3.334	4.520e+03
4 Aroclor-1242	2.430	2.400-2.460	1.503e+04
	2.719	2.689-2.749	1.854e+04
	2.839	2.809-2.869	7.392e+03
	3.049	3.019-3.079	9.592e+03
	3.304	3.274-3.334	9.387e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/120209.b/ECD1-F-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.102	3.072-3.132	9.766e+03
	3.253	3.223-3.283	8.699e+03
	3.304	3.274-3.334	1.693e+04
	3.437	3.407-3.467	1.387e+04
	3.669	3.639-3.699	9.663e+03
6 Aroclor-1254	3.279	3.249-3.309	1.533e+04
	3.435	3.405-3.465	2.093e+04
	3.668	3.638-3.698	2.652e+04
	3.832	3.802-3.862	2.040e+04
	3.940	3.910-3.970	2.023e+04
7 Aroclor-1260	3.776	3.746-3.806	2.145e+04
	3.939	3.909-3.969	3.220e+04
	4.169	4.139-4.199	2.046e+04
	4.311	4.281-4.341	2.008e+04
	4.491	4.461-4.521	4.630e+04
8 Aroclor-1262	3.777	3.747-3.807	1.805e+04
	3.940	3.910-3.970	2.434e+04
	4.170	4.140-4.200	3.192e+04
	4.313	4.283-4.343	2.761e+04
	4.492	4.462-4.522	5.903e+04
9 Aroclor-1268	4.677	4.647-4.707	6.476e+04
	4.699	4.669-4.729	6.428e+04
	4.812	4.782-4.842	4.874e+04
	5.015	4.985-5.045	2.069e+04
	5.181	5.151-5.211	1.402e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.971	1.941-2.001	4.463e+05
$ 12 Decachlorobiphenyl	5.290	5.260-5.320	4.088e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 05:56 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.212	3.182-3.242	1.686e+04
	3.296	3.266-3.326	1.154e+04
	3.421	3.391-3.451	6.951e+03
	3.587	3.557-3.617	9.181e+03
	3.663	3.633-3.693	8.509e+03
62 4,4-DDT	4.695	4.675-4.715	8.846e+04
63 4,4-DDE	4.163	4.143-4.183	3.629e+05
64 4,4-DDD	4.509	4.489-4.529	3.599e+05
2 Aroclor-1221	2.508	2.478-2.538	5.108e+03
	2.604	2.574-2.634	3.283e+03
	2.645	2.615-2.675	1.145e+04
3 Aroclor-1232	2.645	2.615-2.675	7.297e+03
	3.213	3.183-3.243	8.233e+03
	3.297	3.267-3.327	5.504e+03
	3.588	3.558-3.618	4.272e+03
	3.822	3.792-3.852	4.143e+03
4 Aroclor-1242	3.212	3.182-3.242	1.482e+04
	3.296	3.266-3.326	1.016e+04
	3.588	3.558-3.618	8.262e+03
	3.664	3.634-3.694	7.732e+03
	3.850	3.820-3.880	9.404e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.423	3.393-3.453	1.037e+04
	3.588	3.558-3.618	1.280e+04
	3.823	3.793-3.853	1.461e+04
	3.850	3.820-3.880	1.623e+04
	3.988	3.958-4.018	1.566e+04
6 Aroclor-1254	3.423	3.393-3.453	8.334e+03
	3.846	3.816-3.876	1.495e+04
	3.963	3.933-3.993	1.638e+04
	4.239	4.209-4.269	2.215e+04
	4.375	4.345-4.405	1.687e+04
7 Aroclor-1260	4.355	4.325-4.385	1.807e+04
	4.480	4.450-4.510	2.216e+04
	4.746	4.716-4.776	1.768e+04
	4.920	4.890-4.950	1.721e+04
	5.066	5.036-5.096	3.863e+04
8 Aroclor-1262	4.481	4.450-4.511	1.838e+04
	4.746	4.716-4.776	2.607e+04
	4.920	4.891-4.950	2.257e+04
	5.068	5.038-5.098	4.615e+04
	5.280	5.250-5.311	3.242e+04
9 Aroclor-1268	5.279	5.249-5.309	5.681e+04
	5.307	5.277-5.337	5.436e+04
	5.457	5.427-5.487	4.114e+04
	5.621	5.591-5.651	1.776e+04
	5.814	5.784-5.844	1.099e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.310	2.280-2.340	3.713e+05
$ 12 Decachlorobiphenyl	5.966	5.936-5.996	3.006e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Cal Date : 03-Dec-2009 05:07 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/110909.b/010f1001.d
Level 2: /chem/ecd1a.i/110909.b/011f1101.d
Level 3: /chem/ecd1a.i/110909.b/012f1201.d
Level 4: /chem/ecd1a.i/111009b.b/032f3201.d
Level 5: /chem/ecd1a.i/110909.b/014f1401.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20658	18482	17001	15583	13722	17089	15.563
(2)	24543	22131	20883	20176	18452	21237	10.722
(3)	16548	15095	13829	12774	11916	14032	13.123
(4)	9698	9043	8332	7728	7282	8417	11.585
(5)	12784	11504	10586	9800	9293	10793	12.897
63 4,4-DDD	+++++	+++++	+++++	487303	+++++	487303	0.000
64 4,4-DDE	+++++	+++++	+++++	462145	+++++	462145	0.000
62 4,4-DDT	+++++	+++++	+++++	139891	+++++	139891	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5950	+++++	5950	0.000
(2)	+++++	+++++	+++++	3282	+++++	3282	0.000
(3)	+++++	+++++	+++++	14405	+++++	14405	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7786	+++++	7786	0.000
(2)	+++++	+++++	+++++	10255	+++++	10255	0.000
(3)	+++++	+++++	+++++	6616	+++++	6616	0.000
(4)	+++++	+++++	+++++	4921	+++++	4921	0.000
(5)	+++++	+++++	+++++	4520	+++++	4520	0.000
4 Aroclor-1242(1)	17412	15553	15178	14343	12670	15031	11.528
(2)	20986	19324	18457	17508	16436	18542	9.380
(3)	8533	7719	7363	6848	6494	7392	10.720
(4)	11366	9954	9518	8750	8373	9592	12.199
(5)	10712	9680	9208	8779	8557	9387	9.120
5 Aroclor-1248(1)	11448	10174	9548	8978	8682	9766	11.261
(2)	10027	9078	8468	8103	7821	8699	10.098
(3)	19335	17548	16321	15814	15622	16928	9.102
(4)	16098	14147	13625	13026	12432	13866	10.125
(5)	11252	10016	9528	9039	8481	9663	10.921

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Cal Date : 03-Dec-2009 05:07 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	17517	15970	14901	14485	13761	15327	9.541
(2)	23476	21771	20197	19941	19266	20930	8.092
(3)	28419	27206	25987	25832	25135	26516	4.901
(4)	21904	21069	19942	19739	19343	20399	5.185
(5)	21473	21181	19923	19591	18991	20232	5.235
7 Aroclor-1260(1)	24604	22318	20876	20266	19173	21447	9.785
(2)	35844	33345	31633	30611	29543	32195	7.686
(3)	22847	21262	20066	19413	18699	20458	7.992
(4)	22180	20845	19753	19032	18598	20082	7.215
(5)	49574	47568	45834	44759	43761	46299	4.992
8 Aroclor-1262(1)	+++++	+++++	+++++	18047	+++++	18047	0.000
(2)	+++++	+++++	+++++	24345	+++++	24345	0.000
(3)	+++++	+++++	+++++	31917	+++++	31917	0.000
(4)	+++++	+++++	+++++	27612	+++++	27612	0.000
(5)	+++++	+++++	+++++	59026	+++++	59026	0.000
9 Aroclor-1268(1)	68327	66126	65237	63266	60847	64761	4.392
(2)	68601	64443	65877	62667	59795	64277	5.158
(3)	52175	49424	49256	47362	45464	48736	5.146
(4)	22181	21170	20804	20096	19178	20686	5.461
(5)	146769	142521	141652	137032	132906	140176	3.807
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	466250	545108	422258	406785	390967	446274	13.887
$ 12 Decachlorobiphenyl	430420	504395	383103	370310	355553	408756	14.772

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Cal Date : 03-Dec-2009 05:56 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/111009b.b/029b2901.d
Level 2: /chem/ecd1a.i/111009b.b/030b3001.d
Level 3: /chem/ecd1a.i/111009b.b/031b3101.d
Level 4: /chem/ecd1a.i/111009b.b/032b3201.d
Level 5: /chem/ecd1a.i/111009b.b/033b3301.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20143	17832	16713	15449	14165	16860	13.590
(2)	14035	12488	11357	10499	9300	11536	15.783
(3)	8596	7569	6813	6230	5549	6951	17.011
(4)	11079	9913	9060	8322	7528	9181	15.037
(5)	10190	9095	8398	7765	7096	8509	14.067
62 4,4-DDT	+++++	+++++	+++++	88461	+++++	88461	0.000
63 4,4-DDE	+++++	+++++	+++++	362852	+++++	362852	0.000
64 4,4-DDD	+++++	+++++	+++++	359922	+++++	359922	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5108	+++++	5108	0.000
(2)	+++++	+++++	+++++	3283	+++++	3283	0.000
(3)	+++++	+++++	+++++	11452	+++++	11452	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7297	+++++	7297	0.000
(2)	+++++	+++++	+++++	8233	+++++	8233	0.000
(3)	+++++	+++++	+++++	5504	+++++	5504	0.000
(4)	+++++	+++++	+++++	4272	+++++	4272	0.000
(5)	+++++	+++++	+++++	4143	+++++	4143	0.000
4 Aroclor-1242(1)	17172	15118	14593	14231	12964	14816	10.382
(2)	12255	10735	10080	9299	8450	10164	14.252
(3)	9734	8902	8100	7577	6997	8262	13.081
(4)	9161	8279	7511	7126	6585	7732	13.052
(5)	11158	9837	9355	8577	8092	9404	12.659
5 Aroclor-1248(1)	12701	11102	10208	9399	8419	10366	15.810
(2)	15478	13606	12645	11722	10563	12803	14.618
(3)	17430	15245	14486	13522	12342	14605	13.123
(4)	19368	17007	16145	14983	13634	16227	13.342
(5)	18762	16275	15487	14453	13334	15662	13.124

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Cal Date : 03-Dec-2009 05:56 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	10034	8978	8141	7651	6863	8334	14.663
(2)	17568	15909	14674	13904	12711	14953	12.491
(3)	19039	17387	16070	15329	14072	16379	11.670
(4)	24937	23339	21906	20911	19635	22146	9.335
(5)	19077	18105	16810	15765	14609	16873	10.573
7 Aroclor-1260(1)	22503	19003	17476	16529	14825	18067	16.085
(2)	25650	23506	21850	21066	18712	22157	11.763
(3)	20595	18951	17412	16547	14884	17678	12.422
(4)	20138	18349	16944	16067	14572	17214	12.395
(5)	44064	40843	38492	36572	33174	38629	10.709
8 Aroclor-1262(1)	+++++	+++++	+++++	18376	+++++	18376	0.000
(2)	+++++	+++++	+++++	26068	+++++	26068	0.000
(3)	+++++	+++++	+++++	22571	+++++	22571	0.000
(4)	+++++	+++++	+++++	46151	+++++	46151	0.000
(5)	+++++	+++++	+++++	32422	+++++	32422	0.000
9 Aroclor-1268(1)	64233	59607	57611	53879	48726	56811	10.321
(2)	60168	56519	56119	51372	47642	54364	8.990
(3)	46456	42771	41694	38901	35867	41138	9.727
(4)	19817	18449	17847	16818	15872	17760	8.524
(5)	122099	114124	111138	104603	97770	109947	8.427
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	404105	466906	350017	331939	303513	371296	17.462
$ 12 Decachlorobiphenyl	328640	378740	282742	266616	246153	300578	17.707

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 0423

Lab File ID: 002F0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	14628.541	0.01	-14.4	15.0
(2)	21236.796	19135.639	0.01	-9.9	15.0
(3)	14032.402	12293.704	0.01	-12.4	15.0
(4)	8416.650	7458.449	0.01	-11.4	15.0
(5)	10793.469	9402.522	0.01	-12.9	15.0
Aroclor-1260	21447.416	19590.055	0.01	-8.7	15.0
(2)	32195.147	29509.521	0.01	-8.3	15.0
(3)	20457.594	18517.039	0.01	-9.5	15.0
(4)	20081.764	18732.761	0.01	-6.7	15.0
(5)	46299.014	43925.369	0.01	-5.1	15.0
4cmx	446273.70	436190.99	0.01	-2.2	15.0
Decachlorobiphenyl	408756.19	410935.09	0.01	0.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 0423

Lab File ID: 002B0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16876.307	0.01	0.1	15.0
(2)	11535.631	10601.168	0.01	-8.1	15.0
(3)	6951.234	6378.883	0.01	-8.2	15.0
(4)	9180.580	8659.083	0.01	-5.7	15.0
(5)	8508.868	8046.432	0.01	-5.4	15.0
Aroclor-1260	18066.901	16954.209	0.01	-6.2	15.0
(2)	22157.029	21546.269	0.01	-2.8	15.0
(3)	17677.720	17139.175	0.01	-3.0	15.0
(4)	17213.904	16817.751	0.01	-2.3	15.0
(5)	38629.119	38448.636	0.01	-0.5	15.0
4cmx	371295.92	369082.31	0.01	-0.6	15.0
Decachlorobiphenyl	300578.33	313893.90	0.01	4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 0722

Lab File ID: 018F1801 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	15735.233	0.01	-7.9	15.0
(2)	21236.796	20077.954	0.01	-5.4	15.0
(3)	14032.402	12952.808	0.01	-7.7	15.0
(4)	8416.650	7818.361	0.01	-7.1	15.0
(5)	10793.469	10144.815	0.01	-6.0	15.0
Aroclor-1260	21447.416	20538.170	0.01	-4.2	15.0
(2)	32195.147	31242.354	0.01	-3.0	15.0
(3)	20457.594	19584.312	0.01	-4.3	15.0
(4)	20081.764	19942.092	0.01	-0.7	15.0
(5)	46299.014	46630.401	0.01	0.7	15.0
4cmx	446273.70	457196.13	0.01	2.4	15.0
Decachlorobiphenyl	408756.19	433935.31	0.01	6.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 0722

Lab File ID: 018B1801 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16786.900	0.01	-0.4	15.0
(2)	11535.631	10824.007	0.01	-6.2	15.0
(3)	6951.234	6498.103	0.01	-6.5	15.0
(4)	9180.580	8629.391	0.01	-6.0	15.0
(5)	8508.868	7945.348	0.01	-6.6	15.0
Aroclor-1260	18066.901	17569.702	0.01	-2.8	15.0
(2)	22157.029	22603.079	0.01	2.0	15.0
(3)	17677.720	17744.649	0.01	0.4	15.0
(4)	17213.904	17588.450	0.01	2.2	15.0
(5)	38629.119	40251.819	0.01	4.2	15.0
4cmx	371295.92	381240.25	0.01	2.7	15.0
Decachlorobiphenyl	300578.33	323112.52	0.01	7.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 0920

Lab File ID: 028F2801 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16713.943	0.01	-2.2	15.0
(2)	21236.796	21436.937	0.01	0.9	15.0
(3)	14032.402	13331.682	0.01	-5.0	15.0
(4)	8416.650	8141.751	0.01	-3.3	15.0
(5)	10793.469	10317.654	0.01	-4.4	15.0
Aroclor-1260	21447.416	21380.180	0.01	-0.3	15.0
(2)	32195.147	32311.381	0.01	0.4	15.0
(3)	20457.594	20025.599	0.01	-2.1	15.0
(4)	20081.764	20242.165	0.01	0.8	15.0
(5)	46299.014	47371.091	0.01	2.3	15.0
4cmx	446273.70	471029.28	0.01	5.5	15.0
Decachlorobiphenyl	408756.19	420083.44	0.01	2.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 0920

Lab File ID: 028B2801 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	17704.096	0.01	5.0	15.0
(2)	11535.631	11200.102	0.01	-2.9	15.0
(3)	6951.234	6660.382	0.01	-4.2	15.0
(4)	9180.580	9139.200	0.01	-0.4	15.0
(5)	8508.868	8316.697	0.01	-2.2	15.0
Aroclor-1260	18066.901	18064.761	0.01	-0.0	15.0
(2)	22157.029	22988.208	0.01	3.8	15.0
(3)	17677.720	18103.122	0.01	2.4	15.0
(4)	17213.904	17832.508	0.01	3.6	15.0
(5)	38629.119	40545.554	0.01	5.0	15.0
4cmx	371295.92	394055.29	0.01	6.1	15.0
Decachlorobiphenyl	300578.33	321093.70	0.01	6.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 1147

Lab File ID: 040F4001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16596.379	0.01	-2.9	15.0
(2)	21236.796	20480.274	0.01	-3.6	15.0
(3)	14032.402	13244.958	0.01	-5.6	15.0
(4)	8416.650	8123.417	0.01	-3.5	15.0
(5)	10793.469	10410.018	0.01	-3.6	15.0
Aroclor-1260	21447.416	21090.271	0.01	-1.7	15.0
(2)	32195.147	32009.670	0.01	-0.6	15.0
(3)	20457.594	20069.792	0.01	-1.9	15.0
(4)	20081.764	20499.744	0.01	2.1	15.0
(5)	46299.014	47813.468	0.01	3.3	15.0
4cmx	446273.70	468003.92	0.01	4.9	15.0
Decachlorobiphenyl	408756.19	430696.23	0.01	5.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

Instrument ID: ECD1A Calibration Date: 12/02/09 Time: 1147

Lab File ID: 040B4001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16637.441	0.01	-1.3	15.0
(2)	11535.631	11270.968	0.01	-2.3	15.0
(3)	6951.234	6782.659	0.01	-2.4	15.0
(4)	9180.580	9255.062	0.01	0.8	15.0
(5)	8508.868	8738.186	0.01	2.7	15.0
Aroclor-1260	18066.901	18137.441	0.01	0.4	15.0
(2)	22157.029	22998.689	0.01	3.8	15.0
(3)	17677.720	18282.803	0.01	3.4	15.0
(4)	17213.904	17924.048	0.01	4.1	15.0
(5)	38629.119	41072.519	0.01	6.3	15.0
4cmx	371295.92	393909.51	0.01	6.1	15.0
Decachlorobiphenyl	300578.33	329616.67	0.01	9.7	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/002f0201.d
Lab Smp Id: WAR091102-60 01 Client Smp ID: AR166001
Inj Date : 02-DEC-2009 04:23
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 06:04 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.971	0.000	43619099	100.000	97.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	41093509	100.000	100	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.431	2.431	0.000	14628541	1000.00	856	80.00- 120.00	100.00
2.720	2.720	0.000	19135639	1000.00	901	110.81- 150.81	130.81
2.801	2.801	0.000	12293704	1000.00	876	64.04- 104.04	84.04
2.838	2.838	0.000	7458449	1000.00	886	30.99- 70.99	50.99
3.050	3.050	0.000	9402522	1000.00	871	44.28- 84.28	64.28
Average of Peak Amounts =					878		
7 Aroclor-1260					CAS #: 11096-82-5		
3.776	3.776	0.000	19590055	1000.00	913	80.00- 120.00	100.00
3.939	3.939	0.000	29509521	1000.00	916	130.64- 170.64	150.64
4.169	4.169	0.000	18517039	1000.00	905	74.52- 114.52	94.52
4.311	4.311	0.000	18732761	1000.00	933	75.62- 115.62	95.62
4.491	4.491	0.000	43925369	1000.00	949	204.22- 244.22	224.22
Average of Peak Amounts =					923		

Data File: /chem/ecd1a.i/120209.b/002f0201.d

Date : 02-DEC-2009 04:23

Client ID: AR166001

Sample Info: IWAR091102-60 01

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

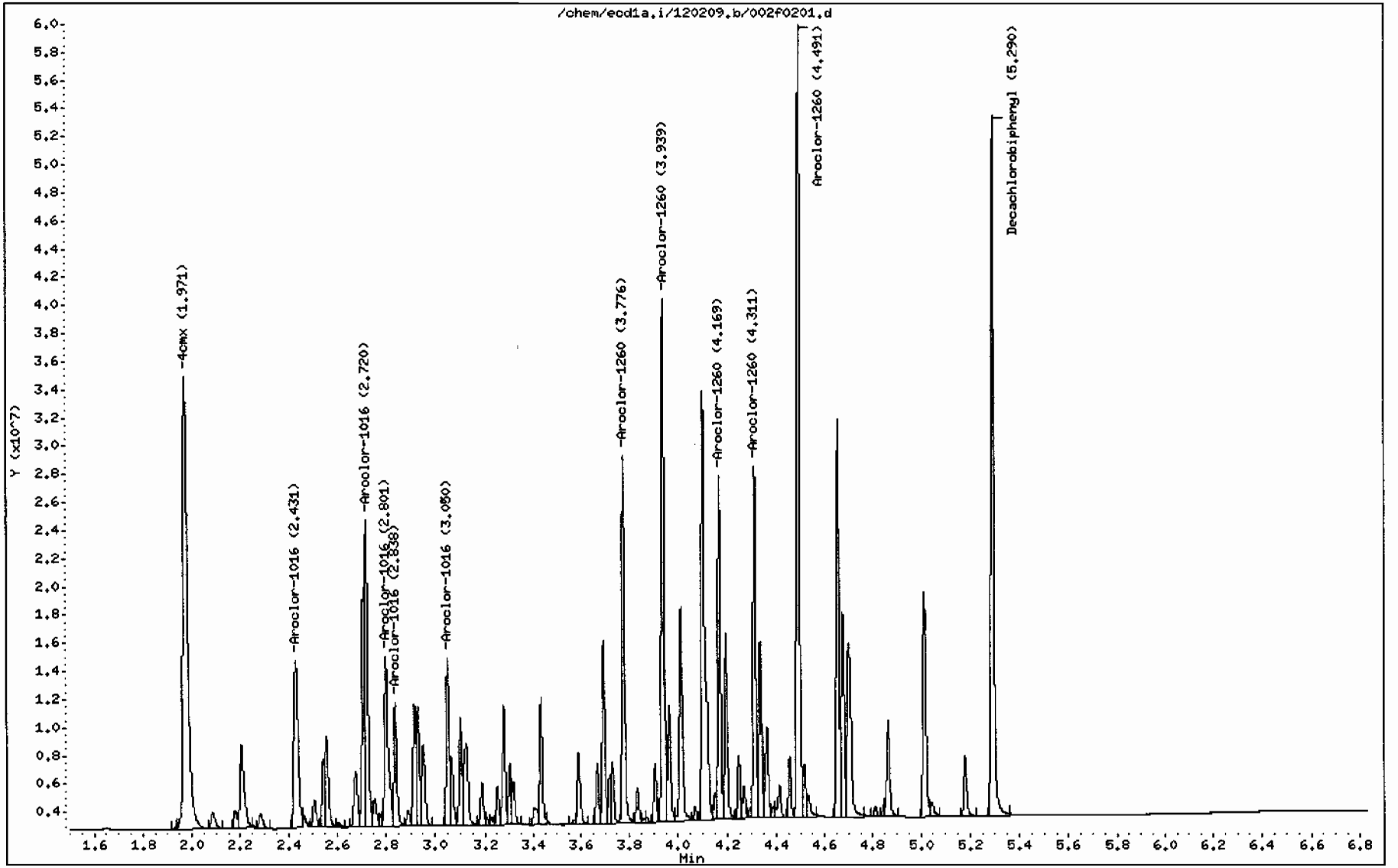

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/002b0201.d
Lab Smp Id: WAR091102-60 01 Client Smp ID: AR166001
Inj Date : 02-DEC-2009 04:23
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 06:04 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.310	0.000	36908231	100.000	99.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	31389390	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	16876307	1000.00	1000	80.00- 120.00	100.00(M)
3.296	3.296	0.000	10601168	1000.00	919	42.82- 82.82	62.82
3.421	3.421	0.000	6378883	1000.00	918	17.80- 57.80	37.80
3.587	3.587	0.000	8659083	1000.00	943	31.31- 71.31	51.31
3.663	3.663	0.000	8046432	1000.00	946	27.68- 67.68	47.68
Average of Peak Amounts =					945		
7 Aroclor-1260					CAS #: 11096-82-5		
4.355	4.355	0.000	16954209	1000.00	938	80.00- 120.00	100.00
4.480	4.480	0.000	21546269	1000.00	972	107.09- 147.09	127.09
4.746	4.746	0.000	17139175	1000.00	970	81.09- 121.09	101.09
4.920	4.920	0.000	16817751	1000.00	977	79.20- 119.20	99.20
5.066	5.066	0.000	38448636	1000.00	995	206.78- 246.78	226.78
Average of Peak Amounts =					971		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdia.i/120209.b/002b0201.d
Date : 02-DEC-2009 04:23
Client ID: AR166001
Sample Info: IWAR091102-60 01
Column phase: CLP2

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

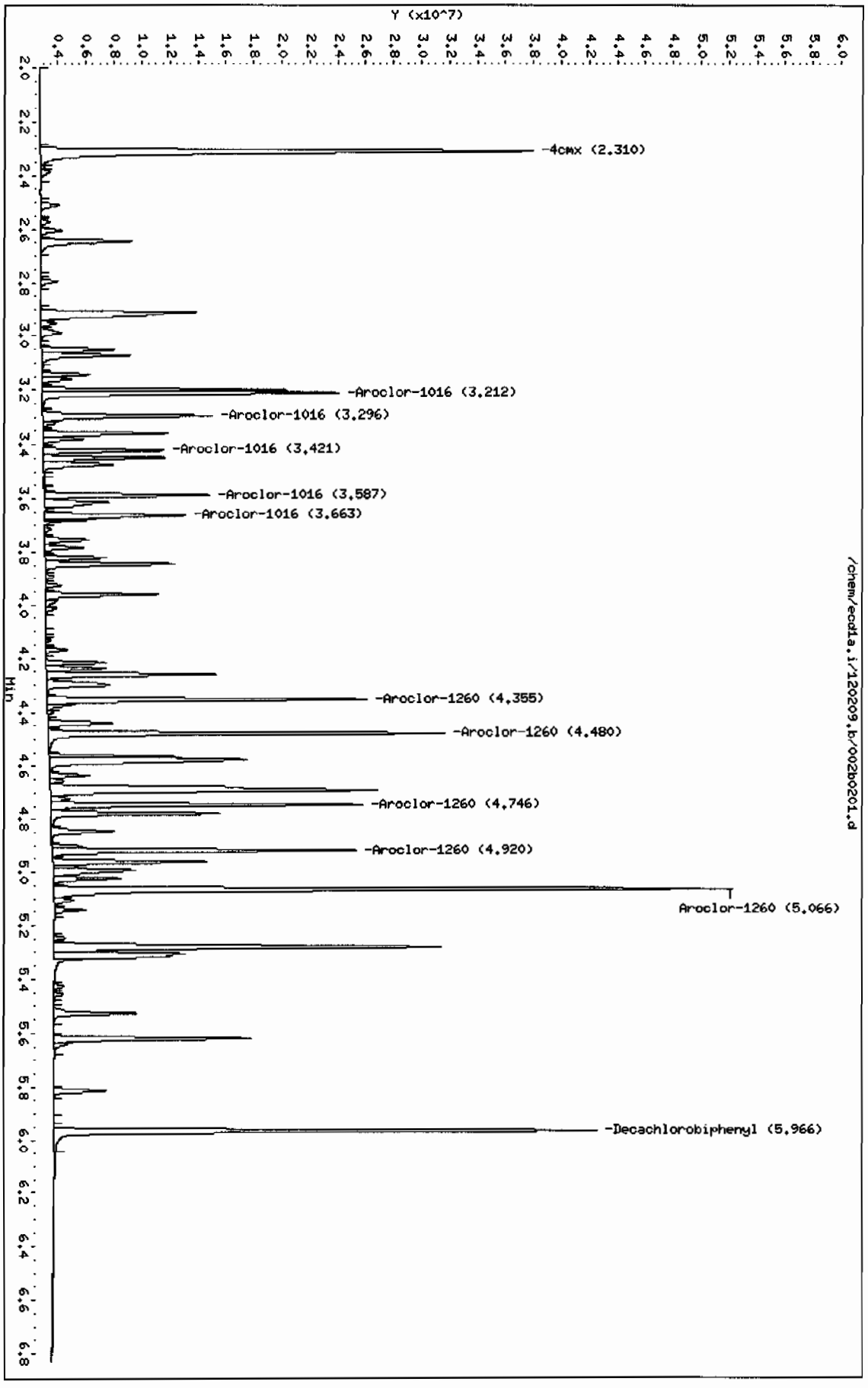

Page 1

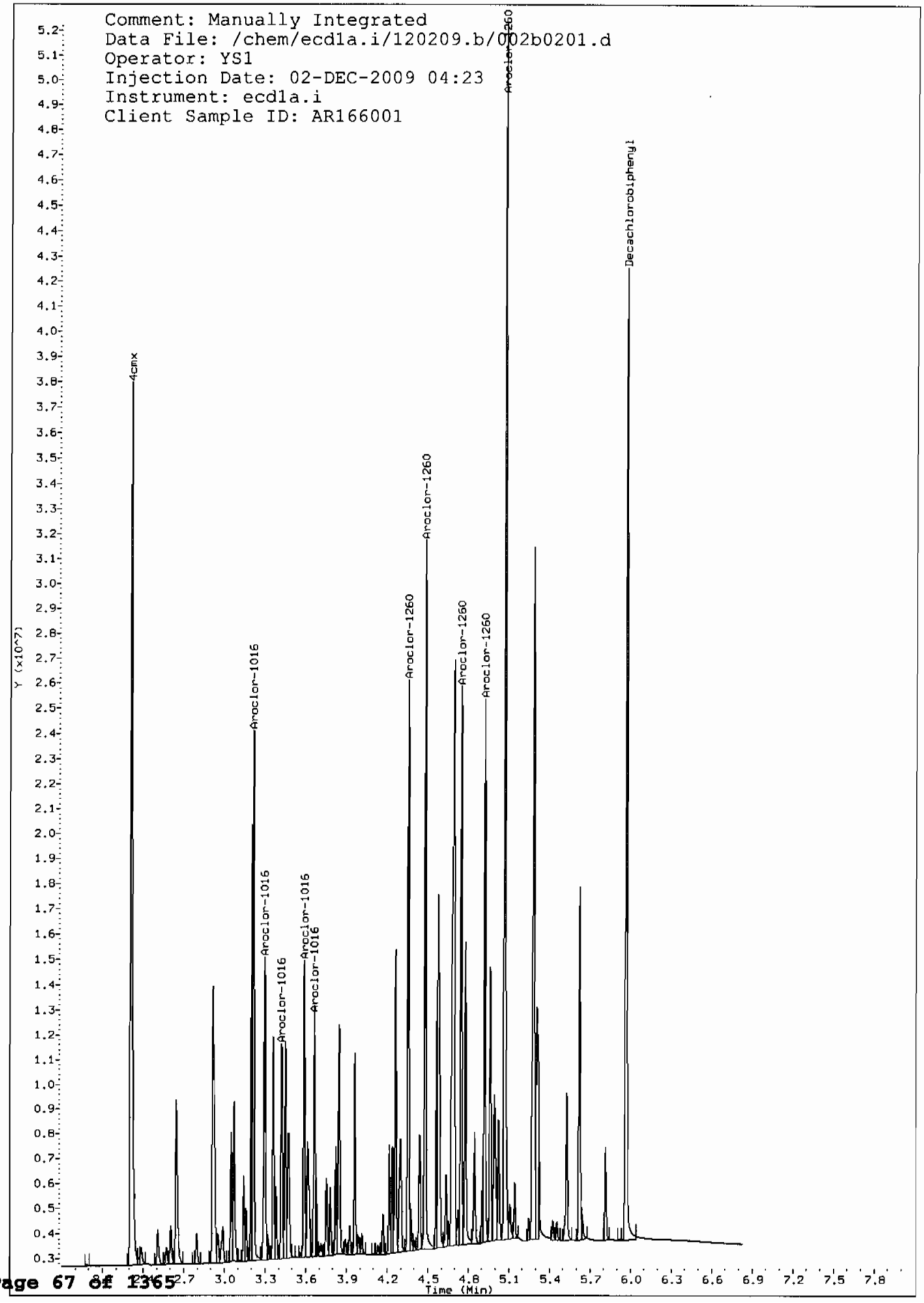
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Operator: YS1
Injection Date: 02-DEC-2009 04:23
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

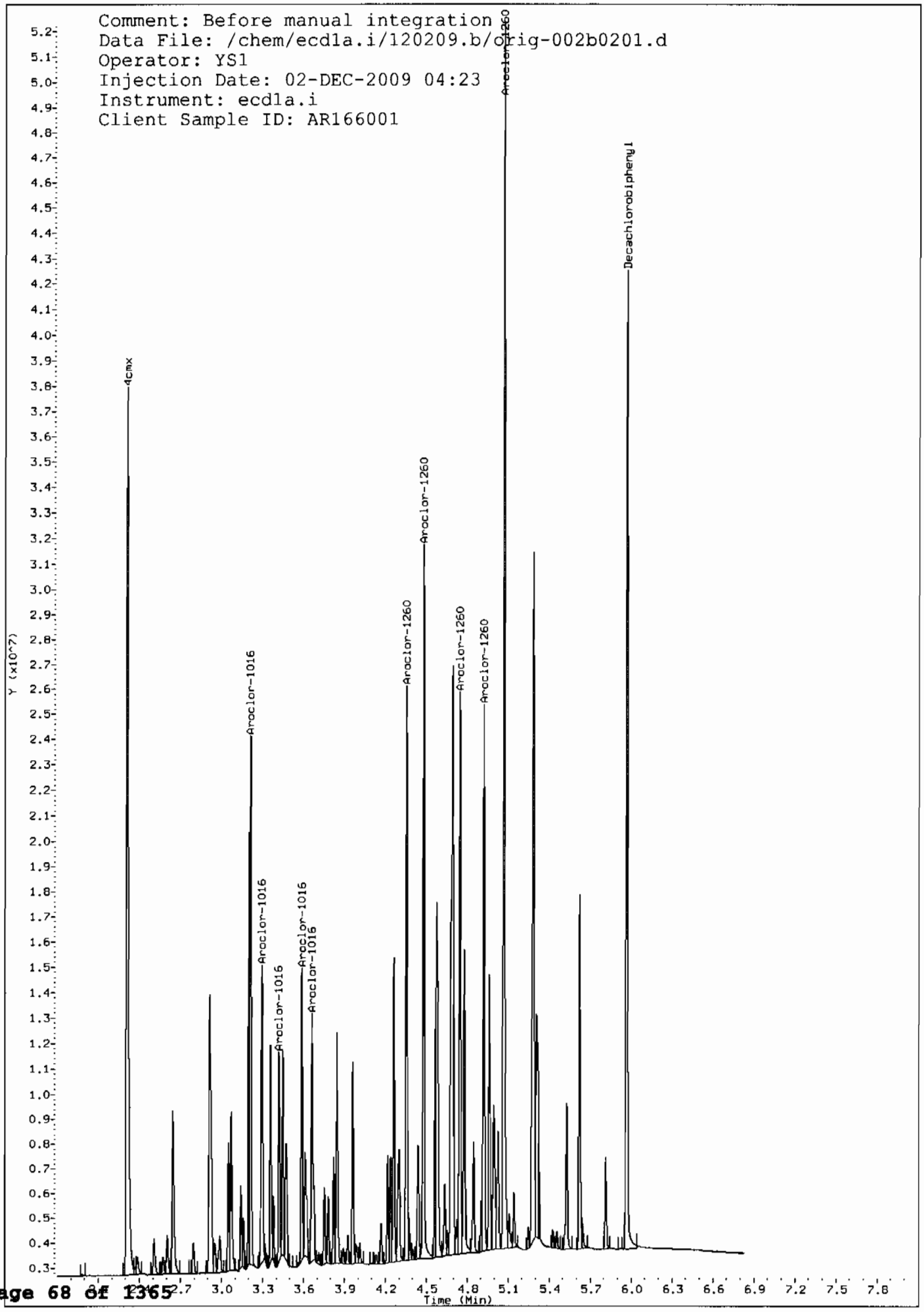
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Operator: YS1
Injection Date: 02-DEC-2009 04:23
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 02-DEC-2009 04:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.973	1.971	0.002	40892892	100.000	91.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	39055026	100.000	95.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.279	3.279	0.000	13273718	1000.00	866	80.00- 120.00	100.00
3.435	3.435	0.000	17899578	1000.00	855	114.85- 154.85	134.85
3.668	3.668	0.000	23656163	1000.00	892	158.22- 198.22	178.22
3.832	3.832	0.000	17908848	1000.00	878	114.92- 154.92	134.92
3.940	3.940	0.000	17923447	1000.00	886	115.03- 155.03	135.03
			Average of Peak Amounts =		875		

Data File: /chem/ecd1a.i/120209.b/003f0301.d

Date : 02-DEC-2009 04:34

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

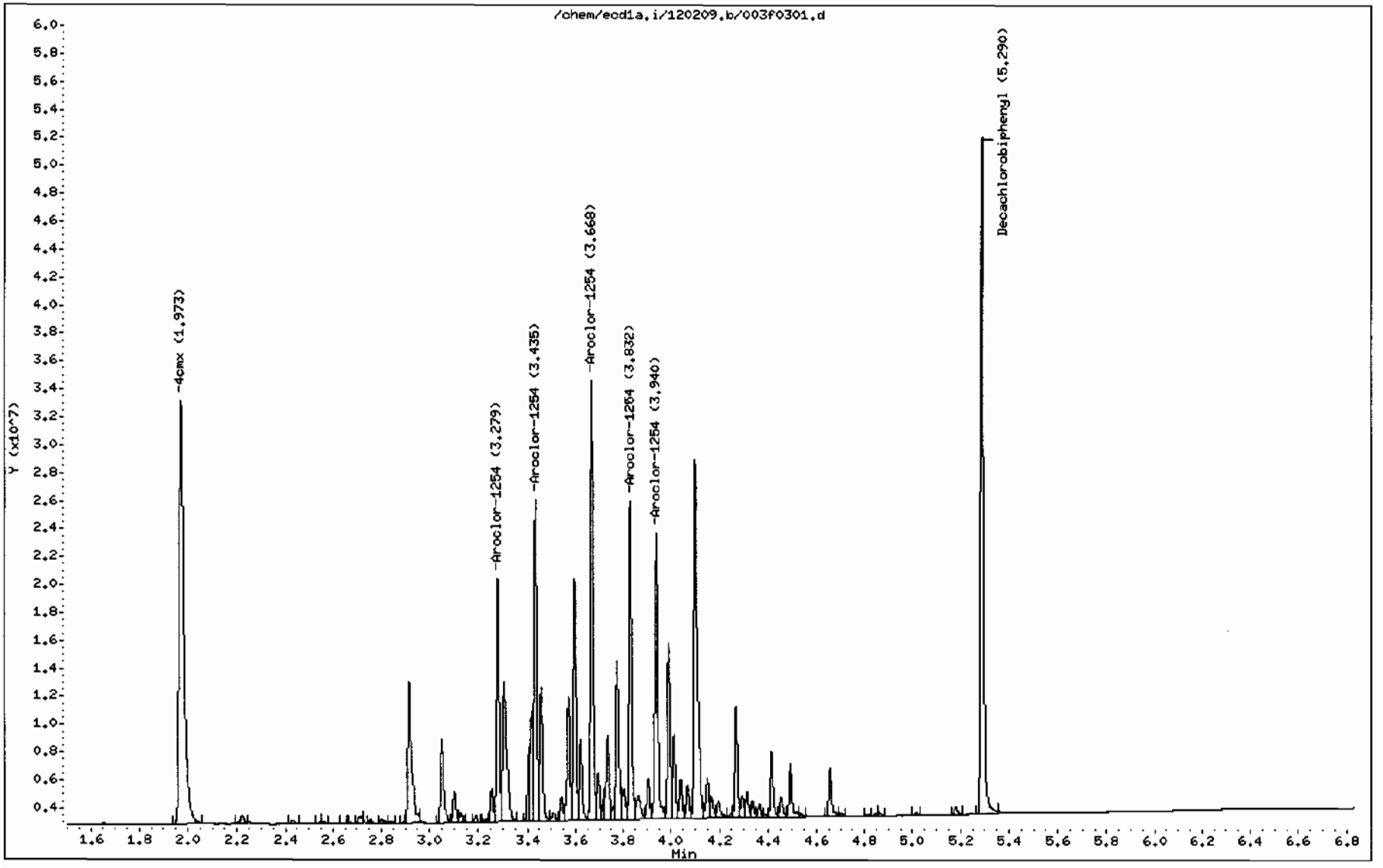

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 02-DEC-2009 04:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.310	0.000	35119341	100.000	94.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	29531733	100.000	98.2	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.423	3.423	0.000	7349018	1000.00	882	80.00- 120.00	100.00(M)
3.846	3.846	0.000	13202458	1000.00	883	159.65- 199.65	179.65
3.963	3.963	0.000	14646405	1000.00	894	179.30- 219.30	199.30
4.239	4.239	0.000	20386180	1000.00	920	257.40- 297.40	277.40
4.375	4.375	0.000	15499422	1000.00	918	190.90- 230.90	210.90
Average of Peak Amounts =					900		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/003b0301.d

Date : 02-DEC-2009 04:34

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

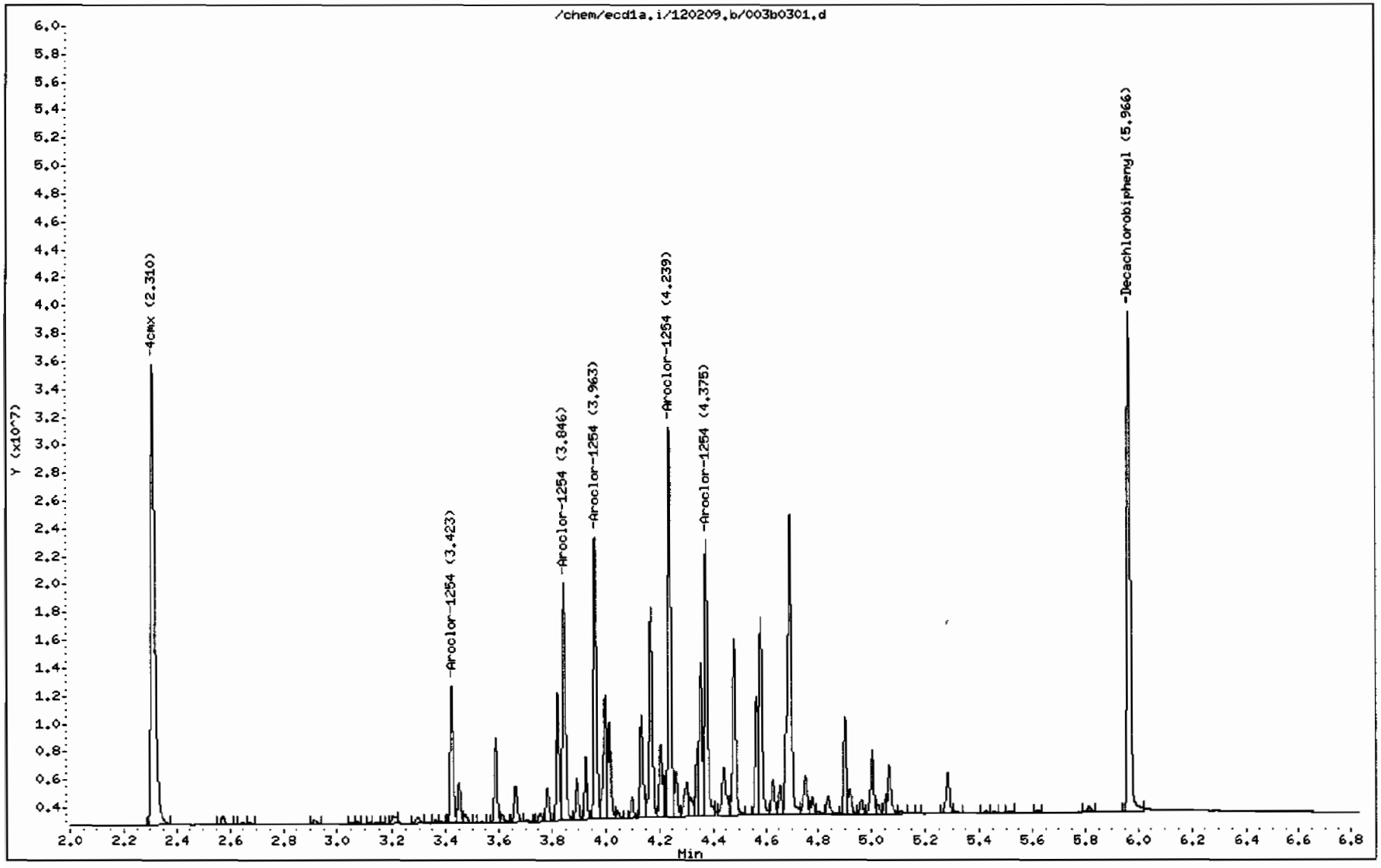

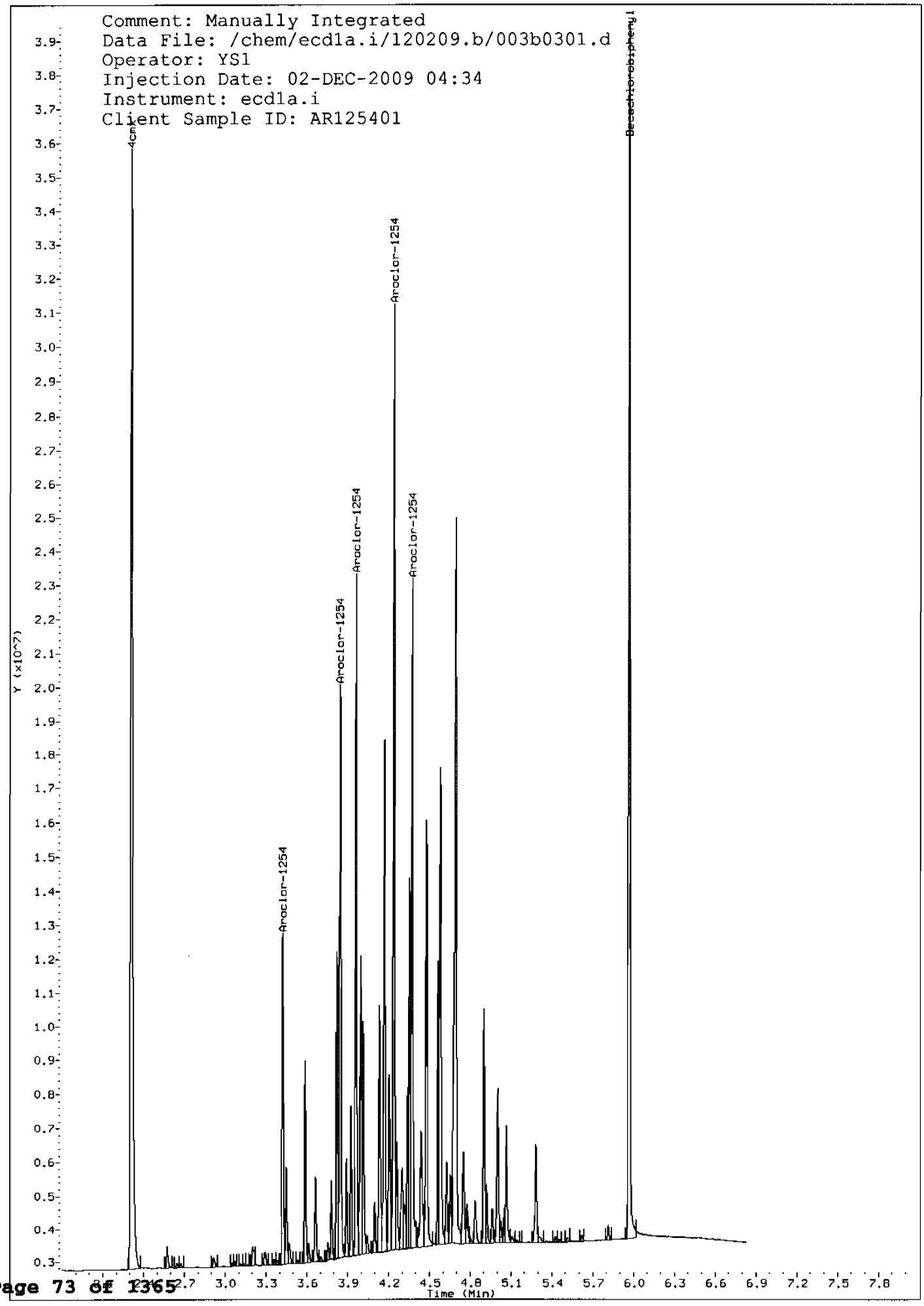
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Operator: YS1
Injection Date: 02-DEC-2009 04:34
Instrument: ecd1a.i
Client Sample ID: AR125401
4cm
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Decachlorobiphenyl
Y (x10^7)
Time (Min)

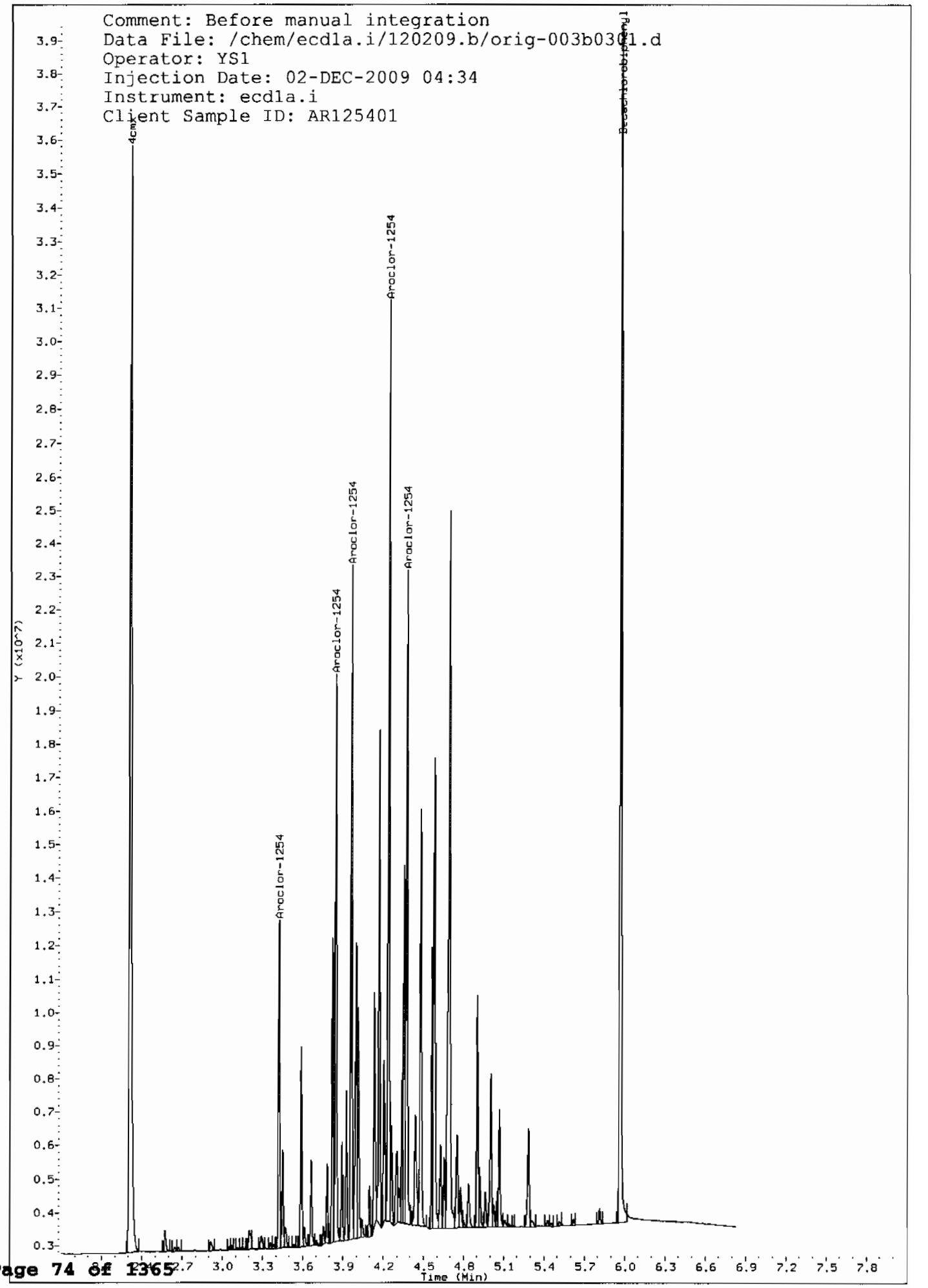
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Operator: YS1
Injection Date: 02-DEC-2009 04:34
Instrument: ecd1a.i
Client Sample ID: AR125401
4cmx
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 02-DEC-2009 04:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.971	0.000	45855610	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.290	0.001	39677316	100.000	97.1	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.430	2.430	0.000	13747634	1000.00	915	80.00- 120.00	100.00
2.719	2.719	0.000	17036187	1000.00	919	103.92- 143.92	123.92
2.839	2.839	0.000	6567805	1000.00	888	27.77- 67.77	47.77
3.049	3.049	0.000	8555330	1000.00	892	42.23- 82.23	62.23
3.304	3.304	0.000	8171678	1000.00	870	39.44- 79.44	59.44
Average of Peak Amounts =					897		

Data File: /chem/ecd1a.i/120209.b/004f0401.d

Date : 02-DEC-2009 04:44

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

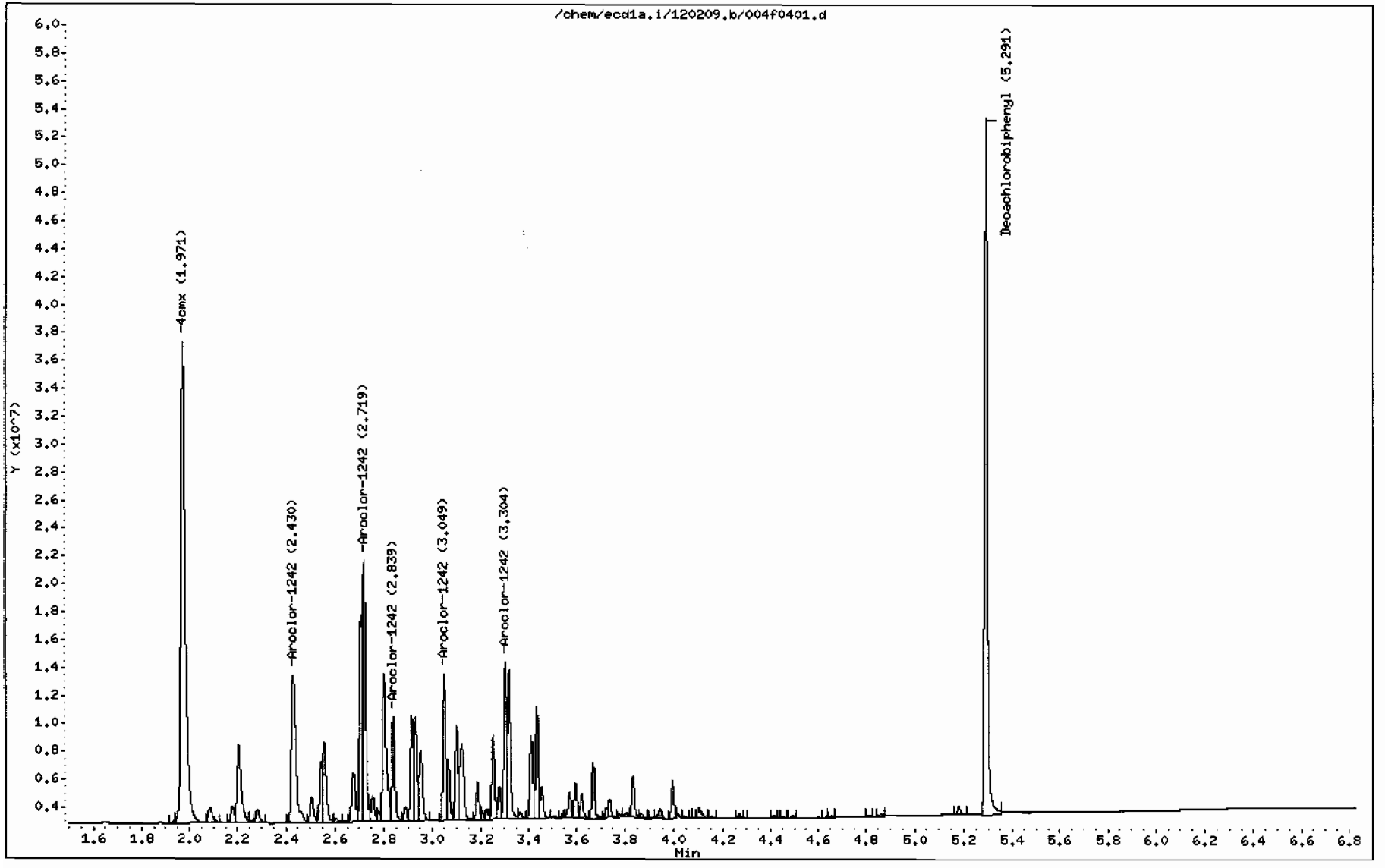

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 02-DEC-2009 04:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	38607706	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	33688932	100.000	112	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.212	3.212	0.000	13636062	1000.00	920	80.00- 120.00	100.00(M)
3.296	3.296	0.000	9107324	1000.00	896	46.79- 86.79	66.79
3.588	3.588	0.000	7651839	1000.00	926	36.11- 76.11	56.11
3.664	3.664	0.000	7070319	1000.00	914	31.85- 71.85	51.85
3.850	3.850	0.000	8422539	1000.00	896	41.77- 81.77	61.77
Average of Peak Amounts =					911		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/004b0401.d
Date : 02-DEC-2009 04:44
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd1a.i
Operator: YSL
Column diameter: 0.25

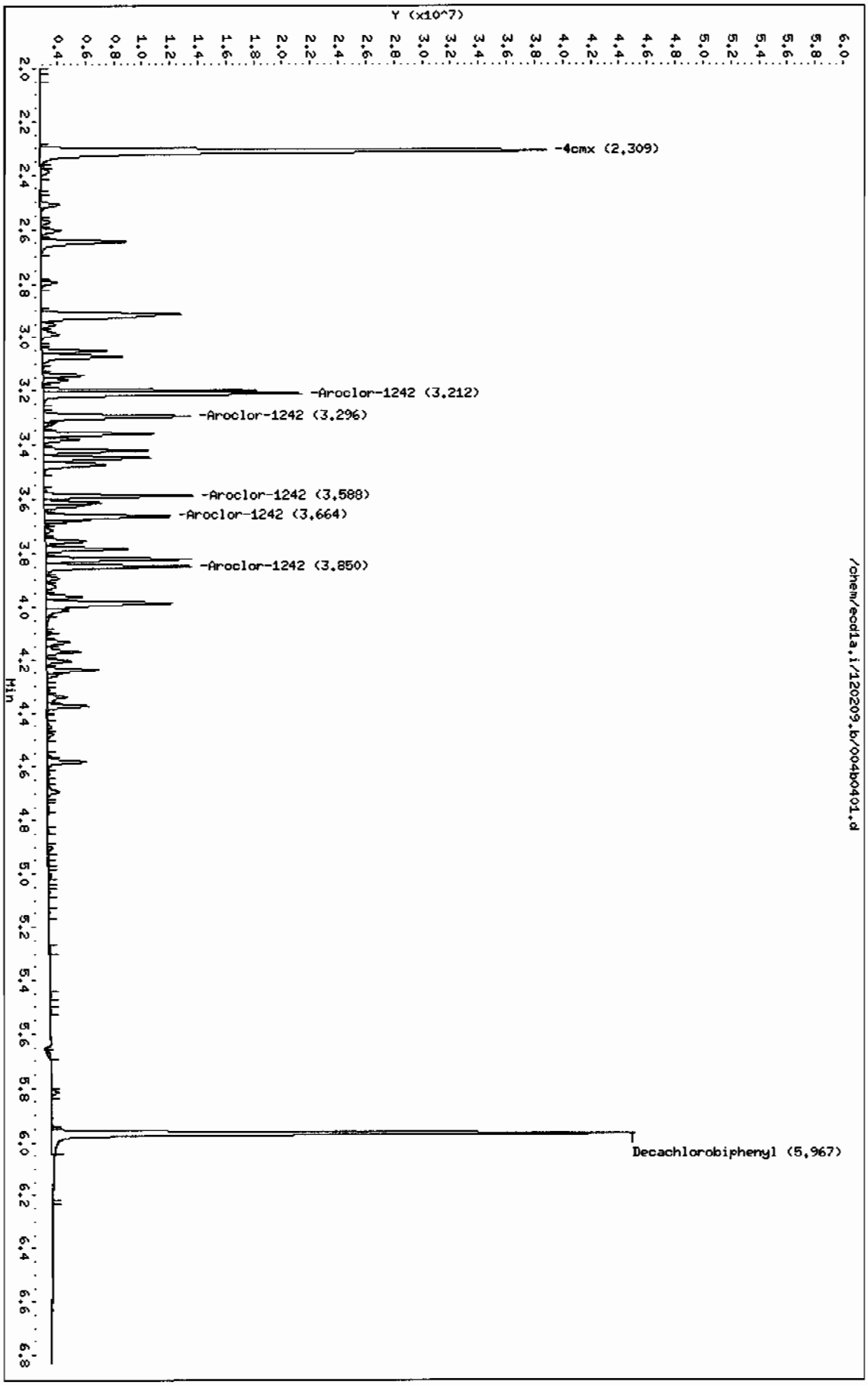

Page 1

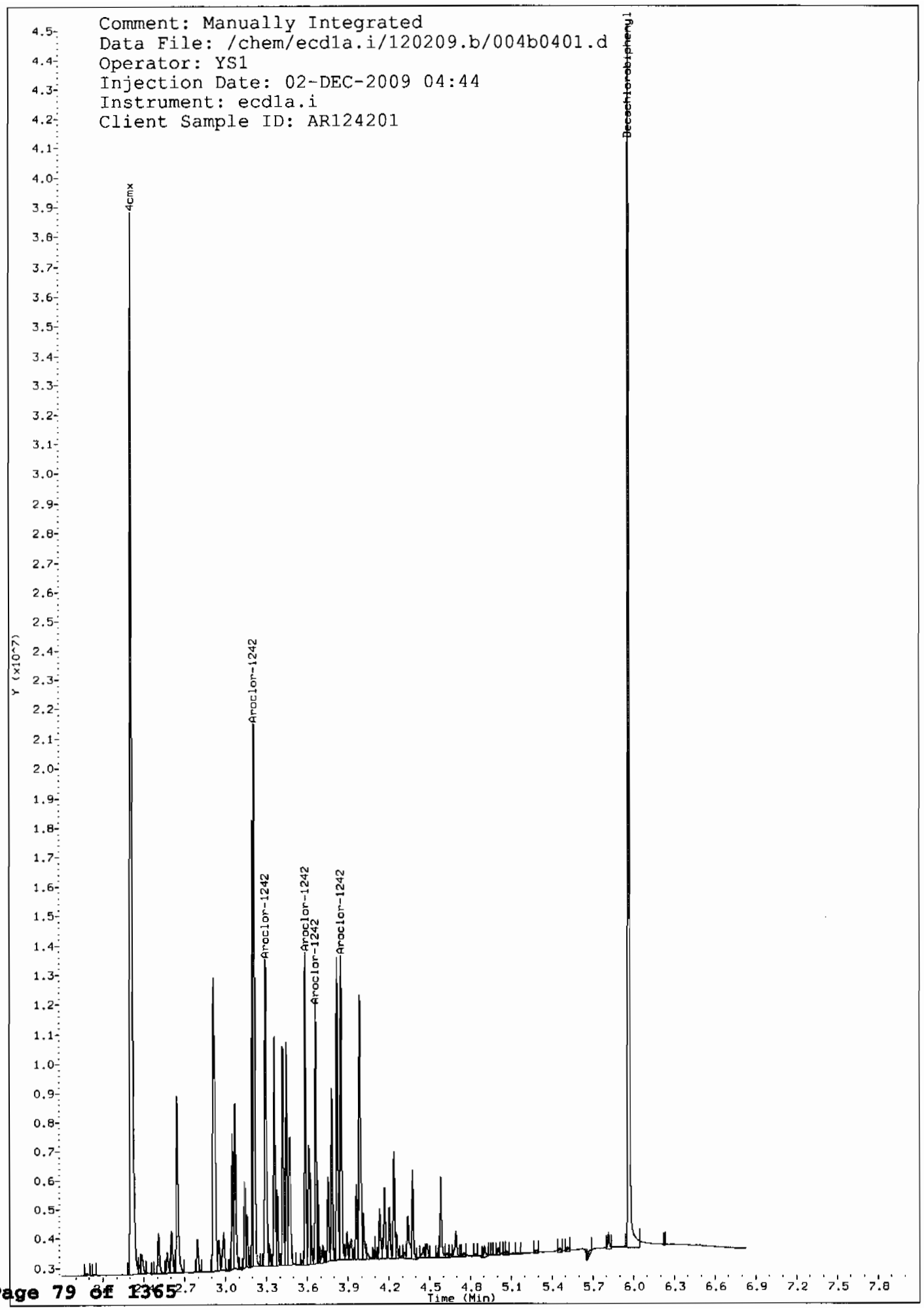
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120209.b/004b0401.d
Operator: YS1
Injection Date: 02-DEC-2009 04:44
Instrument: ecd1a.i
Client Sample ID: AR124201
4cmx
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Decachlorobiphenyl
Y (x10^7)
Time (Min)

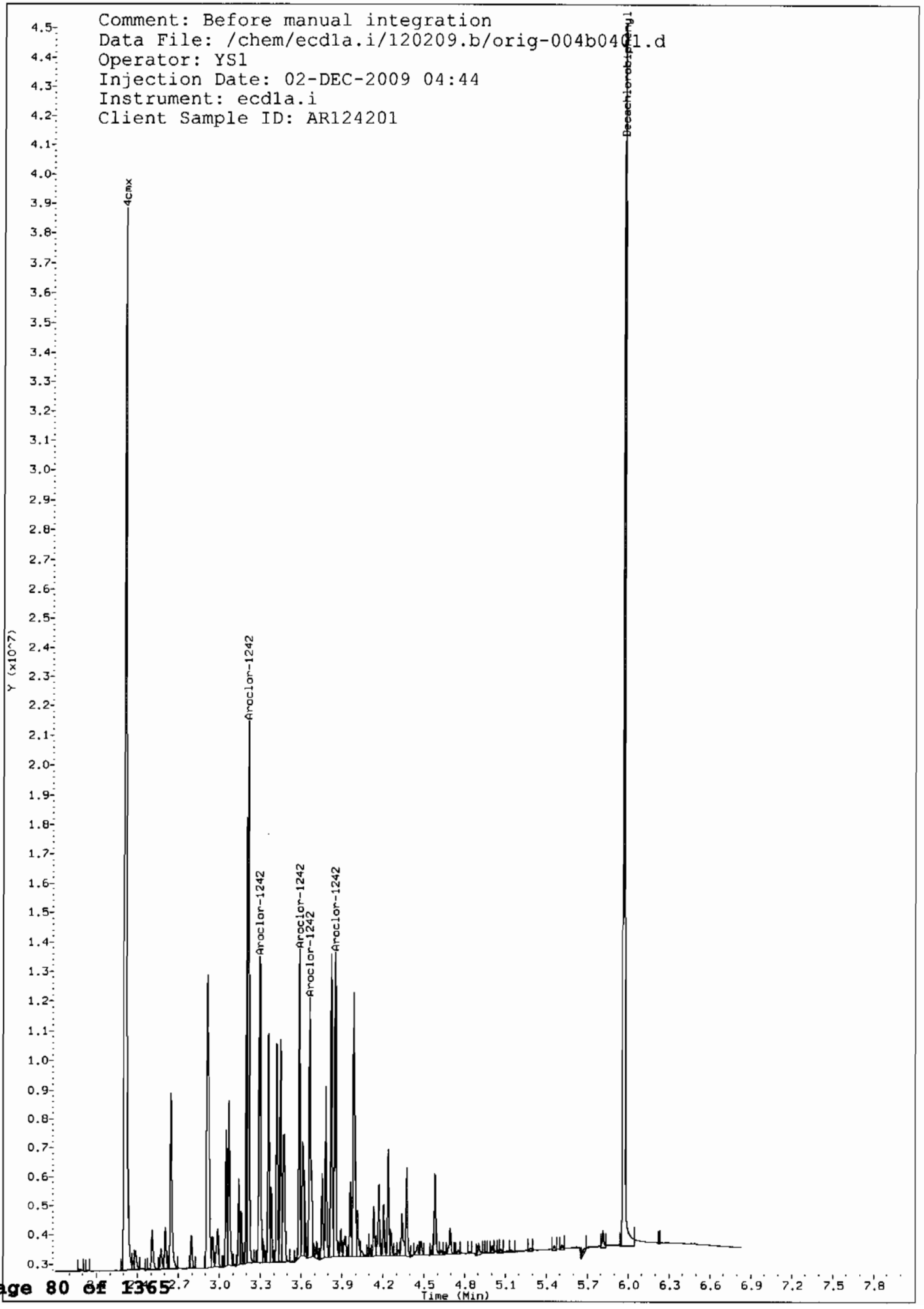
Comment: Before manual integration
Data File: /chem/ecd1a.i/120209.b/orig-004b0401.d
Operator: YS1
Injection Date: 02-DEC-2009 04:44
Instrument: ecd1a.i
Client Sample ID: AR124201
4cmx
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 02-DEC-2009 04:55
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.973	1.971	0.002	44929655	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	43189381	100.000	106	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.102	3.102	0.000	10248168	1000.00	1050	80.00- 120.00	100.00
3.253	3.253	0.000	8954626	1000.00	1030	67.38- 107.38	87.38
3.304	3.304	0.000	17306272	1000.00	1020	148.87- 188.87	168.87
3.437	3.437	0.000	14434648	1000.00	1040	120.85- 160.85	140.85
3.669	3.669	0.000	9434540	1000.00	976	72.06- 112.06	92.06

Average of Peak Amounts = 1.02e+03

Data File: /chem/ecd1a.i/120209.b/005f0501.d

Date : 02-DEC-2009 04:55

Client ID: AR124801

Sample Info: !WAR091027-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

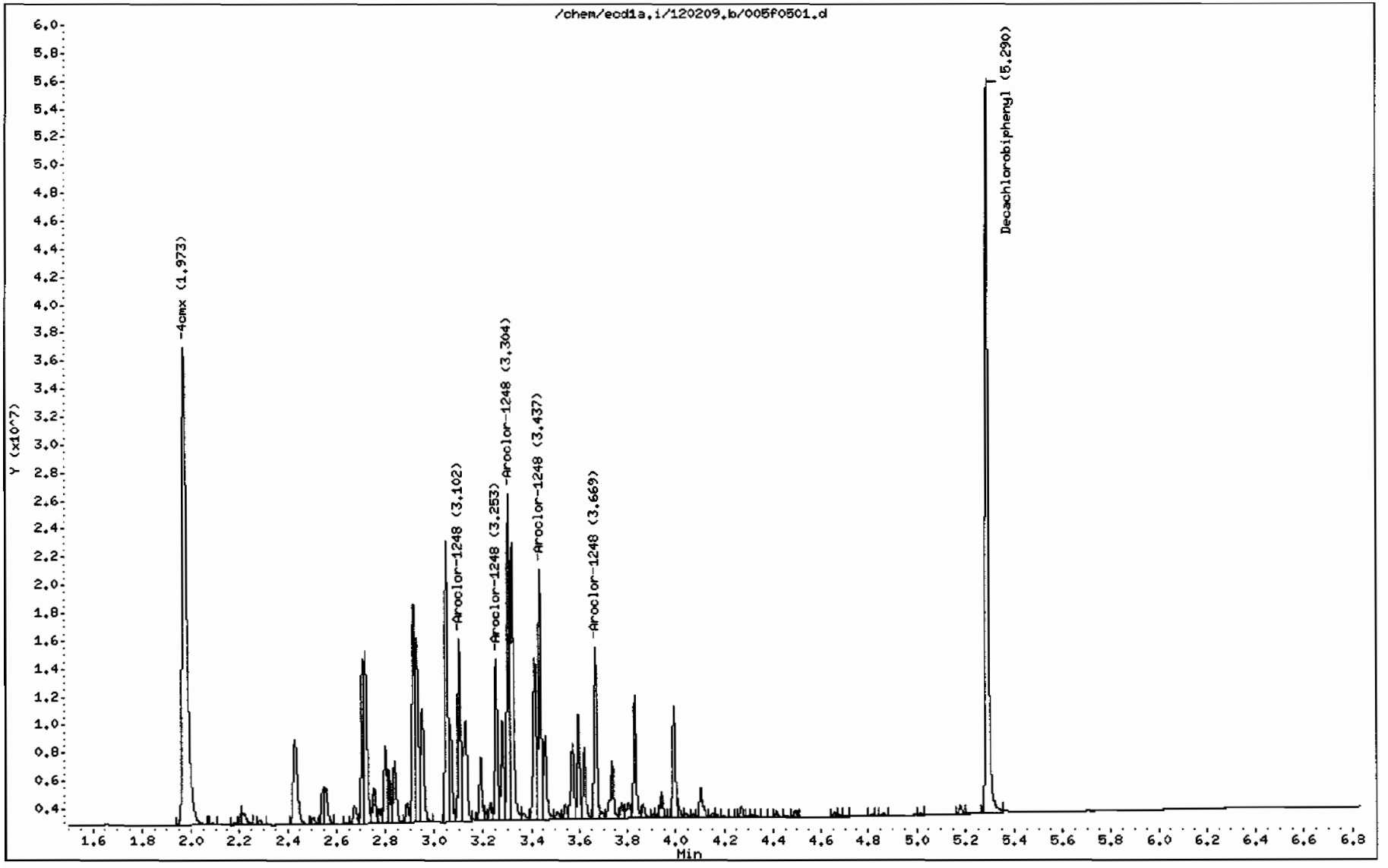

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 02-DEC-2009 04:55
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.310	0.000	38234654	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.968	5.966	0.002	32787914	100.000	109	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.423	3.423	0.000	10991473	1000.00	1060	80.00- 120.00	100.00
3.588	3.588	0.000	13776448	1000.00	1080	105.34- 145.34	125.34
3.823	3.823	0.000	15580314	1000.00	1070	121.75- 161.75	141.75
3.850	3.850	0.000	17559435	1000.00	1080	139.76- 179.76	159.76
3.988	3.988	0.000	16887339	1000.00	1080	133.64- 173.64	153.64

Average of Peak Amounts = 1.07e+03

Data File: /chem/ecd1a.i/120209.b/005b0501.d

Date : 02-DEC-2009 04:55

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

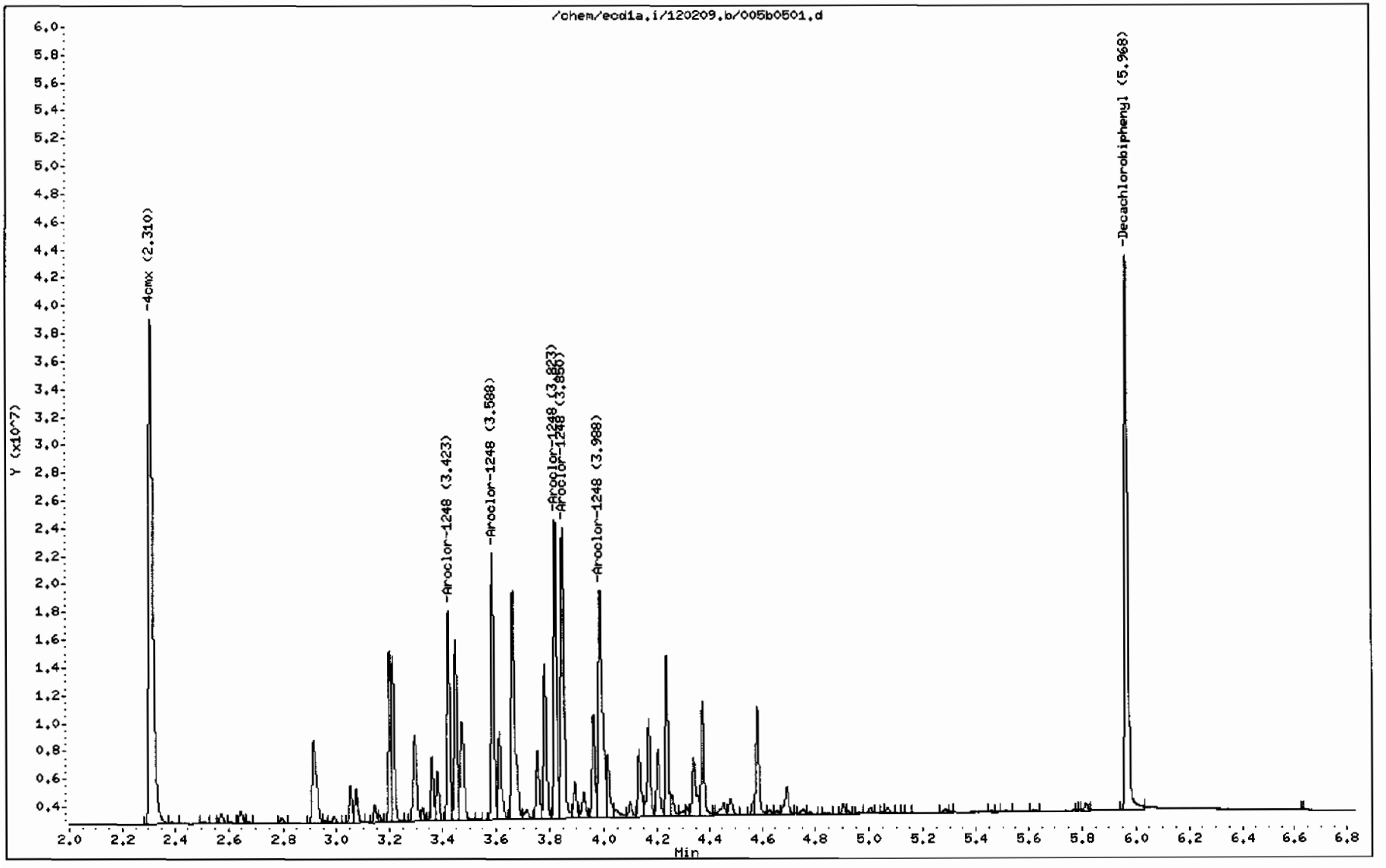

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 02-DEC-2009 05:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.973	1.971	0.002	51433216	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	48593530	100.000	119	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.431	2.431	0.000	7179416	1000.00	922	80.00- 120.00	100.00
2.720	2.720	0.000	9480550	1000.00	924	112.05- 152.05	132.05
2.801	2.801	0.000	6044591	1000.00	914	64.19- 104.19	84.19
3.050	3.050	0.000	4518526	1000.00	918	42.94- 82.94	62.94
3.304	3.304	0.000	4077685	1000.00	902	36.80- 76.80	56.80
Average of Peak Amounts =					916		

Data File: /chem/ecd1a.i/120209.b/006f0601.d
Date : 02-DEC-2009 05:05
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

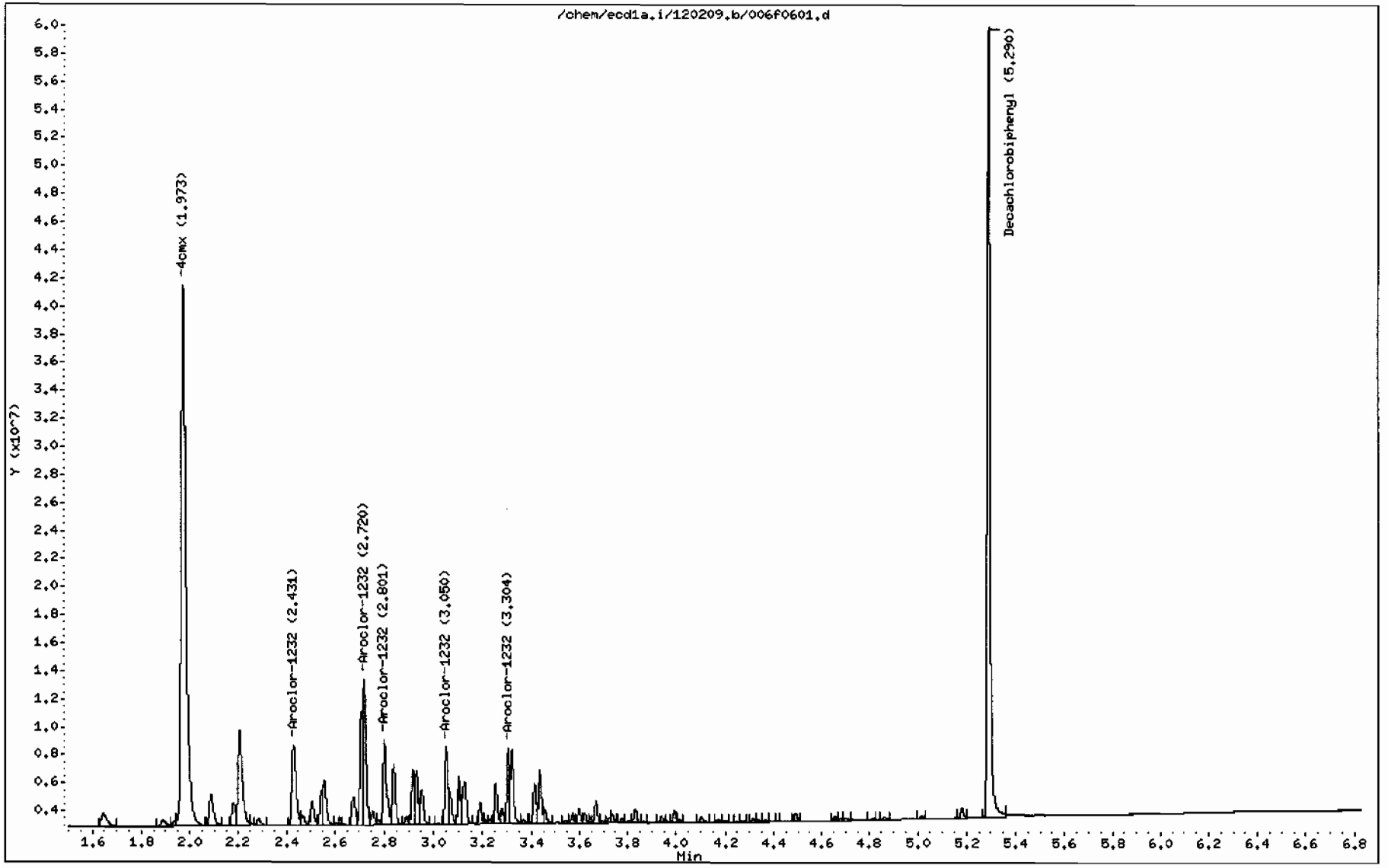

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 02-DEC-2009 05:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 06:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.310	0.000	43185124	100.000	116	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	36998004	100.000	123	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.645	2.645	0.000	7033773	1000.00	964	80.00- 120.00	100.00
3.213	3.213	0.000	7991638	1000.00	971	93.62- 133.62	113.62
3.297	3.297	0.000	5244763	1000.00	953	54.57- 94.57	74.57
3.588	3.588	0.000	3949548	1000.00	924	36.15- 76.15	56.15
3.822	3.822	0.000	3870052	1000.00	934	35.02- 75.02	55.02
Average of Peak Amounts =					949		

Data File: /chem/ecd1a.i/120209.b/006b0601.d

Date : 02-DEC-2009 05:05

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

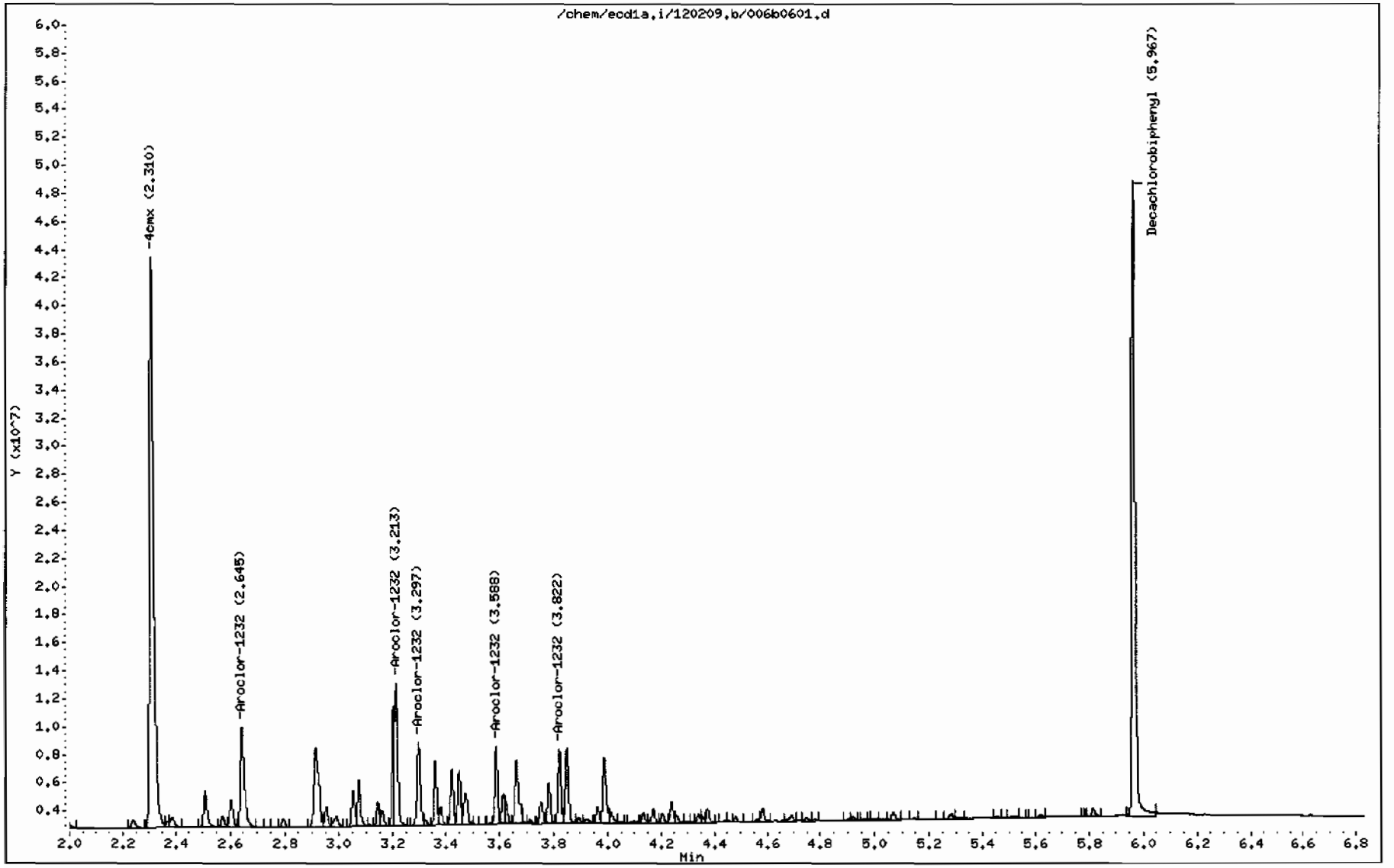

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/007f0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 02-DEC-2009 05:16
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 06:06 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclpl

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.971	-0.001	42103139	100.000	94.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.290	0.001	39492107	100.000	96.6	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.085	2.085	0.000	5028440	1000.00	845	80.00- 120.00	100.00
2.179	2.179	0.000	2713772	1000.00	827	33.97- 73.97	53.97
2.205	2.205	0.000	12195507	1000.00	847	222.53- 262.53	242.53
Average of Peak Amounts =					840		

Data File: /chem/ecd1a.i/120209.b/007f0701.d

Date : 02-DEC-2009 05:16

Client ID: AR122101

Sample Info: IWAR090803-21

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

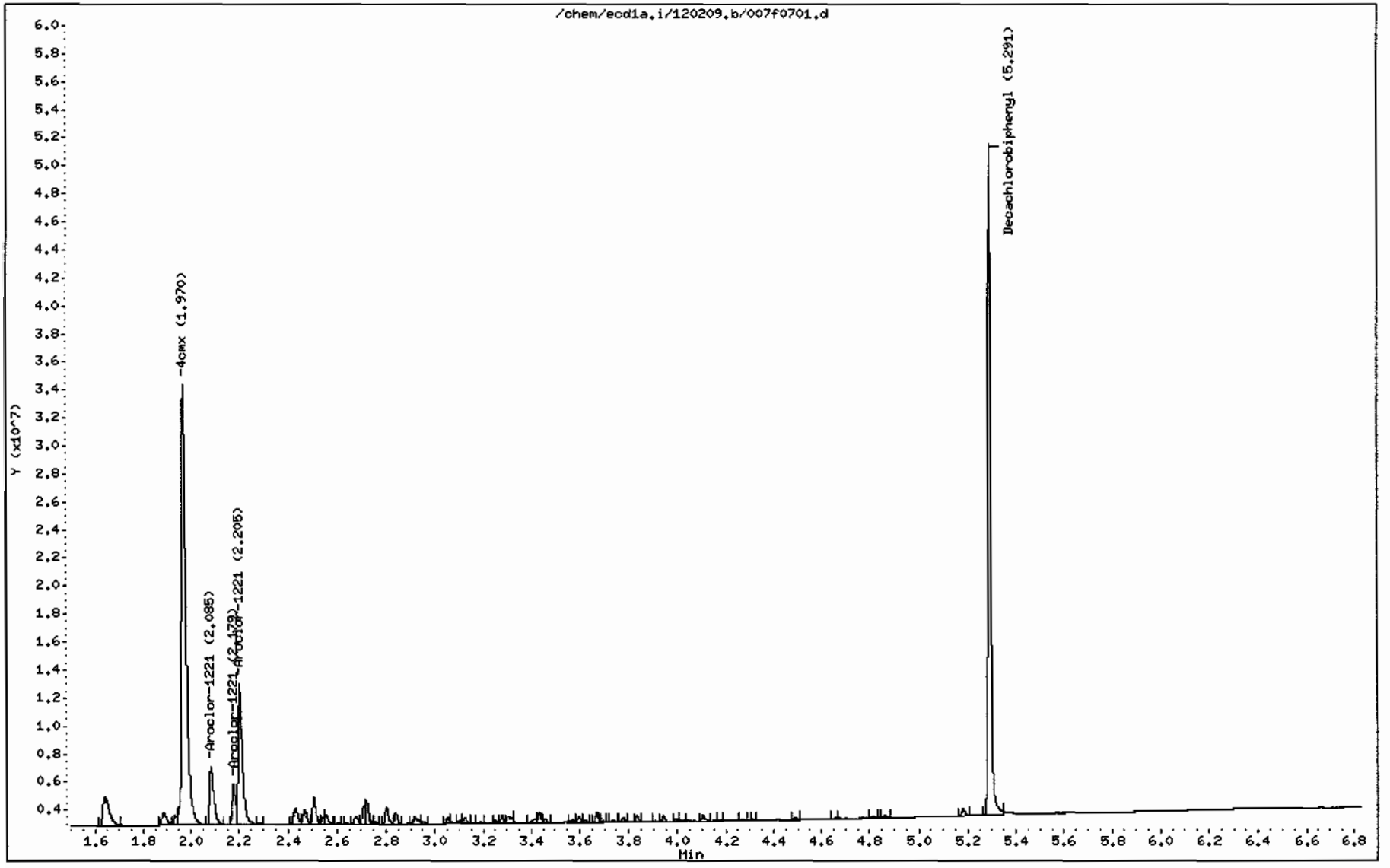

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/007b0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 02-DEC-2009 05:16
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 06:06 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	35170449	100.000	94.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	30070930	100.000	100	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.508	2.508	0.000	4484916	1000.00	878	80.00- 120.00	100.00
2.604	2.604	0.000	2890942	1000.00	881	44.46- 84.46	64.46
2.645	2.645	0.000	10017629	1000.00	875	203.36- 243.36	223.36
Average of Peak Amounts =					878		

Data File: /chem/ecd1a.i/120209.b/007b0701.d

Date : 02-DEC-2009 05:16

Client ID: AR122101

Sample Info: IWAR090803-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

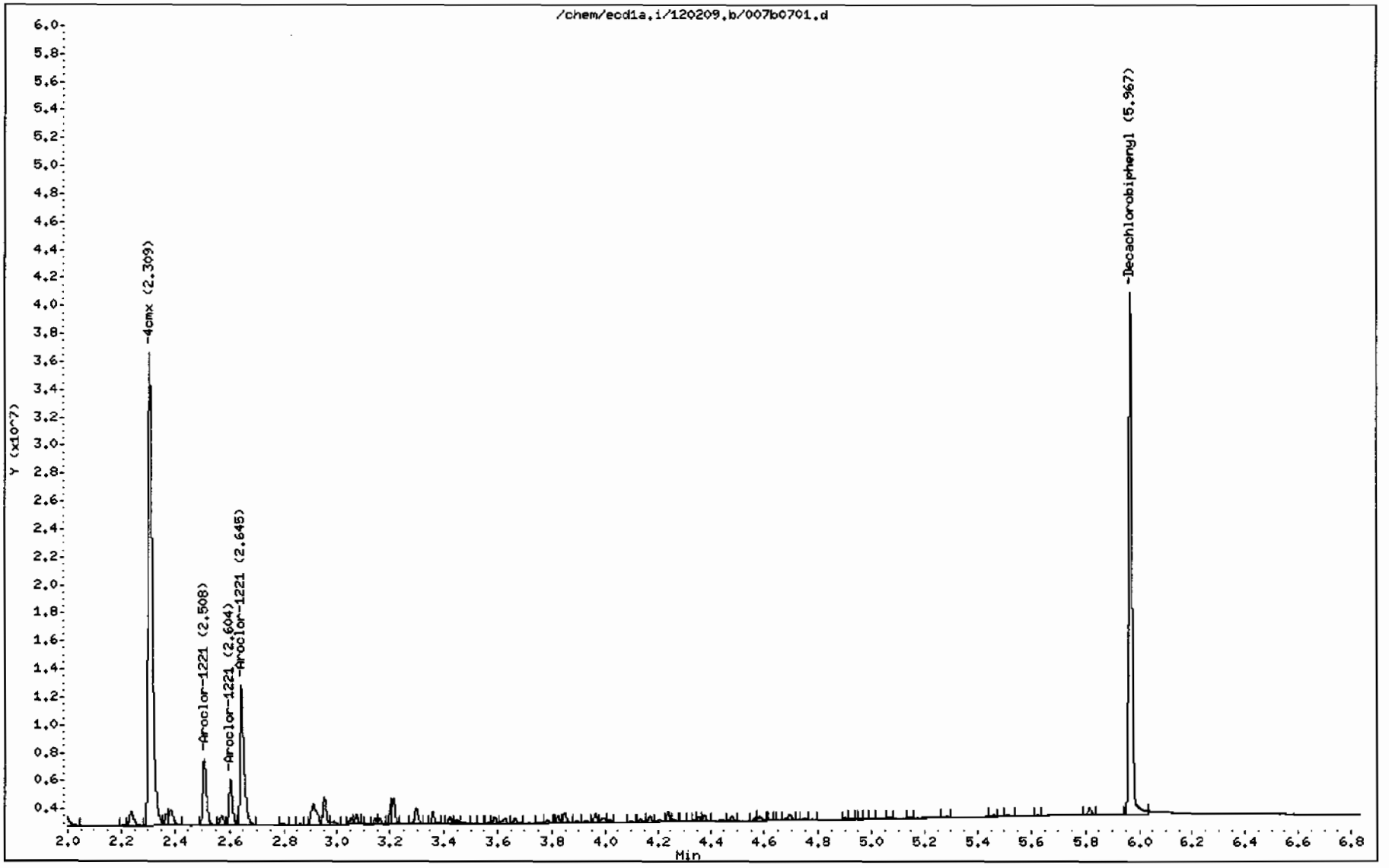

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/018f1801.d
Lab Smp Id: WAR091102-60 02 Client Smp ID: AR166002
Inj Date : 02-DEC-2009 07:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 02
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 08:22 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.971	0.000	45719613	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	43393531	100.000	106	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	15735232	1000.00	921	80.00- 120.00	100.00
2.719	2.720	-0.001	20077954	1000.00	945	107.60- 147.60	127.60
2.800	2.801	-0.001	12952807	1000.00	923	62.32- 102.32	82.32
2.837	2.838	-0.001	7818360	1000.00	929	29.69- 69.69	49.69
3.049	3.050	-0.001	10144815	1000.00	940	44.47- 84.47	64.47
Average of Peak Amounts =					932		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	20538169	1000.00	958	80.00- 120.00	100.00
3.937	3.939	-0.002	31242354	1000.00	970	132.12- 172.12	152.12
4.167	4.169	-0.002	19584311	1000.00	957	75.36- 115.36	95.36
4.310	4.311	-0.001	19942092	1000.00	993	77.10- 117.10	97.10
4.490	4.491	-0.001	46630401	1000.00	1010	207.04- 247.04	227.04
Average of Peak Amounts =					977		

Data File: /ohem/ecd1a.i/120209.b/018f1801.d

Page 1

Date : 02-DEC-2009 07:22

Client ID: AR166002

Instrument: ecd1a.i

Sample Info: IWAR091102-60 02

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

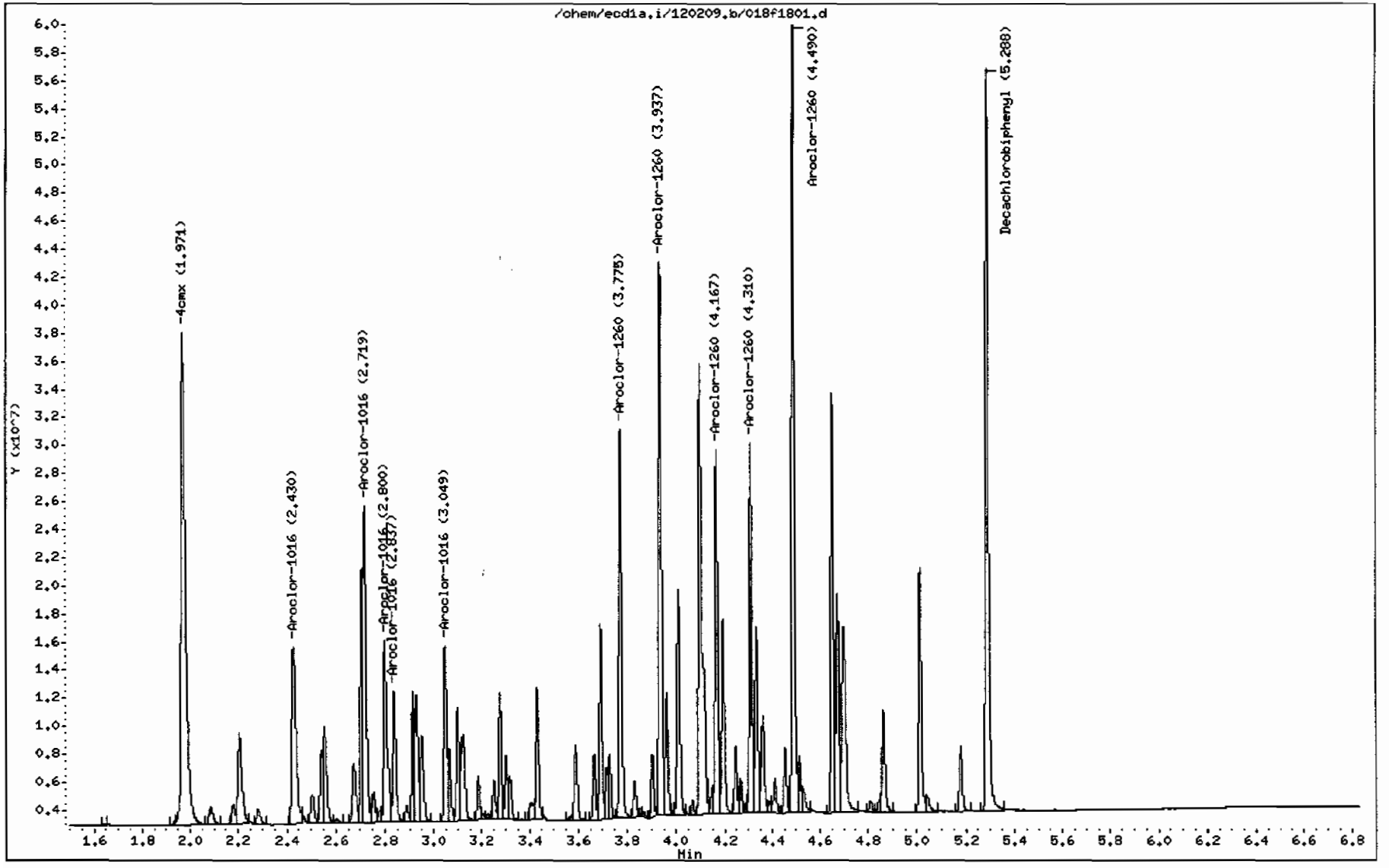

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/018b1801.d
Lab Smp Id: WAR091102-60 02 Client Smp ID: AR166002
Inj Date : 02-DEC-2009 07:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 02
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 08:09 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	38124025	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	32311252	100.000	107	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	16786900	1000.00	996	80.00- 120.00	100.00(M)
3.295	3.296	-0.001	10824007	1000.00	938	44.48- 84.48	64.48
3.421	3.421	0.000	6498103	1000.00	935	18.71- 58.71	38.71
3.586	3.587	-0.001	8629391	1000.00	940	31.41- 71.41	51.41
3.663	3.663	0.000	7945348	1000.00	934	27.33- 67.33	47.33
Average of Peak Amounts =					948		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	17569702	1000.00	972	80.00- 120.00	100.00
4.479	4.480	-0.001	22603079	1000.00	1020	108.65- 148.65	128.65
4.745	4.746	-0.001	17744649	1000.00	1000	81.00- 121.00	101.00
4.919	4.920	-0.001	17588450	1000.00	1020	80.11- 120.11	100.11
5.065	5.066	-0.001	40251819	1000.00	1040	209.10- 249.10	229.10
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/018b1801.d
Date : 02-DEC-2009 07:22
Client ID: AR166002
Sample Info: IWAR091102-60 02
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

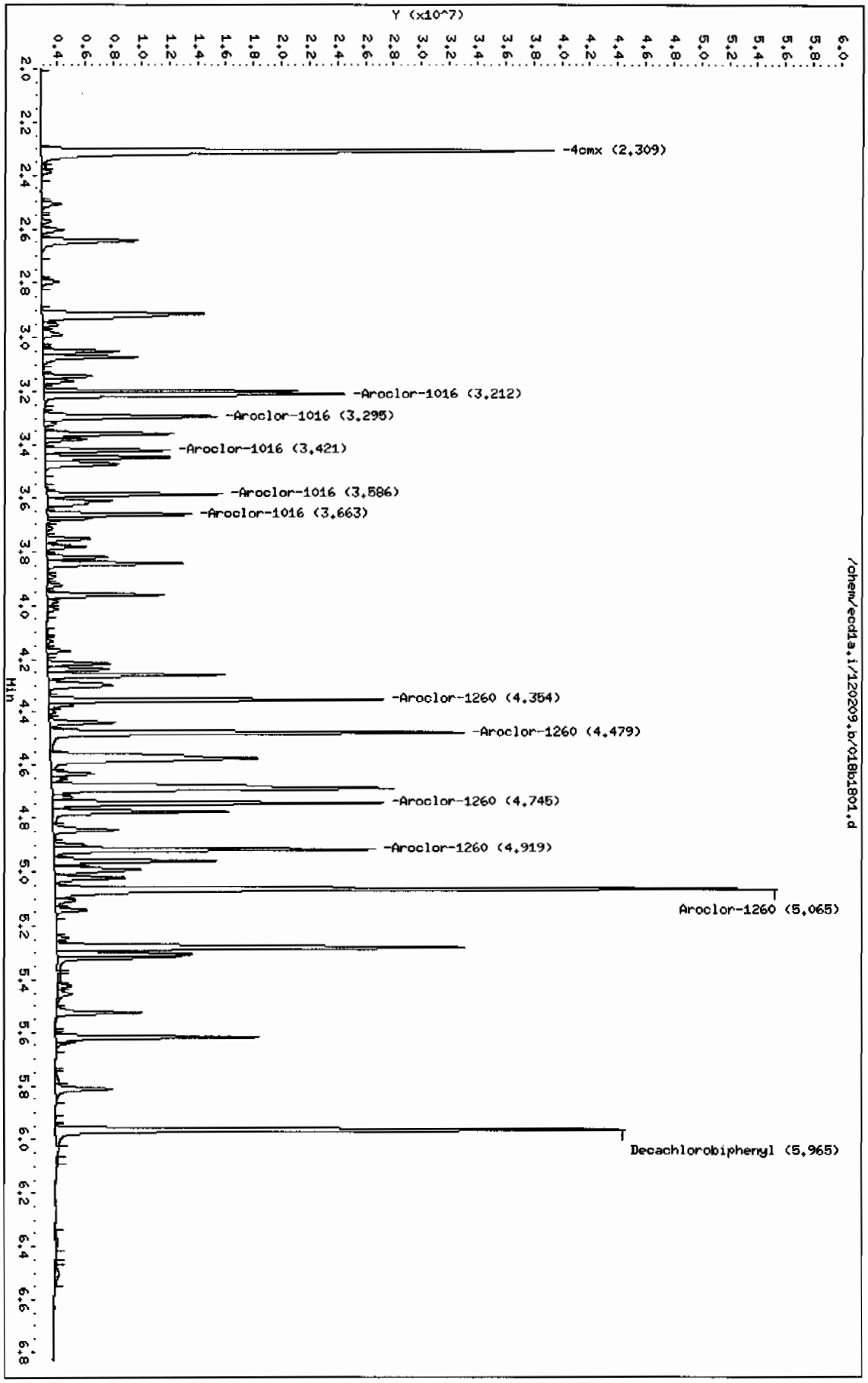

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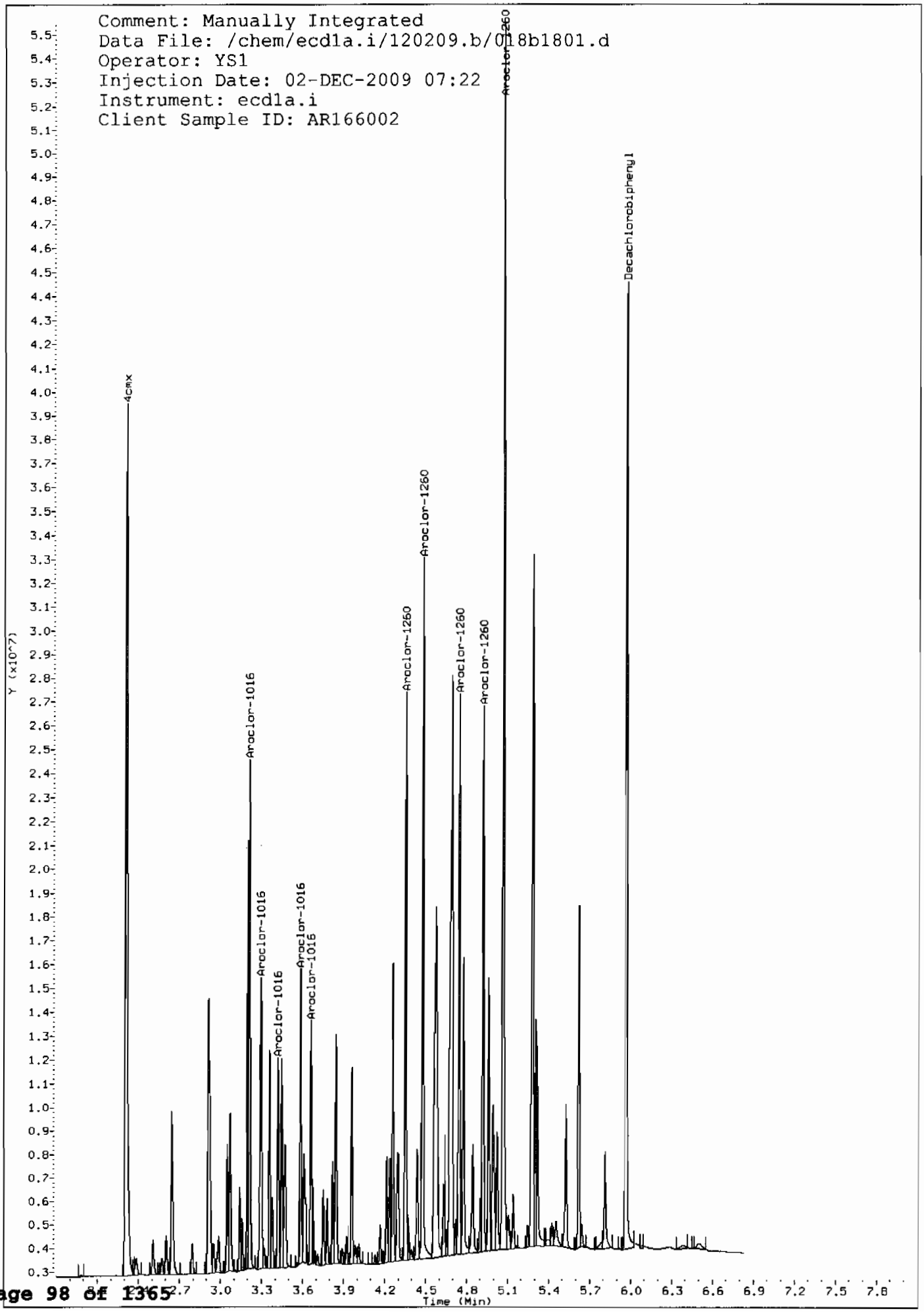
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120209.b/018b1801.d
Operator: YS1
Injection Date: 02-DEC-2009 07:22
Instrument: ecd1a.i
Client Sample ID: AR166002
4CMX
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

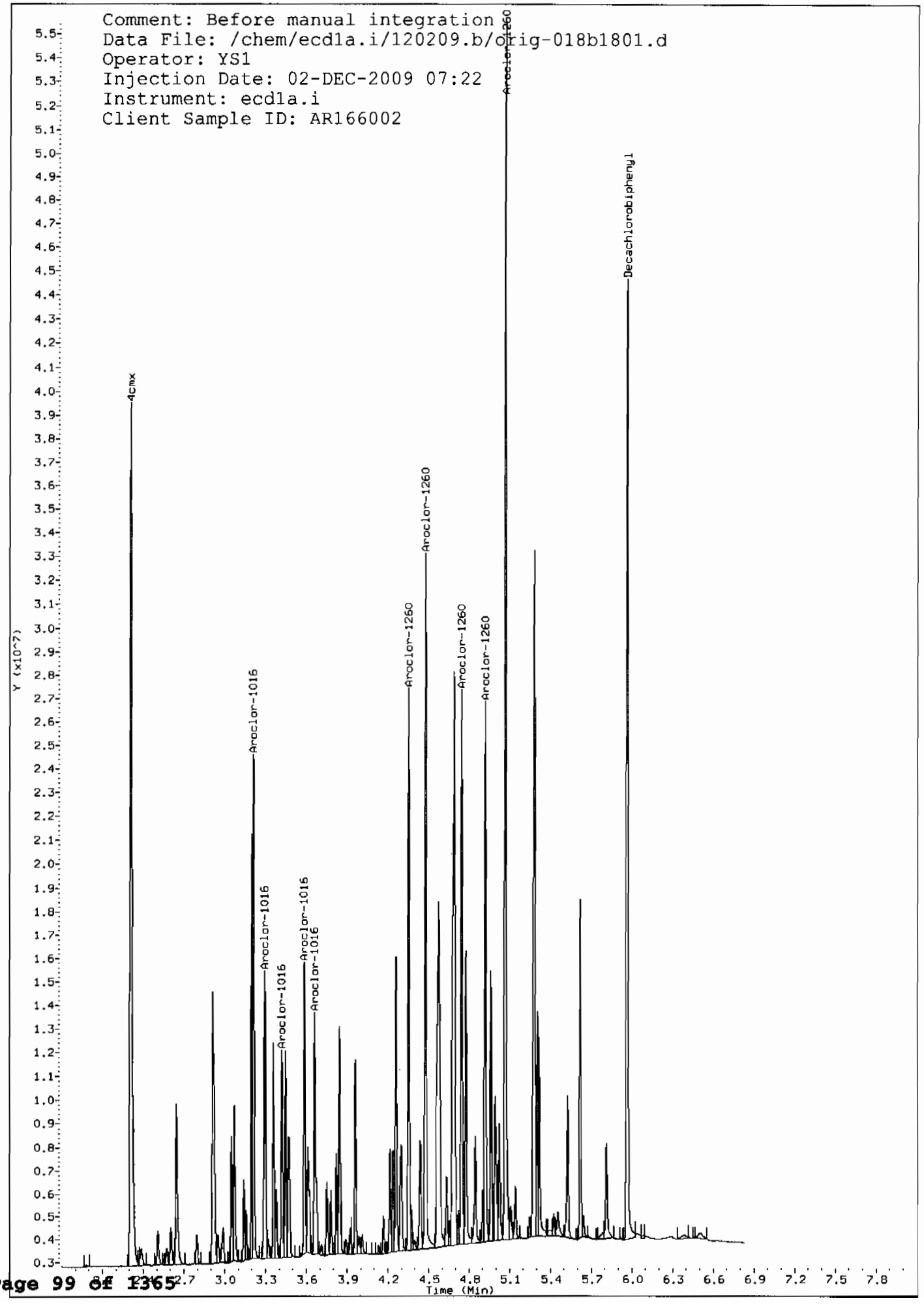
Comment: Before manual integration
Data File: /chem/ecd1a.i/120209.b/orig-018b1801.d
Operator: YS1
Injection Date: 02-DEC-2009 07:22
Instrument: ecd1a.i
Client Sample ID: AR166002
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/028f2801.d
Lab Smp Id: WAR091102-60 03 Client Smp ID: AR166003
Inj Date : 02-DEC-2009 09:20
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 03
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 12:32 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.971	0.001	47102928	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	42008344	100.000	103	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	16713943	1000.00	978	80.00- 120.00	100.00
2.718	2.720	-0.002	21436937	1000.00	1010	108.26- 148.26	128.26
2.799	2.801	-0.002	13331681	1000.00	950	59.76- 99.76	79.76
2.837	2.838	-0.001	8141750	1000.00	967	28.71- 68.71	48.71
3.048	3.050	-0.002	10317653	1000.00	956	41.73- 81.73	61.73
Average of Peak Amounts =					972		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21380179	1000.00	997	80.00- 120.00	100.00
3.937	3.939	-0.002	32311380	1000.00	1000	131.13- 171.13	151.13
4.167	4.169	-0.002	20025599	1000.00	979	73.66- 113.66	93.66
4.310	4.311	-0.001	20242164	1000.00	1010	74.68- 114.68	94.68
4.490	4.491	-0.001	47371091	1000.00	1020	201.57- 241.57	221.57
Average of Peak Amounts =					1e+03		

Data File: /chem/ecd1a.i/120209.b/028f2801.d

Date : 02-DEC-2009 09:20

Client ID: AR166003

Sample Info: IWAR091102-60 03

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

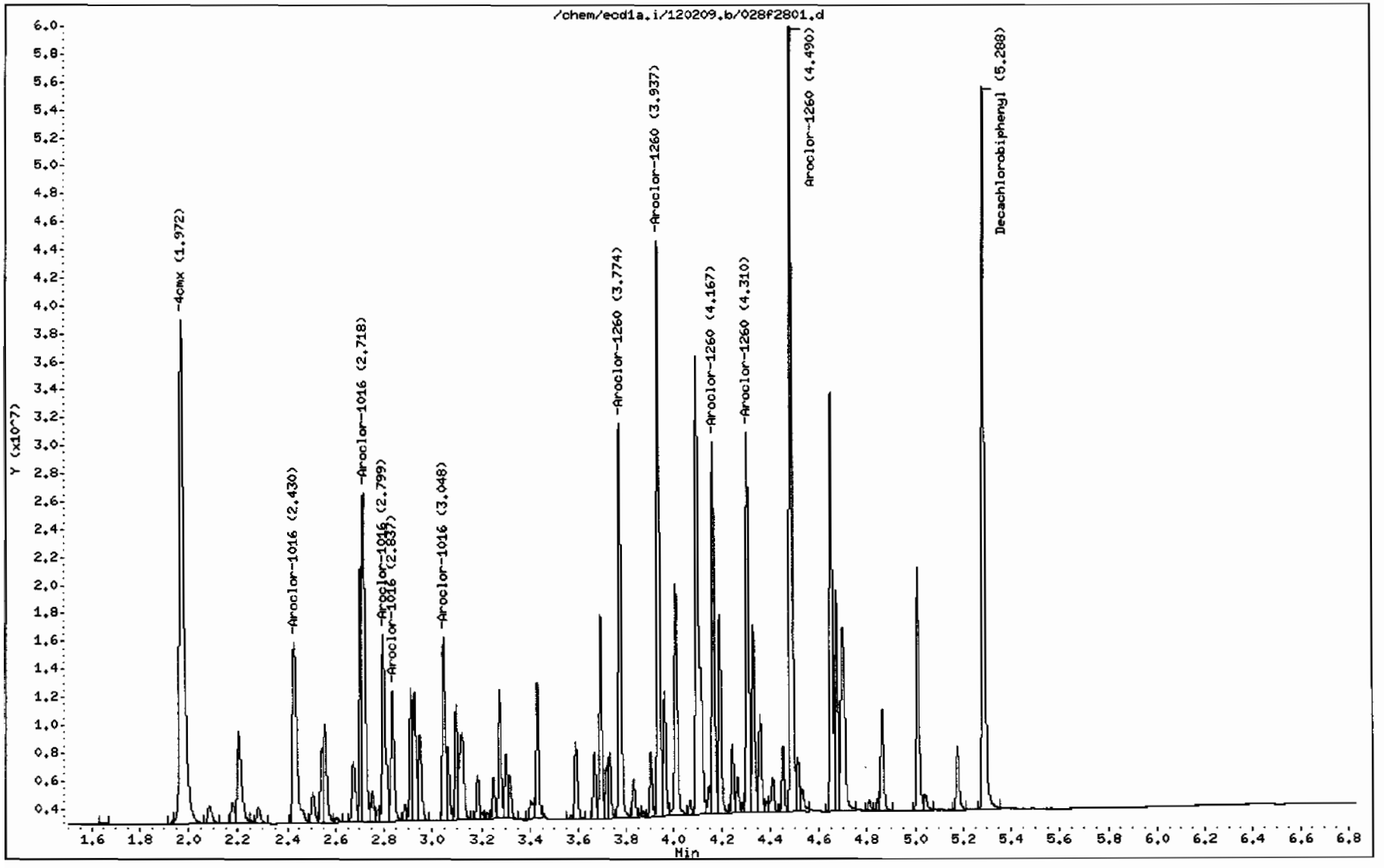

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/028b2801.d
Lab Smp Id: WAR091102-60 03 Client Smp ID: AR166003
Inj Date : 02-DEC-2009 09:20
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 03
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 12:31 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	39405529	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	32109370	100.000	107	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	17704096	1000.00	1050	80.00- 120.00	100.00(M)
3.296	3.296	0.000	11200102	1000.00	971	43.26- 83.26	63.26
3.421	3.421	0.000	6660382	1000.00	958	17.62- 57.62	37.62
3.587	3.587	0.000	9139200	1000.00	995	31.62- 71.62	51.62
3.662	3.663	-0.001	8316697	1000.00	977	26.98- 66.98	46.98
Average of Peak Amounts =					990		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	18064761	1000.00	1000	80.00- 120.00	100.00
4.479	4.480	-0.001	22988208	1000.00	1040	107.25- 147.25	127.25
4.745	4.746	-0.001	18103122	1000.00	1020	80.21- 120.21	100.21
4.919	4.920	-0.001	17832508	1000.00	1040	78.71- 118.71	98.71
5.067	5.066	0.001	40545554	1000.00	1050	204.45- 244.45	224.45
Average of Peak Amounts =					1.03e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdia.i/120209.b/028b2801.d
Date : 02-DEC-2009 09:20
Client ID: AR166003
Sample Info: IWAR091102-60 03
Column phase: CLP2

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

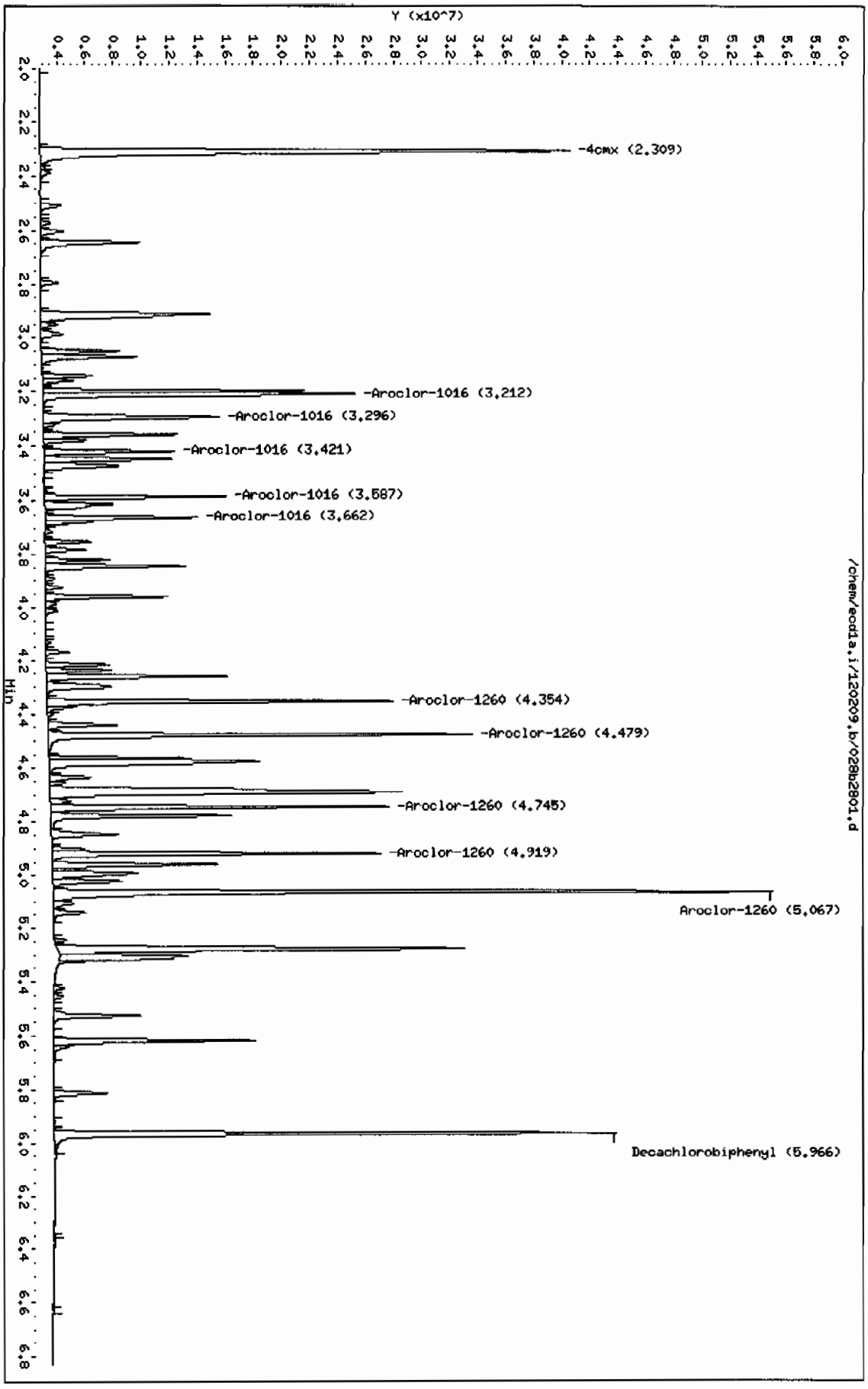

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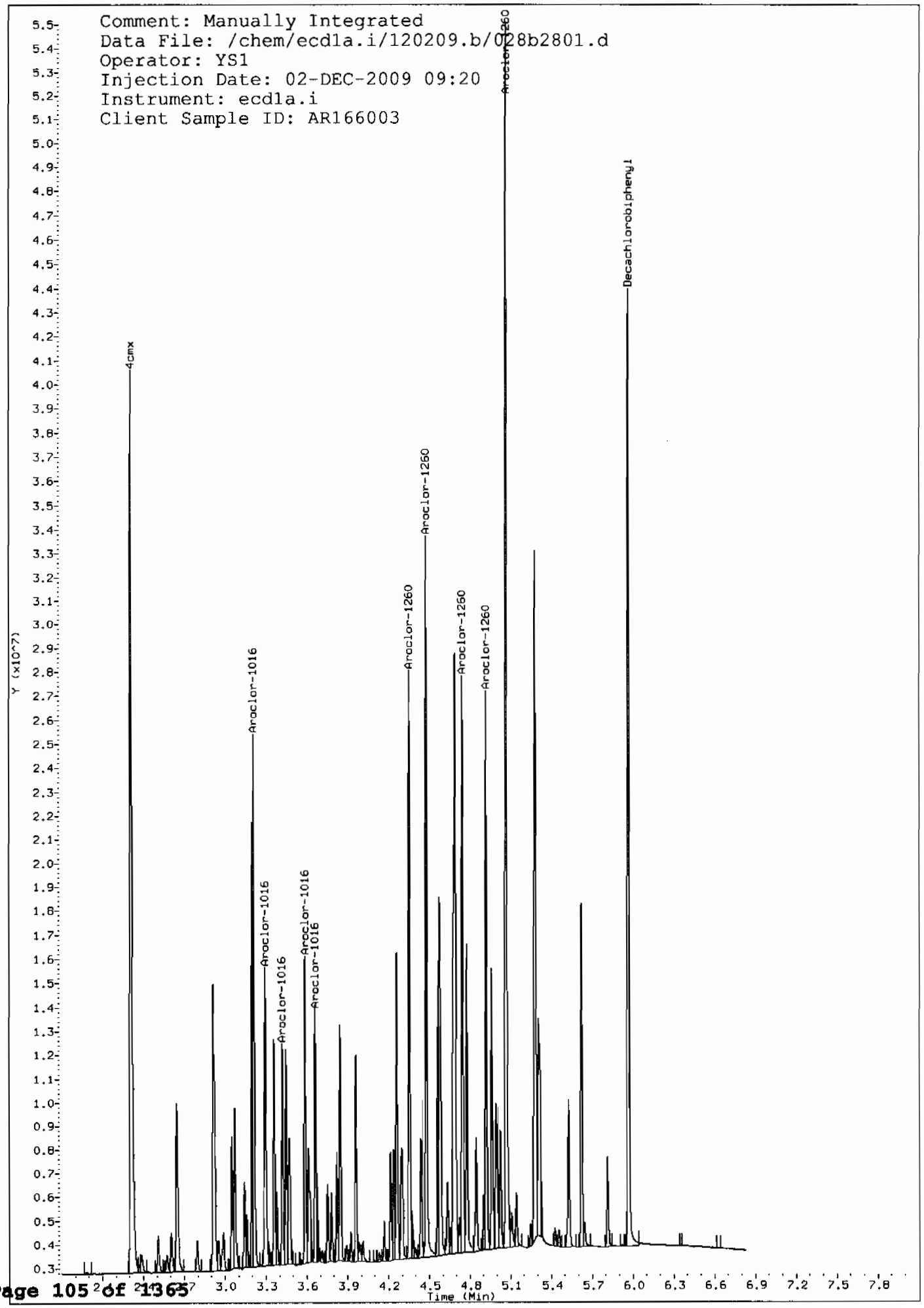
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120209.b/028b2801.d
Operator: YS1
Injection Date: 02-DEC-2009 09:20
Instrument: ecd1a.i
Client Sample ID: AR166003
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

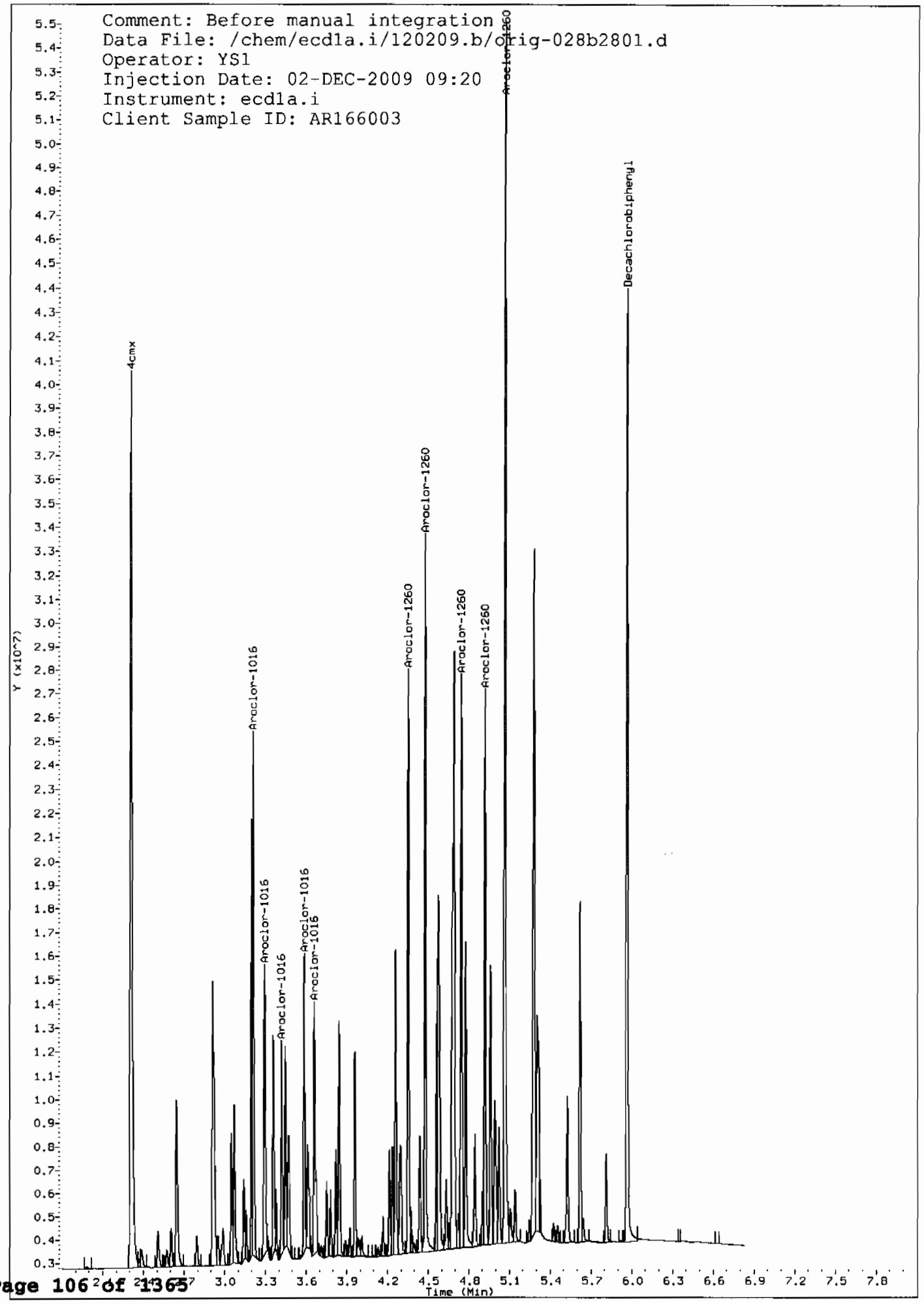
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Data File: /chem/ecd1a.i/120209.b/orig-028b2801.d
Operator: YS1
Injection Date: 02-DEC-2009 09:20
Instrument: ecd1a.i
Client Sample ID: AR166003
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/040f4001.d
Lab Smp Id: WAR091102-60 04 Client Smp ID: AR166004
Inj Date : 02-DEC-2009 11:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 12:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 40 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.971	0.000	46800392	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	43069623	100.000	105	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.431	-0.002	16596379	1000.00	971	80.00- 120.00	100.00
2.719	2.720	-0.001	20480274	1000.00	964	103.40- 143.40	123.40
2.799	2.801	-0.002	13244957	1000.00	944	59.81- 99.81	79.81
2.837	2.838	-0.001	8123416	1000.00	965	28.95- 68.95	48.95
3.048	3.050	-0.002	10410018	1000.00	964	42.72- 82.72	62.72
Average of Peak Amounts =					962		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21090270	1000.00	983	80.00- 120.00	100.00
3.937	3.939	-0.002	32009670	1000.00	994	131.77- 171.77	151.77
4.167	4.169	-0.002	20069792	1000.00	981	75.16- 115.16	95.16
4.310	4.311	-0.001	20499743	1000.00	1020	77.20- 117.20	97.20
4.489	4.491	-0.002	47813467	1000.00	1030	206.71- 246.71	226.71
Average of Peak Amounts =					1e+03		

Data File: /chem/ecd1a.i/120209.b/040f4001.d
Date : 02-DEC-2009 11:47
Client ID: AR166004
Sample Info: IWAR091102-60 04

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

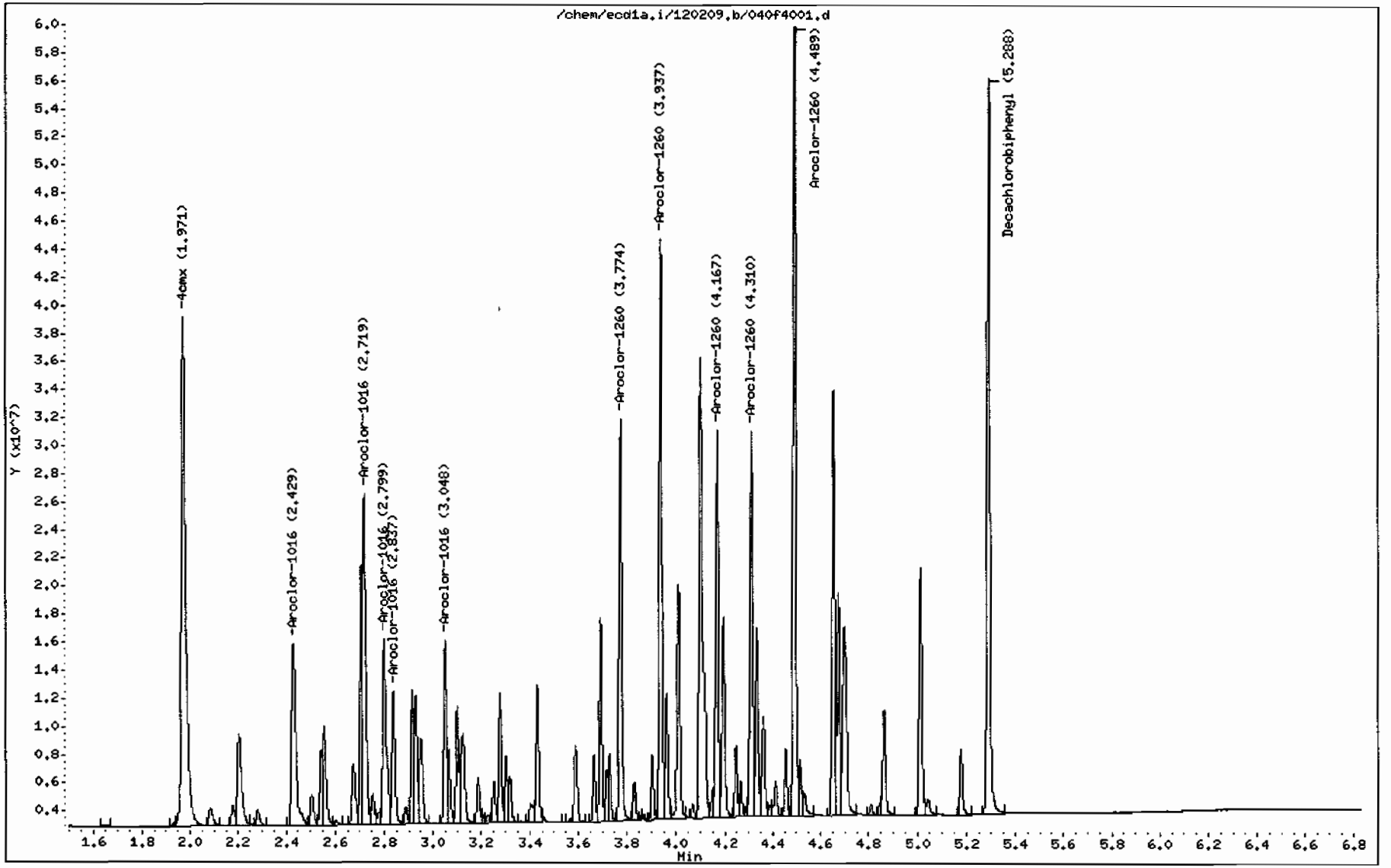

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/040b4001.d
Lab Smp Id: WAR091102-60 04 Client Smp ID: AR166004
Inj Date : 02-DEC-2009 11:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 12:31 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 40 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	39390951	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	32961667	100.000	110	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	16637441	1000.00	987	80.00- 120.00	100.00(M)
3.295	3.296	-0.001	11270968	1000.00	977	47.74- 87.74	67.74
3.421	3.421	0.000	6782659	1000.00	976	20.77- 60.77	40.77
3.587	3.587	0.000	9255062	1000.00	1010	35.63- 75.63	55.63
3.663	3.663	0.000	8738186	1000.00	1030	32.52- 72.52	52.52
Average of Peak Amounts =					995		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	18137441	1000.00	1000	80.00- 120.00	100.00
4.479	4.480	-0.001	22998689	1000.00	1040	106.80- 146.80	126.80
4.744	4.746	-0.002	18282803	1000.00	1030	80.80- 120.80	100.80
4.919	4.920	-0.001	17924048	1000.00	1040	78.82- 118.82	98.82
5.065	5.066	-0.001	41072519	1000.00	1060	206.45- 246.45	226.45
Average of Peak Amounts =					1.04e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/040b4001.d
Date : 02-DEC-2009 11:47
Client ID: AR166004
Sample Info: IWAR091102-60 04
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

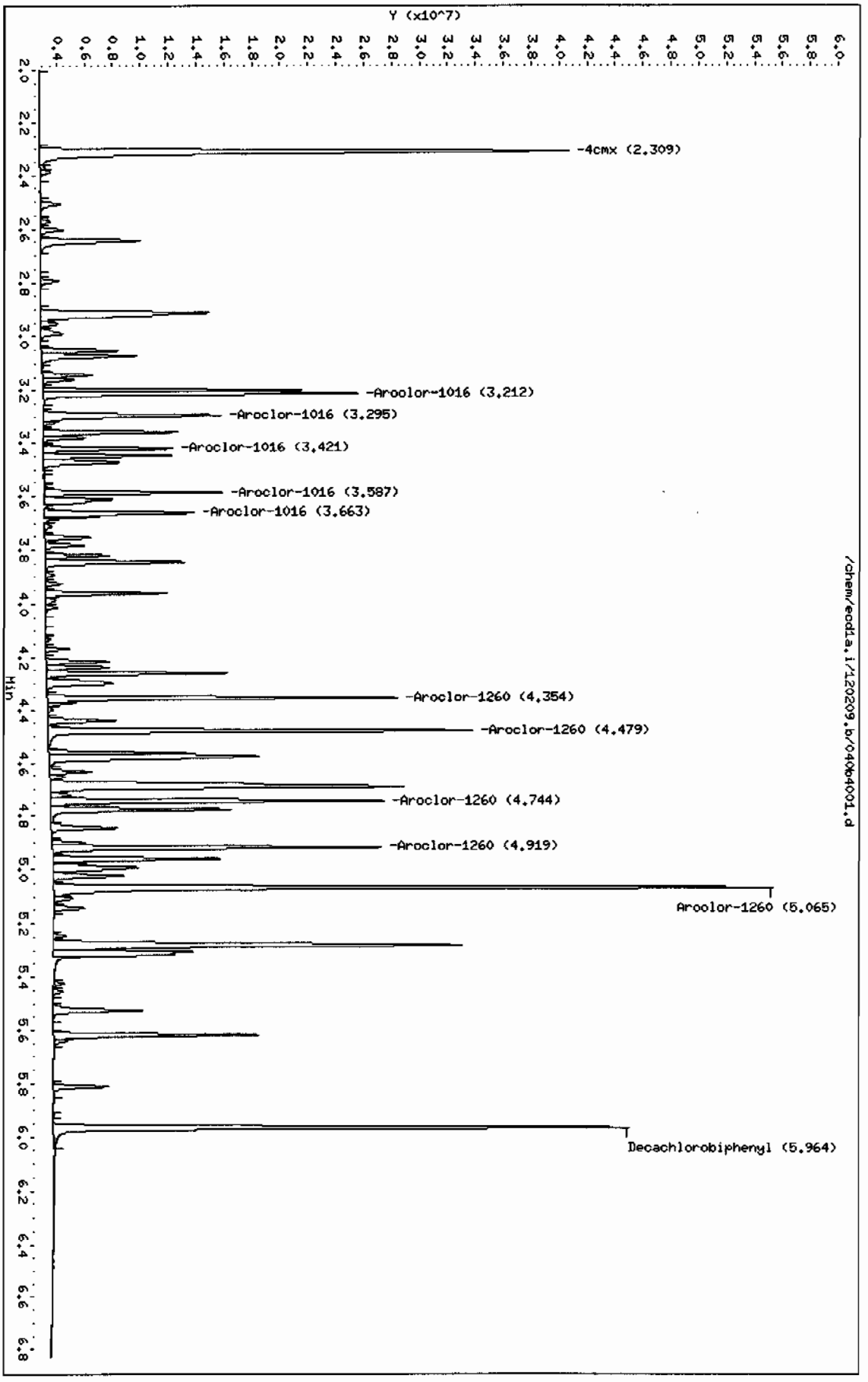

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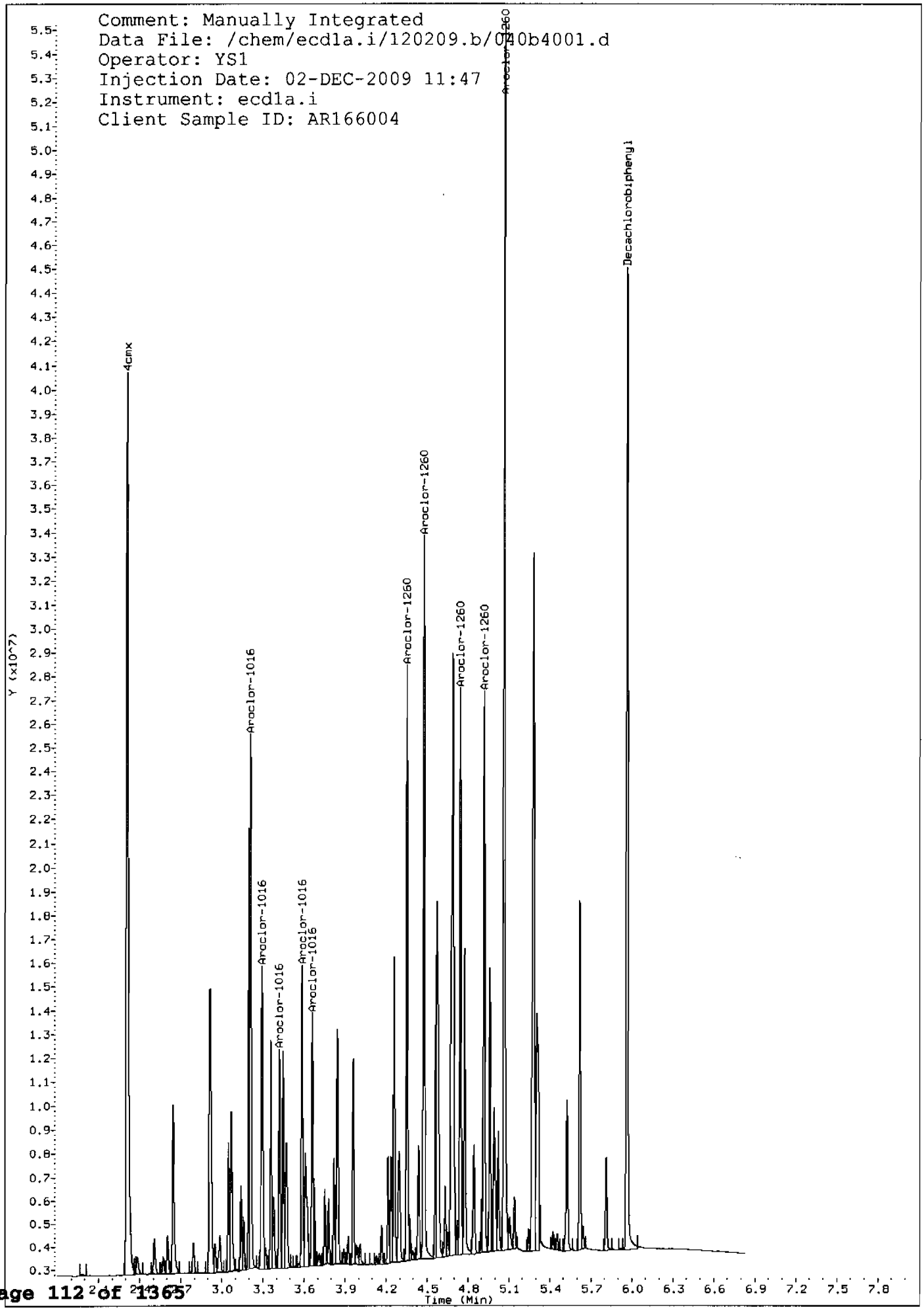
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Operator: YS1
Injection Date: 02-DEC-2009 11:47
Instrument: ecd1a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
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Aroclor-1016
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Aroclor-1016
Aroclor-1260
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Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

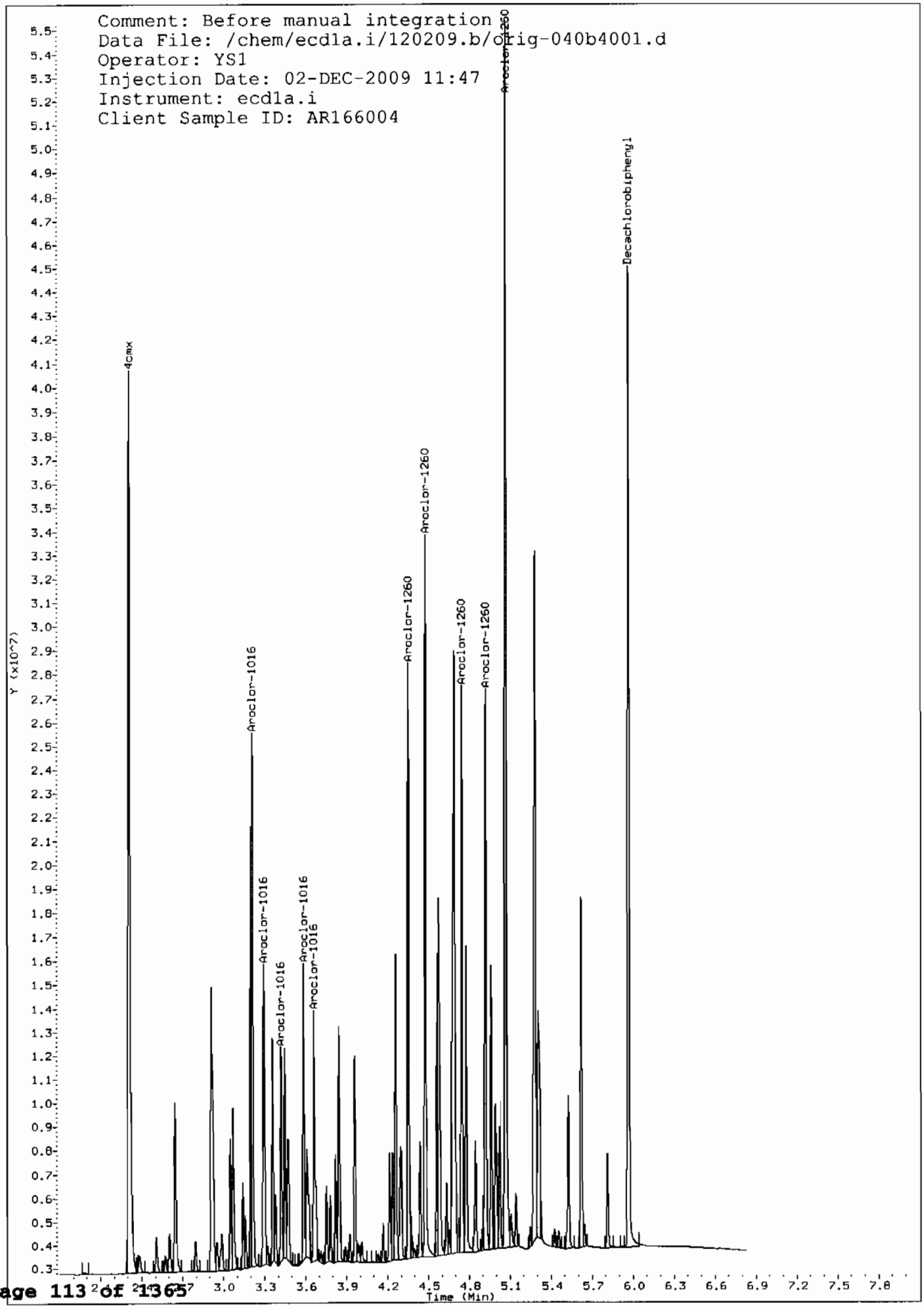
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Data File: /chem/ecd1a.i/120209.b/orig-040b4001.d
Operator: YS1
Injection Date: 02-DEC-2009 11:47
Instrument: ecd1a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	1.97	5.29
02	ZZZZZ	ZZZZZ	11/10/09	0814	1.97	5.29
03	ZZZZZ	ZZZZZ	11/10/09	0825	1.98	5.29
04	ZZZZZ	ZZZZZ	11/10/09	0835	1.98	5.29
05	ZZZZZ	ZZZZZ	11/10/09	0846	1.98	5.30
06	AR123201	WAR090930-32	11/10/09	0856	1.98	5.29
07	AR122101	WAR090803-21	11/10/09	0907	1.97	5.30
08	AR126201	WAR090803-62	11/10/09	0917	1.98	5.29
09	AR126801	WAR091106-68	11/10/09	0928	1.98	5.29
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	1.98	5.30
12	AR166002	WAR091110-02	11/10/09	0959	1.98	5.30
13	AR166003	WAR091110-04	11/10/09	1010	1.98	5.30
14	AR166004	WAR091110-03	11/10/09	1021	1.98	5.30
15	AR166005	IAR091102-01	11/10/09	1031	1.98	5.29
16	AR166001	WAR091102-60	11/10/09	1042	1.98	5.30
17	AR125401	WAR091110-05	11/10/09	1052	1.97	5.30
18	AR125402	WAR091110-06	11/10/09	1103	1.98	5.30
19	AR125403	WAR091110-08	11/10/09	1113	1.98	5.29
20	AR125401	WAR091110-08	11/10/09	1124	1.98	5.30
21	AR125405	IAR091027-01	11/10/09	1134	1.98	5.30
22	AR125401	WAR091102-54	11/10/09	1145	1.98	5.30
23	AR124201	WAR091110-09	11/10/09	1155	1.98	5.30
24	AR124202	WAR091110-10	11/10/09	1206	1.98	5.29
25	AR124203	WAR091110-11	11/10/09	1217	1.98	5.30
26	AR124204	WAR091110-12	11/10/09	1227	1.98	5.30
27	AR124205	IAR090914-01	11/10/09	1238	1.98	5.30
28	AR124201	WAR091102-42	11/10/09	1248	1.98	5.30
29	AR124801	WAR091110-13	11/10/09	1259	1.98	5.30
30	AR124802	WAR091110-14	11/10/09	1309	1.98	5.30
31	AR124803	WAR091110-15	11/10/09	1320	1.98	5.29
32	AR124804	WAR091110-16	11/10/09	1330	1.98	5.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	1.98	5.29
02	AR124801	WAR091027-48	11/10/09	1351	1.98	5.30
03	PIBLK02	WAR090916-99	11/10/09	1402	1.98	5.30
04	ZZZZZ	ZZZZZ	11/10/09	1412	1.98	5.30
05	ZZZZZ	ZZZZZ	11/10/09	1423	1.98	5.30
06	ZZZZZ	ZZZZZ	11/10/09	1433	1.98	5.30
07	ZZZZZ	ZZZZZ	11/10/09	1444	1.98	5.30
08	ZZZZZ	ZZZZZ	11/10/09	1457	1.97	5.30
09	ZZZZZ	ZZZZZ	11/10/09	1509	1.97	5.29
10	ZZZZZ	ZZZZZ	11/10/09	1522	1.97	5.29
11	AR166002	WAR091102-60	11/10/09	1534	1.98	5.29
12	PIBLK03	WAR090916-99	11/10/09	1545	1.98	5.30
13	ZZZZZ	ZZZZZ	11/10/09	1555	1.97	5.30
14	ZZZZZ	ZZZZZ	11/10/09	1608	1.97	5.29
15	ZZZZZ	ZZZZZ	11/10/09	1620	1.98	5.29
16	ZZZZZ	ZZZZZ	11/10/09	1633	1.97	5.29
17	ZZZZZ	ZZZZZ	11/10/09	1645	1.97	5.29
18	ZZZZZ	ZZZZZ	11/10/09	1658	1.98	5.29
19	ZZZZZ	ZZZZZ	11/10/09	1711	1.97	5.29
20	ZZZZZ	ZZZZZ	11/10/09	1723	1.98	5.29
21	ZZZZZ	ZZZZZ	11/10/09	1736	1.97	5.29
22	ZZZZZ	ZZZZZ	11/10/09	1748	1.98	5.29
23	AR166003	WAR091102-60	11/10/09	1801	1.98	5.29
24	PIBLK04	WAR090916-99	11/10/09	1812	1.98	5.30
25	ZZZZZ	ZZZZZ	11/10/09	1822	1.98	5.30
26	ZZZZZ	ZZZZZ	11/10/09	1835	1.98	5.29
27	ZZZZZ	ZZZZZ	11/10/09	1847	1.98	5.29
28	ZZZZZ	ZZZZZ	11/10/09	1900	1.98	5.29
29	ZZZZZ	ZZZZZ	11/10/09	1912	1.98	5.29
30	ZZZZZ	ZZZZZ	11/10/09	1925	1.98	5.29
31	ZZZZZ	ZZZZZ	11/10/09	1938	1.97	5.29
32	ZZZZZ	ZZZZZ	11/10/09	1950	1.98	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	2.31	5.97
02	ZZZZZ	ZZZZZ	11/10/09	0814	2.31	5.97
03	ZZZZZ	ZZZZZ	11/10/09	0825	2.32	5.97
04	ZZZZZ	ZZZZZ	11/10/09	0835	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	0846	2.31	5.97
06	AR123201	WAR090930-32	11/10/09	0856	2.31	5.97
07	AR122101	WAR090803-21	11/10/09	0907	2.31	5.97
08	AR126201	WAR090803-62	11/10/09	0917	2.31	5.97
09	AR126801	WAR091106-68	11/10/09	0928	2.31	5.97
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	2.31	5.97
12	AR166002	WAR091110-02	11/10/09	0959	2.31	5.97
13	AR166003	WAR091110-04	11/10/09	1010	2.31	5.97
14	AR166004	WAR091110-03	11/10/09	1021	2.31	5.97
15	AR166005	IAR091102-01	11/10/09	1031	2.31	5.97
16	AR166001	WAR091102-60	11/10/09	1042	2.31	5.97
17	AR125401	WAR091110-05	11/10/09	1052	2.31	5.97
18	AR125402	WAR091110-06	11/10/09	1103	2.31	5.97
19	AR125403	WAR091110-08	11/10/09	1113	2.31	5.97
20	AR125401	WAR091110-08	11/10/09	1124	2.32	5.97
21	AR125405	IAR091027-01	11/10/09	1134	2.32	5.97
22	AR125401	WAR091102-54	11/10/09	1145	2.32	5.97
23	AR124201	WAR091110-09	11/10/09	1155	2.32	5.97
24	AR124202	WAR091110-10	11/10/09	1206	2.31	5.97
25	AR124203	WAR091110-11	11/10/09	1217	2.31	5.97
26	AR124204	WAR091110-12	11/10/09	1227	2.32	5.97
27	AR124205	IAR090914-01	11/10/09	1238	2.32	5.97
28	AR124201	WAR091102-42	11/10/09	1248	2.32	5.97
29	AR124801	WAR091110-13	11/10/09	1259	2.31	5.97
30	AR124802	WAR091110-14	11/10/09	1309	2.31	5.97
31	AR124803	WAR091110-15	11/10/09	1320	2.31	5.97
32	AR124804	WAR091110-16	11/10/09	1330	2.31	5.97

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	2.31	5.97
02	AR124801	WAR091027-48	11/10/09	1351	2.31	5.97
03	PIBLK02	WAR090916-99	11/10/09	1402	2.31	5.97
04	ZZZZZ	ZZZZZ	11/10/09	1412	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	1423	2.31	5.97
06	ZZZZZ	ZZZZZ	11/10/09	1433	2.31	5.97
07	ZZZZZ	ZZZZZ	11/10/09	1444	2.31	5.97
08	ZZZZZ	ZZZZZ	11/10/09	1457	2.31	5.97
09	ZZZZZ	ZZZZZ	11/10/09	1509	2.31	5.97
10	ZZZZZ	ZZZZZ	11/10/09	1522	2.31	5.97
11	AR166002	WAR091102-60	11/10/09	1534	2.31	5.97
12	PIBLK03	WAR090916-99	11/10/09	1545	2.31	5.97
13	ZZZZZ	ZZZZZ	11/10/09	1555	2.31	5.97
14	ZZZZZ	ZZZZZ	11/10/09	1608	2.31	5.97
15	ZZZZZ	ZZZZZ	11/10/09	1620	2.31	5.97
16	ZZZZZ	ZZZZZ	11/10/09	1633	2.31	5.97
17	ZZZZZ	ZZZZZ	11/10/09	1645	2.31	5.97
18	ZZZZZ	ZZZZZ	11/10/09	1658	2.31	5.97
19	ZZZZZ	ZZZZZ	11/10/09	1711	2.31	5.97
20	ZZZZZ	ZZZZZ	11/10/09	1723	2.31	5.97
21	ZZZZZ	ZZZZZ	11/10/09	1736	2.31	5.97
22	ZZZZZ	ZZZZZ	11/10/09	1748	2.31	5.97
23	AR166003	WAR091102-60	11/10/09	1801	2.31	5.97
24	PIBLK04	WAR090916-99	11/10/09	1812	2.31	5.97
25	ZZZZZ	ZZZZZ	11/10/09	1822	2.31	5.97
26	ZZZZZ	ZZZZZ	11/10/09	1835	2.31	5.97
27	ZZZZZ	ZZZZZ	11/10/09	1847	2.31	5.97
28	ZZZZZ	ZZZZZ	11/10/09	1900	2.31	5.97
29	ZZZZZ	ZZZZZ	11/10/09	1912	2.31	5.97
30	ZZZZZ	ZZZZZ	11/10/09	1925	2.31	5.97
31	ZZZZZ	ZZZZZ	11/10/09	1938	2.31	5.97
32	ZZZZZ	ZZZZZ	11/10/09	1950	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/02/09	0413	1.97	5.29
02	AR166001	WAR091102-60	12/02/09	0423	1.97	5.29
03	AR125401	WAR091102-54	12/02/09	0434	1.97	5.29
04	AR124201	WAR091102-42	12/02/09	0444	1.97	5.29
05	AR124801	WAR091027-48	12/02/09	0455	1.97	5.29
06	AR123201	WAR090930-32	12/02/09	0505	1.97	5.29
07	AR122101	WAR090803-21	12/02/09	0516	1.97	5.29
08	AR126201	WAR090803-62	12/02/09	0526	1.97	5.29
09	AR126801	WAR091106-68	12/02/09	0537	1.97	5.29
10	DDTANALOGSTD	WAR091020-DD	12/02/09	0547		
11	PIBLK02	WAR090916-99	12/02/09	0558	1.97	5.29
12	ZZZZZ	ZZZZZ	12/02/09	0608	1.97	5.29
13	ZZZZZ	ZZZZZ	12/02/09	0619	1.97	5.29
14	ZZZZZ	ZZZZZ	12/02/09	0632		
15	ZZZZZ	ZZZZZ	12/02/09	0644		
16	ZZZZZ	ZZZZZ	12/02/09	0657		
17	ZZZZZ	ZZZZZ	12/02/09	0709	1.97	5.29
18	AR166002	WAR091102-60	12/02/09	0722	1.97	5.29
19	PIBLK03	WAR090916-99	12/02/09	0733	1.97	5.29
20	PBLK01	1201982151	12/02/09	0743	1.97	5.29
21	PBLK01LCS	1201982154	12/02/09	0754	1.97	5.29
22	ZZZZZ	ZZZZZ	12/02/09	0804	1.97	5.29
23	ZZZZZ	ZZZZZ	12/02/09	0817	1.97	5.29
24	ZZZZZ	ZZZZZ	12/02/09	0829	1.97	5.29
25	ZZZZZ	ZZZZZ	12/02/09	0842	1.97	5.29
26	ZZZZZ	ZZZZZ	12/02/09	0855	1.97	5.29
27	ZZZZZ	ZZZZZ	12/02/09	0907	1.97	5.29
28	AR166003	WAR091102-60	12/02/09	0920	1.97	5.29
29	PIBLK04	WAR090916-99	12/02/09	0930	1.97	5.29
30	ZZZZZ	ZZZZZ	12/02/09	0941	1.97	5.29
31	ZZZZZ	ZZZZZ	12/02/09	0953	1.97	5.29
32	ZZZZZ	ZZZZZ	12/02/09	1006	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/02/09	1019	1.97	5.29
02	ZZZZZ	ZZZZZ	12/02/09	1031	1.97	5.29
03	RE03-09-13910	241711002	12/02/09	1044	1.97	5.29
04	RE03-09-13911	241711003	12/02/09	1056	1.97	5.29
05	ZZZZZ	ZZZZZ	12/02/09	1109	1.97	5.29
06	ZZZZZ	ZZZZZ	12/02/09	1122	1.97	5.29
07	ZZZZZ	ZZZZZ	12/02/09	1134	1.97	5.29
08	AR166004	WAR091102-60	12/02/09	1147	1.97	5.29
09	PIBLK05	WAR090916-99	12/02/09	1157	1.97	5.29
10	ZZZZZ	ZZZZZ	12/02/09	1208	1.97	5.29
11	ZZZZZ	ZZZZZ	12/02/09	1218	1.97	5.29
12	ZZZZZ	ZZZZZ	12/02/09	1229	1.97	5.29
13	ZZZZZ	ZZZZZ	12/02/09	1242	1.97	5.29
14	ZZZZZ	ZZZZZ	12/02/09	1254	1.97	5.29
15	ZZZZZ	ZZZZZ	12/02/09	1307	1.97	5.29
16	ZZZZZ	ZZZZZ	12/02/09	1319	1.97	5.29
17	ZZZZZ	ZZZZZ	12/02/09	1332	1.97	5.29
18	ZZZZZ	ZZZZZ	12/02/09	1345	1.97	5.29
19	ZZZZZ	ZZZZZ	12/02/09	1357	1.97	5.29
20	AR166005	WAR091102-60	12/02/09	1410	1.97	5.29
21	PIBLK06	WAR090916-99	12/02/09	1420	1.97	5.29
22	ZZZZZ	ZZZZZ	12/02/09	1431	1.97	5.29
23	ZZZZZ	ZZZZZ	12/02/09	1443	1.97	5.29
24	ZZZZZ	ZZZZZ	12/02/09	1456	1.97	5.29
25	ZZZZZ	ZZZZZ	12/02/09	1509	1.97	5.29
26	AR166006	WAR091102-60	12/02/09	1521	1.97	5.29
27	PIBLK07	WAR090916-99	12/02/09	1532	1.97	5.29
28	ZZZZZ	ZZZZZ	12/02/09	1542	1.97	5.29
29	ZZZZZ	ZZZZZ	12/02/09	1555	1.97	5.29
30	ZZZZZ	ZZZZZ	12/02/09	1608	1.97	5.29
31	ZZZZZ	ZZZZZ	12/02/09	1620	1.97	5.29
32	ZZZZZ	ZZZZZ	12/02/09	1633	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/02/09	0413	2.31	5.96
02	AR166001	WAR091102-60	12/02/09	0423	2.31	5.97
03	AR125401	WAR091102-54	12/02/09	0434	2.31	5.97
04	AR124201	WAR091102-42	12/02/09	0444	2.31	5.97
05	AR124801	WAR091027-48	12/02/09	0455	2.31	5.97
06	AR123201	WAR090930-32	12/02/09	0505	2.31	5.97
07	AR122101	WAR090803-21	12/02/09	0516	2.31	5.97
08	AR126201	WAR090803-62	12/02/09	0526	2.31	5.97
09	AR126801	WAR091106-68	12/02/09	0537	2.31	5.97
10	DDTANALOGSTD	WAR091020-DD	12/02/09	0547		
11	PIBLK02	WAR090916-99	12/02/09	0558	2.31	5.97
12	ZZZZZ	ZZZZZ	12/02/09	0608	2.31	5.97
13	ZZZZZ	ZZZZZ	12/02/09	0619	2.31	5.97
14	ZZZZZ	ZZZZZ	12/02/09	0632		
15	ZZZZZ	ZZZZZ	12/02/09	0644		
16	ZZZZZ	ZZZZZ	12/02/09	0657		
17	ZZZZZ	ZZZZZ	12/02/09	0709	2.31	5.97
18	AR166002	WAR091102-60	12/02/09	0722	2.31	5.96
19	PIBLK03	WAR090916-99	12/02/09	0733	2.31	5.97
20	PBLK01	1201982151	12/02/09	0743	2.31	5.97
21	PBLK01LCS	1201982154	12/02/09	0754	2.31	5.97
22	ZZZZZ	ZZZZZ	12/02/09	0804	2.31	5.97
23	ZZZZZ	ZZZZZ	12/02/09	0817	2.31	5.96
24	ZZZZZ	ZZZZZ	12/02/09	0829	2.31	5.96
25	ZZZZZ	ZZZZZ	12/02/09	0842	2.31	5.97
26	ZZZZZ	ZZZZZ	12/02/09	0855	2.31	5.97
27	ZZZZZ	ZZZZZ	12/02/09	0907	2.31	5.97
28	AR166003	WAR091102-60	12/02/09	0920	2.31	5.97
29	PIBLK04	WAR090916-99	12/02/09	0930	2.31	5.97
30	ZZZZZ	ZZZZZ	12/02/09	0941	2.31	5.97
31	ZZZZZ	ZZZZZ	12/02/09	0953	2.31	5.97
32	ZZZZZ	ZZZZZ	12/02/09	1006	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-649

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/02/09	1019	2.31	5.96
02	ZZZZZ	ZZZZZ	12/02/09	1031	2.31	5.97
03	RE03-09-13910	241711002	12/02/09	1044	2.31	5.97
04	RE03-09-13911	241711003	12/02/09	1056	2.31	5.96
05	ZZZZZ	ZZZZZ	12/02/09	1109	2.31	5.96
06	ZZZZZ	ZZZZZ	12/02/09	1122	2.31	5.96
07	ZZZZZ	ZZZZZ	12/02/09	1134	2.31	5.97
08	AR166004	WAR091102-60	12/02/09	1147	2.31	5.96
09	PIBLK05	WAR090916-99	12/02/09	1157	2.31	5.97
10	ZZZZZ	ZZZZZ	12/02/09	1208	2.31	5.97
11	ZZZZZ	ZZZZZ	12/02/09	1218	2.31	5.97
12	ZZZZZ	ZZZZZ	12/02/09	1229	2.31	5.97
13	ZZZZZ	ZZZZZ	12/02/09	1242	2.31	5.97
14	ZZZZZ	ZZZZZ	12/02/09	1254	2.31	5.97
15	ZZZZZ	ZZZZZ	12/02/09	1307	2.31	5.97
16	ZZZZZ	ZZZZZ	12/02/09	1319	2.31	5.97
17	ZZZZZ	ZZZZZ	12/02/09	1332	2.31	5.97
18	ZZZZZ	ZZZZZ	12/02/09	1345	2.31	5.97
19	ZZZZZ	ZZZZZ	12/02/09	1357	2.31	5.97
20	AR166005	WAR091102-60	12/02/09	1410	2.31	5.96
21	PIBLK06	WAR090916-99	12/02/09	1420	2.31	5.97
22	ZZZZZ	ZZZZZ	12/02/09	1431	2.31	5.97
23	ZZZZZ	ZZZZZ	12/02/09	1443	2.31	5.97
24	ZZZZZ	ZZZZZ	12/02/09	1456	2.31	5.97
25	ZZZZZ	ZZZZZ	12/02/09	1509	2.31	5.97
26	AR166006	WAR091102-60	12/02/09	1521	2.31	5.96
27	PIBLK07	WAR090916-99	12/02/09	1532	2.31	5.97
28	ZZZZZ	ZZZZZ	12/02/09	1542	2.31	5.97
29	ZZZZZ	ZZZZZ	12/02/09	1555	2.31	5.97
30	ZZZZZ	ZZZZZ	12/02/09	1608	2.31	5.97
31	ZZZZZ	ZZZZZ	12/02/09	1620	2.31	5.97
32	ZZZZZ	ZZZZZ	12/02/09	1633	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–649 **Client ID:** LCS for batch 927085

Lab Sample ID: 1201982154

Data File: 021f2101.d **Data File:** 021b2101.d

Inst: ECD1A.I_1 **Inst:** ECD1A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 02–DEC–09 07:54 **Analyzed:** 02–DEC–09 07:54

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							2.27
Column 1	1	2.43	2.4 – 2.46	19.5		ug/kg	
	2	2.72	2.69 – 2.75	20.2		ug/kg	
	3	2.8	2.77 – 2.83	19.6		ug/kg	
	4	2.84	2.81 – 2.87	19.9		ug/kg	
	5	3.05	3.02 – 3.08	20.5		ug/kg	
					19.9		
Column 2	1	3.21	3.18 – 3.24	20.4		ug/kg	
	2	3.3	3.27 – 3.33	20		ug/kg	
	3	3.42	3.39 – 3.45	19.6		ug/kg	
	4	3.59	3.56 – 3.62	20.8		ug/kg	
	5	3.66	3.63 – 3.69	21.3		ug/kg	
					20.4		
Aroclor–1260							3.94
Column 1	1	3.78	3.75 – 3.81	22.6		ug/kg	
	2	3.94	3.91 – 3.97	22.8		ug/kg	
	3	4.17	4.14 – 4.2	22.8		ug/kg	
	4	4.31	4.28 – 4.34	23.7		ug/kg	
	5	4.49	4.46 – 4.52	24.1		ug/kg	
					23.2		
Column 2	1	4.36	4.32 – 4.38	22.9		ug/kg	
	2	4.48	4.45 – 4.51	23.7		ug/kg	
	3	4.75	4.72 – 4.78	24.1		ug/kg	
	4	4.92	4.89 – 4.95	24.6		ug/kg	
	5	5.07	5.04 – 5.1	25.2		ug/kg	
					24.1		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–649**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982151**				
Client Sample:	**QC for batch 927085**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927085**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927088**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 07:43**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:23**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**020f2001–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	020b2001–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/020f2001-1.d
Lab Smp Id: 1201982151 Client Smp ID: PBLK01
Inj Date : 02-DEC-2009 07:43
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982151|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 05:07 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 20 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.971	0.001	50575461	113.328	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	62200814	152.171	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120209.b/020f2001-1.d

Page 1

Date : 02-DEC-2009 07:43

Client ID: PBLK01

Instrument: ecd1a.i

Sample Info: |120198215|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

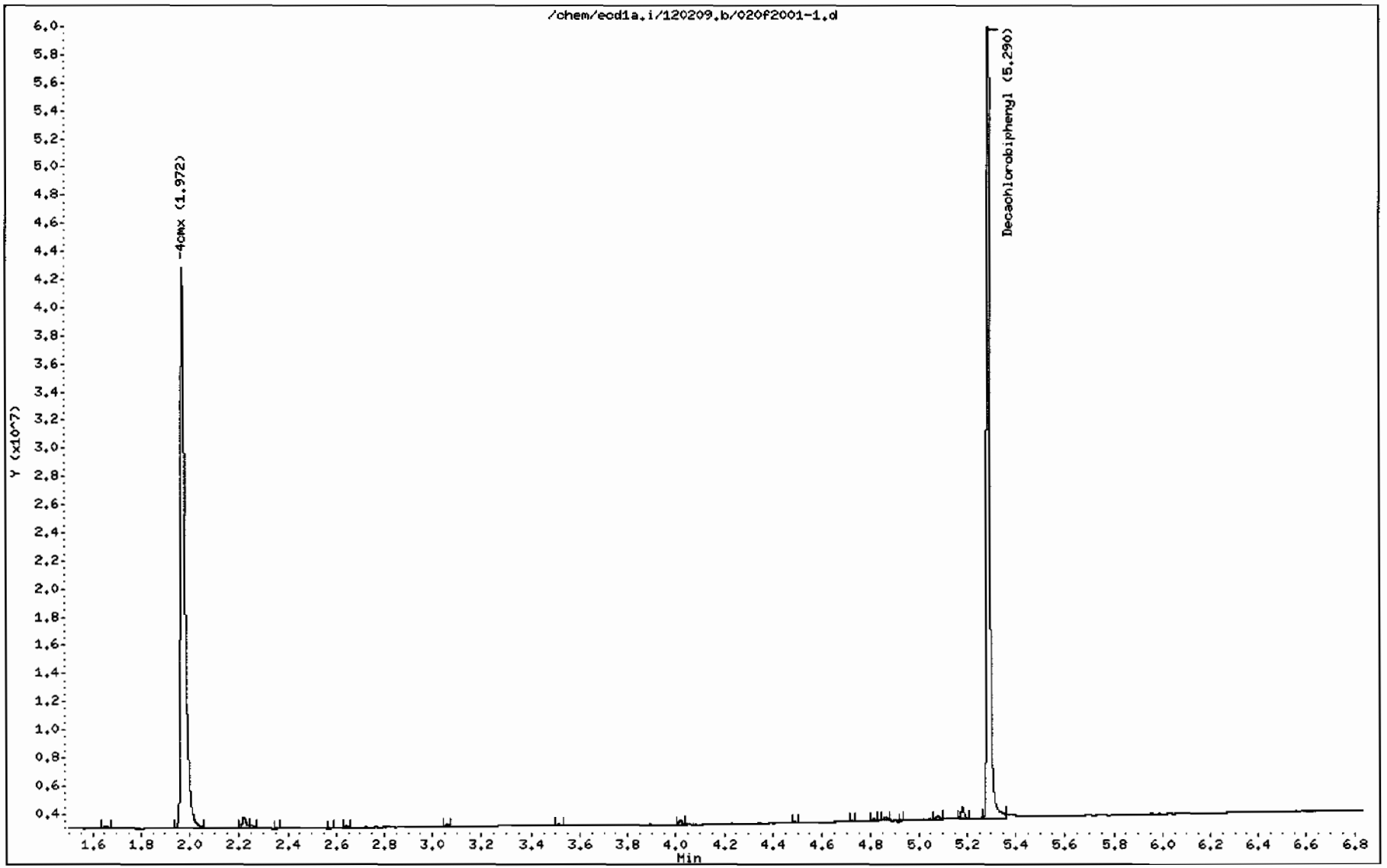

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/020b2001-1.d
Lab Smp Id: 1201982151 Client Smp ID: PBLK01
Inj Date : 02-DEC-2009 07:43
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982151|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 05:56 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 20 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.310	0.000	42210338	113.684	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	46549678	154.867	5.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120209.b/020b2001-1.d

Date : 02-DEC-2009 07:43

Client ID: PBLK01

Sample Info: |120198215|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

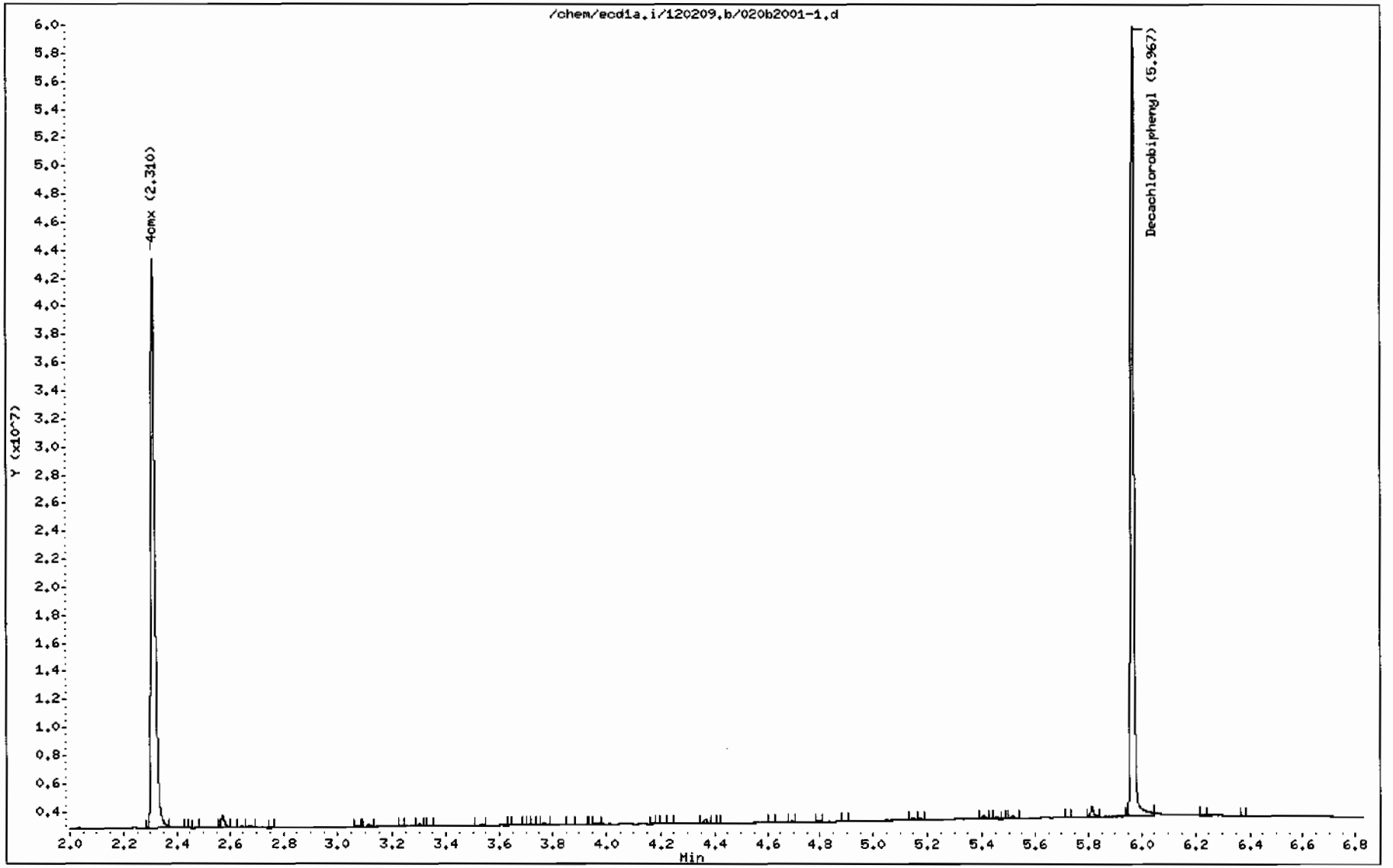

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–649**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982154**				
Client Sample:	**QC for batch 927085**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927085**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927088**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 07:54**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:23**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**021f2101–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	021b2101–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		20.4	ug/kg	1.11	3.33	2
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		24.1	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/021f2101-1.d
Lab Smp Id: 1201982154 Client Smp ID: PBLK01LCS
Inj Date : 02-DEC-2009 07:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982154|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 05:07 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 21 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.971	0.001	42964213	96.2732	3.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	56856640	139.097	4.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	10010493	585.775	19.5	80.00- 120.00	100.00
2.720	2.720	0.000	12846654	604.924	20.2	105.90- 145.90	128.33
2.800	2.801	-0.001	8246960	587.708	19.6	59.41- 99.41	82.38
2.839	2.838	0.001	5033153	598.000	19.9	28.32- 68.32	50.28

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.050	3.050	0.000	6650395	616.150	20.5	41.23- 81.23	66.43
Average of Peak Concentrations =					20.0		
7 Aroclor-1260					CAS #: 11096-82-5		
3.776	3.776	0.000	14519634	676.988	22.6	80.00- 120.00	100.00
3.939	3.939	0.000	22007895	683.578	22.8	131.74- 171.74	151.57
4.169	4.169	0.000	13989177	683.813	22.8	74.40- 114.40	96.35
4.312	4.311	0.001	14270473	710.618	23.7	74.60- 114.60	98.28
4.491	4.491	0.000	33448416	722.443	24.1	202.46- 242.46	230.37
Average of Peak Concentrations =					23.2		

Data File: /chem/ecdia.i/120209.b/021f2101-1.d
Date : 02-DEC-2009 07:54
Client ID: PBLK01LCS
Sample Info: 1120198215411
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdia.i
Operator: YSI
Column diameter: 0.25

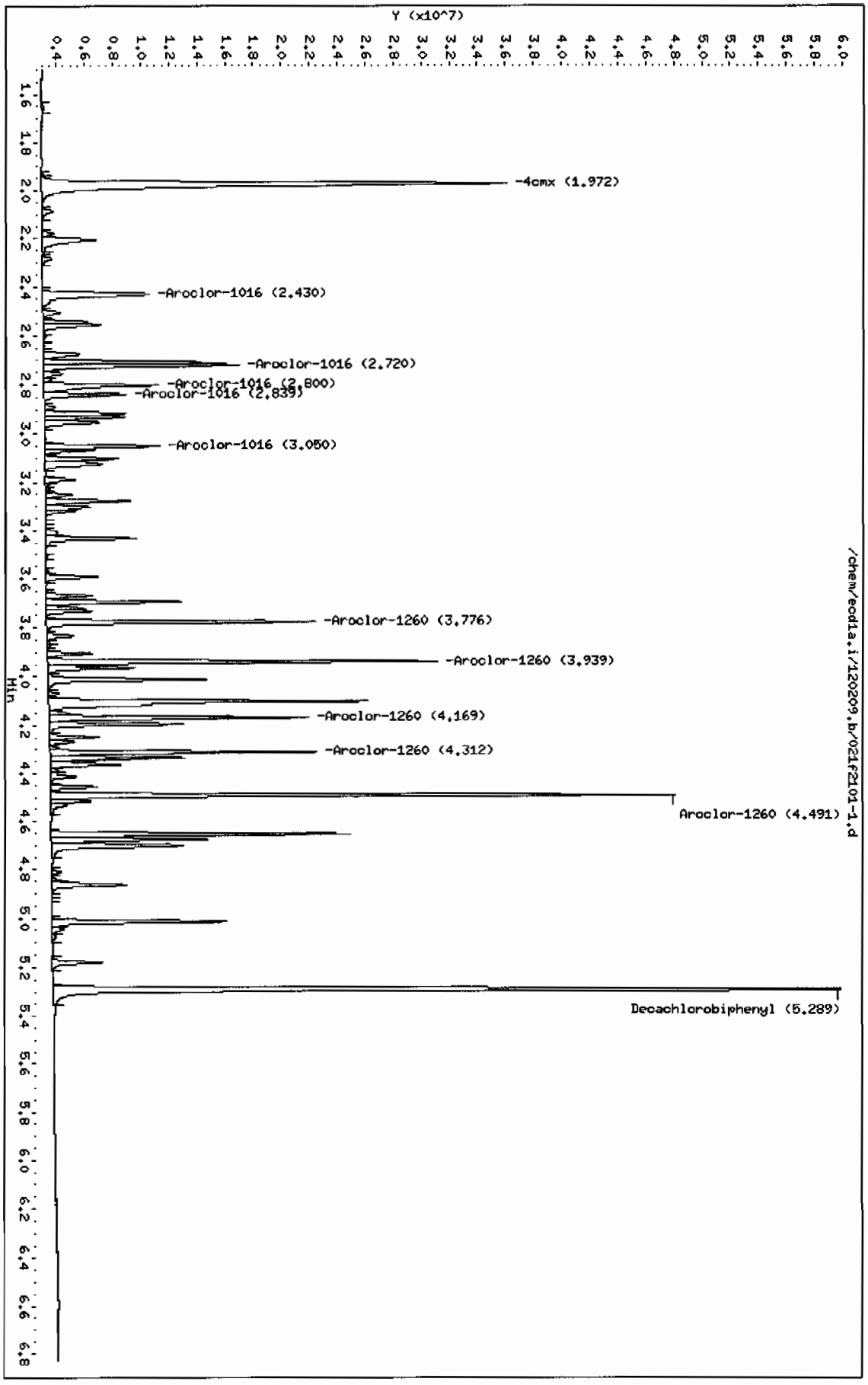

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/021b2101-1.d
Lab Smp Id: 1201982154 Client Smp ID: PBLK01LCS
Inj Date : 02-DEC-2009 07:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982154|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 05:56 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 21 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-649.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	36154843	97.3747	3.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	43035238	143.175	4.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.213	3.212	0.001	10330591	612.710	20.4	80.00- 120.00	100.00
3.296	3.296	0.000	6924245	600.248	20.0	45.68- 85.68	67.03
3.422	3.421	0.001	4083898	587.507	19.6	19.50- 59.50	39.53
3.588	3.587	0.001	5720197	623.076	20.8	32.69- 72.69	55.37

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.664	3.663	0.001	5425431	637.621	21.2	28.65- 68.65	52.52
Average of Peak Concentrations =					20.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.355	4.355	0.000	12438598	688.474	22.9	80.00- 120.00	100.00
4.480	4.480	0.000	15787184	712.514	23.8	106.56- 146.56	126.92
4.746	4.746	0.000	12798718	724.003	24.1	80.54- 120.54	102.90
4.920	4.920	0.000	12684892	736.898	24.6	79.57- 119.57	101.98
5.067	5.066	0.001	29170758	755.149	25.2	206.87- 246.87	234.52
Average of Peak Concentrations =					24.1		

Data File: /chem/ecd1a.i/120209.b/021b2101-1.d

Date : 02-DEC-2009 07:54

Client ID: PBLK01LCS

Sample Info: |120198215411|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

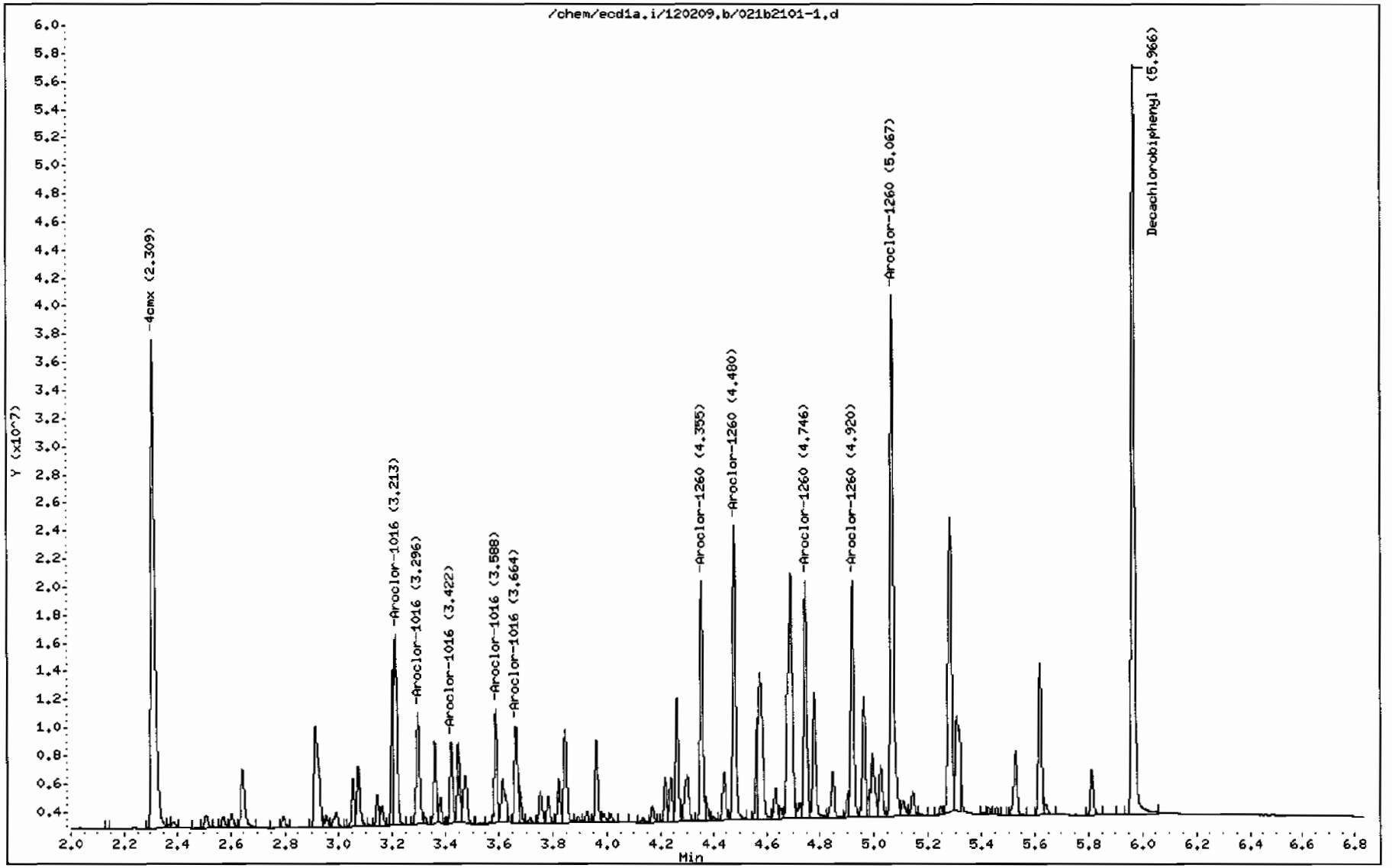

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 11/11/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ600
ALUMINA LOT 1193715-A
COPPER LOT 091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/111009b.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	10-NOV-2009 08:02		111009b	1.0		CLEAN
002f0201.d	WAR091102-60	YS1	10-NOV-2009 08:14		111009b	1.0		DUSE RE-I-CAL
003f0301.d	WAR091102-54	YS1	10-NOV-2009 08:25		111009b	1.0		DUSE RE-I-CAL
004f0401.d	WAR091102-42	YS1	10-NOV-2009 08:35		111009b	1.0		DUSE RE-I-CAL
005f0501.d	WAR091027-48	YS1	10-NOV-2009 08:46		111009b	1.0		DUSE RE-I-CAL
006f0601.d	WAR090930-32	YS1	10-NOV-2009 08:56		111009b	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	10-NOV-2009 09:07		111009b	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	10-NOV-2009 09:17		111009b	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	10-NOV-2009 09:28		111009b	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	YS1	10-NOV-2009 09:38		111009b	1.0		DDT ANALOG STANDARD
011f1101.d	WAR091110-01 60	YS1	10-NOV-2009 09:49		111009b	1.0		AR1660 I-CAL LEVEL 1
012f1201.d	WAR091110-02 60	YS1	10-NOV-2009 09:59		111009b	1.0		AR1660 I-CAL LEVEL 2
013f1301.d	WAR091110-04 60	YS1	10-NOV-2009 10:10		111009b	1.0		AR1660 I-CAL LEVEL 4
014f1401.d	WAR091110-03 60	YS1	10-NOV-2009 10:21		111009b	1.0		AR1660 I-CAL LEVEL 3
015f1501.d	IAR091102-01	YS1	10-NOV-2009 10:31		111009b	1.0		AR1660 I-CAL LEVEL 5

Instrument Batch: /chem/ecd1a.i/111009b.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	WAR091102-60	YS1	10-NOV-2009 10:42		111009b	1.0	PASSED ON BOTH COLUMNS
017f1701.d	WAR091110-05 54	YS1	10-NOV-2009 10:52		111009b	1.0	AR1254 I-CAL LEVEL 1
018f1801.d	WAR091110-06 54	YS1	10-NOV-2009 11:03		111009b	1.0	AR1254 I-CAL LEVEL 2
019f1901.d	WAR091110-07 54	YS1	10-NOV-2009 11:13		111009b	1.0	AR1254 I-CAL LEVEL 3
020f2001.d	WAR091110-08 54	YS1	10-NOV-2009 11:24		111009b	1.0	AR1254 I-CAL LEVEL 4
021f2101.d	IAR091027-01	YS1	10-NOV-2009 11:34		111009b	1.0	AR1254 I-CAL LEVEL 5
022f2201.d	WAR091102-54	YS1	10-NOV-2009 11:45		111009b	1.0	PASSED ON BOTH COLUMNS
023f2301.d	WAR091110-09 42	YS1	10-NOV-2009 11:55		111009b	1.0	AR1242 I-CAL LEVEL 1
024f2401.d	WAR091110-10 42	YS1	10-NOV-2009 12:06		111009b	1.0	AR1242 I-CAL LEVEL 2
025f2501.d	WAR091110-11 42	YS1	10-NOV-2009 12:17		111009b	1.0	AR1242 I-CAL LEVEL 3
026f2601.d	WAR091110-12 42	YS1	10-NOV-2009 12:27		111009b	1.0	AR1242 I-CAL LEVEL 4
027f2701.d	IAR090914-01	YS1	10-NOV-2009 12:38		111009b	1.0	AR1242 I-CAL LEVEL 5
028f2801.d	WAR091102-42	YS1	10-NOV-2009 12:48		111009b	1.0	PASSED ON BOTH COLUMNS
029f2901.d	WAR091110-13 48	YS1	10-NOV-2009 12:59		111009b	1.0	AR1248 I-CAL LEVEL 1
030f3001.d	WAR091110-14 48	YS1	10-NOV-2009 13:09		111009b	1.0	AR1248 I-CAL LEVEL 2
031f3101.d	WAR091110-15 48	YS1	10-NOV-2009 13:20		111009b	1.0	AR1248 I-CAL LEVEL 3
032f3201.d	WAR091110-16 48	YS1	10-NOV-2009 13:30		111009b	1.0	AR1248 I-CAL LEVEL 4
033f3301.d	IAR091027-02	YS1	10-NOV-2009 13:41		111009b	1.0	AR1248 I-CAL LEVEL 5
034f3401.d	WAR091027-48	YS1	10-NOV-2009 13:51		111009b	1.0	PASSED ON BOTH COLUMNS
035f3501.d	WAR090916-99 02	YS1	10-NOV-2009 14:02		111009b	1.0	CLEAN

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201966793	YS1	10-NOV-2009 14:12	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	1201966796	YS1	10-NOV-2009 14:23	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	1201966797	YS1	10-NOV-2009 14:33	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	240542001	YS1	10-NOV-2009 14:44	920460	EUI-7374	25.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	240610001	YS1	10-NOV-2009 14:57	920460	EUI-7377	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201966794	YS1	10-NOV-2009 15:09	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1201966795	YS1	10-NOV-2009 15:22	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	WAR091102-60 02	YS1	10-NOV-2009 15:34		111009b	1.0		PASSED ON BOTH COLUMNS
044f4401.d	WAR090916-99 03	YS1	10-NOV-2009 15:45		111009b	1.0		CLEAN
045f4501.d	1201966802	YS1	10-NOV-2009 15:55	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1201966803	YS1	10-NOV-2009 16:08	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	240151001	YS1	10-NOV-2009 16:20	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	1201966804	YS1	10-NOV-2009 16:33	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201966805	YS1	10-NOV-2009 16:45	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	240151002	YS1	10-NOV-2009 16:58	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	240151003	YS1	10-NOV-2009 17:11	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	240151004	YS1	10-NOV-2009 17:23	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	240151005	YS1	10-NOV-2009 17:36	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	240151006	YS1	10-NOV-2009 17:48	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	WAR091102-60 03	YS1	10-NOV-2009 18:01		111009b	1.0		PASSED ON BOTH COLUMNS

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 04	YS1	10-NOV-2009 18:12		111009b	1.0		CLEAN
057f5701.d	240151007	YS1	10-NOV-2009 18:22	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	240151008	YS1	10-NOV-2009 18:35	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	240151009	YS1	10-NOV-2009 18:47	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	240151010	YS1	10-NOV-2009 19:00	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	240151011	YS1	10-NOV-2009 19:12	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	240151012	YS1	10-NOV-2009 19:25	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	240151013	YS1	10-NOV-2009 19:38	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	240151014	YS1	10-NOV-2009 19:50	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	240151015	YS1	10-NOV-2009 20:03	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	240151016	YS1	10-NOV-2009 20:15	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	WAR091102-60 04	YS1	10-NOV-2009 20:28		111009b	1.0		PASSED ON BOTH COLUMNS
068f6801.d	WAR090916-99 05	YS1	10-NOV-2009 20:39		111009b	1.0		CLEAN
069f6901.d	240151017	YS1	10-NOV-2009 20:49	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	240151018	YS1	10-NOV-2009 21:02	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	240151019	YS1	10-NOV-2009 21:14	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	240151020	YS1	10-NOV-2009 21:27	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091102-60 05	YS1	10-NOV-2009 21:40		111009b	1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 06	YS1	10-NOV-2009 21:50		111009b	1.0		CLEAN
075f7501.d	1201967438	YS1	10-NOV-2009 22:00	920740	111009b	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201967439	YS1	10-NOV-2009 22:13	920740	240688	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	240688001	YS1	10-NOV-2009 22:26	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	1201967440	YS1	10-NOV-2009 22:38	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	1201967441	YS1	10-NOV-2009 22:51	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	240688002	YS1	10-NOV-2009 23:04	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	WAR091102-60 06	YS1	10-NOV-2009 23:16		111009b	1.0		PASSED ON BOTH COLUMNS
082f8201.d	WAR090916-99 07	YS1	10-NOV-2009 23:27		111009b	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 12/03/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ454
ALUMINA LOT 1230997-A
COPPER LOT 207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time, BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/120209.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	02-DEC-2009 04:13		120209	1.0		CLEAN
002f0201.d	WAR091102-60 01	YS1	02-DEC-2009 04:23		120209	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR091102-54	YS1	02-DEC-2009 04:34		120209	1.0		PASSED ON BOTH COLUMNS
004f0401.d	WAR091102-42	YS1	02-DEC-2009 04:44		120209	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091027-48	YS1	02-DEC-2009 04:55		120209	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR090930-32	YS1	02-DEC-2009 05:05		120209	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	02-DEC-2009 05:16		120209	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	02-DEC-2009 05:26		120209	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	02-DEC-2009 05:37		120209	1.0		PASSED ON BOTH COLUMNS
010f1001.d	WAR091020-DDT	YS1	02-DEC-2009 05:47		120209	1.0		DDT ANALOG STANDARD
011f1101.d	WAR090916-99 02	YS1	02-DEC-2009 05:58		120209	1.0		CLEAN
012f1201.d	1201981452	YS1	02-DEC-2009 06:08	926748	120209	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
013f1301.d	1201981455	YS1	02-DEC-2009 06:19	926748	241437	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	241437002	YS1	02-DEC-2009 06:32	926748	241437	500.0	PCGE	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1201981453	YS1	02-DEC-2009 06:44	926748	241437	500.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120209.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	1201981454	YS1	02-DEC-2009 06:57	926748	241437		500.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	241437008	YS1	02-DEC-2009 07:09	926748	241437		1.0	PCGE	UPLOAD BOTH COLUMNS, USE HIGHER
018f1801.d	WAR091102-60 02	YS1	02-DEC-2009 07:22		120209		1.0		PASSED ON BOTH COLUMNS
019f1901.d	WAR090916-99 03	YS1	02-DEC-2009 07:33		120209		1.0		CLEAN
020f2001.d	1201982151	YS1	02-DEC-2009 07:43	927088	10-640		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	1201982154	YS1	02-DEC-2009 07:54	927088	10-640		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	241609001	YS1	02-DEC-2009 08:04	927088	10-640		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	241609002	YS1	02-DEC-2009 08:17	927088	10-640		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	241609003	YS1	02-DEC-2009 08:29	927088	10-640		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	241609004	YS1	02-DEC-2009 08:42	927088	10-640		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	241609005	YS1	02-DEC-2009 08:55	927088	10-640		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	241609006	YS1	02-DEC-2009 09:07	927088	10-640		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	WAR091102-60 03	YS1	02-DEC-2009 09:20		120209		1.0		PASSED ON BOTH COLUMNS
029f2901.d	WAR090916-99 04	YS1	02-DEC-2009 09:30		120209		1.0		CLEAN
030f3001.d	241609007	YS1	02-DEC-2009 09:41	927088	10-640		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	1201982152	YS1	02-DEC-2009 09:53	927088	10-640		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	1201982153	YS1	02-DEC-2009 10:06	927088	10-640		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	241609008	YS1	02-DEC-2009 10:19	927088	10-640		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
034f3401.d	241609010	YS1	02-DEC-2009 10:31	927088	10-640		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	241711002	YS1	02-DEC-2009 10:44	927088	10-649		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241711003	YS1	02-DEC-2009 10:56	927088	10-649	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	241714002	YS1	02-DEC-2009 11:09	927088	10-650	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	241718001	YS1	02-DEC-2009 11:22	927088	10-653	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	241728002	YS1	02-DEC-2009 11:34	927088	10-654	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	WAR091102-60 04	YS1	02-DEC-2009 11:47		120209	1.0		PASSED ON BOTH COLUMNS

041f4101.d	WAR090916-99 05	YS1	02-DEC-2009 11:57		120209	1.0		CLEAN
042f4201.d	1201982305	YS1	02-DEC-2009 12:08	927185	10-655	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	1201982308	YS1	02-DEC-2009 12:18	927185	10-655	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	241750002	YS1	02-DEC-2009 12:29	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	241750003	YS1	02-DEC-2009 12:42	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	241750004	YS1	02-DEC-2009 12:54	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	241750005	YS1	02-DEC-2009 13:07	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	241750006	YS1	02-DEC-2009 13:19	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201982306	YS1	02-DEC-2009 13:32	927185	10-655	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1201982307	YS1	02-DEC-2009 13:45	927185	0-655	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	241750007	YS1	02-DEC-2009 13:57	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	WAR091102-60 05	YS1	02-DEC-2009 14:10		120209	1.0		PASSED ON BOTH COLUMNS
053f5301.d	WAR090916-99 06	YS1	02-DEC-2009 14:20		120209	1.0		CLEAN
054f5401.d	241750008	YS1	02-DEC-2009 14:31	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	241750009	YS1	02-DEC-2009 14:43	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241750010	YS1	02-DEC-2009 14:56	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	241750011	YS1	02-DEC-2009 15:09	927185	10-655	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	WAR091102-60 06	YS1	02-DEC-2009 15:21		120209	1.0		PASSED ON BOTH COLUMNS
059f5901.d	WAR090916-99 07	YS1	02-DEC-2009 15:32		120209	1.0		CLEAN
060f6001.d	1201983673	YS1	02-DEC-2009 15:42	927706	241830	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1201983674	YS1	02-DEC-2009 15:55	927706	241830	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	241830001	YS1	02-DEC-2009 16:08	927706	241830	5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	1201983675	YS1	02-DEC-2009 16:20	927706	241830	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1201983676	YS1	02-DEC-2009 16:33	927706	241830	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	241830002	YS1	02-DEC-2009 16:45	927706	241830		5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	241830003	YS1	02-DEC-2009 16:58	927706	241830		5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	241830004	YS1	02-DEC-2009 17:11	927706	241830		5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
068f6801.d	WAR091102-60 07	YS1	02-DEC-2009 17:23		120209		1.0		PASSED ON BOTH COLUMNS
069f6901.d	WAR090916-99 08	YS1	02-DEC-2009 17:36		120209		1.0		CLEAN
070f7001.d	241833001	YS1	02-DEC-2009 17:48	927706	241833		5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	241833002	YS1	02-DEC-2009 18:01	927706	241833		5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	241833003	YS1	02-DEC-2009 18:14	927706	241833		5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	241833004	YS1	02-DEC-2009 18:26	927706	241833		5.0	EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
074f7401.d	WAR091102-60 08	YS1	02-DEC-2009 18:39		120209		1.0		PASSED ON BOTH COLUMNS
075f7501.d	WAR090916-99 09	YS1	02-DEC-2009 18:52		120209		1.0		CLEAN

Instrument Batch: /chem/ecd1a.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201981414	YS1	02-DEC-2009 19:04	926733	241227	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	1201981417	YS1	02-DEC-2009 19:17	926733	241227	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	241227001	YS1	02-DEC-2009 19:30	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	241227002	YS1	02-DEC-2009 19:42	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	241227003	YS1	02-DEC-2009 19:55	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	241227004	YS1	02-DEC-2009 20:08	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
082f8201.d	1201981415	YS1	02-DEC-2009 20:20	926733	241227	100.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	1201981416	YS1	02-DEC-2009 20:33	926733	241227	100.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	241227005	YS1	02-DEC-2009 20:45	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	241227006	YS1	02-DEC-2009 20:58	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
086f8601.d	WAR091102-60 09	YS1	02-DEC-2009 21:11		120209	1.0		PASSED ON BOTH COLUMNS
087f8701.d	WAR090916-99 10	YS1	02-DEC-2009 21:23		120209	1.0		CLEAN
088f8801.d	241227007	YS1	02-DEC-2009 21:36	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
089f8901.d	241227008	YS1	02-DEC-2009 21:49	926733	241227	100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER

090f9001.d	241227009	YS1	02-DEC-2009 22:01	926733	241227		100.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
091f9101.d	WAR091102-60 11	YS1	02-DEC-2009 22:14		120209		1.0		PASSED ON BOTH COLUMNS
092f9201.d	WAR090916-99 12	YS1	02-DEC-2009 22:27		120209		1.0		CLEAN
093f9301.d	1201982297	YS1	02-DEC-2009 22:39	927179	241509		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
094f9401.d	1201982300	YS1	02-DEC-2009 22:52	927179	241509		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
095f9501.d	241509001	YS1	02-DEC-2009 23:04	927179	241509		200.0	WSMS	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/120209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
096f9601.d	1201982298	YS1	02-DEC-2009 23:17	927179	241509	200.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
097f9701.d	1201982299	YS1	02-DEC-2009 23:30	927179	241509	200.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
098f9801.d	WAR091102-60 12	YS1	02-DEC-2009 23:42		120209	1.0		PASSED ON BOTH COLUMNS
099f9901.d	WAR090916-99 13	YS1	02-DEC-2009 23:55		120209	1.0		CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/031b3101.d
Lab Smp Id: 1201982152 Client Smp ID: RE03-09-13921MS
Inj Date : 02-DEC-2009 09:53
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982152|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 12:31 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 31 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-640.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	18.60040	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	35146525	94.6591	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	35292910	117.417	4.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.217	3.212	0.005	16926196	1003.90	41.0	80.00- 120.00	100.00(M)
3.295	3.296	-0.001	6139962	532.261	21.8	47.74- 87.74	36.27
3.421	3.421	0.000	3832518	551.344	22.5	20.77- 60.77	22.64
3.587	3.587	0.000	4959079	540.171	22.1	35.63- 75.63	29.30

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.663	3.663	0.000	4220834	496.051	20.3	32.52- 72.52	30.62
Average of Peak Concentrations =					25.5		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	9821310	543.608	22.2	80.00- 120.00	100.00
4.479	4.480	-0.001	12449153	561.860	23.0	106.80- 146.80	126.76
4.744	4.746	-0.002	10203833	577.214	23.6	80.80- 120.80	103.89
4.919	4.920	-0.001	10104788	587.013	24.0	78.82- 118.82	102.89
5.065	5.066	-0.001	22876073	592.198	24.2	206.45- 246.45	232.92
Average of Peak Concentrations =					23.4		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/031b3101.d

Date : 02-DEC-2009 09:53

Client ID: RE03-09-13921MS

Sample Info: |1201982152|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

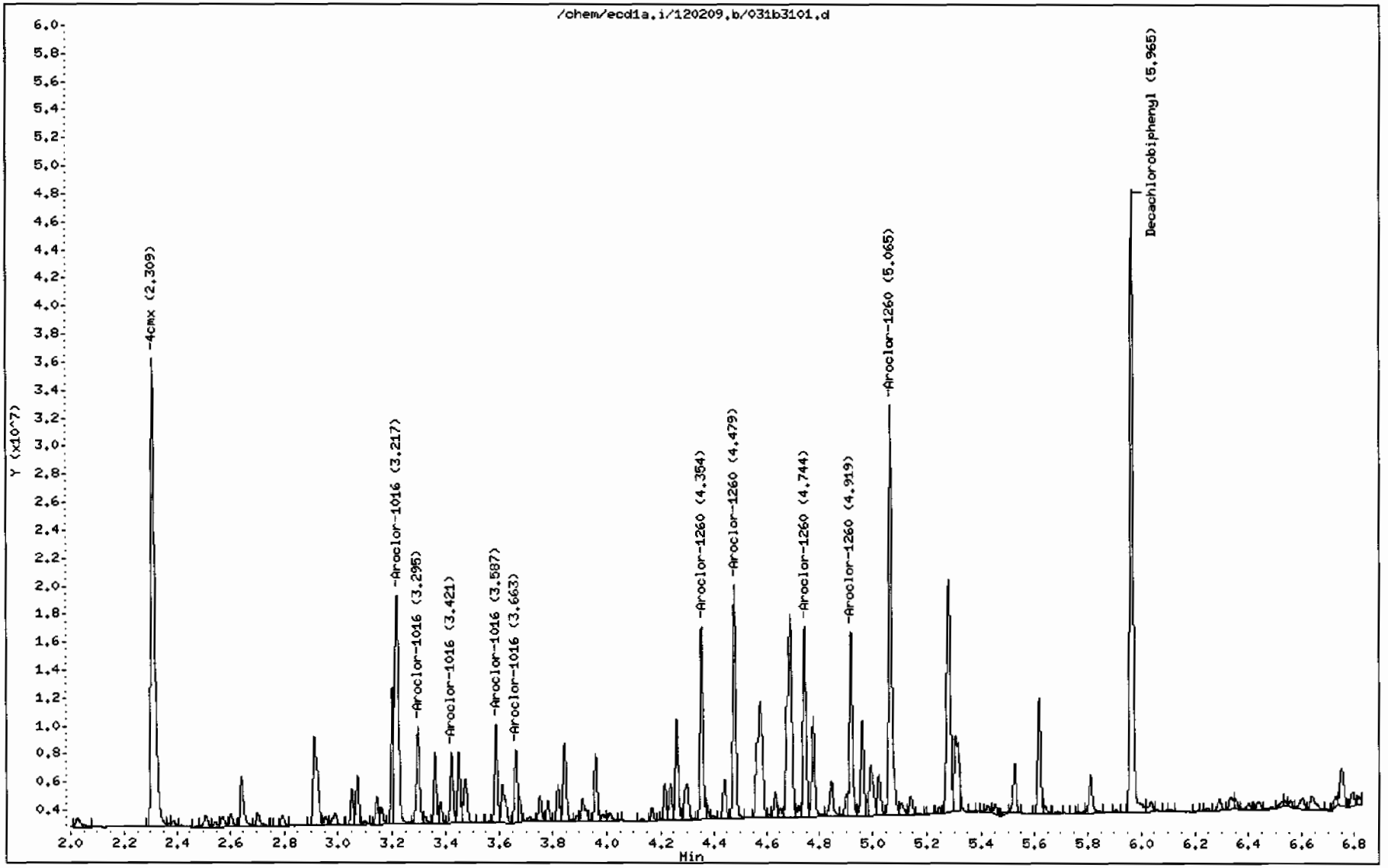

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/031f3101.d
Lab Smp Id: 1201982152 Client Smp ID: RE03-09-13921MS
Inj Date : 02-DEC-2009 09:53
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982152|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 12:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 31 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-640.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	18.60040	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.971	0.001	41087777	92.0686	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	45714074	111.837	4.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.431	-0.002	8738441	511.339	20.9	80.00- 120.00	100.00(M)
2.716	2.720	-0.004	9911222	466.700	19.1	103.40- 143.40	113.42
2.800	2.801	-0.001	6579668	468.891	19.2	59.81- 99.81	75.30
2.836	2.838	-0.002	3530449	419.460	17.2	28.95- 68.95	40.40

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.049	3.050	-0.001	5511009	510.587	20.9	42.72- 82.72	63.07
Average of Peak Concentrations =					19.5		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	11707706	545.880	22.3	80.00- 120.00	100.00
3.938	3.939	-0.001	17331719	538.333	22.0	131.77- 171.77	148.04
4.168	4.169	-0.001	11084846	541.845	22.2	75.16- 115.16	94.68
4.310	4.311	-0.001	11272588	561.335	23.0	77.20- 117.20	96.28
4.489	4.491	-0.002	25830966	557.916	22.8	206.71- 246.71	220.63
Average of Peak Concentrations =					22.5		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/031f3101.d

Date : 02-DEC-2009 09:53

Client ID: RE03-09-13921MS

Sample Info: |120198215211|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

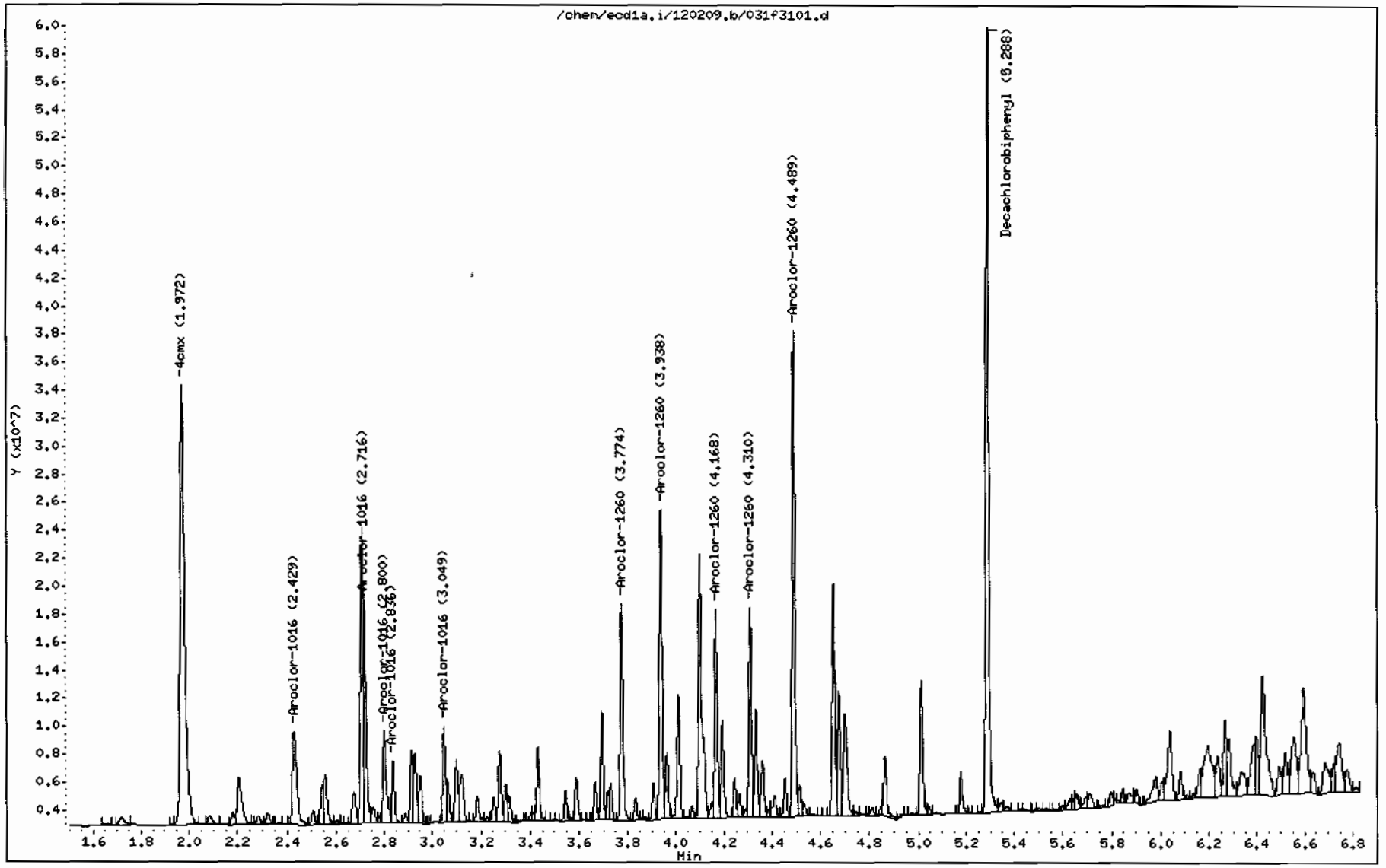

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/032b3201.d
Lab Smp Id: 1201982153 Client Smp ID: RE03-09-13921MSD
Inj Date : 02-DEC-2009 10:06
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982153|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-B-8082-111009B.m
Meth Date : 02-Dec-2009 12:31 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 32 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-640.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	18.60040	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.310	-0.001	36492940	98.2853	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	35343965	117.587	4.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.217	3.212	0.005	17089019	1013.55	41.4	80.00- 120.00	100.00(M)
3.295	3.296	-0.001	6460511	560.048	22.9	47.74- 87.74	37.81
3.421	3.421	0.000	4008740	576.695	23.6	20.77- 60.77	23.46
3.587	3.587	0.000	5287161	575.907	23.5	35.63- 75.63	30.94

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.663	3.663	0.000	4298090	505.131	20.6	32.52- 72.52	30.99
Average of Peak Concentrations =					26.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	10687756	591.566	24.2	80.00- 120.00	100.00
4.478	4.480	-0.002	13601810	613.882	25.1	106.80- 146.80	127.27
4.745	4.746	-0.001	11131771	629.706	25.7	80.80- 120.80	104.15
4.919	4.920	-0.001	11077957	643.547	26.3	78.82- 118.82	103.65
5.065	5.066	-0.001	25292713	654.758	26.7	206.45- 246.45	236.65
Average of Peak Concentrations =					25.6		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/032b3201.d
Date : 02-DEC-2009 10:06
Client ID: RE03-09-13921MSD
Sample Info: !120198215311!
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

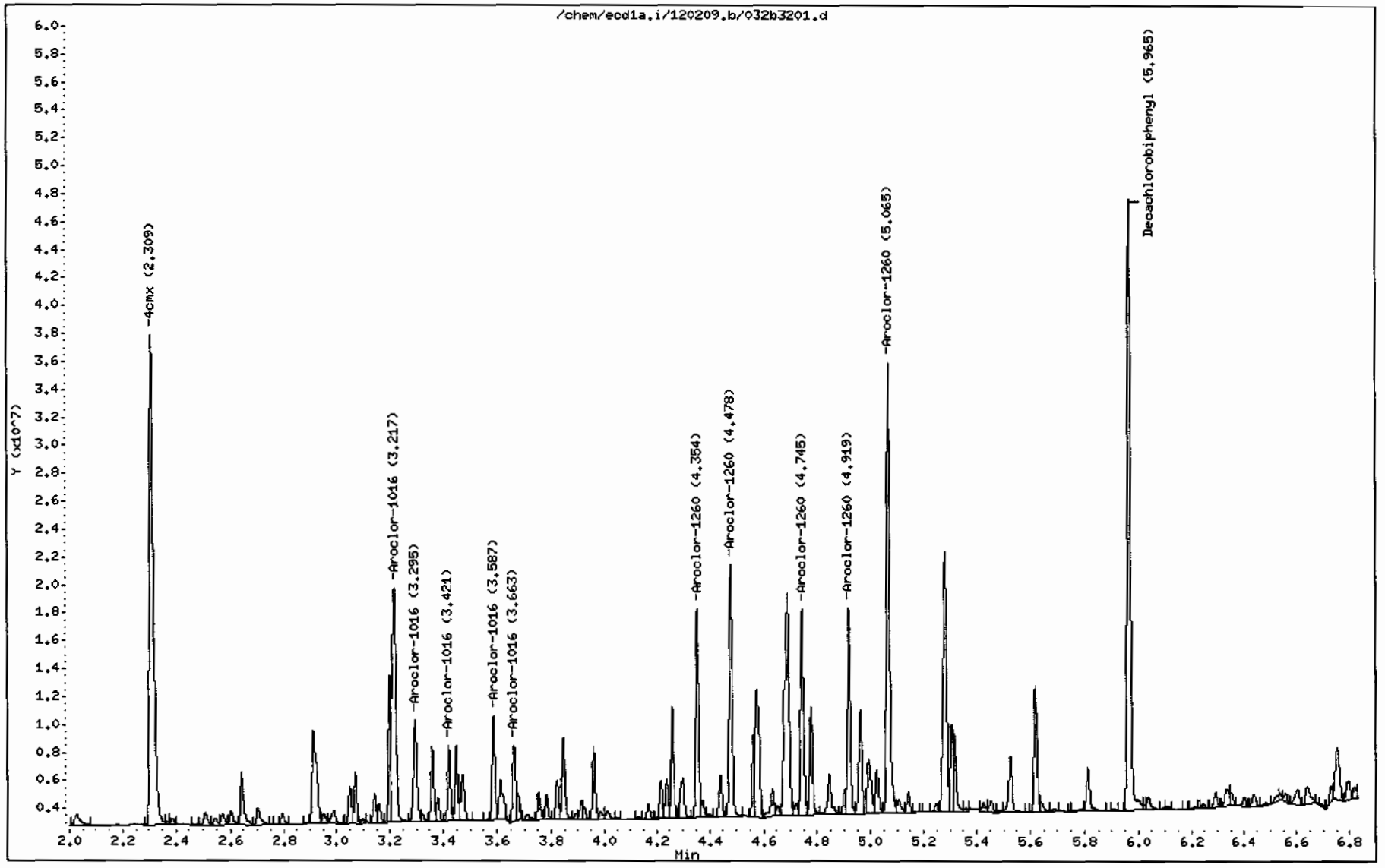

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120209.b/032f3201.d
Lab Smp Id: 1201982153 Client Smp ID: RE03-09-13921MSD
Inj Date : 02-DEC-2009 10:06
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982153|1|
Misc Info : |ECD82P_1SF|927088|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120209.b/ECD1-F-8082-111009B.m
Meth Date : 02-Dec-2009 12:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 32 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-640.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	18.60040	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.971	0.000	43097599	96.5721	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	46433629	113.597	4.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	9229664	540.084	22.0	80.00- 120.00	100.00(M)
2.715	2.720	-0.005	12233066	576.032	23.5	103.40- 143.40	132.54
2.800	2.801	-0.001	6700537	477.505	19.5	59.81- 99.81	72.60
2.836	2.838	-0.002	3541995	420.832	17.2	28.95- 68.95	38.38

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.049	3.050	-0.001	5832485	540.372	22.1	42.72- 82.72	63.19
Average of Peak Concentrations =					20.9		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	12779074	595.833	24.3	80.00- 120.00	100.00
3.937	3.939	-0.002	19012128	590.528	24.1	131.77- 171.77	148.78
4.167	4.169	-0.002	12176314	595.198	24.3	75.16- 115.16	95.28
4.309	4.311	-0.002	12276439	611.323	25.0	77.20- 117.20	96.07
4.489	4.491	-0.002	28768670	621.367	25.4	206.71- 246.71	225.12
Average of Peak Concentrations =					24.6		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120209.b/032f3201.d

Date : 02-DEC-2009 10:06

Client ID: RE03-09-13921MSD

Sample Info: |120198215311|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

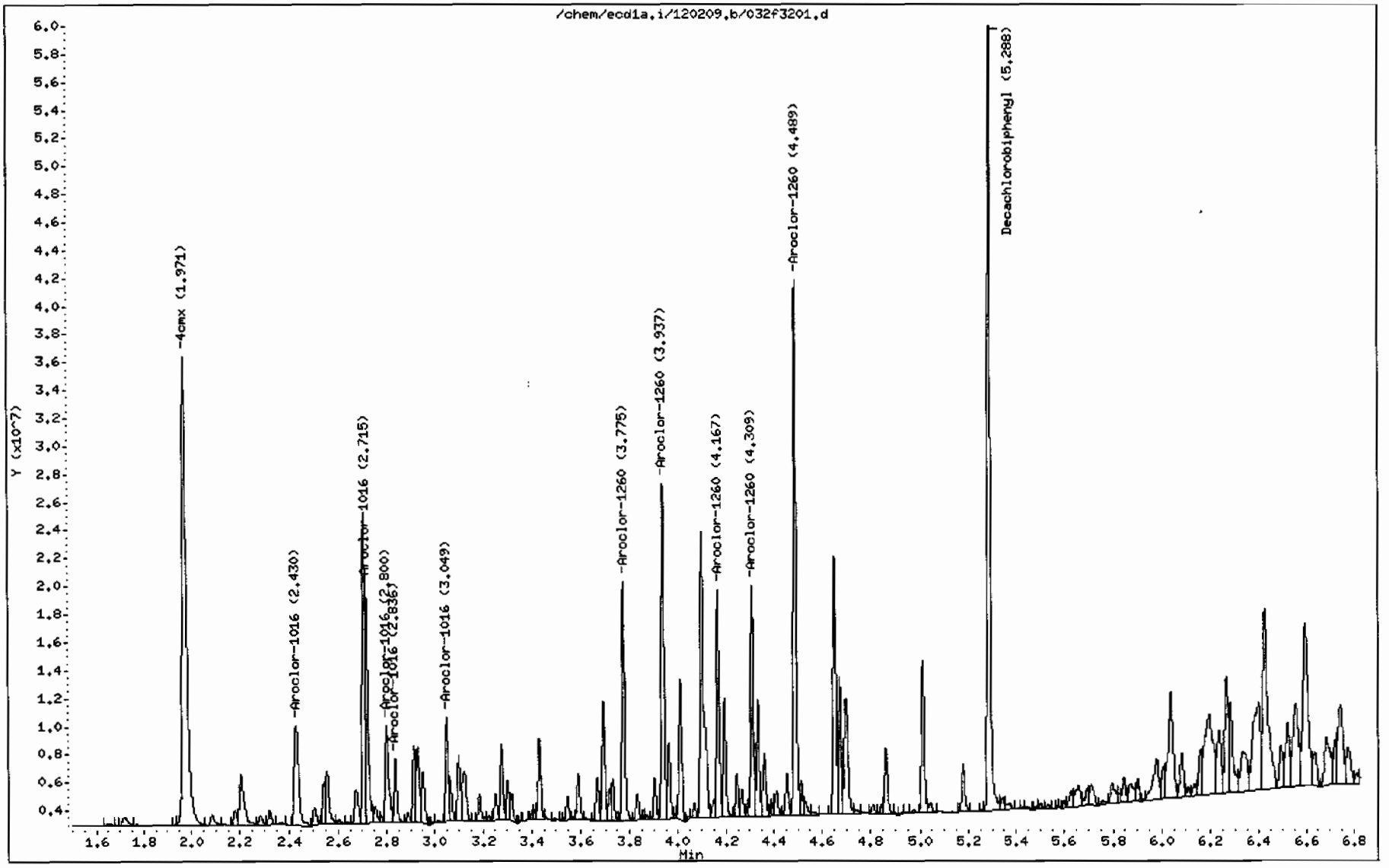

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927085 **Verified by:** _____

Analyst: Joshua McCartney

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982151 MB	30–NOV–2009 11:23:57	30	H2SO4/KMnl		1	8	1	0.03333
1201982154 LCS	30–NOV–2009 11:23:57	30	H2SO4/KMnl		1	8	1	0.03333
241609001	30–NOV–2009 11:23:57	30.08	H2SO4/KMnl		1	8	1	0.03324
241609002	30–NOV–2009 11:23:57	30.08	H2SO4/KMnl		1	8	1	0.03324
241609003	30–NOV–2009 11:23:57	30.09	H2SO4/KMnl		1	8	1	0.03323
241609004	30–NOV–2009 11:23:57	30.03	H2SO4/KMnl		1	8	1	0.0333
241609005	30–NOV–2009 11:23:57	30.01	H2SO4/KMnl		1	8	1	0.03332
241609006	30–NOV–2009 11:23:57	30.01	H2SO4/KMnl		1	8	1	0.03332
241609007	30–NOV–2009 11:23:57	30	H2SO4/KMnl		1	8	1	0.03333
1201982152 MS (241609007)	30–NOV–2009 11:23:57	30.04	H2SO4/KMnl		1	8	1	0.03329
1201982153 MSD (241609007)	30–NOV–2009 11:23:57	30.08	H2SO4/KMnl		1	8	1	0.03324
241609008	30–NOV–2009 11:23:57	30.09	H2SO4/KMnl		1	8	1	0.03323
241609010	30–NOV–2009 11:23:57	30.03	H2SO4/KMnl		1	8	1	0.0333
241711002	30–NOV–2009 11:23:57	30.01	H2SO4/KMnl		1	8	1	0.03332
241711003	30–NOV–2009 11:23:57	30.03	H2SO4/KMnl		1	8	1	0.0333
241714002	30–NOV–2009 11:23:57	30.09	H2SO4/KMnl		1	8	1	0.03323
241718001	30–NOV–2009 11:23:57	30.03	H2SO4/KMnl		1	8	1	0.0333
241728002	30–NOV–2009 11:23:57	30.02	H2SO4/KMnl		1	8	1	0.03331

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982154	PCB Laboratory Control	WE091120–07	1	mL
MS	1201982152	PCB Laboratory Control	WE091120–07	1	mL
MSD	1201982153	PCB Laboratory Control	WE091120–07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091117–15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Hexane	1233925–B2	150	mL
REGNT	All	5% Potassium Permanganate	B1202457–F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/30/2009

Clean up Initials: JAM

Verified By: RWH

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–037

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-649

Sample Analysis

Sample ID	Client ID
241711001	RE03-09-13908
241711002	RE03-09-13910
241711003	RE03-09-13911
241711004	RE03-09-13913
241711005	RE03-09-13912
241711006	RE03-09-13909
241711007	RE03-10-7041
1201981075	Method Blank (MB) **ICP**
1201997314	Method Blank (MB) **ICP**
1201981076	Laboratory Control Sample (LCS)
1201997315	Laboratory Control Sample (LCS)
1201981079	241711001(RE03-09-13908L) Serial Dilution (SD)
1201981077	241711001(RE03-09-13908D) Sample Duplicate (DUP)
1201981078	241711001(RE03-09-13908S) Matrix Spike (MS)
1201981080	241711001(RE03-09-13908SD) Matrix Spike Duplicate (MSD)
1201981228	Method Blank (MB) **ICP-MS**
1201981229	Laboratory Control Sample (LCS)
1201981232	241711001(RE03-09-13908L) Serial Dilution (SD)
1201981230	241711001(RE03-09-13908D) Sample Duplicate (DUP)
1201981231	241711001(RE03-09-13908S) Matrix Spike (MS)
1201981238	241711001(RE03-09-13908SD) Matrix Spike Duplicate (MSD)
1201981594	Method Blank (MB) **CVAA**
1201981595	Laboratory Control Sample (LCS)
1201981598	241711001(RE03-09-13908L) Serial Dilution (SD)
1201981596	241711001(RE03-09-13908D) Sample Duplicate (DUP)
1201981597	241711001(RE03-09-13908S) Matrix Spike (MS)
1201981599	241711001(RE03-09-13908SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	926576, 933552, 926645 and 926816
Prep Batch :	926575, 933551, 926642 and 926815
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System

(FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 241711001 (RE03-09-13908)-ICP, ICP-MS and CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of antimony, barium, cobalt, lead, magnesium, potassium and silicon as indicated by the "N" qualifier.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the

recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of antimony, barium, cobalt, lead, magnesium, potassium, silicon and selenium as indicate by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exceptions of calcium and manganese as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of barium, cobalt, lead, manganese and beryllium as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The sample 241711001 on the ICP required dilutions in order to bring over range manganese concentrations within the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 769738, 771068 and 772017. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nick Colert Elmore **Date:** 12·19·09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711001 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13908 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16100000	ug/Kg		7490	22000	22000	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-36-0	Antimony	1100	ug/Kg	UN	363	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-38-2	Arsenic	3.38	mg/kg		0.221	1.1	1.1	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-39-3	Barium	166000	ug/Kg	*N	115	574	574	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-41-7	Beryllium	1	mg/kg	*	0.0221	0.11	0.11	2	MS	BAJ	12/13/09 15:58	091213-5	926645
7440-42-8	Boron	2740	ug/Kg	J	1100	5510	5510	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-70-2	Calcium	2620000	ug/Kg	*	9180	28700	28700	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-47-3	Chromium	12500	ug/Kg		165	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-48-4	Cobalt	37800	ug/Kg	*N	165	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-50-8	Copper	8850	ug/Kg		330	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576
7439-89-6	Iron	21000000	ug/Kg		8810	27500	27500	1	P	HSC	12/10/09 04:25	120909A-1	926576
7439-92-1	Lead	42600	ug/Kg	*N	275	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576
7439-93-2	Lithium	16.4	mg/kg		0.441	2.21	2.21	2	MS	PRB	12/12/09 21:10	091212-4	926645
7439-95-4	Magnesium	2080000	ug/Kg	N	9760	34400	34400	1	P	HSC	12/17/09 12:40	121709-3	933552
7439-96-5	Manganese	3280000	ug/Kg	*	1100	5510	5510	5	P	HSC	12/16/09 13:43	121609A-2	926576
7439-97-6	Mercury	22.9	ug/kg		4.1	12.1	12.1	1	AV	JXL1	12/09/09 12:10	120909S1-6	926816
7440-02-0	Nickel	10.1	mg/kg		0.11	0.441	0.441	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-09-7	Potassium	942000	ug/Kg	N	7350	28700	28700	1	P	HSC	12/17/09 12:40	121709-3	933552
7782-49-2	Selenium	1.1	mg/kg	UN	0.552	1.1	1.1	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-21-3	Silicon	520000	ug/Kg	N	1720	11500	11500	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-22-4	Silver	1170	ug/Kg		110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-23-5	Sodium	377000	ug/Kg		8030	28700	28700	1	P	HSC	12/17/09 12:40	121709-3	933552
7440-28-0	Thallium	0.292	mg/kg		0.0662	0.221	0.221	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-32-6	Titanium	498000	ug/Kg		110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-61-1	Uranium	0.858	mg/kg		0.0146	0.0441	0.0441	2	MS	PRB	12/12/09 21:10	091212-4	926645
7440-62-2	Vanadium	47300	ug/Kg		110	551	551	1	P	HSC	12/10/09 04:25	120909A-1	926576
7440-66-6	Zinc	25000	ug/Kg		363	1100	1100	1	P	HSC	12/10/09 04:25	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.521	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.52	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.571	g	30	mL	12/08/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

933552	933551	SW846 3050B	0.5	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711002 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13910 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8750000	ug/Kg		7330	21600	21600	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-36-0	Antimony	1080	ug/Kg	UN	356	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-38-2	Arsenic	1.97	mg/kg		0.216	1.08	1.08	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-39-3	Barium	39200	ug/Kg	*N	99.9	500	500	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-41-7	Beryllium	0.557	mg/kg	*	0.0216	0.108	0.108	2	MS	BAJ	12/13/09 16:10	091213-5	926645
7440-42-8	Boron	2240	ug/Kg	J	1080	5390	5390	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-43-9	Cadmium	539	ug/Kg	U	108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-70-2	Calcium	657000	ug/Kg	*	7990	25000	25000	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-47-3	Chromium	14400	ug/Kg		162	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-48-4	Cobalt	4000	ug/Kg	*N	162	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-50-8	Copper	7150	ug/Kg		324	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-89-6	Iron	18500000	ug/Kg		8630	27000	27000	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-92-1	Lead	83700	ug/Kg	*N	270	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-93-2	Lithium	13.2	mg/kg		0.432	2.16	2.16	2	MS	PRB	12/12/09 21:50	091212-4	926645
7439-95-4	Magnesium	1410000	ug/Kg	N	8490	30000	30000	1	P	HSC	12/17/09 13:28	121709-3	933552
7439-96-5	Manganese	316000	ug/Kg	*	216	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576
7439-97-6	Mercury	17.4	ug/kg		4.03	11.9	11.9	1	AV	JXL1	12/09/09 12:18	120909S1-6	926816
7440-02-0	Nickel	9.06	mg/kg		0.108	0.432	0.432	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-09-7	Potassium	1030000	ug/Kg	N	6400	25000	25000	1	P	HSC	12/17/09 13:28	121709-3	933552
7782-49-2	Selenium	1.08	mg/kg	UN	0.54	1.08	1.08	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-21-3	Silicon	651000	ug/Kg	N	1500	9990	9990	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-22-4	Silver	882	ug/Kg		108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-23-5	Sodium	355000	ug/Kg		6990	25000	25000	1	P	HSC	12/17/09 13:28	121709-3	933552
7440-28-0	Thallium	0.179	mg/kg	J	0.0648	0.216	0.216	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-32-6	Titanium	337000	ug/Kg		108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-61-1	Uranium	0.895	mg/kg		0.0143	0.0432	0.0432	2	MS	PRB	12/12/09 21:50	091212-4	926645
7440-62-2	Vanadium	33800	ug/Kg		108	539	539	1	P	HSC	12/10/09 05:15	120909A-1	926576
7440-66-6	Zinc	24300	ug/Kg		356	1080	1080	1	P	HSC	12/10/09 05:15	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.516	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.515	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.563	g	30	mL	12/08/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933552	933551	SW846 3050B	0.557	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711003 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13911 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17900000	ug/Kg		7670	22600	22600	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-36-0	Antimony	1130	ug/Kg	UN	372	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-38-2	Arsenic	2.7	mg/kg		0.23	1.15	1.15	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-39-3	Barium	118000	ug/Kg	*N	117	583	583	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-41-7	Beryllium	1.02	mg/kg	*	0.023	0.115	0.115	2	MS	BAJ	12/13/09 16:12	091213-5	926645
7440-42-8	Boron	2480	ug/Kg	J	1130	5640	5640	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-43-9	Cadmium	119	ug/Kg	J	113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-70-2	Calcium	1500000	ug/Kg	*	9330	29100	29100	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-47-3	Chromium	22200	ug/Kg		169	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-48-4	Cobalt	8600	ug/Kg	*N	169	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-50-8	Copper	10700	ug/Kg		338	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-89-6	Iron	20000000	ug/Kg		9020	28200	28200	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-92-1	Lead	58600	ug/Kg	*N	282	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-93-2	Lithium	17.4	mg/kg		0.461	2.3	2.3	2	MS	PRB	12/12/09 21:56	091212-4	926645
7439-95-4	Magnesium	2180000	ug/Kg	N	9910	35000	35000	1	P	HSC	12/17/09 13:35	121709-3	933552
7439-96-5	Manganese	649000	ug/Kg	*	226	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576
7439-97-6	Mercury	18.3	ug/kg		4.58	13.5	13.5	1	AV	JXL1	12/09/09 12:20	120909S1-6	926816
7440-02-0	Nickel	11.6	mg/kg		0.115	0.461	0.461	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-09-7	Potassium	1230000	ug/Kg	N	7460	29100	29100	1	P	HSC	12/17/09 13:35	121709-3	933552
7782-49-2	Selenium	1.15	mg/kg	UN	0.576	1.15	1.15	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-21-3	Silicon	1060000	ug/Kg	N	1750	11700	11700	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-22-4	Silver	576	ug/Kg		113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-23-5	Sodium	333000	ug/Kg		8160	29100	29100	1	P	HSC	12/17/09 13:35	121709-3	933552
7440-28-0	Thallium	0.242	mg/kg		0.0691	0.23	0.23	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-32-6	Titanium	434000	ug/Kg		113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-61-1	Uranium	1.09	mg/kg		0.0152	0.0461	0.0461	2	MS	PRB	12/12/09 21:56	091212-4	926645
7440-62-2	Vanadium	35300	ug/Kg		113	564	564	1	P	HSC	12/10/09 05:22	120909A-1	926576
7440-66-6	Zinc	32900	ug/Kg		372	1130	1130	1	P	HSC	12/10/09 05:22	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.517	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.506	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.519	g	30	mL	12/08/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933552	933551	SW846 3050B	0.5	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711004 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13913 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	21200000	ug/Kg		7880	23200	23200	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-36-0	Antimony	1160	ug/Kg	UN	383	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-38-2	Arsenic	3.47	mg/kg		0.233	1.16	1.16	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-39-3	Barium	153000	ug/Kg	*N	106	531	531	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-41-7	Beryllium	1.03	mg/kg	*	0.0233	0.116	0.116	2	MS	BAJ	12/13/09 16:13	091213-5	926645
7440-42-8	Boron	2540	ug/Kg	J	1160	5800	5800	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-43-9	Cadmium	580	ug/Kg	U	116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-70-2	Calcium	2920000	ug/Kg	*	8500	26600	26600	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-47-3	Chromium	14500	ug/Kg		174	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-48-4	Cobalt	5310	ug/Kg	*N	174	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-50-8	Copper	11100	ug/Kg		348	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-89-6	Iron	15900000	ug/Kg		9270	29000	29000	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-92-1	Lead	15800	ug/Kg	*N	290	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-93-2	Lithium	20.7	mg/kg		0.466	2.33	2.33	2	MS	PRB	12/12/09 22:02	091212-4	926645
7439-95-4	Magnesium	2180000	ug/Kg	N	9030	31900	31900	1	P	HSC	12/17/09 13:42	121709-3	933552
7439-96-5	Manganese	216000	ug/Kg	*	232	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576
7439-97-6	Mercury	30	ug/kg		4.17	12.3	12.3	1	AV	JXL1	12/09/09 12:22	120909S1-6	926816
7440-02-0	Nickel	10.2	mg/kg		0.116	0.466	0.466	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-09-7	Potassium	1090000	ug/Kg	N	6800	26600	26600	1	P	HSC	12/17/09 13:42	121709-3	933552
7782-49-2	Selenium	1.16	mg/kg	UN	0.582	1.16	1.16	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-21-3	Silicon	508000	ug/Kg	N	1590	10600	10600	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-22-4	Silver	526	ug/Kg	J	116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-23-5	Sodium	794000	ug/Kg		7440	26600	26600	1	P	HSC	12/17/09 13:42	121709-3	933552
7440-28-0	Thallium	0.234	mg/kg		0.0698	0.233	0.233	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-32-6	Titanium	469000	ug/Kg		116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-61-1	Uranium	0.976	mg/kg		0.0154	0.0466	0.0466	2	MS	PRB	12/12/09 22:02	091212-4	926645
7440-62-2	Vanadium	28800	ug/Kg		116	580	580	1	P	HSC	12/10/09 05:29	120909A-1	926576
7440-66-6	Zinc	26300	ug/Kg		383	1160	1160	1	P	HSC	12/10/09 05:29	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.503	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.501	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.571	g	30	mL	12/08/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933552	933551	SW846 3050B	0.549	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711005 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13912 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9410000	ug/Kg		7620	22400	22400	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-36-0	Antimony	1120	ug/Kg	UN	370	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-38-2	Arsenic	1.98	mg/kg		0.23	1.15	1.15	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-39-3	Barium	101000	ug/Kg	*N	115	577	577	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-41-7	Beryllium	0.728	mg/kg	*	0.023	0.115	0.115	2	MS	BAJ	12/13/09 16:15	091213-5	926645
7440-42-8	Boron	2030	ug/Kg	J	1120	5600	5600	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-43-9	Cadmium	228	ug/Kg	J	112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-70-2	Calcium	2120000	ug/Kg	*	9230	28800	28800	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-47-3	Chromium	9790	ug/Kg		168	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-48-4	Cobalt	5500	ug/Kg	*N	168	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-50-8	Copper	9470	ug/Kg		336	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-89-6	Iron	14800000	ug/Kg		8960	28000	28000	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-92-1	Lead	21600	ug/Kg	*N	280	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-93-2	Lithium	11.5	mg/kg		0.46	2.3	2.3	2	MS	PRB	12/12/09 22:08	091212-4	926645
7439-95-4	Magnesium	1590000	ug/Kg	N	9810	34600	34600	1	P	HSC	12/17/09 13:49	121709-3	933552
7439-96-5	Manganese	466000	ug/Kg	*	224	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576
7439-97-6	Mercury	18.1	ug/kg		4.17	12.3	12.3	1	AV	JXL1	12/09/09 12:23	120909S1-6	926816
7440-02-0	Nickel	8.23	mg/kg		0.115	0.46	0.46	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-09-7	Potassium	1220000	ug/Kg	N	7380	28800	28800	1	P	HSC	12/17/09 13:49	121709-3	933552
7782-49-2	Selenium	1.15	mg/kg	UN	0.574	1.15	1.15	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-21-3	Silicon	693000	ug/Kg	N	1730	11500	11500	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-22-4	Silver	410	ug/Kg	J	112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-23-5	Sodium	969000	ug/Kg		8070	28800	28800	1	P	HSC	12/17/09 13:49	121709-3	933552
7440-28-0	Thallium	0.154	mg/kg	J	0.0689	0.23	0.23	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-32-6	Titanium	343000	ug/Kg		112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-61-1	Uranium	0.958	mg/kg		0.0152	0.046	0.046	2	MS	PRB	12/12/09 22:08	091212-4	926645
7440-62-2	Vanadium	24600	ug/Kg		112	560	560	1	P	HSC	12/10/09 05:37	120909A-1	926576
7440-66-6	Zinc	39800	ug/Kg		370	1120	1120	1	P	HSC	12/10/09 05:37	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.515	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.502	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.564	g	30	mL	12/08/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933552	933551	SW846 3050B	0.5	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711006 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-09-13909 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12700000	ug/Kg		7290	21400	21400	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-36-0	Antimony	1070	ug/Kg	UN	354	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-38-2	Arsenic	1.74	mg/kg		0.213	1.06	1.06	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-39-3	Barium	135000	ug/Kg	*N	104	520	520	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-41-7	Beryllium	0.720	mg/kg	*	0.0213	0.106	0.106	2	MS	BAJ	12/13/09 16:17	091213-5	926645
7440-42-8	Boron	1680	ug/Kg	J	1070	5360	5360	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-43-9	Cadmium	536	ug/Kg	U	107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-70-2	Calcium	2310000	ug/Kg	*	8320	26000	26000	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-47-3	Chromium	9440	ug/Kg		161	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-48-4	Cobalt	4110	ug/Kg	*N	161	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-50-8	Copper	5690	ug/Kg		322	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-89-6	Iron	11500000	ug/Kg		8580	26800	26800	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-92-1	Lead	20800	ug/Kg	*N	268	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-93-2	Lithium	13.8	mg/kg		0.426	2.13	2.13	2	MS	PRB	12/12/09 22:14	091212-4	926645
7439-95-4	Magnesium	1890000	ug/Kg	N	8840	31200	31200	1	P	HSC	12/17/09 13:56	121709-3	933552
7439-96-5	Manganese	186000	ug/Kg	*	214	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576
7439-97-6	Mercury	21.5	ug/kg		4.5	13.2	13.2	1	AV	JXL1	12/09/09 12:28	120909S1-6	926816
7440-02-0	Nickel	7.01	mg/kg		0.106	0.426	0.426	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-09-7	Potassium	853000	ug/Kg	N	6660	26000	26000	1	P	HSC	12/17/09 13:56	121709-3	933552
7782-49-2	Selenium	1.06	mg/kg	UN	0.532	1.06	1.06	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-21-3	Silicon	521000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-22-4	Silver	352	ug/Kg	J	107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-23-5	Sodium	235000	ug/Kg		7280	26000	26000	1	P	HSC	12/17/09 13:56	121709-3	933552
7440-28-0	Thallium	0.202	mg/kg	J	0.0638	0.213	0.213	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-32-6	Titanium	410000	ug/Kg		107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-61-1	Uranium	0.667	mg/kg		0.014	0.0426	0.0426	2	MS	PRB	12/12/09 22:14	091212-4	926645
7440-62-2	Vanadium	21100	ug/Kg		107	536	536	1	P	HSC	12/10/09 05:44	120909A-1	926576
7440-66-6	Zinc	18500	ug/Kg		354	1070	1070	1	P	HSC	12/10/09 05:44	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.516	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.52	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.502	g	30	mL	12/08/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933552	933551	SW846 3050B	0.532	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241711007 **BASIS:** Dry Weight **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-10-7041 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13400000	ug/Kg		7220	21200	21200	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-36-0	Antimony	1060	ug/Kg	UN	350	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-38-2	Arsenic	3.12	mg/kg		0.213	1.07	1.07	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-39-3	Barium	140000	ug/Kg	*N	105	523	523	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-41-7	Beryllium	0.874	mg/kg	*	0.0213	0.107	0.107	2	MS	BAJ	12/13/09 16:19	091213-5	926645
7440-42-8	Boron	1810	ug/Kg	J	1060	5310	5310	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-43-9	Cadmium	531	ug/Kg	U	106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-70-2	Calcium	2880000	ug/Kg	*	8360	26100	26100	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-47-3	Chromium	10400	ug/Kg		159	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-48-4	Cobalt	6320	ug/Kg	*N	159	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-50-8	Copper	7270	ug/Kg		318	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-89-6	Iron	14000000	ug/Kg		8490	26500	26500	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-92-1	Lead	25800	ug/Kg	*N	265	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-93-2	Lithium	15.9	mg/kg		0.427	2.13	2.13	2	MS	PRB	12/12/09 22:19	091212-4	926645
7439-95-4	Magnesium	2170000	ug/Kg	N	8890	31400	31400	1	P	HSC	12/17/09 14:03	121709-3	933552
7439-96-5	Manganese	403000	ug/Kg	*	212	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576
7439-97-6	Mercury	23.4	ug/kg		4.18	12.3	12.3	1	AV	JXL1	12/09/09 12:30	120909S1-6	926816
7440-02-0	Nickel	9.98	mg/kg		0.107	0.427	0.427	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-09-7	Potassium	936000	ug/Kg	N	6690	26100	26100	1	P	HSC	12/17/09 14:03	121709-3	933552
7782-49-2	Selenium	1.07	mg/kg	UN	0.534	1.07	1.07	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-21-3	Silicon	469000	ug/Kg	N	1570	10500	10500	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-22-4	Silver	434	ug/Kg	J	106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-23-5	Sodium	381000	ug/Kg		7320	26100	26100	1	P	HSC	12/17/09 14:03	121709-3	933552
7440-28-0	Thallium	0.225	mg/kg		0.064	0.213	0.213	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-32-6	Titanium	434000	ug/Kg		106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-61-1	Uranium	0.808	mg/kg		0.0141	0.0427	0.0427	2	MS	PRB	12/12/09 22:19	091212-4	926645
7440-62-2	Vanadium	27500	ug/Kg		106	531	531	1	P	HSC	12/10/09 05:51	120909A-1	926576
7440-66-6	Zinc	22300	ug/Kg		350	1060	1060	1	P	HSC	12/10/09 05:51	120909A-1	926576

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926576	926575	SW846 3050B	0.525	g	50	mL	12/05/09	BCD1
926645	926642	SW846 3050B	0.522	g	50	mL	12/05/09	BCD1
926816	926815	SW846 7471A Prep	0.544	g	30	mL	12/08/09	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

933552	933551	SW846 3050B	0.533	g	50	mL	12/16/09	FGA

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Boron	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Iron	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Lead	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Manganese	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Silver	260	ug/L	250	ug/L	104.1	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Titanium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09–DEC–09 08:43	120909A–1
	Mercury	5.14	ug/L	5	ug/L	102.9	90.0 – 110.0	AV	09–DEC–09 09:59	120909S1–6
	Arsenic	48.3	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	12–DEC–09 19:55	091212–4
	Lithium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	12–DEC–09 19:55	091212–4
	Nickel	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	12–DEC–09 19:55	091212–4
	Selenium	53.4	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	12–DEC–09 19:55	091212–4
	Thallium	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	12–DEC–09 19:55	091212–4
	Uranium	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	12–DEC–09 19:55	091212–4
	Beryllium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	13–DEC–09 15:43	091213–5
	Manganese	529	ug/L	500	ug/L	105.8	90.0 – 110.0	P	16–DEC–09 11:26	121609A–2
	Barium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	17–DEC–09 09:52	121709–3
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	17–DEC–09 09:52	121709–3
	Magnesium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	17–DEC–09 09:52	121709–3
	Potassium	2370	ug/L	2500	ug/L	94.9	90.0 – 110.0	P	17–DEC–09 09:52	121709–3
	Silicon	4670	ug/L	5000	ug/L	93.3	90.0 – 110.0	P	17–DEC–09 09:52	121709–3
	Sodium	2400	ug/L	2500	ug/L	96.1	90.0 – 110.0	P	17–DEC–09 09:52	121709–3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Aluminum	4870	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Antimony	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Boron	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Cobalt	485	ug/L	500	ug/L	97	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Copper	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Iron	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Lead	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Manganese	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Titanium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	09-DEC-09 10:04	120909S1-6
	Arsenic	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	12-DEC-09 20:24	091212-4
	Lithium	54.2	ug/L	50	ug/L	108.5	90.0 – 110.0	MS	12-DEC-09 20:24	091212-4
	Nickel	52.4	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	12-DEC-09 20:24	091212-4
	Selenium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	12-DEC-09 20:24	091212-4
	Thallium	49.3	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	12-DEC-09 20:24	091212-4
	Uranium	53.9	ug/L	50	ug/L	107.7	90.0 – 110.0	MS	12-DEC-09 20:24	091212-4
	Beryllium	52.2	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	13-DEC-09 15:51	091213-5
	Manganese	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	16-DEC-09 12:27	121609A-2
	Barium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	17-DEC-09 10:37	121709-3
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	17-DEC-09 10:37	121709-3
	Magnesium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	17-DEC-09 10:37	121709-3
	Potassium	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	17-DEC-09 10:37	121709-3
	Silicon	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	17-DEC-09 10:37	121709-3
	Sodium	10200	ug/L	10000	ug/L	102	90.0 – 110.0	P	17-DEC-09 10:37	121709-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Antimony	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Boron	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Cadmium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Cobalt	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Copper	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Lead	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Manganese	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Titanium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Vanadium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09-DEC-09 10:11	120909A-1
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09-DEC-09 10:24	120909S1-6
	Arsenic	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	12-DEC-09 20:41	091212-4
	Lithium	53.4	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	12-DEC-09 20:41	091212-4
	Nickel	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	12-DEC-09 20:41	091212-4
	Selenium	52.6	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	12-DEC-09 20:41	091212-4
	Thallium	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	12-DEC-09 20:41	091212-4
	Uranium	54.5	ug/L	50	ug/L	109	90.0 – 110.0	MS	12-DEC-09 20:41	091212-4
	Beryllium	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	13-DEC-09 16:06	091213-5
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	16-DEC-09 12:56	121609A-2
	Barium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	17-DEC-09 11:10	121709-3
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	17-DEC-09 11:10	121709-3
	Magnesium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	17-DEC-09 11:10	121709-3
	Potassium	4810	ug/L	5000	ug/L	96.3	90.0 – 110.0	P	17-DEC-09 11:10	121709-3
	Silicon	2390	ug/L	2500	ug/L	95.8	90.0 – 110.0	P	17-DEC-09 11:10	121709-3
	Sodium	9530	ug/L	10000	ug/L	95.3	90.0 – 110.0	P	17-DEC-09 11:10	121709-3

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	09–DEC–09 10:44	120909S1–6
	Aluminum	4890	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Boron	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Copper	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Lead	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Manganese	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Titanium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	09–DEC–09 11:31	120909A–1
	Arsenic	47.3	ug/L	50	ug/L	94.5	90.0 – 110.0	MS	12–DEC–09 21:39	091212–4
	Lithium	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	12–DEC–09 21:39	091212–4
	Nickel	53.9	ug/L	50	ug/L	107.7	90.0 – 110.0	MS	12–DEC–09 21:39	091212–4
	Selenium	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	12–DEC–09 21:39	091212–4
	Thallium	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	12–DEC–09 21:39	091212–4
	Uranium	54.3	ug/L	50	ug/L	108.6	90.0 – 110.0	MS	12–DEC–09 21:39	091212–4
	Beryllium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	13–DEC–09 16:20	091213–5
	Manganese	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	16–DEC–09 13:30	121609A–2
	Barium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	17–DEC–09 12:13	121709–3
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	17–DEC–09 12:13	121709–3
	Magnesium	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	17–DEC–09 12:13	121709–3
	Potassium	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	17–DEC–09 12:13	121709–3
	Silicon	2400	ug/L	2500	ug/L	95.8	90.0 – 110.0	P	17–DEC–09 12:13	121709–3
	Sodium	10100	ug/L	10000	ug/L	100.5	90.0 – 110.0	P	17–DEC–09 12:13	121709–3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	09-DEC-09 11:04	120909S1-6
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Antimony	500	ug/L	500	ug/L	100	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Boron	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Cadmium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Chromium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Cobalt	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Copper	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Lead	485	ug/L	500	ug/L	97	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Manganese	485	ug/L	500	ug/L	97	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Titanium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Vanadium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	09-DEC-09 12:40	120909A-1
	Arsenic	48.1	ug/L	50	ug/L	96.2	90.0 – 110.0	MS	12-DEC-09 22:25	091212-4
	Lithium	54.3	ug/L	50	ug/L	108.6	90.0 – 110.0	MS	12-DEC-09 22:25	091212-4
	Nickel	54.4	ug/L	50	ug/L	108.9	90.0 – 110.0	MS	12-DEC-09 22:25	091212-4
	Selenium	50.8	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	12-DEC-09 22:25	091212-4
	Thallium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	12-DEC-09 22:25	091212-4
	Uranium	54.7	ug/L	50	ug/L	109.4	90.0 – 110.0	MS	12-DEC-09 22:25	091212-4
	Manganese	520	ug/L	500	ug/L	104	90.0 – 110.0	P	16-DEC-09 14:18	121609A-2
	Barium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	17-DEC-09 13:14	121709-3
	Calcium	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	17-DEC-09 13:14	121709-3
	Magnesium	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	17-DEC-09 13:14	121709-3
	Potassium	4840	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	17-DEC-09 13:14	121709-3
	Silicon	2420	ug/L	2500	ug/L	96.8	90.0 – 110.0	P	17-DEC-09 13:14	121709-3
	Sodium	9520	ug/L	10000	ug/L	95.2	90.0 – 110.0	P	17-DEC-09 13:14	121709-3
CCV05										
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09-DEC-09 11:24	120909S1-6

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Antimony	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Boron	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Cobalt	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Copper	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Iron	5240	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Lead	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Manganese	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Titanium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Vanadium	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Barium	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	17-DEC-09 14:10	121709-3
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	17-DEC-09 14:10	121709-3
	Magnesium	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	17-DEC-09 14:10	121709-3
	Potassium	4950	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	17-DEC-09 14:10	121709-3
	Silicon	2410	ug/L	2500	ug/L	96.4	90.0 - 110.0	P	17-DEC-09 14:10	121709-3
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 - 110.0	P	17-DEC-09 14:10	121709-3
CCV06										
	Mercury	5.15	ug/L	5	ug/L	103	80.0 - 120.0	AV	09-DEC-09 11:45	120909S1-6
	Aluminum	4820	ug/L	5000	ug/L	96.3	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Antimony	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Boron	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Cadmium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Chromium	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Cobalt	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Copper	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Iron	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 14:37	120909A–1
	Manganese	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 14:37	120909A–1
	Silver	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	09–DEC–09 14:37	120909A–1
	Titanium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	09–DEC–09 14:37	120909A–1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	09–DEC–09 14:37	120909A–1
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 14:37	120909A–1
CCV07										
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	09–DEC–09 12:05	120909S1–6
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Antimony	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Boron	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Copper	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Iron	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Lead	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Manganese	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
	Zinc	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 15:48	120909A–1
CCV08										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	09–DEC–09 12:25	120909S1–6
	Aluminum	4860	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1
	Boron	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Copper	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
	Lead	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
	Silver	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
	Titanium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
	Zinc	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	09-DEC-09 16:58	120909A-1
CCV09										
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 - 120.0	AV	09-DEC-09 12:45	120909S1-6
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Antimony	510	ug/L	500	ug/L	102	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Boron	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Cadmium	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Chromium	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Cobalt	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Copper	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Lead	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Manganese	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Silver	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Titanium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	09-DEC-09 18:08	120909A-1
CCV10										
	Aluminum	4890	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Antimony	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Boron	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Cadmium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Chromium	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Iron	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Lead	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Manganese	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Silver	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Vanadium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Zinc	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
CCV11										
	Aluminum	4920	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Antimony	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Boron	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Cadmium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Chromium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Cobalt	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Lead	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Manganese	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Titanium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Zinc	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
CCV12										
	Aluminum	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Antimony	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Boron	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Cadmium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Lead	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Silver	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Titanium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Zinc	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
CCV13										
	Aluminum	4860	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Antimony	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Boron	485	ug/L	500	ug/L	97	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Cadmium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Cobalt	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Copper	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Titanium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Vanadium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Zinc	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
CCV14										
	Aluminum	4740	ug/L	5000	ug/L	94.9	90.0 – 110.0	P	09–DEC–09 22:59	120909A–1
	Antimony	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	09–DEC–09 22:59	120909A–1
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	09–DEC–09 22:59	120909A–1
	Cadmium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09–DEC–09 22:59	120909A–1
	Chromium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09–DEC–09 22:59	120909A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Copper	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Iron	4810	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Lead	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Manganese	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Titanium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Vanadium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09-DEC-09 22:59	120909A-1
CCV15										
	Aluminum	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Antimony	500	ug/L	500	ug/L	100	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Boron	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Cadmium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Chromium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Cobalt	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Copper	475	ug/L	500	ug/L	95	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Lead	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Manganese	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Titanium	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Vanadium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
	Zinc	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	09-DEC-09 23:47	120909A-1
CCV16										
	Aluminum	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	10-DEC-09 01:10	120909A-1
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	10-DEC-09 01:10	120909A-1
	Boron	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	10-DEC-09 01:10	120909A-1
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	10-DEC-09 01:10	120909A-1
	Chromium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	10-DEC-09 01:10	120909A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Copper	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Lead	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Manganese	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Titanium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Vanadium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
	Zinc	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	10–DEC–09 01:10	120909A–1
CCV17										
	Aluminum	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Cadmium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Copper	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Lead	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Manganese	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Silver	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Titanium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Vanadium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
	Zinc	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	10–DEC–09 02:07	120909A–1
CCV18										
	Aluminum	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Antimony	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Boron	495	ug/L	500	ug/L	99	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Copper	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Lead	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Silver	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Vanadium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
	Zinc	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	10–DEC–09 03:03	120909A–1
CCV19										
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Antimony	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Chromium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Iron	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Lead	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Manganese	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Titanium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Vanadium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	10–DEC–09 03:58	120909A–1
CCV20										
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Antimony	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Boron	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Cadmium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Chromium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Copper	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Titanium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
	Zinc	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	10–DEC–09 05:02	120909A–1
CCV21										
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Antimony	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Boron	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Cadmium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Copper	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Lead	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Silver	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Titanium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Vanadium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1
	Zinc	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	10–DEC–09 05:58	120909A–1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.174	ug/L	.2	ug/L	87	70.0 – 130.0	AV	09-DEC-09 10:02	120909S1-6
	Nickel	2.15	ug/L	2	ug/L	107.7	70.0 – 130.0	MS	12-DEC-09 20:07	091212-4
	Thallium	1.04	ug/L	1	ug/L	103.7	70.0 – 130.0	MS	12-DEC-09 20:07	091212-4
	Arsenic	5.32	ug/L	5	ug/L	106.4	70.0 – 130.0	MS	12-DEC-09 20:07	091212-4
	Lithium	11.2	ug/L	10	ug/L	112.1	70.0 – 130.0	MS	12-DEC-09 20:07	091212-4
	Uranium	.221	ug/L	.2	ug/L	110.5	70.0 – 130.0	MS	12-DEC-09 20:07	091212-4
	Selenium	5.24	ug/L	5	ug/L	104.8	70.0 – 130.0	MS	12-DEC-09 20:07	091212-4
	Beryllium	.566	ug/L	.5	ug/L	113.2	70.0 – 130.0	MS	13-DEC-09 15:46	091213-5
PQL01										
	Cadmium	5	ug/L	5	ug/L	100	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Chromium	4.56	ug/L	5	ug/L	91.1	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Cobalt	4.91	ug/L	5	ug/L	98.1	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Zinc	8.32	ug/L	10	ug/L	83.2	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Boron	51.3	ug/L	50	ug/L	102.6	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Vanadium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Copper	9.93	ug/L	10	ug/L	99.3	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Antimony	10.3	ug/L	10	ug/L	102.7	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Silver	5.49	ug/L	5	ug/L	109.8	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Manganese	10.2	ug/L	10	ug/L	101.8	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Lead	10.4	ug/L	10	ug/L	104.2	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Iron	130	ug/L	100	ug/L	129.5	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Aluminum	200	ug/L	200	ug/L	99.8	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Titanium	5.48	ug/L	5	ug/L	109.5	70.0 – 130.0	P	09-DEC-09 08:57	120909A-1
	Manganese	11	ug/L	10	ug/L	110.1	70.0 – 130.0	P	16-DEC-09 11:40	121609A-2
	Magnesium	220	ug/L	300	ug/L	73.4	70.0 – 130.0	P	17-DEC-09 10:06	121709-3
	Potassium	135	ug/L	150	ug/L	89.9	70.0 – 130.0	P	17-DEC-09 10:06	121709-3
	Sodium	311	ug/L	300	ug/L	103.5	70.0 – 130.0	P	17-DEC-09 10:06	121709-3
	Barium	5.08	ug/L	5	ug/L	101.6	70.0 – 130.0	P	17-DEC-09 10:06	121709-3
	Calcium	208	ug/L	200	ug/L	104	70.0 – 130.0	P	17-DEC-09 10:06	121709-3
	Silicon	98.6	ug/L	100	ug/L	98.6	70.0 – 130.0	P	17-DEC-09 10:06	121709-3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 08:50	120909A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 08:50	120909A-1
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 08:50	120909A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 08:50	120909A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 08:50	120909A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 08:50	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 08:50	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 08:50	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 08:50	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 08:50	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 08:50	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 08:50	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 08:50	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 08:50	120909A-1
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:01	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	12-DEC-09 20:01	091212-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	12-DEC-09 20:01	091212-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-DEC-09 20:01	091212-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	12-DEC-09 20:01	091212-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	12-DEC-09 20:01	091212-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	12-DEC-09 20:01	091212-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	13-DEC-09 15:44	091213-5
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-DEC-09 11:33	121609A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-DEC-09 09:59	121709-3
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-DEC-09 09:59	121709-3
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	17-DEC-09 09:59	121709-3
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-DEC-09 09:59	121709-3
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	17-DEC-09 09:59	121709-3
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-DEC-09 09:59	121709-3
CCB01										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 09:50	120909A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	6.38	+/-10	J	3.3	10.0	SOL	P	09-DEC-09 09:50	120909A-1
	Boron	14.2	+/-50	J	10.0	50.0	SOL	P	09-DEC-09 09:50	120909A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 09:50	120909A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 09:50	120909A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 09:50	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 09:50	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 09:50	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 09:50	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 09:50	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 09:50	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 09:50	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 09:50	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 09:50	120909A-1
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:06	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	12-DEC-09 20:30	091212-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	12-DEC-09 20:30	091212-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-DEC-09 20:30	091212-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	12-DEC-09 20:30	091212-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	12-DEC-09 20:30	091212-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	12-DEC-09 20:30	091212-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	13-DEC-09 15:53	091213-5
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-DEC-09 12:34	121609A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-DEC-09 10:44	121709-3
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-DEC-09 10:44	121709-3
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	17-DEC-09 10:44	121709-3
	Potassium	136.68	+/-250	J	64.0	250	SOL	P	17-DEC-09 10:44	121709-3
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	17-DEC-09 10:44	121709-3
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-DEC-09 10:44	121709-3
CCB02										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 10:18	120909A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 10:18	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 10:18	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 10:18	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 10:18	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 10:18	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 10:18	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 10:18	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 10:18	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 10:18	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 10:18	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 10:18	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 10:18	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 10:18	120909A–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:26	120909S1–6
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–DEC–09 20:47	091212–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	12–DEC–09 20:47	091212–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–DEC–09 20:47	091212–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–DEC–09 20:47	091212–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–DEC–09 20:47	091212–4
	Uranium	0.07	+/–.2	J	0.066	0.2	SOL	MS	12–DEC–09 20:47	091212–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	13–DEC–09 16:08	091213–5
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	16–DEC–09 13:03	121609A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	17–DEC–09 11:17	121709–3
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	17–DEC–09 11:17	121709–3
	Magnesium	–89.49	+/–300	J	85.0	300	SOL	P	17–DEC–09 11:17	121709–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	17–DEC–09 11:17	121709–3
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	17–DEC–09 11:17	121709–3
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	17–DEC–09 11:17	121709–3
CCB03										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:46	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 11:38	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 11:38	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 11:38	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 11:38	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 11:38	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 11:38	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 11:38	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 11:38	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 11:38	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 11:38	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 11:38	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 11:38	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 11:38	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 11:38	120909A–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–DEC–09 21:45	091212–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	12–DEC–09 21:45	091212–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–DEC–09 21:45	091212–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–DEC–09 21:45	091212–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–DEC–09 21:45	091212–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–DEC–09 21:45	091212–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	13–DEC–09 16:22	091213–5
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	16–DEC–09 13:36	121609A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	17–DEC–09 12:20	121709–3
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	17–DEC–09 12:20	121709–3
	Magnesium	–128.96	+/–300	J	85.0	300	SOL	P	17–DEC–09 12:20	121709–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	17–DEC–09 12:20	121709–3
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	17–DEC–09 12:20	121709–3
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	17–DEC–09 12:20	121709–3
CCB04										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 11:06	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 12:47	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 12:47	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 12:47	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 12:47	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 12:47	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 12:47	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 12:47	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 12:47	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 12:47	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 12:47	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 12:47	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 12:47	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 12:47	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 12:47	120909A–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–DEC–09 22:31	091212–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	12–DEC–09 22:31	091212–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–DEC–09 22:31	091212–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–DEC–09 22:31	091212–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–DEC–09 22:31	091212–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–DEC–09 22:31	091212–4
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	16–DEC–09 14:25	121609A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	17–DEC–09 13:21	121709–3
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	17–DEC–09 13:21	121709–3
	Magnesium	–113.37	+/–300	J	85.0	300	SOL	P	17–DEC–09 13:21	121709–3
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	17–DEC–09 13:21	121709–3
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	17–DEC–09 13:21	121709–3
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	17–DEC–09 13:21	121709–3
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 11:26	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 13:28	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 13:28	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 13:28	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 13:28	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 13:28	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 13:28	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 13:28	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 13:28	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 13:28	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 13:28	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 13:28	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 13:28	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 13:28	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 13:28	120909A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-DEC-09 14:17	121709-3
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-DEC-09 14:17	121709-3
	Magnesium	-125.46	+/-300	J	85.0	300	SOL	P	17-DEC-09 14:17	121709-3
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-DEC-09 14:17	121709-3
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	17-DEC-09 14:17	121709-3
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-DEC-09 14:17	121709-3
CCB06										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 11:46	120909S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 14:44	120909A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 14:44	120909A-1
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 14:44	120909A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 14:44	120909A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 14:44	120909A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 14:44	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 14:44	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 14:44	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 14:44	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 14:44	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 14:44	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 14:44	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 14:44	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 14:44	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB07										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 12:06	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 15:55	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 15:55	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 15:55	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 15:55	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 15:55	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 15:55	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 15:55	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 15:55	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 15:55	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 15:55	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 15:55	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 15:55	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 15:55	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 15:55	120909A–1
CCB08										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 12:27	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 17:05	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 17:05	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 17:05	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 17:05	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 17:05	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 17:05	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 17:05	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 17:05	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 17:05	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 17:05	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 17:05	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 17:05	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 17:05	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 17:05	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB09										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 12:47	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 18:15	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 18:15	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 18:15	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 18:15	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 18:15	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 18:15	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 18:15	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 18:15	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 18:15	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 18:15	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 18:15	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 18:15	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 18:15	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 18:15	120909A–1
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 19:25	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 19:25	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 19:25	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 19:25	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 19:25	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 19:25	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 19:25	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 19:25	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 19:25	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 19:25	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 19:25	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 19:25	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 19:25	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 19:25	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 20:28	120909A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 20:28	120909A-1
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 20:28	120909A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 20:28	120909A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 20:28	120909A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 20:28	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 20:28	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 20:28	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 20:28	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 20:28	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 20:28	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 20:28	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 20:28	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 20:28	120909A-1
CCB12										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 21:23	120909A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 21:23	120909A-1
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 21:23	120909A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 21:23	120909A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 21:23	120909A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 21:23	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 21:23	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 21:23	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 21:23	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 21:23	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 21:23	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 21:23	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 21:23	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 21:23	120909A-1
CCB13										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 22:11	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 22:11	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 22:11	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 22:11	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 22:11	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 22:11	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 22:11	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 22:11	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 22:11	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 22:11	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 22:11	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 22:11	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 22:11	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 22:11	120909A–1
CCB14										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 23:06	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 23:06	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 23:06	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:06	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 23:06	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 23:06	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 23:06	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 23:06	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 23:06	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 23:06	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:06	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:06	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:06	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 23:06	120909A–1
CCB15										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 23:54	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 23:54	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 23:54	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:54	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 23:54	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 23:54	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 23:54	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 23:54	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 23:54	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 23:54	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:54	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:54	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 23:54	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 23:54	120909A–1
CCB16										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 01:17	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 01:17	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	10–DEC–09 01:17	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 01:17	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 01:17	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 01:17	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–DEC–09 01:17	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	10–DEC–09 01:17	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	10–DEC–09 01:17	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	10–DEC–09 01:17	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 01:17	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 01:17	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 01:17	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 01:17	120909A–1
CCB17										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 02:14	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 02:14	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	10–DEC–09 02:14	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 02:14	120909A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	10-DEC-09 02:14	120909A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	10-DEC-09 02:14	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	10-DEC-09 02:14	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	10-DEC-09 02:14	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	10-DEC-09 02:14	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	10-DEC-09 02:14	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 02:14	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 02:14	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 02:14	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	10-DEC-09 02:14	120909A-1
CCB18										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 03:10	120909A-1
	Antimony	4.01	+/-10	J	3.3	10.0	SOL	P	10-DEC-09 03:10	120909A-1
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	10-DEC-09 03:10	120909A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 03:10	120909A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	10-DEC-09 03:10	120909A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	10-DEC-09 03:10	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	10-DEC-09 03:10	120909A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	10-DEC-09 03:10	120909A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	10-DEC-09 03:10	120909A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	10-DEC-09 03:10	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 03:10	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 03:10	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 03:10	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	10-DEC-09 03:10	120909A-1
CCB19										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	10-DEC-09 04:05	120909A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	10-DEC-09 04:05	120909A-1
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	10-DEC-09 04:05	120909A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	10-DEC-09 04:05	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 04:05	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 04:05	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–DEC–09 04:05	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	10–DEC–09 04:05	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	10–DEC–09 04:05	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	10–DEC–09 04:05	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 04:05	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 04:05	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 04:05	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 04:05	120909A–1
CCB20										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 05:09	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 05:09	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	10–DEC–09 05:09	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 05:09	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 05:09	120909A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 05:09	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–DEC–09 05:09	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	10–DEC–09 05:09	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	10–DEC–09 05:09	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	10–DEC–09 05:09	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 05:09	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 05:09	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 05:09	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 05:09	120909A–1
CCB21										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	10–DEC–09 06:05	120909A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 06:05	120909A–1
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	10–DEC–09 06:05	120909A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 06:05	120909A–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 06:05	120909A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–649

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	10–DEC–09 06:05	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–DEC–09 06:05	120909A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	10–DEC–09 06:05	120909A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	10–DEC–09 06:05	120909A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	10–DEC–09 06:05	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 06:05	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 06:05	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–DEC–09 06:05	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–DEC–09 06:05	120909A–1

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-649

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201981075								
	Aluminum	6680	ug/Kg	+/-19646.365	U	P	6680	19600
	Antimony	324	ug/Kg	+/-982.318	U	P	324	982
	Boron	3100	ug/Kg	+/-4911.591	J	P	982	4910
	Cadmium	98.2	ug/Kg	+/-491.159	U	P	98.2	491
	Chromium	147	ug/Kg	+/-491.159	U	P	147	491
	Cobalt	147	ug/Kg	+/-491.159	U	P	147	491
	Copper	295	ug/Kg	+/-982.318	U	P	295	982
	Iron	7860	ug/Kg	+/-24557.957	U	P	7860	24600
	Lead	246	ug/Kg	+/-982.318	U	P	246	982
	Manganese	520	ug/Kg	+/-982.318	J	P	196	982
	Silver	98.2	ug/Kg	+/-491.159	U	P	98.2	491
	Titanium	98.2	ug/Kg	+/-491.159	U	P	98.2	491
	Vanadium	98.2	ug/Kg	+/-491.159	U	P	98.2	491
	Zinc	500	ug/Kg	+/-982.318	J	P	324	982
1201981228								
	Arsenic	0.193	mg/kg	+/-0.967	U	MS	0.193	0.967
	Beryllium	0.0193	mg/kg	+/-0.097	U	MS	0.0193	0.0967
	Lithium	0.387	mg/kg	+/-1.934	U	MS	0.387	1.93
	Nickel	0.0967	mg/kg	+/-0.387	U	MS	0.0967	0.387
	Selenium	0.484	mg/kg	+/-0.967	U	MS	0.484	0.967
	Thallium	0.058	mg/kg	+/-0.193	U	MS	0.058	0.193
	Uranium	0.0128	mg/kg	+/-0.039	U	MS	0.0128	0.0387
1201981594								
	Mercury	3.4	ug/kg	+/-10.0	U	AV	3.4	10
1201997314								
	Barium	95.2	ug/Kg	+/-476.19	U	P	95.2	476
	Calcium	7620	ug/Kg	+/-23809.524	U	P	7620	23800
	Magnesium	-13500	ug/Kg	+/-28571.429	J	P	8100	28600
	Potassium	6100	ug/Kg	+/-23809.524	U	P	6100	23800
	Silicon	1430	ug/Kg	+/-9523.81	U	P	1430	9520
	Sodium	7280	ug/Kg	+/-23809.524	J	P	6670	23800

METALS
–4–
Interference Check Sample

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	512000	ug/L	500000	ug/L	102	80.0 – 120.0	09–DEC–09 09:04	120909A–1
	Antimony	–0.294	ug/L					09–DEC–09 09:04	120909A–1
	Boron	2.69	ug/L					09–DEC–09 09:04	120909A–1
	Cadmium	1.46	ug/L					09–DEC–09 09:04	120909A–1
	Chromium	1.09	ug/L					09–DEC–09 09:04	120909A–1
	Cobalt	–1.46	ug/L					09–DEC–09 09:04	120909A–1
	Copper	4.33	ug/L					09–DEC–09 09:04	120909A–1
	Iron	187000	ug/L	200000	ug/L	93.3	80.0 – 120.0	09–DEC–09 09:04	120909A–1
	Lead	5.24	ug/L					09–DEC–09 09:04	120909A–1
	Manganese	9.8	ug/L					09–DEC–09 09:04	120909A–1
	Silver	–0.165	ug/L					09–DEC–09 09:04	120909A–1
	Titanium	–2.41	ug/L					09–DEC–09 09:04	120909A–1
	Vanadium	–0.36	ug/L					09–DEC–09 09:04	120909A–1
	Zinc	–8.08	ug/L					09–DEC–09 09:04	120909A–1
ICSAB01									
	Aluminum	516000	ug/L	500000	ug/L	103	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Antimony	523	ug/L	500	ug/L	105	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Boron	508	ug/L	500	ug/L	102	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Cadmium	463	ug/L	500	ug/L	92.6	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Chromium	475	ug/L	500	ug/L	95.1	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Cobalt	436	ug/L	500	ug/L	87.2	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Copper	552	ug/L	500	ug/L	110	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Iron	190000	ug/L	200000	ug/L	94.8	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Lead	461	ug/L	500	ug/L	92.2	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Manganese	482	ug/L	500	ug/L	96.5	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Silver	273	ug/L	250	ug/L	109	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Titanium	515	ug/L	500	ug/L	103	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Vanadium	499	ug/L	500	ug/L	99.9	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Zinc	478	ug/L	500	ug/L	95.6	80.0 – 120.0	09–DEC–09 09:10	120909A–1

METALS
-4-
Interference Check Sample

SDG No: 10-649

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Manganese	8.7	ug/L					16-DEC-09 11:47	121609A-2
ICSAB01									
	Manganese	504	ug/L	500	ug/L	101	80.0 - 120.0	16-DEC-09 11:53	121609A-2

METALS
–4–
Interference Check Sample

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Barium	1.48	ug/L					17–DEC–09 10:13	121709–3
	Calcium	490000	ug/L	500000	ug/L	97.9	80.0 – 120.0	17–DEC–09 10:13	121709–3
	Magnesium	488000	ug/L	500000	ug/L	97.6	80.0 – 120.0	17–DEC–09 10:13	121709–3
	Potassium	–18.3	ug/L					17–DEC–09 10:13	121709–3
	Silicon	–3.79	ug/L					17–DEC–09 10:13	121709–3
	Sodium	–13.4	ug/L					17–DEC–09 10:13	121709–3
ICSAB01									
	Barium	482	ug/L	500	ug/L	96.4	80.0 – 120.0	17–DEC–09 10:19	121709–3
	Calcium	482000	ug/L	500000	ug/L	96.4	80.0 – 120.0	17–DEC–09 10:19	121709–3
	Magnesium	488000	ug/L	500000	ug/L	97.6	80.0 – 120.0	17–DEC–09 10:19	121709–3
	Potassium	5450	ug/L	5000	ug/L	109	80.0 – 120.0	17–DEC–09 10:19	121709–3
	Silicon	5080	ug/L	5000	ug/L	102	80.0 – 120.0	17–DEC–09 10:19	121709–3
	Sodium	5410	ug/L	5000	ug/L	108	80.0 – 120.0	17–DEC–09 10:19	121709–3

METALS
–4–
Interference Check Sample

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	–0.333	ug/L					12–DEC–09 20:13	091212–4
	Lithium	0.076	ug/L					12–DEC–09 20:13	091212–4
	Nickel	2.48	ug/L					12–DEC–09 20:13	091212–4
	Selenium	–0.68	ug/L					12–DEC–09 20:13	091212–4
	Thallium	0.002	ug/L					12–DEC–09 20:13	091212–4
	Uranium	0.014	ug/L					12–DEC–09 20:13	091212–4
ICSAB01									
	Arsenic	21.4	ug/L	20	ug/L	107	80.0 – 120.0	12–DEC–09 20:18	091212–4
	Lithium	20.7	ug/L	20	ug/L	104	80.0 – 120.0	12–DEC–09 20:18	091212–4
	Nickel	24.2	ug/L	22.7	ug/L	106	80.0 – 120.0	12–DEC–09 20:18	091212–4
	Selenium	20.7	ug/L	20	ug/L	104	80.0 – 120.0	12–DEC–09 20:18	091212–4
	Thallium	20.1	ug/L	20	ug/L	101	80.0 – 120.0	12–DEC–09 20:18	091212–4
	Uranium	22.8	ug/L	20	ug/L	114	80.0 – 120.0	12–DEC–09 20:18	091212–4

METALS
–4–
Interference Check Sample

SDG No: 10–649

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.054	ug/L					13–DEC–09 15:48	091213–5
ICSAB01									
	Beryllium	19.5	ug/L	20	ug/L	97.6	80.0 – 120.0	13–DEC–09 15:49	091213–5

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–649 **Client ID** RE03–09–13908S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 87

Sample ID: 241711001 **Spike ID:** 1201981078

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Vanadium	ug/Kg	75–125	90400		47300		57400	75		P
Zinc	ug/Kg	75–125	85700		25000		57400	106		P
Aluminum	ug/Kg		23800000		16100000		574000	1340	N/A	P
Antimony	ug/Kg	75–125	42200		363	U	57400	73.1	N	P
Barium	ug/Kg	75–125	202000		166000		53900	67.5	N	P
Boron	ug/Kg	75–125	54900		2740	J	57400	90.9		P
Cadmium	ug/Kg	75–125	55400		110	U	57400	96.4		P
Calcium	ug/Kg		4890000		2620000		539000	420	N/A	P
Chromium	ug/Kg	75–125	69500		12500		57400	99.2		P
Cobalt	ug/Kg	75–125	61900		37800		57400	42	N	P
Copper	ug/Kg	75–125	68400		8850		57400	104		P
Iron	ug/Kg		18300000		21000000		574000	–475	N/A	P
Lead	ug/Kg	75–125	73400		42600		57400	53.6	N	P
Magnesium	ug/Kg	75–125	3150000		2080000		539000	199	N	P
Manganese	ug/Kg		738000		3280000		57400	–4430	N/A	P
Potassium	ug/Kg	75–125	1750000		942000		539000	149	N	P
Silicon	ug/Kg	75–125	819000		520000		539000	55.4	N	P
Silver	ug/Kg	75–125	59100		1170		57400	101		P
Sodium	ug/Kg	75–125	894000		377000		539000	95.9		P
Titanium	ug/Kg		656000		498000		57400	275	N/A	P

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-649 **Client ID** RE03-09-13908SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 87

Sample ID: 241711001 **Spike ID:** 1201981080

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		24000000		16100000		566000	1390	N/A	P
Antimony	ug/Kg	75-125	41600		363	U	56600	73.1	N	P
Barium	ug/Kg	75-125	196000		166000		54400	56.6	N	P
Boron	ug/Kg	75-125	55900		2740	J	56600	93.9		P
Cadmium	ug/Kg	75-125	56200		110	U	56600	99.2		P
Calcium	ug/Kg		3000000		2620000		544000	69.3	N/A	P
Chromium	ug/Kg	75-125	71000		12500		56600	103		P
Cobalt	ug/Kg	75-125	60000		37800		56600	39.3	N	P
Copper	ug/Kg	75-125	70000		8850		56600	108		P
Iron	ug/Kg		18700000		21000000		566000	-415	N/A	P
Lead	ug/Kg	75-125	71300		42600		56600	50.8	N	P
Magnesium	ug/Kg	75-125	2920000		2080000		544000	154	N	P
Manganese	ug/Kg		462000		3280000		56600	-4980	N/A	P
Potassium	ug/Kg	75-125	1770000		942000		544000	151	N	P
Silver	ug/Kg	75-125	59700		1170		56600	103		P
Sodium	ug/Kg	75-125	910000		377000		544000	97.8		P
Titanium	ug/Kg		686000		498000		56600	332	N/A	P
Vanadium	ug/Kg	75-125	92700		47300		56600	80.2		P
Zinc	ug/Kg	75-125	90800		25000		56600	116		P
Silicon	ug/Kg	75-125	814000		520000		544000	53.9	N	P

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-649 **Client ID** RE03-09-13908S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 87

Sample ID: 241711001 **Spike ID:** 1201981231

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	11.3		3.38		8.76	90.5		MS
Beryllium	mg/kg	75-125	5.45		1		5.48	81.2		MS
Lithium	mg/kg	75-125	22.8		16.4		5.48	117		MS
Nickel	mg/kg	75-125	14.3		10.1		5.48	77.6		MS
Selenium	mg/kg	75-125	1.83		0.552	U	2.19	83.3		MS
Thallium	mg/kg	75-125	11		0.292		11	97.7		MS
Uranium	mg/kg	75-125	6.74		0.858		5.48	107		MS

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-649 **Client ID** RE03-09-13908SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 87

Sample ID: 241711001 **Spike ID:** 1201981238

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	12.2		3.38		8.79	101		MS
Beryllium	mg/kg	75-125	5.48		1		5.5	81.4		MS
Lithium	mg/kg	75-125	22.8		16.4		5.5	116		MS
Nickel	mg/kg	75-125	15.2		10.1		5.5	94.3		MS
Selenium	mg/kg	75-125	1.55		0.552	U	2.2	70.4	N	MS
Thallium	mg/kg	75-125	10.2		0.292		11	90.3		MS
Uranium	mg/kg	75-125	6.38		0.858		5.5	101		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–649 **Client ID** RE03–09–13908S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 87

Sample ID: 241711001 **Spike ID:** 1201981597

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	158		22.9		126	107		AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–649 **Client ID** RE03–09–13908SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 87

Sample ID: 241711001 **Spike ID:** 1201981599

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	159		22.9		131	104		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13908D

Sample ID: 241711001 **Duplicate ID:** 1201981077 **Percent Solids for Dup:** 87

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	16100000		15900000		1.46		P
Antimony	ug/Kg		363	U	362	U			P
Barium	ug/Kg	+/–20%	166000		224000		30.1	*	P
Boron	ug/Kg	+/–5490	2740	J	2070	J	27.8		P
Cadmium	ug/Kg		110	U	134	J	200		P
Calcium	ug/Kg	+/–20%	2620000		2650000		.981		P
Chromium	ug/Kg	+/–20%	12500		12300		1.71		P
Cobalt	ug/Kg	+/–20%	37800		13300		95.9	*	P
Copper	ug/Kg	+/–20%	8850		8300		6.47		P
Iron	ug/Kg	+/–20%	21000000		20300000		3.44		P
Lead	ug/Kg	+/–20%	42600		24000		55.9	*	P
Magnesium	ug/Kg	+/–20%	2080000		2130000		2.44		P
Manganese	ug/Kg	+/–20%	3280000		1110000		98.8	*	P
Potassium	ug/Kg	+/–20%	942000		942000		.0156		P
Silicon	ug/Kg	+/–20%	520000		548000		5.23		P
Silver	ug/Kg	+/–549	1170		640		58.9		P
Sodium	ug/Kg	+/–20%	377000		376000		.336		P
Titanium	ug/Kg	+/–20%	498000		513000		2.85		P
Vanadium	ug/Kg	+/–20%	47300		46600		1.45		P
Zinc	ug/Kg	+/–20%	25000		24100		3.58		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13908SD

Sample ID: 1201981078 **Duplicate ID:** 1201981080 **Percent Solids for Dup:** 87

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	23800000		24000000		.721		P
Antimony	ug/Kg	+/–20	42200		41600		1.37		P
Barium	ug/Kg	+/–20	202000		196000		2.79		P
Boron	ug/Kg	+/–20	54900		55900		1.73		P
Cadmium	ug/Kg	+/–20	55400		56200		1.53		P
Calcium	ug/Kg	+/–20	4890000		3000000		47.9	*	P
Chromium	ug/Kg	+/–20	69500		71000		2.23		P
Cobalt	ug/Kg	+/–20	61900		60000		3.09		P
Copper	ug/Kg	+/–20	68400		70000		2.27		P
Iron	ug/Kg	+/–20	18300000		18700000		2.05		P
Lead	ug/Kg	+/–20	73400		71300		2.85		P
Magnesium	ug/Kg	+/–20	3150000		2920000		7.69		P
Manganese	ug/Kg	+/–20	738000		462000		46	*	P
Potassium	ug/Kg	+/–20	1750000		1770000		1.03		P
Silicon	ug/Kg	+/–20	819000		814000		.666		P
Silver	ug/Kg	+/–20	59100		59700		1		P
Sodium	ug/Kg	+/–20	894000		910000		1.72		P
Titanium	ug/Kg	+/–20	656000		686000		4.45		P
Vanadium	ug/Kg	+/–20	90400		92700		2.56		P
Zinc	ug/Kg	+/–20	85700		90800		5.82		P

Metals
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Duplicate Sample Summary

SDG No.: 10-649

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13908D

Sample ID: 241711001 **Duplicate ID:** 1201981230 **Percent Solids for Dup:** 87

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.13	3.38		2.64		24.7		MS
Beryllium	mg/kg	+/-20%	1		0.81		21.1	*	MS
Lithium	mg/kg	+/-20%	16.4		16.4		.044		MS
Nickel	mg/kg	+/-20%	10.1		8.52		16.5		MS
Selenium	mg/kg		0.552	U	0.567	U			MS
Thallium	mg/kg	+/-.227	0.292		0.214	J	31		MS
Uranium	mg/kg	+/-20%	0.858		0.806		6.2		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13908SD

Sample ID: 1201981231 **Duplicate ID:** 1201981238 **Percent Solids for Dup:** 87

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	11.3		12.2		7.96		MS
Beryllium	mg/kg	+/–20	5.45		5.48		.527		MS
Lithium	mg/kg	+/–20	22.8		22.8		.204		MS
Nickel	mg/kg	+/–20	14.3		15.2		6.34		MS
Selenium	mg/kg	+/–20	1.83		1.55		16.4		MS
Thallium	mg/kg	+/–20	11		10.2		7.24		MS
Uranium	mg/kg	+/–20	6.74		6.38		5.42		MS

Metals
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Duplicate Sample Summary

SDG No.: 10–649

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13908D

Sample ID: 241711001 **Duplicate ID:** 1201981596 **Percent Solids for Dup:** 87

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–12.1	22.9		23		.439		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13908SD

Sample ID: 1201981597 **Duplicate ID:** 1201981599 **Percent Solids for Dup:** 87

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	158		159		.924		AV

METALS
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Laboratory Control Sample Summary

SDG NO. 10-649

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201981076								
	Aluminum	ug/Kg	7290000	7070000		96.9	56-144	P
	Antimony	ug/Kg	121000	98000		81	71-130	P
	Boron	ug/Kg	139000	134000		96.4	75-125	P
	Cadmium	ug/Kg	116000	119000		103	81-120	P
	Chromium	ug/Kg	84000	78600		93.6	80-120	P
	Cobalt	ug/Kg	83000	81700		98.5	81-120	P
	Copper	ug/Kg	105000	103000		97.9	81-118	P
	Iron	ug/Kg	20000000	19900000		99.9	51-149	P
	Lead	ug/Kg	161000	166000		103	79-121	P
	Manganese	ug/Kg	398000	372000		93.4	81-119	P
	Silver	ug/Kg	133000	134000		101	66-134	P
	Titanium	ug/Kg	382000	354000		92.6	39-161	P
	Vanadium	ug/Kg	166000	151000		91.2	79-121	P
	Zinc	ug/Kg	195000	200000		103	80-121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10–649

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201981229								
	Beryllium	mg/kg	86.4	94.6		109	81.2–126.8	MS
	Lithium	mg/kg	8.01	9.39	J	117	66.7–133.7	MS
	Nickel	mg/kg	101	114		113	83.3–121.4	MS
	Selenium	mg/kg	171	191		112	80.2–125.9	MS
	Thallium	mg/kg	203	217		107	78–123.2	MS
	Arsenic	mg/kg	255	268		105	83–120	MS
	Uranium	mg/kg	2.12	1.71		80.7	61.9–130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-649

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201981595								
	Mercury	ug/kg	5150	5960		116	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-649

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201997315								
	Barium	ug/Kg	198000	174000		87.7	80-120	P
	Calcium	ug/Kg	9870000	9090000		92.1	83-117	P
	Magnesium	ug/Kg	4000000	3480000		87.1	79-122	P
	Potassium	ug/Kg	4300000	3870000		90.1	74-127	P
	Silicon	ug/Kg	1210000	589000		48.7	10-190	P
	Sodium	ug/Kg	1020000	957000		93.9	74-127	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-649 **Client ID** RE03-09-13908L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241711001 **Serial Dilution ID:** 1201981079

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	146000		148000		1.03		10	P
Antimony	3.3	U	16.5	U				P
Barium	1440		1520		5.56		10	P
Boron	24.9	J	50	U	100			P
Cadmium	1	U	5	U				P
Calcium	22800		22800		0		10	P
Chromium	114		115		.439		10	P
Cobalt	343		343		0		10	P
Copper	80.4		73		9.2			P
Iron	191000		198000		3.4		10	P
Lead	387		404		4.39		10	P
Magnesium	18100		17800		1.93		10	P
Manganese	5960		6150		3.19		10	P
Potassium	8210		8150		.731		10	P
Silicon	4530		4760		4.97		10	P
Silver	10.7		13.8	J	28.5			P
Sodium	3290		3330		1.06			P
Titanium	4530		4620		1.88		10	P
Vanadium	430		429		.349		10	P
Zinc	227		227		0		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-649 **Client ID** RE03-09-13908L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241711001 **Serial Dilution ID:** 1201981232

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	15.3		13.8	J	10.1			MS
Beryllium	4.54		5.3		16.7			MS
Lithium	74.2		84		13.2			MS
Nickel	45.5		49.9		9.56			MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.33		1.52	J	14.3			MS
Uranium	3.89		3.94		1.29			MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-649 **Client ID** RE03-09-13908L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241711001 **Serial Dilution ID:** 1201981598

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.379		.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-649 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 926575							
1201981075	MB for batch 926575	MB	S	05-DEC-09	.509g	50mL	
1201981076	LCS for batch 926575	LCS	S	05-DEC-09	.521g	50mL	
1201981078	RE03-09-13908S	MS	S	05-DEC-09	.5g	50mL	
1201981080	RE03-09-13908SD	MSD	S	05-DEC-09	.507g	50mL	
1201981077	RE03-09-13908D	DUP	S	05-DEC-09	.523g	50mL	
241711001	RE03-09-13908	SAMPLE	S	05-DEC-09	.521g	50mL	
241711002	RE03-09-13910	SAMPLE	S	05-DEC-09	.516g	50mL	
241711003	RE03-09-13911	SAMPLE	S	05-DEC-09	.517g	50mL	
241711004	RE03-09-13913	SAMPLE	S	05-DEC-09	.503g	50mL	
241711005	RE03-09-13912	SAMPLE	S	05-DEC-09	.515g	50mL	
241711006	RE03-09-13909	SAMPLE	S	05-DEC-09	.516g	50mL	
241711007	RE03-10-7041	SAMPLE	S	05-DEC-09	.525g	50mL	
Batch Number 933551							
1201997314	MB for batch 933551	MB	S	16-DEC-09	.525g	50mL	
1201997315	LCS for batch 933551	LCS	S	16-DEC-09	.522g	50mL	
1201981078	RE03-09-13908S	MS	S	16-DEC-09	.532g	50mL	
1201981080	RE03-09-13908SD	MSD	S	16-DEC-09	.527g	50mL	
1201981077	RE03-09-13908D	DUP	S	16-DEC-09	.506g	50mL	
241711001	RE03-09-13908	SAMPLE	S	16-DEC-09	.5g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-649 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241711002	RE03-09-13910	SAMPLE	S	16-DEC-09	.557g	50mL	
241711003	RE03-09-13911	SAMPLE	S	16-DEC-09	.5g	50mL	
241711004	RE03-09-13913	SAMPLE	S	16-DEC-09	.549g	50mL	
241711005	RE03-09-13912	SAMPLE	S	16-DEC-09	.5g	50mL	
241711006	RE03-09-13909	SAMPLE	S	16-DEC-09	.532g	50mL	
241711007	RE03-10-7041	SAMPLE	S	16-DEC-09	.533g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-649 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	926642						
1201981228	MB for batch 926642	MB	S	05-DEC-09	.517g	50mL	
1201981229	LCS for batch 926642	LCS	S	05-DEC-09	.512g	50mL	
1201981231	RE03-09-13908S	MS	S	05-DEC-09	.524g	50mL	
1201981238	RE03-09-13908SD	MSD	S	05-DEC-09	.522g	50mL	
1201981230	RE03-09-13908D	DUP	S	05-DEC-09	.506g	50mL	
241711001	RE03-09-13908	SAMPLE	S	05-DEC-09	.52g	50mL	
241711002	RE03-09-13910	SAMPLE	S	05-DEC-09	.515g	50mL	
241711003	RE03-09-13911	SAMPLE	S	05-DEC-09	.506g	50mL	
241711004	RE03-09-13913	SAMPLE	S	05-DEC-09	.501g	50mL	
241711005	RE03-09-13912	SAMPLE	S	05-DEC-09	.502g	50mL	
241711006	RE03-09-13909	SAMPLE	S	05-DEC-09	.52g	50mL	
241711007	RE03-10-7041	SAMPLE	S	05-DEC-09	.522g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–649 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	926815						
1201981594	MB for batch 926815	MB	S	08–DEC–09	.6g	30mL	
1201981595	LCS for batch 926815	LCS	S	08–DEC–09	.2g	30mL	
1201981597	RE03–09–13908S	MS	S	08–DEC–09	.545g	30mL	
1201981599	RE03–09–13908SD	MSD	S	08–DEC–09	.527g	30mL	
1201981596	RE03–09–13908D	DUP	S	08–DEC–09	.567g	30mL	
241711001	RE03–09–13908	SAMPLE	S	08–DEC–09	.571g	30mL	
241711002	RE03–09–13910	SAMPLE	S	08–DEC–09	.563g	30mL	
241711003	RE03–09–13911	SAMPLE	S	08–DEC–09	.519g	30mL	
241711004	RE03–09–13913	SAMPLE	S	08–DEC–09	.571g	30mL	
241711005	RE03–09–13912	SAMPLE	S	08–DEC–09	.564g	30mL	
241711006	RE03–09–13909	SAMPLE	S	08–DEC–09	.502g	30mL	
241711007	RE03–10–7041	SAMPLE	S	08–DEC–09	.544g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 13-DEC-09
End Date: 13-DEC-09
Client Sdg: 10-649
Method MS
Data File: 091213-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	15:38					X																							
S10	1	15:39					X																							
S100	1	15:41					X																							
ICV01	1	15:43					X																							
ICB01	1	15:44					X																							
CRDL01	1	15:46					X																							
ICSA01	1	15:48					X																							
ICSAB01	1	15:49					X																							
CCV01	1	15:51					X																							
CCB01	1	15:53					X																							
1201981228	2	15:54					X																							
1201981229	40	15:56					X																							
241711001	2	15:58					X																							
1201981230	2	16:00					X																							
1201981231	2	16:01					X																							
1201981238	2	16:03					X																							
1201981232	10	16:05					X																							
CCV02	1	16:06					X																							
CCB02	1	16:08					X																							
241711002	2	16:10					X																							
241711003	2	16:12					X																							
241711004	2	16:13					X																							
241711005	2	16:15					X																							
241711006	2	16:17					X																							
241711007	2	16:19					X																							
CCV03	1	16:20					X																							
CCB03	1	16:22					X																							

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 09–DEC–09 **End Date:** 10–DEC–09

Client Sdg: 10–649
Method P
Data File: 120909A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:10	X	X				X	X		X	X	X	X	X			X						X			X		X	X
S0.1	1	08:17		X				X	X		X	X	X		X			X						X			X		X	X
S0.5	1	08:23	X	X				X	X		X	X	X		X			X						X			X		X	X
SCAL	1	08:31	X	X				X	X		X	X	X	X	X			X						X			X		X	X
S10	1	08:38	X											X																
ICV01	1	08:43	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ICB01	1	08:50	X	X				X	X		X	X	X	X	X			X						X			X		X	X
PQL01	1	08:57	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ICSA01	1	09:04	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ICSAB01	1	09:10	X	X				X	X		X	X	X	X	X			X						X			X		X	X
LR01	1	09:16	X	X				X	X		X	X	X	X	X			X						X			X		X	X
LR02	1	09:22	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	09:29																												
ZZZZZZ	1	09:36																												
CCV01	1	09:43	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB01	1	09:50	X	X				X	X		X	X	X	X	X			X						X			X		X	X
LR03	1	09:57	X	X				X	X		X	X	X	X	X			X						X			X		X	X
LR04	1	10:03	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCV02	1	10:11	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB02	1	10:18	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:43																												
ZZZZZZ	1	10:50																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:11																												
ZZZZZZ	1	11:17																												
ZZZZZZ	5	11:24																												
CCV03	1	11:31	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB03	1	11:38	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:53																												
ZZZZZZ	1	11:59																												
ZZZZZZ	5	12:06																												
ZZZZZZ	5	12:13																												
ZZZZZZ	5	12:20																												
ZZZZZZ	5	12:27																												
ZZZZZZ	25	12:33																												
CCV04	1	12:40	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB04	1	12:47	X	X				X	X		X	X	X	X	X			X						X			X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
CCV05	1	13:21	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB05	1	13:28	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	13:34																												
ZZZZZZ	1	13:41																												
ZZZZZZ	1	13:48																												
ZZZZZZ	1	13:55																												
ZZZZZZ	1	14:02																												
ZZZZZZ	1	14:09																												
ZZZZZZ	5	14:16																												
ZZZZZZ	1	14:23																												
ZZZZZZ	1	14:30																												
CCV06	1	14:37	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB06	1	14:44	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	14:51																												
ZZZZZZ	1	14:58																												
ZZZZZZ	1	15:05																												
ZZZZZZ	1	15:12																												
ZZZZZZ	1	15:19																												
ZZZZZZ	1	15:26																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB07	1	15:55	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	16:02																												
ZZZZZZ	1	16:08																												
ZZZZZZ	1	16:15																												
ZZZZZZ	1	16:22																												
ZZZZZZ	1	16:29																												
ZZZZZZ	1	16:37																												
ZZZZZZ	5	16:44																												
ZZZZZZ	1	16:51																												
CCV08	1	16:58	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB08	1	17:05	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	17:12																												
ZZZZZZ	1	17:18																												
ZZZZZZ	1	17:25																												
ZZZZZZ	1	17:32																												
ZZZZZZ	1	17:39																												
ZZZZZZ	1	17:46																												
ZZZZZZ	1	17:53																												

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	18:01																												
CCV09	1	18:08	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB09	1	18:15	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	18:21																												
ZZZZZZ	1	18:28																												
ZZZZZZ	1	18:35																												
ZZZZZZ	1	18:42																												
ZZZZZZ	1	18:49																												
ZZZZZZ	1	18:57																												
ZZZZZZ	1	19:04																												
ZZZZZZ	1	19:11																												
CCV10	1	19:18	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB10	1	19:25	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	19:31																												
ZZZZZZ	1	19:39																												
ZZZZZZ	1	19:46																												
ZZZZZZ	1	19:53																												
ZZZZZZ	1	20:00																												
ZZZZZZ	5	20:07																												
ZZZZZZ	1	20:14																												
CCV11	1	20:21	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB11	1	20:28	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	20:35																												
ZZZZZZ	1	20:42																												
ZZZZZZ	1	20:49																												
ZZZZZZ	1	20:55																												
ZZZZZZ	1	21:02																												
ZZZZZZ	5	21:09																												
CCV12	1	21:16	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB12	1	21:23	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	21:30																												
ZZZZZZ	1	21:37																												
ZZZZZZ	1	21:44																												
ZZZZZZ	1	21:50																												
ZZZZZZ	1	21:57																												
CCV13	1	22:04	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB13	1	22:11	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	22:18																												
ZZZZZZ	1	22:25																												
ZZZZZZ	1	22:32																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
ZZZZZZ	1	22:39																												
ZZZZZZ	1	22:46																												
ZZZZZZ	1	22:53																												
CCV14	1	22:59	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB14	1	23:06	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	23:13																												
ZZZZZZ	1	23:20																												
ZZZZZZ	1	23:27																												
ZZZZZZ	1	23:34																												
ZZZZZZ	5	23:41																												
CCV15	1	23:47	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB15	1	23:54	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	00:01																												
ZZZZZZ	1	00:08																												
ZZZZZZ	1	00:15																												
ZZZZZZ	1	00:22																												
ZZZZZZ	1	00:29																												
ZZZZZZ	1	00:36																												
ZZZZZZ	1	00:43																												
ZZZZZZ	1	00:50																												
ZZZZZZ	1	00:57																												
ZZZZZZ	5	01:03																												
CCV16	1	01:10	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB16	1	01:17	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	01:24																												
ZZZZZZ	2	01:31																												
ZZZZZZ	1	01:38																												
ZZZZZZ	1	01:45																												
ZZZZZZ	1	01:52																												
ZZZZZZ	1	01:59																												
CCV17	1	02:07	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB17	1	02:14	X	X				X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	02:20																												
ZZZZZZ	1	02:28																												
ZZZZZZ	1	02:34																												
ZZZZZZ	5	02:41																												
ZZZZZZ	1	02:48																												
ZZZZZZ	1	02:56																												
CCV18	1	03:03	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB18	1	03:10	X	X				X	X		X	X	X	X	X			X						X			X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	03:16																												
ZZZZZZ	1	03:23																												
ZZZZZZ	1	03:30																												
ZZZZZZ	1	03:37																												
ZZZZZZ	1	03:44																												
ZZZZZZ	5	03:51																												
CCV19	1	03:58	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB19	1	04:05	X	X				X	X		X	X	X	X	X			X						X			X		X	X
1201981075	1	04:11	X	X				X	X		X	X	X	X	X			X						X			X		X	X
1201981076	2	04:18	X	X				X	X		X	X	X	X	X			X						X			X		X	X
241711001	1	04:25	X	X				X	X		X	X	X	X	X									X			X		X	X
1201981077	1	04:33	X	X				X	X		X	X	X	X	X									X			X		X	X
1201981078	1	04:40	X	X				X	X		X	X	X	X	X									X			X		X	X
1201981080	1	04:47	X	X				X	X		X	X	X	X	X									X			X		X	X
1201981079	5	04:54	X	X				X	X		X	X	X	X	X									X			X		X	X
CCV20	1	05:02	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB20	1	05:09	X	X				X	X		X	X	X	X	X			X						X			X		X	X
241711002	1	05:15	X	X				X	X		X	X	X	X	X			X						X			X		X	X
241711003	1	05:22	X	X				X	X		X	X	X	X	X			X						X			X		X	X
241711004	1	05:29	X	X				X	X		X	X	X	X	X			X						X			X		X	X
241711005	1	05:37	X	X				X	X		X	X	X	X	X			X						X			X		X	X
241711006	1	05:44	X	X				X	X		X	X	X	X	X			X						X			X		X	X
241711007	1	05:51	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCV21	1	05:58	X	X				X	X		X	X	X	X	X			X						X			X		X	X
CCB21	1	06:05	X	X				X	X		X	X	X	X	X			X						X			X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 16–DEC–09 **End Date:** 16–DEC–09

Client Sdg: 10–649
Method P
Data File: 121609A–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	10:54																X												
S0.1	1	11:01																X												
S0.5	1	11:07																X												
SCAL	1	11:14																X												
S10	1	11:21																												
ICV01	1	11:26																X												
ICB01	1	11:33																X												
PQL01	1	11:40																X												
ICSA01	1	11:47																X												
ICSAB01	1	11:53																X												
LR01	1	11:59																X												
LR02	1	12:05																X												
ZZZZZZ	1	12:12																												
ZZZZZZ	1	12:18																												
CCV01	1	12:27																X												
CCB01	1	12:34																X												
ZZZZZZ	1	12:41																												
LR03	1	12:50																X												
CCV02	1	12:56																X												
CCB02	1	13:03																X												
CCV03	1	13:30																X												
CCB03	1	13:36																X												
241711001	5	13:43																X												
1201981077	5	13:50																X												
1201981078	5	13:58																X												
1201981080	5	14:04																X												
1201981079	25	14:11																X												
CCV04	1	14:18																X												
CCB04	1	14:25																X												

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 17-DEC-09 **End Date:** 17-DEC-09

Client Sdg: 10-649
Method P
Data File: 121709-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:20				X				X							X				X		X		X					
S0.1	1	09:26				X															X		X							
S0.5	1	09:32				X				X							X				X		X							
SCAL	1	09:40				X				X							X				X		X		X					
S10	1	09:47								X							X								X					
ICV01	1	09:52				X				X							X				X		X		X					
ICB01	1	09:59				X				X							X				X		X		X					
PQL01	1	10:06				X				X							X				X		X		X					
ICSA01	1	10:13				X				X							X				X		X		X					
ICSAB01	1	10:19				X				X							X				X		X		X					
LR01	1	10:24				X				X							X				X		X		X					
LR02	1	10:31				X				X							X				X		X		X					
CCV01	1	10:37				X				X							X				X		X		X					
CCB01	1	10:44				X				X							X				X		X		X					
LR03	1	10:56				X				X							X				X		X		X					
LR04	1	11:03				X				X							X				X		X		X					
CCV02	1	11:10				X				X							X				X		X		X					
CCB02	1	11:17				X				X							X				X		X		X					
ZZZZZZ	1	11:24																												
ZZZZZZ	1	11:31																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	1	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13				X				X							X				X		X		X					
CCB03	1	12:20				X				X							X				X		X		X					
1201997314	1	12:27				X				X							X				X		X		X					
1201997315	1	12:34				X				X							X				X		X		X					
241711001	1	12:40				X				X							X				X		X		X					
1201981077	1	12:47				X				X							X				X		X		X					
1201981078	1	12:55				X				X							X				X		X		X					
1201981080	1	13:01				X				X							X				X		X		X					
1201981079	5	13:07				X				X							X				X		X		X					
CCV04	1	13:14				X				X							X				X		X		X					
CCB04	1	13:21				X				X							X				X		X		X					
241711002	1	13:28				X				X							X				X		X		X					
241711003	1	13:35				X				X							X				X		X		X					
241711004	1	13:42				X				X							X				X		X		X					
241711005	1	13:49				X				X							X				X		X		X					

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
241711006	1	13:56				X				X							X				X		X		X					
241711007	1	14:03				X				X							X				X		X		X					
CCV05	1	14:10				X				X							X				X		X		X					
CCB05	1	14:17				X				X							X				X		X		X					

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 09–DEC–09 **End Date:** 09–DEC–09

Client Sdg: 10–649
Method AV
Data File: 120909S1–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:49																	X											
S0.2	1	09:51																	X											
S0.5	1	09:52																	X											
S2.0	1	09:54																	X											
S5.0	1	09:56																	X											
S10.0	1	09:57																	X											
ICV01	1	09:59																	X											
ICB01	1	10:01																	X											
CRDL01	1	10:02																	X											
CCV01	1	10:04																	X											
CCB01	1	10:06																	X											
ZZZZZZ	1	10:07																												
ZZZZZZ	1	10:09																												
ZZZZZZ	1	10:11																												
ZZZZZZ	1	10:12																												
ZZZZZZ	1	10:14																												
ZZZZZZ	1	10:16																												
ZZZZZZ	1	10:17																												
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:22																												
CCV02	1	10:24																	X											
CCB02	1	10:26																	X											
ZZZZZZ	5	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	1	10:32																												
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:36																												
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												
ZZZZZZ	1	10:41																												
ZZZZZZ	1	10:42																												
CCV03	1	10:44																	X											
CCB03	1	10:46																	X											
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	5	10:54																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	10:56																										
ZZZZZZ	1	10:58																										
ZZZZZZ	1	10:59																										
ZZZZZZ	1	11:01																										
ZZZZZZ	1	11:03																										
CCV04	1	11:04															X											
CCB04	1	11:06															X											
ZZZZZZ	1	11:08																										
ZZZZZZ	5	11:09																										
ZZZZZZ	1	11:11																										
ZZZZZZ	1	11:13																										
ZZZZZZ	1	11:14																										
ZZZZZZ	1	11:16																										
ZZZZZZ	10	11:18																										
ZZZZZZ	1	11:19																										
ZZZZZZ	1	11:21																										
ZZZZZZ	1	11:23																										
CCV05	1	11:24															X											
CCB05	1	11:26															X											
ZZZZZZ	1	11:28																										
ZZZZZZ	1	11:29																										
ZZZZZZ	1	11:31																										
ZZZZZZ	1	11:33																										
ZZZZZZ	1	11:34																										
ZZZZZZ	1	11:36																										
ZZZZZZ	1	11:38																										
ZZZZZZ	1	11:39																										
ZZZZZZ	1	11:41																										
ZZZZZZ	1	11:43																										
CCV06	1	11:45															X											
CCB06	1	11:46															X											
ZZZZZZ	1	11:48																										
ZZZZZZ	1	11:50																										
ZZZZZZ	5	11:51																										
ZZZZZZ	1	11:53																										
ZZZZZZ	1	11:55																										
ZZZZZZ	1	11:56																										
ZZZZZZ	1	11:58																										
ZZZZZZ	1	12:00																										
ZZZZZZ	1	12:01																										

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
1201981594	1	12:03																	X											
CCV07	1	12:05																	X											
CCB07	1	12:06																	X											
1201981595	10	12:08																	X											
241711001	1	12:10																	X											
1201981596	1	12:11																	X											
1201981597	1	12:13																	X											
1201981599	1	12:15																	X											
1201981598	5	12:17																	X											
241711002	1	12:18																	X											
241711003	1	12:20																	X											
241711004	1	12:22																	X											
241711005	1	12:23																	X											
CCV08	1	12:25																	X											
CCB08	1	12:27																	X											
241711006	1	12:28																	X											
241711007	1	12:30																	X											
ZZZZZZ	1	12:32																												
ZZZZZZ	10	12:33																												
ZZZZZZ	1	12:35																												
ZZZZZZ	1	12:37																												
ZZZZZZ	1	12:38																												
ZZZZZZ	1	12:40																												
ZZZZZZ	5	12:42																												
ZZZZZZ	1	12:44																												
CCV09	1	12:45																	X											
CCB09	1	12:47																	X											

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 12-DEC-09
End Date: 12-DEC-09
Client Sdg: 10-649
Method MS
Data File: 091212-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:38			X											X				X		X				X		X		
S10	1	19:44			X											X				X		X				X		X		
S100	1	19:50			X											X				X		X				X		X		
ICV01	1	19:55			X											X				X		X				X		X		
ICB01	1	20:01			X											X				X		X				X		X		
CRDL01	1	20:07			X											X				X		X				X		X		
ICSA01	1	20:13			X											X				X		X				X		X		
ICSAB01	1	20:18			X											X				X		X				X		X		
CCV01	1	20:24			X											X				X		X				X		X		
CCB01	1	20:30			X											X				X		X				X		X		
LR01	1	20:36			X											X				X		X				X		X		
CCV02	1	20:41			X											X				X		X				X		X		
CCB02	1	20:47			X											X				X		X				X		X		
1201981228	2	20:53			X											X				X		X				X		X		
ZZZZZZ	20	20:59																												
1201981229	40	21:04			X											X				X		X				X		X		
241711001	2	21:10			X											X				X		X				X		X		
1201981230	2	21:16			X											X				X		X				X		X		
1201981231	2	21:22			X											X				X		X				X		X		
1201981238	2	21:27			X											X				X		X				X		X		
1201981232	10 ~~2~~ X	21:33			X											X				X		X				X		X		
CCV03	1	21:39			X											X				X		X				X		X		
CCB03	1	21:45			X											X				X		X				X		X		
241711002	2	21:50			X											X				X		X				X		X		
241711003	2	21:56			X											X				X		X				X		X		
241711004	2	22:02			X											X				X		X				X		X		
241711005	2	22:08			X											X				X		X				X		X		
241711006	2	22:14			X											X				X		X				X		X		
241711007	2	22:19			X											X				X		X				X		X		
CCV04	1	22:25			X											X				X		X				X		X		
CCB04	1	22:31			X											X				X		X				X		X		

Nbc 12/19/09

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–649

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–649

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
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Instrument Detection Limits

SDG NO. 10–649

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–649

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–649

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10-649

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09

Raw Data

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120909
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120909A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/9/2009 10:30:28**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/9/2009 08:10:12**
Analyst: **Data Type: Reprocessed on 12/9/2009 10:32:11**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	881145.1	881145.1	99.568	%	08:13:21
1	Sc Radial	5712.8	5712.8	101	%	08:12:05
1	Y 371.029	737967.2	737967.2	99.447	%	08:13:21
1	Y RADIAL	6224.1	6224.1	101.1	%	08:12:05
1	Ag 328.068†	293.6	294.9	[0.00]	ug/L	08:13:21

1	Al 396.153Radial†	-21.8	-21.6	[0.00] ug/L	08:12:25
1	As 188.979†	-24.7	-24.8	[0.00] ug/L	08:13:41
1	B 249.677†	-515.2	-517.4	[0.00] ug/L	08:13:41
1	Ba 233.527†	-17.3	-17.4	[0.00] ug/L	08:13:41
1	Be 313.107†	-5302.3	-5325.3	[0.00] ug/L	08:13:21
1	Ca 317.933Radial†	15.6	15.5	[0.00] ug/L	08:12:25
1	Cd 226.502†	-183.7	-184.5	[0.00] ug/L	08:13:41
1	Co 228.616†	-69.8	-70.1	[0.00] ug/L	08:13:41
1	Cr 267.716†	96.3	96.7	[0.00] ug/L	08:13:41
1	Cu 324.752†	6732.9	6762.1	[0.00] ug/L	08:13:21
1	Fe 238.204 Radial†	5.2	5.2	[0.00] ug/L	08:12:25
1	K 766.490 Radial†	2115.2	2096.9	[0.00] ug/L	08:12:05
1	Mg 279.077 IEC†	1.5	1.5	[0.00] ug/L	08:12:25
1	Mn 257.610†	417.4	419.2	[0.00] ug/L	08:13:41
1	Mo 202.031†	22.7	22.8	[0.00] ug/L	08:13:41
1	Na 589.592 Radial†	-635.2	-629.7	[0.00] ug/L	08:12:05
1	Ni 231.604†	79.5	79.9	[0.00] ug/L	08:13:41
1	P 214.914†	222.8	223.8	[0.00] ug/L	08:13:41
1	Pb 220.353†	-47.1	-47.3	[0.00] ug/L	08:13:41
1	S 181.975 Axial†	45.8	46.0	[0.00] ug/L	08:13:41
1	Sb 206.836†	23.0	23.1	[0.00] ug/L	08:13:41
1	Se 196.026†	-26.5	-26.6	[0.00] ug/L	08:13:41
1	Si 251.611†	570.2	572.6	[0.00] ug/L	08:13:41
1	Sn 189.927†	2.0	2.0	[0.00] ug/L	08:13:41
1	Sr 421.552†	-3.7	-3.7	[0.00] ug/L	08:12:05
1	Ti 334.940†	-960.4	-964.5	[0.00] ug/L	08:13:21
1	Tl 190.801†	-39.2	-39.4	[0.00] ug/L	08:13:41
1	U 409.014†	-1974.7	-1983.3	[0.00] ug/L	08:13:21
1	V 292.402†	-1254.3	-1259.7	[0.00] ug/L	08:13:21
1	Zn 213.857†	800.9	804.4	[0.00] ug/L	08:13:41
1	SiO2†	475.1	477.1	[0.00] ug/L	08:14:52
2	Sc 361.383	888195.9	888195.9	100.36 %	08:13:47
2	Sc Radial	5655.8	5655.8	99.9 %	08:12:30
2	Y 371.029	745171.0	745171.0	100.42 %	08:13:47
2	Y RADIAL	6147.2	6147.2	99.81 %	08:12:30
2	Ag 328.068†	168.6	168.0	[0.00] ug/L	08:13:47
2	Al 396.153Radial†	-15.8	-15.8	[0.00] ug/L	08:12:50
2	As 188.979†	-29.1	-29.0	[0.00] ug/L	08:14:07
2	B 249.677†	-536.1	-534.2	[0.00] ug/L	08:14:07
2	Ba 233.527†	-13.6	-13.5	[0.00] ug/L	08:14:07
2	Be 313.107†	-5391.5	-5371.9	[0.00] ug/L	08:13:47
2	Ca 317.933Radial†	16.6	16.6	[0.00] ug/L	08:12:50
2	Cd 226.502†	-185.1	-184.4	[0.00] ug/L	08:14:07
2	Co 228.616†	-74.7	-74.4	[0.00] ug/L	08:14:07
2	Cr 267.716†	74.6	74.4	[0.00] ug/L	08:14:07
2	Cu 324.752†	6764.2	6739.7	[0.00] ug/L	08:13:47
2	Fe 238.204 Radial†	7.2	7.2	[0.00] ug/L	08:12:50
2	K 766.490 Radial†	2143.7	2146.5	[0.00] ug/L	08:12:30
2	Mg 279.077 IEC†	0.4	0.4	[0.00] ug/L	08:12:50
2	Mn 257.610†	398.6	397.1	[0.00] ug/L	08:14:07
2	Mo 202.031†	21.1	21.0	[0.00] ug/L	08:14:07
2	Na 589.592 Radial†	-615.4	-616.2	[0.00] ug/L	08:12:30
2	Ni 231.604†	68.6	68.3	[0.00] ug/L	08:14:07
2	P 214.914†	215.1	214.3	[0.00] ug/L	08:14:07
2	Pb 220.353†	-48.8	-48.6	[0.00] ug/L	08:14:07
2	S 181.975 Axial†	38.9	38.8	[0.00] ug/L	08:14:07
2	Sb 206.836†	30.5	30.4	[0.00] ug/L	08:14:07
2	Se 196.026†	-20.3	-20.2	[0.00] ug/L	08:14:07
2	Si 251.611†	478.0	476.3	[0.00] ug/L	08:14:07
2	Sn 189.927†	1.5	1.5	[0.00] ug/L	08:14:07
2	Sr 421.552†	12.4	12.4	[0.00] ug/L	08:12:30
2	Ti 334.940†	-938.2	-934.8	[0.00] ug/L	08:13:47
2	Tl 190.801†	-37.7	-37.6	[0.00] ug/L	08:14:07
2	U 409.014†	-1867.0	-1860.2	[0.00] ug/L	08:13:47
2	V 292.402†	-1298.6	-1293.9	[0.00] ug/L	08:13:47
2	Zn 213.857†	816.9	813.9	[0.00] ug/L	08:14:07
2	SiO2†	492.0	490.3	[0.00] ug/L	08:15:12
3	Sc 361.383	885576.2	885576.2	100.07 %	08:14:12
3	Sc Radial	5621.4	5621.4	99.3 %	08:12:55
3	Y 371.029	743077.5	743077.5	100.14 %	08:14:12
3	Y RADIAL	6104.9	6104.9	99.13 %	08:12:55

3	Ag 328.068†	220.0	219.8	[0.00] ug/L	08:14:12
3	Al 396.153Radial†	-23.4	-23.6	[0.00] ug/L	08:13:15
3	As 188.979†	-33.8	-33.8	[0.00] ug/L	08:14:32
3	B 249.677†	-520.3	-520.0	[0.00] ug/L	08:14:32
3	Ba 233.527†	-5.2	-5.2	[0.00] ug/L	08:14:32
3	Be 313.107†	-5267.1	-5263.5	[0.00] ug/L	08:14:12
3	Ca 317.933Radial†	20.8	21.0	[0.00] ug/L	08:13:15
3	Cd 226.502†	-194.8	-194.6	[0.00] ug/L	08:14:32
3	Co 228.616†	-70.8	-70.7	[0.00] ug/L	08:14:32
3	Cr 267.716†	89.9	89.8	[0.00] ug/L	08:14:32
3	Cu 324.752†	6808.8	6804.1	[0.00] ug/L	08:14:12
3	Fe 238.204 Radial†	5.7	5.7	[0.00] ug/L	08:13:15
3	K 766.490 Radial†	2250.7	2267.5	[0.00] ug/L	08:12:55
3	Mg 279.077 IEC†	3.3	3.3	[0.00] ug/L	08:13:15
3	Mn 257.610†	394.2	393.9	[0.00] ug/L	08:14:32
3	Mo 202.031†	16.3	16.2	[0.00] ug/L	08:14:32
3	Na 589.592 Radial†	-597.5	-602.0	[0.00] ug/L	08:12:55
3	Ni 231.604†	62.2	62.2	[0.00] ug/L	08:14:32
3	P 214.914†	221.9	221.8	[0.00] ug/L	08:14:32
3	Pb 220.353†	-61.8	-61.7	[0.00] ug/L	08:14:32
3	S 181.975 Axial†	39.6	39.6	[0.00] ug/L	08:14:32
3	Sb 206.836†	35.3	35.3	[0.00] ug/L	08:14:32
3	Se 196.026†	-23.5	-23.5	[0.00] ug/L	08:14:32
3	Si 251.611†	475.5	475.1	[0.00] ug/L	08:14:32
3	Sn 189.927†	9.4	9.4	[0.00] ug/L	08:14:32
3	Sr 421.552†	1.5	1.5	[0.00] ug/L	08:12:55
3	Ti 334.940†	-996.4	-995.7	[0.00] ug/L	08:14:12
3	Tl 190.801†	-33.6	-33.6	[0.00] ug/L	08:14:32
3	U 409.014†	-2044.4	-2043.0	[0.00] ug/L	08:14:12
3	V 292.402†	-1336.8	-1335.8	[0.00] ug/L	08:14:12
3	Zn 213.857†	804.0	803.5	[0.00] ug/L	08:14:32
3	SiO2†	499.4	499.1	[0.00] ug/L	08:15:32

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	884972.4	3563.94	0.40%	100.00	%
Sc Radial	5663.3	46.19	0.82%	100	%
Y 371.029	742071.9	3705.68	0.50%	100.00	%
Y RADIAL	6158.7	60.42	0.98%	100.0	%
Ag 328.068†	227.6	63.78	28.02%	[0.00]	ug/L
Al 396.153Radial†	-20.3	4.06	19.97%	[0.00]	ug/L
As 188.979†	-29.2	4.46	15.27%	[0.00]	ug/L
B 249.677†	-523.9	9.03	1.72%	[0.00]	ug/L
Ba 233.527†	-12.0	6.24	51.89%	[0.00]	ug/L
Be 313.107†	-5320.2	54.40	1.02%	[0.00]	ug/L
Ca 317.933Radial†	17.7	2.91	16.44%	[0.00]	ug/L
Cd 226.502†	-187.8	5.89	3.14%	[0.00]	ug/L
Co 228.616†	-71.7	2.34	3.26%	[0.00]	ug/L
Cr 267.716†	87.0	11.43	13.15%	[0.00]	ug/L
Cu 324.752†	6768.6	32.71	0.48%	[0.00]	ug/L
Fe 238.204 Radial†	6.0	1.02	16.96%	[0.00]	ug/L
K 766.490 Radial†	2170.3	87.73	4.04%	[0.00]	ug/L
Mg 279.077 IEC†	1.8	1.48	84.32%	[0.00]	ug/L
Mn 257.610†	403.4	13.77	3.41%	[0.00]	ug/L
Mo 202.031†	20.0	3.37	16.86%	[0.00]	ug/L
Na 589.592 Radial†	-616.0	13.86	2.25%	[0.00]	ug/L
Ni 231.604†	70.1	8.98	12.80%	[0.00]	ug/L
P 214.914†	220.0	5.00	2.27%	[0.00]	ug/L
Pb 220.353†	-52.5	7.99	15.21%	[0.00]	ug/L
S 181.975 Axial†	41.5	3.95	9.53%	[0.00]	ug/L
Sb 206.836†	29.6	6.13	20.71%	[0.00]	ug/L
Se 196.026†	-23.4	3.18	13.58%	[0.00]	ug/L
Si 251.611†	508.0	55.98	11.02%	[0.00]	ug/L
Sn 189.927†	4.3	4.41	103.33%	[0.00]	ug/L
Sr 421.552†	3.4	8.23	240.79%	[0.00]	ug/L
Ti 334.940†	-965.0	30.47	3.16%	[0.00]	ug/L
Tl 190.801†	-36.9	2.97	8.05%	[0.00]	ug/L
U 409.014†	-1962.2	93.24	4.75%	[0.00]	ug/L
V 292.402†	-1296.5	38.13	2.94%	[0.00]	ug/L

Zn 213.857†	807.3	5.79	0.72%	[0.00] ug/L
SiO2†	488.8	11.06	2.26%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/9/2009 08:17:43
Data Type: Reprocessed on 12/9/2009 10:32:13

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	915606.8	915606.8	103.46	%	08:20:07
1	Sc Radial	5337.0	5337.0	94.2	%	08:19:41
1	Y 371.029	763081.0	763081.0	102.83	%	08:20:07
1	Y RADIAL	5831.6	5831.6	94.69	%	08:19:41
1	Ag 328.068†	22161.7	21192.6	[100]	ug/L	08:20:12
1	As 188.979†	207.1	229.4	[100]	ug/L	08:20:32
1	B 249.677†	4002.0	4392.0	[100]	ug/L	08:20:12
1	Ba 233.527†	13564.0	13122.2	[100]	ug/L	08:20:12
1	Be 313.107†	254917.7	251708.9	[100]	ug/L	08:20:07
1	Cd 226.502†	9233.5	9112.4	[100]	ug/L	08:20:12
1	Co 228.616†	4967.8	4873.4	[100]	ug/L	08:20:32
1	Cr 267.716†	9596.1	9188.1	[100]	ug/L	08:20:12
1	Cu 324.752†	41626.8	33465.4	[100]	ug/L	08:20:12
1	K 766.490 Radial†	7987.7	6305.9	[1000]	ug/L	08:19:36
1	Mn 257.610†	95038.4	91455.2	[100]	ug/L	08:20:12
1	Mo 202.031†	1541.1	1469.5	[100]	ug/L	08:20:32
1	Ni 231.604†	4194.9	3984.4	[100]	ug/L	08:20:32
1	P 214.914†	1036.1	781.5	[500]	ug/L	08:20:32
1	Pb 220.353†	813.8	839.1	[100]	ug/L	08:20:32
1	S 181.975 Axial†	170.2	123.1	[200]	ug/L	08:20:32
1	Sb 206.836†	331.0	290.3	[100]	ug/L	08:20:32
1	Se 196.026†	135.3	154.3	[100]	ug/L	08:20:32
1	Si 251.611†	16988.8	15912.3	[500]	ug/L	08:20:12
1	Sn 189.927†	583.2	559.5	[100]	ug/L	08:20:32
1	Sr 421.552†	15114.5	16035.4	[100]	ug/L	08:19:41
1	Ti 334.940†	62021.0	60910.9	[100]	ug/L	08:20:12
1	Tl 190.801†	314.9	341.2	[100]	ug/L	08:20:32
1	U 409.014†	1340.0	3257.4	[100]	ug/L	08:20:12
1	V 292.402†	13721.3	14558.7	[100]	ug/L	08:20:12
1	Zn 213.857†	12043.1	10832.9	[100]	ug/L	08:20:12
1	SiO2†	16434.1	15395.5	[1069.5]	ug/L	08:21:39
2	Sc 361.383	900223.3	900223.3	101.72	%	08:20:38
2	Sc Radial	5743.1	5743.1	101	%	08:19:51
2	Y 371.029	750252.5	750252.5	101.10	%	08:20:38
2	Y RADIAL	6209.4	6209.4	100.8	%	08:19:51
2	Ag 328.068†	21711.3	21115.9	[100]	ug/L	08:20:43
2	As 188.979†	208.5	234.1	[100]	ug/L	08:21:03
2	B 249.677†	3895.0	4352.9	[100]	ug/L	08:20:43
2	Ba 233.527†	13261.4	13048.8	[100]	ug/L	08:20:43
2	Be 313.107†	258852.8	259787.7	[100]	ug/L	08:20:38
2	Cd 226.502†	9026.6	9061.5	[100]	ug/L	08:20:43
2	Co 228.616†	4991.7	4978.9	[100]	ug/L	08:21:03
2	Cr 267.716†	9375.7	9129.9	[100]	ug/L	08:20:43
2	Cu 324.752†	40530.5	33075.2	[100]	ug/L	08:20:43
2	K 766.490 Radial†	7752.9	5474.8	[1000]	ug/L	08:19:46
2	Mn 257.610†	92417.4	90448.3	[100]	ug/L	08:20:43
2	Mo 202.031†	1544.4	1498.2	[100]	ug/L	08:21:03
2	Ni 231.604†	4238.1	4096.2	[100]	ug/L	08:21:03
2	P 214.914†	1039.7	802.2	[500]	ug/L	08:21:03
2	Pb 220.353†	799.1	838.1	[100]	ug/L	08:21:03
2	S 181.975 Axial†	168.2	123.9	[200]	ug/L	08:21:03
2	Sb 206.836†	333.8	298.5	[100]	ug/L	08:21:03
2	Se 196.026†	139.2	160.3	[100]	ug/L	08:21:03
2	Si 251.611†	16401.5	15615.6	[500]	ug/L	08:20:43
2	Sn 189.927†	584.1	569.9	[100]	ug/L	08:21:03
2	Sr 421.552†	15040.1	14827.7	[100]	ug/L	08:19:51
2	Ti 334.940†	60191.0	60136.4	[100]	ug/L	08:20:43
2	Tl 190.801†	300.7	332.5	[100]	ug/L	08:21:03

2	U 409.014†	1180.4	3122.6	[100]	ug/L	08:20:43
2	V 292.402†	13324.1	14394.9	[100]	ug/L	08:20:43
2	Zn 213.857†	11685.5	10680.3	[100]	ug/L	08:20:43
2	SiO2†	16279.4	15514.8	[1069.5]	ug/L	08:21:44
3	Sc 361.383	895201.6	895201.6	101.16	%	08:21:08
3	Sc Radial	5702.1	5702.1	101	%	08:20:01
3	Y 371.029	746415.6	746415.6	100.59	%	08:21:08
3	Y RADIAL	6190.6	6190.6	100.5	%	08:20:01
3	Ag 328.068†	21753.4	21277.2	[100]	ug/L	08:21:13
3	As 188.979†	221.0	247.7	[100]	ug/L	08:21:33
3	B 249.677†	3919.0	4398.1	[100]	ug/L	08:21:13
3	Ba 233.527†	13184.2	13045.6	[100]	ug/L	08:21:13
3	Be 313.107†	258647.0	261011.7	[100]	ug/L	08:21:08
3	Cd 226.502†	8997.0	9082.1	[100]	ug/L	08:21:13
3	Co 228.616†	4993.3	5008.0	[100]	ug/L	08:21:33
3	Cr 267.716†	9391.6	9197.3	[100]	ug/L	08:21:13
3	Cu 324.752†	41071.5	33833.6	[100]	ug/L	08:21:13
3	K 766.490 Radial†	7638.8	5416.6	[1000]	ug/L	08:19:56
3	Mn 257.610†	92630.0	91168.1	[100]	ug/L	08:21:13
3	Mo 202.031†	1533.1	1495.6	[100]	ug/L	08:21:33
3	Ni 231.604†	4215.0	4096.7	[100]	ug/L	08:21:33
3	P 214.914†	1041.5	809.6	[500]	ug/L	08:21:33
3	Pb 220.353†	791.9	835.3	[100]	ug/L	08:21:33
3	S 181.975 Axial†	165.1	121.7	[200]	ug/L	08:21:33
3	Sb 206.836†	327.5	294.1	[100]	ug/L	08:21:33
3	Se 196.026†	134.7	156.6	[100]	ug/L	08:21:33
3	Si 251.611†	16478.1	15781.8	[500]	ug/L	08:21:13
3	Sn 189.927†	578.0	567.1	[100]	ug/L	08:21:33
3	Sr 421.552†	15083.5	14977.5	[100]	ug/L	08:20:01
3	Ti 334.940†	60410.1	60684.9	[100]	ug/L	08:21:13
3	Tl 190.801†	315.9	349.1	[100]	ug/L	08:21:33
3	U 409.014†	1408.7	3354.8	[100]	ug/L	08:21:13
3	V 292.402†	13290.3	14434.9	[100]	ug/L	08:21:13
3	Zn 213.857†	11746.4	10804.9	[100]	ug/L	08:21:13
3	SiO2†	16488.6	15811.4	[1069.5]	ug/L	08:21:49

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	903677.2	10632.00	1.18%	102.11	%
Sc Radial	5594.1	223.60	4.00%	98.8	%
Y 371.029	753249.7	8727.64	1.16%	101.51	%
Y RADIAL	6077.2	212.91	3.50%	98.68	%
Ag 328.068†	21195.2	80.70	0.38%	[100]	ug/L
As 188.979†	237.1	9.48	4.00%	[100]	ug/L
B 249.677†	4381.0	24.52	0.56%	[100]	ug/L
Ba 233.527†	13072.2	43.32	0.33%	[100]	ug/L
Be 313.107†	257502.8	5054.82	1.96%	[100]	ug/L
Cd 226.502†	9085.3	25.57	0.28%	[100]	ug/L
Co 228.616†	4953.4	70.84	1.43%	[100]	ug/L
Cr 267.716†	9171.8	36.54	0.40%	[100]	ug/L
Cu 324.752†	33458.1	379.24	1.13%	[100]	ug/L
K 766.490 Radial†	5732.4	497.48	8.68%	[1000]	ug/L
Mn 257.610†	91023.9	518.69	0.57%	[100]	ug/L
Mo 202.031†	1487.8	15.86	1.07%	[100]	ug/L
Ni 231.604†	4059.1	64.66	1.59%	[100]	ug/L
P 214.914†	797.8	14.56	1.82%	[500]	ug/L
Pb 220.353†	837.5	1.95	0.23%	[100]	ug/L
S 181.975 Axial†	122.9	1.09	0.89%	[200]	ug/L
Sb 206.836†	294.3	4.09	1.39%	[100]	ug/L
Se 196.026†	157.1	3.06	1.95%	[100]	ug/L
Si 251.611†	15769.9	148.71	0.94%	[500]	ug/L
Sn 189.927†	565.5	5.41	0.96%	[100]	ug/L
Sr 421.552†	15280.2	658.29	4.31%	[100]	ug/L
Ti 334.940†	60577.4	398.30	0.66%	[100]	ug/L
Tl 190.801†	340.9	8.33	2.44%	[100]	ug/L
U 409.014†	3244.9	116.62	3.59%	[100]	ug/L
V 292.402†	14462.8	85.40	0.59%	[100]	ug/L
Zn 213.857†	10772.7	81.22	0.75%	[100]	ug/L
SiO2†	15573.9	214.18	1.38%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2009 08:23:59
Data Type: Reprocessed on 12/9/2009 10:32:18

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	904434.8	904434.8	102.20	%	08:27:09
1	Sc Radial	5397.2	5397.2	95.3	%	08:25:51
1	Y 371.029	745813.4	745813.4	100.50	%	08:27:09
1	Y RADIAL	5821.5	5821.5	94.52	%	08:25:51
1	Ag 328.068†	110747.4	108136.6	[500]	ug/L	08:27:14
1	Al 396.153Radial†	6353.8	6687.4	[5000]	ug/L	08:25:51
1	As 188.979†	1184.6	1188.3	[500]	ug/L	08:27:34
1	B 249.677†	22269.5	22314.1	[500]	ug/L	08:27:14
1	Ba 233.527†	65708.8	64306.9	[500]	ug/L	08:27:14
1	Be 313.107†	1322017.1	1298889.0	[500]	ug/L	08:27:09
1	Ca 317.933Radial†	3266.8	3410.2	[5000]	ug/L	08:26:12
1	Cd 226.502†	45906.7	45106.7	[500]	ug/L	08:27:14
1	Co 228.616†	25668.9	25188.3	[500]	ug/L	08:27:14
1	Cr 267.716†	46222.9	45141.3	[500]	ug/L	08:27:14
1	Cu 324.752†	177131.3	166550.9	[500]	ug/L	08:27:14
1	K 766.490 Radial†	28650.1	27892.3	[5000]	ug/L	08:25:51
1	Mg 279.077 IEC†	135.5	140.4	[5000]	ug/L	08:26:12
1	Mn 257.610†	455958.3	445743.2	[500]	ug/L	08:27:09
1	Mo 202.031†	7796.0	7608.2	[500]	ug/L	08:27:34
1	Ni 231.604†	21161.1	20635.6	[500]	ug/L	08:27:14
1	P 214.914†	4385.5	4071.2	[2500]	ug/L	08:27:34
1	Pb 220.353†	4210.4	4172.3	[500]	ug/L	08:27:34
1	S 181.975 Axial†	737.8	680.4	[1000]	ug/L	08:27:34
1	Sb 206.836†	1594.1	1530.2	[500]	ug/L	08:27:34
1	Se 196.026†	815.7	821.6	[500]	ug/L	08:27:34
1	Si 251.611†	82827.2	80536.9	[2500]	ug/L	08:27:14
1	Sn 189.927†	3011.7	2942.6	[500]	ug/L	08:27:34
1	Sr 421.552†	73249.6	76857.5	[500]	ug/L	08:25:51
1	Ti 334.940†	312876.3	307108.6	[500]	ug/L	08:27:14
1	Tl 190.801†	1706.2	1706.3	[500]	ug/L	08:27:34
1	U 409.014†	15802.6	17424.7	[500]	ug/L	08:27:14
1	V 292.402†	72068.0	71813.7	[500]	ug/L	08:27:14
1	Zn 213.857†	56449.9	54427.9	[500]	ug/L	08:27:14
1	SiO2†	82752.8	80483.2	[5347.5]	ug/L	08:28:41
2	Sc 361.383	891526.1	891526.1	100.74	%	08:27:40
2	Sc Radial	5732.8	5732.8	101	%	08:26:17
2	Y 371.029	734672.0	734672.0	99.003	%	08:27:40
2	Y RADIAL	6169.8	6169.8	100.2	%	08:26:17
2	Ag 328.068†	108767.6	107740.4	[500]	ug/L	08:27:45
2	Al 396.153Radial†	6574.1	6514.8	[5000]	ug/L	08:26:17
2	As 188.979†	1189.1	1209.5	[500]	ug/L	08:28:05
2	B 249.677†	21903.5	22266.3	[500]	ug/L	08:27:45
2	Ba 233.527†	64546.4	64083.9	[500]	ug/L	08:27:45
2	Be 313.107†	1325989.4	1321562.2	[500]	ug/L	08:27:40
2	Ca 317.933Radial†	3244.1	3187.1	[5000]	ug/L	08:26:37
2	Cd 226.502†	45217.0	45072.4	[500]	ug/L	08:27:45
2	Co 228.616†	25322.9	25208.5	[500]	ug/L	08:27:45
2	Cr 267.716†	45599.0	45176.8	[500]	ug/L	08:27:45
2	Cu 324.752†	173851.2	165804.6	[500]	ug/L	08:27:45
2	K 766.490 Radial†	29550.8	27022.3	[5000]	ug/L	08:26:17
2	Mg 279.077 IEC†	136.9	133.4	[5000]	ug/L	08:26:37
2	Mn 257.610†	457085.2	453321.7	[500]	ug/L	08:27:40
2	Mo 202.031†	7806.1	7728.8	[500]	ug/L	08:28:05
2	Ni 231.604†	20894.9	20671.1	[500]	ug/L	08:27:45
2	P 214.914†	4394.4	4142.2	[2500]	ug/L	08:28:05
2	Pb 220.353†	4208.4	4230.0	[500]	ug/L	08:28:05
2	S 181.975 Axial†	739.1	692.2	[1000]	ug/L	08:28:05
2	Sb 206.836†	1589.3	1548.1	[500]	ug/L	08:28:05

2	Se 196.026†	818.1	835.5	[500]	ug/L	08:28:05
2	Si 251.611†	81408.0	80301.6	[2500]	ug/L	08:27:45
2	Sn 189.927†	3012.0	2985.6	[500]	ug/L	08:28:05
2	Sr 421.552†	75683.5	74762.5	[500]	ug/L	08:26:17
2	Ti 334.940†	307362.6	306068.2	[500]	ug/L	08:27:45
2	Tl 190.801†	1709.1	1733.4	[500]	ug/L	08:28:05
2	U 409.014†	15520.9	17369.0	[500]	ug/L	08:27:45
2	V 292.402†	71037.8	71812.1	[500]	ug/L	08:27:45
2	Zn 213.857†	55598.1	54382.2	[500]	ug/L	08:27:45
2	SiO2†	83026.8	81927.6	[5347.5]	ug/L	08:28:47
3	Sc 361.383	899136.3	899136.3	101.60	%	08:28:11
3	Sc Radial	5706.9	5706.9	101	%	08:26:42
3	Y 371.029	741948.7	741948.7	99.983	%	08:28:11
3	Y RADIAL	6177.1	6177.1	100.3	%	08:26:42
3	Ag 328.068†	109406.8	107455.7	[500]	ug/L	08:28:16
3	Al 396.153Radial†	6511.0	6481.7	[5000]	ug/L	08:26:42
3	As 188.979†	1195.7	1206.1	[500]	ug/L	08:28:36
3	B 249.677†	22048.7	22225.2	[500]	ug/L	08:28:16
3	Ba 233.527†	65054.9	64042.1	[500]	ug/L	08:28:16
3	Be 313.107†	1337323.5	1321577.1	[500]	ug/L	08:28:11
3	Ca 317.933Radial†	3245.6	3203.1	[5000]	ug/L	08:27:02
3	Cd 226.502†	45520.2	44991.0	[500]	ug/L	08:28:16
3	Co 228.616†	25427.5	25098.7	[500]	ug/L	08:28:16
3	Cr 267.716†	45999.4	45187.8	[500]	ug/L	08:28:16
3	Cu 324.752†	174872.4	165349.0	[500]	ug/L	08:28:16
3	K 766.490 Radial†	29635.6	27239.3	[5000]	ug/L	08:26:42
3	Mg 279.077 IEC†	137.9	135.1	[5000]	ug/L	08:27:02
3	Mn 257.610†	459261.8	451623.7	[500]	ug/L	08:28:11
3	Mo 202.031†	7805.6	7662.7	[500]	ug/L	08:28:36
3	Ni 231.604†	21024.4	20623.1	[500]	ug/L	08:28:16
3	P 214.914†	4384.9	4095.8	[2500]	ug/L	08:28:36
3	Pb 220.353†	4201.2	4187.5	[500]	ug/L	08:28:36
3	S 181.975 Axial†	733.3	680.3	[1000]	ug/L	08:28:36
3	Sb 206.836†	1586.5	1531.9	[500]	ug/L	08:28:36
3	Se 196.026†	808.2	819.0	[500]	ug/L	08:28:36
3	Si 251.611†	81886.6	80088.6	[2500]	ug/L	08:28:16
3	Sn 189.927†	3013.3	2961.6	[500]	ug/L	08:28:36
3	Sr 421.552†	75338.5	74760.6	[500]	ug/L	08:26:42
3	Ti 334.940†	309552.3	305641.0	[500]	ug/L	08:28:16
3	Tl 190.801†	1699.9	1710.0	[500]	ug/L	08:28:36
3	U 409.014†	15597.8	17314.3	[500]	ug/L	08:28:16
3	V 292.402†	71536.7	71706.3	[500]	ug/L	08:28:16
3	Zn 213.857†	55938.2	54249.7	[500]	ug/L	08:28:16
3	SiO2†	82872.9	81078.6	[5347.5]	ug/L	08:28:52

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	898365.7	6488.79	0.72%	101.51	%
Sc Radial	5612.3	186.71	3.33%	99.1	%
Y 371.029	740811.3	5657.11	0.76%	99.830	%
Y RADIAL	6056.1	203.26	3.36%	98.33	%
Ag 328.068†	107777.6	341.95	0.32%	[500]	ug/L
Al 396.153Radial†	6561.3	110.45	1.68%	[5000]	ug/L
As 188.979†	1201.3	11.39	0.95%	[500]	ug/L
B 249.677†	22268.6	44.51	0.20%	[500]	ug/L
Ba 233.527†	64144.3	142.34	0.22%	[500]	ug/L
Be 313.107†	1314009.5	13094.70	1.00%	[500]	ug/L
Ca 317.933Radial†	3266.8	124.44	3.81%	[5000]	ug/L
Cd 226.502†	45056.7	59.44	0.13%	[500]	ug/L
Co 228.616†	25165.2	58.44	0.23%	[500]	ug/L
Cr 267.716†	45168.6	24.29	0.05%	[500]	ug/L
Cu 324.752†	165901.5	606.79	0.37%	[500]	ug/L
K 766.490 Radial†	27384.6	452.85	1.65%	[5000]	ug/L
Mg 279.077 IEC†	136.3	3.65	2.68%	[5000]	ug/L
Mn 257.610†	450229.5	3976.95	0.88%	[500]	ug/L
Mo 202.031†	7666.6	60.36	0.79%	[500]	ug/L
Ni 231.604†	20643.3	24.94	0.12%	[500]	ug/L
P 214.914†	4103.1	36.05	0.88%	[2500]	ug/L
Pb 220.353†	4196.6	29.89	0.71%	[500]	ug/L

S 181.975 Axial†	684.3	6.82	1.00%	[1000]	ug/L
Sb 206.836†	1536.7	9.88	0.64%	[500]	ug/L
Se 196.026†	825.4	8.91	1.08%	[500]	ug/L
Si 251.611†	80309.0	224.22	0.28%	[2500]	ug/L
Sn 189.927†	2963.3	21.57	0.73%	[500]	ug/L
Sr 421.552†	75460.2	1210.12	1.60%	[500]	ug/L
Ti 334.940†	306272.6	754.85	0.25%	[500]	ug/L
Tl 190.801†	1716.6	14.68	0.86%	[500]	ug/L
U 409.014†	17369.3	55.20	0.32%	[500]	ug/L
V 292.402†	71777.4	61.55	0.09%	[500]	ug/L
Zn 213.857†	54353.3	92.53	0.17%	[500]	ug/L
SiO2†	81163.1	725.88	0.89%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/9/2009 08:31:02
Data Type: Reprocessed on 12/9/2009 10:32:19

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	850251.5	850251.5	96.077	%	08:34:18
1	Sc Radial	5533.5	5533.5	97.7	%	08:32:55
1	Y 371.029	701415.8	701415.8	94.521	%	08:34:18
1	Y RADIAL	6014.0	6014.0	97.65	%	08:32:55
1	Ag 328.068†	212503.6	220953.8	[1000]	ug/L	08:34:18
1	Al 396.153Radial†	13115.4	13443.4	[10000]	ug/L	08:32:55
1	As 188.979†	2381.3	2507.8	[1000]	ug/L	08:34:39
1	B 249.677†	44947.2	47306.5	[1000]	ug/L	08:34:18
1	Ba 233.527†	130054.0	135377.0	[1000]	ug/L	08:34:18
1	Be 313.107†	2668005.7	2782276.6	[1000]	ug/L	08:34:13
1	Ca 317.933Radial†	6484.0	6618.4	[10000]	ug/L	08:32:55
1	Cd 226.502†	90844.2	94741.8	[1000]	ug/L	08:34:18
1	Co 228.616†	50910.3	53061.1	[1000]	ug/L	08:34:18
1	Cr 267.716†	91753.4	95413.3	[1000]	ug/L	08:34:18
1	Cu 324.752†	346853.3	354248.8	[1000]	ug/L	08:34:18
1	Fe 238.204 Radial†	961.1	977.6	[10000]	ug/L	08:33:15
1	K 766.490 Radial†	56384.8	55537.2	[10000]	ug/L	08:32:55
1	Mg 279.077 IEC†	266.6	271.1	[10000]	ug/L	08:33:15
1	Mn 257.610†	915289.7	952263.1	[1000]	ug/L	08:34:13
1	Mo 202.031†	15078.9	15674.7	[1000]	ug/L	08:34:39
1	Na 589.592 Radial†	23620.3	24790.4	[10000]	ug/L	08:32:55
1	Ni 231.604†	41597.5	43226.0	[1000]	ug/L	08:34:18
1	P 214.914†	8503.1	8630.4	[5000]	ug/L	08:34:39
1	Pb 220.353†	8383.2	8778.1	[1000]	ug/L	08:34:39
1	S 181.975 Axial†	1377.9	1392.6	[2000]	ug/L	08:34:39
1	Sb 206.836†	3049.5	3144.4	[1000]	ug/L	08:34:39
1	Se 196.026†	1618.5	1708.1	[1000]	ug/L	08:34:39
1	Si 251.611†	161724.8	167820.9	[5000]	ug/L	08:34:18
1	Sn 189.927†	5789.0	6021.1	[1000]	ug/L	08:34:39
1	Sr 421.552†	144955.4	148352.3	[1000]	ug/L	08:32:55
1	Ti 334.940†	607181.7	632941.6	[1000]	ug/L	08:34:18
1	Tl 190.801†	3388.0	3563.2	[1000]	ug/L	08:34:39
1	U 409.014†	33553.3	36885.7	[1000]	ug/L	08:34:18
1	V 292.402†	145285.4	152514.7	[1000]	ug/L	08:34:18
1	Zn 213.857†	110499.0	114204.0	[1000]	ug/L	08:34:18
1	SiO2†	160588.3	166657.3	[10695]	ug/L	08:35:47
2	Sc 361.383	876826.0	876826.0	99.079	%	08:34:50
2	Sc Radial	5769.1	5769.1	102	%	08:33:20
2	Y 371.029	725945.2	725945.2	97.827	%	08:34:50
2	Y RADIAL	6233.8	6233.8	101.2	%	08:33:20
2	Ag 328.068†	211821.3	213561.7	[1000]	ug/L	08:34:50
2	Al 396.153Radial†	13223.3	13001.2	[10000]	ug/L	08:33:20
2	As 188.979†	2383.7	2435.1	[1000]	ug/L	08:35:10
2	B 249.677†	44853.4	45794.0	[1000]	ug/L	08:34:50
2	Ba 233.527†	129340.2	130553.9	[1000]	ug/L	08:34:50
2	Be 313.107†	2640831.9	2670687.5	[1000]	ug/L	08:34:44
2	Ca 317.933Radial†	6545.8	6408.1	[10000]	ug/L	08:33:20
2	Cd 226.502†	90370.0	91397.4	[1000]	ug/L	08:34:50
2	Co 228.616†	50520.5	51061.6	[1000]	ug/L	08:34:50
2	Cr 267.716†	91349.0	92110.7	[1000]	ug/L	08:34:50
2	Cu 324.752†	345284.8	341724.1	[1000]	ug/L	08:34:50
2	Fe 238.204 Radial†	965.7	942.0	[10000]	ug/L	08:33:40
2	K 766.490 Radial†	56969.8	53754.9	[10000]	ug/L	08:33:20
2	Mg 279.077 IEC†	263.9	257.3	[10000]	ug/L	08:33:40
2	Mn 257.610†	904052.2	912048.1	[1000]	ug/L	08:34:44
2	Mo 202.031†	15064.1	15184.0	[1000]	ug/L	08:35:10
2	Na 589.592 Radial†	23815.7	23995.0	[10000]	ug/L	08:33:20
2	Ni 231.604†	41490.8	41806.2	[1000]	ug/L	08:34:50

2	P 214.914†	8521.8	8381.0	[5000]	ug/L	08:35:10
2	Pb 220.353†	8346.4	8476.5	[1000]	ug/L	08:35:10
2	S 181.975 Axial†	1382.2	1353.5	[2000]	ug/L	08:35:10
2	Sb 206.836†	3047.9	3046.6	[1000]	ug/L	08:35:10
2	Se 196.026†	1624.6	1663.1	[1000]	ug/L	08:35:10
2	Si 251.611†	160771.4	161757.0	[5000]	ug/L	08:34:50
2	Sn 189.927†	5776.1	5825.5	[1000]	ug/L	08:35:10
2	Sr 421.552†	146272.8	143587.4	[1000]	ug/L	08:33:20
2	Ti 334.940†	604367.5	610947.6	[1000]	ug/L	08:34:50
2	Tl 190.801†	3400.0	3468.4	[1000]	ug/L	08:35:10
2	U 409.014†	33305.7	35577.3	[1000]	ug/L	08:34:50
2	V 292.402†	144462.0	147100.6	[1000]	ug/L	08:34:50
2	Zn 213.857†	109920.3	110134.2	[1000]	ug/L	08:34:50
2	SiO2†	160175.3	161174.6	[10695]	ug/L	08:35:52
3	Sc 361.383	872930.7	872930.7	98.639	%	08:35:21
3	Sc Radial	5474.2	5474.2	96.7	%	08:33:46
3	Y 371.029	721425.0	721425.0	97.218	%	08:35:21
3	Y RADIAL	5944.1	5944.1	96.52	%	08:33:46
3	Ag 328.068†	212333.5	215034.9	[1000]	ug/L	08:35:21
3	Al 396.153Radial†	13175.8	13651.4	[10000]	ug/L	08:33:46
3	As 188.979†	2386.3	2448.5	[1000]	ug/L	08:35:42
3	B 249.677†	45175.6	46322.6	[1000]	ug/L	08:35:21
3	Ba 233.527†	129824.3	131627.2	[1000]	ug/L	08:35:21
3	Be 313.107†	2629626.7	2671221.4	[1000]	ug/L	08:35:16
3	Ca 317.933Radial†	6502.5	6709.5	[10000]	ug/L	08:33:46
3	Cd 226.502†	90539.7	91976.5	[1000]	ug/L	08:35:21
3	Co 228.616†	50628.1	51398.3	[1000]	ug/L	08:35:21
3	Cr 267.716†	91620.2	92797.1	[1000]	ug/L	08:35:21
3	Cu 324.752†	346849.9	344865.9	[1000]	ug/L	08:35:21
3	Fe 238.204 Radial†	967.0	994.4	[10000]	ug/L	08:34:06
3	K 766.490 Radial†	56413.8	56193.0	[10000]	ug/L	08:33:46
3	Mg 279.077 IEC†	268.9	276.4	[10000]	ug/L	08:34:06
3	Mn 257.610†	899357.4	911360.2	[1000]	ug/L	08:35:16
3	Mo 202.031†	15037.0	15224.5	[1000]	ug/L	08:35:42
3	Na 589.592 Radial†	23657.5	25090.9	[10000]	ug/L	08:33:46
3	Ni 231.604†	41585.6	42089.2	[1000]	ug/L	08:35:21
3	P 214.914†	8511.2	8408.6	[5000]	ug/L	08:35:42
3	Pb 220.353†	8367.1	8535.0	[1000]	ug/L	08:35:42
3	S 181.975 Axial†	1383.1	1360.7	[2000]	ug/L	08:35:42
3	Sb 206.836†	3050.9	3063.4	[1000]	ug/L	08:35:42
3	Se 196.026†	1636.4	1682.4	[1000]	ug/L	08:35:42
3	Si 251.611†	161444.9	163163.9	[5000]	ug/L	08:35:21
3	Sn 189.927†	5806.5	5882.4	[1000]	ug/L	08:35:42
3	Sr 421.552†	145221.8	150236.7	[1000]	ug/L	08:33:46
3	Ti 334.940†	606384.0	615713.8	[1000]	ug/L	08:35:21
3	Tl 190.801†	3395.9	3479.6	[1000]	ug/L	08:35:42
3	U 409.014†	33383.6	35806.3	[1000]	ug/L	08:35:21
3	V 292.402†	145043.8	148341.1	[1000]	ug/L	08:35:21
3	Zn 213.857†	110326.9	111041.6	[1000]	ug/L	08:35:21
3	SiO2†	161376.9	163114.2	[10695]	ug/L	08:35:58

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	866669.4	14351.09	1.66%	97.932	%
Sc Radial	5592.3	156.00	2.79%	98.7	%
Y 371.029	716262.0	13054.32	1.82%	96.522	%
Y RADIAL	6064.0	151.18	2.49%	98.46	%
Ag 328.068†	216516.8	3912.52	1.81%	[1000]	ug/L
Al 396.153Radial†	13365.3	332.06	2.48%	[10000]	ug/L
As 188.979†	2463.8	38.69	1.57%	[1000]	ug/L
B 249.677†	46474.4	767.60	1.65%	[1000]	ug/L
Ba 233.527†	132519.3	2532.28	1.91%	[1000]	ug/L
Be 313.107†	2708061.8	64272.46	2.37%	[1000]	ug/L
Ca 317.933Radial†	6578.7	154.56	2.35%	[10000]	ug/L
Cd 226.502†	92705.2	1787.31	1.93%	[1000]	ug/L
Co 228.616†	51840.3	1070.50	2.06%	[1000]	ug/L
Cr 267.716†	93440.4	1742.72	1.87%	[1000]	ug/L
Cu 324.752†	346946.3	6516.33	1.88%	[1000]	ug/L
Fe 238.204 Radial†	971.3	26.76	2.76%	[10000]	ug/L

K 766.490 Radial†	55161.7	1261.67	2.29%	[10000]	ug/L
Mg 279.077 IEC†	268.3	9.87	3.68%	[10000]	ug/L
Mn 257.610†	925223.8	23419.23	2.53%	[1000]	ug/L
Mo 202.031†	15361.1	272.34	1.77%	[1000]	ug/L
Na 589.592 Radial†	24625.4	566.30	2.30%	[10000]	ug/L
Ni 231.604†	42373.8	751.50	1.77%	[1000]	ug/L
P 214.914†	8473.3	136.72	1.61%	[5000]	ug/L
Pb 220.353†	8596.5	159.94	1.86%	[1000]	ug/L
S 181.975 Axial†	1369.0	20.82	1.52%	[2000]	ug/L
Sb 206.836†	3084.8	52.28	1.69%	[1000]	ug/L
Se 196.026†	1684.6	22.56	1.34%	[1000]	ug/L
Si 251.611†	164247.3	3173.79	1.93%	[5000]	ug/L
Sn 189.927†	5909.7	100.64	1.70%	[1000]	ug/L
Sr 421.552†	147392.1	3427.10	2.33%	[1000]	ug/L
Ti 334.940†	619867.7	11570.45	1.87%	[1000]	ug/L
Tl 190.801†	3503.7	51.77	1.48%	[1000]	ug/L
U 409.014†	36089.8	698.72	1.94%	[1000]	ug/L
V 292.402†	149318.8	2836.39	1.90%	[1000]	ug/L
Zn 213.857†	111793.3	2136.49	1.91%	[1000]	ug/L
SiO2†	163648.7	2780.16	1.70%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/9/2009 08:38:08
Data Type: Reprocessed on 12/9/2009 10:32:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860444.2	860444.2	97.228	%	08:41:19
1	Sc Radial	5563.2	5563.2	98.2	%	08:40:22
1	Y 371.029	705763.8	705763.8	95.107	%	08:41:19
1	Y RADIAL	5976.4	5976.4	97.04	%	08:40:22
1	Al 396.153Radial†	64915.4	66104.8	[50000]	ug/L	08:40:02
1	Ca 317.933Radial†	31391.5	31939.2	[50000]	ug/L	08:40:02
1	Fe 238.204 Radial†	1937.0	1965.8	[20000]	ug/L	08:40:22
1	Mg 279.077 IEC†	1300.4	1322.0	[50000]	ug/L	08:40:22
1	Na 589.592 Radial†	51369.4	52910.5	[20000]	ug/L	08:40:02
2	Sc 361.383	865149.4	865149.4	97.760	%	08:41:24
2	Sc Radial	5442.2	5442.2	96.1	%	08:40:47
2	Y 371.029	708522.0	708522.0	95.479	%	08:41:24
2	Y RADIAL	5843.9	5843.9	94.89	%	08:40:47
2	Al 396.153Radial†	65821.3	68516.6	[50000]	ug/L	08:40:27
2	Ca 317.933Radial†	31762.2	33035.3	[50000]	ug/L	08:40:27
2	Fe 238.204 Radial†	1937.0	2009.7	[20000]	ug/L	08:40:47
2	Mg 279.077 IEC†	1297.3	1348.3	[50000]	ug/L	08:40:47
2	Na 589.592 Radial†	52102.0	54835.3	[20000]	ug/L	08:40:27
3	Sc 361.383	870309.3	870309.3	98.343	%	08:41:30
3	Sc Radial	5484.6	5484.6	96.8	%	08:41:12
3	Y 371.029	713259.8	713259.8	96.117	%	08:41:30
3	Y RADIAL	5873.4	5873.4	95.37	%	08:41:12
3	Al 396.153Radial†	66266.7	68446.0	[50000]	ug/L	08:40:52
3	Ca 317.933Radial†	32068.2	33095.3	[50000]	ug/L	08:40:52
3	Fe 238.204 Radial†	1958.1	2015.8	[20000]	ug/L	08:41:12
3	Mg 279.077 IEC†	1316.2	1357.3	[50000]	ug/L	08:41:12
3	Na 589.592 Radial†	52525.2	54852.4	[20000]	ug/L	08:40:52

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	865300.9	4934.29	0.57%	97.777	%
Sc Radial	5496.7	61.38	1.12%	97.1	%
Y 371.029	709181.8	3791.32	0.53%	95.568	%
Y RADIAL	5897.9	69.54	1.18%	95.77	%
Al 396.153Radial†	67689.1	1372.53	2.03%	[50000]	ug/L
Ca 317.933Radial†	32689.9	650.87	1.99%	[50000]	ug/L
Fe 238.204 Radial†	1997.1	27.27	1.37%	[20000]	ug/L
Mg 279.077 IEC†	1342.5	18.31	1.36%	[50000]	ug/L
Na 589.592 Radial†	54199.4	1116.28	2.06%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	216.3	0.00000	0.999997	
Al 396.153Radial	3	Lin Thru 0	0.0	1.353	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	2.451	0.00000	0.999946	
B 249.677	3	Lin Thru 0	0.0	46.07	0.00000	0.999850	
Ba 233.527	3	Lin Thru 0	0.0	131.7	0.00000	0.999918	
Be 313.107	3	Lin Thru 0	0.0	2691	0.00000	0.999922	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6539	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	92.18	0.00000	0.999936	
Co 228.616	3	Lin Thru 0	0.0	51.52	0.00000	0.999926	
Cr 267.716	3	Lin Thru 0	0.0	92.81	0.00000	0.999911	
Cu 324.752	3	Lin Thru 0	0.0	343.8	0.00000	0.999843	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0993	0.00000	0.999940	

K 766.490 Radial	3	Lin Thru 0	0.0	5.510	0.00000	0.999989
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0269	0.00000	0.999999
Mn 257.610	3	Lin Thru 0	0.0	920.2	0.00000	0.999942
Mo 202.031	3	Lin Thru 0	0.0	15.35	0.00000	0.999996
Na 589.592 Radia	2	Lin Thru 0	0.0	2.660	0.00000	0.999309
Ni 231.604	3	Lin Thru 0	0.0	42.14	0.00000	0.999942
P 214.914	3	Lin Thru 0	0.0	1.683	0.00000	0.999909
Pb 220.353	3	Lin Thru 0	0.0	8.554	0.00000	0.999953
S 181.975 Axial	3	Lin Thru 0	0.0	0.6839	0.00000	0.999959
Sb 206.836	3	Lin Thru 0	0.0	3.081	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	1.677	0.00000	0.999952
Si 251.611	3	Lin Thru 0	0.0	32.70	0.00000	0.999956
Sn 189.927	3	Lin Thru 0	0.0	5.911	0.00000	0.999992
Sr 421.552	3	Lin Thru 0	0.0	148.1	0.00000	0.999951
Ti 334.940	3	Lin Thru 0	0.0	618.3	0.00000	0.999987
Tl 190.801	3	Lin Thru 0	0.0	3.489	0.00000	0.999965
U 409.014	3	Lin Thru 0	0.0	35.79	0.00000	0.999852
V 292.402	3	Lin Thru 0	0.0	148.1	0.00000	0.999878
Zn 213.857	3	Lin Thru 0	0.0	111.1	0.00000	0.999935
SiO2	3	Lin Thru 0	0.0	15.27	0.00000	0.999986

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/9/2009 08:43:41
Data Type: Reprocessed on 12/9/2009 10:32:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899143.1	899143.1	101.60	%			08:46:51
1	Sc Radial	5755.3	5755.3	102	%			08:45:34
1	Y 371.029	745083.4	745083.4	100.41	%			08:46:51
1	Y RADIAL	6211.5	6211.5	100.9	%			08:45:34
1	Ag 328.068†	56632.9	55512.7	259.75	ug/L	259.75	ppb	08:46:51
1	Al 396.153Radial†	6818.1	6729.6	4951.6	ug/L	4951.6	ppb	08:45:34
1	As 188.979†	1135.6	1146.9	472.32	ug/L	472.32	ppb	08:47:11
1	B 249.677†	23247.5	23405.0	506.12	ug/L	506.12	ppb	08:46:51
1	Ba 233.527†	67271.4	66223.2	504.28	ug/L	504.28	ppb	08:46:51
1	Be 313.107†	695042.6	689408.8	257.18	ug/L	257.18	ppb	08:46:51
1	Ca 317.933Radial†	3308.0	3237.5	4950.6	ug/L	4950.6	ppb	08:45:54
1	Cd 226.502†	45903.3	45367.7	492.00	ug/L	492.00	ppb	08:46:51
1	Co 228.616†	25866.2	25530.3	495.84	ug/L	495.84	ppb	08:47:11
1	Cr 267.716†	45516.9	44712.6	482.58	ug/L	482.58	ppb	08:46:51
1	Cu 324.752†	180623.3	171008.0	497.60	ug/L	497.60	ppb	08:46:51
1	Fe 238.204 Radial†	515.8	501.5	5065.9	ug/L	5065.9	ppb	08:45:54
1	K 766.490 Radial†	16132.4	13704.5	2482.0	ug/L	2482.0	ppb	08:45:34
1	Mg 279.077 IEC†	147.3	143.2	5338.3	ug/L	5338.3	ppb	08:45:54
1	Mn 257.610†	473453.9	465588.7	506.37	ug/L	506.37	ppb	08:46:51
1	Mo 202.031†	8477.5	8323.9	542.58	ug/L	542.58	ppb	08:47:11
1	Na 589.592 Radial†	5744.7	6268.9	2356.3	ug/L	2356.3	ppb	08:45:34
1	Ni 231.604†	21194.2	20790.0	492.99	ug/L	492.99	ppb	08:47:11
1	P 214.914†	4454.0	4163.9	2399.0	ug/L	2399.0	ppb	08:47:11
1	Pb 220.353†	4241.1	4226.8	495.74	ug/L	495.74	ppb	08:47:11
1	S 181.975 Axial†	1765.6	1696.3	2479.4	ug/L	2479.4	ppb	08:47:11
1	Sb 206.836†	1591.5	1536.8	508.08	ug/L	508.08	ppb	08:47:11
1	Se 196.026†	4216.6	4173.6	2506.7	ug/L	2506.7	ppb	08:47:11
1	Si 251.611†	158477.4	155471.8	4743.2	ug/L	4743.2	ppb	08:46:51
1	Sn 189.927†	3253.6	3198.1	541.63	ug/L	541.63	ppb	08:47:11
1	Sr 421.552†	80003.9	78722.8	531.38	ug/L	531.38	ppb	08:45:34
1	Ti 334.940†	317575.3	313535.2	506.97	ug/L	506.97	ppb	08:46:51
1	Tl 190.801†	1811.6	1819.9	524.93	ug/L	524.93	ppb	08:47:11
1	U 409.014†	15263.7	16985.4	472.98	ug/L	472.98	ppb	08:46:51
1	V 292.402†	74003.4	74133.6	507.71	ug/L	507.71	ppb	08:46:51
1	Zn 213.857†	57517.5	55803.7	497.65	ug/L	497.65	ppb	08:46:51
1	SiO2†	158528.2	155540.9	10159	ug/L	10159	ppb	08:48:09
2	Sc 361.383	900929.8	900929.8	101.80	%			08:47:17
2	Sc Radial	5526.2	5526.2	97.6	%			08:45:59
2	Y 371.029	747790.7	747790.7	100.77	%			08:47:17
2	Y RADIAL	5987.0	5987.0	97.21	%			08:45:59
2	Ag 328.068†	56755.1	55522.2	259.83	ug/L	259.83	ppb	08:47:17
2	Al 396.153Radial†	6648.7	6834.0	5028.9	ug/L	5028.9	ppb	08:45:59
2	As 188.979†	1138.7	1147.8	472.69	ug/L	472.69	ppb	08:47:38
2	B 249.677†	23267.4	23379.2	505.54	ug/L	505.54	ppb	08:47:17
2	Ba 233.527†	67420.8	66238.6	504.40	ug/L	504.40	ppb	08:47:17
2	Be 313.107†	696988.5	689963.5	257.38	ug/L	257.38	ppb	08:47:17
2	Ca 317.933Radial†	3262.6	3325.9	5085.8	ug/L	5085.8	ppb	08:46:19
2	Cd 226.502†	45961.1	45334.9	491.63	ug/L	491.63	ppb	08:47:17
2	Co 228.616†	25875.1	25488.6	495.02	ug/L	495.02	ppb	08:47:38
2	Cr 267.716†	45637.8	44742.5	482.90	ug/L	482.90	ppb	08:47:17
2	Cu 324.752†	181032.7	171057.5	497.75	ug/L	497.75	ppb	08:47:17
2	Fe 238.204 Radial†	507.2	513.7	5188.5	ug/L	5188.5	ppb	08:46:19
2	K 766.490 Radial†	15882.2	14106.0	2554.8	ug/L	2554.8	ppb	08:45:59
2	Mg 279.077 IEC†	144.7	146.5	5463.2	ug/L	5463.2	ppb	08:46:19
2	Mn 257.610†	473926.8	465129.1	505.88	ug/L	505.88	ppb	08:47:17
2	Mo 202.031†	8455.1	8285.4	540.07	ug/L	540.07	ppb	08:47:38
2	Na 589.592 Radial†	5656.1	6412.4	2410.3	ug/L	2410.3	ppb	08:45:59
2	Ni 231.604†	21190.5	20745.1	491.93	ug/L	491.93	ppb	08:47:38

2	P 214.914†	4449.0	4150.2	2390.7	ug/L	2390.7 ppb	08:47:38
2	Pb 220.353†	4244.7	4222.1	495.20	ug/L	495.20 ppb	08:47:38
2	S 181.975 Axial†	1768.7	1695.9	2478.8	ug/L	2478.8 ppb	08:47:38
2	Sb 206.836†	1584.1	1526.4	504.59	ug/L	504.59 ppb	08:47:38
2	Se 196.026†	4230.6	4179.1	2510.4	ug/L	2510.4 ppb	08:47:38
2	Si 251.611†	158592.9	155275.9	4737.3	ug/L	4737.3 ppb	08:47:17
2	Sn 189.927†	3239.3	3177.6	538.18	ug/L	538.18 ppb	08:47:38
2	Sr 421.552†	77858.2	79787.0	538.56	ug/L	538.56 ppb	08:45:59
2	Ti 334.940†	318127.1	313457.4	506.85	ug/L	506.85 ppb	08:47:17
2	Tl 190.801†	1807.6	1812.4	522.78	ug/L	522.78 ppb	08:47:38
2	U 409.014†	15446.1	17134.7	477.14	ug/L	477.14 ppb	08:47:17
2	V 292.402†	74257.6	74238.8	508.38	ug/L	508.38 ppb	08:47:17
2	Zn 213.857†	57541.4	55714.9	496.85	ug/L	496.85 ppb	08:47:17
2	SiO2†	160259.5	156932.1	10251	ug/L	10251 ppb	08:48:14
3	Sc 361.383	892907.1	892907.1	100.90	%		08:47:44
3	Sc Radial	5572.6	5572.6	98.4	%		08:46:24
3	Y 371.029	740826.1	740826.1	99.832	%		08:47:44
3	Y RADIAL	6045.8	6045.8	98.17	%		08:46:24
3	Ag 328.068†	56455.6	55726.3	260.76	ug/L	260.76 ppb	08:47:44
3	Al 396.153Radial†	6733.8	6863.8	5050.6	ug/L	5050.6 ppb	08:46:24
3	As 188.979†	1138.0	1157.1	476.47	ug/L	476.47 ppb	08:48:04
3	B 249.677†	23201.0	23518.7	508.56	ug/L	508.56 ppb	08:47:44
3	Ba 233.527†	67082.8	66498.7	506.38	ug/L	506.38 ppb	08:47:44
3	Be 313.107†	692991.5	692153.6	258.20	ug/L	258.20 ppb	08:47:44
3	Ca 317.933Radial†	3266.2	3301.7	5048.9	ug/L	5048.9 ppb	08:46:44
3	Cd 226.502†	45892.6	45672.6	495.30	ug/L	495.30 ppb	08:47:44
3	Co 228.616†	26031.4	25871.8	502.48	ug/L	502.48 ppb	08:48:04
3	Cr 267.716†	45399.9	44909.5	484.71	ug/L	484.71 ppb	08:47:44
3	Cu 324.752†	179963.6	171595.7	499.31	ug/L	499.31 ppb	08:47:44
3	Fe 238.204 Radial†	503.9	506.1	5111.6	ug/L	5111.6 ppb	08:46:44
3	K 766.490 Radial†	16069.5	14161.0	2564.8	ug/L	2564.8 ppb	08:46:24
3	Mg 279.077 IEC†	140.9	141.4	5273.9	ug/L	5273.9 ppb	08:46:44
3	Mn 257.610†	471754.2	467158.6	508.09	ug/L	508.09 ppb	08:47:44
3	Mo 202.031†	8505.1	8409.6	548.16	ug/L	548.16 ppb	08:48:04
3	Na 589.592 Radial†	5701.6	6410.4	2409.5	ug/L	2409.5 ppb	08:46:24
3	Ni 231.604†	21331.0	21071.3	499.66	ug/L	499.66 ppb	08:48:04
3	P 214.914†	4494.3	4234.4	2440.7	ug/L	2440.7 ppb	08:48:04
3	Pb 220.353†	4273.3	4287.9	502.92	ug/L	502.92 ppb	08:48:04
3	S 181.975 Axial†	1777.7	1720.4	2514.6	ug/L	2514.6 ppb	08:48:04
3	Sb 206.836†	1606.7	1562.8	516.70	ug/L	516.70 ppb	08:48:04
3	Se 196.026†	4269.7	4255.2	2555.6	ug/L	2555.6 ppb	08:48:04
3	Si 251.611†	158021.7	156109.4	4762.6	ug/L	4762.6 ppb	08:47:44
3	Sn 189.927†	3261.6	3228.3	546.75	ug/L	546.75 ppb	08:48:04
3	Sr 421.552†	78802.8	80082.9	540.56	ug/L	540.56 ppb	08:46:24
3	Ti 334.940†	316188.4	314343.7	508.28	ug/L	508.28 ppb	08:47:44
3	Tl 190.801†	1831.5	1852.0	534.12	ug/L	534.12 ppb	08:48:04
3	U 409.014†	15219.2	17046.2	474.67	ug/L	474.67 ppb	08:47:44
3	V 292.402†	73844.6	74484.8	510.15	ug/L	510.15 ppb	08:47:44
3	Zn 213.857†	57412.5	56095.0	500.23	ug/L	500.23 ppb	08:47:44
3	SiO2†	157396.8	155509.3	10157	ug/L	10157 ppb	08:48:20

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897660.0	101.43	%	0.476				0.47%
Sc Radial	5618.0	99.2	%	2.14				2.16%
Y 371.029	744566.7	100.34	%	0.473				0.47%
Y RADIAL	6081.4	98.74	%	1.890				1.91%
Ag 328.068†	55587.1	260.12	ug/L	0.561	260.12	ppb	0.561	0.22%
QC value within limits for Ag 328.068 Recovery = 104.05%								
Al 396.153Radial†	6809.1	5010.4	ug/L	52.04	5010.4	ppb	52.04	1.04%
QC value within limits for Al 396.153Radial Recovery = 100.21%								
As 188.979†	1150.6	473.82	ug/L	2.297	473.82	ppb	2.297	0.48%
QC value within limits for As 188.979 Recovery = 94.76%								
B 249.677†	23434.3	506.74	ug/L	1.604	506.74	ppb	1.604	0.32%
QC value within limits for B 249.677 Recovery = 101.35%								
Ba 233.527†	66320.2	505.02	ug/L	1.178	505.02	ppb	1.178	0.23%
QC value within limits for Ba 233.527 Recovery = 101.00%								
Be 313.107†	690508.6	257.58	ug/L	0.541	257.58	ppb	0.541	0.21%
QC value within limits for Be 313.107 Recovery = 103.03%								

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Ca 317.933Radial†        3288.3      5028.4 ug/L        69.89      5028.4 ppb        69.89   1.39%
   QC value within limits for Ca 317.933Radial  Recovery = 100.57%
Cd 226.502†             45458.4      492.98 ug/L        2.025      492.98 ppb        2.025   0.41%
   QC value within limits for Cd 226.502  Recovery = 98.60%
Co 228.616†             25630.2      497.78 ug/L        4.090      497.78 ppb        4.090   0.82%
   QC value within limits for Co 228.616  Recovery = 99.56%
Cr 267.716†             44788.2      483.40 ug/L        1.145      483.40 ppb        1.145   0.24%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†            171220.4      498.22 ug/L        0.948      498.22 ppb        0.948   0.19%
   QC value within limits for Cu 324.752  Recovery = 99.64%
Fe 238.204 Radial†        507.1      5122.0 ug/L        62.00      5122.0 ppb        62.00   1.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.44%
K 766.490 Radial†       13990.5      2533.9 ug/L        45.22      2533.9 ppb        45.22   1.78%
   QC value within limits for K 766.490 Radial  Recovery = 101.36%
Mg 279.077 IEC†           143.7      5358.5 ug/L        96.24      5358.5 ppb        96.24   1.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.17%
Mn 257.610†            465958.8      506.78 ug/L        1.156      506.78 ppb        1.156   0.23%
   QC value within limits for Mn 257.610  Recovery = 101.36%
Mo 202.031†             8339.6      543.60 ug/L        4.138      543.60 ppb        4.138   0.76%
   QC value within limits for Mo 202.031  Recovery = 108.72%
Na 589.592 Radial†      6363.9      2392.0 ug/L        30.94      2392.0 ppb        30.94   1.29%
   QC value within limits for Na 589.592 Radial  Recovery = 95.68%
Ni 231.604†             20868.8      494.86 ug/L        4.193      494.86 ppb        4.193   0.85%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4182.8      2410.2 ug/L        26.77      2410.2 ppb        26.77   1.11%
   QC value within limits for P 214.914  Recovery = 96.41%
Pb 220.353†             4245.6      497.95 ug/L        4.310      497.95 ppb        4.310   0.87%
   QC value within limits for Pb 220.353  Recovery = 99.59%
S 181.975 Axial†        1704.2      2490.9 ug/L        20.51      2490.9 ppb        20.51   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 99.64%
Sb 206.836†             1542.0      509.79 ug/L        6.233      509.79 ppb        6.233   1.22%
   QC value within limits for Sb 206.836  Recovery = 101.96%
Se 196.026†             4202.7      2524.2 ug/L        27.20      2524.2 ppb        27.20   1.08%
   QC value within limits for Se 196.026  Recovery = 100.97%
Si 251.611†            155619.0      4747.7 ug/L        13.24      4747.7 ppb        13.24   0.28%
   QC value within limits for Si 251.611  Recovery = 94.95%
Sn 189.927†             3201.3      542.19 ug/L        4.315      542.19 ppb        4.315   0.80%
   QC value within limits for Sn 189.927  Recovery = 108.44%
Sr 421.552†            79530.9      536.83 ug/L        4.828      536.83 ppb        4.828   0.90%
   QC value within limits for Sr 421.552  Recovery = 107.37%
Ti 334.940†            313778.8      507.37 ug/L        0.794      507.37 ppb        0.794   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.47%
Tl 190.801†             1828.1      527.28 ug/L        6.020      527.28 ppb        6.020   1.14%
   QC value within limits for Tl 190.801  Recovery = 105.46%
U 409.014†             17055.4      474.93 ug/L        2.090      474.93 ppb        2.090   0.44%
   QC value within limits for U 409.014  Recovery = 94.99%
V 292.402†             74285.7      508.75 ug/L        1.263      508.75 ppb        1.263   0.25%
   QC value within limits for V 292.402  Recovery = 101.75%
Zn 213.857†            55871.2      498.24 ug/L        1.766      498.24 ppb        1.766   0.35%
   QC value within limits for Zn 213.857  Recovery = 99.65%
SiO2†                 155994.1       10189 ug/L         53.3       10189 ppb         53.3   0.52%
   QC value within limits for SiO2  Recovery = 95.27%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/9/2009 08:50:30
Data Type: Reprocessed on 12/9/2009 10:32:22

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885039.3	885039.3	100.01	%			08:53:40
1	Sc Radial	6007.8	6007.8	106	%			08:52:23
1	Y 371.029	743826.3	743826.3	100.24	%			08:53:40
1	Y RADIAL	6510.4	6510.4	105.7	%			08:52:23
1	Ag 328.068†	220.0	-7.6	-0.0265	ug/L	-0.0265	ppb	08:53:40
1	Al 396.153Radial†	-24.9	-3.1	-2.2915	ug/L	-2.2915	ppb	08:52:43
1	As 188.979†	-24.6	4.6	1.8821	ug/L	1.8821	ppb	08:54:00
1	B 249.677†	-224.5	299.4	6.4983	ug/L	6.4983	ppb	08:54:00
1	Ba 233.527†	-23.4	-11.4	-0.0848	ug/L	-0.0848	ppb	08:54:00
1	Be 313.107†	-5243.3	77.4	0.0283	ug/L	0.0283	ppb	08:53:40
1	Ca 317.933Radial†	18.8	0.0	0.0108	ug/L	0.0108	ppb	08:52:43
1	Cd 226.502†	-163.5	24.3	0.2632	ug/L	0.2632	ppb	08:54:00
1	Co 228.616†	-75.4	-3.6	-0.0698	ug/L	-0.0698	ppb	08:54:00
1	Cr 267.716†	75.3	-11.7	-0.1233	ug/L	-0.1233	ppb	08:54:00
1	Cu 324.752†	6855.2	86.1	0.2507	ug/L	0.2507	ppb	08:53:40
1	Fe 238.204 Radial†	7.2	0.7	7.2006	ug/L	7.2006	ppb	08:52:43
1	K 766.490 Radial†	2180.9	-114.5	-20.779	ug/L	-20.779	ppb	08:52:23
1	Mg 279.077 IEC†	1.3	-0.6	-21.220	ug/L	-21.220	ppb	08:52:43
1	Mn 257.610†	412.7	9.3	0.0112	ug/L	0.0112	ppb	08:54:00
1	Mo 202.031†	20.4	0.4	0.0294	ug/L	0.0294	ppb	08:54:00
1	Na 589.592 Radial†	-632.0	20.2	7.6089	ug/L	7.6089	ppb	08:52:23
1	Ni 231.604†	83.6	13.5	0.3200	ug/L	0.3200	ppb	08:54:00
1	P 214.914†	206.1	-13.9	-8.3010	ug/L	-8.3010	ppb	08:54:00
1	Pb 220.353†	-33.4	19.2	2.2424	ug/L	2.2424	ppb	08:54:00
1	S 181.975 Axial†	38.2	-3.3	-4.7613	ug/L	-4.7613	ppb	08:54:00
1	Sb 206.836†	34.3	4.7	1.5120	ug/L	1.5120	ppb	08:54:00
1	Se 196.026†	-29.9	-6.5	-3.8251	ug/L	-3.8251	ppb	08:54:00
1	Si 251.611†	459.2	-48.9	-1.4872	ug/L	-1.4872	ppb	08:54:00
1	Sn 189.927†	0.8	-3.4	-0.5799	ug/L	-0.5799	ppb	08:54:00
1	Sr 421.552†	17.2	12.8	0.0865	ug/L	0.0865	ppb	08:52:23
1	Ti 334.940†	-1119.0	-153.9	-0.2468	ug/L	-0.2468	ppb	08:53:40
1	Tl 190.801†	-22.7	14.2	4.0585	ug/L	4.0585	ppb	08:54:00
1	U 409.014†	-2134.0	-171.6	-4.7958	ug/L	-4.7958	ppb	08:53:40
1	V 292.402†	-1205.4	91.1	0.6051	ug/L	0.6051	ppb	08:53:40
1	Zn 213.857†	940.6	133.2	1.1963	ug/L	1.1963	ppb	08:54:00
1	SiO2†	476.1	-12.8	-0.8192	ug/L	-0.8192	ppb	08:54:56
2	Sc 361.383	884186.2	884186.2	99.911	%			08:54:05
2	Sc Radial	5598.7	5598.7	98.9	%			08:52:48
2	Y 371.029	743197.1	743197.1	100.15	%			08:54:05
2	Y RADIAL	6093.1	6093.1	98.93	%			08:52:48
2	Ag 328.068†	347.5	120.3	0.5593	ug/L	0.5593	ppb	08:54:05
2	Al 396.153Radial†	-26.2	-6.2	-4.5398	ug/L	-4.5398	ppb	08:53:08
2	As 188.979†	-18.3	10.9	4.4392	ug/L	4.4392	ppb	08:54:25
2	B 249.677†	-211.2	312.4	6.7796	ug/L	6.7796	ppb	08:54:25
2	Ba 233.527†	-17.8	-5.7	-0.0442	ug/L	-0.0442	ppb	08:54:25
2	Be 313.107†	-5176.8	138.8	0.0514	ug/L	0.0514	ppb	08:54:05
2	Ca 317.933Radial†	19.1	1.6	2.4285	ug/L	2.4285	ppb	08:53:08
2	Cd 226.502†	-164.7	23.0	0.2483	ug/L	0.2483	ppb	08:54:25
2	Co 228.616†	-69.8	1.9	0.0363	ug/L	0.0363	ppb	08:54:25
2	Cr 267.716†	71.7	-15.2	-0.1644	ug/L	-0.1644	ppb	08:54:25
2	Cu 324.752†	6794.8	32.2	0.0945	ug/L	0.0945	ppb	08:54:05
2	Fe 238.204 Radial†	7.5	1.5	15.338	ug/L	15.338	ppb	08:53:08
2	K 766.490 Radial†	2238.8	94.3	17.130	ug/L	17.130	ppb	08:52:48
2	Mg 279.077 IEC†	1.1	-0.7	-25.524	ug/L	-25.524	ppb	08:53:08
2	Mn 257.610†	412.1	9.0	0.0118	ug/L	0.0118	ppb	08:54:25
2	Mo 202.031†	17.1	-2.8	-0.1835	ug/L	-0.1835	ppb	08:54:25
2	Na 589.592 Radial†	-665.5	-57.2	-21.494	ug/L	-21.494	ppb	08:52:48
2	Ni 231.604†	83.6	13.5	0.3209	ug/L	0.3209	ppb	08:54:25

2	P 214.914†	199.9	-19.9	-11.852	ug/L	-11.852 ppb	08:54:25
2	Pb 220.353†	-52.6	-0.1	-0.0194	ug/L	-0.0194 ppb	08:54:25
2	S 181.975 Axial†	41.9	0.5	0.7238	ug/L	0.7238 ppb	08:54:25
2	Sb 206.836†	32.0	2.4	0.8056	ug/L	0.8056 ppb	08:54:25
2	Se 196.026†	-26.3	-2.9	-1.6864	ug/L	-1.6864 ppb	08:54:25
2	Si 251.611†	483.1	-24.5	-0.7548	ug/L	-0.7548 ppb	08:54:25
2	Sn 189.927†	8.1	3.8	0.6470	ug/L	0.6470 ppb	08:54:25
2	Sr 421.552†	9.6	6.3	0.0423	ug/L	0.0423 ppb	08:52:48
2	Ti 334.940†	-1018.8	-54.7	-0.0879	ug/L	-0.0879 ppb	08:54:05
2	Tl 190.801†	-32.8	4.0	1.1521	ug/L	1.1521 ppb	08:54:25
2	U 409.014†	-1984.7	-24.2	-0.6790	ug/L	-0.6790 ppb	08:54:05
2	V 292.402†	-1373.3	-78.1	-0.5337	ug/L	-0.5337 ppb	08:54:05
2	Zn 213.857†	924.7	118.3	1.0616	ug/L	1.0616 ppb	08:54:25
2	SiO2†	497.5	9.1	0.5882	ug/L	0.5882 ppb	08:55:01
3	Sc 361.383	880642.4	880642.4	99.511	%		08:54:30
3	Sc Radial	5554.9	5554.9	98.1	%		08:53:13
3	Y 371.029	740637.9	740637.9	99.807	%		08:54:30
3	Y RADIAL	6040.2	6040.2	98.08	%		08:53:13
3	Ag 328.068†	199.9	-26.6	-0.1242	ug/L	-0.1242 ppb	08:54:30
3	Al 396.153Radial†	-25.2	-5.3	-3.9345	ug/L	-3.9345 ppb	08:53:33
3	As 188.979†	-18.3	10.8	4.4225	ug/L	4.4225 ppb	08:54:51
3	B 249.677†	-202.0	320.9	6.9648	ug/L	6.9648 ppb	08:54:51
3	Ba 233.527†	-10.4	1.6	0.0114	ug/L	0.0114 ppb	08:54:51
3	Be 313.107†	-5210.3	84.4	0.0315	ug/L	0.0315 ppb	08:54:30
3	Ca 317.933Radial†	17.7	0.3	0.4667	ug/L	0.4667 ppb	08:53:33
3	Cd 226.502†	-163.1	24.0	0.2605	ug/L	0.2605 ppb	08:54:51
3	Co 228.616†	-66.1	5.4	0.1030	ug/L	0.1030 ppb	08:54:51
3	Cr 267.716†	75.8	-10.8	-0.1169	ug/L	-0.1169 ppb	08:54:51
3	Cu 324.752†	6867.1	132.2	0.3845	ug/L	0.3845 ppb	08:54:30
3	Fe 238.204 Radial†	5.8	-0.1	-1.1921	ug/L	-1.1921 ppb	08:53:33
3	K 766.490 Radial†	2207.8	80.7	14.635	ug/L	14.635 ppb	08:53:13
3	Mg 279.077 IEC†	2.1	0.3	12.561	ug/L	12.561 ppb	08:53:33
3	Mn 257.610†	406.6	5.2	0.0053	ug/L	0.0053 ppb	08:54:51
3	Mo 202.031†	13.2	-6.8	-0.4408	ug/L	-0.4408 ppb	08:54:51
3	Na 589.592 Radial†	-602.7	1.5	0.5493	ug/L	0.5493 ppb	08:53:13
3	Ni 231.604†	83.5	13.8	0.3265	ug/L	0.3265 ppb	08:54:51
3	P 214.914†	195.4	-23.6	-14.059	ug/L	-14.059 ppb	08:54:51
3	Pb 220.353†	-65.5	-13.3	-1.5534	ug/L	-1.5534 ppb	08:54:51
3	S 181.975 Axial†	44.3	3.1	4.4794	ug/L	4.4794 ppb	08:54:51
3	Sb 206.836†	38.2	8.8	2.8570	ug/L	2.8570 ppb	08:54:51
3	Se 196.026†	-24.4	-1.0	-0.6240	ug/L	-0.6240 ppb	08:54:51
3	Si 251.611†	485.7	-19.9	-0.6080	ug/L	-0.6080 ppb	08:54:51
3	Sn 189.927†	6.6	2.4	0.4063	ug/L	0.4063 ppb	08:54:51
3	Sr 421.552†	15.9	12.8	0.0863	ug/L	0.0863 ppb	08:53:13
3	Ti 334.940†	-921.1	39.4	0.0639	ug/L	0.0639 ppb	08:54:30
3	Tl 190.801†	-27.3	9.4	2.6959	ug/L	2.6959 ppb	08:54:51
3	U 409.014†	-1968.7	-16.2	-0.4536	ug/L	-0.4536 ppb	08:54:30
3	V 292.402†	-1329.2	-39.3	-0.2718	ug/L	-0.2718 ppb	08:54:30
3	Zn 213.857†	928.1	125.4	1.1255	ug/L	1.1255 ppb	08:54:51
3	SiO2†	478.8	-7.7	-0.5018	ug/L	-0.5018 ppb	08:55:06

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883289.3	99.810	%	0.2635				0.26%
Sc Radial	5720.5	101	%	4.4				4.37%
Y 371.029	742553.8	100.06	%	0.228				0.23%
Y RADIAL	6214.6	100.9	%	4.18				4.14%
Ag 328.068†	28.7	0.1362	ug/L	0.36969	0.1362	ppb	0.36969	271.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.9	-3.5886	ug/L	1.16340	-3.5886	ppb	1.16340	32.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.5813	ug/L	1.47158	3.5813	ppb	1.47158	41.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	310.9	6.7476	ug/L	0.23493	6.7476	ppb	0.23493	3.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0392	ug/L	0.04829	-0.0392	ppb	0.04829	123.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	100.2	0.0370	ug/L	0.01254	0.0370	ppb	0.01254	33.84%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          0.6      0.9687 ug/L       1.28460      0.9687 ppb        1.28460 132.62%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               23.8      0.2573 ug/L       0.00793      0.2573 ppb        0.00793   3.08%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.2      0.0232 ug/L       0.08712      0.0232 ppb        0.08712 376.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -12.6     -0.1349 ug/L       0.02582     -0.1349 ppb        0.02582  19.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               83.5      0.2432 ug/L       0.14514      0.2432 ppb        0.14514  59.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      7.1156 ug/L       8.26554      7.1156 ppb        8.26554 116.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         20.2      3.6621 ug/L      21.20314      3.6621 ppb       21.20314 578.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3    -11.394 ug/L       20.8573     -11.394 ppb        20.8573 183.05%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                7.8      0.0094 ug/L       0.00359      0.0094 ppb        0.00359  38.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -3.1     -0.1983 ug/L       0.23544     -0.1983 ppb        0.23544 118.74%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -11.8     -4.4452 ug/L      15.18056     -4.4452 ppb       15.18056 341.51%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               13.6      0.3225 ug/L       0.00351      0.3225 ppb        0.00351   1.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -19.1    -11.404 ug/L        2.9048    -11.404 ppb         2.9048  25.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.9      0.2232 ug/L       1.90946      0.2232 ppb        1.90946 855.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.1      0.1473 ug/L       4.64729      0.1473 ppb        4.64729 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                5.3      1.7249 ug/L       1.04211      1.7249 ppb        1.04211  60.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.5     -2.0452 ug/L       1.63044     -2.0452 ppb        1.63044  79.72%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.1     -0.9500 ug/L       0.47099     -0.9500 ppb        0.47099  49.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.9      0.1578 ug/L       0.65011      0.1578 ppb        0.65011 412.03%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.6      0.0717 ug/L       0.02547      0.0717 ppb        0.02547  35.50%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -56.4     -0.0903 ug/L       0.15535     -0.0903 ppb        0.15535 172.11%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                9.2      2.6355 ug/L       1.45412      2.6355 ppb        1.45412  55.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -70.7     -1.9761 ug/L       2.44454     -1.9761 ppb        2.44454 123.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -8.7     -0.0668 ug/L       0.59642     -0.0668 ppb        0.59642 892.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              125.6      1.1278 ug/L       0.06737      1.1278 ppb        0.06737   5.97%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -3.8     -0.2443 ug/L       0.73817     -0.2443 ppb        0.73817 302.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/9/2009 08:57:17
Data Type: Reprocessed on 12/9/2009 10:32:23

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896476.4	896476.4	101.30	%			09:00:27
1	Sc Radial	5639.9	5639.9	99.6	%			08:59:10
1	Y 371.029	751861.8	751861.8	101.32	%			09:00:27
1	Y RADIAL	6141.4	6141.4	99.72	%			08:59:10
1	Ag 328.068†	1439.7	1193.6	5.5275	ug/L	5.5275	ppb	09:00:27
1	Al 396.153Radial†	258.9	280.3	206.82	ug/L	206.82	ppb	08:59:10
1	As 188.979†	43.4	72.1	29.441	ug/L	29.441	ppb	09:00:47
1	B 249.677†	1840.1	2340.3	50.773	ug/L	50.773	ppb	09:00:27
1	Ba 233.527†	636.6	640.5	4.8797	ug/L	4.8797	ppb	09:00:47
1	Be 313.107†	7816.4	13036.3	4.8572	ug/L	4.8572	ppb	09:00:27
1	Ca 317.933Radial†	148.1	131.0	200.36	ug/L	200.36	ppb	08:59:30
1	Cd 226.502†	296.0	480.1	5.2002	ug/L	5.2002	ppb	09:00:47
1	Co 228.616†	183.3	252.7	4.9146	ug/L	4.9146	ppb	09:00:47
1	Cr 267.716†	516.6	423.0	4.5517	ug/L	4.5517	ppb	09:00:47
1	Cu 324.752†	10374.0	3472.2	10.104	ug/L	10.104	ppb	09:00:27
1	Fe 238.204 Radial†	17.3	11.4	114.69	ug/L	114.69	ppb	08:59:30
1	K 766.490 Radial†	2975.0	817.0	148.06	ug/L	148.06	ppb	08:59:10
1	Mg 279.077 IEC†	11.4	9.7	362.42	ug/L	362.42	ppb	08:59:30
1	Mn 257.610†	9934.1	9403.2	10.223	ug/L	10.223	ppb	09:00:27
1	Mo 202.031†	170.3	148.1	9.6541	ug/L	9.6541	ppb	09:00:47
1	Na 589.592 Radial†	174.3	790.9	297.29	ug/L	297.29	ppb	08:59:10
1	Ni 231.604†	301.4	227.5	5.3940	ug/L	5.3940	ppb	09:00:47
1	P 214.914†	459.7	233.8	137.40	ug/L	137.40	ppb	09:00:47
1	Pb 220.353†	28.5	80.6	9.4798	ug/L	9.4798	ppb	09:00:47
1	S 181.975 Axial†	109.5	66.6	97.367	ug/L	97.367	ppb	09:00:47
1	Sb 206.836†	59.8	29.5	9.8092	ug/L	9.8092	ppb	09:00:47
1	Se 196.026†	26.7	49.8	30.127	ug/L	30.127	ppb	09:00:47
1	Si 251.611†	3572.6	3018.7	92.084	ug/L	92.084	ppb	09:00:47
1	Sn 189.927†	59.2	54.2	9.1911	ug/L	9.1911	ppb	09:00:47
1	Sr 421.552†	742.0	741.7	5.0050	ug/L	5.0050	ppb	08:59:10
1	Ti 334.940†	3181.4	4105.6	6.6263	ug/L	6.6263	ppb	09:00:27
1	Tl 190.801†	30.0	66.5	19.130	ug/L	19.130	ppb	09:00:47
1	U 409.014†	-119.8	1844.0	51.494	ug/L	51.494	ppb	09:00:27
1	V 292.402†	-576.7	727.2	5.1283	ug/L	5.1283	ppb	09:00:27
1	Zn 213.857†	1760.6	930.7	8.3039	ug/L	8.3039	ppb	09:00:47
1	SiO2†	3702.5	3166.1	206.79	ug/L	206.79	ppb	09:01:43
2	Sc 361.383	889696.1	889696.1	100.53	%			09:00:52
2	Sc Radial	5497.7	5497.7	97.1	%			08:59:35
2	Y 371.029	748074.5	748074.5	100.81	%			09:00:52
2	Y RADIAL	6002.9	6002.9	97.47	%			08:59:35
2	Ag 328.068†	1455.6	1220.3	5.6550	ug/L	5.6550	ppb	09:00:52
2	Al 396.153Radial†	248.9	276.7	204.18	ug/L	204.18	ppb	08:59:35
2	As 188.979†	44.9	73.9	30.185	ug/L	30.185	ppb	09:01:12
2	B 249.677†	1849.6	2363.6	51.275	ug/L	51.275	ppb	09:00:52
2	Ba 233.527†	663.8	672.3	5.1222	ug/L	5.1222	ppb	09:01:12
2	Be 313.107†	7969.5	13247.4	4.9325	ug/L	4.9325	ppb	09:00:52
2	Ca 317.933Radial†	145.2	131.9	201.65	ug/L	201.65	ppb	08:59:55
2	Cd 226.502†	261.6	448.1	4.8505	ug/L	4.8505	ppb	09:01:12
2	Co 228.616†	183.3	254.1	4.9439	ug/L	4.9439	ppb	09:01:12
2	Cr 267.716†	517.0	427.3	4.5977	ug/L	4.5977	ppb	09:01:12
2	Cu 324.752†	10333.8	3510.3	10.216	ug/L	10.216	ppb	09:00:52
2	Fe 238.204 Radial†	19.2	13.7	138.17	ug/L	138.17	ppb	08:59:55
2	K 766.490 Radial†	2995.5	915.5	165.94	ug/L	165.94	ppb	08:59:35
2	Mg 279.077 IEC†	13.0	11.6	433.28	ug/L	433.28	ppb	08:59:55
2	Mn 257.610†	9913.7	9457.7	10.284	ug/L	10.284	ppb	09:00:52
2	Mo 202.031†	163.1	142.2	9.2742	ug/L	9.2742	ppb	09:01:12
2	Na 589.592 Radial†	94.1	712.9	267.96	ug/L	267.96	ppb	08:59:35
2	Ni 231.604†	294.4	222.8	5.2825	ug/L	5.2825	ppb	09:01:12

2	P 214.914†	452.6	230.2	135.23 ug/L	135.23 ppb	09:01:12
2	Pb 220.353†	38.2	90.5	10.632 ug/L	10.632 ppb	09:01:12
2	S 181.975 Axial†	106.4	64.4	94.079 ug/L	94.079 ppb	09:01:12
2	Sb 206.836†	59.8	29.8	9.9548 ug/L	9.9548 ppb	09:01:12
2	Se 196.026†	20.7	44.0	26.718 ug/L	26.718 ppb	09:01:12
2	Si 251.611†	3576.5	3049.5	93.021 ug/L	93.021 ppb	09:01:12
2	Sn 189.927†	67.2	62.5	10.603 ug/L	10.603 ppb	09:01:12
2	Sr 421.552†	704.7	722.5	4.8754 ug/L	4.8754 ppb	08:59:35
2	Ti 334.940†	2138.6	3092.3	4.9858 ug/L	4.9858 ppb	09:00:52
2	Tl 190.801†	33.8	70.5	20.262 ug/L	20.262 ppb	09:01:12
2	U 409.014†	5.4	1967.6	54.945 ug/L	54.945 ppb	09:00:52
2	V 292.402†	-579.5	720.1	5.0813 ug/L	5.0813 ppb	09:00:52
2	Zn 213.857†	1770.3	953.6	8.5058 ug/L	8.5058 ppb	09:01:12
2	SiO2†	3692.8	3184.3	207.98 ug/L	207.98 ppb	09:01:48
3	Sc 361.383	911746.6	911746.6	103.03 %		09:01:18
3	Sc Radial	5691.2	5691.2	100 %		09:00:00
3	Y 371.029	767276.2	767276.2	103.40 %		09:01:18
3	Y RADIAL	6175.4	6175.4	100.3 %		09:00:00
3	Ag 328.068†	1410.1	1141.1	5.2890 ug/L	5.2890 ppb	09:01:18
3	Al 396.153Radial†	235.7	254.9	188.05 ug/L	188.05 ppb	09:00:00
3	As 188.979†	36.4	64.5	26.352 ug/L	26.352 ppb	09:01:38
3	B 249.677†	1919.5	2386.9	51.782 ug/L	51.782 ppb	09:01:18
3	Ba 233.527†	656.1	648.9	4.9443 ug/L	4.9443 ppb	09:01:38
3	Be 313.107†	7943.6	13030.6	4.8515 ug/L	4.8515 ppb	09:01:18
3	Ca 317.933Radial†	151.4	132.9	203.27 ug/L	203.27 ppb	09:00:20
3	Cd 226.502†	277.2	456.9	4.9462 ug/L	4.9462 ppb	09:01:38
3	Co 228.616†	183.2	249.6	4.8573 ug/L	4.8573 ppb	09:01:38
3	Cr 267.716†	522.0	419.7	4.5162 ug/L	4.5162 ppb	09:01:38
3	Cu 324.752†	10328.2	3256.2	9.4770 ug/L	9.4770 ppb	09:01:18
3	Fe 238.204 Radial†	19.6	13.5	135.71 ug/L	135.71 ppb	09:00:20
3	K 766.490 Radial†	3044.5	859.3	155.74 ug/L	155.74 ppb	09:00:00
3	Mg 279.077 IEC†	8.5	6.7	250.23 ug/L	250.23 ppb	09:00:20
3	Mn 257.610†	9907.6	9213.2	10.021 ug/L	10.021 ppb	09:01:18
3	Mo 202.031†	165.5	140.7	9.1734 ug/L	9.1734 ppb	09:01:38
3	Na 589.592 Radial†	122.1	737.5	277.19 ug/L	277.19 ppb	09:00:00
3	Ni 231.604†	288.7	210.1	4.9830 ug/L	4.9830 ppb	09:01:38
3	P 214.914†	457.7	224.3	131.83 ug/L	131.83 ppb	09:01:38
3	Pb 220.353†	43.7	94.9	11.145 ug/L	11.145 ppb	09:01:38
3	S 181.975 Axial†	115.0	70.1	102.50 ug/L	102.50 ppb	09:01:38
3	Sb 206.836†	64.7	33.2	11.050 ug/L	11.050 ppb	09:01:38
3	Se 196.026†	30.6	53.1	32.145 ug/L	32.145 ppb	09:01:38
3	Si 251.611†	3564.3	2951.6	90.034 ug/L	90.034 ppb	09:01:38
3	Sn 189.927†	65.4	59.2	10.032 ug/L	10.032 ppb	09:01:38
3	Sr 421.552†	738.1	731.0	4.9331 ug/L	4.9331 ppb	09:00:00
3	Ti 334.940†	2081.2	2985.1	4.8129 ug/L	4.8129 ppb	09:01:18
3	Tl 190.801†	28.3	64.3	18.493 ug/L	18.493 ppb	09:01:38
3	U 409.014†	-9.5	1953.0	54.537 ug/L	54.537 ppb	09:01:18
3	V 292.402†	-574.5	738.8	5.2022 ug/L	5.2022 ppb	09:01:18
3	Zn 213.857†	1772.2	912.9	8.1486 ug/L	8.1486 ppb	09:01:38
3	SiO2†	3724.3	3126.1	204.18 ug/L	204.18 ppb	09:01:53

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899306.4	101.62	%	1.276				1.26%
Sc Radial	5609.6	99.1	%	1.77				1.79%
Y 371.029	755737.5	101.84	%	1.371				1.35%
Y RADIAL	6106.6	99.15	%	1.484				1.50%
Ag 328.068†	1185.0	5.4905	ug/L	0.18581	5.4905	ppb	0.18581	3.38%
QC value within limits for Ag 328.068 Recovery = 109.81%								
Al 396.153Radial†	270.7	199.68	ug/L	10.163	199.68	ppb	10.163	5.09%
QC value within limits for Al 396.153Radial Recovery = 99.84%								
As 188.979†	70.2	28.659	ug/L	2.0326	28.659	ppb	2.0326	7.09%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2363.6	51.277	ug/L	0.5046	51.277	ppb	0.5046	0.98%
QC value within limits for B 249.677 Recovery = 102.55%								
Ba 233.527†	653.9	4.9821	ug/L	0.12557	4.9821	ppb	0.12557	2.52%
QC value within limits for Ba 233.527 Recovery = 99.64%								
Be 313.107†	13104.8	4.8804	ug/L	0.04516	4.8804	ppb	0.04516	0.93%
QC value within limits for Be 313.107 Recovery = 97.61%								

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Ca 317.933Radial†        131.9      201.76 ug/L        1.457      201.76 ppb        1.457   0.72%
   QC value within limits for Ca 317.933Radial  Recovery = 100.88%
Cd 226.502†              461.7      4.9990 ug/L      0.18071      4.9990 ppb      0.18071   3.61%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†              252.1      4.9053 ug/L      0.04406      4.9053 ppb      0.04406   0.90%
   QC value within limits for Co 228.616  Recovery = 98.11%
Cr 267.716†              423.4      4.5552 ug/L      0.04086      4.5552 ppb      0.04086   0.90%
   QC value within limits for Cr 267.716  Recovery = 91.10%
Cu 324.752†             3412.9      9.9323 ug/L      0.39829      9.9323 ppb      0.39829   4.01%
   QC value within limits for Cu 324.752  Recovery = 99.32%
Fe 238.204 Radial†        12.8      129.52 ug/L       12.901      129.52 ppb       12.901   9.96%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.52%
K 766.490 Radial†        863.9      156.58 ug/L        8.970      156.58 ppb        8.970   5.73%
   QC value within limits for K 766.490 Radial  Recovery = 104.39%
Mg 279.077 IEC†            9.4      348.64 ug/L       92.297      348.64 ppb       92.297  26.47%
   QC value within limits for Mg 279.077 IEC  Recovery = 116.21%
Mn 257.610†             9358.0      10.176 ug/L       0.1375      10.176 ppb       0.1375   1.35%
   QC value within limits for Mn 257.610  Recovery = 101.76%
Mo 202.031†              143.7      9.3672 ug/L      0.25349      9.3672 ppb      0.25349   2.71%
   QC value within limits for Mo 202.031  Recovery = 93.67%
Na 589.592 Radial†       747.1      280.82 ug/L       14.998      280.82 ppb       14.998   5.34%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†              220.1      5.2199 ug/L      0.21252      5.2199 ppb      0.21252   4.07%
   QC value within limits for Ni 231.604  Recovery = 104.40%
P 214.914†               229.4      134.82 ug/L        2.807      134.82 ppb        2.807   2.08%
   QC value within limits for P 214.914  Recovery = 89.88%
Pb 220.353†               88.7      10.419 ug/L       0.8528      10.419 ppb       0.8528   8.19%
   QC value within limits for Pb 220.353  Recovery = 104.19%
S 181.975 Axial†          67.0      97.983 ug/L       4.2452      97.983 ppb       4.2452   4.33%
   QC value within limits for S 181.975 Axial  Recovery = 97.98%
Sb 206.836†               30.8      10.271 ug/L       0.6785      10.271 ppb       0.6785   6.61%
   QC value within limits for Sb 206.836  Recovery = 102.71%
Se 196.026†               49.0      29.663 ug/L       2.7433      29.663 ppb       2.7433   9.25%
   QC value within limits for Se 196.026  Recovery = 98.88%
Si 251.611†             3006.6      91.713 ug/L       1.5276      91.713 ppb       1.5276   1.67%
   QC value within limits for Si 251.611  Recovery = 91.71%
Sn 189.927†               58.6      9.9422 ug/L      0.71035      9.9422 ppb      0.71035   7.14%
   QC value within limits for Sn 189.927  Recovery = 99.42%
Sr 421.552†              731.7      4.9378 ug/L      0.06490      4.9378 ppb      0.06490   1.31%
   QC value within limits for Sr 421.552  Recovery = 98.76%
Ti 334.940†             3394.3      5.4750 ug/L      1.00080      5.4750 ppb      1.00080  18.28%
   QC value within limits for Ti 334.940  Recovery = 109.50%
Tl 190.801†               67.1      19.295 ug/L       0.8963      19.295 ppb       0.8963   4.65%
   QC value within limits for Tl 190.801  Recovery = 96.47%
U 409.014†              1921.5      53.659 ug/L       1.8853      53.659 ppb       1.8853   3.51%
   QC value within limits for U 409.014  Recovery = 107.32%
V 292.402†               728.7      5.1373 ug/L      0.06097      5.1373 ppb      0.06097   1.19%
   QC value within limits for V 292.402  Recovery = 102.75%
Zn 213.857†              932.4      8.3194 ug/L      0.17911      8.3194 ppb      0.17911   2.15%
   QC value within limits for Zn 213.857  Recovery = 83.19%
SiO2†                   3158.9      206.32 ug/L        1.943      206.32 ppb        1.943   0.94%
   QC value within limits for SiO2  Recovery = 96.86%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/9/2009 09:04:05
Data Type: Reprocessed on 12/9/2009 10:32:24

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	766943.3	766943.3	86.663	%			09:06:31
1	Sc Radial	5161.3	5161.3	91.1	%			09:06:04
1	Y 371.029	627463.9	627463.9	84.556	%			09:06:31
1	Y RADIAL	5628.8	5628.8	91.40	%			09:06:04
1	Ag 328.068†	-9591.5	-11295.2	0.4346	ug/L	0.4346	ppb	09:06:31
1	Al 396.153Radial†	635373.7	697200.9	515400	ug/L	515400	ppb	09:05:59
1	As 188.979†	-79.1	-62.1	3.3536	ug/L	3.3536	ppb	09:06:51
1	B 249.677†	563.8	1174.4	0.6643	ug/L	0.6643	ppb	09:06:31
1	Ba 233.527†	-440.7	-496.5	3.2085	ug/L	3.2085	ppb	09:06:51
1	Be 313.107†	-5691.8	-1247.5	-0.5174	ug/L	-0.5174	ppb	09:06:31
1	Ca 317.933Radial†	282566.8	310036.2	474100	ug/L	474100	ppb	09:05:59
1	Cd 226.502†	1440.2	1849.6	1.3590	ug/L	1.3590	ppb	09:06:51
1	Co 228.616†	-29.5	37.7	-1.9298	ug/L	-1.9298	ppb	09:06:51
1	Cr 267.716†	-117.5	-222.5	0.9709	ug/L	0.9709	ppb	09:06:51
1	Cu 324.752†	4309.8	-1795.6	4.3244	ug/L	4.3244	ppb	09:06:31
1	Fe 238.204 Radial†	16943.3	18585.4	187140	ug/L	187140	ppb	09:06:04
1	K 766.490 Radial†	2130.7	167.7	46.717	ug/L	46.717	ppb	09:06:04
1	Mg 279.077 IEC†	11941.9	13101.8	487730	ug/L	487730	ppb	09:06:04
1	Mn 257.610†	575.1	260.2	9.8617	ug/L	9.8617	ppb	09:06:31
1	Mo 202.031†	-243.6	-301.0	-6.3338	ug/L	-6.3338	ppb	09:06:51
1	Na 589.592 Radial†	-477.6	91.9	34.544	ug/L	34.544	ppb	09:06:04
1	Ni 231.604†	200.7	161.4	3.8298	ug/L	3.8298	ppb	09:06:51
1	P 214.914†	155.6	-40.4	-0.3493	ug/L	-0.3493	ppb	09:06:51
1	Pb 220.353†	-752.7	-816.0	4.8633	ug/L	4.8633	ppb	09:06:51
1	S 181.975 Axial†	82.4	53.6	-22.981	ug/L	-22.981	ppb	09:06:51
1	Sb 206.836†	51.5	29.8	-2.8372	ug/L	-2.8372	ppb	09:06:51
1	Se 196.026†	-952.6	-1075.7	6.8174	ug/L	6.8174	ppb	09:06:51
1	Si 251.611†	456.2	18.4	1.1083	ug/L	1.1083	ppb	09:06:51
1	Sn 189.927†	-350.0	-408.2	-17.045	ug/L	-17.045	ppb	09:06:51
1	Sr 421.552†	523.9	571.5	-0.5365	ug/L	-0.5365	ppb	09:06:04
1	Ti 334.940†	-15509.4	-16931.2	-2.6642	ug/L	-2.6642	ppb	09:06:31
1	Tl 190.801†	-86.9	-63.4	-4.3006	ug/L	-4.3006	ppb	09:06:51
1	U 409.014†	-890.5	934.7	2.5732	ug/L	2.5732	ppb	09:06:31
1	V 292.402†	1061.3	2521.1	-0.6421	ug/L	-0.6421	ppb	09:06:51
1	Zn 213.857†	3253.7	2947.1	-8.0725	ug/L	-8.0725	ppb	09:06:51
1	SiO2†	664.6	278.1	19.399	ug/L	19.399	ppb	09:07:47
2	Sc 361.383	764245.3	764245.3	86.358	%			09:06:56
2	Sc Radial	5162.4	5162.4	91.2	%			09:06:14
2	Y 371.029	624372.6	624372.6	84.139	%			09:06:56
2	Y RADIAL	5563.1	5563.1	90.33	%			09:06:14
2	Ag 328.068†	-9701.4	-11461.5	-0.6081	ug/L	-0.6081	ppb	09:06:56
2	Al 396.153Radial†	630403.1	691597.3	511260	ug/L	511260	ppb	09:06:09
2	As 188.979†	-96.0	-81.9	-4.8844	ug/L	-4.8844	ppb	09:07:16
2	B 249.677†	717.6	1354.8	4.7079	ug/L	4.7079	ppb	09:06:56
2	Ba 233.527†	-465.6	-527.1	2.9406	ug/L	2.9406	ppb	09:07:16
2	Be 313.107†	-5728.6	-1313.3	-0.5410	ug/L	-0.5410	ppb	09:06:56
2	Ca 317.933Radial†	281090.2	308349.3	471520	ug/L	471520	ppb	09:06:09
2	Cd 226.502†	1414.8	1826.2	1.2008	ug/L	1.2008	ppb	09:07:16
2	Co 228.616†	-0.8	70.8	-1.2709	ug/L	-1.2709	ppb	09:07:16
2	Cr 267.716†	-87.2	-188.0	1.3244	ug/L	1.3244	ppb	09:07:16
2	Cu 324.752†	4253.3	-1843.4	4.1359	ug/L	4.1359	ppb	09:06:56
2	Fe 238.204 Radial†	16859.4	18489.4	186180	ug/L	186180	ppb	09:06:14
2	K 766.490 Radial†	2153.5	192.2	50.834	ug/L	50.834	ppb	09:06:14
2	Mg 279.077 IEC†	11966.3	13125.7	488620	ug/L	488620	ppb	09:06:14
2	Mn 257.610†	536.7	218.0	9.7029	ug/L	9.7029	ppb	09:06:56
2	Mo 202.031†	-225.5	-281.1	-5.1062	ug/L	-5.1062	ppb	09:07:16
2	Na 589.592 Radial†	-525.6	39.4	14.807	ug/L	14.807	ppb	09:06:14
2	Ni 231.604†	191.8	152.0	3.6067	ug/L	3.6067	ppb	09:07:16

2	P 214.914†	186.0	-4.6	20.288	ug/L	20.288 ppb	09:07:16
2	Pb 220.353†	-733.3	-796.5	6.2948	ug/L	6.2948 ppb	09:07:16
2	S 181.975 Axial†	77.0	47.7	-30.838	ug/L	-30.838 ppb	09:07:16
2	Sb 206.836†	58.0	37.6	-0.2059	ug/L	-0.2059 ppb	09:07:16
2	Se 196.026†	-961.5	-1089.9	-5.1919	ug/L	-5.1919 ppb	09:07:16
2	Si 251.611†	472.5	39.1	1.7195	ug/L	1.7195 ppb	09:07:16
2	Sn 189.927†	-351.8	-411.6	-17.908	ug/L	-17.908 ppb	09:07:16
2	Sr 421.552†	511.6	557.9	-0.6046	ug/L	-0.6046 ppb	09:06:14
2	Ti 334.940†	-15217.0	-16655.7	-2.3559	ug/L	-2.3559 ppb	09:06:56
2	Tl 190.801†	-74.8	-49.7	-0.5025	ug/L	-0.5025 ppb	09:07:16
2	U 409.014†	-703.0	1148.1	8.6579	ug/L	8.6579 ppb	09:06:56
2	V 292.402†	1097.2	2567.0	-0.1353	ug/L	-0.1353 ppb	09:07:16
2	Zn 213.857†	3249.4	2955.4	-7.9349	ug/L	-7.9349 ppb	09:07:16
2	SiO2†	433.3	13.0	1.9883	ug/L	1.9883 ppb	09:07:52
3	Sc 361.383	767298.0	767298.0	86.703	%		09:07:21
3	Sc Radial	5118.2	5118.2	90.4	%		09:06:24
3	Y 371.029	626529.7	626529.7	84.430	%		09:07:21
3	Y RADIAL	5591.8	5591.8	90.79	%		09:06:24
3	Ag 328.068†	-9719.7	-11437.9	-0.3226	ug/L	-0.3226 ppb	09:07:21
3	Al 396.153Radial†	621881.8	688142.3	508710	ug/L	508710 ppb	09:06:19
3	As 188.979†	-91.9	-76.8	-2.7216	ug/L	-2.7216 ppb	09:07:42
3	B 249.677†	642.6	1265.1	2.6882	ug/L	2.6882 ppb	09:07:21
3	Ba 233.527†	-467.0	-526.6	2.9636	ug/L	2.9636 ppb	09:07:42
3	Be 313.107†	-5860.9	-1439.5	-0.5875	ug/L	-0.5875 ppb	09:07:21
3	Ca 317.933Radial†	278239.3	307858.4	470770	ug/L	470770 ppb	09:06:19
3	Cd 226.502†	1473.5	1887.3	1.8105	ug/L	1.8105 ppb	09:07:42
3	Co 228.616†	4.0	76.4	-1.1731	ug/L	-1.1731 ppb	09:07:42
3	Cr 267.716†	-115.6	-220.3	0.9845	ug/L	0.9845 ppb	09:07:42
3	Cu 324.752†	4378.8	-1718.3	4.5270	ug/L	4.5270 ppb	09:07:21
3	Fe 238.204 Radial†	16762.7	18542.2	186710	ug/L	186710 ppb	09:06:24
3	K 766.490 Radial†	2256.8	326.9	74.991	ug/L	74.991 ppb	09:06:24
3	Mg 279.077 IEC†	11908.3	13175.0	490450	ug/L	490450 ppb	09:06:24
3	Mn 257.610†	624.1	316.4	9.8287	ug/L	9.8287 ppb	09:07:21
3	Mo 202.031†	-233.3	-289.1	-5.5891	ug/L	-5.5891 ppb	09:07:42
3	Na 589.592 Radial†	-457.6	109.6	41.195	ug/L	41.195 ppb	09:06:24
3	Ni 231.604†	176.2	133.1	3.1573	ug/L	3.1573 ppb	09:07:42
3	P 214.914†	175.4	-17.7	11.206	ug/L	11.206 ppb	09:07:42
3	Pb 220.353†	-744.4	-806.0	4.5657	ug/L	4.5657 ppb	09:07:42
3	S 181.975 Axial†	70.1	39.4	-42.497	ug/L	-42.497 ppb	09:07:42
3	Sb 206.836†	64.3	44.5	2.1615	ug/L	2.1615 ppb	09:07:42
3	Se 196.026†	-961.9	-1086.0	-1.6214	ug/L	-1.6214 ppb	09:07:42
3	Si 251.611†	441.3	1.0	0.5480	ug/L	0.5480 ppb	09:07:42
3	Sn 189.927†	-341.3	-397.9	-15.662	ug/L	-15.662 ppb	09:07:42
3	Sr 421.552†	510.7	561.7	-0.5719	ug/L	-0.5719 ppb	09:06:24
3	Ti 334.940†	-15170.6	-16532.2	-2.1967	ug/L	-2.1967 ppb	09:07:21
3	Tl 190.801†	-68.0	-41.5	1.7765	ug/L	1.7765 ppb	09:07:42
3	U 409.014†	-596.4	1274.3	12.118	ug/L	12.118 ppb	09:07:21
3	V 292.402†	1085.2	2548.1	-0.3030	ug/L	-0.3030 ppb	09:07:42
3	Zn 213.857†	3243.0	2933.1	-8.2463	ug/L	-8.2463 ppb	09:07:42
3	SiO2†	432.8	10.4	1.8063	ug/L	1.8063 ppb	09:07:57

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	766162.2	86.575	%	0.1887				0.22%
Sc Radial	5147.3	90.9	%	0.45				0.49%
Y 371.029	626122.1	84.375	%	0.2136				0.25%
Y RADIAL	5594.6	90.84	%	0.535				0.59%
Ag 328.068†	-11398.2	-0.1654	ug/L	0.53884	-0.1654	ppb	0.53884	325.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	692313.5	511790	ug/L	3379.6	511790	ppb	3379.6	0.66%
QC value within limits for Al 396.153Radial Recovery = 102.36%								
As 188.979†	-73.6	-1.4174	ug/L	4.27106	-1.4174	ppb	4.27106	301.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1264.8	2.6868	ug/L	2.02176	2.6868	ppb	2.02176	75.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-516.7	3.0375	ug/L	0.14849	3.0375	ppb	0.14849	4.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1333.4	-0.5486	ug/L	0.03565	-0.5486	ppb	0.03565	6.50%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     308747.9      472130 ug/L        1746.8      472130 ppb        1746.8   0.37%
   QC value within limits for Ca 317.933Radial  Recovery = 94.43%
Cd 226.502†             1854.4      1.4568 ug/L       0.31637      1.4568 ppb       0.31637  21.72%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.6     -1.4580 ug/L       0.41157     -1.4580 ppb       0.41157  28.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -210.2      1.0933 ug/L       0.20027      1.0933 ppb       0.20027  18.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -1785.8      4.3291 ug/L       0.19559      4.3291 ppb       0.19559   4.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     18539.0      186680 ug/L         484.3      186680 ppb         484.3   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.34%
K 766.490 Radial†        228.9      57.514 ug/L       15.2747      57.514 ppb       15.2747  26.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        13134.2      488940 ug/L        1388.6      488940 ppb        1388.6   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.79%
Mn 257.610†              264.9      9.7978 ug/L       0.08380      9.7978 ppb       0.08380   0.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -290.4     -5.6764 ug/L       0.61843     -5.6764 ppb       0.61843  10.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        80.3      30.182 ug/L       13.7241      30.182 ppb       13.7241  45.47%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              148.9      3.5313 ug/L       0.34251      3.5313 ppb       0.34251   9.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -20.9      10.382 ug/L       10.3435      10.382 ppb       10.3435  99.63%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -806.2      5.2413 ug/L       0.92442      5.2413 ppb       0.92442  17.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          46.9     -32.105 ug/L        9.8196     -32.105 ppb        9.8196  30.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               37.3     -0.2938 ug/L       2.50051     -0.2938 ppb       2.50051 851.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1083.9      0.0013 ug/L       6.16695      0.0013 ppb       6.16695 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               19.5      1.1253 ug/L       0.58594      1.1253 ppb       0.58594  52.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -405.9     -16.872 ug/L        1.1328     -16.872 ppb        1.1328   6.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              563.7     -0.5710 ug/L       0.03408     -0.5710 ppb       0.03408   5.97%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16706.4     -2.4056 ug/L       0.23766     -2.4056 ppb       0.23766   9.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -51.6     -1.0089 ug/L       3.07003     -1.0089 ppb       3.07003 304.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1119.1      7.7830 ug/L       4.83222      7.7830 ppb       4.83222  62.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2545.4     -0.3602 ug/L       0.25817     -0.3602 ppb       0.25817  71.68%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             2945.2     -8.0845 ug/L       0.15604     -8.0845 ppb       0.15604   1.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    100.5      7.7312 ug/L      10.10504      7.7312 ppb      10.10504 130.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/9/2009 09:10:08
Data Type: Reprocessed on 12/9/2009 10:32:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	780445.9	780445.9	88.189	%			09:12:34
1	Sc Radial	5114.4	5114.4	90.3	%			09:12:06
1	Y 371.029	635832.4	635832.4	85.683	%			09:12:34
1	Y RADIAL	5537.7	5537.7	89.92	%			09:12:06
1	Ag 328.068†	41866.3	47245.9	273.54	ug/L	273.54	ppb	09:12:34
1	Al 396.153Radial†	630325.8	698004.9	515980	ug/L	515980	ppb	09:12:01
1	As 188.979†	991.3	1153.3	503.46	ug/L	503.46	ppb	09:12:54
1	B 249.677†	21231.0	24598.3	507.60	ug/L	507.60	ppb	09:12:34
1	Ba 233.527†	55815.1	63302.6	488.99	ug/L	488.99	ppb	09:12:34
1	Be 313.107†	562241.9	642864.2	239.85	ug/L	239.85	ppb	09:12:34
1	Ca 317.933Radial†	282747.7	313080.0	478750	ug/L	478750	ppb	09:12:01
1	Cd 226.502†	39025.0	44439.6	463.38	ug/L	463.38	ppb	09:12:34
1	Co 228.616†	19801.1	22524.9	434.70	ug/L	434.70	ppb	09:12:54
1	Cr 267.716†	38642.3	43730.8	475.32	ug/L	475.32	ppb	09:12:34
1	Cu 324.752†	170780.1	186884.3	553.22	ug/L	553.22	ppb	09:12:34
1	Fe 238.204 Radial†	17064.7	18890.4	190230	ug/L	190230	ppb	09:12:06
1	K 766.490 Radial†	29740.0	30762.0	5592.1	ug/L	5592.1	ppb	09:12:01
1	Mg 279.077 IEC†	11973.4	13256.8	493510	ug/L	493510	ppb	09:12:06
1	Mn 257.610†	384453.9	435541.1	483.09	ug/L	483.09	ppb	09:12:34
1	Mo 202.031†	6369.3	7202.4	482.65	ug/L	482.65	ppb	09:12:54
1	Na 589.592 Radial†	13215.3	15249.8	5731.9	ug/L	5731.9	ppb	09:12:06
1	Ni 231.604†	16373.4	18496.2	438.60	ug/L	438.60	ppb	09:12:54
1	P 214.914†	3863.7	4161.2	2412.2	ug/L	2412.2	ppb	09:12:54
1	Pb 220.353†	2656.6	3064.9	459.19	ug/L	459.19	ppb	09:12:54
1	S 181.975 Axial†	1676.8	1859.9	2618.2	ug/L	2618.2	ppb	09:12:54
1	Sb 206.836†	1446.8	1611.0	517.85	ug/L	517.85	ppb	09:12:54
1	Se 196.026†	2709.8	3096.2	2505.7	ug/L	2505.7	ppb	09:12:54
1	Si 251.611†	150356.9	169986.4	5187.8	ug/L	5187.8	ppb	09:12:34
1	Sn 189.927†	2207.7	2499.1	475.32	ug/L	475.32	ppb	09:12:54
1	Sr 421.552†	71827.2	79533.6	532.46	ug/L	532.46	ppb	09:12:01
1	Ti 334.940†	267261.3	304021.1	516.29	ug/L	516.29	ppb	09:12:34
1	Tl 190.801†	1322.9	1537.0	457.80	ug/L	457.80	ppb	09:12:54
1	U 409.014†	14007.6	17845.8	473.75	ug/L	473.75	ppb	09:12:34
1	V 292.402†	65551.7	75627.6	499.67	ug/L	499.67	ppb	09:12:34
1	Zn 213.857†	51418.0	57497.2	478.79	ug/L	478.79	ppb	09:12:34
1	SiO2†	149270.3	168773.5	11027	ug/L	11027	ppb	09:13:52
2	Sc 361.383	775696.5	775696.5	87.652	%			09:13:00
2	Sc Radial	5138.5	5138.5	90.7	%			09:12:16
2	Y 371.029	633790.1	633790.1	85.408	%			09:13:00
2	Y RADIAL	5552.8	5552.8	90.16	%			09:12:16
2	Ag 328.068†	41631.8	47269.1	273.46	ug/L	273.46	ppb	09:13:00
2	Al 396.153Radial†	635086.3	699975.6	517430	ug/L	517430	ppb	09:12:11
2	As 188.979†	986.8	1155.0	504.07	ug/L	504.07	ppb	09:13:20
2	B 249.677†	21119.8	24618.9	508.12	ug/L	508.12	ppb	09:13:00
2	Ba 233.527†	55464.4	63290.0	488.87	ug/L	488.87	ppb	09:13:00
2	Be 313.107†	558868.7	642919.3	239.87	ug/L	239.87	ppb	09:13:00
2	Ca 317.933Radial†	284423.5	313457.4	479330	ug/L	479330	ppb	09:12:11
2	Cd 226.502†	38722.8	44365.7	462.64	ug/L	462.64	ppb	09:13:00
2	Co 228.616†	19762.0	22617.7	436.52	ug/L	436.52	ppb	09:13:20
2	Cr 267.716†	38399.3	43721.8	475.22	ug/L	475.22	ppb	09:13:00
2	Cu 324.752†	169147.6	186207.5	551.22	ug/L	551.22	ppb	09:13:00
2	Fe 238.204 Radial†	17094.8	18834.9	189670	ug/L	189670	ppb	09:12:16
2	K 766.490 Radial†	29861.5	30741.4	5588.5	ug/L	5588.5	ppb	09:12:11
2	Mg 279.077 IEC†	12022.3	13248.6	493200	ug/L	493200	ppb	09:12:16
2	Mn 257.610†	381195.7	434493.1	481.90	ug/L	481.90	ppb	09:13:00
2	Mo 202.031†	6387.5	7267.4	486.84	ug/L	486.84	ppb	09:13:20
2	Na 589.592 Radial†	13168.6	15129.7	5686.8	ug/L	5686.8	ppb	09:12:16
2	Ni 231.604†	16304.0	18530.7	439.42	ug/L	439.42	ppb	09:13:20

2	P 214.914†	3843.7	4165.2	2415.9	ug/L	2415.9 ppb	09:13:20
2	Pb 220.353†	2660.5	3087.9	462.25	ug/L	462.25 ppb	09:13:20
2	S 181.975 Axial†	1648.1	1838.8	2587.0	ug/L	2587.0 ppb	09:13:20
2	Sb 206.836†	1446.5	1620.6	521.00	ug/L	521.00 ppb	09:13:20
2	Se 196.026†	2712.6	3118.2	2517.3	ug/L	2517.3 ppb	09:13:20
2	Si 251.611†	149037.3	169524.8	5173.6	ug/L	5173.6 ppb	09:13:00
2	Sn 189.927†	2190.0	2494.2	474.55	ug/L	474.55 ppb	09:13:20
2	Sr 421.552†	72301.3	79682.9	533.46	ug/L	533.46 ppb	09:12:11
2	Ti 334.940†	264911.8	303196.2	514.99	ug/L	514.99 ppb	09:13:00
2	Tl 190.801†	1308.5	1529.7	455.73	ug/L	455.73 ppb	09:13:20
2	U 409.014†	13749.8	17649.0	468.32	ug/L	468.32 ppb	09:13:00
2	V 292.402†	65041.7	75500.9	498.94	ug/L	498.94 ppb	09:13:00
2	Zn 213.857†	50996.0	57372.8	477.73	ug/L	477.73 ppb	09:13:00
2	SiO2†	149212.3	169743.7	11091	ug/L	11091 ppb	09:13:57
3	Sc 361.383	781218.8	781218.8	88.276	%		09:13:26
3	Sc Radial	5178.3	5178.3	91.4	%		09:12:27
3	Y 371.029	637300.9	637300.9	85.881	%		09:13:26
3	Y RADIAL	5577.3	5577.3	90.56	%		09:12:27
3	Ag 328.068†	41948.8	47292.5	273.33	ug/L	273.33 ppb	09:13:26
3	Al 396.153Radial†	637978.3	697749.6	515790	ug/L	515790 ppb	09:12:22
3	As 188.979†	975.4	1134.2	495.43	ug/L	495.43 ppb	09:13:46
3	B 249.677†	21255.5	24602.4	507.87	ug/L	507.87 ppb	09:13:26
3	Ba 233.527†	55834.0	63261.3	488.62	ug/L	488.62 ppb	09:13:26
3	Be 313.107†	563317.0	643451.4	240.06	ug/L	240.06 ppb	09:13:26
3	Ca 317.933Radial†	285215.9	311910.6	476960	ug/L	476960 ppb	09:12:22
3	Cd 226.502†	39066.4	44442.6	463.55	ug/L	463.55 ppb	09:13:26
3	Co 228.616†	19878.9	22590.7	436.01	ug/L	436.01 ppb	09:13:46
3	Cr 267.716†	38681.8	43732.2	475.31	ug/L	475.31 ppb	09:13:26
3	Cu 324.752†	170015.5	185826.6	550.07	ug/L	550.07 ppb	09:13:26
3	Fe 238.204 Radial†	17150.0	18750.2	188820	ug/L	188820 ppb	09:12:27
3	K 766.490 Radial†	30111.2	30761.1	5592.1	ug/L	5592.1 ppb	09:12:22
3	Mg 279.077 IEC†	12021.1	13145.2	489350	ug/L	489350 ppb	09:12:27
3	Mn 257.610†	383873.4	434452.2	481.85	ug/L	481.85 ppb	09:13:26
3	Mo 202.031†	6399.7	7229.7	484.33	ug/L	484.33 ppb	09:13:46
3	Na 589.592 Radial†	13269.8	15128.5	5686.4	ug/L	5686.4 ppb	09:12:27
3	Ni 231.604†	16386.9	18493.1	438.53	ug/L	438.53 ppb	09:13:46
3	P 214.914†	3884.9	4180.9	2425.5	ug/L	2425.5 ppb	09:13:46
3	Pb 220.353†	2672.5	3080.0	461.03	ug/L	461.03 ppb	09:13:46
3	S 181.975 Axial†	1677.0	1858.3	2615.7	ug/L	2615.7 ppb	09:13:46
3	Sb 206.836†	1483.5	1650.9	530.81	ug/L	530.81 ppb	09:13:46
3	Se 196.026†	2703.6	3086.2	2495.4	ug/L	2495.4 ppb	09:13:46
3	Si 251.611†	150003.2	169417.1	5170.4	ug/L	5170.4 ppb	09:13:26
3	Sn 189.927†	2201.7	2489.9	473.55	ug/L	473.55 ppb	09:13:46
3	Sr 421.552†	72639.7	79439.4	531.84	ug/L	531.84 ppb	09:12:22
3	Ti 334.940†	266461.0	302814.7	514.25	ug/L	514.25 ppb	09:13:26
3	Tl 190.801†	1325.4	1538.3	458.16	ug/L	458.16 ppb	09:13:46
3	U 409.014†	13866.4	17670.2	469.02	ug/L	469.02 ppb	09:13:26
3	V 292.402†	65552.9	75555.5	499.32	ug/L	499.32 ppb	09:13:26
3	Zn 213.857†	51255.7	57255.7	476.90	ug/L	476.90 ppb	09:13:26
3	SiO2†	149513.2	168881.2	11034	ug/L	11034 ppb	09:14:02

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	779120.4	88.039	%	0.3379				0.38%
Sc Radial	5143.7	90.8	%	0.57				0.63%
Y 371.029	635641.1	85.658	%	0.2376				0.28%
Y RADIAL	5555.9	90.21	%	0.324				0.36%
Ag 328.068†	47269.2	273.45	ug/L	0.104	273.45	ppb	0.104	0.04%
QC value within limits for Ag 328.068 Recovery = 109.38%								
Al 396.153Radial†	698576.7	516400	ug/L	900.4	516400	ppb	900.4	0.17%
QC value within limits for Al 396.153Radial Recovery = 103.28%								
As 188.979†	1147.5	500.99	ug/L	4.823	500.99	ppb	4.823	0.96%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	24606.5	507.87	ug/L	0.258	507.87	ppb	0.258	0.05%
QC value within limits for B 249.677 Recovery = 101.57%								
Ba 233.527†	63284.6	488.82	ug/L	0.187	488.82	ppb	0.187	0.04%
QC value within limits for Ba 233.527 Recovery = 97.76%								
Be 313.107†	643078.3	239.93	ug/L	0.119	239.93	ppb	0.119	0.05%
QC value within limits for Be 313.107 Recovery = 95.97%								

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Ca 317.933Radial†     312816.0      478350 ug/L        1233.3      478350 ppb         1233.3   0.26%
   QC value within limits for Ca 317.933Radial  Recovery = 95.67%
Cd 226.502†            44416.0      463.19 ug/L         0.488      463.19 ppb          0.488   0.11%
   QC value within limits for Cd 226.502  Recovery = 92.64%
Co 228.616†            22577.8      435.74 ug/L         0.940      435.74 ppb          0.940   0.22%
   QC value within limits for Co 228.616  Recovery = 87.15%
Cr 267.716†            43728.2      475.28 ug/L         0.059      475.28 ppb          0.059   0.01%
   QC value within limits for Cr 267.716  Recovery = 95.06%
Cu 324.752†           186306.1      551.50 ug/L         1.593      551.50 ppb          1.593   0.29%
   QC value within limits for Cu 324.752  Recovery = 110.30%
Fe 238.204 Radial†     18825.2      189570 ug/L         710.8      189570 ppb          710.8   0.37%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.79%
K 766.490 Radial†      30754.8      5590.9 ug/L          2.08      5590.9 ppb           2.08   0.04%
   QC value within limits for K 766.490 Radial  Recovery = 111.82%
Mg 279.077 IEC†        13216.9      492020 ug/L        2315.9      492020 ppb         2315.9   0.47%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.40%
Mn 257.610†           434828.8      482.28 ug/L         0.704      482.28 ppb          0.704   0.15%
   QC value within limits for Mn 257.610  Recovery = 96.46%
Mo 202.031†             7233.1      484.61 ug/L         2.110      484.61 ppb          2.110   0.44%
   QC value within limits for Mo 202.031  Recovery = 96.92%
Na 589.592 Radial†     15169.3      5701.7 ug/L         26.18      5701.7 ppb          26.18   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 114.03%
Ni 231.604†            18506.6      438.85 ug/L         0.495      438.85 ppb          0.495   0.11%
   QC value within limits for Ni 231.604  Recovery = 87.77%
P 214.914†              4169.1      2417.9 ug/L          6.84      2417.9 ppb           6.84   0.28%
   QC value within limits for P 214.914  Recovery = 96.71%
Pb 220.353†             3077.6      460.82 ug/L         1.542      460.82 ppb          1.542   0.33%
   QC value within limits for Pb 220.353  Recovery = 92.16%
S 181.975 Axial†        1852.3      2607.0 ug/L         17.35      2607.0 ppb          17.35   0.67%
   QC value within limits for S 181.975 Axial  Recovery = 104.28%
Sb 206.836†             1627.5      523.22 ug/L         6.758      523.22 ppb          6.758   1.29%
   QC value within limits for Sb 206.836  Recovery = 104.64%
Se 196.026†             3100.2      2506.1 ug/L         11.00      2506.1 ppb          11.00   0.44%
   QC value within limits for Se 196.026  Recovery = 100.24%
Si 251.611†           169642.8      5177.3 ug/L          9.27      5177.3 ppb           9.27   0.18%
   QC value within limits for Si 251.611  Recovery = 103.55%
Sn 189.927†             2494.4      474.47 ug/L         0.883      474.47 ppb          0.883   0.19%
   QC value within limits for Sn 189.927  Recovery = 94.89%
Sr 421.552†            79552.0      532.59 ug/L         0.818      532.59 ppb          0.818   0.15%
   QC value within limits for Sr 421.552  Recovery = 106.52%
Ti 334.940†           303344.0      515.18 ug/L         1.034      515.18 ppb          1.034   0.20%
   QC value within limits for Ti 334.940  Recovery = 103.04%
Tl 190.801†             1535.0      457.23 ug/L         1.309      457.23 ppb          1.309   0.29%
   QC value within limits for Tl 190.801  Recovery = 91.45%
U 409.014†             17721.7      470.36 ug/L         2.954      470.36 ppb          2.954   0.63%
   QC value within limits for U 409.014  Recovery = 94.07%
V 292.402†             75561.3      499.31 ug/L         0.363      499.31 ppb          0.363   0.07%
   QC value within limits for V 292.402  Recovery = 99.86%
Zn 213.857†            57375.3      477.80 ug/L         0.948      477.80 ppb          0.948   0.20%
   QC value within limits for Zn 213.857  Recovery = 95.56%
SiO2†                 169132.8       11051 ug/L          34.7       11051 ppb           34.7   0.31%
   QC value within limits for SiO2  Recovery = 103.33%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/9/2009 09:16:12
Data Type: Reprocessed on 12/9/2009 10:32:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	763793.8	763793.8	86.307	%			09:18:38
1	Sc Radial	5036.5	5036.5	88.9	%			09:18:10
1	Y 371.029	625631.0	625631.0	84.309	%			09:18:38
1	Y RADIAL	5462.4	5462.4	88.69	%			09:18:10
1	Ag 328.068†	-22623.6	-26440.5	-2.4851	ug/L	-2.4851	ppb	09:18:38
1	Al 396.153Radial†	612350.3	688582.2	509030	ug/L	509030	ppb	09:18:05
1	As 188.979†	-205.0	-208.4	-17.747	ug/L	-17.747	ppb	09:18:58
1	B 249.677†	1673.4	2462.8	-4.4154	ug/L	-4.4154	ppb	09:18:38
1	Ba 233.527†	-1280.7	-1471.9	5.0617	ug/L	5.0617	ppb	09:18:58
1	Be 313.107†	-12272.9	-8899.8	-3.3362	ug/L	-3.3362	ppb	09:18:38
1	Ca 317.933Radial†	272811.8	306747.5	469070	ug/L	469070	ppb	09:18:05
1	Cd 226.502†	3628.2	4391.6	4.0431	ug/L	4.0431	ppb	09:18:58
1	Co 228.616†	214.5	320.3	-0.0771	ug/L	-0.0771	ppb	09:18:58
1	Cr 267.716†	32.6	-49.2	2.6890	ug/L	2.6890	ppb	09:18:58
1	Cu 324.752†	1614.1	-4898.5	8.0026	ug/L	8.0026	ppb	09:18:38
1	Fe 238.204 Radial†	38525.8	43314.6	436150	ug/L	436150	ppb	09:18:10
1	K 766.490 Radial†	4725.2	3143.0	369.49	ug/L	369.49	ppb	09:18:10
1	Mg 279.077 IEC†	11576.1	13015.1	484290	ug/L	484290	ppb	09:18:10
1	Mn 257.610†	-23673.7	-27833.0	4.2239	ug/L	4.2239	ppb	09:18:38
1	Mo 202.031†	-506.0	-606.3	-8.5555	ug/L	-8.5555	ppb	09:18:58
1	Na 589.592 Radial†	1209136.0	1360237.8	511270	ug/L	511270	ppb	09:18:05
1	Ni 231.604†	266.7	238.8	5.6635	ug/L	5.6635	ppb	09:18:58
1	P 214.914†	534.1	398.9	59.048	ug/L	59.048	ppb	09:18:58
1	Pb 220.353†	-498.0	-524.4	17.040	ug/L	17.040	ppb	09:18:58
1	S 181.975 Axial†	105.9	81.2	18.595	ug/L	18.595	ppb	09:18:58
1	Sb 206.836†	53.7	32.6	1.7192	ug/L	1.7192	ppb	09:18:58
1	Se 196.026†	-2237.2	-2568.7	-122.29	ug/L	-122.29	ppb	09:18:58
1	Si 251.611†	-528.9	-1120.9	-33.552	ug/L	-33.552	ppb	09:18:58
1	Sn 189.927†	-375.4	-439.2	-19.491	ug/L	-19.491	ppb	09:18:58
1	Sr 421.552†	749.4	839.2	1.3173	ug/L	1.3173	ppb	09:18:10
1	Ti 334.940†	-8730.6	-9150.7	3.3150	ug/L	3.3150	ppb	09:18:38
1	Tl 190.801†	-114.2	-95.4	-13.795	ug/L	-13.795	ppb	09:18:58
1	U 409.014†	442887.7	515115.6	14337	ug/L	14337	ppb	09:18:38
1	V 292.402†	2549.7	4250.6	0.6803	ug/L	0.6803	ppb	09:18:58
1	Zn 213.857†	6483.0	6704.3	2.0653	ug/L	2.0653	ppb	09:18:58
1	SiO2†	-535.5	-1109.3	-71.070	ug/L	-71.070	ppb	09:19:55
2	Sc 361.383	752540.0	752540.0	85.035	%			09:19:04
2	Sc Radial	5004.3	5004.3	88.4	%			09:18:21
2	Y 371.029	616389.8	616389.8	83.063	%			09:19:04
2	Y RADIAL	5509.4	5509.4	89.46	%			09:18:21
2	Ag 328.068†	-22360.4	-26523.0	-1.9431	ug/L	-1.9431	ppb	09:19:04
2	Al 396.153Radial†	625834.9	708278.4	523590	ug/L	523590	ppb	09:18:16
2	As 188.979†	-193.6	-198.5	-13.190	ug/L	-13.190	ppb	09:19:24
2	B 249.677†	1627.5	2437.7	-5.4032	ug/L	-5.4032	ppb	09:19:04
2	Ba 233.527†	-1330.7	-1552.9	4.5717	ug/L	4.5717	ppb	09:19:24
2	Be 313.107†	-12185.2	-9009.3	-3.3768	ug/L	-3.3768	ppb	09:19:04
2	Ca 317.933Radial†	278076.2	314681.4	481200	ug/L	481200	ppb	09:18:16
2	Cd 226.502†	3667.6	4500.9	4.8957	ug/L	4.8957	ppb	09:19:24
2	Co 228.616†	229.0	341.0	0.2719	ug/L	0.2719	ppb	09:19:24
2	Cr 267.716†	78.5	5.3	3.3505	ug/L	3.3505	ppb	09:19:24
2	Cu 324.752†	1555.8	-4939.1	8.0547	ug/L	8.0547	ppb	09:19:04
2	Fe 238.204 Radial†	38572.1	43646.1	439490	ug/L	439490	ppb	09:18:21
2	K 766.490 Radial†	4818.1	3282.4	389.26	ug/L	389.26	ppb	09:18:21
2	Mg 279.077 IEC†	11577.0	13099.9	487440	ug/L	487440	ppb	09:18:21
2	Mn 257.610†	-23155.3	-27633.6	4.7147	ug/L	4.7147	ppb	09:19:04
2	Mo 202.031†	-517.7	-628.8	-9.7851	ug/L	-9.7851	ppb	09:19:24
2	Na 589.592 Radial†	1234729.5	1397960.7	525450	ug/L	525450	ppb	09:18:16
2	Ni 231.604†	301.7	284.7	6.7502	ug/L	6.7502	ppb	09:19:24

2	P 214.914†	553.7	431.2	80.461 ug/L	80.461 ppb	09:19:24
2	Pb 220.353†	-497.8	-532.9	19.042 ug/L	19.042 ppb	09:19:24
2	S 181.975 Axial†	92.1	66.8	-5.3200 ug/L	-5.3200 ppb	09:19:24
2	Sb 206.836†	69.9	52.6	7.7971 ug/L	7.7971 ppb	09:19:24
2	Se 196.026†	-2285.9	-2664.7	-167.18 ug/L	-167.18 ppb	09:19:24
2	Si 251.611†	-502.7	-1099.1	-32.867 ug/L	-32.867 ppb	09:19:24
2	Sn 189.927†	-376.2	-446.7	-19.443 ug/L	-19.443 ppb	09:19:24
2	Sr 421.552†	750.5	845.9	1.2503 ug/L	1.2503 ppb	09:18:21
2	Ti 334.940†	-8569.2	-9112.2	4.0286 ug/L	4.0286 ppb	09:19:04
2	Tl 190.801†	-95.5	-75.4	-7.6618 ug/L	-7.6618 ppb	09:19:24
2	U 409.014†	435064.2	513589.1	14294 ug/L	14294 ppb	09:19:04
2	V 292.402†	2602.1	4356.5	0.8542 ug/L	0.8542 ppb	09:19:24
2	Zn 213.857†	6474.1	6806.1	2.5476 ug/L	2.5476 ppb	09:19:24
2	SiO2†	-591.2	-1184.1	-75.918 ug/L	-75.918 ppb	09:20:00
3	Sc 361.383	757512.2	757512.2	85.597 %		09:19:30
3	Sc Radial	5109.7	5109.7	90.2 %		09:18:31
3	Y 371.029	619781.3	619781.3	83.520 %		09:19:30
3	Y RADIAL	5556.0	5556.0	90.21 %		09:18:31
3	Ag 328.068†	-22684.0	-26728.4	-3.9162 ug/L	-3.9162 ppb	09:19:30
3	Al 396.153Radial†	610370.7	676525.8	500120 ug/L	500120 ppb	09:18:26
3	As 188.979†	-196.5	-200.3	-14.576 ug/L	-14.576 ppb	09:19:50
3	B 249.677†	1758.4	2578.2	-1.8195 ug/L	-1.8195 ppb	09:19:30
3	Ba 233.527†	-1312.5	-1521.3	4.6611 ug/L	4.6611 ppb	09:19:50
3	Be 313.107†	-12269.1	-9013.3	-3.3776 ug/L	-3.3776 ppb	09:19:30
3	Ca 317.933Radial†	271617.6	301030.2	460330 ug/L	460330 ppb	09:18:26
3	Cd 226.502†	3616.2	4412.5	4.3385 ug/L	4.3385 ppb	09:19:50
3	Co 228.616†	213.7	321.4	-0.0448 ug/L	-0.0448 ppb	09:19:50
3	Cr 267.716†	61.5	-15.1	3.0404 ug/L	3.0404 ppb	09:19:50
3	Cu 324.752†	1610.8	-4886.8	8.0014 ug/L	8.0014 ppb	09:19:30
3	Fe 238.204 Radial†	39023.8	43246.1	435460 ug/L	435460 ppb	09:18:31
3	K 766.490 Radial†	4896.4	3256.6	394.83 ug/L	394.83 ppb	09:18:31
3	Mg 279.077 IEC†	11676.6	12940.1	481490 ug/L	481490 ppb	09:18:31
3	Mn 257.610†	-23282.4	-27603.3	4.4568 ug/L	4.4568 ppb	09:19:30
3	Mo 202.031†	-489.2	-591.5	-7.6426 ug/L	-7.6426 ppb	09:19:50
3	Na 589.592 Radial†	1199637.3	1330236.1	500000 ug/L	500000 ppb	09:18:26
3	Ni 231.604†	292.0	271.0	6.4257 ug/L	6.4257 ppb	09:19:50
3	P 214.914†	573.8	450.4	87.128 ug/L	87.128 ppb	09:19:50
3	Pb 220.353†	-520.3	-555.3	11.493 ug/L	11.493 ppb	09:19:50
3	S 181.975 Axial†	97.8	72.8	8.0967 ug/L	8.0967 ppb	09:19:50
3	Sb 206.836†	51.4	30.5	1.2334 ug/L	1.2334 ppb	09:19:50
3	Se 196.026†	-2285.5	-2646.7	-172.18 ug/L	-172.18 ppb	09:19:50
3	Si 251.611†	-506.1	-1099.2	-32.905 ug/L	-32.905 ppb	09:19:50
3	Sn 189.927†	-387.2	-456.6	-23.362 ug/L	-23.362 ppb	09:19:50
3	Sr 421.552†	747.3	824.9	1.3016 ug/L	1.3016 ppb	09:18:31
3	Ti 334.940†	-8457.1	-8915.0	3.2352 ug/L	3.2352 ppb	09:19:30
3	Tl 190.801†	-105.6	-86.5	-11.468 ug/L	-11.468 ppb	09:19:50
3	U 409.014†	439572.3	515497.6	14347 ug/L	14347 ppb	09:19:30
3	V 292.402†	2550.6	4276.3	0.9291 ug/L	0.9291 ppb	09:19:50
3	Zn 213.857†	6453.4	6732.0	2.4709 ug/L	2.4709 ppb	09:19:50
3	SiO2†	-475.8	-1044.7	-66.870 ug/L	-66.870 ppb	09:20:05

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757948.7	85.647	%	0.6373				0.74%
Sc Radial	5050.2	89.2	%	0.95				1.07%
Y 371.029	620600.7	83.631	%	0.6300				0.75%
Y RADIAL	5509.3	89.46	%	0.760				0.85%
Ag 328.068†	-26564.0	-2.7814	ug/L	1.01938	-2.7814	ppb	1.01938	36.65%
Al 396.153Radial†	691128.8	510920	ug/L	11849.2	510920	ppb	11849.2	2.32%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	-202.4	-15.171	ug/L	2.3361	-15.171	ppb	2.3361	15.40%
B 249.677†	2492.9	-3.8794	ug/L	1.85099	-3.8794	ppb	1.85099	47.71%
Ba 233.527†	-1515.3	4.7648	ug/L	0.26096	4.7648	ppb	0.26096	5.48%
Be 313.107†	-8974.1	-3.3635	ug/L	0.02368	-3.3635	ppb	0.02368	0.70%
Ca 317.933Radial†	307486.4	470200	ug/L	10483.3	470200	ppb	10483.3	2.23%
QC value within limits for Ca 317.933Radial Recovery = 94.04%								
Cd 226.502†	4435.0	4.4258	ug/L	0.43292	4.4258	ppb	0.43292	9.78%
Co 228.616†	327.6	0.0500	ug/L	0.19286	0.0500	ppb	0.19286	385.54%
Cr 267.716†	-19.7	3.0266	ug/L	0.33097	3.0266	ppb	0.33097	10.94%

Cu 324.752†	-4908.1	8.0196	ug/L	0.03044	8.0196	ppb	0.03044	0.38%
Fe 238.204 Radial†	43402.3	437030	ug/L	2153.8	437030	ppb	2153.8	0.49%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.41%								
K 766.490 Radial†	3227.4	384.53	ug/L	13.318	384.53	ppb	13.318	3.46%
Mg 279.077 IEC†	13018.4	484410	ug/L	2976.0	484410	ppb	2976.0	0.61%
QC value within limits for Mg 279.077 IEC Recovery = 96.88%								
Mn 257.610†	-27690.0	4.4652	ug/L	0.24550	4.4652	ppb	0.24550	5.50%
Mo 202.031†	-608.9	-8.6611	ug/L	1.07513	-8.6611	ppb	1.07513	12.41%
Na 589.592 Radial†	1362811.5	512240	ug/L	12755.4	512240	ppb	12755.4	2.49%
QC value within limits for Na 589.592 Radial Recovery = 102.45%								
Ni 231.604†	264.8	6.2798	ug/L	0.55785	6.2798	ppb	0.55785	8.88%
P 214.914†	426.8	75.545	ug/L	14.6710	75.545	ppb	14.6710	19.42%
Pb 220.353†	-537.5	15.858	ug/L	3.9109	15.858	ppb	3.9109	24.66%
S 181.975 Axial†	73.6	7.1239	ug/L	11.98708	7.1239	ppb	11.98708	168.27%
Sb 206.836†	38.6	3.5832	ug/L	3.65740	3.5832	ppb	3.65740	102.07%
Se 196.026†	-2626.7	-153.88	ug/L	27.475	-153.88	ppb	27.475	17.85%
Si 251.611†	-1106.4	-33.108	ug/L	0.3852	-33.108	ppb	0.3852	1.16%
Sn 189.927†	-447.5	-20.765	ug/L	2.2491	-20.765	ppb	2.2491	10.83%
Sr 421.552†	836.7	1.2897	ug/L	0.03506	1.2897	ppb	0.03506	2.72%
Ti 334.940†	-9059.3	3.5263	ug/L	0.43690	3.5263	ppb	0.43690	12.39%
Tl 190.801†	-85.8	-10.975	ug/L	3.0965	-10.975	ppb	3.0965	28.21%
U 409.014†	514734.1	14326	ug/L	28.5	14326	ppb	28.5	0.20%
QC value within limits for U 409.014 Recovery = 95.51%								
V 292.402†	4294.5	0.8212	ug/L	0.12765	0.8212	ppb	0.12765	15.54%
Zn 213.857†	6747.4	2.3613	ug/L	0.25918	2.3613	ppb	0.25918	10.98%
SiO2†	-1112.7	-71.286	ug/L	4.5278	-71.286	ppb	4.5278	6.35%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/9/2009 09:22:15
Data Type: Reprocessed on 12/9/2009 10:32:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	867325.0	867325.0	98.006	%			09:25:50
1	Sc Radial	5544.9	5544.9	97.9	%			09:24:13
1	Y 371.029	706892.5	706892.5	95.259	%			09:25:50
1	Y RADIAL	5940.1	5940.1	96.45	%			09:24:13
1	Ag 328.068†	-7523.4	-7904.0	2.0207	ug/L	2.0207	ppb	09:25:55
1	Al 396.153Radial†	617.2	650.7	63.318	ug/L	63.318	ppb	09:24:13
1	As 188.979†	23642.1	24152.3	9938.6	ug/L	9938.6	ppb	09:25:55
1	B 249.677†	221355.9	226383.6	4890.5	ug/L	4890.5	ppb	09:25:50
1	Ba 233.527†	1360252.9	1387941.8	10564	ug/L	10564	ppb	09:25:50
1	Be 313.107†	7468179.0	7625453.3	2853.3	ug/L	2853.3	ppb	09:25:44
1	Ca 317.933Radial†	35.6	18.7	28.537	ug/L	28.537	ppb	09:24:33
1	Cd 226.502†	862126.7	879856.2	9551.6	ug/L	9551.6	ppb	09:25:50
1	Co 228.616†	468823.1	478433.9	9286.0	ug/L	9286.0	ppb	09:25:55
1	Cr 267.716†	2142447.0	2185952.1	23570	ug/L	23570	ppb	09:25:50
1	Cu 324.752†	6705690.7	6835361.9	19879	ug/L	19879	ppb	09:25:44
1	Fe 238.204 Radial†	-18.8	-25.2	38.706	ug/L	38.706	ppb	09:24:33
1	K 766.490 Radial†	1602148.0	1634203.9	296500	ug/L	296500	ppb	09:24:08
1	Mg 279.077 IEC†	-4.4	-6.3	-36.702	ug/L	-36.702	ppb	09:24:33
1	Mn 257.610†	8321385.3	8490296.0	9226.6	ug/L	9226.6	ppb	09:25:44
1	Mo 202.031†	146819.2	149786.6	9757.0	ug/L	9757.0	ppb	09:25:55
1	Na 589.592 Radial†	139.1	758.0	284.91	ug/L	284.91	ppb	09:24:13
1	Ni 231.604†	397646.3	405667.1	9619.8	ug/L	9619.8	ppb	09:25:50
1	P 214.914†	30925.9	31335.2	15572	ug/L	15572	ppb	09:25:55
1	Pb 220.353†	196436.0	200485.4	23445	ug/L	23445	ppb	09:25:55
1	S 181.975 Axial†	34416.4	35075.2	51288	ug/L	51288	ppb	09:25:55
1	Sb 206.836†	31654.7	32269.2	10288	ug/L	10288	ppb	09:25:55
1	Se 196.026†	16507.2	16866.5	10088	ug/L	10088	ppb	09:25:55
1	Si 251.611†	1523978.6	1554478.8	47244	ug/L	47244	ppb	09:25:50
1	Sn 189.927†	60430.6	61655.9	10431	ug/L	10431	ppb	09:25:55
1	Sr 421.552†	1415036.5	1445262.1	9756.4	ug/L	9756.4	ppb	09:24:08
1	Ti 334.940†	6077176.8	6201793.4	10022	ug/L	10022	ppb	09:25:44
1	Tl 190.801†	32675.7	33377.4	9627.5	ug/L	9627.5	ppb	09:25:55
1	U 409.014†	-795.6	1150.4	-13.323	ug/L	-13.323	ppb	09:25:55
1	V 292.402†	1427957.0	1458307.9	9963.5	ug/L	9963.5	ppb	09:25:50
1	Zn 213.857†	1517160.0	1547222.2	13835	ug/L	13835	ppb	09:25:50
1	SiO2†	1518071.3	1548470.5	100740	ug/L	100740	ppb	09:26:43
2	Sc 361.383	866044.1	866044.1	97.861	%			09:26:10
2	Sc Radial	5569.9	5569.9	98.3	%			09:24:43
2	Y 371.029	704578.8	704578.8	94.948	%			09:26:10
2	Y RADIAL	5950.7	5950.7	96.62	%			09:24:43
2	Ag 328.068†	-7530.9	-7923.0	1.9331	ug/L	1.9331	ppb	09:26:15
2	Al 396.153Radial†	574.7	604.7	29.417	ug/L	29.417	ppb	09:24:43
2	As 188.979†	23599.4	24144.4	9935.1	ug/L	9935.1	ppb	09:26:15
2	B 249.677†	221672.2	227040.9	4904.8	ug/L	4904.8	ppb	09:26:10
2	Ba 233.527†	1358565.2	1388270.0	10566	ug/L	10566	ppb	09:26:10
2	Be 313.107†	7440005.0	7607934.0	2846.7	ug/L	2846.7	ppb	09:26:03
2	Ca 317.933Radial†	35.7	18.6	28.494	ug/L	28.494	ppb	09:25:03
2	Cd 226.502†	861453.4	880469.2	9558.2	ug/L	9558.2	ppb	09:26:10
2	Co 228.616†	467836.6	478133.4	9280.2	ug/L	9280.2	ppb	09:26:15
2	Cr 267.716†	2141059.7	2187767.7	23590	ug/L	23590	ppb	09:26:10
2	Cu 324.752†	6671124.4	6810159.8	19806	ug/L	19806	ppb	09:26:03
2	Fe 238.204 Radial†	-21.3	-27.7	13.481	ug/L	13.481	ppb	09:25:03
2	K 766.490 Radial†	1625834.8	1650946.0	299540	ug/L	299540	ppb	09:24:38
2	Mg 279.077 IEC†	-6.2	-8.0	-101.98	ug/L	-101.98	ppb	09:25:03
2	Mn 257.610†	8299437.9	8480427.1	9215.9	ug/L	9215.9	ppb	09:26:03
2	Mo 202.031†	146563.2	149746.4	9754.4	ug/L	9754.4	ppb	09:26:15
2	Na 589.592 Radial†	99.2	716.9	269.45	ug/L	269.45	ppb	09:24:43
2	Ni 231.604†	397468.1	406085.0	9629.7	ug/L	9629.7	ppb	09:26:10

2	P 214.914†	30769.9	31222.4	15517	ug/L	15517 ppb	09:26:15
2	Pb 220.353†	196381.4	200726.0	23473	ug/L	23473 ppb	09:26:15
2	S 181.975 Axial†	34262.7	34970.1	51134	ug/L	51134 ppb	09:26:15
2	Sb 206.836†	31620.7	32282.2	10292	ug/L	10292 ppb	09:26:15
2	Se 196.026†	16474.4	16857.9	10083	ug/L	10083 ppb	09:26:15
2	Si 251.611†	1522772.8	1555546.5	47275	ug/L	47275 ppb	09:26:10
2	Sn 189.927†	60510.9	61829.2	10460	ug/L	10460 ppb	09:26:15
2	Sr 421.552†	1435353.3	1459435.2	9852.1	ug/L	9852.1 ppb	09:24:38
2	Ti 334.940†	6049605.8	6182791.1	9991.3	ug/L	9991.3 ppb	09:26:03
2	Tl 190.801†	32590.6	33339.8	9616.4	ug/L	9616.4 ppb	09:26:15
2	U 409.014†	-893.2	1049.4	-16.178	ug/L	-16.178 ppb	09:26:15
2	V 292.402†	1426061.1	1458525.5	9965.0	ug/L	9965.0 ppb	09:26:10
2	Zn 213.857†	1516284.3	1548616.9	13848	ug/L	13848 ppb	09:26:10
2	SiO2†	1536175.4	1569261.2	102100	ug/L	102100 ppb	09:26:50
3	Sc 361.383	866098.1	866098.1	97.867	%		09:26:30
3	Sc Radial	5547.1	5547.1	97.9	%		09:25:14
3	Y 371.029	705507.1	705507.1	95.073	%		09:26:30
3	Y RADIAL	5954.2	5954.2	96.68	%		09:25:14
3	Ag 328.068†	-7546.1	-7938.1	1.8621	ug/L	1.8621 ppb	09:26:35
3	Al 396.153Radial†	588.4	621.1	37.989	ug/L	37.989 ppb	09:25:14
3	As 188.979†	23907.2	24457.4	10062	ug/L	10062 ppb	09:26:35
3	B 249.677†	221004.5	226344.6	4889.4	ug/L	4889.4 ppb	09:26:30
3	Ba 233.527†	1357439.2	1387033.0	10557	ug/L	10557 ppb	09:26:30
3	Be 313.107†	7354407.1	7519996.7	2813.8	ug/L	2813.8 ppb	09:26:23
3	Ca 317.933Radial†	37.2	20.2	30.949	ug/L	30.949 ppb	09:25:34
3	Cd 226.502†	860569.2	879510.8	9547.8	ug/L	9547.8 ppb	09:26:30
3	Co 228.616†	471689.0	482040.0	9356.4	ug/L	9356.4 ppb	09:26:35
3	Cr 267.716†	2140617.3	2187179.2	23583	ug/L	23583 ppb	09:26:30
3	Cu 324.752†	6579330.7	6715940.7	19532	ug/L	19532 ppb	09:26:23
3	Fe 238.204 Radial†	-18.9	-25.3	40.404	ug/L	40.404 ppb	09:25:34
3	K 766.490 Radial†	1595804.6	1627059.5	295210	ug/L	295210 ppb	09:25:09
3	Mg 279.077 IEC†	-4.4	-6.2	-31.546	ug/L	-31.546 ppb	09:25:34
3	Mn 257.610†	8223078.7	8401875.0	9130.6	ug/L	9130.6 ppb	09:26:23
3	Mo 202.031†	147803.6	151004.6	9836.3	ug/L	9836.3 ppb	09:26:35
3	Na 589.592 Radial†	-8.0	607.8	228.46	ug/L	228.46 ppb	09:25:14
3	Ni 231.604†	396993.2	405574.5	9617.6	ug/L	9617.6 ppb	09:26:30
3	P 214.914†	31020.1	31476.1	15713	ug/L	15713 ppb	09:26:35
3	Pb 220.353†	197558.6	201916.4	23613	ug/L	23613 ppb	09:26:35
3	S 181.975 Axial†	34609.5	35322.2	51649	ug/L	51649 ppb	09:26:35
3	Sb 206.836†	31916.8	32582.7	10393	ug/L	10393 ppb	09:26:35
3	Se 196.026†	16623.9	17009.7	10174	ug/L	10174 ppb	09:26:35
3	Si 251.611†	1520420.3	1553045.8	47199	ug/L	47199 ppb	09:26:30
3	Sn 189.927†	60867.3	62189.5	10521	ug/L	10521 ppb	09:26:35
3	Sr 421.552†	1408462.0	1437959.8	9707.1	ug/L	9707.1 ppb	09:25:09
3	Ti 334.940†	5989689.3	6121183.3	9891.7	ug/L	9891.7 ppb	09:26:23
3	Tl 190.801†	32850.9	33603.6	9690.4	ug/L	9690.4 ppb	09:26:35
3	U 409.014†	-696.7	1250.3	-10.557	ug/L	-10.557 ppb	09:26:35
3	V 292.402†	1425986.3	1458358.3	9965.1	ug/L	9965.1 ppb	09:26:30
3	Zn 213.857†	1513091.8	1545258.2	13818	ug/L	13818 ppb	09:26:30
3	SiO2†	1528564.5	1561386.6	101580	ug/L	101580 ppb	09:26:57

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	866489.1	97.911	%	0.0819				0.08%
Sc Radial	5554.0	98.1	%	0.24				0.25%
Y 371.029	705659.5	95.093	%	0.1569				0.17%
Y RADIAL	5948.3	96.58	%	0.120				0.12%
Ag 328.068†	-7921.7	1.9386	ug/L	0.07944	1.9386	ppb	0.07944	4.10%
Al 396.153Radial†	625.5	43.575	ug/L	17.6273	43.575	ppb	17.6273	40.45%
As 188.979†	24251.4	9978.5	ug/L	72.21	9978.5	ppb	72.21	0.72%
QC value within limits for As 188.979 Recovery = 99.78%								
B 249.677†	226589.7	4894.9	ug/L	8.56	4894.9	ppb	8.56	0.17%
QC value within limits for B 249.677 Recovery = 97.90%								
Ba 233.527†	1387748.3	10562	ug/L	4.9	10562	ppb	4.9	0.05%
QC value less than the lower limit for Ba 233.527 Recovery = 70.41%								
Be 313.107†	7584461.4	2837.9	ug/L	21.13	2837.9	ppb	21.13	0.74%
QC value within limits for Be 313.107 Recovery = 94.60%								
Ca 317.933Radial†	19.2	29.327	ug/L	1.4053	29.327	ppb	1.4053	4.79%
Cd 226.502†	879945.4	9552.5	ug/L	5.27	9552.5	ppb	5.27	0.06%

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   QC value within limits for Cd 226.502  Recovery = 95.53%
Co 228.616†          479535.8      9307.5 ug/L        42.45      9307.5 ppb         42.45   0.46%
   QC value within limits for Co 228.616  Recovery = 93.08%
Cr 267.716†         2186966.3       23581 ug/L         10.0       23581 ppb          10.0   0.04%
   QC value within limits for Cr 267.716  Recovery = 94.32%
Cu 324.752†         6787154.2       19739 ug/L        183.1       19739 ppb         183.1   0.93%
   QC value within limits for Cu 324.752  Recovery = 98.70%
Fe 238.204 Radial†      -26.1      30.864 ug/L      15.0776      30.864 ppb       15.0776  48.85%
K 766.490 Radial†   1637403.1      297090 ug/L       2224.5      297090 ppb        2224.5   0.75%
   QC value within limits for K 766.490 Radial  Recovery = 99.03%
Mg 279.077 IEC†          -6.8     -56.741 ug/L      39.2592     -56.741 ppb       39.2592  69.19%
Mn 257.610†         8457532.7      9191.0 ug/L        52.65      9191.0 ppb         52.65   0.57%
   QC value within limits for Mn 257.610  Recovery = 91.91%
Mo 202.031†          150179.2      9782.6 ug/L        46.58      9782.6 ppb         46.58   0.48%
   QC value within limits for Mo 202.031  Recovery = 97.83%
Na 589.592 Radial†      694.2      260.94 ug/L       29.168      260.94 ppb        29.168  11.18%
Ni 231.604†          405775.5      9622.4 ug/L        6.47      9622.4 ppb          6.47   0.07%
   QC value within limits for Ni 231.604  Recovery = 96.22%
P 214.914†            31344.6       15601 ug/L       100.8       15601 ppb         100.8   0.65%
   QC value within limits for P 214.914  Recovery = 104.00%
Pb 220.353†          201042.6       23510 ug/L        89.8       23510 ppb          89.8   0.38%
   QC value within limits for Pb 220.353  Recovery = 94.04%
S 181.975 Axial†      35122.5       51357 ug/L       264.3       51357 ppb         264.3   0.51%
   QC value within limits for S 181.975 Axial  Recovery = 102.71%
Sb 206.836†           32378.0       10324 ug/L        59.5       10324 ppb          59.5   0.58%
   QC value within limits for Sb 206.836  Recovery = 103.24%
Se 196.026†           16911.3       10115 ug/L        51.0       10115 ppb          51.0   0.50%
   QC value within limits for Se 196.026  Recovery = 101.15%
Si 251.611†         1554357.0       47239 ug/L        38.5       47239 ppb          38.5   0.08%
   QC value within limits for Si 251.611  Recovery = 94.48%
Sn 189.927†           61891.5       10471 ug/L        46.1       10471 ppb          46.1   0.44%
   QC value within limits for Sn 189.927  Recovery = 104.71%
Sr 421.552†         1447552.3      9771.8 ug/L       73.71      9771.8 ppb         73.71   0.75%
   QC value within limits for Sr 421.552  Recovery = 97.72%
Ti 334.940†         6168589.3      9968.4 ug/L       68.16      9968.4 ppb         68.16   0.68%
   QC value within limits for Ti 334.940  Recovery = 99.68%
Tl 190.801†           33440.3      9644.8 ug/L       39.90      9644.8 ppb         39.90   0.41%
   QC value within limits for Tl 190.801  Recovery = 96.45%
U 409.014†             1150.0     -13.353 ug/L      2.8107     -13.353 ppb        2.8107  21.05%
V 292.402†          1458397.2      9964.5 ug/L        0.89      9964.5 ppb          0.89   0.01%
   QC value within limits for V 292.402  Recovery = 99.65%
Zn 213.857†         1547032.5       13834 ug/L        15.0       13834 ppb          15.0   0.11%
   QC value within limits for Zn 213.857  Recovery = 92.22%
SiO2†               1559706.1      101470 ug/L       686.1      101470 ppb         686.1   0.68%
   QC value within limits for SiO2  Recovery = 94.84%
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 09:43:20
Data Type: Reprocessed on 12/9/2009 10:32:31

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	910696.2	910696.2	102.91	%			09:46:30
1	Sc Radial	5714.3	5714.3	101	%			09:45:13
1	Y 371.029	751846.8	751846.8	101.32	%			09:46:30
1	Y RADIAL	6150.6	6150.6	99.87	%			09:45:13
1	Ag 328.068†	110405.9	107059.7	497.97	ug/L	497.97	ppb	09:46:35
1	Al 396.153Radial†	6700.1	6660.7	4902.8	ug/L	4902.8	ppb	09:45:13
1	As 188.979†	1210.7	1205.7	496.24	ug/L	496.24	ppb	09:46:55
1	B 249.677†	22934.9	22810.9	493.26	ug/L	493.26	ppb	09:46:35
1	Ba 233.527†	65619.0	63777.5	485.66	ug/L	485.66	ppb	09:46:35
1	Be 313.107†	1335598.1	1303192.5	485.22	ug/L	485.22	ppb	09:46:30
1	Ca 317.933Radial†	3256.0	3209.3	4907.6	ug/L	4907.6	ppb	09:45:33
1	Cd 226.502†	46127.0	45011.9	488.14	ug/L	488.14	ppb	09:46:35
1	Co 228.616†	25714.1	25059.5	486.60	ug/L	486.60	ppb	09:46:35
1	Cr 267.716†	46284.7	44890.4	484.46	ug/L	484.46	ppb	09:46:35
1	Cu 324.752†	176586.6	164830.1	479.63	ug/L	479.63	ppb	09:46:35
1	Fe 238.204 Radial†	501.5	491.0	4958.9	ug/L	4958.9	ppb	09:45:33
1	K 766.490 Radial†	30258.9	27818.9	5040.4	ug/L	5040.4	ppb	09:45:13
1	Mg 279.077 IEC†	139.7	136.7	5096.6	ug/L	5096.6	ppb	09:45:33
1	Mn 257.610†	459115.9	445744.1	484.80	ug/L	484.80	ppb	09:46:30
1	Mo 202.031†	7823.7	7582.7	494.28	ug/L	494.28	ppb	09:46:55
1	Na 589.592 Radial†	25561.1	25949.2	9753.6	ug/L	9753.6	ppb	09:45:13
1	Ni 231.604†	21225.4	20555.8	487.44	ug/L	487.44	ppb	09:46:35
1	P 214.914†	4429.4	4084.3	2354.1	ug/L	2354.1	ppb	09:46:55
1	Pb 220.353†	4206.8	4140.5	485.55	ug/L	485.55	ppb	09:46:55
1	S 181.975 Axial†	740.9	678.5	991.15	ug/L	991.15	ppb	09:46:55
1	Sb 206.836†	1602.1	1527.2	503.04	ug/L	503.04	ppb	09:46:55
1	Se 196.026†	821.5	821.8	507.45	ug/L	507.45	ppb	09:46:55
1	Si 251.611†	82828.4	79980.8	2434.4	ug/L	2434.4	ppb	09:46:35
1	Sn 189.927†	3010.1	2920.9	494.72	ug/L	494.72	ppb	09:46:55
1	Sr 421.552†	75843.1	75163.6	507.35	ug/L	507.35	ppb	09:45:13
1	Ti 334.940†	312104.3	304253.5	491.95	ug/L	491.95	ppb	09:46:35
1	Tl 190.801†	1725.1	1713.3	494.20	ug/L	494.20	ppb	09:46:55
1	U 409.014†	15879.6	17393.2	484.39	ug/L	484.39	ppb	09:46:35
1	V 292.402†	72323.0	71576.6	489.81	ug/L	489.81	ppb	09:46:35
1	Zn 213.857†	56574.5	54169.2	483.02	ug/L	483.02	ppb	09:46:35
1	SiO2†	81869.3	79068.0	5151.9	ug/L	5151.9	ppb	09:48:03
2	Sc 361.383	904058.2	904058.2	102.16	%			09:47:01
2	Sc Radial	5729.4	5729.4	101	%			09:45:38
2	Y 371.029	745786.4	745786.4	100.50	%			09:47:01
2	Y RADIAL	6175.9	6175.9	100.3	%			09:45:38
2	Ag 328.068†	109423.8	106886.2	497.15	ug/L	497.15	ppb	09:47:06
2	Al 396.153Radial†	6614.7	6558.8	4827.5	ug/L	4827.5	ppb	09:45:38
2	As 188.979†	1189.4	1193.5	491.26	ug/L	491.26	ppb	09:47:26
2	B 249.677†	22706.7	22751.2	491.97	ug/L	491.97	ppb	09:47:06
2	Ba 233.527†	64985.0	63625.1	484.50	ug/L	484.50	ppb	09:47:06
2	Be 313.107†	1324099.1	1301465.9	484.58	ug/L	484.58	ppb	09:47:01
2	Ca 317.933Radial†	3240.8	3185.7	4871.5	ug/L	4871.5	ppb	09:45:58
2	Cd 226.502†	45575.0	44800.7	485.86	ug/L	485.86	ppb	09:47:06
2	Co 228.616†	25488.7	25022.3	485.87	ug/L	485.87	ppb	09:47:06
2	Cr 267.716†	45934.6	44877.9	484.32	ug/L	484.32	ppb	09:47:06
2	Cu 324.752†	175131.0	164665.1	479.15	ug/L	479.15	ppb	09:47:06
2	Fe 238.204 Radial†	498.5	486.7	4916.1	ug/L	4916.1	ppb	09:45:58
2	K 766.490 Radial†	30025.1	27508.5	4984.1	ug/L	4984.1	ppb	09:45:38
2	Mg 279.077 IEC†	138.7	135.4	5046.4	ug/L	5046.4	ppb	09:45:58
2	Mn 257.610†	456255.1	446219.6	485.32	ug/L	485.32	ppb	09:47:01
2	Mo 202.031†	7714.2	7531.3	490.93	ug/L	490.93	ppb	09:47:26
2	Na 589.592 Radial†	25179.1	25504.6	9586.5	ug/L	9586.5	ppb	09:45:38
2	Ni 231.604†	21058.3	20543.6	487.15	ug/L	487.15	ppb	09:47:06

2	P 214.914†	4333.4	4021.9	2317.0 ug/L	2317.0 ppb	09:47:26
2	Pb 220.353†	4157.8	4122.6	483.43 ug/L	483.43 ppb	09:47:26
2	S 181.975 Axial†	729.4	672.6	982.47 ug/L	982.47 ppb	09:47:26
2	Sb 206.836†	1582.8	1519.8	500.51 ug/L	500.51 ppb	09:47:26
2	Se 196.026†	810.1	816.4	504.11 ug/L	504.11 ppb	09:47:26
2	Si 251.611†	82145.1	79902.9	2432.1 ug/L	2432.1 ppb	09:47:06
2	Sn 189.927†	2971.9	2904.8	492.01 ug/L	492.01 ppb	09:47:26
2	Sr 421.552†	74820.3	73953.8	499.19 ug/L	499.19 ppb	09:45:38
2	Ti 334.940†	309543.5	303973.7	491.50 ug/L	491.50 ppb	09:47:06
2	Tl 190.801†	1694.9	1695.9	489.24 ug/L	489.24 ppb	09:47:26
2	U 409.014†	15674.2	17305.5	481.94 ug/L	481.94 ppb	09:47:06
2	V 292.402†	71451.9	71239.9	487.49 ug/L	487.49 ppb	09:47:06
2	Zn 213.857†	56121.6	54129.5	482.67 ug/L	482.67 ppb	09:47:06
2	SiO2†	83418.2	81168.3	5289.6 ug/L	5289.6 ppb	09:48:08
3	Sc 361.383	913585.2	913585.2	103.23 %		09:47:32
3	Sc Radial	5645.2	5645.2	99.7 %		09:46:03
3	Y 371.029	753100.0	753100.0	101.49 %		09:47:32
3	Y RADIAL	6103.0	6103.0	99.10 %		09:46:03
3	Ag 328.068†	110300.8	106618.6	495.95 ug/L	495.95 ppb	09:47:37
3	Al 396.153Radial†	6567.5	6609.0	4864.7 ug/L	4864.7 ppb	09:46:03
3	As 188.979†	1201.7	1193.3	491.18 ug/L	491.18 ppb	09:47:57
3	B 249.677†	22946.7	22751.9	491.98 ug/L	491.98 ppb	09:47:37
3	Ba 233.527†	65486.7	63447.7	483.15 ug/L	483.15 ppb	09:47:37
3	Be 313.107†	1327487.0	1291231.3	480.78 ug/L	480.78 ppb	09:47:32
3	Ca 317.933Radial†	3252.9	3245.7	4963.3 ug/L	4963.3 ppb	09:46:23
3	Cd 226.502†	45883.1	44633.9	484.03 ug/L	484.03 ppb	09:47:37
3	Co 228.616†	25566.4	24837.4	482.28 ug/L	482.28 ppb	09:47:37
3	Cr 267.716†	46141.4	44609.3	481.43 ug/L	481.43 ppb	09:47:37
3	Cu 324.752†	176552.5	164254.4	477.96 ug/L	477.96 ppb	09:47:37
3	Fe 238.204 Radial†	504.4	500.0	5050.3 ug/L	5050.3 ppb	09:46:23
3	K 766.490 Radial†	29830.3	27756.1	5029.1 ug/L	5029.1 ppb	09:46:03
3	Mg 279.077 IEC†	139.3	137.9	5142.4 ug/L	5142.4 ppb	09:46:23
3	Mn 257.610†	457214.1	442491.1	481.28 ug/L	481.28 ppb	09:47:32
3	Mo 202.031†	7772.2	7508.8	489.48 ug/L	489.48 ppb	09:47:57
3	Na 589.592 Radial†	24785.3	25481.1	9577.6 ug/L	9577.6 ppb	09:46:03
3	Ni 231.604†	21097.1	20366.2	482.95 ug/L	482.95 ppb	09:47:37
3	P 214.914†	4364.1	4007.4	2308.5 ug/L	2308.5 ppb	09:47:57
3	Pb 220.353†	4174.7	4096.5	480.38 ug/L	480.38 ppb	09:47:57
3	S 181.975 Axial†	735.7	671.1	980.40 ug/L	980.40 ppb	09:47:57
3	Sb 206.836†	1593.5	1514.0	498.62 ug/L	498.62 ppb	09:47:57
3	Se 196.026†	818.4	816.2	504.42 ug/L	504.42 ppb	09:47:57
3	Si 251.611†	82678.8	79581.3	2422.3 ug/L	2422.3 ppb	09:47:37
3	Sn 189.927†	2989.9	2892.0	489.85 ug/L	489.85 ppb	09:47:57
3	Sr 421.552†	74076.5	74311.6	501.60 ug/L	501.60 ppb	09:46:03
3	Ti 334.940†	312067.0	303258.3	490.35 ug/L	490.35 ppb	09:47:37
3	Tl 190.801†	1683.9	1668.0	481.22 ug/L	481.22 ppb	09:47:57
3	U 409.014†	15771.8	17240.0	480.10 ug/L	480.10 ppb	09:47:37
3	V 292.402†	72008.5	71049.8	486.17 ug/L	486.17 ppb	09:47:37
3	Zn 213.857†	56282.4	53712.4	478.93 ug/L	478.93 ppb	09:47:37
3	SiO2†	82661.7	79583.9	5185.9 ug/L	5185.9 ppb	09:48:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	909446.6	102.77	%	0.552				0.54%
Sc Radial	5696.3	101	%	0.8				0.79%
Y 371.029	750244.4	101.10	%	0.527				0.52%
Y RADIAL	6143.2	99.75	%	0.601				0.60%
Ag 328.068†	106854.8	497.02	ug/L	1.016	497.02	ppb	1.016	0.20%
QC value within limits for Ag 328.068 Recovery = 99.40%								
Al 396.153Radial†	6609.5	4865.0	ug/L	37.62	4865.0	ppb	37.62	0.77%
QC value within limits for Al 396.153Radial Recovery = 97.30%								
As 188.979†	1197.5	492.89	ug/L	2.900	492.89	ppb	2.900	0.59%
QC value within limits for As 188.979 Recovery = 98.58%								
B 249.677†	22771.3	492.40	ug/L	0.742	492.40	ppb	0.742	0.15%
QC value within limits for B 249.677 Recovery = 98.48%								
Ba 233.527†	63616.8	484.44	ug/L	1.256	484.44	ppb	1.256	0.26%
QC value within limits for Ba 233.527 Recovery = 96.89%								
Be 313.107†	1298629.9	483.53	ug/L	2.404	483.53	ppb	2.404	0.50%
QC value within limits for Be 313.107 Recovery = 96.71%								

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Ca 317.933Radial†       3213.6      4914.1 ug/L        46.22      4914.1 ppb        46.22   0.94%
   QC value within limits for Ca 317.933Radial  Recovery = 98.28%
Cd 226.502†            44815.5      486.01 ug/L        2.061      486.01 ppb        2.061   0.42%
   QC value within limits for Cd 226.502  Recovery = 97.20%
Co 228.616†            24973.1      484.92 ug/L        2.313      484.92 ppb        2.313   0.48%
   QC value within limits for Co 228.616  Recovery = 96.98%
Cr 267.716†            44792.5      483.40 ug/L        1.712      483.40 ppb        1.712   0.35%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†           164583.2      478.91 ug/L        0.859      478.91 ppb        0.859   0.18%
   QC value within limits for Cu 324.752  Recovery = 95.78%
Fe 238.204 Radial†       492.6      4975.1 ug/L        68.56      4975.1 ppb        68.56   1.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.50%
K 766.490 Radial†      27694.5      5017.9 ug/L        29.77      5017.9 ppb        29.77   0.59%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†          136.7      5095.1 ug/L        48.03      5095.1 ppb        48.03   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.90%
Mn 257.610†           444818.3      483.80 ug/L        2.199      483.80 ppb        2.199   0.45%
   QC value within limits for Mn 257.610  Recovery = 96.76%
Mo 202.031†             7540.9      491.56 ug/L        2.465      491.56 ppb        2.465   0.50%
   QC value within limits for Mo 202.031  Recovery = 98.31%
Na 589.592 Radial†     25645.0      9639.2 ug/L        99.14      9639.2 ppb        99.14   1.03%
   QC value within limits for Na 589.592 Radial  Recovery = 96.39%
Ni 231.604†            20488.5      485.85 ug/L        2.516      485.85 ppb        2.516   0.52%
   QC value within limits for Ni 231.604  Recovery = 97.17%
P 214.914†              4037.9      2326.5 ug/L        24.22      2326.5 ppb        24.22   1.04%
   QC value within limits for P 214.914  Recovery = 93.06%
Pb 220.353†             4119.9      483.12 ug/L        2.601      483.12 ppb        2.601   0.54%
   QC value within limits for Pb 220.353  Recovery = 96.62%
S 181.975 Axial†         674.1      984.67 ug/L        5.702      984.67 ppb        5.702   0.58%
   QC value within limits for S 181.975 Axial  Recovery = 98.47%
Sb 206.836†             1520.3      500.72 ug/L        2.220      500.72 ppb        2.220   0.44%
   QC value within limits for Sb 206.836  Recovery = 100.14%
Se 196.026†              818.1      505.33 ug/L        1.849      505.33 ppb        1.849   0.37%
   QC value within limits for Se 196.026  Recovery = 101.07%
Si 251.611†            79821.7      2429.6 ug/L         6.44      2429.6 ppb         6.44   0.26%
   QC value within limits for Si 251.611  Recovery = 97.19%
Sn 189.927†             2905.9      492.19 ug/L        2.442      492.19 ppb        2.442   0.50%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            74476.3      502.71 ug/L        4.195      502.71 ppb        4.195   0.83%
   QC value within limits for Sr 421.552  Recovery = 100.54%
Ti 334.940†           303828.5      491.26 ug/L        0.827      491.26 ppb        0.827   0.17%
   QC value within limits for Ti 334.940  Recovery = 98.25%
Tl 190.801†             1692.4      488.22 ug/L        6.552      488.22 ppb        6.552   1.34%
   QC value within limits for Tl 190.801  Recovery = 97.64%
U 409.014†             17312.9      482.14 ug/L        2.150      482.14 ppb        2.150   0.45%
   QC value within limits for U 409.014  Recovery = 96.43%
V 292.402†             71288.8      487.82 ug/L        1.844      487.82 ppb        1.844   0.38%
   QC value within limits for V 292.402  Recovery = 97.56%
Zn 213.857†            54003.7      481.54 ug/L        2.267      481.54 ppb        2.267   0.47%
   QC value within limits for Zn 213.857  Recovery = 96.31%
SiO2†                  79940.1      5209.1 ug/L        71.74      5209.1 ppb        71.74   1.38%
   QC value within limits for SiO2  Recovery = 97.41%
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 09:50:23
Data Type: Reprocessed on 12/9/2009 10:32:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	883487.1	883487.1	99.832	%			09:53:33
1	Sc Radial	5780.6	5780.6	102	%			09:52:16
1	Y 371.029	742503.0	742503.0	100.06	%			09:53:33
1	Y RADIAL	6319.3	6319.3	102.6	%			09:52:16
1	Ag 328.068†	300.6	73.6	0.3412	ug/L	0.3412	ppb	09:53:33
1	Al 396.153Radial†	-15.3	5.4	3.9593	ug/L	3.9593	ppb	09:52:36
1	As 188.979†	-13.6	15.6	6.3379	ug/L	6.3379	ppb	09:53:53
1	B 249.677†	154.7	678.8	14.735	ug/L	14.735	ppb	09:53:53
1	Ba 233.527†	-5.5	6.5	0.0495	ug/L	0.0495	ppb	09:53:53
1	Be 313.107†	-5163.9	147.7	0.0546	ug/L	0.0546	ppb	09:53:33
1	Ca 317.933Radial†	17.0	-1.0	-1.5997	ug/L	-1.5997	ppb	09:52:36
1	Cd 226.502†	-155.4	32.2	0.3494	ug/L	0.3494	ppb	09:53:53
1	Co 228.616†	-70.3	1.3	0.0275	ug/L	0.0275	ppb	09:53:53
1	Cr 267.716†	57.3	-29.6	-0.3184	ug/L	-0.3184	ppb	09:53:53
1	Cu 324.752†	6871.1	114.0	0.3317	ug/L	0.3317	ppb	09:53:33
1	Fe 238.204 Radial†	6.4	0.2	2.0231	ug/L	2.0231	ppb	09:52:36
1	K 766.490 Radial†	2626.6	403.0	73.133	ug/L	73.133	ppb	09:52:16
1	Mg 279.077 IEC†	1.5	-0.3	-9.8264	ug/L	-9.8264	ppb	09:52:36
1	Mn 257.610†	402.6	-0.1	0.0003	ug/L	0.0003	ppb	09:53:53
1	Mo 202.031†	28.5	8.5	0.5556	ug/L	0.5556	ppb	09:53:53
1	Na 589.592 Radial†	-557.2	70.1	26.355	ug/L	26.355	ppb	09:52:16
1	Ni 231.604†	82.1	12.1	0.2868	ug/L	0.2868	ppb	09:53:53
1	P 214.914†	219.8	0.2	0.0528	ug/L	0.0528	ppb	09:53:53
1	Pb 220.353†	-56.5	-4.0	-0.4713	ug/L	-0.4713	ppb	09:53:53
1	S 181.975 Axial†	44.9	3.6	5.1910	ug/L	5.1910	ppb	09:53:53
1	Sb 206.836†	52.1	22.6	7.3665	ug/L	7.3665	ppb	09:53:53
1	Se 196.026†	-22.0	1.4	0.8373	ug/L	0.8373	ppb	09:53:53
1	Si 251.611†	513.2	6.1	0.1511	ug/L	0.1511	ppb	09:53:53
1	Sn 189.927†	6.1	1.8	0.3061	ug/L	0.3061	ppb	09:53:53
1	Sr 421.552†	-10.8	-14.0	-0.0943	ug/L	-0.0943	ppb	09:52:16
1	Ti 334.940†	-1046.4	-83.1	-0.1344	ug/L	-0.1344	ppb	09:53:33
1	Tl 190.801†	-28.5	8.3	2.3736	ug/L	2.3736	ppb	09:53:53
1	U 409.014†	-1960.2	-1.4	-0.0375	ug/L	-0.0375	ppb	09:53:33
1	V 292.402†	-1278.7	15.6	0.1130	ug/L	0.1130	ppb	09:53:33
1	Zn 213.857†	689.1	-117.0	-1.0549	ug/L	-1.0549	ppb	09:53:53
1	SiO2†	552.8	64.9	4.1704	ug/L	4.1704	ppb	09:54:49
2	Sc 361.383	884739.8	884739.8	99.974	%			09:53:58
2	Sc Radial	5764.0	5764.0	102	%			09:52:41
2	Y 371.029	742644.3	742644.3	100.08	%			09:53:58
2	Y RADIAL	6265.5	6265.5	101.7	%			09:52:41
2	Ag 328.068†	300.2	72.7	0.3397	ug/L	0.3397	ppb	09:53:58
2	Al 396.153Radial†	-19.5	1.2	0.8344	ug/L	0.8344	ppb	09:53:01
2	As 188.979†	-13.4	15.8	6.4281	ug/L	6.4281	ppb	09:54:18
2	B 249.677†	129.7	653.5	14.185	ug/L	14.185	ppb	09:54:18
2	Ba 233.527†	-24.2	-12.1	-0.0918	ug/L	-0.0918	ppb	09:54:18
2	Be 313.107†	-5215.7	103.1	0.0380	ug/L	0.0380	ppb	09:53:58
2	Ca 317.933Radial†	14.9	-3.0	-4.6310	ug/L	-4.6310	ppb	09:53:01
2	Cd 226.502†	-148.1	39.7	0.4296	ug/L	0.4296	ppb	09:54:18
2	Co 228.616†	-70.0	1.7	0.0348	ug/L	0.0348	ppb	09:54:18
2	Cr 267.716†	72.1	-14.9	-0.1599	ug/L	-0.1599	ppb	09:54:18
2	Cu 324.752†	6864.6	97.8	0.2849	ug/L	0.2849	ppb	09:53:58
2	Fe 238.204 Radial†	7.2	1.0	10.224	ug/L	10.224	ppb	09:53:01
2	K 766.490 Radial†	2593.8	378.2	68.622	ug/L	68.622	ppb	09:52:41
2	Mg 279.077 IEC†	1.9	0.1	4.5790	ug/L	4.5790	ppb	09:53:01
2	Mn 257.610†	422.1	18.8	0.0213	ug/L	0.0213	ppb	09:54:18
2	Mo 202.031†	31.0	11.0	0.7187	ug/L	0.7187	ppb	09:54:18
2	Na 589.592 Radial†	-535.9	89.4	33.593	ug/L	33.593	ppb	09:52:41
2	Ni 231.604†	84.6	14.5	0.3432	ug/L	0.3432	ppb	09:54:18

2	P 214.914†	222.2	2.3	1.3036	ug/L	1.3036 ppb	09:54:18
2	Pb 220.353†	-48.3	4.3	0.4997	ug/L	0.4997 ppb	09:54:18
2	S 181.975 Axial†	35.4	-6.0	-8.7915	ug/L	-8.7915 ppb	09:54:18
2	Sb 206.836†	49.5	20.0	6.5211	ug/L	6.5211 ppb	09:54:18
2	Se 196.026†	-17.3	6.1	3.6975	ug/L	3.6975 ppb	09:54:18
2	Si 251.611†	503.4	-4.5	-0.1782	ug/L	-0.1782 ppb	09:54:18
2	Sn 189.927†	12.4	8.2	1.3837	ug/L	1.3837 ppb	09:54:18
2	Sr 421.552†	-27.1	-30.1	-0.2029	ug/L	-0.2029 ppb	09:52:41
2	Ti 334.940†	-1080.5	-115.7	-0.1873	ug/L	-0.1873 ppb	09:53:58
2	Tl 190.801†	-32.4	4.4	1.2673	ug/L	1.2673 ppb	09:54:18
2	U 409.014†	-1967.4	-5.7	-0.1603	ug/L	-0.1603 ppb	09:53:58
2	V 292.402†	-1289.8	6.4	0.0517	ug/L	0.0517 ppb	09:53:58
2	Zn 213.857†	701.1	-106.0	-0.9576	ug/L	-0.9576 ppb	09:54:18
2	SiO2†	506.6	17.9	1.0831	ug/L	1.0831 ppb	09:54:54
3	Sc 361.383	887271.0	887271.0	100.26	%		09:54:24
3	Sc Radial	5784.6	5784.6	102	%		09:53:06
3	Y 371.029	744463.2	744463.2	100.32	%		09:54:24
3	Y RADIAL	6304.1	6304.1	102.4	%		09:53:06
3	Ag 328.068†	243.1	14.9	0.0755	ug/L	0.0755 ppb	09:54:24
3	Al 396.153Radial†	-26.2	-5.3	-3.9397	ug/L	-3.9397 ppb	09:53:26
3	As 188.979†	-11.1	18.1	7.3933	ug/L	7.3933 ppb	09:54:44
3	B 249.677†	106.2	629.8	13.670	ug/L	13.670 ppb	09:54:44
3	Ba 233.527†	2.1	14.1	0.1077	ug/L	0.1077 ppb	09:54:44
3	Be 313.107†	-5267.2	66.7	0.0249	ug/L	0.0249 ppb	09:54:24
3	Ca 317.933Radial†	17.9	-0.1	-0.1892	ug/L	-0.1892 ppb	09:53:26
3	Cd 226.502†	-155.1	33.1	0.3583	ug/L	0.3583 ppb	09:54:44
3	Co 228.616†	-67.9	4.0	0.0786	ug/L	0.0786 ppb	09:54:44
3	Cr 267.716†	84.9	-2.3	-0.0233	ug/L	-0.0233 ppb	09:54:44
3	Cu 324.752†	6925.6	139.0	0.4049	ug/L	0.4049 ppb	09:54:24
3	Fe 238.204 Radial†	7.4	1.2	12.352	ug/L	12.352 ppb	09:53:26
3	K 766.490 Radial†	2550.2	326.5	59.239	ug/L	59.239 ppb	09:53:06
3	Mg 279.077 IEC†	-1.3	-3.0	-113.52	ug/L	-113.52 ppb	09:53:26
3	Mn 257.610†	415.8	11.3	0.0157	ug/L	0.0157 ppb	09:54:44
3	Mo 202.031†	24.3	4.3	0.2789	ug/L	0.2789 ppb	09:54:44
3	Na 589.592 Radial†	-562.9	64.9	24.394	ug/L	24.394 ppb	09:53:06
3	Ni 231.604†	89.0	18.7	0.4434	ug/L	0.4434 ppb	09:54:44
3	P 214.914†	222.4	1.9	1.0543	ug/L	1.0543 ppb	09:54:44
3	Pb 220.353†	-60.5	-7.8	-0.9111	ug/L	-0.9111 ppb	09:54:44
3	S 181.975 Axial†	43.6	2.0	2.9267	ug/L	2.9267 ppb	09:54:44
3	Sb 206.836†	45.8	16.1	5.2510	ug/L	5.2510 ppb	09:54:44
3	Se 196.026†	-22.4	1.1	0.6700	ug/L	0.6700 ppb	09:54:44
3	Si 251.611†	494.9	-14.4	-0.4691	ug/L	-0.4691 ppb	09:54:44
3	Sn 189.927†	13.0	8.7	1.4763	ug/L	1.4763 ppb	09:54:44
3	Sr 421.552†	-8.5	-11.8	-0.0795	ug/L	-0.0795 ppb	09:53:06
3	Ti 334.940†	-918.1	49.3	0.0809	ug/L	0.0809 ppb	09:54:24
3	Tl 190.801†	-25.4	11.5	3.2959	ug/L	3.2959 ppb	09:54:44
3	U 409.014†	-2059.3	-91.8	-2.5658	ug/L	-2.5658 ppb	09:54:24
3	V 292.402†	-1282.9	16.9	0.1084	ug/L	0.1084 ppb	09:54:24
3	Zn 213.857†	688.0	-121.0	-1.0895	ug/L	-1.0895 ppb	09:54:44
3	SiO2†	559.7	69.4	4.4787	ug/L	4.4787 ppb	09:54:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885166.0	100.02	%	0.218				0.22%
Sc Radial	5776.4	102	%	0.2				0.19%
Y 371.029	743203.5	100.15	%	0.147				0.15%
Y RADIAL	6296.3	102.2	%	0.45				0.44%
Ag 328.068†	53.7	0.2521	ug/L	0.15298	0.2521	ppb	0.15298	60.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.2847	ug/L	3.97809	0.2847	ppb	3.97809	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	16.5	6.7198	ug/L	0.58506	6.7198	ppb	0.58506	8.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	654.1	14.196	ug/L	0.5326	14.196	ppb	0.5326	3.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.8	0.0218	ug/L	0.10259	0.0218	ppb	0.10259	470.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	105.8	0.0392	ug/L	0.01487	0.0392	ppb	0.01487	37.98%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.4     -2.1400 ug/L       2.26967     -2.1400 ppb        2.26967 106.06%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                35.0      0.3791 ug/L       0.04397      0.3791 ppb        0.04397  11.60%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.3      0.0470 ug/L       0.02766      0.0470 ppb        0.02766  58.90%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -15.6     -0.1672 ug/L       0.14766     -0.1672 ppb        0.14766  88.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               116.9      0.3405 ug/L       0.06050      0.3405 ppb        0.06050  17.77%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.8      8.1998 ug/L       5.45386      8.1998 ppb        5.45386  66.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         369.2     66.998 ug/L        7.0880     66.998 ppb         7.0880  10.58%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.1    -39.588 ug/L       64.4280    -39.588 ppb        64.4280 162.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.0      0.0124 ug/L       0.01089      0.0124 ppb        0.01089  87.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.9      0.5177 ug/L       0.22238      0.5177 ppb        0.22238  42.95%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         74.8     28.114 ug/L        4.8453     28.114 ppb         4.8453  17.23%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.1      0.3578 ug/L       0.07931      0.3578 ppb        0.07931  22.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.4      0.8036 ug/L       0.66205      0.8036 ppb        0.66205  82.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.5     -0.2943 ug/L       0.72189     -0.2943 ppb        0.72189 245.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.2246 ug/L       7.50507     -0.2246 ppb        7.50507 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                19.6      6.3795 ug/L       1.06484      6.3795 ppb        1.06484  16.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.9      1.7349 ug/L       1.70167      1.7349 ppb        1.70167  98.08%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                -4.3     -0.1654 ug/L       0.31028     -0.1654 ppb        0.31028 187.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.2      1.0554 ug/L       0.65051      1.0554 ppb        0.65051  61.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.6     -0.1256 ug/L       0.06737     -0.1256 ppb        0.06737  53.66%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -49.8     -0.0803 ug/L       0.14204     -0.0803 ppb        0.14204 176.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.1      2.3123 ug/L       1.01567      2.3123 ppb        1.01567  43.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.9     -0.9212 ug/L       1.42557     -0.9212 ppb        1.42557 154.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 12.9      0.0910 ug/L       0.03411      0.0910 ppb        0.03411  37.48%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -114.7     -1.0340 ug/L       0.06840     -1.0340 ppb        0.06840   6.61%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      50.7      3.2441 ug/L       1.87777      3.2441 ppb        1.87777  57.88%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/9/2009 09:57:09
Data Type: Reprocessed on 12/9/2009 10:32:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	887319.3	887319.3	100.27	%			10:00:20
1	Sc Radial	5605.4	5605.4	99.0	%			09:59:02
1	Y 371.029	738820.1	738820.1	99.562	%			10:00:20
1	Y RADIAL	6070.3	6070.3	98.56	%			09:59:02
1	Ag 328.068†	-25507.1	-25667.2	0.4653	ug/L	0.4653	ppb	10:00:20
1	Al 396.153Radial†	-53.3	-33.5	-23.660	ug/L	-23.660	ppb	09:59:02
1	As 188.979†	-212.3	-182.5	-16.747	ug/L	-16.747	ppb	10:00:40
1	B 249.677†	2542.2	3059.3	16.807	ug/L	16.807	ppb	10:00:20
1	Ba 233.527†	-1747.2	-1730.6	0.8462	ug/L	0.8462	ppb	10:00:20
1	Be 313.107†	-5195.5	138.5	0.0511	ug/L	0.0511	ppb	10:00:20
1	Ca 317.933Radial†	19.0	1.5	2.2325	ug/L	2.2325	ppb	09:59:22
1	Cd 226.502†	3562.1	3740.5	3.2119	ug/L	3.2119	ppb	10:00:20
1	Co 228.616†	213.6	284.8	0.1277	ug/L	0.1277	ppb	10:00:40
1	Cr 267.716†	-567.9	-653.3	-0.2725	ug/L	-0.2725	ppb	10:00:20
1	Cu 324.752†	432.3	-6337.5	0.6363	ug/L	0.6363	ppb	10:00:20
1	Fe 238.204 Radial†	36747.7	37121.7	373790	ug/L	373790	ppb	09:59:02
1	K 766.490 Radial†	2101.5	-47.1	3.7100	ug/L	3.7100	ppb	09:59:02
1	Mg 279.077 IEC†	11.5	9.8	45.122	ug/L	45.122	ppb	09:59:22
1	Mn 257.610†	-36408.4	-36715.6	-2.6309	ug/L	-2.6309	ppb	10:00:20
1	Mo 202.031†	-385.1	-404.1	0.1946	ug/L	0.1946	ppb	10:00:20
1	Na 589.592 Radial†	-562.7	47.4	17.835	ug/L	17.835	ppb	09:59:02
1	Ni 231.604†	177.0	106.4	2.5217	ug/L	2.5217	ppb	10:00:40
1	P 214.914†	725.0	503.2	0.4044	ug/L	0.4044	ppb	10:00:40
1	Pb 220.353†	238.6	290.5	3.2201	ug/L	3.2201	ppb	10:00:40
1	S 181.975 Axial†	47.1	5.5	8.0097	ug/L	8.0097	ppb	10:00:40
1	Sb 206.836†	11.4	-18.2	-0.1644	ug/L	-0.1644	ppb	10:00:40
1	Se 196.026†	-1992.6	-1963.8	-27.011	ug/L	-27.011	ppb	10:00:40
1	Si 251.611†	-727.5	-1233.6	-37.252	ug/L	-37.252	ppb	10:00:20
1	Sn 189.927†	-24.8	-29.0	0.0868	ug/L	0.0868	ppb	10:00:40
1	Sr 421.552†	25.0	21.8	0.1474	ug/L	0.1474	ppb	09:59:02
1	Ti 334.940†	-1084.3	-116.4	-0.2084	ug/L	-0.2084	ppb	10:00:20
1	Tl 190.801†	-47.3	-10.3	-3.3433	ug/L	-3.3433	ppb	10:00:40
1	U 409.014†	-115.4	1847.1	4.5916	ug/L	4.5916	ppb	10:00:20
1	V 292.402†	7058.1	8335.9	-0.8511	ug/L	-0.8511	ppb	10:00:20
1	Zn 213.857†	4904.2	4083.9	1.0474	ug/L	1.0474	ppb	10:00:40
1	SiO2†	-785.5	-1272.2	-82.275	ug/L	-82.275	ppb	10:01:37
2	Sc 361.383	936084.1	936084.1	105.78	%			10:00:46
2	Sc Radial	5571.4	5571.4	98.4	%			09:59:27
2	Y 371.029	777476.7	777476.7	104.77	%			10:00:46
2	Y RADIAL	6035.2	6035.2	97.99	%			09:59:27
2	Ag 328.068†	-24782.0	-23656.4	10.021	ug/L	10.021	ppb	10:00:46
2	Al 396.153Radial†	-49.3	-29.8	-21.007	ug/L	-21.007	ppb	09:59:27
2	As 188.979†	-227.8	-186.2	-18.093	ug/L	-18.093	ppb	10:01:06
2	B 249.677†	2566.3	2950.1	14.324	ug/L	14.324	ppb	10:00:46
2	Ba 233.527†	-1715.2	-1609.5	1.7908	ug/L	1.7908	ppb	10:00:46
2	Be 313.107†	-5181.6	421.5	0.1568	ug/L	0.1568	ppb	10:00:46
2	Ca 317.933Radial†	21.1	3.8	5.7622	ug/L	5.7622	ppb	09:59:47
2	Cd 226.502†	3450.8	3450.2	-0.0229	ug/L	-0.0229	ppb	10:00:46
2	Co 228.616†	217.5	277.4	-0.0230	ug/L	-0.0230	ppb	10:01:06
2	Cr 267.716†	-513.8	-572.7	0.6063	ug/L	0.6063	ppb	10:00:46
2	Cu 324.752†	495.0	-6300.6	0.7868	ug/L	0.7868	ppb	10:00:46
2	Fe 238.204 Radial†	36608.0	37205.9	374640	ug/L	374640	ppb	09:59:27
2	K 766.490 Radial†	2214.3	80.6	26.877	ug/L	26.877	ppb	09:59:27
2	Mg 279.077 IEC†	9.1	7.5	-40.941	ug/L	-40.941	ppb	09:59:47
2	Mn 257.610†	-35425.9	-33895.0	0.5204	ug/L	0.5204	ppb	10:00:46
2	Mo 202.031†	-371.1	-370.9	2.4170	ug/L	2.4170	ppb	10:00:46
2	Na 589.592 Radial†	-555.0	51.8	19.455	ug/L	19.455	ppb	09:59:27
2	Ni 231.604†	160.3	81.4	1.9289	ug/L	1.9289	ppb	10:01:06

2	P 214.914†	709.0	450.3	-31.693	ug/L	-31.693 ppb	10:01:06
2	Pb 220.353†	240.7	280.1	1.9397	ug/L	1.9397 ppb	10:01:06
2	S 181.975 Axial†	62.7	17.8	26.101	ug/L	26.101 ppb	10:01:06
2	Sb 206.836†	16.3	-14.2	1.1751	ug/L	1.1751 ppb	10:01:06
2	Se 196.026†	-1976.4	-1845.0	46.457	ug/L	46.457 ppb	10:01:06
2	Si 251.611†	-694.7	-1164.8	-35.194	ug/L	-35.194 ppb	10:00:46
2	Sn 189.927†	-26.3	-29.1	0.0788	ug/L	0.0788 ppb	10:01:06
2	Sr 421.552†	45.6	42.9	0.2897	ug/L	0.2897 ppb	09:59:27
2	Ti 334.940†	-959.2	58.2	0.0736	ug/L	0.0736 ppb	10:00:46
2	Tl 190.801†	-41.2	-2.1	-0.9645	ug/L	-0.9645 ppb	10:01:06
2	U 409.014†	-108.2	1859.9	4.8410	ug/L	4.8410 ppb	10:00:46
2	V 292.402†	7016.3	7929.6	-3.6938	ug/L	-3.6938 ppb	10:00:46
2	Zn 213.857†	4863.0	3790.2	-1.6697	ug/L	-1.6697 ppb	10:01:06
2	SiO2†	-750.0	-1197.9	-77.508	ug/L	-77.508 ppb	10:01:42
3	Sc 361.383	879120.8	879120.8	99.339	%		10:01:12
3	Sc Radial	5736.5	5736.5	101	%		09:59:52
3	Y 371.029	730593.9	730593.9	98.453	%		10:01:12
3	Y RADIAL	6234.5	6234.5	101.2	%		09:59:52
3	Ag 328.068†	-25461.6	-25858.7	-2.5167	ug/L	-2.5167 ppb	10:01:12
3	Al 396.153Radial†	-33.0	-12.2	-7.9618	ug/L	-7.9618 ppb	09:59:52
3	As 188.979†	-215.8	-188.0	-20.019	ug/L	-20.019 ppb	10:01:32
3	B 249.677†	2628.4	3169.8	20.082	ug/L	20.082 ppb	10:01:12
3	Ba 233.527†	-1639.6	-1638.5	1.3026	ug/L	1.3026 ppb	10:01:12
3	Be 313.107†	-5245.7	39.6	0.0144	ug/L	0.0144 ppb	10:01:12
3	Ca 317.933Radial†	15.5	-2.4	-3.6204	ug/L	-3.6204 ppb	10:00:12
3	Cd 226.502†	3567.6	3779.2	4.2922	ug/L	4.2922 ppb	10:01:12
3	Co 228.616†	217.9	291.1	0.3481	ug/L	0.3481 ppb	10:01:32
3	Cr 267.716†	-576.3	-667.1	-0.5364	ug/L	-0.5364 ppb	10:01:12
3	Cu 324.752†	487.2	-6278.2	0.4716	ug/L	0.4716 ppb	10:01:12
3	Fe 238.204 Radial†	36942.5	36465.4	367180	ug/L	367180 ppb	09:59:52
3	K 766.490 Radial†	2115.6	-81.7	-2.7680	ug/L	-2.7680 ppb	09:59:52
3	Mg 279.077 IEC†	14.4	12.4	147.83	ug/L	147.83 ppb	10:00:12
3	Mn 257.610†	-36324.2	-36969.4	-3.5676	ug/L	-3.5676 ppb	10:01:12
3	Mo 202.031†	-358.8	-381.1	1.2190	ug/L	1.2190 ppb	10:01:12
3	Na 589.592 Radial†	-557.1	65.9	24.782	ug/L	24.782 ppb	09:59:52
3	Ni 231.604†	163.8	94.7	2.2442	ug/L	2.2442 ppb	10:01:32
3	P 214.914†	716.7	501.5	4.6905	ug/L	4.6905 ppb	10:01:32
3	Pb 220.353†	226.2	280.2	2.5693	ug/L	2.5693 ppb	10:01:32
3	S 181.975 Axial†	59.8	18.7	27.371	ug/L	27.371 ppb	10:01:32
3	Sb 206.836†	25.9	-3.6	4.4954	ug/L	4.4954 ppb	10:01:32
3	Se 196.026†	-1979.5	-1969.2	-50.424	ug/L	-50.424 ppb	10:01:32
3	Si 251.611†	-703.8	-1216.5	-36.752	ug/L	-36.752 ppb	10:01:12
3	Sn 189.927†	-31.1	-35.6	-1.1147	ug/L	-1.1147 ppb	10:01:32
3	Sr 421.552†	45.7	41.7	0.2812	ug/L	0.2812 ppb	09:59:52
3	Ti 334.940†	-1068.5	-110.6	-0.1981	ug/L	-0.1981 ppb	10:01:12
3	Tl 190.801†	-58.9	-22.5	-6.8342	ug/L	-6.8342 ppb	10:01:32
3	U 409.014†	-208.2	1752.5	2.7815	ug/L	2.7815 ppb	10:01:12
3	V 292.402†	7139.6	8483.6	1.1693	ug/L	1.1693 ppb	10:01:12
3	Zn 213.857†	4917.4	4142.9	2.2071	ug/L	2.2071 ppb	10:01:32
3	SiO2†	-764.6	-1258.5	-81.423	ug/L	-81.423 ppb	10:01:47

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900841.4	101.79	%	3.480				3.42%
Sc Radial	5637.8	99.5	%	1.54				1.55%
Y 371.029	748963.5	100.93	%	3.373				3.34%
Y RADIAL	6113.4	99.26	%	1.728				1.74%
Ag 328.068†	-25060.8	2.6565	ug/L	6.54972	2.6565	ppb	6.54972	246.56%
Al 396.153Radial†	-25.2	-17.543	ug/L	8.4031	-17.543	ppb	8.4031	47.90%
As 188.979†	-185.6	-18.286	ug/L	1.6449	-18.286	ppb	1.6449	8.99%
B 249.677†	3059.7	17.071	ug/L	2.8882	17.071	ppb	2.8882	16.92%
Ba 233.527†	-1659.5	1.3132	ug/L	0.47241	1.3132	ppb	0.47241	35.97%
Be 313.107†	199.9	0.0741	ug/L	0.07396	0.0741	ppb	0.07396	99.84%
Ca 317.933Radial†	1.0	1.4581	ug/L	4.73901	1.4581	ppb	4.73901	325.02%
Cd 226.502†	3656.7	2.4937	ug/L	2.24541	2.4937	ppb	2.24541	90.04%
Co 228.616†	284.4	0.1509	ug/L	0.18663	0.1509	ppb	0.18663	123.67%
Cr 267.716†	-631.1	-0.0675	ug/L	0.59827	-0.0675	ppb	0.59827	885.82%
Cu 324.752†	-6305.5	0.6316	ug/L	0.15766	0.6316	ppb	0.15766	24.96%
Fe 238.204 Radial†	36931.0	371870	ug/L	4082.4	371870	ppb	4082.4	1.10%

K 766.490 Radial†	-16.1	9.2731	ug/L	15.58594	9.2731	ppb	15.58594 168.08%
Mg 279.077 IEC†	9.9	50.671	ug/L	94.5094	50.671	ppb	94.5094 186.51%
Mn 257.610†	-35860.0	-1.8927	ug/L	2.14164	-1.8927	ppb	2.14164 113.15%
Mo 202.031†	-385.4	1.2769	ug/L	1.11230	1.2769	ppb	1.11230 87.11%
Na 589.592 Radial†	55.0	20.691	ug/L	3.6346	20.691	ppb	3.6346 17.57%
Ni 231.604†	94.2	2.2316	ug/L	0.29660	2.2316	ppb	0.29660 13.29%
P 214.914†	485.0	-8.8661	ug/L	19.88462	-8.8661	ppb	19.88462 224.28%
Pb 220.353†	283.6	2.5764	ug/L	0.64025	2.5764	ppb	0.64025 24.85%
S 181.975 Axial†	14.0	20.494	ug/L	10.8304	20.494	ppb	10.8304 52.85%
Sb 206.836†	-12.0	1.8354	ug/L	2.39901	1.8354	ppb	2.39901 130.71%
Se 196.026†	-1926.0	-10.326	ug/L	50.5497	-10.326	ppb	50.5497 489.54%
Si 251.611†	-1205.0	-36.399	ug/L	1.0735	-36.399	ppb	1.0735 2.95%
Sn 189.927†	-31.2	-0.3163	ug/L	0.69139	-0.3163	ppb	0.69139 218.56%
Sr 421.552†	35.5	0.2394	ug/L	0.07983	0.2394	ppb	0.07983 33.34%
Ti 334.940†	-56.3	-0.1110	ug/L	0.15992	-0.1110	ppb	0.15992 144.10%
Tl 190.801†	-11.6	-3.7140	ug/L	2.95237	-3.7140	ppb	2.95237 79.49%
U 409.014†	1819.9	4.0714	ug/L	1.12397	4.0714	ppb	1.12397 27.61%
V 292.402†	8249.7	-1.1252	ug/L	2.44315	-1.1252	ppb	2.44315 217.13%
Zn 213.857†	4005.7	0.5283	ug/L	1.98985	0.5283	ppb	1.98985 376.67%
SiO2†	-1242.9	-80.402	ug/L	2.5425	-80.402	ppb	2.5425 3.16%

Sequence No.: 18
Sample ID: LR2
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/9/2009 10:03:58
Data Type: Reprocessed on 12/9/2009 10:32:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	911921.9	911921.9	103.05	%			10:07:09
1	Sc Radial	5737.0	5737.0	101	%			10:05:52
1	Y 371.029	765966.6	765966.6	103.22	%			10:07:09
1	Y RADIAL	6214.8	6214.8	100.9	%			10:05:52
1	Ag 328.068†	348.9	111.0	0.5170	ug/L	0.5170	ppb	10:07:14
1	Al 396.153Radial†	-6.8	13.6	10.067	ug/L	10.067	ppb	10:05:52
1	As 188.979†	-9.9	19.6	8.0099	ug/L	8.0099	ppb	10:07:34
1	B 249.677†	-142.2	385.8	8.3865	ug/L	8.3865	ppb	10:07:34
1	Ba 233.527†	1328395.7	1289150.4	9791.1	ug/L	9791.1	ppb	10:07:09
1	Be 313.107†	-5235.7	239.2	0.0888	ug/L	0.0888	ppb	10:07:14
1	Ca 317.933Radial†	35.2	17.1	26.123	ug/L	26.123	ppb	10:06:12
1	Cd 226.502†	-140.8	51.2	0.5561	ug/L	0.5561	ppb	10:07:34
1	Co 228.616†	-316.7	-235.6	-0.1719	ug/L	-0.1719	ppb	10:07:34
1	Cr 267.716†	85.5	-4.0	-0.0417	ug/L	-0.0417	ppb	10:07:34
1	Cu 324.752†	6919.7	-53.4	-0.1555	ug/L	-0.1555	ppb	10:07:14
1	Fe 238.204 Radial†	6.1	-0.0	-0.4234	ug/L	-0.4234	ppb	10:06:12
1	K 766.490 Radial†	2390.1	189.1	34.319	ug/L	34.319	ppb	10:05:52
1	Mg 279.077 IEC†	2.0	0.2	8.1529	ug/L	8.1529	ppb	10:06:12
1	Mn 257.610†	416.2	0.5	0.0003	ug/L	0.0003	ppb	10:07:34
1	Mo 202.031†	22.0	1.4	0.0888	ug/L	0.0888	ppb	10:07:34
1	Na 589.592 Radial†	-579.3	44.1	16.594	ug/L	16.594	ppb	10:05:52
1	Ni 231.604†	99.8	26.8	0.6383	ug/L	0.6383	ppb	10:07:34
1	P 214.914†	210.8	-15.4	-9.0917	ug/L	-9.0917	ppb	10:07:34
1	Pb 220.353†	-53.0	1.2	0.1376	ug/L	0.1376	ppb	10:07:34
1	S 181.975 Axial†	40.5	-2.2	-3.1619	ug/L	-3.1619	ppb	10:07:34
1	Sb 206.836†	37.1	6.4	2.1078	ug/L	2.1078	ppb	10:07:34
1	Se 196.026†	-14.9	9.0	5.3573	ug/L	5.3573	ppb	10:07:34
1	Si 251.611†	471.7	-50.3	-1.5536	ug/L	-1.5536	ppb	10:07:34
1	Sn 189.927†	9.0	4.5	0.7588	ug/L	0.7588	ppb	10:07:34
1	Sr 421.552†	-16.0	-19.3	-0.1302	ug/L	-0.1302	ppb	10:05:52
1	Ti 334.940†	-1043.1	-47.3	-0.0734	ug/L	-0.0734	ppb	10:07:14
1	Tl 190.801†	-28.9	8.8	2.5596	ug/L	2.5596	ppb	10:07:34
1	U 409.014†	-2160.2	-134.2	-3.7479	ug/L	-3.7479	ppb	10:07:09
1	V 292.402†	-1302.4	32.6	0.2144	ug/L	0.2144	ppb	10:07:14
1	Zn 213.857†	828.6	-3.2	-0.0329	ug/L	-0.0329	ppb	10:07:34
1	SiO2†	495.3	-8.2	-0.5689	ug/L	-0.5689	ppb	10:08:40
2	Sc 361.383	906063.3	906063.3	102.38	%			10:07:39
2	Sc Radial	5826.9	5826.9	103	%			10:06:17
2	Y 371.029	760076.9	760076.9	102.43	%			10:07:39
2	Y RADIAL	6340.6	6340.6	103.0	%			10:06:17
2	Ag 328.068†	379.1	142.7	0.6702	ug/L	0.6702	ppb	10:07:44
2	Al 396.153Radial†	-25.1	-4.0	-2.9620	ug/L	-2.9620	ppb	10:06:17
2	As 188.979†	-23.5	6.3	2.5583	ug/L	2.5583	ppb	10:08:04
2	B 249.677†	-151.1	376.3	8.1768	ug/L	8.1768	ppb	10:08:04
2	Ba 233.527†	1330239.4	1299286.8	9868.1	ug/L	9868.1	ppb	10:07:39
2	Be 313.107†	-5299.5	144.1	0.0534	ug/L	0.0534	ppb	10:07:44
2	Ca 317.933Radial†	33.3	14.7	22.471	ug/L	22.471	ppb	10:06:37
2	Cd 226.502†	-159.3	32.2	0.3488	ug/L	0.3488	ppb	10:08:04
2	Co 228.616†	-302.8	-224.0	0.0854	ug/L	0.0854	ppb	10:08:04
2	Cr 267.716†	102.3	13.0	0.1427	ug/L	0.1427	ppb	10:08:04
2	Cu 324.752†	6853.3	-74.8	-0.2171	ug/L	-0.2171	ppb	10:07:44
2	Fe 238.204 Radial†	7.4	1.2	11.833	ug/L	11.833	ppb	10:06:37
2	K 766.490 Radial†	2542.9	301.2	54.660	ug/L	54.660	ppb	10:06:17
2	Mg 279.077 IEC†	3.1	1.2	45.853	ug/L	45.853	ppb	10:06:37
2	Mn 257.610†	424.1	10.8	0.0121	ug/L	0.0121	ppb	10:08:04
2	Mo 202.031†	9.2	-11.0	-0.7181	ug/L	-0.7181	ppb	10:08:04
2	Na 589.592 Radial†	-622.3	11.1	4.1905	ug/L	4.1905	ppb	10:06:17
2	Ni 231.604†	85.2	13.1	0.3137	ug/L	0.3137	ppb	10:08:04

2	P 214.914†	210.4	-14.4	-8.5541 ug/L	-8.5541 ppb	10:08:04
2	Pb 220.353†	-46.3	7.3	0.8501 ug/L	0.8501 ppb	10:08:04
2	S 181.975 Axial†	49.8	7.1	10.427 ug/L	10.427 ppb	10:08:04
2	Sb 206.836†	38.2	7.7	2.4973 ug/L	2.4973 ppb	10:08:04
2	Se 196.026†	-30.7	-6.5	-3.8387 ug/L	-3.8387 ppb	10:08:04
2	Si 251.611†	469.2	-49.7	-1.5269 ug/L	-1.5269 ppb	10:08:04
2	Sn 189.927†	4.9	0.5	0.0935 ug/L	0.0935 ppb	10:08:04
2	Sr 421.552†	-9.2	-12.4	-0.0837 ug/L	-0.0837 ppb	10:06:17
2	Ti 334.940†	-1028.1	-39.1	-0.0590 ug/L	-0.0590 ppb	10:07:44
2	Tl 190.801†	-30.2	7.4	2.1299 ug/L	2.1299 ppb	10:08:04
2	U 409.014†	-2270.8	-255.8	-7.1473 ug/L	-7.1473 ppb	10:07:39
2	V 292.402†	-1291.0	35.5	0.2146 ug/L	0.2146 ppb	10:07:44
2	Zn 213.857†	834.7	8.0	0.0679 ug/L	0.0679 ppb	10:08:04
2	SiO2†	462.7	-36.9	-2.4319 ug/L	-2.4319 ppb	10:08:45
3	Sc 361.383	899417.1	899417.1	101.63 %		10:08:09
3	Sc Radial	5782.9	5782.9	102 %		10:06:42
3	Y 371.029	755364.8	755364.8	101.79 %		10:08:09
3	Y RADIAL	6284.5	6284.5	102.0 %		10:06:42
3	Ag 328.068†	291.0	58.7	0.2871 ug/L	0.2871 ppb	10:08:14
3	Al 396.153Radial†	-11.6	9.0	6.6395 ug/L	6.6395 ppb	10:06:42
3	As 188.979†	-10.5	18.8	7.6829 ug/L	7.6829 ppb	10:08:35
3	B 249.677†	-146.1	380.1	8.2595 ug/L	8.2595 ppb	10:08:35
3	Ba 233.527†	1320540.7	1299344.7	9868.5 ug/L	9868.5 ppb	10:08:09
3	Be 313.107†	-5272.3	132.6	0.0494 ug/L	0.0494 ppb	10:08:14
3	Ca 317.933Radial†	40.4	21.9	33.423 ug/L	33.423 ppb	10:07:02
3	Cd 226.502†	-149.8	40.5	0.4373 ug/L	0.4373 ppb	10:08:35
3	Co 228.616†	-326.9	-249.9	-0.4160 ug/L	-0.4160 ppb	10:08:35
3	Cr 267.716†	88.5	0.1	0.0055 ug/L	0.0055 ppb	10:08:35
3	Cu 324.752†	7060.6	178.6	0.5204 ug/L	0.5204 ppb	10:08:14
3	Fe 238.204 Radial†	8.1	1.9	19.094 ug/L	19.094 ppb	10:07:02
3	K 766.490 Radial†	2495.9	274.0	49.718 ug/L	49.718 ppb	10:06:42
3	Mg 279.077 IEC†	-1.2	-3.0	-110.26 ug/L	-110.26 ppb	10:07:02
3	Mn 257.610†	412.7	2.6	0.0068 ug/L	0.0068 ppb	10:08:35
3	Mo 202.031†	20.1	-0.2	-0.0110 ug/L	-0.0110 ppb	10:08:35
3	Na 589.592 Radial†	-562.9	64.7	24.325 ug/L	24.325 ppb	10:06:42
3	Ni 231.604†	73.0	1.8	0.0447 ug/L	0.0447 ppb	10:08:35
3	P 214.914†	207.6	-15.6	-9.3830 ug/L	-9.3830 ppb	10:08:35
3	Pb 220.353†	-52.0	1.4	0.1642 ug/L	0.1642 ppb	10:08:35
3	S 181.975 Axial†	33.5	-8.5	-12.393 ug/L	-12.393 ppb	10:08:35
3	Sb 206.836†	36.1	5.9	1.9358 ug/L	1.9358 ppb	10:08:35
3	Se 196.026†	-22.6	1.2	0.7890 ug/L	0.7890 ppb	10:08:35
3	Si 251.611†	487.0	-28.9	-0.9015 ug/L	-0.9015 ppb	10:08:35
3	Sn 189.927†	8.9	4.4	0.7546 ug/L	0.7546 ppb	10:08:35
3	Sr 421.552†	-21.7	-24.6	-0.1666 ug/L	-0.1666 ppb	10:06:42
3	Ti 334.940†	-937.1	43.0	0.0759 ug/L	0.0759 ppb	10:08:14
3	Tl 190.801†	-26.7	10.6	3.0509 ug/L	3.0509 ppb	10:08:35
3	U 409.014†	-2375.5	-375.1	-10.483 ug/L	-10.483 ppb	10:08:09
3	V 292.402†	-1273.9	43.1	0.2646 ug/L	0.2646 ppb	10:08:14
3	Zn 213.857†	835.6	14.9	0.1349 ug/L	0.1349 ppb	10:08:35
3	SiO2†	494.1	-2.6	-0.2146 ug/L	-0.2146 ppb	10:08:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905800.7	102.35	%	0.707				0.69%
Sc Radial	5782.3	102	%	0.8				0.78%
Y 371.029	760469.4	102.48	%	0.716				0.70%
Y RADIAL	6280.0	102.0	%	1.02				1.00%
Ag 328.068†	104.1	0.4914	ug/L	0.19283	0.4914	ppb	0.19283	39.24%
Al 396.153Radial†	6.2	4.5814	ug/L	6.75373	4.5814	ppb	6.75373	147.42%
As 188.979†	14.9	6.0837	ug/L	3.05744	6.0837	ppb	3.05744	50.26%
B 249.677†	380.7	8.2742	ug/L	0.10562	8.2742	ppb	0.10562	1.28%
Ba 233.527†	1295927.3	9842.6	ug/L	44.58	9842.6	ppb	44.58	0.45%
Be 313.107†	172.0	0.0639	ug/L	0.02165	0.0639	ppb	0.02165	33.91%
Ca 317.933Radial†	17.9	27.339	ug/L	5.5762	27.339	ppb	5.5762	20.40%
Cd 226.502†	41.3	0.4474	ug/L	0.10399	0.4474	ppb	0.10399	23.24%
Co 228.616†	-236.5	-0.1675	ug/L	0.25071	-0.1675	ppb	0.25071	149.68%
Cr 267.716†	3.0	0.0355	ug/L	0.09578	0.0355	ppb	0.09578	269.54%
Cu 324.752†	16.8	0.0493	ug/L	0.40915	0.0493	ppb	0.40915	830.05%
Fe 238.204 Radial†	1.0	10.168	ug/L	9.8646	10.168	ppb	9.8646	97.02%

K 766.490 Radial†	254.8	46.232	ug/L	10.6088	46.232	ppb	10.6088 22.95%
Mg 279.077 IEC†	-0.5	-18.751	ug/L	81.4590	-18.751	ppb	81.4590 434.43%
Mn 257.610†	4.6	0.0064	ug/L	0.00587	0.0064	ppb	0.00587 91.59%
Mo 202.031†	-3.3	-0.2134	ug/L	0.43988	-0.2134	ppb	0.43988 206.09%
Na 589.592 Radial†	40.0	15.036	ug/L	10.1571	15.036	ppb	10.1571 67.55%
Ni 231.604†	13.9	0.3322	ug/L	0.29722	0.3322	ppb	0.29722 89.47%
P 214.914†	-15.2	-9.0096	ug/L	0.42051	-9.0096	ppb	0.42051 4.67%
Pb 220.353†	3.3	0.3840	ug/L	0.40392	0.3840	ppb	0.40392 105.20%
S 181.975 Axial†	-1.2	-1.7093	ug/L	11.47907	-1.7093	ppb	11.47907 671.58%
Sb 206.836†	6.7	2.1803	ug/L	0.28766	2.1803	ppb	0.28766 13.19%
Se 196.026†	1.2	0.7692	ug/L	4.59805	0.7692	ppb	4.59805 597.76%
Si 251.611†	-43.0	-1.3274	ug/L	0.36903	-1.3274	ppb	0.36903 27.80%
Sn 189.927†	3.1	0.5356	ug/L	0.38286	0.5356	ppb	0.38286 71.48%
Sr 421.552†	-18.8	-0.1269	ug/L	0.04153	-0.1269	ppb	0.04153 32.73%
Ti 334.940†	-14.5	-0.0188	ug/L	0.08237	-0.0188	ppb	0.08237 437.29%
Tl 190.801†	8.9	2.5801	ug/L	0.46085	2.5801	ppb	0.46085 17.86%
U 409.014†	-255.0	-7.1262	ug/L	3.36777	-7.1262	ppb	3.36777 47.26%
V 292.402†	37.0	0.2312	ug/L	0.02892	0.2312	ppb	0.02892 12.51%
Zn 213.857†	6.6	0.0567	ug/L	0.08447	0.0567	ppb	0.08447 149.06%
SiO2†	-15.9	-1.0718	ug/L	1.19115	-1.0718	ppb	1.19115 111.14%

Sequence No.: 19
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 10:11:01
Data Type: Reprocessed on 12/9/2009 10:32:35

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	905387.0	905387.0	102.31	%			10:14:10
1	Sc Radial	5757.4	5757.4	102	%			10:12:53
1	Y 371.029	747390.8	747390.8	100.72	%			10:14:10
1	Y RADIAL	6187.6	6187.6	100.5	%			10:12:53
1	Ag 328.068†	109631.7	106932.1	497.41	ug/L	497.41	ppb	10:14:15
1	Al 396.153Radial†	6657.5	6569.1	4835.1	ug/L	4835.1	ppb	10:12:53
1	As 188.979†	1187.1	1189.5	489.65	ug/L	489.65	ppb	10:14:35
1	B 249.677†	22332.3	22352.6	483.30	ug/L	483.30	ppb	10:14:15
1	Ba 233.527†	65192.2	63734.3	485.33	ug/L	485.33	ppb	10:14:15
1	Be 313.107†	1327773.7	1303155.4	485.21	ug/L	485.21	ppb	10:14:10
1	Ca 317.933Radial†	3278.0	3206.8	4903.7	ug/L	4903.7	ppb	10:13:13
1	Cd 226.502†	45822.7	44977.4	487.76	ug/L	487.76	ppb	10:14:15
1	Co 228.616†	25503.1	24999.8	485.44	ug/L	485.44	ppb	10:14:15
1	Cr 267.716†	46047.7	44922.5	484.81	ug/L	484.81	ppb	10:14:15
1	Cu 324.752†	175594.6	164866.7	479.74	ug/L	479.74	ppb	10:14:15
1	Fe 238.204 Radial†	516.0	501.5	5065.1	ug/L	5065.1	ppb	10:13:13
1	K 766.490 Radial†	29983.5	27323.4	4950.3	ug/L	4950.3	ppb	10:12:53
1	Mg 279.077 IEC†	142.6	138.5	5162.5	ug/L	5162.5	ppb	10:13:13
1	Mn 257.610†	455894.8	445211.9	484.23	ug/L	484.23	ppb	10:14:10
1	Mo 202.031†	7765.2	7570.1	493.47	ug/L	493.47	ppb	10:14:35
1	Na 589.592 Radial†	26492.5	26675.7	10027	ug/L	10027	ppb	10:12:53
1	Ni 231.604†	21105.9	20559.9	487.54	ug/L	487.54	ppb	10:14:15
1	P 214.914†	4367.2	4048.8	2332.9	ug/L	2332.9	ppb	10:14:35
1	Pb 220.353†	4216.4	4173.9	489.42	ug/L	489.42	ppb	10:14:35
1	S 181.975 Axial†	734.7	676.6	988.45	ug/L	988.45	ppb	10:14:35
1	Sb 206.836†	1573.9	1508.8	497.10	ug/L	497.10	ppb	10:14:35
1	Se 196.026†	816.1	821.1	507.39	ug/L	507.39	ppb	10:14:35
1	Si 251.611†	82345.1	79980.4	2434.5	ug/L	2434.5	ppb	10:14:15
1	Sn 189.927†	3008.2	2936.1	497.31	ug/L	497.31	ppb	10:14:35
1	Sr 421.552†	76890.1	75630.6	510.51	ug/L	510.51	ppb	10:12:53
1	Ti 334.940†	310381.6	304348.1	492.10	ug/L	492.10	ppb	10:14:15
1	Tl 190.801†	1701.0	1699.5	490.26	ug/L	490.26	ppb	10:14:35
1	U 409.014†	15621.5	17231.5	479.85	ug/L	479.85	ppb	10:14:15
1	V 292.402†	71824.9	71501.9	489.27	ug/L	489.27	ppb	10:14:15
1	Zn 213.857†	56177.1	54103.1	482.42	ug/L	482.42	ppb	10:14:15
1	SiO2†	83150.8	80787.1	5264.6	ug/L	5264.6	ppb	10:15:43
2	Sc 361.383	900981.4	900981.4	101.81	%			10:14:41
2	Sc Radial	5822.1	5822.1	103	%			10:13:18
2	Y 371.029	741943.7	741943.7	99.983	%			10:14:41
2	Y RADIAL	6300.2	6300.2	102.3	%			10:13:18
2	Ag 328.068†	110964.8	108765.6	505.87	ug/L	505.87	ppb	10:14:46
2	Al 396.153Radial†	6739.5	6576.0	4839.9	ug/L	4839.9	ppb	10:13:18
2	As 188.979†	1198.2	1206.1	496.45	ug/L	496.45	ppb	10:15:06
2	B 249.677†	22648.0	22769.4	492.34	ug/L	492.34	ppb	10:14:46
2	Ba 233.527†	65913.6	64754.4	493.09	ug/L	493.09	ppb	10:14:46
2	Be 313.107†	1335877.3	1317461.1	490.54	ug/L	490.54	ppb	10:14:41
2	Ca 317.933Radial†	3249.3	3142.9	4806.1	ug/L	4806.1	ppb	10:13:38
2	Cd 226.502†	46173.7	45541.1	493.89	ug/L	493.89	ppb	10:14:46
2	Co 228.616†	25838.6	25451.2	494.20	ug/L	494.20	ppb	10:14:46
2	Cr 267.716†	46509.9	45596.5	492.08	ug/L	492.08	ppb	10:14:46
2	Cu 324.752†	177549.4	167626.0	487.76	ug/L	487.76	ppb	10:14:46
2	Fe 238.204 Radial†	508.6	488.7	4936.8	ug/L	4936.8	ppb	10:13:38
2	K 766.490 Radial†	30180.6	27187.0	4925.5	ug/L	4925.5	ppb	10:13:18
2	Mg 279.077 IEC†	141.6	135.9	5067.8	ug/L	5067.8	ppb	10:13:38
2	Mn 257.610†	460073.3	451495.1	491.05	ug/L	491.05	ppb	10:14:41
2	Mo 202.031†	7819.8	7660.9	499.37	ug/L	499.37	ppb	10:15:06
2	Na 589.592 Radial†	26816.2	26700.7	10036	ug/L	10036	ppb	10:13:18
2	Ni 231.604†	21261.3	20813.4	493.55	ug/L	493.55	ppb	10:14:46

2	P 214.914†	4413.6	4115.2	2371.2	ug/L	2371.2 ppb	10:15:06
2	Pb 220.353†	4213.2	4190.9	491.43	ug/L	491.43 ppb	10:15:06
2	S 181.975 Axial†	726.6	672.2	981.93	ug/L	981.93 ppb	10:15:06
2	Sb 206.836†	1593.6	1535.6	505.86	ug/L	505.86 ppb	10:15:06
2	Se 196.026†	819.3	828.2	511.21	ug/L	511.21 ppb	10:15:06
2	Si 251.611†	83107.3	81122.6	2469.3	ug/L	2469.3 ppb	10:14:46
2	Sn 189.927†	3035.2	2977.0	504.20	ug/L	504.20 ppb	10:15:06
2	Sr 421.552†	77983.9	75853.3	512.01	ug/L	512.01 ppb	10:13:18
2	Ti 334.940†	313586.0	308979.1	499.58	ug/L	499.58 ppb	10:14:46
2	Tl 190.801†	1703.9	1710.5	493.45	ug/L	493.45 ppb	10:15:06
2	U 409.014†	15887.9	17567.8	489.25	ug/L	489.25 ppb	10:14:46
2	V 292.402†	72477.5	72486.2	496.02	ug/L	496.02 ppb	10:14:46
2	Zn 213.857†	56772.8	54956.8	490.06	ug/L	490.06 ppb	10:14:46
2	SiO2†	82463.9	80509.8	5246.1	ug/L	5246.1 ppb	10:15:48
3	Sc 361.383	895885.9	895885.9	101.23	%		10:15:12
3	Sc Radial	5571.4	5571.4	98.4	%		10:13:43
3	Y 371.029	738996.2	738996.2	99.586	%		10:15:12
3	Y RADIAL	6031.2	6031.2	97.93	%		10:13:43
3	Ag 328.068†	110847.1	109269.2	508.31	ug/L	508.31 ppb	10:15:17
3	Al 396.153Radial†	6614.1	6743.7	4963.8	ug/L	4963.8 ppb	10:13:43
3	As 188.979†	1205.7	1220.2	502.29	ug/L	502.29 ppb	10:15:37
3	B 249.677†	22742.3	22989.1	497.06	ug/L	497.06 ppb	10:15:17
3	Ba 233.527†	65729.4	64940.7	494.53	ug/L	494.53 ppb	10:15:17
3	Be 313.107†	1330697.2	1319807.1	491.42	ug/L	491.42 ppb	10:15:12
3	Ca 317.933Radial†	3306.3	3343.2	5112.3	ug/L	5112.3 ppb	10:14:03
3	Cd 226.502†	46027.7	45654.8	495.09	ug/L	495.09 ppb	10:15:17
3	Co 228.616†	25740.0	25498.2	495.10	ug/L	495.10 ppb	10:15:17
3	Cr 267.716†	46474.5	45821.4	494.51	ug/L	494.51 ppb	10:15:17
3	Cu 324.752†	178128.2	169189.6	492.32	ug/L	492.32 ppb	10:15:17
3	Fe 238.204 Radial†	519.4	521.9	5271.2	ug/L	5271.2 ppb	10:14:03
3	K 766.490 Radial†	29664.0	27983.4	5070.0	ug/L	5070.0 ppb	10:13:43
3	Mg 279.077 IEC†	138.9	139.5	5199.4	ug/L	5199.4 ppb	10:14:03
3	Mn 257.610†	457963.5	451981.2	491.61	ug/L	491.61 ppb	10:15:12
3	Mo 202.031†	7783.7	7668.9	499.92	ug/L	499.92 ppb	10:15:37
3	Na 589.592 Radial†	25978.9	27023.8	10157	ug/L	10157 ppb	10:13:43
3	Ni 231.604†	21267.2	20938.0	496.50	ug/L	496.50 ppb	10:15:17
3	P 214.914†	4365.7	4092.6	2356.8	ug/L	2356.8 ppb	10:15:37
3	Pb 220.353†	4186.5	4188.0	491.10	ug/L	491.10 ppb	10:15:37
3	S 181.975 Axial†	726.6	676.3	987.95	ug/L	987.95 ppb	10:15:37
3	Sb 206.836†	1579.5	1530.7	504.14	ug/L	504.14 ppb	10:15:37
3	Se 196.026†	828.6	841.9	520.46	ug/L	520.46 ppb	10:15:37
3	Si 251.611†	83053.4	81533.7	2481.8	ug/L	2481.8 ppb	10:15:17
3	Sn 189.927†	2996.8	2956.0	500.69	ug/L	500.69 ppb	10:15:37
3	Sr 421.552†	76276.7	77532.7	523.34	ug/L	523.34 ppb	10:13:43
3	Ti 334.940†	313907.0	311048.1	502.94	ug/L	502.94 ppb	10:15:17
3	Tl 190.801†	1704.9	1721.0	496.49	ug/L	496.49 ppb	10:15:37
3	U 409.014†	15975.5	17743.0	494.10	ug/L	494.10 ppb	10:15:17
3	V 292.402†	72457.4	72871.2	498.59	ug/L	498.59 ppb	10:15:17
3	Zn 213.857†	56687.5	55189.7	492.10	ug/L	492.10 ppb	10:15:17
3	SiO2†	81855.0	80369.1	5236.8	ug/L	5236.8 ppb	10:15:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900751.4	101.78	%	0.537				0.53%
Sc Radial	5717.0	101	%	2.3				2.28%
Y 371.029	742776.9	100.10	%	0.574				0.57%
Y RADIAL	6173.0	100.2	%	2.19				2.19%
Ag 328.068†	108322.3	503.86	ug/L	5.716	503.86	ppb	5.716	1.13%
QC value within limits for Ag 328.068 Recovery = 100.77%								
Al 396.153Radial†	6629.6	4879.6	ug/L	72.99	4879.6	ppb	72.99	1.50%
QC value within limits for Al 396.153Radial Recovery = 97.59%								
As 188.979†	1205.3	496.13	ug/L	6.327	496.13	ppb	6.327	1.28%
QC value within limits for As 188.979 Recovery = 99.23%								
B 249.677†	22703.7	490.90	ug/L	6.994	490.90	ppb	6.994	1.42%
QC value within limits for B 249.677 Recovery = 98.18%								
Ba 233.527†	64476.5	490.98	ug/L	4.945	490.98	ppb	4.945	1.01%
QC value within limits for Ba 233.527 Recovery = 98.20%								
Be 313.107†	1313474.5	489.06	ug/L	3.360	489.06	ppb	3.360	0.69%
QC value within limits for Be 313.107 Recovery = 97.81%								

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Ca 317.933Radial†        3231.0      4940.7 ug/L        156.41      4940.7 ppb        156.41   3.17%
   QC value within limits for Ca 317.933Radial  Recovery = 98.81%
Cd 226.502†             45391.1      492.25 ug/L         3.934      492.25 ppb         3.934   0.80%
   QC value within limits for Cd 226.502  Recovery = 98.45%
Co 228.616†             25316.4      491.58 ug/L         5.339      491.58 ppb         5.339   1.09%
   QC value within limits for Co 228.616  Recovery = 98.32%
Cr 267.716†             45446.8      490.46 ug/L         5.048      490.46 ppb         5.048   1.03%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†            167227.4      486.61 ug/L         6.370      486.61 ppb         6.370   1.31%
   QC value within limits for Cu 324.752  Recovery = 97.32%
Fe 238.204 Radial†        504.1      5091.0 ug/L        168.71      5091.0 ppb        168.71   3.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.82%
K 766.490 Radial†       27498.0      4982.0 ug/L         77.25      4982.0 ppb         77.25   1.55%
   QC value within limits for K 766.490 Radial  Recovery = 99.64%
Mg 279.077 IEC†           138.0      5143.2 ug/L         67.85      5143.2 ppb         67.85   1.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.86%
Mn 257.610†            449562.8      488.96 ug/L         4.107      488.96 ppb         4.107   0.84%
   QC value within limits for Mn 257.610  Recovery = 97.79%
Mo 202.031†             7633.3      497.59 ug/L         3.578      497.59 ppb         3.578   0.72%
   QC value within limits for Mo 202.031  Recovery = 99.52%
Na 589.592 Radial†      26800.1       10073 ug/L          73.0       10073 ppb          73.0   0.72%
   QC value within limits for Na 589.592 Radial  Recovery = 100.73%
Ni 231.604†             20770.4      492.53 ug/L         4.569      492.53 ppb         4.569   0.93%
   QC value within limits for Ni 231.604  Recovery = 98.51%
P 214.914†               4085.5      2353.6 ug/L         19.38      2353.6 ppb         19.38   0.82%
   QC value within limits for P 214.914  Recovery = 94.14%
Pb 220.353†              4184.3      490.65 ug/L         1.076      490.65 ppb         1.076   0.22%
   QC value within limits for Pb 220.353  Recovery = 98.13%
S 181.975 Axial†          675.0      986.11 ug/L         3.629      986.11 ppb         3.629   0.37%
   QC value within limits for S 181.975 Axial  Recovery = 98.61%
Sb 206.836†              1525.0      502.37 ug/L         4.643      502.37 ppb         4.643   0.92%
   QC value within limits for Sb 206.836  Recovery = 100.47%
Se 196.026†               830.4      513.02 ug/L         6.716      513.02 ppb         6.716   1.31%
   QC value within limits for Se 196.026  Recovery = 102.60%
Si 251.611†             80878.9      2461.9 ug/L         24.53      2461.9 ppb         24.53   1.00%
   QC value within limits for Si 251.611  Recovery = 98.47%
Sn 189.927†              2956.4      500.73 ug/L         3.450      500.73 ppb         3.450   0.69%
   QC value within limits for Sn 189.927  Recovery = 100.15%
Sr 421.552†             76338.9      515.29 ug/L         7.018      515.29 ppb         7.018   1.36%
   QC value within limits for Sr 421.552  Recovery = 103.06%
Ti 334.940†            308125.1      498.21 ug/L         5.548      498.21 ppb         5.548   1.11%
   QC value within limits for Ti 334.940  Recovery = 99.64%
Tl 190.801†              1710.4      493.40 ug/L         3.111      493.40 ppb         3.111   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.68%
U 409.014†              17514.1      487.74 ug/L         7.244      487.74 ppb         7.244   1.49%
   QC value within limits for U 409.014  Recovery = 97.55%
V 292.402†              72286.4      494.63 ug/L         4.813      494.63 ppb         4.813   0.97%
   QC value within limits for V 292.402  Recovery = 98.93%
Zn 213.857†             54749.9      488.19 ug/L         5.105      488.19 ppb         5.105   1.05%
   QC value within limits for Zn 213.857  Recovery = 97.64%
SiO2†                   80555.3      5249.2 ug/L         14.11      5249.2 ppb         14.11   0.27%
   QC value within limits for SiO2  Recovery = 98.16%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 10:18:03
Data Type: Reprocessed on 12/9/2009 10:32:36
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	934147.0	934147.0	105.56	%			10:21:12
1	Sc Radial	5920.6	5920.6	105	%			10:19:56
1	Y 371.029	791293.4	791293.4	106.63	%			10:21:12
1	Y RADIAL	6437.5	6437.5	104.5	%			10:19:56
1	Ag 328.068†	421.0	171.3	0.7872	ug/L	0.7872	ppb	10:21:12
1	Al 396.153Radial†	-8.6	12.1	8.9030	ug/L	8.9030	ppb	10:19:56
1	As 188.979†	-17.8	12.3	5.0171	ug/L	5.0171	ppb	10:21:32
1	B 249.677†	-62.1	465.0	10.096	ug/L	10.096	ppb	10:21:32
1	Ba 233.527†	-5.4	6.9	0.0531	ug/L	0.0531	ppb	10:21:32
1	Be 313.107†	-5196.0	397.8	0.1478	ug/L	0.1478	ppb	10:21:12
1	Ca 317.933Radial†	19.8	1.3	1.9325	ug/L	1.9325	ppb	10:20:16
1	Cd 226.502†	-166.7	29.9	0.3269	ug/L	0.3269	ppb	10:21:32
1	Co 228.616†	-65.1	10.1	0.1971	ug/L	0.1971	ppb	10:21:32
1	Cr 267.716†	85.1	-6.3	-0.0676	ug/L	-0.0676	ppb	10:21:32
1	Cu 324.752†	6827.0	-301.0	-0.8766	ug/L	-0.8766	ppb	10:21:12
1	Fe 238.204 Radial†	4.2	-2.0	-20.618	ug/L	-20.618	ppb	10:20:16
1	K 766.490 Radial†	2447.9	171.3	31.087	ug/L	31.087	ppb	10:19:56
1	Mg 279.077 IEC†	-1.1	-2.8	-104.47	ug/L	-104.47	ppb	10:20:16
1	Mn 257.610†	388.9	-35.0	-0.0381	ug/L	-0.0381	ppb	10:21:32
1	Mo 202.031†	31.0	9.4	0.6115	ug/L	0.6115	ppb	10:21:32
1	Na 589.592 Radial†	-619.7	23.1	8.6971	ug/L	8.6971	ppb	10:19:56
1	Ni 231.604†	83.9	9.4	0.2220	ug/L	0.2220	ppb	10:21:32
1	P 214.914†	213.0	-18.2	-10.626	ug/L	-10.626	ppb	10:21:32
1	Pb 220.353†	-56.2	-0.7	-0.0787	ug/L	-0.0787	ppb	10:21:32
1	S 181.975 Axial†	46.1	2.2	3.2409	ug/L	3.2409	ppb	10:21:32
1	Sb 206.836†	41.5	9.7	3.1886	ug/L	3.1886	ppb	10:21:32
1	Se 196.026†	-23.4	1.3	0.7164	ug/L	0.7164	ppb	10:21:32
1	Si 251.611†	504.9	-29.7	-0.9326	ug/L	-0.9326	ppb	10:21:32
1	Sn 189.927†	10.0	5.2	0.8852	ug/L	0.8852	ppb	10:21:32
1	Sr 421.552†	21.4	17.0	0.1150	ug/L	0.1150	ppb	10:19:56
1	Ti 334.940†	-1027.4	-8.3	-0.0135	ug/L	-0.0135	ppb	10:21:12
1	Tl 190.801†	-30.7	7.7	2.2179	ug/L	2.2179	ppb	10:21:32
1	U 409.014†	-2052.9	17.4	0.4878	ug/L	0.4878	ppb	10:21:12
1	V 292.402†	-1278.4	85.4	0.5869	ug/L	0.5869	ppb	10:21:12
1	Zn 213.857†	652.4	-189.2	-1.6973	ug/L	-1.6973	ppb	10:21:32
1	SiO2†	464.4	-48.9	-3.2545	ug/L	-3.2545	ppb	10:22:28
2	Sc 361.383	894600.3	894600.3	101.09	%			10:21:38
2	Sc Radial	6090.2	6090.2	108	%			10:20:21
2	Y 371.029	750601.0	750601.0	101.15	%			10:21:38
2	Y RADIAL	6649.1	6649.1	108.0	%			10:20:21
2	Ag 328.068†	333.6	102.4	0.4806	ug/L	0.4806	ppb	10:21:38
2	Al 396.153Radial†	-47.4	-23.7	-17.563	ug/L	-17.563	ppb	10:20:21
2	As 188.979†	-16.3	13.1	5.3524	ug/L	5.3524	ppb	10:21:58
2	B 249.677†	-87.8	437.0	9.4827	ug/L	9.4827	ppb	10:21:58
2	Ba 233.527†	-13.3	-1.1	-0.0074	ug/L	-0.0074	ppb	10:21:58
2	Be 313.107†	-5298.5	78.7	0.0291	ug/L	0.0291	ppb	10:21:38
2	Ca 317.933Radial†	18.5	-0.4	-0.6880	ug/L	-0.6880	ppb	10:20:41
2	Cd 226.502†	-174.3	15.4	0.1653	ug/L	0.1653	ppb	10:21:58
2	Co 228.616†	-58.6	13.7	0.2674	ug/L	0.2674	ppb	10:21:58
2	Cr 267.716†	84.0	-3.9	-0.0414	ug/L	-0.0414	ppb	10:21:58
2	Cu 324.752†	6911.1	68.0	0.1989	ug/L	0.1989	ppb	10:21:38
2	Fe 238.204 Radial†	8.6	2.0	19.673	ug/L	19.673	ppb	10:20:41
2	K 766.490 Radial†	2359.2	23.5	4.2593	ug/L	4.2593	ppb	10:20:21
2	Mg 279.077 IEC†	3.8	1.8	66.983	ug/L	66.983	ppb	10:20:41
2	Mn 257.610†	408.3	0.5	0.0012	ug/L	0.0012	ppb	10:21:58
2	Mo 202.031†	24.5	4.2	0.2770	ug/L	0.2770	ppb	10:21:58
2	Na 589.592 Radial†	-583.6	73.3	27.543	ug/L	27.543	ppb	10:20:21
2	Ni 231.604†	83.0	12.0	0.2853	ug/L	0.2853	ppb	10:21:58

2	P 214.914†	215.2	-7.1	-4.2613	ug/L	-4.2613 ppb	10:21:58
2	Pb 220.353†	-50.5	2.6	0.2953	ug/L	0.2953 ppb	10:21:58
2	S 181.975 Axial†	42.4	0.5	0.6666	ug/L	0.6666 ppb	10:21:58
2	Sb 206.836†	35.2	5.2	1.7253	ug/L	1.7253 ppb	10:21:58
2	Se 196.026†	-25.1	-1.4	-0.7648	ug/L	-0.7648 ppb	10:21:58
2	Si 251.611†	492.4	-20.9	-0.6482	ug/L	-0.6482 ppb	10:21:58
2	Sn 189.927†	10.9	6.5	1.0992	ug/L	1.0992 ppb	10:21:58
2	Sr 421.552†	-9.5	-12.2	-0.0824	ug/L	-0.0824 ppb	10:20:21
2	Ti 334.940†	-1021.5	-45.5	-0.0733	ug/L	-0.0733 ppb	10:21:38
2	Tl 190.801†	-35.6	1.6	0.4669	ug/L	0.4669 ppb	10:21:58
2	U 409.014†	-2010.7	-26.9	-0.7549	ug/L	-0.7549 ppb	10:21:38
2	V 292.402†	-1301.0	9.4	0.0649	ug/L	0.0649 ppb	10:21:38
2	Zn 213.857†	657.5	-156.8	-1.4170	ug/L	-1.4170 ppb	10:21:58
2	SiO2†	509.5	15.2	0.9772	ug/L	0.9772 ppb	10:22:33
3	Sc 361.383	892413.2	892413.2	100.84	%		10:22:03
3	Sc Radial	5597.0	5597.0	98.8	%		10:20:46
3	Y 371.029	750328.3	750328.3	101.11	%		10:22:03
3	Y RADIAL	6124.2	6124.2	99.44	%		10:20:46
3	Ag 328.068†	288.2	58.2	0.2707	ug/L	0.2707 ppb	10:22:03
3	Al 396.153Radial†	1.0	21.4	15.808	ug/L	15.808 ppb	10:20:46
3	As 188.979†	-21.2	8.2	3.3419	ug/L	3.3419 ppb	10:22:23
3	B 249.677†	-79.0	445.5	9.6700	ug/L	9.6700 ppb	10:22:23
3	Ba 233.527†	-12.8	-0.7	-0.0043	ug/L	-0.0043 ppb	10:22:23
3	Be 313.107†	-5201.9	161.7	0.0598	ug/L	0.0598 ppb	10:22:03
3	Ca 317.933Radial†	21.8	4.3	6.6107	ug/L	6.6107 ppb	10:21:06
3	Cd 226.502†	-177.8	11.5	0.1246	ug/L	0.1246 ppb	10:22:23
3	Co 228.616†	-67.9	4.5	0.0856	ug/L	0.0856 ppb	10:22:23
3	Cr 267.716†	69.6	-18.0	-0.1935	ug/L	-0.1935 ppb	10:22:23
3	Cu 324.752†	6854.4	28.6	0.0835	ug/L	0.0835 ppb	10:22:03
3	Fe 238.204 Radial†	6.6	0.7	6.6005	ug/L	6.6005 ppb	10:21:06
3	K 766.490 Radial†	2350.0	207.5	37.659	ug/L	37.659 ppb	10:20:46
3	Mg 279.077 IEC†	-1.0	-2.7	-102.07	ug/L	-102.07 ppb	10:21:06
3	Mn 257.610†	408.3	1.5	0.0041	ug/L	0.0041 ppb	10:22:23
3	Mo 202.031†	13.7	-6.4	-0.4166	ug/L	-0.4166 ppb	10:22:23
3	Na 589.592 Radial†	-598.7	10.2	3.8362	ug/L	3.8362 ppb	10:20:46
3	Ni 231.604†	93.0	22.1	0.5247	ug/L	0.5247 ppb	10:22:23
3	P 214.914†	207.3	-14.4	-8.5749	ug/L	-8.5749 ppb	10:22:23
3	Pb 220.353†	-47.1	5.8	0.6838	ug/L	0.6838 ppb	10:22:23
3	S 181.975 Axial†	38.3	-3.4	-5.0466	ug/L	-5.0466 ppb	10:22:23
3	Sb 206.836†	42.2	12.3	3.9740	ug/L	3.9740 ppb	10:22:23
3	Se 196.026†	-24.1	-0.4	-0.2276	ug/L	-0.2276 ppb	10:22:23
3	Si 251.611†	467.2	-44.7	-1.3716	ug/L	-1.3716 ppb	10:22:23
3	Sn 189.927†	4.2	-0.1	-0.0099	ug/L	-0.0099 ppb	10:22:23
3	Sr 421.552†	-24.6	-28.3	-0.1913	ug/L	-0.1913 ppb	10:20:46
3	Ti 334.940†	-1068.3	-94.4	-0.1530	ug/L	-0.1530 ppb	10:22:03
3	Tl 190.801†	-26.5	10.6	3.0234	ug/L	3.0234 ppb	10:22:23
3	U 409.014†	-1921.0	57.2	1.5988	ug/L	1.5988 ppb	10:22:03
3	V 292.402†	-1275.4	31.7	0.2082	ug/L	0.2082 ppb	10:22:03
3	Zn 213.857†	648.0	-164.7	-1.4826	ug/L	-1.4826 ppb	10:22:23
3	SiO2†	463.4	-29.3	-1.9307	ug/L	-1.9307 ppb	10:22:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907053.5	102.50	%	2.654				2.59%
Sc Radial	5869.3	104	%	4.4				4.27%
Y 371.029	764074.2	102.96	%	3.177				3.09%
Y RADIAL	6403.6	104.0	%	4.29				4.12%
Ag 328.068†	110.6	0.5128	ug/L	0.25976	0.5128	ppb	0.25976	50.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.2	2.3827	ug/L	17.61549	2.3827	ppb	17.61549	739.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	11.2	4.5705	ug/L	1.07713	4.5705	ppb	1.07713	23.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	449.2	9.7496	ug/L	0.31434	9.7496	ppb	0.31434	3.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0138	ug/L	0.03406	0.0138	ppb	0.03406	246.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	212.7	0.0789	ug/L	0.06160	0.0789	ppb	0.06160	78.08%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.7      2.6184 ug/L       3.69740      2.6184 ppb        3.69740 141.21%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               18.9      0.2056 ug/L       0.10702      0.2056 ppb        0.10702  52.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                9.4      0.1834 ug/L       0.09167      0.1834 ppb        0.09167  50.00%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -9.4     -0.1008 ug/L       0.08132     -0.1008 ppb        0.08132  80.64%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -68.1     -0.1981 ug/L       0.59043     -0.1981 ppb        0.59043 298.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.2      1.8854 ug/L      20.55520      1.8854 ppb       20.55520 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        134.1     24.335 ug/L       17.6941     24.335 ppb        17.6941  72.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.2    -46.518 ug/L       98.3017    -46.518 ppb        98.3017 211.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -11.0     -0.0109 ug/L       0.02361     -0.0109 ppb        0.02361 216.20%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.4      0.1573 ug/L       0.52444      0.1573 ppb        0.52444 333.37%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        35.5     13.359 ug/L       12.5220     13.359 ppb        12.5220  93.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.5      0.3440 ug/L       0.15968      0.3440 ppb        0.15968  46.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -13.2     -7.8207 ug/L       3.24871     -7.8207 ppb        3.24871  41.54%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                2.6      0.3001 ug/L       0.38126      0.3001 ppb        0.38126 127.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.3     -0.3797 ug/L       4.24167     -0.3797 ppb        4.24167 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.1      2.9626 ug/L       1.14121      2.9626 ppb        1.14121  38.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.2     -0.0920 ug/L       0.74986     -0.0920 ppb        0.74986 815.09%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.8     -0.9841 ug/L       0.36446     -0.9841 ppb        0.36446  37.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                3.9      0.6582 ug/L       0.58840      0.6582 ppb        0.58840  89.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -7.8     -0.0529 ug/L       0.15525     -0.0529 ppb        0.15525 293.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -49.4     -0.0799 ug/L       0.06999     -0.0799 ppb        0.06999  87.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.6      1.9027 ug/L       1.30704      1.9027 ppb        1.30704  68.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                15.9      0.4439 ug/L       1.17743      0.4439 ppb        1.17743 265.26%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                42.2      0.2866 ug/L       0.26970      0.2866 ppb        0.26970  94.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -170.2     -1.5323 ug/L       0.14659     -1.5323 ppb        0.14659   9.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -21.0     -1.4027 ug/L       2.16473     -1.4027 ppb        2.16473 154.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 11:31:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5695.9	5695.9	101	%			11:33:47
1	Y RADIAL	6145.4	6145.4	99.78	%			11:33:47
1	Al 396.153Radial†	6664.7	6647.0	4892.3	ug/L	4892.3	ppb	11:33:47
1	Ca 317.933Radial†	3296.2	3259.7	4984.6	ug/L	4984.6	ppb	11:34:07
1	Fe 238.204 Radial†	517.4	508.5	5135.3	ug/L	5135.3	ppb	11:34:07
1	K 766.490 Radial†	29981.1	27639.5	5007.4	ug/L	5007.4	ppb	11:33:47
1	Mg 279.077 IEC†	142.9	140.3	5232.1	ug/L	5232.1	ppb	11:34:07
1	Na 589.592 Radial†	27169.3	27630.0	10385	ug/L	10385	ppb	11:33:47
1	Sr 421.552†	78007.2	77558.1	523.52	ug/L	523.52	ppb	11:33:47
1	Sc 361.383	893907.0	893907.0	101.01	%			11:35:04
1	Y 371.029	737277.9	737277.9	99.354	%			11:35:04
1	Ag 328.068†	109313.6	107993.4	502.35	ug/L	502.35	ppb	11:35:10
1	As 188.979†	1185.7	1203.1	495.24	ug/L	495.24	ppb	11:35:30
1	B 249.677†	22124.3	22427.0	484.89	ug/L	484.89	ppb	11:35:10
1	Ba 233.527†	65087.3	64448.8	490.77	ug/L	490.77	ppb	11:35:10
1	Be 313.107†	1332185.1	1324190.2	493.04	ug/L	493.04	ppb	11:35:04
1	Cd 226.502†	45574.4	45306.8	491.33	ug/L	491.33	ppb	11:35:10
1	Co 228.616†	25514.4	25331.1	491.87	ug/L	491.87	ppb	11:35:10
1	Cr 267.716†	45842.2	45297.0	488.85	ug/L	488.85	ppb	11:35:10
1	Cu 324.752†	175181.1	166661.5	484.96	ug/L	484.96	ppb	11:35:10
1	Mn 257.610†	459814.9	454815.6	494.68	ug/L	494.68	ppb	11:35:04
1	Mo 202.031†	7793.8	7695.9	501.67	ug/L	501.67	ppb	11:35:30
1	Ni 231.604†	20991.5	20711.6	491.13	ug/L	491.13	ppb	11:35:10
1	P 214.914†	4398.9	4135.0	2383.3	ug/L	2383.3	ppb	11:35:30
1	Pb 220.353†	4205.1	4215.6	494.32	ug/L	494.32	ppb	11:35:30
1	S 181.975 Axial†	728.6	679.8	993.12	ug/L	993.12	ppb	11:35:30
1	Sb 206.836†	1588.8	1543.3	508.51	ug/L	508.51	ppb	11:35:30
1	Se 196.026†	807.9	823.3	508.92	ug/L	508.92	ppb	11:35:30
1	Si 251.611†	82498.0	81165.4	2470.5	ug/L	2470.5	ppb	11:35:10
1	Sn 189.927†	3017.5	2983.1	505.26	ug/L	505.26	ppb	11:35:30
1	Ti 334.940†	310092.3	307958.0	497.94	ug/L	497.94	ppb	11:35:10
1	Tl 190.801†	1708.2	1728.0	498.49	ug/L	498.49	ppb	11:35:30
1	U 409.014†	15720.7	17525.7	488.06	ug/L	488.06	ppb	11:35:10
1	V 292.402†	71444.1	72026.5	492.93	ug/L	492.93	ppb	11:35:10
1	Zn 213.857†	55861.9	54496.3	485.92	ug/L	485.92	ppb	11:35:10
1	SiO2†	83421.9	82099.3	5350.1	ug/L	5350.1	ppb	11:36:37
2	Sc Radial	5645.1	5645.1	99.7	%			11:34:12
2	Y RADIAL	6072.6	6072.6	98.60	%			11:34:12
2	Al 396.153Radial†	6603.0	6644.6	4890.5	ug/L	4890.5	ppb	11:34:12
2	Ca 317.933Radial†	3295.4	3288.3	5028.4	ug/L	5028.4	ppb	11:34:32
2	Fe 238.204 Radial†	521.6	517.2	5223.6	ug/L	5223.6	ppb	11:34:32
2	K 766.490 Radial†	29684.4	27609.9	5002.1	ug/L	5002.1	ppb	11:34:12
2	Mg 279.077 IEC†	140.2	138.9	5178.6	ug/L	5178.6	ppb	11:34:32
2	Na 589.592 Radial†	26740.4	27442.7	10315	ug/L	10315	ppb	11:34:12
2	Sr 421.552†	76785.3	77029.7	519.95	ug/L	519.95	ppb	11:34:12
2	Sc 361.383	893485.7	893485.7	100.96	%			11:35:35
2	Y 371.029	737607.6	737607.6	99.398	%			11:35:35
2	Ag 328.068†	109180.3	107912.5	502.01	ug/L	502.01	ppb	11:35:41
2	As 188.979†	1189.4	1207.3	496.96	ug/L	496.96	ppb	11:36:01
2	B 249.677†	22102.6	22415.9	484.63	ug/L	484.63	ppb	11:35:41
2	Ba 233.527†	65107.2	64498.9	491.16	ug/L	491.16	ppb	11:35:41
2	Be 313.107†	1333991.5	1326601.3	493.94	ug/L	493.94	ppb	11:35:35
2	Cd 226.502†	45642.6	45395.5	492.28	ug/L	492.28	ppb	11:35:41
2	Co 228.616†	25494.7	25323.5	491.72	ug/L	491.72	ppb	11:35:41
2	Cr 267.716†	45905.3	45380.9	489.75	ug/L	489.75	ppb	11:35:41
2	Cu 324.752†	175196.0	166758.1	485.25	ug/L	485.25	ppb	11:35:41
2	Mn 257.610†	459798.5	455014.1	494.90	ug/L	494.90	ppb	11:35:35
2	Mo 202.031†	7791.3	7697.0	501.75	ug/L	501.75	ppb	11:36:01
2	Ni 231.604†	21003.8	20733.6	491.66	ug/L	491.66	ppb	11:35:41

2	P 214.914†	4392.7	4130.9	2380.7	ug/L	2380.7	ppb	11:36:01
2	Pb 220.353†	4184.1	4196.7	492.11	ug/L	492.11	ppb	11:36:01
2	S 181.975 Axial†	740.8	692.3	1011.3	ug/L	1011.3	ppb	11:36:01
2	Sb 206.836†	1594.0	1549.2	510.40	ug/L	510.40	ppb	11:36:01
2	Se 196.026†	813.9	829.6	512.94	ug/L	512.94	ppb	11:36:01
2	Si 251.611†	82303.5	81011.3	2465.8	ug/L	2465.8	ppb	11:35:41
2	Sn 189.927†	3019.2	2986.2	505.79	ug/L	505.79	ppb	11:36:01
2	Ti 334.940†	310607.0	308612.5	499.00	ug/L	499.00	ppb	11:35:41
2	Tl 190.801†	1693.6	1714.3	494.57	ug/L	494.57	ppb	11:36:01
2	U 409.014†	15612.2	17425.6	485.25	ug/L	485.25	ppb	11:35:41
2	V 292.402†	71468.0	72083.5	493.29	ug/L	493.29	ppb	11:35:41
2	Zn 213.857†	55862.1	54522.6	486.14	ug/L	486.14	ppb	11:35:41
2	SiO2†	82826.4	81548.4	5314.0	ug/L	5314.0	ppb	11:36:42
3	Sc Radial	5667.4	5667.4	100	%			11:34:37
3	Y RADIAL	6109.4	6109.4	99.20	%			11:34:37
3	Al 396.153Radial†	6607.2	6622.8	4874.4	ug/L	4874.4	ppb	11:34:37
3	Ca 317.933Radial†	3285.2	3265.1	4992.9	ug/L	4992.9	ppb	11:34:57
3	Fe 238.204 Radial†	516.6	510.2	5152.9	ug/L	5152.9	ppb	11:34:57
3	K 766.490 Radial†	29831.2	27639.7	5007.5	ug/L	5007.5	ppb	11:34:37
3	Mg 279.077 IEC†	138.7	136.8	5100.4	ug/L	5100.4	ppb	11:34:57
3	Na 589.592 Radial†	26893.4	27490.2	10333	ug/L	10333	ppb	11:34:37
3	Sr 421.552†	77277.3	77218.9	521.23	ug/L	521.23	ppb	11:34:37
3	Sc 361.383	895133.7	895133.7	101.15	%			11:36:06
3	Y 371.029	737987.3	737987.3	99.450	%			11:36:06
3	Ag 328.068†	110156.4	108678.4	505.53	ug/L	505.53	ppb	11:36:12
3	As 188.979†	1177.3	1193.1	491.21	ug/L	491.21	ppb	11:36:32
3	B 249.677†	22347.7	22617.9	489.02	ug/L	489.02	ppb	11:36:12
3	Ba 233.527†	65636.8	64903.7	494.23	ug/L	494.23	ppb	11:36:12
3	Be 313.107†	1334695.5	1324864.6	493.30	ug/L	493.30	ppb	11:36:06
3	Cd 226.502†	46026.0	45691.3	495.50	ug/L	495.50	ppb	11:36:12
3	Co 228.616†	25720.3	25500.1	495.15	ug/L	495.15	ppb	11:36:12
3	Cr 267.716†	46265.4	45653.2	492.69	ug/L	492.69	ppb	11:36:12
3	Cu 324.752†	176742.0	167967.0	488.76	ug/L	488.76	ppb	11:36:12
3	Mn 257.610†	461685.7	456041.4	496.01	ug/L	496.01	ppb	11:36:06
3	Mo 202.031†	7810.7	7702.1	502.07	ug/L	502.07	ppb	11:36:32
3	Ni 231.604†	21167.1	20856.7	494.58	ug/L	494.58	ppb	11:36:12
3	P 214.914†	4397.3	4127.4	2378.2	ug/L	2378.2	ppb	11:36:32
3	Pb 220.353†	4207.8	4212.6	493.97	ug/L	493.97	ppb	11:36:32
3	S 181.975 Axial†	736.8	687.0	1003.5	ug/L	1003.5	ppb	11:36:32
3	Sb 206.836†	1600.3	1552.5	511.39	ug/L	511.39	ppb	11:36:32
3	Se 196.026†	818.2	832.3	514.38	ug/L	514.38	ppb	11:36:32
3	Si 251.611†	83154.0	81702.0	2486.9	ug/L	2486.9	ppb	11:36:12
3	Sn 189.927†	3016.1	2977.6	504.33	ug/L	504.33	ppb	11:36:32
3	Ti 334.940†	312886.1	310299.3	501.73	ug/L	501.73	ppb	11:36:12
3	Tl 190.801†	1695.7	1713.3	494.30	ug/L	494.30	ppb	11:36:32
3	U 409.014†	15822.6	17605.2	490.27	ug/L	490.27	ppb	11:36:12
3	V 292.402†	71977.8	72457.2	495.83	ug/L	495.83	ppb	11:36:12
3	Zn 213.857†	56342.7	54895.9	489.49	ug/L	489.49	ppb	11:36:12
3	SiO2†	82994.6	81563.7	5315.0	ug/L	5315.0	ppb	11:36:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894175.5	101.04	%	0.097				0.10%
Sc Radial	5669.5	100	%	0.4				0.45%
Y 371.029	737624.3	99.401	%	0.0478				0.05%
Y RADIAL	6109.1	99.19	%	0.591				0.60%
Ag 328.068†	108194.8	503.29	ug/L	1.944	503.29	ppb	1.944	0.39%
QC value within limits for Ag 328.068 Recovery = 100.66%								
Al 396.153Radial†	6638.1	4885.7	ug/L	9.84	4885.7	ppb	9.84	0.20%
QC value within limits for Al 396.153Radial Recovery = 97.71%								
As 188.979†	1201.2	494.47	ug/L	2.952	494.47	ppb	2.952	0.60%
QC value within limits for As 188.979 Recovery = 98.89%								
B 249.677†	22486.9	486.18	ug/L	2.462	486.18	ppb	2.462	0.51%
QC value within limits for B 249.677 Recovery = 97.24%								
Ba 233.527†	64617.1	492.05	ug/L	1.898	492.05	ppb	1.898	0.39%
QC value within limits for Ba 233.527 Recovery = 98.41%								
Be 313.107†	1325218.7	493.42	ug/L	0.462	493.42	ppb	0.462	0.09%
QC value within limits for Be 313.107 Recovery = 98.68%								
Ca 317.933Radial†	3271.0	5002.0	ug/L	23.23	5002.0	ppb	23.23	0.46%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.04%
Cd 226.502†            45464.5      493.04 ug/L         2.186      493.04 ppb          2.186   0.44%
   QC value within limits for Cd 226.502  Recovery = 98.61%
Co 228.616†            25384.9      492.91 ug/L         1.935      492.91 ppb          1.935   0.39%
   QC value within limits for Co 228.616  Recovery = 98.58%
Cr 267.716†            45443.7      490.43 ug/L         2.009      490.43 ppb          2.009   0.41%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†           167128.9      486.32 ug/L         2.115      486.32 ppb          2.115   0.43%
   QC value within limits for Cu 324.752  Recovery = 97.26%
Fe 238.204 Radial†       512.0      5170.6 ug/L         46.73      5170.6 ppb          46.73   0.90%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.41%
K 766.490 Radial†      27629.7      5005.7 ug/L          3.09      5005.7 ppb           3.09   0.06%
   QC value within limits for K 766.490 Radial  Recovery = 100.11%
Mg 279.077 IEC†          138.7      5170.4 ug/L         66.21      5170.4 ppb          66.21   1.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.41%
Mn 257.610†           455290.4      495.20 ug/L         0.715      495.20 ppb          0.715   0.14%
   QC value within limits for Mn 257.610  Recovery = 99.04%
Mo 202.031†             7698.3      501.83 ug/L         0.214      501.83 ppb          0.214   0.04%
   QC value within limits for Mo 202.031  Recovery = 100.37%
Na 589.592 Radial†     27521.0       10344 ug/L          36.6       10344 ppb           36.6   0.35%
   QC value within limits for Na 589.592 Radial  Recovery = 103.44%
Ni 231.604†            20767.3      492.46 ug/L         1.855      492.46 ppb          1.855   0.38%
   QC value within limits for Ni 231.604  Recovery = 98.49%
P 214.914†              4131.1      2380.7 ug/L          2.58      2380.7 ppb           2.58   0.11%
   QC value within limits for P 214.914  Recovery = 95.23%
Pb 220.353†             4208.3      493.47 ug/L         1.186      493.47 ppb          1.186   0.24%
   QC value within limits for Pb 220.353  Recovery = 98.69%
S 181.975 Axial†         686.4      1002.7 ug/L          9.13      1002.7 ppb           9.13   0.91%
   QC value within limits for S 181.975 Axial  Recovery = 100.27%
Sb 206.836†             1548.4      510.10 ug/L         1.464      510.10 ppb          1.464   0.29%
   QC value within limits for Sb 206.836  Recovery = 102.02%
Se 196.026†              828.4      512.08 ug/L         2.832      512.08 ppb          2.832   0.55%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†            81292.9      2474.4 ug/L         11.09      2474.4 ppb          11.09   0.45%
   QC value within limits for Si 251.611  Recovery = 98.98%
Sn 189.927†             2982.3      505.13 ug/L         0.735      505.13 ppb          0.735   0.15%
   QC value within limits for Sn 189.927  Recovery = 101.03%
Sr 421.552†            77268.9      521.56 ug/L         1.807      521.56 ppb          1.807   0.35%
   QC value within limits for Sr 421.552  Recovery = 104.31%
Ti 334.940†           308956.6      499.56 ug/L         1.952      499.56 ppb          1.952   0.39%
   QC value within limits for Ti 334.940  Recovery = 99.91%
Tl 190.801†             1718.5      495.78 ug/L         2.343      495.78 ppb          2.343   0.47%
   QC value within limits for Tl 190.801  Recovery = 99.16%
U 409.014†             17518.8      487.86 ug/L         2.516      487.86 ppb          2.516   0.52%
   QC value within limits for U 409.014  Recovery = 97.57%
V 292.402†             72189.1      494.02 ug/L         1.583      494.02 ppb          1.583   0.32%
   QC value within limits for V 292.402  Recovery = 98.80%
Zn 213.857†            54638.2      487.18 ug/L         2.000      487.18 ppb          2.000   0.41%
   QC value within limits for Zn 213.857  Recovery = 97.44%
SiO2†                  81737.1      5326.4 ug/L         20.55      5326.4 ppb          20.55   0.39%
   QC value within limits for SiO2  Recovery = 99.60%
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 11:38:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4980.8	4980.8	87.9	%			11:40:50
1	Y RADIAL	5415.5	5415.5	87.93	%			11:40:50
1	Al 396.153Radial†	-23.7	-6.6	-4.8811	ug/L	-4.8811	ppb	11:41:10
1	Ca 317.933Radial†	18.4	3.3	4.9714	ug/L	4.9714	ppb	11:41:10
1	Fe 238.204 Radial†	6.9	1.8	17.809	ug/L	17.809	ppb	11:41:10
1	K 766.490 Radial†	2271.9	412.9	74.951	ug/L	74.951	ppb	11:40:50
1	Mg 279.077 IEC†	1.9	0.4	13.110	ug/L	13.110	ppb	11:41:10
1	Na 589.592 Radial†	-586.9	-51.4	-19.304	ug/L	-19.304	ppb	11:40:50
1	Sr 421.552†	19.5	18.7	0.1262	ug/L	0.1262	ppb	11:40:50
1	Sc 361.383	892845.1	892845.1	100.89	%			11:42:06
1	Y 371.029	748327.2	748327.2	100.84	%			11:42:06
1	Ag 328.068†	313.4	83.0	0.4006	ug/L	0.4006	ppb	11:42:12
1	As 188.979†	-22.7	6.7	2.7447	ug/L	2.7447	ppb	11:42:32
1	B 249.677†	-228.5	297.4	6.4531	ug/L	6.4531	ppb	11:42:32
1	Ba 233.527†	-30.6	-18.3	-0.1377	ug/L	-0.1377	ppb	11:42:32
1	Be 313.107†	-5299.6	67.3	0.0251	ug/L	0.0251	ppb	11:42:12
1	Cd 226.502†	-169.8	19.5	0.2101	ug/L	0.2101	ppb	11:42:32
1	Co 228.616†	-79.2	-6.8	-0.1304	ug/L	-0.1304	ppb	11:42:32
1	Cr 267.716†	68.0	-19.6	-0.2063	ug/L	-0.2063	ppb	11:42:32
1	Cu 324.752†	6819.5	-9.2	-0.0259	ug/L	-0.0259	ppb	11:42:12
1	Mn 257.610†	409.1	2.0	0.0037	ug/L	0.0037	ppb	11:42:32
1	Mo 202.031†	26.4	6.2	0.4021	ug/L	0.4021	ppb	11:42:32
1	Ni 231.604†	95.1	24.1	0.5725	ug/L	0.5725	ppb	11:42:32
1	P 214.914†	215.0	-6.9	-4.0931	ug/L	-4.0931	ppb	11:42:32
1	Pb 220.353†	-48.8	4.2	0.4906	ug/L	0.4906	ppb	11:42:32
1	S 181.975 Axial†	36.2	-5.6	-8.2082	ug/L	-8.2082	ppb	11:42:32
1	Sb 206.836†	24.8	-5.0	-1.6028	ug/L	-1.6028	ppb	11:42:32
1	Se 196.026†	-27.2	-3.5	-2.0278	ug/L	-2.0278	ppb	11:42:32
1	Si 251.611†	773.1	258.2	7.8654	ug/L	7.8654	ppb	11:42:32
1	Sn 189.927†	5.7	1.4	0.2361	ug/L	0.2361	ppb	11:42:32
1	Ti 334.940†	-951.8	21.7	0.0405	ug/L	0.0405	ppb	11:42:12
1	Tl 190.801†	-31.3	5.8	1.6741	ug/L	1.6741	ppb	11:42:32
1	U 409.014†	-2402.2	-418.9	-11.705	ug/L	-11.705	ppb	11:42:12
1	V 292.402†	-1270.3	37.3	0.2327	ug/L	0.2327	ppb	11:42:12
1	Zn 213.857†	655.1	-157.9	-1.4265	ug/L	-1.4265	ppb	11:42:32
1	SiO2†	757.1	261.6	17.055	ug/L	17.055	ppb	11:43:37
2	Sc Radial	5956.2	5956.2	105	%			11:41:15
2	Y RADIAL	6441.8	6441.8	104.6	%			11:41:15
2	Al 396.153Radial†	-14.9	6.2	4.5536	ug/L	4.5536	ppb	11:41:35
2	Ca 317.933Radial†	20.6	1.9	2.9000	ug/L	2.9000	ppb	11:41:35
2	Fe 238.204 Radial†	5.5	-0.8	-8.4169	ug/L	-8.4169	ppb	11:41:35
2	K 766.490 Radial†	2141.6	-134.0	-24.340	ug/L	-24.340	ppb	11:41:15
2	Mg 279.077 IEC†	-0.1	-1.8	-68.060	ug/L	-68.060	ppb	11:41:35
2	Na 589.592 Radial†	-502.9	137.8	51.789	ug/L	51.789	ppb	11:41:15
2	Sr 421.552†	34.2	29.1	0.1965	ug/L	0.1965	ppb	11:41:15
2	Sc 361.383	911727.2	911727.2	103.02	%			11:42:37
2	Y 371.029	763518.3	763518.3	102.89	%			11:42:37
2	Ag 328.068†	294.5	58.3	0.2777	ug/L	0.2777	ppb	11:42:42
2	As 188.979†	-23.9	6.0	2.4491	ug/L	2.4491	ppb	11:43:02
2	B 249.677†	-222.8	307.6	6.6783	ug/L	6.6783	ppb	11:43:02
2	Ba 233.527†	-39.5	-26.3	-0.1994	ug/L	-0.1994	ppb	11:43:02
2	Be 313.107†	-5269.7	205.2	0.0765	ug/L	0.0765	ppb	11:42:42
2	Cd 226.502†	-175.0	17.9	0.1956	ug/L	0.1956	ppb	11:43:02
2	Co 228.616†	-65.8	7.9	0.1542	ug/L	0.1542	ppb	11:43:02
2	Cr 267.716†	81.8	-7.5	-0.0771	ug/L	-0.0771	ppb	11:43:02
2	Cu 324.752†	6913.2	-58.3	-0.1699	ug/L	-0.1699	ppb	11:42:42
2	Mn 257.610†	405.3	-10.0	-0.0104	ug/L	-0.0104	ppb	11:43:02
2	Mo 202.031†	28.5	7.7	0.5000	ug/L	0.5000	ppb	11:43:02
2	Ni 231.604†	84.9	12.3	0.2921	ug/L	0.2921	ppb	11:43:02

2	P 214.914†	226.9	0.3	0.2099 ug/L	0.2099 ppb	11:43:02
2	Pb 220.353†	-55.0	-0.8	-0.0938 ug/L	-0.0938 ppb	11:43:02
2	S 181.975 Axial†	42.2	-0.5	-0.6911 ug/L	-0.6911 ppb	11:43:02
2	Sb 206.836†	35.1	4.5	1.4885 ug/L	1.4885 ppb	11:43:02
2	Se 196.026†	-22.7	1.4	0.8072 ug/L	0.8072 ppb	11:43:02
2	Si 251.611†	729.1	199.7	6.1042 ug/L	6.1042 ppb	11:43:02
2	Sn 189.927†	10.6	6.0	1.0155 ug/L	1.0155 ppb	11:43:02
2	Ti 334.940†	-930.9	61.5	0.1044 ug/L	0.1044 ppb	11:42:42
2	Tl 190.801†	-26.1	11.5	3.3063 ug/L	3.3063 ppb	11:43:02
2	U 409.014†	-2419.3	-386.1	-10.786 ug/L	-10.786 ppb	11:42:42
2	V 292.402†	-1271.6	62.2	0.4057 ug/L	0.4057 ppb	11:42:42
2	Zn 213.857†	667.7	-159.2	-1.4305 ug/L	-1.4305 ppb	11:43:02
2	SiO2†	754.4	243.5	15.935 ug/L	15.935 ppb	11:43:42
3	Sc Radial	5738.2	5738.2	101 %		11:41:40
3	Y RADIAL	6269.4	6269.4	101.8 %		11:41:40
3	Al 396.153Radial†	-8.0	12.4	9.1826 ug/L	9.1826 ppb	11:42:00
3	Ca 317.933Radial†	23.4	5.4	8.3221 ug/L	8.3221 ppb	11:42:00
3	Fe 238.204 Radial†	6.0	-0.1	-0.8655 ug/L	-0.8655 ppb	11:42:00
3	K 766.490 Radial†	2222.6	23.3	4.2106 ug/L	4.2106 ppb	11:41:40
3	Mg 279.077 IEC†	2.2	0.4	15.387 ug/L	15.387 ppb	11:42:00
3	Na 589.592 Radial†	-544.4	78.7	29.563 ug/L	29.563 ppb	11:41:40
3	Sr 421.552†	-0.5	-3.9	-0.0262 ug/L	-0.0262 ppb	11:41:40
3	Sc 361.383	897162.0	897162.0	101.38 %		11:43:07
3	Y 371.029	750910.6	750910.6	101.19 %		11:43:07
3	Ag 328.068†	311.0	79.2	0.3732 ug/L	0.3732 ppb	11:43:12
3	As 188.979†	-18.7	10.8	4.4035 ug/L	4.4035 ppb	11:43:32
3	B 249.677†	-264.9	262.5	5.6981 ug/L	5.6981 ppb	11:43:32
3	Ba 233.527†	-12.5	-0.3	-0.0019 ug/L	-0.0019 ppb	11:43:32
3	Be 313.107†	-5409.8	-16.0	-0.0060 ug/L	-0.0060 ppb	11:43:12
3	Cd 226.502†	-180.7	9.6	0.1043 ug/L	0.1043 ppb	11:43:32
3	Co 228.616†	-63.3	9.3	0.1804 ug/L	0.1804 ppb	11:43:32
3	Cr 267.716†	63.7	-24.2	-0.2575 ug/L	-0.2575 ppb	11:43:32
3	Cu 324.752†	6904.1	41.6	0.1210 ug/L	0.1210 ppb	11:43:12
3	Mn 257.610†	419.6	10.5	0.0110 ug/L	0.0110 ppb	11:43:32
3	Mo 202.031†	21.8	1.5	0.0995 ug/L	0.0995 ppb	11:43:32
3	Ni 231.604†	81.2	10.0	0.2367 ug/L	0.2367 ppb	11:43:32
3	P 214.914†	224.6	1.6	0.9206 ug/L	0.9206 ppb	11:43:32
3	Pb 220.353†	-67.4	-13.9	-1.6279 ug/L	-1.6279 ppb	11:43:32
3	S 181.975 Axial†	34.5	-7.4	-10.864 ug/L	-10.864 ppb	11:43:32
3	Sb 206.836†	31.9	1.9	0.6099 ug/L	0.6099 ppb	11:43:32
3	Se 196.026†	-23.8	-0.1	-0.0373 ug/L	-0.0373 ppb	11:43:32
3	Si 251.611†	733.6	215.6	6.5924 ug/L	6.5924 ppb	11:43:32
3	Sn 189.927†	3.5	-0.8	-0.1333 ug/L	-0.1333 ppb	11:43:32
3	Ti 334.940†	-993.7	-15.2	-0.0206 ug/L	-0.0206 ppb	11:43:12
3	Tl 190.801†	-38.5	-1.1	-0.3256 ug/L	-0.3256 ppb	11:43:32
3	U 409.014†	-2269.8	-276.8	-7.7322 ug/L	-7.7322 ppb	11:43:12
3	V 292.402†	-1277.6	36.2	0.2316 ug/L	0.2316 ppb	11:43:12
3	Zn 213.857†	670.1	-146.3	-1.3183 ug/L	-1.3183 ppb	11:43:32
3	SiO2†	743.2	244.2	15.988 ug/L	15.988 ppb	11:43:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900578.1	101.76	%	1.118				1.10%
Sc Radial	5558.4	98.1	%	9.04				9.21%
Y 371.029	754252.0	101.64	%	1.095				1.08%
Y RADIAL	6042.2	98.11	%	8.923				9.09%
Ag 328.068†	73.5	0.3505	ug/L	0.06450	0.3505	ppb	0.06450	18.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.0	2.9517	ug/L	7.16741	2.9517	ppb	7.16741	242.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.8	3.1991	ug/L	1.05344	3.1991	ppb	1.05344	32.93%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	289.2	6.2765	ug/L	0.51342	6.2765	ppb	0.51342	8.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.0	-0.1130	ug/L	0.10106	-0.1130	ppb	0.10106	89.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	85.5	0.0318	ug/L	0.04164	0.0318	ppb	0.04164	130.74%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3978	ug/L	2.73609	5.3978	ppb	2.73609	50.69%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.7      0.1700 ug/L       0.05739      0.1700 ppb        0.05739  33.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.5      0.0680 ug/L       0.17238      0.0680 ppb        0.17238 253.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.1     -0.1803 ug/L       0.09297     -0.1803 ppb        0.09297  51.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -8.6     -0.0250 ug/L       0.14547     -0.0250 ppb        0.14547 582.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.3      2.8422 ug/L      13.50029      2.8422 ppb       13.50029 475.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         100.7      18.274 ug/L       51.1174      18.274 ppb        51.1174 279.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4     -13.188 ug/L       47.5348     -13.188 ppb        47.5348 360.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 0.8      0.0014 ug/L       0.01091      0.0014 ppb        0.01091 761.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.1      0.3339 ug/L       0.20875      0.3339 ppb        0.20875  62.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         55.0      20.683 ug/L       36.3688      20.683 ppb        36.3688 175.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.5      0.3671 ug/L       0.18004      0.3671 ppb        0.18004  49.04%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.9875 ug/L       2.71287     -0.9875 ppb        2.71287 274.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.5     -0.4104 ug/L       1.09414     -0.4104 ppb        1.09414 266.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.5     -6.5877 ug/L       5.27637     -6.5877 ppb        5.27637  80.09%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.5      0.1652 ug/L       1.59295      0.1652 ppb        1.59295 964.31%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.7     -0.4193 ug/L       1.45559     -0.4193 ppb        1.45559 347.12%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               224.5      6.8540 ug/L       0.90924      6.8540 ppb        0.90924  13.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.2      0.3727 ug/L       0.58646      0.3727 ppb        0.58646 157.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                14.7      0.0989 ug/L       0.11385      0.0989 ppb        0.11385 115.16%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.7      0.0414 ug/L       0.06251      0.0414 ppb        0.06251 150.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.4      1.5516 ug/L       1.81908      1.5516 ppb        1.81908 117.24%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -360.6     -10.074 ug/L        2.0798     -10.074 ppb         2.0798  20.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 45.3      0.2900 ug/L       0.10021      0.2900 ppb        0.10021  34.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -154.5     -1.3918 ug/L       0.06366     -1.3918 ppb        0.06366   4.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     249.8      16.326 ug/L        0.6321      16.326 ppb         0.6321   3.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 12:40:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5623.4	5623.4	99.3	%			12:42:34
1	Y RADIAL	6077.8	6077.8	98.69	%			12:42:34
1	Al 396.153Radial†	6513.5	6580.2	4843.3	ug/L	4843.3	ppb	12:42:34
1	Ca 317.933Radial†	3257.6	3263.1	4989.8	ug/L	4989.8	ppb	12:42:54
1	Fe 238.204 Radial†	505.2	502.7	5077.6	ug/L	5077.6	ppb	12:42:54
1	K 766.490 Radial†	29555.9	27595.6	4999.8	ug/L	4999.8	ppb	12:42:34
1	Mg 279.077 IEC†	139.8	139.0	5183.2	ug/L	5183.2	ppb	12:42:54
1	Na 589.592 Radial†	25670.0	26468.4	9948.7	ug/L	9948.7	ppb	12:42:34
1	Sr 421.552†	75185.9	75716.8	511.09	ug/L	511.09	ppb	12:42:34
1	Sc 361.383	903498.7	903498.7	102.09	%			12:43:52
1	Y 371.029	744787.9	744787.9	100.37	%			12:43:52
1	Ag 328.068†	110161.8	107675.3	500.85	ug/L	500.85	ppb	12:43:57
1	As 188.979†	1172.3	1177.5	484.78	ug/L	484.78	ppb	12:44:17
1	B 249.677†	22188.6	22257.5	481.22	ug/L	481.22	ppb	12:43:57
1	Ba 233.527†	65645.2	64311.2	489.72	ug/L	489.72	ppb	12:43:57
1	Be 313.107†	1318453.3	1296738.5	482.83	ug/L	482.83	ppb	12:43:52
1	Cd 226.502†	46250.3	45489.8	493.32	ug/L	493.32	ppb	12:43:57
1	Co 228.616†	25747.3	25291.1	491.08	ug/L	491.08	ppb	12:43:57
1	Cr 267.716†	46385.2	45347.1	489.38	ug/L	489.38	ppb	12:43:57
1	Cu 324.752†	175722.3	165350.4	481.15	ug/L	481.15	ppb	12:43:57
1	Mn 257.610†	455771.8	446022.8	485.12	ug/L	485.12	ppb	12:43:52
1	Mo 202.031†	7721.2	7542.9	491.70	ug/L	491.70	ppb	12:44:17
1	Ni 231.604†	21195.8	20691.1	490.65	ug/L	490.65	ppb	12:43:57
1	P 214.914†	4342.3	4033.3	2323.4	ug/L	2323.4	ppb	12:44:17
1	Pb 220.353†	4173.4	4140.3	485.50	ug/L	485.50	ppb	12:44:17
1	S 181.975 Axial†	727.4	671.0	980.23	ug/L	980.23	ppb	12:44:17
1	Sb 206.836†	1584.4	1522.3	501.26	ug/L	501.26	ppb	12:44:17
1	Se 196.026†	802.4	809.4	500.42	ug/L	500.42	ppb	12:44:17
1	Si 251.611†	82681.3	80477.9	2449.7	ug/L	2449.7	ppb	12:43:57
1	Sn 189.927†	2981.0	2915.6	493.83	ug/L	493.83	ppb	12:44:17
1	Ti 334.940†	311817.6	306388.8	495.41	ug/L	495.41	ppb	12:43:57
1	Tl 190.801†	1681.7	1684.0	485.82	ug/L	485.82	ppb	12:44:17
1	U 409.014†	15806.2	17444.3	485.79	ug/L	485.79	ppb	12:43:57
1	V 292.402†	71937.4	71758.8	490.98	ug/L	490.98	ppb	12:43:57
1	Zn 213.857†	56469.8	54504.6	486.00	ug/L	486.00	ppb	12:43:57
1	SiO2†	81805.1	79638.8	5189.4	ug/L	5189.4	ppb	12:45:24
2	Sc Radial	5743.6	5743.6	101	%			12:42:59
2	Y RADIAL	6228.6	6228.6	101.1	%			12:42:59
2	Al 396.153Radial†	6551.0	6479.8	4769.1	ug/L	4769.1	ppb	12:42:59
2	Ca 317.933Radial†	3239.4	3176.4	4857.3	ug/L	4857.3	ppb	12:43:19
2	Fe 238.204 Radial†	501.7	488.6	4935.3	ug/L	4935.3	ppb	12:43:19
2	K 766.490 Radial†	29650.2	27065.4	4903.6	ug/L	4903.6	ppb	12:42:59
2	Mg 279.077 IEC†	140.2	136.5	5089.2	ug/L	5089.2	ppb	12:43:19
2	Na 589.592 Radial†	25780.5	26036.0	9786.2	ug/L	9786.2	ppb	12:42:59
2	Sr 421.552†	75852.1	74788.2	504.82	ug/L	504.82	ppb	12:42:59
2	Sc 361.383	899867.3	899867.3	101.68	%			12:44:23
2	Y 371.029	742925.5	742925.5	100.12	%			12:44:23
2	Ag 328.068†	108320.2	106299.7	494.43	ug/L	494.43	ppb	12:44:28
2	As 188.979†	1173.2	1183.0	486.92	ug/L	486.92	ppb	12:44:48
2	B 249.677†	21762.2	21925.9	474.06	ug/L	474.06	ppb	12:44:28
2	Ba 233.527†	64286.9	63234.8	481.53	ug/L	481.53	ppb	12:44:28
2	Be 313.107†	1313584.3	1297161.7	482.97	ug/L	482.97	ppb	12:44:23
2	Cd 226.502†	45106.5	44547.8	483.11	ug/L	483.11	ppb	12:44:28
2	Co 228.616†	25148.4	24803.9	481.64	ug/L	481.64	ppb	12:44:28
2	Cr 267.716†	45515.5	44675.1	482.13	ug/L	482.13	ppb	12:44:28
2	Cu 324.752†	172526.6	162902.2	474.02	ug/L	474.02	ppb	12:44:28
2	Mn 257.610†	453581.6	445670.3	484.72	ug/L	484.72	ppb	12:44:23
2	Mo 202.031†	7703.1	7555.6	492.52	ug/L	492.52	ppb	12:44:48
2	Ni 231.604†	20757.0	20343.3	482.40	ug/L	482.40	ppb	12:44:28

2	P 214.914†	4336.2	4044.4	2331.2 ug/L	2331.2 ppb	12:44:48
2	Pb 220.353†	4157.5	4141.2	485.61 ug/L	485.61 ppb	12:44:48
2	S 181.975 Axial†	723.3	669.8	978.48 ug/L	978.48 ppb	12:44:48
2	Sb 206.836†	1561.9	1506.4	496.31 ug/L	496.31 ppb	12:44:48
2	Se 196.026†	801.3	811.5	501.24 ug/L	501.24 ppb	12:44:48
2	Si 251.611†	81032.0	79182.8	2410.1 ug/L	2410.1 ppb	12:44:28
2	Sn 189.927†	2973.9	2920.5	494.65 ug/L	494.65 ppb	12:44:48
2	Ti 334.940†	305984.4	301884.6	488.12 ug/L	488.12 ppb	12:44:28
2	Tl 190.801†	1683.0	1692.0	488.10 ug/L	488.10 ppb	12:44:48
2	U 409.014†	15508.3	17213.8	479.38 ug/L	479.38 ppb	12:44:28
2	V 292.402†	70802.1	70926.7	485.40 ug/L	485.40 ppb	12:44:28
2	Zn 213.857†	55316.4	53593.5	477.89 ug/L	477.89 ppb	12:44:28
2	SiO2†	81973.0	80127.4	5221.4 ug/L	5221.4 ppb	12:45:29
3	Sc Radial	5696.3	5696.3	101 %		12:43:24
3	Y RADIAL	6125.3	6125.3	99.46 %		12:43:24
3	Al 396.153Radial†	6521.7	6504.3	4787.1 ug/L	4787.1 ppb	12:43:24
3	Ca 317.933Radial†	3284.9	3248.2	4967.1 ug/L	4967.1 ppb	12:43:44
3	Fe 238.204 Radial†	512.6	503.6	5086.3 ug/L	5086.3 ppb	12:43:44
3	K 766.490 Radial†	29631.7	27289.9	4944.3 ug/L	4944.3 ppb	12:43:24
3	Mg 279.077 IEC†	138.1	135.6	5054.2 ug/L	5054.2 ppb	12:43:44
3	Na 589.592 Radial†	25615.0	26082.7	9803.7 ug/L	9803.7 ppb	12:43:24
3	Sr 421.552†	75260.6	74821.6	505.04 ug/L	505.04 ppb	12:43:24
3	Sc 361.383	894001.1	894001.1	101.02 %		12:44:54
3	Y 371.029	739096.7	739096.7	99.599 %		12:44:54
3	Ag 328.068†	108862.3	107535.3	500.21 ug/L	500.21 ppb	12:44:59
3	As 188.979†	1163.5	1181.0	486.19 ug/L	486.19 ppb	12:45:19
3	B 249.677†	21982.2	22284.0	481.80 ug/L	481.80 ppb	12:44:59
3	Ba 233.527†	64624.5	63983.9	487.24 ug/L	487.24 ppb	12:44:59
3	Be 313.107†	1309109.3	1301208.5	484.49 ug/L	484.49 ppb	12:44:54
3	Cd 226.502†	45419.6	45148.7	489.62 ug/L	489.62 ppb	12:44:59
3	Co 228.616†	25349.0	25164.7	488.64 ug/L	488.64 ppb	12:44:59
3	Cr 267.716†	45712.0	45163.4	487.41 ug/L	487.41 ppb	12:44:59
3	Cu 324.752†	173656.7	165134.3	480.52 ug/L	480.52 ppb	12:44:59
3	Mn 257.610†	450513.2	445559.9	484.62 ug/L	484.62 ppb	12:44:54
3	Mo 202.031†	7706.4	7608.6	495.98 ug/L	495.98 ppb	12:45:19
3	Ni 231.604†	20950.4	20668.7	490.12 ug/L	490.12 ppb	12:44:59
3	P 214.914†	4339.3	4075.5	2348.6 ug/L	2348.6 ppb	12:45:19
3	Pb 220.353†	4118.7	4129.7	484.25 ug/L	484.25 ppb	12:45:19
3	S 181.975 Axial†	730.4	681.6	995.70 ug/L	995.70 ppb	12:45:19
3	Sb 206.836†	1571.6	1526.1	502.70 ug/L	502.70 ppb	12:45:19
3	Se 196.026†	812.2	827.5	511.24 ug/L	511.24 ppb	12:45:19
3	Si 251.611†	81584.8	80252.9	2442.8 ug/L	2442.8 ppb	12:44:59
3	Sn 189.927†	2977.7	2943.3	498.53 ug/L	498.53 ppb	12:45:19
3	Ti 334.940†	308067.8	305921.5	494.65 ug/L	494.65 ppb	12:44:59
3	Tl 190.801†	1678.7	1698.6	489.99 ug/L	489.99 ppb	12:45:19
3	U 409.014†	15681.2	17485.0	486.93 ug/L	486.93 ppb	12:44:59
3	V 292.402†	71263.8	71840.6	491.60 ug/L	491.60 ppb	12:44:59
3	Zn 213.857†	55564.5	54196.1	483.24 ug/L	483.24 ppb	12:44:59
3	SiO2†	82256.0	80936.4	5274.2 ug/L	5274.2 ppb	12:45:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899122.4	101.60	%	0.542				0.53%
Sc Radial	5687.8	100	%	1.1				1.07%
Y 371.029	742270.0	100.03	%	0.391				0.39%
Y RADIAL	6143.9	99.76	%	1.252				1.25%
Ag 328.068†	107170.1	498.50	ug/L	3.536	498.50	ppb	3.536	0.71%
QC value within limits for Ag 328.068 Recovery = 99.70%								
Al 396.153Radial†	6521.4	4799.8	ug/L	38.72	4799.8	ppb	38.72	0.81%
QC value within limits for Al 396.153Radial Recovery = 96.00%								
As 188.979†	1180.5	485.96	ug/L	1.090	485.96	ppb	1.090	0.22%
QC value within limits for As 188.979 Recovery = 97.19%								
B 249.677†	22155.8	479.03	ug/L	4.309	479.03	ppb	4.309	0.90%
QC value within limits for B 249.677 Recovery = 95.81%								
Ba 233.527†	63843.3	486.16	ug/L	4.201	486.16	ppb	4.201	0.86%
QC value within limits for Ba 233.527 Recovery = 97.23%								
Be 313.107†	1298369.6	483.43	ug/L	0.920	483.43	ppb	0.920	0.19%
QC value within limits for Be 313.107 Recovery = 96.69%								
Ca 317.933Radial†	3229.2	4938.0	ug/L	70.86	4938.0	ppb	70.86	1.43%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.76%
Cd 226.502†            45062.1      488.68 ug/L         5.169      488.68 ppb          5.169   1.06%
   QC value within limits for Cd 226.502  Recovery = 97.74%
Co 228.616†            25086.6      487.12 ug/L         4.898      487.12 ppb          4.898   1.01%
   QC value within limits for Co 228.616  Recovery = 97.42%
Cr 267.716†            45061.9      486.31 ug/L         3.748      486.31 ppb          3.748   0.77%
   QC value within limits for Cr 267.716  Recovery = 97.26%
Cu 324.752†           164462.3      478.56 ug/L         3.946      478.56 ppb          3.946   0.82%
   QC value within limits for Cu 324.752  Recovery = 95.71%
Fe 238.204 Radial†       498.3      5033.0 ug/L         84.79      5033.0 ppb          84.79   1.68%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.66%
K 766.490 Radial†      27317.0      4949.2 ug/L         48.26      4949.2 ppb          48.26   0.98%
   QC value within limits for K 766.490 Radial  Recovery = 98.98%
Mg 279.077 IEC†          137.0      5108.9 ug/L         66.72      5108.9 ppb          66.72   1.31%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.18%
Mn 257.610†           445751.0      484.82 ug/L         0.264      484.82 ppb          0.264   0.05%
   QC value within limits for Mn 257.610  Recovery = 96.96%
Mo 202.031†             7569.0      493.40 ug/L         2.271      493.40 ppb          2.271   0.46%
   QC value within limits for Mo 202.031  Recovery = 98.68%
Na 589.592 Radial†     26195.7      9846.2 ug/L         89.20      9846.2 ppb          89.20   0.91%
   QC value within limits for Na 589.592 Radial  Recovery = 98.46%
Ni 231.604†            20567.7      487.72 ug/L         4.616      487.72 ppb          4.616   0.95%
   QC value within limits for Ni 231.604  Recovery = 97.54%
P 214.914†              4051.1      2334.4 ug/L         12.89      2334.4 ppb          12.89   0.55%
   QC value within limits for P 214.914  Recovery = 93.38%
Pb 220.353†             4137.1      485.12 ug/L         0.754      485.12 ppb          0.754   0.16%
   QC value within limits for Pb 220.353  Recovery = 97.02%
S 181.975 Axial†         674.1      984.80 ug/L         9.475      984.80 ppb          9.475   0.96%
   QC value within limits for S 181.975 Axial  Recovery = 98.48%
Sb 206.836†             1518.3      500.09 ug/L         3.353      500.09 ppb          3.353   0.67%
   QC value within limits for Sb 206.836  Recovery = 100.02%
Se 196.026†              816.1      504.30 ug/L         6.029      504.30 ppb          6.029   1.20%
   QC value within limits for Se 196.026  Recovery = 100.86%
Si 251.611†            79971.2      2434.2 ug/L         21.14      2434.2 ppb          21.14   0.87%
   QC value within limits for Si 251.611  Recovery = 97.37%
Sn 189.927†             2926.4      495.67 ug/L         2.510      495.67 ppb          2.510   0.51%
   QC value within limits for Sn 189.927  Recovery = 99.13%
Sr 421.552†            75108.9      506.98 ug/L         3.555      506.98 ppb          3.555   0.70%
   QC value within limits for Sr 421.552  Recovery = 101.40%
Ti 334.940†           304731.7      492.72 ug/L         4.006      492.72 ppb          4.006   0.81%
   QC value within limits for Ti 334.940  Recovery = 98.54%
Tl 190.801†             1691.5      487.97 ug/L         2.087      487.97 ppb          2.087   0.43%
   QC value within limits for Tl 190.801  Recovery = 97.59%
U 409.014†             17381.0      484.03 ug/L         4.069      484.03 ppb          4.069   0.84%
   QC value within limits for U 409.014  Recovery = 96.81%
V 292.402†             71508.7      489.32 ug/L         3.417      489.32 ppb          3.417   0.70%
   QC value within limits for V 292.402  Recovery = 97.86%
Zn 213.857†            54098.0      482.38 ug/L         4.127      482.38 ppb          4.127   0.86%
   QC value within limits for Zn 213.857  Recovery = 96.48%
SiO2†                  80234.2      5228.4 ug/L         42.83      5228.4 ppb          42.83   0.82%
   QC value within limits for SiO2  Recovery = 97.77%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 12:47:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5770.6	5770.6	102	%			12:49:37
1	Y RADIAL	6247.3	6247.3	101.4	%			12:49:37
1	Al 396.153Radial†	-15.7	4.9	3.6504	ug/L	3.6504	ppb	12:49:37
1	Ca 317.933Radial†	23.4	5.3	8.0852	ug/L	8.0852	ppb	12:49:57
1	Fe 238.204 Radial†	6.6	0.5	4.9431	ug/L	4.9431	ppb	12:49:57
1	K 766.490 Radial†	2236.1	24.3	4.3858	ug/L	4.3858	ppb	12:49:37
1	Mg 279.077 IEC†	1.1	-0.7	-24.705	ug/L	-24.705	ppb	12:49:57
1	Na 589.592 Radial†	-512.2	113.3	42.580	ug/L	42.580	ppb	12:49:37
1	Sr 421.552†	16.5	12.8	0.0864	ug/L	0.0864	ppb	12:49:37
1	Sc 361.383	903607.9	903607.9	102.11	%			12:50:54
1	Y 371.029	758651.9	758651.9	102.23	%			12:50:54
1	Ag 328.068†	321.7	87.4	0.4137	ug/L	0.4137	ppb	12:50:59
1	As 188.979†	-24.5	5.2	2.1305	ug/L	2.1305	ppb	12:51:19
1	B 249.677†	-324.9	205.7	4.4635	ug/L	4.4635	ppb	12:51:19
1	Ba 233.527†	-23.2	-10.7	-0.0808	ug/L	-0.0808	ppb	12:51:19
1	Be 313.107†	-5275.4	153.6	0.0570	ug/L	0.0570	ppb	12:50:59
1	Cd 226.502†	-176.2	15.3	0.1657	ug/L	0.1657	ppb	12:51:19
1	Co 228.616†	-68.6	4.5	0.0883	ug/L	0.0883	ppb	12:51:19
1	Cr 267.716†	70.1	-18.3	-0.1945	ug/L	-0.1945	ppb	12:51:19
1	Cu 324.752†	6814.2	-95.0	-0.2760	ug/L	-0.2760	ppb	12:50:59
1	Mn 257.610†	426.9	14.7	0.0169	ug/L	0.0169	ppb	12:51:19
1	Mo 202.031†	20.0	-0.5	-0.0291	ug/L	-0.0291	ppb	12:51:19
1	Ni 231.604†	86.7	14.8	0.3514	ug/L	0.3514	ppb	12:51:19
1	P 214.914†	219.6	-4.9	-2.8430	ug/L	-2.8430	ppb	12:51:19
1	Pb 220.353†	-61.0	-7.2	-0.8404	ug/L	-0.8404	ppb	12:51:19
1	S 181.975 Axial†	40.2	-2.1	-3.0921	ug/L	-3.0921	ppb	12:51:19
1	Sb 206.836†	37.3	7.0	2.2897	ug/L	2.2897	ppb	12:51:19
1	Se 196.026†	-22.0	1.9	1.1622	ug/L	1.1622	ppb	12:51:19
1	Si 251.611†	561.6	42.0	1.2796	ug/L	1.2796	ppb	12:51:19
1	Sn 189.927†	14.0	9.4	1.5962	ug/L	1.5962	ppb	12:51:19
1	Ti 334.940†	-1024.8	-38.6	-0.0580	ug/L	-0.0580	ppb	12:50:59
1	Tl 190.801†	-31.1	6.4	1.8306	ug/L	1.8306	ppb	12:51:19
1	U 409.014†	-2328.2	-318.0	-8.8850	ug/L	-8.8850	ppb	12:50:59
1	V 292.402†	-1307.7	15.7	0.0874	ug/L	0.0874	ppb	12:50:59
1	Zn 213.857†	684.0	-137.4	-1.2379	ug/L	-1.2379	ppb	12:51:19
1	SiO2†	583.2	82.3	5.3773	ug/L	5.3773	ppb	12:52:25
2	Sc Radial	5947.3	5947.3	105	%			12:50:02
2	Y RADIAL	6456.8	6456.8	104.8	%			12:50:02
2	Al 396.153Radial†	-32.3	-10.4	-7.7205	ug/L	-7.7205	ppb	12:50:02
2	Ca 317.933Radial†	21.1	2.4	3.6745	ug/L	3.6745	ppb	12:50:22
2	Fe 238.204 Radial†	5.7	-0.6	-5.8945	ug/L	-5.8945	ppb	12:50:22
2	K 766.490 Radial†	2245.8	-31.7	-5.7758	ug/L	-5.7758	ppb	12:50:02
2	Mg 279.077 IEC†	2.1	0.2	9.0627	ug/L	9.0627	ppb	12:50:22
2	Na 589.592 Radial†	-531.3	110.1	41.375	ug/L	41.375	ppb	12:50:02
2	Sr 421.552†	5.6	1.9	0.0129	ug/L	0.0129	ppb	12:50:02
2	Sc 361.383	902742.4	902742.4	102.01	%			12:51:24
2	Y 371.029	759404.3	759404.3	102.34	%			12:51:24
2	Ag 328.068†	346.0	111.6	0.5223	ug/L	0.5223	ppb	12:51:29
2	As 188.979†	-22.2	7.4	3.0285	ug/L	3.0285	ppb	12:51:49
2	B 249.677†	-328.8	201.5	4.3752	ug/L	4.3752	ppb	12:51:49
2	Ba 233.527†	-6.2	5.9	0.0454	ug/L	0.0454	ppb	12:51:49
2	Be 313.107†	-5161.4	260.4	0.0969	ug/L	0.0969	ppb	12:51:29
2	Cd 226.502†	-172.2	19.1	0.2077	ug/L	0.2077	ppb	12:51:49
2	Co 228.616†	-66.0	7.1	0.1369	ug/L	0.1369	ppb	12:51:49
2	Cr 267.716†	85.3	-3.3	-0.0325	ug/L	-0.0325	ppb	12:51:49
2	Cu 324.752†	6839.0	-64.3	-0.1872	ug/L	-0.1872	ppb	12:51:29
2	Mn 257.610†	425.1	13.3	0.0137	ug/L	0.0137	ppb	12:51:49
2	Mo 202.031†	18.8	-1.6	-0.1019	ug/L	-0.1019	ppb	12:51:49
2	Ni 231.604†	86.9	15.1	0.3580	ug/L	0.3580	ppb	12:51:49

2	P 214.914†	218.3	-6.0	-3.5159 ug/L	-3.5159 ppb	12:51:49
2	Pb 220.353†	-63.2	-9.4	-1.1028 ug/L	-1.1028 ppb	12:51:49
2	S 181.975 Axial†	40.0	-2.2	-3.2455 ug/L	-3.2455 ppb	12:51:49
2	Sb 206.836†	34.5	4.2	1.3767 ug/L	1.3767 ppb	12:51:49
2	Se 196.026†	-13.2	10.5	6.2668 ug/L	6.2668 ppb	12:51:49
2	Si 251.611†	566.4	47.3	1.4461 ug/L	1.4461 ppb	12:51:49
2	Sn 189.927†	11.1	6.6	1.1238 ug/L	1.1238 ppb	12:51:49
2	Ti 334.940†	-936.3	47.1	0.0803 ug/L	0.0803 ppb	12:51:29
2	Tl 190.801†	-38.3	-0.7	-0.1910 ug/L	-0.1910 ppb	12:51:49
2	U 409.014†	-2322.0	-314.1	-8.7753 ug/L	-8.7753 ppb	12:51:29
2	V 292.402†	-1290.0	31.9	0.1978 ug/L	0.1978 ppb	12:51:29
2	Zn 213.857†	693.4	-127.5	-1.1490 ug/L	-1.1490 ppb	12:51:49
2	SiO2†	559.2	59.3	3.8854 ug/L	3.8854 ppb	12:52:30
3	Sc Radial	5936.1	5936.1	105 %		12:50:27
3	Y RADIAL	6451.1	6451.1	104.7 %		12:50:27
3	Al 396.153Radial†	-39.5	-17.4	-12.855 ug/L	-12.855 ppb	12:50:27
3	Ca 317.933Radial†	21.6	2.9	4.4388 ug/L	4.4388 ppb	12:50:47
3	Fe 238.204 Radial†	4.8	-1.5	-14.777 ug/L	-14.777 ppb	12:50:47
3	K 766.490 Radial†	2169.1	-100.9	-18.336 ug/L	-18.336 ppb	12:50:27
3	Mg 279.077 IEC†	3.5	1.6	58.379 ug/L	58.379 ppb	12:50:47
3	Na 589.592 Radial†	-498.0	140.9	52.948 ug/L	52.948 ppb	12:50:27
3	Sr 421.552†	43.1	37.7	0.2543 ug/L	0.2543 ppb	12:50:27
3	Sc 361.383	902267.9	902267.9	101.95 %		12:51:54
3	Y 371.029	757493.1	757493.1	102.08 %		12:51:54
3	Ag 328.068†	288.3	55.2	0.2557 ug/L	0.2557 ppb	12:51:59
3	As 188.979†	-22.2	7.4	3.0155 ug/L	3.0155 ppb	12:52:19
3	B 249.677†	-300.9	228.8	4.9675 ug/L	4.9675 ppb	12:52:19
3	Ba 233.527†	-19.3	-6.9	-0.0538 ug/L	-0.0538 ppb	12:52:19
3	Be 313.107†	-5234.1	186.5	0.0693 ug/L	0.0693 ppb	12:51:59
3	Cd 226.502†	-166.1	24.9	0.2716 ug/L	0.2716 ppb	12:52:19
3	Co 228.616†	-72.5	0.6	0.0123 ug/L	0.0123 ppb	12:52:19
3	Cr 267.716†	72.3	-16.0	-0.1713 ug/L	-0.1713 ppb	12:52:19
3	Cu 324.752†	6853.0	-47.0	-0.1374 ug/L	-0.1374 ppb	12:51:59
3	Mn 257.610†	425.2	13.6	0.0122 ug/L	0.0122 ppb	12:52:19
3	Mo 202.031†	17.3	-3.0	-0.1965 ug/L	-0.1965 ppb	12:52:19
3	Ni 231.604†	86.4	14.7	0.3477 ug/L	0.3477 ppb	12:52:19
3	P 214.914†	211.9	-12.2	-7.1623 ug/L	-7.1623 ppb	12:52:19
3	Pb 220.353†	-72.3	-18.4	-2.1486 ug/L	-2.1486 ppb	12:52:19
3	S 181.975 Axial†	48.2	5.8	8.5533 ug/L	8.5533 ppb	12:52:19
3	Sb 206.836†	33.2	3.0	1.0038 ug/L	1.0038 ppb	12:52:19
3	Se 196.026†	-20.5	3.4	1.9682 ug/L	1.9682 ppb	12:52:19
3	Si 251.611†	587.3	68.0	2.0842 ug/L	2.0842 ppb	12:52:19
3	Sn 189.927†	16.3	11.7	1.9755 ug/L	1.9755 ppb	12:52:19
3	Ti 334.940†	-975.1	8.7	0.0175 ug/L	0.0175 ppb	12:51:59
3	Tl 190.801†	-24.9	12.4	3.5624 ug/L	3.5624 ppb	12:52:19
3	U 409.014†	-2261.6	-256.1	-7.1533 ug/L	-7.1533 ppb	12:51:59
3	V 292.402†	-1357.5	-35.0	-0.2495 ug/L	-0.2495 ppb	12:51:59
3	Zn 213.857†	671.3	-148.8	-1.3417 ug/L	-1.3417 ppb	12:52:19
3	SiO2†	591.0	90.8	5.9537 ug/L	5.9537 ppb	12:52:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902872.8	102.02	%	0.077				0.08%
Sc Radial	5884.7	104	%	1.7				1.68%
Y 371.029	758516.4	102.22	%	0.130				0.13%
Y RADIAL	6385.1	103.7	%	1.94				1.87%
Ag 328.068†	84.7	0.3973	ug/L	0.13403	0.3973	ppb	0.13403	33.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.6	-5.6417	ug/L	8.44680	-5.6417	ppb	8.44680	149.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.7	2.7248	ug/L	0.51476	2.7248	ppb	0.51476	18.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	212.0	4.6021	ug/L	0.31951	4.6021	ppb	0.31951	6.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.9	-0.0297	ug/L	0.06646	-0.0297	ppb	0.06646	223.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	200.2	0.0744	ug/L	0.02046	0.0744	ppb	0.02046	27.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3995	ug/L	2.35706	5.3995	ppb	2.35706	43.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                19.7      0.2150 ug/L       0.05331      0.2150 ppb        0.05331  24.79%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 4.1      0.0792 ug/L       0.06278      0.0792 ppb        0.06278  79.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.6     -0.1327 ug/L       0.08759     -0.1327 ppb        0.08759  65.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -68.7     -0.2002 ug/L       0.07021     -0.2002 ppb        0.07021  35.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -5.2429 ug/L       9.87632     -5.2429 ppb        9.87632 188.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -36.1     -6.5755 ug/L      11.38212     -6.5755 ppb       11.38212 173.10%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.4      14.246 ug/L      41.7838      14.246 ppb        41.7838 293.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                13.9      0.0143 ug/L       0.00241      0.0143 ppb        0.00241  16.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.7     -0.1092 ug/L       0.08390     -0.1092 ppb        0.08390  76.87%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        121.4      45.635 ug/L        6.3625      45.635 ppb         6.3625  13.94%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.9      0.3524 ug/L       0.00521      0.3524 ppb        0.00521   1.48%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.7     -4.5071 ug/L       2.32395     -4.5071 ppb        2.32395  51.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.7     -1.3639 ug/L       0.69208     -1.3639 ppb        0.69208  50.74%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.7386 ug/L       6.76817      0.7386 ppb        6.76817 916.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.7      1.5567 ug/L       0.66160      1.5567 ppb        0.66160  42.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.3      3.1324 ug/L       2.74421      3.1324 ppb        2.74421  87.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.4      1.6033 ug/L       0.42469      1.6033 ppb        0.42469  26.49%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.2      1.5652 ug/L       0.42666      1.5652 ppb        0.42666  27.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                17.5      0.1179 ug/L       0.12372      0.1179 ppb        0.12372 104.96%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 5.7      0.0133 ug/L       0.06926      0.0133 ppb        0.06926 522.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.1      1.7340 ug/L       1.87860      1.7340 ppb        1.87860 108.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -296.1     -8.2712 ug/L       0.96965     -8.2712 ppb        0.96965  11.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 4.2      0.0119 ug/L       0.23303      0.0119 ppb        0.23303 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -137.9     -1.2429 ug/L       0.09644     -1.2429 ppb        0.09644   7.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      77.5      5.0721 ug/L       1.06739      5.0721 ppb        1.06739  21.04%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/9/2009 13:20:59 Plasma On Time: 12/7/2009 05:17:52
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120909.sif
Batch ID:
Results Data Set: 120909A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/9/2009 13:21:00
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5577.7	5577.7	98.5	%			13:22:52
1	Y RADIAL	6013.6	6013.6	97.64	%			13:22:52
1	Al 396.153Radial†	6381.3	6499.6	4783.4	ug/L	4783.4	ppb	13:22:52
1	Ca 317.933Radial†	3258.9	3291.3	5032.9	ug/L	5032.9	ppb	13:23:12
1	Fe 238.204 Radial†	522.0	524.0	5291.7	ug/L	5291.7	ppb	13:23:12
1	K 766.490 Radial†	29007.7	27283.0	4942.6	ug/L	4942.6	ppb	13:22:52
1	Mg 279.077 IEC†	144.0	144.4	5383.5	ug/L	5383.5	ppb	13:23:12
1	Na 589.592 Radial†	27412.0	28449.0	10693	ug/L	10693	ppb	13:22:52
1	Sr 421.552†	77124.5	78305.8	528.56	ug/L	528.56	ppb	13:22:52
1	Sc 361.383	886145.5	886145.5	100.13	%			13:24:09
1	Y 371.029	731929.5	731929.5	98.633	%			13:24:09
1	Ag 328.068†	108953.1	108581.3	505.12	ug/L	505.12	ppb	13:24:14
1	As 188.979†	1162.4	1190.1	489.97	ug/L	489.97	ppb	13:24:34
1	B 249.677†	21768.2	22263.3	481.31	ug/L	481.31	ppb	13:24:14
1	Ba 233.527†	64644.9	64571.3	491.71	ug/L	491.71	ppb	13:24:14
1	Be 313.107†	1308085.4	1311673.9	488.39	ug/L	488.39	ppb	13:24:09
1	Cd 226.502†	45371.9	45499.7	493.41	ug/L	493.41	ppb	13:24:14
1	Co 228.616†	25310.3	25348.6	492.20	ug/L	492.20	ppb	13:24:14
1	Cr 267.716†	45696.7	45549.2	491.57	ug/L	491.57	ppb	13:24:14
1	Cu 324.752†	173962.3	166963.3	485.85	ug/L	485.85	ppb	13:24:14
1	Mn 257.610†	452274.8	451272.6	490.84	ug/L	490.84	ppb	13:24:09
1	Mo 202.031†	7697.9	7667.7	499.84	ug/L	499.84	ppb	13:24:34
1	Ni 231.604†	20936.8	20838.9	494.16	ug/L	494.16	ppb	13:24:14
1	P 214.914†	4337.7	4112.0	2369.3	ug/L	2369.3	ppb	13:24:34
1	Pb 220.353†	4124.2	4171.3	489.11	ug/L	489.11	ppb	13:24:34
1	S 181.975 Axial†	719.0	676.6	988.32	ug/L	988.32	ppb	13:24:34
1	Sb 206.836†	1557.3	1525.6	502.57	ug/L	502.57	ppb	13:24:34
1	Se 196.026†	796.1	818.4	506.50	ug/L	506.50	ppb	13:24:34
1	Si 251.611†	81555.2	80939.2	2463.7	ug/L	2463.7	ppb	13:24:14
1	Sn 189.927†	2960.0	2951.9	499.98	ug/L	499.98	ppb	13:24:34
1	Ti 334.940†	308036.7	308594.0	498.97	ug/L	498.97	ppb	13:24:14
1	Tl 190.801†	1667.2	1701.8	490.97	ug/L	490.97	ppb	13:24:34
1	U 409.014†	15776.3	17717.6	493.39	ug/L	493.39	ppb	13:24:14
1	V 292.402†	71265.2	72467.4	495.86	ug/L	495.86	ppb	13:24:14
1	Zn 213.857†	55565.7	54684.9	487.57	ug/L	487.57	ppb	13:24:14
1	SiO2†	80532.8	79937.4	5208.7	ug/L	5208.7	ppb	13:25:42
2	Sc Radial	5650.9	5650.9	99.8	%			13:23:17
2	Y RADIAL	6064.5	6064.5	98.47	%			13:23:17
2	Al 396.153Radial†	6488.9	6523.6	4801.2	ug/L	4801.2	ppb	13:23:17
2	Ca 317.933Radial†	3247.0	3236.5	4949.1	ug/L	4949.1	ppb	13:23:37
2	Fe 238.204 Radial†	517.0	512.1	5172.0	ug/L	5172.0	ppb	13:23:37
2	K 766.490 Radial†	29834.0	27729.5	5023.6	ug/L	5023.6	ppb	13:23:17
2	Mg 279.077 IEC†	139.9	138.5	5161.7	ug/L	5161.7	ppb	13:23:37
2	Na 589.592 Radial†	28176.9	28855.0	10846	ug/L	10846	ppb	13:23:17
2	Sr 421.552†	78681.1	78851.2	532.25	ug/L	532.25	ppb	13:23:17
2	Sc 361.383	884256.8	884256.8	99.919	%			13:24:40
2	Y 371.029	731963.0	731963.0	98.638	%			13:24:40

2	Ag 328.068†	108311.9	108172.0	503.19 ug/L	503.19 ppb	13:24:45
2	As 188.979†	1153.3	1183.5	487.24 ug/L	487.24 ppb	13:25:05
2	B 249.677†	21663.1	22204.5	480.05 ug/L	480.05 ppb	13:24:45
2	Ba 233.527†	64241.1	64305.1	489.69 ug/L	489.69 ppb	13:24:45
2	Be 313.107†	1307541.7	1313920.1	489.22 ug/L	489.22 ppb	13:24:40
2	Cd 226.502†	45242.2	45466.7	493.06 ug/L	493.06 ppb	13:24:45
2	Co 228.616†	25195.6	25287.7	491.02 ug/L	491.02 ppb	13:24:45
2	Cr 267.716†	45611.9	45561.8	491.70 ug/L	491.70 ppb	13:24:45
2	Cu 324.752†	172791.8	166163.0	483.51 ug/L	483.51 ppb	13:24:45
2	Mn 257.610†	450775.0	450736.3	490.25 ug/L	490.25 ppb	13:24:40
2	Mo 202.031†	7650.5	7636.7	497.82 ug/L	497.82 ppb	13:25:05
2	Ni 231.604†	20819.6	20766.3	492.43 ug/L	492.43 ppb	13:24:45
2	P 214.914†	4286.6	4070.1	2344.8 ug/L	2344.8 ppb	13:25:05
2	Pb 220.353†	4111.6	4167.5	488.67 ug/L	488.67 ppb	13:25:05
2	S 181.975 Axial†	719.5	678.6	991.32 ug/L	991.32 ppb	13:25:05
2	Sb 206.836†	1564.7	1536.4	505.98 ug/L	505.98 ppb	13:25:05
2	Se 196.026†	786.3	810.4	501.33 ug/L	501.33 ppb	13:25:05
2	Si 251.611†	81015.8	80573.4	2452.5 ug/L	2452.5 ppb	13:24:45
2	Sn 189.927†	2940.6	2938.7	497.75 ug/L	497.75 ppb	13:25:05
2	Ti 334.940†	306404.5	307617.4	497.39 ug/L	497.39 ppb	13:24:45
2	Tl 190.801†	1670.2	1708.4	492.85 ug/L	492.85 ppb	13:25:05
2	U 409.014†	15616.5	17591.3	489.88 ug/L	489.88 ppb	13:24:45
2	V 292.402†	70955.2	72309.1	494.78 ug/L	494.78 ppb	13:24:45
2	Zn 213.857†	55309.8	54547.3	486.37 ug/L	486.37 ppb	13:24:45
2	SiO2†	81100.5	80677.4	5257.1 ug/L	5257.1 ppb	13:25:47
3	Sc Radial	5569.3	5569.3	98.3 %		13:23:42
3	Y RADIAL	6009.1	6009.1	97.57 %		13:23:42
3	Al 396.153Radial†	6416.4	6545.0	4816.8 ug/L	4816.8 ppb	13:23:42
3	Ca 317.933Radial†	3261.6	3298.9	5044.6 ug/L	5044.6 ppb	13:24:02
3	Fe 238.204 Radial†	516.7	519.3	5245.0 ug/L	5245.0 ppb	13:24:02
3	K 766.490 Radial†	29322.9	27647.6	5008.7 ug/L	5008.7 ppb	13:23:42
3	Mg 279.077 IEC†	137.5	138.1	5147.0 ug/L	5147.0 ppb	13:24:02
3	Na 589.592 Radial†	27863.7	28950.0	10881 ug/L	10881 ppb	13:23:42
3	Sr 421.552†	77812.6	79122.7	534.08 ug/L	534.08 ppb	13:23:42
3	Sc 361.383	881861.1	881861.1	99.648 %		13:25:11
3	Y 371.029	728544.8	728544.8	98.177 %		13:25:11
3	Ag 328.068†	108175.0	108329.1	503.94 ug/L	503.94 ppb	13:25:16
3	As 188.979†	1169.3	1202.6	495.07 ug/L	495.07 ppb	13:25:36
3	B 249.677†	21697.3	22297.7	482.07 ug/L	482.07 ppb	13:25:16
3	Ba 233.527†	64148.3	64386.6	490.31 ug/L	490.31 ppb	13:25:16
3	Be 313.107†	1302364.8	1312279.8	488.61 ug/L	488.61 ppb	13:25:11
3	Cd 226.502†	45025.4	45372.1	492.03 ug/L	492.03 ppb	13:25:16
3	Co 228.616†	25128.2	25288.6	491.06 ug/L	491.06 ppb	13:25:16
3	Cr 267.716†	45566.0	45639.8	492.55 ug/L	492.55 ppb	13:25:16
3	Cu 324.752†	172648.0	166488.4	484.47 ug/L	484.47 ppb	13:25:16
3	Mn 257.610†	450049.7	451234.1	490.80 ug/L	490.80 ppb	13:25:11
3	Mo 202.031†	7737.8	7745.1	504.88 ug/L	504.88 ppb	13:25:36
3	Ni 231.604†	20775.5	20778.7	492.73 ug/L	492.73 ppb	13:25:16
3	P 214.914†	4346.2	4141.6	2387.2 ug/L	2387.2 ppb	13:25:36
3	Pb 220.353†	4173.4	4240.7	497.24 ug/L	497.24 ppb	13:25:36
3	S 181.975 Axial†	728.8	689.9	1007.8 ug/L	1007.8 ppb	13:25:36
3	Sb 206.836†	1575.8	1551.7	511.23 ug/L	511.23 ppb	13:25:36
3	Se 196.026†	815.1	841.4	520.08 ug/L	520.08 ppb	13:25:36
3	Si 251.611†	80889.1	80666.5	2455.2 ug/L	2455.2 ppb	13:25:16
3	Sn 189.927†	2982.2	2988.5	506.17 ug/L	506.17 ppb	13:25:36
3	Ti 334.940†	305834.3	307878.3	497.81 ug/L	497.81 ppb	13:25:16
3	Tl 190.801†	1672.8	1715.6	494.90 ug/L	494.90 ppb	13:25:36
3	U 409.014†	15663.1	17680.5	492.36 ug/L	492.36 ppb	13:25:16
3	V 292.402†	70837.5	72383.9	495.37 ug/L	495.37 ppb	13:25:16
3	Zn 213.857†	55274.0	54661.7	487.39 ug/L	487.39 ppb	13:25:16
3	SiO2†	81635.1	81434.2	5306.4 ug/L	5306.4 ppb	13:25:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884087.8	99.900	%	0.2426				0.24%
Sc Radial	5599.3	98.9	%	0.79				0.80%
Y 371.029	730812.4	98.483	%	0.2647				0.27%
Y RADIAL	6029.1	97.89	%	0.499				0.51%
Ag 328.068†	108360.8	504.08	ug/L	0.973	504.08	ppb	0.973	0.19%

```
   QC value within limits for Ag 328.068  Recovery = 100.82%
Al 396.153Radial†       6522.8      4800.5 ug/L        16.69      4800.5 ppb        16.69   0.35%
   QC value within limits for Al 396.153Radial  Recovery = 96.01%
As 188.979†             1192.1      490.76 ug/L        3.972      490.76 ppb        3.972   0.81%
   QC value within limits for As 188.979  Recovery = 98.15%
B 249.677†             22255.1      481.14 ug/L        1.017      481.14 ppb        1.017   0.21%
   QC value within limits for B 249.677  Recovery = 96.23%
Ba 233.527†            64421.0      490.57 ug/L        1.039      490.57 ppb        1.039   0.21%
   QC value within limits for Ba 233.527  Recovery = 98.11%
Be 313.107†          1312624.6      488.74 ug/L        0.430      488.74 ppb        0.430   0.09%
   QC value within limits for Be 313.107  Recovery = 97.75%
Ca 317.933Radial†       3275.6      5008.9 ug/L        52.09      5008.9 ppb        52.09   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 100.18%
Cd 226.502†            45446.2      492.83 ug/L        0.718      492.83 ppb        0.718   0.15%
   QC value within limits for Cd 226.502  Recovery = 98.57%
Co 228.616†            25308.3      491.43 ug/L        0.673      491.43 ppb        0.673   0.14%
   QC value within limits for Co 228.616  Recovery = 98.29%
Cr 267.716†            45583.6      491.94 ug/L        0.528      491.94 ppb        0.528   0.11%
   QC value within limits for Cr 267.716  Recovery = 98.39%
Cu 324.752†           166538.3      484.61 ug/L        1.174      484.61 ppb        1.174   0.24%
   QC value within limits for Cu 324.752  Recovery = 96.92%
Fe 238.204 Radial†       518.5      5236.2 ug/L        60.31      5236.2 ppb        60.31   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.72%
K 766.490 Radial†      27553.4      4991.7 ug/L        43.11      4991.7 ppb        43.11   0.86%
   QC value within limits for K 766.490 Radial  Recovery = 99.83%
Mg 279.077 IEC†          140.3      5230.7 ug/L       132.55      5230.7 ppb       132.55   2.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.61%
Mn 257.610†           451081.0      490.63 ug/L        0.329      490.63 ppb        0.329   0.07%
   QC value within limits for Mn 257.610  Recovery = 98.13%
Mo 202.031†             7683.2      500.85 ug/L        3.636      500.85 ppb        3.636   0.73%
   QC value within limits for Mo 202.031  Recovery = 100.17%
Na 589.592 Radial†     28751.3       10807 ug/L        100.0       10807 ppb        100.0   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 108.07%
Ni 231.604†            20794.7      493.11 ug/L        0.921      493.11 ppb        0.921   0.19%
   QC value within limits for Ni 231.604  Recovery = 98.62%
P 214.914†              4107.9      2367.1 ug/L        21.28      2367.1 ppb        21.28   0.90%
   QC value within limits for P 214.914  Recovery = 94.68%
Pb 220.353†             4193.2      491.67 ug/L        4.827      491.67 ppb        4.827   0.98%
   QC value within limits for Pb 220.353  Recovery = 98.33%
S 181.975 Axial†         681.7      995.81 ug/L       10.489      995.81 ppb       10.489   1.05%
   QC value within limits for S 181.975 Axial  Recovery = 99.58%
Sb 206.836†             1537.9      506.59 ug/L        4.363      506.59 ppb        4.363   0.86%
   QC value within limits for Sb 206.836  Recovery = 101.32%
Se 196.026†              823.4      509.30 ug/L        9.686      509.30 ppb        9.686   1.90%
   QC value within limits for Se 196.026  Recovery = 101.86%
Si 251.611†            80726.4      2457.1 ug/L         5.83      2457.1 ppb         5.83   0.24%
   QC value within limits for Si 251.611  Recovery = 98.29%
Sn 189.927†             2959.7      501.30 ug/L        4.364      501.30 ppb        4.364   0.87%
   QC value within limits for Sn 189.927  Recovery = 100.26%
Sr 421.552†            78759.9      531.63 ug/L        2.809      531.63 ppb        2.809   0.53%
   QC value within limits for Sr 421.552  Recovery = 106.33%
Ti 334.940†           308029.9      498.06 ug/L        0.819      498.06 ppb        0.819   0.16%
   QC value within limits for Ti 334.940  Recovery = 99.61%
Tl 190.801†             1708.6      492.91 ug/L        1.968      492.91 ppb        1.968   0.40%
   QC value within limits for Tl 190.801  Recovery = 98.58%
U 409.014†             17663.1      491.88 ug/L        1.806      491.88 ppb        1.806   0.37%
   QC value within limits for U 409.014  Recovery = 98.38%
V 292.402†             72386.8      495.34 ug/L        0.546      495.34 ppb        0.546   0.11%
   QC value within limits for V 292.402  Recovery = 99.07%
Zn 213.857†            54631.3      487.11 ug/L        0.649      487.11 ppb        0.649   0.13%
   QC value within limits for Zn 213.857  Recovery = 97.42%
SiO2†                  80683.0      5257.4 ug/L        48.87      5257.4 ppb        48.87   0.93%
   QC value within limits for SiO2  Recovery = 98.32%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 13:28:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5718.8	5718.8	101	%			13:29:55
1	Y RADIAL	6196.7	6196.7	100.6	%			13:29:55
1	Al 396.153Radial†	-12.7	7.8	5.7644	ug/L	5.7644	ppb	13:30:15
1	Ca 317.933Radial†	21.2	3.3	4.9907	ug/L	4.9907	ppb	13:30:15
1	Fe 238.204 Radial†	5.6	-0.4	-4.4720	ug/L	-4.4720	ppb	13:30:15
1	K 766.490 Radial†	2210.3	18.6	3.3609	ug/L	3.3609	ppb	13:29:55
1	Mg 279.077 IEC†	0.4	-1.4	-51.353	ug/L	-51.353	ppb	13:30:15
1	Na 589.592 Radial†	-562.5	58.9	22.155	ug/L	22.155	ppb	13:29:55
1	Sr 421.552†	9.8	6.3	0.0422	ug/L	0.0422	ppb	13:29:55
1	Sc 361.383	879460.3	879460.3	99.377	%			13:31:12
1	Y 371.029	739972.4	739972.4	99.717	%			13:31:12
1	Ag 328.068†	288.4	62.7	0.2866	ug/L	0.2866	ppb	13:31:12
1	As 188.979†	-30.0	-0.9	-0.3851	ug/L	-0.3851	ppb	13:31:32
1	B 249.677†	-324.5	197.3	4.2839	ug/L	4.2839	ppb	13:31:32
1	Ba 233.527†	1.5	13.5	0.1026	ug/L	0.1026	ppb	13:31:32
1	Be 313.107†	-5156.3	131.7	0.0490	ug/L	0.0490	ppb	13:31:12
1	Cd 226.502†	-170.5	16.3	0.1771	ug/L	0.1771	ppb	13:31:32
1	Co 228.616†	-75.4	-4.1	-0.0806	ug/L	-0.0806	ppb	13:31:32
1	Cr 267.716†	81.8	-4.7	-0.0508	ug/L	-0.0508	ppb	13:31:32
1	Cu 324.752†	6752.2	25.9	0.0750	ug/L	0.0750	ppb	13:31:12
1	Mn 257.610†	401.4	0.5	0.0010	ug/L	0.0010	ppb	13:31:32
1	Mo 202.031†	18.7	-1.2	-0.0754	ug/L	-0.0754	ppb	13:31:32
1	Ni 231.604†	80.0	10.4	0.2472	ug/L	0.2472	ppb	13:31:32
1	P 214.914†	216.3	-2.3	-1.3648	ug/L	-1.3648	ppb	13:31:32
1	Pb 220.353†	-68.2	-16.0	-1.8733	ug/L	-1.8733	ppb	13:31:32
1	S 181.975 Axial†	47.8	6.6	9.7139	ug/L	9.7139	ppb	13:31:32
1	Sb 206.836†	46.6	17.3	5.6070	ug/L	5.6070	ppb	13:31:32
1	Se 196.026†	-31.3	-8.0	-4.7890	ug/L	-4.7890	ppb	13:31:32
1	Si 251.611†	478.5	-26.6	-0.8120	ug/L	-0.8120	ppb	13:31:32
1	Sn 189.927†	4.4	0.2	0.0305	ug/L	0.0305	ppb	13:31:32
1	Ti 334.940†	-946.9	12.2	0.0190	ug/L	0.0190	ppb	13:31:12
1	Tl 190.801†	-24.9	11.8	3.3745	ug/L	3.3745	ppb	13:31:32
1	U 409.014†	-1860.5	90.0	2.5153	ug/L	2.5153	ppb	13:31:12
1	V 292.402†	-1266.2	22.3	0.1541	ug/L	0.1541	ppb	13:31:12
1	Zn 213.857†	676.5	-126.6	-1.1383	ug/L	-1.1383	ppb	13:31:32
1	SiO2†	514.7	29.1	1.9082	ug/L	1.9082	ppb	13:32:28
2	Sc Radial	5853.6	5853.6	103	%			13:30:20
2	Y RADIAL	6325.2	6325.2	102.7	%			13:30:20
2	Al 396.153Radial†	-31.4	-10.0	-7.4234	ug/L	-7.4234	ppb	13:30:40
2	Ca 317.933Radial†	18.7	0.4	0.6140	ug/L	0.6140	ppb	13:30:40
2	Fe 238.204 Radial†	6.4	0.2	1.7371	ug/L	1.7371	ppb	13:30:40
2	K 766.490 Radial†	2191.8	-49.7	-9.0386	ug/L	-9.0386	ppb	13:30:20
2	Mg 279.077 IEC†	2.9	1.0	38.845	ug/L	38.845	ppb	13:30:40
2	Na 589.592 Radial†	-513.9	118.8	44.658	ug/L	44.658	ppb	13:30:20
2	Sr 421.552†	10.3	6.5	0.0440	ug/L	0.0440	ppb	13:30:20
2	Sc 361.383	878021.6	878021.6	99.215	%			13:31:37
2	Y 371.029	739560.7	739560.7	99.662	%			13:31:37
2	Ag 328.068†	350.3	125.5	0.5806	ug/L	0.5806	ppb	13:31:37
2	As 188.979†	-26.3	2.7	1.0924	ug/L	1.0924	ppb	13:31:57
2	B 249.677†	-326.5	194.8	4.2286	ug/L	4.2286	ppb	13:31:57
2	Ba 233.527†	-7.8	4.2	0.0323	ug/L	0.0323	ppb	13:31:57
2	Be 313.107†	-5111.5	168.3	0.0624	ug/L	0.0624	ppb	13:31:37
2	Cd 226.502†	-190.0	-3.6	-0.0393	ug/L	-0.0393	ppb	13:31:57
2	Co 228.616†	-78.9	-7.7	-0.1488	ug/L	-0.1488	ppb	13:31:57
2	Cr 267.716†	86.1	-0.1	-0.0016	ug/L	-0.0016	ppb	13:31:57
2	Cu 324.752†	6778.9	63.9	0.1860	ug/L	0.1860	ppb	13:31:37
2	Mn 257.610†	411.6	11.4	0.0118	ug/L	0.0118	ppb	13:31:57
2	Mo 202.031†	25.9	6.1	0.4001	ug/L	0.4001	ppb	13:31:57
2	Ni 231.604†	80.7	11.3	0.2671	ug/L	0.2671	ppb	13:31:57

2	P 214.914†	213.7	-4.6	-2.7716	ug/L	-2.7716 ppb	13:31:57
2	Pb 220.353†	-63.9	-11.9	-1.3873	ug/L	-1.3873 ppb	13:31:57
2	S 181.975 Axial†	44.8	3.7	5.4299	ug/L	5.4299 ppb	13:31:57
2	Sb 206.836†	35.6	6.3	2.0494	ug/L	2.0494 ppb	13:31:57
2	Se 196.026†	-10.9	12.4	7.4152	ug/L	7.4152 ppb	13:31:57
2	Si 251.611†	496.0	-8.1	-0.2494	ug/L	-0.2494 ppb	13:31:57
2	Sn 189.927†	1.6	-2.6	-0.4474	ug/L	-0.4474 ppb	13:31:57
2	Ti 334.940†	-1010.3	-53.2	-0.0866	ug/L	-0.0866 ppb	13:31:37
2	Tl 190.801†	-28.8	7.8	2.2376	ug/L	2.2376 ppb	13:31:57
2	U 409.014†	-1906.4	40.7	1.1361	ug/L	1.1361 ppb	13:31:37
2	V 292.402†	-1258.2	28.3	0.1995	ug/L	0.1995 ppb	13:31:37
2	Zn 213.857†	676.1	-125.8	-1.1352	ug/L	-1.1352 ppb	13:31:57
2	SiO2†	498.9	14.0	0.9130	ug/L	0.9130 ppb	13:32:33
3	Sc Radial	5700.0	5700.0	101	%		13:30:45
3	Y RADIAL	6168.5	6168.5	100.2	%		13:30:45
3	Al 396.153Radial†	-30.5	-9.9	-7.3845	ug/L	-7.3845 ppb	13:31:05
3	Ca 317.933Radial†	19.2	1.4	2.0964	ug/L	2.0964 ppb	13:31:05
3	Fe 238.204 Radial†	6.9	0.9	8.6701	ug/L	8.6701 ppb	13:31:05
3	K 766.490 Radial†	2202.2	17.8	3.2054	ug/L	3.2054 ppb	13:30:45
3	Mg 279.077 IEC†	2.6	0.9	32.628	ug/L	32.628 ppb	13:31:05
3	Na 589.592 Radial†	-503.7	115.5	43.408	ug/L	43.408 ppb	13:30:45
3	Sr 421.552†	24.9	21.3	0.1437	ug/L	0.1437 ppb	13:30:45
3	Sc 361.383	889153.8	889153.8	100.47	%		13:32:02
3	Y 371.029	747454.4	747454.4	100.73	%		13:32:02
3	Ag 328.068†	268.9	40.0	0.1842	ug/L	0.1842 ppb	13:32:02
3	As 188.979†	-32.5	-3.2	-1.2905	ug/L	-1.2905 ppb	13:32:22
3	B 249.677†	-360.5	165.0	3.5809	ug/L	3.5809 ppb	13:32:22
3	Ba 233.527†	-12.8	-0.7	-0.0046	ug/L	-0.0046 ppb	13:32:22
3	Be 313.107†	-5194.1	150.6	0.0559	ug/L	0.0559 ppb	13:32:02
3	Cd 226.502†	-176.0	12.6	0.1361	ug/L	0.1361 ppb	13:32:22
3	Co 228.616†	-77.4	-5.3	-0.1007	ug/L	-0.1007 ppb	13:32:22
3	Cr 267.716†	74.9	-12.4	-0.1350	ug/L	-0.1350 ppb	13:32:22
3	Cu 324.752†	6980.6	179.1	0.5212	ug/L	0.5212 ppb	13:32:02
3	Mn 257.610†	409.0	3.6	0.0042	ug/L	0.0042 ppb	13:32:22
3	Mo 202.031†	34.2	14.1	0.9163	ug/L	0.9163 ppb	13:32:22
3	Ni 231.604†	74.4	4.0	0.0944	ug/L	0.0944 ppb	13:32:22
3	P 214.914†	218.2	-2.8	-1.7331	ug/L	-1.7331 ppb	13:32:22
3	Pb 220.353†	-54.7	-1.9	-0.2173	ug/L	-0.2173 ppb	13:32:22
3	S 181.975 Axial†	35.4	-6.3	-9.1480	ug/L	-9.1480 ppb	13:32:22
3	Sb 206.836†	29.9	0.2	0.0903	ug/L	0.0903 ppb	13:32:22
3	Se 196.026†	-8.3	15.2	9.0844	ug/L	9.0844 ppb	13:32:22
3	Si 251.611†	497.0	-13.4	-0.4279	ug/L	-0.4279 ppb	13:32:22
3	Sn 189.927†	8.2	3.9	0.6537	ug/L	0.6537 ppb	13:32:22
3	Ti 334.940†	-978.3	-8.7	-0.0159	ug/L	-0.0159 ppb	13:32:02
3	Tl 190.801†	-35.0	2.0	0.5709	ug/L	0.5709 ppb	13:32:22
3	U 409.014†	-1804.0	166.7	4.6555	ug/L	4.6555 ppb	13:32:02
3	V 292.402†	-1289.6	13.0	0.1093	ug/L	0.1093 ppb	13:32:02
3	Zn 213.857†	680.3	-130.2	-1.1745	ug/L	-1.1745 ppb	13:32:22
3	SiO2†	522.0	30.7	1.9679	ug/L	1.9679 ppb	13:32:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882211.9	99.688	%	0.6842				0.69%
Sc Radial	5757.5	102	%	1.5				1.46%
Y 371.029	742329.2	100.03	%	0.599				0.60%
Y RADIAL	6230.1	101.2	%	1.36				1.34%
Ag 328.068†	76.1	0.3505	ug/L	0.20574	0.3505	ppb	0.20574	58.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.1	-3.0145	ug/L	7.60279	-3.0145	ppb	7.60279	252.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.1944	ug/L	1.20281	-0.1944	ppb	1.20281	618.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	185.7	4.0311	ug/L	0.39091	4.0311	ppb	0.39091	9.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.7	0.0434	ug/L	0.05448	0.0434	ppb	0.05448	125.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	150.2	0.0557	ug/L	0.00670	0.0557	ppb	0.00670	12.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.7	2.5670	ug/L	2.22596	2.5670	ppb	2.22596	86.71%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.4      0.0913 ug/L       0.11495      0.0913 ppb        0.11495 125.85%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.7     -0.1101 ug/L       0.03504     -0.1101 ppb        0.03504  31.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -5.7     -0.0624 ug/L       0.06745     -0.0624 ppb        0.06745 108.03%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                89.6      0.2607 ug/L       0.23234      0.2607 ppb        0.23234  89.11%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.2      1.9784 ug/L       6.57437      1.9784 ppb        6.57437 332.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -4.5     -0.8241 ug/L       7.11440     -0.8241 ppb        7.11440 863.31%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      6.7068 ug/L      50.37747      6.7068 ppb       50.37747 751.14%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 5.2      0.0057 ug/L       0.00555      0.0057 ppb        0.00555  97.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.3      0.4137 ug/L       0.49594      0.4137 ppb        0.49594 119.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         97.7     36.740 ug/L       12.6467     36.740 ppb        12.6467  34.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.5      0.2029 ug/L       0.09450      0.2029 ppb        0.09450  46.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.2     -1.9565 ug/L       0.72954     -1.9565 ppb        0.72954  37.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -9.9     -1.1593 ug/L       0.85119     -1.1593 ppb        0.85119  73.42%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.4      1.9986 ug/L       9.88803      1.9986 ppb        9.88803 494.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.9      2.5823 ug/L       2.79666      2.5823 ppb        2.79666 108.30%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 6.5      3.9036 ug/L       7.57407      3.9036 ppb        7.57407 194.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -16.0     -0.4964 ug/L       0.28748     -0.4964 ppb        0.28748  57.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.5      0.0789 ug/L       0.55213      0.0789 ppb        0.55213 699.42%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.4      0.0766 ug/L       0.05808      0.0766 ppb        0.05808  75.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -16.6     -0.0278 ug/L       0.05378     -0.0278 ppb        0.05378 193.15%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 7.2      2.0610 ug/L       1.41008      2.0610 ppb        1.41008  68.42%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 99.1      2.7690 ug/L       1.77336      2.7690 ppb        1.77336  64.04%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 21.2      0.1543 ug/L       0.04511      0.1543 ppb        0.04511  29.23%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -127.5     -1.1493 ug/L       0.02186     -1.1493 ppb        0.02186   1.90%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      24.6      1.5964 ug/L       0.59259      1.5964 ppb        0.59259  37.12%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 14:37:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5628.9	5628.9	99.4	%			14:39:37
1	Y RADIAL	6023.9	6023.9	97.81	%			14:39:37
1	Al 396.153Radial†	6504.0	6564.1	4830.8	ug/L	4830.8	ppb	14:39:37
1	Ca 317.933Radial†	3267.8	3270.1	5000.6	ug/L	5000.6	ppb	14:39:57
1	Fe 238.204 Radial†	531.3	528.5	5337.2	ug/L	5337.2	ppb	14:39:57
1	K 766.490 Radial†	29511.0	27521.4	4985.7	ug/L	4985.7	ppb	14:39:37
1	Mg 279.077 IEC†	143.3	142.4	5308.9	ug/L	5308.9	ppb	14:39:57
1	Na 589.592 Radial†	28758.7	29550.7	11107	ug/L	11107	ppb	14:39:37
1	Sr 421.552†	78844.0	79323.4	535.43	ug/L	535.43	ppb	14:39:37
1	Sc 361.383	878416.8	878416.8	99.259	%			14:40:54
1	Y 371.029	726466.3	726466.3	97.897	%			14:40:54
1	Ag 328.068†	109820.5	110412.5	513.63	ug/L	513.63	ppb	14:40:59
1	As 188.979†	1168.9	1206.9	496.89	ug/L	496.89	ppb	14:41:19
1	B 249.677†	22087.3	22776.0	492.41	ug/L	492.41	ppb	14:40:59
1	Ba 233.527†	65011.9	65509.1	498.86	ug/L	498.86	ppb	14:40:59
1	Be 313.107†	1301912.2	1316948.5	490.36	ug/L	490.36	ppb	14:40:54
1	Cd 226.502†	45773.6	46303.1	502.12	ug/L	502.12	ppb	14:40:59
1	Co 228.616†	25491.5	25753.5	500.06	ug/L	500.06	ppb	14:40:59
1	Cr 267.716†	46100.1	46357.2	500.29	ug/L	500.29	ppb	14:40:59
1	Cu 324.752†	175282.7	169822.2	494.17	ug/L	494.17	ppb	14:40:59
1	Mn 257.610†	449592.0	452543.9	492.23	ug/L	492.23	ppb	14:40:54
1	Mo 202.031†	7725.8	7763.5	506.09	ug/L	506.09	ppb	14:41:19
1	Ni 231.604†	21065.4	21152.5	501.59	ug/L	501.59	ppb	14:40:59
1	P 214.914†	4359.5	4172.1	2403.7	ug/L	2403.7	ppb	14:41:19
1	Pb 220.353†	4147.2	4230.7	496.06	ug/L	496.06	ppb	14:41:19
1	S 181.975 Axial†	726.8	690.7	1009.1	ug/L	1009.1	ppb	14:41:19
1	Sb 206.836†	1563.9	1545.9	509.20	ug/L	509.20	ppb	14:41:19
1	Se 196.026†	803.7	833.1	515.42	ug/L	515.42	ppb	14:41:19
1	Si 251.611†	82492.7	82600.3	2514.3	ug/L	2514.3	ppb	14:40:59
1	Sn 189.927†	2975.4	2993.3	506.99	ug/L	506.99	ppb	14:41:19
1	Ti 334.940†	310462.8	313744.8	507.29	ug/L	507.29	ppb	14:40:59
1	Tl 190.801†	1677.6	1727.0	498.20	ug/L	498.20	ppb	14:41:19
1	U 409.014†	15864.8	17945.4	499.73	ug/L	499.73	ppb	14:40:59
1	V 292.402†	71775.3	73607.4	503.64	ug/L	503.64	ppb	14:40:59
1	Zn 213.857†	56135.7	55747.4	497.07	ug/L	497.07	ppb	14:40:59
1	SiO2†	82112.0	82236.0	5358.9	ug/L	5358.9	ppb	14:42:27
2	Sc Radial	5708.1	5708.1	101	%			14:40:02
2	Y RADIAL	6145.7	6145.7	99.79	%			14:40:02
2	Al 396.153Radial†	6552.0	6521.0	4799.2	ug/L	4799.2	ppb	14:40:02
2	Ca 317.933Radial†	3271.6	3228.3	4936.6	ug/L	4936.6	ppb	14:40:22
2	Fe 238.204 Radial†	526.5	516.4	5215.2	ug/L	5215.2	ppb	14:40:22
2	K 766.490 Radial†	29873.2	27468.7	4976.2	ug/L	4976.2	ppb	14:40:02
2	Mg 279.077 IEC†	144.1	141.2	5264.3	ug/L	5264.3	ppb	14:40:22
2	Na 589.592 Radial†	29018.9	29407.4	11053	ug/L	11053	ppb	14:40:02
2	Sr 421.552†	79987.4	79356.9	535.66	ug/L	535.66	ppb	14:40:02
2	Sc 361.383	889104.1	889104.1	100.47	%			14:41:25
2	Y 371.029	733716.0	733716.0	98.874	%			14:41:25
2	Ag 328.068†	111043.7	110300.1	513.06	ug/L	513.06	ppb	14:41:30
2	As 188.979†	1185.9	1209.6	497.98	ug/L	497.98	ppb	14:41:50
2	B 249.677†	22330.0	22750.1	491.87	ug/L	491.87	ppb	14:41:30
2	Ba 233.527†	65635.2	65342.2	497.58	ug/L	497.58	ppb	14:41:30
2	Be 313.107†	1315226.1	1314434.3	489.43	ug/L	489.43	ppb	14:41:25
2	Cd 226.502†	46196.9	46170.0	500.69	ug/L	500.69	ppb	14:41:30
2	Co 228.616†	25782.7	25734.7	499.68	ug/L	499.68	ppb	14:41:30
2	Cr 267.716†	46520.0	46216.8	498.77	ug/L	498.77	ppb	14:41:30
2	Cu 324.752†	177464.1	169870.7	494.30	ug/L	494.30	ppb	14:41:30
2	Mn 257.610†	455552.9	453032.5	492.74	ug/L	492.74	ppb	14:41:25
2	Mo 202.031†	7733.5	7677.6	500.48	ug/L	500.48	ppb	14:41:50
2	Ni 231.604†	21200.8	21032.1	498.74	ug/L	498.74	ppb	14:41:30

2	P 214.914†	4384.3	4144.0	2387.0 ug/L	2387.0 ppb	14:41:50
2	Pb 220.353†	4162.1	4195.3	491.92 ug/L	491.92 ppb	14:41:50
2	S 181.975 Axial†	728.8	683.9	999.06 ug/L	999.06 ppb	14:41:50
2	Sb 206.836†	1578.2	1541.2	507.52 ug/L	507.52 ppb	14:41:50
2	Se 196.026†	805.4	825.1	510.21 ug/L	510.21 ppb	14:41:50
2	Si 251.611†	83397.3	82501.7	2511.4 ug/L	2511.4 ppb	14:41:30
2	Sn 189.927†	2988.5	2970.3	503.09 ug/L	503.09 ppb	14:41:50
2	Ti 334.940†	313603.1	313110.8	506.26 ug/L	506.26 ppb	14:41:30
2	Tl 190.801†	1687.6	1716.6	495.21 ug/L	495.21 ppb	14:41:50
2	U 409.014†	16232.7	18119.4	504.62 ug/L	504.62 ppb	14:41:30
2	V 292.402†	72537.9	73497.3	502.85 ug/L	502.85 ppb	14:41:30
2	Zn 213.857†	56662.1	55591.5	495.70 ug/L	495.70 ppb	14:41:30
2	SiO2†	82556.1	81683.6	5322.9 ug/L	5322.9 ppb	14:42:32
3	Sc Radial	5682.9	5682.9	100 %		14:40:27
3	Y RADIAL	6138.7	6138.7	99.67 %		14:40:27
3	Al 396.153Radial†	6547.4	6545.2	4816.9 ug/L	4816.9 ppb	14:40:27
3	Ca 317.933Radial†	3278.9	3249.9	4969.7 ug/L	4969.7 ppb	14:40:47
3	Fe 238.204 Radial†	528.6	520.7	5259.3 ug/L	5259.3 ppb	14:40:47
3	K 766.490 Radial†	29815.9	27543.1	4989.7 ug/L	4989.7 ppb	14:40:27
3	Mg 279.077 IEC†	142.3	140.0	5219.3 ug/L	5219.3 ppb	14:40:47
3	Na 589.592 Radial†	28859.3	29376.0	11042 ug/L	11042 ppb	14:40:27
3	Sr 421.552†	79601.6	79324.5	535.44 ug/L	535.44 ppb	14:40:27
3	Sc 361.383	883781.0	883781.0	99.865 %		14:41:56
3	Y 371.029	729627.7	729627.7	98.323 %		14:41:56
3	Ag 328.068†	109567.0	109487.2	509.31 ug/L	509.31 ppb	14:42:01
3	As 188.979†	1171.2	1202.0	494.86 ug/L	494.86 ppb	14:42:21
3	B 249.677†	22125.0	22678.6	490.32 ug/L	490.32 ppb	14:42:01
3	Ba 233.527†	64897.9	64997.4	494.96 ug/L	494.96 ppb	14:42:01
3	Be 313.107†	1306191.3	1313272.3	488.99 ug/L	488.99 ppb	14:41:56
3	Cd 226.502†	45710.8	45960.3	498.41 ug/L	498.41 ppb	14:42:01
3	Co 228.616†	25499.7	25605.8	497.21 ug/L	497.21 ppb	14:42:01
3	Cr 267.716†	46071.4	46046.5	496.93 ug/L	496.93 ppb	14:42:01
3	Cu 324.752†	174648.2	168115.0	489.20 ug/L	489.20 ppb	14:42:01
3	Mn 257.610†	453035.1	453242.4	492.98 ug/L	492.98 ppb	14:41:56
3	Mo 202.031†	7768.7	7759.2	505.80 ug/L	505.80 ppb	14:42:21
3	Ni 231.604†	21093.4	21051.7	499.20 ug/L	499.20 ppb	14:42:01
3	P 214.914†	4371.0	4156.9	2395.6 ug/L	2395.6 ppb	14:42:21
3	Pb 220.353†	4177.3	4235.5	496.63 ug/L	496.63 ppb	14:42:21
3	S 181.975 Axial†	721.4	680.9	994.67 ug/L	994.67 ppb	14:42:21
3	Sb 206.836†	1576.4	1548.9	510.28 ug/L	510.28 ppb	14:42:21
3	Se 196.026†	810.9	835.4	516.53 ug/L	516.53 ppb	14:42:21
3	Si 251.611†	82130.5	81733.2	2487.8 ug/L	2487.8 ppb	14:42:01
3	Sn 189.927†	3002.6	3002.4	508.53 ug/L	508.53 ppb	14:42:21
3	Ti 334.940†	309455.0	310837.2	502.59 ug/L	502.59 ppb	14:42:01
3	Tl 190.801†	1660.7	1699.8	490.38 ug/L	490.38 ppb	14:42:21
3	U 409.014†	15871.7	17855.3	497.23 ug/L	497.23 ppb	14:42:01
3	V 292.402†	71519.0	72911.9	498.95 ug/L	498.95 ppb	14:42:01
3	Zn 213.857†	56009.3	55277.6	492.88 ug/L	492.88 ppb	14:42:01
3	SiO2†	81604.0	81225.2	5292.7 ug/L	5292.7 ppb	14:42:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883767.3	99.864	%	0.6038				0.60%
Sc Radial	5673.3	100	%	0.7				0.71%
Y 371.029	729936.7	98.365	%	0.4898				0.50%
Y RADIAL	6102.8	99.09	%	1.111				1.12%
Ag 328.068†	110066.6	512.00	ug/L	2.348	512.00	ppb	2.348	0.46%
QC value within limits for Ag 328.068 Recovery = 102.40%								
Al 396.153Radial†	6543.5	4815.7	ug/L	15.86	4815.7	ppb	15.86	0.33%
QC value within limits for Al 396.153Radial Recovery = 96.31%								
As 188.979†	1206.2	496.58	ug/L	1.584	496.58	ppb	1.584	0.32%
QC value within limits for As 188.979 Recovery = 99.32%								
B 249.677†	22734.9	491.53	ug/L	1.087	491.53	ppb	1.087	0.22%
QC value within limits for B 249.677 Recovery = 98.31%								
Ba 233.527†	65282.9	497.13	ug/L	1.988	497.13	ppb	1.988	0.40%
QC value within limits for Ba 233.527 Recovery = 99.43%								
Be 313.107†	1314885.1	489.59	ug/L	0.702	489.59	ppb	0.702	0.14%
QC value within limits for Be 313.107 Recovery = 97.92%								
Ca 317.933Radial†	3249.5	4969.0	ug/L	32.01	4969.0	ppb	32.01	0.64%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.38%
Cd 226.502†            46144.4      500.41 ug/L         1.872      500.41 ppb          1.872   0.37%
   QC value within limits for Cd 226.502  Recovery = 100.08%
Co 228.616†            25698.0      498.98 ug/L         1.552      498.98 ppb          1.552   0.31%
   QC value within limits for Co 228.616  Recovery = 99.80%
Cr 267.716†            46206.9      498.66 ug/L         1.681      498.66 ppb          1.681   0.34%
   QC value within limits for Cr 267.716  Recovery = 99.73%
Cu 324.752†           169269.3      492.55 ug/L         2.909      492.55 ppb          2.909   0.59%
   QC value within limits for Cu 324.752  Recovery = 98.51%
Fe 238.204 Radial†       521.9      5270.6 ug/L         61.77      5270.6 ppb          61.77   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.41%
K 766.490 Radial†      27511.1      4983.9 ug/L          6.96      4983.9 ppb           6.96   0.14%
   QC value within limits for K 766.490 Radial  Recovery = 99.68%
Mg 279.077 IEC†          141.2      5264.2 ug/L         44.82      5264.2 ppb          44.82   0.85%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.28%
Mn 257.610†           452939.6      492.65 ug/L         0.385      492.65 ppb          0.385   0.08%
   QC value within limits for Mn 257.610  Recovery = 98.53%
Mo 202.031†             7733.4      504.12 ug/L         3.156      504.12 ppb          3.156   0.63%
   QC value within limits for Mo 202.031  Recovery = 100.82%
Na 589.592 Radial†     29444.7       11067 ug/L          35.0       11067 ppb           35.0   0.32%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 110.67%
Ni 231.604†            21078.8      499.84 ug/L         1.533      499.84 ppb          1.533   0.31%
   QC value within limits for Ni 231.604  Recovery = 99.97%
P 214.914†              4157.7      2395.4 ug/L         8.33      2395.4 ppb           8.33   0.35%
   QC value within limits for P 214.914  Recovery = 95.82%
Pb 220.353†             4220.5      494.87 ug/L         2.573      494.87 ppb          2.573   0.52%
   QC value within limits for Pb 220.353  Recovery = 98.97%
S 181.975 Axial†         685.2      1000.9 ug/L         7.38      1000.9 ppb           7.38   0.74%
   QC value within limits for S 181.975 Axial  Recovery = 100.09%
Sb 206.836†             1545.4      509.00 ug/L         1.387      509.00 ppb          1.387   0.27%
   QC value within limits for Sb 206.836  Recovery = 101.80%
Se 196.026†              831.2      514.06 ug/L         3.375      514.06 ppb          3.375   0.66%
   QC value within limits for Se 196.026  Recovery = 102.81%
Si 251.611†            82278.4      2504.5 ug/L         14.55      2504.5 ppb          14.55   0.58%
   QC value within limits for Si 251.611  Recovery = 100.18%
Sn 189.927†             2988.7      506.20 ug/L         2.802      506.20 ppb          2.802   0.55%
   QC value within limits for Sn 189.927  Recovery = 101.24%
Sr 421.552†            79334.9      535.51 ug/L         0.129      535.51 ppb          0.129   0.02%
   QC value within limits for Sr 421.552  Recovery = 107.10%
Ti 334.940†           312564.3      505.38 ug/L         2.471      505.38 ppb          2.471   0.49%
   QC value within limits for Ti 334.940  Recovery = 101.08%
Tl 190.801†             1714.5      494.60 ug/L         3.943      494.60 ppb          3.943   0.80%
   QC value within limits for Tl 190.801  Recovery = 98.92%
U 409.014†             17973.4      500.53 ug/L         3.754      500.53 ppb          3.754   0.75%
   QC value within limits for U 409.014  Recovery = 100.11%
V 292.402†             73338.9      501.81 ug/L         2.509      501.81 ppb          2.509   0.50%
   QC value within limits for V 292.402  Recovery = 100.36%
Zn 213.857†            55538.8      495.22 ug/L         2.139      495.22 ppb          2.139   0.43%
   QC value within limits for Zn 213.857  Recovery = 99.04%
SiO2†                  81714.9      5324.8 ug/L         33.13      5324.8 ppb          33.13   0.62%
   QC value within limits for SiO2  Recovery = 99.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 14:44:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5617.2	5617.2	99.2	%			14:46:39
1	Y RADIAL	6081.7	6081.7	98.75	%			14:46:39
1	Al 396.153Radial†	-20.2	-0.1	-0.0557	ug/L	-0.0557	ppb	14:46:59
1	Ca 317.933Radial†	26.9	9.4	14.400	ug/L	14.400	ppb	14:46:59
1	Fe 238.204 Radial†	10.2	4.2	42.751	ug/L	42.751	ppb	14:46:59
1	K 766.490 Radial†	2303.9	152.6	27.677	ug/L	27.677	ppb	14:46:39
1	Mg 279.077 IEC†	3.2	1.4	53.567	ug/L	53.567	ppb	14:46:59
1	Na 589.592 Radial†	-560.1	51.2	19.252	ug/L	19.252	ppb	14:46:39
1	Sr 421.552†	1.6	-1.8	-0.0124	ug/L	-0.0124	ppb	14:46:39
1	Sc 361.383	878169.0	878169.0	99.231	%			14:47:56
1	Y 371.029	738234.7	738234.7	99.483	%			14:47:56
1	Ag 328.068†	243.2	17.5	0.0968	ug/L	0.0968	ppb	14:47:56
1	As 188.979†	-32.6	-3.6	-1.4823	ug/L	-1.4823	ppb	14:48:16
1	B 249.677†	-332.6	188.7	4.0893	ug/L	4.0893	ppb	14:48:16
1	Ba 233.527†	-22.4	-10.6	-0.0791	ug/L	-0.0791	ppb	14:48:16
1	Be 313.107†	-5204.6	75.3	0.0278	ug/L	0.0278	ppb	14:47:56
1	Cd 226.502†	-179.1	7.4	0.0757	ug/L	0.0757	ppb	14:48:16
1	Co 228.616†	-67.7	3.5	0.0685	ug/L	0.0685	ppb	14:48:16
1	Cr 267.716†	72.0	-14.4	-0.1539	ug/L	-0.1539	ppb	14:48:16
1	Cu 324.752†	6843.6	128.0	0.3745	ug/L	0.3745	ppb	14:47:56
1	Mn 257.610†	442.1	42.1	0.0490	ug/L	0.0490	ppb	14:48:16
1	Mo 202.031†	22.0	2.2	0.1458	ug/L	0.1458	ppb	14:48:16
1	Ni 231.604†	75.4	5.8	0.1387	ug/L	0.1387	ppb	14:48:16
1	P 214.914†	214.8	-3.5	-2.1464	ug/L	-2.1464	ppb	14:48:16
1	Pb 220.353†	-44.2	8.0	0.9269	ug/L	0.9269	ppb	14:48:16
1	S 181.975 Axial†	38.6	-2.6	-3.7638	ug/L	-3.7638	ppb	14:48:16
1	Sb 206.836†	28.1	-1.3	-0.3866	ug/L	-0.3866	ppb	14:48:16
1	Se 196.026†	-14.7	8.6	5.2523	ug/L	5.2523	ppb	14:48:16
1	Si 251.611†	557.6	53.9	1.6293	ug/L	1.6293	ppb	14:48:16
1	Sn 189.927†	16.0	11.8	2.0009	ug/L	2.0009	ppb	14:48:16
1	Ti 334.940†	-1006.8	-49.6	-0.0776	ug/L	-0.0776	ppb	14:47:56
1	Tl 190.801†	-28.8	7.8	2.2400	ug/L	2.2400	ppb	14:48:16
1	U 409.014†	-2093.6	-147.6	-4.1288	ug/L	-4.1288	ppb	14:47:56
1	V 292.402†	-1321.4	-35.2	-0.2485	ug/L	-0.2485	ppb	14:47:56
1	Zn 213.857†	688.2	-113.8	-1.0307	ug/L	-1.0307	ppb	14:48:16
1	SiO2†	562.3	77.8	5.0560	ug/L	5.0560	ppb	14:49:12
2	Sc Radial	5724.4	5724.4	101	%			14:47:04
2	Y RADIAL	6188.2	6188.2	100.5	%			14:47:04
2	Al 396.153Radial†	-19.9	0.7	0.5156	ug/L	0.5156	ppb	14:47:24
2	Ca 317.933Radial†	26.3	8.3	12.743	ug/L	12.743	ppb	14:47:24
2	Fe 238.204 Radial†	7.1	1.0	9.8598	ug/L	9.8598	ppb	14:47:24
2	K 766.490 Radial†	2222.1	28.1	5.0836	ug/L	5.0836	ppb	14:47:04
2	Mg 279.077 IEC†	1.7	-0.0	-1.5553	ug/L	-1.5553	ppb	14:47:24
2	Na 589.592 Radial†	-521.6	99.9	37.556	ug/L	37.556	ppb	14:47:04
2	Sr 421.552†	-27.1	-30.3	-0.2045	ug/L	-0.2045	ppb	14:47:04
2	Sc 361.383	881734.1	881734.1	99.634	%			14:48:21
2	Y 371.029	740753.2	740753.2	99.822	%			14:48:21
2	Ag 328.068†	234.9	8.1	0.0406	ug/L	0.0406	ppb	14:48:21
2	As 188.979†	-28.4	0.7	0.2922	ug/L	0.2922	ppb	14:48:41
2	B 249.677†	-318.7	204.0	4.4272	ug/L	4.4272	ppb	14:48:41
2	Ba 233.527†	-16.8	-4.9	-0.0377	ug/L	-0.0377	ppb	14:48:41
2	Be 313.107†	-5247.5	53.4	0.0199	ug/L	0.0199	ppb	14:48:21
2	Cd 226.502†	-177.3	9.9	0.1061	ug/L	0.1061	ppb	14:48:41
2	Co 228.616†	-68.3	3.2	0.0609	ug/L	0.0609	ppb	14:48:41
2	Cr 267.716†	76.4	-10.3	-0.1111	ug/L	-0.1111	ppb	14:48:41
2	Cu 324.752†	6812.4	68.8	0.2006	ug/L	0.2006	ppb	14:48:21
2	Mn 257.610†	439.6	37.8	0.0421	ug/L	0.0421	ppb	14:48:41
2	Mo 202.031†	15.7	-4.2	-0.2722	ug/L	-0.2722	ppb	14:48:41
2	Ni 231.604†	56.7	-13.2	-0.3135	ug/L	-0.3135	ppb	14:48:41

2	P 214.914†	222.4	3.2	1.8949	ug/L	1.8949	ppb	14:48:41
2	Pb 220.353†	-64.8	-12.5	-1.4636	ug/L	-1.4636	ppb	14:48:41
2	S 181.975 Axial†	42.5	1.2	1.7427	ug/L	1.7427	ppb	14:48:41
2	Sb 206.836†	33.6	4.2	1.3546	ug/L	1.3546	ppb	14:48:41
2	Se 196.026†	-24.6	-1.3	-0.7163	ug/L	-0.7163	ppb	14:48:41
2	Si 251.611†	528.2	22.1	0.6792	ug/L	0.6792	ppb	14:48:41
2	Sn 189.927†	6.8	2.5	0.4324	ug/L	0.4324	ppb	14:48:41
2	Ti 334.940†	-940.4	21.1	0.0359	ug/L	0.0359	ppb	14:48:21
2	Tl 190.801†	-25.8	10.9	3.1314	ug/L	3.1314	ppb	14:48:41
2	U 409.014†	-2037.8	-83.1	-2.3216	ug/L	-2.3216	ppb	14:48:21
2	V 292.402†	-1367.4	-75.9	-0.5226	ug/L	-0.5226	ppb	14:48:21
2	Zn 213.857†	709.2	-95.5	-0.8585	ug/L	-0.8585	ppb	14:48:41
2	SiO2†	511.6	24.7	1.6180	ug/L	1.6180	ppb	14:49:17
3	Sc Radial	5778.2	5778.2	102	%			14:47:29
3	Y RADIAL	6280.8	6280.8	102.0	%			14:47:29
3	Al 396.153Radial†	-18.9	1.8	1.3351	ug/L	1.3351	ppb	14:47:49
3	Ca 317.933Radial†	25.5	7.3	11.171	ug/L	11.171	ppb	14:47:49
3	Fe 238.204 Radial†	5.2	-0.9	-9.4074	ug/L	-9.4074	ppb	14:47:49
3	K 766.490 Radial†	2225.7	11.2	2.0239	ug/L	2.0239	ppb	14:47:29
3	Mg 279.077 IEC†	2.1	0.3	11.108	ug/L	11.108	ppb	14:47:49
3	Na 589.592 Radial†	-593.8	34.0	12.769	ug/L	12.769	ppb	14:47:29
3	Sr 421.552†	31.5	27.4	0.1850	ug/L	0.1850	ppb	14:47:29
3	Sc 361.383	874375.2	874375.2	98.803	%			14:48:47
3	Y 371.029	733626.8	733626.8	98.862	%			14:48:47
3	Ag 328.068†	291.3	67.2	0.3070	ug/L	0.3070	ppb	14:48:47
3	As 188.979†	-18.7	10.3	4.1998	ug/L	4.1998	ppb	14:49:07
3	B 249.677†	-345.5	174.1	3.7810	ug/L	3.7810	ppb	14:49:07
3	Ba 233.527†	-24.3	-12.6	-0.0960	ug/L	-0.0960	ppb	14:49:07
3	Be 313.107†	-5207.7	49.4	0.0183	ug/L	0.0183	ppb	14:48:47
3	Cd 226.502†	-173.9	11.8	0.1294	ug/L	0.1294	ppb	14:49:07
3	Co 228.616†	-69.3	1.6	0.0311	ug/L	0.0311	ppb	14:49:07
3	Cr 267.716†	77.7	-8.3	-0.0898	ug/L	-0.0898	ppb	14:49:07
3	Cu 324.752†	6884.1	198.8	0.5778	ug/L	0.5778	ppb	14:48:47
3	Mn 257.610†	466.4	68.7	0.0735	ug/L	0.0735	ppb	14:49:07
3	Mo 202.031†	23.4	3.7	0.2390	ug/L	0.2390	ppb	14:49:07
3	Ni 231.604†	71.6	2.3	0.0555	ug/L	0.0555	ppb	14:49:07
3	P 214.914†	222.4	5.1	2.9632	ug/L	2.9632	ppb	14:49:07
3	Pb 220.353†	-70.9	-19.2	-2.2463	ug/L	-2.2463	ppb	14:49:07
3	S 181.975 Axial†	41.6	0.6	0.8907	ug/L	0.8907	ppb	14:49:07
3	Sb 206.836†	20.8	-8.6	-2.7433	ug/L	-2.7433	ppb	14:49:07
3	Se 196.026†	-25.9	-2.8	-1.6938	ug/L	-1.6938	ppb	14:49:07
3	Si 251.611†	529.7	28.1	0.8501	ug/L	0.8501	ppb	14:49:07
3	Sn 189.927†	12.4	8.3	1.3974	ug/L	1.3974	ppb	14:49:07
3	Ti 334.940†	-968.2	-14.9	-0.0240	ug/L	-0.0240	ppb	14:48:47
3	Tl 190.801†	-37.0	-0.6	-0.1850	ug/L	-0.1850	ppb	14:49:07
3	U 409.014†	-1899.2	40.0	1.1180	ug/L	1.1180	ppb	14:48:47
3	V 292.402†	-1273.5	7.5	0.0581	ug/L	0.0581	ppb	14:48:47
3	Zn 213.857†	693.1	-105.8	-0.9522	ug/L	-0.9522	ppb	14:49:07
3	SiO2†	558.6	76.5	4.9909	ug/L	4.9909	ppb	14:49:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878092.8	99.223	%	0.4158				0.42%
Sc Radial	5706.6	101	%	1.4				1.44%
Y 371.029	737538.2	99.389	%	0.4870				0.49%
Y RADIAL	6183.6	100.4	%	1.62				1.61%
Ag 328.068†	31.0	0.1481	ug/L	0.14042	0.1481	ppb	0.14042	94.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.8	0.5983	ug/L	0.69908	0.5983	ppb	0.69908	116.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.5	1.0032	ug/L	2.90704	1.0032	ppb	2.90704	289.77%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	188.9	4.0992	ug/L	0.32322	4.0992	ppb	0.32322	7.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-9.3	-0.0709	ug/L	0.02996	-0.0709	ppb	0.02996	42.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	59.4	0.0220	ug/L	0.00510	0.0220	ppb	0.00510	23.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.4	12.771	ug/L	1.6144	12.771	ppb	1.6144	12.64%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.7      0.1037 ug/L       0.02694      0.1037 ppb        0.02694  25.97%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.8      0.0535 ug/L       0.01976      0.0535 ppb        0.01976  36.95%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -11.0     -0.1182 ug/L       0.03265     -0.1182 ppb        0.03265  27.61%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               131.9      0.3843 ug/L       0.18881      0.3843 ppb        0.18881  49.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.4      14.401 ug/L       26.3738      14.401 ppb        26.3738 183.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          64.0      11.595 ug/L       14.0115      11.595 ppb        14.0115 120.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.040 ug/L       28.8718      21.040 ppb        28.8718 137.22%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                49.5      0.0549 ug/L       0.01648      0.0549 ppb        0.01648  30.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0375 ug/L       0.27224      0.0375 ppb        0.27224 725.38%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         61.7      23.193 ug/L       12.8548      23.193 ppb        12.8548  55.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.7     -0.0398 ug/L       0.24071     -0.0398 ppb        0.24071 605.18%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.6      0.9039 ug/L       2.69508      0.9039 ppb        2.69508 298.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.9     -0.9277 ug/L       1.65309     -0.9277 ppb        1.65309 178.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.3     -0.3768 ug/L       2.96397     -0.3768 ppb        2.96397 786.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -1.9     -0.5918 ug/L       2.05663     -0.5918 ppb        2.05663 347.53%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.5      0.9474 ug/L       3.76006      0.9474 ppb        3.76006 396.88%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                34.7      1.0529 ug/L       0.50650      1.0529 ppb        0.50650  48.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.5      1.2769 ug/L       0.79118      1.2769 ppb        0.79118  61.96%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -1.6     -0.0106 ug/L       0.19477     -0.0106 ppb        0.19477 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -14.5     -0.0219 ug/L       0.05676     -0.0219 ppb        0.05676 259.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.0      1.7288 ug/L       1.71627      1.7288 ppb        1.71627  99.27%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -63.6     -1.7774 ug/L       2.66538     -1.7774 ppb        2.66538 149.96%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -34.5     -0.2377 ug/L       0.29052     -0.2377 ppb        0.29052 122.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -105.0     -0.9471 ug/L       0.08622     -0.9471 ppb        0.08622   9.10%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      59.7      3.8883 ug/L       1.96643      3.8883 ppb        1.96643  50.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 15:48:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5688.3	5688.3	100	%			15:50:08
1	Y RADIAL	6094.7	6094.7	98.96	%			15:50:08
1	Al 396.153Radial†	6614.2	6605.5	4861.4	ug/L	4861.4	ppb	15:50:08
1	Ca 317.933Radial†	3298.8	3266.6	4995.2	ug/L	4995.2	ppb	15:50:28
1	Fe 238.204 Radial†	527.7	519.3	5245.1	ug/L	5245.1	ppb	15:50:28
1	K 766.490 Radial†	29948.4	27646.8	5008.7	ug/L	5008.7	ppb	15:50:08
1	Mg 279.077 IEC†	140.8	138.4	5158.7	ug/L	5158.7	ppb	15:50:28
1	Na 589.592 Radial†	27456.3	27951.8	10506	ug/L	10506	ppb	15:50:08
1	Sr 421.552†	77753.9	77409.4	522.51	ug/L	522.51	ppb	15:50:08
1	Sc 361.383	880780.7	880780.7	99.526	%			15:51:25
1	Y 371.029	726716.8	726716.8	97.931	%			15:51:25
1	Ag 328.068†	109293.3	109585.8	509.77	ug/L	509.77	ppb	15:51:30
1	As 188.979†	1173.9	1208.7	497.59	ug/L	497.59	ppb	15:51:51
1	B 249.677†	21923.0	22551.2	487.55	ug/L	487.55	ppb	15:51:30
1	Ba 233.527†	65124.0	65446.0	498.36	ug/L	498.36	ppb	15:51:30
1	Be 313.107†	1310120.0	1321675.3	492.11	ug/L	492.11	ppb	15:51:25
1	Cd 226.502†	45768.8	46174.5	500.74	ug/L	500.74	ppb	15:51:30
1	Co 228.616†	25547.9	25741.2	499.84	ug/L	499.84	ppb	15:51:30
1	Cr 267.716†	45880.6	46012.0	496.56	ug/L	496.56	ppb	15:51:30
1	Cu 324.752†	174566.9	168629.0	490.69	ug/L	490.69	ppb	15:51:30
1	Mn 257.610†	452982.9	454735.2	494.60	ug/L	494.60	ppb	15:51:25
1	Mo 202.031†	7765.2	7782.2	507.30	ug/L	507.30	ppb	15:51:51
1	Ni 231.604†	21040.0	21070.0	499.63	ug/L	499.63	ppb	15:51:30
1	P 214.914†	4404.5	4205.5	2424.3	ug/L	2424.3	ppb	15:51:51
1	Pb 220.353†	4174.5	4246.9	497.98	ug/L	497.98	ppb	15:51:51
1	S 181.975 Axial†	742.5	704.6	1029.3	ug/L	1029.3	ppb	15:51:51
1	Sb 206.836†	1581.7	1559.6	513.82	ug/L	513.82	ppb	15:51:51
1	Se 196.026†	817.7	845.0	522.23	ug/L	522.23	ppb	15:51:51
1	Si 251.611†	82282.5	82166.0	2501.0	ug/L	2501.0	ppb	15:51:30
1	Sn 189.927†	3010.1	3020.2	511.54	ug/L	511.54	ppb	15:51:51
1	Ti 334.940†	309173.9	311610.4	503.85	ug/L	503.85	ppb	15:51:30
1	Tl 190.801†	1695.4	1740.3	502.01	ug/L	502.01	ppb	15:51:51
1	U 409.014†	15586.5	17622.9	490.74	ug/L	490.74	ppb	15:51:30
1	V 292.402†	71409.7	73046.0	499.87	ug/L	499.87	ppb	15:51:30
1	Zn 213.857†	55966.5	55425.6	494.21	ug/L	494.21	ppb	15:51:30
1	SiO2†	82704.5	82609.3	5383.2	ug/L	5383.2	ppb	15:52:58
2	Sc Radial	5608.9	5608.9	99.0	%			15:50:33
2	Y RADIAL	5976.5	5976.5	97.04	%			15:50:33
2	Al 396.153Radial†	6510.2	6593.7	4852.9	ug/L	4852.9	ppb	15:50:33
2	Ca 317.933Radial†	3302.7	3317.1	5072.4	ug/L	5072.4	ppb	15:50:53
2	Fe 238.204 Radial†	524.4	523.5	5287.0	ug/L	5287.0	ppb	15:50:53
2	K 766.490 Radial†	29599.8	27716.8	5021.4	ug/L	5021.4	ppb	15:50:33
2	Mg 279.077 IEC†	142.0	141.7	5280.8	ug/L	5280.8	ppb	15:50:53
2	Na 589.592 Radial†	26882.7	27759.6	10434	ug/L	10434	ppb	15:50:33
2	Sr 421.552†	76338.0	77075.5	520.26	ug/L	520.26	ppb	15:50:33
2	Sc 361.383	894640.7	894640.7	101.09	%			15:51:56
2	Y 371.029	736864.2	736864.2	99.298	%			15:51:56
2	Ag 328.068†	109482.9	108072.2	502.76	ug/L	502.76	ppb	15:52:01
2	As 188.979†	1181.9	1198.4	493.34	ug/L	493.34	ppb	15:52:22
2	B 249.677†	22083.5	22368.7	483.59	ug/L	483.59	ppb	15:52:01
2	Ba 233.527†	65489.4	64793.7	493.40	ug/L	493.40	ppb	15:52:01
2	Be 313.107†	1329997.5	1320944.6	491.83	ug/L	491.83	ppb	15:51:56
2	Cd 226.502†	46153.7	45842.7	497.13	ug/L	497.13	ppb	15:52:01
2	Co 228.616†	25771.4	25564.6	496.40	ug/L	496.40	ppb	15:52:01
2	Cr 267.716†	46132.7	45547.2	491.55	ug/L	491.55	ppb	15:52:01
2	Cu 324.752†	174967.9	166308.3	483.94	ug/L	483.94	ppb	15:52:01
2	Mn 257.610†	461002.3	455616.9	495.56	ug/L	495.56	ppb	15:51:56
2	Mo 202.031†	7792.9	7688.7	501.21	ug/L	501.21	ppb	15:52:22
2	Ni 231.604†	21104.6	20806.4	493.38	ug/L	493.38	ppb	15:52:01

2	P 214.914†	4434.4	4166.5	2402.1 ug/L	2402.1 ppb	15:52:22
2	Pb 220.353†	4185.6	4192.9	491.65 ug/L	491.65 ppb	15:52:22
2	S 181.975 Axial†	742.9	693.4	1013.0 ug/L	1013.0 ppb	15:52:22
2	Sb 206.836†	1588.0	1541.2	507.73 ug/L	507.73 ppb	15:52:22
2	Se 196.026†	825.4	839.9	519.32 ug/L	519.32 ppb	15:52:22
2	Si 251.611†	82690.8	81289.1	2474.3 ug/L	2474.3 ppb	15:52:01
2	Sn 189.927†	3018.0	2981.1	504.93 ug/L	504.93 ppb	15:52:22
2	Ti 334.940†	310619.8	308228.0	498.38 ug/L	498.38 ppb	15:52:01
2	Tl 190.801†	1690.5	1709.1	493.05 ug/L	493.05 ppb	15:52:22
2	U 409.014†	15755.9	17547.8	488.65 ug/L	488.65 ppb	15:52:01
2	V 292.402†	71705.2	72226.7	494.25 ug/L	494.25 ppb	15:52:01
2	Zn 213.857†	56309.8	54894.0	489.46 ug/L	489.46 ppb	15:52:01
2	SiO2†	81916.7	80542.6	5248.1 ug/L	5248.1 ppb	15:53:03
3	Sc Radial	5600.3	5600.3	98.9 %		15:50:58
3	Y RADIAL	5967.8	5967.8	96.90 %		15:50:58
3	Al 396.153Radial†	6466.7	6559.8	4827.9 ug/L	4827.9 ppb	15:50:58
3	Ca 317.933Radial†	3314.3	3333.9	5098.1 ug/L	5098.1 ppb	15:51:18
3	Fe 238.204 Radial†	526.1	525.9	5311.7 ug/L	5311.7 ppb	15:51:18
3	K 766.490 Radial†	29457.4	27618.5	5003.6 ug/L	5003.6 ppb	15:50:58
3	Mg 279.077 IEC†	140.7	140.6	5239.7 ug/L	5239.7 ppb	15:51:18
3	Na 589.592 Radial†	26857.1	27775.2	10440 ug/L	10440 ppb	15:50:58
3	Sr 421.552†	76298.9	77153.8	520.79 ug/L	520.79 ppb	15:50:58
3	Sc 361.383	889983.2	889983.2	100.57 %		15:52:27
3	Y 371.029	732793.2	732793.2	98.750 %		15:52:27
3	Ag 328.068†	110767.4	109916.2	511.32 ug/L	511.32 ppb	15:52:32
3	As 188.979†	1176.9	1199.5	493.87 ug/L	493.87 ppb	15:52:52
3	B 249.677†	22442.8	22840.3	493.81 ug/L	493.81 ppb	15:52:32
3	Ba 233.527†	66021.6	65661.9	500.01 ug/L	500.01 ppb	15:52:32
3	Be 313.107†	1319580.9	1317471.6	490.56 ug/L	490.56 ppb	15:52:27
3	Cd 226.502†	46361.7	46288.5	501.97 ug/L	501.97 ppb	15:52:32
3	Co 228.616†	25908.4	25834.3	501.62 ug/L	501.62 ppb	15:52:32
3	Cr 267.716†	46403.6	46055.4	497.03 ug/L	497.03 ppb	15:52:32
3	Cu 324.752†	177557.0	169788.7	494.07 ug/L	494.07 ppb	15:52:32
3	Mn 257.610†	458591.2	455605.8	495.55 ug/L	495.55 ppb	15:52:27
3	Mo 202.031†	7739.7	7676.1	500.39 ug/L	500.39 ppb	15:52:52
3	Ni 231.604†	21260.4	21070.6	499.65 ug/L	499.65 ppb	15:52:32
3	P 214.914†	4377.6	4133.0	2380.5 ug/L	2380.5 ppb	15:52:52
3	Pb 220.353†	4171.8	4200.9	492.57 ug/L	492.57 ppb	15:52:52
3	S 181.975 Axial†	735.1	689.5	1007.3 ug/L	1007.3 ppb	15:52:52
3	Sb 206.836†	1587.9	1549.4	510.22 ug/L	510.22 ppb	15:52:52
3	Se 196.026†	814.3	833.2	515.35 ug/L	515.35 ppb	15:52:52
3	Si 251.611†	83437.6	82459.8	2510.1 ug/L	2510.1 ppb	15:52:32
3	Sn 189.927†	2995.6	2974.5	503.82 ug/L	503.82 ppb	15:52:52
3	Ti 334.940†	314122.7	313319.2	506.61 ug/L	506.61 ppb	15:52:32
3	Tl 190.801†	1670.9	1698.4	490.00 ug/L	490.00 ppb	15:52:52
3	U 409.014†	15999.2	17871.3	497.67 ug/L	497.67 ppb	15:52:32
3	V 292.402†	72318.8	73208.1	500.86 ug/L	500.86 ppb	15:52:32
3	Zn 213.857†	56785.7	55658.7	496.29 ug/L	496.29 ppb	15:52:32
3	SiO2†	83246.5	82288.9	5362.6 ug/L	5362.6 ppb	15:53:08

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888468.2	100.40	%	0.797				0.79%
Sc Radial	5632.5	99.5	%	0.86				0.86%
Y 371.029	732124.7	98.660	%	0.6882				0.70%
Y RADIAL	6013.0	97.63	%	1.151				1.18%
Ag 328.068†	109191.4	507.95	ug/L	4.557	507.95	ppb	4.557	0.90%
QC value within limits for Ag 328.068 Recovery = 101.59%								
Al 396.153Radial†	6586.3	4847.4	ug/L	17.43	4847.4	ppb	17.43	0.36%
QC value within limits for Al 396.153Radial Recovery = 96.95%								
As 188.979†	1202.2	494.93	ug/L	2.319	494.93	ppb	2.319	0.47%
QC value within limits for As 188.979 Recovery = 98.99%								
B 249.677†	22586.7	488.32	ug/L	5.153	488.32	ppb	5.153	1.06%
QC value within limits for B 249.677 Recovery = 97.66%								
Ba 233.527†	65300.5	497.26	ug/L	3.441	497.26	ppb	3.441	0.69%
QC value within limits for Ba 233.527 Recovery = 99.45%								
Be 313.107†	1320030.5	491.50	ug/L	0.829	491.50	ppb	0.829	0.17%
QC value within limits for Be 313.107 Recovery = 98.30%								
Ca 317.933Radial†	3305.9	5055.3	ug/L	53.56	5055.3	ppb	53.56	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.11%
Cd 226.502†            46101.9      499.94 ug/L         2.514      499.94 ppb          2.514   0.50%
   QC value within limits for Cd 226.502  Recovery = 99.99%
Co 228.616†            25713.4      499.29 ug/L         2.650      499.29 ppb          2.650   0.53%
   QC value within limits for Co 228.616  Recovery = 99.86%
Cr 267.716†            45871.5      495.05 ug/L         3.040      495.05 ppb          3.040   0.61%
   QC value within limits for Cr 267.716  Recovery = 99.01%
Cu 324.752†           168242.0      489.57 ug/L         5.154      489.57 ppb          5.154   1.05%
   QC value within limits for Cu 324.752  Recovery = 97.91%
Fe 238.204 Radial†       522.9      5281.3 ug/L        33.68      5281.3 ppb         33.68   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.63%
K 766.490 Radial†      27660.7      5011.2 ug/L         9.19      5011.2 ppb          9.19   0.18%
   QC value within limits for K 766.490 Radial  Recovery = 100.22%
Mg 279.077 IEC†          140.2      5226.4 ug/L        62.09      5226.4 ppb         62.09   1.19%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.53%
Mn 257.610†           455319.3      495.24 ug/L         0.552      495.24 ppb          0.552   0.11%
   QC value within limits for Mn 257.610  Recovery = 99.05%
Mo 202.031†             7715.6      502.97 ug/L         3.772      502.97 ppb          3.772   0.75%
   QC value within limits for Mo 202.031  Recovery = 100.59%
Na 589.592 Radial†     27828.9       10460 ug/L         40.1       10460 ppb           40.1   0.38%
   QC value within limits for Na 589.592 Radial  Recovery = 104.60%
Ni 231.604†            20982.3      497.55 ug/L         3.614      497.55 ppb          3.614   0.73%
   QC value within limits for Ni 231.604  Recovery = 99.51%
P 214.914†              4168.4      2402.3 ug/L        21.91      2402.3 ppb         21.91   0.91%
   QC value within limits for P 214.914  Recovery = 96.09%
Pb 220.353†             4213.6      494.07 ug/L         3.418      494.07 ppb          3.418   0.69%
   QC value within limits for Pb 220.353  Recovery = 98.81%
S 181.975 Axial†         695.8      1016.5 ug/L        11.41      1016.5 ppb         11.41   1.12%
   QC value within limits for S 181.975 Axial  Recovery = 101.65%
Sb 206.836†             1550.1      510.59 ug/L         3.062      510.59 ppb          3.062   0.60%
   QC value within limits for Sb 206.836  Recovery = 102.12%
Se 196.026†              839.4      518.97 ug/L         3.454      518.97 ppb          3.454   0.67%
   QC value within limits for Se 196.026  Recovery = 103.79%
Si 251.611†            81971.6      2495.2 ug/L        18.62      2495.2 ppb         18.62   0.75%
   QC value within limits for Si 251.611  Recovery = 99.81%
Sn 189.927†             2991.9      506.76 ug/L         4.173      506.76 ppb          4.173   0.82%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            77212.9      521.19 ug/L         1.179      521.19 ppb          1.179   0.23%
   QC value within limits for Sr 421.552  Recovery = 104.24%
Ti 334.940†           311052.5      502.95 ug/L         4.188      502.95 ppb          4.188   0.83%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             1715.9      495.02 ug/L         6.241      495.02 ppb          6.241   1.26%
   QC value within limits for Tl 190.801  Recovery = 99.00%
U 409.014†             17680.6      492.36 ug/L         4.723      492.36 ppb          4.723   0.96%
   QC value within limits for U 409.014  Recovery = 98.47%
V 292.402†             72826.9      498.33 ug/L         3.566      498.33 ppb          3.566   0.72%
   QC value within limits for V 292.402  Recovery = 99.67%
Zn 213.857†            55326.1      493.32 ug/L         3.499      493.32 ppb          3.499   0.71%
   QC value within limits for Zn 213.857  Recovery = 98.66%
SiO2†                  81813.6      5331.3 ug/L        72.76      5331.3 ppb         72.76   1.36%
   QC value within limits for SiO2  Recovery = 99.70%
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 15:55:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5736.3	5736.3	101	%			15:57:11
1	Y RADIAL	6222.8	6222.8	101.0	%			15:57:11
1	Al 396.153Radial†	-14.0	6.6	4.8199	ug/L	4.8199	ppb	15:57:11
1	Ca 317.933Radial†	25.7	7.7	11.815	ug/L	11.815	ppb	15:57:31
1	Fe 238.204 Radial†	7.2	1.1	11.050	ug/L	11.050	ppb	15:57:31
1	K 766.490 Radial†	2436.4	235.1	42.663	ug/L	42.663	ppb	15:57:11
1	Mg 279.077 IEC†	0.9	-0.9	-33.099	ug/L	-33.099	ppb	15:57:31
1	Na 589.592 Radial†	-548.0	75.0	28.178	ug/L	28.178	ppb	15:57:11
1	Sr 421.552†	-3.8	-7.2	-0.0485	ug/L	-0.0485	ppb	15:57:11
1	Sc 361.383	880318.4	880318.4	99.474	%			15:58:28
1	Y 371.029	739070.7	739070.7	99.596	%			15:58:28
1	Ag 328.068†	256.1	29.8	0.1428	ug/L	0.1428	ppb	15:58:28
1	As 188.979†	-29.1	-0.0	-0.0228	ug/L	-0.0228	ppb	15:58:48
1	B 249.677†	-325.0	197.1	4.2774	ug/L	4.2774	ppb	15:58:48
1	Ba 233.527†	-11.2	0.7	0.0066	ug/L	0.0066	ppb	15:58:48
1	Be 313.107†	-5164.7	128.3	0.0472	ug/L	0.0472	ppb	15:58:28
1	Cd 226.502†	-186.0	0.9	0.0081	ug/L	0.0081	ppb	15:58:48
1	Co 228.616†	-72.5	-1.1	-0.0194	ug/L	-0.0194	ppb	15:58:48
1	Cr 267.716†	89.2	2.7	0.0301	ug/L	0.0301	ppb	15:58:48
1	Cu 324.752†	6691.9	-41.4	-0.1198	ug/L	-0.1198	ppb	15:58:28
1	Mn 257.610†	470.1	69.2	0.0769	ug/L	0.0769	ppb	15:58:48
1	Mo 202.031†	29.3	9.5	0.6179	ug/L	0.6179	ppb	15:58:48
1	Ni 231.604†	62.7	-7.1	-0.1686	ug/L	-0.1686	ppb	15:58:48
1	P 214.914†	220.1	1.3	0.7535	ug/L	0.7535	ppb	15:58:48
1	Pb 220.353†	-62.0	-9.8	-1.1429	ug/L	-1.1429	ppb	15:58:48
1	S 181.975 Axial†	36.6	-4.7	-6.8634	ug/L	-6.8634	ppb	15:58:48
1	Sb 206.836†	38.7	9.3	3.0095	ug/L	3.0095	ppb	15:58:48
1	Se 196.026†	-25.3	-2.0	-1.1577	ug/L	-1.1577	ppb	15:58:48
1	Si 251.611†	511.4	6.1	0.1658	ug/L	0.1658	ppb	15:58:48
1	Sn 189.927†	-3.3	-7.6	-1.2842	ug/L	-1.2842	ppb	15:58:48
1	Ti 334.940†	-1114.9	-155.8	-0.2511	ug/L	-0.2511	ppb	15:58:28
1	Tl 190.801†	-33.8	2.9	0.8171	ug/L	0.8171	ppb	15:58:48
1	U 409.014†	-1969.4	-17.6	-0.4931	ug/L	-0.4931	ppb	15:58:28
1	V 292.402†	-1250.1	39.8	0.2744	ug/L	0.2744	ppb	15:58:28
1	Zn 213.857†	716.4	-87.1	-0.7821	ug/L	-0.7821	ppb	15:58:48
1	SiO2†	552.5	66.6	4.3135	ug/L	4.3135	ppb	15:59:44
2	Sc Radial	5681.5	5681.5	100	%			15:57:36
2	Y RADIAL	6150.9	6150.9	99.87	%			15:57:36
2	Al 396.153Radial†	-6.2	14.2	10.488	ug/L	10.488	ppb	15:57:36
2	Ca 317.933Radial†	27.2	9.5	14.462	ug/L	14.462	ppb	15:57:56
2	Fe 238.204 Radial†	8.2	2.1	21.343	ug/L	21.343	ppb	15:57:56
2	K 766.490 Radial†	2481.5	303.3	55.037	ug/L	55.037	ppb	15:57:36
2	Mg 279.077 IEC†	0.7	-1.1	-39.959	ug/L	-39.959	ppb	15:57:56
2	Na 589.592 Radial†	-576.1	41.7	15.681	ug/L	15.681	ppb	15:57:36
2	Sr 421.552†	2.9	-0.5	-0.0036	ug/L	-0.0036	ppb	15:57:36
2	Sc 361.383	884257.6	884257.6	99.919	%			15:58:53
2	Y 371.029	742534.6	742534.6	100.06	%			15:58:53
2	Ag 328.068†	357.0	129.7	0.6048	ug/L	0.6048	ppb	15:58:53
2	As 188.979†	-29.9	-0.8	-0.3074	ug/L	-0.3074	ppb	15:59:13
2	B 249.677†	-359.9	163.6	3.5491	ug/L	3.5491	ppb	15:59:13
2	Ba 233.527†	-5.5	6.5	0.0510	ug/L	0.0510	ppb	15:59:13
2	Be 313.107†	-5200.5	115.5	0.0429	ug/L	0.0429	ppb	15:58:53
2	Cd 226.502†	-164.5	23.2	0.2493	ug/L	0.2493	ppb	15:59:13
2	Co 228.616†	-69.7	1.9	0.0375	ug/L	0.0375	ppb	15:59:13
2	Cr 267.716†	92.3	5.4	0.0577	ug/L	0.0577	ppb	15:59:13
2	Cu 324.752†	6805.2	42.1	0.1234	ug/L	0.1234	ppb	15:58:53
2	Mn 257.610†	490.3	87.3	0.0977	ug/L	0.0977	ppb	15:59:13
2	Mo 202.031†	20.1	0.2	0.0119	ug/L	0.0119	ppb	15:59:13
2	Ni 231.604†	80.3	10.2	0.2432	ug/L	0.2432	ppb	15:59:13

2	P 214.914†	217.3	-2.5	-1.5332 ug/L	-1.5332 ppb	15:59:13
2	Pb 220.353†	-68.2	-15.7	-1.8378 ug/L	-1.8378 ppb	15:59:13
2	S 181.975 Axial†	50.1	8.7	12.672 ug/L	12.672 ppb	15:59:13
2	Sb 206.836†	33.2	3.7	1.1829 ug/L	1.1829 ppb	15:59:13
2	Se 196.026†	-25.5	-2.1	-1.1894 ug/L	-1.1894 ppb	15:59:13
2	Si 251.611†	510.8	3.1	0.0789 ug/L	0.0789 ppb	15:59:13
2	Sn 189.927†	2.4	-1.9	-0.3220 ug/L	-0.3220 ppb	15:59:13
2	Ti 334.940†	-970.6	-6.4	-0.0109 ug/L	-0.0109 ppb	15:58:53
2	Tl 190.801†	-32.3	4.6	1.3047 ug/L	1.3047 ppb	15:59:13
2	U 409.014†	-1851.1	109.6	3.0599 ug/L	3.0599 ppb	15:58:53
2	V 292.402†	-1249.1	46.4	0.3150 ug/L	0.3150 ppb	15:58:53
2	Zn 213.857†	707.3	-99.4	-0.8966 ug/L	-0.8966 ppb	15:59:13
2	SiO2†	514.6	26.2	1.6770 ug/L	1.6770 ppb	15:59:49
3	Sc Radial	5794.8	5794.8	102 %		15:58:01
3	Y RADIAL	6252.1	6252.1	101.5 %		15:58:01
3	Al 396.153Radial†	-23.8	-2.9	-2.1533 ug/L	-2.1533 ppb	15:58:01
3	Ca 317.933Radial†	26.8	8.5	12.934 ug/L	12.934 ppb	15:58:21
3	Fe 238.204 Radial†	7.2	1.0	10.317 ug/L	10.317 ppb	15:58:21
3	K 766.490 Radial†	2375.8	151.6	27.511 ug/L	27.511 ppb	15:58:01
3	Mg 279.077 IEC†	2.0	0.2	8.5764 ug/L	8.5764 ppb	15:58:21
3	Na 589.592 Radial†	-578.2	50.8	19.111 ug/L	19.111 ppb	15:58:01
3	Sr 421.552†	-33.8	-36.5	-0.2463 ug/L	-0.2463 ppb	15:58:01
3	Sc 361.383	884817.6	884817.6	99.983 %		15:59:19
3	Y 371.029	743069.9	743069.9	100.13 %		15:59:19
3	Ag 328.068†	405.2	177.7	0.8231 ug/L	0.8231 ppb	15:59:19
3	As 188.979†	-25.3	3.9	1.5730 ug/L	1.5730 ppb	15:59:39
3	B 249.677†	-333.3	190.5	4.1335 ug/L	4.1335 ppb	15:59:39
3	Ba 233.527†	-14.0	-2.0	-0.0150 ug/L	-0.0150 ppb	15:59:39
3	Be 313.107†	-5330.9	-11.6	-0.0045 ug/L	-0.0045 ppb	15:59:19
3	Cd 226.502†	-180.2	7.6	0.0815 ug/L	0.0815 ppb	15:59:39
3	Co 228.616†	-67.0	4.8	0.0928 ug/L	0.0928 ppb	15:59:39
3	Cr 267.716†	79.4	-7.6	-0.0818 ug/L	-0.0818 ppb	15:59:39
3	Cu 324.752†	6773.5	6.0	0.0180 ug/L	0.0180 ppb	15:59:19
3	Mn 257.610†	488.2	84.9	0.0931 ug/L	0.0931 ppb	15:59:39
3	Mo 202.031†	22.8	2.9	0.1869 ug/L	0.1869 ppb	15:59:39
3	Ni 231.604†	71.7	1.6	0.0380 ug/L	0.0380 ppb	15:59:39
3	P 214.914†	222.6	2.7	1.5472 ug/L	1.5472 ppb	15:59:39
3	Pb 220.353†	-61.8	-9.2	-1.0815 ug/L	-1.0815 ppb	15:59:39
3	S 181.975 Axial†	44.1	2.6	3.8120 ug/L	3.8120 ppb	15:59:39
3	Sb 206.836†	39.1	9.5	3.0785 ug/L	3.0785 ppb	15:59:39
3	Se 196.026†	-25.1	-1.6	-0.9459 ug/L	-0.9459 ppb	15:59:39
3	Si 251.611†	531.9	23.9	0.7236 ug/L	0.7236 ppb	15:59:39
3	Sn 189.927†	-2.4	-6.6	-1.1193 ug/L	-1.1193 ppb	15:59:39
3	Ti 334.940†	-1023.7	-58.9	-0.0950 ug/L	-0.0950 ppb	15:59:19
3	Tl 190.801†	-32.9	4.0	1.1425 ug/L	1.1425 ppb	15:59:39
3	U 409.014†	-1926.3	35.6	0.9928 ug/L	0.9928 ppb	15:59:19
3	V 292.402†	-1314.4	-18.2	-0.1192 ug/L	-0.1192 ppb	15:59:19
3	Zn 213.857†	697.9	-109.2	-0.9840 ug/L	-0.9840 ppb	15:59:39
3	SiO2†	527.0	38.3	2.4870 ug/L	2.4870 ppb	15:59:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883131.2	99.792	%	0.2771				0.28%
Sc Radial	5737.5	101	%	1.0				0.99%
Y 371.029	741558.4	99.931	%	0.2926				0.29%
Y RADIAL	6208.6	100.8	%	0.85				0.84%
Ag 328.068†	112.4	0.5236	ug/L	0.34737	0.5236	ppb	0.34737	66.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.9	4.3850	ug/L	6.33199	4.3850	ppb	6.33199	144.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.0	0.4142	ug/L	1.01353	0.4142	ppb	1.01353	244.67%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	183.8	3.9867	ug/L	0.38571	3.9867	ppb	0.38571	9.67%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.8	0.0142	ug/L	0.03367	0.0142	ppb	0.03367	236.96%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.4	0.0285	ug/L	0.02869	0.0285	ppb	0.02869	100.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.5	13.071	ug/L	1.3288	13.071	ppb	1.3288	10.17%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                10.5      0.1130 ug/L       0.12361      0.1130 ppb        0.12361 109.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.9      0.0369 ug/L       0.05612      0.0369 ppb        0.05612 151.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 0.2      0.0020 ug/L       0.07389      0.0020 ppb        0.07389 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                 2.2      0.0072 ug/L       0.12196      0.0072 ppb        0.12196 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.4     14.237 ug/L        6.1647     14.237 ppb         6.1647  43.30%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         230.0     41.737 ug/L       13.7863     41.737 ppb        13.7863  33.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.6    -21.494 ug/L       26.2666    -21.494 ppb        26.2666 122.20%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                80.5      0.0893 ug/L       0.01093      0.0893 ppb        0.01093  12.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.2      0.2722 ug/L       0.31187      0.2722 ppb        0.31187 114.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         55.8     20.990 ug/L        6.4566     20.990 ppb         6.4566  30.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.6      0.0375 ug/L       0.20589      0.0375 ppb        0.20589 548.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  0.5      0.2558 ug/L       1.59937      0.2558 ppb        1.59937 625.19%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.6     -1.3541 ug/L       0.42003     -1.3541 ppb        0.42003  31.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.2      3.2069 ug/L       9.78181      3.2069 ppb        9.78181 305.02%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.5      2.4237 ug/L       1.07509      2.4237 ppb        1.07509  44.36%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.9     -1.0977 ug/L       0.13242     -1.0977 ppb        0.13242  12.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                11.1      0.3227 ug/L       0.34984      0.3227 ppb        0.34984 108.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -5.4     -0.9085 ug/L       0.51460     -0.9085 ppb        0.51460  56.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.7     -0.0995 ug/L       0.12913     -0.0995 ppb        0.12913 129.83%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -73.7     -0.1190 ug/L       0.12188     -0.1190 ppb        0.12188 102.42%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.8      1.0881 ug/L       0.24831      1.0881 ppb        0.24831  22.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 42.5      1.1865 ug/L       1.78441      1.1865 ppb        1.78441 150.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 22.7      0.1567 ug/L       0.23986      0.1567 ppb        0.23986 153.04%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -98.6     -0.8876 ug/L       0.10125     -0.8876 ppb        0.10125  11.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      43.7      2.8258 ug/L       1.35056      2.8258 ppb        1.35056  47.79%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 16:58:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5686.1	5686.1	100	%			17:00:20
1	Y RADIAL	6160.9	6160.9	100.0	%			17:00:20
1	Al 396.153Radial†	6590.7	6584.6	4845.9	ug/L	4845.9	ppb	17:00:20
1	Ca 317.933Radial†	3242.6	3212.0	4911.6	ug/L	4911.6	ppb	17:00:41
1	Fe 238.204 Radial†	503.3	495.2	5002.4	ug/L	5002.4	ppb	17:00:41
1	K 766.490 Radial†	29887.5	27597.6	5000.0	ug/L	5000.0	ppb	17:00:20
1	Mg 279.077 IEC†	140.9	138.6	5167.3	ug/L	5167.3	ppb	17:00:41
1	Na 589.592 Radial†	26350.0	26860.6	10096	ug/L	10096	ppb	17:00:20
1	Sr 421.552†	76480.4	76171.0	514.15	ug/L	514.15	ppb	17:00:20
1	Sc 361.383	879477.5	879477.5	99.379	%			17:01:38
1	Y 371.029	723573.2	723573.2	97.507	%			17:01:38
1	Ag 328.068†	110108.5	110568.9	514.24	ug/L	514.24	ppb	17:01:43
1	As 188.979†	1186.8	1223.4	503.61	ug/L	503.61	ppb	17:02:03
1	B 249.677†	22297.9	22961.1	496.47	ug/L	496.47	ppb	17:01:43
1	Ba 233.527†	65554.2	65975.8	502.39	ug/L	502.39	ppb	17:01:43
1	Be 313.107†	1307085.5	1320572.2	491.72	ug/L	491.72	ppb	17:01:38
1	Cd 226.502†	46001.1	46476.3	504.04	ug/L	504.04	ppb	17:01:43
1	Co 228.616†	25741.3	25973.9	504.35	ug/L	504.35	ppb	17:01:43
1	Cr 267.716†	46049.8	46250.5	499.13	ug/L	499.13	ppb	17:01:43
1	Cu 324.752†	176620.9	170955.8	497.44	ug/L	497.44	ppb	17:01:43
1	Mn 257.610†	454784.6	457222.7	497.28	ug/L	497.28	ppb	17:01:38
1	Mo 202.031†	7771.9	7800.4	508.47	ug/L	508.47	ppb	17:02:03
1	Ni 231.604†	21128.8	21190.7	502.50	ug/L	502.50	ppb	17:01:43
1	P 214.914†	4400.6	4208.1	2424.9	ug/L	2424.9	ppb	17:02:03
1	Pb 220.353†	4189.6	4268.3	500.50	ug/L	500.50	ppb	17:02:03
1	S 181.975 Axial†	734.2	697.4	1018.7	ug/L	1018.7	ppb	17:02:03
1	Sb 206.836†	1590.6	1570.9	517.45	ug/L	517.45	ppb	17:02:03
1	Se 196.026†	805.8	834.2	515.07	ug/L	515.07	ppb	17:02:03
1	Si 251.611†	82951.1	82961.3	2525.3	ug/L	2525.3	ppb	17:01:43
1	Sn 189.927†	3002.3	3016.8	510.95	ug/L	510.95	ppb	17:02:03
1	Ti 334.940†	312523.4	315441.1	510.03	ug/L	510.03	ppb	17:01:43
1	Tl 190.801†	1702.6	1750.1	504.85	ug/L	504.85	ppb	17:02:03
1	U 409.014†	15952.3	18014.2	501.70	ug/L	501.70	ppb	17:01:43
1	V 292.402†	71829.2	73574.4	503.50	ug/L	503.50	ppb	17:01:43
1	Zn 213.857†	56410.4	55955.6	498.97	ug/L	498.97	ppb	17:01:43
1	SiO2†	81324.8	81344.1	5300.3	ug/L	5300.3	ppb	17:03:11
2	Sc Radial	5752.6	5752.6	102	%			17:00:46
2	Y RADIAL	6208.9	6208.9	100.8	%			17:00:46
2	Al 396.153Radial†	6636.9	6554.3	4823.9	ug/L	4823.9	ppb	17:00:46
2	Ca 317.933Radial†	3293.3	3224.5	4930.8	ug/L	4930.8	ppb	17:01:06
2	Fe 238.204 Radial†	512.1	498.2	5032.1	ug/L	5032.1	ppb	17:01:06
2	K 766.490 Radial†	30089.8	27452.8	4973.7	ug/L	4973.7	ppb	17:00:46
2	Mg 279.077 IEC†	142.1	138.2	5150.9	ug/L	5150.9	ppb	17:01:06
2	Na 589.592 Radial†	26398.5	26604.9	10000	ug/L	10000	ppb	17:00:46
2	Sr 421.552†	76855.7	75660.1	510.70	ug/L	510.70	ppb	17:00:46
2	Sc 361.383	892186.3	892186.3	100.82	%			17:02:09
2	Y 371.029	735477.5	735477.5	99.111	%			17:02:09
2	Ag 328.068†	111001.1	109876.0	511.04	ug/L	511.04	ppb	17:02:14
2	As 188.979†	1168.2	1188.0	489.14	ug/L	489.14	ppb	17:02:34
2	B 249.677†	22507.7	22849.6	494.05	ug/L	494.05	ppb	17:02:14
2	Ba 233.527†	66088.9	65566.5	499.27	ug/L	499.27	ppb	17:02:14
2	Be 313.107†	1324579.0	1319189.2	491.20	ug/L	491.20	ppb	17:02:09
2	Cd 226.502†	46343.0	46156.1	500.56	ug/L	500.56	ppb	17:02:14
2	Co 228.616†	25919.6	25781.8	500.60	ug/L	500.60	ppb	17:02:14
2	Cr 267.716†	46445.8	45983.3	496.25	ug/L	496.25	ppb	17:02:14
2	Cu 324.752†	178283.7	170073.5	494.88	ug/L	494.88	ppb	17:02:14
2	Mn 257.610†	459569.3	455450.0	495.36	ug/L	495.36	ppb	17:02:09
2	Mo 202.031†	7743.0	7660.4	499.35	ug/L	499.35	ppb	17:02:34
2	Ni 231.604†	21295.1	21052.8	499.23	ug/L	499.23	ppb	17:02:14

2	P 214.914†	4365.8	4110.6	2367.2 ug/L	2367.2 ppb		17:02:34
2	Pb 220.353†	4158.3	4177.2	489.81 ug/L	489.81 ppb		17:02:34
2	S 181.975 Axial†	737.5	690.0	1008.0 ug/L	1008.0 ppb		17:02:34
2	Sb 206.836†	1574.8	1532.4	504.62 ug/L	504.62 ppb		17:02:34
2	Se 196.026†	811.2	828.1	511.46 ug/L	511.46 ppb		17:02:34
2	Si 251.611†	83521.2	82337.9	2506.5 ug/L	2506.5 ppb		17:02:14
2	Sn 189.927†	2976.2	2947.8	499.29 ug/L	499.29 ppb		17:02:34
2	Ti 334.940†	315167.2	313583.9	507.03 ug/L	507.03 ppb		17:02:14
2	Tl 190.801†	1695.0	1718.2	495.69 ug/L	495.69 ppb		17:02:34
2	U 409.014†	16218.3	18049.3	502.68 ug/L	502.68 ppb		17:02:14
2	V 292.402†	72470.8	73181.3	500.72 ug/L	500.72 ppb		17:02:14
2	Zn 213.857†	56814.1	55547.4	495.32 ug/L	495.32 ppb		17:02:14
2	SiO2†	81500.3	80352.5	5235.8 ug/L	5235.8 ppb		17:03:16
3	Sc Radial	5656.8	5656.8	99.9 %			17:01:11
3	Y RADIAL	6109.0	6109.0	99.19 %			17:01:11
3	Al 396.153Radial†	6644.3	6672.3	4911.0 ug/L	4911.0 ppb		17:01:11
3	Ca 317.933Radial†	3290.2	3276.3	5010.0 ug/L	5010.0 ppb		17:01:31
3	Fe 238.204 Radial†	511.2	505.7	5108.1 ug/L	5108.1 ppb		17:01:31
3	K 766.490 Radial†	30074.4	27938.7	5061.8 ug/L	5061.8 ppb		17:01:11
3	Mg 279.077 IEC†	141.2	139.6	5203.8 ug/L	5203.8 ppb		17:01:31
3	Na 589.592 Radial†	26546.3	27192.8	10221 ug/L	10221 ppb		17:01:11
3	Sr 421.552†	77093.1	77178.3	520.95 ug/L	520.95 ppb		17:01:11
3	Sc 361.383	884866.2	884866.2	99.988 %			17:02:40
3	Y 371.029	730101.7	730101.7	98.387 %			17:02:40
3	Ag 328.068†	108430.6	108216.0	503.37 ug/L	503.37 ppb		17:02:45
3	As 188.979†	1176.9	1206.2	496.52 ug/L	496.52 ppb		17:03:05
3	B 249.677†	21898.6	22425.1	484.85 ug/L	484.85 ppb		17:02:45
3	Ba 233.527†	64698.2	64718.0	492.82 ug/L	492.82 ppb		17:02:45
3	Be 313.107†	1316354.5	1321832.8	492.16 ug/L	492.16 ppb		17:02:40
3	Cd 226.502†	45459.3	45652.6	495.08 ug/L	495.08 ppb		17:02:45
3	Co 228.616†	25306.9	25381.7	492.86 ug/L	492.86 ppb		17:02:45
3	Cr 267.716†	45508.6	45427.1	490.25 ug/L	490.25 ppb		17:02:45
3	Cu 324.752†	173265.5	166517.7	484.54 ug/L	484.54 ppb		17:02:45
3	Mn 257.610†	456140.2	455791.5	495.73 ug/L	495.73 ppb		17:02:40
3	Mo 202.031†	7718.4	7699.3	501.89 ug/L	501.89 ppb		17:03:05
3	Ni 231.604†	20934.7	20867.1	494.82 ug/L	494.82 ppb		17:02:45
3	P 214.914†	4370.4	4151.0	2392.8 ug/L	2392.8 ppb		17:03:05
3	Pb 220.353†	4154.6	4207.7	493.40 ug/L	493.40 ppb		17:03:05
3	S 181.975 Axial†	736.0	694.7	1014.8 ug/L	1014.8 ppb		17:03:05
3	Sb 206.836†	1568.7	1539.3	507.10 ug/L	507.10 ppb		17:03:05
3	Se 196.026†	810.2	833.7	515.07 ug/L	515.07 ppb		17:03:05
3	Si 251.611†	81546.3	81048.0	2466.9 ug/L	2466.9 ppb		17:02:45
3	Sn 189.927†	2968.3	2964.4	502.10 ug/L	502.10 ppb		17:03:05
3	Ti 334.940†	307199.3	308201.2	498.34 ug/L	498.34 ppb		17:02:45
3	Tl 190.801†	1707.8	1744.9	503.34 ug/L	503.34 ppb		17:03:05
3	U 409.014†	15489.3	17453.3	486.03 ug/L	486.03 ppb		17:02:45
3	V 292.402†	70737.9	72042.9	493.04 ug/L	493.04 ppb		17:02:45
3	Zn 213.857†	55699.1	54898.5	489.51 ug/L	489.51 ppb		17:02:45
3	SiO2†	82282.7	81803.8	5330.7 ug/L	5330.7 ppb		17:03:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885510.0	100.06	%	0.721				0.72%
Sc Radial	5698.5	101	%	0.9				0.86%
Y 371.029	729717.4	98.335	%	0.8034				0.82%
Y RADIAL	6159.6	100.0	%	0.81				0.81%
Ag 328.068†	109553.7	509.55	ug/L	5.587	509.55	ppb	5.587	1.10%
QC value within limits for Ag 328.068 Recovery = 101.91%								
Al 396.153Radial†	6603.7	4860.3	ug/L	45.28	4860.3	ppb	45.28	0.93%
QC value within limits for Al 396.153Radial Recovery = 97.21%								
As 188.979†	1205.9	496.42	ug/L	7.239	496.42	ppb	7.239	1.46%
QC value within limits for As 188.979 Recovery = 99.28%								
B 249.677†	22745.3	491.79	ug/L	6.131	491.79	ppb	6.131	1.25%
QC value within limits for B 249.677 Recovery = 98.36%								
Ba 233.527†	65420.1	498.16	ug/L	4.883	498.16	ppb	4.883	0.98%
QC value within limits for Ba 233.527 Recovery = 99.63%								
Be 313.107†	1320531.4	491.69	ug/L	0.483	491.69	ppb	0.483	0.10%
QC value within limits for Be 313.107 Recovery = 98.34%								
Ca 317.933Radial†	3237.6	4950.8	ug/L	52.15	4950.8	ppb	52.15	1.05%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.02%
Cd 226.502†            46095.0      499.89 ug/L         4.513      499.89 ppb          4.513   0.90%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†            25712.5      499.27 ug/L         5.859      499.27 ppb          5.859   1.17%
   QC value within limits for Co 228.616  Recovery = 99.85%
Cr 267.716†            45887.0      495.21 ug/L         4.532      495.21 ppb          4.532   0.92%
   QC value within limits for Cr 267.716  Recovery = 99.04%
Cu 324.752†           169182.3      492.29 ug/L         6.830      492.29 ppb          6.830   1.39%
   QC value within limits for Cu 324.752  Recovery = 98.46%
Fe 238.204 Radial†       499.7      5047.5 ug/L        54.54      5047.5 ppb         54.54   1.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.95%
K 766.490 Radial†      27663.0      5011.8 ug/L        45.23      5011.8 ppb         45.23   0.90%
   QC value within limits for K 766.490 Radial  Recovery = 100.24%
Mg 279.077 IEC†          138.8      5174.0 ug/L        27.06      5174.0 ppb         27.06   0.52%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.48%
Mn 257.610†           456154.7      496.12 ug/L         1.019      496.12 ppb          1.019   0.21%
   QC value within limits for Mn 257.610  Recovery = 99.22%
Mo 202.031†             7720.0      503.24 ug/L         4.707      503.24 ppb          4.707   0.94%
   QC value within limits for Mo 202.031  Recovery = 100.65%
Na 589.592 Radial†     26886.1       10106 ug/L       110.8         10106 ppb        110.8   1.10%
   QC value within limits for Na 589.592 Radial  Recovery = 101.06%
Ni 231.604†            21036.9      498.85 ug/L         3.850      498.85 ppb          3.850   0.77%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              4156.6      2395.0 ug/L        28.93      2395.0 ppb         28.93   1.21%
   QC value within limits for P 214.914  Recovery = 95.80%
Pb 220.353†             4217.7      494.57 ug/L         5.437      494.57 ppb          5.437   1.10%
   QC value within limits for Pb 220.353  Recovery = 98.91%
S 181.975 Axial†         694.0      1013.8 ug/L         5.42      1013.8 ppb          5.42   0.53%
   QC value within limits for S 181.975 Axial  Recovery = 101.38%
Sb 206.836†             1547.5      509.73 ug/L         6.805      509.73 ppb          6.805   1.34%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†              832.0      513.87 ug/L         2.083      513.87 ppb          2.083   0.41%
   QC value within limits for Se 196.026  Recovery = 102.77%
Si 251.611†            82115.8      2499.6 ug/L        29.80      2499.6 ppb         29.80   1.19%
   QC value within limits for Si 251.611  Recovery = 99.98%
Sn 189.927†             2976.3      504.11 ug/L         6.085      504.11 ppb          6.085   1.21%
   QC value within limits for Sn 189.927  Recovery = 100.82%
Sr 421.552†            76336.5      515.27 ug/L         5.214      515.27 ppb          5.214   1.01%
   QC value within limits for Sr 421.552  Recovery = 103.05%
Ti 334.940†           312408.7      505.13 ug/L         6.073      505.13 ppb          6.073   1.20%
   QC value within limits for Ti 334.940  Recovery = 101.03%
Tl 190.801†             1737.7      501.29 ug/L         4.909      501.29 ppb          4.909   0.98%
   QC value within limits for Tl 190.801  Recovery = 100.26%
U 409.014†             17838.9      496.81 ug/L         9.341      496.81 ppb          9.341   1.88%
   QC value within limits for U 409.014  Recovery = 99.36%
V 292.402†             72932.9      499.09 ug/L         5.419      499.09 ppb          5.419   1.09%
   QC value within limits for V 292.402  Recovery = 99.82%
Zn 213.857†            55467.2      494.60 ug/L         4.770      494.60 ppb          4.770   0.96%
   QC value within limits for Zn 213.857  Recovery = 98.92%
SiO2†                  81166.8      5289.0 ug/L        48.44      5289.0 ppb         48.44   0.92%
   QC value within limits for SiO2  Recovery = 98.91%
All analyte(s) passed QC.
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Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 17:05:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5750.8	5750.8	102	%			17:07:23
1	Y RADIAL	6248.7	6248.7	101.5	%			17:07:23
1	Al 396.153Radial†	-25.1	-4.4	-3.2178	ug/L	-3.2178	ppb	17:07:43
1	Ca 317.933Radial†	28.2	10.1	15.396	ug/L	15.396	ppb	17:07:43
1	Fe 238.204 Radial†	6.2	0.1	0.9011	ug/L	0.9011	ppb	17:07:43
1	K 766.490 Radial†	2202.4	-1.4	-0.2700	ug/L	-0.2700	ppb	17:07:23
1	Mg 279.077 IEC†	3.2	1.4	53.239	ug/L	53.239	ppb	17:07:43
1	Na 589.592 Radial†	-535.0	89.1	33.506	ug/L	33.506	ppb	17:07:23
1	Sr 421.552†	-6.3	-9.6	-0.0652	ug/L	-0.0652	ppb	17:07:23
1	Sc 361.383	880364.0	880364.0	99.479	%			17:08:40
1	Y 371.029	738207.6	738207.6	99.479	%			17:08:40
1	Ag 328.068†	284.6	58.5	0.2679	ug/L	0.2679	ppb	17:08:40
1	As 188.979†	-21.3	7.8	3.1741	ug/L	3.1741	ppb	17:09:00
1	B 249.677†	-262.8	259.7	5.6373	ug/L	5.6373	ppb	17:09:00
1	Ba 233.527†	-31.9	-20.1	-0.1531	ug/L	-0.1531	ppb	17:09:00
1	Be 313.107†	-5299.7	-7.2	-0.0030	ug/L	-0.0030	ppb	17:08:40
1	Cd 226.502†	-171.1	15.9	0.1722	ug/L	0.1722	ppb	17:09:00
1	Co 228.616†	-72.9	-1.6	-0.0308	ug/L	-0.0308	ppb	17:09:00
1	Cr 267.716†	97.5	11.0	0.1178	ug/L	0.1178	ppb	17:09:00
1	Cu 324.752†	6818.7	85.8	0.2495	ug/L	0.2495	ppb	17:08:40
1	Mn 257.610†	492.5	91.7	0.0987	ug/L	0.0987	ppb	17:09:00
1	Mo 202.031†	18.0	-1.9	-0.1253	ug/L	-0.1253	ppb	17:09:00
1	Ni 231.604†	71.9	2.2	0.0516	ug/L	0.0516	ppb	17:09:00
1	P 214.914†	229.4	10.6	6.2730	ug/L	6.2730	ppb	17:09:00
1	Pb 220.353†	-64.0	-11.8	-1.3777	ug/L	-1.3777	ppb	17:09:00
1	S 181.975 Axial†	40.8	-0.5	-0.7308	ug/L	-0.7308	ppb	17:09:00
1	Sb 206.836†	32.4	3.0	0.9770	ug/L	0.9770	ppb	17:09:00
1	Se 196.026†	-27.1	-3.8	-2.2433	ug/L	-2.2433	ppb	17:09:00
1	Si 251.611†	519.5	14.3	0.4341	ug/L	0.4341	ppb	17:09:00
1	Sn 189.927†	12.0	7.8	1.3198	ug/L	1.3198	ppb	17:09:00
1	Ti 334.940†	-1054.9	-95.4	-0.1544	ug/L	-0.1544	ppb	17:08:40
1	Tl 190.801†	-38.3	-1.6	-0.4635	ug/L	-0.4635	ppb	17:09:00
1	U 409.014†	-1881.3	71.1	1.9853	ug/L	1.9853	ppb	17:08:40
1	V 292.402†	-1322.3	-32.7	-0.2178	ug/L	-0.2178	ppb	17:08:40
1	Zn 213.857†	714.7	-88.8	-0.8018	ug/L	-0.8018	ppb	17:09:00
1	SiO2†	556.0	70.1	4.5884	ug/L	4.5884	ppb	17:09:56
2	Sc Radial	5599.3	5599.3	98.9	%			17:07:48
2	Y RADIAL	6113.4	6113.4	99.26	%			17:07:48
2	Al 396.153Radial†	-15.3	4.9	3.6033	ug/L	3.6033	ppb	17:08:08
2	Ca 317.933Radial†	28.6	11.2	17.157	ug/L	17.157	ppb	17:08:08
2	Fe 238.204 Radial†	6.0	0.1	0.5520	ug/L	0.5520	ppb	17:08:08
2	K 766.490 Radial†	2209.3	64.3	11.657	ug/L	11.657	ppb	17:07:48
2	Mg 279.077 IEC†	-1.5	-3.3	-121.90	ug/L	-121.90	ppb	17:08:08
2	Na 589.592 Radial†	-535.6	74.2	27.906	ug/L	27.906	ppb	17:07:48
2	Sr 421.552†	20.9	17.7	0.1196	ug/L	0.1196	ppb	17:07:48
2	Sc 361.383	896229.3	896229.3	101.27	%			17:09:05
2	Y 371.029	752284.0	752284.0	101.38	%			17:09:05
2	Ag 328.068†	259.8	29.0	0.1358	ug/L	0.1358	ppb	17:09:05
2	As 188.979†	-34.2	-4.6	-1.8751	ug/L	-1.8751	ppb	17:09:25
2	B 249.677†	-268.5	258.7	5.6164	ug/L	5.6164	ppb	17:09:25
2	Ba 233.527†	-20.4	-8.1	-0.0613	ug/L	-0.0613	ppb	17:09:25
2	Be 313.107†	-5241.8	144.3	0.0537	ug/L	0.0537	ppb	17:09:05
2	Cd 226.502†	-188.9	1.3	0.0148	ug/L	0.0148	ppb	17:09:25
2	Co 228.616†	-72.0	0.6	0.0121	ug/L	0.0121	ppb	17:09:25
2	Cr 267.716†	91.7	3.6	0.0398	ug/L	0.0398	ppb	17:09:25
2	Cu 324.752†	6916.8	61.3	0.1782	ug/L	0.1782	ppb	17:09:05
2	Mn 257.610†	471.0	61.6	0.0693	ug/L	0.0693	ppb	17:09:25
2	Mo 202.031†	19.2	-1.1	-0.0693	ug/L	-0.0693	ppb	17:09:25
2	Ni 231.604†	87.2	16.0	0.3793	ug/L	0.3793	ppb	17:09:25

2	P 214.914†	229.3	6.4	3.7949	ug/L	3.7949 ppb	17:09:25
2	Pb 220.353†	-52.4	0.8	0.0950	ug/L	0.0950 ppb	17:09:25
2	S 181.975 Axial†	48.5	6.5	9.4329	ug/L	9.4329 ppb	17:09:25
2	Sb 206.836†	23.3	-6.6	-2.1418	ug/L	-2.1418 ppb	17:09:25
2	Se 196.026†	-24.7	-1.0	-0.5841	ug/L	-0.5841 ppb	17:09:25
2	Si 251.611†	527.5	12.9	0.3895	ug/L	0.3895 ppb	17:09:25
2	Sn 189.927†	8.6	4.2	0.7148	ug/L	0.7148 ppb	17:09:25
2	Ti 334.940†	-948.8	28.2	0.0469	ug/L	0.0469 ppb	17:09:05
2	Tl 190.801†	-40.4	-3.0	-0.8679	ug/L	-0.8679 ppb	17:09:25
2	U 409.014†	-2028.6	-40.9	-1.1432	ug/L	-1.1432 ppb	17:09:05
2	V 292.402†	-1283.9	28.7	0.1879	ug/L	0.1879 ppb	17:09:05
2	Zn 213.857†	725.2	-91.2	-0.8192	ug/L	-0.8192 ppb	17:09:25
2	SiO2†	542.9	47.2	3.0824	ug/L	3.0824 ppb	17:10:01
3	Sc Radial	5783.8	5783.8	102	%		17:08:13
3	Y RADIAL	6295.7	6295.7	102.2	%		17:08:13
3	Al 396.153Radial†	-23.3	-2.5	-1.8339	ug/L	-1.8339 ppb	17:08:33
3	Ca 317.933Radial†	27.4	9.1	13.915	ug/L	13.915 ppb	17:08:33
3	Fe 238.204 Radial†	5.2	-1.0	-9.8928	ug/L	-9.8928 ppb	17:08:33
3	K 766.490 Radial†	2287.3	69.3	12.566	ug/L	12.566 ppb	17:08:13
3	Mg 279.077 IEC†	1.8	0.0	1.1961	ug/L	1.1961 ppb	17:08:33
3	Na 589.592 Radial†	-535.3	91.8	34.508	ug/L	34.508 ppb	17:08:13
3	Sr 421.552†	-40.2	-42.8	-0.2892	ug/L	-0.2892 ppb	17:08:13
3	Sc 361.383	886769.5	886769.5	100.20	%		17:09:30
3	Y 371.029	744105.1	744105.1	100.27	%		17:09:30
3	Ag 328.068†	320.2	92.0	0.4208	ug/L	0.4208 ppb	17:09:30
3	As 188.979†	-20.4	8.8	3.5963	ug/L	3.5963 ppb	17:09:50
3	B 249.677†	-300.6	223.9	4.8621	ug/L	4.8621 ppb	17:09:50
3	Ba 233.527†	-23.8	-11.7	-0.0893	ug/L	-0.0893 ppb	17:09:50
3	Be 313.107†	-5272.9	58.1	0.0213	ug/L	0.0213 ppb	17:09:30
3	Cd 226.502†	-176.3	11.9	0.1307	ug/L	0.1307 ppb	17:09:50
3	Co 228.616†	-80.9	-9.0	-0.1729	ug/L	-0.1729 ppb	17:09:50
3	Cr 267.716†	68.6	-18.5	-0.1999	ug/L	-0.1999 ppb	17:09:50
3	Cu 324.752†	6823.7	41.3	0.1195	ug/L	0.1195 ppb	17:09:30
3	Mn 257.610†	461.8	57.4	0.0614	ug/L	0.0614 ppb	17:09:50
3	Mo 202.031†	25.0	4.9	0.3193	ug/L	0.3193 ppb	17:09:50
3	Ni 231.604†	76.6	6.3	0.1498	ug/L	0.1498 ppb	17:09:50
3	P 214.914†	216.5	-3.9	-2.3337	ug/L	-2.3337 ppb	17:09:50
3	Pb 220.353†	-40.5	12.1	1.4182	ug/L	1.4182 ppb	17:09:50
3	S 181.975 Axial†	44.6	3.0	4.4442	ug/L	4.4442 ppb	17:09:50
3	Sb 206.836†	33.2	3.5	1.1731	ug/L	1.1731 ppb	17:09:50
3	Se 196.026†	-26.5	-3.0	-1.8106	ug/L	-1.8106 ppb	17:09:50
3	Si 251.611†	532.9	23.8	0.7147	ug/L	0.7147 ppb	17:09:50
3	Sn 189.927†	9.4	5.1	0.8664	ug/L	0.8664 ppb	17:09:50
3	Ti 334.940†	-1068.6	-101.4	-0.1637	ug/L	-0.1637 ppb	17:09:30
3	Tl 190.801†	-35.9	1.0	0.2994	ug/L	0.2994 ppb	17:09:50
3	U 409.014†	-1931.2	34.9	0.9762	ug/L	0.9762 ppb	17:09:30
3	V 292.402†	-1313.5	-14.4	-0.0889	ug/L	-0.0889 ppb	17:09:30
3	Zn 213.857†	706.2	-102.5	-0.9220	ug/L	-0.9220 ppb	17:09:50
3	SiO2†	551.0	61.0	3.9700	ug/L	3.9700 ppb	17:10:06

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	887787.6	100.32	%	0.902				0.90%
Sc Radial	5711.3	101	%	1.7				1.72%
Y 371.029	744865.5	100.38	%	0.953				0.95%
Y RADIAL	6219.3	101.0	%	1.54				1.52%
Ag 328.068†	59.8	0.2748	ug/L	0.14265	0.2748	ppb	0.14265	51.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.4828	ug/L	3.60570	-0.4828	ppb	3.60570	746.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.0	1.6318	ug/L	3.04437	1.6318	ppb	3.04437	186.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	247.5	5.3719	ug/L	0.44166	5.3719	ppb	0.44166	8.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-13.3	-0.1012	ug/L	0.04702	-0.1012	ppb	0.04702	46.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	65.0	0.0240	ug/L	0.02845	0.0240	ppb	0.02845	118.60%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.1	15.489	ug/L	1.6228	15.489	ppb	1.6228	10.48%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.7      0.1059 ug/L       0.08156      0.1059 ppb        0.08156  77.02%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -3.3     -0.0639 ug/L       0.09681     -0.0639 ppb        0.09681 151.62%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -1.3     -0.0141 ug/L       0.16557     -0.0141 ppb        0.16557 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                62.8      0.1824 ug/L       0.06513      0.1824 ppb        0.06513  35.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.3     -2.8132 ug/L       6.13359     -2.8132 ppb        6.13359 218.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          44.1      7.9844 ug/L       7.16297      7.9844 ppb        7.16297  89.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.6     -22.490 ug/L       89.9418     -22.490 ppb        89.9418 399.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                70.2      0.0765 ug/L       0.01966      0.0765 ppb        0.01966  25.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0416 ug/L       0.24212      0.0416 ppb        0.24212 582.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         85.1      31.973 ug/L        3.5577      31.973 ppb         3.5577  11.13%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.2      0.1936 ug/L       0.16818      0.1936 ppb        0.16818  86.89%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.4      2.5781 ug/L       4.43051      2.5781 ppb        4.43051 171.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.4      0.0452 ug/L       1.39862      0.0452 ppb        1.39862 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.0      4.3821 ug/L       5.08211      4.3821 ppb        5.08211 115.97%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.0      0.0028 ug/L       1.85987      0.0028 ppb        1.85987 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.6     -1.5460 ug/L       0.86068     -1.5460 ppb        0.86068  55.67%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                17.0      0.5128 ug/L       0.17628      0.5128 ppb        0.17628  34.38%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.7      0.9670 ug/L       0.31482      0.9670 ppb        0.31482  32.56%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -11.6     -0.0783 ug/L       0.20470     -0.0783 ppb        0.20470 261.57%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -56.2     -0.0904 ug/L       0.11899     -0.0904 ppb        0.11899 131.67%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.2     -0.3440 ug/L       0.59272     -0.3440 ppb        0.59272 172.29%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 21.7      0.6061 ug/L       1.59676      0.6061 ppb        1.59676 263.45%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -6.1     -0.0396 ug/L       0.20728     -0.0396 ppb        0.20728 523.53%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -94.2     -0.8477 ug/L       0.06494     -0.8477 ppb        0.06494   7.66%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      59.5      3.8803 ug/L       0.75704      3.8803 ppb        0.75704  19.51%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 18:08:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5717.1	5717.1	101	%			18:10:02
1	Y RADIAL	6179.8	6179.8	100.3	%			18:10:02
1	Al 396.153Radial†	6648.9	6606.7	4862.6	ug/L	4862.6	ppb	18:10:02
1	Ca 317.933Radial†	3253.7	3205.4	4901.6	ug/L	4901.6	ppb	18:10:22
1	Fe 238.204 Radial†	508.6	497.8	5028.2	ug/L	5028.2	ppb	18:10:22
1	K 766.490 Radial†	30013.4	27560.9	4993.4	ug/L	4993.4	ppb	18:10:02
1	Mg 279.077 IEC†	138.2	135.1	5037.4	ug/L	5037.4	ppb	18:10:22
1	Na 589.592 Radial†	26333.8	26702.1	10037	ug/L	10037	ppb	18:10:02
1	Sr 421.552†	77009.9	76282.3	514.91	ug/L	514.91	ppb	18:10:02
1	Sc 361.383	893956.9	893956.9	101.02	%			18:11:19
1	Y 371.029	737769.8	737769.8	99.420	%			18:11:19
1	Ag 328.068†	109735.7	108405.3	504.21	ug/L	504.21	ppb	18:11:24
1	As 188.979†	1183.1	1200.4	494.14	ug/L	494.14	ppb	18:11:44
1	B 249.677†	22071.6	22373.6	483.74	ug/L	483.74	ppb	18:11:24
1	Ba 233.527†	65183.3	64540.2	491.46	ug/L	491.46	ppb	18:11:24
1	Be 313.107†	1311647.6	1303785.4	485.46	ug/L	485.46	ppb	18:11:19
1	Cd 226.502†	45718.6	45446.9	492.86	ug/L	492.86	ppb	18:11:24
1	Co 228.616†	25519.9	25335.2	491.95	ug/L	491.95	ppb	18:11:24
1	Cr 267.716†	45814.2	45266.8	488.52	ug/L	488.52	ppb	18:11:24
1	Cu 324.752†	175809.2	167273.6	486.74	ug/L	486.74	ppb	18:11:24
1	Mn 257.610†	453764.2	448800.3	488.13	ug/L	488.13	ppb	18:11:19
1	Mo 202.031†	7766.4	7668.3	499.87	ug/L	499.87	ppb	18:11:44
1	Ni 231.604†	20994.4	20713.2	491.17	ug/L	491.17	ppb	18:11:24
1	P 214.914†	4379.6	4115.6	2371.5	ug/L	2371.5	ppb	18:11:44
1	Pb 220.353†	4185.4	4195.9	492.01	ug/L	492.01	ppb	18:11:44
1	S 181.975 Axial†	732.7	683.9	999.06	ug/L	999.06	ppb	18:11:44
1	Sb 206.836†	1589.1	1543.5	508.46	ug/L	508.46	ppb	18:11:44
1	Se 196.026†	809.2	824.5	509.33	ug/L	509.33	ppb	18:11:44
1	Si 251.611†	82201.5	80867.4	2461.5	ug/L	2461.5	ppb	18:11:24
1	Sn 189.927†	2991.7	2957.4	500.90	ug/L	500.90	ppb	18:11:44
1	Ti 334.940†	310711.8	308554.0	498.90	ug/L	498.90	ppb	18:11:24
1	Tl 190.801†	1680.0	1700.0	490.43	ug/L	490.43	ppb	18:11:44
1	U 409.014†	16032.2	17833.2	496.66	ug/L	496.66	ppb	18:11:24
1	V 292.402†	71521.1	72098.8	493.42	ug/L	493.42	ppb	18:11:24
1	Zn 213.857†	56086.9	54715.9	487.91	ug/L	487.91	ppb	18:11:24
1	SiO2†	81856.5	80545.0	5248.4	ug/L	5248.4	ppb	18:12:52
2	Sc Radial	5755.9	5755.9	102	%			18:10:27
2	Y RADIAL	6188.5	6188.5	100.5	%			18:10:27
2	Al 396.153Radial†	6682.7	6595.6	4854.3	ug/L	4854.3	ppb	18:10:27
2	Ca 317.933Radial†	3265.2	3195.0	4885.6	ug/L	4885.6	ppb	18:10:47
2	Fe 238.204 Radial†	505.1	490.9	4959.0	ug/L	4959.0	ppb	18:10:47
2	K 766.490 Radial†	30021.0	27367.9	4958.4	ug/L	4958.4	ppb	18:10:27
2	Mg 279.077 IEC†	137.9	133.9	4992.0	ug/L	4992.0	ppb	18:10:47
2	Na 589.592 Radial†	26354.3	26546.3	9978.0	ug/L	9978.0	ppb	18:10:27
2	Sr 421.552†	76777.1	75538.8	509.89	ug/L	509.89	ppb	18:10:27
2	Sc 361.383	891157.5	891157.5	100.70	%			18:11:50
2	Y 371.029	735614.7	735614.7	99.130	%			18:11:50
2	Ag 328.068†	109533.2	108545.4	504.85	ug/L	504.85	ppb	18:11:55
2	As 188.979†	1174.6	1195.7	492.19	ug/L	492.19	ppb	18:12:15
2	B 249.677†	22030.6	22401.6	484.35	ug/L	484.35	ppb	18:11:55
2	Ba 233.527†	65198.7	64758.2	493.12	ug/L	493.12	ppb	18:11:55
2	Be 313.107†	1312192.2	1308405.2	487.17	ug/L	487.17	ppb	18:11:50
2	Cd 226.502†	45886.6	45755.9	496.22	ug/L	496.22	ppb	18:11:55
2	Co 228.616†	25596.1	25490.2	494.96	ug/L	494.96	ppb	18:11:55
2	Cr 267.716†	45932.9	45527.1	491.33	ug/L	491.33	ppb	18:11:55
2	Cu 324.752†	174960.0	166977.1	485.87	ug/L	485.87	ppb	18:11:55
2	Mn 257.610†	453068.8	449520.9	488.91	ug/L	488.91	ppb	18:11:50
2	Mo 202.031†	7750.2	7676.4	500.39	ug/L	500.39	ppb	18:12:15
2	Ni 231.604†	21052.1	20835.9	494.08	ug/L	494.08	ppb	18:11:55

2	P 214.914†	4393.2	4142.7	2387.9 ug/L	2387.9 ppb	18:12:15
2	Pb 220.353†	4167.4	4191.1	491.46 ug/L	491.46 ppb	18:12:15
2	S 181.975 Axial†	737.8	691.2	1009.7 ug/L	1009.7 ppb	18:12:15
2	Sb 206.836†	1581.5	1540.9	507.62 ug/L	507.62 ppb	18:12:15
2	Se 196.026†	800.6	818.5	505.55 ug/L	505.55 ppb	18:12:15
2	Si 251.611†	82171.8	81093.5	2468.4 ug/L	2468.4 ppb	18:11:55
2	Sn 189.927†	3001.5	2976.4	504.11 ug/L	504.11 ppb	18:12:15
2	Ti 334.940†	309939.2	308753.0	499.22 ug/L	499.22 ppb	18:11:55
2	Tl 190.801†	1678.6	1703.8	491.53 ug/L	491.53 ppb	18:12:15
2	U 409.014†	15620.1	17473.8	486.62 ug/L	486.62 ppb	18:11:55
2	V 292.402†	71428.1	72228.8	494.29 ug/L	494.29 ppb	18:11:55
2	Zn 213.857†	56139.9	54943.0	489.94 ug/L	489.94 ppb	18:11:55
2	SiO2†	82203.2	81143.9	5287.6 ug/L	5287.6 ppb	18:12:57
3	Sc Radial	5776.6	5776.6	102 %		18:10:52
3	Y RADIAL	6172.7	6172.7	100.2 %		18:10:52
3	Al 396.153Radial†	6664.5	6554.2	4823.8 ug/L	4823.8 ppb	18:10:52
3	Ca 317.933Radial†	3245.9	3164.6	4839.2 ug/L	4839.2 ppb	18:11:12
3	Fe 238.204 Radial†	503.9	488.0	4929.7 ug/L	4929.7 ppb	18:11:12
3	K 766.490 Radial†	30126.8	27365.9	4958.0 ug/L	4958.0 ppb	18:10:52
3	Mg 279.077 IEC†	137.5	133.1	4962.1 ug/L	4962.1 ppb	18:11:12
3	Na 589.592 Radial†	26396.0	26494.5	9958.5 ug/L	9958.5 ppb	18:10:52
3	Sr 421.552†	77218.6	75701.5	510.99 ug/L	510.99 ppb	18:10:52
3	Sc 361.383	893247.4	893247.4	100.94 %		18:12:21
3	Y 371.029	735515.1	735515.1	99.116 %		18:12:21
3	Ag 328.068†	109535.3	108293.0	503.67 ug/L	503.67 ppb	18:12:26
3	As 188.979†	1183.0	1201.3	494.49 ug/L	494.49 ppb	18:12:46
3	B 249.677†	22057.2	22376.7	483.82 ug/L	483.82 ppb	18:12:26
3	Ba 233.527†	65293.7	64700.8	492.68 ug/L	492.68 ppb	18:12:26
3	Be 313.107†	1312173.0	1305337.2	486.03 ug/L	486.03 ppb	18:12:21
3	Cd 226.502†	45819.0	45582.4	494.34 ug/L	494.34 ppb	18:12:26
3	Co 228.616†	25566.2	25401.1	493.23 ug/L	493.23 ppb	18:12:26
3	Cr 267.716†	45836.0	45324.4	489.14 ug/L	489.14 ppb	18:12:26
3	Cu 324.752†	175328.6	166935.7	485.75 ug/L	485.75 ppb	18:12:26
3	Mn 257.610†	455290.5	450669.3	490.15 ug/L	490.15 ppb	18:12:21
3	Mo 202.031†	7748.5	7656.7	499.10 ug/L	499.10 ppb	18:12:46
3	Ni 231.604†	21020.1	20755.3	492.17 ug/L	492.17 ppb	18:12:26
3	P 214.914†	4362.7	4102.4	2363.9 ug/L	2363.9 ppb	18:12:46
3	Pb 220.353†	4172.2	4186.1	490.88 ug/L	490.88 ppb	18:12:46
3	S 181.975 Axial†	729.9	681.7	995.81 ug/L	995.81 ppb	18:12:46
3	Sb 206.836†	1604.2	1559.8	513.70 ug/L	513.70 ppb	18:12:46
3	Se 196.026†	817.3	833.2	514.18 ug/L	514.18 ppb	18:12:46
3	Si 251.611†	82366.6	81095.5	2468.5 ug/L	2468.5 ppb	18:12:26
3	Sn 189.927†	2991.6	2959.6	501.27 ug/L	501.27 ppb	18:12:46
3	Ti 334.940†	310557.1	308645.2	499.04 ug/L	499.04 ppb	18:12:26
3	Tl 190.801†	1687.6	1708.8	492.97 ug/L	492.97 ppb	18:12:46
3	U 409.014†	15798.6	17614.4	490.56 ug/L	490.56 ppb	18:12:26
3	V 292.402†	71478.0	72112.3	493.50 ug/L	493.50 ppb	18:12:26
3	Zn 213.857†	56139.5	54812.1	488.78 ug/L	488.78 ppb	18:12:26
3	SiO2†	82144.3	80894.5	5271.3 ug/L	5271.3 ppb	18:13:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892787.3	100.88	%	0.164				0.16%
Sc Radial	5749.9	102	%	0.5				0.53%
Y 371.029	736299.9	99.222	%	0.1717				0.17%
Y RADIAL	6180.3	100.4	%	0.13				0.13%
Ag 328.068†	108414.6	504.25	ug/L	0.592	504.25	ppb	0.592	0.12%
QC value within limits for Ag 328.068 Recovery = 100.85%								
Al 396.153Radial†	6585.5	4846.9	ug/L	20.45	4846.9	ppb	20.45	0.42%
QC value within limits for Al 396.153Radial Recovery = 96.94%								
As 188.979†	1199.1	493.61	ug/L	1.235	493.61	ppb	1.235	0.25%
QC value within limits for As 188.979 Recovery = 98.72%								
B 249.677†	22384.0	483.97	ug/L	0.331	483.97	ppb	0.331	0.07%
QC value within limits for B 249.677 Recovery = 96.79%								
Ba 233.527†	64666.4	492.42	ug/L	0.858	492.42	ppb	0.858	0.17%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	1305842.6	486.22	ug/L	0.874	486.22	ppb	0.874	0.18%
QC value within limits for Be 313.107 Recovery = 97.24%								
Ca 317.933Radial†	3188.3	4875.5	ug/L	32.41	4875.5	ppb	32.41	0.66%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.51%
Cd 226.502†            45595.1      494.47 ug/L         1.685      494.47 ppb          1.685   0.34%
   QC value within limits for Cd 226.502  Recovery = 98.89%
Co 228.616†            25408.9      493.38 ug/L         1.511      493.38 ppb          1.511   0.31%
   QC value within limits for Co 228.616  Recovery = 98.68%
Cr 267.716†            45372.8      489.66 ug/L         1.475      489.66 ppb          1.475   0.30%
   QC value within limits for Cr 267.716  Recovery = 97.93%
Cu 324.752†           167062.1      486.12 ug/L         0.539      486.12 ppb          0.539   0.11%
   QC value within limits for Cu 324.752  Recovery = 97.22%
Fe 238.204 Radial†       492.3      4972.3 ug/L         50.59      4972.3 ppb          50.59   1.02%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.45%
K 766.490 Radial†      27431.6      4970.0 ug/L         20.32      4970.0 ppb          20.32   0.41%
   QC value within limits for K 766.490 Radial  Recovery = 99.40%
Mg 279.077 IEC†          134.0      4997.1 ug/L         37.90      4997.1 ppb          37.90   0.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.94%
Mn 257.610†           449663.5      489.06 ug/L         1.020      489.06 ppb          1.020   0.21%
   QC value within limits for Mn 257.610  Recovery = 97.81%
Mo 202.031†             7667.2      499.79 ug/L         0.646      499.79 ppb          0.646   0.13%
   QC value within limits for Mo 202.031  Recovery = 99.96%
Na 589.592 Radial†     26581.0      9991.0 ug/L         40.62      9991.0 ppb          40.62   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 99.91%
Ni 231.604†            20768.1      492.48 ug/L         1.478      492.48 ppb          1.478   0.30%
   QC value within limits for Ni 231.604  Recovery = 98.50%
P 214.914†              4120.2      2374.4 ug/L         12.25      2374.4 ppb          12.25   0.52%
   QC value within limits for P 214.914  Recovery = 94.98%
Pb 220.353†             4191.0      491.45 ug/L         0.569      491.45 ppb          0.569   0.12%
   QC value within limits for Pb 220.353  Recovery = 98.29%
S 181.975 Axial†         685.6      1001.5 ug/L          7.26      1001.5 ppb           7.26   0.72%
   QC value within limits for S 181.975 Axial  Recovery = 100.15%
Sb 206.836†             1548.1      509.92 ug/L         3.296      509.92 ppb          3.296   0.65%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†              825.4      509.68 ug/L         4.326      509.68 ppb          4.326   0.85%
   QC value within limits for Se 196.026  Recovery = 101.94%
Si 251.611†            81018.8      2466.1 ug/L          4.02      2466.1 ppb           4.02   0.16%
   QC value within limits for Si 251.611  Recovery = 98.64%
Sn 189.927†             2964.5      502.09 ug/L         1.760      502.09 ppb          1.760   0.35%
   QC value within limits for Sn 189.927  Recovery = 100.42%
Sr 421.552†            75840.8      511.93 ug/L         2.638      511.93 ppb          2.638   0.52%
   QC value within limits for Sr 421.552  Recovery = 102.39%
Ti 334.940†           308650.7      499.06 ug/L         0.162      499.06 ppb          0.162   0.03%
   QC value within limits for Ti 334.940  Recovery = 99.81%
Tl 190.801†             1704.2      491.64 ug/L         1.274      491.64 ppb          1.274   0.26%
   QC value within limits for Tl 190.801  Recovery = 98.33%
U 409.014†             17640.5      491.28 ug/L         5.058      491.28 ppb          5.058   1.03%
   QC value within limits for U 409.014  Recovery = 98.26%
V 292.402†             72146.6      493.74 ug/L         0.483      493.74 ppb          0.483   0.10%
   QC value within limits for V 292.402  Recovery = 98.75%
Zn 213.857†            54823.7      488.87 ug/L         1.020      488.87 ppb          1.020   0.21%
   QC value within limits for Zn 213.857  Recovery = 97.77%
SiO2†                  80861.1      5269.1 ug/L         19.70      5269.1 ppb          19.70   0.37%
   QC value within limits for SiO2  Recovery = 98.53%
All analyte(s) passed QC.
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Sequence No.: 43
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 18:15:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5709.7	5709.7	101	%			18:17:03
1	Y RADIAL	6217.6	6217.6	101.0	%			18:17:03
1	Al 396.153Radial†	-23.0	-2.5	-1.8682	ug/L	-1.8682	ppb	18:17:03
1	Ca 317.933Radial†	24.6	6.7	10.305	ug/L	10.305	ppb	18:17:23
1	Fe 238.204 Radial†	7.9	1.8	17.966	ug/L	17.966	ppb	18:17:23
1	K 766.490 Radial†	2296.3	107.4	19.478	ug/L	19.478	ppb	18:17:03
1	Mg 279.077 IEC†	3.0	1.2	44.599	ug/L	44.599	ppb	18:17:23
1	Na 589.592 Radial†	-562.1	58.4	21.969	ug/L	21.969	ppb	18:17:03
1	Sr 421.552†	1.1	-2.3	-0.0158	ug/L	-0.0158	ppb	18:17:03
1	Sc 361.383	893574.8	893574.8	100.97	%			18:18:20
1	Y 371.029	749991.9	749991.9	101.07	%			18:18:20
1	Ag 328.068†	207.5	-22.1	-0.0996	ug/L	-0.0996	ppb	18:18:20
1	As 188.979†	-21.2	8.2	3.3461	ug/L	3.3461	ppb	18:18:40
1	B 249.677†	-327.7	199.3	4.3248	ug/L	4.3248	ppb	18:18:40
1	Ba 233.527†	-24.6	-12.4	-0.0926	ug/L	-0.0926	ppb	18:18:40
1	Be 313.107†	-5303.3	68.0	0.0250	ug/L	0.0250	ppb	18:18:20
1	Cd 226.502†	-170.4	19.1	0.2055	ug/L	0.2055	ppb	18:18:40
1	Co 228.616†	-83.3	-10.8	-0.2084	ug/L	-0.2084	ppb	18:18:40
1	Cr 267.716†	60.5	-27.1	-0.2925	ug/L	-0.2925	ppb	18:18:40
1	Cu 324.752†	6869.2	34.5	0.1012	ug/L	0.1012	ppb	18:18:20
1	Mn 257.610†	495.7	87.5	0.0961	ug/L	0.0961	ppb	18:18:40
1	Mo 202.031†	24.6	4.4	0.2870	ug/L	0.2870	ppb	18:18:40
1	Ni 231.604†	67.8	-3.0	-0.0704	ug/L	-0.0704	ppb	18:18:40
1	P 214.914†	209.4	-12.5	-7.4692	ug/L	-7.4692	ppb	18:18:40
1	Pb 220.353†	-51.9	1.2	0.1333	ug/L	0.1333	ppb	18:18:40
1	S 181.975 Axial†	43.9	2.0	2.8912	ug/L	2.8912	ppb	18:18:40
1	Sb 206.836†	45.5	15.5	5.0376	ug/L	5.0376	ppb	18:18:40
1	Se 196.026†	-22.5	1.2	0.7437	ug/L	0.7437	ppb	18:18:40
1	Si 251.611†	487.3	-25.4	-0.7907	ug/L	-0.7907	ppb	18:18:40
1	Sn 189.927†	5.9	1.6	0.2680	ug/L	0.2680	ppb	18:18:40
1	Ti 334.940†	-1049.6	-74.5	-0.1218	ug/L	-0.1218	ppb	18:18:20
1	Tl 190.801†	-41.7	-4.5	-1.2792	ug/L	-1.2792	ppb	18:18:40
1	U 409.014†	-1814.1	165.5	4.6223	ug/L	4.6223	ppb	18:18:20
1	V 292.402†	-1270.8	38.0	0.2678	ug/L	0.2678	ppb	18:18:20
1	Zn 213.857†	695.3	-118.6	-1.0702	ug/L	-1.0702	ppb	18:18:40
1	SiO2†	512.1	18.3	1.1719	ug/L	1.1719	ppb	18:19:36
2	Sc Radial	5789.8	5789.8	102	%			18:17:28
2	Y RADIAL	6289.2	6289.2	102.1	%			18:17:28
2	Al 396.153Radial†	-19.5	1.3	0.9184	ug/L	0.9184	ppb	18:17:28
2	Ca 317.933Radial†	22.6	4.4	6.6703	ug/L	6.6703	ppb	18:17:48
2	Fe 238.204 Radial†	5.8	-0.3	-3.3184	ug/L	-3.3184	ppb	18:17:48
2	K 766.490 Radial†	2321.4	100.4	18.207	ug/L	18.207	ppb	18:17:28
2	Mg 279.077 IEC†	1.3	-0.5	-19.789	ug/L	-19.789	ppb	18:17:48
2	Na 589.592 Radial†	-577.8	50.8	19.083	ug/L	19.083	ppb	18:17:28
2	Sr 421.552†	-10.6	-13.7	-0.0929	ug/L	-0.0929	ppb	18:17:28
2	Sc 361.383	880983.8	880983.8	99.549	%			18:18:45
2	Y 371.029	739490.2	739490.2	99.652	%			18:18:45
2	Ag 328.068†	187.7	-39.0	-0.1798	ug/L	-0.1798	ppb	18:18:45
2	As 188.979†	-28.2	0.9	0.3548	ug/L	0.3548	ppb	18:19:05
2	B 249.677†	-337.6	184.8	4.0105	ug/L	4.0105	ppb	18:19:05
2	Ba 233.527†	-23.0	-11.1	-0.0834	ug/L	-0.0834	ppb	18:19:05
2	Be 313.107†	-5245.8	50.7	0.0185	ug/L	0.0185	ppb	18:18:45
2	Cd 226.502†	-166.9	20.1	0.2188	ug/L	0.2188	ppb	18:19:05
2	Co 228.616†	-64.4	7.0	0.1391	ug/L	0.1391	ppb	18:19:05
2	Cr 267.716†	94.3	7.7	0.0841	ug/L	0.0841	ppb	18:19:05
2	Cu 324.752†	6814.5	76.7	0.2230	ug/L	0.2230	ppb	18:18:45
2	Mn 257.610†	535.3	134.3	0.1460	ug/L	0.1460	ppb	18:19:05
2	Mo 202.031†	31.2	11.4	0.7398	ug/L	0.7398	ppb	18:19:05
2	Ni 231.604†	72.7	2.9	0.0679	ug/L	0.0679	ppb	18:19:05

2	P 214.914†	219.2	0.2	0.1177	ug/L	0.1177	ppb	18:19:05
2	Pb 220.353†	-57.8	-5.5	-0.6464	ug/L	-0.6464	ppb	18:19:05
2	S 181.975 Axial†	38.7	-2.6	-3.7352	ug/L	-3.7352	ppb	18:19:05
2	Sb 206.836†	31.3	1.8	0.6070	ug/L	0.6070	ppb	18:19:05
2	Se 196.026†	-21.1	2.3	1.3426	ug/L	1.3426	ppb	18:19:05
2	Si 251.611†	490.8	-15.0	-0.4793	ug/L	-0.4793	ppb	18:19:05
2	Sn 189.927†	6.2	1.9	0.3255	ug/L	0.3255	ppb	18:19:05
2	Ti 334.940†	-1073.4	-113.3	-0.1829	ug/L	-0.1829	ppb	18:18:45
2	Tl 190.801†	-34.3	2.4	0.6803	ug/L	0.6803	ppb	18:19:05
2	U 409.014†	-1950.7	2.6	0.0731	ug/L	0.0731	ppb	18:18:45
2	V 292.402†	-1217.2	73.7	0.5086	ug/L	0.5086	ppb	18:18:45
2	Zn 213.857†	696.2	-107.9	-0.9708	ug/L	-0.9708	ppb	18:19:05
2	SiO2†	499.7	13.1	0.8164	ug/L	0.8164	ppb	18:19:41
3	Sc Radial	5827.7	5827.7	103	%			18:17:53
3	Y RADIAL	6300.4	6300.4	102.3	%			18:17:53
3	Al 396.153Radial†	-35.7	-14.3	-10.594	ug/L	-10.594	ppb	18:17:53
3	Ca 317.933Radial†	22.6	4.2	6.4913	ug/L	6.4913	ppb	18:18:13
3	Fe 238.204 Radial†	7.6	1.3	13.586	ug/L	13.586	ppb	18:18:13
3	K 766.490 Radial†	2295.4	60.3	10.936	ug/L	10.936	ppb	18:17:53
3	Mg 279.077 IEC†	1.1	-0.7	-26.175	ug/L	-26.175	ppb	18:18:13
3	Na 589.592 Radial†	-574.5	57.6	21.661	ug/L	21.661	ppb	18:17:53
3	Sr 421.552†	-5.3	-8.6	-0.0582	ug/L	-0.0582	ppb	18:17:53
3	Sc 361.383	891387.7	891387.7	100.72	%			18:19:10
3	Y 371.029	747805.5	747805.5	100.77	%			18:19:10
3	Ag 328.068†	265.5	36.0	0.1686	ug/L	0.1686	ppb	18:19:10
3	As 188.979†	-21.5	7.8	3.2026	ug/L	3.2026	ppb	18:19:30
3	B 249.677†	-382.9	143.7	3.1172	ug/L	3.1172	ppb	18:19:30
3	Ba 233.527†	-8.9	3.2	0.0244	ug/L	0.0244	ppb	18:19:30
3	Be 313.107†	-5324.4	34.2	0.0128	ug/L	0.0128	ppb	18:19:10
3	Cd 226.502†	-183.9	5.2	0.0553	ug/L	0.0553	ppb	18:19:30
3	Co 228.616†	-64.2	8.0	0.1556	ug/L	0.1556	ppb	18:19:30
3	Cr 267.716†	67.9	-19.6	-0.2114	ug/L	-0.2114	ppb	18:19:30
3	Cu 324.752†	6833.5	15.7	0.0464	ug/L	0.0464	ppb	18:19:10
3	Mn 257.610†	528.5	121.3	0.1337	ug/L	0.1337	ppb	18:19:30
3	Mo 202.031†	19.9	-0.3	-0.0154	ug/L	-0.0154	ppb	18:19:30
3	Ni 231.604†	64.3	-6.3	-0.1490	ug/L	-0.1490	ppb	18:19:30
3	P 214.914†	223.8	2.2	1.3167	ug/L	1.3167	ppb	18:19:30
3	Pb 220.353†	-72.1	-19.0	-2.2280	ug/L	-2.2280	ppb	18:19:30
3	S 181.975 Axial†	45.1	3.3	4.8980	ug/L	4.8980	ppb	18:19:30
3	Sb 206.836†	33.5	3.7	1.2095	ug/L	1.2095	ppb	18:19:30
3	Se 196.026†	-20.0	3.6	2.2051	ug/L	2.2051	ppb	18:19:30
3	Si 251.611†	513.3	1.6	0.0412	ug/L	0.0412	ppb	18:19:30
3	Sn 189.927†	9.9	5.6	0.9441	ug/L	0.9441	ppb	18:19:30
3	Ti 334.940†	-954.9	17.0	0.0269	ug/L	0.0269	ppb	18:19:10
3	Tl 190.801†	-43.6	-6.4	-1.8301	ug/L	-1.8301	ppb	18:19:30
3	U 409.014†	-1894.4	81.4	2.2740	ug/L	2.2740	ppb	18:19:10
3	V 292.402†	-1317.6	-11.6	-0.0768	ug/L	-0.0768	ppb	18:19:10
3	Zn 213.857†	676.5	-135.7	-1.2202	ug/L	-1.2202	ppb	18:19:30
3	SiO2†	500.2	7.7	0.4927	ug/L	0.4927	ppb	18:19:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888648.8	100.42	%	0.760				0.76%
Sc Radial	5775.7	102	%	1.1				1.04%
Y 371.029	745762.6	100.50	%	0.747				0.74%
Y RADIAL	6269.1	101.8	%	0.73				0.72%
Ag 328.068†	-8.4	-0.0369	ug/L	0.18245	-0.0369	ppb	0.18245	494.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.2	-3.8480	ug/L	6.00611	-3.8480	ppb	6.00611	156.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.6	2.3012	ug/L	1.68714	2.3012	ppb	1.68714	73.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	175.9	3.8175	ug/L	0.62652	3.8175	ppb	0.62652	16.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.8	-0.0505	ug/L	0.06506	-0.0505	ppb	0.06506	128.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	51.0	0.0188	ug/L	0.00614	0.0188	ppb	0.00614	32.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.1	7.8224	ug/L	2.15228	7.8224	ppb	2.15228	27.51%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.8      0.1599 ug/L       0.09081      0.1599 ppb        0.09081  56.80%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.4      0.0288 ug/L       0.20556      0.0288 ppb        0.20556 714.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -13.0     -0.1399 ug/L       0.19821     -0.1399 ppb        0.19821 141.67%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                42.3      0.1235 ug/L       0.09041      0.1235 ppb        0.09041  73.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.9      9.4113 ug/L      11.23969      9.4113 ppb       11.23969 119.43%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          89.4     16.207 ug/L        4.6088     16.207 ppb         4.6088  28.44%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.0     -0.4548 ug/L      39.14850     -0.4548 ppb       39.14850 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               114.4      0.1253 ug/L       0.02600      0.1253 ppb        0.02600  20.75%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.2      0.3372 ug/L       0.38008      0.3372 ppb        0.38008 112.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         55.6     20.905 ug/L        1.5852     20.905 ppb         1.5852   7.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -2.1     -0.0505 ug/L       0.10983     -0.0505 ppb        0.10983 217.51%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.3     -2.0116 ug/L       4.76432     -2.0116 ppb        4.76432 236.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.8     -0.9137 ug/L       1.20313     -0.9137 ppb        1.20313 131.68%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.9      1.3513 ug/L       4.51793      1.3513 ppb        4.51793 334.33%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.0      2.2847 ug/L       2.40302      2.2847 ppb        2.40302 105.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.3      1.4305 ug/L       0.73466      1.4305 ppb        0.73466  51.36%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -13.0     -0.4096 ug/L       0.42030     -0.4096 ppb        0.42030 102.62%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      0.5125 ug/L       0.37488      0.5125 ppb        0.37488  73.14%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -8.2     -0.0556 ug/L       0.03862     -0.0556 ppb        0.03862  69.45%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -56.9     -0.0926 ug/L       0.10790     -0.0926 ppb        0.10790 116.51%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.8     -0.8097 ug/L       1.31943     -0.8097 ppb        1.31943 162.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 83.2      2.3231 ug/L       2.27499      2.3231 ppb        2.27499  97.93%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 33.4      0.2332 ug/L       0.29426      0.2332 ppb        0.29426 126.18%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -120.7     -1.0871 ug/L       0.12559     -1.0871 ppb        0.12559  11.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      13.1      0.8270 ug/L       0.33976      0.8270 ppb        0.33976  41.08%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 52
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 19:18:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5584.3	5584.3	98.6	%			19:19:59
1	Y RADIAL	6042.3	6042.3	98.11	%			19:19:59
1	Al 396.153Radial†	6589.2	6702.8	4933.7	ug/L	4933.7	ppb	19:19:59
1	Ca 317.933Radial†	3285.3	3314.1	5067.8	ug/L	5067.8	ppb	19:20:19
1	Fe 238.204 Radial†	510.6	511.8	5168.9	ug/L	5168.9	ppb	19:20:19
1	K 766.490 Radial†	29407.3	27653.4	5010.1	ug/L	5010.1	ppb	19:19:59
1	Mg 279.077 IEC†	140.3	140.6	5240.0	ug/L	5240.0	ppb	19:20:19
1	Na 589.592 Radial†	26185.3	27172.0	10213	ug/L	10213	ppb	19:19:59
1	Sr 421.552†	75720.1	76788.9	518.32	ug/L	518.32	ppb	19:19:59
1	Sc 361.383	896540.3	896540.3	101.31	%			19:21:16
1	Y 371.029	739324.9	739324.9	99.630	%			19:21:16
1	Ag 328.068†	110430.1	108777.7	505.99	ug/L	505.99	ppb	19:21:21
1	As 188.979†	1185.3	1199.2	493.69	ug/L	493.69	ppb	19:21:41
1	B 249.677†	22197.2	22434.6	485.04	ug/L	485.04	ppb	19:21:21
1	Ba 233.527†	65623.7	64789.0	493.36	ug/L	493.36	ppb	19:21:21
1	Be 313.107†	1323323.4	1311568.9	488.35	ug/L	488.35	ppb	19:21:16
1	Cd 226.502†	46084.7	45677.9	495.35	ug/L	495.35	ppb	19:21:21
1	Co 228.616†	25699.9	25440.1	493.98	ug/L	493.98	ppb	19:21:21
1	Cr 267.716†	46231.4	45547.9	491.56	ug/L	491.56	ppb	19:21:21
1	Cu 324.752†	176364.5	167320.3	486.88	ug/L	486.88	ppb	19:21:21
1	Mn 257.610†	457039.7	450739.2	490.25	ug/L	490.25	ppb	19:21:16
1	Mo 202.031†	7772.4	7652.1	498.82	ug/L	498.82	ppb	19:21:41
1	Ni 231.604†	21209.3	20865.5	494.79	ug/L	494.79	ppb	19:21:21
1	P 214.914†	4389.9	4113.3	2370.0	ug/L	2370.0	ppb	19:21:41
1	Pb 220.353†	4170.6	4169.3	488.91	ug/L	488.91	ppb	19:21:41
1	S 181.975 Axial†	728.4	677.5	989.72	ug/L	989.72	ppb	19:21:41
1	Sb 206.836†	1582.7	1532.7	504.81	ug/L	504.81	ppb	19:21:41
1	Se 196.026†	814.0	827.0	511.23	ug/L	511.23	ppb	19:21:41
1	Si 251.611†	82757.2	81181.4	2471.1	ug/L	2471.1	ppb	19:21:21
1	Sn 189.927†	2988.3	2945.5	498.90	ug/L	498.90	ppb	19:21:41
1	Ti 334.940†	312320.0	309255.2	500.04	ug/L	500.04	ppb	19:21:21
1	Tl 190.801†	1692.8	1707.8	492.68	ug/L	492.68	ppb	19:21:41
1	U 409.014†	15805.1	17563.3	489.10	ug/L	489.10	ppb	19:21:21
1	V 292.402†	72045.3	72412.2	495.48	ug/L	495.48	ppb	19:21:21
1	Zn 213.857†	56545.1	55008.2	490.49	ug/L	490.49	ppb	19:21:21
1	SiO2†	82213.5	80663.9	5256.2	ug/L	5256.2	ppb	19:22:49
2	Sc Radial	5611.5	5611.5	99.1	%			19:20:24
2	Y RADIAL	6067.9	6067.9	98.53	%			19:20:24
2	Al 396.153Radial†	6519.9	6600.4	4857.7	ug/L	4857.7	ppb	19:20:24
2	Ca 317.933Radial†	3281.8	3294.3	5037.6	ug/L	5037.6	ppb	19:20:44
2	Fe 238.204 Radial†	505.8	504.4	5094.7	ug/L	5094.7	ppb	19:20:44
2	K 766.490 Radial†	29250.8	27350.5	4955.2	ug/L	4955.2	ppb	19:20:24
2	Mg 279.077 IEC†	142.8	142.3	5306.1	ug/L	5306.1	ppb	19:20:44
2	Na 589.592 Radial†	25955.8	26811.3	10078	ug/L	10078	ppb	19:20:24
2	Sr 421.552†	75156.5	75846.7	511.96	ug/L	511.96	ppb	19:20:24
2	Sc 361.383	888638.0	888638.0	100.41	%			19:21:47
2	Y 371.029	734723.7	734723.7	99.010	%			19:21:47
2	Ag 328.068†	109631.9	108952.0	506.78	ug/L	506.78	ppb	19:21:52
2	As 188.979†	1187.6	1211.9	498.87	ug/L	498.87	ppb	19:22:12
2	B 249.677†	22021.2	22454.2	485.47	ug/L	485.47	ppb	19:21:52
2	Ba 233.527†	65034.7	64778.4	493.28	ug/L	493.28	ppb	19:21:52
2	Be 313.107†	1315065.7	1314961.2	489.61	ug/L	489.61	ppb	19:21:47
2	Cd 226.502†	45686.8	45686.1	495.45	ug/L	495.45	ppb	19:21:52
2	Co 228.616†	25554.3	25520.7	495.55	ug/L	495.55	ppb	19:21:52
2	Cr 267.716†	45952.8	45676.3	492.94	ug/L	492.94	ppb	19:21:52
2	Cu 324.752†	175508.0	168015.4	488.90	ug/L	488.90	ppb	19:21:52
2	Mn 257.610†	453296.3	451023.1	490.55	ug/L	490.55	ppb	19:21:47
2	Mo 202.031†	7789.0	7736.8	504.33	ug/L	504.33	ppb	19:22:12
2	Ni 231.604†	21011.2	20854.4	494.52	ug/L	494.52	ppb	19:21:52

2	P 214.914†	4410.8	4172.6	2405.0 ug/L	2405.0 ppb	19:22:12
2	Pb 220.353†	4195.1	4230.4	496.05 ug/L	496.05 ppb	19:22:12
2	S 181.975 Axial†	743.6	699.1	1021.3 ug/L	1021.3 ppb	19:22:12
2	Sb 206.836†	1590.4	1554.2	511.98 ug/L	511.98 ppb	19:22:12
2	Se 196.026†	822.5	842.6	520.32 ug/L	520.32 ppb	19:22:12
2	Si 251.611†	82215.5	81368.4	2476.7 ug/L	2476.7 ppb	19:21:52
2	Sn 189.927†	2991.8	2975.2	503.92 ug/L	503.92 ppb	19:22:12
2	Ti 334.940†	310248.7	309933.9	501.14 ug/L	501.14 ppb	19:21:52
2	Tl 190.801†	1708.2	1738.0	501.34 ug/L	501.34 ppb	19:22:12
2	U 409.014†	15827.1	17724.0	493.59 ug/L	493.59 ppb	19:21:52
2	V 292.402†	71606.4	72607.6	496.90 ug/L	496.90 ppb	19:21:52
2	Zn 213.857†	56128.3	55089.5	491.23 ug/L	491.23 ppb	19:21:52
2	SiO2†	82471.1	81642.1	5320.1 ug/L	5320.1 ppb	19:22:54
3	Sc Radial	5562.9	5562.9	98.2 %		19:20:49
3	Y RADIAL	6032.7	6032.7	97.95 %		19:20:49
3	Al 396.153Radial†	6505.6	6643.5	4889.7 ug/L	4889.7 ppb	19:20:49
3	Ca 317.933Radial†	3287.8	3329.5	5091.4 ug/L	5091.4 ppb	19:21:09
3	Fe 238.204 Radial†	512.4	515.7	5208.1 ug/L	5208.1 ppb	19:21:09
3	K 766.490 Radial†	29289.8	27648.5	5009.2 ug/L	5009.2 ppb	19:20:49
3	Mg 279.077 IEC†	138.6	139.4	5195.9 ug/L	5195.9 ppb	19:21:09
3	Na 589.592 Radial†	25915.8	26999.9	10148 ug/L	10148 ppb	19:20:49
3	Sr 421.552†	74874.1	76223.1	514.50 ug/L	514.50 ppb	19:20:49
3	Sc 361.383	896516.4	896516.4	101.30 %		19:22:18
3	Y 371.029	740280.6	740280.6	99.759 %		19:22:18
3	Ag 328.068†	110735.7	109082.3	507.42 ug/L	507.42 ppb	19:22:23
3	As 188.979†	1188.3	1202.2	494.92 ug/L	494.92 ppb	19:22:43
3	B 249.677†	22423.1	22658.2	489.89 ug/L	489.89 ppb	19:22:23
3	Ba 233.527†	65790.2	64955.1	494.63 ug/L	494.63 ppb	19:22:23
3	Be 313.107†	1329267.4	1317471.2	490.55 ug/L	490.55 ppb	19:22:18
3	Cd 226.502†	46161.4	45754.8	496.18 ug/L	496.18 ppb	19:22:23
3	Co 228.616†	25810.3	25549.7	496.11 ug/L	496.11 ppb	19:22:23
3	Cr 267.716†	46373.0	45688.9	493.08 ug/L	493.08 ppb	19:22:23
3	Cu 324.752†	177648.9	168592.8	490.58 ug/L	490.58 ppb	19:22:23
3	Mn 257.610†	458076.7	451774.9	491.38 ug/L	491.38 ppb	19:22:18
3	Mo 202.031†	7809.9	7689.4	501.25 ug/L	501.25 ppb	19:22:43
3	Ni 231.604†	21232.6	20889.1	495.34 ug/L	495.34 ppb	19:22:23
3	P 214.914†	4414.3	4137.5	2383.8 ug/L	2383.8 ppb	19:22:43
3	Pb 220.353†	4202.5	4201.0	492.60 ug/L	492.60 ppb	19:22:43
3	S 181.975 Axial†	743.0	691.9	1010.8 ug/L	1010.8 ppb	19:22:43
3	Sb 206.836†	1597.5	1547.3	509.61 ug/L	509.61 ppb	19:22:43
3	Se 196.026†	830.7	843.4	521.17 ug/L	521.17 ppb	19:22:43
3	Si 251.611†	83279.2	81698.8	2486.9 ug/L	2486.9 ppb	19:22:23
3	Sn 189.927†	3002.3	2959.3	501.25 ug/L	501.25 ppb	19:22:43
3	Ti 334.940†	313525.7	310453.6	501.98 ug/L	501.98 ppb	19:22:23
3	Tl 190.801†	1706.7	1721.6	496.63 ug/L	496.63 ppb	19:22:43
3	U 409.014†	16028.1	17783.9	495.25 ug/L	495.25 ppb	19:22:23
3	V 292.402†	72331.9	72697.0	497.44 ug/L	497.44 ppb	19:22:23
3	Zn 213.857†	56783.5	55245.0	492.61 ug/L	492.61 ppb	19:22:23
3	SiO2†	81806.6	80264.4	5230.0 ug/L	5230.0 ppb	19:22:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	893898.3	101.01	%	0.515				0.51%
Sc Radial	5586.2	98.6	%	0.43				0.44%
Y 371.029	738109.7	99.466	%	0.4004				0.40%
Y RADIAL	6047.6	98.20	%	0.295				0.30%
Ag 328.068†	108937.3	506.73	ug/L	0.713	506.73	ppb	0.713	0.14%
QC value within limits for Ag 328.068 Recovery = 101.35%								
Al 396.153Radial†	6648.9	4893.7	ug/L	38.15	4893.7	ppb	38.15	0.78%
QC value within limits for Al 396.153Radial Recovery = 97.87%								
As 188.979†	1204.5	495.83	ug/L	2.704	495.83	ppb	2.704	0.55%
QC value within limits for As 188.979 Recovery = 99.17%								
B 249.677†	22515.7	486.80	ug/L	2.681	486.80	ppb	2.681	0.55%
QC value within limits for B 249.677 Recovery = 97.36%								
Ba 233.527†	64840.8	493.76	ug/L	0.756	493.76	ppb	0.756	0.15%
QC value within limits for Ba 233.527 Recovery = 98.75%								
Be 313.107†	1314667.1	489.50	ug/L	1.103	489.50	ppb	1.103	0.23%
QC value within limits for Be 313.107 Recovery = 97.90%								
Ca 317.933Radial†	3312.7	5065.6	ug/L	26.97	5065.6	ppb	26.97	0.53%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.31%
Cd 226.502†            45706.3      495.66 ug/L        0.454      495.66 ppb          0.454   0.09%
   QC value within limits for Cd 226.502  Recovery = 99.13%
Co 228.616†            25503.5      495.21 ug/L        1.105      495.21 ppb          1.105   0.22%
   QC value within limits for Co 228.616  Recovery = 99.04%
Cr 267.716†            45637.7      492.52 ug/L        0.841      492.52 ppb          0.841   0.17%
   QC value within limits for Cr 267.716  Recovery = 98.50%
Cu 324.752†           167976.1      488.79 ug/L        1.854      488.79 ppb          1.854   0.38%
   QC value within limits for Cu 324.752  Recovery = 97.76%
Fe 238.204 Radial†       510.6      5157.2 ug/L       57.63      5157.2 ppb          57.63   1.12%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.14%
K 766.490 Radial†      27550.8      4991.5 ug/L       31.46      4991.5 ppb          31.46   0.63%
   QC value within limits for K 766.490 Radial  Recovery = 99.83%
Mg 279.077 IEC†          140.8      5247.3 ug/L       55.46      5247.3 ppb          55.46   1.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.95%
Mn 257.610†           451179.0      490.73 ug/L        0.585      490.73 ppb          0.585   0.12%
   QC value within limits for Mn 257.610  Recovery = 98.15%
Mo 202.031†             7692.8      501.47 ug/L        2.762      501.47 ppb          2.762   0.55%
   QC value within limits for Mo 202.031  Recovery = 100.29%
Na 589.592 Radial†     26994.4       10146 ug/L         67.8       10146 ppb           67.8   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 101.46%
Ni 231.604†            20869.7      494.88 ug/L        0.420      494.88 ppb          0.420   0.08%
   QC value within limits for Ni 231.604  Recovery = 98.98%
P 214.914†              4141.2      2386.3 ug/L       17.65      2386.3 ppb          17.65   0.74%
   QC value within limits for P 214.914  Recovery = 95.45%
Pb 220.353†             4200.2      492.52 ug/L        3.572      492.52 ppb          3.572   0.73%
   QC value within limits for Pb 220.353  Recovery = 98.50%
S 181.975 Axial†         689.5      1007.3 ug/L       16.07      1007.3 ppb          16.07   1.60%
   QC value within limits for S 181.975 Axial  Recovery = 100.73%
Sb 206.836†             1544.7      508.80 ug/L        3.655      508.80 ppb          3.655   0.72%
   QC value within limits for Sb 206.836  Recovery = 101.76%
Se 196.026†              837.7      517.58 ug/L        5.509      517.58 ppb          5.509   1.06%
   QC value within limits for Se 196.026  Recovery = 103.52%
Si 251.611†            81416.2      2478.2 ug/L        8.00      2478.2 ppb           8.00   0.32%
   QC value within limits for Si 251.611  Recovery = 99.13%
Sn 189.927†             2960.0      501.36 ug/L        2.512      501.36 ppb          2.512   0.50%
   QC value within limits for Sn 189.927  Recovery = 100.27%
Sr 421.552†            76286.2      514.93 ug/L        3.201      514.93 ppb          3.201   0.62%
   QC value within limits for Sr 421.552  Recovery = 102.99%
Ti 334.940†           309880.9      501.05 ug/L        0.971      501.05 ppb          0.971   0.19%
   QC value within limits for Ti 334.940  Recovery = 100.21%
Tl 190.801†             1722.5      496.88 ug/L        4.333      496.88 ppb          4.333   0.87%
   QC value within limits for Tl 190.801  Recovery = 99.38%
U 409.014†             17690.4      492.65 ug/L        3.184      492.65 ppb          3.184   0.65%
   QC value within limits for U 409.014  Recovery = 98.53%
V 292.402†             72572.2      496.61 ug/L        1.012      496.61 ppb          1.012   0.20%
   QC value within limits for V 292.402  Recovery = 99.32%
Zn 213.857†            55114.2      491.44 ug/L        1.077      491.44 ppb          1.077   0.22%
   QC value within limits for Zn 213.857  Recovery = 98.29%
SiO2†                  80856.8      5268.8 ug/L       46.35      5268.8 ppb          46.35   0.88%
   QC value within limits for SiO2  Recovery = 98.53%
All analyte(s) passed QC.
```

Sequence No.: 53
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 19:25:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5641.8	5641.8	99.6	%			19:27:00
1	Y RADIAL	6146.6	6146.6	99.80	%			19:27:00
1	Al 396.153Radial†	-31.4	-11.2	-8.3136	ug/L	-8.3136	ppb	19:27:00
1	Ca 317.933Radial†	24.8	7.2	10.951	ug/L	10.951	ppb	19:27:20
1	Fe 238.204 Radial†	7.6	1.6	15.999	ug/L	15.999	ppb	19:27:20
1	K 766.490 Radial†	2251.1	89.3	16.206	ug/L	16.206	ppb	19:27:00
1	Mg 279.077 IEC†	3.3	1.6	59.143	ug/L	59.143	ppb	19:27:20
1	Na 589.592 Radial†	-586.0	27.7	10.417	ug/L	10.417	ppb	19:27:00
1	Sr 421.552†	15.8	12.5	0.0842	ug/L	0.0842	ppb	19:27:00
1	Sc 361.383	886271.2	886271.2	100.15	%			19:28:17
1	Y 371.029	744404.2	744404.2	100.31	%			19:28:17
1	Ag 328.068†	300.3	72.3	0.3378	ug/L	0.3378	ppb	19:28:17
1	As 188.979†	-19.8	9.5	3.8708	ug/L	3.8708	ppb	19:28:37
1	B 249.677†	-356.9	167.5	3.6344	ug/L	3.6344	ppb	19:28:37
1	Ba 233.527†	-12.4	-0.4	-0.0024	ug/L	-0.0024	ppb	19:28:37
1	Be 313.107†	-5236.1	91.8	0.0340	ug/L	0.0340	ppb	19:28:17
1	Cd 226.502†	-167.7	20.4	0.2201	ug/L	0.2201	ppb	19:28:37
1	Co 228.616†	-81.9	-10.1	-0.1953	ug/L	-0.1953	ppb	19:28:37
1	Cr 267.716†	87.6	0.5	0.0054	ug/L	0.0054	ppb	19:28:37
1	Cu 324.752†	6804.2	25.6	0.0754	ug/L	0.0754	ppb	19:28:17
1	Mn 257.610†	536.6	132.4	0.1444	ug/L	0.1444	ppb	19:28:37
1	Mo 202.031†	22.9	2.9	0.1902	ug/L	0.1902	ppb	19:28:37
1	Ni 231.604†	77.1	6.9	0.1627	ug/L	0.1627	ppb	19:28:37
1	P 214.914†	223.1	2.8	1.6323	ug/L	1.6323	ppb	19:28:37
1	Pb 220.353†	-52.9	-0.3	-0.0321	ug/L	-0.0321	ppb	19:28:37
1	S 181.975 Axial†	39.2	-2.4	-3.4574	ug/L	-3.4574	ppb	19:28:37
1	Sb 206.836†	34.8	5.1	1.6397	ug/L	1.6397	ppb	19:28:37
1	Se 196.026†	-24.2	-0.7	-0.3672	ug/L	-0.3672	ppb	19:28:37
1	Si 251.611†	493.5	-15.2	-0.4686	ug/L	-0.4686	ppb	19:28:37
1	Sn 189.927†	-6.0	-10.3	-1.7344	ug/L	-1.7344	ppb	19:28:37
1	Ti 334.940†	-990.8	-24.3	-0.0393	ug/L	-0.0393	ppb	19:28:17
1	Tl 190.801†	-30.6	6.3	1.8066	ug/L	1.8066	ppb	19:28:37
1	U 409.014†	-1918.2	46.8	1.3051	ug/L	1.3051	ppb	19:28:17
1	V 292.402†	-1309.1	-10.7	-0.0679	ug/L	-0.0679	ppb	19:28:17
1	Zn 213.857†	693.9	-114.4	-1.0341	ug/L	-1.0341	ppb	19:28:37
1	SiO2†	470.8	-18.7	-1.2307	ug/L	-1.2307	ppb	19:29:33
2	Sc Radial	5759.5	5759.5	102	%			19:27:25
2	Y RADIAL	6231.6	6231.6	101.2	%			19:27:25
2	Al 396.153Radial†	-17.3	3.3	2.4089	ug/L	2.4089	ppb	19:27:25
2	Ca 317.933Radial†	22.9	4.9	7.4285	ug/L	7.4285	ppb	19:27:46
2	Fe 238.204 Radial†	8.0	1.9	18.650	ug/L	18.650	ppb	19:27:46
2	K 766.490 Radial†	2279.1	70.8	12.831	ug/L	12.831	ppb	19:27:25
2	Mg 279.077 IEC†	1.9	0.1	5.1277	ug/L	5.1277	ppb	19:27:46
2	Na 589.592 Radial†	-553.0	72.2	27.138	ug/L	27.138	ppb	19:27:25
2	Sr 421.552†	-21.9	-24.9	-0.1683	ug/L	-0.1683	ppb	19:27:25
2	Sc 361.383	887722.3	887722.3	100.31	%			19:28:43
2	Y 371.029	745789.6	745789.6	100.50	%			19:28:43
2	Ag 328.068†	217.8	-10.4	-0.0415	ug/L	-0.0415	ppb	19:28:43
2	As 188.979†	-21.8	7.5	3.0641	ug/L	3.0641	ppb	19:29:03
2	B 249.677†	-355.5	169.4	3.6752	ug/L	3.6752	ppb	19:29:03
2	Ba 233.527†	-15.2	-3.2	-0.0230	ug/L	-0.0230	ppb	19:29:03
2	Be 313.107†	-5253.7	82.8	0.0306	ug/L	0.0306	ppb	19:28:43
2	Cd 226.502†	-184.3	4.1	0.0430	ug/L	0.0430	ppb	19:29:03
2	Co 228.616†	-66.8	5.1	0.1006	ug/L	0.1006	ppb	19:29:03
2	Cr 267.716†	73.7	-13.5	-0.1444	ug/L	-0.1444	ppb	19:29:03
2	Cu 324.752†	6898.2	108.2	0.3156	ug/L	0.3156	ppb	19:28:43
2	Mn 257.610†	531.8	126.8	0.1395	ug/L	0.1395	ppb	19:29:03
2	Mo 202.031†	27.2	7.1	0.4649	ug/L	0.4649	ppb	19:29:03
2	Ni 231.604†	77.0	6.6	0.1572	ug/L	0.1572	ppb	19:29:03

2	P 214.914†	215.1	-5.5	-3.3489	ug/L	-3.3489 ppb	19:29:03
2	Pb 220.353†	-68.4	-15.6	-1.8255	ug/L	-1.8255 ppb	19:29:03
2	S 181.975 Axial†	48.6	7.0	10.204	ug/L	10.204 ppb	19:29:03
2	Sb 206.836†	37.7	8.0	2.6346	ug/L	2.6346 ppb	19:29:03
2	Se 196.026†	-20.7	2.8	1.7145	ug/L	1.7145 ppb	19:29:03
2	Si 251.611†	493.3	-16.3	-0.5128	ug/L	-0.5128 ppb	19:29:03
2	Sn 189.927†	9.6	5.3	0.8974	ug/L	0.8974 ppb	19:29:03
2	Ti 334.940†	-1014.6	-46.4	-0.0745	ug/L	-0.0745 ppb	19:28:43
2	Tl 190.801†	-31.9	5.0	1.4437	ug/L	1.4437 ppb	19:29:03
2	U 409.014†	-1974.4	-6.1	-0.1726	ug/L	-0.1726 ppb	19:28:43
2	V 292.402†	-1276.0	24.4	0.1688	ug/L	0.1688 ppb	19:28:43
2	Zn 213.857†	696.2	-113.2	-1.0219	ug/L	-1.0219 ppb	19:29:03
2	SiO2†	510.8	20.4	1.3006	ug/L	1.3006 ppb	19:29:38
3	Sc Radial	5815.1	5815.1	103	%		19:27:51
3	Y RADIAL	6309.9	6309.9	102.5	%		19:27:51
3	Al 396.153Radial†	-11.4	9.2	6.8077	ug/L	6.8077 ppb	19:27:51
3	Ca 317.933Radial†	23.0	4.7	7.1202	ug/L	7.1202 ppb	19:28:11
3	Fe 238.204 Radial†	8.3	2.1	21.103	ug/L	21.103 ppb	19:28:11
3	K 766.490 Radial†	2474.1	239.2	43.407	ug/L	43.407 ppb	19:27:51
3	Mg 279.077 IEC†	0.3	-1.5	-56.106	ug/L	-56.106 ppb	19:28:11
3	Na 589.592 Radial†	-559.8	70.8	26.618	ug/L	26.618 ppb	19:27:51
3	Sr 421.552†	-16.1	-19.1	-0.1290	ug/L	-0.1290 ppb	19:27:51
3	Sc 361.383	901355.2	901355.2	101.85	%		19:29:08
3	Y 371.029	755841.4	755841.4	101.86	%		19:29:08
3	Ag 328.068†	265.1	32.7	0.1543	ug/L	0.1543 ppb	19:29:08
3	As 188.979†	-32.7	-2.9	-1.1827	ug/L	-1.1827 ppb	19:29:28
3	B 249.677†	-368.6	162.0	3.5131	ug/L	3.5131 ppb	19:29:28
3	Ba 233.527†	3.9	15.9	0.1209	ug/L	0.1209 ppb	19:29:28
3	Be 313.107†	-5305.1	111.6	0.0416	ug/L	0.0416 ppb	19:29:08
3	Cd 226.502†	-203.2	-11.6	-0.1278	ug/L	-0.1278 ppb	19:29:28
3	Co 228.616†	-70.1	2.9	0.0571	ug/L	0.0571 ppb	19:29:28
3	Cr 267.716†	55.8	-32.2	-0.3479	ug/L	-0.3479 ppb	19:29:28
3	Cu 324.752†	6920.5	26.1	0.0769	ug/L	0.0769 ppb	19:29:08
3	Mn 257.610†	499.9	87.4	0.0981	ug/L	0.0981 ppb	19:29:28
3	Mo 202.031†	23.1	2.7	0.1757	ug/L	0.1757 ppb	19:29:28
3	Ni 231.604†	104.3	32.3	0.7655	ug/L	0.7655 ppb	19:29:28
3	P 214.914†	212.1	-11.7	-6.9825	ug/L	-6.9825 ppb	19:29:28
3	Pb 220.353†	-59.1	-5.4	-0.6352	ug/L	-0.6352 ppb	19:29:28
3	S 181.975 Axial†	43.8	1.5	2.2133	ug/L	2.2133 ppb	19:29:28
3	Sb 206.836†	41.0	10.6	3.4548	ug/L	3.4548 ppb	19:29:28
3	Se 196.026†	-29.4	-5.4	-3.1518	ug/L	-3.1518 ppb	19:29:28
3	Si 251.611†	498.6	-18.4	-0.5810	ug/L	-0.5810 ppb	19:29:28
3	Sn 189.927†	3.3	-1.1	-0.1779	ug/L	-0.1779 ppb	19:29:28
3	Ti 334.940†	-933.0	49.0	0.0783	ug/L	0.0783 ppb	19:29:08
3	Tl 190.801†	-41.2	-3.6	-1.0289	ug/L	-1.0289 ppb	19:29:28
3	U 409.014†	-1883.1	113.3	3.1640	ug/L	3.1640 ppb	19:29:08
3	V 292.402†	-1343.2	-22.3	-0.1461	ug/L	-0.1461 ppb	19:29:08
3	Zn 213.857†	694.3	-125.6	-1.1349	ug/L	-1.1349 ppb	19:29:28
3	SiO2†	506.2	8.1	0.4954	ug/L	0.4954 ppb	19:29:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891782.9	100.77	%	0.940				0.93%
Sc Radial	5738.8	101	%	1.6				1.54%
Y 371.029	748678.4	100.89	%	0.841				0.83%
Y RADIAL	6229.4	101.1	%	1.33				1.31%
Ag 328.068†	31.5	0.1502	ug/L	0.18970	0.1502	ppb	0.18970	126.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.3010	ug/L	7.77795	0.3010	ppb	7.77795	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.7	1.9174	ug/L	2.71489	1.9174	ppb	2.71489	141.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	166.3	3.6076	ug/L	0.08432	3.6076	ppb	0.08432	2.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.1	0.0318	ug/L	0.07782	0.0318	ppb	0.07782	244.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	95.4	0.0354	ug/L	0.00563	0.0354	ppb	0.00563	15.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.6	8.4999	ug/L	2.12837	8.4999	ppb	2.12837	25.04%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.3      0.0451 ug/L       0.17396      0.0451 ppb        0.17396 385.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -0.7     -0.0125 ug/L       0.15978     -0.0125 ppb        0.15978 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -15.0     -0.1623 ug/L       0.17734     -0.1623 ppb        0.17734 109.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                53.3      0.1560 ug/L       0.13826      0.1560 ppb        0.13826  88.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      18.584 ug/L        2.5526      18.584 ppb         2.5526  13.74%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         133.1      24.148 ug/L       16.7640      24.148 ppb        16.7640  69.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.1      2.7213 ug/L      57.66209      2.7213 ppb       57.66209 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               115.5      0.1273 ug/L       0.02543      0.1273 ppb        0.02543  19.97%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.2      0.2769 ug/L       0.16295      0.2769 ppb        0.16295  58.84%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         56.9      21.391 ug/L        9.5072      21.391 ppb         9.5072  44.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.2      0.3618 ug/L       0.34959      0.3618 ppb        0.34959  96.63%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.8     -2.8997 ug/L       4.32492     -2.8997 ppb        4.32492 149.15%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.1     -0.8309 ug/L       0.91255     -0.8309 ppb        0.91255 109.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.0      2.9866 ug/L       6.86342      2.9866 ppb        6.86342 229.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.9      2.5764 ug/L       0.90893      2.5764 ppb        0.90893  35.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.1     -0.6015 ug/L       2.44164     -0.6015 ppb        2.44164 405.93%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -16.6     -0.5208 ug/L       0.05663     -0.5208 ppb        0.05663  10.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.0     -0.3383 ug/L       1.32319     -0.3383 ppb        1.32319 391.10%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.5     -0.0710 ug/L       0.13584     -0.0710 ppb        0.13584 191.25%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -7.3     -0.0119 ug/L       0.08001     -0.0119 ppb        0.08001 674.70%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.6      0.7405 ug/L       1.54306      0.7405 ppb        1.54306 208.39%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 51.3      1.4322 ug/L       1.67195      1.4322 ppb        1.67195 116.74%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.8     -0.0151 ug/L       0.16394     -0.0151 ppb        0.16394 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -117.7     -1.0636 ug/L       0.06201     -1.0636 ppb        0.06201   5.83%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       3.3      0.1884 ug/L       1.29328      0.1884 ppb        1.29328 686.37%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 61
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 20:21:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5751.0	5751.0	102	%			20:23:20
1	Y RADIAL	6179.7	6179.7	100.3	%			20:23:20
1	Al 396.153Radial†	6766.9	6684.1	4919.5	ug/L	4919.5	ppb	20:23:20
1	Ca 317.933Radial†	3270.3	3202.7	4897.5	ug/L	4897.5	ppb	20:23:40
1	Fe 238.204 Radial†	514.5	500.6	5056.4	ug/L	5056.4	ppb	20:23:40
1	K 766.490 Radial†	30347.2	27714.3	5021.1	ug/L	5021.1	ppb	20:23:20
1	Mg 279.077 IEC†	140.7	136.8	5101.4	ug/L	5101.4	ppb	20:23:40
1	Na 589.592 Radial†	27055.9	27259.5	10246	ug/L	10246	ppb	20:23:20
1	Sr 421.552†	77921.7	76730.6	517.93	ug/L	517.93	ppb	20:23:20
1	Sc 361.383	885496.8	885496.8	100.06	%			20:24:38
1	Y 371.029	729699.6	729699.6	98.333	%			20:24:38
1	Ag 328.068†	108846.1	108554.0	504.93	ug/L	504.93	ppb	20:24:43
1	As 188.979†	1191.9	1220.5	502.32	ug/L	502.32	ppb	20:25:03
1	B 249.677†	21907.5	22418.3	484.70	ug/L	484.70	ppb	20:24:43
1	Ba 233.527†	64934.4	64908.0	494.26	ug/L	494.26	ppb	20:24:43
1	Be 313.107†	1323753.5	1328289.7	494.56	ug/L	494.56	ppb	20:24:38
1	Cd 226.502†	45672.5	45833.3	497.05	ug/L	497.05	ppb	20:24:43
1	Co 228.616†	25434.9	25491.6	495.00	ug/L	495.00	ppb	20:24:43
1	Cr 267.716†	45758.7	45644.6	492.60	ug/L	492.60	ppb	20:24:43
1	Cu 324.752†	173843.2	166971.6	485.86	ug/L	485.86	ppb	20:24:43
1	Mn 257.610†	457805.1	457130.6	497.19	ug/L	497.19	ppb	20:24:38
1	Mo 202.031†	7810.0	7785.4	507.49	ug/L	507.49	ppb	20:25:03
1	Ni 231.604†	21014.8	20932.2	496.37	ug/L	496.37	ppb	20:24:43
1	P 214.914†	4415.7	4193.1	2417.8	ug/L	2417.8	ppb	20:25:03
1	Pb 220.353†	4204.9	4255.0	498.95	ug/L	498.95	ppb	20:25:03
1	S 181.975 Axial†	734.0	692.1	1011.0	ug/L	1011.0	ppb	20:25:03
1	Sb 206.836†	1584.0	1553.5	511.95	ug/L	511.95	ppb	20:25:03
1	Se 196.026†	828.2	851.2	525.34	ug/L	525.34	ppb	20:25:03
1	Si 251.611†	81857.8	81301.3	2474.6	ug/L	2474.6	ppb	20:24:43
1	Sn 189.927†	3026.6	3020.6	511.59	ug/L	511.59	ppb	20:25:03
1	Ti 334.940†	308078.7	308861.3	499.40	ug/L	499.40	ppb	20:24:43
1	Tl 190.801†	1690.5	1726.3	498.01	ug/L	498.01	ppb	20:25:03
1	U 409.014†	15567.7	17520.7	487.92	ug/L	487.92	ppb	20:24:43
1	V 292.402†	71141.9	72396.3	495.51	ug/L	495.51	ppb	20:24:43
1	Zn 213.857†	56065.2	55224.7	492.45	ug/L	492.45	ppb	20:24:43
1	SiO2†	82696.9	82159.1	5353.7	ug/L	5353.7	ppb	20:26:10
2	Sc Radial	5601.7	5601.7	98.9	%			20:23:45
2	Y RADIAL	6022.6	6022.6	97.79	%			20:23:45
2	Al 396.153Radial†	6576.3	6669.0	4908.4	ug/L	4908.4	ppb	20:23:45
2	Ca 317.933Radial†	3279.7	3298.1	5043.4	ug/L	5043.4	ppb	20:24:05
2	Fe 238.204 Radial†	512.1	511.7	5168.6	ug/L	5168.6	ppb	20:24:05
2	K 766.490 Radial†	29664.6	27820.9	5040.4	ug/L	5040.4	ppb	20:23:45
2	Mg 279.077 IEC†	140.4	140.2	5224.8	ug/L	5224.8	ppb	20:24:05
2	Na 589.592 Radial†	26362.2	27268.3	10249	ug/L	10249	ppb	20:23:45
2	Sr 421.552†	75986.6	76819.7	518.53	ug/L	518.53	ppb	20:23:45
2	Sc 361.383	883060.7	883060.7	99.784	%			20:25:09
2	Y 371.029	727196.2	727196.2	97.995	%			20:25:09
2	Ag 328.068†	109023.7	109032.1	507.17	ug/L	507.17	ppb	20:25:14
2	As 188.979†	1184.5	1216.3	500.63	ug/L	500.63	ppb	20:25:34
2	B 249.677†	21969.1	22540.6	487.34	ug/L	487.34	ppb	20:25:14
2	Ba 233.527†	64749.2	64901.4	494.22	ug/L	494.22	ppb	20:25:14
2	Be 313.107†	1320305.8	1328484.2	494.64	ug/L	494.64	ppb	20:25:09
2	Cd 226.502†	45491.5	45777.8	496.44	ug/L	496.44	ppb	20:25:14
2	Co 228.616†	25417.2	25543.9	496.01	ug/L	496.01	ppb	20:25:14
2	Cr 267.716†	45704.0	45715.9	493.36	ug/L	493.36	ppb	20:25:14
2	Cu 324.752†	174510.5	168119.7	489.21	ug/L	489.21	ppb	20:25:14
2	Mn 257.610†	456506.8	457091.7	497.15	ug/L	497.15	ppb	20:25:09
2	Mo 202.031†	7756.6	7753.3	505.41	ug/L	505.41	ppb	20:25:34
2	Ni 231.604†	20941.4	20916.7	496.00	ug/L	496.00	ppb	20:25:14

2	P 214.914†	4376.9	4166.5	2401.3 ug/L	2401.3 ppb	20:25:34
2	Pb 220.353†	4170.0	4231.6	496.20 ug/L	496.20 ppb	20:25:34
2	S 181.975 Axial†	735.6	695.7	1016.3 ug/L	1016.3 ppb	20:25:34
2	Sb 206.836†	1575.0	1548.9	510.32 ug/L	510.32 ppb	20:25:34
2	Se 196.026†	807.9	833.1	514.91 ug/L	514.91 ppb	20:25:34
2	Si 251.611†	81740.4	81409.3	2477.9 ug/L	2477.9 ppb	20:25:14
2	Sn 189.927†	2997.0	2999.2	507.99 ug/L	507.99 ppb	20:25:34
2	Ti 334.940†	308054.3	309686.2	500.74 ug/L	500.74 ppb	20:25:14
2	Tl 190.801†	1686.7	1727.2	498.27 ug/L	498.27 ppb	20:25:34
2	U 409.014†	15823.1	17819.5	496.25 ug/L	496.25 ppb	20:25:14
2	V 292.402†	71041.0	72491.3	496.12 ug/L	496.12 ppb	20:25:14
2	Zn 213.857†	55900.7	55214.4	492.34 ug/L	492.34 ppb	20:25:14
2	SiO2†	83275.5	82967.0	5406.7 ug/L	5406.7 ppb	20:26:15
3	Sc Radial	5586.3	5586.3	98.6 %		20:24:10
3	Y RADIAL	6023.6	6023.6	97.81 %		20:24:10
3	Al 396.153Radial†	6606.3	6717.8	4944.5 ug/L	4944.5 ppb	20:24:10
3	Ca 317.933Radial†	3290.6	3318.3	5074.2 ug/L	5074.2 ppb	20:24:31
3	Fe 238.204 Radial†	512.4	513.5	5186.0 ug/L	5186.0 ppb	20:24:31
3	K 766.490 Radial†	29736.4	27976.3	5068.7 ug/L	5068.7 ppb	20:24:10
3	Mg 279.077 IEC†	139.6	139.8	5210.0 ug/L	5210.0 ppb	20:24:31
3	Na 589.592 Radial†	26134.9	27111.4	10190 ug/L	10190 ppb	20:24:10
3	Sr 421.552†	75703.2	76744.2	518.02 ug/L	518.02 ppb	20:24:10
3	Sc 361.383	887529.7	887529.7	100.29 %		20:25:40
3	Y 371.029	732100.4	732100.4	98.656 %		20:25:40
3	Ag 328.068†	110722.0	110175.4	512.48 ug/L	512.48 ppb	20:25:45
3	As 188.979†	1196.1	1221.9	502.99 ug/L	502.99 ppb	20:26:05
3	B 249.677†	22495.1	22954.2	496.30 ug/L	496.30 ppb	20:25:45
3	Ba 233.527†	65745.8	65568.4	499.30 ug/L	499.30 ppb	20:25:45
3	Be 313.107†	1325523.4	1327024.3	494.11 ug/L	494.11 ppb	20:25:40
3	Cd 226.502†	46221.6	46276.2	501.85 ug/L	501.85 ppb	20:25:45
3	Co 228.616†	25819.4	25816.8	501.29 ug/L	501.29 ppb	20:25:45
3	Cr 267.716†	46322.8	46102.4	497.54 ug/L	497.54 ppb	20:25:45
3	Cu 324.752†	177746.1	170465.3	496.03 ug/L	496.03 ppb	20:25:45
3	Mn 257.610†	456668.7	454949.5	494.83 ug/L	494.83 ppb	20:25:40
3	Mo 202.031†	7790.2	7747.8	505.05 ug/L	505.05 ppb	20:26:05
3	Ni 231.604†	21220.8	21089.5	500.10 ug/L	500.10 ppb	20:25:45
3	P 214.914†	4397.7	4165.1	2399.4 ug/L	2399.4 ppb	20:26:05
3	Pb 220.353†	4209.8	4250.2	498.37 ug/L	498.37 ppb	20:26:05
3	S 181.975 Axial†	728.7	685.2	1000.9 ug/L	1000.9 ppb	20:26:05
3	Sb 206.836†	1596.6	1562.4	514.55 ug/L	514.55 ppb	20:26:05
3	Se 196.026†	809.9	831.0	513.72 ug/L	513.72 ppb	20:26:05
3	Si 251.611†	83228.2	82480.4	2510.7 ug/L	2510.7 ppb	20:25:45
3	Sn 189.927†	2999.8	2986.9	505.91 ug/L	505.91 ppb	20:26:05
3	Ti 334.940†	313230.3	313292.8	506.57 ug/L	506.57 ppb	20:25:45
3	Tl 190.801†	1692.4	1724.4	497.47 ug/L	497.47 ppb	20:26:05
3	U 409.014†	16027.6	17943.6	499.71 ug/L	499.71 ppb	20:25:45
3	V 292.402†	72349.2	73437.3	502.50 ug/L	502.50 ppb	20:25:45
3	Zn 213.857†	56827.2	55856.2	498.08 ug/L	498.08 ppb	20:25:45
3	SiO2†	83136.6	82408.2	5370.1 ug/L	5370.1 ppb	20:26:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	885362.4	100.04	%	0.253				0.25%
Sc Radial	5646.3	99.7	%	1.61				1.61%
Y 371.029	729665.4	98.328	%	0.3305				0.34%
Y RADIAL	6075.3	98.65	%	1.468				1.49%
Ag 328.068†	109253.8	508.19	ug/L	3.879	508.19	ppb	3.879	0.76%
QC value within limits for Ag 328.068 Recovery = 101.64%								
Al 396.153Radial†	6690.3	4924.1	ug/L	18.49	4924.1	ppb	18.49	0.38%
QC value within limits for Al 396.153Radial Recovery = 98.48%								
As 188.979†	1219.5	501.98	ug/L	1.213	501.98	ppb	1.213	0.24%
QC value within limits for As 188.979 Recovery = 100.40%								
B 249.677†	22637.7	489.45	ug/L	6.080	489.45	ppb	6.080	1.24%
QC value within limits for B 249.677 Recovery = 97.89%								
Ba 233.527†	65125.9	495.93	ug/L	2.921	495.93	ppb	2.921	0.59%
QC value within limits for Ba 233.527 Recovery = 99.19%								
Be 313.107†	1327932.8	494.44	ug/L	0.287	494.44	ppb	0.287	0.06%
QC value within limits for Be 313.107 Recovery = 98.89%								
Ca 317.933Radial†	3273.0	5005.0	ug/L	94.40	5005.0	ppb	94.40	1.89%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.10%
Cd 226.502†            45962.5      498.44 ug/L         2.961      498.44 ppb          2.961   0.59%
   QC value within limits for Cd 226.502  Recovery = 99.69%
Co 228.616†            25617.4      497.43 ug/L         3.378      497.43 ppb          3.378   0.68%
   QC value within limits for Co 228.616  Recovery = 99.49%
Cr 267.716†            45821.0      494.50 ug/L         2.660      494.50 ppb          2.660   0.54%
   QC value within limits for Cr 267.716  Recovery = 98.90%
Cu 324.752†           168518.9      490.36 ug/L         5.182      490.36 ppb          5.182   1.06%
   QC value within limits for Cu 324.752  Recovery = 98.07%
Fe 238.204 Radial†       508.6      5137.0 ug/L        70.32      5137.0 ppb         70.32   1.37%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27837.2      5043.4 ug/L        23.93      5043.4 ppb         23.93   0.47%
   QC value within limits for K 766.490 Radial  Recovery = 100.87%
Mg 279.077 IEC†          138.9      5178.7 ug/L        67.40      5178.7 ppb         67.40   1.30%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.57%
Mn 257.610†           456390.6      496.39 ug/L         1.353      496.39 ppb          1.353   0.27%
   QC value within limits for Mn 257.610  Recovery = 99.28%
Mo 202.031†             7762.2      505.99 ug/L         1.318      505.99 ppb          1.318   0.26%
   QC value within limits for Mo 202.031  Recovery = 101.20%
Na 589.592 Radial†     27213.1       10229 ug/L          33.1       10229 ppb           33.1   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 102.29%
Ni 231.604†            20979.5      497.49 ug/L         2.267      497.49 ppb          2.267   0.46%
   QC value within limits for Ni 231.604  Recovery = 99.50%
P 214.914†              4174.9      2406.2 ug/L        10.14      2406.2 ppb         10.14   0.42%
   QC value within limits for P 214.914  Recovery = 96.25%
Pb 220.353†             4245.6      497.84 ug/L         1.450      497.84 ppb          1.450   0.29%
   QC value within limits for Pb 220.353  Recovery = 99.57%
S 181.975 Axial†         691.0      1009.4 ug/L         7.84      1009.4 ppb           7.84   0.78%
   QC value within limits for S 181.975 Axial  Recovery = 100.94%
Sb 206.836†             1554.9      512.27 ug/L         2.136      512.27 ppb          2.136   0.42%
   QC value within limits for Sb 206.836  Recovery = 102.45%
Se 196.026†              838.4      517.99 ug/L         6.394      517.99 ppb          6.394   1.23%
   QC value within limits for Se 196.026  Recovery = 103.60%
Si 251.611†            81730.3      2487.7 ug/L        19.95      2487.7 ppb         19.95   0.80%
   QC value within limits for Si 251.611  Recovery = 99.51%
Sn 189.927†             3002.2      508.49 ug/L         2.872      508.49 ppb          2.872   0.56%
   QC value within limits for Sn 189.927  Recovery = 101.70%
Sr 421.552†            76764.8      518.16 ug/L         0.323      518.16 ppb          0.323   0.06%
   QC value within limits for Sr 421.552  Recovery = 103.63%
Ti 334.940†           310613.4      502.23 ug/L         3.812      502.23 ppb          3.812   0.76%
   QC value within limits for Ti 334.940  Recovery = 100.45%
Tl 190.801†             1726.0      497.91 ug/L         0.409      497.91 ppb          0.409   0.08%
   QC value within limits for Tl 190.801  Recovery = 99.58%
U 409.014†             17761.3      494.63 ug/L         6.061      494.63 ppb          6.061   1.23%
   QC value within limits for U 409.014  Recovery = 98.93%
V 292.402†             72775.0      498.05 ug/L         3.870      498.05 ppb          3.870   0.78%
   QC value within limits for V 292.402  Recovery = 99.61%
Zn 213.857†            55431.8      494.29 ug/L         3.282      494.29 ppb          3.282   0.66%
   QC value within limits for Zn 213.857  Recovery = 98.86%
SiO2†                  82511.4      5376.8 ug/L        27.13      5376.8 ppb         27.13   0.50%
   QC value within limits for SiO2  Recovery = 100.55%
All analyte(s) passed QC.
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Sequence No.: 62
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 20:28:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5725.6	5725.6	101	%			20:30:22
1	Y RADIAL	6263.4	6263.4	101.7	%			20:30:22
1	Al 396.153Radial†	-7.4	13.0	9.6152	ug/L	9.6152	ppb	20:30:22
1	Ca 317.933Radial†	21.6	3.7	5.6475	ug/L	5.6475	ppb	20:30:42
1	Fe 238.204 Radial†	5.8	-0.3	-3.0203	ug/L	-3.0203	ppb	20:30:42
1	K 766.490 Radial†	2439.8	243.0	44.094	ug/L	44.094	ppb	20:30:22
1	Mg 279.077 IEC†	2.7	0.9	33.942	ug/L	33.942	ppb	20:30:42
1	Na 589.592 Radial†	-588.5	33.8	12.711	ug/L	12.711	ppb	20:30:22
1	Sr 421.552†	10.7	7.1	0.0480	ug/L	0.0480	ppb	20:30:22
1	Sc 361.383	878490.1	878490.1	99.268	%			20:31:39
1	Y 371.029	736008.6	736008.6	99.183	%			20:31:39
1	Ag 328.068†	274.6	49.1	0.2241	ug/L	0.2241	ppb	20:31:39
1	As 188.979†	-20.0	9.0	3.6724	ug/L	3.6724	ppb	20:31:59
1	B 249.677†	-261.8	260.1	5.6474	ug/L	5.6474	ppb	20:31:59
1	Ba 233.527†	-8.0	4.0	0.0295	ug/L	0.0295	ppb	20:31:59
1	Be 313.107†	-5265.2	16.2	0.0060	ug/L	0.0060	ppb	20:31:39
1	Cd 226.502†	-177.3	9.2	0.1002	ug/L	0.1002	ppb	20:31:59
1	Co 228.616†	-72.5	-1.2	-0.0231	ug/L	-0.0231	ppb	20:31:59
1	Cr 267.716†	66.6	-19.8	-0.2145	ug/L	-0.2145	ppb	20:31:59
1	Cu 324.752†	6766.2	47.5	0.1380	ug/L	0.1380	ppb	20:31:39
1	Mn 257.610†	589.9	190.9	0.2065	ug/L	0.2065	ppb	20:31:59
1	Mo 202.031†	23.6	3.8	0.2482	ug/L	0.2482	ppb	20:31:59
1	Ni 231.604†	59.8	-9.9	-0.2350	ug/L	-0.2350	ppb	20:31:59
1	P 214.914†	220.4	2.0	1.2012	ug/L	1.2012	ppb	20:31:59
1	Pb 220.353†	-48.1	4.1	0.4785	ug/L	0.4785	ppb	20:31:59
1	S 181.975 Axial†	42.4	1.2	1.8003	ug/L	1.8003	ppb	20:31:59
1	Sb 206.836†	32.5	3.2	1.0407	ug/L	1.0407	ppb	20:31:59
1	Se 196.026†	-19.1	4.2	2.4986	ug/L	2.4986	ppb	20:31:59
1	Si 251.611†	525.8	21.6	0.6421	ug/L	0.6421	ppb	20:31:59
1	Sn 189.927†	4.8	0.6	0.0948	ug/L	0.0948	ppb	20:31:59
1	Ti 334.940†	-970.5	-12.6	-0.0206	ug/L	-0.0206	ppb	20:31:39
1	Tl 190.801†	-26.0	10.7	3.0633	ug/L	3.0633	ppb	20:31:59
1	U 409.014†	-1899.9	48.3	1.3500	ug/L	1.3500	ppb	20:31:39
1	V 292.402†	-1310.0	-23.2	-0.1493	ug/L	-0.1493	ppb	20:31:39
1	Zn 213.857†	681.0	-121.2	-1.0904	ug/L	-1.0904	ppb	20:31:59
1	SiO2†	550.9	66.1	4.2873	ug/L	4.2873	ppb	20:32:55
2	Sc Radial	5703.0	5703.0	101	%			20:30:47
2	Y RADIAL	6180.9	6180.9	100.4	%			20:30:47
2	Al 396.153Radial†	-8.6	11.8	8.7023	ug/L	8.7023	ppb	20:30:47
2	Ca 317.933Radial†	22.0	4.2	6.3568	ug/L	6.3568	ppb	20:31:08
2	Fe 238.204 Radial†	7.2	1.1	11.534	ug/L	11.534	ppb	20:31:08
2	K 766.490 Radial†	2354.6	167.9	30.468	ug/L	30.468	ppb	20:30:47
2	Mg 279.077 IEC†	1.9	0.1	4.2837	ug/L	4.2837	ppb	20:31:08
2	Na 589.592 Radial†	-576.6	43.4	16.303	ug/L	16.303	ppb	20:30:47
2	Sr 421.552†	26.3	22.7	0.1533	ug/L	0.1533	ppb	20:30:47
2	Sc 361.383	879375.8	879375.8	99.368	%			20:32:05
2	Y 371.029	737736.9	737736.9	99.416	%			20:32:05
2	Ag 328.068†	315.1	89.5	0.4219	ug/L	0.4219	ppb	20:32:05
2	As 188.979†	-19.7	9.4	3.8311	ug/L	3.8311	ppb	20:32:25
2	B 249.677†	-256.3	266.0	5.7724	ug/L	5.7724	ppb	20:32:25
2	Ba 233.527†	2.9	14.9	0.1142	ug/L	0.1142	ppb	20:32:25
2	Be 313.107†	-5205.5	81.7	0.0302	ug/L	0.0302	ppb	20:32:05
2	Cd 226.502†	-167.1	19.6	0.2123	ug/L	0.2123	ppb	20:32:25
2	Co 228.616†	-85.0	-13.8	-0.2670	ug/L	-0.2670	ppb	20:32:25
2	Cr 267.716†	82.9	-3.5	-0.0360	ug/L	-0.0360	ppb	20:32:25
2	Cu 324.752†	6891.1	166.3	0.4843	ug/L	0.4843	ppb	20:32:05
2	Mn 257.610†	567.1	167.3	0.1828	ug/L	0.1828	ppb	20:32:25
2	Mo 202.031†	23.6	3.7	0.2431	ug/L	0.2431	ppb	20:32:25
2	Ni 231.604†	96.9	27.4	0.6491	ug/L	0.6491	ppb	20:32:25

2	P 214.914†	228.1	9.6	5.6003 ug/L	5.6003 ppb	20:32:25
2	Pb 220.353†	-54.6	-2.4	-0.2839 ug/L	-0.2839 ppb	20:32:25
2	S 181.975 Axial†	43.5	2.3	3.3359 ug/L	3.3359 ppb	20:32:25
2	Sb 206.836†	27.6	-1.8	-0.5681 ug/L	-0.5681 ppb	20:32:25
2	Se 196.026†	-23.5	-0.2	-0.0620 ug/L	-0.0620 ppb	20:32:25
2	Si 251.611†	536.6	32.0	0.9639 ug/L	0.9639 ppb	20:32:25
2	Sn 189.927†	7.9	3.6	0.6149 ug/L	0.6149 ppb	20:32:25
2	Ti 334.940†	-1000.9	-42.3	-0.0661 ug/L	-0.0661 ppb	20:32:05
2	Tl 190.801†	-25.8	10.9	3.1200 ug/L	3.1200 ppb	20:32:25
2	U 409.014†	-2106.1	-157.3	-4.3955 ug/L	-4.3955 ppb	20:32:05
2	V 292.402†	-1263.0	25.4	0.1648 ug/L	0.1648 ppb	20:32:05
2	Zn 213.857†	690.4	-112.4	-1.0175 ug/L	-1.0175 ppb	20:32:25
2	SiO2†	526.4	40.9	2.6450 ug/L	2.6450 ppb	20:33:00
3	Sc Radial	5826.1	5826.1	103 %		20:31:13
3	Y RADIAL	6369.9	6369.9	103.4 %		20:31:13
3	Al 396.153Radial†	-17.1	3.7	2.7378 ug/L	2.7378 ppb	20:31:13
3	Ca 317.933Radial†	17.0	-1.2	-1.8516 ug/L	-1.8516 ppb	20:31:33
3	Fe 238.204 Radial†	6.9	0.7	6.8301 ug/L	6.8301 ppb	20:31:33
3	K 766.490 Radial†	2450.8	212.1	38.488 ug/L	38.488 ppb	20:31:13
3	Mg 279.077 IEC†	-1.1	-2.8	-103.80 ug/L	-103.80 ppb	20:31:33
3	Na 589.592 Radial†	-615.0	18.2	6.8340 ug/L	6.8340 ppb	20:31:13
3	Sr 421.552†	-3.6	-6.9	-0.0466 ug/L	-0.0466 ppb	20:31:13
3	Sc 361.383	879002.4	879002.4	99.325 %		20:32:30
3	Y 371.029	737638.1	737638.1	99.403 %		20:32:30
3	Ag 328.068†	273.4	47.7	0.2220 ug/L	0.2220 ppb	20:32:30
3	As 188.979†	-19.7	9.4	3.8239 ug/L	3.8239 ppb	20:32:50
3	B 249.677†	-272.8	249.2	5.4084 ug/L	5.4084 ppb	20:32:50
3	Ba 233.527†	-9.8	2.1	0.0159 ug/L	0.0159 ppb	20:32:50
3	Be 313.107†	-5173.7	111.4	0.0414 ug/L	0.0414 ppb	20:32:30
3	Cd 226.502†	-171.6	15.0	0.1625 ug/L	0.1625 ppb	20:32:50
3	Co 228.616†	-61.0	10.4	0.2022 ug/L	0.2022 ppb	20:32:50
3	Cr 267.716†	56.8	-29.8	-0.3208 ug/L	-0.3208 ppb	20:32:50
3	Cu 324.752†	6781.5	58.9	0.1715 ug/L	0.1715 ppb	20:32:30
3	Mn 257.610†	528.2	128.3	0.1421 ug/L	0.1421 ppb	20:32:50
3	Mo 202.031†	24.7	4.9	0.3197 ug/L	0.3197 ppb	20:32:50
3	Ni 231.604†	81.9	12.4	0.2932 ug/L	0.2932 ppb	20:32:50
3	P 214.914†	217.8	-0.7	-0.4186 ug/L	-0.4186 ppb	20:32:50
3	Pb 220.353†	-54.7	-2.5	-0.2900 ug/L	-0.2900 ppb	20:32:50
3	S 181.975 Axial†	43.4	2.3	3.3256 ug/L	3.3256 ppb	20:32:50
3	Sb 206.836†	35.6	6.2	2.0420 ug/L	2.0420 ppb	20:32:50
3	Se 196.026†	-21.3	2.0	1.2388 ug/L	1.2388 ppb	20:32:50
3	Si 251.611†	518.2	13.7	0.4004 ug/L	0.4004 ppb	20:32:50
3	Sn 189.927†	4.6	0.4	0.0671 ug/L	0.0671 ppb	20:32:50
3	Ti 334.940†	-950.1	8.4	0.0137 ug/L	0.0137 ppb	20:32:30
3	Tl 190.801†	-34.7	2.0	0.5600 ug/L	0.5600 ppb	20:32:50
3	U 409.014†	-1955.8	-6.9	-0.1934 ug/L	-0.1934 ppb	20:32:30
3	V 292.402†	-1324.2	-36.7	-0.2469 ug/L	-0.2469 ppb	20:32:30
3	Zn 213.857†	706.8	-95.6	-0.8596 ug/L	-0.8596 ppb	20:32:50
3	SiO2†	569.3	84.3	5.4823 ug/L	5.4823 ppb	20:33:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878956.1	99.320	%	0.0502				0.05%
Sc Radial	5751.6	102	%	1.2				1.14%
Y 371.029	737127.9	99.334	%	0.1308				0.13%
Y RADIAL	6271.4	101.8	%	1.54				1.51%
Ag 328.068†	62.1	0.2893	ug/L	0.11478	0.2893	ppb	0.11478	39.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.5	7.0184	ug/L	3.73514	7.0184	ppb	3.73514	53.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	9.3	3.7758	ug/L	0.08962	3.7758	ppb	0.08962	2.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	258.4	5.6094	ug/L	0.18495	5.6094	ppb	0.18495	3.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0532	ug/L	0.05328	0.0532	ppb	0.05328	100.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	69.7	0.0259	ug/L	0.01812	0.0259	ppb	0.01812	70.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.2	3.3842	ug/L	4.54817	3.3842	ppb	4.54817	134.39%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.6      0.1583 ug/L       0.05619      0.1583 ppb        0.05619  35.49%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.6     -0.0293 ug/L       0.23469     -0.0293 ppb        0.23469 800.49%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.7     -0.1905 ug/L       0.14394     -0.1905 ppb        0.14394  75.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                90.9      0.2646 ug/L       0.19096      0.2646 ppb        0.19096  72.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      5.1147 ug/L       7.42731      5.1147 ppb        7.42731 145.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         207.7      37.683 ug/L        6.8484      37.683 ppb         6.8484  18.17%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.6     -21.857 ug/L       72.4939     -21.857 ppb        72.4939 331.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               162.1      0.1771 ug/L       0.03258      0.1771 ppb        0.03258  18.39%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.1      0.2703 ug/L       0.04282      0.2703 ppb        0.04282  15.84%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        31.8      11.949 ug/L        4.7802      11.949 ppb         4.7802  40.00%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9      0.2358 ug/L       0.44484      0.2358 ppb        0.44484 188.66%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 3.6      2.1277 ug/L       3.11455      2.1277 ppb        3.11455 146.38%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -0.3     -0.0318 ug/L       0.44197     -0.0318 ppb        0.44197 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           1.9      2.8206 ug/L       0.88363      2.8206 ppb        0.88363  31.33%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.5      0.8382 ug/L       1.31678      0.8382 ppb        1.31678 157.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.0      1.2252 ug/L       1.28036      1.2252 ppb        1.28036 104.50%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               22.5      0.6688 ug/L       0.28270      0.6688 ppb        0.28270  42.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.5      0.2589 ug/L       0.30857      0.2589 ppb        0.30857 119.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                7.6      0.0516 ug/L       0.10001      0.0516 ppb        0.10001 193.96%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.5     -0.0243 ug/L       0.04004     -0.0243 ppb        0.04004 164.56%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                7.8      2.2478 ug/L       1.46195      2.2478 ppb        1.46195  65.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -38.6     -1.0797 ug/L       2.97351     -1.0797 ppb        2.97351 275.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -11.5     -0.0771 ug/L       0.21511     -0.0771 ppb        0.21511 278.94%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -109.8     -0.9892 ug/L       0.11798     -0.9892 ppb        0.11798  11.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      63.8      4.1382 ug/L       1.42452      4.1382 ppb        1.42452  34.42%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 69
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 21:16:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5647.9	5647.9	99.7	%			21:18:18
1	Y RADIAL	6106.6	6106.6	99.15	%			21:18:18
1	Al 396.153Radial†	6639.3	6677.7	4914.9	ug/L	4914.9	ppb	21:18:18
1	Ca 317.933Radial†	3268.0	3259.2	4983.9	ug/L	4983.9	ppb	21:18:38
1	Fe 238.204 Radial†	512.2	507.6	5126.6	ug/L	5126.6	ppb	21:18:38
1	K 766.490 Radial†	29935.2	27846.6	5045.1	ug/L	5045.1	ppb	21:18:18
1	Mg 279.077 IEC†	140.4	139.0	5183.7	ug/L	5183.7	ppb	21:18:38
1	Na 589.592 Radial†	26686.3	27375.1	10290	ug/L	10290	ppb	21:18:18
1	Sr 421.552†	77041.2	77248.0	521.42	ug/L	521.42	ppb	21:18:18
1	Sc 361.383	892884.8	892884.8	100.89	%			21:19:36
1	Y 371.029	737462.7	737462.7	99.379	%			21:19:36
1	Ag 328.068†	110521.4	109314.5	508.47	ug/L	508.47	ppb	21:19:41
1	As 188.979†	1200.1	1218.7	501.64	ug/L	501.64	ppb	21:20:01
1	B 249.677†	22393.0	22718.4	491.20	ug/L	491.20	ppb	21:19:41
1	Ba 233.527†	65783.7	65212.8	496.59	ug/L	496.59	ppb	21:19:41
1	Be 313.107†	1327756.6	1321310.7	491.98	ug/L	491.98	ppb	21:19:36
1	Cd 226.502†	46332.8	46110.1	500.05	ug/L	500.05	ppb	21:19:41
1	Co 228.616†	25734.1	25577.8	496.66	ug/L	496.66	ppb	21:19:41
1	Cr 267.716†	46429.2	45930.8	495.69	ug/L	495.69	ppb	21:19:41
1	Cu 324.752†	176754.6	168419.6	490.08	ug/L	490.08	ppb	21:19:41
1	Mn 257.610†	457659.5	453200.4	492.92	ug/L	492.92	ppb	21:19:36
1	Mo 202.031†	7828.1	7738.7	504.46	ug/L	504.46	ppb	21:20:01
1	Ni 231.604†	21282.7	21024.0	498.54	ug/L	498.54	ppb	21:19:41
1	P 214.914†	4417.9	4158.8	2396.6	ug/L	2396.6	ppb	21:20:01
1	Pb 220.353†	4199.6	4214.9	494.26	ug/L	494.26	ppb	21:20:01
1	S 181.975 Axial†	729.6	681.7	995.75	ug/L	995.75	ppb	21:20:01
1	Sb 206.836†	1596.8	1553.0	511.54	ug/L	511.54	ppb	21:20:01
1	Se 196.026†	813.9	830.1	512.98	ug/L	512.98	ppb	21:20:01
1	Si 251.611†	82976.9	81733.5	2487.8	ug/L	2487.8	ppb	21:19:41
1	Sn 189.927†	3013.9	2982.9	505.23	ug/L	505.23	ppb	21:20:01
1	Ti 334.940†	312347.0	310544.1	502.12	ug/L	502.12	ppb	21:19:41
1	Tl 190.801†	1708.3	1730.1	499.07	ug/L	499.07	ppb	21:20:01
1	U 409.014†	15797.6	17619.8	490.67	ug/L	490.67	ppb	21:19:41
1	V 292.402†	72238.3	72894.6	498.82	ug/L	498.82	ppb	21:19:41
1	Zn 213.857†	56724.9	55415.0	494.13	ug/L	494.13	ppb	21:19:41
1	SiO2†	82859.0	81635.9	5319.6	ug/L	5319.6	ppb	21:21:08
2	Sc Radial	5655.2	5655.2	99.9	%			21:18:43
2	Y RADIAL	6145.3	6145.3	99.78	%			21:18:43
2	Al 396.153Radial†	6648.2	6678.1	4915.2	ug/L	4915.2	ppb	21:18:43
2	Ca 317.933Radial†	3263.7	3250.7	4970.9	ug/L	4970.9	ppb	21:19:03
2	Fe 238.204 Radial†	508.5	503.2	5082.2	ug/L	5082.2	ppb	21:19:03
2	K 766.490 Radial†	29991.6	27864.6	5048.4	ug/L	5048.4	ppb	21:18:43
2	Mg 279.077 IEC†	140.0	138.4	5159.6	ug/L	5159.6	ppb	21:19:03
2	Na 589.592 Radial†	26553.6	27207.9	10227	ug/L	10227	ppb	21:18:43
2	Sr 421.552†	76919.7	77027.4	519.93	ug/L	519.93	ppb	21:18:43
2	Sc 361.383	888615.2	888615.2	100.41	%			21:20:07
2	Y 371.029	732497.7	732497.7	98.710	%			21:20:07
2	Ag 328.068†	108993.3	108318.9	503.84	ug/L	503.84	ppb	21:20:12
2	As 188.979†	1189.7	1214.0	499.69	ug/L	499.69	ppb	21:20:32
2	B 249.677†	22048.8	22482.2	486.09	ug/L	486.09	ppb	21:20:12
2	Ba 233.527†	64854.6	64600.8	491.93	ug/L	491.93	ppb	21:20:12
2	Be 313.107†	1322089.7	1321990.1	492.22	ug/L	492.22	ppb	21:20:07
2	Cd 226.502†	45643.7	45644.4	495.00	ug/L	495.00	ppb	21:20:12
2	Co 228.616†	25431.7	25399.2	493.20	ug/L	493.20	ppb	21:20:12
2	Cr 267.716†	45729.8	45455.3	490.55	ug/L	490.55	ppb	21:20:12
2	Cu 324.752†	174407.3	166923.6	485.72	ug/L	485.72	ppb	21:20:12
2	Mn 257.610†	456128.9	453855.6	493.63	ug/L	493.63	ppb	21:20:07
2	Mo 202.031†	7785.4	7733.5	504.12	ug/L	504.12	ppb	21:20:32
2	Ni 231.604†	20970.5	20814.4	493.57	ug/L	493.57	ppb	21:20:12

2	P 214.914†	4407.1	4169.1	2403.5	ug/L	2403.5	ppb	21:20:32
2	Pb 220.353†	4177.7	4213.2	494.05	ug/L	494.05	ppb	21:20:32
2	S 181.975 Axial†	727.1	682.6	997.18	ug/L	997.18	ppb	21:20:32
2	Sb 206.836†	1594.9	1558.8	513.53	ug/L	513.53	ppb	21:20:32
2	Se 196.026†	820.0	840.1	518.81	ug/L	518.81	ppb	21:20:32
2	Si 251.611†	81858.5	81014.9	2465.9	ug/L	2465.9	ppb	21:20:12
2	Sn 189.927†	2998.7	2982.1	505.10	ug/L	505.10	ppb	21:20:32
2	Ti 334.940†	308241.4	307942.8	497.92	ug/L	497.92	ppb	21:20:12
2	Tl 190.801†	1688.9	1718.8	495.84	ug/L	495.84	ppb	21:20:32
2	U 409.014†	15723.1	17620.9	490.72	ug/L	490.72	ppb	21:20:12
2	V 292.402†	71196.8	72201.4	494.15	ug/L	494.15	ppb	21:20:12
2	Zn 213.857†	56011.9	54975.0	490.21	ug/L	490.21	ppb	21:20:12
2	SiO2†	81560.6	80737.4	5260.8	ug/L	5260.8	ppb	21:21:13
3	Sc Radial	5552.2	5552.2	98.0	%			21:19:08
3	Y RADIAL	6003.1	6003.1	97.47	%			21:19:08
3	Al 396.153Radial†	6533.9	6685.1	4920.6	ug/L	4920.6	ppb	21:19:08
3	Ca 317.933Radial†	3289.2	3337.4	5103.4	ug/L	5103.4	ppb	21:19:28
3	Fe 238.204 Radial†	511.4	515.6	5207.4	ug/L	5207.4	ppb	21:19:28
3	K 766.490 Radial†	29533.8	27954.9	5064.8	ug/L	5064.8	ppb	21:19:08
3	Mg 279.077 IEC†	141.6	142.6	5317.6	ug/L	5317.6	ppb	21:19:28
3	Na 589.592 Radial†	26091.8	27230.2	10235	ug/L	10235	ppb	21:19:08
3	Sr 421.552†	75439.3	76946.3	519.39	ug/L	519.39	ppb	21:19:08
3	Sc 361.383	893642.1	893642.1	100.98	%			21:20:38
3	Y 371.029	737015.0	737015.0	99.319	%			21:20:38
3	Ag 328.068†	109763.3	108470.8	504.59	ug/L	504.59	ppb	21:20:43
3	As 188.979†	1177.2	1195.0	491.96	ug/L	491.96	ppb	21:21:03
3	B 249.677†	22213.3	22521.7	486.93	ug/L	486.93	ppb	21:20:43
3	Ba 233.527†	65320.5	64698.8	492.68	ug/L	492.68	ppb	21:20:43
3	Be 313.107†	1327808.5	1320247.0	491.57	ug/L	491.57	ppb	21:20:38
3	Cd 226.502†	45987.1	45728.8	495.90	ug/L	495.90	ppb	21:20:43
3	Co 228.616†	25601.1	25424.5	493.68	ug/L	493.68	ppb	21:20:43
3	Cr 267.716†	46002.9	45469.7	490.71	ug/L	490.71	ppb	21:20:43
3	Cu 324.752†	176061.8	167585.1	487.65	ug/L	487.65	ppb	21:20:43
3	Mn 257.610†	457555.0	452712.6	492.40	ug/L	492.40	ppb	21:20:38
3	Mo 202.031†	7750.2	7655.0	499.01	ug/L	499.01	ppb	21:21:03
3	Ni 231.604†	21111.0	20836.1	494.09	ug/L	494.09	ppb	21:20:43
3	P 214.914†	4378.0	4115.5	2371.2	ug/L	2371.2	ppb	21:21:03
3	Pb 220.353†	4191.4	4203.3	492.88	ug/L	492.88	ppb	21:21:03
3	S 181.975 Axial†	729.4	680.8	994.56	ug/L	994.56	ppb	21:21:03
3	Sb 206.836†	1589.7	1544.7	508.81	ug/L	508.81	ppb	21:21:03
3	Se 196.026†	810.5	826.1	510.84	ug/L	510.84	ppb	21:21:03
3	Si 251.611†	82458.9	81150.9	2470.1	ug/L	2470.1	ppb	21:20:43
3	Sn 189.927†	3003.4	2970.0	503.05	ug/L	503.05	ppb	21:21:03
3	Ti 334.940†	310938.2	308886.6	499.45	ug/L	499.45	ppb	21:20:43
3	Tl 190.801†	1689.2	1709.7	493.22	ug/L	493.22	ppb	21:21:03
3	U 409.014†	15684.2	17494.2	487.16	ug/L	487.16	ppb	21:20:43
3	V 292.402†	71787.9	72388.0	495.32	ug/L	495.32	ppb	21:20:43
3	Zn 213.857†	56359.5	55005.5	490.46	ug/L	490.46	ppb	21:20:43
3	SiO2†	82318.3	81030.8	5280.2	ug/L	5280.2	ppb	21:21:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	891714.0	100.76	%	0.306				0.30%
Sc Radial	5618.4	99.2	%	1.02				1.02%
Y 371.029	735658.5	99.136	%	0.3701				0.37%
Y RADIAL	6085.0	98.80	%	1.194				1.21%
Ag 328.068†	108701.4	505.63	ug/L	2.488	505.63	ppb	2.488	0.49%
QC value within limits for Ag 328.068 Recovery = 101.13%								
Al 396.153Radial†	6680.3	4916.9	ug/L	3.19	4916.9	ppb	3.19	0.06%
QC value within limits for Al 396.153Radial Recovery = 98.34%								
As 188.979†	1209.2	497.76	ug/L	5.120	497.76	ppb	5.120	1.03%
QC value within limits for As 188.979 Recovery = 99.55%								
B 249.677†	22574.1	488.07	ug/L	2.742	488.07	ppb	2.742	0.56%
QC value within limits for B 249.677 Recovery = 97.61%								
Ba 233.527†	64837.4	493.73	ug/L	2.502	493.73	ppb	2.502	0.51%
QC value within limits for Ba 233.527 Recovery = 98.75%								
Be 313.107†	1321182.6	491.92	ug/L	0.326	491.92	ppb	0.326	0.07%
QC value within limits for Be 313.107 Recovery = 98.38%								
Ca 317.933Radial†	3282.4	5019.4	ug/L	73.05	5019.4	ppb	73.05	1.46%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.39%
Cd 226.502†            45827.8      496.98 ug/L         2.693      496.98 ppb          2.693   0.54%
   QC value within limits for Cd 226.502  Recovery = 99.40%
Co 228.616†            25467.1      494.51 ug/L         1.875      494.51 ppb          1.875   0.38%
   QC value within limits for Co 228.616  Recovery = 98.90%
Cr 267.716†            45618.6      492.32 ug/L         2.918      492.32 ppb          2.918   0.59%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           167642.8      487.82 ug/L         2.181      487.82 ppb          2.181   0.45%
   QC value within limits for Cu 324.752  Recovery = 97.56%
Fe 238.204 Radial†       508.8      5138.7 ug/L        63.50      5138.7 ppb         63.50   1.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.77%
K 766.490 Radial†      27888.7      5052.8 ug/L        10.52      5052.8 ppb         10.52   0.21%
   QC value within limits for K 766.490 Radial  Recovery = 101.06%
Mg 279.077 IEC†          140.0      5220.3 ug/L        85.11      5220.3 ppb         85.11   1.63%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.41%
Mn 257.610†           453256.2      492.98 ug/L         0.619      492.98 ppb          0.619   0.13%
   QC value within limits for Mn 257.610  Recovery = 98.60%
Mo 202.031†             7709.1      502.53 ug/L         3.052      502.53 ppb          3.052   0.61%
   QC value within limits for Mo 202.031  Recovery = 100.51%
Na 589.592 Radial†     27271.1       10250 ug/L          34.1       10250 ppb           34.1   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 102.50%
Ni 231.604†            20891.5      495.40 ug/L         2.734      495.40 ppb          2.734   0.55%
   QC value within limits for Ni 231.604  Recovery = 99.08%
P 214.914†              4147.8      2390.4 ug/L        16.98      2390.4 ppb         16.98   0.71%
   QC value within limits for P 214.914  Recovery = 95.62%
Pb 220.353†             4210.5      493.73 ug/L         0.745      493.73 ppb          0.745   0.15%
   QC value within limits for Pb 220.353  Recovery = 98.75%
S 181.975 Axial†         681.7      995.83 ug/L         1.313      995.83 ppb          1.313   0.13%
   QC value within limits for S 181.975 Axial  Recovery = 99.58%
Sb 206.836†             1552.2      511.29 ug/L         2.371      511.29 ppb          2.371   0.46%
   QC value within limits for Sb 206.836  Recovery = 102.26%
Se 196.026†              832.1      514.21 ug/L         4.126      514.21 ppb          4.126   0.80%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†            81299.8      2474.6 ug/L        11.66      2474.6 ppb         11.66   0.47%
   QC value within limits for Si 251.611  Recovery = 98.98%
Sn 189.927†             2978.4      504.46 ug/L         1.219      504.46 ppb          1.219   0.24%
   QC value within limits for Sn 189.927  Recovery = 100.89%
Sr 421.552†            77073.9      520.25 ug/L         1.054      520.25 ppb          1.054   0.20%
   QC value within limits for Sr 421.552  Recovery = 104.05%
Ti 334.940†           309124.5      499.83 ug/L         2.128      499.83 ppb          2.128   0.43%
   QC value within limits for Ti 334.940  Recovery = 99.97%
Tl 190.801†             1719.5      496.04 ug/L         2.929      496.04 ppb          2.929   0.59%
   QC value within limits for Tl 190.801  Recovery = 99.21%
U 409.014†             17578.3      489.52 ug/L         2.039      489.52 ppb          2.039   0.42%
   QC value within limits for U 409.014  Recovery = 97.90%
V 292.402†             72494.7      496.10 ug/L         2.432      496.10 ppb          2.432   0.49%
   QC value within limits for V 292.402  Recovery = 99.22%
Zn 213.857†            55131.8      491.60 ug/L         2.192      491.60 ppb          2.192   0.45%
   QC value within limits for Zn 213.857  Recovery = 98.32%
SiO2†                  81134.7      5286.9 ug/L        29.97      5286.9 ppb         29.97   0.57%
   QC value within limits for SiO2  Recovery = 98.87%
All analyte(s) passed QC.
```

Sequence No.: 70
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 21:23:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5632.3	5632.3	99.5	%			21:25:20
1	Y RADIAL	6162.4	6162.4	100.1	%			21:25:20
1	Al 396.153Radial†	23.8	44.3	32.699	ug/L	32.699	ppb	21:25:20
1	Ca 317.933Radial†	25.2	7.7	11.755	ug/L	11.755	ppb	21:25:40
1	Fe 238.204 Radial†	6.1	0.1	1.2351	ug/L	1.2351	ppb	21:25:40
1	K 766.490 Radial†	2337.0	179.6	32.588	ug/L	32.588	ppb	21:25:20
1	Mg 279.077 IEC†	3.0	1.2	46.542	ug/L	46.542	ppb	21:25:40
1	Na 589.592 Radial†	-603.7	9.0	3.3749	ug/L	3.3749	ppb	21:25:20
1	Sr 421.552†	13.1	9.8	0.0658	ug/L	0.0658	ppb	21:25:20
1	Sc 361.383	912717.9	912717.9	103.14	%			21:26:37
1	Y 371.029	764283.2	764283.2	102.99	%			21:26:37
1	Ag 328.068†	376.3	137.3	0.6491	ug/L	0.6491	ppb	21:26:42
1	As 188.979†	-22.9	7.0	2.8424	ug/L	2.8424	ppb	21:27:02
1	B 249.677†	-250.4	281.1	6.1023	ug/L	6.1023	ppb	21:27:02
1	Ba 233.527†	-26.0	-13.2	-0.0983	ug/L	-0.0983	ppb	21:27:02
1	Be 313.107†	-5285.0	195.9	0.0729	ug/L	0.0729	ppb	21:26:42
1	Cd 226.502†	-183.5	9.9	0.1080	ug/L	0.1080	ppb	21:27:02
1	Co 228.616†	-81.8	-7.5	-0.1455	ug/L	-0.1455	ppb	21:27:02
1	Cr 267.716†	83.6	-5.9	-0.0578	ug/L	-0.0578	ppb	21:27:02
1	Cu 324.752†	6850.0	-126.9	-0.3691	ug/L	-0.3691	ppb	21:26:42
1	Mn 257.610†	478.8	60.8	0.0653	ug/L	0.0653	ppb	21:27:02
1	Mo 202.031†	27.5	6.7	0.4359	ug/L	0.4359	ppb	21:27:02
1	Ni 231.604†	93.4	20.5	0.4861	ug/L	0.4861	ppb	21:27:02
1	P 214.914†	218.4	-8.2	-4.8388	ug/L	-4.8388	ppb	21:27:02
1	Pb 220.353†	-61.1	-6.7	-0.7788	ug/L	-0.7788	ppb	21:27:02
1	S 181.975 Axial†	44.5	1.6	2.3837	ug/L	2.3837	ppb	21:27:02
1	Sb 206.836†	34.5	3.8	1.2488	ug/L	1.2488	ppb	21:27:02
1	Se 196.026†	-26.5	-2.3	-1.3392	ug/L	-1.3392	ppb	21:27:02
1	Si 251.611†	500.1	-23.1	-0.7233	ug/L	-0.7233	ppb	21:27:02
1	Sn 189.927†	0.1	-4.2	-0.7061	ug/L	-0.7061	ppb	21:27:02
1	Ti 334.940†	-965.1	29.3	0.0538	ug/L	0.0538	ppb	21:26:42
1	Tl 190.801†	-30.3	7.5	2.1439	ug/L	2.1439	ppb	21:27:02
1	U 409.014†	-2508.5	-470.1	-13.133	ug/L	-13.133	ppb	21:26:42
1	V 292.402†	-1221.5	112.1	0.7386	ug/L	0.7386	ppb	21:26:42
1	Zn 213.857†	688.2	-140.0	-1.2640	ug/L	-1.2640	ppb	21:27:02
1	SiO2†	509.5	5.2	0.3055	ug/L	0.3055	ppb	21:28:08
2	Sc Radial	5785.9	5785.9	102	%			21:25:45
2	Y RADIAL	6290.8	6290.8	102.1	%			21:25:45
2	Al 396.153Radial†	-25.5	-4.6	-3.3946	ug/L	-3.3946	ppb	21:25:45
2	Ca 317.933Radial†	28.7	10.4	15.927	ug/L	15.927	ppb	21:26:05
2	Fe 238.204 Radial†	7.1	0.9	9.5092	ug/L	9.5092	ppb	21:26:05
2	K 766.490 Radial†	2168.3	-47.9	-8.7037	ug/L	-8.7037	ppb	21:25:45
2	Mg 279.077 IEC†	0.3	-1.4	-53.056	ug/L	-53.056	ppb	21:26:05
2	Na 589.592 Radial†	-610.4	18.5	6.9518	ug/L	6.9518	ppb	21:25:45
2	Sr 421.552†	0.8	-2.7	-0.0182	ug/L	-0.0182	ppb	21:25:45
2	Sc 361.383	922354.0	922354.0	104.22	%			21:27:07
2	Y 371.029	771287.1	771287.1	103.94	%			21:27:07
2	Ag 328.068†	383.0	139.9	0.6569	ug/L	0.6569	ppb	21:27:12
2	As 188.979†	-18.3	11.7	4.7654	ug/L	4.7654	ppb	21:27:32
2	B 249.677†	-275.3	259.7	5.6371	ug/L	5.6371	ppb	21:27:32
2	Ba 233.527†	-19.3	-6.5	-0.0479	ug/L	-0.0479	ppb	21:27:32
2	Be 313.107†	-5292.1	242.7	0.0900	ug/L	0.0900	ppb	21:27:12
2	Cd 226.502†	-174.6	20.3	0.2196	ug/L	0.2196	ppb	21:27:32
2	Co 228.616†	-77.5	-2.6	-0.0501	ug/L	-0.0501	ppb	21:27:32
2	Cr 267.716†	70.8	-19.0	-0.2017	ug/L	-0.2017	ppb	21:27:32
2	Cu 324.752†	6830.1	-215.3	-0.6258	ug/L	-0.6258	ppb	21:27:12
2	Mn 257.610†	505.5	81.6	0.0906	ug/L	0.0906	ppb	21:27:32
2	Mo 202.031†	18.1	-2.6	-0.1694	ug/L	-0.1694	ppb	21:27:32
2	Ni 231.604†	90.9	17.1	0.4064	ug/L	0.4064	ppb	21:27:32

2	P 214.914†	229.1	-0.1	0.0208	ug/L	0.0208 ppb	21:27:32
2	Pb 220.353†	-56.6	-1.8	-0.2087	ug/L	-0.2087 ppb	21:27:32
2	S 181.975 Axial†	49.3	5.9	8.5871	ug/L	8.5871 ppb	21:27:32
2	Sb 206.836†	42.7	11.4	3.7073	ug/L	3.7073 ppb	21:27:32
2	Se 196.026†	-25.8	-1.3	-0.7387	ug/L	-0.7387 ppb	21:27:32
2	Si 251.611†	481.1	-46.4	-1.4169	ug/L	-1.4169 ppb	21:27:32
2	Sn 189.927†	11.9	7.2	1.2160	ug/L	1.2160 ppb	21:27:32
2	Ti 334.940†	-1060.6	-52.6	-0.0812	ug/L	-0.0812 ppb	21:27:12
2	Tl 190.801†	-40.9	-2.3	-0.6727	ug/L	-0.6727 ppb	21:27:32
2	U 409.014†	-2294.7	-239.5	-6.6931	ug/L	-6.6931 ppb	21:27:12
2	V 292.402†	-1289.5	59.2	0.3817	ug/L	0.3817 ppb	21:27:12
2	Zn 213.857†	680.5	-154.4	-1.3900	ug/L	-1.3900 ppb	21:27:32
2	SiO2†	497.9	-11.1	-0.7230	ug/L	-0.7230 ppb	21:28:13
3	Sc Radial	5772.2	5772.2	102	%		21:26:10
3	Y RADIAL	6294.5	6294.5	102.2	%		21:26:10
3	Al 396.153Radial†	-26.3	-5.4	-4.0242	ug/L	-4.0242 ppb	21:26:10
3	Ca 317.933Radial†	27.4	9.2	14.072	ug/L	14.072 ppb	21:26:30
3	Fe 238.204 Radial†	5.3	-0.8	-7.8442	ug/L	-7.8442 ppb	21:26:30
3	K 766.490 Radial†	2311.4	97.6	17.699	ug/L	17.699 ppb	21:26:10
3	Mg 279.077 IEC†	1.7	-0.1	-4.8429	ug/L	-4.8429 ppb	21:26:30
3	Na 589.592 Radial†	-588.3	38.8	14.572	ug/L	14.572 ppb	21:26:10
3	Sr 421.552†	9.6	6.0	0.0407	ug/L	0.0407 ppb	21:26:10
3	Sc 361.383	911407.4	911407.4	102.99	%		21:27:37
3	Y 371.029	764115.5	764115.5	102.97	%		21:27:37
3	Ag 328.068†	431.3	191.2	0.8919	ug/L	0.8919 ppb	21:27:42
3	As 188.979†	-21.9	7.9	3.2293	ug/L	3.2293 ppb	21:28:02
3	B 249.677†	-258.8	272.6	5.9169	ug/L	5.9169 ppb	21:28:02
3	Ba 233.527†	-9.2	3.1	0.0249	ug/L	0.0249 ppb	21:28:02
3	Be 313.107†	-5189.4	281.4	0.1047	ug/L	0.1047 ppb	21:27:42
3	Cd 226.502†	-179.6	13.5	0.1472	ug/L	0.1472 ppb	21:28:02
3	Co 228.616†	-61.1	12.4	0.2422	ug/L	0.2422 ppb	21:28:02
3	Cr 267.716†	60.5	-28.3	-0.3005	ug/L	-0.3005 ppb	21:28:02
3	Cu 324.752†	6866.0	-101.8	-0.2966	ug/L	-0.2966 ppb	21:27:42
3	Mn 257.610†	496.7	78.9	0.0850	ug/L	0.0850 ppb	21:28:02
3	Mo 202.031†	26.0	5.2	0.3409	ug/L	0.3409 ppb	21:28:02
3	Ni 231.604†	82.2	9.7	0.2297	ug/L	0.2297 ppb	21:28:02
3	P 214.914†	220.8	-5.6	-3.2365	ug/L	-3.2365 ppb	21:28:02
3	Pb 220.353†	-54.9	-0.7	-0.0867	ug/L	-0.0867 ppb	21:28:02
3	S 181.975 Axial†	40.3	-2.4	-3.4510	ug/L	-3.4510 ppb	21:28:02
3	Sb 206.836†	27.2	-3.2	-1.0180	ug/L	-1.0180 ppb	21:28:02
3	Se 196.026†	-25.2	-1.0	-0.6295	ug/L	-0.6295 ppb	21:28:02
3	Si 251.611†	481.2	-40.8	-1.2630	ug/L	-1.2630 ppb	21:28:02
3	Sn 189.927†	10.5	6.0	1.0107	ug/L	1.0107 ppb	21:28:02
3	Ti 334.940†	-955.3	37.5	0.0655	ug/L	0.0655 ppb	21:27:42
3	Tl 190.801†	-36.0	1.9	0.5533	ug/L	0.5533 ppb	21:28:02
3	U 409.014†	-2359.7	-329.1	-9.1938	ug/L	-9.1938 ppb	21:27:42
3	V 292.402†	-1223.6	108.4	0.7200	ug/L	0.7200 ppb	21:27:42
3	Zn 213.857†	687.3	-139.9	-1.2587	ug/L	-1.2587 ppb	21:28:02
3	SiO2†	475.1	-27.5	-1.8346	ug/L	-1.8346 ppb	21:28:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915493.1	103.45	%	0.675				0.65%
Sc Radial	5730.1	101	%	1.5				1.48%
Y 371.029	766561.9	103.30	%	0.552				0.53%
Y RADIAL	6249.3	101.5	%	1.22				1.20%
Ag 328.068†	156.1	0.7326	ug/L	0.13797	0.7326	ppb	0.13797	18.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.4	8.4268	ug/L	21.02283	8.4268	ppb	21.02283	249.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.9	3.6124	ug/L	1.01713	3.6124	ppb	1.01713	28.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	271.1	5.8854	ug/L	0.23416	5.8854	ppb	0.23416	3.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.5	-0.0404	ug/L	0.06194	-0.0404	ppb	0.06194	153.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	240.0	0.0892	ug/L	0.01591	0.0892	ppb	0.01591	17.84%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.1	13.918	ug/L	2.0905	13.918	ppb	2.0905	15.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.6      0.1583 ug/L       0.05664      0.1583 ppb        0.05664  35.79%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.8      0.0155 ug/L       0.20200      0.0155 ppb        0.20200 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.7     -0.1867 ug/L       0.12205     -0.1867 ppb        0.12205  65.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -148.0     -0.4305 ug/L       0.17299     -0.4305 ppb        0.17299  40.19%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.1      0.9667 ug/L       8.67983      0.9667 ppb        8.67983 897.88%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          76.4     13.861 ug/L       20.9117     13.861 ppb        20.9117 150.87%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.1     -3.7856 ug/L      49.80713     -3.7856 ppb       49.80713 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                73.8      0.0803 ug/L       0.01326      0.0803 ppb        0.01326  16.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.1      0.2025 ug/L       0.32556      0.2025 ppb        0.32556 160.80%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         22.1      8.2995 ug/L       5.71876      8.2995 ppb        5.71876  68.90%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.8      0.3741 ug/L       0.13120      0.3741 ppb        0.13120  35.07%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.7     -2.6848 ug/L       2.47630     -2.6848 ppb        2.47630  92.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.1     -0.3581 ug/L       0.36945     -0.3581 ppb        0.36945 103.18%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      2.5066 ug/L       6.01998      2.5066 ppb        6.01998 240.16%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.0      1.3127 ug/L       2.36327      1.3127 ppb        2.36327 180.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.5     -0.9025 ug/L       0.38211     -0.9025 ppb        0.38211  42.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -36.8     -1.1344 ug/L       0.36429     -1.1344 ppb        0.36429  32.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      0.5069 ug/L       1.05549      0.5069 ppb        1.05549 208.24%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 4.4      0.0294 ug/L       0.04312      0.0294 ppb        0.04312 146.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 4.7      0.0127 ug/L       0.08153      0.0127 ppb        0.08153 641.95%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.4      0.6749 ug/L       1.41224      0.6749 ppb        1.41224 209.26%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -346.2     -9.6734 ug/L       3.24676     -9.6734 ppb        3.24676  33.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 93.3      0.6134 ug/L       0.20088      0.6134 ppb        0.20088  32.75%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -144.8     -1.3042 ug/L       0.07436     -1.3042 ppb        0.07436   5.70%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -11.1     -0.7507 ug/L       1.07035     -0.7507 ppb        1.07035 142.58%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 76
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 22:04:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5696.5	5696.5	101	%			22:06:15
1	Y RADIAL	6171.7	6171.7	100.2	%			22:06:15
1	Al 396.153Radial†	6648.0	6629.6	4879.3	ug/L	4879.3	ppb	22:06:15
1	Ca 317.933Radial†	3272.8	3236.1	4948.5	ug/L	4948.5	ppb	22:06:35
1	Fe 238.204 Radial†	511.7	502.7	5077.7	ug/L	5077.7	ppb	22:06:35
1	K 766.490 Radial†	29654.1	27311.2	4948.0	ug/L	4948.0	ppb	22:06:15
1	Mg 279.077 IEC†	141.2	138.6	5168.6	ug/L	5168.6	ppb	22:06:35
1	Na 589.592 Radial†	26727.4	27187.8	10219	ug/L	10219	ppb	22:06:15
1	Sr 421.552†	76489.3	76040.6	513.27	ug/L	513.27	ppb	22:06:15
1	Sc 361.383	888838.6	888838.6	100.44	%			22:07:32
1	Y 371.029	733797.3	733797.3	98.885	%			22:07:32
1	Ag 328.068†	109392.2	108688.8	505.56	ug/L	505.56	ppb	22:07:38
1	As 188.979†	1187.7	1211.7	498.76	ug/L	498.76	ppb	22:07:58
1	B 249.677†	21986.8	22415.1	484.63	ug/L	484.63	ppb	22:07:38
1	Ba 233.527†	65136.9	64865.6	493.94	ug/L	493.94	ppb	22:07:38
1	Be 313.107†	1316927.4	1316519.4	490.19	ug/L	490.19	ppb	22:07:32
1	Cd 226.502†	45831.1	45819.6	496.90	ug/L	496.90	ppb	22:07:38
1	Co 228.616†	25517.5	25478.2	494.73	ug/L	494.73	ppb	22:07:38
1	Cr 267.716†	46043.0	45755.8	493.80	ug/L	493.80	ppb	22:07:38
1	Cu 324.752†	174577.5	167049.5	486.09	ug/L	486.09	ppb	22:07:38
1	Mn 257.610†	453104.2	450730.0	490.23	ug/L	490.23	ppb	22:07:32
1	Mo 202.031†	7789.3	7735.5	504.24	ug/L	504.24	ppb	22:07:58
1	Ni 231.604†	21052.2	20890.5	495.38	ug/L	495.38	ppb	22:07:38
1	P 214.914†	4409.0	4169.9	2403.9	ug/L	2403.9	ppb	22:07:58
1	Pb 220.353†	4203.5	4237.8	496.92	ug/L	496.92	ppb	22:07:58
1	S 181.975 Axial†	727.7	683.1	997.85	ug/L	997.85	ppb	22:07:58
1	Sb 206.836†	1591.4	1554.9	512.21	ug/L	512.21	ppb	22:07:58
1	Se 196.026†	819.6	839.5	518.42	ug/L	518.42	ppb	22:07:58
1	Si 251.611†	82079.5	81214.5	2472.0	ug/L	2472.0	ppb	22:07:38
1	Sn 189.927†	3006.7	2989.3	506.31	ug/L	506.31	ppb	22:07:58
1	Ti 334.940†	309089.7	308710.3	499.16	ug/L	499.16	ppb	22:07:38
1	Tl 190.801†	1689.2	1718.7	495.80	ug/L	495.80	ppb	22:07:58
1	U 409.014†	15614.1	17508.4	487.57	ug/L	487.57	ppb	22:07:38
1	V 292.402†	71647.1	72631.9	497.05	ug/L	497.05	ppb	22:07:38
1	Zn 213.857†	56132.0	55080.6	491.15	ug/L	491.15	ppb	22:07:38
1	SiO2†	82674.3	81825.8	5332.1	ug/L	5332.1	ppb	22:09:05
2	Sc Radial	5690.0	5690.0	100	%			22:06:40
2	Y RADIAL	6139.2	6139.2	99.68	%			22:06:40
2	Al 396.153Radial†	6624.8	6614.1	4868.2	ug/L	4868.2	ppb	22:06:40
2	Ca 317.933Radial†	3270.2	3237.1	4950.1	ug/L	4950.1	ppb	22:07:00
2	Fe 238.204 Radial†	507.7	499.3	5043.3	ug/L	5043.3	ppb	22:07:00
2	K 766.490 Radial†	29803.0	27492.9	4980.9	ug/L	4980.9	ppb	22:06:40
2	Mg 279.077 IEC†	142.6	140.2	5226.7	ug/L	5226.7	ppb	22:07:00
2	Na 589.592 Radial†	26724.8	27215.3	10229	ug/L	10229	ppb	22:06:40
2	Sr 421.552†	76611.9	76249.0	514.68	ug/L	514.68	ppb	22:06:40
2	Sc 361.383	902079.3	902079.3	101.93	%			22:08:03
2	Y 371.029	743443.4	743443.4	100.18	%			22:08:03
2	Ag 328.068†	110427.2	108105.5	502.84	ug/L	502.84	ppb	22:08:09
2	As 188.979†	1185.5	1192.3	490.81	ug/L	490.81	ppb	22:08:29
2	B 249.677†	22260.2	22361.9	483.48	ug/L	483.48	ppb	22:08:09
2	Ba 233.527†	65972.1	64733.0	492.93	ug/L	492.93	ppb	22:08:09
2	Be 313.107†	1339026.1	1318953.2	491.09	ug/L	491.09	ppb	22:08:03
2	Cd 226.502†	46392.5	45700.6	495.61	ug/L	495.61	ppb	22:08:09
2	Co 228.616†	25847.3	25428.9	493.76	ug/L	493.76	ppb	22:08:09
2	Cr 267.716†	46420.7	45453.4	490.53	ug/L	490.53	ppb	22:08:09
2	Cu 324.752†	176309.6	166197.4	483.61	ug/L	483.61	ppb	22:08:09
2	Mn 257.610†	461656.5	452498.3	492.15	ug/L	492.15	ppb	22:08:03
2	Mo 202.031†	7761.5	7594.3	495.05	ug/L	495.05	ppb	22:08:29
2	Ni 231.604†	21321.0	20846.6	494.34	ug/L	494.34	ppb	22:08:09

2	P 214.914†	4391.1	4087.9	2355.5 ug/L	2355.5 ppb	22:08:29
2	Pb 220.353†	4195.5	4168.4	488.80 ug/L	488.80 ppb	22:08:29
2	S 181.975 Axial†	726.7	671.5	980.92 ug/L	980.92 ppb	22:08:29
2	Sb 206.836†	1587.3	1527.5	503.07 ug/L	503.07 ppb	22:08:29
2	Se 196.026†	817.4	825.4	509.86 ug/L	509.86 ppb	22:08:29
2	Si 251.611†	83014.8	80932.5	2463.5 ug/L	2463.5 ppb	22:08:09
2	Sn 189.927†	3001.5	2940.3	498.02 ug/L	498.02 ppb	22:08:29
2	Ti 334.940†	312721.8	307756.4	497.61 ug/L	497.61 ppb	22:08:09
2	Tl 190.801†	1689.8	1694.6	488.89 ug/L	488.89 ppb	22:08:29
2	U 409.014†	15834.1	17496.0	487.23 ug/L	487.23 ppb	22:08:09
2	V 292.402†	72213.3	72140.3	493.61 ug/L	493.61 ppb	22:08:09
2	Zn 213.857†	56869.4	54983.7	490.29 ug/L	490.29 ppb	22:08:09
2	SiO2†	83041.4	80977.8	5277.0 ug/L	5277.0 ppb	22:09:10
3	Sc Radial	5762.8	5762.8	102 %		22:07:05
3	Y RADIAL	6176.2	6176.2	100.3 %		22:07:05
3	Al 396.153Radial†	6664.3	6569.6	4835.0 ug/L	4835.0 ppb	22:07:05
3	Ca 317.933Radial†	3263.4	3189.4	4877.2 ug/L	4877.2 ppb	22:07:25
3	Fe 238.204 Radial†	509.5	494.6	4996.4 ug/L	4996.4 ppb	22:07:25
3	K 766.490 Radial†	29850.5	27165.0	4921.5 ug/L	4921.5 ppb	22:07:05
3	Mg 279.077 IEC†	138.2	134.0	4997.1 ug/L	4997.1 ppb	22:07:25
3	Na 589.592 Radial†	26773.9	26927.8	10121 ug/L	10121 ppb	22:07:05
3	Sr 421.552†	77064.5	75730.9	511.18 ug/L	511.18 ppb	22:07:05
3	Sc 361.383	893621.8	893621.8	100.98 %		22:08:34
3	Y 371.029	736950.4	736950.4	99.310 %		22:08:34
3	Ag 328.068†	109614.4	108325.9	503.85 ug/L	503.85 ppb	22:08:40
3	As 188.979†	1195.8	1213.5	499.45 ug/L	499.45 ppb	22:09:00
3	B 249.677†	22177.9	22487.1	486.20 ug/L	486.20 ppb	22:08:40
3	Ba 233.527†	65218.5	64599.3	491.91 ug/L	491.91 ppb	22:08:40
3	Be 313.107†	1331089.9	1323526.4	492.79 ug/L	492.79 ppb	22:08:34
3	Cd 226.502†	45828.3	45572.6	494.23 ug/L	494.23 ppb	22:08:40
3	Co 228.616†	25626.7	25450.4	494.19 ug/L	494.19 ppb	22:08:40
3	Cr 267.716†	46064.2	45531.4	491.37 ug/L	491.37 ppb	22:08:40
3	Cu 324.752†	175601.1	167132.8	486.33 ug/L	486.33 ppb	22:08:40
3	Mn 257.610†	459496.6	454645.7	494.48 ug/L	494.48 ppb	22:08:34
3	Mo 202.031†	7800.9	7705.4	502.28 ug/L	502.28 ppb	22:09:00
3	Ni 231.604†	21061.0	20787.0	492.92 ug/L	492.92 ppb	22:08:40
3	P 214.914†	4392.8	4130.4	2380.4 ug/L	2380.4 ppb	22:09:00
3	Pb 220.353†	4194.1	4206.0	493.20 ug/L	493.20 ppb	22:09:00
3	S 181.975 Axial†	728.8	680.3	993.76 ug/L	993.76 ppb	22:09:00
3	Sb 206.836†	1588.3	1543.3	508.48 ug/L	508.48 ppb	22:09:00
3	Se 196.026†	819.9	835.4	515.73 ug/L	515.73 ppb	22:09:00
3	Si 251.611†	82370.1	81064.8	2467.5 ug/L	2467.5 ppb	22:08:40
3	Sn 189.927†	3023.3	2989.8	506.38 ug/L	506.38 ppb	22:09:00
3	Ti 334.940†	309877.7	307843.4	497.75 ug/L	497.75 ppb	22:08:40
3	Tl 190.801†	1696.3	1716.7	495.23 ug/L	495.23 ppb	22:09:00
3	U 409.014†	15804.5	17613.7	490.53 ug/L	490.53 ppb	22:08:40
3	V 292.402†	71616.6	72219.9	494.26 ug/L	494.26 ppb	22:08:40
3	Zn 213.857†	56253.6	54901.9	489.57 ug/L	489.57 ppb	22:08:40
3	SiO2†	82930.5	81639.0	5320.0 ug/L	5320.0 ppb	22:09:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894846.5	101.12	%	0.758				0.75%
Sc Radial	5716.4	101	%	0.7				0.70%
Y 371.029	738063.7	99.460	%	0.6628				0.67%
Y RADIAL	6162.4	100.1	%	0.33				0.33%
Ag 328.068†	108373.4	504.08	ug/L	1.376	504.08	ppb	1.376	0.27%
QC value within limits for Ag 328.068 Recovery = 100.82%								
Al 396.153Radial†	6604.4	4860.9	ug/L	23.05	4860.9	ppb	23.05	0.47%
QC value within limits for Al 396.153Radial Recovery = 97.22%								
As 188.979†	1205.8	496.34	ug/L	4.800	496.34	ppb	4.800	0.97%
QC value within limits for As 188.979 Recovery = 99.27%								
B 249.677†	22421.4	484.77	ug/L	1.366	484.77	ppb	1.366	0.28%
QC value within limits for B 249.677 Recovery = 96.95%								
Ba 233.527†	64732.6	492.93	ug/L	1.016	492.93	ppb	1.016	0.21%
QC value within limits for Ba 233.527 Recovery = 98.59%								
Be 313.107†	1319666.4	491.36	ug/L	1.321	491.36	ppb	1.321	0.27%
QC value within limits for Be 313.107 Recovery = 98.27%								
Ca 317.933Radial†	3220.9	4925.3	ug/L	41.67	4925.3	ppb	41.67	0.85%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.51%
Cd 226.502†            45697.6      495.58 ug/L         1.337      495.58 ppb          1.337   0.27%
   QC value within limits for Cd 226.502  Recovery = 99.12%
Co 228.616†            25452.5      494.23 ug/L         0.489      494.23 ppb          0.489   0.10%
   QC value within limits for Co 228.616  Recovery = 98.85%
Cr 267.716†            45580.2      491.90 ug/L         1.695      491.90 ppb          1.695   0.34%
   QC value within limits for Cr 267.716  Recovery = 98.38%
Cu 324.752†           166793.2      485.34 ug/L         1.505      485.34 ppb          1.505   0.31%
   QC value within limits for Cu 324.752  Recovery = 97.07%
Fe 238.204 Radial†       498.9      5039.1 ug/L        40.82      5039.1 ppb         40.82   0.81%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.78%
K 766.490 Radial†      27323.0      4950.1 ug/L        29.78      4950.1 ppb         29.78   0.60%
   QC value within limits for K 766.490 Radial  Recovery = 99.00%
Mg 279.077 IEC†          137.6      5130.8 ug/L       119.38      5130.8 ppb        119.38   2.33%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.62%
Mn 257.610†           452624.7      492.29 ug/L         2.129      492.29 ppb          2.129   0.43%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             7678.4      500.52 ug/L         4.842      500.52 ppb          4.842   0.97%
   QC value within limits for Mo 202.031  Recovery = 100.10%
Na 589.592 Radial†     27110.3       10190 ug/L          59.6       10190 ppb           59.6   0.59%
   QC value within limits for Na 589.592 Radial  Recovery = 101.90%
Ni 231.604†            20841.4      494.21 ug/L         1.232      494.21 ppb          1.232   0.25%
   QC value within limits for Ni 231.604  Recovery = 98.84%
P 214.914†              4129.4      2379.9 ug/L        24.22      2379.9 ppb         24.22   1.02%
   QC value within limits for P 214.914  Recovery = 95.20%
Pb 220.353†             4204.1      492.98 ug/L         4.066      492.98 ppb          4.066   0.82%
   QC value within limits for Pb 220.353  Recovery = 98.60%
S 181.975 Axial†         678.3      990.84 ug/L         8.836      990.84 ppb          8.836   0.89%
   QC value within limits for S 181.975 Axial  Recovery = 99.08%
Sb 206.836†             1541.9      507.92 ug/L         4.595      507.92 ppb          4.595   0.90%
   QC value within limits for Sb 206.836  Recovery = 101.58%
Se 196.026†              833.4      514.67 ug/L         4.377      514.67 ppb          4.377   0.85%
   QC value within limits for Se 196.026  Recovery = 102.93%
Si 251.611†            81070.6      2467.7 ug/L          4.23      2467.7 ppb          4.23   0.17%
   QC value within limits for Si 251.611  Recovery = 98.71%
Sn 189.927†             2973.1      503.57 ug/L         4.806      503.57 ppb          4.806   0.95%
   QC value within limits for Sn 189.927  Recovery = 100.71%
Sr 421.552†            76006.8      513.05 ug/L         1.759      513.05 ppb          1.759   0.34%
   QC value within limits for Sr 421.552  Recovery = 102.61%
Ti 334.940†           308103.4      498.17 ug/L         0.854      498.17 ppb          0.854   0.17%
   QC value within limits for Ti 334.940  Recovery = 99.63%
Tl 190.801†             1710.0      493.31 ug/L         3.832      493.31 ppb          3.832   0.78%
   QC value within limits for Tl 190.801  Recovery = 98.66%
U 409.014†             17539.4      488.44 ug/L         1.813      488.44 ppb          1.813   0.37%
   QC value within limits for U 409.014  Recovery = 97.69%
V 292.402†             72330.7      494.98 ug/L         1.829      494.98 ppb          1.829   0.37%
   QC value within limits for V 292.402  Recovery = 99.00%
Zn 213.857†            54988.7      490.34 ug/L         0.791      490.34 ppb          0.791   0.16%
   QC value within limits for Zn 213.857  Recovery = 98.07%
SiO2†                  81480.9      5309.7 ug/L        28.98      5309.7 ppb         28.98   0.55%
   QC value within limits for SiO2  Recovery = 99.29%
All analyte(s) passed QC.
```

Sequence No.: 77
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 22:11:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5772.9	5772.9	102	%			22:13:17
1	Y RADIAL	6299.7	6299.7	102.3	%			22:13:17
1	Al 396.153Radial†	5.8	26.0	19.223	ug/L	19.223	ppb	22:13:17
1	Ca 317.933Radial†	20.4	2.3	3.4956	ug/L	3.4956	ppb	22:13:37
1	Fe 238.204 Radial†	5.6	-0.5	-5.2452	ug/L	-5.2452	ppb	22:13:37
1	K 766.490 Radial†	2268.3	55.0	9.9810	ug/L	9.9810	ppb	22:13:17
1	Mg 279.077 IEC†	1.8	-0.0	-1.4498	ug/L	-1.4498	ppb	22:13:37
1	Na 589.592 Radial†	-621.2	6.6	2.4722	ug/L	2.4722	ppb	22:13:17
1	Sr 421.552†	4.1	0.6	0.0039	ug/L	0.0039	ppb	22:13:17
1	Sc 361.383	850747.6	850747.6	96.133	%			22:14:34
1	Y 371.029	714644.3	714644.3	96.304	%			22:14:34
1	Ag 328.068†	240.0	22.1	0.1000	ug/L	0.1000	ppb	22:14:34
1	As 188.979†	-30.1	-2.1	-0.8511	ug/L	-0.8511	ppb	22:14:54
1	B 249.677†	-289.6	222.6	4.8330	ug/L	4.8330	ppb	22:14:54
1	Ba 233.527†	-17.0	-5.6	-0.0434	ug/L	-0.0434	ppb	22:14:54
1	Be 313.107†	-5082.2	33.6	0.0122	ug/L	0.0122	ppb	22:14:34
1	Cd 226.502†	-182.2	-1.7	-0.0174	ug/L	-0.0174	ppb	22:14:54
1	Co 228.616†	-72.0	-3.1	-0.0588	ug/L	-0.0588	ppb	22:14:54
1	Cr 267.716†	66.8	-17.5	-0.1888	ug/L	-0.1888	ppb	22:14:54
1	Cu 324.752†	6826.5	332.5	0.9668	ug/L	0.9668	ppb	22:14:34
1	Mn 257.610†	470.0	85.5	0.0924	ug/L	0.0924	ppb	22:14:54
1	Mo 202.031†	28.7	9.9	0.6448	ug/L	0.6448	ppb	22:14:54
1	Ni 231.604†	82.0	15.1	0.3593	ug/L	0.3593	ppb	22:14:54
1	P 214.914†	206.9	-4.7	-2.9284	ug/L	-2.9284	ppb	22:14:54
1	Pb 220.353†	-50.7	-0.2	-0.0192	ug/L	-0.0192	ppb	22:14:54
1	S 181.975 Axial†	44.8	5.1	7.4480	ug/L	7.4480	ppb	22:14:54
1	Sb 206.836†	31.4	3.1	1.0433	ug/L	1.0433	ppb	22:14:54
1	Se 196.026†	-18.4	4.4	2.5844	ug/L	2.5844	ppb	22:14:54
1	Si 251.611†	476.8	-12.1	-0.3885	ug/L	-0.3885	ppb	22:14:54
1	Sn 189.927†	12.7	8.9	1.5068	ug/L	1.5068	ppb	22:14:54
1	Ti 334.940†	-998.3	-73.4	-0.1183	ug/L	-0.1183	ppb	22:14:34
1	Tl 190.801†	-30.2	5.5	1.5694	ug/L	1.5694	ppb	22:14:54
1	U 409.014†	-1904.3	-18.7	-0.5211	ug/L	-0.5211	ppb	22:14:34
1	V 292.402†	-1277.9	-32.9	-0.2127	ug/L	-0.2127	ppb	22:14:34
1	Zn 213.857†	696.2	-83.0	-0.7499	ug/L	-0.7499	ppb	22:14:54
1	SiO2†	457.4	-13.1	-0.8972	ug/L	-0.8972	ppb	22:15:50
2	Sc Radial	5779.6	5779.6	102	%			22:13:42
2	Y RADIAL	6244.1	6244.1	101.4	%			22:13:42
2	Al 396.153Radial†	-16.6	4.1	2.9900	ug/L	2.9900	ppb	22:13:42
2	Ca 317.933Radial†	19.3	1.3	1.9242	ug/L	1.9242	ppb	22:14:02
2	Fe 238.204 Radial†	6.3	0.1	1.2613	ug/L	1.2613	ppb	22:14:02
2	K 766.490 Radial†	2194.0	-20.4	-3.7017	ug/L	-3.7017	ppb	22:13:42
2	Mg 279.077 IEC†	3.1	1.3	48.779	ug/L	48.779	ppb	22:14:02
2	Na 589.592 Radial†	-645.9	-17.0	-6.3771	ug/L	-6.3771	ppb	22:13:42
2	Sr 421.552†	-23.8	-26.8	-0.1808	ug/L	-0.1808	ppb	22:13:42
2	Sc 361.383	907092.4	907092.4	102.50	%			22:14:59
2	Y 371.029	762404.9	762404.9	102.74	%			22:14:59
2	Ag 328.068†	243.4	9.9	0.0473	ug/L	0.0473	ppb	22:14:59
2	As 188.979†	-24.8	5.0	2.0309	ug/L	2.0309	ppb	22:15:19
2	B 249.677†	-317.9	213.7	4.6392	ug/L	4.6392	ppb	22:15:19
2	Ba 233.527†	-4.0	8.1	0.0620	ug/L	0.0620	ppb	22:15:19
2	Be 313.107†	-5281.1	167.9	0.0623	ug/L	0.0623	ppb	22:14:59
2	Cd 226.502†	-179.0	13.2	0.1438	ug/L	0.1438	ppb	22:15:19
2	Co 228.616†	-71.8	1.7	0.0349	ug/L	0.0349	ppb	22:15:19
2	Cr 267.716†	84.9	-4.1	-0.0435	ug/L	-0.0435	ppb	22:15:19
2	Cu 324.752†	6910.3	-26.8	-0.0780	ug/L	-0.0780	ppb	22:14:59
2	Mn 257.610†	476.7	61.7	0.0662	ug/L	0.0662	ppb	22:15:19
2	Mo 202.031†	30.7	10.0	0.6511	ug/L	0.6511	ppb	22:15:19
2	Ni 231.604†	87.4	15.2	0.3598	ug/L	0.3598	ppb	22:15:19

2	P 214.914†	224.1	-1.4	-0.8078	ug/L	-0.8078 ppb	22:15:19
2	Pb 220.353†	-37.7	15.8	1.8449	ug/L	1.8449 ppb	22:15:19
2	S 181.975 Axial†	40.2	-2.3	-3.3508	ug/L	-3.3508 ppb	22:15:19
2	Sb 206.836†	39.8	9.2	3.0029	ug/L	3.0029 ppb	22:15:19
2	Se 196.026†	-24.5	-0.5	-0.2821	ug/L	-0.2821 ppb	22:15:19
2	Si 251.611†	507.6	-12.8	-0.3987	ug/L	-0.3987 ppb	22:15:19
2	Sn 189.927†	1.5	-2.8	-0.4793	ug/L	-0.4793 ppb	22:15:19
2	Ti 334.940†	-1032.2	-42.0	-0.0676	ug/L	-0.0676 ppb	22:14:59
2	Tl 190.801†	-35.1	2.6	0.7416	ug/L	0.7416 ppb	22:15:19
2	U 409.014†	-2034.1	-22.4	-0.6247	ug/L	-0.6247 ppb	22:14:59
2	V 292.402†	-1297.1	31.0	0.2182	ug/L	0.2182 ppb	22:14:59
2	Zn 213.857†	683.1	-140.9	-1.2712	ug/L	-1.2712 ppb	22:15:19
2	SiO2†	491.4	-9.4	-0.6367	ug/L	-0.6367 ppb	22:15:55
3	Sc Radial	5761.8	5761.8	102	%		22:14:07
3	Y RADIAL	6246.1	6246.1	101.4	%		22:14:07
3	Al 396.153Radial†	-11.0	9.6	7.0573	ug/L	7.0573 ppb	22:14:07
3	Ca 317.933Radial†	18.0	-0.0	-0.0087	ug/L	-0.0087 ppb	22:14:27
3	Fe 238.204 Radial†	6.7	0.5	5.1234	ug/L	5.1234 ppb	22:14:27
3	K 766.490 Radial†	2168.6	-38.8	-7.0425	ug/L	-7.0425 ppb	22:14:07
3	Mg 279.077 IEC†	3.2	1.4	52.523	ug/L	52.523 ppb	22:14:27
3	Na 589.592 Radial†	-609.3	17.1	6.4317	ug/L	6.4317 ppb	22:14:07
3	Sr 421.552†	-4.7	-8.1	-0.0545	ug/L	-0.0545 ppb	22:14:07
3	Sc 361.383	886739.6	886739.6	100.20	%		22:15:24
3	Y 371.029	744240.2	744240.2	100.29	%		22:15:24
3	Ag 328.068†	403.3	174.9	0.8103	ug/L	0.8103 ppb	22:15:24
3	As 188.979†	-25.9	3.3	1.3542	ug/L	1.3542 ppb	22:15:44
3	B 249.677†	-329.3	195.2	4.2367	ug/L	4.2367 ppb	22:15:44
3	Ba 233.527†	-13.0	-1.0	-0.0075	ug/L	-0.0075 ppb	22:15:44
3	Be 313.107†	-5267.0	63.8	0.0235	ug/L	0.0235 ppb	22:15:24
3	Cd 226.502†	-171.4	16.7	0.1815	ug/L	0.1815 ppb	22:15:44
3	Co 228.616†	-66.9	5.0	0.0973	ug/L	0.0973 ppb	22:15:44
3	Cr 267.716†	71.9	-15.3	-0.1643	ug/L	-0.1643 ppb	22:15:44
3	Cu 324.752†	6764.3	-17.8	-0.0516	ug/L	-0.0516 ppb	22:15:24
3	Mn 257.610†	492.5	88.1	0.0953	ug/L	0.0953 ppb	22:15:44
3	Mo 202.031†	22.8	2.8	0.1807	ug/L	0.1807 ppb	22:15:44
3	Ni 231.604†	93.8	23.5	0.5579	ug/L	0.5579 ppb	22:15:44
3	P 214.914†	214.7	-5.7	-3.3948	ug/L	-3.3948 ppb	22:15:44
3	Pb 220.353†	-62.6	-9.9	-1.1609	ug/L	-1.1609 ppb	22:15:44
3	S 181.975 Axial†	48.4	6.8	9.9728	ug/L	9.9728 ppb	22:15:44
3	Sb 206.836†	37.3	7.6	2.4641	ug/L	2.4641 ppb	22:15:44
3	Se 196.026†	-21.6	1.9	1.1508	ug/L	1.1508 ppb	22:15:44
3	Si 251.611†	483.1	-25.8	-0.7866	ug/L	-0.7866 ppb	22:15:44
3	Sn 189.927†	-4.0	-8.2	-1.3895	ug/L	-1.3895 ppb	22:15:44
3	Ti 334.940†	-1021.4	-54.3	-0.0876	ug/L	-0.0876 ppb	22:15:24
3	Tl 190.801†	-31.1	5.8	1.6642	ug/L	1.6642 ppb	22:15:44
3	U 409.014†	-1982.3	-16.2	-0.4528	ug/L	-0.4528 ppb	22:15:24
3	V 292.402†	-1308.3	-9.2	-0.0601	ug/L	-0.0601 ppb	22:15:24
3	Zn 213.857†	685.9	-122.7	-1.1099	ug/L	-1.1099 ppb	22:15:44
3	SiO2†	491.7	1.9	0.1327	ug/L	0.1327 ppb	22:16:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881526.5	99.611	%	3.2240				3.24%
Sc Radial	5771.4	102	%	0.2				0.16%
Y 371.029	740429.8	99.779	%	3.2486				3.26%
Y RADIAL	6263.3	101.7	%	0.51				0.50%
Ag 328.068†	68.9	0.3192	ug/L	0.42614	0.3192	ppb	0.42614	133.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.2	9.7568	ug/L	8.44650	9.7568	ppb	8.44650	86.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.1	0.8447	ug/L	1.50707	0.8447	ppb	1.50707	178.42%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	210.5	4.5696	ug/L	0.30419	4.5696	ppb	0.30419	6.66%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.5	0.0037	ug/L	0.05359	0.0037	ppb	0.05359	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	88.4	0.0327	ug/L	0.02624	0.0327	ppb	0.02624	80.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.2	1.8037	ug/L	1.75524	1.8037	ppb	1.75524	97.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.4      0.1026 ug/L       0.10565      0.1026 ppb        0.10565 102.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.2      0.0245 ug/L       0.07859      0.0245 ppb        0.07859 321.26%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.3     -0.1322 ug/L       0.07780     -0.1322 ppb        0.07780  58.84%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                95.9      0.2790 ug/L       0.59576      0.2790 ppb        0.59576 213.50%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.3798 ug/L       5.24018      0.3798 ppb        5.24018 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -1.4     -0.2544 ug/L       9.02015     -0.2544 ppb        9.02015 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.9      33.284 ug/L      30.1385      33.284 ppb        30.1385  90.55%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                78.4      0.0846 ug/L       0.01601      0.0846 ppb        0.01601  18.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.6      0.4922 ug/L       0.26979      0.4922 ppb        0.26979  54.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†          2.2      0.8423 ug/L       6.55807      0.8423 ppb        6.55807 778.62%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                17.9      0.4257 ug/L       0.11456      0.4257 ppb        0.11456  26.91%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.9     -2.3770 ug/L       1.37886     -2.3770 ppb        1.37886  58.01%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.9      0.2216 ug/L       1.51728      0.2216 ppb        1.51728 684.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.2      4.6900 ug/L       7.07704      4.6900 ppb        7.07704 150.90%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.7      2.1701 ug/L       1.01236      2.1701 ppb        1.01236  46.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.9      1.1510 ug/L       1.43323      1.1510 ppb        1.43323 124.52%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -16.9     -0.5246 ug/L       0.22695     -0.5246 ppb        0.22695  43.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.1207 ug/L       1.48107     -0.1207 ppb        1.48107 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -11.4     -0.0772 ug/L       0.09441     -0.0772 ppb        0.09441 122.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -56.6     -0.0911 ug/L       0.02555     -0.0911 ppb        0.02555  28.03%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.6      1.3250 ug/L       0.50754      1.3250 ppb        0.50754  38.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -19.1     -0.5328 ug/L       0.08656     -0.5328 ppb        0.08656  16.24%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -3.7     -0.0182 ug/L       0.21850     -0.0182 ppb        0.21850 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -115.5     -1.0437 ug/L       0.26689     -1.0437 ppb        0.26689  25.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -6.9     -0.4671 ug/L       0.53547     -0.4671 ppb        0.53547 114.65%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 84
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 22:59:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6040.6	6040.6	107	%			23:01:47
1	Y RADIAL	6541.8	6541.8	106.2	%			23:01:47
1	Al 396.153Radial†	6643.5	6248.9	4598.2	ug/L	4598.2	ppb	23:01:47
1	Ca 317.933Radial†	3274.0	3051.8	4666.7	ug/L	4666.7	ppb	23:02:07
1	Fe 238.204 Radial†	503.5	466.0	4707.7	ug/L	4707.7	ppb	23:02:07
1	K 766.490 Radial†	30160.4	26106.2	4729.7	ug/L	4729.7	ppb	23:01:47
1	Mg 279.077 IEC†	139.7	129.2	4818.1	ug/L	4818.1	ppb	23:02:07
1	Na 589.592 Radial†	26320.4	25292.3	9506.7	ug/L	9506.7	ppb	23:01:47
1	Sr 421.552†	76537.0	71753.0	484.33	ug/L	484.33	ppb	23:01:47
1	Sc 361.383	902160.1	902160.1	101.94	%			23:03:04
1	Y 371.029	744552.5	744552.5	100.33	%			23:03:04
1	Ag 328.068†	108930.6	106627.7	495.88	ug/L	495.88	ppb	23:03:09
1	As 188.979†	1192.5	1199.0	493.45	ug/L	493.45	ppb	23:03:29
1	B 249.677†	21964.3	22069.7	477.21	ug/L	477.21	ppb	23:03:09
1	Ba 233.527†	64683.8	63463.5	483.26	ug/L	483.26	ppb	23:03:09
1	Be 313.107†	1322157.1	1302288.0	484.88	ug/L	484.88	ppb	23:03:04
1	Cd 226.502†	45538.3	44858.5	486.50	ug/L	486.50	ppb	23:03:09
1	Co 228.616†	25327.9	24917.1	483.85	ug/L	483.85	ppb	23:03:09
1	Cr 267.716†	45605.1	44649.3	481.85	ug/L	481.85	ppb	23:03:09
1	Cu 324.752†	173862.9	163781.9	476.57	ug/L	476.57	ppb	23:03:09
1	Mn 257.610†	455058.6	445985.5	485.04	ug/L	485.04	ppb	23:03:04
1	Mo 202.031†	7792.0	7623.6	496.93	ug/L	496.93	ppb	23:03:29
1	Ni 231.604†	20869.5	20401.7	483.79	ug/L	483.79	ppb	23:03:09
1	P 214.914†	4399.3	4095.6	2361.4	ug/L	2361.4	ppb	23:03:29
1	Pb 220.353†	4218.0	4190.2	491.32	ug/L	491.32	ppb	23:03:29
1	S 181.975 Axial†	734.4	678.9	991.84	ug/L	991.84	ppb	23:03:29
1	Sb 206.836†	1585.4	1525.6	502.72	ug/L	502.72	ppb	23:03:29
1	Se 196.026†	814.1	822.0	506.82	ug/L	506.82	ppb	23:03:29
1	Si 251.611†	81659.5	79595.7	2422.7	ug/L	2422.7	ppb	23:03:09
1	Sn 189.927†	3008.3	2946.7	499.07	ug/L	499.07	ppb	23:03:29
1	Ti 334.940†	307147.8	302261.1	488.72	ug/L	488.72	ppb	23:03:09
1	Tl 190.801†	1682.0	1686.8	486.62	ug/L	486.62	ppb	23:03:29
1	U 409.014†	15537.0	17203.2	479.11	ug/L	479.11	ppb	23:03:09
1	V 292.402†	70963.8	70908.3	485.36	ug/L	485.36	ppb	23:03:09
1	Zn 213.857†	55885.4	54013.4	481.68	ug/L	481.68	ppb	23:03:09
1	SiO2†	81999.6	79948.5	5209.7	ug/L	5209.7	ppb	23:04:37
2	Sc Radial	5836.2	5836.2	103	%			23:02:12
2	Y RADIAL	6300.4	6300.4	102.3	%			23:02:12
2	Al 396.153Radial†	6730.5	6551.5	4821.9	ug/L	4821.9	ppb	23:02:12
2	Ca 317.933Radial†	3268.6	3154.1	4823.1	ug/L	4823.1	ppb	23:02:32
2	Fe 238.204 Radial†	502.3	481.4	4862.9	ug/L	4862.9	ppb	23:02:32
2	K 766.490 Radial†	30142.5	27079.3	4906.1	ug/L	4906.1	ppb	23:02:12
2	Mg 279.077 IEC†	138.2	132.4	4934.8	ug/L	4934.8	ppb	23:02:32
2	Na 589.592 Radial†	26260.6	26098.7	9809.7	ug/L	9809.7	ppb	23:02:12
2	Sr 421.552†	76786.1	74508.2	502.93	ug/L	502.93	ppb	23:02:12
2	Sc 361.383	900382.0	900382.0	101.74	%			23:03:35
2	Y 371.029	743153.9	743153.9	100.15	%			23:03:35
2	Ag 328.068†	109424.4	107324.1	499.16	ug/L	499.16	ppb	23:03:40
2	As 188.979†	1186.4	1195.3	491.99	ug/L	491.99	ppb	23:04:00
2	B 249.677†	22129.5	22274.6	481.62	ug/L	481.62	ppb	23:03:40
2	Ba 233.527†	65035.2	63934.2	486.85	ug/L	486.85	ppb	23:03:40
2	Be 313.107†	1318478.2	1301233.4	484.50	ug/L	484.50	ppb	23:03:35
2	Cd 226.502†	45848.2	45251.4	490.75	ug/L	490.75	ppb	23:03:40
2	Co 228.616†	25516.4	25151.5	488.39	ug/L	488.39	ppb	23:03:40
2	Cr 267.716†	45967.8	45094.2	486.65	ug/L	486.65	ppb	23:03:40
2	Cu 324.752†	174912.6	165150.4	480.55	ug/L	480.55	ppb	23:03:40
2	Mn 257.610†	453613.6	445446.9	484.47	ug/L	484.47	ppb	23:03:35
2	Mo 202.031†	7766.3	7613.4	496.28	ug/L	496.28	ppb	23:04:00
2	Ni 231.604†	21041.9	20611.7	488.77	ug/L	488.77	ppb	23:03:40

2	P 214.914†	4382.2	4087.2	2355.7	ug/L	2355.7	ppb	23:04:00
2	Pb 220.353†	4186.1	4167.0	488.64	ug/L	488.64	ppb	23:04:00
2	S 181.975 Axial†	737.8	683.7	998.80	ug/L	998.80	ppb	23:04:00
2	Sb 206.836†	1581.7	1525.1	502.43	ug/L	502.43	ppb	23:04:00
2	Se 196.026†	815.4	824.8	509.00	ug/L	509.00	ppb	23:04:00
2	Si 251.611†	82222.2	80307.0	2444.4	ug/L	2444.4	ppb	23:03:40
2	Sn 189.927†	3009.1	2953.4	500.21	ug/L	500.21	ppb	23:04:00
2	Ti 334.940†	308801.5	304481.6	492.31	ug/L	492.31	ppb	23:03:40
2	Tl 190.801†	1675.9	1684.1	485.82	ug/L	485.82	ppb	23:04:00
2	U 409.014†	15653.3	17347.5	483.12	ug/L	483.12	ppb	23:03:40
2	V 292.402†	71513.4	71586.0	489.91	ug/L	489.91	ppb	23:03:40
2	Zn 213.857†	56169.5	54401.0	485.11	ug/L	485.11	ppb	23:03:40
2	SiO2†	82878.9	80971.7	5276.5	ug/L	5276.5	ppb	23:04:42
3	Sc Radial	5789.5	5789.5	102	%			23:02:37
3	Y RADIAL	6246.2	6246.2	101.4	%			23:02:37
3	Al 396.153Radial†	6661.2	6536.4	4810.8	ug/L	4810.8	ppb	23:02:37
3	Ca 317.933Radial†	3240.7	3152.4	4820.6	ug/L	4820.6	ppb	23:02:57
3	Fe 238.204 Radial†	498.4	481.5	4863.7	ug/L	4863.7	ppb	23:02:57
3	K 766.490 Radial†	30037.3	27212.5	4930.3	ug/L	4930.3	ppb	23:02:37
3	Mg 279.077 IEC†	137.1	132.4	4934.9	ug/L	4934.9	ppb	23:02:57
3	Na 589.592 Radial†	26319.7	26362.2	9908.8	ug/L	9908.8	ppb	23:02:37
3	Sr 421.552†	76407.8	74739.5	504.49	ug/L	504.49	ppb	23:02:37
3	Sc 361.383	901274.9	901274.9	101.84	%			23:04:06
3	Y 371.029	744643.4	744643.4	100.35	%			23:04:06
3	Ag 328.068†	110739.2	108508.6	504.66	ug/L	504.66	ppb	23:04:11
3	As 188.979†	1188.9	1196.6	492.58	ug/L	492.58	ppb	23:04:31
3	B 249.677†	22430.4	22548.5	487.55	ug/L	487.55	ppb	23:04:11
3	Ba 233.527†	65967.8	64786.6	493.33	ug/L	493.33	ppb	23:04:11
3	Be 313.107†	1319272.2	1300729.1	484.32	ug/L	484.32	ppb	23:04:06
3	Cd 226.502†	46388.6	45737.4	496.03	ug/L	496.03	ppb	23:04:11
3	Co 228.616†	25884.1	25487.7	494.90	ug/L	494.90	ppb	23:04:11
3	Cr 267.716†	46382.8	45456.9	490.57	ug/L	490.57	ppb	23:04:11
3	Cu 324.752†	177230.3	167255.9	486.68	ug/L	486.68	ppb	23:04:11
3	Mn 257.610†	453103.5	444504.2	483.45	ug/L	483.45	ppb	23:04:06
3	Mo 202.031†	7753.9	7593.7	494.99	ug/L	494.99	ppb	23:04:31
3	Ni 231.604†	21277.7	20822.7	493.77	ug/L	493.77	ppb	23:04:11
3	P 214.914†	4374.4	4075.3	2347.6	ug/L	2347.6	ppb	23:04:31
3	Pb 220.353†	4190.0	4166.7	488.60	ug/L	488.60	ppb	23:04:31
3	S 181.975 Axial†	734.9	680.1	993.56	ug/L	993.56	ppb	23:04:31
3	Sb 206.836†	1574.8	1516.7	499.55	ug/L	499.55	ppb	23:04:31
3	Se 196.026†	812.7	821.4	506.95	ug/L	506.95	ppb	23:04:31
3	Si 251.611†	83292.4	81277.7	2474.1	ug/L	2474.1	ppb	23:04:11
3	Sn 189.927†	2999.2	2940.7	498.06	ug/L	498.06	ppb	23:04:31
3	Ti 334.940†	313052.2	308354.6	498.58	ug/L	498.58	ppb	23:04:11
3	Tl 190.801†	1689.3	1695.6	489.11	ug/L	489.11	ppb	23:04:31
3	U 409.014†	15772.6	17449.5	485.96	ug/L	485.96	ppb	23:04:11
3	V 292.402†	72365.3	72352.8	495.06	ug/L	495.06	ppb	23:04:11
3	Zn 213.857†	56928.0	55091.0	491.28	ug/L	491.28	ppb	23:04:11
3	SiO2†	82283.2	80306.0	5233.0	ug/L	5233.0	ppb	23:04:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901272.3	101.84	%	0.100				0.10%
Sc Radial	5888.8	104	%	2.4				2.27%
Y 371.029	744116.6	100.28	%	0.113				0.11%
Y RADIAL	6362.8	103.3	%	2.56				2.47%
Ag 328.068†	107486.8	499.90	ug/L	4.434	499.90	ppb	4.434	0.89%
QC value within limits for Ag 328.068 Recovery = 99.98%								
Al 396.153Radial†	6445.6	4743.6	ug/L	126.06	4743.6	ppb	126.06	2.66%
QC value within limits for Al 396.153Radial Recovery = 94.87%								
As 188.979†	1197.0	492.67	ug/L	0.731	492.67	ppb	0.731	0.15%
QC value within limits for As 188.979 Recovery = 98.53%								
B 249.677†	22297.6	482.13	ug/L	5.190	482.13	ppb	5.190	1.08%
QC value within limits for B 249.677 Recovery = 96.43%								
Ba 233.527†	64061.4	487.81	ug/L	5.107	487.81	ppb	5.107	1.05%
QC value within limits for Ba 233.527 Recovery = 97.56%								
Be 313.107†	1301416.8	484.57	ug/L	0.286	484.57	ppb	0.286	0.06%
QC value within limits for Be 313.107 Recovery = 96.91%								
Ca 317.933Radial†	3119.4	4770.1	ug/L	89.59	4770.1	ppb	89.59	1.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.40%
Cd 226.502†            45282.4      491.09 ug/L         4.772      491.09 ppb          4.772   0.97%
   QC value within limits for Cd 226.502  Recovery = 98.22%
Co 228.616†            25185.4      489.05 ug/L         5.553      489.05 ppb          5.553   1.14%
   QC value within limits for Co 228.616  Recovery = 97.81%
Cr 267.716†            45066.8      486.36 ug/L         4.367      486.36 ppb          4.367   0.90%
   QC value within limits for Cr 267.716  Recovery = 97.27%
Cu 324.752†           165396.1      481.27 ug/L         5.093      481.27 ppb          5.093   1.06%
   QC value within limits for Cu 324.752  Recovery = 96.25%
Fe 238.204 Radial†       476.3      4811.4 ug/L        89.80      4811.4 ppb         89.80   1.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.23%
K 766.490 Radial†      26799.3      4855.4 ug/L       109.53      4855.4 ppb        109.53   2.26%
   QC value within limits for K 766.490 Radial  Recovery = 97.11%
Mg 279.077 IEC†          131.3      4895.9 ug/L        67.41      4895.9 ppb         67.41   1.38%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.92%
Mn 257.610†           445312.2      484.32 ug/L         0.809      484.32 ppb          0.809   0.17%
   QC value within limits for Mn 257.610  Recovery = 96.86%
Mo 202.031†             7610.2      496.07 ug/L         0.986      496.07 ppb          0.986   0.20%
   QC value within limits for Mo 202.031  Recovery = 99.21%
Na 589.592 Radial†     25917.7      9741.7 ug/L       209.51      9741.7 ppb        209.51   2.15%
   QC value within limits for Na 589.592 Radial  Recovery = 97.42%
Ni 231.604†            20612.0      488.77 ug/L         4.990      488.77 ppb          4.990   1.02%
   QC value within limits for Ni 231.604  Recovery = 97.75%
P 214.914†              4086.0      2354.9 ug/L         6.90      2354.9 ppb          6.90   0.29%
   QC value within limits for P 214.914  Recovery = 94.20%
Pb 220.353†             4174.6      489.52 ug/L         1.556      489.52 ppb          1.556   0.32%
   QC value within limits for Pb 220.353  Recovery = 97.90%
S 181.975 Axial†         680.9      994.74 ug/L         3.625      994.74 ppb          3.625   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.47%
Sb 206.836†             1522.5      501.56 ug/L         1.752      501.56 ppb          1.752   0.35%
   QC value within limits for Sb 206.836  Recovery = 100.31%
Se 196.026†              822.8      507.59 ug/L         1.225      507.59 ppb          1.225   0.24%
   QC value within limits for Se 196.026  Recovery = 101.52%
Si 251.611†            80393.5      2447.1 ug/L        25.81      2447.1 ppb         25.81   1.05%
   QC value within limits for Si 251.611  Recovery = 97.88%
Sn 189.927†             2946.9      499.11 ug/L         1.073      499.11 ppb          1.073   0.21%
   QC value within limits for Sn 189.927  Recovery = 99.82%
Sr 421.552†            73666.9      497.25 ug/L        11.215      497.25 ppb         11.215   2.26%
   QC value within limits for Sr 421.552  Recovery = 99.45%
Ti 334.940†           305032.4      493.20 ug/L         4.988      493.20 ppb          4.988   1.01%
   QC value within limits for Ti 334.940  Recovery = 98.64%
Tl 190.801†             1688.8      487.18 ug/L         1.715      487.18 ppb          1.715   0.35%
   QC value within limits for Tl 190.801  Recovery = 97.44%
U 409.014†             17333.4      482.73 ug/L         3.438      482.73 ppb          3.438   0.71%
   QC value within limits for U 409.014  Recovery = 96.55%
V 292.402†             71615.7      490.11 ug/L         4.854      490.11 ppb          4.854   0.99%
   QC value within limits for V 292.402  Recovery = 98.02%
Zn 213.857†            54501.8      486.03 ug/L         4.865      486.03 ppb          4.865   1.00%
   QC value within limits for Zn 213.857  Recovery = 97.21%
SiO2†                  80408.7      5239.7 ug/L        33.95      5239.7 ppb         33.95   0.65%
   QC value within limits for SiO2  Recovery = 97.98%
All analyte(s) passed QC.
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Sequence No.: 85
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 23:06:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5713.4	5713.4	101	%			23:08:49
1	Y RADIAL	6227.9	6227.9	101.1	%			23:08:49
1	Al 396.153Radial†	-10.3	10.1	7.4347	ug/L	7.4347	ppb	23:08:49
1	Ca 317.933Radial†	21.4	3.5	5.3965	ug/L	5.3965	ppb	23:09:09
1	Fe 238.204 Radial†	5.7	-0.3	-3.4425	ug/L	-3.4425	ppb	23:09:09
1	K 766.490 Radial†	2246.3	56.3	10.213	ug/L	10.213	ppb	23:08:49
1	Mg 279.077 IEC†	-0.6	-2.4	-88.223	ug/L	-88.223	ppb	23:09:09
1	Na 589.592 Radial†	-535.9	84.7	31.849	ug/L	31.849	ppb	23:08:49
1	Sr 421.552†	20.3	16.7	0.1125	ug/L	0.1125	ppb	23:08:49
1	Sc 361.383	900274.9	900274.9	101.73	%			23:10:06
1	Y 371.029	755130.0	755130.0	101.76	%			23:10:06
1	Ag 328.068†	388.5	154.3	0.7122	ug/L	0.7122	ppb	23:10:06
1	As 188.979†	-19.0	10.5	4.2829	ug/L	4.2829	ppb	23:10:26
1	B 249.677†	-304.4	224.7	4.8775	ug/L	4.8775	ppb	23:10:26
1	Ba 233.527†	-2.3	9.8	0.0744	ug/L	0.0744	ppb	23:10:26
1	Be 313.107†	-5192.6	215.9	0.0802	ug/L	0.0802	ppb	23:10:06
1	Cd 226.502†	-187.0	4.0	0.0438	ug/L	0.0438	ppb	23:10:26
1	Co 228.616†	-77.3	-4.2	-0.0802	ug/L	-0.0802	ppb	23:10:26
1	Cr 267.716†	91.1	2.6	0.0280	ug/L	0.0280	ppb	23:10:26
1	Cu 324.752†	6919.7	33.4	0.0971	ug/L	0.0971	ppb	23:10:06
1	Mn 257.610†	465.5	54.2	0.0602	ug/L	0.0602	ppb	23:10:26
1	Mo 202.031†	29.3	8.8	0.5739	ug/L	0.5739	ppb	23:10:26
1	Ni 231.604†	73.2	1.9	0.0446	ug/L	0.0446	ppb	23:10:26
1	P 214.914†	227.8	3.9	2.3172	ug/L	2.3172	ppb	23:10:26
1	Pb 220.353†	-45.6	7.7	0.9074	ug/L	0.9074	ppb	23:10:26
1	S 181.975 Axial†	37.7	-4.4	-6.3781	ug/L	-6.3781	ppb	23:10:26
1	Sb 206.836†	34.0	3.8	1.2543	ug/L	1.2543	ppb	23:10:26
1	Se 196.026†	-22.4	1.4	0.8465	ug/L	0.8465	ppb	23:10:26
1	Si 251.611†	512.5	-4.2	-0.1402	ug/L	-0.1402	ppb	23:10:26
1	Sn 189.927†	2.3	-2.0	-0.3396	ug/L	-0.3396	ppb	23:10:26
1	Ti 334.940†	-991.2	-9.3	-0.0148	ug/L	-0.0148	ppb	23:10:06
1	Tl 190.801†	-33.6	3.8	1.0919	ug/L	1.0919	ppb	23:10:26
1	U 409.014†	-1993.5	2.6	0.0726	ug/L	0.0726	ppb	23:10:06
1	V 292.402†	-1316.5	2.4	0.0228	ug/L	0.0228	ppb	23:10:06
1	Zn 213.857†	690.5	-128.6	-1.1537	ug/L	-1.1537	ppb	23:10:26
1	SiO2†	488.0	-9.1	-0.6224	ug/L	-0.6224	ppb	23:11:22
2	Sc Radial	5739.4	5739.4	101	%			23:09:14
2	Y RADIAL	6240.9	6240.9	101.3	%			23:09:14
2	Al 396.153Radial†	-12.3	8.2	6.0331	ug/L	6.0331	ppb	23:09:14
2	Ca 317.933Radial†	23.0	5.0	7.7156	ug/L	7.7156	ppb	23:09:34
2	Fe 238.204 Radial†	6.1	-0.0	-0.4828	ug/L	-0.4828	ppb	23:09:34
2	K 766.490 Radial†	2235.8	35.9	6.5009	ug/L	6.5009	ppb	23:09:14
2	Mg 279.077 IEC†	2.2	0.4	15.087	ug/L	15.087	ppb	23:09:34
2	Na 589.592 Radial†	-540.0	83.2	31.255	ug/L	31.255	ppb	23:09:14
2	Sr 421.552†	11.3	7.7	0.0518	ug/L	0.0518	ppb	23:09:14
2	Sc 361.383	891510.4	891510.4	100.74	%			23:10:31
2	Y 371.029	747922.5	747922.5	100.79	%			23:10:31
2	Ag 328.068†	316.5	86.6	0.3993	ug/L	0.3993	ppb	23:10:31
2	As 188.979†	-23.7	5.7	2.3167	ug/L	2.3167	ppb	23:10:51
2	B 249.677†	-306.3	219.8	4.7711	ug/L	4.7711	ppb	23:10:51
2	Ba 233.527†	-14.8	-2.7	-0.0208	ug/L	-0.0208	ppb	23:10:51
2	Be 313.107†	-5251.4	107.4	0.0396	ug/L	0.0396	ppb	23:10:31
2	Cd 226.502†	-182.1	7.1	0.0775	ug/L	0.0775	ppb	23:10:51
2	Co 228.616†	-62.4	9.8	0.1911	ug/L	0.1911	ppb	23:10:51
2	Cr 267.716†	72.2	-15.3	-0.1658	ug/L	-0.1658	ppb	23:10:51
2	Cu 324.752†	6851.5	32.6	0.0949	ug/L	0.0949	ppb	23:10:31
2	Mn 257.610†	487.7	80.8	0.0874	ug/L	0.0874	ppb	23:10:51
2	Mo 202.031†	23.8	3.6	0.2346	ug/L	0.2346	ppb	23:10:51
2	Ni 231.604†	87.7	16.9	0.4013	ug/L	0.4013	ppb	23:10:51

2	P 214.914†	215.5	-6.0	-3.5618 ug/L	-3.5618 ppb	23:10:51
2	Pb 220.353†	-58.2	-5.2	-0.6084 ug/L	-0.6084 ppb	23:10:51
2	S 181.975 Axial†	35.0	-6.8	-9.8823 ug/L	-9.8823 ppb	23:10:51
2	Sb 206.836†	39.3	9.4	3.0891 ug/L	3.0891 ppb	23:10:51
2	Se 196.026†	-21.0	2.6	1.5358 ug/L	1.5358 ppb	23:10:51
2	Si 251.611†	502.7	-9.0	-0.2855 ug/L	-0.2855 ppb	23:10:51
2	Sn 189.927†	9.0	4.7	0.7927 ug/L	0.7927 ppb	23:10:51
2	Ti 334.940†	-1080.9	-107.9	-0.1745 ug/L	-0.1745 ppb	23:10:31
2	Tl 190.801†	-38.9	-1.8	-0.5187 ug/L	-0.5187 ppb	23:10:51
2	U 409.014†	-1940.3	36.1	1.0085 ug/L	1.0085 ppb	23:10:31
2	V 292.402†	-1314.9	-8.8	-0.0535 ug/L	-0.0535 ppb	23:10:31
2	Zn 213.857†	690.7	-121.6	-1.0971 ug/L	-1.0971 ppb	23:10:51
2	SiO2†	502.3	9.8	0.6209 ug/L	0.6209 ppb	23:11:27
3	Sc Radial	5654.8	5654.8	99.8 %		23:09:39
3	Y RADIAL	6174.8	6174.8	100.3 %		23:09:39
3	Al 396.153Radial†	-20.2	0.1	0.0964 ug/L	0.0964 ppb	23:09:39
3	Ca 317.933Radial†	17.8	0.1	0.2161 ug/L	0.2161 ppb	23:09:59
3	Fe 238.204 Radial†	3.9	-2.1	-21.204 ug/L	-21.204 ppb	23:09:59
3	K 766.490 Radial†	2196.5	29.6	5.3595 ug/L	5.3595 ppb	23:09:39
3	Mg 279.077 IEC†	2.1	0.4	13.913 ug/L	13.913 ppb	23:09:59
3	Na 589.592 Radial†	-581.8	33.3	12.512 ug/L	12.512 ppb	23:09:39
3	Sr 421.552†	-23.4	-26.9	-0.1814 ug/L	-0.1814 ppb	23:09:39
3	Sc 361.383	881210.3	881210.3	99.575 %		23:10:57
3	Y 371.029	740358.7	740358.7	99.769 %		23:10:57
3	Ag 328.068†	348.3	122.2	0.5545 ug/L	0.5545 ppb	23:10:57
3	As 188.979†	-19.4	9.7	3.9560 ug/L	3.9560 ppb	23:11:17
3	B 249.677†	-301.9	220.7	4.7933 ug/L	4.7933 ppb	23:11:17
3	Ba 233.527†	6.3	18.3	0.1383 ug/L	0.1383 ppb	23:11:17
3	Be 313.107†	-5102.1	196.4	0.0729 ug/L	0.0729 ppb	23:10:57
3	Cd 226.502†	-182.8	4.3	0.0489 ug/L	0.0489 ppb	23:11:17
3	Co 228.616†	-72.1	-0.6	-0.0111 ug/L	-0.0111 ppb	23:11:17
3	Cr 267.716†	84.8	-1.8	-0.0216 ug/L	-0.0216 ppb	23:11:17
3	Cu 324.752†	6768.7	29.0	0.0832 ug/L	0.0832 ppb	23:10:57
3	Mn 257.610†	461.0	59.5	0.0623 ug/L	0.0623 ppb	23:11:17
3	Mo 202.031†	23.4	3.5	0.2283 ug/L	0.2283 ppb	23:11:17
3	Ni 231.604†	94.1	24.4	0.5792 ug/L	0.5792 ppb	23:11:17
3	P 214.914†	207.8	-11.3	-6.6789 ug/L	-6.6789 ppb	23:11:17
3	Pb 220.353†	-68.5	-16.2	-1.8951 ug/L	-1.8951 ppb	23:11:17
3	S 181.975 Axial†	42.8	1.5	2.2304 ug/L	2.2304 ppb	23:11:17
3	Sb 206.836†	30.0	0.5	0.1931 ug/L	0.1931 ppb	23:11:17
3	Se 196.026†	-23.5	-0.1	-0.1284 ug/L	-0.1284 ppb	23:11:17
3	Si 251.611†	485.8	-20.1	-0.6248 ug/L	-0.6248 ppb	23:11:17
3	Sn 189.927†	10.7	6.5	1.0965 ug/L	1.0965 ppb	23:11:17
3	Ti 334.940†	-997.4	-36.6	-0.0610 ug/L	-0.0610 ppb	23:10:57
3	Tl 190.801†	-33.2	3.5	1.0079 ug/L	1.0079 ppb	23:11:17
3	U 409.014†	-1805.6	148.9	4.1618 ug/L	4.1618 ppb	23:10:57
3	V 292.402†	-1291.2	-0.3	0.0132 ug/L	0.0132 ppb	23:10:57
3	Zn 213.857†	680.5	-123.8	-1.1163 ug/L	-1.1163 ppb	23:11:17
3	SiO2†	520.9	34.3	2.2268 ug/L	2.2268 ppb	23:11:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	890998.6	100.68	%	1.078				1.07%
Sc Radial	5702.5	101	%	0.8				0.76%
Y 371.029	747803.7	100.77	%	0.995				0.99%
Y RADIAL	6214.5	100.9	%	0.57				0.56%
Ag 328.068†	121.0	0.5553	ug/L	0.15648	0.5553	ppb	0.15648	28.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.1	4.5214	ug/L	3.89569	4.5214	ppb	3.89569	86.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.6	3.5185	ug/L	1.05358	3.5185	ppb	1.05358	29.94%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	221.7	4.8140	ug/L	0.05609	4.8140	ppb	0.05609	1.17%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.5	0.0640	ug/L	0.08005	0.0640	ppb	0.08005	125.12%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	173.2	0.0642	ug/L	0.02165	0.0642	ppb	0.02165	33.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.9	4.4427	ug/L	3.83961	4.4427	ppb	3.83961	86.42%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 5.1      0.0567 ug/L       0.01819      0.0567 ppb        0.01819  32.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.6      0.0333 ug/L       0.14100      0.0333 ppb        0.14100 423.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.9     -0.0531 ug/L       0.10067     -0.0531 ppb        0.10067 189.51%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                31.7      0.0917 ug/L       0.00749      0.0917 ppb        0.00749   8.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -8.3765 ug/L      11.20733     -8.3765 ppb       11.20733 133.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          40.6      7.3579 ug/L       2.53792      7.3579 ppb        2.53792  34.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -19.741 ug/L       59.3102     -19.741 ppb        59.3102 300.44%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                64.8      0.0700 ug/L       0.01515      0.0700 ppb        0.01515  21.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.3      0.3456 ug/L       0.19776      0.3456 ppb        0.19776  57.23%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         67.1      25.205 ug/L       10.9965      25.205 ppb        10.9965  43.63%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.4      0.3417 ug/L       0.27223      0.3417 ppb        0.27223  79.67%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.4     -2.6411 ug/L       4.56815     -2.6411 ppb        4.56815 172.96%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -4.6     -0.5320 ug/L       1.40283     -0.5320 ppb        1.40283 263.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.2     -4.6767 ug/L       6.23299     -4.6767 ppb        6.23299 133.28%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.6      1.5122 ug/L       1.46515      1.5122 ppb        1.46515  96.89%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.3      0.7513 ug/L       0.83617      0.7513 ppb        0.83617 111.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -11.1     -0.3502 ug/L       0.24873     -0.3502 ppb        0.24873  71.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.1      0.5165 ug/L       0.75681      0.5165 ppb        0.75681 146.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.8     -0.0057 ug/L       0.15517     -0.0057 ppb        0.15517 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -51.3     -0.0835 ug/L       0.08217     -0.0835 ppb        0.08217  98.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.8      0.5270 ug/L       0.90663      0.5270 ppb        0.90663 172.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 62.5      1.7476 ug/L       2.14242      1.7476 ppb        2.14242 122.59%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.2     -0.0058 ug/L       0.04158     -0.0058 ppb        0.04158 711.61%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -124.7     -1.1224 ug/L       0.02876     -1.1224 ppb        0.02876   2.56%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      11.7      0.7418 ug/L       1.42845      0.7418 ppb        1.42845 192.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 91
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 23:47:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5812.4	5812.4	103	%			23:49:43
1	Y RADIAL	6258.9	6258.9	101.6	%			23:49:43
1	Al 396.153Radial†	6748.9	6596.2	4855.1	ug/L	4855.1	ppb	23:49:43
1	Ca 317.933Radial†	3284.6	3182.7	4866.8	ug/L	4866.8	ppb	23:50:03
1	Fe 238.204 Radial†	510.6	491.5	4964.8	ug/L	4964.8	ppb	23:50:03
1	K 766.490 Radial†	30273.4	27326.9	4950.9	ug/L	4950.9	ppb	23:49:43
1	Mg 279.077 IEC†	142.5	137.1	5110.9	ug/L	5110.9	ppb	23:50:03
1	Na 589.592 Radial†	26920.0	26845.7	10091	ug/L	10091	ppb	23:49:43
1	Sr 421.552†	77884.4	75883.9	512.22	ug/L	512.22	ppb	23:49:43
1	Sc 361.383	906208.6	906208.6	102.40	%			23:51:00
1	Y 371.029	747826.2	747826.2	100.78	%			23:51:00
1	Ag 328.068†	110068.7	107261.7	498.91	ug/L	498.91	ppb	23:51:05
1	As 188.979†	1185.3	1186.8	488.52	ug/L	488.52	ppb	23:51:25
1	B 249.677†	22234.5	22237.3	480.80	ug/L	480.80	ppb	23:51:05
1	Ba 233.527†	65559.9	64035.6	487.62	ug/L	487.62	ppb	23:51:05
1	Be 313.107†	1327230.3	1301448.0	484.58	ug/L	484.58	ppb	23:51:00
1	Cd 226.502†	46070.4	45178.7	489.95	ug/L	489.95	ppb	23:51:05
1	Co 228.616†	25720.6	25189.7	489.12	ug/L	489.12	ppb	23:51:05
1	Cr 267.716†	46216.6	45046.6	486.14	ug/L	486.14	ppb	23:51:05
1	Cu 324.752†	176020.9	165127.3	480.49	ug/L	480.49	ppb	23:51:05
1	Mn 257.610†	455973.8	444885.0	483.87	ug/L	483.87	ppb	23:51:00
1	Mo 202.031†	7779.0	7576.7	493.89	ug/L	493.89	ppb	23:51:25
1	Ni 231.604†	21184.6	20618.0	488.92	ug/L	488.92	ppb	23:51:05
1	P 214.914†	4388.8	4066.0	2343.1	ug/L	2343.1	ppb	23:51:25
1	Pb 220.353†	4198.5	4152.6	486.95	ug/L	486.95	ppb	23:51:25
1	S 181.975 Axial†	735.4	676.7	988.47	ug/L	988.47	ppb	23:51:25
1	Sb 206.836†	1579.1	1512.5	498.26	ug/L	498.26	ppb	23:51:25
1	Se 196.026†	813.4	817.8	505.10	ug/L	505.10	ppb	23:51:25
1	Si 251.611†	82768.6	80321.0	2444.9	ug/L	2444.9	ppb	23:51:05
1	Sn 189.927†	3006.8	2932.1	496.62	ug/L	496.62	ppb	23:51:25
1	Ti 334.940†	311056.6	304732.3	492.72	ug/L	492.72	ppb	23:51:05
1	Tl 190.801†	1702.6	1699.6	490.26	ug/L	490.26	ppb	23:51:25
1	U 409.014†	15809.0	17400.7	484.59	ug/L	484.59	ppb	23:51:05
1	V 292.402†	72050.3	71658.3	490.35	ug/L	490.35	ppb	23:51:05
1	Zn 213.857†	56568.9	54436.0	485.41	ug/L	485.41	ppb	23:51:05
1	SiO2†	82066.0	79654.1	5190.3	ug/L	5190.3	ppb	23:52:33
2	Sc Radial	5711.5	5711.5	101	%			23:50:08
2	Y RADIAL	6152.5	6152.5	99.90	%			23:50:08
2	Al 396.153Radial†	6605.2	6569.8	4835.7	ug/L	4835.7	ppb	23:50:08
2	Ca 317.933Radial†	3260.6	3215.4	4917.0	ug/L	4917.0	ppb	23:50:28
2	Fe 238.204 Radial†	500.7	490.5	4953.9	ug/L	4953.9	ppb	23:50:28
2	K 766.490 Radial†	29877.2	27455.1	4974.2	ug/L	4974.2	ppb	23:50:08
2	Mg 279.077 IEC†	137.7	134.8	5025.2	ug/L	5025.2	ppb	23:50:28
2	Na 589.592 Radial†	26197.5	26592.7	9995.4	ug/L	9995.4	ppb	23:50:08
2	Sr 421.552†	76047.5	75403.2	508.97	ug/L	508.97	ppb	23:50:08
2	Sc 361.383	915831.6	915831.6	103.49	%			23:51:31
2	Y 371.029	755119.9	755119.9	101.76	%			23:51:31
2	Ag 328.068†	109334.0	105422.4	490.37	ug/L	490.37	ppb	23:51:36
2	As 188.979†	1191.7	1180.8	486.00	ug/L	486.00	ppb	23:51:56
2	B 249.677†	22147.8	21925.3	474.05	ug/L	474.05	ppb	23:51:36
2	Ba 233.527†	65205.9	63020.8	479.89	ug/L	479.89	ppb	23:51:36
2	Be 313.107†	1339313.0	1299504.6	483.84	ug/L	483.84	ppb	23:51:31
2	Cd 226.502†	45757.3	44403.3	481.54	ug/L	481.54	ppb	23:51:36
2	Co 228.616†	25573.3	24783.3	481.25	ug/L	481.25	ppb	23:51:36
2	Cr 267.716†	45889.1	44255.9	477.61	ug/L	477.61	ppb	23:51:36
2	Cu 324.752†	174806.0	162147.2	471.82	ug/L	471.82	ppb	23:51:36
2	Mn 257.610†	461428.4	445477.0	484.51	ug/L	484.51	ppb	23:51:31
2	Mo 202.031†	7813.2	7529.9	490.84	ug/L	490.84	ppb	23:51:56
2	Ni 231.604†	21133.9	20351.7	482.60	ug/L	482.60	ppb	23:51:36

2	P 214.914†	4396.3	4028.2	2322.0 ug/L	2322.0 ppb	23:51:56
2	Pb 220.353†	4191.9	4103.2	481.18 ug/L	481.18 ppb	23:51:56
2	S 181.975 Axial†	736.7	670.4	979.37 ug/L	979.37 ppb	23:51:56
2	Sb 206.836†	1598.6	1515.1	499.22 ug/L	499.22 ppb	23:51:56
2	Se 196.026†	830.1	825.6	509.70 ug/L	509.70 ppb	23:51:56
2	Si 251.611†	82138.0	78862.3	2400.3 ug/L	2400.3 ppb	23:51:36
2	Sn 189.927†	3029.6	2923.2	495.12 ug/L	495.12 ppb	23:51:56
2	Ti 334.940†	308886.4	299443.4	484.18 ug/L	484.18 ppb	23:51:36
2	Tl 190.801†	1704.4	1683.8	485.74 ug/L	485.74 ppb	23:51:56
2	U 409.014†	15608.7	17044.9	474.67 ug/L	474.67 ppb	23:51:36
2	V 292.402†	71473.6	70361.7	481.55 ug/L	481.55 ppb	23:51:36
2	Zn 213.857†	56270.5	53567.1	477.65 ug/L	477.65 ppb	23:51:36
2	SiO2†	82786.9	79508.5	5180.9 ug/L	5180.9 ppb	23:52:38
3	Sc Radial	5736.7	5736.7	101 %		23:50:33
3	Y RADIAL	6158.0	6158.0	99.99 %		23:50:33
3	Al 396.153Radial†	6620.6	6556.2	4825.5 ug/L	4825.5 ppb	23:50:33
3	Ca 317.933Radial†	3255.9	3196.5	4888.1 ug/L	4888.1 ppb	23:50:53
3	Fe 238.204 Radial†	503.1	490.7	4955.7 ug/L	4955.7 ppb	23:50:53
3	K 766.490 Radial†	29709.6	27159.2	4920.6 ug/L	4920.6 ppb	23:50:33
3	Mg 279.077 IEC†	138.1	134.6	5018.5 ug/L	5018.5 ppb	23:50:53
3	Na 589.592 Radial†	26070.0	26352.4	9905.1 ug/L	9905.1 ppb	23:50:33
3	Sr 421.552†	76087.6	75110.7	507.00 ug/L	507.00 ppb	23:50:33
3	Sc 361.383	909361.6	909361.6	102.76 %		23:52:02
3	Y 371.029	750338.2	750338.2	101.11 %		23:52:02
3	Ag 328.068†	108910.6	105762.1	491.96 ug/L	491.96 ppb	23:52:07
3	As 188.979†	1189.0	1186.4	488.29 ug/L	488.29 ppb	23:52:27
3	B 249.677†	22006.5	21940.1	474.37 ug/L	474.37 ppb	23:52:07
3	Ba 233.527†	64909.5	63180.6	481.11 ug/L	481.11 ppb	23:52:07
3	Be 313.107†	1329226.2	1298896.5	483.61 ug/L	483.61 ppb	23:52:02
3	Cd 226.502†	45690.9	44653.3	484.25 ug/L	484.25 ppb	23:52:07
3	Co 228.616†	25374.9	24766.0	480.91 ug/L	480.91 ppb	23:52:07
3	Cr 267.716†	45763.3	44449.0	479.70 ug/L	479.70 ppb	23:52:07
3	Cu 324.752†	173888.7	162456.4	472.72 ug/L	472.72 ppb	23:52:07
3	Mn 257.610†	458025.1	445337.4	484.36 ug/L	484.36 ppb	23:52:02
3	Mo 202.031†	7810.7	7581.2	494.19 ug/L	494.19 ppb	23:52:27
3	Ni 231.604†	20973.4	20340.8	482.34 ug/L	482.34 ppb	23:52:07
3	P 214.914†	4407.6	4069.5	2346.3 ug/L	2346.3 ppb	23:52:27
3	Pb 220.353†	4204.4	4144.2	485.97 ug/L	485.97 ppb	23:52:27
3	S 181.975 Axial†	740.3	679.0	991.85 ug/L	991.85 ppb	23:52:27
3	Sb 206.836†	1596.1	1523.7	502.07 ug/L	502.07 ppb	23:52:27
3	Se 196.026†	804.5	806.4	498.27 ug/L	498.27 ppb	23:52:27
3	Si 251.611†	81808.7	79106.5	2407.7 ug/L	2407.7 ppb	23:52:07
3	Sn 189.927†	3019.4	2934.2	496.97 ug/L	496.97 ppb	23:52:27
3	Ti 334.940†	307896.4	300603.6	486.05 ug/L	486.05 ppb	23:52:07
3	Tl 190.801†	1708.7	1699.7	490.31 ug/L	490.31 ppb	23:52:27
3	U 409.014†	15401.5	16950.6	472.03 ug/L	472.03 ppb	23:52:07
3	V 292.402†	71335.0	70718.3	484.00 ug/L	484.00 ppb	23:52:07
3	Zn 213.857†	55988.0	53679.1	478.66 ug/L	478.66 ppb	23:52:07
3	SiO2†	83013.2	80297.9	5232.5 ug/L	5232.5 ppb	23:52:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910467.3	102.88	%	0.554				0.54%
Sc Radial	5753.5	102	%	0.9				0.91%
Y 371.029	751094.8	101.22	%	0.499				0.49%
Y RADIAL	6189.8	100.5	%	0.97				0.97%
Ag 328.068†	106148.7	493.74	ug/L	4.540	493.74	ppb	4.540	0.92%
QC value within limits for Ag 328.068 Recovery = 98.75%								
Al 396.153Radial†	6574.1	4838.8	ug/L	15.02	4838.8	ppb	15.02	0.31%
QC value within limits for Al 396.153Radial Recovery = 96.78%								
As 188.979†	1184.6	487.60	ug/L	1.397	487.60	ppb	1.397	0.29%
QC value within limits for As 188.979 Recovery = 97.52%								
B 249.677†	22034.3	476.41	ug/L	3.808	476.41	ppb	3.808	0.80%
QC value within limits for B 249.677 Recovery = 95.28%								
Ba 233.527†	63412.3	482.88	ug/L	4.154	482.88	ppb	4.154	0.86%
QC value within limits for Ba 233.527 Recovery = 96.58%								
Be 313.107†	1299949.7	484.01	ug/L	0.503	484.01	ppb	0.503	0.10%
QC value within limits for Be 313.107 Recovery = 96.80%								
Ca 317.933Radial†	3198.2	4890.6	ug/L	25.15	4890.6	ppb	25.15	0.51%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.81%
Cd 226.502†            44745.1      485.25 ug/L         4.295      485.25 ppb          4.295   0.89%
   QC value within limits for Cd 226.502  Recovery = 97.05%
Co 228.616†            24913.0      483.76 ug/L         4.646      483.76 ppb          4.646   0.96%
   QC value within limits for Co 228.616  Recovery = 96.75%
Cr 267.716†            44583.8      481.15 ug/L         4.448      481.15 ppb          4.448   0.92%
   QC value within limits for Cr 267.716  Recovery = 96.23%
Cu 324.752†           163243.6      475.01 ug/L         4.766      475.01 ppb          4.766   1.00%
   QC value within limits for Cu 324.752  Recovery = 95.00%
Fe 238.204 Radial†       490.9      4958.1 ug/L          5.81      4958.1 ppb           5.81   0.12%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.16%
K 766.490 Radial†      27313.7      4948.6 ug/L         26.90      4948.6 ppb          26.90   0.54%
   QC value within limits for K 766.490 Radial  Recovery = 98.97%
Mg 279.077 IEC†          135.5      5051.5 ug/L         51.53      5051.5 ppb          51.53   1.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.03%
Mn 257.610†           445233.1      484.25 ug/L         0.337      484.25 ppb          0.337   0.07%
   QC value within limits for Mn 257.610  Recovery = 96.85%
Mo 202.031†             7562.6      492.98 ug/L         1.852      492.98 ppb          1.852   0.38%
   QC value within limits for Mo 202.031  Recovery = 98.60%
Na 589.592 Radial†     26596.9      9997.0 ug/L         92.72      9997.0 ppb          92.72   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 99.97%
Ni 231.604†            20436.8      484.62 ug/L         3.722      484.62 ppb          3.722   0.77%
   QC value within limits for Ni 231.604  Recovery = 96.92%
P 214.914†              4054.6      2337.1 ug/L         13.22      2337.1 ppb          13.22   0.57%
   QC value within limits for P 214.914  Recovery = 93.48%
Pb 220.353†             4133.4      484.70 ug/L         3.091      484.70 ppb          3.091   0.64%
   QC value within limits for Pb 220.353  Recovery = 96.94%
S 181.975 Axial†         675.4      986.56 ug/L         6.453      986.56 ppb          6.453   0.65%
   QC value within limits for S 181.975 Axial  Recovery = 98.66%
Sb 206.836†             1517.1      499.85 ug/L         1.980      499.85 ppb          1.980   0.40%
   QC value within limits for Sb 206.836  Recovery = 99.97%
Se 196.026†              816.6      504.36 ug/L         5.747      504.36 ppb          5.747   1.14%
   QC value within limits for Se 196.026  Recovery = 100.87%
Si 251.611†            79430.0      2417.6 ug/L         23.88      2417.6 ppb          23.88   0.99%
   QC value within limits for Si 251.611  Recovery = 96.71%
Sn 189.927†             2929.8      496.24 ug/L         0.983      496.24 ppb          0.983   0.20%
   QC value within limits for Sn 189.927  Recovery = 99.25%
Sr 421.552†            75465.9      509.39 ug/L         2.635      509.39 ppb          2.635   0.52%
   QC value within limits for Sr 421.552  Recovery = 101.88%
Ti 334.940†           301593.1      487.65 ug/L         4.490      487.65 ppb          4.490   0.92%
   QC value within limits for Ti 334.940  Recovery = 97.53%
Tl 190.801†             1694.4      488.77 ug/L         2.621      488.77 ppb          2.621   0.54%
   QC value within limits for Tl 190.801  Recovery = 97.75%
U 409.014†             17132.1      477.10 ug/L         6.623      477.10 ppb          6.623   1.39%
   QC value within limits for U 409.014  Recovery = 95.42%
V 292.402†             70912.8      485.30 ug/L         4.544      485.30 ppb          4.544   0.94%
   QC value within limits for V 292.402  Recovery = 97.06%
Zn 213.857†            53894.1      480.57 ug/L         4.221      480.57 ppb          4.221   0.88%
   QC value within limits for Zn 213.857  Recovery = 96.11%
SiO2†                  79820.2      5201.3 ug/L         27.47      5201.3 ppb          27.47   0.53%
   QC value within limits for SiO2  Recovery = 97.27%
All analyte(s) passed QC.
```

Sequence No.: 92
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 23:54:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5905.8	5905.8	104	%			23:56:44
1	Y RADIAL	6399.6	6399.6	103.9	%			23:56:44
1	Al 396.153Radial†	-26.6	-5.2	-3.8500	ug/L	-3.8500	ppb	23:56:44
1	Ca 317.933Radial†	17.3	-1.1	-1.6939	ug/L	-1.6939	ppb	23:57:04
1	Fe 238.204 Radial†	9.0	2.6	25.912	ug/L	25.912	ppb	23:57:04
1	K 766.490 Radial†	2284.9	20.8	3.7729	ug/L	3.7729	ppb	23:56:44
1	Mg 279.077 IEC†	2.4	0.6	20.626	ug/L	20.626	ppb	23:57:04
1	Na 589.592 Radial†	-611.4	29.7	11.162	ug/L	11.162	ppb	23:56:44
1	Sr 421.552†	5.3	1.7	0.0115	ug/L	0.0115	ppb	23:56:44
1	Sc 361.383	898628.9	898628.9	101.54	%			23:58:01
1	Y 371.029	754338.2	754338.2	101.65	%			23:58:01
1	Ag 328.068†	380.1	146.8	0.6849	ug/L	0.6849	ppb	23:58:01
1	As 188.979†	-25.7	3.9	1.5789	ug/L	1.5789	ppb	23:58:21
1	B 249.677†	-270.7	257.3	5.5804	ug/L	5.5804	ppb	23:58:21
1	Ba 233.527†	-9.0	3.2	0.0258	ug/L	0.0258	ppb	23:58:21
1	Be 313.107†	-5197.9	201.3	0.0749	ug/L	0.0749	ppb	23:58:01
1	Cd 226.502†	-186.1	4.6	0.0470	ug/L	0.0470	ppb	23:58:21
1	Co 228.616†	-58.9	13.8	0.2677	ug/L	0.2677	ppb	23:58:21
1	Cr 267.716†	85.6	-2.7	-0.0289	ug/L	-0.0289	ppb	23:58:21
1	Cu 324.752†	6839.1	-33.5	-0.0961	ug/L	-0.0961	ppb	23:58:01
1	Mn 257.610†	451.6	41.3	0.0471	ug/L	0.0471	ppb	23:58:21
1	Mo 202.031†	27.4	7.0	0.4575	ug/L	0.4575	ppb	23:58:21
1	Ni 231.604†	81.2	9.9	0.2341	ug/L	0.2341	ppb	23:58:21
1	P 214.914†	213.8	-9.4	-5.5956	ug/L	-5.5956	ppb	23:58:21
1	Pb 220.353†	-72.0	-18.4	-2.1485	ug/L	-2.1485	ppb	23:58:21
1	S 181.975 Axial†	45.3	3.1	4.6034	ug/L	4.6034	ppb	23:58:21
1	Sb 206.836†	38.9	8.7	2.8308	ug/L	2.8308	ppb	23:58:21
1	Se 196.026†	-22.6	1.2	0.7693	ug/L	0.7693	ppb	23:58:21
1	Si 251.611†	501.4	-14.2	-0.4405	ug/L	-0.4405	ppb	23:58:21
1	Sn 189.927†	-0.9	-5.1	-0.8643	ug/L	-0.8643	ppb	23:58:21
1	Ti 334.940†	-950.6	28.8	0.0450	ug/L	0.0450	ppb	23:58:01
1	Tl 190.801†	-33.6	3.7	1.0689	ug/L	1.0689	ppb	23:58:21
1	U 409.014†	-1865.5	125.1	3.4908	ug/L	3.4908	ppb	23:58:01
1	V 292.402†	-1282.8	33.2	0.2339	ug/L	0.2339	ppb	23:58:01
1	Zn 213.857†	686.6	-131.1	-1.1838	ug/L	-1.1838	ppb	23:58:21
1	SiO2†	467.4	-28.5	-1.8817	ug/L	-1.8817	ppb	23:59:17
2	Sc Radial	5881.2	5881.2	104	%			23:57:09
2	Y RADIAL	6402.5	6402.5	104.0	%			23:57:09
2	Al 396.153Radial†	-34.2	-12.6	-9.3405	ug/L	-9.3405	ppb	23:57:09
2	Ca 317.933Radial†	21.9	3.4	5.2585	ug/L	5.2585	ppb	23:57:29
2	Fe 238.204 Radial†	5.3	-0.9	-9.2453	ug/L	-9.2453	ppb	23:57:29
2	K 766.490 Radial†	2158.2	-92.0	-16.700	ug/L	-16.700	ppb	23:57:09
2	Mg 279.077 IEC†	-1.5	-3.2	-118.56	ug/L	-118.56	ppb	23:57:29
2	Na 589.592 Radial†	-638.6	1.0	0.3692	ug/L	0.3692	ppb	23:57:09
2	Sr 421.552†	-19.8	-22.5	-0.1520	ug/L	-0.1520	ppb	23:57:09
2	Sc 361.383	890912.1	890912.1	100.67	%			23:58:26
2	Y 371.029	747223.7	747223.7	100.69	%			23:58:26
2	Ag 328.068†	402.9	172.6	0.7941	ug/L	0.7941	ppb	23:58:26
2	As 188.979†	-20.8	8.5	3.4697	ug/L	3.4697	ppb	23:58:47
2	B 249.677†	-287.1	238.7	5.1818	ug/L	5.1818	ppb	23:58:47
2	Ba 233.527†	-10.4	1.7	0.0128	ug/L	0.0128	ppb	23:58:47
2	Be 313.107†	-5190.5	164.4	0.0608	ug/L	0.0608	ppb	23:58:26
2	Cd 226.502†	-179.6	9.4	0.1034	ug/L	0.1034	ppb	23:58:47
2	Co 228.616†	-56.3	15.8	0.3083	ug/L	0.3083	ppb	23:58:47
2	Cr 267.716†	87.5	-0.0	-0.0009	ug/L	-0.0009	ppb	23:58:47
2	Cu 324.752†	6631.4	-181.5	-0.5282	ug/L	-0.5282	ppb	23:58:26
2	Mn 257.610†	491.8	85.1	0.0938	ug/L	0.0938	ppb	23:58:47
2	Mo 202.031†	21.5	1.3	0.0860	ug/L	0.0860	ppb	23:58:47
2	Ni 231.604†	93.4	22.6	0.5372	ug/L	0.5372	ppb	23:58:47

2	P 214.914†	218.2	-3.2	-1.8382	ug/L	-1.8382 ppb	23:58:47
2	Pb 220.353†	-71.1	-18.1	-2.1127	ug/L	-2.1127 ppb	23:58:47
2	S 181.975 Axial†	41.7	-0.1	-0.0784	ug/L	-0.0784 ppb	23:58:47
2	Sb 206.836†	32.5	2.6	0.8455	ug/L	0.8455 ppb	23:58:47
2	Se 196.026†	-26.6	-2.9	-1.7770	ug/L	-1.7770 ppb	23:58:47
2	Si 251.611†	517.1	5.6	0.1778	ug/L	0.1778 ppb	23:58:47
2	Sn 189.927†	0.8	-3.4	-0.5813	ug/L	-0.5813 ppb	23:58:47
2	Ti 334.940†	-1068.8	-96.7	-0.1568	ug/L	-0.1568 ppb	23:58:26
2	Tl 190.801†	-45.9	-8.7	-2.5030	ug/L	-2.5030 ppb	23:58:47
2	U 409.014†	-1918.9	56.0	1.5669	ug/L	1.5669 ppb	23:58:26
2	V 292.402†	-1294.4	10.7	0.0756	ug/L	0.0756 ppb	23:58:26
2	Zn 213.857†	687.4	-124.5	-1.1178	ug/L	-1.1178 ppb	23:58:47
2	SiO2†	495.8	3.7	0.2544	ug/L	0.2544 ppb	23:59:22
3	Sc Radial	5888.0	5888.0	104	%		23:57:34
3	Y RADIAL	6408.8	6408.8	104.1	%		23:57:34
3	Al 396.153Radial†	-7.2	13.4	9.8869	ug/L	9.8869 ppb	23:57:34
3	Ca 317.933Radial†	18.8	0.4	0.6255	ug/L	0.6255 ppb	23:57:55
3	Fe 238.204 Radial†	6.2	-0.1	-0.5348	ug/L	-0.5348 ppb	23:57:55
3	K 766.490 Radial†	2229.4	-26.0	-4.7138	ug/L	-4.7138 ppb	23:57:34
3	Mg 279.077 IEC†	1.5	-0.3	-10.914	ug/L	-10.914 ppb	23:57:55
3	Na 589.592 Radial†	-628.3	11.6	4.3716	ug/L	4.3716 ppb	23:57:34
3	Sr 421.552†	12.4	8.5	0.0572	ug/L	0.0572 ppb	23:57:34
3	Sc 361.383	893643.2	893643.2	100.98	%		23:58:52
3	Y 371.029	749617.7	749617.7	101.02	%		23:58:52
3	Ag 328.068†	364.8	133.7	0.6184	ug/L	0.6184 ppb	23:58:52
3	As 188.979†	-27.2	2.2	0.9090	ug/L	0.9090 ppb	23:59:12
3	B 249.677†	-265.6	260.9	5.6621	ug/L	5.6621 ppb	23:59:12
3	Ba 233.527†	-24.3	-12.0	-0.0910	ug/L	-0.0910 ppb	23:59:12
3	Be 313.107†	-5172.9	197.5	0.0736	ug/L	0.0736 ppb	23:58:52
3	Cd 226.502†	-179.8	9.8	0.1064	ug/L	0.1064 ppb	23:59:12
3	Co 228.616†	-57.6	14.7	0.2854	ug/L	0.2854 ppb	23:59:12
3	Cr 267.716†	60.6	-27.0	-0.2902	ug/L	-0.2902 ppb	23:59:12
3	Cu 324.752†	6903.5	67.9	0.1974	ug/L	0.1974 ppb	23:58:52
3	Mn 257.610†	456.2	48.4	0.0527	ug/L	0.0527 ppb	23:59:12
3	Mo 202.031†	17.7	-2.4	-0.1590	ug/L	-0.1590 ppb	23:59:12
3	Ni 231.604†	91.6	20.6	0.4888	ug/L	0.4888 ppb	23:59:12
3	P 214.914†	216.4	-5.6	-3.3503	ug/L	-3.3503 ppb	23:59:12
3	Pb 220.353†	-65.5	-12.3	-1.4406	ug/L	-1.4406 ppb	23:59:12
3	S 181.975 Axial†	45.1	3.2	4.7214	ug/L	4.7214 ppb	23:59:12
3	Sb 206.836†	37.0	7.0	2.3067	ug/L	2.3067 ppb	23:59:12
3	Se 196.026†	-18.6	5.1	3.0217	ug/L	3.0217 ppb	23:59:12
3	Si 251.611†	498.7	-14.1	-0.4307	ug/L	-0.4307 ppb	23:59:12
3	Sn 189.927†	10.6	6.3	1.0603	ug/L	1.0603 ppb	23:59:12
3	Ti 334.940†	-902.8	71.0	0.1148	ug/L	0.1148 ppb	23:58:52
3	Tl 190.801†	-38.5	-1.3	-0.3711	ug/L	-0.3711 ppb	23:59:12
3	U 409.014†	-1970.5	10.8	0.3028	ug/L	0.3028 ppb	23:58:52
3	V 292.402†	-1282.2	26.7	0.1784	ug/L	0.1784 ppb	23:58:52
3	Zn 213.857†	683.8	-130.1	-1.1735	ug/L	-1.1735 ppb	23:59:12
3	SiO2†	518.3	24.5	1.6041	ug/L	1.6041 ppb	23:59:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894394.8	101.06	%	0.442				0.44%
Sc Radial	5891.7	104	%	0.2				0.22%
Y 371.029	750393.2	101.12	%	0.488				0.48%
Y RADIAL	6403.6	104.0	%	0.08				0.07%
Ag 328.068†	151.0	0.6991	ug/L	0.08875	0.6991	ppb	0.08875	12.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.5	-1.1012	ug/L	9.90409	-1.1012	ppb	9.90409	899.38%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.9	1.9859	ug/L	1.32799	1.9859	ppb	1.32799	66.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	252.3	5.4748	ug/L	0.25699	5.4748	ppb	0.25699	4.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.4	-0.0175	ug/L	0.06402	-0.0175	ppb	0.06402	366.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	187.7	0.0698	ug/L	0.00782	0.0698	ppb	0.00782	11.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.9	1.3967	ug/L	3.53975	1.3967	ppb	3.53975	253.44%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.9      0.0856 ug/L       0.03344      0.0856 ppb        0.03344  39.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               14.8      0.2872 ug/L       0.02033      0.2872 ppb        0.02033   7.08%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -9.9     -0.1067 ug/L       0.15957     -0.1067 ppb        0.15957 149.62%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -49.0     -0.1423 ug/L       0.36501     -0.1423 ppb        0.36501 256.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      5.3772 ug/L      18.30893      5.3772 ppb       18.30893 340.49%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -32.4     -5.8804 ug/L      10.28631     -5.8804 ppb       10.28631 174.93%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.0    -36.284 ug/L       72.9812    -36.284 ppb        72.9812 201.14%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               58.3      0.0645 ug/L       0.02547      0.0645 ppb        0.02547  39.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.0      0.1282 ug/L       0.31038      0.1282 ppb        0.31038 242.20%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        14.1      5.3008 ug/L       5.45585      5.3008 ppb        5.45585 102.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               17.7      0.4200 ug/L       0.16285      0.4200 ppb        0.16285  38.77%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -6.1     -3.5947 ug/L       1.89057     -3.5947 ppb        1.89057  52.59%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -16.3     -1.9006 ug/L       0.39878     -1.9006 ppb        0.39878  20.98%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.1      3.0821 ug/L       2.73777      3.0821 ppb        2.73777  88.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                6.1      1.9943 ug/L       1.02886      1.9943 ppb        1.02886  51.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                1.1      0.6713 ug/L       2.40084      0.6713 ppb        2.40084 357.62%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -7.6     -0.2311 ug/L       0.35419     -0.2311 ppb        0.35419 153.25%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.8     -0.1284 ug/L       1.03912     -0.1284 ppb        1.03912 809.19%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -4.1     -0.0278 ug/L       0.10996     -0.0278 ppb        0.10996 395.90%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                1.0      0.0010 ug/L       0.14105      0.0010 ppb        0.14105 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.1     -0.6017 ug/L       1.79711     -0.6017 ppb        1.79711 298.65%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                64.0      1.7869 ug/L       1.60538      1.7869 ppb        1.60538  89.84%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                23.5      0.1626 ug/L       0.08028      0.1626 ppb        0.08028  49.37%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -128.6     -1.1584 ug/L       0.03549     -1.1584 ppb        0.03549   3.06%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -0.1     -0.0077 ug/L       1.75763     -0.0077 ppb        1.75763 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 103
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 01:10:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5685.6	5685.6	100	%			01:12:40
1	Y RADIAL	6153.6	6153.6	99.92	%			01:12:40
1	Al 396.153Radial†	6710.2	6704.3	4934.5	ug/L	4934.5	ppb	01:12:40
1	Ca 317.933Radial†	3287.3	3256.8	4980.2	ug/L	4980.2	ppb	01:13:00
1	Fe 238.204 Radial†	504.8	496.8	5018.3	ug/L	5018.3	ppb	01:13:00
1	K 766.490 Radial†	29953.4	27665.8	5012.4	ug/L	5012.4	ppb	01:12:40
1	Mg 279.077 IEC†	140.2	137.8	5139.3	ug/L	5139.3	ppb	01:13:00
1	Na 589.592 Radial†	26040.8	26554.9	9981.2	ug/L	9981.2	ppb	01:12:40
1	Sr 421.552†	76329.5	76027.3	513.18	ug/L	513.18	ppb	01:12:40
1	Sc 361.383	888535.2	888535.2	100.40	%			01:13:57
1	Y 371.029	733717.8	733717.8	98.874	%			01:13:57
1	Ag 328.068†	111042.6	110369.7	513.33	ug/L	513.33	ppb	01:14:03
1	As 188.979†	1186.4	1210.8	498.46	ug/L	498.46	ppb	01:14:23
1	B 249.677†	22422.2	22856.1	494.19	ug/L	494.19	ppb	01:14:03
1	Ba 233.527†	66163.8	65910.5	501.89	ug/L	501.89	ppb	01:14:03
1	Be 313.107†	1330597.8	1330582.6	495.43	ug/L	495.43	ppb	01:13:57
1	Cd 226.502†	46547.1	46548.3	504.82	ug/L	504.82	ppb	01:14:03
1	Co 228.616†	25970.5	25938.1	503.65	ug/L	503.65	ppb	01:14:03
1	Cr 267.716†	46659.3	46385.2	500.59	ug/L	500.59	ppb	01:14:03
1	Cu 324.752†	177839.9	170358.2	495.71	ug/L	495.71	ppb	01:14:03
1	Mn 257.610†	457927.0	455687.4	495.61	ug/L	495.61	ppb	01:13:57
1	Mo 202.031†	7816.1	7764.7	506.15	ug/L	506.15	ppb	01:14:23
1	Ni 231.604†	21400.7	21244.7	503.78	ug/L	503.78	ppb	01:14:03
1	P 214.914†	4415.1	4177.4	2406.9	ug/L	2406.9	ppb	01:14:23
1	Pb 220.353†	4189.3	4225.0	495.45	ug/L	495.45	ppb	01:14:23
1	S 181.975 Axial†	740.2	695.8	1016.4	ug/L	1016.4	ppb	01:14:23
1	Sb 206.836†	1576.6	1540.6	507.50	ug/L	507.50	ppb	01:14:23
1	Se 196.026†	814.7	834.9	515.49	ug/L	515.49	ppb	01:14:23
1	Si 251.611†	83629.7	82786.3	2520.0	ug/L	2520.0	ppb	01:14:03
1	Sn 189.927†	3021.0	3004.6	508.90	ug/L	508.90	ppb	01:14:23
1	Ti 334.940†	314410.8	314115.1	507.89	ug/L	507.89	ppb	01:14:03
1	Tl 190.801†	1681.6	1711.7	493.83	ug/L	493.83	ppb	01:14:23
1	U 409.014†	15974.4	17872.5	497.74	ug/L	497.74	ppb	01:14:03
1	V 292.402†	72573.0	73578.5	503.49	ug/L	503.49	ppb	01:14:03
1	Zn 213.857†	57083.7	56047.5	499.79	ug/L	499.79	ppb	01:14:03
1	SiO2†	83361.9	82538.8	5378.7	ug/L	5378.7	ppb	01:15:30
2	Sc Radial	5513.5	5513.5	97.4	%			01:13:05
2	Y RADIAL	5963.1	5963.1	96.82	%			01:13:05
2	Al 396.153Radial†	6784.0	6988.7	5145.0	ug/L	5145.0	ppb	01:13:05
2	Ca 317.933Radial†	3291.0	3362.8	5142.3	ug/L	5142.3	ppb	01:13:25
2	Fe 238.204 Radial†	500.2	507.8	5128.9	ug/L	5128.9	ppb	01:13:25
2	K 766.490 Radial†	30068.3	28715.2	5202.8	ug/L	5202.8	ppb	01:13:05
2	Mg 279.077 IEC†	141.1	143.2	5336.9	ug/L	5336.9	ppb	01:13:25
2	Na 589.592 Radial†	25897.1	27217.0	10230	ug/L	10230	ppb	01:13:05
2	Sr 421.552†	76617.6	78696.6	531.20	ug/L	531.20	ppb	01:13:05
2	Sc 361.383	899857.8	899857.8	101.68	%			01:14:28
2	Y 371.029	741991.3	741991.3	99.989	%			01:14:28
2	Ag 328.068†	110888.3	108826.5	506.20	ug/L	506.20	ppb	01:14:34
2	As 188.979†	1185.9	1195.5	492.14	ug/L	492.14	ppb	01:14:54
2	B 249.677†	22401.0	22554.3	487.64	ug/L	487.64	ppb	01:14:34
2	Ba 233.527†	65779.1	64703.0	492.71	ug/L	492.71	ppb	01:14:34
2	Be 313.107†	1339636.6	1322796.7	492.52	ug/L	492.52	ppb	01:14:28
2	Cd 226.502†	46116.4	45541.4	493.88	ug/L	493.88	ppb	01:14:34
2	Co 228.616†	25787.8	25432.9	493.84	ug/L	493.84	ppb	01:14:34
2	Cr 267.716†	46335.6	45482.2	490.84	ug/L	490.84	ppb	01:14:34
2	Cu 324.752†	177650.1	167942.8	488.69	ug/L	488.69	ppb	01:14:34
2	Mn 257.610†	461749.6	453708.0	493.47	ug/L	493.47	ppb	01:14:28
2	Mo 202.031†	7820.4	7671.0	500.05	ug/L	500.05	ppb	01:14:54
2	Ni 231.604†	21243.6	20822.0	493.75	ug/L	493.75	ppb	01:14:34

2	P 214.914†	4411.2	4118.2	2372.8 ug/L	2372.8 ppb	01:14:54
2	Pb 220.353†	4196.5	4179.6	490.17 ug/L	490.17 ppb	01:14:54
2	S 181.975 Axial†	736.5	682.9	997.47 ug/L	997.47 ppb	01:14:54
2	Sb 206.836†	1604.9	1548.7	510.12 ug/L	510.12 ppb	01:14:54
2	Se 196.026†	827.7	837.5	517.40 ug/L	517.40 ppb	01:14:54
2	Si 251.611†	83145.5	81262.1	2473.5 ug/L	2473.5 ppb	01:14:34
2	Sn 189.927†	3021.7	2967.4	502.63 ug/L	502.63 ppb	01:14:54
2	Ti 334.940†	313043.4	308830.1	499.36 ug/L	499.36 ppb	01:14:34
2	Tl 190.801†	1698.9	1707.7	492.66 ug/L	492.66 ppb	01:14:54
2	U 409.014†	15960.4	17658.5	491.77 ug/L	491.77 ppb	01:14:34
2	V 292.402†	72261.7	72362.9	495.18 ug/L	495.18 ppb	01:14:34
2	Zn 213.857†	56768.9	55022.6	490.63 ug/L	490.63 ppb	01:14:34
2	SiO2†	83549.6	81678.7	5322.5 ug/L	5322.5 ppb	01:15:35
3	Sc Radial	5714.2	5714.2	101 %		01:13:30
3	Y RADIAL	6145.2	6145.2	99.78 %		01:13:30
3	Al 396.153Radial†	6754.1	6714.3	4942.0 ug/L	4942.0 ppb	01:13:30
3	Ca 317.933Radial†	3280.8	3233.9	4945.2 ug/L	4945.2 ppb	01:13:50
3	Fe 238.204 Radial†	503.0	492.5	4975.1 ug/L	4975.1 ppb	01:13:50
3	K 766.490 Radial†	30321.2	27881.0	5051.5 ug/L	5051.5 ppb	01:13:30
3	Mg 279.077 IEC†	137.3	134.3	5007.9 ug/L	5007.9 ppb	01:13:50
3	Na 589.592 Radial†	26041.3	26425.4	9932.6 ug/L	9932.6 ppb	01:13:30
3	Sr 421.552†	76882.4	76194.4	514.31 ug/L	514.31 ppb	01:13:30
3	Sc 361.383	899212.4	899212.4	101.61 %		01:14:59
3	Y 371.029	741963.5	741963.5	99.985 %		01:14:59
3	Ag 328.068†	111730.1	109733.1	510.36 ug/L	510.36 ppb	01:15:04
3	As 188.979†	1208.9	1219.0	501.75 ug/L	501.75 ppb	01:15:25
3	B 249.677†	22601.9	22767.8	492.29 ug/L	492.29 ppb	01:15:04
3	Ba 233.527†	66428.6	65388.6	497.92 ug/L	497.92 ppb	01:15:04
3	Be 313.107†	1333869.7	1318066.6	490.77 ug/L	490.77 ppb	01:14:59
3	Cd 226.502†	46717.8	46165.9	500.67 ug/L	500.67 ppb	01:15:04
3	Co 228.616†	26031.7	25691.2	498.86 ug/L	498.86 ppb	01:15:04
3	Cr 267.716†	46775.9	45948.2	495.87 ug/L	495.87 ppb	01:15:04
3	Cu 324.752†	178832.1	169231.5	492.43 ug/L	492.43 ppb	01:15:04
3	Mn 257.610†	458821.9	451152.5	490.68 ug/L	490.68 ppb	01:14:59
3	Mo 202.031†	7865.0	7720.5	503.26 ug/L	503.26 ppb	01:15:25
3	Ni 231.604†	21459.7	21049.8	499.15 ug/L	499.15 ppb	01:15:04
3	P 214.914†	4449.0	4158.6	2396.3 ug/L	2396.3 ppb	01:15:25
3	Pb 220.353†	4242.2	4227.6	495.75 ug/L	495.75 ppb	01:15:25
3	S 181.975 Axial†	745.5	692.2	1011.2 ug/L	1011.2 ppb	01:15:25
3	Sb 206.836†	1613.5	1558.4	513.27 ug/L	513.27 ppb	01:15:25
3	Se 196.026†	828.9	839.2	517.96 ug/L	517.96 ppb	01:15:25
3	Si 251.611†	83871.8	82035.6	2497.1 ug/L	2497.1 ppb	01:15:04
3	Sn 189.927†	3040.9	2988.5	506.16 ug/L	506.16 ppb	01:15:25
3	Ti 334.940†	315928.4	311890.4	504.29 ug/L	504.29 ppb	01:15:04
3	Tl 190.801†	1718.1	1727.7	498.39 ug/L	498.39 ppb	01:15:25
3	U 409.014†	16081.3	17788.8	495.41 ug/L	495.41 ppb	01:15:04
3	V 292.402†	72994.1	73134.7	500.45 ug/L	500.45 ppb	01:15:04
3	Zn 213.857†	57358.6	55643.0	496.19 ug/L	496.19 ppb	01:15:04
3	SiO2†	82336.9	80544.2	5248.1 ug/L	5248.1 ppb	01:15:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895868.5	101.23	%	0.719				0.71%
Sc Radial	5637.8	99.5	%	1.92				1.93%
Y 371.029	739224.2	99.616	%	0.6426				0.65%
Y RADIAL	6087.3	98.84	%	1.748				1.77%
Ag 328.068†	109643.1	509.97	ug/L	3.581	509.97	ppb	3.581	0.70%
QC value within limits for Ag 328.068 Recovery = 101.99%								
Al 396.153Radial†	6802.4	5007.1	ug/L	119.44	5007.1	ppb	119.44	2.39%
QC value within limits for Al 396.153Radial Recovery = 100.14%								
As 188.979†	1208.4	497.45	ug/L	4.884	497.45	ppb	4.884	0.98%
QC value within limits for As 188.979 Recovery = 99.49%								
B 249.677†	22726.1	491.37	ug/L	3.366	491.37	ppb	3.366	0.68%
QC value within limits for B 249.677 Recovery = 98.27%								
Ba 233.527†	65334.0	497.51	ug/L	4.607	497.51	ppb	4.607	0.93%
QC value within limits for Ba 233.527 Recovery = 99.50%								
Be 313.107†	1323815.3	492.91	ug/L	2.353	492.91	ppb	2.353	0.48%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	3284.5	5022.5	ug/L	105.14	5022.5	ppb	105.14	2.09%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.45%
Cd 226.502†            46085.2      499.79 ug/L         5.524      499.79 ppb          5.524   1.11%
   QC value within limits for Cd 226.502  Recovery = 99.96%
Co 228.616†            25687.4      498.78 ug/L         4.903      498.78 ppb          4.903   0.98%
   QC value within limits for Co 228.616  Recovery = 99.76%
Cr 267.716†            45938.5      495.77 ug/L         4.871      495.77 ppb          4.871   0.98%
   QC value within limits for Cr 267.716  Recovery = 99.15%
Cu 324.752†           169177.5      492.28 ug/L         3.512      492.28 ppb          3.512   0.71%
   QC value within limits for Cu 324.752  Recovery = 98.46%
Fe 238.204 Radial†       499.0      5040.8 ug/L        79.35      5040.8 ppb         79.35   1.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.82%
K 766.490 Radial†      28087.3      5088.9 ug/L       100.53      5088.9 ppb        100.53   1.98%
   QC value within limits for K 766.490 Radial  Recovery = 101.78%
Mg 279.077 IEC†          138.4      5161.3 ug/L       165.62      5161.3 ppb        165.62   3.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.23%
Mn 257.610†           453516.0      493.25 ug/L         2.472      493.25 ppb          2.472   0.50%
   QC value within limits for Mn 257.610  Recovery = 98.65%
Mo 202.031†             7718.8      503.15 ug/L         3.050      503.15 ppb          3.050   0.61%
   QC value within limits for Mo 202.031  Recovery = 100.63%
Na 589.592 Radial†     26732.4       10048 ug/L       159.6        10048 ppb        159.6   1.59%
   QC value within limits for Na 589.592 Radial  Recovery = 100.48%
Ni 231.604†            21038.8      498.90 ug/L         5.017      498.90 ppb          5.017   1.01%
   QC value within limits for Ni 231.604  Recovery = 99.78%
P 214.914†              4151.4      2392.0 ug/L        17.46      2392.0 ppb         17.46   0.73%
   QC value within limits for P 214.914  Recovery = 95.68%
Pb 220.353†             4210.7      493.79 ug/L         3.139      493.79 ppb          3.139   0.64%
   QC value within limits for Pb 220.353  Recovery = 98.76%
S 181.975 Axial†         690.3      1008.4 ug/L         9.80      1008.4 ppb          9.80   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 100.84%
Sb 206.836†             1549.3      510.30 ug/L         2.885      510.30 ppb          2.885   0.57%
   QC value within limits for Sb 206.836  Recovery = 102.06%
Se 196.026†              837.2      516.95 ug/L         1.297      516.95 ppb          1.297   0.25%
   QC value within limits for Se 196.026  Recovery = 103.39%
Si 251.611†            82028.0      2496.9 ug/L        23.28      2496.9 ppb         23.28   0.93%
   QC value within limits for Si 251.611  Recovery = 99.87%
Sn 189.927†             2986.9      505.90 ug/L         3.146      505.90 ppb          3.146   0.62%
   QC value within limits for Sn 189.927  Recovery = 101.18%
Sr 421.552†            76972.8      519.57 ug/L        10.093      519.57 ppb         10.093   1.94%
   QC value within limits for Sr 421.552  Recovery = 103.91%
Ti 334.940†           311611.8      503.85 ug/L         4.284      503.85 ppb          4.284   0.85%
   QC value within limits for Ti 334.940  Recovery = 100.77%
Tl 190.801†             1715.7      494.96 ug/L         3.028      494.96 ppb          3.028   0.61%
   QC value within limits for Tl 190.801  Recovery = 98.99%
U 409.014†             17773.3      494.97 ug/L         3.011      494.97 ppb          3.011   0.61%
   QC value within limits for U 409.014  Recovery = 98.99%
V 292.402†             73025.3      499.71 ug/L         4.202      499.71 ppb          4.202   0.84%
   QC value within limits for V 292.402  Recovery = 99.94%
Zn 213.857†            55571.1      495.54 ug/L         4.618      495.54 ppb          4.618   0.93%
   QC value within limits for Zn 213.857  Recovery = 99.11%
SiO2†                  81587.2      5316.4 ug/L        65.47      5316.4 ppb         65.47   1.23%
   QC value within limits for SiO2  Recovery = 99.42%
All analyte(s) passed QC.
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Sequence No.: 104
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 01:17:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5758.1	5758.1	102	%			01:19:43
1	Y RADIAL	6255.2	6255.2	101.6	%			01:19:43
1	Al 396.153Radial†	-29.4	-8.6	-6.3947	ug/L	-6.3947	ppb	01:19:43
1	Ca 317.933Radial†	28.9	10.7	16.384	ug/L	16.384	ppb	01:20:03
1	Fe 238.204 Radial†	4.2	-1.9	-19.145	ug/L	-19.145	ppb	01:20:03
1	K 766.490 Radial†	2255.9	48.5	8.7928	ug/L	8.7928	ppb	01:19:43
1	Mg 279.077 IEC†	3.6	1.8	65.535	ug/L	65.535	ppb	01:20:03
1	Na 589.592 Radial†	-628.0	-1.7	-0.6278	ug/L	-0.6278	ppb	01:19:43
1	Sr 421.552†	-28.3	-31.2	-0.2110	ug/L	-0.2110	ppb	01:19:43
1	Sc 361.383	888239.9	888239.9	100.37	%			01:21:00
1	Y 371.029	744914.6	744914.6	100.38	%			01:21:00
1	Ag 328.068†	330.6	101.8	0.4611	ug/L	0.4611	ppb	01:21:00
1	As 188.979†	-21.3	8.0	3.2383	ug/L	3.2383	ppb	01:21:20
1	B 249.677†	-290.5	234.4	5.0902	ug/L	5.0902	ppb	01:21:20
1	Ba 233.527†	-1.4	10.6	0.0786	ug/L	0.0786	ppb	01:21:20
1	Be 313.107†	-5087.0	251.9	0.0935	ug/L	0.0935	ppb	01:21:00
1	Cd 226.502†	-183.0	5.6	0.0627	ug/L	0.0627	ppb	01:21:20
1	Co 228.616†	-68.9	3.1	0.0623	ug/L	0.0623	ppb	01:21:20
1	Cr 267.716†	85.8	-1.5	-0.0173	ug/L	-0.0173	ppb	01:21:20
1	Cu 324.752†	6827.0	33.3	0.0958	ug/L	0.0958	ppb	01:21:00
1	Mn 257.610†	470.0	64.9	0.0674	ug/L	0.0674	ppb	01:21:20
1	Mo 202.031†	25.9	5.8	0.3758	ug/L	0.3758	ppb	01:21:20
1	Ni 231.604†	96.6	26.1	0.6191	ug/L	0.6191	ppb	01:21:20
1	P 214.914†	207.7	-13.0	-7.7579	ug/L	-7.7579	ppb	01:21:20
1	Pb 220.353†	-64.7	-11.9	-1.3887	ug/L	-1.3887	ppb	01:21:20
1	S 181.975 Axial†	39.0	-2.6	-3.7894	ug/L	-3.7894	ppb	01:21:20
1	Sb 206.836†	37.7	8.0	2.6009	ug/L	2.6009	ppb	01:21:20
1	Se 196.026†	-17.5	6.0	3.5175	ug/L	3.5175	ppb	01:21:20
1	Si 251.611†	509.8	-0.1	-0.0113	ug/L	-0.0113	ppb	01:21:20
1	Sn 189.927†	2.9	-1.4	-0.2396	ug/L	-0.2396	ppb	01:21:20
1	Ti 334.940†	-1016.3	-47.5	-0.0766	ug/L	-0.0766	ppb	01:21:00
1	Tl 190.801†	-13.3	23.6	6.7630	ug/L	6.7630	ppb	01:21:20
1	U 409.014†	-1916.9	52.3	1.4631	ug/L	1.4631	ppb	01:21:00
1	V 292.402†	-1375.2	-73.7	-0.4848	ug/L	-0.4848	ppb	01:21:00
1	Zn 213.857†	710.2	-99.7	-0.9011	ug/L	-0.9011	ppb	01:21:20
1	SiO2†	529.7	38.9	2.5311	ug/L	2.5311	ppb	01:22:16
2	Sc Radial	5801.6	5801.6	102	%			01:20:08
2	Y RADIAL	6283.3	6283.3	102.0	%			01:20:08
2	Al 396.153Radial†	-8.9	11.7	8.6367	ug/L	8.6367	ppb	01:20:08
2	Ca 317.933Radial†	30.0	11.6	17.693	ug/L	17.693	ppb	01:20:28
2	Fe 238.204 Radial†	6.0	-0.2	-2.0959	ug/L	-2.0959	ppb	01:20:28
2	K 766.490 Radial†	2261.9	37.7	6.8427	ug/L	6.8427	ppb	01:20:08
2	Mg 279.077 IEC†	1.6	-0.2	-8.7471	ug/L	-8.7471	ppb	01:20:28
2	Na 589.592 Radial†	-643.3	-12.0	-4.5175	ug/L	-4.5175	ppb	01:20:08
2	Sr 421.552†	-6.9	-10.1	-0.0684	ug/L	-0.0684	ppb	01:20:08
2	Sc 361.383	897587.4	897587.4	101.43	%			01:21:25
2	Y 371.029	752573.6	752573.6	101.42	%			01:21:25
2	Ag 328.068†	305.2	73.3	0.3360	ug/L	0.3360	ppb	01:21:25
2	As 188.979†	-33.0	-3.3	-1.3592	ug/L	-1.3592	ppb	01:21:45
2	B 249.677†	-278.0	249.8	5.4227	ug/L	5.4227	ppb	01:21:45
2	Ba 233.527†	-9.7	2.4	0.0193	ug/L	0.0193	ppb	01:21:45
2	Be 313.107†	-5274.8	119.6	0.0443	ug/L	0.0443	ppb	01:21:25
2	Cd 226.502†	-165.1	25.0	0.2720	ug/L	0.2720	ppb	01:21:45
2	Co 228.616†	-74.9	-2.1	-0.0410	ug/L	-0.0410	ppb	01:21:45
2	Cr 267.716†	62.8	-25.1	-0.2709	ug/L	-0.2709	ppb	01:21:45
2	Cu 324.752†	6848.7	-16.2	-0.0473	ug/L	-0.0473	ppb	01:21:25
2	Mn 257.610†	472.1	62.0	0.0674	ug/L	0.0674	ppb	01:21:45
2	Mo 202.031†	20.4	0.1	0.0071	ug/L	0.0071	ppb	01:21:45
2	Ni 231.604†	95.2	23.7	0.5623	ug/L	0.5623	ppb	01:21:45

2	P 214.914†	217.8	-5.2	-3.0886	ug/L	-3.0886 ppb	01:21:45
2	Pb 220.353†	-62.6	-9.2	-1.0708	ug/L	-1.0708 ppb	01:21:45
2	S 181.975 Axial†	36.5	-5.5	-8.0098	ug/L	-8.0098 ppb	01:21:45
2	Sb 206.836†	39.0	8.8	2.8683	ug/L	2.8683 ppb	01:21:45
2	Se 196.026†	-18.4	5.3	3.1460	ug/L	3.1460 ppb	01:21:45
2	Si 251.611†	529.0	13.5	0.4123	ug/L	0.4123 ppb	01:21:45
2	Sn 189.927†	3.4	-0.9	-0.1572	ug/L	-0.1572 ppb	01:21:45
2	Ti 334.940†	-1017.2	-37.9	-0.0622	ug/L	-0.0622 ppb	01:21:25
2	Tl 190.801†	-25.8	11.4	3.2631	ug/L	3.2631 ppb	01:21:45
2	U 409.014†	-1828.0	159.8	4.4667	ug/L	4.4667 ppb	01:21:25
2	V 292.402†	-1253.3	60.8	0.4193	ug/L	0.4193 ppb	01:21:25
2	Zn 213.857†	714.3	-103.0	-0.9295	ug/L	-0.9295 ppb	01:21:45
2	SiO2†	533.1	36.8	2.4062	ug/L	2.4062 ppb	01:22:21
3	Sc Radial	5712.3	5712.3	101	%		01:20:33
3	Y RADIAL	6238.7	6238.7	101.3	%		01:20:33
3	Al 396.153Radial†	-18.1	2.3	1.7333	ug/L	1.7333 ppb	01:20:33
3	Ca 317.933Radial†	29.7	11.8	18.035	ug/L	18.035 ppb	01:20:53
3	Fe 238.204 Radial†	5.7	-0.4	-3.5818	ug/L	-3.5818 ppb	01:20:53
3	K 766.490 Radial†	2255.3	65.7	11.924	ug/L	11.924 ppb	01:20:33
3	Mg 279.077 IEC†	0.5	-1.3	-47.823	ug/L	-47.823 ppb	01:20:53
3	Na 589.592 Radial†	-607.2	14.0	5.2480	ug/L	5.2480 ppb	01:20:33
3	Sr 421.552†	-4.2	-7.6	-0.0513	ug/L	-0.0513 ppb	01:20:33
3	Sc 361.383	882574.0	882574.0	99.729	%		01:21:51
3	Y 371.029	740360.4	740360.4	99.769	%		01:21:51
3	Ag 328.068†	372.6	146.0	0.6726	ug/L	0.6726 ppb	01:21:51
3	As 188.979†	-26.2	3.0	1.2069	ug/L	1.2069 ppb	01:22:11
3	B 249.677†	-284.5	238.6	5.1793	ug/L	5.1793 ppb	01:22:11
3	Ba 233.527†	-19.2	-7.2	-0.0548	ug/L	-0.0548 ppb	01:22:11
3	Be 313.107†	-5158.0	148.2	0.0549	ug/L	0.0549 ppb	01:21:51
3	Cd 226.502†	-189.0	-1.7	-0.0179	ug/L	-0.0179 ppb	01:22:11
3	Co 228.616†	-66.0	5.6	0.1082	ug/L	0.1082 ppb	01:22:11
3	Cr 267.716†	94.7	8.0	0.0853	ug/L	0.0853 ppb	01:22:11
3	Cu 324.752†	6771.8	21.5	0.0624	ug/L	0.0624 ppb	01:21:51
3	Mn 257.610†	449.3	47.1	0.0517	ug/L	0.0517 ppb	01:22:11
3	Mo 202.031†	21.1	1.1	0.0746	ug/L	0.0746 ppb	01:22:11
3	Ni 231.604†	93.2	23.4	0.5545	ug/L	0.5545 ppb	01:22:11
3	P 214.914†	223.4	4.1	2.4131	ug/L	2.4131 ppb	01:22:11
3	Pb 220.353†	-50.0	2.4	0.2811	ug/L	0.2811 ppb	01:22:11
3	S 181.975 Axial†	41.5	0.2	0.2621	ug/L	0.2621 ppb	01:22:11
3	Sb 206.836†	33.0	3.4	1.1028	ug/L	1.1028 ppb	01:22:11
3	Se 196.026†	-23.3	0.1	0.0479	ug/L	0.0479 ppb	01:22:11
3	Si 251.611†	502.6	-4.1	-0.1278	ug/L	-0.1278 ppb	01:22:11
3	Sn 189.927†	-0.6	-4.9	-0.8254	ug/L	-0.8254 ppb	01:22:11
3	Ti 334.940†	-1012.7	-50.4	-0.0811	ug/L	-0.0811 ppb	01:21:51
3	Tl 190.801†	-30.6	6.2	1.7733	ug/L	1.7733 ppb	01:22:11
3	U 409.014†	-1921.0	35.9	1.0047	ug/L	1.0047 ppb	01:21:51
3	V 292.402†	-1299.7	-6.7	-0.0428	ug/L	-0.0428 ppb	01:21:51
3	Zn 213.857†	702.4	-103.0	-0.9284	ug/L	-0.9284 ppb	01:22:11
3	SiO2†	501.6	14.2	0.9221	ug/L	0.9221 ppb	01:22:26

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	889467.1	100.51	%	0.857				0.85%
Sc Radial	5757.3	102	%	0.8				0.78%
Y 371.029	745949.5	100.52	%	0.832				0.83%
Y RADIAL	6259.1	101.6	%	0.37				0.36%
Ag 328.068†	107.1	0.4899	ug/L	0.17016	0.4899	ppb	0.17016	34.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.8	1.3251	ug/L	7.52404	1.3251	ppb	7.52404	567.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.5	1.0286	ug/L	2.30390	1.0286	ppb	2.30390	223.97%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	240.9	5.2308	ug/L	0.17211	5.2308	ppb	0.17211	3.29%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.9	0.0144	ug/L	0.06683	0.0144	ppb	0.06683	465.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	173.3	0.0642	ug/L	0.02586	0.0642	ppb	0.02586	40.26%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.4	17.370	ug/L	0.8715	17.370	ppb	0.8715	5.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.6      0.1056 ug/L       0.14965      0.1056 ppb        0.14965 141.69%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.2      0.0432 ug/L       0.07641      0.0432 ppb        0.07641 177.04%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -6.2     -0.0676 ug/L       0.18336     -0.0676 ppb        0.18336 271.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                12.9      0.0370 ug/L       0.07488      0.0370 ppb        0.07488 202.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.8     -8.2743 ug/L       9.44368     -8.2743 ppb        9.44368 114.13%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          50.6      9.1865 ug/L       2.56349      9.1865 ppb        2.56349  27.90%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.1      2.9885 ug/L      57.58294      2.9885 ppb       57.58294 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                58.0      0.0622 ug/L       0.00902      0.0622 ppb        0.00902  14.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1525 ug/L       0.19631      0.1525 ppb        0.19631 128.74%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†          0.1      0.0342 ug/L       4.91627      0.0342 ppb        4.91627 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                24.4      0.5786 ug/L       0.03528      0.5786 ppb        0.03528   6.10%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.7     -2.8112 ug/L       5.09119     -2.8112 ppb        5.09119 181.11%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.2     -0.7261 ug/L       0.88669     -0.7261 ppb        0.88669 122.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.6     -3.8457 ug/L       4.13624     -3.8457 ppb        4.13624 107.55%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.8      2.1907 ug/L       0.95158      2.1907 ppb        0.95158  43.44%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.8      2.2371 ug/L       1.90500      2.2371 ppb        1.90500  85.15%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                 3.1      0.0910 ug/L       0.28425      0.0910 ppb        0.28425 312.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.4     -0.4074 ug/L       0.36433     -0.4074 ppb        0.36433  89.44%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -16.3     -0.1102 ug/L       0.08767     -0.1102 ppb        0.08767  79.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -45.3     -0.0733 ug/L       0.00988     -0.0733 ppb        0.00988  13.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                13.7      3.9331 ug/L       2.56146      3.9331 ppb        2.56146  65.13%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 82.7      2.3115 ug/L       1.88050      2.3115 ppb        1.88050  81.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -6.6     -0.0361 ug/L       0.45209     -0.0361 ppb        0.45209 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -101.9     -0.9197 ug/L       0.01606     -0.9197 ppb        0.01606   1.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      30.0      1.9531 ug/L       0.89511      1.9531 ppb        0.89511  45.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 111
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 02:07:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5798.4	5798.4	102	%			02:08:57
1	Y RADIAL	6249.3	6249.3	101.5	%			02:08:57
1	Al 396.153Radial†	6780.9	6643.3	4889.8	ug/L	4889.8	ppb	02:08:57
1	Ca 317.933Radial†	3287.7	3193.4	4883.3	ug/L	4883.3	ppb	02:09:17
1	Fe 238.204 Radial†	504.3	486.5	4914.7	ug/L	4914.7	ppb	02:09:17
1	K 766.490 Radial†	30234.1	27359.4	4956.9	ug/L	4956.9	ppb	02:08:57
1	Mg 279.077 IEC†	138.1	133.2	4964.7	ug/L	4964.7	ppb	02:09:17
1	Na 589.592 Radial†	26271.4	26275.3	9876.1	ug/L	9876.1	ppb	02:08:57
1	Sr 421.552†	76771.9	74980.0	506.11	ug/L	506.11	ppb	02:08:57
1	Sc 361.383	900677.3	900677.3	101.77	%			02:10:14
1	Y 371.029	744182.6	744182.6	100.28	%			02:10:14
1	Ag 328.068†	109737.9	107596.8	500.44	ug/L	500.44	ppb	02:10:19
1	As 188.979†	1191.6	1200.0	493.92	ug/L	493.92	ppb	02:10:39
1	B 249.677†	22096.1	22234.7	480.75	ug/L	480.75	ppb	02:10:19
1	Ba 233.527†	65346.2	64218.8	489.01	ug/L	489.01	ppb	02:10:19
1	Be 313.107†	1333060.3	1315136.3	489.67	ug/L	489.67	ppb	02:10:14
1	Cd 226.502†	45777.2	45166.8	489.83	ug/L	489.83	ppb	02:10:19
1	Co 228.616†	25597.1	25222.5	489.76	ug/L	489.76	ppb	02:10:19
1	Cr 267.716†	46000.7	45111.7	486.84	ug/L	486.84	ppb	02:10:19
1	Cu 324.752†	175794.4	165960.5	482.91	ug/L	482.91	ppb	02:10:19
1	Mn 257.610†	457428.8	449049.3	488.39	ug/L	488.39	ppb	02:10:14
1	Mo 202.031†	7777.8	7622.2	496.85	ug/L	496.85	ppb	02:10:39
1	Ni 231.604†	21065.2	20627.8	489.15	ug/L	489.15	ppb	02:10:19
1	P 214.914†	4379.5	4083.2	2353.0	ug/L	2353.0	ppb	02:10:39
1	Pb 220.353†	4206.7	4185.9	490.86	ug/L	490.86	ppb	02:10:39
1	S 181.975 Axial†	739.2	684.9	1000.4	ug/L	1000.4	ppb	02:10:39
1	Sb 206.836†	1583.8	1526.6	502.95	ug/L	502.95	ppb	02:10:39
1	Se 196.026†	808.8	818.1	505.17	ug/L	505.17	ppb	02:10:39
1	Si 251.611†	83076.0	81119.4	2469.2	ug/L	2469.2	ppb	02:10:19
1	Sn 189.927†	3016.4	2959.6	501.26	ug/L	501.26	ppb	02:10:39
1	Ti 334.940†	310430.1	305982.2	494.74	ug/L	494.74	ppb	02:10:19
1	Tl 190.801†	1696.7	1703.9	491.55	ug/L	491.55	ppb	02:10:39
1	U 409.014†	15671.5	17360.4	483.47	ug/L	483.47	ppb	02:10:19
1	V 292.402†	71569.5	71618.0	490.12	ug/L	490.12	ppb	02:10:19
1	Zn 213.857†	56295.0	54506.1	486.05	ug/L	486.05	ppb	02:10:19
1	SiO2†	81718.0	79804.2	5200.0	ug/L	5200.0	ppb	02:11:47
2	Sc Radial	5763.0	5763.0	102	%			02:09:22
2	Y RADIAL	6252.3	6252.3	101.5	%			02:09:22
2	Al 396.153Radial†	6767.5	6670.8	4909.8	ug/L	4909.8	ppb	02:09:22
2	Ca 317.933Radial†	3302.9	3228.0	4936.2	ug/L	4936.2	ppb	02:09:42
2	Fe 238.204 Radial†	510.6	495.7	5007.0	ug/L	5007.0	ppb	02:09:42
2	K 766.490 Radial†	30230.3	27537.1	4989.1	ug/L	4989.1	ppb	02:09:22
2	Mg 279.077 IEC†	143.4	139.2	5188.0	ug/L	5188.0	ppb	02:09:42
2	Na 589.592 Radial†	26237.2	26399.3	9922.8	ug/L	9922.8	ppb	02:09:22
2	Sr 421.552†	76799.9	75468.2	509.41	ug/L	509.41	ppb	02:09:22
2	Sc 361.383	905817.9	905817.9	102.36	%			02:10:45
2	Y 371.029	747457.3	747457.3	100.73	%			02:10:45
2	Ag 328.068†	110493.3	107722.9	501.06	ug/L	501.06	ppb	02:10:50
2	As 188.979†	1215.7	1216.9	500.84	ug/L	500.84	ppb	02:11:10
2	B 249.677†	22322.9	22333.0	482.86	ug/L	482.86	ppb	02:10:50
2	Ba 233.527†	65965.6	64459.5	490.85	ug/L	490.85	ppb	02:10:50
2	Be 313.107†	1343306.5	1317713.3	490.63	ug/L	490.63	ppb	02:10:45
2	Cd 226.502†	46451.4	45570.3	494.20	ug/L	494.20	ppb	02:10:50
2	Co 228.616†	25866.7	25343.1	492.12	ug/L	492.12	ppb	02:10:50
2	Cr 267.716†	46553.9	45395.5	489.91	ug/L	489.91	ppb	02:10:50
2	Cu 324.752†	176873.9	166034.9	483.13	ug/L	483.13	ppb	02:10:50
2	Mn 257.610†	461540.0	450515.2	489.99	ug/L	489.99	ppb	02:10:45
2	Mo 202.031†	7910.9	7708.9	502.50	ug/L	502.50	ppb	02:11:10
2	Ni 231.604†	21307.8	20747.3	491.98	ug/L	491.98	ppb	02:10:50

2	P 214.914†	4473.7	4150.8	2393.1 ug/L	2393.1 ppb	02:11:10
2	Pb 220.353†	4254.4	4209.1	493.58 ug/L	493.58 ppb	02:11:10
2	S 181.975 Axial†	754.4	695.6	1016.2 ug/L	1016.2 ppb	02:11:10
2	Sb 206.836†	1613.7	1546.9	509.64 ug/L	509.64 ppb	02:11:10
2	Se 196.026†	832.0	836.3	516.32 ug/L	516.32 ppb	02:11:10
2	Si 251.611†	83695.9	81261.8	2473.5 ug/L	2473.5 ppb	02:10:50
2	Sn 189.927†	3049.4	2975.0	503.88 ug/L	503.88 ppb	02:11:10
2	Ti 334.940†	312580.5	306352.1	495.34 ug/L	495.34 ppb	02:10:50
2	Tl 190.801†	1724.5	1721.7	496.63 ug/L	496.63 ppb	02:11:10
2	U 409.014†	15755.6	17355.2	483.31 ug/L	483.31 ppb	02:10:50
2	V 292.402†	72258.8	71892.4	492.05 ug/L	492.05 ppb	02:10:50
2	Zn 213.857†	56967.2	54848.9	489.10 ug/L	489.10 ppb	02:10:50
2	SiO2†	82881.0	80484.9	5244.3 ug/L	5244.3 ppb	02:11:52
3	Sc Radial	5694.8	5694.8	101 %		02:09:47
3	Y RADIAL	6160.9	6160.9	100.0 %		02:09:47
3	Al 396.153Radial†	6667.6	6651.1	4895.4 ug/L	4895.4 ppb	02:09:47
3	Ca 317.933Radial†	3312.1	3276.1	5009.7 ug/L	5009.7 ppb	02:10:07
3	Fe 238.204 Radial†	509.2	500.3	5053.4 ug/L	5053.4 ppb	02:10:07
3	K 766.490 Radial†	29840.1	27505.1	4983.3 ug/L	4983.3 ppb	02:09:47
3	Mg 279.077 IEC†	140.6	138.0	5145.6 ug/L	5145.6 ppb	02:10:07
3	Na 589.592 Radial†	26004.4	26476.7	9951.8 ug/L	9951.8 ppb	02:09:47
3	Sr 421.552†	75852.5	75430.3	509.15 ug/L	509.15 ppb	02:09:47
3	Sc 361.383	903671.1	903671.1	102.11 %		02:11:16
3	Y 371.029	743959.8	743959.8	100.25 %		02:11:16
3	Ag 328.068†	110098.0	107592.3	500.46 ug/L	500.46 ppb	02:11:21
3	As 188.979†	1206.3	1210.5	498.23 ug/L	498.23 ppb	02:11:41
3	B 249.677†	22246.2	22309.7	482.36 ug/L	482.36 ppb	02:11:21
3	Ba 233.527†	65804.6	64455.0	490.81 ug/L	490.81 ppb	02:11:21
3	Be 313.107†	1336835.7	1314494.2	489.43 ug/L	489.43 ppb	02:11:16
3	Cd 226.502†	46274.4	45504.7	493.48 ug/L	493.48 ppb	02:11:21
3	Co 228.616†	25714.5	25254.1	490.39 ug/L	490.39 ppb	02:11:21
3	Cr 267.716†	46298.4	45253.4	488.37 ug/L	488.37 ppb	02:11:21
3	Cu 324.752†	175539.1	165138.2	480.53 ug/L	480.53 ppb	02:11:21
3	Mn 257.610†	460894.9	450954.7	490.47 ug/L	490.47 ppb	02:11:16
3	Mo 202.031†	7860.1	7677.5	500.46 ug/L	500.46 ppb	02:11:41
3	Ni 231.604†	21256.4	20746.4	491.96 ug/L	491.96 ppb	02:11:21
3	P 214.914†	4442.0	4130.1	2381.2 ug/L	2381.2 ppb	02:11:41
3	Pb 220.353†	4217.0	4182.3	490.44 ug/L	490.44 ppb	02:11:41
3	S 181.975 Axial†	752.7	695.7	1016.3 ug/L	1016.3 ppb	02:11:41
3	Sb 206.836†	1610.0	1547.0	509.68 ug/L	509.68 ppb	02:11:41
3	Se 196.026†	825.4	831.7	513.72 ug/L	513.72 ppb	02:11:41
3	Si 251.611†	83158.2	80929.4	2463.3 ug/L	2463.3 ppb	02:11:21
3	Sn 189.927†	3044.2	2976.9	504.22 ug/L	504.22 ppb	02:11:41
3	Ti 334.940†	311182.8	305708.8	494.31 ug/L	494.31 ppb	02:11:21
3	Tl 190.801†	1715.7	1717.0	495.30 ug/L	495.30 ppb	02:11:41
3	U 409.014†	15889.7	17523.1	487.99 ug/L	487.99 ppb	02:11:21
3	V 292.402†	71992.1	71798.9	491.39 ug/L	491.39 ppb	02:11:21
3	Zn 213.857†	56636.5	54657.3	487.37 ug/L	487.37 ppb	02:11:21
3	SiO2†	83628.5	81409.2	5305.0 ug/L	5305.0 ppb	02:11:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903388.8	102.08	%	0.292				0.29%
Sc Radial	5752.1	102	%	0.9				0.92%
Y 371.029	745199.9	100.42	%	0.264				0.26%
Y RADIAL	6220.8	101.0	%	0.84				0.83%
Ag 328.068†	107637.3	500.65	ug/L	0.351	500.65	ppb	0.351	0.07%
QC value within limits for Ag 328.068 Recovery = 100.13%								
Al 396.153Radial†	6655.0	4898.3	ug/L	10.35	4898.3	ppb	10.35	0.21%
QC value within limits for Al 396.153Radial Recovery = 97.97%								
As 188.979†	1209.1	497.66	ug/L	3.495	497.66	ppb	3.495	0.70%
QC value within limits for As 188.979 Recovery = 99.53%								
B 249.677†	22292.5	481.99	ug/L	1.105	481.99	ppb	1.105	0.23%
QC value within limits for B 249.677 Recovery = 96.40%								
Ba 233.527†	64377.8	490.22	ug/L	1.050	490.22	ppb	1.050	0.21%
QC value within limits for Ba 233.527 Recovery = 98.04%								
Be 313.107†	1315781.2	489.91	ug/L	0.634	489.91	ppb	0.634	0.13%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	3232.5	4943.1	ug/L	63.50	4943.1	ppb	63.50	1.28%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.86%
Cd 226.502†            45413.9      492.50 ug/L         2.343      492.50 ppb          2.343   0.48%
   QC value within limits for Cd 226.502  Recovery = 98.50%
Co 228.616†            25273.3      490.76 ug/L         1.220      490.76 ppb          1.220   0.25%
   QC value within limits for Co 228.616  Recovery = 98.15%
Cr 267.716†            45253.5      488.37 ug/L         1.532      488.37 ppb          1.532   0.31%
   QC value within limits for Cr 267.716  Recovery = 97.67%
Cu 324.752†           165711.2      482.19 ug/L         1.445      482.19 ppb          1.445   0.30%
   QC value within limits for Cu 324.752  Recovery = 96.44%
Fe 238.204 Radial†       494.2      4991.7 ug/L         70.63      4991.7 ppb         70.63   1.41%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.83%
K 766.490 Radial†      27467.2      4976.4 ug/L         17.16      4976.4 ppb         17.16   0.34%
   QC value within limits for K 766.490 Radial  Recovery = 99.53%
Mg 279.077 IEC†          136.8      5099.4 ug/L        118.58      5099.4 ppb        118.58   2.33%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.99%
Mn 257.610†           450173.1      489.62 ug/L         1.089      489.62 ppb          1.089   0.22%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†             7669.5      499.94 ug/L         2.863      499.94 ppb          2.863   0.57%
   QC value within limits for Mo 202.031  Recovery = 99.99%
Na 589.592 Radial†     26383.8      9916.9 ug/L         38.19      9916.9 ppb         38.19   0.39%
   QC value within limits for Na 589.592 Radial  Recovery = 99.17%
Ni 231.604†            20707.2      491.03 ug/L         1.631      491.03 ppb          1.631   0.33%
   QC value within limits for Ni 231.604  Recovery = 98.21%
P 214.914†              4121.4      2375.7 ug/L         20.59      2375.7 ppb         20.59   0.87%
   QC value within limits for P 214.914  Recovery = 95.03%
Pb 220.353†             4192.4      491.63 ug/L         1.702      491.63 ppb          1.702   0.35%
   QC value within limits for Pb 220.353  Recovery = 98.33%
S 181.975 Axial†         692.1      1011.0 ug/L          9.12      1011.0 ppb          9.12   0.90%
   QC value within limits for S 181.975 Axial  Recovery = 101.10%
Sb 206.836†             1540.2      507.42 ug/L         3.876      507.42 ppb          3.876   0.76%
   QC value within limits for Sb 206.836  Recovery = 101.48%
Se 196.026†              828.7      511.73 ug/L         5.831      511.73 ppb          5.831   1.14%
   QC value within limits for Se 196.026  Recovery = 102.35%
Si 251.611†            81103.6      2468.7 ug/L          5.09      2468.7 ppb          5.09   0.21%
   QC value within limits for Si 251.611  Recovery = 98.75%
Sn 189.927†             2970.5      503.12 ug/L         1.617      503.12 ppb          1.617   0.32%
   QC value within limits for Sn 189.927  Recovery = 100.62%
Sr 421.552†            75292.8      508.23 ug/L         1.833      508.23 ppb          1.833   0.36%
   QC value within limits for Sr 421.552  Recovery = 101.65%
Ti 334.940†           306014.4      494.80 ug/L         0.521      494.80 ppb          0.521   0.11%
   QC value within limits for Ti 334.940  Recovery = 98.96%
Tl 190.801†             1714.2      494.49 ug/L         2.635      494.49 ppb          2.635   0.53%
   QC value within limits for Tl 190.801  Recovery = 98.90%
U 409.014†             17412.9      484.92 ug/L         2.661      484.92 ppb          2.661   0.55%
   QC value within limits for U 409.014  Recovery = 96.98%
V 292.402†             71769.8      491.19 ug/L         0.977      491.19 ppb          0.977   0.20%
   QC value within limits for V 292.402  Recovery = 98.24%
Zn 213.857†            54670.8      487.51 ug/L         1.529      487.51 ppb          1.529   0.31%
   QC value within limits for Zn 213.857  Recovery = 97.50%
SiO2†                  80566.1      5249.8 ug/L         52.67      5249.8 ppb         52.67   1.00%
   QC value within limits for SiO2  Recovery = 98.17%
All analyte(s) passed QC.
```

Sequence No.: 112
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 02:14:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5674.0	5674.0	100	%			02:15:59
1	Y RADIAL	6192.9	6192.9	100.6	%			02:15:59
1	Al 396.153Radial†	-29.3	-9.0	-6.6393	ug/L	-6.6393	ppb	02:15:59
1	Ca 317.933Radial†	29.5	11.8	18.018	ug/L	18.018	ppb	02:16:19
1	Fe 238.204 Radial†	6.7	0.6	6.1987	ug/L	6.1987	ppb	02:16:19
1	K 766.490 Radial†	2329.6	155.0	28.123	ug/L	28.123	ppb	02:15:59
1	Mg 279.077 IEC†	2.3	0.6	21.553	ug/L	21.553	ppb	02:16:19
1	Na 589.592 Radial†	-613.6	3.5	1.3299	ug/L	1.3299	ppb	02:15:59
1	Sr 421.552†	1.2	-2.2	-0.0149	ug/L	-0.0149	ppb	02:15:59
1	Sc 361.383	892945.0	892945.0	100.90	%			02:17:16
1	Y 371.029	750028.9	750028.9	101.07	%			02:17:16
1	Ag 328.068†	406.1	174.9	0.8119	ug/L	0.8119	ppb	02:17:16
1	As 188.979†	-24.8	4.7	1.9051	ug/L	1.9051	ppb	02:17:36
1	B 249.677†	-305.1	221.4	4.8056	ug/L	4.8056	ppb	02:17:36
1	Ba 233.527†	-15.4	-3.2	-0.0240	ug/L	-0.0240	ppb	02:17:36
1	Be 313.107†	-4986.5	378.3	0.1404	ug/L	0.1404	ppb	02:17:16
1	Cd 226.502†	-177.5	12.0	0.1296	ug/L	0.1296	ppb	02:17:36
1	Co 228.616†	-62.6	9.7	0.1899	ug/L	0.1899	ppb	02:17:36
1	Cr 267.716†	73.1	-14.5	-0.1554	ug/L	-0.1554	ppb	02:17:36
1	Cu 324.752†	6780.0	-49.1	-0.1426	ug/L	-0.1426	ppb	02:17:16
1	Mn 257.610†	482.0	74.2	0.0809	ug/L	0.0809	ppb	02:17:36
1	Mo 202.031†	27.9	7.7	0.5002	ug/L	0.5002	ppb	02:17:36
1	Ni 231.604†	95.6	24.6	0.5840	ug/L	0.5840	ppb	02:17:36
1	P 214.914†	208.3	-13.5	-7.9981	ug/L	-7.9981	ppb	02:17:36
1	Pb 220.353†	-69.6	-16.4	-1.9223	ug/L	-1.9223	ppb	02:17:36
1	S 181.975 Axial†	37.6	-4.2	-6.1082	ug/L	-6.1082	ppb	02:17:36
1	Sb 206.836†	43.7	13.7	4.4654	ug/L	4.4654	ppb	02:17:36
1	Se 196.026†	-26.5	-2.8	-1.6492	ug/L	-1.6492	ppb	02:17:36
1	Si 251.611†	695.7	181.4	5.5337	ug/L	5.5337	ppb	02:17:36
1	Sn 189.927†	0.5	-3.8	-0.6382	ug/L	-0.6382	ppb	02:17:36
1	Ti 334.940†	-1038.4	-64.1	-0.1019	ug/L	-0.1019	ppb	02:17:16
1	Tl 190.801†	-28.9	8.2	2.3543	ug/L	2.3543	ppb	02:17:36
1	U 409.014†	-2040.4	-60.0	-1.6778	ug/L	-1.6778	ppb	02:17:16
1	V 292.402†	-1309.4	-1.2	-0.0044	ug/L	-0.0044	ppb	02:17:16
1	Zn 213.857†	696.9	-116.6	-1.0541	ug/L	-1.0541	ppb	02:17:36
1	SiO2†	711.2	216.1	14.112	ug/L	14.112	ppb	02:18:32
2	Sc Radial	5807.2	5807.2	103	%			02:16:24
2	Y RADIAL	6303.9	6303.9	102.4	%			02:16:24
2	Al 396.153Radial†	-17.1	3.7	2.7007	ug/L	2.7007	ppb	02:16:24
2	Ca 317.933Radial†	27.3	8.9	13.601	ug/L	13.601	ppb	02:16:44
2	Fe 238.204 Radial†	6.2	-0.0	0.0004	ug/L	0.0004	ppb	02:16:44
2	K 766.490 Radial†	2338.5	110.3	20.026	ug/L	20.026	ppb	02:16:24
2	Mg 279.077 IEC†	3.1	1.3	48.482	ug/L	48.482	ppb	02:16:44
2	Na 589.592 Radial†	-696.6	-63.4	-23.830	ug/L	-23.830	ppb	02:16:24
2	Sr 421.552†	-25.7	-28.4	-0.1921	ug/L	-0.1921	ppb	02:16:24
2	Sc 361.383	895492.0	895492.0	101.19	%			02:17:41
2	Y 371.029	751854.1	751854.1	101.32	%			02:17:41
2	Ag 328.068†	326.2	94.8	0.4419	ug/L	0.4419	ppb	02:17:41
2	As 188.979†	-30.4	-0.8	-0.3425	ug/L	-0.3425	ppb	02:18:01
2	B 249.677†	-343.0	184.9	4.0130	ug/L	4.0130	ppb	02:18:01
2	Ba 233.527†	-3.2	8.8	0.0674	ug/L	0.0674	ppb	02:18:01
2	Be 313.107†	-5187.3	193.9	0.0721	ug/L	0.0721	ppb	02:17:41
2	Cd 226.502†	-185.1	5.0	0.0540	ug/L	0.0540	ppb	02:18:01
2	Co 228.616†	-57.8	14.6	0.2837	ug/L	0.2837	ppb	02:18:01
2	Cr 267.716†	104.8	16.6	0.1804	ug/L	0.1804	ppb	02:18:01
2	Cu 324.752†	6893.2	43.6	0.1268	ug/L	0.1268	ppb	02:17:41
2	Mn 257.610†	477.3	68.3	0.0733	ug/L	0.0733	ppb	02:18:01
2	Mo 202.031†	19.7	-0.5	-0.0318	ug/L	-0.0318	ppb	02:18:01
2	Ni 231.604†	90.9	19.7	0.4671	ug/L	0.4671	ppb	02:18:01

2	P 214.914†	213.9	-8.5	-5.0963	ug/L	-5.0963 ppb	02:18:01
2	Pb 220.353†	-58.3	-5.1	-0.5923	ug/L	-0.5923 ppb	02:18:01
2	S 181.975 Axial†	44.6	2.6	3.8696	ug/L	3.8696 ppb	02:18:01
2	Sb 206.836†	27.5	-2.5	-0.8036	ug/L	-0.8036 ppb	02:18:01
2	Se 196.026†	-22.2	1.5	0.9136	ug/L	0.9136 ppb	02:18:01
2	Si 251.611†	714.0	197.6	6.0389	ug/L	6.0389 ppb	02:18:01
2	Sn 189.927†	4.6	0.3	0.0525	ug/L	0.0525 ppb	02:18:01
2	Ti 334.940†	-970.2	6.3	0.0127	ug/L	0.0127 ppb	02:17:41
2	Tl 190.801†	-30.1	7.1	2.0342	ug/L	2.0342 ppb	02:18:01
2	U 409.014†	-2140.4	-153.0	-4.2763	ug/L	-4.2763 ppb	02:17:41
2	V 292.402†	-1296.5	15.2	0.0950	ug/L	0.0950 ppb	02:17:41
2	Zn 213.857†	722.3	-93.4	-0.8454	ug/L	-0.8454 ppb	02:18:01
2	SiO2†	672.5	175.8	11.496	ug/L	11.496 ppb	02:18:37
3	Sc Radial	5784.3	5784.3	102	%		02:16:49
3	Y RADIAL	6269.7	6269.7	101.8	%		02:16:49
3	Al 396.153Radial†	-1.6	18.8	13.871	ug/L	13.871 ppb	02:16:49
3	Ca 317.933Radial†	29.8	11.4	17.484	ug/L	17.484 ppb	02:17:09
3	Fe 238.204 Radial†	8.0	1.8	18.200	ug/L	18.200 ppb	02:17:09
3	K 766.490 Radial†	2199.6	-16.7	-3.0291	ug/L	-3.0291 ppb	02:16:49
3	Mg 279.077 IEC†	-0.2	-1.9	-72.078	ug/L	-72.078 ppb	02:17:09
3	Na 589.592 Radial†	-644.0	-14.6	-5.4768	ug/L	-5.4768 ppb	02:16:49
3	Sr 421.552†	-13.9	-17.0	-0.1152	ug/L	-0.1152 ppb	02:16:49
3	Sc 361.383	893978.7	893978.7	101.02	%		02:18:07
3	Y 371.029	749321.1	749321.1	100.98	%		02:18:07
3	Ag 328.068†	286.0	55.6	0.2622	ug/L	0.2622 ppb	02:18:07
3	As 188.979†	-22.1	7.3	2.9818	ug/L	2.9818 ppb	02:18:27
3	B 249.677†	-292.7	234.1	5.0787	ug/L	5.0787 ppb	02:18:27
3	Ba 233.527†	-8.8	3.3	0.0254	ug/L	0.0254 ppb	02:18:27
3	Be 313.107†	-5173.0	199.3	0.0739	ug/L	0.0739 ppb	02:18:07
3	Cd 226.502†	-176.1	13.5	0.1449	ug/L	0.1449 ppb	02:18:27
3	Co 228.616†	-70.3	2.2	0.0422	ug/L	0.0422 ppb	02:18:27
3	Cr 267.716†	79.0	-8.8	-0.0945	ug/L	-0.0945 ppb	02:18:27
3	Cu 324.752†	6866.1	28.3	0.0831	ug/L	0.0831 ppb	02:18:07
3	Mn 257.610†	480.4	72.1	0.0815	ug/L	0.0815 ppb	02:18:27
3	Mo 202.031†	21.5	1.2	0.0825	ug/L	0.0825 ppb	02:18:27
3	Ni 231.604†	86.0	15.1	0.3572	ug/L	0.3572 ppb	02:18:27
3	P 214.914†	216.9	-5.3	-3.1600	ug/L	-3.1600 ppb	02:18:27
3	Pb 220.353†	-57.1	-4.0	-0.4617	ug/L	-0.4617 ppb	02:18:27
3	S 181.975 Axial†	41.5	-0.3	-0.5034	ug/L	-0.5034 ppb	02:18:27
3	Sb 206.836†	23.6	-6.3	-2.0434	ug/L	-2.0434 ppb	02:18:27
3	Se 196.026†	-23.7	0.0	0.0613	ug/L	0.0613 ppb	02:18:27
3	Si 251.611†	681.2	166.3	5.0879	ug/L	5.0879 ppb	02:18:27
3	Sn 189.927†	1.6	-2.7	-0.4606	ug/L	-0.4606 ppb	02:18:27
3	Ti 334.940†	-1014.9	-39.7	-0.0630	ug/L	-0.0630 ppb	02:18:07
3	Tl 190.801†	-29.1	8.0	2.2967	ug/L	2.2967 ppb	02:18:27
3	U 409.014†	-2006.3	-23.9	-0.6690	ug/L	-0.6690 ppb	02:18:07
3	V 292.402†	-1340.8	-30.8	-0.2125	ug/L	-0.2125 ppb	02:18:07
3	Zn 213.857†	714.8	-99.7	-0.8983	ug/L	-0.8983 ppb	02:18:27
3	SiO2†	684.6	188.9	12.373	ug/L	12.373 ppb	02:18:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894138.6	101.04	%	0.145				0.14%
Sc Radial	5755.2	102	%	1.3				1.24%
Y 371.029	750401.4	101.12	%	0.176				0.17%
Y RADIAL	6255.5	101.6	%	0.92				0.91%
Ag 328.068†	108.4	0.5054	ug/L	0.28032	0.5054	ppb	0.28032	55.47%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.5	3.3107	ug/L	10.26856	3.3107	ppb	10.26856	310.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.7	1.5148	ug/L	1.69620	1.5148	ppb	1.69620	111.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	213.5	4.6324	ug/L	0.55356	4.6324	ppb	0.55356	11.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.0	0.0229	ug/L	0.04576	0.0229	ppb	0.04576	199.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	257.2	0.0955	ug/L	0.03889	0.0955	ppb	0.03889	40.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.7	16.368	ug/L	2.4112	16.368	ppb	2.4112	14.73%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                10.1      0.1095 ug/L       0.04866      0.1095 ppb        0.04866  44.43%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 8.8      0.1719 ug/L       0.12171      0.1719 ppb        0.12171  70.79%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -2.2     -0.0232 ug/L       0.17888     -0.0232 ppb        0.17888 771.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                 7.6      0.0224 ug/L       0.14459      0.0224 ppb        0.14459 644.35%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.8      8.1332 ug/L       9.25295      8.1332 ppb        9.25295 113.77%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          82.9     15.040 ug/L       16.1634     15.040 ppb        16.1634 107.47%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.0     -0.6809 ug/L      63.28069     -0.6809 ppb       63.28069 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                71.6      0.0786 ug/L       0.00456      0.0786 ppb        0.00456   5.80%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.8      0.1836 ug/L       0.28004      0.1836 ppb        0.28004 152.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -24.8     -9.3256 ug/L      13.01398     -9.3256 ppb       13.01398 139.55%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                19.8      0.4694 ug/L       0.11342      0.4694 ppb        0.11342  24.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -9.1     -5.4182 ug/L       2.43507     -5.4182 ppb        2.43507  44.94%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -8.5     -0.9921 ug/L       0.80822     -0.9921 ppb        0.80822  81.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.6     -0.9140 ug/L       5.00156     -0.9140 ppb        5.00156 547.20%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.7      0.5395 ug/L       3.45604      0.5395 ppb        3.45604 640.64%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.4     -0.2248 ug/L       1.30509     -0.2248 ppb        1.30509 580.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               181.8      5.5535 ug/L       0.47580      5.5535 ppb        0.47580   8.57%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.1     -0.3487 ug/L       0.35867     -0.3487 ppb        0.35867 102.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -15.9     -0.1074 ug/L       0.08885     -0.1074 ppb        0.08885  82.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -32.5     -0.0507 ug/L       0.05825     -0.0507 ppb        0.05825 114.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 7.8      2.2284 ug/L       0.17061      2.2284 ppb        0.17061   7.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.0     -2.2077 ug/L       1.86110     -2.2077 ppb        1.86110  84.30%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.6     -0.0406 ug/L       0.15694     -0.0406 ppb        0.15694 386.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -103.2     -0.9326 ug/L       0.10850     -0.9326 ppb        0.10850  11.63%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     193.6      12.660 ug/L        1.3318      12.660 ppb         1.3318  10.52%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 119
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:03:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5510.8	5510.8	97.3	%			03:05:02
1	Y RADIAL	5991.3	5991.3	97.28	%			03:05:02
1	Al 396.153Radial†	6641.0	6845.2	5038.4	ug/L	5038.4	ppb	03:05:02
1	Ca 317.933Radial†	3317.5	3391.6	5186.4	ug/L	5186.4	ppb	03:05:22
1	Fe 238.204 Radial†	510.6	518.7	5238.9	ug/L	5238.9	ppb	03:05:22
1	K 766.490 Radial†	29554.1	28201.9	5109.5	ug/L	5109.5	ppb	03:05:02
1	Mg 279.077 IEC†	140.7	142.8	5323.8	ug/L	5323.8	ppb	03:05:22
1	Na 589.592 Radial†	26052.5	27389.7	10295	ug/L	10295	ppb	03:05:02
1	Sr 421.552†	75771.4	77865.6	525.59	ug/L	525.59	ppb	03:05:02
1	Sc 361.383	891059.1	891059.1	100.69	%			03:06:19
1	Y 371.029	734738.4	734738.4	99.012	%			03:06:19
1	Ag 328.068†	112448.7	111453.0	518.42	ug/L	518.42	ppb	03:06:24
1	As 188.979†	1221.8	1242.7	511.53	ug/L	511.53	ppb	03:06:44
1	B 249.677†	22769.7	23138.0	500.27	ug/L	500.27	ppb	03:06:24
1	Ba 233.527†	66913.7	66468.6	506.15	ug/L	506.15	ppb	03:06:24
1	Be 313.107†	1349646.1	1345747.1	501.08	ug/L	501.08	ppb	03:06:19
1	Cd 226.502†	47129.4	46995.3	509.65	ug/L	509.65	ppb	03:06:24
1	Co 228.616†	26247.3	26139.8	507.56	ug/L	507.56	ppb	03:06:24
1	Cr 267.716†	47237.4	46827.8	505.36	ug/L	505.36	ppb	03:06:24
1	Cu 324.752†	180412.8	172411.8	501.69	ug/L	501.69	ppb	03:06:24
1	Mn 257.610†	463670.4	460099.7	500.43	ug/L	500.43	ppb	03:06:19
1	Mo 202.031†	7920.3	7846.2	511.47	ug/L	511.47	ppb	03:06:44
1	Ni 231.604†	21602.8	21385.1	507.11	ug/L	507.11	ppb	03:06:24
1	P 214.914†	4497.2	4246.5	2446.9	ug/L	2446.9	ppb	03:06:44
1	Pb 220.353†	4285.7	4309.0	505.28	ug/L	505.28	ppb	03:06:44
1	S 181.975 Axial†	758.5	711.9	1039.9	ug/L	1039.9	ppb	03:06:44
1	Sb 206.836†	1619.2	1578.5	519.87	ug/L	519.87	ppb	03:06:44
1	Se 196.026†	838.8	856.6	529.14	ug/L	529.14	ppb	03:06:44
1	Si 251.611†	84969.4	83881.0	2553.4	ug/L	2553.4	ppb	03:06:24
1	Sn 189.927†	3056.6	3031.4	513.46	ug/L	513.46	ppb	03:06:44
1	Ti 334.940†	318833.2	317620.3	513.57	ug/L	513.57	ppb	03:06:24
1	Tl 190.801†	1725.2	1750.2	504.91	ug/L	504.91	ppb	03:06:44
1	U 409.014†	16256.1	18107.2	504.26	ug/L	504.26	ppb	03:06:24
1	V 292.402†	73541.2	74335.3	508.65	ug/L	508.65	ppb	03:06:24
1	Zn 213.857†	57895.1	56692.3	505.54	ug/L	505.54	ppb	03:06:24
1	SiO2†	84542.1	83475.8	5439.7	ug/L	5439.7	ppb	03:07:52
2	Sc Radial	5678.5	5678.5	100	%			03:05:27
2	Y RADIAL	6119.2	6119.2	99.36	%			03:05:27
2	Al 396.153Radial†	6834.5	6836.6	5032.4	ug/L	5032.4	ppb	03:05:27
2	Ca 317.933Radial†	3319.4	3292.9	5035.4	ug/L	5035.4	ppb	03:05:47
2	Fe 238.204 Radial†	515.3	507.9	5130.0	ug/L	5130.0	ppb	03:05:47
2	K 766.490 Radial†	30372.2	28121.0	5094.8	ug/L	5094.8	ppb	03:05:27
2	Mg 279.077 IEC†	141.0	138.9	5176.5	ug/L	5176.5	ppb	03:05:47
2	Na 589.592 Radial†	26697.7	27242.5	10240	ug/L	10240	ppb	03:05:27
2	Sr 421.552†	77891.1	77680.0	524.34	ug/L	524.34	ppb	03:05:27
2	Sc 361.383	897835.6	897835.6	101.45	%			03:06:50
2	Y 371.029	739954.2	739954.2	99.715	%			03:06:50
2	Ag 328.068†	110430.4	108620.7	505.27	ug/L	505.27	ppb	03:06:55
2	As 188.979†	1203.6	1215.6	500.35	ug/L	500.35	ppb	03:07:15
2	B 249.677†	22308.4	22512.6	486.73	ug/L	486.73	ppb	03:06:55
2	Ba 233.527†	66045.6	65111.4	495.81	ug/L	495.81	ppb	03:06:55
2	Be 313.107†	1360960.9	1346782.8	501.44	ug/L	501.44	ppb	03:06:50
2	Cd 226.502†	46400.1	45923.1	498.02	ug/L	498.02	ppb	03:06:55
2	Co 228.616†	25858.1	25559.4	496.30	ug/L	496.30	ppb	03:06:55
2	Cr 267.716†	46529.5	45775.9	494.02	ug/L	494.02	ppb	03:06:55
2	Cu 324.752†	176942.3	167638.6	487.80	ug/L	487.80	ppb	03:06:55
2	Mn 257.610†	467234.4	460136.9	500.46	ug/L	500.46	ppb	03:06:50
2	Mo 202.031†	7851.7	7719.2	503.19	ug/L	503.19	ppb	03:07:15
2	Ni 231.604†	21388.8	21012.2	498.27	ug/L	498.27	ppb	03:06:55

2	P 214.914†	4442.9	4159.3	2397.4 ug/L	2397.4 ppb	03:07:15
2	Pb 220.353†	4261.6	4253.1	498.75 ug/L	498.75 ppb	03:07:15
2	S 181.975 Axial†	760.7	708.3	1034.7 ug/L	1034.7 ppb	03:07:15
2	Sb 206.836†	1605.8	1553.2	511.65 ug/L	511.65 ppb	03:07:15
2	Se 196.026†	829.2	840.8	519.36 ug/L	519.36 ppb	03:07:15
2	Si 251.611†	83576.6	81871.2	2492.0 ug/L	2492.0 ppb	03:06:55
2	Sn 189.927†	3041.7	2993.8	507.08 ug/L	507.08 ppb	03:07:15
2	Ti 334.940†	313122.2	309601.2	500.60 ug/L	500.60 ppb	03:06:55
2	Tl 190.801†	1709.9	1722.3	496.88 ug/L	496.88 ppb	03:07:15
2	U 409.014†	15660.8	17398.6	484.50 ug/L	484.50 ppb	03:06:55
2	V 292.402†	72442.9	72701.5	497.49 ug/L	497.49 ppb	03:06:55
2	Zn 213.857†	56976.0	55352.5	493.57 ug/L	493.57 ppb	03:06:55
2	SiO2†	83191.2	81510.5	5311.4 ug/L	5311.4 ppb	03:07:57
3	Sc Radial	5701.3	5701.3	101 %		03:05:52
3	Y RADIAL	6167.8	6167.8	100.1 %		03:05:52
3	Al 396.153Radial†	6827.7	6802.5	5006.7 ug/L	5006.7 ppb	03:05:52
3	Ca 317.933Radial†	3337.6	3297.6	5042.6 ug/L	5042.6 ppb	03:06:12
3	Fe 238.204 Radial†	517.8	508.3	5133.9 ug/L	5133.9 ppb	03:06:12
3	K 766.490 Radial†	30490.2	28116.7	5094.1 ug/L	5094.1 ppb	03:05:52
3	Mg 279.077 IEC†	143.3	140.6	5240.9 ug/L	5240.9 ppb	03:06:12
3	Na 589.592 Radial†	26744.9	27182.6	10217 ug/L	10217 ppb	03:05:52
3	Sr 421.552†	78072.5	77548.6	523.45 ug/L	523.45 ppb	03:05:52
3	Sc 361.383	885920.6	885920.6	100.11 %		03:07:21
3	Y 371.029	730488.3	730488.3	98.439 %		03:07:21
3	Ag 328.068†	110893.7	110547.5	514.19 ug/L	514.19 ppb	03:07:26
3	As 188.979†	1221.9	1249.8	514.37 ug/L	514.37 ppb	03:07:46
3	B 249.677†	22555.6	23055.4	498.50 ug/L	498.50 ppb	03:07:26
3	Ba 233.527†	66302.1	66243.2	504.43 ug/L	504.43 ppb	03:07:26
3	Be 313.107†	1344521.8	1348403.0	502.06 ug/L	502.06 ppb	03:07:21
3	Cd 226.502†	46546.7	46684.7	506.29 ug/L	506.29 ppb	03:07:26
3	Co 228.616†	25911.0	25955.0	503.99 ug/L	503.99 ppb	03:07:26
3	Cr 267.716†	46737.4	46600.4	502.91 ug/L	502.91 ppb	03:07:26
3	Cu 324.752†	178592.4	171632.6	499.42 ug/L	499.42 ppb	03:07:26
3	Mn 257.610†	462390.1	461491.7	501.93 ug/L	501.93 ppb	03:07:21
3	Mo 202.031†	7939.0	7910.5	515.65 ug/L	515.65 ppb	03:07:46
3	Ni 231.604†	21393.5	21300.5	505.10 ug/L	505.10 ppb	03:07:26
3	P 214.914†	4493.3	4268.5	2460.5 ug/L	2460.5 ppb	03:07:46
3	Pb 220.353†	4273.9	4321.9	506.80 ug/L	506.80 ppb	03:07:46
3	S 181.975 Axial†	758.6	716.3	1046.5 ug/L	1046.5 ppb	03:07:46
3	Sb 206.836†	1622.7	1591.4	524.29 ug/L	524.29 ppb	03:07:46
3	Se 196.026†	826.4	848.9	524.28 ug/L	524.28 ppb	03:07:46
3	Si 251.611†	84111.3	83513.3	2542.0 ug/L	2542.0 ppb	03:07:26
3	Sn 189.927†	3071.7	3064.1	518.98 ug/L	518.98 ppb	03:07:46
3	Ti 334.940†	315277.6	315905.2	510.79 ug/L	510.79 ppb	03:07:26
3	Tl 190.801†	1726.6	1761.6	508.18 ug/L	508.18 ppb	03:07:46
3	U 409.014†	16033.9	17978.9	500.69 ug/L	500.69 ppb	03:07:26
3	V 292.402†	72530.4	73749.3	504.76 ug/L	504.76 ppb	03:07:26
3	Zn 213.857†	57243.7	56375.2	502.71 ug/L	502.71 ppb	03:07:26
3	SiO2†	84831.9	84252.3	5490.4 ug/L	5490.4 ppb	03:08:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891605.1	100.75	%	0.675				0.67%
Sc Radial	5630.2	99.4	%	1.84				1.85%
Y 371.029	735060.3	99.055	%	0.6389				0.64%
Y RADIAL	6092.8	98.93	%	1.481				1.50%
Ag 328.068†	110207.0	512.63	ug/L	6.715	512.63	ppb	6.715	1.31%
QC value within limits for Ag 328.068 Recovery = 102.53%								
Al 396.153Radial†	6828.1	5025.8	ug/L	16.87	5025.8	ppb	16.87	0.34%
QC value within limits for Al 396.153Radial Recovery = 100.52%								
As 188.979†	1236.0	508.75	ug/L	7.410	508.75	ppb	7.410	1.46%
QC value within limits for As 188.979 Recovery = 101.75%								
B 249.677†	22902.0	495.17	ug/L	7.355	495.17	ppb	7.355	1.49%
QC value within limits for B 249.677 Recovery = 99.03%								
Ba 233.527†	65941.1	502.13	ug/L	5.538	502.13	ppb	5.538	1.10%
QC value within limits for Ba 233.527 Recovery = 100.43%								
Be 313.107†	1346977.6	501.53	ug/L	0.497	501.53	ppb	0.497	0.10%
QC value within limits for Be 313.107 Recovery = 100.31%								
Ca 317.933Radial†	3327.4	5088.1	ug/L	85.16	5088.1	ppb	85.16	1.67%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.76%
Cd 226.502†            46534.4      504.65 ug/L         5.983      504.65 ppb          5.983   1.19%
   QC value within limits for Cd 226.502  Recovery = 100.93%
Co 228.616†            25884.7      502.62 ug/L         5.753      502.62 ppb          5.753   1.14%
   QC value within limits for Co 228.616  Recovery = 100.52%
Cr 267.716†            46401.3      500.76 ug/L         5.971      500.76 ppb          5.971   1.19%
   QC value within limits for Cr 267.716  Recovery = 100.15%
Cu 324.752†           170561.0      496.31 ug/L         7.449      496.31 ppb          7.449   1.50%
   QC value within limits for Cu 324.752  Recovery = 99.26%
Fe 238.204 Radial†       511.6      5167.6 ug/L        61.77      5167.6 ppb         61.77   1.20%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.35%
K 766.490 Radial†      28146.5      5099.5 ug/L         8.70      5099.5 ppb          8.70   0.17%
   QC value within limits for K 766.490 Radial  Recovery = 101.99%
Mg 279.077 IEC†          140.7      5247.0 ug/L        73.83      5247.0 ppb         73.83   1.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.94%
Mn 257.610†           460576.1      500.94 ug/L         0.859      500.94 ppb          0.859   0.17%
   QC value within limits for Mn 257.610  Recovery = 100.19%
Mo 202.031†             7825.3      510.10 ug/L         6.341      510.10 ppb          6.341   1.24%
   QC value within limits for Mo 202.031  Recovery = 102.02%
Na 589.592 Radial†     27271.6       10251 ug/L        40.0        10251 ppb         40.0   0.39%
   QC value within limits for Na 589.592 Radial  Recovery = 102.51%
Ni 231.604†            21232.6      503.49 ug/L         4.635      503.49 ppb          4.635   0.92%
   QC value within limits for Ni 231.604  Recovery = 100.70%
P 214.914†              4224.8      2434.9 ug/L        33.25      2434.9 ppb         33.25   1.37%
   QC value within limits for P 214.914  Recovery = 97.40%
Pb 220.353†             4294.7      503.61 ug/L         4.278      503.61 ppb          4.278   0.85%
   QC value within limits for Pb 220.353  Recovery = 100.72%
S 181.975 Axial†         712.2      1040.4 ug/L         5.87      1040.4 ppb          5.87   0.56%
   QC value within limits for S 181.975 Axial  Recovery = 104.04%
Sb 206.836†             1574.4      518.60 ug/L         6.415      518.60 ppb          6.415   1.24%
   QC value within limits for Sb 206.836  Recovery = 103.72%
Se 196.026†              848.7      524.26 ug/L         4.889      524.26 ppb          4.889   0.93%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            83088.5      2529.1 ug/L        32.62      2529.1 ppb         32.62   1.29%
   QC value within limits for Si 251.611  Recovery = 101.17%
Sn 189.927†             3029.8      513.17 ug/L         5.955      513.17 ppb          5.955   1.16%
   QC value within limits for Sn 189.927  Recovery = 102.63%
Sr 421.552†            77698.1      524.46 ug/L         1.074      524.46 ppb          1.074   0.20%
   QC value within limits for Sr 421.552  Recovery = 104.89%
Ti 334.940†           314375.6      508.32 ug/L         6.826      508.32 ppb          6.826   1.34%
   QC value within limits for Ti 334.940  Recovery = 101.66%
Tl 190.801†             1744.7      503.32 ug/L         5.814      503.32 ppb          5.814   1.16%
   QC value within limits for Tl 190.801  Recovery = 100.66%
U 409.014†             17828.3      496.48 ug/L        10.532      496.48 ppb         10.532   2.12%
   QC value within limits for U 409.014  Recovery = 99.30%
V 292.402†             73595.3      503.63 ug/L         5.662      503.63 ppb          5.662   1.12%
   QC value within limits for V 292.402  Recovery = 100.73%
Zn 213.857†            56140.0      500.61 ug/L         6.255      500.61 ppb          6.255   1.25%
   QC value within limits for Zn 213.857  Recovery = 100.12%
SiO2†                  83079.5      5413.8 ug/L        92.26      5413.8 ppb         92.26   1.70%
   QC value within limits for SiO2  Recovery = 101.24%
All analyte(s) passed QC.
```

Sequence No.: 120
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 03:10:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5727.7	5727.7	101	%			03:12:04
1	Y RADIAL	6190.7	6190.7	100.5	%			03:12:04
1	Al 396.153Radial†	-27.7	-7.1	-5.2823	ug/L	-5.2823	ppb	03:12:04
1	Ca 317.933Radial†	26.0	8.0	12.250	ug/L	12.250	ppb	03:12:24
1	Fe 238.204 Radial†	5.9	-0.2	-1.5690	ug/L	-1.5690	ppb	03:12:24
1	K 766.490 Radial†	2436.1	238.4	43.265	ug/L	43.265	ppb	03:12:04
1	Mg 279.077 IEC†	2.8	1.0	38.120	ug/L	38.120	ppb	03:12:24
1	Na 589.592 Radial†	-655.8	-32.5	-12.219	ug/L	-12.219	ppb	03:12:04
1	Sr 421.552†	-8.6	-11.9	-0.0804	ug/L	-0.0804	ppb	03:12:04
1	Sc 361.383	883550.6	883550.6	99.839	%			03:13:21
1	Y 371.029	741253.2	741253.2	99.890	%			03:13:21
1	Ag 328.068†	354.3	127.3	0.5871	ug/L	0.5871	ppb	03:13:21
1	As 188.979†	-29.0	0.2	0.0805	ug/L	0.0805	ppb	03:13:41
1	B 249.677†	-296.5	226.8	4.9235	ug/L	4.9235	ppb	03:13:41
1	Ba 233.527†	-11.4	0.6	0.0044	ug/L	0.0044	ppb	03:13:41
1	Be 313.107†	-5092.0	220.1	0.0817	ug/L	0.0817	ppb	03:13:21
1	Cd 226.502†	-175.3	12.3	0.1338	ug/L	0.1338	ppb	03:13:41
1	Co 228.616†	-62.3	9.4	0.1839	ug/L	0.1839	ppb	03:13:41
1	Cr 267.716†	76.5	-10.3	-0.1118	ug/L	-0.1118	ppb	03:13:41
1	Cu 324.752†	6816.5	58.8	0.1710	ug/L	0.1710	ppb	03:13:21
1	Mn 257.610†	494.1	91.5	0.0986	ug/L	0.0986	ppb	03:13:41
1	Mo 202.031†	30.8	10.8	0.7062	ug/L	0.7062	ppb	03:13:41
1	Ni 231.604†	99.1	29.2	0.6916	ug/L	0.6916	ppb	03:13:41
1	P 214.914†	215.2	-4.4	-2.6285	ug/L	-2.6285	ppb	03:13:41
1	Pb 220.353†	-45.1	7.4	0.8645	ug/L	0.8645	ppb	03:13:41
1	S 181.975 Axial†	41.6	0.2	0.2646	ug/L	0.2646	ppb	03:13:41
1	Sb 206.836†	44.4	14.9	4.8490	ug/L	4.8490	ppb	03:13:41
1	Se 196.026†	-29.2	-5.8	-3.4360	ug/L	-3.4360	ppb	03:13:41
1	Si 251.611†	705.0	198.1	6.0306	ug/L	6.0306	ppb	03:13:41
1	Sn 189.927†	6.4	2.1	0.3606	ug/L	0.3606	ppb	03:13:41
1	Ti 334.940†	-986.8	-23.3	-0.0371	ug/L	-0.0371	ppb	03:13:21
1	Tl 190.801†	-36.6	0.2	0.0589	ug/L	0.0589	ppb	03:13:41
1	U 409.014†	-1951.9	7.2	0.2009	ug/L	0.2009	ppb	03:13:21
1	V 292.402†	-1319.9	-25.6	-0.1608	ug/L	-0.1608	ppb	03:13:21
1	Zn 213.857†	723.9	-82.2	-0.7454	ug/L	-0.7454	ppb	03:13:41
1	SiO2†	667.2	179.5	11.691	ug/L	11.691	ppb	03:14:37
2	Sc Radial	6460.5	6460.5	114	%			03:12:29
2	Y RADIAL	6979.4	6979.4	113.3	%			03:12:29
2	Al 396.153Radial†	-47.0	-20.9	-15.434	ug/L	-15.434	ppb	03:12:29
2	Ca 317.933Radial†	29.1	7.8	12.000	ug/L	12.000	ppb	03:12:49
2	Fe 238.204 Radial†	8.0	1.0	9.6314	ug/L	9.6314	ppb	03:12:49
2	K 766.490 Radial†	2311.4	-144.1	-26.170	ug/L	-26.170	ppb	03:12:29
2	Mg 279.077 IEC†	-0.5	-2.2	-80.146	ug/L	-80.146	ppb	03:12:49
2	Na 589.592 Radial†	-652.3	44.2	16.595	ug/L	16.595	ppb	03:12:29
2	Sr 421.552†	20.2	14.3	0.0963	ug/L	0.0963	ppb	03:12:29
2	Sc 361.383	897764.4	897764.4	101.45	%			03:13:46
2	Y 371.029	753719.0	753719.0	101.57	%			03:13:46
2	Ag 328.068†	304.3	72.4	0.3396	ug/L	0.3396	ppb	03:13:46
2	As 188.979†	-20.9	8.6	3.5119	ug/L	3.5119	ppb	03:14:06
2	B 249.677†	-292.8	235.2	5.1039	ug/L	5.1039	ppb	03:14:06
2	Ba 233.527†	-13.5	-1.3	-0.0088	ug/L	-0.0088	ppb	03:14:06
2	Be 313.107†	-5116.4	276.7	0.1029	ug/L	0.1029	ppb	03:13:46
2	Cd 226.502†	-182.8	7.6	0.0820	ug/L	0.0820	ppb	03:14:06
2	Co 228.616†	-59.3	13.3	0.2576	ug/L	0.2576	ppb	03:14:06
2	Cr 267.716†	67.1	-20.8	-0.2232	ug/L	-0.2232	ppb	03:14:06
2	Cu 324.752†	6848.0	-18.3	-0.0526	ug/L	-0.0526	ppb	03:13:46
2	Mn 257.610†	500.3	89.8	0.1000	ug/L	0.1000	ppb	03:14:06
2	Mo 202.031†	18.0	-2.3	-0.1485	ug/L	-0.1485	ppb	03:14:06
2	Ni 231.604†	90.1	18.7	0.4424	ug/L	0.4424	ppb	03:14:06

2	P 214.914†	224.7	1.5	0.8708	ug/L	0.8708 ppb	03:14:06
2	Pb 220.353†	-75.5	-21.9	-2.5624	ug/L	-2.5624 ppb	03:14:06
2	S 181.975 Axial†	43.0	0.9	1.2806	ug/L	1.2806 ppb	03:14:06
2	Sb 206.836†	34.7	4.6	1.4972	ug/L	1.4972 ppb	03:14:06
2	Se 196.026†	-26.5	-2.7	-1.5840	ug/L	-1.5840 ppb	03:14:06
2	Si 251.611†	718.1	199.9	6.1273	ug/L	6.1273 ppb	03:14:06
2	Sn 189.927†	-0.7	-5.0	-0.8422	ug/L	-0.8422 ppb	03:14:06
2	Ti 334.940†	-963.5	15.2	0.0262	ug/L	0.0262 ppb	03:13:46
2	Tl 190.801†	-28.1	9.1	2.6109	ug/L	2.6109 ppb	03:14:06
2	U 409.014†	-2059.6	-68.0	-1.9019	ug/L	-1.9019 ppb	03:13:46
2	V 292.402†	-1295.0	19.9	0.1254	ug/L	0.1254 ppb	03:13:46
2	Zn 213.857†	721.2	-96.4	-0.8679	ug/L	-0.8679 ppb	03:14:06
2	SiO2†	714.6	215.6	14.149	ug/L	14.149 ppb	03:14:42
3	Sc Radial	5174.3	5174.3	91.4	%		03:12:54
3	Y RADIAL	5613.7	5613.7	91.15	%		03:12:54
3	Al 396.153Radial†	-14.9	4.0	2.9764	ug/L	2.9764 ppb	03:12:54
3	Ca 317.933Radial†	28.8	13.9	21.190	ug/L	21.190 ppb	03:13:14
3	Fe 238.204 Radial†	5.3	-0.3	-2.5193	ug/L	-2.5193 ppb	03:13:14
3	K 766.490 Radial†	2356.0	408.4	74.129	ug/L	74.129 ppb	03:12:54
3	Mg 279.077 IEC†	1.1	-0.5	-19.042	ug/L	-19.042 ppb	03:13:14
3	Na 589.592 Radial†	-674.2	-121.9	-45.836	ug/L	-45.836 ppb	03:12:54
3	Sr 421.552†	-3.8	-7.6	-0.0515	ug/L	-0.0515 ppb	03:12:54
3	Sc 361.383	892289.3	892289.3	100.83	%		03:14:12
3	Y 371.029	749284.1	749284.1	100.97	%		03:14:12
3	Ag 328.068†	453.9	222.6	1.0270	ug/L	1.0270 ppb	03:14:12
3	As 188.979†	-28.9	0.6	0.2197	ug/L	0.2197 ppb	03:14:32
3	B 249.677†	-272.2	253.9	5.5107	ug/L	5.5107 ppb	03:14:32
3	Ba 233.527†	-16.9	-4.7	-0.0363	ug/L	-0.0363 ppb	03:14:32
3	Be 313.107†	-5037.2	324.3	0.1202	ug/L	0.1202 ppb	03:14:12
3	Cd 226.502†	-181.3	8.0	0.0875	ug/L	0.0875 ppb	03:14:32
3	Co 228.616†	-51.2	20.9	0.4081	ug/L	0.4081 ppb	03:14:32
3	Cr 267.716†	67.4	-20.1	-0.2168	ug/L	-0.2168 ppb	03:14:32
3	Cu 324.752†	6774.6	-49.6	-0.1444	ug/L	-0.1444 ppb	03:14:12
3	Mn 257.610†	501.8	94.3	0.1025	ug/L	0.1025 ppb	03:14:32
3	Mo 202.031†	26.2	6.0	0.3925	ug/L	0.3925 ppb	03:14:32
3	Ni 231.604†	95.2	24.3	0.5772	ug/L	0.5772 ppb	03:14:32
3	P 214.914†	222.4	0.6	0.3780	ug/L	0.3780 ppb	03:14:32
3	Pb 220.353†	-58.7	-5.7	-0.6640	ug/L	-0.6640 ppb	03:14:32
3	S 181.975 Axial†	43.8	1.9	2.8423	ug/L	2.8423 ppb	03:14:32
3	Sb 206.836†	47.6	17.6	5.6985	ug/L	5.6985 ppb	03:14:32
3	Se 196.026†	-17.2	6.4	3.7904	ug/L	3.7904 ppb	03:14:32
3	Si 251.611†	667.5	154.0	4.6851	ug/L	4.6851 ppb	03:14:32
3	Sn 189.927†	-7.2	-11.4	-1.9232	ug/L	-1.9232 ppb	03:14:32
3	Ti 334.940†	-1088.6	-114.7	-0.1845	ug/L	-0.1845 ppb	03:14:12
3	Tl 190.801†	-37.0	0.1	0.0350	ug/L	0.0350 ppb	03:14:32
3	U 409.014†	-1963.1	15.2	0.4255	ug/L	0.4255 ppb	03:14:12
3	V 292.402†	-1327.6	-20.3	-0.1301	ug/L	-0.1301 ppb	03:14:12
3	Zn 213.857†	729.1	-84.2	-0.7598	ug/L	-0.7598 ppb	03:14:32
3	SiO2†	675.7	181.4	11.821	ug/L	11.821 ppb	03:14:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891201.5	100.70	%	0.810				0.80%
Sc Radial	5787.5	102	%	11.4				11.15%
Y 371.029	748085.4	100.81	%	0.851				0.84%
Y RADIAL	6261.3	101.7	%	11.13				10.95%
Ag 328.068†	140.7	0.6512	ug/L	0.34815	0.6512	ppb	0.34815	53.46%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.0	-5.9132	ug/L	9.22119	-5.9132	ppb	9.22119	155.94%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.1	1.2707	ug/L	1.94218	1.2707	ppb	1.94218	152.84%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	238.7	5.1794	ug/L	0.30077	5.1794	ppb	0.30077	5.81%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.8	-0.0136	ug/L	0.02080	-0.0136	ppb	0.02080	153.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	273.7	0.1016	ug/L	0.01926	0.1016	ppb	0.01926	18.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.9	15.147	ug/L	5.2352	15.147	ppb	5.2352	34.56%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.3      0.1011 ug/L       0.02843      0.1011 ppb        0.02843  28.13%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                14.5      0.2832 ug/L       0.11428      0.2832 ppb        0.11428  40.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.1     -0.1839 ug/L       0.06251     -0.1839 ppb        0.06251  33.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -3.0     -0.0087 ug/L       0.16222     -0.0087 ppb        0.16222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.2      1.8477 ug/L       6.75760      1.8477 ppb        6.75760 365.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         167.5      30.408 ug/L       51.3708      30.408 ppb        51.3708 168.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -20.356 ug/L       59.1436     -20.356 ppb        59.1436 290.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                91.8      0.1004 ug/L       0.00201      0.1004 ppb        0.00201   2.00%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.9      0.3167 ug/L       0.43236      0.3167 ppb        0.43236 136.51%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -36.8     -13.820 ug/L       31.2466     -13.820 ppb        31.2466 226.10%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                24.0      0.5704 ug/L       0.12476      0.5704 ppb        0.12476  21.87%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -0.8     -0.4599 ug/L       1.89418     -0.4599 ppb        1.89418 411.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.7     -0.7873 ug/L       1.71681     -0.7873 ppb        1.71681 218.06%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.0      1.4625 ug/L       1.29845      1.4625 ppb        1.29845  88.78%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.4      4.0149 ug/L       2.22139      4.0149 ppb        2.22139  55.33%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.7     -0.4099 ug/L       3.75358     -0.4099 ppb        3.75358 915.80%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               184.0      5.6143 ug/L       0.80622      5.6143 ppb        0.80622  14.36%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -4.7     -0.8016 ug/L       1.14244     -0.8016 ppb        1.14244 142.52%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -1.7     -0.0119 ug/L       0.09478     -0.0119 ppb        0.09478 799.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -40.9     -0.0652 ug/L       0.10809     -0.0652 ppb        0.10809 165.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.2      0.9016 ug/L       1.48040      0.9016 ppb        1.48040 164.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -15.2     -0.4252 ug/L       1.28382     -0.4252 ppb        1.28382 301.96%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -8.6     -0.0552 ug/L       0.15712     -0.0552 ppb        0.15712 284.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -87.6     -0.7910 ug/L       0.06695     -0.7910 ppb        0.06695   8.46%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     192.1      12.554 ug/L        1.3833      12.554 ppb         1.3833  11.02%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 127
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 03:58:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5639.6	5639.6	99.6	%			03:59:56
1	Y RADIAL	6106.2	6106.2	99.15	%			03:59:56
1	Al 396.153Radial†	6798.4	6847.4	5040.9	ug/L	5040.9	ppb	03:59:56
1	Ca 317.933Radial†	3310.0	3306.2	5055.8	ug/L	5055.8	ppb	04:00:16
1	Fe 238.204 Radial†	515.2	511.3	5163.9	ug/L	5163.9	ppb	04:00:16
1	K 766.490 Radial†	30158.8	28115.7	5094.0	ug/L	5094.0	ppb	03:59:56
1	Mg 279.077 IEC†	141.4	140.3	5228.3	ug/L	5228.3	ppb	04:00:16
1	Na 589.592 Radial†	26858.7	27587.9	10370	ug/L	10370	ppb	03:59:56
1	Sr 421.552†	77856.3	78181.1	527.72	ug/L	527.72	ppb	03:59:56
1	Sc 361.383	922484.2	922484.2	104.24	%			04:01:14
1	Y 371.029	759493.4	759493.4	102.35	%			04:01:14
1	Ag 328.068†	111123.9	106377.6	494.87	ug/L	494.87	ppb	04:01:19
1	As 188.979†	1203.7	1183.9	487.36	ug/L	487.36	ppb	04:01:39
1	B 249.677†	22477.2	22087.1	477.52	ug/L	477.52	ppb	04:01:19
1	Ba 233.527†	66361.4	63675.0	484.88	ug/L	484.88	ppb	04:01:19
1	Be 313.107†	1359728.8	1309757.2	487.66	ug/L	487.66	ppb	04:01:14
1	Cd 226.502†	46536.2	44831.7	486.17	ug/L	486.17	ppb	04:01:19
1	Co 228.616†	25987.1	25002.1	485.48	ug/L	485.48	ppb	04:01:19
1	Cr 267.716†	46789.9	44800.3	483.49	ug/L	483.49	ppb	04:01:19
1	Cu 324.752†	177890.7	163888.3	476.90	ug/L	476.90	ppb	04:01:19
1	Mn 257.610†	466513.4	447139.8	486.34	ug/L	486.34	ppb	04:01:14
1	Mo 202.031†	7873.9	7533.7	491.11	ug/L	491.11	ppb	04:01:39
1	Ni 231.604†	21502.2	20557.7	487.49	ug/L	487.49	ppb	04:01:19
1	P 214.914†	4438.2	4037.8	2326.7	ug/L	2326.7	ppb	04:01:39
1	Pb 220.353†	4260.2	4139.5	485.44	ug/L	485.44	ppb	04:01:39
1	S 181.975 Axial†	742.7	671.0	980.22	ug/L	980.22	ppb	04:01:39
1	Sb 206.836†	1594.2	1499.7	494.07	ug/L	494.07	ppb	04:01:39
1	Se 196.026†	816.3	806.6	499.03	ug/L	499.03	ppb	04:01:39
1	Si 251.611†	83661.1	79751.1	2427.5	ug/L	2427.5	ppb	04:01:19
1	Sn 189.927†	3047.8	2919.6	494.52	ug/L	494.52	ppb	04:01:39
1	Ti 334.940†	314270.8	302456.4	489.05	ug/L	489.05	ppb	04:01:19
1	Tl 190.801†	1697.5	1665.3	480.45	ug/L	480.45	ppb	04:01:39
1	U 409.014†	15946.4	17260.1	480.64	ug/L	480.64	ppb	04:01:19
1	V 292.402†	72696.6	71037.0	486.09	ug/L	486.09	ppb	04:01:19
1	Zn 213.857†	57232.5	54097.9	482.36	ug/L	482.36	ppb	04:01:19
1	SiO2†	83880.8	79981.1	5211.8	ug/L	5211.8	ppb	04:02:46
2	Sc Radial	5788.8	5788.8	102	%			04:00:21
2	Y RADIAL	6247.0	6247.0	101.4	%			04:00:21
2	Al 396.153Radial†	6811.2	6683.8	4919.8	ug/L	4919.8	ppb	04:00:21
2	Ca 317.933Radial†	3296.5	3207.3	4904.5	ug/L	4904.5	ppb	04:00:41
2	Fe 238.204 Radial†	512.8	495.6	5006.1	ug/L	5006.1	ppb	04:00:41
2	K 766.490 Radial†	30073.2	27251.0	4937.1	ug/L	4937.1	ppb	04:00:21
2	Mg 279.077 IEC†	142.8	137.9	5141.6	ug/L	5141.6	ppb	04:00:41
2	Na 589.592 Radial†	26650.4	26688.6	10032	ug/L	10032	ppb	04:00:21
2	Sr 421.552†	77578.2	75893.0	512.28	ug/L	512.28	ppb	04:00:21
2	Sc 361.383	908625.0	908625.0	102.67	%			04:01:45
2	Y 371.029	749542.1	749542.1	101.01	%			04:01:45
2	Ag 328.068†	110908.6	107794.0	501.39	ug/L	501.39	ppb	04:01:50
2	As 188.979†	1207.6	1205.4	496.15	ug/L	496.15	ppb	04:02:10
2	B 249.677†	22623.9	22558.8	487.77	ug/L	487.77	ppb	04:01:50
2	Ba 233.527†	66206.1	64494.7	491.12	ug/L	491.12	ppb	04:01:50
2	Be 313.107†	1347836.9	1318071.3	490.76	ug/L	490.76	ppb	04:01:45
2	Cd 226.502†	46428.7	45407.9	492.44	ug/L	492.44	ppb	04:01:50
2	Co 228.616†	25872.4	25270.6	490.69	ug/L	490.69	ppb	04:01:50
2	Cr 267.716†	46673.0	45371.1	489.65	ug/L	489.65	ppb	04:01:50
2	Cu 324.752†	177893.5	166494.1	484.47	ug/L	484.47	ppb	04:01:50
2	Mn 257.610†	461814.4	449389.4	488.77	ug/L	488.77	ppb	04:01:45
2	Mo 202.031†	7822.4	7598.8	495.33	ug/L	495.33	ppb	04:02:10
2	Ni 231.604†	21388.6	20761.7	492.33	ug/L	492.33	ppb	04:01:50

2	P 214.914†	4408.1	4073.4	2346.8 ug/L	2346.8 ppb	04:02:10
2	Pb 220.353†	4231.2	4173.6	489.42 ug/L	489.42 ppb	04:02:10
2	S 181.975 Axial†	751.0	690.0	1007.9 ug/L	1007.9 ppb	04:02:10
2	Sb 206.836†	1594.0	1522.9	501.63 ug/L	501.63 ppb	04:02:10
2	Se 196.026†	827.1	829.0	511.92 ug/L	511.92 ppb	04:02:10
2	Si 251.611†	83500.2	80818.6	2460.1 ug/L	2460.1 ppb	04:01:50
2	Sn 189.927†	3043.9	2960.4	501.41 ug/L	501.41 ppb	04:02:10
2	Ti 334.940†	314072.9	306862.2	496.17 ug/L	496.17 ppb	04:01:50
2	Tl 190.801†	1707.5	1699.9	490.41 ug/L	490.41 ppb	04:02:10
2	U 409.014†	15809.3	17359.9	483.44 ug/L	483.44 ppb	04:01:50
2	V 292.402†	72691.9	72096.1	493.32 ug/L	493.32 ppb	04:01:50
2	Zn 213.857†	57104.4	54810.6	488.75 ug/L	488.75 ppb	04:01:50
2	SiO2†	83548.0	80884.3	5270.8 ug/L	5270.8 ppb	04:02:51
3	Sc Radial	5731.3	5731.3	101 %		04:00:47
3	Y RADIAL	6179.8	6179.8	100.3 %		04:00:47
3	Al 396.153Radial†	6765.5	6705.6	4935.9 ug/L	4935.9 ppb	04:00:47
3	Ca 317.933Radial†	3287.3	3230.7	4940.2 ug/L	4940.2 ppb	04:01:07
3	Fe 238.204 Radial†	506.8	494.7	4997.1 ug/L	4997.1 ppb	04:01:07
3	K 766.490 Radial†	29950.6	27425.2	4968.7 ug/L	4968.7 ppb	04:00:47
3	Mg 279.077 IEC†	140.6	137.2	5113.6 ug/L	5113.6 ppb	04:01:07
3	Na 589.592 Radial†	26590.4	26891.1	10108 ug/L	10108 ppb	04:00:47
3	Sr 421.552†	76994.9	76078.7	513.53 ug/L	513.53 ppb	04:00:47
3	Sc 361.383	910617.2	910617.2	102.90 %		04:02:16
3	Y 371.029	751104.5	751104.5	101.22 %		04:02:16
3	Ag 328.068†	110379.0	107042.9	497.91 ug/L	497.91 ppb	04:02:21
3	As 188.979†	1212.5	1207.6	497.01 ug/L	497.01 ppb	04:02:41
3	B 249.677†	22358.1	22252.3	481.12 ug/L	481.12 ppb	04:02:21
3	Ba 233.527†	65878.8	64035.5	487.62 ug/L	487.62 ppb	04:02:21
3	Be 313.107†	1354095.4	1321281.5	491.94 ug/L	491.94 ppb	04:02:16
3	Cd 226.502†	46266.1	45151.0	489.65 ug/L	489.65 ppb	04:02:21
3	Co 228.616†	25770.9	25116.9	487.72 ug/L	487.72 ppb	04:02:21
3	Cr 267.716†	46519.9	45122.9	486.97 ug/L	486.97 ppb	04:02:21
3	Cu 324.752†	176367.9	164632.3	479.05 ug/L	479.05 ppb	04:02:21
3	Mn 257.610†	463672.9	450211.5	489.66 ug/L	489.66 ppb	04:02:16
3	Mo 202.031†	7849.4	7608.4	495.96 ug/L	495.96 ppb	04:02:41
3	Ni 231.604†	21320.7	20650.2	489.68 ug/L	489.68 ppb	04:02:21
3	P 214.914†	4451.9	4106.6	2367.5 ug/L	2367.5 ppb	04:02:41
3	Pb 220.353†	4235.5	4168.7	488.86 ug/L	488.86 ppb	04:02:41
3	S 181.975 Axial†	748.5	686.0	1002.1 ug/L	1002.1 ppb	04:02:41
3	Sb 206.836†	1600.8	1526.1	502.79 ug/L	502.79 ppb	04:02:41
3	Se 196.026†	822.5	822.7	508.17 ug/L	508.17 ppb	04:02:41
3	Si 251.611†	83068.4	80221.0	2441.8 ug/L	2441.8 ppb	04:02:21
3	Sn 189.927†	3059.9	2969.4	502.94 ug/L	502.94 ppb	04:02:41
3	Ti 334.940†	311976.2	304155.3	491.79 ug/L	491.79 ppb	04:02:21
3	Tl 190.801†	1702.6	1691.5	488.00 ug/L	488.00 ppb	04:02:41
3	U 409.014†	15718.4	17238.0	480.04 ug/L	480.04 ppb	04:02:21
3	V 292.402†	72361.3	71619.9	490.11 ug/L	490.11 ppb	04:02:21
3	Zn 213.857†	56972.9	54561.2	486.53 ug/L	486.53 ppb	04:02:21
3	SiO2†	83101.9	80272.7	5230.7 ug/L	5230.7 ppb	04:02:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	913908.8	103.27	%	0.847				0.82%
Sc Radial	5719.9	101	%	1.3				1.32%
Y 371.029	753380.0	101.52	%	0.721				0.71%
Y RADIAL	6177.7	100.3	%	1.14				1.14%
Ag 328.068†	107071.5	498.05	ug/L	3.265	498.05	ppb	3.265	0.66%
QC value within limits for Ag 328.068 Recovery = 99.61%								
Al 396.153Radial†	6745.6	4965.5	ug/L	65.76	4965.5	ppb	65.76	1.32%
QC value within limits for Al 396.153Radial Recovery = 99.31%								
As 188.979†	1199.0	493.51	ug/L	5.340	493.51	ppb	5.340	1.08%
QC value within limits for As 188.979 Recovery = 98.70%								
B 249.677†	22299.4	482.14	ug/L	5.198	482.14	ppb	5.198	1.08%
QC value within limits for B 249.677 Recovery = 96.43%								
Ba 233.527†	64068.4	487.87	ug/L	3.126	487.87	ppb	3.126	0.64%
QC value within limits for Ba 233.527 Recovery = 97.57%								
Be 313.107†	1316370.0	490.12	ug/L	2.214	490.12	ppb	2.214	0.45%
QC value within limits for Be 313.107 Recovery = 98.02%								
Ca 317.933Radial†	3248.1	4966.8	ug/L	79.06	4966.8	ppb	79.06	1.59%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.34%
Cd 226.502†            45130.2      489.42 ug/L         3.142      489.42 ppb          3.142   0.64%
   QC value within limits for Cd 226.502  Recovery = 97.88%
Co 228.616†            25129.9      487.96 ug/L         2.614      487.96 ppb          2.614   0.54%
   QC value within limits for Co 228.616  Recovery = 97.59%
Cr 267.716†            45098.1      486.70 ug/L         3.088      486.70 ppb          3.088   0.63%
   QC value within limits for Cr 267.716  Recovery = 97.34%
Cu 324.752†           165004.9      480.14 ug/L         3.900      480.14 ppb          3.900   0.81%
   QC value within limits for Cu 324.752  Recovery = 96.03%
Fe 238.204 Radial†       500.6      5055.7 ug/L        93.81      5055.7 ppb         93.81   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.11%
K 766.490 Radial†      27597.3      4999.9 ug/L        82.93      4999.9 ppb         82.93   1.66%
   QC value within limits for K 766.490 Radial  Recovery = 100.00%
Mg 279.077 IEC†          138.4      5161.2 ug/L        59.79      5161.2 ppb         59.79   1.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.22%
Mn 257.610†           448913.6      488.25 ug/L         1.720      488.25 ppb          1.720   0.35%
   QC value within limits for Mn 257.610  Recovery = 97.65%
Mo 202.031†             7580.3      494.13 ug/L         2.639      494.13 ppb          2.639   0.53%
   QC value within limits for Mo 202.031  Recovery = 98.83%
Na 589.592 Radial†     27055.9       10170 ug/L       177.3       10170 ppb        177.3   1.74%
   QC value within limits for Na 589.592 Radial  Recovery = 101.70%
Ni 231.604†            20656.5      489.83 ug/L         2.422      489.83 ppb          2.422   0.49%
   QC value within limits for Ni 231.604  Recovery = 97.97%
P 214.914†              4072.6      2347.0 ug/L        20.37      2347.0 ppb         20.37   0.87%
   QC value within limits for P 214.914  Recovery = 93.88%
Pb 220.353†             4160.6      487.91 ug/L         2.153      487.91 ppb          2.153   0.44%
   QC value within limits for Pb 220.353  Recovery = 97.58%
S 181.975 Axial†         682.3      996.74 ug/L        14.598      996.74 ppb         14.598   1.46%
   QC value within limits for S 181.975 Axial  Recovery = 99.67%
Sb 206.836†             1516.2      499.50 ug/L         4.734      499.50 ppb          4.734   0.95%
   QC value within limits for Sb 206.836  Recovery = 99.90%
Se 196.026†              819.4      506.38 ug/L         6.630      506.38 ppb          6.630   1.31%
   QC value within limits for Se 196.026  Recovery = 101.28%
Si 251.611†            80263.6      2443.1 ug/L        16.34      2443.1 ppb         16.34   0.67%
   QC value within limits for Si 251.611  Recovery = 97.72%
Sn 189.927†             2949.8      499.63 ug/L         4.484      499.63 ppb          4.484   0.90%
   QC value within limits for Sn 189.927  Recovery = 99.93%
Sr 421.552†            76717.6      517.84 ug/L         8.578      517.84 ppb          8.578   1.66%
   QC value within limits for Sr 421.552  Recovery = 103.57%
Ti 334.940†           304491.3      492.34 ug/L         3.588      492.34 ppb          3.588   0.73%
   QC value within limits for Ti 334.940  Recovery = 98.47%
Tl 190.801†             1685.6      486.29 ug/L         5.193      486.29 ppb          5.193   1.07%
   QC value within limits for Tl 190.801  Recovery = 97.26%
U 409.014†             17286.0      481.37 ug/L         1.815      481.37 ppb          1.815   0.38%
   QC value within limits for U 409.014  Recovery = 96.27%
V 292.402†             71584.3      489.84 ug/L         3.621      489.84 ppb          3.621   0.74%
   QC value within limits for V 292.402  Recovery = 97.97%
Zn 213.857†            54489.9      485.88 ug/L         3.244      485.88 ppb          3.244   0.67%
   QC value within limits for Zn 213.857  Recovery = 97.18%
SiO2†                  80379.4      5237.8 ug/L        30.15      5237.8 ppb         30.15   0.58%
   QC value within limits for SiO2  Recovery = 97.95%
All analyte(s) passed QC.
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Sequence No.: 128
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 04:05:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5727.1	5727.1	101	%			04:06:59
1	Y RADIAL	6230.7	6230.7	101.2	%			04:06:59
1	Al 396.153Radial†	-18.1	2.5	1.7996	ug/L	1.7996	ppb	04:06:59
1	Ca 317.933Radial†	27.1	9.1	13.903	ug/L	13.903	ppb	04:07:19
1	Fe 238.204 Radial†	6.4	0.3	3.3651	ug/L	3.3651	ppb	04:07:19
1	K 766.490 Radial†	2324.6	128.5	23.334	ug/L	23.334	ppb	04:06:59
1	Mg 279.077 IEC†	0.3	-1.4	-52.894	ug/L	-52.894	ppb	04:07:19
1	Na 589.592 Radial†	-705.9	-82.1	-30.846	ug/L	-30.846	ppb	04:06:59
1	Sr 421.552†	10.8	7.2	0.0488	ug/L	0.0488	ppb	04:06:59
1	Sc 361.383	897238.6	897238.6	101.39	%			04:08:16
1	Y 371.029	752738.1	752738.1	101.44	%			04:08:16
1	Ag 328.068†	346.8	114.5	0.5315	ug/L	0.5315	ppb	04:08:16
1	As 188.979†	-25.4	4.1	1.6747	ug/L	1.6747	ppb	04:08:36
1	B 249.677†	-212.8	313.9	6.8137	ug/L	6.8137	ppb	04:08:36
1	Ba 233.527†	-14.5	-2.3	-0.0175	ug/L	-0.0175	ppb	04:08:36
1	Be 313.107†	-5130.0	260.4	0.0966	ug/L	0.0966	ppb	04:08:16
1	Cd 226.502†	-182.1	8.2	0.0889	ug/L	0.0889	ppb	04:08:36
1	Co 228.616†	-63.6	9.0	0.1772	ug/L	0.1772	ppb	04:08:36
1	Cr 267.716†	76.5	-11.5	-0.1232	ug/L	-0.1232	ppb	04:08:36
1	Cu 324.752†	6821.8	-40.1	-0.1165	ug/L	-0.1165	ppb	04:08:16
1	Mn 257.610†	484.2	74.1	0.0819	ug/L	0.0819	ppb	04:08:36
1	Mo 202.031†	29.4	9.0	0.5884	ug/L	0.5884	ppb	04:08:36
1	Ni 231.604†	79.5	8.3	0.1972	ug/L	0.1972	ppb	04:08:36
1	P 214.914†	217.5	-5.5	-3.2295	ug/L	-3.2295	ppb	04:08:36
1	Pb 220.353†	-57.0	-3.7	-0.4257	ug/L	-0.4257	ppb	04:08:36
1	S 181.975 Axial†	44.2	2.1	3.1054	ug/L	3.1054	ppb	04:08:36
1	Sb 206.836†	26.6	-3.4	-1.0821	ug/L	-1.0821	ppb	04:08:36
1	Se 196.026†	-25.5	-1.7	-1.0092	ug/L	-1.0092	ppb	04:08:36
1	Si 251.611†	546.9	31.4	0.9418	ug/L	0.9418	ppb	04:08:36
1	Sn 189.927†	6.7	2.4	0.4044	ug/L	0.4044	ppb	04:08:36
1	Ti 334.940†	-1043.6	-64.3	-0.1027	ug/L	-0.1027	ppb	04:08:16
1	Tl 190.801†	-21.1	16.0	4.5970	ug/L	4.5970	ppb	04:08:36
1	U 409.014†	-2039.5	-49.5	-1.3824	ug/L	-1.3824	ppb	04:08:16
1	V 292.402†	-1313.9	0.5	0.0077	ug/L	0.0077	ppb	04:08:16
1	Zn 213.857†	720.7	-96.4	-0.8671	ug/L	-0.8671	ppb	04:08:36
1	SiO2†	543.9	47.6	3.0756	ug/L	3.0756	ppb	04:09:32
2	Sc Radial	5784.1	5784.1	102	%			04:07:24
2	Y RADIAL	6309.9	6309.9	102.5	%			04:07:24
2	Al 396.153Radial†	-21.5	-0.7	-0.5212	ug/L	-0.5212	ppb	04:07:24
2	Ca 317.933Radial†	30.3	12.0	18.330	ug/L	18.330	ppb	04:07:44
2	Fe 238.204 Radial†	7.4	1.2	11.942	ug/L	11.942	ppb	04:07:44
2	K 766.490 Radial†	2210.1	-6.3	-1.1369	ug/L	-1.1369	ppb	04:07:24
2	Mg 279.077 IEC†	-0.2	-2.0	-73.367	ug/L	-73.367	ppb	04:07:44
2	Na 589.592 Radial†	-716.0	-85.1	-32.000	ug/L	-32.000	ppb	04:07:24
2	Sr 421.552†	-3.9	-7.2	-0.0490	ug/L	-0.0490	ppb	04:07:24
2	Sc 361.383	899421.9	899421.9	101.63	%			04:08:41
2	Y 371.029	755143.1	755143.1	101.76	%			04:08:41
2	Ag 328.068†	316.9	84.3	0.3913	ug/L	0.3913	ppb	04:08:41
2	As 188.979†	-26.0	3.6	1.4783	ug/L	1.4783	ppb	04:09:01
2	B 249.677†	-230.6	297.0	6.4450	ug/L	6.4450	ppb	04:09:01
2	Ba 233.527†	3.5	15.5	0.1176	ug/L	0.1176	ppb	04:09:01
2	Be 313.107†	-5092.4	309.6	0.1149	ug/L	0.1149	ppb	04:08:41
2	Cd 226.502†	-179.5	11.2	0.1208	ug/L	0.1208	ppb	04:09:01
2	Co 228.616†	-68.9	4.0	0.0754	ug/L	0.0754	ppb	04:09:01
2	Cr 267.716†	69.9	-18.2	-0.1966	ug/L	-0.1966	ppb	04:09:01
2	Cu 324.752†	6785.9	-91.7	-0.2662	ug/L	-0.2662	ppb	04:08:41
2	Mn 257.610†	486.8	75.5	0.0847	ug/L	0.0847	ppb	04:09:01
2	Mo 202.031†	10.6	-9.6	-0.6216	ug/L	-0.6216	ppb	04:09:01
2	Ni 231.604†	88.3	16.8	0.3988	ug/L	0.3988	ppb	04:09:01

2	P 214.914†	217.2	-6.3	-3.6982 ug/L	-3.6982 ppb	04:09:01
2	Pb 220.353†	-49.1	4.3	0.4949 ug/L	0.4949 ppb	04:09:01
2	S 181.975 Axial†	44.3	2.1	3.0376 ug/L	3.0376 ppb	04:09:01
2	Sb 206.836†	31.6	1.5	0.4790 ug/L	0.4790 ppb	04:09:01
2	Se 196.026†	-17.9	5.8	3.5220 ug/L	3.5220 ppb	04:09:01
2	Si 251.611†	528.4	11.9	0.3756 ug/L	0.3756 ppb	04:09:01
2	Sn 189.927†	3.9	-0.5	-0.0786 ug/L	-0.0786 ppb	04:09:01
2	Ti 334.940†	-1041.9	-60.1	-0.0967 ug/L	-0.0967 ppb	04:08:41
2	Tl 190.801†	-16.2	20.9	6.0043 ug/L	6.0043 ppb	04:09:01
2	U 409.014†	-1956.2	37.4	1.0443 ug/L	1.0443 ppb	04:08:41
2	V 292.402†	-1353.1	-34.8	-0.2453 ug/L	-0.2453 ppb	04:08:41
2	Zn 213.857†	717.3	-101.5	-0.9142 ug/L	-0.9142 ppb	04:09:01
2	SiO2†	575.5	77.5	5.0985 ug/L	5.0985 ppb	04:09:37
3	Sc Radial	5682.0	5682.0	100 %		04:07:49
3	Y RADIAL	6174.8	6174.8	100.3 %		04:07:49
3	Al 396.153Radial†	-21.1	-0.7	-0.5167 ug/L	-0.5167 ppb	04:07:49
3	Ca 317.933Radial†	30.0	12.2	18.718 ug/L	18.718 ppb	04:08:09
3	Fe 238.204 Radial†	7.9	1.8	18.084 ug/L	18.084 ppb	04:08:09
3	K 766.490 Radial†	2166.4	-11.0	-1.9885 ug/L	-1.9885 ppb	04:07:49
3	Mg 279.077 IEC†	-0.8	-2.6	-96.410 ug/L	-96.410 ppb	04:08:09
3	Na 589.592 Radial†	-677.9	-59.7	-22.435 ug/L	-22.435 ppb	04:07:49
3	Sr 421.552†	-14.0	-17.3	-0.1172 ug/L	-0.1172 ppb	04:07:49
3	Sc 361.383	899123.4	899123.4	101.60 %		04:09:07
3	Y 371.029	755793.2	755793.2	101.85 %		04:09:07
3	Ag 328.068†	328.6	95.9	0.4480 ug/L	0.4480 ppb	04:09:07
3	As 188.979†	-22.3	7.2	2.9431 ug/L	2.9431 ppb	04:09:27
3	B 249.677†	-225.5	301.9	6.5512 ug/L	6.5512 ppb	04:09:27
3	Ba 233.527†	1.2	13.2	0.0999 ug/L	0.0999 ppb	04:09:27
3	Be 313.107†	-5055.1	344.7	0.1281 ug/L	0.1281 ppb	04:09:07
3	Cd 226.502†	-177.6	13.0	0.1397 ug/L	0.1397 ppb	04:09:27
3	Co 228.616†	-66.5	6.3	0.1225 ug/L	0.1225 ppb	04:09:27
3	Cr 267.716†	71.5	-16.6	-0.1788 ug/L	-0.1788 ppb	04:09:27
3	Cu 324.752†	6846.8	-29.6	-0.0852 ug/L	-0.0852 ppb	04:09:07
3	Mn 257.610†	461.7	51.0	0.0590 ug/L	0.0590 ppb	04:09:27
3	Mo 202.031†	20.1	-0.2	-0.0141 ug/L	-0.0141 ppb	04:09:27
3	Ni 231.604†	87.0	15.5	0.3672 ug/L	0.3672 ppb	04:09:27
3	P 214.914†	221.4	-2.0	-1.2168 ug/L	-1.2168 ppb	04:09:27
3	Pb 220.353†	-77.2	-23.4	-2.7401 ug/L	-2.7401 ppb	04:09:27
3	S 181.975 Axial†	44.7	2.5	3.6423 ug/L	3.6423 ppb	04:09:27
3	Sb 206.836†	36.2	6.0	1.9354 ug/L	1.9354 ppb	04:09:27
3	Se 196.026†	-25.2	-1.3	-0.7441 ug/L	-0.7441 ppb	04:09:27
3	Si 251.611†	519.1	2.9	0.0918 ug/L	0.0918 ppb	04:09:27
3	Sn 189.927†	-0.7	-4.9	-0.8319 ug/L	-0.8319 ppb	04:09:27
3	Ti 334.940†	-981.7	-1.3	-0.0007 ug/L	-0.0007 ppb	04:09:07
3	Tl 190.801†	-27.8	9.5	2.7155 ug/L	2.7155 ppb	04:09:27
3	U 409.014†	-2016.8	-22.9	-0.6404 ug/L	-0.6404 ppb	04:09:07
3	V 292.402†	-1368.5	-50.5	-0.3471 ug/L	-0.3471 ppb	04:09:07
3	Zn 213.857†	719.5	-99.1	-0.8925 ug/L	-0.8925 ppb	04:09:27
3	SiO2†	557.9	60.3	3.9576 ug/L	3.9576 ppb	04:09:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898594.6	101.54	%	0.134				0.13%
Sc Radial	5731.0	101	%	0.9				0.89%
Y 371.029	754558.1	101.68	%	0.217				0.21%
Y RADIAL	6238.5	101.3	%	1.10				1.09%
Ag 328.068†	98.2	0.4569	ug/L	0.07054	0.4569	ppb	0.07054	15.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.3	0.2539	ug/L	1.33858	0.2539	ppb	1.33858	527.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.0	2.0320	ug/L	0.79506	2.0320	ppb	0.79506	39.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	304.3	6.6033	ug/L	0.18980	6.6033	ppb	0.18980	2.87%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.8	0.0667	ug/L	0.07342	0.0667	ppb	0.07342	110.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	304.9	0.1132	ug/L	0.01584	0.1132	ppb	0.01584	14.00%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.1	16.984	ug/L	2.6746	16.984	ppb	2.6746	15.75%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                10.8      0.1165 ug/L       0.02568      0.1165 ppb        0.02568  22.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.4      0.1250 ug/L       0.05095      0.1250 ppb        0.05095  40.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -15.4     -0.1662 ug/L       0.03829     -0.1662 ppb        0.03829  23.03%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -53.8     -0.1559 ug/L       0.09675     -0.1559 ppb        0.09675  62.04%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.1      11.130 ug/L        7.3931      11.130 ppb         7.3931  66.42%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          37.1      6.7363 ug/L      14.38056      6.7363 ppb       14.38056 213.48%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.0     -74.224 ug/L       21.7710     -74.224 ppb        21.7710  29.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                66.9      0.0752 ug/L       0.01408      0.0752 ppb        0.01408  18.74%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.3     -0.0157 ug/L       0.60500     -0.0157 ppb        0.60500 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -75.6     -28.427 ug/L        5.2214     -28.427 ppb         5.2214  18.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.5      0.3211 ug/L       0.10843      0.3211 ppb        0.10843  33.77%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.6     -2.7148 ug/L       1.31833     -2.7148 ppb        1.31833  48.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.6     -0.8903 ug/L       1.66681     -0.8903 ppb        1.66681 187.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.2      3.2618 ug/L       0.33131      3.2618 ppb        0.33131  10.16%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.4      0.4441 ug/L       1.50908      0.4441 ppb        1.50908 339.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5895 ug/L       2.54303      0.5895 ppb        2.54303 431.37%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                15.4      0.4697 ug/L       0.43274      0.4697 ppb        0.43274  92.13%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.0     -0.1687 ug/L       0.62307     -0.1687 ppb        0.62307 369.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.8     -0.0391 ug/L       0.08341     -0.0391 ppb        0.08341 213.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -41.9     -0.0667 ug/L       0.05721     -0.0667 ppb        0.05721  85.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                15.5      4.4389 ug/L       1.65011      4.4389 ppb        1.65011  37.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -11.6     -0.3262 ug/L       1.24349     -0.3262 ppb        1.24349 381.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -28.3     -0.1949 ug/L       0.18269     -0.1949 ppb        0.18269  93.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -99.0     -0.8913 ug/L       0.02356     -0.8913 ppb        0.02356   2.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      61.8      4.0439 ug/L       1.01419      4.0439 ppb        1.01419  25.08%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 129
Sample ID: 1201981075|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 136
Date Collected: 12/10/2009 04:11:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981075|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5806.9	5806.9	103	%			04:13:46
1	Y RADIAL	6257.3	6257.3	101.6	%			04:13:46
1	Al 396.153Radial†	46.9	66.0	48.823	ug/L	48.823	ppb	04:13:46
1	Ca 317.933Radial†	5297.9	5149.2	7874.1	ug/L	7874.1	ppb	04:13:46
1	Fe 238.204 Radial†	8.3	2.1	20.989	ug/L	20.989	ppb	04:14:06
1	K 766.490 Radial†	11693.6	9234.2	1671.5	ug/L	1671.5	ppb	04:13:46
1	Mg 279.077 IEC†	43.7	40.8	1520.5	ug/L	1520.5	ppb	04:14:06
1	Na 589.592 Radial†	20485.2	20594.8	7741.0	ug/L	7741.0	ppb	04:13:46
1	Sr 421.552†	3445.3	3356.7	22.587	ug/L	22.587	ppb	04:13:46
1	Sc 361.383	883402.6	883402.6	99.823	%			04:15:03
1	Y 371.029	733770.0	733770.0	98.881	%			04:15:03
1	Ag 328.068†	260.6	33.5	0.0513	ug/L	0.0513	ppb	04:15:03
1	As 188.979†	-26.6	2.6	1.0383	ug/L	1.0383	ppb	04:15:23
1	B 249.677†	925.2	1450.7	31.487	ug/L	31.487	ppb	04:15:03
1	Ba 233.527†	803.6	817.1	6.2069	ug/L	6.2069	ppb	04:15:23
1	Be 313.107†	-5092.5	218.7	0.0794	ug/L	0.0794	ppb	04:15:03
1	Cd 226.502†	-165.4	22.2	0.2387	ug/L	0.2387	ppb	04:15:23
1	Co 228.616†	-74.2	-2.6	-0.0464	ug/L	-0.0464	ppb	04:15:23
1	Cr 267.716†	127.5	40.8	0.4417	ug/L	0.4417	ppb	04:15:23
1	Cu 324.752†	7577.6	822.4	2.3929	ug/L	2.3929	ppb	04:15:03
1	Mn 257.610†	5307.2	4913.2	5.3131	ug/L	5.3131	ppb	04:15:03
1	Mo 202.031†	19.8	-0.2	-0.0103	ug/L	-0.0103	ppb	04:15:23
1	Ni 231.604†	100.5	30.5	0.7242	ug/L	0.7242	ppb	04:15:23
1	P 214.914†	558.3	339.4	201.01	ug/L	201.01	ppb	04:15:23
1	Pb 220.353†	-66.3	-13.9	-1.6161	ug/L	-1.6161	ppb	04:15:23
1	S 181.975 Axial†	3642.5	3607.5	5274.9	ug/L	5274.9	ppb	04:15:23
1	Sb 206.836†	26.9	-2.7	-1.1437	ug/L	-1.1437	ppb	04:15:23
1	Se 196.026†	-21.3	2.1	1.3236	ug/L	1.3236	ppb	04:15:23
1	Si 251.611†	59181.6	58778.8	1797.3	ug/L	1797.3	ppb	04:15:03
1	Sn 189.927†	-87.0	-91.4	-14.647	ug/L	-14.647	ppb	04:15:23
1	Ti 334.940†	-1537.3	-575.0	-0.5171	ug/L	-0.5171	ppb	04:15:03
1	Tl 190.801†	-24.5	12.3	3.5484	ug/L	3.5484	ppb	04:15:23
1	U 409.014†	-2143.6	-185.2	-5.1779	ug/L	-5.1779	ppb	04:15:03
1	V 292.402†	-1268.7	25.5	0.1941	ug/L	0.1941	ppb	04:15:03
1	Zn 213.857†	1381.3	576.5	5.1250	ug/L	5.1250	ppb	04:15:23
1	SiO2†	59657.8	59275.0	3880.4	ug/L	3880.4	ppb	04:16:19
2	Sc Radial	5748.5	5748.5	102	%			04:14:11
2	Y RADIAL	6240.6	6240.6	101.3	%			04:14:11
2	Al 396.153Radial†	27.6	47.5	35.110	ug/L	35.110	ppb	04:14:11
2	Ca 317.933Radial†	5302.4	5206.2	7961.1	ug/L	7961.1	ppb	04:14:11
2	Fe 238.204 Radial†	11.1	4.9	49.722	ug/L	49.722	ppb	04:14:31
2	K 766.490 Radial†	11592.6	9250.7	1674.5	ug/L	1674.5	ppb	04:14:11
2	Mg 279.077 IEC†	43.8	41.4	1542.5	ug/L	1542.5	ppb	04:14:31
2	Na 589.592 Radial†	20229.4	20545.8	7722.6	ug/L	7722.6	ppb	04:14:11
2	Sr 421.552†	3443.5	3389.1	22.804	ug/L	22.804	ppb	04:14:11
2	Sc 361.383	889632.7	889632.7	100.53	%			04:15:28
2	Y 371.029	740123.3	740123.3	99.737	%			04:15:28
2	Ag 328.068†	325.2	95.9	0.3490	ug/L	0.3490	ppb	04:15:28
2	As 188.979†	-25.0	4.3	1.7407	ug/L	1.7407	ppb	04:15:48
2	B 249.677†	943.3	1462.3	31.734	ug/L	31.734	ppb	04:15:28
2	Ba 233.527†	798.1	805.9	6.1237	ug/L	6.1237	ppb	04:15:48
2	Be 313.107†	-5057.8	288.9	0.1057	ug/L	0.1057	ppb	04:15:28
2	Cd 226.502†	-173.2	15.5	0.1640	ug/L	0.1640	ppb	04:15:48
2	Co 228.616†	-62.5	9.6	0.1904	ug/L	0.1904	ppb	04:15:48
2	Cr 267.716†	104.5	17.0	0.1861	ug/L	0.1861	ppb	04:15:48
2	Cu 324.752†	7563.9	755.6	2.2002	ug/L	2.2002	ppb	04:15:28
2	Mn 257.610†	5289.0	4857.9	5.2555	ug/L	5.2555	ppb	04:15:28
2	Mo 202.031†	19.3	-0.8	-0.0475	ug/L	-0.0475	ppb	04:15:48
2	Ni 231.604†	91.8	21.2	0.5038	ug/L	0.5038	ppb	04:15:48

2	P 214.914†	544.1	321.2	190.27	ug/L	190.27	ppb	04:15:48
2	Pb 220.353†	-50.4	2.4	0.2851	ug/L	0.2851	ppb	04:15:48
2	S 181.975 Axial†	3645.2	3584.6	5241.5	ug/L	5241.5	ppb	04:15:48
2	Sb 206.836†	35.4	5.7	1.5922	ug/L	1.5922	ppb	04:15:48
2	Se 196.026†	-19.8	3.7	2.3861	ug/L	2.3861	ppb	04:15:48
2	Si 251.611†	59514.0	58694.3	1794.7	ug/L	1794.7	ppb	04:15:28
2	Sn 189.927†	-77.8	-81.6	-12.984	ug/L	-12.984	ppb	04:15:48
2	Ti 334.940†	-1508.9	-535.9	-0.4490	ug/L	-0.4490	ppb	04:15:28
2	Tl 190.801†	-35.3	1.7	0.5112	ug/L	0.5112	ppb	04:15:48
2	U 409.014†	-2183.8	-210.2	-5.8789	ug/L	-5.8789	ppb	04:15:28
2	V 292.402†	-1256.5	46.6	0.3303	ug/L	0.3303	ppb	04:15:28
2	Zn 213.857†	1375.4	561.0	4.9835	ug/L	4.9835	ppb	04:15:48
2	SiO2†	59411.5	58611.5	3836.9	ug/L	3836.9	ppb	04:16:24
3	Sc Radial	5845.2	5845.2	103	%			04:14:36
3	Y RADIAL	6357.4	6357.4	103.2	%			04:14:36
3	Al 396.153Radial†	23.8	43.4	32.112	ug/L	32.112	ppb	04:14:36
3	Ca 317.933Radial†	5359.3	5174.9	7913.3	ug/L	7913.3	ppb	04:14:36
3	Fe 238.204 Radial†	12.2	5.8	58.812	ug/L	58.812	ppb	04:14:56
3	K 766.490 Radial†	11779.2	9242.4	1673.0	ug/L	1673.0	ppb	04:14:36
3	Mg 279.077 IEC†	41.8	38.7	1440.9	ug/L	1440.9	ppb	04:14:56
3	Na 589.592 Radial†	20712.5	20684.0	7774.5	ug/L	7774.5	ppb	04:14:36
3	Sr 421.552†	3505.2	3392.8	22.830	ug/L	22.830	ppb	04:14:36
3	Sc 361.383	884459.2	884459.2	99.942	%			04:15:54
3	Y 371.029	736423.0	736423.0	99.239	%			04:15:54
3	Ag 328.068†	318.8	91.4	0.3302	ug/L	0.3302	ppb	04:15:54
3	As 188.979†	-22.9	6.3	2.5533	ug/L	2.5533	ppb	04:16:14
3	B 249.677†	927.3	1451.7	31.502	ug/L	31.502	ppb	04:15:54
3	Ba 233.527†	799.4	811.9	6.1686	ug/L	6.1686	ppb	04:16:14
3	Be 313.107†	-5017.6	299.7	0.1092	ug/L	0.1092	ppb	04:15:54
3	Cd 226.502†	-182.8	4.9	0.0483	ug/L	0.0483	ppb	04:16:14
3	Co 228.616†	-53.0	18.7	0.3652	ug/L	0.3652	ppb	04:16:14
3	Cr 267.716†	113.7	26.8	0.2916	ug/L	0.2916	ppb	04:16:14
3	Cu 324.752†	7565.6	801.4	2.3336	ug/L	2.3336	ppb	04:15:54
3	Mn 257.610†	5299.6	4899.3	5.3032	ug/L	5.3032	ppb	04:15:54
3	Mo 202.031†	6.4	-13.6	-0.8798	ug/L	-0.8798	ppb	04:16:14
3	Ni 231.604†	102.4	32.3	0.7660	ug/L	0.7660	ppb	04:16:14
3	P 214.914†	557.3	337.7	200.03	ug/L	200.03	ppb	04:16:14
3	Pb 220.353†	-57.1	-4.6	-0.5420	ug/L	-0.5420	ppb	04:16:14
3	S 181.975 Axial†	3646.5	3607.1	5274.4	ug/L	5274.4	ppb	04:16:14
3	Sb 206.836†	27.1	-2.5	-1.0417	ug/L	-1.0417	ppb	04:16:14
3	Se 196.026†	-32.3	-8.8	-5.0838	ug/L	-5.0838	ppb	04:16:14
3	Si 251.611†	59148.9	58675.2	1794.1	ug/L	1794.1	ppb	04:15:54
3	Sn 189.927†	-69.3	-73.7	-11.639	ug/L	-11.639	ppb	04:16:14
3	Ti 334.940†	-1658.8	-694.7	-0.7086	ug/L	-0.7086	ppb	04:15:54
3	Tl 190.801†	-20.4	16.5	4.7393	ug/L	4.7393	ppb	04:16:14
3	U 409.014†	-2151.4	-190.4	-5.3284	ug/L	-5.3284	ppb	04:15:54
3	V 292.402†	-1276.7	19.1	0.1305	ug/L	0.1305	ppb	04:15:54
3	Zn 213.857†	1385.8	579.4	5.1499	ug/L	5.1499	ppb	04:16:14
3	SiO2†	59477.2	59022.9	3863.9	ug/L	3863.9	ppb	04:16:29

Mean Data: 1201981075|926576|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885831.5	100.10	%	0.377				0.38%
Sc Radial	5800.2	102	%	0.9				0.84%
Y 371.029	736772.1	99.286	%	0.4300				0.43%
Y RADIAL	6285.1	102.1	%	1.03				1.00%
Ag 328.068†	73.6	0.2435	ug/L	0.16673	0.2435	ppb	0.16673	68.48%
Al 396.153Radial†	52.3	38.682	ug/L	8.9097	38.682	ppb	8.9097	23.03%
As 188.979†	4.4	1.7774	ug/L	0.75815	1.7774	ppb	0.75815	42.66%
B 249.677†	1454.9	31.574	ug/L	0.1384	31.574	ppb	0.1384	0.44%
Ba 233.527†	811.6	6.1664	ug/L	0.04163	6.1664	ppb	0.04163	0.68%
Be 313.107†	269.1	0.0981	ug/L	0.01625	0.0981	ppb	0.01625	16.57%
Ca 317.933Radial†	5176.8	7916.2	ug/L	43.60	7916.2	ppb	43.60	0.55%
Cd 226.502†	14.2	0.1503	ug/L	0.09594	0.1503	ppb	0.09594	63.82%
Co 228.616†	8.6	0.1697	ug/L	0.20658	0.1697	ppb	0.20658	121.73%
Cr 267.716†	28.2	0.3065	ug/L	0.12842	0.3065	ppb	0.12842	41.90%
Cu 324.752†	793.1	2.3089	ug/L	0.09871	2.3089	ppb	0.09871	4.28%
Fe 238.204 Radial†	4.3	43.174	ug/L	19.7435	43.174	ppb	19.7435	45.73%
K 766.490 Radial†	9242.4	1673.0	ug/L	1.49	1673.0	ppb	1.49	0.09%

Mg 279.077 IEC†	40.3	1501.3	ug/L	53.44	1501.3	ppb	53.44	3.56%
Mn 257.610†	4890.1	5.2906	ug/L	0.03083	5.2906	ppb	0.03083	0.58%
Mo 202.031†	-4.8	-0.3125	ug/L	0.49160	-0.3125	ppb	0.49160	157.30%
Na 589.592 Radial†	20608.2	7746.0	ug/L	26.34	7746.0	ppb	26.34	0.34%
Ni 231.604†	28.0	0.6647	ug/L	0.14084	0.6647	ppb	0.14084	21.19%
P 214.914†	332.8	197.11	ug/L	5.938	197.11	ppb	5.938	3.01%
Pb 220.353†	-5.4	-0.6243	ug/L	0.95327	-0.6243	ppb	0.95327	152.69%
S 181.975 Axial†	3599.7	5263.6	ug/L	19.13	5263.6	ppb	19.13	0.36%
Sb 206.836†	0.2	-0.1977	ug/L	1.55096	-0.1977	ppb	1.55096	784.33%
Se 196.026†	-1.0	-0.4580	ug/L	4.04112	-0.4580	ppb	4.04112	882.33%
Si 251.611†	58716.1	1795.4	ug/L	1.69	1795.4	ppb	1.69	0.09%
Sn 189.927†	-82.2	-13.090	ug/L	1.5068	-13.090	ppb	1.5068	11.51%
Sr 421.552†	3379.5	22.740	ug/L	0.1335	22.740	ppb	0.1335	0.59%
Ti 334.940†	-601.9	-0.5582	ug/L	0.13460	-0.5582	ppb	0.13460	24.11%
Tl 190.801†	10.2	2.9329	ug/L	2.18021	2.9329	ppb	2.18021	74.34%
U 409.014†	-195.3	-5.4618	ug/L	0.36904	-5.4618	ppb	0.36904	6.76%
V 292.402†	30.4	0.2183	ug/L	0.10208	0.2183	ppb	0.10208	46.77%
Zn 213.857†	572.3	5.0861	ug/L	0.08978	5.0861	ppb	0.08978	1.77%
SiO2†	58969.8	3860.4	ug/L	21.94	3860.4	ppb	21.94	0.57%

Sequence No.: 130
Sample ID: 1201981076|926576|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 137
Date Collected: 12/10/2009 04:18:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981076|926576|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5738.3	5738.3	101	%			04:20:56
1	Y RADIAL	6568.9	6568.9	106.7	%			04:20:56
1	Al 396.153Radial†	51113.7	50466.5	37288	ug/L	37288	ppb	04:20:36
1	Ca 317.933Radial†	12901.0	12714.8	19443	ug/L	19443	ppb	04:20:36
1	Fe 238.204 Radial†	10603.3	10458.8	105330	ug/L	105330	ppb	04:20:36
1	K 766.490 Radial†	69119.1	66046.2	11968	ug/L	11968	ppb	04:20:36
1	Mg 279.077 IEC†	432.2	424.8	15736	ug/L	15736	ppb	04:20:56
1	Na 589.592 Radial†	7987.4	8499.0	3194.5	ug/L	3194.5	ppb	04:20:36
1	Sr 421.552†	139192.9	137371.7	927.16	ug/L	927.16	ppb	04:20:36
1	Sc 361.383	908011.2	908011.2	102.60	%			04:21:55
1	Y 371.029	799890.1	799890.1	107.79	%			04:21:55
1	Ag 328.068†	148782.0	144779.4	705.91	ug/L	705.91	ppb	04:21:55
1	As 188.979†	3347.1	3291.3	1374.1	ug/L	1374.1	ppb	04:22:15
1	B 249.677†	33476.0	33150.5	704.51	ug/L	704.51	ppb	04:21:55
1	Ba 233.527†	333153.4	324712.4	2471.9	ug/L	2471.9	ppb	04:21:55
1	Be 313.107†	1293857.8	1266349.3	474.23	ug/L	474.23	ppb	04:21:55
1	Cd 226.502†	60011.8	58677.0	626.39	ug/L	626.39	ppb	04:21:55
1	Co 228.616†	22923.3	22413.4	431.66	ug/L	431.66	ppb	04:22:15
1	Cr 267.716†	39177.0	38096.0	413.83	ug/L	413.83	ppb	04:21:55
1	Cu 324.752†	195823.8	184086.5	540.75	ug/L	540.75	ppb	04:21:55
1	Mn 257.610†	1837966.1	1790928.3	1956.5	ug/L	1956.5	ppb	04:21:55
1	Mo 202.031†	6897.2	6702.2	444.05	ug/L	444.05	ppb	04:22:15
1	Ni 231.604†	23199.0	22540.3	534.56	ug/L	534.56	ppb	04:22:15
1	P 214.914†	6924.6	6529.0	3728.5	ug/L	3728.5	ppb	04:22:15
1	Pb 220.353†	7651.3	7509.7	878.25	ug/L	878.25	ppb	04:22:15
1	S 181.975 Axial†	853.6	790.4	1148.5	ug/L	1148.5	ppb	04:22:15
1	Sb 206.836†	1650.6	1579.1	519.47	ug/L	519.47	ppb	04:22:15
1	Se 196.026†	1121.4	1116.4	994.97	ug/L	994.97	ppb	04:22:15
1	Si 251.611†	282550.3	274873.2	8393.8	ug/L	8393.8	ppb	04:21:55
1	Sn 189.927†	3451.9	3360.0	571.89	ug/L	571.89	ppb	04:22:15
1	Ti 334.940†	1180587.4	1151597.6	1863.5	ug/L	1863.5	ppb	04:21:55
1	Tl 190.801†	3756.4	3697.9	1082.6	ug/L	1082.6	ppb	04:22:15
1	U 409.014†	-7707.9	-5550.1	-169.10	ug/L	-169.10	ppb	04:21:55
1	V 292.402†	121413.2	119629.1	795.62	ug/L	795.62	ppb	04:21:55
1	Zn 213.857†	122522.1	118606.1	1052.4	ug/L	1052.4	ppb	04:21:55
1	SiO2†	282867.5	275201.5	17992	ug/L	17992	ppb	04:23:15
2	Sc Radial	5775.4	5775.4	102	%			04:21:21
2	Y RADIAL	6607.6	6607.6	107.3	%			04:21:21
2	Al 396.153Radial†	50068.8	49117.6	36292	ug/L	36292	ppb	04:21:01
2	Ca 317.933Radial†	12651.8	12388.6	18944	ug/L	18944	ppb	04:21:01
2	Fe 238.204 Radial†	10378.2	10170.7	102430	ug/L	102430	ppb	04:21:01
2	K 766.490 Radial†	67827.2	64340.7	11659	ug/L	11659	ppb	04:21:01
2	Mg 279.077 IEC†	436.1	425.9	15782	ug/L	15782	ppb	04:21:21
2	Na 589.592 Radial†	7752.5	8218.0	3088.9	ug/L	3088.9	ppb	04:21:01
2	Sr 421.552†	136056.4	133412.8	900.44	ug/L	900.44	ppb	04:21:01
2	Sc 361.383	918161.2	918161.2	103.75	%			04:22:22
2	Y 371.029	810200.3	810200.3	109.18	%			04:22:22
2	Ag 328.068†	149889.0	144243.4	702.50	ug/L	702.50	ppb	04:22:22
2	As 188.979†	3300.8	3210.7	1340.6	ug/L	1340.6	ppb	04:22:42
2	B 249.677†	33670.7	32977.4	701.16	ug/L	701.16	ppb	04:22:22
2	Ba 233.527†	334886.5	322793.4	2457.2	ug/L	2457.2	ppb	04:22:22
2	Be 313.107†	1303652.7	1261849.8	472.53	ug/L	472.53	ppb	04:22:22
2	Cd 226.502†	60360.3	58366.3	623.30	ug/L	623.30	ppb	04:22:22
2	Co 228.616†	22626.5	21880.4	421.35	ug/L	421.35	ppb	04:22:42
2	Cr 267.716†	39384.1	37873.5	411.37	ug/L	411.37	ppb	04:22:22
2	Cu 324.752†	196833.6	182950.0	537.30	ug/L	537.30	ppb	04:22:22
2	Mn 257.610†	1847318.4	1780139.9	1944.5	ug/L	1944.5	ppb	04:22:22
2	Mo 202.031†	6822.0	6555.4	434.28	ug/L	434.28	ppb	04:22:42
2	Ni 231.604†	22889.2	21991.7	521.55	ug/L	521.55	ppb	04:22:42

2	P 214.914†	6841.1	6373.8	3638.6	ug/L	3638.6 ppb	04:22:42
2	Pb 220.353†	7567.7	7346.7	859.18	ug/L	859.18 ppb	04:22:42
2	S 181.975 Axial†	840.7	768.9	1117.1	ug/L	1117.1 ppb	04:22:42
2	Sb 206.836†	1623.4	1535.2	504.82	ug/L	504.82 ppb	04:22:42
2	Se 196.026†	1091.9	1075.8	961.71	ug/L	961.71 ppb	04:22:42
2	Si 251.611†	284205.8	273424.6	8349.8	ug/L	8349.8 ppb	04:22:22
2	Sn 189.927†	3409.5	3282.0	558.59	ug/L	558.59 ppb	04:22:42
2	Ti 334.940†	1185853.0	1143953.0	1851.1	ug/L	1851.1 ppb	04:22:22
2	Tl 190.801†	3690.2	3593.7	1052.6	ug/L	1052.6 ppb	04:22:42
2	U 409.014†	-7720.8	-5479.5	-166.76	ug/L	-166.76 ppb	04:22:22
2	V 292.402†	122279.3	119155.7	792.74	ug/L	792.74 ppb	04:22:22
2	Zn 213.857†	123453.2	118183.4	1049.0	ug/L	1049.0 ppb	04:22:22
2	SiO2†	283519.1	272781.9	17834	ug/L	17834 ppb	04:23:20
3	Sc Radial	5792.8	5792.8	102	%		04:21:46
3	Y RADIAL	6667.6	6667.6	108.3	%		04:21:46
3	Al 396.153Radial†	51044.9	49924.2	36888	ug/L	36888 ppb	04:21:26
3	Ca 317.933Radial†	12892.7	12586.8	19247	ug/L	19247 ppb	04:21:26
3	Fe 238.204 Radial†	10558.5	10316.5	103890	ug/L	103890 ppb	04:21:26
3	K 766.490 Radial†	68911.3	65200.7	11815	ug/L	11815 ppb	04:21:26
3	Mg 279.077 IEC†	438.1	426.6	15805	ug/L	15805 ppb	04:21:46
3	Na 589.592 Radial†	7946.5	8384.9	3151.6	ug/L	3151.6 ppb	04:21:26
3	Sr 421.552†	138933.0	135824.1	916.71	ug/L	916.71 ppb	04:21:26
3	Sc 361.383	925299.6	925299.6	104.56	%		04:22:49
3	Y 371.029	814755.2	814755.2	109.79	%		04:22:49
3	Ag 328.068†	148546.1	141844.5	691.81	ug/L	691.81 ppb	04:22:49
3	As 188.979†	3361.2	3243.9	1354.1	ug/L	1354.1 ppb	04:23:09
3	B 249.677†	33297.3	32370.0	687.78	ug/L	687.78 ppb	04:22:49
3	Ba 233.527†	330546.6	316152.5	2406.8	ug/L	2406.8 ppb	04:22:49
3	Be 313.107†	1289604.7	1238720.3	463.87	ug/L	463.87 ppb	04:22:49
3	Cd 226.502†	59636.0	57224.7	610.77	ug/L	610.77 ppb	04:22:49
3	Co 228.616†	22977.1	22047.4	424.63	ug/L	424.63 ppb	04:23:09
3	Cr 267.716†	38908.1	37125.4	403.31	ug/L	403.31 ppb	04:22:49
3	Cu 324.752†	195087.4	179816.3	528.26	ug/L	528.26 ppb	04:22:49
3	Mn 257.610†	1826351.6	1746350.6	1907.9	ug/L	1907.9 ppb	04:22:49
3	Mo 202.031†	6909.5	6588.3	436.53	ug/L	436.53 ppb	04:23:09
3	Ni 231.604†	23202.4	22121.0	524.62	ug/L	524.62 ppb	04:23:09
3	P 214.914†	6936.8	6414.5	3663.3	ug/L	3663.3 ppb	04:23:09
3	Pb 220.353†	7646.3	7365.6	861.42	ug/L	861.42 ppb	04:23:09
3	S 181.975 Axial†	851.7	773.1	1123.2	ug/L	1123.2 ppb	04:23:09
3	Sb 206.836†	1641.2	1540.1	506.80	ug/L	506.80 ppb	04:23:09
3	Se 196.026†	1121.0	1095.6	978.09	ug/L	978.09 ppb	04:23:09
3	Si 251.611†	281097.2	268338.2	8194.2	ug/L	8194.2 ppb	04:22:49
3	Sn 189.927†	3462.4	3307.2	562.91	ug/L	562.91 ppb	04:23:09
3	Ti 334.940†	1172977.3	1122820.7	1816.9	ug/L	1816.9 ppb	04:22:49
3	Tl 190.801†	3736.9	3610.8	1057.0	ug/L	1057.0 ppb	04:23:09
3	U 409.014†	-7710.4	-5412.2	-165.05	ug/L	-165.05 ppb	04:22:49
3	V 292.402†	120848.4	116877.9	777.22	ug/L	777.22 ppb	04:22:49
3	Zn 213.857†	121994.9	115870.7	1028.0	ug/L	1028.0 ppb	04:22:49
3	SiO2†	283079.3	270253.1	17668	ug/L	17668 ppb	04:23:25

Mean Data: 1201981076|926576|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917157.3	103.64	%	0.982				0.95%
Sc Radial	5768.8	102	%	0.5				0.48%
Y 371.029	808281.9	108.92	%	1.026				0.94%
Y RADIAL	6614.7	107.4	%	0.81				0.75%
Ag 328.068†	143622.4	700.08	ug/L	7.356	700.08	ppb	7.356	1.05%
Al 396.153Radial†	49836.1	36823	ug/L	501.6	36823	ppb	501.6	1.36%
As 188.979†	3248.6	1356.3	ug/L	16.84	1356.3	ppb	16.84	1.24%
B 249.677†	32832.6	697.82	ug/L	8.855	697.82	ppb	8.855	1.27%
Ba 233.527†	321219.4	2445.3	ug/L	34.15	2445.3	ppb	34.15	1.40%
Be 313.107†	1255639.8	470.21	ug/L	5.556	470.21	ppb	5.556	1.18%
Ca 317.933Radial†	12563.4	19212	ug/L	251.3	19212	ppb	251.3	1.31%
Cd 226.502†	58089.3	620.15	ug/L	8.271	620.15	ppb	8.271	1.33%
Co 228.616†	22113.7	425.88	ug/L	5.267	425.88	ppb	5.267	1.24%
Cr 267.716†	37698.3	409.50	ug/L	5.502	409.50	ppb	5.502	1.34%
Cu 324.752†	182284.3	535.44	ug/L	6.451	535.44	ppb	6.451	1.20%
Fe 238.204 Radial†	10315.4	103880	ug/L	1450.6	103880	ppb	1450.6	1.40%
K 766.490 Radial†	65195.9	11814	ug/L	154.8	11814	ppb	154.8	1.31%

Mg 279.077 IEC†	425.8	15774	ug/L	34.9	15774	ppb	34.9	0.22%
Mn 257.610†	1772472.9	1936.3	ug/L	25.31	1936.3	ppb	25.31	1.31%
Mo 202.031†	6615.3	438.28	ug/L	5.115	438.28	ppb	5.115	1.17%
Na 589.592 Radial†	8367.3	3145.0	ug/L	53.11	3145.0	ppb	53.11	1.69%
Ni 231.604†	22217.7	526.91	ug/L	6.801	526.91	ppb	6.801	1.29%
P 214.914†	6439.1	3676.8	ug/L	46.41	3676.8	ppb	46.41	1.26%
Pb 220.353†	7407.3	866.28	ug/L	10.423	866.28	ppb	10.423	1.20%
S 181.975 Axial†	777.5	1129.6	ug/L	16.64	1129.6	ppb	16.64	1.47%
Sb 206.836†	1551.5	510.36	ug/L	7.950	510.36	ppb	7.950	1.56%
Se 196.026†	1096.0	978.26	ug/L	16.631	978.26	ppb	16.631	1.70%
Si 251.611†	272212.0	8312.6	ug/L	104.91	8312.6	ppb	104.91	1.26%
Sn 189.927†	3316.4	564.46	ug/L	6.785	564.46	ppb	6.785	1.20%
Sr 421.552†	135536.2	914.77	ug/L	13.466	914.77	ppb	13.466	1.47%
Ti 334.940†	1139457.1	1843.8	ug/L	24.11	1843.8	ppb	24.11	1.31%
Tl 190.801†	3634.2	1064.1	ug/L	16.19	1064.1	ppb	16.19	1.52%
U 409.014†	-5480.6	-166.97	ug/L	2.035	-166.97	ppb	2.035	1.22%
V 292.402†	118554.2	788.53	ug/L	9.896	788.53	ppb	9.896	1.26%
Zn 213.857†	117553.4	1043.2	ug/L	13.20	1043.2	ppb	13.20	1.27%
SiO2†	272745.5	17831	ug/L	161.8	17831	ppb	161.8	0.91%

Sequence No.: 131
Sample ID: 241711001|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 138
Date Collected: 12/10/2009 04:25:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711001|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5756.1	5756.1	102	%			04:27:53
1	Y RADIAL	7567.2	7567.2	122.9	%			04:27:33
1	Al 396.153Radial†	200849.2	197631.2	146100	ug/L	146100	ppb	04:27:33
1	Ca 317.933Radial†	17945.5	17638.5	26972	ug/L	26972	ppb	04:27:33
1	Fe 238.204 Radial†	19265.3	18948.6	190810	ug/L	190810	ppb	04:27:33
1	K 766.490 Radial†	51463.3	48463.2	8505.7	ug/L	8505.7	ppb	04:27:33
1	Mg 279.077 IEC†	546.9	536.3	19808	ug/L	19808	ppb	04:27:53
1	Na 589.592 Radial†	9622.1	10082.9	3789.9	ug/L	3789.9	ppb	04:27:33
1	Sr 421.552†	44651.8	43928.4	296.29	ug/L	296.29	ppb	04:27:33
1	Sc 361.383	899806.6	899806.6	101.68	%			04:28:59
1	Y 371.029	881006.7	881006.7	118.72	%			04:28:59
1	Ag 328.068†	-11304.6	-11345.8	10.045	ug/L	10.045	ppb	04:29:04
1	As 188.979†	10.0	39.0	83.419	ug/L	83.419	ppb	04:29:24
1	B 249.677†	1884.4	2377.2	25.379	ug/L	25.379	ppb	04:29:04
1	Ba 233.527†	477344.4	469487.0	3573.9	ug/L	3573.9	ppb	04:28:59
1	Be 313.107†	-3506.6	1871.4	9.5990	ug/L	9.5990	ppb	04:29:04
1	Cd 226.502†	1696.0	1855.9	1.1170	ug/L	1.1170	ppb	04:29:24
1	Co 228.616†	18692.2	18455.8	347.40	ug/L	347.40	ppb	04:29:04
1	Cr 267.716†	10528.6	10268.1	115.00	ug/L	115.00	ppb	04:29:04
1	Cu 324.752†	31879.6	24585.4	81.235	ug/L	81.235	ppb	04:29:04
1	Mn 257.610†	23385629.7	22999691.6	25013	ug/L	25013	ppb	04:28:53
1	Mo 202.031†	-52.4	-71.5	8.8767	ug/L	8.8767	ppb	04:29:04
1	Ni 231.604†	3957.8	3822.4	90.471	ug/L	90.471	ppb	04:29:24
1	P 214.914†	2140.5	1885.2	1003.8	ug/L	1003.8	ppb	04:29:24
1	Pb 220.353†	3174.5	3174.7	388.18	ug/L	388.18	ppb	04:29:24
1	S 181.975 Axial†	374.0	326.3	448.43	ug/L	448.43	ppb	04:29:24
1	Sb 206.836†	84.7	53.7	2.0073	ug/L	2.0073	ppb	04:29:24
1	Se 196.026†	-1017.7	-977.5	22.508	ug/L	22.508	ppb	04:29:24
1	Si 251.611†	737352.6	724688.6	22162	ug/L	22162	ppb	04:28:59
1	Sn 189.927†	-147.0	-148.9	-19.750	ug/L	-19.750	ppb	04:29:24
1	Ti 334.940†	2846762.7	2800796.1	4531.4	ug/L	4531.4	ppb	04:28:59
1	Tl 190.801†	-663.5	-615.7	5.8572	ug/L	5.8572	ppb	04:29:24
1	U 409.014†	-16055.3	-13828.4	-410.57	ug/L	-410.57	ppb	04:28:59
1	V 292.402†	69398.8	69551.2	435.08	ug/L	435.08	ppb	04:29:04
1	Zn 213.857†	28993.6	27708.3	229.72	ug/L	229.72	ppb	04:29:04
1	SiO2†	736288.3	723661.1	47382	ug/L	47382	ppb	04:30:48
2	Sc Radial	5746.8	5746.8	101	%			04:28:18
2	Y RADIAL	7576.2	7576.2	123.0	%			04:27:58
2	Al 396.153Radial†	199590.6	196713.7	145420	ug/L	145420	ppb	04:27:58
2	Ca 317.933Radial†	17857.4	17580.5	26884	ug/L	26884	ppb	04:27:58
2	Fe 238.204 Radial†	19178.0	18893.6	190260	ug/L	190260	ppb	04:27:58
2	K 766.490 Radial†	51154.7	48241.9	8467.8	ug/L	8467.8	ppb	04:27:58
2	Mg 279.077 IEC†	544.7	535.0	19760	ug/L	19760	ppb	04:28:18
2	Na 589.592 Radial†	9559.7	10036.9	3772.6	ug/L	3772.6	ppb	04:27:58
2	Sr 421.552†	44327.5	43680.7	294.62	ug/L	294.62	ppb	04:27:58
2	Sc 361.383	904102.8	904102.8	102.16	%			04:29:38
2	Y 371.029	885837.2	885837.2	119.37	%			04:29:38
2	Ag 328.068†	-11178.1	-11169.1	10.654	ug/L	10.654	ppb	04:29:43
2	As 188.979†	7.2	36.3	82.130	ug/L	82.130	ppb	04:30:03
2	B 249.677†	1803.1	2288.8	23.549	ug/L	23.549	ppb	04:29:43
2	Ba 233.527†	479412.0	469279.9	3572.3	ug/L	3572.3	ppb	04:29:38
2	Be 313.107†	-3775.0	1625.2	9.4886	ug/L	9.4886	ppb	04:29:43
2	Cd 226.502†	1678.0	1830.4	0.8953	ug/L	0.8953	ppb	04:30:03
2	Co 228.616†	18468.4	18149.3	341.48	ug/L	341.48	ppb	04:29:43
2	Cr 267.716†	10439.8	10131.9	113.51	ug/L	113.51	ppb	04:29:43
2	Cu 324.752†	31678.1	24239.2	80.200	ug/L	80.200	ppb	04:29:43
2	Mn 257.610†	23322966.2	22829060.0	24828	ug/L	24828	ppb	04:29:32
2	Mo 202.031†	-56.2	-75.0	8.6109	ug/L	8.6109	ppb	04:29:43
2	Ni 231.604†	3962.1	3808.2	90.136	ug/L	90.136	ppb	04:30:03

2	P 214.914†	2140.3	1875.1	998.19 ug/L	998.19 ppb	04:30:03
2	Pb 220.353†	3161.2	3146.8	384.81 ug/L	384.81 ppb	04:30:03
2	S 181.975 Axial†	381.7	332.1	457.04 ug/L	457.04 ppb	04:30:03
2	Sb 206.836†	84.4	53.0	1.8362 ug/L	1.8362 ppb	04:30:03
2	Se 196.026†	-1025.2	-980.1	19.184 ug/L	19.184 ppb	04:30:03
2	Si 251.611†	740571.6	724393.4	22153 ug/L	22153 ppb	04:29:38
2	Sn 189.927†	-142.7	-143.9	-18.928 ug/L	-18.928 ppb	04:30:03
2	Ti 334.940†	2854285.8	2794855.5	4521.7 ug/L	4521.7 ppb	04:29:38
2	Tl 190.801†	-641.2	-590.7	11.866 ug/L	11.866 ppb	04:30:03
2	U 409.014†	-15832.2	-13535.0	-402.29 ug/L	-402.29 ppb	04:29:38
2	V 292.402†	68743.9	68585.8	428.67 ug/L	428.67 ppb	04:29:43
2	Zn 213.857†	28762.8	27346.9	226.53 ug/L	226.53 ppb	04:29:43
2	SiO2†	731703.1	715731.8	46862 ug/L	46862 ppb	04:30:54
3	Sc Radial	5759.4	5759.4	102 %		04:28:43
3	Y RADIAL	7647.8	7647.8	124.2 %		04:28:23
3	Al 396.153Radial†	202729.0	199368.7	147380 ug/L	147380 ppb	04:28:23
3	Ca 317.933Radial†	17994.7	17676.9	27031 ug/L	27031 ppb	04:28:23
3	Fe 238.204 Radial†	19366.5	19037.5	191710 ug/L	191710 ppb	04:28:23
3	K 766.490 Radial†	51899.5	48863.8	8578.2 ug/L	8578.2 ppb	04:28:23
3	Mg 279.077 IEC†	549.7	538.8	19900 ug/L	19900 ppb	04:28:43
3	Na 589.592 Radial†	9673.2	10127.9	3806.8 ug/L	3806.8 ppb	04:28:23
3	Sr 421.552†	45053.4	44298.7	298.79 ug/L	298.79 ppb	04:28:23
3	Sc 361.383	903993.9	903993.9	102.15 %		04:30:17
3	Y 371.029	884987.8	884987.8	119.26 %		04:30:17
3	Ag 328.068†	-11133.1	-11126.4	11.300 ug/L	11.300 ppb	04:30:22
3	As 188.979†	-0.9	28.3	79.127 ug/L	79.127 ppb	04:30:42
3	B 249.677†	1912.6	2396.2	25.690 ug/L	25.690 ppb	04:30:22
3	Ba 233.527†	480443.9	470346.6	3580.4 ug/L	3580.4 ppb	04:30:17
3	Be 313.107†	-3443.2	1949.5	9.6123 ug/L	9.6123 ppb	04:30:22
3	Cd 226.502†	1683.7	1836.1	0.8132 ug/L	0.8132 ppb	04:30:42
3	Co 228.616†	18435.8	18119.6	340.89 ug/L	340.89 ppb	04:30:22
3	Cr 267.716†	10358.1	10053.1	112.68 ug/L	112.68 ppb	04:30:22
3	Cu 324.752†	31455.2	24024.7	79.650 ug/L	79.650 ppb	04:30:22
3	Mn 257.610†	23525763.6	23030339.3	25047 ug/L	25047 ppb	04:30:11
3	Mo 202.031†	-41.0	-60.1	9.6825 ug/L	9.6825 ppb	04:30:22
3	Ni 231.604†	3964.0	3810.5	90.192 ug/L	90.192 ppb	04:30:42
3	P 214.914†	2130.2	1865.4	992.03 ug/L	992.03 ppb	04:30:42
3	Pb 220.353†	3178.7	3164.4	387.19 ug/L	387.19 ppb	04:30:42
3	S 181.975 Axial†	377.2	327.8	450.27 ug/L	450.27 ppb	04:30:42
3	Sb 206.836†	85.7	54.3	2.2707 ug/L	2.2707 ppb	04:30:42
3	Se 196.026†	-1021.1	-976.2	26.216 ug/L	26.216 ppb	04:30:42
3	Si 251.611†	741747.5	725631.9	22191 ug/L	22191 ppb	04:30:17
3	Sn 189.927†	-142.3	-143.6	-18.844 ug/L	-18.844 ppb	04:30:42
3	Ti 334.940†	2854981.7	2795873.2	4523.4 ug/L	4523.4 ppb	04:30:17
3	Tl 190.801†	-650.6	-600.1	10.556 ug/L	10.556 ppb	04:30:42
3	U 409.014†	-15976.3	-13677.9	-406.47 ug/L	-406.47 ppb	04:30:17
3	V 292.402†	68203.0	68064.4	424.94 ug/L	424.94 ppb	04:30:22
3	Zn 213.857†	28600.5	27191.4	224.99 ug/L	224.99 ppb	04:30:22
3	SiO2†	745679.2	729500.1	47764 ug/L	47764 ppb	04:31:00

Mean Data: 241711001|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902634.4	102.00	%	0.277				0.27%
Sc Radial	5754.1	102	%	0.1				0.11%
Y 371.029	883943.9	119.12	%	0.348				0.29%
Y RADIAL	7597.1	123.4	%	0.72				0.58%
Ag 328.068†	-11213.8	10.666	ug/L	0.6276	10.666	ppb	0.6276	5.88%
Al 396.153Radial†	197904.5	146300	ug/L	996.8	146300	ppb	996.8	0.68%
As 188.979†	34.5	81.559	ug/L	2.2024	81.559	ppb	2.2024	2.70%
B 249.677†	2354.0	24.873	ug/L	1.1569	24.873	ppb	1.1569	4.65%
Ba 233.527†	469704.5	3575.5	ug/L	4.32	3575.5	ppb	4.32	0.12%
Be 313.107†	1815.4	9.5666	ug/L	0.06792	9.5666	ppb	0.06792	0.71%
Ca 317.933Radial†	17632.0	26962	ug/L	74.2	26962	ppb	74.2	0.28%
Cd 226.502†	1840.8	0.9418	ug/L	0.15715	0.9418	ppb	0.15715	16.69%
Co 228.616†	18241.6	343.26	ug/L	3.602	343.26	ppb	3.602	1.05%
Cr 267.716†	10151.0	113.73	ug/L	1.175	113.73	ppb	1.175	1.03%
Cu 324.752†	24283.1	80.361	ug/L	0.8048	80.361	ppb	0.8048	1.00%
Fe 238.204 Radial†	18959.9	190930	ug/L	731.2	190930	ppb	731.2	0.38%
K 766.490 Radial†	48523.0	8517.2	ug/L	56.11	8517.2	ppb	56.11	0.66%

Mg 279.077 IEC†	536.7	19823	ug/L	70.9	19823	ppb	70.9	0.36%
Mn 257.610†	22953030.3	24962	ug/L	117.9	24962	ppb	117.9	0.47%
Mo 202.031†	-68.9	9.0567	ug/L	0.55801	9.0567	ppb	0.55801	6.16%
Na 589.592 Radial†	10082.6	3789.7	ug/L	17.11	3789.7	ppb	17.11	0.45%
Ni 231.604†	3813.7	90.266	ug/L	0.1792	90.266	ppb	0.1792	0.20%
P 214.914†	1875.3	998.02	ug/L	5.895	998.02	ppb	5.895	0.59%
Pb 220.353†	3162.0	386.72	ug/L	1.733	386.72	ppb	1.733	0.45%
S 181.975 Axial†	328.7	451.92	ug/L	4.533	451.92	ppb	4.533	1.00%
Sb 206.836†	53.7	2.0381	ug/L	0.21891	2.0381	ppb	0.21891	10.74%
Se 196.026†	-977.9	22.636	ug/L	3.5178	22.636	ppb	3.5178	15.54%
Si 251.611†	724904.7	22169	ug/L	19.8	22169	ppb	19.8	0.09%
Sn 189.927†	-145.5	-19.174	ug/L	0.5009	-19.174	ppb	0.5009	2.61%
Sr 421.552†	43969.3	296.57	ug/L	2.099	296.57	ppb	2.099	0.71%
Ti 334.940†	2797175.0	4525.5	ug/L	5.14	4525.5	ppb	5.14	0.11%
Tl 190.801†	-602.2	9.4265	ug/L	3.15974	9.4265	ppb	3.15974	33.52%
U 409.014†	-13680.4	-406.44	ug/L	4.135	-406.44	ppb	4.135	1.02%
V 292.402†	68733.8	429.56	ug/L	5.129	429.56	ppb	5.129	1.19%
Zn 213.857†	27415.5	227.08	ug/L	2.415	227.08	ppb	2.415	1.06%
SiO2†	722964.3	47336	ug/L	452.5	47336	ppb	452.5	0.96%

Sequence No.: 132
Sample ID: 1201981077|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 139
Date Collected: 12/10/2009 04:33:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981077|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5764.3	5764.3	102	%			04:35:26
1	Y RADIAL	7141.7	7141.7	116.0	%			04:35:26
1	Al 396.153Radial†	200773.9	197278.9	145840	ug/L	145840	ppb	04:35:06
1	Ca 317.933Radial†	18450.8	18110.0	27693	ug/L	27693	ppb	04:35:06
1	Fe 238.204 Radial†	18881.2	18544.6	186740	ug/L	186740	ppb	04:35:06
1	K 766.490 Radial†	50889.3	47828.0	8588.8	ug/L	8588.8	ppb	04:35:06
1	Mg 279.077 IEC†	558.3	546.8	20201	ug/L	20201	ppb	04:35:26
1	Na 589.592 Radial†	9159.4	9615.0	3614.0	ug/L	3614.0	ppb	04:35:06
1	Sr 421.552†	41911.8	41174.6	277.70	ug/L	277.70	ppb	04:35:06
1	Sc 361.383	904257.9	904257.9	102.18	%			04:36:31
1	Y 371.029	857363.1	857363.1	115.54	%			04:36:31
1	Ag 328.068†	-11794.0	-11770.1	6.6269	ug/L	6.6269	ppb	04:36:31
1	As 188.979†	-9.3	20.1	76.269	ug/L	76.269	ppb	04:36:51
1	B 249.677†	1572.8	2063.1	19.672	ug/L	19.672	ppb	04:36:31
1	Ba 233.527†	217927.5	213291.7	1627.9	ug/L	1627.9	ppb	04:36:31
1	Be 313.107†	-6487.6	-1029.0	8.7978	ug/L	8.7978	ppb	04:36:31
1	Cd 226.502†	1661.6	1814.0	1.0555	ug/L	1.0555	ppb	04:36:51
1	Co 228.616†	6966.2	6889.3	121.79	ug/L	121.79	ppb	04:36:51
1	Cr 267.716†	10352.8	10045.0	112.46	ug/L	112.46	ppb	04:36:51
1	Cu 324.752†	30136.4	22725.0	75.617	ug/L	75.617	ppb	04:36:31
1	Mn 257.610†	8482545.5	8301231.4	9039.4	ug/L	9039.4	ppb	04:36:24
1	Mo 202.031†	-80.6	-98.9	6.8043	ug/L	6.8043	ppb	04:36:51
1	Ni 231.604†	3084.8	2948.9	69.887	ug/L	69.887	ppb	04:36:51
1	P 214.914†	1817.2	1558.5	813.73	ug/L	813.73	ppb	04:36:51
1	Pb 220.353†	1714.4	1730.4	219.61	ug/L	219.61	ppb	04:36:51
1	S 181.975 Axial†	308.0	260.0	351.47	ug/L	351.47	ppb	04:36:51
1	Sb 206.836†	75.5	44.3	-1.5191	ug/L	-1.5191	ppb	04:36:51
1	Se 196.026†	-1015.1	-970.0	14.499	ug/L	14.499	ppb	04:36:51
1	Si 251.611†	776799.0	759723.8	23234	ug/L	23234	ppb	04:36:31
1	Sn 189.927†	-154.8	-155.8	-20.905	ug/L	-20.905	ppb	04:36:51
1	Ti 334.940†	2949740.4	2887795.1	4672.0	ug/L	4672.0	ppb	04:36:31
1	Tl 190.801†	-335.1	-291.1	7.5716	ug/L	7.5716	ppb	04:36:51
1	U 409.014†	-11497.8	-9290.4	-283.26	ug/L	-283.26	ppb	04:36:31
1	V 292.402†	68102.6	67946.7	424.94	ug/L	424.94	ppb	04:36:31
1	Zn 213.857†	28085.3	26679.0	220.98	ug/L	220.98	ppb	04:36:51
1	SiO2†	779839.0	762718.2	49939	ug/L	49939	ppb	04:38:03
2	Sc Radial	5780.4	5780.4	102	%			04:35:52
2	Y RADIAL	7123.8	7123.8	115.7	%			04:35:52
2	Al 396.153Radial†	200238.9	196205.2	145040	ug/L	145040	ppb	04:35:32
2	Ca 317.933Radial†	18378.5	17988.7	27508	ug/L	27508	ppb	04:35:32
2	Fe 238.204 Radial†	18810.5	18423.6	185520	ug/L	185520	ppb	04:35:32
2	K 766.490 Radial†	50714.9	47517.8	8532.0	ug/L	8532.0	ppb	04:35:32
2	Mg 279.077 IEC†	558.1	545.0	20136	ug/L	20136	ppb	04:35:52
2	Na 589.592 Radial†	9094.1	9526.0	3580.5	ug/L	3580.5	ppb	04:35:32
2	Sr 421.552†	41767.2	40918.2	275.97	ug/L	275.97	ppb	04:35:32
2	Sc 361.383	902492.4	902492.4	101.98	%			04:37:04
2	Y 371.029	855784.7	855784.7	115.32	%			04:37:04
2	Ag 328.068†	-11848.5	-11846.0	5.8877	ug/L	5.8877	ppb	04:37:04
2	As 188.979†	-21.1	8.5	71.383	ug/L	71.383	ppb	04:37:24
2	B 249.677†	1509.7	2004.2	18.555	ug/L	18.555	ppb	04:37:04
2	Ba 233.527†	217403.2	213194.8	1627.1	ug/L	1627.1	ppb	04:37:04
2	Be 313.107†	-6427.8	-982.8	8.8202	ug/L	8.8202	ppb	04:37:04
2	Cd 226.502†	1668.9	1824.4	1.2905	ug/L	1.2905	ppb	04:37:24
2	Co 228.616†	6958.6	6895.2	121.91	ug/L	121.91	ppb	04:37:24
2	Cr 267.716†	10360.5	10072.4	112.73	ug/L	112.73	ppb	04:37:24
2	Cu 324.752†	30165.7	22811.4	75.806	ug/L	75.806	ppb	04:37:04
2	Mn 257.610†	8493891.9	8328597.4	9069.1	ug/L	9069.1	ppb	04:36:57
2	Mo 202.031†	-96.5	-114.7	5.6910	ug/L	5.6910	ppb	04:37:24
2	Ni 231.604†	3099.0	2968.7	70.357	ug/L	70.357	ppb	04:37:24

2	P 214.914†	1822.6	1567.3	819.67 ug/L	819.67 ppb	04:37:24
2	Pb 220.353†	1709.8	1729.1	219.38 ug/L	219.38 ppb	04:37:24
2	S 181.975 Axial†	313.9	266.4	360.95 ug/L	360.95 ppb	04:37:24
2	Sb 206.836†	79.5	48.4	-0.2093 ug/L	-0.2093 ppb	04:37:24
2	Se 196.026†	-1010.4	-967.3	12.262 ug/L	12.262 ppb	04:37:24
2	Si 251.611†	775521.0	759957.9	23241 ug/L	23241 ppb	04:37:04
2	Sn 189.927†	-146.2	-147.6	-19.555 ug/L	-19.555 ppb	04:37:24
2	Ti 334.940†	2945682.1	2889462.9	4674.7 ug/L	4674.7 ppb	04:37:04
2	Tl 190.801†	-326.4	-283.2	9.9952 ug/L	9.9952 ppb	04:37:24
2	U 409.014†	-11390.7	-9207.4	-280.79 ug/L	-280.79 ppb	04:37:04
2	V 292.402†	67927.1	67904.9	424.83 ug/L	424.83 ppb	04:37:04
2	Zn 213.857†	27975.8	26625.4	220.61 ug/L	220.61 ppb	04:37:24
2	SiO2†	777419.3	761838.5	49882 ug/L	49882 ppb	04:38:09
3	Sc Radial	5825.5	5825.5	103 %		04:36:17
3	Y RADIAL	7188.7	7188.7	116.7 %		04:36:17
3	Al 396.153Radial†	199444.7	193912.4	143350 ug/L	143350 ppb	04:35:57
3	Ca 317.933Radial†	18331.1	17803.1	27224 ug/L	27224 ppb	04:35:57
3	Fe 238.204 Radial†	18731.1	18203.5	183300 ug/L	183300 ppb	04:35:57
3	K 766.490 Radial†	50354.4	46782.2	8399.3 ug/L	8399.3 ppb	04:35:57
3	Mg 279.077 IEC†	563.6	546.1	20180 ug/L	20180 ppb	04:36:17
3	Na 589.592 Radial†	9091.3	9454.1	3553.5 ug/L	3553.5 ppb	04:35:57
3	Sr 421.552†	41568.7	40408.0	272.53 ug/L	272.53 ppb	04:35:57
3	Sc 361.383	913773.0	913773.0	103.25 %		04:37:37
3	Y 371.029	864873.8	864873.8	116.55 %		04:37:37
3	Ag 328.068†	-12042.2	-11890.2	4.9851 ug/L	4.9851 ppb	04:37:37
3	As 188.979†	-14.8	14.9	73.649 ug/L	73.649 ppb	04:37:57
3	B 249.677†	1507.4	1983.8	18.410 ug/L	18.410 ppb	04:37:37
3	Ba 233.527†	219810.3	212894.3	1624.8 ug/L	1624.8 ppb	04:37:37
3	Be 313.107†	-6364.2	-843.3	8.8751 ug/L	8.8751 ppb	04:37:37
3	Cd 226.502†	1672.2	1807.4	1.3267 ug/L	1.3267 ppb	04:37:57
3	Co 228.616†	6951.3	6803.9	120.17 ug/L	120.17 ppb	04:37:57
3	Cr 267.716†	10376.1	9962.0	111.51 ug/L	111.51 ppb	04:37:57
3	Cu 324.752†	30446.2	22717.9	75.421 ug/L	75.421 ppb	04:37:37
3	Mn 257.610†	8518258.5	8249374.0	8982.7 ug/L	8982.7 ppb	04:37:30
3	Mo 202.031†	-74.0	-91.6	7.0344 ug/L	7.0344 ppb	04:37:57
3	Ni 231.604†	3082.7	2915.4	69.093 ug/L	69.093 ppb	04:37:57
3	P 214.914†	1820.3	1542.9	806.48 ug/L	806.48 ppb	04:37:57
3	Pb 220.353†	1711.7	1710.3	216.98 ug/L	216.98 ppb	04:37:57
3	S 181.975 Axial†	300.0	249.0	335.95 ug/L	335.95 ppb	04:37:57
3	Sb 206.836†	72.8	40.9	-2.5110 ug/L	-2.5110 ppb	04:37:57
3	Se 196.026†	-1022.9	-967.3	5.2526 ug/L	5.2526 ppb	04:37:57
3	Si 251.611†	784976.1	759727.0	23234 ug/L	23234 ppb	04:37:37
3	Sn 189.927†	-133.1	-133.1	-17.165 ug/L	-17.165 ppb	04:37:57
3	Ti 334.940†	2983497.6	2890427.8	4676.3 ug/L	4676.3 ppb	04:37:37
3	Tl 190.801†	-330.7	-283.4	9.4144 ug/L	9.4144 ppb	04:37:57
3	U 409.014†	-11648.7	-9319.4	-283.64 ug/L	-283.64 ppb	04:37:37
3	V 292.402†	68779.6	67908.2	425.21 ug/L	425.21 ppb	04:37:37
3	Zn 213.857†	28025.3	26334.7	218.21 ug/L	218.21 ppb	04:37:57
3	SiO2†	781167.5	756057.6	49503 ug/L	49503 ppb	04:38:15

Mean Data: 1201981077|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906841.1	102.47	%	0.686				0.67%
Sc Radial	5790.1	102	%	0.6				0.55%
Y 371.029	859340.5	115.80	%	0.654				0.57%
Y RADIAL	7151.4	116.1	%	0.54				0.47%
Ag 328.068†	-11835.5	5.8332	ug/L	0.82226	5.8332	ppb	0.82226	14.10%
Al 396.153Radial†	195798.8	144740	ug/L	1271.3	144740	ppb	1271.3	0.88%
As 188.979†	14.5	73.767	ug/L	2.4452	73.767	ppb	2.4452	3.31%
B 249.677†	2017.0	18.879	ug/L	0.6906	18.879	ppb	0.6906	3.66%
Ba 233.527†	213126.9	1626.6	ug/L	1.64	1626.6	ppb	1.64	0.10%
Be 313.107†	-951.7	8.8310	ug/L	0.03979	8.8310	ppb	0.03979	0.45%
Ca 317.933Radial†	17967.3	27475	ug/L	236.4	27475	ppb	236.4	0.86%
Cd 226.502†	1815.2	1.2243	ug/L	0.14725	1.2243	ppb	0.14725	12.03%
Co 228.616†	6862.8	121.29	ug/L	0.971	121.29	ppb	0.971	0.80%
Cr 267.716†	10026.5	112.23	ug/L	0.645	112.23	ppb	0.645	0.57%
Cu 324.752†	22751.5	75.614	ug/L	0.1925	75.614	ppb	0.1925	0.25%
Fe 238.204 Radial†	18390.6	185190	ug/L	1741.1	185190	ppb	1741.1	0.94%
K 766.490 Radial†	47376.0	8506.7	ug/L	97.24	8506.7	ppb	97.24	1.14%

Mg 279.077 IEC†	546.0	20172	ug/L	33.0	20172	ppb	33.0	0.16%
Mn 257.610†	8293067.6	9030.4	ug/L	43.86	9030.4	ppb	43.86	0.49%
Mo 202.031†	-101.7	6.5099	ug/L	0.71846	6.5099	ppb	0.71846	11.04%
Na 589.592 Radial†	9531.7	3582.7	ug/L	30.29	3582.7	ppb	30.29	0.85%
Ni 231.604†	2944.3	69.779	ug/L	0.6388	69.779	ppb	0.6388	0.92%
P 214.914†	1556.2	813.29	ug/L	6.602	813.29	ppb	6.602	0.81%
Pb 220.353†	1723.3	218.66	ug/L	1.457	218.66	ppb	1.457	0.67%
S 181.975 Axial†	258.5	349.45	ug/L	12.621	349.45	ppb	12.621	3.61%
Sb 206.836†	44.5	-1.4131	ug/L	1.15451	-1.4131	ppb	1.15451	81.70%
Se 196.026†	-968.2	10.671	ug/L	4.8242	10.671	ppb	4.8242	45.21%
Si 251.611†	759802.9	23236	ug/L	4.1	23236	ppb	4.1	0.02%
Sn 189.927†	-145.5	-19.208	ug/L	1.8938	-19.208	ppb	1.8938	9.86%
Sr 421.552†	40833.6	275.40	ug/L	2.632	275.40	ppb	2.632	0.96%
Ti 334.940†	2889228.6	4674.3	ug/L	2.14	4674.3	ppb	2.14	0.05%
Tl 190.801†	-285.9	8.9937	ug/L	1.26537	8.9937	ppb	1.26537	14.07%
U 409.014†	-9272.4	-282.56	ug/L	1.547	-282.56	ppb	1.547	0.55%
V 292.402†	67919.9	424.99	ug/L	0.192	424.99	ppb	0.192	0.05%
Zn 213.857†	26546.4	219.93	ug/L	1.501	219.93	ppb	1.501	0.68%
SiO2†	760204.8	49775	ug/L	236.9	49775	ppb	236.9	0.48%

Sequence No.: 133
Sample ID: 1201981078|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 140
Date Collected: 12/10/2009 04:40:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981078|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5831.5	5831.5	103	%			04:42:40
1	Y RADIAL	6874.4	6874.4	111.6	%			04:42:40
1	Al 396.153Radial†	290979.5	282607.2	208900	ug/L	208900	ppb	04:42:20
1	Ca 317.933Radial†	18644.6	18089.1	27661	ug/L	27661	ppb	04:42:20
1	Fe 238.204 Radial†	16464.7	15983.8	160960	ug/L	160960	ppb	04:42:20
1	K 766.490 Radial†	96047.3	91106.8	16492	ug/L	16492	ppb	04:42:20
1	Mg 279.077 IEC†	774.6	750.5	27820	ug/L	27820	ppb	04:42:40
1	Na 589.592 Radial†	22875.1	22831.3	8581.6	ug/L	8581.6	ppb	04:42:20
1	Sr 421.552†	117313.0	113926.0	768.81	ug/L	768.81	ppb	04:42:20
1	Sc 361.383	903215.0	903215.0	102.06	%			04:43:39
1	Y 371.029	785687.5	785687.5	105.88	%			04:43:45
1	Ag 328.068†	101591.0	99311.6	512.88	ug/L	512.88	ppb	04:43:45
1	As 188.979†	1150.2	1156.2	544.10	ug/L	544.10	ppb	04:44:05
1	B 249.677†	22838.7	22901.3	474.35	ug/L	474.35	ppb	04:43:45
1	Ba 233.527†	245618.8	240670.0	1835.7	ug/L	1835.7	ppb	04:43:45
1	Be 313.107†	1377552.5	1355049.8	514.77	ug/L	514.77	ppb	04:43:39
1	Cd 226.502†	46662.7	45908.1	482.30	ug/L	482.30	ppb	04:43:45
1	Co 228.616†	28997.3	28483.3	540.13	ug/L	540.13	ppb	04:44:05
1	Cr 267.716†	56839.4	55604.4	603.32	ug/L	603.32	ppb	04:43:45
1	Cu 324.752†	211383.6	200345.5	590.87	ug/L	590.87	ppb	04:43:45
1	Mn 257.610†	5316138.5	5208362.7	5675.6	ug/L	5675.6	ppb	04:43:39
1	Mo 202.031†	6940.6	6780.4	453.09	ug/L	453.09	ppb	04:44:05
1	Ni 231.604†	23384.2	22841.8	541.64	ug/L	541.64	ppb	04:44:05
1	P 214.914†	2560.2	2288.5	1213.8	ug/L	1213.8	ppb	04:44:05
1	Pb 220.353†	5219.2	5166.4	638.24	ug/L	638.24	ppb	04:44:05
1	S 181.975 Axial†	3960.3	3838.9	5572.2	ug/L	5572.2	ppb	04:44:05
1	Sb 206.836†	1228.3	1173.9	367.56	ug/L	367.56	ppb	04:44:05
1	Se 196.026†	-41.2	-17.0	514.56	ug/L	514.56	ppb	04:44:05
1	Si 251.611†	813416.4	796479.5	24346	ug/L	24346	ppb	04:43:39
1	Sn 189.927†	2891.3	2828.7	483.68	ug/L	483.68	ppb	04:44:05
1	Ti 334.940†	3608674.0	3536753.1	5721.2	ug/L	5721.2	ppb	04:43:39
1	Tl 190.801†	1405.1	1413.6	483.28	ug/L	483.28	ppb	04:44:05
1	U 409.014†	9285.9	11060.5	287.61	ug/L	287.61	ppb	04:43:45
1	V 292.402†	120708.6	119567.1	783.66	ug/L	783.66	ppb	04:43:45
1	Zn 213.857†	87514.8	84939.9	743.72	ug/L	743.72	ppb	04:43:45
1	SiO2†	818118.5	801105.7	52427	ug/L	52427	ppb	04:45:15
2	Sc Radial	5814.5	5814.5	103	%			04:43:06
2	Y RADIAL	6874.6	6874.6	111.6	%			04:43:06
2	Al 396.153Radial†	284939.3	277551.1	205160	ug/L	205160	ppb	04:42:46
2	Ca 317.933Radial†	18263.2	17770.7	27174	ug/L	27174	ppb	04:42:46
2	Fe 238.204 Radial†	16117.2	15692.2	158030	ug/L	158030	ppb	04:42:46
2	K 766.490 Radial†	93843.5	89233.3	16152	ug/L	16152	ppb	04:42:46
2	Mg 279.077 IEC†	765.5	743.9	27575	ug/L	27575	ppb	04:43:06
2	Na 589.592 Radial†	22170.8	22210.3	8348.2	ug/L	8348.2	ppb	04:42:46
2	Sr 421.552†	114263.8	111289.5	751.02	ug/L	751.02	ppb	04:42:46
2	Sc 361.383	898772.8	898772.8	101.56	%			04:44:11
2	Y 371.029	792163.9	792163.9	106.75	%			04:44:17
2	Ag 328.068†	102499.9	100698.5	518.40	ug/L	518.40	ppb	04:44:17
2	As 188.979†	1132.7	1144.5	538.83	ug/L	538.83	ppb	04:44:37
2	B 249.677†	23158.6	23326.9	483.98	ug/L	483.98	ppb	04:44:17
2	Ba 233.527†	246321.4	242551.2	1849.9	ug/L	1849.9	ppb	04:44:17
2	Be 313.107†	1369772.2	1354060.0	514.39	ug/L	514.39	ppb	04:44:11
2	Cd 226.502†	46731.7	46202.0	485.79	ug/L	485.79	ppb	04:44:17
2	Co 228.616†	28893.1	28521.2	540.93	ug/L	540.93	ppb	04:44:37
2	Cr 267.716†	57099.4	56135.7	609.00	ug/L	609.00	ppb	04:44:17
2	Cu 324.752†	214398.2	204337.5	602.34	ug/L	602.34	ppb	04:44:17
2	Mn 257.610†	5288526.5	5206919.4	5673.8	ug/L	5673.8	ppb	04:44:11
2	Mo 202.031†	6934.4	6807.9	454.67	ug/L	454.67	ppb	04:44:37
2	Ni 231.604†	23366.1	22937.2	543.90	ug/L	543.90	ppb	04:44:37

2	P 214.914†	2534.7	2275.8	1205.4	ug/L	1205.4	ppb	04:44:37
2	Pb 220.353†	5242.2	5214.3	643.23	ug/L	643.23	ppb	04:44:37
2	S 181.975 Axial†	3937.3	3835.4	5567.8	ug/L	5567.8	ppb	04:44:37
2	Sb 206.836†	1221.7	1173.3	367.36	ug/L	367.36	ppb	04:44:37
2	Se 196.026†	-53.5	-29.2	497.73	ug/L	497.73	ppb	04:44:37
2	Si 251.611†	809502.2	796564.6	24349	ug/L	24349	ppb	04:44:11
2	Sn 189.927†	2881.2	2832.7	484.28	ug/L	484.28	ppb	04:44:37
2	Ti 334.940†	3587642.4	3533520.3	5715.9	ug/L	5715.9	ppb	04:44:11
2	Tl 190.801†	1414.2	1429.4	487.63	ug/L	487.63	ppb	04:44:37
2	U 409.014†	9413.1	11230.7	292.72	ug/L	292.72	ppb	04:44:17
2	V 292.402†	121587.4	121017.0	793.93	ug/L	793.93	ppb	04:44:17
2	Zn 213.857†	88218.5	86056.6	754.03	ug/L	754.03	ppb	04:44:17
2	SiO2†	816197.6	803176.3	52563	ug/L	52563	ppb	04:45:21
3	Sc Radial	5869.9	5869.9	104	%			04:43:31
3	Y RADIAL	6954.5	6954.5	112.9	%			04:43:31
3	Al 396.153Radial†	292682.8	282403.4	208750	ug/L	208750	ppb	04:43:11
3	Ca 317.933Radial†	18641.8	17968.1	27476	ug/L	27476	ppb	04:43:11
3	Fe 238.204 Radial†	16416.0	15832.2	159440	ug/L	159440	ppb	04:43:11
3	K 766.490 Radial†	96494.0	90928.0	16460	ug/L	16460	ppb	04:43:11
3	Mg 279.077 IEC†	773.4	744.5	27595	ug/L	27595	ppb	04:43:31
3	Na 589.592 Radial†	22797.7	22611.4	8499.0	ug/L	8499.0	ppb	04:43:11
3	Sr 421.552†	117576.9	113435.9	765.50	ug/L	765.50	ppb	04:43:11
3	Sc 361.383	903409.2	903409.2	102.08	%			04:44:44
3	Y 371.029	788746.0	788746.0	106.29	%			04:44:49
3	Ag 328.068†	101932.0	99624.2	513.85	ug/L	513.85	ppb	04:44:49
3	As 188.979†	1130.5	1136.6	535.85	ug/L	535.85	ppb	04:45:09
3	B 249.677†	22970.3	23025.4	477.26	ug/L	477.26	ppb	04:44:49
3	Ba 233.527†	244797.3	239813.5	1829.1	ug/L	1829.1	ppb	04:44:49
3	Be 313.107†	1375848.8	1353090.7	514.03	ug/L	514.03	ppb	04:44:44
3	Cd 226.502†	46432.9	45673.1	479.91	ug/L	479.91	ppb	04:44:49
3	Co 228.616†	28854.8	28337.7	537.33	ug/L	537.33	ppb	04:45:09
3	Cr 267.716†	56893.9	55645.9	603.74	ug/L	603.74	ppb	04:44:49
3	Cu 324.752†	212611.1	201503.5	594.16	ug/L	594.16	ppb	04:44:49
3	Mn 257.610†	5305473.9	5196796.2	5662.9	ug/L	5662.9	ppb	04:44:44
3	Mo 202.031†	6912.9	6751.8	451.12	ug/L	451.12	ppb	04:45:09
3	Ni 231.604†	23324.5	22778.4	540.14	ug/L	540.14	ppb	04:45:09
3	P 214.914†	2548.2	2276.3	1207.1	ug/L	1207.1	ppb	04:45:09
3	Pb 220.353†	5205.4	5151.7	636.61	ug/L	636.61	ppb	04:45:09
3	S 181.975 Axial†	3925.3	3803.7	5520.8	ug/L	5520.8	ppb	04:45:09
3	Sb 206.836†	1228.0	1173.4	367.26	ug/L	367.26	ppb	04:45:09
3	Se 196.026†	-42.9	-18.6	508.89	ug/L	508.89	ppb	04:45:09
3	Si 251.611†	814098.8	796976.6	24361	ug/L	24361	ppb	04:44:44
3	Sn 189.927†	2871.8	2808.9	480.30	ug/L	480.30	ppb	04:45:09
3	Ti 334.940†	3606978.6	3534332.3	5717.3	ug/L	5717.3	ppb	04:44:44
3	Tl 190.801†	1380.8	1389.5	476.29	ug/L	476.29	ppb	04:45:09
3	U 409.014†	9408.1	11178.3	291.09	ug/L	291.09	ppb	04:44:49
3	V 292.402†	120844.7	119675.0	784.60	ug/L	784.60	ppb	04:44:49
3	Zn 213.857†	87352.6	84762.7	742.28	ug/L	742.28	ppb	04:44:49
3	SiO2†	808435.6	791448.2	51795	ug/L	51795	ppb	04:45:27

Mean Data: 1201981078|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901799.0	101.90	%	0.296				0.29%
Sc Radial	5838.7	103	%	0.5				0.49%
Y 371.029	788865.8	106.31	%	0.437				0.41%
Y RADIAL	6901.1	112.1	%	0.75				0.67%
Ag 328.068†	99878.1	515.04	ug/L	2.948	515.04	ppb	2.948	0.57%
Al 396.153Radial†	280853.9	207600	ug/L	2115.9	207600	ppb	2115.9	1.02%
As 188.979†	1145.8	539.59	ug/L	4.177	539.59	ppb	4.177	0.77%
B 249.677†	23084.5	478.53	ug/L	4.938	478.53	ppb	4.938	1.03%
Ba 233.527†	241011.6	1838.2	ug/L	10.61	1838.2	ppb	10.61	0.58%
Be 313.107†	1354066.8	514.40	ug/L	0.368	514.40	ppb	0.368	0.07%
Ca 317.933Radial†	17942.6	27437	ug/L	245.8	27437	ppb	245.8	0.90%
Cd 226.502†	45927.7	482.67	ug/L	2.957	482.67	ppb	2.957	0.61%
Co 228.616†	28447.4	539.46	ug/L	1.892	539.46	ppb	1.892	0.35%
Cr 267.716†	55795.3	605.35	ug/L	3.170	605.35	ppb	3.170	0.52%
Cu 324.752†	202062.2	595.79	ug/L	5.901	595.79	ppb	5.901	0.99%
Fe 238.204 Radial†	15836.1	159480	ug/L	1468.6	159480	ppb	1468.6	0.92%
K 766.490 Radial†	90422.7	16368	ug/L	187.9	16368	ppb	187.9	1.15%

Mg 279.077 IEC†	746.3	27664	ug/L	136.2	27664	ppb	136.2	0.49%
Mn 257.610†	5204026.1	5670.8	ug/L	6.87	5670.8	ppb	6.87	0.12%
Mo 202.031†	6780.0	452.96	ug/L	1.779	452.96	ppb	1.779	0.39%
Na 589.592 Radial†	22551.0	8476.3	ug/L	118.35	8476.3	ppb	118.35	1.40%
Ni 231.604†	22852.5	541.90	ug/L	1.896	541.90	ppb	1.896	0.35%
P 214.914†	2280.2	1208.7	ug/L	4.41	1208.7	ppb	4.41	0.36%
Pb 220.353†	5177.5	639.36	ug/L	3.453	639.36	ppb	3.453	0.54%
S 181.975 Axial†	3826.0	5553.6	ug/L	28.49	5553.6	ppb	28.49	0.51%
Sb 206.836†	1173.5	367.39	ug/L	0.149	367.39	ppb	0.149	0.04%
Se 196.026†	-21.6	507.06	ug/L	8.564	507.06	ppb	8.564	1.69%
Si 251.611†	796673.5	24352	ug/L	8.1	24352	ppb	8.1	0.03%
Sn 189.927†	2823.4	482.76	ug/L	2.147	482.76	ppb	2.147	0.44%
Sr 421.552†	112883.8	761.78	ug/L	9.464	761.78	ppb	9.464	1.24%
Ti 334.940†	3534868.6	5718.1	ug/L	2.73	5718.1	ppb	2.73	0.05%
Tl 190.801†	1410.8	482.40	ug/L	5.718	482.40	ppb	5.718	1.19%
U 409.014†	11156.5	290.47	ug/L	2.612	290.47	ppb	2.612	0.90%
V 292.402†	120086.4	787.39	ug/L	5.676	787.39	ppb	5.676	0.72%
Zn 213.857†	85253.1	746.68	ug/L	6.406	746.68	ppb	6.406	0.86%
SiO2†	798576.7	52262	ug/L	409.9	52262	ppb	409.9	0.78%

Sequence No.: 134
Sample ID: 1201981080|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 141
Date Collected: 12/10/2009 04:47:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981080|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5883.1	5883.1	104	%			04:49:54
1	Y RADIAL	6928.6	6928.6	112.5	%			04:49:54
1	Al 396.153Radial†	298000.3	286886.8	212060	ug/L	212060	ppb	04:49:34
1	Ca 317.933Radial†	19075.8	18345.4	28053	ug/L	28053	ppb	04:49:34
1	Fe 238.204 Radial†	17051.4	16408.3	165240	ug/L	165240	ppb	04:49:34
1	K 766.490 Radial†	102131.1	96145.0	17431	ug/L	17431	ppb	04:49:34
1	Mg 279.077 IEC†	827.2	794.5	29454	ug/L	29454	ppb	04:49:54
1	Na 589.592 Radial†	23273.8	23020.2	8652.6	ug/L	8652.6	ppb	04:49:34
1	Sr 421.552†	117776.8	113373.0	765.07	ug/L	765.07	ppb	04:49:34
1	Sc 361.383	869130.8	869130.8	98.210	%			04:50:58
1	Y 371.029	792622.6	792622.6	106.81	%			04:50:58
1	Ag 328.068†	100651.5	102258.5	527.99	ug/L	527.99	ppb	04:50:58
1	As 188.979†	1100.3	1149.6	545.16	ug/L	545.16	ppb	04:51:18
1	B 249.677†	22923.9	23865.6	494.75	ug/L	494.75	ppb	04:50:58
1	Ba 233.527†	240661.6	245060.2	1869.3	ug/L	1869.3	ppb	04:50:58
1	Be 313.107†	1363580.5	1393754.6	529.88	ug/L	529.88	ppb	04:50:52
1	Cd 226.502†	46315.4	47347.5	497.50	ug/L	497.50	ppb	04:50:58
1	Co 228.616†	27338.8	27908.8	528.16	ug/L	528.16	ppb	04:51:18
1	Cr 267.716†	56988.7	57940.4	628.62	ug/L	628.62	ppb	04:50:58
1	Cu 324.752†	212441.4	209544.9	617.85	ug/L	617.85	ppb	04:50:58
1	Mn 257.610†	3400351.7	3461926.1	3778.1	ug/L	3778.1	ppb	04:50:52
1	Mo 202.031†	6824.4	6928.8	463.06	ug/L	463.06	ppb	04:51:18
1	Ni 231.604†	22953.5	23301.7	552.56	ug/L	552.56	ppb	04:51:18
1	P 214.914†	2646.1	2474.4	1317.6	ug/L	1317.6	ppb	04:51:18
1	Pb 220.353†	4930.3	5072.7	627.65	ug/L	627.65	ppb	04:51:18
1	S 181.975 Axial†	3848.3	3877.0	5627.2	ug/L	5627.2	ppb	04:51:18
1	Sb 206.836†	1192.9	1185.1	369.96	ug/L	369.96	ppb	04:51:18
1	Se 196.026†	-109.6	-88.1	485.70	ug/L	485.70	ppb	04:51:18
1	Si 251.611†	847979.0	862927.0	26378	ug/L	26378	ppb	04:50:52
1	Sn 189.927†	2824.1	2871.3	490.99	ug/L	490.99	ppb	04:51:18
1	Ti 334.940†	3697735.9	3766099.2	6092.1	ug/L	6092.1	ppb	04:50:52
1	Tl 190.801†	1409.7	1472.3	491.89	ug/L	491.89	ppb	04:51:18
1	U 409.014†	9475.9	11610.8	302.40	ug/L	302.40	ppb	04:50:58
1	V 292.402†	121439.7	124949.7	819.13	ug/L	819.13	ppb	04:50:58
1	Zn 213.857†	90842.3	91690.8	803.89	ug/L	803.89	ppb	04:50:58
1	SiO2†	847859.5	862824.6	56467	ug/L	56467	ppb	04:52:28
2	Sc Radial	5835.6	5835.6	103	%			04:50:19
2	Y RADIAL	6900.1	6900.1	112.0	%			04:50:19
2	Al 396.153Radial†	298100.1	289319.8	213860	ug/L	213860	ppb	04:49:59
2	Ca 317.933Radial†	19075.7	18494.9	28282	ug/L	28282	ppb	04:49:59
2	Fe 238.204 Radial†	17026.9	16518.2	166350	ug/L	166350	ppb	04:49:59
2	K 766.490 Radial†	102078.1	96894.2	17567	ug/L	17567	ppb	04:49:59
2	Mg 279.077 IEC†	821.6	795.6	29494	ug/L	29494	ppb	04:50:19
2	Na 589.592 Radial†	23198.8	23129.9	8693.9	ug/L	8693.9	ppb	04:49:59
2	Sr 421.552†	117584.2	114109.4	770.04	ug/L	770.04	ppb	04:49:59
2	Sc 361.383	863493.2	863493.2	97.573	%			04:51:30
2	Y 371.029	786806.7	786806.7	106.03	%			04:51:30
2	Ag 328.068†	99611.5	101861.7	526.50	ug/L	526.50	ppb	04:51:30
2	As 188.979†	1116.8	1173.8	555.18	ug/L	555.18	ppb	04:51:50
2	B 249.677†	22609.5	23695.7	490.90	ug/L	490.90	ppb	04:51:30
2	Ba 233.527†	238433.1	244376.1	1864.1	ug/L	1864.1	ppb	04:51:30
2	Be 313.107†	1352714.4	1391683.0	529.10	ug/L	529.10	ppb	04:51:24
2	Cd 226.502†	45845.9	47174.1	495.51	ug/L	495.51	ppb	04:51:30
2	Co 228.616†	27493.3	28248.9	534.77	ug/L	534.77	ppb	04:51:50
2	Cr 267.716†	56344.0	57658.6	625.60	ug/L	625.60	ppb	04:51:30
2	Cu 324.752†	210257.7	208719.2	615.50	ug/L	615.50	ppb	04:51:30
2	Mn 257.610†	3374820.6	3458364.8	3774.3	ug/L	3774.3	ppb	04:51:24
2	Mo 202.031†	6839.7	6989.8	467.11	ug/L	467.11	ppb	04:51:50
2	Ni 231.604†	23068.2	23571.9	558.97	ug/L	558.97	ppb	04:51:50

2	P 214.914†	2638.3	2484.0	1323.5	ug/L	1323.5 ppb	04:51:50
2	Pb 220.353†	4966.7	5142.8	636.16	ug/L	636.16 ppb	04:51:50
2	S 181.975 Axial†	3863.4	3918.1	5687.0	ug/L	5687.0 ppb	04:51:50
2	Sb 206.836†	1183.0	1182.8	369.45	ug/L	369.45 ppb	04:51:50
2	Se 196.026†	-106.3	-85.5	490.93	ug/L	490.93 ppb	04:51:50
2	Si 251.611†	842277.7	862721.1	26372	ug/L	26372 ppb	04:51:24
2	Sn 189.927†	2832.1	2898.3	495.61	ug/L	495.61 ppb	04:51:50
2	Ti 334.940†	3671298.7	3763586.2	6088.1	ug/L	6088.1 ppb	04:51:24
2	Tl 190.801†	1422.6	1494.8	498.33	ug/L	498.33 ppb	04:51:50
2	U 409.014†	9331.8	11526.1	299.90	ug/L	299.90 ppb	04:51:30
2	V 292.402†	120302.9	124591.9	816.61	ug/L	816.61 ppb	04:51:30
2	Zn 213.857†	89727.8	91152.5	798.90	ug/L	798.90 ppb	04:51:30
2	SiO2†	851973.6	872677.4	57112	ug/L	57112 ppb	04:52:34
3	Sc Radial	5889.8	5889.8	104	%		04:50:44
3	Y RADIAL	6939.3	6939.3	112.7	%		04:50:44
3	Al 396.153Radial†	295677.8	284330.0	210170	ug/L	210170 ppb	04:50:24
3	Ca 317.933Radial†	18937.5	18191.7	27818	ug/L	27818 ppb	04:50:24
3	Fe 238.204 Radial†	16903.9	16247.9	163620	ug/L	163620 ppb	04:50:24
3	K 766.490 Radial†	101176.4	95116.1	17244	ug/L	17244 ppb	04:50:24
3	Mg 279.077 IEC†	837.8	803.8	29803	ug/L	29803 ppb	04:50:44
3	Na 589.592 Radial†	23052.1	22781.8	8563.0	ug/L	8563.0 ppb	04:50:24
3	Sr 421.552†	116727.3	112236.0	757.40	ug/L	757.40 ppb	04:50:24
3	Sc 361.383	873357.8	873357.8	98.688	%		04:52:02
3	Y 371.029	800153.0	800153.0	107.83	%		04:52:02
3	Ag 328.068†	101264.6	102383.8	528.07	ug/L	528.07 ppb	04:52:02
3	As 188.979†	1121.8	1166.0	550.88	ug/L	550.88 ppb	04:52:22
3	B 249.677†	23060.8	23891.3	495.52	ug/L	495.52 ppb	04:52:02
3	Ba 233.527†	242738.5	245978.6	1876.2	ug/L	1876.2 ppb	04:52:02
3	Be 313.107†	1349870.2	1373142.0	522.05	ug/L	522.05 ppb	04:51:56
3	Cd 226.502†	46556.1	47363.1	497.83	ug/L	497.83 ppb	04:52:02
3	Co 228.616†	27460.9	27897.8	528.16	ug/L	528.16 ppb	04:52:22
3	Cr 267.716†	57276.2	57950.9	628.71	ug/L	628.71 ppb	04:52:02
3	Cu 324.752†	214475.1	210558.7	620.71	ug/L	620.71 ppb	04:52:02
3	Mn 257.610†	3363010.2	3407330.5	3718.6	ug/L	3718.6 ppb	04:51:56
3	Mo 202.031†	6838.0	6908.9	461.65	ug/L	461.65 ppb	04:52:22
3	Ni 231.604†	23050.0	23286.4	552.20	ug/L	552.20 ppb	04:52:22
3	P 214.914†	2640.2	2455.3	1306.5	ug/L	1306.5 ppb	04:52:22
3	Pb 220.353†	4947.4	5065.8	626.54	ug/L	626.54 ppb	04:52:22
3	S 181.975 Axial†	3869.0	3879.0	5630.6	ug/L	5630.6 ppb	04:52:22
3	Sb 206.836†	1177.0	1163.0	363.05	ug/L	363.05 ppb	04:52:22
3	Se 196.026†	-83.1	-60.7	496.81	ug/L	496.81 ppb	04:52:22
3	Si 251.611†	838532.6	849176.0	25958	ug/L	25958 ppb	04:51:56
3	Sn 189.927†	2841.8	2875.4	491.64	ug/L	491.64 ppb	04:52:22
3	Ti 334.940†	3662679.5	3712353.5	6005.2	ug/L	6005.2 ppb	04:51:56
3	Tl 190.801†	1429.2	1485.1	494.49	ug/L	494.49 ppb	04:52:22
3	U 409.014†	9605.3	11695.2	304.96	ug/L	304.96 ppb	04:52:02
3	V 292.402†	122326.5	125249.8	821.49	ug/L	821.49 ppb	04:52:02
3	Zn 213.857†	91352.7	91760.3	804.66	ug/L	804.66 ppb	04:52:02
3	SiO2†	841655.6	852359.7	55782	ug/L	55782 ppb	04:52:40

Mean Data: 1201981080|926576|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868660.6	98.157	%	0.5592				0.57%
Sc Radial	5869.5	104	%	0.5				0.50%
Y 371.029	793194.1	106.89	%	0.902				0.84%
Y RADIAL	6922.7	112.4	%	0.33				0.29%
Ag 328.068†	102168.0	527.52	ug/L	0.884	527.52	ppb	0.884	0.17%
Al 396.153Radial†	286845.5	212030	ug/L	1844.4	212030	ppb	1844.4	0.87%
As 188.979†	1163.1	550.41	ug/L	5.029	550.41	ppb	5.029	0.91%
B 249.677†	23817.5	493.72	ug/L	2.477	493.72	ppb	2.477	0.50%
Ba 233.527†	245138.3	1869.8	ug/L	6.06	1869.8	ppb	6.06	0.32%
Be 313.107†	1386193.2	527.01	ug/L	4.314	527.01	ppb	4.314	0.82%
Ca 317.933Radial†	18344.0	28051	ug/L	231.8	28051	ppb	231.8	0.83%
Cd 226.502†	47294.9	496.95	ug/L	1.254	496.95	ppb	1.254	0.25%
Co 228.616†	28018.5	530.36	ug/L	3.814	530.36	ppb	3.814	0.72%
Cr 267.716†	57850.0	627.64	ug/L	1.769	627.64	ppb	1.769	0.28%
Cu 324.752†	209607.6	618.02	ug/L	2.610	618.02	ppb	2.610	0.42%
Fe 238.204 Radial†	16391.5	165070	ug/L	1368.7	165070	ppb	1368.7	0.83%
K 766.490 Radial†	96051.8	17414	ug/L	161.9	17414	ppb	161.9	0.93%

Mg 279.077 IEC†	798.0	29584	ug/L	190.7	29584	ppb	190.7	0.64%
Mn 257.610†	3442540.5	3757.0	ug/L	33.32	3757.0	ppb	33.32	0.89%
Mo 202.031†	6942.5	463.94	ug/L	2.835	463.94	ppb	2.835	0.61%
Na 589.592 Radial†	22977.3	8636.5	ug/L	66.90	8636.5	ppb	66.90	0.77%
Ni 231.604†	23386.7	554.58	ug/L	3.809	554.58	ppb	3.809	0.69%
P 214.914†	2471.2	1315.9	ug/L	8.62	1315.9	ppb	8.62	0.66%
Pb 220.353†	5093.8	630.12	ug/L	5.265	630.12	ppb	5.265	0.84%
S 181.975 Axial†	3891.3	5648.3	ug/L	33.59	5648.3	ppb	33.59	0.59%
Sb 206.836†	1177.0	367.48	ug/L	3.848	367.48	ppb	3.848	1.05%
Se 196.026†	-78.1	491.15	ug/L	5.557	491.15	ppb	5.557	1.13%
Si 251.611†	858274.7	26236	ug/L	240.9	26236	ppb	240.9	0.92%
Sn 189.927†	2881.6	492.75	ug/L	2.499	492.75	ppb	2.499	0.51%
Sr 421.552†	113239.5	764.17	ug/L	6.369	764.17	ppb	6.369	0.83%
Ti 334.940†	3747346.3	6061.8	ug/L	49.07	6061.8	ppb	49.07	0.81%
Tl 190.801†	1484.0	494.90	ug/L	3.239	494.90	ppb	3.239	0.65%
U 409.014†	11610.7	302.42	ug/L	2.531	302.42	ppb	2.531	0.84%
V 292.402†	124930.5	819.08	ug/L	2.443	819.08	ppb	2.443	0.30%
Zn 213.857†	91534.5	802.48	ug/L	3.125	802.48	ppb	3.125	0.39%
SiO2†	862620.6	56454	ug/L	665.1	56454	ppb	665.1	1.18%

Sequence No.: 135
Sample ID: 1201981079|926576|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 142
Date Collected: 12/10/2009 04:54:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981079|926576|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5793.3	5793.3	102	%			04:56:46
1	Y RADIAL	6514.3	6514.3	105.8	%			04:56:46
1	Al 396.153Radial†	40819.2	39924.0	29514	ug/L	29514	ppb	04:56:46
1	Ca 317.933Radial†	3670.5	3570.4	5459.8	ug/L	5459.8	ppb	04:57:06
1	Fe 238.204 Radial†	4019.1	3923.0	39504	ug/L	39504	ppb	04:56:46
1	K 766.490 Radial†	12493.5	10043.0	1756.9	ug/L	1756.9	ppb	04:56:46
1	Mg 279.077 IEC†	114.7	110.4	4076.6	ug/L	4076.6	ppb	04:57:06
1	Na 589.592 Radial†	1241.6	1829.7	687.72	ug/L	687.72	ppb	04:56:46
1	Sr 421.552†	8832.9	8631.4	58.216	ug/L	58.216	ppb	04:56:46
1	Sc 361.383	932248.8	932248.8	105.34	%			04:58:04
1	Y 371.029	796746.2	796746.2	107.37	%			04:58:04
1	Ag 328.068†	-2082.3	-2204.3	2.7332	ug/L	2.7332	ppb	04:58:09
1	As 188.979†	-18.5	11.6	18.704	ug/L	18.704	ppb	04:58:29
1	B 249.677†	168.4	683.7	9.4185	ug/L	9.4185	ppb	04:58:09
1	Ba 233.527†	100198.1	95128.9	724.18	ug/L	724.18	ppb	04:58:09
1	Be 313.107†	-4929.7	640.5	2.0793	ug/L	2.0793	ppb	04:58:09
1	Cd 226.502†	206.7	384.1	0.2297	ug/L	0.2297	ppb	04:58:29
1	Co 228.616†	3811.2	3689.7	69.373	ug/L	69.373	ppb	04:58:29
1	Cr 267.716†	2231.3	2031.1	22.780	ug/L	22.780	ppb	04:58:09
1	Cu 324.752†	11599.8	4242.9	14.355	ug/L	14.355	ppb	04:58:09
1	Mn 257.610†	5466657.2	5189027.6	5642.9	ug/L	5642.9	ppb	04:58:04
1	Mo 202.031†	8.1	-12.3	2.0008	ug/L	2.0008	ppb	04:58:29
1	Ni 231.604†	929.3	812.1	19.224	ug/L	19.224	ppb	04:58:29
1	P 214.914†	612.7	361.6	190.88	ug/L	190.88	ppb	04:58:29
1	Pb 220.353†	643.6	663.5	80.935	ug/L	80.935	ppb	04:58:29
1	S 181.975 Axial†	110.1	63.0	86.356	ug/L	86.356	ppb	04:58:29
1	Sb 206.836†	39.7	8.1	-0.5974	ug/L	-0.5974	ppb	04:58:29
1	Se 196.026†	-236.5	-201.0	5.3467	ug/L	5.3467	ppb	04:58:29
1	Si 251.611†	151552.6	143359.0	4384.2	ug/L	4384.2	ppb	04:58:09
1	Sn 189.927†	-53.8	-55.4	-8.2580	ug/L	-8.2580	ppb	04:58:29
1	Ti 334.940†	609139.8	579214.0	937.09	ug/L	937.09	ppb	04:58:04
1	Tl 190.801†	-147.6	-103.2	10.877	ug/L	10.877	ppb	04:58:29
1	U 409.014†	-5186.2	-2961.0	-87.738	ug/L	-87.738	ppb	04:58:09
1	V 292.402†	13029.2	13664.9	85.116	ug/L	85.116	ppb	04:58:09
1	Zn 213.857†	6578.3	5437.5	44.871	ug/L	44.871	ppb	04:58:09
1	SiO2†	152720.7	144487.0	9460.3	ug/L	9460.3	ppb	04:59:38
2	Sc Radial	5831.7	5831.7	103	%			04:57:11
2	Y RADIAL	6556.2	6556.2	106.5	%			04:57:11
2	Al 396.153Radial†	40874.3	39714.3	29359	ug/L	29359	ppb	04:57:11
2	Ca 317.933Radial†	3669.2	3545.5	5421.7	ug/L	5421.7	ppb	04:57:31
2	Fe 238.204 Radial†	4040.7	3918.0	39454	ug/L	39454	ppb	04:57:11
2	K 766.490 Radial†	12389.0	9861.0	1726.6	ug/L	1726.6	ppb	04:57:11
2	Mg 279.077 IEC†	120.5	115.3	4258.8	ug/L	4258.8	ppb	04:57:31
2	Na 589.592 Radial†	1209.4	1790.5	672.99	ug/L	672.99	ppb	04:57:11
2	Sr 421.552†	8821.8	8563.6	57.759	ug/L	57.759	ppb	04:57:11
2	Sc 361.383	948126.6	948126.6	107.14	%			04:58:35
2	Y 371.029	811451.8	811451.8	109.35	%			04:58:35
2	Ag 328.068†	-2174.0	-2256.8	2.4772	ug/L	2.4772	ppb	04:58:41
2	As 188.979†	-21.5	9.2	17.361	ug/L	17.361	ppb	04:59:01
2	B 249.677†	139.6	654.2	8.7883	ug/L	8.7883	ppb	04:58:41
2	Ba 233.527†	102236.6	95438.7	726.53	ug/L	726.53	ppb	04:58:41
2	Be 313.107†	-5004.8	648.8	2.0034	ug/L	2.0034	ppb	04:58:41
2	Cd 226.502†	202.9	377.2	0.1604	ug/L	0.1604	ppb	04:59:01
2	Co 228.616†	3785.3	3604.9	67.813	ug/L	67.813	ppb	04:59:01
2	Cr 267.716†	2290.1	2050.6	22.990	ug/L	22.990	ppb	04:58:41
2	Cu 324.752†	11795.6	4241.3	14.347	ug/L	14.347	ppb	04:58:41
2	Mn 257.610†	5341197.3	4985019.4	5421.2	ug/L	5421.2	ppb	04:58:35
2	Mo 202.031†	7.4	-13.1	1.9438	ug/L	1.9438	ppb	04:59:01
2	Ni 231.604†	909.7	779.0	18.440	ug/L	18.440	ppb	04:59:01

2	P 214.914†	607.5	347.1	182.25	ug/L	182.25 ppb	04:59:01
2	Pb 220.353†	655.8	664.6	81.032	ug/L	81.032 ppb	04:59:01
2	S 181.975 Axial†	106.0	57.5	78.268	ug/L	78.268 ppb	04:59:01
2	Sb 206.836†	47.2	14.4	1.5814	ug/L	1.5814 ppb	04:59:01
2	Se 196.026†	-229.6	-190.9	11.230	ug/L	11.230 ppb	04:59:01
2	Si 251.611†	154920.8	144093.6	4406.6	ug/L	4406.6 ppb	04:58:41
2	Sn 189.927†	-49.1	-50.1	-7.3764	ug/L	-7.3764 ppb	04:59:01
2	Ti 334.940†	592892.6	554365.3	896.90	ug/L	896.90 ppb	04:58:35
2	Tl 190.801†	-160.4	-112.9	6.5130	ug/L	6.5130 ppb	04:59:01
2	U 409.014†	-5253.3	-2941.2	-87.180	ug/L	-87.180 ppb	04:58:41
2	V 292.402†	13365.9	13772.1	85.896	ug/L	85.896 ppb	04:58:41
2	Zn 213.857†	6746.3	5489.6	45.343	ug/L	45.343 ppb	04:58:41
2	SiO2†	153419.8	142711.7	9344.0	ug/L	9344.0 ppb	04:59:43
3	Sc Radial	5822.9	5822.9	103	%		04:57:36
3	Y RADIAL	6560.5	6560.5	106.5	%		04:57:36
3	Al 396.153Radial†	41203.4	40094.6	29640	ug/L	29640 ppb	04:57:36
3	Ca 317.933Radial†	3680.8	3562.2	5447.3	ug/L	5447.3 ppb	04:57:56
3	Fe 238.204 Radial†	4058.0	3940.7	39683	ug/L	39683 ppb	04:57:36
3	K 766.490 Radial†	12593.6	10078.2	1763.1	ug/L	1763.1 ppb	04:57:36
3	Mg 279.077 IEC†	113.3	108.5	4005.2	ug/L	4005.2 ppb	04:57:56
3	Na 589.592 Radial†	1322.9	1902.6	715.13	ug/L	715.13 ppb	04:57:36
3	Sr 421.552†	8879.4	8632.7	58.225	ug/L	58.225 ppb	04:57:36
3	Sc 361.383	927808.6	927808.6	104.84	%		04:59:07
3	Y 371.029	793774.2	793774.2	106.97	%		04:59:07
3	Ag 328.068†	-2017.8	-2152.2	3.0402	ug/L	3.0402 ppb	04:59:12
3	As 188.979†	-19.6	10.5	18.268	ug/L	18.268 ppb	04:59:32
3	B 249.677†	146.9	664.0	8.9694	ug/L	8.9694 ppb	04:59:12
3	Ba 233.527†	101125.7	96468.8	734.36	ug/L	734.36 ppb	04:59:12
3	Be 313.107†	-4894.2	652.0	2.0823	ug/L	2.0823 ppb	04:59:12
3	Cd 226.502†	191.6	370.6	0.0656	ug/L	0.0656 ppb	04:59:32
3	Co 228.616†	3753.9	3652.4	68.650	ug/L	68.650 ppb	04:59:32
3	Cr 267.716†	2227.6	2037.8	22.859	ug/L	22.859 ppb	04:59:12
3	Cu 324.752†	11767.9	4456.0	14.983	ug/L	14.983 ppb	04:59:12
3	Mn 257.610†	5450789.5	5198727.3	5653.5	ug/L	5653.5 ppb	04:59:07
3	Mo 202.031†	-0.4	-20.4	1.4854	ug/L	1.4854 ppb	04:59:32
3	Ni 231.604†	920.7	808.0	19.128	ug/L	19.128 ppb	04:59:32
3	P 214.914†	604.3	356.4	187.58	ug/L	187.58 ppb	04:59:32
3	Pb 220.353†	636.9	660.1	80.544	ug/L	80.544 ppb	04:59:32
3	S 181.975 Axial†	109.2	62.7	85.890	ug/L	85.890 ppb	04:59:32
3	Sb 206.836†	39.5	8.1	-0.6153	ug/L	-0.6153 ppb	04:59:32
3	Se 196.026†	-234.0	-199.7	6.7081	ug/L	6.7081 ppb	04:59:32
3	Si 251.611†	153306.4	145720.4	4456.4	ug/L	4456.4 ppb	04:59:12
3	Sn 189.927†	-54.8	-56.5	-8.4459	ug/L	-8.4459 ppb	04:59:32
3	Ti 334.940†	605832.7	578826.9	936.47	ug/L	936.47 ppb	04:59:07
3	Tl 190.801†	-155.7	-111.7	8.5084	ug/L	8.5084 ppb	04:59:32
3	U 409.014†	-5389.4	-3178.4	-93.835	ug/L	-93.835 ppb	04:59:12
3	V 292.402†	13125.6	13816.1	86.089	ug/L	86.089 ppb	04:59:12
3	Zn 213.857†	6664.4	5549.5	45.864	ug/L	45.864 ppb	04:59:12
3	SiO2†	153312.9	145745.7	9542.7	ug/L	9542.7 ppb	04:59:48

Mean Data: 1201981079|926576|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	936061.3	105.77	%	1.207				1.14%
Sc Radial	5816.0	103	%	0.4				0.35%
Y 371.029	800657.4	107.89	%	1.276				1.18%
Y RADIAL	6543.7	106.3	%	0.41				0.39%
Ag 328.068†	-2204.4	2.7502	ug/L	0.28192	2.7502	ppb	0.28192	10.25%
Al 396.153Radial†	39911.0	29504	ug/L	140.9	29504	ppb	140.9	0.48%
As 188.979†	10.4	18.111	ug/L	0.6847	18.111	ppb	0.6847	3.78%
B 249.677†	667.3	9.0587	ug/L	0.32446	9.0587	ppb	0.32446	3.58%
Ba 233.527†	95678.8	728.36	ug/L	5.333	728.36	ppb	5.333	0.73%
Be 313.107†	647.1	2.0550	ug/L	0.04473	2.0550	ppb	0.04473	2.18%
Ca 317.933Radial†	3559.4	5442.9	ug/L	19.43	5442.9	ppb	19.43	0.36%
Cd 226.502†	377.3	0.1519	ug/L	0.08234	0.1519	ppb	0.08234	54.21%
Co 228.616†	3649.0	68.612	ug/L	0.7806	68.612	ppb	0.7806	1.14%
Cr 267.716†	2039.8	22.876	ug/L	0.1060	22.876	ppb	0.1060	0.46%
Cu 324.752†	4313.4	14.562	ug/L	0.3652	14.562	ppb	0.3652	2.51%
Fe 238.204 Radial†	3927.2	39547	ug/L	120.5	39547	ppb	120.5	0.30%
K 766.490 Radial†	9994.1	1748.9	ug/L	19.56	1748.9	ppb	19.56	1.12%

Mg 279.077 IEC†	111.4	4113.6	ug/L	130.76	4113.6	ppb	130.76	3.18%
Mn 257.610†	5124258.1	5572.6	ug/L	131.16	5572.6	ppb	131.16	2.35%
Mo 202.031†	-15.3	1.8100	ug/L	0.28251	1.8100	ppb	0.28251	15.61%
Na 589.592 Radial†	1840.9	691.95	ug/L	21.387	691.95	ppb	21.387	3.09%
Ni 231.604†	799.7	18.931	ug/L	0.4277	18.931	ppb	0.4277	2.26%
P 214.914†	355.1	186.90	ug/L	4.355	186.90	ppb	4.355	2.33%
Pb 220.353†	662.7	80.837	ug/L	0.2585	80.837	ppb	0.2585	0.32%
S 181.975 Axial†	61.1	83.504	ug/L	4.5412	83.504	ppb	4.5412	5.44%
Sb 206.836†	10.2	0.1229	ug/L	1.26312	0.1229	ppb	1.26312	>999.9%
Se 196.026†	-197.2	7.7615	ug/L	3.07977	7.7615	ppb	3.07977	39.68%
Si 251.611†	144391.0	4415.7	ug/L	36.96	4415.7	ppb	36.96	0.84%
Sn 189.927†	-54.0	-8.0268	ug/L	0.57102	-8.0268	ppb	0.57102	7.11%
Sr 421.552†	8609.2	58.067	ug/L	0.2667	58.067	ppb	0.2667	0.46%
Ti 334.940†	570802.1	923.49	ug/L	23.026	923.49	ppb	23.026	2.49%
Tl 190.801†	-109.3	8.6329	ug/L	2.18470	8.6329	ppb	2.18470	25.31%
U 409.014†	-3026.9	-89.584	ug/L	3.6916	-89.584	ppb	3.6916	4.12%
V 292.402†	13751.0	85.700	ug/L	0.5152	85.700	ppb	0.5152	0.60%
Zn 213.857†	5492.2	45.359	ug/L	0.4966	45.359	ppb	0.4966	1.09%
SiO2†	144314.8	9449.0	ug/L	99.81	9449.0	ppb	99.81	1.06%

Sequence No.: 136
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 05:02:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5744.9	5744.9	101	%			05:03:53
1	Y RADIAL	6240.2	6240.2	101.3	%			05:03:53
1	Al 396.153Radial†	6768.8	6693.1	4926.2	ug/L	4926.2	ppb	05:03:53
1	Ca 317.933Radial†	3301.9	3237.4	4950.5	ug/L	4950.5	ppb	05:04:13
1	Fe 238.204 Radial†	513.3	500.0	5050.8	ug/L	5050.8	ppb	05:04:13
1	K 766.490 Radial†	30040.3	27443.6	4972.0	ug/L	4972.0	ppb	05:03:53
1	Mg 279.077 IEC†	140.9	137.1	5112.5	ug/L	5112.5	ppb	05:04:13
1	Na 589.592 Radial†	27073.8	27305.5	10263	ug/L	10263	ppb	05:03:53
1	Sr 421.552†	77612.9	76507.8	516.43	ug/L	516.43	ppb	05:03:53
1	Sc 361.383	887339.7	887339.7	100.27	%			05:05:10
1	Y 371.029	731343.2	731343.2	98.554	%			05:05:10
1	Ag 328.068†	110263.4	109741.7	510.44	ug/L	510.44	ppb	05:05:15
1	As 188.979†	1196.6	1222.6	503.23	ug/L	503.23	ppb	05:05:35
1	B 249.677†	22388.0	22852.1	494.10	ug/L	494.10	ppb	05:05:15
1	Ba 233.527†	65839.3	65675.6	500.11	ug/L	500.11	ppb	05:05:15
1	Be 313.107†	1319918.0	1321716.9	492.13	ug/L	492.13	ppb	05:05:10
1	Cd 226.502†	46396.2	46460.2	503.86	ug/L	503.86	ppb	05:05:15
1	Co 228.616†	25768.7	25771.7	500.42	ug/L	500.42	ppb	05:05:15
1	Cr 267.716†	46512.8	46301.7	499.69	ug/L	499.69	ppb	05:05:15
1	Cu 324.752†	176258.9	169020.0	491.82	ug/L	491.82	ppb	05:05:15
1	Mn 257.610†	452836.7	451225.1	490.77	ug/L	490.77	ppb	05:05:10
1	Mo 202.031†	7800.5	7759.7	505.82	ug/L	505.82	ppb	05:05:35
1	Ni 231.604†	21316.8	21189.8	502.48	ug/L	502.48	ppb	05:05:15
1	P 214.914†	4401.8	4170.1	2403.2	ug/L	2403.2	ppb	05:05:35
1	Pb 220.353†	4202.9	4244.3	497.69	ug/L	497.69	ppb	05:05:35
1	S 181.975 Axial†	748.6	705.1	1030.1	ug/L	1030.1	ppb	05:05:35
1	Sb 206.836†	1583.5	1549.6	510.42	ug/L	510.42	ppb	05:05:35
1	Se 196.026†	824.6	845.9	522.16	ug/L	522.16	ppb	05:05:35
1	Si 251.611†	83495.3	82764.5	2519.4	ug/L	2519.4	ppb	05:05:15
1	Sn 189.927†	3011.9	2999.6	508.05	ug/L	508.05	ppb	05:05:35
1	Ti 334.940†	312023.6	312156.2	504.72	ug/L	504.72	ppb	05:05:15
1	Tl 190.801†	1690.1	1722.4	496.86	ug/L	496.86	ppb	05:05:35
1	U 409.014†	15739.8	17660.0	491.80	ug/L	491.80	ppb	05:05:15
1	V 292.402†	72254.9	73358.7	501.98	ug/L	501.98	ppb	05:05:15
1	Zn 213.857†	56893.4	55934.3	498.78	ug/L	498.78	ppb	05:05:15
1	SiO2†	82978.0	82267.8	5361.0	ug/L	5361.0	ppb	05:06:43
2	Sc Radial	5741.0	5741.0	101	%			05:04:18
2	Y RADIAL	6216.3	6216.3	100.9	%			05:04:18
2	Al 396.153Radial†	6765.6	6694.4	4927.4	ug/L	4927.4	ppb	05:04:18
2	Ca 317.933Radial†	3304.8	3242.4	4958.2	ug/L	4958.2	ppb	05:04:38
2	Fe 238.204 Radial†	515.2	502.2	5072.9	ug/L	5072.9	ppb	05:04:38
2	K 766.490 Radial†	29952.2	27376.9	4959.9	ug/L	4959.9	ppb	05:04:18
2	Mg 279.077 IEC†	144.6	140.9	5252.9	ug/L	5252.9	ppb	05:04:38
2	Na 589.592 Radial†	26956.1	27207.5	10227	ug/L	10227	ppb	05:04:18
2	Sr 421.552†	77144.7	76097.9	513.66	ug/L	513.66	ppb	05:04:18
2	Sc 361.383	896956.0	896956.0	101.35	%			05:05:41
2	Y 371.029	740036.2	740036.2	99.726	%			05:05:41
2	Ag 328.068†	109570.4	107879.0	501.81	ug/L	501.81	ppb	05:05:46
2	As 188.979†	1210.9	1223.9	503.70	ug/L	503.70	ppb	05:06:06
2	B 249.677†	22290.6	22516.6	486.84	ug/L	486.84	ppb	05:05:46
2	Ba 233.527†	65490.6	64627.7	492.13	ug/L	492.13	ppb	05:05:46
2	Be 313.107†	1336041.1	1323511.5	492.78	ug/L	492.78	ppb	05:05:41
2	Cd 226.502†	46066.9	45639.3	494.94	ug/L	494.94	ppb	05:05:46
2	Co 228.616†	25703.3	25431.6	493.83	ug/L	493.83	ppb	05:05:46
2	Cr 267.716†	46130.2	45426.9	490.25	ug/L	490.25	ppb	05:05:46
2	Cu 324.752†	175235.5	166125.7	483.40	ug/L	483.40	ppb	05:05:46
2	Mn 257.610†	456986.9	450478.0	489.95	ug/L	489.95	ppb	05:05:41
2	Mo 202.031†	7812.4	7688.0	501.15	ug/L	501.15	ppb	05:06:06
2	Ni 231.604†	21134.2	20781.7	492.80	ug/L	492.80	ppb	05:05:46

2	P 214.914†	4419.8	4140.8	2387.0 ug/L	2387.0 ppb	05:06:06
2	Pb 220.353†	4206.3	4202.6	492.82 ug/L	492.82 ppb	05:06:06
2	S 181.975 Axial†	752.1	700.5	1023.4 ug/L	1023.4 ppb	05:06:06
2	Sb 206.836†	1599.6	1548.6	510.14 ug/L	510.14 ppb	05:06:06
2	Se 196.026†	821.4	833.9	515.05 ug/L	515.05 ppb	05:06:06
2	Si 251.611†	83068.2	81450.3	2479.3 ug/L	2479.3 ppb	05:05:46
2	Sn 189.927†	3013.5	2968.9	502.86 ug/L	502.86 ppb	05:06:06
2	Ti 334.940†	310017.5	306840.6	496.14 ug/L	496.14 ppb	05:05:46
2	Tl 190.801†	1687.9	1702.2	491.06 ug/L	491.06 ppb	05:06:06
2	U 409.014†	15588.3	17342.2	482.94 ug/L	482.94 ppb	05:05:46
2	V 292.402†	71747.5	72085.4	493.32 ug/L	493.32 ppb	05:05:46
2	Zn 213.857†	56620.0	55056.3	490.95 ug/L	490.95 ppb	05:05:46
2	SiO2†	82596.0	81003.6	5278.4 ug/L	5278.4 ppb	05:06:48
3	Sc Radial	5793.2	5793.2	102 %		05:04:43
3	Y RADIAL	6245.3	6245.3	101.4 %		05:04:43
3	Al 396.153Radial†	6840.6	6707.6	4937.4 ug/L	4937.4 ppb	05:04:43
3	Ca 317.933Radial†	3298.5	3206.9	4903.8 ug/L	4903.8 ppb	05:05:03
3	Fe 238.204 Radial†	511.0	493.5	4984.8 ug/L	4984.8 ppb	05:05:03
3	K 766.490 Radial†	30211.2	27363.4	4957.4 ug/L	4957.4 ppb	05:04:43
3	Mg 279.077 IEC†	141.4	136.4	5086.7 ug/L	5086.7 ppb	05:05:03
3	Na 589.592 Radial†	27252.8	27257.6	10245 ug/L	10245 ppb	05:04:43
3	Sr 421.552†	78238.2	76480.4	516.24 ug/L	516.24 ppb	05:04:43
3	Sc 361.383	903005.0	903005.0	102.04 %		05:06:12
3	Y 371.029	744293.2	744293.2	100.30 %		05:06:12
3	Ag 328.068†	110164.1	107736.6	501.12 ug/L	501.12 ppb	05:06:17
3	As 188.979†	1197.3	1202.6	495.01 ug/L	495.01 ppb	05:06:37
3	B 249.677†	22382.8	22459.7	485.62 ug/L	485.62 ppb	05:06:17
3	Ba 233.527†	65764.0	64462.8	490.87 ug/L	490.87 ppb	05:06:17
3	Be 313.107†	1344341.9	1322816.2	492.52 ug/L	492.52 ppb	05:06:12
3	Cd 226.502†	46329.2	45591.9	494.44 ug/L	494.44 ppb	05:06:17
3	Co 228.616†	25735.8	25293.6	491.14 ug/L	491.14 ppb	05:06:17
3	Cr 267.716†	46363.6	45350.8	489.43 ug/L	489.43 ppb	05:06:17
3	Cu 324.752†	175853.7	165573.4	481.79 ug/L	481.79 ppb	05:06:17
3	Mn 257.610†	460612.7	451011.1	490.53 ug/L	490.53 ppb	05:06:12
3	Mo 202.031†	7764.9	7589.9	494.75 ug/L	494.75 ppb	05:06:37
3	Ni 231.604†	21313.1	20817.4	493.65 ug/L	493.65 ppb	05:06:17
3	P 214.914†	4404.2	4096.3	2360.9 ug/L	2360.9 ppb	05:06:37
3	Pb 220.353†	4200.2	4168.9	488.88 ug/L	488.88 ppb	05:06:37
3	S 181.975 Axial†	748.6	692.2	1011.2 ug/L	1011.2 ppb	05:06:37
3	Sb 206.836†	1590.5	1529.2	503.67 ug/L	503.67 ppb	05:06:37
3	Se 196.026†	808.7	816.0	504.12 ug/L	504.12 ppb	05:06:37
3	Si 251.611†	83296.2	81124.8	2469.4 ug/L	2469.4 ppb	05:06:17
3	Sn 189.927†	3021.2	2956.6	500.77 ug/L	500.77 ppb	05:06:37
3	Ti 334.940†	311313.1	306061.3	494.87 ug/L	494.87 ppb	05:06:17
3	Tl 190.801†	1697.5	1700.4	490.54 ug/L	490.54 ppb	05:06:37
3	U 409.014†	15680.4	17329.5	482.59 ug/L	482.59 ppb	05:06:17
3	V 292.402†	72190.1	72045.0	492.97 ug/L	492.97 ppb	05:06:17
3	Zn 213.857†	56811.3	54869.5	489.28 ug/L	489.28 ppb	05:06:17
3	SiO2†	82962.3	80816.7	5266.4 ug/L	5266.4 ppb	05:06:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895766.9	101.22	%	0.893				0.88%
Sc Radial	5759.7	102	%	0.5				0.51%
Y 371.029	738557.5	99.526	%	0.8895				0.89%
Y RADIAL	6233.9	101.2	%	0.25				0.25%
Ag 328.068†	108452.4	504.45	ug/L	5.193	504.45	ppb	5.193	1.03%
QC value within limits for Ag 328.068 Recovery = 100.89%								
Al 396.153Radial†	6698.4	4930.3	ug/L	6.15	4930.3	ppb	6.15	0.12%
QC value within limits for Al 396.153Radial Recovery = 98.61%								
As 188.979†	1216.4	500.65	ug/L	4.887	500.65	ppb	4.887	0.98%
QC value within limits for As 188.979 Recovery = 100.13%								
B 249.677†	22609.5	488.85	ug/L	4.588	488.85	ppb	4.588	0.94%
QC value within limits for B 249.677 Recovery = 97.77%								
Ba 233.527†	64922.0	494.37	ug/L	5.008	494.37	ppb	5.008	1.01%
QC value within limits for Ba 233.527 Recovery = 98.87%								
Be 313.107†	1322681.5	492.48	ug/L	0.327	492.48	ppb	0.327	0.07%
QC value within limits for Be 313.107 Recovery = 98.50%								
Ca 317.933Radial†	3228.9	4937.5	ug/L	29.43	4937.5	ppb	29.43	0.60%

```
   QC value within limits for Ca 317.933Radial  Recovery = 98.75%
Cd 226.502†            45897.1      497.75 ug/L         5.299      497.75 ppb          5.299   1.06%
   QC value within limits for Cd 226.502  Recovery = 99.55%
Co 228.616†            25499.0      495.13 ug/L         4.778      495.13 ppb          4.778   0.96%
   QC value within limits for Co 228.616  Recovery = 99.03%
Cr 267.716†            45693.1      493.12 ug/L         5.701      493.12 ppb          5.701   1.16%
   QC value within limits for Cr 267.716  Recovery = 98.62%
Cu 324.752†           166906.3      485.67 ug/L         5.385      485.67 ppb          5.385   1.11%
   QC value within limits for Cu 324.752  Recovery = 97.13%
Fe 238.204 Radial†       498.6      5036.1 ug/L         45.83      5036.1 ppb          45.83   0.91%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.72%
K 766.490 Radial†      27394.6      4963.1 ug/L          7.80      4963.1 ppb           7.80   0.16%
   QC value within limits for K 766.490 Radial  Recovery = 99.26%
Mg 279.077 IEC†          138.2      5150.7 ug/L         89.44      5150.7 ppb          89.44   1.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.01%
Mn 257.610†           450904.8      490.42 ug/L         0.417      490.42 ppb          0.417   0.09%
   QC value within limits for Mn 257.610  Recovery = 98.08%
Mo 202.031†             7679.2      500.57 ug/L         5.555      500.57 ppb          5.555   1.11%
   QC value within limits for Mo 202.031  Recovery = 100.11%
Na 589.592 Radial†     27256.9       10245 ug/L          18.4       10245 ppb           18.4   0.18%
   QC value within limits for Na 589.592 Radial  Recovery = 102.45%
Ni 231.604†            20929.6      496.31 ug/L         5.361      496.31 ppb          5.361   1.08%
   QC value within limits for Ni 231.604  Recovery = 99.26%
P 214.914†              4135.7      2383.7 ug/L         21.34      2383.7 ppb          21.34   0.90%
   QC value within limits for P 214.914  Recovery = 95.35%
Pb 220.353†             4205.3      493.13 ug/L         4.418      493.13 ppb          4.418   0.90%
   QC value within limits for Pb 220.353  Recovery = 98.63%
S 181.975 Axial†         699.3      1021.6 ug/L          9.57      1021.6 ppb           9.57   0.94%
   QC value within limits for S 181.975 Axial  Recovery = 102.16%
Sb 206.836†             1542.5      508.08 ug/L         3.819      508.08 ppb          3.819   0.75%
   QC value within limits for Sb 206.836  Recovery = 101.62%
Se 196.026†              831.9      513.78 ug/L         9.087      513.78 ppb          9.087   1.77%
   QC value within limits for Se 196.026  Recovery = 102.76%
Si 251.611†            81779.9      2489.4 ug/L         26.45      2489.4 ppb          26.45   1.06%
   QC value within limits for Si 251.611  Recovery = 99.57%
Sn 189.927†             2975.0      503.89 ug/L         3.746      503.89 ppb          3.746   0.74%
   QC value within limits for Sn 189.927  Recovery = 100.78%
Sr 421.552†            76362.1      515.44 ug/L         1.547      515.44 ppb          1.547   0.30%
   QC value within limits for Sr 421.552  Recovery = 103.09%
Ti 334.940†           308352.7      498.58 ug/L         5.361      498.58 ppb          5.361   1.08%
   QC value within limits for Ti 334.940  Recovery = 99.72%
Tl 190.801†             1708.4      492.82 ug/L         3.509      492.82 ppb          3.509   0.71%
   QC value within limits for Tl 190.801  Recovery = 98.56%
U 409.014†             17443.9      485.78 ug/L         5.218      485.78 ppb          5.218   1.07%
   QC value within limits for U 409.014  Recovery = 97.16%
V 292.402†             72496.3      496.09 ug/L         5.108      496.09 ppb          5.108   1.03%
   QC value within limits for V 292.402  Recovery = 99.22%
Zn 213.857†            55286.7      493.00 ug/L         5.075      493.00 ppb          5.075   1.03%
   QC value within limits for Zn 213.857  Recovery = 98.60%
SiO2†                  81362.7      5301.9 ug/L         51.48      5301.9 ppb          51.48   0.97%
   QC value within limits for SiO2  Recovery = 99.15%
All analyte(s) passed QC.
```

Sequence No.: 137
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 05:09:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5809.0	5809.0	103	%			05:10:56
1	Y RADIAL	6331.8	6331.8	102.8	%			05:10:56
1	Al 396.153Radial†	-33.2	-12.1	-8.9095	ug/L	-8.9095	ppb	05:10:56
1	Ca 317.933Radial†	26.5	8.2	12.482	ug/L	12.482	ppb	05:11:16
1	Fe 238.204 Radial†	6.0	-0.2	-1.8068	ug/L	-1.8068	ppb	05:11:16
1	K 766.490 Radial†	2381.7	151.7	27.532	ug/L	27.532	ppb	05:10:56
1	Mg 279.077 IEC†	0.2	-1.6	-58.081	ug/L	-58.081	ppb	05:11:16
1	Na 589.592 Radial†	-714.2	-80.3	-30.183	ug/L	-30.183	ppb	05:10:56
1	Sr 421.552†	3.3	-0.2	-0.0016	ug/L	-0.0016	ppb	05:10:56
1	Sc 361.383	876351.9	876351.9	99.026	%			05:12:12
1	Y 371.029	747113.1	747113.1	100.68	%			05:12:12
1	Ag 328.068†	298.5	73.8	0.3405	ug/L	0.3405	ppb	05:12:12
1	As 188.979†	-22.6	6.4	2.6025	ug/L	2.6025	ppb	05:12:32
1	B 249.677†	-172.0	350.2	7.6016	ug/L	7.6016	ppb	05:12:32
1	Ba 233.527†	3.8	15.9	0.1200	ug/L	0.1200	ppb	05:12:32
1	Be 313.107†	-4962.3	309.1	0.1144	ug/L	0.1144	ppb	05:12:12
1	Cd 226.502†	-183.5	2.6	0.0287	ug/L	0.0287	ppb	05:12:32
1	Co 228.616†	-58.7	12.4	0.2409	ug/L	0.2409	ppb	05:12:32
1	Cr 267.716†	83.9	-2.2	-0.0239	ug/L	-0.0239	ppb	05:12:32
1	Cu 324.752†	6822.9	121.4	0.3530	ug/L	0.3530	ppb	05:12:12
1	Mn 257.610†	556.5	158.6	0.1732	ug/L	0.1732	ppb	05:12:32
1	Mo 202.031†	15.2	-4.6	-0.3006	ug/L	-0.3006	ppb	05:12:32
1	Ni 231.604†	102.8	33.6	0.7982	ug/L	0.7982	ppb	05:12:32
1	P 214.914†	209.4	-8.5	-5.1269	ug/L	-5.1269	ppb	05:12:32
1	Pb 220.353†	-59.8	-7.9	-0.9205	ug/L	-0.9205	ppb	05:12:32
1	S 181.975 Axial†	41.6	0.5	0.7681	ug/L	0.7681	ppb	05:12:32
1	Sb 206.836†	36.1	6.9	2.2246	ug/L	2.2246	ppb	05:12:32
1	Se 196.026†	-29.0	-5.8	-3.4656	ug/L	-3.4656	ppb	05:12:32
1	Si 251.611†	762.2	261.7	8.0011	ug/L	8.0011	ppb	05:12:32
1	Sn 189.927†	1.5	-2.7	-0.4610	ug/L	-0.4610	ppb	05:12:32
1	Ti 334.940†	-1105.4	-151.3	-0.2438	ug/L	-0.2438	ppb	05:12:12
1	Tl 190.801†	-25.6	11.0	3.1545	ug/L	3.1545	ppb	05:12:32
1	U 409.014†	-1964.6	-21.7	-0.6070	ug/L	-0.6070	ppb	05:12:12
1	V 292.402†	-1307.2	-23.6	-0.1656	ug/L	-0.1656	ppb	05:12:12
1	Zn 213.857†	735.1	-64.9	-0.5876	ug/L	-0.5876	ppb	05:12:32
1	SiO2†	802.1	321.2	21.027	ug/L	21.027	ppb	05:13:28
2	Sc Radial	5762.7	5762.7	102	%			05:11:21
2	Y RADIAL	6259.1	6259.1	101.6	%			05:11:21
2	Al 396.153Radial†	-4.5	16.0	11.769	ug/L	11.769	ppb	05:11:21
2	Ca 317.933Radial†	29.7	11.5	17.520	ug/L	17.520	ppb	05:11:41
2	Fe 238.204 Radial†	5.3	-0.9	-8.5989	ug/L	-8.5989	ppb	05:11:41
2	K 766.490 Radial†	2309.0	98.9	17.948	ug/L	17.948	ppb	05:11:21
2	Mg 279.077 IEC†	2.4	0.6	20.679	ug/L	20.679	ppb	05:11:41
2	Na 589.592 Radial†	-661.1	-33.8	-12.691	ug/L	-12.691	ppb	05:11:21
2	Sr 421.552†	18.2	14.4	0.0974	ug/L	0.0974	ppb	05:11:21
2	Sc 361.383	871283.2	871283.2	98.453	%			05:12:38
2	Y 371.029	741125.6	741125.6	99.872	%			05:12:38
2	Ag 328.068†	318.1	95.6	0.4452	ug/L	0.4452	ppb	05:12:38
2	As 188.979†	-14.5	14.5	5.9079	ug/L	5.9079	ppb	05:12:58
2	B 249.677†	-212.4	308.2	6.6899	ug/L	6.6899	ppb	05:12:58
2	Ba 233.527†	-4.3	7.6	0.0576	ug/L	0.0576	ppb	05:12:58
2	Be 313.107†	-4970.4	271.8	0.1007	ug/L	0.1007	ppb	05:12:38
2	Cd 226.502†	-193.5	-8.7	-0.0928	ug/L	-0.0928	ppb	05:12:58
2	Co 228.616†	-64.2	6.6	0.1292	ug/L	0.1292	ppb	05:12:58
2	Cr 267.716†	82.2	-3.5	-0.0352	ug/L	-0.0352	ppb	05:12:58
2	Cu 324.752†	6730.0	67.0	0.1946	ug/L	0.1946	ppb	05:12:38
2	Mn 257.610†	537.7	142.7	0.1539	ug/L	0.1539	ppb	05:12:58
2	Mo 202.031†	27.8	8.2	0.5336	ug/L	0.5336	ppb	05:12:58
2	Ni 231.604†	95.3	26.7	0.6339	ug/L	0.6339	ppb	05:12:58

2	P 214.914†	228.3	12.0	7.1051	ug/L	7.1051 ppb	05:12:58
2	Pb 220.353†	-53.9	-2.2	-0.2571	ug/L	-0.2571 ppb	05:12:58
2	S 181.975 Axial†	41.0	0.2	0.2505	ug/L	0.2505 ppb	05:12:58
2	Sb 206.836†	37.5	8.5	2.7934	ug/L	2.7934 ppb	05:12:58
2	Se 196.026†	-25.7	-2.7	-1.6324	ug/L	-1.6324 ppb	05:12:58
2	Si 251.611†	756.1	259.9	7.9314	ug/L	7.9314 ppb	05:12:58
2	Sn 189.927†	10.2	6.0	1.0251	ug/L	1.0251 ppb	05:12:58
2	Ti 334.940†	-1030.0	-81.2	-0.1269	ug/L	-0.1269 ppb	05:12:38
2	Tl 190.801†	-31.7	4.7	1.3480	ug/L	1.3480 ppb	05:12:58
2	U 409.014†	-2205.1	-277.6	-7.7532	ug/L	-7.7532 ppb	05:12:38
2	V 292.402†	-1285.1	-8.9	-0.0653	ug/L	-0.0653 ppb	05:12:38
2	Zn 213.857†	724.5	-71.4	-0.6462	ug/L	-0.6462 ppb	05:12:58
2	SiO2†	772.2	295.5	19.309	ug/L	19.309 ppb	05:13:33
3	Sc Radial	5593.9	5593.9	98.8	%		05:11:46
3	Y RADIAL	6074.0	6074.0	98.63	%		05:11:46
3	Al 396.153Radial†	-27.3	-7.3	-5.4374	ug/L	-5.4374 ppb	05:11:46
3	Ca 317.933Radial†	35.6	18.3	27.979	ug/L	27.979 ppb	05:12:06
3	Fe 238.204 Radial†	7.4	1.4	14.275	ug/L	14.275 ppb	05:12:06
3	K 766.490 Radial†	2262.6	120.4	21.852	ug/L	21.852 ppb	05:11:46
3	Mg 279.077 IEC†	4.4	2.7	100.07	ug/L	100.07 ppb	05:12:06
3	Na 589.592 Radial†	-669.3	-61.7	-23.178	ug/L	-23.178 ppb	05:11:46
3	Sr 421.552†	14.4	11.1	0.0749	ug/L	0.0749 ppb	05:11:46
3	Sc 361.383	871112.9	871112.9	98.434	%		05:13:03
3	Y 371.029	741156.2	741156.2	99.877	%		05:13:03
3	Ag 328.068†	429.4	208.7	0.9703	ug/L	0.9703 ppb	05:13:03
3	As 188.979†	-20.4	8.5	3.4652	ug/L	3.4652 ppb	05:13:23
3	B 249.677†	-201.1	319.5	6.9331	ug/L	6.9331 ppb	05:13:23
3	Ba 233.527†	1.1	13.1	0.1000	ug/L	0.1000 ppb	05:13:23
3	Be 313.107†	-5013.7	226.7	0.0838	ug/L	0.0838 ppb	05:13:03
3	Cd 226.502†	-168.1	17.1	0.1844	ug/L	0.1844 ppb	05:13:23
3	Co 228.616†	-54.0	16.9	0.3298	ug/L	0.3298 ppb	05:13:23
3	Cr 267.716†	93.4	7.9	0.0855	ug/L	0.0855 ppb	05:13:23
3	Cu 324.752†	6784.8	124.1	0.3615	ug/L	0.3615 ppb	05:13:03
3	Mn 257.610†	533.9	139.0	0.1506	ug/L	0.1506 ppb	05:13:23
3	Mo 202.031†	26.0	6.4	0.4204	ug/L	0.4204 ppb	05:13:23
3	Ni 231.604†	92.9	24.2	0.5750	ug/L	0.5750 ppb	05:13:23
3	P 214.914†	208.9	-7.7	-4.6427	ug/L	-4.6427 ppb	05:13:23
3	Pb 220.353†	-73.1	-21.8	-2.5454	ug/L	-2.5454 ppb	05:13:23
3	S 181.975 Axial†	44.6	3.8	5.5731	ug/L	5.5731 ppb	05:13:23
3	Sb 206.836†	30.5	1.4	0.4645	ug/L	0.4645 ppb	05:13:23
3	Se 196.026†	-16.2	7.0	4.2068	ug/L	4.2068 ppb	05:13:23
3	Si 251.611†	759.5	263.6	8.0447	ug/L	8.0447 ppb	05:13:23
3	Sn 189.927†	9.1	5.0	0.8483	ug/L	0.8483 ppb	05:13:23
3	Ti 334.940†	-1077.4	-129.5	-0.2071	ug/L	-0.2071 ppb	05:13:03
3	Tl 190.801†	-23.8	12.7	3.6356	ug/L	3.6356 ppb	05:13:23
3	U 409.014†	-2006.0	-75.7	-2.1176	ug/L	-2.1176 ppb	05:13:03
3	V 292.402†	-1294.4	-18.5	-0.1225	ug/L	-0.1225 ppb	05:13:03
3	Zn 213.857†	737.2	-58.4	-0.5341	ug/L	-0.5341 ppb	05:13:23
3	SiO2†	738.1	261.0	17.054	ug/L	17.054 ppb	05:13:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	872916.0	98.638	%	0.3364				0.34%
Sc Radial	5721.9	101	%	2.0				1.98%
Y 371.029	743131.6	100.14	%	0.465				0.46%
Y RADIAL	6221.6	101.0	%	2.16				2.14%
Ag 328.068†	126.0	0.5853	ug/L	0.33745	0.5853	ppb	0.33745	57.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.1	-0.8594	ug/L	11.07327	-0.8594	ppb	11.07327	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	9.8	3.9919	ug/L	1.71445	3.9919	ppb	1.71445	42.95%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	326.0	7.0749	ug/L	0.47209	7.0749	ppb	0.47209	6.67%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0926	ug/L	0.03187	0.0926	ppb	0.03187	34.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	269.2	0.0997	ug/L	0.01531	0.0997	ppb	0.01531	15.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.6	19.327	ug/L	7.9051	19.327	ppb	7.9051	40.90%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                3.7      0.0401 ug/L       0.13894      0.0401 ppb        0.13894 346.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               12.0      0.2333 ug/L       0.10053      0.2333 ppb        0.10053  43.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                0.7      0.0088 ug/L       0.06667      0.0088 ppb        0.06667 757.76%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              104.2      0.3030 ug/L       0.09404      0.3030 ppb        0.09404  31.03%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.1      1.2897 ug/L      11.74703      1.2897 ppb       11.74703 910.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        123.6     22.444 ug/L       4.8192      22.444 ppb         4.8192  21.47%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.6     20.889 ug/L      79.0751      20.889 ppb        79.0751 378.55%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              146.8      0.1592 ug/L       0.01223      0.1592 ppb        0.01223   7.68%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.3      0.2178 ug/L       0.45250      0.2178 ppb        0.45250 207.76%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -58.6    -22.017 ug/L       8.8036     -22.017 ppb         8.8036  39.99%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               28.2      0.6690 ug/L       0.11569      0.6690 ppb        0.11569  17.29%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -1.4     -0.8882 ug/L       6.92660     -0.8882 ppb        6.92660 779.87%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -10.6     -1.2410 ug/L       1.17731     -1.2410 ppb        1.17731  94.87%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           1.5      2.1972 ug/L       2.93500      2.1972 ppb        2.93500 133.58%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                5.6      1.8275 ug/L       1.21419      1.8275 ppb        1.21419  66.44%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.5     -0.2971 ug/L       4.00672     -0.2971 ppb        4.00672 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              261.7      7.9924 ug/L       0.05712      7.9924 ppb        0.05712   0.71%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                2.8      0.4708 ug/L       0.81180      0.4708 ppb        0.81180 172.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                8.5      0.0569 ug/L       0.05188      0.0569 ppb        0.05188  91.22%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -120.7     -0.1926 ug/L       0.05975     -0.1926 ppb        0.05975  31.02%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                9.5      2.7127 ug/L       1.20608      2.7127 ppb        1.20608  44.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -125.0     -3.4926 ug/L       3.76631     -3.4926 ppb        3.76631 107.84%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -17.0     -0.1178 ug/L       0.05032     -0.1178 ppb        0.05032  42.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -64.9     -0.5893 ug/L       0.05607     -0.5893 ppb        0.05607   9.52%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    292.6     19.130 ug/L        1.9927      19.130 ppb         1.9927  10.42%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 138
Sample ID: 241711002|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 143
Date Collected: 12/10/2009 05:15:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711002|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6070.2	6070.2	107	%			05:17:44
1	Y RADIAL	6917.6	6917.6	112.3	%			05:17:44
1	Al 396.153Radial†	113261.4	105690.5	78131	ug/L	78131	ppb	05:17:44
1	Ca 317.933Radial†	3953.8	3671.1	5613.7	ug/L	5613.7	ppb	05:17:44
1	Fe 238.204 Radial†	17550.2	16367.8	164820	ug/L	164820	ppb	05:17:44
1	K 766.490 Radial†	56413.2	50461.8	9134.3	ug/L	9134.3	ppb	05:17:44
1	Mg 279.077 IEC†	362.0	336.0	12370	ug/L	12370	ppb	05:18:04
1	Na 589.592 Radial†	7700.6	7800.4	2932.0	ug/L	2932.0	ppb	05:17:44
1	Sr 421.552†	15561.7	14515.3	97.935	ug/L	97.935	ppb	05:17:44
1	Sc 361.383	891981.9	891981.9	100.79	%			05:19:02
1	Y 371.029	776656.2	776656.2	104.66	%			05:19:02
1	Ag 328.068†	-10472.2	-10617.5	4.8244	ug/L	4.8244	ppb	05:19:22
1	As 188.979†	-29.3	0.2	52.709	ug/L	52.709	ppb	05:19:22
1	B 249.677†	1582.0	2093.4	23.457	ug/L	23.457	ppb	05:19:02
1	Ba 233.527†	59693.3	59236.2	456.81	ug/L	456.81	ppb	05:19:02
1	Be 313.107†	-12911.1	-7489.4	3.5724	ug/L	3.5724	ppb	05:19:02
1	Cd 226.502†	1458.7	1635.1	1.3065	ug/L	1.3065	ppb	05:19:22
1	Co 228.616†	2384.0	2437.0	38.213	ug/L	38.213	ppb	05:19:22
1	Cr 267.716†	12596.7	12410.7	137.35	ug/L	137.35	ppb	05:19:22
1	Cu 324.752†	27613.4	20627.8	68.399	ug/L	68.399	ppb	05:19:02
1	Mn 257.610†	2799893.1	2777487.2	3034.6	ug/L	3034.6	ppb	05:19:02
1	Mo 202.031†	-55.7	-75.2	6.7913	ug/L	6.7913	ppb	05:19:22
1	Ni 231.604†	3039.8	2945.8	69.868	ug/L	69.868	ppb	05:19:22
1	P 214.914†	3519.3	3271.7	1827.6	ug/L	1827.6	ppb	05:19:22
1	Pb 220.353†	6777.9	6777.2	796.18	ug/L	796.18	ppb	05:19:22
1	S 181.975 Axial†	725.1	677.9	975.92	ug/L	975.92	ppb	05:19:22
1	Sb 206.836†	64.3	34.2	0.1516	ug/L	0.1516	ppb	05:19:22
1	Se 196.026†	-906.0	-875.5	-6.1333	ug/L	-6.1333	ppb	05:19:22
1	Si 251.611†	691133.9	685194.8	20954	ug/L	20954	ppb	05:19:02
1	Sn 189.927†	-27.8	-31.9	-2.5606	ug/L	-2.5606	ppb	05:19:22
1	Ti 334.940†	2014086.7	1999224.4	3233.7	ug/L	3233.7	ppb	05:19:02
1	Tl 190.801†	-175.2	-137.0	4.3445	ug/L	4.3445	ppb	05:19:22
1	U 409.014†	-8246.2	-6219.2	-194.75	ug/L	-194.75	ppb	05:19:02
1	V 292.402†	51742.9	52632.7	326.49	ug/L	326.49	ppb	05:19:02
1	Zn 213.857†	28682.3	27649.7	232.08	ug/L	232.08	ppb	05:19:22
1	SiO2†	692755.7	686823.0	44969	ug/L	44969	ppb	05:20:21
2	Sc Radial	5937.5	5937.5	105	%			05:18:09
2	Y RADIAL	6748.1	6748.1	109.6	%			05:18:09
2	Al 396.153Radial†	110717.1	105624.3	78083	ug/L	78083	ppb	05:18:09
2	Ca 317.933Radial†	3906.9	3708.8	5671.4	ug/L	5671.4	ppb	05:18:09
2	Fe 238.204 Radial†	17244.8	16442.4	165570	ug/L	165570	ppb	05:18:09
2	K 766.490 Radial†	55271.7	50548.9	9152.1	ug/L	9152.1	ppb	05:18:09
2	Mg 279.077 IEC†	359.8	341.4	12572	ug/L	12572	ppb	05:18:29
2	Na 589.592 Radial†	7481.7	7752.1	2913.8	ug/L	2913.8	ppb	05:18:09
2	Sr 421.552†	15177.1	14472.8	97.647	ug/L	97.647	ppb	05:18:09
2	Sc 361.383	927907.4	927907.4	104.85	%			05:19:29
2	Y 371.029	804667.3	804667.3	108.44	%			05:19:29
2	Ag 328.068†	-10490.4	-10232.6	6.7589	ug/L	6.7589	ppb	05:19:49
2	As 188.979†	-33.8	-3.0	50.081	ug/L	50.081	ppb	05:19:49
2	B 249.677†	1561.4	2013.0	21.616	ug/L	21.616	ppb	05:19:29
2	Ba 233.527†	58980.2	56263.1	434.21	ug/L	434.21	ppb	05:19:29
2	Be 313.107†	-12979.6	-7058.8	3.3941	ug/L	3.3941	ppb	05:19:29
2	Cd 226.502†	1484.8	1604.0	0.8920	ug/L	0.8920	ppb	05:19:49
2	Co 228.616†	2396.0	2356.9	37.001	ug/L	37.001	ppb	05:19:49
2	Cr 267.716†	12622.7	11951.7	132.38	ug/L	132.38	ppb	05:19:49
2	Cu 324.752†	27289.9	19258.5	64.455	ug/L	64.455	ppb	05:19:29
2	Mn 257.610†	2761393.6	2633218.2	2877.9	ug/L	2877.9	ppb	05:19:29
2	Mo 202.031†	-83.3	-99.5	5.2640	ug/L	5.2640	ppb	05:19:49
2	Ni 231.604†	3061.2	2849.4	67.582	ug/L	67.582	ppb	05:19:49

2	P 214.914†	3531.8	3148.4	1754.3	ug/L	1754.3	ppb	05:19:49
2	Pb 220.353†	6804.6	6542.3	768.66	ug/L	768.66	ppb	05:19:49
2	S 181.975 Axial†	737.7	662.1	952.73	ug/L	952.73	ppb	05:19:49
2	Sb 206.836†	67.5	34.8	0.8870	ug/L	0.8870	ppb	05:19:49
2	Se 196.026†	-917.1	-851.3	10.577	ug/L	10.577	ppb	05:19:49
2	Si 251.611†	683617.9	651478.3	19923	ug/L	19923	ppb	05:19:29
2	Sn 189.927†	-26.7	-29.7	-2.1768	ug/L	-2.1768	ppb	05:19:49
2	Ti 334.940†	1983634.3	1892814.9	3061.6	ug/L	3061.6	ppb	05:19:29
2	Tl 190.801†	-161.2	-116.9	7.9222	ug/L	7.9222	ppb	05:19:49
2	U 409.014†	-8232.0	-5889.0	-185.61	ug/L	-185.61	ppb	05:19:29
2	V 292.402†	50846.6	49790.4	307.38	ug/L	307.38	ppb	05:19:29
2	Zn 213.857†	28827.8	26686.7	223.36	ug/L	223.36	ppb	05:19:49
2	SiO2†	690900.3	658442.9	43111	ug/L	43111	ppb	05:20:27
3	Sc Radial	5550.6	5550.6	98.0	%			05:18:34
3	Y RADIAL	6334.8	6334.8	102.9	%			05:18:34
3	Al 396.153Radial†	115448.8	117813.0	87093	ug/L	87093	ppb	05:18:34
3	Ca 317.933Radial†	4019.4	4083.3	6244.0	ug/L	6244.0	ppb	05:18:34
3	Fe 238.204 Radial†	17850.8	18207.1	183340	ug/L	183340	ppb	05:18:34
3	K 766.490 Radial†	56894.9	55879.7	10121	ug/L	10121	ppb	05:18:34
3	Mg 279.077 IEC†	357.5	363.0	13359	ug/L	13359	ppb	05:18:54
3	Na 589.592 Radial†	7813.5	8588.1	3228.0	ug/L	3228.0	ppb	05:18:34
3	Sr 421.552†	15781.5	16098.4	108.62	ug/L	108.62	ppb	05:18:34
3	Sc 361.383	932249.1	932249.1	105.34	%			05:19:56
3	Y 371.029	807312.1	807312.1	108.79	%			05:19:56
3	Ag 328.068†	-10413.5	-10113.0	12.956	ug/L	12.956	ppb	05:20:16
3	As 188.979†	-31.0	-0.3	53.983	ug/L	53.983	ppb	05:20:16
3	B 249.677†	1465.6	1915.2	17.137	ug/L	17.137	ppb	05:19:56
3	Ba 233.527†	59385.7	56386.1	435.81	ug/L	435.81	ppb	05:19:56
3	Be 313.107†	-12728.0	-6762.3	3.5117	ug/L	3.5117	ppb	05:19:56
3	Cd 226.502†	1443.7	1558.4	-1.3794	ug/L	-1.3794	ppb	05:20:16
3	Co 228.616†	2366.4	2318.1	35.989	ug/L	35.989	ppb	05:20:16
3	Cr 267.716†	12607.4	11881.1	131.94	ug/L	131.94	ppb	05:20:16
3	Cu 324.752†	27607.2	19438.5	65.885	ug/L	65.885	ppb	05:19:56
3	Mn 257.610†	2783053.4	2641514.3	2888.6	ug/L	2888.6	ppb	05:19:56
3	Mo 202.031†	-74.9	-91.1	7.0700	ug/L	7.0700	ppb	05:20:16
3	Ni 231.604†	3046.8	2822.2	66.936	ug/L	66.936	ppb	05:20:16
3	P 214.914†	3535.7	3136.5	1735.9	ug/L	1735.9	ppb	05:20:16
3	Pb 220.353†	6786.7	6495.1	763.70	ug/L	763.70	ppb	05:20:16
3	S 181.975 Axial†	730.7	652.2	936.55	ug/L	936.55	ppb	05:20:16
3	Sb 206.836†	56.7	24.2	-2.4786	ug/L	-2.4786	ppb	05:20:16
3	Se 196.026†	-899.8	-830.7	78.533	ug/L	78.533	ppb	05:20:16
3	Si 251.611†	689559.3	654082.0	20002	ug/L	20002	ppb	05:19:56
3	Sn 189.927†	-22.5	-25.6	-1.1848	ug/L	-1.1848	ppb	05:20:16
3	Ti 334.940†	1995365.8	1895140.8	3065.4	ug/L	3065.4	ppb	05:19:56
3	Tl 190.801†	-162.1	-117.0	8.2218	ug/L	8.2218	ppb	05:20:16
3	U 409.014†	-8029.8	-5660.4	-181.46	ug/L	-181.46	ppb	05:19:56
3	V 292.402†	51182.3	49883.2	305.33	ug/L	305.33	ppb	05:19:56
3	Zn 213.857†	28782.7	26515.8	220.10	ug/L	220.10	ppb	05:20:16
3	SiO2†	688278.1	652884.9	42746	ug/L	42746	ppb	05:20:32

Mean Data: 241711002|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917379.5	103.66	%	2.497				2.41%
Sc Radial	5852.8	103	%	4.8				4.61%
Y 371.029	796211.9	107.30	%	2.289				2.13%
Y RADIAL	6666.8	108.3	%	4.87				4.50%
Ag 328.068†	-10321.0	8.1796	ug/L	4.24764	8.1796	ppb	4.24764	51.93%
Al 396.153Radial†	109709.3	81102	ug/L	5188.1	81102	ppb	5188.1	6.40%
As 188.979†	-1.0	52.258	ug/L	1.9900	52.258	ppb	1.9900	3.81%
B 249.677†	2007.2	20.737	ug/L	3.2504	20.737	ppb	3.2504	15.67%
Ba 233.527†	57295.1	442.28	ug/L	12.611	442.28	ppb	12.611	2.85%
Be 313.107†	-7103.5	3.4928	ug/L	0.09064	3.4928	ppb	0.09064	2.59%
Ca 317.933Radial†	3821.0	5843.0	ug/L	348.45	5843.0	ppb	348.45	5.96%
Cd 226.502†	1599.1	0.2730	ug/L	1.44602	0.2730	ppb	1.44602	529.61%
Co 228.616†	2370.7	37.068	ug/L	1.1138	37.068	ppb	1.1138	3.00%
Cr 267.716†	12081.2	133.89	ug/L	3.005	133.89	ppb	3.005	2.24%
Cu 324.752†	19775.0	66.247	ug/L	1.9966	66.247	ppb	1.9966	3.01%
Fe 238.204 Radial†	17005.8	171240	ug/L	10482.9	171240	ppb	10482.9	6.12%
K 766.490 Radial†	52296.8	9469.1	ug/L	564.61	9469.1	ppb	564.61	5.96%

Mg 279.077 IEC†	346.8	12767	ug/L	522.5	12767	ppb	522.5	4.09%
Mn 257.610†	2684073.2	2933.7	ug/L	87.53	2933.7	ppb	87.53	2.98%
Mo 202.031†	-88.6	6.3751	ug/L	0.97227	6.3751	ppb	0.97227	15.25%
Na 589.592 Radial†	8046.9	3024.6	ug/L	176.40	3024.6	ppb	176.40	5.83%
Ni 231.604†	2872.5	68.129	ug/L	1.5407	68.129	ppb	1.5407	2.26%
P 214.914†	3185.5	1772.6	ug/L	48.49	1772.6	ppb	48.49	2.74%
Pb 220.353†	6604.8	776.18	ug/L	17.500	776.18	ppb	17.500	2.25%
S 181.975 Axial†	664.1	955.07	ug/L	19.785	955.07	ppb	19.785	2.07%
Sb 206.836†	31.1	-0.4800	ug/L	1.76947	-0.4800	ppb	1.76947	368.67%
Se 196.026†	-852.5	27.659	ug/L	44.8436	27.659	ppb	44.8436	162.13%
Si 251.611†	663585.0	20293	ug/L	573.9	20293	ppb	573.9	2.83%
Sn 189.927†	-29.1	-1.9740	ug/L	0.70994	-1.9740	ppb	0.70994	35.96%
Sr 421.552†	15028.8	101.40	ug/L	6.252	101.40	ppb	6.252	6.17%
Ti 334.940†	1929060.0	3120.3	ug/L	98.29	3120.3	ppb	98.29	3.15%
Tl 190.801†	-123.6	6.8295	ug/L	2.15726	6.8295	ppb	2.15726	31.59%
U 409.014†	-5922.9	-187.27	ug/L	6.801	-187.27	ppb	6.801	3.63%
V 292.402†	50768.8	313.07	ug/L	11.667	313.07	ppb	11.667	3.73%
Zn 213.857†	26950.7	225.18	ug/L	6.195	225.18	ppb	6.195	2.75%
SiO2†	666050.3	43609	ug/L	1192.2	43609	ppb	1192.2	2.73%

Sequence No.: 139
Sample ID: 241711003|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 144
Date Collected: 12/10/2009 05:22:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711003|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5755.3	5755.3	102	%			05:24:59
1	Y RADIAL	7082.1	7082.1	115.0	%			05:24:59
1	Al 396.153Radial†	221793.9	218270.5	161360	ug/L	161360	ppb	05:24:39
1	Ca 317.933Radial†	9394.1	9226.4	14109	ug/L	14109	ppb	05:24:39
1	Fe 238.204 Radial†	18179.5	17883.0	180070	ug/L	180070	ppb	05:24:39
1	K 766.490 Radial†	61806.6	58648.8	10598	ug/L	10598	ppb	05:24:39
1	Mg 279.077 IEC†	570.7	559.9	20694	ug/L	20694	ppb	05:24:59
1	Na 589.592 Radial†	8620.1	9098.3	3419.8	ug/L	3419.8	ppb	05:24:39
1	Sr 421.552†	25982.1	25563.6	172.44	ug/L	172.44	ppb	05:24:39
1	Sc 361.383	879918.8	879918.8	99.429	%			05:26:02
1	Y 371.029	843625.0	843625.0	113.69	%			05:26:02
1	Ag 328.068†	-11144.9	-11436.5	5.7847	ug/L	5.7847	ppb	05:26:02
1	As 188.979†	-37.5	-8.5	56.310	ug/L	56.310	ppb	05:26:22
1	B 249.677†	1626.1	2159.3	22.766	ug/L	22.766	ppb	05:26:02
1	Ba 233.527†	161100.8	162038.1	1238.1	ug/L	1238.1	ppb	05:26:02
1	Be 313.107†	1832.1	7162.9	10.131	ug/L	10.131	ppb	05:26:02
1	Cd 226.502†	1529.3	1725.9	0.7938	ug/L	0.7938	ppb	05:26:22
1	Co 228.616†	4333.7	4430.3	75.803	ug/L	75.803	ppb	05:26:22
1	Cr 267.716†	17786.3	17801.5	195.71	ug/L	195.71	ppb	05:26:22
1	Cu 324.752†	36007.5	29445.6	94.822	ug/L	94.822	ppb	05:26:02
1	Mn 257.610†	5187015.1	5216402.1	5686.4	ug/L	5686.4	ppb	05:25:57
1	Mo 202.031†	-74.7	-95.2	6.5743	ug/L	6.5743	ppb	05:26:22
1	Ni 231.604†	4811.5	4769.0	113.11	ug/L	113.11	ppb	05:26:22
1	P 214.914†	2127.0	1919.3	1035.7	ug/L	1035.7	ppb	05:26:22
1	Pb 220.353†	4151.0	4227.3	515.52	ug/L	515.52	ppb	05:26:22
1	S 181.975 Axial†	538.6	500.3	699.76	ug/L	699.76	ppb	05:26:22
1	Sb 206.836†	79.1	50.0	0.0395	ug/L	0.0395	ppb	05:26:22
1	Se 196.026†	-957.0	-939.1	14.828	ug/L	14.828	ppb	05:26:22
1	Si 251.611†	797556.0	801628.6	24515	ug/L	24515	ppb	05:25:57
1	Sn 189.927†	-89.3	-94.1	-11.954	ug/L	-11.954	ppb	05:26:22
1	Ti 334.940†	2335351.5	2349729.1	3801.1	ug/L	3801.1	ppb	05:25:57
1	Tl 190.801†	-245.6	-210.2	5.3483	ug/L	5.3483	ppb	05:26:22
1	U 409.014†	-10478.7	-8576.7	-262.65	ug/L	-262.65	ppb	05:26:02
1	V 292.402†	49538.3	51119.3	313.34	ug/L	313.34	ppb	05:26:02
1	Zn 213.857†	35084.6	34478.8	291.47	ug/L	291.47	ppb	05:26:02
1	SiO2†	801174.4	805287.0	52725	ug/L	52725	ppb	05:27:32
2	Sc Radial	5918.4	5918.4	105	%			05:25:24
2	Y RADIAL	7260.6	7260.6	117.9	%			05:25:24
2	Al 396.153Radial†	226076.9	216353.4	159940	ug/L	159940	ppb	05:25:04
2	Ca 317.933Radial†	9517.9	9090.0	13900	ug/L	13900	ppb	05:25:04
2	Fe 238.204 Radial†	18505.8	17702.2	178250	ug/L	178250	ppb	05:25:04
2	K 766.490 Radial†	62578.5	57711.1	10426	ug/L	10426	ppb	05:25:04
2	Mg 279.077 IEC†	566.3	540.1	19960	ug/L	19960	ppb	05:25:24
2	Na 589.592 Radial†	8825.1	9060.7	3405.7	ug/L	3405.7	ppb	05:25:04
2	Sr 421.552†	26576.0	25427.2	171.52	ug/L	171.52	ppb	05:25:04
2	Sc 361.383	882149.6	882149.6	99.681	%			05:26:34
2	Y 371.029	846847.4	846847.4	114.12	%			05:26:34
2	Ag 328.068†	-11214.4	-11477.9	5.0240	ug/L	5.0240	ppb	05:26:34
2	As 188.979†	-23.7	5.4	62.253	ug/L	62.253	ppb	05:26:54
2	B 249.677†	1587.0	2115.9	22.063	ug/L	22.063	ppb	05:26:34
2	Ba 233.527†	162144.7	162675.6	1242.9	ug/L	1242.9	ppb	05:26:34
2	Be 313.107†	1737.5	7063.3	10.222	ug/L	10.222	ppb	05:26:34
2	Cd 226.502†	1521.8	1714.6	0.8532	ug/L	0.8532	ppb	05:26:54
2	Co 228.616†	4370.0	4455.7	76.186	ug/L	76.186	ppb	05:26:54
2	Cr 267.716†	17879.6	17849.8	196.20	ug/L	196.20	ppb	05:26:54
2	Cu 324.752†	36238.0	29585.3	95.136	ug/L	95.136	ppb	05:26:34
2	Mn 257.610†	5290803.1	5307329.5	5785.0	ug/L	5785.0	ppb	05:26:29
2	Mo 202.031†	-70.7	-90.9	6.7244	ug/L	6.7244	ppb	05:26:54
2	Ni 231.604†	4836.2	4781.5	113.40	ug/L	113.40	ppb	05:26:54

2	P 214.914†	2133.9	1920.8	1037.6	ug/L	1037.6	ppb	05:26:54
2	Pb 220.353†	4238.6	4304.7	524.39	ug/L	524.39	ppb	05:26:54
2	S 181.975 Axial†	553.6	513.9	719.92	ug/L	719.92	ppb	05:26:54
2	Sb 206.836†	84.8	55.4	1.6870	ug/L	1.6870	ppb	05:26:54
2	Se 196.026†	-948.0	-927.6	15.868	ug/L	15.868	ppb	05:26:54
2	Si 251.611†	815040.9	817140.9	24989	ug/L	24989	ppb	05:26:29
2	Sn 189.927†	-74.8	-79.3	-9.4972	ug/L	-9.4972	ppb	05:26:54
2	Ti 334.940†	2381334.1	2389919.1	3866.1	ug/L	3866.1	ppb	05:26:29
2	Tl 190.801†	-238.5	-202.4	8.6237	ug/L	8.6237	ppb	05:26:54
2	U 409.014†	-10639.8	-8711.7	-266.19	ug/L	-266.19	ppb	05:26:34
2	V 292.402†	49802.4	51258.2	314.47	ug/L	314.47	ppb	05:26:34
2	Zn 213.857†	35332.9	34638.7	293.11	ug/L	293.11	ppb	05:26:34
2	SiO2†	810920.8	813026.8	53232	ug/L	53232	ppb	05:27:38
3	Sc Radial	5938.9	5938.9	105	%			05:25:49
3	Y RADIAL	7285.1	7285.1	118.3	%			05:25:49
3	Al 396.153Radial†	221092.1	210852.2	155870	ug/L	155870	ppb	05:25:29
3	Ca 317.933Radial†	9354.2	8902.4	13613	ug/L	13613	ppb	05:25:29
3	Fe 238.204 Radial†	18096.3	17250.5	173700	ug/L	173700	ppb	05:25:29
3	K 766.490 Radial†	61382.1	56363.2	10181	ug/L	10181	ppb	05:25:29
3	Mg 279.077 IEC†	568.7	540.6	19981	ug/L	19981	ppb	05:25:49
3	Na 589.592 Radial†	8618.9	8834.9	3320.8	ug/L	3320.8	ppb	05:25:29
3	Sr 421.552†	25960.5	24752.4	166.97	ug/L	166.97	ppb	05:25:29
3	Sc 361.383	874620.7	874620.7	98.830	%			05:27:06
3	Y 371.029	835958.3	835958.3	112.65	%			05:27:06
3	Ag 328.068†	-10918.6	-11275.4	4.5061	ug/L	4.5061	ppb	05:27:06
3	As 188.979†	-32.3	-3.4	58.053	ug/L	58.053	ppb	05:27:26
3	B 249.677†	1509.1	2050.8	21.252	ug/L	21.252	ppb	05:27:06
3	Ba 233.527†	159854.0	161757.9	1235.8	ug/L	1235.8	ppb	05:27:06
3	Be 313.107†	1669.1	7009.1	10.226	ug/L	10.226	ppb	05:27:06
3	Cd 226.502†	1528.2	1734.2	1.5215	ug/L	1.5215	ppb	05:27:26
3	Co 228.616†	4360.5	4483.9	76.768	ug/L	76.768	ppb	05:27:26
3	Cr 267.716†	17850.7	17975.0	197.46	ug/L	197.46	ppb	05:27:26
3	Cu 324.752†	35789.6	29444.5	94.494	ug/L	94.494	ppb	05:27:06
3	Mn 257.610†	5257807.9	5319633.8	5798.0	ug/L	5798.0	ppb	05:27:00
3	Mo 202.031†	-71.7	-92.5	6.2952	ug/L	6.2952	ppb	05:27:26
3	Ni 231.604†	4849.1	4836.4	114.70	ug/L	114.70	ppb	05:27:26
3	P 214.914†	2113.0	1918.1	1038.3	ug/L	1038.3	ppb	05:27:26
3	Pb 220.353†	4172.6	4274.5	520.32	ug/L	520.32	ppb	05:27:26
3	S 181.975 Axial†	552.0	517.1	725.45	ug/L	725.45	ppb	05:27:26
3	Sb 206.836†	70.8	42.1	-2.7156	ug/L	-2.7156	ppb	05:27:26
3	Se 196.026†	-957.6	-945.5	-9.3192	ug/L	-9.3192	ppb	05:27:26
3	Si 251.611†	810077.6	819157.3	25051	ug/L	25051	ppb	05:27:00
3	Sn 189.927†	-80.3	-85.5	-10.643	ug/L	-10.643	ppb	05:27:26
3	Ti 334.940†	2368550.8	2397549.1	3878.4	ug/L	3878.4	ppb	05:27:00
3	Tl 190.801†	-244.7	-210.7	6.3030	ug/L	6.3030	ppb	05:27:26
3	U 409.014†	-10504.3	-8666.4	-264.36	ug/L	-264.36	ppb	05:27:06
3	V 292.402†	49013.5	50890.1	312.66	ug/L	312.66	ppb	05:27:06
3	Zn 213.857†	34811.7	34416.4	291.53	ug/L	291.53	ppb	05:27:06
3	SiO2†	808768.4	817851.8	53549	ug/L	53549	ppb	05:27:44

Mean Data: 241711003|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878896.4	99.313	%	0.4370				0.44%
Sc Radial	5870.9	104	%	1.8				1.71%
Y 371.029	842143.6	113.49	%	0.754				0.66%
Y RADIAL	7209.3	117.1	%	1.80				1.54%
Ag 328.068†	-11396.6	5.1049	ug/L	0.64310	5.1049	ppb	0.64310	12.60%
Al 396.153Radial†	215158.7	159060	ug/L	2846.7	159060	ppb	2846.7	1.79%
As 188.979†	-2.2	58.872	ug/L	3.0551	58.872	ppb	3.0551	5.19%
B 249.677†	2108.7	22.027	ug/L	0.7574	22.027	ppb	0.7574	3.44%
Ba 233.527†	162157.2	1238.9	ug/L	3.64	1238.9	ppb	3.64	0.29%
Be 313.107†	7078.5	10.193	ug/L	0.0536	10.193	ppb	0.0536	0.53%
Ca 317.933Radial†	9072.9	13874	ug/L	248.8	13874	ppb	248.8	1.79%
Cd 226.502†	1724.9	1.0561	ug/L	0.40412	1.0561	ppb	0.40412	38.26%
Co 228.616†	4456.6	76.252	ug/L	0.4855	76.252	ppb	0.4855	0.64%
Cr 267.716†	17875.5	196.46	ug/L	0.905	196.46	ppb	0.905	0.46%
Cu 324.752†	29491.8	94.817	ug/L	0.3208	94.817	ppb	0.3208	0.34%
Fe 238.204 Radial†	17611.9	177340	ug/L	3280.5	177340	ppb	3280.5	1.85%
K 766.490 Radial†	57574.4	10402	ug/L	209.6	10402	ppb	209.6	2.02%

Mg 279.077 IEC†	546.8	20212	ug/L	417.9	20212	ppb	417.9	2.07%
Mn 257.610†	5281121.8	5756.5	ug/L	61.02	5756.5	ppb	61.02	1.06%
Mo 202.031†	-92.9	6.5313	ug/L	0.21780	6.5313	ppb	0.21780	3.33%
Na 589.592 Radial†	8998.0	3382.1	ug/L	53.55	3382.1	ppb	53.55	1.58%
Ni 231.604†	4795.6	113.74	ug/L	0.850	113.74	ppb	0.850	0.75%
P 214.914†	1919.4	1037.2	ug/L	1.33	1037.2	ppb	1.33	0.13%
Pb 220.353†	4268.8	520.07	ug/L	4.441	520.07	ppb	4.441	0.85%
S 181.975 Axial†	510.4	715.04	ug/L	13.524	715.04	ppb	13.524	1.89%
Sb 206.836†	49.2	-0.3297	ug/L	2.22443	-0.3297	ppb	2.22443	674.72%
Se 196.026†	-937.4	7.1255	ug/L	14.25098	7.1255	ppb	14.25098	200.00%
Si 251.611†	812642.3	24852	ug/L	293.4	24852	ppb	293.4	1.18%
Sn 189.927†	-86.3	-10.698	ug/L	1.2293	-10.698	ppb	1.2293	11.49%
Sr 421.552†	25247.7	170.31	ug/L	2.930	170.31	ppb	2.930	1.72%
Ti 334.940†	2379065.8	3848.5	ug/L	41.54	3848.5	ppb	41.54	1.08%
Tl 190.801†	-207.8	6.7583	ug/L	1.68449	6.7583	ppb	1.68449	24.92%
U 409.014†	-8651.6	-264.40	ug/L	1.771	-264.40	ppb	1.771	0.67%
V 292.402†	51089.2	313.49	ug/L	0.912	313.49	ppb	0.912	0.29%
Zn 213.857†	34511.3	292.04	ug/L	0.927	292.04	ppb	0.927	0.32%
SiO2†	812055.2	53169	ug/L	415.2	53169	ppb	415.2	0.78%

Sequence No.: 140
Sample ID: 241711004|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 145
Date Collected: 12/10/2009 05:29:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711004|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5895.0	5895.0	104	%			05:32:10
1	Y RADIAL	7069.5	7069.5	114.8	%			05:32:10
1	Al 396.153Radial†	259107.5	248943.4	184030	ug/L	184030	ppb	05:31:50
1	Ca 317.933Radial†	19437.2	18655.5	28527	ug/L	28527	ppb	05:31:50
1	Fe 238.204 Radial†	14349.3	13779.3	138750	ug/L	138750	ppb	05:31:50
1	K 766.490 Radial†	60419.9	55874.8	10140	ug/L	10140	ppb	05:31:50
1	Mg 279.077 IEC†	584.8	560.0	20736	ug/L	20736	ppb	05:32:10
1	Na 589.592 Radial†	21091.3	20878.3	7847.6	ug/L	7847.6	ppb	05:31:50
1	Sr 421.552†	41866.3	40217.3	271.23	ug/L	271.23	ppb	05:31:50
1	Sc 361.383	910466.1	910466.1	102.88	%			05:33:08
1	Y 371.029	834146.5	834146.5	112.41	%			05:33:08
1	Ag 328.068†	-8747.8	-8730.5	4.6095	ug/L	4.6095	ppb	05:33:13
1	As 188.979†	-46.8	-16.2	48.775	ug/L	48.775	ppb	05:33:33
1	B 249.677†	1369.8	1855.3	21.722	ug/L	21.722	ppb	05:33:13
1	Ba 233.527†	189790.9	184488.7	1407.0	ug/L	1407.0	ppb	05:33:13
1	Be 313.107†	-7200.2	-1678.3	7.3238	ug/L	7.3238	ppb	05:33:13
1	Cd 226.502†	1156.3	1311.7	0.3995	ug/L	0.3995	ppb	05:33:33
1	Co 228.616†	2918.8	2908.8	46.444	ug/L	46.444	ppb	05:33:33
1	Cr 267.716†	11778.1	11361.4	125.44	ug/L	125.44	ppb	05:33:13
1	Cu 324.752†	38583.4	30734.3	96.463	ug/L	96.463	ppb	05:33:13
1	Mn 257.610†	1756105.1	1706529.5	1868.0	ug/L	1868.0	ppb	05:33:08
1	Mo 202.031†	-101.8	-118.9	2.0972	ug/L	2.0972	ppb	05:33:33
1	Ni 231.604†	2800.1	2651.6	62.881	ug/L	62.881	ppb	05:33:33
1	P 214.914†	1364.9	1106.7	593.32	ug/L	593.32	ppb	05:33:33
1	Pb 220.353†	895.8	923.3	137.75	ug/L	137.75	ppb	05:33:33
1	S 181.975 Axial†	390.3	337.9	457.92	ug/L	457.92	ppb	05:33:33
1	Sb 206.836†	73.6	41.9	-3.1551	ug/L	-3.1551	ppb	05:33:33
1	Se 196.026†	-766.8	-721.9	21.148	ug/L	21.148	ppb	05:33:33
1	Si 251.611†	793088.8	770373.7	23559	ug/L	23559	ppb	05:33:08
1	Sn 189.927†	-134.6	-135.1	-17.928	ug/L	-17.928	ppb	05:33:33
1	Ti 334.940†	2571052.5	2500026.3	4044.9	ug/L	4044.9	ppb	05:33:08
1	Tl 190.801†	-193.9	-151.6	2.5822	ug/L	2.5822	ppb	05:33:33
1	U 409.014†	-8561.6	-6359.7	-195.37	ug/L	-195.37	ppb	05:33:08
1	V 292.402†	40709.1	40865.7	250.27	ug/L	250.27	ppb	05:33:13
1	Zn 213.857†	28535.7	26929.4	227.81	ug/L	227.81	ppb	05:33:13
1	SiO2†	798807.7	775951.7	50805	ug/L	50805	ppb	05:34:41
2	Sc Radial	5954.8	5954.8	105	%			05:32:35
2	Y RADIAL	7146.7	7146.7	116.0	%			05:32:35
2	Al 396.153Radial†	259400.3	246723.0	182390	ug/L	182390	ppb	05:32:15
2	Ca 317.933Radial†	19419.5	18451.2	28215	ug/L	28215	ppb	05:32:15
2	Fe 238.204 Radial†	14331.4	13623.9	137190	ug/L	137190	ppb	05:32:15
2	K 766.490 Radial†	60352.2	55227.7	10022	ug/L	10022	ppb	05:32:15
2	Mg 279.077 IEC†	592.8	562.0	20810	ug/L	20810	ppb	05:32:35
2	Na 589.592 Radial†	21091.8	20675.3	7771.3	ug/L	7771.3	ppb	05:32:15
2	Sr 421.552†	41991.8	39932.9	269.31	ug/L	269.31	ppb	05:32:15
2	Sc 361.383	927721.1	927721.1	104.83	%			05:33:39
2	Y 371.029	848652.7	848652.7	114.36	%			05:33:39
2	Ag 328.068†	-8802.6	-8624.6	4.5836	ug/L	4.5836	ppb	05:33:44
2	As 188.979†	-52.1	-20.5	46.804	ug/L	46.804	ppb	05:34:04
2	B 249.677†	1402.5	1861.7	22.074	ug/L	22.074	ppb	05:33:44
2	Ba 233.527†	190164.9	181414.3	1383.5	ug/L	1383.5	ppb	05:33:44
2	Be 313.107†	-7080.5	-1434.0	7.4157	ug/L	7.4157	ppb	05:33:44
2	Cd 226.502†	1141.9	1277.1	0.1798	ug/L	0.1798	ppb	05:34:04
2	Co 228.616†	2894.8	2833.1	44.991	ug/L	44.991	ppb	05:34:04
2	Cr 267.716†	11808.4	11177.4	123.42	ug/L	123.42	ppb	05:33:44
2	Cu 324.752†	38647.9	30098.4	94.533	ug/L	94.533	ppb	05:33:44
2	Mn 257.610†	1787528.1	1704756.7	1865.9	ug/L	1865.9	ppb	05:33:39
2	Mo 202.031†	-77.3	-93.7	3.6260	ug/L	3.6260	ppb	05:34:04
2	Ni 231.604†	2824.4	2624.1	62.230	ug/L	62.230	ppb	05:34:04

2	P 214.914†	1364.2	1081.4	579.22	ug/L	579.22 ppb	05:34:04
2	Pb 220.353†	875.4	887.6	133.35	ug/L	133.35 ppb	05:34:04
2	S 181.975 Axial†	391.1	331.6	448.97	ug/L	448.97 ppb	05:34:04
2	Sb 206.836†	93.5	59.5	2.6315	ug/L	2.6315 ppb	05:34:04
2	Se 196.026†	-757.8	-699.5	29.518	ug/L	29.518 ppb	05:34:04
2	Si 251.611†	808548.1	770782.7	23572	ug/L	23572 ppb	05:33:39
2	Sn 189.927†	-149.0	-146.4	-19.898	ug/L	-19.898 ppb	05:34:04
2	Ti 334.940†	2620133.8	2500365.0	4045.4	ug/L	4045.4 ppb	05:33:39
2	Tl 190.801†	-191.3	-145.6	4.2655	ug/L	4.2655 ppb	05:34:04
2	U 409.014†	-8642.6	-6282.2	-193.01	ug/L	-193.01 ppb	05:33:39
2	V 292.402†	40692.7	40114.1	245.46	ug/L	245.46 ppb	05:33:44
2	Zn 213.857†	28575.6	26451.6	223.67	ug/L	223.67 ppb	05:33:44
2	SiO2†	800544.6	763167.3	49968	ug/L	49968 ppb	05:34:47
3	Sc Radial	5936.2	5936.2	105	%		05:33:00
3	Y RADIAL	7112.0	7112.0	115.5	%		05:33:00
3	Al 396.153Radial†	257767.1	245938.0	181810	ug/L	181810 ppb	05:32:40
3	Ca 317.933Radial†	19294.3	18389.7	28121	ug/L	28121 ppb	05:32:40
3	Fe 238.204 Radial†	14199.0	13540.3	136340	ug/L	136340 ppb	05:32:40
3	K 766.490 Radial†	60085.1	55152.7	10009	ug/L	10009 ppb	05:32:40
3	Mg 279.077 IEC†	583.0	554.5	20531	ug/L	20531 ppb	05:33:00
3	Na 589.592 Radial†	20794.5	20454.6	7688.3	ug/L	7688.3 ppb	05:32:40
3	Sr 421.552†	41685.4	39765.8	268.18	ug/L	268.18 ppb	05:32:40
3	Sc 361.383	912654.2	912654.2	103.13	%		05:34:10
3	Y 371.029	835448.9	835448.9	112.58	%		05:34:10
3	Ag 328.068†	-8640.4	-8606.0	4.4238	ug/L	4.4238 ppb	05:34:15
3	As 188.979†	-61.7	-30.6	42.596	ug/L	42.596 ppb	05:34:35
3	B 249.677†	1370.5	1852.8	21.989	ug/L	21.989 ppb	05:34:15
3	Ba 233.527†	189922.1	184173.6	1404.5	ug/L	1404.5 ppb	05:34:15
3	Be 313.107†	-7018.0	-1484.9	7.4052	ug/L	7.4052 ppb	05:34:15
3	Cd 226.502†	1150.2	1303.2	0.5478	ug/L	0.5478 ppb	05:34:35
3	Co 228.616†	2906.2	2889.8	46.101	ug/L	46.101 ppb	05:34:35
3	Cr 267.716†	11806.7	11361.6	125.40	ug/L	125.40 ppb	05:34:15
3	Cu 324.752†	38937.8	30988.1	97.078	ug/L	97.078 ppb	05:34:15
3	Mn 257.610†	1760718.6	1706910.6	1868.2	ug/L	1868.2 ppb	05:34:10
3	Mo 202.031†	-78.3	-95.9	3.4243	ug/L	3.4243 ppb	05:34:35
3	Ni 231.604†	2829.8	2673.9	63.410	ug/L	63.410 ppb	05:34:35
3	P 214.914†	1361.0	1099.8	590.24	ug/L	590.24 ppb	05:34:35
3	Pb 220.353†	892.6	918.1	136.84	ug/L	136.84 ppb	05:34:35
3	S 181.975 Axial†	399.0	345.5	469.37	ug/L	469.37 ppb	05:34:35
3	Sb 206.836†	85.4	53.2	0.5471	ug/L	0.5471 ppb	05:34:35
3	Se 196.026†	-770.5	-723.7	12.396	ug/L	12.396 ppb	05:34:35
3	Si 251.611†	796230.0	771571.4	23596	ug/L	23596 ppb	05:34:10
3	Sn 189.927†	-140.1	-140.1	-18.856	ug/L	-18.856 ppb	05:34:35
3	Ti 334.940†	2580332.1	2503032.8	4049.7	ug/L	4049.7 ppb	05:34:10
3	Tl 190.801†	-188.5	-145.9	4.2033	ug/L	4.2033 ppb	05:34:35
3	U 409.014†	-8534.5	-6313.5	-193.78	ug/L	-193.78 ppb	05:34:10
3	V 292.402†	40795.7	40854.8	250.58	ug/L	250.58 ppb	05:34:15
3	Zn 213.857†	28605.9	26931.0	228.06	ug/L	228.06 ppb	05:34:15
3	SiO2†	793174.1	768627.4	50325	ug/L	50325 ppb	05:34:53

Mean Data: 241711004|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916947.1	103.61	%	1.062				1.02%
Sc Radial	5928.7	105	%	0.5				0.52%
Y 371.029	839416.1	113.12	%	1.082				0.96%
Y RADIAL	7109.4	115.4	%	0.63				0.54%
Ag 328.068†	-8653.7	4.5390	ug/L	0.10058	4.5390	ppb	0.10058	2.22%
Al 396.153Radial†	247201.5	182740	ug/L	1152.4	182740	ppb	1152.4	0.63%
As 188.979†	-22.4	46.058	ug/L	3.1565	46.058	ppb	3.1565	6.85%
B 249.677†	1856.6	21.928	ug/L	0.1835	21.928	ppb	0.1835	0.84%
Ba 233.527†	183358.8	1398.3	ug/L	12.86	1398.3	ppb	12.86	0.92%
Be 313.107†	-1532.4	7.3816	ug/L	0.05031	7.3816	ppb	0.05031	0.68%
Ca 317.933Radial†	18498.8	28288	ug/L	212.8	28288	ppb	212.8	0.75%
Cd 226.502†	1297.3	0.3757	ug/L	0.18518	0.3757	ppb	0.18518	49.29%
Co 228.616†	2877.2	45.845	ug/L	0.7597	45.845	ppb	0.7597	1.66%
Cr 267.716†	11300.1	124.75	ug/L	1.155	124.75	ppb	1.155	0.93%
Cu 324.752†	30607.0	96.025	ug/L	1.3276	96.025	ppb	1.3276	1.38%
Fe 238.204 Radial†	13647.8	137430	ug/L	1221.3	137430	ppb	1221.3	0.89%
K 766.490 Radial†	55418.4	10057	ug/L	72.2	10057	ppb	72.2	0.72%

Mg 279.077 IEC†	558.8	20692	ug/L	144.4	20692	ppb	144.4	0.70%
Mn 257.610†	1706065.6	1867.4	ug/L	1.26	1867.4	ppb	1.26	0.07%
Mo 202.031†	-102.8	3.0492	ug/L	0.83060	3.0492	ppb	0.83060	27.24%
Na 589.592 Radial†	20669.4	7769.0	ug/L	79.66	7769.0	ppb	79.66	1.03%
Ni 231.604†	2649.9	62.841	ug/L	0.5909	62.841	ppb	0.5909	0.94%
P 214.914†	1096.0	587.59	ug/L	7.413	587.59	ppb	7.413	1.26%
Pb 220.353†	909.7	135.98	ug/L	2.324	135.98	ppb	2.324	1.71%
S 181.975 Axial†	338.3	458.75	ug/L	10.224	458.75	ppb	10.224	2.23%
Sb 206.836†	51.6	0.0078	ug/L	2.93075	0.0078	ppb	2.93075	>999.9%
Se 196.026†	-715.0	21.021	ug/L	8.5614	21.021	ppb	8.5614	40.73%
Si 251.611†	770909.3	23576	ug/L	18.6	23576	ppb	18.6	0.08%
Sn 189.927†	-140.5	-18.894	ug/L	0.9859	-18.894	ppb	0.9859	5.22%
Sr 421.552†	39972.0	269.57	ug/L	1.539	269.57	ppb	1.539	0.57%
Ti 334.940†	2501141.4	4046.7	ug/L	2.65	4046.7	ppb	2.65	0.07%
Tl 190.801†	-147.7	3.6837	ug/L	0.95438	3.6837	ppb	0.95438	25.91%
U 409.014†	-6318.5	-194.05	ug/L	1.207	-194.05	ppb	1.207	0.62%
V 292.402†	40611.5	248.77	ug/L	2.867	248.77	ppb	2.867	1.15%
Zn 213.857†	26770.6	226.51	ug/L	2.468	226.51	ppb	2.468	1.09%
SiO2†	769248.8	50366	ug/L	420.0	50366	ppb	420.0	0.83%

Sequence No.: 141
Sample ID: 241711005|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 146
Date Collected: 12/10/2009 05:37:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711005|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6031.8	6031.8	107	%			05:39:19
1	Y RADIAL	7272.0	7272.0	118.1	%			05:39:19
1	Al 396.153Radial†	114604.5	107624.2	79561	ug/L	79561	ppb	05:38:59
1	Ca 317.933Radial†	50793.5	47673.1	72900	ug/L	72900	ppb	05:38:59
1	Fe 238.204 Radial†	13236.9	12422.3	125090	ug/L	125090	ppb	05:38:59
1	K 766.490 Radial†	60773.0	54890.4	9912.7	ug/L	9912.7	ppb	05:38:59
1	Mg 279.077 IEC†	465.4	435.3	16101	ug/L	16101	ppb	05:39:19
1	Na 589.592 Radial†	24271.1	23404.5	8797.1	ug/L	8797.1	ppb	05:38:59
1	Sr 421.552†	40768.2	38274.4	257.70	ug/L	257.70	ppb	05:38:59
1	Sc 361.383	877926.0	877926.0	99.204	%			05:40:22
1	Y 371.029	847383.5	847383.5	114.19	%			05:40:17
1	Ag 328.068†	-7982.4	-8274.0	1.5978	ug/L	1.5978	ppb	05:40:42
1	As 188.979†	-30.2	-1.3	44.581	ug/L	44.581	ppb	05:40:42
1	B 249.677†	1088.9	1621.5	18.461	ug/L	18.461	ppb	05:40:22
1	Ba 233.527†	147936.3	149135.7	1137.9	ug/L	1137.9	ppb	05:40:22
1	Be 313.107†	-3464.8	1827.6	6.7124	ug/L	6.7124	ppb	05:40:22
1	Cd 226.502†	1196.2	1393.6	2.6598	ug/L	2.6598	ppb	05:40:42
1	Co 228.616†	2829.9	2924.4	48.908	ug/L	48.908	ppb	05:40:42
1	Cr 267.716†	7871.4	7847.6	87.280	ug/L	87.280	ppb	05:40:42
1	Cu 324.752†	33272.2	26770.6	84.238	ug/L	84.238	ppb	05:40:22
1	Mn 257.610†	3807821.6	3837980.2	4183.0	ug/L	4183.0	ppb	05:40:17
1	Mo 202.031†	-86.1	-106.8	1.9142	ug/L	1.9142	ppb	05:40:42
1	Ni 231.604†	3078.4	3033.0	71.932	ug/L	71.932	ppb	05:40:42
1	P 214.914†	3387.1	3194.3	1810.7	ug/L	1810.7	ppb	05:40:42
1	Pb 220.353†	1501.2	1565.8	190.55	ug/L	190.55	ppb	05:40:42
1	S 181.975 Axial†	680.1	644.0	926.08	ug/L	926.08	ppb	05:40:42
1	Sb 206.836†	73.9	44.9	3.6862	ug/L	3.6862	ppb	05:40:42
1	Se 196.026†	-727.4	-709.8	-28.731	ug/L	-28.731	ppb	05:40:42
1	Si 251.611†	656804.6	661568.2	20231	ug/L	20231	ppb	05:40:22
1	Sn 189.927†	-227.7	-233.8	-30.265	ug/L	-30.265	ppb	05:40:42
1	Ti 334.940†	1881809.4	1897878.1	3073.3	ug/L	3073.3	ppb	05:40:17
1	Tl 190.801†	-213.7	-178.6	-1.8394	ug/L	-1.8394	ppb	05:40:42
1	U 409.014†	-8483.2	-6589.1	-199.99	ug/L	-199.99	ppb	05:40:22
1	V 292.402†	34440.1	36013.0	220.57	ug/L	220.57	ppb	05:40:22
1	Zn 213.857†	41503.1	41029.0	356.09	ug/L	356.09	ppb	05:40:22
1	SiO2†	667707.2	672577.4	44036	ug/L	44036	ppb	05:41:51
2	Sc Radial	5732.8	5732.8	101	%			05:39:44
2	Y RADIAL	6962.7	6962.7	113.1	%			05:39:44
2	Al 396.153Radial†	117221.1	115821.0	85620	ug/L	85620	ppb	05:39:24
2	Ca 317.933Radial†	51810.8	51165.3	78240	ug/L	78240	ppb	05:39:24
2	Fe 238.204 Radial†	13488.5	13319.1	134120	ug/L	134120	ppb	05:39:24
2	K 766.490 Radial†	62068.7	59146.3	10686	ug/L	10686	ppb	05:39:24
2	Mg 279.077 IEC†	470.5	463.0	17127	ug/L	17127	ppb	05:39:44
2	Na 589.592 Radial†	24699.1	25015.7	9402.7	ug/L	9402.7	ppb	05:39:24
2	Sr 421.552†	41547.7	41040.9	276.33	ug/L	276.33	ppb	05:39:24
2	Sc 361.383	883153.3	883153.3	99.794	%			05:40:54
2	Y 371.029	844710.1	844710.1	113.83	%			05:40:48
2	Ag 328.068†	-8005.1	-8249.2	4.5075	ug/L	4.5075	ppb	05:41:14
2	As 188.979†	-48.8	-19.7	38.248	ug/L	38.248	ppb	05:41:14
2	B 249.677†	1154.7	1680.9	18.551	ug/L	18.551	ppb	05:40:54
2	Ba 233.527†	148825.2	149143.8	1138.3	ug/L	1138.3	ppb	05:40:54
2	Be 313.107†	-3273.9	2039.6	6.7396	ug/L	6.7396	ppb	05:40:54
2	Cd 226.502†	1197.6	1387.9	1.6957	ug/L	1.6957	ppb	05:41:14
2	Co 228.616†	2857.1	2934.7	49.036	ug/L	49.036	ppb	05:41:14
2	Cr 267.716†	7875.6	7804.9	86.980	ug/L	86.980	ppb	05:41:14
2	Cu 324.752†	33541.0	26841.4	84.904	ug/L	84.904	ppb	05:40:54
2	Mn 257.610†	3795295.8	3802709.9	4145.6	ug/L	4145.6	ppb	05:40:48
2	Mo 202.031†	-83.9	-104.1	2.7345	ug/L	2.7345	ppb	05:41:14
2	Ni 231.604†	3100.0	3036.2	72.008	ug/L	72.008	ppb	05:41:14

2	P 214.914†	3370.1	3157.1	1783.4	ug/L	1783.4	ppb	05:41:14
2	Pb 220.353†	1525.3	1581.0	192.95	ug/L	192.95	ppb	05:41:14
2	S 181.975 Axial†	672.6	632.6	908.10	ug/L	908.10	ppb	05:41:14
2	Sb 206.836†	49.5	20.0	-4.2978	ug/L	-4.2978	ppb	05:41:14
2	Se 196.026†	-727.2	-705.3	2.4564	ug/L	2.4564	ppb	05:41:14
2	Si 251.611†	661647.7	662502.5	20260	ug/L	20260	ppb	05:40:54
2	Sn 189.927†	-224.6	-229.4	-28.841	ug/L	-28.841	ppb	05:41:14
2	Ti 334.940†	1876839.0	1881669.9	3047.4	ug/L	3047.4	ppb	05:40:48
2	Tl 190.801†	-188.8	-152.4	5.4109	ug/L	5.4109	ppb	05:41:14
2	U 409.014†	-8518.1	-6573.4	-200.69	ug/L	-200.69	ppb	05:40:54
2	V 292.402†	34636.6	36004.4	219.20	ug/L	219.20	ppb	05:40:54
2	Zn 213.857†	41717.4	40996.1	354.89	ug/L	354.89	ppb	05:40:54
2	SiO2†	667966.3	668853.3	43791	ug/L	43791	ppb	05:41:57
3	Sc Radial	5777.6	5777.6	102	%			05:40:09
3	Y RADIAL	7017.5	7017.5	113.9	%			05:40:09
3	Al 396.153Radial†	120053.7	117699.0	87009	ug/L	87009	ppb	05:39:49
3	Ca 317.933Radial†	52963.6	51898.1	79361	ug/L	79361	ppb	05:39:49
3	Fe 238.204 Radial†	13793.9	13515.0	136090	ug/L	136090	ppb	05:39:49
3	K 766.490 Radial†	63397.8	59973.3	10836	ug/L	10836	ppb	05:39:49
3	Mg 279.077 IEC†	469.2	458.2	16945	ug/L	16945	ppb	05:40:09
3	Na 589.592 Radial†	25332.2	25447.0	9564.8	ug/L	9564.8	ppb	05:39:49
3	Sr 421.552†	42665.3	41817.8	281.56	ug/L	281.56	ppb	05:39:49
3	Sc 361.383	872834.1	872834.1	98.628	%			05:41:25
3	Y 371.029	838968.5	838968.5	113.06	%			05:41:20
3	Ag 328.068†	-7963.2	-8301.5	4.8741	ug/L	4.8741	ppb	05:41:45
3	As 188.979†	-30.0	-1.2	46.171	ug/L	46.171	ppb	05:41:45
3	B 249.677†	1098.6	1637.7	17.351	ug/L	17.351	ppb	05:41:25
3	Ba 233.527†	147314.2	149374.9	1140.1	ug/L	1140.1	ppb	05:41:25
3	Be 313.107†	-3432.6	1839.9	6.6799	ug/L	6.6799	ppb	05:41:25
3	Cd 226.502†	1206.6	1411.2	1.7506	ug/L	1.7506	ppb	05:41:45
3	Co 228.616†	2841.0	2952.2	49.334	ug/L	49.334	ppb	05:41:45
3	Cr 267.716†	7866.5	7888.9	87.920	ug/L	87.920	ppb	05:41:45
3	Cu 324.752†	32946.7	26636.2	84.408	ug/L	84.408	ppb	05:41:25
3	Mn 257.610†	3759398.4	3811275.9	4155.1	ug/L	4155.1	ppb	05:41:20
3	Mo 202.031†	-72.3	-93.3	3.5769	ug/L	3.5769	ppb	05:41:45
3	Ni 231.604†	3078.3	3051.0	72.357	ug/L	72.357	ppb	05:41:45
3	P 214.914†	3362.8	3189.6	1801.6	ug/L	1801.6	ppb	05:41:45
3	Pb 220.353†	1530.1	1603.9	195.77	ug/L	195.77	ppb	05:41:45
3	S 181.975 Axial†	689.5	657.6	944.48	ug/L	944.48	ppb	05:41:45
3	Sb 206.836†	54.2	25.3	-2.6398	ug/L	-2.6398	ppb	05:41:45
3	Se 196.026†	-736.2	-723.0	-1.8372	ug/L	-1.8372	ppb	05:41:45
3	Si 251.611†	651919.8	660477.8	20198	ug/L	20198	ppb	05:41:25
3	Sn 189.927†	-236.1	-243.6	-31.108	ug/L	-31.108	ppb	05:41:45
3	Ti 334.940†	1859406.8	1886230.1	3054.8	ug/L	3054.8	ppb	05:41:20
3	Tl 190.801†	-196.6	-162.4	2.6753	ug/L	2.6753	ppb	05:41:45
3	U 409.014†	-8327.2	-6480.8	-198.35	ug/L	-198.35	ppb	05:41:25
3	V 292.402†	34207.2	35979.4	218.73	ug/L	218.73	ppb	05:41:25
3	Zn 213.857†	41175.4	40940.8	354.21	ug/L	354.21	ppb	05:41:25
3	SiO2†	665524.4	674290.8	44147	ug/L	44147	ppb	05:42:02

Mean Data: 241711005|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877971.1	99.209	%	0.5830				0.59%
Sc Radial	5847.4	103	%	2.8				2.76%
Y 371.029	843687.4	113.69	%	0.579				0.51%
Y RADIAL	7084.1	115.0	%	2.68				2.33%
Ag 328.068†	-8274.9	3.6598	ug/L	1.79515	3.6598	ppb	1.79515	49.05%
Al 396.153Radial†	113714.7	84063	ug/L	3960.5	84063	ppb	3960.5	4.71%
As 188.979†	-7.4	43.000	ug/L	4.1913	43.000	ppb	4.1913	9.75%
B 249.677†	1646.7	18.121	ug/L	0.6682	18.121	ppb	0.6682	3.69%
Ba 233.527†	149218.1	1138.7	ug/L	1.19	1138.7	ppb	1.19	0.10%
Be 313.107†	1902.4	6.7106	ug/L	0.02990	6.7106	ppb	0.02990	0.45%
Ca 317.933Radial†	50245.5	76834	ug/L	3452.4	76834	ppb	3452.4	4.49%
Cd 226.502†	1397.6	2.0354	ug/L	0.54149	2.0354	ppb	0.54149	26.60%
Co 228.616†	2937.1	49.093	ug/L	0.2187	49.093	ppb	0.2187	0.45%
Cr 267.716†	7847.1	87.393	ug/L	0.4799	87.393	ppb	0.4799	0.55%
Cu 324.752†	26749.4	84.517	ug/L	0.3463	84.517	ppb	0.3463	0.41%
Fe 238.204 Radial†	13085.4	131760	ug/L	5866.4	131760	ppb	5866.4	4.45%
K 766.490 Radial†	58003.3	10478	ug/L	495.4	10478	ppb	495.4	4.73%

Mg 279.077 IEC†	452.1	16724	ug/L	547.5	16724	ppb	547.5	3.27%
Mn 257.610†	3817322.0	4161.2	ug/L	19.47	4161.2	ppb	19.47	0.47%
Mo 202.031†	-101.4	2.7419	ug/L	0.83137	2.7419	ppb	0.83137	30.32%
Na 589.592 Radial†	24622.4	9254.9	ug/L	404.66	9254.9	ppb	404.66	4.37%
Ni 231.604†	3040.1	72.099	ug/L	0.2268	72.099	ppb	0.2268	0.31%
P 214.914†	3180.3	1798.6	ug/L	13.94	1798.6	ppb	13.94	0.77%
Pb 220.353†	1583.6	193.09	ug/L	2.614	193.09	ppb	2.614	1.35%
S 181.975 Axial†	644.7	926.22	ug/L	18.193	926.22	ppb	18.193	1.96%
Sb 206.836†	30.1	-1.0838	ug/L	4.21327	-1.0838	ppb	4.21327	388.75%
Se 196.026†	-712.7	-9.3704	ug/L	16.90321	-9.3704	ppb	16.90321	180.39%
Si 251.611†	661516.2	20230	ug/L	31.0	20230	ppb	31.0	0.15%
Sn 189.927†	-235.6	-30.072	ug/L	1.1456	-30.072	ppb	1.1456	3.81%
Sr 421.552†	40377.7	271.86	ug/L	12.541	271.86	ppb	12.541	4.61%
Ti 334.940†	1888592.7	3058.5	ug/L	13.36	3058.5	ppb	13.36	0.44%
Tl 190.801†	-164.5	2.0823	ug/L	3.66133	2.0823	ppb	3.66133	175.83%
U 409.014†	-6547.8	-199.68	ug/L	1.200	-199.68	ppb	1.200	0.60%
V 292.402†	35998.9	219.50	ug/L	0.958	219.50	ppb	0.958	0.44%
Zn 213.857†	40988.6	355.06	ug/L	0.949	355.06	ppb	0.949	0.27%
SiO2†	671907.2	43992	ug/L	182.1	43992	ppb	182.1	0.41%

Sequence No.: 142
Sample ID: 241711006|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 147
Date Collected: 12/10/2009 05:44:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711006|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5756.3	5756.3	102	%			05:46:28
1	Y RADIAL	6731.8	6731.8	109.3	%			05:46:28
1	Al 396.153Radial†	162145.4	159547.2	117940	ug/L	117940	ppb	05:46:08
1	Ca 317.933Radial†	12982.0	12754.7	19504	ug/L	19504	ppb	05:46:08
1	Fe 238.204 Radial†	10834.3	10653.3	107270	ug/L	107270	ppb	05:46:08
1	K 766.490 Radial†	43373.2	40502.5	7345.2	ug/L	7345.2	ppb	05:46:08
1	Mg 279.077 IEC†	478.5	469.0	17372	ug/L	17372	ppb	05:46:28
1	Na 589.592 Radial†	5060.0	5594.3	2102.7	ug/L	2102.7	ppb	05:46:08
1	Sr 421.552†	33879.2	33328.7	224.81	ug/L	224.81	ppb	05:46:08
1	Sc 361.383	922864.3	922864.3	104.28	%			05:47:26
1	Y 371.029	824583.0	824583.0	111.12	%			05:47:26
1	Ag 328.068†	-6940.8	-6883.4	3.0317	ug/L	3.0317	ppb	05:47:31
1	As 188.979†	-70.9	-38.8	32.885	ug/L	32.885	ppb	05:47:51
1	B 249.677†	879.1	1366.8	15.318	ug/L	15.318	ppb	05:47:31
1	Ba 233.527†	143455.9	137577.7	1049.4	ug/L	1049.4	ppb	05:47:31
1	Be 313.107†	-11514.7	-5721.7	5.3979	ug/L	5.3979	ppb	05:47:31
1	Cd 226.502†	883.7	1035.3	0.5404	ug/L	0.5404	ppb	05:47:51
1	Co 228.616†	2473.6	2443.8	38.184	ug/L	38.184	ppb	05:47:51
1	Cr 267.716†	8428.5	7995.5	88.506	ug/L	88.506	ppb	05:47:31
1	Cu 324.752†	24092.2	16334.4	52.977	ug/L	52.977	ppb	05:47:31
1	Mn 257.610†	1662214.7	1593562.3	1742.1	ug/L	1742.1	ppb	05:47:26
1	Mo 202.031†	-66.5	-83.7	2.1560	ug/L	2.1560	ppb	05:47:51
1	Ni 231.604†	2351.0	2184.3	51.800	ug/L	51.800	ppb	05:47:51
1	P 214.914†	975.7	715.7	370.72	ug/L	370.72	ppb	05:47:51
1	Pb 220.353†	1511.1	1501.6	193.15	ug/L	193.15	ppb	05:47:51
1	S 181.975 Axial†	195.0	145.5	189.60	ug/L	189.60	ppb	05:47:51
1	Sb 206.836†	81.6	48.7	1.7699	ug/L	1.7699	ppb	05:47:51
1	Se 196.026†	-592.6	-544.8	20.756	ug/L	20.756	ppb	05:47:51
1	Si 251.611†	726191.7	695867.0	21281	ug/L	21281	ppb	05:47:26
1	Sn 189.927†	-121.8	-121.0	-16.953	ug/L	-16.953	ppb	05:47:51
1	Ti 334.940†	2467182.1	2366846.9	3829.0	ug/L	3829.0	ppb	05:47:26
1	Tl 190.801†	-169.4	-125.6	6.0194	ug/L	6.0194	ppb	05:47:51
1	U 409.014†	-8421.1	-6113.2	-184.46	ug/L	-184.46	ppb	05:47:31
1	V 292.402†	32353.7	32321.8	197.60	ug/L	197.60	ppb	05:47:31
1	Zn 213.857†	22227.3	20507.4	173.28	ug/L	173.28	ppb	05:47:31
1	SiO2†	714890.9	685049.3	44854	ug/L	44854	ppb	05:49:00
2	Sc Radial	5838.8	5838.8	103	%			05:46:53
2	Y RADIAL	6816.6	6816.6	110.7	%			05:46:53
2	Al 396.153Radial†	163693.1	158793.5	117390	ug/L	117390	ppb	05:46:33
2	Ca 317.933Radial†	13045.6	12635.8	19322	ug/L	19322	ppb	05:46:33
2	Fe 238.204 Radial†	10925.3	10590.9	106650	ug/L	106650	ppb	05:46:33
2	K 766.490 Radial†	43510.1	40032.1	7259.8	ug/L	7259.8	ppb	05:46:33
2	Mg 279.077 IEC†	482.6	466.4	17275	ug/L	17275	ppb	05:46:53
2	Na 589.592 Radial†	5092.3	5555.2	2088.0	ug/L	2088.0	ppb	05:46:33
2	Sr 421.552†	34142.0	33112.4	223.35	ug/L	223.35	ppb	05:46:33
2	Sc 361.383	916960.4	916960.4	103.61	%			05:47:57
2	Y 371.029	818228.3	818228.3	110.26	%			05:47:57
2	Ag 328.068†	-6799.4	-6789.8	3.2580	ug/L	3.2580	ppb	05:48:02
2	As 188.979†	-71.7	-40.0	32.265	ug/L	32.265	ppb	05:48:22
2	B 249.677†	892.7	1385.4	15.804	ug/L	15.804	ppb	05:48:02
2	Ba 233.527†	141434.9	136513.0	1041.3	ug/L	1041.3	ppb	05:48:02
2	Be 313.107†	-11493.0	-5771.8	5.3717	ug/L	5.3717	ppb	05:48:02
2	Cd 226.502†	890.5	1047.3	0.7339	ug/L	0.7339	ppb	05:48:22
2	Co 228.616†	2486.5	2471.5	38.736	ug/L	38.736	ppb	05:48:22
2	Cr 267.716†	8330.4	7952.8	88.031	ug/L	88.031	ppb	05:48:02
2	Cu 324.752†	23873.0	16271.6	52.763	ug/L	52.763	ppb	05:48:02
2	Mn 257.610†	1648367.2	1590460.8	1738.7	ug/L	1738.7	ppb	05:47:57
2	Mo 202.031†	-70.9	-88.4	1.8075	ug/L	1.8075	ppb	05:48:22
2	Ni 231.604†	2349.0	2197.0	52.099	ug/L	52.099	ppb	05:48:22

2	P 214.914†	985.6	731.3	380.36 ug/L	380.36 ppb	05:48:22
2	Pb 220.353†	1520.0	1519.5	195.17 ug/L	195.17 ppb	05:48:22
2	S 181.975 Axial†	206.5	157.8	207.64 ug/L	207.64 ppb	05:48:22
2	Sb 206.836†	80.5	48.1	1.6139 ug/L	1.6139 ppb	05:48:22
2	Se 196.026†	-606.5	-561.9	8.5405 ug/L	8.5405 ppb	05:48:22
2	Si 251.611†	721226.8	695558.9	21272 ug/L	21272 ppb	05:47:57
2	Sn 189.927†	-117.5	-117.7	-16.408 ug/L	-16.408 ppb	05:48:22
2	Ti 334.940†	2448928.8	2364463.4	3825.2 ug/L	3825.2 ppb	05:47:57
2	Tl 190.801†	-174.3	-131.3	4.3200 ug/L	4.3200 ppb	05:48:22
2	U 409.014†	-8199.6	-5951.4	-179.86 ug/L	-179.86 ppb	05:48:02
2	V 292.402†	31936.6	32118.9	196.34 ug/L	196.34 ppb	05:48:02
2	Zn 213.857†	21866.3	20296.3	171.44 ug/L	171.44 ppb	05:48:02
2	SiO2†	716687.5	691197.2	45257 ug/L	45257 ppb	05:49:05
3	Sc Radial	5792.9	5792.9	102 %		05:47:19
3	Y RADIAL	6800.2	6800.2	110.4 %		05:47:19
3	Al 396.153Radial†	164434.5	160776.8	118850 ug/L	118850 ppb	05:46:58
3	Ca 317.933Radial†	13187.3	12874.7	19688 ug/L	19688 ppb	05:46:58
3	Fe 238.204 Radial†	10957.9	10706.7	107810 ug/L	107810 ppb	05:46:58
3	K 766.490 Radial†	43978.7	40824.7	7403.9 ug/L	7403.9 ppb	05:46:58
3	Mg 279.077 IEC†	480.4	467.9	17331 ug/L	17331 ppb	05:47:19
3	Na 589.592 Radial†	5122.4	5623.8	2113.8 ug/L	2113.8 ppb	05:46:58
3	Sr 421.552†	34327.2	33555.9	226.34 ug/L	226.34 ppb	05:46:58
3	Sc 361.383	916531.8	916531.8	103.57 %		05:48:28
3	Y 371.029	818563.6	818563.6	110.31 %		05:48:28
3	Ag 328.068†	-6814.4	-6807.3	3.5452 ug/L	3.5452 ppb	05:48:33
3	As 188.979†	-67.1	-35.5	34.214 ug/L	34.214 ppb	05:48:53
3	B 249.677†	907.1	1399.7	15.961 ug/L	15.961 ppb	05:48:33
3	Ba 233.527†	142038.2	137159.4	1046.2 ug/L	1046.2 ppb	05:48:33
3	Be 313.107†	-11668.5	-5946.5	5.2955 ug/L	5.2955 ppb	05:48:33
3	Cd 226.502†	889.0	1046.2	0.6051 ug/L	0.6051 ppb	05:48:53
3	Co 228.616†	2454.9	2442.1	38.165 ug/L	38.165 ppb	05:48:53
3	Cr 267.716†	8284.3	7912.1	87.614 ug/L	87.614 ppb	05:48:33
3	Cu 324.752†	24132.3	16532.7	53.582 ug/L	53.582 ppb	05:48:33
3	Mn 257.610†	1643824.1	1586818.1	1734.9 ug/L	1734.9 ppb	05:48:28
3	Mo 202.031†	-61.1	-79.0	2.4991 ug/L	2.4991 ppb	05:48:53
3	Ni 231.604†	2347.6	2196.6	52.092 ug/L	52.092 ppb	05:48:53
3	P 214.914†	968.9	715.6	370.45 ug/L	370.45 ppb	05:48:53
3	Pb 220.353†	1511.8	1512.3	194.56 ug/L	194.56 ppb	05:48:53
3	S 181.975 Axial†	204.0	155.5	203.95 ug/L	203.95 ppb	05:48:53
3	Sb 206.836†	75.5	43.3	0.0969 ug/L	0.0969 ppb	05:48:53
3	Se 196.026†	-606.5	-562.1	12.190 ug/L	12.190 ppb	05:48:53
3	Si 251.611†	719978.0	694678.6	21245 ug/L	21245 ppb	05:48:28
3	Sn 189.927†	-116.7	-117.0	-16.236 ug/L	-16.236 ppb	05:48:53
3	Ti 334.940†	2444108.8	2360914.7	3819.4 ug/L	3819.4 ppb	05:48:28
3	Tl 190.801†	-180.6	-137.5	2.5291 ug/L	2.5291 ppb	05:48:53
3	U 409.014†	-8122.3	-5880.4	-178.02 ug/L	-178.02 ppb	05:48:33
3	V 292.402†	32094.9	32286.2	197.31 ug/L	197.31 ppb	05:48:33
3	Zn 213.857†	21993.0	20428.4	172.51 ug/L	172.51 ppb	05:48:33
3	SiO2†	713860.9	688791.4	45099 ug/L	45099 ppb	05:49:11

Mean Data: 241711006|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918785.5	103.82	%	0.400				0.39%
Sc Radial	5796.0	102	%	0.7				0.71%
Y 371.029	820458.3	110.56	%	0.482				0.44%
Y RADIAL	6782.9	110.1	%	0.73				0.66%
Ag 328.068†	-6826.8	3.2783	ug/L	0.25737	3.2783	ppb	0.25737	7.85%
Al 396.153Radial†	159705.8	118060	ug/L	740.1	118060	ppb	740.1	0.63%
As 188.979†	-38.1	33.121	ug/L	0.9957	33.121	ppb	0.9957	3.01%
B 249.677†	1384.0	15.694	ug/L	0.3350	15.694	ppb	0.3350	2.13%
Ba 233.527†	137083.4	1045.6	ug/L	4.09	1045.6	ppb	4.09	0.39%
Be 313.107†	-5813.3	5.3551	ug/L	0.05320	5.3551	ppb	0.05320	0.99%
Ca 317.933Radial†	12755.0	19505	ug/L	182.7	19505	ppb	182.7	0.94%
Cd 226.502†	1042.9	0.6265	ug/L	0.09848	0.6265	ppb	0.09848	15.72%
Co 228.616†	2452.4	38.362	ug/L	0.3242	38.362	ppb	0.3242	0.85%
Cr 267.716†	7953.5	88.050	ug/L	0.4461	88.050	ppb	0.4461	0.51%
Cu 324.752†	16379.5	53.107	ug/L	0.4246	53.107	ppb	0.4246	0.80%
Fe 238.204 Radial†	10650.3	107240	ug/L	583.7	107240	ppb	583.7	0.54%
K 766.490 Radial†	40453.1	7336.3	ug/L	72.46	7336.3	ppb	72.46	0.99%

Mg 279.077 IEC†	467.7	17326	ug/L	48.7	17326	ppb	48.7	0.28%
Mn 257.610†	1590280.4	1738.6	ug/L	3.64	1738.6	ppb	3.64	0.21%
Mo 202.031†	-83.7	2.1542	ug/L	0.34581	2.1542	ppb	0.34581	16.05%
Na 589.592 Radial†	5591.1	2101.5	ug/L	12.94	2101.5	ppb	12.94	0.62%
Ni 231.604†	2192.6	51.997	ug/L	0.1711	51.997	ppb	0.1711	0.33%
P 214.914†	720.8	373.85	ug/L	5.644	373.85	ppb	5.644	1.51%
Pb 220.353†	1511.1	194.29	ug/L	1.036	194.29	ppb	1.036	0.53%
S 181.975 Axial†	152.9	200.39	ug/L	9.531	200.39	ppb	9.531	4.76%
Sb 206.836†	46.7	1.1602	ug/L	0.92417	1.1602	ppb	0.92417	79.66%
Se 196.026†	-556.3	13.829	ug/L	6.2703	13.829	ppb	6.2703	45.34%
Si 251.611†	695368.2	21266	ug/L	18.9	21266	ppb	18.9	0.09%
Sn 189.927†	-118.6	-16.532	ug/L	0.3742	-16.532	ppb	0.3742	2.26%
Sr 421.552†	33332.4	224.83	ug/L	1.495	224.83	ppb	1.495	0.67%
Ti 334.940†	2364075.0	3824.6	ug/L	4.82	3824.6	ppb	4.82	0.13%
Tl 190.801†	-131.5	4.2895	ug/L	1.74536	4.2895	ppb	1.74536	40.69%
U 409.014†	-5981.7	-180.78	ug/L	3.316	-180.78	ppb	3.316	1.83%
V 292.402†	32242.3	197.08	ug/L	0.663	197.08	ppb	0.663	0.34%
Zn 213.857†	20410.7	172.41	ug/L	0.923	172.41	ppb	0.923	0.54%
SiO2†	688345.9	45070	ug/L	202.9	45070	ppb	202.9	0.45%

Sequence No.: 143
Sample ID: 241711007|926576|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 148
Date Collected: 12/10/2009 05:51:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711007|926576|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5859.3	5859.3	103	%			05:53:38
1	Y RADIAL	6906.1	6906.1	112.1	%			05:53:38
1	Al 396.153Radial†	177497.3	171581.2	126840	ug/L	126840	ppb	05:53:18
1	Ca 317.933Radial†	15534.0	14996.7	22933	ug/L	22933	ppb	05:53:18
1	Fe 238.204 Radial†	13600.7	13139.8	132310	ug/L	132310	ppb	05:53:18
1	K 766.490 Radial†	47433.8	43677.1	7897.0	ug/L	7897.0	ppb	05:53:18
1	Mg 279.077 IEC†	509.4	490.6	18157	ug/L	18157	ppb	05:53:38
1	Na 589.592 Radial†	7613.1	7974.4	2997.3	ug/L	2997.3	ppb	05:53:18
1	Sr 421.552†	35619.0	34424.3	232.17	ug/L	232.17	ppb	05:53:18
1	Sc 361.383	924319.7	924319.7	104.45	%			05:54:37
1	Y 371.029	835775.1	835775.1	112.63	%			05:54:37
1	Ag 328.068†	-8521.5	-8386.3	4.2667	ug/L	4.2667	ppb	05:54:42
1	As 188.979†	-65.0	-33.0	41.352	ug/L	41.352	ppb	05:55:02
1	B 249.677†	1169.9	1644.0	17.958	ug/L	17.958	ppb	05:54:42
1	Ba 233.527†	165198.6	158178.3	1206.9	ug/L	1206.9	ppb	05:54:42
1	Be 313.107†	-10307.7	-4548.7	6.3574	ug/L	6.3574	ppb	05:54:42
1	Cd 226.502†	1141.9	1281.1	0.7117	ug/L	0.7117	ppb	05:55:02
1	Co 228.616†	3642.9	3559.6	58.985	ug/L	58.985	ppb	05:55:02
1	Cr 267.716†	9270.7	8789.0	97.623	ug/L	97.623	ppb	05:54:42
1	Cu 324.752†	29075.5	21069.2	68.025	ug/L	68.025	ppb	05:54:42
1	Mn 257.610†	3643598.4	3488090.9	3803.5	ug/L	3803.5	ppb	05:54:37
1	Mo 202.031†	-67.7	-84.8	3.8610	ug/L	3.8610	ppb	05:55:02
1	Ni 231.604†	2866.5	2674.3	63.413	ug/L	63.413	ppb	05:55:02
1	P 214.914†	1760.9	1465.9	797.02	ug/L	797.02	ppb	05:55:02
1	Pb 220.353†	1953.0	1922.4	242.27	ug/L	242.27	ppb	05:55:02
1	S 181.975 Axial†	263.0	210.3	282.60	ug/L	282.60	ppb	05:55:02
1	Sb 206.836†	68.2	35.7	-3.1192	ug/L	-3.1192	ppb	05:55:02
1	Se 196.026†	-750.3	-694.9	9.1890	ug/L	9.1890	ppb	05:55:02
1	Si 251.611†	721056.9	689854.3	21097	ug/L	21097	ppb	05:54:37
1	Sn 189.927†	-144.8	-142.9	-19.949	ug/L	-19.949	ppb	05:55:02
1	Ti 334.940†	2643086.8	2531538.4	4095.6	ug/L	4095.6	ppb	05:54:37
1	Tl 190.801†	-224.3	-177.9	5.1415	ug/L	5.1415	ppb	05:55:02
1	U 409.014†	-8753.2	-6418.4	-196.15	ug/L	-196.15	ppb	05:54:37
1	V 292.402†	42582.9	42066.7	259.28	ug/L	259.28	ppb	05:54:42
1	Zn 213.857†	26845.8	24895.8	210.25	ug/L	210.25	ppb	05:54:42
1	SiO2†	721999.9	690776.3	45229	ug/L	45229	ppb	05:56:12
2	Sc Radial	5852.8	5852.8	103	%			05:54:03
2	Y RADIAL	6891.8	6891.8	111.9	%			05:54:03
2	Al 396.153Radial†	177441.1	171716.9	126940	ug/L	126940	ppb	05:53:43
2	Ca 317.933Radial†	15590.5	15068.0	23042	ug/L	23042	ppb	05:53:43
2	Fe 238.204 Radial†	13601.4	13155.0	132460	ug/L	132460	ppb	05:53:43
2	K 766.490 Radial†	47653.4	43940.3	7944.8	ug/L	7944.8	ppb	05:53:43
2	Mg 279.077 IEC†	512.1	493.7	18272	ug/L	18272	ppb	05:54:03
2	Na 589.592 Radial†	7631.8	8000.7	3007.2	ug/L	3007.2	ppb	05:53:43
2	Sr 421.552†	35496.1	34343.5	231.63	ug/L	231.63	ppb	05:53:43
2	Sc 361.383	917395.6	917395.6	103.66	%			05:55:09
2	Y 371.029	830331.1	830331.1	111.89	%			05:55:09
2	Ag 328.068†	-8560.1	-8485.1	3.8580	ug/L	3.8580	ppb	05:55:14
2	As 188.979†	-38.3	-7.7	51.647	ug/L	51.647	ppb	05:55:34
2	B 249.677†	1090.5	1575.9	16.457	ug/L	16.457	ppb	05:55:14
2	Ba 233.527†	163955.0	158172.4	1206.9	ug/L	1206.9	ppb	05:55:14
2	Be 313.107†	-10629.7	-4933.7	6.2026	ug/L	6.2026	ppb	05:55:14
2	Cd 226.502†	1137.9	1285.6	0.7447	ug/L	0.7447	ppb	05:55:34
2	Co 228.616†	3653.1	3595.8	59.696	ug/L	59.696	ppb	05:55:34
2	Cr 267.716†	9255.6	8841.5	98.191	ug/L	98.191	ppb	05:55:14
2	Cu 324.752†	29222.2	21420.8	69.055	ug/L	69.055	ppb	05:55:14
2	Mn 257.610†	3612051.2	3483988.3	3799.0	ug/L	3799.0	ppb	05:55:09
2	Mo 202.031†	-77.7	-95.0	3.2101	ug/L	3.2101	ppb	05:55:34
2	Ni 231.604†	2852.2	2681.3	63.577	ug/L	63.577	ppb	05:55:34

2	P 214.914†	1738.2	1456.8	791.36	ug/L	791.36 ppb	05:55:34
2	Pb 220.353†	1942.7	1926.6	242.77	ug/L	242.77 ppb	05:55:34
2	S 181.975 Axial†	266.4	215.5	290.16	ug/L	290.16 ppb	05:55:34
2	Sb 206.836†	80.0	47.6	0.7918	ug/L	0.7918 ppb	05:55:34
2	Se 196.026†	-749.4	-699.4	6.9528	ug/L	6.9528 ppb	05:55:34
2	Si 251.611†	713955.5	688214.4	21047	ug/L	21047 ppb	05:55:09
2	Sn 189.927†	-122.9	-122.9	-16.552	ug/L	-16.552 ppb	05:55:34
2	Ti 334.940†	2619468.4	2527854.5	4089.6	ug/L	4089.6 ppb	05:55:09
2	Tl 190.801†	-221.0	-176.4	5.4963	ug/L	5.4963 ppb	05:55:34
2	U 409.014†	-8789.3	-6516.5	-198.91	ug/L	-198.91 ppb	05:55:09
2	V 292.402†	42219.6	42023.9	258.96	ug/L	258.96 ppb	05:55:14
2	Zn 213.857†	26605.8	24858.2	209.89	ug/L	209.89 ppb	05:55:14
2	SiO2†	718055.6	692188.8	45321	ug/L	45321 ppb	05:56:18
3	Sc Radial	5854.6	5854.6	103	%		05:54:28
3	Y RADIAL	6934.7	6934.7	112.6	%		05:54:28
3	Al 396.153Radial†	176323.0	170584.5	126100	ug/L	126100 ppb	05:54:08
3	Ca 317.933Radial†	15474.4	14951.3	22863	ug/L	22863 ppb	05:54:08
3	Fe 238.204 Radial†	13573.1	13123.8	132150	ug/L	132150 ppb	05:54:08
3	K 766.490 Radial†	47322.7	43606.8	7884.2	ug/L	7884.2 ppb	05:54:08
3	Mg 279.077 IEC†	514.7	496.1	18361	ug/L	18361 ppb	05:54:28
3	Na 589.592 Radial†	7537.0	7906.8	2971.9	ug/L	2971.9 ppb	05:54:08
3	Sr 421.552†	35257.5	34102.5	230.00	ug/L	230.00 ppb	05:54:08
3	Sc 361.383	915633.1	915633.1	103.46	%		05:55:41
3	Y 371.029	827898.5	827898.5	111.57	%		05:55:41
3	Ag 328.068†	-8458.0	-8402.3	4.1398	ug/L	4.1398 ppb	05:55:46
3	As 188.979†	-48.1	-17.2	47.711	ug/L	47.711 ppb	05:56:06
3	B 249.677†	1101.3	1588.3	16.768	ug/L	16.768 ppb	05:55:46
3	Ba 233.527†	163238.0	157783.8	1203.9	ug/L	1203.9 ppb	05:55:46
3	Be 313.107†	-10380.1	-4712.2	6.2850	ug/L	6.2850 ppb	05:55:46
3	Cd 226.502†	1150.3	1299.7	0.9286	ug/L	0.9286 ppb	05:56:06
3	Co 228.616†	3663.4	3612.4	60.023	ug/L	60.023 ppb	05:56:06
3	Cr 267.716†	9239.1	8842.7	98.197	ug/L	98.197 ppb	05:55:46
3	Cu 324.752†	28907.5	21170.9	68.312	ug/L	68.312 ppb	05:55:46
3	Mn 257.610†	3606426.7	3485259.2	3800.4	ug/L	3800.4 ppb	05:55:41
3	Mo 202.031†	-75.2	-92.7	3.3383	ug/L	3.3383 ppb	05:56:06
3	Ni 231.604†	2825.0	2660.3	63.078	ug/L	63.078 ppb	05:56:06
3	P 214.914†	1746.5	1468.1	798.14	ug/L	798.14 ppb	05:56:06
3	Pb 220.353†	1965.7	1952.4	245.62	ug/L	245.62 ppb	05:56:06
3	S 181.975 Axial†	272.7	222.1	300.02	ug/L	300.02 ppb	05:56:06
3	Sb 206.836†	83.4	51.0	1.8867	ug/L	1.8867 ppb	05:56:06
3	Se 196.026†	-739.5	-691.3	10.742	ug/L	10.742 ppb	05:56:06
3	Si 251.611†	712916.3	688535.8	21057	ug/L	21057 ppb	05:55:41
3	Sn 189.927†	-127.0	-127.0	-17.277	ug/L	-17.277 ppb	05:56:06
3	Ti 334.940†	2614473.8	2527891.1	4089.7	ug/L	4089.7 ppb	05:55:41
3	Tl 190.801†	-226.9	-182.5	3.7402	ug/L	3.7402 ppb	05:56:06
3	U 409.014†	-8799.2	-6542.3	-199.59	ug/L	-199.59 ppb	05:55:41
3	V 292.402†	41980.3	41871.0	257.98	ug/L	257.98 ppb	05:55:46
3	Zn 213.857†	26545.5	24849.4	209.84	ug/L	209.84 ppb	05:55:46
3	SiO2†	715838.6	691379.4	45268	ug/L	45268 ppb	05:56:24

Mean Data: 241711007|926576|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	919116.1	103.86	%	0.519				0.50%
Sc Radial	5855.6	103	%	0.1				0.06%
Y 371.029	831334.9	112.03	%	0.543				0.49%
Y RADIAL	6910.8	112.2	%	0.35				0.32%
Ag 328.068†	-8424.6	4.0881	ug/L	0.20919	4.0881	ppb	0.20919	5.12%
Al 396.153Radial†	171294.2	126630	ug/L	457.1	126630	ppb	457.1	0.36%
As 188.979†	-19.3	46.903	ug/L	5.1948	46.903	ppb	5.1948	11.08%
B 249.677†	1602.7	17.061	ug/L	0.7925	17.061	ppb	0.7925	4.64%
Ba 233.527†	158044.9	1205.9	ug/L	1.72	1205.9	ppb	1.72	0.14%
Be 313.107†	-4731.5	6.2816	ug/L	0.07746	6.2816	ppb	0.07746	1.23%
Ca 317.933Radial†	15005.4	22946	ug/L	90.0	22946	ppb	90.0	0.39%
Cd 226.502†	1288.8	0.7950	ug/L	0.11690	0.7950	ppb	0.11690	14.70%
Co 228.616†	3589.3	59.568	ug/L	0.5306	59.568	ppb	0.5306	0.89%
Cr 267.716†	8824.4	98.004	ug/L	0.3300	98.004	ppb	0.3300	0.34%
Cu 324.752†	21220.3	68.464	ug/L	0.5317	68.464	ppb	0.5317	0.78%
Fe 238.204 Radial†	13139.5	132310	ug/L	157.2	132310	ppb	157.2	0.12%
K 766.490 Radial†	43741.4	7908.7	ug/L	31.96	7908.7	ppb	31.96	0.40%

Mg 279.077 IEC†	493.5	18263	ug/L	102.4	18263	ppb	102.4	0.56%
Mn 257.610†	3485779.5	3801.0	ug/L	2.28	3801.0	ppb	2.28	0.06%
Mo 202.031†	-90.8	3.4698	ug/L	0.34481	3.4698	ppb	0.34481	9.94%
Na 589.592 Radial†	7960.6	2992.2	ug/L	18.21	2992.2	ppb	18.21	0.61%
Ni 231.604†	2672.0	63.356	ug/L	0.2541	63.356	ppb	0.2541	0.40%
P 214.914†	1463.6	795.51	ug/L	3.637	795.51	ppb	3.637	0.46%
Pb 220.353†	1933.8	243.55	ug/L	1.810	243.55	ppb	1.810	0.74%
S 181.975 Axial†	216.0	290.93	ug/L	8.737	290.93	ppb	8.737	3.00%
Sb 206.836†	44.8	-0.1469	ug/L	2.63164	-0.1469	ppb	2.63164	>999.9%
Se 196.026†	-695.2	8.9611	ug/L	1.90463	8.9611	ppb	1.90463	21.25%
Si 251.611†	688868.2	21067	ug/L	26.6	21067	ppb	26.6	0.13%
Sn 189.927†	-130.9	-17.926	ug/L	1.7890	-17.926	ppb	1.7890	9.98%
Sr 421.552†	34290.1	231.27	ug/L	1.130	231.27	ppb	1.130	0.49%
Ti 334.940†	2529094.7	4091.6	ug/L	3.42	4091.6	ppb	3.42	0.08%
Tl 190.801†	-178.9	4.7927	ug/L	0.92857	4.7927	ppb	0.92857	19.37%
U 409.014†	-6492.4	-198.22	ug/L	1.824	-198.22	ppb	1.824	0.92%
V 292.402†	41987.2	258.74	ug/L	0.677	258.74	ppb	0.677	0.26%
Zn 213.857†	24867.8	209.99	ug/L	0.223	209.99	ppb	0.223	0.11%
SiO2†	691448.2	45273	ug/L	46.4	45273	ppb	46.4	0.10%

Sequence No.: 144
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/10/2009 05:58:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5850.6	5850.6	103	%			06:00:28
1	Y RADIAL	6345.7	6345.7	103.0	%			06:00:28
1	Al 396.153Radial†	6863.8	6664.5	4905.4	ug/L	4905.4	ppb	06:00:28
1	Ca 317.933Radial†	3327.1	3202.9	4897.8	ug/L	4897.8	ppb	06:00:48
1	Fe 238.204 Radial†	517.0	494.4	4993.8	ug/L	4993.8	ppb	06:00:48
1	K 766.490 Radial†	30619.8	27469.5	4976.7	ug/L	4976.7	ppb	06:00:28
1	Mg 279.077 IEC†	143.9	137.5	5127.8	ug/L	5127.8	ppb	06:00:48
1	Na 589.592 Radial†	27800.2	27526.4	10346	ug/L	10346	ppb	06:00:28
1	Sr 421.552†	79607.3	77056.0	520.13	ug/L	520.13	ppb	06:00:28
1	Sc 361.383	901669.2	901669.2	101.89	%			06:01:45
1	Y 371.029	743415.7	743415.7	100.18	%			06:01:45
1	Ag 328.068†	110865.0	108584.4	505.05	ug/L	505.05	ppb	06:01:51
1	As 188.979†	1206.2	1213.1	499.31	ug/L	499.31	ppb	06:02:11
1	B 249.677†	22315.1	22425.7	484.87	ug/L	484.87	ppb	06:01:51
1	Ba 233.527†	66110.2	64898.0	494.19	ug/L	494.19	ppb	06:01:51
1	Be 313.107†	1336926.0	1317489.5	490.55	ug/L	490.55	ppb	06:01:45
1	Cd 226.502†	46541.3	45867.3	497.43	ug/L	497.43	ppb	06:01:51
1	Co 228.616†	25876.7	25469.3	494.55	ug/L	494.55	ppb	06:01:51
1	Cr 267.716†	46692.0	45740.4	493.63	ug/L	493.63	ppb	06:01:51
1	Cu 324.752†	177552.0	167495.5	487.38	ug/L	487.38	ppb	06:01:51
1	Mn 257.610†	457675.9	448797.4	488.12	ug/L	488.12	ppb	06:01:45
1	Mo 202.031†	7804.5	7640.0	498.02	ug/L	498.02	ppb	06:02:11
1	Ni 231.604†	21405.8	20939.3	496.54	ug/L	496.54	ppb	06:01:51
1	P 214.914†	4433.0	4130.9	2380.6	ug/L	2380.6	ppb	06:02:11
1	Pb 220.353†	4237.4	4211.5	493.85	ug/L	493.85	ppb	06:02:11
1	S 181.975 Axial†	760.0	704.5	1029.1	ug/L	1029.1	ppb	06:02:11
1	Sb 206.836†	1577.6	1518.8	500.34	ug/L	500.34	ppb	06:02:11
1	Se 196.026†	816.2	824.5	509.21	ug/L	509.21	ppb	06:02:11
1	Si 251.611†	83763.2	81704.1	2487.1	ug/L	2487.1	ppb	06:01:51
1	Sn 189.927†	3039.0	2978.4	504.46	ug/L	504.46	ppb	06:02:11
1	Ti 334.940†	313760.9	308915.9	499.49	ug/L	499.49	ppb	06:01:51
1	Tl 190.801†	1702.1	1707.4	492.54	ug/L	492.54	ppb	06:02:11
1	U 409.014†	15789.7	17459.5	486.22	ug/L	486.22	ppb	06:01:51
1	V 292.402†	72635.5	72587.0	496.67	ug/L	496.67	ppb	06:01:51
1	Zn 213.857†	57199.4	55332.9	493.42	ug/L	493.42	ppb	06:01:51
1	SiO2†	84413.8	82361.9	5367.4	ug/L	5367.4	ppb	06:03:18
2	Sc Radial	5771.4	5771.4	102	%			06:00:53
2	Y RADIAL	6222.2	6222.2	101.0	%			06:00:53
2	Al 396.153Radial†	6835.5	6727.8	4952.2	ug/L	4952.2	ppb	06:00:53
2	Ca 317.933Radial†	3347.4	3267.1	4995.9	ug/L	4995.9	ppb	06:01:13
2	Fe 238.204 Radial†	520.5	504.7	5097.2	ug/L	5097.2	ppb	06:01:13
2	K 766.490 Radial†	30298.7	27561.0	4993.3	ug/L	4993.3	ppb	06:00:53
2	Mg 279.077 IEC†	144.7	140.2	5226.8	ug/L	5226.8	ppb	06:01:13
2	Na 589.592 Radial†	27387.9	27491.0	10333	ug/L	10333	ppb	06:00:53
2	Sr 421.552†	78533.5	77059.4	520.15	ug/L	520.15	ppb	06:00:53
2	Sc 361.383	901939.0	901939.0	101.92	%			06:02:16
2	Y 371.029	744835.4	744835.4	100.37	%			06:02:16
2	Ag 328.068†	109465.8	107179.0	498.57	ug/L	498.57	ppb	06:02:22
2	As 188.979†	1194.9	1201.6	494.58	ug/L	494.58	ppb	06:02:42
2	B 249.677†	22117.6	22225.4	480.53	ug/L	480.53	ppb	06:02:22
2	Ba 233.527†	65104.7	63892.0	486.53	ug/L	486.53	ppb	06:02:22
2	Be 313.107†	1347162.8	1327141.1	494.12	ug/L	494.12	ppb	06:02:16
2	Cd 226.502†	45898.0	45222.5	490.42	ug/L	490.42	ppb	06:02:22
2	Co 228.616†	25428.0	25021.4	485.87	ug/L	485.87	ppb	06:02:22
2	Cr 267.716†	46036.2	45083.3	486.54	ug/L	486.54	ppb	06:02:22
2	Cu 324.752†	175253.6	165188.2	480.68	ug/L	480.68	ppb	06:02:22
2	Mn 257.610†	459297.7	450254.3	489.71	ug/L	489.71	ppb	06:02:16
2	Mo 202.031†	7807.8	7640.9	498.09	ug/L	498.09	ppb	06:02:42
2	Ni 231.604†	21111.2	20644.0	489.53	ug/L	489.53	ppb	06:02:22

2	P 214.914†	4414.2	4111.2	2369.9	ug/L	2369.9 ppb	06:02:42
2	Pb 220.353†	4219.5	4192.7	491.66	ug/L	491.66 ppb	06:02:42
2	S 181.975 Axial†	754.6	698.9	1021.0	ug/L	1021.0 ppb	06:02:42
2	Sb 206.836†	1586.1	1526.7	503.03	ug/L	503.03 ppb	06:02:42
2	Se 196.026†	818.7	826.7	510.85	ug/L	510.85 ppb	06:02:42
2	Si 251.611†	82471.6	80412.2	2447.6	ug/L	2447.6 ppb	06:02:22
2	Sn 189.927†	3026.7	2965.4	502.27	ug/L	502.27 ppb	06:02:42
2	Ti 334.940†	309008.0	304160.2	491.81	ug/L	491.81 ppb	06:02:22
2	Tl 190.801†	1709.4	1714.1	494.48	ug/L	494.48 ppb	06:02:42
2	U 409.014†	15534.3	17204.3	479.09	ug/L	479.09 ppb	06:02:22
2	V 292.402†	71596.5	71546.1	489.63	ug/L	489.63 ppb	06:02:22
2	Zn 213.857†	56430.5	54561.7	486.52	ug/L	486.52 ppb	06:02:22
2	SiO2†	82574.3	80532.2	5247.6	ug/L	5247.6 ppb	06:03:23
3	Sc Radial	5779.6	5779.6	102	%		06:01:18
3	Y RADIAL	6232.0	6232.0	101.2	%		06:01:18
3	Al 396.153Radial†	6830.9	6713.7	4941.6	ug/L	4941.6 ppb	06:01:18
3	Ca 317.933Radial†	3294.4	3210.4	4909.3	ug/L	4909.3 ppb	06:01:38
3	Fe 238.204 Radial†	516.7	500.3	5053.1	ug/L	5053.1 ppb	06:01:38
3	K 766.490 Radial†	30288.3	27508.5	4983.8	ug/L	4983.8 ppb	06:01:18
3	Mg 279.077 IEC†	140.4	135.8	5061.7	ug/L	5061.7 ppb	06:01:38
3	Na 589.592 Radial†	27387.3	27452.2	10318	ug/L	10318 ppb	06:01:18
3	Sr 421.552†	78688.4	77101.5	520.44	ug/L	520.44 ppb	06:01:18
3	Sc 361.383	896065.1	896065.1	101.25	%		06:02:47
3	Y 371.029	737965.8	737965.8	99.447	%		06:02:47
3	Ag 328.068†	110711.5	109113.4	507.53	ug/L	507.53 ppb	06:02:52
3	As 188.979†	1217.7	1231.8	506.98	ug/L	506.98 ppb	06:03:13
3	B 249.677†	22459.1	22704.9	490.91	ug/L	490.91 ppb	06:02:52
3	Ba 233.527†	66077.6	65271.6	497.03	ug/L	497.03 ppb	06:02:52
3	Be 313.107†	1337293.6	1326059.0	493.74	ug/L	493.74 ppb	06:02:47
3	Cd 226.502†	46431.6	46044.7	499.34	ug/L	499.34 ppb	06:02:52
3	Co 228.616†	25934.5	25685.2	498.74	ug/L	498.74 ppb	06:02:52
3	Cr 267.716†	46509.4	45846.6	494.78	ug/L	494.78 ppb	06:02:52
3	Cu 324.752†	177784.8	168815.3	491.22	ug/L	491.22 ppb	06:02:52
3	Mn 257.610†	457888.2	451816.5	491.41	ug/L	491.41 ppb	06:02:47
3	Mo 202.031†	7845.8	7728.7	503.80	ug/L	503.80 ppb	06:03:13
3	Ni 231.604†	21317.0	20983.0	497.57	ug/L	497.57 ppb	06:02:52
3	P 214.914†	4450.5	4175.5	2406.4	ug/L	2406.4 ppb	06:03:13
3	Pb 220.353†	4221.8	4222.1	495.11	ug/L	495.11 ppb	06:03:13
3	S 181.975 Axial†	765.9	715.0	1044.5	ug/L	1044.5 ppb	06:03:13
3	Sb 206.836†	1586.8	1537.5	506.54	ug/L	506.54 ppb	06:03:13
3	Se 196.026†	822.8	836.0	516.29	ug/L	516.29 ppb	06:03:13
3	Si 251.611†	83590.5	82047.7	2497.5	ug/L	2497.5 ppb	06:02:52
3	Sn 189.927†	3031.0	2989.2	506.28	ug/L	506.28 ppb	06:03:13
3	Ti 334.940†	313655.4	310737.5	502.44	ug/L	502.44 ppb	06:02:52
3	Tl 190.801†	1704.5	1720.3	496.25	ug/L	496.25 ppb	06:03:13
3	U 409.014†	15486.2	17256.7	480.54	ug/L	480.54 ppb	06:02:52
3	V 292.402†	72488.7	72887.8	498.76	ug/L	498.76 ppb	06:02:52
3	Zn 213.857†	57134.6	55620.1	495.99	ug/L	495.99 ppb	06:02:52
3	SiO2†	82894.3	81379.3	5302.9	ug/L	5302.9 ppb	06:03:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899891.1	101.69	%	0.375				0.37%
Sc Radial	5800.6	102	%	0.8				0.75%
Y 371.029	742072.3	100.00	%	0.489				0.49%
Y RADIAL	6266.6	101.8	%	1.11				1.10%
Ag 328.068†	108292.3	503.72	ug/L	4.630	503.72	ppb	4.630	0.92%
QC value within limits for Ag 328.068 Recovery = 100.74%								
Al 396.153Radial†	6702.0	4933.0	ug/L	24.53	4933.0	ppb	24.53	0.50%
QC value within limits for Al 396.153Radial Recovery = 98.66%								
As 188.979†	1215.5	500.29	ug/L	6.255	500.29	ppb	6.255	1.25%
QC value within limits for As 188.979 Recovery = 100.06%								
B 249.677†	22452.0	485.44	ug/L	5.215	485.44	ppb	5.215	1.07%
QC value within limits for B 249.677 Recovery = 97.09%								
Ba 233.527†	64687.2	492.58	ug/L	5.429	492.58	ppb	5.429	1.10%
QC value within limits for Ba 233.527 Recovery = 98.52%								
Be 313.107†	1323563.2	492.80	ug/L	1.961	492.80	ppb	1.961	0.40%
QC value within limits for Be 313.107 Recovery = 98.56%								
Ca 317.933Radial†	3226.8	4934.3	ug/L	53.63	4934.3	ppb	53.63	1.09%

```
   QC value within limits for Ca 317.933Radial  Recovery = 98.69%
Cd 226.502†            45711.5      495.73 ug/L         4.700      495.73 ppb          4.700   0.95%
   QC value within limits for Cd 226.502  Recovery = 99.15%
Co 228.616†            25392.0      493.05 ug/L         6.568      493.05 ppb          6.568   1.33%
   QC value within limits for Co 228.616  Recovery = 98.61%
Cr 267.716†            45556.8      491.65 ug/L         4.462      491.65 ppb          4.462   0.91%
   QC value within limits for Cr 267.716  Recovery = 98.33%
Cu 324.752†           167166.3      486.43 ug/L         5.338      486.43 ppb          5.338   1.10%
   QC value within limits for Cu 324.752  Recovery = 97.29%
Fe 238.204 Radial†       499.8      5048.0 ug/L         51.88      5048.0 ppb          51.88   1.03%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.96%
K 766.490 Radial†      27513.0      4984.6 ug/L          8.32      4984.6 ppb           8.32   0.17%
   QC value within limits for K 766.490 Radial  Recovery = 99.69%
Mg 279.077 IEC†          137.8      5138.8 ug/L         83.07      5138.8 ppb          83.07   1.62%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.78%
Mn 257.610†           450289.4      489.75 ug/L         1.644      489.75 ppb          1.644   0.34%
   QC value within limits for Mn 257.610  Recovery = 97.95%
Mo 202.031†             7669.9      499.97 ug/L         3.319      499.97 ppb          3.319   0.66%
   QC value within limits for Mo 202.031  Recovery = 99.99%
Na 589.592 Radial†     27489.8       10333 ug/L          14.0       10333 ppb           14.0   0.14%
   QC value within limits for Na 589.592 Radial  Recovery = 103.33%
Ni 231.604†            20855.4      494.55 ug/L         4.372      494.55 ppb          4.372   0.88%
   QC value within limits for Ni 231.604  Recovery = 98.91%
P 214.914†              4139.2      2385.6 ug/L         18.80      2385.6 ppb          18.80   0.79%
   QC value within limits for P 214.914  Recovery = 95.43%
Pb 220.353†             4208.8      493.54 ug/L         1.744      493.54 ppb          1.744   0.35%
   QC value within limits for Pb 220.353  Recovery = 98.71%
S 181.975 Axial†         706.1      1031.5 ug/L         11.92      1031.5 ppb          11.92   1.16%
   QC value within limits for S 181.975 Axial  Recovery = 103.15%
Sb 206.836†             1527.7      503.30 ug/L         3.110      503.30 ppb          3.110   0.62%
   QC value within limits for Sb 206.836  Recovery = 100.66%
Se 196.026†              829.1      512.11 ug/L         3.706      512.11 ppb          3.706   0.72%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†            81388.0      2477.4 ug/L         26.33      2477.4 ppb          26.33   1.06%
   QC value within limits for Si 251.611  Recovery = 99.09%
Sn 189.927†             2977.7      504.34 ug/L         2.006      504.34 ppb          2.006   0.40%
   QC value within limits for Sn 189.927  Recovery = 100.87%
Sr 421.552†            77072.3      520.24 ug/L         0.171      520.24 ppb          0.171   0.03%
   QC value within limits for Sr 421.552  Recovery = 104.05%
Ti 334.940†           307937.9      497.91 ug/L         5.488      497.91 ppb          5.488   1.10%
   QC value within limits for Ti 334.940  Recovery = 99.58%
Tl 190.801†             1713.9      494.42 ug/L         1.857      494.42 ppb          1.857   0.38%
   QC value within limits for Tl 190.801  Recovery = 98.88%
U 409.014†             17306.8      481.95 ug/L         3.768      481.95 ppb          3.768   0.78%
   QC value within limits for U 409.014  Recovery = 96.39%
V 292.402†             72340.3      495.02 ug/L         4.784      495.02 ppb          4.784   0.97%
   QC value within limits for V 292.402  Recovery = 99.00%
Zn 213.857†            55171.5      491.98 ug/L         4.896      491.98 ppb          4.896   1.00%
   QC value within limits for Zn 213.857  Recovery = 98.40%
SiO2†                  81424.4      5306.0 ug/L         59.97      5306.0 ppb          59.97   1.13%
   QC value within limits for SiO2  Recovery = 99.22%
All analyte(s) passed QC.
```

Sequence No.: 145
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/10/2009 06:05:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5740.1	5740.1	101	%			06:07:31
1	Y RADIAL	6248.3	6248.3	101.5	%			06:07:31
1	Al 396.153Radial†	-9.7	10.8	7.9544	ug/L	7.9544	ppb	06:07:31
1	Ca 317.933Radial†	29.4	11.3	17.315	ug/L	17.315	ppb	06:07:51
1	Fe 238.204 Radial†	8.0	1.8	18.451	ug/L	18.451	ppb	06:07:51
1	K 766.490 Radial†	2443.7	240.7	43.700	ug/L	43.700	ppb	06:07:31
1	Mg 279.077 IEC†	1.7	-0.1	-4.3208	ug/L	-4.3208	ppb	06:07:51
1	Na 589.592 Radial†	-726.9	-101.2	-38.046	ug/L	-38.046	ppb	06:07:31
1	Sr 421.552†	13.8	10.2	0.0689	ug/L	0.0689	ppb	06:07:31
1	Sc 361.383	915361.2	915361.2	103.43	%			06:08:48
1	Y 371.029	766375.4	766375.4	103.28	%			06:08:48
1	Ag 328.068†	349.4	110.2	0.5163	ug/L	0.5163	ppb	06:08:53
1	As 188.979†	-6.9	22.5	9.1810	ug/L	9.1810	ppb	06:09:13
1	B 249.677†	-277.9	255.2	5.5360	ug/L	5.5360	ppb	06:09:13
1	Ba 233.527†	-3.0	9.1	0.0694	ug/L	0.0694	ppb	06:09:13
1	Be 313.107†	-4999.9	486.4	0.1809	ug/L	0.1809	ppb	06:08:53
1	Cd 226.502†	-177.0	16.7	0.1799	ug/L	0.1799	ppb	06:09:13
1	Co 228.616†	-63.8	10.0	0.1945	ug/L	0.1945	ppb	06:09:13
1	Cr 267.716†	93.2	3.2	0.0349	ug/L	0.0349	ppb	06:09:13
1	Cu 324.752†	6789.0	-205.1	-0.5955	ug/L	-0.5955	ppb	06:08:53
1	Mn 257.610†	519.5	98.9	0.1094	ug/L	0.1094	ppb	06:09:13
1	Mo 202.031†	22.3	1.5	0.1018	ug/L	0.1018	ppb	06:09:13
1	Ni 231.604†	85.3	12.3	0.2929	ug/L	0.2929	ppb	06:09:13
1	P 214.914†	218.6	-8.6	-5.0126	ug/L	-5.0126	ppb	06:09:13
1	Pb 220.353†	-79.3	-24.1	-2.8202	ug/L	-2.8202	ppb	06:09:13
1	S 181.975 Axial†	43.0	0.1	0.1147	ug/L	0.1147	ppb	06:09:13
1	Sb 206.836†	33.6	2.9	0.9592	ug/L	0.9592	ppb	06:09:13
1	Se 196.026†	-24.5	-0.2	-0.0587	ug/L	-0.0587	ppb	06:09:13
1	Si 251.611†	625.2	96.4	2.9311	ug/L	2.9311	ppb	06:09:13
1	Sn 189.927†	7.8	3.2	0.5480	ug/L	0.5480	ppb	06:09:13
1	Ti 334.940†	-934.9	61.2	0.1008	ug/L	0.1008	ppb	06:08:53
1	Tl 190.801†	-26.9	10.9	3.1193	ug/L	3.1193	ppb	06:09:13
1	U 409.014†	-2104.3	-72.3	-2.0213	ug/L	-2.0213	ppb	06:08:48
1	V 292.402†	-1360.5	-18.8	-0.1325	ug/L	-0.1325	ppb	06:08:53
1	Zn 213.857†	727.8	-103.6	-0.9353	ug/L	-0.9353	ppb	06:09:13
1	SiO2†	578.7	70.7	4.5902	ug/L	4.5902	ppb	06:10:19
2	Sc Radial	5786.8	5786.8	102	%			06:07:56
2	Y RADIAL	6272.2	6272.2	101.8	%			06:07:56
2	Al 396.153Radial†	-16.5	4.2	3.0560	ug/L	3.0560	ppb	06:07:56
2	Ca 317.933Radial†	32.1	13.7	21.008	ug/L	21.008	ppb	06:08:16
2	Fe 238.204 Radial†	7.9	1.7	17.563	ug/L	17.563	ppb	06:08:16
2	K 766.490 Radial†	2440.2	217.9	39.561	ug/L	39.561	ppb	06:07:56
2	Mg 279.077 IEC†	2.1	0.3	12.578	ug/L	12.578	ppb	06:08:16
2	Na 589.592 Radial†	-726.6	-95.1	-35.762	ug/L	-35.762	ppb	06:07:56
2	Sr 421.552†	-42.2	-44.7	-0.3018	ug/L	-0.3018	ppb	06:07:56
2	Sc 361.383	914599.1	914599.1	103.35	%			06:09:18
2	Y 371.029	764792.5	764792.5	103.06	%			06:09:18
2	Ag 328.068†	378.8	139.0	0.6505	ug/L	0.6505	ppb	06:09:23
2	As 188.979†	-22.8	7.2	2.9261	ug/L	2.9261	ppb	06:09:43
2	B 249.677†	-309.5	224.4	4.8685	ug/L	4.8685	ppb	06:09:43
2	Ba 233.527†	-9.4	3.0	0.0231	ug/L	0.0231	ppb	06:09:43
2	Be 313.107†	-5000.9	481.4	0.1789	ug/L	0.1789	ppb	06:09:23
2	Cd 226.502†	-174.4	19.1	0.2060	ug/L	0.2060	ppb	06:09:43
2	Co 228.616†	-79.6	-5.3	-0.1004	ug/L	-0.1004	ppb	06:09:43
2	Cr 267.716†	96.8	6.7	0.0737	ug/L	0.0737	ppb	06:09:43
2	Cu 324.752†	6836.6	-153.5	-0.4455	ug/L	-0.4455	ppb	06:09:23
2	Mn 257.610†	535.4	114.6	0.1261	ug/L	0.1261	ppb	06:09:43
2	Mo 202.031†	37.6	16.4	1.0697	ug/L	1.0697	ppb	06:09:43
2	Ni 231.604†	94.2	21.0	0.4990	ug/L	0.4990	ppb	06:09:43

2	P 214.914†	225.0	-2.2	-1.2595	ug/L	-1.2595 ppb	06:09:43
2	Pb 220.353†	-58.3	-3.8	-0.4454	ug/L	-0.4454 ppb	06:09:43
2	S 181.975 Axial†	43.1	0.2	0.2892	ug/L	0.2892 ppb	06:09:43
2	Sb 206.836†	33.5	2.8	0.9231	ug/L	0.9231 ppb	06:09:43
2	Se 196.026†	-22.6	1.5	0.9695	ug/L	0.9695 ppb	06:09:43
2	Si 251.611†	602.6	75.1	2.2654	ug/L	2.2654 ppb	06:09:43
2	Sn 189.927†	3.1	-1.3	-0.2147	ug/L	-0.2147 ppb	06:09:43
2	Ti 334.940†	-991.6	5.6	0.0114	ug/L	0.0114 ppb	06:09:23
2	Tl 190.801†	-29.3	8.5	2.4360	ug/L	2.4360 ppb	06:09:43
2	U 409.014†	-2142.4	-110.8	-3.0989	ug/L	-3.0989 ppb	06:09:18
2	V 292.402†	-1338.9	0.9	0.0130	ug/L	0.0130 ppb	06:09:23
2	Zn 213.857†	753.1	-78.6	-0.7116	ug/L	-0.7116 ppb	06:09:43
2	SiO2†	600.8	92.6	5.9933	ug/L	5.9933 ppb	06:10:24
3	Sc Radial	5903.2	5903.2	104	%		06:08:21
3	Y RADIAL	6394.9	6394.9	103.8	%		06:08:21
3	Al 396.153Radial†	-32.8	-11.1	-8.2379	ug/L	-8.2379 ppb	06:08:21
3	Ca 317.933Radial†	30.7	11.7	17.930	ug/L	17.930 ppb	06:08:41
3	Fe 238.204 Radial†	6.4	0.1	0.8498	ug/L	0.8498 ppb	06:08:41
3	K 766.490 Radial†	2349.6	83.8	15.228	ug/L	15.228 ppb	06:08:21
3	Mg 279.077 IEC†	0.2	-1.6	-59.605	ug/L	-59.605 ppb	06:08:41
3	Na 589.592 Radial†	-760.8	-113.9	-42.817	ug/L	-42.817 ppb	06:08:21
3	Sr 421.552†	11.3	7.4	0.0497	ug/L	0.0497 ppb	06:08:21
3	Sc 361.383	904644.8	904644.8	102.22	%		06:09:49
3	Y 371.029	755458.7	755458.7	101.80	%		06:09:49
3	Ag 328.068†	372.9	137.2	0.6414	ug/L	0.6414 ppb	06:09:54
3	As 188.979†	-21.2	8.5	3.4592	ug/L	3.4592 ppb	06:10:14
3	B 249.677†	-308.7	221.9	4.8158	ug/L	4.8158 ppb	06:10:14
3	Ba 233.527†	-7.2	5.0	0.0380	ug/L	0.0380 ppb	06:10:14
3	Be 313.107†	-5073.7	356.9	0.1325	ug/L	0.1325 ppb	06:09:54
3	Cd 226.502†	-180.3	11.4	0.1247	ug/L	0.1247 ppb	06:10:14
3	Co 228.616†	-63.3	9.9	0.1926	ug/L	0.1926 ppb	06:10:14
3	Cr 267.716†	89.9	1.0	0.0132	ug/L	0.0132 ppb	06:10:14
3	Cu 324.752†	6783.5	-132.7	-0.3859	ug/L	-0.3859 ppb	06:09:54
3	Mn 257.610†	529.8	114.9	0.1260	ug/L	0.1260 ppb	06:10:14
3	Mo 202.031†	28.0	7.4	0.4809	ug/L	0.4809 ppb	06:10:14
3	Ni 231.604†	112.8	40.3	0.9550	ug/L	0.9550 ppb	06:10:14
3	P 214.914†	225.4	0.5	0.3642	ug/L	0.3642 ppb	06:10:14
3	Pb 220.353†	-44.5	9.0	1.0535	ug/L	1.0535 ppb	06:10:14
3	S 181.975 Axial†	39.3	-3.0	-4.4339	ug/L	-4.4339 ppb	06:10:14
3	Sb 206.836†	37.2	6.8	2.2212	ug/L	2.2212 ppb	06:10:14
3	Se 196.026†	-26.8	-2.8	-1.6567	ug/L	-1.6567 ppb	06:10:14
3	Si 251.611†	610.7	89.4	2.7185	ug/L	2.7185 ppb	06:10:14
3	Sn 189.927†	6.9	2.4	0.4138	ug/L	0.4138 ppb	06:10:14
3	Ti 334.940†	-1014.5	-27.4	-0.0399	ug/L	-0.0399 ppb	06:09:54
3	Tl 190.801†	-40.6	-2.8	-0.8130	ug/L	-0.8130 ppb	06:10:14
3	U 409.014†	-2291.4	-279.4	-7.8054	ug/L	-7.8054 ppb	06:09:49
3	V 292.402†	-1307.4	17.5	0.1083	ug/L	0.1083 ppb	06:09:54
3	Zn 213.857†	735.4	-87.9	-0.7941	ug/L	-0.7941 ppb	06:10:14
3	SiO2†	642.1	139.3	9.0891	ug/L	9.0891 ppb	06:10:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911535.0	103.00	%	0.676				0.66%
Sc Radial	5810.0	103	%	1.5				1.45%
Y 371.029	762208.8	102.71	%	0.795				0.77%
Y RADIAL	6305.1	102.4	%	1.28				1.25%
Ag 328.068†	128.8	0.6027	ug/L	0.07500	0.6027	ppb	0.07500	12.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.3	0.9241	ug/L	8.30399	0.9241	ppb	8.30399	898.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	12.7	5.1888	ug/L	3.46764	5.1888	ppb	3.46764	66.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	233.8	5.0734	ug/L	0.40146	5.0734	ppb	0.40146	7.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.7	0.0435	ug/L	0.02365	0.0435	ppb	0.02365	54.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	441.5	0.1641	ug/L	0.02737	0.1641	ppb	0.02737	16.68%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.3	18.751	ug/L	1.9786	18.751	ppb	1.9786	10.55%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.8      0.1702 ug/L       0.04148      0.1702 ppb        0.04148  24.37%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               4.9      0.0956 ug/L       0.16970      0.0956 ppb        0.16970 177.57%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               3.6      0.0406 ug/L       0.03065      0.0406 ppb        0.03065  75.46%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -163.8     -0.4756 ug/L       0.10800     -0.4756 ppb        0.10800  22.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.2      12.288 ug/L        9.9157      12.288 ppb         9.9157  80.69%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       180.8      32.829 ug/L       15.3829      32.829 ppb        15.3829  46.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.5     -17.116 ug/L       37.7545     -17.116 ppb        37.7545 220.58%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             109.5      0.1205 ug/L       0.00963      0.1205 ppb        0.00963   8.00%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.4      0.5508 ug/L       0.48771      0.5508 ppb        0.48771  88.54%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -103.4     -38.875 ug/L        3.5999     -38.875 ppb         3.5999   9.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              24.5      0.5823 ug/L       0.33882      0.5823 ppb        0.33882  58.19%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -3.4     -1.9693 ug/L       2.75779     -1.9693 ppb        2.75779 140.04%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -6.3     -0.7374 ug/L       1.95327     -0.7374 ppb        1.95327 264.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.9     -1.3433 ug/L       2.67792     -1.3433 ppb        2.67792 199.35%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.2      1.3678 ug/L       0.73925      1.3678 ppb        0.73925  54.05%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.5     -0.2486 ug/L       1.32336     -0.2486 ppb        1.32336 532.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              87.0      2.6383 ug/L       0.34002      2.6383 ppb        0.34002  12.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.5      0.2491 ug/L       0.40718      0.2491 ppb        0.40718 163.48%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -9.0     -0.0610 ug/L       0.20870     -0.0610 ppb        0.20870 341.91%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              13.1      0.0241 ug/L       0.07120      0.0241 ppb        0.07120 295.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               5.5      1.5808 ug/L       2.10104      1.5808 ppb        2.10104 132.91%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -154.2     -4.3085 ug/L       3.07596     -4.3085 ppb        3.07596  71.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -0.1     -0.0038 ug/L       0.12128     -0.0038 ppb        0.12128 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -90.0     -0.8137 ug/L       0.11313     -0.8137 ppb        0.11313  13.90%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   100.9      6.5575 ug/L       2.30194      6.5575 ppb        2.30194  35.10%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 121609
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 121609A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/16/2009 13:12:14**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/16/2009 10:54:03**
Analyst: **Data Type: Reprocessed on 12/16/2009 13:14:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	959863.3	959863.3	99.699	%	10:57:12
1	Sc Radial	6304.8	6304.8	100	%	10:55:55
1	Y 371.029	799682.8	799682.8	99.719	%	10:57:12
1	Y RADIAL	6756.9	6756.9	100.00	%	10:55:55
1	Ag 328.068†	454.9	456.3	[0.00]	ug/L	10:57:17

1	Al 396.153Radial†	-28.0	-27.9	[0.00]	ug/L	10:55:55
1	As 188.979†	-26.2	-26.3	[0.00]	ug/L	10:57:37
1	B 249.677†	-330.5	-331.5	[0.00]	ug/L	10:57:37
1	Ba 233.527†	19.7	19.8	[0.00]	ug/L	10:57:37
1	Be 313.107†	-4735.9	-4750.2	[0.00]	ug/L	10:57:17
1	Ca 317.933Radial†	35.3	35.1	[0.00]	ug/L	10:56:15
1	Cd 226.502†	-209.9	-210.5	[0.00]	ug/L	10:57:37
1	Co 228.616†	-84.8	-85.1	[0.00]	ug/L	10:57:37
1	Cr 267.716†	78.2	78.5	[0.00]	ug/L	10:57:37
1	Cu 324.752†	6366.4	6385.6	[0.00]	ug/L	10:57:17
1	Fe 238.204 Radial†	8.0	8.0	[0.00]	ug/L	10:56:15
1	K 766.490 Radial†	2871.0	2861.1	[0.00]	ug/L	10:55:55
1	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	10:56:15
1	Mn 257.610†	556.8	558.5	[0.00]	ug/L	10:57:37
1	Mo 202.031†	20.6	20.6	[0.00]	ug/L	10:57:37
1	Na 589.592 Radial†	-1616.1	-1610.6	[0.00]	ug/L	10:55:55
1	Ni 231.604†	106.5	106.8	[0.00]	ug/L	10:57:37
1	P 214.914†	232.8	233.5	[0.00]	ug/L	10:57:37
1	Pb 220.353†	-75.8	-76.0	[0.00]	ug/L	10:57:37
1	S 181.975 Axial†	47.5	47.6	[0.00]	ug/L	10:57:37
1	Sb 206.836†	38.5	38.6	[0.00]	ug/L	10:57:37
1	Se 196.026†	-22.0	-22.1	[0.00]	ug/L	10:57:37
1	Si 251.611†	637.9	639.8	[0.00]	ug/L	10:57:37
1	Sn 189.927†	6.7	6.7	[0.00]	ug/L	10:57:37
1	Sr 421.552†	21.4	21.3	[0.00]	ug/L	10:55:55
1	Ti 334.940†	-1368.6	-1372.7	[0.00]	ug/L	10:57:17
1	Tl 190.801†	-37.3	-37.4	[0.00]	ug/L	10:57:37
1	U 409.014†	-2773.0	-2781.3	[0.00]	ug/L	10:57:12
1	V 292.402†	-1567.5	-1572.2	[0.00]	ug/L	10:57:17
1	Zn 213.857†	887.7	890.4	[0.00]	ug/L	10:57:37
1	SiO2†	689.2	691.3	[0.00]	ug/L	10:58:43
2	Sc 361.383	967982.4	967982.4	100.54	%	10:57:42
2	Sc Radial	6267.8	6267.8	99.8	%	10:56:20
2	Y 371.029	805260.8	805260.8	100.41	%	10:57:42
2	Y RADIAL	6731.1	6731.1	99.61	%	10:56:20
2	Ag 328.068†	432.9	430.5	[0.00]	ug/L	10:57:48
2	Al 396.153Radial†	-47.8	-47.9	[0.00]	ug/L	10:56:20
2	As 188.979†	-27.4	-27.3	[0.00]	ug/L	10:58:08
2	B 249.677†	-329.6	-327.8	[0.00]	ug/L	10:58:08
2	Ba 233.527†	30.0	29.8	[0.00]	ug/L	10:58:08
2	Be 313.107†	-4626.0	-4601.0	[0.00]	ug/L	10:57:48
2	Ca 317.933Radial†	37.8	37.9	[0.00]	ug/L	10:56:40
2	Cd 226.502†	-209.9	-208.8	[0.00]	ug/L	10:58:08
2	Co 228.616†	-59.5	-59.1	[0.00]	ug/L	10:58:08
2	Cr 267.716†	100.5	100.0	[0.00]	ug/L	10:58:08
2	Cu 324.752†	6285.9	6252.0	[0.00]	ug/L	10:57:48
2	Fe 238.204 Radial†	10.6	10.6	[0.00]	ug/L	10:56:40
2	K 766.490 Radial†	2909.8	2917.0	[0.00]	ug/L	10:56:20
2	Mg 279.077 IEC†	1.1	1.1	[0.00]	ug/L	10:56:40
2	Mn 257.610†	559.6	556.6	[0.00]	ug/L	10:58:08
2	Mo 202.031†	21.0	20.9	[0.00]	ug/L	10:58:08
2	Na 589.592 Radial†	-1641.7	-1645.8	[0.00]	ug/L	10:56:20
2	Ni 231.604†	137.7	137.0	[0.00]	ug/L	10:58:08
2	P 214.914†	247.7	246.3	[0.00]	ug/L	10:58:08
2	Pb 220.353†	-100.3	-99.8	[0.00]	ug/L	10:58:08
2	S 181.975 Axial†	41.1	40.9	[0.00]	ug/L	10:58:08
2	Sb 206.836†	34.3	34.2	[0.00]	ug/L	10:58:08
2	Se 196.026†	-27.5	-27.3	[0.00]	ug/L	10:58:08
2	Si 251.611†	640.3	636.9	[0.00]	ug/L	10:58:08
2	Sn 189.927†	10.0	9.9	[0.00]	ug/L	10:58:08
2	Sr 421.552†	12.0	12.1	[0.00]	ug/L	10:56:20
2	Ti 334.940†	-1472.8	-1464.9	[0.00]	ug/L	10:57:48
2	Tl 190.801†	-36.8	-36.6	[0.00]	ug/L	10:58:08
2	U 409.014†	-2873.7	-2858.2	[0.00]	ug/L	10:57:42
2	V 292.402†	-1497.7	-1489.6	[0.00]	ug/L	10:57:48
2	Zn 213.857†	900.3	895.4	[0.00]	ug/L	10:58:08
2	SiO2†	643.3	639.8	[0.00]	ug/L	10:58:48
3	Sc 361.383	960437.4	960437.4	99.759	%	10:58:13
3	Sc Radial	6276.9	6276.9	99.9	%	10:56:46
3	Y 371.029	800864.3	800864.3	99.866	%	10:58:13
3	Y RADIAL	6783.6	6783.6	100.4	%	10:56:46

3	Ag 328.068†	491.0	492.1	[0.00]	ug/L	10:58:18
3	Al 396.153Radial†	-4.5	-4.5	[0.00]	ug/L	10:56:46
3	As 188.979†	-13.4	-13.5	[0.00]	ug/L	10:58:38
3	B 249.677†	-341.1	-342.0	[0.00]	ug/L	10:58:38
3	Ba 233.527†	23.8	23.9	[0.00]	ug/L	10:58:38
3	Be 313.107†	-4684.1	-4695.4	[0.00]	ug/L	10:58:18
3	Ca 317.933Radial†	31.5	31.5	[0.00]	ug/L	10:57:06
3	Cd 226.502†	-216.4	-216.9	[0.00]	ug/L	10:58:38
3	Co 228.616†	-67.0	-67.2	[0.00]	ug/L	10:58:38
3	Cr 267.716†	85.5	85.7	[0.00]	ug/L	10:58:38
3	Cu 324.752†	6230.1	6245.1	[0.00]	ug/L	10:58:18
3	Fe 238.204 Radial†	8.8	8.9	[0.00]	ug/L	10:57:06
3	K 766.490 Radial†	2929.4	2932.3	[0.00]	ug/L	10:56:46
3	Mg 279.077 IEC†	4.0	4.0	[0.00]	ug/L	10:57:06
3	Mn 257.610†	551.9	553.3	[0.00]	ug/L	10:58:38
3	Mo 202.031†	15.7	15.8	[0.00]	ug/L	10:58:38
3	Na 589.592 Radial†	-1644.6	-1646.2	[0.00]	ug/L	10:56:46
3	Ni 231.604†	140.3	140.6	[0.00]	ug/L	10:58:38
3	P 214.914†	243.5	244.1	[0.00]	ug/L	10:58:38
3	Pb 220.353†	-72.0	-72.2	[0.00]	ug/L	10:58:38
3	S 181.975 Axial†	58.0	58.2	[0.00]	ug/L	10:58:38
3	Sb 206.836†	47.5	47.6	[0.00]	ug/L	10:58:38
3	Se 196.026†	-27.3	-27.3	[0.00]	ug/L	10:58:38
3	Si 251.611†	625.5	627.0	[0.00]	ug/L	10:58:38
3	Sn 189.927†	10.6	10.7	[0.00]	ug/L	10:58:38
3	Sr 421.552†	64.3	64.4	[0.00]	ug/L	10:56:46
3	Ti 334.940†	-1326.1	-1329.3	[0.00]	ug/L	10:58:18
3	Tl 190.801†	-48.0	-48.1	[0.00]	ug/L	10:58:38
3	U 409.014†	-2747.6	-2754.3	[0.00]	ug/L	10:58:13
3	V 292.402†	-1542.5	-1546.2	[0.00]	ug/L	10:58:18
3	Zn 213.857†	884.0	886.1	[0.00]	ug/L	10:58:38
3	SiO2†	611.1	612.6	[0.00]	ug/L	10:58:53

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	962761.0	4530.93	0.47%	100.00	%
Sc Radial	6283.2	19.27	0.31%	100	%
Y 371.029	801936.0	2939.41	0.37%	100.00	%
Y RADIAL	6757.2	26.27	0.39%	100.0	%
Ag 328.068†	459.7	30.95	6.73%	[0.00]	ug/L
Al 396.153Radial†	-26.8	21.72	81.04%	[0.00]	ug/L
As 188.979†	-22.3	7.70	34.45%	[0.00]	ug/L
B 249.677†	-333.8	7.34	2.20%	[0.00]	ug/L
Ba 233.527†	24.5	5.06	20.65%	[0.00]	ug/L
Be 313.107†	-4682.2	75.45	1.61%	[0.00]	ug/L
Ca 317.933Radial†	34.8	3.21	9.20%	[0.00]	ug/L
Cd 226.502†	-212.1	4.26	2.01%	[0.00]	ug/L
Co 228.616†	-70.5	13.29	18.85%	[0.00]	ug/L
Cr 267.716†	88.0	10.96	12.44%	[0.00]	ug/L
Cu 324.752†	6294.3	79.20	1.26%	[0.00]	ug/L
Fe 238.204 Radial†	9.2	1.35	14.70%	[0.00]	ug/L
K 766.490 Radial†	2903.5	37.47	1.29%	[0.00]	ug/L
Mg 279.077 IEC†	2.7	1.47	53.88%	[0.00]	ug/L
Mn 257.610†	556.1	2.63	0.47%	[0.00]	ug/L
Mo 202.031†	19.1	2.88	15.09%	[0.00]	ug/L
Na 589.592 Radial†	-1634.2	20.42	1.25%	[0.00]	ug/L
Ni 231.604†	128.1	18.56	14.49%	[0.00]	ug/L
P 214.914†	241.3	6.86	2.84%	[0.00]	ug/L
Pb 220.353†	-82.7	14.94	18.08%	[0.00]	ug/L
S 181.975 Axial†	48.9	8.70	17.78%	[0.00]	ug/L
Sb 206.836†	40.1	6.87	17.13%	[0.00]	ug/L
Se 196.026†	-25.6	3.02	11.81%	[0.00]	ug/L
Si 251.611†	634.6	6.68	1.05%	[0.00]	ug/L
Sn 189.927†	9.1	2.12	23.33%	[0.00]	ug/L
Sr 421.552†	32.6	27.92	85.66%	[0.00]	ug/L
Ti 334.940†	-1389.0	69.25	4.99%	[0.00]	ug/L
Tl 190.801†	-40.7	6.42	15.77%	[0.00]	ug/L
U 409.014†	-2797.9	53.90	1.93%	[0.00]	ug/L
V 292.402†	-1536.0	42.21	2.75%	[0.00]	ug/L

Zn 213.857†	890.7	4.66	0.52%	[0.00] ug/L
SiO2†	647.9	39.95	6.17%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/16/2009 11:01:04
Data Type: Reprocessed on 12/16/2009 13:14:22

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	973647.1	973647.1	101.13	%	11:03:28
1	Sc Radial	6402.3	6402.3	102	%	11:03:01
1	Y 371.029	808189.9	808189.9	100.78	%	11:03:28
1	Y RADIAL	6853.0	6853.0	101.4	%	11:03:01
1	Ag 328.068†	23591.8	22868.4	[100]	ug/L	11:03:33
1	As 188.979†	255.2	274.7	[100]	ug/L	11:03:53
1	B 249.677†	4246.6	4532.9	[100]	ug/L	11:03:33
1	Ba 233.527†	14997.4	14805.2	[100]	ug/L	11:03:33
1	Be 313.107†	292948.8	294355.7	[100]	ug/L	11:03:28
1	Cd 226.502†	10017.8	10117.9	[100]	ug/L	11:03:33
1	Co 228.616†	5620.3	5627.9	[100]	ug/L	11:03:53
1	Cr 267.716†	10123.9	9922.6	[100]	ug/L	11:03:33
1	Cu 324.752†	41691.2	34930.8	[100]	ug/L	11:03:33
1	K 766.490 Radial†	8787.9	5720.9	[1000]	ug/L	11:02:56
1	Mn 257.610†	102425.7	100724.4	[100]	ug/L	11:03:33
1	Mo 202.031†	1712.2	1674.0	[100]	ug/L	11:03:53
1	Ni 231.604†	4875.0	4692.4	[100]	ug/L	11:03:33
1	P 214.914†	1179.5	925.0	[500]	ug/L	11:03:53
1	Pb 220.353†	897.8	970.5	[100]	ug/L	11:03:53
1	S 181.975 Axial†	211.2	160.0	[200]	ug/L	11:03:53
1	Sb 206.836†	366.9	322.7	[100]	ug/L	11:03:53
1	Se 196.026†	153.7	177.6	[100]	ug/L	11:03:53
1	Si 251.611†	18129.9	17292.6	[500]	ug/L	11:03:33
1	Sn 189.927†	675.6	659.0	[100]	ug/L	11:03:53
1	Sr 421.552†	18521.5	18144.3	[100]	ug/L	11:03:01
1	Ti 334.940†	66290.3	66938.1	[100]	ug/L	11:03:33
1	Tl 190.801†	354.1	390.9	[100]	ug/L	11:03:53
1	U 409.014†	888.3	3676.3	[100]	ug/L	11:03:28
1	V 292.402†	14136.5	15514.4	[100]	ug/L	11:03:33
1	Zn 213.857†	13092.2	12055.2	[100]	ug/L	11:03:33
1	SiO2†	18345.3	17492.3	[1069.5]	ug/L	11:04:59
2	Sc 361.383	973230.1	973230.1	101.09	%	11:03:59
2	Sc Radial	6377.9	6377.9	102	%	11:03:11
2	Y 371.029	807731.7	807731.7	100.72	%	11:03:59
2	Y RADIAL	6876.0	6876.0	101.8	%	11:03:11
2	Ag 328.068†	23666.8	22952.5	[100]	ug/L	11:04:04
2	As 188.979†	240.0	259.7	[100]	ug/L	11:04:24
2	B 249.677†	4359.4	4646.2	[100]	ug/L	11:04:04
2	Ba 233.527†	15075.3	14888.6	[100]	ug/L	11:04:04
2	Be 313.107†	293085.4	294614.9	[100]	ug/L	11:03:59
2	Cd 226.502†	10096.6	10200.1	[100]	ug/L	11:04:04
2	Co 228.616†	5582.7	5593.1	[100]	ug/L	11:04:24
2	Cr 267.716†	10115.4	9918.6	[100]	ug/L	11:04:04
2	Cu 324.752†	41868.9	35124.3	[100]	ug/L	11:04:04
2	K 766.490 Radial†	8681.0	5648.6	[1000]	ug/L	11:03:06
2	Mn 257.610†	102963.0	101299.3	[100]	ug/L	11:04:04
2	Mo 202.031†	1717.3	1679.7	[100]	ug/L	11:04:24
2	Ni 231.604†	4822.2	4642.2	[100]	ug/L	11:04:04
2	P 214.914†	1199.1	944.9	[500]	ug/L	11:04:24
2	Pb 220.353†	904.9	977.8	[100]	ug/L	11:04:24
2	S 181.975 Axial†	208.2	157.1	[200]	ug/L	11:04:24
2	Sb 206.836†	370.8	326.7	[100]	ug/L	11:04:24
2	Se 196.026†	159.7	183.5	[100]	ug/L	11:04:24
2	Si 251.611†	18211.7	17381.2	[500]	ug/L	11:04:04
2	Sn 189.927†	678.7	662.3	[100]	ug/L	11:04:24
2	Sr 421.552†	18537.2	18229.2	[100]	ug/L	11:03:11
2	Ti 334.940†	66554.6	67227.7	[100]	ug/L	11:04:04
2	Tl 190.801†	350.5	387.4	[100]	ug/L	11:04:24

2	U 409.014†	832.5	3621.5	[100]	ug/L	11:03:59
2	V 292.402†	14199.1	15582.4	[100]	ug/L	11:04:04
2	Zn 213.857†	13252.5	12219.3	[100]	ug/L	11:04:04
2	SiO2†	18130.2	17287.3	[1069.5]	ug/L	11:05:05
3	Sc 361.383	969019.5	969019.5	100.65	%	11:04:29
3	Sc Radial	6380.8	6380.8	102	%	11:03:21
3	Y 371.029	804489.0	804489.0	100.32	%	11:04:29
3	Y RADIAL	6819.2	6819.2	100.9	%	11:03:21
3	Ag 328.068†	23825.1	23211.6	[100]	ug/L	11:04:34
3	As 188.979†	262.5	283.2	[100]	ug/L	11:04:54
3	B 249.677†	4374.4	4679.9	[100]	ug/L	11:04:34
3	Ba 233.527†	15215.0	15092.2	[100]	ug/L	11:04:34
3	Be 313.107†	291558.7	294357.9	[100]	ug/L	11:04:29
3	Cd 226.502†	10204.0	10350.1	[100]	ug/L	11:04:34
3	Co 228.616†	5627.1	5661.2	[100]	ug/L	11:04:54
3	Cr 267.716†	10258.1	10103.8	[100]	ug/L	11:04:34
3	Cu 324.752†	42336.8	35769.1	[100]	ug/L	11:04:34
3	K 766.490 Radial†	8608.5	5573.4	[1000]	ug/L	11:03:16
3	Mn 257.610†	104066.7	102838.5	[100]	ug/L	11:04:34
3	Mo 202.031†	1704.8	1674.7	[100]	ug/L	11:04:54
3	Ni 231.604†	4861.8	4702.3	[100]	ug/L	11:04:34
3	P 214.914†	1170.0	921.2	[500]	ug/L	11:04:54
3	Pb 220.353†	889.2	966.2	[100]	ug/L	11:04:54
3	S 181.975 Axial†	204.4	154.2	[200]	ug/L	11:04:54
3	Sb 206.836†	367.5	325.0	[100]	ug/L	11:04:54
3	Se 196.026†	158.1	182.6	[100]	ug/L	11:04:54
3	Si 251.611†	18415.3	17661.7	[500]	ug/L	11:04:34
3	Sn 189.927†	669.4	656.0	[100]	ug/L	11:04:54
3	Sr 421.552†	18514.0	18198.3	[100]	ug/L	11:03:21
3	Ti 334.940†	67297.5	68251.8	[100]	ug/L	11:04:34
3	Tl 190.801†	343.8	382.3	[100]	ug/L	11:04:54
3	U 409.014†	815.5	3608.2	[100]	ug/L	11:04:29
3	V 292.402†	14403.3	15846.3	[100]	ug/L	11:04:34
3	Zn 213.857†	13340.1	12363.3	[100]	ug/L	11:04:34
3	SiO2†	18332.0	17565.7	[1069.5]	ug/L	11:05:10

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	971965.6	2559.88	0.26%	100.96	%
Sc Radial	6387.0	13.33	0.21%	102	%
Y 371.029	806803.5	2017.46	0.25%	100.61	%
Y RADIAL	6849.4	28.58	0.42%	101.4	%
Ag 328.068†	23010.8	178.87	0.78%	[100]	ug/L
As 188.979†	272.5	11.86	4.35%	[100]	ug/L
B 249.677†	4619.7	77.03	1.67%	[100]	ug/L
Ba 233.527†	14928.7	147.66	0.99%	[100]	ug/L
Be 313.107†	294442.8	149.04	0.05%	[100]	ug/L
Cd 226.502†	10222.7	117.77	1.15%	[100]	ug/L
Co 228.616†	5627.4	34.05	0.61%	[100]	ug/L
Cr 267.716†	9981.7	105.79	1.06%	[100]	ug/L
Cu 324.752†	35274.7	438.96	1.24%	[100]	ug/L
K 766.490 Radial†	5647.6	73.75	1.31%	[1000]	ug/L
Mn 257.610†	101620.7	1093.10	1.08%	[100]	ug/L
Mo 202.031†	1676.1	3.14	0.19%	[100]	ug/L
Ni 231.604†	4678.9	32.24	0.69%	[100]	ug/L
P 214.914†	930.3	12.73	1.37%	[500]	ug/L
Pb 220.353†	971.5	5.91	0.61%	[100]	ug/L
S 181.975 Axial†	157.1	2.91	1.85%	[200]	ug/L
Sb 206.836†	324.8	1.99	0.61%	[100]	ug/L
Se 196.026†	181.2	3.21	1.77%	[100]	ug/L
Si 251.611†	17445.2	192.69	1.10%	[500]	ug/L
Sn 189.927†	659.1	3.19	0.48%	[100]	ug/L
Sr 421.552†	18190.6	42.95	0.24%	[100]	ug/L
Ti 334.940†	67472.5	690.25	1.02%	[100]	ug/L
Tl 190.801†	386.9	4.34	1.12%	[100]	ug/L
U 409.014†	3635.4	36.12	0.99%	[100]	ug/L
V 292.402†	15647.7	175.28	1.12%	[100]	ug/L
Zn 213.857†	12212.6	154.20	1.26%	[100]	ug/L
SiO2†	17448.4	144.31	0.83%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/16/2009 11:07:20
Data Type: Reprocessed on 12/16/2009 13:14:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	973645.7	973645.7	101.13	%	11:10:31
1	Sc Radial	6293.5	6293.5	100	%	11:09:12
1	Y 371.029	801343.3	801343.3	99.926	%	11:10:31
1	Y RADIAL	6699.0	6699.0	99.14	%	11:09:12
1	Ag 328.068†	119915.1	118114.9	[500]	ug/L	11:10:31
1	Al 396.153Radial†	7881.6	7895.4	[5000]	ug/L	11:09:12
1	As 188.979†	1391.6	1398.4	[500]	ug/L	11:10:51
1	B 249.677†	24688.2	24746.0	[500]	ug/L	11:10:31
1	Ba 233.527†	76791.3	75908.3	[500]	ug/L	11:10:31
1	Be 313.107†	1533994.3	1521527.5	[500]	ug/L	11:10:31
1	Ca 317.933Radial†	3902.5	3861.2	[5000]	ug/L	11:09:12
1	Cd 226.502†	52736.9	52359.4	[500]	ug/L	11:10:31
1	Co 228.616†	29098.2	28843.4	[500]	ug/L	11:10:51
1	Cr 267.716†	51438.1	50775.0	[500]	ug/L	11:10:31
1	Cu 324.752†	191450.2	183015.6	[500]	ug/L	11:10:31
1	K 766.490 Radial†	32354.1	29397.2	[5000]	ug/L	11:09:12
1	Mg 279.077 IEC†	180.9	177.9	[5000]	ug/L	11:09:32
1	Mn 257.610†	525661.3	519228.6	[500]	ug/L	11:10:31
1	Mo 202.031†	8728.7	8612.0	[500]	ug/L	11:10:51
1	Ni 231.604†	23659.3	23266.7	[500]	ug/L	11:10:51
1	P 214.914†	5172.3	4873.2	[2500]	ug/L	11:10:51
1	Pb 220.353†	4903.5	4931.3	[500]	ug/L	11:10:51
1	S 181.975 Axial†	882.5	823.7	[1000]	ug/L	11:10:51
1	Sb 206.836†	1760.1	1700.3	[500]	ug/L	11:10:51
1	Se 196.026†	908.2	923.6	[500]	ug/L	11:10:51
1	Si 251.611†	93497.4	91817.6	[2500]	ug/L	11:10:31
1	Sn 189.927†	3456.0	3408.2	[500]	ug/L	11:10:51
1	Sr 421.552†	93751.5	93564.3	[500]	ug/L	11:09:12
1	Ti 334.940†	356445.7	353849.9	[500]	ug/L	11:10:31
1	Tl 190.801†	1961.7	1980.5	[500]	ug/L	11:10:51
1	U 409.014†	15112.4	17741.4	[500]	ug/L	11:10:31
1	V 292.402†	79884.0	80527.0	[500]	ug/L	11:10:31
1	Zn 213.857†	64245.8	62636.9	[500]	ug/L	11:10:31
1	SiO2†	94216.9	92515.7	[5347.5]	ug/L	11:11:52
2	Sc 361.383	974260.9	974260.9	101.19	%	11:10:59
2	Sc Radial	6313.4	6313.4	100	%	11:09:37
2	Y 371.029	800900.6	800900.6	99.871	%	11:10:59
2	Y RADIAL	6747.9	6747.9	99.86	%	11:09:37
2	Ag 328.068†	119861.4	117986.9	[500]	ug/L	11:10:59
2	Al 396.153Radial†	7940.5	7929.3	[5000]	ug/L	11:09:37
2	As 188.979†	1407.7	1413.5	[500]	ug/L	11:11:19
2	B 249.677†	24661.9	24704.6	[500]	ug/L	11:10:59
2	Ba 233.527†	76802.5	75871.4	[500]	ug/L	11:10:59
2	Be 313.107†	1532347.0	1518941.8	[500]	ug/L	11:10:59
2	Ca 317.933Radial†	3920.9	3867.3	[5000]	ug/L	11:09:37
2	Cd 226.502†	52635.1	52225.9	[500]	ug/L	11:10:59
2	Co 228.616†	29089.4	28816.6	[500]	ug/L	11:11:19
2	Cr 267.716†	51395.8	50701.1	[500]	ug/L	11:10:59
2	Cu 324.752†	191447.9	182893.9	[500]	ug/L	11:10:59
2	K 766.490 Radial†	32582.1	29522.9	[5000]	ug/L	11:09:37
2	Mg 279.077 IEC†	178.4	174.8	[5000]	ug/L	11:09:57
2	Mn 257.610†	526339.9	519571.0	[500]	ug/L	11:10:59
2	Mo 202.031†	8708.0	8586.1	[500]	ug/L	11:11:19
2	Ni 231.604†	23650.6	23243.3	[500]	ug/L	11:11:19
2	P 214.914†	5163.0	4860.8	[2500]	ug/L	11:11:19
2	Pb 220.353†	4900.2	4925.0	[500]	ug/L	11:11:19
2	S 181.975 Axial†	875.1	815.9	[1000]	ug/L	11:11:19
2	Sb 206.836†	1759.4	1698.5	[500]	ug/L	11:11:19

2	Se 196.026†	911.8	926.6	[500]	ug/L	11:11:19
2	Si 251.611†	93590.9	91851.6	[2500]	ug/L	11:10:59
2	Sn 189.927†	3446.3	3396.6	[500]	ug/L	11:11:19
2	Sr 421.552†	94507.7	94023.2	[500]	ug/L	11:09:37
2	Ti 334.940†	356626.1	353805.6	[500]	ug/L	11:10:59
2	Tl 190.801†	1955.8	1973.5	[500]	ug/L	11:11:19
2	U 409.014†	15370.7	17987.2	[500]	ug/L	11:10:59
2	V 292.402†	79767.8	80362.2	[500]	ug/L	11:10:59
2	Zn 213.857†	64197.1	62548.6	[500]	ug/L	11:10:59
2	SiO2†	92451.2	90712.0	[5347.5]	ug/L	11:11:57
3	Sc 361.383	968618.4	968618.4	100.61	%	11:11:26
3	Sc Radial	6262.5	6262.5	99.7	%	11:10:02
3	Y 371.029	796255.3	796255.3	99.292	%	11:11:26
3	Y RADIAL	6679.1	6679.1	98.84	%	11:10:02
3	Ag 328.068†	119469.0	118286.9	[500]	ug/L	11:11:26
3	Al 396.153Radial†	7849.2	7901.9	[5000]	ug/L	11:10:02
3	As 188.979†	1392.3	1406.3	[500]	ug/L	11:11:46
3	B 249.677†	24492.1	24677.8	[500]	ug/L	11:11:26
3	Ba 233.527†	76617.1	76129.3	[500]	ug/L	11:11:26
3	Be 313.107†	1524558.6	1520021.5	[500]	ug/L	11:11:26
3	Ca 317.933Radial†	3893.8	3871.8	[5000]	ug/L	11:10:02
3	Cd 226.502†	52476.2	52371.0	[500]	ug/L	11:11:26
3	Co 228.616†	29087.3	28981.9	[500]	ug/L	11:11:46
3	Cr 267.716†	51222.0	50824.2	[500]	ug/L	11:11:26
3	Cu 324.752†	190771.5	183323.6	[500]	ug/L	11:11:26
3	K 766.490 Radial†	32630.1	29834.2	[5000]	ug/L	11:10:02
3	Mg 279.077 IEC†	178.9	176.7	[5000]	ug/L	11:10:22
3	Mn 257.610†	523947.6	520223.1	[500]	ug/L	11:11:26
3	Mo 202.031†	8715.4	8643.6	[500]	ug/L	11:11:46
3	Ni 231.604†	23629.0	23358.0	[500]	ug/L	11:11:46
3	P 214.914†	5173.2	4900.6	[2500]	ug/L	11:11:46
3	Pb 220.353†	4920.7	4973.6	[500]	ug/L	11:11:46
3	S 181.975 Axial†	895.8	841.5	[1000]	ug/L	11:11:46
3	Sb 206.836†	1767.3	1716.4	[500]	ug/L	11:11:46
3	Se 196.026†	899.7	919.8	[500]	ug/L	11:11:46
3	Si 251.611†	93181.6	91983.5	[2500]	ug/L	11:11:26
3	Sn 189.927†	3448.3	3418.3	[500]	ug/L	11:11:46
3	Sr 421.552†	94272.5	94550.7	[500]	ug/L	11:10:02
3	Ti 334.940†	355103.8	354345.4	[500]	ug/L	11:11:26
3	Tl 190.801†	1963.4	1992.2	[500]	ug/L	11:11:46
3	U 409.014†	15154.6	17860.8	[500]	ug/L	11:11:26
3	V 292.402†	79540.5	80595.5	[500]	ug/L	11:11:26
3	Zn 213.857†	64044.7	62766.8	[500]	ug/L	11:11:26
3	SiO2†	92158.9	90953.7	[5347.5]	ug/L	11:12:02

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	972175.0	3095.41	0.32%	100.98	%
Sc Radial	6289.8	25.62	0.41%	100	%
Y 371.029	799499.7	2818.43	0.35%	99.696	%
Y RADIAL	6708.7	35.40	0.53%	99.28	%
Ag 328.068†	118129.6	150.50	0.13%	[500]	ug/L
Al 396.153Radial†	7908.9	18.03	0.23%	[5000]	ug/L
As 188.979†	1406.0	7.52	0.54%	[500]	ug/L
B 249.677†	24709.5	34.35	0.14%	[500]	ug/L
Ba 233.527†	75969.7	139.45	0.18%	[500]	ug/L
Be 313.107†	1520163.6	1298.67	0.09%	[500]	ug/L
Ca 317.933Radial†	3866.8	5.29	0.14%	[5000]	ug/L
Cd 226.502†	52318.7	80.63	0.15%	[500]	ug/L
Co 228.616†	28880.6	88.72	0.31%	[500]	ug/L
Cr 267.716†	50766.8	61.93	0.12%	[500]	ug/L
Cu 324.752†	183077.7	221.48	0.12%	[500]	ug/L
K 766.490 Radial†	29584.8	224.95	0.76%	[5000]	ug/L
Mg 279.077 IEC†	176.5	1.56	0.88%	[5000]	ug/L
Mn 257.610†	519674.2	505.20	0.10%	[500]	ug/L
Mo 202.031†	8613.9	28.81	0.33%	[500]	ug/L
Ni 231.604†	23289.3	60.60	0.26%	[500]	ug/L
P 214.914†	4878.2	20.40	0.42%	[2500]	ug/L
Pb 220.353†	4943.3	26.43	0.53%	[500]	ug/L

S 181.975 Axial†	827.0	13.11	1.59%	[1000]	ug/L
Sb 206.836†	1705.1	9.87	0.58%	[500]	ug/L
Se 196.026†	923.4	3.41	0.37%	[500]	ug/L
Si 251.611†	91884.2	87.67	0.10%	[2500]	ug/L
Sn 189.927†	3407.7	10.90	0.32%	[500]	ug/L
Sr 421.552†	94046.1	493.61	0.52%	[500]	ug/L
Ti 334.940†	354000.3	299.68	0.08%	[500]	ug/L
Tl 190.801†	1982.0	9.47	0.48%	[500]	ug/L
U 409.014†	17863.1	122.92	0.69%	[500]	ug/L
V 292.402†	80494.9	119.91	0.15%	[500]	ug/L
Zn 213.857†	62650.8	109.72	0.18%	[500]	ug/L
SiO2†	91393.8	979.06	1.07%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/16/2009 11:14:13
Data Type: Reprocessed on 12/16/2009 13:14:31

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	967171.7	967171.7	100.46	%	11:17:24
1	Sc Radial	6120.2	6120.2	97.4	%	11:16:26
1	Y 371.029	763509.0	763509.0	95.208	%	11:17:29
1	Y RADIAL	6479.1	6479.1	95.88	%	11:16:26
1	Ag 328.068†	233208.2	231685.0	[1000]	ug/L	11:17:29
1	Al 396.153Radial†	15759.1	16205.6	[10000]	ug/L	11:16:06
1	As 188.979†	2774.5	2784.2	[1000]	ug/L	11:17:49
1	B 249.677†	48867.3	48978.2	[1000]	ug/L	11:17:29
1	Ba 233.527†	149543.4	148837.0	[1000]	ug/L	11:17:29
1	Be 313.107†	3009240.3	3000199.1	[1000]	ug/L	11:17:24
1	Ca 317.933Radial†	7466.6	7630.6	[10000]	ug/L	11:16:26
1	Cd 226.502†	102428.2	102173.2	[1000]	ug/L	11:17:29
1	Co 228.616†	57475.8	57284.2	[1000]	ug/L	11:17:29
1	Cr 267.716†	100253.8	99708.6	[1000]	ug/L	11:17:29
1	Cu 324.752†	365833.9	357871.2	[1000]	ug/L	11:17:29
1	Fe 238.204 Radial†	1295.6	1320.9	[10000]	ug/L	11:16:26
1	K 766.490 Radial†	61944.0	60690.3	[10000]	ug/L	11:16:06
1	Mg 279.077 IEC†	352.7	359.4	[10000]	ug/L	11:16:26
1	Mn 257.610†	1029152.9	1023903.5	[1000]	ug/L	11:17:24
1	Mo 202.031†	16924.3	16828.0	[1000]	ug/L	11:17:49
1	Na 589.592 Radial†	33958.2	36496.8	[10000]	ug/L	11:16:06
1	Ni 231.604†	46304.7	45965.3	[1000]	ug/L	11:17:29
1	P 214.914†	9900.6	9614.2	[5000]	ug/L	11:17:49
1	Pb 220.353†	9594.9	9633.8	[1000]	ug/L	11:17:49
1	S 181.975 Axial†	1689.9	1633.3	[2000]	ug/L	11:17:49
1	Sb 206.836†	3410.0	3354.4	[1000]	ug/L	11:17:49
1	Se 196.026†	1814.9	1832.2	[1000]	ug/L	11:17:49
1	Si 251.611†	178848.3	177398.1	[5000]	ug/L	11:17:29
1	Sn 189.927†	6733.0	6693.2	[1000]	ug/L	11:17:49
1	Sr 421.552†	187267.6	192222.6	[1000]	ug/L	11:16:06
1	Ti 334.940†	679156.7	677448.4	[1000]	ug/L	11:17:29
1	Tl 190.801†	3861.7	3884.8	[1000]	ug/L	11:17:49
1	U 409.014†	33785.6	36429.4	[1000]	ug/L	11:17:29
1	V 292.402†	157938.8	158754.6	[1000]	ug/L	11:17:29
1	Zn 213.857†	123965.9	122509.9	[1000]	ug/L	11:17:29
1	SiO2†	179598.2	178131.3	[10695]	ug/L	11:18:58
2	Sc 361.383	961162.7	961162.7	99.834	%	11:17:55
2	Sc Radial	6148.6	6148.6	97.9	%	11:16:51
2	Y 371.029	760402.5	760402.5	94.821	%	11:18:01
2	Y RADIAL	6495.5	6495.5	96.13	%	11:16:51
2	Ag 328.068†	232331.2	232257.9	[1000]	ug/L	11:18:01
2	Al 396.153Radial†	15574.1	15941.9	[10000]	ug/L	11:16:31
2	As 188.979†	2762.8	2789.7	[1000]	ug/L	11:18:21
2	B 249.677†	48937.0	49352.1	[1000]	ug/L	11:18:01
2	Ba 233.527†	149319.7	149543.5	[1000]	ug/L	11:18:01
2	Be 313.107†	2996668.3	3006333.6	[1000]	ug/L	11:17:55
2	Ca 317.933Radial†	7508.3	7637.8	[10000]	ug/L	11:16:51
2	Cd 226.502†	102450.9	102833.3	[1000]	ug/L	11:18:01
2	Co 228.616†	57594.8	57761.0	[1000]	ug/L	11:18:01
2	Cr 267.716†	100196.5	100275.0	[1000]	ug/L	11:18:01
2	Cu 324.752†	364768.4	359080.7	[1000]	ug/L	11:18:01
2	Fe 238.204 Radial†	1303.2	1322.5	[10000]	ug/L	11:16:51
2	K 766.490 Radial†	61530.4	59974.0	[10000]	ug/L	11:16:31
2	Mg 279.077 IEC†	353.1	358.1	[10000]	ug/L	11:16:51
2	Mn 257.610†	1023974.8	1025121.4	[1000]	ug/L	11:17:55
2	Mo 202.031†	16882.2	16891.1	[1000]	ug/L	11:18:21
2	Na 589.592 Radial†	33395.4	35760.6	[10000]	ug/L	11:16:31
2	Ni 231.604†	46330.0	46278.9	[1000]	ug/L	11:18:01

2	P 214.914†	9889.3	9664.5	[5000]	ug/L	11:18:21
2	Pb 220.353†	9586.8	9685.4	[1000]	ug/L	11:18:21
2	S 181.975 Axial†	1684.1	1638.0	[2000]	ug/L	11:18:21
2	Sb 206.836†	3410.7	3376.3	[1000]	ug/L	11:18:21
2	Se 196.026†	1799.8	1828.4	[1000]	ug/L	11:18:21
2	Si 251.611†	178779.1	178441.9	[5000]	ug/L	11:18:01
2	Sn 189.927†	6734.8	6736.9	[1000]	ug/L	11:18:21
2	Sr 421.552†	184351.3	188354.4	[1000]	ug/L	11:16:31
2	Ti 334.940†	677676.3	680192.2	[1000]	ug/L	11:18:01
2	Tl 190.801†	3850.6	3897.7	[1000]	ug/L	11:18:21
2	U 409.014†	33733.7	36587.7	[1000]	ug/L	11:18:01
2	V 292.402†	157468.5	159266.4	[1000]	ug/L	11:18:01
2	Zn 213.857†	123868.0	123183.3	[1000]	ug/L	11:18:01
2	SiO2†	179143.1	178793.1	[10695]	ug/L	11:19:03
3	Sc 361.383	962606.6	962606.6	99.984	%	11:18:27
3	Sc Radial	6115.9	6115.9	97.3	%	11:17:16
3	Y 371.029	763454.5	763454.5	95.201	%	11:18:32
3	Y RADIAL	6461.9	6461.9	95.63	%	11:17:16
3	Ag 328.068†	233779.8	233357.6	[1000]	ug/L	11:18:32
3	Al 396.153Radial†	15688.5	16144.4	[10000]	ug/L	11:16:56
3	As 188.979†	2759.4	2782.2	[1000]	ug/L	11:18:53
3	B 249.677†	49228.4	49570.1	[1000]	ug/L	11:18:32
3	Ba 233.527†	150173.4	150173.0	[1000]	ug/L	11:18:32
3	Be 313.107†	3005596.0	3010760.4	[1000]	ug/L	11:18:27
3	Ca 317.933Radial†	7473.0	7642.6	[10000]	ug/L	11:17:16
3	Cd 226.502†	103041.1	103269.7	[1000]	ug/L	11:18:32
3	Co 228.616†	57868.7	57948.4	[1000]	ug/L	11:18:32
3	Cr 267.716†	100551.6	100479.7	[1000]	ug/L	11:18:32
3	Cu 324.752†	367199.2	360963.8	[1000]	ug/L	11:18:32
3	Fe 238.204 Radial†	1293.2	1319.4	[10000]	ug/L	11:17:16
3	K 766.490 Radial†	62302.6	61102.9	[10000]	ug/L	11:16:56
3	Mg 279.077 IEC†	350.2	357.0	[10000]	ug/L	11:17:16
3	Mn 257.610†	1027860.1	1027468.9	[1000]	ug/L	11:18:27
3	Mo 202.031†	16827.7	16811.4	[1000]	ug/L	11:18:53
3	Na 589.592 Radial†	33659.1	36213.8	[10000]	ug/L	11:16:56
3	Ni 231.604†	46589.6	46468.9	[1000]	ug/L	11:18:32
3	P 214.914†	9877.7	9638.0	[5000]	ug/L	11:18:53
3	Pb 220.353†	9590.8	9675.0	[1000]	ug/L	11:18:53
3	S 181.975 Axial†	1691.4	1642.8	[2000]	ug/L	11:18:53
3	Sb 206.836†	3417.6	3378.1	[1000]	ug/L	11:18:53
3	Se 196.026†	1791.5	1817.4	[1000]	ug/L	11:18:53
3	Si 251.611†	179855.3	179249.5	[5000]	ug/L	11:18:32
3	Sn 189.927†	6749.6	6741.5	[1000]	ug/L	11:18:53
3	Sr 421.552†	187051.6	192134.2	[1000]	ug/L	11:16:56
3	Ti 334.940†	680762.3	682260.5	[1000]	ug/L	11:18:32
3	Tl 190.801†	3869.1	3910.4	[1000]	ug/L	11:18:53
3	U 409.014†	33802.8	36606.2	[1000]	ug/L	11:18:32
3	V 292.402†	158443.9	160005.3	[1000]	ug/L	11:18:32
3	Zn 213.857†	124534.3	123663.6	[1000]	ug/L	11:18:32
3	SiO2†	177597.6	176978.2	[10695]	ug/L	11:19:09

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	963647.0	3136.70	0.33%	100.09	%
Sc Radial	6128.2	17.75	0.29%	97.5	%
Y 371.029	762455.3	1777.98	0.23%	95.077	%
Y RADIAL	6478.8	16.81	0.26%	95.88	%
Ag 328.068†	232433.5	850.02	0.37%	[1000]	ug/L
Al 396.153Radial†	16097.3	138.02	0.86%	[10000]	ug/L
As 188.979†	2785.4	3.89	0.14%	[1000]	ug/L
B 249.677†	49300.1	299.32	0.61%	[1000]	ug/L
Ba 233.527†	149517.9	668.40	0.45%	[1000]	ug/L
Be 313.107†	3005764.4	5303.60	0.18%	[1000]	ug/L
Ca 317.933Radial†	7637.0	6.02	0.08%	[10000]	ug/L
Cd 226.502†	102758.7	552.04	0.54%	[1000]	ug/L
Co 228.616†	57664.6	342.47	0.59%	[1000]	ug/L
Cr 267.716†	100154.4	399.47	0.40%	[1000]	ug/L
Cu 324.752†	359305.3	1558.49	0.43%	[1000]	ug/L
Fe 238.204 Radial†	1321.0	1.55	0.12%	[10000]	ug/L

K 766.490 Radial†	60589.1	571.26	0.94%	[10000]	ug/L
Mg 279.077 IEC†	358.2	1.16	0.32%	[10000]	ug/L
Mn 257.610†	1025497.9	1812.29	0.18%	[1000]	ug/L
Mo 202.031†	16843.5	42.09	0.25%	[1000]	ug/L
Na 589.592 Radial†	36157.1	371.32	1.03%	[10000]	ug/L
Ni 231.604†	46237.7	254.29	0.55%	[1000]	ug/L
P 214.914†	9638.9	25.17	0.26%	[5000]	ug/L
Pb 220.353†	9664.7	27.31	0.28%	[1000]	ug/L
S 181.975 Axial†	1638.0	4.77	0.29%	[2000]	ug/L
Sb 206.836†	3369.6	13.19	0.39%	[1000]	ug/L
Se 196.026†	1826.0	7.70	0.42%	[1000]	ug/L
Si 251.611†	178363.2	928.24	0.52%	[5000]	ug/L
Sn 189.927†	6723.9	26.70	0.40%	[1000]	ug/L
Sr 421.552†	190903.7	2208.24	1.16%	[1000]	ug/L
Ti 334.940†	679967.0	2413.91	0.36%	[1000]	ug/L
Tl 190.801†	3897.6	12.80	0.33%	[1000]	ug/L
U 409.014†	36541.1	97.14	0.27%	[1000]	ug/L
V 292.402†	159342.1	628.79	0.39%	[1000]	ug/L
Zn 213.857†	123118.9	579.56	0.47%	[1000]	ug/L
SiO2†	177967.5	918.46	0.52%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/16/2009 11:21:19
Data Type: Reprocessed on 12/16/2009 13:14:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	928105.9	928105.9	96.400	%	11:24:30
1	Sc Radial	6111.1	6111.1	97.3	%	11:23:33
1	Y 371.029	758192.1	758192.1	94.545	%	11:24:30
1	Y RADIAL	6473.5	6473.5	95.80	%	11:23:33
1	Al 396.153Radial†	79155.7	81410.9	[50000]	ug/L	11:23:13
1	Ca 317.933Radial†	36842.4	37844.7	[50000]	ug/L	11:23:33
1	Fe 238.204 Radial†	2566.1	2629.2	[20000]	ug/L	11:23:33
1	Mg 279.077 IEC†	1698.8	1743.9	[50000]	ug/L	11:23:33
1	Na 589.592 Radial†	70563.7	74184.5	[20000]	ug/L	11:23:13
2	Sc 361.383	929113.7	929113.7	96.505	%	11:24:36
2	Sc Radial	6094.9	6094.9	97.0	%	11:23:58
2	Y 371.029	758779.9	758779.9	94.619	%	11:24:36
2	Y RADIAL	6491.4	6491.4	96.07	%	11:23:58
2	Al 396.153Radial†	79430.0	81910.1	[50000]	ug/L	11:23:38
2	Ca 317.933Radial†	36737.2	37837.0	[50000]	ug/L	11:23:58
2	Fe 238.204 Radial†	2574.5	2644.8	[20000]	ug/L	11:23:58
2	Mg 279.077 IEC†	1700.8	1750.7	[50000]	ug/L	11:23:58
2	Na 589.592 Radial†	71215.3	75049.0	[20000]	ug/L	11:23:38
3	Sc 361.383	940062.7	940062.7	97.642	%	11:24:42
3	Sc Radial	6119.9	6119.9	97.4	%	11:24:23
3	Y 371.029	767463.9	767463.9	95.701	%	11:24:42
3	Y RADIAL	6503.4	6503.4	96.24	%	11:24:23
3	Al 396.153Radial†	77971.8	80078.7	[50000]	ug/L	11:24:03
3	Ca 317.933Radial†	36893.6	37843.0	[50000]	ug/L	11:24:23
3	Fe 238.204 Radial†	2567.7	2627.0	[20000]	ug/L	11:24:23
3	Mg 279.077 IEC†	1706.0	1748.8	[50000]	ug/L	11:24:23
3	Na 589.592 Radial†	69158.4	72637.5	[20000]	ug/L	11:24:03

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	932427.4	6631.53	0.71%	96.849	%
Sc Radial	6108.7	12.67	0.21%	97.2	%
Y 371.029	761478.6	5191.70	0.68%	94.955	%
Y RADIAL	6489.5	15.05	0.23%	96.04	%
Al 396.153Radial†	81133.2	946.74	1.17%	[50000]	ug/L
Ca 317.933Radial†	37841.6	4.07	0.01%	[50000]	ug/L
Fe 238.204 Radial†	2633.7	9.70	0.37%	[20000]	ug/L
Mg 279.077 IEC†	1747.8	3.48	0.20%	[50000]	ug/L
Na 589.592 Radial†	73957.0	1221.71	1.65%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	233.2	0.00000	0.999978	
Al 396.153Radial	3	Lin Thru 0	0.0	1.622	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	2.790	0.00000	0.999991	
B 249.677	3	Lin Thru 0	0.0	49.30	0.00000	0.999984	
Ba 233.527	3	Lin Thru 0	0.0	150.0	0.00000	0.999979	
Be 313.107	3	Lin Thru 0	0.0	3012	0.00000	0.999988	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.7573	0.00000	0.999996	
Cd 226.502	3	Lin Thru 0	0.0	103.1	0.00000	0.999973	
Co 228.616	3	Lin Thru 0	0.0	57.67	0.00000	0.999997	
Cr 267.716	3	Lin Thru 0	0.0	100.4	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	360.6	0.00000	0.999969	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1318	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	6.027	0.00000	0.999940
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0350	0.00000	0.999989
Mn 257.610	3	Lin Thru 0	0.0	1028	0.00000	0.999985
Mo 202.031	3	Lin Thru 0	0.0	16.92	0.00000	0.999959
Na 589.592 Radia	2	Lin Thru 0	0.0	3.681	0.00000	0.999960
Ni 231.604	3	Lin Thru 0	0.0	46.31	0.00000	0.999995
P 214.914	3	Lin Thru 0	0.0	1.932	0.00000	0.999983
Pb 220.353	3	Lin Thru 0	0.0	9.709	0.00000	0.999959
S 181.975 Axial	3	Lin Thru 0	0.0	0.8203	0.00000	0.999985
Sb 206.836	3	Lin Thru 0	0.0	3.377	0.00000	0.999983
Se 196.026	3	Lin Thru 0	0.0	1.830	0.00000	0.999989
Si 251.611	3	Lin Thru 0	0.0	35.88	0.00000	0.999925
Sn 189.927	3	Lin Thru 0	0.0	6.741	0.00000	0.999983
Sr 421.552	3	Lin Thru 0	0.0	190.3	0.00000	0.999975
Ti 334.940	3	Lin Thru 0	0.0	685.5	0.00000	0.999866
Tl 190.801	3	Lin Thru 0	0.0	3.911	0.00000	0.999977
U 409.014	3	Lin Thru 0	0.0	36.38	0.00000	0.999960
V 292.402	3	Lin Thru 0	0.0	159.6	0.00000	0.999990
Zn 213.857	3	Lin Thru 0	0.0	123.5	0.00000	0.999975
SiO2	3	Lin Thru 0	0.0	16.73	0.00000	0.999940

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/16/2009 11:26:53
Data Type: Reprocessed on 12/16/2009 13:14:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	963516.7	963516.7	100.08	%			11:30:03
1	Sc Radial	6246.7	6246.7	99.4	%			11:28:46
1	Y 371.029	794830.5	794830.5	99.114	%			11:30:03
1	Y RADIAL	6679.0	6679.0	98.84	%			11:28:46
1	Ag 328.068†	62439.2	61930.5	268.86	ug/L	268.86	ppb	11:30:03
1	Al 396.153Radial†	8052.9	8126.7	4987.2	ug/L	4987.2	ppb	11:28:46
1	As 188.979†	1345.5	1366.8	494.33	ug/L	494.33	ppb	11:30:24
1	B 249.677†	25781.6	26095.1	527.33	ug/L	527.33	ppb	11:30:03
1	Ba 233.527†	78897.0	78810.6	526.79	ug/L	526.79	ppb	11:30:03
1	Be 313.107†	798683.2	802739.0	267.53	ug/L	267.53	ppb	11:30:03
1	Ca 317.933Radial†	3886.8	3874.7	5116.8	ug/L	5116.8	ppb	11:28:46
1	Cd 226.502†	52715.5	52886.2	512.64	ug/L	512.64	ppb	11:30:03
1	Co 228.616†	29747.3	29794.5	516.94	ug/L	516.94	ppb	11:30:24
1	Cr 267.716†	50603.8	50476.0	503.47	ug/L	503.47	ppb	11:30:03
1	Cu 324.752†	195817.4	189369.5	525.39	ug/L	525.39	ppb	11:30:03
1	Fe 238.204 Radial†	680.8	675.6	5143.6	ug/L	5143.6	ppb	11:29:06
1	K 766.490 Radial†	17772.5	14972.9	2478.7	ug/L	2478.7	ppb	11:28:46
1	Mg 279.077 IEC†	185.7	184.0	5266.1	ug/L	5266.1	ppb	11:29:06
1	Mn 257.610†	544320.2	543337.1	528.86	ug/L	528.86	ppb	11:30:03
1	Mo 202.031†	9442.4	9415.9	556.89	ug/L	556.89	ppb	11:30:24
1	Na 589.592 Radial†	7383.9	9061.2	2461.3	ug/L	2461.3	ppb	11:28:46
1	Ni 231.604†	23999.8	23852.8	514.74	ug/L	514.74	ppb	11:30:24
1	P 214.914†	5249.9	5004.5	2511.4	ug/L	2511.4	ppb	11:30:24
1	Pb 220.353†	4900.4	4979.2	514.49	ug/L	514.49	ppb	11:30:24
1	S 181.975 Axial†	2169.7	2119.1	2582.2	ug/L	2582.2	ppb	11:30:24
1	Sb 206.836†	1777.2	1735.7	523.40	ug/L	523.40	ppb	11:30:24
1	Se 196.026†	4816.2	4838.0	2664.2	ug/L	2664.2	ppb	11:30:24
1	Si 251.611†	179266.3	178491.1	4962.3	ug/L	4962.3	ppb	11:30:03
1	Sn 189.927†	3740.7	3728.7	553.74	ug/L	553.74	ppb	11:30:24
1	Sr 421.552†	99664.7	100214.6	526.64	ug/L	526.64	ppb	11:28:46
1	Ti 334.940†	357463.7	358572.3	522.95	ug/L	522.95	ppb	11:30:03
1	Tl 190.801†	2094.4	2133.4	548.95	ug/L	548.95	ppb	11:30:24
1	U 409.014†	15872.9	18658.4	511.29	ug/L	511.29	ppb	11:30:03
1	V 292.402†	82341.5	83812.9	532.51	ug/L	532.51	ppb	11:30:03
1	Zn 213.857†	66229.4	65286.8	523.86	ug/L	523.86	ppb	11:30:03
1	SiO2†	178538.3	177750.4	10600	ug/L	10600	ppb	11:31:21
2	Sc 361.383	968762.7	968762.7	100.62	%			11:30:30
2	Sc Radial	6339.8	6339.8	101	%			11:29:11
2	Y 371.029	798542.0	798542.0	99.577	%			11:30:30
2	Y RADIAL	6780.4	6780.4	100.3	%			11:29:11
2	Ag 328.068†	62499.9	61653.1	267.62	ug/L	267.62	ppb	11:30:30
2	Al 396.153Radial†	8152.6	8106.5	4974.8	ug/L	4974.8	ppb	11:29:11
2	As 188.979†	1334.9	1349.0	487.93	ug/L	487.93	ppb	11:30:50
2	B 249.677†	25896.2	26069.5	526.83	ug/L	526.83	ppb	11:30:30
2	Ba 233.527†	79288.3	78772.6	526.53	ug/L	526.53	ppb	11:30:30
2	Be 313.107†	801477.8	801194.7	267.02	ug/L	267.02	ppb	11:30:30
2	Ca 317.933Radial†	3947.3	3877.2	5120.1	ug/L	5120.1	ppb	11:29:11
2	Cd 226.502†	53023.5	52907.0	512.86	ug/L	512.86	ppb	11:30:30
2	Co 228.616†	29799.9	29685.8	515.05	ug/L	515.05	ppb	11:30:50
2	Cr 267.716†	50844.9	50441.8	503.13	ug/L	503.13	ppb	11:30:30
2	Cu 324.752†	196061.3	188552.4	523.12	ug/L	523.12	ppb	11:30:30
2	Fe 238.204 Radial†	673.3	658.1	5010.9	ug/L	5010.9	ppb	11:29:31
2	K 766.490 Radial†	18077.7	15012.6	2485.2	ug/L	2485.2	ppb	11:29:11
2	Mg 279.077 IEC†	184.2	179.8	5144.9	ug/L	5144.9	ppb	11:29:31
2	Mn 257.610†	546393.3	542452.2	527.99	ug/L	527.99	ppb	11:30:30
2	Mo 202.031†	9447.5	9369.9	554.16	ug/L	554.16	ppb	11:30:50
2	Na 589.592 Radial†	7521.7	9088.6	2468.8	ug/L	2468.8	ppb	11:29:11
2	Ni 231.604†	24069.2	23792.0	513.43	ug/L	513.43	ppb	11:30:50

2	P 214.914†	5239.9	4966.2	2492.1 ug/L	2492.1 ppb	11:30:50
2	Pb 220.353†	4923.0	4975.2	514.08 ug/L	514.08 ppb	11:30:50
2	S 181.975 Axial†	2162.4	2100.1	2559.0 ug/L	2559.0 ppb	11:30:50
2	Sb 206.836†	1796.4	1745.1	526.17 ug/L	526.17 ppb	11:30:50
2	Se 196.026†	4837.7	4833.3	2661.2 ug/L	2661.2 ppb	11:30:50
2	Si 251.611†	179983.7	178234.1	4955.2 ug/L	4955.2 ppb	11:30:30
2	Sn 189.927†	3771.1	3738.6	555.21 ug/L	555.21 ppb	11:30:50
2	Sr 421.552†	100988.7	100053.3	525.79 ug/L	525.79 ppb	11:29:11
2	Ti 334.940†	358826.3	357992.3	522.11 ug/L	522.11 ppb	11:30:30
2	Tl 190.801†	2109.3	2136.9	549.84 ug/L	549.84 ppb	11:30:50
2	U 409.014†	15875.0	18574.5	509.00 ug/L	509.00 ppb	11:30:30
2	V 292.402†	82587.5	83611.9	531.22 ug/L	531.22 ppb	11:30:30
2	Zn 213.857†	66525.1	65222.3	523.37 ug/L	523.37 ppb	11:30:30
2	SiO2†	178216.0	176464.0	10523 ug/L	10523 ppb	11:31:26
3	Sc 361.383	963401.2	963401.2	100.07 %		11:30:56
3	Sc Radial	6390.7	6390.7	102 %		11:29:36
3	Y 371.029	793787.0	793787.0	98.984 %		11:30:56
3	Y RADIAL	6821.6	6821.6	101.0 %		11:29:36
3	Ag 328.068†	62441.4	61940.3	268.87 ug/L	268.87 ppb	11:30:56
3	Al 396.153Radial†	8149.6	8039.3	4933.1 ug/L	4933.1 ppb	11:29:36
3	As 188.979†	1346.3	1367.7	494.66 ug/L	494.66 ppb	11:31:16
3	B 249.677†	25820.3	26136.9	528.19 ug/L	528.19 ppb	11:30:56
3	Ba 233.527†	79177.5	79100.4	528.72 ug/L	528.72 ppb	11:30:56
3	Be 313.107†	799800.0	803950.8	267.93 ug/L	267.93 ppb	11:30:56
3	Ca 317.933Radial†	3953.8	3852.4	5087.4 ug/L	5087.4 ppb	11:29:36
3	Cd 226.502†	52808.0	52985.0	513.61 ug/L	513.61 ppb	11:30:56
3	Co 228.616†	29826.4	29877.0	518.38 ug/L	518.38 ppb	11:31:16
3	Cr 267.716†	50575.3	50453.6	503.25 ug/L	503.25 ppb	11:30:56
3	Cu 324.752†	195741.2	189316.8	525.24 ug/L	525.24 ppb	11:30:56
3	Fe 238.204 Radial†	682.4	661.8	5038.7 ug/L	5038.7 ppb	11:29:56
3	K 766.490 Radial†	18036.2	14829.2	2454.8 ug/L	2454.8 ppb	11:29:36
3	Mg 279.077 IEC†	189.5	183.6	5254.8 ug/L	5254.8 ppb	11:29:56
3	Mn 257.610†	545226.1	544307.7	529.80 ug/L	529.80 ppb	11:30:56
3	Mo 202.031†	9475.5	9450.1	558.90 ug/L	558.90 ppb	11:31:16
3	Na 589.592 Radial†	7410.6	8920.1	2423.0 ug/L	2423.0 ppb	11:29:36
3	Ni 231.604†	24093.1	23948.9	516.82 ug/L	516.82 ppb	11:31:16
3	P 214.914†	5253.5	5008.7	2513.8 ug/L	2513.8 ppb	11:31:16
3	Pb 220.353†	4925.4	5004.8	517.13 ug/L	517.13 ppb	11:31:16
3	S 181.975 Axial†	2174.3	2123.9	2588.1 ug/L	2588.1 ppb	11:31:16
3	Sb 206.836†	1800.7	1759.4	530.57 ug/L	530.57 ppb	11:31:16
3	Se 196.026†	4834.8	4857.2	2674.3 ug/L	2674.3 ppb	11:31:16
3	Si 251.611†	179718.6	178964.6	4975.4 ug/L	4975.4 ppb	11:30:56
3	Sn 189.927†	3779.2	3767.6	559.51 ug/L	559.51 ppb	11:31:16
3	Sr 421.552†	100687.3	98960.2	520.04 ug/L	520.04 ppb	11:29:36
3	Ti 334.940†	357913.7	359064.8	523.67 ug/L	523.67 ppb	11:30:56
3	Tl 190.801†	2114.7	2154.0	554.21 ug/L	554.21 ppb	11:31:16
3	U 409.014†	15939.8	18727.1	513.19 ug/L	513.19 ppb	11:30:56
3	V 292.402†	82374.5	83855.8	532.82 ug/L	532.82 ppb	11:30:56
3	Zn 213.857†	66330.2	65395.5	524.74 ug/L	524.74 ppb	11:30:56
3	SiO2†	177242.7	176477.1	10524 ug/L	10524 ppb	11:31:32

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	965226.9	100.26	%	0.318				0.32%
Sc Radial	6325.7	101	%	1.2				1.15%
Y 371.029	795719.8	99.225	%	0.3116				0.31%
Y RADIAL	6760.3	100.0	%	1.09				1.09%
Ag 328.068†	61841.3	268.45	ug/L	0.716	268.45	ppb	0.716	0.27%
QC value within limits for Ag 328.068 Recovery = 107.38%								
Al 396.153Radial†	8090.8	4965.0	ug/L	28.31	4965.0	ppb	28.31	0.57%
QC value within limits for Al 396.153Radial Recovery = 99.30%								
As 188.979†	1361.1	492.30	ug/L	3.795	492.30	ppb	3.795	0.77%
QC value within limits for As 188.979 Recovery = 98.46%								
B 249.677†	26100.5	527.45	ug/L	0.686	527.45	ppb	0.686	0.13%
QC value within limits for B 249.677 Recovery = 105.49%								
Ba 233.527†	78894.6	527.34	ug/L	1.196	527.34	ppb	1.196	0.23%
QC value within limits for Ba 233.527 Recovery = 105.47%								
Be 313.107†	802628.2	267.49	ug/L	0.460	267.49	ppb	0.460	0.17%
QC value within limits for Be 313.107 Recovery = 107.00%								

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Ca 317.933Radial†        3868.1      5108.1 ug/L        18.01      5108.1 ppb        18.01   0.35%
   QC value within limits for Ca 317.933Radial  Recovery = 102.16%
Cd 226.502†             52926.1      513.04 ug/L        0.509      513.04 ppb        0.509   0.10%
   QC value within limits for Cd 226.502  Recovery = 102.61%
Co 228.616†             29785.8      516.79 ug/L        1.668      516.79 ppb        1.668   0.32%
   QC value within limits for Co 228.616  Recovery = 103.36%
Cr 267.716†             50457.2      503.28 ug/L        0.175      503.28 ppb        0.175   0.03%
   QC value within limits for Cr 267.716  Recovery = 100.66%
Cu 324.752†            189079.6      524.59 ug/L        1.271      524.59 ppb        1.271   0.24%
   QC value within limits for Cu 324.752  Recovery = 104.92%
Fe 238.204 Radial†        665.2      5064.4 ug/L        70.00      5064.4 ppb        70.00   1.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.29%
K 766.490 Radial†       14938.3      2472.9 ug/L        16.00      2472.9 ppb        16.00   0.65%
   QC value within limits for K 766.490 Radial  Recovery = 98.92%
Mg 279.077 IEC†           182.5      5221.9 ug/L        66.94      5221.9 ppb        66.94   1.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.44%
Mn 257.610†            543365.7      528.88 ug/L        0.903      528.88 ppb        0.903   0.17%
   QC value within limits for Mn 257.610  Recovery = 105.78%
Mo 202.031†              9412.0      556.65 ug/L        2.379      556.65 ppb        2.379   0.43%
   QC value greater than the upper limit for Mo 202.031  Recovery = 111.33%
Na 589.592 Radial†       9023.3      2451.0 ug/L        24.57      2451.0 ppb        24.57   1.00%
   QC value within limits for Na 589.592 Radial  Recovery = 98.04%
Ni 231.604†             23864.6      515.00 ug/L        1.708      515.00 ppb        1.708   0.33%
   QC value within limits for Ni 231.604  Recovery = 103.00%
P 214.914†               4993.1      2505.8 ug/L        11.91      2505.8 ppb        11.91   0.48%
   QC value within limits for P 214.914  Recovery = 100.23%
Pb 220.353†              4986.4      515.23 ug/L        1.657      515.23 ppb        1.657   0.32%
   QC value within limits for Pb 220.353  Recovery = 103.05%
S 181.975 Axial†         2114.4      2576.4 ug/L        15.38      2576.4 ppb        15.38   0.60%
   QC value within limits for S 181.975 Axial  Recovery = 103.06%
Sb 206.836†              1746.7      526.71 ug/L        3.612      526.71 ppb        3.612   0.69%
   QC value within limits for Sb 206.836  Recovery = 105.34%
Se 196.026†              4842.8      2666.6 ug/L         6.88      2666.6 ppb         6.88   0.26%
   QC value within limits for Se 196.026  Recovery = 106.66%
Si 251.611†            178563.3      4964.3 ug/L        10.29      4964.3 ppb        10.29   0.21%
   QC value within limits for Si 251.611  Recovery = 99.29%
Sn 189.927†              3745.0      556.15 ug/L        2.997      556.15 ppb        2.997   0.54%
   QC value greater than the upper limit for Sn 189.927  Recovery = 111.23%
Sr 421.552†             99742.7      524.16 ug/L        3.586      524.16 ppb        3.586   0.68%
   QC value within limits for Sr 421.552  Recovery = 104.83%
Ti 334.940†            358543.1      522.91 ug/L        0.781      522.91 ppb        0.781   0.15%
   QC value within limits for Ti 334.940  Recovery = 104.58%
Tl 190.801†              2141.4      551.00 ug/L        2.816      551.00 ppb        2.816   0.51%
   QC value greater than the upper limit for Tl 190.801  Recovery = 110.20%
U 409.014†              18653.4      511.16 ug/L        2.098      511.16 ppb        2.098   0.41%
   QC value within limits for U 409.014  Recovery = 102.23%
V 292.402†              83760.2      532.18 ug/L        0.847      532.18 ppb        0.847   0.16%
   QC value within limits for V 292.402  Recovery = 106.44%
Zn 213.857†             65301.5      523.99 ug/L        0.694      523.99 ppb        0.694   0.13%
   QC value within limits for Zn 213.857  Recovery = 104.80%
SiO2†                  176897.1       10549 ug/L         44.2       10549 ppb         44.2   0.42%
   QC value within limits for SiO2  Recovery = 98.63%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/16/2009 11:33:42
Data Type: Reprocessed on 12/16/2009 13:14:35

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	970684.8	970684.8	100.82	%			11:36:52
1	Sc Radial	6366.8	6366.8	101	%			11:35:35
1	Y 371.029	809455.5	809455.5	100.94	%			11:36:52
1	Y RADIAL	6801.4	6801.4	100.7	%			11:35:35
1	Ag 328.068†	441.6	-21.7	-0.0841	ug/L	-0.0841	ppb	11:36:57
1	Al 396.153Radial†	14.3	40.9	25.204	ug/L	25.204	ppb	11:35:35
1	As 188.979†	-25.3	-2.8	-0.9852	ug/L	-0.9852	ppb	11:37:17
1	B 249.677†	-220.5	115.0	2.3299	ug/L	2.3299	ppb	11:37:17
1	Ba 233.527†	6.4	-18.2	-0.1192	ug/L	-0.1192	ppb	11:37:17
1	Be 313.107†	-4490.9	228.0	0.0763	ug/L	0.0763	ppb	11:36:57
1	Ca 317.933Radial†	29.4	-5.8	-7.6622	ug/L	-7.6622	ppb	11:35:55
1	Cd 226.502†	-214.4	-0.6	-0.0084	ug/L	-0.0084	ppb	11:37:17
1	Co 228.616†	-69.8	1.2	0.0224	ug/L	0.0224	ppb	11:37:17
1	Cr 267.716†	97.5	8.7	0.0865	ug/L	0.0865	ppb	11:37:17
1	Cu 324.752†	6381.8	35.4	0.0996	ug/L	0.0996	ppb	11:36:57
1	Fe 238.204 Radial†	13.1	3.7	28.407	ug/L	28.407	ppb	11:35:55
1	K 766.490 Radial†	3029.7	86.4	14.352	ug/L	14.352	ppb	11:35:35
1	Mg 279.077 IEC†	3.5	0.7	20.075	ug/L	20.075	ppb	11:35:55
1	Mn 257.610†	546.7	-13.9	-0.0110	ug/L	-0.0110	ppb	11:37:17
1	Mo 202.031†	35.1	15.7	0.9314	ug/L	0.9314	ppb	11:37:17
1	Na 589.592 Radial†	-1678.2	-21.9	-5.9555	ug/L	-5.9555	ppb	11:35:35
1	Ni 231.604†	132.1	2.9	0.0616	ug/L	0.0616	ppb	11:37:17
1	P 214.914†	234.2	-9.0	-4.7192	ug/L	-4.7192	ppb	11:37:17
1	Pb 220.353†	-77.7	5.6	0.5861	ug/L	0.5861	ppb	11:37:17
1	S 181.975 Axial†	48.6	-0.7	-0.8436	ug/L	-0.8436	ppb	11:37:17
1	Sb 206.836†	46.6	6.1	1.8168	ug/L	1.8168	ppb	11:37:17
1	Se 196.026†	-34.6	-8.8	-4.6871	ug/L	-4.6871	ppb	11:37:17
1	Si 251.611†	653.6	13.7	0.3621	ug/L	0.3621	ppb	11:37:17
1	Sn 189.927†	6.6	-2.6	-0.3812	ug/L	-0.3812	ppb	11:37:17
1	Sr 421.552†	-6.4	-38.9	-0.2045	ug/L	-0.2045	ppb	11:35:35
1	Ti 334.940†	-1182.5	216.2	0.3137	ug/L	0.3137	ppb	11:36:57
1	Tl 190.801†	-40.7	0.3	0.0812	ug/L	0.0812	ppb	11:37:17
1	U 409.014†	-2718.0	102.1	2.8035	ug/L	2.8035	ppb	11:36:52
1	V 292.402†	-1483.2	64.9	0.4213	ug/L	0.4213	ppb	11:36:57
1	Zn 213.857†	861.4	-36.2	-0.2973	ug/L	-0.2973	ppb	11:37:17
1	SiO2†	665.5	12.2	0.6837	ug/L	0.6837	ppb	11:38:23
2	Sc 361.383	979167.2	979167.2	101.70	%			11:37:22
2	Sc Radial	6329.0	6329.0	101	%			11:36:00
2	Y 371.029	813853.0	813853.0	101.49	%			11:37:22
2	Y RADIAL	6807.6	6807.6	100.7	%			11:36:00
2	Ag 328.068†	381.5	-84.5	-0.3537	ug/L	-0.3537	ppb	11:37:27
2	Al 396.153Radial†	15.5	42.1	25.955	ug/L	25.955	ppb	11:36:00
2	As 188.979†	-35.6	-12.7	-4.5500	ug/L	-4.5500	ppb	11:37:47
2	B 249.677†	-192.3	144.6	2.9317	ug/L	2.9317	ppb	11:37:47
2	Ba 233.527†	28.1	3.1	0.0229	ug/L	0.0229	ppb	11:37:47
2	Be 313.107†	-4692.1	68.7	0.0229	ug/L	0.0229	ppb	11:37:27
2	Ca 317.933Radial†	35.3	0.2	0.2139	ug/L	0.2139	ppb	11:36:20
2	Cd 226.502†	-224.3	-8.4	-0.0841	ug/L	-0.0841	ppb	11:37:47
2	Co 228.616†	-85.1	-13.2	-0.2281	ug/L	-0.2281	ppb	11:37:47
2	Cr 267.716†	90.9	1.3	0.0142	ug/L	0.0142	ppb	11:37:47
2	Cu 324.752†	6196.5	-201.6	-0.5579	ug/L	-0.5579	ppb	11:37:27
2	Fe 238.204 Radial†	12.2	2.9	22.330	ug/L	22.330	ppb	11:36:20
2	K 766.490 Radial†	2977.9	52.9	8.7782	ug/L	8.7782	ppb	11:36:00
2	Mg 279.077 IEC†	1.9	-0.8	-24.017	ug/L	-24.017	ppb	11:36:20
2	Mn 257.610†	556.7	-8.7	-0.0058	ug/L	-0.0058	ppb	11:37:47
2	Mo 202.031†	31.3	11.7	0.6918	ug/L	0.6918	ppb	11:37:47
2	Na 589.592 Radial†	-1588.5	57.2	15.544	ug/L	15.544	ppb	11:36:00
2	Ni 231.604†	131.7	1.3	0.0289	ug/L	0.0289	ppb	11:37:47

2	P 214.914†	232.8	-12.4	-6.3602	ug/L	-6.3602	ppb	11:37:47
2	Pb 220.353†	-70.0	13.9	1.4333	ug/L	1.4333	ppb	11:37:47
2	S 181.975 Axial†	52.2	2.5	3.0056	ug/L	3.0056	ppb	11:37:47
2	Sb 206.836†	44.3	3.4	1.0140	ug/L	1.0140	ppb	11:37:47
2	Se 196.026†	-26.2	-0.2	-0.0030	ug/L	-0.0030	ppb	11:37:47
2	Si 251.611†	650.5	5.1	0.1274	ug/L	0.1274	ppb	11:37:47
2	Sn 189.927†	5.7	-3.5	-0.5135	ug/L	-0.5135	ppb	11:37:47
2	Sr 421.552†	19.5	-13.3	-0.0698	ug/L	-0.0698	ppb	11:36:00
2	Ti 334.940†	-1376.4	35.6	0.0515	ug/L	0.0515	ppb	11:37:27
2	Tl 190.801†	-45.0	-3.5	-0.9058	ug/L	-0.9058	ppb	11:37:47
2	U 409.014†	-2799.7	45.1	1.2372	ug/L	1.2372	ppb	11:37:22
2	V 292.402†	-1462.3	98.2	0.6232	ug/L	0.6232	ppb	11:37:27
2	Zn 213.857†	863.7	-41.5	-0.3365	ug/L	-0.3365	ppb	11:37:47
2	SiO2†	638.4	-20.2	-1.2353	ug/L	-1.2353	ppb	11:38:28
3	Sc 361.383	970319.3	970319.3	100.79	%			11:37:52
3	Sc Radial	6277.3	6277.3	99.9	%			11:36:25
3	Y 371.029	806933.7	806933.7	100.62	%			11:37:52
3	Y RADIAL	6782.0	6782.0	100.4	%			11:36:25
3	Ag 328.068†	494.8	31.3	0.1379	ug/L	0.1379	ppb	11:37:57
3	Al 396.153Radial†	-7.1	19.7	12.097	ug/L	12.097	ppb	11:36:25
3	As 188.979†	-23.9	-1.4	-0.4993	ug/L	-0.4993	ppb	11:38:17
3	B 249.677†	-228.3	107.2	2.1743	ug/L	2.1743	ppb	11:38:17
3	Ba 233.527†	30.1	5.3	0.0349	ug/L	0.0349	ppb	11:38:17
3	Be 313.107†	-4688.8	29.9	0.0099	ug/L	0.0099	ppb	11:37:57
3	Ca 317.933Radial†	37.9	3.1	4.1205	ug/L	4.1205	ppb	11:36:45
3	Cd 226.502†	-225.4	-11.5	-0.1125	ug/L	-0.1125	ppb	11:38:17
3	Co 228.616†	-71.0	0.1	0.0037	ug/L	0.0037	ppb	11:38:17
3	Cr 267.716†	75.9	-12.8	-0.1265	ug/L	-0.1265	ppb	11:38:17
3	Cu 324.752†	6177.5	-164.9	-0.4568	ug/L	-0.4568	ppb	11:37:57
3	Fe 238.204 Radial†	10.1	0.9	7.1351	ug/L	7.1351	ppb	11:36:45
3	K 766.490 Radial†	2839.4	-61.4	-10.162	ug/L	-10.162	ppb	11:36:25
3	Mg 279.077 IEC†	4.0	1.3	37.971	ug/L	37.971	ppb	11:36:45
3	Mn 257.610†	537.1	-23.2	-0.0226	ug/L	-0.0226	ppb	11:38:17
3	Mo 202.031†	35.6	16.2	0.9599	ug/L	0.9599	ppb	11:38:17
3	Na 589.592 Radial†	-1737.7	-105.2	-28.566	ug/L	-28.566	ppb	11:36:25
3	Ni 231.604†	144.3	15.0	0.3237	ug/L	0.3237	ppb	11:38:17
3	P 214.914†	247.1	3.9	2.0892	ug/L	2.0892	ppb	11:38:17
3	Pb 220.353†	-74.3	8.9	0.9234	ug/L	0.9234	ppb	11:38:17
3	S 181.975 Axial†	44.8	-4.5	-5.4355	ug/L	-5.4355	ppb	11:38:17
3	Sb 206.836†	48.7	8.2	2.4461	ug/L	2.4461	ppb	11:38:17
3	Se 196.026†	-29.7	-3.9	-2.1179	ug/L	-2.1179	ppb	11:38:17
3	Si 251.611†	652.7	13.0	0.3508	ug/L	0.3508	ppb	11:38:17
3	Sn 189.927†	6.8	-2.4	-0.3546	ug/L	-0.3546	ppb	11:38:17
3	Sr 421.552†	66.2	33.7	0.1770	ug/L	0.1770	ppb	11:36:25
3	Ti 334.940†	-1406.8	-6.8	-0.0081	ug/L	-0.0081	ppb	11:37:57
3	Tl 190.801†	-39.5	1.5	0.3869	ug/L	0.3869	ppb	11:38:17
3	U 409.014†	-2955.3	-134.4	-3.6947	ug/L	-3.6947	ppb	11:37:52
3	V 292.402†	-1613.4	-64.8	-0.3997	ug/L	-0.3997	ppb	11:37:57
3	Zn 213.857†	870.8	-26.7	-0.2194	ug/L	-0.2194	ppb	11:38:17
3	SiO2†	691.8	38.5	2.2769	ug/L	2.2769	ppb	11:38:33

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	973390.4	101.10	%	0.520				0.51%
Sc Radial	6324.4	101	%	0.7				0.71%
Y 371.029	810080.7	101.02	%	0.437				0.43%
Y RADIAL	6797.0	100.6	%	0.20				0.20%
Ag 328.068†	-25.0	-0.0999	ug/L	0.24617	-0.0999	ppb	0.24617	246.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	34.3	21.085	ug/L	7.7930	21.085	ppb	7.7930	36.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.6	-2.0115	ug/L	2.21178	-2.0115	ppb	2.21178	109.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	122.3	2.4786	ug/L	0.40001	2.4786	ppb	0.40001	16.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.2	-0.0205	ug/L	0.08572	-0.0205	ppb	0.08572	418.55%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	108.9	0.0364	ug/L	0.03518	0.0364	ppb	0.03518	96.71%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -0.8     -1.1093 ug/L       6.00177     -1.1093 ppb        6.00177 541.06%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -6.9     -0.0683 ug/L       0.05380     -0.0683 ppb        0.05380  78.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -4.0     -0.0673 ug/L       0.13958     -0.0673 ppb        0.13958 207.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -0.9     -0.0086 ug/L       0.10835     -0.0086 ppb        0.10835 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -110.4     -0.3050 ug/L       0.35405     -0.3050 ppb        0.35405 116.06%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.5      19.291 ug/L      10.9571      19.291 ppb        10.9571  56.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          26.0      4.3226 ug/L      12.84984      4.3226 ppb       12.84984 297.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.4      11.343 ug/L      31.9032      11.343 ppb        31.9032 281.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -15.3     -0.0131 ug/L       0.00857     -0.0131 ppb        0.00857  65.21%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                14.5      0.8610 ug/L       0.14725      0.8610 ppb        0.14725  17.10%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -23.3     -6.3259 ug/L      22.05698     -6.3259 ppb       22.05698 348.68%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 6.4      0.1380 ug/L       0.16157      0.1380 ppb        0.16157 117.04%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.9     -2.9968 ug/L       4.48036     -2.9968 ppb        4.48036 149.51%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 9.5      0.9809 ug/L       0.42651      0.9809 ppb        0.42651  43.48%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.9     -1.0912 ug/L       4.22599     -1.0912 ppb        4.22599 387.29%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.9      1.7590 ug/L       0.71777      1.7590 ppb        0.71777  40.81%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.3     -2.2693 ug/L       2.34568     -2.2693 ppb        2.34568 103.37%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                10.6      0.2801 ug/L       0.13238      0.2801 ppb        0.13238  47.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.8     -0.4164 ug/L       0.08508     -0.4164 ppb        0.08508  20.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -6.2     -0.0324 ug/L       0.19347     -0.0324 ppb        0.19347 596.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                81.7      0.1190 ug/L       0.17117      0.1190 ppb        0.17117 143.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.6     -0.1459 ug/L       0.67565     -0.1459 ppb        0.67565 463.08%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  4.3      0.1153 ug/L       3.39126      0.1153 ppb        3.39126 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 32.8      0.2149 ug/L       0.54180      0.2149 ppb        0.54180 252.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -34.8     -0.2844 ug/L       0.05962     -0.2844 ppb        0.05962  20.96%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      10.2      0.5751 ug/L       1.75862      0.5751 ppb        1.75862 305.79%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/16/2009 11:40:43
Data Type: Reprocessed on 12/16/2009 13:14:36
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	972151.4	972151.4	100.98	%			11:43:53
1	Sc Radial	6255.7	6255.7	99.6	%			11:42:36
1	Y 371.029	809632.5	809632.5	100.96	%			11:43:53
1	Y RADIAL	6745.0	6745.0	99.82	%			11:42:36
1	Ag 328.068†	1745.3	1268.7	5.4504	ug/L	5.4504	ppb	11:43:58
1	Al 396.153Radial†	298.3	326.4	200.77	ug/L	200.77	ppb	11:42:36
1	As 188.979†	54.0	75.8	27.193	ug/L	27.193	ppb	11:44:18
1	B 249.677†	2121.3	2434.5	49.354	ug/L	49.354	ppb	11:43:58
1	Ba 233.527†	821.4	789.0	5.2752	ug/L	5.2752	ppb	11:44:18
1	Be 313.107†	11171.9	15746.2	5.2380	ug/L	5.2380	ppb	11:43:58
1	Ca 317.933Radial†	181.8	147.8	195.18	ug/L	195.18	ppb	11:42:56
1	Cd 226.502†	324.9	533.8	5.1675	ug/L	5.1675	ppb	11:44:18
1	Co 228.616†	228.8	297.1	5.1680	ug/L	5.1680	ppb	11:44:18
1	Cr 267.716†	597.6	503.8	5.0100	ug/L	5.0100	ppb	11:44:18
1	Cu 324.752†	10082.1	3690.4	10.240	ug/L	10.240	ppb	11:43:58
1	Fe 238.204 Radial†	24.7	15.6	118.67	ug/L	118.67	ppb	11:42:56
1	K 766.490 Radial†	3797.6	910.8	150.89	ug/L	150.89	ppb	11:42:36
1	Mg 279.077 IEC†	14.8	12.2	348.45	ug/L	348.45	ppb	11:42:56
1	Mn 257.610†	11758.4	11088.7	10.790	ug/L	10.790	ppb	11:43:58
1	Mo 202.031†	209.6	188.5	11.147	ug/L	11.147	ppb	11:44:18
1	Na 589.592 Radial†	-542.6	1089.2	295.87	ug/L	295.87	ppb	11:42:36
1	Ni 231.604†	373.4	241.6	5.2142	ug/L	5.2142	ppb	11:44:18
1	P 214.914†	536.5	290.0	148.60	ug/L	148.60	ppb	11:44:18
1	Pb 220.353†	39.5	121.8	12.600	ug/L	12.600	ppb	11:44:18
1	S 181.975 Axial†	129.4	79.2	96.523	ug/L	96.523	ppb	11:44:18
1	Sb 206.836†	75.1	34.3	10.429	ug/L	10.429	ppb	11:44:18
1	Se 196.026†	27.5	52.8	29.351	ug/L	29.351	ppb	11:44:18
1	Si 251.611†	4432.2	3754.8	104.37	ug/L	104.37	ppb	11:43:58
1	Sn 189.927†	74.6	64.8	9.6336	ug/L	9.6336	ppb	11:44:18
1	Sr 421.552†	940.6	912.1	4.7920	ug/L	4.7920	ppb	11:42:36
1	Ti 334.940†	2273.0	3640.1	5.2945	ug/L	5.2945	ppb	11:43:58
1	Tl 190.801†	44.9	85.2	21.861	ug/L	21.861	ppb	11:44:18
1	U 409.014†	-819.3	1986.5	54.583	ug/L	54.583	ppb	11:43:53
1	V 292.402†	-768.2	775.2	5.1032	ug/L	5.1032	ppb	11:43:58
1	Zn 213.857†	2172.6	1261.0	10.138	ug/L	10.138	ppb	11:44:18
1	SiO2†	4382.2	3691.9	220.12	ug/L	220.12	ppb	11:45:24
2	Sc 361.383	960247.5	960247.5	99.739	%			11:44:23
2	Sc Radial	6190.2	6190.2	98.5	%			11:43:01
2	Y 371.029	798596.7	798596.7	99.584	%			11:44:23
2	Y RADIAL	6679.0	6679.0	98.84	%			11:43:01
2	Ag 328.068†	1691.9	1236.7	5.3107	ug/L	5.3107	ppb	11:44:29
2	Al 396.153Radial†	280.1	311.2	191.40	ug/L	191.40	ppb	11:43:01
2	As 188.979†	62.2	84.7	30.386	ug/L	30.386	ppb	11:44:49
2	B 249.677†	2219.4	2559.0	51.881	ug/L	51.881	ppb	11:44:29
2	Ba 233.527†	808.6	786.3	5.2583	ug/L	5.2583	ppb	11:44:49
2	Be 313.107†	11242.6	15954.3	5.3075	ug/L	5.3075	ppb	11:44:29
2	Ca 317.933Radial†	180.5	148.3	195.90	ug/L	195.90	ppb	11:43:21
2	Cd 226.502†	314.3	527.2	5.1054	ug/L	5.1054	ppb	11:44:49
2	Co 228.616†	228.1	299.1	5.2024	ug/L	5.2024	ppb	11:44:49
2	Cr 267.716†	618.1	531.7	5.2884	ug/L	5.2884	ppb	11:44:49
2	Cu 324.752†	10135.1	3867.4	10.730	ug/L	10.730	ppb	11:44:29
2	Fe 238.204 Radial†	22.5	13.7	103.91	ug/L	103.91	ppb	11:43:21
2	K 766.490 Radial†	3903.8	1058.9	175.45	ug/L	175.45	ppb	11:43:01
2	Mg 279.077 IEC†	11.3	8.7	249.49	ug/L	249.49	ppb	11:43:21
2	Mn 257.610†	11926.4	11401.5	11.095	ug/L	11.095	ppb	11:44:29
2	Mo 202.031†	201.2	182.6	10.802	ug/L	10.802	ppb	11:44:49
2	Na 589.592 Radial†	-462.0	1165.2	316.52	ug/L	316.52	ppb	11:43:01
2	Ni 231.604†	376.7	249.6	5.3861	ug/L	5.3861	ppb	11:44:49

2	P 214.914†	538.4	298.5	152.90 ug/L	152.90 ppb		11:44:49
2	Pb 220.353†	18.4	101.1	10.467 ug/L	10.467 ppb		11:44:49
2	S 181.975 Axial†	130.9	82.3	100.31 ug/L	100.31 ppb		11:44:49
2	Sb 206.836†	75.0	35.0	10.656 ug/L	10.656 ppb		11:44:49
2	Se 196.026†	27.4	53.0	29.420 ug/L	29.420 ppb		11:44:49
2	Si 251.611†	4450.1	3827.2	106.39 ug/L	106.39 ppb		11:44:29
2	Sn 189.927†	77.3	68.4	10.166 ug/L	10.166 ppb		11:44:49
2	Sr 421.552†	914.7	895.9	4.7065 ug/L	4.7065 ppb		11:43:01
2	Ti 334.940†	2383.4	3778.7	5.4965 ug/L	5.4965 ppb		11:44:29
2	Tl 190.801†	37.9	78.7	20.199 ug/L	20.199 ppb		11:44:49
2	U 409.014†	-801.2	1994.6	54.806 ug/L	54.806 ppb		11:44:23
2	V 292.402†	-644.0	890.4	5.8197 ug/L	5.8197 ppb		11:44:29
2	Zn 213.857†	2163.1	1278.1	10.280 ug/L	10.280 ppb		11:44:49
2	SiO2†	4439.9	3803.7	226.79 ug/L	226.79 ppb		11:45:29
3	Sc 361.383	956614.3	956614.3	99.362 %			11:44:54
3	Sc Radial	6222.9	6222.9	99.0 %			11:43:27
3	Y 371.029	797120.9	797120.9	99.400 %			11:44:54
3	Y RADIAL	6683.6	6683.6	98.91 %			11:43:27
3	Ag 328.068†	1698.6	1249.9	5.3634 ug/L	5.3634 ppb		11:44:59
3	Al 396.153Radial†	291.6	321.2	197.60 ug/L	197.60 ppb		11:43:27
3	As 188.979†	62.8	85.6	30.696 ug/L	30.696 ppb		11:45:19
3	B 249.677†	2135.9	2483.4	50.346 ug/L	50.346 ppb		11:44:59
3	Ba 233.527†	807.0	787.7	5.2669 ug/L	5.2669 ppb		11:45:19
3	Be 313.107†	11239.0	15993.5	5.3204 ug/L	5.3204 ppb		11:44:59
3	Ca 317.933Radial†	183.4	150.3	198.48 ug/L	198.48 ppb		11:43:47
3	Cd 226.502†	322.3	536.5	5.1949 ug/L	5.1949 ppb		11:45:19
3	Co 228.616†	229.5	301.4	5.2426 ug/L	5.2426 ppb		11:45:19
3	Cr 267.716†	604.7	520.5	5.1753 ug/L	5.1753 ppb		11:45:19
3	Cu 324.752†	10083.7	3854.2	10.694 ug/L	10.694 ppb		11:44:59
3	Fe 238.204 Radial†	23.2	14.3	108.59 ug/L	108.59 ppb		11:43:47
3	K 766.490 Radial†	3845.3	979.1	162.22 ug/L	162.22 ppb		11:43:27
3	Mg 279.077 IEC†	11.6	9.0	256.40 ug/L	256.40 ppb		11:43:47
3	Mn 257.610†	11916.1	11436.6	11.129 ug/L	11.129 ppb		11:44:59
3	Mo 202.031†	202.8	185.0	10.944 ug/L	10.944 ppb		11:45:19
3	Na 589.592 Radial†	-600.6	1027.8	279.18 ug/L	279.18 ppb		11:43:27
3	Ni 231.604†	388.5	262.8	5.6724 ug/L	5.6724 ppb		11:45:19
3	P 214.914†	524.7	286.7	146.83 ug/L	146.83 ppb		11:45:19
3	Pb 220.353†	23.1	105.9	10.960 ug/L	10.960 ppb		11:45:19
3	S 181.975 Axial†	138.3	90.2	109.98 ug/L	109.98 ppb		11:45:19
3	Sb 206.836†	75.0	35.3	10.749 ug/L	10.749 ppb		11:45:19
3	Se 196.026†	46.4	72.3	39.950 ug/L	39.950 ppb		11:45:19
3	Si 251.611†	4426.9	3820.8	106.21 ug/L	106.21 ppb		11:44:59
3	Sn 189.927†	76.5	67.9	10.089 ug/L	10.089 ppb		11:45:19
3	Sr 421.552†	956.0	932.6	4.8997 ug/L	4.8997 ppb		11:43:27
3	Ti 334.940†	2323.8	3727.7	5.4208 ug/L	5.4208 ppb		11:44:59
3	Tl 190.801†	50.9	91.9	23.581 ug/L	23.581 ppb		11:45:19
3	U 409.014†	-667.7	2126.0	58.418 ug/L	58.418 ppb		11:44:54
3	V 292.402†	-733.7	797.6	5.2469 ug/L	5.2469 ppb		11:44:59
3	Zn 213.857†	2176.4	1299.8	10.453 ug/L	10.453 ppb		11:45:19
3	SiO2†	4468.4	3849.3	229.52 ug/L	229.52 ppb		11:45:34

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	963004.4	100.03	%	0.844				0.84%
Sc Radial	6223.0	99.0	%	0.52				0.53%
Y 371.029	801783.4	99.981	%	0.8526				0.85%
Y RADIAL	6702.5	99.19	%	0.546				0.55%
Ag 328.068†	1251.8	5.3749	ug/L	0.07055	5.3749	ppb	0.07055	1.31%
QC value within limits for Ag 328.068 Recovery = 107.50%								
Al 396.153Radial†	319.6	196.59	ug/L	4.767	196.59	ppb	4.767	2.42%
QC value within limits for Al 396.153Radial Recovery = 98.29%								
As 188.979†	82.0	29.425	ug/L	1.9390	29.425	ppb	1.9390	6.59%
QC value within limits for As 188.979 Recovery = 98.08%								
B 249.677†	2492.3	50.527	ug/L	1.2728	50.527	ppb	1.2728	2.52%
QC value within limits for B 249.677 Recovery = 101.05%								
Ba 233.527†	787.7	5.2668	ug/L	0.00846	5.2668	ppb	0.00846	0.16%
QC value within limits for Ba 233.527 Recovery = 105.34%								
Be 313.107†	15898.0	5.2886	ug/L	0.04429	5.2886	ppb	0.04429	0.84%
QC value within limits for Be 313.107 Recovery = 105.77%								

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Ca 317.933Radial†        148.8      196.52 ug/L        1.737      196.52 ppb        1.737   0.88%
   QC value within limits for Ca 317.933Radial  Recovery = 98.26%
Cd 226.502†              532.5      5.1559 ug/L      0.04589      5.1559 ppb      0.04589   0.89%
   QC value within limits for Cd 226.502  Recovery = 103.12%
Co 228.616†              299.2      5.2043 ug/L      0.03730      5.2043 ppb      0.03730   0.72%
   QC value within limits for Co 228.616  Recovery = 104.09%
Cr 267.716†              518.7      5.1579 ug/L      0.14000      5.1579 ppb      0.14000   2.71%
   QC value within limits for Cr 267.716  Recovery = 103.16%
Cu 324.752†             3804.0      10.554 ug/L       0.2731      10.554 ppb       0.2731   2.59%
   QC value within limits for Cu 324.752  Recovery = 105.54%
Fe 238.204 Radial†        14.5      110.39 ug/L        7.545      110.39 ppb        7.545   6.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 110.39%
K 766.490 Radial†        982.9      162.85 ug/L       12.291      162.85 ppb       12.291   7.55%
   QC value within limits for K 766.490 Radial  Recovery = 108.57%
Mg 279.077 IEC†           10.0      284.78 ug/L       55.250      284.78 ppb       55.250  19.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 94.93%
Mn 257.610†            11308.9      11.005 ug/L       0.1866      11.005 ppb       0.1866   1.70%
   QC value within limits for Mn 257.610  Recovery = 110.05%
Mo 202.031†              185.4      10.964 ug/L       0.1735      10.964 ppb       0.1735   1.58%
   QC value within limits for Mo 202.031  Recovery = 109.64%
Na 589.592 Radial†      1094.1      297.19 ug/L       18.705      297.19 ppb       18.705   6.29%
   QC value within limits for Na 589.592 Radial  Recovery = 99.06%
Ni 231.604†              251.3      5.4242 ug/L      0.23144      5.4242 ppb      0.23144   4.27%
   QC value within limits for Ni 231.604  Recovery = 108.48%
P 214.914†               291.8      149.44 ug/L        3.124      149.44 ppb        3.124   2.09%
   QC value within limits for P 214.914  Recovery = 99.63%
Pb 220.353†              109.6      11.343 ug/L       1.1168      11.343 ppb       1.1168   9.85%
   QC value within limits for Pb 220.353  Recovery = 113.43%
S 181.975 Axial†          83.9      102.27 ug/L        6.938      102.27 ppb        6.938   6.78%
   QC value within limits for S 181.975 Axial  Recovery = 102.27%
Sb 206.836†               34.9      10.611 ug/L       0.1649      10.611 ppb       0.1649   1.55%
   QC value within limits for Sb 206.836  Recovery = 106.11%
Se 196.026†               59.4      32.907 ug/L       6.0995      32.907 ppb       6.0995  18.54%
   QC value within limits for Se 196.026  Recovery = 109.69%
Si 251.611†             3800.9      105.66 ug/L        1.115      105.66 ppb        1.115   1.06%
   QC value within limits for Si 251.611  Recovery = 105.66%
Sn 189.927†               67.0      9.9629 ug/L      0.28773      9.9629 ppb      0.28773   2.89%
   QC value within limits for Sn 189.927  Recovery = 99.63%
Sr 421.552†              913.6      4.7994 ug/L      0.09678      4.7994 ppb      0.09678   2.02%
   QC value within limits for Sr 421.552  Recovery = 95.99%
Ti 334.940†             3715.5      5.4039 ug/L      0.10207      5.4039 ppb      0.10207   1.89%
   QC value within limits for Ti 334.940  Recovery = 108.08%
Tl 190.801†               85.3      21.881 ug/L       1.6913      21.881 ppb       1.6913   7.73%
   QC value within limits for Tl 190.801  Recovery = 109.40%
U 409.014†              2035.7      55.936 ug/L       2.1525      55.936 ppb       2.1525   3.85%
   QC value within limits for U 409.014  Recovery = 111.87%
V 292.402†               821.1      5.3899 ug/L      0.37906      5.3899 ppb      0.37906   7.03%
   QC value within limits for V 292.402  Recovery = 107.80%
Zn 213.857†             1279.6      10.290 ug/L       0.1576      10.290 ppb       0.1576   1.53%
   QC value within limits for Zn 213.857  Recovery = 102.90%
SiO2†                   3781.6      225.48 ug/L        4.836      225.48 ppb        4.836   2.14%
   QC value within limits for SiO2  Recovery = 105.86%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/16/2009 11:47:45
Data Type: Reprocessed on 12/16/2009 13:14:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	827911.9	827911.9	85.994	%			11:50:12
1	Sc Radial	5623.3	5623.3	89.5	%			11:49:45
1	Y 371.029	674767.1	674767.1	84.142	%			11:50:12
1	Y RADIAL	6030.4	6030.4	89.24	%			11:49:45
1	Ag 328.068†	-10781.8	-12997.6	0.0030	ug/L	0.0030	ppb	11:50:12
1	Al 396.153Radial†	748207.2	836031.7	515500	ug/L	515500	ppb	11:49:39
1	As 188.979†	-102.3	-96.6	-5.8077	ug/L	-5.8077	ppb	11:50:32
1	B 249.677†	307.3	691.2	-10.926	ug/L	-10.926	ppb	11:50:12
1	Ba 233.527†	-643.2	-772.5	1.8595	ug/L	1.8595	ppb	11:50:32
1	Be 313.107†	-5175.8	-1336.6	-0.4980	ug/L	-0.4980	ppb	11:50:12
1	Ca 317.933Radial†	330260.6	368979.9	487260	ug/L	487260	ppb	11:49:39
1	Cd 226.502†	1445.6	1893.1	-0.4384	ug/L	-0.4384	ppb	11:50:32
1	Co 228.616†	-17.9	49.6	-1.8099	ug/L	-1.8099	ppb	11:50:32
1	Cr 267.716†	-118.0	-225.3	1.1384	ug/L	1.1384	ppb	11:50:32
1	Cu 324.752†	2692.4	-3163.4	0.8195	ug/L	0.8195	ppb	11:50:12
1	Fe 238.204 Radial†	22182.3	24776.1	188030	ug/L	188030	ppb	11:49:45
1	K 766.490 Radial†	2462.3	-152.3	-10.336	ug/L	-10.336	ppb	11:49:39
1	Mg 279.077 IEC†	15315.6	17110.1	488810	ug/L	488810	ppb	11:49:45
1	Mn 257.610†	-392.5	-1012.5	8.6625	ug/L	8.6625	ppb	11:50:12
1	Mo 202.031†	-244.3	-303.2	-4.5832	ug/L	-4.5832	ppb	11:50:32
1	Na 589.592 Radial†	-1481.9	-21.6	-5.8769	ug/L	-5.8769	ppb	11:49:45
1	Ni 231.604†	287.2	205.9	4.4448	ug/L	4.4448	ppb	11:50:32
1	P 214.914†	216.7	10.7	29.103	ug/L	29.103	ppb	11:50:32
1	Pb 220.353†	-993.4	-1072.5	-10.255	ug/L	-10.255	ppb	11:50:32
1	S 181.975 Axial†	76.0	39.5	-53.302	ug/L	-53.302	ppb	11:50:32
1	Sb 206.836†	87.9	62.1	5.9522	ug/L	5.9522	ppb	11:50:32
1	Se 196.026†	-1236.9	-1412.8	4.4294	ug/L	4.4294	ppb	11:50:32
1	Si 251.611†	430.9	-133.4	-3.1901	ug/L	-3.1901	ppb	11:50:32
1	Sn 189.927†	-380.3	-451.3	-13.563	ug/L	-13.563	ppb	11:50:32
1	Sr 421.552†	623.5	664.1	-1.0261	ug/L	-1.0261	ppb	11:49:45
1	Ti 334.940†	-17472.2	-18929.1	-2.2089	ug/L	-2.2089	ppb	11:50:12
1	Tl 190.801†	-88.4	-62.1	-2.0113	ug/L	-2.0113	ppb	11:50:32
1	U 409.014†	-1538.3	1009.1	4.0877	ug/L	4.0877	ppb	11:50:12
1	V 292.402†	879.8	2559.1	-1.7140	ug/L	-1.7140	ppb	11:50:32
1	Zn 213.857†	3676.9	3385.1	-7.3091	ug/L	-7.3091	ppb	11:50:32
1	SiO2†	428.3	-149.9	-7.8079	ug/L	-7.8079	ppb	11:51:28
2	Sc 361.383	819755.5	819755.5	85.146	%			11:50:37
2	Sc Radial	5673.7	5673.7	90.3	%			11:49:55
2	Y 371.029	668438.8	668438.8	83.353	%			11:50:37
2	Y RADIAL	6058.0	6058.0	89.65	%			11:49:55
2	Ag 328.068†	-10604.5	-12914.1	0.0678	ug/L	0.0678	ppb	11:50:37
2	Al 396.153Radial†	744887.8	824935.5	508660	ug/L	508660	ppb	11:49:50
2	As 188.979†	-97.8	-92.5	-4.4960	ug/L	-4.4960	ppb	11:50:57
2	B 249.677†	222.6	595.2	-12.716	ug/L	-12.716	ppb	11:50:37
2	Ba 233.527†	-672.9	-814.8	1.5344	ug/L	1.5344	ppb	11:50:57
2	Be 313.107†	-4962.0	-1145.4	-0.4341	ug/L	-0.4341	ppb	11:50:37
2	Ca 317.933Radial†	328788.4	364074.3	480780	ug/L	480780	ppb	11:49:50
2	Cd 226.502†	1500.9	1974.8	0.4725	ug/L	0.4725	ppb	11:50:57
2	Co 228.616†	21.3	95.5	-1.0008	ug/L	-1.0008	ppb	11:50:57
2	Cr 267.716†	-96.3	-201.1	1.3616	ug/L	1.3616	ppb	11:50:57
2	Cu 324.752†	2712.4	-3108.7	0.9103	ug/L	0.9103	ppb	11:50:37
2	Fe 238.204 Radial†	22239.1	24619.0	186840	ug/L	186840	ppb	11:49:55
2	K 766.490 Radial†	2504.3	-130.1	-6.9117	ug/L	-6.9117	ppb	11:49:50
2	Mg 279.077 IEC†	15388.0	17038.3	486760	ug/L	486760	ppb	11:49:55
2	Mn 257.610†	-200.4	-791.5	8.7968	ug/L	8.7968	ppb	11:50:37
2	Mo 202.031†	-259.6	-324.0	-5.8936	ug/L	-5.8936	ppb	11:50:57
2	Na 589.592 Radial†	-1445.6	33.3	9.0387	ug/L	9.0387	ppb	11:49:55
2	Ni 231.604†	254.6	170.9	3.6899	ug/L	3.6899	ppb	11:50:57

2	P 214.914†	208.1	3.1	23.732 ug/L	23.732 ppb		11:50:57
2	Pb 220.353†	-981.8	-1070.5	-11.480 ug/L	-11.480 ppb		11:50:57
2	S 181.975 Axial†	75.8	40.1	-51.140 ug/L	-51.140 ppb		11:50:57
2	Sb 206.836†	89.8	65.3	7.0300 ug/L	7.0300 ppb		11:50:57
2	Se 196.026†	-1236.2	-1426.3	-8.8280 ug/L	-8.8280 ppb		11:50:57
2	Si 251.611†	418.2	-143.4	-3.4463 ug/L	-3.4463 ppb		11:50:57
2	Sn 189.927†	-380.9	-456.5	-15.026 ug/L	-15.026 ppb		11:50:57
2	Sr 421.552†	631.2	666.4	-0.9539 ug/L	-0.9539 ppb		11:49:55
2	Ti 334.940†	-17155.9	-18759.8	-2.2953 ug/L	-2.2953 ppb		11:50:37
2	Tl 190.801†	-91.7	-67.0	-3.4673 ug/L	-3.4673 ppb		11:50:57
2	U 409.014†	-1847.8	627.7	-6.2462 ug/L	-6.2462 ppb		11:50:37
2	V 292.402†	919.0	2615.4	-1.2646 ug/L	-1.2646 ppb		11:50:57
2	Zn 213.857†	3695.1	3449.0	-6.6031 ug/L	-6.6031 ppb		11:50:57
2	SiO2†	425.0	-148.7	-7.6913 ug/L	-7.6913 ppb		11:51:33
3	Sc 361.383	824074.5	824074.5	85.595 %			11:51:03
3	Sc Radial	5773.0	5773.0	91.9 %			11:50:05
3	Y 371.029	670922.0	670922.0	83.663 %			11:51:03
3	Y RADIAL	6159.6	6159.6	91.16 %			11:50:05
3	Ag 328.068†	-10753.1	-13022.4	-0.0704 ug/L	-0.0704 ppb		11:51:03
3	Al 396.153Radial†	757090.5	824020.7	508100 ug/L	508100 ppb		11:50:00
3	As 188.979†	-118.9	-116.6	-12.991 ug/L	-12.991 ppb		11:51:23
3	B 249.677†	394.3	794.4	-8.7925 ug/L	-8.7925 ppb		11:51:03
3	Ba 233.527†	-675.1	-813.2	1.5773 ug/L	1.5773 ppb		11:51:23
3	Be 313.107†	-5126.7	-1307.2	-0.4875 ug/L	-0.4875 ppb		11:51:03
3	Ca 317.933Radial†	332860.9	362240.6	478360 ug/L	478360 ppb		11:50:00
3	Cd 226.502†	1487.0	1949.4	0.1365 ug/L	0.1365 ppb		11:51:23
3	Co 228.616†	-25.2	41.0	-1.9549 ug/L	-1.9549 ppb		11:51:23
3	Cr 267.716†	-113.7	-220.9	1.1780 ug/L	1.1780 ppb		11:51:23
3	Cu 324.752†	2828.1	-2990.3	1.2844 ug/L	1.2844 ppb		11:51:03
3	Fe 238.204 Radial†	22736.9	24737.0	187730 ug/L	187730 ppb		11:50:05
3	K 766.490 Radial†	2344.8	-351.5	-43.453 ug/L	-43.453 ppb		11:50:00
3	Mg 279.077 IEC†	15709.5	17095.1	488380 ug/L	488380 ppb		11:50:05
3	Mn 257.610†	-388.7	-1010.2	8.6432 ug/L	8.6432 ppb		11:51:03
3	Mo 202.031†	-238.8	-298.1	-4.3038 ug/L	-4.3038 ppb		11:51:23
3	Na 589.592 Radial†	-1430.3	77.5	21.046 ug/L	21.046 ppb		11:50:05
3	Ni 231.604†	270.3	187.7	4.0525 ug/L	4.0525 ppb		11:51:23
3	P 214.914†	183.5	-26.9	7.2613 ug/L	7.2613 ppb		11:51:23
3	Pb 220.353†	-1010.5	-1097.9	-14.508 ug/L	-14.508 ppb		11:51:23
3	S 181.975 Axial†	73.9	37.4	-54.329 ug/L	-54.329 ppb		11:51:23
3	Sb 206.836†	67.1	38.2	-0.9220 ug/L	-0.9220 ppb		11:51:23
3	Se 196.026†	-1226.5	-1407.4	4.3951 ug/L	4.3951 ppb		11:51:23
3	Si 251.611†	429.6	-132.7	-3.1624 ug/L	-3.1624 ppb		11:51:23
3	Sn 189.927†	-382.2	-455.6	-15.131 ug/L	-15.131 ppb		11:51:23
3	Sr 421.552†	687.5	715.7	-0.6727 ug/L	-0.6727 ppb		11:50:05
3	Ti 334.940†	-17169.2	-18669.7	-2.2941 ug/L	-2.2941 ppb		11:51:03
3	Tl 190.801†	-83.5	-56.8	-0.8675 ug/L	-0.8675 ppb		11:51:23
3	U 409.014†	-1580.1	952.0	2.5536 ug/L	2.5536 ppb		11:51:03
3	V 292.402†	896.2	2583.0	-1.5279 ug/L	-1.5279 ppb		11:51:23
3	Zn 213.857†	3705.7	3438.7	-6.8307 ug/L	-6.8307 ppb		11:51:23
3	SiO2†	480.6	-86.4	-3.9948 ug/L	-3.9948 ppb		11:51:38

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	823914.0	85.578	%	0.4238				0.50%
Sc Radial	5690.0	90.6	%	1.21				1.34%
Y 371.029	671376.0	83.719	%	0.3976				0.47%
Y RADIAL	6082.7	90.02	%	1.007				1.12%
Ag 328.068†	-12978.1	0.0001	ug/L	0.06911	0.0001	ppb	0.06911	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	828329.3	510750	ug/L	4122.7	510750	ppb	4122.7	0.81%
QC value within limits for Al 396.153Radial Recovery = 102.15%								
As 188.979†	-101.9	-7.7650	ug/L	4.57344	-7.7650	ppb	4.57344	58.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	693.6	-10.811	ug/L	1.9641	-10.811	ppb	1.9641	18.17%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-800.2	1.6571	ug/L	0.17664	1.6571	ppb	0.17664	10.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1263.1	-0.4732	ug/L	0.03430	-0.4732	ppb	0.03430	7.25%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     365098.3      482140 ug/L        4601.3      482140 ppb        4601.3   0.95%
   QC value within limits for Ca 317.933Radial  Recovery = 96.43%
Cd 226.502†             1939.1      0.0569 ug/L       0.46065      0.0569 ppb       0.46065 810.19%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               62.1     -1.5885 ug/L       0.51412     -1.5885 ppb       0.51412  32.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -215.8      1.2260 ug/L       0.11907      1.2260 ppb       0.11907   9.71%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3087.5      1.0047 ug/L       0.24642      1.0047 ppb       0.24642  24.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     24710.7      187530 ug/L         620.8      187530 ppb         620.8   0.33%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.77%
K 766.490 Radial†       -211.3     -20.234 ug/L       20.1813     -20.234 ppb       20.1813  99.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        17081.2      487980 ug/L        1081.6      487980 ppb        1081.6   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.60%
Mn 257.610†             -938.1      8.7008 ug/L       0.08367      8.7008 ppb       0.08367   0.96%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -308.4     -4.9269 ug/L       0.84880     -4.9269 ppb       0.84880  17.23%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        29.7      8.0693 ug/L      13.48766      8.0693 ppb      13.48766 167.15%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              188.2      4.0624 ug/L       0.37754      4.0624 ppb       0.37754   9.29%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.4      20.032 ug/L       11.3813      20.032 ppb       11.3813  56.81%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1080.3     -12.081 ug/L        2.1892     -12.081 ppb        2.1892  18.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          39.0     -52.924 ug/L        1.6278     -52.924 ppb        1.6278   3.08%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               55.2      4.0201 ug/L       4.31374      4.0201 ppb       4.31374 107.31%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1415.5     -0.0011 ug/L       7.64427     -0.0011 ppb       7.64427 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             -136.5     -3.2662 ug/L       0.15653     -3.2662 ppb       0.15653   4.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -454.5     -14.573 ug/L        0.8768     -14.573 ppb        0.8768   6.02%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              682.1     -0.8842 ug/L       0.18671     -0.8842 ppb       0.18671  21.12%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18786.2     -2.2661 ug/L       0.04954     -2.2661 ppb       0.04954   2.19%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -62.0     -2.1154 ug/L       1.30299     -2.1154 ppb       1.30299  61.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               862.9      0.1317 ug/L       5.57645      0.1317 ppb       5.57645 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2585.8     -1.5021 ug/L       0.22580     -1.5021 ppb       0.22580  15.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3424.3     -6.9143 ug/L       0.36035     -6.9143 ppb       0.36035   5.21%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -128.3     -6.4980 ug/L       2.16863     -6.4980 ppb       2.16863  33.37%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/16/2009 11:53:50
Data Type: Reprocessed on 12/16/2009 13:14:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	840074.1	840074.1	87.257	%			11:56:15
1	Sc Radial	5660.1	5660.1	90.1	%			11:55:47
1	Y 371.029	681971.5	681971.5	85.041	%			11:56:15
1	Y RADIAL	6091.4	6091.4	90.15	%			11:55:47
1	Ag 328.068†	46564.4	52905.1	283.82	ug/L	283.82	ppb	11:56:15
1	Al 396.153Radial†	762006.6	845913.5	521570	ug/L	521570	ppb	11:55:42
1	As 188.979†	1176.3	1370.5	523.66	ug/L	523.66	ppb	11:56:20
1	B 249.677†	23597.5	27377.5	529.39	ug/L	529.39	ppb	11:56:15
1	Ba 233.527†	66152.4	75789.0	513.41	ug/L	513.41	ppb	11:56:15
1	Be 313.107†	658682.4	759560.5	253.17	ug/L	253.17	ppb	11:56:15
1	Ca 317.933Radial†	332883.3	369491.6	487940	ug/L	487940	ppb	11:55:42
1	Cd 226.502†	45102.5	51901.5	484.91	ug/L	484.91	ppb	11:56:20
1	Co 228.616†	23237.6	26701.8	460.57	ug/L	460.57	ppb	11:56:20
1	Cr 267.716†	42894.7	49071.2	492.75	ug/L	492.75	ppb	11:56:20
1	Cu 324.752†	181841.8	202104.3	569.97	ug/L	569.97	ppb	11:56:15
1	Fe 238.204 Radial†	22175.3	24607.1	186760	ug/L	186760	ppb	11:55:47
1	K 766.490 Radial†	32677.1	33370.6	5545.3	ug/L	5545.3	ppb	11:55:42
1	Mg 279.077 IEC†	15488.7	17191.0	491130	ug/L	491130	ppb	11:55:47
1	Mn 257.610†	444588.4	508961.2	504.49	ug/L	504.49	ppb	11:56:15
1	Mo 202.031†	7223.8	8259.6	501.43	ug/L	501.43	ppb	11:56:20
1	Na 589.592 Radial†	16573.3	20031.8	5441.3	ug/L	5441.3	ppb	11:55:47
1	Ni 231.604†	19117.1	21780.9	470.04	ug/L	470.04	ppb	11:56:20
1	P 214.914†	4659.7	5099.0	2581.8	ug/L	2581.8	ppb	11:56:20
1	Pb 220.353†	3069.5	3600.5	473.31	ug/L	473.31	ppb	11:56:20
1	S 181.975 Axial†	2043.0	2292.5	2692.0	ug/L	2692.0	ppb	11:56:20
1	Sb 206.836†	1707.8	1917.1	563.04	ug/L	563.04	ppb	11:56:20
1	Se 196.026†	3044.7	3514.9	2696.0	ug/L	2696.0	ppb	11:56:20
1	Si 251.611†	171667.8	196104.0	5453.7	ug/L	5453.7	ppb	11:56:15
1	Sn 189.927†	2645.0	3022.1	501.77	ug/L	501.77	ppb	11:56:20
1	Sr 421.552†	87985.7	97638.4	508.62	ug/L	508.62	ppb	11:55:42
1	Ti 334.940†	303219.1	348891.1	534.01	ug/L	534.01	ppb	11:56:15
1	Tl 190.801†	1575.5	1846.2	489.61	ug/L	489.61	ppb	11:56:20
1	U 409.014†	14452.5	19361.1	507.78	ug/L	507.78	ppb	11:56:15
1	V 292.402†	73645.1	85936.5	528.23	ug/L	528.23	ppb	11:56:15
1	Zn 213.857†	58572.8	66236.2	497.81	ug/L	497.81	ppb	11:56:20
1	SiO2†	169438.9	193536.4	11545	ug/L	11545	ppb	11:56:47
2	Sc 361.383	840006.0	840006.0	87.250	%			11:56:26
2	Sc Radial	5639.5	5639.5	89.8	%			11:55:58
2	Y 371.029	682338.8	682338.8	85.086	%			11:56:26
2	Y RADIAL	6027.9	6027.9	89.21	%			11:55:58
2	Ag 328.068†	46616.2	52968.8	284.16	ug/L	284.16	ppb	11:56:26
2	Al 396.153Radial†	749899.9	835523.9	515170	ug/L	515170	ppb	11:55:53
2	As 188.979†	1159.7	1351.5	516.86	ug/L	516.86	ppb	11:56:31
2	B 249.677†	23588.7	27369.6	529.23	ug/L	529.23	ppb	11:56:26
2	Ba 233.527†	65972.4	75588.9	512.07	ug/L	512.07	ppb	11:56:26
2	Be 313.107†	658484.0	759394.3	253.11	ug/L	253.11	ppb	11:56:26
2	Ca 317.933Radial†	328848.5	366350.1	483790	ug/L	483790	ppb	11:55:53
2	Cd 226.502†	44564.8	51289.4	478.97	ug/L	478.97	ppb	11:56:31
2	Co 228.616†	22934.0	26355.9	454.58	ug/L	454.58	ppb	11:56:31
2	Cr 267.716†	42405.8	48514.8	487.21	ug/L	487.21	ppb	11:56:31
2	Cu 324.752†	182060.9	202372.3	570.72	ug/L	570.72	ppb	11:56:26
2	Fe 238.204 Radial†	22099.7	24613.1	186810	ug/L	186810	ppb	11:55:58
2	K 766.490 Radial†	32384.1	33177.1	5512.8	ug/L	5512.8	ppb	11:55:53
2	Mg 279.077 IEC†	15408.9	17165.1	490390	ug/L	490390	ppb	11:55:58
2	Mn 257.610†	443861.2	508169.1	503.74	ug/L	503.74	ppb	11:56:26
2	Mo 202.031†	7234.4	8272.5	502.19	ug/L	502.19	ppb	11:56:31
2	Na 589.592 Radial†	16507.2	20025.6	5439.6	ug/L	5439.6	ppb	11:55:58
2	Ni 231.604†	18903.9	21538.4	464.80	ug/L	464.80	ppb	11:56:31

2	P 214.914†	4614.8	5047.9	2553.0	ug/L	2553.0	ppb	11:56:31
2	Pb 220.353†	3001.9	3523.3	463.92	ug/L	463.92	ppb	11:56:31
2	S 181.975 Axial†	2034.4	2282.8	2681.4	ug/L	2681.4	ppb	11:56:31
2	Sb 206.836†	1657.2	1859.3	546.14	ug/L	546.14	ppb	11:56:31
2	Se 196.026†	2990.8	3453.4	2660.8	ug/L	2660.8	ppb	11:56:31
2	Si 251.611†	171426.6	195843.6	5446.4	ug/L	5446.4	ppb	11:56:26
2	Sn 189.927†	2613.6	2986.5	496.04	ug/L	496.04	ppb	11:56:31
2	Sr 421.552†	86543.4	96389.3	502.10	ug/L	502.10	ppb	11:55:53
2	Ti 334.940†	302709.6	348335.4	532.99	ug/L	532.99	ppb	11:56:26
2	Tl 190.801†	1530.4	1794.7	476.28	ug/L	476.28	ppb	11:56:31
2	U 409.014†	14559.7	19485.4	511.20	ug/L	511.20	ppb	11:56:26
2	V 292.402†	73527.2	85808.2	527.42	ug/L	527.42	ppb	11:56:26
2	Zn 213.857†	57591.0	65116.4	488.80	ug/L	488.80	ppb	11:56:31
2	SiO2†	170062.4	194266.8	11588	ug/L	11588	ppb	11:56:53
3	Sc 361.383	836911.0	836911.0	86.928	%			11:56:37
3	Sc Radial	5617.6	5617.6	89.4	%			11:56:08
3	Y 371.029	679086.7	679086.7	84.681	%			11:56:37
3	Y RADIAL	6016.8	6016.8	89.04	%			11:56:08
3	Ag 328.068†	46381.4	52896.4	284.09	ug/L	284.09	ppb	11:56:37
3	Al 396.153Radial†	752327.1	841484.4	518840	ug/L	518840	ppb	11:56:03
3	As 188.979†	1186.1	1386.8	529.61	ug/L	529.61	ppb	11:56:42
3	B 249.677†	23587.4	27468.1	531.12	ug/L	531.12	ppb	11:56:37
3	Ba 233.527†	65716.6	75574.3	512.00	ug/L	512.00	ppb	11:56:37
3	Be 313.107†	654322.1	757397.6	252.45	ug/L	252.45	ppb	11:56:37
3	Ca 317.933Radial†	328674.0	367578.2	485410	ug/L	485410	ppb	11:56:03
3	Cd 226.502†	44740.5	51680.4	482.68	ug/L	482.68	ppb	11:56:42
3	Co 228.616†	23026.2	26559.2	458.09	ug/L	458.09	ppb	11:56:42
3	Cr 267.716†	42569.3	48882.6	490.88	ug/L	490.88	ppb	11:56:42
3	Cu 324.752†	181493.2	202490.9	571.09	ug/L	571.09	ppb	11:56:37
3	Fe 238.204 Radial†	22108.1	24718.2	187610	ug/L	187610	ppb	11:56:08
3	K 766.490 Radial†	32410.5	33346.8	5541.3	ug/L	5541.3	ppb	11:56:03
3	Mg 279.077 IEC†	15414.5	17237.9	492470	ug/L	492470	ppb	11:56:08
3	Mn 257.610†	441311.5	507117.3	502.76	ug/L	502.76	ppb	11:56:37
3	Mo 202.031†	7207.1	8271.7	502.21	ug/L	502.21	ppb	11:56:42
3	Na 589.592 Radial†	16443.1	20025.4	5439.6	ug/L	5439.6	ppb	11:56:08
3	Ni 231.604†	18926.5	21644.4	467.09	ug/L	467.09	ppb	11:56:42
3	P 214.914†	4560.4	5004.8	2531.2	ug/L	2531.2	ppb	11:56:42
3	Pb 220.353†	3022.9	3560.1	468.48	ug/L	468.48	ppb	11:56:42
3	S 181.975 Axial†	2037.9	2295.5	2696.1	ug/L	2696.1	ppb	11:56:42
3	Sb 206.836†	1633.0	1838.4	539.70	ug/L	539.70	ppb	11:56:42
3	Se 196.026†	3007.4	3485.2	2681.9	ug/L	2681.9	ppb	11:56:42
3	Si 251.611†	170614.7	195636.2	5440.6	ug/L	5440.6	ppb	11:56:37
3	Sn 189.927†	2577.7	2956.2	491.73	ug/L	491.73	ppb	11:56:42
3	Sr 421.552†	86673.3	96909.2	504.81	ug/L	504.81	ppb	11:56:03
3	Ti 334.940†	300902.2	347539.1	531.91	ug/L	531.91	ppb	11:56:37
3	Tl 190.801†	1499.1	1765.3	468.82	ug/L	468.82	ppb	11:56:42
3	U 409.014†	14591.3	19583.4	513.79	ug/L	513.79	ppb	11:56:37
3	V 292.402†	73158.4	85695.5	526.64	ug/L	526.64	ppb	11:56:37
3	Zn 213.857†	58001.5	65832.8	494.44	ug/L	494.44	ppb	11:56:42
3	SiO2†	169388.7	194212.5	11585	ug/L	11585	ppb	11:56:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	838997.1	87.145	%	0.1877				0.22%
Sc Radial	5639.1	89.7	%	0.34				0.38%
Y 371.029	681132.3	84.936	%	0.2221				0.26%
Y RADIAL	6045.4	89.47	%	0.596				0.67%
Ag 328.068†	52923.4	284.02	ug/L	0.181	284.02	ppb	0.181	0.06%
QC value within limits for Ag 328.068 Recovery = 113.61%								
Al 396.153Radial†	840973.9	518530	ug/L	3214.7	518530	ppb	3214.7	0.62%
QC value within limits for Al 396.153Radial Recovery = 103.71%								
As 188.979†	1369.6	523.38	ug/L	6.381	523.38	ppb	6.381	1.22%
QC value within limits for As 188.979 Recovery = 104.68%								
B 249.677†	27405.1	529.91	ug/L	1.046	529.91	ppb	1.046	0.20%
QC value within limits for B 249.677 Recovery = 105.98%								
Ba 233.527†	75650.7	512.50	ug/L	0.791	512.50	ppb	0.791	0.15%
QC value within limits for Ba 233.527 Recovery = 102.50%								
Be 313.107†	758784.2	252.91	ug/L	0.401	252.91	ppb	0.401	0.16%
QC value within limits for Be 313.107 Recovery = 101.16%								

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Ca 317.933Radial†     367806.6      485710 ug/L        2090.7      485710 ppb        2090.7   0.43%
   QC value within limits for Ca 317.933Radial  Recovery = 97.14%
Cd 226.502†            51623.8      482.18 ug/L         3.002      482.18 ppb         3.002   0.62%
   QC value within limits for Cd 226.502  Recovery = 96.44%
Co 228.616†            26539.0      457.75 ug/L         3.011      457.75 ppb         3.011   0.66%
   QC value within limits for Co 228.616  Recovery = 91.55%
Cr 267.716†            48822.8      490.28 ug/L         2.820      490.28 ppb         2.820   0.58%
   QC value within limits for Cr 267.716  Recovery = 98.06%
Cu 324.752†           202322.5      570.59 ug/L         0.568      570.59 ppb         0.568   0.10%
   QC value within limits for Cu 324.752  Recovery = 114.12%
Fe 238.204 Radial†     24646.2      187060 ug/L         474.1      187060 ppb         474.1   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.53%
K 766.490 Radial†      33298.2      5533.1 ug/L         17.72      5533.1 ppb         17.72   0.32%
   QC value within limits for K 766.490 Radial  Recovery = 110.66%
Mg 279.077 IEC†        17198.0      491330 ug/L        1055.4      491330 ppb        1055.4   0.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.27%
Mn 257.610†           508082.6      503.66 ug/L         0.870      503.66 ppb         0.870   0.17%
   QC value within limits for Mn 257.610  Recovery = 100.73%
Mo 202.031†             8267.9      501.94 ug/L         0.444      501.94 ppb         0.444   0.09%
   QC value within limits for Mo 202.031  Recovery = 100.39%
Na 589.592 Radial†     20027.6      5440.2 ug/L          0.99      5440.2 ppb          0.99   0.02%
   QC value within limits for Na 589.592 Radial  Recovery = 108.80%
Ni 231.604†            21654.6      467.31 ug/L         2.624      467.31 ppb         2.624   0.56%
   QC value within limits for Ni 231.604  Recovery = 93.46%
P 214.914†              5050.6      2555.3 ug/L         25.40      2555.3 ppb         25.40   0.99%
   QC value within limits for P 214.914  Recovery = 102.21%
Pb 220.353†             3561.3      468.57 ug/L         4.697      468.57 ppb         4.697   1.00%
   QC value within limits for Pb 220.353  Recovery = 93.71%
S 181.975 Axial†        2290.3      2689.8 ug/L          7.60      2689.8 ppb          7.60   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 107.59%
Sb 206.836†             1871.6      549.63 ug/L        12.051      549.63 ppb        12.051   2.19%
   QC value within limits for Sb 206.836  Recovery = 109.93%
Se 196.026†             3484.5      2679.6 ug/L         17.70      2679.6 ppb         17.70   0.66%
   QC value within limits for Se 196.026  Recovery = 107.18%
Si 251.611†           195861.3      5446.9 ug/L          6.52      5446.9 ppb          6.52   0.12%
   QC value within limits for Si 251.611  Recovery = 108.94%
Sn 189.927†             2988.3      496.51 ug/L         5.032      496.51 ppb         5.032   1.01%
   QC value within limits for Sn 189.927  Recovery = 99.30%
Sr 421.552†            96979.0      505.18 ug/L         3.278      505.18 ppb         3.278   0.65%
   QC value within limits for Sr 421.552  Recovery = 101.04%
Ti 334.940†           348255.2      532.97 ug/L         1.053      532.97 ppb         1.053   0.20%
   QC value within limits for Ti 334.940  Recovery = 106.59%
Tl 190.801†             1802.1      478.24 ug/L        10.531      478.24 ppb        10.531   2.20%
   QC value within limits for Tl 190.801  Recovery = 95.65%
U 409.014†             19476.6      510.93 ug/L         3.013      510.93 ppb         3.013   0.59%
   QC value within limits for U 409.014  Recovery = 102.19%
V 292.402†             85813.4      527.43 ug/L         0.791      527.43 ppb         0.791   0.15%
   QC value within limits for V 292.402  Recovery = 105.49%
Zn 213.857†            65728.5      493.68 ug/L         4.552      493.68 ppb         4.552   0.92%
   QC value within limits for Zn 213.857  Recovery = 98.74%
SiO2†                 194005.2       11573 ug/L          24.3       11573 ppb          24.3   0.21%
   QC value within limits for SiO2  Recovery = 108.21%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/16/2009 11:59:08
Data Type: Reprocessed on 12/16/2009 13:14:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	814361.0	814361.0	84.586	%			12:01:34
1	Sc Radial	5645.1	5645.1	89.8	%			12:01:06
1	Y 371.029	663316.3	663316.3	82.714	%			12:01:34
1	Y RADIAL	6035.1	6035.1	89.31	%			12:01:06
1	Ag 328.068†	-25352.2	-30431.8	-1.8968	ug/L	-1.8968	ppb	12:01:34
1	Al 396.153Radial†	733304.3	816218.9	503290	ug/L	503290	ppb	12:01:01
1	As 188.979†	-217.8	-235.2	-15.766	ug/L	-15.766	ppb	12:01:54
1	B 249.677†	1243.5	1803.9	-22.340	ug/L	-22.340	ppb	12:01:34
1	Ba 233.527†	-1888.4	-2257.0	1.4843	ug/L	1.4843	ppb	12:01:54
1	Be 313.107†	-12076.7	-9595.2	-3.2121	ug/L	-3.2121	ppb	12:01:34
1	Ca 317.933Radial†	324174.1	360781.7	476440	ug/L	476440	ppb	12:01:01
1	Cd 226.502†	3787.3	4689.6	1.0758	ug/L	1.0758	ppb	12:01:54
1	Co 228.616†	207.7	316.0	-0.9293	ug/L	-0.9293	ppb	12:01:54
1	Cr 267.716†	63.1	-13.4	2.9736	ug/L	2.9736	ppb	12:01:54
1	Cu 324.752†	-355.8	-6714.9	4.0349	ug/L	4.0349	ppb	12:01:34
1	Fe 238.204 Radial†	52586.1	58520.9	444130	ug/L	444130	ppb	12:01:06
1	K 766.490 Radial†	2903.8	328.5	-167.22	ug/L	-167.22	ppb	12:01:01
1	Mg 279.077 IEC†	15274.1	16997.9	485380	ug/L	485380	ppb	12:01:06
1	Mn 257.610†	-29361.7	-35268.4	0.9437	ug/L	0.9437	ppb	12:01:34
1	Mo 202.031†	-527.4	-642.6	-6.4787	ug/L	-6.4787	ppb	12:01:34
1	Na 589.592 Radial†	1836205.4	2045391.9	555600	ug/L	555600	ppb	12:01:01
1	Ni 231.604†	349.7	285.2	6.1561	ug/L	6.1561	ppb	12:01:54
1	P 214.914†	626.6	499.5	72.916	ug/L	72.916	ppb	12:01:54
1	Pb 220.353†	-701.6	-746.8	-0.5116	ug/L	-0.5116	ppb	12:01:54
1	S 181.975 Axial†	133.3	108.7	33.559	ug/L	33.559	ppb	12:01:54
1	Sb 206.836†	78.0	52.1	6.8492	ug/L	6.8492	ppb	12:01:54
1	Se 196.026†	-2864.5	-3360.9	-193.81	ug/L	-193.81	ppb	12:01:54
1	Si 251.611†	-684.7	-1444.0	-39.366	ug/L	-39.366	ppb	12:01:54
1	Sn 189.927†	-424.5	-511.0	-20.123	ug/L	-20.123	ppb	12:01:54
1	Sr 421.552†	908.3	978.4	0.7261	ug/L	0.7261	ppb	12:01:06
1	Ti 334.940†	-9006.2	-9258.4	4.6496	ug/L	4.6496	ppb	12:01:34
1	Tl 190.801†	-94.3	-70.8	-4.7168	ug/L	-4.7168	ppb	12:01:54
1	U 409.014†	464374.1	551794.4	15113	ug/L	15113	ppb	12:01:34
1	V 292.402†	2277.1	4228.1	-1.1892	ug/L	-1.1892	ppb	12:01:34
1	Zn 213.857†	6861.3	7221.0	-0.6011	ug/L	-0.6011	ppb	12:01:54
1	SiO2†	-758.3	-1544.4	-90.419	ug/L	-90.419	ppb	12:02:51
2	Sc 361.383	817139.6	817139.6	84.875	%			12:02:00
2	Sc Radial	5647.2	5647.2	89.9	%			12:01:16
2	Y 371.029	665620.8	665620.8	83.002	%			12:02:00
2	Y RADIAL	6074.2	6074.2	89.89	%			12:01:16
2	Ag 328.068†	-25822.9	-30884.4	-4.0208	ug/L	-4.0208	ppb	12:02:00
2	Al 396.153Radial†	734463.7	817207.9	503900	ug/L	503900	ppb	12:01:11
2	As 188.979†	-211.1	-226.4	-12.659	ug/L	-12.659	ppb	12:02:20
2	B 249.677†	1355.9	1931.3	-19.721	ug/L	-19.721	ppb	12:02:00
2	Ba 233.527†	-1870.7	-2228.6	1.6636	ug/L	1.6636	ppb	12:02:20
2	Be 313.107†	-12081.2	-9551.9	-3.1984	ug/L	-3.1984	ppb	12:02:00
2	Ca 317.933Radial†	324973.3	361537.9	477430	ug/L	477430	ppb	12:01:11
2	Cd 226.502†	3776.0	4661.0	0.8269	ug/L	0.8269	ppb	12:02:20
2	Co 228.616†	243.2	357.0	-0.2201	ug/L	-0.2201	ppb	12:02:20
2	Cr 267.716†	51.9	-26.8	2.8069	ug/L	2.8069	ppb	12:02:20
2	Cu 324.752†	-503.0	-6886.9	3.5436	ug/L	3.5436	ppb	12:02:00
2	Fe 238.204 Radial†	52572.3	58484.0	443850	ug/L	443850	ppb	12:01:16
2	K 766.490 Radial†	2815.6	229.3	-184.10	ug/L	-184.10	ppb	12:01:11
2	Mg 279.077 IEC†	15278.9	16996.9	485360	ug/L	485360	ppb	12:01:16
2	Mn 257.610†	-30007.5	-35911.2	0.2910	ug/L	0.2910	ppb	12:02:00
2	Mo 202.031†	-568.6	-689.0	-9.2416	ug/L	-9.2416	ppb	12:02:00
2	Na 589.592 Radial†	1839679.5	2048503.6	556440	ug/L	556440	ppb	12:01:11
2	Ni 231.604†	363.2	299.8	6.4708	ug/L	6.4708	ppb	12:02:20

2	P 214.914†	639.1	511.6	79.736	ug/L	79.736	ppb	12:02:20
2	Pb 220.353†	-742.5	-792.2	-5.0294	ug/L	-5.0294	ppb	12:02:20
2	S 181.975 Axial†	104.3	74.0	-8.9304	ug/L	-8.9304	ppb	12:02:20
2	Sb 206.836†	74.3	47.4	5.4241	ug/L	5.4241	ppb	12:02:20
2	Se 196.026†	-2891.9	-3381.7	-205.98	ug/L	-205.98	ppb	12:02:20
2	Si 251.611†	-708.8	-1469.7	-40.034	ug/L	-40.034	ppb	12:02:20
2	Sn 189.927†	-415.1	-498.2	-18.128	ug/L	-18.128	ppb	12:02:20
2	Sr 421.552†	998.2	1078.1	1.2405	ug/L	1.2405	ppb	12:01:16
2	Ti 334.940†	-9241.5	-9499.4	4.3113	ug/L	4.3113	ppb	12:02:00
2	Tl 190.801†	-132.4	-115.3	-16.084	ug/L	-16.084	ppb	12:02:20
2	U 409.014†	468670.6	554989.7	15200	ug/L	15200	ppb	12:02:00
2	V 292.402†	2296.1	4241.3	-0.9326	ug/L	-0.9326	ppb	12:02:00
2	Zn 213.857†	6823.3	7148.6	-1.1609	ug/L	-1.1609	ppb	12:02:20
2	SiO2†	-737.2	-1516.4	-88.645	ug/L	-88.645	ppb	12:02:56
3	Sc 361.383	813455.2	813455.2	84.492	%			12:02:26
3	Sc Radial	5539.5	5539.5	88.2	%			12:01:27
3	Y 371.029	664883.5	664883.5	82.910	%			12:02:26
3	Y RADIAL	5942.4	5942.4	87.94	%			12:01:27
3	Ag 328.068†	-25157.0	-30234.1	-0.4801	ug/L	-0.4801	ppb	12:02:26
3	Al 396.153Radial†	737606.4	836650.7	515890	ug/L	515890	ppb	12:01:22
3	As 188.979†	-220.8	-239.0	-16.792	ug/L	-16.792	ppb	12:02:46
3	B 249.677†	1239.9	1801.2	-22.693	ug/L	-22.693	ppb	12:02:26
3	Ba 233.527†	-1876.7	-2245.7	1.6401	ug/L	1.6401	ppb	12:02:46
3	Be 313.107†	-11891.5	-9391.9	-3.1457	ug/L	-3.1457	ppb	12:02:26
3	Ca 317.933Radial†	325429.9	369081.3	487400	ug/L	487400	ppb	12:01:22
3	Cd 226.502†	3813.8	4725.9	1.2030	ug/L	1.2030	ppb	12:02:46
3	Co 228.616†	219.9	330.8	-0.7101	ug/L	-0.7101	ppb	12:02:46
3	Cr 267.716†	72.0	-2.9	3.1110	ug/L	3.1110	ppb	12:02:46
3	Cu 324.752†	-469.3	-6849.7	3.7754	ug/L	3.7754	ppb	12:02:26
3	Fe 238.204 Radial†	51863.7	58816.8	446370	ug/L	446370	ppb	12:01:27
3	K 766.490 Radial†	2899.7	385.5	-163.39	ug/L	-163.39	ppb	12:01:22
3	Mg 279.077 IEC†	15084.5	17106.7	488490	ug/L	488490	ppb	12:01:27
3	Mn 257.610†	-29792.6	-35817.0	0.5762	ug/L	0.5762	ppb	12:02:26
3	Mo 202.031†	-559.7	-681.5	-8.6157	ug/L	-8.6157	ppb	12:02:26
3	Na 589.592 Radial†	1847306.1	2096925.9	569600	ug/L	569600	ppb	12:01:22
3	Ni 231.604†	324.8	256.3	5.5311	ug/L	5.5311	ppb	12:02:46
3	P 214.914†	663.3	543.7	98.369	ug/L	98.369	ppb	12:02:46
3	Pb 220.353†	-663.7	-702.9	6.6507	ug/L	6.6507	ppb	12:02:46
3	S 181.975 Axial†	146.7	124.7	50.533	ug/L	50.533	ppb	12:02:46
3	Sb 206.836†	62.9	34.3	1.2825	ug/L	1.2825	ppb	12:02:46
3	Se 196.026†	-2898.0	-3404.3	-206.54	ug/L	-206.54	ppb	12:02:46
3	Si 251.611†	-733.3	-1502.5	-40.968	ug/L	-40.968	ppb	12:02:46
3	Sn 189.927†	-405.5	-489.0	-15.696	ug/L	-15.696	ppb	12:02:46
3	Sr 421.552†	941.4	1035.2	0.9229	ug/L	0.9229	ppb	12:01:27
3	Ti 334.940†	-9318.1	-9639.5	4.6572	ug/L	4.6572	ppb	12:02:26
3	Tl 190.801†	-127.0	-109.6	-14.283	ug/L	-14.283	ppb	12:02:46
3	U 409.014†	464422.6	552463.0	15131	ug/L	15131	ppb	12:02:26
3	V 292.402†	2098.7	4020.0	-2.7609	ug/L	-2.7609	ppb	12:02:26
3	Zn 213.857†	6882.9	7255.6	-0.6375	ug/L	-0.6375	ppb	12:02:46
3	SiO2†	-682.5	-1455.6	-85.056	ug/L	-85.056	ppb	12:03:01

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	814985.3	84.651	%	0.1994				0.24%
Sc Radial	5610.6	89.3	%	0.98				1.10%
Y 371.029	664606.8	82.875	%	0.1468				0.18%
Y RADIAL	6017.2	89.05	%	1.002				1.13%
Ag 328.068†	-30516.8	-2.1326	ug/L	1.78208	-2.1326	ppb	1.78208	83.57%
Al 396.153Radial†	823359.2	507690	ug/L	7104.2	507690	ppb	7104.2	1.40%
QC value within limits for Al 396.153Radial Recovery = 101.54%								
As 188.979†	-233.5	-15.072	ug/L	2.1521	-15.072	ppb	2.1521	14.28%
B 249.677†	1845.5	-21.584	ug/L	1.6237	-21.584	ppb	1.6237	7.52%
Ba 233.527†	-2243.7	1.5960	ug/L	0.09749	1.5960	ppb	0.09749	6.11%
Be 313.107†	-9513.0	-3.1854	ug/L	0.03507	-3.1854	ppb	0.03507	1.10%
Ca 317.933Radial†	363800.3	480420	ug/L	6060.2	480420	ppb	6060.2	1.26%
QC value within limits for Ca 317.933Radial Recovery = 96.08%								
Cd 226.502†	4692.1	1.0352	ug/L	0.19131	1.0352	ppb	0.19131	18.48%
Co 228.616†	334.6	-0.6198	ug/L	0.36311	-0.6198	ppb	0.36311	58.58%
Cr 267.716†	-14.4	2.9638	ug/L	0.15225	2.9638	ppb	0.15225	5.14%

Cu 324.752†	-6817.2	3.7846	ug/L	0.24575	3.7846	ppb	0.24575	6.49%
Fe 238.204 Radial†	58607.2	444780	ug/L	1384.4	444780	ppb	1384.4	0.31%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 88.96%								
K 766.490 Radial†	314.4	-171.57	ug/L	11.019	-171.57	ppb	11.019	6.42%
Mg 279.077 IEC†	17033.8	486410	ug/L	1802.2	486410	ppb	1802.2	0.37%
QC value within limits for Mg 279.077 IEC Recovery = 97.28%								
Mn 257.610†	-35665.5	0.6036	ug/L	0.32721	0.6036	ppb	0.32721	54.21%
Mo 202.031†	-671.1	-8.1120	ug/L	1.44869	-8.1120	ppb	1.44869	17.86%
Na 589.592 Radial†	2063607.1	560550	ug/L	7849.4	560550	ppb	7849.4	1.40%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 112.11%								
Ni 231.604†	280.5	6.0526	ug/L	0.47830	6.0526	ppb	0.47830	7.90%
P 214.914†	518.3	83.674	ug/L	13.1756	83.674	ppb	13.1756	15.75%
Pb 220.353†	-747.3	0.3699	ug/L	5.88972	0.3699	ppb	5.88972	>999.9%
S 181.975 Axial†	102.5	25.054	ug/L	30.6302	25.054	ppb	30.6302	122.26%
Sb 206.836†	44.6	4.5186	ug/L	2.89173	4.5186	ppb	2.89173	64.00%
Se 196.026†	-3382.3	-202.11	ug/L	7.193	-202.11	ppb	7.193	3.56%
Si 251.611†	-1472.1	-40.123	ug/L	0.8047	-40.123	ppb	0.8047	2.01%
Sn 189.927†	-499.4	-17.982	ug/L	2.2171	-17.982	ppb	2.2171	12.33%
Sr 421.552†	1030.6	0.9632	ug/L	0.25957	0.9632	ppb	0.25957	26.95%
Ti 334.940†	-9465.8	4.5393	ug/L	0.19756	4.5393	ppb	0.19756	4.35%
Tl 190.801†	-98.6	-11.695	ug/L	6.1099	-11.695	ppb	6.1099	52.24%
U 409.014†	553082.4	15148	ug/L	46.4	15148	ppb	46.4	0.31%
QC value within limits for U 409.014 Recovery = 100.99%								
V 292.402†	4163.1	-1.6275	ug/L	0.98983	-1.6275	ppb	0.98983	60.82%
Zn 213.857†	7208.4	-0.7998	ug/L	0.31320	-0.7998	ppb	0.31320	39.16%
SiO2†	-1505.5	-88.040	ug/L	2.7325	-88.040	ppb	2.7325	3.10%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/16/2009 12:05:10
Data Type: Reprocessed on 12/16/2009 13:14:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	914860.3	914860.3	95.025	%			12:08:45
1	Sc Radial	6077.6	6077.6	96.7	%			12:07:08
1	Y 371.029	742722.1	742722.1	92.616	%			12:08:45
1	Y RADIAL	6417.0	6417.0	94.97	%			12:07:08
1	Ag 328.068†	-7885.5	-8758.1	3.0976	ug/L	3.0976	ppb	12:08:51
1	Al 396.153Radial†	726.8	778.2	46.999	ug/L	46.999	ppb	12:07:08
1	As 188.979†	27747.6	29222.8	10560	ug/L	10560	ppb	12:08:51
1	B 249.677†	244552.1	257690.2	5203.2	ug/L	5203.2	ppb	12:08:45
1	Ba 233.527†	2092443.9	2201976.7	14704	ug/L	14704	ppb	12:08:45
1	Be 313.107†	8471404.4	8919637.2	2981.6	ug/L	2981.6	ppb	12:08:39
1	Ca 317.933Radial†	42.2	8.8	11.558	ug/L	11.558	ppb	12:07:28
1	Cd 226.502†	992407.0	1044580.1	10136	ug/L	10136	ppb	12:08:45
1	Co 228.616†	516190.5	543288.0	9421.9	ug/L	9421.9	ppb	12:08:51
1	Cr 267.716†	2371136.0	2495197.2	24865	ug/L	24865	ppb	12:08:45
1	Cu 324.752†	7148417.8	7516404.4	20843	ug/L	20843	ppb	12:08:39
1	Fe 238.204 Radial†	-26.0	-36.0	23.589	ug/L	23.589	ppb	12:07:28
1	K 766.490 Radial†	1760195.6	1816831.5	301340	ug/L	301340	ppb	12:07:03
1	Mg 279.077 IEC†	-5.8	-8.7	-45.000	ug/L	-45.000	ppb	12:07:28
1	Mn 257.610†	9459418.4	9954143.8	9681.4	ug/L	9681.4	ppb	12:08:39
1	Mo 202.031†	162565.3	171057.8	10110	ug/L	10110	ppb	12:08:51
1	Na 589.592 Radial†	-1011.8	588.2	159.77	ug/L	159.77	ppb	12:07:08
1	Ni 231.604†	450494.5	473953.6	10228	ug/L	10228	ppb	12:08:45
1	P 214.914†	34909.6	36496.1	15700	ug/L	15700	ppb	12:08:51
1	Pb 220.353†	233589.6	245902.7	25335	ug/L	25335	ppb	12:08:51
1	S 181.975 Axial†	42678.4	44864.1	54689	ug/L	54689	ppb	12:08:51
1	Sb 206.836†	35429.7	37244.6	10831	ug/L	10831	ppb	12:08:51
1	Se 196.026†	18547.1	19543.8	10711	ug/L	10711	ppb	12:08:51
1	Si 251.611†	1699880.1	1788248.8	49528	ug/L	49528	ppb	12:08:45
1	Sn 189.927†	70118.4	73780.6	10945	ug/L	10945	ppb	12:08:51
1	Sr 421.552†	1802404.8	1863339.3	9792.9	ug/L	9792.9	ppb	12:07:03
1	Ti 334.940†	6732031.7	7085900.1	10328	ug/L	10328	ppb	12:08:39
1	Tl 190.801†	37226.8	39216.7	10092	ug/L	10092	ppb	12:08:51
1	U 409.014†	-1730.1	977.3	-21.095	ug/L	-21.095	ppb	12:08:51
1	V 292.402†	1573003.4	1656899.6	10502	ug/L	10502	ppb	12:08:45
1	Zn 213.857†	1736074.6	1826082.3	14691	ug/L	14691	ppb	12:08:45
1	SiO2†	1724362.6	1813999.8	107770	ug/L	107770	ppb	12:09:38
2	Sc 361.383	909108.7	909108.7	94.427	%			12:09:05
2	Sc Radial	6065.3	6065.3	96.5	%			12:07:39
2	Y 371.029	739363.1	739363.1	92.197	%			12:09:05
2	Y RADIAL	6470.5	6470.5	95.76	%			12:07:39
2	Ag 328.068†	-7744.8	-8661.5	3.5119	ug/L	3.5119	ppb	12:09:10
2	Al 396.153Radial†	740.3	793.7	56.240	ug/L	56.240	ppb	12:07:39
2	As 188.979†	27546.4	29194.5	10551	ug/L	10551	ppb	12:09:10
2	B 249.677†	242672.8	257328.2	5195.8	ug/L	5195.8	ppb	12:09:05
2	Ba 233.527†	2081410.5	2204223.5	14719	ug/L	14719	ppb	12:09:05
2	Be 313.107†	8459933.5	8963890.9	2996.3	ug/L	2996.3	ppb	12:08:59
2	Ca 317.933Radial†	51.8	18.9	24.909	ug/L	24.909	ppb	12:07:59
2	Cd 226.502†	987268.7	1045745.9	10147	ug/L	10147	ppb	12:09:05
2	Co 228.616†	514901.2	545359.4	9457.7	ug/L	9457.7	ppb	12:09:10
2	Cr 267.716†	2359337.2	2498488.9	24897	ug/L	24897	ppb	12:09:05
2	Cu 324.752†	7119208.0	7533064.1	20890	ug/L	20890	ppb	12:08:59
2	Fe 238.204 Radial†	-25.1	-35.2	31.355	ug/L	31.355	ppb	12:07:59
2	K 766.490 Radial†	1767950.9	1828548.5	303280	ug/L	303280	ppb	12:07:34
2	Mg 279.077 IEC†	-5.5	-8.4	-36.384	ug/L	-36.384	ppb	12:07:59
2	Mn 257.610†	9446491.8	10003434.0	9729.3	ug/L	9729.3	ppb	12:08:59
2	Mo 202.031†	161668.3	171190.3	10118	ug/L	10118	ppb	12:09:10
2	Na 589.592 Radial†	-1078.7	516.7	140.36	ug/L	140.36	ppb	12:07:39
2	Ni 231.604†	448016.4	474328.6	10236	ug/L	10236	ppb	12:09:05

2	P 214.914†	34608.1	36409.2	15648	ug/L	15648	ppb	12:09:10
2	Pb 220.353†	231969.7	245742.4	25319	ug/L	25319	ppb	12:09:10
2	S 181.975 Axial†	42226.0	44669.2	54452	ug/L	54452	ppb	12:09:10
2	Sb 206.836†	35259.7	37300.5	10847	ug/L	10847	ppb	12:09:10
2	Se 196.026†	18462.1	19577.3	10729	ug/L	10729	ppb	12:09:10
2	Si 251.611†	1686610.2	1785513.4	49451	ug/L	49451	ppb	12:09:05
2	Sn 189.927†	69699.2	73803.5	10948	ug/L	10948	ppb	12:09:10
2	Sr 421.552†	1814389.6	1879526.0	9878.0	ug/L	9878.0	ppb	12:07:34
2	Ti 334.940†	6721228.9	7119280.8	10377	ug/L	10377	ppb	12:08:59
2	Tl 190.801†	37025.0	39250.8	10102	ug/L	10102	ppb	12:09:10
2	U 409.014†	-1507.5	1201.4	-14.997	ug/L	-14.997	ppb	12:09:10
2	V 292.402†	1563255.3	1657049.1	10503	ug/L	10503	ppb	12:09:05
2	Zn 213.857†	1725905.7	1826871.9	14697	ug/L	14697	ppb	12:09:05
2	SiO2†	1731316.0	1832844.3	108890	ug/L	108890	ppb	12:09:45
3	Sc 361.383	922065.9	922065.9	95.773	%			12:09:25
3	Sc Radial	6047.7	6047.7	96.3	%			12:08:09
3	Y 371.029	749573.8	749573.8	93.471	%			12:09:25
3	Y RADIAL	6418.9	6418.9	94.99	%			12:08:09
3	Ag 328.068†	-7640.0	-8436.9	4.5053	ug/L	4.5053	ppb	12:09:30
3	Al 396.153Radial†	718.3	773.1	50.503	ug/L	50.503	ppb	12:08:09
3	As 188.979†	27390.0	28621.2	10344	ug/L	10344	ppb	12:09:30
3	B 249.677†	247312.4	258561.3	5221.1	ug/L	5221.1	ppb	12:09:25
3	Ba 233.527†	2106071.2	2198997.6	14684	ug/L	14684	ppb	12:09:25
3	Be 313.107†	8499075.1	8878862.0	2967.9	ug/L	2967.9	ppb	12:09:19
3	Ca 317.933Radial†	55.3	22.6	29.870	ug/L	29.870	ppb	12:08:29
3	Cd 226.502†	999000.5	1043303.3	10123	ug/L	10123	ppb	12:09:25
3	Co 228.616†	514098.1	536858.1	9310.1	ug/L	9310.1	ppb	12:09:30
3	Cr 267.716†	2389441.8	2494811.2	24861	ug/L	24861	ppb	12:09:25
3	Cu 324.752†	7167622.1	7477669.2	20736	ug/L	20736	ppb	12:09:19
3	Fe 238.204 Radial†	-24.0	-34.1	34.523	ug/L	34.523	ppb	12:08:29
3	K 766.490 Radial†	1723302.4	1787499.1	296470	ug/L	296470	ppb	12:08:04
3	Mg 279.077 IEC†	-6.0	-8.9	-54.053	ug/L	-54.053	ppb	12:08:29
3	Mn 257.610†	9479134.5	9896937.7	9625.7	ug/L	9625.7	ppb	12:09:19
3	Mo 202.031†	161317.6	168418.2	9954.3	ug/L	9954.3	ppb	12:09:30
3	Na 589.592 Radial†	-1050.2	543.1	147.52	ug/L	147.52	ppb	12:08:09
3	Ni 231.604†	453473.8	473359.6	10216	ug/L	10216	ppb	12:09:25
3	P 214.914†	34491.7	35772.7	15340	ug/L	15340	ppb	12:09:30
3	Pb 220.353†	231938.2	242257.4	24960	ug/L	24960	ppb	12:09:30
3	S 181.975 Axial†	42092.9	43901.8	53516	ug/L	53516	ppb	12:09:30
3	Sb 206.836†	35087.7	36596.2	10632	ug/L	10632	ppb	12:09:30
3	Se 196.026†	18334.5	19169.3	10506	ug/L	10506	ppb	12:09:30
3	Si 251.611†	1716126.4	1791232.7	49616	ug/L	49616	ppb	12:09:25
3	Sn 189.927†	69489.6	72547.4	10762	ug/L	10762	ppb	12:09:30
3	Sr 421.552†	1761419.3	1829971.0	9617.5	ug/L	9617.5	ppb	12:08:04
3	Ti 334.940†	6751388.9	7050748.8	10277	ug/L	10277	ppb	12:09:19
3	Tl 190.801†	36903.7	38573.2	9927.7	ug/L	9927.7	ppb	12:09:30
3	U 409.014†	-1600.0	1127.3	-16.965	ug/L	-16.965	ppb	12:09:30
3	V 292.402†	1586528.3	1658085.4	10507	ug/L	10507	ppb	12:09:25
3	Zn 213.857†	1745682.8	1821837.5	14656	ug/L	14656	ppb	12:09:25
3	SiO2†	1749841.4	1826422.4	108520	ug/L	108520	ppb	12:09:52

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915344.9	95.075	%	0.6743				0.71%
Sc Radial	6063.5	96.5	%	0.24				0.25%
Y 371.029	743886.3	92.761	%	0.6489				0.70%
Y RADIAL	6435.5	95.24	%	0.449				0.47%
Ag 328.068†	-8618.8	3.7050	ug/L	0.72344	3.7050	ppb	0.72344	19.53%
Al 396.153Radial†	781.7	51.247	ug/L	4.6651	51.247	ppb	4.6651	9.10%
As 188.979†	29012.8	10485	ug/L	121.9	10485	ppb	121.9	1.16%
QC value within limits for As 188.979 Recovery = 104.85%								
B 249.677†	257859.9	5206.7	ug/L	13.05	5206.7	ppb	13.05	0.25%
QC value within limits for B 249.677 Recovery = 104.13%								
Ba 233.527†	2201732.6	14702	ug/L	17.5	14702	ppb	17.5	0.12%
QC value within limits for Ba 233.527 Recovery = 98.01%								
Be 313.107†	8920796.7	2981.9	ug/L	14.22	2981.9	ppb	14.22	0.48%
QC value within limits for Be 313.107 Recovery = 99.40%								
Ca 317.933Radial†	16.7	22.112	ug/L	9.4712	22.112	ppb	9.4712	42.83%
Cd 226.502†	1044543.1	10135	ug/L	11.9	10135	ppb	11.9	0.12%

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   QC value within limits for Cd 226.502  Recovery = 101.35%
Co 228.616†          541835.2      9396.5 ug/L        77.00      9396.5 ppb         77.00   0.82%
   QC value within limits for Co 228.616  Recovery = 93.97%
Cr 267.716†         2496165.7       24874 ug/L         20.1       24874 ppb          20.1   0.08%
   QC value within limits for Cr 267.716  Recovery = 99.50%
Cu 324.752†         7509045.9       20823 ug/L         78.8       20823 ppb          78.8   0.38%
   QC value within limits for Cu 324.752  Recovery = 104.12%
Fe 238.204 Radial†      -35.1      29.822 ug/L       5.6260      29.822 ppb        5.6260  18.87%
K 766.490 Radial†   1810959.7      300370 ug/L       3507.8      300370 ppb        3507.8   1.17%
   QC value within limits for K 766.490 Radial  Recovery = 100.12%
Mg 279.077 IEC†          -8.7     -45.146 ug/L       8.8356     -45.146 ppb        8.8356  19.57%
Mn 257.610†         9951505.2      9678.8 ug/L        51.84      9678.8 ppb         51.84   0.54%
   QC value within limits for Mn 257.610  Recovery = 96.79%
Mo 202.031†          170222.1       10061 ug/L         92.4       10061 ppb          92.4   0.92%
   QC value within limits for Mo 202.031  Recovery = 100.61%
Na 589.592 Radial†      549.3     149.22 ug/L         9.816      149.22 ppb         9.816   6.58%
Ni 231.604†          473880.6       10227 ug/L         10.5       10227 ppb          10.5   0.10%
   QC value within limits for Ni 231.604  Recovery = 102.27%
P 214.914†            36226.0       15563 ug/L        194.4       15563 ppb         194.4   1.25%
   QC value within limits for P 214.914  Recovery = 103.75%
Pb 220.353†          244634.2       25205 ug/L        212.3       25205 ppb         212.3   0.84%
   QC value within limits for Pb 220.353  Recovery = 100.82%
S 181.975 Axial†      44478.4       54219 ug/L        620.2       54219 ppb         620.2   1.14%
   QC value within limits for S 181.975 Axial  Recovery = 108.44%
Sb 206.836†           37047.1       10770 ug/L        119.4       10770 ppb         119.4   1.11%
   QC value within limits for Sb 206.836  Recovery = 107.70%
Se 196.026†           19430.1       10649 ug/L        124.0       10649 ppb         124.0   1.16%
   QC value within limits for Se 196.026  Recovery = 106.49%
Si 251.611†         1788331.6       49532 ug/L         82.6       49532 ppb          82.6   0.17%
   QC value within limits for Si 251.611  Recovery = 99.06%
Sn 189.927†           73377.2       10885 ug/L        106.6       10885 ppb         106.6   0.98%
   QC value within limits for Sn 189.927  Recovery = 108.85%
Sr 421.552†         1857612.1      9762.8 ug/L       132.80      9762.8 ppb        132.80   1.36%
   QC value within limits for Sr 421.552  Recovery = 97.63%
Ti 334.940†         7085309.9       10327 ug/L         50.0       10327 ppb          50.0   0.48%
   QC value within limits for Ti 334.940  Recovery = 103.27%
Tl 190.801†           39013.5       10041 ug/L         97.8       10041 ppb          97.8   0.97%
   QC value within limits for Tl 190.801  Recovery = 100.41%
U 409.014†             1102.0     -17.686 ug/L       3.1122     -17.686 ppb        3.1122  17.60%
V 292.402†          1657344.7       10504 ug/L          2.8       10504 ppb           2.8   0.03%
   QC value within limits for V 292.402  Recovery = 105.04%
Zn 213.857†         1824930.5       14681 ug/L         21.8       14681 ppb          21.8   0.15%
   QC value within limits for Zn 213.857  Recovery = 97.87%
SiO2†               1824422.2      108390 ug/L        573.1      108390 ppb         573.1   0.53%
   QC value within limits for SiO2  Recovery = 101.30%
All analyte(s) passed QC.
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Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/16/2009 12:27:44
Data Type: Reprocessed on 12/16/2009 13:14:44

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	953678.0	953678.0	99.057	%			12:30:53
1	Sc Radial	6104.0	6104.0	97.1	%			12:29:36
1	Y 371.029	783278.0	783278.0	97.673	%			12:30:53
1	Y RADIAL	6504.0	6504.0	96.25	%			12:29:36
1	Ag 328.068†	118871.8	119544.3	515.91	ug/L	515.91	ppb	12:30:58
1	Al 396.153Radial†	7711.9	7965.0	4889.4	ug/L	4889.4	ppb	12:29:36
1	As 188.979†	1437.3	1473.4	532.58	ug/L	532.58	ppb	12:31:18
1	B 249.677†	24907.1	25478.0	514.80	ug/L	514.80	ppb	12:30:58
1	Ba 233.527†	76547.3	77251.9	516.37	ug/L	516.37	ppb	12:30:58
1	Be 313.107†	1510327.6	1529394.5	508.76	ug/L	508.76	ppb	12:30:53
1	Ca 317.933Radial†	3796.9	3873.5	5115.2	ug/L	5115.2	ppb	12:29:36
1	Cd 226.502†	52404.8	53115.9	514.87	ug/L	514.87	ppb	12:30:58
1	Co 228.616†	29534.4	29886.1	518.41	ug/L	518.41	ppb	12:30:58
1	Cr 267.716†	51140.8	51539.8	514.04	ug/L	514.04	ppb	12:30:58
1	Cu 324.752†	188291.8	183790.9	509.93	ug/L	509.93	ppb	12:30:58
1	Fe 238.204 Radial†	672.5	683.1	5200.1	ug/L	5200.1	ppb	12:29:56
1	K 766.490 Radial†	33077.7	31144.8	5158.4	ug/L	5158.4	ppb	12:29:36
1	Mg 279.077 IEC†	177.8	180.2	5156.8	ug/L	5156.8	ppb	12:29:56
1	Mn 257.610†	521660.7	526073.0	512.08	ug/L	512.08	ppb	12:30:53
1	Mo 202.031†	8592.6	8655.3	511.94	ug/L	511.94	ppb	12:31:18
1	Na 589.592 Radial†	34680.5	37332.3	10141	ug/L	10141	ppb	12:29:36
1	Ni 231.604†	23837.5	23936.4	516.54	ug/L	516.54	ppb	12:30:58
1	P 214.914†	5151.9	4959.6	2490.1	ug/L	2490.1	ppb	12:31:18
1	Pb 220.353†	4847.2	4976.1	514.04	ug/L	514.04	ppb	12:31:18
1	S 181.975 Axial†	871.1	830.5	1011.4	ug/L	1011.4	ppb	12:31:18
1	Sb 206.836†	1785.3	1762.2	529.32	ug/L	529.32	ppb	12:31:18
1	Se 196.026†	908.7	942.9	535.78	ug/L	535.78	ppb	12:31:18
1	Si 251.611†	92449.5	92695.5	2571.2	ug/L	2571.2	ppb	12:30:58
1	Sn 189.927†	3445.9	3469.6	515.30	ug/L	515.30	ppb	12:31:18
1	Sr 421.552†	92682.3	95369.4	501.17	ug/L	501.17	ppb	12:29:36
1	Ti 334.940†	350800.2	355530.2	518.51	ug/L	518.51	ppb	12:30:53
1	Tl 190.801†	1964.3	2023.7	520.77	ug/L	520.77	ppb	12:31:18
1	U 409.014†	15835.0	18783.7	514.71	ug/L	514.71	ppb	12:30:58
1	V 292.402†	79353.6	81645.4	518.28	ug/L	518.28	ppb	12:30:58
1	Zn 213.857†	63875.4	63593.1	510.16	ug/L	510.16	ppb	12:30:58
1	SiO2†	92558.3	92791.9	5520.8	ug/L	5520.8	ppb	12:32:26
2	Sc 361.383	975939.8	975939.8	101.37	%			12:31:24
2	Sc Radial	6129.1	6129.1	97.5	%			12:30:01
2	Y 371.029	800482.6	800482.6	99.819	%			12:31:24
2	Y RADIAL	6552.4	6552.4	96.97	%			12:30:01
2	Ag 328.068†	120953.7	118860.7	512.97	ug/L	512.97	ppb	12:31:30
2	Al 396.153Radial†	7744.6	7966.0	4890.5	ug/L	4890.5	ppb	12:30:01
2	As 188.979†	1424.8	1427.9	516.29	ug/L	516.29	ppb	12:31:50
2	B 249.677†	25447.8	25437.9	514.00	ug/L	514.00	ppb	12:31:30
2	Ba 233.527†	77774.4	76699.6	512.68	ug/L	512.68	ppb	12:31:30
2	Be 313.107†	1543460.8	1527300.6	508.07	ug/L	508.07	ppb	12:31:24
2	Ca 317.933Radial†	3825.9	3887.3	5133.4	ug/L	5133.4	ppb	12:30:01
2	Cd 226.502†	53315.8	52807.9	511.88	ug/L	511.88	ppb	12:31:30
2	Co 228.616†	30057.7	29722.3	515.54	ug/L	515.54	ppb	12:31:30
2	Cr 267.716†	52131.8	51339.8	512.05	ug/L	512.05	ppb	12:31:30
2	Cu 324.752†	192192.7	183303.1	508.57	ug/L	508.57	ppb	12:31:30
2	Fe 238.204 Radial†	674.4	682.1	5193.2	ug/L	5193.2	ppb	12:30:21
2	K 766.490 Radial†	33016.7	30942.9	5124.8	ug/L	5124.8	ppb	12:30:01
2	Mg 279.077 IEC†	183.8	185.7	5312.6	ug/L	5312.6	ppb	12:30:21
2	Mn 257.610†	532206.3	524463.4	510.51	ug/L	510.51	ppb	12:31:24
2	Mo 202.031†	8600.5	8465.3	500.71	ug/L	500.71	ppb	12:31:50
2	Na 589.592 Radial†	34711.2	37217.7	10110	ug/L	10110	ppb	12:30:01
2	Ni 231.604†	24328.0	23871.3	515.14	ug/L	515.14	ppb	12:31:30

2	P 214.914†	5123.4	4812.9	2414.2 ug/L	2414.2 ppb	12:31:50
2	Pb 220.353†	4833.2	4850.6	501.09 ug/L	501.09 ppb	12:31:50
2	S 181.975 Axial†	886.0	825.1	1004.9 ug/L	1004.9 ppb	12:31:50
2	Sb 206.836†	1785.8	1721.6	516.86 ug/L	516.86 ppb	12:31:50
2	Se 196.026†	906.7	920.0	523.24 ug/L	523.24 ppb	12:31:50
2	Si 251.611†	94100.3	92195.1	2557.5 ug/L	2557.5 ppb	12:31:30
2	Sn 189.927†	3439.0	3383.5	502.53 ug/L	502.53 ppb	12:31:50
2	Sr 421.552†	92737.5	95035.5	499.42 ug/L	499.42 ppb	12:30:01
2	Ti 334.940†	359098.1	355637.9	518.67 ug/L	518.67 ppb	12:31:24
2	Tl 190.801†	1941.0	1955.5	503.34 ug/L	503.34 ppb	12:31:50
2	U 409.014†	16108.9	18689.3	512.11 ug/L	512.11 ppb	12:31:30
2	V 292.402†	80889.2	81332.9	516.17 ug/L	516.17 ppb	12:31:30
2	Zn 213.857†	65070.5	63301.2	507.80 ug/L	507.80 ppb	12:31:30
2	SiO2†	92876.2	90974.1	5412.6 ug/L	5412.6 ppb	12:32:31
3	Sc 361.383	957379.9	957379.9	99.441 %		12:31:56
3	Sc Radial	6190.0	6190.0	98.5 %		12:30:26
3	Y 371.029	787463.3	787463.3	98.195 %		12:31:56
3	Y RADIAL	6612.7	6612.7	97.86 %		12:30:26
3	Ag 328.068†	117761.4	117963.6	509.08 ug/L	509.08 ppb	12:32:01
3	Al 396.153Radial†	7868.6	8013.9	4919.5 ug/L	4919.5 ppb	12:30:26
3	As 188.979†	1420.4	1450.7	524.44 ug/L	524.44 ppb	12:32:21
3	B 249.677†	24711.6	25184.2	508.88 ug/L	508.88 ppb	12:32:01
3	Ba 233.527†	75870.1	76272.0	509.82 ug/L	509.82 ppb	12:32:01
3	Be 313.107†	1517988.2	1531202.5	509.36 ug/L	509.36 ppb	12:31:56
3	Ca 317.933Radial†	3870.5	3893.9	5142.2 ug/L	5142.2 ppb	12:30:26
3	Cd 226.502†	52021.8	52526.3	509.16 ug/L	509.16 ppb	12:32:01
3	Co 228.616†	29212.5	29447.2	510.80 ug/L	510.80 ppb	12:32:01
3	Cr 267.716†	50985.8	51184.4	510.50 ug/L	510.50 ppb	12:32:01
3	Cu 324.752†	186411.7	181165.2	502.64 ug/L	502.64 ppb	12:32:01
3	Fe 238.204 Radial†	666.6	667.4	5081.4 ug/L	5081.4 ppb	12:30:46
3	K 766.490 Radial†	33624.9	31227.4	5172.1 ug/L	5172.1 ppb	12:30:26
3	Mg 279.077 IEC†	176.3	176.2	5041.3 ug/L	5041.3 ppb	12:30:46
3	Mn 257.610†	522056.2	524434.4	510.48 ug/L	510.48 ppb	12:31:56
3	Mo 202.031†	8613.5	8642.8	511.19 ug/L	511.19 ppb	12:32:21
3	Na 589.592 Radial†	35006.9	37167.9	10096 ug/L	10096 ppb	12:30:26
3	Ni 231.604†	23726.1	23731.3	512.12 ug/L	512.12 ppb	12:32:01
3	P 214.914†	5152.0	4939.6	2481.0 ug/L	2481.0 ppb	12:32:21
3	Pb 220.353†	4872.9	4983.0	514.77 ug/L	514.77 ppb	12:32:21
3	S 181.975 Axial†	884.2	840.3	1023.3 ug/L	1023.3 ppb	12:32:21
3	Sb 206.836†	1785.7	1755.6	527.41 ug/L	527.41 ppb	12:32:21
3	Se 196.026†	901.9	932.6	529.74 ug/L	529.74 ppb	12:32:21
3	Si 251.611†	91310.7	91189.4	2529.2 ug/L	2529.2 ppb	12:32:01
3	Sn 189.927†	3457.5	3467.9	515.05 ug/L	515.05 ppb	12:32:21
3	Sr 421.552†	93864.9	95244.9	500.52 ug/L	500.52 ppb	12:30:26
3	Ti 334.940†	351893.9	355260.7	518.13 ug/L	518.13 ppb	12:31:56
3	Tl 190.801†	1954.8	2006.5	516.41 ug/L	516.41 ppb	12:32:21
3	U 409.014†	15477.4	18362.4	503.14 ug/L	503.14 ppb	12:32:01
3	V 292.402†	78892.8	80872.3	513.42 ug/L	513.42 ppb	12:32:01
3	Zn 213.857†	63232.7	62697.4	502.96 ug/L	502.96 ppb	12:32:01
3	SiO2†	93040.0	92915.1	5528.1 ug/L	5528.1 ppb	12:32:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	962332.6	99.955	%	1.2390				1.24%
Sc Radial	6141.1	97.7	%	0.70				0.72%
Y 371.029	790408.0	98.562	%	1.1188				1.14%
Y RADIAL	6556.4	97.03	%	0.806				0.83%
Ag 328.068†	118789.5	512.65	ug/L	3.425	512.65	ppb	3.425	0.67%
QC value within limits for Ag 328.068 Recovery = 102.53%								
Al 396.153Radial†	7981.6	4899.8	ug/L	17.09	4899.8	ppb	17.09	0.35%
QC value within limits for Al 396.153Radial Recovery = 98.00%								
As 188.979†	1450.6	524.44	ug/L	8.145	524.44	ppb	8.145	1.55%
QC value within limits for As 188.979 Recovery = 104.89%								
B 249.677†	25366.7	512.56	ug/L	3.213	512.56	ppb	3.213	0.63%
QC value within limits for B 249.677 Recovery = 102.51%								
Ba 233.527†	76741.2	512.96	ug/L	3.283	512.96	ppb	3.283	0.64%
QC value within limits for Ba 233.527 Recovery = 102.59%								
Be 313.107†	1529299.2	508.73	ug/L	0.648	508.73	ppb	0.648	0.13%
QC value within limits for Be 313.107 Recovery = 101.75%								

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Ca 317.933Radial†       3884.9      5130.3 ug/L         13.79      5130.3 ppb          13.79   0.27%
   QC value within limits for Ca 317.933Radial  Recovery = 102.61%
Cd 226.502†            52816.7      511.97 ug/L         2.855      511.97 ppb          2.855   0.56%
   QC value within limits for Cd 226.502  Recovery = 102.39%
Co 228.616†            29685.2      514.91 ug/L         3.844      514.91 ppb          3.844   0.75%
   QC value within limits for Co 228.616  Recovery = 102.98%
Cr 267.716†            51354.7      512.20 ug/L         1.778      512.20 ppb          1.778   0.35%
   QC value within limits for Cr 267.716  Recovery = 102.44%
Cu 324.752†           182753.1      507.05 ug/L         3.876      507.05 ppb          3.876   0.76%
   QC value within limits for Cu 324.752  Recovery = 101.41%
Fe 238.204 Radial†       677.5      5158.2 ug/L         66.62      5158.2 ppb          66.62   1.29%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.16%
K 766.490 Radial†      31105.1      5151.8 ug/L         24.31      5151.8 ppb          24.31   0.47%
   QC value within limits for K 766.490 Radial  Recovery = 103.04%
Mg 279.077 IEC†          180.7      5170.2 ug/L        136.18      5170.2 ppb         136.18   2.63%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.40%
Mn 257.610†           524990.3      511.02 ug/L         0.916      511.02 ppb          0.916   0.18%
   QC value within limits for Mn 257.610  Recovery = 102.20%
Mo 202.031†            8587.8       507.94 ug/L         6.281      507.94 ppb          6.281   1.24%
   QC value within limits for Mo 202.031  Recovery = 101.59%
Na 589.592 Radial†     37239.3       10115 ug/L          22.9       10115 ppb           22.9   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 101.15%
Ni 231.604†            23846.3      514.60 ug/L         2.260      514.60 ppb          2.260   0.44%
   QC value within limits for Ni 231.604  Recovery = 102.92%
P 214.914†              4904.0      2461.8 ug/L         41.45      2461.8 ppb          41.45   1.68%
   QC value within limits for P 214.914  Recovery = 98.47%
Pb 220.353†             4936.5      509.97 ug/L         7.698      509.97 ppb          7.698   1.51%
   QC value within limits for Pb 220.353  Recovery = 101.99%
S 181.975 Axial†         832.0      1013.2 ug/L          9.36      1013.2 ppb           9.36   0.92%
   QC value within limits for S 181.975 Axial  Recovery = 101.32%
Sb 206.836†             1746.5      524.53 ug/L         6.712      524.53 ppb          6.712   1.28%
   QC value within limits for Sb 206.836  Recovery = 104.91%
Se 196.026†              931.8      529.59 ug/L         6.273      529.59 ppb          6.273   1.18%
   QC value within limits for Se 196.026  Recovery = 105.92%
Si 251.611†            92026.6      2552.6 ug/L         21.40      2552.6 ppb          21.40   0.84%
   QC value within limits for Si 251.611  Recovery = 102.11%
Sn 189.927†             3440.3      510.96 ug/L         7.304      510.96 ppb          7.304   1.43%
   QC value within limits for Sn 189.927  Recovery = 102.19%
Sr 421.552†            95216.6      500.37 ug/L         0.887      500.37 ppb          0.887   0.18%
   QC value within limits for Sr 421.552  Recovery = 100.07%
Ti 334.940†           355476.3      518.44 ug/L         0.280      518.44 ppb          0.280   0.05%
   QC value within limits for Ti 334.940  Recovery = 103.69%
Tl 190.801†             1995.2      513.51 ug/L         9.072      513.51 ppb          9.072   1.77%
   QC value within limits for Tl 190.801  Recovery = 102.70%
U 409.014†             18611.8      509.99 ug/L         6.067      509.99 ppb          6.067   1.19%
   QC value within limits for U 409.014  Recovery = 102.00%
V 292.402†             81283.5      515.96 ug/L         2.436      515.96 ppb          2.436   0.47%
   QC value within limits for V 292.402  Recovery = 103.19%
Zn 213.857†            63197.2      506.97 ug/L         3.669      506.97 ppb          3.669   0.72%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                  92227.0      5487.2 ug/L         64.67      5487.2 ppb          64.67   1.18%
   QC value within limits for SiO2  Recovery = 102.61%
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/16/2009 12:34:46
Data Type: Reprocessed on 12/16/2009 13:14:45

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	973545.9	973545.9	101.12	%			12:37:56
1	Sc Radial	6053.5	6053.5	96.3	%			12:36:39
1	Y 371.029	810234.3	810234.3	101.03	%			12:37:56
1	Y RADIAL	6538.3	6538.3	96.76	%			12:36:39
1	Ag 328.068†	518.4	53.0	0.2350	ug/L	0.2350	ppb	12:38:01
1	Al 396.153Radial†	-21.1	4.9	2.9917	ug/L	2.9917	ppb	12:36:39
1	As 188.979†	-15.4	7.1	2.5557	ug/L	2.5557	ppb	12:38:21
1	B 249.677†	26.0	359.5	7.2898	ug/L	7.2898	ppb	12:38:01
1	Ba 233.527†	16.6	-8.0	-0.0524	ug/L	-0.0524	ppb	12:38:21
1	Be 313.107†	-4675.7	58.3	0.0196	ug/L	0.0196	ppb	12:38:01
1	Ca 317.933Radial†	39.1	5.8	7.6049	ug/L	7.6049	ppb	12:36:59
1	Cd 226.502†	-171.5	42.4	0.4097	ug/L	0.4097	ppb	12:38:21
1	Co 228.616†	-75.2	-3.8	-0.0644	ug/L	-0.0644	ppb	12:38:21
1	Cr 267.716†	107.3	18.0	0.1804	ug/L	0.1804	ppb	12:38:21
1	Cu 324.752†	6290.8	-73.2	-0.2019	ug/L	-0.2019	ppb	12:38:01
1	Fe 238.204 Radial†	11.3	2.5	19.196	ug/L	19.196	ppb	12:36:59
1	K 766.490 Radial†	3476.7	705.1	116.99	ug/L	116.99	ppb	12:36:39
1	Mg 279.077 IEC†	3.3	0.7	19.703	ug/L	19.703	ppb	12:36:59
1	Mn 257.610†	572.3	9.8	0.0111	ug/L	0.0111	ppb	12:38:21
1	Mo 202.031†	37.8	18.3	1.0825	ug/L	1.0825	ppb	12:38:21
1	Na 589.592 Radial†	-1565.2	9.6	2.6199	ug/L	2.6199	ppb	12:36:39
1	Ni 231.604†	131.4	1.8	0.0396	ug/L	0.0396	ppb	12:38:21
1	P 214.914†	239.0	-4.9	-2.5082	ug/L	-2.5082	ppb	12:38:21
1	Pb 220.353†	-72.6	10.9	1.1251	ug/L	1.1251	ppb	12:38:21
1	S 181.975 Axial†	48.9	-0.6	-0.6974	ug/L	-0.6974	ppb	12:38:21
1	Sb 206.836†	53.2	12.5	3.7400	ug/L	3.7400	ppb	12:38:21
1	Se 196.026†	-18.6	7.2	3.9871	ug/L	3.9871	ppb	12:38:21
1	Si 251.611†	712.1	69.7	1.8817	ug/L	1.8817	ppb	12:38:21
1	Sn 189.927†	14.1	4.9	0.7240	ug/L	0.7240	ppb	12:38:21
1	Sr 421.552†	40.2	9.1	0.0478	ug/L	0.0478	ppb	12:36:39
1	Ti 334.940†	-1327.8	75.9	0.1113	ug/L	0.1113	ppb	12:38:01
1	Tl 190.801†	-42.8	-1.6	-0.4141	ug/L	-0.4141	ppb	12:38:21
1	U 409.014†	-2850.3	-20.8	-0.5745	ug/L	-0.5745	ppb	12:37:56
1	V 292.402†	-1518.2	34.6	0.2286	ug/L	0.2286	ppb	12:38:01
1	Zn 213.857†	910.7	9.9	0.0777	ug/L	0.0777	ppb	12:38:21
1	SiO2†	731.8	75.8	4.4004	ug/L	4.4004	ppb	12:39:27
2	Sc 361.383	974796.2	974796.2	101.25	%			12:38:26
2	Sc Radial	6240.5	6240.5	99.3	%			12:37:04
2	Y 371.029	811835.1	811835.1	101.23	%			12:38:26
2	Y RADIAL	6703.2	6703.2	99.20	%			12:37:04
2	Ag 328.068†	467.7	2.3	0.0107	ug/L	0.0107	ppb	12:38:31
2	Al 396.153Radial†	17.1	44.0	27.112	ug/L	27.112	ppb	12:37:04
2	As 188.979†	-11.9	10.6	3.7920	ug/L	3.7920	ppb	12:38:51
2	B 249.677†	-38.8	295.4	5.9933	ug/L	5.9933	ppb	12:38:31
2	Ba 233.527†	22.2	-2.6	-0.0146	ug/L	-0.0146	ppb	12:38:51
2	Be 313.107†	-4648.0	91.7	0.0307	ug/L	0.0307	ppb	12:38:31
2	Ca 317.933Radial†	32.7	-1.9	-2.5095	ug/L	-2.5095	ppb	12:37:24
2	Cd 226.502†	-161.1	53.0	0.5141	ug/L	0.5141	ppb	12:38:51
2	Co 228.616†	-76.8	-5.4	-0.0931	ug/L	-0.0931	ppb	12:38:51
2	Cr 267.716†	121.5	32.0	0.3193	ug/L	0.3193	ppb	12:38:51
2	Cu 324.752†	6220.6	-150.5	-0.4174	ug/L	-0.4174	ppb	12:38:31
2	Fe 238.204 Radial†	8.8	-0.3	-2.3934	ug/L	-2.3934	ppb	12:37:24
2	K 766.490 Radial†	3426.3	546.3	90.618	ug/L	90.618	ppb	12:37:04
2	Mg 279.077 IEC†	6.6	3.9	111.00	ug/L	111.00	ppb	12:37:24
2	Mn 257.610†	579.9	16.6	0.0139	ug/L	0.0139	ppb	12:38:51
2	Mo 202.031†	27.1	7.7	0.4527	ug/L	0.4527	ppb	12:38:51
2	Na 589.592 Radial†	-1496.1	127.8	34.715	ug/L	34.715	ppb	12:37:04
2	Ni 231.604†	124.6	-5.1	-0.1101	ug/L	-0.1101	ppb	12:38:51

2	P 214.914†	236.4	-7.8	-3.9556	ug/L	-3.9556	ppb	12:38:51
2	Pb 220.353†	-75.9	7.7	0.8037	ug/L	0.8037	ppb	12:38:51
2	S 181.975 Axial†	42.9	-6.5	-7.9120	ug/L	-7.9120	ppb	12:38:51
2	Sb 206.836†	48.5	7.8	2.3291	ug/L	2.3291	ppb	12:38:51
2	Se 196.026†	-28.7	-2.8	-1.5065	ug/L	-1.5065	ppb	12:38:51
2	Si 251.611†	689.2	46.1	1.2460	ug/L	1.2460	ppb	12:38:51
2	Sn 189.927†	13.2	3.9	0.5835	ug/L	0.5835	ppb	12:38:51
2	Sr 421.552†	41.2	8.8	0.0465	ug/L	0.0465	ppb	12:37:04
2	Ti 334.940†	-1317.7	87.6	0.1261	ug/L	0.1261	ppb	12:38:31
2	Tl 190.801†	-43.6	-2.3	-0.5966	ug/L	-0.5966	ppb	12:38:51
2	U 409.014†	-2713.8	117.6	3.2320	ug/L	3.2320	ppb	12:38:26
2	V 292.402†	-1370.4	182.6	1.1591	ug/L	1.1591	ppb	12:38:31
2	Zn 213.857†	913.9	12.0	0.0945	ug/L	0.0945	ppb	12:38:51
2	SiO2†	697.1	40.6	2.3388	ug/L	2.3388	ppb	12:39:32
3	Sc 361.383	967569.8	967569.8	100.50	%			12:38:56
3	Sc Radial	6365.9	6365.9	101	%			12:37:29
3	Y 371.029	806808.7	806808.7	100.61	%			12:38:56
3	Y RADIAL	6874.7	6874.7	101.7	%			12:37:29
3	Ag 328.068†	443.7	-18.1	-0.0757	ug/L	-0.0757	ppb	12:39:01
3	Al 396.153Radial†	-20.3	6.8	4.1593	ug/L	4.1593	ppb	12:37:29
3	As 188.979†	-17.8	4.6	1.6492	ug/L	1.6492	ppb	12:39:21
3	B 249.677†	15.2	348.9	7.0771	ug/L	7.0771	ppb	12:39:01
3	Ba 233.527†	22.8	-1.8	-0.0119	ug/L	-0.0119	ppb	12:39:21
3	Be 313.107†	-4636.0	69.3	0.0229	ug/L	0.0229	ppb	12:39:01
3	Ca 317.933Radial†	36.7	1.4	1.8036	ug/L	1.8036	ppb	12:37:49
3	Cd 226.502†	-182.6	30.4	0.2936	ug/L	0.2936	ppb	12:39:21
3	Co 228.616†	-72.7	-1.9	-0.0300	ug/L	-0.0300	ppb	12:39:21
3	Cr 267.716†	101.2	12.7	0.1263	ug/L	0.1263	ppb	12:39:21
3	Cu 324.752†	6286.2	-39.3	-0.1087	ug/L	-0.1087	ppb	12:39:01
3	Fe 238.204 Radial†	10.2	0.9	6.7021	ug/L	6.7021	ppb	12:37:49
3	K 766.490 Radial†	3410.8	463.0	76.808	ug/L	76.808	ppb	12:37:29
3	Mg 279.077 IEC†	1.7	-1.1	-31.216	ug/L	-31.216	ppb	12:37:49
3	Mn 257.610†	537.0	-21.7	-0.0199	ug/L	-0.0199	ppb	12:39:21
3	Mo 202.031†	33.3	14.0	0.8287	ug/L	0.8287	ppb	12:39:21
3	Na 589.592 Radial†	-1609.4	45.8	12.428	ug/L	12.428	ppb	12:37:29
3	Ni 231.604†	117.1	-11.6	-0.2504	ug/L	-0.2504	ppb	12:39:21
3	P 214.914†	242.6	0.1	0.0561	ug/L	0.0561	ppb	12:39:21
3	Pb 220.353†	-53.7	29.2	3.0141	ug/L	3.0141	ppb	12:39:21
3	S 181.975 Axial†	47.0	-2.1	-2.5890	ug/L	-2.5890	ppb	12:39:21
3	Sb 206.836†	59.7	19.3	5.7525	ug/L	5.7525	ppb	12:39:21
3	Se 196.026†	-16.2	9.5	5.1994	ug/L	5.1994	ppb	12:39:21
3	Si 251.611†	701.1	63.0	1.7139	ug/L	1.7139	ppb	12:39:21
3	Sn 189.927†	14.6	5.4	0.8079	ug/L	0.8079	ppb	12:39:21
3	Sr 421.552†	42.8	9.7	0.0509	ug/L	0.0509	ppb	12:37:29
3	Ti 334.940†	-1422.2	-26.2	-0.0383	ug/L	-0.0383	ppb	12:39:01
3	Tl 190.801†	-40.6	0.3	0.0691	ug/L	0.0691	ppb	12:39:21
3	U 409.014†	-2803.7	8.1	0.2228	ug/L	0.2228	ppb	12:38:56
3	V 292.402†	-1541.7	2.0	0.0229	ug/L	0.0229	ppb	12:39:01
3	Zn 213.857†	908.1	12.9	0.1066	ug/L	0.1066	ppb	12:39:21
3	SiO2†	722.8	71.3	4.1695	ug/L	4.1695	ppb	12:39:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	971970.6	100.96	%	0.401				0.40%
Sc Radial	6220.0	99.0	%	2.50				2.53%
Y 371.029	809626.1	100.96	%	0.320				0.32%
Y RADIAL	6705.4	99.23	%	2.489				2.51%
Ag 328.068†	12.4	0.0566	ug/L	0.16034	0.0566	ppb	0.16034	283.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.6	11.421	ug/L	13.6013	11.421	ppb	13.6013	119.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.4	2.6656	ug/L	1.07561	2.6656	ppb	1.07561	40.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	334.6	6.7867	ug/L	0.69529	6.7867	ppb	0.69529	10.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.1	-0.0263	ug/L	0.02261	-0.0263	ppb	0.02261	85.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	73.1	0.0244	ug/L	0.00569	0.0244	ppb	0.00569	23.32%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.7      2.2997 ug/L       5.07544      2.2997 ppb        5.07544 220.70%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               41.9      0.4058 ug/L       0.11030      0.4058 ppb        0.11030  27.18%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -3.7     -0.0625 ug/L       0.03160     -0.0625 ppb        0.03160  50.55%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               20.9      0.2087 ug/L       0.09955      0.2087 ppb        0.09955  47.71%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -87.7     -0.2427 ug/L       0.15830     -0.2427 ppb        0.15830  65.23%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.0      7.8348 ug/L      10.83900      7.8348 ppb       10.83900 138.34%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        571.4     94.804 ug/L       20.4129      94.804 ppb        20.4129  21.53%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.2     33.163 ug/L       72.0575      33.163 ppb        72.0575 217.28%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                1.6      0.0017 ug/L       0.01875      0.0017 ppb        0.01875 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               13.3      0.7880 ug/L       0.31686      0.7880 ppb        0.31686  40.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        61.1     16.588 ug/L       16.4467     16.588 ppb        16.4467  99.15%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -5.0     -0.1070 ug/L       0.14501     -0.1070 ppb        0.14501 135.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.2     -2.1359 ug/L       2.03158     -2.1359 ppb        2.03158  95.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               16.0      1.6476 ug/L       1.19424      1.6476 ppb        1.19424  72.48%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.1     -3.7328 ug/L       3.74080     -3.7328 ppb        3.74080 100.21%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               13.2      3.9405 ug/L       1.72048      3.9405 ppb        1.72048  43.66%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                4.6      2.5600 ug/L       3.57352      2.5600 ppb        3.57352 139.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               59.6      1.6139 ug/L       0.32943      1.6139 ppb        0.32943  20.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                4.8      0.7051 ug/L       0.11340      0.7051 ppb        0.11340  16.08%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0484 ug/L       0.00227      0.0484 ppb        0.00227   4.68%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               45.7      0.0664 ug/L       0.09090      0.0664 ppb        0.09090 136.99%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.2     -0.3139 ug/L       0.34398     -0.3139 ppb        0.34398 109.59%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                35.0      0.9601 ug/L       2.00749      0.9601 ppb        2.00749 209.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                73.1      0.4702 ug/L       0.60539      0.4702 ppb        0.60539 128.75%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               11.6      0.0929 ug/L       0.01454      0.0929 ppb        0.01454  15.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     62.6      3.6362 ug/L       1.12956      3.6362 ppb        1.12956  31.06%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Cr 267.716†	-38.9	-0.3915	ug/L	0.10042	-0.3915	ppb	0.10042	25.65%
Cu 324.752†	-4185.8	-11.609	ug/L	0.2058	-11.609	ppb	0.2058	1.77%
Fe 238.204 Radial†	-2.8	-21.271	ug/L	9.4058	-21.271	ppb	9.4058	44.22%
K 766.490 Radial†	-1257.2	-208.68	ug/L	9.060	-208.68	ppb	9.060	4.34%
Mg 279.077 IEC†	-2.2	-63.251	ug/L	14.8012	-63.251	ppb	14.8012	23.40%
Mn 257.610†	-308.9	-0.3013	ug/L	0.00819	-0.3013	ppb	0.00819	2.72%
Mo 202.031†	-2.2	-0.1294	ug/L	0.04364	-0.1294	ppb	0.04364	33.73%
Na 589.592 Radial†	803.9	218.37	ug/L	2.774	218.37	ppb	2.774	1.27%
Ni 231.604†	-62.3	-1.3456	ug/L	0.10464	-1.3456	ppb	0.10464	7.78%
P 214.914†	-102.6	-51.260	ug/L	2.6190	-51.260	ppb	2.6190	5.11%
Pb 220.353†	62.6	6.4553	ug/L	0.44194	6.4553	ppb	0.44194	6.85%
S 181.975 Axial†	-29.4	-35.847	ug/L	1.4092	-35.847	ppb	1.4092	3.93%
Sb 206.836†	-10.7	-3.1552	ug/L	0.84673	-3.1552	ppb	0.84673	26.84%
Se 196.026†	15.5	8.4095	ug/L	1.50203	8.4095	ppb	1.50203	17.86%
Si 251.611†	-342.4	-9.4691	ug/L	0.16576	-9.4691	ppb	0.16576	1.75%
Sn 189.927†	-4.4	-0.6504	ug/L	0.26540	-0.6504	ppb	0.26540	40.81%
Sr 421.552†	-54.4	-0.2857	ug/L	0.05835	-0.2857	ppb	0.05835	20.43%
Ti 334.940†	798.0	1.1440	ug/L	0.06295	1.1440	ppb	0.06295	5.50%
Tl 190.801†	17.6	4.4923	ug/L	0.44634	4.4923	ppb	0.44634	9.94%
U 409.014†	1578.0	43.381	ug/L	0.9109	43.381	ppb	0.9109	2.10%
V 292.402†	901.7	5.7311	ug/L	0.20447	5.7311	ppb	0.20447	3.57%
Zn 213.857†	-451.8	-3.6306	ug/L	0.04207	-3.6306	ppb	0.04207	1.16%
SiO2†	-356.1	-21.124	ug/L	0.1388	-21.124	ppb	0.1388	0.66%

Internal Standard Check failed. Continue with analysis.

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Sequence No.: 18
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/16/2009 12:50:03
Data Type: Reprocessed on 12/16/2009 13:14:48
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	939677.9	939677.9	97.602	%			12:53:14
1	Sc Radial	5999.2	5999.2	95.5	%			12:51:56
1	Y 371.029	778866.1	778866.1	97.123	%			12:53:14
1	Y RADIAL	6401.1	6401.1	94.73	%			12:51:56
1	Ag 328.068†	-28391.8	-29548.9	1.0174	ug/L	1.0174	ppb	12:53:14
1	Al 396.153Radial†	-33.0	-7.8	-3.5787	ug/L	-3.5787	ppb	12:51:56
1	As 188.979†	-258.9	-243.0	-28.106	ug/L	-28.106	ppb	12:53:34
1	B 249.677†	2054.7	2438.9	-1.1807	ug/L	-1.1807	ppb	12:53:14
1	Ba 233.527†	-2119.7	-2196.2	-0.3606	ug/L	-0.3606	ppb	12:53:34
1	Be 313.107†	-4448.4	124.6	0.0413	ug/L	0.0413	ppb	12:53:14
1	Ca 317.933Radial†	23.9	-9.8	-12.915	ug/L	-12.915	ppb	12:52:16
1	Cd 226.502†	3747.9	4052.1	1.1309	ug/L	1.1309	ppb	12:53:34
1	Co 228.616†	236.8	313.1	-0.0911	ug/L	-0.0911	ppb	12:53:34
1	Cr 267.716†	-641.6	-745.4	-0.5201	ug/L	-0.5201	ppb	12:53:34
1	Cu 324.752†	-2559.0	-8916.1	-5.2527	ug/L	-5.2527	ppb	12:53:14
1	Fe 238.204 Radial†	48033.9	50298.1	381720	ug/L	381720	ppb	12:51:56
1	K 766.490 Radial†	2862.4	94.4	28.229	ug/L	28.229	ppb	12:51:56
1	Mg 279.077 IEC†	10.3	8.1	-96.154	ug/L	-96.154	ppb	12:52:16
1	Mn 257.610†	-44148.9	-45789.5	-6.4727	ug/L	-6.4727	ppb	12:53:14
1	Mo 202.031†	-449.9	-480.0	-1.2949	ug/L	-1.2949	ppb	12:53:34
1	Na 589.592 Radial†	-1547.9	13.0	3.5409	ug/L	3.5409	ppb	12:51:56
1	Ni 231.604†	256.1	134.3	2.8958	ug/L	2.8958	ppb	12:53:34
1	P 214.914†	849.7	629.2	21.817	ug/L	21.817	ppb	12:53:34
1	Pb 220.353†	228.1	316.4	1.2015	ug/L	1.2015	ppb	12:53:34
1	S 181.975 Axial†	63.4	16.1	19.623	ug/L	19.623	ppb	12:53:34
1	Sb 206.836†	27.2	-12.2	2.2363	ug/L	2.2363	ppb	12:53:34
1	Se 196.026†	-2556.8	-2594.0	-121.32	ug/L	-121.32	ppb	12:53:34
1	Si 251.611†	-807.4	-1461.8	-40.238	ug/L	-40.238	ppb	12:53:34
1	Sn 189.927†	-17.4	-26.9	1.1088	ug/L	1.1088	ppb	12:53:34
1	Sr 421.552†	118.7	91.7	0.4819	ug/L	0.4819	ppb	12:51:56
1	Ti 334.940†	-1388.5	-33.6	-0.0757	ug/L	-0.0757	ppb	12:53:34
1	Tl 190.801†	-32.9	7.0	1.3845	ug/L	1.3845	ppb	12:53:34
1	U 409.014†	-424.3	2363.2	16.952	ug/L	16.952	ppb	12:53:14
1	V 292.402†	7096.1	8806.5	-3.1729	ug/L	-3.1729	ppb	12:53:34

1	Zn 213.857†	5388.2	4629.9	1.0329 ug/L	1.0329 ppb	12:53:34
1	SiO2†	-885.2	-1554.8	-91.865 ug/L	-91.865 ppb	12:54:30
2	Sc 361.383	941243.5	941243.5	97.765 %		12:53:39
2	Sc Radial	6172.4	6172.4	98.2 %		12:52:21
2	Y 371.029	778497.3	778497.3	97.077 %		12:53:39
2	Y RADIAL	6581.7	6581.7	97.40 %		12:52:21
2	Ag 328.068†	-28522.6	-29634.3	0.4643 ug/L	0.4643 ppb	12:53:39
2	Al 396.153Radial†	-72.8	-47.3	-27.984 ug/L	-27.984 ppb	12:52:21
2	As 188.979†	-251.5	-234.9	-25.304 ug/L	-25.304 ppb	12:53:59
2	B 249.677†	1972.8	2351.7	-2.8757 ug/L	-2.8757 ppb	12:53:39
2	Ba 233.527†	-2233.3	-2308.8	-1.1333 ug/L	-1.1333 ppb	12:53:59
2	Be 313.107†	-4551.4	26.8	0.0089 ug/L	0.0089 ppb	12:53:39
2	Ca 317.933Radial†	31.6	-2.6	-3.4783 ug/L	-3.4783 ppb	12:52:42
2	Cd 226.502†	3737.6	4035.1	1.0223 ug/L	1.0223 ppb	12:53:59
2	Co 228.616†	250.1	326.3	0.1490 ug/L	0.1490 ppb	12:53:59
2	Cr 267.716†	-646.2	-749.0	-0.5658 ug/L	-0.5658 ppb	12:53:59
2	Cu 324.752†	-2621.7	-8975.9	-5.4472 ug/L	-5.4472 ppb	12:53:39
2	Fe 238.204 Radial†	49347.6	50224.0	381160 ug/L	381160 ppb	12:52:21
2	K 766.490 Radial†	2732.8	-121.6	-7.6360 ug/L	-7.6360 ppb	12:52:21
2	Mg 279.077 IEC†	10.4	7.9	-101.87 ug/L	-101.87 ppb	12:52:42
2	Mn 257.610†	-44237.1	-45804.5	-6.5433 ug/L	-6.5433 ppb	12:53:39
2	Mo 202.031†	-429.3	-458.2	-0.0465 ug/L	-0.0465 ppb	12:53:59
2	Na 589.592 Radial†	-1439.7	168.6	45.801 ug/L	45.801 ppb	12:52:21
2	Ni 231.604†	234.7	112.0	2.4143 ug/L	2.4143 ppb	12:53:59
2	P 214.914†	841.3	619.2	17.072 ug/L	17.072 ppb	12:53:59
2	Pb 220.353†	247.1	335.4	3.2011 ug/L	3.2011 ppb	12:53:59
2	S 181.975 Axial†	59.2	11.7	14.264 ug/L	14.264 ppb	12:53:59
2	Sb 206.836†	15.4	-24.3	-1.3853 ug/L	-1.3853 ppb	12:53:59
2	Se 196.026†	-2530.2	-2562.4	-105.98 ug/L	-105.98 ppb	12:53:59
2	Si 251.611†	-816.6	-1469.9	-40.465 ug/L	-40.465 ppb	12:53:59
2	Sn 189.927†	-37.4	-47.4	-1.9365 ug/L	-1.9365 ppb	12:53:59
2	Sr 421.552†	96.7	65.9	0.3462 ug/L	0.3462 ppb	12:52:21
2	Ti 334.940†	-1367.0	-9.2	-0.0380 ug/L	-0.0380 ppb	12:53:59
2	Tl 190.801†	-57.4	-18.0	-5.0137 ug/L	-5.0137 ppb	12:53:59
2	U 409.014†	-558.5	2226.6	13.269 ug/L	13.269 ppb	12:53:39
2	V 292.402†	7032.1	8728.9	-3.5623 ug/L	-3.5623 ppb	12:53:59
2	Zn 213.857†	5370.7	4602.8	0.8708 ug/L	0.8708 ppb	12:53:59
2	SiO2†	-903.1	-1571.7	-92.875 ug/L	-92.875 ppb	12:54:35
3	Sc 361.383	938523.4	938523.4	97.482 %		12:54:05
3	Sc Radial	6024.4	6024.4	95.9 %		12:52:47
3	Y 371.029	776532.0	776532.0	96.832 %		12:54:05
3	Y RADIAL	6510.6	6510.6	96.35 %		12:52:47
3	Ag 328.068†	-28403.8	-29597.0	1.7711 ug/L	1.7711 ppb	12:54:05
3	Al 396.153Radial†	-33.9	-8.5	-4.0317 ug/L	-4.0317 ppb	12:52:47
3	As 188.979†	-254.2	-238.4	-26.041 ug/L	-26.041 ppb	12:54:25
3	B 249.677†	2066.8	2453.9	-1.2556 ug/L	-1.2556 ppb	12:54:05
3	Ba 233.527†	-2122.1	-2201.4	-0.2907 ug/L	-0.2907 ppb	12:54:25
3	Be 313.107†	-4510.9	54.8	0.0180 ug/L	0.0180 ppb	12:54:05
3	Ca 317.933Radial†	23.5	-10.4	-13.705 ug/L	-13.705 ppb	12:53:07
3	Cd 226.502†	3726.9	4035.2	0.6818 ug/L	0.6818 ppb	12:54:25
3	Co 228.616†	244.8	321.6	0.0158 ug/L	0.0158 ppb	12:54:25
3	Cr 267.716†	-674.2	-779.7	-0.8084 ug/L	-0.8084 ppb	12:54:25
3	Cu 324.752†	-2526.3	-8885.8	-5.0230 ug/L	-5.0230 ppb	12:54:05
3	Fe 238.204 Radial†	48596.0	50674.4	384580 ug/L	384580 ppb	12:52:47
3	K 766.490 Radial†	2902.8	124.0	33.224 ug/L	33.224 ppb	12:52:47
3	Mg 279.077 IEC†	12.4	10.2	-37.076 ug/L	-37.076 ppb	12:53:07
3	Mn 257.610†	-43864.1	-45553.0	-5.9590 ug/L	-5.9590 ppb	12:54:05
3	Mo 202.031†	-450.9	-481.6	-1.1843 ug/L	-1.1843 ppb	12:54:25
3	Na 589.592 Radial†	-1495.2	74.8	20.311 ug/L	20.311 ppb	12:52:47
3	Ni 231.604†	231.4	109.2	2.3552 ug/L	2.3552 ppb	12:54:25
3	P 214.914†	847.6	628.1	18.889 ug/L	18.889 ppb	12:54:25
3	Pb 220.353†	275.0	364.8	5.9482 ug/L	5.9482 ppb	12:54:25
3	S 181.975 Axial†	58.6	11.2	13.706 ug/L	13.706 ppb	12:54:25
3	Sb 206.836†	28.6	-10.8	2.6340 ug/L	2.6340 ppb	12:54:25
3	Se 196.026†	-2526.3	-2566.0	-96.321 ug/L	-96.321 ppb	12:54:25
3	Si 251.611†	-809.5	-1465.0	-40.315 ug/L	-40.315 ppb	12:54:25
3	Sn 189.927†	-43.3	-53.5	-2.7959 ug/L	-2.7959 ppb	12:54:25
3	Sr 421.552†	97.7	69.4	0.3646 ug/L	0.3646 ppb	12:52:47
3	Ti 334.940†	-1423.7	-71.5	-0.1269 ug/L	-0.1269 ppb	12:54:25
3	Tl 190.801†	-47.9	-8.4	-2.5596 ug/L	-2.5596 ppb	12:54:25
3	U 409.014†	-750.0	2028.6	7.3940 ug/L	7.3940 ppb	12:54:05

3	V 292.402†	6997.4	8714.2	-4.2030 ug/L	-4.2030 ppb	12:54:25
3	Zn 213.857†	5344.6	4592.0	0.4546 ug/L	0.4546 ppb	12:54:25
3	SiO2†	-912.0	-1583.5	-93.553 ug/L	-93.553 ppb	12:54:40

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	939814.9	97.617	%	0.1418				0.15%
Sc Radial	6065.3	96.5	%	1.49				1.54%
Y 371.029	777965.2	97.011	%	0.1565				0.16%
Y RADIAL	6497.8	96.16	%	1.346				1.40%
Ag 328.068†	-29593.4	1.0843	ug/L	0.65597	1.0843	ppb	0.65597	60.50%
Al 396.153Radial†	-21.2	-11.865	ug/L	13.9616	-11.865	ppb	13.9616	117.67%
As 188.979†	-238.8	-26.484	ug/L	1.4523	-26.484	ppb	1.4523	5.48%
B 249.677†	2414.8	-1.7706	ug/L	0.95772	-1.7706	ppb	0.95772	54.09%
Ba 233.527†	-2235.5	-0.5949	ug/L	0.46759	-0.5949	ppb	0.46759	78.60%
Be 313.107†	68.7	0.0227	ug/L	0.01670	0.0227	ppb	0.01670	73.54%
Ca 317.933Radial†	-7.6	-10.033	ug/L	5.6900	-10.033	ppb	5.6900	56.71%
Cd 226.502†	4040.8	0.9450	ug/L	0.23429	0.9450	ppb	0.23429	24.79%
Co 228.616†	320.3	0.0246	ug/L	0.12032	0.0246	ppb	0.12032	489.44%
Cr 267.716†	-758.0	-0.6314	ug/L	0.15497	-0.6314	ppb	0.15497	24.54%
Cu 324.752†	-8926.0	-5.2410	ug/L	0.21232	-5.2410	ppb	0.21232	4.05%
Fe 238.204 Radial†	50398.8	382490	ug/L	1832.9	382490	ppb	1832.9	0.48%
K 766.490 Radial†	32.3	17.939	ug/L	22.2889	17.939	ppb	22.2889	124.25%
Mg 279.077 IEC†	8.7	-78.368	ug/L	35.8745	-78.368	ppb	35.8745	45.78%
Mn 257.610†	-45715.7	-6.3250	ug/L	0.31892	-6.3250	ppb	0.31892	5.04%
Mo 202.031†	-473.3	-0.8419	ug/L	0.69103	-0.8419	ppb	0.69103	82.08%
Na 589.592 Radial†	85.5	23.218	ug/L	21.2793	23.218	ppb	21.2793	91.65%
Ni 231.604†	118.5	2.5551	ug/L	0.29654	2.5551	ppb	0.29654	11.61%
P 214.914†	625.5	19.259	ug/L	2.3944	19.259	ppb	2.3944	12.43%
Pb 220.353†	338.8	3.4503	ug/L	2.38315	3.4503	ppb	2.38315	69.07%
S 181.975 Axial†	13.0	15.865	ug/L	3.2668	15.865	ppb	3.2668	20.59%
Sb 206.836†	-15.8	1.1617	ug/L	2.21467	1.1617	ppb	2.21467	190.64%
Se 196.026†	-2574.1	-107.87	ug/L	12.606	-107.87	ppb	12.606	11.69%
Si 251.611†	-1465.6	-40.339	ug/L	0.1152	-40.339	ppb	0.1152	0.29%
Sn 189.927†	-42.6	-1.2079	ug/L	2.05182	-1.2079	ppb	2.05182	169.87%
Sr 421.552†	75.6	0.3976	ug/L	0.07362	0.3976	ppb	0.07362	18.52%
Ti 334.940†	-38.1	-0.0802	ug/L	0.04460	-0.0802	ppb	0.04460	55.58%
Tl 190.801†	-6.5	-2.0629	ug/L	3.22789	-2.0629	ppb	3.22789	156.47%
U 409.014†	2206.1	12.538	ug/L	4.8207	12.538	ppb	4.8207	38.45%
V 292.402†	8749.8	-3.6461	ug/L	0.52016	-3.6461	ppb	0.52016	14.27%
Zn 213.857†	4608.2	0.7861	ug/L	0.29830	0.7861	ppb	0.29830	37.95%
SiO2†	-1570.0	-92.765	ug/L	0.8497	-92.765	ppb	0.8497	0.92%

Sequence No.: 19
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/16/2009 12:56:52
Data Type: Reprocessed on 12/16/2009 13:14:49

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	965523.3	965523.3	100.29	%			13:00:03
1	Sc Radial	6172.5	6172.5	98.2	%			12:58:44
1	Y 371.029	792793.2	792793.2	98.860	%			13:00:03
1	Y RADIAL	6590.5	6590.5	97.53	%			12:58:44
1	Ag 328.068†	119736.5	118934.3	513.29	ug/L	513.29	ppb	13:00:03
1	Al 396.153Radial†	7821.2	7988.2	4903.7	ug/L	4903.7	ppb	12:58:44
1	As 188.979†	1407.4	1425.7	515.52	ug/L	515.52	ppb	13:00:23
1	B 249.677†	24793.6	25056.4	506.29	ug/L	506.29	ppb	13:00:03
1	Ba 233.527†	77388.8	77142.9	515.64	ug/L	515.64	ppb	13:00:03
1	Be 313.107†	1536337.4	1536624.3	511.17	ug/L	511.17	ppb	13:00:03
1	Ca 317.933Radial†	3861.4	3895.7	5144.6	ug/L	5144.6	ppb	12:58:44
1	Cd 226.502†	53051.1	53111.4	514.82	ug/L	514.82	ppb	13:00:03
1	Co 228.616†	29125.7	29112.8	504.99	ug/L	504.99	ppb	13:00:23
1	Cr 267.716†	51673.0	51437.2	513.03	ug/L	513.03	ppb	13:00:03
1	Cu 324.752†	191490.9	184648.8	512.30	ug/L	512.30	ppb	13:00:03
1	Fe 238.204 Radial†	672.6	675.5	5142.6	ug/L	5142.6	ppb	12:59:04
1	K 766.490 Radial†	33024.4	30713.0	5086.7	ug/L	5086.7	ppb	12:58:44
1	Mg 279.077 IEC†	178.5	178.9	5119.6	ug/L	5119.6	ppb	12:59:04
1	Mn 257.610†	529317.3	527246.8	513.22	ug/L	513.22	ppb	13:00:03
1	Mo 202.031†	8686.1	8642.1	511.15	ug/L	511.15	ppb	13:00:23
1	Na 589.592 Radial†	35192.6	37457.6	10175	ug/L	10175	ppb	12:58:44
1	Ni 231.604†	23663.9	23468.1	506.44	ug/L	506.44	ppb	13:00:23
1	P 214.914†	5180.7	4924.6	2471.6	ug/L	2471.6	ppb	13:00:23
1	Pb 220.353†	4921.9	4990.5	515.54	ug/L	515.54	ppb	13:00:23
1	S 181.975 Axial†	884.0	832.6	1014.0	ug/L	1014.0	ppb	13:00:23
1	Sb 206.836†	1738.5	1693.4	508.87	ug/L	508.87	ppb	13:00:23
1	Se 196.026†	907.1	930.1	528.57	ug/L	528.57	ppb	13:00:23
1	Si 251.611†	93366.6	92464.9	2564.8	ug/L	2564.8	ppb	13:00:03
1	Sn 189.927†	3455.7	3436.7	510.43	ug/L	510.43	ppb	13:00:23
1	Sr 421.552†	93731.9	95379.5	501.23	ug/L	501.23	ppb	12:58:44
1	Ti 334.940†	356542.8	356911.7	520.54	ug/L	520.54	ppb	13:00:03
1	Tl 190.801†	1936.8	1972.0	507.64	ug/L	507.64	ppb	13:00:23
1	U 409.014†	15131.2	17885.8	490.03	ug/L	490.03	ppb	13:00:03
1	V 292.402†	80138.0	81444.8	516.97	ug/L	516.97	ppb	13:00:03
1	Zn 213.857†	64591.2	63515.8	509.60	ug/L	509.60	ppb	13:00:03
1	SiO2†	92759.4	91846.1	5464.3	ug/L	5464.3	ppb	13:01:24
2	Sc 361.383	960206.5	960206.5	99.735	%			13:00:31
2	Sc Radial	6170.3	6170.3	98.2	%			12:59:09
2	Y 371.029	788029.8	788029.8	98.266	%			13:00:31
2	Y RADIAL	6579.3	6579.3	97.37	%			12:59:09
2	Ag 328.068†	119099.1	118956.3	513.37	ug/L	513.37	ppb	13:00:31
2	Al 396.153Radial†	7800.4	7969.9	4892.2	ug/L	4892.2	ppb	12:59:09
2	As 188.979†	1405.7	1431.8	517.68	ug/L	517.68	ppb	13:00:51
2	B 249.677†	24655.8	25055.1	506.25	ug/L	506.25	ppb	13:00:31
2	Ba 233.527†	76923.2	77103.4	515.37	ug/L	515.37	ppb	13:00:31
2	Be 313.107†	1526022.2	1534764.2	510.55	ug/L	510.55	ppb	13:00:31
2	Ca 317.933Radial†	3864.6	3900.5	5150.8	ug/L	5150.8	ppb	12:59:09
2	Cd 226.502†	52778.7	53131.2	515.02	ug/L	515.02	ppb	13:00:31
2	Co 228.616†	29295.8	29444.3	510.76	ug/L	510.76	ppb	13:00:51
2	Cr 267.716†	51369.7	51418.3	512.84	ug/L	512.84	ppb	13:00:31
2	Cu 324.752†	190286.3	184498.3	511.89	ug/L	511.89	ppb	13:00:31
2	Fe 238.204 Radial†	669.7	672.8	5122.3	ug/L	5122.3	ppb	12:59:29
2	K 766.490 Radial†	33050.6	30751.8	5093.1	ug/L	5093.1	ppb	12:59:09
2	Mg 279.077 IEC†	183.0	183.6	5252.6	ug/L	5252.6	ppb	12:59:29
2	Mn 257.610†	525964.4	526807.5	512.78	ug/L	512.78	ppb	13:00:31
2	Mo 202.031†	8722.9	8727.0	516.17	ug/L	516.17	ppb	13:00:51
2	Na 589.592 Radial†	35064.1	37339.7	10143	ug/L	10143	ppb	12:59:09
2	Ni 231.604†	23803.8	23739.0	512.29	ug/L	512.29	ppb	13:00:51

2	P 214.914†	5206.3	4978.9	2499.8	ug/L	2499.8 ppb	13:00:51
2	Pb 220.353†	4942.0	5037.8	520.42	ug/L	520.42 ppb	13:00:51
2	S 181.975 Axial†	898.4	851.9	1037.5	ug/L	1037.5 ppb	13:00:51
2	Sb 206.836†	1776.6	1741.2	523.25	ug/L	523.25 ppb	13:00:51
2	Se 196.026†	911.5	939.5	533.66	ug/L	533.66 ppb	13:00:51
2	Si 251.611†	92806.9	92419.2	2563.4	ug/L	2563.4 ppb	13:00:31
2	Sn 189.927†	3478.8	3478.9	516.69	ug/L	516.69 ppb	13:00:51
2	Sr 421.552†	93640.9	95321.4	500.92	ug/L	500.92 ppb	12:59:09
2	Ti 334.940†	353912.0	356242.5	519.56	ug/L	519.56 ppb	13:00:31
2	Tl 190.801†	1952.3	1998.2	514.31	ug/L	514.31 ppb	13:00:51
2	U 409.014†	15181.8	18020.1	493.73	ug/L	493.73 ppb	13:00:31
2	V 292.402†	79592.8	81340.6	516.41	ug/L	516.41 ppb	13:00:31
2	Zn 213.857†	64173.4	63453.5	509.06	ug/L	509.06 ppb	13:00:31
2	SiO2†	91640.5	91236.4	5427.6	ug/L	5427.6 ppb	13:01:29
3	Sc 361.383	951719.7	951719.7	98.853	%		13:00:58
3	Sc Radial	6211.5	6211.5	98.9	%		12:59:34
3	Y 371.029	781059.5	781059.5	97.397	%		13:00:58
3	Y RADIAL	6648.9	6648.9	98.40	%		12:59:34
3	Ag 328.068†	118207.8	119119.5	514.07	ug/L	514.07 ppb	13:00:58
3	Al 396.153Radial†	7865.6	7983.1	4900.2	ug/L	4900.2 ppb	12:59:34
3	As 188.979†	1412.1	1450.8	524.48	ug/L	524.48 ppb	13:01:18
3	B 249.677†	24491.7	25109.6	507.35	ug/L	507.35 ppb	13:00:58
3	Ba 233.527†	76368.1	77229.6	516.21	ug/L	516.21 ppb	13:00:58
3	Be 313.107†	1519520.1	1541831.0	512.90	ug/L	512.90 ppb	13:00:58
3	Ca 317.933Radial†	3870.6	3880.4	5124.3	ug/L	5124.3 ppb	12:59:34
3	Cd 226.502†	52605.5	53427.8	517.90	ug/L	517.90 ppb	13:00:58
3	Co 228.616†	29257.2	29667.1	514.63	ug/L	514.63 ppb	13:01:18
3	Cr 267.716†	51138.8	51644.0	515.08	ug/L	515.08 ppb	13:00:58
3	Cu 324.752†	188903.2	184800.5	512.72	ug/L	512.72 ppb	13:00:58
3	Fe 238.204 Radial†	671.5	670.1	5101.8	ug/L	5101.8 ppb	12:59:54
3	K 766.490 Radial†	33208.9	30688.4	5082.7	ug/L	5082.7 ppb	12:59:34
3	Mg 279.077 IEC†	183.2	182.6	5223.4	ug/L	5223.4 ppb	12:59:54
3	Mn 257.610†	522804.8	528313.9	514.25	ug/L	514.25 ppb	13:00:58
3	Mo 202.031†	8705.1	8787.0	519.71	ug/L	519.71 ppb	13:01:18
3	Na 589.592 Radial†	35049.9	37088.4	10074	ug/L	10074 ppb	12:59:34
3	Ni 231.604†	23766.1	23913.7	516.06	ug/L	516.06 ppb	13:01:18
3	P 214.914†	5201.6	5020.7	2521.4	ug/L	2521.4 ppb	13:01:18
3	Pb 220.353†	4937.1	5077.1	524.48	ug/L	524.48 ppb	13:01:18
3	S 181.975 Axial†	901.5	863.1	1051.1	ug/L	1051.1 ppb	13:01:18
3	Sb 206.836†	1779.5	1760.1	528.89	ug/L	528.89 ppb	13:01:18
3	Se 196.026†	905.5	941.6	534.78	ug/L	534.78 ppb	13:01:18
3	Si 251.611†	92167.1	92601.8	2568.4	ug/L	2568.4 ppb	13:00:58
3	Sn 189.927†	3466.5	3497.6	519.46	ug/L	519.46 ppb	13:01:18
3	Sr 421.552†	94194.6	95248.5	500.54	ug/L	500.54 ppb	12:59:34
3	Ti 334.940†	351537.5	357004.8	520.67	ug/L	520.67 ppb	13:00:58
3	Tl 190.801†	1971.3	2034.8	523.68	ug/L	523.68 ppb	13:01:18
3	U 409.014†	14938.4	17909.6	490.69	ug/L	490.69 ppb	13:00:58
3	V 292.402†	78974.3	81426.6	516.99	ug/L	516.99 ppb	13:00:58
3	Zn 213.857†	63856.6	63706.8	511.09	ug/L	511.09 ppb	13:00:58
3	SiO2†	91991.6	92410.9	5497.7	ug/L	5497.7 ppb	13:01:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	959149.8	99.625	%	0.7232				0.73%
Sc Radial	6184.8	98.4	%	0.37				0.37%
Y 371.029	787294.2	98.174	%	0.7359				0.75%
Y RADIAL	6606.2	97.77	%	0.553				0.57%
Ag 328.068†	119003.4	513.58	ug/L	0.429	513.58	ppb	0.429	0.08%
QC value within limits for Ag 328.068 Recovery = 102.72%								
Al 396.153Radial†	7980.4	4898.7	ug/L	5.89	4898.7	ppb	5.89	0.12%
QC value within limits for Al 396.153Radial Recovery = 97.97%								
As 188.979†	1436.1	519.23	ug/L	4.679	519.23	ppb	4.679	0.90%
QC value within limits for As 188.979 Recovery = 103.85%								
B 249.677†	25073.7	506.63	ug/L	0.623	506.63	ppb	0.623	0.12%
QC value within limits for B 249.677 Recovery = 101.33%								
Ba 233.527†	77158.6	515.74	ug/L	0.430	515.74	ppb	0.430	0.08%
QC value within limits for Ba 233.527 Recovery = 103.15%								
Be 313.107†	1537739.8	511.54	ug/L	1.217	511.54	ppb	1.217	0.24%
QC value within limits for Be 313.107 Recovery = 102.31%								

Ca 317.933Radial†	3892.2	5139.9 ug/L	13.88	5139.9 ppb	13.88	0.27%
QC value within limits for Ca 317.933Radial Recovery = 102.80%						
Cd 226.502†	53223.5	515.91 ug/L	1.723	515.91 ppb	1.723	0.33%
QC value within limits for Cd 226.502 Recovery = 103.18%						
Co 228.616†	29408.0	510.13 ug/L	4.847	510.13 ppb	4.847	0.95%
QC value within limits for Co 228.616 Recovery = 102.03%						
Cr 267.716†	51499.8	513.65 ug/L	1.247	513.65 ppb	1.247	0.24%
QC value within limits for Cr 267.716 Recovery = 102.73%						
Cu 324.752†	184649.2	512.30 ug/L	0.419	512.30 ppb	0.419	0.08%
QC value within limits for Cu 324.752 Recovery = 102.46%						
Fe 238.204 Radial†	672.8	5122.2 ug/L	20.41	5122.2 ppb	20.41	0.40%
QC value within limits for Fe 238.204 Radial Recovery = 102.44%						
K 766.490 Radial†	30717.7	5087.5 ug/L	5.29	5087.5 ppb	5.29	0.10%
QC value within limits for K 766.490 Radial Recovery = 101.75%						
Mg 279.077 IEC†	181.7	5198.5 ug/L	69.92	5198.5 ppb	69.92	1.35%
QC value within limits for Mg 279.077 IEC Recovery = 103.97%						
Mn 257.610†	527456.1	513.42 ug/L	0.752	513.42 ppb	0.752	0.15%
QC value within limits for Mn 257.610 Recovery = 102.68%						
Mo 202.031†	8718.7	515.68 ug/L	4.300	515.68 ppb	4.300	0.83%
QC value within limits for Mo 202.031 Recovery = 103.14%						
Na 589.592 Radial†	37295.2	10131 ug/L	51.2	10131 ppb	51.2	0.51%
QC value within limits for Na 589.592 Radial Recovery = 101.31%						
Ni 231.604†	23706.9	511.60 ug/L	4.845	511.60 ppb	4.845	0.95%
QC value within limits for Ni 231.604 Recovery = 102.32%						
P 214.914†	4974.7	2497.6 ug/L	24.98	2497.6 ppb	24.98	1.00%
QC value within limits for P 214.914 Recovery = 99.90%						
Pb 220.353†	5035.1	520.14 ug/L	4.476	520.14 ppb	4.476	0.86%
QC value within limits for Pb 220.353 Recovery = 104.03%						
S 181.975 Axial†	849.2	1034.2 ug/L	18.79	1034.2 ppb	18.79	1.82%
QC value within limits for S 181.975 Axial Recovery = 103.42%						
Sb 206.836†	1731.6	520.34 ug/L	10.325	520.34 ppb	10.325	1.98%
QC value within limits for Sb 206.836 Recovery = 104.07%						
Se 196.026†	937.1	532.34 ug/L	3.308	532.34 ppb	3.308	0.62%
QC value within limits for Se 196.026 Recovery = 106.47%						
Si 251.611†	92495.3	2565.6 ug/L	2.59	2565.6 ppb	2.59	0.10%
QC value within limits for Si 251.611 Recovery = 102.62%						
Sn 189.927†	3471.1	515.53 ug/L	4.628	515.53 ppb	4.628	0.90%
QC value within limits for Sn 189.927 Recovery = 103.11%						
Sr 421.552†	95316.4	500.89 ug/L	0.345	500.89 ppb	0.345	0.07%
QC value within limits for Sr 421.552 Recovery = 100.18%						
Ti 334.940†	356719.7	520.26 ug/L	0.607	520.26 ppb	0.607	0.12%
QC value within limits for Ti 334.940 Recovery = 104.05%						
Tl 190.801†	2001.7	515.21 ug/L	8.056	515.21 ppb	8.056	1.56%
QC value within limits for Tl 190.801 Recovery = 103.04%						
U 409.014†	17938.5	491.48 ug/L	1.972	491.48 ppb	1.972	0.40%
QC value within limits for U 409.014 Recovery = 98.30%						
V 292.402†	81404.0	516.79 ug/L	0.332	516.79 ppb	0.332	0.06%
QC value within limits for V 292.402 Recovery = 103.36%						
Zn 213.857†	63558.7	509.91 ug/L	1.050	509.91 ppb	1.050	0.21%
QC value within limits for Zn 213.857 Recovery = 101.98%						
SiO2†	91831.1	5463.2 ug/L	35.05	5463.2 ppb	35.05	0.64%
QC value within limits for SiO2 Recovery = 102.16%						

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/16/2009 13:03:43
Data Type: Reprocessed on 12/16/2009 13:14:50

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	919938.1	919938.1	95.552	%			13:06:53
1	Sc Radial	6216.2	6216.2	98.9	%			13:05:36
1	Y 371.029	776765.0	776765.0	96.861	%			13:06:53
1	Y RADIAL	6634.0	6634.0	98.18	%			13:05:36
1	Ag 328.068†	431.0	-8.5	-0.0312	ug/L	-0.0312	ppb	13:06:53
1	Al 396.153Radial†	9.6	36.5	22.501	ug/L	22.501	ppb	13:05:36
1	As 188.979†	-19.8	1.6	0.5875	ug/L	0.5875	ppb	13:07:13
1	B 249.677†	-179.5	145.9	2.9569	ug/L	2.9569	ppb	13:06:53
1	Ba 233.527†	26.6	3.4	0.0222	ug/L	0.0222	ppb	13:07:13
1	Be 313.107†	-4574.6	-105.3	-0.0353	ug/L	-0.0353	ppb	13:06:53
1	Ca 317.933Radial†	37.8	3.3	4.4201	ug/L	4.4201	ppb	13:05:56
1	Cd 226.502†	-209.8	-7.5	-0.0740	ug/L	-0.0740	ppb	13:07:13
1	Co 228.616†	-70.2	-3.0	-0.0498	ug/L	-0.0498	ppb	13:07:13
1	Cr 267.716†	115.6	32.9	0.3278	ug/L	0.3278	ppb	13:07:13
1	Cu 324.752†	6292.8	291.5	0.8093	ug/L	0.8093	ppb	13:06:53
1	Fe 238.204 Radial†	11.3	2.3	17.406	ug/L	17.406	ppb	13:05:56
1	K 766.490 Radial†	3173.5	304.3	50.485	ug/L	50.485	ppb	13:05:36
1	Mg 279.077 IEC†	2.9	0.2	4.8809	ug/L	4.8809	ppb	13:05:56
1	Mn 257.610†	528.6	-3.0	-0.0012	ug/L	-0.0012	ppb	13:07:13
1	Mo 202.031†	30.2	12.5	0.7378	ug/L	0.7378	ppb	13:07:13
1	Na 589.592 Radial†	-1614.1	2.7	0.7399	ug/L	0.7399	ppb	13:05:36
1	Ni 231.604†	126.1	3.9	0.0834	ug/L	0.0834	ppb	13:07:13
1	P 214.914†	257.5	28.2	14.456	ug/L	14.456	ppb	13:07:13
1	Pb 220.353†	-67.7	11.8	1.2203	ug/L	1.2203	ppb	13:07:13
1	S 181.975 Axial†	42.1	-4.9	-5.9187	ug/L	-5.9187	ppb	13:07:13
1	Sb 206.836†	54.7	17.1	5.0549	ug/L	5.0549	ppb	13:07:13
1	Se 196.026†	-27.5	-3.2	-1.6841	ug/L	-1.6841	ppb	13:07:13
1	Si 251.611†	637.6	32.7	0.8831	ug/L	0.8831	ppb	13:07:13
1	Sn 189.927†	4.4	-4.5	-0.6659	ug/L	-0.6659	ppb	13:07:13
1	Sr 421.552†	5.8	-26.7	-0.1404	ug/L	-0.1404	ppb	13:05:36
1	Ti 334.940†	-1452.7	-131.4	-0.1908	ug/L	-0.1908	ppb	13:06:53
1	Tl 190.801†	-44.6	-6.0	-1.5336	ug/L	-1.5336	ppb	13:07:13
1	U 409.014†	-2728.2	-57.2	-1.5759	ug/L	-1.5759	ppb	13:06:53
1	V 292.402†	-1531.7	-67.0	-0.4145	ug/L	-0.4145	ppb	13:06:53
1	Zn 213.857†	866.9	16.6	0.1307	ug/L	0.1307	ppb	13:07:13
1	SiO2†	690.0	74.2	4.3737	ug/L	4.3737	ppb	13:08:09
2	Sc 361.383	927944.3	927944.3	96.384	%			13:07:18
2	Sc Radial	6199.2	6199.2	98.7	%			13:06:01
2	Y 371.029	782782.7	782782.7	97.612	%			13:07:18
2	Y RADIAL	6666.4	6666.4	98.66	%			13:06:01
2	Ag 328.068†	377.0	-68.5	-0.2850	ug/L	-0.2850	ppb	13:07:18
2	Al 396.153Radial†	-16.8	9.7	6.0009	ug/L	6.0009	ppb	13:06:01
2	As 188.979†	-27.4	-6.1	-2.1713	ug/L	-2.1713	ppb	13:07:38
2	B 249.677†	-174.4	152.8	3.0992	ug/L	3.0992	ppb	13:07:18
2	Ba 233.527†	14.1	-9.8	-0.0644	ug/L	-0.0644	ppb	13:07:38
2	Be 313.107†	-4674.2	-167.3	-0.0558	ug/L	-0.0558	ppb	13:07:18
2	Ca 317.933Radial†	38.8	4.5	5.9550	ug/L	5.9550	ppb	13:06:21
2	Cd 226.502†	-199.3	5.3	0.0507	ug/L	0.0507	ppb	13:07:38
2	Co 228.616†	-82.9	-15.6	-0.2694	ug/L	-0.2694	ppb	13:07:38
2	Cr 267.716†	103.9	19.7	0.1992	ug/L	0.1992	ppb	13:07:38
2	Cu 324.752†	6212.3	151.1	0.4194	ug/L	0.4194	ppb	13:07:18
2	Fe 238.204 Radial†	10.0	1.0	7.4453	ug/L	7.4453	ppb	13:06:21
2	K 766.490 Radial†	3183.3	322.9	53.579	ug/L	53.579	ppb	13:06:01
2	Mg 279.077 IEC†	-0.0	-2.7	-78.455	ug/L	-78.455	ppb	13:06:21
2	Mn 257.610†	532.2	-3.9	-0.0016	ug/L	-0.0016	ppb	13:07:38
2	Mo 202.031†	21.5	3.2	0.1909	ug/L	0.1909	ppb	13:07:38
2	Na 589.592 Radial†	-1612.6	-0.2	-0.0622	ug/L	-0.0622	ppb	13:06:01
2	Ni 231.604†	124.7	1.2	0.0267	ug/L	0.0267	ppb	13:07:38

2	P 214.914†	237.6	5.2	2.6094 ug/L	2.6094 ppb		13:07:38
2	Pb 220.353†	-64.1	16.1	1.6603 ug/L	1.6603 ppb		13:07:38
2	S 181.975 Axial†	51.5	4.5	5.4797 ug/L	5.4797 ppb		13:07:38
2	Sb 206.836†	47.6	9.2	2.7355 ug/L	2.7355 ppb		13:07:38
2	Se 196.026†	-25.0	-0.3	-0.1504 ug/L	-0.1504 ppb		13:07:38
2	Si 251.611†	644.0	33.6	0.9154 ug/L	0.9154 ppb		13:07:38
2	Sn 189.927†	9.8	1.1	0.1585 ug/L	0.1585 ppb		13:07:38
2	Sr 421.552†	48.9	16.9	0.0890 ug/L	0.0890 ppb		13:06:01
2	Ti 334.940†	-1414.6	-78.7	-0.1120 ug/L	-0.1120 ppb		13:07:18
2	Tl 190.801†	-42.1	-3.0	-0.7665 ug/L	-0.7665 ppb		13:07:38
2	U 409.014†	-2905.4	-216.5	-5.9531 ug/L	-5.9531 ppb		13:07:18
2	V 292.402†	-1422.9	59.7	0.3622 ug/L	0.3622 ppb		13:07:18
2	Zn 213.857†	875.1	17.3	0.1410 ug/L	0.1410 ppb		13:07:38
2	SiO2†	666.4	43.5	2.5513 ug/L	2.5513 ppb		13:08:14
3	Sc 361.383	923958.2	923958.2	95.970 %			13:07:43
3	Sc Radial	6136.6	6136.6	97.7 %			13:06:26
3	Y 371.029	778943.9	778943.9	97.133 %			13:07:43
3	Y RADIAL	6568.5	6568.5	97.21 %			13:06:26
3	Ag 328.068†	361.7	-82.8	-0.3466 ug/L	-0.3466 ppb		13:07:43
3	Al 396.153Radial†	-17.9	8.4	5.2022 ug/L	5.2022 ppb		13:06:26
3	As 188.979†	-20.7	0.8	0.2968 ug/L	0.2968 ppb		13:08:03
3	B 249.677†	-223.5	100.9	2.0462 ug/L	2.0462 ppb		13:07:43
3	Ba 233.527†	29.4	6.1	0.0412 ug/L	0.0412 ppb		13:08:03
3	Be 313.107†	-4622.1	-134.0	-0.0444 ug/L	-0.0444 ppb		13:07:43
3	Ca 317.933Radial†	35.0	1.0	1.3752 ug/L	1.3752 ppb		13:06:46
3	Cd 226.502†	-205.6	-2.2	-0.0223 ug/L	-0.0223 ppb		13:08:03
3	Co 228.616†	-81.5	-14.4	-0.2503 ug/L	-0.2503 ppb		13:08:03
3	Cr 267.716†	90.0	5.8	0.0593 ug/L	0.0593 ppb		13:08:03
3	Cu 324.752†	6233.1	200.6	0.5569 ug/L	0.5569 ppb		13:07:43
3	Fe 238.204 Radial†	10.5	1.6	11.993 ug/L	11.993 ppb		13:06:46
3	K 766.490 Radial†	3138.6	310.1	51.456 ug/L	51.456 ppb		13:06:26
3	Mg 279.077 IEC†	4.2	1.5	44.280 ug/L	44.280 ppb		13:06:46
3	Mn 257.610†	535.7	2.1	0.0024 ug/L	0.0024 ppb		13:08:03
3	Mo 202.031†	19.7	1.4	0.0834 ug/L	0.0834 ppb		13:08:03
3	Na 589.592 Radial†	-1647.2	-52.4	-14.237 ug/L	-14.237 ppb		13:06:26
3	Ni 231.604†	130.1	7.4	0.1596 ug/L	0.1596 ppb		13:08:03
3	P 214.914†	253.1	22.5	11.536 ug/L	11.536 ppb		13:08:03
3	Pb 220.353†	-79.9	-0.6	-0.0611 ug/L	-0.0611 ppb		13:08:03
3	S 181.975 Axial†	47.9	1.0	1.2741 ug/L	1.2741 ppb		13:08:03
3	Sb 206.836†	42.3	4.0	1.1821 ug/L	1.1821 ppb		13:08:03
3	Se 196.026†	-23.7	0.9	0.5191 ug/L	0.5191 ppb		13:08:03
3	Si 251.611†	657.4	50.5	1.3871 ug/L	1.3871 ppb		13:08:03
3	Sn 189.927†	10.3	1.6	0.2411 ug/L	0.2411 ppb		13:08:03
3	Sr 421.552†	37.4	5.7	0.0301 ug/L	0.0301 ppb		13:06:26
3	Ti 334.940†	-1313.1	20.7	0.0328 ug/L	0.0328 ppb		13:07:43
3	Tl 190.801†	-43.0	-4.1	-1.0439 ug/L	-1.0439 ppb		13:08:03
3	U 409.014†	-2880.6	-203.6	-5.5984 ug/L	-5.5984 ppb		13:07:43
3	V 292.402†	-1482.6	-8.8	-0.0658 ug/L	-0.0658 ppb		13:07:43
3	Zn 213.857†	866.9	12.6	0.0979 ug/L	0.0979 ppb		13:08:03
3	SiO2†	667.7	47.8	2.8162 ug/L	2.8162 ppb		13:08:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	923946.9	95.968	%	0.4158				0.43%
Sc Radial	6184.0	98.4	%	0.67				0.68%
Y 371.029	779497.2	97.202	%	0.3799				0.39%
Y RADIAL	6623.0	98.01	%	0.738				0.75%
Ag 328.068†	-53.3	-0.2209	ug/L	0.16716	-0.2209	ppb	0.16716	75.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.2	11.235	ug/L	9.7651	11.235	ppb	9.7651	86.92%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.2	-0.4290	ug/L	1.51588	-0.4290	ppb	1.51588	353.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	133.2	2.7008	ug/L	0.57129	2.7008	ppb	0.57129	21.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0003	ug/L	0.05628	-0.0003	ppb	0.05628	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-135.5	-0.0452	ug/L	0.01024	-0.0452	ppb	0.01024	22.67%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          3.0      3.9167 ug/L       2.33101      3.9167 ppb        2.33101  59.51%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               -1.4     -0.0152 ug/L       0.06268     -0.0152 ppb        0.06268 412.23%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -11.0     -0.1898 ug/L       0.12167     -0.1898 ppb        0.12167  64.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               19.5      0.1954 ug/L       0.13430      0.1954 ppb        0.13430  68.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              214.4      0.5952 ug/L       0.19773      0.5952 ppb        0.19773  33.22%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.6      12.282 ug/L        4.9867      12.282 ppb         4.9867  40.60%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        312.4      51.840 ug/L        1.5822      51.840 ppb         1.5822   3.05%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3     -9.7647 ug/L      62.66447     -9.7647 ppb       62.66447 641.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -1.6     -0.0001 ug/L       0.00222     -0.0001 ppb        0.00222 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.7      0.3374 ug/L       0.35098      0.3374 ppb        0.35098 104.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -16.6     -4.5197 ug/L       8.42479     -4.5197 ppb        8.42479 186.40%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                4.2      0.0899 ug/L       0.06666      0.0899 ppb        0.06666  74.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                18.6      9.5338 ug/L       6.17192      9.5338 ppb        6.17192  64.74%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                9.1      0.9398 ug/L       0.89430      0.9398 ppb        0.89430  95.15%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.2784 ug/L       5.76406      0.2784 ppb        5.76406 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.1      2.9908 ug/L       1.94896      2.9908 ppb        1.94896  65.17%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.9     -0.4385 ug/L       1.12947     -0.4385 ppb        1.12947 257.60%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               38.9      1.0619 ug/L       0.28211      1.0619 ppb        0.28211  26.57%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.6     -0.0888 ug/L       0.50151     -0.0888 ppb        0.50151 564.97%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -1.3     -0.0071 ug/L       0.11910     -0.0071 ppb        0.11910 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -63.1     -0.0900 ug/L       0.11341     -0.0900 ppb        0.11341 125.98%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -4.4     -1.1146 ug/L       0.38841     -1.1146 ppb        0.38841  34.85%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -159.1     -4.3758 ug/L       2.43125     -4.3758 ppb        2.43125  55.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.4     -0.0394 ug/L       0.38902     -0.0394 ppb        0.38902 988.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               15.5      0.1232 ug/L       0.02251      0.1232 ppb        0.02251  18.27%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     55.2      3.2471 ug/L       0.98465      3.2471 ppb        0.98465  30.32%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/16/2009 13:29:59 **Plasma On Time:** 12/14/2009 06:02:42
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\121609.sif
Batch ID:
Results Data Set: 121609A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/16/2009 13:30:01
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	6143.8	6143.8	97.8	%			13:31:53
1	Y RADIAL	6545.1	6545.1	96.86	%			13:31:53
1	Al 396.153Radial†	7731.7	7933.9	4870.3	ug/L	4870.3	ppb	13:31:53
1	Ca 317.933Radial†	3782.3	3833.2	5062.1	ug/L	5062.1	ppb	13:32:13
1	Fe 238.204 Radial†	674.4	680.5	5180.7	ug/L	5180.7	ppb	13:32:13
1	K 766.490 Radial†	32789.3	30629.8	5072.9	ug/L	5072.9	ppb	13:31:53
1	Mg 279.077 IEC†	178.8	180.1	5153.2	ug/L	5153.2	ppb	13:32:13
1	Na 589.592 Radial†	35666.9	38110.3	10352	ug/L	10352	ppb	13:31:53
1	Sr 421.552†	94063.2	96164.9	505.35	ug/L	505.35	ppb	13:31:53
1	Sc 361.383	971324.9	971324.9	100.89	%			13:33:12
1	Y 371.029	798833.0	798833.0	99.613	%			13:33:12
1	Ag 328.068†	119632.0	118117.6	509.78	ug/L	509.78	ppb	13:33:12
1	As 188.979†	1394.5	1404.6	507.91	ug/L	507.91	ppb	13:33:32
1	B 249.677†	24691.0	24807.1	501.23	ug/L	501.23	ppb	13:33:12
1	Ba 233.527†	77022.5	76318.9	510.13	ug/L	510.13	ppb	13:33:12
1	Be 313.107†	1531152.6	1522335.2	506.42	ug/L	506.42	ppb	13:33:12
1	Cd 226.502†	52820.0	52566.3	509.53	ug/L	509.53	ppb	13:33:12
1	Co 228.616†	29298.2	29110.4	504.96	ug/L	504.96	ppb	13:33:32
1	Cr 267.716†	51471.3	50929.5	507.96	ug/L	507.96	ppb	13:33:12
1	Cu 324.752†	191349.6	183368.3	508.75	ug/L	508.75	ppb	13:33:12
1	Mn 257.610†	526635.7	521436.5	507.57	ug/L	507.57	ppb	13:33:12
1	Mo 202.031†	8714.5	8618.5	509.76	ug/L	509.76	ppb	13:33:32
1	Ni 231.604†	23828.3	23490.0	506.92	ug/L	506.92	ppb	13:33:32
1	P 214.914†	5187.8	4900.8	2459.8	ug/L	2459.8	ppb	13:33:32
1	Pb 220.353†	4940.4	4979.5	514.39	ug/L	514.39	ppb	13:33:32
1	S 181.975 Axial†	876.6	820.0	998.57	ug/L	998.57	ppb	13:33:32
1	Sb 206.836†	1768.4	1712.7	514.66	ug/L	514.66	ppb	13:33:32
1	Se 196.026†	918.7	936.2	532.04	ug/L	532.04	ppb	13:33:32
1	Si 251.611†	92937.8	91483.9	2537.5	ug/L	2537.5	ppb	13:33:12
1	Sn 189.927†	3473.6	3433.8	510.00	ug/L	510.00	ppb	13:33:32
1	Ti 334.940†	355521.8	353776.2	515.96	ug/L	515.96	ppb	13:33:12
1	Tl 190.801†	1962.1	1985.6	511.06	ug/L	511.06	ppb	13:33:32
1	U 409.014†	15243.8	17907.3	490.63	ug/L	490.63	ppb	13:33:12
1	V 292.402†	79920.8	80752.2	512.62	ug/L	512.62	ppb	13:33:12
1	Zn 213.857†	64202.5	62745.8	503.36	ug/L	503.36	ppb	13:33:12
1	SiO2†	92393.0	90930.5	5409.7	ug/L	5409.7	ppb	13:34:32
2	Sc Radial	6239.3	6239.3	99.3	%			13:32:18
2	Y RADIAL	6650.9	6650.9	98.43	%			13:32:18
2	Al 396.153Radial†	7863.8	7946.0	4877.6	ug/L	4877.6	ppb	13:32:18
2	Ca 317.933Radial†	3801.0	3792.9	5008.7	ug/L	5008.7	ppb	13:32:38
2	Fe 238.204 Radial†	675.5	671.1	5109.3	ug/L	5109.3	ppb	13:32:38
2	K 766.490 Radial†	33400.8	30732.4	5089.9	ug/L	5089.9	ppb	13:32:18
2	Mg 279.077 IEC†	184.5	183.1	5238.1	ug/L	5238.1	ppb	13:32:38
2	Na 589.592 Radial†	36175.8	38064.6	10340	ug/L	10340	ppb	13:32:18
2	Sr 421.552†	95910.4	96552.7	507.39	ug/L	507.39	ppb	13:32:18
2	Sc 361.383	963952.0	963952.0	100.12	%			13:33:39
2	Y 371.029	791220.3	791220.3	98.664	%			13:33:39

2	Ag 328.068†	119129.6	118522.8	511.50 ug/L	511.50 ppb	13:33:39
2	As 188.979†	1408.1	1428.7	516.56 ug/L	516.56 ppb	13:34:00
2	B 249.677†	24510.4	24813.9	501.37 ug/L	501.37 ppb	13:33:39
2	Ba 233.527†	76965.9	76846.3	513.65 ug/L	513.65 ppb	13:33:39
2	Be 313.107†	1521682.9	1524485.1	507.13 ug/L	507.13 ppb	13:33:39
2	Cd 226.502†	52741.7	52888.6	512.67 ug/L	512.67 ppb	13:33:39
2	Co 228.616†	29224.2	29258.6	507.53 ug/L	507.53 ppb	13:34:00
2	Cr 267.716†	51411.1	51259.5	511.25 ug/L	511.25 ppb	13:33:39
2	Cu 324.752†	190468.1	183938.5	510.33 ug/L	510.33 ppb	13:33:39
2	Mn 257.610†	526003.7	524797.8	510.83 ug/L	510.83 ppb	13:33:39
2	Mo 202.031†	8686.9	8657.1	512.04 ug/L	512.04 ppb	13:34:00
2	Ni 231.604†	23727.0	23569.5	508.63 ug/L	508.63 ppb	13:34:00
2	P 214.914†	5177.5	4929.8	2474.6 ug/L	2474.6 ppb	13:34:00
2	Pb 220.353†	4910.1	4986.7	515.14 ug/L	515.14 ppb	13:34:00
2	S 181.975 Axial†	891.5	841.5	1024.8 ug/L	1024.8 ppb	13:34:00
2	Sb 206.836†	1762.3	1720.0	516.77 ug/L	516.77 ppb	13:34:00
2	Se 196.026†	908.1	932.5	529.82 ug/L	529.82 ppb	13:34:00
2	Si 251.611†	92749.7	92000.5	2551.9 ug/L	2551.9 ppb	13:33:39
2	Sn 189.927†	3446.6	3433.2	509.90 ug/L	509.90 ppb	13:34:00
2	Ti 334.940†	354628.1	355579.0	518.59 ug/L	518.59 ppb	13:33:39
2	Tl 190.801†	1949.4	1987.7	511.64 ug/L	511.64 ppb	13:34:00
2	U 409.014†	15345.6	18124.6	496.60 ug/L	496.60 ppb	13:33:39
2	V 292.402†	79472.5	80910.3	513.66 ug/L	513.66 ppb	13:33:39
2	Zn 213.857†	64025.7	63056.0	505.87 ug/L	505.87 ppb	13:33:39
2	SiO2†	93081.0	92318.1	5492.5 ug/L	5492.5 ppb	13:34:38
3	Sc Radial	6200.3	6200.3	98.7 %		13:32:43
3	Y RADIAL	6631.3	6631.3	98.14 %		13:32:43
3	Al 396.153Radial†	7810.4	7941.7	4874.9 ug/L	4874.9 ppb	13:32:43
3	Ca 317.933Radial†	3792.6	3808.5	5029.4 ug/L	5029.4 ppb	13:33:03
3	Fe 238.204 Radial†	675.6	675.5	5142.2 ug/L	5142.2 ppb	13:33:03
3	K 766.490 Radial†	33157.5	30697.4	5084.1 ug/L	5084.1 ppb	13:32:43
3	Mg 279.077 IEC†	179.3	179.0	5121.0 ug/L	5121.0 ppb	13:33:03
3	Na 589.592 Radial†	35643.7	37754.6	10255 ug/L	10255 ppb	13:32:43
3	Sr 421.552†	94780.9	96015.8	504.57 ug/L	504.57 ppb	13:32:43
3	Sc 361.383	964187.0	964187.0	100.15 %		13:34:07
3	Y 371.029	791945.1	791945.1	98.754 %		13:34:07
3	Ag 328.068†	118865.1	118229.6	510.26 ug/L	510.26 ppb	13:34:07
3	As 188.979†	1408.3	1428.6	516.53 ug/L	516.53 ppb	13:34:27
3	B 249.677†	24576.0	24873.4	502.58 ug/L	502.58 ppb	13:34:07
3	Ba 233.527†	76739.2	76601.2	512.02 ug/L	512.02 ppb	13:34:07
3	Be 313.107†	1521934.9	1524366.3	507.09 ug/L	507.09 ppb	13:34:07
3	Cd 226.502†	52629.6	52763.9	511.45 ug/L	511.45 ppb	13:34:07
3	Co 228.616†	29149.9	29177.2	506.12 ug/L	506.12 ppb	13:34:27
3	Cr 267.716†	51414.4	51250.3	511.16 ug/L	511.16 ppb	13:34:07
3	Cu 324.752†	189966.1	183390.8	508.82 ug/L	508.82 ppb	13:34:07
3	Mn 257.610†	525072.0	523739.4	509.80 ug/L	509.80 ppb	13:34:07
3	Mo 202.031†	8702.7	8670.7	512.84 ug/L	512.84 ppb	13:34:27
3	Ni 231.604†	23669.8	23506.7	507.27 ug/L	507.27 ppb	13:34:27
3	P 214.914†	5165.0	4916.0	2467.7 ug/L	2467.7 ppb	13:34:27
3	Pb 220.353†	4875.9	4951.4	511.51 ug/L	511.51 ppb	13:34:27
3	S 181.975 Axial†	879.3	829.1	1009.8 ug/L	1009.8 ppb	13:34:27
3	Sb 206.836†	1761.6	1718.9	516.51 ug/L	516.51 ppb	13:34:27
3	Se 196.026†	906.3	930.5	528.83 ug/L	528.83 ppb	13:34:27
3	Si 251.611†	92670.3	91898.7	2549.0 ug/L	2549.0 ppb	13:34:07
3	Sn 189.927†	3458.1	3443.9	511.48 ug/L	511.48 ppb	13:34:27
3	Ti 334.940†	353949.0	354814.5	517.48 ug/L	517.48 ppb	13:34:07
3	Tl 190.801†	1952.4	1990.3	512.28 ug/L	512.28 ppb	13:34:27
3	U 409.014†	15068.1	17843.7	488.88 ug/L	488.88 ppb	13:34:07
3	V 292.402†	79500.6	80919.0	513.71 ug/L	513.71 ppb	13:34:07
3	Zn 213.857†	63998.8	63013.5	505.53 ug/L	505.53 ppb	13:34:07
3	SiO2†	93324.5	92538.6	5505.7 ug/L	5505.7 ppb	13:34:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	966487.9	100.39	%	0.435				0.43%
Sc Radial	6194.4	98.6	%	0.76				0.78%
Y 371.029	793999.5	99.010	%	0.5239				0.53%
Y RADIAL	6609.1	97.81	%	0.833				0.85%
Ag 328.068†	118290.0	510.51	ug/L	0.885	510.51	ppb	0.885	0.17%

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   QC value within limits for Ag 328.068  Recovery = 102.10%
Al 396.153Radial†       7940.5      4874.3 ug/L          3.72      4874.3 ppb          3.72   0.08%
   QC value within limits for Al 396.153Radial  Recovery = 97.49%
As 188.979†             1420.6      513.66 ug/L         4.986      513.66 ppb         4.986   0.97%
   QC value within limits for As 188.979  Recovery = 102.73%
B 249.677†             24831.5      501.72 ug/L         0.740      501.72 ppb         0.740   0.15%
   QC value within limits for B 249.677  Recovery = 100.34%
Ba 233.527†            76588.8      511.93 ug/L         1.759      511.93 ppb         1.759   0.34%
   QC value within limits for Ba 233.527  Recovery = 102.39%
Be 313.107†          1523728.9      506.88 ug/L         0.404      506.88 ppb         0.404   0.08%
   QC value within limits for Be 313.107  Recovery = 101.38%
Ca 317.933Radial†       3811.5      5033.4 ug/L         26.88      5033.4 ppb         26.88   0.53%
   QC value within limits for Ca 317.933Radial  Recovery = 100.67%
Cd 226.502†            52739.6      511.22 ug/L         1.580      511.22 ppb         1.580   0.31%
   QC value within limits for Cd 226.502  Recovery = 102.24%
Co 228.616†            29182.1      506.20 ug/L         1.287      506.20 ppb         1.287   0.25%
   QC value within limits for Co 228.616  Recovery = 101.24%
Cr 267.716†            51146.4      510.12 ug/L         1.871      510.12 ppb         1.871   0.37%
   QC value within limits for Cr 267.716  Recovery = 102.02%
Cu 324.752†           183565.9      509.30 ug/L         0.894      509.30 ppb         0.894   0.18%
   QC value within limits for Cu 324.752  Recovery = 101.86%
Fe 238.204 Radial†       675.7      5144.0 ug/L         35.74      5144.0 ppb         35.74   0.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.88%
K 766.490 Radial†      30686.5      5082.3 ug/L          8.64      5082.3 ppb          8.64   0.17%
   QC value within limits for K 766.490 Radial  Recovery = 101.65%
Mg 279.077 IEC†          180.7      5170.8 ug/L         60.52      5170.8 ppb         60.52   1.17%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.42%
Mn 257.610†           523324.5      509.40 ug/L         1.667      509.40 ppb         1.667   0.33%
   QC value within limits for Mn 257.610  Recovery = 101.88%
Mo 202.031†            8648.8       511.55 ug/L         1.598      511.55 ppb         1.598   0.31%
   QC value within limits for Mo 202.031  Recovery = 102.31%
Na 589.592 Radial†     37976.5       10316 ug/L          52.6       10316 ppb          52.6   0.51%
   QC value within limits for Na 589.592 Radial  Recovery = 103.16%
Ni 231.604†            23522.1      507.61 ug/L         0.905      507.61 ppb         0.905   0.18%
   QC value within limits for Ni 231.604  Recovery = 101.52%
P 214.914†              4915.6      2467.3 ug/L          7.42      2467.3 ppb          7.42   0.30%
   QC value within limits for P 214.914  Recovery = 98.69%
Pb 220.353†             4972.5      513.68 ug/L         1.918      513.68 ppb         1.918   0.37%
   QC value within limits for Pb 220.353  Recovery = 102.74%
S 181.975 Axial†         830.2      1011.1 ug/L         13.18      1011.1 ppb         13.18   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 101.11%
Sb 206.836†             1717.2      515.98 ug/L         1.150      515.98 ppb         1.150   0.22%
   QC value within limits for Sb 206.836  Recovery = 103.20%
Se 196.026†              933.1      530.23 ug/L         1.645      530.23 ppb         1.645   0.31%
   QC value within limits for Se 196.026  Recovery = 106.05%
Si 251.611†            91794.4      2546.1 ug/L          7.60      2546.1 ppb          7.60   0.30%
   QC value within limits for Si 251.611  Recovery = 101.84%
Sn 189.927†             3437.0      510.46 ug/L         0.886      510.46 ppb         0.886   0.17%
   QC value within limits for Sn 189.927  Recovery = 102.09%
Sr 421.552†            96244.5      505.77 ug/L         1.457      505.77 ppb         1.457   0.29%
   QC value within limits for Sr 421.552  Recovery = 101.15%
Ti 334.940†           354723.2      517.34 ug/L         1.317      517.34 ppb         1.317   0.25%
   QC value within limits for Ti 334.940  Recovery = 103.47%
Tl 190.801†             1987.9      511.66 ug/L         0.611      511.66 ppb         0.611   0.12%
   QC value within limits for Tl 190.801  Recovery = 102.33%
U 409.014†             17958.5      492.04 ug/L         4.050      492.04 ppb         4.050   0.82%
   QC value within limits for U 409.014  Recovery = 98.41%
V 292.402†             80860.5      513.33 ug/L         0.616      513.33 ppb         0.616   0.12%
   QC value within limits for V 292.402  Recovery = 102.67%
Zn 213.857†            62938.4      504.92 ug/L         1.359      504.92 ppb         1.359   0.27%
   QC value within limits for Zn 213.857  Recovery = 100.98%
SiO2†                  91929.1      5469.3 ug/L         52.05      5469.3 ppb         52.05   0.95%
   QC value within limits for SiO2  Recovery = 102.28%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/16/2009 13:36:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6113.7	6113.7	97.3	%			13:38:45
1	Y RADIAL	6553.8	6553.8	96.99	%			13:38:45
1	Al 396.153Radial†	-41.3	-15.7	-9.6808	ug/L	-9.6808	ppb	13:38:45
1	Ca 317.933Radial†	37.6	3.8	4.9643	ug/L	4.9643	ppb	13:39:05
1	Fe 238.204 Radial†	10.2	1.3	10.033	ug/L	10.033	ppb	13:39:05
1	K 766.490 Radial†	3035.3	216.0	35.842	ug/L	35.842	ppb	13:38:45
1	Mg 279.077 IEC†	0.6	-2.1	-60.876	ug/L	-60.876	ppb	13:39:05
1	Na 589.592 Radial†	-1592.2	-2.2	-0.5925	ug/L	-0.5925	ppb	13:38:45
1	Sr 421.552†	13.7	-18.5	-0.0974	ug/L	-0.0974	ppb	13:38:45
1	Sc 361.383	957828.1	957828.1	99.488	%			13:40:02
1	Y 371.029	799585.4	799585.4	99.707	%			13:40:02
1	Ag 328.068†	417.3	-40.2	-0.1688	ug/L	-0.1688	ppb	13:40:07
1	As 188.979†	-18.9	3.3	1.1824	ug/L	1.1824	ppb	13:40:27
1	B 249.677†	-196.1	136.6	2.7703	ug/L	2.7703	ppb	13:40:07
1	Ba 233.527†	30.1	5.7	0.0393	ug/L	0.0393	ppb	13:40:27
1	Be 313.107†	-4631.5	26.9	0.0089	ug/L	0.0089	ppb	13:40:07
1	Cd 226.502†	-198.7	12.3	0.1183	ug/L	0.1183	ppb	13:40:27
1	Co 228.616†	-72.1	-2.0	-0.0329	ug/L	-0.0329	ppb	13:40:27
1	Cr 267.716†	97.2	9.6	0.0963	ug/L	0.0963	ppb	13:40:27
1	Cu 324.752†	6164.3	-98.3	-0.2720	ug/L	-0.2720	ppb	13:40:07
1	Mn 257.610†	536.2	-17.1	-0.0145	ug/L	-0.0145	ppb	13:40:27
1	Mo 202.031†	30.7	11.8	0.6960	ug/L	0.6960	ppb	13:40:27
1	Ni 231.604†	124.8	-2.7	-0.0584	ug/L	-0.0584	ppb	13:40:27
1	P 214.914†	252.9	12.9	6.7160	ug/L	6.7160	ppb	13:40:27
1	Pb 220.353†	-91.7	-9.5	-0.9770	ug/L	-0.9770	ppb	13:40:27
1	S 181.975 Axial†	59.2	10.7	12.988	ug/L	12.988	ppb	13:40:27
1	Sb 206.836†	44.5	4.6	1.3851	ug/L	1.3851	ppb	13:40:27
1	Se 196.026†	-21.5	4.0	2.2118	ug/L	2.2118	ppb	13:40:27
1	Si 251.611†	628.9	-2.5	-0.0925	ug/L	-0.0925	ppb	13:40:27
1	Sn 189.927†	7.5	-1.5	-0.2289	ug/L	-0.2289	ppb	13:40:27
1	Ti 334.940†	-1399.2	-17.5	-0.0257	ug/L	-0.0257	ppb	13:40:07
1	Tl 190.801†	-41.7	-1.2	-0.3075	ug/L	-0.3075	ppb	13:40:27
1	U 409.014†	-2746.6	37.1	1.0192	ug/L	1.0192	ppb	13:40:02
1	V 292.402†	-1479.6	48.8	0.3146	ug/L	0.3146	ppb	13:40:07
1	Zn 213.857†	902.4	16.4	0.1343	ug/L	0.1343	ppb	13:40:27
1	SiO2†	626.4	-18.2	-1.1408	ug/L	-1.1408	ppb	13:41:33
2	Sc Radial	6172.3	6172.3	98.2	%			13:39:10
2	Y RADIAL	6645.8	6645.8	98.35	%			13:39:10
2	Al 396.153Radial†	-7.3	19.3	11.918	ug/L	11.918	ppb	13:39:10
2	Ca 317.933Radial†	34.4	0.2	0.2734	ug/L	0.2734	ppb	13:39:30
2	Fe 238.204 Radial†	12.0	3.1	23.339	ug/L	23.339	ppb	13:39:30
2	K 766.490 Radial†	3054.0	205.4	34.076	ug/L	34.076	ppb	13:39:10
2	Mg 279.077 IEC†	2.6	-0.1	-1.8770	ug/L	-1.8770	ppb	13:39:30
2	Na 589.592 Radial†	-1550.1	56.2	15.278	ug/L	15.278	ppb	13:39:10
2	Sr 421.552†	40.7	8.9	0.0465	ug/L	0.0465	ppb	13:39:10
2	Sc 361.383	961615.8	961615.8	99.881	%			13:40:32
2	Y 371.029	800719.7	800719.7	99.848	%			13:40:32
2	Ag 328.068†	536.6	77.6	0.3391	ug/L	0.3391	ppb	13:40:37
2	As 188.979†	-24.7	-2.4	-0.8491	ug/L	-0.8491	ppb	13:40:57
2	B 249.677†	-251.9	81.5	1.6511	ug/L	1.6511	ppb	13:40:37
2	Ba 233.527†	33.2	8.7	0.0588	ug/L	0.0588	ppb	13:40:57
2	Be 313.107†	-4670.3	6.4	0.0023	ug/L	0.0023	ppb	13:40:37
2	Cd 226.502†	-188.8	23.0	0.2209	ug/L	0.2209	ppb	13:40:57
2	Co 228.616†	-72.9	-2.5	-0.0442	ug/L	-0.0442	ppb	13:40:57
2	Cr 267.716†	98.1	10.2	0.1014	ug/L	0.1014	ppb	13:40:57
2	Cu 324.752†	6336.7	49.9	0.1397	ug/L	0.1397	ppb	13:40:37
2	Mn 257.610†	541.9	-13.6	-0.0108	ug/L	-0.0108	ppb	13:40:57
2	Mo 202.031†	21.2	2.2	0.1302	ug/L	0.1302	ppb	13:40:57
2	Ni 231.604†	121.9	-6.1	-0.1321	ug/L	-0.1321	ppb	13:40:57

2	P 214.914†	262.4	21.4	11.024	ug/L	11.024 ppb	13:40:57
2	Pb 220.353†	-87.8	-5.2	-0.5364	ug/L	-0.5364 ppb	13:40:57
2	S 181.975 Axial†	49.0	0.2	0.2412	ug/L	0.2412 ppb	13:40:57
2	Sb 206.836†	47.4	7.3	2.1539	ug/L	2.1539 ppb	13:40:57
2	Se 196.026†	-21.4	4.2	2.3659	ug/L	2.3659 ppb	13:40:57
2	Si 251.611†	642.3	8.5	0.2269	ug/L	0.2269 ppb	13:40:57
2	Sn 189.927†	2.1	-7.0	-1.0427	ug/L	-1.0427 ppb	13:40:57
2	Ti 334.940†	-1333.1	54.3	0.0785	ug/L	0.0785 ppb	13:40:37
2	Tl 190.801†	-56.1	-15.4	-3.9444	ug/L	-3.9444 ppb	13:40:57
2	U 409.014†	-2739.8	54.9	1.5047	ug/L	1.5047 ppb	13:40:32
2	V 292.402†	-1535.8	-1.6	-0.0091	ug/L	-0.0091 ppb	13:40:37
2	Zn 213.857†	901.1	11.6	0.0921	ug/L	0.0921 ppb	13:40:57
2	SiO2†	619.1	-28.1	-1.7023	ug/L	-1.7023 ppb	13:41:38
3	Sc Radial	6212.3	6212.3	98.9	%		13:39:35
3	Y RADIAL	6670.6	6670.6	98.72	%		13:39:35
3	Al 396.153Radial†	-27.0	-0.5	-0.3794	ug/L	-0.3794 ppb	13:39:35
3	Ca 317.933Radial†	39.3	4.9	6.5271	ug/L	6.5271 ppb	13:39:55
3	Fe 238.204 Radial†	11.7	2.7	20.579	ug/L	20.579 ppb	13:39:55
3	K 766.490 Radial†	2982.8	113.3	18.794	ug/L	18.794 ppb	13:39:35
3	Mg 279.077 IEC†	4.3	1.6	45.083	ug/L	45.083 ppb	13:39:55
3	Na 589.592 Radial†	-1543.4	73.2	19.881	ug/L	19.881 ppb	13:39:35
3	Sr 421.552†	-6.6	-39.3	-0.2065	ug/L	-0.2065 ppb	13:39:35
3	Sc 361.383	956446.8	956446.8	99.344	%		13:41:02
3	Y 371.029	797416.2	797416.2	99.436	%		13:41:02
3	Ag 328.068†	413.6	-43.3	-0.1792	ug/L	-0.1792 ppb	13:41:07
3	As 188.979†	-19.4	2.8	0.9965	ug/L	0.9965 ppb	13:41:27
3	B 249.677†	-217.6	114.7	2.3236	ug/L	2.3236 ppb	13:41:07
3	Ba 233.527†	13.2	-11.2	-0.0742	ug/L	-0.0742 ppb	13:41:27
3	Be 313.107†	-4610.4	41.4	0.0138	ug/L	0.0138 ppb	13:41:07
3	Cd 226.502†	-193.9	16.9	0.1614	ug/L	0.1614 ppb	13:41:27
3	Co 228.616†	-60.7	9.3	0.1647	ug/L	0.1647 ppb	13:41:27
3	Cr 267.716†	96.5	9.1	0.0908	ug/L	0.0908 ppb	13:41:27
3	Cu 324.752†	6218.0	-35.2	-0.0966	ug/L	-0.0966 ppb	13:41:07
3	Mn 257.610†	549.2	-3.3	-0.0020	ug/L	-0.0020 ppb	13:41:27
3	Mo 202.031†	39.2	20.4	1.2071	ug/L	1.2071 ppb	13:41:27
3	Ni 231.604†	121.6	-5.7	-0.1237	ug/L	-0.1237 ppb	13:41:27
3	P 214.914†	239.3	-0.5	-0.2239	ug/L	-0.2239 ppb	13:41:27
3	Pb 220.353†	-72.5	9.7	0.9989	ug/L	0.9989 ppb	13:41:27
3	S 181.975 Axial†	53.1	4.6	5.6001	ug/L	5.6001 ppb	13:41:27
3	Sb 206.836†	39.4	-0.5	-0.1013	ug/L	-0.1013 ppb	13:41:27
3	Se 196.026†	-29.8	-4.4	-2.3528	ug/L	-2.3528 ppb	13:41:27
3	Si 251.611†	643.1	12.8	0.3253	ug/L	0.3253 ppb	13:41:27
3	Sn 189.927†	16.7	7.7	1.1388	ug/L	1.1388 ppb	13:41:27
3	Ti 334.940†	-1358.0	22.0	0.0322	ug/L	0.0322 ppb	13:41:07
3	Tl 190.801†	-54.7	-14.3	-3.6648	ug/L	-3.6648 ppb	13:41:27
3	U 409.014†	-2769.1	10.5	0.2866	ug/L	0.2866 ppb	13:41:02
3	V 292.402†	-1532.6	-6.7	-0.0266	ug/L	-0.0266 ppb	13:41:07
3	Zn 213.857†	898.8	14.0	0.1110	ug/L	0.1110 ppb	13:41:27
3	SiO2†	674.3	30.8	1.7769	ug/L	1.7769 ppb	13:41:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	958630.2	99.571	%	0.2780				0.28%
Sc Radial	6166.1	98.1	%	0.79				0.80%
Y 371.029	799240.5	99.664	%	0.2093				0.21%
Y RADIAL	6623.4	98.02	%	0.911				0.93%
Ag 328.068†	-2.0	-0.0030	ug/L	0.29627	-0.0030	ppb	0.29627	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.1	0.6191	ug/L	10.83378	0.6191	ppb	10.83378	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	0.4433	ug/L	1.12303	0.4433	ppb	1.12303	253.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	111.0	2.2483	ug/L	0.56339	2.2483	ppb	0.56339	25.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.1	0.0080	ug/L	0.07180	0.0080	ppb	0.07180	901.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	24.9	0.0083	ug/L	0.00579	0.0083	ppb	0.00579	69.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.0	3.9216	ug/L	3.25463	3.9216	ppb	3.25463	82.99%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              17.4      0.1668 ug/L       0.05150      0.1668 ppb        0.05150  30.87%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               1.6      0.0292 ug/L       0.11746      0.0292 ppb        0.11746 401.78%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               9.6      0.0962 ug/L       0.00528      0.0962 ppb        0.00528   5.49%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -27.8     -0.0763 ug/L       0.20657     -0.0763 ppb        0.20657 270.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.4      17.984 ug/L        7.0226      17.984 ppb         7.0226  39.05%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       178.3      29.571 ug/L        9.3744      29.571 ppb         9.3744  31.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.2      -5.8901 ug/L      53.09310     -5.8901 ppb       53.09310 901.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -11.3      -0.0091 ug/L       0.00644     -0.0091 ppb        0.00644  70.59%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              11.4       0.6778 ug/L       0.53865      0.6778 ppb        0.53865  79.47%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       42.4      11.522 ug/L       10.7411      11.522 ppb        10.7411  93.22%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -4.8      -0.1047 ug/L       0.04035     -0.1047 ppb        0.04035  38.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               11.3       5.8386 ug/L       5.67482      5.8386 ppb        5.67482  97.20%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -1.7      -0.1715 ug/L       1.03729     -0.1715 ppb        1.03729 604.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          5.1       6.2765 ug/L       6.40031      6.2765 ppb        6.40031 101.97%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.8       1.1459 ug/L       1.14648      1.1459 ppb        1.14648 100.05%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.2       0.7416 ug/L       2.68098      0.7416 ppb        2.68098 361.50%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               6.3       0.1532 ug/L       0.21843      0.1532 ppb        0.21843 142.56%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -0.3      -0.0443 ug/L       1.10239     -0.0443 ppb        1.10239 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -16.3      -0.0858 ug/L       0.12692     -0.0858 ppb        0.12692 147.92%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              19.6       0.0283 ug/L       0.05220      0.0283 ppb        0.05220 184.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -10.3      -2.6389 ug/L       2.02388     -2.6389 ppb        2.02388  76.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               34.2       0.9368 ug/L       0.61322      0.9368 ppb        0.61322  65.46%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               13.5       0.0930 ug/L       0.19211      0.0930 ppb        0.19211 206.66%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              14.0       0.1125 ug/L       0.02112      0.1125 ppb        0.02112  18.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -5.2      -0.3554 ug/L       1.86786     -0.3554 ppb        1.86786 525.54%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: 241711001|926576|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 12/16/2009 13:43:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711001|926576|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6185.7	6185.7	98.4	%			13:45:46
1	Y RADIAL	6868.4	6868.4	101.6	%			13:45:46
1	Al 396.153Radial†	48492.5	49283.7	30389	ug/L	30389	ppb	13:45:46
1	Ca 317.933Radial†	4283.2	4315.9	5699.4	ug/L	5699.4	ppb	13:45:46
1	Fe 238.204 Radial†	5364.7	5440.1	41288	ug/L	41288	ppb	13:45:46
1	K 766.490 Radial†	14276.5	11598.1	1854.7	ug/L	1854.7	ppb	13:45:46
1	Mg 279.077 IEC†	146.2	145.8	4132.1	ug/L	4132.1	ppb	13:46:06
1	Na 589.592 Radial†	1219.5	2873.0	780.39	ug/L	780.39	ppb	13:45:46
1	Sr 421.552†	10991.7	11132.4	58.454	ug/L	58.454	ppb	13:45:46
1	Sc 361.383	967124.6	967124.6	100.45	%			13:47:04
1	Y 371.029	827758.2	827758.2	103.22	%			13:47:04
1	Ag 328.068†	-2401.0	-2849.8	1.9774	ug/L	1.9774	ppb	13:47:09
1	As 188.979†	-9.3	13.1	19.314	ug/L	19.314	ppb	13:47:29
1	B 249.677†	172.4	505.4	4.5780	ug/L	4.5780	ppb	13:47:09
1	Ba 233.527†	119005.0	118443.6	791.40	ug/L	791.40	ppb	13:47:09
1	Be 313.107†	-4324.4	377.4	2.0566	ug/L	2.0566	ppb	13:47:09
1	Cd 226.502†	205.9	417.1	-0.0698	ug/L	-0.0698	ppb	13:47:29
1	Co 228.616†	4421.4	4471.9	75.204	ug/L	75.204	ppb	13:47:29
1	Cr 267.716†	2501.1	2401.8	24.865	ug/L	24.865	ppb	13:47:29
1	Cu 324.752†	11584.9	5238.4	16.632	ug/L	16.632	ppb	13:47:09
1	Mn 257.610†	6145665.1	6117380.5	5953.8	ug/L	5953.8	ppb	13:47:04
1	Mo 202.031†	-5.2	-24.3	1.4953	ug/L	1.4953	ppb	13:47:29
1	Ni 231.604†	1107.8	974.7	20.997	ug/L	20.997	ppb	13:47:29
1	P 214.914†	742.8	498.2	232.41	ug/L	232.41	ppb	13:47:29
1	Pb 220.353†	736.6	815.9	87.455	ug/L	87.455	ppb	13:47:29
1	S 181.975 Axial†	130.0	80.5	92.174	ug/L	92.174	ppb	13:47:29
1	Sb 206.836†	59.7	19.3	2.3255	ug/L	2.3255	ppb	13:47:29
1	Se 196.026†	-288.0	-261.1	5.6404	ug/L	5.6404	ppb	13:47:29
1	Si 251.611†	273046.0	271179.5	7557.2	ug/L	7557.2	ppb	13:47:09
1	Sn 189.927†	-53.7	-62.5	-8.1122	ug/L	-8.1122	ppb	13:47:29
1	Ti 334.940†	675222.7	673565.1	982.94	ug/L	982.94	ppb	13:47:04
1	Tl 190.801†	-221.3	-179.6	-3.3149	ug/L	-3.3149	ppb	13:47:29
1	U 409.014†	-6457.1	-3630.0	-105.03	ug/L	-105.03	ppb	13:47:09
1	V 292.402†	14741.2	16210.7	94.049	ug/L	94.049	ppb	13:47:09
1	Zn 213.857†	7571.3	6646.5	49.562	ug/L	49.562	ppb	13:47:29
1	SiO2†	270473.3	268605.1	16057	ug/L	16057	ppb	13:48:38
2	Sc Radial	6219.7	6219.7	99.0	%			13:46:11
2	Y RADIAL	6926.9	6926.9	102.5	%			13:46:11
2	Al 396.153Radial†	48699.2	49223.0	30351	ug/L	30351	ppb	13:46:11
2	Ca 317.933Radial†	4286.9	4295.9	5673.0	ug/L	5673.0	ppb	13:46:11
2	Fe 238.204 Radial†	5381.8	5427.5	41193	ug/L	41193	ppb	13:46:11
2	K 766.490 Radial†	14246.9	11488.9	1836.5	ug/L	1836.5	ppb	13:46:11
2	Mg 279.077 IEC†	151.4	150.2	4258.5	ug/L	4258.5	ppb	13:46:31
2	Na 589.592 Radial†	1180.3	2826.5	767.78	ug/L	767.78	ppb	13:46:11
2	Sr 421.552†	10993.3	11072.9	58.142	ug/L	58.142	ppb	13:46:11
2	Sc 361.383	970761.6	970761.6	100.83	%			13:47:36
2	Y 371.029	829433.3	829433.3	103.43	%			13:47:36
2	Ag 328.068†	-2441.8	-2881.4	1.8061	ug/L	1.8061	ppb	13:47:41
2	As 188.979†	-15.4	7.1	17.144	ug/L	17.144	ppb	13:48:01
2	B 249.677†	53.1	386.4	2.1806	ug/L	2.1806	ppb	13:47:41
2	Ba 233.527†	118417.0	117416.5	784.55	ug/L	784.55	ppb	13:47:41
2	Be 313.107†	-4294.6	423.1	2.0717	ug/L	2.0717	ppb	13:47:41
2	Cd 226.502†	196.2	406.6	-0.1622	ug/L	-0.1622	ppb	13:48:01
2	Co 228.616†	4367.8	4402.2	73.996	ug/L	73.996	ppb	13:48:01
2	Cr 267.716†	2497.6	2389.0	24.735	ug/L	24.735	ppb	13:48:01
2	Cu 324.752†	11636.0	5245.9	16.648	ug/L	16.648	ppb	13:47:41
2	Mn 257.610†	6174723.1	6123277.9	5959.5	ug/L	5959.5	ppb	13:47:36
2	Mo 202.031†	8.7	-10.5	2.3014	ug/L	2.3014	ppb	13:48:01
2	Ni 231.604†	1075.7	938.7	20.221	ug/L	20.221	ppb	13:48:01

2	P 214.914†	727.3	480.0	223.10	ug/L	223.10	ppb	13:48:01
2	Pb 220.353†	736.9	813.5	87.207	ug/L	87.207	ppb	13:48:01
2	S 181.975 Axial†	128.0	78.1	89.204	ug/L	89.204	ppb	13:48:01
2	Sb 206.836†	55.1	14.6	0.9671	ug/L	0.9671	ppb	13:48:01
2	Se 196.026†	-280.6	-252.7	9.8844	ug/L	9.8844	ppb	13:48:01
2	Si 251.611†	272313.3	269434.4	7508.5	ug/L	7508.5	ppb	13:47:41
2	Sn 189.927†	-44.3	-53.1	-6.7154	ug/L	-6.7154	ppb	13:48:01
2	Ti 334.940†	677708.3	673512.0	982.86	ug/L	982.86	ppb	13:47:36
2	Tl 190.801†	-208.7	-166.2	0.1429	ug/L	0.1429	ppb	13:48:01
2	U 409.014†	-6386.7	-3536.2	-102.43	ug/L	-102.43	ppb	13:47:41
2	V 292.402†	14697.1	16112.0	93.465	ug/L	93.465	ppb	13:47:41
2	Zn 213.857†	7519.1	6566.5	48.924	ug/L	48.924	ppb	13:48:01
2	SiO2†	275244.8	272328.4	16279	ug/L	16279	ppb	13:48:44
3	Sc Radial	6207.4	6207.4	98.8	%			13:46:36
3	Y RADIAL	6898.0	6898.0	102.1	%			13:46:36
3	Al 396.153Radial†	48603.0	49223.2	30351	ug/L	30351	ppb	13:46:36
3	Ca 317.933Radial†	4283.8	4301.3	5680.1	ug/L	5680.1	ppb	13:46:36
3	Fe 238.204 Radial†	5364.2	5420.5	41140	ug/L	41140	ppb	13:46:36
3	K 766.490 Radial†	14204.2	11474.2	1834.1	ug/L	1834.1	ppb	13:46:36
3	Mg 279.077 IEC†	151.1	150.2	4256.5	ug/L	4256.5	ppb	13:46:56
3	Na 589.592 Radial†	1199.4	2848.2	773.67	ug/L	773.67	ppb	13:46:36
3	Sr 421.552†	11018.4	11120.3	58.391	ug/L	58.391	ppb	13:46:36
3	Sc 361.383	958562.0	958562.0	99.564	%			13:48:08
3	Y 371.029	820668.7	820668.7	102.34	%			13:48:08
3	Ag 328.068†	-2330.7	-2800.6	2.1377	ug/L	2.1377	ppb	13:48:13
3	As 188.979†	-22.9	-0.6	14.380	ug/L	14.380	ppb	13:48:33
3	B 249.677†	50.9	384.9	2.1536	ug/L	2.1536	ppb	13:48:13
3	Ba 233.527†	117118.5	117607.1	785.82	ug/L	785.82	ppb	13:48:13
3	Be 313.107†	-4398.8	264.1	2.0181	ug/L	2.0181	ppb	13:48:13
3	Cd 226.502†	211.1	424.1	0.0131	ug/L	0.0131	ppb	13:48:33
3	Co 228.616†	4391.2	4480.9	75.360	ug/L	75.360	ppb	13:48:33
3	Cr 267.716†	2497.0	2419.9	25.042	ug/L	25.042	ppb	13:48:33
3	Cu 324.752†	11573.3	5329.7	16.878	ug/L	16.878	ppb	13:48:13
3	Mn 257.610†	6095825.7	6121972.4	5958.3	ug/L	5958.3	ppb	13:48:08
3	Mo 202.031†	-5.4	-24.6	1.4662	ug/L	1.4662	ppb	13:48:33
3	Ni 231.604†	1087.3	963.9	20.764	ug/L	20.764	ppb	13:48:33
3	P 214.914†	718.3	480.1	223.13	ug/L	223.13	ppb	13:48:33
3	Pb 220.353†	748.4	834.4	89.357	ug/L	89.357	ppb	13:48:33
3	S 181.975 Axial†	134.1	85.8	98.562	ug/L	98.562	ppb	13:48:33
3	Sb 206.836†	55.6	15.7	1.2595	ug/L	1.2595	ppb	13:48:33
3	Se 196.026†	-288.3	-264.0	3.5551	ug/L	3.5551	ppb	13:48:33
3	Si 251.611†	269042.0	269586.0	7512.8	ug/L	7512.8	ppb	13:48:13
3	Sn 189.927†	-52.0	-61.3	-7.9355	ug/L	-7.9355	ppb	13:48:33
3	Ti 334.940†	668916.2	673235.4	982.46	ug/L	982.46	ppb	13:48:08
3	Tl 190.801†	-212.5	-172.8	-1.5478	ug/L	-1.5478	ppb	13:48:33
3	U 409.014†	-6467.1	-3697.5	-106.86	ug/L	-106.86	ppb	13:48:13
3	V 292.402†	14481.5	16080.9	93.259	ug/L	93.259	ppb	13:48:13
3	Zn 213.857†	7539.9	6682.3	49.863	ug/L	49.863	ppb	13:48:33
3	SiO2†	272610.2	273156.5	16329	ug/L	16329	ppb	13:48:49

Mean Data: 241711001|926576|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	965482.7	100.28	%	0.651				0.65%
Sc Radial	6204.2	98.7	%	0.27				0.28%
Y 371.029	825953.4	102.99	%	0.580				0.56%
Y RADIAL	6897.8	102.1	%	0.43				0.42%
Ag 328.068†	-2843.9	1.9738	ug/L	0.16582	1.9738	ppb	0.16582	8.40%
Al 396.153Radial†	49243.3	30364	ug/L	21.6	30364	ppb	21.6	0.07%
As 188.979†	6.5	16.946	ug/L	2.4726	16.946	ppb	2.4726	14.59%
B 249.677†	425.6	2.9708	ug/L	1.39199	2.9708	ppb	1.39199	46.86%
Ba 233.527†	117822.4	787.26	ug/L	3.646	787.26	ppb	3.646	0.46%
Be 313.107†	354.8	2.0488	ug/L	0.02763	2.0488	ppb	0.02763	1.35%
Ca 317.933Radial†	4304.3	5684.2	ug/L	13.68	5684.2	ppb	13.68	0.24%
Cd 226.502†	415.9	-0.0730	ug/L	0.08772	-0.0730	ppb	0.08772	120.23%
Co 228.616†	4451.7	74.853	ug/L	0.7467	74.853	ppb	0.7467	1.00%
Cr 267.716†	2403.6	24.881	ug/L	0.1544	24.881	ppb	0.1544	0.62%
Cu 324.752†	5271.3	16.720	ug/L	0.1375	16.720	ppb	0.1375	0.82%
Fe 238.204 Radial†	5429.4	41207	ug/L	75.2	41207	ppb	75.2	0.18%
K 766.490 Radial†	11520.4	1841.7	ug/L	11.27	1841.7	ppb	11.27	0.61%

Mg 279.077 IEC†	148.8	4215.7	ug/L	72.40	4215.7	ppb	72.40	1.72%
Mn 257.610†	6120877.0	5957.2	ug/L	3.01	5957.2	ppb	3.01	0.05%
Mo 202.031†	-19.8	1.7543	ug/L	0.47406	1.7543	ppb	0.47406	27.02%
Na 589.592 Radial†	2849.2	773.95	ug/L	6.312	773.95	ppb	6.312	0.82%
Ni 231.604†	959.1	20.661	ug/L	0.3981	20.661	ppb	0.3981	1.93%
P 214.914†	486.1	226.21	ug/L	5.365	226.21	ppb	5.365	2.37%
Pb 220.353†	821.3	88.006	ug/L	1.1761	88.006	ppb	1.1761	1.34%
S 181.975 Axial†	81.4	93.313	ug/L	4.7817	93.313	ppb	4.7817	5.12%
Sb 206.836†	16.5	1.5174	ug/L	0.71501	1.5174	ppb	0.71501	47.12%
Se 196.026†	-259.3	6.3600	ug/L	3.22542	6.3600	ppb	3.22542	50.71%
Si 251.611†	270066.6	7526.2	ug/L	26.95	7526.2	ppb	26.95	0.36%
Sn 189.927†	-59.0	-7.5877	ug/L	0.76062	-7.5877	ppb	0.76062	10.02%
Sr 421.552†	11108.6	58.329	ug/L	0.1652	58.329	ppb	0.1652	0.28%
Ti 334.940†	673437.5	982.75	ug/L	0.258	982.75	ppb	0.258	0.03%
Tl 190.801†	-172.9	-1.5733	ug/L	1.72906	-1.5733	ppb	1.72906	109.90%
U 409.014†	-3621.2	-104.77	ug/L	2.226	-104.77	ppb	2.226	2.12%
V 292.402†	16134.5	93.591	ug/L	0.4101	93.591	ppb	0.4101	0.44%
Zn 213.857†	6631.8	49.450	ug/L	0.4796	49.450	ppb	0.4796	0.97%
SiO2†	271363.4	16222	ug/L	144.9	16222	ppb	144.9	0.89%

Sequence No.: 4
Sample ID: 1201981077|926576|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 12/16/2009 13:50:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981077|926576|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6120.7	6120.7	97.4	%			13:52:52
1	Y RADIAL	6752.7	6752.7	99.93	%			13:52:52
1	Al 396.153Radial†	47340.7	48624.2	29982	ug/L	29982	ppb	13:52:52
1	Ca 317.933Radial†	4314.4	4394.0	5802.6	ug/L	5802.6	ppb	13:52:52
1	Fe 238.204 Radial†	5161.7	5289.6	40144	ug/L	40144	ppb	13:52:52
1	K 766.490 Radial†	13599.7	11057.3	1813.7	ug/L	1813.7	ppb	13:52:52
1	Mg 279.077 IEC†	146.6	147.8	4188.9	ug/L	4188.9	ppb	13:53:12
1	Na 589.592 Radial†	1086.1	2749.2	746.77	ug/L	746.77	ppb	13:52:52
1	Sr 421.552†	10117.0	10353.0	54.357	ug/L	54.357	ppb	13:52:52
1	Sc 361.383	958203.5	958203.5	99.527	%			13:54:10
1	Y 371.029	813279.4	813279.4	101.41	%			13:54:10
1	Ag 328.068†	-2532.4	-3004.1	0.9065	ug/L	0.9065	ppb	13:54:15
1	As 188.979†	-19.8	2.5	15.531	ug/L	15.531	ppb	13:54:35
1	B 249.677†	-2.7	331.0	1.3139	ug/L	1.3139	ppb	13:54:15
1	Ba 233.527†	53585.3	53815.6	360.50	ug/L	360.50	ppb	13:54:15
1	Be 313.107†	-5007.6	-349.2	1.8609	ug/L	1.8609	ppb	13:54:15
1	Cd 226.502†	196.5	409.5	-0.0325	ug/L	-0.0325	ppb	13:54:35
1	Co 228.616†	1628.9	1707.1	27.039	ug/L	27.039	ppb	13:54:35
1	Cr 267.716†	2448.1	2371.7	24.535	ug/L	24.535	ppb	13:54:35
1	Cu 324.752†	11342.1	5101.8	16.195	ug/L	16.195	ppb	13:54:15
1	Mn 257.610†	2072444.7	2081745.8	2028.6	ug/L	2028.6	ppb	13:54:10
1	Mo 202.031†	6.6	-12.5	2.1109	ug/L	2.1109	ppb	13:54:35
1	Ni 231.604†	838.9	714.7	15.414	ug/L	15.414	ppb	13:54:35
1	P 214.914†	633.2	394.9	179.80	ug/L	179.80	ppb	13:54:35
1	Pb 220.353†	351.5	435.8	48.311	ug/L	48.311	ppb	13:54:35
1	S 181.975 Axial†	109.4	61.0	68.469	ug/L	68.469	ppb	13:54:35
1	Sb 206.836†	43.8	3.9	-2.2625	ug/L	-2.2625	ppb	13:54:35
1	Se 196.026†	-276.2	-252.0	6.6644	ug/L	6.6644	ppb	13:54:35
1	Si 251.611†	268769.7	269413.4	7508.0	ug/L	7508.0	ppb	13:54:15
1	Sn 189.927†	-47.1	-56.4	-7.2091	ug/L	-7.2091	ppb	13:54:35
1	Ti 334.940†	684770.5	689416.4	1006.1	ug/L	1006.1	ppb	13:54:10
1	Tl 190.801†	-117.3	-77.2	0.2940	ug/L	0.2940	ppb	13:54:35
1	U 409.014†	-5333.1	-2560.5	-75.483	ug/L	-75.483	ppb	13:54:15
1	V 292.402†	14560.5	16165.8	93.985	ug/L	93.985	ppb	13:54:15
1	Zn 213.857†	7342.6	6486.9	48.414	ug/L	48.414	ppb	13:54:35
1	SiO2†	271059.9	271701.2	16242	ug/L	16242	ppb	13:55:42
2	Sc Radial	6417.5	6417.5	102	%			13:53:17
2	Y RADIAL	7061.9	7061.9	104.5	%			13:53:17
2	Al 396.153Radial†	49476.6	48468.1	29886	ug/L	29886	ppb	13:53:17
2	Ca 317.933Radial†	4497.8	4368.8	5769.3	ug/L	5769.3	ppb	13:53:17
2	Fe 238.204 Radial†	5370.2	5248.7	39834	ug/L	39834	ppb	13:53:17
2	K 766.490 Radial†	14189.6	10989.2	1802.4	ug/L	1802.4	ppb	13:53:17
2	Mg 279.077 IEC†	149.3	143.5	4066.6	ug/L	4066.6	ppb	13:53:37
2	Na 589.592 Radial†	1181.5	2791.0	758.13	ug/L	758.13	ppb	13:53:17
2	Sr 421.552†	10644.4	10389.1	54.547	ug/L	54.547	ppb	13:53:17
2	Sc 361.383	957660.6	957660.6	99.470	%			13:54:41
2	Y 371.029	813028.4	813028.4	101.38	%			13:54:41
2	Ag 328.068†	-2393.1	-2865.5	1.3853	ug/L	1.3853	ppb	13:54:46
2	As 188.979†	-30.7	-8.6	11.521	ug/L	11.521	ppb	13:55:06
2	B 249.677†	-0.9	332.9	1.3939	ug/L	1.3939	ppb	13:54:46
2	Ba 233.527†	52403.6	52658.2	352.76	ug/L	352.76	ppb	13:54:46
2	Be 313.107†	-4916.3	-260.2	1.8878	ug/L	1.8878	ppb	13:54:46
2	Cd 226.502†	188.0	401.1	-0.0829	ug/L	-0.0829	ppb	13:55:06
2	Co 228.616†	1594.1	1673.0	26.450	ug/L	26.450	ppb	13:55:06
2	Cr 267.716†	2451.9	2376.9	24.576	ug/L	24.576	ppb	13:55:06
2	Cu 324.752†	11019.5	4783.9	15.298	ug/L	15.298	ppb	13:54:46
2	Mn 257.610†	2065876.1	2076322.7	2023.3	ug/L	2023.3	ppb	13:54:41
2	Mo 202.031†	-7.1	-26.2	1.2765	ug/L	1.2765	ppb	13:55:06
2	Ni 231.604†	835.8	712.1	15.358	ug/L	15.358	ppb	13:55:06

2	P 214.914†	632.3	394.3	179.88	ug/L	179.88	ppb	13:55:06
2	Pb 220.353†	362.9	447.5	49.513	ug/L	49.513	ppb	13:55:06
2	S 181.975 Axial†	112.1	63.8	71.907	ug/L	71.907	ppb	13:55:06
2	Sb 206.836†	54.1	14.3	0.7825	ug/L	0.7825	ppb	13:55:06
2	Se 196.026†	-265.8	-241.6	11.230	ug/L	11.230	ppb	13:55:06
2	Si 251.611†	261823.2	262583.1	7317.6	ug/L	7317.6	ppb	13:54:46
2	Sn 189.927†	-48.6	-58.0	-7.4559	ug/L	-7.4559	ppb	13:55:06
2	Ti 334.940†	683480.9	688510.1	1004.7	ug/L	1004.7	ppb	13:54:41
2	Tl 190.801†	-120.1	-80.0	-0.4790	ug/L	-0.4790	ppb	13:55:06
2	U 409.014†	-5180.8	-2410.5	-71.320	ug/L	-71.320	ppb	13:54:46
2	V 292.402†	14198.9	15810.6	91.802	ug/L	91.802	ppb	13:54:46
2	Zn 213.857†	7331.1	6479.5	48.389	ug/L	48.389	ppb	13:55:06
2	SiO2†	270264.2	271055.7	16203	ug/L	16203	ppb	13:55:48
3	Sc Radial	6244.2	6244.2	99.4	%			13:53:42
3	Y RADIAL	6888.3	6888.3	101.9	%			13:53:42
3	Al 396.153Radial†	48224.7	48552.7	29938	ug/L	29938	ppb	13:53:42
3	Ca 317.933Radial†	4412.1	4404.8	5816.9	ug/L	5816.9	ppb	13:53:42
3	Fe 238.204 Radial†	5239.7	5263.2	39945	ug/L	39945	ppb	13:53:42
3	K 766.490 Radial†	13641.1	10822.8	1774.8	ug/L	1774.8	ppb	13:53:42
3	Mg 279.077 IEC†	149.9	148.1	4197.1	ug/L	4197.1	ppb	13:54:02
3	Na 589.592 Radial†	1046.8	2687.5	730.02	ug/L	730.02	ppb	13:53:42
3	Sr 421.552†	10343.4	10375.4	54.475	ug/L	54.475	ppb	13:53:42
3	Sc 361.383	964544.7	964544.7	100.19	%			13:55:12
3	Y 371.029	819634.2	819634.2	102.21	%			13:55:12
3	Ag 328.068†	-2450.8	-2905.9	1.2527	ug/L	1.2527	ppb	13:55:17
3	As 188.979†	-27.8	-5.4	12.688	ug/L	12.688	ppb	13:55:37
3	B 249.677†	-111.2	222.8	-0.8531	ug/L	-0.8531	ppb	13:55:17
3	Ba 233.527†	53533.6	53410.2	357.78	ug/L	357.78	ppb	13:55:17
3	Be 313.107†	-5079.4	-387.7	1.8471	ug/L	1.8471	ppb	13:55:17
3	Cd 226.502†	214.7	426.4	0.1512	ug/L	0.1512	ppb	13:55:37
3	Co 228.616†	1611.7	1679.2	26.557	ug/L	26.557	ppb	13:55:37
3	Cr 267.716†	2469.1	2376.5	24.576	ug/L	24.576	ppb	13:55:37
3	Cu 324.752†	11270.6	4955.5	15.779	ug/L	15.779	ppb	13:55:17
3	Mn 257.610†	2078390.8	2073991.1	2021.1	ug/L	2021.1	ppb	13:55:12
3	Mo 202.031†	-1.3	-20.4	1.6269	ug/L	1.6269	ppb	13:55:37
3	Ni 231.604†	839.8	710.1	15.315	ug/L	15.315	ppb	13:55:37
3	P 214.914†	631.8	389.3	177.16	ug/L	177.16	ppb	13:55:37
3	Pb 220.353†	352.9	434.9	48.217	ug/L	48.217	ppb	13:55:37
3	S 181.975 Axial†	103.4	54.4	60.364	ug/L	60.364	ppb	13:55:37
3	Sb 206.836†	59.5	19.3	2.2815	ug/L	2.2815	ppb	13:55:37
3	Se 196.026†	-276.2	-250.2	6.9562	ug/L	6.9562	ppb	13:55:37
3	Si 251.611†	268352.0	267221.2	7446.9	ug/L	7446.9	ppb	13:55:17
3	Sn 189.927†	-42.3	-51.3	-6.4616	ug/L	-6.4616	ppb	13:55:37
3	Ti 334.940†	688966.9	689081.8	1005.6	ug/L	1005.6	ppb	13:55:12
3	Tl 190.801†	-124.3	-83.4	-1.3372	ug/L	-1.3372	ppb	13:55:37
3	U 409.014†	-5256.0	-2448.3	-72.373	ug/L	-72.373	ppb	13:55:17
3	V 292.402†	14444.1	15953.5	92.685	ug/L	92.685	ppb	13:55:17
3	Zn 213.857†	7357.8	6453.5	48.164	ug/L	48.164	ppb	13:55:37
3	SiO2†	269342.9	268196.9	16032	ug/L	16032	ppb	13:55:53

Mean Data: 1201981077|926576|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	960136.3	99.727	%	0.3976				0.40%
Sc Radial	6260.8	99.6	%	2.37				2.38%
Y 371.029	815314.0	101.67	%	0.467				0.46%
Y RADIAL	6901.0	102.1	%	2.29				2.25%
Ag 328.068†	-2925.1	1.1815	ug/L	0.24721	1.1815	ppb	0.24721	20.92%
Al 396.153Radial†	48548.4	29935	ug/L	48.2	29935	ppb	48.2	0.16%
As 188.979†	-3.8	13.246	ug/L	2.0624	13.246	ppb	2.0624	15.57%
B 249.677†	295.6	0.6182	ug/L	1.27486	0.6182	ppb	1.27486	206.21%
Ba 233.527†	53294.7	357.01	ug/L	3.923	357.01	ppb	3.923	1.10%
Be 313.107†	-332.4	1.8653	ug/L	0.02070	1.8653	ppb	0.02070	1.11%
Ca 317.933Radial†	4389.2	5796.3	ug/L	24.42	5796.3	ppb	24.42	0.42%
Cd 226.502†	412.3	0.0119	ug/L	0.12324	0.0119	ppb	0.12324	>999.9%
Co 228.616†	1686.4	26.682	ug/L	0.3139	26.682	ppb	0.3139	1.18%
Cr 267.716†	2375.0	24.563	ug/L	0.0238	24.563	ppb	0.0238	0.10%
Cu 324.752†	4947.1	15.758	ug/L	0.4491	15.758	ppb	0.4491	2.85%
Fe 238.204 Radial†	5267.2	39974	ug/L	157.2	39974	ppb	157.2	0.39%
K 766.490 Radial†	10956.5	1797.0	ug/L	19.97	1797.0	ppb	19.97	1.11%

Mg 279.077 IEC†	146.4	4150.8	ug/L	73.09	4150.8	ppb	73.09	1.76%
Mn 257.610†	2077353.2	2024.3	ug/L	3.88	2024.3	ppb	3.88	0.19%
Mo 202.031†	-19.7	1.6714	ug/L	0.41898	1.6714	ppb	0.41898	25.07%
Na 589.592 Radial†	2742.6	744.97	ug/L	14.138	744.97	ppb	14.138	1.90%
Ni 231.604†	712.3	15.363	ug/L	0.0496	15.363	ppb	0.0496	0.32%
P 214.914†	392.9	178.95	ug/L	1.548	178.95	ppb	1.548	0.87%
Pb 220.353†	439.4	48.680	ug/L	0.7227	48.680	ppb	0.7227	1.48%
S 181.975 Axial†	59.7	66.913	ug/L	5.9264	66.913	ppb	5.9264	8.86%
Sb 206.836†	12.5	0.2672	ug/L	2.31539	0.2672	ppb	2.31539	866.62%
Se 196.026†	-247.9	8.2836	ug/L	2.55601	8.2836	ppb	2.55601	30.86%
Si 251.611†	266405.9	7424.2	ug/L	97.19	7424.2	ppb	97.19	1.31%
Sn 189.927†	-55.2	-7.0422	ug/L	0.51775	-7.0422	ppb	0.51775	7.35%
Sr 421.552†	10372.5	54.460	ug/L	0.0959	54.460	ppb	0.0959	0.18%
Ti 334.940†	689002.8	1005.5	ug/L	0.67	1005.5	ppb	0.67	0.07%
Tl 190.801†	-80.2	-0.5074	ug/L	0.81598	-0.5074	ppb	0.81598	160.81%
U 409.014†	-2473.1	-73.059	ug/L	2.1647	-73.059	ppb	2.1647	2.96%
V 292.402†	15976.6	92.824	ug/L	1.0980	92.824	ppb	1.0980	1.18%
Zn 213.857†	6473.3	48.322	ug/L	0.1379	48.322	ppb	0.1379	0.29%
SiO2†	270318.0	16159	ug/L	111.5	16159	ppb	111.5	0.69%

Sequence No.: 5
Sample ID: 1201981078|926576|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/16/2009 13:58:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981078|926576|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6233.0	6233.0	99.2	%			13:59:57
1	Y RADIAL	6753.0	6753.0	99.94	%			13:59:57
1	Al 396.153Radial†	71742.8	72346.7	44605	ug/L	44605	ppb	13:59:57
1	Ca 317.933Radial†	4520.7	4522.2	5971.9	ug/L	5971.9	ppb	13:59:57
1	Fe 238.204 Radial†	4691.6	4720.2	35826	ug/L	35826	ppb	13:59:57
1	K 766.490 Radial†	24544.2	21838.1	3613.2	ug/L	3613.2	ppb	13:59:57
1	Mg 279.077 IEC†	215.1	214.1	6089.6	ug/L	6089.6	ppb	14:00:17
1	Na 589.592 Radial†	4954.5	6628.5	1800.5	ug/L	1800.5	ppb	13:59:57
1	Sr 421.552†	29726.0	29932.6	157.26	ug/L	157.26	ppb	13:59:57
1	Sc 361.383	947168.8	947168.8	98.380	%			14:01:14
1	Y 371.029	793134.7	793134.7	98.902	%			14:01:14
1	Ag 328.068†	22982.8	22901.4	110.75	ug/L	110.75	ppb	14:01:14
1	As 188.979†	250.8	277.2	115.38	ug/L	115.38	ppb	14:01:34
1	B 249.677†	4813.8	5226.8	100.95	ug/L	100.95	ppb	14:01:34
1	Ba 233.527†	61113.7	62095.2	415.71	ug/L	415.71	ppb	14:01:14
1	Be 313.107†	312930.0	322763.7	109.63	ug/L	109.63	ppb	14:01:14
1	Cd 226.502†	11210.2	11606.8	109.05	ug/L	109.05	ppb	14:01:34
1	Co 228.616†	7184.9	7373.6	125.05	ug/L	125.05	ppb	14:01:34
1	Cr 267.716†	13413.7	13546.5	135.83	ug/L	135.83	ppb	14:01:34
1	Cu 324.752†	50067.5	44597.4	125.50	ug/L	125.50	ppb	14:01:14
1	Mn 257.610†	1299367.9	1320201.9	1287.5	ug/L	1287.5	ppb	14:01:14
1	Mo 202.031†	1612.8	1620.3	98.308	ug/L	98.308	ppb	14:01:34
1	Ni 231.604†	5902.0	5871.0	126.69	ug/L	126.69	ppb	14:01:34
1	P 214.914†	804.6	576.5	266.25	ug/L	266.25	ppb	14:01:34
1	Pb 220.353†	1232.7	1335.7	144.77	ug/L	144.77	ppb	14:01:34
1	S 181.975 Axial†	989.8	957.2	1158.1	ug/L	1158.1	ppb	14:01:34
1	Sb 206.836†	289.6	254.2	72.244	ug/L	72.244	ppb	14:01:34
1	Se 196.026†	-54.6	-29.9	117.53	ug/L	117.53	ppb	14:01:34
1	Si 251.611†	266101.6	269847.5	7517.4	ug/L	7517.4	ppb	14:01:14
1	Sn 189.927†	698.9	701.3	105.16	ug/L	105.16	ppb	14:01:34
1	Ti 334.940†	849339.8	864710.6	1261.7	ug/L	1261.7	ppb	14:01:14
1	Tl 190.801†	326.5	372.6	112.65	ug/L	112.65	ppb	14:01:34
1	U 409.014†	-475.2	2314.9	58.867	ug/L	58.867	ppb	14:01:14
1	V 292.402†	26521.6	28494.2	173.22	ug/L	173.22	ppb	14:01:14
1	Zn 213.857†	21749.9	21217.3	167.15	ug/L	167.15	ppb	14:01:34
1	SiO2†	268482.9	272254.7	16269	ug/L	16269	ppb	14:02:31
2	Sc Radial	6189.3	6189.3	98.5	%			14:00:22
2	Y RADIAL	6723.6	6723.6	99.50	%			14:00:22
2	Al 396.153Radial†	71296.4	72404.9	44641	ug/L	44641	ppb	14:00:22
2	Ca 317.933Radial†	4503.1	4536.6	5990.9	ug/L	5990.9	ppb	14:00:22
2	Fe 238.204 Radial†	4631.4	4692.5	35616	ug/L	35616	ppb	14:00:22
2	K 766.490 Radial†	24415.4	21882.4	3620.5	ug/L	3620.5	ppb	14:00:22
2	Mg 279.077 IEC†	214.6	215.2	6120.3	ug/L	6120.3	ppb	14:00:42
2	Na 589.592 Radial†	4849.6	6557.4	1781.2	ug/L	1781.2	ppb	14:00:22
2	Sr 421.552†	29463.2	29877.6	156.97	ug/L	156.97	ppb	14:00:22
2	Sc 361.383	951533.7	951533.7	98.834	%			14:01:40
2	Y 371.029	798578.9	798578.9	99.581	%			14:01:40
2	Ag 328.068†	23034.9	22847.0	110.44	ug/L	110.44	ppb	14:01:40
2	As 188.979†	256.5	281.8	117.01	ug/L	117.01	ppb	14:02:00
2	B 249.677†	4854.7	5245.7	101.36	ug/L	101.36	ppb	14:02:00
2	Ba 233.527†	61424.2	62124.5	415.90	ug/L	415.90	ppb	14:01:40
2	Be 313.107†	314717.7	323113.3	109.75	ug/L	109.75	ppb	14:01:40
2	Cd 226.502†	11120.6	11463.9	107.68	ug/L	107.68	ppb	14:02:00
2	Co 228.616†	7162.4	7317.4	124.07	ug/L	124.07	ppb	14:02:00
2	Cr 267.716†	13333.2	13402.4	134.39	ug/L	134.39	ppb	14:02:00
2	Cu 324.752†	50412.3	44712.8	125.81	ug/L	125.81	ppb	14:01:40
2	Mn 257.610†	1304954.9	1319796.2	1287.1	ug/L	1287.1	ppb	14:01:40
2	Mo 202.031†	1605.8	1605.6	97.426	ug/L	97.426	ppb	14:02:00
2	Ni 231.604†	5879.6	5820.9	125.61	ug/L	125.61	ppb	14:02:00

2	P 214.914†	799.7	567.8	261.88	ug/L	261.88	ppb	14:02:00
2	Pb 220.353†	1235.7	1332.9	144.51	ug/L	144.51	ppb	14:02:00
2	S 181.975 Axial†	988.5	951.2	1150.8	ug/L	1150.8	ppb	14:02:00
2	Sb 206.836†	294.2	257.5	73.211	ug/L	73.211	ppb	14:02:00
2	Se 196.026†	-42.3	-17.2	123.76	ug/L	123.76	ppb	14:02:00
2	Si 251.611†	267498.6	270020.3	7522.3	ug/L	7522.3	ppb	14:01:40
2	Sn 189.927†	694.6	693.7	104.03	ug/L	104.03	ppb	14:02:00
2	Ti 334.940†	854330.6	865800.0	1263.3	ug/L	1263.3	ppb	14:01:40
2	Tl 190.801†	304.9	349.2	106.68	ug/L	106.68	ppb	14:02:00
2	U 409.014†	-252.3	2542.7	65.157	ug/L	65.157	ppb	14:01:40
2	V 292.402†	26673.7	28524.4	173.44	ug/L	173.44	ppb	14:01:40
2	Zn 213.857†	21584.6	20948.6	165.00	ug/L	165.00	ppb	14:02:00
2	SiO2†	269141.3	271669.0	16234	ug/L	16234	ppb	14:02:37
3	Sc Radial	6117.1	6117.1	97.4	%			14:00:47
3	Y RADIAL	6636.2	6636.2	98.21	%			14:00:47
3	Al 396.153Radial†	70363.2	72300.2	44577	ug/L	44577	ppb	14:00:47
3	Ca 317.933Radial†	4413.6	4498.6	5940.6	ug/L	5940.6	ppb	14:00:47
3	Fe 238.204 Radial†	4569.5	4684.4	35555	ug/L	35555	ppb	14:00:47
3	K 766.490 Radial†	24144.6	21896.6	3622.9	ug/L	3622.9	ppb	14:00:47
3	Mg 279.077 IEC†	211.4	214.4	6098.8	ug/L	6098.8	ppb	14:01:07
3	Na 589.592 Radial†	4861.4	6627.6	1800.3	ug/L	1800.3	ppb	14:00:47
3	Sr 421.552†	29072.4	29829.1	156.71	ug/L	156.71	ppb	14:00:47
3	Sc 361.383	946835.3	946835.3	98.346	%			14:02:06
3	Y 371.029	795217.4	795217.4	99.162	%			14:02:06
3	Ag 328.068†	23034.7	22962.5	110.92	ug/L	110.92	ppb	14:02:06
3	As 188.979†	259.9	286.7	118.71	ug/L	118.71	ppb	14:02:26
3	B 249.677†	4817.8	5232.6	101.10	ug/L	101.10	ppb	14:02:26
3	Ba 233.527†	61001.2	62002.7	415.08	ug/L	415.08	ppb	14:02:06
3	Be 313.107†	313198.2	323148.4	109.76	ug/L	109.76	ppb	14:02:06
3	Cd 226.502†	11163.3	11563.1	108.65	ug/L	108.65	ppb	14:02:26
3	Co 228.616†	7172.9	7364.0	124.89	ug/L	124.89	ppb	14:02:26
3	Cr 267.716†	13361.3	13498.0	135.34	ug/L	135.34	ppb	14:02:26
3	Cu 324.752†	50131.4	44680.4	125.71	ug/L	125.71	ppb	14:02:06
3	Mn 257.610†	1296964.5	1318223.3	1285.5	ug/L	1285.5	ppb	14:02:06
3	Mo 202.031†	1632.6	1641.0	99.511	ug/L	99.511	ppb	14:02:26
3	Ni 231.604†	5901.5	5872.6	126.73	ug/L	126.73	ppb	14:02:26
3	P 214.914†	792.7	564.7	260.29	ug/L	260.29	ppb	14:02:26
3	Pb 220.353†	1231.6	1335.0	144.72	ug/L	144.72	ppb	14:02:26
3	S 181.975 Axial†	986.5	954.2	1154.4	ug/L	1154.4	ppb	14:02:26
3	Sb 206.836†	286.8	251.6	71.468	ug/L	71.468	ppb	14:02:26
3	Se 196.026†	-62.2	-37.7	112.37	ug/L	112.37	ppb	14:02:26
3	Si 251.611†	265861.1	269698.3	7513.3	ug/L	7513.3	ppb	14:02:06
3	Sn 189.927†	689.3	691.8	103.74	ug/L	103.74	ppb	14:02:26
3	Ti 334.940†	849044.9	864714.8	1261.7	ug/L	1261.7	ppb	14:02:06
3	Tl 190.801†	311.7	357.7	108.83	ug/L	108.83	ppb	14:02:26
3	U 409.014†	-273.7	2519.6	64.529	ug/L	64.529	ppb	14:02:06
3	V 292.402†	26550.4	28533.0	173.54	ug/L	173.54	ppb	14:02:06
3	Zn 213.857†	21633.2	21106.4	166.28	ug/L	166.28	ppb	14:02:26
3	SiO2†	270218.7	274115.9	16380	ug/L	16380	ppb	14:02:42

Mean Data: 1201981078|926576|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	948512.6	98.520	%	0.2723				0.28%
Sc Radial	6179.8	98.4	%	0.93				0.95%
Y 371.029	795643.7	99.215	%	0.3425				0.35%
Y RADIAL	6704.3	99.22	%	0.899				0.91%
Ag 328.068†	22903.6	110.70	ug/L	0.241	110.70	ppb	0.241	0.22%
Al 396.153Radial†	72350.6	44608	ug/L	32.4	44608	ppb	32.4	0.07%
As 188.979†	281.9	117.03	ug/L	1.663	117.03	ppb	1.663	1.42%
B 249.677†	5235.1	101.14	ug/L	0.209	101.14	ppb	0.209	0.21%
Ba 233.527†	62074.1	415.56	ug/L	0.426	415.56	ppb	0.426	0.10%
Be 313.107†	323008.5	109.72	ug/L	0.071	109.72	ppb	0.071	0.07%
Ca 317.933Radial†	4519.1	5967.8	ug/L	25.37	5967.8	ppb	25.37	0.43%
Cd 226.502†	11544.6	108.46	ug/L	0.702	108.46	ppb	0.702	0.65%
Co 228.616†	7351.7	124.67	ug/L	0.524	124.67	ppb	0.524	0.42%
Cr 267.716†	13482.3	135.18	ug/L	0.732	135.18	ppb	0.732	0.54%
Cu 324.752†	44663.5	125.67	ug/L	0.159	125.67	ppb	0.159	0.13%
Fe 238.204 Radial†	4699.0	35666	ug/L	142.4	35666	ppb	142.4	0.40%
K 766.490 Radial†	21872.3	3618.8	ug/L	5.07	3618.8	ppb	5.07	0.14%

Mg 279.077 IEC†	214.6	6102.9	ug/L	15.75	6102.9	ppb	15.75	0.26%
Mn 257.610†	1319407.2	1286.7	ug/L	1.03	1286.7	ppb	1.03	0.08%
Mo 202.031†	1622.3	98.415	ug/L	1.0464	98.415	ppb	1.0464	1.06%
Na 589.592 Radial†	6604.5	1794.0	ug/L	11.08	1794.0	ppb	11.08	0.62%
Ni 231.604†	5854.8	126.35	ug/L	0.635	126.35	ppb	0.635	0.50%
P 214.914†	569.7	262.81	ug/L	3.085	262.81	ppb	3.085	1.17%
Pb 220.353†	1334.5	144.67	ug/L	0.138	144.67	ppb	0.138	0.10%
S 181.975 Axial†	954.2	1154.4	ug/L	3.67	1154.4	ppb	3.67	0.32%
Sb 206.836†	254.4	72.307	ug/L	0.8732	72.307	ppb	0.8732	1.21%
Se 196.026†	-28.3	117.89	ug/L	5.704	117.89	ppb	5.704	4.84%
Si 251.611†	269855.4	7517.7	ug/L	4.51	7517.7	ppb	4.51	0.06%
Sn 189.927†	695.6	104.31	ug/L	0.751	104.31	ppb	0.751	0.72%
Sr 421.552†	29879.8	156.98	ug/L	0.272	156.98	ppb	0.272	0.17%
Ti 334.940†	865075.1	1262.2	ug/L	0.92	1262.2	ppb	0.92	0.07%
Tl 190.801†	359.9	109.39	ug/L	3.024	109.39	ppb	3.024	2.76%
U 409.014†	2459.0	62.851	ug/L	3.4646	62.851	ppb	3.4646	5.51%
V 292.402†	28517.2	173.40	ug/L	0.161	173.40	ppb	0.161	0.09%
Zn 213.857†	21090.8	166.14	ug/L	1.081	166.14	ppb	1.081	0.65%
SiO2†	272679.9	16295	ug/L	76.3	16295	ppb	76.3	0.47%

Sequence No.: 6
Sample ID: 1201981080|926576|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/16/2009 14:04:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981080|926576|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6212.3	6212.3	98.9	%			14:06:46
1	Y RADIAL	6743.5	6743.5	99.80	%			14:06:46
1	Al 396.153Radial†	73045.0	73905.3	45566	ug/L	45566	ppb	14:06:46
1	Ca 317.933Radial†	4625.3	4643.2	6131.6	ug/L	6131.6	ppb	14:06:46
1	Fe 238.204 Radial†	4846.9	4893.1	37138	ug/L	37138	ppb	14:06:46
1	K 766.490 Radial†	26002.5	23395.7	3877.5	ug/L	3877.5	ppb	14:06:46
1	Mg 279.077 IEC†	227.6	227.5	6470.2	ug/L	6470.2	ppb	14:07:06
1	Na 589.592 Radial†	5176.6	6869.9	1866.1	ug/L	1866.1	ppb	14:06:46
1	Sr 421.552†	29962.4	30271.7	159.04	ug/L	159.04	ppb	14:06:46
1	Sc 361.383	962198.8	962198.8	99.942	%			14:08:03
1	Y 371.029	806426.2	806426.2	100.56	%			14:08:03
1	Ag 328.068†	22839.4	22393.1	109.00	ug/L	109.00	ppb	14:08:03
1	As 188.979†	249.9	272.4	114.10	ug/L	114.10	ppb	14:08:24
1	B 249.677†	4843.2	5179.8	99.836	ug/L	99.836	ppb	14:08:24
1	Ba 233.527†	60565.9	60576.8	405.64	ug/L	405.64	ppb	14:08:03
1	Be 313.107†	314418.9	319284.8	108.54	ug/L	108.54	ppb	14:08:03
1	Cd 226.502†	11192.8	11411.4	107.02	ug/L	107.02	ppb	14:08:24
1	Co 228.616†	6886.8	6961.3	117.81	ug/L	117.81	ppb	14:08:24
1	Cr 267.716†	13464.6	13384.4	134.23	ug/L	134.23	ppb	14:08:24
1	Cu 324.752†	50544.6	44279.8	124.68	ug/L	124.68	ppb	14:08:03
1	Mn 257.610†	838038.3	837971.8	818.59	ug/L	818.59	ppb	14:08:03
1	Mo 202.031†	1605.8	1587.6	96.470	ug/L	96.470	ppb	14:08:24
1	Ni 231.604†	5896.0	5771.3	124.55	ug/L	124.55	ppb	14:08:24
1	P 214.914†	839.8	599.0	277.25	ug/L	277.25	ppb	14:08:24
1	Pb 220.353†	1177.1	1260.5	137.13	ug/L	137.13	ppb	14:08:24
1	S 181.975 Axial†	992.6	944.3	1142.1	ug/L	1142.1	ppb	14:08:24
1	Sb 206.836†	279.2	239.2	67.649	ug/L	67.649	ppb	14:08:24
1	Se 196.026†	-66.8	-41.3	116.05	ug/L	116.05	ppb	14:08:24
1	Si 251.611†	272757.7	272282.5	7585.3	ug/L	7585.3	ppb	14:08:03
1	Sn 189.927†	680.0	671.3	100.74	ug/L	100.74	ppb	14:08:24
1	Ti 334.940†	882505.4	884410.0	1290.4	ug/L	1290.4	ppb	14:08:03
1	Tl 190.801†	324.5	365.4	108.34	ug/L	108.34	ppb	14:08:24
1	U 409.014†	-264.8	2533.0	64.699	ug/L	64.699	ppb	14:08:03
1	V 292.402†	27036.1	28587.9	173.57	ug/L	173.57	ppb	14:08:03
1	Zn 213.857†	22253.2	21375.5	168.31	ug/L	168.31	ppb	14:08:24
1	SiO2†	268541.1	268050.1	16018	ug/L	16018	ppb	14:09:21
2	Sc Radial	6172.1	6172.1	98.2	%			14:07:11
2	Y RADIAL	6720.0	6720.0	99.45	%			14:07:11
2	Al 396.153Radial†	72254.3	73581.1	45367	ug/L	45367	ppb	14:07:11
2	Ca 317.933Radial†	4589.2	4637.0	6123.4	ug/L	6123.4	ppb	14:07:11
2	Fe 238.204 Radial†	4791.5	4868.6	36952	ug/L	36952	ppb	14:07:11
2	K 766.490 Radial†	25669.6	23227.9	3849.7	ug/L	3849.7	ppb	14:07:11
2	Mg 279.077 IEC†	234.2	235.6	6704.5	ug/L	6704.5	ppb	14:07:31
2	Na 589.592 Radial†	4973.6	6697.3	1819.2	ug/L	1819.2	ppb	14:07:11
2	Sr 421.552†	29574.0	30073.5	158.00	ug/L	158.00	ppb	14:07:11
2	Sc 361.383	956436.4	956436.4	99.343	%			14:08:29
2	Y 371.029	800494.2	800494.2	99.820	%			14:08:29
2	Ag 328.068†	22770.9	22461.8	109.23	ug/L	109.23	ppb	14:08:29
2	As 188.979†	260.6	284.6	118.45	ug/L	118.45	ppb	14:08:49
2	B 249.677†	4811.0	5176.6	99.796	ug/L	99.796	ppb	14:08:49
2	Ba 233.527†	60038.7	60411.2	404.52	ug/L	404.52	ppb	14:08:29
2	Be 313.107†	310891.1	317629.2	107.99	ug/L	107.99	ppb	14:08:29
2	Cd 226.502†	11083.7	11369.1	106.63	ug/L	106.63	ppb	14:08:49
2	Co 228.616†	6836.5	6952.2	117.65	ug/L	117.65	ppb	14:08:49
2	Cr 267.716†	13347.7	13347.9	133.87	ug/L	133.87	ppb	14:08:49
2	Cu 324.752†	50490.4	44530.0	125.37	ug/L	125.37	ppb	14:08:29
2	Mn 257.610†	831157.6	836097.7	816.75	ug/L	816.75	ppb	14:08:29
2	Mo 202.031†	1586.8	1578.2	95.900	ug/L	95.900	ppb	14:08:49
2	Ni 231.604†	5798.0	5708.2	123.19	ug/L	123.19	ppb	14:08:49

2	P 214.914†	840.8	605.1	280.38	ug/L	280.38	ppb	14:08:49
2	Pb 220.353†	1162.4	1252.7	136.31	ug/L	136.31	ppb	14:08:49
2	S 181.975 Axial†	979.9	937.5	1133.9	ug/L	1133.9	ppb	14:08:49
2	Sb 206.836†	288.1	249.9	70.812	ug/L	70.812	ppb	14:08:49
2	Se 196.026†	-72.1	-46.9	112.26	ug/L	112.26	ppb	14:08:49
2	Si 251.611†	270958.4	272115.6	7580.6	ug/L	7580.6	ppb	14:08:29
2	Sn 189.927†	683.7	679.1	101.90	ug/L	101.90	ppb	14:08:49
2	Ti 334.940†	877404.5	884595.5	1290.7	ug/L	1290.7	ppb	14:08:29
2	Tl 190.801†	315.3	358.1	106.46	ug/L	106.46	ppb	14:08:49
2	U 409.014†	-141.4	2655.6	68.096	ug/L	68.096	ppb	14:08:29
2	V 292.402†	26738.1	28451.0	172.75	ug/L	172.75	ppb	14:08:29
2	Zn 213.857†	22038.7	21293.7	167.66	ug/L	167.66	ppb	14:08:49
2	SiO2†	269275.8	270408.6	16159	ug/L	16159	ppb	14:09:26
3	Sc Radial	6260.2	6260.2	99.6	%			14:07:36
3	Y RADIAL	6788.0	6788.0	100.5	%			14:07:36
3	Al 396.153Radial†	73437.3	73733.9	45461	ug/L	45461	ppb	14:07:36
3	Ca 317.933Radial†	4677.2	4659.5	6153.2	ug/L	6153.2	ppb	14:07:36
3	Fe 238.204 Radial†	4868.5	4877.2	37018	ug/L	37018	ppb	14:07:36
3	K 766.490 Radial†	25964.8	23156.7	3837.9	ug/L	3837.9	ppb	14:07:36
3	Mg 279.077 IEC†	226.3	224.4	6382.1	ug/L	6382.1	ppb	14:07:56
3	Na 589.592 Radial†	5038.6	6691.3	1817.6	ug/L	1817.6	ppb	14:07:36
3	Sr 421.552†	30085.0	30162.9	158.47	ug/L	158.47	ppb	14:07:36
3	Sc 361.383	962426.0	962426.0	99.965	%			14:08:55
3	Y 371.029	806800.9	806800.9	100.61	%			14:08:55
3	Ag 328.068†	22916.5	22464.8	109.27	ug/L	109.27	ppb	14:08:55
3	As 188.979†	249.7	272.1	113.96	ug/L	113.96	ppb	14:09:15
3	B 249.677†	4786.8	5122.2	98.687	ug/L	98.687	ppb	14:09:15
3	Ba 233.527†	60350.7	60347.3	404.10	ug/L	404.10	ppb	14:08:55
3	Be 313.107†	313874.8	318666.2	108.33	ug/L	108.33	ppb	14:08:55
3	Cd 226.502†	11069.2	11285.1	105.81	ug/L	105.81	ppb	14:09:15
3	Co 228.616†	6808.4	6881.3	116.42	ug/L	116.42	ppb	14:09:15
3	Cr 267.716†	13358.4	13275.0	133.14	ug/L	133.14	ppb	14:09:15
3	Cu 324.752†	50718.2	44441.6	125.13	ug/L	125.13	ppb	14:08:55
3	Mn 257.610†	835711.7	835446.5	816.13	ug/L	816.13	ppb	14:08:55
3	Mo 202.031†	1595.8	1577.3	95.850	ug/L	95.850	ppb	14:09:15
3	Ni 231.604†	5831.4	5705.3	123.12	ug/L	123.12	ppb	14:09:15
3	P 214.914†	845.5	604.5	280.09	ug/L	280.09	ppb	14:09:15
3	Pb 220.353†	1200.1	1283.1	139.45	ug/L	139.45	ppb	14:09:15
3	S 181.975 Axial†	969.1	920.6	1113.3	ug/L	1113.3	ppb	14:09:15
3	Sb 206.836†	263.7	223.7	63.059	ug/L	63.059	ppb	14:09:15
3	Se 196.026†	-65.6	-40.0	116.30	ug/L	116.30	ppb	14:09:15
3	Si 251.611†	272495.5	271955.8	7576.2	ug/L	7576.2	ppb	14:08:55
3	Sn 189.927†	681.2	672.3	100.89	ug/L	100.89	ppb	14:09:15
3	Ti 334.940†	882061.8	883757.9	1289.5	ug/L	1289.5	ppb	14:08:55
3	Tl 190.801†	328.5	369.3	109.32	ug/L	109.32	ppb	14:09:15
3	U 409.014†	-331.9	2465.9	62.873	ug/L	62.873	ppb	14:08:55
3	V 292.402†	26898.5	28443.9	172.67	ug/L	172.67	ppb	14:08:55
3	Zn 213.857†	22026.2	21143.2	166.45	ug/L	166.45	ppb	14:09:15
3	SiO2†	272424.8	271871.7	16246	ug/L	16246	ppb	14:09:31

Mean Data: 1201981080|926576|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	960353.7	99.750	%	0.3526				0.35%
Sc Radial	6214.9	98.9	%	0.70				0.71%
Y 371.029	804573.8	100.33	%	0.441				0.44%
Y RADIAL	6750.5	99.90	%	0.511				0.51%
Ag 328.068†	22439.9	109.17	ug/L	0.143	109.17	ppb	0.143	0.13%
Al 396.153Radial†	73740.1	45465	ug/L	100.0	45465	ppb	100.0	0.22%
As 188.979†	276.4	115.50	ug/L	2.552	115.50	ppb	2.552	2.21%
B 249.677†	5159.5	99.440	ug/L	0.6520	99.440	ppb	0.6520	0.66%
Ba 233.527†	60445.1	404.75	ug/L	0.794	404.75	ppb	0.794	0.20%
Be 313.107†	318526.8	108.28	ug/L	0.277	108.28	ppb	0.277	0.26%
Ca 317.933Radial†	4646.6	6136.1	ug/L	15.38	6136.1	ppb	15.38	0.25%
Cd 226.502†	11355.2	106.49	ug/L	0.619	106.49	ppb	0.619	0.58%
Co 228.616†	6931.6	117.29	ug/L	0.759	117.29	ppb	0.759	0.65%
Cr 267.716†	13335.8	133.75	ug/L	0.556	133.75	ppb	0.556	0.42%
Cu 324.752†	44417.1	125.06	ug/L	0.347	125.06	ppb	0.347	0.28%
Fe 238.204 Radial†	4879.6	37036	ug/L	94.3	37036	ppb	94.3	0.25%
K 766.490 Radial†	23260.1	3855.0	ug/L	20.34	3855.0	ppb	20.34	0.53%

Mg 279.077 IEC†	229.2	6518.9	ug/L	166.59	6518.9	ppb	166.59	2.56%
Mn 257.610†	836505.3	817.16	ug/L	1.283	817.16	ppb	1.283	0.16%
Mo 202.031†	1581.0	96.073	ug/L	0.3446	96.073	ppb	0.3446	0.36%
Na 589.592 Radial†	6752.8	1834.3	ug/L	27.54	1834.3	ppb	27.54	1.50%
Ni 231.604†	5728.3	123.62	ug/L	0.805	123.62	ppb	0.805	0.65%
P 214.914†	602.9	279.24	ug/L	1.729	279.24	ppb	1.729	0.62%
Pb 220.353†	1265.4	137.63	ug/L	1.632	137.63	ppb	1.632	1.19%
S 181.975 Axial†	934.1	1129.8	ug/L	14.87	1129.8	ppb	14.87	1.32%
Sb 206.836†	237.6	67.173	ug/L	3.8985	67.173	ppb	3.8985	5.80%
Se 196.026†	-42.7	114.87	ug/L	2.266	114.87	ppb	2.266	1.97%
Si 251.611†	272117.9	7580.7	ug/L	4.54	7580.7	ppb	4.54	0.06%
Sn 189.927†	674.2	101.18	ug/L	0.628	101.18	ppb	0.628	0.62%
Sr 421.552†	30169.4	158.50	ug/L	0.522	158.50	ppb	0.522	0.33%
Ti 334.940†	884254.5	1290.2	ug/L	0.64	1290.2	ppb	0.64	0.05%
Tl 190.801†	364.3	108.04	ug/L	1.453	108.04	ppb	1.453	1.34%
U 409.014†	2551.5	65.223	ug/L	2.6505	65.223	ppb	2.6505	4.06%
V 292.402†	28494.3	173.00	ug/L	0.499	173.00	ppb	0.499	0.29%
Zn 213.857†	21270.8	167.47	ug/L	0.943	167.47	ppb	0.943	0.56%
SiO2†	270110.1	16141	ug/L	115.3	16141	ppb	115.3	0.71%

Sequence No.: 7
Sample ID: 1201981079|926576|25
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 12/16/2009 14:11:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981079|926576|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6261.2	6261.2	99.7	%			14:13:34
1	Y RADIAL	6745.2	6745.2	99.82	%			14:13:34
1	Al 396.153Radial†	9551.7	9612.0	5926.8	ug/L	5926.8	ppb	14:13:34
1	Ca 317.933Radial†	888.0	856.3	1130.8	ug/L	1130.8	ppb	14:13:54
1	Fe 238.204 Radial†	1094.5	1089.1	8266.2	ug/L	8266.2	ppb	14:13:54
1	K 766.490 Radial†	5123.3	2237.9	356.92	ug/L	356.92	ppb	14:13:34
1	Mg 279.077 IEC†	34.9	32.3	915.69	ug/L	915.69	ppb	14:13:54
1	Na 589.592 Radial†	-975.6	655.1	177.96	ug/L	177.96	ppb	14:13:34
1	Sr 421.552†	2224.5	2199.7	11.550	ug/L	11.550	ppb	14:13:34
1	Sc 361.383	974117.0	974117.0	101.18	%			14:14:51
1	Y 371.029	812593.6	812593.6	101.33	%			14:14:51
1	Ag 328.068†	-88.3	-547.0	0.4939	ug/L	0.4939	ppb	14:14:56
1	As 188.979†	-18.2	4.3	4.4740	ug/L	4.4740	ppb	14:15:16
1	B 249.677†	-368.3	-30.2	-1.7488	ug/L	-1.7488	ppb	14:14:56
1	Ba 233.527†	23920.6	23617.2	157.80	ug/L	157.80	ppb	14:14:56
1	Be 313.107†	-4557.8	177.6	0.4439	ug/L	0.4439	ppb	14:14:56
1	Cd 226.502†	-144.2	69.6	-0.1491	ug/L	-0.1491	ppb	14:15:16
1	Co 228.616†	823.4	884.3	14.867	ug/L	14.867	ppb	14:15:16
1	Cr 267.716†	583.2	488.4	5.0520	ug/L	5.0520	ppb	14:14:56
1	Cu 324.752†	7295.9	916.5	2.9632	ug/L	2.9632	ppb	14:14:56
1	Mn 257.610†	1273975.2	1258567.4	1224.9	ug/L	1224.9	ppb	14:14:51
1	Mo 202.031†	19.4	0.1	0.5917	ug/L	0.5917	ppb	14:15:16
1	Ni 231.604†	316.4	184.5	3.9749	ug/L	3.9749	ppb	14:15:16
1	P 214.914†	351.0	105.6	49.554	ug/L	49.554	ppb	14:15:16
1	Pb 220.353†	87.4	169.0	18.058	ug/L	18.058	ppb	14:15:16
1	S 181.975 Axial†	74.4	24.6	28.819	ug/L	28.819	ppb	14:15:16
1	Sb 206.836†	50.4	9.7	2.1737	ug/L	2.1737	ppb	14:15:16
1	Se 196.026†	-78.5	-52.0	1.2454	ug/L	1.2454	ppb	14:15:16
1	Si 251.611†	55154.0	53876.5	1501.4	ug/L	1501.4	ppb	14:14:56
1	Sn 189.927†	-15.2	-24.1	-3.3506	ug/L	-3.3506	ppb	14:15:16
1	Ti 334.940†	134419.9	134241.8	195.90	ug/L	195.90	ppb	14:14:51
1	Tl 190.801†	-79.6	-37.9	-0.9870	ug/L	-0.9870	ppb	14:15:16
1	U 409.014†	-3440.7	-602.7	-17.617	ug/L	-17.617	ppb	14:14:51
1	V 292.402†	1710.8	3226.9	18.726	ug/L	18.726	ppb	14:14:56
1	Zn 213.857†	2177.4	1261.4	9.3606	ug/L	9.3606	ppb	14:15:16
1	SiO2†	55266.8	53974.6	3226.5	ug/L	3226.5	ppb	14:16:23
2	Sc Radial	6168.3	6168.3	98.2	%			14:13:59
2	Y RADIAL	6664.1	6664.1	98.62	%			14:13:59
2	Al 396.153Radial†	9532.2	9736.5	6003.6	ug/L	6003.6	ppb	14:13:59
2	Ca 317.933Radial†	893.2	875.0	1155.5	ug/L	1155.5	ppb	14:14:19
2	Fe 238.204 Radial†	1097.2	1108.5	8413.1	ug/L	8413.1	ppb	14:14:19
2	K 766.490 Radial†	5147.0	2339.3	373.65	ug/L	373.65	ppb	14:13:59
2	Mg 279.077 IEC†	35.2	33.1	939.63	ug/L	939.63	ppb	14:14:19
2	Na 589.592 Radial†	-1068.3	546.0	148.31	ug/L	148.31	ppb	14:13:59
2	Sr 421.552†	2175.9	2183.8	11.466	ug/L	11.466	ppb	14:13:59
2	Sc 361.383	958149.0	958149.0	99.521	%			14:15:22
2	Y 371.029	800064.8	800064.8	99.767	%			14:15:22
2	Ag 328.068†	-217.8	-678.5	-0.0231	ug/L	-0.0231	ppb	14:15:27
2	As 188.979†	-21.7	0.5	3.1420	ug/L	3.1420	ppb	14:15:47
2	B 249.677†	-354.6	-22.6	-1.6139	ug/L	-1.6139	ppb	14:15:27
2	Ba 233.527†	23889.8	23980.3	160.23	ug/L	160.23	ppb	14:15:27
2	Be 313.107†	-4610.2	49.8	0.4044	ug/L	0.4044	ppb	14:15:27
2	Cd 226.502†	-134.2	77.3	-0.0893	ug/L	-0.0893	ppb	14:15:47
2	Co 228.616†	833.0	907.4	15.265	ug/L	15.265	ppb	14:15:47
2	Cr 267.716†	586.5	501.3	5.1825	ug/L	5.1825	ppb	14:15:27
2	Cu 324.752†	7298.8	1039.7	3.3122	ug/L	3.3122	ppb	14:15:27
2	Mn 257.610†	1263314.7	1268839.5	1234.9	ug/L	1234.9	ppb	14:15:22
2	Mo 202.031†	22.4	3.4	0.7956	ug/L	0.7956	ppb	14:15:47
2	Ni 231.604†	311.5	184.8	3.9812	ug/L	3.9812	ppb	14:15:47

2	P 214.914†	359.5	120.0	56.851 ug/L	56.851 ppb	14:15:47
2	Pb 220.353†	91.3	174.4	18.616 ug/L	18.616 ppb	14:15:47
2	S 181.975 Axial†	63.2	14.6	16.580 ug/L	16.580 ppb	14:15:47
2	Sb 206.836†	21.5	-18.5	-6.1660 ug/L	-6.1660 ppb	14:15:47
2	Se 196.026†	-76.6	-51.3	2.1185 ug/L	2.1185 ppb	14:15:47
2	Si 251.611†	55212.7	54843.9	1528.4 ug/L	1528.4 ppb	14:15:27
2	Sn 189.927†	-9.7	-18.8	-2.5572 ug/L	-2.5572 ppb	14:15:47
2	Ti 334.940†	133220.7	135250.9	197.37 ug/L	197.37 ppb	14:15:22
2	Tl 190.801†	-74.4	-34.1	0.0682 ug/L	0.0682 ppb	14:15:47
2	U 409.014†	-3322.4	-540.5	-15.925 ug/L	-15.925 ppb	14:15:22
2	V 292.402†	1669.2	3213.2	18.624 ug/L	18.624 ppb	14:15:27
2	Zn 213.857†	2169.5	1289.2	9.5709 ug/L	9.5709 ppb	14:15:47
2	SiO2†	55542.1	55161.6	3297.5 ug/L	3297.5 ppb	14:16:28
3	Sc Radial	6174.0	6174.0	98.3 %		14:14:25
3	Y RADIAL	6656.4	6656.4	98.51 %		14:14:25
3	Al 396.153Radial†	9497.1	9691.8	5976.0 ug/L	5976.0 ppb	14:14:25
3	Ca 317.933Radial†	880.3	861.1	1137.1 ug/L	1137.1 ppb	14:14:45
3	Fe 238.204 Radial†	1088.6	1098.7	8338.9 ug/L	8338.9 ppb	14:14:45
3	K 766.490 Radial†	5210.9	2399.6	383.56 ug/L	383.56 ppb	14:14:25
3	Mg 279.077 IEC†	29.2	27.0	764.82 ug/L	764.82 ppb	14:14:45
3	Na 589.592 Radial†	-1031.9	584.1	158.66 ug/L	158.66 ppb	14:14:25
3	Sr 421.552†	2215.5	2222.1	11.668 ug/L	11.668 ppb	14:14:25
3	Sc 361.383	959670.8	959670.8	99.679 %		14:15:52
3	Y 371.029	801065.4	801065.4	99.891 %		14:15:52
3	Ag 328.068†	-161.8	-622.0	0.1996 ug/L	0.1996 ppb	14:15:57
3	As 188.979†	-31.6	-9.3	-0.3887 ug/L	-0.3887 ppb	14:16:17
3	B 249.677†	-312.5	20.2	-0.7356 ug/L	-0.7356 ppb	14:15:57
3	Ba 233.527†	23700.6	23752.5	158.71 ug/L	158.71 ppb	14:15:57
3	Be 313.107†	-4583.7	83.8	0.4177 ug/L	0.4177 ppb	14:15:57
3	Cd 226.502†	-132.6	79.0	-0.0650 ug/L	-0.0650 ppb	14:16:17
3	Co 228.616†	827.5	900.7	15.147 ug/L	15.147 ppb	14:16:17
3	Cr 267.716†	592.7	506.6	5.2354 ug/L	5.2354 ppb	14:15:57
3	Cu 324.752†	7239.4	968.5	3.1110 ug/L	3.1110 ppb	14:15:57
3	Mn 257.610†	1272644.7	1276186.7	1242.0 ug/L	1242.0 ppb	14:15:52
3	Mo 202.031†	25.0	6.0	0.9465 ug/L	0.9465 ppb	14:16:17
3	Ni 231.604†	314.9	187.8	4.0454 ug/L	4.0454 ppb	14:16:17
3	P 214.914†	339.3	99.1	46.105 ug/L	46.105 ppb	14:16:17
3	Pb 220.353†	92.5	175.4	18.723 ug/L	18.723 ppb	14:16:17
3	S 181.975 Axial†	61.5	12.8	14.393 ug/L	14.393 ppb	14:16:17
3	Sb 206.836†	39.0	-1.0	-0.9930 ug/L	-0.9930 ppb	14:16:17
3	Se 196.026†	-81.7	-56.4	-0.8978 ug/L	-0.8978 ppb	14:16:17
3	Si 251.611†	54525.9	54066.9	1506.7 ug/L	1506.7 ppb	14:15:57
3	Sn 189.927†	-12.1	-21.2	-2.9171 ug/L	-2.9171 ppb	14:16:17
3	Ti 334.940†	134154.7	135975.7	198.43 ug/L	198.43 ppb	14:15:52
3	Tl 190.801†	-78.8	-38.3	-0.9667 ug/L	-0.9667 ppb	14:16:17
3	U 409.014†	-3521.7	-735.1	-21.266 ug/L	-21.266 ppb	14:15:52
3	V 292.402†	1699.4	3240.8	18.795 ug/L	18.795 ppb	14:15:57
3	Zn 213.857†	2183.5	1299.9	9.6699 ug/L	9.6699 ppb	14:16:17
3	SiO2†	55084.2	54613.7	3264.7 ug/L	3264.7 ppb	14:16:33

Mean Data: 1201981079|926576|25

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	963978.9	100.13	%	0.915				0.91%
Sc Radial	6201.2	98.7	%	0.83				0.84%
Y 371.029	804574.6	100.33	%	0.868				0.87%
Y RADIAL	6688.6	98.98	%	0.728				0.74%
Ag 328.068†	-615.8	0.2234	ug/L	0.25932	0.2234	ppb	0.25932	116.05%
Al 396.153Radial†	9680.1	5968.8	ug/L	38.89	5968.8	ppb	38.89	0.65%
As 188.979†	-1.5	2.4091	ug/L	2.51285	2.4091	ppb	2.51285	104.31%
B 249.677†	-10.9	-1.3661	ug/L	0.55017	-1.3661	ppb	0.55017	40.27%
Ba 233.527†	23783.3	158.91	ug/L	1.226	158.91	ppb	1.226	0.77%
Be 313.107†	103.7	0.4220	ug/L	0.02011	0.4220	ppb	0.02011	4.76%
Ca 317.933Radial†	864.1	1141.1	ug/L	12.82	1141.1	ppb	12.82	1.12%
Cd 226.502†	75.3	-0.1011	ug/L	0.04327	-0.1011	ppb	0.04327	42.79%
Co 228.616†	897.5	15.093	ug/L	0.2044	15.093	ppb	0.2044	1.35%
Cr 267.716†	498.7	5.1567	ug/L	0.09443	5.1567	ppb	0.09443	1.83%
Cu 324.752†	974.9	3.1288	ug/L	0.17516	3.1288	ppb	0.17516	5.60%
Fe 238.204 Radial†	1098.8	8339.4	ug/L	73.44	8339.4	ppb	73.44	0.88%
K 766.490 Radial†	2325.6	371.38	ug/L	13.465	371.38	ppb	13.465	3.63%

Mg 279.077 IEC†	30.8	873.38	ug/L	94.773	873.38	ppb	94.773	10.85%
Mn 257.610†	1267864.5	1233.9	ug/L	8.61	1233.9	ppb	8.61	0.70%
Mo 202.031†	3.2	0.7779	ug/L	0.17807	0.7779	ppb	0.17807	22.89%
Na 589.592 Radial†	595.1	161.64	ug/L	15.048	161.64	ppb	15.048	9.31%
Ni 231.604†	185.7	4.0005	ug/L	0.03899	4.0005	ppb	0.03899	0.97%
P 214.914†	108.2	50.837	ug/L	5.4866	50.837	ppb	5.4866	10.79%
Pb 220.353†	172.9	18.466	ug/L	0.3571	18.466	ppb	0.3571	1.93%
S 181.975 Axial†	17.3	19.931	ug/L	7.7747	19.931	ppb	7.7747	39.01%
Sb 206.836†	-3.3	-1.6618	ug/L	4.20988	-1.6618	ppb	4.20988	253.33%
Se 196.026†	-53.2	0.8220	ug/L	1.55208	0.8220	ppb	1.55208	188.82%
Si 251.611†	54262.4	1512.2	ug/L	14.28	1512.2	ppb	14.28	0.94%
Sn 189.927†	-21.4	-2.9416	ug/L	0.39724	-2.9416	ppb	0.39724	13.50%
Sr 421.552†	2201.9	11.562	ug/L	0.1011	11.562	ppb	0.1011	0.87%
Ti 334.940†	135156.1	197.23	ug/L	1.271	197.23	ppb	1.271	0.64%
Tl 190.801†	-36.8	-0.6285	ug/L	0.60343	-0.6285	ppb	0.60343	96.01%
U 409.014†	-626.1	-18.269	ug/L	2.7294	-18.269	ppb	2.7294	14.94%
V 292.402†	3227.0	18.715	ug/L	0.0861	18.715	ppb	0.0861	0.46%
Zn 213.857†	1283.5	9.5338	ug/L	0.15797	9.5338	ppb	0.15797	1.66%
SiO2†	54583.3	3262.9	ug/L	35.50	3262.9	ppb	35.50	1.09%

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/16/2009 14:18:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6130.1	6130.1	97.6	%			14:20:35
1	Y RADIAL	6548.4	6548.4	96.91	%			14:20:35
1	Al 396.153Radial†	7859.2	8082.2	4961.6	ug/L	4961.6	ppb	14:20:35
1	Ca 317.933Radial†	3890.0	3952.2	5219.2	ug/L	5219.2	ppb	14:20:35
1	Fe 238.204 Radial†	671.6	679.2	5171.6	ug/L	5171.6	ppb	14:20:55
1	K 766.490 Radial†	33366.2	31295.7	5183.3	ug/L	5183.3	ppb	14:20:35
1	Mg 279.077 IEC†	184.2	186.0	5322.2	ug/L	5322.2	ppb	14:20:55
1	Na 589.592 Radial†	35044.6	37553.7	10201	ug/L	10201	ppb	14:20:35
1	Sr 421.552†	93967.7	96281.2	505.96	ug/L	505.96	ppb	14:20:35
1	Sc 361.383	950474.9	950474.9	98.724	%			14:21:53
1	Y 371.029	780993.2	780993.2	97.388	%			14:21:53
1	Ag 328.068†	121803.9	122918.8	530.42	ug/L	530.42	ppb	14:21:58
1	As 188.979†	1395.1	1435.5	519.07	ug/L	519.07	ppb	14:22:18
1	B 249.677†	25274.7	25935.2	524.04	ug/L	524.04	ppb	14:21:58
1	Ba 233.527†	78389.9	79378.7	530.58	ug/L	530.58	ppb	14:21:58
1	Be 313.107†	1526612.2	1551028.0	515.96	ug/L	515.96	ppb	14:21:53
1	Cd 226.502†	53878.6	54787.1	531.09	ug/L	531.09	ppb	14:21:58
1	Co 228.616†	30362.2	30825.2	534.68	ug/L	534.68	ppb	14:21:58
1	Cr 267.716†	52578.7	53170.4	530.30	ug/L	530.30	ppb	14:21:58
1	Cu 324.752†	192868.2	189067.0	524.56	ug/L	524.56	ppb	14:21:58
1	Mn 257.610†	527239.5	533498.7	519.30	ug/L	519.30	ppb	14:21:53
1	Mo 202.031†	8601.1	8693.2	514.18	ug/L	514.18	ppb	14:22:18
1	Ni 231.604†	24530.3	24719.3	533.44	ug/L	533.44	ppb	14:21:58
1	P 214.914†	5158.3	4983.7	2500.3	ug/L	2500.3	ppb	14:22:18
1	Pb 220.353†	4819.9	4964.9	512.90	ug/L	512.90	ppb	14:22:18
1	S 181.975 Axial†	884.1	846.7	1031.1	ug/L	1031.1	ppb	14:22:18
1	Sb 206.836†	1743.3	1725.7	518.23	ug/L	518.23	ppb	14:22:18
1	Se 196.026†	904.2	941.5	534.92	ug/L	534.92	ppb	14:22:18
1	Si 251.611†	94818.1	95409.2	2646.8	ug/L	2646.8	ppb	14:21:58
1	Sn 189.927†	3452.2	3487.7	518.00	ug/L	518.00	ppb	14:22:18
1	Ti 334.940†	354891.9	360868.3	526.29	ug/L	526.29	ppb	14:21:53
1	Tl 190.801†	1945.5	2011.3	517.60	ug/L	517.60	ppb	14:22:18
1	U 409.014†	16240.9	19248.7	527.46	ug/L	527.46	ppb	14:21:58
1	V 292.402†	81545.8	84135.9	533.93	ug/L	533.93	ppb	14:21:58
1	Zn 213.857†	65535.1	65491.6	525.40	ug/L	525.40	ppb	14:21:58
1	SiO2†	92938.4	93491.9	5562.5	ug/L	5562.5	ppb	14:23:26
2	Sc Radial	6125.4	6125.4	97.5	%			14:21:00
2	Y RADIAL	6546.8	6546.8	96.89	%			14:21:00
2	Al 396.153Radial†	7825.3	8053.7	4943.8	ug/L	4943.8	ppb	14:21:00
2	Ca 317.933Radial†	3875.1	3940.1	5203.2	ug/L	5203.2	ppb	14:21:00
2	Fe 238.204 Radial†	672.0	680.2	5178.6	ug/L	5178.6	ppb	14:21:20
2	K 766.490 Radial†	33233.5	31185.9	5165.1	ug/L	5165.1	ppb	14:21:00
2	Mg 279.077 IEC†	181.0	182.9	5234.0	ug/L	5234.0	ppb	14:21:20
2	Na 589.592 Radial†	34970.7	37505.5	10188	ug/L	10188	ppb	14:21:00
2	Sr 421.552†	94294.6	96690.2	508.11	ug/L	508.11	ppb	14:21:00
2	Sc 361.383	945621.8	945621.8	98.220	%			14:22:24
2	Y 371.029	777439.2	777439.2	96.945	%			14:22:24
2	Ag 328.068†	120057.3	121773.6	525.50	ug/L	525.50	ppb	14:22:29
2	As 188.979†	1402.4	1450.2	524.33	ug/L	524.33	ppb	14:22:49
2	B 249.677†	24748.7	25531.1	515.86	ug/L	515.86	ppb	14:22:29
2	Ba 233.527†	77385.9	78764.0	526.47	ug/L	526.47	ppb	14:22:29
2	Be 313.107†	1521791.1	1554055.5	516.97	ug/L	516.97	ppb	14:22:24
2	Cd 226.502†	53134.8	54310.0	526.45	ug/L	526.45	ppb	14:22:29
2	Co 228.616†	29830.0	30441.1	528.03	ug/L	528.03	ppb	14:22:29
2	Cr 267.716†	51809.0	52660.0	525.21	ug/L	525.21	ppb	14:22:29
2	Cu 324.752†	189708.4	186852.6	518.42	ug/L	518.42	ppb	14:22:29
2	Mn 257.610†	525437.2	534404.5	520.18	ug/L	520.18	ppb	14:22:24
2	Mo 202.031†	8626.6	8763.8	518.35	ug/L	518.35	ppb	14:22:49
2	Ni 231.604†	24196.0	24506.4	528.85	ug/L	528.85	ppb	14:22:29

2	P 214.914†	5173.4	5025.9	2523.2 ug/L	2523.2 ppb	14:22:49
2	Pb 220.353†	4845.6	5016.0	518.18 ug/L	518.18 ppb	14:22:49
2	S 181.975 Axial†	890.8	858.1	1045.0 ug/L	1045.0 ppb	14:22:49
2	Sb 206.836†	1762.1	1753.9	526.86 ug/L	526.86 ppb	14:22:49
2	Se 196.026†	907.4	949.4	539.31 ug/L	539.31 ppb	14:22:49
2	Si 251.611†	93260.9	94316.7	2616.2 ug/L	2616.2 ppb	14:22:29
2	Sn 189.927†	3464.3	3518.0	522.49 ug/L	522.49 ppb	14:22:49
2	Ti 334.940†	353475.6	361271.3	526.88 ug/L	526.88 ppb	14:22:24
2	Tl 190.801†	1957.2	2033.4	523.30 ug/L	523.30 ppb	14:22:49
2	U 409.014†	16029.8	19118.2	523.88 ug/L	523.88 ppb	14:22:29
2	V 292.402†	80408.9	83402.3	529.39 ug/L	529.39 ppb	14:22:29
2	Zn 213.857†	64493.9	64772.1	519.61 ug/L	519.61 ppb	14:22:29
2	SiO2†	93188.2	94229.4	5606.4 ug/L	5606.4 ppb	14:23:31
3	Sc Radial	5990.8	5990.8	95.3 %		14:21:25
3	Y RADIAL	6420.2	6420.2	95.01 %		14:21:25
3	Al 396.153Radial†	7724.9	8128.7	4990.0 ug/L	4990.0 ppb	14:21:25
3	Ca 317.933Radial†	3810.0	3961.1	5230.9 ug/L	5230.9 ppb	14:21:25
3	Fe 238.204 Radial†	664.2	687.4	5233.6 ug/L	5233.6 ppb	14:21:45
3	K 766.490 Radial†	32590.0	31277.0	5180.2 ug/L	5180.2 ppb	14:21:25
3	Mg 279.077 IEC†	178.9	184.9	5290.9 ug/L	5290.9 ppb	14:21:45
3	Na 589.592 Radial†	34158.5	37459.6	10175 ug/L	10175 ppb	14:21:25
3	Sr 421.552†	92044.4	96503.6	507.13 ug/L	507.13 ppb	14:21:25
3	Sc 361.383	946410.0	946410.0	98.302 %		14:22:55
3	Y 371.029	777979.9	777979.9	97.013 %		14:22:55
3	Ag 328.068†	120005.1	121618.8	524.85 ug/L	524.85 ppb	14:23:00
3	As 188.979†	1411.5	1458.2	527.22 ug/L	527.22 ppb	14:23:20
3	B 249.677†	24739.1	25500.3	515.22 ug/L	515.22 ppb	14:23:00
3	Ba 233.527†	77308.7	78619.9	525.51 ug/L	525.51 ppb	14:23:00
3	Be 313.107†	1526400.2	1557453.8	518.10 ug/L	518.10 ppb	14:22:55
3	Cd 226.502†	53073.5	54202.5	525.41 ug/L	525.41 ppb	14:23:00
3	Co 228.616†	29891.8	30478.7	528.68 ug/L	528.68 ppb	14:23:00
3	Cr 267.716†	51894.6	52703.1	525.65 ug/L	525.65 ppb	14:23:00
3	Cu 324.752†	189973.0	186960.9	518.72 ug/L	518.72 ppb	14:23:00
3	Mn 257.610†	525828.6	534357.1	520.14 ug/L	520.14 ppb	14:22:55
3	Mo 202.031†	8642.0	8772.2	518.85 ug/L	518.85 ppb	14:23:20
3	Ni 231.604†	24131.1	24419.9	526.98 ug/L	526.98 ppb	14:23:00
3	P 214.914†	5173.5	5021.6	2520.9 ug/L	2520.9 ppb	14:23:20
3	Pb 220.353†	4861.7	5028.3	519.45 ug/L	519.45 ppb	14:23:20
3	S 181.975 Axial†	891.3	857.8	1044.6 ug/L	1044.6 ppb	14:23:20
3	Sb 206.836†	1774.6	1765.1	530.20 ug/L	530.20 ppb	14:23:20
3	Se 196.026†	917.9	959.4	544.95 ug/L	544.95 ppb	14:23:20
3	Si 251.611†	93381.9	94360.7	2617.4 ug/L	2617.4 ppb	14:23:00
3	Sn 189.927†	3472.2	3523.0	523.25 ug/L	523.25 ppb	14:23:20
3	Ti 334.940†	353726.5	361226.7	526.82 ug/L	526.82 ppb	14:22:55
3	Tl 190.801†	1965.4	2040.1	525.00 ug/L	525.00 ppb	14:23:20
3	U 409.014†	15897.5	18970.1	519.80 ug/L	519.80 ppb	14:23:00
3	V 292.402†	80476.4	83402.8	529.38 ug/L	529.38 ppb	14:23:00
3	Zn 213.857†	64614.5	64840.2	520.17 ug/L	520.17 ppb	14:23:00
3	SiO2†	92853.0	93809.3	5581.2 ug/L	5581.2 ppb	14:23:36

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	947502.2	98.415	%	0.2705				0.27%
Sc Radial	6082.1	96.8	%	1.26				1.30%
Y 371.029	778804.1	97.115	%	0.2388				0.25%
Y RADIAL	6505.1	96.27	%	1.089				1.13%
Ag 328.068†	122103.7	526.92	ug/L	3.045	526.92	ppb	3.045	0.58%
QC value within limits for Ag 328.068 Recovery = 105.38%								
Al 396.153Radial†	8088.2	4965.1	ug/L	23.32	4965.1	ppb	23.32	0.47%
QC value within limits for Al 396.153Radial Recovery = 99.30%								
As 188.979†	1448.0	523.54	ug/L	4.135	523.54	ppb	4.135	0.79%
QC value within limits for As 188.979 Recovery = 104.71%								
B 249.677†	25655.5	518.37	ug/L	4.917	518.37	ppb	4.917	0.95%
QC value within limits for B 249.677 Recovery = 103.67%								
Ba 233.527†	78920.8	527.52	ug/L	2.692	527.52	ppb	2.692	0.51%
QC value within limits for Ba 233.527 Recovery = 105.50%								
Be 313.107†	1554179.1	517.01	ug/L	1.068	517.01	ppb	1.068	0.21%
QC value within limits for Be 313.107 Recovery = 103.40%								
Ca 317.933Radial†	3951.1	5217.7	ug/L	13.91	5217.7	ppb	13.91	0.27%

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   QC value within limits for Ca 317.933Radial  Recovery = 104.35%
Cd 226.502†            54433.2      527.65 ug/L         3.022      527.65 ppb          3.022   0.57%
   QC value within limits for Cd 226.502  Recovery = 105.53%
Co 228.616†            30581.6      530.47 ug/L         3.665      530.47 ppb          3.665   0.69%
   QC value within limits for Co 228.616  Recovery = 106.09%
Cr 267.716†            52844.5      527.05 ug/L         2.822      527.05 ppb          2.822   0.54%
   QC value within limits for Cr 267.716  Recovery = 105.41%
Cu 324.752†           187626.8      520.56 ug/L         3.461      520.56 ppb          3.461   0.66%
   QC value within limits for Cu 324.752  Recovery = 104.11%
Fe 238.204 Radial†       682.3      5194.6 ug/L         33.94      5194.6 ppb          33.94   0.65%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.89%
K 766.490 Radial†      31252.9      5176.2 ug/L          9.75      5176.2 ppb           9.75   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 103.52%
Mg 279.077 IEC†          184.6      5282.3 ug/L         44.71      5282.3 ppb          44.71   0.85%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.65%
Mn 257.610†           534086.8      519.87 ug/L         0.498      519.87 ppb          0.498   0.10%
   QC value within limits for Mn 257.610  Recovery = 103.97%
Mo 202.031†             8743.1      517.13 ug/L         2.566      517.13 ppb          2.566   0.50%
   QC value within limits for Mo 202.031  Recovery = 103.43%
Na 589.592 Radial†     37506.3       10188 ug/L          12.8       10188 ppb           12.8   0.13%
   QC value within limits for Na 589.592 Radial  Recovery = 101.88%
Ni 231.604†            24548.5      529.76 ug/L         3.325      529.76 ppb          3.325   0.63%
   QC value within limits for Ni 231.604  Recovery = 105.95%
P 214.914†              5010.4      2514.8 ug/L         12.60      2514.8 ppb          12.60   0.50%
   QC value within limits for P 214.914  Recovery = 100.59%
Pb 220.353†             5003.1      516.85 ug/L         3.473      516.85 ppb          3.473   0.67%
   QC value within limits for Pb 220.353  Recovery = 103.37%
S 181.975 Axial†         854.2      1040.3 ug/L          7.93      1040.3 ppb           7.93   0.76%
   QC value within limits for S 181.975 Axial  Recovery = 104.03%
Sb 206.836†             1748.3      525.09 ug/L         6.175      525.09 ppb          6.175   1.18%
   QC value within limits for Sb 206.836  Recovery = 105.02%
Se 196.026†              950.1      539.73 ug/L         5.027      539.73 ppb          5.027   0.93%
   QC value within limits for Se 196.026  Recovery = 107.95%
Si 251.611†            94695.5      2626.8 ug/L         17.29      2626.8 ppb          17.29   0.66%
   QC value within limits for Si 251.611  Recovery = 105.07%
Sn 189.927†             3509.6      521.25 ug/L         2.838      521.25 ppb          2.838   0.54%
   QC value within limits for Sn 189.927  Recovery = 104.25%
Sr 421.552†            96491.7      507.07 ug/L         1.076      507.07 ppb          1.076   0.21%
   QC value within limits for Sr 421.552  Recovery = 101.41%
Ti 334.940†           361122.1      526.67 ug/L         0.324      526.67 ppb          0.324   0.06%
   QC value within limits for Ti 334.940  Recovery = 105.33%
Tl 190.801†             2028.3      521.97 ug/L         3.877      521.97 ppb          3.877   0.74%
   QC value within limits for Tl 190.801  Recovery = 104.39%
U 409.014†             19112.4      523.72 ug/L         3.832      523.72 ppb          3.832   0.73%
   QC value within limits for U 409.014  Recovery = 104.74%
V 292.402†             83647.0      530.90 ug/L         2.625      530.90 ppb          2.625   0.49%
   QC value within limits for V 292.402  Recovery = 106.18%
Zn 213.857†            65034.6      521.73 ug/L         3.192      521.73 ppb          3.192   0.61%
   QC value within limits for Zn 213.857  Recovery = 104.35%
SiO2†                  93843.5      5583.4 ug/L         22.03      5583.4 ppb          22.03   0.39%
   QC value within limits for SiO2  Recovery = 104.41%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/16/2009 14:25:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6169.5	6169.5	98.2	%			14:27:38
1	Y RADIAL	6574.7	6574.7	97.30	%			14:27:38
1	Al 396.153Radial†	24.4	51.7	31.831	ug/L	31.831	ppb	14:27:38
1	Ca 317.933Radial†	31.2	-3.1	-4.0398	ug/L	-4.0398	ppb	14:27:58
1	Fe 238.204 Radial†	7.7	-1.3	-9.7295	ug/L	-9.7295	ppb	14:27:58
1	K 766.490 Radial†	3096.6	250.1	41.501	ug/L	41.501	ppb	14:27:38
1	Mg 279.077 IEC†	3.0	0.3	9.2145	ug/L	9.2145	ppb	14:27:58
1	Na 589.592 Radial†	-1572.9	32.3	8.7727	ug/L	8.7727	ppb	14:27:38
1	Sr 421.552†	47.7	16.0	0.0842	ug/L	0.0842	ppb	14:27:38
1	Sc 361.383	956384.8	956384.8	99.338	%			14:28:55
1	Y 371.029	796430.0	796430.0	99.313	%			14:28:55
1	Ag 328.068†	474.4	18.0	0.0723	ug/L	0.0723	ppb	14:29:00
1	As 188.979†	-28.6	-6.4	-2.3088	ug/L	-2.3088	ppb	14:29:20
1	B 249.677†	-310.8	20.9	0.4249	ug/L	0.4249	ppb	14:29:20
1	Ba 233.527†	5.8	-18.7	-0.1240	ug/L	-0.1240	ppb	14:29:20
1	Be 313.107†	-4555.5	96.4	0.0317	ug/L	0.0317	ppb	14:29:00
1	Cd 226.502†	-209.8	0.9	0.0096	ug/L	0.0096	ppb	14:29:20
1	Co 228.616†	-83.2	-13.2	-0.2277	ug/L	-0.2277	ppb	14:29:20
1	Cr 267.716†	110.9	23.6	0.2346	ug/L	0.2346	ppb	14:29:20
1	Cu 324.752†	6166.4	-86.8	-0.2411	ug/L	-0.2411	ppb	14:29:00
1	Mn 257.610†	578.6	26.3	0.0245	ug/L	0.0245	ppb	14:29:20
1	Mo 202.031†	29.3	10.4	0.6152	ug/L	0.6152	ppb	14:29:20
1	Ni 231.604†	129.6	2.3	0.0496	ug/L	0.0496	ppb	14:29:20
1	P 214.914†	238.4	-1.3	-0.6304	ug/L	-0.6304	ppb	14:29:20
1	Pb 220.353†	-71.7	10.5	1.0883	ug/L	1.0883	ppb	14:29:20
1	S 181.975 Axial†	43.0	-5.6	-6.8020	ug/L	-6.8020	ppb	14:29:20
1	Sb 206.836†	48.8	9.0	2.6448	ug/L	2.6448	ppb	14:29:20
1	Se 196.026†	-27.6	-2.2	-1.2295	ug/L	-1.2295	ppb	14:29:20
1	Si 251.611†	692.4	62.5	1.7205	ug/L	1.7205	ppb	14:29:20
1	Sn 189.927†	0.4	-8.7	-1.2862	ug/L	-1.2862	ppb	14:29:20
1	Ti 334.940†	-1466.8	-87.6	-0.1296	ug/L	-0.1296	ppb	14:29:00
1	Tl 190.801†	-40.5	-0.1	-0.0155	ug/L	-0.0155	ppb	14:29:20
1	U 409.014†	-2651.6	128.6	3.5359	ug/L	3.5359	ppb	14:28:55
1	V 292.402†	-1468.2	58.0	0.3807	ug/L	0.3807	ppb	14:29:00
1	Zn 213.857†	909.4	24.8	0.2016	ug/L	0.2016	ppb	14:29:20
1	SiO2†	731.8	88.8	5.2636	ug/L	5.2636	ppb	14:30:26
2	Sc Radial	6115.0	6115.0	97.3	%			14:28:03
2	Y RADIAL	6604.1	6604.1	97.73	%			14:28:03
2	Al 396.153Radial†	-17.6	8.7	5.3797	ug/L	5.3797	ppb	14:28:03
2	Ca 317.933Radial†	36.5	2.6	3.4541	ug/L	3.4541	ppb	14:28:23
2	Fe 238.204 Radial†	9.5	0.6	4.7995	ug/L	4.7995	ppb	14:28:23
2	K 766.490 Radial†	3009.7	189.0	31.360	ug/L	31.360	ppb	14:28:03
2	Mg 279.077 IEC†	3.6	0.9	26.513	ug/L	26.513	ppb	14:28:23
2	Na 589.592 Radial†	-1619.2	-29.5	-8.0222	ug/L	-8.0222	ppb	14:28:03
2	Sr 421.552†	14.6	-17.5	-0.0923	ug/L	-0.0923	ppb	14:28:03
2	Sc 361.383	953227.4	953227.4	99.010	%			14:29:25
2	Y 371.029	794597.4	794597.4	99.085	%			14:29:25
2	Ag 328.068†	356.7	-99.4	-0.4236	ug/L	-0.4236	ppb	14:29:30
2	As 188.979†	-23.9	-1.8	-0.6536	ug/L	-0.6536	ppb	14:29:50
2	B 249.677†	-300.5	30.3	0.6143	ug/L	0.6143	ppb	14:29:50
2	Ba 233.527†	32.6	8.4	0.0571	ug/L	0.0571	ppb	14:29:50
2	Be 313.107†	-4585.8	50.6	0.0169	ug/L	0.0169	ppb	14:29:30
2	Cd 226.502†	-216.5	-6.6	-0.0647	ug/L	-0.0647	ppb	14:29:50
2	Co 228.616†	-87.7	-18.1	-0.3131	ug/L	-0.3131	ppb	14:29:50
2	Cr 267.716†	93.8	6.7	0.0677	ug/L	0.0677	ppb	14:29:50
2	Cu 324.752†	6219.5	-12.5	-0.0345	ug/L	-0.0345	ppb	14:29:30
2	Mn 257.610†	567.8	17.3	0.0169	ug/L	0.0169	ppb	14:29:50
2	Mo 202.031†	22.7	3.9	0.2298	ug/L	0.2298	ppb	14:29:50
2	Ni 231.604†	120.5	-6.4	-0.1382	ug/L	-0.1382	ppb	14:29:50

2	P 214.914†	262.5	23.8	12.336	ug/L	12.336 ppb	14:29:50
2	Pb 220.353†	-61.9	20.1	2.0741	ug/L	2.0741 ppb	14:29:50
2	S 181.975 Axial†	50.2	1.8	2.1476	ug/L	2.1476 ppb	14:29:50
2	Sb 206.836†	45.9	6.2	1.8520	ug/L	1.8520 ppb	14:29:50
2	Se 196.026†	-27.1	-1.8	-0.9415	ug/L	-0.9415 ppb	14:29:50
2	Si 251.611†	679.8	52.0	1.4328	ug/L	1.4328 ppb	14:29:50
2	Sn 189.927†	13.8	4.8	0.7177	ug/L	0.7177 ppb	14:29:50
2	Ti 334.940†	-1344.2	31.4	0.0455	ug/L	0.0455 ppb	14:29:30
2	Tl 190.801†	-32.7	7.7	1.9785	ug/L	1.9785 ppb	14:29:50
2	U 409.014†	-2735.1	35.5	0.9739	ug/L	0.9739 ppb	14:29:25
2	V 292.402†	-1445.4	76.2	0.4821	ug/L	0.4821 ppb	14:29:30
2	Zn 213.857†	908.7	27.1	0.2189	ug/L	0.2189 ppb	14:29:50
2	SiO2†	698.1	57.2	3.3807	ug/L	3.3807 ppb	14:30:31
3	Sc Radial	6119.4	6119.4	97.4	%		14:28:28
3	Y RADIAL	6586.1	6586.1	97.47	%		14:28:28
3	Al 396.153Radial†	-44.4	-18.8	-11.607	ug/L	-11.607 ppb	14:28:28
3	Ca 317.933Radial†	32.7	-1.3	-1.6617	ug/L	-1.6617 ppb	14:28:48
3	Fe 238.204 Radial†	13.8	5.0	37.914	ug/L	37.914 ppb	14:28:48
3	K 766.490 Radial†	2949.1	124.5	20.664	ug/L	20.664 ppb	14:28:28
3	Mg 279.077 IEC†	3.5	0.9	25.771	ug/L	25.771 ppb	14:28:48
3	Na 589.592 Radial†	-1590.2	1.5	0.3987	ug/L	0.3987 ppb	14:28:28
3	Sr 421.552†	15.7	-16.5	-0.0865	ug/L	-0.0865 ppb	14:28:28
3	Sc 361.383	956248.5	956248.5	99.324	%		14:29:55
3	Y 371.029	797778.8	797778.8	99.482	%		14:29:55
3	Ag 328.068†	516.8	60.7	0.2707	ug/L	0.2707 ppb	14:30:00
3	As 188.979†	-36.3	-14.3	-5.1034	ug/L	-5.1034 ppb	14:30:20
3	B 249.677†	-328.0	3.5	0.0662	ug/L	0.0662 ppb	14:30:20
3	Ba 233.527†	24.1	-0.3	-0.0001	ug/L	-0.0001 ppb	14:30:20
3	Be 313.107†	-4671.8	-21.4	-0.0074	ug/L	-0.0074 ppb	14:30:00
3	Cd 226.502†	-222.4	-11.8	-0.1188	ug/L	-0.1188 ppb	14:30:20
3	Co 228.616†	-78.6	-8.6	-0.1481	ug/L	-0.1481 ppb	14:30:20
3	Cr 267.716†	113.1	25.9	0.2573	ug/L	0.2573 ppb	14:30:20
3	Cu 324.752†	6217.9	-34.1	-0.0925	ug/L	-0.0925 ppb	14:30:00
3	Mn 257.610†	565.0	12.7	0.0157	ug/L	0.0157 ppb	14:30:20
3	Mo 202.031†	30.3	11.4	0.6770	ug/L	0.6770 ppb	14:30:20
3	Ni 231.604†	117.3	-10.0	-0.2167	ug/L	-0.2167 ppb	14:30:20
3	P 214.914†	253.0	13.5	6.9210	ug/L	6.9210 ppb	14:30:20
3	Pb 220.353†	-72.6	9.5	0.9769	ug/L	0.9769 ppb	14:30:20
3	S 181.975 Axial†	46.2	-2.3	-2.8524	ug/L	-2.8524 ppb	14:30:20
3	Sb 206.836†	37.9	-2.0	-0.6059	ug/L	-0.6059 ppb	14:30:20
3	Se 196.026†	-18.6	6.9	3.8768	ug/L	3.8768 ppb	14:30:20
3	Si 251.611†	687.0	57.1	1.5790	ug/L	1.5790 ppb	14:30:20
3	Sn 189.927†	-2.7	-11.8	-1.7539	ug/L	-1.7539 ppb	14:30:20
3	Ti 334.940†	-1484.0	-105.2	-0.1550	ug/L	-0.1550 ppb	14:30:00
3	Tl 190.801†	-54.8	-14.5	-3.7006	ug/L	-3.7006 ppb	14:30:20
3	U 409.014†	-2663.7	116.1	3.1869	ug/L	3.1869 ppb	14:29:55
3	V 292.402†	-1502.5	23.3	0.1564	ug/L	0.1564 ppb	14:30:00
3	Zn 213.857†	892.2	7.7	0.0589	ug/L	0.0589 ppb	14:30:20
3	SiO2†	710.4	67.4	4.0000	ug/L	4.0000 ppb	14:30:36

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	955286.9	99.224	%	0.1854				0.19%
Sc Radial	6134.7	97.6	%	0.48				0.49%
Y 371.029	796268.7	99.293	%	0.1991				0.20%
Y RADIAL	6588.3	97.50	%	0.219				0.22%
Ag 328.068†	-6.9	-0.0269	ug/L	0.35760	-0.0269	ppb	0.35760	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.9	8.5345	ug/L	21.89046	8.5345	ppb	21.89046	256.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-7.5	-2.6886	ug/L	2.24910	-2.6886	ppb	2.24910	83.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	18.2	0.3685	ug/L	0.27835	0.3685	ppb	0.27835	75.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.5	-0.0223	ug/L	0.09261	-0.0223	ppb	0.09261	414.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.9	0.0137	ug/L	0.01976	0.0137	ppb	0.01976	143.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.6	-0.7491	ug/L	3.82943	-0.7491	ppb	3.82943	511.19%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -5.9     -0.0580 ug/L       0.06446     -0.0580 ppb        0.06446 111.22%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -13.3     -0.2296 ug/L       0.08250     -0.2296 ppb        0.08250  35.93%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.7      0.1866 ug/L       0.10355      0.1866 ppb        0.10355  55.50%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -44.5     -0.1227 ug/L       0.10655     -0.1227 ppb        0.10655  86.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.4      10.995 ug/L       24.4183      10.995 ppb        24.4183 222.09%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       187.9      31.175 ug/L       10.4198      31.175 ppb        10.4198  33.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.7      20.500 ug/L        9.7802      20.500 ppb         9.7802  47.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              18.8      0.0190 ug/L       0.00478      0.0190 ppb        0.00478  25.14%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.6      0.5073 ug/L       0.24232      0.5073 ppb        0.24232  47.76%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        1.4      0.3831 ug/L       8.39747      0.3831 ppb        8.39747 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -4.7     -0.1018 ug/L       0.13683     -0.1018 ppb        0.13683 134.44%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               12.0      6.2089 ug/L       6.51258      6.2089 ppb        6.51258 104.89%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              13.4      1.3798 ug/L       0.60391      1.3798 ppb        0.60391  43.77%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.1     -2.5023 ug/L       4.48506     -2.5023 ppb        4.48506 179.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.4      1.2970 ug/L       1.69492      1.2970 ppb        1.69492 130.68%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.0      0.5686 ug/L       2.86861      0.5686 ppb        2.86861 504.50%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              57.2      1.5774 ug/L       0.14386      1.5774 ppb        0.14386   9.12%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -5.2     -0.7741 ug/L       1.31300     -0.7741 ppb        1.31300 169.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -6.0     -0.0315 ug/L       0.10024     -0.0315 ppb        0.10024 317.83%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -53.8     -0.0797 ug/L       0.10917     -0.0797 ppb        0.10917 136.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.3     -0.5792 ug/L       2.88118     -0.5792 ppb        2.88118 497.44%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               93.4      2.5655 ug/L       1.38942      2.5655 ppb        1.38942  54.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               52.5      0.3397 ug/L       0.16668      0.3397 ppb        0.16668  49.06%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              19.9      0.1598 ug/L       0.08779      0.1598 ppb        0.08779  54.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    71.1      4.2148 ug/L       0.95965      4.2148 ppb        0.95965  22.77%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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12/17/2009 09:17:33 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.000 Slit adjustment: -4

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Analysis Begun

Start Time: 12/17/2009 09:20:07 **Plasma On Time: 12/14/2009 06:02:42**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\121709.sif
Batch ID:
Results Data Set: 121709
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/16/2009 13:12:14**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/17/2009 09:20:08**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5744.7	5744.7	96.5	%	09:22:01
1	Y RADIAL	5956.3	5956.3	96.39	%	09:22:01
1	Al 396.153Radial†	-11.1	-11.5	[0.00]	ug/L	09:22:01
1	Ca 317.933Radial†	19.7	20.4	[0.00]	ug/L	09:22:21
1	Fe 238.204 Radial†	12.5	12.9	[0.00]	ug/L	09:22:21
1	K 766.490 Radial†	3128.1	3240.5	[0.00]	ug/L	09:22:01
1	Mg 279.077 IEC†	5.8	6.0	[0.00]	ug/L	09:22:21
1	Na 589.592 Radial†	-1743.8	-1806.4	[0.00]	ug/L	09:22:01
1	Sr 421.552†	-7.2	-7.4	[0.00]	ug/L	09:22:01
1	Sc 361.383	932420.7	932420.7	100.01	%	09:23:18
1	Y 371.029	769736.5	769736.5	100.10	%	09:23:18
1	Ag 328.068†	371.0	370.9	[0.00]	ug/L	09:23:18
1	As 188.979†	-33.2	-33.2	[0.00]	ug/L	09:23:38
1	B 249.677†	-536.5	-536.5	[0.00]	ug/L	09:23:38
1	Ba 233.527†	16.7	16.7	[0.00]	ug/L	09:23:38
1	Be 313.107†	-4501.7	-4501.3	[0.00]	ug/L	09:23:18
1	Cd 226.502†	-210.6	-210.6	[0.00]	ug/L	09:23:38
1	Co 228.616†	-82.2	-82.2	[0.00]	ug/L	09:23:38
1	Cr 267.716†	96.0	96.0	[0.00]	ug/L	09:23:38
1	Cu 324.752†	6055.4	6055.0	[0.00]	ug/L	09:23:18
1	Mn 257.610†	560.8	560.8	[0.00]	ug/L	09:23:38
1	Mo 202.031†	27.6	27.6	[0.00]	ug/L	09:23:38
1	Ni 231.604†	131.6	131.6	[0.00]	ug/L	09:23:38
1	P 214.914†	242.6	242.6	[0.00]	ug/L	09:23:38
1	Pb 220.353†	-71.1	-71.1	[0.00]	ug/L	09:23:38
1	S 181.975 Axial†	47.7	47.7	[0.00]	ug/L	09:23:38
1	Sb 206.836†	39.9	39.9	[0.00]	ug/L	09:23:38
1	Se 196.026†	-36.4	-36.4	[0.00]	ug/L	09:23:38
1	Si 251.611†	652.8	652.7	[0.00]	ug/L	09:23:38
1	Sn 189.927†	3.8	3.8	[0.00]	ug/L	09:23:38
1	Ti 334.940†	-1408.2	-1408.1	[0.00]	ug/L	09:23:18
1	Tl 190.801†	-39.9	-39.9	[0.00]	ug/L	09:23:38
1	U 409.014†	-2907.3	-2907.1	[0.00]	ug/L	09:23:18
1	V 292.402†	-1526.9	-1526.8	[0.00]	ug/L	09:23:18
1	Zn 213.857†	891.0	890.9	[0.00]	ug/L	09:23:38
1	SiO2†	651.9	651.8	[0.00]	ug/L	09:24:34
2	Sc Radial	6003.9	6003.9	101	%	09:22:26
2	Y RADIAL	6212.8	6212.8	100.5	%	09:22:26
2	Al 396.153Radial†	-17.7	-17.6	[0.00]	ug/L	09:22:26
2	Ca 317.933Radial†	21.5	21.3	[0.00]	ug/L	09:22:46
2	Fe 238.204 Radial†	11.9	11.8	[0.00]	ug/L	09:22:46
2	K 766.490 Radial†	3221.2	3192.9	[0.00]	ug/L	09:22:26
2	Mg 279.077 IEC†	4.7	4.7	[0.00]	ug/L	09:22:46
2	Na 589.592 Radial†	-1661.2	-1646.6	[0.00]	ug/L	09:22:26
2	Sr 421.552†	-1.8	-1.8	[0.00]	ug/L	09:22:26
2	Sc 361.383	932154.5	932154.5	99.979	%	09:23:43
2	Y 371.029	768446.2	768446.2	99.935	%	09:23:43
2	Ag 328.068†	397.2	397.3	[0.00]	ug/L	09:23:43
2	As 188.979†	-28.0	-28.0	[0.00]	ug/L	09:24:03
2	B 249.677†	-527.1	-527.2	[0.00]	ug/L	09:24:03
2	Ba 233.527†	4.1	4.1	[0.00]	ug/L	09:24:03
2	Be 313.107†	-4542.1	-4543.1	[0.00]	ug/L	09:23:43
2	Cd 226.502†	-210.7	-210.7	[0.00]	ug/L	09:24:03
2	Co 228.616†	-89.9	-89.9	[0.00]	ug/L	09:24:03
2	Cr 267.716†	62.4	62.4	[0.00]	ug/L	09:24:03
2	Cu 324.752†	6141.0	6142.3	[0.00]	ug/L	09:23:43
2	Mn 257.610†	552.4	552.5	[0.00]	ug/L	09:24:03
2	Mo 202.031†	27.0	27.0	[0.00]	ug/L	09:24:03
2	Ni 231.604†	139.0	139.1	[0.00]	ug/L	09:24:03
2	P 214.914†	248.2	248.3	[0.00]	ug/L	09:24:03
2	Pb 220.353†	-87.1	-87.2	[0.00]	ug/L	09:24:03
2	S 181.975 Axial†	43.8	43.8	[0.00]	ug/L	09:24:03
2	Sb 206.836†	38.4	38.4	[0.00]	ug/L	09:24:03
2	Se 196.026†	-34.0	-34.0	[0.00]	ug/L	09:24:03
2	Si 251.611†	627.1	627.3	[0.00]	ug/L	09:24:03
2	Sn 189.927†	8.8	8.8	[0.00]	ug/L	09:24:03
2	Ti 334.940†	-1413.2	-1413.5	[0.00]	ug/L	09:23:43
2	Tl 190.801†	-52.2	-52.2	[0.00]	ug/L	09:24:03
2	U 409.014†	-2963.4	-2964.0	[0.00]	ug/L	09:23:43
2	V 292.402†	-1541.2	-1541.6	[0.00]	ug/L	09:23:43

2	Zn 213.857†	867.9	868.1	[0.00]	ug/L	09:24:03
2	SiO2†	705.4	705.5	[0.00]	ug/L	09:24:39
3	Sc Radial	6104.8	6104.8	103	%	09:22:51
3	Y RADIAL	6369.0	6369.0	103.1	%	09:22:51
3	Al 396.153Radial†	-20.2	-19.7	[0.00]	ug/L	09:22:51
3	Ca 317.933Radial†	20.2	19.7	[0.00]	ug/L	09:23:11
3	Fe 238.204 Radial†	14.3	13.9	[0.00]	ug/L	09:23:11
3	K 766.490 Radial†	3083.5	3005.9	[0.00]	ug/L	09:22:51
3	Mg 279.077 IEC†	5.5	5.4	[0.00]	ug/L	09:23:11
3	Na 589.592 Radial†	-1766.5	-1722.0	[0.00]	ug/L	09:22:51
3	Sr 421.552†	-34.4	-33.5	[0.00]	ug/L	09:22:51
3	Sc 361.383	932487.0	932487.0	100.01	%	09:24:09
3	Y 371.029	768660.1	768660.1	99.963	%	09:24:09
3	Ag 328.068†	457.1	457.1	[0.00]	ug/L	09:24:09
3	As 188.979†	-33.2	-33.2	[0.00]	ug/L	09:24:29
3	B 249.677†	-516.1	-516.1	[0.00]	ug/L	09:24:29
3	Ba 233.527†	13.7	13.7	[0.00]	ug/L	09:24:29
3	Be 313.107†	-4601.5	-4600.8	[0.00]	ug/L	09:24:09
3	Cd 226.502†	-220.3	-220.2	[0.00]	ug/L	09:24:29
3	Co 228.616†	-79.2	-79.2	[0.00]	ug/L	09:24:29
3	Cr 267.716†	95.8	95.8	[0.00]	ug/L	09:24:29
3	Cu 324.752†	6102.3	6101.4	[0.00]	ug/L	09:24:09
3	Mn 257.610†	565.2	565.1	[0.00]	ug/L	09:24:29
3	Mo 202.031†	20.3	20.3	[0.00]	ug/L	09:24:29
3	Ni 231.604†	118.6	118.5	[0.00]	ug/L	09:24:29
3	P 214.914†	244.3	244.2	[0.00]	ug/L	09:24:29
3	Pb 220.353†	-70.4	-70.4	[0.00]	ug/L	09:24:29
3	S 181.975 Axial†	53.7	53.7	[0.00]	ug/L	09:24:29
3	Sb 206.836†	54.9	54.9	[0.00]	ug/L	09:24:29
3	Se 196.026†	-37.4	-37.4	[0.00]	ug/L	09:24:29
3	Si 251.611†	645.2	645.1	[0.00]	ug/L	09:24:29
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	09:24:29
3	Ti 334.940†	-1543.4	-1543.2	[0.00]	ug/L	09:24:09
3	Tl 190.801†	-31.3	-31.3	[0.00]	ug/L	09:24:29
3	U 409.014†	-3035.8	-3035.4	[0.00]	ug/L	09:24:09
3	V 292.402†	-1528.2	-1528.0	[0.00]	ug/L	09:24:09
3	Zn 213.857†	879.0	878.9	[0.00]	ug/L	09:24:29
3	SiO2†	680.2	680.1	[0.00]	ug/L	09:24:44

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	932354.1	175.98	0.02%	100.00	%
Sc Radial	5951.1	185.72	3.12%	100.0	%
Y 371.029	768947.6	691.56	0.09%	100.00	%
Y RADIAL	6179.4	208.39	3.37%	100.0	%
Ag 328.068†	408.4	44.13	10.80%	[0.00]	ug/L
Al 396.153Radial†	-16.3	4.25	26.15%	[0.00]	ug/L
As 188.979†	-31.5	2.99	9.50%	[0.00]	ug/L
B 249.677†	-526.6	10.22	1.94%	[0.00]	ug/L
Ba 233.527†	11.5	6.57	57.06%	[0.00]	ug/L
Be 313.107†	-4548.4	49.97	1.10%	[0.00]	ug/L
Ca 317.933Radial†	20.5	0.80	3.90%	[0.00]	ug/L
Cd 226.502†	-213.8	5.55	2.60%	[0.00]	ug/L
Co 228.616†	-83.8	5.53	6.60%	[0.00]	ug/L
Cr 267.716†	84.7	19.35	22.84%	[0.00]	ug/L
Cu 324.752†	6099.6	43.66	0.72%	[0.00]	ug/L
Fe 238.204 Radial†	12.9	1.07	8.26%	[0.00]	ug/L
K 766.490 Radial†	3146.4	124.01	3.94%	[0.00]	ug/L
Mg 279.077 IEC†	5.4	0.64	12.01%	[0.00]	ug/L
Mn 257.610†	559.5	6.41	1.15%	[0.00]	ug/L
Mo 202.031†	25.0	4.09	16.37%	[0.00]	ug/L
Na 589.592 Radial†	-1725.0	79.96	4.64%	[0.00]	ug/L
Ni 231.604†	129.7	10.39	8.01%	[0.00]	ug/L
P 214.914†	245.0	2.94	1.20%	[0.00]	ug/L
Pb 220.353†	-76.2	9.47	12.42%	[0.00]	ug/L
S 181.975 Axial†	48.4	4.95	10.23%	[0.00]	ug/L
Sb 206.836†	44.4	9.13	20.55%	[0.00]	ug/L
Se 196.026†	-35.9	1.71	4.77%	[0.00]	ug/L
Si 251.611†	641.7	13.08	2.04%	[0.00]	ug/L

Sn 189.927†	6.2	2.51	40.41%	[0.00]	ug/L
Sr 421.552†	-14.2	16.93	118.85%	[0.00]	ug/L
Ti 334.940†	-1454.9	76.46	5.26%	[0.00]	ug/L
Tl 190.801†	-41.1	10.55	25.64%	[0.00]	ug/L
U 409.014†	-2968.8	64.29	2.17%	[0.00]	ug/L
V 292.402†	-1532.1	8.21	0.54%	[0.00]	ug/L
Zn 213.857†	879.3	11.43	1.30%	[0.00]	ug/L
SiO2†	679.1	26.88	3.96%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/17/2009 09:26:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	6188.7	6188.7	104	%	09:28:53
1	Y RADIAL	6370.5	6370.5	103.1	%	09:28:53
1	K 766.490 Radial†	9149.4	5651.8	[1000]	ug/L	09:28:48
1	Sr 421.552†	18411.6	17719.2	[100]	ug/L	09:28:53
1	Sc 361.383	931384.4	931384.4	99.896	%	09:29:20
1	Y 371.029	766219.7	766219.7	99.645	%	09:29:20
1	Ag 328.068†	24626.2	24243.4	[100]	ug/L	09:29:20
1	As 188.979†	266.7	298.5	[100]	ug/L	09:29:40
1	B 249.677†	4343.0	4874.1	[100]	ug/L	09:29:20
1	Ba 233.527†	15744.6	15749.4	[100]	ug/L	09:29:20
1	Be 313.107†	304494.4	309359.9	[100]	ug/L	09:29:20
1	Cd 226.502†	10469.3	10694.0	[100]	ug/L	09:29:40
1	Co 228.616†	5983.4	6073.4	[100]	ug/L	09:29:40
1	Cr 267.716†	10658.2	10584.6	[100]	ug/L	09:29:20
1	Cu 324.752†	42984.3	36929.5	[100]	ug/L	09:29:20
1	Mn 257.610†	108901.3	108455.2	[100]	ug/L	09:29:20
1	Mo 202.031†	1783.6	1760.5	[100]	ug/L	09:29:40
1	Ni 231.604†	5013.5	4889.0	[100]	ug/L	09:29:40
1	P 214.914†	1239.9	996.1	[500]	ug/L	09:29:40
1	Pb 220.353†	958.8	1036.0	[100]	ug/L	09:29:40
1	S 181.975 Axial†	223.4	175.2	[200]	ug/L	09:29:40
1	Sb 206.836†	377.1	333.0	[100]	ug/L	09:29:40
1	Se 196.026†	164.0	200.1	[100]	ug/L	09:29:40
1	Si 251.611†	19122.6	18500.8	[500]	ug/L	09:29:20
1	Sn 189.927†	696.2	690.7	[100]	ug/L	09:29:40
1	Ti 334.940†	70264.1	71792.2	[100]	ug/L	09:29:20
1	Tl 190.801†	367.6	409.1	[100]	ug/L	09:29:40
1	U 409.014†	770.0	3739.6	[100]	ug/L	09:29:20
1	V 292.402†	14784.8	16332.3	[100]	ug/L	09:29:20
1	Zn 213.857†	13810.1	12945.1	[100]	ug/L	09:29:20
1	SiO2†	19132.6	18473.4	[1069.5]	ug/L	09:30:36
2	Sc Radial	5895.3	5895.3	99.1	%	09:29:03
2	Y RADIAL	6094.6	6094.6	98.63	%	09:29:03
2	K 766.490 Radial†	9280.4	6221.9	[1000]	ug/L	09:28:58
2	Sr 421.552†	18509.4	18698.8	[100]	ug/L	09:29:03
2	Sc 361.383	927327.3	927327.3	99.461	%	09:29:45
2	Y 371.029	762103.6	762103.6	99.110	%	09:29:45
2	Ag 328.068†	24638.0	24363.1	[100]	ug/L	09:29:45
2	As 188.979†	258.3	291.1	[100]	ug/L	09:30:05
2	B 249.677†	4355.3	4905.5	[100]	ug/L	09:29:45
2	Ba 233.527†	15783.3	15857.4	[100]	ug/L	09:29:45
2	Be 313.107†	304548.2	310747.5	[100]	ug/L	09:29:45
2	Cd 226.502†	10386.8	10657.0	[100]	ug/L	09:30:05
2	Co 228.616†	5922.1	6038.0	[100]	ug/L	09:30:05
2	Cr 267.716†	10642.2	10615.2	[100]	ug/L	09:29:45
2	Cu 324.752†	43129.7	37263.9	[100]	ug/L	09:29:45
2	Mn 257.610†	109010.6	109042.0	[100]	ug/L	09:29:45
2	Mo 202.031†	1767.5	1752.1	[100]	ug/L	09:30:05
2	Ni 231.604†	4995.4	4892.8	[100]	ug/L	09:30:05
2	P 214.914†	1250.9	1012.7	[500]	ug/L	09:30:05
2	Pb 220.353†	958.1	1039.5	[100]	ug/L	09:30:05
2	S 181.975 Axial†	212.7	165.4	[200]	ug/L	09:30:05
2	Sb 206.836†	381.3	339.0	[100]	ug/L	09:30:05
2	Se 196.026†	160.5	197.3	[100]	ug/L	09:30:05
2	Si 251.611†	19059.4	18521.0	[500]	ug/L	09:29:45
2	Sn 189.927†	705.6	703.2	[100]	ug/L	09:30:05
2	Ti 334.940†	70361.6	72197.9	[100]	ug/L	09:29:45
2	Tl 190.801†	368.3	411.4	[100]	ug/L	09:30:05
2	U 409.014†	834.8	3808.1	[100]	ug/L	09:29:45

2	V 292.402†	14780.6	16392.9	[100]	ug/L	09:29:45
2	Zn 213.857†	13807.7	13003.2	[100]	ug/L	09:29:45
2	SiO2†	19075.1	18499.4	[1069.5]	ug/L	09:30:41
3	Sc Radial	6077.1	6077.1	102	%	09:29:13
3	Y RADIAL	6296.4	6296.4	101.9	%	09:29:13
3	K 766.490 Radial†	9456.7	6114.3	[1000]	ug/L	09:29:08
3	Sr 421.552†	18645.7	18273.5	[100]	ug/L	09:29:13
3	Sc 361.383	929385.5	929385.5	99.682	%	09:30:11
3	Y 371.029	764846.7	764846.7	99.467	%	09:30:11
3	Ag 328.068†	24910.5	24581.7	[100]	ug/L	09:30:11
3	As 188.979†	264.5	296.8	[100]	ug/L	09:30:31
3	B 249.677†	4349.8	4890.3	[100]	ug/L	09:30:11
3	Ba 233.527†	15820.2	15859.3	[100]	ug/L	09:30:11
3	Be 313.107†	306180.7	311707.1	[100]	ug/L	09:30:11
3	Cd 226.502†	10371.5	10618.5	[100]	ug/L	09:30:31
3	Co 228.616†	5942.5	6045.2	[100]	ug/L	09:30:31
3	Cr 267.716†	10642.9	10592.2	[100]	ug/L	09:30:11
3	Cu 324.752†	43343.5	37382.4	[100]	ug/L	09:30:11
3	Mn 257.610†	109327.0	109116.7	[100]	ug/L	09:30:11
3	Mo 202.031†	1770.6	1751.3	[100]	ug/L	09:30:31
3	Ni 231.604†	4967.7	4853.9	[100]	ug/L	09:30:31
3	P 214.914†	1219.3	978.1	[500]	ug/L	09:30:31
3	Pb 220.353†	927.5	1006.7	[100]	ug/L	09:30:31
3	S 181.975 Axial†	215.2	167.5	[200]	ug/L	09:30:31
3	Sb 206.836†	386.3	343.1	[100]	ug/L	09:30:31
3	Se 196.026†	156.0	192.4	[100]	ug/L	09:30:31
3	Si 251.611†	19260.8	18680.6	[500]	ug/L	09:30:11
3	Sn 189.927†	705.0	701.0	[100]	ug/L	09:30:31
3	Ti 334.940†	70801.6	72482.7	[100]	ug/L	09:30:11
3	Tl 190.801†	368.3	410.6	[100]	ug/L	09:30:31
3	U 409.014†	871.4	3843.1	[100]	ug/L	09:30:11
3	V 292.402†	14932.7	16512.5	[100]	ug/L	09:30:11
3	Zn 213.857†	13899.5	13064.6	[100]	ug/L	09:30:11
3	SiO2†	19244.4	18626.8	[1069.5]	ug/L	09:30:46

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	929365.7	2028.64	0.22%	99.679	%
Sc Radial	6053.7	148.06	2.45%	102	%
Y 371.029	764390.0	2095.69	0.27%	99.407	%
Y RADIAL	6253.8	142.83	2.28%	101.2	%
Ag 328.068†	24396.1	171.51	0.70%	[100]	ug/L
As 188.979†	295.5	3.85	1.30%	[100]	ug/L
B 249.677†	4890.0	15.70	0.32%	[100]	ug/L
Ba 233.527†	15822.0	62.87	0.40%	[100]	ug/L
Be 313.107†	310604.8	1180.11	0.38%	[100]	ug/L
Cd 226.502†	10656.5	37.77	0.35%	[100]	ug/L
Co 228.616†	6052.2	18.71	0.31%	[100]	ug/L
Cr 267.716†	10597.3	15.93	0.15%	[100]	ug/L
Cu 324.752†	37191.9	234.87	0.63%	[100]	ug/L
K 766.490 Radial†	5996.0	302.89	5.05%	[1000]	ug/L
Mn 257.610†	108871.3	362.32	0.33%	[100]	ug/L
Mo 202.031†	1754.6	5.08	0.29%	[100]	ug/L
Ni 231.604†	4878.6	21.46	0.44%	[100]	ug/L
P 214.914†	995.7	17.27	1.73%	[500]	ug/L
Pb 220.353†	1027.4	18.01	1.75%	[100]	ug/L
S 181.975 Axial†	169.4	5.17	3.05%	[200]	ug/L
Sb 206.836†	338.4	5.05	1.49%	[100]	ug/L
Se 196.026†	196.6	3.90	1.98%	[100]	ug/L
Si 251.611†	18567.5	98.50	0.53%	[500]	ug/L
Sn 189.927†	698.3	6.68	0.96%	[100]	ug/L
Sr 421.552†	18230.5	491.25	2.69%	[100]	ug/L
Ti 334.940†	72157.6	347.01	0.48%	[100]	ug/L
Tl 190.801†	410.4	1.15	0.28%	[100]	ug/L
U 409.014†	3796.9	52.61	1.39%	[100]	ug/L
V 292.402†	16412.5	91.69	0.56%	[100]	ug/L
Zn 213.857†	13004.3	59.75	0.46%	[100]	ug/L
SiO2†	18533.2	82.07	0.44%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/17/2009 09:32:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5858.3	5858.3	98.4	%	09:34:50
1	Y RADIAL	6034.6	6034.6	97.66	%	09:34:50
1	Al 396.153Radial†	7340.6	7473.2	[5000]	ug/L	09:34:50
1	Ca 317.933Radial†	3650.6	3688.0	[5000]	ug/L	09:35:10
1	K 766.490 Radial†	33178.6	30558.2	[5000]	ug/L	09:34:50
1	Mg 279.077 IEC†	177.5	175.0	[5000]	ug/L	09:35:10
1	Sr 421.552†	90088.3	91530.7	[500]	ug/L	09:34:50
1	Sc 361.383	971260.6	971260.6	104.17	%	09:36:07
1	Y 371.029	774695.9	774695.9	100.75	%	09:36:07
1	Ag 328.068†	119937.9	114725.0	[500]	ug/L	09:36:12
1	As 188.979†	1426.7	1401.0	[500]	ug/L	09:36:32
1	B 249.677†	24569.9	24112.3	[500]	ug/L	09:36:12
1	Ba 233.527†	77141.0	74039.4	[500]	ug/L	09:36:12
1	Be 313.107†	1548383.4	1490907.2	[500]	ug/L	09:36:07
1	Cd 226.502†	53203.8	51286.4	[500]	ug/L	09:36:12
1	Co 228.616†	29760.8	28652.4	[500]	ug/L	09:36:12
1	Cr 267.716†	51690.1	49534.8	[500]	ug/L	09:36:12
1	Cu 324.752†	188430.2	174782.5	[500]	ug/L	09:36:12
1	Mn 257.610†	531985.6	510116.0	[500]	ug/L	09:36:07
1	Mo 202.031†	8661.6	8289.6	[500]	ug/L	09:36:32
1	Ni 231.604†	24171.8	23073.8	[500]	ug/L	09:36:12
1	P 214.914†	5212.7	4758.9	[2500]	ug/L	09:36:32
1	Pb 220.353†	4900.8	4780.8	[500]	ug/L	09:36:32
1	S 181.975 Axial†	900.2	815.7	[1000]	ug/L	09:36:32
1	Sb 206.836†	1772.5	1657.1	[500]	ug/L	09:36:32
1	Se 196.026†	917.2	916.4	[500]	ug/L	09:36:32
1	Si 251.611†	93998.3	89591.2	[2500]	ug/L	09:36:12
1	Sn 189.927†	3484.9	3339.1	[500]	ug/L	09:36:32
1	Ti 334.940†	357623.2	344752.6	[500]	ug/L	09:36:07
1	Tl 190.801†	1963.4	1925.9	[500]	ug/L	09:36:32
1	U 409.014†	15269.3	17626.5	[500]	ug/L	09:36:12
1	V 292.402†	79998.9	78326.4	[500]	ug/L	09:36:12
1	Zn 213.857†	64757.8	61284.4	[500]	ug/L	09:36:12
1	SiO2†	93268.1	88852.8	[5347.5]	ug/L	09:37:40
2	Sc Radial	6038.1	6038.1	101	%	09:35:15
2	Y RADIAL	6172.5	6172.5	99.89	%	09:35:15
2	Al 396.153Radial†	7528.1	7436.0	[5000]	ug/L	09:35:15
2	Ca 317.933Radial†	3620.2	3547.6	[5000]	ug/L	09:35:35
2	K 766.490 Radial†	33998.1	30362.1	[5000]	ug/L	09:35:15
2	Mg 279.077 IEC†	173.7	165.8	[5000]	ug/L	09:35:35
2	Sr 421.552†	92157.9	90845.0	[500]	ug/L	09:35:15
2	Sc 361.383	962071.3	962071.3	103.19	%	09:36:38
2	Y 371.029	766439.0	766439.0	99.674	%	09:36:38
2	Ag 328.068†	121214.0	117061.4	[500]	ug/L	09:36:43
2	As 188.979†	1422.5	1410.0	[500]	ug/L	09:37:04
2	B 249.677†	24861.6	24620.3	[500]	ug/L	09:36:43
2	Ba 233.527†	77917.1	75498.8	[500]	ug/L	09:36:43
2	Be 313.107†	1529968.0	1487257.6	[500]	ug/L	09:36:38
2	Cd 226.502†	53824.2	52375.5	[500]	ug/L	09:36:43
2	Co 228.616†	30136.9	29289.8	[500]	ug/L	09:36:43
2	Cr 267.716†	52213.1	50515.5	[500]	ug/L	09:36:43
2	Cu 324.752†	190333.6	178354.9	[500]	ug/L	09:36:43
2	Mn 257.610†	527624.0	510766.9	[500]	ug/L	09:36:38
2	Mo 202.031†	8664.6	8372.0	[500]	ug/L	09:37:04
2	Ni 231.604†	24415.3	23531.4	[500]	ug/L	09:36:43
2	P 214.914†	5212.4	4806.3	[2500]	ug/L	09:37:04
2	Pb 220.353†	4899.4	4824.3	[500]	ug/L	09:37:04
2	S 181.975 Axial†	901.6	825.4	[1000]	ug/L	09:37:04
2	Sb 206.836†	1760.4	1661.6	[500]	ug/L	09:37:04

2	Se 196.026†	917.0	924.6	[500]	ug/L	09:37:04
2	Si 251.611†	95180.1	91598.4	[2500]	ug/L	09:36:43
2	Sn 189.927†	3479.1	3365.4	[500]	ug/L	09:37:04
2	Ti 334.940†	354091.5	344608.9	[500]	ug/L	09:36:38
2	Tl 190.801†	1973.7	1953.9	[500]	ug/L	09:37:04
2	U 409.014†	15675.7	18160.3	[500]	ug/L	09:36:43
2	V 292.402†	80787.4	79824.1	[500]	ug/L	09:36:43
2	Zn 213.857†	65326.9	62429.7	[500]	ug/L	09:36:43
2	SiO2†	94060.2	90475.6	[5347.5]	ug/L	09:37:45
3	Sc Radial	5932.7	5932.7	99.7	%	09:35:40
3	Y RADIAL	6120.2	6120.2	99.04	%	09:35:40
3	Al 396.153Radial†	7411.3	7450.6	[5000]	ug/L	09:35:40
3	Ca 317.933Radial†	3645.6	3636.5	[5000]	ug/L	09:36:00
3	K 766.490 Radial†	33362.4	30319.9	[5000]	ug/L	09:35:40
3	Mg 279.077 IEC†	177.1	172.3	[5000]	ug/L	09:36:00
3	Sr 421.552†	90891.7	91189.1	[500]	ug/L	09:35:40
3	Sc 361.383	968746.4	968746.4	103.90	%	09:37:09
3	Y 371.029	771471.0	771471.0	100.33	%	09:37:09
3	Ag 328.068†	119443.5	114548.0	[500]	ug/L	09:37:15
3	As 188.979†	1408.0	1386.6	[500]	ug/L	09:37:35
3	B 249.677†	24564.3	24168.1	[500]	ug/L	09:37:15
3	Ba 233.527†	76728.1	73834.1	[500]	ug/L	09:37:15
3	Be 313.107†	1541267.8	1487916.3	[500]	ug/L	09:37:09
3	Cd 226.502†	52942.6	51167.6	[500]	ug/L	09:37:15
3	Co 228.616†	29618.4	28589.6	[500]	ug/L	09:37:15
3	Cr 267.716†	51470.8	49452.5	[500]	ug/L	09:37:15
3	Cu 324.752†	187098.4	173970.2	[500]	ug/L	09:37:15
3	Mn 257.610†	530395.6	509911.1	[500]	ug/L	09:37:09
3	Mo 202.031†	8648.0	8298.1	[500]	ug/L	09:37:35
3	Ni 231.604†	24048.6	23015.4	[500]	ug/L	09:37:15
3	P 214.914†	5193.5	4753.4	[2500]	ug/L	09:37:35
3	Pb 220.353†	4869.9	4763.2	[500]	ug/L	09:37:35
3	S 181.975 Axial†	900.9	818.7	[1000]	ug/L	09:37:35
3	Sb 206.836†	1768.6	1657.7	[500]	ug/L	09:37:35
3	Se 196.026†	912.2	913.9	[500]	ug/L	09:37:35
3	Si 251.611†	93552.9	89396.8	[2500]	ug/L	09:37:15
3	Sn 189.927†	3465.7	3329.3	[500]	ug/L	09:37:35
3	Ti 334.940†	356507.5	344569.7	[500]	ug/L	09:37:09
3	Tl 190.801†	1977.4	1944.2	[500]	ug/L	09:37:35
3	U 409.014†	15296.3	17690.5	[500]	ug/L	09:37:15
3	V 292.402†	79638.8	78179.1	[500]	ug/L	09:37:15
3	Zn 213.857†	64331.9	61035.9	[500]	ug/L	09:37:15
3	SiO2†	94460.5	90232.8	[5347.5]	ug/L	09:37:50

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	967359.4	4749.02	0.49%	103.75	%
Sc Radial	5943.0	90.36	1.52%	99.9	%
Y 371.029	770868.6	4161.25	0.54%	100.25	%
Y RADIAL	6109.1	69.62	1.14%	98.86	%
Ag 328.068†	115444.8	1402.83	1.22%	[500]	ug/L
Al 396.153Radial†	7453.3	18.75	0.25%	[5000]	ug/L
As 188.979†	1399.2	11.82	0.84%	[500]	ug/L
B 249.677†	24300.2	278.57	1.15%	[500]	ug/L
Ba 233.527†	74457.4	907.68	1.22%	[500]	ug/L
Be 313.107†	1488693.7	1945.04	0.13%	[500]	ug/L
Ca 317.933Radial†	3624.0	71.01	1.96%	[5000]	ug/L
Cd 226.502†	51609.8	665.75	1.29%	[500]	ug/L
Co 228.616†	28843.9	387.40	1.34%	[500]	ug/L
Cr 267.716†	49834.3	591.44	1.19%	[500]	ug/L
Cu 324.752†	175702.5	2332.62	1.33%	[500]	ug/L
K 766.490 Radial†	30413.4	127.16	0.42%	[5000]	ug/L
Mg 279.077 IEC†	171.0	4.69	2.74%	[5000]	ug/L
Mn 257.610†	510264.7	446.84	0.09%	[500]	ug/L
Mo 202.031†	8319.9	45.27	0.54%	[500]	ug/L
Ni 231.604†	23206.9	282.57	1.22%	[500]	ug/L
P 214.914†	4772.9	29.11	0.61%	[2500]	ug/L
Pb 220.353†	4789.4	31.44	0.66%	[500]	ug/L
S 181.975 Axial†	819.9	4.96	0.60%	[1000]	ug/L

Sb 206.836†	1658.8	2.45	0.15%	[500]	ug/L
Se 196.026†	918.3	5.62	0.61%	[500]	ug/L
Si 251.611†	90195.5	1218.86	1.35%	[2500]	ug/L
Sn 189.927†	3344.6	18.67	0.56%	[500]	ug/L
Sr 421.552†	91188.3	342.87	0.38%	[500]	ug/L
Ti 334.940†	344643.7	96.26	0.03%	[500]	ug/L
Tl 190.801†	1941.3	14.22	0.73%	[500]	ug/L
U 409.014†	17825.8	291.48	1.64%	[500]	ug/L
V 292.402†	78776.6	910.19	1.16%	[500]	ug/L
Zn 213.857†	61583.3	743.42	1.21%	[500]	ug/L
SiO2†	89853.7	875.28	0.97%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/17/2009 09:40:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5791.5	5791.5	97.3	%	09:42:14
1	Y RADIAL	5914.9	5914.9	95.72	%	09:42:14
1	Al 396.153Radial†	14996.1	15425.7	[10000]	ug/L	09:41:54
1	Ca 317.933Radial†	7223.1	7401.7	[10000]	ug/L	09:42:14
1	Fe 238.204 Radial†	1300.5	1323.4	[10000]	ug/L	09:42:14
1	K 766.490 Radial†	64686.1	63322.6	[10000]	ug/L	09:41:54
1	Mg 279.077 IEC†	350.3	354.6	[10000]	ug/L	09:42:14
1	Na 589.592 Radial†	36581.8	39315.1	[10000]	ug/L	09:41:54
1	Sr 421.552†	183826.4	188907.4	[1000]	ug/L	09:41:54
1	Sc 361.383	915054.2	915054.2	98.144	%	09:43:17
1	Y 371.029	743131.0	743131.0	96.643	%	09:43:17
1	Ag 328.068†	237383.8	241463.3	[1000]	ug/L	09:43:17
1	As 188.979†	2854.7	2940.1	[1000]	ug/L	09:43:37
1	B 249.677†	49610.9	51075.4	[1000]	ug/L	09:43:17
1	Ba 233.527†	152612.0	155485.8	[1000]	ug/L	09:43:17
1	Be 313.107†	3015413.3	3076970.6	[1000]	ug/L	09:43:12
1	Cd 226.502†	105243.7	107447.2	[1000]	ug/L	09:43:17
1	Co 228.616†	58806.2	60001.8	[1000]	ug/L	09:43:17
1	Cr 267.716†	102505.3	104358.6	[1000]	ug/L	09:43:17
1	Cu 324.752†	368797.6	369670.5	[1000]	ug/L	09:43:17
1	Mn 257.610†	1032451.5	1051411.4	[1000]	ug/L	09:43:12
1	Mo 202.031†	17316.8	17619.2	[1000]	ug/L	09:43:37
1	Ni 231.604†	47535.6	48304.5	[1000]	ug/L	09:43:17
1	P 214.914†	10199.1	10146.9	[5000]	ug/L	09:43:37
1	Pb 220.353†	9836.3	10098.5	[1000]	ug/L	09:43:37
1	S 181.975 Axial†	1744.1	1728.7	[2000]	ug/L	09:43:37
1	Sb 206.836†	3493.8	3515.4	[1000]	ug/L	09:43:37
1	Se 196.026†	1845.8	1916.7	[1000]	ug/L	09:43:37
1	Si 251.611†	183468.9	186295.8	[5000]	ug/L	09:43:17
1	Sn 189.927†	6977.4	7103.1	[1000]	ug/L	09:43:37
1	Ti 334.940†	690998.5	705517.3	[1000]	ug/L	09:43:17
1	Tl 190.801†	3941.0	4056.6	[1000]	ug/L	09:43:37
1	U 409.014†	33699.3	37305.3	[1000]	ug/L	09:43:17
1	V 292.402†	160640.3	165209.5	[1000]	ug/L	09:43:17
1	Zn 213.857†	126335.2	127844.4	[1000]	ug/L	09:43:17
1	SiO2†	181995.7	184757.4	[10695]	ug/L	09:44:46
2	Sc Radial	5819.6	5819.6	97.8	%	09:42:39
2	Y RADIAL	5949.9	5949.9	96.29	%	09:42:39
2	Al 396.153Radial†	14806.5	15157.4	[10000]	ug/L	09:42:19
2	Ca 317.933Radial†	7223.2	7366.0	[10000]	ug/L	09:42:39
2	Fe 238.204 Radial†	1301.7	1318.2	[10000]	ug/L	09:42:39
2	K 766.490 Radial†	63967.5	62266.6	[10000]	ug/L	09:42:19
2	Mg 279.077 IEC†	348.7	351.3	[10000]	ug/L	09:42:39
2	Na 589.592 Radial†	35964.7	38502.4	[10000]	ug/L	09:42:19
2	Sr 421.552†	181417.0	185530.9	[1000]	ug/L	09:42:19
2	Sc 361.383	912489.7	912489.7	97.869	%	09:43:49
2	Y 371.029	740718.7	740718.7	96.329	%	09:43:49
2	Ag 328.068†	236895.9	241644.6	[1000]	ug/L	09:43:49
2	As 188.979†	2825.5	2918.5	[1000]	ug/L	09:44:09
2	B 249.677†	49531.3	51136.2	[1000]	ug/L	09:43:49
2	Ba 233.527†	152009.8	155307.4	[1000]	ug/L	09:43:49
2	Be 313.107†	3036671.3	3107326.5	[1000]	ug/L	09:43:43
2	Cd 226.502†	104661.5	107153.8	[1000]	ug/L	09:43:49
2	Co 228.616†	58726.9	60089.1	[1000]	ug/L	09:43:49
2	Cr 267.716†	102138.9	104277.7	[1000]	ug/L	09:43:49
2	Cu 324.752†	367916.8	369826.6	[1000]	ug/L	09:43:49
2	Mn 257.610†	1042254.4	1064384.2	[1000]	ug/L	09:43:43
2	Mo 202.031†	17212.2	17561.9	[1000]	ug/L	09:44:09
2	Ni 231.604†	47321.6	48222.0	[1000]	ug/L	09:43:49

2	P 214.914†	10147.3	10123.2	[5000]	ug/L	09:44:09
2	Pb 220.353†	9806.7	10096.4	[1000]	ug/L	09:44:09
2	S 181.975 Axial†	1738.3	1727.8	[2000]	ug/L	09:44:09
2	Sb 206.836†	3483.7	3515.2	[1000]	ug/L	09:44:09
2	Se 196.026†	1826.2	1901.9	[1000]	ug/L	09:44:09
2	Si 251.611†	182874.1	186213.4	[5000]	ug/L	09:43:49
2	Sn 189.927†	6941.3	7086.2	[1000]	ug/L	09:44:09
2	Ti 334.940†	688977.7	705431.3	[1000]	ug/L	09:43:49
2	Tl 190.801†	3920.0	4046.4	[1000]	ug/L	09:44:09
2	U 409.014†	33818.9	37523.9	[1000]	ug/L	09:43:49
2	V 292.402†	160076.5	165093.4	[1000]	ug/L	09:43:49
2	Zn 213.857†	125850.0	127710.4	[1000]	ug/L	09:43:49
2	SiO2†	182900.9	186203.4	[10695]	ug/L	09:44:51
3	Sc Radial	5860.4	5860.4	98.5	%	09:43:04
3	Y RADIAL	5994.5	5994.5	97.01	%	09:43:04
3	Al 396.153Radial†	14698.8	14942.6	[10000]	ug/L	09:42:44
3	Ca 317.933Radial†	7270.1	7362.2	[10000]	ug/L	09:43:04
3	Fe 238.204 Radial†	1307.9	1315.2	[10000]	ug/L	09:43:04
3	K 766.490 Radial†	63376.2	61210.9	[10000]	ug/L	09:42:44
3	Mg 279.077 IEC†	353.7	353.8	[10000]	ug/L	09:43:04
3	Na 589.592 Radial†	35425.0	37698.3	[10000]	ug/L	09:42:44
3	Sr 421.552†	179083.9	181870.4	[1000]	ug/L	09:42:44
3	Sc 361.383	918746.9	918746.9	98.541	%	09:44:20
3	Y 371.029	748190.1	748190.1	97.301	%	09:44:20
3	Ag 328.068†	239123.9	242257.0	[1000]	ug/L	09:44:20
3	As 188.979†	2802.1	2875.1	[1000]	ug/L	09:44:40
3	B 249.677†	50096.4	51365.0	[1000]	ug/L	09:44:20
3	Ba 233.527†	152963.2	155217.1	[1000]	ug/L	09:44:20
3	Be 313.107†	3015619.0	3064830.7	[1000]	ug/L	09:44:15
3	Cd 226.502†	105360.6	107134.9	[1000]	ug/L	09:44:20
3	Co 228.616†	59003.2	59960.9	[1000]	ug/L	09:44:20
3	Cr 267.716†	102827.5	104265.7	[1000]	ug/L	09:44:20
3	Cu 324.752†	372460.3	371877.1	[1000]	ug/L	09:44:20
3	Mn 257.610†	1033269.5	1048013.4	[1000]	ug/L	09:44:15
3	Mo 202.031†	17135.9	17364.7	[1000]	ug/L	09:44:40
3	Ni 231.604†	47583.3	48158.3	[1000]	ug/L	09:44:20
3	P 214.914†	10047.8	9951.5	[5000]	ug/L	09:44:40
3	Pb 220.353†	9738.4	9958.9	[1000]	ug/L	09:44:40
3	S 181.975 Axial†	1722.7	1699.8	[2000]	ug/L	09:44:40
3	Sb 206.836†	3455.0	3461.7	[1000]	ug/L	09:44:40
3	Se 196.026†	1799.4	1862.0	[1000]	ug/L	09:44:40
3	Si 251.611†	184624.4	186717.1	[5000]	ug/L	09:44:20
3	Sn 189.927†	6898.0	6993.9	[1000]	ug/L	09:44:40
3	Ti 334.940†	695802.4	707562.6	[1000]	ug/L	09:44:20
3	Tl 190.801†	3891.0	3989.7	[1000]	ug/L	09:44:40
3	U 409.014†	34390.1	37868.3	[1000]	ug/L	09:44:20
3	V 292.402†	161638.1	165564.1	[1000]	ug/L	09:44:20
3	Zn 213.857†	126815.1	127814.0	[1000]	ug/L	09:44:20
3	SiO2†	180925.8	182926.3	[10695]	ug/L	09:44:56

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	915430.3	3145.50	0.34%	98.185	%
Sc Radial	5823.9	34.65	0.59%	97.9	%
Y 371.029	744013.3	3813.05	0.51%	96.757	%
Y RADIAL	5953.1	39.91	0.67%	96.34	%
Ag 328.068†	241788.3	415.91	0.17%	[1000]	ug/L
Al 396.153Radial†	15175.2	242.06	1.60%	[10000]	ug/L
As 188.979†	2911.2	33.11	1.14%	[1000]	ug/L
B 249.677†	51192.2	152.69	0.30%	[1000]	ug/L
Ba 233.527†	155336.8	136.71	0.09%	[1000]	ug/L
Be 313.107†	3083042.6	21888.92	0.71%	[1000]	ug/L
Ca 317.933Radial†	7376.6	21.82	0.30%	[10000]	ug/L
Cd 226.502†	107245.3	175.14	0.16%	[1000]	ug/L
Co 228.616†	60017.3	65.52	0.11%	[1000]	ug/L
Cr 267.716†	104300.7	50.51	0.05%	[1000]	ug/L
Cu 324.752†	370458.1	1231.39	0.33%	[1000]	ug/L
Fe 238.204 Radial†	1318.9	4.15	0.31%	[10000]	ug/L
K 766.490 Radial†	62266.7	1055.87	1.70%	[10000]	ug/L

Mg 279.077 IEC†	353.2	1.75	0.49%	[10000]	ug/L
Mn 257.610†	1054603.0	8639.48	0.82%	[1000]	ug/L
Mo 202.031†	17515.3	133.52	0.76%	[1000]	ug/L
Na 589.592 Radial†	38505.3	808.40	2.10%	[10000]	ug/L
Ni 231.604†	48228.3	73.31	0.15%	[1000]	ug/L
P 214.914†	10073.9	106.60	1.06%	[5000]	ug/L
Pb 220.353†	10051.3	80.02	0.80%	[1000]	ug/L
S 181.975 Axial†	1718.7	16.43	0.96%	[2000]	ug/L
Sb 206.836†	3497.4	30.92	0.88%	[1000]	ug/L
Se 196.026†	1893.5	28.28	1.49%	[1000]	ug/L
Si 251.611†	186408.8	270.16	0.14%	[5000]	ug/L
Sn 189.927†	7061.1	58.73	0.83%	[1000]	ug/L
Sr 421.552†	185436.3	3519.46	1.90%	[1000]	ug/L
Ti 334.940†	706170.4	1206.44	0.17%	[1000]	ug/L
Tl 190.801†	4030.9	36.05	0.89%	[1000]	ug/L
U 409.014†	37565.8	283.83	0.76%	[1000]	ug/L
V 292.402†	165289.0	245.24	0.15%	[1000]	ug/L
Zn 213.857†	127789.6	70.24	0.05%	[1000]	ug/L
SiO2†	184629.0	1642.33	0.89%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/17/2009 09:47:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5674.9	5674.9	95.4	%	09:49:21
1	Y RADIAL	5814.4	5814.4	94.09	%	09:49:21
1	Al 396.153Radial†	72775.5	76334.8	[50000]	ug/L	09:49:01
1	Ca 317.933Radial†	35362.1	37063.2	[50000]	ug/L	09:49:21
1	Fe 238.204 Radial†	2544.0	2655.0	[20000]	ug/L	09:49:21
1	Mg 279.077 IEC†	1671.9	1747.9	[50000]	ug/L	09:49:21
1	Na 589.592 Radial†	72046.0	77278.5	[20000]	ug/L	09:49:01
1	Sc 361.383	933930.3	933930.3	100.17	%	09:50:18
1	Y 371.029	739330.1	739330.1	96.148	%	09:50:18
2	Sc Radial	5809.9	5809.9	97.6	%	09:49:46
2	Y RADIAL	5969.7	5969.7	96.61	%	09:49:46
2	Al 396.153Radial†	72192.1	73963.7	[50000]	ug/L	09:49:26
2	Ca 317.933Radial†	35102.6	35935.7	[50000]	ug/L	09:49:46
2	Fe 238.204 Radial†	2519.1	2567.4	[20000]	ug/L	09:49:46
2	Mg 279.077 IEC†	1648.7	1683.5	[50000]	ug/L	09:49:46
2	Na 589.592 Radial†	71382.4	74843.0	[20000]	ug/L	09:49:26
2	Sc 361.383	933116.4	933116.4	100.08	%	09:50:24
2	Y 371.029	738712.8	738712.8	96.068	%	09:50:24
3	Sc Radial	5778.7	5778.7	97.1	%	09:50:11
3	Y RADIAL	5930.5	5930.5	95.97	%	09:50:11
3	Al 396.153Radial†	72906.5	75097.7	[50000]	ug/L	09:49:51
3	Ca 317.933Radial†	35132.4	36160.0	[50000]	ug/L	09:50:11
3	Fe 238.204 Radial†	2513.7	2575.8	[20000]	ug/L	09:50:11
3	Mg 279.077 IEC†	1656.4	1700.5	[50000]	ug/L	09:50:11
3	Na 589.592 Radial†	71581.0	75441.4	[20000]	ug/L	09:49:51
3	Sc 361.383	935660.4	935660.4	100.35	%	09:50:29
3	Y 371.029	740399.5	740399.5	96.287	%	09:50:29

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	934235.7	1299.21	0.14%	100.20	%
Sc Radial	5754.5	70.70	1.23%	96.7	%
Y 371.029	739480.8	853.41	0.12%	96.168	%
Y RADIAL	5904.9	80.79	1.37%	95.56	%
Al 396.153Radial†	75132.1	1185.94	1.58%	[50000]	ug/L
Ca 317.933Radial†	36386.3	596.88	1.64%	[50000]	ug/L
Fe 238.204 Radial†	2599.4	48.34	1.86%	[20000]	ug/L
Mg 279.077 IEC†	1710.6	33.41	1.95%	[50000]	ug/L
Na 589.592 Radial†	75854.3	1269.18	1.67%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	239.6	0.00000	0.999835	
Al 396.153Radial	3	Lin Thru 0	0.0	1.503	0.00000	0.999998	
As 188.979	3	Lin Thru 0	0.0	2.889	0.00000	0.999877	
B 249.677	3	Lin Thru 0	0.0	50.66	0.00000	0.999788	
Ba 233.527	3	Lin Thru 0	0.0	154.1	0.00000	0.999859	
Be 313.107	3	Lin Thru 0	0.0	3062	0.00000	0.999905	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.7281	0.00000	0.999996	
Cd 226.502	3	Lin Thru 0	0.0	106.4	0.00000	0.999886	
Co 228.616	3	Lin Thru 0	0.0	59.56	0.00000	0.999878	
Cr 267.716	3	Lin Thru 0	0.0	103.4	0.00000	0.999838	
Cu 324.752	3	Lin Thru 0	0.0	366.7	0.00000	0.999785	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1304	0.00000	0.999983	
K 766.490 Radial	3	Lin Thru 0	0.0	6.196	0.00000	0.999953	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0343	0.00000	0.999981
Mn 257.610	3	Lin Thru 0	0.0	1048	0.00000	0.999910
Mo 202.031	3	Lin Thru 0	0.0	17.34	0.00000	0.999797
Na 589.592 Radia	2	Lin Thru 0	0.0	3.804	0.00000	0.999982
Ni 231.604	3	Lin Thru 0	0.0	47.87	0.00000	0.999885
P 214.914	3	Lin Thru 0	0.0	1.994	0.00000	0.999777
Pb 220.353	3	Lin Thru 0	0.0	9.959	0.00000	0.999817
S 181.975 Axial	3	Lin Thru 0	0.0	0.8514	0.00000	0.999830
Sb 206.836	3	Lin Thru 0	0.0	3.461	0.00000	0.999784
Se 196.026	3	Lin Thru 0	0.0	1.883	0.00000	0.999920
Si 251.611	3	Lin Thru 0	0.0	37.04	0.00000	0.999916
Sn 189.927	3	Lin Thru 0	0.0	6.987	0.00000	0.999775
Sr 421.552	3	Lin Thru 0	0.0	184.8	0.00000	0.999978
Ti 334.940	3	Lin Thru 0	0.0	702.9	0.00000	0.999951
Tl 190.801	3	Lin Thru 0	0.0	4.002	0.00000	0.999888
U 409.014	3	Lin Thru 0	0.0	37.19	0.00000	0.999788
V 292.402	3	Lin Thru 0	0.0	163.7	0.00000	0.999823
Zn 213.857	3	Lin Thru 0	0.0	126.9	0.00000	0.999892
SiO2	3	Lin Thru 0	0.0	17.17	0.00000	0.999943

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/17/2009 09:52:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6311.3	6311.3	106	%			09:54:33
1	Y RADIAL	6473.4	6473.4	104.8	%			09:54:33
1	Al 396.153Radial†	7245.5	6848.4	4533.9	ug/L	4533.9	ppb	09:54:33
1	Ca 317.933Radial†	3673.8	3443.8	4729.9	ug/L	4729.9	ppb	09:54:54
1	Fe 238.204 Radial†	674.8	623.4	4797.1	ug/L	4797.1	ppb	09:54:54
1	K 766.490 Radial†	18141.4	13959.8	2247.8	ug/L	2247.8	ppb	09:54:33
1	Mg 279.077 IEC†	186.2	170.2	4975.8	ug/L	4975.8	ppb	09:54:54
1	Na 589.592 Radial†	7479.8	8778.0	2307.4	ug/L	2307.4	ppb	09:54:33
1	Sr 421.552†	92726.7	87449.7	473.16	ug/L	473.16	ppb	09:54:33
1	Sc 361.383	972779.4	972779.4	104.34	%			09:55:51
1	Y 371.029	778695.2	778695.2	101.27	%			09:55:51
1	Ag 328.068†	62184.7	59192.1	250.04	ug/L	250.04	ppb	09:55:51
1	As 188.979†	1353.0	1328.2	463.87	ug/L	463.87	ppb	09:56:11
1	B 249.677†	25449.5	24918.5	490.03	ug/L	490.03	ppb	09:55:51
1	Ba 233.527†	78228.1	74965.7	487.79	ug/L	487.79	ppb	09:55:51
1	Be 313.107†	799051.5	770394.2	252.53	ug/L	252.53	ppb	09:55:51
1	Cd 226.502†	52854.1	50871.5	477.76	ug/L	477.76	ppb	09:55:51
1	Co 228.616†	29676.0	28526.5	479.28	ug/L	479.28	ppb	09:56:11
1	Cr 267.716†	50181.9	48011.8	465.14	ug/L	465.14	ppb	09:55:51
1	Cu 324.752†	191930.6	177855.1	485.27	ug/L	485.27	ppb	09:55:51
1	Mn 257.610†	544198.5	521024.1	497.49	ug/L	497.49	ppb	09:55:51
1	Mo 202.031†	9431.2	9014.3	520.14	ug/L	520.14	ppb	09:56:11
1	Ni 231.604†	24135.0	23002.3	480.18	ug/L	480.18	ppb	09:56:11
1	P 214.914†	5268.5	4804.5	2337.0	ug/L	2337.0	ppb	09:56:11
1	Pb 220.353†	4925.8	4797.4	483.22	ug/L	483.22	ppb	09:56:11
1	S 181.975 Axial†	2194.7	2055.1	2412.8	ug/L	2412.8	ppb	09:56:11
1	Sb 206.836†	1789.4	1670.6	491.65	ug/L	491.65	ppb	09:56:11
1	Se 196.026†	4855.3	4689.5	2509.8	ug/L	2509.8	ppb	09:56:11
1	Si 251.611†	179429.8	171331.6	4613.9	ug/L	4613.9	ppb	09:55:51
1	Sn 189.927†	3787.6	3624.0	519.25	ug/L	519.25	ppb	09:56:11
1	Ti 334.940†	353550.0	340312.6	484.00	ug/L	484.00	ppb	09:55:51
1	Tl 190.801†	2111.8	2065.2	519.22	ug/L	519.22	ppb	09:56:11
1	U 409.014†	15322.1	17654.2	473.21	ug/L	473.21	ppb	09:55:51
1	V 292.402†	81558.1	79700.9	493.76	ug/L	493.76	ppb	09:55:51
1	Zn 213.857†	66605.9	62958.7	491.89	ug/L	491.89	ppb	09:55:51
1	SiO2†	179869.4	171715.6	9974.7	ug/L	9974.7	ppb	09:57:09
2	Sc Radial	5924.9	5924.9	99.6	%			09:54:59
2	Y RADIAL	6106.1	6106.1	98.82	%			09:54:59
2	Al 396.153Radial†	7442.3	7491.5	4961.4	ug/L	4961.4	ppb	09:54:59
2	Ca 317.933Radial†	3657.1	3652.9	5017.2	ug/L	5017.2	ppb	09:55:19
2	Fe 238.204 Radial†	673.7	663.7	5107.2	ug/L	5107.2	ppb	09:55:19
2	K 766.490 Radial†	18222.2	15156.5	2440.8	ug/L	2440.8	ppb	09:54:59
2	Mg 279.077 IEC†	182.3	177.8	5196.9	ug/L	5196.9	ppb	09:55:19
2	Na 589.592 Radial†	7573.3	9331.8	2453.0	ug/L	2453.0	ppb	09:54:59
2	Sr 421.552†	94733.4	95167.4	514.92	ug/L	514.92	ppb	09:54:59
2	Sc 361.383	959935.7	959935.7	102.96	%			09:56:17
2	Y 371.029	768430.2	768430.2	99.933	%			09:56:17
2	Ag 328.068†	62327.0	60127.7	254.07	ug/L	254.07	ppb	09:56:17
2	As 188.979†	1337.9	1331.0	464.93	ug/L	464.93	ppb	09:56:37
2	B 249.677†	25767.3	25553.5	502.50	ug/L	502.50	ppb	09:56:17
2	Ba 233.527†	78574.5	76305.3	496.52	ug/L	496.52	ppb	09:56:17
2	Be 313.107†	804985.8	786404.8	257.77	ug/L	257.77	ppb	09:56:17
2	Cd 226.502†	52911.2	51604.8	484.63	ug/L	484.63	ppb	09:56:17
2	Co 228.616†	29769.3	28997.7	487.19	ug/L	487.19	ppb	09:56:37
2	Cr 267.716†	50472.0	48937.1	474.11	ug/L	474.11	ppb	09:56:17
2	Cu 324.752†	192998.0	181353.1	494.83	ug/L	494.83	ppb	09:56:17
2	Mn 257.610†	546827.0	530555.7	506.61	ug/L	506.61	ppb	09:56:17
2	Mo 202.031†	9481.1	9183.7	529.93	ug/L	529.93	ppb	09:56:37
2	Ni 231.604†	24221.3	23395.6	488.39	ug/L	488.39	ppb	09:56:37

2	P 214.914†	5280.5	4883.7	2375.3	ug/L	2375.3 ppb	09:56:37
2	Pb 220.353†	4939.6	4873.9	491.00	ug/L	491.00 ppb	09:56:37
2	S 181.975 Axial†	2199.3	2087.7	2451.0	ug/L	2451.0 ppb	09:56:37
2	Sb 206.836†	1786.8	1691.1	497.75	ug/L	497.75 ppb	09:56:37
2	Se 196.026†	4854.8	4751.2	2543.8	ug/L	2543.8 ppb	09:56:37
2	Si 251.611†	180175.6	174357.0	4695.3	ug/L	4695.3 ppb	09:56:17
2	Sn 189.927†	3819.4	3703.4	530.66	ug/L	530.66 ppb	09:56:37
2	Ti 334.940†	355507.1	346747.3	493.16	ug/L	493.16 ppb	09:56:17
2	Tl 190.801†	2122.8	2103.0	528.73	ug/L	528.73 ppb	09:56:37
2	U 409.014†	15483.1	18007.1	482.65	ug/L	482.65 ppb	09:56:17
2	V 292.402†	82130.0	81302.2	503.64	ug/L	503.64 ppb	09:56:17
2	Zn 213.857†	66800.5	64001.8	500.01	ug/L	500.01 ppb	09:56:17
2	SiO2†	179224.0	173395.3	10072	ug/L	10072 ppb	09:57:14
3	Sc Radial	5873.4	5873.4	98.7	%		09:55:24
3	Y RADIAL	6066.3	6066.3	98.17	%		09:55:24
3	Al 396.153Radial†	7390.2	7504.3	4969.8	ug/L	4969.8 ppb	09:55:24
3	Ca 317.933Radial†	3638.6	3666.3	5035.5	ug/L	5035.5 ppb	09:55:44
3	Fe 238.204 Radial†	667.9	663.8	5108.0	ug/L	5108.0 ppb	09:55:44
3	K 766.490 Radial†	18012.0	15103.8	2432.3	ug/L	2432.3 ppb	09:55:24
3	Mg 279.077 IEC†	185.7	182.8	5342.2	ug/L	5342.2 ppb	09:55:44
3	Na 589.592 Radial†	7498.0	9322.2	2450.5	ug/L	2450.5 ppb	09:55:24
3	Sr 421.552†	93662.2	94915.6	513.55	ug/L	513.55 ppb	09:55:24
3	Sc 361.383	960276.2	960276.2	102.99	%		09:56:43
3	Y 371.029	769292.7	769292.7	100.04	%		09:56:43
3	Ag 328.068†	62397.3	60174.5	254.27	ug/L	254.27 ppb	09:56:43
3	As 188.979†	1353.1	1345.2	469.86	ug/L	469.86 ppb	09:57:03
3	B 249.677†	25605.8	25387.8	499.23	ug/L	499.23 ppb	09:56:43
3	Ba 233.527†	78536.5	76241.4	496.11	ug/L	496.11 ppb	09:56:43
3	Be 313.107†	805025.2	786165.8	257.70	ug/L	257.70 ppb	09:56:43
3	Cd 226.502†	52978.3	51651.7	485.07	ug/L	485.07 ppb	09:56:43
3	Co 228.616†	29869.6	29084.8	488.66	ug/L	488.66 ppb	09:57:03
3	Cr 267.716†	50498.9	48945.8	474.20	ug/L	474.20 ppb	09:56:43
3	Cu 324.752†	192942.9	181233.1	494.50	ug/L	494.50 ppb	09:56:43
3	Mn 257.610†	546270.2	529826.7	505.91	ug/L	505.91 ppb	09:56:43
3	Mo 202.031†	9517.1	9215.4	531.76	ug/L	531.76 ppb	09:57:03
3	Ni 231.604†	24309.0	23472.4	490.00	ug/L	490.00 ppb	09:57:03
3	P 214.914†	5317.5	4917.9	2392.4	ug/L	2392.4 ppb	09:57:03
3	Pb 220.353†	4975.7	4907.2	494.34	ug/L	494.34 ppb	09:57:03
3	S 181.975 Axial†	2204.3	2091.8	2455.7	ug/L	2455.7 ppb	09:57:03
3	Sb 206.836†	1794.8	1698.2	499.79	ug/L	499.79 ppb	09:57:03
3	Se 196.026†	4912.9	4805.9	2572.8	ug/L	2572.8 ppb	09:57:03
3	Si 251.611†	180082.7	174204.7	4691.2	ug/L	4691.2 ppb	09:56:43
3	Sn 189.927†	3803.1	3686.3	528.21	ug/L	528.21 ppb	09:57:03
3	Ti 334.940†	355377.1	346498.6	492.81	ug/L	492.81 ppb	09:56:43
3	Tl 190.801†	2134.1	2113.2	531.26	ug/L	531.26 ppb	09:57:03
3	U 409.014†	15551.1	18067.8	484.28	ug/L	484.28 ppb	09:56:43
3	V 292.402†	82201.7	81343.6	503.93	ug/L	503.93 ppb	09:56:43
3	Zn 213.857†	66762.6	63942.0	499.52	ug/L	499.52 ppb	09:56:43
3	SiO2†	179239.4	173348.5	10069	ug/L	10069 ppb	09:57:19

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	964330.4	103.43	%	0.785				0.76%
Sc Radial	6036.5	101	%	4.0				3.96%
Y 371.029	772139.4	100.42	%	0.740				0.74%
Y RADIAL	6215.3	100.6	%	3.63				3.61%
Ag 328.068†	59831.5	252.79	ug/L	2.387	252.79	ppb	2.387	0.94%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	7281.4	4821.7	ug/L	249.26	4821.7	ppb	249.26	5.17%
QC value within limits for Al 396.153Radial Recovery = 96.43%								
As 188.979†	1334.8	466.22	ug/L	3.193	466.22	ppb	3.193	0.68%
QC value within limits for As 188.979 Recovery = 93.24%								
B 249.677†	25286.6	497.25	ug/L	6.467	497.25	ppb	6.467	1.30%
QC value within limits for B 249.677 Recovery = 99.45%								
Ba 233.527†	75837.4	493.47	ug/L	4.924	493.47	ppb	4.924	1.00%
QC value within limits for Ba 233.527 Recovery = 98.69%								
Be 313.107†	780988.2	256.00	ug/L	3.007	256.00	ppb	3.007	1.17%
QC value within limits for Be 313.107 Recovery = 102.40%								
Ca 317.933Radial†	3587.6	4927.5	ug/L	171.38	4927.5	ppb	171.38	3.48%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.55%
Cd 226.502†            51376.0      482.48 ug/L         4.096      482.48 ppb          4.096   0.85%
   QC value within limits for Cd 226.502  Recovery = 96.50%
Co 228.616†            28869.7      485.04 ug/L         5.046      485.04 ppb          5.046   1.04%
   QC value within limits for Co 228.616  Recovery = 97.01%
Cr 267.716†            48631.6      471.15 ug/L         5.203      471.15 ppb          5.203   1.10%
   QC value within limits for Cr 267.716  Recovery = 94.23%
Cu 324.752†           180147.1      491.53 ug/L         5.425      491.53 ppb          5.425   1.10%
   QC value within limits for Cu 324.752  Recovery = 98.31%
Fe 238.204 Radial†       650.3      5004.1 ug/L        179.29      5004.1 ppb         179.29   3.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.08%
K 766.490 Radial†      14740.1      2373.6 ug/L        109.08      2373.6 ppb         109.08   4.60%
   QC value within limits for K 766.490 Radial  Recovery = 94.95%
Mg 279.077 IEC†          176.9      5171.6 ug/L        184.54      5171.6 ppb         184.54   3.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.43%
Mn 257.610†           527135.5      503.34 ug/L         5.076      503.34 ppb          5.076   1.01%
   QC value within limits for Mn 257.610  Recovery = 100.67%
Mo 202.031†             9137.8      527.28 ug/L         6.247      527.28 ppb          6.247   1.18%
   QC value within limits for Mo 202.031  Recovery = 105.46%
Na 589.592 Radial†      9144.0      2403.6 ug/L         83.33      2403.6 ppb         83.33   3.47%
   QC value within limits for Na 589.592 Radial  Recovery = 96.14%
Ni 231.604†            23290.1      486.19 ug/L         5.265      486.19 ppb          5.265   1.08%
   QC value within limits for Ni 231.604  Recovery = 97.24%
P 214.914†              4868.7      2368.2 ug/L         28.36      2368.2 ppb         28.36   1.20%
   QC value within limits for P 214.914  Recovery = 94.73%
Pb 220.353†             4859.5      489.52 ug/L         5.707      489.52 ppb          5.707   1.17%
   QC value within limits for Pb 220.353  Recovery = 97.90%
S 181.975 Axial†        2078.2      2439.9 ug/L         23.57      2439.9 ppb         23.57   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 97.59%
Sb 206.836†             1686.6      496.40 ug/L         4.234      496.40 ppb          4.234   0.85%
   QC value within limits for Sb 206.836  Recovery = 99.28%
Se 196.026†             4748.9      2542.1 ug/L         31.56      2542.1 ppb         31.56   1.24%
   QC value within limits for Se 196.026  Recovery = 101.69%
Si 251.611†           173297.8      4666.8 ug/L         45.85      4666.8 ppb         45.85   0.98%
   QC value within limits for Si 251.611  Recovery = 93.34%
Sn 189.927†             3671.2      526.04 ug/L         6.004      526.04 ppb          6.004   1.14%
   QC value within limits for Sn 189.927  Recovery = 105.21%
Sr 421.552†            92510.9      500.54 ug/L        23.726      500.54 ppb         23.726   4.74%
   QC value within limits for Sr 421.552  Recovery = 100.11%
Ti 334.940†           344519.5      489.99 ug/L         5.190      489.99 ppb          5.190   1.06%
   QC value within limits for Ti 334.940  Recovery = 98.00%
Tl 190.801†             2093.8      526.40 ug/L         6.351      526.40 ppb          6.351   1.21%
   QC value within limits for Tl 190.801  Recovery = 105.28%
U 409.014†             17909.7      480.05 ug/L         5.973      480.05 ppb          5.973   1.24%
   QC value within limits for U 409.014  Recovery = 96.01%
V 292.402†             80782.3      500.44 ug/L         5.789      500.44 ppb          5.789   1.16%
   QC value within limits for V 292.402  Recovery = 100.09%
Zn 213.857†            63634.2      497.14 ug/L         4.554      497.14 ppb          4.554   0.92%
   QC value within limits for Zn 213.857  Recovery = 99.43%
SiO2†                 172819.8       10039 ug/L          55.4       10039 ppb           55.4   0.55%
   QC value within limits for SiO2  Recovery = 93.86%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/17/2009 09:59:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6121.3	6121.3	103	%			10:01:23
1	Y RADIAL	6318.8	6318.8	102.3	%			10:01:23
1	Al 396.153Radial†	5.9	22.0	14.618	ug/L	14.618	ppb	10:01:23
1	Ca 317.933Radial†	19.6	-1.4	-1.9505	ug/L	-1.9505	ppb	10:01:44
1	Fe 238.204 Radial†	14.2	0.9	7.0290	ug/L	7.0290	ppb	10:01:44
1	K 766.490 Radial†	3191.6	-43.6	-7.0164	ug/L	-7.0164	ppb	10:01:23
1	Mg 279.077 IEC†	3.3	-2.1	-61.714	ug/L	-61.714	ppb	10:01:44
1	Na 589.592 Radial†	-1820.6	-45.0	-11.821	ug/L	-11.821	ppb	10:01:23
1	Sr 421.552†	-16.8	-2.1	-0.0115	ug/L	-0.0115	ppb	10:01:23
1	Sc 361.383	970240.5	970240.5	104.06	%			10:02:40
1	Y 371.029	784205.1	784205.1	101.98	%			10:02:40
1	Ag 328.068†	470.7	43.9	0.1805	ug/L	0.1805	ppb	10:02:45
1	As 188.979†	-28.4	4.2	1.4408	ug/L	1.4408	ppb	10:03:05
1	B 249.677†	-340.8	199.1	3.9278	ug/L	3.9278	ppb	10:03:05
1	Ba 233.527†	28.4	15.7	0.1035	ug/L	0.1035	ppb	10:03:05
1	Be 313.107†	-4496.0	227.9	0.0745	ug/L	0.0745	ppb	10:02:45
1	Cd 226.502†	-211.7	10.4	0.0973	ug/L	0.0973	ppb	10:03:05
1	Co 228.616†	-70.8	15.8	0.2671	ug/L	0.2671	ppb	10:03:05
1	Cr 267.716†	115.4	26.1	0.2510	ug/L	0.2510	ppb	10:03:05
1	Cu 324.752†	6119.3	-219.2	-0.5974	ug/L	-0.5974	ppb	10:02:45
1	Mn 257.610†	538.1	-42.4	-0.0386	ug/L	-0.0386	ppb	10:03:05
1	Mo 202.031†	43.3	16.6	0.9578	ug/L	0.9578	ppb	10:03:05
1	Ni 231.604†	134.2	-0.8	-0.0171	ug/L	-0.0171	ppb	10:03:05
1	P 214.914†	231.2	-22.9	-11.378	ug/L	-11.378	ppb	10:03:05
1	Pb 220.353†	-72.5	6.5	0.6618	ug/L	0.6618	ppb	10:03:05
1	S 181.975 Axial†	42.6	-7.5	-8.8085	ug/L	-8.8085	ppb	10:03:05
1	Sb 206.836†	45.2	-1.0	-0.2702	ug/L	-0.2702	ppb	10:03:05
1	Se 196.026†	-25.6	11.3	6.0579	ug/L	6.0579	ppb	10:03:05
1	Si 251.611†	739.2	68.6	1.8382	ug/L	1.8382	ppb	10:03:05
1	Sn 189.927†	5.8	-0.6	-0.0892	ug/L	-0.0892	ppb	10:03:05
1	Ti 334.940†	-1498.7	14.7	0.0173	ug/L	0.0173	ppb	10:02:45
1	Tl 190.801†	-38.1	4.5	1.1223	ug/L	1.1223	ppb	10:03:05
1	U 409.014†	-2780.8	296.6	7.9737	ug/L	7.9737	ppb	10:02:40
1	V 292.402†	-1516.3	75.0	0.4847	ug/L	0.4847	ppb	10:02:45
1	Zn 213.857†	866.2	-47.0	-0.3679	ug/L	-0.3679	ppb	10:03:05
1	SiO2†	690.5	-15.6	-0.9364	ug/L	-0.9364	ppb	10:04:11
2	Sc Radial	6088.2	6088.2	102	%			10:01:49
2	Y RADIAL	6338.5	6338.5	102.6	%			10:01:49
2	Al 396.153Radial†	-16.4	0.2	0.1297	ug/L	0.1297	ppb	10:01:49
2	Ca 317.933Radial†	22.5	1.5	2.1188	ug/L	2.1188	ppb	10:02:09
2	Fe 238.204 Radial†	12.2	-1.0	-7.8712	ug/L	-7.8712	ppb	10:02:09
2	K 766.490 Radial†	3058.5	-156.8	-25.300	ug/L	-25.300	ppb	10:01:49
2	Mg 279.077 IEC†	-0.8	-6.1	-177.74	ug/L	-177.74	ppb	10:02:09
2	Na 589.592 Radial†	-1739.1	25.0	6.5725	ug/L	6.5725	ppb	10:01:49
2	Sr 421.552†	6.6	20.6	0.1117	ug/L	0.1117	ppb	10:01:49
2	Sc 361.383	972978.0	972978.0	104.36	%			10:03:11
2	Y 371.029	787063.9	787063.9	102.36	%			10:03:11
2	Ag 328.068†	505.3	75.8	0.3113	ug/L	0.3113	ppb	10:03:16
2	As 188.979†	-33.6	-0.7	-0.2621	ug/L	-0.2621	ppb	10:03:36
2	B 249.677†	-317.1	222.7	4.3969	ug/L	4.3969	ppb	10:03:36
2	Ba 233.527†	20.4	8.0	0.0516	ug/L	0.0516	ppb	10:03:36
2	Be 313.107†	-4520.3	216.9	0.0710	ug/L	0.0710	ppb	10:03:16
2	Cd 226.502†	-205.3	17.1	0.1617	ug/L	0.1617	ppb	10:03:36
2	Co 228.616†	-72.4	14.4	0.2418	ug/L	0.2418	ppb	10:03:36
2	Cr 267.716†	107.3	18.1	0.1737	ug/L	0.1737	ppb	10:03:36
2	Cu 324.752†	6169.5	-187.7	-0.5122	ug/L	-0.5122	ppb	10:03:16
2	Mn 257.610†	582.8	-1.0	0.0015	ug/L	0.0015	ppb	10:03:36
2	Mo 202.031†	27.5	1.4	0.0782	ug/L	0.0782	ppb	10:03:36
2	Ni 231.604†	124.2	-10.7	-0.2240	ug/L	-0.2240	ppb	10:03:36

2	P 214.914†	233.8	-21.0	-10.440 ug/L	-10.440 ppb	10:03:36
2	Pb 220.353†	-75.1	4.2	0.4268 ug/L	0.4268 ppb	10:03:36
2	S 181.975 Axial†	48.0	-2.4	-2.8197 ug/L	-2.8197 ppb	10:03:36
2	Sb 206.836†	45.4	-0.9	-0.2625 ug/L	-0.2625 ppb	10:03:36
2	Se 196.026†	-27.6	9.4	4.9887 ug/L	4.9887 ppb	10:03:36
2	Si 251.611†	674.5	4.6	0.1303 ug/L	0.1303 ppb	10:03:36
2	Sn 189.927†	9.2	2.6	0.3783 ug/L	0.3783 ppb	10:03:36
2	Ti 334.940†	-1457.8	58.0	0.0816 ug/L	0.0816 ppb	10:03:16
2	Tl 190.801†	-48.1	-5.0	-1.2381 ug/L	-1.2381 ppb	10:03:36
2	U 409.014†	-3014.4	80.3	2.1594 ug/L	2.1594 ppb	10:03:11
2	V 292.402†	-1619.4	-19.6	-0.1176 ug/L	-0.1176 ppb	10:03:16
2	Zn 213.857†	845.4	-69.2	-0.5368 ug/L	-0.5368 ppb	10:03:36
2	SiO2†	638.7	-67.1	-3.8968 ug/L	-3.8968 ppb	10:04:16
3	Sc Radial	5871.5	5871.5	98.7 %		10:02:14
3	Y RADIAL	6122.4	6122.4	99.08 %		10:02:14
3	Al 396.153Radial†	-31.9	-16.1	-10.699 ug/L	-10.699 ppb	10:02:14
3	Ca 317.933Radial†	21.1	0.9	1.3028 ug/L	1.3028 ppb	10:02:34
3	Fe 238.204 Radial†	12.2	-0.6	-4.3144 ug/L	-4.3144 ppb	10:02:34
3	K 766.490 Radial†	3137.5	33.6	5.4372 ug/L	5.4372 ppb	10:02:14
3	Mg 279.077 IEC†	5.0	-0.3	-9.5978 ug/L	-9.5978 ppb	10:02:34
3	Na 589.592 Radial†	-1784.6	-83.8	-22.037 ug/L	-22.037 ppb	10:02:14
3	Sr 421.552†	-51.7	-38.2	-0.2066 ug/L	-0.2066 ppb	10:02:14
3	Sc 361.383	966746.5	966746.5	103.69 %		10:03:41
3	Y 371.029	782262.8	782262.8	101.73 %		10:03:41
3	Ag 328.068†	454.3	29.7	0.1176 ug/L	0.1176 ppb	10:03:46
3	As 188.979†	-36.2	-3.5	-1.2068 ug/L	-1.2068 ppb	10:04:06
3	B 249.677†	-350.8	188.3	3.7165 ug/L	3.7165 ppb	10:04:06
3	Ba 233.527†	11.9	-0.1	0.0004 ug/L	0.0004 ppb	10:04:06
3	Be 313.107†	-4442.5	264.0	0.0862 ug/L	0.0862 ppb	10:03:46
3	Cd 226.502†	-192.9	27.8	0.2617 ug/L	0.2617 ppb	10:04:06
3	Co 228.616†	-84.3	2.5	0.0427 ug/L	0.0427 ppb	10:04:06
3	Cr 267.716†	113.9	25.2	0.2415 ug/L	0.2415 ppb	10:04:06
3	Cu 324.752†	6169.3	-149.7	-0.4086 ug/L	-0.4086 ppb	10:03:46
3	Mn 257.610†	576.6	-3.4	-0.0035 ug/L	-0.0035 ppb	10:04:06
3	Mo 202.031†	28.9	2.9	0.1646 ug/L	0.1646 ppb	10:04:06
3	Ni 231.604†	137.7	3.1	0.0646 ug/L	0.0646 ppb	10:04:06
3	P 214.914†	233.6	-19.7	-9.8283 ug/L	-9.8283 ppb	10:04:06
3	Pb 220.353†	-65.8	12.8	1.2840 ug/L	1.2840 ppb	10:04:06
3	S 181.975 Axial†	50.4	0.2	0.1974 ug/L	0.1974 ppb	10:04:06
3	Sb 206.836†	38.2	-7.6	-2.1983 ug/L	-2.1983 ppb	10:04:06
3	Se 196.026†	-28.4	8.6	4.5272 ug/L	4.5272 ppb	10:04:06
3	Si 251.611†	649.0	-15.8	-0.4303 ug/L	-0.4303 ppb	10:04:06
3	Sn 189.927†	6.5	0.0	0.0034 ug/L	0.0034 ppb	10:04:06
3	Ti 334.940†	-1511.9	-3.2	-0.0080 ug/L	-0.0080 ppb	10:03:46
3	Tl 190.801†	-26.6	15.5	3.8760 ug/L	3.8760 ppb	10:04:06
3	U 409.014†	-2775.1	292.4	7.8637 ug/L	7.8637 ppb	10:03:41
3	V 292.402†	-1511.9	74.0	0.4696 ug/L	0.4696 ppb	10:03:46
3	Zn 213.857†	833.2	-75.8	-0.5964 ug/L	-0.5964 ppb	10:04:06
3	SiO2†	694.5	-9.4	-0.5563 ug/L	-0.5563 ppb	10:04:21

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	969988.3	104.04	%	0.335				0.32%
Sc Radial	6027.0	101	%	2.3				2.25%
Y 371.029	784510.6	102.02	%	0.314				0.31%
Y RADIAL	6259.9	101.3	%	1.93				1.91%
Ag 328.068†	49.8	0.2031	ug/L	0.09880	0.2031	ppb	0.09880	48.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.1	1.3495	ug/L	12.70281	1.3495	ppb	12.70281	941.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.0	-0.0093	ug/L	1.34174	-0.0093	ppb	1.34174	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	203.3	4.0137	ug/L	0.34826	4.0137	ppb	0.34826	8.68%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.9	0.0518	ug/L	0.05153	0.0518	ppb	0.05153	99.41%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	236.3	0.0772	ug/L	0.00797	0.0772	ppb	0.00797	10.32%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.4	0.4904	ug/L	2.15284	0.4904	ppb	2.15284	439.03%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                18.5      0.1736 ug/L       0.08282      0.1736 ppb        0.08282  47.72%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                10.9      0.1839 ug/L       0.12292      0.1839 ppb        0.12292  66.86%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                23.1      0.2221 ug/L       0.04216      0.2221 ppb        0.04216  18.98%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -185.5     -0.5060 ug/L       0.09456     -0.5060 ppb        0.09456  18.69%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.2     -1.7189 ug/L       7.78182     -1.7189 ppb        7.78182 452.72%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -55.6     -8.9596 ug/L      15.46034     -8.9596 ppb       15.46034 172.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.8     -83.019 ug/L       86.0738     -83.019 ppb        86.0738 103.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -15.6     -0.0135 ug/L       0.02186     -0.0135 ppb        0.02186 161.58%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.9      0.4002 ug/L       0.48487      0.4002 ppb        0.48487 121.16%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -34.6     -9.0951 ug/L      14.49825     -9.0951 ppb       14.49825 159.41%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -2.8     -0.0589 ug/L       0.14876     -0.0589 ppb        0.14876 252.64%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -21.2     -10.549 ug/L        0.7808     -10.549 ppb         0.7808   7.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.7909 ug/L       0.44296      0.7909 ppb        0.44296  56.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.2     -3.8103 ug/L       4.58391     -3.8103 ppb        4.58391 120.30%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.2     -0.9104 ug/L       1.11543     -0.9104 ppb        1.11543 122.53%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 9.8      5.1913 ug/L       0.78520      5.1913 ppb        0.78520  15.13%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                19.2      0.5127 ug/L       1.18162      0.5127 ppb        1.18162 230.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.7      0.0975 ug/L       0.24751      0.0975 ppb        0.24751 253.79%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -6.6     -0.0355 ug/L       0.16050     -0.0355 ppb        0.16050 452.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                23.2      0.0303 ug/L       0.04616      0.0303 ppb        0.04616 152.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.0      1.2534 ug/L       2.55958      1.2534 ppb        2.55958 204.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                223.1      5.9989 ug/L       3.32561      5.9989 ppb        3.32561  55.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 43.1      0.2789 ug/L       0.34345      0.2789 ppb        0.34345 123.14%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -64.0     -0.5004 ug/L       0.11852     -0.5004 ppb        0.11852  23.69%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -30.7     -1.7965 ug/L       1.82883     -1.7965 ppb        1.82883 101.80%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/17/2009 10:06:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6186.3	6186.3	104	%			10:08:26
1	Y RADIAL	6446.2	6446.2	104.3	%			10:08:26
1	Al 396.153Radial†	294.5	299.6	198.87	ug/L	198.87	ppb	10:08:26
1	Ca 317.933Radial†	176.5	149.3	205.10	ug/L	205.10	ppb	10:08:46
1	Fe 238.204 Radial†	25.8	11.9	91.455	ug/L	91.455	ppb	10:08:46
1	K 766.490 Radial†	4104.9	802.5	129.28	ug/L	129.28	ppb	10:08:26
1	Mg 279.077 IEC†	15.5	9.5	277.85	ug/L	277.85	ppb	10:08:46
1	Na 589.592 Radial†	-548.0	1197.8	314.87	ug/L	314.87	ppb	10:08:26
1	Sr 421.552†	935.9	914.6	4.9469	ug/L	4.9469	ppb	10:08:26
1	Sc 361.383	972389.1	972389.1	104.29	%			10:09:43
1	Y 371.029	785362.7	785362.7	102.13	%			10:09:43
1	Ag 328.068†	1710.7	1231.8	5.1367	ug/L	5.1367	ppb	10:09:48
1	As 188.979†	52.1	81.4	28.190	ug/L	28.190	ppb	10:10:08
1	B 249.677†	2127.9	2566.8	50.643	ug/L	50.643	ppb	10:09:48
1	Ba 233.527†	821.1	775.8	5.0490	ug/L	5.0490	ppb	10:10:08
1	Be 313.107†	11593.9	15665.0	5.1254	ug/L	5.1254	ppb	10:09:48
1	Cd 226.502†	334.5	534.5	5.0159	ug/L	5.0159	ppb	10:10:08
1	Co 228.616†	224.8	299.3	5.0396	ug/L	5.0396	ppb	10:10:08
1	Cr 267.716†	614.8	504.7	4.8727	ug/L	4.8727	ppb	10:10:08
1	Cu 324.752†	10034.9	3522.2	9.6101	ug/L	9.6101	ppb	10:09:48
1	Mn 257.610†	11992.2	10939.0	10.441	ug/L	10.441	ppb	10:09:48
1	Mo 202.031†	206.4	172.9	9.9762	ug/L	9.9762	ppb	10:10:08
1	Ni 231.604†	375.8	230.6	4.8132	ug/L	4.8132	ppb	10:10:08
1	P 214.914†	552.0	284.2	141.15	ug/L	141.15	ppb	10:10:08
1	Pb 220.353†	23.3	98.6	9.9560	ug/L	9.9560	ppb	10:10:08
1	S 181.975 Axial†	137.9	83.8	98.440	ug/L	98.440	ppb	10:10:08
1	Sb 206.836†	69.5	22.2	6.6774	ug/L	6.6774	ppb	10:10:08
1	Se 196.026†	35.6	70.0	37.595	ug/L	37.595	ppb	10:10:08
1	Si 251.611†	4529.9	3701.7	99.687	ug/L	99.687	ppb	10:09:48
1	Sn 189.927†	75.1	65.8	9.4353	ug/L	9.4353	ppb	10:10:08
1	Ti 334.940†	2188.8	3553.6	5.0387	ug/L	5.0387	ppb	10:09:48
1	Tl 190.801†	38.1	77.7	19.471	ug/L	19.471	ppb	10:10:08
1	U 409.014†	-840.6	2162.8	58.137	ug/L	58.137	ppb	10:09:43
1	V 292.402†	-785.0	779.4	5.0000	ug/L	5.0000	ppb	10:09:48
1	Zn 213.857†	2177.8	1208.8	9.4658	ug/L	9.4658	ppb	10:10:08
1	SiO2†	4443.6	3581.5	208.03	ug/L	208.03	ppb	10:11:14
2	Sc Radial	6174.5	6174.5	104	%			10:08:51
2	Y RADIAL	6406.6	6406.6	103.7	%			10:08:51
2	Al 396.153Radial†	308.9	313.9	208.43	ug/L	208.43	ppb	10:08:51
2	Ca 317.933Radial†	177.1	150.2	206.35	ug/L	206.35	ppb	10:09:11
2	Fe 238.204 Radial†	26.2	12.4	95.009	ug/L	95.009	ppb	10:09:11
2	K 766.490 Radial†	4154.0	857.3	138.14	ug/L	138.14	ppb	10:08:51
2	Mg 279.077 IEC†	11.5	5.7	166.65	ug/L	166.65	ppb	10:09:11
2	Na 589.592 Radial†	-577.0	1168.9	307.26	ug/L	307.26	ppb	10:08:51
2	Sr 421.552†	914.2	895.4	4.8431	ug/L	4.8431	ppb	10:08:51
2	Sc 361.383	974880.5	974880.5	104.56	%			10:10:13
2	Y 371.029	787853.6	787853.6	102.46	%			10:10:13
2	Ag 328.068†	1653.4	1172.8	4.8912	ug/L	4.8912	ppb	10:10:19
2	As 188.979†	57.9	86.8	30.075	ug/L	30.075	ppb	10:10:39
2	B 249.677†	2157.4	2589.9	51.098	ug/L	51.098	ppb	10:10:19
2	Ba 233.527†	826.7	779.1	5.0713	ug/L	5.0713	ppb	10:10:39
2	Be 313.107†	11462.0	15510.4	5.0749	ug/L	5.0749	ppb	10:10:19
2	Cd 226.502†	346.5	545.2	5.1156	ug/L	5.1156	ppb	10:10:39
2	Co 228.616†	226.8	300.7	5.0636	ug/L	5.0636	ppb	10:10:39
2	Cr 267.716†	614.5	502.9	4.8555	ug/L	4.8555	ppb	10:10:39
2	Cu 324.752†	10018.4	3481.8	9.5000	ug/L	9.5000	ppb	10:10:19
2	Mn 257.610†	11965.8	10884.3	10.391	ug/L	10.391	ppb	10:10:19
2	Mo 202.031†	206.4	172.4	9.9507	ug/L	9.9507	ppb	10:10:39
2	Ni 231.604†	380.4	234.0	4.8855	ug/L	4.8855	ppb	10:10:39

2	P 214.914†	561.1	291.6	144.87 ug/L	144.87 ppb	10:10:39
2	Pb 220.353†	32.8	107.6	10.856 ug/L	10.856 ppb	10:10:39
2	S 181.975 Axial†	142.0	87.4	102.63 ug/L	102.63 ppb	10:10:39
2	Sb 206.836†	79.1	31.2	9.2672 ug/L	9.2672 ppb	10:10:39
2	Se 196.026†	29.9	64.5	34.672 ug/L	34.672 ppb	10:10:39
2	Si 251.611†	4463.0	3626.6	97.659 ug/L	97.659 ppb	10:10:19
2	Sn 189.927†	71.3	62.0	8.8984 ug/L	8.8984 ppb	10:10:39
2	Ti 334.940†	2176.4	3536.3	5.0130 ug/L	5.0130 ppb	10:10:19
2	Tl 190.801†	33.2	72.9	18.288 ug/L	18.288 ppb	10:10:39
2	U 409.014†	-737.9	2263.1	60.833 ug/L	60.833 ppb	10:10:13
2	V 292.402†	-716.1	847.2	5.4163 ug/L	5.4163 ppb	10:10:19
2	Zn 213.857†	2172.9	1198.8	9.3902 ug/L	9.3902 ppb	10:10:39
2	SiO2†	4512.7	3636.7	211.24 ug/L	211.24 ppb	10:11:19
3	Sc Radial	6035.8	6035.8	101 %		10:09:17
3	Y RADIAL	6235.5	6235.5	100.9 %		10:09:17
3	Al 396.153Radial†	283.9	296.1	196.60 ug/L	196.60 ppb	10:09:17
3	Ca 317.933Radial†	177.8	154.8	212.67 ug/L	212.67 ppb	10:09:37
3	Fe 238.204 Radial†	26.0	12.8	98.017 ug/L	98.017 ppb	10:09:37
3	K 766.490 Radial†	4055.4	852.1	137.28 ug/L	137.28 ppb	10:09:17
3	Mg 279.077 IEC†	12.9	7.4	216.16 ug/L	216.16 ppb	10:09:37
3	Na 589.592 Radial†	-555.9	1176.9	309.36 ug/L	309.36 ppb	10:09:17
3	Sr 421.552†	903.3	904.8	4.8942 ug/L	4.8942 ppb	10:09:17
3	Sc 361.383	966644.7	966644.7	103.68 %		10:10:44
3	Y 371.029	781194.0	781194.0	101.59 %		10:10:44
3	Ag 328.068†	1777.3	1305.9	5.4518 ug/L	5.4518 ppb	10:10:49
3	As 188.979†	57.1	86.5	29.964 ug/L	29.964 ppb	10:11:09
3	B 249.677†	2130.8	2581.8	50.938 ug/L	50.938 ppb	10:10:49
3	Ba 233.527†	828.2	787.3	5.1246 ug/L	5.1246 ppb	10:11:09
3	Be 313.107†	11465.9	15607.5	5.1068 ug/L	5.1068 ppb	10:10:49
3	Cd 226.502†	339.3	541.1	5.0769 ug/L	5.0769 ppb	10:11:09
3	Co 228.616†	228.1	303.8	5.1142 ug/L	5.1142 ppb	10:11:09
3	Cr 267.716†	601.6	495.5	4.7851 ug/L	4.7851 ppb	10:11:09
3	Cu 324.752†	10020.7	3565.6	9.7289 ug/L	9.7289 ppb	10:10:49
3	Mn 257.610†	11991.9	11007.0	10.507 ug/L	10.507 ppb	10:10:49
3	Mo 202.031†	201.4	169.3	9.7680 ug/L	9.7680 ppb	10:11:09
3	Ni 231.604†	383.1	239.8	5.0062 ug/L	5.0062 ppb	10:11:09
3	P 214.914†	541.5	277.3	137.64 ug/L	137.64 ppb	10:11:09
3	Pb 220.353†	31.7	106.8	10.774 ug/L	10.774 ppb	10:11:09
3	S 181.975 Axial†	143.0	89.6	105.15 ug/L	105.15 ppb	10:11:09
3	Sb 206.836†	73.2	26.2	7.8243 ug/L	7.8243 ppb	10:11:09
3	Se 196.026†	24.0	59.0	31.775 ug/L	31.775 ppb	10:11:09
3	Si 251.611†	4457.1	3657.3	98.489 ug/L	98.489 ppb	10:10:49
3	Sn 189.927†	77.8	68.8	9.8774 ug/L	9.8774 ppb	10:11:09
3	Ti 334.940†	2215.9	3592.2	5.0953 ug/L	5.0953 ppb	10:10:49
3	Tl 190.801†	30.9	70.9	17.795 ug/L	17.795 ppb	10:11:09
3	U 409.014†	-953.8	2048.9	55.073 ug/L	55.073 ppb	10:10:44
3	V 292.402†	-722.9	834.9	5.3277 ug/L	5.3277 ppb	10:10:49
3	Zn 213.857†	2179.2	1222.6	9.5748 ug/L	9.5748 ppb	10:11:09
3	SiO2†	4493.1	3654.6	212.28 ug/L	212.28 ppb	10:11:24

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	971304.8	104.18	%	0.453				0.43%
Sc Radial	6132.2	103	%	1.4				1.36%
Y 371.029	784803.4	102.06	%	0.438				0.43%
Y RADIAL	6362.8	103.0	%	1.81				1.76%
Ag 328.068†	1236.8	5.1599	ug/L	0.28100	5.1599	ppb	0.28100	5.45%
QC value within limits for Ag 328.068 Recovery = 103.20%								
Al 396.153Radial†	303.2	201.30	ug/L	6.278	201.30	ppb	6.278	3.12%
QC value within limits for Al 396.153Radial Recovery = 100.65%								
As 188.979†	84.9	29.409	ug/L	1.0579	29.409	ppb	1.0579	3.60%
QC value within limits for As 188.979 Recovery = 98.03%								
B 249.677†	2579.5	50.893	ug/L	0.2305	50.893	ppb	0.2305	0.45%
QC value within limits for B 249.677 Recovery = 101.79%								
Ba 233.527†	780.7	5.0816	ug/L	0.03884	5.0816	ppb	0.03884	0.76%
QC value within limits for Ba 233.527 Recovery = 101.63%								
Be 313.107†	15594.3	5.1024	ug/L	0.02554	5.1024	ppb	0.02554	0.50%
QC value within limits for Be 313.107 Recovery = 102.05%								
Ca 317.933Radial†	151.5	208.04	ug/L	4.057	208.04	ppb	4.057	1.95%

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   QC value within limits for Ca 317.933Radial  Recovery = 104.02%
Cd 226.502†              540.3      5.0695 ug/L       0.05026      5.0695 ppb        0.05026   0.99%
   QC value within limits for Cd 226.502  Recovery = 101.39%
Co 228.616†              301.3      5.0725 ug/L       0.03809      5.0725 ppb        0.03809   0.75%
   QC value within limits for Co 228.616  Recovery = 101.45%
Cr 267.716†              501.0      4.8378 ug/L       0.04640      4.8378 ppb        0.04640   0.96%
   QC value within limits for Cr 267.716  Recovery = 96.76%
Cu 324.752†             3523.2      9.6130 ug/L       0.11444      9.6130 ppb        0.11444   1.19%
   QC value within limits for Cu 324.752  Recovery = 96.13%
Fe 238.204 Radial†        12.3      94.827 ug/L        3.2850      94.827 ppb         3.2850   3.46%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.83%
K 766.490 Radial†        837.3      134.90 ug/L         4.886      134.90 ppb          4.886   3.62%
   QC value within limits for K 766.490 Radial  Recovery = 89.93%
Mg 279.077 IEC†            7.5      220.22 ug/L        55.712      220.22 ppb         55.712  25.30%
   QC value within limits for Mg 279.077 IEC  Recovery = 73.41%
Mn 257.610†            10943.5      10.446 ug/L        0.0584      10.446 ppb         0.0584   0.56%
   QC value within limits for Mn 257.610  Recovery = 104.46%
Mo 202.031†              171.5      9.8983 ug/L       0.11357      9.8983 ppb        0.11357   1.15%
   QC value within limits for Mo 202.031  Recovery = 98.98%
Na 589.592 Radial†      1181.2      310.50 ug/L         3.928      310.50 ppb          3.928   1.27%
   QC value within limits for Na 589.592 Radial  Recovery = 103.50%
Ni 231.604†              234.8      4.9017 ug/L       0.09752      4.9017 ppb        0.09752   1.99%
   QC value within limits for Ni 231.604  Recovery = 98.03%
P 214.914†               284.4      141.22 ug/L         3.613      141.22 ppb          3.613   2.56%
   QC value within limits for P 214.914  Recovery = 94.15%
Pb 220.353†              104.3      10.529 ug/L        0.4977      10.529 ppb         0.4977   4.73%
   QC value within limits for Pb 220.353  Recovery = 105.29%
S 181.975 Axial†          86.9      102.07 ug/L         3.389      102.07 ppb          3.389   3.32%
   QC value within limits for S 181.975 Axial  Recovery = 102.07%
Sb 206.836†               26.5      7.9230 ug/L       1.29773      7.9230 ppb        1.29773  16.38%
   QC value within limits for Sb 206.836  Recovery = 79.23%
Se 196.026†               64.5      34.680 ug/L        2.9099      34.680 ppb         2.9099   8.39%
   QC value within limits for Se 196.026  Recovery = 115.60%
Si 251.611†             3661.9      98.611 ug/L        1.0194      98.611 ppb         1.0194   1.03%
   QC value within limits for Si 251.611  Recovery = 98.61%
Sn 189.927†               65.5      9.4037 ug/L       0.49027      9.4037 ppb        0.49027   5.21%
   QC value within limits for Sn 189.927  Recovery = 94.04%
Sr 421.552†              904.9      4.8948 ug/L       0.05191      4.8948 ppb        0.05191   1.06%
   QC value within limits for Sr 421.552  Recovery = 97.90%
Ti 334.940†             3560.7      5.0490 ug/L       0.04213      5.0490 ppb        0.04213   0.83%
   QC value within limits for Ti 334.940  Recovery = 100.98%
Tl 190.801†               73.8      18.518 ug/L        0.8614      18.518 ppb         0.8614   4.65%
   QC value within limits for Tl 190.801  Recovery = 92.59%
U 409.014†              2158.3      58.014 ug/L        2.8818      58.014 ppb         2.8818   4.97%
   QC value within limits for U 409.014  Recovery = 116.03%
V 292.402†               820.5      5.2480 ug/L       0.21927      5.2480 ppb        0.21927   4.18%
   QC value within limits for V 292.402  Recovery = 104.96%
Zn 213.857†             1210.1      9.4769 ug/L       0.09279      9.4769 ppb        0.09279   0.98%
   QC value within limits for Zn 213.857  Recovery = 94.77%
SiO2†                   3624.3      210.52 ug/L         2.217      210.52 ppb          2.217   1.05%
   QC value within limits for SiO2  Recovery = 98.83%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/17/2009 10:13:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5326.6	5326.6	89.5	%			10:15:34
1	Y RADIAL	5533.1	5533.1	89.54	%			10:15:34
1	Al 396.153Radial†	681439.2	761354.5	506530	ug/L	506530	ppb	10:15:29
1	Ca 317.933Radial†	308829.5	345019.4	473880	ug/L	473880	ppb	10:15:29
1	Fe 238.204 Radial†	21060.9	23517.4	180410	ug/L	180410	ppb	10:15:34
1	K 766.490 Radial†	2562.8	-283.1	-30.483	ug/L	-30.483	ppb	10:15:29
1	Mg 279.077 IEC†	14476.5	16168.5	471850	ug/L	471850	ppb	10:15:34
1	Na 589.592 Radial†	-1562.6	-20.9	-5.4865	ug/L	-5.4865	ppb	10:15:34
1	Sr 421.552†	608.5	694.1	-0.6365	ug/L	-0.6365	ppb	10:15:34
1	Sc 361.383	821406.9	821406.9	88.100	%			10:16:01
1	Y 371.029	651043.1	651043.1	84.667	%			10:16:01
1	Ag 328.068†	-10649.8	-12496.7	1.2497	ug/L	1.2497	ppb	10:16:01
1	As 188.979†	-89.5	-70.1	3.4265	ug/L	3.4265	ppb	10:16:21
1	B 249.677†	161.9	710.4	-9.9123	ug/L	-9.9123	ppb	10:16:01
1	Ba 233.527†	-732.8	-843.3	1.2528	ug/L	1.2528	ppb	10:16:21
1	Be 313.107†	-4960.8	-1082.4	-0.4012	ug/L	-0.4012	ppb	10:16:01
1	Cd 226.502†	1460.6	1871.7	-0.4504	ug/L	-0.4504	ppb	10:16:21
1	Co 228.616†	-29.2	50.7	-1.7162	ug/L	-1.7162	ppb	10:16:21
1	Cr 267.716†	-113.8	-213.9	1.1771	ug/L	1.1771	ppb	10:16:21
1	Cu 324.752†	2350.4	-3431.7	-0.1555	ug/L	-0.1555	ppb	10:16:01
1	Mn 257.610†	-227.0	-817.2	8.4237	ug/L	8.4237	ppb	10:16:01
1	Mo 202.031†	-242.1	-299.7	-4.4870	ug/L	-4.4870	ppb	10:16:21
1	Ni 231.604†	252.5	156.9	3.2770	ug/L	3.2770	ppb	10:16:21
1	P 214.914†	184.2	-36.0	8.7418	ug/L	8.7418	ppb	10:16:21
1	Pb 220.353†	-1018.0	-1079.3	-9.5412	ug/L	-9.5412	ppb	10:16:21
1	S 181.975 Axial†	77.4	39.5	-53.268	ug/L	-53.268	ppb	10:16:21
1	Sb 206.836†	96.2	64.8	6.4427	ug/L	6.4427	ppb	10:16:21
1	Se 196.026†	-1235.8	-1366.8	22.237	ug/L	22.237	ppb	10:16:21
1	Si 251.611†	425.2	-159.1	-3.7793	ug/L	-3.7793	ppb	10:16:21
1	Sn 189.927†	-389.7	-448.6	-12.318	ug/L	-12.318	ppb	10:16:21
1	Ti 334.940†	-16324.5	-17074.5	0.4188	ug/L	0.4188	ppb	10:16:01
1	Tl 190.801†	-99.1	-71.4	-4.1901	ug/L	-4.1901	ppb	10:16:21
1	U 409.014†	-1849.1	870.0	0.6991	ug/L	0.6991	ppb	10:16:01
1	V 292.402†	893.1	2545.8	-1.4230	ug/L	-1.4230	ppb	10:16:21
1	Zn 213.857†	3666.7	3282.6	-7.5232	ug/L	-7.5232	ppb	10:16:21
1	SiO2†	401.1	-223.8	-11.912	ug/L	-11.912	ppb	10:17:18
2	Sc Radial	5243.9	5243.9	88.1	%			10:15:44
2	Y RADIAL	5400.0	5400.0	87.39	%			10:15:44
2	Al 396.153Radial†	703349.6	798231.0	531060	ug/L	531060	ppb	10:15:39
2	Ca 317.933Radial†	317985.1	360853.3	495630	ug/L	495630	ppb	10:15:39
2	Fe 238.204 Radial†	21664.6	24573.7	188510	ug/L	188510	ppb	10:15:44
2	K 766.490 Radial†	2635.1	-155.9	-9.0721	ug/L	-9.0721	ppb	10:15:39
2	Mg 279.077 IEC†	14889.9	16892.8	492990	ug/L	492990	ppb	10:15:44
2	Na 589.592 Radial†	-1571.4	-58.3	-15.337	ug/L	-15.337	ppb	10:15:44
2	Sr 421.552†	612.8	709.7	-0.7538	ug/L	-0.7538	ppb	10:15:44
2	Sc 361.383	819502.8	819502.8	87.896	%			10:16:27
2	Y 371.029	648520.0	648520.0	84.339	%			10:16:27
2	Ag 328.068†	-10745.1	-12633.3	3.0633	ug/L	3.0633	ppb	10:16:27
2	As 188.979†	-114.0	-98.2	-5.0651	ug/L	-5.0651	ppb	10:16:47
2	B 249.677†	272.5	836.6	-8.4967	ug/L	-8.4967	ppb	10:16:27
2	Ba 233.527†	-728.9	-840.8	1.5698	ug/L	1.5698	ppb	10:16:47
2	Be 313.107†	-4961.6	-1096.4	-0.4064	ug/L	-0.4064	ppb	10:16:27
2	Cd 226.502†	1463.6	1879.0	-1.1913	ug/L	-1.1913	ppb	10:16:47
2	Co 228.616†	-22.0	58.7	-1.6930	ug/L	-1.6930	ppb	10:16:47
2	Cr 267.716†	-139.1	-243.0	1.0382	ug/L	1.0382	ppb	10:16:47
2	Cu 324.752†	2495.3	-3260.6	0.7244	ug/L	0.7244	ppb	10:16:27
2	Mn 257.610†	-160.4	-742.0	8.9099	ug/L	8.9099	ppb	10:16:27
2	Mo 202.031†	-225.0	-281.0	-2.8293	ug/L	-2.8293	ppb	10:16:47
2	Ni 231.604†	271.9	179.6	3.7513	ug/L	3.7513	ppb	10:16:47

2	P 214.914†	198.8	-18.8	19.082 ug/L	19.082 ppb	10:16:47
2	Pb 220.353†	-1015.1	-1078.7	-4.6432 ug/L	-4.6432 ppb	10:16:47
2	S 181.975 Axial†	96.3	61.2	-32.626 ug/L	-32.626 ppb	10:16:47
2	Sb 206.836†	70.1	35.3	-2.5217 ug/L	-2.5217 ppb	10:16:47
2	Se 196.026†	-1226.3	-1359.3	60.314 ug/L	60.314 ppb	10:16:47
2	Si 251.611†	434.1	-147.8	-3.5085 ug/L	-3.5085 ppb	10:16:47
2	Sn 189.927†	-370.6	-427.9	-6.9762 ug/L	-6.9762 ppb	10:16:47
2	Ti 334.940†	-16492.9	-17309.2	1.2162 ug/L	1.2162 ppb	10:16:27
2	Tl 190.801†	-100.1	-72.7	-3.8546 ug/L	-3.8546 ppb	10:16:47
2	U 409.014†	-1609.1	1138.2	6.8918 ug/L	6.8918 ppb	10:16:27
2	V 292.402†	896.3	2551.8	-2.1120 ug/L	-2.1120 ppb	10:16:47
2	Zn 213.857†	3703.0	3333.6	-8.6222 ug/L	-8.6222 ppb	10:16:47
2	SiO2†	449.5	-167.7	-8.7196 ug/L	-8.7196 ppb	10:17:23
3	Sc Radial	5260.2	5260.2	88.4 %		10:15:55
3	Y RADIAL	5434.2	5434.2	87.94 %		10:15:55
3	Al 396.153Radial†	714755.0	808649.4	537990 ug/L	537990 ppb	10:15:50
3	Ca 317.933Radial†	321282.6	363460.4	499210 ug/L	499210 ppb	10:15:50
3	Fe 238.204 Radial†	21966.2	24838.4	190550 ug/L	190550 ppb	10:15:55
3	K 766.490 Radial†	2606.9	-197.1	-15.230 ug/L	-15.230 ppb	10:15:50
3	Mg 279.077 IEC†	15142.5	17126.0	499800 ug/L	499800 ppb	10:15:55
3	Na 589.592 Radial†	-1589.5	-73.2	-19.254 ug/L	-19.254 ppb	10:15:55
3	Sr 421.552†	616.4	711.6	-0.7763 ug/L	-0.7763 ppb	10:15:55
3	Sc 361.383	812477.0	812477.0	87.143 %		10:16:52
3	Y 371.029	642322.4	642322.4	83.533 %		10:16:52
3	Ag 328.068†	-10743.0	-12736.5	3.2607 ug/L	3.2607 ppb	10:16:52
3	As 188.979†	-94.8	-77.3	2.4916 ug/L	2.4916 ppb	10:17:12
3	B 249.677†	166.3	717.4	-11.120 ug/L	-11.120 ppb	10:16:52
3	Ba 233.527†	-724.7	-843.2	1.6294 ug/L	1.6294 ppb	10:17:12
3	Be 313.107†	-4939.0	-1119.3	-0.4152 ug/L	-0.4152 ppb	10:16:52
3	Cd 226.502†	1452.0	1880.1	-1.3846 ug/L	-1.3846 ppb	10:17:12
3	Co 228.616†	-15.8	65.7	-1.6107 ug/L	-1.6107 ppb	10:17:12
3	Cr 267.716†	-116.5	-218.4	1.3130 ug/L	1.3130 ppb	10:17:12
3	Cu 324.752†	2411.2	-3332.6	0.6317 ug/L	0.6317 ppb	10:16:52
3	Mn 257.610†	-86.9	-659.2	9.0647 ug/L	9.0647 ppb	10:16:52
3	Mo 202.031†	-261.6	-325.2	-5.2369 ug/L	-5.2369 ppb	10:17:12
3	Ni 231.604†	232.1	136.7	2.8538 ug/L	2.8538 ppb	10:17:12
3	P 214.914†	182.5	-35.6	11.306 ug/L	11.306 ppb	10:17:12
3	Pb 220.353†	-1020.2	-1094.5	-4.8489 ug/L	-4.8489 ppb	10:17:12
3	S 181.975 Axial†	82.3	46.1	-51.705 ug/L	-51.705 ppb	10:17:12
3	Sb 206.836†	79.9	47.3	0.6148 ug/L	0.6148 ppb	10:17:12
3	Se 196.026†	-1234.0	-1380.1	57.990 ug/L	57.990 ppb	10:17:12
3	Si 251.611†	409.3	-172.0	-4.0964 ug/L	-4.0964 ppb	10:17:12
3	Sn 189.927†	-403.6	-469.4	-12.507 ug/L	-12.507 ppb	10:17:12
3	Ti 334.940†	-16770.1	-17789.5	0.7212 ug/L	0.7212 ppb	10:16:52
3	Tl 190.801†	-91.7	-64.1	-1.5177 ug/L	-1.5177 ppb	10:17:12
3	U 409.014†	-1707.6	1009.3	3.1713 ug/L	3.1713 ppb	10:16:52
3	V 292.402†	853.9	2512.0	-2.5535 ug/L	-2.5535 ppb	10:17:12
3	Zn 213.857†	3667.6	3329.4	-9.0763 ug/L	-9.0763 ppb	10:17:12
3	SiO2†	377.7	-245.7	-13.122 ug/L	-13.122 ppb	10:17:28

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	817795.6	87.713	%	0.5045				0.58%
Sc Radial	5276.9	88.7	%	0.74				0.83%
Y 371.029	647295.2	84.179	%	0.5836				0.69%
Y RADIAL	5455.8	88.29	%	1.119				1.27%
Ag 328.068†	-12622.1	2.5246	ug/L	1.10844	2.5246	ppb	1.10844	43.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	789411.6	525190	ug/L	16532.8	525190	ppb	16532.8	3.15%
QC value within limits for Al 396.153Radial Recovery = 105.04%								
As 188.979†	-81.8	0.2843	ug/L	4.65623	0.2843	ppb	4.65623	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	754.8	-9.8428	ug/L	1.31277	-9.8428	ppb	1.31277	13.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-842.4	1.4840	ug/L	0.20242	1.4840	ppb	0.20242	13.64%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1099.4	-0.4076	ug/L	0.00709	-0.4076	ppb	0.00709	1.74%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	356444.4	489570	ug/L	13707.1	489570	ppb	13707.1	2.80%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.91%
Cd 226.502†            1876.9     -1.0088 ug/L       0.49316     -1.0088 ppb       0.49316  48.89%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              58.4     -1.6733 ug/L       0.05545     -1.6733 ppb       0.05545   3.31%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -225.1      1.1761 ug/L       0.13742      1.1761 ppb       0.13742  11.68%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -3341.6      0.4002 ug/L       0.48346      0.4002 ppb       0.48346 120.80%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    24309.8      186490 ug/L        5361.6      186490 ppb        5361.6   2.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.25%
K 766.490 Radial†       -212.1     -18.262 ug/L       11.0227     -18.262 ppb       11.0227  60.36%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       16729.1      488210 ug/L       14571.2      488210 ppb       14571.2   2.98%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.64%
Mn 257.610†            -739.4      8.7994 ug/L       0.33444      8.7994 ppb       0.33444   3.80%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -302.0     -4.1844 ug/L       1.23199     -4.1844 ppb       1.23199  29.44%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -50.8     -13.359 ug/L        7.0935     -13.359 ppb        7.0935  53.10%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             157.7      3.2940 ug/L       0.44898      3.2940 ppb       0.44898  13.63%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -30.1      13.043 ug/L        5.3846      13.043 ppb        5.3846  41.28%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†           -1084.2     -6.3444 ug/L       2.77040     -6.3444 ppb       2.77040  43.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         48.9     -45.866 ug/L       11.4932     -45.866 ppb       11.4932  25.06%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              49.1      1.5119 ug/L       4.54900      1.5119 ppb       4.54900 300.87%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1368.7      46.847 ug/L       21.3444      46.847 ppb       21.3444  45.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†            -159.6     -3.7947 ug/L       0.29429     -3.7947 ppb       0.29429   7.76%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -448.6     -10.600 ug/L        3.1400     -10.600 ppb        3.1400  29.62%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             705.1     -0.7222 ug/L       0.07508     -0.7222 ppb       0.07508  10.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -17391.1      0.7854 ug/L       0.40257      0.7854 ppb       0.40257  51.26%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -69.4     -3.1874 ug/L       1.45574     -3.1874 ppb       1.45574  45.67%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1005.8      3.5874 ug/L       3.11726      3.5874 ppb       3.11726  86.89%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2536.5     -2.0295 ug/L       0.56972     -2.0295 ppb       0.56972  28.07%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            3315.2     -8.4072 ug/L       0.79855     -8.4072 ppb       0.79855   9.50%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                  -212.4     -11.251 ug/L        2.2745     -11.251 ppb        2.2745  20.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/17/2009 10:19:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5358.2	5358.2	90.0	%			10:21:37
1	Y RADIAL	5578.3	5578.3	90.27	%			10:21:37
1	Al 396.153Radial†	710248.9	788862.3	524810	ug/L	524810	ppb	10:21:32
1	Ca 317.933Radial†	319451.1	354781.6	487290	ug/L	487290	ppb	10:21:32
1	Fe 238.204 Radial†	21841.5	24245.7	186010	ug/L	186010	ppb	10:21:37
1	K 766.490 Radial†	33578.7	34148.1	5520.7	ug/L	5520.7	ppb	10:21:32
1	Mg 279.077 IEC†	15109.6	16776.3	489600	ug/L	489600	ppb	10:21:37
1	Na 589.592 Radial†	17004.9	20611.7	5418.0	ug/L	5418.0	ppb	10:21:37
1	Sr 421.552†	83937.9	93240.8	500.02	ug/L	500.02	ppb	10:21:32
1	Sc 361.383	835373.5	835373.5	89.598	%			10:22:04
1	Y 371.029	658351.2	658351.2	85.617	%			10:22:04
1	Ag 328.068†	46016.8	50950.6	269.19	ug/L	269.19	ppb	10:22:04
1	As 188.979†	1203.3	1374.4	507.85	ug/L	507.85	ppb	10:22:10
1	B 249.677†	23418.5	26663.8	500.55	ug/L	500.55	ppb	10:22:04
1	Ba 233.527†	65455.0	73042.4	482.07	ug/L	482.07	ppb	10:22:04
1	Be 313.107†	656175.0	736900.4	241.58	ug/L	241.58	ppb	10:22:04
1	Cd 226.502†	45090.5	50539.0	456.50	ug/L	456.50	ppb	10:22:10
1	Co 228.616†	23166.0	25939.2	433.11	ug/L	433.11	ppb	10:22:10
1	Cr 267.716†	42593.3	47453.3	463.01	ug/L	463.01	ppb	10:22:10
1	Cu 324.752†	178904.7	193574.7	537.39	ug/L	537.39	ppb	10:22:04
1	Mn 257.610†	441736.0	492458.8	479.28	ug/L	479.28	ppb	10:22:04
1	Mo 202.031†	7165.8	7972.7	472.93	ug/L	472.93	ppb	10:22:10
1	Ni 231.604†	19055.5	21138.0	441.27	ug/L	441.27	ppb	10:22:10
1	P 214.914†	4636.0	4929.1	2421.4	ug/L	2421.4	ppb	10:22:10
1	Pb 220.353†	3040.9	3470.1	451.65	ug/L	451.65	ppb	10:22:10
1	S 181.975 Axial†	2074.0	2266.3	2558.5	ug/L	2558.5	ppb	10:22:10
1	Sb 206.836†	1675.5	1825.6	522.21	ug/L	522.21	ppb	10:22:10
1	Se 196.026†	3038.4	3427.1	2593.7	ug/L	2593.7	ppb	10:22:10
1	Si 251.611†	169824.9	188898.6	5088.5	ug/L	5088.5	ppb	10:22:04
1	Sn 189.927†	2607.7	2904.2	469.04	ug/L	469.04	ppb	10:22:10
1	Ti 334.940†	298758.2	334896.7	501.46	ug/L	501.46	ppb	10:22:04
1	Tl 190.801†	1549.4	1770.4	459.77	ug/L	459.77	ppb	10:22:10
1	U 409.014†	14113.6	18720.9	479.11	ug/L	479.11	ppb	10:22:04
1	V 292.402†	72712.1	82685.5	494.56	ug/L	494.56	ppb	10:22:04
1	Zn 213.857†	58014.6	63870.3	465.38	ug/L	465.38	ppb	10:22:10
1	SiO2†	169750.2	188777.7	10969	ug/L	10969	ppb	10:22:37
2	Sc Radial	5408.6	5408.6	90.9	%			10:21:47
2	Y RADIAL	5565.4	5565.4	90.06	%			10:21:47
2	Al 396.153Radial†	703637.5	774236.9	515080	ug/L	515080	ppb	10:21:42
2	Ca 317.933Radial†	316489.5	348216.7	478270	ug/L	478270	ppb	10:21:42
2	Fe 238.204 Radial†	21995.6	24189.1	185580	ug/L	185580	ppb	10:21:47
2	K 766.490 Radial†	33188.2	33371.0	5394.9	ug/L	5394.9	ppb	10:21:42
2	Mg 279.077 IEC†	15198.7	16717.9	487900	ug/L	487900	ppb	10:21:47
2	Na 589.592 Radial†	17172.5	20620.1	5420.2	ug/L	5420.2	ppb	10:21:47
2	Sr 421.552†	83109.7	91460.8	490.47	ug/L	490.47	ppb	10:21:42
2	Sc 361.383	830420.6	830420.6	89.067	%			10:22:15
2	Y 371.029	655990.2	655990.2	85.310	%			10:22:15
2	Ag 328.068†	45717.5	50920.9	269.05	ug/L	269.05	ppb	10:22:15
2	As 188.979†	1159.4	1333.2	493.51	ug/L	493.51	ppb	10:22:20
2	B 249.677†	23073.1	26431.8	496.03	ug/L	496.03	ppb	10:22:15
2	Ba 233.527†	65039.3	73011.3	481.85	ug/L	481.85	ppb	10:22:15
2	Be 313.107†	651877.4	736443.3	241.42	ug/L	241.42	ppb	10:22:15
2	Cd 226.502†	44774.8	50484.7	456.03	ug/L	456.03	ppb	10:22:20
2	Co 228.616†	23046.7	25959.5	433.46	ug/L	433.46	ppb	10:22:20
2	Cr 267.716†	42432.9	47556.8	464.00	ug/L	464.00	ppb	10:22:20
2	Cu 324.752†	177507.6	193196.9	536.33	ug/L	536.33	ppb	10:22:15
2	Mn 257.610†	438336.3	491582.2	478.44	ug/L	478.44	ppb	10:22:15
2	Mo 202.031†	7134.0	7984.7	473.59	ug/L	473.59	ppb	10:22:20
2	Ni 231.604†	18898.4	21088.4	440.23	ug/L	440.23	ppb	10:22:20

2	P 214.914†	4594.9	4913.9	2411.0 ug/L	2411.0 ppb	10:22:20
2	Pb 220.353†	3020.3	3467.3	449.22 ug/L	449.22 ppb	10:22:20
2	S 181.975 Axial†	2039.8	2241.7	2531.6 ug/L	2531.6 ppb	10:22:20
2	Sb 206.836†	1680.8	1842.7	527.47 ug/L	527.47 ppb	10:22:20
2	Se 196.026†	3034.3	3442.7	2597.9 ug/L	2597.9 ppb	10:22:20
2	Si 251.611†	168428.7	188461.5	5076.7 ug/L	5076.7 ppb	10:22:15
2	Sn 189.927†	2610.4	2924.6	471.02 ug/L	471.02 ppb	10:22:20
2	Ti 334.940†	296305.8	334132.0	499.90 ug/L	499.90 ppb	10:22:15
2	Tl 190.801†	1502.7	1728.3	448.97 ug/L	448.97 ppb	10:22:20
2	U 409.014†	14094.1	18793.0	481.10 ug/L	481.10 ppb	10:22:15
2	V 292.402†	72266.0	82668.7	494.50 ug/L	494.50 ppb	10:22:15
2	Zn 213.857†	57895.1	64122.4	467.47 ug/L	467.47 ppb	10:22:20
2	SiO2†	169015.2	189082.6	10987 ug/L	10987 ppb	10:22:42
3	Sc Radial	5396.9	5396.9	90.7 %		10:21:57
3	Y RADIAL	5546.7	5546.7	89.76 %		10:21:57
3	Al 396.153Radial†	704218.4	776560.6	516620 ug/L	516620 ppb	10:21:52
3	Ca 317.933Radial†	317320.7	349890.3	480570 ug/L	480570 ppb	10:21:52
3	Fe 238.204 Radial†	21919.2	24157.4	185340 ug/L	185340 ppb	10:21:57
3	K 766.490 Radial†	33394.2	33677.5	5444.4 ug/L	5444.4 ppb	10:21:52
3	Mg 279.077 IEC†	15099.3	16644.7	485760 ug/L	485760 ppb	10:21:57
3	Na 589.592 Radial†	17063.9	20541.4	5399.6 ug/L	5399.6 ppb	10:21:57
3	Sr 421.552†	83160.3	91715.4	491.83 ug/L	491.83 ppb	10:21:52
3	Sc 361.383	832188.8	832188.8	89.257 %		10:22:26
3	Y 371.029	656678.8	656678.8	85.400 %		10:22:26
3	Ag 328.068†	45897.6	51013.6	269.33 ug/L	269.33 ppb	10:22:26
3	As 188.979†	1156.4	1327.1	491.35 ug/L	491.35 ppb	10:22:31
3	B 249.677†	23354.9	26692.5	501.21 ug/L	501.21 ppb	10:22:26
3	Ba 233.527†	65195.2	73030.8	481.97 ug/L	481.97 ppb	10:22:26
3	Be 313.107†	654051.5	737324.0	241.71 ug/L	241.71 ppb	10:22:26
3	Cd 226.502†	44865.0	50478.9	456.00 ug/L	456.00 ppb	10:22:31
3	Co 228.616†	22998.9	25850.9	431.62 ug/L	431.62 ppb	10:22:31
3	Cr 267.716†	42337.8	47348.9	461.99 ug/L	461.99 ppb	10:22:31
3	Cu 324.752†	177454.3	192713.8	535.00 ug/L	535.00 ppb	10:22:26
3	Mn 257.610†	439647.0	492005.0	478.85 ug/L	478.85 ppb	10:22:26
3	Mo 202.031†	7065.5	7891.0	468.17 ug/L	468.17 ppb	10:22:31
3	Ni 231.604†	18969.7	21123.3	440.96 ug/L	440.96 ppb	10:22:31
3	P 214.914†	4597.5	4905.9	2407.8 ug/L	2407.8 ppb	10:22:31
3	Pb 220.353†	3058.2	3502.5	453.11 ug/L	453.11 ppb	10:22:31
3	S 181.975 Axial†	2051.5	2250.0	2541.0 ug/L	2541.0 ppb	10:22:31
3	Sb 206.836†	1620.0	1770.6	506.32 ug/L	506.32 ppb	10:22:31
3	Se 196.026†	3027.3	3427.6	2589.5 ug/L	2589.5 ppb	10:22:31
3	Si 251.611†	168767.3	188439.1	5076.2 ug/L	5076.2 ppb	10:22:26
3	Sn 189.927†	2552.8	2853.9	461.13 ug/L	461.13 ppb	10:22:31
3	Ti 334.940†	296885.4	334074.5	499.94 ug/L	499.94 ppb	10:22:26
3	Tl 190.801†	1504.7	1726.9	448.68 ug/L	448.68 ppb	10:22:31
3	U 409.014†	13998.1	18651.8	477.34 ug/L	477.34 ppb	10:22:26
3	V 292.402†	72488.1	82745.1	494.87 ug/L	494.87 ppb	10:22:26
3	Zn 213.857†	57813.5	63892.9	465.75 ug/L	465.75 ppb	10:22:31
3	SiO2†	168689.5	188314.5	10942 ug/L	10942 ppb	10:22:47

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	832661.0	89.307	%	0.2692				0.30%
Sc Radial	5387.9	90.5	%	0.44				0.49%
Y 371.029	657006.7	85.442	%	0.1579				0.18%
Y RADIAL	5563.5	90.03	%	0.257				0.29%
Ag 328.068†	50961.7	269.19	ug/L	0.138	269.19	ppb	0.138	0.05%
QC value within limits for Ag 328.068 Recovery = 107.68%								
Al 396.153Radial†	779886.6	518830	ug/L	5228.9	518830	ppb	5228.9	1.01%
QC value within limits for Al 396.153Radial Recovery = 103.77%								
As 188.979†	1344.9	497.57	ug/L	8.964	497.57	ppb	8.964	1.80%
QC value within limits for As 188.979 Recovery = 99.51%								
B 249.677†	26596.0	499.26	ug/L	2.821	499.26	ppb	2.821	0.57%
QC value within limits for B 249.677 Recovery = 99.85%								
Ba 233.527†	73028.2	481.97	ug/L	0.109	481.97	ppb	0.109	0.02%
QC value within limits for Ba 233.527 Recovery = 96.39%								
Be 313.107†	736889.2	241.57	ug/L	0.144	241.57	ppb	0.144	0.06%
QC value within limits for Be 313.107 Recovery = 96.63%								
Ca 317.933Radial†	350962.9	482040	ug/L	4685.4	482040	ppb	4685.4	0.97%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.41%
Cd 226.502†            50500.9      456.17 ug/L         0.279      456.17 ppb          0.279   0.06%
   QC value within limits for Cd 226.502  Recovery = 91.23%
Co 228.616†            25916.5      432.73 ug/L         0.973      432.73 ppb          0.973   0.22%
   QC value within limits for Co 228.616  Recovery = 86.55%
Cr 267.716†            47453.0      463.00 ug/L         1.006      463.00 ppb          1.006   0.22%
   QC value within limits for Cr 267.716  Recovery = 92.60%
Cu 324.752†           193161.8      536.24 ug/L         1.194      536.24 ppb          1.194   0.22%
   QC value within limits for Cu 324.752  Recovery = 107.25%
Fe 238.204 Radial†     24197.4      185640 ug/L         342.9      185640 ppb          342.9   0.18%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.82%
K 766.490 Radial†      33732.2      5453.3 ug/L         63.35      5453.3 ppb          63.35   1.16%
   QC value within limits for K 766.490 Radial  Recovery = 109.07%
Mg 279.077 IEC†        16713.0      487750 ug/L        1924.1      487750 ppb         1924.1   0.39%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.55%
Mn 257.610†           492015.3      478.86 ug/L         0.424      478.86 ppb          0.424   0.09%
   QC value within limits for Mn 257.610  Recovery = 95.77%
Mo 202.031†             7949.5      471.57 ug/L         2.958      471.57 ppb          2.958   0.63%
   QC value within limits for Mo 202.031  Recovery = 94.31%
Na 589.592 Radial†     20591.0      5412.6 ug/L         11.35      5412.6 ppb          11.35   0.21%
   QC value within limits for Na 589.592 Radial  Recovery = 108.25%
Ni 231.604†            21116.6      440.82 ug/L         0.532      440.82 ppb          0.532   0.12%
   QC value within limits for Ni 231.604  Recovery = 88.16%
P 214.914†              4916.3      2413.4 ug/L          7.12      2413.4 ppb           7.12   0.29%
   QC value within limits for P 214.914  Recovery = 96.54%
Pb 220.353†             3480.0      451.33 ug/L         1.967      451.33 ppb          1.967   0.44%
   QC value within limits for Pb 220.353  Recovery = 90.27%
S 181.975 Axial†        2252.7      2543.7 ug/L         13.68      2543.7 ppb          13.68   0.54%
   QC value within limits for S 181.975 Axial  Recovery = 101.75%
Sb 206.836†             1813.0      518.67 ug/L        11.009      518.67 ppb         11.009   2.12%
   QC value within limits for Sb 206.836  Recovery = 103.73%
Se 196.026†             3432.5      2593.7 ug/L          4.21      2593.7 ppb           4.21   0.16%
   QC value within limits for Se 196.026  Recovery = 103.75%
Si 251.611†           188599.7      5080.5 ug/L          6.95      5080.5 ppb           6.95   0.14%
   QC value within limits for Si 251.611  Recovery = 101.61%
Sn 189.927†             2894.2      467.07 ug/L         5.233      467.07 ppb          5.233   1.12%
   QC value within limits for Sn 189.927  Recovery = 93.41%
Sr 421.552†            92139.0      494.11 ug/L         5.166      494.11 ppb          5.166   1.05%
   QC value within limits for Sr 421.552  Recovery = 98.82%
Ti 334.940†           334367.7      500.43 ug/L         0.889      500.43 ppb          0.889   0.18%
   QC value within limits for Ti 334.940  Recovery = 100.09%
Tl 190.801†             1741.9      452.47 ug/L         6.323      452.47 ppb          6.323   1.40%
   QC value within limits for Tl 190.801  Recovery = 90.49%
U 409.014†             18721.9      479.18 ug/L         1.883      479.18 ppb          1.883   0.39%
   QC value within limits for U 409.014  Recovery = 95.84%
V 292.402†             82699.8      494.65 ug/L         0.200      494.65 ppb          0.200   0.04%
   QC value within limits for V 292.402  Recovery = 98.93%
Zn 213.857†            63961.9      466.20 ug/L         1.116      466.20 ppb          1.116   0.24%
   QC value within limits for Zn 213.857  Recovery = 93.24%
SiO2†                 188724.9       10966 ug/L          22.4       10966 ppb           22.4   0.20%
   QC value within limits for SiO2  Recovery = 102.53%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/17/2009 10:24:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5267.4	5267.4	88.5	%			10:26:56
1	Y RADIAL	5448.7	5448.7	88.18	%			10:26:56
1	Al 396.153Radial†	681378.3	769842.1	512170	ug/L	512170	ppb	10:26:51
1	Ca 317.933Radial†	308118.7	348094.1	478100	ug/L	478100	ppb	10:26:51
1	Fe 238.204 Radial†	49976.0	56450.3	433050	ug/L	433050	ppb	10:26:56
1	K 766.490 Radial†	3201.7	470.9	-127.02	ug/L	-127.02	ppb	10:26:51
1	Mg 279.077 IEC†	14434.2	16302.5	475550	ug/L	475550	ppb	10:26:56
1	Na 589.592 Radial†	1732609.4	1959238.9	515010	ug/L	515010	ppb	10:26:51
1	Sr 421.552†	858.1	983.7	0.8914	ug/L	0.8914	ppb	10:26:56
1	Sc 361.383	815360.7	815360.7	87.452	%			10:27:25
1	Y 371.029	644325.3	644325.3	83.793	%			10:27:25
1	Ag 328.068†	-25454.2	-29515.0	2.6938	ug/L	2.6938	ppb	10:27:25
1	As 188.979†	-229.1	-230.4	-12.942	ug/L	-12.942	ppb	10:27:45
1	B 249.677†	1206.0	1905.7	-19.846	ug/L	-19.846	ppb	10:27:25
1	Ba 233.527†	-1974.0	-2268.8	1.3919	ug/L	1.3919	ppb	10:27:45
1	Be 313.107†	-11735.7	-8871.2	-2.9206	ug/L	-2.9206	ppb	10:27:25
1	Cd 226.502†	3768.2	4522.7	-0.8013	ug/L	-0.8013	ppb	10:27:45
1	Co 228.616†	244.8	363.7	-0.1465	ug/L	-0.1465	ppb	10:27:45
1	Cr 267.716†	65.5	-9.9	3.1778	ug/L	3.1778	ppb	10:27:45
1	Cu 324.752†	-915.8	-7146.8	2.6008	ug/L	2.6008	ppb	10:27:25
1	Mn 257.610†	-29571.5	-34374.0	1.5287	ug/L	1.5287	ppb	10:27:25
1	Mo 202.031†	-552.1	-656.3	-7.1276	ug/L	-7.1276	ppb	10:27:25
1	Ni 231.604†	336.3	254.8	5.3187	ug/L	5.3187	ppb	10:27:45
1	P 214.914†	674.0	525.6	90.146	ug/L	90.146	ppb	10:27:45
1	Pb 220.353†	-739.2	-769.1	2.0914	ug/L	2.0914	ppb	10:27:45
1	S 181.975 Axial†	108.8	76.0	-11.454	ug/L	-11.454	ppb	10:27:45
1	Sb 206.836†	70.6	36.3	1.5311	ug/L	1.5311	ppb	10:27:45
1	Se 196.026†	-2877.1	-3254.0	-120.71	ug/L	-120.71	ppb	10:27:45
1	Si 251.611†	-662.6	-1399.4	-36.918	ug/L	-36.918	ppb	10:27:45
1	Sn 189.927†	-437.9	-507.0	-16.859	ug/L	-16.859	ppb	10:27:45
1	Ti 334.940†	-8673.7	-8463.4	6.7067	ug/L	6.7067	ppb	10:27:25
1	Tl 190.801†	-138.3	-117.0	-15.574	ug/L	-15.574	ppb	10:27:45
1	U 409.014†	453590.6	521643.6	13972	ug/L	13972	ppb	10:27:25
1	V 292.402†	2170.7	4014.3	-3.9125	ug/L	-3.9125	ppb	10:27:25
1	Zn 213.857†	6763.0	6854.1	-3.6337	ug/L	-3.6337	ppb	10:27:45
1	SiO2†	-736.8	-1521.6	-86.745	ug/L	-86.745	ppb	10:28:44
2	Sc Radial	5243.8	5243.8	88.1	%			10:27:06
2	Y RADIAL	5390.9	5390.9	87.24	%			10:27:06
2	Al 396.153Radial†	686845.8	779511.4	518610	ug/L	518610	ppb	10:27:01
2	Ca 317.933Radial†	310385.2	352232.9	483790	ug/L	483790	ppb	10:27:01
2	Fe 238.204 Radial†	50660.3	57481.0	440960	ug/L	440960	ppb	10:27:06
2	K 766.490 Radial†	3335.9	639.4	-102.45	ug/L	-102.45	ppb	10:27:01
2	Mg 279.077 IEC†	14702.9	16680.8	486590	ug/L	486590	ppb	10:27:06
2	Na 589.592 Radial†	1747423.3	1984860.1	521740	ug/L	521740	ppb	10:27:01
2	Sr 421.552†	844.9	973.2	0.7817	ug/L	0.7817	ppb	10:27:06
2	Sc 361.383	809329.1	809329.1	86.805	%			10:27:52
2	Y 371.029	639529.8	639529.8	83.169	%			10:27:52
2	Ag 328.068†	-25225.8	-29468.7	5.4515	ug/L	5.4515	ppb	10:27:52
2	As 188.979†	-234.9	-239.1	-14.741	ug/L	-14.741	ppb	10:28:12
2	B 249.677†	1192.0	1899.8	-21.009	ug/L	-21.009	ppb	10:27:52
2	Ba 233.527†	-2005.0	-2321.3	1.3409	ug/L	1.3409	ppb	10:28:12
2	Be 313.107†	-11685.8	-8913.8	-2.9366	ug/L	-2.9366	ppb	10:27:52
2	Cd 226.502†	3731.6	4512.7	-1.6854	ug/L	-1.6854	ppb	10:28:12
2	Co 228.616†	211.2	327.1	-0.8654	ug/L	-0.8654	ppb	10:28:12
2	Cr 267.716†	21.4	-60.1	2.8354	ug/L	2.8354	ppb	10:28:12
2	Cu 324.752†	-928.1	-7168.7	2.9443	ug/L	2.9443	ppb	10:27:52
2	Mn 257.610†	-29516.4	-34562.6	1.9317	ug/L	1.9317	ppb	10:27:52
2	Mo 202.031†	-511.3	-614.0	-4.1258	ug/L	-4.1258	ppb	10:27:52
2	Ni 231.604†	337.5	259.1	5.4079	ug/L	5.4079	ppb	10:28:12

2	P 214.914†	660.9	516.3	81.257 ug/L	81.257 ppb	10:28:12
2	Pb 220.353†	-731.5	-766.4	3.1546 ug/L	3.1546 ppb	10:28:12
2	S 181.975 Axial†	109.1	77.3	-11.231 ug/L	-11.231 ppb	10:28:12
2	Sb 206.836†	72.1	38.6	2.2103 ug/L	2.2103 ppb	10:28:12
2	Se 196.026†	-2883.7	-3286.1	-109.20 ug/L	-109.20 ppb	10:28:12
2	Si 251.611†	-666.0	-1409.0	-37.227 ug/L	-37.227 ppb	10:28:12
2	Sn 189.927†	-437.5	-510.2	-16.616 ug/L	-16.616 ppb	10:28:12
2	Ti 334.940†	-9255.4	-9207.4	5.9508 ug/L	5.9508 ppb	10:27:52
2	Tl 190.801†	-128.5	-106.9	-12.891 ug/L	-12.891 ppb	10:28:12
2	U 409.014†	449813.6	521158.0	13958 ug/L	13958 ppb	10:27:52
2	V 292.402†	1945.1	3772.9	-6.3291 ug/L	-6.3291 ppb	10:27:52
2	Zn 213.857†	6769.5	6919.2	-4.2541 ug/L	-4.2541 ppb	10:28:12
2	SiO2†	-631.3	-1406.4	-80.143 ug/L	-80.143 ppb	10:28:49
3	Sc Radial	5303.2	5303.2	89.1 %		10:27:17
3	Y RADIAL	5482.2	5482.2	88.72 %		10:27:17
3	Al 396.153Radial†	686416.9	770298.8	512480 ug/L	512480 ppb	10:27:12
3	Ca 317.933Radial†	310706.7	348648.1	478860 ug/L	478860 ppb	10:27:12
3	Fe 238.204 Radial†	50778.3	56969.4	437040 ug/L	437040 ppb	10:27:17
3	K 766.490 Radial†	3104.1	336.9	-148.76 ug/L	-148.76 ppb	10:27:12
3	Mg 279.077 IEC†	14693.6	16483.5	480830 ug/L	480830 ppb	10:27:17
3	Na 589.592 Radial†	1745527.7	1960519.3	515350 ug/L	515350 ppb	10:27:12
3	Sr 421.552†	875.2	996.3	0.9528 ug/L	0.9528 ppb	10:27:17
3	Sc 361.383	761512.1	761512.1	81.676 %		10:28:19
3	Y 371.029	602522.2	602522.2	78.357 %		10:28:19
3	Ag 328.068†	-25959.1	-32191.4	-8.1647 ug/L	-8.1647 ppb	10:28:19
3	As 188.979†	-239.3	-261.5	-23.082 ug/L	-23.082 ppb	10:28:39
3	B 249.677†	1267.3	2078.3	-16.967 ug/L	-16.967 ppb	10:28:19
3	Ba 233.527†	-1998.7	-2458.7	0.3096 ug/L	0.3096 ppb	10:28:39
3	Be 313.107†	-11875.5	-9991.3	-3.2898 ug/L	-3.2898 ppb	10:28:19
3	Cd 226.502†	3772.0	4832.0	1.7070 ug/L	1.7070 ppb	10:28:39
3	Co 228.616†	219.6	352.7	-0.3905 ug/L	-0.3905 ppb	10:28:39
3	Cr 267.716†	56.3	-15.8	2.8110 ug/L	2.8110 ppb	10:28:39
3	Cu 324.752†	-888.4	-7187.2	2.6936 ug/L	2.6936 ppb	10:28:19
3	Mn 257.610†	-30242.2	-37586.4	-1.2374 ug/L	-1.2374 ppb	10:28:19
3	Mo 202.031†	-542.3	-688.9	-8.7220 ug/L	-8.7220 ppb	10:28:19
3	Ni 231.604†	321.5	263.9	5.5084 ug/L	5.5084 ppb	10:28:39
3	P 214.914†	661.9	565.4	106.96 ug/L	106.96 ppb	10:28:39
3	Pb 220.353†	-767.5	-863.5	-7.6509 ug/L	-7.6509 ppb	10:28:39
3	S 181.975 Axial†	131.5	112.6	31.463 ug/L	31.463 ppb	10:28:39
3	Sb 206.836†	61.0	30.2	-0.2374 ug/L	-0.2374 ppb	10:28:39
3	Se 196.026†	-2914.0	-3531.7	-254.65 ug/L	-254.65 ppb	10:28:39
3	Si 251.611†	-692.1	-1489.0	-39.291 ug/L	-39.291 ppb	10:28:39
3	Sn 189.927†	-423.8	-525.1	-19.313 ug/L	-19.313 ppb	10:28:39
3	Ti 334.940†	-9104.9	-9692.7	4.4733 ug/L	4.4733 ppb	10:28:19
3	Tl 190.801†	-130.8	-119.1	-16.116 ug/L	-16.116 ppb	10:28:39
3	U 409.014†	459710.8	565813.9	15159 ug/L	15159 ppb	10:28:19
3	V 292.402†	2157.2	4173.3	-1.1463 ug/L	-1.1463 ppb	10:28:19
3	Zn 213.857†	6848.7	7505.8	0.9403 ug/L	0.9403 ppb	10:28:39
3	SiO2†	-675.4	-1506.0	-85.730 ug/L	-85.730 ppb	10:28:54

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	795400.6	85.311	%	3.1643				3.71%
Sc Radial	5271.5	88.6	%	0.50				0.57%
Y 371.029	628792.4	81.773	%	2.9751				3.64%
Y RADIAL	5440.6	88.04	%	0.748				0.85%
Ag 328.068†	-30391.7	-0.0065	ug/L	7.19851	-0.0065	ppb	7.19851	>999.9%
Al 396.153Radial†	773217.4	514420	ug/L	3629.4	514420	ppb	3629.4	0.71%
QC value within limits for Al 396.153Radial Recovery = 102.88%								
As 188.979†	-243.7	-16.922	ug/L	5.4105	-16.922	ppb	5.4105	31.97%
B 249.677†	1961.2	-19.274	ug/L	2.0808	-19.274	ppb	2.0808	10.80%
Ba 233.527†	-2349.6	1.0142	ug/L	0.61066	1.0142	ppb	0.61066	60.21%
Be 313.107†	-9258.8	-3.0490	ug/L	0.20870	-3.0490	ppb	0.20870	6.84%
Ca 317.933Radial†	349658.4	480250	ug/L	3085.9	480250	ppb	3085.9	0.64%
QC value within limits for Ca 317.933Radial Recovery = 96.05%								
Cd 226.502†	4622.5	-0.2599	ug/L	1.75982	-0.2599	ppb	1.75982	677.13%
Co 228.616†	347.8	-0.4675	ug/L	0.36556	-0.4675	ppb	0.36556	78.20%
Cr 267.716†	-28.6	2.9414	ug/L	0.20509	2.9414	ppb	0.20509	6.97%
Cu 324.752†	-7167.6	2.7462	ug/L	0.17768	2.7462	ppb	0.17768	6.47%

Fe 238.204 Radial†	56966.9	437020	ug/L	3953.6	437020	ppb	3953.6	0.90%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.40%								
K 766.490 Radial†	482.4	-126.08	ug/L	23.169	-126.08	ppb	23.169	18.38%
Mg 279.077 IEC†	16489.0	480990	ug/L	5520.2	480990	ppb	5520.2	1.15%
QC value within limits for Mg 279.077 IEC Recovery = 96.20%								
Mn 257.610†	-35507.7	0.7410	ug/L	1.72518	0.7410	ppb	1.72518	232.81%
Mo 202.031†	-653.1	-6.6585	ug/L	2.33373	-6.6585	ppb	2.33373	35.05%
Na 589.592 Radial†	1968206.1	517370	ug/L	3794.9	517370	ppb	3794.9	0.73%
QC value within limits for Na 589.592 Radial Recovery = 103.47%								
Ni 231.604†	259.2	5.4116	ug/L	0.09490	5.4116	ppb	0.09490	1.75%
P 214.914†	535.8	92.786	ug/L	13.0510	92.786	ppb	13.0510	14.07%
Pb 220.353†	-799.7	-0.8016	ug/L	5.95542	-0.8016	ppb	5.95542	742.90%
S 181.975 Axial†	88.6	2.9261	ug/L	24.71414	2.9261	ppb	24.71414	844.62%
Sb 206.836†	35.0	1.1680	ug/L	1.26361	1.1680	ppb	1.26361	108.19%
Se 196.026†	-3357.3	-161.52	ug/L	80.859	-161.52	ppb	80.859	50.06%
Si 251.611†	-1432.5	-37.812	ug/L	1.2901	-37.812	ppb	1.2901	3.41%
Sn 189.927†	-514.1	-17.596	ug/L	1.4919	-17.596	ppb	1.4919	8.48%
Sr 421.552†	984.4	0.8753	ug/L	0.08668	0.8753	ppb	0.08668	9.90%
Ti 334.940†	-9121.1	5.7103	ug/L	1.13597	5.7103	ppb	1.13597	19.89%
Tl 190.801†	-114.3	-14.860	ug/L	1.7267	-14.860	ppb	1.7267	11.62%
U 409.014†	536205.2	14363	ug/L	689.5	14363	ppb	689.5	4.80%
QC value within limits for U 409.014 Recovery = 95.76%								
V 292.402†	3986.8	-3.7959	ug/L	2.59338	-3.7959	ppb	2.59338	68.32%
Zn 213.857†	7093.0	-2.3158	ug/L	2.83689	-2.3158	ppb	2.83689	122.50%
SiO2†	-1478.0	-84.206	ug/L	3.5553	-84.206	ppb	3.5553	4.22%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/17/2009 10:31:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5759.4	5759.4	96.8	%			10:33:01
1	Y RADIAL	5886.8	5886.8	95.27	%			10:33:01
1	Al 396.153Radial†	659.8	698.1	65.758	ug/L	65.758	ppb	10:33:01
1	Ca 317.933Radial†	47.9	29.0	39.843	ug/L	39.843	ppb	10:33:21
1	Fe 238.204 Radial†	-24.4	-38.1	-18.884	ug/L	-18.884	ppb	10:33:21
1	K 766.490 Radial†	1719644.1	1773736.2	286180	ug/L	286180	ppb	10:32:56
1	Mg 279.077 IEC†	-4.3	-9.8	-98.582	ug/L	-98.582	ppb	10:33:21
1	Na 589.592 Radial†	-1202.6	482.3	126.79	ug/L	126.79	ppb	10:33:01
1	Sr 421.552†	1647490.3	1702341.4	9211.6	ug/L	9211.6	ppb	10:32:56
1	Sc 361.383	928308.6	928308.6	99.566	%			10:34:38
1	Y 371.029	732256.4	732256.4	95.228	%			10:34:38
1	Ag 328.068†	-7784.9	-8227.2	3.8842	ug/L	3.8842	ppb	10:34:43
1	As 188.979†	27294.2	27444.6	9580.9	ug/L	9580.9	ppb	10:34:43
1	B 249.677†	246912.3	248514.9	4883.6	ug/L	4883.6	ppb	10:34:38
1	Ba 233.527†	2112668.5	2121863.9	13793	ug/L	13793	ppb	10:34:38
1	Be 313.107†	8602845.5	8644884.5	2842.1	ug/L	2842.1	ppb	10:34:32
1	Cd 226.502†	1006796.1	1011397.5	9508.1	ug/L	9508.1	ppb	10:34:38
1	Co 228.616†	513645.7	515967.9	8664.2	ug/L	8664.2	ppb	10:34:43
1	Cr 267.716†	2402985.5	2413372.8	23359	ug/L	23359	ppb	10:34:38
1	Cu 324.752†	7192647.9	7217893.4	19684	ug/L	19684	ppb	10:34:32
1	Mn 257.610†	9576333.0	9617506.6	9176.0	ug/L	9176.0	ppb	10:34:32
1	Mo 202.031†	160803.3	161479.1	9311.5	ug/L	9311.5	ppb	10:34:43
1	Ni 231.604†	455956.8	457814.1	9557.6	ug/L	9557.6	ppb	10:34:38
1	P 214.914†	34584.8	34490.4	14282	ug/L	14282	ppb	10:34:43
1	Pb 220.353†	232202.0	233290.1	23432	ug/L	23432	ppb	10:34:43
1	S 181.975 Axial†	42270.2	42406.0	49805	ug/L	49805	ppb	10:34:43
1	Sb 206.836†	34877.5	34985.1	9912.8	ug/L	9912.8	ppb	10:34:43
1	Se 196.026†	18323.3	18439.1	9822.1	ug/L	9822.1	ppb	10:34:43
1	Si 251.611†	1714975.3	1721807.4	46194	ug/L	46194	ppb	10:34:38
1	Sn 189.927†	69615.5	69912.6	10007	ug/L	10007	ppb	10:34:43
1	Ti 334.940†	6784670.2	6815692.3	9687.7	ug/L	9687.7	ppb	10:34:32
1	Tl 190.801†	36938.6	37140.7	9341.9	ug/L	9341.9	ppb	10:34:43
1	U 409.014†	-1696.1	1265.3	-11.025	ug/L	-11.025	ppb	10:34:43
1	V 292.402†	1589704.9	1598164.8	9873.4	ug/L	9873.4	ppb	10:34:38
1	Zn 213.857†	1755627.2	1762398.8	13805	ug/L	13805	ppb	10:34:38
1	SiO2†	1727973.9	1734825.2	100390	ug/L	100390	ppb	10:35:31
2	Sc Radial	5750.1	5750.1	96.6	%			10:33:31
2	Y RADIAL	5864.4	5864.4	94.90	%			10:33:31
2	Al 396.153Radial†	674.6	714.4	70.757	ug/L	70.757	ppb	10:33:31
2	Ca 317.933Radial†	41.2	22.1	30.420	ug/L	30.420	ppb	10:33:51
2	Fe 238.204 Radial†	-24.2	-37.9	-16.131	ug/L	-16.131	ppb	10:33:51
2	K 766.490 Radial†	1745240.2	1803107.4	290920	ug/L	290920	ppb	10:33:26
2	Mg 279.077 IEC†	-5.7	-11.3	-137.42	ug/L	-137.42	ppb	10:33:51
2	Na 589.592 Radial†	-1123.6	562.2	147.77	ug/L	147.77	ppb	10:33:31
2	Sr 421.552†	1666243.3	1724509.4	9331.5	ug/L	9331.5	ppb	10:33:26
2	Sc 361.383	930157.1	930157.1	99.764	%			10:34:58
2	Y 371.029	734544.7	734544.7	95.526	%			10:34:58
2	Ag 328.068†	-7951.9	-8379.1	3.2591	ug/L	3.2591	ppb	10:35:03
2	As 188.979†	27923.0	28020.4	9779.4	ug/L	9779.4	ppb	10:35:03
2	B 249.677†	247774.2	248886.0	4890.8	ug/L	4890.8	ppb	10:34:58
2	Ba 233.527†	2113155.6	2118135.2	13768	ug/L	13768	ppb	10:34:58
2	Be 313.107†	8561754.8	8586525.4	2822.9	ug/L	2822.9	ppb	10:34:51
2	Cd 226.502†	1006426.2	1009017.2	9485.7	ug/L	9485.7	ppb	10:34:58
2	Co 228.616†	517361.9	518667.7	8710.1	ug/L	8710.1	ppb	10:35:03
2	Cr 267.716†	2404421.9	2410016.2	23326	ug/L	23326	ppb	10:34:58
2	Cu 324.752†	7150307.0	7161095.9	19529	ug/L	19529	ppb	10:34:51
2	Mn 257.610†	9532682.8	9554638.8	9116.0	ug/L	9116.0	ppb	10:34:51
2	Mo 202.031†	163496.6	163857.8	9448.7	ug/L	9448.7	ppb	10:35:03
2	Ni 231.604†	455781.6	456728.4	9534.9	ug/L	9534.9	ppb	10:34:58

2	P 214.914†	35114.2	34952.1	14540 ug/L	14540 ppb	10:35:03
2	Pb 220.353†	235931.6	236565.1	23761 ug/L	23761 ppb	10:35:03
2	S 181.975 Axial†	43175.9	43229.4	50772 ug/L	50772 ppb	10:35:03
2	Sb 206.836†	35648.8	35688.6	10122 ug/L	10122 ppb	10:35:03
2	Se 196.026†	18707.2	18787.3	10007 ug/L	10007 ppb	10:35:03
2	Si 251.611†	1719045.5	1722464.1	46208 ug/L	46208 ppb	10:34:58
2	Sn 189.927†	70693.4	70854.2	10141 ug/L	10141 ppb	10:35:03
2	Ti 334.940†	6751522.1	6768923.6	9621.2 ug/L	9621.2 ppb	10:34:51
2	Tl 190.801†	37575.9	37705.8	9481.9 ug/L	9481.9 ppb	10:35:03
2	U 409.014†	-1645.3	1319.7	-9.5009 ug/L	-9.5009 ppb	10:35:03
2	V 292.402†	1593260.8	1598556.1	9877.9 ug/L	9877.9 ppb	10:34:58
2	Zn 213.857†	1756312.4	1759581.4	13783 ug/L	13783 ppb	10:34:58
2	SiO2†	1700441.9	1703779.1	98575 ug/L	98575 ppb	10:35:38
3	Sc Radial	5564.1	5564.1	93.5 %		10:34:02
3	Y RADIAL	5695.9	5695.9	92.18 %		10:34:02
3	Al 396.153Radial†	662.4	724.7	78.440 ug/L	78.440 ppb	10:34:02
3	Ca 317.933Radial†	41.8	24.3	33.363 ug/L	33.363 ppb	10:34:22
3	Fe 238.204 Radial†	-25.1	-39.8	-28.079 ug/L	-28.079 ppb	10:34:22
3	K 766.490 Radial†	1774606.2	1894915.9	305740 ug/L	305740 ppb	10:33:57
3	Mg 279.077 IEC†	-2.8	-8.3	-52.216 ug/L	-52.216 ppb	10:34:22
3	Na 589.592 Radial†	-1157.2	487.3	128.09 ug/L	128.09 ppb	10:34:02
3	Sr 421.552†	1703811.8	1822357.1	9861.0 ug/L	9861.0 ppb	10:33:57
3	Sc 361.383	919345.7	919345.7	98.605 %		10:35:18
3	Y 371.029	724681.8	724681.8	94.243 %		10:35:18
3	Ag 328.068†	-7946.7	-8467.6	2.8350 ug/L	2.8350 ppb	10:35:23
3	As 188.979†	27492.2	27912.6	9742.7 ug/L	9742.7 ppb	10:35:23
3	B 249.677†	244775.2	248765.2	4888.3 ug/L	4888.3 ppb	10:35:18
3	Ba 233.527†	2095219.3	2124854.3	13812 ug/L	13812 ppb	10:35:18
3	Be 313.107†	8526256.1	8651447.5	2844.3 ug/L	2844.3 ppb	10:35:11
3	Cd 226.502†	996911.1	1011230.8	9506.5 ug/L	9506.5 ppb	10:35:18
3	Co 228.616†	515341.9	522717.6	8777.9 ug/L	8777.9 ppb	10:35:23
3	Cr 267.716†	2378634.1	2412206.1	23347 ug/L	23347 ppb	10:35:18
3	Cu 324.752†	7126672.0	7221412.0	19694 ug/L	19694 ppb	10:35:11
3	Mn 257.610†	9499638.7	9633495.3	9191.2 ug/L	9191.2 ppb	10:35:11
3	Mo 202.031†	161272.8	163529.8	9429.8 ug/L	9429.8 ppb	10:35:23
3	Ni 231.604†	451218.1	457472.9	9550.4 ug/L	9550.4 ppb	10:35:18
3	P 214.914†	34836.6	35084.5	14581 ug/L	14581 ppb	10:35:23
3	Pb 220.353†	232888.7	236260.2	23730 ug/L	23730 ppb	10:35:23
3	S 181.975 Axial†	42392.3	42943.7	50437 ug/L	50437 ppb	10:35:23
3	Sb 206.836†	35038.0	35489.4	10064 ug/L	10064 ppb	10:35:23
3	Se 196.026†	18395.7	18692.0	9956.7 ug/L	9956.7 ppb	10:35:23
3	Si 251.611†	1700527.2	1723947.3	46243 ug/L	46243 ppb	10:35:18
3	Sn 189.927†	69934.2	70917.5	10150 ug/L	10150 ppb	10:35:23
3	Ti 334.940†	6723685.9	6820278.2	9694.3 ug/L	9694.3 ppb	10:35:11
3	Tl 190.801†	37011.0	37575.8	9450.1 ug/L	9450.1 ppb	10:35:23
3	U 409.014†	-1625.4	1320.4	-9.5208 ug/L	-9.5208 ppb	10:35:23
3	V 292.402†	1572682.8	1596467.8	9864.8 ug/L	9864.8 ppb	10:35:18
3	Zn 213.857†	1741200.2	1764958.2	13825 ug/L	13825 ppb	10:35:18
3	SiO2†	1706554.0	1730021.9	100090 ug/L	100090 ppb	10:35:45

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	925937.2	99.312	%	0.6202				0.62%
Sc Radial	5691.2	95.6	%	1.85				1.94%
Y 371.029	730494.3	94.999	%	0.6713				0.71%
Y RADIAL	5815.7	94.11	%	1.688				1.79%
Ag 328.068†	-8358.0	3.3261	ug/L	0.52778	3.3261	ppb	0.52778	15.87%
Al 396.153Radial†	712.4	71.652	ug/L	6.3883	71.652	ppb	6.3883	8.92%
As 188.979†	27792.6	9701.0	ug/L	105.63	9701.0	ppb	105.63	1.09%
QC value within limits for As 188.979 Recovery = 97.01%								
B 249.677†	248722.0	4887.6	ug/L	3.66	4887.6	ppb	3.66	0.07%
QC value within limits for B 249.677 Recovery = 97.75%								
Ba 233.527†	2121617.8	13791	ug/L	21.8	13791	ppb	21.8	0.16%
QC value within limits for Ba 233.527 Recovery = 91.94%								
Be 313.107†	8627619.2	2836.4	ug/L	11.75	2836.4	ppb	11.75	0.41%
QC value within limits for Be 313.107 Recovery = 94.55%								
Ca 317.933Radial†	25.1	34.542	ug/L	4.8206	34.542	ppb	4.8206	13.96%
Cd 226.502†	1010548.5	9500.1	ug/L	12.49	9500.1	ppb	12.49	0.13%
QC value within limits for Cd 226.502 Recovery = 95.00%								

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Co 228.616†          519117.7      8717.4 ug/L        57.17      8717.4 ppb        57.17   0.66%
   QC value less than the lower limit for Co 228.616  Recovery = 87.17%
Cr 267.716†         2411865.0       23344 ug/L         16.5       23344 ppb         16.5   0.07%
   QC value within limits for Cr 267.716  Recovery = 93.38%
Cu 324.752†         7200133.8       19636 ug/L         92.3       19636 ppb         92.3   0.47%
   QC value within limits for Cu 324.752  Recovery = 98.18%
Fe 238.204 Radial†      -38.6     -21.031 ug/L       6.2567     -21.031 ppb      6.2567  29.75%
K 766.490 Radial†   1823919.8      294280 ug/L      10201.9      294280 ppb     10201.9   3.47%
   QC value within limits for K 766.490 Radial  Recovery = 98.09%
Mg 279.077 IEC†         -9.8     -96.073 ug/L      42.6588     -96.073 ppb     42.6588  44.40%
Mn 257.610†         9601880.2      9161.1 ug/L       39.77      9161.1 ppb       39.77   0.43%
   QC value within limits for Mn 257.610  Recovery = 91.61%
Mo 202.031†          162955.6      9396.7 ug/L       74.34      9396.7 ppb       74.34   0.79%
   QC value within limits for Mo 202.031  Recovery = 93.97%
Na 589.592 Radial†      510.6      134.22 ug/L      11.756      134.22 ppb      11.756   8.76%
Ni 231.604†          457338.5      9547.7 ug/L       11.60      9547.7 ppb       11.60   0.12%
   QC value within limits for Ni 231.604  Recovery = 95.48%
P 214.914†            34842.4       14468 ug/L       162.0       14468 ppb       162.0   1.12%
   QC value within limits for P 214.914  Recovery = 96.45%
Pb 220.353†          235371.8       23641 ug/L       181.9       23641 ppb       181.9   0.77%
   QC value within limits for Pb 220.353  Recovery = 94.56%
S 181.975 Axial†      42859.7       50338 ug/L       491.1       50338 ppb       491.1   0.98%
   QC value within limits for S 181.975 Axial  Recovery = 100.68%
Sb 206.836†           35387.7       10033 ug/L       108.2       10033 ppb       108.2   1.08%
   QC value within limits for Sb 206.836  Recovery = 100.33%
Se 196.026†           18639.4      9928.7 ug/L       95.81      9928.7 ppb       95.81   0.96%
   QC value within limits for Se 196.026  Recovery = 99.29%
Si 251.611†         1722739.6       46215 ug/L        25.2       46215 ppb        25.2   0.05%
   QC value within limits for Si 251.611  Recovery = 92.43%
Sn 189.927†           70561.4       10099 ug/L        80.5       10099 ppb        80.5   0.80%
   QC value within limits for Sn 189.927  Recovery = 100.99%
Sr 421.552†         1749736.0      9468.0 ug/L      345.56      9468.0 ppb      345.56   3.65%
   QC value within limits for Sr 421.552  Recovery = 94.68%
Ti 334.940†         6801631.4      9667.7 ug/L       40.42      9667.7 ppb       40.42   0.42%
   QC value within limits for Ti 334.940  Recovery = 96.68%
Tl 190.801†           37474.1      9424.6 ug/L       73.45      9424.6 ppb       73.45   0.78%
   QC value within limits for Tl 190.801  Recovery = 94.25%
U 409.014†             1301.8     -10.016 ug/L      0.8743     -10.016 ppb     0.8743   8.73%
V 292.402†          1597729.6      9872.0 ug/L        6.67      9872.0 ppb        6.67   0.07%
   QC value within limits for V 292.402  Recovery = 98.72%
Zn 213.857†         1762312.8       13804 ug/L        21.0       13804 ppb        21.0   0.15%
   QC value within limits for Zn 213.857  Recovery = 92.03%
SiO2†               1722875.4       99687 ug/L       974.4       99687 ppb       974.4   0.98%
   QC value within limits for SiO2  Recovery = 93.17%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/17/2009 10:37:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5875.5	5875.5	98.7	%			10:39:48
1	Y RADIAL	6012.2	6012.2	97.29	%			10:39:48
1	Al 396.153Radial†	7180.6	7289.3	4828.9	ug/L	4828.9	ppb	10:39:48
1	Ca 317.933Radial†	3650.2	3676.7	5049.9	ug/L	5049.9	ppb	10:40:08
1	Fe 238.204 Radial†	670.1	665.8	5122.8	ug/L	5122.8	ppb	10:40:08
1	K 766.490 Radial†	34813.3	32115.2	5174.5	ug/L	5174.5	ppb	10:39:48
1	Mg 279.077 IEC†	180.2	177.2	5177.4	ug/L	5177.4	ppb	10:40:08
1	Na 589.592 Radial†	36218.6	38410.1	10097	ug/L	10097	ppb	10:39:48
1	Sr 421.552†	88604.1	89759.6	485.65	ug/L	485.65	ppb	10:39:48
1	Sc 361.383	964531.5	964531.5	103.45	%			10:41:07
1	Y 371.029	768616.3	768616.3	99.957	%			10:41:07
1	Ag 328.068†	118255.6	113902.1	478.40	ug/L	478.40	ppb	10:41:07
1	As 188.979†	1466.7	1449.3	505.87	ug/L	505.87	ppb	10:41:27
1	B 249.677†	25934.5	25595.9	503.38	ug/L	503.38	ppb	10:41:07
1	Ba 233.527†	76023.7	73476.0	478.11	ug/L	478.11	ppb	10:41:07
1	Be 313.107†	1513128.4	1467197.9	480.07	ug/L	480.07	ppb	10:41:07
1	Cd 226.502†	52495.1	50957.7	478.53	ug/L	478.53	ppb	10:41:07
1	Co 228.616†	28972.9	28090.2	471.84	ug/L	471.84	ppb	10:41:27
1	Cr 267.716†	50907.6	49124.6	475.89	ug/L	475.89	ppb	10:41:07
1	Cu 324.752†	187801.0	175436.3	478.69	ug/L	478.69	ppb	10:41:07
1	Mn 257.610†	520985.4	503045.6	480.37	ug/L	480.37	ppb	10:41:07
1	Mo 202.031†	8681.6	8367.0	482.84	ug/L	482.84	ppb	10:41:27
1	Ni 231.604†	23595.0	22678.1	473.42	ug/L	473.42	ppb	10:41:27
1	P 214.914†	5184.4	4766.4	2318.2	ug/L	2318.2	ppb	10:41:27
1	Pb 220.353†	4902.9	4815.6	485.00	ug/L	485.00	ppb	10:41:27
1	S 181.975 Axial†	880.9	803.1	942.33	ug/L	942.33	ppb	10:41:27
1	Sb 206.836†	1777.2	1673.5	490.63	ug/L	490.63	ppb	10:41:27
1	Se 196.026†	906.7	912.4	504.77	ug/L	504.77	ppb	10:41:27
1	Si 251.611†	92952.7	89210.1	2396.7	ug/L	2396.7	ppb	10:41:07
1	Sn 189.927†	3455.8	3334.3	477.84	ug/L	477.84	ppb	10:41:27
1	Ti 334.940†	350534.1	340295.0	483.99	ug/L	483.99	ppb	10:41:07
1	Tl 190.801†	1950.1	1926.1	484.44	ug/L	484.44	ppb	10:41:27
1	U 409.014†	14823.1	17297.5	463.56	ug/L	463.56	ppb	10:41:07
1	V 292.402†	78728.0	77633.7	480.53	ug/L	480.53	ppb	10:41:07
1	Zn 213.857†	63897.4	60886.4	475.57	ug/L	475.57	ppb	10:41:07
1	SiO2†	93604.9	89803.0	5204.2	ug/L	5204.2	ppb	10:42:27
2	Sc Radial	5951.9	5951.9	100	%			10:40:13
2	Y RADIAL	6095.0	6095.0	98.64	%			10:40:13
2	Al 396.153Radial†	7280.3	7295.6	4832.8	ug/L	4832.8	ppb	10:40:13
2	Ca 317.933Radial†	3641.6	3620.7	4972.9	ug/L	4972.9	ppb	10:40:33
2	Fe 238.204 Radial†	668.7	655.7	5045.3	ug/L	5045.3	ppb	10:40:33
2	K 766.490 Radial†	35137.5	31986.4	5153.6	ug/L	5153.6	ppb	10:40:13
2	Mg 279.077 IEC†	177.9	172.5	5042.8	ug/L	5042.8	ppb	10:40:33
2	Na 589.592 Radial†	36882.1	38602.2	10147	ug/L	10147	ppb	10:40:13
2	Sr 421.552†	89770.6	89772.7	485.73	ug/L	485.73	ppb	10:40:13
2	Sc 361.383	949867.0	949867.0	101.88	%			10:41:34
2	Y 371.029	757051.6	757051.6	98.453	%			10:41:34
2	Ag 328.068†	118058.9	115473.8	484.96	ug/L	484.96	ppb	10:41:34
2	As 188.979†	1462.2	1466.7	511.94	ug/L	511.94	ppb	10:41:54
2	B 249.677†	25893.5	25942.7	510.21	ug/L	510.21	ppb	10:41:34
2	Ba 233.527†	76289.8	74871.7	487.18	ug/L	487.18	ppb	10:41:34
2	Be 313.107†	1520024.3	1496547.7	489.67	ug/L	489.67	ppb	10:41:34
2	Cd 226.502†	52678.7	51921.3	487.60	ug/L	487.60	ppb	10:41:34
2	Co 228.616†	28957.8	28507.7	478.85	ug/L	478.85	ppb	10:41:54
2	Cr 267.716†	51159.3	50131.3	485.64	ug/L	485.64	ppb	10:41:34
2	Cu 324.752†	187617.2	178058.5	485.84	ug/L	485.84	ppb	10:41:34
2	Mn 257.610†	522470.9	512278.5	489.17	ug/L	489.17	ppb	10:41:34
2	Mo 202.031†	8655.9	8471.4	488.85	ug/L	488.85	ppb	10:41:54
2	Ni 231.604†	23617.0	23051.9	481.22	ug/L	481.22	ppb	10:41:54

2	P 214.914†	5168.9	4828.6	2348.5 ug/L	2348.5 ppb	10:41:54
2	Pb 220.353†	4916.6	4902.2	493.71 ug/L	493.71 ppb	10:41:54
2	S 181.975 Axial†	892.7	827.8	971.33 ug/L	971.33 ppb	10:41:54
2	Sb 206.836†	1771.6	1694.5	496.79 ug/L	496.79 ppb	10:41:54
2	Se 196.026†	900.5	919.8	508.48 ug/L	508.48 ppb	10:41:54
2	Si 251.611†	93078.6	90720.8	2437.4 ug/L	2437.4 ppb	10:41:34
2	Sn 189.927†	3479.4	3409.0	488.52 ug/L	488.52 ppb	10:41:54
2	Ti 334.940†	351197.4	346177.2	492.35 ug/L	492.35 ppb	10:41:34
2	Tl 190.801†	1951.7	1956.8	492.17 ug/L	492.17 ppb	10:41:54
2	U 409.014†	14536.3	17237.2	461.93 ug/L	461.93 ppb	10:41:34
2	V 292.402†	78687.8	78769.2	487.55 ug/L	487.55 ppb	10:41:34
2	Zn 213.857†	63966.9	61908.2	483.58 ug/L	483.58 ppb	10:41:34
2	SiO2†	92317.5	89936.3	5211.7 ug/L	5211.7 ppb	10:42:32
3	Sc Radial	5792.9	5792.9	97.3 %		10:40:38
3	Y RADIAL	5939.5	5939.5	96.12 %		10:40:38
3	Al 396.153Radial†	7256.5	7471.0	4949.6 ug/L	4949.6 ppb	10:40:38
3	Ca 317.933Radial†	3585.0	3662.5	5030.4 ug/L	5030.4 ppb	10:40:58
3	Fe 238.204 Radial†	656.2	661.3	5087.8 ug/L	5087.8 ppb	10:40:58
3	K 766.490 Radial†	35077.1	32888.9	5299.0 ug/L	5299.0 ppb	10:40:38
3	Mg 279.077 IEC†	174.8	174.2	5090.8 ug/L	5090.8 ppb	10:40:58
3	Na 589.592 Radial†	36688.2	39415.5	10361 ug/L	10361 ppb	10:40:38
3	Sr 421.552†	89439.0	91896.6	497.22 ug/L	497.22 ppb	10:40:38
3	Sc 361.383	937322.1	937322.1	100.53 %		10:42:02
3	Y 371.029	747412.8	747412.8	97.199 %		10:42:02
3	Ag 328.068†	119872.4	118828.7	499.01 ug/L	499.01 ppb	10:42:02
3	As 188.979†	1432.6	1456.5	508.54 ug/L	508.54 ppb	10:42:22
3	B 249.677†	26168.6	26556.5	522.33 ug/L	522.33 ppb	10:42:02
3	Ba 233.527†	77426.2	77004.3	501.05 ug/L	501.05 ppb	10:42:02
3	Be 313.107†	1542684.7	1539056.6	503.58 ug/L	503.58 ppb	10:42:02
3	Cd 226.502†	53378.1	53309.1	500.63 ug/L	500.63 ppb	10:42:02
3	Co 228.616†	28453.1	28386.1	476.77 ug/L	476.77 ppb	10:42:22
3	Cr 267.716†	51821.4	51462.0	498.53 ug/L	498.53 ppb	10:42:02
3	Cu 324.752†	190779.5	183668.8	501.14 ug/L	501.14 ppb	10:42:02
3	Mn 257.610†	530376.4	527005.8	503.23 ug/L	503.23 ppb	10:42:02
3	Mo 202.031†	8508.9	8438.8	486.98 ug/L	486.98 ppb	10:42:22
3	Ni 231.604†	23160.3	22907.8	478.21 ug/L	478.21 ppb	10:42:22
3	P 214.914†	5092.3	4820.3	2341.8 ug/L	2341.8 ppb	10:42:22
3	Pb 220.353†	4828.7	4879.4	491.43 ug/L	491.43 ppb	10:42:22
3	S 181.975 Axial†	883.3	830.2	974.13 ug/L	974.13 ppb	10:42:22
3	Sb 206.836†	1758.2	1704.5	499.20 ug/L	499.20 ppb	10:42:22
3	Se 196.026†	896.6	927.8	512.88 ug/L	512.88 ppb	10:42:22
3	Si 251.611†	94557.7	93414.8	2510.1 ug/L	2510.1 ppb	10:42:02
3	Sn 189.927†	3393.0	3368.8	482.77 ug/L	482.77 ppb	10:42:22
3	Ti 334.940†	356302.0	355868.4	506.13 ug/L	506.13 ppb	10:42:02
3	Tl 190.801†	1928.7	1959.6	493.03 ug/L	493.03 ppb	10:42:22
3	U 409.014†	14972.7	17862.2	478.71 ug/L	478.71 ppb	10:42:02
3	V 292.402†	79996.7	81104.9	501.79 ug/L	501.79 ppb	10:42:02
3	Zn 213.857†	64875.2	63652.0	497.32 ug/L	497.32 ppb	10:42:02
3	SiO2†	92818.1	91647.0	5311.3 ug/L	5311.3 ppb	10:42:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	950573.5	101.95	%	1.461				1.43%
Sc Radial	5873.4	98.7	%	1.34				1.35%
Y 371.029	757693.6	98.536	%	1.3806				1.40%
Y RADIAL	6015.6	97.35	%	1.259				1.29%
Ag 328.068†	116068.2	487.46	ug/L	10.533	487.46	ppb	10.533	2.16%
QC value within limits for Ag 328.068 Recovery = 97.49%								
Al 396.153Radial†	7352.0	4870.4	ug/L	68.58	4870.4	ppb	68.58	1.41%
QC value within limits for Al 396.153Radial Recovery = 97.41%								
As 188.979†	1457.5	508.78	ug/L	3.046	508.78	ppb	3.046	0.60%
QC value within limits for As 188.979 Recovery = 101.76%								
B 249.677†	26031.7	511.97	ug/L	9.599	511.97	ppb	9.599	1.87%
QC value within limits for B 249.677 Recovery = 102.39%								
Ba 233.527†	75117.3	488.78	ug/L	11.556	488.78	ppb	11.556	2.36%
QC value within limits for Ba 233.527 Recovery = 97.76%								
Be 313.107†	1500934.1	491.11	ug/L	11.820	491.11	ppb	11.820	2.41%
QC value within limits for Be 313.107 Recovery = 98.22%								
Ca 317.933Radial†	3653.3	5017.8	ug/L	40.04	5017.8	ppb	40.04	0.80%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            52062.7      488.92 ug/L        11.108      488.92 ppb        11.108   2.27%
   QC value within limits for Cd 226.502  Recovery = 97.78%
Co 228.616†            28328.0      475.82 ug/L         3.601      475.82 ppb         3.601   0.76%
   QC value within limits for Co 228.616  Recovery = 95.16%
Cr 267.716†            50239.3      486.69 ug/L        11.355      486.69 ppb        11.355   2.33%
   QC value within limits for Cr 267.716  Recovery = 97.34%
Cu 324.752†           179054.5      488.56 ug/L        11.469      488.56 ppb        11.469   2.35%
   QC value within limits for Cu 324.752  Recovery = 97.71%
Fe 238.204 Radial†       660.9      5085.3 ug/L         38.80      5085.3 ppb         38.80   0.76%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.71%
K 766.490 Radial†      32330.2      5209.0 ug/L         78.61      5209.0 ppb         78.61   1.51%
   QC value within limits for K 766.490 Radial  Recovery = 104.18%
Mg 279.077 IEC†          174.6      5103.7 ug/L         68.21      5103.7 ppb         68.21   1.34%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.07%
Mn 257.610†           514110.0      490.92 ug/L        11.529      490.92 ppb        11.529   2.35%
   QC value within limits for Mn 257.610  Recovery = 98.18%
Mo 202.031†             8425.7      486.22 ug/L         3.076      486.22 ppb         3.076   0.63%
   QC value within limits for Mo 202.031  Recovery = 97.24%
Na 589.592 Radial†     38809.2       10201 ug/L         140.3       10201 ppb         140.3   1.38%
   QC value within limits for Na 589.592 Radial  Recovery = 102.01%
Ni 231.604†            22879.3      477.62 ug/L         3.936      477.62 ppb         3.936   0.82%
   QC value within limits for Ni 231.604  Recovery = 95.52%
P 214.914†              4805.1      2336.2 ug/L         15.89      2336.2 ppb         15.89   0.68%
   QC value within limits for P 214.914  Recovery = 93.45%
Pb 220.353†             4865.7      490.05 ug/L         4.516      490.05 ppb         4.516   0.92%
   QC value within limits for Pb 220.353  Recovery = 98.01%
S 181.975 Axial†         820.4      962.60 ug/L        17.610      962.60 ppb        17.610   1.83%
   QC value within limits for S 181.975 Axial  Recovery = 96.26%
Sb 206.836†             1690.8      495.54 ug/L         4.420      495.54 ppb         4.420   0.89%
   QC value within limits for Sb 206.836  Recovery = 99.11%
Se 196.026†              920.0      508.71 ug/L         4.060      508.71 ppb         4.060   0.80%
   QC value within limits for Se 196.026  Recovery = 101.74%
Si 251.611†            91115.2      2448.1 ug/L         57.44      2448.1 ppb         57.44   2.35%
   QC value within limits for Si 251.611  Recovery = 97.92%
Sn 189.927†             3370.7      483.04 ug/L         5.345      483.04 ppb         5.345   1.11%
   QC value within limits for Sn 189.927  Recovery = 96.61%
Sr 421.552†            90476.3      489.53 ug/L         6.656      489.53 ppb         6.656   1.36%
   QC value within limits for Sr 421.552  Recovery = 97.91%
Ti 334.940†           347446.9      494.16 ug/L        11.179      494.16 ppb        11.179   2.26%
   QC value within limits for Ti 334.940  Recovery = 98.83%
Tl 190.801†             1947.5      489.88 ug/L         4.732      489.88 ppb         4.732   0.97%
   QC value within limits for Tl 190.801  Recovery = 97.98%
U 409.014†             17465.6      468.06 ug/L         9.251      468.06 ppb         9.251   1.98%
   QC value within limits for U 409.014  Recovery = 93.61%
V 292.402†             79169.2      489.96 ug/L        10.832      489.96 ppb        10.832   2.21%
   QC value within limits for V 292.402  Recovery = 97.99%
Zn 213.857†            62148.9      485.49 ug/L        10.997      485.49 ppb        10.997   2.27%
   QC value within limits for Zn 213.857  Recovery = 97.10%
SiO2†                  90462.1      5242.4 ug/L         59.79      5242.4 ppb         59.79   1.14%
   QC value within limits for SiO2  Recovery = 98.03%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/17/2009 10:44:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6077.2	6077.2	102	%			10:46:40
1	Y RADIAL	6295.6	6295.6	101.9	%			10:46:40
1	Al 396.153Radial†	-23.5	-6.8	-4.5384	ug/L	-4.5384	ppb	10:46:40
1	Ca 317.933Radial†	31.6	10.5	14.369	ug/L	14.369	ppb	10:47:00
1	Fe 238.204 Radial†	12.1	-1.1	-8.3618	ug/L	-8.3618	ppb	10:47:00
1	K 766.490 Radial†	4050.6	820.2	132.35	ug/L	132.35	ppb	10:46:40
1	Mg 279.077 IEC†	3.6	-1.9	-54.456	ug/L	-54.456	ppb	10:47:00
1	Na 589.592 Radial†	-1629.5	129.3	33.992	ug/L	33.992	ppb	10:46:40
1	Sr 421.552†	-1.2	13.1	0.0708	ug/L	0.0708	ppb	10:46:40
1	Sc 361.383	976393.3	976393.3	104.72	%			10:47:57
1	Y 371.029	790152.5	790152.5	102.76	%			10:47:57
1	Ag 328.068†	357.0	-67.5	-0.2878	ug/L	-0.2878	ppb	10:48:02
1	As 188.979†	15.2	46.0	15.920	ug/L	15.920	ppb	10:48:22
1	B 249.677†	456.6	962.6	19.003	ug/L	19.003	ppb	10:48:02
1	Ba 233.527†	23.2	10.7	0.0693	ug/L	0.0693	ppb	10:48:22
1	Be 313.107†	-4369.0	376.5	0.1233	ug/L	0.1233	ppb	10:48:02
1	Cd 226.502†	-150.9	69.7	0.6558	ug/L	0.6558	ppb	10:48:22
1	Co 228.616†	-76.5	10.8	0.1815	ug/L	0.1815	ppb	10:48:22
1	Cr 267.716†	147.0	55.6	0.5366	ug/L	0.5366	ppb	10:48:02
1	Cu 324.752†	6091.0	-283.3	-0.7731	ug/L	-0.7731	ppb	10:48:02
1	Mn 257.610†	603.2	16.5	0.0159	ug/L	0.0159	ppb	10:48:22
1	Mo 202.031†	33.7	7.2	0.4162	ug/L	0.4162	ppb	10:48:22
1	Ni 231.604†	128.2	-7.3	-0.1528	ug/L	-0.1528	ppb	10:48:22
1	P 214.914†	239.9	-16.0	-7.8636	ug/L	-7.8636	ppb	10:48:22
1	Pb 220.353†	-91.6	-11.3	-1.1315	ug/L	-1.1315	ppb	10:48:22
1	S 181.975 Axial†	46.8	-3.7	-4.3885	ug/L	-4.3885	ppb	10:48:22
1	Sb 206.836†	48.1	1.5	0.4559	ug/L	0.4559	ppb	10:48:22
1	Se 196.026†	-15.5	21.1	11.177	ug/L	11.177	ppb	10:48:22
1	Si 251.611†	796.8	119.1	3.1593	ug/L	3.1593	ppb	10:48:22
1	Sn 189.927†	18.9	11.8	1.6965	ug/L	1.6965	ppb	10:48:22
1	Ti 334.940†	-1387.3	130.2	0.1839	ug/L	0.1839	ppb	10:48:02
1	Tl 190.801†	-39.8	3.1	0.7720	ug/L	0.7720	ppb	10:48:22
1	U 409.014†	-2944.1	157.5	4.2362	ug/L	4.2362	ppb	10:47:57
1	V 292.402†	-1580.1	23.3	0.1560	ug/L	0.1560	ppb	10:48:02
1	Zn 213.857†	973.8	50.5	0.4028	ug/L	0.4028	ppb	10:48:22
1	SiO2†	796.7	81.6	4.6265	ug/L	4.6265	ppb	10:49:28
2	Sc Radial	6041.6	6041.6	102	%			10:47:05
2	Y RADIAL	6288.0	6288.0	101.8	%			10:47:05
2	Al 396.153Radial†	-57.9	-40.8	-27.159	ug/L	-27.159	ppb	10:47:05
2	Ca 317.933Radial†	30.2	9.3	12.770	ug/L	12.770	ppb	10:47:25
2	Fe 238.204 Radial†	15.5	2.3	17.757	ug/L	17.757	ppb	10:47:25
2	K 766.490 Radial†	4051.3	844.2	136.23	ug/L	136.23	ppb	10:47:05
2	Mg 279.077 IEC†	1.9	-3.5	-101.28	ug/L	-101.28	ppb	10:47:25
2	Na 589.592 Radial†	-1654.3	95.5	25.105	ug/L	25.105	ppb	10:47:05
2	Sr 421.552†	-4.4	9.9	0.0537	ug/L	0.0537	ppb	10:47:05
2	Sc 361.383	984334.2	984334.2	105.58	%			10:48:27
2	Y 371.029	797172.3	797172.3	103.67	%			10:48:27
2	Ag 328.068†	415.2	-15.2	-0.0625	ug/L	-0.0625	ppb	10:48:32
2	As 188.979†	-5.5	26.2	9.0670	ug/L	9.0670	ppb	10:48:52
2	B 249.677†	425.8	929.9	18.353	ug/L	18.353	ppb	10:48:32
2	Ba 233.527†	30.5	17.4	0.1140	ug/L	0.1140	ppb	10:48:52
2	Be 313.107†	-4377.6	402.0	0.1314	ug/L	0.1314	ppb	10:48:32
2	Cd 226.502†	-164.0	58.5	0.5478	ug/L	0.5478	ppb	10:48:52
2	Co 228.616†	-77.7	10.2	0.1701	ug/L	0.1701	ppb	10:48:52
2	Cr 267.716†	138.1	46.1	0.4443	ug/L	0.4443	ppb	10:48:32
2	Cu 324.752†	6154.1	-270.4	-0.7365	ug/L	-0.7365	ppb	10:48:32
2	Mn 257.610†	594.3	3.4	0.0069	ug/L	0.0069	ppb	10:48:52
2	Mo 202.031†	27.5	1.0	0.0615	ug/L	0.0615	ppb	10:48:52
2	Ni 231.604†	145.5	8.1	0.1683	ug/L	0.1683	ppb	10:48:52

2	P 214.914†	242.1	-15.7	-7.7646	ug/L	-7.7646	ppb	10:48:52
2	Pb 220.353†	-60.7	18.7	1.8753	ug/L	1.8753	ppb	10:48:52
2	S 181.975 Axial†	54.3	3.1	3.6004	ug/L	3.6004	ppb	10:48:52
2	Sb 206.836†	55.2	7.9	2.2868	ug/L	2.2868	ppb	10:48:52
2	Se 196.026†	-25.9	11.4	6.1157	ug/L	6.1157	ppb	10:48:52
2	Si 251.611†	776.1	93.4	2.4729	ug/L	2.4729	ppb	10:48:52
2	Sn 189.927†	13.6	6.6	0.9506	ug/L	0.9506	ppb	10:48:52
2	Ti 334.940†	-1484.0	49.3	0.0675	ug/L	0.0675	ppb	10:48:32
2	Tl 190.801†	-47.0	-3.4	-0.8572	ug/L	-0.8572	ppb	10:48:52
2	U 409.014†	-2858.2	261.6	7.0300	ug/L	7.0300	ppb	10:48:27
2	V 292.402†	-1565.2	49.6	0.3122	ug/L	0.3122	ppb	10:48:32
2	Zn 213.857†	960.5	30.5	0.2417	ug/L	0.2417	ppb	10:48:52
2	SiO2†	800.8	79.4	4.5126	ug/L	4.5126	ppb	10:49:33
3	Sc Radial	6132.1	6132.1	103	%			10:47:30
3	Y RADIAL	6287.8	6287.8	101.8	%			10:47:30
3	Al 396.153Radial†	-4.4	12.0	7.9592	ug/L	7.9592	ppb	10:47:30
3	Ca 317.933Radial†	21.0	-0.1	-0.1005	ug/L	-0.1005	ppb	10:47:50
3	Fe 238.204 Radial†	10.6	-2.6	-20.166	ug/L	-20.166	ppb	10:47:50
3	K 766.490 Radial†	4145.3	876.5	141.44	ug/L	141.44	ppb	10:47:30
3	Mg 279.077 IEC†	3.7	-1.8	-51.485	ug/L	-51.485	ppb	10:47:50
3	Na 589.592 Radial†	-1615.3	157.4	41.361	ug/L	41.361	ppb	10:47:30
3	Sr 421.552†	-4.4	10.0	0.0542	ug/L	0.0542	ppb	10:47:30
3	Sc 361.383	985954.6	985954.6	105.75	%			10:48:57
3	Y 371.029	798445.5	798445.5	103.84	%			10:48:57
3	Ag 328.068†	468.9	34.9	0.1345	ug/L	0.1345	ppb	10:49:02
3	As 188.979†	-0.5	31.0	10.715	ug/L	10.715	ppb	10:49:22
3	B 249.677†	314.5	824.0	16.266	ug/L	16.266	ppb	10:49:02
3	Ba 233.527†	30.3	17.1	0.1119	ug/L	0.1119	ppb	10:49:22
3	Be 313.107†	-4422.6	366.3	0.1197	ug/L	0.1197	ppb	10:49:02
3	Cd 226.502†	-158.2	64.2	0.6051	ug/L	0.6051	ppb	10:49:22
3	Co 228.616†	-70.7	16.9	0.2847	ug/L	0.2847	ppb	10:49:22
3	Cr 267.716†	109.4	18.7	0.1790	ug/L	0.1790	ppb	10:49:02
3	Cu 324.752†	6226.9	-211.2	-0.5770	ug/L	-0.5770	ppb	10:49:02
3	Mn 257.610†	567.8	-22.6	-0.0226	ug/L	-0.0226	ppb	10:49:22
3	Mo 202.031†	33.8	7.0	0.4011	ug/L	0.4011	ppb	10:49:22
3	Ni 231.604†	115.3	-20.7	-0.4319	ug/L	-0.4319	ppb	10:49:22
3	P 214.914†	234.8	-23.0	-11.377	ug/L	-11.377	ppb	10:49:22
3	Pb 220.353†	-70.7	9.4	0.9499	ug/L	0.9499	ppb	10:49:22
3	S 181.975 Axial†	54.9	3.5	4.0719	ug/L	4.0719	ppb	10:49:22
3	Sb 206.836†	60.8	13.1	3.8327	ug/L	3.8327	ppb	10:49:22
3	Se 196.026†	-19.5	17.5	9.2448	ug/L	9.2448	ppb	10:49:22
3	Si 251.611†	775.6	91.7	2.4150	ug/L	2.4150	ppb	10:49:22
3	Sn 189.927†	22.7	15.3	2.1854	ug/L	2.1854	ppb	10:49:22
3	Ti 334.940†	-1520.1	17.5	0.0212	ug/L	0.0212	ppb	10:49:02
3	Tl 190.801†	-32.0	10.8	2.7071	ug/L	2.7071	ppb	10:49:22
3	U 409.014†	-2820.1	302.1	8.1250	ug/L	8.1250	ppb	10:48:57
3	V 292.402†	-1511.2	103.1	0.6528	ug/L	0.6528	ppb	10:49:02
3	Zn 213.857†	960.9	29.3	0.2382	ug/L	0.2382	ppb	10:49:22
3	SiO2†	828.6	104.4	5.9433	ug/L	5.9433	ppb	10:49:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	982227.4	105.35	%	0.549				0.52%
Sc Radial	6083.6	102	%	0.8				0.75%
Y 371.029	795256.8	103.42	%	0.581				0.56%
Y RADIAL	6290.5	101.8	%	0.07				0.07%
Ag 328.068†	-15.9	-0.0719	ug/L	0.21134	-0.0719	ppb	0.21134	293.79%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.9	-7.9126	ug/L	17.80039	-7.9126	ppb	17.80039	224.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	34.4	11.901	ug/L	3.5771	11.901	ppb	3.5771	30.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	905.5	17.874	ug/L	1.4296	17.874	ppb	1.4296	8.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.1	0.0984	ug/L	0.02523	0.0984	ppb	0.02523	25.64%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	381.6	0.1248	ug/L	0.00600	0.1248	ppb	0.00600	4.81%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.6	9.0126	ug/L	7.93260	9.0126	ppb	7.93260	88.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                64.1      0.6029 ug/L       0.05403      0.6029 ppb        0.05403   8.96%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                12.6      0.2121 ug/L       0.06313      0.2121 ppb        0.06313  29.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                40.1      0.3866 ug/L       0.18563      0.3866 ppb        0.18563  48.01%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -255.0     -0.6955 ug/L       0.10424     -0.6955 ppb        0.10424  14.99%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -3.5904 ug/L      19.40642     -3.5904 ppb       19.40642 540.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         847.0      136.68 ug/L         4.563      136.68 ppb          4.563   3.34%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.4     -69.074 ug/L       27.9321     -69.074 ppb        27.9321  40.44%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -0.9      0.0001 ug/L       0.02016      0.0001 ppb        0.02016 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.1      0.2930 ug/L       0.20056      0.2930 ppb        0.20056  68.46%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        127.4      33.486 ug/L        8.1397      33.486 ppb         8.1397  24.31%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.6     -0.1388 ug/L       0.30033     -0.1388 ppb        0.30033 216.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -18.2     -9.0017 ug/L       2.05755     -9.0017 ppb        2.05755  22.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 5.6      0.5646 ug/L       1.53997      0.5646 ppb        1.53997 272.77%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.9      1.0946 ug/L       4.75435      1.0946 ppb        4.75435 434.35%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.5      2.1918 ug/L       1.69040      2.1918 ppb        1.69040  77.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                16.7      8.8460 ug/L       2.55429      8.8460 ppb        2.55429  28.88%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               101.4      2.6824 ug/L       0.41401      2.6824 ppb        0.41401  15.43%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                11.2      1.6108 ug/L       0.62185      1.6108 ppb        0.62185  38.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.0      0.0595 ug/L       0.00974      0.0595 ppb        0.00974  16.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                65.6      0.0909 ug/L       0.08383      0.0909 ppb        0.08383  92.26%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.5      0.8740 ug/L       1.78437      0.8740 ppb        1.78437 204.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                240.4      6.4637 ug/L       2.00529      6.4637 ppb        2.00529  31.02%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 58.7      0.3737 ug/L       0.25406      0.3737 ppb        0.25406  67.99%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.8      0.2942 ug/L       0.09400      0.2942 ppb        0.09400  31.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      88.5      5.0275 ug/L       0.79519      5.0275 ppb        0.79519  15.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/17/2009 10:56:42 **Plasma On Time:** 12/14/2009 06:02:42
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\121709.sif
Batch ID:
Results Data Set: 121709
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved:** 12/17/2009 09:24:46
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location:** 36
Sample ID: LR1 **Date Collected:** 12/17/2009 10:56:43
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5801.3	5801.3	97.5	%			10:58:37
1	Y RADIAL	5973.8	5973.8	96.67	%			10:58:37
1	Al 396.153Radial†	-38.9	-23.6	-14.620	ug/L	-14.620	ppb	10:58:37

1	Ca 317.933Radial†	18.8	-1.2	-1.5809	ug/L	-1.5809 ppb	10:58:57
1	Fe 238.204 Radial†	47353.1	48562.9	372550	ug/L	372550 ppb	10:58:37
1	K 766.490 Radial†	3474.6	417.9	79.679	ug/L	79.679 ppb	10:58:37
1	Mg 279.077 IEC†	15.7	10.7	-6.3896	ug/L	-6.3896 ppb	10:58:57
1	Na 589.592 Radial†	-1601.9	81.7	21.487	ug/L	21.487 ppb	10:58:37
1	Sr 421.552†	64.2	80.1	0.4332	ug/L	0.4332 ppb	10:58:37
1	Sc 361.383	938520.7	938520.7	100.66	%		10:59:54
1	Y 371.029	754987.8	754987.8	98.185	%		10:59:54
1	Ag 328.068†	-28320.4	-28542.7	5.5598	ug/L	5.5598 ppb	10:59:54
1	As 188.979†	-261.8	-228.6	-21.589	ug/L	-21.589 ppb	11:00:14
1	B 249.677†	1963.0	2476.6	-0.5466	ug/L	-0.5466 ppb	10:59:54
1	Ba 233.527†	-2232.7	-2229.6	-0.5364	ug/L	-0.5364 ppb	11:00:14
1	Be 313.107†	-4306.6	270.1	0.0882	ug/L	0.0882 ppb	10:59:54
1	Cd 226.502†	3716.1	3905.5	-0.5527	ug/L	-0.5527 ppb	11:00:14
1	Co 228.616†	233.8	316.0	-0.0767	ug/L	-0.0767 ppb	11:00:14
1	Cr 267.716†	-622.4	-703.1	-0.0664	ug/L	-0.0664 ppb	11:00:14
1	Cu 324.752†	-2923.1	-9003.4	-5.5491	ug/L	-5.5491 ppb	10:59:54
1	Mn 257.610†	-43505.7	-43779.3	-4.6239	ug/L	-4.6239 ppb	10:59:54
1	Mo 202.031†	-428.9	-451.1	0.4148	ug/L	0.4148 ppb	10:59:54
1	Ni 231.604†	215.9	84.7	1.7659	ug/L	1.7659 ppb	11:00:14
1	P 214.914†	838.9	588.4	-1.4311	ug/L	-1.4311 ppb	11:00:14
1	Pb 220.353†	256.4	330.9	2.6014	ug/L	2.6014 ppb	11:00:14
1	S 181.975 Axial†	65.1	16.3	19.132	ug/L	19.132 ppb	11:00:14
1	Sb 206.836†	27.5	-17.1	0.7494	ug/L	0.7494 ppb	11:00:14
1	Se 196.026†	-2572.8	-2520.0	-73.423	ug/L	-73.423 ppb	11:00:14
1	Si 251.611†	-862.0	-1498.0	-39.989	ug/L	-39.989 ppb	11:00:14
1	Sn 189.927†	-42.1	-48.0	-1.8972	ug/L	-1.8972 ppb	11:00:14
1	Ti 334.940†	-1471.6	-7.0	-0.0348	ug/L	-0.0348 ppb	11:00:14
1	Tl 190.801†	-44.8	-3.4	-1.2422	ug/L	-1.2422 ppb	11:00:14
1	U 409.014†	-692.3	2281.1	14.481	ug/L	14.481 ppb	10:59:54
1	V 292.402†	6989.3	8475.4	-5.1513	ug/L	-5.1513 ppb	11:00:14
1	Zn 213.857†	5309.8	4395.6	-0.9219	ug/L	-0.9219 ppb	11:00:14
1	SiO2†	-807.8	-1481.7	-85.304	ug/L	-85.304 ppb	11:01:11
2	Sc Radial	5797.1	5797.1	97.4	%		10:59:02
2	Y RADIAL	6008.5	6008.5	97.23	%		10:59:02
2	Al 396.153Radial†	-50.8	-35.9	-22.693	ug/L	-22.693 ppb	10:59:02
2	Ca 317.933Radial†	14.1	-6.0	-8.2373	ug/L	-8.2373 ppb	10:59:22
2	Fe 238.204 Radial†	48170.5	49437.4	379250	ug/L	379250 ppb	10:59:02
2	K 766.490 Radial†	3381.1	324.5	64.822	ug/L	64.822 ppb	10:59:02
2	Mg 279.077 IEC†	11.2	6.2	-145.35	ug/L	-145.35 ppb	10:59:22
2	Na 589.592 Radial†	-1570.1	113.1	29.741	ug/L	29.741 ppb	10:59:02
2	Sr 421.552†	84.8	101.3	0.5484	ug/L	0.5484 ppb	10:59:02
2	Sc 361.383	936493.2	936493.2	100.44	%		11:00:20
2	Y 371.029	753800.6	753800.6	98.030	%		11:00:20
2	Ag 328.068†	-28270.2	-28553.7	7.7577	ug/L	7.7577 ppb	11:00:20
2	As 188.979†	-241.0	-208.4	-13.559	ug/L	-13.559 ppb	11:00:40
2	B 249.677†	1810.5	2329.1	-4.3489	ug/L	-4.3489 ppb	11:00:20
2	Ba 233.527†	-2177.9	-2179.8	0.0340	ug/L	0.0340 ppb	11:00:40
2	Be 313.107†	-4462.1	106.0	0.0345	ug/L	0.0345 ppb	11:00:20
2	Cd 226.502†	3667.6	3865.3	-1.6013	ug/L	-1.6013 ppb	11:00:40
2	Co 228.616†	237.4	320.1	-0.1061	ug/L	-0.1061 ppb	11:00:40
2	Cr 267.716†	-622.5	-704.5	0.0405	ug/L	0.0405 ppb	11:00:40
2	Cu 324.752†	-2889.1	-8975.8	-5.1317	ug/L	-5.1317 ppb	11:00:20
2	Mn 257.610†	-43677.4	-44043.8	-4.2049	ug/L	-4.2049 ppb	11:00:20
2	Mo 202.031†	-448.0	-471.0	-0.2573	ug/L	-0.2573 ppb	11:00:20
2	Ni 231.604†	211.2	80.5	1.6787	ug/L	1.6787 ppb	11:00:40
2	P 214.914†	845.1	596.3	-2.8779	ug/L	-2.8779 ppb	11:00:40
2	Pb 220.353†	214.7	289.9	-2.0714	ug/L	-2.0714 ppb	11:00:40
2	S 181.975 Axial†	64.3	15.6	18.287	ug/L	18.287 ppb	11:00:40
2	Sb 206.836†	10.2	-34.2	-4.1172	ug/L	-4.1172 ppb	11:00:40
2	Se 196.026†	-2580.0	-2532.7	-57.388	ug/L	-57.388 ppb	11:00:40
2	Si 251.611†	-823.7	-1461.7	-38.986	ug/L	-38.986 ppb	11:00:40
2	Sn 189.927†	-37.8	-43.8	-1.2072	ug/L	-1.2072 ppb	11:00:40
2	Ti 334.940†	-1490.1	-28.6	-0.0638	ug/L	-0.0638 ppb	11:00:40
2	Tl 190.801†	-46.6	-5.3	-1.7072	ug/L	-1.7072 ppb	11:00:40
2	U 409.014†	-866.4	2106.2	8.9343	ug/L	8.9343 ppb	11:00:20
2	V 292.402†	6869.6	8371.4	-6.8356	ug/L	-6.8356 ppb	11:00:40
2	Zn 213.857†	5313.1	4410.3	-1.4414	ug/L	-1.4414 ppb	11:00:40
2	SiO2†	-911.5	-1586.6	-91.365	ug/L	-91.365 ppb	11:01:16
3	Sc Radial	5879.7	5879.7	98.8	%		10:59:27
3	Y RADIAL	6056.6	6056.6	98.01	%		10:59:27

3	Al 396.153Radial†	-60.3	-44.8	-28.789	ug/L	-28.789 ppb	10:59:27
3	Ca 317.933Radial†	18.3	-1.9	-2.6711	ug/L	-2.6711 ppb	10:59:47
3	Fe 238.204 Radial†	48255.7	48829.3	374590	ug/L	374590 ppb	10:59:27
3	K 766.490 Radial†	3318.6	212.5	46.612	ug/L	46.612 ppb	10:59:27
3	Mg 279.077 IEC†	14.6	9.4	-45.219	ug/L	-45.219 ppb	10:59:47
3	Na 589.592 Radial†	-1638.3	66.8	17.549	ug/L	17.549 ppb	10:59:27
3	Sr 421.552†	136.2	152.1	0.8229	ug/L	0.8229 ppb	10:59:27
3	Sc 361.383	935450.3	935450.3	100.33	%		11:00:45
3	Y 371.029	753145.4	753145.4	97.945	%		11:00:45
3	Ag 328.068†	-28043.1	-28358.7	7.0048	ug/L	7.0048 ppb	11:00:45
3	As 188.979†	-258.9	-226.5	-20.544	ug/L	-20.544 ppb	11:01:06
3	B 249.677†	1988.1	2508.1	-0.1970	ug/L	-0.1970 ppb	11:00:45
3	Ba 233.527†	-2233.2	-2237.3	-0.5117	ug/L	-0.5117 ppb	11:01:06
3	Be 313.107†	-4447.9	115.2	0.0375	ug/L	0.0375 ppb	11:00:45
3	Cd 226.502†	3679.9	3881.5	-0.9817	ug/L	-0.9817 ppb	11:01:06
3	Co 228.616†	217.6	300.7	-0.3569	ug/L	-0.3569 ppb	11:01:06
3	Cr 267.716†	-646.1	-728.7	-0.2798	ug/L	-0.2798 ppb	11:01:06
3	Cu 324.752†	-2893.2	-8983.2	-5.3896	ug/L	-5.3896 ppb	11:00:45
3	Mn 257.610†	-43946.1	-44360.1	-4.9735	ug/L	-4.9735 ppb	11:00:45
3	Mo 202.031†	-385.1	-408.8	2.9999	ug/L	2.9999 ppb	11:00:45
3	Ni 231.604†	259.9	129.3	2.6985	ug/L	2.6985 ppb	11:01:06
3	P 214.914†	836.2	588.4	-3.0714	ug/L	-3.0714 ppb	11:01:06
3	Pb 220.353†	245.6	321.0	1.4419	ug/L	1.4419 ppb	11:01:06
3	S 181.975 Axial†	46.1	-2.5	-2.9222	ug/L	-2.9222 ppb	11:01:06
3	Sb 206.836†	29.5	-15.0	1.4543	ug/L	1.4543 ppb	11:01:06
3	Se 196.026†	-2592.5	-2548.0	-81.347	ug/L	-81.347 ppb	11:01:06
3	Si 251.611†	-822.7	-1461.7	-39.041	ug/L	-39.041 ppb	11:01:06
3	Sn 189.927†	-38.2	-44.3	-1.3348	ug/L	-1.3348 ppb	11:01:06
3	Ti 334.940†	-1510.3	-50.4	-0.0987	ug/L	-0.0987 ppb	11:01:06
3	Tl 190.801†	-51.7	-10.4	-2.9880	ug/L	-2.9880 ppb	11:01:06
3	U 409.014†	-492.7	2477.8	19.512	ug/L	19.512 ppb	11:00:45
3	V 292.402†	6904.3	8413.5	-5.7958	ug/L	-5.7958 ppb	11:01:06
3	Zn 213.857†	5311.0	4414.1	-0.9760	ug/L	-0.9760 ppb	11:01:06
3	SiO2†	-883.7	-1559.9	-89.933	ug/L	-89.933 ppb	11:01:21

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	936821.4	100.48	%	0.167				0.17%
Sc Radial	5826.0	97.9	%	0.78				0.80%
Y 371.029	753977.9	98.053	%	0.1215				0.12%
Y RADIAL	6012.9	97.31	%	0.673				0.69%
Ag 328.068†	-28485.1	6.7741	ug/L	1.11700	6.7741	ppb	1.11700	16.49%
Al 396.153Radial†	-34.8	-22.034	ug/L	7.1074	-22.034	ppb	7.1074	32.26%
As 188.979†	-221.2	-18.564	ug/L	4.3656	-18.564	ppb	4.3656	23.52%
B 249.677†	2437.9	-1.6975	ug/L	2.30279	-1.6975	ppb	2.30279	135.66%
Ba 233.527†	-2215.6	-0.3380	ug/L	0.32240	-0.3380	ppb	0.32240	95.37%
Be 313.107†	163.8	0.0534	ug/L	0.03015	0.0534	ppb	0.03015	56.47%
Ca 317.933Radial†	-3.0	-4.1631	ug/L	3.57024	-4.1631	ppb	3.57024	85.76%
Cd 226.502†	3884.1	-1.0452	ug/L	0.52718	-1.0452	ppb	0.52718	50.44%
Co 228.616†	312.3	-0.1799	ug/L	0.15395	-0.1799	ppb	0.15395	85.58%
Cr 267.716†	-712.1	-0.1019	ug/L	0.16307	-0.1019	ppb	0.16307	159.99%
Cu 324.752†	-8987.5	-5.3568	ug/L	0.21061	-5.3568	ppb	0.21061	3.93%
Fe 238.204 Radial†	48943.2	375460	ug/L	3438.4	375460	ppb	3438.4	0.92%
K 766.490 Radial†	318.3	63.705	ug/L	16.5619	63.705	ppb	16.5619	26.00%
Mg 279.077 IEC†	8.8	-65.654	ug/L	71.6994	-65.654	ppb	71.6994	109.21%
Mn 257.610†	-44061.1	-4.6008	ug/L	0.38485	-4.6008	ppb	0.38485	8.36%
Mo 202.031†	-443.6	1.0525	ug/L	1.71968	1.0525	ppb	1.71968	163.39%
Na 589.592 Radial†	87.2	22.925	ug/L	6.2217	22.925	ppb	6.2217	27.14%
Ni 231.604†	98.2	2.0477	ug/L	0.56531	2.0477	ppb	0.56531	27.61%
P 214.914†	591.0	-2.4601	ug/L	0.89638	-2.4601	ppb	0.89638	36.44%
Pb 220.353†	314.0	0.6573	ug/L	2.43319	0.6573	ppb	2.43319	370.18%
S 181.975 Axial†	9.8	11.499	ug/L	12.4961	11.499	ppb	12.4961	108.67%
Sb 206.836†	-22.1	-0.6378	ug/L	3.03373	-0.6378	ppb	3.03373	475.64%
Se 196.026†	-2533.6	-70.720	ug/L	12.2060	-70.720	ppb	12.2060	17.26%
Si 251.611†	-1473.8	-39.339	ug/L	0.5638	-39.339	ppb	0.5638	1.43%
Sn 189.927†	-45.4	-1.4797	ug/L	0.36714	-1.4797	ppb	0.36714	24.81%
Sr 421.552†	111.2	0.6015	ug/L	0.20020	0.6015	ppb	0.20020	33.28%
Ti 334.940†	-28.7	-0.0658	ug/L	0.03202	-0.0658	ppb	0.03202	48.68%
Tl 190.801†	-6.4	-1.9791	ug/L	0.90409	-1.9791	ppb	0.90409	45.68%

U 409.014†	2288.4	14.309 ug/L	5.2912	14.309 ppb	5.2912	36.98%
V 292.402†	8420.1	-5.9276 ug/L	0.84985	-5.9276 ppb	0.84985	14.34%
Zn 213.857†	4406.6	-1.1131 ug/L	0.28563	-1.1131 ppb	0.28563	25.66%
SiO2†	-1542.7	-88.867 ug/L	3.1677	-88.867 ppb	3.1677	3.56%

Sequence No.: 2
Sample ID: LR2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/17/2009 11:03:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5944.7	5944.7	99.9	%			11:05:26
1	Y RADIAL	6194.2	6194.2	100.2	%			11:05:26
1	Al 396.153Radial†	-43.1	-26.9	-17.940	ug/L	-17.940	ppb	11:05:26
1	Ca 317.933Radial†	37.2	16.8	23.087	ug/L	23.087	ppb	11:05:46
1	Fe 238.204 Radial†	-9.4	-22.3	-14.537	ug/L	-14.537	ppb	11:05:46
1	K 766.490 Radial†	3559.7	417.1	67.306	ug/L	67.306	ppb	11:05:26
1	Mg 279.077 IEC†	3.6	-1.8	-51.260	ug/L	-51.260	ppb	11:05:46
1	Na 589.592 Radial†	-1705.0	18.2	4.7823	ug/L	4.7823	ppb	11:05:26
1	Sr 421.552†	-16.9	-2.6	-0.0144	ug/L	-0.0144	ppb	11:05:26
1	Sc 361.383	974267.5	974267.5	104.50	%			11:06:43
1	Y 371.029	790863.7	790863.7	102.85	%			11:06:43
1	Ag 328.068†	370.3	-54.1	-0.2881	ug/L	-0.2881	ppb	11:06:48
1	As 188.979†	-20.6	11.7	4.0182	ug/L	4.0182	ppb	11:07:08
1	B 249.677†	517.6	1021.9	7.6101	ug/L	7.6101	ppb	11:06:48
1	Ba 233.527†	-2.6	-14.0	-0.0980	ug/L	-0.0980	ppb	11:07:08
1	Be 313.107†	-4574.5	170.7	0.0561	ug/L	0.0561	ppb	11:06:48
1	Cd 226.502†	-245.4	-21.0	-0.1783	ug/L	-0.1783	ppb	11:07:08
1	Co 228.616†	308226.0	295049.8	4953.9	ug/L	4953.9	ppb	11:06:43
1	Cr 267.716†	79.8	-8.3	-0.0856	ug/L	-0.0856	ppb	11:06:48
1	Cu 324.752†	5308.3	-1019.6	-2.7893	ug/L	-2.7893	ppb	11:06:48
1	Mn 257.610†	509.9	-71.5	-0.0843	ug/L	-0.0843	ppb	11:07:08
1	Mo 202.031†	34.4	7.9	0.4463	ug/L	0.4463	ppb	11:07:08
1	Ni 231.604†	286.2	144.1	-0.1532	ug/L	-0.1532	ppb	11:07:08
1	P 214.914†	225.2	-29.5	-14.228	ug/L	-14.228	ppb	11:07:08
1	Pb 220.353†	-64.8	14.2	1.4403	ug/L	1.4403	ppb	11:07:08
1	S 181.975 Axial†	52.5	1.8	2.1404	ug/L	2.1404	ppb	11:07:08
1	Sb 206.836†	31.8	-14.0	-4.0204	ug/L	-4.0204	ppb	11:07:08
1	Se 196.026†	-25.2	11.8	5.7036	ug/L	5.7036	ppb	11:07:08
1	Si 251.611†	703.4	31.4	0.8163	ug/L	0.8163	ppb	11:07:08
1	Sn 189.927†	9.1	2.5	0.3509	ug/L	0.3509	ppb	11:07:08
1	Ti 334.940†	-1386.7	127.8	0.1811	ug/L	0.1811	ppb	11:06:48
1	Tl 190.801†	48.6	87.6	-4.0066	ug/L	-4.0066	ppb	11:07:08
1	U 409.014†	-2928.1	166.7	4.5043	ug/L	4.5043	ppb	11:06:43
1	V 292.402†	-1656.5	-53.1	-0.2844	ug/L	-0.2844	ppb	11:06:48
1	Zn 213.857†	878.5	-38.6	-0.3020	ug/L	-0.3020	ppb	11:07:08
1	SiO2†	710.4	0.7	-0.0279	ug/L	-0.0279	ppb	11:08:14
2	Sc Radial	6001.1	6001.1	101	%			11:05:51
2	Y RADIAL	6241.8	6241.8	101.0	%			11:05:51
2	Al 396.153Radial†	-30.2	-13.7	-9.1128	ug/L	-9.1128	ppb	11:05:51
2	Ca 317.933Radial†	24.5	3.8	5.2442	ug/L	5.2442	ppb	11:06:11
2	Fe 238.204 Radial†	-9.0	-21.8	-11.463	ug/L	-11.463	ppb	11:06:11
2	K 766.490 Radial†	3574.0	397.8	64.197	ug/L	64.197	ppb	11:05:51
2	Mg 279.077 IEC†	1.7	-3.7	-107.89	ug/L	-107.89	ppb	11:06:11
2	Na 589.592 Radial†	-1736.3	3.1	0.8188	ug/L	0.8188	ppb	11:05:51
2	Sr 421.552†	-22.0	-7.6	-0.0412	ug/L	-0.0412	ppb	11:05:51
2	Sc 361.383	970750.8	970750.8	104.12	%			11:07:13
2	Y 371.029	788710.5	788710.5	102.57	%			11:07:13
2	Ag 328.068†	429.4	4.0	-0.0431	ug/L	-0.0431	ppb	11:07:18
2	As 188.979†	-20.9	11.4	3.8964	ug/L	3.8964	ppb	11:07:38
2	B 249.677†	571.6	1075.6	8.7210	ug/L	8.7210	ppb	11:07:18
2	Ba 233.527†	32.7	19.9	0.1238	ug/L	0.1238	ppb	11:07:38
2	Be 313.107†	-4513.8	213.1	0.0699	ug/L	0.0699	ppb	11:07:18
2	Cd 226.502†	-247.1	-23.5	-0.2026	ug/L	-0.2026	ppb	11:07:38
2	Co 228.616†	305854.4	293840.5	4933.6	ug/L	4933.6	ppb	11:07:13
2	Cr 267.716†	147.2	56.7	0.5439	ug/L	0.5439	ppb	11:07:18
2	Cu 324.752†	5297.6	-1011.5	-2.7670	ug/L	-2.7670	ppb	11:07:18
2	Mn 257.610†	504.3	-75.1	-0.0863	ug/L	-0.0863	ppb	11:07:38
2	Mo 202.031†	29.4	3.3	0.1783	ug/L	0.1783	ppb	11:07:38
2	Ni 231.604†	245.8	106.4	-0.9286	ug/L	-0.9286	ppb	11:07:38

2	P 214.914†	242.0	-12.6	-5.7589 ug/L	-5.7589 ppb	11:07:38
2	Pb 220.353†	-37.4	40.3	4.0653 ug/L	4.0653 ppb	11:07:38
2	S 181.975 Axial†	41.7	-8.3	-9.7989 ug/L	-9.7989 ppb	11:07:38
2	Sb 206.836†	44.9	-1.3	-0.3699 ug/L	-0.3699 ppb	11:07:38
2	Se 196.026†	-24.5	12.4	6.0259 ug/L	6.0259 ppb	11:07:38
2	Si 251.611†	679.6	11.0	0.2713 ug/L	0.2713 ppb	11:07:38
2	Sn 189.927†	11.2	4.5	0.6445 ug/L	0.6445 ppb	11:07:38
2	Ti 334.940†	-1389.2	120.7	0.1693 ug/L	0.1693 ppb	11:07:18
2	Tl 190.801†	55.0	93.9	-2.3212 ug/L	-2.3212 ppb	11:07:38
2	U 409.014†	-2871.9	210.6	5.6821 ug/L	5.6821 ppb	11:07:13
2	V 292.402†	-1546.0	47.2	0.3247 ug/L	0.3247 ppb	11:07:18
2	Zn 213.857†	891.1	-23.5	-0.1763 ug/L	-0.1763 ppb	11:07:38
2	SiO2†	688.6	-17.7	-1.0918 ug/L	-1.0918 ppb	11:08:19
3	Sc Radial	6032.2	6032.2	101 %		11:06:16
3	Y RADIAL	6252.7	6252.7	101.2 %		11:06:16
3	Al 396.153Radial†	-16.8	-0.3	-0.1623 ug/L	-0.1623 ppb	11:06:16
3	Ca 317.933Radial†	25.1	4.4	5.9762 ug/L	5.9762 ppb	11:06:36
3	Fe 238.204 Radial†	-10.1	-22.9	-19.353 ug/L	-19.353 ppb	11:06:36
3	K 766.490 Radial†	3467.1	274.1	44.218 ug/L	44.218 ppb	11:06:16
3	Mg 279.077 IEC†	3.3	-2.1	-61.256 ug/L	-61.256 ppb	11:06:36
3	Na 589.592 Radial†	-1689.7	58.0	15.238 ug/L	15.238 ppb	11:06:16
3	Sr 421.552†	23.1	37.1	0.2005 ug/L	0.2005 ppb	11:06:16
3	Sc 361.383	974978.6	974978.6	104.57 %		11:07:44
3	Y 371.029	792355.4	792355.4	103.04 %		11:07:44
3	Ag 328.068†	466.1	37.3	0.0901 ug/L	0.0901 ppb	11:07:49
3	As 188.979†	-27.7	5.0	1.6885 ug/L	1.6885 ppb	11:08:09
3	B 249.677†	577.6	1078.9	8.7424 ug/L	8.7424 ppb	11:07:49
3	Ba 233.527†	27.1	14.4	0.0876 ug/L	0.0876 ppb	11:08:09
3	Be 313.107†	-4503.3	242.0	0.0793 ug/L	0.0793 ppb	11:07:49
3	Cd 226.502†	-238.4	-14.1	-0.1134 ug/L	-0.1134 ppb	11:08:09
3	Co 228.616†	308305.2	294910.4	4951.6 ug/L	4951.6 ppb	11:07:44
3	Cr 267.716†	117.3	27.4	0.2595 ug/L	0.2595 ppb	11:07:49
3	Cu 324.752†	5343.4	-989.8	-2.7082 ug/L	-2.7082 ppb	11:07:49
3	Mn 257.610†	536.4	-46.6	-0.0608 ug/L	-0.0608 ppb	11:08:09
3	Mo 202.031†	17.3	-8.5	-0.5001 ug/L	-0.5001 ppb	11:08:09
3	Ni 231.604†	284.9	142.7	-0.1819 ug/L	-0.1819 ppb	11:08:09
3	P 214.914†	237.4	-18.0	-8.4434 ug/L	-8.4434 ppb	11:08:09
3	Pb 220.353†	-39.7	38.3	3.8572 ug/L	3.8572 ppb	11:08:09
3	S 181.975 Axial†	59.8	8.8	10.297 ug/L	10.297 ppb	11:08:09
3	Sb 206.836†	49.6	3.1	0.8632 ug/L	0.8632 ppb	11:08:09
3	Se 196.026†	-30.6	6.7	2.9366 ug/L	2.9366 ppb	11:08:09
3	Si 251.611†	660.7	-9.9	-0.2722 ug/L	-0.2722 ppb	11:08:09
3	Sn 189.927†	5.8	-0.7	-0.1044 ug/L	-0.1044 ppb	11:08:09
3	Ti 334.940†	-1404.5	111.9	0.1551 ug/L	0.1551 ppb	11:07:49
3	Tl 190.801†	41.5	80.8	-5.7019 ug/L	-5.7019 ppb	11:08:09
3	U 409.014†	-2731.8	356.5	9.6080 ug/L	9.6080 ppb	11:07:44
3	V 292.402†	-1539.3	60.1	0.4040 ug/L	0.4040 ppb	11:07:49
3	Zn 213.857†	901.7	-17.0	-0.1311 ug/L	-0.1311 ppb	11:08:09
3	SiO2†	708.4	-1.7	-0.1149 ug/L	-0.1149 ppb	11:08:24

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	973332.3	104.40	%	0.243				0.23%
Sc Radial	5992.7	101	%	0.7				0.74%
Y 371.029	790643.2	102.82	%	0.238				0.23%
Y RADIAL	6229.6	100.8	%	0.50				0.50%
Ag 328.068†	-4.3	-0.0804	ug/L	0.19182	-0.0804	ppb	0.19182	238.71%
Al 396.153Radial†	-13.6	-9.0716	ug/L	8.88881	-9.0716	ppb	8.88881	97.99%
As 188.979†	9.4	3.2011	ug/L	1.31130	3.2011	ppb	1.31130	40.96%
B 249.677†	1058.8	8.3578	ug/L	0.64763	8.3578	ppb	0.64763	7.75%
Ba 233.527†	6.8	0.0378	ug/L	0.11895	0.0378	ppb	0.11895	314.68%
Be 313.107†	208.6	0.0685	ug/L	0.01168	0.0685	ppb	0.01168	17.06%
Ca 317.933Radial†	8.3	11.436	ug/L	10.0967	11.436	ppb	10.0967	88.29%
Cd 226.502†	-19.5	-0.1647	ug/L	0.04607	-0.1647	ppb	0.04607	27.97%
Co 228.616†	294600.3	4946.4	ug/L	11.11	4946.4	ppb	11.11	0.22%
Cr 267.716†	25.3	0.2393	ug/L	0.31527	0.2393	ppb	0.31527	131.77%
Cu 324.752†	-1007.0	-2.7548	ug/L	0.04188	-2.7548	ppb	0.04188	1.52%
Fe 238.204 Radial†	-22.3	-15.118	ug/L	3.9772	-15.118	ppb	3.9772	26.31%
K 766.490 Radial†	363.0	58.574	ug/L	12.5290	58.574	ppb	12.5290	21.39%

Mg 279.077 IEC†	-2.5	-73.468	ug/L	30.2249	-73.468	ppb	30.2249 41.14%
Mn 257.610†	-64.4	-0.0771	ug/L	0.01419	-0.0771	ppb	0.01419 18.39%
Mo 202.031†	0.9	0.0415	ug/L	0.48784	0.0415	ppb	0.48784 >999.9%
Na 589.592 Radial†	26.4	6.9464	ug/L	7.44934	6.9464	ppb	7.44934 107.24%
Ni 231.604†	131.1	-0.4212	ug/L	0.43963	-0.4212	ppb	0.43963 104.37%
P 214.914†	-20.0	-9.4767	ug/L	4.32786	-9.4767	ppb	4.32786 45.67%
Pb 220.353†	30.9	3.1209	ug/L	1.45921	3.1209	ppb	1.45921 46.76%
S 181.975 Axial†	0.7	0.8796	ug/L	10.10722	0.8796	ppb	10.10722 >999.9%
Sb 206.836†	-4.1	-1.1757	ug/L	2.53956	-1.1757	ppb	2.53956 216.00%
Se 196.026†	10.3	4.8887	ug/L	1.69820	4.8887	ppb	1.69820 34.74%
Si 251.611†	10.9	0.2718	ug/L	0.54423	0.2718	ppb	0.54423 200.22%
Sn 189.927†	2.1	0.2970	ug/L	0.37732	0.2970	ppb	0.37732 127.05%
Sr 421.552†	8.9	0.0483	ug/L	0.13249	0.0483	ppb	0.13249 274.32%
Ti 334.940†	120.1	0.1685	ug/L	0.01301	0.1685	ppb	0.01301 7.72%
Tl 190.801†	87.5	-4.0099	ug/L	1.69035	-4.0099	ppb	1.69035 42.15%
U 409.014†	244.6	6.5981	ug/L	2.67235	6.5981	ppb	2.67235 40.50%
V 292.402†	18.1	0.1481	ug/L	0.37663	0.1481	ppb	0.37663 254.33%
Zn 213.857†	-26.4	-0.2031	ug/L	0.08856	-0.2031	ppb	0.08856 43.60%
SiO2†	-6.3	-0.4115	ug/L	0.59073	-0.4115	ppb	0.59073 143.55%

Sequence No.: 3
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/17/2009 11:10:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5563.8	5563.8	93.5	%			11:12:28
1	Y RADIAL	5712.6	5712.6	92.45	%			11:12:28
1	Al 396.153Radial†	7174.6	7690.4	5096.2	ug/L	5096.2	ppb	11:12:28
1	Ca 317.933Radial†	3604.1	3834.6	5266.7	ug/L	5266.7	ppb	11:12:48
1	Fe 238.204 Radial†	651.1	683.5	5258.2	ug/L	5258.2	ppb	11:12:48
1	K 766.490 Radial†	33297.7	32469.5	5231.6	ug/L	5231.6	ppb	11:12:28
1	Mg 279.077 IEC†	175.2	182.0	5318.4	ug/L	5318.4	ppb	11:12:48
1	Na 589.592 Radial†	34761.0	38906.1	10227	ug/L	10227	ppb	11:12:28
1	Sr 421.552†	86611.5	92655.7	501.32	ug/L	501.32	ppb	11:12:28
1	Sc 361.383	973785.8	973785.8	104.44	%			11:13:46
1	Y 371.029	775556.4	775556.4	100.86	%			11:13:46
1	Ag 328.068†	118776.2	113314.2	475.97	ug/L	475.97	ppb	11:13:51
1	As 188.979†	1408.7	1380.3	482.02	ug/L	482.02	ppb	11:14:11
1	B 249.677†	24699.6	24175.3	475.31	ug/L	475.31	ppb	11:13:51
1	Ba 233.527†	76308.7	73050.5	475.35	ug/L	475.35	ppb	11:13:51
1	Be 313.107†	1531301.5	1470697.6	481.21	ug/L	481.21	ppb	11:13:46
1	Cd 226.502†	52934.7	50896.3	477.95	ug/L	477.95	ppb	11:13:51
1	Co 228.616†	29449.7	28280.5	475.00	ug/L	475.00	ppb	11:13:51
1	Cr 267.716†	51332.0	49063.2	475.30	ug/L	475.30	ppb	11:13:51
1	Cu 324.752†	186287.4	172261.9	470.04	ug/L	470.04	ppb	11:13:51
1	Mn 257.610†	527067.5	504082.9	481.37	ug/L	481.37	ppb	11:13:46
1	Mo 202.031†	8579.2	8189.3	472.60	ug/L	472.60	ppb	11:14:11
1	Ni 231.604†	23956.6	22807.6	476.12	ug/L	476.12	ppb	11:13:51
1	P 214.914†	5161.3	4696.6	2284.6	ug/L	2284.6	ppb	11:14:11
1	Pb 220.353†	4841.3	4711.6	474.59	ug/L	474.59	ppb	11:14:11
1	S 181.975 Axial†	890.8	804.5	943.91	ug/L	943.91	ppb	11:14:11
1	Sb 206.836†	1764.3	1644.9	482.12	ug/L	482.12	ppb	11:14:11
1	Se 196.026†	905.2	902.6	500.07	ug/L	500.07	ppb	11:14:11
1	Si 251.611†	93049.2	88448.5	2376.4	ug/L	2376.4	ppb	11:13:51
1	Sn 189.927†	3479.1	3324.8	476.51	ug/L	476.51	ppb	11:14:11
1	Ti 334.940†	353254.9	339679.9	483.12	ug/L	483.12	ppb	11:13:46
1	Tl 190.801†	1935.0	1893.8	476.36	ug/L	476.36	ppb	11:14:11
1	U 409.014†	15279.2	17598.0	471.63	ug/L	471.63	ppb	11:13:51
1	V 292.402†	79133.9	77299.1	478.34	ug/L	478.34	ppb	11:13:51
1	Zn 213.857†	64118.0	60510.7	472.59	ug/L	472.59	ppb	11:13:51
1	SiO2†	92793.8	88166.6	5109.3	ug/L	5109.3	ppb	11:15:19
2	Sc Radial	6519.8	6519.8	110	%			11:12:53
2	Y RADIAL	6686.1	6686.1	108.2	%			11:12:53
2	Al 396.153Radial†	7210.3	6597.7	4368.9	ug/L	4368.9	ppb	11:12:53
2	Ca 317.933Radial†	3627.3	3290.5	4519.4	ug/L	4519.4	ppb	11:13:13
2	Fe 238.204 Radial†	659.6	589.2	4535.0	ug/L	4535.0	ppb	11:13:13
2	K 766.490 Radial†	33544.7	27472.3	4425.7	ug/L	4425.7	ppb	11:12:53
2	Mg 279.077 IEC†	174.3	153.8	4494.7	ug/L	4494.7	ppb	11:13:13
2	Na 589.592 Radial†	35232.7	33884.6	8907.0	ug/L	8907.0	ppb	11:12:53
2	Sr 421.552†	87439.9	79827.3	431.91	ug/L	431.91	ppb	11:12:53
2	Sc 361.383	964478.8	964478.8	103.45	%			11:14:17
2	Y 371.029	769880.3	769880.3	100.12	%			11:14:17
2	Ag 328.068†	118385.6	114034.0	478.75	ug/L	478.75	ppb	11:14:22
2	As 188.979†	1404.9	1389.6	485.14	ug/L	485.14	ppb	11:14:42
2	B 249.677†	24622.7	24329.1	478.43	ug/L	478.43	ppb	11:14:22
2	Ba 233.527†	76077.7	73532.2	478.45	ug/L	478.45	ppb	11:14:22
2	Be 313.107†	1522667.1	1476498.8	483.11	ug/L	483.11	ppb	11:14:17
2	Cd 226.502†	52642.4	51102.8	479.96	ug/L	479.96	ppb	11:14:22
2	Co 228.616†	29385.7	28490.7	478.56	ug/L	478.56	ppb	11:14:22
2	Cr 267.716†	51057.4	49272.0	477.31	ug/L	477.31	ppb	11:14:22
2	Cu 324.752†	185842.1	173552.6	473.53	ug/L	473.53	ppb	11:14:22
2	Mn 257.610†	522954.3	504976.4	482.16	ug/L	482.16	ppb	11:14:17
2	Mo 202.031†	8633.5	8320.9	480.14	ug/L	480.14	ppb	11:14:42
2	Ni 231.604†	23880.1	22955.0	479.20	ug/L	479.20	ppb	11:14:22

2	P 214.914†	5195.6	4777.5	2325.0 ug/L	2325.0 ppb	11:14:42
2	Pb 220.353†	4884.6	4798.1	483.19 ug/L	483.19 ppb	11:14:42
2	S 181.975 Axial†	889.2	811.2	951.87 ug/L	951.87 ppb	11:14:42
2	Sb 206.836†	1771.9	1668.4	489.19 ug/L	489.19 ppb	11:14:42
2	Se 196.026†	911.8	917.4	505.29 ug/L	505.29 ppb	11:14:42
2	Si 251.611†	92707.3	88977.7	2390.7 ug/L	2390.7 ppb	11:14:22
2	Sn 189.927†	3502.6	3379.7	484.28 ug/L	484.28 ppb	11:14:42
2	Ti 334.940†	350778.0	340549.3	484.32 ug/L	484.32 ppb	11:14:17
2	Tl 190.801†	1958.3	1934.2	486.41 ug/L	486.41 ppb	11:14:42
2	U 409.014†	15307.8	17766.8	476.25 ug/L	476.25 ppb	11:14:22
2	V 292.402†	78913.0	77816.7	481.71 ug/L	481.71 ppb	11:14:22
2	Zn 213.857†	63790.1	60786.0	474.83 ug/L	474.83 ppb	11:14:22
2	SiO2†	92454.2	88695.7	5140.3 ug/L	5140.3 ppb	11:15:24
3	Sc Radial	5989.7	5989.7	101 %		11:13:18
3	Y RADIAL	6125.0	6125.0	99.12 %		11:13:18
3	Al 396.153Radial†	7069.2	7039.9	4663.3 ug/L	4663.3 ppb	11:13:18
3	Ca 317.933Radial†	3628.5	3584.7	4923.6 ug/L	4923.6 ppb	11:13:38
3	Fe 238.204 Radial†	659.9	642.7	4945.7 ug/L	4945.7 ppb	11:13:38
3	K 766.490 Radial†	33066.8	29707.5	4786.1 ug/L	4786.1 ppb	11:13:18
3	Mg 279.077 IEC†	181.7	175.1	5118.3 ug/L	5118.3 ppb	11:13:38
3	Na 589.592 Radial†	34517.4	36020.2	9468.3 ug/L	9468.3 ppb	11:13:18
3	Sr 421.552†	85675.6	85138.5	460.65 ug/L	460.65 ppb	11:13:18
3	Sc 361.383	975522.9	975522.9	104.63 %		11:14:48
3	Y 371.029	777134.9	777134.9	101.06 %		11:14:48
3	Ag 328.068†	120321.8	114588.9	481.21 ug/L	481.21 ppb	11:14:53
3	As 188.979†	1413.5	1382.4	482.73 ug/L	482.73 ppb	11:15:13
3	B 249.677†	25157.2	24570.5	483.13 ug/L	483.13 ppb	11:14:53
3	Ba 233.527†	77698.2	74248.4	483.12 ug/L	483.12 ppb	11:14:53
3	Be 313.107†	1543953.8	1480179.2	484.32 ug/L	484.32 ppb	11:14:48
3	Cd 226.502†	53642.2	51482.3	483.49 ug/L	483.49 ppb	11:14:53
3	Co 228.616†	29955.8	28714.0	482.29 ug/L	482.29 ppb	11:14:53
3	Cr 267.716†	52178.6	49784.9	482.28 ug/L	482.28 ppb	11:14:53
3	Cu 324.752†	189421.3	174939.5	477.33 ug/L	477.33 ppb	11:14:53
3	Mn 257.610†	530861.0	506809.9	483.94 ug/L	483.94 ppb	11:14:48
3	Mo 202.031†	8615.8	8209.6	473.75 ug/L	473.75 ppb	11:15:13
3	Ni 231.604†	24380.9	23172.3	483.73 ug/L	483.73 ppb	11:14:53
3	P 214.914†	5192.9	4718.0	2294.3 ug/L	2294.3 ppb	11:15:13
3	Pb 220.353†	4884.1	4744.2	477.79 ug/L	477.79 ppb	11:15:13
3	S 181.975 Axial†	895.0	807.0	946.84 ug/L	946.84 ppb	11:15:13
3	Sb 206.836†	1756.6	1634.5	479.00 ug/L	479.00 ppb	11:15:13
3	Se 196.026†	912.5	908.1	501.81 ug/L	501.81 ppb	11:15:13
3	Si 251.611†	94676.1	89844.8	2414.2 ug/L	2414.2 ppb	11:14:53
3	Sn 189.927†	3490.1	3329.5	477.13 ug/L	477.13 ppb	11:15:13
3	Ti 334.940†	355791.7	341502.1	485.69 ug/L	485.69 ppb	11:14:48
3	Tl 190.801†	1956.1	1910.6	480.53 ug/L	480.53 ppb	11:15:13
3	U 409.014†	15614.1	17892.0	479.56 ug/L	479.56 ppb	11:14:53
3	V 292.402†	80337.8	78314.8	484.61 ug/L	484.61 ppb	11:14:53
3	Zn 213.857†	65175.0	61411.5	479.67 ug/L	479.67 ppb	11:14:53
3	SiO2†	93591.2	88770.5	5144.7 ug/L	5144.7 ppb	11:15:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	971262.5	104.17	%	0.637				0.61%
Sc Radial	6024.4	101	%	8.0				7.95%
Y 371.029	774190.5	100.68	%	0.496				0.49%
Y RADIAL	6174.6	99.92	%	7.907				7.91%
Ag 328.068†	113979.0	478.64	ug/L	2.620	478.64	ppb	2.620	0.55%
QC value within limits for Ag 328.068 Recovery = 95.73%								
Al 396.153Radial†	7109.3	4709.4	ug/L	365.84	4709.4	ppb	365.84	7.77%
QC value within limits for Al 396.153Radial Recovery = 94.19%								
As 188.979†	1384.1	483.30	ug/L	1.634	483.30	ppb	1.634	0.34%
QC value within limits for As 188.979 Recovery = 96.66%								
B 249.677†	24358.3	478.96	ug/L	3.939	478.96	ppb	3.939	0.82%
QC value within limits for B 249.677 Recovery = 95.79%								
Ba 233.527†	73610.3	478.97	ug/L	3.914	478.97	ppb	3.914	0.82%
QC value within limits for Ba 233.527 Recovery = 95.79%								
Be 313.107†	1475791.9	482.88	ug/L	1.564	482.88	ppb	1.564	0.32%
QC value within limits for Be 313.107 Recovery = 96.58%								
Ca 317.933Radial†	3569.9	4903.2	ug/L	374.10	4903.2	ppb	374.10	7.63%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.06%
Cd 226.502†            51160.5      480.46 ug/L        2.805      480.46 ppb         2.805   0.58%
   QC value within limits for Cd 226.502  Recovery = 96.09%
Co 228.616†            28495.1      478.62 ug/L        3.641      478.62 ppb         3.641   0.76%
   QC value within limits for Co 228.616  Recovery = 95.72%
Cr 267.716†            49373.4      478.29 ug/L        3.594      478.29 ppb         3.594   0.75%
   QC value within limits for Cr 267.716  Recovery = 95.66%
Cu 324.752†           173584.6      473.63 ug/L        3.644      473.63 ppb         3.644   0.77%
   QC value within limits for Cu 324.752  Recovery = 94.73%
Fe 238.204 Radial†       638.5      4913.0 ug/L       362.72      4913.0 ppb       362.72   7.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.26%
K 766.490 Radial†      29883.1      4814.5 ug/L       403.70      4814.5 ppb       403.70   8.39%
   QC value within limits for K 766.490 Radial  Recovery = 96.29%
Mg 279.077 IEC†          170.3      4977.2 ug/L       429.59      4977.2 ppb       429.59   8.63%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.54%
Mn 257.610†           505289.7      482.49 ug/L        1.318      482.49 ppb         1.318   0.27%
   QC value within limits for Mn 257.610  Recovery = 96.50%
Mo 202.031†             8239.9      475.49 ug/L        4.063      475.49 ppb         4.063   0.85%
   QC value within limits for Mo 202.031  Recovery = 95.10%
Na 589.592 Radial†     36270.3      9534.1 ug/L       662.43      9534.1 ppb       662.43   6.95%
   QC value within limits for Na 589.592 Radial  Recovery = 95.34%
Ni 231.604†            22978.3      479.68 ug/L        3.830      479.68 ppb         3.830   0.80%
   QC value within limits for Ni 231.604  Recovery = 95.94%
P 214.914†              4730.7      2301.3 ug/L       21.12      2301.3 ppb        21.12   0.92%
   QC value within limits for P 214.914  Recovery = 92.05%
Pb 220.353†             4751.3      478.52 ug/L        4.349      478.52 ppb         4.349   0.91%
   QC value within limits for Pb 220.353  Recovery = 95.70%
S 181.975 Axial†         807.6      947.54 ug/L        4.025      947.54 ppb         4.025   0.42%
   QC value within limits for S 181.975 Axial  Recovery = 94.75%
Sb 206.836†             1649.3      483.44 ug/L        5.224      483.44 ppb         5.224   1.08%
   QC value within limits for Sb 206.836  Recovery = 96.69%
Se 196.026†              909.4      502.39 ug/L        2.657      502.39 ppb         2.657   0.53%
   QC value within limits for Se 196.026  Recovery = 100.48%
Si 251.611†            89090.3      2393.8 ug/L       19.09      2393.8 ppb        19.09   0.80%
   QC value within limits for Si 251.611  Recovery = 95.75%
Sn 189.927†             3344.7      479.30 ug/L        4.318      479.30 ppb         4.318   0.90%
   QC value within limits for Sn 189.927  Recovery = 95.86%
Sr 421.552†            85873.8      464.63 ug/L       34.875      464.63 ppb        34.875   7.51%
   QC value within limits for Sr 421.552  Recovery = 92.93%
Ti 334.940†           340577.1      484.38 ug/L        1.285      484.38 ppb         1.285   0.27%
   QC value within limits for Ti 334.940  Recovery = 96.88%
Tl 190.801†             1912.9      481.10 ug/L        5.048      481.10 ppb         5.048   1.05%
   QC value within limits for Tl 190.801  Recovery = 96.22%
U 409.014†             17752.2      475.81 ug/L        3.984      475.81 ppb         3.984   0.84%
   QC value within limits for U 409.014  Recovery = 95.16%
V 292.402†             77810.2      481.56 ug/L        3.139      481.56 ppb         3.139   0.65%
   QC value within limits for V 292.402  Recovery = 96.31%
Zn 213.857†            60902.7      475.69 ug/L        3.618      475.69 ppb         3.618   0.76%
   QC value within limits for Zn 213.857  Recovery = 95.14%
SiO2†                  88544.2      5131.4 ug/L       19.33      5131.4 ppb        19.33   0.38%
   QC value within limits for SiO2  Recovery = 95.96%
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/17/2009 11:17:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6200.1	6200.1	104	%			11:19:31
1	Y RADIAL	6395.3	6395.3	103.5	%			11:19:31
1	Al 396.153Radial†	-5.5	11.0	7.3470	ug/L	7.3470	ppb	11:19:31
1	Ca 317.933Radial†	26.0	4.5	6.2437	ug/L	6.2437	ppb	11:19:51
1	Fe 238.204 Radial†	9.8	-3.5	-27.156	ug/L	-27.156	ppb	11:19:51
1	K 766.490 Radial†	3411.6	128.2	20.672	ug/L	20.672	ppb	11:19:31
1	Mg 279.077 IEC†	4.8	-0.7	-21.539	ug/L	-21.539	ppb	11:19:51
1	Na 589.592 Radial†	-1700.8	92.5	24.321	ug/L	24.321	ppb	11:19:31
1	Sr 421.552†	-36.0	-20.3	-0.1099	ug/L	-0.1099	ppb	11:19:31
1	Sc 361.383	950096.5	950096.5	101.90	%			11:20:48
1	Y 371.029	768239.6	768239.6	99.908	%			11:20:48
1	Ag 328.068†	539.3	120.8	0.4939	ug/L	0.4939	ppb	11:20:53
1	As 188.979†	-36.7	-4.6	-1.5906	ug/L	-1.5906	ppb	11:21:13
1	B 249.677†	-108.0	420.6	8.3063	ug/L	8.3063	ppb	11:20:53
1	Ba 233.527†	24.5	12.5	0.0792	ug/L	0.0792	ppb	11:21:13
1	Be 313.107†	-4540.8	92.4	0.0301	ug/L	0.0301	ppb	11:20:53
1	Cd 226.502†	-201.8	15.8	0.1514	ug/L	0.1514	ppb	11:21:13
1	Co 228.616†	-77.9	7.4	0.1235	ug/L	0.1235	ppb	11:21:13
1	Cr 267.716†	65.1	-20.8	-0.2023	ug/L	-0.2023	ppb	11:20:53
1	Cu 324.752†	6132.6	-81.4	-0.2235	ug/L	-0.2235	ppb	11:20:53
1	Mn 257.610†	553.8	-16.0	-0.0175	ug/L	-0.0175	ppb	11:21:13
1	Mo 202.031†	19.9	-5.4	-0.3147	ug/L	-0.3147	ppb	11:21:13
1	Ni 231.604†	124.9	-7.2	-0.1504	ug/L	-0.1504	ppb	11:21:13
1	P 214.914†	256.9	7.1	3.6202	ug/L	3.6202	ppb	11:21:13
1	Pb 220.353†	-59.9	17.4	1.7507	ug/L	1.7507	ppb	11:21:13
1	S 181.975 Axial†	51.6	2.2	2.5640	ug/L	2.5640	ppb	11:21:13
1	Sb 206.836†	41.5	-3.7	-1.0799	ug/L	-1.0799	ppb	11:21:13
1	Se 196.026†	-35.6	1.0	0.4551	ug/L	0.4551	ppb	11:21:13
1	Si 251.611†	702.7	47.8	1.2899	ug/L	1.2899	ppb	11:21:13
1	Sn 189.927†	7.1	0.7	0.1071	ug/L	0.1071	ppb	11:21:13
1	Ti 334.940†	-1524.0	-40.6	-0.0572	ug/L	-0.0572	ppb	11:20:53
1	Tl 190.801†	-38.6	3.2	0.8012	ug/L	0.8012	ppb	11:21:13
1	U 409.014†	-3039.6	-14.0	-0.3731	ug/L	-0.3731	ppb	11:20:48
1	V 292.402†	-1623.7	-61.2	-0.3754	ug/L	-0.3754	ppb	11:20:53
1	Zn 213.857†	910.9	14.6	0.1197	ug/L	0.1197	ppb	11:21:13
1	SiO2†	668.1	-23.6	-1.3759	ug/L	-1.3759	ppb	11:22:19
2	Sc Radial	6153.4	6153.4	103	%			11:19:56
2	Y RADIAL	6351.6	6351.6	102.8	%			11:19:56
2	Al 396.153Radial†	3.4	19.6	13.019	ug/L	13.019	ppb	11:19:56
2	Ca 317.933Radial†	21.2	0.1	0.0870	ug/L	0.0870	ppb	11:20:16
2	Fe 238.204 Radial†	10.7	-2.6	-19.640	ug/L	-19.640	ppb	11:20:16
2	K 766.490 Radial†	3378.5	121.1	19.531	ug/L	19.531	ppb	11:19:56
2	Mg 279.077 IEC†	0.5	-4.9	-143.22	ug/L	-143.22	ppb	11:20:16
2	Na 589.592 Radial†	-1686.3	94.1	24.730	ug/L	24.730	ppb	11:19:56
2	Sr 421.552†	-12.6	2.0	0.0109	ug/L	0.0109	ppb	11:19:56
2	Sc 361.383	972695.0	972695.0	104.33	%			11:21:18
2	Y 371.029	787543.0	787543.0	102.42	%			11:21:18
2	Ag 328.068†	501.0	71.8	0.2871	ug/L	0.2871	ppb	11:21:23
2	As 188.979†	-28.4	4.2	1.4549	ug/L	1.4549	ppb	11:21:43
2	B 249.677†	-146.2	386.5	7.6305	ug/L	7.6305	ppb	11:21:23
2	Ba 233.527†	34.7	21.7	0.1403	ug/L	0.1403	ppb	11:21:43
2	Be 313.107†	-4480.6	253.6	0.0828	ug/L	0.0828	ppb	11:21:23
2	Cd 226.502†	-221.4	1.6	0.0169	ug/L	0.0169	ppb	11:21:43
2	Co 228.616†	-73.6	13.2	0.2224	ug/L	0.2224	ppb	11:21:43
2	Cr 267.716†	97.1	8.3	0.0782	ug/L	0.0782	ppb	11:21:23
2	Cu 324.752†	6175.9	-179.8	-0.4913	ug/L	-0.4913	ppb	11:21:23
2	Mn 257.610†	551.9	-30.4	-0.0283	ug/L	-0.0283	ppb	11:21:43
2	Mo 202.031†	25.9	-0.1	-0.0093	ug/L	-0.0093	ppb	11:21:43
2	Ni 231.604†	136.5	1.1	0.0222	ug/L	0.0222	ppb	11:21:43

2	P 214.914†	240.4	-14.6	-7.2279	ug/L	-7.2279	ppb	11:21:43
2	Pb 220.353†	-85.1	-5.4	-0.5352	ug/L	-0.5352	ppb	11:21:43
2	S 181.975 Axial†	53.5	2.9	3.4269	ug/L	3.4269	ppb	11:21:43
2	Sb 206.836†	38.0	-8.0	-2.2874	ug/L	-2.2874	ppb	11:21:43
2	Se 196.026†	-29.4	7.7	4.0433	ug/L	4.0433	ppb	11:21:43
2	Si 251.611†	675.9	6.1	0.1561	ug/L	0.1561	ppb	11:21:43
2	Sn 189.927†	13.7	6.9	0.9874	ug/L	0.9874	ppb	11:21:43
2	Ti 334.940†	-1535.1	-16.5	-0.0266	ug/L	-0.0266	ppb	11:21:23
2	Tl 190.801†	-31.2	11.3	2.8117	ug/L	2.8117	ppb	11:21:43
2	U 409.014†	-2818.6	267.2	7.1859	ug/L	7.1859	ppb	11:21:18
2	V 292.402†	-1581.1	16.6	0.1149	ug/L	0.1149	ppb	11:21:23
2	Zn 213.857†	888.1	-28.0	-0.2138	ug/L	-0.2138	ppb	11:21:43
2	SiO2†	711.5	2.8	0.1428	ug/L	0.1428	ppb	11:22:24
3	Sc Radial	6012.2	6012.2	101	%			11:20:21
3	Y RADIAL	6206.2	6206.2	100.4	%			11:20:21
3	Al 396.153Radial†	-48.0	-31.3	-20.838	ug/L	-20.838	ppb	11:20:21
3	Ca 317.933Radial†	29.1	8.3	11.455	ug/L	11.455	ppb	11:20:41
3	Fe 238.204 Radial†	9.0	-4.0	-30.455	ug/L	-30.455	ppb	11:20:41
3	K 766.490 Radial†	3473.7	292.0	47.113	ug/L	47.113	ppb	11:20:21
3	Mg 279.077 IEC†	1.8	-3.6	-103.71	ug/L	-103.71	ppb	11:20:41
3	Na 589.592 Radial†	-1723.7	18.8	4.9453	ug/L	4.9453	ppb	11:20:21
3	Sr 421.552†	-8.2	6.1	0.0330	ug/L	0.0330	ppb	11:20:21
3	Sc 361.383	965950.2	965950.2	103.60	%			11:21:48
3	Y 371.029	781873.8	781873.8	101.68	%			11:21:48
3	Ag 328.068†	428.7	5.4	0.0064	ug/L	0.0064	ppb	11:21:54
3	As 188.979†	-18.4	13.7	4.7399	ug/L	4.7399	ppb	11:22:14
3	B 249.677†	-211.6	322.3	6.3657	ug/L	6.3657	ppb	11:21:54
3	Ba 233.527†	36.5	23.7	0.1528	ug/L	0.1528	ppb	11:22:14
3	Be 313.107†	-4492.2	212.4	0.0692	ug/L	0.0692	ppb	11:21:54
3	Cd 226.502†	-212.1	9.1	0.0880	ug/L	0.0880	ppb	11:22:14
3	Co 228.616†	-80.6	5.9	0.1011	ug/L	0.1011	ppb	11:22:14
3	Cr 267.716†	117.4	28.6	0.2740	ug/L	0.2740	ppb	11:21:54
3	Cu 324.752†	6116.4	-195.9	-0.5359	ug/L	-0.5359	ppb	11:21:54
3	Mn 257.610†	560.3	-18.7	-0.0189	ug/L	-0.0189	ppb	11:22:14
3	Mo 202.031†	30.4	4.4	0.2490	ug/L	0.2490	ppb	11:22:14
3	Ni 231.604†	111.1	-22.5	-0.4706	ug/L	-0.4706	ppb	11:22:14
3	P 214.914†	248.7	-4.9	-2.3669	ug/L	-2.3669	ppb	11:22:14
3	Pb 220.353†	-83.3	-4.2	-0.4205	ug/L	-0.4205	ppb	11:22:14
3	S 181.975 Axial†	50.0	-0.1	-0.1662	ug/L	-0.1662	ppb	11:22:14
3	Sb 206.836†	51.5	5.3	1.5359	ug/L	1.5359	ppb	11:22:14
3	Se 196.026†	-29.2	7.8	4.0095	ug/L	4.0095	ppb	11:22:14
3	Si 251.611†	706.2	39.9	1.0556	ug/L	1.0556	ppb	11:22:14
3	Sn 189.927†	11.0	4.4	0.6274	ug/L	0.6274	ppb	11:22:14
3	Ti 334.940†	-1564.2	-54.9	-0.0803	ug/L	-0.0803	ppb	11:21:54
3	Tl 190.801†	-40.6	2.0	0.4921	ug/L	0.4921	ppb	11:22:14
3	U 409.014†	-2837.4	230.2	6.1919	ug/L	6.1919	ppb	11:21:48
3	V 292.402†	-1603.3	-15.5	-0.0766	ug/L	-0.0766	ppb	11:21:54
3	Zn 213.857†	890.9	-19.4	-0.1427	ug/L	-0.1427	ppb	11:22:14
3	SiO2†	696.0	-7.3	-0.4740	ug/L	-0.4740	ppb	11:22:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	962913.9	103.28	%	1.244				1.20%
Sc Radial	6121.9	103	%	1.6				1.60%
Y 371.029	779218.8	101.34	%	1.290				1.27%
Y RADIAL	6317.7	102.2	%	1.60				1.57%
Ag 328.068†	66.0	0.2625	ug/L	0.24464	0.2625	ppb	0.24464	93.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.2	-0.1573	ug/L	18.13349	-0.1573	ppb	18.13349	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.5	1.5348	ug/L	3.16599	1.5348	ppb	3.16599	206.29%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	376.5	7.4342	ug/L	0.98508	7.4342	ppb	0.98508	13.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.3	0.1241	ug/L	0.03936	0.1241	ppb	0.03936	31.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	186.2	0.0607	ug/L	0.02737	0.0607	ppb	0.02737	45.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.3	5.9287	ug/L	5.69075	5.9287	ppb	5.69075	95.99%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.8      0.0854 ug/L       0.06728      0.0854 ppb        0.06728  78.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 8.8      0.1490 ug/L       0.06454      0.1490 ppb        0.06454  43.32%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.4      0.0500 ug/L       0.23941      0.0500 ppb        0.23941 479.04%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -152.4     -0.4169 ug/L       0.16895     -0.4169 ppb        0.16895  40.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -3.4     -25.750 ug/L        5.5428     -25.750 ppb         5.5428  21.53%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         180.4      29.105 ug/L       15.6057      29.105 ppb        15.6057  53.62%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.1     -89.492 ug/L       62.0754     -89.492 ppb        62.0754  69.36%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -21.7     -0.0216 ug/L       0.00587     -0.0216 ppb        0.00587  27.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.4     -0.0250 ug/L       0.28219     -0.0250 ppb        0.28219 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         68.5      17.999 ug/L       11.3065      17.999 ppb        11.3065  62.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -9.6     -0.1996 ug/L       0.25007     -0.1996 ppb        0.25007 125.27%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.2     -1.9916 ug/L       5.43378     -1.9916 ppb        5.43378 272.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.6      0.2650 ug/L       1.28790      0.2650 ppb        1.28790 485.99%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      1.9416 ug/L       1.87570      1.9416 ppb        1.87570  96.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -2.1     -0.6105 ug/L       1.95440     -0.6105 ppb        1.95440 320.13%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      2.8360 ug/L       2.06200      2.8360 ppb        2.06200  72.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                31.3      0.8339 ug/L       0.59855      0.8339 ppb        0.59855  71.78%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.0      0.5740 ug/L       0.44256      0.5740 ppb        0.44256  77.10%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -4.1     -0.0220 ug/L       0.07689     -0.0220 ppb        0.07689 349.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -37.3     -0.0547 ug/L       0.02692     -0.0547 ppb        0.02692  49.19%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.5      1.3683 ug/L       1.25949      1.3683 ppb        1.25949  92.05%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                161.1      4.3349 ug/L       4.10740      4.3349 ppb        4.10740  94.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -20.0     -0.1123 ug/L       0.24712     -0.1123 ppb        0.24712 219.97%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -10.9     -0.0789 ug/L       0.17562     -0.0789 ppb        0.17562 222.46%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -9.3     -0.5690 ug/L       0.76381     -0.5690 ppb        0.76381 134.23%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/17/2009 12:13:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5907.3	5907.3	99.3	%			12:15:23
1	Y RADIAL	6081.5	6081.5	98.42	%			12:15:23
1	Al 396.153Radial†	7270.2	7340.5	4863.0	ug/L	4863.0	ppb	12:15:23
1	Ca 317.933Radial†	3638.3	3644.8	5006.1	ug/L	5006.1	ppb	12:15:43
1	Fe 238.204 Radial†	666.2	658.2	5064.2	ug/L	5064.2	ppb	12:15:43
1	K 766.490 Radial†	33566.5	30669.4	4941.2	ug/L	4941.2	ppb	12:15:23
1	Mg 279.077 IEC†	180.9	176.9	5168.4	ug/L	5168.4	ppb	12:15:43
1	Na 589.592 Radial†	36098.6	38091.6	10013	ug/L	10013	ppb	12:15:23
1	Sr 421.552†	88984.0	89659.1	485.11	ug/L	485.11	ppb	12:15:23
1	Sc 361.383	963575.5	963575.5	103.35	%			12:16:42
1	Y 371.029	767955.1	767955.1	99.871	%			12:16:42
1	Ag 328.068†	117596.9	113378.1	476.19	ug/L	476.19	ppb	12:16:42
1	As 188.979†	1402.6	1388.6	484.88	ug/L	484.88	ppb	12:17:02
1	B 249.677†	24131.5	23876.2	469.43	ug/L	469.43	ppb	12:16:42
1	Ba 233.527†	75887.1	73416.7	477.72	ug/L	477.72	ppb	12:16:42
1	Be 313.107†	1508789.1	1464450.4	479.17	ug/L	479.17	ppb	12:16:42
1	Cd 226.502†	52602.5	51111.9	479.99	ug/L	479.99	ppb	12:16:42
1	Co 228.616†	29043.9	28186.7	473.46	ug/L	473.46	ppb	12:17:02
1	Cr 267.716†	50892.1	49158.4	476.22	ug/L	476.22	ppb	12:16:42
1	Cu 324.752†	186370.7	174232.4	475.41	ug/L	475.41	ppb	12:16:42
1	Mn 257.610†	520414.4	502992.7	480.31	ug/L	480.31	ppb	12:16:42
1	Mo 202.031†	8638.3	8333.5	480.90	ug/L	480.90	ppb	12:17:02
1	Ni 231.604†	23590.9	22696.8	473.81	ug/L	473.81	ppb	12:17:02
1	P 214.914†	5189.5	4776.3	2323.8	ug/L	2323.8	ppb	12:17:02
1	Pb 220.353†	4916.8	4833.7	486.83	ug/L	486.83	ppb	12:17:02
1	S 181.975 Axial†	886.0	808.9	949.06	ug/L	949.06	ppb	12:17:02
1	Sb 206.836†	1759.3	1657.9	486.10	ug/L	486.10	ppb	12:17:02
1	Se 196.026†	902.5	909.2	502.88	ug/L	502.88	ppb	12:17:02
1	Si 251.611†	92421.5	88785.2	2385.4	ug/L	2385.4	ppb	12:16:42
1	Sn 189.927†	3462.3	3343.9	479.20	ug/L	479.20	ppb	12:17:02
1	Ti 334.940†	349218.2	339357.9	482.66	ug/L	482.66	ppb	12:16:42
1	Tl 190.801†	1940.8	1919.1	482.65	ug/L	482.65	ppb	12:17:02
1	U 409.014†	14764.5	17255.0	462.42	ug/L	462.42	ppb	12:16:42
1	V 292.402†	78397.0	77388.9	479.02	ug/L	479.02	ppb	12:16:42
1	Zn 213.857†	63500.3	60563.5	473.04	ug/L	473.04	ppb	12:16:42
1	SiO2†	92191.8	88525.5	5130.1	ug/L	5130.1	ppb	12:18:02
2	Sc Radial	5898.3	5898.3	99.1	%			12:15:48
2	Y RADIAL	6006.7	6006.7	97.21	%			12:15:48
2	Al 396.153Radial†	7214.1	7295.0	4832.7	ug/L	4832.7	ppb	12:15:48
2	Ca 317.933Radial†	3577.6	3589.2	4929.7	ug/L	4929.7	ppb	12:16:08
2	Fe 238.204 Radial†	648.9	641.8	4938.4	ug/L	4938.4	ppb	12:16:08
2	K 766.490 Radial†	33539.5	30693.6	4945.1	ug/L	4945.1	ppb	12:15:48
2	Mg 279.077 IEC†	172.9	169.1	4941.6	ug/L	4941.6	ppb	12:16:08
2	Na 589.592 Radial†	36050.2	38098.3	10015	ug/L	10015	ppb	12:15:48
2	Sr 421.552†	88512.1	89319.6	483.27	ug/L	483.27	ppb	12:15:48
2	Sc 361.383	964950.0	964950.0	103.50	%			12:17:09
2	Y 371.029	769511.7	769511.7	100.07	%			12:17:09
2	Ag 328.068†	118795.5	114374.2	480.31	ug/L	480.31	ppb	12:17:09
2	As 188.979†	1392.8	1377.2	480.95	ug/L	480.95	ppb	12:17:30
2	B 249.677†	24563.4	24260.3	477.03	ug/L	477.03	ppb	12:17:09
2	Ba 233.527†	76605.3	74006.1	481.54	ug/L	481.54	ppb	12:17:09
2	Be 313.107†	1524342.4	1477398.7	483.41	ug/L	483.41	ppb	12:17:09
2	Cd 226.502†	52978.0	51402.2	482.73	ug/L	482.73	ppb	12:17:09
2	Co 228.616†	29148.0	28247.2	474.47	ug/L	474.47	ppb	12:17:30
2	Cr 267.716†	51385.8	49565.3	480.16	ug/L	480.16	ppb	12:17:09
2	Cu 324.752†	188210.6	175753.4	479.55	ug/L	479.55	ppb	12:17:09
2	Mn 257.610†	525247.2	506945.0	484.07	ug/L	484.07	ppb	12:17:09
2	Mo 202.031†	8670.8	8352.9	482.01	ug/L	482.01	ppb	12:17:30
2	Ni 231.604†	23671.7	22742.4	474.76	ug/L	474.76	ppb	12:17:30

2	P 214.914†	5218.0	4796.7	2333.4 ug/L	2333.4 ppb	12:17:30
2	Pb 220.353†	4913.7	4824.0	485.86 ug/L	485.86 ppb	12:17:30
2	S 181.975 Axial†	889.4	810.9	951.48 ug/L	951.48 ppb	12:17:30
2	Sb 206.836†	1751.3	1647.8	483.12 ug/L	483.12 ppb	12:17:30
2	Se 196.026†	908.6	913.9	504.93 ug/L	504.93 ppb	12:17:30
2	Si 251.611†	93435.6	89637.6	2408.4 ug/L	2408.4 ppb	12:17:09
2	Sn 189.927†	3479.8	3356.1	480.94 ug/L	480.94 ppb	12:17:30
2	Ti 334.940†	352122.9	341683.1	485.96 ug/L	485.96 ppb	12:17:09
2	Tl 190.801†	1950.6	1925.9	484.39 ug/L	484.39 ppb	12:17:30
2	U 409.014†	14779.1	17248.8	462.27 ug/L	462.27 ppb	12:17:09
2	V 292.402†	79022.1	77884.9	482.07 ug/L	482.07 ppb	12:17:09
2	Zn 213.857†	64054.4	61011.3	476.57 ug/L	476.57 ppb	12:17:09
2	SiO2†	93539.2	89700.3	5198.4 ug/L	5198.4 ppb	12:18:08
3	Sc Radial	5884.2	5884.2	98.9 %		12:16:13
3	Y RADIAL	6024.8	6024.8	97.50 %		12:16:13
3	Al 396.153Radial†	7305.6	7405.0	4906.1 ug/L	4906.1 ppb	12:16:13
3	Ca 317.933Radial†	3624.4	3645.2	5006.6 ug/L	5006.6 ppb	12:16:33
3	Fe 238.204 Radial†	659.7	654.3	5034.2 ug/L	5034.2 ppb	12:16:33
3	K 766.490 Radial†	33843.3	31082.1	5007.7 ug/L	5007.7 ppb	12:16:13
3	Mg 279.077 IEC†	176.5	173.1	5059.2 ug/L	5059.2 ppb	12:16:33
3	Na 589.592 Radial†	36390.9	38530.1	10128 ug/L	10128 ppb	12:16:13
3	Sr 421.552†	89699.0	90734.2	490.93 ug/L	490.93 ppb	12:16:13
3	Sc 361.383	971892.9	971892.9	104.24 %		12:17:37
3	Y 371.029	773557.4	773557.4	100.60 %		12:17:37
3	Ag 328.068†	118748.4	113509.1	476.73 ug/L	476.73 ppb	12:17:37
3	As 188.979†	1397.1	1371.7	479.04 ug/L	479.04 ppb	12:17:57
3	B 249.677†	24484.2	24014.7	472.18 ug/L	472.18 ppb	12:17:37
3	Ba 233.527†	76934.5	73793.1	480.16 ug/L	480.16 ppb	12:17:37
3	Be 313.107†	1521839.7	1464476.3	479.18 ug/L	479.18 ppb	12:17:37
3	Cd 226.502†	53156.1	51207.4	480.89 ug/L	480.89 ppb	12:17:37
3	Co 228.616†	29001.3	27905.2	468.72 ug/L	468.72 ppb	12:17:57
3	Cr 267.716†	51378.1	49203.2	476.65 ug/L	476.65 ppb	12:17:37
3	Cu 324.752†	188206.3	174450.1	476.00 ug/L	476.00 ppb	12:17:37
3	Mn 257.610†	526349.5	504376.9	481.63 ug/L	481.63 ppb	12:17:37
3	Mo 202.031†	8626.7	8250.8	476.13 ug/L	476.13 ppb	12:17:57
3	Ni 231.604†	23593.7	22504.1	469.78 ug/L	469.78 ppb	12:17:57
3	P 214.914†	5181.0	4725.2	2298.1 ug/L	2298.1 ppb	12:17:57
3	Pb 220.353†	4910.6	4787.1	482.15 ug/L	482.15 ppb	12:17:57
3	S 181.975 Axial†	883.0	798.7	937.07 ug/L	937.07 ppb	12:17:57
3	Sb 206.836†	1752.0	1636.3	479.69 ug/L	479.69 ppb	12:17:57
3	Se 196.026†	901.3	900.6	498.20 ug/L	498.20 ppb	12:17:57
3	Si 251.611†	93499.7	89054.2	2392.7 ug/L	2392.7 ppb	12:17:37
3	Sn 189.927†	3467.2	3319.9	475.77 ug/L	475.77 ppb	12:17:57
3	Ti 334.940†	352745.9	339850.3	483.36 ug/L	483.36 ppb	12:17:37
3	Tl 190.801†	1942.4	1904.5	479.06 ug/L	479.06 ppb	12:17:57
3	U 409.014†	14695.3	17066.3	457.36 ug/L	457.36 ppb	12:17:37
3	V 292.402†	79243.5	77551.8	479.94 ug/L	479.94 ppb	12:17:37
3	Zn 213.857†	64111.6	60624.1	473.54 ug/L	473.54 ppb	12:17:37
3	SiO2†	93769.4	89275.5	5173.9 ug/L	5173.9 ppb	12:18:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	966806.1	103.70	%	0.478				0.46%
Sc Radial	5896.6	99.1	%	0.20				0.20%
Y 371.029	770341.4	100.18	%	0.376				0.38%
Y RADIAL	6037.7	97.71	%	0.632				0.65%
Ag 328.068†	113753.8	477.74	ug/L	2.242	477.74	ppb	2.242	0.47%
QC value within limits for Ag 328.068 Recovery = 95.55%								
Al 396.153Radial†	7346.8	4867.3	ug/L	36.91	4867.3	ppb	36.91	0.76%
QC value within limits for Al 396.153Radial Recovery = 97.35%								
As 188.979†	1379.2	481.62	ug/L	2.982	481.62	ppb	2.982	0.62%
QC value within limits for As 188.979 Recovery = 96.32%								
B 249.677†	24050.4	472.88	ug/L	3.846	472.88	ppb	3.846	0.81%
QC value within limits for B 249.677 Recovery = 94.58%								
Ba 233.527†	73738.6	479.81	ug/L	1.938	479.81	ppb	1.938	0.40%
QC value within limits for Ba 233.527 Recovery = 95.96%								
Be 313.107†	1468775.1	480.59	ug/L	2.442	480.59	ppb	2.442	0.51%
QC value within limits for Be 313.107 Recovery = 96.12%								
Ca 317.933Radial†	3626.4	4980.8	ug/L	44.25	4980.8	ppb	44.25	0.89%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.62%
Cd 226.502†            51240.5      481.20 ug/L         1.397      481.20 ppb          1.397   0.29%
   QC value within limits for Cd 226.502  Recovery = 96.24%
Co 228.616†            28113.0      472.21 ug/L         3.071      472.21 ppb          3.071   0.65%
   QC value within limits for Co 228.616  Recovery = 94.44%
Cr 267.716†            49309.0      477.68 ug/L         2.159      477.68 ppb          2.159   0.45%
   QC value within limits for Cr 267.716  Recovery = 95.54%
Cu 324.752†           174811.9      476.99 ug/L         2.240      476.99 ppb          2.240   0.47%
   QC value within limits for Cu 324.752  Recovery = 95.40%
Fe 238.204 Radial†       651.4      5012.3 ug/L        65.68      5012.3 ppb         65.68   1.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.25%
K 766.490 Radial†      30815.1      4964.7 ug/L        37.34      4964.7 ppb         37.34   0.75%
   QC value within limits for K 766.490 Radial  Recovery = 99.29%
Mg 279.077 IEC†          173.0      5056.4 ug/L       113.39      5056.4 ppb        113.39   2.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.13%
Mn 257.610†           504771.5      482.00 ug/L         1.909      482.00 ppb          1.909   0.40%
   QC value within limits for Mn 257.610  Recovery = 96.40%
Mo 202.031†             8312.4      479.68 ug/L         3.126      479.68 ppb          3.126   0.65%
   QC value within limits for Mo 202.031  Recovery = 95.94%
Na 589.592 Radial†     38240.0       10052 ug/L        66.0        10052 ppb           66.0   0.66%
   QC value within limits for Na 589.592 Radial  Recovery = 100.52%
Ni 231.604†            22647.8      472.78 ug/L         2.640      472.78 ppb          2.640   0.56%
   QC value within limits for Ni 231.604  Recovery = 94.56%
P 214.914†              4766.1      2318.4 ug/L        18.28      2318.4 ppb         18.28   0.79%
   QC value within limits for P 214.914  Recovery = 92.74%
Pb 220.353†             4814.9      484.95 ug/L         2.470      484.95 ppb          2.470   0.51%
   QC value within limits for Pb 220.353  Recovery = 96.99%
S 181.975 Axial†         806.2      945.87 ug/L         7.715      945.87 ppb          7.715   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 94.59%
Sb 206.836†             1647.3      482.97 ug/L         3.209      482.97 ppb          3.209   0.66%
   QC value within limits for Sb 206.836  Recovery = 96.59%
Se 196.026†              907.9      502.00 ug/L         3.453      502.00 ppb          3.453   0.69%
   QC value within limits for Se 196.026  Recovery = 100.40%
Si 251.611†            89159.0      2395.5 ug/L        11.74      2395.5 ppb         11.74   0.49%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†             3340.0      478.64 ug/L         2.631      478.64 ppb          2.631   0.55%
   QC value within limits for Sn 189.927  Recovery = 95.73%
Sr 421.552†            89904.3      486.44 ug/L         3.996      486.44 ppb          3.996   0.82%
   QC value within limits for Sr 421.552  Recovery = 97.29%
Ti 334.940†           340297.1      483.99 ug/L         1.740      483.99 ppb          1.740   0.36%
   QC value within limits for Ti 334.940  Recovery = 96.80%
Tl 190.801†             1916.5      482.03 ug/L         2.716      482.03 ppb          2.716   0.56%
   QC value within limits for Tl 190.801  Recovery = 96.41%
U 409.014†             17190.0      460.68 ug/L         2.882      460.68 ppb          2.882   0.63%
   QC value within limits for U 409.014  Recovery = 92.14%
V 292.402†             77608.5      480.34 ug/L         1.567      480.34 ppb          1.567   0.33%
   QC value within limits for V 292.402  Recovery = 96.07%
Zn 213.857†            60733.0      474.38 ug/L         1.913      474.38 ppb          1.913   0.40%
   QC value within limits for Zn 213.857  Recovery = 94.88%
SiO2†                  89167.1      5167.5 ug/L        34.63      5167.5 ppb         34.63   0.67%
   QC value within limits for SiO2  Recovery = 96.63%
All analyte(s) passed QC.
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Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/17/2009 12:20:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6138.5	6138.5	103	%			12:22:15
1	Y RADIAL	6296.6	6296.6	101.9	%			12:22:15
1	Al 396.153Radial†	-21.2	-4.3	-2.8040	ug/L	-2.8040	ppb	12:22:15
1	Ca 317.933Radial†	28.3	6.9	9.5306	ug/L	9.5306	ppb	12:22:35
1	Fe 238.204 Radial†	12.2	-1.1	-8.3182	ug/L	-8.3182	ppb	12:22:35
1	K 766.490 Radial†	3231.2	-13.8	-2.2425	ug/L	-2.2425	ppb	12:22:15
1	Mg 279.077 IEC†	2.3	-3.1	-91.007	ug/L	-91.007	ppb	12:22:35
1	Na 589.592 Radial†	-1687.6	88.9	23.380	ug/L	23.380	ppb	12:22:15
1	Sr 421.552†	-42.3	-26.7	-0.1447	ug/L	-0.1447	ppb	12:22:15
1	Sc 361.383	957434.4	957434.4	102.69	%			12:23:32
1	Y 371.029	774342.9	774342.9	100.70	%			12:23:32
1	Ag 328.068†	374.2	-44.0	-0.1849	ug/L	-0.1849	ppb	12:23:37
1	As 188.979†	-24.2	7.9	2.7461	ug/L	2.7461	ppb	12:23:57
1	B 249.677†	-307.8	226.8	4.4782	ug/L	4.4782	ppb	12:23:37
1	Ba 233.527†	24.7	12.5	0.0820	ug/L	0.0820	ppb	12:23:57
1	Be 313.107†	-4483.4	182.5	0.0595	ug/L	0.0595	ppb	12:23:37
1	Cd 226.502†	-233.5	-13.5	-0.1267	ug/L	-0.1267	ppb	12:23:57
1	Co 228.616†	-83.6	2.3	0.0378	ug/L	0.0378	ppb	12:23:57
1	Cr 267.716†	106.1	18.6	0.1803	ug/L	0.1803	ppb	12:23:57
1	Cu 324.752†	6175.8	-85.5	-0.2337	ug/L	-0.2337	ppb	12:23:37
1	Mn 257.610†	547.4	-26.4	-0.0243	ug/L	-0.0243	ppb	12:23:57
1	Mo 202.031†	13.4	-11.9	-0.6891	ug/L	-0.6891	ppb	12:23:57
1	Ni 231.604†	108.7	-23.9	-0.4983	ug/L	-0.4983	ppb	12:23:57
1	P 214.914†	246.9	-4.6	-2.2828	ug/L	-2.2828	ppb	12:23:57
1	Pb 220.353†	-85.6	-7.1	-0.7132	ug/L	-0.7132	ppb	12:23:57
1	S 181.975 Axial†	43.1	-6.5	-7.6085	ug/L	-7.6085	ppb	12:23:57
1	Sb 206.836†	32.8	-12.4	-3.6164	ug/L	-3.6164	ppb	12:23:57
1	Se 196.026†	-41.0	-4.0	-2.1349	ug/L	-2.1349	ppb	12:23:57
1	Si 251.611†	632.9	-25.4	-0.6712	ug/L	-0.6712	ppb	12:23:57
1	Sn 189.927†	5.1	-1.3	-0.1782	ug/L	-0.1782	ppb	12:23:57
1	Ti 334.940†	-1545.2	-49.8	-0.0703	ug/L	-0.0703	ppb	12:23:37
1	Tl 190.801†	-34.6	7.4	1.8550	ug/L	1.8550	ppb	12:23:57
1	U 409.014†	-3051.2	-2.4	-0.0643	ug/L	-0.0643	ppb	12:23:32
1	V 292.402†	-1506.2	65.4	0.3887	ug/L	0.3887	ppb	12:23:37
1	Zn 213.857†	860.7	-41.1	-0.3169	ug/L	-0.3169	ppb	12:23:57
1	SiO2†	688.5	-8.6	-0.4734	ug/L	-0.4734	ppb	12:25:03
2	Sc Radial	6248.5	6248.5	105	%			12:22:40
2	Y RADIAL	6468.3	6468.3	104.7	%			12:22:40
2	Al 396.153Radial†	-21.7	-4.4	-2.9055	ug/L	-2.9055	ppb	12:22:40
2	Ca 317.933Radial†	24.0	2.4	3.2755	ug/L	3.2755	ppb	12:23:00
2	Fe 238.204 Radial†	12.5	-1.0	-7.7566	ug/L	-7.7566	ppb	12:23:00
2	K 766.490 Radial†	3080.1	-212.9	-34.361	ug/L	-34.361	ppb	12:22:40
2	Mg 279.077 IEC†	0.2	-5.2	-150.83	ug/L	-150.83	ppb	12:23:00
2	Na 589.592 Radial†	-1753.2	55.2	14.521	ug/L	14.521	ppb	12:22:40
2	Sr 421.552†	18.2	31.6	0.1709	ug/L	0.1709	ppb	12:22:40
2	Sc 361.383	970703.8	970703.8	104.11	%			12:24:02
2	Y 371.029	785530.8	785530.8	102.16	%			12:24:02
2	Ag 328.068†	454.5	28.1	0.1077	ug/L	0.1077	ppb	12:24:07
2	As 188.979†	-25.2	7.3	2.5164	ug/L	2.5164	ppb	12:24:27
2	B 249.677†	-312.6	226.3	4.4678	ug/L	4.4678	ppb	12:24:07
2	Ba 233.527†	25.3	12.8	0.0818	ug/L	0.0818	ppb	12:24:27
2	Be 313.107†	-4418.7	304.3	0.0993	ug/L	0.0993	ppb	12:24:07
2	Cd 226.502†	-210.3	11.8	0.1116	ug/L	0.1116	ppb	12:24:27
2	Co 228.616†	-69.8	16.7	0.2807	ug/L	0.2807	ppb	12:24:27
2	Cr 267.716†	117.3	28.0	0.2675	ug/L	0.2675	ppb	12:24:27
2	Cu 324.752†	6185.0	-158.9	-0.4336	ug/L	-0.4336	ppb	12:24:07
2	Mn 257.610†	560.6	-21.0	-0.0180	ug/L	-0.0180	ppb	12:24:27
2	Mo 202.031†	22.3	-3.5	-0.2027	ug/L	-0.2027	ppb	12:24:27
2	Ni 231.604†	130.2	-4.7	-0.0988	ug/L	-0.0988	ppb	12:24:27

2	P 214.914†	250.3	-4.6	-2.2187 ug/L	-2.2187 ppb		12:24:27
2	Pb 220.353†	-79.2	0.2	0.0153 ug/L	0.0153 ppb		12:24:27
2	S 181.975 Axial†	47.9	-2.4	-2.8587 ug/L	-2.8587 ppb		12:24:27
2	Sb 206.836†	35.6	-10.3	-2.9677 ug/L	-2.9677 ppb		12:24:27
2	Se 196.026†	-36.9	0.5	0.2320 ug/L	0.2320 ppb		12:24:27
2	Si 251.611†	638.4	-28.5	-0.7563 ug/L	-0.7563 ppb		12:24:27
2	Sn 189.927†	11.1	4.4	0.6304 ug/L	0.6304 ppb		12:24:27
2	Ti 334.940†	-1531.2	-15.8	-0.0253 ug/L	-0.0253 ppb		12:24:07
2	Tl 190.801†	-30.7	11.6	2.8963 ug/L	2.8963 ppb		12:24:27
2	U 409.014†	-2843.1	238.1	6.4021 ug/L	6.4021 ppb		12:24:02
2	V 292.402†	-1658.3	-60.7	-0.3635 ug/L	-0.3635 ppb		12:24:07
2	Zn 213.857†	866.4	-47.2	-0.3646 ug/L	-0.3646 ppb		12:24:27
2	SiO2†	675.8	-30.0	-1.7180 ug/L	-1.7180 ppb		12:25:08
3	Sc Radial	6326.3	6326.3	106 %			12:23:05
3	Y RADIAL	6516.6	6516.6	105.5 %			12:23:05
3	Al 396.153Radial†	-23.6	-6.0	-3.9579 ug/L	-3.9579 ppb		12:23:05
3	Ca 317.933Radial†	22.5	0.7	0.9881 ug/L	0.9881 ppb		12:23:26
3	Fe 238.204 Radial†	12.1	-1.5	-11.769 ug/L	-11.769 ppb		12:23:26
3	K 766.490 Radial†	3248.7	-90.4	-14.595 ug/L	-14.595 ppb		12:23:05
3	Mg 279.077 IEC†	0.4	-5.0	-145.05 ug/L	-145.05 ppb		12:23:26
3	Na 589.592 Radial†	-1742.9	85.5	22.465 ug/L	22.465 ppb		12:23:05
3	Sr 421.552†	-18.2	-2.9	-0.0158 ug/L	-0.0158 ppb		12:23:05
3	Sc 361.383	1012861.2	1012861.2	108.63 %			12:24:33
3	Y 371.029	820046.0	820046.0	106.65 %			12:24:33
3	Ag 328.068†	387.6	-51.6	-0.2213 ug/L	-0.2213 ppb		12:24:38
3	As 188.979†	-26.1	7.4	2.5750 ug/L	2.5750 ppb		12:24:58
3	B 249.677†	-308.3	242.8	4.7949 ug/L	4.7949 ppb		12:24:38
3	Ba 233.527†	20.2	7.0	0.0474 ug/L	0.0474 ppb		12:24:58
3	Be 313.107†	-4519.9	387.8	0.1268 ug/L	0.1268 ppb		12:24:38
3	Cd 226.502†	-219.4	11.9	0.1127 ug/L	0.1127 ppb		12:24:58
3	Co 228.616†	-90.6	0.4	0.0061 ug/L	0.0061 ppb		12:24:58
3	Cr 267.716†	96.4	4.0	0.0384 ug/L	0.0384 ppb		12:24:58
3	Cu 324.752†	6149.3	-439.0	-1.1978 ug/L	-1.1978 ppb		12:24:38
3	Mn 257.610†	570.5	-34.3	-0.0312 ug/L	-0.0312 ppb		12:24:58
3	Mo 202.031†	26.8	-0.3	-0.0168 ug/L	-0.0168 ppb		12:24:58
3	Ni 231.604†	114.2	-24.6	-0.5140 ug/L	-0.5140 ppb		12:24:58
3	P 214.914†	253.4	-11.7	-5.6744 ug/L	-5.6744 ppb		12:24:58
3	Pb 220.353†	-63.7	17.6	1.7685 ug/L	1.7685 ppb		12:24:58
3	S 181.975 Axial†	52.6	-0.0	-0.0030 ug/L	-0.0030 ppb		12:24:58
3	Sb 206.836†	33.9	-13.2	-3.7920 ug/L	-3.7920 ppb		12:24:58
3	Se 196.026†	-30.9	7.5	3.9241 ug/L	3.9241 ppb		12:24:58
3	Si 251.611†	635.1	-57.0	-1.5392 ug/L	-1.5392 ppb		12:24:58
3	Sn 189.927†	17.1	9.5	1.3633 ug/L	1.3633 ppb		12:24:58
3	Ti 334.940†	-1497.6	76.4	0.1058 ug/L	0.1058 ppb		12:24:38
3	Tl 190.801†	-39.0	5.2	1.2974 ug/L	1.2974 ppb		12:24:58
3	U 409.014†	-2962.8	241.6	6.4968 ug/L	6.4968 ppb		12:24:33
3	V 292.402†	-1496.2	154.8	0.9561 ug/L	0.9561 ppb		12:24:38
3	Zn 213.857†	873.3	-75.4	-0.5833 ug/L	-0.5833 ppb		12:24:58
3	SiO2†	650.8	-80.1	-4.6619 ug/L	-4.6619 ppb		12:25:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	980333.1	105.15	%	3.104				2.95%
Sc Radial	6237.8	105	%	1.6				1.51%
Y 371.029	793306.6	103.17	%	3.098				3.00%
Y RADIAL	6427.1	104.0	%	1.87				1.80%
Ag 328.068†	-22.5	-0.0995	ug/L	0.18037	-0.0995	ppb	0.18037	181.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.9	-3.2225	ug/L	0.63893	-3.2225	ppb	0.63893	19.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.6	2.6125	ug/L	0.11938	2.6125	ppb	0.11938	4.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	232.0	4.5803	ug/L	0.18594	4.5803	ppb	0.18594	4.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.8	0.0704	ug/L	0.01991	0.0704	ppb	0.01991	28.30%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	291.5	0.0952	ug/L	0.03388	0.0952	ppb	0.03388	35.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.3	4.5981	ug/L	4.42215	4.5981	ppb	4.42215	96.17%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 3.4      0.0325 ug/L       0.13788      0.0325 ppb        0.13788 423.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.5      0.1082 ug/L       0.15020      0.1082 ppb        0.15020 138.82%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.9      0.1620 ug/L       0.11562      0.1620 ppb        0.11562  71.35%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -227.8     -0.6217 ug/L       0.50882     -0.6217 ppb        0.50882  81.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.2     -9.2812 ug/L       2.17245     -9.2812 ppb        2.17245  23.41%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -105.7     -17.066 ug/L       16.2015     -17.066 ppb        16.2015  94.93%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.4     -128.96 ug/L        32.997     -128.96 ppb         32.997  25.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -27.2     -0.0245 ug/L       0.00660     -0.0245 ppb        0.00660  26.94%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -5.2     -0.3029 ug/L       0.34717     -0.3029 ppb        0.34717 114.62%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         76.5      20.122 ug/L        4.8718      20.122 ppb         4.8718  24.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -17.7     -0.3704 ug/L       0.23530     -0.3704 ppb        0.23530  63.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.0     -3.3920 ug/L       1.97691     -3.3920 ppb        1.97691  58.28%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 3.6      0.3569 ug/L       1.27562      0.3569 ppb        1.27562 357.45%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.4901 ug/L       3.84185     -3.4901 ppb        3.84185 110.08%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -12.0     -3.4587 ug/L       0.43422     -3.4587 ppb        0.43422  12.55%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.3      0.6737 ug/L       3.05354      0.6737 ppb        3.05354 453.22%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -37.0     -0.9889 ug/L       0.47846     -0.9889 ppb        0.47846  48.38%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.2      0.6052 ug/L       0.77104      0.6052 ppb        0.77104 127.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 0.7      0.0035 ug/L       0.15872      0.0035 ppb        0.15872 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 3.6      0.0034 ug/L       0.09150      0.0034 ppb        0.09150 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.1      2.0162 ug/L       0.81156      2.0162 ppb        0.81156  40.25%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                159.1      4.2782 ug/L       3.76102      4.2782 ppb        3.76102  87.91%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 53.2      0.3271 ug/L       0.66198      0.3271 ppb        0.66198 202.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -54.6     -0.4216 ug/L       0.14205     -0.4216 ppb        0.14205  33.69%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -39.6     -2.2844 ug/L       2.15090     -2.2844 ppb        2.15090  94.16%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: 1201997314|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 12/17/2009 12:27:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201997314|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6001.4	6001.4	101	%			12:29:16
1	Y RADIAL	6186.9	6186.9	100.1	%			12:29:16
1	Al 396.153Radial†	26.4	42.4	28.222	ug/L	28.222	ppb	12:29:16
1	Ca 317.933Radial†	29.7	9.0	12.363	ug/L	12.363	ppb	12:29:36
1	Fe 238.204 Radial†	17.8	4.7	36.338	ug/L	36.338	ppb	12:29:36
1	K 766.490 Radial†	3052.5	-119.5	-19.294	ug/L	-19.294	ppb	12:29:16
1	Mg 279.077 IEC†	-0.3	-5.7	-165.24	ug/L	-165.24	ppb	12:29:36
1	Na 589.592 Radial†	-1611.9	126.6	33.280	ug/L	33.280	ppb	12:29:16
1	Sr 421.552†	-17.8	-3.4	-0.0185	ug/L	-0.0185	ppb	12:29:16
1	Sc 361.383	966312.9	966312.9	103.64	%			12:30:33
1	Y 371.029	779418.9	779418.9	101.36	%			12:30:33
1	Ag 328.068†	472.5	47.4	0.2087	ug/L	0.2087	ppb	12:30:38
1	As 188.979†	-34.3	-1.6	-0.5462	ug/L	-0.5462	ppb	12:30:58
1	B 249.677†	-345.0	193.7	3.8177	ug/L	3.8177	ppb	12:30:58
1	Ba 233.527†	30.3	17.7	0.1172	ug/L	0.1172	ppb	12:30:58
1	Be 313.107†	-4541.0	167.0	0.0554	ug/L	0.0554	ppb	12:30:38
1	Cd 226.502†	-232.0	-10.0	-0.0980	ug/L	-0.0980	ppb	12:30:58
1	Co 228.616†	-72.9	13.4	0.2241	ug/L	0.2241	ppb	12:30:58
1	Cr 267.716†	184.1	92.9	0.8985	ug/L	0.8985	ppb	12:30:58
1	Cu 324.752†	6133.0	-182.1	-0.4948	ug/L	-0.4948	ppb	12:30:38
1	Mn 257.610†	994.8	400.3	0.3886	ug/L	0.3886	ppb	12:30:58
1	Mo 202.031†	27.5	1.6	0.0941	ug/L	0.0941	ppb	12:30:58
1	Ni 231.604†	127.1	-7.1	-0.1487	ug/L	-0.1487	ppb	12:30:58
1	P 214.914†	265.4	11.1	5.6194	ug/L	5.6194	ppb	12:30:58
1	Pb 220.353†	-69.7	9.0	0.9060	ug/L	0.9060	ppb	12:30:58
1	S 181.975 Axial†	49.3	-0.8	-0.9363	ug/L	-0.9363	ppb	12:30:58
1	Sb 206.836†	42.0	-3.9	-1.1228	ug/L	-1.1228	ppb	12:30:58
1	Se 196.026†	-29.8	7.1	3.9260	ug/L	3.9260	ppb	12:30:58
1	Si 251.611†	956.2	280.9	7.5846	ug/L	7.5846	ppb	12:30:58
1	Sn 189.927†	15.2	8.4	1.2111	ug/L	1.2111	ppb	12:30:58
1	Ti 334.940†	-1201.9	295.2	0.4188	ug/L	0.4188	ppb	12:30:38
1	Tl 190.801†	-53.4	-10.4	-2.5894	ug/L	-2.5894	ppb	12:30:58
1	U 409.014†	-2945.5	126.9	3.4051	ug/L	3.4051	ppb	12:30:33
1	V 292.402†	-1510.3	74.8	0.4549	ug/L	0.4549	ppb	12:30:38
1	Zn 213.857†	1128.9	209.9	1.6579	ug/L	1.6579	ppb	12:30:58
1	SiO2†	1009.1	294.5	17.150	ug/L	17.150	ppb	12:32:04
2	Sc Radial	6047.5	6047.5	102	%			12:29:42
2	Y RADIAL	6236.9	6236.9	100.9	%			12:29:42
2	Al 396.153Radial†	0.3	16.5	10.974	ug/L	10.974	ppb	12:29:42
2	Ca 317.933Radial†	30.2	9.3	12.746	ug/L	12.746	ppb	12:30:02
2	Fe 238.204 Radial†	16.7	3.6	27.353	ug/L	27.353	ppb	12:30:02
2	K 766.490 Radial†	3197.7	0.3	0.0348	ug/L	0.0348	ppb	12:29:42
2	Mg 279.077 IEC†	-1.1	-6.4	-188.01	ug/L	-188.01	ppb	12:30:02
2	Na 589.592 Radial†	-1609.5	141.2	37.106	ug/L	37.106	ppb	12:29:42
2	Sr 421.552†	7.5	21.6	0.1170	ug/L	0.1170	ppb	12:29:42
2	Sc 361.383	972777.7	972777.7	104.34	%			12:31:04
2	Y 371.029	784449.1	784449.1	102.02	%			12:31:04
2	Ag 328.068†	410.7	-14.8	-0.0580	ug/L	-0.0580	ppb	12:31:09
2	As 188.979†	-30.0	2.7	0.9468	ug/L	0.9468	ppb	12:31:29
2	B 249.677†	-311.4	228.1	4.4990	ug/L	4.4990	ppb	12:31:29
2	Ba 233.527†	44.2	30.9	0.2024	ug/L	0.2024	ppb	12:31:29
2	Be 313.107†	-4554.9	182.8	0.0607	ug/L	0.0607	ppb	12:31:09
2	Cd 226.502†	-225.3	-2.1	-0.0225	ug/L	-0.0225	ppb	12:31:29
2	Co 228.616†	-76.8	10.2	0.1700	ug/L	0.1700	ppb	12:31:29
2	Cr 267.716†	190.2	97.5	0.9419	ug/L	0.9419	ppb	12:31:29
2	Cu 324.752†	6174.0	-182.1	-0.4951	ug/L	-0.4951	ppb	12:31:09
2	Mn 257.610†	1001.1	400.0	0.3879	ug/L	0.3879	ppb	12:31:29
2	Mo 202.031†	33.9	7.5	0.4372	ug/L	0.4372	ppb	12:31:29
2	Ni 231.604†	129.7	-5.4	-0.1129	ug/L	-0.1129	ppb	12:31:29

2	P 214.914†	269.4	13.1	6.6555	ug/L	6.6555 ppb	12:31:29
2	Pb 220.353†	-87.8	-7.9	-0.7900	ug/L	-0.7900 ppb	12:31:29
2	S 181.975 Axial†	56.2	5.5	6.4497	ug/L	6.4497 ppb	12:31:29
2	Sb 206.836†	41.8	-4.4	-1.2591	ug/L	-1.2591 ppb	12:31:29
2	Se 196.026†	-24.7	12.3	6.6073	ug/L	6.6073 ppb	12:31:29
2	Si 251.611†	943.9	263.0	7.0886	ug/L	7.0886 ppb	12:31:29
2	Sn 189.927†	12.9	6.1	0.8794	ug/L	0.8794 ppb	12:31:29
2	Ti 334.940†	-1132.4	369.6	0.5226	ug/L	0.5226 ppb	12:31:09
2	Tl 190.801†	-54.9	-11.5	-2.8610	ug/L	-2.8610 ppb	12:31:29
2	U 409.014†	-2785.0	299.5	8.0491	ug/L	8.0491 ppb	12:31:04
2	V 292.402†	-1517.5	77.6	0.4865	ug/L	0.4865 ppb	12:31:09
2	Zn 213.857†	1124.3	198.3	1.5677	ug/L	1.5677 ppb	12:31:29
2	SiO2†	944.0	225.6	13.116	ug/L	13.116 ppb	12:32:09
3	Sc Radial	6106.7	6106.7	103	%		12:30:07
3	Y RADIAL	6294.9	6294.9	101.9	%		12:30:07
3	Al 396.153Radial†	-12.5	4.1	2.7104	ug/L	2.7104 ppb	12:30:07
3	Ca 317.933Radial†	31.7	10.4	14.332	ug/L	14.332 ppb	12:30:27
3	Fe 238.204 Radial†	14.4	1.1	8.3409	ug/L	8.3409 ppb	12:30:27
3	K 766.490 Radial†	3318.4	87.4	14.029	ug/L	14.029 ppb	12:30:07
3	Mg 279.077 IEC†	3.0	-2.5	-71.884	ug/L	-71.884 ppb	12:30:27
3	Na 589.592 Radial†	-1149.2	605.1	159.05	ug/L	159.05 ppb	12:30:07
3	Sr 421.552†	75.4	87.7	0.4747	ug/L	0.4747 ppb	12:30:07
3	Sc 361.383	979590.6	979590.6	105.07	%		12:31:34
3	Y 371.029	790536.4	790536.4	102.81	%		12:31:34
3	Ag 328.068†	398.1	-29.6	-0.1233	ug/L	-0.1233 ppb	12:31:39
3	As 188.979†	-30.9	2.1	0.7297	ug/L	0.7297 ppb	12:31:59
3	B 249.677†	-342.2	200.9	3.9646	ug/L	3.9646 ppb	12:31:59
3	Ba 233.527†	34.6	21.4	0.1403	ug/L	0.1403 ppb	12:31:59
3	Be 313.107†	-4499.1	266.3	0.0880	ug/L	0.0880 ppb	12:31:39
3	Cd 226.502†	-238.7	-13.4	-0.1269	ug/L	-0.1269 ppb	12:31:59
3	Co 228.616†	-83.1	4.7	0.0780	ug/L	0.0780 ppb	12:31:59
3	Cr 267.716†	175.3	82.1	0.7935	ug/L	0.7935 ppb	12:31:59
3	Cu 324.752†	6094.6	-298.8	-0.8145	ug/L	-0.8145 ppb	12:31:39
3	Mn 257.610†	977.5	370.9	0.3560	ug/L	0.3560 ppb	12:31:59
3	Mo 202.031†	27.8	1.5	0.0879	ug/L	0.0879 ppb	12:31:59
3	Ni 231.604†	107.5	-27.4	-0.5734	ug/L	-0.5734 ppb	12:31:59
3	P 214.914†	264.0	6.2	3.2474	ug/L	3.2474 ppb	12:31:59
3	Pb 220.353†	-68.6	11.0	1.1006	ug/L	1.1006 ppb	12:31:59
3	S 181.975 Axial†	52.8	1.8	2.1377	ug/L	2.1377 ppb	12:31:59
3	Sb 206.836†	36.1	-10.0	-2.8955	ug/L	-2.8955 ppb	12:31:59
3	Se 196.026†	-35.4	2.3	1.2370	ug/L	1.2370 ppb	12:31:59
3	Si 251.611†	956.6	268.8	7.2457	ug/L	7.2457 ppb	12:31:59
3	Sn 189.927†	15.3	8.3	1.1933	ug/L	1.1933 ppb	12:31:59
3	Ti 334.940†	-1132.1	377.4	0.5349	ug/L	0.5349 ppb	12:31:39
3	Tl 190.801†	-43.7	-0.5	-0.1089	ug/L	-0.1089 ppb	12:31:59
3	U 409.014†	-2905.4	203.5	5.4698	ug/L	5.4698 ppb	12:31:34
3	V 292.402†	-1518.9	86.5	0.5362	ug/L	0.5362 ppb	12:31:39
3	Zn 213.857†	1131.5	197.6	1.5634	ug/L	1.5634 ppb	12:31:59
3	SiO2†	994.5	267.4	15.551	ug/L	15.551 ppb	12:32:14

Mean Data: 1201997314|933552|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	972893.7	104.35	%	0.712				0.68%
Sc Radial	6051.9	102	%	0.9				0.87%
Y 371.029	784801.4	102.06	%	0.724				0.71%
Y RADIAL	6239.6	101.0	%	0.87				0.87%
Ag 328.068†	1.0	0.0091	ug/L	0.17590	0.0091	ppb	0.17590	>999.9%
Al 396.153Radial†	21.0	13.969	ug/L	13.0171	13.969	ppb	13.0171	93.19%
As 188.979†	1.1	0.3768	ug/L	0.80668	0.3768	ppb	0.80668	214.10%
B 249.677†	207.6	4.0938	ug/L	0.35852	4.0938	ppb	0.35852	8.76%
Ba 233.527†	23.3	0.1533	ug/L	0.04411	0.1533	ppb	0.04411	28.77%
Be 313.107†	205.4	0.0680	ug/L	0.01750	0.0680	ppb	0.01750	25.73%
Ca 317.933Radial†	9.6	13.147	ug/L	1.0437	13.147	ppb	1.0437	7.94%
Cd 226.502†	-8.5	-0.0825	ug/L	0.05387	-0.0825	ppb	0.05387	65.31%
Co 228.616†	9.4	0.1573	ug/L	0.07387	0.1573	ppb	0.07387	46.95%
Cr 267.716†	90.8	0.8780	ug/L	0.07633	0.8780	ppb	0.07633	8.69%
Cu 324.752†	-221.0	-0.6015	ug/L	0.18451	-0.6015	ppb	0.18451	30.68%
Fe 238.204 Radial†	3.1	24.011	ug/L	14.2947	24.011	ppb	14.2947	59.54%
K 766.490 Radial†	-10.6	-1.7437	ug/L	16.73263	-1.7437	ppb	16.73263	959.62%

Mg 279.077 IEC†	-4.9	-141.71	ug/L	61.535	-141.71	ppb	61.535	43.42%
Mn 257.610†	390.4	0.3775	ug/L	0.01861	0.3775	ppb	0.01861	4.93%
Mo 202.031†	3.5	0.2064	ug/L	0.19991	0.2064	ppb	0.19991	96.86%
Na 589.592 Radial†	290.9	76.480	ug/L	71.5364	76.480	ppb	71.5364	93.54%
Ni 231.604†	-13.3	-0.2784	ug/L	0.25614	-0.2784	ppb	0.25614	92.02%
P 214.914†	10.1	5.1741	ug/L	1.74715	5.1741	ppb	1.74715	33.77%
Pb 220.353†	4.0	0.4055	ug/L	1.03992	0.4055	ppb	1.03992	256.44%
S 181.975 Axial†	2.2	2.5504	ug/L	3.71025	2.5504	ppb	3.71025	145.48%
Sb 206.836†	-6.1	-1.7591	ug/L	0.98647	-1.7591	ppb	0.98647	56.08%
Se 196.026†	7.2	3.9234	ug/L	2.68511	3.9234	ppb	2.68511	68.44%
Si 251.611†	270.9	7.3063	ug/L	0.25348	7.3063	ppb	0.25348	3.47%
Sn 189.927†	7.6	1.0946	ug/L	0.18660	1.0946	ppb	0.18660	17.05%
Sr 421.552†	35.3	0.1911	ug/L	0.25478	0.1911	ppb	0.25478	133.34%
Ti 334.940†	347.4	0.4921	ug/L	0.06377	0.4921	ppb	0.06377	12.96%
Tl 190.801†	-7.4	-1.8531	ug/L	1.51659	-1.8531	ppb	1.51659	81.84%
U 409.014†	210.0	5.6414	ug/L	2.32675	5.6414	ppb	2.32675	41.24%
V 292.402†	79.6	0.4926	ug/L	0.04094	0.4926	ppb	0.04094	8.31%
Zn 213.857†	201.9	1.5963	ug/L	0.05335	1.5963	ppb	0.05335	3.34%
SiO2†	262.5	15.272	ug/L	2.0315	15.272	ppb	2.0315	13.30%

Sequence No.: 15
Sample ID: 1201997315|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 12/17/2009 12:34:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201997315|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6374.0	6374.0	107	%			12:36:38
1	Y RADIAL	7098.4	7098.4	114.9	%			12:36:38
1	Al 396.153Radial†	129474.1	120901.9	80415	ug/L	80415	ppb	12:36:18
1	Ca 317.933Radial†	71278.9	66530.2	91378	ug/L	91378	ppb	12:36:18
1	Fe 238.204 Radial†	24568.2	22925.6	175900	ug/L	175900	ppb	12:36:18
1	K 766.490 Radial†	262003.1	241477.0	38911	ug/L	38911	ppb	12:36:18
1	Mg 279.077 IEC†	1296.6	1205.2	35044	ug/L	35044	ppb	12:36:38
1	Na 589.592 Radial†	37477.4	36716.4	9651.3	ug/L	9651.3	ppb	12:36:18
1	Sr 421.552†	418002.6	390289.2	2111.1	ug/L	2111.1	ppb	12:36:18
1	Sc 361.383	979846.0	979846.0	105.09	%			12:37:40
1	Y 371.029	847773.3	847773.3	110.25	%			12:37:40
1	Ag 328.068†	61955.9	58544.6	306.60	ug/L	306.60	ppb	12:37:40
1	As 188.979†	2875.5	2767.6	1028.3	ug/L	1028.3	ppb	12:37:45
1	B 249.677†	74768.1	71670.7	1389.2	ug/L	1389.2	ppb	12:37:40
1	Ba 233.527†	295063.9	280751.0	1831.3	ug/L	1831.3	ppb	12:37:40
1	Be 313.107†	2411966.1	2299609.6	761.06	ug/L	761.06	ppb	12:37:40
1	Cd 226.502†	62813.3	59982.7	546.74	ug/L	546.74	ppb	12:37:45
1	Co 228.616†	53891.9	51363.6	850.19	ug/L	850.19	ppb	12:37:45
1	Cr 267.716†	241653.3	229855.9	2228.4	ug/L	2228.4	ppb	12:37:40
1	Cu 324.752†	702429.3	662283.9	1815.1	ug/L	1815.1	ppb	12:37:40
1	Mn 257.610†	5667581.5	5392321.6	5161.7	ug/L	5161.7	ppb	12:37:40
1	Mo 202.031†	8837.5	8384.2	495.94	ug/L	495.94	ppb	12:37:45
1	Ni 231.604†	62036.8	58900.2	1229.8	ug/L	1229.8	ppb	12:37:45
1	P 214.914†	15707.3	14701.0	6983.7	ug/L	6983.7	ppb	12:37:45
1	Pb 220.353†	8190.2	7869.4	793.55	ug/L	793.55	ppb	12:37:45
1	S 181.975 Axial†	3248.6	3042.8	3557.8	ug/L	3557.8	ppb	12:37:45
1	Sb 206.836†	6782.6	6409.4	1815.1	ug/L	1815.1	ppb	12:37:45
1	Se 196.026†	4292.1	4120.0	2808.5	ug/L	2808.5	ppb	12:37:45
1	Si 251.611†	243179.3	230751.0	6205.0	ug/L	6205.0	ppb	12:37:40
1	Sn 189.927†	7395.6	7031.0	1018.2	ug/L	1018.2	ppb	12:37:45
1	Ti 334.940†	3796505.8	3613949.0	5145.2	ug/L	5145.2	ppb	12:37:40
1	Tl 190.801†	4567.7	4387.5	1161.0	ug/L	1161.0	ppb	12:37:45
1	U 409.014†	-9494.1	-6065.1	-189.51	ug/L	-189.51	ppb	12:37:40
1	V 292.402†	204955.1	196553.3	1174.5	ug/L	1174.5	ppb	12:37:40
1	Zn 213.857†	747926.5	710796.2	5573.6	ug/L	5573.6	ppb	12:37:40
1	SiO2†	247328.1	234661.3	13611	ug/L	13611	ppb	12:38:19
2	Sc Radial	5972.5	5972.5	100	%			12:37:04
2	Y RADIAL	6725.9	6725.9	108.8	%			12:37:04
2	Al 396.153Radial†	128699.5	128255.2	85306	ug/L	85306	ppb	12:36:44
2	Ca 317.933Radial†	70662.0	70388.7	96678	ug/L	96678	ppb	12:36:44
2	Fe 238.204 Radial†	24340.6	24240.6	185990	ug/L	185990	ppb	12:36:44
2	K 766.490 Radial†	260335.8	256257.8	41297	ug/L	41297	ppb	12:36:44
2	Mg 279.077 IEC†	1313.5	1303.5	37903	ug/L	37903	ppb	12:37:04
2	Na 589.592 Radial†	37214.2	38806.0	10201	ug/L	10201	ppb	12:36:44
2	Sr 421.552†	414763.6	413293.6	2235.5	ug/L	2235.5	ppb	12:36:44
2	Sc 361.383	980119.2	980119.2	105.12	%			12:37:54
2	Y 371.029	848874.8	848874.8	110.39	%			12:37:54
2	Ag 328.068†	61490.4	58085.3	307.92	ug/L	307.92	ppb	12:37:54
2	As 188.979†	2965.5	2852.5	1058.7	ug/L	1058.7	ppb	12:37:59
2	B 249.677†	73852.9	70780.4	1370.3	ug/L	1370.3	ppb	12:37:54
2	Ba 233.527†	291339.2	277129.6	1808.1	ug/L	1808.1	ppb	12:37:54
2	Be 313.107†	2384719.5	2273051.1	752.26	ug/L	752.26	ppb	12:37:54
2	Cd 226.502†	63772.9	60878.9	554.16	ug/L	554.16	ppb	12:37:59
2	Co 228.616†	54855.6	52266.0	865.35	ug/L	865.35	ppb	12:37:59
2	Cr 267.716†	238839.1	227114.8	2202.0	ug/L	2202.0	ppb	12:37:54
2	Cu 324.752†	693123.4	653245.2	1791.0	ug/L	1791.0	ppb	12:37:54
2	Mn 257.610†	5593791.6	5320624.5	5094.2	ug/L	5094.2	ppb	12:37:54
2	Mo 202.031†	8975.6	8513.2	504.10	ug/L	504.10	ppb	12:37:59
2	Ni 231.604†	63064.7	59861.6	1249.9	ug/L	1249.9	ppb	12:37:59

2	P 214.914†	16007.8	14982.7	7122.7	ug/L	7122.7	ppb	12:37:59
2	Pb 220.353†	8298.6	7970.4	804.00	ug/L	804.00	ppb	12:37:59
2	S 181.975 Axial†	3350.7	3139.0	3669.9	ug/L	3669.9	ppb	12:37:59
2	Sb 206.836†	6859.3	6480.6	1836.9	ug/L	1836.9	ppb	12:37:59
2	Se 196.026†	4367.5	4190.5	2881.6	ug/L	2881.6	ppb	12:37:59
2	Si 251.611†	240805.0	228427.9	6141.3	ug/L	6141.3	ppb	12:37:54
2	Sn 189.927†	7517.7	7145.1	1035.2	ug/L	1035.2	ppb	12:37:59
2	Ti 334.940†	3750272.2	3568961.5	5081.5	ug/L	5081.5	ppb	12:37:54
2	Tl 190.801†	4647.6	4462.2	1178.8	ug/L	1178.8	ppb	12:37:59
2	U 409.014†	-9497.8	-6066.1	-190.75	ug/L	-190.75	ppb	12:37:54
2	V 292.402†	202738.0	194389.8	1160.0	ug/L	1160.0	ppb	12:37:54
2	Zn 213.857†	738980.6	702087.9	5503.9	ug/L	5503.9	ppb	12:37:54
2	SiO2†	246711.7	234009.3	13571	ug/L	13571	ppb	12:38:24
3	Sc Radial	6191.3	6191.3	104	%			12:37:29
3	Y RADIAL	6891.5	6891.5	111.5	%			12:37:29
3	Al 396.153Radial†	133512.3	128349.6	85370	ug/L	85370	ppb	12:37:09
3	Ca 317.933Radial†	73161.3	70302.9	96560	ug/L	96560	ppb	12:37:09
3	Fe 238.204 Radial†	25264.5	24271.6	186220	ug/L	186220	ppb	12:37:09
3	K 766.490 Radial†	268490.2	254929.0	41083	ug/L	41083	ppb	12:37:09
3	Mg 279.077 IEC†	1300.4	1244.6	36185	ug/L	36185	ppb	12:37:29
3	Na 589.592 Radial†	38323.6	38562.1	10136	ug/L	10136	ppb	12:37:09
3	Sr 421.552†	429292.6	412654.6	2232.0	ug/L	2232.0	ppb	12:37:09
3	Sc 361.383	986442.7	986442.7	105.80	%			12:38:09
3	Y 371.029	854173.2	854173.2	111.08	%			12:38:09
3	Ag 328.068†	61492.5	57712.3	306.43	ug/L	306.43	ppb	12:38:09
3	As 188.979†	2929.8	2800.6	1040.6	ug/L	1040.6	ppb	12:38:14
3	B 249.677†	73911.5	70385.4	1362.5	ug/L	1362.5	ppb	12:38:09
3	Ba 233.527†	292023.0	275999.3	1800.8	ug/L	1800.8	ppb	12:38:09
3	Be 313.107†	2391093.4	2264533.6	749.43	ug/L	749.43	ppb	12:38:09
3	Cd 226.502†	62907.5	59672.0	542.78	ug/L	542.78	ppb	12:38:14
3	Co 228.616†	53993.7	51116.9	846.09	ug/L	846.09	ppb	12:38:14
3	Cr 267.716†	239394.1	226182.9	2193.0	ug/L	2193.0	ppb	12:38:09
3	Cu 324.752†	693771.4	649631.0	1781.1	ug/L	1781.1	ppb	12:38:09
3	Mn 257.610†	5606456.4	5298484.0	5073.2	ug/L	5073.2	ppb	12:38:09
3	Mo 202.031†	8892.4	8379.8	496.42	ug/L	496.42	ppb	12:38:14
3	Ni 231.604†	62078.2	58544.6	1222.4	ug/L	1222.4	ppb	12:38:14
3	P 214.914†	15814.6	14702.4	6983.1	ug/L	6983.1	ppb	12:38:14
3	Pb 220.353†	8195.3	7822.2	789.09	ug/L	789.09	ppb	12:38:14
3	S 181.975 Axial†	3294.8	3065.7	3583.8	ug/L	3583.8	ppb	12:38:14
3	Sb 206.836†	6746.3	6331.9	1793.6	ug/L	1793.6	ppb	12:38:14
3	Se 196.026†	4308.2	4108.0	2838.5	ug/L	2838.5	ppb	12:38:14
3	Si 251.611†	241182.0	227315.8	6111.6	ug/L	6111.6	ppb	12:38:09
3	Sn 189.927†	7378.6	6967.8	1009.9	ug/L	1009.9	ppb	12:38:14
3	Ti 334.940†	3757278.3	3552714.4	5058.4	ug/L	5058.4	ppb	12:38:09
3	Tl 190.801†	4619.4	4407.2	1164.9	ug/L	1164.9	ppb	12:38:14
3	U 409.014†	-9818.9	-6311.7	-197.37	ug/L	-197.37	ppb	12:38:09
3	V 292.402†	203056.9	193455.0	1154.1	ug/L	1154.1	ppb	12:38:09
3	Zn 213.857†	740064.7	698606.2	5476.6	ug/L	5476.6	ppb	12:38:09
3	SiO2†	239187.5	225393.3	13070	ug/L	13070	ppb	12:38:30

Mean Data: 1201997315|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	982136.0	105.34	%	0.400				0.38%
Sc Radial	6179.3	104	%	3.4				3.25%
Y 371.029	850273.8	110.58	%	0.445				0.40%
Y RADIAL	6905.3	111.7	%	3.02				2.70%
Ag 328.068†	58114.1	306.98	ug/L	0.818	306.98	ppb	0.818	0.27%
Al 396.153Radial†	125835.6	83697	ug/L	2842.7	83697	ppb	2842.7	3.40%
As 188.979†	2806.9	1042.5	ug/L	15.29	1042.5	ppb	15.29	1.47%
B 249.677†	70945.5	1374.0	ug/L	13.75	1374.0	ppb	13.75	1.00%
Ba 233.527†	277959.9	1813.4	ug/L	15.92	1813.4	ppb	15.92	0.88%
Be 313.107†	2279064.8	754.25	ug/L	6.063	754.25	ppb	6.063	0.80%
Ca 317.933Radial†	69073.9	94872	ug/L	3026.3	94872	ppb	3026.3	3.19%
Cd 226.502†	60177.9	547.89	ug/L	5.777	547.89	ppb	5.777	1.05%
Co 228.616†	51582.2	853.88	ug/L	10.149	853.88	ppb	10.149	1.19%
Cr 267.716†	227717.9	2207.8	ug/L	18.38	2207.8	ppb	18.38	0.83%
Cu 324.752†	655053.4	1795.7	ug/L	17.48	1795.7	ppb	17.48	0.97%
Fe 238.204 Radial†	23812.6	182700	ug/L	5894.2	182700	ppb	5894.2	3.23%
K 766.490 Radial†	250887.9	40431	ug/L	1320.3	40431	ppb	1320.3	3.27%

Mg 279.077 IEC†	1251.1	36377	ug/L	1439.2	36377	ppb	1439.2	3.96%
Mn 257.610†	5337143.4	5109.7	ug/L	46.24	5109.7	ppb	46.24	0.90%
Mo 202.031†	8425.7	498.82	ug/L	4.575	498.82	ppb	4.575	0.92%
Na 589.592 Radial†	38028.1	9996.1	ug/L	300.34	9996.1	ppb	300.34	3.00%
Ni 231.604†	59102.1	1234.0	ug/L	14.23	1234.0	ppb	14.23	1.15%
P 214.914†	14795.4	7029.8	ug/L	80.41	7029.8	ppb	80.41	1.14%
Pb 220.353†	7887.4	795.54	ug/L	7.651	795.54	ppb	7.651	0.96%
S 181.975 Axial†	3082.5	3603.8	ug/L	58.64	3603.8	ppb	58.64	1.63%
Sb 206.836†	6407.3	1815.2	ug/L	21.64	1815.2	ppb	21.64	1.19%
Se 196.026†	4139.5	2842.8	ug/L	36.73	2842.8	ppb	36.73	1.29%
Si 251.611†	228831.6	6152.6	ug/L	47.73	6152.6	ppb	47.73	0.78%
Sn 189.927†	7047.9	1021.1	ug/L	12.94	1021.1	ppb	12.94	1.27%
Sr 421.552†	405412.5	2192.9	ug/L	70.86	2192.9	ppb	70.86	3.23%
Ti 334.940†	3578541.6	5095.0	ug/L	44.97	5095.0	ppb	44.97	0.88%
Tl 190.801†	4419.0	1168.2	ug/L	9.39	1168.2	ppb	9.39	0.80%
U 409.014†	-6147.6	-192.54	ug/L	4.225	-192.54	ppb	4.225	2.19%
V 292.402†	194799.4	1162.8	ug/L	10.49	1162.8	ppb	10.49	0.90%
Zn 213.857†	703830.1	5518.0	ug/L	50.03	5518.0	ppb	50.03	0.91%
SiO2†	231354.6	13417	ug/L	301.6	13417	ppb	301.6	2.25%

Sequence No.: 16
Sample ID: 241711001|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 12/17/2009 12:40:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711001|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5845.7	5845.7	98.2	%			12:42:54
1	Y RADIAL	6659.5	6659.5	107.8	%			12:42:54
1	Al 396.153Radial†	193775.6	197286.6	131250	ug/L	131250	ppb	12:42:34
1	Ca 317.933Radial†	16516.0	16793.5	23065	ug/L	23065	ppb	12:42:34
1	Fe 238.204 Radial†	18458.7	18778.7	144060	ug/L	144060	ppb	12:42:34
1	K 766.490 Radial†	53997.6	51825.1	8289.7	ug/L	8289.7	ppb	12:42:34
1	Mg 279.077 IEC†	624.7	630.6	18287	ug/L	18287	ppb	12:42:54
1	Na 589.592 Radial†	10694.8	12612.7	3315.4	ug/L	3315.4	ppb	12:42:34
1	Sr 421.552†	40613.8	41360.5	223.59	ug/L	223.59	ppb	12:42:34
1	Sc 361.383	976740.3	976740.3	104.76	%			12:43:59
1	Y 371.029	864560.4	864560.4	112.43	%			12:43:59
1	Ag 328.068†	-9883.0	-9842.3	8.1258	ug/L	8.1258	ppb	12:43:59
1	As 188.979†	-30.6	2.2	53.504	ug/L	53.504	ppb	12:44:19
1	B 249.677†	1337.3	1803.1	16.173	ug/L	16.173	ppb	12:43:59
1	Ba 233.527†	231390.1	220863.5	1439.4	ug/L	1439.4	ppb	12:43:59
1	Be 313.107†	-7347.2	-2464.9	6.3285	ug/L	6.3285	ppb	12:43:59
1	Cd 226.502†	1235.2	1392.9	-1.2716	ug/L	-1.2716	ppb	12:44:19
1	Co 228.616†	7512.3	7254.7	112.64	ug/L	112.64	ppb	12:44:19
1	Cr 267.716†	10004.5	9465.2	94.729	ug/L	94.729	ppb	12:44:19
1	Cu 324.752†	29629.0	22183.0	67.844	ug/L	67.844	ppb	12:43:59
1	Mn 257.610†	8168169.2	7796422.3	7452.6	ug/L	7452.6	ppb	12:43:52
1	Mo 202.031†	-36.8	-60.1	6.7547	ug/L	6.7547	ppb	12:44:19
1	Ni 231.604†	3607.2	3313.5	69.138	ug/L	69.138	ppb	12:44:19
1	P 214.914†	1717.5	1394.4	617.79	ug/L	617.79	ppb	12:44:19
1	Pb 220.353†	1511.7	1519.3	170.12	ug/L	170.12	ppb	12:44:19
1	S 181.975 Axial†	315.7	252.9	271.22	ug/L	271.22	ppb	12:44:19
1	Sb 206.836†	106.8	57.5	3.5388	ug/L	3.5388	ppb	12:44:19
1	Se 196.026†	-942.0	-863.3	65.804	ug/L	65.804	ppb	12:44:19
1	Si 251.611†	176769.3	168094.6	4535.3	ug/L	4535.3	ppb	12:43:59
1	Sn 189.927†	-124.9	-125.5	-13.564	ug/L	-13.564	ppb	12:44:19
1	Ti 334.940†	2671051.3	2551125.2	3630.5	ug/L	3630.5	ppb	12:43:59
1	Tl 190.801†	-333.9	-277.6	4.3623	ug/L	4.3623	ppb	12:44:19
1	U 409.014†	-11694.9	-8194.6	-238.65	ug/L	-238.65	ppb	12:43:59
1	V 292.402†	50722.6	49949.7	279.04	ug/L	279.04	ppb	12:43:59
1	Zn 213.857†	28756.6	26570.5	194.50	ug/L	194.50	ppb	12:44:19
1	SiO2†	176644.6	167938.1	9773.6	ug/L	9773.6	ppb	12:45:30
2	Sc Radial	5963.2	5963.2	100	%			12:43:19
2	Y RADIAL	6793.2	6793.2	109.9	%			12:43:19
2	Al 396.153Radial†	195273.6	194894.3	129660	ug/L	129660	ppb	12:42:59
2	Ca 317.933Radial†	16578.1	16524.1	22696	ug/L	22696	ppb	12:42:59
2	Fe 238.204 Radial†	18543.7	18493.2	141870	ug/L	141870	ppb	12:42:59
2	K 766.490 Radial†	54273.0	51016.7	8158.6	ug/L	8158.6	ppb	12:42:59
2	Mg 279.077 IEC†	629.9	623.3	18075	ug/L	18075	ppb	12:43:19
2	Na 589.592 Radial†	10772.1	12475.3	3279.3	ug/L	3279.3	ppb	12:42:59
2	Sr 421.552†	40958.6	40889.9	221.05	ug/L	221.05	ppb	12:42:59
2	Sc 361.383	969243.2	969243.2	103.96	%			12:44:31
2	Y 371.029	857027.1	857027.1	111.45	%			12:44:31
2	Ag 328.068†	-9753.5	-9790.8	7.6175	ug/L	7.6175	ppb	12:44:31
2	As 188.979†	-23.3	9.1	55.611	ug/L	55.611	ppb	12:44:51
2	B 249.677†	1137.5	1620.8	12.861	ug/L	12.861	ppb	12:44:31
2	Ba 233.527†	230708.0	221915.8	1446.2	ug/L	1446.2	ppb	12:44:31
2	Be 313.107†	-7082.7	-2264.7	6.4101	ug/L	6.4101	ppb	12:44:31
2	Cd 226.502†	1239.4	1406.0	-0.9293	ug/L	-0.9293	ppb	12:44:51
2	Co 228.616†	7559.8	7355.9	114.35	ug/L	114.35	ppb	12:44:51
2	Cr 267.716†	10056.0	9588.5	95.884	ug/L	95.884	ppb	12:44:51
2	Cu 324.752†	29514.4	22291.6	68.028	ug/L	68.028	ppb	12:44:31
2	Mn 257.610†	8140631.7	7830242.1	7484.6	ug/L	7484.6	ppb	12:44:25
2	Mo 202.031†	-50.3	-73.3	5.8355	ug/L	5.8355	ppb	12:44:51
2	Ni 231.604†	3591.5	3325.1	69.378	ug/L	69.378	ppb	12:44:51

2	P 214.914†	1692.1	1382.7	613.14	ug/L	613.14 ppb	12:44:51
2	Pb 220.353†	1498.0	1517.2	169.73	ug/L	169.73 ppb	12:44:51
2	S 181.975 Axial†	319.8	259.2	278.90	ug/L	278.90 ppb	12:44:51
2	Sb 206.836†	82.8	35.3	-2.9008	ug/L	-2.9008 ppb	12:44:51
2	Se 196.026†	-931.3	-859.9	59.741	ug/L	59.741 ppb	12:44:51
2	Si 251.611†	176202.4	168854.5	4555.9	ug/L	4555.9 ppb	12:44:31
2	Sn 189.927†	-102.8	-105.1	-10.714	ug/L	-10.714 ppb	12:44:51
2	Ti 334.940†	2656590.5	2556936.4	3638.7	ug/L	3638.7 ppb	12:44:31
2	Tl 190.801†	-348.8	-294.4	0.3653	ug/L	0.3653 ppb	12:44:51
2	U 409.014†	-11702.3	-8288.1	-240.89	ug/L	-240.89 ppb	12:44:31
2	V 292.402†	50376.6	49991.4	279.60	ug/L	279.60 ppb	12:44:31
2	Zn 213.857†	28866.0	26888.0	197.22	ug/L	197.22 ppb	12:44:51
2	SiO2†	176266.1	168878.4	9828.5	ug/L	9828.5 ppb	12:45:35
3	Sc Radial	5993.3	5993.3	101	%		12:43:44
3	Y RADIAL	6814.5	6814.5	110.3	%		12:43:44
3	Al 396.153Radial†	196147.2	194783.6	129590	ug/L	129590 ppb	12:43:24
3	Ca 317.933Radial†	16719.6	16581.5	22774	ug/L	22774 ppb	12:43:24
3	Fe 238.204 Radial†	18593.5	18449.8	141540	ug/L	141540 ppb	12:43:24
3	K 766.490 Radial†	54666.0	51135.0	8177.7	ug/L	8177.7 ppb	12:43:24
3	Mg 279.077 IEC†	629.5	619.7	17971	ug/L	17971 ppb	12:43:44
3	Na 589.592 Radial†	10782.8	12431.9	3267.9	ug/L	3267.9 ppb	12:43:24
3	Sr 421.552†	41224.0	40948.3	221.37	ug/L	221.37 ppb	12:43:24
3	Sc 361.383	975057.7	975057.7	104.58	%		12:45:04
3	Y 371.029	863044.2	863044.2	112.24	%		12:45:04
3	Ag 328.068†	-9831.5	-9809.3	7.4252	ug/L	7.4252 ppb	12:45:04
3	As 188.979†	-15.6	16.5	58.101	ug/L	58.101 ppb	12:45:24
3	B 249.677†	1225.0	1697.9	14.430	ug/L	14.430 ppb	12:45:04
3	Ba 233.527†	231459.4	221310.9	1442.2	ug/L	1442.2 ppb	12:45:04
3	Be 313.107†	-7273.4	-2406.4	6.3558	ug/L	6.3558 ppb	12:45:04
3	Cd 226.502†	1240.1	1399.6	-0.9571	ug/L	-0.9571 ppb	12:45:24
3	Co 228.616†	7516.3	7270.9	112.93	ug/L	112.93 ppb	12:45:24
3	Cr 267.716†	10026.6	9502.8	95.047	ug/L	95.047 ppb	12:45:24
3	Cu 324.752†	29579.1	22184.1	67.718	ug/L	67.718 ppb	12:45:04
3	Mn 257.610†	8181928.0	7823033.3	7477.7	ug/L	7477.7 ppb	12:44:58
3	Mo 202.031†	-61.4	-83.7	5.2143	ug/L	5.2143 ppb	12:45:24
3	Ni 231.604†	3567.6	3281.6	68.471	ug/L	68.471 ppb	12:45:24
3	P 214.914†	1707.2	1387.4	615.76	ug/L	615.76 ppb	12:45:24
3	Pb 220.353†	1470.1	1482.0	166.21	ug/L	166.21 ppb	12:45:24
3	S 181.975 Axial†	327.5	264.7	285.40	ug/L	285.40 ppb	12:45:24
3	Sb 206.836†	108.8	59.7	4.1122	ug/L	4.1122 ppb	12:45:24
3	Se 196.026†	-934.8	-857.9	59.647	ug/L	59.647 ppb	12:45:24
3	Si 251.611†	175559.0	167228.5	4512.0	ug/L	4512.0 ppb	12:45:04
3	Sn 189.927†	-124.5	-125.3	-13.598	ug/L	-13.598 ppb	12:45:24
3	Ti 334.940†	2669547.1	2554086.7	3634.7	ug/L	3634.7 ppb	12:45:04
3	Tl 190.801†	-351.0	-294.5	0.2801	ug/L	0.2801 ppb	12:45:24
3	U 409.014†	-11694.9	-8213.9	-238.85	ug/L	-238.85 ppb	12:45:04
3	V 292.402†	50646.2	49960.2	279.45	ug/L	279.45 ppb	12:45:04
3	Zn 213.857†	28805.0	26664.1	195.49	ug/L	195.49 ppb	12:45:24
3	SiO2†	173134.5	164872.8	9595.2	ug/L	9595.2 ppb	12:45:40

Mean Data: 241711001|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	973680.4	104.43	%	0.422				0.40%
Sc Radial	5934.1	99.7	%	1.31				1.31%
Y 371.029	861543.9	112.04	%	0.518				0.46%
Y RADIAL	6755.7	109.3	%	1.36				1.24%
Ag 328.068†	-9814.1	7.7228	ug/L	0.36200	7.7228	ppb	0.36200	4.69%
Al 396.153Radial†	195654.8	130170	ug/L	940.8	130170	ppb	940.8	0.72%
As 188.979†	9.3	55.739	ug/L	2.3012	55.739	ppb	2.3012	4.13%
B 249.677†	1707.3	14.488	ug/L	1.6569	14.488	ppb	1.6569	11.44%
Ba 233.527†	221363.4	1442.6	ug/L	3.39	1442.6	ppb	3.39	0.23%
Be 313.107†	-2378.6	6.3648	ug/L	0.04154	6.3648	ppb	0.04154	0.65%
Ca 317.933Radial†	16633.0	22845	ug/L	194.9	22845	ppb	194.9	0.85%
Cd 226.502†	1399.5	-1.0527	ug/L	0.19009	-1.0527	ppb	0.19009	18.06%
Co 228.616†	7293.8	113.31	ug/L	0.916	113.31	ppb	0.916	0.81%
Cr 267.716†	9518.8	95.220	ug/L	0.5966	95.220	ppb	0.5966	0.63%
Cu 324.752†	22219.6	67.864	ug/L	0.1559	67.864	ppb	0.1559	0.23%
Fe 238.204 Radial†	18573.9	142490	ug/L	1370.8	142490	ppb	1370.8	0.96%
K 766.490 Radial†	51325.6	8208.6	ug/L	70.81	8208.6	ppb	70.81	0.86%

Mg 279.077 IEC†	624.6	18111	ug/L	161.2	18111	ppb	161.2	0.89%
Mn 257.610†	7816565.9	7471.6	ug/L	16.87	7471.6	ppb	16.87	0.23%
Mo 202.031†	-72.4	5.9348	ug/L	0.77501	5.9348	ppb	0.77501	13.06%
Na 589.592 Radial†	12506.6	3287.5	ug/L	24.81	3287.5	ppb	24.81	0.75%
Ni 231.604†	3306.7	68.996	ug/L	0.4700	68.996	ppb	0.4700	0.68%
P 214.914†	1388.2	615.57	ug/L	2.328	615.57	ppb	2.328	0.38%
Pb 220.353†	1506.2	168.69	ug/L	2.157	168.69	ppb	2.157	1.28%
S 181.975 Axial†	258.9	278.50	ug/L	7.100	278.50	ppb	7.100	2.55%
Sb 206.836†	50.8	1.5834	ug/L	3.89403	1.5834	ppb	3.89403	245.93%
Se 196.026†	-860.4	61.731	ug/L	3.5277	61.731	ppb	3.5277	5.71%
Si 251.611†	168059.2	4534.4	ug/L	21.96	4534.4	ppb	21.96	0.48%
Sn 189.927†	-118.6	-12.625	ug/L	1.6551	-12.625	ppb	1.6551	13.11%
Sr 421.552†	41066.2	222.00	ug/L	1.386	222.00	ppb	1.386	0.62%
Ti 334.940†	2554049.4	3634.6	ug/L	4.12	3634.6	ppb	4.12	0.11%
Tl 190.801†	-288.8	1.6692	ug/L	2.33261	1.6692	ppb	2.33261	139.74%
U 409.014†	-8232.2	-239.46	ug/L	1.240	-239.46	ppb	1.240	0.52%
V 292.402†	49967.1	279.36	ug/L	0.290	279.36	ppb	0.290	0.10%
Zn 213.857†	26707.6	195.74	ug/L	1.375	195.74	ppb	1.375	0.70%
SiO2†	167229.8	9732.4	ug/L	121.94	9732.4	ppb	121.94	1.25%

Sequence No.: 17
Sample ID: 1201981077|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 12/17/2009 12:47:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981077|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5989.0	5989.0	101	%			12:50:05
1	Y RADIAL	6945.8	6945.8	112.4	%			12:50:05
1	Al 396.153Radial†	190909.7	189718.6	126220	ug/L	126220	ppb	12:49:45
1	Ca 317.933Radial†	17062.6	16934.2	23259	ug/L	23259	ppb	12:49:45
1	Fe 238.204 Radial†	20194.1	20053.5	153840	ug/L	153840	ppb	12:49:45
1	K 766.490 Radial†	55441.5	51944.5	8261.3	ug/L	8261.3	ppb	12:49:45
1	Mg 279.077 IEC†	663.8	654.2	18968	ug/L	18968	ppb	12:50:05
1	Na 589.592 Radial†	10986.2	12641.7	3323.0	ug/L	3323.0	ppb	12:49:45
1	Sr 421.552†	42878.6	42621.7	230.42	ug/L	230.42	ppb	12:49:45
1	Sc 361.383	968476.5	968476.5	103.87	%			12:51:10
1	Y 371.029	875317.8	875317.8	113.83	%			12:51:10
1	Ag 328.068†	-10716.5	-10725.3	7.9148	ug/L	7.9148	ppb	12:51:10
1	As 188.979†	-20.2	12.0	58.317	ug/L	58.317	ppb	12:51:30
1	B 249.677†	1286.4	1765.0	14.050	ug/L	14.050	ppb	12:51:10
1	Ba 233.527†	316424.3	304610.8	1983.4	ug/L	1983.4	ppb	12:51:10
1	Be 313.107†	-4813.7	-85.7	7.0859	ug/L	7.0859	ppb	12:51:10
1	Cd 226.502†	1383.9	1546.1	-0.8066	ug/L	-0.8066	ppb	12:51:30
1	Co 228.616†	9205.5	8945.9	141.16	ug/L	141.16	ppb	12:51:30
1	Cr 267.716†	10229.0	9762.8	97.872	ug/L	97.872	ppb	12:51:30
1	Cu 324.752†	30283.1	23054.0	70.718	ug/L	70.718	ppb	12:51:10
1	Mn 257.610†	12239132.5	11782076.1	11256	ug/L	11256	ppb	12:51:03
1	Mo 202.031†	-15.4	-39.8	8.6158	ug/L	8.6158	ppb	12:51:30
1	Ni 231.604†	3817.3	3545.2	73.959	ug/L	73.959	ppb	12:51:30
1	P 214.914†	1841.7	1527.9	674.79	ug/L	674.79	ppb	12:51:30
1	Pb 220.353†	1821.7	1830.0	199.39	ug/L	199.39	ppb	12:51:30
1	S 181.975 Axial†	352.3	290.8	316.71	ug/L	316.71	ppb	12:51:30
1	Sb 206.836†	83.0	35.5	-2.4617	ug/L	-2.4617	ppb	12:51:30
1	Se 196.026†	-1012.6	-938.9	57.511	ug/L	57.511	ppb	12:51:30
1	Si 251.611†	187627.0	179987.2	4856.3	ug/L	4856.3	ppb	12:51:10
1	Sn 189.927†	-129.6	-131.0	-14.207	ug/L	-14.207	ppb	12:51:30
1	Ti 334.940†	2641219.1	2544161.4	3620.6	ug/L	3620.6	ppb	12:51:10
1	Tl 190.801†	-436.7	-379.2	0.7938	ug/L	0.7938	ppb	12:51:30
1	U 409.014†	-13378.4	-9910.5	-286.03	ug/L	-286.03	ppb	12:51:10
1	V 292.402†	57574.8	56959.5	320.31	ug/L	320.31	ppb	12:51:10
1	Zn 213.857†	29714.5	27726.9	202.62	ug/L	202.62	ppb	12:51:30
1	SiO2†	187409.5	179740.3	10461	ug/L	10461	ppb	12:52:41
2	Sc Radial	6001.2	6001.2	101	%			12:50:31
2	Y RADIAL	6963.9	6963.9	112.7	%			12:50:31
2	Al 396.153Radial†	190987.1	189411.5	126010	ug/L	126010	ppb	12:50:11
2	Ca 317.933Radial†	17004.7	16842.5	23133	ug/L	23133	ppb	12:50:11
2	Fe 238.204 Radial†	20069.9	19889.8	152590	ug/L	152590	ppb	12:50:11
2	K 766.490 Radial†	55565.5	51955.9	8263.7	ug/L	8263.7	ppb	12:50:11
2	Mg 279.077 IEC†	656.8	646.0	18728	ug/L	18728	ppb	12:50:31
2	Na 589.592 Radial†	10846.1	12480.7	3280.7	ug/L	3280.7	ppb	12:50:11
2	Sr 421.552†	42673.5	42332.0	228.85	ug/L	228.85	ppb	12:50:11
2	Sc 361.383	983042.8	983042.8	105.44	%			12:51:43
2	Y 371.029	887355.3	887355.3	115.40	%			12:51:43
2	Ag 328.068†	-10881.6	-10728.9	7.4744	ug/L	7.4744	ppb	12:51:43
2	As 188.979†	-7.8	24.1	62.227	ug/L	62.227	ppb	12:52:03
2	B 249.677†	1309.2	1768.3	14.288	ug/L	14.288	ppb	12:51:43
2	Ba 233.527†	320134.5	303615.9	1976.9	ug/L	1976.9	ppb	12:51:43
2	Be 313.107†	-4809.2	-12.8	7.0925	ug/L	7.0925	ppb	12:51:43
2	Cd 226.502†	1385.2	1527.6	-0.8558	ug/L	-0.8558	ppb	12:52:03
2	Co 228.616†	9202.0	8811.3	138.93	ug/L	138.93	ppb	12:52:03
2	Cr 267.716†	10142.4	9534.7	95.641	ug/L	95.641	ppb	12:52:03
2	Cu 324.752†	30661.0	22980.5	70.454	ug/L	70.454	ppb	12:51:43
2	Mn 257.610†	12371526.6	11733053.4	11209	ug/L	11209	ppb	12:51:36
2	Mo 202.031†	-17.4	-41.5	8.4304	ug/L	8.4304	ppb	12:52:03
2	Ni 231.604†	3806.0	3480.0	72.598	ug/L	72.598	ppb	12:52:03

2	P 214.914†	1831.7	1492.2	657.83	ug/L	657.83 ppb	12:52:03
2	Pb 220.353†	1791.5	1775.3	193.96	ug/L	193.96 ppb	12:52:03
2	S 181.975 Axial†	354.0	287.3	312.67	ug/L	312.67 ppb	12:52:03
2	Sb 206.836†	85.4	36.6	-2.0927	ug/L	-2.0927 ppb	12:52:03
2	Se 196.026†	-1008.6	-920.7	62.871	ug/L	62.871 ppb	12:52:03
2	Si 251.611†	189867.6	179435.7	4841.5	ug/L	4841.5 ppb	12:51:43
2	Sn 189.927†	-136.7	-135.8	-14.930	ug/L	-14.930 ppb	12:52:03
2	Ti 334.940†	2674455.0	2538006.9	3611.8	ug/L	3611.8 ppb	12:51:43
2	Tl 190.801†	-454.0	-389.5	-2.0937	ug/L	-2.0937 ppb	12:52:03
2	U 409.014†	-13479.8	-9815.9	-283.32	ug/L	-283.32 ppb	12:51:43
2	V 292.402†	58225.2	56755.0	319.26	ug/L	319.26 ppb	12:51:43
2	Zn 213.857†	29555.9	27152.6	198.23	ug/L	198.23 ppb	12:52:03
2	SiO2†	188544.3	178143.3	10368	ug/L	10368 ppb	12:52:47
3	Sc Radial	5996.6	5996.6	101	%		12:50:56
3	Y RADIAL	6945.5	6945.5	112.4	%		12:50:56
3	Al 396.153Radial†	194253.9	192798.7	128270	ug/L	128270 ppb	12:50:36
3	Ca 317.933Radial†	17370.4	17218.3	23649	ug/L	23649 ppb	12:50:36
3	Fe 238.204 Radial†	20443.0	20275.2	155540	ug/L	155540 ppb	12:50:36
3	K 766.490 Radial†	56360.0	52786.6	8400.2	ug/L	8400.2 ppb	12:50:36
3	Mg 279.077 IEC†	653.7	643.4	18650	ug/L	18650 ppb	12:50:56
3	Na 589.592 Radial†	11079.0	12720.1	3343.6	ug/L	3343.6 ppb	12:50:36
3	Sr 421.552†	43454.8	43139.9	233.22	ug/L	233.22 ppb	12:50:36
3	Sc 361.383	979745.7	979745.7	105.08	%		12:52:16
3	Y 371.029	885729.9	885729.9	115.19	%		12:52:16
3	Ag 328.068†	-10789.4	-10676.0	8.6723	ug/L	8.6723 ppb	12:52:16
3	As 188.979†	-26.2	6.5	56.598	ug/L	56.598 ppb	12:52:36
3	B 249.677†	1138.3	1609.8	10.766	ug/L	10.766 ppb	12:52:16
3	Ba 233.527†	318540.2	303120.5	1973.8	ug/L	1973.8 ppb	12:52:16
3	Be 313.107†	-5146.0	-348.7	6.9814	ug/L	6.9814 ppb	12:52:16
3	Cd 226.502†	1385.3	1532.1	-1.1094	ug/L	-1.1094 ppb	12:52:36
3	Co 228.616†	9225.9	8863.4	139.76	ug/L	139.76 ppb	12:52:36
3	Cr 267.716†	10208.1	9629.6	96.610	ug/L	96.610 ppb	12:52:36
3	Cu 324.752†	30538.3	22961.6	70.553	ug/L	70.553 ppb	12:52:16
3	Mn 257.610†	12136188.3	11548585.2	11034	ug/L	11034 ppb	12:52:09
3	Mo 202.031†	-30.0	-53.5	7.9488	ug/L	7.9488 ppb	12:52:36
3	Ni 231.604†	3771.9	3459.7	72.174	ug/L	72.174 ppb	12:52:36
3	P 214.914†	1837.3	1503.3	661.82	ug/L	661.82 ppb	12:52:36
3	Pb 220.353†	1811.0	1799.6	196.66	ug/L	196.66 ppb	12:52:36
3	S 181.975 Axial†	366.7	300.6	327.78	ug/L	327.78 ppb	12:52:36
3	Sb 206.836†	93.6	44.6	0.1833	ug/L	0.1833 ppb	12:52:36
3	Se 196.026†	-1006.9	-922.2	72.677	ug/L	72.677 ppb	12:52:36
3	Si 251.611†	187909.5	178178.3	4807.5	ug/L	4807.5 ppb	12:52:16
3	Sn 189.927†	-132.7	-132.5	-14.364	ug/L	-14.364 ppb	12:52:36
3	Ti 334.940†	2664943.2	2537491.2	3611.1	ug/L	3611.1 ppb	12:52:16
3	Tl 190.801†	-450.3	-387.4	-2.5543	ug/L	-2.5543 ppb	12:52:36
3	U 409.014†	-13410.2	-9792.7	-283.07	ug/L	-283.07 ppb	12:52:16
3	V 292.402†	57886.7	56618.7	317.97	ug/L	317.97 ppb	12:52:16
3	Zn 213.857†	29601.6	27290.4	199.04	ug/L	199.04 ppb	12:52:36
3	SiO2†	189455.1	179611.7	10453	ug/L	10453 ppb	12:52:52

Mean Data: 1201981077|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	977088.3	104.80	%	0.819				0.78%
Sc Radial	5995.6	101	%	0.1				0.10%
Y 371.029	882801.0	114.81	%	0.849				0.74%
Y RADIAL	6951.8	112.5	%	0.17				0.15%
Ag 328.068†	-10710.0	8.0205	ug/L	0.60591	8.0205	ppb	0.60591	7.55%
Al 396.153Radial†	190642.9	126830	ug/L	1246.3	126830	ppb	1246.3	0.98%
As 188.979†	14.2	59.047	ug/L	2.8848	59.047	ppb	2.8848	4.89%
B 249.677†	1714.4	13.035	ug/L	1.9687	13.035	ppb	1.9687	15.10%
Ba 233.527†	303782.4	1978.0	ug/L	4.91	1978.0	ppb	4.91	0.25%
Be 313.107†	-149.1	7.0533	ug/L	0.06234	7.0533	ppb	0.06234	0.88%
Ca 317.933Radial†	16998.4	23347	ug/L	269.1	23347	ppb	269.1	1.15%
Cd 226.502†	1535.3	-0.9239	ug/L	0.16248	-0.9239	ppb	0.16248	17.59%
Co 228.616†	8873.5	139.95	ug/L	1.125	139.95	ppb	1.125	0.80%
Cr 267.716†	9642.4	96.708	ug/L	1.1188	96.708	ppb	1.1188	1.16%
Cu 324.752†	22998.7	70.575	ug/L	0.1337	70.575	ppb	0.1337	0.19%
Fe 238.204 Radial†	20072.8	153990	ug/L	1484.0	153990	ppb	1484.0	0.96%
K 766.490 Radial†	52229.0	8308.4	ug/L	79.55	8308.4	ppb	79.55	0.96%

Mg 279.077 IEC†	647.9	18782	ug/L	165.4	18782	ppb	165.4	0.88%
Mn 257.610†	11687904.9	11166	ug/L	117.3	11166	ppb	117.3	1.05%
Mo 202.031†	-44.9	8.3317	ug/L	0.34428	8.3317	ppb	0.34428	4.13%
Na 589.592 Radial†	12614.2	3315.8	ug/L	32.08	3315.8	ppb	32.08	0.97%
Ni 231.604†	3495.0	72.910	ug/L	0.9322	72.910	ppb	0.9322	1.28%
P 214.914†	1507.8	664.81	ug/L	8.870	664.81	ppb	8.870	1.33%
Pb 220.353†	1801.6	196.67	ug/L	2.715	196.67	ppb	2.715	1.38%
S 181.975 Axial†	292.9	319.05	ug/L	7.821	319.05	ppb	7.821	2.45%
Sb 206.836†	38.9	-1.4570	ug/L	1.43253	-1.4570	ppb	1.43253	98.32%
Se 196.026†	-927.3	64.353	ug/L	7.6908	64.353	ppb	7.6908	11.95%
Si 251.611†	179200.4	4835.1	ug/L	25.05	4835.1	ppb	25.05	0.52%
Sn 189.927†	-133.1	-14.500	ug/L	0.3803	-14.500	ppb	0.3803	2.62%
Sr 421.552†	42697.9	230.83	ug/L	2.212	230.83	ppb	2.212	0.96%
Ti 334.940†	2539886.5	3614.5	ug/L	5.27	3614.5	ppb	5.27	0.15%
Tl 190.801†	-385.4	-1.2847	ug/L	1.81471	-1.2847	ppb	1.81471	141.25%
U 409.014†	-9839.7	-284.14	ug/L	1.640	-284.14	ppb	1.640	0.58%
V 292.402†	56777.8	319.18	ug/L	1.173	319.18	ppb	1.173	0.37%
Zn 213.857†	27390.0	199.96	ug/L	2.336	199.96	ppb	2.336	1.17%
SiO2†	179165.1	10427	ug/L	51.6	10427	ppb	51.6	0.50%

Sequence No.: 18
Sample ID: 1201981078|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 12/17/2009 12:55:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981078|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	6023.5	6023.5	101	%			12:57:16
1	Y RADIAL	7099.4	7099.4	114.9	%			12:57:16
1	Al 396.153Radial†	281861.1	278490.1	185260	ug/L	185260	ppb	12:56:56
1	Ca 317.933Radial†	33263.6	32843.4	45110	ug/L	45110	ppb	12:56:56
1	Fe 238.204 Radial†	26788.6	26453.8	202950	ug/L	202950	ppb	12:56:56
1	K 766.490 Radial†	104687.7	100283.2	16119	ug/L	16119	ppb	12:56:56
1	Mg 279.077 IEC†	1019.9	1002.3	29095	ug/L	29095	ppb	12:57:16
1	Na 589.592 Radial†	30123.4	31486.4	8276.6	ug/L	8276.6	ppb	12:56:56
1	Sr 421.552†	136043.2	134422.5	726.96	ug/L	726.96	ppb	12:56:56
1	Sc 361.383	948184.6	948184.6	101.70	%			12:58:22
1	Y 371.029	863579.8	863579.8	112.31	%			12:58:22
1	Ag 328.068†	100204.8	98123.4	480.00	ug/L	480.00	ppb	12:58:22
1	As 188.979†	1309.7	1319.3	530.80	ug/L	530.80	ppb	12:58:27
1	B 249.677†	22795.0	22941.0	424.54	ug/L	424.54	ppb	12:58:22
1	Ba 233.527†	292962.7	288060.0	1879.1	ug/L	1879.1	ppb	12:58:22
1	Be 313.107†	1450660.9	1430989.7	477.44	ug/L	477.44	ppb	12:58:22
1	Cd 226.502†	51134.0	50494.1	454.45	ug/L	454.45	ppb	12:58:27
1	Co 228.616†	32995.6	32528.5	534.08	ug/L	534.08	ppb	12:58:27
1	Cr 267.716†	62677.6	61546.4	600.42	ug/L	600.42	ppb	12:58:22
1	Cu 324.752†	214540.6	204859.1	569.02	ug/L	569.02	ppb	12:58:22
1	Mn 257.610†	7728307.2	7598719.0	7269.6	ug/L	7269.6	ppb	12:58:15
1	Mo 202.031†	7898.4	7741.6	460.81	ug/L	460.81	ppb	12:58:27
1	Ni 231.604†	26608.6	26034.6	543.48	ug/L	543.48	ppb	12:58:27
1	P 214.914†	3885.3	3575.4	1609.1	ug/L	1609.1	ppb	12:58:27
1	Pb 220.353†	6389.4	6359.0	664.07	ug/L	664.07	ppb	12:58:27
1	S 181.975 Axial†	4536.6	4412.5	5145.9	ug/L	5145.9	ppb	12:58:27
1	Sb 206.836†	1644.0	1572.2	443.61	ug/L	443.61	ppb	12:58:27
1	Se 196.026†	-450.5	-407.0	523.97	ug/L	523.97	ppb	12:58:27
1	Si 251.611†	288196.9	282743.5	7618.6	ug/L	7618.6	ppb	12:58:22
1	Sn 189.927†	3175.3	3116.1	453.51	ug/L	453.51	ppb	12:58:27
1	Ti 334.940†	3687996.0	3627877.6	5163.0	ug/L	5163.0	ppb	12:58:15
1	Tl 190.801†	1482.9	1499.2	456.91	ug/L	456.91	ppb	12:58:27
1	U 409.014†	6692.4	9549.5	230.10	ug/L	230.10	ppb	12:58:22
1	V 292.402†	150995.0	150006.2	886.85	ug/L	886.85	ppb	12:58:22
1	Zn 213.857†	96238.7	93752.6	714.33	ug/L	714.33	ppb	12:58:22
1	SiO2†	293926.9	288340.4	16759	ug/L	16759	ppb	12:59:10
2	Sc Radial	6102.5	6102.5	103	%			12:57:41
2	Y RADIAL	7195.0	7195.0	116.4	%			12:57:41
2	Al 396.153Radial†	287679.3	280560.9	186640	ug/L	186640	ppb	12:57:21
2	Ca 317.933Radial†	33850.9	32990.9	45312	ug/L	45312	ppb	12:57:21
2	Fe 238.204 Radial†	27270.4	26581.2	203930	ug/L	203930	ppb	12:57:21
2	K 766.490 Radial†	106574.3	100784.7	16202	ug/L	16202	ppb	12:57:21
2	Mg 279.077 IEC†	1036.6	1005.6	29190	ug/L	29190	ppb	12:57:41
2	Na 589.592 Radial†	30624.9	31590.4	8303.9	ug/L	8303.9	ppb	12:57:21
2	Sr 421.552†	138695.3	135269.8	731.54	ug/L	731.54	ppb	12:57:21
2	Sc 361.383	963502.9	963502.9	103.34	%			12:58:41
2	Y 371.029	876966.6	876966.6	114.05	%			12:58:41
2	Ag 328.068†	101708.6	98012.1	479.85	ug/L	479.85	ppb	12:58:41
2	As 188.979†	1299.1	1288.5	519.03	ug/L	519.03	ppb	12:58:46
2	B 249.677†	23285.5	23059.3	426.78	ug/L	426.78	ppb	12:58:41
2	Ba 233.527†	296207.2	286619.6	1869.8	ug/L	1869.8	ppb	12:58:41
2	Be 313.107†	1471307.4	1428290.3	476.26	ug/L	476.26	ppb	12:58:41
2	Cd 226.502†	50476.5	49058.5	440.85	ug/L	440.85	ppb	12:58:46
2	Co 228.616†	32578.8	31609.3	518.93	ug/L	518.93	ppb	12:58:46
2	Cr 267.716†	63399.1	61264.8	597.71	ug/L	597.71	ppb	12:58:41
2	Cu 324.752†	218818.1	205644.5	571.22	ug/L	571.22	ppb	12:58:41
2	Mn 257.610†	7613483.4	7366789.7	7048.4	ug/L	7048.4	ppb	12:58:34
2	Mo 202.031†	7826.1	7548.1	449.72	ug/L	449.72	ppb	12:58:46
2	Ni 231.604†	26331.5	25350.5	529.20	ug/L	529.20	ppb	12:58:46

2	P 214.914†	3796.3	3428.6	1534.7 ug/L	1534.7 ppb	12:58:46
2	Pb 220.353†	6227.8	6102.7	638.54 ug/L	638.54 ppb	12:58:46
2	S 181.975 Axial†	4450.9	4258.6	4964.9 ug/L	4964.9 ppb	12:58:46
2	Sb 206.836†	1644.1	1546.6	436.26 ug/L	436.26 ppb	12:58:46
2	Se 196.026†	-476.3	-425.0	518.07 ug/L	518.07 ppb	12:58:46
2	Si 251.611†	291972.4	281891.6	7595.7 ug/L	7595.7 ppb	12:58:41
2	Sn 189.927†	3160.5	3052.1	444.39 ug/L	444.39 ppb	12:58:46
2	Ti 334.940†	3634592.2	3518545.4	5007.5 ug/L	5007.5 ppb	12:58:34
2	Tl 190.801†	1489.8	1482.8	450.43 ug/L	450.43 ppb	12:58:46
2	U 409.014†	7052.7	9793.6	236.55 ug/L	236.55 ppb	12:58:41
2	V 292.402†	153071.5	149655.0	884.58 ug/L	884.58 ppb	12:58:41
2	Zn 213.857†	97453.9	93424.0	711.73 ug/L	711.73 ppb	12:58:41
2	SiO2†	291617.5	281510.8	16362 ug/L	16362 ppb	12:59:16
3	Sc Radial	6025.4	6025.4	101 %		12:58:07
3	Y RADIAL	7093.0	7093.0	114.8 %		12:58:07
3	Al 396.153Radial†	285334.9	281835.1	187480 ug/L	187480 ppb	12:57:47
3	Ca 317.933Radial†	33568.0	33133.9	45509 ug/L	45509 ppb	12:57:47
3	Fe 238.204 Radial†	27045.2	26699.1	204840 ug/L	204840 ppb	12:57:47
3	K 766.490 Radial†	105750.7	101301.2	16285 ug/L	16285 ppb	12:57:47
3	Mg 279.077 IEC†	1028.9	1010.9	29344 ug/L	29344 ppb	12:58:07
3	Na 589.592 Radial†	30190.6	31543.6	8291.6 ug/L	8291.6 ppb	12:57:47
3	Sr 421.552†	136982.2	135308.5	731.75 ug/L	731.75 ppb	12:57:47
3	Sc 361.383	960350.4	960350.4	103.00 %		12:59:00
3	Y 371.029	875106.0	875106.0	113.81 %		12:59:00
3	Ag 328.068†	101121.4	97765.0	479.11 ug/L	479.11 ppb	12:59:00
3	As 188.979†	1323.1	1316.0	529.28 ug/L	529.28 ppb	12:59:05
3	B 249.677†	23047.6	22902.3	423.55 ug/L	423.55 ppb	12:59:00
3	Ba 233.527†	295006.4	286394.8	1868.3 ug/L	1868.3 ppb	12:59:00
3	Be 313.107†	1466295.9	1428098.6	476.33 ug/L	476.33 ppb	12:59:00
3	Cd 226.502†	50694.2	49430.2	444.25 ug/L	444.25 ppb	12:59:05
3	Co 228.616†	32654.1	31786.0	521.73 ug/L	521.73 ppb	12:59:05
3	Cr 267.716†	63147.4	61221.8	597.30 ug/L	597.30 ppb	12:59:00
3	Cu 324.752†	217179.7	204748.9	568.82 ug/L	568.82 ppb	12:59:00
3	Mn 257.610†	7687571.1	7462902.1	7140.2 ug/L	7140.2 ppb	12:58:53
3	Mo 202.031†	7830.1	7576.9	451.44 ug/L	451.44 ppb	12:59:05
3	Ni 231.604†	26374.4	25475.8	531.82 ug/L	531.82 ppb	12:59:05
3	P 214.914†	3834.5	3477.7	1559.2 ug/L	1559.2 ppb	12:59:05
3	Pb 220.353†	6291.4	6184.2	646.85 ug/L	646.85 ppb	12:59:05
3	S 181.975 Axial†	4449.7	4271.6	4980.0 ug/L	4980.0 ppb	12:59:05
3	Sb 206.836†	1650.4	1557.9	439.28 ug/L	439.28 ppb	12:59:05
3	Se 196.026†	-504.0	-453.3	506.33 ug/L	506.33 ppb	12:59:05
3	Si 251.611†	289892.7	280800.0	7566.2 ug/L	7566.2 ppb	12:59:00
3	Sn 189.927†	3110.7	3013.8	438.94 ug/L	438.94 ppb	12:59:05
3	Ti 334.940†	3674591.4	3568923.9	5079.2 ug/L	5079.2 ppb	12:58:53
3	Tl 190.801†	1481.7	1479.6	450.74 ug/L	450.74 ppb	12:59:05
3	U 409.014†	7061.2	9824.2	237.26 ug/L	237.26 ppb	12:59:00
3	V 292.402†	152478.7	149565.7	883.85 ug/L	883.85 ppb	12:59:00
3	Zn 213.857†	97005.8	93298.5	710.64 ug/L	710.64 ppb	12:59:00
3	SiO2†	292346.4	283144.7	16457 ug/L	16457 ppb	12:59:21

Mean Data: 1201981078|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	957346.0	102.68	%	0.868				0.84%
Sc Radial	6050.5	102	%	0.8				0.74%
Y 371.029	871884.1	113.39	%	0.943				0.83%
Y RADIAL	7129.2	115.4	%	0.92				0.80%
Ag 328.068†	97966.8	479.65	ug/L	0.475	479.65	ppb	0.475	0.10%
Al 396.153Radial†	280295.4	186460	ug/L	1123.4	186460	ppb	1123.4	0.60%
As 188.979†	1307.9	526.37	ug/L	6.403	526.37	ppb	6.403	1.22%
B 249.677†	22967.5	424.96	ug/L	1.655	424.96	ppb	1.655	0.39%
Ba 233.527†	287024.8	1872.4	ug/L	5.83	1872.4	ppb	5.83	0.31%
Be 313.107†	1429126.2	476.68	ug/L	0.664	476.68	ppb	0.664	0.14%
Ca 317.933Radial†	32989.4	45310	ug/L	199.5	45310	ppb	199.5	0.44%
Cd 226.502†	49660.9	446.52	ug/L	7.074	446.52	ppb	7.074	1.58%
Co 228.616†	31974.6	524.91	ug/L	8.060	524.91	ppb	8.060	1.54%
Cr 267.716†	61344.3	598.48	ug/L	1.693	598.48	ppb	1.693	0.28%
Cu 324.752†	205084.2	569.69	ug/L	1.328	569.69	ppb	1.328	0.23%
Fe 238.204 Radial†	26578.0	203910	ug/L	940.9	203910	ppb	940.9	0.46%
K 766.490 Radial†	100789.7	16202	ug/L	83.1	16202	ppb	83.1	0.51%

Mg 279.077 IEC†	1006.2	29210	ug/L	125.4	29210	ppb	125.4	0.43%
Mn 257.610†	7476137.0	7152.7	ug/L	111.13	7152.7	ppb	111.13	1.55%
Mo 202.031†	7622.2	453.99	ug/L	5.966	453.99	ppb	5.966	1.31%
Na 589.592 Radial†	31540.1	8290.7	ug/L	13.70	8290.7	ppb	13.70	0.17%
Ni 231.604†	25620.3	534.83	ug/L	7.603	534.83	ppb	7.603	1.42%
P 214.914†	3493.9	1567.7	ug/L	37.93	1567.7	ppb	37.93	2.42%
Pb 220.353†	6215.3	649.82	ug/L	13.023	649.82	ppb	13.023	2.00%
S 181.975 Axial†	4314.2	5030.3	ug/L	100.41	5030.3	ppb	100.41	2.00%
Sb 206.836†	1558.9	439.72	ug/L	3.691	439.72	ppb	3.691	0.84%
Se 196.026†	-428.4	516.12	ug/L	8.983	516.12	ppb	8.983	1.74%
Si 251.611†	281811.7	7593.5	ug/L	26.23	7593.5	ppb	26.23	0.35%
Sn 189.927†	3060.7	445.61	ug/L	7.363	445.61	ppb	7.363	1.65%
Sr 421.552†	135000.3	730.08	ug/L	2.708	730.08	ppb	2.708	0.37%
Ti 334.940†	3571782.3	5083.2	ug/L	77.84	5083.2	ppb	77.84	1.53%
Tl 190.801†	1487.2	452.70	ug/L	3.656	452.70	ppb	3.656	0.81%
U 409.014†	9722.4	234.63	ug/L	3.942	234.63	ppb	3.942	1.68%
V 292.402†	149742.3	885.09	ug/L	1.563	885.09	ppb	1.563	0.18%
Zn 213.857†	93491.7	712.23	ug/L	1.896	712.23	ppb	1.896	0.27%
SiO2†	284332.0	16526	ug/L	207.5	16526	ppb	207.5	1.26%

Sequence No.: 19
Sample ID: 1201981080|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 12/17/2009 13:01:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981080|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6138.3	6138.3	103	%			13:03:45
1	Y RADIAL	6960.4	6960.4	112.6	%			13:03:45
1	Al 396.153Radial†	293119.6	284199.1	189060	ug/L	189060	ppb	13:03:25
1	Ca 317.933Radial†	20291.0	19651.9	26992	ug/L	26992	ppb	13:03:25
1	Fe 238.204 Radial†	21748.3	21072.3	161670	ug/L	161670	ppb	13:03:25
1	K 766.490 Radial†	105016.9	98668.7	15886	ug/L	15886	ppb	13:03:25
1	Mg 279.077 IEC†	950.6	916.3	26619	ug/L	26619	ppb	13:03:45
1	Na 589.592 Radial†	30512.8	31307.6	8229.6	ug/L	8229.6	ppb	13:03:25
1	Sr 421.552†	132014.7	128004.0	692.40	ug/L	692.40	ppb	13:03:25
1	Sc 361.383	972136.6	972136.6	104.27	%			13:04:46
1	Y 371.029	857189.7	857189.7	111.48	%			13:04:46
1	Ag 328.068†	105689.8	100956.2	477.80	ug/L	477.80	ppb	13:04:46
1	As 188.979†	1319.3	1296.7	514.46	ug/L	514.46	ppb	13:04:51
1	B 249.677†	23253.5	22828.4	427.88	ug/L	427.88	ppb	13:04:46
1	Ba 233.527†	287987.7	276191.0	1800.2	ug/L	1800.2	ppb	13:04:46
1	Be 313.107†	1493664.1	1437087.7	478.93	ug/L	478.93	ppb	13:04:46
1	Cd 226.502†	50918.2	49048.3	444.98	ug/L	444.98	ppb	13:04:51
1	Co 228.616†	31753.5	30537.8	501.75	ug/L	501.75	ppb	13:04:51
1	Cr 267.716†	61333.7	58739.0	572.31	ug/L	572.31	ppb	13:04:46
1	Cu 324.752†	220346.1	205229.4	567.93	ug/L	567.93	ppb	13:04:46
1	Mn 257.610†	5545913.7	5318400.1	5089.9	ug/L	5089.9	ppb	13:04:46
1	Mo 202.031†	8004.7	7652.2	452.72	ug/L	452.72	ppb	13:04:51
1	Ni 231.604†	26175.9	24975.0	521.37	ug/L	521.37	ppb	13:04:51
1	P 214.914†	3050.9	2681.0	1195.0	ug/L	1195.0	ppb	13:04:51
1	Pb 220.353†	6052.2	5880.8	620.28	ug/L	620.28	ppb	13:04:51
1	S 181.975 Axial†	4473.5	4242.0	4945.0	ug/L	4945.0	ppb	13:04:51
1	Sb 206.836†	1710.6	1596.2	450.88	ug/L	450.88	ppb	13:04:51
1	Se 196.026†	-196.3	-152.4	520.04	ug/L	520.04	ppb	13:04:51
1	Si 251.611†	289823.0	277321.0	7472.3	ug/L	7472.3	ppb	13:04:46
1	Sn 189.927†	3308.0	3166.4	458.28	ug/L	458.28	ppb	13:04:51
1	Ti 334.940†	3592827.3	3447253.8	4905.1	ug/L	4905.1	ppb	13:04:46
1	Tl 190.801†	1580.6	1557.0	457.17	ug/L	457.17	ppb	13:04:51
1	U 409.014†	7915.0	10559.9	262.52	ug/L	262.52	ppb	13:04:46
1	V 292.402†	134701.6	130721.4	775.57	ug/L	775.57	ppb	13:04:46
1	Zn 213.857†	97311.0	92449.5	708.23	ug/L	708.23	ppb	13:04:46
1	SiO2†	292770.3	280110.2	16280	ug/L	16280	ppb	13:05:25
2	Sc Radial	6127.0	6127.0	103	%			13:04:10
2	Y RADIAL	6972.3	6972.3	112.8	%			13:04:10
2	Al 396.153Radial†	302763.2	294091.9	195640	ug/L	195640	ppb	13:03:50
2	Ca 317.933Radial†	20917.6	20297.0	27877	ug/L	27877	ppb	13:03:50
2	Fe 238.204 Radial†	22413.0	21757.0	166920	ug/L	166920	ppb	13:03:50
2	K 766.490 Radial†	108263.0	102010.1	16426	ug/L	16426	ppb	13:03:50
2	Mg 279.077 IEC†	953.8	921.1	26757	ug/L	26757	ppb	13:04:10
2	Na 589.592 Radial†	31450.5	32273.0	8483.4	ug/L	8483.4	ppb	13:03:50
2	Sr 421.552†	136311.8	132414.7	716.25	ug/L	716.25	ppb	13:03:50
2	Sc 361.383	965895.8	965895.8	103.60	%			13:05:00
2	Y 371.029	851563.4	851563.4	110.74	%			13:05:00
2	Ag 328.068†	104993.5	100939.0	479.48	ug/L	479.48	ppb	13:05:00
2	As 188.979†	1333.1	1318.2	522.76	ug/L	522.76	ppb	13:05:05
2	B 249.677†	23026.6	22753.6	425.68	ug/L	425.68	ppb	13:05:00
2	Ba 233.527†	287371.0	277380.2	1808.2	ug/L	1808.2	ppb	13:05:00
2	Be 313.107†	1486094.0	1439036.4	479.58	ug/L	479.58	ppb	13:05:00
2	Cd 226.502†	51390.4	49819.6	451.70	ug/L	451.70	ppb	13:05:05
2	Co 228.616†	32052.5	31023.2	509.83	ug/L	509.83	ppb	13:05:05
2	Cr 267.716†	61238.1	59026.8	575.19	ug/L	575.19	ppb	13:05:00
2	Cu 324.752†	218847.9	205148.7	567.98	ug/L	567.98	ppb	13:05:00
2	Mn 257.610†	5526923.9	5334436.6	5105.7	ug/L	5105.7	ppb	13:05:00
2	Mo 202.031†	8041.3	7737.1	457.99	ug/L	457.99	ppb	13:05:05
2	Ni 231.604†	26453.0	25404.6	530.34	ug/L	530.34	ppb	13:05:05

2	P 214.914†	3055.9	2704.8	1205.1 ug/L	1205.1 ppb	13:05:05
2	Pb 220.353†	6038.8	5905.3	623.80 ug/L	623.80 ppb	13:05:05
2	S 181.975 Axial†	4568.4	4361.3	5083.8 ug/L	5083.8 ppb	13:05:05
2	Sb 206.836†	1717.2	1613.2	455.83 ug/L	455.83 ppb	13:05:05
2	Se 196.026†	-208.9	-165.7	532.54 ug/L	532.54 ppb	13:05:05
2	Si 251.611†	287012.4	276403.9	7447.3 ug/L	7447.3 ppb	13:05:00
2	Sn 189.927†	3333.0	3211.1	464.84 ug/L	464.84 ppb	13:05:05
2	Ti 334.940†	3573999.0	3451343.4	4911.0 ug/L	4911.0 ppb	13:05:00
2	Tl 190.801†	1595.5	1581.2	463.49 ug/L	463.49 ppb	13:05:05
2	U 409.014†	7838.2	10534.9	261.18 ug/L	261.18 ppb	13:05:00
2	V 292.402†	133991.7	130870.8	775.75 ug/L	775.75 ppb	13:05:00
2	Zn 213.857†	96976.3	92729.4	709.87 ug/L	709.87 ppb	13:05:00
2	SiO2†	286847.0	276206.8	16052 ug/L	16052 ppb	13:05:30
3	Sc Radial	6057.0	6057.0	102 %		13:04:35
3	Y RADIAL	6916.2	6916.2	111.9 %		13:04:35
3	Al 396.153Radial†	298368.4	293167.9	195020 ug/L	195020 ppb	13:04:15
3	Ca 317.933Radial†	20597.8	20217.2	27768 ug/L	27768 ppb	13:04:15
3	Fe 238.204 Radial†	22085.3	21686.2	166380 ug/L	166380 ppb	13:04:15
3	K 766.490 Radial†	106461.5	101453.6	16337 ug/L	16337 ppb	13:04:15
3	Mg 279.077 IEC†	951.6	929.6	27006 ug/L	27006 ppb	13:04:35
3	Na 589.592 Radial†	30584.2	31774.4	8352.3 ug/L	8352.3 ppb	13:04:15
3	Sr 421.552†	133580.7	131259.3	710.00 ug/L	710.00 ppb	13:04:15
3	Sc 361.383	970910.3	970910.3	104.14 %		13:05:15
3	Y 371.029	856176.7	856176.7	111.34 %		13:05:15
3	Ag 328.068†	105680.3	101075.2	479.87 ug/L	479.87 ppb	13:05:15
3	As 188.979†	1335.1	1313.5	521.05 ug/L	521.05 ppb	13:05:20
3	B 249.677†	23170.1	22776.6	426.21 ug/L	426.21 ppb	13:05:15
3	Ba 233.527†	288011.2	276562.3	1802.8 ug/L	1802.8 ppb	13:05:15
3	Be 313.107†	1491240.6	1436569.7	478.77 ug/L	478.77 ppb	13:05:15
3	Cd 226.502†	51324.9	49500.6	448.76 ug/L	448.76 ppb	13:05:20
3	Co 228.616†	31999.3	30812.4	506.30 ug/L	506.30 ppb	13:05:20
3	Cr 267.716†	61323.6	58803.6	573.02 ug/L	573.02 ppb	13:05:15
3	Cu 324.752†	220497.5	205641.7	569.29 ug/L	569.29 ppb	13:05:15
3	Mn 257.610†	5540644.8	5320058.5	5091.9 ug/L	5091.9 ppb	13:05:15
3	Mo 202.031†	8119.3	7771.9	459.96 ug/L	459.96 ppb	13:05:20
3	Ni 231.604†	26373.0	25195.9	525.98 ug/L	525.98 ppb	13:05:20
3	P 214.914†	3037.8	2672.1	1188.7 ug/L	1188.7 ppb	13:05:20
3	Pb 220.353†	6030.4	5867.2	619.89 ug/L	619.89 ppb	13:05:20
3	S 181.975 Axial†	4533.3	4304.9	5017.6 ug/L	5017.6 ppb	13:05:20
3	Sb 206.836†	1711.9	1599.5	451.95 ug/L	451.95 ppb	13:05:20
3	Se 196.026†	-210.6	-166.3	530.26 ug/L	530.26 ppb	13:05:20
3	Si 251.611†	290425.4	278250.5	7497.1 ug/L	7497.1 ppb	13:05:15
3	Sn 189.927†	3345.5	3206.4	464.15 ug/L	464.15 ppb	13:05:20
3	Ti 334.940†	3593762.8	3452504.3	4912.6 ug/L	4912.6 ppb	13:05:15
3	Tl 190.801†	1575.9	1554.5	456.74 ug/L	456.74 ppb	13:05:20
3	U 409.014†	7792.5	10451.9	259.02 ug/L	259.02 ppb	13:05:15
3	V 292.402†	134615.1	130801.5	775.44 ug/L	775.44 ppb	13:05:15
3	Zn 213.857†	97339.8	92594.9	708.88 ug/L	708.88 ppb	13:05:15
3	SiO2†	290042.3	277845.2	16148 ug/L	16148 ppb	13:05:36

Mean Data: 1201981080|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	969647.6	104.00	%	0.355				0.34%
Sc Radial	6107.4	103	%	0.7				0.72%
Y 371.029	854976.6	111.19	%	0.390				0.35%
Y RADIAL	6949.6	112.5	%	0.48				0.43%
Ag 328.068†	100990.2	479.05	ug/L	1.096	479.05	ppb	1.096	0.23%
Al 396.153Radial†	290486.3	193240	ug/L	3635.3	193240	ppb	3635.3	1.88%
As 188.979†	1309.5	519.42	ug/L	4.380	519.42	ppb	4.380	0.84%
B 249.677†	22786.2	426.59	ug/L	1.145	426.59	ppb	1.145	0.27%
Ba 233.527†	276711.2	1803.7	ug/L	4.04	1803.7	ppb	4.04	0.22%
Be 313.107†	1437564.6	479.09	ug/L	0.426	479.09	ppb	0.426	0.09%
Ca 317.933Radial†	20055.4	27546	ug/L	483.0	27546	ppb	483.0	1.75%
Cd 226.502†	49456.2	448.48	ug/L	3.372	448.48	ppb	3.372	0.75%
Co 228.616†	30791.1	505.96	ug/L	4.050	505.96	ppb	4.050	0.80%
Cr 267.716†	58856.5	573.51	ug/L	1.500	573.51	ppb	1.500	0.26%
Cu 324.752†	205339.9	568.40	ug/L	0.774	568.40	ppb	0.774	0.14%
Fe 238.204 Radial†	21505.2	164990	ug/L	2888.6	164990	ppb	2888.6	1.75%
K 766.490 Radial†	100710.8	16216	ug/L	289.3	16216	ppb	289.3	1.78%

Mg 279.077 IEC†	922.3	26794	ug/L	195.9	26794	ppb	195.9	0.73%
Mn 257.610†	5324298.4	5095.8	ug/L	8.61	5095.8	ppb	8.61	0.17%
Mo 202.031†	7720.4	456.89	ug/L	3.743	456.89	ppb	3.743	0.82%
Na 589.592 Radial†	31785.0	8355.1	ug/L	126.92	8355.1	ppb	126.92	1.52%
Ni 231.604†	25191.9	525.90	ug/L	4.485	525.90	ppb	4.485	0.85%
P 214.914†	2686.0	1196.3	ug/L	8.27	1196.3	ppb	8.27	0.69%
Pb 220.353†	5884.4	621.32	ug/L	2.157	621.32	ppb	2.157	0.35%
S 181.975 Axial†	4302.7	5015.5	ug/L	69.44	5015.5	ppb	69.44	1.38%
Sb 206.836†	1602.9	452.88	ug/L	2.603	452.88	ppb	2.603	0.57%
Se 196.026†	-161.5	527.61	ug/L	6.658	527.61	ppb	6.658	1.26%
Si 251.611†	277325.1	7472.2	ug/L	24.92	7472.2	ppb	24.92	0.33%
Sn 189.927†	3194.6	462.42	ug/L	3.603	462.42	ppb	3.603	0.78%
Sr 421.552†	130559.3	706.22	ug/L	12.372	706.22	ppb	12.372	1.75%
Ti 334.940†	3450367.2	4909.6	ug/L	3.95	4909.6	ppb	3.95	0.08%
Tl 190.801†	1564.2	459.13	ug/L	3.778	459.13	ppb	3.778	0.82%
U 409.014†	10515.6	260.90	ug/L	1.765	260.90	ppb	1.765	0.68%
V 292.402†	130797.9	775.59	ug/L	0.156	775.59	ppb	0.156	0.02%
Zn 213.857†	92591.3	708.99	ug/L	0.827	708.99	ppb	0.827	0.12%
SiO2†	278054.1	16160	ug/L	114.5	16160	ppb	114.5	0.71%

Sequence No.: 20
Sample ID: 1201981079|933552|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 12/17/2009 13:07:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201981079|933552|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6333.2	6333.2	106	%			13:09:39
1	Y RADIAL	6645.7	6645.7	107.5	%			13:09:39
1	Al 396.153Radial†	38698.0	36379.7	24203	ug/L	24203	ppb	13:09:39
1	Ca 317.933Radial†	3450.3	3221.7	4425.0	ug/L	4425.0	ppb	13:09:59
1	Fe 238.204 Radial†	3736.9	3498.5	26839	ug/L	26839	ppb	13:09:39
1	K 766.490 Radial†	13348.0	9396.3	1499.7	ug/L	1499.7	ppb	13:09:39
1	Mg 279.077 IEC†	134.3	120.8	3504.5	ug/L	3504.5	ppb	13:09:59
1	Na 589.592 Radial†	640.3	2326.6	611.58	ug/L	611.58	ppb	13:09:39
1	Sr 421.552†	7930.0	7465.8	40.358	ug/L	40.358	ppb	13:09:39
1	Sc 361.383	977957.7	977957.7	104.89	%			13:10:57
1	Y 371.029	796765.7	796765.7	103.62	%			13:10:57
1	Ag 328.068†	-1746.6	-2073.6	0.5465	ug/L	0.5465	ppb	13:11:02
1	As 188.979†	-32.4	0.6	10.773	ug/L	10.773	ppb	13:11:22
1	B 249.677†	42.1	566.7	7.5608	ug/L	7.5608	ppb	13:11:02
1	Ba 233.527†	49143.3	46840.2	305.13	ug/L	305.13	ppb	13:11:02
1	Be 313.107†	-5159.5	-370.5	1.3845	ug/L	1.3845	ppb	13:11:02
1	Cd 226.502†	52.4	263.8	-0.1957	ug/L	-0.1957	ppb	13:11:22
1	Co 228.616†	1540.5	1552.4	24.182	ug/L	24.182	ppb	13:11:22
1	Cr 267.716†	2158.1	1972.8	19.689	ug/L	19.689	ppb	13:11:22
1	Cu 324.752†	10924.8	4315.8	13.139	ug/L	13.139	ppb	13:11:02
1	Mn 257.610†	1777442.7	1693998.5	1618.8	ug/L	1618.8	ppb	13:10:57
1	Mo 202.031†	16.8	-9.0	1.3866	ug/L	1.3866	ppb	13:11:22
1	Ni 231.604†	870.3	699.9	14.604	ug/L	14.604	ppb	13:11:22
1	P 214.914†	559.8	288.7	129.39	ug/L	129.39	ppb	13:11:22
1	Pb 220.353†	252.2	316.6	35.012	ug/L	35.012	ppb	13:11:22
1	S 181.975 Axial†	106.0	52.7	57.104	ug/L	57.104	ppb	13:11:22
1	Sb 206.836†	58.1	11.0	0.4191	ug/L	0.4191	ppb	13:11:22
1	Se 196.026†	-223.7	-177.4	3.4117	ug/L	3.4117	ppb	13:11:22
1	Si 251.611†	37840.1	35433.9	956.12	ug/L	956.12	ppb	13:11:02
1	Sn 189.927†	-35.5	-40.0	-4.8953	ug/L	-4.8953	ppb	13:11:22
1	Ti 334.940†	563210.0	538401.6	766.17	ug/L	766.17	ppb	13:10:57
1	Tl 190.801†	-119.0	-72.3	-2.3256	ug/L	-2.3256	ppb	13:11:22
1	U 409.014†	-5124.5	-1916.7	-54.953	ug/L	-54.953	ppb	13:11:02
1	V 292.402†	9316.1	10413.8	58.636	ug/L	58.636	ppb	13:11:02
1	Zn 213.857†	6766.3	5571.4	41.117	ug/L	41.117	ppb	13:11:22
1	SiO2†	38229.2	35767.4	2081.8	ug/L	2081.8	ppb	13:12:29
2	Sc Radial	6010.1	6010.1	101	%			13:10:04
2	Y RADIAL	6326.3	6326.3	102.4	%			13:10:04
2	Al 396.153Radial†	40817.1	40432.8	26900	ug/L	26900	ppb	13:10:04
2	Ca 317.933Radial†	3450.2	3395.9	4664.2	ug/L	4664.2	ppb	13:10:24
2	Fe 238.204 Radial†	3936.6	3885.0	29804	ug/L	29804	ppb	13:10:04
2	K 766.490 Radial†	13929.0	10645.9	1701.8	ug/L	1701.8	ppb	13:10:04
2	Mg 279.077 IEC†	132.1	125.4	3636.0	ug/L	3636.0	ppb	13:10:24
2	Na 589.592 Radial†	912.3	2628.4	690.89	ug/L	690.89	ppb	13:10:04
2	Sr 421.552†	8393.6	8325.5	45.007	ug/L	45.007	ppb	13:10:04
2	Sc 361.383	966376.9	966376.9	103.65	%			13:11:28
2	Y 371.029	788022.5	788022.5	102.48	%			13:11:28
2	Ag 328.068†	-1725.6	-2073.3	1.5386	ug/L	1.5386	ppb	13:11:33
2	As 188.979†	-30.2	2.3	11.845	ug/L	11.845	ppb	13:11:53
2	B 249.677†	74.8	598.8	7.7998	ug/L	7.7998	ppb	13:11:33
2	Ba 233.527†	48676.1	46950.9	305.96	ug/L	305.96	ppb	13:11:33
2	Be 313.107†	-5103.8	-375.7	1.3853	ug/L	1.3853	ppb	13:11:33
2	Cd 226.502†	57.7	269.5	-0.4386	ug/L	-0.4386	ppb	13:11:53
2	Co 228.616†	1521.7	1551.9	24.128	ug/L	24.128	ppb	13:11:53
2	Cr 267.716†	2154.7	1994.1	19.950	ug/L	19.950	ppb	13:11:53
2	Cu 324.752†	10888.3	4405.4	13.534	ug/L	13.534	ppb	13:11:33
2	Mn 257.610†	1754417.9	1692091.5	1617.3	ug/L	1617.3	ppb	13:11:28
2	Mo 202.031†	14.5	-11.0	1.4789	ug/L	1.4789	ppb	13:11:53
2	Ni 231.604†	862.9	702.8	14.664	ug/L	14.664	ppb	13:11:53

2	P 214.914†	555.0	290.5	128.77 ug/L	128.77 ppb	13:11:53
2	Pb 220.353†	241.6	309.4	34.643 ug/L	34.643 ppb	13:11:53
2	S 181.975 Axial†	117.1	64.6	70.596 ug/L	70.596 ppb	13:11:53
2	Sb 206.836†	41.8	-4.1	-3.9615 ug/L	-3.9615 ppb	13:11:53
2	Se 196.026†	-219.1	-175.4	15.229 ug/L	15.229 ppb	13:11:53
2	Si 251.611†	37543.7	35580.2	960.00 ug/L	960.00 ppb	13:11:33
2	Sn 189.927†	-36.6	-41.6	-5.0492 ug/L	-5.0492 ppb	13:11:53
2	Ti 334.940†	557481.0	539308.9	767.48 ug/L	767.48 ppb	13:11:28
2	Tl 190.801†	-111.6	-66.6	-0.8211 ug/L	-0.8211 ppb	13:11:53
2	U 409.014†	-5171.7	-2020.7	-58.124 ug/L	-58.124 ppb	13:11:33
2	V 292.402†	9262.6	10468.6	58.514 ug/L	58.514 ppb	13:11:33
2	Zn 213.857†	6778.0	5660.0	41.527 ug/L	41.527 ppb	13:11:53
2	SiO2†	37309.7	35317.0	2055.4 ug/L	2055.4 ppb	13:12:34
3	Sc Radial	6037.7	6037.7	101 %		13:10:29
3	Y RADIAL	6272.8	6272.8	101.5 %		13:10:29
3	Al 396.153Radial†	40579.2	40013.7	26621 ug/L	26621 ppb	13:10:29
3	Ca 317.933Radial†	3401.1	3331.9	4576.3 ug/L	4576.3 ppb	13:10:49
3	Fe 238.204 Radial†	3923.8	3854.7	29571 ug/L	29571 ppb	13:10:29
3	K 766.490 Radial†	13878.2	10532.8	1683.5 ug/L	1683.5 ppb	13:10:29
3	Mg 279.077 IEC†	128.7	121.5	3520.8 ug/L	3520.8 ppb	13:10:49
3	Na 589.592 Radial†	926.7	2638.4	693.54 ug/L	693.54 ppb	13:10:29
3	Sr 421.552†	8291.5	8186.9	44.258 ug/L	44.258 ppb	13:10:29
3	Sc 361.383	982903.2	982903.2	105.42 %		13:11:59
3	Y 371.029	799473.7	799473.7	103.97 %		13:11:59
3	Ag 328.068†	-1860.1	-2172.9	1.0386 ug/L	1.0386 ppb	13:12:04
3	As 188.979†	-26.0	6.8	13.359 ug/L	13.359 ppb	13:12:24
3	B 249.677†	94.7	616.4	8.1802 ug/L	8.1802 ppb	13:12:04
3	Ba 233.527†	48664.8	46150.5	300.75 ug/L	300.75 ppb	13:12:04
3	Be 313.107†	-5100.6	-289.9	1.4095 ug/L	1.4095 ppb	13:12:04
3	Cd 226.502†	81.7	291.4	-0.2099 ug/L	-0.2099 ppb	13:12:24
3	Co 228.616†	1522.3	1527.8	23.730 ug/L	23.730 ppb	13:12:24
3	Cr 267.716†	2167.9	1971.7	19.725 ug/L	19.725 ppb	13:12:24
3	Cu 324.752†	11032.2	4365.3	13.413 ug/L	13.413 ppb	13:12:04
3	Mn 257.610†	1784181.4	1691864.4	1617.1 ug/L	1617.1 ppb	13:11:59
3	Mo 202.031†	17.0	-8.8	1.5880 ug/L	1.5880 ppb	13:12:24
3	Ni 231.604†	856.2	682.4	14.238 ug/L	14.238 ppb	13:12:24
3	P 214.914†	553.7	280.2	123.76 ug/L	123.76 ppb	13:12:24
3	Pb 220.353†	237.4	301.4	33.803 ug/L	33.803 ppb	13:12:24
3	S 181.975 Axial†	112.9	58.7	63.735 ug/L	63.735 ppb	13:12:24
3	Sb 206.836†	54.2	7.0	-0.7534 ug/L	-0.7534 ppb	13:12:24
3	Se 196.026†	-215.4	-168.4	18.099 ug/L	18.099 ppb	13:12:24
3	Si 251.611†	37332.7	34771.0	938.16 ug/L	938.16 ppb	13:12:04
3	Sn 189.927†	-33.0	-37.5	-4.4832 ug/L	-4.4832 ppb	13:12:24
3	Ti 334.940†	565554.0	537923.4	765.50 ug/L	765.50 ppb	13:11:59
3	Tl 190.801†	-111.9	-65.1	-0.4678 ug/L	-0.4678 ppb	13:12:24
3	U 409.014†	-5130.8	-1898.1	-54.796 ug/L	-54.796 ppb	13:12:04
3	V 292.402†	9194.1	10253.3	57.243 ug/L	57.243 ppb	13:12:04
3	Zn 213.857†	6761.2	5534.1	40.563 ug/L	40.563 ppb	13:12:24
3	SiO2†	36737.3	34168.8	1988.6 ug/L	1988.6 ppb	13:12:39

Mean Data: 1201981079|933552|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	975745.9	104.65	%	0.910				0.87%
Sc Radial	6127.0	103	%	3.0				2.92%
Y 371.029	794754.0	103.36	%	0.778				0.75%
Y RADIAL	6414.9	103.8	%	3.26				3.14%
Ag 328.068†	-2106.6	1.0412	ug/L	0.49608	1.0412	ppb	0.49608	47.64%
Al 396.153Radial†	38942.0	25908	ug/L	1482.9	25908	ppb	1482.9	5.72%
As 188.979†	3.2	11.992	ug/L	1.2991	11.992	ppb	1.2991	10.83%
B 249.677†	594.0	7.8469	ug/L	0.31241	7.8469	ppb	0.31241	3.98%
Ba 233.527†	46647.2	303.94	ug/L	2.797	303.94	ppb	2.797	0.92%
Be 313.107†	-345.3	1.3931	ug/L	0.01418	1.3931	ppb	0.01418	1.02%
Ca 317.933Radial†	3316.5	4555.2	ug/L	121.01	4555.2	ppb	121.01	2.66%
Cd 226.502†	274.9	-0.2814	ug/L	0.13633	-0.2814	ppb	0.13633	48.45%
Co 228.616†	1544.1	24.013	ug/L	0.2471	24.013	ppb	0.2471	1.03%
Cr 267.716†	1979.5	19.788	ug/L	0.1415	19.788	ppb	0.1415	0.72%
Cu 324.752†	4362.2	13.362	ug/L	0.2027	13.362	ppb	0.2027	1.52%
Fe 238.204 Radial†	3746.1	28738	ug/L	1648.7	28738	ppb	1648.7	5.74%
K 766.490 Radial†	10191.7	1628.3	ug/L	111.78	1628.3	ppb	111.78	6.86%

Mg 279.077 IEC†	122.6	3553.8	ug/L	71.72	3553.8	ppb	71.72	2.02%
Mn 257.610†	1692651.4	1617.8	ug/L	0.96	1617.8	ppb	0.96	0.06%
Mo 202.031†	-9.6	1.4845	ug/L	0.10082	1.4845	ppb	0.10082	6.79%
Na 589.592 Radial†	2531.1	665.34	ug/L	46.573	665.34	ppb	46.573	7.00%
Ni 231.604†	695.1	14.502	ug/L	0.2307	14.502	ppb	0.2307	1.59%
P 214.914†	286.5	127.31	ug/L	3.089	127.31	ppb	3.089	2.43%
Pb 220.353†	309.2	34.486	ug/L	0.6195	34.486	ppb	0.6195	1.80%
S 181.975 Axial†	58.7	63.812	ug/L	6.7460	63.812	ppb	6.7460	10.57%
Sb 206.836†	4.6	-1.4319	ug/L	2.26778	-1.4319	ppb	2.26778	158.37%
Se 196.026†	-173.7	12.247	ug/L	7.7846	12.247	ppb	7.7846	63.57%
Si 251.611†	35261.7	951.43	ug/L	11.652	951.43	ppb	11.652	1.22%
Sn 189.927†	-39.7	-4.8093	ug/L	0.29265	-4.8093	ppb	0.29265	6.09%
Sr 421.552†	7992.7	43.208	ug/L	2.4963	43.208	ppb	2.4963	5.78%
Ti 334.940†	538544.6	766.38	ug/L	1.005	766.38	ppb	1.005	0.13%
Tl 190.801†	-68.0	-1.2049	ug/L	0.98655	-1.2049	ppb	0.98655	81.88%
U 409.014†	-1945.2	-55.958	ug/L	1.8775	-55.958	ppb	1.8775	3.36%
V 292.402†	10378.6	58.131	ug/L	0.7716	58.131	ppb	0.7716	1.33%
Zn 213.857†	5588.5	41.069	ug/L	0.4833	41.069	ppb	0.4833	1.18%
SiO2†	35084.4	2041.9	ug/L	48.06	2041.9	ppb	48.06	2.35%

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/17/2009 13:14:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6355.2	6355.2	107	%			13:16:42
1	Y RADIAL	6494.1	6494.1	105.1	%			13:16:42
1	Al 396.153Radial†	7184.5	6744.0	4466.0	ug/L	4466.0	ppb	13:16:42
1	Ca 317.933Radial†	3641.4	3389.4	4655.3	ug/L	4655.3	ppb	13:17:02
1	Fe 238.204 Radial†	658.7	603.9	4648.2	ug/L	4648.2	ppb	13:17:02
1	K 766.490 Radial†	33746.4	28454.6	4584.1	ug/L	4584.1	ppb	13:16:42
1	Mg 279.077 IEC†	176.3	159.8	4670.5	ug/L	4670.5	ppb	13:17:02
1	Na 589.592 Radial†	35012.2	34511.3	9071.7	ug/L	9071.7	ppb	13:16:42
1	Sr 421.552†	87119.8	81595.6	441.48	ug/L	441.48	ppb	13:16:42
1	Sc 361.383	961618.8	961618.8	103.14	%			13:18:01
1	Y 371.029	765053.2	765053.2	99.494	%			13:18:01
1	Ag 328.068†	119032.9	115002.0	482.85	ug/L	482.85	ppb	13:18:01
1	As 188.979†	1414.8	1403.2	489.92	ug/L	489.92	ppb	13:18:21
1	B 249.677†	24536.9	24316.7	478.17	ug/L	478.17	ppb	13:18:01
1	Ba 233.527†	76788.9	74440.5	484.36	ug/L	484.36	ppb	13:18:01
1	Be 313.107†	1523632.2	1481812.4	484.86	ug/L	484.86	ppb	13:18:01
1	Cd 226.502†	52740.5	51349.3	482.26	ug/L	482.26	ppb	13:18:01
1	Co 228.616†	29349.5	28540.1	479.39	ug/L	479.39	ppb	13:18:21
1	Cr 267.716†	51211.4	49568.2	480.18	ug/L	480.18	ppb	13:18:01
1	Cu 324.752†	189412.1	177548.3	484.43	ug/L	484.43	ppb	13:18:01
1	Mn 257.610†	525968.0	509401.9	486.39	ug/L	486.39	ppb	13:18:01
1	Mo 202.031†	8690.1	8400.7	484.75	ug/L	484.75	ppb	13:18:21
1	Ni 231.604†	23745.1	22892.7	477.89	ug/L	477.89	ppb	13:18:21
1	P 214.914†	5227.4	4823.2	2346.2	ug/L	2346.2	ppb	13:18:21
1	Pb 220.353†	4926.2	4852.5	488.66	ug/L	488.66	ppb	13:18:21
1	S 181.975 Axial†	897.5	821.7	964.25	ug/L	964.25	ppb	13:18:21
1	Sb 206.836†	1770.4	1672.1	490.29	ug/L	490.29	ppb	13:18:21
1	Se 196.026†	909.0	917.2	505.63	ug/L	505.63	ppb	13:18:21
1	Si 251.611†	93882.8	90384.0	2428.6	ug/L	2428.6	ppb	13:18:01
1	Sn 189.927†	3491.9	3379.4	484.25	ug/L	484.25	ppb	13:18:21
1	Ti 334.940†	354022.5	344703.5	490.24	ug/L	490.24	ppb	13:18:01
1	Tl 190.801†	1956.4	1938.0	487.43	ug/L	487.43	ppb	13:18:21
1	U 409.014†	14855.7	17372.4	465.63	ug/L	465.63	ppb	13:18:01
1	V 292.402†	79125.1	78249.2	484.38	ug/L	484.38	ppb	13:18:01
1	Zn 213.857†	64026.3	61198.5	478.06	ug/L	478.06	ppb	13:18:01
1	SiO2†	94532.6	90976.5	5272.9	ug/L	5272.9	ppb	13:19:22
2	Sc Radial	5974.5	5974.5	100	%			13:17:07
2	Y RADIAL	6140.4	6140.4	99.37	%			13:17:07
2	Al 396.153Radial†	7308.2	7295.9	4833.2	ug/L	4833.2	ppb	13:17:07
2	Ca 317.933Radial†	3596.2	3561.7	4891.9	ug/L	4891.9	ppb	13:17:27
2	Fe 238.204 Radial†	653.3	637.9	4908.6	ug/L	4908.6	ppb	13:17:27
2	K 766.490 Radial†	34003.3	30724.2	4950.1	ug/L	4950.1	ppb	13:17:07
2	Mg 279.077 IEC†	173.1	167.1	4882.5	ug/L	4882.5	ppb	13:17:27
2	Na 589.592 Radial†	35390.5	36977.4	9719.9	ug/L	9719.9	ppb	13:17:07
2	Sr 421.552†	88298.6	87968.4	475.96	ug/L	475.96	ppb	13:17:07
2	Sc 361.383	957129.5	957129.5	102.66	%			13:18:29
2	Y 371.029	762178.2	762178.2	99.120	%			13:18:29
2	Ag 328.068†	118027.5	114563.9	481.10	ug/L	481.10	ppb	13:18:29
2	As 188.979†	1406.9	1402.0	489.51	ug/L	489.51	ppb	13:18:49
2	B 249.677†	24378.1	24273.7	477.29	ug/L	477.29	ppb	13:18:29
2	Ba 233.527†	76399.3	74410.2	484.17	ug/L	484.17	ppb	13:18:29
2	Be 313.107†	1513320.4	1478696.3	483.84	ug/L	483.84	ppb	13:18:29
2	Cd 226.502†	52633.8	51485.2	483.51	ug/L	483.51	ppb	13:18:29
2	Co 228.616†	29151.4	28480.6	478.39	ug/L	478.39	ppb	13:18:49
2	Cr 267.716†	50964.7	49560.8	480.12	ug/L	480.12	ppb	13:18:29
2	Cu 324.752†	186999.3	176059.2	480.38	ug/L	480.38	ppb	13:18:29
2	Mn 257.610†	522795.5	508703.4	485.75	ug/L	485.75	ppb	13:18:29
2	Mo 202.031†	8628.1	8379.8	483.56	ug/L	483.56	ppb	13:18:49
2	Ni 231.604†	23597.1	22856.5	477.14	ug/L	477.14	ppb	13:18:49

2	P 214.914†	5211.3	4831.4	2350.8 ug/L	2350.8 ppb	13:18:49
2	Pb 220.353†	4913.4	4862.5	489.73 ug/L	489.73 ppb	13:18:49
2	S 181.975 Axial†	895.6	824.0	966.79 ug/L	966.79 ppb	13:18:49
2	Sb 206.836†	1753.0	1663.2	487.64 ug/L	487.64 ppb	13:18:49
2	Se 196.026†	899.4	912.0	503.85 ug/L	503.85 ppb	13:18:49
2	Si 251.611†	93014.0	89964.6	2417.2 ug/L	2417.2 ppb	13:18:29
2	Sn 189.927†	3455.5	3359.8	481.47 ug/L	481.47 ppb	13:18:49
2	Ti 334.940†	350671.9	343049.6	487.90 ug/L	487.90 ppb	13:18:29
2	Tl 190.801†	1941.1	1931.9	485.91 ug/L	485.91 ppb	13:18:49
2	U 409.014†	14490.3	17084.1	457.84 ug/L	457.84 ppb	13:18:29
2	V 292.402†	78542.6	78041.6	483.04 ug/L	483.04 ppb	13:18:29
2	Zn 213.857†	63760.1	61230.3	478.29 ug/L	478.29 ppb	13:18:29
2	SiO2†	93689.8	90585.5	5249.9 ug/L	5249.9 ppb	13:19:27
3	Sc Radial	5816.6	5816.6	97.7 %		13:17:32
3	Y RADIAL	5987.5	5987.5	96.90 %		13:17:32
3	Al 396.153Radial†	7119.0	7299.9	4836.1 ug/L	4836.1 ppb	13:17:32
3	Ca 317.933Radial†	3608.1	3671.1	5042.2 ug/L	5042.2 ppb	13:17:52
3	Fe 238.204 Radial†	653.8	656.0	5047.2 ug/L	5047.2 ppb	13:17:52
3	K 766.490 Radial†	33403.1	31029.1	4999.3 ug/L	4999.3 ppb	13:17:32
3	Mg 279.077 IEC†	175.3	174.0	5085.3 ug/L	5085.3 ppb	13:17:52
3	Na 589.592 Radial†	34608.2	37133.5	9761.0 ug/L	9761.0 ppb	13:17:32
3	Sr 421.552†	86384.5	88396.4	478.28 ug/L	478.28 ppb	13:17:32
3	Sc 361.383	967317.7	967317.7	103.75 %		13:18:56
3	Y 371.029	769335.6	769335.6	100.05 %		13:18:56
3	Ag 328.068†	118935.4	114228.1	479.73 ug/L	479.73 ppb	13:18:56
3	As 188.979†	1390.5	1371.7	479.04 ug/L	479.04 ppb	13:19:16
3	B 249.677†	24605.0	24242.3	476.66 ug/L	476.66 ppb	13:18:56
3	Ba 233.527†	76786.8	73999.9	481.50 ug/L	481.50 ppb	13:18:56
3	Be 313.107†	1521740.2	1471285.4	481.41 ug/L	481.41 ppb	13:18:56
3	Cd 226.502†	53053.4	51349.7	482.22 ug/L	482.22 ppb	13:18:56
3	Co 228.616†	29114.5	28145.9	472.76 ug/L	472.76 ppb	13:19:16
3	Cr 267.716†	51150.6	49217.1	476.79 ug/L	476.79 ppb	13:18:56
3	Cu 324.752†	188259.6	175355.4	478.47 ug/L	478.47 ppb	13:18:56
3	Mn 257.610†	526180.2	506602.0	483.75 ug/L	483.75 ppb	13:18:56
3	Mo 202.031†	8636.8	8299.6	478.95 ug/L	478.95 ppb	13:19:16
3	Ni 231.604†	23572.5	22590.7	471.59 ug/L	471.59 ppb	13:19:16
3	P 214.914†	5213.0	4779.6	2324.9 ug/L	2324.9 ppb	13:19:16
3	Pb 220.353†	4901.8	4800.8	483.52 ug/L	483.52 ppb	13:19:16
3	S 181.975 Axial†	894.0	813.3	954.23 ug/L	954.23 ppb	13:19:16
3	Sb 206.836†	1757.5	1649.5	483.56 ug/L	483.56 ppb	13:19:16
3	Se 196.026†	901.7	905.0	500.59 ug/L	500.59 ppb	13:19:16
3	Si 251.611†	93819.2	89786.4	2412.4 ug/L	2412.4 ppb	13:18:56
3	Sn 189.927†	3449.5	3318.6	475.58 ug/L	475.58 ppb	13:19:16
3	Ti 334.940†	353107.4	341799.3	486.13 ug/L	486.13 ppb	13:18:56
3	Tl 190.801†	1949.5	1920.1	482.97 ug/L	482.97 ppb	13:19:16
3	U 409.014†	15035.9	17461.2	467.97 ug/L	467.97 ppb	13:18:56
3	V 292.402†	78930.9	77610.0	480.35 ug/L	480.35 ppb	13:18:56
3	Zn 213.857†	64074.4	60879.2	475.54 ug/L	475.54 ppb	13:18:56
3	SiO2†	93973.6	89897.8	5210.0 ug/L	5210.0 ppb	13:19:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	962022.0	103.18	%	0.548				0.53%
Sc Radial	6048.8	102	%	4.7				4.58%
Y 371.029	765522.3	99.555	%	0.4684				0.47%
Y RADIAL	6207.4	100.5	%	4.21				4.19%
Ag 328.068†	114598.0	481.23	ug/L	1.563	481.23	ppb	1.563	0.32%
QC value within limits for Ag 328.068 Recovery = 96.25%								
Al 396.153Radial†	7113.3	4711.8	ug/L	212.84	4711.8	ppb	212.84	4.52%
QC value within limits for Al 396.153Radial Recovery = 94.24%								
As 188.979†	1392.3	486.16	ug/L	6.170	486.16	ppb	6.170	1.27%
QC value within limits for As 188.979 Recovery = 97.23%								
B 249.677†	24277.6	477.37	ug/L	0.757	477.37	ppb	0.757	0.16%
QC value within limits for B 249.677 Recovery = 95.47%								
Ba 233.527†	74283.5	483.34	ug/L	1.595	483.34	ppb	1.595	0.33%
QC value within limits for Ba 233.527 Recovery = 96.67%								
Be 313.107†	1477264.7	483.37	ug/L	1.770	483.37	ppb	1.770	0.37%
QC value within limits for Be 313.107 Recovery = 96.67%								
Ca 317.933Radial†	3540.7	4863.1	ug/L	195.07	4863.1	ppb	195.07	4.01%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.26%
Cd 226.502†            51394.7      482.67 ug/L         0.734      482.67 ppb          0.734   0.15%
   QC value within limits for Cd 226.502  Recovery = 96.53%
Co 228.616†            28388.9      476.85 ug/L         3.574      476.85 ppb          3.574   0.75%
   QC value within limits for Co 228.616  Recovery = 95.37%
Cr 267.716†            49448.7      479.03 ug/L         1.942      479.03 ppb          1.942   0.41%
   QC value within limits for Cr 267.716  Recovery = 95.81%
Cu 324.752†           176321.0      481.09 ug/L         3.043      481.09 ppb          3.043   0.63%
   QC value within limits for Cu 324.752  Recovery = 96.22%
Fe 238.204 Radial†       632.6      4868.0 ug/L        202.56      4868.0 ppb         202.56   4.16%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.36%
K 766.490 Radial†      30069.3      4844.5 ug/L        226.87      4844.5 ppb         226.87   4.68%
   QC value within limits for K 766.490 Radial  Recovery = 96.89%
Mg 279.077 IEC†          167.0      4879.4 ug/L        207.40      4879.4 ppb         207.40   4.25%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.59%
Mn 257.610†           508235.8      485.30 ug/L         1.376      485.30 ppb          1.376   0.28%
   QC value within limits for Mn 257.610  Recovery = 97.06%
Mo 202.031†             8360.0      482.42 ug/L         3.064      482.42 ppb          3.064   0.64%
   QC value within limits for Mo 202.031  Recovery = 96.48%
Na 589.592 Radial†     36207.4      9517.5 ug/L        386.65      9517.5 ppb         386.65   4.06%
   QC value within limits for Na 589.592 Radial  Recovery = 95.18%
Ni 231.604†            22780.0      475.54 ug/L         3.442      475.54 ppb          3.442   0.72%
   QC value within limits for Ni 231.604  Recovery = 95.11%
P 214.914†              4811.4      2340.6 ug/L         13.81      2340.6 ppb          13.81   0.59%
   QC value within limits for P 214.914  Recovery = 93.62%
Pb 220.353†             4838.6      487.30 ug/L         3.320      487.30 ppb          3.320   0.68%
   QC value within limits for Pb 220.353  Recovery = 97.46%
S 181.975 Axial†         819.7      961.76 ug/L         6.641      961.76 ppb          6.641   0.69%
   QC value within limits for S 181.975 Axial  Recovery = 96.18%
Sb 206.836†             1661.6      487.16 ug/L         3.389      487.16 ppb          3.389   0.70%
   QC value within limits for Sb 206.836  Recovery = 97.43%
Se 196.026†              911.4      503.35 ug/L         2.558      503.35 ppb          2.558   0.51%
   QC value within limits for Se 196.026  Recovery = 100.67%
Si 251.611†            90045.0      2419.4 ug/L          8.30      2419.4 ppb           8.30   0.34%
   QC value within limits for Si 251.611  Recovery = 96.78%
Sn 189.927†             3352.6      480.43 ug/L         4.423      480.43 ppb          4.423   0.92%
   QC value within limits for Sn 189.927  Recovery = 96.09%
Sr 421.552†            85986.8      465.24 ug/L        20.609      465.24 ppb         20.609   4.43%
   QC value within limits for Sr 421.552  Recovery = 93.05%
Ti 334.940†           343184.1      488.09 ug/L         2.062      488.09 ppb          2.062   0.42%
   QC value within limits for Ti 334.940  Recovery = 97.62%
Tl 190.801†             1930.0      485.44 ug/L         2.264      485.44 ppb          2.264   0.47%
   QC value within limits for Tl 190.801  Recovery = 97.09%
U 409.014†             17305.9      463.81 ug/L         5.304      463.81 ppb          5.304   1.14%
   QC value within limits for U 409.014  Recovery = 92.76%
V 292.402†             77966.9      482.59 ug/L         2.052      482.59 ppb          2.052   0.43%
   QC value within limits for V 292.402  Recovery = 96.52%
Zn 213.857†            61102.6      477.30 ug/L         1.526      477.30 ppb          1.526   0.32%
   QC value within limits for Zn 213.857  Recovery = 95.46%
SiO2†                  90486.6      5244.3 ug/L         31.80      5244.3 ppb          31.80   0.61%
   QC value within limits for SiO2  Recovery = 98.07%
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/17/2009 13:21:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5992.1	5992.1	101	%			13:23:34
1	Y RADIAL	6190.6	6190.6	100.2	%			13:23:34
1	Al 396.153Radial†	-27.3	-10.8	-7.1935	ug/L	-7.1935	ppb	13:23:34
1	Ca 317.933Radial†	22.0	1.4	1.9510	ug/L	1.9510	ppb	13:23:54
1	Fe 238.204 Radial†	11.3	-1.6	-12.638	ug/L	-12.638	ppb	13:23:54
1	K 766.490 Radial†	3261.8	93.1	15.007	ug/L	15.007	ppb	13:23:34
1	Mg 279.077 IEC†	3.5	-1.8	-53.316	ug/L	-53.316	ppb	13:23:54
1	Na 589.592 Radial†	-1559.2	176.4	46.379	ug/L	46.379	ppb	13:23:34
1	Sr 421.552†	-12.7	1.7	0.0090	ug/L	0.0090	ppb	13:23:34
1	Sc 361.383	958161.0	958161.0	102.77	%			13:24:51
1	Y 371.029	774429.9	774429.9	100.71	%			13:24:51
1	Ag 328.068†	536.8	113.9	0.4667	ug/L	0.4667	ppb	13:24:56
1	As 188.979†	-31.9	0.4	0.1444	ug/L	0.1444	ppb	13:25:16
1	B 249.677†	-227.8	304.9	6.0192	ug/L	6.0192	ppb	13:25:16
1	Ba 233.527†	19.4	7.4	0.0475	ug/L	0.0475	ppb	13:25:16
1	Be 313.107†	-4501.7	167.9	0.0551	ug/L	0.0551	ppb	13:24:56
1	Cd 226.502†	-207.0	12.4	0.1176	ug/L	0.1176	ppb	13:25:16
1	Co 228.616†	-55.7	29.6	0.4969	ug/L	0.4969	ppb	13:25:16
1	Cr 267.716†	119.3	31.4	0.3014	ug/L	0.3014	ppb	13:25:16
1	Cu 324.752†	6106.9	-157.1	-0.4291	ug/L	-0.4291	ppb	13:24:56
1	Mn 257.610†	577.5	2.5	0.0021	ug/L	0.0021	ppb	13:25:16
1	Mo 202.031†	25.2	-0.5	-0.0280	ug/L	-0.0280	ppb	13:25:16
1	Ni 231.604†	101.3	-31.2	-0.6510	ug/L	-0.6510	ppb	13:25:16
1	P 214.914†	248.1	-3.6	-1.7227	ug/L	-1.7227	ppb	13:25:16
1	Pb 220.353†	-83.1	-4.6	-0.4647	ug/L	-0.4647	ppb	13:25:16
1	S 181.975 Axial†	51.2	1.5	1.7065	ug/L	1.7065	ppb	13:25:16
1	Sb 206.836†	49.6	3.8	1.0853	ug/L	1.0853	ppb	13:25:16
1	Se 196.026†	-28.3	8.4	4.4251	ug/L	4.4251	ppb	13:25:16
1	Si 251.611†	759.4	97.3	2.6229	ug/L	2.6229	ppb	13:25:16
1	Sn 189.927†	3.7	-2.6	-0.3694	ug/L	-0.3694	ppb	13:25:16
1	Ti 334.940†	-1387.4	104.9	0.1471	ug/L	0.1471	ppb	13:24:56
1	Tl 190.801†	-43.7	-1.4	-0.3602	ug/L	-0.3602	ppb	13:25:16
1	U 409.014†	-2862.2	183.7	4.9416	ug/L	4.9416	ppb	13:24:51
1	V 292.402†	-1573.8	0.7	0.0140	ug/L	0.0140	ppb	13:24:56
1	Zn 213.857†	868.9	-33.8	-0.2587	ug/L	-0.2587	ppb	13:25:16
1	SiO2†	798.0	97.4	5.6643	ug/L	5.6643	ppb	13:26:22
2	Sc Radial	6052.8	6052.8	102	%			13:23:59
2	Y RADIAL	6223.3	6223.3	100.7	%			13:23:59
2	Al 396.153Radial†	-25.0	-8.3	-5.5354	ug/L	-5.5354	ppb	13:23:59
2	Ca 317.933Radial†	21.3	0.5	0.6334	ug/L	0.6334	ppb	13:24:19
2	Fe 238.204 Radial†	12.7	-0.5	-3.5033	ug/L	-3.5033	ppb	13:24:19
2	K 766.490 Radial†	3097.5	-100.9	-16.308	ug/L	-16.308	ppb	13:23:59
2	Mg 279.077 IEC†	1.6	-3.8	-109.63	ug/L	-109.63	ppb	13:24:19
2	Na 589.592 Radial†	-1572.8	178.6	46.959	ug/L	46.959	ppb	13:23:59
2	Sr 421.552†	6.7	20.8	0.1125	ug/L	0.1125	ppb	13:23:59
2	Sc 361.383	966404.8	966404.8	103.65	%			13:25:21
2	Y 371.029	780451.6	780451.6	101.50	%			13:25:21
2	Ag 328.068†	436.9	13.0	0.0516	ug/L	0.0516	ppb	13:25:26
2	As 188.979†	-26.1	6.3	2.1792	ug/L	2.1792	ppb	13:25:46
2	B 249.677†	-259.4	276.3	5.4538	ug/L	5.4538	ppb	13:25:46
2	Ba 233.527†	18.1	5.9	0.0393	ug/L	0.0393	ppb	13:25:46
2	Be 313.107†	-4537.0	171.3	0.0560	ug/L	0.0560	ppb	13:25:26
2	Cd 226.502†	-213.2	8.1	0.0766	ug/L	0.0766	ppb	13:25:46
2	Co 228.616†	-79.4	7.2	0.1226	ug/L	0.1226	ppb	13:25:46
2	Cr 267.716†	108.3	19.7	0.1903	ug/L	0.1903	ppb	13:25:46
2	Cu 324.752†	6061.5	-251.6	-0.6863	ug/L	-0.6863	ppb	13:25:26
2	Mn 257.610†	575.1	-4.6	-0.0027	ug/L	-0.0027	ppb	13:25:46
2	Mo 202.031†	36.4	10.2	0.5855	ug/L	0.5855	ppb	13:25:46
2	Ni 231.604†	115.5	-18.3	-0.3824	ug/L	-0.3824	ppb	13:25:46

2	P 214.914†	265.9	11.5	5.8935	ug/L	5.8935	ppb	13:25:46
2	Pb 220.353†	-72.6	6.2	0.6199	ug/L	0.6199	ppb	13:25:46
2	S 181.975 Axial†	51.1	0.9	1.0368	ug/L	1.0368	ppb	13:25:46
2	Sb 206.836†	33.3	-12.3	-3.5262	ug/L	-3.5262	ppb	13:25:46
2	Se 196.026†	-33.2	4.0	2.0872	ug/L	2.0872	ppb	13:25:46
2	Si 251.611†	756.3	88.0	2.3683	ug/L	2.3683	ppb	13:25:46
2	Sn 189.927†	9.7	3.1	0.4483	ug/L	0.4483	ppb	13:25:46
2	Ti 334.940†	-1497.3	10.4	0.0130	ug/L	0.0130	ppb	13:25:26
2	Tl 190.801†	-36.7	5.8	1.4353	ug/L	1.4353	ppb	13:25:46
2	U 409.014†	-2925.7	146.2	3.9313	ug/L	3.9313	ppb	13:25:21
2	V 292.402†	-1515.3	70.2	0.4424	ug/L	0.4424	ppb	13:25:26
2	Zn 213.857†	864.8	-45.0	-0.3469	ug/L	-0.3469	ppb	13:25:46
2	SiO2†	781.9	75.2	4.3667	ug/L	4.3667	ppb	13:26:27
3	Sc Radial	5999.5	5999.5	101	%			13:24:24
3	Y RADIAL	6181.7	6181.7	100.0	%			13:24:24
3	Al 396.153Radial†	-10.2	6.2	4.1188	ug/L	4.1188	ppb	13:24:24
3	Ca 317.933Radial†	27.4	6.8	9.2745	ug/L	9.2745	ppb	13:24:44
3	Fe 238.204 Radial†	13.6	0.6	4.5032	ug/L	4.5032	ppb	13:24:44
3	K 766.490 Radial†	3096.5	-74.9	-12.093	ug/L	-12.093	ppb	13:24:24
3	Mg 279.077 IEC†	-0.7	-6.1	-177.16	ug/L	-177.16	ppb	13:24:44
3	Na 589.592 Radial†	-1624.1	114.0	29.962	ug/L	29.962	ppb	13:24:24
3	Sr 421.552†	-17.2	-2.8	-0.0153	ug/L	-0.0153	ppb	13:24:24
3	Sc 361.383	973802.4	973802.4	104.45	%			13:25:51
3	Y 371.029	785435.7	785435.7	102.14	%			13:25:51
3	Ag 328.068†	417.4	-8.8	-0.0432	ug/L	-0.0432	ppb	13:25:56
3	As 188.979†	-21.9	10.5	3.6210	ug/L	3.6210	ppb	13:26:16
3	B 249.677†	-238.0	298.8	5.8961	ug/L	5.8961	ppb	13:26:16
3	Ba 233.527†	4.8	-7.0	-0.0441	ug/L	-0.0441	ppb	13:26:16
3	Be 313.107†	-4511.0	229.4	0.0752	ug/L	0.0752	ppb	13:25:56
3	Cd 226.502†	-213.0	9.9	0.0921	ug/L	0.0921	ppb	13:26:16
3	Co 228.616†	-72.5	14.3	0.2392	ug/L	0.2392	ppb	13:26:16
3	Cr 267.716†	94.9	6.1	0.0567	ug/L	0.0567	ppb	13:26:16
3	Cu 324.752†	6073.7	-284.4	-0.7753	ug/L	-0.7753	ppb	13:25:56
3	Mn 257.610†	632.6	46.2	0.0478	ug/L	0.0478	ppb	13:26:16
3	Mo 202.031†	18.9	-6.8	-0.3940	ug/L	-0.3940	ppb	13:26:16
3	Ni 231.604†	114.4	-20.2	-0.4218	ug/L	-0.4218	ppb	13:26:16
3	P 214.914†	244.4	-11.1	-5.4277	ug/L	-5.4277	ppb	13:26:16
3	Pb 220.353†	-73.0	6.3	0.6369	ug/L	0.6369	ppb	13:26:16
3	S 181.975 Axial†	56.0	5.2	6.1530	ug/L	6.1530	ppb	13:26:16
3	Sb 206.836†	35.5	-10.5	-3.0199	ug/L	-3.0199	ppb	13:26:16
3	Se 196.026†	-24.0	12.9	6.8724	ug/L	6.8724	ppb	13:26:16
3	Si 251.611†	766.6	92.2	2.4985	ug/L	2.4985	ppb	13:26:16
3	Sn 189.927†	11.6	4.9	0.7023	ug/L	0.7023	ppb	13:26:16
3	Ti 334.940†	-1405.9	108.8	0.1504	ug/L	0.1504	ppb	13:25:56
3	Tl 190.801†	-46.7	-3.6	-0.9070	ug/L	-0.9070	ppb	13:26:16
3	U 409.014†	-2674.3	408.3	10.979	ug/L	10.979	ppb	13:25:51
3	V 292.402†	-1537.4	60.1	0.3781	ug/L	0.3781	ppb	13:25:56
3	Zn 213.857†	866.4	-49.8	-0.3832	ug/L	-0.3832	ppb	13:26:16
3	SiO2†	853.7	138.3	8.0711	ug/L	8.0711	ppb	13:26:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	966122.7	103.62	%	0.839				0.81%
Sc Radial	6014.8	101	%	0.6				0.55%
Y 371.029	780105.7	101.45	%	0.717				0.71%
Y RADIAL	6198.6	100.3	%	0.35				0.35%
Ag 328.068†	39.4	0.1584	ug/L	0.27123	0.1584	ppb	0.27123	171.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.3	-2.8700	ug/L	6.10904	-2.8700	ppb	6.10904	212.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.7	1.9815	ug/L	1.74673	1.9815	ppb	1.74673	88.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	293.3	5.7897	ug/L	0.29736	5.7897	ppb	0.29736	5.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0142	ug/L	0.05073	0.0142	ppb	0.05073	356.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	189.5	0.0621	ug/L	0.01136	0.0621	ppb	0.01136	18.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.9	3.9530	ug/L	4.65545	3.9530	ppb	4.65545	117.77%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                10.1      0.0954 ug/L       0.02071      0.0954 ppb        0.02071  21.71%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                17.1      0.2862 ug/L       0.19151      0.2862 ppb        0.19151  66.91%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.1      0.1828 ug/L       0.12255      0.1828 ppb        0.12255  67.04%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -231.0     -0.6302 ug/L       0.17978     -0.6302 ppb        0.17978  28.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -3.8794 ug/L       8.57684     -3.8794 ppb        8.57684 221.08%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -27.6     -4.4647 ug/L      16.99398     -4.4647 ppb       16.99398 380.63%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.9     -113.37 ug/L        62.007     -113.37 ppb         62.007  54.69%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                14.7      0.0157 ug/L       0.02789      0.0157 ppb        0.02789 177.23%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.9      0.0545 ug/L       0.49495      0.0545 ppb        0.49495 908.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        156.4      41.100 ug/L        9.6500      41.100 ppb         9.6500  23.48%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -23.2     -0.4851 ug/L       0.14509     -0.4851 ppb        0.14509  29.91%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.0     -0.4190 ug/L       5.77213     -0.4190 ppb        5.77213 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.6      0.2641 ug/L       0.63115      0.2641 ppb        0.63115 239.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.5      2.9655 ug/L       2.78071      2.9655 ppb        2.78071  93.77%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -6.3     -1.8202 ug/L       2.52900     -1.8202 ppb        2.52900 138.94%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 8.4      4.4616 ug/L       2.39281      4.4616 ppb        2.39281  53.63%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                92.5      2.4966 ug/L       0.12728      2.4966 ppb        0.12728   5.10%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.8      0.2604 ug/L       0.56004      0.2604 ppb        0.56004 215.07%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 6.5      0.0354 ug/L       0.06789      0.0354 ppb        0.06789 191.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                74.7      0.1035 ug/L       0.07839      0.1035 ppb        0.07839  75.75%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.2      0.0560 ug/L       1.22540      0.0560 ppb        1.22540 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                246.1      6.6174 ug/L       3.81112      6.6174 ppb        3.81112  57.59%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 43.7      0.2782 ug/L       0.23104      0.2782 ppb        0.23104  83.06%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -42.9     -0.3296 ug/L       0.06401     -0.3296 ppb        0.06401  19.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     103.6      6.0340 ug/L       1.87970      6.0340 ppb        1.87970  31.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: 241711002|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 12/17/2009 13:28:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711002|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6104.5	6104.5	103	%			13:30:55
1	Y RADIAL	6535.7	6535.7	105.8	%			13:30:55
1	Al 396.153Radial†	160951.1	156924.0	104400	ug/L	104400	ppb	13:30:35
1	Ca 317.933Radial†	4937.8	4793.3	6583.5	ug/L	6583.5	ppb	13:30:55
1	Fe 238.204 Radial†	24776.8	24141.5	185200	ug/L	185200	ppb	13:30:35
1	K 766.490 Radial†	68676.5	63804.8	10286	ug/L	10286	ppb	13:30:35
1	Mg 279.077 IEC†	507.0	488.9	14115	ug/L	14115	ppb	13:30:55
1	Na 589.592 Radial†	12112.4	13533.1	3557.3	ug/L	3557.3	ppb	13:30:35
1	Sr 421.552†	16936.2	16525.0	89.358	ug/L	89.358	ppb	13:30:35
1	Sc 361.383	989401.1	989401.1	106.12	%			13:31:53
1	Y 371.029	830805.1	830805.1	108.04	%			13:31:53
1	Ag 328.068†	-13505.3	-13135.0	8.2710	ug/L	8.2710	ppb	13:31:53
1	As 188.979†	-49.8	-15.5	43.282	ug/L	43.282	ppb	13:32:13
1	B 249.677†	1711.5	2139.4	17.578	ug/L	17.578	ppb	13:31:53
1	Ba 233.527†	63045.5	59398.9	393.02	ug/L	393.02	ppb	13:31:53
1	Be 313.107†	-9716.6	-4607.9	3.1774	ug/L	3.1774	ppb	13:31:53
1	Cd 226.502†	1646.0	1764.9	-1.9002	ug/L	-1.9002	ppb	13:32:13
1	Co 228.616†	2026.8	1993.7	25.889	ug/L	25.889	ppb	13:32:13
1	Cr 267.716†	11052.0	10330.1	103.79	ug/L	103.79	ppb	13:32:13
1	Cu 324.752†	30611.1	22746.6	71.480	ug/L	71.480	ppb	13:31:53
1	Mn 257.610†	2597403.7	2447082.8	2353.0	ug/L	2353.0	ppb	13:31:53
1	Mo 202.031†	-86.1	-106.1	7.0213	ug/L	7.0213	ppb	13:32:13
1	Ni 231.604†	2831.1	2538.1	52.996	ug/L	52.996	ppb	13:32:13
1	P 214.914†	3898.2	3428.4	1595.7	ug/L	1595.7	ppb	13:32:13
1	Pb 220.353†	4275.0	4104.8	420.32	ug/L	420.32	ppb	13:32:13
1	S 181.975 Axial†	786.8	693.0	793.42	ug/L	793.42	ppb	13:32:13
1	Sb 206.836†	88.7	39.2	3.0219	ug/L	3.0219	ppb	13:32:13
1	Se 196.026†	-1198.1	-1093.1	76.251	ug/L	76.251	ppb	13:32:13
1	Si 251.611†	257401.3	241918.3	6527.7	ug/L	6527.7	ppb	13:31:53
1	Sn 189.927†	-12.6	-18.1	0.6337	ug/L	0.6337	ppb	13:32:13
1	Ti 334.940†	1775413.7	1674501.6	2382.5	ug/L	2382.5	ppb	13:31:53
1	Tl 190.801†	-174.7	-123.5	3.1390	ug/L	3.1390	ppb	13:32:13
1	U 409.014†	-9386.1	-5876.1	-181.50	ug/L	-181.50	ppb	13:31:53
1	V 292.402†	49027.2	47732.5	260.60	ug/L	260.60	ppb	13:31:53
1	Zn 213.857†	41224.4	37968.1	280.64	ug/L	280.64	ppb	13:31:53
1	SiO2†	253142.6	237867.7	13844	ug/L	13844	ppb	13:33:13
2	Sc Radial	6143.6	6143.6	103	%			13:31:20
2	Y RADIAL	6590.3	6590.3	106.7	%			13:31:20
2	Al 396.153Radial†	159270.0	154295.9	102650	ug/L	102650	ppb	13:31:00
2	Ca 317.933Radial†	4958.0	4782.2	6568.3	ug/L	6568.3	ppb	13:31:20
2	Fe 238.204 Radial†	24498.2	23717.7	181950	ug/L	181950	ppb	13:31:00
2	K 766.490 Radial†	68123.9	62843.0	10130	ug/L	10130	ppb	13:31:00
2	Mg 279.077 IEC†	512.6	491.2	14185	ug/L	14185	ppb	13:31:20
2	Na 589.592 Radial†	11993.5	13342.7	3507.3	ug/L	3507.3	ppb	13:31:00
2	Sr 421.552†	16812.0	16299.4	88.137	ug/L	88.137	ppb	13:31:00
2	Sc 361.383	986834.2	986834.2	105.84	%			13:32:20
2	Y 371.029	828652.5	828652.5	107.76	%			13:32:20
2	Ag 328.068†	-13527.7	-13189.3	6.9607	ug/L	6.9607	ppb	13:32:20
2	As 188.979†	-62.4	-27.5	38.629	ug/L	38.629	ppb	13:32:40
2	B 249.677†	1711.5	2143.6	18.091	ug/L	18.091	ppb	13:32:20
2	Ba 233.527†	62957.7	59470.5	393.36	ug/L	393.36	ppb	13:32:20
2	Be 313.107†	-9725.5	-4640.2	3.1720	ug/L	3.1720	ppb	13:32:20
2	Cd 226.502†	1641.9	1765.1	-1.5731	ug/L	-1.5731	ppb	13:32:40
2	Co 228.616†	2030.6	2002.3	26.075	ug/L	26.075	ppb	13:32:40
2	Cr 267.716†	11029.5	10335.9	103.78	ug/L	103.78	ppb	13:32:40
2	Cu 324.752†	30407.3	22629.1	70.993	ug/L	70.993	ppb	13:32:20
2	Mn 257.610†	2596705.9	2452790.2	2358.1	ug/L	2358.1	ppb	13:32:20
2	Mo 202.031†	-70.4	-91.5	7.6294	ug/L	7.6294	ppb	13:32:40
2	Ni 231.604†	2834.3	2548.1	53.206	ug/L	53.206	ppb	13:32:40

2	P 214.914†	3895.9	3435.8	1601.5	ug/L	1601.5 ppb	13:32:40
2	Pb 220.353†	4242.1	4084.1	418.12	ug/L	418.12 ppb	13:32:40
2	S 181.975 Axial†	790.0	697.9	799.54	ug/L	799.54 ppb	13:32:40
2	Sb 206.836†	79.4	30.6	0.5823	ug/L	0.5823 ppb	13:32:40
2	Se 196.026†	-1199.9	-1097.7	62.305	ug/L	62.305 ppb	13:32:40
2	Si 251.611†	256265.3	241475.9	6515.7	ug/L	6515.7 ppb	13:32:20
2	Sn 189.927†	-3.4	-9.4	1.8233	ug/L	1.8233 ppb	13:32:40
2	Ti 334.940†	1772743.6	1676330.7	2385.1	ug/L	2385.1 ppb	13:32:20
2	Tl 190.801†	-183.2	-132.0	1.0321	ug/L	1.0321 ppb	13:32:40
2	U 409.014†	-9345.3	-5860.5	-180.67	ug/L	-180.67 ppb	13:32:20
2	V 292.402†	49036.2	47861.2	261.89	ug/L	261.89 ppb	13:32:20
2	Zn 213.857†	41211.6	38057.1	281.64	ug/L	281.64 ppb	13:32:20
2	SiO2†	255431.7	240650.9	14007	ug/L	14007 ppb	13:33:18
3	Sc Radial	6095.2	6095.2	102	%		13:31:45
3	Y RADIAL	6545.9	6545.9	105.9	%		13:31:45
3	Al 396.153Radial†	161885.1	158075.4	105170	ug/L	105170 ppb	13:31:25
3	Ca 317.933Radial†	4920.6	4783.9	6570.6	ug/L	6570.6 ppb	13:31:45
3	Fe 238.204 Radial†	24889.1	24288.0	186320	ug/L	186320 ppb	13:31:25
3	K 766.490 Radial†	69344.5	64559.2	10408	ug/L	10408 ppb	13:31:25
3	Mg 279.077 IEC†	506.7	489.4	14128	ug/L	14128 ppb	13:31:45
3	Na 589.592 Radial†	12200.4	13637.0	3584.7	ug/L	3584.7 ppb	13:31:25
3	Sr 421.552†	17062.5	16673.5	90.161	ug/L	90.161 ppb	13:31:25
3	Sc 361.383	994868.0	994868.0	106.70	%		13:32:47
3	Y 371.029	833806.9	833806.9	108.43	%		13:32:47
3	Ag 328.068†	-13571.6	-13127.3	8.6768	ug/L	8.6768 ppb	13:32:47
3	As 188.979†	-50.2	-15.6	43.356	ug/L	43.356 ppb	13:33:07
3	B 249.677†	1526.5	1957.1	13.831	ug/L	13.831 ppb	13:32:47
3	Ba 233.527†	63121.0	59143.1	391.40	ug/L	391.40 ppb	13:32:47
3	Be 313.107†	-9620.4	-4467.5	3.2090	ug/L	3.2090 ppb	13:32:47
3	Cd 226.502†	1632.8	1744.1	-2.2081	ug/L	-2.2081 ppb	13:33:07
3	Co 228.616†	2017.4	1974.4	25.561	ug/L	25.561 ppb	13:33:07
3	Cr 267.716†	11060.1	10280.4	103.32	ug/L	103.32 ppb	13:33:07
3	Cu 324.752†	30621.5	22597.8	71.131	ug/L	71.131 ppb	13:32:47
3	Mn 257.610†	2606867.5	2442501.9	2348.7	ug/L	2348.7 ppb	13:32:47
3	Mo 202.031†	-98.8	-117.5	6.4400	ug/L	6.4400 ppb	13:33:07
3	Ni 231.604†	2864.6	2554.9	53.347	ug/L	53.347 ppb	13:33:07
3	P 214.914†	3876.9	3388.3	1575.0	ug/L	1575.0 ppb	13:33:07
3	Pb 220.353†	4279.0	4086.4	418.55	ug/L	418.55 ppb	13:33:07
3	S 181.975 Axial†	794.2	695.9	796.62	ug/L	796.62 ppb	13:33:07
3	Sb 206.836†	73.9	24.9	-1.0863	ug/L	-1.0863 ppb	13:33:07
3	Se 196.026†	-1199.2	-1088.0	83.006	ug/L	83.006 ppb	13:33:07
3	Si 251.611†	257318.6	240507.9	6489.5	ug/L	6489.5 ppb	13:32:47
3	Sn 189.927†	-8.2	-13.9	1.2405	ug/L	1.2405 ppb	13:33:07
3	Ti 334.940†	1779753.1	1669374.9	2375.2	ug/L	2375.2 ppb	13:32:47
3	Tl 190.801†	-175.2	-123.0	3.2051	ug/L	3.2051 ppb	13:33:07
3	U 409.014†	-9497.2	-5931.6	-183.13	ug/L	-183.13 ppb	13:32:47
3	V 292.402†	49135.1	47579.8	259.49	ug/L	259.49 ppb	13:32:47
3	Zn 213.857†	41354.5	37876.6	279.81	ug/L	279.81 ppb	13:32:47
3	SiO2†	259906.5	242895.8	14137	ug/L	14137 ppb	13:33:23

Mean Data: 241711002|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	990367.8	106.22	%	0.440				0.41%
Sc Radial	6114.4	103	%	0.4				0.42%
Y 371.029	831088.2	108.08	%	0.337				0.31%
Y RADIAL	6557.3	106.1	%	0.47				0.44%
Ag 328.068†	-13150.5	7.9695	ug/L	0.89693	7.9695	ppb	0.89693	11.25%
Al 396.153Radial†	156431.7	104070	ug/L	1288.9	104070	ppb	1288.9	1.24%
As 188.979†	-19.5	41.756	ug/L	2.7083	41.756	ppb	2.7083	6.49%
B 249.677†	2080.0	16.500	ug/L	2.3254	16.500	ppb	2.3254	14.09%
Ba 233.527†	59337.5	392.59	ug/L	1.050	392.59	ppb	1.050	0.27%
Be 313.107†	-4571.9	3.1861	ug/L	0.01996	3.1861	ppb	0.01996	0.63%
Ca 317.933Radial†	4786.5	6574.1	ug/L	8.23	6574.1	ppb	8.23	0.13%
Cd 226.502†	1758.0	-1.8938	ug/L	0.31755	-1.8938	ppb	0.31755	16.77%
Co 228.616†	1990.1	25.841	ug/L	0.2603	25.841	ppb	0.2603	1.01%
Cr 267.716†	10315.5	103.63	ug/L	0.266	103.63	ppb	0.266	0.26%
Cu 324.752†	22657.8	71.201	ug/L	0.2506	71.201	ppb	0.2506	0.35%
Fe 238.204 Radial†	24049.1	184490	ug/L	2272.1	184490	ppb	2272.1	1.23%
K 766.490 Radial†	63735.7	10275	ug/L	139.1	10275	ppb	139.1	1.35%

Mg 279.077 IEC†	489.9	14142	ug/L	37.2	14142	ppb	37.2	0.26%
Mn 257.610†	2447458.3	2353.2	ug/L	4.70	2353.2	ppb	4.70	0.20%
Mo 202.031†	-105.0	7.0303	ug/L	0.59472	7.0303	ppb	0.59472	8.46%
Na 589.592 Radial†	13504.3	3549.8	ug/L	39.24	3549.8	ppb	39.24	1.11%
Ni 231.604†	2547.0	53.183	ug/L	0.1765	53.183	ppb	0.1765	0.33%
P 214.914†	3417.5	1590.8	ug/L	13.93	1590.8	ppb	13.93	0.88%
Pb 220.353†	4091.8	419.00	ug/L	1.163	419.00	ppb	1.163	0.28%
S 181.975 Axial†	695.6	796.53	ug/L	3.058	796.53	ppb	3.058	0.38%
Sb 206.836†	31.6	0.8393	ug/L	2.06613	0.8393	ppb	2.06613	246.18%
Se 196.026†	-1092.9	73.854	ug/L	10.5568	73.854	ppb	10.5568	14.29%
Si 251.611†	241300.7	6511.0	ug/L	19.50	6511.0	ppb	19.50	0.30%
Sn 189.927†	-13.8	1.2325	ug/L	0.59480	1.2325	ppb	0.59480	48.26%
Sr 421.552†	16499.3	89.219	ug/L	1.0191	89.219	ppb	1.0191	1.14%
Ti 334.940†	1673402.4	2380.9	ug/L	5.13	2380.9	ppb	5.13	0.22%
Tl 190.801†	-126.2	2.4587	ug/L	1.23595	2.4587	ppb	1.23595	50.27%
U 409.014†	-5889.4	-181.77	ug/L	1.252	-181.77	ppb	1.252	0.69%
V 292.402†	47724.5	260.66	ug/L	1.201	260.66	ppb	1.201	0.46%
Zn 213.857†	37967.3	280.70	ug/L	0.921	280.70	ppb	0.921	0.33%
SiO2†	240471.5	13996	ug/L	146.6	13996	ppb	146.6	1.05%

Sequence No.: 24
Sample ID: 241711003|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 12/17/2009 13:35:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711003|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5988.6	5988.6	101	%			13:37:47
1	Y RADIAL	6993.9	6993.9	113.2	%			13:37:47
1	Al 396.153Radial†	220339.3	218978.5	145690	ug/L	145690	ppb	13:37:27
1	Ca 317.933Radial†	9301.9	9223.3	12668	ug/L	12668	ppb	13:37:27
1	Fe 238.204 Radial†	20181.7	20042.7	153760	ug/L	153760	ppb	13:37:27
1	K 766.490 Radial†	68387.9	64814.1	10417	ug/L	10417	ppb	13:37:27
1	Mg 279.077 IEC†	655.2	645.7	18719	ug/L	18719	ppb	13:37:47
1	Na 589.592 Radial†	8979.4	10648.3	2799.0	ug/L	2799.0	ppb	13:37:27
1	Sr 421.552†	25577.3	25431.7	137.50	ug/L	137.50	ppb	13:37:27
1	Sc 361.383	973549.5	973549.5	104.42	%			13:38:45
1	Y 371.029	885002.4	885002.4	115.09	%			13:38:45
1	Ag 328.068†	-10773.8	-10726.4	7.8029	ug/L	7.8029	ppb	13:38:51
1	As 188.979†	-27.2	5.4	53.879	ug/L	53.879	ppb	13:39:11
1	B 249.677†	1354.5	1823.8	15.408	ug/L	15.408	ppb	13:38:51
1	Ba 233.527†	162325.4	155445.1	1015.2	ug/L	1015.2	ppb	13:38:51
1	Be 313.107†	730.6	5248.1	8.3095	ug/L	8.3095	ppb	13:38:51
1	Cd 226.502†	1343.5	1500.5	-1.2054	ug/L	-1.2054	ppb	13:39:11
1	Co 228.616†	4724.6	4608.5	68.419	ug/L	68.419	ppb	13:39:11
1	Cr 267.716†	21021.4	20047.2	197.24	ug/L	197.24	ppb	13:39:11
1	Cu 324.752†	35026.9	27445.2	82.689	ug/L	82.689	ppb	13:38:51
1	Mn 257.610†	5749249.3	5505412.2	5267.7	ug/L	5267.7	ppb	13:38:45
1	Mo 202.031†	-35.1	-58.6	7.5293	ug/L	7.5293	ppb	13:39:11
1	Ni 231.604†	5544.0	5179.7	108.15	ug/L	108.15	ppb	13:39:11
1	P 214.914†	2294.4	1952.3	892.50	ug/L	892.50	ppb	13:39:11
1	Pb 220.353†	4648.3	4527.8	474.64	ug/L	474.64	ppb	13:39:11
1	S 181.975 Axial†	563.4	491.1	548.15	ug/L	548.15	ppb	13:39:11
1	Sb 206.836†	87.1	39.0	-3.7022	ug/L	-3.7022	ppb	13:39:11
1	Se 196.026†	-985.6	-908.0	78.865	ug/L	78.865	ppb	13:39:11
1	Si 251.611†	350693.8	335212.6	9046.2	ug/L	9046.2	ppb	13:38:51
1	Sn 189.927†	-70.5	-73.8	-7.1049	ug/L	-7.1049	ppb	13:39:11
1	Ti 334.940†	2461544.5	2358840.0	3356.4	ug/L	3356.4	ppb	13:38:45
1	Tl 190.801†	-281.6	-228.6	2.3544	ug/L	2.3544	ppb	13:39:11
1	U 409.014†	-11598.9	-8139.3	-238.58	ug/L	-238.58	ppb	13:38:51
1	V 292.402†	49430.2	48870.7	271.25	ug/L	271.25	ppb	13:38:51
1	Zn 213.857†	36959.3	34516.1	255.91	ug/L	255.91	ppb	13:38:51
1	SiO2†	350982.6	335451.7	19527	ug/L	19527	ppb	13:40:20
2	Sc Radial	5986.7	5986.7	101	%			13:38:12
2	Y RADIAL	6972.6	6972.6	112.8	%			13:38:12
2	Al 396.153Radial†	224254.3	222940.1	148320	ug/L	148320	ppb	13:37:52
2	Ca 317.933Radial†	9475.9	9399.2	12910	ug/L	12910	ppb	13:37:52
2	Fe 238.204 Radial†	20529.9	20395.2	156460	ug/L	156460	ppb	13:37:52
2	K 766.490 Radial†	69679.8	66120.0	10628	ug/L	10628	ppb	13:37:52
2	Mg 279.077 IEC†	658.7	649.5	18826	ug/L	18826	ppb	13:38:12
2	Na 589.592 Radial†	9306.5	10976.3	2885.3	ug/L	2885.3	ppb	13:37:52
2	Sr 421.552†	26126.6	25985.8	140.49	ug/L	140.49	ppb	13:37:52
2	Sc 361.383	974748.7	974748.7	104.55	%			13:39:17
2	Y 371.029	885826.4	885826.4	115.20	%			13:39:17
2	Ag 328.068†	-10926.4	-10859.6	8.1536	ug/L	8.1536	ppb	13:39:22
2	As 188.979†	-50.6	-16.9	46.620	ug/L	46.620	ppb	13:39:42
2	B 249.677†	1428.8	1893.3	16.419	ug/L	16.419	ppb	13:39:22
2	Ba 233.527†	162903.9	155807.2	1017.6	ug/L	1017.6	ppb	13:39:22
2	Be 313.107†	924.3	5432.5	8.3833	ug/L	8.3833	ppb	13:39:22
2	Cd 226.502†	1292.9	1450.5	-1.9451	ug/L	-1.9451	ppb	13:39:42
2	Co 228.616†	4747.5	4624.8	68.641	ug/L	68.641	ppb	13:39:42
2	Cr 267.716†	21078.6	20077.1	197.58	ug/L	197.58	ppb	13:39:42
2	Cu 324.752†	35064.1	27439.5	82.812	ug/L	82.812	ppb	13:39:22
2	Mn 257.610†	5768797.6	5517336.8	5279.3	ug/L	5279.3	ppb	13:39:17
2	Mo 202.031†	-35.4	-58.8	7.7085	ug/L	7.7085	ppb	13:39:42
2	Ni 231.604†	5561.9	5190.2	108.37	ug/L	108.37	ppb	13:39:42

2	P 214.914†	2311.3	1965.7	897.95	ug/L	897.95 ppb	13:39:42
2	Pb 220.353†	4659.8	4533.4	475.57	ug/L	475.57 ppb	13:39:42
2	S 181.975 Axial†	555.1	482.5	537.55	ug/L	537.55 ppb	13:39:42
2	Sb 206.836†	111.4	62.2	2.9459	ug/L	2.9459 ppb	13:39:42
2	Se 196.026†	-980.0	-901.4	92.228	ug/L	92.228 ppb	13:39:42
2	Si 251.611†	352553.6	336578.3	9083.0	ug/L	9083.0 ppb	13:39:22
2	Sn 189.927†	-69.2	-72.4	-6.8417	ug/L	-6.8417 ppb	13:39:42
2	Ti 334.940†	2469653.9	2363696.6	3363.3	ug/L	3363.3 ppb	13:39:17
2	Tl 190.801†	-280.2	-226.9	2.9614	ug/L	2.9614 ppb	13:39:42
2	U 409.014†	-11881.8	-8396.1	-245.83	ug/L	-245.83 ppb	13:39:22
2	V 292.402†	49514.0	48892.6	270.95	ug/L	270.95 ppb	13:39:22
2	Zn 213.857†	37127.7	34633.6	256.57	ug/L	256.57 ppb	13:39:22
2	SiO2†	353756.0	337691.0	19657	ug/L	19657 ppb	13:40:25
3	Sc Radial	5954.6	5954.6	100	%		13:38:37
3	Y RADIAL	6935.2	6935.2	112.2	%		13:38:37
3	Al 396.153Radial†	225292.3	225178.5	149810	ug/L	149810 ppb	13:38:17
3	Ca 317.933Radial†	9504.6	9478.7	13019	ug/L	13019 ppb	13:38:17
3	Fe 238.204 Radial†	20550.2	20525.4	157460	ug/L	157460 ppb	13:38:17
3	K 766.490 Radial†	69829.2	66642.4	10712	ug/L	10712 ppb	13:38:17
3	Mg 279.077 IEC†	644.7	639.0	18518	ug/L	18518 ppb	13:38:37
3	Na 589.592 Radial†	9242.7	10962.3	2881.6	ug/L	2881.6 ppb	13:38:17
3	Sr 421.552†	26294.3	26293.4	142.16	ug/L	142.16 ppb	13:38:17
3	Sc 361.383	975212.9	975212.9	104.60	%		13:39:49
3	Y 371.029	885204.4	885204.4	115.12	%		13:39:49
3	Ag 328.068†	-10886.4	-10816.4	8.6567	ug/L	8.6567 ppb	13:39:54
3	As 188.979†	-41.6	-8.3	49.750	ug/L	49.750 ppb	13:40:14
3	B 249.677†	1427.3	1891.2	16.247	ug/L	16.247 ppb	13:39:54
3	Ba 233.527†	161789.7	154667.8	1010.3	ug/L	1010.3 ppb	13:39:54
3	Be 313.107†	831.1	5343.0	8.3493	ug/L	8.3493 ppb	13:39:54
3	Cd 226.502†	1308.0	1464.4	-1.9154	ug/L	-1.9154 ppb	13:40:14
3	Co 228.616†	4724.5	4600.6	68.222	ug/L	68.222 ppb	13:40:14
3	Cr 267.716†	21011.5	20003.4	196.88	ug/L	196.88 ppb	13:40:14
3	Cu 324.752†	34955.8	27320.0	82.537	ug/L	82.537 ppb	13:39:54
3	Mn 257.610†	5773626.9	5519327.4	5281.3	ug/L	5281.3 ppb	13:39:49
3	Mo 202.031†	-39.8	-63.0	7.5344	ug/L	7.5344 ppb	13:40:14
3	Ni 231.604†	5522.1	5149.7	107.52	ug/L	107.52 ppb	13:40:14
3	P 214.914†	2278.9	1933.7	881.67	ug/L	881.67 ppb	13:40:14
3	Pb 220.353†	4629.9	4502.7	472.73	ug/L	472.73 ppb	13:40:14
3	S 181.975 Axial†	550.7	478.1	532.02	ug/L	532.02 ppb	13:40:14
3	Sb 206.836†	101.7	52.9	0.2656	ug/L	0.2656 ppb	13:40:14
3	Se 196.026†	-998.3	-918.5	86.933	ug/L	86.933 ppb	13:40:14
3	Si 251.611†	350742.8	334686.6	9031.9	ug/L	9031.9 ppb	13:39:54
3	Sn 189.927†	-61.0	-64.5	-5.6944	ug/L	-5.6944 ppb	13:40:14
3	Ti 334.940†	2469047.2	2361992.2	3360.9	ug/L	3360.9 ppb	13:39:49
3	Tl 190.801†	-284.3	-230.7	2.0523	ug/L	2.0523 ppb	13:40:14
3	U 409.014†	-11764.3	-8278.4	-242.79	ug/L	-242.79 ppb	13:39:54
3	V 292.402†	49253.4	48620.9	269.14	ug/L	269.14 ppb	13:39:54
3	Zn 213.857†	36890.2	34389.7	254.57	ug/L	254.57 ppb	13:39:54
3	SiO2†	349912.4	333855.2	19434	ug/L	19434 ppb	13:40:30

Mean Data: 241711003|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	974503.7	104.52	%	0.092				0.09%
Sc Radial	5976.6	100	%	0.3				0.32%
Y 371.029	885344.4	115.14	%	0.056				0.05%
Y RADIAL	6967.2	112.8	%	0.48				0.43%
Ag 328.068†	-10800.8	8.2044	ug/L	0.42917	8.2044	ppb	0.42917	5.23%
Al 396.153Radial†	222365.7	147940	ug/L	2088.8	147940	ppb	2088.8	1.41%
As 188.979†	-6.6	50.083	ug/L	3.6408	50.083	ppb	3.6408	7.27%
B 249.677†	1869.4	16.025	ug/L	0.5414	16.025	ppb	0.5414	3.38%
Ba 233.527†	155306.7	1014.4	ug/L	3.75	1014.4	ppb	3.75	0.37%
Be 313.107†	5341.2	8.3474	ug/L	0.03694	8.3474	ppb	0.03694	0.44%
Ca 317.933Radial†	9367.1	12866	ug/L	179.5	12866	ppb	179.5	1.40%
Cd 226.502†	1471.8	-1.6886	ug/L	0.41878	-1.6886	ppb	0.41878	24.80%
Co 228.616†	4611.3	68.427	ug/L	0.2096	68.427	ppb	0.2096	0.31%
Cr 267.716†	20042.6	197.23	ug/L	0.350	197.23	ppb	0.350	0.18%
Cu 324.752†	27401.6	82.679	ug/L	0.1378	82.679	ppb	0.1378	0.17%
Fe 238.204 Radial†	20321.1	155890	ug/L	1915.9	155890	ppb	1915.9	1.23%
K 766.490 Radial†	65858.8	10586	ug/L	152.2	10586	ppb	152.2	1.44%

Mg 279.077 IEC†	644.7	18688	ug/L	156.3	18688	ppb	156.3	0.84%
Mn 257.610†	5514025.5	5276.1	ug/L	7.37	5276.1	ppb	7.37	0.14%
Mo 202.031†	-60.1	7.5907	ug/L	0.10204	7.5907	ppb	0.10204	1.34%
Na 589.592 Radial†	10862.3	2855.3	ug/L	48.75	2855.3	ppb	48.75	1.71%
Ni 231.604†	5173.2	108.01	ug/L	0.439	108.01	ppb	0.439	0.41%
P 214.914†	1950.6	890.71	ug/L	8.287	890.71	ppb	8.287	0.93%
Pb 220.353†	4521.3	474.31	ug/L	1.445	474.31	ppb	1.445	0.30%
S 181.975 Axial†	483.9	539.24	ug/L	8.198	539.24	ppb	8.198	1.52%
Sb 206.836†	51.3	-0.1636	ug/L	3.34477	-0.1636	ppb	3.34477	>999.9%
Se 196.026†	-909.3	86.009	ug/L	6.7291	86.009	ppb	6.7291	7.82%
Si 251.611†	335492.5	9053.7	ug/L	26.36	9053.7	ppb	26.36	0.29%
Sn 189.927†	-70.2	-6.5470	ug/L	0.75000	-6.5470	ppb	0.75000	11.46%
Sr 421.552†	25903.6	140.05	ug/L	2.361	140.05	ppb	2.361	1.69%
Ti 334.940†	2361509.6	3360.2	ug/L	3.51	3360.2	ppb	3.51	0.10%
Tl 190.801†	-228.7	2.4560	ug/L	0.46296	2.4560	ppb	0.46296	18.85%
U 409.014†	-8271.3	-242.40	ug/L	3.640	-242.40	ppb	3.640	1.50%
V 292.402†	48794.7	270.45	ug/L	1.142	270.45	ppb	1.142	0.42%
Zn 213.857†	34513.1	255.68	ug/L	1.020	255.68	ppb	1.020	0.40%
SiO2†	335666.0	19539	ug/L	112.2	19539	ppb	112.2	0.57%

Sequence No.: 25
Sample ID: 241711004|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 12/17/2009 13:42:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711004|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6025.0	6025.0	101	%			13:44:54
1	Y RADIAL	7022.2	7022.2	113.6	%			13:44:54
1	Al 396.153Radial†	255428.1	252312.2	167860	ug/L	167860	ppb	13:44:34
1	Ca 317.933Radial†	20233.3	19964.7	27421	ug/L	27421	ppb	13:44:34
1	Fe 238.204 Radial†	20789.7	20521.8	157430	ug/L	157430	ppb	13:44:34
1	K 766.490 Radial†	67202.7	63232.2	10193	ug/L	10193	ppb	13:44:34
1	Mg 279.077 IEC†	727.3	713.1	20682	ug/L	20682	ppb	13:44:54
1	Na 589.592 Radial†	27000.2	28394.1	7463.7	ug/L	7463.7	ppb	13:44:34
1	Sr 421.552†	45512.3	44968.4	243.08	ug/L	243.08	ppb	13:44:34
1	Sc 361.383	973804.6	973804.6	104.45	%			13:45:53
1	Y 371.029	886802.6	886802.6	115.33	%			13:45:53
1	Ag 328.068†	-11211.1	-11142.4	7.1526	ug/L	7.1526	ppb	13:45:53
1	As 188.979†	-28.2	4.4	53.266	ug/L	53.266	ppb	13:46:13
1	B 249.677†	1127.3	1605.9	10.668	ug/L	10.668	ppb	13:45:53
1	Ba 233.527†	230691.1	220860.1	1439.9	ug/L	1439.9	ppb	13:45:53
1	Be 313.107†	-764.9	3816.1	7.6567	ug/L	7.6567	ppb	13:45:53
1	Cd 226.502†	1417.3	1570.8	-0.9381	ug/L	-0.9381	ppb	13:46:13
1	Co 228.616†	3509.7	3444.0	49.229	ug/L	49.229	ppb	13:46:13
1	Cr 267.716†	12895.8	12262.1	122.04	ug/L	122.04	ppb	13:46:13
1	Cu 324.752†	38920.1	31163.9	93.018	ug/L	93.018	ppb	13:45:53
1	Mn 257.610†	2884292.3	2760961.5	2649.5	ug/L	2649.5	ppb	13:45:53
1	Mo 202.031†	-86.0	-107.3	4.9808	ug/L	4.9808	ppb	13:46:13
1	Ni 231.604†	3551.2	3270.3	68.275	ug/L	68.275	ppb	13:46:13
1	P 214.914†	2049.0	1716.7	777.12	ug/L	777.12	ppb	13:46:13
1	Pb 220.353†	1375.6	1393.3	164.56	ug/L	164.56	ppb	13:46:13
1	S 181.975 Axial†	525.4	454.6	500.90	ug/L	500.90	ppb	13:46:13
1	Sb 206.836†	92.6	44.2	-0.8014	ug/L	-0.8014	ppb	13:46:13
1	Se 196.026†	-1039.4	-959.2	70.042	ug/L	70.042	ppb	13:46:13
1	Si 251.611†	185705.3	177159.0	4779.5	ug/L	4779.5	ppb	13:45:53
1	Sn 189.927†	-140.8	-141.0	-15.135	ug/L	-15.135	ppb	13:46:13
1	Ti 334.940†	2393016.1	2292611.2	3262.9	ug/L	3262.9	ppb	13:45:53
1	Tl 190.801†	-226.6	-175.8	0.1187	ug/L	0.1187	ppb	13:46:13
1	U 409.014†	-10348.9	-6939.5	-206.64	ug/L	-206.64	ppb	13:45:53
1	V 292.402†	53834.2	53074.8	296.56	ug/L	296.56	ppb	13:45:53
1	Zn 213.857†	32579.6	30313.5	222.61	ug/L	222.61	ppb	13:46:13
1	SiO2†	185604.1	177024.6	10302	ug/L	10302	ppb	13:47:12
2	Sc Radial	6086.3	6086.3	102	%			13:45:19
2	Y RADIAL	7087.9	7087.9	114.7	%			13:45:19
2	Al 396.153Radial†	259820.9	254067.2	169030	ug/L	169030	ppb	13:44:59
2	Ca 317.933Radial†	20567.1	20089.9	27593	ug/L	27593	ppb	13:44:59
2	Fe 238.204 Radial†	21076.1	20595.1	158000	ug/L	158000	ppb	13:44:59
2	K 766.490 Radial†	68314.5	63651.0	10261	ug/L	10261	ppb	13:44:59
2	Mg 279.077 IEC†	725.3	703.9	20412	ug/L	20412	ppb	13:45:19
2	Na 589.592 Radial†	27459.6	28574.8	7511.2	ug/L	7511.2	ppb	13:44:59
2	Sr 421.552†	46391.9	45375.9	245.28	ug/L	245.28	ppb	13:44:59
2	Sc 361.383	982785.3	982785.3	105.41	%			13:46:20
2	Y 371.029	893058.8	893058.8	116.14	%			13:46:20
2	Ag 328.068†	-11502.4	-11320.6	6.5918	ug/L	6.5918	ppb	13:46:20
2	As 188.979†	-16.7	15.6	57.298	ug/L	57.298	ppb	13:46:40
2	B 249.677†	1072.7	1544.2	9.3793	ug/L	9.3793	ppb	13:46:20
2	Ba 233.527†	233641.2	221640.4	1445.0	ug/L	1445.0	ppb	13:46:20
2	Be 313.107†	-407.5	4161.8	7.7855	ug/L	7.7855	ppb	13:46:20
2	Cd 226.502†	1377.9	1521.0	-1.4628	ug/L	-1.4628	ppb	13:46:40
2	Co 228.616†	3460.7	3366.9	47.914	ug/L	47.914	ppb	13:46:40
2	Cr 267.716†	12727.1	11989.3	119.41	ug/L	119.41	ppb	13:46:40
2	Cu 324.752†	39449.5	31325.6	93.488	ug/L	93.488	ppb	13:46:20
2	Mn 257.610†	2920840.5	2770399.4	2658.6	ug/L	2658.6	ppb	13:46:20
2	Mo 202.031†	-76.2	-97.2	5.6001	ug/L	5.6001	ppb	13:46:40
2	Ni 231.604†	3514.0	3203.9	66.890	ug/L	66.890	ppb	13:46:40

2	P 214.914†	2040.7	1690.9	764.07	ug/L	764.07 ppb	13:46:40
2	Pb 220.353†	1400.2	1404.6	165.92	ug/L	165.92 ppb	13:46:40
2	S 181.975 Axial†	503.2	429.0	470.61	ug/L	470.61 ppb	13:46:40
2	Sb 206.836†	107.9	57.9	3.2059	ug/L	3.2059 ppb	13:46:40
2	Se 196.026†	-1008.6	-920.9	92.634	ug/L	92.634 ppb	13:46:40
2	Si 251.611†	187262.5	177011.5	4775.4	ug/L	4775.4 ppb	13:46:20
2	Sn 189.927†	-133.2	-132.6	-13.900	ug/L	-13.900 ppb	13:46:40
2	Ti 334.940†	2421071.7	2298290.3	3271.0	ug/L	3271.0 ppb	13:46:20
2	Tl 190.801†	-233.6	-180.5	-0.9046	ug/L	-0.9046 ppb	13:46:40
2	U 409.014†	-10307.9	-6810.1	-203.22	ug/L	-203.22 ppb	13:46:20
2	V 292.402†	54348.9	53092.1	296.59	ug/L	296.59 ppb	13:46:20
2	Zn 213.857†	32322.9	29785.0	218.41	ug/L	218.41 ppb	13:46:40
2	SiO2†	183806.8	173695.7	10108	ug/L	10108 ppb	13:47:18
3	Sc Radial	6069.8	6069.8	102	%		13:45:45
3	Y RADIAL	7086.4	7086.4	114.7	%		13:45:45
3	Al 396.153Radial†	258310.6	253275.9	168500	ug/L	168500 ppb	13:45:25
3	Ca 317.933Radial†	20350.6	19932.2	27377	ug/L	27377 ppb	13:45:25
3	Fe 238.204 Radial†	20865.1	20444.2	156840	ug/L	156840 ppb	13:45:25
3	K 766.490 Radial†	67731.1	63260.3	10198	ug/L	10198 ppb	13:45:25
3	Mg 279.077 IEC†	723.1	703.6	20406	ug/L	20406 ppb	13:45:45
3	Na 589.592 Radial†	27098.4	28293.5	7437.3	ug/L	7437.3 ppb	13:45:25
3	Sr 421.552†	46011.6	45126.1	243.93	ug/L	243.93 ppb	13:45:25
3	Sc 361.383	974637.1	974637.1	104.54	%		13:46:47
3	Y 371.029	885710.1	885710.1	115.18	%		13:46:47
3	Ag 328.068†	-11392.2	-11306.4	6.2680	ug/L	6.2680 ppb	13:46:47
3	As 188.979†	-31.9	0.9	52.053	ug/L	52.053 ppb	13:47:07
3	B 249.677†	1161.3	1637.5	11.374	ug/L	11.374 ppb	13:46:47
3	Ba 233.527†	231883.9	221812.5	1446.1	ug/L	1446.1 ppb	13:46:47
3	Be 313.107†	-428.1	4138.9	7.7844	ug/L	7.7844 ppb	13:46:47
3	Cd 226.502†	1389.6	1543.2	-1.1381	ug/L	-1.1381 ppb	13:47:07
3	Co 228.616†	3447.8	3382.0	48.175	ug/L	48.175 ppb	13:47:07
3	Cr 267.716†	12763.6	12125.2	120.71	ug/L	120.71 ppb	13:47:07
3	Cu 324.752†	39108.3	31312.1	93.392	ug/L	93.392 ppb	13:46:47
3	Mn 257.610†	2898689.7	2772375.6	2660.4	ug/L	2660.4 ppb	13:46:47
3	Mo 202.031†	-88.4	-109.5	4.8106	ug/L	4.8106 ppb	13:47:07
3	Ni 231.604†	3522.1	3239.6	67.635	ug/L	67.635 ppb	13:47:07
3	P 214.914†	2018.4	1685.8	762.24	ug/L	762.24 ppb	13:47:07
3	Pb 220.353†	1381.7	1398.0	165.23	ug/L	165.23 ppb	13:47:07
3	S 181.975 Axial†	497.1	427.1	468.53	ug/L	468.53 ppb	13:47:07
3	Sb 206.836†	87.1	38.9	-2.3645	ug/L	-2.3645 ppb	13:47:07
3	Se 196.026†	-1027.5	-947.0	74.684	ug/L	74.684 ppb	13:47:07
3	Si 251.611†	185903.9	177197.1	4780.5	ug/L	4780.5 ppb	13:46:47
3	Sn 189.927†	-140.1	-140.3	-15.044	ug/L	-15.044 ppb	13:47:07
3	Ti 334.940†	2403390.4	2300578.4	3274.2	ug/L	3274.2 ppb	13:46:47
3	Tl 190.801†	-217.7	-167.1	2.4706	ug/L	2.4706 ppb	13:47:07
3	U 409.014†	-10215.2	-6803.2	-202.89	ug/L	-202.89 ppb	13:46:47
3	V 292.402†	53942.7	53134.6	297.01	ug/L	297.01 ppb	13:46:47
3	Zn 213.857†	32258.7	29979.9	220.05	ug/L	220.05 ppb	13:47:07
3	SiO2†	187411.0	178601.4	10393	ug/L	10393 ppb	13:47:23

Mean Data: 241711004|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	977075.6	104.80	%	0.532				0.51%
Sc Radial	6060.4	102	%	0.5				0.52%
Y 371.029	888523.8	115.55	%	0.516				0.45%
Y RADIAL	7065.5	114.3	%	0.61				0.53%
Ag 328.068†	-11256.5	6.6708	ug/L	0.44756	6.6708	ppb	0.44756	6.71%
Al 396.153Radial†	253218.4	168470	ug/L	584.7	168470	ppb	584.7	0.35%
As 188.979†	7.0	54.206	ug/L	2.7459	54.206	ppb	2.7459	5.07%
B 249.677†	1595.9	10.474	ug/L	1.0115	10.474	ppb	1.0115	9.66%
Ba 233.527†	221437.7	1443.7	ug/L	3.29	1443.7	ppb	3.29	0.23%
Be 313.107†	4038.9	7.7422	ug/L	0.07404	7.7422	ppb	0.07404	0.96%
Ca 317.933Radial†	19995.6	27464	ug/L	114.3	27464	ppb	114.3	0.42%
Cd 226.502†	1545.0	-1.1797	ug/L	0.26484	-1.1797	ppb	0.26484	22.45%
Co 228.616†	3397.7	48.439	ug/L	0.6962	48.439	ppb	0.6962	1.44%
Cr 267.716†	12125.5	120.72	ug/L	1.315	120.72	ppb	1.315	1.09%
Cu 324.752†	31267.2	93.299	ug/L	0.2482	93.299	ppb	0.2482	0.27%
Fe 238.204 Radial†	20520.4	157420	ug/L	578.8	157420	ppb	578.8	0.37%
K 766.490 Radial†	63381.2	10217	ug/L	37.8	10217	ppb	37.8	0.37%

Mg 279.077 IEC†	706.8	20500	ug/L	157.5	20500	ppb	157.5	0.77%
Mn 257.610†	2767912.1	2656.2	ug/L	5.81	2656.2	ppb	5.81	0.22%
Mo 202.031†	-104.7	5.1305	ug/L	0.41550	5.1305	ppb	0.41550	8.10%
Na 589.592 Radial†	28420.8	7470.7	ug/L	37.46	7470.7	ppb	37.46	0.50%
Ni 231.604†	3237.9	67.600	ug/L	0.6933	67.600	ppb	0.6933	1.03%
P 214.914†	1697.8	767.81	ug/L	8.118	767.81	ppb	8.118	1.06%
Pb 220.353†	1398.6	165.24	ug/L	0.677	165.24	ppb	0.677	0.41%
S 181.975 Axial†	436.9	480.01	ug/L	18.120	480.01	ppb	18.120	3.77%
Sb 206.836†	47.0	0.0133	ug/L	2.87320	0.0133	ppb	2.87320	>999.9%
Se 196.026†	-942.4	79.120	ug/L	11.9315	79.120	ppb	11.9315	15.08%
Si 251.611†	177122.5	4778.5	ug/L	2.67	4778.5	ppb	2.67	0.06%
Sn 189.927†	-137.9	-14.693	ug/L	0.6881	-14.693	ppb	0.6881	4.68%
Sr 421.552†	45156.8	244.09	ug/L	1.111	244.09	ppb	1.111	0.46%
Ti 334.940†	2297160.0	3269.4	ug/L	5.84	3269.4	ppb	5.84	0.18%
Tl 190.801†	-174.5	0.5616	ug/L	1.73065	0.5616	ppb	1.73065	308.17%
U 409.014†	-6850.9	-204.25	ug/L	2.073	-204.25	ppb	2.073	1.01%
V 292.402†	53100.5	296.72	ug/L	0.250	296.72	ppb	0.250	0.08%
Zn 213.857†	30026.1	220.36	ug/L	2.118	220.36	ppb	2.118	0.96%
SiO2†	176440.5	10267	ug/L	145.9	10267	ppb	145.9	1.42%

Sequence No.: 26
Sample ID: 241711005|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 12/17/2009 13:49:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711005|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6229.0	6229.0	105	%			13:51:46
1	Y RADIAL	7119.6	7119.6	115.2	%			13:51:46
1	Al 396.153Radial†	127803.6	122118.8	81245	ug/L	81245	ppb	13:51:26
1	Ca 317.933Radial†	13786.5	13151.1	18063	ug/L	18063	ppb	13:51:26
1	Fe 238.204 Radial†	17206.3	16425.9	126010	ug/L	126010	ppb	13:51:26
1	K 766.490 Radial†	71153.6	64833.2	10437	ug/L	10437	ppb	13:51:26
1	Mg 279.077 IEC†	489.2	462.1	13381	ug/L	13381	ppb	13:51:46
1	Na 589.592 Radial†	31191.6	31525.2	8286.8	ug/L	8286.8	ppb	13:51:26
1	Sr 421.552†	32579.9	31140.9	168.34	ug/L	168.34	ppb	13:51:26
1	Sc 361.383	978983.1	978983.1	105.00	%			13:52:44
1	Y 371.029	881007.7	881007.7	114.57	%			13:52:44
1	Ag 328.068†	-9028.2	-9006.6	5.3096	ug/L	5.3096	ppb	13:52:44
1	As 188.979†	-26.7	6.1	42.435	ug/L	42.435	ppb	13:53:05
1	B 249.677†	922.2	1404.8	10.896	ug/L	10.896	ppb	13:52:44
1	Ba 233.527†	140530.0	133825.1	873.70	ug/L	873.70	ppb	13:52:44
1	Be 313.107†	-630.8	3947.7	6.1710	ug/L	6.1710	ppb	13:52:44
1	Cd 226.502†	1116.4	1277.1	-0.5599	ug/L	-0.5599	ppb	13:53:05
1	Co 228.616†	2832.0	2780.9	39.960	ug/L	39.960	ppb	13:53:05
1	Cr 267.716†	9253.3	8727.8	87.123	ug/L	87.123	ppb	13:53:05
1	Cu 324.752†	27031.9	19644.8	60.001	ug/L	60.001	ppb	13:52:44
1	Mn 257.610†	3105622.8	2957142.5	2833.7	ug/L	2833.7	ppb	13:52:44
1	Mo 202.031†	-58.9	-81.0	4.2651	ug/L	4.2651	ppb	13:53:05
1	Ni 231.604†	3251.2	2966.6	61.939	ug/L	61.939	ppb	13:53:05
1	P 214.914†	3400.0	2993.0	1418.4	ug/L	1418.4	ppb	13:53:05
1	Pb 220.353†	1845.2	1833.6	191.94	ug/L	191.94	ppb	13:53:05
1	S 181.975 Axial†	697.0	615.4	706.76	ug/L	706.76	ppb	13:53:05
1	Sb 206.836†	78.2	30.1	-0.1629	ug/L	-0.1629	ppb	13:53:05
1	Se 196.026†	-833.7	-758.0	47.030	ug/L	47.030	ppb	13:53:05
1	Si 251.611†	234570.5	222756.2	6010.3	ug/L	6010.3	ppb	13:52:44
1	Sn 189.927†	-104.9	-106.1	-11.581	ug/L	-11.581	ppb	13:53:05
1	Ti 334.940†	1831711.4	1745921.8	2484.7	ug/L	2484.7	ppb	13:52:44
1	Tl 190.801†	-201.2	-150.5	-0.5381	ug/L	-0.5381	ppb	13:53:05
1	U 409.014†	-9971.0	-6527.2	-191.53	ug/L	-191.53	ppb	13:52:44
1	V 292.402†	37446.1	37194.6	205.11	ug/L	205.11	ppb	13:52:44
1	Zn 213.857†	35577.4	33003.6	247.14	ug/L	247.14	ppb	13:52:44
1	SiO2†	232880.2	221108.9	12868	ug/L	12868	ppb	13:54:04
2	Sc Radial	6037.5	6037.5	101	%			13:52:11
2	Y RADIAL	6970.5	6970.5	112.8	%			13:52:11
2	Al 396.153Radial†	129639.4	127802.1	85026	ug/L	85026	ppb	13:51:51
2	Ca 317.933Radial†	13957.7	13737.7	18869	ug/L	18869	ppb	13:51:51
2	Fe 238.204 Radial†	17428.7	17166.6	131690	ug/L	131690	ppb	13:51:51
2	K 766.490 Radial†	71699.3	67527.8	10873	ug/L	10873	ppb	13:51:51
2	Mg 279.077 IEC†	498.6	486.2	14080	ug/L	14080	ppb	13:52:11
2	Na 589.592 Radial†	31476.8	32751.8	8609.2	ug/L	8609.2	ppb	13:51:51
2	Sr 421.552†	32949.6	32492.7	175.65	ug/L	175.65	ppb	13:51:51
2	Sc 361.383	987510.9	987510.9	105.92	%			13:53:12
2	Y 371.029	888101.5	888101.5	115.50	%			13:53:12
2	Ag 328.068†	-9015.6	-8920.5	7.5589	ug/L	7.5589	ppb	13:53:12
2	As 188.979†	-37.9	-4.4	39.736	ug/L	39.736	ppb	13:53:32
2	B 249.677†	906.8	1382.7	9.7070	ug/L	9.7070	ppb	13:53:12
2	Ba 233.527†	141979.0	134037.4	875.29	ug/L	875.29	ppb	13:53:12
2	Be 313.107†	-662.8	3922.7	6.1696	ug/L	6.1696	ppb	13:53:12
2	Cd 226.502†	1085.1	1238.4	-1.4924	ug/L	-1.4924	ppb	13:53:32
2	Co 228.616†	2830.8	2756.5	39.463	ug/L	39.463	ppb	13:53:32
2	Cr 267.716†	9236.1	8635.5	86.333	ug/L	86.333	ppb	13:53:32
2	Cu 324.752†	27335.7	19709.3	60.467	ug/L	60.467	ppb	13:53:12
2	Mn 257.610†	3136564.6	2960814.2	2837.8	ug/L	2837.8	ppb	13:53:12
2	Mo 202.031†	-55.3	-77.2	4.8907	ug/L	4.8907	ppb	13:53:32
2	Ni 231.604†	3246.4	2935.4	61.287	ug/L	61.287	ppb	13:53:32

2	P 214.914†	3405.2	2969.9	1403.5	ug/L	1403.5 ppb	13:53:32
2	Pb 220.353†	1799.7	1775.4	186.48	ug/L	186.48 ppb	13:53:32
2	S 181.975 Axial†	698.7	611.3	701.20	ug/L	701.20 ppb	13:53:32
2	Sb 206.836†	78.5	29.7	-0.2768	ug/L	-0.2768 ppb	13:53:32
2	Se 196.026†	-829.9	-747.6	72.879	ug/L	72.879 ppb	13:53:32
2	Si 251.611†	236393.7	222548.4	6004.5	ug/L	6004.5 ppb	13:53:12
2	Sn 189.927†	-103.3	-103.8	-11.088	ug/L	-11.088 ppb	13:53:32
2	Ti 334.940†	1850226.5	1748338.2	2488.2	ug/L	2488.2 ppb	13:53:12
2	Tl 190.801†	-218.8	-165.4	-4.1047	ug/L	-4.1047 ppb	13:53:32
2	U 409.014†	-10101.2	-6568.2	-193.35	ug/L	-193.35 ppb	13:53:12
2	V 292.402†	37837.8	37256.5	204.64	ug/L	204.64 ppb	13:53:12
2	Zn 213.857†	36007.6	33117.1	247.48	ug/L	247.48 ppb	13:53:12
2	SiO2†	242764.7	228526.1	13300	ug/L	13300 ppb	13:54:10
3	Sc Radial	6091.7	6091.7	102	%		13:52:36
3	Y RADIAL	7014.6	7014.6	113.5	%		13:52:36
3	Al 396.153Radial†	125594.9	122713.5	81641	ug/L	81641 ppb	13:52:16
3	Ca 317.933Radial†	13589.4	13255.4	18206	ug/L	18206 ppb	13:52:16
3	Fe 238.204 Radial†	16955.6	16551.5	126970	ug/L	126970 ppb	13:52:16
3	K 766.490 Radial†	70080.7	65317.4	10516	ug/L	10516 ppb	13:52:16
3	Mg 279.077 IEC†	493.0	476.3	13796	ug/L	13796 ppb	13:52:36
3	Na 589.592 Radial†	30522.6	31543.4	8291.6	ug/L	8291.6 ppb	13:52:16
3	Sr 421.552†	31975.9	31252.5	168.94	ug/L	168.94 ppb	13:52:16
3	Sc 361.383	996134.4	996134.4	106.84	%		13:53:39
3	Y 371.029	894948.6	894948.6	116.39	%		13:53:39
3	Ag 328.068†	-9098.6	-8924.5	5.9668	ug/L	5.9668 ppb	13:53:39
3	As 188.979†	-35.7	-2.0	39.736	ug/L	39.736 ppb	13:53:59
3	B 249.677†	911.6	1379.8	10.277	ug/L	10.277 ppb	13:53:39
3	Ba 233.527†	142358.5	133232.1	869.88	ug/L	869.88 ppb	13:53:39
3	Be 313.107†	-624.5	3963.9	6.1598	ug/L	6.1598 ppb	13:53:39
3	Cd 226.502†	1105.2	1248.3	-0.9275	ug/L	-0.9275 ppb	13:53:59
3	Co 228.616†	2810.9	2714.7	38.854	ug/L	38.854 ppb	13:53:59
3	Cr 267.716†	9208.9	8534.6	85.269	ug/L	85.269 ppb	13:53:59
3	Cu 324.752†	27442.3	19585.7	59.889	ug/L	59.889 ppb	13:53:39
3	Mn 257.610†	3145040.7	2943111.2	2820.4	ug/L	2820.4 ppb	13:53:39
3	Mo 202.031†	-39.7	-62.1	5.4241	ug/L	5.4241 ppb	13:53:59
3	Ni 231.604†	3246.4	2908.8	60.732	ug/L	60.732 ppb	13:53:59
3	P 214.914†	3403.1	2940.2	1391.3	ug/L	1391.3 ppb	13:53:59
3	Pb 220.353†	1826.4	1785.6	187.14	ug/L	187.14 ppb	13:53:59
3	S 181.975 Axial†	701.7	608.4	698.44	ug/L	698.44 ppb	13:53:59
3	Sb 206.836†	79.6	30.1	-0.0754	ug/L	-0.0754 ppb	13:53:59
3	Se 196.026†	-826.7	-737.8	61.142	ug/L	61.142 ppb	13:53:59
3	Si 251.611†	238778.4	222848.3	6012.7	ug/L	6012.7 ppb	13:53:39
3	Sn 189.927†	-108.4	-107.7	-11.777	ug/L	-11.777 ppb	13:53:59
3	Ti 334.940†	1857491.9	1740015.7	2476.3	ug/L	2476.3 ppb	13:53:39
3	Tl 190.801†	-192.5	-139.0	2.2099	ug/L	2.2099 ppb	13:53:59
3	U 409.014†	-10063.2	-6450.0	-189.57	ug/L	-189.57 ppb	13:53:39
3	V 292.402†	37934.0	37037.3	204.04	ug/L	204.04 ppb	13:53:39
3	Zn 213.857†	36054.6	32866.8	245.97	ug/L	245.97 ppb	13:53:39
3	SiO2†	237271.1	221400.0	12885	ug/L	12885 ppb	13:54:15

Mean Data: 241711005|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	987542.8	105.92	%	0.920				0.87%
Sc Radial	6119.4	103	%	1.7				1.61%
Y 371.029	888019.3	115.49	%	0.907				0.78%
Y RADIAL	7034.9	113.8	%	1.24				1.09%
Ag 328.068†	-8950.5	6.2784	ug/L	1.15655	6.2784	ppb	1.15655	18.42%
Al 396.153Radial†	124211.5	82637	ug/L	2078.2	82637	ppb	2078.2	2.51%
As 188.979†	-0.1	40.635	ug/L	1.5584	40.635	ppb	1.5584	3.84%
B 249.677†	1389.1	10.293	ug/L	0.5946	10.293	ppb	0.5946	5.78%
Ba 233.527†	133698.2	872.95	ug/L	2.778	872.95	ppb	2.778	0.32%
Be 313.107†	3944.8	6.1668	ug/L	0.00611	6.1668	ppb	0.00611	0.10%
Ca 317.933Radial†	13381.4	18379	ug/L	429.9	18379	ppb	429.9	2.34%
Cd 226.502†	1254.6	-0.9933	ug/L	0.46971	-0.9933	ppb	0.46971	47.29%
Co 228.616†	2750.7	39.426	ug/L	0.5537	39.426	ppb	0.5537	1.40%
Cr 267.716†	8632.6	86.241	ug/L	0.9306	86.241	ppb	0.9306	1.08%
Cu 324.752†	19646.6	60.119	ug/L	0.3065	60.119	ppb	0.3065	0.51%
Fe 238.204 Radial†	16714.7	128230	ug/L	3041.1	128230	ppb	3041.1	2.37%
K 766.490 Radial†	65892.8	10609	ug/L	232.0	10609	ppb	232.0	2.19%

Mg 279.077 IEC†	474.8	13752	ug/L	351.1	13752	ppb	351.1	2.55%
Mn 257.610†	2953689.3	2830.6	ug/L	9.08	2830.6	ppb	9.08	0.32%
Mo 202.031†	-73.5	4.8600	ug/L	0.58009	4.8600	ppb	0.58009	11.94%
Na 589.592 Radial†	31940.1	8395.8	ug/L	184.78	8395.8	ppb	184.78	2.20%
Ni 231.604†	2936.9	61.319	ug/L	0.6042	61.319	ppb	0.6042	0.99%
P 214.914†	2967.7	1404.4	ug/L	13.58	1404.4	ppb	13.58	0.97%
Pb 220.353†	1798.2	188.52	ug/L	2.980	188.52	ppb	2.980	1.58%
S 181.975 Axial†	611.7	702.13	ug/L	4.237	702.13	ppb	4.237	0.60%
Sb 206.836†	30.0	-0.1717	ug/L	0.10097	-0.1717	ppb	0.10097	58.80%
Se 196.026†	-747.8	60.350	ug/L	12.9426	60.350	ppb	12.9426	21.45%
Si 251.611†	222717.6	6009.2	ug/L	4.21	6009.2	ppb	4.21	0.07%
Sn 189.927†	-105.9	-11.482	ug/L	0.3548	-11.482	ppb	0.3548	3.09%
Sr 421.552†	31628.7	170.98	ug/L	4.056	170.98	ppb	4.056	2.37%
Ti 334.940†	1744758.6	2483.1	ug/L	6.10	2483.1	ppb	6.10	0.25%
Tl 190.801†	-151.7	-0.8109	ug/L	3.16614	-0.8109	ppb	3.16614	390.43%
U 409.014†	-6515.2	-191.48	ug/L	1.887	-191.48	ppb	1.887	0.99%
V 292.402†	37162.8	204.60	ug/L	0.535	204.60	ppb	0.535	0.26%
Zn 213.857†	32995.8	246.86	ug/L	0.793	246.86	ppb	0.793	0.32%
SiO2†	223678.3	13018	ug/L	244.5	13018	ppb	244.5	1.88%

Sequence No.: 27
Sample ID: 241711006|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 12/17/2009 13:56:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711006|933552|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5919.5	5919.5	99.5	%			13:58:38
1	Y RADIAL	6843.4	6843.4	110.7	%			13:58:38
1	Al 396.153Radial†	192026.8	193070.2	128450	ug/L	128450	ppb	13:58:18
1	Ca 317.933Radial†	16511.9	16579.7	22772	ug/L	22772	ppb	13:58:18
1	Fe 238.204 Radial†	17658.2	17739.8	136090	ug/L	136090	ppb	13:58:18
1	K 766.490 Radial†	55112.9	52261.3	8388.2	ug/L	8388.2	ppb	13:58:18
1	Mg 279.077 IEC†	631.1	629.1	18249	ug/L	18249	ppb	13:58:38
1	Na 589.592 Radial†	7007.5	8769.9	2305.3	ug/L	2305.3	ppb	13:58:18
1	Sr 421.552†	42473.4	42714.8	230.92	ug/L	230.92	ppb	13:58:18
1	Sc 361.383	974362.5	974362.5	104.51	%			13:59:36
1	Y 371.029	879655.1	879655.1	114.40	%			13:59:36
1	Ag 328.068†	-9244.5	-9254.4	7.7968	ug/L	7.7968	ppb	13:59:42
1	As 188.979†	-28.7	4.0	48.352	ug/L	48.352	ppb	14:00:02
1	B 249.677†	999.3	1482.8	11.053	ug/L	11.053	ppb	13:59:42
1	Ba 233.527†	208610.3	199604.8	1301.1	ug/L	1301.1	ppb	13:59:42
1	Be 313.107†	-2979.4	1697.5	6.6254	ug/L	6.6254	ppb	13:59:42
1	Cd 226.502†	1070.2	1237.9	-1.9366	ug/L	-1.9366	ppb	14:00:02
1	Co 228.616†	3914.5	3829.5	56.321	ug/L	56.321	ppb	14:00:02
1	Cr 267.716†	11267.2	10696.7	106.44	ug/L	106.44	ppb	13:59:42
1	Cu 324.752†	27609.8	20319.9	62.357	ug/L	62.357	ppb	13:59:42
1	Mn 257.610†	5650317.0	5406151.1	5171.2	ug/L	5171.2	ppb	13:59:36
1	Mo 202.031†	-57.2	-79.7	5.0559	ug/L	5.0559	ppb	14:00:02
1	Ni 231.604†	3149.7	2884.1	60.205	ug/L	60.205	ppb	14:00:02
1	P 214.914†	1545.2	1233.6	543.40	ug/L	543.40	ppb	14:00:02
1	Pb 220.353†	1603.0	1610.1	179.27	ug/L	179.27	ppb	14:00:02
1	S 181.975 Axial†	286.5	225.8	239.89	ug/L	239.89	ppb	14:00:02
1	Sb 206.836†	93.7	45.3	1.0271	ug/L	1.0271	ppb	14:00:02
1	Se 196.026†	-854.8	-782.0	81.144	ug/L	81.144	ppb	14:00:02
1	Si 251.611†	195474.5	186405.1	5029.6	ug/L	5029.6	ppb	13:59:42
1	Sn 189.927†	-129.6	-130.3	-14.390	ug/L	-14.390	ppb	14:00:02
1	Ti 334.940†	2267520.7	2171214.3	3090.0	ug/L	3090.0	ppb	13:59:36
1	Tl 190.801†	-266.4	-213.8	3.0768	ug/L	3.0768	ppb	14:00:02
1	U 409.014†	-11141.8	-7692.6	-224.17	ug/L	-224.17	ppb	13:59:36
1	V 292.402†	45743.4	45303.3	252.47	ug/L	252.47	ppb	13:59:42
1	Zn 213.857†	28566.8	26455.9	194.42	ug/L	194.42	ppb	13:59:42
1	SiO2†	192144.2	183181.0	10661	ug/L	10661	ppb	14:01:11
2	Sc Radial	6060.9	6060.9	102	%			13:59:03
2	Y RADIAL	6988.6	6988.6	113.1	%			13:59:03
2	Al 396.153Radial†	188569.2	185170.7	123190	ug/L	123190	ppb	13:58:43
2	Ca 317.933Radial†	16191.2	15877.5	21807	ug/L	21807	ppb	13:58:43
2	Fe 238.204 Radial†	17373.0	17045.5	130760	ug/L	130760	ppb	13:58:43
2	K 766.490 Radial†	54437.8	50305.6	8071.7	ug/L	8071.7	ppb	13:58:43
2	Mg 279.077 IEC†	644.3	627.3	18201	ug/L	18201	ppb	13:59:03
2	Na 589.592 Radial†	6840.0	8441.2	2218.9	ug/L	2218.9	ppb	13:58:43
2	Sr 421.552†	41862.6	41118.7	222.30	ug/L	222.30	ppb	13:58:43
2	Sc 361.383	964806.5	964806.5	103.48	%			14:00:08
2	Y 371.029	870127.0	870127.0	113.16	%			14:00:08
2	Ag 328.068†	-9264.5	-9361.3	5.5904	ug/L	5.5904	ppb	14:00:13
2	As 188.979†	-34.7	-2.1	45.494	ug/L	45.494	ppb	14:00:33
2	B 249.677†	888.9	1385.6	9.8384	ug/L	9.8384	ppb	14:00:13
2	Ba 233.527†	208088.0	201077.2	1310.4	ug/L	1310.4	ppb	14:00:13
2	Be 313.107†	-2869.6	1775.3	6.6645	ug/L	6.6645	ppb	14:00:13
2	Cd 226.502†	1089.5	1266.7	-1.1328	ug/L	-1.1328	ppb	14:00:33
2	Co 228.616†	3944.9	3896.0	57.500	ug/L	57.500	ppb	14:00:33
2	Cr 267.716†	11176.7	10716.0	106.54	ug/L	106.54	ppb	14:00:13
2	Cu 324.752†	27556.8	20530.4	62.659	ug/L	62.659	ppb	14:00:13
2	Mn 257.610†	5609594.5	5420350.0	5184.2	ug/L	5184.2	ppb	14:00:08
2	Mo 202.031†	-67.1	-89.8	4.0984	ug/L	4.0984	ppb	14:00:33
2	Ni 231.604†	3191.2	2954.1	61.666	ug/L	61.666	ppb	14:00:33

2	P 214.914†	1555.5	1258.2	558.15	ug/L	558.15 ppb	14:00:33
2	Pb 220.353†	1618.6	1640.4	181.56	ug/L	181.56 ppb	14:00:33
2	S 181.975 Axial†	283.9	225.9	241.10	ug/L	241.10 ppb	14:00:33
2	Sb 206.836†	86.9	39.6	-0.5971	ug/L	-0.5971 ppb	14:00:33
2	Se 196.026†	-851.6	-787.0	58.985	ug/L	58.985 ppb	14:00:33
2	Si 251.611†	194365.1	187185.7	5050.8	ug/L	5050.8 ppb	14:00:13
2	Sn 189.927†	-132.1	-133.9	-15.079	ug/L	-15.079 ppb	14:00:33
2	Ti 334.940†	2250327.5	2176090.2	3096.9	ug/L	3096.9 ppb	14:00:08
2	Tl 190.801†	-268.9	-218.7	1.8411	ug/L	1.8411 ppb	14:00:33
2	U 409.014†	-11091.8	-7749.8	-225.04	ug/L	-225.04 ppb	14:00:08
2	V 292.402†	45485.5	45487.7	254.39	ug/L	254.39 ppb	14:00:13
2	Zn 213.857†	28490.1	26652.5	196.47	ug/L	196.47 ppb	14:00:13
2	SiO2†	192809.0	185644.5	10805	ug/L	10805 ppb	14:01:16
3	Sc Radial	6055.2	6055.2	102	%		13:59:29
3	Y RADIAL	6996.5	6996.5	113.2	%		13:59:29
3	Al 396.153Radial†	191136.3	187868.0	124990	ug/L	124990 ppb	13:59:09
3	Ca 317.933Radial†	16378.6	16076.7	22081	ug/L	22081 ppb	13:59:09
3	Fe 238.204 Radial†	17524.6	17210.5	132030	ug/L	132030 ppb	13:59:09
3	K 766.490 Radial†	54788.0	50700.1	8135.6	ug/L	8135.6 ppb	13:59:09
3	Mg 279.077 IEC†	643.7	627.3	18200	ug/L	18200 ppb	13:59:29
3	Na 589.592 Radial†	6964.6	8569.9	2252.7	ug/L	2252.7 ppb	13:59:09
3	Sr 421.552†	42447.7	41732.5	225.62	ug/L	225.62 ppb	13:59:09
3	Sc 361.383	972299.3	972299.3	104.28	%		14:00:40
3	Y 371.029	876058.7	876058.7	113.93	%		14:00:40
3	Ag 328.068†	-9334.6	-9359.5	6.0009	ug/L	6.0009 ppb	14:00:45
3	As 188.979†	-23.5	8.9	49.489	ug/L	49.489 ppb	14:01:05
3	B 249.677†	901.0	1390.5	9.7706	ug/L	9.7706 ppb	14:00:45
3	Ba 233.527†	206501.8	198006.5	1290.6	ug/L	1290.6 ppb	14:00:45
3	Be 313.107†	-2856.6	1809.1	6.6722	ug/L	6.6722 ppb	14:00:45
3	Cd 226.502†	1066.6	1236.6	-1.5429	ug/L	-1.5429 ppb	14:01:05
3	Co 228.616†	3908.2	3831.4	56.395	ug/L	56.395 ppb	14:01:05
3	Cr 267.716†	11081.2	10541.2	104.86	ug/L	104.86 ppb	14:00:45
3	Cu 324.752†	27152.5	19937.4	61.106	ug/L	61.106 ppb	14:00:45
3	Mn 257.610†	5651179.9	5418451.7	5182.5	ug/L	5182.5 ppb	14:00:40
3	Mo 202.031†	-54.1	-76.9	4.9329	ug/L	4.9329 ppb	14:01:05
3	Ni 231.604†	3157.6	2898.2	60.498	ug/L	60.498 ppb	14:01:05
3	P 214.914†	1548.5	1239.9	548.83	ug/L	548.83 ppb	14:01:05
3	Pb 220.353†	1605.1	1615.4	179.35	ug/L	179.35 ppb	14:01:05
3	S 181.975 Axial†	292.8	232.4	248.36	ug/L	248.36 ppb	14:01:05
3	Sb 206.836†	86.8	38.8	-0.7921	ug/L	-0.7921 ppb	14:01:05
3	Se 196.026†	-848.9	-778.1	68.533	ug/L	68.533 ppb	14:01:05
3	Si 251.611†	191350.0	182847.0	4933.7	ug/L	4933.7 ppb	14:00:45
3	Sn 189.927†	-131.1	-131.9	-14.752	ug/L	-14.752 ppb	14:01:05
3	Ti 334.940†	2266559.6	2174897.0	3095.2	ug/L	3095.2 ppb	14:00:40
3	Tl 190.801†	-280.8	-228.1	-0.4717	ug/L	-0.4717 ppb	14:01:05
3	U 409.014†	-11135.9	-7709.5	-224.11	ug/L	-224.11 ppb	14:00:40
3	V 292.402†	45183.5	44859.3	250.37	ug/L	250.37 ppb	14:00:45
3	Zn 213.857†	28243.0	26203.4	192.82	ug/L	192.82 ppb	14:00:45
3	SiO2†	194204.4	185546.7	10799	ug/L	10799 ppb	14:01:21

Mean Data: 241711006|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	970489.4	104.09	%	0.539				0.52%
Sc Radial	6011.9	101	%	1.3				1.33%
Y 371.029	875280.3	113.83	%	0.626				0.55%
Y RADIAL	6942.8	112.4	%	1.40				1.24%
Ag 328.068†	-9325.1	6.4627	ug/L	1.17347	6.4627	ppb	1.17347	18.16%
Al 396.153Radial†	188703.0	125540	ug/L	2671.4	125540	ppb	2671.4	2.13%
As 188.979†	3.6	47.778	ug/L	2.0584	47.778	ppb	2.0584	4.31%
B 249.677†	1419.7	10.221	ug/L	0.7219	10.221	ppb	0.7219	7.06%
Ba 233.527†	199562.8	1300.7	ug/L	9.95	1300.7	ppb	9.95	0.77%
Be 313.107†	1760.6	6.6540	ug/L	0.02507	6.6540	ppb	0.02507	0.38%
Ca 317.933Radial†	16178.0	22220	ug/L	497.1	22220	ppb	497.1	2.24%
Cd 226.502†	1247.1	-1.5374	ug/L	0.40193	-1.5374	ppb	0.40193	26.14%
Co 228.616†	3852.3	56.738	ug/L	0.6607	56.738	ppb	0.6607	1.16%
Cr 267.716†	10651.3	105.95	ug/L	0.941	105.95	ppb	0.941	0.89%
Cu 324.752†	20262.6	62.041	ug/L	0.8231	62.041	ppb	0.8231	1.33%
Fe 238.204 Radial†	17331.9	132960	ug/L	2782.6	132960	ppb	2782.6	2.09%
K 766.490 Radial†	51089.0	8198.5	ug/L	167.38	8198.5	ppb	167.38	2.04%

Mg 279.077 IEC†	627.9	18217	ug/L	28.2	18217	ppb	28.2	0.16%
Mn 257.610†	5414984.3	5179.3	ug/L	7.08	5179.3	ppb	7.08	0.14%
Mo 202.031†	-82.1	4.6957	ug/L	0.52098	4.6957	ppb	0.52098	11.09%
Na 589.592 Radial†	8593.7	2259.0	ug/L	43.55	2259.0	ppb	43.55	1.93%
Ni 231.604†	2912.1	60.789	ug/L	0.7729	60.789	ppb	0.7729	1.27%
P 214.914†	1243.9	550.13	ug/L	7.458	550.13	ppb	7.458	1.36%
Pb 220.353†	1621.9	180.06	ug/L	1.302	180.06	ppb	1.302	0.72%
S 181.975 Axial†	228.0	243.12	ug/L	4.582	243.12	ppb	4.582	1.88%
Sb 206.836†	41.2	-0.1207	ug/L	0.99878	-0.1207	ppb	0.99878	827.44%
Se 196.026†	-782.4	69.554	ug/L	11.1148	69.554	ppb	11.1148	15.98%
Si 251.611†	185479.3	5004.7	ug/L	62.43	5004.7	ppb	62.43	1.25%
Sn 189.927†	-132.0	-14.740	ug/L	0.3445	-14.740	ppb	0.3445	2.34%
Sr 421.552†	41855.3	226.28	ug/L	4.352	226.28	ppb	4.352	1.92%
Ti 334.940†	2174067.1	3094.0	ug/L	3.59	3094.0	ppb	3.59	0.12%
Tl 190.801†	-220.2	1.4821	ug/L	1.80133	1.4821	ppb	1.80133	121.54%
U 409.014†	-7717.3	-224.44	ug/L	0.520	-224.44	ppb	0.520	0.23%
V 292.402†	45216.8	252.41	ug/L	2.008	252.41	ppb	2.008	0.80%
Zn 213.857†	26437.3	194.57	ug/L	1.830	194.57	ppb	1.830	0.94%
SiO2†	184790.8	10755	ug/L	81.4	10755	ppb	81.4	0.76%

Sequence No.: 28
Sample ID: 241711007|933552|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 12/17/2009 14:03:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241711007|933552|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6026.7	6026.7	101	%			14:05:45
1	Y RADIAL	6883.1	6883.1	111.4	%			14:05:45
1	Al 396.153Radial†	255881.0	252690.6	168110	ug/L	168110	ppb	14:05:25
1	Ca 317.933Radial†	20180.7	19907.4	27342	ug/L	27342	ppb	14:05:25
1	Fe 238.204 Radial†	20830.4	20556.4	157700	ug/L	157700	ppb	14:05:25
1	K 766.490 Radial†	59294.4	55404.9	8929.6	ug/L	8929.6	ppb	14:05:25
1	Mg 279.077 IEC†	729.8	715.3	20748	ug/L	20748	ppb	14:05:45
1	Na 589.592 Radial†	12218.2	13790.1	3624.9	ug/L	3624.9	ppb	14:05:25
1	Sr 421.552†	47082.6	46506.9	251.40	ug/L	251.40	ppb	14:05:25
1	Sc 361.383	965117.7	965117.7	103.51	%			14:06:44
1	Y 371.029	863863.1	863863.1	112.34	%			14:06:44
1	Ag 328.068†	-11047.4	-11080.8	7.4827	ug/L	7.4827	ppb	14:06:44
1	As 188.979†	-35.1	-2.4	53.000	ug/L	53.000	ppb	14:07:04
1	B 249.677†	936.0	1430.8	7.1878	ug/L	7.1878	ppb	14:06:44
1	Ba 233.527†	211393.7	204205.9	1331.9	ug/L	1331.9	ppb	14:06:44
1	Be 313.107†	-3391.5	1272.1	7.3123	ug/L	7.3123	ppb	14:06:44
1	Cd 226.502†	1379.5	1546.5	-1.1951	ug/L	-1.1951	ppb	14:07:04
1	Co 228.616†	3190.8	3166.3	43.991	ug/L	43.991	ppb	14:07:04
1	Cr 267.716†	11677.2	11196.1	111.73	ug/L	111.73	ppb	14:07:04
1	Cu 324.752†	33598.9	26358.8	79.928	ug/L	79.928	ppb	14:06:44
1	Mn 257.610†	3063671.4	2959107.1	2838.6	ug/L	2838.6	ppb	14:06:44
1	Mo 202.031†	-81.6	-103.8	5.2017	ug/L	5.2017	ppb	14:07:04
1	Ni 231.604†	3361.8	3118.0	65.096	ug/L	65.096	ppb	14:07:04
1	P 214.914†	1561.7	1263.6	551.82	ug/L	551.82	ppb	14:07:04
1	Pb 220.353†	1027.4	1068.8	132.03	ug/L	132.03	ppb	14:07:04
1	S 181.975 Axial†	349.6	289.3	306.73	ug/L	306.73	ppb	14:07:04
1	Sb 206.836†	116.8	68.4	5.7474	ug/L	5.7474	ppb	14:07:04
1	Se 196.026†	-1013.3	-942.9	79.670	ug/L	79.670	ppb	14:07:04
1	Si 251.611†	172698.5	166194.1	4483.9	ug/L	4483.9	ppb	14:06:44
1	Sn 189.927†	-147.0	-148.3	-16.179	ug/L	-16.179	ppb	14:07:04
1	Ti 334.940†	2551730.9	2466560.3	3510.4	ug/L	3510.4	ppb	14:06:44
1	Tl 190.801†	-247.0	-197.4	-2.2437	ug/L	-2.2437	ppb	14:07:04
1	U 409.014†	-9743.0	-6443.4	-193.31	ug/L	-193.31	ppb	14:06:44
1	V 292.402†	53131.9	52860.3	294.98	ug/L	294.98	ppb	14:06:44
1	Zn 213.857†	30884.5	28956.7	211.93	ug/L	211.93	ppb	14:07:04
1	SiO2†	173959.0	167374.4	9740.5	ug/L	9740.5	ppb	14:08:04
2	Sc Radial	5966.9	5966.9	100	%			14:06:11
2	Y RADIAL	6852.2	6852.2	110.9	%			14:06:11
2	Al 396.153Radial†	256810.9	256147.9	170410	ug/L	170410	ppb	14:05:50
2	Ca 317.933Radial†	20201.5	20127.6	27645	ug/L	27645	ppb	14:05:50
2	Fe 238.204 Radial†	20846.1	20778.0	159400	ug/L	159400	ppb	14:05:50
2	K 766.490 Radial†	59117.0	55814.2	8995.8	ug/L	8995.8	ppb	14:05:50
2	Mg 279.077 IEC†	728.4	721.1	20914	ug/L	20914	ppb	14:06:11
2	Na 589.592 Radial†	12245.8	13938.4	3663.9	ug/L	3663.9	ppb	14:05:50
2	Sr 421.552†	47238.8	47128.1	254.76	ug/L	254.76	ppb	14:05:50
2	Sc 361.383	967870.0	967870.0	103.81	%			14:07:11
2	Y 371.029	864621.1	864621.1	112.44	%			14:07:11
2	Ag 328.068†	-11093.4	-11094.8	7.9863	ug/L	7.9863	ppb	14:07:11
2	As 188.979†	-36.1	-3.3	53.009	ug/L	53.009	ppb	14:07:31
2	B 249.677†	929.0	1421.5	6.7792	ug/L	6.7792	ppb	14:07:11
2	Ba 233.527†	212731.5	204913.8	1336.5	ug/L	1336.5	ppb	14:07:11
2	Be 313.107†	-3092.2	1569.7	7.4207	ug/L	7.4207	ppb	14:07:11
2	Cd 226.502†	1367.9	1531.5	-1.5048	ug/L	-1.5048	ppb	14:07:31
2	Co 228.616†	3223.8	3189.3	44.345	ug/L	44.345	ppb	14:07:31
2	Cr 267.716†	11772.9	11256.2	112.34	ug/L	112.34	ppb	14:07:31
2	Cu 324.752†	33647.4	26313.1	79.890	ug/L	79.890	ppb	14:07:11
2	Mn 257.610†	3081543.1	2967906.8	2847.2	ug/L	2847.2	ppb	14:07:11
2	Mo 202.031†	-65.7	-88.3	6.2161	ug/L	6.2161	ppb	14:07:31
2	Ni 231.604†	3412.8	3157.8	65.929	ug/L	65.929	ppb	14:07:31

2	P 214.914†	1589.5	1286.1	562.57	ug/L	562.57	ppb	14:07:31
2	Pb 220.353†	1020.2	1059.0	131.42	ug/L	131.42	ppb	14:07:31
2	S 181.975 Axial†	354.9	293.5	311.16	ug/L	311.16	ppb	14:07:31
2	Sb 206.836†	98.0	50.0	0.4046	ug/L	0.4046	ppb	14:07:31
2	Se 196.026†	-1018.0	-944.7	85.139	ug/L	85.139	ppb	14:07:31
2	Si 251.611†	173407.5	166402.6	4489.5	ug/L	4489.5	ppb	14:07:11
2	Sn 189.927†	-134.8	-136.1	-14.375	ug/L	-14.375	ppb	14:07:31
2	Ti 334.940†	2563183.6	2470582.8	3516.1	ug/L	3516.1	ppb	14:07:11
2	Tl 190.801†	-240.1	-190.1	-0.2612	ug/L	-0.2612	ppb	14:07:31
2	U 409.014†	-9670.8	-6347.0	-190.93	ug/L	-190.93	ppb	14:07:11
2	V 292.402†	53298.7	52875.0	294.82	ug/L	294.82	ppb	14:07:11
2	Zn 213.857†	31117.7	29096.6	212.86	ug/L	212.86	ppb	14:07:31
2	SiO2†	175204.5	168096.3	9782.4	ug/L	9782.4	ppb	14:08:09
3	Sc Radial	5982.3	5982.3	101	%			14:06:36
3	Y RADIAL	6873.4	6873.4	111.2	%			14:06:36
3	Al 396.153Radial†	256226.9	254907.7	169590	ug/L	169590	ppb	14:06:16
3	Ca 317.933Radial†	20203.7	20077.9	27577	ug/L	27577	ppb	14:06:16
3	Fe 238.204 Radial†	20824.2	20702.7	158820	ug/L	158820	ppb	14:06:16
3	K 766.490 Radial†	58927.8	55474.3	8940.9	ug/L	8940.9	ppb	14:06:16
3	Mg 279.077 IEC†	724.7	715.6	20754	ug/L	20754	ppb	14:06:36
3	Na 589.592 Radial†	12164.1	13825.7	3634.2	ug/L	3634.2	ppb	14:06:16
3	Sr 421.552†	47052.5	46821.5	253.10	ug/L	253.10	ppb	14:06:16
3	Sc 361.383	967904.4	967904.4	103.81	%			14:07:38
3	Y 371.029	864220.3	864220.3	112.39	%			14:07:38
3	Ag 328.068†	-11157.9	-11156.5	7.5443	ug/L	7.5443	ppb	14:07:38
3	As 188.979†	-41.1	-8.1	51.253	ug/L	51.253	ppb	14:07:58
3	B 249.677†	880.7	1374.9	5.9359	ug/L	5.9359	ppb	14:07:38
3	Ba 233.527†	212701.2	204877.4	1336.3	ug/L	1336.3	ppb	14:07:38
3	Be 313.107†	-3141.7	1522.1	7.4031	ug/L	7.4031	ppb	14:07:38
3	Cd 226.502†	1375.8	1539.1	-1.3759	ug/L	-1.3759	ppb	14:07:58
3	Co 228.616†	3228.2	3193.4	44.421	ug/L	44.421	ppb	14:07:58
3	Cr 267.716†	11778.7	11261.3	112.38	ug/L	112.38	ppb	14:07:58
3	Cu 324.752†	33581.1	26248.1	79.683	ug/L	79.683	ppb	14:07:38
3	Mn 257.610†	3079562.7	2965893.4	2845.2	ug/L	2845.2	ppb	14:07:38
3	Mo 202.031†	-90.3	-112.0	4.8095	ug/L	4.8095	ppb	14:07:58
3	Ni 231.604†	3379.6	3125.8	65.259	ug/L	65.259	ppb	14:07:58
3	P 214.914†	1575.6	1272.7	556.04	ug/L	556.04	ppb	14:07:58
3	Pb 220.353†	1019.1	1057.9	131.17	ug/L	131.17	ppb	14:07:58
3	S 181.975 Axial†	360.3	298.6	317.38	ug/L	317.38	ppb	14:07:58
3	Sb 206.836†	100.0	51.9	0.9696	ug/L	0.9696	ppb	14:07:58
3	Se 196.026†	-1022.1	-948.7	80.833	ug/L	80.833	ppb	14:07:58
3	Si 251.611†	173467.5	166454.5	4490.9	ug/L	4490.9	ppb	14:07:38
3	Sn 189.927†	-124.0	-125.7	-12.909	ug/L	-12.909	ppb	14:07:58
3	Ti 334.940†	2562476.1	2469813.4	3515.0	ug/L	3515.0	ppb	14:07:38
3	Tl 190.801†	-226.9	-177.5	2.8607	ug/L	2.8607	ppb	14:07:58
3	U 409.014†	-9943.4	-6609.4	-197.91	ug/L	-197.91	ppb	14:07:38
3	V 292.402†	53369.7	52941.6	295.28	ug/L	295.28	ppb	14:07:38
3	Zn 213.857†	31101.8	29080.2	212.79	ug/L	212.79	ppb	14:07:58
3	SiO2†	171042.3	164080.9	9548.7	ug/L	9548.7	ppb	14:08:14

Mean Data: 241711007|933552|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	966964.0	103.71	%	0.172				0.17%
Sc Radial	5992.0	101	%	0.5				0.52%
Y 371.029	864234.8	112.39	%	0.049				0.04%
Y RADIAL	6869.6	111.2	%	0.26				0.23%
Ag 328.068†	-11110.7	7.6711	ug/L	0.27472	7.6711	ppb	0.27472	3.58%
Al 396.153Radial†	254582.1	169370	ug/L	1165.3	169370	ppb	1165.3	0.69%
As 188.979†	-4.6	52.421	ug/L	1.0113	52.421	ppb	1.0113	1.93%
B 249.677†	1409.1	6.6343	ug/L	0.63842	6.6343	ppb	0.63842	9.62%
Ba 233.527†	204665.7	1334.9	ug/L	2.62	1334.9	ppb	2.62	0.20%
Be 313.107†	1454.6	7.3787	ug/L	0.05817	7.3787	ppb	0.05817	0.79%
Ca 317.933Radial†	20037.6	27521	ug/L	158.7	27521	ppb	158.7	0.58%
Cd 226.502†	1539.1	-1.3586	ug/L	0.15556	-1.3586	ppb	0.15556	11.45%
Co 228.616†	3183.0	44.252	ug/L	0.2293	44.252	ppb	0.2293	0.52%
Cr 267.716†	11237.8	112.15	ug/L	0.366	112.15	ppb	0.366	0.33%
Cu 324.752†	26306.7	79.833	ug/L	0.1316	79.833	ppb	0.1316	0.16%
Fe 238.204 Radial†	20679.1	158640	ug/L	864.4	158640	ppb	864.4	0.54%
K 766.490 Radial†	55564.5	8955.4	ug/L	35.45	8955.4	ppb	35.45	0.40%

Mg 279.077 IEC†	717.3	20805	ug/L	94.2	20805	ppb	94.2	0.45%
Mn 257.610†	2964302.5	2843.7	ug/L	4.48	2843.7	ppb	4.48	0.16%
Mo 202.031†	-101.3	5.4091	ug/L	0.72589	5.4091	ppb	0.72589	13.42%
Na 589.592 Radial†	13851.4	3641.0	ug/L	20.35	3641.0	ppb	20.35	0.56%
Ni 231.604†	3133.9	65.428	ug/L	0.4411	65.428	ppb	0.4411	0.67%
P 214.914†	1274.2	556.81	ug/L	5.413	556.81	ppb	5.413	0.97%
Pb 220.353†	1061.9	131.54	ug/L	0.440	131.54	ppb	0.440	0.33%
S 181.975 Axial†	293.8	311.76	ug/L	5.349	311.76	ppb	5.349	1.72%
Sb 206.836†	56.8	2.3739	ug/L	2.93520	2.3739	ppb	2.93520	123.65%
Se 196.026†	-945.4	81.881	ug/L	2.8813	81.881	ppb	2.8813	3.52%
Si 251.611†	166350.4	4488.1	ug/L	3.71	4488.1	ppb	3.71	0.08%
Sn 189.927†	-136.7	-14.488	ug/L	1.6382	-14.488	ppb	1.6382	11.31%
Sr 421.552†	46818.8	253.09	ug/L	1.679	253.09	ppb	1.679	0.66%
Ti 334.940†	2468985.5	3513.8	ug/L	3.05	3513.8	ppb	3.05	0.09%
Tl 190.801†	-188.3	0.1186	ug/L	2.57328	0.1186	ppb	2.57328	>999.9%
U 409.014†	-6466.6	-194.05	ug/L	3.549	-194.05	ppb	3.549	1.83%
V 292.402†	52892.3	295.03	ug/L	0.234	295.03	ppb	0.234	0.08%
Zn 213.857†	29044.5	212.53	ug/L	0.519	212.53	ppb	0.519	0.24%
SiO2†	166517.2	9690.5	ug/L	124.62	9690.5	ppb	124.62	1.29%

Sequence No.: 29
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/17/2009 14:10:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5964.3	5964.3	100	%			14:12:16
1	Y RADIAL	6108.4	6108.4	98.85	%			14:12:16
1	Al 396.153Radial†	7196.3	7196.8	4767.6	ug/L	4767.6	ppb	14:12:16
1	Ca 317.933Radial†	3708.5	3679.9	5054.3	ug/L	5054.3	ppb	14:12:16
1	Fe 238.204 Radial†	659.3	645.0	4962.7	ug/L	4962.7	ppb	14:12:36
1	K 766.490 Radial†	33770.8	30550.2	4922.0	ug/L	4922.0	ppb	14:12:16
1	Mg 279.077 IEC†	180.1	174.4	5096.2	ug/L	5096.2	ppb	14:12:36
1	Na 589.592 Radial†	35527.6	37174.5	9771.8	ug/L	9771.8	ppb	14:12:16
1	Sr 421.552†	87945.7	87766.6	474.87	ug/L	474.87	ppb	14:12:16
1	Sc 361.383	965469.5	965469.5	103.55	%			14:13:35
1	Y 371.029	769238.0	769238.0	100.04	%			14:13:35
1	Ag 328.068†	118955.2	114466.7	480.70	ug/L	480.70	ppb	14:13:35
1	As 188.979†	1374.3	1358.6	474.52	ug/L	474.52	ppb	14:13:55
1	B 249.677†	24295.3	23988.6	471.67	ug/L	471.67	ppb	14:13:35
1	Ba 233.527†	76365.7	73734.8	479.78	ug/L	479.78	ppb	14:13:35
1	Be 313.107†	1517768.1	1470257.4	481.08	ug/L	481.08	ppb	14:13:35
1	Cd 226.502†	52653.2	51061.0	479.52	ug/L	479.52	ppb	14:13:35
1	Co 228.616†	28922.2	28013.9	470.54	ug/L	470.54	ppb	14:13:55
1	Cr 267.716†	51093.4	49256.2	477.16	ug/L	477.16	ppb	14:13:35
1	Cu 324.752†	188689.7	176118.1	480.54	ug/L	480.54	ppb	14:13:35
1	Mn 257.610†	524318.0	505774.5	482.96	ug/L	482.96	ppb	14:13:35
1	Mo 202.031†	8593.4	8273.6	477.44	ug/L	477.44	ppb	14:13:55
1	Ni 231.604†	23436.4	22502.8	469.76	ug/L	469.76	ppb	14:13:55
1	P 214.914†	5159.3	4737.3	2303.4	ug/L	2303.4	ppb	14:13:55
1	Pb 220.353†	4866.2	4775.5	480.96	ug/L	480.96	ppb	14:13:55
1	S 181.975 Axial†	884.2	805.5	945.05	ug/L	945.05	ppb	14:13:55
1	Sb 206.836†	1735.9	1632.0	478.40	ug/L	478.40	ppb	14:13:55
1	Se 196.026†	893.3	898.6	496.84	ug/L	496.84	ppb	14:13:55
1	Si 251.611†	93441.5	89594.8	2407.3	ug/L	2407.3	ppb	14:13:35
1	Sn 189.927†	3423.1	3299.5	472.85	ug/L	472.85	ppb	14:13:55
1	Ti 334.940†	352820.6	342173.8	486.66	ug/L	486.66	ppb	14:13:35
1	Tl 190.801†	1927.0	1902.0	478.45	ug/L	478.45	ppb	14:13:55
1	U 409.014†	14843.9	17303.6	463.74	ug/L	463.74	ppb	14:13:35
1	V 292.402†	78862.7	77689.9	480.82	ug/L	480.82	ppb	14:13:35
1	Zn 213.857†	63889.8	60819.1	475.08	ug/L	475.08	ppb	14:13:35
1	SiO2†	93409.5	89526.5	5188.5	ug/L	5188.5	ppb	14:14:56
2	Sc Radial	5958.2	5958.2	100	%			14:12:41
2	Y RADIAL	6085.4	6085.4	98.48	%			14:12:41
2	Al 396.153Radial†	7213.8	7221.5	4783.8	ug/L	4783.8	ppb	14:12:41
2	Ca 317.933Radial†	3734.3	3709.5	5094.9	ug/L	5094.9	ppb	14:12:41
2	Fe 238.204 Radial†	659.5	645.8	4969.0	ug/L	4969.0	ppb	14:13:01
2	K 766.490 Radial†	34060.0	30873.4	4974.1	ug/L	4974.1	ppb	14:12:41
2	Mg 279.077 IEC†	173.7	168.1	4912.9	ug/L	4912.9	ppb	14:13:01
2	Na 589.592 Radial†	36137.9	37820.2	9941.5	ug/L	9941.5	ppb	14:12:41
2	Sr 421.552†	88738.1	88647.6	479.64	ug/L	479.64	ppb	14:12:41
2	Sc 361.383	958963.5	958963.5	102.85	%			14:14:03
2	Y 371.029	764155.8	764155.8	99.377	%			14:14:03
2	Ag 328.068†	117863.0	114184.1	479.53	ug/L	479.53	ppb	14:14:03
2	As 188.979†	1383.0	1376.1	480.56	ug/L	480.56	ppb	14:14:23
2	B 249.677†	24048.2	23907.5	470.06	ug/L	470.06	ppb	14:14:03
2	Ba 233.527†	76042.5	73920.9	480.99	ug/L	480.99	ppb	14:14:03
2	Be 313.107†	1507574.4	1470290.6	481.09	ug/L	481.09	ppb	14:14:03
2	Cd 226.502†	52443.3	51201.9	480.85	ug/L	480.85	ppb	14:14:03
2	Co 228.616†	29060.0	28337.4	475.98	ug/L	475.98	ppb	14:14:23
2	Cr 267.716†	50839.9	49344.5	478.02	ug/L	478.02	ppb	14:14:03
2	Cu 324.752†	186822.2	175538.7	478.97	ug/L	478.97	ppb	14:14:03
2	Mn 257.610†	521176.0	506154.9	483.32	ug/L	483.32	ppb	14:14:03
2	Mo 202.031†	8620.1	8355.9	482.19	ug/L	482.19	ppb	14:14:23
2	Ni 231.604†	23544.3	22761.3	475.15	ug/L	475.15	ppb	14:14:23

2	P 214.914†	5176.4	4787.8	2329.0	ug/L	2329.0	ppb	14:14:23
2	Pb 220.353†	4901.7	4842.0	487.65	ug/L	487.65	ppb	14:14:23
2	S 181.975 Axial†	885.4	812.4	953.21	ug/L	953.21	ppb	14:14:23
2	Sb 206.836†	1754.9	1661.8	487.19	ug/L	487.19	ppb	14:14:23
2	Se 196.026†	899.5	910.5	503.21	ug/L	503.21	ppb	14:14:23
2	Si 251.611†	92730.2	89515.4	2405.1	ug/L	2405.1	ppb	14:14:03
2	Sn 189.927†	3437.2	3335.6	478.02	ug/L	478.02	ppb	14:14:23
2	Ti 334.940†	350141.3	341880.5	486.25	ug/L	486.25	ppb	14:14:03
2	Tl 190.801†	1944.0	1931.2	485.71	ug/L	485.71	ppb	14:14:23
2	U 409.014†	14694.7	17255.8	462.46	ug/L	462.46	ppb	14:14:03
2	V 292.402†	78524.5	77877.7	482.03	ug/L	482.03	ppb	14:14:03
2	Zn 213.857†	63457.3	60817.1	475.04	ug/L	475.04	ppb	14:14:03
2	SiO2†	92205.7	88968.0	5155.8	ug/L	5155.8	ppb	14:15:01
3	Sc Radial	5951.6	5951.6	100	%			14:13:07
3	Y RADIAL	6070.3	6070.3	98.23	%			14:13:07
3	Al 396.153Radial†	7230.2	7245.9	4800.2	ug/L	4800.2	ppb	14:13:07
3	Ca 317.933Radial†	3685.0	3664.3	5032.8	ug/L	5032.8	ppb	14:13:07
3	Fe 238.204 Radial†	657.8	644.8	4961.6	ug/L	4961.6	ppb	14:13:27
3	K 766.490 Radial†	33819.0	30670.0	4941.3	ug/L	4941.3	ppb	14:13:07
3	Mg 279.077 IEC†	176.0	170.7	4987.4	ug/L	4987.4	ppb	14:13:27
3	Na 589.592 Radial†	35633.6	37355.9	9819.4	ug/L	9819.4	ppb	14:13:07
3	Sr 421.552†	88105.1	88112.6	476.74	ug/L	476.74	ppb	14:13:07
3	Sc 361.383	959508.2	959508.2	102.91	%			14:14:30
3	Y 371.029	763380.0	763380.0	99.276	%			14:14:30
3	Ag 328.068†	118563.6	114799.9	482.10	ug/L	482.10	ppb	14:14:30
3	As 188.979†	1383.1	1375.4	480.35	ug/L	480.35	ppb	14:14:50
3	B 249.677†	24348.5	24186.0	475.57	ug/L	475.57	ppb	14:14:30
3	Ba 233.527†	76489.9	74313.7	483.54	ug/L	483.54	ppb	14:14:30
3	Be 313.107†	1511474.3	1473248.0	482.06	ug/L	482.06	ppb	14:14:30
3	Cd 226.502†	52727.6	51449.3	483.17	ug/L	483.17	ppb	14:14:30
3	Co 228.616†	28858.1	28125.2	472.41	ug/L	472.41	ppb	14:14:50
3	Cr 267.716†	51025.6	49496.8	479.49	ug/L	479.49	ppb	14:14:30
3	Cu 324.752†	188018.9	176598.4	481.85	ug/L	481.85	ppb	14:14:30
3	Mn 257.610†	523929.9	508543.2	485.60	ug/L	485.60	ppb	14:14:30
3	Mo 202.031†	8559.7	8292.5	478.53	ug/L	478.53	ppb	14:14:50
3	Ni 231.604†	23371.1	22580.0	471.37	ug/L	471.37	ppb	14:14:50
3	P 214.914†	5152.4	4761.6	2315.4	ug/L	2315.4	ppb	14:14:50
3	Pb 220.353†	4853.3	4792.1	482.64	ug/L	482.64	ppb	14:14:50
3	S 181.975 Axial†	885.5	812.0	952.72	ug/L	952.72	ppb	14:14:50
3	Sb 206.836†	1734.7	1641.2	481.06	ug/L	481.06	ppb	14:14:50
3	Se 196.026†	889.5	900.3	497.77	ug/L	497.77	ppb	14:14:50
3	Si 251.611†	93227.5	89947.5	2416.8	ug/L	2416.8	ppb	14:14:30
3	Sn 189.927†	3420.5	3317.5	475.43	ug/L	475.43	ppb	14:14:50
3	Ti 334.940†	351972.7	343466.8	488.50	ug/L	488.50	ppb	14:14:30
3	Tl 190.801†	1924.7	1911.3	480.79	ug/L	480.79	ppb	14:14:50
3	U 409.014†	14805.2	17355.0	465.12	ug/L	465.12	ppb	14:14:30
3	V 292.402†	78715.5	78019.9	482.85	ug/L	482.85	ppb	14:14:30
3	Zn 213.857†	63745.1	61061.8	476.99	ug/L	476.99	ppb	14:14:30
3	SiO2†	92134.1	88847.6	5148.9	ug/L	5148.9	ppb	14:15:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	961313.7	103.11	%	0.387				0.38%
Sc Radial	5958.0	100	%	0.1				0.11%
Y 371.029	765591.3	99.564	%	0.4138				0.42%
Y RADIAL	6088.0	98.52	%	0.311				0.32%
Ag 328.068†	114483.5	480.78	ug/L	1.286	480.78	ppb	1.286	0.27%
QC value within limits for Ag 328.068 Recovery = 96.16%								
Al 396.153Radial†	7221.4	4783.8	ug/L	16.32	4783.8	ppb	16.32	0.34%
QC value within limits for Al 396.153Radial Recovery = 95.68%								
As 188.979†	1370.1	478.48	ug/L	3.431	478.48	ppb	3.431	0.72%
QC value within limits for As 188.979 Recovery = 95.70%								
B 249.677†	24027.4	472.43	ug/L	2.831	472.43	ppb	2.831	0.60%
QC value within limits for B 249.677 Recovery = 94.49%								
Ba 233.527†	73989.8	481.44	ug/L	1.920	481.44	ppb	1.920	0.40%
QC value within limits for Ba 233.527 Recovery = 96.29%								
Be 313.107†	1471265.3	481.41	ug/L	0.563	481.41	ppb	0.563	0.12%
QC value within limits for Be 313.107 Recovery = 96.28%								
Ca 317.933Radial†	3684.6	5060.7	ug/L	31.51	5060.7	ppb	31.51	0.62%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.21%
Cd 226.502†          51237.4      481.18 ug/L        1.847      481.18 ppb        1.847   0.38%
   QC value within limits for Cd 226.502  Recovery = 96.24%
Co 228.616†          28158.8      472.98 ug/L        2.767      472.98 ppb        2.767   0.58%
   QC value within limits for Co 228.616  Recovery = 94.60%
Cr 267.716†          49365.8      478.23 ug/L        1.179      478.23 ppb        1.179   0.25%
   QC value within limits for Cr 267.716  Recovery = 95.65%
Cu 324.752†         176085.1      480.45 ug/L        1.447      480.45 ppb        1.447   0.30%
   QC value within limits for Cu 324.752  Recovery = 96.09%
Fe 238.204 Radial†     645.2      4964.4 ug/L         3.96      4964.4 ppb         3.96   0.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.29%
K 766.490 Radial†    30697.9      4945.8 ug/L        26.34      4945.8 ppb        26.34   0.53%
   QC value within limits for K 766.490 Radial  Recovery = 98.92%
Mg 279.077 IEC†        171.0      4998.8 ug/L        92.14      4998.8 ppb        92.14   1.84%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.98%
Mn 257.610†         506824.2      483.96 ug/L        1.432      483.96 ppb        1.432   0.30%
   QC value within limits for Mn 257.610  Recovery = 96.79%
Mo 202.031†           8307.4      479.39 ug/L        2.486      479.39 ppb        2.486   0.52%
   QC value within limits for Mo 202.031  Recovery = 95.88%
Na 589.592 Radial†   37450.2      9844.2 ug/L        87.55      9844.2 ppb        87.55   0.89%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†          22614.7      472.09 ug/L        2.769      472.09 ppb        2.769   0.59%
   QC value within limits for Ni 231.604  Recovery = 94.42%
P 214.914†            4762.2      2315.9 ug/L        12.82      2315.9 ppb        12.82   0.55%
   QC value within limits for P 214.914  Recovery = 92.64%
Pb 220.353†           4803.2      483.75 ug/L        3.479      483.75 ppb        3.479   0.72%
   QC value within limits for Pb 220.353  Recovery = 96.75%
S 181.975 Axial†       809.9      950.32 ug/L        4.577      950.32 ppb        4.577   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 95.03%
Sb 206.836†           1645.0      482.21 ug/L        4.508      482.21 ppb        4.508   0.93%
   QC value within limits for Sb 206.836  Recovery = 96.44%
Se 196.026†            903.1      499.27 ug/L        3.439      499.27 ppb        3.439   0.69%
   QC value within limits for Se 196.026  Recovery = 99.85%
Si 251.611†          89685.9      2409.7 ug/L         6.23      2409.7 ppb         6.23   0.26%
   QC value within limits for Si 251.611  Recovery = 96.39%
Sn 189.927†           3317.5      475.43 ug/L        2.588      475.43 ppb        2.588   0.54%
   QC value within limits for Sn 189.927  Recovery = 95.09%
Sr 421.552†          88175.6      477.08 ug/L        2.402      477.08 ppb        2.402   0.50%
   QC value within limits for Sr 421.552  Recovery = 95.42%
Ti 334.940†         342507.1      487.14 ug/L        1.198      487.14 ppb        1.198   0.25%
   QC value within limits for Ti 334.940  Recovery = 97.43%
Tl 190.801†           1914.8      481.65 ug/L        3.705      481.65 ppb        3.705   0.77%
   QC value within limits for Tl 190.801  Recovery = 96.33%
U 409.014†           17304.8      463.77 ug/L        1.333      463.77 ppb        1.333   0.29%
   QC value within limits for U 409.014  Recovery = 92.75%
V 292.402†           77862.5      481.90 ug/L        1.020      481.90 ppb        1.020   0.21%
   QC value within limits for V 292.402  Recovery = 96.38%
Zn 213.857†          60899.3      475.70 ug/L        1.112      475.70 ppb        1.112   0.23%
   QC value within limits for Zn 213.857  Recovery = 95.14%
SiO2†                89114.0      5164.4 ug/L        21.17      5164.4 ppb        21.17   0.41%
   QC value within limits for SiO2  Recovery = 96.58%
All analyte(s) passed QC.
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Sequence No.: 30
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/17/2009 14:17:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5976.3	5976.3	100	%			14:19:08
1	Y RADIAL	6166.2	6166.2	99.79	%			14:19:08
1	Al 396.153Radial†	2.4	18.6	12.351	ug/L	12.351	ppb	14:19:08
1	Ca 317.933Radial†	25.9	5.3	7.3304	ug/L	7.3304	ppb	14:19:28
1	Fe 238.204 Radial†	12.8	-0.1	-1.0795	ug/L	-1.0795	ppb	14:19:28
1	K 766.490 Radial†	3147.3	-12.4	-2.0061	ug/L	-2.0061	ppb	14:19:08
1	Mg 279.077 IEC†	-0.8	-6.2	-179.82	ug/L	-179.82	ppb	14:19:28
1	Na 589.592 Radial†	-1607.6	124.2	32.639	ug/L	32.639	ppb	14:19:08
1	Sr 421.552†	5.4	19.6	0.1060	ug/L	0.1060	ppb	14:19:08
1	Sc 361.383	934837.4	934837.4	100.27	%			14:20:25
1	Y 371.029	768564.0	768564.0	99.950	%			14:20:25
1	Ag 328.068†	423.7	14.1	0.0551	ug/L	0.0551	ppb	14:20:25
1	As 188.979†	-33.7	-2.2	-0.7529	ug/L	-0.7529	ppb	14:20:45
1	B 249.677†	-379.1	148.5	2.9303	ug/L	2.9303	ppb	14:20:45
1	Ba 233.527†	17.2	5.7	0.0370	ug/L	0.0370	ppb	14:20:45
1	Be 313.107†	-4541.2	19.3	0.0065	ug/L	0.0065	ppb	14:20:25
1	Cd 226.502†	-220.7	-6.2	-0.0584	ug/L	-0.0584	ppb	14:20:45
1	Co 228.616†	-72.7	11.3	0.1907	ug/L	0.1907	ppb	14:20:45
1	Cr 267.716†	97.7	12.8	0.1222	ug/L	0.1222	ppb	14:20:45
1	Cu 324.752†	6066.2	-49.5	-0.1350	ug/L	-0.1350	ppb	14:20:25
1	Mn 257.610†	624.2	63.1	0.0634	ug/L	0.0634	ppb	14:20:25
1	Mo 202.031†	33.4	8.3	0.4797	ug/L	0.4797	ppb	14:20:45
1	Ni 231.604†	135.7	5.6	0.1174	ug/L	0.1174	ppb	14:20:45
1	P 214.914†	255.8	10.1	5.0742	ug/L	5.0742	ppb	14:20:45
1	Pb 220.353†	-82.3	-5.8	-0.5802	ug/L	-0.5802	ppb	14:20:45
1	S 181.975 Axial†	58.3	9.7	11.393	ug/L	11.393	ppb	14:20:45
1	Sb 206.836†	45.9	1.4	0.4157	ug/L	0.4157	ppb	14:20:45
1	Se 196.026†	-33.0	3.0	1.6009	ug/L	1.6009	ppb	14:20:45
1	Si 251.611†	658.1	14.7	0.3871	ug/L	0.3871	ppb	14:20:45
1	Sn 189.927†	8.7	2.5	0.3586	ug/L	0.3586	ppb	14:20:45
1	Ti 334.940†	-1381.7	76.9	0.1077	ug/L	0.1077	ppb	14:20:25
1	Tl 190.801†	-41.8	-0.5	-0.1355	ug/L	-0.1355	ppb	14:20:45
1	U 409.014†	-2809.4	166.9	4.4870	ug/L	4.4870	ppb	14:20:25
1	V 292.402†	-1511.2	24.9	0.1637	ug/L	0.1637	ppb	14:20:25
1	Zn 213.857†	887.4	5.7	0.0506	ug/L	0.0506	ppb	14:20:45
1	SiO2†	661.9	-19.0	-1.1235	ug/L	-1.1235	ppb	14:21:41
2	Sc Radial	6004.6	6004.6	101	%			14:19:33
2	Y RADIAL	6151.5	6151.5	99.55	%			14:19:33
2	Al 396.153Radial†	-19.6	-3.2	-2.1583	ug/L	-2.1583	ppb	14:19:33
2	Ca 317.933Radial†	34.3	13.5	18.538	ug/L	18.538	ppb	14:19:53
2	Fe 238.204 Radial†	11.0	-2.0	-15.539	ug/L	-15.539	ppb	14:19:53
2	K 766.490 Radial†	3124.3	-49.9	-8.0691	ug/L	-8.0691	ppb	14:19:33
2	Mg 279.077 IEC†	2.5	-2.8	-83.135	ug/L	-83.135	ppb	14:19:53
2	Na 589.592 Radial†	-1605.1	134.2	35.282	ug/L	35.282	ppb	14:19:33
2	Sr 421.552†	-34.0	-19.4	-0.1052	ug/L	-0.1052	ppb	14:19:33
2	Sc 361.383	926212.4	926212.4	99.341	%			14:20:50
2	Y 371.029	760802.3	760802.3	98.941	%			14:20:50
2	Ag 328.068†	385.3	-20.6	-0.0930	ug/L	-0.0930	ppb	14:20:50
2	As 188.979†	-32.7	-1.5	-0.5217	ug/L	-0.5217	ppb	14:21:10
2	B 249.677†	-404.5	119.4	2.3588	ug/L	2.3588	ppb	14:21:10
2	Ba 233.527†	25.6	14.3	0.0916	ug/L	0.0916	ppb	14:21:10
2	Be 313.107†	-4435.4	83.7	0.0273	ug/L	0.0273	ppb	14:20:50
2	Cd 226.502†	-227.0	-14.6	-0.1361	ug/L	-0.1361	ppb	14:21:10
2	Co 228.616†	-92.4	-9.2	-0.1516	ug/L	-0.1516	ppb	14:21:10
2	Cr 267.716†	110.8	26.8	0.2584	ug/L	0.2584	ppb	14:21:10
2	Cu 324.752†	6120.5	61.5	0.1670	ug/L	0.1670	ppb	14:20:50
2	Mn 257.610†	592.8	37.2	0.0355	ug/L	0.0355	ppb	14:20:50
2	Mo 202.031†	45.8	21.1	1.2175	ug/L	1.2175	ppb	14:21:10
2	Ni 231.604†	126.5	-2.4	-0.0493	ug/L	-0.0493	ppb	14:21:10

2	P 214.914†	244.8	1.4	0.6977 ug/L	0.6977 ppb	14:21:10
2	Pb 220.353†	-74.6	1.1	0.1151 ug/L	0.1151 ppb	14:21:10
2	S 181.975 Axial†	56.2	8.1	9.5692 ug/L	9.5692 ppb	14:21:10
2	Sb 206.836†	35.2	-8.9	-2.5453 ug/L	-2.5453 ppb	14:21:10
2	Se 196.026†	-35.8	-0.1	-0.1253 ug/L	-0.1253 ppb	14:21:10
2	Si 251.611†	662.0	24.7	0.6460 ug/L	0.6460 ppb	14:21:10
2	Sn 189.927†	12.9	6.8	0.9708 ug/L	0.9708 ppb	14:21:10
2	Ti 334.940†	-1454.7	-9.4	-0.0131 ug/L	-0.0131 ppb	14:20:50
2	Tl 190.801†	-49.6	-8.8	-2.1951 ug/L	-2.1951 ppb	14:21:10
2	U 409.014†	-2896.7	52.9	1.4250 ug/L	1.4250 ppb	14:20:50
2	V 292.402†	-1542.2	-20.3	-0.1037 ug/L	-0.1037 ppb	14:20:50
2	Zn 213.857†	884.0	10.5	0.0874 ug/L	0.0874 ppb	14:21:10
2	SiO2†	688.5	13.9	0.7640 ug/L	0.7640 ppb	14:21:46
3	Sc Radial	6235.3	6235.3	105 %		14:19:58
3	Y RADIAL	6398.7	6398.7	103.5 %		14:19:58
3	Al 396.153Radial†	-41.9	-23.7	-15.761 ug/L	-15.761 ppb	14:19:58
3	Ca 317.933Radial†	31.8	9.9	13.624 ug/L	13.624 ppb	14:20:18
3	Fe 238.204 Radial†	13.7	0.2	1.6198 ug/L	1.6198 ppb	14:20:18
3	K 766.490 Radial†	3171.7	-119.3	-19.275 ug/L	-19.275 ppb	14:19:58
3	Mg 279.077 IEC†	1.5	-3.9	-113.42 ug/L	-113.42 ppb	14:20:18
3	Na 589.592 Radial†	-1572.1	224.5	59.021 ug/L	59.021 ppb	14:19:58
3	Sr 421.552†	-21.9	-6.7	-0.0363 ug/L	-0.0363 ppb	14:19:58
3	Sc 361.383	933142.9	933142.9	100.08 %		14:21:15
3	Y 371.029	765967.2	765967.2	99.612 %		14:21:15
3	Ag 328.068†	521.2	112.3	0.4672 ug/L	0.4672 ppb	14:21:15
3	As 188.979†	-23.2	8.3	2.8557 ug/L	2.8557 ppb	14:21:35
3	B 249.677†	-411.6	115.3	2.2764 ug/L	2.2764 ppb	14:21:35
3	Ba 233.527†	17.6	6.1	0.0398 ug/L	0.0398 ppb	14:21:35
3	Be 313.107†	-4528.0	24.2	0.0079 ug/L	0.0079 ppb	14:21:15
3	Cd 226.502†	-202.8	11.2	0.1050 ug/L	0.1050 ppb	14:21:35
3	Co 228.616†	-77.5	6.3	0.1053 ug/L	0.1053 ppb	14:21:35
3	Cr 267.716†	96.4	11.6	0.1116 ug/L	0.1116 ppb	14:21:35
3	Cu 324.752†	6083.6	-21.1	-0.0574 ug/L	-0.0574 ppb	14:21:15
3	Mn 257.610†	581.4	21.5	0.0228 ug/L	0.0228 ppb	14:21:15
3	Mo 202.031†	22.7	-2.3	-0.1341 ug/L	-0.1341 ppb	14:21:35
3	Ni 231.604†	107.0	-22.9	-0.4776 ug/L	-0.4776 ppb	14:21:35
3	P 214.914†	243.1	-2.1	-1.0549 ug/L	-1.0549 ppb	14:21:35
3	Pb 220.353†	-84.6	-8.3	-0.8335 ug/L	-0.8335 ppb	14:21:35
3	S 181.975 Axial†	51.6	3.2	3.7369 ug/L	3.7369 ppb	14:21:35
3	Sb 206.836†	34.8	-9.7	-2.7888 ug/L	-2.7888 ppb	14:21:35
3	Se 196.026†	-22.7	13.2	7.0188 ug/L	7.0188 ppb	14:21:35
3	Si 251.611†	637.9	-4.4	-0.1113 ug/L	-0.1113 ppb	14:21:35
3	Sn 189.927†	9.9	3.7	0.5250 ug/L	0.5250 ppb	14:21:35
3	Ti 334.940†	-1451.5	4.7	0.0059 ug/L	0.0059 ppb	14:21:15
3	Tl 190.801†	-45.6	-4.5	-1.1188 ug/L	-1.1188 ppb	14:21:35
3	U 409.014†	-2854.4	116.9	3.1422 ug/L	3.1422 ppb	14:21:15
3	V 292.402†	-1503.8	29.6	0.1820 ug/L	0.1820 ppb	14:21:15
3	Zn 213.857†	879.2	-0.9	-0.0003 ug/L	-0.0003 ppb	14:21:35
3	SiO2†	695.8	16.1	0.9537 ug/L	0.9537 ppb	14:21:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	931397.6	99.897	%	0.4901				0.49%
Sc Radial	6072.1	102	%	2.4				2.34%
Y 371.029	765111.2	99.501	%	0.5138				0.52%
Y RADIAL	6238.8	101.0	%	2.24				2.22%
Ag 328.068†	35.3	0.1431	ug/L	0.29028	0.1431	ppb	0.29028	202.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.8	-1.8559	ug/L	14.05835	-1.8559	ppb	14.05835	757.51%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	0.5271	ug/L	2.01998	0.5271	ppb	2.01998	383.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	127.7	2.5219	ug/L	0.35614	2.5219	ppb	0.35614	14.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.7	0.0562	ug/L	0.03077	0.0562	ppb	0.03077	54.80%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	42.4	0.0139	ug/L	0.01161	0.0139	ppb	0.01161	83.49%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.6	13.164	ug/L	5.6178	13.164	ppb	5.6178	42.68%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -3.2     -0.0298 ug/L       0.12306     -0.0298 ppb        0.12306 412.59%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.8      0.0482 ug/L       0.17815      0.0482 ppb        0.17815 369.98%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.1      0.1640 ug/L       0.08186      0.1640 ppb        0.08186  49.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -3.0     -0.0084 ug/L       0.15684     -0.0084 ppb        0.15684 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.7     -4.9995 ug/L       9.22658     -4.9995 ppb        9.22658 184.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -60.5     -9.7833 ug/L       8.76105     -9.7833 ppb        8.76105  89.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.3     -125.46 ug/L        49.452     -125.46 ppb         49.452  39.42%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.6      0.0406 ug/L       0.02079      0.0406 ppb        0.02079  51.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.0      0.5210 ug/L       0.67676      0.5210 ppb        0.67676 129.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        161.0      42.314 ug/L       14.5291      42.314 ppb        14.5291  34.34%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.5     -0.1365 ug/L       0.30693     -0.1365 ppb        0.30693 224.88%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  3.1      1.5723 ug/L       3.15676      1.5723 ppb        3.15676 200.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -4.3     -0.4329 ug/L       0.49119     -0.4329 ppb        0.49119 113.48%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            7.0      8.2330 ug/L       3.99906      8.2330 ppb        3.99906  48.57%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -5.7     -1.6395 ug/L       1.78399     -1.6395 ppb        1.78399 108.82%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.4      2.8315 ug/L       3.72760      2.8315 ppb        3.72760 131.65%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                11.7      0.3073 ug/L       0.38491      0.3073 ppb        0.38491 125.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.3      0.6181 ug/L       0.31650      0.6181 ppb        0.31650  51.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -2.2     -0.0118 ug/L       0.10772     -0.0118 ppb        0.10772 911.48%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                24.1      0.0335 ug/L       0.06499      0.0335 ppb        0.06499 193.90%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.6     -1.1498 ug/L       1.03015     -1.1498 ppb        1.03015  89.59%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                112.2      3.0181 ug/L       1.53480      3.0181 ppb        1.53480  50.85%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 11.4      0.0807 ug/L       0.15991      0.0807 ppb        0.15991 198.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 5.1      0.0459 ug/L       0.04403      0.0459 ppb        0.04403  95.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       3.7      0.1981 ug/L       1.14842      0.1981 ppb        1.14842 579.76%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 12, 2009 11:49:39
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.5198
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	422.4	422.406	7.437	1.8
	Mg	24.0	3614.9	3614.857	69.784	1.9
	Co	58.9	18678.2	18678.204	209.911	1.1
	Rh	102.9	46739.3	46739.341	450.620	1.0
	In	114.9	71778.1	71778.082	630.904	0.9
	Pb	208.0	52588.6	52588.618	181.752	0.3
⌈>	Ba	137.9	63501.6	63501.570	477.460	0.8
⌊	Ba++	69.0	708.5	0.011	0.000	3.9
⌈>	Ce	139.9	78518.0	78518.003	784.318	1.0
⌊	CeO	155.9	1234.0	0.016	0.000	1.7
	Bkgd	220.0	6.5	6.500	1.000	15.4

Current Optimization File Data

Current Value	Description
0.99	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1812.00	Analog Stage Voltage
950.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.5	341.0
Co	59	17	8.3	17476.7
In	115	17	9.0	84322.5

ICPMS#3 Instrument Tuning Report

File Name: 091212.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.1	588	2030	0.686
Be	9.0	9.0	2074	2010	0.665
Mg	24.0	24.0	5710	2090	0.637
Mg	25.0	25.0	5915	2010	0.666
Mg	26.0	26.0	6217	2110	0.706
Co	58.9	59.0	14206	2100	0.665
Rh	102.9	102.9	24907	2150	0.691
In	114.9	114.9	27827	2160	0.701
Ce	139.9	139.9	33920	2200	0.670
Pb	206.0	206.0	50004	2270	0.682
Pb	207.0	207.0	50282	2310	0.653
Pb	208.0	208.0	50498	2290	0.644
U	238.1	238.0	57839	2330	0.699

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 12, 2009 19:38:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\Blank.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		12	
	Be	9		ug/L		10	
	B	11		ug/L		76	
	Na	23		ug/L		3334	
	Mg	24		ug/L		0	
	Al	27		ug/L		333	
	P	31		ug/L		1413	
	K	39		ug/L		174400	
	Ca	43		ug/L		113	
>	Sc	45		ug/L		185540	
	Ti	47		ug/L		84	
	V	51		ug/L		375	
	Cr	52		ug/L		1353	
	Cr	53		ug/L		39611	
	Mn	55		ug/L		368	
	Fe	57		ug/L		2476	
	Co	59		ug/L		91	
	Ni	60		ug/L		34	
	Cu	63		ug/L		79	
	Cu	65		ug/L		40	
	Zn	66		ug/L		72	
	Zn	67		ug/L		2527	
	Zn	68		ug/L		380	
>	Ge	74		ug/L		103400	
	As	75		ug/L		540	
	Se	77		ug/L		1636	
	Se	82		ug/L		4	
	Kr	83		ug/L		36	
	Sr	88		ug/L		77	
	Y	89		ug/L		17	
	Zr	90		ug/L		643	
	Mo	98		ug/L		26	
	Ag	107		ug/L		24	
	Cd	111		ug/L		9	
	Cd	114		ug/L		15	
>	In	115		ug/L		88734	
	Sn	120		ug/L		126	
	Sb	121		ug/L		235	
	Sb	123		ug/L		187	
	Ba	135		ug/L		14	
	Ba	137		ug/L		25	
	Ho	165		ug/L		16	
>	Lu	175		ug/L		170186	
	Tl	205		ug/L		601	
	Pb	208		ug/L		163	
	Th	232		ug/L		341	
	U	238		ug/L		131	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 12, 2009 19:44:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\Standard 1.095

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	4.828	653	0.003
	Be	9	10.000	ug/L	1.589	376	0.002
	B	11	20.000	ug/L	4.622	1084	0.005
	Na	23	1000.000	ug/L	7.806	494454	2.654
	Mg	24	1000.000	ug/L	8.886	359485	1.945
	Al	27	1000.000	ug/L	1.229	638983	3.453
	P	31	1000.000	ug/L	0.956	43794	0.229
	K	39	1000.000	ug/L	6.139	1152423	5.291
	Ca	43	1000.000	ug/L	5.398	2248	0.012
>	Sc	45		ug/L		184944	184944.383
	Ti	47	10.000	ug/L	0.739	1144	0.006
	V	51	10.000	ug/L	8.068	11090	0.058
	Cr	52	10.000	ug/L	2.736	14760	0.073
	Cr	53		ug/L		39448	-0.000
	Mn	55	10.000	ug/L	2.353	24235	0.129
	Fe	57	1000.000	ug/L	2.640	48762	0.250
	Co	59	10.000	ug/L	1.424	16081	0.086
	Ni	60	10.000	ug/L	2.492	3255	0.017
	Cu	63		ug/L		7364	0.039
	Cu	65	10.000	ug/L	3.516	3503	0.019
	Zn	66	10.000	ug/L	2.080	2411	0.022
	Zn	67		ug/L		2708	0.002
	Zn	68		ug/L		2084	0.016
>	Ge	74		ug/L		104046	104046.249
	As	75	10.000	ug/L	8.391	3773	0.031
	Se	77		ug/L		1736	0.001
	Se	82	10.000	ug/L	13.438	320	0.003
	Kr	83		ug/L		31	-0.000
	Sr	88	10.000	ug/L	1.456	38247	0.424
	Y	89		ug/L		18	0.000
	Zr	90	10.000	ug/L	0.644	22314	0.241
	Mo	98	10.000	ug/L	2.139	9579	0.106
	Ag	107	10.000	ug/L	2.030	18402	0.204
	Cd	111	10.000	ug/L	1.286	4662	0.052
	Cd	114		ug/L		11388	0.126
>	In	115		ug/L		90021	90020.667
	Sn	120	10.000	ug/L	1.007	20295	0.224
	Sb	121	10.000	ug/L	6.822	17682	0.194
	Sb	123		ug/L		13572	0.149
	Ba	135		ug/L		4974	0.029
	Ba	137	10.000	ug/L	1.789	8665	0.051
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		170865	170865.472
	Tl	205	10.000	ug/L	1.368	85121	0.495
	Pb	208	10.000	ug/L	2.157	97141	0.568
	Th	232	10.000	ug/L	2.302	112307	0.655
	U	238	10.000	ug/L	1.742	121082	0.708

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 12, 2009 19:50:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\Standard 2.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.994**	**ug/L**	0.829	6305	0.034
	Be	9	**100.071**	**ug/L**	1.546	3898	0.021
	B	11	**200.059**	**ug/L**	2.683	10332	0.056
	Na	23	**9997.342**	**ug/L**	7.766	4721529	25.847
	Mg	24	**9995.762**	**ug/L**	1.928	3404084	18.651
	Al	27	**9991.755**	**ug/L**	7.341	5819260	31.873
	P	31	**9998.449**	**ug/L**	1.445	413245	2.257
	K	39	**9990.775**	**ug/L**	1.942	9004949	48.400
	Ca	43	**9995.685**	**ug/L**	1.753	20300	0.111
>	Sc	45		**ug/L**		182519	182519.064
	Ti	47	**100.023**	**ug/L**	1.141	10795	0.059
	V	51	**100.084**	**ug/L**	2.855	115946	0.633
	Cr	52	**100.007**	**ug/L**	2.731	134583	0.730
	Cr	53		**ug/L**		51558	0.069
	Mn	55	**99.981**	**ug/L**	1.088	231399	1.266
	Fe	57	**9996.423**	**ug/L**	1.536	443436	2.416
	Co	59	**99.975**	**ug/L**	2.677	154075	0.844
	Ni	60	**99.978**	**ug/L**	0.761	31129	0.170
	Cu	63		**ug/L**		69228	0.379
	Cu	65	**99.947**	**ug/L**	0.834	32489	0.178
	Zn	66	**99.933**	**ug/L**	1.690	22029	0.211
	Zn	67		**ug/L**		5929	0.032
	Zn	68		**ug/L**		16970	0.159
>	Ge	74		**ug/L**		104292	104291.707
	As	75	**100.011**	**ug/L**	1.112	33299	0.314
	Se	77		**ug/L**		3686	0.020
	Se	82	**99.917**	**ug/L**	2.560	2928	0.028
	Kr	83		**ug/L**		41	0.000
	Sr	88	**99.973**	**ug/L**	1.106	370472	4.129
	Y	89		**ug/L**		50	0.000
	Zr	90	**99.919**	**ug/L**	1.113	200081	2.223
	Mo	98	**99.997**	**ug/L**	1.597	94904	1.058
	Ag	107	**99.974**	**ug/L**	1.344	178469	1.989
	Cd	111	**99.991**	**ug/L**	2.140	45939	0.512
	Cd	114		**ug/L**		111293	1.241
>	In	115		**ug/L**		89703	89703.130
	Sn	120	**99.993**	**ug/L**	1.090	199570	2.223
	Sb	121	**100.028**	**ug/L**	2.189	179245	1.995
	Sb	123		**ug/L**		136031	1.514
	Ba	135		**ug/L**		49515	0.289
	Ba	137	**99.987**	**ug/L**	1.859	85679	0.499
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		171567	171566.720
	Tl	205	**99.971**	**ug/L**	1.642	825183	4.807
	Pb	208	**99.972**	**ug/L**	2.566	947170	5.522
	Th	232	**99.989**	**ug/L**	1.507	1112035	6.481
	U	238	**99.950**	**ug/L**	2.412	1155671	6.737

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 12, 2009 19:55:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 1.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.715**	**ug/L**	3.804	3228	0.018
	Be	9	**53.868**	**ug/L**	4.235	2078	0.011
	B	11	**103.550**	**ug/L**	4.320	5320	0.029
	Na	23	**5121.197**	**ug/L**	7.617	2393322	13.240
	Mg	24	**5214.703**	**ug/L**	6.514	1754725	9.730
	Al	27	**5216.350**	**ug/L**	5.552	3003259	16.640
	P	31	**5216.582**	**ug/L**	0.998	213767	1.177
	K	39	**5548.742**	**ug/L**	4.913	5018547	26.880
	Ca	43	**5216.396**	**ug/L**	0.726	10525	0.058
>	Sc	45		**ug/L**		180414	180413.982
	Ti	47	**50.948**	**ug/L**	4.232	5473	0.030
	V	51	**50.666**	**ug/L**	4.304	58188	0.321
	Cr	52	**52.403**	**ug/L**	0.780	70338	0.383
	Cr	53		**ug/L**		42522	0.022
	Mn	55	**52.796**	**ug/L**	2.482	120933	0.668
	Fe	57	**5184.855**	**ug/L**	4.225	228441	1.253
	Co	59	**50.908**	**ug/L**	0.344	77600	0.430
	Ni	60	**51.748**	**ug/L**	0.940	15944	0.088
	Cu	63		**ug/L**		36156	0.200
	Cu	65	**52.631**	**ug/L**	2.213	16927	0.094
	Zn	66	**53.450**	**ug/L**	1.535	11585	0.113
	Zn	67		**ug/L**		3886	0.014
	Zn	68		**ug/L**		9028	0.085
>	Ge	74		**ug/L**		102241	102241.275
	As	75	**48.332**	**ug/L**	1.243	16050	0.152
	Se	77		**ug/L**		2450	0.008
	Se	82	**53.433**	**ug/L**	2.213	1537	0.015
	Kr	83		**ug/L**		32	-0.000
	Sr	88	**50.751**	**ug/L**	0.525	184839	2.096
	Y	89		**ug/L**		22	0.000
	Zr	90	**44.123**	**ug/L**	6.945	87186	0.982
	Mo	98	**50.256**	**ug/L**	2.003	46873	0.532
	Ag	107	**51.321**	**ug/L**	2.731	90007	1.021
	Cd	111	**51.162**	**ug/L**	3.960	23093	0.262
	Cd	114		**ug/L**		55871	0.634
>	In	115		**ug/L**		88153	88152.887
	Sn	120	**52.835**	**ug/L**	1.351	103668	1.175
	Sb	121	**48.490**	**ug/L**	7.951	85501	0.967
	Sb	123		**ug/L**		65406	0.740
	Ba	135		**ug/L**		24845	0.145
	Ba	137	**51.441**	**ug/L**	0.785	43910	0.257
	Ho	165		**ug/L**		40	0.000
>	Lu	175		**ug/L**		170825	170824.637
	Tl	205	**49.343**	**ug/L**	1.792	405900	2.373
	Pb	208	**51.806**	**ug/L**	0.252	488946	2.861
	Th	232	**52.338**	**ug/L**	2.023	579812	3.392
	U	238	**53.690**	**ug/L**	1.636	618340	3.619

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.430				
	Be	9	107.735				
	B	11	103.550				
	Na	23	102.424				
	Mg	24	104.294				
	Al	27	103.294				
	P	31	104.332				
	K	39	110.975				
	Ca	43	104.328				
>	Sc	45			97.2		
	Ti	47	101.896				
	V	51	101.333				
	Cr	52	104.806				
	Cr	53					
	Mn	55	105.593				
	Fe	57	103.697				
	Co	59	101.817				
	Ni	60	103.497				
	Cu	63					
	Cu	65	105.263				
	Zn	66	106.899				
	Zn	67					
	Zn	68					
>	Ge	74			98.9		
	As	75	96.663				
	Se	77					
	Se	82	106.866				
	Kr	83					
	Sr	88	101.503				
	Y	89					
	Zr	90	88.247				
	Mo	98	100.513				
	Ag	107	102.642				
	Cd	111	102.325				
	Cd	114					
>	In	115			99.3		
	Sn	120	105.669				
	Sb	121	96.981				
	Sb	123					
	Ba	135					
	Ba	137	102.882				
	Ho	165					
>	Lu	175			100.4		
	Tl	205	98.686				
	Pb	208	103.612				
	Th	232	104.675				
	U	238	107.380				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 1	K	39ICV is out of limits (+/- 10%)
QC Std 1	Zr	90ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 12, 2009 20:01:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 2.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.032**	**ug/L**	99.696	10	-0.000
	Be	9	**0.059**	**ug/L**	192.312	12	0.000
	B	11	**2.678**	**ug/L**	25.971	210	0.001
	Na	23	**-0.526**	**ug/L**	408.174	3000	-0.001
	Mg	24	**0.000**	**ug/L**		0	0.000
	Al	27	**0.021**	**ug/L**	4818.765	333	0.000
	P	31	**-0.771**	**ug/L**	140.435	1343	-0.000
	K	39	**-6.987**	**ug/L**	102.652	163598	-0.034
	Ca	43	**-1.447**	**ug/L**	398.137	107	-0.000
>	Sc	45		**ug/L**		180610	180609.790
	Ti	47	**-0.104**	**ug/L**	195.868	70	-0.000
	V	51	**-0.839**	**ug/L**	66.045	-600	-0.005
	Cr	52	**0.078**	**ug/L**	38.202	1419	0.001
	Cr	53		**ug/L**		38541	-0.000
	Mn	55	**-0.005**	**ug/L**	283.994	347	-0.000
	Fe	57	**-0.408**	**ug/L**	717.472	2392	-0.000
	Co	59	**0.009**	**ug/L**	77.546	103	0.000
	Ni	60	**0.021**	**ug/L**	112.217	40	0.000
	Cu	63		**ug/L**		71	-0.000
	Cu	65	**0.024**	**ug/L**	81.629	47	0.000
	Zn	66	**0.022**	**ug/L**	102.126	77	0.000
	Zn	67		**ug/L**		2421	-0.001
	Zn	68		**ug/L**		377	-0.000
>	Ge	74		**ug/L**		102671	102671.319
	As	75	**-0.431**	**ug/L**	29.572	397	-0.001
	Se	77		**ug/L**		1643	0.000
	Se	82	**0.048**	**ug/L**	952.320	5	0.000
	Kr	83		**ug/L**		35	-0.000
	Sr	88	**-0.000**	**ug/L**	619.378	74	-0.000
	Y	89		**ug/L**		15	-0.000
	Zr	90	**0.517**	**ug/L**	8.357	1629	0.011
	Mo	98	**0.096**	**ug/L**	14.288	114	0.001
	Ag	107	**0.000**	**ug/L**	1397.069	25	0.000
	Cd	111	**0.006**	**ug/L**	67.564	11	0.000
	Cd	114		**ug/L**		20	0.000
>	In	115		**ug/L**		86891	86890.545
	Sn	120	**0.228**	**ug/L**	18.683	565	0.005
	Sb	121	**1.269**	**ug/L**	12.789	2431	0.025
	Sb	123		**ug/L**		1917	0.020
	Ba	135		**ug/L**		18	0.000
	Ba	137	**0.001**	**ug/L**	681.685	25	0.000
	Ho	165		**ug/L**		17	0.000
>	Lu	175		**ug/L**		166987	166987.357
	Tl	205	**0.124**	**ug/L**	27.024	1582	0.006
	Pb	208	**0.005**	**ug/L**	27.833	203	0.000
	Th	232	**0.239**	**ug/L**	23.991	2918	0.015
	U	238	**0.008**	**ug/L**	8.348	224	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			97.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 12, 2009 20:07:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 3.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.206**	**ug/L**	5.858	718	0.004
	Be	9	**0.380**	**ug/L**	21.884	25	0.000
	B	11	**16.398**	**ug/L**	4.532	917	0.005
	Na	23	**245.835**	**ug/L**	6.861	119499	0.636
	Mg	24	**21.507**	**ug/L**	8.662	7335	0.040
	Al	27	**40.540**	**ug/L**	24.174	24021	0.129
	P	31	**45.171**	**ug/L**	3.698	3256	0.010
	K	39	**330.522**	**ug/L**	9.060	464792	1.601
	Ca	43	**214.465**	**ug/L**	13.696	546	0.002
>	Sc	45		**ug/L**		182878	182877.726
	Ti	47	**8.783**	**ug/L**	3.923	1025	0.005
	V	51	**11.005**	**ug/L**	3.022	13101	0.070
	Cr	52	**10.572**	**ug/L**	0.902	15448	0.077
	Cr	53		**ug/L**		38032	-0.005
	Mn	55	**5.629**	**ug/L**	0.992	13395	0.071
	Fe	57	**106.960**	**ug/L**	2.366	7168	0.026
	Co	59	**1.071**	**ug/L**	1.934	1743	0.009
	Ni	60	**2.154**	**ug/L**	5.478	704	0.004
	Cu	63		**ug/L**		874	0.004
	Cu	65	**1.140**	**ug/L**	0.495	410	0.002
	Zn	66	**11.354**	**ug/L**	2.541	2567	0.024
	Zn	67		**ug/L**		2592	0.000
	Zn	68		**ug/L**		2221	0.018
>	Ge	74		**ug/L**		104254	104254.082
	As	75	**5.319**	**ug/L**	8.895	2285	0.017
	Se	77		**ug/L**		1556	-0.001
	Se	82	**5.240**	**ug/L**	12.962	157	0.001
	Kr	83		**ug/L**		32	-0.000
	Sr	88	**11.210**	**ug/L**	1.408	41317	0.463
	Y	89		**ug/L**		14	-0.000
	Zr	90	**1.904**	**ug/L**	7.029	4419	0.042
	Mo	98	**0.573**	**ug/L**	0.575	567	0.006
	Ag	107	**1.054**	**ug/L**	5.871	1892	0.021
	Cd	111	**1.059**	**ug/L**	0.472	492	0.005
	Cd	114		**ug/L**		1237	0.014
>	In	115		**ug/L**		89074	89073.678
	Sn	120	**5.449**	**ug/L**	1.058	10920	0.121
	Sb	121	**3.345**	**ug/L**	3.225	6180	0.067
	Sb	123		**ug/L**		4744	0.051
	Ba	135		**ug/L**		1068	0.006
	Ba	137	**2.111**	**ug/L**	3.083	1845	0.011
	Ho	165		**ug/L**		23	0.000
>	Lu	175		**ug/L**		172699	172698.775
	Tl	205	**1.037**	**ug/L**	2.842	9218	0.050
	Pb	208	**2.170**	**ug/L**	2.717	20858	0.120
	Th	232	**1.064**	**ug/L**	0.956	12253	0.069
	U	238	**0.221**	**ug/L**	3.951	2706	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	112.056				
	Be	9	75.963				
	B	11	109.321				
	Na	23	98.334				
	Mg	24	143.382				
	Al	27	135.134				
	P	31	90.341				
	K	39	110.174				
	Ca	43	107.233				
>	Sc	45		98.6			
	Ti	47	87.835				
	V	51	110.048				
	Cr	52	105.723				
	Cr	53					
	Mn	55	112.573				
	Fe	57	106.960				
	Co	59	107.141				
	Ni	60	107.684				
	Cu	63					
	Cu	65	114.024				
	Zn	66	113.540				
	Zn	67					
	Zn	68					
>	Ge	74		100.8			
	As	75	106.371				
	Se	77					
	Se	82	104.806				
	Kr	83					
	Sr	88	112.099				
	Y	89					
	Zr	90	95.183				
	Mo	98	114.614				
	Ag	107	105.406				
	Cd	111	105.869				
	Cd	114					
>	In	115		100.4			
	Sn	120	108.989				
	Sb	121	111.495				
	Sb	123					
	Ba	135					
	Ba	137	105.568				
	Ho	165					
>	Lu	175		101.5			
	Tl	205	103.684				
	Pb	208	108.520				
	Th	232	106.388				
	U	238	110.560				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Mg	24CRDL is out of limits
QC Std 3	Al	27CRDL is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 3
Report Date/Time: Saturday, December 12, 2009 20:10:09
Page 3

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 12, 2009 20:13:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 4.100

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.076**	**ug/L**	68.967	15	0.000
	Be	9	**0.031**	**ug/L**	241.640	10	0.000
	B	11	**1.314**	**ug/L**	22.470	129	0.000
	Na	23	**99750.894**	**ug/L**	1.102	42587465	257.895
	Mg	24	**99996.577**	**ug/L**	7.865	30804391	186.579
	Al	27	**100346.540**	**ug/L**	5.965	52845942	320.096
	P	31	**100696.890**	**ug/L**	1.570	3753697	22.726
	K	39	**115837.832**	**ug/L**	10.791	92763715	561.168
	Ca	43	**101307.659**	**ug/L**	0.954	185199	1.121
>	Sc	45		**ug/L**		165127	165127.214
	Ti	47	**1565.989**	**ug/L**	1.854	151796	0.919
	V	51	**-2.029**	**ug/L**	21.255	-1784	-0.013
	Cr	52	**2.432**	**ug/L**	4.573	4136	0.018
	Cr	53		**ug/L**		31363	-0.024
	Mn	55	**6.041**	**ug/L**	2.115	12956	0.076
	Fe	57	**101327.815**	**ug/L**	0.151	4046558	24.492
	Co	59	**0.235**	**ug/L**	5.865	408	0.002
	Ni	60	**2.479**	**ug/L**	5.659	728	0.004
	Cu	63		**ug/L**		2566	0.015
	Cu	65	**4.872**	**ug/L**	2.467	1466	0.009
	Zn	66	**3.420**	**ug/L**	2.255	759	0.007
	Zn	67		**ug/L**		1944	-0.004
	Zn	68		**ug/L**		459	0.001
>	Ge	74		**ug/L**		96075	96074.964
	As	75	**-0.333**	**ug/L**	157.780	400	-0.001
	Se	77		**ug/L**		2037	0.005
	Se	82	**-0.680**	**ug/L**	68.538	-15	-0.000
	Kr	83		**ug/L**		65	0.000
	Sr	88	**1.204**	**ug/L**	2.134	4084	0.050
	Y	89		**ug/L**		118	0.001
	Zr	90	**6.032**	**ug/L**	59.676	11375	0.134
	Mo	98	**1990.751**	**ug/L**	1.414	1699961	21.057
	Ag	107	**0.055**	**ug/L**	19.856	111	0.001
	Cd	111	**0.271**	**ug/L**	24.269	120	0.001
	Cd	114		**ug/L**		2126	0.026
>	In	115		**ug/L**		80733	80732.706
	Sn	120	**0.124**	**ug/L**	3.977	338	0.003
	Sb	121	**0.211**	**ug/L**	6.715	554	0.004
	Sb	123		**ug/L**		422	0.003
	Ba	135		**ug/L**		319	0.002
	Ba	137	**0.706**	**ug/L**	9.197	586	0.004
	Ho	165		**ug/L**		386	0.002
>	Lu	175		**ug/L**		159515	159515.196
	Tl	205	**0.002**	**ug/L**	274.438	575	0.000
	Pb	208	**0.188**	**ug/L**	3.167	1808	0.010
	Th	232	**0.061**	**ug/L**	28.029	948	0.004
	U	238	**0.014**	**ug/L**	10.966	278	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	99.751				
	Mg	24	99.997				
	Al	27	100.347				
	P	31	100.697				
	K	39	115.838				
	Ca	43	101.308				
>	Sc	45			89.0		
	Ti	47	78.299				
	V	51					
	Cr	52	65.742				
	Cr	53					
	Mn	55	104.155				
	Fe	57	101.328				
	Co	59	93.875				
	Ni	60	91.811				
	Cu	63					
	Cu	65	167.990				
	Zn	66	94.996				
	Zn	67					
	Zn	68					
>	Ge	74			92.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	100.330				
	Y	89					
	Zr	90					
	Mo	98	99.538				
	Ag	107					
	Cd	111	67.758				
	Cd	114					
>	In	115			91.0		
	Sn	120					
	Sb	121	211.210				
	Sb	123					
	Ba	135					
	Ba	137	105.443				
	Ho	165					
>	Lu	175			93.7		
	Tl	205					
	Pb	208	93.969				
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits
QC Std 4	Zr	90ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 12, 2009 20:18:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 5.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.726**	**ug/L**	1.540	1180	0.007
	Be	9	**19.517**	**ug/L**	4.773	688	0.004
	B	11	**20.683**	**ug/L**	1.869	1017	0.006
	Na	23	**100034.962**	**ug/L**	7.856	42282543	258.630
	Mg	24	**101946.034**	**ug/L**	5.527	31123057	190.216
	Al	27	**106810.311**	**ug/L**	8.891	55699394	340.715
	P	31	**99576.923**	**ug/L**	1.559	3677197	22.474
	K	39	**104303.351**	**ug/L**	3.444	82837406	505.290
	Ca	43	**100781.978**	**ug/L**	0.902	182544	1.115
>	Sc	45		**ug/L**		163591	163590.739
	Ti	47	**1539.986**	**ug/L**	0.436	147903	0.904
	V	51	**20.077**	**ug/L**	4.816	21114	0.127
	Cr	52	**23.727**	**ug/L**	2.108	29527	0.173
	Cr	53		**ug/L**		32838	-0.013
	Mn	55	**27.863**	**ug/L**	1.506	58031	0.353
	Fe	57	**102492.224**	**ug/L**	1.189	4054545	24.774
	Co	59	**21.550**	**ug/L**	1.190	29830	0.182
	Ni	60	**24.171**	**ug/L**	0.493	6768	0.041
	Cu	63		**ug/L**		15373	0.094
	Cu	65	**25.058**	**ug/L**	0.173	7327	0.045
	Zn	66	**24.669**	**ug/L**	5.100	5028	0.052
	Zn	67		**ug/L**		2571	0.002
	Zn	68		**ug/L**		3783	0.036
>	Ge	74		**ug/L**		95490	95490.095
	As	75	**21.443**	**ug/L**	0.744	6929	0.067
	Se	77		**ug/L**		2445	0.010
	Se	82	**20.739**	**ug/L**	3.792	559	0.006
	Kr	83		**ug/L**		60	0.000
	Sr	88	**23.601**	**ug/L**	0.302	78520	0.975
	Y	89		**ug/L**		112	0.001
	Zr	90	**22.366**	**ug/L**	0.995	40634	0.498
	Mo	98	**1997.756**	**ug/L**	1.509	1700556	21.131
	Ag	107	**20.187**	**ug/L**	2.038	32345	0.402
	Cd	111	**21.562**	**ug/L**	2.151	8894	0.110
	Cd	114		**ug/L**		22666	0.281
>	In	115		**ug/L**		80483	80482.939
	Sn	120	**21.282**	**ug/L**	2.574	38193	0.473
	Sb	121	**22.372**	**ug/L**	3.410	36123	0.446
	Sb	123		**ug/L**		28031	0.346
	Ba	135		**ug/L**		9974	0.062
	Ba	137	**21.832**	**ug/L**	1.432	17525	0.109
	Ho	165		**ug/L**		402	0.002
>	Lu	175		**ug/L**		160517	160517.027
	Tl	205	**20.125**	**ug/L**	1.146	155900	0.968
	Pb	208	**20.881**	**ug/L**	1.167	185271	1.153
	Th	232	**21.966**	**ug/L**	0.649	228853	1.424
	U	238	**22.797**	**ug/L**	0.219	246788	1.537

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.630				
	Be	9	97.585				
	B	11	103.414				
	Na	23	100.035				
	Mg	24	101.946				
	Al	27	106.810				
	P	31	99.577				
	K	39	104.303				
	Ca	43	100.782				
>	Sc	45		88.2			
	Ti	47	76.999				
	V	51	100.386				
	Cr	52	100.114				
	Cr	53					
	Mn	55	107.996				
	Fe	57	102.492				
	Co	59	106.422				
	Ni	60	106.482				
	Cu	63					
	Cu	65	109.422				
	Zn	66	104.530				
	Zn	67					
	Zn	68					
>	Ge	74		92.4			
	As	75	107.213				
	Se	77					
	Se	82	103.696				
	Kr	83					
	Sr	88	111.326				
	Y	89					
	Zr	90	111.830				
	Mo	98	99.888				
	Ag	107	100.933				
	Cd	111	105.695				
	Cd	114					
>	In	115		90.7			
	Sn	120	106.410				
	Sb	121	111.302				
	Sb	123					
	Ba	135					
	Ba	137	105.621				
	Ho	165					
>	Lu	175		94.3			
	Tl	205	100.627				
	Pb	208	103.370				
	Th	232	109.830				
	U	238	113.986				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 20:24:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.225**	**ug/L**	2.612	3323	0.019
	Be	9	**55.543**	**ug/L**	2.414	2104	0.012
	B	11	**103.919**	**ug/L**	2.909	5244	0.029
	Na	23	**4876.182**	**ug/L**	3.520	2237684	12.607
	Mg	24	**4691.283**	**ug/L**	4.553	1550558	8.753
	Al	27	**5366.714**	**ug/L**	10.175	3030010	17.119
	P	31	**5174.135**	**ug/L**	3.897	208165	1.168
	K	39	**5641.558**	**ug/L**	2.965	5007468	27.330
	Ca	43	**5230.114**	**ug/L**	2.765	10360	0.058
>	Sc	45		**ug/L**		177194	177194.174
	Ti	47	**51.020**	**ug/L**	4.905	5381	0.030
	V	51	**52.509**	**ug/L**	0.633	59229	0.332
	Cr	52	**53.703**	**ug/L**	1.676	70755	0.392
	Cr	53		**ug/L**		42327	0.025
	Mn	55	**53.604**	**ug/L**	2.916	120568	0.679
	Fe	57	**5304.063**	**ug/L**	2.165	229481	1.282
	Co	59	**52.130**	**ug/L**	1.463	78030	0.440
	Ni	60	**52.424**	**ug/L**	4.363	15853	0.089
	Cu	63		**ug/L**		35870	0.202
	Cu	65	**52.482**	**ug/L**	3.261	16574	0.093
	Zn	66	**51.812**	**ug/L**	1.611	11392	0.109
	Zn	67		**ug/L**		3939	0.014
	Zn	68		**ug/L**		8934	0.082
>	Ge	74		**ug/L**		103686	103685.625
	As	75	**47.434**	**ug/L**	2.467	15986	0.149
	Se	77		**ug/L**		2598	0.009
	Se	82	**52.090**	**ug/L**	3.098	1519	0.015
	Kr	83		**ug/L**		35	-0.000
	Sr	88	**50.111**	**ug/L**	1.338	180177	2.070
	Y	89		**ug/L**		28	0.000
	Zr	90	**42.533**	**ug/L**	11.409	83001	0.946
	Mo	98	**52.402**	**ug/L**	2.684	48250	0.554
	Ag	107	**52.932**	**ug/L**	3.385	91651	1.053
	Cd	111	**51.022**	**ug/L**	2.361	22743	0.261
	Cd	114		**ug/L**		55552	0.638
>	In	115		**ug/L**		87034	87033.843
	Sn	120	**52.623**	**ug/L**	2.411	101949	1.170
	Sb	121	**50.068**	**ug/L**	6.470	87151	0.999
	Sb	123		**ug/L**		66774	0.765
	Ba	135		**ug/L**		24980	0.145
	Ba	137	**51.205**	**ug/L**	1.583	43967	0.256
	Ho	165		**ug/L**		35	0.000
>	Lu	175		**ug/L**		171848	171848.356
	Tl	205	**49.253**	**ug/L**	1.373	407541	2.368
	Pb	208	**51.990**	**ug/L**	1.124	493590	2.871
	Th	232	**52.652**	**ug/L**	1.469	586899	3.413
	U	238	**53.855**	**ug/L**	1.535	623866	3.630

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	108.450				
	Be	9	111.086				
	B	11	103.919				
	Na	23	97.524				
	Mg	24	93.826				
	Al	27	106.272				
	P	31	103.483				
	K	39	112.831				
	Ca	43	104.602				
>	Sc	45			95.5		
	Ti	47	102.039				
	V	51	105.019				
	Cr	52	107.406				
	Cr	53					
	Mn	55	107.208				
	Fe	57	106.081				
	Co	59	104.260				
	Ni	60	104.848				
	Cu	63					
	Cu	65	104.963				
	Zn	66	103.624				
	Zn	67					
	Zn	68					
>	Ge	74			100.3		
	As	75	94.868				
	Se	77					
	Se	82	104.180				
	Kr	83					
	Sr	88	100.223				
	Y	89					
	Zr	90	85.066				
	Mo	98	104.804				
	Ag	107	105.864				
	Cd	111	102.043				
	Cd	114					
>	In	115			98.1		
	Sn	120	105.245				
	Sb	121	100.137				
	Sb	123					
	Ba	135					
	Ba	137	102.411				
	Ho	165					
>	Lu	175			101.0		
	Tl	205	98.506				
	Pb	208	103.980				
	Th	232	105.303				
	U	238	107.710				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	K	39CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 20:30:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.031**	**ug/L**	125.400	14	0.000
	Be	9	**0.040**	**ug/L**	186.656	11	0.000
	B	11	**2.282**	**ug/L**	28.374	186	0.001
	Na	23	**-0.369**	**ug/L**	609.003	3000	-0.001
	Mg	24	**4.069**	**ug/L**	114.183	1333	0.008
	Al	27	**1.217**	**ug/L**	147.879	1000	0.004
	P	31	**-2.711**	**ug/L**	105.450	1237	-0.001
	K	39	**-22.356**	**ug/L**	52.625	147090	-0.108
	Ca	43	**-4.336**	**ug/L**	220.016	99	-0.000
>	Sc	45		**ug/L**		176791	176790.815
	Ti	47	**0.125**	**ug/L**	89.793	93	0.000
	V	51	**-0.985**	**ug/L**	63.218	-748	-0.006
	Cr	52	**0.121**	**ug/L**	67.364	1444	0.001
	Cr	53		**ug/L**		37375	-0.002
	Mn	55	**-0.011**	**ug/L**	107.846	326	-0.000
	Fe	57	**-0.840**	**ug/L**	181.904	2323	-0.000
	Co	59	**0.000**	**ug/L**	574.243	87	0.000
	Ni	60	**0.012**	**ug/L**	153.860	36	0.000
	Cu	63		**ug/L**		58	-0.000
	Cu	65	**0.009**	**ug/L**	226.062	41	0.000
	Zn	66	**0.009**	**ug/L**	355.060	74	0.000
	Zn	67		**ug/L**		2320	-0.002
	Zn	68		**ug/L**		338	-0.000
>	Ge	74		**ug/L**		102928	102927.614
	As	75	**-0.043**	**ug/L**	319.214	523	-0.000
	Se	77		**ug/L**		1684	0.001
	Se	82	**0.067**	**ug/L**	419.612	6	0.000
	Kr	83		**ug/L**		35	-0.000
	Sr	88	**-0.002**	**ug/L**	177.929	69	-0.000
	Y	89		**ug/L**		15	-0.000
	Zr	90	**0.298**	**ug/L**	12.635	1206	0.007
	Mo	98	**0.242**	**ug/L**	14.473	248	0.003
	Ag	107	**0.001**	**ug/L**	229.112	25	0.000
	Cd	111	**0.007**	**ug/L**	295.308	12	0.000
	Cd	114		**ug/L**		15	0.000
>	In	115		**ug/L**		86861	86861.413
	Sn	120	**0.142**	**ug/L**	13.733	397	0.003
	Sb	121	**0.780**	**ug/L**	15.737	1583	0.016
	Sb	123		**ug/L**		1278	0.013
	Ba	135		**ug/L**		17	0.000
	Ba	137	**-0.001**	**ug/L**	318.749	24	-0.000
	Ho	165		**ug/L**		17	0.000
>	Lu	175		**ug/L**		168995	168995.033
	Tl	205	**0.121**	**ug/L**	33.965	1576	0.006
	Pb	208	**0.002**	**ug/L**	117.620	183	0.000
	Th	232	**0.225**	**ug/L**	21.567	2803	0.015
	U	238	**0.008**	**ug/L**	43.403	219	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.3		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Saturday, December 12, 2009 20:36:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 10.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1024.517**	**ug/L**	1.981	59007	0.353
	Be	9	**1002.487**	**ug/L**	1.189	35655	0.213
	B	11	**0.860**	**ug/L**	33.674	109	0.000
	Na	23	**43550.363**	**ug/L**	4.953	18803535	112.595
	Mg	24	**48085.298**	**ug/L**	8.332	14992245	89.720
	Al	27	**52687.557**	**ug/L**	2.473	28077973	168.068
	P	31	**25068.720**	**ug/L**	1.147	946204	5.658
	K	39	**53979.593**	**ug/L**	4.689	43841195	261.500
	Ca	43	**51218.870**	**ug/L**	1.159	94769	0.567
>	Sc	45		**ug/L**		167029	167028.526
	Ti	47	**37.408**	**ug/L**	2.606	3742	0.022
	V	51	**1001.651**	**ug/L**	0.920	1058927	6.338
	Cr	52	**987.826**	**ug/L**	2.672	1205586	7.212
	Cr	53		**ug/L**		181682	0.874
	Mn	55	**1040.368**	**ug/L**	1.447	2200422	13.172
	Fe	57	**51429.336**	**ug/L**	3.687	2078657	12.431
	Co	59	**978.195**	**ug/L**	2.410	1378733	8.255
	Ni	60	**1016.544**	**ug/L**	2.680	289309	1.732
	Cu	63		**ug/L**		622551	3.727
	Cu	65	**996.002**	**ug/L**	1.693	295932	1.772
	Zn	66	**2406.349**	**ug/L**	1.922	503692	5.070
	Zn	67		**ug/L**		82744	0.808
	Zn	68		**ug/L**		368840	3.709
>	Ge	74		**ug/L**		99350	99349.626
	As	75	**936.235**	**ug/L**	0.765	292580	2.940
	Se	77		**ug/L**		12172	0.107
	Se	82	**507.789**	**ug/L**	1.067	14159	0.142
	Kr	83		**ug/L**		46	0.000
	Sr	88	**1000.794**	**ug/L**	1.612	3467966	41.334
	Y	89		**ug/L**		90	0.001
	Zr	90	**520.280**	**ug/L**	1.933	971883	11.577
	Mo	98	**1022.359**	**ug/L**	1.280	907322	10.814
	Ag	107	**261.829**	**ug/L**	1.593	437127	5.210
	Cd	111	**986.588**	**ug/L**	2.594	423842	5.052
	Cd	114		**ug/L**		1012731	12.071
>	In	115		**ug/L**		83911	83911.344
	Sn	120	**1011.777**	**ug/L**	1.789	1887669	22.498
	Sb	121	**251.649**	**ug/L**	2.909	421495	5.020
	Sb	123		**ug/L**		324097	3.860
	Ba	135		**ug/L**		475498	2.837
	Ba	137	**984.330**	**ug/L**	1.764	823838	4.916
	Ho	165		**ug/L**		121	0.001
>	Lu	175		**ug/L**		167605	167604.558
	Tl	205	**461.600**	**ug/L**	1.923	3720740	22.196
	Pb	208	**4651.383**	**ug/L**	1.905	43051562	256.903
	Th	232	**2382.148**	**ug/L**	0.994	25876327	154.399
	U	238	**5000.367**	**ug/L**	2.052	56489126	337.058

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.452				
	Be	9	100.249				
	B	11					
	Na	23	87.101				
	Mg	24	96.171				
	Al	27	105.375				
	P	31	100.275				
	K	39	107.959				
	Ca	43	102.438				
>	Sc	45			90.0		
	Ti	47					
	V	51	100.165				
	Cr	52	98.783				
	Cr	53					
	Mn	55	104.037				
	Fe	57	102.859				
	Co	59	97.820				
	Ni	60	101.654				
	Cu	63					
	Cu	65	99.600				
	Zn	66	96.254				
	Zn	67					
	Zn	68					
>	Ge	74			96.1		
	As	75	93.623				
	Se	77					
	Se	82	101.558				
	Kr	83					
	Sr	88	100.079				
	Y	89					
	Zr	90	104.056				
	Mo	98	102.236				
	Ag	107	104.732				
	Cd	111	98.659				
	Cd	114					
>	In	115			94.6		
	Sn	120	101.178				
	Sb	121	100.660				
	Sb	123					
	Ba	135					
	Ba	137	98.433				
	Ho	165					
>	Lu	175			98.5		
	Tl	205	92.320				
	Pb	208	93.028				
	Th	232	95.286				
	U	238	100.007				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 10	Na	23LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Saturday, December 12, 2009 20:41:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 11.105

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.426**	**ug/L**	0.430	3242	0.018
	Be	9	**54.896**	**ug/L**	4.522	2059	0.012
	B	11	**99.691**	**ug/L**	3.945	4982	0.028
	Na	23	**5304.053**	**ug/L**	5.704	2407615	13.713
	Mg	24	**5055.417**	**ug/L**	1.170	1654222	9.433
	Al	27	**5801.146**	**ug/L**	9.929	3247586	18.505
	P	31	**5207.171**	**ug/L**	1.030	207424	1.175
	K	39	**5509.863**	**ug/L**	2.740	4846830	26.692
	Ca	43	**5184.612**	**ug/L**	3.610	10170	0.057
>	Sc	45		**ug/L**		175367	175367.347
	Ti	47	**50.797**	**ug/L**	5.897	5305	0.030
	V	51	**51.663**	**ug/L**	3.737	57668	0.327
	Cr	52	**51.790**	**ug/L**	1.205	67590	0.378
	Cr	53		**ug/L**		40627	0.018
	Mn	55	**53.617**	**ug/L**	2.549	119367	0.679
	Fe	57	**5276.201**	**ug/L**	2.949	225938	1.275
	Co	59	**51.817**	**ug/L**	1.047	76775	0.437
	Ni	60	**52.573**	**ug/L**	0.724	15742	0.090
	Cu	63		**ug/L**		35300	0.201
	Cu	65	**52.928**	**ug/L**	0.409	16548	0.094
	Zn	66	**52.575**	**ug/L**	1.459	11380	0.111
	Zn	67		**ug/L**		3796	0.013
	Zn	68		**ug/L**		8881	0.083
>	Ge	74		**ug/L**		102104	102104.322
	As	75	**48.264**	**ug/L**	1.451	16005	0.152
	Se	77		**ug/L**		2531	0.009
	Se	82	**52.551**	**ug/L**	2.935	1510	0.015
	Kr	83		**ug/L**		37	0.000
	Sr	88	**50.134**	**ug/L**	1.696	180303	2.071
	Y	89		**ug/L**		21	0.000
	Zr	90	**54.323**	**ug/L**	6.254	105787	1.209
	Mo	98	**51.270**	**ug/L**	2.304	47224	0.542
	Ag	107	**51.392**	**ug/L**	2.158	89027	1.023
	Cd	111	**51.796**	**ug/L**	2.914	23092	0.265
	Cd	114		**ug/L**		56297	0.647
>	In	115		**ug/L**		87063	87063.241
	Sn	120	**53.791**	**ug/L**	2.381	104224	1.196
	Sb	121	**50.461**	**ug/L**	5.230	87878	1.007
	Sb	123		**ug/L**		67159	0.769
	Ba	135		**ug/L**		24770	0.147
	Ba	137	**51.271**	**ug/L**	1.120	43090	0.256
	Ho	165		**ug/L**		41	0.000
>	Lu	175		**ug/L**		168191	168190.978
	Tl	205	**50.171**	**ug/L**	0.743	406344	2.412
	Pb	208	**52.153**	**ug/L**	0.458	484626	2.880
	Th	232	**52.892**	**ug/L**	0.752	576928	3.428
	U	238	**54.504**	**ug/L**	0.783	618062	3.674

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	106.852				
	Be	9	109.793				
	B	11	99.691				
	Na	23	106.081				
	Mg	24	101.108				
	Al	27	114.874				
	P	31	104.143				
	K	39	110.197				
	Ca	43	103.692				
>	Sc	45		94.5			
	Ti	47	101.594				
	V	51	103.326				
	Cr	52	103.579				
	Cr	53					
	Mn	55	107.234				
	Fe	57	105.524				
	Co	59	103.634				
	Ni	60	105.146				
	Cu	63					
	Cu	65	105.856				
	Zn	66	105.149				
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75	96.528				
	Se	77					
	Se	82	105.103				
	Kr	83					
	Sr	88	100.268				
	Y	89					
	Zr	90	108.646				
	Mo	98	102.539				
	Ag	107	102.784				
	Cd	111	103.592				
	Cd	114					
>	In	115		98.1			
	Sn	120	107.582				
	Sb	121	100.922				
	Sb	123					
	Ba	135					
	Ba	137	102.542				
	Ho	165					
>	Lu	175		98.8			
	Tl	205	100.342				
	Pb	208	104.306				
	Th	232	105.784				
	U	238	109.008				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 11	Al	27CCV is out of limits (+/- 10%)
QC Std 11	K	39CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Saturday, December 12, 2009 20:47:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 12.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.028**	**ug/L**	247.257	13	0.000
	Be	9	**0.069**	**ug/L**	115.758	12	0.000
	B	11	**2.098**	**ug/L**	41.033	175	0.001
	Na	23	**0.413**	**ug/L**	301.290	3334	0.001
	Mg	24	**0.000**	**ug/L**		0	0.000
	Al	27	**-0.563**	**ug/L**	0.000	0	-0.002
	P	31	**-3.149**	**ug/L**	40.949	1208	-0.001
	K	39	**-30.855**	**ug/L**	58.574	138338	-0.149
	Ca	43	**-4.616**	**ug/L**	64.265	98	-0.000
>	Sc	45		**ug/L**		175061	175060.842
	Ti	47	**-0.051**	**ug/L**	114.180	74	-0.000
	V	51	**-0.292**	**ug/L**	437.446	35	-0.002
	Cr	52	**0.157**	**ug/L**	5.695	1478	0.001
	Cr	53		**ug/L**		36000	-0.008
	Mn	55	**-0.001**	**ug/L**	333.477	344	-0.000
	Fe	57	**-2.131**	**ug/L**	83.674	2246	-0.001
	Co	59	**0.031**	**ug/L**	14.491	132	0.000
	Ni	60	**0.020**	**ug/L**	105.274	38	0.000
	Cu	63		**ug/L**		73	-0.000
	Cu	65	**0.024**	**ug/L**	40.331	45	0.000
	Zn	66	**-0.026**	**ug/L**	97.395	65	-0.000
	Zn	67		**ug/L**		2166	-0.003
	Zn	68		**ug/L**		355	-0.000
>	Ge	74		**ug/L**		101224	101224.395
	As	75	**0.467**	**ug/L**	31.193	677	0.001
	Se	77		**ug/L**		1605	0.000
	Se	82	**-0.093**	**ug/L**	335.119	1	-0.000
	Kr	83		**ug/L**		40	0.000
	Sr	88	**0.004**	**ug/L**	51.220	89	0.000
	Y	89		**ug/L**		14	-0.000
	Zr	90	**0.644**	**ug/L**	6.770	1852	0.014
	Mo	98	**0.295**	**ug/L**	14.569	294	0.003
	Ag	107	**0.003**	**ug/L**	83.122	28	0.000
	Cd	111	**0.015**	**ug/L**	119.953	15	0.000
	Cd	114		**ug/L**		18	0.000
>	In	115		**ug/L**		85827	85827.376
	Sn	120	**1.107**	**ug/L**	9.329	2235	0.025
	Sb	121	**2.366**	**ug/L**	8.844	4278	0.047
	Sb	123		**ug/L**		3258	0.036
	Ba	135		**ug/L**		21	0.000
	Ba	137	**0.013**	**ug/L**	12.382	35	0.000
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		168633	168632.630
	Tl	205	**0.214**	**ug/L**	26.286	2324	0.010
	Pb	208	**0.018**	**ug/L**	15.851	329	0.001
	Th	232	**0.405**	**ug/L**	15.657	4760	0.026
	U	238	**0.070**	**ug/L**	17.427	931	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201981228
Sample Date/Time: Saturday, December 12, 2009 20:53:18
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\1201981228.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.071	ug/L	61.646	16	0.000
	Be	9	0.085	ug/L	18.130	13	0.000
	B	11	2.179	ug/L	8.610	180	0.001
	Na	23	463.675	ug/L	19.977	214302	1.199
	Mg	24	86.283	ug/L	14.315	28362	0.161
	Al	27	7.146	ug/L	51.700	4334	0.023
	P	31	14.376	ug/L	8.043	1913	0.003
	K	39	97.943	ug/L	19.891	249160	0.474
	Ca	43	453.618	ug/L	9.570	992	0.005
>	Sc	45		ug/L		176176	176175.760
	Ti	47	-0.001	ug/L	12889.430	79	-0.000
	V	51	-0.034	ug/L	3004.479	320	-0.000
	Cr	52	0.056	ug/L	111.417	1356	0.000
	Cr	53		ug/L		27706	-0.056
	Mn	55	0.536	ug/L	4.440	1545	0.007
	Fe	57	7.541	ug/L	27.160	2672	0.002
	Co	59	0.015	ug/L	28.928	109	0.000
	Ni	60	0.102	ug/L	45.187	63	0.000
	Cu	63		ug/L		291	0.001
	Cu	65	0.342	ug/L	12.886	145	0.001
	Zn	66	1.297	ug/L	5.329	349	0.003
	Zn	67		ug/L		1693	-0.008
	Zn	68		ug/L		491	0.001
>	Ge	74		ug/L		101788	101788.386
	As	75	-0.085	ug/L	273.420	504	-0.000
	Se	77		ug/L		968	-0.006
	Se	82	-0.045	ug/L	511.922	3	-0.000
	Kr	83		ug/L		33	-0.000
	Sr	88	1.349	ug/L	1.009	4986	0.056
	Y	89		ug/L		22	0.000
	Zr	90	2.550	ug/L	11.040	5632	0.057
	Mo	98	0.132	ug/L	16.601	150	0.001
	Ag	107	0.004	ug/L	84.154	31	0.000
	Cd	111	0.011	ug/L	141.124	14	0.000
	Cd	114		ug/L		17	0.000
>	In	115		ug/L		88124	88123.685
	Sn	120	0.161	ug/L	9.097	442	0.004
	Sb	121	0.512	ug/L	4.903	1133	0.010
	Sb	123		ug/L		887	0.008
	Ba	135		ug/L		203	0.001
	Ba	137	0.369	ug/L	6.258	339	0.002
	Ho	165		ug/L		22	0.000
>	Lu	175		ug/L		170175	170175.201
	Tl	205	0.055	ug/L	21.140	1051	0.003
	Pb	208	0.026	ug/L	16.707	408	0.001
	Th	232	0.127	ug/L	5.031	1742	0.008
	U	238	0.031	ug/L	10.429	485	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.0		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201981229
Sample Date/Time: Saturday, December 12, 2009 21:04:48
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 926645|40|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\1201981229.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.405**	**ug/L**	6.185	158	0.001
	Be	9	**26.100**	**ug/L**	4.999	987	0.006
	B	11	**37.903**	**ug/L**	1.320	1946	0.011
	Na	23	**167.097**	**ug/L**	9.171	79220	0.432
	Mg	24	**857.083**	**ug/L**	7.029	281419	1.599
	Al	27	**2414.229**	**ug/L**	7.116	1355568	7.701
	P	31	**192.993**	**ug/L**	3.307	9006	0.044
	K	39	**799.931**	**ug/L**	4.043	847420	3.875
	Ca	43	**989.808**	**ug/L**	4.377	2035	0.011
>	Sc	45		**ug/L**		176018	176018.202
	Ti	47	**55.559**	**ug/L**	1.498	5818	0.033
	V	51	**41.197**	**ug/L**	2.695	46234	0.261
	Cr	52	**18.865**	**ug/L**	1.312	25527	0.138
	Cr	53		**ug/L**		32409	-0.029
	Mn	55	**102.811**	**ug/L**	0.208	229468	1.302
	Fe	57	**3058.793**	**ug/L**	1.013	132484	0.739
	Co	59	**23.814**	**ug/L**	0.628	35462	0.201
	Ni	60	**29.171**	**ug/L**	3.237	8781	0.050
	Cu	63		**ug/L**		18357	0.104
	Cu	65	**26.948**	**ug/L**	1.372	8476	0.048
	Zn	66	**56.247**	**ug/L**	3.397	12032	0.119
	Zn	67		**ug/L**		3817	0.013
	Zn	68		**ug/L**		9771	0.093
>	Ge	74		**ug/L**		100963	100963.262
	As	75	**68.710**	**ug/L**	1.159	22310	0.216
	Se	77		**ug/L**		2250	0.006
	Se	82	**48.821**	**ug/L**	1.079	1387	0.014
	Kr	83		**ug/L**		25	-0.000
	Sr	88	**45.377**	**ug/L**	2.107	162163	1.874
	Y	89		**ug/L**		12860	0.148
	Zr	90	**1.721**	**ug/L**	3.607	3940	0.038
	Mo	98	**21.689**	**ug/L**	1.876	19869	0.229
	Ag	107	**20.926**	**ug/L**	1.061	36044	0.416
	Cd	111	**33.997**	**ug/L**	1.440	15068	0.174
	Cd	114		**ug/L**		36387	0.421
>	In	115		**ug/L**		86504	86504.387
	Sn	120	**10.480**	**ug/L**	2.918	20279	0.233
	Sb	121	**4.887**	**ug/L**	1.601	8661	0.097
	Sb	123		**ug/L**		6623	0.074
	Ba	135		**ug/L**		61941	0.367
	Ba	137	**128.500**	**ug/L**	3.870	108208	0.642
	Ho	165		**ug/L**		1402	0.008
>	Lu	175		**ug/L**		168645	168645.278
	Tl	205	**55.605**	**ug/L**	1.216	451425	2.674
	Pb	208	**46.821**	**ug/L**	1.219	436202	2.586
	Th	232	**2.781**	**ug/L**	5.365	30744	0.180
	U	238	**0.438**	**ug/L**	2.518	5109	0.030

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241711001
Sample Date/Time: Saturday, December 12, 2009 21:10:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\241711001.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**74.221**	**ug/L**	2.479	4783	0.026
	Be	9	**4.682**	**ug/L**	9.299	196	0.001
	B	11	**15.675**	**ug/L**	1.404	897	0.004
	Na	23	**1886.503**	**ug/L**	2.701	912968	4.877
	Mg	24	**12491.727**	**ug/L**	8.352	4346805	23.308
	Al	27	**104865.978**	**ug/L**	7.420	62319404	334.513
	P	31	**416.932**	**ug/L**	2.755	18961	0.094
	K	39	**7711.162**	**ug/L**	2.918	7140073	37.356
	Ca	43	**12125.411**	**ug/L**	0.490	25131	0.134
>	Sc	45		**ug/L**		186447	186446.519
	Ti	47	**1215.741**	**ug/L**	2.764	133054	0.713
	V	51	**188.586**	**ug/L**	1.871	222840	1.193
	Cr	52	**59.711**	**ug/L**	2.059	82625	0.436
	Cr	53		**ug/L**		33837	-0.032
	Mn	55	**10467.055**	**ug/L**	1.238	24705497	132.523
	Fe	57	**89940.362**	**ug/L**	1.804	4055630	21.740
	Co	59	**93.806**	**ug/L**	2.702	147689	0.792
	Ni	60	**45.537**	**ug/L**	1.189	14504	0.078
	Cu	63		**ug/L**		27879	0.149
	Cu	65	**39.397**	**ug/L**	1.675	13104	0.070
	Zn	66	**155.252**	**ug/L**	1.773	31972	0.327
	Zn	67		**ug/L**		8118	0.059
	Zn	68		**ug/L**		28549	0.289
>	Ge	74		**ug/L**		97557	97557.395
	As	75	**15.309**	**ug/L**	3.588	5197	0.048
	Se	77		**ug/L**		1016	-0.005
	Se	82	**-0.150**	**ug/L**	199.440	-0	-0.000
	Kr	83		**ug/L**		86	0.001
	Sr	88	**148.425**	**ug/L**	1.712	521027	6.130
	Y	89		**ug/L**		263750	3.103
	Zr	90	**64.216**	**ug/L**	10.425	122058	1.429
	Mo	98	**1.557**	**ug/L**	5.153	1425	0.016
	Ag	107	**0.334**	**ug/L**	5.922	588	0.007
	Cd	111	**0.770**	**ug/L**	11.144	344	0.004
	Cd	114		**ug/L**		388	0.004
>	In	115		**ug/L**		84993	84992.875
	Sn	120	**0.813**	**ug/L**	2.012	1658	0.018
	Sb	121	**0.266**	**ug/L**	6.006	677	0.005
	Sb	123		**ug/L**		539	0.004
	Ba	135		**ug/L**		756706	4.444
	Ba	137	**1523.257**	**ug/L**	1.308	1295269	7.607
	Ho	165		**ug/L**		28440	0.167
>	Lu	175		**ug/L**		170255	170255.236
	Tl	205	**1.325**	**ug/L**	4.605	11445	0.064
	Pb	208	**143.309**	**ug/L**	0.406	1347777	7.915
	Th	232	**43.585**	**ug/L**	0.834	481292	2.825
	U	238	**3.886**	**ug/L**	2.277	44724	0.262

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			100.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			94.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.0		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEFe	57	Sample is out of limits (over linear range)
Ba 137 Upper, S, EEBa	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1201981230
Sample Date/Time: Saturday, December 12, 2009 21:16:20
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\1201981230.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**72.191**	**ug/L**	1.349	4741	0.025
	Be	9	**4.089**	**ug/L**	6.251	176	0.001
	B	11	**12.415**	**ug/L**	3.382	740	0.003
	Na	23	**1584.517**	**ug/L**	3.975	781853	4.097
	Mg	24	**12406.736**	**ug/L**	5.450	4398256	23.149
	Al	27	**106015.133**	**ug/L**	6.906	64259752	338.178
	P	31	**511.347**	**ug/L**	1.979	23371	0.115
	K	39	**7235.665**	**ug/L**	5.169	6839108	35.053
	Ca	43	**11511.079**	**ug/L**	0.461	24316	0.127
>	Sc	45		**ug/L**		189988	189988.257
	Ti	47	**1065.262**	**ug/L**	1.493	118837	0.625
	V	51	**148.947**	**ug/L**	0.335	179446	0.942
	Cr	52	**59.664**	**ug/L**	2.090	84138	0.436
	Cr	53		**ug/L**		33775	-0.036
	Mn	55	**1917.739**	**ug/L**	0.546	4613254	24.280
	Fe	57	**76158.138**	**ug/L**	1.040	3499777	18.409
	Co	59	**41.009**	**ug/L**	3.112	65840	0.346
	Ni	60	**37.567**	**ug/L**	0.985	12197	0.064
	Cu	63		**ug/L**		25990	0.136
	Cu	65	**35.151**	**ug/L**	2.927	11919	0.063
	Zn	66	**147.680**	**ug/L**	2.283	31227	0.311
	Zn	67		**ug/L**		7094	0.046
	Zn	68		**ug/L**		25102	0.247
>	Ge	74		**ug/L**		100168	100168.403
	As	75	**11.623**	**ug/L**	9.707	4173	0.036
	Se	77		**ug/L**		1001	-0.006
	Se	82	**-0.347**	**ug/L**	87.765	-6	-0.000
	Kr	83		**ug/L**		68	0.000
	Sr	88	**132.721**	**ug/L**	2.061	468203	5.482
	Y	89		**ug/L**		183246	2.145
	Zr	90	**77.072**	**ug/L**	5.573	147041	1.715
	Mo	98	**1.192**	**ug/L**	2.512	1103	0.013
	Ag	107	**0.369**	**ug/L**	3.066	650	0.007
	Cd	111	**0.570**	**ug/L**	5.557	258	0.003
	Cd	114		**ug/L**		197	0.002
>	In	115		**ug/L**		85416	85415.925
	Sn	120	**0.516**	**ug/L**	3.556	1101	0.011
	Sb	121	**0.128**	**ug/L**	6.491	444	0.003
	Sb	123		**ug/L**		363	0.002
	Ba	135		**ug/L**		342496	2.018
	Ba	137	**693.097**	**ug/L**	0.182	587600	3.461
	Ho	165		**ug/L**		19043	0.112
>	Lu	175		**ug/L**		169751	169751.115
	Tl	205	**0.943**	**ug/L**	2.796	8298	0.045
	Pb	208	**69.161**	**ug/L**	0.888	648532	3.820
	Th	232	**41.029**	**ug/L**	1.035	451711	2.659
	U	238	**3.554**	**ug/L**	2.381	40789	0.240

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			102.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1201981231
Sample Date/Time: Saturday, December 12, 2009 21:22:07
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\1201981231.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**104.089**	ug/L	2.011	6915	0.036
	Be	9	**25.099**	ug/L	5.199	1038	0.005
	B	11	**59.592**	ug/L	2.023	3298	0.017
	Na	23	**2848.642**	ug/L	10.219	1418389	7.365
	Mg	24	**13726.829**	ug/L	5.985	4922727	25.612
	Al	27	**123305.628**	ug/L	5.519	75673562	393.334
	P	31	**1347.047**	ug/L	1.959	59923	0.304
	K	39	**10330.536**	ug/L	5.376	9806292	50.046
	Ca	43	**13124.397**	ug/L	1.468	28049	0.145
>	Sc	45		ug/L		192323	192323.388
	Ti	47	**1691.051**	ug/L	0.278	190926	0.992
	V	51	**188.298**	ug/L	1.541	229509	1.191
	Cr	52	**90.952**	ug/L	2.240	129082	0.664
	Cr	53		ug/L		38779	-0.012
	Mn	55	**1806.147**	ug/L	1.393	4398100	22.868
	Fe	57	**77525.883**	ug/L	2.208	3605706	18.739
	Co	59	**54.256**	ug/L	1.279	88146	0.458
	Ni	60	**65.279**	ug/L	2.529	21429	0.111
	Cu	63		ug/L		45354	0.235
	Cu	65	**62.086**	ug/L	0.364	21282	0.110
	Zn	66	**188.903**	ug/L	1.594	39194	0.398
	Zn	67		ug/L		8329	0.060
	Zn	68		ug/L		31018	0.312
>	Ge	74		ug/L		98316	98316.500
	As	75	**51.637**	ug/L	1.284	16454	0.162
	Se	77		ug/L		1205	-0.004
	Se	82	**8.334**	ug/L	10.366	234	0.002
	Kr	83		ug/L		87	0.001
	Sr	88	**172.911**	ug/L	0.820	611473	7.141
	Y	89		ug/L		211513	2.471
	Zr	90	**142.995**	ug/L	2.937	272953	3.182
	Mo	98	**21.406**	ug/L	0.934	19410	0.226
	Ag	107	**25.625**	ug/L	1.772	43671	0.510
	Cd	111	**6.063**	ug/L	6.772	2666	0.031
	Cd	114		ug/L		5704	0.066
>	In	115		ug/L		85608	85608.486
	Sn	120	**10.328**	ug/L	1.808	19784	0.230
	Sb	121	**13.277**	ug/L	1.547	22901	0.265
	Sb	123		ug/L		17522	0.203
	Ba	135		ug/L		359115	2.129
	Ba	137	**740.960**	ug/L	3.080	624323	3.700
	Ho	165		ug/L		21716	0.129
>	Lu	175		ug/L		168737	168736.643
	Tl	205	**50.161**	ug/L	1.625	407495	2.412
	Pb	208	**176.366**	ug/L	1.687	1643474	9.741
	Th	232	**68.234**	ug/L	0.508	746535	4.423
	U	238	**30.773**	ug/L	0.715	350104	2.074

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1201981238
Sample Date/Time: Saturday, December 12, 2009 21:27:53
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\1201981238.113

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**103.480**	**ug/L**	2.831	6758	0.036
	Be	9	**25.993**	**ug/L**	5.042	1056	0.006
	B	11	**54.373**	**ug/L**	3.992	2965	0.015
	Na	23	**2408.601**	**ug/L**	7.039	1181408	6.227
	Mg	24	**13990.937**	**ug/L**	11.103	4936005	26.105
	Al	27	**118683.076**	**ug/L**	5.325	71564591	378.588
	P	31	**1308.218**	**ug/L**	1.679	57272	0.295
	K	39	**9823.659**	**ug/L**	7.005	9171126	47.590
	Ca	43	**12316.025**	**ug/L**	1.265	25895	0.136
>	Sc	45		**ug/L**		189140	189140.018
	Ti	47	**1713.885**	**ug/L**	0.280	190299	1.006
	V	51	**240.605**	**ug/L**	2.538	288272	1.522
	Cr	52	**87.930**	**ug/L**	2.757	122761	0.642
	Cr	53		**ug/L**		38023	-0.012
	Mn	55	**6142.738**	**ug/L**	2.443	14706272	77.773
	Fe	57	**95480.809**	**ug/L**	2.013	4366688	23.079
	Co	59	**107.249**	**ug/L**	3.411	171216	0.905
	Ni	60	**69.288**	**ug/L**	2.738	22359	0.118
	Cu	63		**ug/L**		43841	0.231
	Cu	65	**60.924**	**ug/L**	1.988	20534	0.108
	Zn	66	**183.863**	**ug/L**	2.688	38807	0.387
	Zn	67		**ug/L**		8754	0.063
	Zn	68		**ug/L**		32044	0.317
>	Ge	74		**ug/L**		100036	100036.486
	As	75	**55.704**	**ug/L**	1.315	18017	0.175
	Se	77		**ug/L**		1172	-0.004
	Se	82	**7.041**	**ug/L**	10.237	202	0.002
	Kr	83		**ug/L**		90	0.001
	Sr	88	**173.507**	**ug/L**	2.397	610499	7.166
	Y	89		**ug/L**		236164	2.772
	Zr	90	**144.180**	**ug/L**	2.214	273906	3.208
	Mo	98	**20.517**	**ug/L**	2.511	18512	0.217
	Ag	107	**23.846**	**ug/L**	1.879	40445	0.474
	Cd	111	**5.733**	**ug/L**	4.253	2509	0.029
	Cd	114		**ug/L**		5390	0.063
>	In	115		**ug/L**		85202	85202.275
	Sn	120	**9.196**	**ug/L**	3.093	17538	0.204
	Sb	121	**11.968**	**ug/L**	3.499	20561	0.239
	Sb	123		**ug/L**		15675	0.182
	Ba	135		**ug/L**		493595	2.897
	Ba	137	**999.849**	**ug/L**	0.331	851017	4.993
	Ho	165		**ug/L**		25552	0.150
>	Lu	175		**ug/L**		170425	170425.276
	Tl	205	**46.480**	**ug/L**	0.606	381505	2.235
	Pb	208	**250.669**	**ug/L**	0.662	2359600	13.845
	Th	232	**67.566**	**ug/L**	0.700	746671	4.379
	U	238	**29.038**	**ug/L**	0.193	333715	1.957

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			101.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1201981232
Sample Date/Time: Saturday, December 12, 2009 21:33:37
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3 10X PRB 12/13/09
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\1201981232.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	16.762	ug/L	4.343	1015	0.006
	Be	9	1.217	ug/L	11.717	54	0.000
	B	11	4.463	ug/L	13.389	289	0.001
	Na	23	417.041	ug/L	10.376	190267	1.078
	Mg	24	2692.436	ug/L	7.923	872658	5.024
	Al	27	25590.717	ug/L	11.420	14183443	81.632
	P	31	88.607	ug/L	2.651	4794	0.020
	K	39	1591.618	ug/L	9.398	1502015	7.710
	Ca	43	2723.332	ug/L	3.497	5337	0.030
>	Sc	45		ug/L		173625	173625.187
	Ti	47	269.540	ug/L	3.237	27534	0.158
	V	51	42.940	ug/L	1.588	47529	0.272
	Cr	52	13.503	ug/L	1.358	18381	0.099
	Cr	53		ug/L		28056	-0.052
	Mn	55	2310.195	ug/L	1.857	5078164	29.249
	Fe	57	19608.213	ug/L	0.073	825226	4.740
	Co	59	20.992	ug/L	0.577	30844	0.177
	Ni	60	9.969	ug/L	2.942	2981	0.017
	Cu	63		ug/L		5890	0.034
	Cu	65	8.998	ug/L	1.067	2817	0.016
	Zn	66	31.026	ug/L	0.793	6664	0.065
	Zn	67		ug/L		2884	0.004
	Zn	68		ug/L		6408	0.060
>	Ge	74		ug/L		100873	100872.585
	As	75	2.751	ug/L	15.973	1399	0.009
	Se	77		ug/L		1075	-0.005
	Se	82	0.227	ug/L	137.059	10	0.000
	Kr	83		ug/L		41	0.000
	Sr	88	29.879	ug/L	2.023	104918	1.234
	Y	89		ug/L		53183	0.626
	Zr	90	12.100	ug/L	5.515	23485	0.269
	Mo	98	0.333	ug/L	2.534	325	0.004
	Ag	107	0.059	ug/L	19.073	124	0.001
	Cd	111	0.174	ug/L	32.789	84	0.001
	Cd	114		ug/L		89	0.001
>	In	115		ug/L		84982	84981.930
	Sn	120	0.171	ug/L	5.405	444	0.004
	Sb	121	0.085	ug/L	9.718	370	0.002
	Sb	123		ug/L		298	0.001
	Ba	135		ug/L		155573	0.932
	Ba	137	325.964	ug/L	0.992	271789	1.628
	Ho	165		ug/L		5965	0.036
>	Lu	175		ug/L		166944	166943.747
	Tl	205	0.304	ug/L	8.295	3026	0.015
	Pb	208	30.815	ug/L	1.827	284216	1.702
	Th	232	9.057	ug/L	1.194	98355	0.587
	U	238	0.788	ug/L	2.928	9000	0.053

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114			[illegible]		
>	In	115			95.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_
Mn 55 Upper, S, EE	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 21:39:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.508**	ug/L	3.437	3133	0.018
	Be	9	**57.092**	ug/L	2.199	2066	0.012
	B	11	**102.915**	ug/L	0.922	4962	0.029
	Na	23	**5445.619**	ug/L	13.866	2385381	14.079
	Mg	24	**5191.931**	ug/L	7.071	1639619	9.687
	Al	27	**5398.196**	ug/L	5.470	2914088	17.220
	P	31	**5318.559**	ug/L	0.685	204408	1.200
	K	39	**5415.956**	ug/L	8.456	4597565	26.237
	Ca	43	**5154.120**	ug/L	1.473	9755	0.057
>	Sc	45		ug/L		169223	169223.445
	Ti	47	**51.941**	ug/L	2.492	5234	0.030
	V	51	**53.549**	ug/L	0.946	57678	0.339
	Cr	52	**54.790**	ug/L	2.297	68918	0.400
	Cr	53		ug/L		39248	0.018
	Mn	55	**56.116**	ug/L	1.438	120557	0.710
	Fe	57	**5419.666**	ug/L	1.075	223935	1.310
	Co	59	**53.061**	ug/L	1.935	75858	0.448
	Ni	60	**53.855**	ug/L	2.496	15560	0.092
	Cu	63		ug/L		34966	0.206
	Cu	65	**53.779**	ug/L	1.299	16225	0.096
	Zn	66	**51.480**	ug/L	2.380	11072	0.108
	Zn	67		ug/L		3647	0.011
	Zn	68		ug/L		8659	0.082
>	Ge	74		ug/L		101445	101444.668
	As	75	**47.259**	ug/L	2.191	15580	0.148
	Se	77		ug/L		2552	0.009
	Se	82	**50.665**	ug/L	0.477	1446	0.014
	Kr	83		ug/L		32	-0.000
	Sr	88	**49.644**	ug/L	0.791	175477	2.050
	Y	89		ug/L		26	0.000
	Zr	90	**57.624**	ug/L	7.575	110213	1.282
	Mo	98	**50.912**	ug/L	1.343	46091	0.539
	Ag	107	**52.296**	ug/L	2.316	89031	1.041
	Cd	111	**51.034**	ug/L	2.306	22361	0.261
	Cd	114		ug/L		55256	0.646
>	In	115		ug/L		85556	85555.889
	Sn	120	**52.156**	ug/L	2.814	99305	1.160
	Sb	121	**50.104**	ug/L	3.731	85738	1.000
	Sb	123		ug/L		65949	0.769
	Ba	135		ug/L		24428	0.146
	Ba	137	**51.312**	ug/L	2.432	42755	0.256
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		166754	166754.262
	Tl	205	**48.833**	ug/L	2.600	392167	2.348
	Pb	208	**52.039**	ug/L	1.364	479424	2.874
	Th	232	**52.572**	ug/L	0.665	568544	3.407
	U	238	**54.292**	ug/L	0.650	610396	3.660

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	107.017				
	Be	9	114.184				
	B	11	102.915				
	Na	23	108.912				
	Mg	24	103.839				
	Al	27	106.895				
	P	31	106.371				
	K	39	108.319				
	Ca	43	103.082				
>	Sc	45			91.2		
	Ti	47	103.883				
	V	51	107.097				
	Cr	52	109.580				
	Cr	53					
	Mn	55	112.233				
	Fe	57	108.393				
	Co	59	106.122				
	Ni	60	107.710				
	Cu	63					
	Cu	65	107.558				
	Zn	66	102.961				
	Zn	67					
	Zn	68					
>	Ge	74			98.1		
	As	75	94.519				
	Se	77					
	Se	82	101.330				
	Kr	83					
	Sr	88	99.289				
	Y	89					
	Zr	90	115.248				
	Mo	98	101.824				
	Ag	107	104.591				
	Cd	111	102.069				
	Cd	114					
>	In	115			96.4		
	Sn	120	104.311				
	Sb	121	100.208				
	Sb	123					
	Ba	135					
	Ba	137	102.623				
	Ho	165					
>	Lu	175			98.0		
	Tl	205	97.666				
	Pb	208	104.077				
	Th	232	105.145				
	U	238	108.584				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	Mn	55CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 21:45:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.061**	**ug/L**	64.115	15	0.000
	Be	9	**0.064**	**ug/L**	197.161	11	0.000
	B	11	**2.042**	**ug/L**	23.927	165	0.001
	Na	23	**0.772**	**ug/L**	767.933	3334	0.002
	Mg	24	**1.083**	**ug/L**	173.205	333	0.002
	Al	27	**1.948**	**ug/L**	149.409	1333	0.006
	P	31	**-2.897**	**ug/L**	11.610	1167	-0.001
	K	39	**-2.897**	**ug/L**	418.005	155173	-0.014
	Ca	43	**-13.179**	**ug/L**	27.273	78	-0.000
>	Sc	45		**ug/L**		167691	167690.683
	Ti	47	**0.048**	**ug/L**	116.402	80	0.000
	V	51	**0.522**	**ug/L**	51.676	890	0.003
	Cr	52	**0.180**	**ug/L**	24.504	1444	0.001
	Cr	53		**ug/L**		33470	-0.014
	Mn	55	**0.309**	**ug/L**	1.911	988	0.004
	Fe	57	**-5.175**	**ug/L**	50.892	2027	-0.001
	Co	59	**0.011**	**ug/L**	41.136	98	0.000
	Ni	60	**0.017**	**ug/L**	99.316	36	0.000
	Cu	63		**ug/L**		64	-0.000
	Cu	65	**0.026**	**ug/L**	90.613	44	0.000
	Zn	66	**0.012**	**ug/L**	275.008	72	0.000
	Zn	67		**ug/L**		2037	-0.004
	Zn	68		**ug/L**		311	-0.001
>	Ge	74		**ug/L**		99863	99863.189
	As	75	**0.090**	**ug/L**	855.084	549	0.000
	Se	77		**ug/L**		1588	0.000
	Se	82	**-0.107**	**ug/L**	635.294	1	-0.000
	Kr	83		**ug/L**		29	-0.000
	Sr	88	**-0.001**	**ug/L**	49.858	68	-0.000
	Y	89		**ug/L**		14	-0.000
	Zr	90	**0.532**	**ug/L**	14.782	1609	0.012
	Mo	98	**0.070**	**ug/L**	6.725	88	0.001
	Ag	107	**0.002**	**ug/L**	247.779	26	0.000
	Cd	111	**-0.011**	**ug/L**	115.458	4	-0.000
	Cd	114		**ug/L**		17	0.000
>	In	115		**ug/L**		84326	84326.406
	Sn	120	**0.210**	**ug/L**	12.536	514	0.005
	Sb	121	**0.866**	**ug/L**	17.255	1677	0.017
	Sb	123		**ug/L**		1280	0.013
	Ba	135		**ug/L**		21	0.000
	Ba	137	**0.018**	**ug/L**	26.501	39	0.000
	Ho	165		**ug/L**		15	0.000
>	Lu	175		**ug/L**		165701	165701.004
	Tl	205	**0.096**	**ug/L**	26.092	1348	0.005
	Pb	208	**0.008**	**ug/L**	26.573	234	0.000
	Th	232	**0.140**	**ug/L**	24.391	1826	0.009
	U	238	**0.012**	**ug/L**	8.600	263	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.4		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241711002
Sample Date/Time: Saturday, December 12, 2009 21:50:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\241711002.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**61.209**	**ug/L**	1.565	3886	0.021
	Be	9	**2.868**	**ug/L**	2.393	122	0.001
	B	11	**13.644**	**ug/L**	5.546	779	0.004
	Na	23	**1846.720**	**ug/L**	15.593	879286	4.774
	Mg	24	**8718.448**	**ug/L**	9.588	2985835	16.267
	Al	27	**74842.026**	**ug/L**	11.070	43829032	238.739
	P	31	**717.801**	**ug/L**	3.146	31135	0.162
	K	39	**8004.734**	**ug/L**	9.003	7289633	38.778
	Ca	43	**4516.001**	**ug/L**	0.750	9286	0.050
>	Sc	45		**ug/L**		183588	183587.998
	Ti	47	**957.640**	**ug/L**	2.946	103241	0.562
	V	51	**122.222**	**ug/L**	2.104	142340	0.773
	Cr	52	**51.126**	**ug/L**	1.659	69861	0.373
	Cr	53		**ug/L**		32822	-0.035
	Mn	55	**2800.099**	**ug/L**	2.918	6508378	35.452
	Fe	57	**75699.841**	**ug/L**	1.377	3361481	18.298
	Co	59	**23.845**	**ug/L**	2.314	37032	0.201
	Ni	60	**41.905**	**ug/L**	2.097	13142	0.071
	Cu	63		**ug/L**		27176	0.148
	Cu	65	**38.485**	**ug/L**	1.271	12607	0.068
	Zn	66	**199.809**	**ug/L**	1.457	42043	0.421
	Zn	67		**ug/L**		8360	0.059
	Zn	68		**ug/L**		32410	0.321
>	Ge	74		**ug/L**		99701	99701.051
	As	75	**9.099**	**ug/L**	6.116	3368	0.029
	Se	77		**ug/L**		1006	-0.006
	Se	82	**-0.025**	**ug/L**	2473.653	3	-0.000
	Kr	83		**ug/L**		69	0.000
	Sr	88	**58.915**	**ug/L**	0.872	204760	2.433
	Y	89		**ug/L**		200269	2.381
	Zr	90	**69.194**	**ug/L**	3.502	130158	1.540
	Mo	98	**2.613**	**ug/L**	3.825	2349	0.028
	Ag	107	**0.291**	**ug/L**	3.716	510	0.006
	Cd	111	**1.339**	**ug/L**	14.353	584	0.007
	Cd	114		**ug/L**		1082	0.013
>	In	115		**ug/L**		84124	84124.123
	Sn	120	**1.423**	**ug/L**	1.629	2780	0.032
	Sb	121	**0.259**	**ug/L**	11.542	656	0.005
	Sb	123		**ug/L**		519	0.004
	Ba	135		**ug/L**		169006	0.979
	Ba	137	**342.257**	**ug/L**	2.262	295124	1.709
	Ho	165		**ug/L**		23491	0.136
>	Lu	175		**ug/L**		172649	172649.461
	Tl	205	**0.830**	**ug/L**	2.674	7498	0.040
	Pb	208	**287.098**	**ug/L**	1.151	2737630	15.857
	Th	232	**29.748**	**ug/L**	1.324	333236	1.928
	U	238	**4.140**	**ug/L**	1.689	48319	0.279

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.4			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEEMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241711003
Sample Date/Time: Saturday, December 12, 2009 21:56:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\241711003.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**75.618**	ug/L	1.670	4937	0.026
	Be	9	**4.663**	ug/L	3.205	198	0.001
	B	11	**14.011**	ug/L	3.780	821	0.004
	Na	23	**1278.685**	ug/L	8.087	627528	3.306
	Mg	24	**11969.868**	ug/L	8.905	4215687	22.334
	Al	27	**107760.241**	ug/L	3.195	64944581	343.745
	P	31	**483.151**	ug/L	2.880	22032	0.109
	K	39	**8576.008**	ug/L	4.638	8022658	41.546
	Ca	43	**5827.421**	ug/L	1.163	12295	0.064
>	Sc	45		ug/L		188908	188907.864
	Ti	47	**930.124**	ug/L	0.578	103186	0.546
	V	51	**153.864**	ug/L	3.318	184281	0.974
	Cr	52	**87.635**	ug/L	1.901	122222	0.640
	Cr	53		ug/L		38027	-0.012
	Mn	55	**3545.340**	ug/L	0.876	8479902	44.887
	Fe	57	**85676.215**	ug/L	2.544	3914395	20.709
	Co	59	**49.180**	ug/L	2.944	78500	0.415
	Ni	60	**50.440**	ug/L	2.171	16269	0.086
	Cu	63		ug/L		29834	0.157
	Cu	65	**41.823**	ug/L	0.926	14095	0.074
	Zn	66	**171.917**	ug/L	2.303	36083	0.362
	Zn	67		ug/L		7645	0.052
	Zn	68		ug/L		28663	0.285
>	Ge	74		ug/L		99440	99439.573
	As	75	**11.714**	ug/L	3.021	4176	0.037
	Se	77		ug/L		974	-0.006
	Se	82	**-0.754**	ug/L	34.704	-17	-0.000
	Kr	83		ug/L		92	0.001
	Sr	88	**79.692**	ug/L	0.568	278893	3.291
	Y	89		ug/L		237748	2.806
	Zr	90	**88.442**	ug/L	3.460	167355	1.968
	Mo	98	**1.483**	ug/L	3.877	1354	0.016
	Ag	107	**0.344**	ug/L	5.323	603	0.007
	Cd	111	**0.656**	ug/L	15.151	293	0.003
	Cd	114		ug/L		287	0.003
>	In	115		ug/L		84709	84708.730
	Sn	120	**0.740**	ug/L	0.882	1515	0.016
	Sb	121	**0.127**	ug/L	3.683	439	0.003
	Sb	123		ug/L		349	0.002
	Ba	135		ug/L		283506	1.688
	Ba	137	**587.850**	ug/L	0.258	493155	2.936
	Ho	165		ug/L		25817	0.154
>	Lu	175		ug/L		167969	167969.447
	Tl	205	**1.050**	ug/L	2.929	9071	0.050
	Pb	208	**231.156**	ug/L	0.754	2144599	12.767
	Th	232	**41.379**	ug/L	0.821	450847	2.682
	U	238	**4.731**	ug/L	1.056	53690	0.319

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.7			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241711004
Sample Date/Time: Saturday, December 12, 2009 22:02:25
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\241711004.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**88.943**	**ug/L**	1.553	5848	0.031
	Be	9	**4.641**	**ug/L**	6.768	198	0.001
	B	11	**18.103**	**ug/L**	3.821	1046	0.005
	Na	23	**3168.159**	**ug/L**	14.611	1561586	8.191
	Mg	24	**12273.251**	**ug/L**	5.747	4356763	22.900
	Al	27	**124089.283**	**ug/L**	2.751	75331148	395.833
	P	31	**438.488**	**ug/L**	1.948	20280	0.099
	K	39	**9333.812**	**ug/L**	7.433	8787072	45.217
	Ca	43	**12729.778**	**ug/L**	1.414	26919	0.141
>	Sc	45		**ug/L**		190296	190295.683
	Ti	47	**1525.965**	**ug/L**	1.136	170486	0.895
	V	51	**186.544**	**ug/L**	1.224	224997	1.180
	Cr	52	**77.404**	**ug/L**	1.334	108920	0.565
	Cr	53		**ug/L**		35987	-0.024
	Mn	55	**1102.204**	**ug/L**	0.282	2655955	13.955
	Fe	57	**91882.306**	**ug/L**	2.182	4229168	22.209
	Co	59	**25.887**	**ug/L**	2.830	41671	0.218
	Ni	60	**43.769**	**ug/L**	1.051	14229	0.075
	Cu	63		**ug/L**		34685	0.182
	Cu	65	**47.751**	**ug/L**	0.336	16205	0.085
	Zn	66	**158.568**	**ug/L**	0.998	33803	0.334
	Zn	67		**ug/L**		7568	0.051
	Zn	68		**ug/L**		27794	0.272
>	Ge	74		**ug/L**		100967	100966.974
	As	75	**14.903**	**ug/L**	2.206	5252	0.047
	Se	77		**ug/L**		1017	-0.006
	Se	82	**-1.212**	**ug/L**	32.118	-31	-0.000
	Kr	83		**ug/L**		102	0.001
	Sr	88	**138.844**	**ug/L**	1.875	490348	5.734
	Y	89		**ug/L**		247842	2.899
	Zr	90	**129.094**	**ug/L**	1.254	246218	2.872
	Mo	98	**1.799**	**ug/L**	2.533	1652	0.019
	Ag	107	**0.581**	**ug/L**	2.937	1013	0.012
	Cd	111	**0.795**	**ug/L**	19.949	357	0.004
	Cd	114		**ug/L**		191	0.002
>	In	115		**ug/L**		85500	85500.122
	Sn	120	**1.267**	**ug/L**	1.353	2531	0.028
	Sb	121	**0.169**	**ug/L**	1.699	514	0.003
	Sb	123		**ug/L**		411	0.003
	Ba	135		**ug/L**		380099	2.231
	Ba	137	**776.816**	**ug/L**	3.590	660908	3.880
	Ho	165		**ug/L**		26935	0.158
>	Lu	175		**ug/L**		170448	170447.923
	Tl	205	**1.005**	**ug/L**	2.122	8836	0.048
	Pb	208	**80.780**	**ug/L**	2.408	760334	4.462
	Th	232	**49.979**	**ug/L**	0.578	552483	3.239
	U	238	**4.191**	**ug/L**	3.914	48250	0.282

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	MassOut of Limits Message
Al 27 Upper, S, EEEAl	27Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241711005
Sample Date/Time: Saturday, December 12, 2009 22:08:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\241711005.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.878**	**ug/L**	1.782	3142	0.017
	Be	9	**3.619**	**ug/L**	10.220	150	0.001
	B	11	**12.054**	**ug/L**	6.918	691	0.003
	Na	23	**3409.951**	**ug/L**	10.266	1607438	8.816
	Mg	24	**8587.881**	**ug/L**	13.516	2914467	16.024
	Al	27	**62334.845**	**ug/L**	13.549	36181779	198.842
	P	31	**731.097**	**ug/L**	1.353	31419	0.165
	K	39	**8141.686**	**ug/L**	0.907	7350564	39.442
	Ca	43	**8987.177**	**ug/L**	0.716	18212	0.099
>	Sc	45		**ug/L**		182024	182024.172
	Ti	47	**849.123**	**ug/L**	2.023	90768	0.498
	V	51	**119.485**	**ug/L**	1.506	137978	0.756
	Cr	52	**48.809**	**ug/L**	2.679	66183	0.356
	Cr	53		**ug/L**		31267	-0.042
	Mn	55	**1435.111**	**ug/L**	1.801	3307394	18.170
	Fe	57	**64198.964**	**ug/L**	1.344	2826876	15.518
	Co	59	**21.585**	**ug/L**	2.778	33247	0.182
	Ni	60	**35.835**	**ug/L**	1.130	11148	0.061
	Cu	63		**ug/L**		22919	0.125
	Cu	65	**32.494**	**ug/L**	1.266	10560	0.058
	Zn	66	**152.731**	**ug/L**	1.370	32925	0.322
	Zn	67		**ug/L**		7059	0.045
	Zn	68		**ug/L**		26206	0.253
>	Ge	74		**ug/L**		102105	102104.991
	As	75	**8.597**	**ug/L**	2.622	3290	0.027
	Se	77		**ug/L**		989	-0.006
	Se	82	**-0.161**	**ug/L**	115.281	-1	-0.000
	Kr	83		**ug/L**		69	0.000
	Sr	88	**95.951**	**ug/L**	2.482	344965	3.963
	Y	89		**ug/L**		202782	2.331
	Zr	90	**72.814**	**ug/L**	3.888	141594	1.620
	Mo	98	**1.395**	**ug/L**	2.366	1310	0.015
	Ag	107	**0.319**	**ug/L**	1.290	576	0.006
	Cd	111	**0.686**	**ug/L**	11.281	314	0.004
	Cd	114		**ug/L**		359	0.004
>	In	115		**ug/L**		87068	87068.194
	Sn	120	**0.790**	**ug/L**	6.144	1651	0.018
	Sb	121	**0.121**	**ug/L**	7.157	441	0.002
	Sb	123		**ug/L**		340	0.002
	Ba	135		**ug/L**		246658	1.439
	Ba	137	**501.823**	**ug/L**	2.290	429479	2.506
	Ho	165		**ug/L**		20564	0.120
>	Lu	175		**ug/L**		171381	171380.632
	Tl	205	**0.668**	**ug/L**	1.300	6108	0.032
	Pb	208	**91.181**	**ug/L**	1.238	863178	5.036
	Th	232	**27.933**	**ug/L**	0.787	310614	1.811
	U	238	**4.170**	**ug/L**	0.865	48303	0.281

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			98.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	MassOut of Limits Message
Al 27 Upper, S, EEEAl	27Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51Sample is out of limits (over linear range)
Mn 55 Upper, S, EEMn	55Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241711006
Sample Date/Time: Saturday, December 12, 2009 22:14:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\241711006.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**65.062**	ug/L	2.198	4165	0.022
	Be	9	**3.780**	ug/L	9.709	159	0.001
	B	11	**15.199**	ug/L	0.999	866	0.004
	Na	23	**1387.743**	ug/L	3.914	667591	3.588
	Mg	24	**10783.201**	ug/L	4.230	3724410	20.120
	Al	27	**96243.590**	ug/L	0.885	56840775	307.008
	P	31	**257.770**	ug/L	1.318	12180	0.058
	K	39	**7552.463**	ug/L	5.129	6946200	36.587
	Ca	43	**10407.784**	ug/L	1.861	21433	0.115
>	Sc	45		ug/L		185143	185142.549
	Ti	47	**1342.722**	ug/L	1.406	145948	0.788
	V	51	**135.329**	ug/L	1.073	158924	0.856
	Cr	52	**59.726**	ug/L	0.836	82085	0.436
	Cr	53		ug/L		32493	-0.038
	Mn	55	**764.267**	ug/L	2.953	1791625	9.676
	Fe	57	**66238.529**	ug/L	2.246	2966423	16.011
	Co	59	**19.194**	ug/L	0.644	30081	0.162
	Ni	60	**32.934**	ug/L	4.030	10423	0.056
	Cu	63		ug/L		20921	0.113
	Cu	65	**29.936**	ug/L	2.172	9899	0.053
	Zn	66	**122.876**	ug/L	1.518	26244	0.259
	Zn	67		ug/L		6043	0.035
	Zn	68		ug/L		21419	0.208
>	Ge	74		ug/L		101099	101098.824
	As	75	**8.178**	ug/L	1.436	3124	0.026
	Se	77		ug/L		965	-0.006
	Se	82	**-1.143**	ug/L	51.555	-28	-0.000
	Kr	83		ug/L		85	0.000
	Sr	88	**128.340**	ug/L	1.790	453363	5.301
	Y	89		ug/L		183713	2.148
	Zr	90	**80.358**	ug/L	4.122	153528	1.788
	Mo	98	**1.026**	ug/L	3.458	953	0.011
	Ag	107	**0.361**	ug/L	4.341	637	0.007
	Cd	111	**0.545**	ug/L	11.707	247	0.003
	Cd	114		ug/L		144	0.002
>	In	115		ug/L		85516	85515.776
	Sn	120	**0.958**	ug/L	1.528	1943	0.021
	Sb	121	**0.137**	ug/L	2.847	460	0.003
	Sb	123		ug/L		370	0.002
	Ba	135		ug/L		282285	1.656
	Ba	137	**575.842**	ug/L	1.072	490234	2.876
	Ho	165		ug/L		19368	0.114
>	Lu	175		ug/L		170465	170465.122
	Tl	205	**0.948**	ug/L	0.239	8374	0.046
	Pb	208	**54.537**	ug/L	1.557	513574	3.012
	Th	232	**41.021**	ug/L	0.404	453587	2.659
	U	238	**3.135**	ug/L	1.732	36151	0.211

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241711007
Sample Date/Time: Saturday, December 12, 2009 22:19:47
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|prb
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\241711007.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**74.404**	**ug/L**	3.133	4799	0.026
	Be	9	**4.793**	**ug/L**	12.075	200	0.001
	B	11	**14.325**	**ug/L**	1.783	827	0.004
	Na	23	**1472.011**	**ug/L**	2.993	713748	3.806
	Mg	24	**12099.563**	**ug/L**	9.576	4212368	22.576
	Al	27	**104491.963**	**ug/L**	1.035	62205266	333.320
	P	31	**396.316**	**ug/L**	1.958	18112	0.089
	K	39	**7704.794**	**ug/L**	5.065	7138227	37.325
	Ca	43	**12032.955**	**ug/L**	1.393	24962	0.133
>	Sc	45		**ug/L**		186621	186621.024
	Ti	47	**1456.815**	**ug/L**	3.074	159583	0.855
	V	51	**179.216**	**ug/L**	0.863	211994	1.134
	Cr	52	**64.468**	**ug/L**	2.348	89182	0.471
	Cr	53		**ug/L**		33146	-0.036
	Mn	55	**3945.713**	**ug/L**	3.791	9320664	49.956
	Fe	57	**85316.952**	**ug/L**	2.660	3850265	20.622
	Co	59	**59.472**	**ug/L**	2.662	93740	0.502
	Ni	60	**46.750**	**ug/L**	1.302	14900	0.080
	Cu	63		**ug/L**		27723	0.148
	Cu	65	**38.417**	**ug/L**	2.805	12791	0.068
	Zn	66	**147.663**	**ug/L**	0.720	31221	0.311
	Zn	67		**ug/L**		7072	0.046
	Zn	68		**ug/L**		25923	0.255
>	Ge	74		**ug/L**		100127	100126.663
	As	75	**14.611**	**ug/L**	4.471	5117	0.046
	Se	77		**ug/L**		996	-0.006
	Se	82	**-0.856**	**ug/L**	108.226	-20	-0.000
	Kr	83		**ug/L**		87	0.001
	Sr	88	**142.119**	**ug/L**	0.874	490946	5.870
	Y	89		**ug/L**		207578	2.482
	Zr	90	**94.889**	**ug/L**	3.766	177168	2.111
	Mo	98	**1.757**	**ug/L**	2.514	1579	0.019
	Ag	107	**0.443**	**ug/L**	2.066	760	0.009
	Cd	111	**0.703**	**ug/L**	8.068	310	0.004
	Cd	114		**ug/L**		272	0.003
>	In	115		**ug/L**		83628	83628.272
	Sn	120	**1.205**	**ug/L**	0.308	2359	0.027
	Sb	121	**0.150**	**ug/L**	11.436	472	0.003
	Sb	123		**ug/L**		366	0.002
	Ba	135		**ug/L**		387623	2.315
	Ba	137	**806.416**	**ug/L**	2.743	674277	4.027
	Ho	165		**ug/L**		21812	0.130
>	Lu	175		**ug/L**		167449	167449.057
	Tl	205	**1.055**	**ug/L**	2.275	9086	0.051
	Pb	208	**108.248**	**ug/L**	1.343	1001199	5.979
	Th	232	**44.623**	**ug/L**	2.313	484603	2.892
	U	238	**3.787**	**ug/L**	1.079	42876	0.255

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.4			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	MassOut of Limits Message
Al 27 Upper, S, EEEAl	27Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47Sample is out of limits (over linear range)
V 51 Upper, S, EEE V	51Sample is out of limits (over linear range)
Mn 55 Upper, S, EEMn	55Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 22:25:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.275**	ug/L	2.825	3131	0.019
	Be	9	**58.125**	ug/L	4.453	2072	0.012
	B	11	**99.891**	ug/L	1.950	4748	0.028
	Na	23	**5088.930**	ug/L	16.762	2191834	13.157
	Mg	24	**5138.761**	ug/L	5.152	1598023	9.588
	Al	27	**5120.329**	ug/L	5.413	2723264	16.333
	P	31	**5266.082**	ug/L	2.894	199422	1.189
	K	39	**5897.357**	ug/L	9.602	4920687	28.569
	Ca	43	**5301.522**	ug/L	3.080	9882	0.059
>	Sc	45		ug/L		166796	166796.420
	Ti	47	**51.244**	ug/L	1.840	5090	0.030
	V	51	**53.796**	ug/L	4.795	57077	0.340
	Cr	52	**55.192**	ug/L	3.876	68388	0.403
	Cr	53		ug/L		38684	0.018
	Mn	55	**56.483**	ug/L	2.588	119571	0.715
	Fe	57	**5489.271**	ug/L	2.976	223443	1.327
	Co	59	**54.027**	ug/L	2.381	76107	0.456
	Ni	60	**54.425**	ug/L	2.107	15496	0.093
	Cu	63		ug/L		34873	0.209
	Cu	65	**54.284**	ug/L	1.767	16138	0.097
	Zn	66	**50.682**	ug/L	3.005	10839	0.107
	Zn	67		ug/L		3457	0.010
	Zn	68		ug/L		8518	0.081
>	Ge	74		ug/L		100864	100864.242
	As	75	**48.098**	ug/L	1.587	15762	0.151
	Se	77		ug/L		2510	0.009
	Se	82	**50.752**	ug/L	3.415	1440	0.014
	Kr	83		ug/L		40	0.000
	Sr	88	**50.510**	ug/L	0.528	176737	2.086
	Y	89		ug/L		36	0.000
	Zr	90	**59.992**	ug/L	7.088	113677	1.335
	Mo	98	**52.118**	ug/L	0.866	46712	0.551
	Ag	107	**52.725**	ug/L	0.776	88870	1.049
	Cd	111	**52.631**	ug/L	2.363	22834	0.270
	Cd	114		ug/L		53878	0.636
>	In	115		ug/L		84686	84686.313
	Sn	120	**51.982**	ug/L	1.136	98004	1.156
	Sb	121	**50.758**	ug/L	5.102	85966	1.013
	Sb	123		ug/L		65695	0.774
	Ba	135		ug/L		24400	0.149
	Ba	137	**51.998**	ug/L	2.041	42422	0.260
	Ho	165		ug/L		33	0.000
>	Lu	175		ug/L		163274	163274.046
	Tl	205	**50.015**	ug/L	0.878	393234	2.405
	Pb	208	**52.505**	ug/L	0.979	473641	2.900
	Th	232	**52.322**	ug/L	0.889	554025	3.391
	U	238	**54.721**	ug/L	0.915	602359	3.689

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	108.551				
	Be	9	116.250				
	B	11	99.891				
	Na	23	101.779				
	Mg	24	102.775				
	Al	27	101.393				
	P	31	105.322				
	K	39	117.947				
	Ca	43	106.030				
>	Sc	45			89.9		
	Ti	47	102.487				
	V	51	107.592				
	Cr	52	110.384				
	Cr	53					
	Mn	55	112.966				
	Fe	57	109.785				
	Co	59	108.053				
	Ni	60	108.849				
	Cu	63					
	Cu	65	108.569				
	Zn	66	101.365				
	Zn	67					
	Zn	68					
>	Ge	74			97.5		
	As	75	96.196				
	Se	77					
	Se	82	101.504				
	Kr	83					
	Sr	88	101.019				
	Y	89					
	Zr	90	119.983				
	Mo	98	104.236				
	Ag	107	105.450				
	Cd	111	105.262				
	Cd	114					
>	In	115			95.4		
	Sn	120	103.965				
	Sb	121	101.516				
	Sb	123					
	Ba	135					
	Ba	137	103.997				
	Ho	165					
>	Lu	175			95.9		
	Tl	205	100.030				
	Pb	208	105.010				
	Th	232	104.644				
	U	238	109.443				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	K	39CCV is out of limits (+/- 10%)
QC Std 6	Cr	52CCV is out of limits (+/- 10%)
QC Std 6	Mn	55CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 22:31:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.068**	**ug/L**	154.563	15	0.000
	Be	9	**0.052**	**ug/L**	301.268	11	0.000
	B	11	**1.919**	**ug/L**	37.351	156	0.001
	Na	23	**4.046**	**ug/L**	117.345	4668	0.010
	Mg	24	**1.073**	**ug/L**	173.205	333	0.002
	Al	27	**0.701**	**ug/L**	156.224	667	0.002
	P	31	**2.947**	**ug/L**	30.434	1355	0.001
	K	39	**21.252**	**ug/L**	163.678	170356	0.103
	Ca	43	**-9.197**	**ug/L**	12.599	83	-0.000
>	Sc	45		**ug/L**		163680	163679.864
	Ti	47	**0.006**	**ug/L**	656.375	74	0.000
	V	51	**0.498**	**ug/L**	69.249	850	0.003
	Cr	52	**0.299**	**ug/L**	10.739	1551	0.002
	Cr	53		**ug/L**		32678	-0.014
	Mn	55	**0.465**	**ug/L**	6.380	1288	0.006
	Fe	57	**0.670**	**ug/L**	104.686	2211	0.000
	Co	59	**0.012**	**ug/L**	50.213	98	0.000
	Ni	60	**-0.006**	**ug/L**	226.942	28	-0.000
	Cu	63		**ug/L**		64	-0.000
	Cu	65	**0.008**	**ug/L**	389.569	38	0.000
	Zn	66	**-0.027**	**ug/L**	156.639	63	-0.000
	Zn	67		**ug/L**		1928	-0.005
	Zn	68		**ug/L**		312	-0.001
>	Ge	74		**ug/L**		98223	98222.843
	As	75	**-0.227**	**ug/L**	437.157	444	-0.001
	Se	77		**ug/L**		1498	-0.001
	Se	82	**-0.137**	**ug/L**	126.521	0	-0.000
	Kr	83		**ug/L**		33	-0.000
	Sr	88	**0.003**	**ug/L**	107.998	81	0.000
	Y	89		**ug/L**		25	0.000
	Zr	90	**0.540**	**ug/L**	10.647	1597	0.012
	Mo	98	**0.068**	**ug/L**	27.536	85	0.001
	Ag	107	**0.003**	**ug/L**	112.605	27	0.000
	Cd	111	**-0.014**	**ug/L**	58.612	2	-0.000
	Cd	114		**ug/L**		20	0.000
>	In	115		**ug/L**		82871	82870.684
	Sn	120	**0.166**	**ug/L**	11.708	425	0.004
	Sb	121	**0.755**	**ug/L**	12.142	1468	0.015
	Sb	123		**ug/L**		1170	0.012
	Ba	135		**ug/L**		30	0.000
	Ba	137	**0.016**	**ug/L**	41.573	37	0.000
	Ho	165		**ug/L**		22	0.000
>	Lu	175		**ug/L**		163196	163195.987
	Tl	205	**0.067**	**ug/L**	38.634	1102	0.003
	Pb	208	**0.008**	**ug/L**	8.447	225	0.000
	Th	232	**0.127**	**ug/L**	26.859	1664	0.008
	U	238	**0.009**	**ug/L**	20.648	229	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			88.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.9		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Sunday, December 13, 2009 11:11:07
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1466
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	4107.8	4107.791	43.483	1.1
	Mg	24.0	39878.8	39878.786	299.060	0.7
	Co	58.9	88170.1	88170.092	1210.346	1.4
	Rh	102.9	170748.0	170748.041	1718.755	1.0
	In	114.9	250485.8	250485.827	1935.096	0.8
	Pb	208.0	160323.9	160323.887	1658.373	1.0
⌈>	Ba	137.9	228790.4	228790.382	1970.247	0.9
⌊	Ba++	69.0	3840.6	0.017	0.000	1.3
⌈>	Ce	139.9	274571.4	274571.434	3421.265	1.2
⌊	CeO	155.9	6692.7	0.024	0.001	3.1
	Bkgd	220.0	25.8	25.800	0.975	3.8

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	6.0	4563.7
Co	59	9	6.3	80404.0
In	115	9	6.8	245507.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	596	2060	0.596
Be	9.0	9.0	2061	2070	0.612
Mg	24.0	24.0	5681	2080	0.608
Mg	25.0	25.0	5957	2075	0.660
Mg	26.0	26.0	6141	2070	0.657
Co	58.9	58.9	14184	2110	0.623
Rh	102.9	102.9	24871	2160	0.624
In	114.9	114.9	27797	2180	0.620
Ce	139.9	139.9	33869	2195	0.645
Pb	206.0	206.0	49948	2290	0.614
Pb	207.0	207.0	50159	2260	0.605
Pb	208.0	208.0	50451	2280	0.646
U	238.1	238.0	57722	2270	0.719

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 13, 2009 15:38:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\Blank.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9		ug/L		25	
⌊>	Sc	45		ug/L		856411	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 13, 2009 15:39:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\Standard 1.126

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	0.683	4174	0.005
Sc	45		ug/L		839982	839981.547

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 13, 2009 15:41:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\Standard 2.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	100.023	ug/L	7.299	40480	0.051
⌊>	Sc	45		ug/L		801541	801541.140

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 13, 2009 15:43:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 1.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	52.405	ug/L	6.280	21531	0.027
⌊>	Sc	45		ug/L		813181	813181.284

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	104.810				
⌊>	Sc	45		95.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 13, 2009 15:44:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 2.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.002	ug/L	489.891	25	0.000
⌊>	Sc	45		ug/L		827078	827078.175

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		96.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 13, 2009 15:46:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 3.130

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.566	ug/L	8.826	249	0.000
Sc	45		ug/L		791092	791091.676

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	113.267				
Sc	45		92.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 13, 2009 15:48:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 4.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.054	ug/L	48.343	43	0.000
⌊>	Sc	45		ug/L		769433	769432.605

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		89.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 13, 2009 15:49:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 5.132

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.519	ug/L	2.165	7878	0.010
Sc	45		ug/L		795390	795389.529

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	97.593				
Sc	45		92.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 13, 2009 15:51:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 6.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**52.224**	**ug/L**	7.814	21176	0.026
⌊>	Sc	45		**ug/L**		803655	803654.532

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	104.447				
⌊>	Sc	45		93.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 13, 2009 15:53:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 7.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.007	ug/L	115.453	26	0.000
Sc	45		ug/L		811145	811144.860

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		94.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981228
Sample Date/Time: Sunday, December 13, 2009 15:54:53
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\1201981228.135

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.003	ug/L	480.249	23	-0.000
Sc	45		ug/L		849719	849719.057

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		99.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981229
Sample Date/Time: Sunday, December 13, 2009 15:56:38
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 926645|40|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\1201981229.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	24.209	ug/L	1.937	10020	0.012
⌊>	Sc	45		ug/L		816119	816118.956

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241711001
Sample Date/Time: Sunday, December 13, 2009 15:58:22
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\241711001.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	4.536	ug/L	6.837	2178	0.002
>	Sc	45		ug/L		939064	939063.921

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		109.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981230
Sample Date/Time: Sunday, December 13, 2009 16:00:04
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 926645|2|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\1201981230.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	3.572	ug/L	2.413	1785	0.002
⌊>	Sc	45		ug/L		972026	972026.201

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		113.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981231
Sample Date/Time: Sunday, December 13, 2009 16:01:47
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\1201981231.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	24.875	ug/L	1.346	12631	0.013
⌊>	Sc	45		ug/L		1001436	1001436.222

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		116.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981238
Sample Date/Time: Sunday, December 13, 2009 16:03:31
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 926645|2|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\1201981238.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**24.911**	**ug/L**	1.227	12505	0.013
⌊>	Sc	45		**ug/L**		989899	989898.590

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		115.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981232
Sample Date/Time: Sunday, December 13, 2009 16:05:15
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 926645|10|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\1201981232.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	1.058	ug/L	9.408	486	0.001
⌊>	Sc	45		ug/L		864435	864435.435

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		100.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Sunday, December 13, 2009 16:06:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 8.142

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.349	ug/L	5.828	21930	0.026
Sc	45		ug/L		844989	844989.445

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	102.698				
Sc	45		98.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Sunday, December 13, 2009 16:08:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 9.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.004	ug/L	172.993	22	-0.000
⌊>	Sc	45		ug/L		831360	831360.339

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		97.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241711002
Sample Date/Time: Sunday, December 13, 2009 16:10:22
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\241711002.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	2.579	ug/L	2.521	1272	0.001
>	Sc	45		ug/L		954308	954307.605

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		111.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241711003
Sample Date/Time: Sunday, December 13, 2009 16:12:07
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\241711003.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	4.414	ug/L	1.030	2269	0.002
>	Sc	45		ug/L		1003061	1003060.708

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		117.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241711004
Sample Date/Time: Sunday, December 13, 2009 16:13:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\241711004.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**4.410**	**ug/L**	0.844	2271	0.002
⌊>	Sc	45		**ug/L**		1005062	1005061.735

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		117.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241711005
Sample Date/Time: Sunday, December 13, 2009 16:15:35
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\241711005.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	3.167	ug/L	1.229	1576	0.002
⌊>	Sc	45		ug/L		966534	966534.172

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		112.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241711006
Sample Date/Time: Sunday, December 13, 2009 16:17:18
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\241711006.148

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	3.382	ug/L	4.991	1636	0.002
Sc	45		ug/L		942024	942024.165

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		110.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241711007
Sample Date/Time: Sunday, December 13, 2009 16:19:03
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926645|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\241711007.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	4.095	ug/L	0.924	2076	0.002
⌊>	Sc	45		ug/L		988052	988051.660

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		115.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 13, 2009 16:20:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 6.150

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.549	ug/L	0.917	22230	0.026
Sc	45		ug/L		868284	868284.456

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	101.099				
Sc	45		101.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 13, 2009 16:22:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091213\QC Std 7.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.006	ug/L	129.726	21	-0.000
⌊>	Sc	45		ug/L		828847	828846.635

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		96.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120909S1.SIF
Batch ID:
Results Data Set: 120909S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: SOIL **Method Last Saved: 12/7/2009 16:18:28**
Method Description: 7471A, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/9/2009 09:48:12**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	09:49:02	Yes
2		[0.00]	0.0001	0.0005	0.0001	09:49:32	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	12.71				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/9/2009 09:49:51**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0027	0.0120	0.0028	09:50:41	Yes
2		[0.2]	0.0026	0.0113	0.0027	09:51:11	Yes
Mean:		[0.2]	0.0026				
SD:		0.0	0.0001				
%RSD:		0.0	1.99				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01311 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/9/2009 09:51:30**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0067	0.0287	0.0068	09:52:21	Yes
2		[0.5]	0.0066	0.0286	0.0067	09:52:51	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.38				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999975 Slope: 0.01333 Intercept: -0.00002

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/9/2009 09:53:11**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0262	0.1118	0.0263	09:54:02	Yes
2		[2.0]	0.0260	0.1114	0.0261	09:54:32	Yes
Mean:		[2.0]	0.0261				
SD:		0.0	0.0001				
%RSD:		0.0	0.46				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999984 Slope: 0.01303 Intercept: 0.00005

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/9/2009 09:54:52**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0637	0.2711	0.0638	09:55:43	Yes
2		[5.0]	0.0635	0.2705	0.0636	09:56:13	Yes
Mean:		[5.0]	0.0636				
SD:		0.0	0.0002				
%RSD:		0.0	0.25				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999945 Slope: 0.01271 Intercept: 0.00022

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/9/2009 09:56:33**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1239	0.5296	0.1240	09:57:23	Yes
2		[10.0]	0.1237	0.5263	0.1238	09:57:53	Yes
Mean:		[10.0]	0.1238				
SD:		0.0	0.0002				
%RSD:		0.0	0.13				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

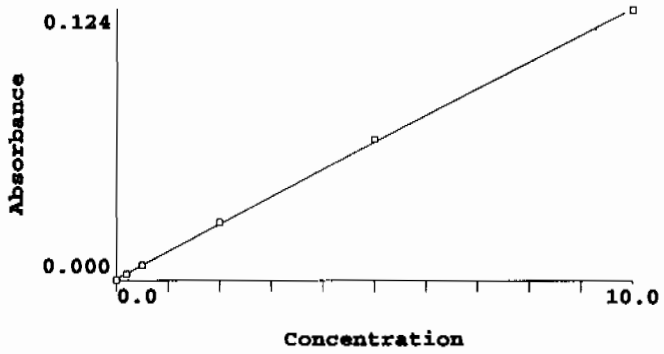

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.046	0.00	12.7
S0.2	0.0026	0.2	0.165	0.00	2.0
S0.5	0.0067	0.5	0.491	0.00	0.4
S2.0	0.0261	2.0	2.059	0.00	0.5

S5.0	0.0636	5.0	5.084	0.00	0.2
S10.0	0.1238	10.0	9.947	0.00	0.1

Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

==========

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/9/2009 09:58:12**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.135	5.135	0.0642	0.2745	0.0643	09:59:03	Yes
2	5.151	5.151	0.0644	0.2738	0.0645	09:59:33	Yes
Mean:	5.143	5.143	0.0643				
SD:	0.012	0.012	0.0001				
%RSD:	0.225	0.225	0.22				

QC value within limits for Hg 253.7 Recovery = 102.86%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/9/2009 09:59:53**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0006	0.0002	10:00:44	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	10:01:14	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.240	3.240	18.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/9/2009 10:01:33**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.175	0.175	0.0027	0.0126	0.0028	10:02:24	Yes
2	0.172	0.172	0.0027	0.0120	0.0028	10:02:54	Yes
Mean:	0.174	0.174	0.0027				
SD:	0.002	0.002	0.0000				
%RSD:	1.238	1.238	0.98				

QC value within limits for Hg 253.7 Recovery = 86.79%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:03:14**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.169	5.169	0.0646	0.2746	0.0647	10:04:04	Yes
2	5.106	5.106	0.0638	0.2718	0.0639	10:04:34	Yes
Mean:	5.138	5.138	0.0642				
SD:	0.044	0.044	0.0005				
%RSD:	0.863	0.863	0.86				

QC value within limits for Hg 253.7 Recovery = 102.75%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 10:04:53
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	10:05:44	Yes
2	-0.037	-0.037	0.0001	0.0011	0.0002	10:06:14	Yes
Mean:	-0.039	-0.039	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.870	4.870	23.91				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201987684|929435|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 12/9/2009 10:06:33
Data Type: Original

Replicate Data: 1201987684|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0004	0.0002	10:07:25	Yes
2	-0.036	-0.036	0.0001	0.0010	0.0002	10:07:55	Yes
Mean:	-0.037	-0.037	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.673	5.673	23.16				

Sequence No.: 13
Sample ID: 1201987685|929435|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 12/9/2009 10:08:15
Data Type: Original

Replicate Data: 1201987685|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.112	2.112	0.0267	0.1144	0.0268	10:09:07	Yes
2	2.119	2.119	0.0268	0.1137	0.0269	10:09:37	Yes
Mean:	2.116	2.116	0.0268				
SD:	0.005	0.005	0.0001				
%RSD:	0.233	0.233	0.23				

Sequence No.: 14
Sample ID: 242156001|929435|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 12/9/2009 10:09:57
Data Type: Original

Replicate Data: 242156001|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0010	0.0043	0.0011	10:10:48	Yes
2	0.031	0.031	0.0010	0.0042	0.0011	10:11:18	Yes
Mean:	0.032	0.032	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	3.102	3.102	1.26				

Sequence No.: 15
Sample ID: 242156002|929435|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 12/9/2009 10:11:37
Data Type: Original

Replicate Data: 242156002|929435|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1201987687|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.348	2.348	0.0297	0.1272	0.0298	10:20:46	Yes
2	2.347	2.347	0.0296	0.1275	0.0297	10:21:16	Yes
Mean:	2.347	2.347	0.0297				
SD:	0.001	0.001	0.0000				
%RSD:	0.025	0.025	0.02				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1201987688|929435|1 **Date Collected: 12/9/2009 10:21:35**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987688|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.257	2.257	0.0285	0.1224	0.0286	10:22:26	Yes
2	2.268	2.268	0.0287	0.1224	0.0288	10:22:56	Yes
Mean:	2.263	2.263	0.0286				
SD:	0.008	0.008	0.0001				
%RSD:	0.348	0.348	0.34				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:23:15**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.127	5.127	0.0641	0.2745	0.0642	10:24:06	Yes
2	5.094	5.094	0.0637	0.2725	0.0638	10:24:36	Yes
Mean:	5.110	5.110	0.0639				
SD:	0.023	0.023	0.0003				
%RSD:	0.453	0.453	0.45				

QC value within limits for Hg 253.7 Recovery = 102.21%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 10:24:55**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0006	0.0002	10:25:45	Yes
2	-0.039	-0.039	0.0001	0.0010	0.0002	10:26:15	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.855	2.855	18.17				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 1201987689|929435|5 **Date Collected: 12/9/2009 10:26:35**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987689|929435|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0005	0.0026	0.0006	10:27:26	Yes
2	-0.004	-0.004	0.0005	0.0027	0.0006	10:27:56	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0060	0.0262	0.0061	10:35:50	Yes
2	0.436	0.436	0.0060	0.0257	0.0061	10:36:20	Yes
Mean:	0.438	0.438	0.0060				
SD:	0.003	0.003	0.0000				
%RSD:	0.627	0.627	0.57				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 242316002|929460|1 **Date Collected: 12/9/2009 10:36:39**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316002|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.465	0.465	0.0063	0.0277	0.0064	10:37:29	Yes
2	0.458	0.458	0.0062	0.0268	0.0063	10:37:59	Yes
Mean:	0.461	0.461	0.0063				
SD:	0.005	0.005	0.0001				
%RSD:	1.087	1.087	0.99				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 242316003|929460|1 **Date Collected: 12/9/2009 10:38:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316003|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0020	0.0087	0.0021	10:39:09	Yes
2	0.112	0.112	0.0020	0.0089	0.0021	10:39:39	Yes
Mean:	0.112	0.112	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.186	0.186	0.13				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 242316004|929460|1 **Date Collected: 12/9/2009 10:39:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316004|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.205	0.205	0.0031	0.0138	0.0032	10:40:49	Yes
2	0.207	0.207	0.0031	0.0139	0.0032	10:41:19	Yes
Mean:	0.206	0.206	0.0031				
SD:	0.002	0.002	0.0000				
%RSD:	0.731	0.731	0.60				

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 242316005|929460|1 **Date Collected: 12/9/2009 10:41:38**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316005|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.224	0.224	0.0033	0.0144	0.0034	10:42:29	Yes
2	0.224	0.224	0.0033	0.0146	0.0034	10:42:59	Yes
Mean:	0.224	0.224	0.0033				
SD:	0.000	0.000	0.0000				
%RSD:	0.058	0.058	0.05				

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:43:18**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.162	5.162	0.0645	0.2762	0.0646	10:44:09	Yes
2	5.116	5.116	0.0640	0.2741	0.0641	10:44:39	Yes
Mean:	5.139	5.139	0.0642				
SD:	0.032	0.032	0.0004				
%RSD:	0.623	0.623	0.62				

QC value within limits for Hg 253.7 Recovery = 102.78%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/9/2009 10:44:58
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0006	0.0002	10:45:49	Yes
2	-0.038	-0.038	0.0001	0.0013	0.0002	10:46:19	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.882	6.882	40.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 242316006|929460|1 Date Collected: 12/9/2009 10:46:38
Analyst: JXL1 Data Type: Original

Replicate Data: 242316006|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.072	0.072	0.0015	0.0067	0.0016	10:47:29	Yes
2	0.072	0.072	0.0015	0.0065	0.0016	10:47:59	Yes
Mean:	0.072	0.072	0.0015				
SD:	0.000	0.000	0.0000				
%RSD:	0.079	0.079	0.05				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1201987743|929460|1 Date Collected: 12/9/2009 10:48:18
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987743|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.074	0.074	0.0015	0.0068	0.0016	10:49:09	Yes
2	0.075	0.075	0.0015	0.0066	0.0016	10:49:39	Yes
Mean:	0.074	0.074	0.0015				
SD:	0.001	0.001	0.0000				
%RSD:	1.300	1.300	0.80				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1201987744|929460|1 Date Collected: 12/9/2009 10:49:59
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987744|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.168	2.168	0.0274	0.1171	0.0275	10:50:50	Yes

Replicate Data: 242333001|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.590	0.590	0.0079	0.0340	0.0080	10:59:16	Yes
2	0.588	0.588	0.0079	0.0343	0.0080	10:59:46	Yes
Mean:	0.589	0.589	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.238	0.238	0.22				

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1201989931|930397|1 **Date Collected: 12/9/2009 11:00:05**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201989931|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.600	0.600	0.0080	0.0349	0.0081	11:00:56	Yes
2	0.593	0.593	0.0079	0.0361	0.0080	11:01:26	Yes
Mean:	0.596	0.596	0.0080				
SD:	0.005	0.005	0.0001				
%RSD:	0.770	0.770	0.71				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 1201989932|930397|1 **Date Collected: 12/9/2009 11:01:46**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201989932|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.604	2.604	0.0328	0.1408	0.0329	11:02:37	Yes
2	2.596	2.596	0.0327	0.1394	0.0328	11:03:07	Yes
Mean:	2.600	2.600	0.0328				
SD:	0.006	0.006	0.0001				
%RSD:	0.218	0.218	0.21				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 11:03:26**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.222	5.222	0.0653	0.2784	0.0654	11:04:16	Yes
2	5.172	5.172	0.0647	0.2761	0.0648	11:04:46	Yes
Mean:	5.197	5.197	0.0650				
SD:	0.035	0.035	0.0004				
%RSD:	0.676	0.676	0.67				

QC value within limits for Hg 253.7 Recovery = 103.94%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 11:05:05**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	11:05:55	Yes
2	-0.042	-0.042	0.0001	0.0005	0.0001	11:06:25	Yes
Mean:	-0.042	-0.042	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.206	0.206	2.18				

QC value within limits for Hg 253.7 Recovery = Not calculated

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Replicate Data: 241916003|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.594	0.594	0.0079	0.0339	0.0080	11:22:44	Yes
2	0.593	0.593	0.0079	0.0338	0.0080	11:23:14	Yes
Mean:	0.594	0.594	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.089	0.089	0.08				

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 11:23:34**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.106	5.106	0.0638	0.2734	0.0639	11:24:24	Yes
2	5.118	5.118	0.0640	0.2723	0.0641	11:24:54	Yes
Mean:	5.112	5.112	0.0639				
SD:	0.008	0.008	0.0001				
%RSD:	0.165	0.165	0.16				

QC value within limits for Hg 253.7 Recovery = 102.25%
All analyte(s) passed QC.

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 11:25:12**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0004	0.0002	11:26:03	Yes
2	-0.040	-0.040	0.0001	0.0006	0.0002	11:26:33	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.305	1.305	9.29				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 241916004|928035|1 **Date Collected: 12/9/2009 11:26:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241916004|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.181	1.181	0.0152	0.0653	0.0153	11:27:43	Yes
2	1.177	1.177	0.0152	0.0648	0.0153	11:28:13	Yes
Mean:	1.179	1.179	0.0152				
SD:	0.003	0.003	0.0000				
%RSD:	0.234	0.234	0.22				

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 241916005|928035|1 **Date Collected: 12/9/2009 11:28:33**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241916005|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.319	0.319	0.0045	0.0197	0.0046	11:29:24	Yes
2	0.330	0.330	0.0047	0.0212	0.0048	11:29:54	Yes
Mean:	0.324	0.324	0.0046				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.299	0.299	0.0043	0.0186	0.0044	11:37:48	Yes
2	0.303	0.303	0.0043	0.0187	0.0044	11:38:18	Yes
Mean:	0.301	0.301	0.0043				
SD:	0.003	0.003	0.0000				
%RSD:	1.073	1.073	0.93				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 241916011|928035|1 **Date Collected: 12/9/2009 11:38:37**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241916011|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.415	0.415	0.0057	0.0244	0.0058	11:39:29	Yes
2	0.407	0.407	0.0056	0.0240	0.0057	11:39:58	Yes
Mean:	0.411	0.411	0.0057				
SD:	0.005	0.005	0.0001				
%RSD:	1.278	1.278	1.15				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241922001|928035|1 **Date Collected: 12/9/2009 11:40:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241922001|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.036	1.036	0.0134	0.0569	0.0135	11:41:10	Yes
2	1.030	1.030	0.0133	0.0567	0.0134	11:41:40	Yes
Mean:	1.033	1.033	0.0134				
SD:	0.004	0.004	0.0001				
%RSD:	0.401	0.401	0.38				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201984320|928035|1 **Date Collected: 12/9/2009 11:42:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984320|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.236	1.236	0.0159	0.0671	0.0160	11:42:51	Yes
2	1.223	1.223	0.0157	0.0666	0.0158	11:43:21	Yes
Mean:	1.230	1.230	0.0158				
SD:	0.009	0.009	0.0001				
%RSD:	0.759	0.759	0.73				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 11:43:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.170	5.170	0.0646	0.2729	0.0647	11:44:32	Yes
2	5.127	5.127	0.0641	0.2716	0.0642	11:45:02	Yes
Mean:	5.148	5.148	0.0644				
SD:	0.030	0.030	0.0004				
%RSD:	0.587	0.587	0.58				

QC value within limits for Hg 253.7 Recovery = 102.97%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 12/9/2009 11:45:21
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0004	0.0002	11:46:11	Yes
2	-0.044	-0.044	0.0000	0.0001	0.0001	11:46:41	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.281	2.281	28.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 1201984321|928035|1
Analyst: JXL1
Autosampler Location: 62
Date Collected: 12/9/2009 11:47:01
Data Type: Original

Replicate Data: 1201984321|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.129	3.129	0.0393	0.1671	0.0394	11:47:52	Yes
2	3.115	3.115	0.0392	0.1665	0.0393	11:48:22	Yes
Mean:	3.122	3.122	0.0393				
SD:	0.010	0.010	0.0001				
%RSD:	0.316	0.316	0.31				

Sequence No.: 73
Sample ID: 1201984323|928035|1
Analyst: JXL1
Autosampler Location: 63
Date Collected: 12/9/2009 11:48:42
Data Type: Original

Replicate Data: 1201984323|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.118	3.118	0.0392	0.1666	0.0393	11:49:33	Yes
2	3.100	3.100	0.0390	0.1662	0.0391	11:50:03	Yes
Mean:	3.109	3.109	0.0391				
SD:	0.013	0.013	0.0002				
%RSD:	0.411	0.411	0.40				

Sequence No.: 74
Sample ID: 1201984322|928035|5
Analyst: JXL1
Autosampler Location: 64
Date Collected: 12/9/2009 11:50:23
Data Type: Original

Replicate Data: 1201984322|928035|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.177	0.177	0.0028	0.0119	0.0029	11:51:15	Yes
2	0.179	0.179	0.0028	0.0120	0.0029	11:51:44	Yes
Mean:	0.178	0.178	0.0028				
SD:	0.001	0.001	0.0000				
%RSD:	0.738	0.738	0.59				

Sequence No.: 75
Sample ID: 241922002|928035|1
Analyst: JXL1
Autosampler Location: 65
Date Collected: 12/9/2009 11:52:04
Data Type: Original

Replicate Data: 241922002|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.961	0.961	0.0125	0.0531	0.0126	11:52:56	Yes
2	0.958	0.958	0.0124	0.0531	0.0125	11:53:26	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.261	0.261	0.0038	0.0167	0.0039	12:01:21	Yes
2	0.255	0.255	0.0037	0.0163	0.0038	12:01:51	Yes
Mean:	0.258	0.258	0.0038				
SD:	0.004	0.004	0.0001				
%RSD:	1.643	1.643	1.39				

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201981594|926816|1 **Date Collected: 12/9/2009 12:02:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981594|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:02	Yes
2	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:32	Yes
Mean:	-0.044	-0.044	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.850	0.850	14.48				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:03:52**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.113	5.113	0.0639	0.2744	0.0640	12:04:42	Yes
2	5.098	5.098	0.0637	0.2741	0.0638	12:05:12	Yes
Mean:	5.106	5.106	0.0638				
SD:	0.011	0.011	0.0001				
%RSD:	0.206	0.206	0.20				

QC value within limits for Hg 253.7 Recovery = 102.12%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:05:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	12:06:21	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	12:06:51	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.638	2.638	23.77				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201981595|926816|10 **Date Collected: 12/9/2009 12:07:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981595|926816|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.982	3.982	0.0499	0.2127	0.0500	12:08:02	Yes
2	3.961	3.961	0.0497	0.2123	0.0498	12:08:32	Yes
Mean:	3.972	3.972	0.0498				
SD:	0.014	0.014	0.0002				
%RSD:	0.362	0.362	0.36				

Sequence No.: 85
Sample ID: 241711001|926816|1
Analyst: JXL1
Autosampler Location: 73
Date Collected: 12/9/2009 12:08:52
Data Type: Original

Replicate Data: 241711001|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.379	0.379	0.0053	0.0232	0.0054	12:09:44	Yes
2	0.379	0.379	0.0053	0.0226	0.0054	12:10:14	Yes
Mean:	0.379	0.379	0.0053				
SD:	0.000	0.000	0.0000				
%RSD:	0.041	0.041	0.04				

Sequence No.: 86
Sample ID: 1201981596|926816|1
Analyst: JXL1
Autosampler Location: 74
Date Collected: 12/9/2009 12:10:34
Data Type: Original

Replicate Data: 1201981596|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.379	0.379	0.0053	0.0229	0.0054	12:11:26	Yes
2	0.376	0.376	0.0052	0.0226	0.0053	12:11:56	Yes
Mean:	0.378	0.378	0.0053				
SD:	0.003	0.003	0.0000				
%RSD:	0.669	0.669	0.60				

Sequence No.: 87
Sample ID: 1201981597|926816|1
Analyst: JXL1
Autosampler Location: 75
Date Collected: 12/9/2009 12:12:16
Data Type: Original

Replicate Data: 1201981597|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.497	2.497	0.0315	0.1363	0.0316	12:13:08	Yes
2	2.494	2.494	0.0315	0.1346	0.0316	12:13:38	Yes
Mean:	2.495	2.495	0.0315				
SD:	0.001	0.001	0.0000				
%RSD:	0.060	0.060	0.06				

Sequence No.: 88
Sample ID: 1201981599|926816|1
Analyst: JXL1
Autosampler Location: 76
Date Collected: 12/9/2009 12:13:57
Data Type: Original

Replicate Data: 1201981599|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.445	2.445	0.0309	0.1326	0.0310	12:14:49	Yes
2	2.425	2.425	0.0306	0.1312	0.0307	12:15:18	Yes
Mean:	2.435	2.435	0.0307				
SD:	0.014	0.014	0.0002				
%RSD:	0.556	0.556	0.55				

Sequence No.: 89
Sample ID: 1201981598|926816|5
Analyst: JXL1
Autosampler Location: 77
Date Collected: 12/9/2009 12:15:38
Data Type: Original

Replicate Data: 1201981598|926816|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0011	0.0047	0.0012	12:16:30	Yes

2	0.042	0.042	0.0011	0.0049	0.0012	12:17:00	Yes
Mean:	0.041	0.041	0.0011				
SD:	0.001	0.001	0.0000				
%RSD:	1.821	1.821	0.86				

==========

Sequence No.: 90 **Autosampler Location: 78**
Sample ID: 241711002|926816|1 **Date Collected: 12/9/2009 12:17:20**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711002|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.294	0.294	0.0042	0.0184	0.0043	12:18:12	Yes
2	0.294	0.294	0.0042	0.0185	0.0043	12:18:42	Yes
Mean:	0.294	0.294	0.0042				
SD:	0.000	0.000	0.0000				
%RSD:	0.024	0.024	0.02				

==========

Sequence No.: 91 **Autosampler Location: 79**
Sample ID: 241711003|926816|1 **Date Collected: 12/9/2009 12:19:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711003|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.272	0.272	0.0039	0.0174	0.0040	12:19:53	Yes
2	0.270	0.270	0.0039	0.0168	0.0040	12:20:23	Yes
Mean:	0.271	0.271	0.0039				
SD:	0.002	0.002	0.0000				
%RSD:	0.579	0.579	0.49				

==========

Sequence No.: 92 **Autosampler Location: 80**
Sample ID: 241711004|926816|1 **Date Collected: 12/9/2009 12:20:43**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711004|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.492	0.492	0.0067	0.0293	0.0068	12:21:34	Yes
2	0.488	0.488	0.0066	0.0290	0.0067	12:22:04	Yes
Mean:	0.490	0.490	0.0066				
SD:	0.003	0.003	0.0000				
%RSD:	0.610	0.610	0.56				

==========

Sequence No.: 93 **Autosampler Location: 81**
Sample ID: 241711005|926816|1 **Date Collected: 12/9/2009 12:22:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711005|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.296	0.296	0.0042	0.0187	0.0043	12:23:15	Yes
2	0.294	0.294	0.0042	0.0187	0.0043	12:23:45	Yes
Mean:	0.295	0.295	0.0042				
SD:	0.002	0.002	0.0000				
%RSD:	0.527	0.527	0.46				

==========

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:24:05**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.115	5.115	0.0639	0.2767	0.0640	12:24:55	Yes
2	5.089	5.089	0.0636	0.2752	0.0637	12:25:25	Yes
Mean:	5.102	5.102	0.0638				
SD:	0.019	0.019	0.0002				
%RSD:	0.372	0.372	0.37				

QC value within limits for Hg 253.7 Recovery = 102.04%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:25:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0007	0.0002	12:26:35	Yes
2	-0.043	-0.043	0.0000	0.0006	0.0001	12:27:05	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.813	1.813	18.79				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 241711006|926816|1 **Date Collected: 12/9/2009 12:27:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711006|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.327	0.327	0.0046	0.0204	0.0047	12:28:16	Yes
2	0.323	0.323	0.0046	0.0203	0.0047	12:28:46	Yes
Mean:	0.325	0.325	0.0046				
SD:	0.003	0.003	0.0000				
%RSD:	0.902	0.902	0.79				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 241711007|926816|1 **Date Collected: 12/9/2009 12:29:06**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711007|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.383	0.383	0.0053	0.0230	0.0054	12:29:57	Yes
2	0.380	0.380	0.0053	0.0228	0.0054	12:30:27	Yes
Mean:	0.381	0.381	0.0053				
SD:	0.002	0.002	0.0000				
%RSD:	0.416	0.416	0.37				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 1201984335|928044|1 **Date Collected: 12/9/2009 12:30:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984335|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	12:31:38	Yes
2	-0.041	-0.041	0.0001	0.0004	0.0002	12:32:08	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.000	0.000	0.0000				

1	2.129	2.129	0.0269	0.1157	0.0270	12:40:08	Yes
2	2.117	2.117	0.0268	0.1153	0.0269	12:40:38	Yes
Mean:	2.123	2.123	0.0269				
SD:	0.008	0.008	0.0001				
%RSD:	0.400	0.400	0.39				

==========

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 1201984339|928044|5 **Date Collected: 12/9/2009 12:40:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984339|928044|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	0.0001	0.0007	0.0002	12:41:50	Yes
2	-0.035	-0.035	0.0001	0.0009	0.0002	12:42:20	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.977	3.977	13.36				

==========

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 241825002|928044|1 **Date Collected: 12/9/2009 12:42:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825002|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.273	0.273	0.0040	0.0173	0.0041	12:43:32	Yes
2	0.274	0.274	0.0040	0.0176	0.0041	12:44:02	Yes
Mean:	0.274	0.274	0.0040				
SD:	0.000	0.000	0.0000				
%RSD:	0.084	0.084	0.07				

==========

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:44:22**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.112	5.112	0.0639	0.2765	0.0640	12:45:12	Yes
2	5.069	5.069	0.0634	0.2743	0.0635	12:45:42	Yes
Mean:	5.091	5.091	0.0636				
SD:	0.030	0.030	0.0004				
%RSD:	0.591	0.591	0.59				

QC value within limits for Hg 253.7 Recovery = 101.81%
All analyte(s) passed QC.

==========

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:46:01**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0009	0.0002	12:46:51	Yes
2	-0.043	-0.043	0.0000	0.0004	0.0001	12:47:21	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.460	5.460	43.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Miscellaneous

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 926575

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201981076	UI652380	.521	g
MS	1201981078	UI091124-01	.25	mL
MS	1201981078	UI091124-06	.25	mL
MSD	1201981080	UI091124-01	.25	mL
MSD	1201981080	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201981075		SW846 3050B	05-DEC-2009 13:10	0.509 g	50 mL	98.23183	SOIL
LCS	1201981076		SW846 3050B	05-DEC-2009 13:10	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241711001		SW846 3050B	05-DEC-2009 13:10	0.521 g	50 mL	95.96929	SOIL
DUP	1201981077	241711001	SW846 3050B	05-DEC-2009 13:10	0.523 g	50 mL	95.60229	SOIL
MS	1201981078	241711001	SW846 3050B	05-DEC-2009 13:10	0.5 g	50 mL	100	SOIL
MSD	1201981080	241711001	SW846 3050B	05-DEC-2009 13:10	0.507 g	50 mL	98.61933	SOIL
SDILT	1201981079	241711001	SW846 3050B	05-DEC-2009 13:10	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241711002		SW846 3050B	05-DEC-2009 13:10	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241711003		SW846 3050B	05-DEC-2009 13:10	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241711004		SW846 3050B	05-DEC-2009 13:10	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241711005		SW846 3050B	05-DEC-2009 13:10	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241711006		SW846 3050B	05-DEC-2009 13:10	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241711007		SW846 3050B	05-DEC-2009 13:10	0.525 g	50 mL	95.2381	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238343	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: The QC sample is rich, brown soil.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 926642

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201981229	UI647733-01	.512	g
MS	1201981231	UI091015-A	.5	mL
MS	1201981231	UI091015-B	.5	mL
MSD	1201981238	UI091015-A	.5	mL
MSD	1201981238	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201981228		SW846 3050B	05-DEC-2009 13:28	0.517 g	50 mL	96.7118	SOIL
LCS	1201981229		SW846 3050B	05-DEC-2009 13:28	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241711001		SW846 3050B	05-DEC-2009 13:28	0.52 g	50 mL	96.15385	SOIL
DUP	1201981230	241711001	SW846 3050B	05-DEC-2009 13:28	0.506 g	50 mL	98.81423	SOIL
MS	1201981231	241711001	SW846 3050B	05-DEC-2009 13:28	0.524 g	50 mL	95.41985	SOIL
MSD	1201981238	241711001	SW846 3050B	05-DEC-2009 13:28	0.522 g	50 mL	95.78544	SOIL
SDILT	1201981232	241711001	SW846 3050B	05-DEC-2009 13:28	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241711002		SW846 3050B	05-DEC-2009 13:28	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241711003		SW846 3050B	05-DEC-2009 13:28	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241711004		SW846 3050B	05-DEC-2009 13:28	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241711005		SW846 3050B	05-DEC-2009 13:28	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241711006		SW846 3050B	05-DEC-2009 13:28	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241711007		SW846 3050B	05-DEC-2009 13:28	0.522 g	50 mL	95.78544	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1238345	5 mL	Nitric Acid CONC.

Comments The QC sample is a rich, brown soil.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 933551

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201997315	UI062540-I	.522	g
MS	1201981078	UI091124-01	.25	mL
MS	1201981078	UI091124-06	.25	mL
MSD	1201981080	UI091124-01	.25	mL
MSD	1201981080	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201997314		SW846 3050B	16-DEC-2009 13:30	0.525 g	50 mL	95.2381	SOIL
LCS	1201997315		SW846 3050B	16-DEC-2009 13:30	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241711001		SW846 3050B	16-DEC-2009 13:30	0.5 g	50 mL	100	SOIL
DUP	1201981077	241711001	SW846 3050B	16-DEC-2009 13:30	0.506 g	50 mL	98.81423	SOIL
MS	1201981078	241711001	SW846 3050B	16-DEC-2009 13:30	0.532 g	50 mL	93.98496	SOIL
MSD	1201981080	241711001	SW846 3050B	16-DEC-2009 13:30	0.527 g	50 mL	94.87666	SOIL
SDILT	1201981079	241711001	SW846 3050B	16-DEC-2009 13:30	0.5 g	50 mL	100	SOIL
SAMPLE	241711002		SW846 3050B	16-DEC-2009 13:30	0.557 g	50 mL	89.76661	SOIL
SAMPLE	241711003		SW846 3050B	16-DEC-2009 13:30	0.5 g	50 mL	100	SOIL
SAMPLE	241711004		SW846 3050B	16-DEC-2009 13:30	0.549 g	50 mL	91.07468	SOIL
SAMPLE	241711005		SW846 3050B	16-DEC-2009 13:30	0.5 g	50 mL	100	SOIL
SAMPLE	241711006		SW846 3050B	16-DEC-2009 13:30	0.532 g	50 mL	93.98496	SOIL
SAMPLE	241711007		SW846 3050B	16-DEC-2009 13:30	0.533 g	50 mL	93.80863	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments Brown,medium soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 926815

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201981595	UI031809A	.2	g
MS	1201981597	WHG091208-14	.3	mL
MSD	1201981599	WHG091208-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201981594		SW846 7471A Prep	08-DEC-2009 12:40	0.6 g	30 mL	50	SOIL
LCS	1201981595		SW846 7471A Prep	08-DEC-2009 12:40	0.2 g	30 mL	150	SOIL
SAMPLE	241711001		SW846 7471A Prep	08-DEC-2009 12:40	0.571 g	30 mL	52.5394	SOIL
DUP	1201981596	241711001	SW846 7471A Prep	08-DEC-2009 12:40	0.567 g	30 mL	52.91005	SOIL
MS	1201981597	241711001	SW846 7471A Prep	08-DEC-2009 12:40	0.545 g	30 mL	55.04587	SOIL
MSD	1201981599	241711001	SW846 7471A Prep	08-DEC-2009 12:40	0.527 g	30 mL	56.926	SOIL
SDILT	1201981598	241711001	SW846 7471A Prep	08-DEC-2009 12:40	0.571 g	30 mL	52.5394	SOIL
SAMPLE	241711002		SW846 7471A Prep	08-DEC-2009 12:40	0.563 g	30 mL	53.28597	SOIL
SAMPLE	241711003		SW846 7471A Prep	08-DEC-2009 12:40	0.519 g	30 mL	57.80347	SOIL
SAMPLE	241711004		SW846 7471A Prep	08-DEC-2009 12:40	0.571 g	30 mL	52.5394	SOIL
SAMPLE	241711005		SW846 7471A Prep	08-DEC-2009 12:40	0.564 g	30 mL	53.19149	SOIL
SAMPLE	241711006		SW846 7471A Prep	08-DEC-2009 12:40	0.502 g	30 mL	59.76096	SOIL
SAMPLE	241711007		SW846 7471A Prep	08-DEC-2009 12:40	0.544 g	30 mL	55.14706	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091208-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091208-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091208-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091208-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091208-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091208-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments Sample 241711001 is a rocky brown soil.
Digestion Start Date: 08-DEC-09 12:40
Digestion End Date: 08-DEC-09 13:10

NCR Report No.: 769738
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
14-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
926645	See Below		

Potentially affected work order(s)(SDG): 241711(10-649)

Application Issues:

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201981230DUP 2. Failed Recovery for MSD/PSD: QC 1201981238MSD	The matrix spike duplicate recovery failed outside of the control limits for Se due to possible matrix interferences and/or sample non-homogeneity. The sample and sample duplicate % RPD failed outside the control limits for Be due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Paul Boyd 14-DEC-09

Data Validator/Group Leader:

Samantha Jacobs 14-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
16-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
926576	See Below		

Potentially affected work order(s)(SDG): 241711(10-649)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201981078MS 2. Failed RPD for DUP: QC 1201981077DUP 3. Failed Recovery for MSD/PSD: QC 1201981080MSD 4. Failed RPD for MSD/PSD: QC 1201981080MSD	1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for antimony,cobalt and lead due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for cobalt,lead and manganese due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 4. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 16-DEC-09

Data Validator/Group Leader:
Louise Smith 17-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
18-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
933552	See Below		

Potentially affected work order(s)(SDG): 241711(10-649)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:

1. Failed Recovery for MS/PS:

   QC 1201981078MS

2. Failed RPD for DUP:

   QC 1201981077DUP

3. Failed RPD for MS/MSD, or PS/PSD:

   QC 1201981080MSD

4. Failed Recovery for MSD/PSD:

   QC 1201981080MSD

NRG Disposition:

1./4. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for barium,magnesium,potassium and silicon due to possible matrix interferences and/or non-homogeneity.
Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The sample and sample duplicate % RPD failed outside the control limits for barium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for calcium due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Carnello 18-DEC-09

Data Validator/Group Leader:

Louise Smith 18-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si

Standard Logbook

Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI

Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID:	UI090929-08	**Opened:**	29-SEP-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master C	**Received:**	29-SEP-09	**Catalog Number :**	160054-03
Type:	Source Material	**Expires:**	17-DEC-09	**Lot Number :**	1017427
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				

Description: ICPMS ICV/CCV Soln C - 10ppm

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID:	UI091015-42	**Opened:**	28-OCT-09	**Amount :**	500 mL
Name:	SI 1000mg/L	**Received:**	15-OCT-09	**Catalog Number :**	060014-02-03
Type:	Source Material	**Expires:**	28-OCT-10	**Lot Number :**	1017581
Employee:	Helen Camello			**Solvent :**	0.3%H2O(NH4)2SiF6
Supplier:	o2si				

Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6

Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID:	UI091015-A	**Opened:**	15-OCT-09	**Catalog Number :**	160067-03
Name:	ICP-MS DOE SOIL SPIKE	**Received:**	15-OCT-09	**Lot Number :**	1017142
Type:	Source Material	**Expires:**	15-OCT-10		
Employee:	Francena Armstrong				
Supplier:	02si				

Description: ICP-MS Spike for soil products.

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI

Standard Logbook

Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Standard Logbook

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091208-01 **Opened:** 08-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 08-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 09-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091208-02 **Opened:** 08-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 09-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091208-07 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Standard Logbook

Serial ID: WHG091208-08 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091208-09 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091208-10 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091208-11 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Standard Logbook

Serial ID: WHG091208-12 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091208-14 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091209-42 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091209-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091209-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091209-43 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091209-44 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091209-45 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091209-46 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091209-47 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091216-42 **Opened:** 16-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 17-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091216-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091216-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091216-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091216-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091216-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091216-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091216-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091216-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091216-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091216-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091216-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091216-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091216-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091216-43 **Opened:** 16-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 17-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091216-44 **Opened:** 16-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 17-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1242318
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091216-45 **Opened:** 16-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 17-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091216-46 **Opened:** 16-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 17-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1242318
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091216-47 **Opened:** 16-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 17-DEC-09 **Solvent :** 3%HCL &1%HNO3-1242318
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091217-42 **Opened:** 17-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 18-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091217-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091217-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091217-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091217-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091217-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091217-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091217-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091217-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091217-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091217-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091217-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091217-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091217-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091217-43 **Opened:** 17-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 18-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091217-44 **Opened:** 17-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 18-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1242318
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091217-45 **Opened:** 17-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 18-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091217-46 **Opened:** 17-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 18-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1242318
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091217-47 **Opened:** 17-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 18-DEC-09 **Solvent :** 3%HCL &1%HNO3-1242318
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091212-04 **Opened:** 12-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 13-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091212-04A **Opened:** 12-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 12-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091212-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091212-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091212-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091212-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091212-05 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 12-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091212-06 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 12-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091212-07 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 12-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 13-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091212-08 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 12-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091212-70 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 12-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091213-04 **Opened:** 13-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 14-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091213-04A **Opened:** 13-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 14-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091213-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091213-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091213-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091213-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091213-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091213-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091213-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091213-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091213-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091213-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091213-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091213-05 **Opened:** 13-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 14-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091213-06 **Opened:** 13-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 14-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091213-07 **Opened:** 13-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 14-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091213-08 **Opened:** 13-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 14-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl,NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Standard Logbook

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242318 **Opened:** 14-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 20-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-649-1

Sample Analysis

Sample ID	Client ID
241713001	RE03-10-7042
241713002	RE03-10-7043
1201982716	Method Blank (MB) **ICP**
1201982721	Laboratory Control Sample (LCS)
1201982718	241713001(RE03-10-7042L) Serial Dilution (SD)
1201982717	241713001(RE03-10-7042D) Sample Duplicate (DUP)
1201982719	241713001(RE03-10-7042S) Matrix Spike (MS)
1201982720	241713001(RE03-10-7042SD) Matrix Spike Duplicate (MSD)
1201981201	Method Blank (MB) **ICP-MS**
1201999410	Method Blank (MB) **ICP-MS**
1201981202	Laboratory Control Sample (LCS)
1201999411	Laboratory Control Sample (LCS)
1201981205	241713001(RE03-10-7042L) Serial Dilution (SD)
1201999414	241713001(RE03-10-7042L) Serial Dilution (SD)
1201981203	241713001(RE03-10-7042D) Sample Duplicate (DUP)
1201999412	241713001(RE03-10-7042D) Sample Duplicate (DUP)
1201981204	241713001(RE03-10-7042S) Matrix Spike (MS)
1201999413	241713001(RE03-10-7042S) Matrix Spike (MS)
1201981600	Method Blank (MB) **CVAA**
1201981601	Laboratory Control Sample (LCS)
1201981607	241713001(RE03-10-7042L) Serial Dilution (SD)
1201981602	241713001(RE03-10-7042D) Sample Duplicate (DUP)
1201981603	241713001(RE03-10-7042S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	927388, 926630, 934523 and 926820
Prep Batch :	927387, 926629, 934522 and 926819
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction

through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits with the exception of iron that recovered outside of the advisory control limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 241713001 (RE03-10-7042)-ICP, ICP-MS, ICP-MS and CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nik-Cole Elmore **Date:** 12.21.09

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241713001 **BASIS:** As Received **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-10-7042 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	344	ug/L		68	200	200	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/20/09 09:05	091219-5	934523
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-39-3	Barium	3.19	ug/L	J	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/15/09 13:22	091215-4	926630
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/15/09 02:30	091214-2	926630
7440-70-2	Calcium	155	ug/L	J	50	200	200	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-47-3	Chromium	4.75	ug/L	J	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/08/09 13:22	120809-1	927388
7439-89-6	Iron	316	ug/L		30	100	100	1	P	HSC	12/08/09 13:22	120809-1	927388
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/15/09 02:30	091214-2	926630
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/15/09 02:30	091214-2	926630
7439-95-4	Magnesium	145	ug/L	J	85	300	300	1	P	HSC	12/08/09 13:22	120809-1	927388
7439-96-5	Manganese	8.59	ug/L		1	5	5	1	MS	PRB	12/15/09 02:30	091214-2	926630
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:56	100809W4-6	926820
7440-02-0	Nickel	1.98	ug/L	J	1.5	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-09-7	Potassium	63.6	ug/L	J	50	150	150	1	P	HSC	12/08/09 13:22	120809-1	927388
7782-49-2	Selenium	5.71	ug/L	J	5	30	30	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-21-3	Silicon	735	ug/L		25	100	100	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-23-5	Sodium	286	ug/L	J	100	300	300	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/15/09 02:30	091214-2	926630
7440-32-6	Titanium	8.31	ug/L		1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/15/09 02:30	091214-2	926630
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:22	120809-1	927388
7440-66-6	Zinc	5.6	ug/L	J	3.3	10	10	1	P	HSC	12/08/09 13:22	120809-1	927388

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926630	926629	SW846 3005A	25	mL	25	mL	12/14/09	BCD1
926820	926819	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
927388	927387	SW846 3005A	50	mL	50	mL	12/04/09	AXG2

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

934523	934522	SW846 3005A	50	mL	50	mL	12/18/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-649-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241713002 **BASIS:** As Received **DATE COLLECTED** 20-NOV-09

CLIENT ID: RE03-10-7043 **LEVEL:** Low **DATE RECEIVED** 24-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/20/09 09:14	091219-5	934523
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/15/09 13:29	091215-4	926630
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/15/09 02:53	091214-2	926630
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/08/09 13:56	120809-1	927388
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/08/09 13:56	120809-1	927388
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/15/09 02:53	091214-2	926630
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/15/09 02:53	091214-2	926630
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/08/09 13:56	120809-1	927388
7439-96-5	Manganese	3.74	ug/L	J	1	5	5	1	MS	PRB	12/15/09 02:53	091214-2	926630
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:08	100809W4-6	926820
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/08/09 13:56	120809-1	927388
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-21-3	Silicon	57.6	ug/L	J	25	100	100	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-28-0	Thallium	0.705	ug/L	J	0.3	1	1	1	MS	PRB	12/15/09 02:53	091214-2	926630
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/15/09 02:53	091214-2	926630
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/08/09 13:56	120809-1	927388
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/08/09 13:56	120809-1	927388

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
926630	926629	SW846 3005A	25	mL	25	mL	12/14/09	BCD1
926820	926819	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
927388	927387	SW846 3005A	50	mL	50	mL	12/04/09	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

934523	934522	SW846 3005A	50	mL	50	mL	12/18/09	BCD1

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Arsenic	468	ug/L	500	ug/L	93.6	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Calcium	4840	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Chromium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Nickel	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Potassium	2440	ug/L	2500	ug/L	97.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Selenium	2520	ug/L	2500	ug/L	101	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Silicon	4700	ug/L	5000	ug/L	94.1	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Silver	258	ug/L	250	ug/L	103.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Sodium	2370	ug/L	2500	ug/L	94.8	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Zinc	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:01	120809–1
	Mercury	4.9	ug/L	5	ug/L	98	90.0 – 110.0	AV	08–DEC–09 10:04	100809W4–6
	Cadmium	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	15–DEC–09 00:05	091214–2
	Lead	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	15–DEC–09 00:05	091214–2
	Lithium	50.9	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	15–DEC–09 00:05	091214–2
	Manganese	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	15–DEC–09 00:05	091214–2
	Thallium	48.4	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	15–DEC–09 00:05	091214–2
	Uranium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	15–DEC–09 00:05	091214–2
	Beryllium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	15–DEC–09 12:01	091215–4
	Antimony	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	20–DEC–09 08:38	091219–5
CCV01										
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:47	120809–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Boron	510	ug/L	500	ug/L	102	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Nickel	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Potassium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Selenium	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Silicon	2460	ug/L	2500	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Sodium	9150	ug/L	10000	ug/L	91.5	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Titanium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Zinc	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-1
	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	08-DEC-09 10:10	100809W4-6
	Cadmium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	15-DEC-09 00:34	091214-2
	Lead	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	15-DEC-09 00:34	091214-2
	Lithium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	15-DEC-09 00:34	091214-2
	Manganese	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	15-DEC-09 00:34	091214-2
	Thallium	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	15-DEC-09 00:34	091214-2
	Uranium	53.3	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	15-DEC-09 00:34	091214-2
	Beryllium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	15-DEC-09 12:09	091215-4
	Antimony	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	20-DEC-09 08:49	091219-5
CCV02										
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 09:11	120809-1
	Arsenic	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 09:11	120809-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Boron	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Nickel	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Selenium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Silicon	2410	ug/L	2500	ug/L	96.4	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Silver	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Sodium	9430	ug/L	10000	ug/L	94.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Titanium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–1
	Mercury	4.98	ug/L	5	ug/L	99.6	80.0 – 120.0	AV	08–DEC–09 10:33	100809W4–6
	Cadmium	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	15–DEC–09 00:51	091214–2
	Lead	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	15–DEC–09 00:51	091214–2
	Lithium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	15–DEC–09 00:51	091214–2
	Manganese	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	15–DEC–09 00:51	091214–2
	Thallium	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	15–DEC–09 00:51	091214–2
	Uranium	53.7	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	15–DEC–09 00:51	091214–2
	Beryllium	45.1	ug/L	50	ug/L	90.1	90.0 – 110.0	MS	15–DEC–09 12:26	091215–4
	Antimony	53.9	ug/L	50	ug/L	107.8	90.0 – 110.0	MS	20–DEC–09 08:55	091219–5
CCV03										
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Arsenic	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 09:52	120809–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Cobalt	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Nickel	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Selenium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Sodium	9300	ug/L	10000	ug/L	93	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Zinc	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–1
	Mercury	4.98	ug/L	5	ug/L	99.6	80.0 – 120.0	AV	08–DEC–09 10:56	100809W4–6
	Cadmium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	15–DEC–09 02:01	091214–2
	Lead	51.6	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	15–DEC–09 02:01	091214–2
	Lithium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	15–DEC–09 02:01	091214–2
	Manganese	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	15–DEC–09 02:01	091214–2
	Thallium	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	15–DEC–09 02:01	091214–2
	Uranium	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	15–DEC–09 02:01	091214–2
	Beryllium	46	ug/L	50	ug/L	92	90.0 – 110.0	MS	15–DEC–09 12:42	091215–4
	Antimony	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	20–DEC–09 09:16	091219–5
CCV04										
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 10:55	120809–1
	Arsenic	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 10:55	120809–1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	08–DEC–09 10:55	120809–1
	Boron	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08–DEC–09 10:55	120809–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Iron	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Nickel	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Potassium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Selenium	515	ug/L	500	ug/L	103	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Silicon	2490	ug/L	2500	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Sodium	9450	ug/L	10000	ug/L	94.5	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Titanium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 10:55	120809-1
	Mercury	4.95	ug/L	5	ug/L	99	80.0 – 120.0	AV	08-DEC-09 11:19	100809W4-6
	Cadmium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	15-DEC-09 02:59	091214-2
	Lead	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	15-DEC-09 02:59	091214-2
	Lithium	52.6	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	15-DEC-09 02:59	091214-2
	Manganese	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	15-DEC-09 02:59	091214-2
	Thallium	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	15-DEC-09 02:59	091214-2
	Uranium	54.2	ug/L	50	ug/L	108.5	90.0 – 110.0	MS	15-DEC-09 02:59	091214-2
	Beryllium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	15-DEC-09 12:55	091215-4
CCV05										
	Mercury	4.92	ug/L	5	ug/L	98.4	80.0 – 120.0	AV	08-DEC-09 11:42	100809W4-6
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Arsenic	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08-DEC-09 11:57	120809-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Nickel	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Selenium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Silicon	2470	ug/L	2500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Sodium	9490	ug/L	10000	ug/L	94.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Vanadium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	08-DEC-09 11:57	120809-1
	Beryllium	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	15-DEC-09 13:07	091215-4
CCV06										
	Mercury	4.93	ug/L	5	ug/L	98.5	80.0 – 120.0	AV	08-DEC-09 12:05	100809W4-6
	Aluminum	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Boron	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Nickel	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Selenium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	08-DEC-09 12:54	120809-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silicon	2490	ug/L	2500	ug/L	99.7	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Sodium	9480	ug/L	10000	ug/L	94.8	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Titanium	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 12:54	120809-1
	Beryllium	49.8	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	15-DEC-09 13:13	091215-4
CCV07										
	Mercury	4.95	ug/L	5	ug/L	99	80.0 – 120.0	AV	08-DEC-09 12:28	100809W4-6
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Arsenic	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Boron	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Cobalt	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Iron	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Nickel	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Selenium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08-DEC-09 14:10	120809-1
	Beryllium	54.7	ug/L	50	ug/L	109.3	90.0 – 110.0	MS	15-DEC-09 13:31	091215-4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV08										
	Mercury	4.98	ug/L	5	ug/L	99.5	80.0 – 120.0	AV	08-DEC-09 12:52	100809W4-6
CCV09										
	Mercury	4.9	ug/L	5	ug/L	98	80.0 – 120.0	AV	08-DEC-09 13:15	100809W4-6
CCV10										
	Mercury	5	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	08-DEC-09 13:38	100809W4-6
CCV11										
	Mercury	5	ug/L	5	ug/L	100.1	80.0 – 120.0	AV	08-DEC-09 14:02	100809W4-6
CCV12										
	Mercury	5.02	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	08-DEC-09 14:25	100809W4-6

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.164	ug/L	.2	ug/L	82	70.0 – 130.0	AV	08–DEC–09 10:08	100809W4–6
	Manganese	5.66	ug/L	5	ug/L	113.1	70.0 – 130.0	MS	15–DEC–09 00:17	091214–2
	Thallium	1.1	ug/L	1	ug/L	110.2	70.0 – 130.0	MS	15–DEC–09 00:17	091214–2
	Cadmium	1.1	ug/L	1	ug/L	110.3	70.0 – 130.0	MS	15–DEC–09 00:17	091214–2
	Lithium	10.9	ug/L	10	ug/L	109.3	70.0 – 130.0	MS	15–DEC–09 00:17	091214–2
	Lead	2.14	ug/L	2	ug/L	106.9	70.0 – 130.0	MS	15–DEC–09 00:17	091214–2
	Uranium	.212	ug/L	.2	ug/L	106	70.0 – 130.0	MS	15–DEC–09 00:17	091214–2
	Beryllium	.568	ug/L	.5	ug/L	113.6	70.0 – 130.0	MS	15–DEC–09 12:04	091215–4
	Antimony	3.29	ug/L	3	ug/L	109.5	70.0 – 130.0	MS	20–DEC–09 08:42	091219–5
PQL01										
	Titanium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Aluminum	196	ug/L	200	ug/L	97.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Iron	132	ug/L	100	ug/L	131.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Magnesium	317	ug/L	300	ug/L	105.7	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Nickel	5.33	ug/L	5	ug/L	106.7	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Potassium	161	ug/L	150	ug/L	107.2	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Silver	5.13	ug/L	5	ug/L	102.5	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Sodium	274	ug/L	300	ug/L	91.4	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Arsenic	28.7	ug/L	30	ug/L	95.5	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Barium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Chromium	4.82	ug/L	5	ug/L	96.4	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Cobalt	4.76	ug/L	5	ug/L	95.3	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Copper	9.87	ug/L	10	ug/L	98.7	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Vanadium	5.23	ug/L	5	ug/L	104.5	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Zinc	10.1	ug/L	10	ug/L	100.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Calcium	204	ug/L	200	ug/L	102.1	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Selenium	36.2	ug/L	30	ug/L	120.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Boron	49.5	ug/L	50	ug/L	98.9	70.0 – 130.0	P	08–DEC–09 08:15	120809–1
	Silicon	94.6	ug/L	100	ug/L	94.6	70.0 – 130.0	P	08–DEC–09 08:15	120809–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-649-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	08-DEC-09 08:08	120809-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 08:08	120809-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 08:08	120809-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	08-DEC-09 08:08	120809-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	08-DEC-09 08:08	120809-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 08:08	120809-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 08:08	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	08-DEC-09 08:08	120809-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	08-DEC-09 08:08	120809-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	08-DEC-09 08:08	120809-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	08-DEC-09 08:08	120809-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	08-DEC-09 08:08	120809-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 08:08	120809-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	08-DEC-09 08:08	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 08:08	120809-1
	Sodium	100	+/-300	U	100	300	LIQ	P	08-DEC-09 08:08	120809-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 08:08	120809-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 08:08	120809-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	08-DEC-09 08:08	120809-1
	Mercury	-0.082	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 10:06	100809W4-6
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	15-DEC-09 00:11	091214-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	15-DEC-09 00:11	091214-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	15-DEC-09 00:11	091214-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	15-DEC-09 00:11	091214-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	15-DEC-09 00:11	091214-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	15-DEC-09 00:11	091214-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	15-DEC-09 12:03	091215-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-DEC-09 08:40	091219-5
CCB01										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	08-DEC-09 08:54	120809-1
	Arsenic	13.2	+/-30	J	5.0	30.0	LIQ	P	08-DEC-09 08:54	120809-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–649–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 08:54	120809–1
	Boron	16.85	+/–50	J	15.0	50.0	LIQ	P	08–DEC–09 08:54	120809–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	08–DEC–09 08:54	120809–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 08:54	120809–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 08:54	120809–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	08–DEC–09 08:54	120809–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	08–DEC–09 08:54	120809–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	08–DEC–09 08:54	120809–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	08–DEC–09 08:54	120809–1
	Potassium	138.07	+/–150	J	50.0	150	LIQ	P	08–DEC–09 08:54	120809–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	08–DEC–09 08:54	120809–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	08–DEC–09 08:54	120809–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 08:54	120809–1
	Sodium	100	+/–300	U	100	300	LIQ	P	08–DEC–09 08:54	120809–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 08:54	120809–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 08:54	120809–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	08–DEC–09 08:54	120809–1
	Mercury	–0.077	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:12	100809W4–6
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	15–DEC–09 00:40	091214–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	15–DEC–09 00:40	091214–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	15–DEC–09 00:40	091214–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	15–DEC–09 00:40	091214–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	15–DEC–09 00:40	091214–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	15–DEC–09 00:40	091214–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	15–DEC–09 12:11	091215–4
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	20–DEC–09 08:51	091219–5
CCB02										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	08–DEC–09 09:18	120809–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	08–DEC–09 09:18	120809–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:18	120809–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	08–DEC–09 09:18	120809–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–649–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	08–DEC–09 09:18	120809–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:18	120809–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:18	120809–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	08–DEC–09 09:18	120809–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	08–DEC–09 09:18	120809–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	08–DEC–09 09:18	120809–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	08–DEC–09 09:18	120809–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	08–DEC–09 09:18	120809–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	08–DEC–09 09:18	120809–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	08–DEC–09 09:18	120809–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:18	120809–1
	Sodium	100	+/–300	U	100	300	LIQ	P	08–DEC–09 09:18	120809–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:18	120809–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:18	120809–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	08–DEC–09 09:18	120809–1
	Mercury	–0.068	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:35	100809W4–6
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	15–DEC–09 00:57	091214–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	15–DEC–09 00:57	091214–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	15–DEC–09 00:57	091214–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	15–DEC–09 00:57	091214–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	15–DEC–09 00:57	091214–2
	Uranium	0.078	+/–.2	J	0.05	0.2	LIQ	MS	15–DEC–09 00:57	091214–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	15–DEC–09 12:28	091215–4
	Antimony	1.28	+/–3	J	1.0	3.0	LIQ	MS	20–DEC–09 08:57	091219–5
CCB03										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	08–DEC–09 09:59	120809–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	08–DEC–09 09:59	120809–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:59	120809–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	08–DEC–09 09:59	120809–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	08–DEC–09 09:59	120809–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 09:59	120809–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-649-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 09:59	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	08-DEC-09 09:59	120809-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	08-DEC-09 09:59	120809-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	08-DEC-09 09:59	120809-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	08-DEC-09 09:59	120809-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	08-DEC-09 09:59	120809-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 09:59	120809-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	08-DEC-09 09:59	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 09:59	120809-1
	Sodium	100	+/-300	U	100	300	LIQ	P	08-DEC-09 09:59	120809-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 09:59	120809-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 09:59	120809-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	08-DEC-09 09:59	120809-1
	Mercury	-0.068	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 10:58	100809W4-6
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	15-DEC-09 02:06	091214-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	15-DEC-09 02:06	091214-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	15-DEC-09 02:06	091214-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	15-DEC-09 02:06	091214-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	15-DEC-09 02:06	091214-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	15-DEC-09 02:06	091214-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	15-DEC-09 12:43	091215-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-DEC-09 09:18	091219-5
CCB04										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	08-DEC-09 11:02	120809-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 11:02	120809-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 11:02	120809-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	08-DEC-09 11:02	120809-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	08-DEC-09 11:02	120809-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 11:02	120809-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 11:02	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	08-DEC-09 11:02	120809-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–649–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	08–DEC–09 11:02	120809–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	08–DEC–09 11:02	120809–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	08–DEC–09 11:02	120809–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	08–DEC–09 11:02	120809–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	08–DEC–09 11:02	120809–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	08–DEC–09 11:02	120809–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 11:02	120809–1
	Sodium	100	+/–300	U	100	300	LIQ	P	08–DEC–09 11:02	120809–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 11:02	120809–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 11:02	120809–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	08–DEC–09 11:02	120809–1
	Mercury	–0.073	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 11:21	100809W4–6
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	15–DEC–09 03:04	091214–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	15–DEC–09 03:04	091214–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	15–DEC–09 03:04	091214–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	15–DEC–09 03:04	091214–2
	Thallium	0.494	+/–1	J	0.3	1.0	LIQ	MS	15–DEC–09 03:04	091214–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	15–DEC–09 03:04	091214–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	15–DEC–09 12:57	091215–4
CCB05										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 11:44	100809W4–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	08–DEC–09 12:04	120809–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	08–DEC–09 12:04	120809–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 12:04	120809–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	08–DEC–09 12:04	120809–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	08–DEC–09 12:04	120809–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 12:04	120809–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	08–DEC–09 12:04	120809–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	08–DEC–09 12:04	120809–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	08–DEC–09 12:04	120809–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	08–DEC–09 12:04	120809–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-649-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	08-DEC-09 12:04	120809-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	08-DEC-09 12:04	120809-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 12:04	120809-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	08-DEC-09 12:04	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 12:04	120809-1
	Sodium	100	+/-300	U	100	300	LIQ	P	08-DEC-09 12:04	120809-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 12:04	120809-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 12:04	120809-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	08-DEC-09 12:04	120809-1
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	15-DEC-09 13:09	091215-4
CCB06										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-DEC-09 12:07	100809W4-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	08-DEC-09 13:01	120809-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 13:01	120809-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 13:01	120809-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	08-DEC-09 13:01	120809-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	08-DEC-09 13:01	120809-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 13:01	120809-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 13:01	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	08-DEC-09 13:01	120809-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	08-DEC-09 13:01	120809-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	08-DEC-09 13:01	120809-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	08-DEC-09 13:01	120809-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	08-DEC-09 13:01	120809-1
	Selenium	6.98	+/-30	J	5.0	30.0	LIQ	P	08-DEC-09 13:01	120809-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	08-DEC-09 13:01	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 13:01	120809-1
	Sodium	100	+/-300	U	100	300	LIQ	P	08-DEC-09 13:01	120809-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 13:01	120809-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 13:01	120809-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	08-DEC-09 13:01	120809-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-649-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	15-DEC-09 13:15	091215-4
CCB07										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-DEC-09 12:30	100809W4-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	08-DEC-09 14:17	120809-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 14:17	120809-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 14:17	120809-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	08-DEC-09 14:17	120809-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	08-DEC-09 14:17	120809-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 14:17	120809-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 14:17	120809-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	08-DEC-09 14:17	120809-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	08-DEC-09 14:17	120809-1
	Magnesium	91.19	+/-300	J	85.0	300	LIQ	P	08-DEC-09 14:17	120809-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	08-DEC-09 14:17	120809-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	08-DEC-09 14:17	120809-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	08-DEC-09 14:17	120809-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	08-DEC-09 14:17	120809-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 14:17	120809-1
	Sodium	100	+/-300	U	100	300	LIQ	P	08-DEC-09 14:17	120809-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 14:17	120809-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	08-DEC-09 14:17	120809-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	08-DEC-09 14:17	120809-1
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	15-DEC-09 13:33	091215-4
CCB08										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-DEC-09 12:54	100809W4-6
CCB09										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-DEC-09 13:17	100809W4-6
CCB10										
	Mercury	-0.075	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 13:40	100809W4-6
CCB11										
	Mercury	-0.07	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 14:04	100809W4-6

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-649-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB12										
	Mercury	-0.075	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 14:27	100809W4-6

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-649-1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201981201								
	Thallium	0.3	ug/L	+/-1.0	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Lithium	2	ug/L	+/-10.0	U	MS	2	10
	Manganese	1	ug/L	+/-5.0	U	MS	1	5
	Lead	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Cadmium	0.11	ug/L	+/-1.0	U	MS	0.11	1
1201981600								
	Mercury	-0.098	ug/L	+/-0.2	J	AV	0.066	0.2
1201982716								
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30.0	U	P	5	30
	Barium	1	ug/L	+/-5.0	U	P	1	5
	Boron	15	ug/L	+/-50.0	U	P	15	50
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5.0	U	P	1	5
	Cobalt	1	ug/L	+/-5.0	U	P	1	5
	Copper	3	ug/L	+/-10.0	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5.0	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30.0	U	P	5	30
	Silicon	25	ug/L	+/-100	U	P	25	100
	Silver	1	ug/L	+/-5.0	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Titanium	1	ug/L	+/-5.0	U	P	1	5
	Vanadium	1	ug/L	+/-5.0	U	P	1	5
	Zinc	3.3	ug/L	+/-10.0	U	P	3.3	10
1201999410								
	Antimony	1.96	ug/L	+/-3.0	J	MS	1	3

METALS
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Interference Check Sample

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 - 120.0	08-DEC-09 08:22	120809-1
	Arsenic	-3.25	ug/L					08-DEC-09 08:22	120809-1
	Barium	2.42	ug/L					08-DEC-09 08:22	120809-1
	Boron	-2.81	ug/L					08-DEC-09 08:22	120809-1
	Calcium	481000	ug/L	500000	ug/L	96.1	80.0 - 120.0	08-DEC-09 08:22	120809-1
	Chromium	1.17	ug/L					08-DEC-09 08:22	120809-1
	Cobalt	-1.69	ug/L					08-DEC-09 08:22	120809-1
	Copper	3.23	ug/L					08-DEC-09 08:22	120809-1
	Iron	183000	ug/L	200000	ug/L	91.5	80.0 - 120.0	08-DEC-09 08:22	120809-1
	Magnesium	486000	ug/L	500000	ug/L	97.1	80.0 - 120.0	08-DEC-09 08:22	120809-1
	Nickel	3.85	ug/L					08-DEC-09 08:22	120809-1
	Potassium	36.8	ug/L					08-DEC-09 08:22	120809-1
	Selenium	-56.2	ug/L					08-DEC-09 08:22	120809-1
	Silicon	2.18	ug/L					08-DEC-09 08:22	120809-1
	Silver	-2.89	ug/L					08-DEC-09 08:22	120809-1
	Sodium	12.2	ug/L					08-DEC-09 08:22	120809-1
	Titanium	-3.82	ug/L					08-DEC-09 08:22	120809-1
	Vanadium	-1.05	ug/L					08-DEC-09 08:22	120809-1
	Zinc	-4.58	ug/L					08-DEC-09 08:22	120809-1
ICSAB01									
	Aluminum	498000	ug/L	500000	ug/L	99.6	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Arsenic	499	ug/L	500	ug/L	99.8	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Barium	486	ug/L	500	ug/L	97.2	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Boron	497	ug/L	500	ug/L	99.4	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Calcium	461000	ug/L	500000	ug/L	92.1	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Chromium	472	ug/L	500	ug/L	94.4	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Cobalt	433	ug/L	500	ug/L	86.5	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Copper	544	ug/L	500	ug/L	109	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Iron	180000	ug/L	200000	ug/L	90	80.0 - 120.0	08-DEC-09 08:28	120809-1

METALS
-4-
Interference Check Sample

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	475000	ug/L	500000	ug/L	95.1	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Nickel	436	ug/L	500	ug/L	87.1	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Potassium	5370	ug/L	5000	ug/L	107	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Selenium	2450	ug/L	2500	ug/L	98.2	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Silicon	5150	ug/L	5000	ug/L	103	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Silver	270	ug/L	250	ug/L	108	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Sodium	5100	ug/L	5000	ug/L	102	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Titanium	511	ug/L	500	ug/L	102	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Vanadium	496	ug/L	500	ug/L	99.2	80.0 - 120.0	08-DEC-09 08:28	120809-1
	Zinc	476	ug/L	500	ug/L	95.2	80.0 - 120.0	08-DEC-09 08:28	120809-1

METALS
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Interference Check Sample

SDG No: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Cadmium	0.324	ug/L					15–DEC–09 00:23	091214–2
	Lead	0.154	ug/L					15–DEC–09 00:23	091214–2
	Lithium	0.047	ug/L					15–DEC–09 00:23	091214–2
	Manganese	5.82	ug/L					15–DEC–09 00:23	091214–2
	Thallium	0.027	ug/L					15–DEC–09 00:23	091214–2
	Uranium	–0.029	ug/L					15–DEC–09 00:23	091214–2
ICSAB01									
	Cadmium	20.9	ug/L	20.4	ug/L	103	80.0 – 120.0	15–DEC–09 00:28	091214–2
	Lead	20.9	ug/L	20.5	ug/L	102	80.0 – 120.0	15–DEC–09 00:28	091214–2
	Lithium	19.5	ug/L	20	ug/L	97.3	80.0 – 120.0	15–DEC–09 00:28	091214–2
	Manganese	26.4	ug/L	25.8	ug/L	102	80.0 – 120.0	15–DEC–09 00:28	091214–2
	Thallium	19.8	ug/L	20	ug/L	99.2	80.0 – 120.0	15–DEC–09 00:28	091214–2
	Uranium	22.8	ug/L	20	ug/L	114	80.0 – 120.0	15–DEC–09 00:28	091214–2

METALS
-4-
Interference Check Sample

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.073	ug/L					15-DEC-09 12:06	091215-4
ICSAB01									
	Beryllium	19.6	ug/L	20	ug/L	98	80.0 - 120.0	15-DEC-09 12:08	091215-4

METALS
-4-
Interference Check Sample

SDG No: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.249	ug/L					20-DEC-09 08:44	091219-5
ICSAB01									
	Antimony	20.8	ug/L	20.1	ug/L	104	80.0 - 120.0	20-DEC-09 08:47	091219-5

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–649–1 **Client ID** RE03–10–7042S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241713001 **Spike ID:** 1201981204

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	ug/L	75–125	61		0.1	U	50	122		MS
Cadmium	ug/L	75–125	10.8		0.11	U	10	108		MS
Lead	ug/L	75–125	42.6		0.5	U	40	105		MS
Lithium	ug/L	75–125	56.7		2	U	50	112		MS
Manganese	ug/L	75–125	61.4		8.59		50	106		MS
Thallium	ug/L	75–125	90.3		0.3	U	100	90.2		MS
Uranium	ug/L	75–125	55.1		0.05	U	50	110		MS

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-649-1 **Client ID** RE03-10-7042S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241713001 **Spike ID:** 1201981603

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	1.9		0.066	U	2	94.9		AV

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-649-1 **Client ID** RE03-10-7042S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241713001 **Spike ID:** 1201982719

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75-125	501		5	U	500	100		P
Barium	ug/L	75-125	513		3.19	J	500	102		P
Boron	ug/L	75-125	486		15	U	500	96.4		P
Calcium	ug/L	75-125	5190		155	J	5000	101		P
Chromium	ug/L	75-125	499		4.75	J	500	98.8		P
Cobalt	ug/L	75-125	491		1	U	500	98.2		P
Copper	ug/L	75-125	506		3	U	500	101		P
Iron	ug/L	75-125	5470		316		5000	103		P
Magnesium	ug/L	75-125	5260		145	J	5000	102		P
Nickel	ug/L	75-125	500		1.98	J	500	99.5		P
Potassium	ug/L	75-125	5280		63.6	J	5000	104		P
Selenium	ug/L	75-125	516		5.71	J	500	102		P
Silicon	ug/L	75-125	5840		735		5000	102		P
Silver	ug/L	75-125	507		1	U	500	101		P
Sodium	ug/L	75-125	5170		286	J	5000	97.8		P
Titanium	ug/L	75-125	530		8.31		500	104		P
Vanadium	ug/L	75-125	506		1	U	500	101		P
Zinc	ug/L	75-125	494		5.6	J	500	97.7		P
Aluminum	ug/L	75-125	5490		344		5000	103		P

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–649–1 **Client ID** RE03–10–7042SD

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241713001 **Spike ID:** 1201982720

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Silver	ug/L	75–125	513		1	U	500	102		P
Sodium	ug/L	75–125	5060		286	J	5000	95.4		P
Titanium	ug/L	75–125	533		8.31		500	105		P
Vanadium	ug/L	75–125	510		1	U	500	102		P
Zinc	ug/L	75–125	500		5.6	J	500	98.8		P
Aluminum	ug/L	75–125	5520		344		5000	104		P
Arsenic	ug/L	75–125	504		5	U	500	101		P
Barium	ug/L	75–125	518		3.19	J	500	103		P
Boron	ug/L	75–125	494		15	U	500	98		P
Calcium	ug/L	75–125	5210		155	J	5000	101		P
Chromium	ug/L	75–125	502		4.75	J	500	99.4		P
Cobalt	ug/L	75–125	494		1	U	500	98.8		P
Copper	ug/L	75–125	509		3	U	500	102		P
Iron	ug/L	75–125	5380		316		5000	101		P
Magnesium	ug/L	75–125	5330		145	J	5000	104		P
Nickel	ug/L	75–125	501		1.98	J	500	99.8		P
Potassium	ug/L	75–125	5290		63.6	J	5000	104		P
Selenium	ug/L	75–125	518		5.71	J	500	103		P
Silicon	ug/L	75–125	5860		735		5000	103		P

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-649-1 **Client ID** RE03-10-7042S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241713001 **Spike ID:** 1201999413

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	203		1	U	200	101		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–7042D

Sample ID: 241713001 **Duplicate ID:** 1201981203 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Lithium	ug/L		2	U	2	U			MS
Manganese	ug/L	+/–5	8.59		8.9		3.59		MS
Thallium	ug/L		0.3	U	0.3	U			MS
Uranium	ug/L		0.05	U	0.05	U			MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–7042D

Sample ID: 241713001 **Duplicate ID:** 1201981602 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–7042D

Sample ID: 241713001 **Duplicate ID:** 1201982717 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/–200	344		360		4.68		P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L	+/–5	3.19	J	3.03	J	5.26		P
Boron	ug/L		15	U	15	U			P
Calcium	ug/L	+/–200	155	J	157	J	1.42		P
Chromium	ug/L	+/–5	4.75	J	4.09	J	15		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L	+/–100	316		287		9.58		P
Magnesium	ug/L	+/–300	145	J	93.5	J	43.5		P
Nickel	ug/L	+/–5	1.98	J	1.82	J	8.45		P
Potassium	ug/L	+/–150	63.6	J	75.7	J	17.4		P
Selenium	ug/L		5.71	J	5	U	200		P
Silicon	ug/L	+/–20%	735		703		4.56		P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–300	286	J	282	J	1.56		P
Titanium	ug/L	+/–5	8.31		8.19		1.46		P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L	+/–10	5.6	J	4.12	J	30.4		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-649-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03-10-7042SD

Sample ID: 1201982719 **Duplicate ID:** 1201982720 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/-20	5490		5520		.594		P
Arsenic	ug/L	+/-20	501		504		.617		P
Barium	ug/L	+/-20	513		518		.92		P
Boron	ug/L	+/-20	486		494		1.65		P
Calcium	ug/L	+/-20	5190		5210		.294		P
Chromium	ug/L	+/-20	499		502		.592		P
Cobalt	ug/L	+/-20	491		494		.542		P
Copper	ug/L	+/-20	506		509		.495		P
Iron	ug/L	+/-20	5470		5380		1.57		P
Magnesium	ug/L	+/-20	5260		5330		1.27		P
Nickel	ug/L	+/-20	500		501		.314		P
Potassium	ug/L	+/-20	5280		5290		.108		P
Selenium	ug/L	+/-20	516		518		.425		P
Silicon	ug/L	+/-20	5840		5860		.455		P
Silver	ug/L	+/-20	507		513		1.03		P
Sodium	ug/L	+/-20	5170		5060		2.29		P
Titanium	ug/L	+/-20	530		533		.587		P
Vanadium	ug/L	+/-20	506		510		.841		P
Zinc	ug/L	+/-20	494		500		1.12		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–649–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–7042D

Sample ID: 241713001 **Duplicate ID:** 1201999412 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10-649-1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201981202								
	Beryllium	ug/L	50	55.2		110	80-120	MS
	Cadmium	ug/L	50	53.9		108	80-120	MS
	Lead	ug/L	50	53.1		106	80-120	MS
	Lithium	ug/L	50	51.4		103	80-120	MS
	Manganese	ug/L	50	54		108	80-120	MS
	Thallium	ug/L	50	49.8		99.6	80-120	MS
	Uranium	ug/L	50	54.6		109	80-120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-649-1

Contract: LANL01004

Aqueous LCS Source:GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201981601								
	Mercury	ug/L	2	1.9		95.1	80-120	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-649-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201982721								
	Aluminum	ug/L	5000	5070		101	80-120	P
	Arsenic	ug/L	500	509		102	80-120	P
	Barium	ug/L	500	515		103	80-120	P
	Boron	ug/L	500	492		98.3	80-120	P
	Calcium	ug/L	5000	5060		101	80-120	P
	Chromium	ug/L	500	499		99.9	80-120	P
	Cobalt	ug/L	500	496		99.2	80-120	P
	Copper	ug/L	500	504		101	80-120	P
	Iron	ug/L	5000	5140		103	80-120	P
	Magnesium	ug/L	5000	5240		105	80-120	P
	Nickel	ug/L	500	502		100	80-120	P
	Potassium	ug/L	5000	5190		104	80-120	P
	Selenium	ug/L	500	523		105	80-120	P
	Silicon	ug/L	5000	4980		99.5	80-120	P
	Silver	ug/L	500	512		102	80-120	P
	Sodium	ug/L	5000	5030		101	80-120	P
	Titanium	ug/L	500	523		105	80-120	P
	Vanadium	ug/L	500	508		102	80-120	P
	Zinc	ug/L	500	497		99.5	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-649-1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201999411								
	Antimony	ug/L	50	53.9		108	80-120	MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–649–1 **Client ID** RE03–10–7042L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241713001 **Serial Dilution ID:** 1201981205

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Lithium	2	U	10	U				MS
Manganese	8.59		8.1	J	5.7			MS
Thallium	.3	U	8.7					MS
Uranium	.05	U	.25	U				MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–649–1 **Client ID** RE03–10–7042L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241713001 **Serial Dilution ID:** 1201981607

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-649-1 **Client ID** RE03-10-7042L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241713001 **Serial Dilution ID:** 1201982718

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	344		341	J	.872			P
Arsenic	5	U	25	U				P
Barium	3.19	J	5	U	100			P
Boron	15	U	75	U				P
Calcium	155	J	250	U	100			P
Chromium	4.75	J	5.05	J	6.32			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	316		279	J	11.7			P
Magnesium	145	J	425	U	100			P
Nickel	1.98	J	7.5	U	100			P
Potassium	63.6	J	250	U	100			P
Selenium	5.71	J	25	U	100			P
Silicon	735		705		4.08			P
Silver	1	U	5	U				P
Sodium	286	J	500	U	100			P
Titanium	8.31		8.55	J	2.89			P
Vanadium	1	U	5	U				P
Zinc	5.6	J	16.5	U	100			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-649-1 **Client ID** RE03-10-7042L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241713001 **Serial Dilution ID:** 1201999414

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-649-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	927387						
1201982716	MB for batch 927387	MB	W	04-DEC-09	50mL	50mL	
1201982721	LCS for batch 927387	LCS	W	04-DEC-09	50mL	50mL	
1201982719	RE03-10-7042S	MS	W	04-DEC-09	50mL	50mL	
1201982720	RE03-10-7042SD	MSD	W	04-DEC-09	50mL	50mL	
1201982717	RE03-10-7042D	DUP	W	04-DEC-09	50mL	50mL	
241713001	RE03-10-7042	SAMPLE	W	04-DEC-09	50mL	50mL	
241713002	RE03-10-7043	SAMPLE	W	04-DEC-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-649-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 926629							
1201981201	MB for batch 926629	MB	SU	14-DEC-09	25mL	25mL	
1201981202	LCS for batch 926629	LCS	SU	14-DEC-09	25mL	25mL	
1201981204	RE03-10-7042S	MS	W	14-DEC-09	25mL	25mL	
1201981203	RE03-10-7042D	DUP	W	14-DEC-09	25mL	25mL	
241713001	RE03-10-7042	SAMPLE	W	14-DEC-09	25mL	25mL	
241713002	RE03-10-7043	SAMPLE	W	14-DEC-09	25mL	25mL	
Batch Number 934522							
1201999410	MB for batch 934522	MB	W	18-DEC-09	50mL	50mL	
1201999411	LCS for batch 934522	LCS	W	18-DEC-09	50mL	50mL	
1201999413	RE03-10-7042S	MS	W	18-DEC-09	50mL	50mL	
1201999412	RE03-10-7042D	DUP	W	18-DEC-09	50mL	50mL	
241713001	RE03-10-7042	SAMPLE	W	18-DEC-09	50mL	50mL	
241713002	RE03-10-7043	SAMPLE	W	18-DEC-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-649-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 926819							
1201981600	MB for batch 926819	MB	W	07-DEC-09	20mL	20mL	
1201981601	LCS for batch 926819	LCS	W	07-DEC-09	20mL	20mL	
1201981603	RE03-10-7042S	MS	W	07-DEC-09	20mL	20mL	
1201981602	RE03-10-7042D	DUP	W	07-DEC-09	20mL	20mL	
241713001	RE03-10-7042	SAMPLE	W	07-DEC-09	20mL	20mL	
241713002	RE03-10-7043	SAMPLE	W	07-DEC-09	20mL	20mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 15–DEC–09 **End Date:** 15–DEC–09

Client Sdg: 10–649–1
Method MS
Data File: 091215–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	11:56					X																							
S10	1	11:58					X																							
S100	1	11:59					X																							
ICV01	1	12:01					X																							
ICB01	1	12:03					X																							
CRDL01	1	12:04					X																							
ICSA01	1	12:06					X																							
ICSAB01	1	12:08					X																							
CCV01	1	12:09					X																							
CCB01	1	12:11					X																							
ZZZZZZ	2	12:13																												
ZZZZZZ	40	12:14																												
ZZZZZZ	2	12:16																												
ZZZZZZ	2	12:18																												
ZZZZZZ	2	12:19																												
ZZZZZZ	2	12:21																												
ZZZZZZ	10	12:23																												
ZZZZZZ	2	12:25																												
CCV02	1	12:26					X																							
CCB02	1	12:28					X																							
ZZZZZZ	2	12:30																												
ZZZZZZ	2	12:31																												
ZZZZZZ	2	12:33																												
ZZZZZZ	2	12:35																												
ZZZZZZ	2	12:36																												
ZZZZZZ	2	12:38																												
ZZZZZZ	2	12:40																												
CCV03	1	12:42					X																							
CCB03	1	12:43					X																							
ZZZZZZ	2	12:45																												
ZZZZZZ	2	12:47																												
ZZZZZZ	2	12:48																												
ZZZZZZ	2	12:50																												
ZZZZZZ	2	12:52																												
ZZZZZZ	2	12:53																												
CCV04	1	12:55					X																							
CCB04	1	12:57					X																							
ZZZZZZ	2	12:59																												
ZZZZZZ	2	13:00																												
ZZZZZZ	2	13:02																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	2	13:04																											
ZZZZZZ	2	13:05																											
CCV05	1	13:07					X																						
CCB05	1	13:09					X																						
ZZZZZZ	2	13:12																											
CCV06	1	13:13					X																						
CCB06	1	13:15					X																						
1201981201	1	13:17					X																						
1201981202	1	13:18					X																						
ZZZZZZ	1	13:20																											
241713001	1	13:22					X																						
1201981203	1	13:24					X																						
1201981204	1	13:26					X																						
1201981205	5	13:28					X																						
241713002	1	13:29					X																						
CCV07	1	13:31					X																						
CCB07	1	13:33					X																						

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 20-DEC-09 **End Date:** 20-DEC-09

Client Sdg: 10-649-1
Method MS
Data File: 091219-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:31		X																										
S10	1	08:34		X																										
S100	1	08:36		X																										
ICV01	1	08:38		X																										
ICB01	1	08:40		X																										
CRDL01	1	08:42		X																										
ICSA01	1	08:44		X																										
ICSAB01	1	08:47		X																										
CCV01	1	08:49		X																										
CCB01	1	08:51		X																										
LR01	1	08:53		X																										
CCV02	1	08:55		X																										
CCB02	1	08:57		X																										
1201999410	1	09:01		X																										
1201999411	1	09:03		X																										
241713001	1	09:05		X																										
1201999412	1	09:08		X																										
1201999413	1	09:10		X																										
1201999414	5	09:12		X																										
241713002	1	09:14		X																										
CCV03	1	09:16		X																										
CCB03	1	09:18		X																										

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–649–1
Method P
Data File: 120809–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:28	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S0.1	1	07:35			X	X		X			X	X	X							X	X	X	X	X			X		X	X
S0.5	1	07:41	X		X	X		X		X	X	X	X				X			X	X	X	X	X			X		X	X
SCAL	1	07:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S10	1	07:55	X							X				X			X								X					
ICV01	1	08:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICB01	1	08:08	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
PQL01	1	08:15	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSA01	1	08:22	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSAB01	1	08:28	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR01	1	08:34	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR02	1	08:40	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV01	1	08:47	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB01	1	08:54	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR03	1	09:04	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV02	1	09:11	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB02	1	09:18	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	20	09:25																												
ZZZZZZ	20	09:32																												
ZZZZZZ	20	09:38																												
ZZZZZZ	20	09:45																												
CCV03	1	09:52	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB03	1	09:59	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	10:06																												
ZZZZZZ	2	10:13																												
ZZZZZZ	1	10:20																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:41																												
ZZZZZZ	5	10:48																												
CCV04	1	10:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB04	1	11:02	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:15																												
ZZZZZZ	1	11:23																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:36																												
ZZZZZZ	1	11:43																												
ZZZZZZ	1	11:50																												
CCV05	1	11:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	12:04	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	12:11																												
ZZZZZZ	1	12:18																												
ZZZZZZ	1	12:26																												
ZZZZZZ	1	12:33																												
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:47																												
CCV06	1	12:54	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB06	1	13:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201982716	1	13:08	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201982721	1	13:15	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241713001	1	13:22	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201982717	1	13:28	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201982719	1	13:35	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201982720	1	13:42	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201982718	5	13:49	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241713002	1	13:56	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	5	14:03																												
CCV07	1	14:10	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB07	1	14:17	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–649–1
Method AV
Data File: 100809W4–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:52																	X											
S0.2	1	09:54																	X											
S0.5	1	09:56																	X											
S2.0	1	09:58																	X											
S5.0	1	10:00																	X											
S10.0	1	10:02																	X											
ICV01	1	10:04																	X											
ICB01	1	10:06																	X											
CRDL01	1	10:08																	X											
CCV01	1	10:10																	X											
CCB01	1	10:12																	X											
ZZZZZZ	1	10:14																												
ZZZZZZ	1	10:15																												
ZZZZZZ	1	10:17																												
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	5	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
CCV02	1	10:33																	X											
CCB02	1	10:35																	X											
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												
ZZZZZZ	1	10:40																												
ZZZZZZ	1	10:42																												
ZZZZZZ	1	10:44																												
ZZZZZZ	5	10:46																												
ZZZZZZ	1	10:48																												
ZZZZZZ	1	10:50																												
ZZZZZZ	1	10:52																												
ZZZZZZ	1	10:54																												
CCV03	1	10:56																	X											
CCB03	1	10:58																	X											
ZZZZZZ	1	11:00																												
ZZZZZZ	5	11:02																												
ZZZZZZ	1	11:03																												
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	11:09																										
ZZZZZZ	1	11:11																										
ZZZZZZ	1	11:13																										
ZZZZZZ	5	11:15																										
ZZZZZZ	1	11:17																										
CCV04	1	11:19															X											
CCB04	1	11:21															X											
ZZZZZZ	1	11:23																										
ZZZZZZ	1	11:25																										
ZZZZZZ	1	11:27																										
ZZZZZZ	1	11:29																										
ZZZZZZ	5	11:30																										
ZZZZZZ	1	11:32																										
ZZZZZZ	1	11:34																										
ZZZZZZ	1	11:36																										
ZZZZZZ	1	11:38																										
ZZZZZZ	1	11:40																										
CCV05	1	11:42															X											
CCB05	1	11:44															X											
ZZZZZZ	1	11:46																										
ZZZZZZ	5	11:48																										
ZZZZZZ	1	11:50																										
ZZZZZZ	1	11:52																										
ZZZZZZ	1	11:54																										
ZZZZZZ	1	11:56																										
ZZZZZZ	1	11:57																										
ZZZZZZ	1	11:59																										
ZZZZZZ	1	12:01																										
ZZZZZZ	1	12:03																										
CCV06	1	12:05															X											
CCB06	1	12:07															X											
ZZZZZZ	1	12:09																										
ZZZZZZ	1	12:11																										
ZZZZZZ	1	12:13																										
ZZZZZZ	1	12:15																										
ZZZZZZ	1	12:17																										
ZZZZZZ	1	12:19																										
ZZZZZZ	5	12:21																										
ZZZZZZ	1	12:23																										
ZZZZZZ	1	12:25																										

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	12:27																												
CCV07	1	12:28																	X											
CCB07	1	12:30																	X											
ZZZZZZ	1	12:32																												
ZZZZZZ	1	12:34																												
ZZZZZZ	1	12:36																												
ZZZZZZ	1	12:38																												
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:42																												
ZZZZZZ	1	12:44																												
ZZZZZZ	1	12:46																												
ZZZZZZ	1	12:48																												
ZZZZZZ	1	12:50																												
CCV08	1	12:52																	X											
CCB08	1	12:54																	X											
ZZZZZZ	1	12:56																												
ZZZZZZ	5	12:57																												
ZZZZZZ	1	12:59																												
ZZZZZZ	1	13:01																												
ZZZZZZ	1	13:03																												
ZZZZZZ	1	13:05																												
ZZZZZZ	1	13:07																												
ZZZZZZ	1	13:09																												
ZZZZZZ	1	13:11																												
ZZZZZZ	1	13:13																												
CCV09	1	13:15																	X											
CCB09	1	13:17																	X											
ZZZZZZ	1	13:19																												
ZZZZZZ	1	13:21																												
ZZZZZZ	1	13:23																												
ZZZZZZ	1	13:25																												
ZZZZZZ	1	13:27																												
ZZZZZZ	1	13:29																												
ZZZZZZ	1	13:31																												
ZZZZZZ	1	13:32																												
ZZZZZZ	1	13:34																												
ZZZZZZ	1	13:36																												
CCV10	1	13:38																	X											
CCB10	1	13:40																	X											
ZZZZZZ	1	13:42																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	5	13:44																											
ZZZZZZ	1	13:46																											
ZZZZZZ	1	13:48																											
ZZZZZZ	1	13:50																											
1201981600	1	13:52																X											
1201981601	1	13:54																X											
241713001	1	13:56																X											
1201981602	1	13:58																X											
1201981603	1	14:00																X											
CCV11	1	14:02																X											
CCB11	1	14:04																X											
1201981607	5	14:06																X											
241713002	1	14:08																X											
ZZZZZZ	1	14:09																											
ZZZZZZ	1	14:11																											
ZZZZZZ	1	14:13																											
ZZZZZZ	1	14:15																											
ZZZZZZ	1	14:17																											
ZZZZZZ	1	14:19																											
ZZZZZZ	1	14:21																											
ZZZZZZ	1	14:23																											
CCV12	1	14:25																X											
CCB12	1	14:27																X											

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 14-DEC-09 **End Date:** 15-DEC-09

Client Sdg: 10-649-1
Method MS
Data File: 091214-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	23:48							X						X	X		X								X		X		
S10	1	23:54							X						X	X		X								X		X		
S100	1	00:00							X						X	X		X								X		X		
ICV01	1	00:05							X						X	X		X								X		X		
ICB01	1	00:11							X						X	X		X								X		X		
CRDL01	1	00:17							X						X	X		X								X		X		
ICSA01	1	00:23							X						X	X		X								X		X		
ICSAB01	1	00:28							X						X	X		X								X		X		
CCV01	1	00:34							X						X	X		X								X		X		
CCB01	1	00:40							X						X	X		X								X		X		
LR01	1	00:45							X						X	X		X								X		X		
CCV02	1	00:51							X						X	X		X								X		X		
CCB02	1	00:57							X						X	X		X								X		X		
ZZZZZZ	1	01:03																												
ZZZZZZ	1	01:09																												
ZZZZZZ	1	01:14																												
ZZZZZZ	1	01:20																												
ZZZZZZ	1	01:26																												
ZZZZZZ	1	01:32																												
ZZZZZZ	1	01:38																												
ZZZZZZ	1	01:43																												
ZZZZZZ	5	01:49																												
ZZZZZZ	1	01:55																												
CCV03	1	02:01							X						X	X		X								X		X		
CCB03	1	02:06							X						X	X		X								X		X		
1201981201	1	02:12							X						X	X		X								X		X		
1201981202	1	02:18							X						X	X		X								X		X		
ZZZZZZ	1	02:24																												
241713001	1	02:30							X						X	X		X								X		X		
1201981203	1	02:35							X						X	X		X								X		X		
1201981204	1	02:41							X						X	X		X								X		X		
1201981205	5	02:47							X						X	X		X								X		X		
241713002	1	02:53							X						X	X		X								X		X		
CCV04	1	02:59							X						X	X		X								X		X		
CCB04	1	03:04							X						X	X		X								X		X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-649-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-649-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-649-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	15.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silicon	251.611	25.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-649-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-649-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL | GEL Job No: 10-649-1

Contract: LANL01004

Instrument: OPTIMA3 | Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Linear Ranges

SDG NO. 10-649-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-649-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-649-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

Raw Data

12/8/2009 07:27:56 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 2

Analysis Begun

Start Time: 12/8/2009 07:28:37 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/7/2009 08:20:00**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/8/2009 07:28:38**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5745.6	5745.6	98.3	%	07:30:31
1	Y RADIAL	6211.7	6211.7	98.79	%	07:30:31
1	Al 396.153Radial†	-19.0	-19.3	[0.00]	ug/L	07:30:31
1	Ca 317.933Radial†	15.5	15.8	[0.00]	ug/L	07:30:51
1	Fe 238.204 Radial†	5.3	5.4	[0.00]	ug/L	07:30:51
1	K 766.490 Radial†	2457.5	2499.5	[0.00]	ug/L	07:30:31
1	Mg 279.077 IEC†	0.5	0.5	[0.00]	ug/L	07:30:51
1	Na 589.592 Radial†	-1085.4	-1103.9	[0.00]	ug/L	07:30:31
1	Sr 421.552†	-7.0	-7.1	[0.00]	ug/L	07:30:31
1	Sc 361.383	900693.7	900693.7	99.937	%	07:31:48
1	Y 371.029	750994.5	750994.5	99.988	%	07:31:48
1	Ag 328.068†	258.4	258.6	[0.00]	ug/L	07:31:48
1	As 188.979†	-20.1	-20.1	[0.00]	ug/L	07:32:08
1	B 249.677†	-538.8	-539.2	[0.00]	ug/L	07:32:08
1	Ba 233.527†	-14.2	-14.2	[0.00]	ug/L	07:32:08
1	Be 313.107†	-5056.8	-5060.0	[0.00]	ug/L	07:31:48
1	Cd 226.502†	-193.9	-194.0	[0.00]	ug/L	07:32:08
1	Co 228.616†	-62.5	-62.5	[0.00]	ug/L	07:32:08
1	Cr 267.716†	74.9	74.9	[0.00]	ug/L	07:32:08
1	Cu 324.752†	6750.3	6754.6	[0.00]	ug/L	07:31:48
1	Mn 257.610†	418.2	418.5	[0.00]	ug/L	07:32:08
1	Mo 202.031†	24.3	24.3	[0.00]	ug/L	07:32:08
1	Ni 231.604†	82.5	82.6	[0.00]	ug/L	07:32:08
1	P 214.914†	227.9	228.1	[0.00]	ug/L	07:32:08
1	Pb 220.353†	-62.4	-62.5	[0.00]	ug/L	07:32:08
1	S 181.975 Axial†	41.2	41.3	[0.00]	ug/L	07:32:08
1	Sb 206.836†	33.6	33.6	[0.00]	ug/L	07:32:08
1	Se 196.026†	-24.2	-24.2	[0.00]	ug/L	07:32:08
1	Si 251.611†	437.2	437.5	[0.00]	ug/L	07:32:08
1	Sn 189.927†	-2.2	-2.2	[0.00]	ug/L	07:32:08
1	Ti 334.940†	-1030.7	-1031.3	[0.00]	ug/L	07:31:48
1	Tl 190.801†	-27.6	-27.6	[0.00]	ug/L	07:32:08
1	U 409.014†	-2346.9	-2348.4	[0.00]	ug/L	07:31:48
1	V 292.402†	-1372.8	-1373.7	[0.00]	ug/L	07:31:48
1	Zn 213.857†	625.8	626.2	[0.00]	ug/L	07:32:08
1	SiO2†	455.0	455.3	[0.00]	ug/L	07:33:04
2	Sc Radial	5922.7	5922.7	101	%	07:30:56
2	Y RADIAL	6350.2	6350.2	101.0	%	07:30:56
2	Al 396.153Radial†	-27.2	-26.9	[0.00]	ug/L	07:30:56
2	Ca 317.933Radial†	15.9	15.6	[0.00]	ug/L	07:31:16
2	Fe 238.204 Radial†	8.7	8.6	[0.00]	ug/L	07:31:16
2	K 766.490 Radial†	2256.7	2226.7	[0.00]	ug/L	07:30:56
2	Mg 279.077 IEC†	1.4	1.4	[0.00]	ug/L	07:31:16
2	Na 589.592 Radial†	-1070.6	-1056.4	[0.00]	ug/L	07:30:56
2	Sr 421.552†	-29.3	-28.9	[0.00]	ug/L	07:30:56
2	Sc 361.383	897080.5	897080.5	99.536	%	07:32:13
2	Y 371.029	746552.6	746552.6	99.397	%	07:32:13
2	Ag 328.068†	238.8	240.0	[0.00]	ug/L	07:32:13
2	As 188.979†	-23.4	-23.5	[0.00]	ug/L	07:32:33
2	B 249.677†	-533.8	-536.2	[0.00]	ug/L	07:32:33
2	Ba 233.527†	0.1	0.1	[0.00]	ug/L	07:32:33
2	Be 313.107†	-5169.1	-5193.2	[0.00]	ug/L	07:32:13
2	Cd 226.502†	-185.9	-186.8	[0.00]	ug/L	07:32:33
2	Co 228.616†	-67.4	-67.7	[0.00]	ug/L	07:32:33
2	Cr 267.716†	72.6	72.9	[0.00]	ug/L	07:32:33
2	Cu 324.752†	6796.2	6827.9	[0.00]	ug/L	07:32:13
2	Mn 257.610†	427.5	429.5	[0.00]	ug/L	07:32:33
2	Mo 202.031†	14.6	14.7	[0.00]	ug/L	07:32:33
2	Ni 231.604†	86.6	87.0	[0.00]	ug/L	07:32:33
2	P 214.914†	222.0	223.0	[0.00]	ug/L	07:32:33
2	Pb 220.353†	-69.2	-69.5	[0.00]	ug/L	07:32:33
2	S 181.975 Axial†	41.0	41.2	[0.00]	ug/L	07:32:33
2	Sb 206.836†	36.1	36.3	[0.00]	ug/L	07:32:33
2	Se 196.026†	-32.4	-32.6	[0.00]	ug/L	07:32:33
2	Si 251.611†	455.6	457.8	[0.00]	ug/L	07:32:33
2	Sn 189.927†	9.9	10.0	[0.00]	ug/L	07:32:33
2	Ti 334.940†	-1182.5	-1188.0	[0.00]	ug/L	07:32:13
2	Tl 190.801†	-32.3	-32.4	[0.00]	ug/L	07:32:33
2	U 409.014†	-2442.7	-2454.1	[0.00]	ug/L	07:32:13
2	V 292.402†	-1362.6	-1369.0	[0.00]	ug/L	07:32:13

2	Zn 213.857†	620.7	623.6	[0.00]	ug/L	07:32:33
2	SiO2†	500.9	503.3	[0.00]	ug/L	07:33:09
3	Sc Radial	5863.5	5863.5	100	%	07:31:21
3	Y RADIAL	6301.5	6301.5	100.2	%	07:31:21
3	Al 396.153Radial†	-15.1	-15.0	[0.00]	ug/L	07:31:21
3	Ca 317.933Radial†	15.4	15.3	[0.00]	ug/L	07:31:41
3	Fe 238.204 Radial†	6.4	6.4	[0.00]	ug/L	07:31:41
3	K 766.490 Radial†	2336.7	2328.9	[0.00]	ug/L	07:31:21
3	Mg 279.077 IEC†	1.6	1.6	[0.00]	ug/L	07:31:41
3	Na 589.592 Radial†	-1107.2	-1103.5	[0.00]	ug/L	07:31:21
3	Sr 421.552†	-46.2	-46.0	[0.00]	ug/L	07:31:21
3	Sc 361.383	906018.4	906018.4	100.53	%	07:32:38
3	Y 371.029	755705.3	755705.3	100.62	%	07:32:38
3	Ag 328.068†	381.7	379.7	[0.00]	ug/L	07:32:38
3	As 188.979†	-29.1	-29.0	[0.00]	ug/L	07:32:58
3	B 249.677†	-519.4	-516.6	[0.00]	ug/L	07:32:58
3	Ba 233.527†	-11.3	-11.2	[0.00]	ug/L	07:32:58
3	Be 313.107†	-5112.7	-5085.8	[0.00]	ug/L	07:32:38
3	Cd 226.502†	-205.6	-204.5	[0.00]	ug/L	07:32:58
3	Co 228.616†	-66.3	-66.0	[0.00]	ug/L	07:32:58
3	Cr 267.716†	88.6	88.1	[0.00]	ug/L	07:32:58
3	Cu 324.752†	6722.9	6687.6	[0.00]	ug/L	07:32:38
3	Mn 257.610†	421.2	419.0	[0.00]	ug/L	07:32:58
3	Mo 202.031†	16.1	16.0	[0.00]	ug/L	07:32:58
3	Ni 231.604†	90.6	90.1	[0.00]	ug/L	07:32:58
3	P 214.914†	220.6	219.4	[0.00]	ug/L	07:32:58
3	Pb 220.353†	-73.8	-73.4	[0.00]	ug/L	07:32:58
3	S 181.975 Axial†	42.5	42.2	[0.00]	ug/L	07:32:58
3	Sb 206.836†	33.0	32.8	[0.00]	ug/L	07:32:58
3	Se 196.026†	-29.8	-29.7	[0.00]	ug/L	07:32:58
3	Si 251.611†	456.1	453.7	[0.00]	ug/L	07:32:58
3	Sn 189.927†	7.3	7.2	[0.00]	ug/L	07:32:58
3	Ti 334.940†	-1131.4	-1125.5	[0.00]	ug/L	07:32:38
3	Tl 190.801†	-37.6	-37.4	[0.00]	ug/L	07:32:58
3	U 409.014†	-2415.7	-2403.0	[0.00]	ug/L	07:32:38
3	V 292.402†	-1339.4	-1332.4	[0.00]	ug/L	07:32:38
3	Zn 213.857†	618.9	615.7	[0.00]	ug/L	07:32:58
3	SiO2†	446.1	443.8	[0.00]	ug/L	07:33:14

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	901264.2	4496.20	0.50%	100.00	%
Sc Radial	5843.9	90.14	1.54%	100	%
Y 371.029	751084.2	4577.00	0.61%	100.00	%
Y RADIAL	6287.8	70.25	1.12%	100.0	%
Ag 328.068†	292.7	75.86	25.92%	[0.00]	ug/L
Al 396.153Radial†	-20.4	5.98	29.32%	[0.00]	ug/L
As 188.979†	-24.2	4.49	18.59%	[0.00]	ug/L
B 249.677†	-530.7	12.25	2.31%	[0.00]	ug/L
Ba 233.527†	-8.5	7.54	89.18%	[0.00]	ug/L
Be 313.107†	-5113.0	70.64	1.38%	[0.00]	ug/L
Ca 317.933Radial†	15.6	0.26	1.66%	[0.00]	ug/L
Cd 226.502†	-195.1	8.91	4.57%	[0.00]	ug/L
Co 228.616†	-65.4	2.64	4.04%	[0.00]	ug/L
Cr 267.716†	78.7	8.27	10.52%	[0.00]	ug/L
Cu 324.752†	6756.7	70.20	1.04%	[0.00]	ug/L
Fe 238.204 Radial†	6.8	1.66	24.44%	[0.00]	ug/L
K 766.490 Radial†	2351.7	137.81	5.86%	[0.00]	ug/L
Mg 279.077 IEC†	1.2	0.61	52.53%	[0.00]	ug/L
Mn 257.610†	422.3	6.23	1.47%	[0.00]	ug/L
Mo 202.031†	18.3	5.20	28.34%	[0.00]	ug/L
Na 589.592 Radial†	-1087.9	27.36	2.52%	[0.00]	ug/L
Ni 231.604†	86.6	3.79	4.38%	[0.00]	ug/L
P 214.914†	223.5	4.34	1.94%	[0.00]	ug/L
Pb 220.353†	-68.5	5.55	8.11%	[0.00]	ug/L
S 181.975 Axial†	41.6	0.57	1.37%	[0.00]	ug/L
Sb 206.836†	34.2	1.82	5.32%	[0.00]	ug/L
Se 196.026†	-28.8	4.23	14.66%	[0.00]	ug/L
Si 251.611†	449.7	10.73	2.39%	[0.00]	ug/L

Sn 189.927†	5.0	6.41	128.46%	[0.00]	ug/L
Sr 421.552†	-27.4	19.51	71.35%	[0.00]	ug/L
Ti 334.940†	-1114.9	78.85	7.07%	[0.00]	ug/L
Tl 190.801†	-32.5	4.90	15.07%	[0.00]	ug/L
U 409.014†	-2401.8	52.87	2.20%	[0.00]	ug/L
V 292.402†	-1358.4	22.59	1.66%	[0.00]	ug/L
Zn 213.857†	621.8	5.49	0.88%	[0.00]	ug/L
SiO2†	467.5	31.54	6.75%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/8/2009 07:35:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5765.8	5765.8	98.7	%	07:37:21
1	Y RADIAL	6189.1	6189.1	98.43	%	07:37:21
1	K 766.490 Radial†	8010.4	5767.1	[1000]	ug/L	07:37:16
1	Sr 421.552†	15682.7	15922.4	[100]	ug/L	07:37:21
1	Sc 361.383	914536.7	914536.7	101.47	%	07:37:48
1	Y 371.029	754661.2	754661.2	100.48	%	07:37:48
1	Ag 328.068†	21843.7	21234.0	[100]	ug/L	07:37:53
1	As 188.979†	227.9	248.8	[100]	ug/L	07:38:13
1	B 249.677†	3929.5	4403.2	[100]	ug/L	07:37:53
1	Ba 233.527†	13325.8	13140.9	[100]	ug/L	07:37:53
1	Be 313.107†	260898.9	262225.5	[100]	ug/L	07:37:48
1	Cd 226.502†	9200.0	9261.6	[100]	ug/L	07:37:53
1	Co 228.616†	5047.2	5039.4	[100]	ug/L	07:38:13
1	Cr 267.716†	9428.4	9212.9	[100]	ug/L	07:37:53
1	Cu 324.752†	40509.5	33164.9	[100]	ug/L	07:37:53
1	Mn 257.610†	93021.3	91249.0	[100]	ug/L	07:37:53
1	Mo 202.031†	1542.1	1501.4	[100]	ug/L	07:38:13
1	Ni 231.604†	4280.0	4131.4	[100]	ug/L	07:38:13
1	P 214.914†	1053.7	814.9	[500]	ug/L	07:38:13
1	Pb 220.353†	819.7	876.2	[100]	ug/L	07:38:13
1	S 181.975 Axial†	175.1	130.9	[200]	ug/L	07:38:13
1	Sb 206.836†	334.6	295.5	[100]	ug/L	07:38:13
1	Se 196.026†	142.3	169.1	[100]	ug/L	07:38:13
1	Si 251.611†	16559.7	15869.7	[500]	ug/L	07:37:53
1	Sn 189.927†	576.8	563.4	[100]	ug/L	07:38:13
1	Ti 334.940†	59872.4	60118.4	[100]	ug/L	07:37:53
1	Tl 190.801†	319.5	347.4	[100]	ug/L	07:38:13
1	U 409.014†	1213.1	3597.3	[100]	ug/L	07:37:48
1	V 292.402†	13311.9	14477.1	[100]	ug/L	07:37:53
1	Zn 213.857†	11943.1	11147.9	[100]	ug/L	07:37:53
1	SiO2†	16722.0	16011.9	[1069.5]	ug/L	07:39:19
2	Sc Radial	5769.0	5769.0	98.7	%	07:37:31
2	Y RADIAL	6129.7	6129.7	97.49	%	07:37:31
2	K 766.490 Radial†	7990.0	5742.1	[1000]	ug/L	07:37:26
2	Sr 421.552†	15612.4	15842.5	[100]	ug/L	07:37:31
2	Sc 361.383	915362.8	915362.8	101.56	%	07:38:18
2	Y 371.029	757053.4	757053.4	100.79	%	07:38:18
2	Ag 328.068†	22010.2	21378.4	[100]	ug/L	07:38:23
2	As 188.979†	219.9	240.7	[100]	ug/L	07:38:43
2	B 249.677†	3929.3	4399.5	[100]	ug/L	07:38:23
2	Ba 233.527†	13353.9	13156.7	[100]	ug/L	07:38:23
2	Be 313.107†	261281.3	262369.9	[100]	ug/L	07:38:18
2	Cd 226.502†	9245.9	9298.6	[100]	ug/L	07:38:23
2	Co 228.616†	5066.0	5053.3	[100]	ug/L	07:38:43
2	Cr 267.716†	9513.3	9288.1	[100]	ug/L	07:38:23
2	Cu 324.752†	40726.1	33342.1	[100]	ug/L	07:38:23
2	Mn 257.610†	93398.3	91537.5	[100]	ug/L	07:38:23
2	Mo 202.031†	1547.3	1505.1	[100]	ug/L	07:38:43
2	Ni 231.604†	4269.5	4117.2	[100]	ug/L	07:38:43
2	P 214.914†	1060.5	820.7	[500]	ug/L	07:38:43
2	Pb 220.353†	815.7	871.6	[100]	ug/L	07:38:43
2	S 181.975 Axial†	174.2	129.9	[200]	ug/L	07:38:43
2	Sb 206.836†	333.9	294.5	[100]	ug/L	07:38:43
2	Se 196.026†	147.7	174.2	[100]	ug/L	07:38:43
2	Si 251.611†	16619.4	15913.7	[500]	ug/L	07:38:23
2	Sn 189.927†	602.2	587.9	[100]	ug/L	07:38:43
2	Ti 334.940†	60122.7	60311.6	[100]	ug/L	07:38:23
2	Tl 190.801†	325.1	352.6	[100]	ug/L	07:38:43
2	U 409.014†	1005.2	3391.5	[100]	ug/L	07:38:18

2	V 292.402†	13412.6	14564.3	[100]	ug/L	07:38:23
2	Zn 213.857†	11968.2	11162.1	[100]	ug/L	07:38:23
2	SiO2†	16537.0	15814.9	[1069.5]	ug/L	07:39:24
3	Sc Radial	5875.5	5875.5	101	%	07:37:41
3	Y RADIAL	6269.8	6269.8	99.71	%	07:37:41
3	K 766.490 Radial†	7932.9	5538.6	[1000]	ug/L	07:37:36
3	Sr 421.552†	15938.0	15879.7	[100]	ug/L	07:37:41
3	Sc 361.383	919222.5	919222.5	101.99	%	07:38:49
3	Y 371.029	759136.1	759136.1	101.07	%	07:38:49
3	Ag 328.068†	22234.4	21507.3	[100]	ug/L	07:38:54
3	As 188.979†	225.1	244.9	[100]	ug/L	07:39:14
3	B 249.677†	4040.0	4491.7	[100]	ug/L	07:38:54
3	Ba 233.527†	13560.3	13303.8	[100]	ug/L	07:38:54
3	Be 313.107†	261887.7	261884.4	[100]	ug/L	07:38:49
3	Cd 226.502†	9334.1	9346.9	[100]	ug/L	07:38:54
3	Co 228.616†	5039.9	5006.8	[100]	ug/L	07:39:14
3	Cr 267.716†	9582.2	9316.3	[100]	ug/L	07:38:54
3	Cu 324.752†	40945.3	33388.7	[100]	ug/L	07:38:54
3	Mn 257.610†	94457.9	92190.2	[100]	ug/L	07:38:54
3	Mo 202.031†	1552.8	1504.1	[100]	ug/L	07:39:14
3	Ni 231.604†	4263.2	4093.4	[100]	ug/L	07:39:14
3	P 214.914†	1052.4	808.3	[500]	ug/L	07:39:14
3	Pb 220.353†	818.7	871.2	[100]	ug/L	07:39:14
3	S 181.975 Axial†	175.0	130.0	[200]	ug/L	07:39:14
3	Sb 206.836†	329.8	289.1	[100]	ug/L	07:39:14
3	Se 196.026†	150.6	176.5	[100]	ug/L	07:39:14
3	Si 251.611†	16850.5	16071.6	[500]	ug/L	07:38:54
3	Sn 189.927†	596.2	579.5	[100]	ug/L	07:39:14
3	Ti 334.940†	60935.8	60860.2	[100]	ug/L	07:38:54
3	Tl 190.801†	315.6	342.0	[100]	ug/L	07:39:14
3	U 409.014†	972.6	3355.4	[100]	ug/L	07:38:49
3	V 292.402†	13503.5	14598.0	[100]	ug/L	07:38:54
3	Zn 213.857†	12098.0	11239.8	[100]	ug/L	07:38:54
3	SiO2†	16521.2	15731.0	[1069.5]	ug/L	07:39:29

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	916374.0	2501.23	0.27%	101.68	%
Sc Radial	5803.4	62.41	1.08%	99.3	%
Y 371.029	756950.2	2239.21	0.30%	100.78	%
Y RADIAL	6196.2	70.31	1.13%	98.54	%
Ag 328.068†	21373.3	136.74	0.64%	[100]	ug/L
As 188.979†	244.8	4.02	1.64%	[100]	ug/L
B 249.677†	4431.5	52.22	1.18%	[100]	ug/L
Ba 233.527†	13200.4	89.86	0.68%	[100]	ug/L
Be 313.107†	262159.9	249.34	0.10%	[100]	ug/L
Cd 226.502†	9302.4	42.77	0.46%	[100]	ug/L
Co 228.616†	5033.2	23.87	0.47%	[100]	ug/L
Cr 267.716†	9272.4	53.46	0.58%	[100]	ug/L
Cu 324.752†	33298.6	118.07	0.35%	[100]	ug/L
K 766.490 Radial†	5682.6	125.36	2.21%	[1000]	ug/L
Mn 257.610†	91658.9	482.19	0.53%	[100]	ug/L
Mo 202.031†	1503.6	1.93	0.13%	[100]	ug/L
Ni 231.604†	4114.0	19.19	0.47%	[100]	ug/L
P 214.914†	814.6	6.21	0.76%	[500]	ug/L
Pb 220.353†	873.0	2.80	0.32%	[100]	ug/L
S 181.975 Axial†	130.3	0.57	0.43%	[200]	ug/L
Sb 206.836†	293.0	3.44	1.17%	[100]	ug/L
Se 196.026†	173.3	3.78	2.18%	[100]	ug/L
Si 251.611†	15951.7	106.20	0.67%	[500]	ug/L
Sn 189.927†	576.9	12.46	2.16%	[100]	ug/L
Sr 421.552†	15881.5	39.96	0.25%	[100]	ug/L
Ti 334.940†	60430.1	384.83	0.64%	[100]	ug/L
Tl 190.801†	347.3	5.29	1.52%	[100]	ug/L
U 409.014†	3448.1	130.52	3.79%	[100]	ug/L
V 292.402†	14546.5	62.44	0.43%	[100]	ug/L
Zn 213.857†	11183.3	49.46	0.44%	[100]	ug/L
SiO2†	15852.6	144.20	0.91%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/8/2009 07:41:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5755.3	5755.3	98.5	%	07:43:33
1	Y RADIAL	6135.8	6135.8	97.58	%	07:43:33
1	Al 396.153Radial†	6940.6	7067.9	[5000]	ug/L	07:43:33
1	Ca 317.933Radial†	3383.4	3419.9	[5000]	ug/L	07:43:53
1	K 766.490 Radial†	30250.2	28364.4	[5000]	ug/L	07:43:33
1	Mg 279.077 IEC†	149.6	150.7	[5000]	ug/L	07:43:53
1	Sr 421.552†	79566.2	80818.9	[500]	ug/L	07:43:33
1	Sc 361.383	902007.9	902007.9	100.08	%	07:44:50
1	Y 371.029	736818.6	736818.6	98.101	%	07:44:50
1	Ag 328.068†	110404.5	110020.7	[500]	ug/L	07:44:55
1	As 188.979†	1227.6	1250.8	[500]	ug/L	07:45:15
1	B 249.677†	22624.2	23136.2	[500]	ug/L	07:44:55
1	Ba 233.527†	66321.3	66275.0	[500]	ug/L	07:44:55
1	Be 313.107†	1344073.3	1348078.1	[500]	ug/L	07:44:50
1	Cd 226.502†	46481.0	46637.8	[500]	ug/L	07:44:55
1	Co 228.616†	25957.4	26001.4	[500]	ug/L	07:44:55
1	Cr 267.716†	46880.7	46763.4	[500]	ug/L	07:44:55
1	Cu 324.752†	176748.5	169846.1	[500]	ug/L	07:44:55
1	Mn 257.610†	463225.0	462420.8	[500]	ug/L	07:44:50
1	Mo 202.031†	7863.2	7838.4	[500]	ug/L	07:45:15
1	Ni 231.604†	21487.8	21383.5	[500]	ug/L	07:44:55
1	P 214.914†	4473.1	4245.9	[2500]	ug/L	07:45:15
1	Pb 220.353†	4294.6	4359.5	[500]	ug/L	07:45:15
1	S 181.975 Axial†	761.5	719.3	[1000]	ug/L	07:45:15
1	Sb 206.836†	1615.7	1580.1	[500]	ug/L	07:45:15
1	Se 196.026†	818.6	846.7	[500]	ug/L	07:45:15
1	Si 251.611†	82564.9	82047.1	[2500]	ug/L	07:44:55
1	Sn 189.927†	3040.6	3033.1	[500]	ug/L	07:45:15
1	Ti 334.940†	310662.0	311520.8	[500]	ug/L	07:44:55
1	Tl 190.801†	1746.7	1777.8	[500]	ug/L	07:45:15
1	U 409.014†	15499.0	17888.0	[500]	ug/L	07:44:55
1	V 292.402†	72745.3	74043.7	[500]	ug/L	07:44:55
1	Zn 213.857†	56861.0	56192.3	[500]	ug/L	07:44:55
1	SiO2†	83677.9	83141.4	[5347.5]	ug/L	07:46:23
2	Sc Radial	5753.2	5753.2	98.4	%	07:43:58
2	Y RADIAL	6098.6	6098.6	96.99	%	07:43:58
2	Al 396.153Radial†	7008.5	7139.3	[5000]	ug/L	07:43:58
2	Ca 317.933Radial†	3357.1	3394.4	[5000]	ug/L	07:44:18
2	K 766.490 Radial†	30376.3	28503.4	[5000]	ug/L	07:43:58
2	Mg 279.077 IEC†	145.0	146.2	[5000]	ug/L	07:44:18
2	Sr 421.552†	80143.3	81433.9	[500]	ug/L	07:43:58
2	Sc 361.383	897050.9	897050.9	99.533	%	07:45:21
2	Y 371.029	733930.5	733930.5	97.716	%	07:45:21
2	Ag 328.068†	111157.6	111387.0	[500]	ug/L	07:45:26
2	As 188.979†	1224.7	1254.7	[500]	ug/L	07:45:46
2	B 249.677†	22833.2	23471.2	[500]	ug/L	07:45:26
2	Ba 233.527†	66766.7	67088.7	[500]	ug/L	07:45:26
2	Be 313.107†	1337696.5	1349092.5	[500]	ug/L	07:45:21
2	Cd 226.502†	46562.9	46976.7	[500]	ug/L	07:45:26
2	Co 228.616†	26072.6	26260.5	[500]	ug/L	07:45:26
2	Cr 267.716†	47094.3	47236.9	[500]	ug/L	07:45:26
2	Cu 324.752†	179116.2	173200.8	[500]	ug/L	07:45:26
2	Mn 257.610†	460045.0	461783.5	[500]	ug/L	07:45:21
2	Mo 202.031†	7897.3	7916.1	[500]	ug/L	07:45:46
2	Ni 231.604†	21502.8	21517.2	[500]	ug/L	07:45:26
2	P 214.914†	4483.7	4281.3	[2500]	ug/L	07:45:46
2	Pb 220.353†	4299.8	4388.4	[500]	ug/L	07:45:46
2	S 181.975 Axial†	755.4	717.4	[1000]	ug/L	07:45:46
2	Sb 206.836†	1616.8	1590.2	[500]	ug/L	07:45:46

2	Se 196.026†	835.3	868.1	[500]	ug/L	07:45:46
2	Si 251.611†	83146.9	83087.8	[2500]	ug/L	07:45:26
2	Sn 189.927†	3056.2	3065.6	[500]	ug/L	07:45:46
2	Ti 334.940†	313337.6	315924.2	[500]	ug/L	07:45:26
2	Tl 190.801†	1732.8	1773.5	[500]	ug/L	07:45:46
2	U 409.014†	15713.5	18189.1	[500]	ug/L	07:45:26
2	V 292.402†	73060.5	74762.0	[500]	ug/L	07:45:26
2	Zn 213.857†	57384.3	57032.0	[500]	ug/L	07:45:26
2	SiO2†	82111.0	82029.2	[5347.5]	ug/L	07:46:28
3	Sc Radial	5658.5	5658.5	96.8	%	07:44:23
3	Y RADIAL	6000.3	6000.3	95.43	%	07:44:23
3	Al 396.153Radial†	7008.2	7258.2	[5000]	ug/L	07:44:23
3	Ca 317.933Radial†	3379.5	3474.7	[5000]	ug/L	07:44:43
3	K 766.490 Radial†	30355.1	28998.2	[5000]	ug/L	07:44:23
3	Mg 279.077 IEC†	146.2	149.8	[5000]	ug/L	07:44:43
3	Sr 421.552†	80169.9	82824.7	[500]	ug/L	07:44:23
3	Sc 361.383	903673.3	903673.3	100.27	%	07:45:52
3	Y 371.029	738349.2	738349.2	98.304	%	07:45:52
3	Ag 328.068†	111866.7	111275.7	[500]	ug/L	07:45:57
3	As 188.979†	1213.8	1234.8	[500]	ug/L	07:46:17
3	B 249.677†	23191.3	23660.2	[500]	ug/L	07:45:57
3	Ba 233.527†	67179.0	67008.4	[500]	ug/L	07:45:57
3	Be 313.107†	1348404.0	1349922.3	[500]	ug/L	07:45:52
3	Cd 226.502†	47083.0	47152.6	[500]	ug/L	07:45:57
3	Co 228.616†	26298.3	26293.6	[500]	ug/L	07:45:57
3	Cr 267.716†	47483.6	47278.4	[500]	ug/L	07:45:57
3	Cu 324.752†	179916.3	172680.0	[500]	ug/L	07:45:57
3	Mn 257.610†	464824.3	463162.8	[500]	ug/L	07:45:52
3	Mo 202.031†	7859.2	7820.0	[500]	ug/L	07:46:17
3	Ni 231.604†	21680.2	21535.9	[500]	ug/L	07:45:57
3	P 214.914†	4444.9	4209.6	[2500]	ug/L	07:46:17
3	Pb 220.353†	4302.0	4359.0	[500]	ug/L	07:46:17
3	S 181.975 Axial†	750.3	706.7	[1000]	ug/L	07:46:17
3	Sb 206.836†	1605.1	1566.6	[500]	ug/L	07:46:17
3	Se 196.026†	826.7	853.3	[500]	ug/L	07:46:17
3	Si 251.611†	83765.2	83092.2	[2500]	ug/L	07:45:57
3	Sn 189.927†	3059.4	3046.2	[500]	ug/L	07:46:17
3	Ti 334.940†	315390.3	315664.4	[500]	ug/L	07:45:57
3	Tl 190.801†	1716.4	1744.4	[500]	ug/L	07:46:17
3	U 409.014†	15674.1	18034.2	[500]	ug/L	07:45:57
3	V 292.402†	73603.1	74765.2	[500]	ug/L	07:45:57
3	Zn 213.857†	57834.5	57058.5	[500]	ug/L	07:45:57
3	SiO2†	81804.4	81118.8	[5347.5]	ug/L	07:46:33

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	900910.7	3444.89	0.38%	99.961	%
Sc Radial	5722.3	55.31	0.97%	97.9	%
Y 371.029	736366.1	2243.84	0.30%	98.040	%
Y RADIAL	6078.3	70.01	1.15%	96.67	%
Ag 328.068†	110894.5	758.70	0.68%	[500]	ug/L
Al 396.153Radial†	7155.2	96.14	1.34%	[5000]	ug/L
As 188.979†	1246.7	10.54	0.85%	[500]	ug/L
B 249.677†	23422.5	265.36	1.13%	[500]	ug/L
Ba 233.527†	66790.7	448.39	0.67%	[500]	ug/L
Be 313.107†	1349030.9	923.63	0.07%	[500]	ug/L
Ca 317.933Radial†	3429.7	41.02	1.20%	[5000]	ug/L
Cd 226.502†	46922.4	261.67	0.56%	[500]	ug/L
Co 228.616†	26185.2	159.97	0.61%	[500]	ug/L
Cr 267.716†	47092.9	286.09	0.61%	[500]	ug/L
Cu 324.752†	171909.0	1805.36	1.05%	[500]	ug/L
K 766.490 Radial†	28622.0	333.13	1.16%	[5000]	ug/L
Mg 279.077 IEC†	148.9	2.41	1.62%	[5000]	ug/L
Mn 257.610†	462455.7	690.31	0.15%	[500]	ug/L
Mo 202.031†	7858.1	51.01	0.65%	[500]	ug/L
Ni 231.604†	21478.9	83.11	0.39%	[500]	ug/L
P 214.914†	4245.6	35.86	0.84%	[2500]	ug/L
Pb 220.353†	4369.0	16.86	0.39%	[500]	ug/L
S 181.975 Axial†	714.5	6.78	0.95%	[1000]	ug/L

Sb 206.836†	1579.0	11.84	0.75%	[500]	ug/L
Se 196.026†	856.0	10.93	1.28%	[500]	ug/L
Si 251.611†	82742.4	602.11	0.73%	[2500]	ug/L
Sn 189.927†	3048.3	16.37	0.54%	[500]	ug/L
Sr 421.552†	81692.5	1027.61	1.26%	[500]	ug/L
Ti 334.940†	314369.8	2470.75	0.79%	[500]	ug/L
Tl 190.801†	1765.2	18.18	1.03%	[500]	ug/L
U 409.014†	18037.1	150.54	0.83%	[500]	ug/L
V 292.402†	74523.6	415.67	0.56%	[500]	ug/L
Zn 213.857†	56760.9	492.63	0.87%	[500]	ug/L
SiO2†	82096.5	1012.97	1.23%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/8/2009 07:48:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5727.6	5727.6	98.0	%	07:50:36
1	Y RADIAL	6092.4	6092.4	96.89	%	07:50:36
1	Al 396.153Radial†	13699.9	13998.6	[10000]	ug/L	07:50:36
1	Ca 317.933Radial†	6656.5	6776.1	[10000]	ug/L	07:50:36
1	Fe 238.204 Radial†	1055.7	1070.4	[10000]	ug/L	07:50:56
1	K 766.490 Radial†	57301.4	56113.4	[10000]	ug/L	07:50:36
1	Mg 279.077 IEC†	286.7	291.4	[10000]	ug/L	07:50:56
1	Na 589.592 Radial†	26952.5	28587.8	[10000]	ug/L	07:50:36
1	Sr 421.552†	156642.7	159851.3	[1000]	ug/L	07:50:36
1	Sc 361.383	866703.8	866703.8	96.165	%	07:51:59
1	Y 371.029	725126.9	725126.9	96.544	%	07:51:59
1	Ag 328.068†	212191.8	220360.3	[1000]	ug/L	07:51:59
1	As 188.979†	2413.4	2533.8	[1000]	ug/L	07:52:19
1	B 249.677†	45434.2	47776.6	[1000]	ug/L	07:51:59
1	Ba 233.527†	129842.7	135028.7	[1000]	ug/L	07:51:59
1	Be 313.107†	2636643.4	2746894.1	[1000]	ug/L	07:51:54
1	Cd 226.502†	90744.2	94557.8	[1000]	ug/L	07:51:59
1	Co 228.616†	50574.3	52656.4	[1000]	ug/L	07:51:59
1	Cr 267.716†	91836.0	95419.4	[1000]	ug/L	07:51:59
1	Cu 324.752†	343293.5	350225.9	[1000]	ug/L	07:51:59
1	Mn 257.610†	901280.3	936797.1	[1000]	ug/L	07:51:54
1	Mo 202.031†	15191.7	15779.1	[1000]	ug/L	07:52:19
1	Ni 231.604†	41580.1	43151.6	[1000]	ug/L	07:51:59
1	P 214.914†	8615.8	8735.8	[5000]	ug/L	07:52:19
1	Pb 220.353†	8464.2	8870.1	[1000]	ug/L	07:52:19
1	S 181.975 Axial†	1409.9	1424.5	[2000]	ug/L	07:52:19
1	Sb 206.836†	3070.7	3158.9	[1000]	ug/L	07:52:19
1	Se 196.026†	1640.1	1734.3	[1000]	ug/L	07:52:19
1	Si 251.611†	161079.4	167052.8	[5000]	ug/L	07:51:59
1	Sn 189.927†	5873.8	6103.0	[1000]	ug/L	07:52:19
1	Ti 334.940†	600269.7	625320.7	[1000]	ug/L	07:51:59
1	Tl 190.801†	3419.3	3588.1	[1000]	ug/L	07:52:19
1	U 409.014†	32652.6	36356.5	[1000]	ug/L	07:51:59
1	V 292.402†	144700.9	151829.2	[1000]	ug/L	07:51:59
1	Zn 213.857†	110773.1	114568.4	[1000]	ug/L	07:51:59
1	SiO2†	162097.8	168094.0	[10695]	ug/L	07:53:28
2	Sc Radial	5706.1	5706.1	97.6	%	07:51:01
2	Y RADIAL	6044.1	6044.1	96.12	%	07:51:01
2	Al 396.153Radial†	13658.2	14008.6	[10000]	ug/L	07:51:01
2	Ca 317.933Radial†	6641.4	6786.2	[10000]	ug/L	07:51:01
2	Fe 238.204 Radial†	1051.8	1070.4	[10000]	ug/L	07:51:21
2	K 766.490 Radial†	57341.9	56375.2	[10000]	ug/L	07:51:01
2	Mg 279.077 IEC†	284.9	290.6	[10000]	ug/L	07:51:21
2	Na 589.592 Radial†	26942.8	28681.5	[10000]	ug/L	07:51:01
2	Sr 421.552†	156508.0	160315.7	[1000]	ug/L	07:51:01
2	Sc 361.383	870985.3	870985.3	96.640	%	07:52:31
2	Y 371.029	731540.9	731540.9	97.398	%	07:52:31
2	Ag 328.068†	213845.0	220986.4	[1000]	ug/L	07:52:31
2	As 188.979†	2432.4	2541.1	[1000]	ug/L	07:52:51
2	B 249.677†	46010.4	48140.5	[1000]	ug/L	07:52:31
2	Ba 233.527†	130856.3	135413.9	[1000]	ug/L	07:52:31
2	Be 313.107†	2666787.9	2764609.1	[1000]	ug/L	07:52:25
2	Cd 226.502†	91618.2	94998.3	[1000]	ug/L	07:52:31
2	Co 228.616†	51055.4	52895.7	[1000]	ug/L	07:52:31
2	Cr 267.716†	92533.4	95671.6	[1000]	ug/L	07:52:31
2	Cu 324.752†	346989.1	352295.1	[1000]	ug/L	07:52:31
2	Mn 257.610†	910927.9	942173.1	[1000]	ug/L	07:52:25
2	Mo 202.031†	15202.7	15712.9	[1000]	ug/L	07:52:51
2	Ni 231.604†	42023.0	43397.4	[1000]	ug/L	07:52:31

2	P 214.914†	8619.1	8695.2	[5000]	ug/L	07:52:51
2	Pb 220.353†	8484.9	8848.3	[1000]	ug/L	07:52:51
2	S 181.975 Axial†	1414.8	1422.4	[2000]	ug/L	07:52:51
2	Sb 206.836†	3088.5	3161.7	[1000]	ug/L	07:52:51
2	Se 196.026†	1638.9	1724.7	[1000]	ug/L	07:52:51
2	Si 251.611†	162691.4	167897.5	[5000]	ug/L	07:52:31
2	Sn 189.927†	5905.9	6106.2	[1000]	ug/L	07:52:51
2	Ti 334.940†	605448.6	627611.3	[1000]	ug/L	07:52:31
2	Tl 190.801†	3427.2	3578.8	[1000]	ug/L	07:52:51
2	U 409.014†	32852.3	36396.2	[1000]	ug/L	07:52:31
2	V 292.402†	145972.5	152405.4	[1000]	ug/L	07:52:31
2	Zn 213.857†	111675.6	114936.0	[1000]	ug/L	07:52:31
2	SiO2†	162732.6	167922.3	[10695]	ug/L	07:53:33
3	Sc Radial	5835.4	5835.4	99.9	%	07:51:26
3	Y RADIAL	6153.0	6153.0	97.86	%	07:51:26
3	Al 396.153Radial†	13935.7	13976.5	[10000]	ug/L	07:51:26
3	Ca 317.933Radial†	6750.2	6744.5	[10000]	ug/L	07:51:26
3	Fe 238.204 Radial†	1062.5	1057.3	[10000]	ug/L	07:51:46
3	K 766.490 Radial†	58299.6	56033.1	[10000]	ug/L	07:51:26
3	Mg 279.077 IEC†	286.1	285.3	[10000]	ug/L	07:51:46
3	Na 589.592 Radial†	27504.4	28632.6	[10000]	ug/L	07:51:26
3	Sr 421.552†	159231.4	159491.6	[1000]	ug/L	07:51:26
3	Sc 361.383	870659.7	870659.7	96.604	%	07:53:02
3	Y 371.029	729400.6	729400.6	97.113	%	07:53:02
3	Ag 328.068†	213245.6	220448.6	[1000]	ug/L	07:53:02
3	As 188.979†	2437.9	2547.8	[1000]	ug/L	07:53:22
3	B 249.677†	45730.3	47868.4	[1000]	ug/L	07:53:02
3	Ba 233.527†	130842.6	135450.2	[1000]	ug/L	07:53:02
3	Be 313.107†	2658103.6	2756651.3	[1000]	ug/L	07:52:57
3	Cd 226.502†	91430.2	94839.1	[1000]	ug/L	07:53:02
3	Co 228.616†	50994.1	52852.0	[1000]	ug/L	07:53:02
3	Cr 267.716†	92409.5	95579.1	[1000]	ug/L	07:53:02
3	Cu 324.752†	345135.9	350511.0	[1000]	ug/L	07:53:02
3	Mn 257.610†	911726.2	943351.9	[1000]	ug/L	07:52:57
3	Mo 202.031†	15254.9	15772.8	[1000]	ug/L	07:53:22
3	Ni 231.604†	41851.4	43236.0	[1000]	ug/L	07:53:02
3	P 214.914†	8647.5	8728.0	[5000]	ug/L	07:53:22
3	Pb 220.353†	8535.4	8903.9	[1000]	ug/L	07:53:22
3	S 181.975 Axial†	1428.8	1437.4	[2000]	ug/L	07:53:22
3	Sb 206.836†	3094.4	3169.0	[1000]	ug/L	07:53:22
3	Se 196.026†	1655.8	1742.8	[1000]	ug/L	07:53:22
3	Si 251.611†	162249.9	167503.4	[5000]	ug/L	07:53:02
3	Sn 189.927†	5928.4	6131.8	[1000]	ug/L	07:53:22
3	Ti 334.940†	603756.8	626094.3	[1000]	ug/L	07:53:02
3	Tl 190.801†	3424.4	3577.2	[1000]	ug/L	07:53:22
3	U 409.014†	32820.6	36376.1	[1000]	ug/L	07:53:02
3	V 292.402†	145449.4	151920.4	[1000]	ug/L	07:53:02
3	Zn 213.857†	111377.9	114671.1	[1000]	ug/L	07:53:02
3	SiO2†	161107.2	166302.8	[10695]	ug/L	07:53:38

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	869449.6	2383.48	0.27%	96.470	%
Sc Radial	5756.4	69.28	1.20%	98.5	%
Y 371.029	728689.4	3265.57	0.45%	97.018	%
Y RADIAL	6096.5	54.59	0.90%	96.96	%
Ag 328.068†	220598.4	338.87	0.15%	[1000]	ug/L
Al 396.153Radial†	13994.5	16.43	0.12%	[10000]	ug/L
As 188.979†	2540.9	6.99	0.28%	[1000]	ug/L
B 249.677†	47928.5	189.28	0.39%	[1000]	ug/L
Ba 233.527†	135297.6	233.59	0.17%	[1000]	ug/L
Be 313.107†	2756051.5	8872.70	0.32%	[1000]	ug/L
Ca 317.933Radial†	6768.9	21.76	0.32%	[10000]	ug/L
Cd 226.502†	94798.4	223.05	0.24%	[1000]	ug/L
Co 228.616†	52801.4	127.43	0.24%	[1000]	ug/L
Cr 267.716†	95556.7	127.57	0.13%	[1000]	ug/L
Cu 324.752†	351010.6	1121.46	0.32%	[1000]	ug/L
Fe 238.204 Radial†	1066.0	7.56	0.71%	[10000]	ug/L
K 766.490 Radial†	56173.9	178.89	0.32%	[10000]	ug/L

Mg 279.077 IEC†	289.1	3.30	1.14%	[10000]	ug/L
Mn 257.610†	940774.0	3494.17	0.37%	[1000]	ug/L
Mo 202.031†	15754.9	36.54	0.23%	[1000]	ug/L
Na 589.592 Radial†	28634.0	46.86	0.16%	[10000]	ug/L
Ni 231.604†	43261.7	124.89	0.29%	[1000]	ug/L
P 214.914†	8719.7	21.52	0.25%	[5000]	ug/L
Pb 220.353†	8874.1	28.01	0.32%	[1000]	ug/L
S 181.975 Axial†	1428.1	8.14	0.57%	[2000]	ug/L
Sb 206.836†	3163.2	5.19	0.16%	[1000]	ug/L
Se 196.026†	1733.9	9.04	0.52%	[1000]	ug/L
Si 251.611†	167484.6	422.65	0.25%	[5000]	ug/L
Sn 189.927†	6113.7	15.78	0.26%	[1000]	ug/L
Sr 421.552†	159886.2	413.17	0.26%	[1000]	ug/L
Ti 334.940†	626342.1	1165.23	0.19%	[1000]	ug/L
Tl 190.801†	3581.4	5.88	0.16%	[1000]	ug/L
U 409.014†	36376.3	19.85	0.05%	[1000]	ug/L
V 292.402†	152051.7	309.69	0.20%	[1000]	ug/L
Zn 213.857†	114725.2	189.70	0.17%	[1000]	ug/L
SiO2†	167439.7	988.35	0.59%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/8/2009 07:55:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5634.4	5634.4	96.4	%	07:58:03
1	Y RADIAL	5976.9	5976.9	95.06	%	07:58:03
1	Al 396.153Radial†	70118.2	72745.8	[50000]	ug/L	07:57:43
1	Ca 317.933Radial†	33119.0	34334.9	[50000]	ug/L	07:57:43
1	Fe 238.204 Radial†	2068.2	2138.3	[20000]	ug/L	07:58:03
1	Mg 279.077 IEC†	1367.9	1417.6	[50000]	ug/L	07:58:03
1	Na 589.592 Radial†	57661.4	60893.3	[20000]	ug/L	07:57:43
1	Sc 361.383	873678.1	873678.1	96.939	%	07:59:00
1	Y 371.029	712440.2	712440.2	94.855	%	07:59:00
2	Sc Radial	5657.2	5657.2	96.8	%	07:58:28
2	Y RADIAL	5981.2	5981.2	95.12	%	07:58:28
2	Al 396.153Radial†	69017.3	71315.7	[50000]	ug/L	07:58:08
2	Ca 317.933Radial†	32519.9	33577.7	[50000]	ug/L	07:58:08
2	Fe 238.204 Radial†	2074.1	2135.7	[20000]	ug/L	07:58:28
2	Mg 279.077 IEC†	1366.8	1410.8	[50000]	ug/L	07:58:28
2	Na 589.592 Radial†	56539.3	59493.5	[20000]	ug/L	07:58:08
2	Sc 361.383	887334.1	887334.1	98.454	%	07:59:05
2	Y 371.029	723198.7	723198.7	96.287	%	07:59:05
3	Sc Radial	5603.7	5603.7	95.9	%	07:58:53
3	Y RADIAL	5935.7	5935.7	94.40	%	07:58:53
3	Al 396.153Radial†	69152.0	72137.0	[50000]	ug/L	07:58:33
3	Ca 317.933Radial†	32476.7	33853.5	[50000]	ug/L	07:58:33
3	Fe 238.204 Radial†	2056.8	2138.2	[20000]	ug/L	07:58:53
3	Mg 279.077 IEC†	1360.7	1417.9	[50000]	ug/L	07:58:53
3	Na 589.592 Radial†	56639.2	60155.3	[20000]	ug/L	07:58:33
3	Sc 361.383	876437.1	876437.1	97.245	%	07:59:11
3	Y 371.029	715214.6	715214.6	95.224	%	07:59:11

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	879149.8	7220.84	0.82%	97.546	%
Sc Radial	5631.8	26.85	0.48%	96.4	%
Y 371.029	716951.2	5585.53	0.78%	95.456	%
Y RADIAL	5964.6	25.13	0.42%	94.86	%
Al 396.153Radial†	72066.2	717.65	1.00%	[50000]	ug/L
Ca 317.933Radial†	33922.0	383.22	1.13%	[50000]	ug/L
Fe 238.204 Radial†	2137.4	1.46	0.07%	[20000]	ug/L
Mg 279.077 IEC†	1415.5	4.03	0.28%	[50000]	ug/L
Na 589.592 Radial†	60180.7	700.27	1.16%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	220.8	0.00000	0.999994	
Al 396.153Radial	3	Lin Thru 0	0.0	1.440	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	2.531	0.00000	0.999968	
B 249.677	3	Lin Thru 0	0.0	47.68	0.00000	0.999939	
Ba 233.527	3	Lin Thru 0	0.0	134.9	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	2743	0.00000	0.999957	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6785	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	94.60	0.00000	0.999991	
Co 228.616	3	Lin Thru 0	0.0	52.70	0.00000	0.999987	
Cr 267.716	3	Lin Thru 0	0.0	95.26	0.00000	0.999981	
Cu 324.752	3	Lin Thru 0	0.0	349.4	0.00000	0.999958	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1068	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.639	0.00000	0.999971	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0283	0.00000	0.999979
Mn 257.610	3	Lin Thru 0	0.0	937.4	0.00000	0.999975
Mo 202.031	3	Lin Thru 0	0.0	15.74	0.00000	0.999991
Na 589.592 Radia	2	Lin Thru 0	0.0	2.980	0.00000	0.999809
Ni 231.604	3	Lin Thru 0	0.0	43.18	0.00000	0.999987
P 214.914	3	Lin Thru 0	0.0	1.734	0.00000	0.999930
Pb 220.353	3	Lin Thru 0	0.0	8.846	0.00000	0.999981
S 181.975 Axial	3	Lin Thru 0	0.0	0.7136	0.00000	0.999970
Sb 206.836	3	Lin Thru 0	0.0	3.160	0.00000	0.999979
Se 196.026	3	Lin Thru 0	0.0	1.730	0.00000	0.999987
Si 251.611	3	Lin Thru 0	0.0	33.40	0.00000	0.999981
Sn 189.927	3	Lin Thru 0	0.0	6.108	0.00000	0.999987
Sr 421.552	3	Lin Thru 0	0.0	160.6	0.00000	0.999962
Ti 334.940	3	Lin Thru 0	0.0	626.6	0.00000	0.999994
Tl 190.801	3	Lin Thru 0	0.0	3.570	0.00000	0.999981
U 409.014	3	Lin Thru 0	0.0	36.30	0.00000	0.999984
V 292.402	3	Lin Thru 0	0.0	151.4	0.00000	0.999963
Zn 213.857	3	Lin Thru 0	0.0	114.5	0.00000	0.999989
SiO2	3	Lin Thru 0	0.0	15.59	0.00000	0.999960

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/8/2009 08:01:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6009.6	6009.6	103	%			08:03:14
1	Y RADIAL	6456.4	6456.4	102.7	%			08:03:14
1	Al 396.153Radial†	7067.2	6892.7	4765.0	ug/L	4765.0	ppb	08:03:14
1	Ca 317.933Radial†	3331.3	3223.9	4751.8	ug/L	4751.8	ppb	08:03:35
1	Fe 238.204 Radial†	542.1	520.4	4887.1	ug/L	4887.1	ppb	08:03:35
1	K 766.490 Radial†	16331.3	13529.3	2394.0	ug/L	2394.0	ppb	08:03:14
1	Mg 279.077 IEC†	148.3	143.1	5053.8	ug/L	5053.8	ppb	08:03:35
1	Na 589.592 Radial†	6072.0	6992.5	2346.6	ug/L	2346.6	ppb	08:03:14
1	Sr 421.552†	83886.5	81601.2	508.15	ug/L	508.15	ppb	08:03:14
1	Sc 361.383	912453.5	912453.5	101.24	%			08:04:32
1	Y 371.029	752091.5	752091.5	100.13	%			08:04:32
1	Ag 328.068†	57656.7	56656.9	259.65	ug/L	259.65	ppb	08:04:32
1	As 188.979†	1167.3	1177.2	469.45	ug/L	469.45	ppb	08:04:52
1	B 249.677†	23906.7	24144.2	504.43	ug/L	504.43	ppb	08:04:32
1	Ba 233.527†	68424.2	67593.6	502.25	ug/L	502.25	ppb	08:04:32
1	Be 313.107†	705987.4	702442.9	257.03	ug/L	257.03	ppb	08:04:32
1	Cd 226.502†	47081.6	46699.3	493.50	ug/L	493.50	ppb	08:04:32
1	Co 228.616†	26273.8	26017.0	494.03	ug/L	494.03	ppb	08:04:52
1	Cr 267.716†	46520.1	45871.0	482.33	ug/L	482.33	ppb	08:04:32
1	Cu 324.752†	183044.9	174043.5	498.31	ug/L	498.31	ppb	08:04:32
1	Mn 257.610†	477045.7	470773.4	502.59	ug/L	502.59	ppb	08:04:32
1	Mo 202.031†	8517.1	8394.4	533.61	ug/L	533.61	ppb	08:04:52
1	Ni 231.604†	21479.4	21129.4	488.97	ug/L	488.97	ppb	08:04:52
1	P 214.914†	4554.6	4275.2	2390.8	ug/L	2390.8	ppb	08:04:52
1	Pb 220.353†	4364.0	4378.9	496.61	ug/L	496.61	ppb	08:04:52
1	S 181.975 Axial†	1818.9	1755.0	2458.3	ug/L	2458.3	ppb	08:04:52
1	Sb 206.836†	1586.3	1532.6	494.01	ug/L	494.01	ppb	08:04:52
1	Se 196.026†	4375.9	4351.0	2533.6	ug/L	2533.6	ppb	08:04:52
1	Si 251.611†	160353.0	157937.0	4716.2	ug/L	4716.2	ppb	08:04:32
1	Sn 189.927†	3306.2	3260.6	534.43	ug/L	534.43	ppb	08:04:52
1	Ti 334.940†	317801.3	315019.0	502.58	ug/L	502.58	ppb	08:04:32
1	Tl 190.801†	1838.8	1848.8	521.06	ug/L	521.06	ppb	08:04:52
1	U 409.014†	14870.6	17090.1	469.24	ug/L	469.24	ppb	08:04:32
1	V 292.402†	74687.1	75129.5	503.39	ug/L	503.39	ppb	08:04:32
1	Zn 213.857†	58836.0	57492.6	497.92	ug/L	497.92	ppb	08:04:32
1	SiO2†	158439.0	156028.6	9983.3	ug/L	9983.3	ppb	08:05:50
2	Sc Radial	5793.2	5793.2	99.1	%			08:03:40
2	Y RADIAL	6177.7	6177.7	98.25	%			08:03:40
2	Al 396.153Radial†	7001.0	7082.7	4896.9	ug/L	4896.9	ppb	08:03:40
2	Ca 317.933Radial†	3313.6	3327.0	4903.8	ug/L	4903.8	ppb	08:04:00
2	Fe 238.204 Radial†	539.7	537.6	5048.4	ug/L	5048.4	ppb	08:04:00
2	K 766.490 Radial†	16265.1	14055.7	2487.4	ug/L	2487.4	ppb	08:03:40
2	Mg 279.077 IEC†	149.3	149.4	5277.4	ug/L	5277.4	ppb	08:04:00
2	Na 589.592 Radial†	5957.8	7097.9	2381.9	ug/L	2381.9	ppb	08:03:40
2	Sr 421.552†	83562.4	84321.3	525.09	ug/L	525.09	ppb	08:03:40
2	Sc 361.383	907490.4	907490.4	100.69	%			08:04:58
2	Y 371.029	745986.1	745986.1	99.321	%			08:04:58
2	Ag 328.068†	56982.2	56298.5	258.07	ug/L	258.07	ppb	08:04:58
2	As 188.979†	1163.4	1179.6	470.43	ug/L	470.43	ppb	08:05:18
2	B 249.677†	23675.8	24044.1	502.30	ug/L	502.30	ppb	08:04:58
2	Ba 233.527†	67850.0	67393.0	500.76	ug/L	500.76	ppb	08:04:58
2	Be 313.107†	697546.8	697874.0	255.36	ug/L	255.36	ppb	08:04:58
2	Cd 226.502†	46668.9	46543.8	491.84	ug/L	491.84	ppb	08:04:58
2	Co 228.616†	26211.1	26096.7	495.55	ug/L	495.55	ppb	08:05:18
2	Cr 267.716†	46057.8	45663.2	480.15	ug/L	480.15	ppb	08:04:58
2	Cu 324.752†	181224.7	173224.6	495.98	ug/L	495.98	ppb	08:04:58
2	Mn 257.610†	473022.1	469354.4	501.08	ug/L	501.08	ppb	08:04:58
2	Mo 202.031†	8509.7	8433.0	536.07	ug/L	536.07	ppb	08:05:18
2	Ni 231.604†	21412.6	21179.1	490.12	ug/L	490.12	ppb	08:05:18

2	P 214.914†	4536.6	4281.9	2394.9	ug/L	2394.9 ppb	08:05:18
2	Pb 220.353†	4334.8	4373.6	496.03	ug/L	496.03 ppb	08:05:18
2	S 181.975 Axial†	1822.1	1768.0	2476.4	ug/L	2476.4 ppb	08:05:18
2	Sb 206.836†	1605.6	1560.3	502.85	ug/L	502.85 ppb	08:05:18
2	Se 196.026†	4352.9	4351.8	2534.6	ug/L	2534.6 ppb	08:05:18
2	Si 251.611†	158990.5	157450.0	4701.6	ug/L	4701.6 ppb	08:04:58
2	Sn 189.927†	3284.1	3256.6	533.79	ug/L	533.79 ppb	08:05:18
2	Ti 334.940†	314891.7	313846.1	500.72	ug/L	500.72 ppb	08:04:58
2	Tl 190.801†	1828.3	1848.3	520.91	ug/L	520.91 ppb	08:05:18
2	U 409.014†	14835.2	17135.3	470.47	ug/L	470.47 ppb	08:04:58
2	V 292.402†	73950.2	74801.2	501.24	ug/L	501.24 ppb	08:04:58
2	Zn 213.857†	58273.9	57252.3	495.79	ug/L	495.79 ppb	08:04:58
2	SiO2†	160101.9	158536.0	10144	ug/L	10144 ppb	08:05:55
3	Sc Radial	5889.1	5889.1	101	%		08:04:05
3	Y RADIAL	6279.1	6279.1	99.86	%		08:04:05
3	Al 396.153Radial†	7083.1	7049.2	4873.9	ug/L	4873.9 ppb	08:04:05
3	Ca 317.933Radial†	3333.3	3292.1	4852.4	ug/L	4852.4 ppb	08:04:25
3	Fe 238.204 Radial†	542.0	531.1	4987.3	ug/L	4987.3 ppb	08:04:25
3	K 766.490 Radial†	16313.1	13836.3	2448.5	ug/L	2448.5 ppb	08:04:05
3	Mg 279.077 IEC†	149.3	147.0	5193.5	ug/L	5193.5 ppb	08:04:25
3	Na 589.592 Radial†	6061.0	7102.5	2383.5	ug/L	2383.5 ppb	08:04:05
3	Sr 421.552†	83836.6	83221.2	518.23	ug/L	518.23 ppb	08:04:05
3	Sc 361.383	911772.7	911772.7	101.17	%		08:05:24
3	Y 371.029	751267.0	751267.0	100.02	%		08:05:24
3	Ag 328.068†	57151.9	56200.5	257.60	ug/L	257.60 ppb	08:05:24
3	As 188.979†	1153.3	1164.1	464.30	ug/L	464.30 ppb	08:05:44
3	B 249.677†	23705.7	23963.1	500.63	ug/L	500.63 ppb	08:05:24
3	Ba 233.527†	68150.6	67373.6	500.61	ug/L	500.61 ppb	08:05:24
3	Be 313.107†	702427.5	699444.7	255.93	ug/L	255.93 ppb	08:05:24
3	Cd 226.502†	46920.7	46575.1	492.18	ug/L	492.18 ppb	08:05:24
3	Co 228.616†	25964.5	25730.7	488.58	ug/L	488.58 ppb	08:05:44
3	Cr 267.716†	46302.7	45690.4	480.44	ug/L	480.44 ppb	08:05:24
3	Cu 324.752†	181422.2	172574.6	494.11	ug/L	494.11 ppb	08:05:24
3	Mn 257.610†	475160.7	469262.0	500.98	ug/L	500.98 ppb	08:05:24
3	Mo 202.031†	8439.4	8323.8	529.13	ug/L	529.13 ppb	08:05:44
3	Ni 231.604†	21253.5	20922.0	484.17	ug/L	484.17 ppb	08:05:44
3	P 214.914†	4499.7	4224.3	2362.0	ug/L	2362.0 ppb	08:05:44
3	Pb 220.353†	4320.0	4338.7	492.07	ug/L	492.07 ppb	08:05:44
3	S 181.975 Axial†	1804.6	1742.3	2440.4	ug/L	2440.4 ppb	08:05:44
3	Sb 206.836†	1602.0	1549.3	499.13	ug/L	499.13 ppb	08:05:44
3	Se 196.026†	4323.5	4302.5	2505.8	ug/L	2505.8 ppb	08:05:44
3	Si 251.611†	159550.9	157262.3	4696.1	ug/L	4696.1 ppb	08:05:24
3	Sn 189.927†	3266.4	3223.7	528.40	ug/L	528.40 ppb	08:05:44
3	Ti 334.940†	315966.4	313439.7	500.07	ug/L	500.07 ppb	08:05:24
3	Tl 190.801†	1822.4	1833.9	516.90	ug/L	516.90 ppb	08:05:44
3	U 409.014†	14891.2	17121.4	470.10	ug/L	470.10 ppb	08:05:24
3	V 292.402†	74284.8	74787.0	501.05	ug/L	501.05 ppb	08:05:24
3	Zn 213.857†	58572.4	57275.5	496.05	ug/L	496.05 ppb	08:05:24
3	SiO2†	157929.4	155641.7	9958.7	ug/L	9958.7 ppb	08:06:00

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910572.2	101.03	%	0.299				0.30%
Sc Radial	5897.3	101	%	1.9				1.84%
Y 371.029	749781.5	99.827	%	0.4411				0.44%
Y RADIAL	6304.4	100.3	%	2.24				2.24%
Ag 328.068†	56385.3	258.44	ug/L	1.073	258.44	ppb	1.073	0.42%
QC value within limits for Ag 328.068 Recovery = 103.38%								
Al 396.153Radial†	7008.2	4845.3	ug/L	70.45	4845.3	ppb	70.45	1.45%
QC value within limits for Al 396.153Radial Recovery = 96.91%								
As 188.979†	1173.6	468.06	ug/L	3.291	468.06	ppb	3.291	0.70%
QC value within limits for As 188.979 Recovery = 93.61%								
B 249.677†	24050.5	502.45	ug/L	1.903	502.45	ppb	1.903	0.38%
QC value within limits for B 249.677 Recovery = 100.49%								
Ba 233.527†	67453.4	501.21	ug/L	0.903	501.21	ppb	0.903	0.18%
QC value within limits for Ba 233.527 Recovery = 100.24%								
Be 313.107†	699920.5	256.11	ug/L	0.848	256.11	ppb	0.848	0.33%
QC value within limits for Be 313.107 Recovery = 102.44%								
Ca 317.933Radial†	3281.0	4836.0	ug/L	77.30	4836.0	ppb	77.30	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.72%
Cd 226.502†            46606.1      492.51 ug/L         0.878      492.51 ppb          0.878   0.18%
   QC value within limits for Cd 226.502  Recovery = 98.50%
Co 228.616†            25948.1      492.72 ug/L         3.661      492.72 ppb          3.661   0.74%
   QC value within limits for Co 228.616  Recovery = 98.54%
Cr 267.716†            45741.5      480.97 ug/L         1.187      480.97 ppb          1.187   0.25%
   QC value within limits for Cr 267.716  Recovery = 96.19%
Cu 324.752†           173280.9      496.13 ug/L         2.104      496.13 ppb          2.104   0.42%
   QC value within limits for Cu 324.752  Recovery = 99.23%
Fe 238.204 Radial†       529.7      4974.3 ug/L        81.47      4974.3 ppb         81.47   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.49%
K 766.490 Radial†      13807.1      2443.3 ug/L        46.90      2443.3 ppb         46.90   1.92%
   QC value within limits for K 766.490 Radial  Recovery = 97.73%
Mg 279.077 IEC†          146.5      5174.9 ug/L       112.95      5174.9 ppb        112.95   2.18%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           469796.6      501.55 ug/L         0.898      501.55 ppb          0.898   0.18%
   QC value within limits for Mn 257.610  Recovery = 100.31%
Mo 202.031†             8383.7      532.94 ug/L         3.519      532.94 ppb          3.519   0.66%
   QC value within limits for Mo 202.031  Recovery = 106.59%
Na 589.592 Radial†      7064.3      2370.6 ug/L        20.88      2370.6 ppb         20.88   0.88%
   QC value within limits for Na 589.592 Radial  Recovery = 94.83%
Ni 231.604†            21076.9      487.75 ug/L         3.155      487.75 ppb          3.155   0.65%
   QC value within limits for Ni 231.604  Recovery = 97.55%
P 214.914†              4260.5      2382.6 ug/L        17.95      2382.6 ppb         17.95   0.75%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4363.7      494.90 ug/L         2.468      494.90 ppb          2.468   0.50%
   QC value within limits for Pb 220.353  Recovery = 98.98%
S 181.975 Axial†        1755.1      2458.4 ug/L        18.02      2458.4 ppb         18.02   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 98.33%
Sb 206.836†             1547.4      498.66 ug/L         4.442      498.66 ppb          4.442   0.89%
   QC value within limits for Sb 206.836  Recovery = 99.73%
Se 196.026†             4335.1      2524.7 ug/L        16.33      2524.7 ppb         16.33   0.65%
   QC value within limits for Se 196.026  Recovery = 100.99%
Si 251.611†           157549.8      4704.6 ug/L        10.40      4704.6 ppb         10.40   0.22%
   QC value within limits for Si 251.611  Recovery = 94.09%
Sn 189.927†             3247.0      532.21 ug/L         3.311      532.21 ppb          3.311   0.62%
   QC value within limits for Sn 189.927  Recovery = 106.44%
Sr 421.552†            83047.9      517.16 ug/L         8.521      517.16 ppb          8.521   1.65%
   QC value within limits for Sr 421.552  Recovery = 103.43%
Ti 334.940†           314101.6      501.12 ug/L         1.305      501.12 ppb          1.305   0.26%
   QC value within limits for Ti 334.940  Recovery = 100.22%
Tl 190.801†             1843.6      519.62 ug/L         2.361      519.62 ppb          2.361   0.45%
   QC value within limits for Tl 190.801  Recovery = 103.92%
U 409.014†             17115.6      469.94 ug/L         0.630      469.94 ppb          0.630   0.13%
   QC value within limits for U 409.014  Recovery = 93.99%
V 292.402†             74905.9      501.89 ug/L         1.297      501.89 ppb          1.297   0.26%
   QC value within limits for V 292.402  Recovery = 100.38%
Zn 213.857†            57340.1      496.59 ug/L         1.162      496.59 ppb          1.162   0.23%
   QC value within limits for Zn 213.857  Recovery = 99.32%
SiO2†                 156735.4       10029 ug/L         100.6       10029 ppb          100.6   1.00%
   QC value within limits for SiO2  Recovery = 93.77%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/8/2009 08:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5863.4	5863.4	100	%			08:10:04
1	Y RADIAL	6302.2	6302.2	100.2	%			08:10:04
1	Al 396.153Radial†	-13.8	6.7	4.5878	ug/L	4.5878	ppb	08:10:04
1	Ca 317.933Radial†	19.2	3.6	5.2688	ug/L	5.2688	ppb	08:10:24
1	Fe 238.204 Radial†	8.0	1.2	11.415	ug/L	11.415	ppb	08:10:24
1	K 766.490 Radial†	2488.1	128.1	22.724	ug/L	22.724	ppb	08:10:04
1	Mg 279.077 IEC†	2.3	1.1	38.489	ug/L	38.489	ppb	08:10:24
1	Na 589.592 Radial†	-1113.9	-22.2	-7.4610	ug/L	-7.4610	ppb	08:10:04
1	Sr 421.552†	-33.7	-6.3	-0.0391	ug/L	-0.0391	ppb	08:10:04
1	Sc 361.383	917080.9	917080.9	101.75	%			08:11:21
1	Y 371.029	764417.3	764417.3	101.78	%			08:11:21
1	Ag 328.068†	348.3	49.5	0.2333	ug/L	0.2333	ppb	08:11:26
1	As 188.979†	-22.9	1.6	0.6456	ug/L	0.6456	ppb	08:11:46
1	B 249.677†	-334.1	202.3	4.2414	ug/L	4.2414	ppb	08:11:46
1	Ba 233.527†	-12.6	-4.0	-0.0287	ug/L	-0.0287	ppb	08:11:46
1	Be 313.107†	-4947.4	250.9	0.0916	ug/L	0.0916	ppb	08:11:26
1	Cd 226.502†	-181.7	16.5	0.1736	ug/L	0.1736	ppb	08:11:46
1	Co 228.616†	-63.4	3.1	0.0612	ug/L	0.0612	ppb	08:11:46
1	Cr 267.716†	66.2	-13.6	-0.1409	ug/L	-0.1409	ppb	08:11:46
1	Cu 324.752†	6717.4	-155.2	-0.4435	ug/L	-0.4435	ppb	08:11:26
1	Mn 257.610†	419.5	-10.1	-0.0103	ug/L	-0.0103	ppb	08:11:46
1	Mo 202.031†	32.0	13.1	0.8345	ug/L	0.8345	ppb	08:11:46
1	Ni 231.604†	83.7	-4.3	-0.0992	ug/L	-0.0992	ppb	08:11:46
1	P 214.914†	209.3	-17.8	-10.216	ug/L	-10.216	ppb	08:11:46
1	Pb 220.353†	-65.1	4.5	0.5114	ug/L	0.5114	ppb	08:11:46
1	S 181.975 Axial†	40.0	-2.3	-3.1993	ug/L	-3.1993	ppb	08:11:46
1	Sb 206.836†	39.9	5.0	1.5899	ug/L	1.5899	ppb	08:11:46
1	Se 196.026†	-24.9	4.4	2.5561	ug/L	2.5561	ppb	08:11:46
1	Si 251.611†	479.1	21.1	0.6112	ug/L	0.6112	ppb	08:11:46
1	Sn 189.927†	4.3	-0.8	-0.1275	ug/L	-0.1275	ppb	08:11:46
1	Ti 334.940†	-1091.9	41.9	0.0697	ug/L	0.0697	ppb	08:11:26
1	Tl 190.801†	-35.8	-2.6	-0.7368	ug/L	-0.7368	ppb	08:11:46
1	U 409.014†	-2659.8	-212.1	-5.8431	ug/L	-5.8431	ppb	08:11:21
1	V 292.402†	-1367.8	14.2	0.0934	ug/L	0.0934	ppb	08:11:26
1	Zn 213.857†	672.2	38.8	0.3379	ug/L	0.3379	ppb	08:11:46
1	SiO2†	486.6	10.7	0.6409	ug/L	0.6409	ppb	08:12:52
2	Sc Radial	5788.1	5788.1	99.0	%			08:10:29
2	Y RADIAL	6221.9	6221.9	98.95	%			08:10:29
2	Al 396.153Radial†	-45.4	-25.4	-17.699	ug/L	-17.699	ppb	08:10:29
2	Ca 317.933Radial†	19.1	3.7	5.5102	ug/L	5.5102	ppb	08:10:49
2	Fe 238.204 Radial†	8.1	1.4	13.251	ug/L	13.251	ppb	08:10:49
2	K 766.490 Radial†	2366.7	37.8	6.7059	ug/L	6.7059	ppb	08:10:29
2	Mg 279.077 IEC†	0.6	-0.5	-18.604	ug/L	-18.604	ppb	08:10:49
2	Na 589.592 Radial†	-1117.3	-40.2	-13.477	ug/L	-13.477	ppb	08:10:29
2	Sr 421.552†	-26.1	1.0	0.0061	ug/L	0.0061	ppb	08:10:29
2	Sc 361.383	921030.5	921030.5	102.19	%			08:11:51
2	Y 371.029	765704.1	765704.1	101.95	%			08:11:51
2	Ag 328.068†	345.6	45.5	0.2119	ug/L	0.2119	ppb	08:11:56
2	As 188.979†	-20.9	3.7	1.4577	ug/L	1.4577	ppb	08:12:17
2	B 249.677†	-369.6	169.0	3.5417	ug/L	3.5417	ppb	08:12:17
2	Ba 233.527†	4.8	13.1	0.0982	ug/L	0.0982	ppb	08:12:17
2	Be 313.107†	-4999.5	220.8	0.0806	ug/L	0.0806	ppb	08:11:56
2	Cd 226.502†	-187.8	11.3	0.1186	ug/L	0.1186	ppb	08:12:17
2	Co 228.616†	-68.1	-1.2	-0.0205	ug/L	-0.0205	ppb	08:12:17
2	Cr 267.716†	69.1	-11.0	-0.1148	ug/L	-0.1148	ppb	08:12:17
2	Cu 324.752†	6713.4	-187.4	-0.5357	ug/L	-0.5357	ppb	08:11:56
2	Mn 257.610†	439.8	8.1	0.0103	ug/L	0.0103	ppb	08:12:17
2	Mo 202.031†	36.4	17.3	1.1000	ug/L	1.1000	ppb	08:12:17
2	Ni 231.604†	100.8	12.1	0.2799	ug/L	0.2799	ppb	08:12:17

2	P 214.914†	201.9	-26.0	-14.897	ug/L	-14.897 ppb	08:12:17
2	Pb 220.353†	-58.2	11.5	1.2990	ug/L	1.2990 ppb	08:12:17
2	S 181.975 Axial†	32.1	-10.2	-14.223	ug/L	-14.223 ppb	08:12:17
2	Sb 206.836†	32.9	-2.0	-0.6113	ug/L	-0.6113 ppb	08:12:17
2	Se 196.026†	-24.0	5.4	3.1479	ug/L	3.1479 ppb	08:12:17
2	Si 251.611†	484.7	24.6	0.7154	ug/L	0.7154 ppb	08:12:17
2	Sn 189.927†	5.4	0.3	0.0478	ug/L	0.0478 ppb	08:12:17
2	Ti 334.940†	-1097.3	41.2	0.0666	ug/L	0.0666 ppb	08:11:56
2	Tl 190.801†	-38.7	-5.4	-1.5059	ug/L	-1.5059 ppb	08:12:17
2	U 409.014†	-2499.4	-43.9	-1.2109	ug/L	-1.2109 ppb	08:11:51
2	V 292.402†	-1362.2	25.3	0.1783	ug/L	0.1783 ppb	08:11:56
2	Zn 213.857†	657.7	21.7	0.1879	ug/L	0.1879 ppb	08:12:17
2	SiO2†	477.7	-0.0	-0.0471	ug/L	-0.0471 ppb	08:12:57
3	Sc Radial	5801.4	5801.4	99.3	%		08:10:54
3	Y RADIAL	6256.3	6256.3	99.50	%		08:10:54
3	Al 396.153Radial†	-3.8	16.6	11.493	ug/L	11.493 ppb	08:10:54
3	Ca 317.933Radial†	21.4	6.0	8.8051	ug/L	8.8051 ppb	08:11:15
3	Fe 238.204 Radial†	7.9	1.2	11.147	ug/L	11.147 ppb	08:11:15
3	K 766.490 Radial†	2292.2	-42.7	-7.5763	ug/L	-7.5763 ppb	08:10:54
3	Mg 279.077 IEC†	1.9	0.8	26.566	ug/L	26.566 ppb	08:11:15
3	Na 589.592 Radial†	-1095.1	-15.2	-5.1014	ug/L	-5.1014 ppb	08:10:54
3	Sr 421.552†	-24.4	2.8	0.0174	ug/L	0.0174 ppb	08:10:54
3	Sc 361.383	917281.5	917281.5	101.78	%		08:12:22
3	Y 371.029	764497.1	764497.1	101.79	%		08:12:22
3	Ag 328.068†	371.5	72.2	0.3336	ug/L	0.3336 ppb	08:12:27
3	As 188.979†	-26.0	-1.4	-0.5580	ug/L	-0.5580 ppb	08:12:47
3	B 249.677†	-364.7	172.3	3.6127	ug/L	3.6127 ppb	08:12:47
3	Ba 233.527†	3.5	11.9	0.0885	ug/L	0.0885 ppb	08:12:47
3	Be 313.107†	-4952.6	246.9	0.0901	ug/L	0.0901 ppb	08:12:27
3	Cd 226.502†	-187.5	10.8	0.1139	ug/L	0.1139 ppb	08:12:47
3	Co 228.616†	-63.4	3.1	0.0586	ug/L	0.0586 ppb	08:12:47
3	Cr 267.716†	63.9	-15.9	-0.1653	ug/L	-0.1653 ppb	08:12:47
3	Cu 324.752†	6714.5	-159.4	-0.4557	ug/L	-0.4557 ppb	08:12:27
3	Mn 257.610†	459.3	28.9	0.0315	ug/L	0.0315 ppb	08:12:47
3	Mo 202.031†	20.1	1.4	0.0900	ug/L	0.0900 ppb	08:12:47
3	Ni 231.604†	116.1	27.5	0.6373	ug/L	0.6373 ppb	08:12:47
3	P 214.914†	209.1	-18.1	-10.383	ug/L	-10.383 ppb	08:12:47
3	Pb 220.353†	-61.8	7.7	0.8752	ug/L	0.8752 ppb	08:12:47
3	S 181.975 Axial†	37.7	-4.5	-6.3631	ug/L	-6.3631 ppb	08:12:47
3	Sb 206.836†	36.0	1.1	0.3524	ug/L	0.3524 ppb	08:12:47
3	Se 196.026†	-23.5	5.7	3.3461	ug/L	3.3461 ppb	08:12:47
3	Si 251.611†	486.9	28.7	0.8618	ug/L	0.8618 ppb	08:12:47
3	Sn 189.927†	0.7	-4.3	-0.7058	ug/L	-0.7058 ppb	08:12:47
3	Ti 334.940†	-1114.9	19.5	0.0330	ug/L	0.0330 ppb	08:12:27
3	Tl 190.801†	-24.6	8.3	2.3260	ug/L	2.3260 ppb	08:12:47
3	U 409.014†	-2560.9	-114.4	-3.1511	ug/L	-3.1511 ppb	08:12:22
3	V 292.402†	-1372.0	10.3	0.0621	ug/L	0.0621 ppb	08:12:27
3	Zn 213.857†	632.6	-0.3	-0.0081	ug/L	-0.0081 ppb	08:12:47
3	SiO2†	481.9	6.1	0.3958	ug/L	0.3958 ppb	08:13:02

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918464.3	101.91	%	0.247				0.24%
Sc Radial	5817.6	99.6	%	0.69				0.69%
Y 371.029	764872.8	101.84	%	0.096				0.09%
Y RADIAL	6260.2	99.56	%	0.641				0.64%
Ag 328.068†	55.8	0.2596	ug/L	0.06495	0.2596	ppb	0.06495	25.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.5396	ug/L	15.25647	-0.5396	ppb	15.25647	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5151	ug/L	1.01417	0.5151	ppb	1.01417	196.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	181.2	3.7986	ug/L	0.38512	3.7986	ppb	0.38512	10.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0527	ug/L	0.07066	0.0527	ppb	0.07066	134.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	239.5	0.0874	ug/L	0.00595	0.0874	ppb	0.00595	6.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.4	6.5280	ug/L	1.97572	6.5280	ppb	1.97572	30.27%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.9      0.1354 ug/L       0.03318      0.1354 ppb        0.03318  24.51%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.7      0.0331 ug/L       0.04646      0.0331 ppb        0.04646 140.40%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -13.5     -0.1403 ug/L       0.02526     -0.1403 ppb        0.02526  18.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -167.4     -0.4783 ug/L       0.05006     -0.4783 ppb        0.05006  10.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      11.938 ug/L        1.1452      11.938 ppb         1.1452   9.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          41.0      7.2846 ug/L      15.15852      7.2846 ppb       15.15852 208.09%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.4      15.484 ug/L       30.1170      15.484 ppb        30.1170 194.51%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 9.0      0.0105 ug/L       0.02090      0.0105 ppb        0.02090 199.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                10.6      0.6748 ug/L       0.52359      0.6748 ppb        0.52359  77.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -25.9     -8.6799 ug/L       4.31890     -8.6799 ppb        4.31890  49.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.8      0.2727 ug/L       0.36830      0.2727 ppb        0.36830 135.08%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -20.6     -11.832 ug/L        2.6556     -11.832 ppb         2.6556  22.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8952 ug/L       0.39415      0.8952 ppb        0.39415  44.03%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -5.7     -7.9284 ug/L       5.67605     -7.9284 ppb        5.67605  71.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.4      0.4437 ug/L       1.10344      0.4437 ppb        1.10344 248.71%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.1      3.0167 ug/L       0.41103      3.0167 ppb        0.41103  13.63%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.8      0.7294 ug/L       0.12588      0.7294 ppb        0.12588  17.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.6     -0.2618 ug/L       0.39435     -0.2618 ppb        0.39435 150.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.8     -0.0052 ug/L       0.02993     -0.0052 ppb        0.02993 575.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                34.2      0.0564 ug/L       0.02032      0.0564 ppb        0.02032  36.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.1      0.0278 ug/L       2.02711      0.0278 ppb        2.02711 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -123.4     -3.4017 ug/L       2.32626     -3.4017 ppb        2.32626  68.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                16.6      0.1113 ug/L       0.06011      0.1113 ppb        0.06011  54.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                20.1      0.1726 ug/L       0.17351      0.1726 ppb        0.17351 100.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       5.6      0.3299 ug/L       0.34869      0.3299 ppb        0.34869 105.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/8/2009 08:15:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5940.5	5940.5	102	%			08:17:06
1	Y RADIAL	6395.2	6395.2	101.7	%			08:17:06
1	Al 396.153Radial†	260.7	276.9	191.93	ug/L	191.93	ppb	08:17:06
1	Ca 317.933Radial†	153.9	135.9	200.25	ug/L	200.25	ppb	08:17:26
1	Fe 238.204 Radial†	20.4	13.3	124.24	ug/L	124.24	ppb	08:17:26
1	K 766.490 Radial†	3305.8	900.3	159.44	ug/L	159.44	ppb	08:17:06
1	Mg 279.077 IEC†	7.2	5.9	209.88	ug/L	209.88	ppb	08:17:26
1	Na 589.592 Radial†	-237.5	854.3	286.69	ug/L	286.69	ppb	08:17:06
1	Sr 421.552†	769.9	784.8	4.8854	ug/L	4.8854	ppb	08:17:06
1	Sc 361.383	901641.8	901641.8	100.04	%			08:18:23
1	Y 371.029	753823.3	753823.3	100.36	%			08:18:23
1	Ag 328.068†	1343.5	1050.2	4.7669	ug/L	4.7669	ppb	08:18:23
1	As 188.979†	48.4	72.6	28.705	ug/L	28.705	ppb	08:18:43
1	B 249.677†	1835.1	2365.0	49.569	ug/L	49.569	ppb	08:18:23
1	Ba 233.527†	676.8	684.9	5.0920	ug/L	5.0920	ppb	08:18:43
1	Be 313.107†	8490.6	13600.1	4.9675	ug/L	4.9675	ppb	08:18:23
1	Cd 226.502†	271.5	466.4	4.9219	ug/L	4.9219	ppb	08:18:43
1	Co 228.616†	190.1	255.4	4.8605	ug/L	4.8605	ppb	08:18:43
1	Cr 267.716†	535.1	456.2	4.7826	ug/L	4.7826	ppb	08:18:43
1	Cu 324.752†	10202.8	3441.8	9.8558	ug/L	9.8558	ppb	08:18:23
1	Mn 257.610†	10097.5	9670.9	10.325	ug/L	10.325	ppb	08:18:23
1	Mo 202.031†	173.7	155.3	9.8742	ug/L	9.8742	ppb	08:18:43
1	Ni 231.604†	315.7	229.0	5.2994	ug/L	5.2994	ppb	08:18:43
1	P 214.914†	456.1	232.4	132.55	ug/L	132.55	ppb	08:18:43
1	Pb 220.353†	25.9	94.4	10.717	ug/L	10.717	ppb	08:18:43
1	S 181.975 Axial†	110.1	68.5	95.956	ug/L	95.956	ppb	08:18:43
1	Sb 206.836†	69.5	35.3	11.434	ug/L	11.434	ppb	08:18:43
1	Se 196.026†	33.0	61.8	36.168	ug/L	36.168	ppb	08:18:43
1	Si 251.611†	3632.7	3181.5	94.983	ug/L	94.983	ppb	08:18:43
1	Sn 189.927†	68.9	63.9	10.481	ug/L	10.481	ppb	08:18:43
1	Ti 334.940†	2173.8	3287.9	5.2317	ug/L	5.2317	ppb	08:18:23
1	Tl 190.801†	39.9	72.4	20.346	ug/L	20.346	ppb	08:18:43
1	U 409.014†	-441.2	1960.8	53.991	ug/L	53.991	ppb	08:18:23
1	V 292.402†	-596.4	762.2	5.2581	ug/L	5.2581	ppb	08:18:23
1	Zn 213.857†	1785.0	1162.4	10.091	ug/L	10.091	ppb	08:18:43
1	SiO2†	3760.9	3291.8	210.60	ug/L	210.60	ppb	08:19:40
2	Sc Radial	5778.3	5778.3	98.9	%			08:17:31
2	Y RADIAL	6209.6	6209.6	98.76	%			08:17:31
2	Al 396.153Radial†	262.1	285.5	197.91	ug/L	197.91	ppb	08:17:31
2	Ca 317.933Radial†	154.9	141.0	207.90	ug/L	207.90	ppb	08:17:52
2	Fe 238.204 Radial†	20.3	13.7	128.46	ug/L	128.46	ppb	08:17:52
2	K 766.490 Radial†	3191.9	876.4	155.21	ug/L	155.21	ppb	08:17:31
2	Mg 279.077 IEC†	10.5	9.5	335.33	ug/L	335.33	ppb	08:17:52
2	Na 589.592 Radial†	-280.7	804.1	269.83	ug/L	269.83	ppb	08:17:31
2	Sr 421.552†	760.1	796.1	4.9557	ug/L	4.9557	ppb	08:17:31
2	Sc 361.383	901543.3	901543.3	100.03	%			08:18:49
2	Y 371.029	753311.9	753311.9	100.30	%			08:18:49
2	Ag 328.068†	1410.9	1117.8	5.0769	ug/L	5.0769	ppb	08:18:49
2	As 188.979†	51.1	75.3	29.767	ug/L	29.767	ppb	08:19:09
2	B 249.677†	1816.1	2346.2	49.173	ug/L	49.173	ppb	08:18:49
2	Ba 233.527†	673.4	681.6	5.0677	ug/L	5.0677	ppb	08:19:09
2	Be 313.107†	8482.4	13592.8	4.9644	ug/L	4.9644	ppb	08:18:49
2	Cd 226.502†	284.4	479.4	5.0588	ug/L	5.0588	ppb	08:19:09
2	Co 228.616†	174.4	239.8	4.5649	ug/L	4.5649	ppb	08:19:09
2	Cr 267.716†	547.3	468.5	4.9130	ug/L	4.9130	ppb	08:19:09
2	Cu 324.752†	10227.0	3467.1	9.9285	ug/L	9.9285	ppb	08:18:49
2	Mn 257.610†	10053.3	9627.9	10.277	ug/L	10.277	ppb	08:18:49
2	Mo 202.031†	176.8	158.4	10.073	ug/L	10.073	ppb	08:19:09
2	Ni 231.604†	319.1	232.5	5.3801	ug/L	5.3801	ppb	08:19:09

2	P 214.914†	470.3	246.6	140.77 ug/L	140.77 ppb	08:19:09
2	Pb 220.353†	11.6	80.1	9.1052 ug/L	9.1052 ppb	08:19:09
2	S 181.975 Axial†	109.3	67.7	94.849 ug/L	94.849 ppb	08:19:09
2	Sb 206.836†	66.3	32.0	10.412 ug/L	10.412 ppb	08:19:09
2	Se 196.026†	28.9	57.7	33.851 ug/L	33.851 ppb	08:19:09
2	Si 251.611†	3618.6	3167.8	94.570 ug/L	94.570 ppb	08:19:09
2	Sn 189.927†	71.4	66.3	10.886 ug/L	10.886 ppb	08:19:09
2	Ti 334.940†	2003.5	3117.8	4.9622 ug/L	4.9622 ppb	08:18:49
2	Tl 190.801†	32.8	65.3	18.347 ug/L	18.347 ppb	08:19:09
2	U 409.014†	-563.6	1838.4	50.616 ug/L	50.616 ppb	08:18:49
2	V 292.402†	-605.8	752.7	5.1946 ug/L	5.1946 ppb	08:18:49
2	Zn 213.857†	1781.3	1158.9	10.054 ug/L	10.054 ppb	08:19:09
2	SiO2†	3752.2	3283.5	210.06 ug/L	210.06 ppb	08:19:45
3	Sc Radial	5805.0	5805.0	99.3 %		08:17:57
3	Y RADIAL	6273.9	6273.9	99.78 %		08:17:57
3	Al 396.153Radial†	262.7	284.9	197.48 ug/L	197.48 ppb	08:17:57
3	Ca 317.933Radial†	153.3	138.7	204.49 ug/L	204.49 ppb	08:18:17
3	Fe 238.204 Radial†	21.8	15.2	142.16 ug/L	142.16 ppb	08:18:17
3	K 766.490 Radial†	3276.4	946.6	167.66 ug/L	167.66 ppb	08:17:57
3	Mg 279.077 IEC†	12.6	11.5	405.90 ug/L	405.90 ppb	08:18:17
3	Na 589.592 Radial†	-294.2	791.8	265.71 ug/L	265.71 ppb	08:17:57
3	Sr 421.552†	792.6	825.2	5.1374 ug/L	5.1374 ppb	08:17:57
3	Sc 361.383	905114.1	905114.1	100.43 %		08:19:14
3	Y 371.029	758310.9	758310.9	100.96 %		08:19:14
3	Ag 328.068†	1518.1	1218.9	5.5368 ug/L	5.5368 ppb	08:19:14
3	As 188.979†	45.6	69.5	27.505 ug/L	27.505 ppb	08:19:34
3	B 249.677†	1844.8	2367.6	49.620 ug/L	49.620 ppb	08:19:14
3	Ba 233.527†	684.6	690.2	5.1316 ug/L	5.1316 ppb	08:19:34
3	Be 313.107†	8549.0	13625.7	4.9766 ug/L	4.9766 ppb	08:19:14
3	Cd 226.502†	270.4	464.4	4.8984 ug/L	4.8984 ppb	08:19:34
3	Co 228.616†	191.0	255.6	4.8644 ug/L	4.8644 ppb	08:19:34
3	Cr 267.716†	535.3	454.3	4.7632 ug/L	4.7632 ppb	08:19:34
3	Cu 324.752†	10231.8	3431.6	9.8274 ug/L	9.8274 ppb	08:19:14
3	Mn 257.610†	10048.0	9582.9	10.229 ug/L	10.229 ppb	08:19:14
3	Mo 202.031†	175.0	155.9	9.9140 ug/L	9.9140 ppb	08:19:34
3	Ni 231.604†	317.8	229.9	5.3208 ug/L	5.3208 ppb	08:19:34
3	P 214.914†	462.6	237.2	135.29 ug/L	135.29 ppb	08:19:34
3	Pb 220.353†	18.1	86.5	9.8297 ug/L	9.8297 ppb	08:19:34
3	S 181.975 Axial†	109.9	67.8	95.025 ug/L	95.025 ppb	08:19:34
3	Sb 206.836†	58.7	24.2	7.9299 ug/L	7.9299 ppb	08:19:34
3	Se 196.026†	37.1	65.8	38.547 ug/L	38.547 ppb	08:19:34
3	Si 251.611†	3618.1	3153.0	94.127 ug/L	94.127 ppb	08:19:34
3	Sn 189.927†	69.7	64.5	10.576 ug/L	10.576 ppb	08:19:34
3	Ti 334.940†	2093.8	3199.8	5.0916 ug/L	5.0916 ppb	08:19:14
3	Tl 190.801†	40.4	72.7	20.436 ug/L	20.436 ppb	08:19:34
3	U 409.014†	-456.0	1947.7	53.628 ug/L	53.628 ppb	08:19:14
3	V 292.402†	-603.6	757.3	5.2280 ug/L	5.2280 ppb	08:19:14
3	Zn 213.857†	1787.2	1157.7	10.041 ug/L	10.041 ppb	08:19:34
3	SiO2†	3771.9	3288.4	210.37 ug/L	210.37 ppb	08:19:50

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902766.4	100.17	%	0.226				0.23%
Sc Radial	5841.3	100.0	%	1.49				1.49%
Y 371.029	755148.7	100.54	%	0.366				0.36%
Y RADIAL	6292.9	100.1	%	1.50				1.50%
Ag 328.068†	1128.9	5.1269	ug/L	0.38740	5.1269	ppb	0.38740	7.56%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	282.5	195.77	ug/L	3.334	195.77	ppb	3.334	1.70%
QC value within limits for Al 396.153Radial Recovery = 97.89%								
As 188.979†	72.5	28.659	ug/L	1.1313	28.659	ppb	1.1313	3.95%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2359.6	49.454	ug/L	0.2442	49.454	ppb	0.2442	0.49%
QC value within limits for B 249.677 Recovery = 98.91%								
Ba 233.527†	685.6	5.0971	ug/L	0.03226	5.0971	ppb	0.03226	0.63%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	13606.2	4.9695	ug/L	0.00635	4.9695	ppb	0.00635	0.13%
QC value within limits for Be 313.107 Recovery = 99.39%								
Ca 317.933Radial†	138.5	204.21	ug/L	3.830	204.21	ppb	3.830	1.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.11%
Cd 226.502†              470.1      4.9597 ug/L       0.08663      4.9597 ppb        0.08663   1.75%
   QC value within limits for Cd 226.502  Recovery = 99.19%
Co 228.616†              250.3      4.7633 ug/L       0.17179      4.7633 ppb        0.17179   3.61%
   QC value within limits for Co 228.616  Recovery = 95.27%
Cr 267.716†              459.7      4.8196 ug/L       0.08146      4.8196 ppb        0.08146   1.69%
   QC value within limits for Cr 267.716  Recovery = 96.39%
Cu 324.752†             3446.8      9.8706 ug/L       0.05214      9.8706 ppb        0.05214   0.53%
   QC value within limits for Cu 324.752  Recovery = 98.71%
Fe 238.204 Radial†       14.0      131.62 ug/L         9.372      131.62 ppb          9.372   7.12%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 131.62%
K 766.490 Radial†        907.8      160.77 ug/L         6.329      160.77 ppb          6.329   3.94%
   QC value within limits for K 766.490 Radial  Recovery = 107.18%
Mg 279.077 IEC†           9.0      317.04 ug/L        99.282      317.04 ppb         99.282  31.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.68%
Mn 257.610†             9627.3      10.277 ug/L        0.0479      10.277 ppb         0.0479   0.47%
   QC value within limits for Mn 257.610  Recovery = 102.77%
Mo 202.031†              156.5      9.9537 ug/L       0.10505      9.9537 ppb        0.10505   1.06%
   QC value within limits for Mo 202.031  Recovery = 99.54%
Na 589.592 Radial†       816.7      274.08 ug/L        11.114      274.08 ppb         11.114   4.05%
   QC value within limits for Na 589.592 Radial  Recovery = 91.36%
Ni 231.604†              230.5      5.3334 ug/L       0.04181      5.3334 ppb        0.04181   0.78%
   QC value within limits for Ni 231.604  Recovery = 106.67%
P 214.914†               238.7      136.20 ug/L         4.184      136.20 ppb          4.184   3.07%
   QC value within limits for P 214.914  Recovery = 90.80%
Pb 220.353†               87.0      9.8839 ug/L       0.80722      9.8839 ppb        0.80722   8.17%
   QC value within limits for Pb 220.353  Recovery = 98.84%
S 181.975 Axial†          68.0      95.277 ug/L        0.5949      95.277 ppb         0.5949   0.62%
   QC value within limits for S 181.975 Axial  Recovery = 95.28%
Sb 206.836†               30.5      9.9256 ug/L       1.80229      9.9256 ppb        1.80229  18.16%
   QC value within limits for Sb 206.836  Recovery = 99.26%
Se 196.026†               61.8      36.189 ug/L        2.3479      36.189 ppb         2.3479   6.49%
   QC value within limits for Se 196.026  Recovery = 120.63%
Si 251.611†             3167.4      94.560 ug/L        0.4282      94.560 ppb         0.4282   0.45%
   QC value within limits for Si 251.611  Recovery = 94.56%
Sn 189.927†               64.9      10.648 ug/L        0.2117      10.648 ppb         0.2117   1.99%
   QC value within limits for Sn 189.927  Recovery = 106.48%
Sr 421.552†              802.0      4.9928 ug/L       0.13002      4.9928 ppb        0.13002   2.60%
   QC value within limits for Sr 421.552  Recovery = 99.86%
Ti 334.940†             3201.8      5.0952 ug/L       0.13476      5.0952 ppb        0.13476   2.64%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†               70.1      19.710 ug/L        1.1813      19.710 ppb         1.1813   5.99%
   QC value within limits for Tl 190.801  Recovery = 98.55%
U 409.014†              1915.6      52.745 ug/L        1.8523      52.745 ppb         1.8523   3.51%
   QC value within limits for U 409.014  Recovery = 105.49%
V 292.402†               757.4      5.2269 ug/L       0.03179      5.2269 ppb        0.03179   0.61%
   QC value within limits for V 292.402  Recovery = 104.54%
Zn 213.857†             1159.7      10.062 ug/L        0.0256      10.062 ppb         0.0256   0.25%
   QC value within limits for Zn 213.857  Recovery = 100.62%
SiO2†                   3287.9      210.35 ug/L         0.271      210.35 ppb          0.271   0.13%
   QC value within limits for SiO2  Recovery = 98.75%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/8/2009 08:22:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5189.8	5189.8	88.8	%			08:23:59
1	Y RADIAL	5590.3	5590.3	88.91	%			08:23:59
1	Al 396.153Radial†	669734.8	754172.3	523870	ug/L	523870	ppb	08:23:54
1	Ca 317.933Radial†	291928.0	328708.7	484500	ug/L	484500	ppb	08:23:54
1	Fe 238.204 Radial†	17643.1	19860.1	185930	ug/L	185930	ppb	08:23:59
1	K 766.490 Radial†	2220.3	148.4	42.540	ug/L	42.540	ppb	08:23:59
1	Mg 279.077 IEC†	12418.2	13982.3	493110	ug/L	493110	ppb	08:23:59
1	Na 589.592 Radial†	-979.9	-15.4	-5.1754	ug/L	-5.1754	ppb	08:23:59
1	Sr 421.552†	535.4	630.3	-0.5657	ug/L	-0.5657	ppb	08:23:59
1	Sc 361.383	776307.7	776307.7	86.135	%			08:24:26
1	Y 371.029	629776.0	629776.0	83.849	%			08:24:26
1	Ag 328.068†	-9607.7	-11447.0	0.2578	ug/L	0.2578	ppb	08:24:26
1	As 188.979†	-78.4	-66.9	2.0669	ug/L	2.0669	ppb	08:24:46
1	B 249.677†	446.4	1048.9	-2.6705	ug/L	-2.6705	ppb	08:24:26
1	Ba 233.527†	-463.0	-529.1	3.0093	ug/L	3.0093	ppb	08:24:46
1	Be 313.107†	-5475.2	-1243.6	-0.5072	ug/L	-0.5072	ppb	08:24:26
1	Cd 226.502†	1417.2	1840.4	0.8697	ug/L	0.8697	ppb	08:24:46
1	Co 228.616†	-13.4	49.8	-1.6911	ug/L	-1.6911	ppb	08:24:46
1	Cr 267.716†	-127.7	-226.9	0.9593	ug/L	0.9593	ppb	08:24:46
1	Cu 324.752†	3902.7	-2225.8	3.1148	ug/L	3.1148	ppb	08:24:26
1	Mn 257.610†	-402.3	-889.3	8.4088	ug/L	8.4088	ppb	08:24:26
1	Mo 202.031†	-211.4	-263.7	-3.5634	ug/L	-3.5634	ppb	08:24:46
1	Ni 231.604†	221.2	170.3	3.9419	ug/L	3.9419	ppb	08:24:46
1	P 214.914†	179.5	-15.1	18.966	ug/L	18.966	ppb	08:24:46
1	Pb 220.353†	-791.2	-850.1	6.1602	ug/L	6.1602	ppb	08:24:46
1	S 181.975 Axial†	83.0	54.8	-26.290	ug/L	-26.290	ppb	08:24:46
1	Sb 206.836†	63.7	39.7	-0.1476	ug/L	-0.1476	ppb	08:24:46
1	Se 196.026†	-1063.9	-1206.3	-16.785	ug/L	-16.785	ppb	08:24:46
1	Si 251.611†	453.6	76.9	2.8018	ug/L	2.8018	ppb	08:24:46
1	Sn 189.927†	-361.1	-424.2	-16.384	ug/L	-16.384	ppb	08:24:46
1	Ti 334.940†	-15761.9	-17184.0	-2.1640	ug/L	-2.1640	ppb	08:24:26
1	Tl 190.801†	-85.3	-66.6	-4.5522	ug/L	-4.5522	ppb	08:24:46
1	U 409.014†	-1013.4	1225.3	10.365	ug/L	10.365	ppb	08:24:26
1	V 292.402†	867.1	2365.0	-1.6778	ug/L	-1.6778	ppb	08:24:46
1	Zn 213.857†	3296.5	3205.3	-6.6524	ug/L	-6.6524	ppb	08:24:46
1	SiO2†	440.3	43.7	3.8863	ug/L	3.8863	ppb	08:25:43
2	Sc Radial	5172.2	5172.2	88.5	%			08:24:09
2	Y RADIAL	5524.2	5524.2	87.86	%			08:24:09
2	Al 396.153Radial†	671985.1	759276.6	527410	ug/L	527410	ppb	08:24:04
2	Ca 317.933Radial†	292632.2	330620.9	487320	ug/L	487320	ppb	08:24:04
2	Fe 238.204 Radial†	17633.3	19916.5	186450	ug/L	186450	ppb	08:24:09
2	K 766.490 Radial†	2182.2	113.9	36.591	ug/L	36.591	ppb	08:24:09
2	Mg 279.077 IEC†	12395.4	14004.0	493880	ug/L	493880	ppb	08:24:09
2	Na 589.592 Radial†	-942.9	22.6	7.5962	ug/L	7.5962	ppb	08:24:09
2	Sr 421.552†	494.0	585.5	-0.8709	ug/L	-0.8709	ppb	08:24:09
2	Sc 361.383	703840.2	703840.2	78.095	%			08:24:52
2	Y 371.029	571920.7	571920.7	76.146	%			08:24:52
2	Ag 328.068†	-9831.3	-12881.6	-6.1038	ug/L	-6.1038	ppb	08:24:52
2	As 188.979†	-85.5	-85.3	-5.1682	ug/L	-5.1682	ppb	08:25:12
2	B 249.677†	361.2	993.2	-3.9085	ug/L	-3.9085	ppb	08:24:52
2	Ba 233.527†	-536.2	-678.2	1.9266	ug/L	1.9266	ppb	08:25:12
2	Be 313.107†	-5405.9	-1809.3	-0.7211	ug/L	-0.7211	ppb	08:24:52
2	Cd 226.502†	1474.1	2082.7	3.3788	ug/L	3.3788	ppb	08:25:12
2	Co 228.616†	-20.8	38.8	-1.9097	ug/L	-1.9097	ppb	08:25:12
2	Cr 267.716†	-87.7	-191.0	1.3502	ug/L	1.3502	ppb	08:25:12
2	Cu 324.752†	3771.0	-1927.9	3.9942	ug/L	3.9942	ppb	08:24:52
2	Mn 257.610†	-522.6	-1091.4	8.2316	ug/L	8.2316	ppb	08:24:52
2	Mo 202.031†	-238.1	-323.2	-7.3030	ug/L	-7.3030	ppb	08:25:12
2	Ni 231.604†	205.0	175.9	4.0727	ug/L	4.0727	ppb	08:25:12

2	P 214.914†	142.8	-40.6	4.8366 ug/L	4.8366 ppb	08:25:12
2	Pb 220.353†	-811.4	-970.5	-6.7096 ug/L	-6.7096 ppb	08:25:12
2	S 181.975 Axial†	82.5	64.0	-14.051 ug/L	-14.051 ppb	08:25:12
2	Sb 206.836†	80.0	68.2	8.6688 ug/L	8.6688 ppb	08:25:12
2	Se 196.026†	-1075.3	-1348.1	-96.472 ug/L	-96.472 ppb	08:25:12
2	Si 251.611†	393.7	54.5	2.2031 ug/L	2.2031 ppb	08:25:12
2	Sn 189.927†	-335.1	-434.1	-17.705 ug/L	-17.705 ppb	08:25:12
2	Ti 334.940†	-16209.8	-19641.7	-5.9362 ug/L	-5.9362 ppb	08:24:52
2	Tl 190.801†	-76.2	-65.1	-4.0711 ug/L	-4.0711 ppb	08:25:12
2	U 409.014†	-1109.0	981.8	3.5914 ug/L	3.5914 ppb	08:24:52
2	V 292.402†	911.5	2525.6	-0.7433 ug/L	-0.7433 ppb	08:25:12
2	Zn 213.857†	3324.6	3635.3	-2.9743 ug/L	-2.9743 ppb	08:25:12
2	SiO2†	494.5	165.8	11.879 ug/L	11.879 ppb	08:25:48
3	Sc Radial	5341.1	5341.1	91.4 %		08:24:20
3	Y RADIAL	5696.8	5696.8	90.60 %		08:24:20
3	Al 396.153Radial†	668773.5	731756.6	508300 ug/L	508300 ppb	08:24:14
3	Ca 317.933Radial†	291429.1	318850.6	469970 ug/L	469970 ppb	08:24:14
3	Fe 238.204 Radial†	17266.5	18885.3	176800 ug/L	176800 ppb	08:24:20
3	K 766.490 Radial†	2229.6	87.8	31.346 ug/L	31.346 ppb	08:24:20
3	Mg 279.077 IEC†	12175.8	13320.9	469790 ug/L	469790 ppb	08:24:20
3	Na 589.592 Radial†	-901.3	101.7	34.145 ug/L	34.145 ppb	08:24:20
3	Sr 421.552†	505.0	579.9	-0.7448 ug/L	-0.7448 ppb	08:24:20
3	Sc 361.383	766708.2	766708.2	85.070 %		08:25:17
3	Y 371.029	621737.7	621737.7	82.779 %		08:25:17
3	Ag 328.068†	-9560.5	-11531.1	-2.8107 ug/L	-2.8107 ppb	08:25:17
3	As 188.979†	-93.2	-85.4	-6.6566 ug/L	-6.6566 ppb	08:25:37
3	B 249.677†	425.5	1030.8	-1.8388 ug/L	-1.8388 ppb	08:25:17
3	Ba 233.527†	-496.6	-575.2	2.3293 ug/L	2.3293 ppb	08:25:37
3	Be 313.107†	-5346.4	-1171.7	-0.4819 ug/L	-0.4819 ppb	08:25:17
3	Cd 226.502†	1451.3	1901.1	2.4241 ug/L	2.4241 ppb	08:25:37
3	Co 228.616†	-9.2	54.7	-1.4754 ug/L	-1.4754 ppb	08:25:37
3	Cr 267.716†	-93.8	-188.9	1.1967 ug/L	1.1967 ppb	08:25:37
3	Cu 324.752†	3834.9	-2248.8	2.5836 ug/L	2.5836 ppb	08:25:17
3	Mn 257.610†	-380.3	-869.3	7.9544 ug/L	7.9544 ppb	08:25:17
3	Mo 202.031†	-241.1	-301.8	-6.6288 ug/L	-6.6288 ppb	08:25:37
3	Ni 231.604†	204.1	153.3	3.5498 ug/L	3.5498 ppb	08:25:37
3	P 214.914†	162.7	-32.3	11.143 ug/L	11.143 ppb	08:25:37
3	Pb 220.353†	-803.2	-875.7	0.5132 ug/L	0.5132 ppb	08:25:37
3	S 181.975 Axial†	75.6	47.3	-33.723 ug/L	-33.723 ppb	08:25:37
3	Sb 206.836†	59.7	36.0	-1.1159 ug/L	-1.1159 ppb	08:25:37
3	Se 196.026†	-1060.8	-1218.2	-55.253 ug/L	-55.253 ppb	08:25:37
3	Si 251.611†	410.8	33.3	1.5399 ug/L	1.5399 ppb	08:25:37
3	Sn 189.927†	-354.6	-421.8	-17.629 ug/L	-17.629 ppb	08:25:37
3	Ti 334.940†	-15808.1	-17467.5	-3.3724 ug/L	-3.3724 ppb	08:25:17
3	Tl 190.801†	-85.2	-67.6	-5.2665 ug/L	-5.2665 ppb	08:25:37
3	U 409.014†	-1140.9	1060.7	6.9789 ug/L	6.9789 ppb	08:25:17
3	V 292.402†	872.8	2384.3	-0.7314 ug/L	-0.7314 ppb	08:25:37
3	Zn 213.857†	3339.7	3304.0	-4.1173 ug/L	-4.1173 ppb	08:25:37
3	SiO2†	414.5	19.8	2.4542 ug/L	2.4542 ppb	08:25:53

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	748952.0	83.100	%	4.3674				5.26%
Sc Radial	5234.3	89.6	%	1.59				1.77%
Y 371.029	607811.5	80.925	%	4.1728				5.16%
Y RADIAL	5603.8	89.12	%	1.385				1.55%
Ag 328.068†	-11953.2	-2.8856	ug/L	3.18143	-2.8856	ppb	3.18143	110.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	748401.9	519860	ug/L	10168.8	519860	ppb	10168.8	1.96%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	-79.2	-3.2526	ug/L	4.66656	-3.2526	ppb	4.66656	143.47%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1024.3	-2.8059	ug/L	1.04145	-2.8059	ppb	1.04145	37.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-594.2	2.4218	ug/L	0.54724	2.4218	ppb	0.54724	22.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1408.2	-0.5701	ug/L	0.13141	-0.5701	ppb	0.13141	23.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	326060.1	480590	ug/L	9310.0	480590	ppb	9310.0	1.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.12%
Cd 226.502†            1941.4      2.2242 ug/L       1.26642      2.2242 ppb        1.26642  56.94%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              47.8     -1.6920 ug/L       0.21716     -1.6920 ppb        0.21716  12.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -202.3      1.1687 ug/L       0.19695      1.1687 ppb        0.19695  16.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2134.2      3.2308 ug/L       0.71244      3.2308 ppb        0.71244  22.05%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    19554.0      183060 ug/L        5428.0      183060 ppb         5428.0   2.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.53%
K 766.490 Radial†       116.7      36.826 ug/L        5.6005      36.826 ppb         5.6005  15.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       13769.1      485590 ug/L       13692.7      485590 ppb        13692.7   2.82%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.12%
Mn 257.610†            -950.0      8.1983 ug/L       0.22901      8.1983 ppb        0.22901   2.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -296.2     -5.8318 ug/L       1.99315     -5.8318 ppb        1.99315  34.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       36.3      12.189 ug/L       20.0583      12.189 ppb       20.0583 164.57%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             166.5      3.8548 ug/L       0.27213      3.8548 ppb        0.27213   7.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -29.3      11.648 ug/L        7.0781      11.648 ppb         7.0781  60.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -898.8     -0.0121 ug/L       6.45097     -0.0121 ppb        6.45097 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         55.4     -24.688 ug/L        9.9331     -24.688 ppb         9.9331  40.23%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              48.0      2.4684 ug/L       5.39148      2.4684 ppb       5.39148 218.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†          -1257.5     -56.170 ug/L       39.8514     -56.170 ppb        39.8514  70.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              54.9      2.1816 ug/L       0.63120      2.1816 ppb        0.63120  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -426.7     -17.239 ug/L        0.7416     -17.239 ppb         0.7416   4.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             598.5     -0.7271 ug/L       0.15335     -0.7271 ppb        0.15335  21.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†         -18097.7     -3.8242 ug/L       1.92624     -3.8242 ppb        1.92624  50.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -66.4     -4.6299 ug/L       0.60148     -4.6299 ppb        0.60148  12.99%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1089.2      6.9786 ug/L       3.38696      6.9786 ppb        3.38696  48.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2425.0     -1.0508 ug/L       0.54301     -1.0508 ppb        0.54301  51.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            3381.5     -4.5813 ug/L       1.88241     -4.5813 ppb        1.88241  41.09%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    76.4      6.0733 ug/L       5.07889      6.0733 ppb        5.07889  83.63%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/8/2009 08:28:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5678.5	5678.5	97.2	%			08:30:02
1	Y RADIAL	6082.3	6082.3	96.73	%			08:30:02
1	Al 396.153Radial†	666388.7	685819.7	476370	ug/L	476370	ppb	08:29:57
1	Ca 317.933Radial†	290269.6	298709.0	440280	ug/L	440280	ppb	08:29:57
1	Fe 238.204 Radial†	17682.4	18190.6	170310	ug/L	170310	ppb	08:30:02
1	K 766.490 Radial†	30306.4	28837.4	5122.4	ug/L	5122.4	ppb	08:29:57
1	Mg 279.077 IEC†	12380.2	12739.7	449300	ug/L	449300	ppb	08:30:02
1	Na 589.592 Radial†	12920.7	14385.0	4827.3	ug/L	4827.3	ppb	08:30:02
1	Sr 421.552†	73414.3	75580.0	466.61	ug/L	466.61	ppb	08:29:57
1	Sc 361.383	798852.1	798852.1	88.637	%			08:30:29
1	Y 371.029	647271.7	647271.7	86.178	%			08:30:29
1	Ag 328.068†	42822.1	48019.2	266.81	ug/L	266.81	ppb	08:30:29
1	As 188.979†	1018.7	1173.4	493.46	ug/L	493.46	ppb	08:30:50
1	B 249.677†	21666.1	24974.3	500.05	ug/L	500.05	ppb	08:30:29
1	Ba 233.527†	57014.2	64331.8	484.23	ug/L	484.23	ppb	08:30:29
1	Be 313.107†	576364.8	655367.2	239.84	ug/L	239.84	ppb	08:30:29
1	Cd 226.502†	38769.0	43934.3	447.70	ug/L	447.70	ppb	08:30:50
1	Co 228.616†	20156.9	22806.4	430.59	ug/L	430.59	ppb	08:30:50
1	Cr 267.716†	39430.2	44406.4	469.93	ug/L	469.93	ppb	08:30:29
1	Cu 324.752†	171408.3	186626.0	542.76	ug/L	542.76	ppb	08:30:29
1	Mn 257.610†	389330.6	438820.1	476.72	ug/L	476.72	ppb	08:30:29
1	Mo 202.031†	6497.4	7312.0	476.58	ug/L	476.58	ppb	08:30:50
1	Ni 231.604†	16695.5	18749.2	433.89	ug/L	433.89	ppb	08:30:50
1	P 214.914†	3977.5	4263.9	2403.3	ug/L	2403.3	ppb	08:30:50
1	Pb 220.353†	2698.9	3113.3	445.59	ug/L	445.59	ppb	08:30:50
1	S 181.975 Axial†	1732.0	1912.5	2586.2	ug/L	2586.2	ppb	08:30:50
1	Sb 206.836†	1484.7	1640.8	514.93	ug/L	514.93	ppb	08:30:50
1	Se 196.026†	2736.6	3116.2	2426.1	ug/L	2426.1	ppb	08:30:50
1	Si 251.611†	152690.0	171815.1	5132.3	ug/L	5132.3	ppb	08:30:29
1	Sn 189.927†	2275.0	2561.6	467.67	ug/L	467.67	ppb	08:30:50
1	Ti 334.940†	268963.2	304558.9	508.60	ug/L	508.60	ppb	08:30:29
1	Tl 190.801†	1347.6	1552.8	451.07	ug/L	451.07	ppb	08:30:50
1	U 409.014†	13644.1	17795.1	467.88	ug/L	467.88	ppb	08:30:29
1	V 292.402†	66527.3	76414.4	495.81	ug/L	495.81	ppb	08:30:29
1	Zn 213.857†	52450.8	58553.1	476.49	ug/L	476.49	ppb	08:30:29
1	SiO2†	152506.2	171589.9	10983	ug/L	10983	ppb	08:31:47
2	Sc Radial	5253.3	5253.3	89.9	%			08:30:12
2	Y RADIAL	5660.3	5660.3	90.02	%			08:30:12
2	Al 396.153Radial†	669134.5	744386.3	517050	ug/L	517050	ppb	08:30:07
2	Ca 317.933Radial†	291040.4	323746.7	477180	ug/L	477180	ppb	08:30:07
2	Fe 238.204 Radial†	17943.6	19954.2	186820	ug/L	186820	ppb	08:30:12
2	K 766.490 Radial†	30260.5	31311.0	5562.1	ug/L	5562.1	ppb	08:30:07
2	Mg 279.077 IEC†	12561.2	13972.3	492770	ug/L	492770	ppb	08:30:12
2	Na 589.592 Radial†	13114.0	15676.3	5260.7	ug/L	5260.7	ppb	08:30:12
2	Sr 421.552†	73629.2	81934.7	505.84	ug/L	505.84	ppb	08:30:07
2	Sc 361.383	796712.5	796712.5	88.399	%			08:30:55
2	Y 371.029	643552.7	643552.7	85.683	%			08:30:55
2	Ag 328.068†	42735.7	48051.2	271.67	ug/L	271.67	ppb	08:30:55
2	As 188.979†	1015.2	1172.6	495.72	ug/L	495.72	ppb	08:31:16
2	B 249.677†	21486.0	24836.2	494.95	ug/L	494.95	ppb	08:30:55
2	Ba 233.527†	57186.8	64699.9	487.57	ug/L	487.57	ppb	08:30:55
2	Be 313.107†	575113.2	655697.7	239.96	ug/L	239.96	ppb	08:30:55
2	Cd 226.502†	38833.6	44124.8	448.06	ug/L	448.06	ppb	08:31:16
2	Co 228.616†	20227.1	22946.9	433.02	ug/L	433.02	ppb	08:31:16
2	Cr 267.716†	39521.6	44629.3	472.56	ug/L	472.56	ppb	08:30:55
2	Cu 324.752†	171480.3	187226.7	545.32	ug/L	545.32	ppb	08:30:55
2	Mn 257.610†	391057.2	441952.9	480.90	ug/L	480.90	ppb	08:30:55
2	Mo 202.031†	6536.7	7376.1	481.83	ug/L	481.83	ppb	08:31:16
2	Ni 231.604†	16709.6	18815.9	435.43	ug/L	435.43	ppb	08:31:16

2	P 214.914†	3949.7	4244.6	2392.4 ug/L	2392.4 ppb	08:31:16
2	Pb 220.353†	2735.7	3163.2	459.01 ug/L	459.01 ppb	08:31:16
2	S 181.975 Axial†	1746.4	1934.0	2608.4 ug/L	2608.4 ppb	08:31:16
2	Sb 206.836†	1494.1	1656.0	518.97 ug/L	518.97 ppb	08:31:16
2	Se 196.026†	2715.8	3101.0	2476.7 ug/L	2476.7 ppb	08:31:16
2	Si 251.611†	153211.3	172867.4	5163.6 ug/L	5163.6 ppb	08:30:55
2	Sn 189.927†	2278.8	2572.8	473.58 ug/L	473.58 ppb	08:31:16
2	Ti 334.940†	269939.9	306478.8	513.59 ug/L	513.59 ppb	08:30:55
2	Tl 190.801†	1329.2	1536.1	447.53 ug/L	447.53 ppb	08:31:16
2	U 409.014†	13777.1	17986.9	471.08 ug/L	471.08 ppb	08:30:55
2	V 292.402†	66665.8	76772.6	496.71 ug/L	496.71 ppb	08:30:55
2	Zn 213.857†	52594.9	58875.0	476.22 ug/L	476.22 ppb	08:30:55
2	SiO2†	151895.1	171360.7	10968 ug/L	10968 ppb	08:31:52
3	Sc Radial	5329.5	5329.5	91.2 %		08:30:22
3	Y RADIAL	5716.9	5716.9	90.92 %		08:30:22
3	Al 396.153Radial†	656419.4	719803.9	499970 ug/L	499970 ppb	08:30:17
3	Ca 317.933Radial†	287241.2	314952.9	464220 ug/L	464220 ppb	08:30:17
3	Fe 238.204 Radial†	17841.4	19556.9	183100 ug/L	183100 ppb	08:30:22
3	K 766.490 Radial†	29973.6	30515.2	5420.2 ug/L	5420.2 ppb	08:30:17
3	Mg 279.077 IEC†	12509.3	13715.6	483720 ug/L	483720 ppb	08:30:22
3	Na 589.592 Radial†	13157.8	15515.9	5206.8 ug/L	5206.8 ppb	08:30:22
3	Sr 421.552†	72231.6	79231.4	489.13 ug/L	489.13 ppb	08:30:17
3	Sc 361.383	790190.3	790190.3	87.676 %		08:31:21
3	Y 371.029	639607.1	639607.1	85.158 %		08:31:21
3	Ag 328.068†	42287.3	47938.8	270.17 ug/L	270.17 ppb	08:31:21
3	As 188.979†	1035.6	1205.4	508.07 ug/L	508.07 ppb	08:31:42
3	B 249.677†	21305.2	24830.6	495.33 ug/L	495.33 ppb	08:31:21
3	Ba 233.527†	56590.8	64554.0	486.35 ug/L	486.35 ppb	08:31:21
3	Be 313.107†	570088.1	655336.1	239.83 ug/L	239.83 ppb	08:31:21
3	Cd 226.502†	38615.9	44239.1	449.65 ug/L	449.65 ppb	08:31:42
3	Co 228.616†	20126.4	23020.9	434.49 ug/L	434.49 ppb	08:31:42
3	Cr 267.716†	39221.0	44655.5	472.77 ug/L	472.77 ppb	08:31:21
3	Cu 324.752†	169737.3	186839.9	544.02 ug/L	544.02 ppb	08:31:21
3	Mn 257.610†	386530.2	440441.0	479.09 ug/L	479.09 ppb	08:31:21
3	Mo 202.031†	6526.6	7425.7	484.71 ug/L	484.71 ppb	08:31:42
3	Ni 231.604†	16652.9	18907.1	437.54 ug/L	437.54 ppb	08:31:42
3	P 214.914†	3959.3	4292.4	2417.3 ug/L	2417.3 ppb	08:31:42
3	Pb 220.353†	2673.5	3117.8	450.36 ug/L	450.36 ppb	08:31:42
3	S 181.975 Axial†	1725.8	1926.8	2601.6 ug/L	2601.6 ppb	08:31:42
3	Sb 206.836†	1474.2	1647.1	516.57 ug/L	516.57 ppb	08:31:42
3	Se 196.026†	2692.7	3100.1	2461.3 ug/L	2461.3 ppb	08:31:42
3	Si 251.611†	151474.4	172316.8	5147.1 ug/L	5147.1 ppb	08:31:21
3	Sn 189.927†	2237.1	2546.5	467.87 ug/L	467.87 ppb	08:31:42
3	Ti 334.940†	267030.2	305680.5	511.64 ug/L	511.64 ppb	08:31:21
3	Tl 190.801†	1335.4	1555.6	452.50 ug/L	452.50 ppb	08:31:42
3	U 409.014†	13591.7	17904.1	469.27 ug/L	469.27 ppb	08:31:21
3	V 292.402†	65923.7	76548.7	495.64 ug/L	495.64 ppb	08:31:21
3	Zn 213.857†	51997.0	58684.2	475.21 ug/L	475.21 ppb	08:31:21
3	SiO2†	151961.7	172854.8	11064 ug/L	11064 ppb	08:31:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	795251.6	88.237	%	0.5006				0.57%
Sc Radial	5420.4	92.8	%	3.88				4.18%
Y 371.029	643477.2	85.673	%	0.5103				0.60%
Y RADIAL	5819.8	92.56	%	3.643				3.94%
Ag 328.068†	48003.0	269.55	ug/L	2.490	269.55	ppb	2.490	0.92%
QC value within limits for Ag 328.068 Recovery = 107.82%								
Al 396.153Radial†	716670.0	497800	ug/L	20427.9	497800	ppb	20427.9	4.10%
QC value within limits for Al 396.153Radial Recovery = 99.56%								
As 188.979†	1183.8	499.08	ug/L	7.867	499.08	ppb	7.867	1.58%
QC value within limits for As 188.979 Recovery = 99.82%								
B 249.677†	24880.4	496.78	ug/L	2.839	496.78	ppb	2.839	0.57%
QC value within limits for B 249.677 Recovery = 99.36%								
Ba 233.527†	64528.6	486.05	ug/L	1.693	486.05	ppb	1.693	0.35%
QC value within limits for Ba 233.527 Recovery = 97.21%								
Be 313.107†	655467.0	239.88	ug/L	0.075	239.88	ppb	0.075	0.03%
QC value within limits for Be 313.107 Recovery = 95.95%								
Ca 317.933Radial†	312469.5	460560	ug/L	18722.4	460560	ppb	18722.4	4.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 92.11%
Cd 226.502†            44099.4      448.47 ug/L         1.035      448.47 ppb          1.035   0.23%
   QC value within limits for Cd 226.502  Recovery = 89.69%
Co 228.616†            22924.7      432.70 ug/L         1.971      432.70 ppb          1.971   0.46%
   QC value within limits for Co 228.616  Recovery = 86.54%
Cr 267.716†            44563.7      471.75 ug/L         1.586      471.75 ppb          1.586   0.34%
   QC value within limits for Cr 267.716  Recovery = 94.35%
Cu 324.752†           186897.5      544.03 ug/L         1.281      544.03 ppb          1.281   0.24%
   QC value within limits for Cu 324.752  Recovery = 108.81%
Fe 238.204 Radial†     19233.9      180080 ug/L        8660.4      180080 ppb         8660.4   4.81%
   QC value within limits for Fe 238.204 Radial  Recovery = 90.04%
K 766.490 Radial†      30221.2      5368.2 ug/L        224.43      5368.2 ppb         224.43   4.18%
   QC value within limits for K 766.490 Radial  Recovery = 107.36%
Mg 279.077 IEC†        13475.9      475260 ug/L       22935.4      475260 ppb        22935.4   4.83%
   QC value within limits for Mg 279.077 IEC  Recovery = 95.05%
Mn 257.610†           440404.7      478.90 ug/L         2.095      478.90 ppb          2.095   0.44%
   QC value within limits for Mn 257.610  Recovery = 95.78%
Mo 202.031†             7371.3      481.04 ug/L         4.122      481.04 ppb          4.122   0.86%
   QC value within limits for Mo 202.031  Recovery = 96.21%
Na 589.592 Radial†     15192.4      5098.3 ug/L        236.19      5098.3 ppb         236.19   4.63%
   QC value within limits for Na 589.592 Radial  Recovery = 101.97%
Ni 231.604†            18824.1      435.62 ug/L         1.834      435.62 ppb          1.834   0.42%
   QC value within limits for Ni 231.604  Recovery = 87.12%
P 214.914†              4266.9      2404.3 ug/L         12.48      2404.3 ppb          12.48   0.52%
   QC value within limits for P 214.914  Recovery = 96.17%
Pb 220.353†             3131.4      451.66 ug/L         6.802      451.66 ppb          6.802   1.51%
   QC value within limits for Pb 220.353  Recovery = 90.33%
S 181.975 Axial†        1924.4      2598.7 ug/L         11.39      2598.7 ppb          11.39   0.44%
   QC value within limits for S 181.975 Axial  Recovery = 103.95%
Sb 206.836†             1648.0      516.82 ug/L         2.030      516.82 ppb          2.030   0.39%
   QC value within limits for Sb 206.836  Recovery = 103.36%
Se 196.026†             3105.8      2454.7 ug/L         25.95      2454.7 ppb          25.95   1.06%
   QC value within limits for Se 196.026  Recovery = 98.19%
Si 251.611†           172333.1      5147.7 ug/L         15.65      5147.7 ppb          15.65   0.30%
   QC value within limits for Si 251.611  Recovery = 102.95%
Sn 189.927†             2560.3      469.70 ug/L         3.357      469.70 ppb          3.357   0.71%
   QC value within limits for Sn 189.927  Recovery = 93.94%
Sr 421.552†            78915.4      487.20 ug/L        19.688      487.20 ppb         19.688   4.04%
   QC value within limits for Sr 421.552  Recovery = 97.44%
Ti 334.940†           305572.7      511.28 ug/L         2.512      511.28 ppb          2.512   0.49%
   QC value within limits for Ti 334.940  Recovery = 102.26%
Tl 190.801†             1548.2      450.37 ug/L         2.558      450.37 ppb          2.558   0.57%
   QC value within limits for Tl 190.801  Recovery = 90.07%
U 409.014†             17895.4      469.41 ug/L         1.606      469.41 ppb          1.606   0.34%
   QC value within limits for U 409.014  Recovery = 93.88%
V 292.402†             76578.6      496.05 ug/L         0.577      496.05 ppb          0.577   0.12%
   QC value within limits for V 292.402  Recovery = 99.21%
Zn 213.857†            58704.1      475.97 ug/L         0.675      475.97 ppb          0.675   0.14%
   QC value within limits for Zn 213.857  Recovery = 95.19%
SiO2†                 171935.1       11005 ug/L          51.5       11005 ppb           51.5   0.47%
   QC value within limits for SiO2  Recovery = 102.90%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/8/2009 08:34:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5000.9	5000.9	85.6	%			08:36:06
1	Y RADIAL	5375.7	5375.7	85.49	%			08:36:06
1	Al 396.153Radial†	649764.4	759313.3	527440	ug/L	527440	ppb	08:36:01
1	Ca 317.933Radial†	281096.4	328464.2	484140	ug/L	484140	ppb	08:36:01
1	Fe 238.204 Radial†	39476.3	46123.9	431800	ug/L	431800	ppb	08:36:06
1	K 766.490 Radial†	3503.5	1742.3	121.03	ug/L	121.03	ppb	08:36:06
1	Mg 279.077 IEC†	11841.5	13836.5	487760	ug/L	487760	ppb	08:36:06
1	Na 589.592 Radial†	1231875.6	1440616.5	483440	ug/L	483440	ppb	08:36:01
1	Sr 421.552†	695.9	840.5	0.7472	ug/L	0.7472	ppb	08:36:06
1	Sc 361.383	771300.7	771300.7	85.580	%			08:36:34
1	Y 371.029	626017.5	626017.5	83.349	%			08:36:34
1	Ag 328.068†	-22719.5	-26840.4	-3.2200	ug/L	-3.2200	ppb	08:36:34
1	As 188.979†	-207.8	-218.6	-19.790	ug/L	-19.790	ppb	08:36:54
1	B 249.677†	1415.1	2184.2	-11.491	ug/L	-11.491	ppb	08:36:34
1	Ba 233.527†	-1526.8	-1775.6	2.9110	ug/L	2.9110	ppb	08:36:54
1	Be 313.107†	-11993.9	-8901.9	-3.2741	ug/L	-3.2741	ppb	08:36:34
1	Cd 226.502†	3639.7	4448.1	3.8564	ug/L	3.8564	ppb	08:36:54
1	Co 228.616†	198.8	297.7	-0.5794	ug/L	-0.5794	ppb	08:36:54
1	Cr 267.716†	123.2	65.3	3.8985	ug/L	3.8985	ppb	08:36:54
1	Cu 324.752†	1091.9	-5480.9	6.3424	ug/L	6.3424	ppb	08:36:34
1	Mn 257.610†	-25668.8	-30416.2	1.5267	ug/L	1.5267	ppb	08:36:34
1	Mo 202.031†	-493.2	-594.6	-7.1425	ug/L	-7.1425	ppb	08:36:54
1	Ni 231.604†	283.8	245.0	5.6702	ug/L	5.6702	ppb	08:36:54
1	P 214.914†	594.9	471.6	103.98	ug/L	103.98	ppb	08:36:54
1	Pb 220.353†	-558.6	-584.3	16.782	ug/L	16.782	ppb	08:36:54
1	S 181.975 Axial†	112.6	90.0	22.368	ug/L	22.368	ppb	08:36:54
1	Sb 206.836†	65.0	41.7	3.7037	ug/L	3.7037	ppb	08:36:54
1	Se 196.026†	-2484.6	-2874.4	-206.03	ug/L	-206.03	ppb	08:36:54
1	Si 251.611†	-583.5	-1131.5	-33.075	ug/L	-33.075	ppb	08:36:54
1	Sn 189.927†	-400.0	-472.4	-21.025	ug/L	-21.025	ppb	08:36:54
1	Ti 334.940†	-8964.2	-9359.7	4.0726	ug/L	4.0726	ppb	08:36:34
1	Tl 190.801†	-104.9	-90.1	-11.168	ug/L	-11.168	ppb	08:36:54
1	U 409.014†	437392.5	513494.5	14091	ug/L	14091	ppb	08:36:34
1	V 292.402†	2035.5	3736.8	-3.0468	ug/L	-3.0468	ppb	08:36:54
1	Zn 213.857†	6171.5	6589.6	-0.3854	ug/L	-0.3854	ppb	08:36:54
1	SiO2†	-667.1	-1247.0	-78.271	ug/L	-78.271	ppb	08:37:51
2	Sc Radial	5047.1	5047.1	86.4	%			08:36:16
2	Y RADIAL	5379.7	5379.7	85.56	%			08:36:16
2	Al 396.153Radial†	648919.6	751395.2	521940	ug/L	521940	ppb	08:36:11
2	Ca 317.933Radial†	280281.3	324518.2	478320	ug/L	478320	ppb	08:36:11
2	Fe 238.204 Radial†	39267.0	45459.9	425590	ug/L	425590	ppb	08:36:16
2	K 766.490 Radial†	3384.7	1567.4	92.631	ug/L	92.631	ppb	08:36:16
2	Mg 279.077 IEC†	11734.0	13585.5	478910	ug/L	478910	ppb	08:36:16
2	Na 589.592 Radial†	1226896.0	1421693.4	477090	ug/L	477090	ppb	08:36:11
2	Sr 421.552†	705.7	844.5	0.8257	ug/L	0.8257	ppb	08:36:16
2	Sc 361.383	760812.5	760812.5	84.416	%			08:36:59
2	Y 371.029	617644.0	617644.0	82.234	%			08:36:59
2	Ag 328.068†	-22429.0	-26862.3	-5.1840	ug/L	-5.1840	ppb	08:36:59
2	As 188.979†	-197.3	-209.6	-17.174	ug/L	-17.174	ppb	08:37:19
2	B 249.677†	1451.0	2249.6	-9.2958	ug/L	-9.2958	ppb	08:36:59
2	Ba 233.527†	-1497.0	-1764.9	2.7630	ug/L	2.7630	ppb	08:37:19
2	Be 313.107†	-11778.7	-8840.1	-3.2506	ug/L	-3.2506	ppb	08:36:59
2	Cd 226.502†	3625.7	4490.2	4.9226	ug/L	4.9226	ppb	08:37:19
2	Co 228.616†	200.5	302.9	-0.4003	ug/L	-0.4003	ppb	08:37:19
2	Cr 267.716†	67.3	1.1	3.1242	ug/L	3.1242	ppb	08:37:19
2	Cu 324.752†	1131.9	-5415.9	6.2112	ug/L	6.2112	ppb	08:36:59
2	Mn 257.610†	-25098.4	-30154.0	1.3513	ug/L	1.3513	ppb	08:36:59
2	Mo 202.031†	-524.4	-639.6	-10.441	ug/L	-10.441	ppb	08:37:19
2	Ni 231.604†	280.4	245.7	5.6851	ug/L	5.6851	ppb	08:37:19

2	P 214.914†	587.8	472.7	107.76	ug/L	107.76 ppb	08:37:19
2	Pb 220.353†	-552.6	-586.2	15.843	ug/L	15.843 ppb	08:37:19
2	S 181.975 Axial†	102.3	79.6	8.8127	ug/L	8.8127 ppb	08:37:19
2	Sb 206.836†	51.5	26.8	-0.9806	ug/L	-0.9806 ppb	08:37:19
2	Se 196.026†	-2486.1	-2916.3	-250.79	ug/L	-250.79 ppb	08:37:19
2	Si 251.611†	-513.5	-1058.0	-30.818	ug/L	-30.818 ppb	08:37:19
2	Sn 189.927†	-389.4	-466.3	-20.709	ug/L	-20.709 ppb	08:37:19
2	Ti 334.940†	-8570.3	-9037.5	4.2951	ug/L	4.2951 ppb	08:36:59
2	Tl 190.801†	-106.2	-93.3	-12.214	ug/L	-12.214 ppb	08:37:19
2	U 409.014†	430645.6	512547.8	14066	ug/L	14066 ppb	08:36:59
2	V 292.402†	2197.4	3961.4	-0.9096	ug/L	-0.9096 ppb	08:37:19
2	Zn 213.857†	6159.1	6674.3	1.2507	ug/L	1.2507 ppb	08:37:19
2	SiO2†	-605.6	-1184.9	-74.162	ug/L	-74.162 ppb	08:37:56
3	Sc Radial	5165.7	5165.7	88.4	%		08:36:27
3	Y RADIAL	5522.4	5522.4	87.83	%		08:36:27
3	Al 396.153Radial†	642891.5	727321.1	505220	ug/L	505220 ppb	08:36:21
3	Ca 317.933Radial†	278315.4	314841.6	464060	ug/L	464060 ppb	08:36:21
3	Fe 238.204 Radial†	39710.3	44917.3	420510	ug/L	420510 ppb	08:36:27
3	K 766.490 Radial†	3439.3	1539.1	94.417	ug/L	94.417 ppb	08:36:27
3	Mg 279.077 IEC†	11899.8	13461.0	474520	ug/L	474520 ppb	08:36:27
3	Na 589.592 Radial†	1210113.3	1370084.6	459770	ug/L	459770 ppb	08:36:21
3	Sr 421.552†	717.5	839.1	0.9243	ug/L	0.9243 ppb	08:36:27
3	Sc 361.383	772776.7	772776.7	85.744	%		08:37:25
3	Y 371.029	625753.3	625753.3	83.313	%		08:37:25
3	Ag 328.068†	-22889.6	-26988.2	-7.1932	ug/L	-7.1932 ppb	08:37:25
3	As 188.979†	-196.3	-204.7	-16.043	ug/L	-16.043 ppb	08:37:45
3	B 249.677†	1532.1	2317.5	-7.1964	ug/L	-7.1964 ppb	08:37:25
3	Ba 233.527†	-1572.7	-1825.8	2.1229	ug/L	2.1229 ppb	08:37:45
3	Be 313.107†	-12043.2	-8932.6	-3.2847	ug/L	-3.2847 ppb	08:37:25
3	Cd 226.502†	3599.9	4393.5	4.4090	ug/L	4.4090 ppb	08:37:45
3	Co 228.616†	199.7	298.3	-0.4121	ug/L	-0.4121 ppb	08:37:45
3	Cr 267.716†	74.0	7.7	3.0910	ug/L	3.0910 ppb	08:37:45
3	Cu 324.752†	1115.2	-5456.1	5.8371	ug/L	5.8371 ppb	08:37:25
3	Mn 257.610†	-25593.9	-30271.7	0.8010	ug/L	0.8010 ppb	08:37:25
3	Mo 202.031†	-517.6	-622.0	-9.6842	ug/L	-9.6842 ppb	08:37:45
3	Ni 231.604†	292.4	254.5	5.8899	ug/L	5.8899 ppb	08:37:45
3	P 214.914†	577.1	449.5	92.795	ug/L	92.795 ppb	08:37:45
3	Pb 220.353†	-556.8	-581.0	13.099	ug/L	13.099 ppb	08:37:45
3	S 181.975 Axial†	91.4	65.0	-8.2624	ug/L	-8.2624 ppb	08:37:45
3	Sb 206.836†	35.6	7.3	-6.7597	ug/L	-6.7597 ppb	08:37:45
3	Se 196.026†	-2465.4	-2846.5	-229.50	ug/L	-229.50 ppb	08:37:45
3	Si 251.611†	-520.1	-1056.3	-30.784	ug/L	-30.784 ppb	08:37:45
3	Sn 189.927†	-398.3	-469.5	-22.789	ug/L	-22.789 ppb	08:37:45
3	Ti 334.940†	-8828.6	-9181.6	3.3055	ug/L	3.3055 ppb	08:37:25
3	Tl 190.801†	-95.8	-79.2	-8.7262	ug/L	-8.7262 ppb	08:37:45
3	U 409.014†	438523.0	513836.9	14102	ug/L	14102 ppb	08:37:25
3	V 292.402†	2204.3	3929.2	-0.3636	ug/L	-0.3636 ppb	08:37:45
3	Zn 213.857†	6143.8	6543.5	0.7426	ug/L	0.7426 ppb	08:37:45
3	SiO2†	-603.9	-1171.7	-73.351	ug/L	-73.351 ppb	08:38:01

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	768296.6	85.247	%	0.7238				0.85%
Sc Radial	5071.2	86.8	%	1.45				1.68%
Y 371.029	623138.3	82.965	%	0.6338				0.76%
Y RADIAL	5425.9	86.29	%	1.329				1.54%
Ag 328.068†	-26897.0	-5.1991	ug/L	1.98666	-5.1991	ppb	1.98666	38.21%
Al 396.153Radial†	746009.9	518200	ug/L	11573.9	518200	ppb	11573.9	2.23%
QC value within limits for Al 396.153Radial Recovery = 103.64%								
As 188.979†	-211.0	-17.669	ug/L	1.9221	-17.669	ppb	1.9221	10.88%
B 249.677†	2250.4	-9.3278	ug/L	2.14768	-9.3278	ppb	2.14768	23.02%
Ba 233.527†	-1788.7	2.5990	ug/L	0.41885	2.5990	ppb	0.41885	16.12%
Be 313.107†	-8891.5	-3.2698	ug/L	0.01747	-3.2698	ppb	0.01747	0.53%
Ca 317.933Radial†	322608.0	475510	ug/L	10331.3	475510	ppb	10331.3	2.17%
QC value within limits for Ca 317.933Radial Recovery = 95.10%								
Cd 226.502†	4443.9	4.3960	ug/L	0.53322	4.3960	ppb	0.53322	12.13%
Co 228.616†	299.6	-0.4640	ug/L	0.10017	-0.4640	ppb	0.10017	21.59%
Cr 267.716†	24.7	3.3712	ug/L	0.45693	3.3712	ppb	0.45693	13.55%
Cu 324.752†	-5450.9	6.1302	ug/L	0.26219	6.1302	ppb	0.26219	4.28%

Fe 238.204 Radial†	45500.4	425970	ug/L	5657.7	425970	ppb	5657.7	1.33%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 85.19%								
K 766.490 Radial†	1616.3	102.69	ug/L	15.907	102.69	ppb	15.907	15.49%
Mg 279.077 IEC†	13627.6	480400	ug/L	6742.2	480400	ppb	6742.2	1.40%
QC value within limits for Mg 279.077 IEC Recovery = 96.08%								
Mn 257.610†	-30280.6	1.2263	ug/L	0.37865	1.2263	ppb	0.37865	30.88%
Mo 202.031†	-618.7	-9.0891	ug/L	1.72772	-9.0891	ppb	1.72772	19.01%
Na 589.592 Radial†	1410798.2	473440	ug/L	12250.8	473440	ppb	12250.8	2.59%
QC value within limits for Na 589.592 Radial Recovery = 94.69%								
Ni 231.604†	248.4	5.7484	ug/L	0.12280	5.7484	ppb	0.12280	2.14%
P 214.914†	464.6	101.51	ug/L	7.782	101.51	ppb	7.782	7.67%
Pb 220.353†	-583.8	15.241	ug/L	1.9138	15.241	ppb	1.9138	12.56%
S 181.975 Axial†	78.2	7.6395	ug/L	15.34901	7.6395	ppb	15.34901	200.92%
Sb 206.836†	25.3	-1.3456	ug/L	5.24120	-1.3456	ppb	5.24120	389.52%
Se 196.026†	-2879.1	-228.77	ug/L	22.392	-228.77	ppb	22.392	9.79%
Si 251.611†	-1081.9	-31.559	ug/L	1.3131	-31.559	ppb	1.3131	4.16%
Sn 189.927†	-469.4	-21.508	ug/L	1.1209	-21.508	ppb	1.1209	5.21%
Sr 421.552†	841.4	0.8324	ug/L	0.08875	0.8324	ppb	0.08875	10.66%
Ti 334.940†	-9192.9	3.8911	ug/L	0.51918	3.8911	ppb	0.51918	13.34%
Tl 190.801†	-87.5	-10.703	ug/L	1.7899	-10.703	ppb	1.7899	16.72%
U 409.014†	513293.1	14086	ug/L	18.5	14086	ppb	18.5	0.13%
QC value within limits for U 409.014 Recovery = 93.91%								
V 292.402†	3875.8	-1.4400	ug/L	1.41804	-1.4400	ppb	1.41804	98.48%
Zn 213.857†	6602.5	0.5360	ug/L	0.83740	0.5360	ppb	0.83740	156.24%
SiO2†	-1201.2	-75.261	ug/L	2.6374	-75.261	ppb	2.6374	3.50%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/8/2009 08:40:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5467.0	5467.0	93.5	%			08:42:08
1	Y RADIAL	5820.4	5820.4	92.57	%			08:42:08
1	Al 396.153Radial†	648.2	713.3	73.153	ug/L	73.153	ppb	08:42:08
1	Ca 317.933Radial†	40.2	27.3	40.294	ug/L	40.294	ppb	08:42:28
1	Fe 238.204 Radial†	-20.2	-28.4	30.402	ug/L	30.402	ppb	08:42:28
1	K 766.490 Radial†	1630640.1	1740720.3	308600	ug/L	308600	ppb	08:42:03
1	Mg 279.077 IEC†	-4.9	-6.4	-27.533	ug/L	-27.533	ppb	08:42:28
1	Na 589.592 Radial†	-395.2	665.5	223.32	ug/L	223.32	ppb	08:42:08
1	Sr 421.552†	1474708.6	1576416.5	9817.5	ug/L	9817.5	ppb	08:42:03
1	Sc 361.383	867124.6	867124.6	96.212	%			08:43:46
1	Y 371.029	701273.1	701273.1	93.368	%			08:43:46
1	Ag 328.068†	-7380.9	-7964.3	3.0125	ug/L	3.0125	ppb	08:43:51
1	As 188.979†	24239.3	25217.9	10051	ug/L	10051	ppb	08:43:51
1	B 249.677†	225599.7	235012.5	4904.6	ug/L	4904.6	ppb	08:43:46
1	Ba 233.527†	1819903.5	1891563.5	14041	ug/L	14041	ppb	08:43:46
1	Be 313.107†	7677022.8	7984388.4	2930.5	ug/L	2930.5	ppb	08:43:39
1	Cd 226.502†	883298.9	918270.4	9713.7	ug/L	9713.7	ppb	08:43:46
1	Co 228.616†	476506.8	495332.8	9401.0	ug/L	9401.0	ppb	08:43:51
1	Cr 267.716†	2192143.9	2278372.3	23934	ug/L	23934	ppb	08:43:46
1	Cu 324.752†	6813641.4	7075145.1	20247	ug/L	20247	ppb	08:43:39
1	Mn 257.610†	8511935.4	8846637.1	9437.0	ug/L	9437.0	ppb	08:43:39
1	Mo 202.031†	149411.9	155276.0	9864.1	ug/L	9864.1	ppb	08:43:51
1	Ni 231.604†	406202.4	422108.5	9768.5	ug/L	9768.5	ppb	08:43:46
1	P 214.914†	30887.7	31880.2	15285	ug/L	15285	ppb	08:43:51
1	Pb 220.353†	205565.7	213727.5	24170	ug/L	24170	ppb	08:43:51
1	S 181.975 Axial†	36410.6	37802.5	52971	ug/L	52971	ppb	08:43:51
1	Sb 206.836†	32057.5	33285.4	10343	ug/L	10343	ppb	08:43:51
1	Se 196.026†	16842.4	17534.3	10169	ug/L	10169	ppb	08:43:51
1	Si 251.611†	1547757.8	1608245.0	47837	ug/L	47837	ppb	08:43:46
1	Sn 189.927†	62087.1	64526.6	10565	ug/L	10565	ppb	08:43:51
1	Ti 334.940†	6182963.9	6427508.7	10249	ug/L	10249	ppb	08:43:39
1	Tl 190.801†	33155.5	34493.4	9723.9	ug/L	9723.9	ppb	08:43:51
1	U 409.014†	-1235.9	1117.3	-15.386	ug/L	-15.386	ppb	08:43:51
1	V 292.402†	1452120.7	1510650.6	10098	ug/L	10098	ppb	08:43:46
1	Zn 213.857†	1555331.3	1615944.6	14031	ug/L	14031	ppb	08:43:46
1	SiO2†	1561537.4	1622549.4	103410	ug/L	103410	ppb	08:44:38
2	Sc Radial	5444.5	5444.5	93.2	%			08:42:39
2	Y RADIAL	5757.5	5757.5	91.57	%			08:42:39
2	Al 396.153Radial†	634.7	701.7	68.198	ug/L	68.198	ppb	08:42:39
2	Ca 317.933Radial†	40.9	28.3	41.687	ug/L	41.687	ppb	08:42:59
2	Fe 238.204 Radial†	-21.6	-30.0	14.286	ug/L	14.286	ppb	08:42:59
2	K 766.490 Radial†	1678331.1	1799114.9	318960	ug/L	318960	ppb	08:42:34
2	Mg 279.077 IEC†	-4.3	-5.8	-5.8103	ug/L	-5.8103	ppb	08:42:59
2	Na 589.592 Radial†	-444.2	611.2	205.10	ug/L	205.10	ppb	08:42:39
2	Sr 421.552†	1524852.5	1636755.0	10193	ug/L	10193	ppb	08:42:34
2	Sc 361.383	875997.1	875997.1	97.196	%			08:44:05
2	Y 371.029	706892.2	706892.2	94.116	%			08:44:05
2	Ag 328.068†	-7542.1	-8052.4	2.5047	ug/L	2.5047	ppb	08:44:11
2	As 188.979†	24445.9	25175.2	10032	ug/L	10032	ppb	08:44:11
2	B 249.677†	227893.7	234997.7	4904.4	ug/L	4904.4	ppb	08:44:05
2	Ba 233.527†	1836991.3	1889985.5	14029	ug/L	14029	ppb	08:44:05
2	Be 313.107†	7606544.6	7831059.2	2874.2	ug/L	2874.2	ppb	08:43:59
2	Cd 226.502†	890702.9	916589.3	9695.9	ug/L	9695.9	ppb	08:44:05
2	Co 228.616†	478916.3	492795.5	9353.1	ug/L	9353.1	ppb	08:44:11
2	Cr 267.716†	2207826.3	2271429.7	23862	ug/L	23862	ppb	08:44:05
2	Cu 324.752†	6728151.8	6915460.5	19790	ug/L	19790	ppb	08:43:59
2	Mn 257.610†	8436455.1	8679372.2	9258.6	ug/L	9258.6	ppb	08:43:59
2	Mo 202.031†	149840.4	154144.1	9792.2	ug/L	9792.2	ppb	08:44:11
2	Ni 231.604†	409458.3	421182.0	9747.1	ug/L	9747.1	ppb	08:44:05

2	P 214.914†	31072.0	31744.7	15279 ug/L	15279 ppb	08:44:11
2	Pb 220.353†	206625.4	212653.7	24048 ug/L	24048 ppb	08:44:11
2	S 181.975 Axial†	36505.0	37516.4	52570 ug/L	52570 ppb	08:44:11
2	Sb 206.836†	32226.2	33121.5	10291 ug/L	10291 ppb	08:44:11
2	Se 196.026†	16905.3	17421.7	10103 ug/L	10103 ppb	08:44:11
2	Si 251.611†	1563796.3	1608452.5	47841 ug/L	47841 ppb	08:44:05
2	Sn 189.927†	62338.6	64131.7	10500 ug/L	10500 ppb	08:44:11
2	Ti 334.940†	6117371.6	6294934.8	10037 ug/L	10037 ppb	08:43:59
2	Tl 190.801†	33295.1	34288.0	9664.0 ug/L	9664.0 ppb	08:44:11
2	U 409.014†	-1090.5	1279.9	-10.764 ug/L	-10.764 ppb	08:44:11
2	V 292.402†	1463232.8	1506796.3	10072 ug/L	10072 ppb	08:44:05
2	Zn 213.857†	1567638.7	1612233.5	13999 ug/L	13999 ppb	08:44:05
2	SiO2†	1556021.4	1600435.5	101990 ug/L	101990 ppb	08:44:45
3	Sc Radial	5627.2	5627.2	96.3 %		08:43:09
3	Y RADIAL	5959.5	5959.5	94.78 %		08:43:09
3	Al 396.153Radial†	620.4	664.7	38.156 ug/L	38.156 ppb	08:43:09
3	Ca 317.933Radial†	43.5	29.6	43.629 ug/L	43.629 ppb	08:43:29
3	Fe 238.204 Radial†	-20.6	-28.2	34.402 ug/L	34.402 ppb	08:43:29
3	K 766.490 Radial†	1663829.2	1725552.7	305910 ug/L	305910 ppb	08:43:04
3	Mg 279.077 IEC†	-2.4	-3.7	71.666 ug/L	71.666 ppb	08:43:29
3	Na 589.592 Radial†	-505.0	563.5	189.12 ug/L	189.12 ppb	08:43:09
3	Sr 421.552†	1503489.9	1561417.6	9724.1 ug/L	9724.1 ppb	08:43:04
3	Sc 361.383	860972.2	860972.2	95.529 %		08:44:25
3	Y 371.029	693995.6	693995.6	92.399 %		08:44:25
3	Ag 328.068†	-7391.7	-8030.3	2.6685 ug/L	2.6685 ppb	08:44:30
3	As 188.979†	24137.2	25291.0	10079 ug/L	10079 ppb	08:44:30
3	B 249.677†	224130.1	235149.6	4907.3 ug/L	4907.3 ppb	08:44:25
3	Ba 233.527†	1812109.2	1896921.1	14081 ug/L	14081 ppb	08:44:25
3	Be 313.107†	7558719.3	7917566.9	2906.0 ug/L	2906.0 ppb	08:44:19
3	Cd 226.502†	877962.6	919244.8	9724.0 ug/L	9724.0 ppb	08:44:25
3	Co 228.616†	475940.9	498279.5	9457.1 ug/L	9457.1 ppb	08:44:30
3	Cr 267.716†	2176726.4	2278514.6	23936 ug/L	23936 ppb	08:44:25
3	Cu 324.752†	6705646.3	7012701.8	20068 ug/L	20068 ppb	08:44:19
3	Mn 257.610†	8434113.9	8828393.0	9417.6 ug/L	9417.6 ppb	08:44:19
3	Mo 202.031†	148782.4	155726.8	9892.7 ug/L	9892.7 ppb	08:44:30
3	Ni 231.604†	403751.5	422559.8	9778.9 ug/L	9778.9 ppb	08:44:25
3	P 214.914†	30822.4	32041.3	15407 ug/L	15407 ppb	08:44:30
3	Pb 220.353†	205278.5	214953.7	24308 ug/L	24308 ppb	08:44:30
3	S 181.975 Axial†	36042.6	37687.8	52810 ug/L	52810 ppb	08:44:30
3	Sb 206.836†	31930.0	33390.0	10378 ug/L	10378 ppb	08:44:30
3	Se 196.026†	16715.5	17526.6	10164 ug/L	10164 ppb	08:44:30
3	Si 251.611†	1540381.3	1612018.7	47950 ug/L	47950 ppb	08:44:25
3	Sn 189.927†	61948.9	64843.0	10617 ug/L	10617 ppb	08:44:30
3	Ti 334.940†	6107035.0	6393948.3	10195 ug/L	10195 ppb	08:44:19
3	Tl 190.801†	33080.3	34660.9	9770.0 ug/L	9770.0 ppb	08:44:30
3	U 409.014†	-984.4	1371.4	-8.3904 ug/L	-8.3904 ppb	08:44:30
3	V 292.402†	1440370.5	1509135.6	10089 ug/L	10089 ppb	08:44:25
3	Zn 213.857†	1547039.7	1618816.6	14056 ug/L	14056 ppb	08:44:25
3	SiO2†	1561660.1	1634275.6	104160 ug/L	104160 ppb	08:44:52

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868031.3	96.313	%	0.8381				0.87%
Sc Radial	5512.9	94.3	%	1.71				1.81%
Y 371.029	700720.3	93.295	%	0.8609				0.92%
Y RADIAL	5845.8	92.97	%	1.643				1.77%
Ag 328.068†	-8015.7	2.7286	ug/L	0.25915	2.7286	ppb	0.25915	9.50%
Al 396.153Radial†	693.2	59.836	ug/L	18.9377	59.836	ppb	18.9377	31.65%
As 188.979†	25228.0	10054	ug/L	23.7	10054	ppb	23.7	0.24%
QC value within limits for As 188.979 Recovery = 100.54%								
B 249.677†	235053.3	4905.5	ug/L	1.63	4905.5	ppb	1.63	0.03%
QC value within limits for B 249.677 Recovery = 98.11%								
Ba 233.527†	1892823.4	14050	ug/L	27.0	14050	ppb	27.0	0.19%
QC value within limits for Ba 233.527 Recovery = 93.67%								
Be 313.107†	7911004.8	2903.6	ug/L	28.23	2903.6	ppb	28.23	0.97%
QC value within limits for Be 313.107 Recovery = 96.79%								
Ca 317.933Radial†	28.4	41.870	ug/L	1.6750	41.870	ppb	1.6750	4.00%
Cd 226.502†	918034.8	9711.2	ug/L	14.21	9711.2	ppb	14.21	0.15%
QC value within limits for Cd 226.502 Recovery = 97.11%								

```
Co 228.616†          495469.3      9403.8 ug/L        52.05      9403.8 ppb        52.05   0.55%
   QC value within limits for Co 228.616  Recovery = 94.04%
Cr 267.716†         2276105.6       23911 ug/L         42.5       23911 ppb         42.5   0.18%
   QC value within limits for Cr 267.716  Recovery = 95.64%
Cu 324.752†         7001102.5       20035 ug/L        230.3       20035 ppb        230.3   1.15%
   QC value within limits for Cu 324.752  Recovery = 100.18%
Fe 238.204 Radial†      -28.9      26.363 ug/L      10.6490      26.363 ppb      10.6490  40.39%
K 766.490 Radial†   1755129.3      311160 ug/L       6888.6      311160 ppb       6888.6   2.21%
   QC value within limits for K 766.490 Radial  Recovery = 103.72%
Mg 279.077 IEC†          -5.3      12.774 ug/L      52.1454      12.774 ppb      52.1454 408.21%
Mn 257.610†         8784800.8      9371.1 ug/L        97.88      9371.1 ppb        97.88   1.04%
   QC value within limits for Mn 257.610  Recovery = 93.71%
Mo 202.031†          155049.0      9849.6 ug/L        51.80      9849.6 ppb        51.80   0.53%
   QC value within limits for Mo 202.031  Recovery = 98.50%
Na 589.592 Radial†      613.4      205.85 ug/L       17.116      205.85 ppb       17.116   8.32%
Ni 231.604†          421950.1      9764.9 ug/L        16.23      9764.9 ppb        16.23   0.17%
   QC value within limits for Ni 231.604  Recovery = 97.65%
P 214.914†            31888.7       15324 ug/L         72.3       15324 ppb         72.3   0.47%
   QC value within limits for P 214.914  Recovery = 102.16%
Pb 220.353†          213778.3       24175 ug/L        130.1       24175 ppb        130.1   0.54%
   QC value within limits for Pb 220.353  Recovery = 96.70%
S 181.975 Axial†      37668.9       52784 ug/L        201.8       52784 ppb        201.8   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 105.57%
Sb 206.836†           33265.6       10337 ug/L         43.8       10337 ppb         43.8   0.42%
   QC value within limits for Sb 206.836  Recovery = 103.37%
Se 196.026†           17494.2       10145 ug/L         36.5       10145 ppb         36.5   0.36%
   QC value within limits for Se 196.026  Recovery = 101.45%
Si 251.611†         1609572.1       47876 ug/L         64.2       47876 ppb         64.2   0.13%
   QC value within limits for Si 251.611  Recovery = 95.75%
Sn 189.927†           64500.4       10561 ug/L         58.4       10561 ppb         58.4   0.55%
   QC value within limits for Sn 189.927  Recovery = 105.61%
Sr 421.552†         1591529.7      9911.6 ug/L       248.35      9911.6 ppb       248.35   2.51%
   QC value within limits for Sr 421.552  Recovery = 99.12%
Ti 334.940†         6372130.6       10160 ug/L        110.0       10160 ppb        110.0   1.08%
   QC value within limits for Ti 334.940  Recovery = 101.60%
Tl 190.801†           34480.7      9719.3 ug/L        53.15      9719.3 ppb        53.15   0.55%
   QC value within limits for Tl 190.801  Recovery = 97.19%
U 409.014†             1256.2     -11.514 ug/L       3.5577     -11.514 ppb       3.5577  30.90%
V 292.402†          1508860.8       10086 ug/L         13.3       10086 ppb         13.3   0.13%
   QC value within limits for V 292.402  Recovery = 100.86%
Zn 213.857†         1615664.9       14029 ug/L         28.5       14029 ppb         28.5   0.20%
   QC value within limits for Zn 213.857  Recovery = 93.53%
SiO2†               1619086.8      103190 ug/L       1105.0      103190 ppb       1105.0   1.07%
   QC value within limits for SiO2  Recovery = 96.44%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 08:47:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5782.1	5782.1	98.9	%			08:48:55
1	Y RADIAL	6146.7	6146.7	97.76	%			08:48:55
1	Al 396.153Radial†	7076.6	7172.7	4961.1	ug/L	4961.1	ppb	08:48:55
1	Ca 317.933Radial†	3407.2	3428.0	5052.7	ug/L	5052.7	ppb	08:49:15
1	Fe 238.204 Radial†	532.6	531.5	4991.6	ug/L	4991.6	ppb	08:49:15
1	K 766.490 Radial†	32409.0	30403.6	5383.4	ug/L	5383.4	ppb	08:48:55
1	Mg 279.077 IEC†	148.2	148.6	5249.8	ug/L	5249.8	ppb	08:49:15
1	Na 589.592 Radial†	25995.9	27361.6	9182.0	ug/L	9182.0	ppb	08:48:55
1	Sr 421.552†	78123.6	78985.8	491.86	ug/L	491.86	ppb	08:48:55
1	Sc 361.383	915700.9	915700.9	101.60	%			08:50:12
1	Y 371.029	748883.0	748883.0	99.707	%			08:50:12
1	Ag 328.068†	111463.9	109413.9	498.59	ug/L	498.59	ppb	08:50:17
1	As 188.979†	1317.5	1320.9	526.25	ug/L	526.25	ppb	08:50:37
1	B 249.677†	24216.2	24365.1	509.06	ug/L	509.06	ppb	08:50:17
1	Ba 233.527†	67026.7	65978.4	490.26	ug/L	490.26	ppb	08:50:17
1	Be 313.107†	1367141.0	1350700.0	493.30	ug/L	493.30	ppb	08:50:12
1	Cd 226.502†	47097.9	46550.5	491.92	ug/L	491.92	ppb	08:50:17
1	Co 228.616†	26192.0	25844.5	490.66	ug/L	490.66	ppb	08:50:17
1	Cr 267.716†	47478.6	46651.4	490.51	ug/L	490.51	ppb	08:50:17
1	Cu 324.752†	179450.2	169864.4	486.36	ug/L	486.36	ppb	08:50:17
1	Mn 257.610†	468544.1	460734.8	491.88	ug/L	491.88	ppb	08:50:12
1	Mo 202.031†	7937.6	7794.1	495.48	ug/L	495.48	ppb	08:50:37
1	Ni 231.604†	21717.3	21288.4	492.65	ug/L	492.65	ppb	08:50:17
1	P 214.914†	4496.1	4201.7	2349.8	ug/L	2349.8	ppb	08:50:37
1	Pb 220.353†	4339.1	4339.2	492.07	ug/L	492.07	ppb	08:50:37
1	S 181.975 Axial†	768.7	715.0	1001.0	ug/L	1001.0	ppb	08:50:37
1	Sb 206.836†	1660.7	1600.3	513.72	ug/L	513.72	ppb	08:50:37
1	Se 196.026†	829.5	845.2	506.85	ug/L	506.85	ppb	08:50:37
1	Si 251.611†	83963.3	82189.9	2448.4	ug/L	2448.4	ppb	08:50:17
1	Sn 189.927†	3091.0	3037.3	497.89	ug/L	497.89	ppb	08:50:37
1	Ti 334.940†	314148.2	310310.4	495.07	ug/L	495.07	ppb	08:50:17
1	Tl 190.801†	1753.9	1758.8	495.78	ug/L	495.78	ppb	08:50:37
1	U 409.014†	15497.7	17655.2	484.78	ug/L	484.78	ppb	08:50:17
1	V 292.402†	73683.2	73879.9	494.61	ug/L	494.61	ppb	08:50:17
1	Zn 213.857†	58008.6	56472.2	488.98	ug/L	488.98	ppb	08:50:17
1	SiO2†	84671.3	82869.0	5289.8	ug/L	5289.8	ppb	08:51:45
2	Sc Radial	5788.5	5788.5	99.1	%			08:49:20
2	Y RADIAL	6144.8	6144.8	97.73	%			08:49:20
2	Al 396.153Radial†	7103.7	7192.2	4974.5	ug/L	4974.5	ppb	08:49:20
2	Ca 317.933Radial†	3346.8	3363.2	4957.2	ug/L	4957.2	ppb	08:49:40
2	Fe 238.204 Radial†	527.8	526.1	4940.5	ug/L	4940.5	ppb	08:49:40
2	K 766.490 Radial†	32276.6	30234.0	5353.3	ug/L	5353.3	ppb	08:49:20
2	Mg 279.077 IEC†	146.4	146.7	5180.9	ug/L	5180.9	ppb	08:49:40
2	Na 589.592 Radial†	25876.0	27211.8	9131.8	ug/L	9131.8	ppb	08:49:20
2	Sr 421.552†	78170.1	78946.0	491.61	ug/L	491.61	ppb	08:49:20
2	Sc 361.383	916693.8	916693.8	101.71	%			08:50:43
2	Y 371.029	749698.1	749698.1	99.815	%			08:50:43
2	Ag 328.068†	111726.1	109552.8	499.21	ug/L	499.21	ppb	08:50:48
2	As 188.979†	1322.7	1324.7	527.73	ug/L	527.73	ppb	08:51:08
2	B 249.677†	24303.2	24424.8	510.31	ug/L	510.31	ppb	08:50:48
2	Ba 233.527†	67467.5	66340.4	492.94	ug/L	492.94	ppb	08:50:48
2	Be 313.107†	1368824.6	1350897.8	493.38	ug/L	493.38	ppb	08:50:43
2	Cd 226.502†	47404.8	46802.0	494.59	ug/L	494.59	ppb	08:50:48
2	Co 228.616†	26331.6	25953.8	492.74	ug/L	492.74	ppb	08:50:48
2	Cr 267.716†	47593.6	46713.8	491.16	ug/L	491.16	ppb	08:50:48
2	Cu 324.752†	179807.8	170024.6	486.81	ug/L	486.81	ppb	08:50:48
2	Mn 257.610†	469543.6	461218.1	492.39	ug/L	492.39	ppb	08:50:43
2	Mo 202.031†	8012.0	7858.8	499.59	ug/L	499.59	ppb	08:51:08
2	Ni 231.604†	21790.2	21336.9	493.77	ug/L	493.77	ppb	08:50:48

2	P 214.914†	4553.2	4253.0	2379.4 ug/L	2379.4 ppb	08:51:08
2	Pb 220.353†	4360.0	4355.1	493.88 ug/L	493.88 ppb	08:51:08
2	S 181.975 Axial†	776.7	722.1	1010.8 ug/L	1010.8 ppb	08:51:08
2	Sb 206.836†	1674.2	1611.8	517.49 ug/L	517.49 ppb	08:51:08
2	Se 196.026†	850.9	865.4	518.35 ug/L	518.35 ppb	08:51:08
2	Si 251.611†	84254.2	82386.4	2454.3 ug/L	2454.3 ppb	08:50:48
2	Sn 189.927†	3110.0	3052.7	500.40 ug/L	500.40 ppb	08:51:08
2	Ti 334.940†	315465.2	311270.3	496.60 ug/L	496.60 ppb	08:50:48
2	Tl 190.801†	1762.5	1765.4	497.62 ug/L	497.62 ppb	08:51:08
2	U 409.014†	15551.4	17691.4	485.78 ug/L	485.78 ppb	08:50:48
2	V 292.402†	73936.6	74050.4	495.80 ug/L	495.80 ppb	08:50:48
2	Zn 213.857†	58308.9	56705.6	491.02 ug/L	491.02 ppb	08:50:48
2	SiO2†	84289.9	82403.7	5259.8 ug/L	5259.8 ppb	08:51:50
3	Sc Radial	5847.4	5847.4	100 %		08:49:45
3	Y RADIAL	6208.4	6208.4	98.74 %		08:49:45
3	Al 396.153Radial†	7161.0	7177.2	4964.1 ug/L	4964.1 ppb	08:49:45
3	Ca 317.933Radial†	3361.4	3343.9	4928.7 ug/L	4928.7 ppb	08:50:05
3	Fe 238.204 Radial†	533.2	526.1	4940.8 ug/L	4940.8 ppb	08:50:05
3	K 766.490 Radial†	32465.1	30094.2	5328.5 ug/L	5328.5 ppb	08:49:45
3	Mg 279.077 IEC†	147.3	146.0	5157.2 ug/L	5157.2 ppb	08:50:05
3	Na 589.592 Radial†	26135.2	27207.7	9130.4 ug/L	9130.4 ppb	08:49:45
3	Sr 421.552†	79104.0	79084.6	492.47 ug/L	492.47 ppb	08:49:45
3	Sc 361.383	913157.2	913157.2	101.32 %		08:51:14
3	Y 371.029	746146.8	746146.8	99.343 %		08:51:14
3	Ag 328.068†	111949.4	110198.7	502.13 ug/L	502.13 ppb	08:51:19
3	As 188.979†	1322.9	1329.9	529.82 ug/L	529.82 ppb	08:51:39
3	B 249.677†	24230.2	24445.3	510.73 ug/L	510.73 ppb	08:51:19
3	Ba 233.527†	67345.5	66476.8	493.96 ug/L	493.96 ppb	08:51:19
3	Be 313.107†	1359749.2	1347152.8	492.02 ug/L	492.02 ppb	08:51:14
3	Cd 226.502†	47198.8	46779.2	494.35 ug/L	494.35 ppb	08:51:19
3	Co 228.616†	26403.8	26125.3	495.99 ug/L	495.99 ppb	08:51:19
3	Cr 267.716†	47416.6	46720.4	491.23 ug/L	491.23 ppb	08:51:19
3	Cu 324.752†	180362.3	171256.6	490.34 ug/L	490.34 ppb	08:51:19
3	Mn 257.610†	467972.0	461454.8	492.65 ug/L	492.65 ppb	08:51:14
3	Mo 202.031†	7964.6	7842.6	498.56 ug/L	498.56 ppb	08:51:39
3	Ni 231.604†	21690.8	21321.7	493.42 ug/L	493.42 ppb	08:51:19
3	P 214.914†	4511.2	4229.0	2365.0 ug/L	2365.0 ppb	08:51:39
3	Pb 220.353†	4333.2	4345.2	492.76 ug/L	492.76 ppb	08:51:39
3	S 181.975 Axial†	770.2	718.6	1005.9 ug/L	1005.9 ppb	08:51:39
3	Sb 206.836†	1648.3	1592.6	511.39 ug/L	511.39 ppb	08:51:39
3	Se 196.026†	837.6	855.5	512.64 ug/L	512.64 ppb	08:51:39
3	Si 251.611†	84314.0	82766.2	2465.7 ug/L	2465.7 ppb	08:51:19
3	Sn 189.927†	3099.7	3054.3	500.67 ug/L	500.67 ppb	08:51:39
3	Ti 334.940†	315905.7	312906.3	499.20 ug/L	499.20 ppb	08:51:19
3	Tl 190.801†	1760.2	1769.7	498.86 ug/L	498.86 ppb	08:51:39
3	U 409.014†	15741.3	17938.2	492.58 ug/L	492.58 ppb	08:51:19
3	V 292.402†	73739.7	74137.7	496.37 ug/L	496.37 ppb	08:51:19
3	Zn 213.857†	58213.2	56833.2	492.13 ug/L	492.13 ppb	08:51:19
3	SiO2†	84868.2	83295.4	5317.0 ug/L	5317.0 ppb	08:51:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	915183.9	101.54	%	0.202				0.20%
Sc Radial	5806.0	99.4	%	0.62				0.62%
Y 371.029	748242.6	99.622	%	0.2477				0.25%
Y RADIAL	6166.6	98.07	%	0.575				0.59%
Ag 328.068†	109721.8	499.98	ug/L	1.891	499.98	ppb	1.891	0.38%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	7180.7	4966.6	ug/L	7.01	4966.6	ppb	7.01	0.14%
QC value within limits for Al 396.153Radial Recovery = 99.33%								
As 188.979†	1325.2	527.94	ug/L	1.794	527.94	ppb	1.794	0.34%
QC value within limits for As 188.979 Recovery = 105.59%								
B 249.677†	24411.7	510.03	ug/L	0.871	510.03	ppb	0.871	0.17%
QC value within limits for B 249.677 Recovery = 102.01%								
Ba 233.527†	66265.2	492.39	ug/L	1.910	492.39	ppb	1.910	0.39%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	1349583.6	492.90	ug/L	0.764	492.90	ppb	0.764	0.16%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	3378.4	4979.5	ug/L	64.94	4979.5	ppb	64.94	1.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.59%
Cd 226.502†            46710.6      493.62 ug/L         1.474      493.62 ppb          1.474   0.30%
   QC value within limits for Cd 226.502  Recovery = 98.72%
Co 228.616†            25974.5      493.13 ug/L         2.686      493.13 ppb          2.686   0.54%
   QC value within limits for Co 228.616  Recovery = 98.63%
Cr 267.716†            46695.2      490.97 ug/L         0.400      490.97 ppb          0.400   0.08%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†           170381.8      487.84 ug/L         2.179      487.84 ppb          2.179   0.45%
   QC value within limits for Cu 324.752  Recovery = 97.57%
Fe 238.204 Radial†       527.9      4957.6 ug/L         29.40      4957.6 ppb          29.40   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.15%
K 766.490 Radial†      30243.9      5355.1 ug/L         27.45      5355.1 ppb          27.45   0.51%
   QC value within limits for K 766.490 Radial  Recovery = 107.10%
Mg 279.077 IEC†          147.1      5195.9 ug/L         48.14      5195.9 ppb          48.14   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†           461135.9      492.31 ug/L         0.390      492.31 ppb          0.390   0.08%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             7831.8      497.88 ug/L         2.135      497.88 ppb          2.135   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     27260.4      9148.1 ug/L         29.43      9148.1 ppb          29.43   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 91.48%
Ni 231.604†            21315.7      493.28 ug/L         0.574      493.28 ppb          0.574   0.12%
   QC value within limits for Ni 231.604  Recovery = 98.66%
P 214.914†              4227.9      2364.7 ug/L         14.81      2364.7 ppb          14.81   0.63%
   QC value within limits for P 214.914  Recovery = 94.59%
Pb 220.353†             4346.5      492.90 ug/L         0.915      492.90 ppb          0.915   0.19%
   QC value within limits for Pb 220.353  Recovery = 98.58%
S 181.975 Axial†         718.6      1005.9 ug/L          4.92      1005.9 ppb           4.92   0.49%
   QC value within limits for S 181.975 Axial  Recovery = 100.59%
Sb 206.836†             1601.6      514.20 ug/L         3.082      514.20 ppb          3.082   0.60%
   QC value within limits for Sb 206.836  Recovery = 102.84%
Se 196.026†              855.4      512.61 ug/L         5.748      512.61 ppb          5.748   1.12%
   QC value within limits for Se 196.026  Recovery = 102.52%
Si 251.611†            82447.5      2456.1 ug/L          8.75      2456.1 ppb           8.75   0.36%
   QC value within limits for Si 251.611  Recovery = 98.24%
Sn 189.927†             3048.1      499.65 ug/L         1.532      499.65 ppb          1.532   0.31%
   QC value within limits for Sn 189.927  Recovery = 99.93%
Sr 421.552†            79005.5      491.98 ug/L         0.445      491.98 ppb          0.445   0.09%
   QC value within limits for Sr 421.552  Recovery = 98.40%
Ti 334.940†           311495.6      496.96 ug/L         2.090      496.96 ppb          2.090   0.42%
   QC value within limits for Ti 334.940  Recovery = 99.39%
Tl 190.801†             1764.6      497.42 ug/L         1.546      497.42 ppb          1.546   0.31%
   QC value within limits for Tl 190.801  Recovery = 99.48%
U 409.014†             17761.6      487.71 ug/L         4.243      487.71 ppb          4.243   0.87%
   QC value within limits for U 409.014  Recovery = 97.54%
V 292.402†             74022.7      495.60 ug/L         0.899      495.60 ppb          0.899   0.18%
   QC value within limits for V 292.402  Recovery = 99.12%
Zn 213.857†            56670.3      490.71 ug/L         1.599      490.71 ppb          1.599   0.33%
   QC value within limits for Zn 213.857  Recovery = 98.14%
SiO2†                  82856.0      5288.9 ug/L         28.64      5288.9 ppb          28.64   0.54%
   QC value within limits for SiO2  Recovery = 98.90%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 08:54:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.9	5848.9	100	%			08:55:57
1	Y RADIAL	6279.8	6279.8	99.87	%			08:55:57
1	Al 396.153Radial†	-26.0	-5.6	-3.9206	ug/L	-3.9206	ppb	08:55:57
1	Ca 317.933Radial†	21.0	5.4	7.9071	ug/L	7.9071	ppb	08:56:17
1	Fe 238.204 Radial†	5.7	-1.1	-10.330	ug/L	-10.330	ppb	08:56:17
1	K 766.490 Radial†	3182.5	828.1	146.83	ug/L	146.83	ppb	08:55:57
1	Mg 279.077 IEC†	2.1	1.0	34.534	ug/L	34.534	ppb	08:56:17
1	Na 589.592 Radial†	-941.9	146.9	49.290	ug/L	49.290	ppb	08:55:57
1	Sr 421.552†	15.9	43.3	0.2694	ug/L	0.2694	ppb	08:55:57
1	Sc 361.383	901425.1	901425.1	100.02	%			08:57:14
1	Y 371.029	753544.9	753544.9	100.33	%			08:57:14
1	Ag 328.068†	368.5	75.7	0.3398	ug/L	0.3398	ppb	08:57:14
1	As 188.979†	15.2	39.3	15.531	ug/L	15.531	ppb	08:57:34
1	B 249.677†	312.7	843.3	17.688	ug/L	17.688	ppb	08:57:34
1	Ba 233.527†	11.1	19.6	0.1457	ug/L	0.1457	ppb	08:57:34
1	Be 313.107†	-4890.2	223.7	0.0819	ug/L	0.0819	ppb	08:57:14
1	Cd 226.502†	-156.4	38.7	0.4107	ug/L	0.4107	ppb	08:57:34
1	Co 228.616†	-74.1	-8.7	-0.1627	ug/L	-0.1627	ppb	08:57:34
1	Cr 267.716†	79.8	1.2	0.0123	ug/L	0.0123	ppb	08:57:34
1	Cu 324.752†	6899.0	141.1	0.4032	ug/L	0.4032	ppb	08:57:14
1	Mn 257.610†	479.6	57.2	0.0593	ug/L	0.0593	ppb	08:57:34
1	Mo 202.031†	34.7	16.4	1.0403	ug/L	1.0403	ppb	08:57:34
1	Ni 231.604†	94.7	8.1	0.1884	ug/L	0.1884	ppb	08:57:34
1	P 214.914†	218.2	-5.3	-3.0892	ug/L	-3.0892	ppb	08:57:34
1	Pb 220.353†	-50.4	18.1	2.0453	ug/L	2.0453	ppb	08:57:34
1	S 181.975 Axial†	42.4	0.8	1.0843	ug/L	1.0843	ppb	08:57:34
1	Sb 206.836†	62.0	27.7	8.8422	ug/L	8.8422	ppb	08:57:34
1	Se 196.026†	-16.2	12.6	7.2774	ug/L	7.2774	ppb	08:57:34
1	Si 251.611†	602.0	152.3	4.4842	ug/L	4.4842	ppb	08:57:34
1	Sn 189.927†	18.6	13.6	2.2351	ug/L	2.2351	ppb	08:57:34
1	Ti 334.940†	-1003.7	111.4	0.1774	ug/L	0.1774	ppb	08:57:14
1	Tl 190.801†	-20.6	11.9	3.3333	ug/L	3.3333	ppb	08:57:34
1	U 409.014†	-2337.6	64.6	1.7809	ug/L	1.7809	ppb	08:57:14
1	V 292.402†	-1287.7	70.9	0.4890	ug/L	0.4890	ppb	08:57:14
1	Zn 213.857†	853.4	231.4	2.0199	ug/L	2.0199	ppb	08:57:34
1	SiO2†	567.6	100.0	6.2536	ug/L	6.2536	ppb	08:58:30
2	Sc Radial	5763.2	5763.2	98.6	%			08:56:22
2	Y RADIAL	6204.0	6204.0	98.67	%			08:56:22
2	Al 396.153Radial†	-35.2	-15.2	-10.645	ug/L	-10.645	ppb	08:56:22
2	Ca 317.933Radial†	18.1	2.8	4.1167	ug/L	4.1167	ppb	08:56:42
2	Fe 238.204 Radial†	8.3	1.6	14.665	ug/L	14.665	ppb	08:56:42
2	K 766.490 Radial†	3056.0	747.1	132.47	ug/L	132.47	ppb	08:56:22
2	Mg 279.077 IEC†	0.6	-0.6	-19.519	ug/L	-19.519	ppb	08:56:42
2	Na 589.592 Radial†	-945.8	128.9	43.263	ug/L	43.263	ppb	08:56:22
2	Sr 421.552†	-26.0	1.0	0.0062	ug/L	0.0062	ppb	08:56:22
2	Sc 361.383	904499.4	904499.4	100.36	%			08:57:39
2	Y 371.029	753447.4	753447.4	100.31	%			08:57:39
2	Ag 328.068†	351.8	57.8	0.2600	ug/L	0.2600	ppb	08:57:39
2	As 188.979†	11.6	35.7	14.109	ug/L	14.109	ppb	08:57:59
2	B 249.677†	271.6	801.3	16.804	ug/L	16.804	ppb	08:57:59
2	Ba 233.527†	-16.9	-8.4	-0.0622	ug/L	-0.0622	ppb	08:57:59
2	Be 313.107†	-5037.8	93.2	0.0338	ug/L	0.0338	ppb	08:57:39
2	Cd 226.502†	-148.0	47.6	0.5021	ug/L	0.5021	ppb	08:57:59
2	Co 228.616†	-75.2	-9.5	-0.1759	ug/L	-0.1759	ppb	08:57:59
2	Cr 267.716†	96.7	17.7	0.1836	ug/L	0.1836	ppb	08:57:59
2	Cu 324.752†	6834.9	53.7	0.1545	ug/L	0.1545	ppb	08:57:39
2	Mn 257.610†	476.0	52.0	0.0573	ug/L	0.0573	ppb	08:57:59
2	Mo 202.031†	41.2	22.7	1.4411	ug/L	1.4411	ppb	08:57:59
2	Ni 231.604†	102.3	15.4	0.3561	ug/L	0.3561	ppb	08:57:59

2	P 214.914†	217.8	-6.5	-3.7894	ug/L	-3.7894 ppb	08:57:59
2	Pb 220.353†	-42.2	26.4	2.9877	ug/L	2.9877 ppb	08:57:59
2	S 181.975 Axial†	42.4	0.7	0.9493	ug/L	0.9493 ppb	08:57:59
2	Sb 206.836†	61.2	26.7	8.5108	ug/L	8.5108 ppb	08:57:59
2	Se 196.026†	-30.8	-1.9	-1.0542	ug/L	-1.0542 ppb	08:57:59
2	Si 251.611†	599.3	147.4	4.3396	ug/L	4.3396 ppb	08:57:59
2	Sn 189.927†	15.2	10.1	1.6614	ug/L	1.6614 ppb	08:57:59
2	Ti 334.940†	-1183.0	-63.8	-0.1044	ug/L	-0.1044 ppb	08:57:39
2	Tl 190.801†	-30.7	1.9	0.5410	ug/L	0.5410 ppb	08:57:59
2	U 409.014†	-2192.6	217.1	5.9770	ug/L	5.9770 ppb	08:57:39
2	V 292.402†	-1417.6	-54.1	-0.3279	ug/L	-0.3279 ppb	08:57:39
2	Zn 213.857†	827.2	202.4	1.7647	ug/L	1.7647 ppb	08:57:59
2	SiO2†	578.3	108.8	6.8154	ug/L	6.8154 ppb	08:58:35
3	Sc Radial	5778.5	5778.5	98.9	%		08:56:47
3	Y RADIAL	6196.6	6196.6	98.55	%		08:56:47
3	Al 396.153Radial†	-13.1	7.2	4.9512	ug/L	4.9512 ppb	08:56:47
3	Ca 317.933Radial†	17.3	1.9	2.8636	ug/L	2.8636 ppb	08:57:07
3	Fe 238.204 Radial†	5.3	-1.4	-13.193	ug/L	-13.193 ppb	08:57:07
3	K 766.490 Radial†	3077.8	760.9	134.91	ug/L	134.91 ppb	08:56:47
3	Mg 279.077 IEC†	2.2	1.0	36.914	ug/L	36.914 ppb	08:57:07
3	Na 589.592 Radial†	-940.2	137.1	45.999	ug/L	45.999 ppb	08:56:47
3	Sr 421.552†	-14.7	12.4	0.0774	ug/L	0.0774 ppb	08:56:47
3	Sc 361.383	901678.2	901678.2	100.05	%		08:58:05
3	Y 371.029	751276.9	751276.9	100.03	%		08:58:05
3	Ag 328.068†	353.0	60.1	0.2640	ug/L	0.2640 ppb	08:58:05
3	As 188.979†	1.1	25.2	9.9656	ug/L	9.9656 ppb	08:58:25
3	B 249.677†	234.5	765.1	16.046	ug/L	16.046 ppb	08:58:25
3	Ba 233.527†	16.8	25.3	0.1861	ug/L	0.1861 ppb	08:58:25
3	Be 313.107†	-4967.7	147.6	0.0540	ug/L	0.0540 ppb	08:58:05
3	Cd 226.502†	-152.4	42.8	0.4533	ug/L	0.4533 ppb	08:58:25
3	Co 228.616†	-67.8	-2.4	-0.0438	ug/L	-0.0438 ppb	08:58:25
3	Cr 267.716†	87.7	9.0	0.0923	ug/L	0.0923 ppb	08:58:25
3	Cu 324.752†	6900.3	140.5	0.4013	ug/L	0.4013 ppb	08:58:05
3	Mn 257.610†	424.4	1.9	0.0000	ug/L	0.0000 ppb	08:58:25
3	Mo 202.031†	28.5	10.1	0.6413	ug/L	0.6413 ppb	08:58:25
3	Ni 231.604†	91.4	4.8	0.1114	ug/L	0.1114 ppb	08:58:25
3	P 214.914†	212.5	-11.1	-6.4313	ug/L	-6.4313 ppb	08:58:25
3	Pb 220.353†	-56.8	11.7	1.3264	ug/L	1.3264 ppb	08:58:25
3	S 181.975 Axial†	35.8	-5.8	-8.1206	ug/L	-8.1206 ppb	08:58:25
3	Sb 206.836†	49.5	15.2	4.8512	ug/L	4.8512 ppb	08:58:25
3	Se 196.026†	-26.0	2.9	1.6149	ug/L	1.6149 ppb	08:58:25
3	Si 251.611†	583.4	133.4	3.9342	ug/L	3.9342 ppb	08:58:25
3	Sn 189.927†	13.7	8.8	1.4330	ug/L	1.4330 ppb	08:58:25
3	Ti 334.940†	-1043.5	71.9	0.1135	ug/L	0.1135 ppb	08:58:05
3	Tl 190.801†	-33.7	-1.2	-0.3407	ug/L	-0.3407 ppb	08:58:25
3	U 409.014†	-2289.9	113.0	3.1135	ug/L	3.1135 ppb	08:58:05
3	V 292.402†	-1405.9	-46.9	-0.2917	ug/L	-0.2917 ppb	08:58:05
3	Zn 213.857†	837.0	214.7	1.8749	ug/L	1.8749 ppb	08:58:25
3	SiO2†	586.3	118.6	7.4719	ug/L	7.4719 ppb	08:58:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902534.2	100.14	%	0.189				0.19%
Sc Radial	5796.9	99.2	%	0.78				0.79%
Y 371.029	752756.4	100.22	%	0.171				0.17%
Y RADIAL	6226.8	99.03	%	0.732				0.74%
Ag 328.068†	64.5	0.2879	ug/L	0.04497	0.2879	ppb	0.04497	15.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.5	-3.2049	ug/L	7.82294	-3.2049	ppb	7.82294	244.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	33.4	13.202	ug/L	2.8916	13.202	ppb	2.8916	21.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	803.2	16.846	ug/L	0.8218	16.846	ppb	0.8218	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0899	ug/L	0.13323	0.0899	ppb	0.13323	148.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.8	0.0566	ug/L	0.02416	0.0566	ppb	0.02416	42.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9625	ug/L	2.62598	4.9625	ppb	2.62598	52.92%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                43.0      0.4554 ug/L       0.04576      0.4554 ppb        0.04576  10.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.9     -0.1275 ug/L       0.07277     -0.1275 ppb        0.07277  57.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 9.3      0.0961 ug/L       0.08574      0.0961 ppb        0.08574  89.25%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               111.8      0.3197 ug/L       0.14300      0.3197 ppb        0.14300  44.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.3     -2.9527 ug/L      15.32419     -2.9527 ppb       15.32419 518.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         778.7      138.07 ug/L         7.683      138.07 ppb          7.683   5.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.5      17.309 ug/L       31.9168      17.309 ppb        31.9168 184.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                37.0      0.0389 ug/L       0.03368      0.0389 ppb        0.03368  86.60%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                16.4      1.0409 ug/L       0.39988      1.0409 ppb        0.39988  38.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        137.6      46.184 ug/L        3.0177      46.184 ppb         3.0177   6.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.4      0.2186 ug/L       0.12512      0.2186 ppb        0.12512  57.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.6     -4.4366 ug/L       1.76250     -4.4366 ppb        1.76250  39.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                18.7      2.1198 ug/L       0.83315      2.1198 ppb        0.83315  39.30%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.4     -2.0290 ug/L       5.27591     -2.0290 ppb        5.27591 260.03%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                23.2      7.4014 ug/L       2.21472      7.4014 ppb        2.21472  29.92%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 4.5      2.6127 ug/L       4.25448      2.6127 ppb        4.25448 162.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               144.4      4.2527 ug/L       0.28511      4.2527 ppb        0.28511   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.8      1.7765 ug/L       0.41326      1.7765 ppb        0.41326  23.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.9      0.1177 ug/L       0.13614      0.1177 ppb        0.13614 115.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                39.8      0.0622 ug/L       0.14773      0.0622 ppb        0.14773 237.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.2      1.1779 ug/L       1.91799      1.1779 ppb        1.91799 162.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                131.5      3.6238 ug/L       2.14410      3.6238 ppb        2.14410  59.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -10.0     -0.0436 ug/L       0.46154     -0.0436 ppb        0.46154 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               216.2      1.8865 ug/L       0.12801      1.8865 ppb        0.12801   6.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     109.1      6.8470 ug/L       0.60978      6.8470 ppb        0.60978   8.91%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 09:04:46 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/8/2009 07:33:15**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 37**
Sample ID: LR1 **Date Collected: 12/8/2009 09:04:47**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5674.8	5674.8	97.1	%			09:06:40
1	Y RADIAL	6109.0	6109.0	97.16	%			09:06:40
1	Al 396.153Radial†	-44.6	-25.5	-16.605	ug/L	-16.605	ppb	09:06:40

1	Ca 317.933Radial†	48.4	34.2	50.475 ug/L	50.475 ppb	09:07:00
1	Fe 238.204 Radial†	39249.2	40411.8	378330 ug/L	378330 ppb	09:06:40
1	K 766.490 Radial†	2474.7	196.7	47.290 ug/L	47.290 ppb	09:06:40
1	Mg 279.077 IEC†	8.2	7.2	-68.508 ug/L	-68.508 ppb	09:07:00
1	Na 589.592 Radial†	-982.9	75.8	25.423 ug/L	25.423 ppb	09:06:40
1	Sr 421.552†	73.8	103.4	0.6433 ug/L	0.6433 ppb	09:06:40
1	Sc 361.383	897521.6	897521.6	99.585 %		09:07:58
1	Y 371.029	739294.0	739294.0	98.430 %		09:07:58
1	Ag 328.068†	-25481.6	-25880.6	3.3525 ug/L	3.3525 ppb	09:07:58
1	As 188.979†	-214.5	-191.2	-17.133 ug/L	-17.133 ppb	09:08:18
1	B 249.677†	2487.7	3028.7	13.314 ug/L	13.314 ppb	09:07:58
1	Ba 233.527†	-1770.5	-1769.5	1.0427 ug/L	1.0427 ppb	09:07:58
1	Be 313.107†	-4846.7	246.1	0.0894 ug/L	0.0894 ppb	09:07:58
1	Cd 226.502†	3574.9	3784.9	2.1903 ug/L	2.1903 ppb	09:07:58
1	Co 228.616†	211.8	278.1	-0.1855 ug/L	-0.1855 ppb	09:08:18
1	Cr 267.716†	-619.6	-700.8	-0.5095 ug/L	-0.5095 ppb	09:07:58
1	Cu 324.752†	21.2	-6735.4	0.0244 ug/L	0.0244 ppb	09:07:58
1	Mn 257.610†	-37238.4	-37815.9	-2.6165 ug/L	-2.6165 ppb	09:07:58
1	Mo 202.031†	-382.7	-402.6	1.2600 ug/L	1.2600 ppb	09:07:58
1	Ni 231.604†	208.3	122.6	2.8363 ug/L	2.8363 ppb	09:08:18
1	P 214.914†	753.0	532.6	5.1179 ug/L	5.1179 ppb	09:08:18
1	Pb 220.353†	220.4	289.7	1.6461 ug/L	1.6461 ppb	09:08:18
1	S 181.975 Axial†	53.1	11.7	16.442 ug/L	16.442 ppb	09:08:18
1	Sb 206.836†	31.2	-3.0	4.8987 ug/L	4.8987 ppb	09:08:18
1	Se 196.026†	-2121.3	-2101.3	-23.019 ug/L	-23.019 ppb	09:08:18
1	Si 251.611†	-704.3	-1156.9	-34.181 ug/L	-34.181 ppb	09:07:58
1	Sn 189.927†	-28.8	-33.9	-0.4826 ug/L	-0.4826 ppb	09:08:18
1	Ti 334.940†	-1214.7	-104.8	-0.1851 ug/L	-0.1851 ppb	09:07:58
1	Tl 190.801†	-43.3	-10.9	-3.4531 ug/L	-3.4531 ppb	09:08:18
1	U 409.014†	-505.7	1894.0	4.5915 ug/L	4.5915 ppb	09:07:58
1	V 292.402†	7050.4	8438.2	-2.0700 ug/L	-2.0700 ppb	09:07:58
1	Zn 213.857†	4885.8	4284.4	1.3044 ug/L	1.3044 ppb	09:08:18
1	SiO2†	-783.5	-1254.3	-79.480 ug/L	-79.480 ppb	09:09:15
2	Sc Radial	5859.6	5859.6	100 %		09:07:05
2	Y RADIAL	6268.0	6268.0	99.69 %		09:07:05
2	Al 396.153Radial†	-53.2	-32.6	-21.569 ug/L	-21.569 ppb	09:07:05
2	Ca 317.933Radial†	51.5	35.8	52.701 ug/L	52.701 ppb	09:07:25
2	Fe 238.204 Radial†	39706.4	39593.5	370670 ug/L	370670 ppb	09:07:05
2	K 766.490 Radial†	2416.7	58.5	22.531 ug/L	22.531 ppb	09:07:05
2	Mg 279.077 IEC†	7.2	6.0	-104.83 ug/L	-104.83 ppb	09:07:25
2	Na 589.592 Radial†	-981.9	108.7	36.480 ug/L	36.480 ppb	09:07:05
2	Sr 421.552†	69.0	96.2	0.5986 ug/L	0.5986 ppb	09:07:05
2	Sc 361.383	892276.6	892276.6	99.003 %		09:08:24
2	Y 371.029	734022.9	734022.9	97.728 %		09:08:24
2	Ag 328.068†	-25591.8	-26142.3	-0.2725 ug/L	-0.2725 ppb	09:08:24
2	As 188.979†	-212.9	-190.9	-18.162 ug/L	-18.162 ppb	09:08:44
2	B 249.677†	2371.1	2925.6	12.168 ug/L	12.168 ppb	09:08:24
2	Ba 233.527†	-1757.7	-1767.0	0.7774 ug/L	0.7774 ppb	09:08:24
2	Be 313.107†	-4974.3	88.6	0.0322 ug/L	0.0322 ppb	09:08:24
2	Cd 226.502†	3528.9	3759.6	2.6878 ug/L	2.6878 ppb	09:08:24
2	Co 228.616†	210.9	278.5	-0.0703 ug/L	-0.0703 ppb	09:08:44
2	Cr 267.716†	-604.4	-689.1	-0.5247 ug/L	-0.5247 ppb	09:08:24
2	Cu 324.752†	24.9	-6731.6	-0.3556 ug/L	-0.3556 ppb	09:08:24
2	Mn 257.610†	-37010.4	-37805.5	-3.3686 ug/L	-3.3686 ppb	09:08:24
2	Mo 202.031†	-385.1	-407.3	0.4165 ug/L	0.4165 ppb	09:08:24
2	Ni 231.604†	185.1	100.5	2.3228 ug/L	2.3228 ppb	09:08:44
2	P 214.914†	738.7	522.7	5.5558 ug/L	5.5558 ppb	09:08:44
2	Pb 220.353†	220.1	290.8	2.3945 ug/L	2.3945 ppb	09:08:44
2	S 181.975 Axial†	57.0	16.0	22.396 ug/L	22.396 ppb	09:08:44
2	Sb 206.836†	24.3	-9.7	2.6260 ug/L	2.6260 ppb	09:08:44
2	Se 196.026†	-2108.8	-2101.2	-47.131 ug/L	-47.131 ppb	09:08:44
2	Si 251.611†	-790.8	-1248.4	-36.906 ug/L	-36.906 ppb	09:08:24
2	Sn 189.927†	-30.1	-35.3	-0.8273 ug/L	-0.8273 ppb	09:08:44
2	Ti 334.940†	-1122.8	-19.2	-0.0494 ug/L	-0.0494 ppb	09:08:24
2	Tl 190.801†	-38.2	-6.0	-2.0739 ug/L	-2.0739 ppb	09:08:44
2	U 409.014†	-422.2	1975.4	7.7953 ug/L	7.7953 ppb	09:08:24
2	V 292.402†	7016.4	8445.5	-0.8577 ug/L	-0.8577 ppb	09:08:24
2	Zn 213.857†	4882.3	4309.7	2.2615 ug/L	2.2615 ppb	09:08:44
2	SiO2†	-749.4	-1224.4	-77.532 ug/L	-77.532 ppb	09:09:20
3	Sc Radial	5765.3	5765.3	98.7 %		09:07:30
3	Y RADIAL	6199.1	6199.1	98.59 %		09:07:30

3	Al 396.153Radial†	-80.6	-61.3	-41.455 ug/L	-41.455 ppb	09:07:30
3	Ca 317.933Radial†	48.2	33.3	49.051 ug/L	49.051 ppb	09:07:50
3	Fe 238.204 Radial†	39281.5	39810.2	372700 ug/L	372700 ppb	09:07:30
3	K 766.490 Radial†	2355.2	35.6	18.540 ug/L	18.540 ppb	09:07:30
3	Mg 279.077 IEC†	13.9	12.9	136.09 ug/L	136.09 ppb	09:07:50
3	Na 589.592 Radial†	-1033.0	40.9	13.709 ug/L	13.709 ppb	09:07:30
3	Sr 421.552†	60.1	88.3	0.5492 ug/L	0.5492 ppb	09:07:30
3	Sc 361.383	894183.3	894183.3	99.214 %		09:08:50
3	Y 371.029	735495.5	735495.5	97.925 %		09:08:50
3	Ag 328.068†	-25540.2	-26035.2	0.8586 ug/L	0.8586 ppb	09:08:50
3	As 188.979†	-218.4	-195.9	-19.849 ug/L	-19.849 ppb	09:09:10
3	B 249.677†	2406.5	2956.3	12.542 ug/L	12.542 ppb	09:08:50
3	Ba 233.527†	-1710.9	-1716.0	1.2281 ug/L	1.2281 ppb	09:08:50
3	Be 313.107†	-4932.6	141.3	0.0513 ug/L	0.0513 ppb	09:08:50
3	Cd 226.502†	3569.6	3793.0	2.8380 ug/L	2.8380 ppb	09:08:50
3	Co 228.616†	200.3	267.3	-0.3114 ug/L	-0.3114 ppb	09:09:10
3	Cr 267.716†	-627.3	-710.9	-0.7171 ug/L	-0.7171 ppb	09:08:50
3	Cu 324.752†	-29.6	-6786.5	-0.4093 ug/L	-0.4093 ppb	09:08:50
3	Mn 257.610†	-37288.3	-38005.9	-3.3844 ug/L	-3.3844 ppb	09:08:50
3	Mo 202.031†	-394.6	-416.1	0.0069 ug/L	0.0069 ppb	09:08:50
3	Ni 231.604†	174.2	89.0	2.0577 ug/L	2.0577 ppb	09:09:10
3	P 214.914†	751.9	534.3	10.658 ug/L	10.658 ppb	09:09:10
3	Pb 220.353†	253.9	324.4	6.0178 ug/L	6.0178 ppb	09:09:10
3	S 181.975 Axial†	58.5	17.4	24.396 ug/L	24.396 ppb	09:09:10
3	Sb 206.836†	22.0	-12.1	1.9004 ug/L	1.9004 ppb	09:09:10
3	Se 196.026†	-2099.6	-2087.5	-32.776 ug/L	-32.776 ppb	09:09:10
3	Si 251.611†	-792.9	-1248.9	-36.910 ug/L	-36.910 ppb	09:08:50
3	Sn 189.927†	-27.3	-32.5	-0.3349 ug/L	-0.3349 ppb	09:09:10
3	Ti 334.940†	-1172.2	-66.6	-0.1230 ug/L	-0.1230 ppb	09:08:50
3	Tl 190.801†	-37.5	-5.3	-1.8614 ug/L	-1.8614 ppb	09:09:10
3	U 409.014†	-595.4	1801.7	2.7559 ug/L	2.7559 ppb	09:08:50
3	V 292.402†	6887.9	8300.8	-2.1334 ug/L	-2.1334 ppb	09:08:50
3	Zn 213.857†	4888.1	4305.0	2.0203 ug/L	2.0203 ppb	09:09:10
3	SiO2†	-772.8	-1246.4	-78.924 ug/L	-78.924 ppb	09:09:25

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894660.5	99.267	%	0.2946				0.30%
Sc Radial	5766.6	98.7	%	1.58				1.60%
Y 371.029	736270.8	98.028	%	0.3621				0.37%
Y RADIAL	6192.0	98.48	%	1.269				1.29%
Ag 328.068†	-26019.4	1.3128	ug/L	1.85472	1.3128	ppb	1.85472	141.28%
Al 396.153Radial†	-39.8	-26.543	ug/L	13.1508	-26.543	ppb	13.1508	49.55%
As 188.979†	-192.7	-18.381	ug/L	1.3714	-18.381	ppb	1.3714	7.46%
B 249.677†	2970.2	12.675	ug/L	0.5842	12.675	ppb	0.5842	4.61%
Ba 233.527†	-1750.8	1.0161	ug/L	0.22652	1.0161	ppb	0.22652	22.29%
Be 313.107†	158.7	0.0576	ug/L	0.02910	0.0576	ppb	0.02910	50.48%
Ca 317.933Radial†	34.4	50.742	ug/L	1.8397	50.742	ppb	1.8397	3.63%
Cd 226.502†	3779.2	2.5720	ug/L	0.33898	2.5720	ppb	0.33898	13.18%
Co 228.616†	274.6	-0.1891	ug/L	0.12058	-0.1891	ppb	0.12058	63.77%
Cr 267.716†	-700.3	-0.5838	ug/L	0.11570	-0.5838	ppb	0.11570	19.82%
Cu 324.752†	-6751.2	-0.2468	ug/L	0.23640	-0.2468	ppb	0.23640	95.77%
Fe 238.204 Radial†	39938.5	373900	ug/L	3969.2	373900	ppb	3969.2	1.06%
K 766.490 Radial†	97.0	29.454	ug/L	15.5752	29.454	ppb	15.5752	52.88%
Mg 279.077 IEC†	8.7	-12.417	ug/L	129.8883	-12.417	ppb	129.8883	>999.9%
Mn 257.610†	-37875.8	-3.1232	ug/L	0.43887	-3.1232	ppb	0.43887	14.05%
Mo 202.031†	-408.7	0.5611	ug/L	0.63894	0.5611	ppb	0.63894	113.87%
Na 589.592 Radial†	75.1	25.204	ug/L	11.3872	25.204	ppb	11.3872	45.18%
Ni 231.604†	104.0	2.4056	ug/L	0.39584	2.4056	ppb	0.39584	16.45%
P 214.914†	529.9	7.1105	ug/L	3.07985	7.1105	ppb	3.07985	43.31%
Pb 220.353†	301.6	3.3528	ug/L	2.33809	3.3528	ppb	2.33809	69.74%
S 181.975 Axial†	15.0	21.078	ug/L	4.1374	21.078	ppb	4.1374	19.63%
Sb 206.836†	-8.2	3.1417	ug/L	1.56424	3.1417	ppb	1.56424	49.79%
Se 196.026†	-2096.7	-34.309	ug/L	12.1289	-34.309	ppb	12.1289	35.35%
Si 251.611†	-1218.1	-35.999	ug/L	1.5747	-35.999	ppb	1.5747	4.37%
Sn 189.927†	-33.9	-0.5483	ug/L	0.25266	-0.5483	ppb	0.25266	46.08%
Sr 421.552†	95.9	0.5970	ug/L	0.04707	0.5970	ppb	0.04707	7.88%
Ti 334.940†	-63.5	-0.1192	ug/L	0.06791	-0.1192	ppb	0.06791	56.99%
Tl 190.801†	-7.4	-2.4628	ug/L	0.86420	-2.4628	ppb	0.86420	35.09%

U 409.014†	1890.4	5.0475 ug/L	2.55046	5.0475 ppb	2.55046	50.53%
V 292.402†	8394.8	-1.6870 ug/L	0.71891	-1.6870 ppb	0.71891	42.61%
Zn 213.857†	4299.7	1.8621 ug/L	0.49779	1.8621 ppb	0.49779	26.73%
SiO2†	-1241.7	-78.646 ug/L	1.0035	-78.646 ppb	1.0035	1.28%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5760.8	5760.8	98.6	%			09:13:29
1	Y RADIAL	6116.4	6116.4	97.27	%			09:13:29
1	Al 396.153Radial†	7034.5	7156.4	4950.1	ug/L	4950.1	ppb	09:13:29
1	Ca 317.933Radial†	3364.6	3397.5	5007.8	ug/L	5007.8	ppb	09:13:49
1	Fe 238.204 Radial†	538.1	539.0	5061.5	ug/L	5061.5	ppb	09:13:49
1	K 766.490 Radial†	31007.5	29103.4	5152.6	ug/L	5152.6	ppb	09:13:29
1	Mg 279.077 IEC†	150.9	151.9	5364.4	ug/L	5364.4	ppb	09:13:49
1	Na 589.592 Radial†	26896.4	28372.6	9521.3	ug/L	9521.3	ppb	09:13:29
1	Sr 421.552†	79592.9	80769.1	502.96	ug/L	502.96	ppb	09:13:29
1	Sc 361.383	922734.0	922734.0	102.38	%			09:14:46
1	Y 371.029	754063.7	754063.7	100.40	%			09:14:46
1	Ag 328.068†	110965.4	108090.8	492.60	ug/L	492.60	ppb	09:14:51
1	As 188.979†	1231.3	1226.8	489.06	ug/L	489.06	ppb	09:15:12
1	B 249.677†	22929.7	22926.9	478.90	ug/L	478.90	ppb	09:14:51
1	Ba 233.527†	66920.1	65371.5	485.75	ug/L	485.75	ppb	09:14:51
1	Be 313.107†	1375184.7	1348300.4	492.42	ug/L	492.42	ppb	09:14:46
1	Cd 226.502†	46992.1	46093.8	487.09	ug/L	487.09	ppb	09:14:51
1	Co 228.616†	26129.9	25587.3	485.77	ug/L	485.77	ppb	09:14:51
1	Cr 267.716†	47317.9	46138.3	485.11	ug/L	485.11	ppb	09:14:51
1	Cu 324.752†	177843.4	166948.7	478.02	ug/L	478.02	ppb	09:14:51
1	Mn 257.610†	471345.6	459956.2	491.06	ug/L	491.06	ppb	09:14:46
1	Mo 202.031†	7882.8	7681.1	488.31	ug/L	488.31	ppb	09:15:12
1	Ni 231.604†	21715.5	21123.7	488.84	ug/L	488.84	ppb	09:14:51
1	P 214.914†	4481.1	4153.3	2323.1	ug/L	2323.1	ppb	09:15:12
1	Pb 220.353†	4313.2	4281.3	485.50	ug/L	485.50	ppb	09:15:12
1	S 181.975 Axial†	757.5	698.3	977.50	ug/L	977.50	ppb	09:15:12
1	Sb 206.836†	1596.8	1525.4	489.90	ug/L	489.90	ppb	09:15:12
1	Se 196.026†	838.3	847.6	508.44	ug/L	508.44	ppb	09:15:12
1	Si 251.611†	83061.3	80679.0	2403.4	ug/L	2403.4	ppb	09:14:51
1	Sn 189.927†	3071.2	2994.7	490.93	ug/L	490.93	ppb	09:15:12
1	Ti 334.940†	312506.5	306350.1	488.75	ug/L	488.75	ppb	09:14:51
1	Tl 190.801†	1729.6	1721.8	485.42	ug/L	485.42	ppb	09:15:12
1	U 409.014†	15419.3	17462.3	479.47	ug/L	479.47	ppb	09:14:51
1	V 292.402†	73201.8	72857.0	487.74	ug/L	487.74	ppb	09:14:51
1	Zn 213.857†	57549.1	55588.2	481.28	ug/L	481.28	ppb	09:14:51
1	SiO2†	83836.2	81418.0	5197.2	ug/L	5197.2	ppb	09:16:19
2	Sc Radial	5745.5	5745.5	98.3	%			09:13:54
2	Y RADIAL	6192.6	6192.6	98.49	%			09:13:54
2	Al 396.153Radial†	7003.1	7143.6	4941.1	ug/L	4941.1	ppb	09:13:54
2	Ca 317.933Radial†	3363.9	3406.0	5020.2	ug/L	5020.2	ppb	09:14:14
2	Fe 238.204 Radial†	533.2	535.5	5028.9	ug/L	5028.9	ppb	09:14:14
2	K 766.490 Radial†	30739.7	28914.8	5119.2	ug/L	5119.2	ppb	09:13:54
2	Mg 279.077 IEC†	147.9	149.3	5273.6	ug/L	5273.6	ppb	09:14:14
2	Na 589.592 Radial†	26537.9	28080.6	9423.3	ug/L	9423.3	ppb	09:13:54
2	Sr 421.552†	78795.9	80173.6	499.25	ug/L	499.25	ppb	09:13:54
2	Sc 361.383	918645.3	918645.3	101.93	%			09:15:17
2	Y 371.029	749404.0	749404.0	99.776	%			09:15:17
2	Ag 328.068†	111114.6	108719.5	495.44	ug/L	495.44	ppb	09:15:22
2	As 188.979†	1241.3	1241.9	495.05	ug/L	495.05	ppb	09:15:43
2	B 249.677†	22912.8	23009.9	480.64	ug/L	480.64	ppb	09:15:22
2	Ba 233.527†	66956.5	65698.1	488.17	ug/L	488.17	ppb	09:15:22
2	Be 313.107†	1358622.3	1338029.7	488.68	ug/L	488.68	ppb	09:15:17
2	Cd 226.502†	46897.3	46205.1	488.27	ug/L	488.27	ppb	09:15:22
2	Co 228.616†	26185.9	25755.9	488.97	ug/L	488.97	ppb	09:15:22
2	Cr 267.716†	47298.1	46324.5	487.07	ug/L	487.07	ppb	09:15:22
2	Cu 324.752†	178329.4	168198.6	481.59	ug/L	481.59	ppb	09:15:22
2	Mn 257.610†	468894.0	459600.0	490.68	ug/L	490.68	ppb	09:15:17
2	Mo 202.031†	7898.2	7730.5	491.44	ug/L	491.44	ppb	09:15:43
2	Ni 231.604†	21658.2	21161.9	489.72	ug/L	489.72	ppb	09:15:22

2	P 214.914†	4481.9	4173.6	2334.2 ug/L	2334.2 ppb	09:15:43
2	Pb 220.353†	4305.7	4292.7	486.80 ug/L	486.80 ppb	09:15:43
2	S 181.975 Axial†	742.6	687.0	961.68 ug/L	961.68 ppb	09:15:43
2	Sb 206.836†	1611.4	1546.7	496.65 ug/L	496.65 ppb	09:15:43
2	Se 196.026†	816.5	829.9	498.09 ug/L	498.09 ppb	09:15:43
2	Si 251.611†	83451.2	81422.6	2425.7 ug/L	2425.7 ppb	09:15:22
2	Sn 189.927†	3064.3	3001.3	492.00 ug/L	492.00 ppb	09:15:43
2	Ti 334.940†	313467.9	308651.9	492.42 ug/L	492.42 ppb	09:15:22
2	Tl 190.801†	1733.8	1733.5	488.68 ug/L	488.68 ppb	09:15:43
2	U 409.014†	15637.9	17743.9	487.22 ug/L	487.22 ppb	09:15:22
2	V 292.402†	73233.5	73206.2	490.11 ug/L	490.11 ppb	09:15:22
2	Zn 213.857†	57577.9	55866.6	483.71 ug/L	483.71 ppb	09:15:22
2	SiO2†	84539.8	82472.9	5264.8 ug/L	5264.8 ppb	09:16:24
3	Sc Radial	5870.9	5870.9	100 %		09:14:19
3	Y RADIAL	6265.4	6265.4	99.64 %		09:14:19
3	Al 396.153Radial†	7091.8	7079.6	4896.6 ug/L	4896.6 ppb	09:14:19
3	Ca 317.933Radial†	3390.8	3359.6	4951.9 ug/L	4951.9 ppb	09:14:39
3	Fe 238.204 Radial†	544.0	534.7	5021.2 ug/L	5021.2 ppb	09:14:39
3	K 766.490 Radial†	31070.1	28575.4	5059.1 ug/L	5059.1 ppb	09:14:19
3	Mg 279.077 IEC†	148.1	146.3	5165.6 ug/L	5165.6 ppb	09:14:39
3	Na 589.592 Radial†	26868.9	27833.2	9340.3 ug/L	9340.3 ppb	09:14:19
3	Sr 421.552†	79717.2	79377.6	494.30 ug/L	494.30 ppb	09:14:19
3	Sc 361.383	925667.8	925667.8	102.71 %		09:15:48
3	Y 371.029	756709.0	756709.0	100.75 %		09:15:48
3	Ag 328.068†	111245.2	108019.7	492.26 ug/L	492.26 ppb	09:15:53
3	As 188.979†	1236.1	1227.6	489.36 ug/L	489.36 ppb	09:16:14
3	B 249.677†	23103.8	23025.4	480.97 ug/L	480.97 ppb	09:15:53
3	Ba 233.527†	66683.4	64933.9	482.50 ug/L	482.50 ppb	09:15:53
3	Be 313.107†	1368635.9	1337667.3	488.54 ug/L	488.54 ppb	09:15:48
3	Cd 226.502†	46751.6	45714.1	483.07 ug/L	483.07 ppb	09:15:53
3	Co 228.616†	26093.7	25471.2	483.57 ug/L	483.57 ppb	09:15:53
3	Cr 267.716†	47245.6	45921.4	482.83 ug/L	482.83 ppb	09:15:53
3	Cu 324.752†	179081.9	167604.0	479.89 ug/L	479.89 ppb	09:15:53
3	Mn 257.610†	469661.4	456857.3	487.75 ug/L	487.75 ppb	09:15:48
3	Mo 202.031†	7946.8	7719.0	490.71 ug/L	490.71 ppb	09:16:14
3	Ni 231.604†	21620.0	20963.5	485.13 ug/L	485.13 ppb	09:15:53
3	P 214.914†	4497.4	4155.4	2324.0 ug/L	2324.0 ppb	09:16:14
3	Pb 220.353†	4343.4	4297.4	487.32 ug/L	487.32 ppb	09:16:14
3	S 181.975 Axial†	765.5	703.7	985.12 ug/L	985.12 ppb	09:16:14
3	Sb 206.836†	1633.4	1556.1	499.75 ug/L	499.75 ppb	09:16:14
3	Se 196.026†	833.8	840.6	504.26 ug/L	504.26 ppb	09:16:14
3	Si 251.611†	83304.0	80658.2	2402.8 ug/L	2402.8 ppb	09:15:53
3	Sn 189.927†	3097.9	3011.3	493.62 ug/L	493.62 ppb	09:16:14
3	Ti 334.940†	313165.7	306024.6	488.23 ug/L	488.23 ppb	09:15:53
3	Tl 190.801†	1748.1	1734.5	488.96 ug/L	488.96 ppb	09:16:14
3	U 409.014†	15443.1	17437.8	478.80 ug/L	478.80 ppb	09:15:53
3	V 292.402†	73192.0	72620.7	486.22 ug/L	486.22 ppb	09:15:53
3	Zn 213.857†	57567.6	55428.1	479.91 ug/L	479.91 ppb	09:15:53
3	SiO2†	83513.2	80844.1	5160.3 ug/L	5160.3 ppb	09:16:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	922349.0	102.34	%	0.391				0.38%
Sc Radial	5792.4	99.1	%	1.17				1.18%
Y 371.029	753392.2	100.31	%	0.492				0.49%
Y RADIAL	6191.5	98.47	%	1.186				1.20%
Ag 328.068†	108276.7	493.43	ug/L	1.746	493.43	ppb	1.746	0.35%
QC value within limits for Ag 328.068 Recovery = 98.69%								
Al 396.153Radial†	7126.5	4929.3	ug/L	28.62	4929.3	ppb	28.62	0.58%
QC value within limits for Al 396.153Radial Recovery = 98.59%								
As 188.979†	1232.1	491.16	ug/L	3.377	491.16	ppb	3.377	0.69%
QC value within limits for As 188.979 Recovery = 98.23%								
B 249.677†	22987.4	480.17	ug/L	1.114	480.17	ppb	1.114	0.23%
QC value within limits for B 249.677 Recovery = 96.03%								
Ba 233.527†	65334.5	485.48	ug/L	2.846	485.48	ppb	2.846	0.59%
QC value within limits for Ba 233.527 Recovery = 97.10%								
Be 313.107†	1341332.5	489.88	ug/L	2.199	489.88	ppb	2.199	0.45%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	3387.7	4993.3	ug/L	36.39	4993.3	ppb	36.39	0.73%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.87%
Cd 226.502†            46004.4      486.14 ug/L         2.722      486.14 ppb          2.722   0.56%
   QC value within limits for Cd 226.502  Recovery = 97.23%
Co 228.616†            25604.8      486.10 ug/L         2.713      486.10 ppb          2.713   0.56%
   QC value within limits for Co 228.616  Recovery = 97.22%
Cr 267.716†            46128.1      485.01 ug/L         2.120      485.01 ppb          2.120   0.44%
   QC value within limits for Cr 267.716  Recovery = 97.00%
Cu 324.752†           167583.8      479.83 ug/L         1.788      479.83 ppb          1.788   0.37%
   QC value within limits for Cu 324.752  Recovery = 95.97%
Fe 238.204 Radial†       536.4      5037.2 ug/L        21.40      5037.2 ppb         21.40   0.42%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      28864.5      5110.3 ug/L        47.39      5110.3 ppb         47.39   0.93%
   QC value within limits for K 766.490 Radial  Recovery = 102.21%
Mg 279.077 IEC†          149.2      5267.9 ug/L        99.54      5267.9 ppb         99.54   1.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.36%
Mn 257.610†           458804.5      489.83 ug/L         1.809      489.83 ppb          1.809   0.37%
   QC value within limits for Mn 257.610  Recovery = 97.97%
Mo 202.031†             7710.2      490.15 ug/L         1.640      490.15 ppb          1.640   0.33%
   QC value within limits for Mo 202.031  Recovery = 98.03%
Na 589.592 Radial†     28095.5      9428.3 ug/L        90.60      9428.3 ppb         90.60   0.96%
   QC value within limits for Na 589.592 Radial  Recovery = 94.28%
Ni 231.604†            21083.0      487.90 ug/L         2.436      487.90 ppb          2.436   0.50%
   QC value within limits for Ni 231.604  Recovery = 97.58%
P 214.914†              4160.8      2327.1 ug/L         6.18      2327.1 ppb          6.18   0.27%
   QC value within limits for P 214.914  Recovery = 93.08%
Pb 220.353†             4290.5      486.54 ug/L         0.936      486.54 ppb          0.936   0.19%
   QC value within limits for Pb 220.353  Recovery = 97.31%
S 181.975 Axial†         696.3      974.77 ug/L        11.960      974.77 ppb         11.960   1.23%
   QC value within limits for S 181.975 Axial  Recovery = 97.48%
Sb 206.836†             1542.7      495.43 ug/L         5.037      495.43 ppb          5.037   1.02%
   QC value within limits for Sb 206.836  Recovery = 99.09%
Se 196.026†              839.4      503.59 ug/L         5.207      503.59 ppb          5.207   1.03%
   QC value within limits for Se 196.026  Recovery = 100.72%
Si 251.611†            80919.9      2410.6 ug/L        13.01      2410.6 ppb         13.01   0.54%
   QC value within limits for Si 251.611  Recovery = 96.43%
Sn 189.927†             3002.4      492.18 ug/L         1.357      492.18 ppb          1.357   0.28%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            80106.8      498.84 ug/L         4.348      498.84 ppb          4.348   0.87%
   QC value within limits for Sr 421.552  Recovery = 99.77%
Ti 334.940†           307008.9      489.80 ug/L         2.284      489.80 ppb          2.284   0.47%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†             1729.9      487.69 ug/L         1.971      487.69 ppb          1.971   0.40%
   QC value within limits for Tl 190.801  Recovery = 97.54%
U 409.014†             17548.0      481.83 ug/L         4.683      481.83 ppb          4.683   0.97%
   QC value within limits for U 409.014  Recovery = 96.37%
V 292.402†             72894.6      488.02 ug/L         1.960      488.02 ppb          1.960   0.40%
   QC value within limits for V 292.402  Recovery = 97.60%
Zn 213.857†            55627.6      481.63 ug/L         1.922      481.63 ppb          1.922   0.40%
   QC value within limits for Zn 213.857  Recovery = 96.33%
SiO2†                  81578.3      5207.4 ug/L        52.96      5207.4 ppb         52.96   1.02%
   QC value within limits for SiO2  Recovery = 97.38%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:18:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5673.3	5673.3	97.1	%			09:20:32
1	Y RADIAL	6094.3	6094.3	96.92	%			09:20:32
1	Al 396.153Radial†	-30.7	-11.2	-7.7882	ug/L	-7.7882	ppb	09:20:32
1	Ca 317.933Radial†	21.1	6.1	9.0265	ug/L	9.0265	ppb	09:20:52
1	Fe 238.204 Radial†	7.9	1.3	12.187	ug/L	12.187	ppb	09:20:52
1	K 766.490 Radial†	2609.3	336.1	59.601	ug/L	59.601	ppb	09:20:32
1	Mg 279.077 IEC†	2.8	1.7	61.423	ug/L	61.423	ppb	09:20:52
1	Na 589.592 Radial†	-1099.0	-44.1	-14.808	ug/L	-14.808	ppb	09:20:32
1	Sr 421.552†	0.7	28.1	0.1748	ug/L	0.1748	ppb	09:20:32
1	Sc 361.383	904057.2	904057.2	100.31	%			09:21:49
1	Y 371.029	754720.7	754720.7	100.48	%			09:21:49
1	Ag 328.068†	312.9	19.2	0.0919	ug/L	0.0919	ppb	09:21:49
1	As 188.979†	-23.0	1.2	0.4798	ug/L	0.4798	ppb	09:22:09
1	B 249.677†	-87.7	443.2	9.2934	ug/L	9.2934	ppb	09:22:09
1	Ba 233.527†	-11.7	-3.2	-0.0229	ug/L	-0.0229	ppb	09:22:09
1	Be 313.107†	-4874.0	254.1	0.0927	ug/L	0.0927	ppb	09:21:49
1	Cd 226.502†	-179.4	16.3	0.1714	ug/L	0.1714	ppb	09:22:09
1	Co 228.616†	-79.9	-14.3	-0.2709	ug/L	-0.2709	ppb	09:22:09
1	Cr 267.716†	68.7	-10.1	-0.1056	ug/L	-0.1056	ppb	09:22:09
1	Cu 324.752†	6725.9	-51.6	-0.1469	ug/L	-0.1469	ppb	09:21:49
1	Mn 257.610†	420.1	-3.5	-0.0036	ug/L	-0.0036	ppb	09:22:09
1	Mo 202.031†	18.8	0.4	0.0244	ug/L	0.0244	ppb	09:22:09
1	Ni 231.604†	113.9	27.0	0.6255	ug/L	0.6255	ppb	09:22:09
1	P 214.914†	226.0	1.7	1.0491	ug/L	1.0491	ppb	09:22:09
1	Pb 220.353†	-56.2	12.4	1.4025	ug/L	1.4025	ppb	09:22:09
1	S 181.975 Axial†	39.2	-2.5	-3.4623	ug/L	-3.4623	ppb	09:22:09
1	Sb 206.836†	40.8	6.4	2.0583	ug/L	2.0583	ppb	09:22:09
1	Se 196.026†	-27.6	1.3	0.7972	ug/L	0.7972	ppb	09:22:09
1	Si 251.611†	479.1	28.0	0.8114	ug/L	0.8114	ppb	09:22:09
1	Sn 189.927†	17.7	12.7	2.0783	ug/L	2.0783	ppb	09:22:09
1	Ti 334.940†	-1083.6	34.6	0.0561	ug/L	0.0561	ppb	09:21:49
1	Tl 190.801†	-28.5	4.1	1.1534	ug/L	1.1534	ppb	09:22:09
1	U 409.014†	-2434.0	-24.7	-0.6809	ug/L	-0.6809	ppb	09:21:49
1	V 292.402†	-1342.8	19.7	0.1285	ug/L	0.1285	ppb	09:21:49
1	Zn 213.857†	711.6	87.6	0.7583	ug/L	0.7583	ppb	09:22:09
1	SiO2†	526.8	57.7	3.6408	ug/L	3.6408	ppb	09:23:05
2	Sc Radial	5946.6	5946.6	102	%			09:20:57
2	Y RADIAL	6401.7	6401.7	101.8	%			09:20:57
2	Al 396.153Radial†	-7.9	12.7	8.7846	ug/L	8.7846	ppb	09:20:57
2	Ca 317.933Radial†	24.4	8.4	12.347	ug/L	12.347	ppb	09:21:17
2	Fe 238.204 Radial†	8.6	1.6	15.360	ug/L	15.360	ppb	09:21:17
2	K 766.490 Radial†	2552.1	156.3	27.714	ug/L	27.714	ppb	09:20:57
2	Mg 279.077 IEC†	0.8	-0.4	-14.689	ug/L	-14.689	ppb	09:21:17
2	Na 589.592 Radial†	-1075.1	31.4	10.531	ug/L	10.531	ppb	09:20:57
2	Sr 421.552†	-38.2	-10.2	-0.0635	ug/L	-0.0635	ppb	09:20:57
2	Sc 361.383	913109.6	913109.6	101.31	%			09:22:14
2	Y 371.029	762217.3	762217.3	101.48	%			09:22:14
2	Ag 328.068†	373.3	75.7	0.3473	ug/L	0.3473	ppb	09:22:14
2	As 188.979†	-22.0	2.5	0.9795	ug/L	0.9795	ppb	09:22:34
2	B 249.677†	-143.7	388.9	8.1531	ug/L	8.1531	ppb	09:22:34
2	Ba 233.527†	-8.4	0.2	0.0033	ug/L	0.0033	ppb	09:22:34
2	Be 313.107†	-4965.6	211.8	0.0770	ug/L	0.0770	ppb	09:22:14
2	Cd 226.502†	-173.3	24.0	0.2526	ug/L	0.2526	ppb	09:22:34
2	Co 228.616†	-67.4	-1.1	-0.0193	ug/L	-0.0193	ppb	09:22:34
2	Cr 267.716†	75.4	-4.2	-0.0439	ug/L	-0.0439	ppb	09:22:34
2	Cu 324.752†	6711.1	-132.7	-0.3789	ug/L	-0.3789	ppb	09:22:14
2	Mn 257.610†	437.1	9.1	0.0115	ug/L	0.0115	ppb	09:22:34
2	Mo 202.031†	27.1	8.4	0.5349	ug/L	0.5349	ppb	09:22:34
2	Ni 231.604†	93.1	5.4	0.1242	ug/L	0.1242	ppb	09:22:34

2	P 214.914†	209.0	-17.2	-9.8660 ug/L	-9.8660 ppb	09:22:34
2	Pb 220.353†	-64.7	4.6	0.5214 ug/L	0.5214 ppb	09:22:34
2	S 181.975 Axial†	41.5	-0.6	-0.8812 ug/L	-0.8812 ppb	09:22:34
2	Sb 206.836†	44.6	9.8	3.1149 ug/L	3.1149 ppb	09:22:34
2	Se 196.026†	-31.9	-2.7	-1.4810 ug/L	-1.4810 ppb	09:22:34
2	Si 251.611†	482.1	26.2	0.7650 ug/L	0.7650 ppb	09:22:34
2	Sn 189.927†	8.0	2.9	0.4693 ug/L	0.4693 ppb	09:22:34
2	Ti 334.940†	-1207.0	-76.4	-0.1226 ug/L	-0.1226 ppb	09:22:14
2	Tl 190.801†	-28.9	4.0	1.1274 ug/L	1.1274 ppb	09:22:34
2	U 409.014†	-2327.4	104.7	2.8810 ug/L	2.8810 ppb	09:22:14
2	V 292.402†	-1294.0	81.1	0.5465 ug/L	0.5465 ppb	09:22:14
2	Zn 213.857†	712.1	81.1	0.7069 ug/L	0.7069 ppb	09:22:34
2	SiO2†	494.8	20.9	1.2965 ug/L	1.2965 ppb	09:23:10
3	Sc Radial	5965.8	5965.8	102 %		09:21:22
3	Y RADIAL	6390.8	6390.8	101.6 %		09:21:22
3	Al 396.153Radial†	-18.0	2.8	1.8837 ug/L	1.8837 ppb	09:21:22
3	Ca 317.933Radial†	21.0	5.0	7.3675 ug/L	7.3675 ppb	09:21:42
3	Fe 238.204 Radial†	8.8	1.8	17.163 ug/L	17.163 ppb	09:21:42
3	K 766.490 Radial†	2654.1	248.2	44.012 ug/L	44.012 ppb	09:21:22
3	Mg 279.077 IEC†	2.7	1.5	51.921 ug/L	51.921 ppb	09:21:42
3	Na 589.592 Radial†	-1140.7	-29.5	-9.8839 ug/L	-9.8839 ppb	09:21:22
3	Sr 421.552†	-12.2	15.4	0.0956 ug/L	0.0956 ppb	09:21:22
3	Sc 361.383	916495.3	916495.3	101.69 %		09:22:39
3	Y 371.029	767046.2	767046.2	102.13 %		09:22:39
3	Ag 328.068†	305.8	8.0	0.0385 ug/L	0.0385 ppb	09:22:39
3	As 188.979†	-16.6	7.9	3.1139 ug/L	3.1139 ppb	09:22:59
3	B 249.677†	-153.3	379.9	7.9653 ug/L	7.9653 ppb	09:22:59
3	Ba 233.527†	-1.6	6.9	0.0519 ug/L	0.0519 ppb	09:22:59
3	Be 313.107†	-4926.0	268.9	0.0981 ug/L	0.0981 ppb	09:22:39
3	Cd 226.502†	-178.1	19.9	0.2092 ug/L	0.2092 ppb	09:22:59
3	Co 228.616†	-68.9	-2.4	-0.0426 ug/L	-0.0426 ppb	09:22:59
3	Cr 267.716†	77.8	-2.2	-0.0234 ug/L	-0.0234 ppb	09:22:59
3	Cu 324.752†	6814.0	-56.0	-0.1594 ug/L	-0.1594 ppb	09:22:39
3	Mn 257.610†	440.3	10.7	0.0122 ug/L	0.0122 ppb	09:22:59
3	Mo 202.031†	34.1	15.2	0.9654 ug/L	0.9654 ppb	09:22:59
3	Ni 231.604†	98.7	10.5	0.2430 ug/L	0.2430 ppb	09:22:59
3	P 214.914†	223.4	-3.8	-2.1956 ug/L	-2.1956 ppb	09:22:59
3	Pb 220.353†	-65.7	3.8	0.4307 ug/L	0.4307 ppb	09:22:59
3	S 181.975 Axial†	39.1	-3.1	-4.3810 ug/L	-4.3810 ppb	09:22:59
3	Sb 206.836†	43.6	8.7	2.7720 ug/L	2.7720 ppb	09:22:59
3	Se 196.026†	-25.3	3.9	2.3314 ug/L	2.3314 ppb	09:22:59
3	Si 251.611†	505.4	47.3	1.3841 ug/L	1.3841 ppb	09:22:59
3	Sn 189.927†	6.5	1.4	0.2312 ug/L	0.2312 ppb	09:22:59
3	Ti 334.940†	-1100.5	32.7	0.0506 ug/L	0.0506 ppb	09:22:39
3	Tl 190.801†	-31.0	2.0	0.5543 ug/L	0.5543 ppb	09:22:59
3	U 409.014†	-2281.5	158.3	4.3581 ug/L	4.3581 ppb	09:22:39
3	V 292.402†	-1351.2	29.6	0.2165 ug/L	0.2165 ppb	09:22:39
3	Zn 213.857†	707.0	73.4	0.6366 ug/L	0.6366 ppb	09:22:59
3	SiO2†	503.4	27.6	1.6973 ug/L	1.6973 ppb	09:23:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911220.7	101.10	%	0.714				0.71%
Sc Radial	5861.9	100	%	2.8				2.79%
Y 371.029	761328.0	101.36	%	0.827				0.82%
Y RADIAL	6295.6	100.1	%	2.77				2.77%
Ag 328.068†	34.3	0.1592	ug/L	0.16502	0.1592	ppb	0.16502	103.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.4	0.9600	ug/L	8.32490	0.9600	ppb	8.32490	867.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.9	1.5244	ug/L	1.39905	1.5244	ppb	1.39905	91.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	404.0	8.4706	ug/L	0.71870	8.4706	ppb	0.71870	8.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.3	0.0108	ug/L	0.03799	0.0108	ppb	0.03799	352.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	244.9	0.0893	ug/L	0.01098	0.0893	ppb	0.01098	12.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.5	9.5803	ug/L	2.53552	9.5803	ppb	2.53552	26.47%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                20.1      0.2111 ug/L       0.04065      0.2111 ppb        0.04065  19.26%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.9     -0.1109 ug/L       0.13905     -0.1109 ppb        0.13905 125.33%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -5.5     -0.0576 ug/L       0.04278     -0.0576 ppb        0.04278  74.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -80.1     -0.2284 ug/L       0.13050     -0.2284 ppb        0.13050  57.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.6      14.903 ug/L        2.5196      14.903 ppb         2.5196  16.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         246.8      43.776 ug/L       15.9447      43.776 ppb        15.9447  36.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.9      32.885 ug/L       41.4731      32.885 ppb        41.4731 126.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 5.5      0.0067 ug/L       0.00894      0.0067 ppb        0.00894 133.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.0      0.5082 ug/L       0.47108      0.5082 ppb        0.47108  92.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -14.1     -4.7202 ug/L      13.43550     -4.7202 ppb       13.43550 284.64%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.3      0.3309 ug/L       0.26193      0.3309 ppb        0.26193  79.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.4     -3.6708 ug/L       5.60512     -3.6708 ppb        5.60512 152.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.9      0.7849 ug/L       0.53682      0.7849 ppb        0.53682  68.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.1     -2.9082 ug/L       1.81452     -2.9082 ppb        1.81452  62.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 8.3      2.6484 ug/L       0.53904      2.6484 ppb        0.53904  20.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5492 ug/L       1.91828      0.5492 ppb        1.91828 349.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                33.8      0.9868 ug/L       0.34483      0.9868 ppb        0.34483  34.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.9263 ug/L       1.00478      0.9263 ppb        1.00478 108.48%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.1      0.0690 ug/L       0.12137      0.0690 ppb        0.12137 175.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -3.0     -0.0053 ug/L       0.10161     -0.0053 ppb        0.10161 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.4      0.9450 ug/L       0.33865      0.9450 ppb        0.33865  35.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 79.4      2.1861 ug/L       2.59036      2.1861 ppb        2.59036 118.49%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 43.5      0.2972 ug/L       0.22039      0.2972 ppb        0.22039  74.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                80.7      0.7006 ug/L       0.06110      0.7006 ppb        0.06110   8.72%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      35.4      2.2115 ug/L       1.25386      2.2115 ppb        1.25386  56.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:52:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5798.3	5798.3	99.2	%			09:54:38
1	Y RADIAL	6170.9	6170.9	98.14	%			09:54:38
1	Al 396.153Radial†	7003.2	7078.7	4895.8	ug/L	4895.8	ppb	09:54:38
1	Ca 317.933Radial†	3348.4	3359.1	4951.2	ug/L	4951.2	ppb	09:54:58
1	Fe 238.204 Radial†	532.5	529.9	4976.0	ug/L	4976.0	ppb	09:54:58
1	K 766.490 Radial†	30386.2	28273.5	5005.6	ug/L	5005.6	ppb	09:54:38
1	Mg 279.077 IEC†	143.2	143.2	5056.6	ug/L	5056.6	ppb	09:54:58
1	Na 589.592 Radial†	26305.9	27600.8	9262.3	ug/L	9262.3	ppb	09:54:38
1	Sr 421.552†	78338.6	78982.3	491.84	ug/L	491.84	ppb	09:54:38
1	Sc 361.383	913291.3	913291.3	101.33	%			09:55:55
1	Y 371.029	746166.9	746166.9	99.345	%			09:55:55
1	Ag 328.068†	111619.8	109857.2	500.60	ug/L	500.60	ppb	09:56:00
1	As 188.979†	1235.9	1243.8	495.83	ug/L	495.83	ppb	09:56:20
1	B 249.677†	22935.9	23164.5	483.87	ug/L	483.87	ppb	09:56:00
1	Ba 233.527†	67190.5	66314.2	492.75	ug/L	492.75	ppb	09:56:00
1	Be 313.107†	1363119.3	1350281.4	493.16	ug/L	493.16	ppb	09:55:55
1	Cd 226.502†	47270.4	46843.0	495.02	ug/L	495.02	ppb	09:56:00
1	Co 228.616†	26329.1	26047.8	494.52	ug/L	494.52	ppb	09:56:00
1	Cr 267.716†	47557.2	46852.2	492.62	ug/L	492.62	ppb	09:56:00
1	Cu 324.752†	179106.7	169991.4	486.72	ug/L	486.72	ppb	09:56:00
1	Mn 257.610†	467768.4	461186.1	492.37	ug/L	492.37	ppb	09:55:55
1	Mo 202.031†	7951.8	7828.7	497.68	ug/L	497.68	ppb	09:56:20
1	Ni 231.604†	21776.8	21403.5	495.31	ug/L	495.31	ppb	09:56:00
1	P 214.914†	4496.3	4213.6	2356.6	ug/L	2356.6	ppb	09:56:20
1	Pb 220.353†	4324.7	4336.2	491.73	ug/L	491.73	ppb	09:56:20
1	S 181.975 Axial†	761.4	709.8	993.59	ug/L	993.59	ppb	09:56:20
1	Sb 206.836†	1610.3	1554.9	499.36	ug/L	499.36	ppb	09:56:20
1	Se 196.026†	830.1	847.9	508.36	ug/L	508.36	ppb	09:56:20
1	Si 251.611†	83663.7	82112.3	2446.2	ug/L	2446.2	ppb	09:56:00
1	Sn 189.927†	3087.2	3041.6	498.59	ug/L	498.59	ppb	09:56:20
1	Ti 334.940†	314687.5	311658.3	497.22	ug/L	497.22	ppb	09:56:00
1	Tl 190.801†	1737.0	1746.6	492.37	ug/L	492.37	ppb	09:56:20
1	U 409.014†	15597.8	17794.2	488.61	ug/L	488.61	ppb	09:56:00
1	V 292.402†	73648.2	74036.7	495.68	ug/L	495.68	ppb	09:56:00
1	Zn 213.857†	57897.4	56513.1	489.33	ug/L	489.33	ppb	09:56:00
1	SiO2†	82623.5	81068.0	5174.4	ug/L	5174.4	ppb	09:57:28
2	Sc Radial	5699.5	5699.5	97.5	%			09:55:03
2	Y RADIAL	6095.6	6095.6	96.94	%			09:55:03
2	Al 396.153Radial†	6983.8	7181.2	4967.1	ug/L	4967.1	ppb	09:55:03
2	Ca 317.933Radial†	3382.0	3452.1	5088.2	ug/L	5088.2	ppb	09:55:23
2	Fe 238.204 Radial†	536.3	543.1	5100.2	ug/L	5100.2	ppb	09:55:23
2	K 766.490 Radial†	30276.6	28692.1	5079.8	ug/L	5079.8	ppb	09:55:03
2	Mg 279.077 IEC†	148.2	150.8	5324.3	ug/L	5324.3	ppb	09:55:23
2	Na 589.592 Radial†	26033.4	27781.1	9322.8	ug/L	9322.8	ppb	09:55:03
2	Sr 421.552†	77942.2	79944.7	497.83	ug/L	497.83	ppb	09:55:03
2	Sc 361.383	917308.5	917308.5	101.78	%			09:56:26
2	Y 371.029	749645.7	749645.7	99.808	%			09:56:26
2	Ag 328.068†	112752.9	110488.1	503.50	ug/L	503.50	ppb	09:56:31
2	As 188.979†	1226.0	1228.7	489.90	ug/L	489.90	ppb	09:56:51
2	B 249.677†	23222.7	23347.2	487.68	ug/L	487.68	ppb	09:56:31
2	Ba 233.527†	68008.6	66827.5	496.57	ug/L	496.57	ppb	09:56:31
2	Be 313.107†	1371532.3	1352656.2	494.03	ug/L	494.03	ppb	09:56:26
2	Cd 226.502†	47576.1	46939.1	496.02	ug/L	496.02	ppb	09:56:31
2	Co 228.616†	26565.9	26166.7	496.75	ug/L	496.75	ppb	09:56:31
2	Cr 267.716†	48003.3	47085.1	495.07	ug/L	495.07	ppb	09:56:31
2	Cu 324.752†	181535.2	171603.3	491.34	ug/L	491.34	ppb	09:56:31
2	Mn 257.610†	470796.4	462139.6	493.39	ug/L	493.39	ppb	09:56:26
2	Mo 202.031†	7918.0	7761.2	493.40	ug/L	493.40	ppb	09:56:51
2	Ni 231.604†	21967.0	21496.2	497.46	ug/L	497.46	ppb	09:56:31

2	P 214.914†	4508.4	4206.0	2351.4 ug/L	2351.4 ppb	09:56:51
2	Pb 220.353†	4313.4	4306.4	488.35 ug/L	488.35 ppb	09:56:51
2	S 181.975 Axial†	750.8	696.1	974.45 ug/L	974.45 ppb	09:56:51
2	Sb 206.836†	1620.0	1557.5	499.99 ug/L	499.99 ppb	09:56:51
2	Se 196.026†	819.8	834.2	500.83 ug/L	500.83 ppb	09:56:51
2	Si 251.611†	84641.3	82711.1	2464.2 ug/L	2464.2 ppb	09:56:31
2	Sn 189.927†	3086.1	3027.1	496.23 ug/L	496.23 ppb	09:56:51
2	Ti 334.940†	318134.5	313685.0	500.46 ug/L	500.46 ppb	09:56:31
2	Tl 190.801†	1738.7	1740.8	490.77 ug/L	490.77 ppb	09:56:51
2	U 409.014†	15717.0	17843.9	489.96 ug/L	489.96 ppb	09:56:31
2	V 292.402†	74442.7	74499.0	498.66 ug/L	498.66 ppb	09:56:31
2	Zn 213.857†	58410.1	56766.6	491.50 ug/L	491.50 ppb	09:56:31
2	SiO2†	83428.0	81501.3	5202.4 ug/L	5202.4 ppb	09:57:33
3	Sc Radial	5781.7	5781.7	98.9 %		09:55:28
3	Y RADIAL	6134.2	6134.2	97.56 %		09:55:28
3	Al 396.153Radial†	7144.4	7241.7	5009.0 ug/L	5009.0 ppb	09:55:28
3	Ca 317.933Radial†	3390.8	3411.7	5028.7 ug/L	5028.7 ppb	09:55:48
3	Fe 238.204 Radial†	533.2	532.2	4997.9 ug/L	4997.9 ppb	09:55:48
3	K 766.490 Radial†	31003.1	28985.2	5131.8 ug/L	5131.8 ppb	09:55:28
3	Mg 279.077 IEC†	146.5	146.9	5189.7 ug/L	5189.7 ppb	09:55:48
3	Na 589.592 Radial†	26404.0	27776.3	9321.2 ug/L	9321.2 ppb	09:55:28
3	Sr 421.552†	79363.0	80245.0	499.70 ug/L	499.70 ppb	09:55:28
3	Sc 361.383	911611.3	911611.3	101.15 %		09:56:57
3	Y 371.029	745769.9	745769.9	99.292 %		09:56:57
3	Ag 328.068†	112067.6	110502.8	503.55 ug/L	503.55 ppb	09:57:02
3	As 188.979†	1237.5	1247.6	497.35 ug/L	497.35 ppb	09:57:22
3	B 249.677†	23101.5	23370.0	488.17 ug/L	488.17 ppb	09:57:02
3	Ba 233.527†	67671.0	66911.4	497.19 ug/L	497.19 ppb	09:57:02
3	Be 313.107†	1364038.9	1353669.5	494.40 ug/L	494.40 ppb	09:56:57
3	Cd 226.502†	47536.3	47191.8	498.71 ug/L	498.71 ppb	09:57:02
3	Co 228.616†	26480.7	26245.6	498.26 ug/L	498.26 ppb	09:57:02
3	Cr 267.716†	47913.3	47290.8	497.23 ug/L	497.23 ppb	09:57:02
3	Cu 324.752†	179727.3	170930.7	489.41 ug/L	489.41 ppb	09:57:02
3	Mn 257.610†	467403.8	461676.3	492.89 ug/L	492.89 ppb	09:56:57
3	Mo 202.031†	7909.1	7801.0	495.92 ug/L	495.92 ppb	09:57:22
3	Ni 231.604†	21876.1	21541.2	498.50 ug/L	498.50 ppb	09:57:02
3	P 214.914†	4487.9	4213.5	2356.1 ug/L	2356.1 ppb	09:57:22
3	Pb 220.353†	4324.6	4343.9	492.62 ug/L	492.62 ppb	09:57:22
3	S 181.975 Axial†	753.5	703.4	984.64 ug/L	984.64 ppb	09:57:22
3	Sb 206.836†	1616.8	1564.2	502.10 ug/L	502.10 ppb	09:57:22
3	Se 196.026†	830.8	850.1	509.72 ug/L	509.72 ppb	09:57:22
3	Si 251.611†	84048.4	82644.7	2462.1 ug/L	2462.1 ppb	09:57:02
3	Sn 189.927†	3062.7	3023.0	495.55 ug/L	495.55 ppb	09:57:22
3	Ti 334.940†	316195.2	313721.2	500.51 ug/L	500.51 ppb	09:57:02
3	Tl 190.801†	1738.8	1751.6	493.76 ug/L	493.76 ppb	09:57:22
3	U 409.014†	15569.6	17794.7	488.61 ug/L	488.61 ppb	09:57:02
3	V 292.402†	74329.4	74844.1	500.98 ug/L	500.98 ppb	09:57:02
3	Zn 213.857†	58136.8	56855.1	492.29 ug/L	492.29 ppb	09:57:02
3	SiO2†	82825.2	81417.6	5196.9 ug/L	5196.9 ppb	09:57:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914070.4	101.42	%	0.325				0.32%
Sc Radial	5759.8	98.6	%	0.91				0.92%
Y 371.029	747194.2	99.482	%	0.2839				0.29%
Y RADIAL	6133.6	97.55	%	0.599				0.61%
Ag 328.068†	110282.7	502.55	ug/L	1.691	502.55	ppb	1.691	0.34%
QC value within limits for Ag 328.068 Recovery = 100.51%								
Al 396.153Radial†	7167.2	4957.3	ug/L	57.27	4957.3	ppb	57.27	1.16%
QC value within limits for Al 396.153Radial Recovery = 99.15%								
As 188.979†	1240.1	494.36	ug/L	3.935	494.36	ppb	3.935	0.80%
QC value within limits for As 188.979 Recovery = 98.87%								
B 249.677†	23293.9	486.57	ug/L	2.353	486.57	ppb	2.353	0.48%
QC value within limits for B 249.677 Recovery = 97.31%								
Ba 233.527†	66684.4	495.50	ug/L	2.403	495.50	ppb	2.403	0.49%
QC value within limits for Ba 233.527 Recovery = 99.10%								
Be 313.107†	1352202.4	493.86	ug/L	0.637	493.86	ppb	0.637	0.13%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	3407.6	5022.7	ug/L	68.70	5022.7	ppb	68.70	1.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.45%
Cd 226.502†            46991.3      496.58 ug/L         1.906      496.58 ppb          1.906   0.38%
   QC value within limits for Cd 226.502  Recovery = 99.32%
Co 228.616†            26153.3      496.51 ug/L         1.883      496.51 ppb          1.883   0.38%
   QC value within limits for Co 228.616  Recovery = 99.30%
Cr 267.716†            47076.0      494.97 ug/L         2.308      494.97 ppb          2.308   0.47%
   QC value within limits for Cr 267.716  Recovery = 98.99%
Cu 324.752†           170841.8      489.16 ug/L         2.320      489.16 ppb          2.320   0.47%
   QC value within limits for Cu 324.752  Recovery = 97.83%
Fe 238.204 Radial†       535.0      5024.7 ug/L        66.27      5024.7 ppb         66.27   1.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.49%
K 766.490 Radial†      28650.3      5072.4 ug/L        63.41      5072.4 ppb         63.41   1.25%
   QC value within limits for K 766.490 Radial  Recovery = 101.45%
Mg 279.077 IEC†          147.0      5190.2 ug/L       133.85      5190.2 ppb        133.85   2.58%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.80%
Mn 257.610†           461667.3      492.88 ug/L         0.512      492.88 ppb          0.512   0.10%
   QC value within limits for Mn 257.610  Recovery = 98.58%
Mo 202.031†             7797.0      495.67 ug/L         2.152      495.67 ppb          2.152   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.13%
Na 589.592 Radial†     27719.4      9302.1 ug/L        34.47      9302.1 ppb         34.47   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 93.02%
Ni 231.604†            21480.3      497.09 ug/L         1.625      497.09 ppb          1.625   0.33%
   QC value within limits for Ni 231.604  Recovery = 99.42%
P 214.914†              4211.0      2354.7 ug/L         2.87      2354.7 ppb          2.87   0.12%
   QC value within limits for P 214.914  Recovery = 94.19%
Pb 220.353†             4328.9      490.90 ug/L         2.250      490.90 ppb          2.250   0.46%
   QC value within limits for Pb 220.353  Recovery = 98.18%
S 181.975 Axial†         703.1      984.23 ug/L         9.577      984.23 ppb          9.577   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 98.42%
Sb 206.836†             1558.8      500.49 ug/L         1.436      500.49 ppb          1.436   0.29%
   QC value within limits for Sb 206.836  Recovery = 100.10%
Se 196.026†              844.1      506.30 ug/L         4.789      506.30 ppb          4.789   0.95%
   QC value within limits for Se 196.026  Recovery = 101.26%
Si 251.611†            82489.4      2457.5 ug/L         9.85      2457.5 ppb          9.85   0.40%
   QC value within limits for Si 251.611  Recovery = 98.30%
Sn 189.927†             3030.5      496.79 ug/L         1.593      496.79 ppb          1.593   0.32%
   QC value within limits for Sn 189.927  Recovery = 99.36%
Sr 421.552†            79724.0      496.45 ug/L         4.108      496.45 ppb          4.108   0.83%
   QC value within limits for Sr 421.552  Recovery = 99.29%
Ti 334.940†           313021.5      499.39 ug/L         1.886      499.39 ppb          1.886   0.38%
   QC value within limits for Ti 334.940  Recovery = 99.88%
Tl 190.801†             1746.4      492.30 ug/L         1.499      492.30 ppb          1.499   0.30%
   QC value within limits for Tl 190.801  Recovery = 98.46%
U 409.014†             17810.9      489.06 ug/L         0.779      489.06 ppb          0.779   0.16%
   QC value within limits for U 409.014  Recovery = 97.81%
V 292.402†             74459.9      498.44 ug/L         2.658      498.44 ppb          2.658   0.53%
   QC value within limits for V 292.402  Recovery = 99.69%
Zn 213.857†            56711.6      491.04 ug/L         1.532      491.04 ppb          1.532   0.31%
   QC value within limits for Zn 213.857  Recovery = 98.21%
SiO2†                  81329.0      5191.2 ug/L        14.79      5191.2 ppb         14.79   0.28%
   QC value within limits for SiO2  Recovery = 97.08%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5856.6	5856.6	100	%			10:01:40
1	Y RADIAL	6302.7	6302.7	100.2	%			10:01:40
1	Al 396.153Radial†	-34.9	-14.4	-10.047	ug/L	-10.047	ppb	10:01:40
1	Ca 317.933Radial†	25.4	9.8	14.456	ug/L	14.456	ppb	10:02:00
1	Fe 238.204 Radial†	10.4	3.5	33.153	ug/L	33.153	ppb	10:02:00
1	K 766.490 Radial†	2417.2	60.2	10.691	ug/L	10.691	ppb	10:01:40
1	Mg 279.077 IEC†	1.7	0.5	17.521	ug/L	17.521	ppb	10:02:00
1	Na 589.592 Radial†	-1131.4	-41.1	-13.778	ug/L	-13.778	ppb	10:01:40
1	Sr 421.552†	-11.1	16.3	0.1012	ug/L	0.1012	ppb	10:01:40
1	Sc 361.383	910453.7	910453.7	101.02	%			10:02:57
1	Y 371.029	761123.5	761123.5	101.34	%			10:02:57
1	Ag 328.068†	424.3	127.3	0.5854	ug/L	0.5854	ppb	10:02:57
1	As 188.979†	-20.3	4.1	1.6169	ug/L	1.6169	ppb	10:03:17
1	B 249.677†	-282.4	251.1	5.2624	ug/L	5.2624	ppb	10:03:17
1	Ba 233.527†	-10.7	-2.2	-0.0145	ug/L	-0.0145	ppb	10:03:17
1	Be 313.107†	-4984.1	179.2	0.0655	ug/L	0.0655	ppb	10:02:57
1	Cd 226.502†	-199.5	-2.4	-0.0279	ug/L	-0.0279	ppb	10:03:17
1	Co 228.616†	-71.1	-4.9	-0.0924	ug/L	-0.0924	ppb	10:03:17
1	Cr 267.716†	90.6	11.0	0.1154	ug/L	0.1154	ppb	10:03:17
1	Cu 324.752†	6722.7	-101.8	-0.2898	ug/L	-0.2898	ppb	10:02:57
1	Mn 257.610†	429.7	3.1	0.0062	ug/L	0.0062	ppb	10:03:17
1	Mo 202.031†	29.8	11.2	0.7111	ug/L	0.7111	ppb	10:03:17
1	Ni 231.604†	110.3	22.6	0.5242	ug/L	0.5242	ppb	10:03:17
1	P 214.914†	216.2	-9.5	-5.4823	ug/L	-5.4823	ppb	10:03:17
1	Pb 220.353†	-58.5	10.5	1.1878	ug/L	1.1878	ppb	10:03:17
1	S 181.975 Axial†	42.2	0.2	0.2210	ug/L	0.2210	ppb	10:03:17
1	Sb 206.836†	42.3	7.6	2.4420	ug/L	2.4420	ppb	10:03:17
1	Se 196.026†	-34.3	-5.1	-2.8713	ug/L	-2.8713	ppb	10:03:17
1	Si 251.611†	498.1	43.4	1.2818	ug/L	1.2818	ppb	10:03:17
1	Sn 189.927†	7.9	2.9	0.4713	ug/L	0.4713	ppb	10:03:17
1	Ti 334.940†	-1069.0	56.8	0.0901	ug/L	0.0901	ppb	10:02:57
1	Tl 190.801†	-32.9	-0.0	-0.0121	ug/L	-0.0121	ppb	10:03:17
1	U 409.014†	-2331.2	94.1	2.5885	ug/L	2.5885	ppb	10:02:57
1	V 292.402†	-1353.0	19.0	0.1359	ug/L	0.1359	ppb	10:02:57
1	Zn 213.857†	694.0	65.1	0.5621	ug/L	0.5621	ppb	10:03:17
1	SiO2†	465.2	-7.0	-0.4864	ug/L	-0.4864	ppb	10:04:13
2	Sc Radial	5902.5	5902.5	101	%			10:02:05
2	Y RADIAL	6366.5	6366.5	101.3	%			10:02:05
2	Al 396.153Radial†	-13.1	7.4	5.1522	ug/L	5.1522	ppb	10:02:05
2	Ca 317.933Radial†	20.3	4.5	6.7005	ug/L	6.7005	ppb	10:02:25
2	Fe 238.204 Radial†	5.6	-1.3	-11.735	ug/L	-11.735	ppb	10:02:25
2	K 766.490 Radial†	2448.0	72.0	12.773	ug/L	12.773	ppb	10:02:05
2	Mg 279.077 IEC†	2.0	0.9	30.205	ug/L	30.205	ppb	10:02:25
2	Na 589.592 Radial†	-1120.1	-21.0	-7.0524	ug/L	-7.0524	ppb	10:02:05
2	Sr 421.552†	-4.8	22.6	0.1409	ug/L	0.1409	ppb	10:02:05
2	Sc 361.383	906696.3	906696.3	100.60	%			10:03:22
2	Y 371.029	757143.8	757143.8	100.81	%			10:03:22
2	Ag 328.068†	460.3	164.8	0.7406	ug/L	0.7406	ppb	10:03:22
2	As 188.979†	-18.5	5.8	2.2924	ug/L	2.2924	ppb	10:03:42
2	B 249.677†	-286.2	246.2	5.1636	ug/L	5.1636	ppb	10:03:42
2	Ba 233.527†	-12.4	-3.8	-0.0285	ug/L	-0.0285	ppb	10:03:42
2	Be 313.107†	-4940.5	202.1	0.0737	ug/L	0.0737	ppb	10:03:22
2	Cd 226.502†	-189.0	7.3	0.0778	ug/L	0.0778	ppb	10:03:42
2	Co 228.616†	-61.9	3.9	0.0757	ug/L	0.0757	ppb	10:03:42
2	Cr 267.716†	76.6	-2.5	-0.0269	ug/L	-0.0269	ppb	10:03:42
2	Cu 324.752†	6780.8	-16.6	-0.0480	ug/L	-0.0480	ppb	10:03:22
2	Mn 257.610†	438.7	13.7	0.0129	ug/L	0.0129	ppb	10:03:42
2	Mo 202.031†	24.4	6.0	0.3775	ug/L	0.3775	ppb	10:03:42
2	Ni 231.604†	74.4	-12.6	-0.2911	ug/L	-0.2911	ppb	10:03:42

2	P 214.914†	211.6	-13.2	-7.5926	ug/L	-7.5926	ppb	10:03:42
2	Pb 220.353†	-63.4	5.4	0.6161	ug/L	0.6161	ppb	10:03:42
2	S 181.975 Axial†	45.7	3.9	5.4030	ug/L	5.4030	ppb	10:03:42
2	Sb 206.836†	42.8	8.3	2.6247	ug/L	2.6247	ppb	10:03:42
2	Se 196.026†	-24.4	4.6	2.6330	ug/L	2.6330	ppb	10:03:42
2	Si 251.611†	494.0	41.4	1.2271	ug/L	1.2271	ppb	10:03:42
2	Sn 189.927†	5.3	0.3	0.0474	ug/L	0.0474	ppb	10:03:42
2	Ti 334.940†	-1108.9	12.6	0.0192	ug/L	0.0192	ppb	10:03:22
2	Tl 190.801†	-30.9	1.8	0.5082	ug/L	0.5082	ppb	10:03:42
2	U 409.014†	-2307.9	107.7	2.9690	ug/L	2.9690	ppb	10:03:22
2	V 292.402†	-1348.2	18.2	0.1339	ug/L	0.1339	ppb	10:03:22
2	Zn 213.857†	689.0	63.0	0.5524	ug/L	0.5524	ppb	10:03:42
2	SiO2†	513.6	43.1	2.7395	ug/L	2.7395	ppb	10:04:18
3	Sc Radial	5922.3	5922.3	101	%			10:02:30
3	Y RADIAL	6371.5	6371.5	101.3	%			10:02:30
3	Al 396.153Radial†	-29.0	-8.2	-5.7155	ug/L	-5.7155	ppb	10:02:30
3	Ca 317.933Radial†	20.3	4.5	6.5597	ug/L	6.5597	ppb	10:02:50
3	Fe 238.204 Radial†	8.3	1.4	13.121	ug/L	13.121	ppb	10:02:50
3	K 766.490 Radial†	2353.1	-29.8	-5.2822	ug/L	-5.2822	ppb	10:02:30
3	Mg 279.077 IEC†	0.6	-0.6	-20.672	ug/L	-20.672	ppb	10:02:50
3	Na 589.592 Radial†	-1094.9	7.5	2.5235	ug/L	2.5235	ppb	10:02:30
3	Sr 421.552†	3.7	31.0	0.1931	ug/L	0.1931	ppb	10:02:30
3	Sc 361.383	902829.2	902829.2	100.17	%			10:03:47
3	Y 371.029	755411.0	755411.0	100.58	%			10:03:47
3	Ag 328.068†	358.0	64.7	0.2988	ug/L	0.2988	ppb	10:03:47
3	As 188.979†	-15.0	9.2	3.6283	ug/L	3.6283	ppb	10:04:07
3	B 249.677†	-300.1	231.1	4.8434	ug/L	4.8434	ppb	10:04:07
3	Ba 233.527†	-0.7	7.7	0.0580	ug/L	0.0580	ppb	10:04:07
3	Be 313.107†	-4892.1	229.3	0.0837	ug/L	0.0837	ppb	10:03:47
3	Cd 226.502†	-180.1	15.3	0.1610	ug/L	0.1610	ppb	10:04:07
3	Co 228.616†	-60.9	4.6	0.0881	ug/L	0.0881	ppb	10:04:07
3	Cr 267.716†	79.3	0.5	0.0064	ug/L	0.0064	ppb	10:04:07
3	Cu 324.752†	6709.2	-59.1	-0.1685	ug/L	-0.1685	ppb	10:03:47
3	Mn 257.610†	438.1	15.0	0.0177	ug/L	0.0177	ppb	10:04:07
3	Mo 202.031†	21.5	3.2	0.2015	ug/L	0.2015	ppb	10:04:07
3	Ni 231.604†	99.5	12.8	0.2969	ug/L	0.2969	ppb	10:04:07
3	P 214.914†	215.8	-8.1	-4.6716	ug/L	-4.6716	ppb	10:04:07
3	Pb 220.353†	-65.9	2.6	0.2959	ug/L	0.2959	ppb	10:04:07
3	S 181.975 Axial†	39.7	-2.0	-2.7906	ug/L	-2.7906	ppb	10:04:07
3	Sb 206.836†	32.3	-2.0	-0.6310	ug/L	-0.6310	ppb	10:04:07
3	Se 196.026†	-16.8	12.0	6.9843	ug/L	6.9843	ppb	10:04:07
3	Si 251.611†	489.0	38.5	1.1488	ug/L	1.1488	ppb	10:04:07
3	Sn 189.927†	6.7	1.7	0.2867	ug/L	0.2867	ppb	10:04:07
3	Ti 334.940†	-1078.5	38.3	0.0622	ug/L	0.0622	ppb	10:03:47
3	Tl 190.801†	-33.1	-0.6	-0.1545	ug/L	-0.1545	ppb	10:04:07
3	U 409.014†	-2470.8	-64.7	-1.7847	ug/L	-1.7847	ppb	10:03:47
3	V 292.402†	-1354.7	6.0	0.0363	ug/L	0.0363	ppb	10:03:47
3	Zn 213.857†	672.6	49.6	0.4309	ug/L	0.4309	ppb	10:04:07
3	SiO2†	501.7	33.4	2.1374	ug/L	2.1374	ppb	10:04:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906659.7	100.60	%	0.423				0.42%
Sc Radial	5893.8	101	%	0.6				0.57%
Y 371.029	757892.8	100.91	%	0.390				0.39%
Y RADIAL	6346.9	100.9	%	0.61				0.60%
Ag 328.068†	118.9	0.5416	ug/L	0.22414	0.5416	ppb	0.22414	41.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.1	-3.5369	ug/L	7.83042	-3.5369	ppb	7.83042	221.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.4	2.5125	ug/L	1.02361	2.5125	ppb	1.02361	40.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	242.8	5.0898	ug/L	0.21902	5.0898	ppb	0.21902	4.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.6	0.0050	ug/L	0.04645	0.0050	ppb	0.04645	932.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.5	0.0743	ug/L	0.00913	0.0743	ppb	0.00913	12.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	9.2388	ug/L	4.51901	9.2388	ppb	4.51901	48.91%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 6.7      0.0703 ug/L       0.09465      0.0703 ppb        0.09465 134.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.2      0.0238 ug/L       0.10080      0.0238 ppb        0.10080 423.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.0      0.0316 ug/L       0.07442      0.0316 ppb        0.07442 235.34%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -59.2     -0.1688 ug/L       0.12088     -0.1688 ppb        0.12088  71.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.2      11.513 ug/L       22.4868      11.513 ppb        22.4868 195.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          34.2      6.0606 ug/L       9.87817      6.0606 ppb        9.87817 162.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      9.0182 ug/L      26.48267      9.0182 ppb       26.48267 293.66%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.6      0.0123 ug/L       0.00577      0.0123 ppb        0.00577  46.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.8      0.4300 ug/L       0.25880      0.4300 ppb        0.25880  60.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -18.2     -6.1022 ug/L       8.19208     -6.1022 ppb        8.19208 134.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.6      0.1767 ug/L       0.42074      0.1767 ppb        0.42074 238.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -10.3     -5.9155 ug/L       1.50790     -5.9155 ppb        1.50790  25.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.2      0.7000 ug/L       0.45182      0.7000 ppb        0.45182  64.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.7      0.9445 ug/L       4.14441      0.9445 ppb        4.14441 438.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.6      1.4786 ug/L       1.82922      1.4786 ppb        1.82922 123.72%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.8      2.2487 ug/L       4.93905      2.2487 ppb        4.93905 219.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                41.1      1.2192 ug/L       0.06684      1.2192 ppb        0.06684   5.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.6      0.2684 ug/L       0.21256      0.2684 ppb        0.21256  79.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.3      0.1451 ug/L       0.04613      0.1451 ppb        0.04613  31.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                35.9      0.0572 ug/L       0.03572      0.0572 ppb        0.03572  62.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.4      0.1139 ug/L       0.34885      0.1139 ppb        0.34885 306.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 45.7      1.2576 ug/L       2.64158      1.2576 ppb        2.64158 210.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 14.4      0.1020 ug/L       0.05695      0.1020 ppb        0.05695  55.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                59.2      0.5151 ug/L       0.07311      0.5151 ppb        0.07311  14.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      23.2      1.4635 ug/L       1.71530      1.4635 ppb        1.71530 117.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 10:55:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5836.7	5836.7	99.9	%			10:56:54
1	Y RADIAL	6210.2	6210.2	98.77	%			10:56:54
1	Al 396.153Radial†	7234.6	7264.0	5024.4	ug/L	5024.4	ppb	10:56:54
1	Ca 317.933Radial†	3402.4	3391.0	4998.2	ug/L	4998.2	ppb	10:57:14
1	Fe 238.204 Radial†	541.2	535.0	5024.5	ug/L	5024.5	ppb	10:57:14
1	K 766.490 Radial†	31171.5	28858.3	5109.2	ug/L	5109.2	ppb	10:56:54
1	Mg 279.077 IEC†	147.8	146.8	5185.7	ug/L	5185.7	ppb	10:57:14
1	Na 589.592 Radial†	26951.7	28073.0	9420.8	ug/L	9420.8	ppb	10:56:54
1	Sr 421.552†	80685.7	80812.9	503.24	ug/L	503.24	ppb	10:56:54
1	Sc 361.383	912942.5	912942.5	101.30	%			10:58:11
1	Y 371.029	746090.1	746090.1	99.335	%			10:58:11
1	Ag 328.068†	113045.6	111306.8	507.20	ug/L	507.20	ppb	10:58:16
1	As 188.979†	1243.0	1251.3	498.84	ug/L	498.84	ppb	10:58:36
1	B 249.677†	23351.6	23583.6	492.64	ug/L	492.64	ppb	10:58:16
1	Ba 233.527†	68082.7	67220.2	499.48	ug/L	499.48	ppb	10:58:16
1	Be 313.107†	1379726.6	1367190.1	499.33	ug/L	499.33	ppb	10:58:11
1	Cd 226.502†	47784.4	47368.2	500.57	ug/L	500.57	ppb	10:58:16
1	Co 228.616†	26603.3	26328.4	499.82	ug/L	499.82	ppb	10:58:16
1	Cr 267.716†	48114.7	47420.6	498.60	ug/L	498.60	ppb	10:58:16
1	Cu 324.752†	182183.4	173096.2	495.61	ug/L	495.61	ppb	10:58:16
1	Mn 257.610†	472775.1	466305.0	497.83	ug/L	497.83	ppb	10:58:11
1	Mo 202.031†	7944.6	7824.7	497.43	ug/L	497.43	ppb	10:58:36
1	Ni 231.604†	22018.7	21650.5	501.03	ug/L	501.03	ppb	10:58:16
1	P 214.914†	4530.0	4248.6	2375.4	ug/L	2375.4	ppb	10:58:36
1	Pb 220.353†	4336.0	4349.0	493.19	ug/L	493.19	ppb	10:58:36
1	S 181.975 Axial†	760.5	709.2	992.78	ug/L	992.78	ppb	10:58:36
1	Sb 206.836†	1628.6	1573.5	505.12	ug/L	505.12	ppb	10:58:36
1	Se 196.026†	832.9	851.0	510.32	ug/L	510.32	ppb	10:58:36
1	Si 251.611†	85003.3	83466.2	2486.7	ug/L	2486.7	ppb	10:58:16
1	Sn 189.927†	3093.2	3048.7	499.75	ug/L	499.75	ppb	10:58:36
1	Ti 334.940†	319189.1	316220.9	504.49	ug/L	504.49	ppb	10:58:16
1	Tl 190.801†	1748.6	1758.7	495.80	ug/L	495.80	ppb	10:58:36
1	U 409.014†	15769.5	17969.6	493.42	ug/L	493.42	ppb	10:58:16
1	V 292.402†	74759.8	75161.8	503.10	ug/L	503.10	ppb	10:58:16
1	Zn 213.857†	58554.3	57183.4	495.13	ug/L	495.13	ppb	10:58:16
1	SiO2†	84380.2	82833.4	5287.6	ug/L	5287.6	ppb	10:59:44
2	Sc Radial	5834.9	5834.9	99.8	%			10:57:19
2	Y RADIAL	6222.6	6222.6	98.96	%			10:57:19
2	Al 396.153Radial†	7203.7	7235.3	5004.3	ug/L	5004.3	ppb	10:57:19
2	Ca 317.933Radial†	3392.1	3381.8	4984.6	ug/L	4984.6	ppb	10:57:39
2	Fe 238.204 Radial†	535.4	529.4	4972.3	ug/L	4972.3	ppb	10:57:39
2	K 766.490 Radial†	31223.2	28919.9	5120.1	ug/L	5120.1	ppb	10:57:19
2	Mg 279.077 IEC†	147.2	146.2	5165.0	ug/L	5165.0	ppb	10:57:39
2	Na 589.592 Radial†	27037.9	28167.8	9452.6	ug/L	9452.6	ppb	10:57:19
2	Sr 421.552†	80750.8	80903.3	503.80	ug/L	503.80	ppb	10:57:19
2	Sc 361.383	909552.0	909552.0	100.92	%			10:58:42
2	Y 371.029	743255.5	743255.5	98.958	%			10:58:42
2	Ag 328.068†	112515.9	111198.0	506.69	ug/L	506.69	ppb	10:58:47
2	As 188.979†	1256.0	1268.7	505.70	ug/L	505.70	ppb	10:59:07
2	B 249.677†	23323.4	23641.6	493.86	ug/L	493.86	ppb	10:58:47
2	Ba 233.527†	67589.6	66982.2	497.72	ug/L	497.72	ppb	10:58:47
2	Be 313.107†	1376097.3	1368671.4	499.87	ug/L	499.87	ppb	10:58:42
2	Cd 226.502†	47400.4	47163.6	498.41	ug/L	498.41	ppb	10:58:47
2	Co 228.616†	26513.1	26336.9	500.00	ug/L	500.00	ppb	10:58:47
2	Cr 267.716†	47769.9	47256.0	496.86	ug/L	496.86	ppb	10:58:47
2	Cu 324.752†	181689.9	173277.6	496.12	ug/L	496.12	ppb	10:58:47
2	Mn 257.610†	471465.6	466747.3	498.30	ug/L	498.30	ppb	10:58:42
2	Mo 202.031†	7999.6	7908.4	502.74	ug/L	502.74	ppb	10:59:07
2	Ni 231.604†	21920.1	21633.9	500.64	ug/L	500.64	ppb	10:58:47

2	P 214.914†	4543.1	4278.2	2392.4 ug/L	2392.4 ppb	10:59:07
2	Pb 220.353†	4354.4	4383.1	497.06 ug/L	497.06 ppb	10:59:07
2	S 181.975 Axial†	764.8	716.3	1002.7 ug/L	1002.7 ppb	10:59:07
2	Sb 206.836†	1632.7	1583.6	508.54 ug/L	508.54 ppb	10:59:07
2	Se 196.026†	848.5	869.6	520.92 ug/L	520.92 ppb	10:59:07
2	Si 251.611†	84780.6	83558.4	2489.4 ug/L	2489.4 ppb	10:58:47
2	Sn 189.927†	3104.1	3070.8	503.38 ug/L	503.38 ppb	10:59:07
2	Ti 334.940†	317707.7	315927.7	504.03 ug/L	504.03 ppb	10:58:47
2	Tl 190.801†	1746.8	1763.4	497.13 ug/L	497.13 ppb	10:59:07
2	U 409.014†	15661.1	17920.2	492.07 ug/L	492.07 ppb	10:58:47
2	V 292.402†	74294.6	74976.0	501.96 ug/L	501.96 ppb	10:58:47
2	Zn 213.857†	58260.9	57108.1	494.48 ug/L	494.48 ppb	10:58:47
2	SiO2†	84649.4	83410.6	5324.4 ug/L	5324.4 ppb	10:59:49
3	Sc Radial	5661.5	5661.5	96.9 %		10:57:44
3	Y RADIAL	6036.7	6036.7	96.01 %		10:57:44
3	Al 396.153Radial†	7058.0	7305.9	5053.4 ug/L	5053.4 ppb	10:57:44
3	Ca 317.933Radial†	3401.0	3495.0	5151.4 ug/L	5151.4 ppb	10:58:04
3	Fe 238.204 Radial†	540.2	550.8	5172.0 ug/L	5172.0 ppb	10:58:04
3	K 766.490 Radial†	30464.0	29093.9	5150.9 ug/L	5150.9 ppb	10:57:44
3	Mg 279.077 IEC†	150.6	154.3	5450.5 ug/L	5450.5 ppb	10:58:04
3	Na 589.592 Radial†	26299.4	28234.8	9475.0 ug/L	9475.0 ppb	10:57:44
3	Sr 421.552†	78649.8	81211.4	505.72 ug/L	505.72 ppb	10:57:44
3	Sc 361.383	910135.6	910135.6	100.98 %		10:59:13
3	Y 371.029	743780.8	743780.8	99.028 %		10:59:13
3	Ag 328.068†	112947.9	111554.2	508.37 ug/L	508.37 ppb	10:59:18
3	As 188.979†	1238.3	1250.4	498.50 ug/L	498.50 ppb	10:59:38
3	B 249.677†	23406.9	23709.4	495.25 ug/L	495.25 ppb	10:59:18
3	Ba 233.527†	67980.8	67326.6	500.28 ug/L	500.28 ppb	10:59:18
3	Be 313.107†	1377213.7	1368902.5	499.96 ug/L	499.96 ppb	10:59:13
3	Cd 226.502†	47687.0	47417.3	501.07 ug/L	501.07 ppb	10:59:18
3	Co 228.616†	26599.4	26405.6	501.29 ug/L	501.29 ppb	10:59:18
3	Cr 267.716†	47962.8	47416.7	498.56 ug/L	498.56 ppb	10:59:18
3	Cu 324.752†	182088.2	173556.6	496.93 ug/L	496.93 ppb	10:59:18
3	Mn 257.610†	472502.0	467474.0	499.09 ug/L	499.09 ppb	10:59:13
3	Mo 202.031†	7966.0	7870.1	500.32 ug/L	500.32 ppb	10:59:38
3	Ni 231.604†	21954.6	21654.0	501.11 ug/L	501.11 ppb	10:59:18
3	P 214.914†	4524.4	4256.8	2379.8 ug/L	2379.8 ppb	10:59:38
3	Pb 220.353†	4326.4	4352.7	493.61 ug/L	493.61 ppb	10:59:38
3	S 181.975 Axial†	764.3	715.3	1001.3 ug/L	1001.3 ppb	10:59:38
3	Sb 206.836†	1612.5	1562.5	501.73 ug/L	501.73 ppb	10:59:38
3	Se 196.026†	836.6	857.2	514.39 ug/L	514.39 ppb	10:59:38
3	Si 251.611†	85020.0	83741.6	2494.9 ug/L	2494.9 ppb	10:59:18
3	Sn 189.927†	3089.6	3054.5	500.73 ug/L	500.73 ppb	10:59:38
3	Ti 334.940†	318560.4	316570.2	505.06 ug/L	505.06 ppb	10:59:18
3	Tl 190.801†	1744.8	1760.3	496.26 ug/L	496.26 ppb	10:59:38
3	U 409.014†	15645.4	17894.7	491.34 ug/L	491.34 ppb	10:59:18
3	V 292.402†	74546.6	75178.3	503.23 ug/L	503.23 ppb	10:59:18
3	Zn 213.857†	58671.4	57477.7	497.67 ug/L	497.67 ppb	10:59:18
3	SiO2†	83527.3	82245.7	5249.8 ug/L	5249.8 ppb	10:59:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	910876.7	101.07	%	0.201				0.20%
Sc Radial	5777.7	98.9	%	1.72				1.74%
Y 371.029	744375.4	99.107	%	0.2008				0.20%
Y RADIAL	6156.5	97.91	%	1.653				1.69%
Ag 328.068†	111353.0	507.42	ug/L	0.861	507.42	ppb	0.861	0.17%
QC value within limits for Ag 328.068 Recovery = 101.48%								
Al 396.153Radial†	7268.4	5027.4	ug/L	24.71	5027.4	ppb	24.71	0.49%
QC value within limits for Al 396.153Radial Recovery = 100.55%								
As 188.979†	1256.8	501.01	ug/L	4.064	501.01	ppb	4.064	0.81%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	23644.8	493.92	ug/L	1.308	493.92	ppb	1.308	0.26%
QC value within limits for B 249.677 Recovery = 98.78%								
Ba 233.527†	67176.3	499.16	ug/L	1.312	499.16	ppb	1.312	0.26%
QC value within limits for Ba 233.527 Recovery = 99.83%								
Be 313.107†	1368254.7	499.72	ug/L	0.339	499.72	ppb	0.339	0.07%
QC value within limits for Be 313.107 Recovery = 99.94%								
Ca 317.933Radial†	3422.6	5044.7	ug/L	92.67	5044.7	ppb	92.67	1.84%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.89%
Cd 226.502†            47316.4      500.02 ug/L         1.414      500.02 ppb          1.414   0.28%
   QC value within limits for Cd 226.502  Recovery = 100.00%
Co 228.616†            26357.0      500.37 ug/L         0.802      500.37 ppb          0.802   0.16%
   QC value within limits for Co 228.616  Recovery = 100.07%
Cr 267.716†            47364.4      498.01 ug/L         0.988      498.01 ppb          0.988   0.20%
   QC value within limits for Cr 267.716  Recovery = 99.60%
Cu 324.752†           173310.1      496.22 ug/L         0.668      496.22 ppb          0.668   0.13%
   QC value within limits for Cu 324.752  Recovery = 99.24%
Fe 238.204 Radial†       538.4      5056.3 ug/L        103.60      5056.3 ppb         103.60   2.05%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.13%
K 766.490 Radial†      28957.4      5126.7 ug/L         21.65      5126.7 ppb          21.65   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 102.53%
Mg 279.077 IEC†          149.1      5267.1 ug/L        159.20      5267.1 ppb         159.20   3.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.34%
Mn 257.610†           466842.1      498.40 ug/L         0.635      498.40 ppb          0.635   0.13%
   QC value within limits for Mn 257.610  Recovery = 99.68%
Mo 202.031†             7867.7      500.16 ug/L         2.660      500.16 ppb          2.660   0.53%
   QC value within limits for Mo 202.031  Recovery = 100.03%
Na 589.592 Radial†     28158.5      9449.5 ug/L         27.27      9449.5 ppb          27.27   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 94.49%
Ni 231.604†            21646.1      500.93 ug/L         0.249      500.93 ppb          0.249   0.05%
   QC value within limits for Ni 231.604  Recovery = 100.19%
P 214.914†              4261.2      2382.5 ug/L          8.85      2382.5 ppb           8.85   0.37%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4361.6      494.62 ug/L         2.124      494.62 ppb          2.124   0.43%
   QC value within limits for Pb 220.353  Recovery = 98.92%
S 181.975 Axial†         713.6      998.91 ug/L         5.360      998.91 ppb          5.360   0.54%
   QC value within limits for S 181.975 Axial  Recovery = 99.89%
Sb 206.836†             1573.2      505.13 ug/L         3.408      505.13 ppb          3.408   0.67%
   QC value within limits for Sb 206.836  Recovery = 101.03%
Se 196.026†              859.3      515.21 ug/L         5.347      515.21 ppb          5.347   1.04%
   QC value within limits for Se 196.026  Recovery = 103.04%
Si 251.611†            83588.8      2490.3 ug/L          4.17      2490.3 ppb           4.17   0.17%
   QC value within limits for Si 251.611  Recovery = 99.61%
Sn 189.927†             3058.0      501.29 ug/L         1.878      501.29 ppb          1.878   0.37%
   QC value within limits for Sn 189.927  Recovery = 100.26%
Sr 421.552†            80975.9      504.25 ug/L         1.300      504.25 ppb          1.300   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†           316239.6      504.53 ug/L         0.518      504.53 ppb          0.518   0.10%
   QC value within limits for Ti 334.940  Recovery = 100.91%
Tl 190.801†             1760.8      496.40 ug/L         0.673      496.40 ppb          0.673   0.14%
   QC value within limits for Tl 190.801  Recovery = 99.28%
U 409.014†             17928.2      492.28 ug/L         1.056      492.28 ppb          1.056   0.21%
   QC value within limits for U 409.014  Recovery = 98.46%
V 292.402†             75105.4      502.76 ug/L         0.701      502.76 ppb          0.701   0.14%
   QC value within limits for V 292.402  Recovery = 100.55%
Zn 213.857†            57256.4      495.76 ug/L         1.689      495.76 ppb          1.689   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.15%
SiO2†                  82829.9      5287.3 ug/L         37.32      5287.3 ppb          37.32   0.71%
   QC value within limits for SiO2  Recovery = 98.87%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 11:02:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5907.4	5907.4	101	%			11:03:56
1	Y RADIAL	6373.2	6373.2	101.4	%			11:03:56
1	Al 396.153Radial†	-16.4	4.2	2.8934	ug/L	2.8934	ppb	11:03:56
1	Ca 317.933Radial†	26.3	10.4	15.372	ug/L	15.372	ppb	11:04:16
1	Fe 238.204 Radial†	8.9	2.0	18.992	ug/L	18.992	ppb	11:04:16
1	K 766.490 Radial†	2487.0	108.5	19.254	ug/L	19.254	ppb	11:03:56
1	Mg 279.077 IEC†	1.8	0.6	20.816	ug/L	20.816	ppb	11:04:16
1	Na 589.592 Radial†	-1139.5	-39.4	-13.208	ug/L	-13.208	ppb	11:03:56
1	Sr 421.552†	-17.9	9.7	0.0600	ug/L	0.0600	ppb	11:03:56
1	Sc 361.383	921090.1	921090.1	102.20	%			11:05:13
1	Y 371.029	765057.3	765057.3	101.86	%			11:05:13
1	Ag 328.068†	422.5	120.7	0.5537	ug/L	0.5537	ppb	11:05:18
1	As 188.979†	-29.5	-4.7	-1.8629	ug/L	-1.8629	ppb	11:05:38
1	B 249.677†	-196.7	338.2	7.0890	ug/L	7.0890	ppb	11:05:38
1	Ba 233.527†	-11.6	-2.9	-0.0190	ug/L	-0.0190	ppb	11:05:38
1	Be 313.107†	-5013.6	207.3	0.0759	ug/L	0.0759	ppb	11:05:18
1	Cd 226.502†	-193.1	6.1	0.0631	ug/L	0.0631	ppb	11:05:38
1	Co 228.616†	-63.1	3.7	0.0701	ug/L	0.0701	ppb	11:05:38
1	Cr 267.716†	78.2	-2.2	-0.0219	ug/L	-0.0219	ppb	11:05:38
1	Cu 324.752†	6827.8	-75.9	-0.2162	ug/L	-0.2162	ppb	11:05:18
1	Mn 257.610†	450.5	18.5	0.0213	ug/L	0.0213	ppb	11:05:38
1	Mo 202.031†	27.3	8.4	0.5323	ug/L	0.5323	ppb	11:05:38
1	Ni 231.604†	89.4	0.9	0.0214	ug/L	0.0214	ppb	11:05:38
1	P 214.914†	211.9	-16.2	-9.3236	ug/L	-9.3236	ppb	11:05:38
1	Pb 220.353†	-64.3	5.6	0.6285	ug/L	0.6285	ppb	11:05:38
1	S 181.975 Axial†	41.5	-1.0	-1.3774	ug/L	-1.3774	ppb	11:05:38
1	Sb 206.836†	36.6	1.5	0.4904	ug/L	0.4904	ppb	11:05:38
1	Se 196.026†	-26.5	2.9	1.7419	ug/L	1.7419	ppb	11:05:38
1	Si 251.611†	653.6	189.9	5.6697	ug/L	5.6697	ppb	11:05:38
1	Sn 189.927†	2.2	-2.9	-0.4695	ug/L	-0.4695	ppb	11:05:38
1	Ti 334.940†	-1019.1	117.8	0.1879	ug/L	0.1879	ppb	11:05:18
1	Tl 190.801†	-30.7	2.5	0.6973	ug/L	0.6973	ppb	11:05:38
1	U 409.014†	-2386.4	66.7	1.8362	ug/L	1.8362	ppb	11:05:13
1	V 292.402†	-1272.8	113.0	0.7547	ug/L	0.7547	ppb	11:05:18
1	Zn 213.857†	691.1	54.4	0.4729	ug/L	0.4729	ppb	11:05:38
1	SiO2†	679.7	197.6	12.642	ug/L	12.642	ppb	11:06:44
2	Sc Radial	5763.9	5763.9	98.6	%			11:04:21
2	Y RADIAL	6194.3	6194.3	98.51	%			11:04:21
2	Al 396.153Radial†	4.4	24.8	17.233	ug/L	17.233	ppb	11:04:21
2	Ca 317.933Radial†	28.7	13.5	19.943	ug/L	19.943	ppb	11:04:41
2	Fe 238.204 Radial†	6.9	0.2	1.8678	ug/L	1.8678	ppb	11:04:41
2	K 766.490 Radial†	2548.3	232.0	41.140	ug/L	41.140	ppb	11:04:21
2	Mg 279.077 IEC†	3.6	2.5	86.967	ug/L	86.967	ppb	11:04:41
2	Na 589.592 Radial†	-1094.3	-21.6	-7.2337	ug/L	-7.2337	ppb	11:04:21
2	Sr 421.552†	-18.4	8.7	0.0542	ug/L	0.0542	ppb	11:04:21
2	Sc 361.383	926942.0	926942.0	102.85	%			11:05:43
2	Y 371.029	770672.4	770672.4	102.61	%			11:05:43
2	Ag 328.068†	401.4	97.5	0.4398	ug/L	0.4398	ppb	11:05:48
2	As 188.979†	-22.5	2.3	0.9165	ug/L	0.9165	ppb	11:06:08
2	B 249.677†	-182.2	353.5	7.4138	ug/L	7.4138	ppb	11:06:08
2	Ba 233.527†	-3.0	5.6	0.0422	ug/L	0.0422	ppb	11:06:08
2	Be 313.107†	-5006.2	245.5	0.0896	ug/L	0.0896	ppb	11:05:48
2	Cd 226.502†	-191.4	9.0	0.0952	ug/L	0.0952	ppb	11:06:08
2	Co 228.616†	-69.6	-2.2	-0.0411	ug/L	-0.0411	ppb	11:06:08
2	Cr 267.716†	63.2	-17.2	-0.1810	ug/L	-0.1810	ppb	11:06:08
2	Cu 324.752†	6828.8	-117.1	-0.3350	ug/L	-0.3350	ppb	11:05:48
2	Mn 257.610†	438.6	4.1	0.0030	ug/L	0.0030	ppb	11:06:08
2	Mo 202.031†	23.8	4.8	0.3045	ug/L	0.3045	ppb	11:06:08
2	Ni 231.604†	81.8	-7.1	-0.1636	ug/L	-0.1636	ppb	11:06:08

2	P 214.914†	205.3	-23.9	-13.726 ug/L	-13.726 ppb	11:06:08
2	Pb 220.353†	-62.5	7.7	0.8775 ug/L	0.8775 ppb	11:06:08
2	S 181.975 Axial†	41.7	-1.0	-1.4676 ug/L	-1.4676 ppb	11:06:08
2	Sb 206.836†	29.2	-5.9	-1.8352 ug/L	-1.8352 ppb	11:06:08
2	Se 196.026†	-22.1	7.4	4.2662 ug/L	4.2662 ppb	11:06:08
2	Si 251.611†	667.8	199.7	5.9570 ug/L	5.9570 ppb	11:06:08
2	Sn 189.927†	8.0	2.8	0.4656 ug/L	0.4656 ppb	11:06:08
2	Ti 334.940†	-1103.5	42.0	0.0662 ug/L	0.0662 ppb	11:05:48
2	Tl 190.801†	-29.8	3.5	0.9826 ug/L	0.9826 ppb	11:06:08
2	U 409.014†	-2304.3	161.3	4.4447 ug/L	4.4447 ppb	11:05:43
2	V 292.402†	-1330.3	64.9	0.4431 ug/L	0.4431 ppb	11:05:48
2	Zn 213.857†	694.5	53.4	0.4652 ug/L	0.4652 ppb	11:06:08
2	SiO2†	634.7	149.7	9.5550 ug/L	9.5550 ppb	11:06:49
3	Sc Radial	5852.5	5852.5	100 %		11:04:46
3	Y RADIAL	6294.3	6294.3	100.1 %		11:04:46
3	Al 396.153Radial†	-20.8	-0.3	-0.2076 ug/L	-0.2076 ppb	11:04:46
3	Ca 317.933Radial†	26.3	10.6	15.688 ug/L	15.688 ppb	11:05:06
3	Fe 238.204 Radial†	7.6	0.7	6.9508 ug/L	6.9508 ppb	11:05:06
3	K 766.490 Radial†	2526.5	171.1	30.334 ug/L	30.334 ppb	11:04:46
3	Mg 279.077 IEC†	-0.1	-1.2	-43.215 ug/L	-43.215 ppb	11:05:06
3	Na 589.592 Radial†	-1082.0	7.5	2.5188 ug/L	2.5188 ppb	11:04:46
3	Sr 421.552†	-35.5	-8.1	-0.0508 ug/L	-0.0508 ppb	11:04:46
3	Sc 361.383	926310.6	926310.6	102.78 %		11:06:13
3	Y 371.029	767982.9	767982.9	102.25 %		11:06:13
3	Ag 328.068†	331.6	29.9	0.1375 ug/L	0.1375 ppb	11:06:18
3	As 188.979†	-35.3	-10.2	-4.0182 ug/L	-4.0182 ppb	11:06:38
3	B 249.677†	-161.8	373.2	7.8261 ug/L	7.8261 ppb	11:06:38
3	Ba 233.527†	-5.2	3.4	0.0266 ug/L	0.0266 ppb	11:06:38
3	Be 313.107†	-5081.7	168.7	0.0619 ug/L	0.0619 ppb	11:06:18
3	Cd 226.502†	-185.5	14.6	0.1543 ug/L	0.1543 ppb	11:06:38
3	Co 228.616†	-67.0	0.2	0.0024 ug/L	0.0024 ppb	11:06:38
3	Cr 267.716†	86.4	5.4	0.0568 ug/L	0.0568 ppb	11:06:38
3	Cu 324.752†	6866.4	-75.9	-0.2170 ug/L	-0.2170 ppb	11:06:18
3	Mn 257.610†	434.6	0.6	0.0021 ug/L	0.0021 ppb	11:06:38
3	Mo 202.031†	13.3	-5.4	-0.3443 ug/L	-0.3443 ppb	11:06:38
3	Ni 231.604†	103.4	14.1	0.3264 ug/L	0.3264 ppb	11:06:38
3	P 214.914†	224.7	-4.9	-2.7834 ug/L	-2.7834 ppb	11:06:38
3	Pb 220.353†	-59.6	10.5	1.1836 ug/L	1.1836 ppb	11:06:38
3	S 181.975 Axial†	39.4	-3.2	-4.5029 ug/L	-4.5029 ppb	11:06:38
3	Sb 206.836†	24.5	-10.4	-3.3172 ug/L	-3.3172 ppb	11:06:38
3	Se 196.026†	-23.1	6.4	3.7104 ug/L	3.7104 ppb	11:06:38
3	Si 251.611†	645.3	178.2	5.3332 ug/L	5.3332 ppb	11:06:38
3	Sn 189.927†	1.3	-3.7	-0.6028 ug/L	-0.6028 ppb	11:06:38
3	Ti 334.940†	-1024.2	118.4	0.1890 ug/L	0.1890 ppb	11:06:18
3	Tl 190.801†	-28.7	4.6	1.2797 ug/L	1.2797 ppb	11:06:38
3	U 409.014†	-2403.5	63.3	1.7426 ug/L	1.7426 ppb	11:06:13
3	V 292.402†	-1333.5	61.0	0.3988 ug/L	0.3988 ppb	11:06:18
3	Zn 213.857†	675.7	35.6	0.3103 ug/L	0.3103 ppb	11:06:38
3	SiO2†	640.4	155.6	9.9788 ug/L	9.9788 ppb	11:06:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	924780.9	102.61	%	0.356				0.35%
Sc Radial	5841.3	100.0	%	1.24				1.24%
Y 371.029	767904.2	102.24	%	0.374				0.37%
Y RADIAL	6287.3	99.99	%	1.426				1.43%
Ag 328.068†	82.7	0.3770	ug/L	0.21509	0.3770	ppb	0.21509	57.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.6	6.6396	ug/L	9.30430	6.6396	ppb	9.30430	140.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.2	-1.6548	ug/L	2.47392	-1.6548	ppb	2.47392	149.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	355.0	7.4429	ug/L	0.36945	7.4429	ppb	0.36945	4.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0166	ug/L	0.03179	0.0166	ppb	0.03179	191.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	207.1	0.0758	ug/L	0.01388	0.0758	ppb	0.01388	18.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.5	17.001	ug/L	2.5526	17.001	ppb	2.5526	15.01%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.9      0.1042 ug/L       0.04626      0.1042 ppb        0.04626  44.41%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0104 ug/L       0.05605      0.0104 ppb        0.05605 536.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.7     -0.0487 ug/L       0.12113     -0.0487 ppb        0.12113 248.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -89.6     -0.2560 ug/L       0.06838     -0.2560 ppb        0.06838  26.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2701 ug/L       8.79450      9.2701 ppb        8.79450  94.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         170.5      30.243 ug/L       10.9433      30.243 ppb        10.9433  36.18%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.522 ug/L       65.0937      21.522 ppb        65.0937 302.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.7      0.0088 ug/L       0.01083      0.0088 ppb        0.01083 123.29%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.6      0.1642 ug/L       0.45483      0.1642 ppb        0.45483 277.06%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -17.8     -5.9743 ug/L       7.93874     -5.9743 ppb        7.93874 132.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.7      0.0614 ug/L       0.24741      0.0614 ppb        0.24741 402.87%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.0     -8.6109 ug/L       5.50587     -8.6109 ppb        5.50587  63.94%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8965 ug/L       0.27803      0.8965 ppb        0.27803  31.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.7     -2.4493 ug/L       1.77904     -2.4493 ppb        1.77904  72.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.9     -1.5540 ug/L       1.91933     -1.5540 ppb        1.91933 123.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      3.2395 ug/L       1.32638      3.2395 ppb        1.32638  40.94%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               189.3      5.6533 ug/L       0.31226      5.6533 ppb        0.31226   5.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.2     -0.2022 ug/L       0.58216     -0.2022 ppb        0.58216 287.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 3.4      0.0211 ug/L       0.06241      0.0211 ppb        0.06241 295.14%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                92.7      0.1477 ug/L       0.07062      0.1477 ppb        0.07062  47.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.5      0.9865 ug/L       0.29122      0.9865 ppb        0.29122  29.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 97.1      2.6745 ug/L       1.53372      2.6745 ppb        1.53372  57.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 79.6      0.5322 ug/L       0.19394      0.5322 ppb        0.19394  36.44%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.4161 ug/L       0.09172      0.4161 ppb        0.09172  22.04%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     167.6      10.725 ug/L        1.6735      10.725 ppb         1.6735  15.60%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 11:57:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5830.5	5830.5	99.8	%			11:59:41
1	Y RADIAL	6202.8	6202.8	98.65	%			11:59:41
1	Al 396.153Radial†	7094.2	7130.9	4932.0	ug/L	4932.0	ppb	11:59:41
1	Ca 317.933Radial†	3394.3	3386.6	4991.6	ug/L	4991.6	ppb	12:00:01
1	Fe 238.204 Radial†	542.6	537.1	5043.6	ug/L	5043.6	ppb	12:00:01
1	K 766.490 Radial†	30903.2	28622.7	5067.4	ug/L	5067.4	ppb	11:59:41
1	Mg 279.077 IEC†	148.5	147.6	5214.1	ug/L	5214.1	ppb	12:00:01
1	Na 589.592 Radial†	27223.4	28374.1	9521.8	ug/L	9521.8	ppb	11:59:41
1	Sr 421.552†	80201.0	80413.2	500.75	ug/L	500.75	ppb	11:59:41
1	Sc 361.383	918521.4	918521.4	101.91	%			12:00:59
1	Y 371.029	750066.3	750066.3	99.864	%			12:00:59
1	Ag 328.068†	112350.8	109947.2	501.03	ug/L	501.03	ppb	12:01:04
1	As 188.979†	1247.6	1248.3	497.63	ug/L	497.63	ppb	12:01:24
1	B 249.677†	22959.7	23059.0	481.64	ug/L	481.64	ppb	12:01:04
1	Ba 233.527†	67958.6	66690.2	495.54	ug/L	495.54	ppb	12:01:04
1	Be 313.107†	1373495.7	1352803.5	494.08	ug/L	494.08	ppb	12:00:59
1	Cd 226.502†	47617.2	46917.7	495.80	ug/L	495.80	ppb	12:01:04
1	Co 228.616†	26557.5	26124.0	495.96	ug/L	495.96	ppb	12:01:04
1	Cr 267.716†	47889.0	46910.6	493.23	ug/L	493.23	ppb	12:01:04
1	Cu 324.752†	180614.2	170464.1	488.08	ug/L	488.08	ppb	12:01:04
1	Mn 257.610†	472034.3	462743.4	494.03	ug/L	494.03	ppb	12:00:59
1	Mo 202.031†	8022.2	7853.2	499.24	ug/L	499.24	ppb	12:01:24
1	Ni 231.604†	21931.5	21432.9	495.99	ug/L	495.99	ppb	12:01:04
1	P 214.914†	4554.7	4245.6	2374.8	ug/L	2374.8	ppb	12:01:24
1	Pb 220.353†	4352.0	4338.7	492.01	ug/L	492.01	ppb	12:01:24
1	S 181.975 Axial†	765.9	710.0	993.87	ug/L	993.87	ppb	12:01:24
1	Sb 206.836†	1635.2	1570.2	504.25	ug/L	504.25	ppb	12:01:24
1	Se 196.026†	844.2	857.1	513.90	ug/L	513.90	ppb	12:01:24
1	Si 251.611†	84702.9	82661.8	2462.6	ug/L	2462.6	ppb	12:01:04
1	Sn 189.927†	3110.9	3047.4	499.55	ug/L	499.55	ppb	12:01:24
1	Ti 334.940†	317360.8	312513.2	498.58	ug/L	498.58	ppb	12:01:04
1	Tl 190.801†	1776.2	1775.3	500.42	ug/L	500.42	ppb	12:01:24
1	U 409.014†	15668.6	17776.0	488.10	ug/L	488.10	ppb	12:01:04
1	V 292.402†	74306.5	74268.8	497.23	ug/L	497.23	ppb	12:01:04
1	Zn 213.857†	58266.2	56549.7	489.63	ug/L	489.63	ppb	12:01:04
1	SiO2†	83444.8	81409.6	5196.2	ug/L	5196.2	ppb	12:02:31
2	Sc Radial	5836.0	5836.0	99.9	%			12:00:06
2	Y RADIAL	6237.9	6237.9	99.21	%			12:00:06
2	Al 396.153Radial†	7113.8	7143.8	4941.2	ug/L	4941.2	ppb	12:00:06
2	Ca 317.933Radial†	3379.1	3368.1	4964.4	ug/L	4964.4	ppb	12:00:26
2	Fe 238.204 Radial†	541.4	535.4	5027.5	ug/L	5027.5	ppb	12:00:26
2	K 766.490 Radial†	30922.1	28612.4	5065.6	ug/L	5065.6	ppb	12:00:06
2	Mg 279.077 IEC†	145.0	144.1	5087.7	ug/L	5087.7	ppb	12:00:26
2	Na 589.592 Radial†	27104.4	28229.2	9473.2	ug/L	9473.2	ppb	12:00:06
2	Sr 421.552†	79988.6	80124.7	498.95	ug/L	498.95	ppb	12:00:06
2	Sc 361.383	915777.4	915777.4	101.61	%			12:01:29
2	Y 371.029	747914.5	747914.5	99.578	%			12:01:29
2	Ag 328.068†	112273.2	110201.2	502.17	ug/L	502.17	ppb	12:01:35
2	As 188.979†	1226.2	1230.9	490.75	ug/L	490.75	ppb	12:01:55
2	B 249.677†	22927.2	23094.5	482.39	ug/L	482.39	ppb	12:01:35
2	Ba 233.527†	67534.9	66473.1	493.93	ug/L	493.93	ppb	12:01:35
2	Be 313.107†	1367741.0	1351178.1	493.49	ug/L	493.49	ppb	12:01:29
2	Cd 226.502†	47330.6	46775.6	494.30	ug/L	494.30	ppb	12:01:35
2	Co 228.616†	26423.0	26069.6	494.91	ug/L	494.91	ppb	12:01:35
2	Cr 267.716†	47634.4	46800.8	492.08	ug/L	492.08	ppb	12:01:35
2	Cu 324.752†	181101.5	171474.7	490.97	ug/L	490.97	ppb	12:01:35
2	Mn 257.610†	470818.6	462934.8	494.24	ug/L	494.24	ppb	12:01:29
2	Mo 202.031†	7886.3	7742.9	492.23	ug/L	492.23	ppb	12:01:55
2	Ni 231.604†	21779.2	21347.5	494.02	ug/L	494.02	ppb	12:01:35

2	P 214.914†	4507.0	4212.1	2354.9 ug/L	2354.9 ppb	12:01:55
2	Pb 220.353†	4296.6	4297.0	487.28 ug/L	487.28 ppb	12:01:55
2	S 181.975 Axial†	749.8	696.4	974.83 ug/L	974.83 ppb	12:01:55
2	Sb 206.836†	1600.2	1540.6	494.60 ug/L	494.60 ppb	12:01:55
2	Se 196.026†	823.5	839.3	503.52 ug/L	503.52 ppb	12:01:55
2	Si 251.611†	84593.1	82802.8	2467.0 ug/L	2467.0 ppb	12:01:35
2	Sn 189.927†	3046.2	2993.0	490.63 ug/L	490.63 ppb	12:01:55
2	Ti 334.940†	316972.8	313064.4	499.46 ug/L	499.46 ppb	12:01:35
2	Tl 190.801†	1733.2	1738.2	490.05 ug/L	490.05 ppb	12:01:55
2	U 409.014†	15918.3	18067.9	496.14 ug/L	496.14 ppb	12:01:35
2	V 292.402†	74100.8	74284.8	497.25 ug/L	497.25 ppb	12:01:35
2	Zn 213.857†	58044.3	56502.6	489.23 ug/L	489.23 ppb	12:01:35
2	SiO2†	84324.6	82520.8	5267.8 ug/L	5267.8 ppb	12:02:36
3	Sc Radial	5884.4	5884.4	101 %		12:00:31
3	Y RADIAL	6270.2	6270.2	99.72 %		12:00:31
3	Al 396.153Radial†	7158.7	7129.8	4931.4 ug/L	4931.4 ppb	12:00:31
3	Ca 317.933Radial†	3409.0	3370.0	4967.2 ug/L	4967.2 ppb	12:00:51
3	Fe 238.204 Radial†	545.2	534.7	5021.0 ug/L	5021.0 ppb	12:00:51
3	K 766.490 Radial†	31146.7	28580.5	5059.9 ug/L	5059.9 ppb	12:00:31
3	Mg 279.077 IEC†	147.8	145.7	5144.4 ug/L	5144.4 ppb	12:00:51
3	Na 589.592 Radial†	27319.4	28219.2	9469.8 ug/L	9469.8 ppb	12:00:31
3	Sr 421.552†	80838.8	80309.4	500.10 ug/L	500.10 ppb	12:00:31
3	Sc 361.383	916763.4	916763.4	101.72 %		12:02:00
3	Y 371.029	750219.5	750219.5	99.885 %		12:02:00
3	Ag 328.068†	112532.6	110337.4	502.79 ug/L	502.79 ppb	12:02:06
3	As 188.979†	1232.9	1236.2	492.84 ug/L	492.84 ppb	12:02:26
3	B 249.677†	22961.7	23104.2	482.60 ug/L	482.60 ppb	12:02:06
3	Ba 233.527†	67633.9	66498.9	494.13 ug/L	494.13 ppb	12:02:06
3	Be 313.107†	1372957.1	1354858.4	494.83 ug/L	494.83 ppb	12:02:00
3	Cd 226.502†	47315.4	46710.6	493.61 ug/L	493.61 ppb	12:02:06
3	Co 228.616†	26421.4	26040.1	494.36 ug/L	494.36 ppb	12:02:06
3	Cr 267.716†	47764.7	46878.6	492.90 ug/L	492.90 ppb	12:02:06
3	Cu 324.752†	181442.5	171618.3	491.38 ug/L	491.38 ppb	12:02:06
3	Mn 257.610†	470737.9	462357.1	493.62 ug/L	493.62 ppb	12:02:00
3	Mo 202.031†	7937.8	7785.2	494.92 ug/L	494.92 ppb	12:02:26
3	Ni 231.604†	21824.4	21368.9	494.51 ug/L	494.51 ppb	12:02:06
3	P 214.914†	4510.5	4210.8	2354.1 ug/L	2354.1 ppb	12:02:26
3	Pb 220.353†	4325.6	4321.0	490.00 ug/L	490.00 ppb	12:02:26
3	S 181.975 Axial†	761.3	706.8	989.49 ug/L	989.49 ppb	12:02:26
3	Sb 206.836†	1624.9	1563.2	501.88 ug/L	501.88 ppb	12:02:26
3	Se 196.026†	832.2	846.9	507.93 ug/L	507.93 ppb	12:02:26
3	Si 251.611†	84649.0	82768.2	2465.9 ug/L	2465.9 ppb	12:02:06
3	Sn 189.927†	3082.7	3025.6	495.96 ug/L	495.96 ppb	12:02:26
3	Ti 334.940†	317453.6	313201.5	499.68 ug/L	499.68 ppb	12:02:06
3	Tl 190.801†	1745.8	1748.8	493.00 ug/L	493.00 ppb	12:02:26
3	U 409.014†	15926.1	18058.6	495.88 ug/L	495.88 ppb	12:02:06
3	V 292.402†	74332.9	74434.6	498.28 ug/L	498.28 ppb	12:02:06
3	Zn 213.857†	58061.6	56458.2	488.84 ug/L	488.84 ppb	12:02:06
3	SiO2†	84953.7	83050.0	5301.7 ug/L	5301.7 ppb	12:02:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917020.7	101.75	%	0.154				0.15%
Sc Radial	5850.3	100	%	0.5				0.51%
Y 371.029	749400.1	99.776	%	0.1716				0.17%
Y RADIAL	6237.0	99.19	%	0.536				0.54%
Ag 328.068†	110161.9	502.00	ug/L	0.892	502.00	ppb	0.892	0.18%
QC value within limits for Ag 328.068 Recovery = 100.40%								
Al 396.153Radial†	7134.9	4934.8	ug/L	5.53	4934.8	ppb	5.53	0.11%
QC value within limits for Al 396.153Radial Recovery = 98.70%								
As 188.979†	1238.5	493.74	ug/L	3.525	493.74	ppb	3.525	0.71%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	23085.9	482.21	ug/L	0.502	482.21	ppb	0.502	0.10%
QC value within limits for B 249.677 Recovery = 96.44%								
Ba 233.527†	66554.1	494.54	ug/L	0.879	494.54	ppb	0.879	0.18%
QC value within limits for Ba 233.527 Recovery = 98.91%								
Be 313.107†	1352946.7	494.13	ug/L	0.673	494.13	ppb	0.673	0.14%
QC value within limits for Be 313.107 Recovery = 98.83%								
Ca 317.933Radial†	3374.9	4974.4	ug/L	14.97	4974.4	ppb	14.97	0.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.49%
Cd 226.502†            46801.3      494.57 ug/L        1.119      494.57 ppb          1.119   0.23%
   QC value within limits for Cd 226.502  Recovery = 98.91%
Co 228.616†            26077.9      495.08 ug/L        0.815      495.08 ppb          0.815   0.16%
   QC value within limits for Co 228.616  Recovery = 99.02%
Cr 267.716†            46863.3      492.74 ug/L        0.594      492.74 ppb          0.594   0.12%
   QC value within limits for Cr 267.716  Recovery = 98.55%
Cu 324.752†           171185.7      490.14 ug/L        1.800      490.14 ppb          1.800   0.37%
   QC value within limits for Cu 324.752  Recovery = 98.03%
Fe 238.204 Radial†       535.7      5030.7 ug/L       11.65      5030.7 ppb          11.65   0.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.61%
K 766.490 Radial†      28605.2      5064.3 ug/L        3.89      5064.3 ppb           3.89   0.08%
   QC value within limits for K 766.490 Radial  Recovery = 101.29%
Mg 279.077 IEC†          145.8      5148.7 ug/L       63.35      5148.7 ppb          63.35   1.23%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.97%
Mn 257.610†           462678.4      493.96 ug/L        0.315      493.96 ppb          0.315   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.79%
Mo 202.031†             7793.8      495.46 ug/L        3.533      495.46 ppb          3.533   0.71%
   QC value within limits for Mo 202.031  Recovery = 99.09%
Na 589.592 Radial†     28274.2      9488.3 ug/L       29.09      9488.3 ppb          29.09   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 94.88%
Ni 231.604†            21383.1      494.84 ug/L        1.030      494.84 ppb          1.030   0.21%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4222.8      2361.3 ug/L       11.71      2361.3 ppb          11.71   0.50%
   QC value within limits for P 214.914  Recovery = 94.45%
Pb 220.353†             4318.9      489.76 ug/L        2.373      489.76 ppb          2.373   0.48%
   QC value within limits for Pb 220.353  Recovery = 97.95%
S 181.975 Axial†         704.4      986.06 ug/L        9.972      986.06 ppb          9.972   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 98.61%
Sb 206.836†             1558.0      500.24 ug/L        5.028      500.24 ppb          5.028   1.01%
   QC value within limits for Sb 206.836  Recovery = 100.05%
Se 196.026†              847.8      508.45 ug/L        5.213      508.45 ppb          5.213   1.03%
   QC value within limits for Se 196.026  Recovery = 101.69%
Si 251.611†            82744.3      2465.2 ug/L        2.27      2465.2 ppb           2.27   0.09%
   QC value within limits for Si 251.611  Recovery = 98.61%
Sn 189.927†             3022.0      495.38 ug/L        4.487      495.38 ppb          4.487   0.91%
   QC value within limits for Sn 189.927  Recovery = 99.08%
Sr 421.552†            80282.4      499.93 ug/L        0.910      499.93 ppb          0.910   0.18%
   QC value within limits for Sr 421.552  Recovery = 99.99%
Ti 334.940†           312926.3      499.24 ug/L        0.579      499.24 ppb          0.579   0.12%
   QC value within limits for Ti 334.940  Recovery = 99.85%
Tl 190.801†             1754.1      494.49 ug/L        5.347      494.49 ppb          5.347   1.08%
   QC value within limits for Tl 190.801  Recovery = 98.90%
U 409.014†             17967.5      493.37 ug/L        4.573      493.37 ppb          4.573   0.93%
   QC value within limits for U 409.014  Recovery = 98.67%
V 292.402†             74329.4      497.58 ug/L        0.600      497.58 ppb          0.600   0.12%
   QC value within limits for V 292.402  Recovery = 99.52%
Zn 213.857†            56503.5      489.23 ug/L        0.395      489.23 ppb          0.395   0.08%
   QC value within limits for Zn 213.857  Recovery = 97.85%
SiO2†                  82326.8      5255.2 ug/L       53.83      5255.2 ppb          53.83   1.02%
   QC value within limits for SiO2  Recovery = 98.27%
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 12:04:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5943.6	5943.6	102	%			12:06:44
1	Y RADIAL	6397.8	6397.8	101.7	%			12:06:44
1	Al 396.153Radial†	-36.7	-15.7	-10.945	ug/L	-10.945	ppb	12:06:44
1	Ca 317.933Radial†	31.9	15.8	23.253	ug/L	23.253	ppb	12:07:04
1	Fe 238.204 Radial†	6.4	-0.5	-5.0186	ug/L	-5.0186	ppb	12:07:04
1	K 766.490 Radial†	2423.9	31.5	5.5818	ug/L	5.5818	ppb	12:06:44
1	Mg 279.077 IEC†	1.9	0.7	26.364	ug/L	26.364	ppb	12:07:04
1	Na 589.592 Radial†	-1049.6	55.9	18.772	ug/L	18.772	ppb	12:06:44
1	Sr 421.552†	-27.7	0.1	0.0002	ug/L	0.0002	ppb	12:06:44
1	Sc 361.383	904747.1	904747.1	100.39	%			12:08:01
1	Y 371.029	752940.7	752940.7	100.25	%			12:08:01
1	Ag 328.068†	351.0	57.0	0.2560	ug/L	0.2560	ppb	12:08:01
1	As 188.979†	-22.3	2.0	0.7794	ug/L	0.7794	ppb	12:08:21
1	B 249.677†	-384.4	147.8	3.0992	ug/L	3.0992	ppb	12:08:21
1	Ba 233.527†	-10.1	-1.6	-0.0110	ug/L	-0.0110	ppb	12:08:21
1	Be 313.107†	-4990.4	141.8	0.0518	ug/L	0.0518	ppb	12:08:01
1	Cd 226.502†	-182.7	13.1	0.1395	ug/L	0.1395	ppb	12:08:21
1	Co 228.616†	-62.0	3.6	0.0702	ug/L	0.0702	ppb	12:08:21
1	Cr 267.716†	81.3	2.4	0.0248	ug/L	0.0248	ppb	12:08:21
1	Cu 324.752†	6819.0	36.1	0.1029	ug/L	0.1029	ppb	12:08:01
1	Mn 257.610†	447.6	23.6	0.0241	ug/L	0.0241	ppb	12:08:21
1	Mo 202.031†	28.1	9.7	0.6137	ug/L	0.6137	ppb	12:08:21
1	Ni 231.604†	95.1	8.2	0.1888	ug/L	0.1888	ppb	12:08:21
1	P 214.914†	211.1	-13.3	-7.6724	ug/L	-7.6724	ppb	12:08:21
1	Pb 220.353†	-64.7	4.0	0.4526	ug/L	0.4526	ppb	12:08:21
1	S 181.975 Axial†	39.4	-2.3	-3.2083	ug/L	-3.2083	ppb	12:08:21
1	Sb 206.836†	34.8	0.4	0.1241	ug/L	0.1241	ppb	12:08:21
1	Se 196.026†	-25.1	3.8	2.1663	ug/L	2.1663	ppb	12:08:21
1	Si 251.611†	725.9	273.4	8.1744	ug/L	8.1744	ppb	12:08:21
1	Sn 189.927†	0.5	-4.5	-0.7298	ug/L	-0.7298	ppb	12:08:21
1	Ti 334.940†	-1079.7	39.4	0.0632	ug/L	0.0632	ppb	12:08:01
1	Tl 190.801†	-37.9	-5.2	-1.4600	ug/L	-1.4600	ppb	12:08:21
1	U 409.014†	-2334.6	76.2	2.1001	ug/L	2.1001	ppb	12:08:01
1	V 292.402†	-1295.7	67.6	0.4609	ug/L	0.4609	ppb	12:08:01
1	Zn 213.857†	678.6	54.1	0.4711	ug/L	0.4711	ppb	12:08:21
1	SiO2†	563.1	93.5	5.9727	ug/L	5.9727	ppb	12:09:17
2	Sc Radial	5877.5	5877.5	101	%			12:07:09
2	Y RADIAL	6301.1	6301.1	100.2	%			12:07:09
2	Al 396.153Radial†	-30.4	-9.8	-6.7942	ug/L	-6.7942	ppb	12:07:09
2	Ca 317.933Radial†	29.5	13.7	20.250	ug/L	20.250	ppb	12:07:29
2	Fe 238.204 Radial†	8.5	1.6	15.144	ug/L	15.144	ppb	12:07:29
2	K 766.490 Radial†	2420.9	55.3	9.8013	ug/L	9.8013	ppb	12:07:09
2	Mg 279.077 IEC†	0.3	-0.9	-30.512	ug/L	-30.512	ppb	12:07:29
2	Na 589.592 Radial†	-1064.0	30.1	10.092	ug/L	10.092	ppb	12:07:09
2	Sr 421.552†	-6.2	21.2	0.1316	ug/L	0.1316	ppb	12:07:09
2	Sc 361.383	915787.5	915787.5	101.61	%			12:08:26
2	Y 371.029	763840.5	763840.5	101.70	%			12:08:26
2	Ag 328.068†	373.0	74.4	0.3355	ug/L	0.3355	ppb	12:08:26
2	As 188.979†	-22.8	1.8	0.7053	ug/L	0.7053	ppb	12:08:46
2	B 249.677†	-358.0	178.3	3.7375	ug/L	3.7375	ppb	12:08:46
2	Ba 233.527†	16.7	24.9	0.1859	ug/L	0.1859	ppb	12:08:46
2	Be 313.107†	-5092.2	101.6	0.0371	ug/L	0.0371	ppb	12:08:26
2	Cd 226.502†	-198.1	0.2	0.0002	ug/L	0.0002	ppb	12:08:46
2	Co 228.616†	-66.9	-0.4	-0.0071	ug/L	-0.0071	ppb	12:08:46
2	Cr 267.716†	95.7	15.5	0.1608	ug/L	0.1608	ppb	12:08:46
2	Cu 324.752†	6866.8	1.2	0.0042	ug/L	0.0042	ppb	12:08:26
2	Mn 257.610†	453.6	24.1	0.0278	ug/L	0.0278	ppb	12:08:46
2	Mo 202.031†	21.7	3.0	0.1917	ug/L	0.1917	ppb	12:08:46
2	Ni 231.604†	90.0	2.1	0.0479	ug/L	0.0479	ppb	12:08:46

2	P 214.914†	213.6	-13.3	-7.6526	ug/L	-7.6526	ppb	12:08:46
2	Pb 220.353†	-68.6	0.9	0.1004	ug/L	0.1004	ppb	12:08:46
2	S 181.975 Axial†	40.1	-2.1	-2.9631	ug/L	-2.9631	ppb	12:08:46
2	Sb 206.836†	38.8	3.9	1.2504	ug/L	1.2504	ppb	12:08:46
2	Se 196.026†	-16.0	13.1	7.5950	ug/L	7.5950	ppb	12:08:46
2	Si 251.611†	678.6	218.2	6.5230	ug/L	6.5230	ppb	12:08:46
2	Sn 189.927†	9.9	4.8	0.7858	ug/L	0.7858	ppb	12:08:46
2	Ti 334.940†	-1103.3	29.1	0.0434	ug/L	0.0434	ppb	12:08:26
2	Tl 190.801†	-37.2	-4.1	-1.1582	ug/L	-1.1582	ppb	12:08:46
2	U 409.014†	-2106.4	328.8	9.0562	ug/L	9.0562	ppb	12:08:26
2	V 292.402†	-1307.0	72.1	0.4934	ug/L	0.4934	ppb	12:08:26
2	Zn 213.857†	689.6	56.9	0.4960	ug/L	0.4960	ppb	12:08:46
2	SiO2†	577.4	100.8	6.4452	ug/L	6.4452	ppb	12:09:22
3	Sc Radial	5765.2	5765.2	98.7	%			12:07:34
3	Y RADIAL	6230.6	6230.6	99.09	%			12:07:34
3	Al 396.153Radial†	-30.3	-10.3	-7.1552	ug/L	-7.1552	ppb	12:07:34
3	Ca 317.933Radial†	31.8	16.7	24.546	ug/L	24.546	ppb	12:07:54
3	Fe 238.204 Radial†	6.9	0.1	1.3209	ug/L	1.3209	ppb	12:07:54
3	K 766.490 Radial†	2425.1	106.5	18.876	ug/L	18.876	ppb	12:07:34
3	Mg 279.077 IEC†	0.7	-0.5	-16.193	ug/L	-16.193	ppb	12:07:54
3	Na 589.592 Radial†	-1040.0	33.8	11.341	ug/L	11.341	ppb	12:07:34
3	Sr 421.552†	0.5	27.8	0.1730	ug/L	0.1730	ppb	12:07:34
3	Sc 361.383	904812.9	904812.9	100.39	%			12:08:51
3	Y 371.029	754674.2	754674.2	100.48	%			12:08:51
3	Ag 328.068†	311.7	17.7	0.0780	ug/L	0.0780	ppb	12:08:51
3	As 188.979†	-26.5	-2.2	-0.8622	ug/L	-0.8622	ppb	12:09:11
3	B 249.677†	-375.9	156.2	3.2768	ug/L	3.2768	ppb	12:09:11
3	Ba 233.527†	-9.4	-1.0	-0.0062	ug/L	-0.0062	ppb	12:09:11
3	Be 313.107†	-4986.8	145.8	0.0531	ug/L	0.0531	ppb	12:08:51
3	Cd 226.502†	-180.6	15.3	0.1612	ug/L	0.1612	ppb	12:09:11
3	Co 228.616†	-73.7	-8.0	-0.1515	ug/L	-0.1515	ppb	12:09:11
3	Cr 267.716†	75.4	-3.5	-0.0376	ug/L	-0.0376	ppb	12:09:11
3	Cu 324.752†	6811.0	27.6	0.0790	ug/L	0.0790	ppb	12:08:51
3	Mn 257.610†	443.6	19.6	0.0213	ug/L	0.0213	ppb	12:09:11
3	Mo 202.031†	20.5	2.1	0.1318	ug/L	0.1318	ppb	12:09:11
3	Ni 231.604†	90.4	3.4	0.0800	ug/L	0.0800	ppb	12:09:11
3	P 214.914†	205.7	-18.7	-10.767	ug/L	-10.767	ppb	12:09:11
3	Pb 220.353†	-57.3	11.3	1.2803	ug/L	1.2803	ppb	12:09:11
3	S 181.975 Axial†	42.1	0.4	0.5027	ug/L	0.5027	ppb	12:09:11
3	Sb 206.836†	31.3	-3.1	-0.9572	ug/L	-0.9572	ppb	12:09:11
3	Se 196.026†	-28.5	0.4	0.2427	ug/L	0.2427	ppb	12:09:11
3	Si 251.611†	587.0	135.0	4.0314	ug/L	4.0314	ppb	12:09:11
3	Sn 189.927†	7.7	2.6	0.4341	ug/L	0.4341	ppb	12:09:11
3	Ti 334.940†	-1138.7	-19.4	-0.0317	ug/L	-0.0317	ppb	12:08:51
3	Tl 190.801†	-40.8	-8.1	-2.2771	ug/L	-2.2771	ppb	12:09:11
3	U 409.014†	-2241.4	169.2	4.6600	ug/L	4.6600	ppb	12:08:51
3	V 292.402†	-1304.3	59.2	0.4013	ug/L	0.4013	ppb	12:08:51
3	Zn 213.857†	688.0	63.4	0.5539	ug/L	0.5539	ppb	12:09:11
3	SiO2†	579.7	110.0	7.0334	ug/L	7.0334	ppb	12:09:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908449.2	100.80	%	0.705				0.70%
Sc Radial	5862.1	100	%	1.5				1.54%
Y 371.029	757151.8	100.81	%	0.780				0.77%
Y RADIAL	6309.8	100.4	%	1.34				1.33%
Ag 328.068†	49.7	0.2232	ug/L	0.13185	0.2232	ppb	0.13185	59.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.9	-8.2981	ug/L	2.29928	-8.2981	ppb	2.29928	27.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.2075	ug/L	0.92711	0.2075	ppb	0.92711	446.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.8	3.3712	ug/L	0.32948	3.3712	ppb	0.32948	9.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.4	0.0562	ug/L	0.11232	0.0562	ppb	0.11232	199.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	129.7	0.0473	ug/L	0.00887	0.0473	ppb	0.00887	18.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.4	22.683	ug/L	2.2037	22.683	ppb	2.2037	9.72%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.5      0.1003 ug/L       0.08734      0.1003 ppb        0.08734  87.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.6     -0.0295 ug/L       0.11254     -0.0295 ppb        0.11254 381.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.8      0.0494 ug/L       0.10145      0.0494 ppb        0.10145 205.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                21.6      0.0621 ug/L       0.05151      0.0621 ppb        0.05151  83.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.4      3.8155 ug/L      10.31030      3.8155 ppb       10.31030 270.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          64.4      11.420 ug/L        6.7935      11.420 ppb        6.7935  59.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.2     -6.7803 ug/L      29.58356     -6.7803 ppb       29.58356 436.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.4      0.0244 ug/L       0.00323      0.0244 ppb        0.00323  13.22%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.9      0.3124 ug/L       0.26266      0.3124 ppb        0.26266  84.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         39.9      13.402 ug/L        4.6928      13.402 ppb        4.6928  35.02%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.6      0.1056 ug/L       0.07387      0.1056 ppb        0.07387  69.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.1     -8.6973 ug/L       1.79249     -8.6973 ppb        1.79249  20.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 5.4      0.6111 ug/L       0.60572      0.6111 ppb        0.60572  99.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.3     -1.8896 ug/L       2.07538     -1.8896 ppb        2.07538 109.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.4      0.1391 ug/L       1.10385      0.1391 ppb        1.10385 793.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.7      3.3347 ug/L       3.81286      3.3347 ppb        3.81286 114.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               208.9      6.2429 ug/L       2.08565      6.2429 ppb        2.08565  33.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.0      0.1634 ug/L       0.79323      0.1634 ppb        0.79323 485.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                16.3      0.1016 ug/L       0.09020      0.1016 ppb        0.09020  88.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                16.4      0.0250 ug/L       0.05004      0.0250 ppb        0.05004 200.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.8     -1.6318 ug/L       0.57888     -1.6318 ppb        0.57888  35.48%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                191.4      5.2721 ug/L       3.51825      5.2721 ppb        3.51825  66.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 66.3      0.4518 ug/L       0.04670      0.4518 ppb        0.04670  10.33%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                58.1      0.5070 ug/L       0.04248      0.5070 ppb        0.04248   8.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     101.4      6.4838 ug/L       0.53137      6.4838 ppb        0.53137   8.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 12:54:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.2	5848.2	100	%			12:56:17
1	Y RADIAL	6232.2	6232.2	99.12	%			12:56:17
1	Al 396.153Radial†	7194.6	7209.7	4986.7	ug/L	4986.7	ppb	12:56:17
1	Ca 317.933Radial†	3408.9	3390.8	4997.8	ug/L	4997.8	ppb	12:56:37
1	Fe 238.204 Radial†	540.1	532.9	5005.0	ug/L	5005.0	ppb	12:56:37
1	K 766.490 Radial†	31431.1	29056.3	5144.2	ug/L	5144.2	ppb	12:56:17
1	Mg 279.077 IEC†	146.4	145.1	5124.1	ug/L	5124.1	ppb	12:56:37
1	Na 589.592 Radial†	27231.8	28299.8	9496.9	ug/L	9496.9	ppb	12:56:17
1	Sr 421.552†	80956.2	80924.2	503.93	ug/L	503.93	ppb	12:56:17
1	Sc 361.383	912254.4	912254.4	101.22	%			12:57:34
1	Y 371.029	744537.5	744537.5	99.128	%			12:57:34
1	Ag 328.068†	112666.9	111016.8	505.86	ug/L	505.86	ppb	12:57:39
1	As 188.979†	1234.9	1244.2	496.11	ug/L	496.11	ppb	12:57:59
1	B 249.677†	22942.3	23196.5	484.53	ug/L	484.53	ppb	12:57:39
1	Ba 233.527†	67793.9	66985.6	497.74	ug/L	497.74	ppb	12:57:39
1	Be 313.107†	1375749.3	1364288.2	498.30	ug/L	498.30	ppb	12:57:34
1	Cd 226.502†	47434.1	47057.7	497.29	ug/L	497.29	ppb	12:57:39
1	Co 228.616†	26515.2	26261.2	498.53	ug/L	498.53	ppb	12:57:39
1	Cr 267.716†	47769.1	47114.9	495.38	ug/L	495.38	ppb	12:57:39
1	Cu 324.752†	181657.9	172712.7	494.51	ug/L	494.51	ppb	12:57:39
1	Mn 257.610†	473453.5	467327.3	498.92	ug/L	498.92	ppb	12:57:34
1	Mo 202.031†	7948.0	7833.9	498.01	ug/L	498.01	ppb	12:57:59
1	Ni 231.604†	21906.5	21556.1	498.84	ug/L	498.84	ppb	12:57:39
1	P 214.914†	4536.0	4257.8	2380.8	ug/L	2380.8	ppb	12:57:59
1	Pb 220.353†	4319.8	4336.2	491.73	ug/L	491.73	ppb	12:57:59
1	S 181.975 Axial†	756.8	706.1	988.42	ug/L	988.42	ppb	12:57:59
1	Sb 206.836†	1617.9	1564.2	502.19	ug/L	502.19	ppb	12:57:59
1	Se 196.026†	831.0	849.9	509.57	ug/L	509.57	ppb	12:57:59
1	Si 251.611†	84761.3	83290.5	2481.4	ug/L	2481.4	ppb	12:57:39
1	Sn 189.927†	3078.5	3036.4	497.75	ug/L	497.75	ppb	12:57:59
1	Ti 334.940†	325620.8	322812.9	515.01	ug/L	515.01	ppb	12:57:34
1	Tl 190.801†	1749.0	1760.5	496.40	ug/L	496.40	ppb	12:57:59
1	U 409.014†	15897.7	18108.0	497.24	ug/L	497.24	ppb	12:57:39
1	V 292.402†	74188.5	74653.1	499.75	ug/L	499.75	ppb	12:57:39
1	Zn 213.857†	58215.4	56892.3	492.60	ug/L	492.60	ppb	12:57:39
1	SiO2†	84461.0	82976.0	5296.7	ug/L	5296.7	ppb	12:59:07
2	Sc Radial	5803.5	5803.5	99.3	%			12:56:42
2	Y RADIAL	6206.0	6206.0	98.70	%			12:56:42
2	Al 396.153Radial†	7175.4	7245.8	5011.9	ug/L	5011.9	ppb	12:56:42
2	Ca 317.933Radial†	3438.4	3446.8	5080.3	ug/L	5080.3	ppb	12:57:02
2	Fe 238.204 Radial†	545.7	542.7	5096.7	ug/L	5096.7	ppb	12:57:02
2	K 766.490 Radial†	31189.8	29055.6	5144.1	ug/L	5144.1	ppb	12:56:42
2	Mg 279.077 IEC†	147.8	147.6	5214.0	ug/L	5214.0	ppb	12:57:02
2	Na 589.592 Radial†	26929.5	28205.2	9465.1	ug/L	9465.1	ppb	12:56:42
2	Sr 421.552†	80181.3	80767.7	502.95	ug/L	502.95	ppb	12:56:42
2	Sc 361.383	913415.6	913415.6	101.35	%			12:58:05
2	Y 371.029	745440.7	745440.7	99.249	%			12:58:05
2	Ag 328.068†	113535.7	111732.6	509.14	ug/L	509.14	ppb	12:58:11
2	As 188.979†	1239.3	1247.0	497.24	ug/L	497.24	ppb	12:58:31
2	B 249.677†	23165.3	23387.8	488.52	ug/L	488.52	ppb	12:58:11
2	Ba 233.527†	68388.5	67487.2	501.47	ug/L	501.47	ppb	12:58:11
2	Be 313.107†	1373939.6	1360774.7	497.01	ug/L	497.01	ppb	12:58:05
2	Cd 226.502†	47909.1	47466.9	501.61	ug/L	501.61	ppb	12:58:11
2	Co 228.616†	26781.7	26490.8	502.88	ug/L	502.88	ppb	12:58:11
2	Cr 267.716†	48292.3	47571.2	500.18	ug/L	500.18	ppb	12:58:11
2	Cu 324.752†	183289.2	174094.2	498.47	ug/L	498.47	ppb	12:58:11
2	Mn 257.610†	473255.3	466537.2	498.08	ug/L	498.08	ppb	12:58:05
2	Mo 202.031†	7917.2	7793.5	495.45	ug/L	495.45	ppb	12:58:31
2	Ni 231.604†	22089.9	21709.5	502.39	ug/L	502.39	ppb	12:58:11

2	P 214.914†	4515.2	4231.6	2365.1 ug/L	2365.1 ppb	12:58:31
2	Pb 220.353†	4309.4	4320.5	489.95 ug/L	489.95 ppb	12:58:31
2	S 181.975 Axial†	752.7	701.1	981.44 ug/L	981.44 ppb	12:58:31
2	Sb 206.836†	1612.0	1556.4	499.57 ug/L	499.57 ppb	12:58:31
2	Se 196.026†	835.8	853.5	511.94 ug/L	511.94 ppb	12:58:31
2	Si 251.611†	85473.2	83886.5	2499.3 ug/L	2499.3 ppb	12:58:11
2	Sn 189.927†	3086.7	3040.6	498.45 ug/L	498.45 ppb	12:58:31
2	Ti 334.940†	325546.6	322330.7	514.24 ug/L	514.24 ppb	12:58:05
2	Tl 190.801†	1735.6	1745.1	492.04 ug/L	492.04 ppb	12:58:31
2	U 409.014†	16225.5	18411.5	505.58 ug/L	505.58 ppb	12:58:11
2	V 292.402†	74965.0	75326.1	504.16 ug/L	504.16 ppb	12:58:11
2	Zn 213.857†	58717.4	57314.4	496.25 ug/L	496.25 ppb	12:58:11
2	SiO2†	85200.7	83599.8	5336.8 ug/L	5336.8 ppb	12:59:12
3	Sc Radial	5762.9	5762.9	98.6 %		12:57:07
3	Y RADIAL	6173.0	6173.0	98.17 %		12:57:07
3	Al 396.153Radial†	7133.9	7254.6	5017.9 ug/L	5017.9 ppb	12:57:07
3	Ca 317.933Radial†	3390.6	3422.7	5044.8 ug/L	5044.8 ppb	12:57:27
3	Fe 238.204 Radial†	542.7	543.5	5103.8 ug/L	5103.8 ppb	12:57:27
3	K 766.490 Radial†	30798.1	28879.2	5112.9 ug/L	5112.9 ppb	12:57:07
3	Mg 279.077 IEC†	149.9	150.9	5328.4 ug/L	5328.4 ppb	12:57:27
3	Na 589.592 Radial†	26765.7	28229.9	9473.4 ug/L	9473.4 ppb	12:57:07
3	Sr 421.552†	79557.2	80702.8	502.55 ug/L	502.55 ppb	12:57:07
3	Sc 361.383	913286.2	913286.2	101.33 %		12:58:37
3	Y 371.029	745920.9	745920.9	99.313 %		12:58:37
3	Ag 328.068†	113322.2	111537.7	508.26 ug/L	508.26 ppb	12:58:42
3	As 188.979†	1234.0	1242.0	495.25 ug/L	495.25 ppb	12:59:02
3	B 249.677†	23113.6	23340.1	487.52 ug/L	487.52 ppb	12:58:42
3	Ba 233.527†	68321.3	67430.4	501.05 ug/L	501.05 ppb	12:58:42
3	Be 313.107†	1375010.7	1362023.8	497.47 ug/L	497.47 ppb	12:58:37
3	Cd 226.502†	47830.2	47395.7	500.85 ug/L	500.85 ppb	12:58:42
3	Co 228.616†	26719.9	26433.6	501.80 ug/L	501.80 ppb	12:58:42
3	Cr 267.716†	48139.2	47426.9	498.66 ug/L	498.66 ppb	12:58:42
3	Cu 324.752†	182898.0	173733.7	497.44 ug/L	497.44 ppb	12:58:42
3	Mn 257.610†	473496.5	466841.3	498.41 ug/L	498.41 ppb	12:58:37
3	Mo 202.031†	7957.6	7834.5	498.06 ug/L	498.06 ppb	12:59:02
3	Ni 231.604†	21966.3	21590.6	499.64 ug/L	499.64 ppb	12:58:42
3	P 214.914†	4534.6	4251.4	2376.6 ug/L	2376.6 ppb	12:59:02
3	Pb 220.353†	4365.7	4376.6	496.30 ug/L	496.30 ppb	12:59:02
3	S 181.975 Axial†	771.7	720.0	1007.9 ug/L	1007.9 ppb	12:59:02
3	Sb 206.836†	1609.2	1553.8	498.84 ug/L	498.84 ppb	12:59:02
3	Se 196.026†	823.7	841.7	505.15 ug/L	505.15 ppb	12:59:02
3	Si 251.611†	85416.9	83842.8	2498.0 ug/L	2498.0 ppb	12:58:42
3	Sn 189.927†	3083.0	3037.5	497.92 ug/L	497.92 ppb	12:59:02
3	Ti 334.940†	325654.1	322482.3	514.48 ug/L	514.48 ppb	12:58:37
3	Tl 190.801†	1752.9	1762.4	496.90 ug/L	496.90 ppb	12:59:02
3	U 409.014†	16132.8	18322.3	503.13 ug/L	503.13 ppb	12:58:42
3	V 292.402†	74830.0	75203.4	503.39 ug/L	503.39 ppb	12:58:42
3	Zn 213.857†	58637.8	57244.1	495.65 ug/L	495.65 ppb	12:58:42
3	SiO2†	84734.0	83151.2	5308.0 ug/L	5308.0 ppb	12:59:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912985.4	101.30	%	0.071				0.07%
Sc Radial	5804.9	99.3	%	0.73				0.73%
Y 371.029	745299.7	99.230	%	0.0935				0.09%
Y RADIAL	6203.8	98.66	%	0.472				0.48%
Ag 328.068†	111429.0	507.76	ug/L	1.698	507.76	ppb	1.698	0.33%
QC value within limits for Ag 328.068 Recovery = 101.55%								
Al 396.153Radial†	7236.7	5005.5	ug/L	16.55	5005.5	ppb	16.55	0.33%
QC value within limits for Al 396.153Radial Recovery = 100.11%								
As 188.979†	1244.4	496.20	ug/L	0.999	496.20	ppb	0.999	0.20%
QC value within limits for As 188.979 Recovery = 99.24%								
B 249.677†	23308.1	486.85	ug/L	2.075	486.85	ppb	2.075	0.43%
QC value within limits for B 249.677 Recovery = 97.37%								
Ba 233.527†	67301.1	500.08	ug/L	2.043	500.08	ppb	2.043	0.41%
QC value within limits for Ba 233.527 Recovery = 100.02%								
Be 313.107†	1362362.2	497.59	ug/L	0.650	497.59	ppb	0.650	0.13%
QC value within limits for Be 313.107 Recovery = 99.52%								
Ca 317.933Radial†	3420.1	5041.0	ug/L	41.39	5041.0	ppb	41.39	0.82%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.82%
Cd 226.502†            47306.8      499.91 ug/L         2.306      499.91 ppb          2.306   0.46%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†            26395.2      501.07 ug/L         2.265      501.07 ppb          2.265   0.45%
   QC value within limits for Co 228.616  Recovery = 100.21%
Cr 267.716†            47371.0      498.07 ug/L         2.452      498.07 ppb          2.452   0.49%
   QC value within limits for Cr 267.716  Recovery = 99.61%
Cu 324.752†           173513.5      496.80 ug/L         2.053      496.80 ppb          2.053   0.41%
   QC value within limits for Cu 324.752  Recovery = 99.36%
Fe 238.204 Radial†       539.7      5068.5 ug/L        55.12      5068.5 ppb         55.12   1.09%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.37%
K 766.490 Radial†      28997.0      5133.7 ug/L        18.08      5133.7 ppb         18.08   0.35%
   QC value within limits for K 766.490 Radial  Recovery = 102.67%
Mg 279.077 IEC†          147.9      5222.2 ug/L       102.39      5222.2 ppb        102.39   1.96%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.44%
Mn 257.610†           466901.9      498.47 ug/L         0.421      498.47 ppb          0.421   0.08%
   QC value within limits for Mn 257.610  Recovery = 99.69%
Mo 202.031†             7820.7      497.17 ug/L         1.491      497.17 ppb          1.491   0.30%
   QC value within limits for Mo 202.031  Recovery = 99.43%
Na 589.592 Radial†     28245.0      9478.5 ug/L        16.47      9478.5 ppb         16.47   0.17%
   QC value within limits for Na 589.592 Radial  Recovery = 94.78%
Ni 231.604†            21618.7      500.29 ug/L         1.863      500.29 ppb          1.863   0.37%
   QC value within limits for Ni 231.604  Recovery = 100.06%
P 214.914†              4247.0      2374.2 ug/L         8.17      2374.2 ppb          8.17   0.34%
   QC value within limits for P 214.914  Recovery = 94.97%
Pb 220.353†             4344.4      492.66 ug/L         3.276      492.66 ppb          3.276   0.67%
   QC value within limits for Pb 220.353  Recovery = 98.53%
S 181.975 Axial†         709.1      992.58 ug/L        13.705      992.58 ppb         13.705   1.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.26%
Sb 206.836†             1558.1      500.20 ug/L         1.762      500.20 ppb          1.762   0.35%
   QC value within limits for Sb 206.836  Recovery = 100.04%
Se 196.026†              848.3      508.89 ug/L         3.448      508.89 ppb          3.448   0.68%
   QC value within limits for Se 196.026  Recovery = 101.78%
Si 251.611†            83673.3      2492.9 ug/L         9.96      2492.9 ppb          9.96   0.40%
   QC value within limits for Si 251.611  Recovery = 99.72%
Sn 189.927†             3038.2      498.04 ug/L         0.362      498.04 ppb          0.362   0.07%
   QC value within limits for Sn 189.927  Recovery = 99.61%
Sr 421.552†            80798.2      503.14 ug/L         0.709      503.14 ppb          0.709   0.14%
   QC value within limits for Sr 421.552  Recovery = 100.63%
Ti 334.940†           322542.0      514.58 ug/L         0.394      514.58 ppb          0.394   0.08%
   QC value within limits for Ti 334.940  Recovery = 102.92%
Tl 190.801†             1756.0      495.11 ug/L         2.674      495.11 ppb          2.674   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.02%
U 409.014†             18280.6      501.98 ug/L         4.285      501.98 ppb          4.285   0.85%
   QC value within limits for U 409.014  Recovery = 100.40%
V 292.402†             75060.8      502.43 ug/L         2.355      502.43 ppb          2.355   0.47%
   QC value within limits for V 292.402  Recovery = 100.49%
Zn 213.857†            57150.3      494.84 ug/L         1.957      494.84 ppb          1.957   0.40%
   QC value within limits for Zn 213.857  Recovery = 98.97%
SiO2†                  83242.3      5313.8 ug/L        20.69      5313.8 ppb         20.69   0.39%
   QC value within limits for SiO2  Recovery = 99.37%
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 13:01:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5868.7	5868.7	100	%			13:03:21
1	Y RADIAL	6266.3	6266.3	99.66	%			13:03:21
1	Al 396.153Radial†	-30.6	-10.0	-6.9732	ug/L	-6.9732	ppb	13:03:21
1	Ca 317.933Radial†	27.1	11.4	16.834	ug/L	16.834	ppb	13:03:41
1	Fe 238.204 Radial†	7.1	0.3	2.8617	ug/L	2.8617	ppb	13:03:41
1	K 766.490 Radial†	2529.2	166.8	29.557	ug/L	29.557	ppb	13:03:21
1	Mg 279.077 IEC†	2.6	1.4	48.947	ug/L	48.947	ppb	13:03:41
1	Na 589.592 Radial†	-997.4	94.8	31.813	ug/L	31.813	ppb	13:03:21
1	Sr 421.552†	-4.1	23.2	0.1444	ug/L	0.1444	ppb	13:03:21
1	Sc 361.383	909330.4	909330.4	100.89	%			13:04:37
1	Y 371.029	756247.7	756247.7	100.69	%			13:04:37
1	Ag 328.068†	309.1	13.6	0.0644	ug/L	0.0644	ppb	13:04:37
1	As 188.979†	-26.8	-2.4	-0.9536	ug/L	-0.9536	ppb	13:04:57
1	B 249.677†	-417.1	117.3	2.4588	ug/L	2.4588	ppb	13:04:57
1	Ba 233.527†	-20.7	-12.0	-0.0874	ug/L	-0.0874	ppb	13:04:57
1	Be 313.107†	-5096.0	62.2	0.0227	ug/L	0.0227	ppb	13:04:37
1	Cd 226.502†	-193.8	3.0	0.0311	ug/L	0.0311	ppb	13:04:57
1	Co 228.616†	-60.1	5.8	0.1104	ug/L	0.1104	ppb	13:04:57
1	Cr 267.716†	70.5	-8.8	-0.0914	ug/L	-0.0914	ppb	13:04:57
1	Cu 324.752†	6809.4	-7.7	-0.0218	ug/L	-0.0218	ppb	13:04:37
1	Mn 257.610†	455.0	28.6	0.0299	ug/L	0.0299	ppb	13:04:57
1	Mo 202.031†	16.2	-2.3	-0.1469	ug/L	-0.1469	ppb	13:04:57
1	Ni 231.604†	76.1	-11.2	-0.2588	ug/L	-0.2588	ppb	13:04:57
1	P 214.914†	204.8	-20.5	-11.821	ug/L	-11.821	ppb	13:04:57
1	Pb 220.353†	-56.1	12.9	1.4528	ug/L	1.4528	ppb	13:04:57
1	S 181.975 Axial†	41.0	-1.0	-1.3701	ug/L	-1.3701	ppb	13:04:57
1	Sb 206.836†	35.0	0.4	0.1492	ug/L	0.1492	ppb	13:04:57
1	Se 196.026†	-22.5	6.6	3.7976	ug/L	3.7976	ppb	13:04:57
1	Si 251.611†	555.9	101.3	3.0211	ug/L	3.0211	ppb	13:04:57
1	Sn 189.927†	11.9	6.8	1.1211	ug/L	1.1211	ppb	13:04:57
1	Ti 334.940†	-1127.8	-2.9	-0.0042	ug/L	-0.0042	ppb	13:04:37
1	Tl 190.801†	-37.4	-4.6	-1.2783	ug/L	-1.2783	ppb	13:04:57
1	U 409.014†	-2380.6	42.3	1.1648	ug/L	1.1648	ppb	13:04:37
1	V 292.402†	-1258.8	110.7	0.7320	ug/L	0.7320	ppb	13:04:37
1	Zn 213.857†	683.4	55.5	0.4848	ug/L	0.4848	ppb	13:04:57
1	SiO2†	542.9	70.6	4.5059	ug/L	4.5059	ppb	13:05:53
2	Sc Radial	5855.0	5855.0	100	%			13:03:46
2	Y RADIAL	6293.2	6293.2	100.1	%			13:03:46
2	Al 396.153Radial†	-28.1	-7.6	-5.3089	ug/L	-5.3089	ppb	13:03:46
2	Ca 317.933Radial†	28.7	13.1	19.271	ug/L	19.271	ppb	13:04:06
2	Fe 238.204 Radial†	6.7	-0.1	-0.8685	ug/L	-0.8685	ppb	13:04:06
2	K 766.490 Radial†	2589.7	233.1	41.320	ug/L	41.320	ppb	13:03:46
2	Mg 279.077 IEC†	2.6	1.4	50.157	ug/L	50.157	ppb	13:04:06
2	Na 589.592 Radial†	-1015.8	74.1	24.869	ug/L	24.869	ppb	13:03:46
2	Sr 421.552†	-45.3	-17.9	-0.1116	ug/L	-0.1116	ppb	13:03:46
2	Sc 361.383	901165.7	901165.7	99.989	%			13:05:03
2	Y 371.029	749854.7	749854.7	99.836	%			13:05:03
2	Ag 328.068†	310.6	17.9	0.0813	ug/L	0.0813	ppb	13:05:03
2	As 188.979†	-14.4	9.8	3.8646	ug/L	3.8646	ppb	13:05:23
2	B 249.677†	-420.0	110.6	2.3197	ug/L	2.3197	ppb	13:05:23
2	Ba 233.527†	1.0	9.5	0.0704	ug/L	0.0704	ppb	13:05:23
2	Be 313.107†	-5025.4	87.0	0.0318	ug/L	0.0318	ppb	13:05:03
2	Cd 226.502†	-196.4	-1.3	-0.0140	ug/L	-0.0140	ppb	13:05:23
2	Co 228.616†	-58.2	7.2	0.1379	ug/L	0.1379	ppb	13:05:23
2	Cr 267.716†	91.5	12.8	0.1348	ug/L	0.1348	ppb	13:05:23
2	Cu 324.752†	6670.0	-86.0	-0.2461	ug/L	-0.2461	ppb	13:05:03
2	Mn 257.610†	575.8	153.5	0.1628	ug/L	0.1628	ppb	13:05:23
2	Mo 202.031†	22.9	4.5	0.2874	ug/L	0.2874	ppb	13:05:23
2	Ni 231.604†	88.3	1.7	0.0399	ug/L	0.0399	ppb	13:05:23

2	P 214.914†	217.0	-6.5	-3.7298	ug/L	-3.7298 ppb	13:05:23
2	Pb 220.353†	-51.8	16.6	1.8791	ug/L	1.8791 ppb	13:05:23
2	S 181.975 Axial†	44.5	2.9	4.0947	ug/L	4.0947 ppb	13:05:23
2	Sb 206.836†	33.9	-0.3	-0.1071	ug/L	-0.1071 ppb	13:05:23
2	Se 196.026†	-13.0	15.9	9.1655	ug/L	9.1655 ppb	13:05:23
2	Si 251.611†	597.7	148.1	4.4168	ug/L	4.4168 ppb	13:05:23
2	Sn 189.927†	2.5	-2.5	-0.4044	ug/L	-0.4044 ppb	13:05:23
2	Ti 334.940†	-1080.2	34.6	0.0563	ug/L	0.0563 ppb	13:05:03
2	Tl 190.801†	-32.3	0.3	0.0723	ug/L	0.0723 ppb	13:05:23
2	U 409.014†	-2419.0	-17.5	-0.4815	ug/L	-0.4815 ppb	13:05:03
2	V 292.402†	-1344.5	13.7	0.0947	ug/L	0.0947 ppb	13:05:03
2	Zn 213.857†	675.2	53.4	0.4649	ug/L	0.4649 ppb	13:05:23
2	SiO2†	559.6	92.2	5.8782	ug/L	5.8782 ppb	13:05:58
3	Sc Radial	5767.9	5767.9	98.7	%		13:04:11
3	Y RADIAL	6173.0	6173.0	98.17	%		13:04:11
3	Al 396.153Radial†	-28.0	-8.0	-5.5661	ug/L	-5.5661 ppb	13:04:11
3	Ca 317.933Radial†	25.0	9.7	14.340	ug/L	14.340 ppb	13:04:31
3	Fe 238.204 Radial†	6.6	-0.2	-1.4562	ug/L	-1.4562 ppb	13:04:31
3	K 766.490 Radial†	2509.3	190.6	33.799	ug/L	33.799 ppb	13:04:11
3	Mg 279.077 IEC†	-1.3	-2.5	-87.543	ug/L	-87.543 ppb	13:04:31
3	Na 589.592 Radial†	-1023.7	50.7	17.013	ug/L	17.013 ppb	13:04:11
3	Sr 421.552†	-34.9	-8.0	-0.0497	ug/L	-0.0497 ppb	13:04:11
3	Sc 361.383	904623.9	904623.9	100.37	%		13:05:28
3	Y 371.029	754861.8	754861.8	100.50	%		13:05:28
3	Ag 328.068†	417.8	123.5	0.5554	ug/L	0.5554 ppb	13:05:28
3	As 188.979†	-16.9	7.3	2.8912	ug/L	2.8912 ppb	13:05:48
3	B 249.677†	-395.9	136.2	2.8560	ug/L	2.8560 ppb	13:05:48
3	Ba 233.527†	1.7	10.1	0.0762	ug/L	0.0762 ppb	13:05:48
3	Be 313.107†	-4983.4	148.1	0.0545	ug/L	0.0545 ppb	13:05:28
3	Cd 226.502†	-176.5	19.2	0.2035	ug/L	0.2035 ppb	13:05:48
3	Co 228.616†	-58.4	7.2	0.1366	ug/L	0.1366 ppb	13:05:48
3	Cr 267.716†	78.7	-0.3	-0.0042	ug/L	-0.0042 ppb	13:05:48
3	Cu 324.752†	6872.2	90.0	0.2573	ug/L	0.2573 ppb	13:05:28
3	Mn 257.610†	469.1	45.1	0.0496	ug/L	0.0496 ppb	13:05:48
3	Mo 202.031†	22.0	3.6	0.2268	ug/L	0.2268 ppb	13:05:48
3	Ni 231.604†	96.7	9.8	0.2258	ug/L	0.2258 ppb	13:05:48
3	P 214.914†	225.9	1.5	0.8286	ug/L	0.8286 ppb	13:05:48
3	Pb 220.353†	-48.5	20.1	2.2709	ug/L	2.2709 ppb	13:05:48
3	S 181.975 Axial†	40.5	-1.3	-1.7683	ug/L	-1.7683 ppb	13:05:48
3	Sb 206.836†	35.0	0.7	0.2079	ug/L	0.2079 ppb	13:05:48
3	Se 196.026†	-15.1	13.8	7.9618	ug/L	7.9618 ppb	13:05:48
3	Si 251.611†	545.0	93.3	2.7804	ug/L	2.7804 ppb	13:05:48
3	Sn 189.927†	2.6	-2.4	-0.3905	ug/L	-0.3905 ppb	13:05:48
3	Ti 334.940†	-944.1	174.4	0.2764	ug/L	0.2764 ppb	13:05:28
3	Tl 190.801†	-31.8	0.9	0.2397	ug/L	0.2397 ppb	13:05:48
3	U 409.014†	-2197.1	212.9	5.8648	ug/L	5.8648 ppb	13:05:28
3	V 292.402†	-1294.3	68.9	0.4674	ug/L	0.4674 ppb	13:05:28
3	Zn 213.857†	659.7	35.5	0.3111	ug/L	0.3111 ppb	13:05:48
3	SiO2†	559.8	90.3	5.7599	ug/L	5.7599 ppb	13:06:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905040.0	100.42	%	0.455				0.45%
Sc Radial	5830.5	99.8	%	0.94				0.94%
Y 371.029	753654.7	100.34	%	0.448				0.45%
Y RADIAL	6244.2	99.31	%	1.004				1.01%
Ag 328.068†	51.7	0.2337	ug/L	0.27875	0.2337	ppb	0.27875	119.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.6	-5.9494	ug/L	0.89589	-5.9494	ppb	0.89589	15.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.9	1.9341	ug/L	2.54769	1.9341	ppb	2.54769	131.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	121.4	2.5448	ug/L	0.27833	2.5448	ppb	0.27833	10.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.5	0.0197	ug/L	0.09280	0.0197	ppb	0.09280	470.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	99.1	0.0363	ug/L	0.01641	0.0363	ppb	0.01641	45.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.4	16.815	ug/L	2.4656	16.815	ppb	2.4656	14.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.0      0.0735 ug/L       0.11483      0.0735 ppb        0.11483 156.20%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                6.8      0.1283 ug/L       0.01552      0.1283 ppb        0.01552  12.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.2      0.0131 ug/L       0.11408      0.0131 ppb        0.11408 872.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -1.2     -0.0035 ug/L       0.25223     -0.0035 ppb        0.25223 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.0      0.1790 ug/L       2.34180      0.1790 ppb        2.34180 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        196.8     34.892 ug/L        5.9572     34.892 ppb         5.9572  17.07%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      3.8537 ug/L      79.15382      3.8537 ppb       79.15382 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               75.8      0.0808 ug/L       0.07169      0.0808 ppb        0.07169  88.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.9      0.1224 ug/L       0.23521      0.1224 ppb        0.23521 192.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        73.2     24.565 ug/L        7.4046     24.565 ppb         7.4046  30.14%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.1      0.0023 ug/L       0.24447      0.0023 ppb        0.24447 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -8.5     -4.9075 ug/L       6.40658     -4.9075 ppb        6.40658 130.55%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               16.5      1.8676 ug/L       0.40916      1.8676 ppb        0.40916  21.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.3188 ug/L       3.27610      0.3188 ppb        3.27610 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.2      0.0833 ug/L       0.16755      0.0833 ppb        0.16755 201.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               12.1      6.9750 ug/L       2.81675      6.9750 ppb        2.81675  40.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              114.2      3.4061 ug/L       0.88355      3.4061 ppb        0.88355  25.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.7      0.1087 ug/L       0.87675      0.1087 ppb        0.87675 806.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -0.9     -0.0056 ug/L       0.13359     -0.0056 ppb        0.13359 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               68.7      0.1095 ug/L       0.14767      0.1095 ppb        0.14767 134.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.1     -0.3221 ug/L       0.83232     -0.3221 ppb        0.83232 258.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                79.2      2.1827 ug/L       3.29335      2.1827 ppb        3.29335 150.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                64.4      0.4314 ug/L       0.32014      0.4314 ppb        0.32014  74.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               48.1      0.4203 ug/L       0.09507      0.4203 ppb        0.09507  22.62%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     84.4      5.3813 ug/L       0.76046      5.3813 ppb        0.76046  14.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 13:08:06 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120709A.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 143**
Sample ID: 1201982716|927388|1 **Date Collected: 12/8/2009 13:08:06**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201982716|927388|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5972.8	5972.8	102	%			13:10:00
1	Y RADIAL	6442.3	6442.3	102.5	%			13:10:00
1	Al 396.153Radial†	-6.3	14.3	9.8970	ug/L	9.8970	ppb	13:10:00
1	Ca 317.933Radial†	24.1	8.0	11.847	ug/L	11.847	ppb	13:10:20
1	Fe 238.204 Radial†	9.6	2.6	23.923	ug/L	23.923	ppb	13:10:20
1	K 766.490 Radial†	2298.0	-103.3	-18.343	ug/L	-18.343	ppb	13:10:00
1	Mg 279.077 IEC†	3.1	1.8	65.248	ug/L	65.248	ppb	13:10:20
1	Na 589.592 Radial†	-977.0	132.0	44.291	ug/L	44.291	ppb	13:10:00
1	Sr 421.552†	13.0	40.1	0.2496	ug/L	0.2496	ppb	13:10:00
1	Sc 361.383	936699.4	936699.4	103.93	%			13:11:17
1	Y 371.029	775339.5	775339.5	103.23	%			13:11:17
1	Ag 328.068†	318.9	14.1	0.0709	ug/L	0.0709	ppb	13:11:22
1	As 188.979†	-15.4	9.4	3.7010	ug/L	3.7010	ppb	13:11:42
1	B 249.677†	-453.1	94.7	1.9835	ug/L	1.9835	ppb	13:11:42
1	Ba 233.527†	-9.1	-0.3	-0.0004	ug/L	-0.0004	ppb	13:11:42
1	Be 313.107†	-5202.0	107.8	0.0398	ug/L	0.0398	ppb	13:11:22
1	Cd 226.502†	-200.1	2.5	0.0245	ug/L	0.0245	ppb	13:11:42
1	Co 228.616†	-70.5	-2.4	-0.0451	ug/L	-0.0451	ppb	13:11:42
1	Cr 267.716†	98.1	15.7	0.1652	ug/L	0.1652	ppb	13:11:42
1	Cu 324.752†	6820.0	-194.7	-0.5559	ug/L	-0.5559	ppb	13:11:22
1	Mn 257.610†	474.0	33.8	0.0372	ug/L	0.0372	ppb	13:11:42
1	Mo 202.031†	25.7	6.4	0.4073	ug/L	0.4073	ppb	13:11:42
1	Ni 231.604†	100.7	10.3	0.2386	ug/L	0.2386	ppb	13:11:42
1	P 214.914†	229.4	-2.8	-1.5642	ug/L	-1.5642	ppb	13:11:42
1	Pb 220.353†	-49.9	20.5	2.3167	ug/L	2.3167	ppb	13:11:42
1	S 181.975 Axial†	38.7	-4.3	-6.0593	ug/L	-6.0593	ppb	13:11:42
1	Sb 206.836†	41.3	5.5	1.7494	ug/L	1.7494	ppb	13:11:42
1	Se 196.026†	-26.8	3.0	1.8104	ug/L	1.8104	ppb	13:11:42
1	Si 251.611†	741.1	263.4	7.8838	ug/L	7.8838	ppb	13:11:42
1	Sn 189.927†	5.2	0.0	0.0064	ug/L	0.0064	ppb	13:11:42
1	Ti 334.940†	-979.0	172.9	0.2752	ug/L	0.2752	ppb	13:11:22
1	Tl 190.801†	-31.6	2.1	0.5901	ug/L	0.5901	ppb	13:11:42
1	U 409.014†	-2381.6	110.4	3.0366	ug/L	3.0366	ppb	13:11:17
1	V 292.402†	-1325.2	83.3	0.5596	ug/L	0.5596	ppb	13:11:22
1	Zn 213.857†	845.7	191.9	1.6709	ug/L	1.6709	ppb	13:11:42
1	SiO2†	751.2	255.3	16.376	ug/L	16.376	ppb	13:12:48
2	Sc Radial	6100.2	6100.2	104	%			13:10:25
2	Y RADIAL	6506.3	6506.3	103.5	%			13:10:25
2	Al 396.153Radial†	7.8	27.9	19.383	ug/L	19.383	ppb	13:10:25
2	Ca 317.933Radial†	22.5	5.9	8.7412	ug/L	8.7412	ppb	13:10:45
2	Fe 238.204 Radial†	7.7	0.5	4.9718	ug/L	4.9718	ppb	13:10:45
2	K 766.490 Radial†	2330.8	-118.8	-21.085	ug/L	-21.085	ppb	13:10:25
2	Mg 279.077 IEC†	2.1	0.9	31.419	ug/L	31.419	ppb	13:10:45
2	Na 589.592 Radial†	-1011.5	118.9	39.907	ug/L	39.907	ppb	13:10:25
2	Sr 421.552†	4.7	31.8	0.1982	ug/L	0.1982	ppb	13:10:25
2	Sc 361.383	944759.7	944759.7	104.83	%			13:11:47
2	Y 371.029	782531.0	782531.0	104.19	%			13:11:47

2	Ag 328.068†	335.4	27.3	0.1230 ug/L	0.1230 ppb	13:11:52
2	As 188.979†	-21.7	3.5	1.3921 ug/L	1.3921 ppb	13:12:12
2	B 249.677†	-454.7	96.9	2.0324 ug/L	2.0324 ppb	13:12:12
2	Ba 233.527†	-14.8	-5.7	-0.0406 ug/L	-0.0406 ppb	13:12:12
2	Be 313.107†	-5167.5	183.4	0.0673 ug/L	0.0673 ppb	13:11:52
2	Cd 226.502†	-184.8	18.8	0.1987 ug/L	0.1987 ppb	13:12:12
2	Co 228.616†	-68.3	0.3	0.0053 ug/L	0.0053 ppb	13:12:12
2	Cr 267.716†	88.9	6.2	0.0643 ug/L	0.0643 ppb	13:12:12
2	Cu 324.752†	6798.9	-270.8	-0.7748 ug/L	-0.7748 ppb	13:11:52
2	Mn 257.610†	460.0	16.5	0.0175 ug/L	0.0175 ppb	13:12:12
2	Mo 202.031†	22.6	3.2	0.2067 ug/L	0.2067 ppb	13:12:12
2	Ni 231.604†	91.2	0.4	0.0094 ug/L	0.0094 ppb	13:12:12
2	P 214.914†	210.9	-22.4	-12.784 ug/L	-12.784 ppb	13:12:12
2	Pb 220.353†	-58.4	12.7	1.4435 ug/L	1.4435 ppb	13:12:12
2	S 181.975 Axial†	43.4	-0.2	-0.2148 ug/L	-0.2148 ppb	13:12:12
2	Sb 206.836†	38.7	2.6	0.8279 ug/L	0.8279 ppb	13:12:12
2	Se 196.026†	-21.2	8.6	4.9824 ug/L	4.9824 ppb	13:12:12
2	Si 251.611†	727.0	243.8	7.3040 ug/L	7.3040 ppb	13:12:12
2	Sn 189.927†	1.1	-4.0	-0.6500 ug/L	-0.6500 ppb	13:12:12
2	Ti 334.940†	-1018.6	143.2	0.2266 ug/L	0.2266 ppb	13:11:52
2	Tl 190.801†	-40.5	-6.1	-1.7070 ug/L	-1.7070 ppb	13:12:12
2	U 409.014†	-2313.8	194.5	5.3585 ug/L	5.3585 ppb	13:11:47
2	V 292.402†	-1315.2	103.7	0.6979 ug/L	0.6979 ppb	13:11:52
2	Zn 213.857†	840.6	180.1	1.5725 ug/L	1.5725 ppb	13:12:12
2	SiO2†	730.6	229.5	14.732 ug/L	14.732 ppb	13:12:53
3	Sc Radial	6075.3	6075.3	104 %		13:10:50
3	Y RADIAL	6522.5	6522.5	103.7 %		13:10:50
3	Al 396.153Radial†	-10.2	10.6	7.3775 ug/L	7.3775 ppb	13:10:50
3	Ca 317.933Radial†	17.8	1.6	2.2992 ug/L	2.2992 ppb	13:11:10
3	Fe 238.204 Radial†	7.2	0.1	1.1662 ug/L	1.1662 ppb	13:11:10
3	K 766.490 Radial†	2326.5	-113.8	-20.200 ug/L	-20.200 ppb	13:10:50
3	Mg 279.077 IEC†	2.5	1.2	43.210 ug/L	43.210 ppb	13:11:10
3	Na 589.592 Radial†	-991.6	134.1	44.993 ug/L	44.993 ppb	13:10:50
3	Sr 421.552†	9.5	36.5	0.2271 ug/L	0.2271 ppb	13:10:50
3	Sc 361.383	958027.1	958027.1	106.30 %		13:12:17
3	Y 371.029	794032.9	794032.9	105.72 %		13:12:17
3	Ag 328.068†	332.7	20.3	0.0897 ug/L	0.0897 ppb	13:12:22
3	As 188.979†	-15.2	9.8	3.8870 ug/L	3.8870 ppb	13:12:42
3	B 249.677†	-397.2	157.0	3.2924 ug/L	3.2924 ppb	13:12:42
3	Ba 233.527†	-5.4	3.4	0.0266 ug/L	0.0266 ppb	13:12:42
3	Be 313.107†	-5106.9	308.6	0.1130 ug/L	0.1130 ppb	13:12:22
3	Cd 226.502†	-191.9	14.5	0.1536 ug/L	0.1536 ppb	13:12:42
3	Co 228.616†	-69.7	-0.2	-0.0039 ug/L	-0.0039 ppb	13:12:42
3	Cr 267.716†	88.0	4.1	0.0424 ug/L	0.0424 ppb	13:12:42
3	Cu 324.752†	6896.8	-268.5	-0.7684 ug/L	-0.7684 ppb	13:12:22
3	Mn 257.610†	481.0	30.2	0.0315 ug/L	0.0315 ppb	13:12:42
3	Mo 202.031†	20.4	0.8	0.0517 ug/L	0.0517 ppb	13:12:42
3	Ni 231.604†	96.0	3.7	0.0864 ug/L	0.0864 ppb	13:12:42
3	P 214.914†	227.4	-9.5	-5.3776 ug/L	-5.3776 ppb	13:12:42
3	Pb 220.353†	-48.8	22.5	2.5470 ug/L	2.5470 ppb	13:12:42
3	S 181.975 Axial†	44.5	0.3	0.4024 ug/L	0.4024 ppb	13:12:42
3	Sb 206.836†	41.8	5.1	1.6071 ug/L	1.6071 ppb	13:12:42
3	Se 196.026†	-26.5	3.9	2.2770 ug/L	2.2770 ppb	13:12:42
3	Si 251.611†	726.4	233.7	7.0018 ug/L	7.0018 ppb	13:12:42
3	Sn 189.927†	6.0	0.7	0.1129 ug/L	0.1129 ppb	13:12:42
3	Ti 334.940†	-1024.1	151.5	0.2391 ug/L	0.2391 ppb	13:12:22
3	Tl 190.801†	-28.6	5.6	1.5720 ug/L	1.5720 ppb	13:12:42
3	U 409.014†	-2312.5	226.4	6.2358 ug/L	6.2358 ppb	13:12:17
3	V 292.402†	-1324.6	112.2	0.7547 ug/L	0.7547 ppb	13:12:22
3	Zn 213.857†	852.9	180.6	1.5764 ug/L	1.5764 ppb	13:12:42
3	SiO2†	757.5	245.1	15.737 ug/L	15.737 ppb	13:12:58

Mean Data: 1201982716|927388|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	946495.4	105.02	%	1.195				1.14%
Sc Radial	6049.4	104	%	1.2				1.12%
Y 371.029	783967.8	104.38	%	1.255				1.20%
Y RADIAL	6490.4	103.2	%	0.67				0.65%
Ag 328.068†	20.5	0.0945	ug/L	0.02640	0.0945	ppb	0.02640	27.94%

Al 396.153Radial†	17.6	12.219	ug/L	6.3309	12.219	ppb	6.3309	51.81%
As 188.979†	7.6	2.9934	ug/L	1.38987	2.9934	ppb	1.38987	46.43%
B 249.677†	116.2	2.4361	ug/L	0.74198	2.4361	ppb	0.74198	30.46%
Ba 233.527†	-0.9	-0.0048	ug/L	0.03378	-0.0048	ppb	0.03378	706.16%
Be 313.107†	200.0	0.0734	ug/L	0.03694	0.0734	ppb	0.03694	50.35%
Ca 317.933Radial†	5.2	7.6292	ug/L	4.87010	7.6292	ppb	4.87010	63.84%
Cd 226.502†	12.0	0.1256	ug/L	0.09045	0.1256	ppb	0.09045	72.02%
Co 228.616†	-0.8	-0.0146	ug/L	0.02684	-0.0146	ppb	0.02684	184.19%
Cr 267.716†	8.7	0.0907	ug/L	0.06549	0.0907	ppb	0.06549	72.24%
Cu 324.752†	-244.7	-0.6997	ug/L	0.12456	-0.6997	ppb	0.12456	17.80%
Fe 238.204 Radial†	1.1	10.020	ug/L	12.1894	10.020	ppb	12.1894	121.65%
K 766.490 Radial†	-112.0	-19.876	ug/L	1.3995	-19.876	ppb	1.3995	7.04%
Mg 279.077 IEC†	1.3	46.626	ug/L	17.1708	46.626	ppb	17.1708	36.83%
Mn 257.610†	26.8	0.0287	ug/L	0.01013	0.0287	ppb	0.01013	35.24%
Mo 202.031†	3.5	0.2219	ug/L	0.17833	0.2219	ppb	0.17833	80.37%
Na 589.592 Radial†	128.3	43.063	ug/L	2.7562	43.063	ppb	2.7562	6.40%
Ni 231.604†	4.8	0.1115	ug/L	0.11666	0.1115	ppb	0.11666	104.63%
P 214.914†	-11.6	-6.5753	ug/L	5.70505	-6.5753	ppb	5.70505	86.76%
Pb 220.353†	18.6	2.1024	ug/L	0.58214	2.1024	ppb	0.58214	27.69%
S 181.975 Axial†	-1.4	-1.9572	ug/L	3.56589	-1.9572	ppb	3.56589	182.19%
Sb 206.836†	4.4	1.3948	ug/L	0.49609	1.3948	ppb	0.49609	35.57%
Se 196.026†	5.2	3.0233	ug/L	1.71262	3.0233	ppb	1.71262	56.65%
Si 251.611†	247.0	7.3965	ug/L	0.44822	7.3965	ppb	0.44822	6.06%
Sn 189.927†	-1.1	-0.1769	ug/L	0.41320	-0.1769	ppb	0.41320	233.57%
Sr 421.552†	36.1	0.2250	ug/L	0.02576	0.2250	ppb	0.02576	11.45%
Ti 334.940†	155.9	0.2470	ug/L	0.02522	0.2470	ppb	0.02522	10.21%
Tl 190.801†	0.5	0.1517	ug/L	1.68288	0.1517	ppb	1.68288	>999.9%
U 409.014†	177.1	4.8770	ug/L	1.65305	4.8770	ppb	1.65305	33.90%
V 292.402†	99.8	0.6707	ug/L	0.10036	0.6707	ppb	0.10036	14.96%
Zn 213.857†	184.2	1.6066	ug/L	0.05569	1.6066	ppb	0.05569	3.47%
SiO2†	243.3	15.615	ug/L	0.8289	15.615	ppb	0.8289	5.31%

Sequence No.: 2
Sample ID: 1201982721|927388|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 144
Date Collected: 12/8/2009 13:15:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201982721|927388|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5864.1	5864.1	100	%			13:17:04
1	Y RADIAL	6224.7	6224.7	99.00	%			13:17:04
1	Al 396.153Radial†	7341.7	7336.8	5074.6	ug/L	5074.6	ppb	13:17:04
1	Ca 317.933Radial†	3503.4	3475.8	5123.2	ug/L	5123.2	ppb	13:17:24
1	Fe 238.204 Radial†	558.0	549.3	5158.1	ug/L	5158.1	ppb	13:17:24
1	K 766.490 Radial†	31758.1	29297.2	5188.8	ug/L	5188.8	ppb	13:17:04
1	Mg 279.077 IEC†	150.6	149.0	5260.9	ug/L	5260.9	ppb	13:17:24
1	Na 589.592 Radial†	13963.0	15002.9	5034.7	ug/L	5034.7	ppb	13:17:04
1	Sr 421.552†	83481.3	83221.7	518.24	ug/L	518.24	ppb	13:17:04
1	Sc 361.383	907888.3	907888.3	100.73	%			13:18:23
1	Y 371.029	741935.6	741935.6	98.782	%			13:18:23
1	Ag 328.068†	113351.7	112231.9	511.44	ug/L	511.44	ppb	13:18:23
1	As 188.979†	1275.8	1290.7	514.55	ug/L	514.55	ppb	13:18:43
1	B 249.677†	23044.3	23406.8	488.91	ug/L	488.91	ppb	13:18:23
1	Ba 233.527†	69782.2	69281.5	514.78	ug/L	514.78	ppb	13:18:23
1	Be 313.107†	1387999.1	1382985.0	505.13	ug/L	505.13	ppb	13:18:23
1	Cd 226.502†	48171.8	48015.4	507.40	ug/L	507.40	ppb	13:18:23
1	Co 228.616†	26478.2	26350.4	500.24	ug/L	500.24	ppb	13:18:43
1	Cr 267.716†	47926.4	47498.1	499.42	ug/L	499.42	ppb	13:18:23
1	Cu 324.752†	183834.8	175736.8	503.17	ug/L	503.17	ppb	13:18:23
1	Mn 257.610†	480451.4	476523.6	508.74	ug/L	508.74	ppb	13:18:23
1	Mo 202.031†	8055.5	7978.3	507.20	ug/L	507.20	ppb	13:18:43
1	Ni 231.604†	22137.5	21889.5	506.56	ug/L	506.56	ppb	13:18:43
1	P 214.914†	1268.2	1035.5	521.45	ug/L	521.45	ppb	13:18:43
1	Pb 220.353†	4501.7	4537.3	514.49	ug/L	514.49	ppb	13:18:43
1	S 181.975 Axial†	3783.2	3714.0	5203.3	ug/L	5203.3	ppb	13:18:43
1	Sb 206.836†	1683.0	1636.5	525.76	ug/L	525.76	ppb	13:18:43
1	Se 196.026†	849.3	872.0	522.89	ug/L	522.89	ppb	13:18:43
1	Si 251.611†	168141.5	166465.0	4971.0	ug/L	4971.0	ppb	13:18:23
1	Sn 189.927†	3274.4	3245.5	532.00	ug/L	532.00	ppb	13:18:43
1	Ti 334.940†	328439.0	327157.5	521.95	ug/L	521.95	ppb	13:18:23
1	Tl 190.801†	1804.9	1824.2	514.34	ug/L	514.34	ppb	13:18:43
1	U 409.014†	15956.9	18242.3	500.91	ug/L	500.91	ppb	13:18:23
1	V 292.402†	74988.9	75800.2	507.44	ug/L	507.44	ppb	13:18:23
1	Zn 213.857†	58584.1	57534.8	498.14	ug/L	498.14	ppb	13:18:23
1	SiO2†	171168.1	169451.8	10843	ug/L	10843	ppb	13:19:43
2	Sc Radial	5981.8	5981.8	102	%			13:17:29
2	Y RADIAL	6375.0	6375.0	101.4	%			13:17:29
2	Al 396.153Radial†	7468.3	7316.5	5060.7	ug/L	5060.7	ppb	13:17:29
2	Ca 317.933Radial†	3511.5	3415.0	5033.5	ug/L	5033.5	ppb	13:17:49
2	Fe 238.204 Radial†	566.8	546.9	5135.9	ug/L	5135.9	ppb	13:17:49
2	K 766.490 Radial†	32336.1	29239.0	5178.5	ug/L	5178.5	ppb	13:17:29
2	Mg 279.077 IEC†	152.2	147.5	5209.7	ug/L	5209.7	ppb	13:17:49
2	Na 589.592 Radial†	14160.3	14921.8	5007.5	ug/L	5007.5	ppb	13:17:29
2	Sr 421.552†	85169.1	83233.1	518.31	ug/L	518.31	ppb	13:17:29
2	Sc 361.383	916334.6	916334.6	101.67	%			13:18:50
2	Y 371.029	748807.3	748807.3	99.697	%			13:18:50
2	Ag 328.068†	114489.4	112313.7	511.81	ug/L	511.81	ppb	13:18:50
2	As 188.979†	1276.1	1279.3	510.08	ug/L	510.08	ppb	13:19:10
2	B 249.677†	23385.9	23532.0	491.55	ug/L	491.55	ppb	13:18:50
2	Ba 233.527†	70570.3	69418.2	515.79	ug/L	515.79	ppb	13:18:50
2	Be 313.107†	1401843.2	1383901.0	505.46	ug/L	505.46	ppb	13:18:50
2	Cd 226.502†	48609.3	48004.9	507.29	ug/L	507.29	ppb	13:18:50
2	Co 228.616†	26558.5	26187.1	497.13	ug/L	497.13	ppb	13:19:10
2	Cr 267.716†	48422.1	47547.1	499.93	ug/L	499.93	ppb	13:18:50
2	Cu 324.752†	185927.3	176112.8	504.25	ug/L	504.25	ppb	13:18:50
2	Mn 257.610†	485695.7	477285.4	509.55	ug/L	509.55	ppb	13:18:50
2	Mo 202.031†	8070.3	7919.3	503.44	ug/L	503.44	ppb	13:19:10
2	Ni 231.604†	22196.9	21745.3	503.23	ug/L	503.23	ppb	13:19:10

2	P 214.914†	1247.4	1003.4	502.72 ug/L	502.72 ppb	13:19:10
2	Pb 220.353†	4538.0	4531.8	513.86 ug/L	513.86 ppb	13:19:10
2	S 181.975 Axial†	3789.0	3685.1	5162.9 ug/L	5162.9 ppb	13:19:10
2	Sb 206.836†	1696.7	1634.6	524.99 ug/L	524.99 ppb	13:19:10
2	Se 196.026†	866.0	880.5	527.77 ug/L	527.77 ppb	13:19:10
2	Si 251.611†	170003.1	166757.5	4979.9 ug/L	4979.9 ppb	13:18:50
2	Sn 189.927†	3274.7	3215.9	527.13 ug/L	527.13 ppb	13:19:10
2	Ti 334.940†	332141.1	327793.5	522.96 ug/L	522.96 ppb	13:18:50
2	Tl 190.801†	1796.5	1799.5	507.45 ug/L	507.45 ppb	13:19:10
2	U 409.014†	16061.2	18198.9	499.72 ug/L	499.72 ppb	13:18:50
2	V 292.402†	75813.6	75925.1	508.21 ug/L	508.21 ppb	13:18:50
2	Zn 213.857†	59093.3	57499.5	497.85 ug/L	497.85 ppb	13:18:50
2	SiO2†	172185.2	168885.9	10807 ug/L	10807 ppb	13:19:49
3	Sc Radial	5981.3	5981.3	102 %		13:17:54
3	Y RADIAL	6369.3	6369.3	101.3 %		13:17:54
3	Al 396.153Radial†	7499.6	7347.7	5082.6 ug/L	5082.6 ppb	13:17:54
3	Ca 317.933Radial†	3510.1	3413.9	5031.9 ug/L	5031.9 ppb	13:18:14
3	Fe 238.204 Radial†	566.2	546.4	5130.8 ug/L	5130.8 ppb	13:18:14
3	K 766.490 Radial†	32490.5	29392.4	5205.7 ug/L	5205.7 ppb	13:17:54
3	Mg 279.077 IEC†	153.1	148.4	5241.7 ug/L	5241.7 ppb	13:18:14
3	Na 589.592 Radial†	14246.6	15007.2	5036.1 ug/L	5036.1 ppb	13:17:54
3	Sr 421.552†	85266.2	83334.9	518.94 ug/L	518.94 ppb	13:17:54
3	Sc 361.383	927975.4	927975.4	102.96 %		13:19:18
3	Y 371.029	758782.7	758782.7	101.02 %		13:19:18
3	Ag 328.068†	115930.9	112301.2	511.75 ug/L	511.75 ppb	13:19:18
3	As 188.979†	1269.2	1256.8	501.18 ug/L	501.18 ppb	13:19:38
3	B 249.677†	23837.6	23682.2	494.72 ug/L	494.72 ppb	13:19:18
3	Ba 233.527†	71170.4	69130.3	513.65 ug/L	513.65 ppb	13:19:18
3	Be 313.107†	1420858.9	1385073.4	505.89 ug/L	505.89 ppb	13:19:18
3	Cd 226.502†	48965.8	47751.4	504.61 ug/L	504.61 ppb	13:19:18
3	Co 228.616†	26512.1	25814.4	490.04 ug/L	490.04 ppb	13:19:38
3	Cr 267.716†	48892.7	47406.7	498.46 ug/L	498.46 ppb	13:19:18
3	Cu 324.752†	188853.6	176660.8	505.81 ug/L	505.81 ppb	13:19:18
3	Mn 257.610†	490353.1	475816.3	507.99 ug/L	507.99 ppb	13:19:18
3	Mo 202.031†	8070.0	7819.4	497.10 ug/L	497.10 ppb	13:19:38
3	Ni 231.604†	22175.9	21451.0	496.42 ug/L	496.42 ppb	13:19:38
3	P 214.914†	1245.4	986.0	492.40 ug/L	492.40 ppb	13:19:38
3	Pb 220.353†	4502.9	4441.8	503.67 ug/L	503.67 ppb	13:19:38
3	S 181.975 Axial†	3778.5	3628.2	5083.0 ug/L	5083.0 ppb	13:19:38
3	Sb 206.836†	1683.9	1601.2	514.22 ug/L	514.22 ppb	13:19:38
3	Se 196.026†	861.5	865.5	519.05 ug/L	519.05 ppb	13:19:38
3	Si 251.611†	172013.3	166612.4	4975.6 ug/L	4975.6 ppb	13:19:18
3	Sn 189.927†	3281.3	3181.9	521.57 ug/L	521.57 ppb	13:19:38
3	Ti 334.940†	336159.7	327598.5	522.65 ug/L	522.65 ppb	13:19:18
3	Tl 190.801†	1802.0	1782.7	502.75 ug/L	502.75 ppb	13:19:38
3	U 409.014†	16328.5	18260.3	501.42 ug/L	501.42 ppb	13:19:18
3	V 292.402†	76586.9	75740.8	506.90 ug/L	506.90 ppb	13:19:18
3	Zn 213.857†	59622.6	57284.6	496.02 ug/L	496.02 ppb	13:19:18
3	SiO2†	171630.0	166222.3	10637 ug/L	10637 ppb	13:19:54

Mean Data: 1201982721|927388|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917399.4	101.79	%	1.119				1.10%
Sc Radial	5942.4	102	%	1.2				1.14%
Y 371.029	749841.9	99.835	%	1.1278				1.13%
Y RADIAL	6323.0	100.6	%	1.35				1.35%
Ag 328.068†	112282.3	511.67	ug/L	0.197	511.67	ppb	0.197	0.04%
Al 396.153Radial†	7333.7	5072.7	ug/L	11.10	5072.7	ppb	11.10	0.22%
As 188.979†	1275.6	508.61	ug/L	6.804	508.61	ppb	6.804	1.34%
B 249.677†	23540.3	491.73	ug/L	2.906	491.73	ppb	2.906	0.59%
Ba 233.527†	69276.6	514.74	ug/L	1.069	514.74	ppb	1.069	0.21%
Be 313.107†	1383986.4	505.49	ug/L	0.382	505.49	ppb	0.382	0.08%
Ca 317.933Radial†	3434.9	5062.8	ug/L	52.23	5062.8	ppb	52.23	1.03%
Cd 226.502†	47923.9	506.43	ug/L	1.583	506.43	ppb	1.583	0.31%
Co 228.616†	26117.3	495.80	ug/L	5.228	495.80	ppb	5.228	1.05%
Cr 267.716†	47484.0	499.27	ug/L	0.749	499.27	ppb	0.749	0.15%
Cu 324.752†	176170.1	504.41	ug/L	1.329	504.41	ppb	1.329	0.26%
Fe 238.204 Radial†	547.5	5141.6	ug/L	14.51	5141.6	ppb	14.51	0.28%
K 766.490 Radial†	29309.5	5191.0	ug/L	13.73	5191.0	ppb	13.73	0.26%

Mg 279.077 IEC†	148.3	5237.4	ug/L	25.87	5237.4	ppb	25.87	0.49%
Mn 257.610†	476541.8	508.76	ug/L	0.784	508.76	ppb	0.784	0.15%
Mo 202.031†	7905.7	502.58	ug/L	5.106	502.58	ppb	5.106	1.02%
Na 589.592 Radial†	14977.3	5026.1	ug/L	16.15	5026.1	ppb	16.15	0.32%
Ni 231.604†	21695.3	502.07	ug/L	5.171	502.07	ppb	5.171	1.03%
P 214.914†	1008.3	505.52	ug/L	14.726	505.52	ppb	14.726	2.91%
Pb 220.353†	4503.6	510.67	ug/L	6.072	510.67	ppb	6.072	1.19%
S 181.975 Axial†	3675.8	5149.7	ug/L	61.20	5149.7	ppb	61.20	1.19%
Sb 206.836†	1624.1	521.66	ug/L	6.454	521.66	ppb	6.454	1.24%
Se 196.026†	872.7	523.23	ug/L	4.369	523.23	ppb	4.369	0.84%
Si 251.611†	166611.6	4975.5	ug/L	4.42	4975.5	ppb	4.42	0.09%
Sn 189.927†	3214.4	526.90	ug/L	5.219	526.90	ppb	5.219	0.99%
Sr 421.552†	83263.2	518.49	ug/L	0.388	518.49	ppb	0.388	0.07%
Ti 334.940†	327516.5	522.52	ug/L	0.517	522.52	ppb	0.517	0.10%
Tl 190.801†	1802.1	508.18	ug/L	5.826	508.18	ppb	5.826	1.15%
U 409.014†	18233.8	500.68	ug/L	0.870	500.68	ppb	0.870	0.17%
V 292.402†	75822.0	507.51	ug/L	0.655	507.51	ppb	0.655	0.13%
Zn 213.857†	57439.6	497.34	ug/L	1.152	497.34	ppb	1.152	0.23%
SiO2†	168186.7	10762	ug/L	110.4	10762	ppb	110.4	1.03%

Sequence No.: 3
Sample ID: 241713001|927388|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 145
Date Collected: 12/8/2009 13:22:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241713001|927388|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6087.2	6087.2	104	%			13:24:00
1	Y RADIAL	6547.4	6547.4	104.1	%			13:24:00
1	Al 396.153Radial†	486.1	487.0	338.28	ug/L	338.28	ppb	13:24:00
1	Ca 317.933Radial†	123.5	103.0	151.84	ug/L	151.84	ppb	13:24:20
1	Fe 238.204 Radial†	44.1	35.5	332.22	ug/L	332.22	ppb	13:24:20
1	K 766.490 Radial†	2754.9	293.1	51.792	ug/L	51.792	ppb	13:24:00
1	Mg 279.077 IEC†	6.9	5.4	191.92	ug/L	191.92	ppb	13:24:20
1	Na 589.592 Radial†	-230.5	866.7	290.83	ug/L	290.83	ppb	13:24:00
1	Sr 421.552†	156.8	177.9	1.1066	ug/L	1.1066	ppb	13:24:00
1	Sc 361.383	917505.6	917505.6	101.80	%			13:25:16
1	Y 371.029	762521.6	762521.6	101.52	%			13:25:16
1	Ag 328.068†	369.1	69.8	0.4160	ug/L	0.4160	ppb	13:25:16
1	As 188.979†	-25.5	-0.9	-0.2185	ug/L	-0.2185	ppb	13:25:37
1	B 249.677†	-320.1	216.3	4.4909	ug/L	4.4909	ppb	13:25:37
1	Ba 233.527†	418.8	419.9	3.1259	ug/L	3.1259	ppb	13:25:37
1	Be 313.107†	-5291.1	-84.4	-0.0144	ug/L	-0.0144	ppb	13:25:16
1	Cd 226.502†	-183.1	15.2	0.1292	ug/L	0.1292	ppb	13:25:37
1	Co 228.616†	-63.1	3.5	0.0443	ug/L	0.0443	ppb	13:25:37
1	Cr 267.716†	546.6	458.3	4.8158	ug/L	4.8158	ppb	13:25:37
1	Cu 324.752†	7007.2	126.4	0.3787	ug/L	0.3787	ppb	13:25:16
1	Mn 257.610†	7748.1	7188.6	7.6979	ug/L	7.6979	ppb	13:25:16
1	Mo 202.031†	26.3	7.5	0.5000	ug/L	0.5000	ppb	13:25:37
1	Ni 231.604†	179.8	90.1	2.0866	ug/L	2.0866	ppb	13:25:37
1	P 214.914†	236.1	8.4	4.6444	ug/L	4.6444	ppb	13:25:37
1	Pb 220.353†	-61.5	8.1	0.9612	ug/L	0.9612	ppb	13:25:37
1	S 181.975 Axial†	49.2	6.7	9.3911	ug/L	9.3911	ppb	13:25:37
1	Sb 206.836†	38.5	3.6	0.9987	ug/L	0.9987	ppb	13:25:37
1	Se 196.026†	-24.2	5.0	4.0113	ug/L	4.0113	ppb	13:25:37
1	Si 251.611†	25474.0	24573.4	735.60	ug/L	735.60	ppb	13:25:16
1	Sn 189.927†	-0.0	-5.0	-0.8026	ug/L	-0.8026	ppb	13:25:37
1	Ti 334.940†	4164.2	5205.4	8.3095	ug/L	8.3095	ppb	13:25:16
1	Tl 190.801†	-34.2	-1.1	-0.1800	ug/L	-0.1800	ppb	13:25:37
1	U 409.014†	-2149.0	290.8	7.9608	ug/L	7.9608	ppb	13:25:16
1	V 292.402†	-1256.2	124.4	0.7870	ug/L	0.7870	ppb	13:25:16
1	Zn 213.857†	1284.6	640.0	5.5396	ug/L	5.5396	ppb	13:25:37
1	SiO2†	25541.5	24621.9	1579.4	ug/L	1579.4	ppb	13:26:33
2	Sc Radial	6110.2	6110.2	105	%			13:24:25
2	Y RADIAL	6570.5	6570.5	104.5	%			13:24:25
2	Al 396.153Radial†	507.6	505.9	351.37	ug/L	351.37	ppb	13:24:25
2	Ca 317.933Radial†	125.7	104.6	154.17	ug/L	154.17	ppb	13:24:45
2	Fe 238.204 Radial†	40.9	32.4	302.95	ug/L	302.95	ppb	13:24:45
2	K 766.490 Radial†	2765.2	293.0	51.771	ug/L	51.771	ppb	13:24:25
2	Mg 279.077 IEC†	4.4	3.1	108.95	ug/L	108.95	ppb	13:24:45
2	Na 589.592 Radial†	-250.3	848.6	284.76	ug/L	284.76	ppb	13:24:25
2	Sr 421.552†	146.2	167.2	1.0396	ug/L	1.0396	ppb	13:24:25
2	Sc 361.383	909708.2	909708.2	100.94	%			13:25:42
2	Y 371.029	756015.6	756015.6	100.66	%			13:25:42
2	Ag 328.068†	262.0	-33.2	-0.0578	ug/L	-0.0578	ppb	13:25:42
2	As 188.979†	-26.7	-2.3	-0.7733	ug/L	-0.7733	ppb	13:26:02
2	B 249.677†	-330.6	203.1	4.2189	ug/L	4.2189	ppb	13:26:02
2	Ba 233.527†	424.8	429.3	3.1952	ug/L	3.1952	ppb	13:26:02
2	Be 313.107†	-5118.9	41.6	0.0315	ug/L	0.0315	ppb	13:25:42
2	Cd 226.502†	-173.3	23.4	0.2183	ug/L	0.2183	ppb	13:26:02
2	Co 228.616†	-53.1	12.8	0.2209	ug/L	0.2209	ppb	13:26:02
2	Cr 267.716†	549.8	466.0	4.8970	ug/L	4.8970	ppb	13:26:02
2	Cu 324.752†	7076.6	254.2	0.7429	ug/L	0.7429	ppb	13:25:42
2	Mn 257.610†	7725.3	7231.3	7.7421	ug/L	7.7421	ppb	13:25:42
2	Mo 202.031†	22.7	4.1	0.2827	ug/L	0.2827	ppb	13:26:02
2	Ni 231.604†	173.7	85.6	1.9815	ug/L	1.9815	ppb	13:26:02

2	P 214.914†	217.7	-7.8	-4.7492 ug/L	-4.7492 ppb	13:26:02
2	Pb 220.353†	-62.2	6.8	0.8245 ug/L	0.8245 ppb	13:26:02
2	S 181.975 Axial†	51.0	9.0	12.508 ug/L	12.508 ppb	13:26:02
2	Sb 206.836†	32.2	-2.3	-0.8798 ug/L	-0.8798 ppb	13:26:02
2	Se 196.026†	-11.1	17.8	11.334 ug/L	11.334 ppb	13:26:02
2	Si 251.611†	25309.2	24624.6	737.13 ug/L	737.13 ppb	13:25:42
2	Sn 189.927†	2.4	-2.6	-0.4105 ug/L	-0.4105 ppb	13:26:02
2	Ti 334.940†	4141.2	5217.7	8.3299 ug/L	8.3299 ppb	13:25:42
2	Tl 190.801†	-27.4	5.3	1.6081 ug/L	1.6081 ppb	13:26:02
2	U 409.014†	-2187.8	234.3	6.4071 ug/L	6.4071 ppb	13:25:42
2	V 292.402†	-1220.0	149.7	0.9505 ug/L	0.9505 ppb	13:25:42
2	Zn 213.857†	1285.7	651.9	5.6491 ug/L	5.6491 ppb	13:26:02
2	SiO2†	25361.5	24658.6	1581.7 ug/L	1581.7 ppb	13:26:38
3	Sc Radial	5942.2	5942.2	102 %		13:24:50
3	Y RADIAL	6351.0	6351.0	101.0 %		13:24:50
3	Al 396.153Radial†	480.1	492.5	342.11 ug/L	342.11 ppb	13:24:50
3	Ca 317.933Radial†	124.6	107.0	157.65 ug/L	157.65 ppb	13:25:10
3	Fe 238.204 Radial†	41.0	33.5	313.36 ug/L	313.36 ppb	13:25:10
3	K 766.490 Radial†	2892.6	493.1	87.252 ug/L	87.252 ppb	13:24:50
3	Mg 279.077 IEC†	5.1	3.8	135.30 ug/L	135.30 ppb	13:25:10
3	Na 589.592 Radial†	-249.4	842.6	282.77 ug/L	282.77 ppb	13:24:50
3	Sr 421.552†	139.6	164.6	1.0236 ug/L	1.0236 ppb	13:24:50
3	Sc 361.383	919000.1	919000.1	101.97 %		13:26:07
3	Y 371.029	764807.9	764807.9	101.83 %		13:26:07
3	Ag 328.068†	297.2	-1.3	0.0879 ug/L	0.0879 ppb	13:26:07
3	As 188.979†	-26.1	-1.4	-0.4524 ug/L	-0.4524 ppb	13:26:27
3	B 249.677†	-350.0	187.4	3.8878 ug/L	3.8878 ppb	13:26:27
3	Ba 233.527†	437.2	437.2	3.2529 ug/L	3.2529 ppb	13:26:27
3	Be 313.107†	-5092.8	118.5	0.0595 ug/L	0.0595 ppb	13:26:07
3	Cd 226.502†	-175.6	22.9	0.2116 ug/L	0.2116 ppb	13:26:27
3	Co 228.616†	-48.4	18.0	0.3195 ug/L	0.3195 ppb	13:26:27
3	Cr 267.716†	521.4	432.7	4.5462 ug/L	4.5462 ppb	13:26:27
3	Cu 324.752†	7068.9	175.8	0.5190 ug/L	0.5190 ppb	13:26:07
3	Mn 257.610†	7781.8	7209.3	7.7192 ug/L	7.7192 ppb	13:26:07
3	Mo 202.031†	22.7	4.0	0.2742 ug/L	0.2742 ppb	13:26:27
3	Ni 231.604†	170.2	80.4	1.8611 ug/L	1.8611 ppb	13:26:27
3	P 214.914†	231.0	3.0	1.5046 ug/L	1.5046 ppb	13:26:27
3	Pb 220.353†	-56.2	13.3	1.5575 ug/L	1.5575 ppb	13:26:27
3	S 181.975 Axial†	54.1	11.5	16.045 ug/L	16.045 ppb	13:26:27
3	Sb 206.836†	43.9	8.8	2.6243 ug/L	2.6243 ppb	13:26:27
3	Se 196.026†	-28.1	1.3	1.7990 ug/L	1.7990 ppb	13:26:27
3	Si 251.611†	25441.9	24501.2	733.43 ug/L	733.43 ppb	13:26:07
3	Sn 189.927†	-0.7	-5.6	-0.9038 ug/L	-0.9038 ppb	13:26:27
3	Ti 334.940†	4166.8	5201.3	8.3039 ug/L	8.3039 ppb	13:26:07
3	Tl 190.801†	-37.1	-3.9	-0.9788 ug/L	-0.9788 ppb	13:26:27
3	U 409.014†	-2197.6	246.7	6.7464 ug/L	6.7464 ppb	13:26:07
3	V 292.402†	-1300.0	83.4	0.5123 ug/L	0.5123 ppb	13:26:07
3	Zn 213.857†	1294.4	647.6	5.6109 ug/L	5.6109 ppb	13:26:27
3	SiO2†	25603.2	24641.7	1580.6 ug/L	1580.6 ppb	13:26:43

Mean Data: 241713001|927388|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915404.7	101.57	%	0.554				0.55%
Sc Radial	6046.5	103	%	1.6				1.51%
Y 371.029	761115.0	101.34	%	0.607				0.60%
Y RADIAL	6489.6	103.2	%	1.92				1.86%
Ag 328.068†	11.8	0.1487	ug/L	0.24269	0.1487	ppb	0.24269	163.20%
Al 396.153Radial†	495.1	343.92	ug/L	6.731	343.92	ppb	6.731	1.96%
As 188.979†	-1.5	-0.4814	ug/L	0.27853	-0.4814	ppb	0.27853	57.86%
B 249.677†	202.3	4.1992	ug/L	0.30198	4.1992	ppb	0.30198	7.19%
Ba 233.527†	428.8	3.1913	ug/L	0.06354	3.1913	ppb	0.06354	1.99%
Be 313.107†	25.2	0.0255	ug/L	0.03734	0.0255	ppb	0.03734	146.24%
Ca 317.933Radial†	104.9	154.55	ug/L	2.928	154.55	ppb	2.928	1.89%
Cd 226.502†	20.5	0.1864	ug/L	0.04963	0.1864	ppb	0.04963	26.63%
Co 228.616†	11.4	0.1949	ug/L	0.13939	0.1949	ppb	0.13939	71.53%
Cr 267.716†	452.3	4.7530	ug/L	0.18363	4.7530	ppb	0.18363	3.86%
Cu 324.752†	185.5	0.5468	ug/L	0.18369	0.5468	ppb	0.18369	33.59%
Fe 238.204 Radial†	33.8	316.18	ug/L	14.841	316.18	ppb	14.841	4.69%
K 766.490 Radial†	359.7	63.605	ug/L	20.4790	63.605	ppb	20.4790	32.20%

Mg 279.077 IEC†	4.1	145.39	ug/L	42.396	145.39	ppb	42.396	29.16%
Mn 257.610†	7209.7	7.7197	ug/L	0.02208	7.7197	ppb	0.02208	0.29%
Mo 202.031†	5.2	0.3523	ug/L	0.12798	0.3523	ppb	0.12798	36.33%
Na 589.592 Radial†	852.6	286.12	ug/L	4.199	286.12	ppb	4.199	1.47%
Ni 231.604†	85.4	1.9764	ug/L	0.11285	1.9764	ppb	0.11285	5.71%
P 214.914†	1.2	0.4666	ug/L	4.78208	0.4666	ppb	4.78208	>999.9%
Pb 220.353†	9.4	1.1144	ug/L	0.38982	1.1144	ppb	0.38982	34.98%
S 181.975 Axial†	9.1	12.648	ug/L	3.3289	12.648	ppb	3.3289	26.32%
Sb 206.836†	3.4	0.9144	ug/L	1.75355	0.9144	ppb	1.75355	191.77%
Se 196.026†	8.1	5.7148	ug/L	4.99064	5.7148	ppb	4.99064	87.33%
Si 251.611†	24566.4	735.39	ug/L	1.860	735.39	ppb	1.860	0.25%
Sn 189.927†	-4.4	-0.7056	ug/L	0.26054	-0.7056	ppb	0.26054	36.92%
Sr 421.552†	169.9	1.0566	ug/L	0.04405	1.0566	ppb	0.04405	4.17%
Ti 334.940†	5208.1	8.3144	ug/L	0.01370	8.3144	ppb	0.01370	0.16%
Tl 190.801†	0.1	0.1498	ug/L	1.32460	0.1498	ppb	1.32460	884.27%
U 409.014†	257.3	7.0381	ug/L	0.81689	7.0381	ppb	0.81689	11.61%
V 292.402†	119.2	0.7499	ug/L	0.22144	0.7499	ppb	0.22144	29.53%
Zn 213.857†	646.5	5.5999	ug/L	0.05560	5.5999	ppb	0.05560	0.99%
SiO2†	24640.7	1580.6	ug/L	1.18	1580.6	ppb	1.18	0.07%

Sequence No.: 4
Sample ID: 1201982717|927388|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 146
Date Collected: 12/8/2009 13:28:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201982717|927388|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6181.1	6181.1	106	%			13:30:49
1	Y RADIAL	6609.2	6609.2	105.1	%			13:30:49
1	Al 396.153Radial†	526.9	518.5	360.19	ug/L	360.19	ppb	13:30:49
1	Ca 317.933Radial†	126.9	104.4	153.86	ug/L	153.86	ppb	13:31:09
1	Fe 238.204 Radial†	38.4	29.5	275.91	ug/L	275.91	ppb	13:31:09
1	K 766.490 Radial†	2861.2	353.4	62.493	ug/L	62.493	ppb	13:30:49
1	Mg 279.077 IEC†	2.8	1.5	51.886	ug/L	51.886	ppb	13:31:09
1	Na 589.592 Radial†	-249.5	852.1	285.94	ug/L	285.94	ppb	13:30:49
1	Sr 421.552†	124.0	144.5	0.8987	ug/L	0.8987	ppb	13:30:49
1	Sc 361.383	946743.1	946743.1	105.05	%			13:32:05
1	Y 371.029	782170.9	782170.9	104.14	%			13:32:05
1	Ag 328.068†	285.1	-21.3	-0.0096	ug/L	-0.0096	ppb	13:32:10
1	As 188.979†	-30.6	-5.0	-1.8564	ug/L	-1.8564	ppb	13:32:31
1	B 249.677†	-428.5	122.8	2.5378	ug/L	2.5378	ppb	13:32:31
1	Ba 233.527†	422.1	410.2	3.0521	ug/L	3.0521	ppb	13:32:31
1	Be 313.107†	-5224.3	139.6	0.0670	ug/L	0.0670	ppb	13:32:10
1	Cd 226.502†	-204.1	0.8	-0.0179	ug/L	-0.0179	ppb	13:32:31
1	Co 228.616†	-57.5	10.7	0.1813	ug/L	0.1813	ppb	13:32:31
1	Cr 267.716†	484.9	383.0	4.0257	ug/L	4.0257	ppb	13:32:31
1	Cu 324.752†	7110.8	12.5	0.0497	ug/L	0.0497	ppb	13:32:10
1	Mn 257.610†	7673.4	6882.5	7.3684	ug/L	7.3684	ppb	13:32:10
1	Mo 202.031†	17.1	-2.1	-0.1110	ug/L	-0.1110	ppb	13:32:31
1	Ni 231.604†	175.2	80.3	1.8588	ug/L	1.8588	ppb	13:32:31
1	P 214.914†	226.4	-8.0	-4.7085	ug/L	-4.7085	ppb	13:32:31
1	Pb 220.353†	-39.5	30.9	3.5455	ug/L	3.5455	ppb	13:32:31
1	S 181.975 Axial†	55.2	11.0	15.298	ug/L	15.298	ppb	13:32:31
1	Sb 206.836†	34.4	-1.5	-0.6226	ug/L	-0.6226	ppb	13:32:31
1	Se 196.026†	-27.6	2.5	2.3900	ug/L	2.3900	ppb	13:32:31
1	Si 251.611†	25174.6	23515.6	703.94	ug/L	703.94	ppb	13:32:10
1	Sn 189.927†	-1.8	-6.7	-1.0825	ug/L	-1.0825	ppb	13:32:31
1	Ti 334.940†	4204.4	5117.4	8.1724	ug/L	8.1724	ppb	13:32:10
1	Tl 190.801†	-39.9	-5.4	-1.4065	ug/L	-1.4065	ppb	13:32:31
1	U 409.014†	-2474.1	46.6	1.2402	ug/L	1.2402	ppb	13:32:05
1	V 292.402†	-1323.0	98.9	0.6026	ug/L	0.6026	ppb	13:32:10
1	Zn 213.857†	1152.8	475.5	4.1146	ug/L	4.1146	ppb	13:32:31
1	SiO2†	25505.7	23813.1	1527.5	ug/L	1527.5	ppb	13:33:37
2	Sc Radial	5872.4	5872.4	100	%			13:31:14
2	Y RADIAL	6288.7	6288.7	100.0	%			13:31:14
2	Al 396.153Radial†	508.1	526.0	365.36	ug/L	365.36	ppb	13:31:14
2	Ca 317.933Radial†	122.8	106.6	157.15	ug/L	157.15	ppb	13:31:34
2	Fe 238.204 Radial†	39.1	32.1	300.40	ug/L	300.40	ppb	13:31:34
2	K 766.490 Radial†	2901.6	535.8	94.840	ug/L	94.840	ppb	13:31:14
2	Mg 279.077 IEC†	4.8	3.6	126.03	ug/L	126.03	ppb	13:31:34
2	Na 589.592 Radial†	-250.4	838.7	281.46	ug/L	281.46	ppb	13:31:14
2	Sr 421.552†	115.3	142.1	0.8833	ug/L	0.8833	ppb	13:31:14
2	Sc 361.383	950744.9	950744.9	105.49	%			13:32:36
2	Y 371.029	786796.4	786796.4	104.75	%			13:32:36
2	Ag 328.068†	325.7	16.0	0.1656	ug/L	0.1656	ppb	13:32:41
2	As 188.979†	-28.9	-3.2	-1.1480	ug/L	-1.1480	ppb	13:33:01
2	B 249.677†	-405.9	145.9	3.0197	ug/L	3.0197	ppb	13:33:01
2	Ba 233.527†	422.8	409.2	3.0462	ug/L	3.0462	ppb	13:33:01
2	Be 313.107†	-5199.6	184.0	0.0831	ug/L	0.0831	ppb	13:32:41
2	Cd 226.502†	-184.9	19.9	0.1810	ug/L	0.1810	ppb	13:33:01
2	Co 228.616†	-65.5	3.4	0.0427	ug/L	0.0427	ppb	13:33:01
2	Cr 267.716†	510.0	404.8	4.2553	ug/L	4.2553	ppb	13:33:01
2	Cu 324.752†	7086.4	-39.1	-0.0966	ug/L	-0.0966	ppb	13:32:41
2	Mn 257.610†	7663.8	6842.7	7.3270	ug/L	7.3270	ppb	13:32:41
2	Mo 202.031†	23.9	4.4	0.2977	ug/L	0.2977	ppb	13:33:01
2	Ni 231.604†	175.2	79.5	1.8415	ug/L	1.8415	ppb	13:33:01

2	P 214.914†	229.5	-6.0	-3.5561	ug/L	-3.5561	ppb	13:33:01
2	Pb 220.353†	-76.3	-3.9	-0.3809	ug/L	-0.3809	ppb	13:33:01
2	S 181.975 Axial†	58.3	13.7	19.144	ug/L	19.144	ppb	13:33:01
2	Sb 206.836†	42.5	6.1	1.7740	ug/L	1.7740	ppb	13:33:01
2	Se 196.026†	-24.1	6.0	4.4859	ug/L	4.4859	ppb	13:33:01
2	Si 251.611†	25161.3	23402.1	700.53	ug/L	700.53	ppb	13:32:41
2	Sn 189.927†	-2.5	-7.3	-1.1772	ug/L	-1.1772	ppb	13:33:01
2	Ti 334.940†	4228.5	5123.3	8.1805	ug/L	8.1805	ppb	13:32:41
2	Tl 190.801†	-30.8	3.3	1.0319	ug/L	1.0319	ppb	13:33:01
2	U 409.014†	-2354.8	169.5	4.6241	ug/L	4.6241	ppb	13:32:36
2	V 292.402†	-1273.2	151.4	0.9596	ug/L	0.9596	ppb	13:32:41
2	Zn 213.857†	1170.2	487.5	4.2144	ug/L	4.2144	ppb	13:33:01
2	SiO2†	25424.1	23633.5	1516.0	ug/L	1516.0	ppb	13:33:42
3	Sc Radial	6062.0	6062.0	104	%			13:31:39
3	Y RADIAL	6506.8	6506.8	103.5	%			13:31:39
3	Al 396.153Radial†	510.0	512.0	355.66	ug/L	355.66	ppb	13:31:39
3	Ca 317.933Radial†	128.3	108.1	159.26	ug/L	159.26	ppb	13:31:59
3	Fe 238.204 Radial†	38.7	30.5	285.53	ug/L	285.53	ppb	13:31:59
3	K 766.490 Radial†	2849.4	395.2	69.911	ug/L	69.911	ppb	13:31:39
3	Mg 279.077 IEC†	4.2	2.9	102.44	ug/L	102.44	ppb	13:31:59
3	Na 589.592 Radial†	-270.3	827.4	277.66	ug/L	277.66	ppb	13:31:39
3	Sr 421.552†	147.7	169.7	1.0554	ug/L	1.0554	ppb	13:31:39
3	Sc 361.383	960406.0	960406.0	106.56	%			13:33:06
3	Y 371.029	794730.2	794730.2	105.81	%			13:33:06
3	Ag 328.068†	309.9	-2.0	0.0763	ug/L	0.0763	ppb	13:33:11
3	As 188.979†	-25.9	-0.1	0.0553	ug/L	0.0553	ppb	13:33:31
3	B 249.677†	-415.2	141.1	2.9199	ug/L	2.9199	ppb	13:33:31
3	Ba 233.527†	418.3	401.0	2.9850	ug/L	2.9850	ppb	13:33:31
3	Be 313.107†	-5218.5	215.8	0.0948	ug/L	0.0948	ppb	13:33:11
3	Cd 226.502†	-194.4	12.6	0.1063	ug/L	0.1063	ppb	13:33:31
3	Co 228.616†	-50.5	18.0	0.3210	ug/L	0.3210	ppb	13:33:31
3	Cr 267.716†	488.6	379.9	3.9919	ug/L	3.9919	ppb	13:33:31
3	Cu 324.752†	7124.8	-70.7	-0.1877	ug/L	-0.1877	ppb	13:33:11
3	Mn 257.610†	7810.0	6906.7	7.3942	ug/L	7.3942	ppb	13:33:11
3	Mo 202.031†	23.4	3.7	0.2534	ug/L	0.2534	ppb	13:33:31
3	Ni 231.604†	172.7	75.5	1.7481	ug/L	1.7481	ppb	13:33:31
3	P 214.914†	231.2	-6.5	-3.8356	ug/L	-3.8356	ppb	13:33:31
3	Pb 220.353†	-61.2	11.1	1.3070	ug/L	1.3070	ppb	13:33:31
3	S 181.975 Axial†	51.4	6.7	9.2753	ug/L	9.2753	ppb	13:33:31
3	Sb 206.836†	20.6	-14.9	-4.8396	ug/L	-4.8396	ppb	13:33:31
3	Se 196.026†	-19.9	10.1	6.8240	ug/L	6.8240	ppb	13:33:31
3	Si 251.611†	25514.9	23494.1	703.28	ug/L	703.28	ppb	13:33:11
3	Sn 189.927†	4.0	-1.2	-0.1807	ug/L	-0.1807	ppb	13:33:31
3	Ti 334.940†	4304.7	5154.6	8.2282	ug/L	8.2282	ppb	13:33:11
3	Tl 190.801†	-35.0	-0.3	0.0171	ug/L	0.0171	ppb	13:33:31
3	U 409.014†	-2174.2	361.5	9.9157	ug/L	9.9157	ppb	13:33:06
3	V 292.402†	-1237.8	196.8	1.2707	ug/L	1.2707	ppb	13:33:11
3	Zn 213.857†	1160.3	467.0	4.0385	ug/L	4.0385	ppb	13:33:31
3	SiO2†	25329.0	23301.8	1494.7	ug/L	1494.7	ppb	13:33:47

Mean Data: 1201982717|927388|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	952631.3	105.70	%	0.779				0.74%
Sc Radial	6038.5	103	%	2.7				2.58%
Y 371.029	787899.1	104.90	%	0.846				0.81%
Y RADIAL	6468.2	102.9	%	2.60				2.53%
Ag 328.068†	-2.4	0.0774	ug/L	0.08761	0.0774	ppb	0.08761	113.14%
Al 396.153Radial†	518.9	360.41	ug/L	4.851	360.41	ppb	4.851	1.35%
As 188.979†	-2.8	-0.9830	ug/L	0.96645	-0.9830	ppb	0.96645	98.32%
B 249.677†	136.6	2.8258	ug/L	0.25432	2.8258	ppb	0.25432	9.00%
Ba 233.527†	406.8	3.0278	ug/L	0.03712	3.0278	ppb	0.03712	1.23%
Be 313.107†	179.8	0.0816	ug/L	0.01400	0.0816	ppb	0.01400	17.15%
Ca 317.933Radial†	106.4	156.76	ug/L	2.722	156.76	ppb	2.722	1.74%
Cd 226.502†	11.1	0.0898	ug/L	0.10046	0.0898	ppb	0.10046	111.86%
Co 228.616†	10.7	0.1817	ug/L	0.13920	0.1817	ppb	0.13920	76.62%
Cr 267.716†	389.2	4.0910	ug/L	0.14333	4.0910	ppb	0.14333	3.50%
Cu 324.752†	-32.4	-0.0782	ug/L	0.11977	-0.0782	ppb	0.11977	153.21%
Fe 238.204 Radial†	30.7	287.28	ug/L	12.341	287.28	ppb	12.341	4.30%
K 766.490 Radial†	428.1	75.748	ug/L	16.9448	75.748	ppb	16.9448	22.37%

Mg 279.077 IEC†	2.7	93.450	ug/L	37.8788	93.450	ppb	37.8788	40.53%
Mn 257.610†	6877.3	7.3632	ug/L	0.03393	7.3632	ppb	0.03393	0.46%
Mo 202.031†	2.0	0.1467	ug/L	0.22425	0.1467	ppb	0.22425	152.87%
Na 589.592 Radial†	839.4	281.69	ug/L	4.143	281.69	ppb	4.143	1.47%
Ni 231.604†	78.4	1.8161	ug/L	0.05955	1.8161	ppb	0.05955	3.28%
P 214.914†	-6.8	-4.0334	ug/L	0.60111	-4.0334	ppb	0.60111	14.90%
Pb 220.353†	12.7	1.4906	ug/L	1.96961	1.4906	ppb	1.96961	132.14%
S 181.975 Axial†	10.4	14.572	ug/L	4.9741	14.572	ppb	4.9741	34.13%
Sb 206.836†	-3.5	-1.2294	ug/L	3.34832	-1.2294	ppb	3.34832	272.35%
Se 196.026†	6.2	4.5666	ug/L	2.21813	4.5666	ppb	2.21813	48.57%
Si 251.611†	23470.6	702.58	ug/L	1.813	702.58	ppb	1.813	0.26%
Sn 189.927†	-5.1	-0.8135	ug/L	0.55006	-0.8135	ppb	0.55006	67.62%
Sr 421.552†	152.1	0.9458	ug/L	0.09524	0.9458	ppb	0.09524	10.07%
Ti 334.940†	5131.7	8.1937	ug/L	0.03018	8.1937	ppb	0.03018	0.37%
Tl 190.801†	-0.8	-0.1192	ug/L	1.22488	-0.1192	ppb	1.22488	>999.9%
U 409.014†	192.5	5.2600	ug/L	4.37258	5.2600	ppb	4.37258	83.13%
V 292.402†	149.0	0.9443	ug/L	0.33430	0.9443	ppb	0.33430	35.40%
Zn 213.857†	476.7	4.1225	ug/L	0.08824	4.1225	ppb	0.08824	2.14%
SiO2†	23582.8	1512.7	ug/L	16.65	1512.7	ppb	16.65	1.10%

Sequence No.: 5
Sample ID: 1201982719|927388|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 147
Date Collected: 12/8/2009 13:35:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201982719|927388|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5943.0	5943.0	102	%			13:37:53
1	Y RADIAL	6352.6	6352.6	101.0	%			13:37:53
1	Al 396.153Radial†	8028.9	7915.5	5477.1	ug/L	5477.1	ppb	13:37:53
1	Ca 317.933Radial†	3611.2	3535.5	5211.1	ug/L	5211.1	ppb	13:38:13
1	Fe 238.204 Radial†	601.6	584.7	5489.5	ug/L	5489.5	ppb	13:38:13
1	K 766.490 Radial†	32688.2	29791.7	5276.4	ug/L	5276.4	ppb	13:37:53
1	Mg 279.077 IEC†	152.5	148.8	5255.7	ug/L	5255.7	ppb	13:38:13
1	Na 589.592 Radial†	14613.0	15457.4	5187.2	ug/L	5187.2	ppb	13:37:53
1	Sr 421.552†	83970.2	82598.3	514.35	ug/L	514.35	ppb	13:37:53
1	Sc 361.383	934331.1	934331.1	103.67	%			13:39:12
1	Y 371.029	761914.5	761914.5	101.44	%			13:39:12
1	Ag 328.068†	115716.3	111328.2	507.44	ug/L	507.44	ppb	13:39:12
1	As 188.979†	1269.6	1248.9	498.17	ug/L	498.17	ppb	13:39:32
1	B 249.677†	23604.2	23299.5	486.65	ug/L	486.65	ppb	13:39:12
1	Ba 233.527†	71440.0	68920.1	512.10	ug/L	512.10	ppb	13:39:12
1	Be 313.107†	1405857.7	1361216.0	497.21	ug/L	497.21	ppb	13:39:12
1	Cd 226.502†	48546.2	47023.2	496.87	ug/L	496.87	ppb	13:39:12
1	Co 228.616†	26603.4	25727.3	488.36	ug/L	488.36	ppb	13:39:32
1	Cr 267.716†	49191.0	47371.4	498.09	ug/L	498.09	ppb	13:39:12
1	Cu 324.752†	190815.3	177305.5	507.68	ug/L	507.68	ppb	13:39:12
1	Mn 257.610†	498886.9	480808.5	513.35	ug/L	513.35	ppb	13:39:12
1	Mo 202.031†	8101.1	7796.0	495.64	ug/L	495.64	ppb	13:39:32
1	Ni 231.604†	22344.0	21466.7	496.78	ug/L	496.78	ppb	13:39:32
1	P 214.914†	1273.8	1005.2	502.98	ug/L	502.98	ppb	13:39:32
1	Pb 220.353†	4526.1	4434.3	502.89	ug/L	502.89	ppb	13:39:32
1	S 181.975 Axial†	3809.5	3633.1	5089.8	ug/L	5089.8	ppb	13:39:32
1	Sb 206.836†	1693.1	1598.9	513.40	ug/L	513.40	ppb	13:39:32
1	Se 196.026†	855.2	853.7	513.43	ug/L	513.43	ppb	13:39:32
1	Si 251.611†	203357.5	195710.8	5846.7	ug/L	5846.7	ppb	13:39:12
1	Sn 189.927†	3288.5	3167.1	519.18	ug/L	519.18	ppb	13:39:32
1	Ti 334.940†	343475.7	332434.7	530.37	ug/L	530.37	ppb	13:39:12
1	Tl 190.801†	1780.5	1750.0	493.73	ug/L	493.73	ppb	13:39:32
1	U 409.014†	16630.0	18443.3	506.41	ug/L	506.41	ppb	13:39:12
1	V 292.402†	76769.6	75411.0	504.65	ug/L	504.65	ppb	13:39:12
1	Zn 213.857†	59769.2	57032.1	493.77	ug/L	493.77	ppb	13:39:12
1	SiO2†	201301.4	193709.7	12400	ug/L	12400	ppb	13:40:33
2	Sc Radial	5922.8	5922.8	101	%			13:38:18
2	Y RADIAL	6285.9	6285.9	99.97	%			13:38:18
2	Al 396.153Radial†	8020.3	7933.9	5489.7	ug/L	5489.7	ppb	13:38:18
2	Ca 317.933Radial†	3581.1	3517.9	5185.2	ug/L	5185.2	ppb	13:38:38
2	Fe 238.204 Radial†	597.8	583.1	5474.0	ug/L	5474.0	ppb	13:38:38
2	K 766.490 Radial†	32569.0	29783.7	5275.0	ug/L	5275.0	ppb	13:38:18
2	Mg 279.077 IEC†	151.5	148.4	5239.1	ug/L	5239.1	ppb	13:38:38
2	Na 589.592 Radial†	14485.2	15380.3	5161.3	ug/L	5161.3	ppb	13:38:18
2	Sr 421.552†	83491.6	82407.5	513.16	ug/L	513.16	ppb	13:38:18
2	Sc 361.383	929919.1	929919.1	103.18	%			13:39:40
2	Y 371.029	760512.1	760512.1	101.26	%			13:39:40
2	Ag 328.068†	115151.6	111310.6	507.36	ug/L	507.36	ppb	13:39:40
2	As 188.979†	1259.0	1244.4	496.38	ug/L	496.38	ppb	13:40:00
2	B 249.677†	23486.2	23293.1	486.51	ug/L	486.51	ppb	13:39:40
2	Ba 233.527†	71191.2	69006.0	512.74	ug/L	512.74	ppb	13:39:40
2	Be 313.107†	1403611.4	1365473.0	498.76	ug/L	498.76	ppb	13:39:40
2	Cd 226.502†	48467.4	47169.0	498.42	ug/L	498.42	ppb	13:39:40
2	Co 228.616†	26602.3	25848.0	490.66	ug/L	490.66	ppb	13:40:00
2	Cr 267.716†	49090.9	47499.6	499.43	ug/L	499.43	ppb	13:39:40
2	Cu 324.752†	189182.3	176596.1	505.65	ug/L	505.65	ppb	13:39:40
2	Mn 257.610†	496297.9	480582.5	513.10	ug/L	513.10	ppb	13:39:40
2	Mo 202.031†	8118.2	7849.7	499.05	ug/L	499.05	ppb	13:40:00
2	Ni 231.604†	22322.7	21548.3	498.67	ug/L	498.67	ppb	13:40:00

2	P 214.914†	1236.5	974.9	485.86 ug/L	485.86 ppb	13:40:00
2	Pb 220.353†	4521.2	4450.3	504.70 ug/L	504.70 ppb	13:40:00
2	S 181.975 Axial†	3827.9	3668.4	5139.3 ug/L	5139.3 ppb	13:40:00
2	Sb 206.836†	1701.1	1614.4	518.43 ug/L	518.43 ppb	13:40:00
2	Se 196.026†	859.8	862.1	518.25 ug/L	518.25 ppb	13:40:00
2	Si 251.611†	201893.2	195222.3	5832.0 ug/L	5832.0 ppb	13:39:40
2	Sn 189.927†	3297.3	3190.7	523.03 ug/L	523.03 ppb	13:40:00
2	Ti 334.940†	341269.1	331868.0	529.47 ug/L	529.47 ppb	13:39:40
2	Tl 190.801†	1786.4	1763.9	497.58 ug/L	497.58 ppb	13:40:00
2	U 409.014†	16634.2	18523.5	508.62 ug/L	508.62 ppb	13:39:40
2	V 292.402†	76650.0	75646.4	506.26 ug/L	506.26 ppb	13:39:40
2	Zn 213.857†	59550.8	57094.0	494.30 ug/L	494.30 ppb	13:39:40
2	SiO2†	202478.3	195771.6	12532 ug/L	12532 ppb	13:40:38
3	Sc Radial	5926.5	5926.5	101 %		13:38:43
3	Y RADIAL	6345.9	6345.9	100.9 %		13:38:43
3	Al 396.153Radial†	8045.7	7953.9	5503.4 ug/L	5503.4 ppb	13:38:43
3	Ca 317.933Radial†	3579.0	3513.5	5178.8 ug/L	5178.8 ppb	13:39:03
3	Fe 238.204 Radial†	594.8	579.8	5443.1 ug/L	5443.1 ppb	13:39:03
3	K 766.490 Radial†	32692.1	29884.6	5292.9 ug/L	5292.9 ppb	13:38:43
3	Mg 279.077 IEC†	152.8	149.5	5278.7 ug/L	5278.7 ppb	13:39:03
3	Na 589.592 Radial†	14529.2	15414.6	5172.8 ug/L	5172.8 ppb	13:38:43
3	Sr 421.552†	83884.5	82742.4	515.25 ug/L	515.25 ppb	13:38:43
3	Sc 361.383	924004.5	924004.5	102.52 %		13:40:07
3	Y 371.029	754338.8	754338.8	100.43 %		13:40:07
3	Ag 328.068†	114363.6	111256.4	507.10 ug/L	507.10 ppb	13:40:07
3	As 188.979†	1280.2	1272.9	507.64 ug/L	507.64 ppb	13:40:27
3	B 249.677†	23259.1	23217.4	484.91 ug/L	484.91 ppb	13:40:07
3	Ba 233.527†	70852.5	69117.2	513.57 ug/L	513.57 ppb	13:40:07
3	Be 313.107†	1392944.7	1363776.6	498.14 ug/L	498.14 ppb	13:40:07
3	Cd 226.502†	48277.5	47284.4	499.64 ug/L	499.64 ppb	13:40:07
3	Co 228.616†	26681.8	26090.5	495.28 ug/L	495.28 ppb	13:40:27
3	Cr 267.716†	48715.1	47437.5	498.78 ug/L	498.78 ppb	13:40:07
3	Cu 324.752†	187725.0	176348.2	504.94 ug/L	504.94 ppb	13:40:07
3	Mn 257.610†	493781.6	481207.1	513.77 ug/L	513.77 ppb	13:40:07
3	Mo 202.031†	8158.1	7939.0	504.72 ug/L	504.72 ppb	13:40:27
3	Ni 231.604†	22378.1	21740.8	503.12 ug/L	503.12 ppb	13:40:27
3	P 214.914†	1264.5	1009.9	506.23 ug/L	506.23 ppb	13:40:27
3	Pb 220.353†	4524.7	4481.8	508.29 ug/L	508.29 ppb	13:40:27
3	S 181.975 Axial†	3823.0	3687.3	5165.8 ug/L	5165.8 ppb	13:40:27
3	Sb 206.836†	1706.7	1630.5	523.69 ug/L	523.69 ppb	13:40:27
3	Se 196.026†	851.9	859.7	516.78 ug/L	516.78 ppb	13:40:27
3	Si 251.611†	200689.0	195300.3	5834.3 ug/L	5834.3 ppb	13:40:07
3	Sn 189.927†	3294.2	3208.2	525.90 ug/L	525.90 ppb	13:40:27
3	Ti 334.940†	338973.2	331745.8	529.27 ug/L	529.27 ppb	13:40:07
3	Tl 190.801†	1798.9	1787.2	504.09 ug/L	504.09 ppb	13:40:27
3	U 409.014†	16384.3	18382.9	504.75 ug/L	504.75 ppb	13:40:07
3	V 292.402†	76105.7	75591.1	505.98 ug/L	505.98 ppb	13:40:07
3	Zn 213.857†	59130.2	57053.2	493.92 ug/L	493.92 ppb	13:40:07
3	SiO2†	198930.6	193567.3	12390 ug/L	12390 ppb	13:40:43

Mean Data: 1201982719|927388|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	929418.2	103.12	%	0.575				0.56%
Sc Radial	5930.8	101	%	0.2				0.18%
Y 371.029	758921.8	101.04	%	0.537				0.53%
Y RADIAL	6328.1	100.6	%	0.58				0.58%
Ag 328.068†	111298.4	507.30	ug/L	0.174	507.30	ppb	0.174	0.03%
Al 396.153Radial†	7934.5	5490.1	ug/L	13.16	5490.1	ppb	13.16	0.24%
As 188.979†	1255.4	500.73	ug/L	6.050	500.73	ppb	6.050	1.21%
B 249.677†	23270.0	486.02	ug/L	0.963	486.02	ppb	0.963	0.20%
Ba 233.527†	69014.4	512.80	ug/L	0.733	512.80	ppb	0.733	0.14%
Be 313.107†	1363488.5	498.03	ug/L	0.780	498.03	ppb	0.780	0.16%
Ca 317.933Radial†	3522.3	5191.7	ug/L	17.11	5191.7	ppb	17.11	0.33%
Cd 226.502†	47158.9	498.31	ug/L	1.388	498.31	ppb	1.388	0.28%
Co 228.616†	25888.6	491.43	ug/L	3.524	491.43	ppb	3.524	0.72%
Cr 267.716†	47436.2	498.77	ug/L	0.674	498.77	ppb	0.674	0.14%
Cu 324.752†	176749.9	506.09	ug/L	1.423	506.09	ppb	1.423	0.28%
Fe 238.204 Radial†	582.5	5468.9	ug/L	23.58	5468.9	ppb	23.58	0.43%
K 766.490 Radial†	29820.0	5281.5	ug/L	9.96	5281.5	ppb	9.96	0.19%

Mg 279.077 IEC†	148.9	5257.8	ug/L	19.90	5257.8	ppb	19.90	0.38%
Mn 257.610†	480866.0	513.41	ug/L	0.335	513.41	ppb	0.335	0.07%
Mo 202.031†	7861.6	499.80	ug/L	4.585	499.80	ppb	4.585	0.92%
Na 589.592 Radial†	15417.4	5173.8	ug/L	12.97	5173.8	ppb	12.97	0.25%
Ni 231.604†	21585.3	499.52	ug/L	3.257	499.52	ppb	3.257	0.65%
P 214.914†	996.6	498.36	ug/L	10.943	498.36	ppb	10.943	2.20%
Pb 220.353†	4455.5	505.29	ug/L	2.747	505.29	ppb	2.747	0.54%
S 181.975 Axial†	3662.9	5131.6	ug/L	38.59	5131.6	ppb	38.59	0.75%
Sb 206.836†	1614.6	518.50	ug/L	5.147	518.50	ppb	5.147	0.99%
Se 196.026†	858.5	516.15	ug/L	2.471	516.15	ppb	2.471	0.48%
Si 251.611†	195411.1	5837.7	ug/L	7.92	5837.7	ppb	7.92	0.14%
Sn 189.927†	3188.7	522.70	ug/L	3.372	522.70	ppb	3.372	0.65%
Sr 421.552†	82582.7	514.26	ug/L	1.046	514.26	ppb	1.046	0.20%
Ti 334.940†	332016.2	529.70	ug/L	0.588	529.70	ppb	0.588	0.11%
Tl 190.801†	1767.0	498.47	ug/L	5.236	498.47	ppb	5.236	1.05%
U 409.014†	18449.9	506.60	ug/L	1.940	506.60	ppb	1.940	0.38%
V 292.402†	75549.5	505.63	ug/L	0.859	505.63	ppb	0.859	0.17%
Zn 213.857†	57059.7	494.00	ug/L	0.275	494.00	ppb	0.275	0.06%
SiO2†	194349.6	12441	ug/L	79.2	12441	ppb	79.2	0.64%

Sequence No.: 6
Sample ID: 1201982720|927388|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 148
Date Collected: 12/8/2009 13:42:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201982720|927388|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5932.2	5932.2	102	%			13:44:49
1	Y RADIAL	6316.7	6316.7	100.5	%			13:44:49
1	Al 396.153Radial†	8072.1	7972.4	5516.2	ug/L	5516.2	ppb	13:44:49
1	Ca 317.933Radial†	3613.5	3544.2	5223.9	ug/L	5223.9	ppb	13:45:09
1	Fe 238.204 Radial†	591.9	576.3	5411.1	ug/L	5411.1	ppb	13:45:09
1	K 766.490 Radial†	32680.3	29842.4	5285.4	ug/L	5285.4	ppb	13:44:49
1	Mg 279.077 IEC†	154.1	150.7	5320.9	ug/L	5320.9	ppb	13:45:09
1	Na 589.592 Radial†	14180.0	15057.0	5052.9	ug/L	5052.9	ppb	13:44:49
1	Sr 421.552†	83129.2	81919.8	510.13	ug/L	510.13	ppb	13:44:49
1	Sc 361.383	923156.1	923156.1	102.43	%			13:46:08
1	Y 371.029	753881.9	753881.9	100.37	%			13:46:08
1	Ag 328.068†	116213.8	113165.2	515.76	ug/L	515.76	ppb	13:46:08
1	As 188.979†	1278.5	1272.4	507.50	ug/L	507.50	ppb	13:46:28
1	B 249.677†	23821.6	23787.4	496.87	ug/L	496.87	ppb	13:46:08
1	Ba 233.527†	71957.7	70259.7	522.05	ug/L	522.05	ppb	13:46:08
1	Be 313.107†	1413357.3	1384953.7	505.87	ug/L	505.87	ppb	13:46:08
1	Cd 226.502†	49104.8	48135.4	508.64	ug/L	508.64	ppb	13:46:08
1	Co 228.616†	26816.7	26246.1	498.22	ug/L	498.22	ppb	13:46:28
1	Cr 267.716†	49402.5	48152.3	506.29	ug/L	506.29	ppb	13:46:08
1	Cu 324.752†	189941.8	178680.8	511.61	ug/L	511.61	ppb	13:46:08
1	Mn 257.610†	500622.3	488328.2	521.36	ug/L	521.36	ppb	13:46:08
1	Mo 202.031†	8170.1	7958.0	505.93	ug/L	505.93	ppb	13:46:28
1	Ni 231.604†	22445.1	21826.2	505.10	ug/L	505.10	ppb	13:46:28
1	P 214.914†	1261.3	1007.9	504.09	ug/L	504.09	ppb	13:46:28
1	Pb 220.353†	4555.3	4515.7	512.12	ug/L	512.12	ppb	13:46:28
1	S 181.975 Axial†	3822.0	3689.8	5169.3	ug/L	5169.3	ppb	13:46:28
1	Sb 206.836†	1702.9	1628.2	522.89	ug/L	522.89	ppb	13:46:28
1	Se 196.026†	858.4	866.9	520.81	ug/L	520.81	ppb	13:46:28
1	Si 251.611†	203045.1	197780.4	5908.5	ug/L	5908.5	ppb	13:46:08
1	Sn 189.927†	3315.1	3231.5	529.72	ug/L	529.72	ppb	13:46:28
1	Ti 334.940†	343318.4	336291.8	536.52	ug/L	536.52	ppb	13:46:08
1	Tl 190.801†	1793.6	1783.6	503.15	ug/L	503.15	ppb	13:46:28
1	U 409.014†	16733.0	18738.0	514.52	ug/L	514.52	ppb	13:46:08
1	V 292.402†	77123.3	76652.7	513.02	ug/L	513.02	ppb	13:46:08
1	Zn 213.857†	60202.1	58152.6	503.51	ug/L	503.51	ppb	13:46:08
1	SiO2†	199932.8	194724.1	12464	ug/L	12464	ppb	13:47:29
2	Sc Radial	5987.4	5987.4	102	%			13:45:14
2	Y RADIAL	6371.7	6371.7	101.3	%			13:45:14
2	Al 396.153Radial†	8132.7	7958.2	5506.7	ug/L	5506.7	ppb	13:45:14
2	Ca 317.933Radial†	3611.3	3509.2	5172.3	ug/L	5172.3	ppb	13:45:34
2	Fe 238.204 Radial†	587.6	566.7	5320.7	ug/L	5320.7	ppb	13:45:34
2	K 766.490 Radial†	32944.0	29802.9	5278.5	ug/L	5278.5	ppb	13:45:14
2	Mg 279.077 IEC†	155.0	150.2	5302.6	ug/L	5302.6	ppb	13:45:34
2	Na 589.592 Radial†	14351.3	15095.4	5065.7	ug/L	5065.7	ppb	13:45:14
2	Sr 421.552†	83581.4	81605.9	508.17	ug/L	508.17	ppb	13:45:14
2	Sc 361.383	932676.0	932676.0	103.49	%			13:46:36
2	Y 371.029	762654.0	762654.0	101.54	%			13:46:36
2	Ag 328.068†	116221.3	112014.4	510.50	ug/L	510.50	ppb	13:46:36
2	As 188.979†	1273.0	1254.3	500.28	ug/L	500.28	ppb	13:46:56
2	B 249.677†	23878.1	23604.6	493.06	ug/L	493.06	ppb	13:46:36
2	Ba 233.527†	71608.5	69205.2	514.22	ug/L	514.22	ppb	13:46:36
2	Be 313.107†	1412812.3	1370342.8	500.53	ug/L	500.53	ppb	13:46:36
2	Cd 226.502†	48822.2	47373.0	500.59	ug/L	500.59	ppb	13:46:36
2	Co 228.616†	26699.5	25865.7	490.99	ug/L	490.99	ppb	13:46:56
2	Cr 267.716†	49137.9	47404.3	498.43	ug/L	498.43	ppb	13:46:36
2	Cu 324.752†	190185.8	177023.8	506.86	ug/L	506.86	ppb	13:46:36
2	Mn 257.610†	498543.4	481330.5	513.89	ug/L	513.89	ppb	13:46:36
2	Mo 202.031†	8134.9	7842.6	498.59	ug/L	498.59	ppb	13:46:56
2	Ni 231.604†	22356.8	21517.3	497.95	ug/L	497.95	ppb	13:46:56

2	P 214.914†	1265.8	999.7	500.09	ug/L	500.09 ppb	13:46:56
2	Pb 220.353†	4537.2	4452.8	505.00	ug/L	505.00 ppb	13:46:56
2	S 181.975 Axial†	3809.1	3639.3	5098.5	ug/L	5098.5 ppb	13:46:56
2	Sb 206.836†	1695.8	1604.5	515.26	ug/L	515.26 ppb	13:46:56
2	Se 196.026†	857.2	857.1	514.86	ug/L	514.86 ppb	13:46:56
2	Si 251.611†	202604.1	195330.9	5835.3	ug/L	5835.3 ppb	13:46:36
2	Sn 189.927†	3296.3	3180.3	521.33	ug/L	521.33 ppb	13:46:56
2	Ti 334.940†	342734.5	332306.4	530.17	ug/L	530.17 ppb	13:46:36
2	Tl 190.801†	1794.7	1766.7	498.39	ug/L	498.39 ppb	13:46:56
2	U 409.014†	16744.1	18582.0	510.25	ug/L	510.25 ppb	13:46:36
2	V 292.402†	77113.5	75874.7	507.79	ug/L	507.79 ppb	13:46:36
2	Zn 213.857†	59998.0	57355.5	496.61	ug/L	496.61 ppb	13:46:36
2	SiO2†	202109.5	194835.1	12472	ug/L	12472 ppb	13:47:34
3	Sc Radial	5939.1	5939.1	102	%		13:45:39
3	Y RADIAL	6359.2	6359.2	101.1	%		13:45:39
3	Al 396.153Radial†	8124.4	8014.5	5545.7	ug/L	5545.7 ppb	13:45:39
3	Ca 317.933Radial†	3618.4	3544.8	5224.8	ug/L	5224.8 ppb	13:45:59
3	Fe 238.204 Radial†	593.5	577.2	5419.3	ug/L	5419.3 ppb	13:45:59
3	K 766.490 Radial†	32789.2	29911.8	5297.8	ug/L	5297.8 ppb	13:45:39
3	Mg 279.077 IEC†	155.2	151.5	5351.9	ug/L	5351.9 ppb	13:45:59
3	Na 589.592 Radial†	14191.0	15051.4	5051.0	ug/L	5051.0 ppb	13:45:39
3	Sr 421.552†	83255.6	81948.2	510.30	ug/L	510.30 ppb	13:45:39
3	Sc 361.383	930502.6	930502.6	103.24	%		13:47:03
3	Y 371.029	761166.2	761166.2	101.34	%		13:47:03
3	Ag 328.068†	116161.2	112218.4	511.46	ug/L	511.46 ppb	13:47:03
3	As 188.979†	1278.9	1262.9	503.71	ug/L	503.71 ppb	13:47:23
3	B 249.677†	23789.8	23573.0	492.38	ug/L	492.38 ppb	13:47:03
3	Ba 233.527†	71740.0	69494.2	516.37	ug/L	516.37 ppb	13:47:03
3	Be 313.107†	1413650.4	1374343.4	501.99	ug/L	501.99 ppb	13:47:03
3	Cd 226.502†	49026.9	47681.4	503.84	ug/L	503.84 ppb	13:47:03
3	Co 228.616†	26751.4	25976.2	493.09	ug/L	493.09 ppb	13:47:23
3	Cr 267.716†	49221.9	47596.6	500.46	ug/L	500.46 ppb	13:47:03
3	Cu 324.752†	189906.0	177182.1	507.32	ug/L	507.32 ppb	13:47:03
3	Mn 257.610†	499106.3	483001.0	515.68	ug/L	515.68 ppb	13:47:03
3	Mo 202.031†	8145.7	7871.4	500.42	ug/L	500.42 ppb	13:47:23
3	Ni 231.604†	22405.3	21614.8	500.21	ug/L	500.21 ppb	13:47:23
3	P 214.914†	1278.6	1014.9	508.78	ug/L	508.78 ppb	13:47:23
3	Pb 220.353†	4572.5	4497.2	510.03	ug/L	510.03 ppb	13:47:23
3	S 181.975 Axial†	3817.6	3656.1	5122.0	ug/L	5122.0 ppb	13:47:23
3	Sb 206.836†	1704.5	1616.7	519.19	ug/L	519.19 ppb	13:47:23
3	Se 196.026†	862.6	864.3	519.37	ug/L	519.37 ppb	13:47:23
3	Si 251.611†	202613.2	195796.9	5849.2	ug/L	5849.2 ppb	13:47:03
3	Sn 189.927†	3315.1	3205.9	525.53	ug/L	525.53 ppb	13:47:23
3	Ti 334.940†	342977.4	333315.3	531.78	ug/L	531.78 ppb	13:47:03
3	Tl 190.801†	1807.3	1783.0	502.97	ug/L	502.97 ppb	13:47:23
3	U 409.014†	16583.1	18463.8	506.98	ug/L	506.98 ppb	13:47:03
3	V 292.402†	77106.7	76042.2	508.90	ug/L	508.90 ppb	13:47:03
3	Zn 213.857†	60087.1	57577.2	498.52	ug/L	498.52 ppb	13:47:03
3	SiO2†	200885.4	194105.7	12425	ug/L	12425 ppb	13:47:39

Mean Data: 1201982720|927388|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	928778.2	103.05	%	0.554				0.54%
Sc Radial	5952.9	102	%	0.5				0.51%
Y 371.029	759234.0	101.09	%	0.625				0.62%
Y RADIAL	6349.2	101.0	%	0.46				0.45%
Ag 328.068†	112466.0	512.57	ug/L	2.799	512.57	ppb	2.799	0.55%
Al 396.153Radial†	7981.7	5522.8	ug/L	20.34	5522.8	ppb	20.34	0.37%
As 188.979†	1263.2	503.83	ug/L	3.613	503.83	ppb	3.613	0.72%
B 249.677†	23655.0	494.10	ug/L	2.417	494.10	ppb	2.417	0.49%
Ba 233.527†	69653.1	517.54	ug/L	4.046	517.54	ppb	4.046	0.78%
Be 313.107†	1376546.6	502.80	ug/L	2.759	502.80	ppb	2.759	0.55%
Ca 317.933Radial†	3532.7	5207.0	ug/L	30.06	5207.0	ppb	30.06	0.58%
Cd 226.502†	47729.9	504.36	ug/L	4.053	504.36	ppb	4.053	0.80%
Co 228.616†	26029.3	494.10	ug/L	3.717	494.10	ppb	3.717	0.75%
Cr 267.716†	47717.7	501.73	ug/L	4.082	501.73	ppb	4.082	0.81%
Cu 324.752†	177628.9	508.60	ug/L	2.618	508.60	ppb	2.618	0.51%
Fe 238.204 Radial†	573.4	5383.7	ug/L	54.68	5383.7	ppb	54.68	1.02%
K 766.490 Radial†	29852.3	5287.2	ug/L	9.78	5287.2	ppb	9.78	0.18%

Mg 279.077 IEC†	150.8	5325.1	ug/L	24.92	5325.1	ppb	24.92	0.47%
Mn 257.610†	484219.9	516.97	ug/L	3.902	516.97	ppb	3.902	0.75%
Mo 202.031†	7890.7	501.65	ug/L	3.820	501.65	ppb	3.820	0.76%
Na 589.592 Radial†	15068.0	5056.5	ug/L	8.03	5056.5	ppb	8.03	0.16%
Ni 231.604†	21652.8	501.09	ug/L	3.655	501.09	ppb	3.655	0.73%
P 214.914†	1007.5	504.32	ug/L	4.349	504.32	ppb	4.349	0.86%
Pb 220.353†	4488.6	509.05	ug/L	3.659	509.05	ppb	3.659	0.72%
S 181.975 Axial†	3661.7	5129.9	ug/L	36.07	5129.9	ppb	36.07	0.70%
Sb 206.836†	1616.5	519.11	ug/L	3.817	519.11	ppb	3.817	0.74%
Se 196.026†	862.8	518.35	ug/L	3.103	518.35	ppb	3.103	0.60%
Si 251.611†	196302.7	5864.3	ug/L	38.86	5864.3	ppb	38.86	0.66%
Sn 189.927†	3205.9	525.53	ug/L	4.194	525.53	ppb	4.194	0.80%
Sr 421.552†	81824.7	509.53	ug/L	1.183	509.53	ppb	1.183	0.23%
Ti 334.940†	333971.1	532.82	ug/L	3.305	532.82	ppb	3.305	0.62%
Tl 190.801†	1777.8	501.50	ug/L	2.698	501.50	ppb	2.698	0.54%
U 409.014†	18594.6	510.59	ug/L	3.782	510.59	ppb	3.782	0.74%
V 292.402†	76189.9	509.90	ug/L	2.755	509.90	ppb	2.755	0.54%
Zn 213.857†	57695.1	499.54	ug/L	3.565	499.54	ppb	3.565	0.71%
SiO2†	194555.0	12454	ug/L	25.2	12454	ppb	25.2	0.20%

Sequence No.: 7
Sample ID: 1201982718|927388|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 149
Date Collected: 12/8/2009 13:49:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201982718|927388|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5692.4	5692.4	97.4	%			13:51:45
1	Y RADIAL	6098.2	6098.2	96.98	%			13:51:45
1	Al 396.153Radial†	68.5	90.7	62.962	ug/L	62.962	ppb	13:51:45
1	Ca 317.933Radial†	45.7	31.3	46.145	ug/L	46.145	ppb	13:52:05
1	Fe 238.204 Radial†	13.8	7.3	68.656	ug/L	68.656	ppb	13:52:05
1	K 766.490 Radial†	2471.5	185.5	32.856	ug/L	32.856	ppb	13:51:45
1	Mg 279.077 IEC†	2.8	1.7	60.055	ug/L	60.055	ppb	13:52:05
1	Na 589.592 Radial†	-846.1	219.4	73.619	ug/L	73.619	ppb	13:51:45
1	Sr 421.552†	34.5	62.7	0.3904	ug/L	0.3904	ppb	13:51:45
1	Sc 361.383	916620.1	916620.1	101.70	%			13:53:02
1	Y 371.029	761838.5	761838.5	101.43	%			13:53:02
1	Ag 328.068†	286.7	-10.8	-0.0343	ug/L	-0.0343	ppb	13:53:02
1	As 188.979†	-32.8	-8.0	-3.1557	ug/L	-3.1557	ppb	13:53:22
1	B 249.677†	-278.3	257.0	5.3809	ug/L	5.3809	ppb	13:53:22
1	Ba 233.527†	70.9	78.2	0.5830	ug/L	0.5830	ppb	13:53:22
1	Be 313.107†	-5106.0	92.5	0.0372	ug/L	0.0372	ppb	13:53:02
1	Cd 226.502†	-178.7	19.3	0.1982	ug/L	0.1982	ppb	13:53:22
1	Co 228.616†	-67.4	-0.8	-0.0188	ug/L	-0.0188	ppb	13:53:22
1	Cr 267.716†	183.8	102.1	1.0708	ug/L	1.0708	ppb	13:53:22
1	Cu 324.752†	6972.0	98.5	0.2853	ug/L	0.2853	ppb	13:53:02
1	Mn 257.610†	1773.6	1321.6	1.4155	ug/L	1.4155	ppb	13:53:22
1	Mo 202.031†	29.4	10.5	0.6748	ug/L	0.6748	ppb	13:53:22
1	Ni 231.604†	121.9	33.3	0.7720	ug/L	0.7720	ppb	13:53:22
1	P 214.914†	224.6	-2.7	-1.6508	ug/L	-1.6508	ppb	13:53:22
1	Pb 220.353†	-66.8	2.8	0.3249	ug/L	0.3249	ppb	13:53:22
1	S 181.975 Axial†	39.0	-3.2	-4.5208	ug/L	-4.5208	ppb	13:53:22
1	Sb 206.836†	26.3	-8.4	-2.6857	ug/L	-2.6857	ppb	13:53:22
1	Se 196.026†	-28.3	1.0	0.8138	ug/L	0.8138	ppb	13:53:22
1	Si 251.611†	5284.3	4746.1	142.06	ug/L	142.06	ppb	13:53:02
1	Sn 189.927†	0.7	-4.3	-0.7023	ug/L	-0.7023	ppb	13:53:22
1	Ti 334.940†	-1.1	1113.8	1.7751	ug/L	1.7751	ppb	13:53:02
1	Tl 190.801†	-37.1	-4.0	-1.0999	ug/L	-1.0999	ppb	13:53:22
1	U 409.014†	-2076.6	360.0	9.9060	ug/L	9.9060	ppb	13:53:02
1	V 292.402†	-1307.1	73.1	0.5003	ug/L	0.5003	ppb	13:53:02
1	Zn 213.857†	794.4	159.3	1.3776	ug/L	1.3776	ppb	13:53:22
1	SiO2†	5292.1	4736.0	303.76	ug/L	303.76	ppb	13:54:18
2	Sc Radial	5855.6	5855.6	100	%			13:52:10
2	Y RADIAL	6249.9	6249.9	99.40	%			13:52:10
2	Al 396.153Radial†	93.4	113.6	78.882	ug/L	78.882	ppb	13:52:10
2	Ca 317.933Radial†	46.4	30.7	45.300	ug/L	45.300	ppb	13:52:30
2	Fe 238.204 Radial†	12.0	5.2	48.883	ug/L	48.883	ppb	13:52:30
2	K 766.490 Radial†	2384.0	27.5	4.8207	ug/L	4.8207	ppb	13:52:10
2	Mg 279.077 IEC†	5.2	4.0	142.19	ug/L	142.19	ppb	13:52:30
2	Na 589.592 Radial†	-808.5	281.0	94.304	ug/L	94.304	ppb	13:52:10
2	Sr 421.552†	16.8	44.1	0.2744	ug/L	0.2744	ppb	13:52:10
2	Sc 361.383	909581.6	909581.6	100.92	%			13:53:28
2	Y 371.029	756933.3	756933.3	100.78	%			13:53:28
2	Ag 328.068†	344.5	48.6	0.2298	ug/L	0.2298	ppb	13:53:28
2	As 188.979†	-23.0	1.4	0.5850	ug/L	0.5850	ppb	13:53:48
2	B 249.677†	-294.9	238.5	4.9950	ug/L	4.9950	ppb	13:53:48
2	Ba 233.527†	66.8	74.6	0.5562	ug/L	0.5562	ppb	13:53:48
2	Be 313.107†	-5079.2	80.2	0.0325	ug/L	0.0325	ppb	13:53:28
2	Cd 226.502†	-181.4	15.4	0.1582	ug/L	0.1582	ppb	13:53:48
2	Co 228.616†	-70.5	-4.4	-0.0868	ug/L	-0.0868	ppb	13:53:48
2	Cr 267.716†	171.1	90.9	0.9533	ug/L	0.9533	ppb	13:53:48
2	Cu 324.752†	6850.3	31.0	0.0912	ug/L	0.0912	ppb	13:53:28
2	Mn 257.610†	1797.9	1359.2	1.4521	ug/L	1.4521	ppb	13:53:48
2	Mo 202.031†	25.1	6.5	0.4189	ug/L	0.4189	ppb	13:53:48
2	Ni 231.604†	114.2	26.6	0.6165	ug/L	0.6165	ppb	13:53:48

2	P 214.914†	232.8	7.2	4.1022 ug/L	4.1022 ppb	13:53:48
2	Pb 220.353†	-60.6	8.4	0.9597 ug/L	0.9597 ppb	13:53:48
2	S 181.975 Axial†	42.4	0.5	0.6245 ug/L	0.6245 ppb	13:53:48
2	Sb 206.836†	33.6	-0.9	-0.3141 ug/L	-0.3141 ppb	13:53:48
2	Se 196.026†	-22.6	6.4	3.8876 ug/L	3.8876 ppb	13:53:48
2	Si 251.611†	5216.3	4718.9	141.26 ug/L	141.26 ppb	13:53:28
2	Sn 189.927†	4.5	-0.6	-0.0889 ug/L	-0.0889 ppb	13:53:48
2	Ti 334.940†	-59.1	1056.3	1.6838 ug/L	1.6838 ppb	13:53:28
2	Tl 190.801†	-29.8	3.0	0.8664 ug/L	0.8664 ppb	13:53:48
2	U 409.014†	-2095.3	325.7	8.9640 ug/L	8.9640 ppb	13:53:28
2	V 292.402†	-1275.9	94.2	0.6388 ug/L	0.6388 ppb	13:53:28
2	Zn 213.857†	789.0	160.0	1.3840 ug/L	1.3840 ppb	13:53:48
2	SiO2†	5284.5	4768.7	305.88 ug/L	305.88 ppb	13:54:23
3	Sc Radial	5969.1	5969.1	102 %		13:52:36
3	Y RADIAL	6327.3	6327.3	100.6 %		13:52:36
3	Al 396.153Radial†	71.3	90.2	62.668 ug/L	62.668 ppb	13:52:36
3	Ca 317.933Radial†	44.3	27.8	40.954 ug/L	40.954 ppb	13:52:56
3	Fe 238.204 Radial†	12.4	5.3	49.920 ug/L	49.920 ppb	13:52:56
3	K 766.490 Radial†	2426.0	23.4	4.0963 ug/L	4.0963 ppb	13:52:36
3	Mg 279.077 IEC†	0.2	-0.9	-32.925 ug/L	-32.925 ppb	13:52:56
3	Na 589.592 Radial†	-854.2	251.7	84.465 ug/L	84.465 ppb	13:52:36
3	Sr 421.552†	14.1	41.2	0.2561 ug/L	0.2561 ppb	13:52:36
3	Sc 361.383	912538.9	912538.9	101.25 %		13:53:53
3	Y 371.029	760271.0	760271.0	101.22 %		13:53:53
3	Ag 328.068†	341.9	44.9	0.2190 ug/L	0.2190 ppb	13:53:53
3	As 188.979†	-25.6	-1.1	-0.4220 ug/L	-0.4220 ppb	13:54:13
3	B 249.677†	-301.6	232.8	4.8752 ug/L	4.8752 ppb	13:54:13
3	Ba 233.527†	77.7	85.2	0.6352 ug/L	0.6352 ppb	13:54:13
3	Be 313.107†	-5107.9	68.2	0.0281 ug/L	0.0281 ppb	13:53:53
3	Cd 226.502†	-188.0	9.5	0.0955 ug/L	0.0955 ppb	13:54:13
3	Co 228.616†	-66.2	0.0	-0.0028 ug/L	-0.0028 ppb	13:54:13
3	Cr 267.716†	176.1	95.3	1.0015 ug/L	1.0015 ppb	13:54:13
3	Cu 324.752†	6911.4	69.3	0.2010 ug/L	0.2010 ppb	13:53:53
3	Mn 257.610†	1828.4	1383.5	1.4814 ug/L	1.4814 ppb	13:54:13
3	Mo 202.031†	25.7	7.1	0.4522 ug/L	0.4522 ppb	13:54:13
3	Ni 231.604†	114.1	26.1	0.6052 ug/L	0.6052 ppb	13:54:13
3	P 214.914†	227.2	0.9	0.4526 ug/L	0.4526 ppb	13:54:13
3	Pb 220.353†	-71.3	-2.0	-0.2117 ug/L	-0.2117 ppb	13:54:13
3	S 181.975 Axial†	37.2	-4.8	-6.7250 ug/L	-6.7250 ppb	13:54:13
3	Sb 206.836†	36.1	1.4	0.4397 ug/L	0.4397 ppb	13:54:13
3	Se 196.026†	-23.8	5.3	3.2447 ug/L	3.2447 ppb	13:54:13
3	Si 251.611†	5221.4	4707.2	140.90 ug/L	140.90 ppb	13:53:53
3	Sn 189.927†	5.8	0.7	0.1185 ug/L	0.1185 ppb	13:54:13
3	Ti 334.940†	-72.1	1043.7	1.6660 ug/L	1.6660 ppb	13:53:53
3	Tl 190.801†	-24.6	8.2	2.3236 ug/L	2.3236 ppb	13:54:13
3	U 409.014†	-2321.1	109.4	3.0055 ug/L	3.0055 ppb	13:53:53
3	V 292.402†	-1261.9	112.1	0.7418 ug/L	0.7418 ppb	13:53:53
3	Zn 213.857†	803.9	172.2	1.4964 ug/L	1.4964 ppb	13:54:13
3	SiO2†	5281.6	4748.9	304.61 ug/L	304.61 ppb	13:54:28

Mean Data: 1201982718|927388|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912913.6	101.29	%	0.392				0.39%
Sc Radial	5839.0	99.9	%	2.38				2.38%
Y 371.029	759681.0	101.14	%	0.334				0.33%
Y RADIAL	6225.1	99.00	%	1.853				1.87%
Ag 328.068†	27.6	0.1382	ug/L	0.14945	0.1382	ppb	0.14945	108.16%
Al 396.153Radial†	98.2	68.170	ug/L	9.2773	68.170	ppb	9.2773	13.61%
As 188.979†	-2.6	-0.9976	ug/L	1.93565	-0.9976	ppb	1.93565	194.03%
B 249.677†	242.8	5.0837	ug/L	0.26426	5.0837	ppb	0.26426	5.20%
Ba 233.527†	79.3	0.5915	ug/L	0.04019	0.5915	ppb	0.04019	6.79%
Be 313.107†	80.3	0.0326	ug/L	0.00454	0.0326	ppb	0.00454	13.91%
Ca 317.933Radial†	29.9	44.133	ug/L	2.7851	44.133	ppb	2.7851	6.31%
Cd 226.502†	14.7	0.1506	ug/L	0.05178	0.1506	ppb	0.05178	34.38%
Co 228.616†	-1.7	-0.0362	ug/L	0.04459	-0.0362	ppb	0.04459	123.30%
Cr 267.716†	96.1	1.0085	ug/L	0.05905	1.0085	ppb	0.05905	5.85%
Cu 324.752†	66.3	0.1925	ug/L	0.09735	0.1925	ppb	0.09735	50.57%
Fe 238.204 Radial†	6.0	55.820	ug/L	11.1285	55.820	ppb	11.1285	19.94%
K 766.490 Radial†	78.8	13.924	ug/L	16.3995	13.924	ppb	16.3995	117.77%

Mg 279.077 IEC†	1.6	56.439	ug/L	87.6111	56.439	ppb	87.6111 155.23%
Mn 257.610†	1354.8	1.4497	ug/L	0.03299	1.4497	ppb	0.03299 2.28%
Mo 202.031†	8.0	0.5153	ug/L	0.13911	0.5153	ppb	0.13911 27.00%
Na 589.592 Radial†	250.7	84.130	ug/L	10.3462	84.130	ppb	10.3462 12.30%
Ni 231.604†	28.7	0.6646	ug/L	0.09319	0.6646	ppb	0.09319 14.02%
P 214.914†	1.8	0.9680	ug/L	2.91090	0.9680	ppb	2.91090 300.72%
Pb 220.353†	3.1	0.3576	ug/L	0.58637	0.3576	ppb	0.58637 163.95%
S 181.975 Axial†	-2.5	-3.5404	ug/L	3.77159	-3.5404	ppb	3.77159 106.53%
Sb 206.836†	-2.6	-0.8534	ug/L	1.63096	-0.8534	ppb	1.63096 191.12%
Se 196.026†	4.3	2.6487	ug/L	1.62127	2.6487	ppb	1.62127 61.21%
Si 251.611†	4724.1	141.41	ug/L	0.592	141.41	ppb	0.592 0.42%
Sn 189.927†	-1.4	-0.2242	ug/L	0.42678	-0.2242	ppb	0.42678 190.33%
Sr 421.552†	49.4	0.3069	ug/L	0.07282	0.3069	ppb	0.07282 23.72%
Ti 334.940†	1071.3	1.7083	ug/L	0.05855	1.7083	ppb	0.05855 3.43%
Tl 190.801†	2.4	0.6967	ug/L	1.71801	0.6967	ppb	1.71801 246.59%
U 409.014†	265.0	7.2919	ug/L	3.74185	7.2919	ppb	3.74185 51.32%
V 292.402†	93.1	0.6270	ug/L	0.12120	0.6270	ppb	0.12120 19.33%
Zn 213.857†	163.8	1.4193	ug/L	0.06685	1.4193	ppb	0.06685 4.71%
SiO2†	4751.2	304.75	ug/L	1.069	304.75	ppb	1.069 0.35%

Sequence No.: 8
Sample ID: 241713002|927388|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 150
Date Collected: 12/8/2009 13:56:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241713002|927388|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5996.2	5996.2	103	%			13:58:35
1	Y RADIAL	6446.8	6446.8	102.5	%			13:58:35
1	Al 396.153Radial†	1.4	21.7	15.124	ug/L	15.124	ppb	13:58:35
1	Ca 317.933Radial†	30.0	13.7	20.153	ug/L	20.153	ppb	13:58:55
1	Fe 238.204 Radial†	8.1	1.1	10.022	ug/L	10.022	ppb	13:58:55
1	K 766.490 Radial†	2337.7	-73.4	-13.045	ug/L	-13.045	ppb	13:58:35
1	Mg 279.077 IEC†	1.9	0.7	25.449	ug/L	25.449	ppb	13:58:55
1	Na 589.592 Radial†	-953.1	159.0	53.365	ug/L	53.365	ppb	13:58:35
1	Sr 421.552†	2.4	29.7	0.1847	ug/L	0.1847	ppb	13:58:35
1	Sc 361.383	914256.5	914256.5	101.44	%			13:59:52
1	Y 371.029	759751.6	759751.6	101.15	%			13:59:52
1	Ag 328.068†	238.8	-57.3	-0.2617	ug/L	-0.2617	ppb	13:59:52
1	As 188.979†	-21.1	3.4	1.3562	ug/L	1.3562	ppb	14:00:12
1	B 249.677†	-387.1	149.1	3.1261	ug/L	3.1261	ppb	14:00:12
1	Ba 233.527†	-22.7	-13.9	-0.1011	ug/L	-0.1011	ppb	14:00:12
1	Be 313.107†	-5157.5	28.8	0.0113	ug/L	0.0113	ppb	13:59:52
1	Cd 226.502†	-189.3	8.5	0.0889	ug/L	0.0889	ppb	14:00:12
1	Co 228.616†	-70.5	-4.1	-0.0804	ug/L	-0.0804	ppb	14:00:12
1	Cr 267.716†	80.1	0.3	0.0019	ug/L	0.0019	ppb	14:00:12
1	Cu 324.752†	6982.8	126.9	0.3636	ug/L	0.3636	ppb	13:59:52
1	Mn 257.610†	549.3	119.2	0.1277	ug/L	0.1277	ppb	14:00:12
1	Mo 202.031†	12.1	-6.4	-0.4061	ug/L	-0.4061	ppb	14:00:12
1	Ni 231.604†	84.8	-2.9	-0.0676	ug/L	-0.0676	ppb	14:00:12
1	P 214.914†	238.2	11.3	6.4710	ug/L	6.4710	ppb	14:00:12
1	Pb 220.353†	-66.0	3.4	0.3830	ug/L	0.3830	ppb	14:00:12
1	S 181.975 Axial†	43.8	1.6	2.2529	ug/L	2.2529	ppb	14:00:12
1	Sb 206.836†	28.8	-5.9	-1.8769	ug/L	-1.8769	ppb	14:00:12
1	Se 196.026†	-20.1	9.0	5.2240	ug/L	5.2240	ppb	14:00:12
1	Si 251.611†	2395.7	1912.0	57.251	ug/L	57.251	ppb	14:00:12
1	Sn 189.927†	-0.5	-5.5	-0.8970	ug/L	-0.8970	ppb	14:00:12
1	Ti 334.940†	-873.7	253.6	0.4017	ug/L	0.4017	ppb	13:59:52
1	Tl 190.801†	-40.6	-7.5	-2.0873	ug/L	-2.0873	ppb	14:00:12
1	U 409.014†	-2098.1	333.5	9.1855	ug/L	9.1855	ppb	13:59:52
1	V 292.402†	-1260.9	115.3	0.7724	ug/L	0.7724	ppb	13:59:52
1	Zn 213.857†	842.9	209.0	1.8245	ug/L	1.8245	ppb	14:00:12
1	SiO2†	2479.2	1976.5	126.82	ug/L	126.82	ppb	14:01:08
2	Sc Radial	6040.9	6040.9	103	%			13:59:00
2	Y RADIAL	6482.0	6482.0	103.1	%			13:59:00
2	Al 396.153Radial†	14.4	34.4	23.877	ug/L	23.877	ppb	13:59:00
2	Ca 317.933Radial†	31.2	14.6	21.460	ug/L	21.460	ppb	13:59:20
2	Fe 238.204 Radial†	6.5	-0.5	-4.4938	ug/L	-4.4938	ppb	13:59:20
2	K 766.490 Radial†	2238.5	-186.2	-33.043	ug/L	-33.043	ppb	13:59:00
2	Mg 279.077 IEC†	2.9	1.6	57.821	ug/L	57.821	ppb	13:59:20
2	Na 589.592 Radial†	-939.8	178.8	59.997	ug/L	59.997	ppb	13:59:00
2	Sr 421.552†	-14.0	13.8	0.0860	ug/L	0.0860	ppb	13:59:00
2	Sc 361.383	916687.5	916687.5	101.71	%			14:00:17
2	Y 371.029	763273.8	763273.8	101.62	%			14:00:17
2	Ag 328.068†	259.5	-37.6	-0.1786	ug/L	-0.1786	ppb	14:00:17
2	As 188.979†	-25.3	-0.7	-0.2707	ug/L	-0.2707	ppb	14:00:37
2	B 249.677†	-335.8	200.5	4.2060	ug/L	4.2060	ppb	14:00:37
2	Ba 233.527†	5.8	14.2	0.1055	ug/L	0.1055	ppb	14:00:37
2	Be 313.107†	-5071.0	127.3	0.0470	ug/L	0.0470	ppb	14:00:17
2	Cd 226.502†	-181.4	16.8	0.1780	ug/L	0.1780	ppb	14:00:37
2	Co 228.616†	-67.8	-1.2	-0.0234	ug/L	-0.0234	ppb	14:00:37
2	Cr 267.716†	75.4	-4.5	-0.0499	ug/L	-0.0499	ppb	14:00:37
2	Cu 324.752†	6836.3	-35.5	-0.1017	ug/L	-0.1017	ppb	14:00:17
2	Mn 257.610†	584.7	152.5	0.1612	ug/L	0.1612	ppb	14:00:37
2	Mo 202.031†	17.5	-1.2	-0.0747	ug/L	-0.0747	ppb	14:00:37
2	Ni 231.604†	103.7	15.4	0.3569	ug/L	0.3569	ppb	14:00:37

2	P 214.914†	224.5	-2.8	-1.6168	ug/L	-1.6168	ppb	14:00:37
2	Pb 220.353†	-48.4	20.8	2.3610	ug/L	2.3610	ppb	14:00:37
2	S 181.975 Axial†	51.6	9.1	12.775	ug/L	12.775	ppb	14:00:37
2	Sb 206.836†	39.7	4.8	1.5044	ug/L	1.5044	ppb	14:00:37
2	Se 196.026†	-30.8	-1.4	-0.8452	ug/L	-0.8452	ppb	14:00:37
2	Si 251.611†	2410.8	1920.6	57.508	ug/L	57.508	ppb	14:00:37
2	Sn 189.927†	0.5	-4.5	-0.7357	ug/L	-0.7357	ppb	14:00:37
2	Ti 334.940†	-936.8	193.9	0.3067	ug/L	0.3067	ppb	14:00:17
2	Tl 190.801†	-31.7	1.4	0.3845	ug/L	0.3845	ppb	14:00:37
2	U 409.014†	-2119.2	318.3	8.7689	ug/L	8.7689	ppb	14:00:17
2	V 292.402†	-1343.1	37.8	0.2675	ug/L	0.2675	ppb	14:00:17
2	Zn 213.857†	856.6	220.4	1.9215	ug/L	1.9215	ppb	14:00:37
2	SiO2†	2438.0	1929.5	123.80	ug/L	123.80	ppb	14:01:13
3	Sc Radial	5952.2	5952.2	102	%			13:59:25
3	Y RADIAL	6377.6	6377.6	101.4	%			13:59:25
3	Al 396.153Radial†	-2.1	18.3	12.712	ug/L	12.712	ppb	13:59:25
3	Ca 317.933Radial†	24.2	8.2	12.115	ug/L	12.115	ppb	13:59:45
3	Fe 238.204 Radial†	6.4	-0.5	-4.8383	ug/L	-4.8383	ppb	13:59:45
3	K 766.490 Radial†	2256.0	-136.7	-24.281	ug/L	-24.281	ppb	13:59:25
3	Mg 279.077 IEC†	3.3	2.1	72.465	ug/L	72.465	ppb	13:59:45
3	Na 589.592 Radial†	-899.7	204.6	68.662	ug/L	68.662	ppb	13:59:25
3	Sr 421.552†	8.0	35.2	0.2190	ug/L	0.2190	ppb	13:59:25
3	Sc 361.383	915531.0	915531.0	101.58	%			14:00:42
3	Y 371.029	762564.0	762564.0	101.53	%			14:00:42
3	Ag 328.068†	360.6	62.2	0.2763	ug/L	0.2763	ppb	14:00:42
3	As 188.979†	-25.2	-0.6	-0.2340	ug/L	-0.2340	ppb	14:01:02
3	B 249.677†	-370.6	165.9	3.4788	ug/L	3.4788	ppb	14:01:02
3	Ba 233.527†	16.1	24.3	0.1808	ug/L	0.1808	ppb	14:01:02
3	Be 313.107†	-5143.0	50.1	0.0187	ug/L	0.0187	ppb	14:00:42
3	Cd 226.502†	-197.9	0.3	0.0037	ug/L	0.0037	ppb	14:01:02
3	Co 228.616†	-58.0	8.4	0.1585	ug/L	0.1585	ppb	14:01:02
3	Cr 267.716†	98.4	18.2	0.1901	ug/L	0.1901	ppb	14:01:02
3	Cu 324.752†	6846.1	-17.3	-0.0497	ug/L	-0.0497	ppb	14:00:42
3	Mn 257.610†	575.4	144.1	0.1519	ug/L	0.1519	ppb	14:01:02
3	Mo 202.031†	19.3	0.6	0.0394	ug/L	0.0394	ppb	14:01:02
3	Ni 231.604†	84.4	-3.4	-0.0797	ug/L	-0.0797	ppb	14:01:02
3	P 214.914†	225.0	-2.0	-1.1536	ug/L	-1.1536	ppb	14:01:02
3	Pb 220.353†	-48.7	20.5	2.3244	ug/L	2.3244	ppb	14:01:02
3	S 181.975 Axial†	42.8	0.5	0.7128	ug/L	0.7128	ppb	14:01:02
3	Sb 206.836†	19.8	-14.7	-4.6739	ug/L	-4.6739	ppb	14:01:02
3	Se 196.026†	-32.2	-2.9	-1.6804	ug/L	-1.6804	ppb	14:01:02
3	Si 251.611†	2423.9	1936.5	57.979	ug/L	57.979	ppb	14:01:02
3	Sn 189.927†	2.3	-2.7	-0.4474	ug/L	-0.4474	ppb	14:01:02
3	Ti 334.940†	-982.0	148.3	0.2344	ug/L	0.2344	ppb	14:00:42
3	Tl 190.801†	-31.4	1.6	0.4370	ug/L	0.4370	ppb	14:01:02
3	U 409.014†	-2214.2	222.1	6.1190	ug/L	6.1190	ppb	14:00:42
3	V 292.402†	-1322.4	56.6	0.3884	ug/L	0.3884	ppb	14:00:42
3	Zn 213.857†	865.0	229.7	2.0053	ug/L	2.0053	ppb	14:01:02
3	SiO2†	2448.6	1943.0	124.66	ug/L	124.66	ppb	14:01:18

Mean Data: 241713002|927388|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915491.7	101.58	%	0.135				0.13%
Sc Radial	5996.4	103	%	0.8				0.74%
Y 371.029	761863.1	101.44	%	0.248				0.24%
Y RADIAL	6435.4	102.3	%	0.84				0.82%
Ag 328.068†	-10.9	-0.0546	ug/L	0.28962	-0.0546	ppb	0.28962	529.99%
Al 396.153Radial†	24.8	17.237	ug/L	5.8749	17.237	ppb	5.8749	34.08%
As 188.979†	0.7	0.2838	ug/L	0.92889	0.2838	ppb	0.92889	327.27%
B 249.677†	171.8	3.6036	ug/L	0.55069	3.6036	ppb	0.55069	15.28%
Ba 233.527†	8.2	0.0618	ug/L	0.14594	0.0618	ppb	0.14594	236.30%
Be 313.107†	68.7	0.0257	ug/L	0.01885	0.0257	ppb	0.01885	73.42%
Ca 317.933Radial†	12.2	17.909	ug/L	5.0607	17.909	ppb	5.0607	28.26%
Cd 226.502†	8.5	0.0902	ug/L	0.08720	0.0902	ppb	0.08720	96.68%
Co 228.616†	1.0	0.0182	ug/L	0.12477	0.0182	ppb	0.12477	684.55%
Cr 267.716†	4.7	0.0473	ug/L	0.12628	0.0473	ppb	0.12628	266.74%
Cu 324.752†	24.7	0.0707	ug/L	0.25497	0.0707	ppb	0.25497	360.43%
Fe 238.204 Radial†	0.0	0.2299	ug/L	8.48185	0.2299	ppb	8.48185	>999.9%
K 766.490 Radial†	-132.1	-23.456	ug/L	10.0242	-23.456	ppb	10.0242	42.74%

Mg 279.077 IEC†	1.5	51.912	ug/L	24.0585	51.912	ppb	24.0585 46.34%
Mn 257.610†	138.6	0.1469	ug/L	0.01729	0.1469	ppb	0.01729 11.77%
Mo 202.031†	-2.3	-0.1471	ug/L	0.23143	-0.1471	ppb	0.23143 157.29%
Na 589.592 Radial†	180.8	60.674	ug/L	7.6713	60.674	ppb	7.6713 12.64%
Ni 231.604†	3.0	0.0699	ug/L	0.24866	0.0699	ppb	0.24866 355.89%
P 214.914†	2.2	1.2335	ug/L	4.54169	1.2335	ppb	4.54169 368.18%
Pb 220.353†	14.9	1.6895	ug/L	1.13153	1.6895	ppb	1.13153 66.98%
S 181.975 Axial†	3.7	5.2469	ug/L	6.56485	5.2469	ppb	6.56485 125.12%
Sb 206.836†	-5.3	-1.6821	ug/L	3.09375	-1.6821	ppb	3.09375 183.92%
Se 196.026†	1.5	0.8995	ug/L	3.76840	0.8995	ppb	3.76840 418.95%
Si 251.611†	1923.0	57.579	ug/L	0.3693	57.579	ppb	0.3693 0.64%
Sn 189.927†	-4.2	-0.6934	ug/L	0.22777	-0.6934	ppb	0.22777 32.85%
Sr 421.552†	26.2	0.1632	ug/L	0.06904	0.1632	ppb	0.06904 42.30%
Ti 334.940†	198.6	0.3143	ug/L	0.08389	0.3143	ppb	0.08389 26.69%
Tl 190.801†	-1.5	-0.4220	ug/L	1.44248	-0.4220	ppb	1.44248 341.85%
U 409.014†	291.3	8.0244	ug/L	1.66328	8.0244	ppb	1.66328 20.73%
V 292.402†	69.9	0.4761	ug/L	0.26366	0.4761	ppb	0.26366 55.38%
Zn 213.857†	219.7	1.9171	ug/L	0.09046	1.9171	ppb	0.09046 4.72%
SiO2†	1949.6	125.09	ug/L	1.554	125.09	ppb	1.554 1.24%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 14:10:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5767.6	5767.6	98.7	%			14:12:27
1	Y RADIAL	6113.9	6113.9	97.23	%			14:12:27
1	Al 396.153Radial†	7037.9	7151.4	4946.2	ug/L	4946.2	ppb	14:12:27
1	Ca 317.933Radial†	3411.0	3440.5	5071.1	ug/L	5071.1	ppb	14:12:47
1	Fe 238.204 Radial†	551.7	552.2	5185.6	ug/L	5185.6	ppb	14:12:47
1	K 766.490 Radial†	30862.4	28918.9	5119.7	ug/L	5119.7	ppb	14:12:27
1	Mg 279.077 IEC†	148.5	149.4	5274.6	ug/L	5274.6	ppb	14:12:47
1	Na 589.592 Radial†	28095.3	29554.8	9918.0	ug/L	9918.0	ppb	14:12:27
1	Sr 421.552†	80684.1	81778.7	509.25	ug/L	509.25	ppb	14:12:27
1	Sc 361.383	914335.1	914335.1	101.45	%			14:13:44
1	Y 371.029	745873.4	745873.4	99.306	%			14:13:44
1	Ag 328.068†	112981.5	111073.6	506.18	ug/L	506.18	ppb	14:13:49
1	As 188.979†	1241.4	1247.8	497.49	ug/L	497.49	ppb	14:14:09
1	B 249.677†	23031.8	23233.2	485.27	ug/L	485.27	ppb	14:13:49
1	Ba 233.527†	67901.6	66939.4	497.40	ug/L	497.40	ppb	14:13:49
1	Be 313.107†	1359268.7	1344950.1	491.23	ug/L	491.23	ppb	14:13:44
1	Cd 226.502†	47511.2	47027.1	496.94	ug/L	496.94	ppb	14:13:49
1	Co 228.616†	26580.2	26265.6	498.63	ug/L	498.63	ppb	14:13:49
1	Cr 267.716†	47865.6	47102.7	495.25	ug/L	495.25	ppb	14:13:49
1	Cu 324.752†	182072.2	172712.6	494.52	ug/L	494.52	ppb	14:13:49
1	Mn 257.610†	469610.4	462474.8	493.76	ug/L	493.76	ppb	14:13:44
1	Mo 202.031†	7966.9	7834.7	498.07	ug/L	498.07	ppb	14:14:09
1	Ni 231.604†	21836.7	21438.0	496.11	ug/L	496.11	ppb	14:13:49
1	P 214.914†	4530.8	4242.6	2371.9	ug/L	2371.9	ppb	14:14:09
1	Pb 220.353†	4334.3	4340.8	492.23	ug/L	492.23	ppb	14:14:09
1	S 181.975 Axial†	752.5	700.2	980.20	ug/L	980.20	ppb	14:14:09
1	Sb 206.836†	1621.5	1564.0	502.20	ug/L	502.20	ppb	14:14:09
1	Se 196.026†	835.3	852.1	511.46	ug/L	511.46	ppb	14:14:09
1	Si 251.611†	84831.3	83168.9	2477.8	ug/L	2477.8	ppb	14:13:49
1	Sn 189.927†	3088.6	3039.5	498.26	ug/L	498.26	ppb	14:14:09
1	Ti 334.940†	319504.6	316052.1	504.23	ug/L	504.23	ppb	14:13:49
1	Tl 190.801†	1751.4	1758.9	495.84	ug/L	495.84	ppb	14:14:09
1	U 409.014†	16013.2	18186.1	499.37	ug/L	499.37	ppb	14:13:49
1	V 292.402†	74358.8	74654.1	499.75	ug/L	499.75	ppb	14:13:49
1	Zn 213.857†	58240.8	56786.4	491.67	ug/L	491.67	ppb	14:13:49
1	SiO2†	84590.2	82913.5	5292.7	ug/L	5292.7	ppb	14:15:17
2	Sc Radial	5844.2	5844.2	100	%			14:12:52
2	Y RADIAL	6183.7	6183.7	98.34	%			14:12:52
2	Al 396.153Radial†	7136.0	7156.1	4949.6	ug/L	4949.6	ppb	14:12:52
2	Ca 317.933Radial†	3429.6	3413.8	5031.8	ug/L	5031.8	ppb	14:13:12
2	Fe 238.204 Radial†	560.4	553.6	5198.5	ug/L	5198.5	ppb	14:13:12
2	K 766.490 Radial†	31201.2	28848.2	5107.2	ug/L	5107.2	ppb	14:12:52
2	Mg 279.077 IEC†	150.4	149.3	5271.3	ug/L	5271.3	ppb	14:13:12
2	Na 589.592 Radial†	28413.1	29499.8	9899.6	ug/L	9899.6	ppb	14:12:52
2	Sr 421.552†	81619.5	81643.5	508.41	ug/L	508.41	ppb	14:12:52
2	Sc 361.383	916326.9	916326.9	101.67	%			14:14:15
2	Y 371.029	747946.9	747946.9	99.582	%			14:14:15
2	Ag 328.068†	112044.5	109909.9	500.90	ug/L	500.90	ppb	14:14:20
2	As 188.979†	1222.6	1226.7	489.10	ug/L	489.10	ppb	14:14:40
2	B 249.677†	22946.8	23100.3	482.49	ug/L	482.49	ppb	14:14:20
2	Ba 233.527†	67507.5	66406.3	493.44	ug/L	493.44	ppb	14:14:20
2	Be 313.107†	1365317.7	1347987.5	492.33	ug/L	492.33	ppb	14:14:15
2	Cd 226.502†	47350.7	46767.4	494.19	ug/L	494.19	ppb	14:14:20
2	Co 228.616†	26500.9	26130.7	496.07	ug/L	496.07	ppb	14:14:20
2	Cr 267.716†	47619.4	46758.0	491.63	ug/L	491.63	ppb	14:14:20
2	Cu 324.752†	180608.4	170882.9	489.28	ug/L	489.28	ppb	14:14:20
2	Mn 257.610†	471448.2	463276.2	494.61	ug/L	494.61	ppb	14:14:15
2	Mo 202.031†	7948.2	7799.2	495.82	ug/L	495.82	ppb	14:14:40
2	Ni 231.604†	21746.7	21302.6	492.98	ug/L	492.98	ppb	14:14:20

2	P 214.914†	4549.4	4251.1	2377.6	ug/L	2377.6 ppb	14:14:40
2	Pb 220.353†	4320.6	4318.0	489.66	ug/L	489.66 ppb	14:14:40
2	S 181.975 Axial†	751.5	697.6	976.54	ug/L	976.54 ppb	14:14:40
2	Sb 206.836†	1620.3	1559.4	500.74	ug/L	500.74 ppb	14:14:40
2	Se 196.026†	837.8	852.8	511.89	ug/L	511.89 ppb	14:14:40
2	Si 251.611†	84132.7	82300.0	2451.8	ug/L	2451.8 ppb	14:14:20
2	Sn 189.927†	3084.6	3028.9	496.53	ug/L	496.53 ppb	14:14:40
2	Ti 334.940†	317654.2	313547.4	500.23	ug/L	500.23 ppb	14:14:20
2	Tl 190.801†	1736.1	1740.1	490.58	ug/L	490.58 ppb	14:14:40
2	U 409.014†	15862.4	18003.5	494.35	ug/L	494.35 ppb	14:14:20
2	V 292.402†	73950.4	74093.1	496.01	ug/L	496.01 ppb	14:14:20
2	Zn 213.857†	57929.0	56354.9	487.93	ug/L	487.93 ppb	14:14:20
2	SiO2†	84189.5	82338.1	5255.9	ug/L	5255.9 ppb	14:15:22
3	Sc Radial	5890.8	5890.8	101	%		14:13:17
3	Y RADIAL	6272.3	6272.3	99.75	%		14:13:17
3	Al 396.153Radial†	7123.1	7086.9	4901.4	ug/L	4901.4 ppb	14:13:17
3	Ca 317.933Radial†	3415.8	3373.1	4971.7	ug/L	4971.7 ppb	14:13:37
3	Fe 238.204 Radial†	550.4	539.2	5063.4	ug/L	5063.4 ppb	14:13:37
3	K 766.490 Radial†	31389.4	28788.0	5096.5	ug/L	5096.5 ppb	14:13:17
3	Mg 279.077 IEC†	148.3	146.0	5156.2	ug/L	5156.2 ppb	14:13:37
3	Na 589.592 Radial†	28750.2	29609.5	9936.4	ug/L	9936.4 ppb	14:13:17
3	Sr 421.552†	82414.1	81785.9	509.30	ug/L	509.30 ppb	14:13:17
3	Sc 361.383	917143.5	917143.5	101.76	%		14:14:46
3	Y 371.029	747714.9	747714.9	99.551	%		14:14:46
3	Ag 328.068†	111815.0	109586.3	499.39	ug/L	499.39 ppb	14:14:51
3	As 188.979†	1227.9	1230.8	490.72	ug/L	490.72 ppb	14:15:11
3	B 249.677†	22960.0	23093.1	482.36	ug/L	482.36 ppb	14:14:51
3	Ba 233.527†	67497.4	66337.2	492.92	ug/L	492.92 ppb	14:14:51
3	Be 313.107†	1368447.3	1349867.2	493.01	ug/L	493.01 ppb	14:14:46
3	Cd 226.502†	47312.9	46688.8	493.38	ug/L	493.38 ppb	14:14:51
3	Co 228.616†	26449.5	26057.0	494.69	ug/L	494.69 ppb	14:14:51
3	Cr 267.716†	47510.7	46609.4	490.07	ug/L	490.07 ppb	14:14:51
3	Cu 324.752†	180160.7	170284.7	487.56	ug/L	487.56 ppb	14:14:51
3	Mn 257.610†	473615.9	464993.5	496.44	ug/L	496.44 ppb	14:14:46
3	Mo 202.031†	7973.5	7817.1	496.95	ug/L	496.95 ppb	14:15:11
3	Ni 231.604†	21750.4	21287.3	492.62	ug/L	492.62 ppb	14:14:51
3	P 214.914†	4556.7	4254.3	2379.9	ug/L	2379.9 ppb	14:15:11
3	Pb 220.353†	4347.5	4340.6	492.22	ug/L	492.22 ppb	14:15:11
3	S 181.975 Axial†	765.3	710.5	994.61	ug/L	994.61 ppb	14:15:11
3	Sb 206.836†	1636.8	1574.2	505.57	ug/L	505.57 ppb	14:15:11
3	Se 196.026†	835.3	849.7	509.63	ug/L	509.63 ppb	14:15:11
3	Si 251.611†	84088.3	82182.7	2448.3	ug/L	2448.3 ppb	14:14:51
3	Sn 189.927†	3113.9	3055.0	500.79	ug/L	500.79 ppb	14:15:11
3	Ti 334.940†	316824.9	312454.3	498.49	ug/L	498.49 ppb	14:14:51
3	Tl 190.801†	1742.6	1745.0	491.94	ug/L	491.94 ppb	14:15:11
3	U 409.014†	15712.7	17842.5	489.93	ug/L	489.93 ppb	14:14:51
3	V 292.402†	73846.4	73926.1	494.93	ug/L	494.93 ppb	14:14:51
3	Zn 213.857†	57930.5	56305.7	487.52	ug/L	487.52 ppb	14:14:51
3	SiO2†	84838.9	82902.6	5292.1	ug/L	5292.1 ppb	14:15:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915935.2	101.63	%	0.160				0.16%
Sc Radial	5834.2	99.8	%	1.06				1.07%
Y 371.029	747178.4	99.480	%	0.1513				0.15%
Y RADIAL	6189.9	98.44	%	1.262				1.28%
Ag 328.068†	110190.0	502.16	ug/L	3.563	502.16	ppb	3.563	0.71%
QC value within limits for Ag 328.068 Recovery = 100.43%								
Al 396.153Radial†	7131.5	4932.4	ug/L	26.88	4932.4	ppb	26.88	0.55%
QC value within limits for Al 396.153Radial Recovery = 98.65%								
As 188.979†	1235.1	492.44	ug/L	4.451	492.44	ppb	4.451	0.90%
QC value within limits for As 188.979 Recovery = 98.49%								
B 249.677†	23142.2	483.37	ug/L	1.645	483.37	ppb	1.645	0.34%
QC value within limits for B 249.677 Recovery = 96.67%								
Ba 233.527†	66560.9	494.59	ug/L	2.449	494.59	ppb	2.449	0.50%
QC value within limits for Ba 233.527 Recovery = 98.92%								
Be 313.107†	1347601.6	492.19	ug/L	0.899	492.19	ppb	0.899	0.18%
QC value within limits for Be 313.107 Recovery = 98.44%								
Ca 317.933Radial†	3409.1	5024.9	ug/L	50.04	5024.9	ppb	50.04	1.00%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.50%
Cd 226.502†            46827.8      494.84 ug/L         1.868      494.84 ppb          1.868   0.38%
   QC value within limits for Cd 226.502  Recovery = 98.97%
Co 228.616†            26151.1      496.46 ug/L         2.003      496.46 ppb          2.003   0.40%
   QC value within limits for Co 228.616  Recovery = 99.29%
Cr 267.716†            46823.4      492.32 ug/L         2.660      492.32 ppb          2.660   0.54%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           171293.4      490.46 ug/L         3.622      490.46 ppb          3.622   0.74%
   QC value within limits for Cu 324.752  Recovery = 98.09%
Fe 238.204 Radial†       548.3      5149.1 ug/L        74.56      5149.1 ppb         74.56   1.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.98%
K 766.490 Radial†      28851.7      5107.8 ug/L        11.64      5107.8 ppb         11.64   0.23%
   QC value within limits for K 766.490 Radial  Recovery = 102.16%
Mg 279.077 IEC†          148.2      5234.1 ug/L        67.45      5234.1 ppb         67.45   1.29%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.68%
Mn 257.610†           463581.5      494.94 ug/L         1.367      494.94 ppb          1.367   0.28%
   QC value within limits for Mn 257.610  Recovery = 98.99%
Mo 202.031†             7817.0      496.95 ug/L         1.126      496.95 ppb          1.126   0.23%
   QC value within limits for Mo 202.031  Recovery = 99.39%
Na 589.592 Radial†     29554.7      9918.0 ug/L        18.39      9918.0 ppb         18.39   0.19%
   QC value within limits for Na 589.592 Radial  Recovery = 99.18%
Ni 231.604†            21342.6      493.90 ug/L         1.919      493.90 ppb          1.919   0.39%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†              4249.3      2376.5 ug/L         4.13      2376.5 ppb          4.13   0.17%
   QC value within limits for P 214.914  Recovery = 95.06%
Pb 220.353†             4333.1      491.37 ug/L         1.482      491.37 ppb          1.482   0.30%
   QC value within limits for Pb 220.353  Recovery = 98.27%
S 181.975 Axial†         702.8      983.78 ug/L         9.551      983.78 ppb          9.551   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 98.38%
Sb 206.836†             1565.9      502.84 ug/L         2.475      502.84 ppb          2.475   0.49%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†              851.5      510.99 ug/L         1.202      510.99 ppb          1.202   0.24%
   QC value within limits for Se 196.026  Recovery = 102.20%
Si 251.611†            82550.6      2459.3 ug/L        16.11      2459.3 ppb         16.11   0.66%
   QC value within limits for Si 251.611  Recovery = 98.37%
Sn 189.927†             3041.1      498.53 ug/L         2.145      498.53 ppb          2.145   0.43%
   QC value within limits for Sn 189.927  Recovery = 99.71%
Sr 421.552†            81736.0      508.98 ug/L         0.500      508.98 ppb          0.500   0.10%
   QC value within limits for Sr 421.552  Recovery = 101.80%
Ti 334.940†           314017.9      500.98 ug/L         2.943      500.98 ppb          2.943   0.59%
   QC value within limits for Ti 334.940  Recovery = 100.20%
Tl 190.801†             1748.0      492.79 ug/L         2.732      492.79 ppb          2.732   0.55%
   QC value within limits for Tl 190.801  Recovery = 98.56%
U 409.014†             18010.7      494.55 ug/L         4.724      494.55 ppb          4.724   0.96%
   QC value within limits for U 409.014  Recovery = 98.91%
V 292.402†             74224.5      496.90 ug/L         2.529      496.90 ppb          2.529   0.51%
   QC value within limits for V 292.402  Recovery = 99.38%
Zn 213.857†            56482.3      489.04 ug/L         2.289      489.04 ppb          2.289   0.47%
   QC value within limits for Zn 213.857  Recovery = 97.81%
SiO2†                  82718.1      5280.2 ug/L        21.06      5280.2 ppb         21.06   0.40%
   QC value within limits for SiO2  Recovery = 98.74%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 14:17:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5779.9	5779.9	98.9	%			14:19:30
1	Y RADIAL	6181.0	6181.0	98.30	%			14:19:30
1	Al 396.153Radial†	-29.7	-9.6	-6.7264	ug/L	-6.7264	ppb	14:19:30
1	Ca 317.933Radial†	26.3	11.0	16.241	ug/L	16.241	ppb	14:19:50
1	Fe 238.204 Radial†	8.6	1.9	18.113	ug/L	18.113	ppb	14:19:50
1	K 766.490 Radial†	2440.0	115.3	20.422	ug/L	20.422	ppb	14:19:30
1	Mg 279.077 IEC†	6.0	5.0	174.72	ug/L	174.72	ppb	14:19:50
1	Na 589.592 Radial†	-917.1	160.7	53.921	ug/L	53.921	ppb	14:19:30
1	Sr 421.552†	-12.7	14.5	0.0901	ug/L	0.0901	ppb	14:19:30
1	Sc 361.383	909647.7	909647.7	100.93	%			14:20:46
1	Y 371.029	757756.8	757756.8	100.89	%			14:20:46
1	Ag 328.068†	423.4	126.8	0.5784	ug/L	0.5784	ppb	14:20:46
1	As 188.979†	-34.0	-9.5	-3.7454	ug/L	-3.7454	ppb	14:21:06
1	B 249.677†	-308.9	224.6	4.7091	ug/L	4.7091	ppb	14:21:06
1	Ba 233.527†	-18.5	-9.9	-0.0707	ug/L	-0.0707	ppb	14:21:06
1	Be 313.107†	-5051.6	107.9	0.0395	ug/L	0.0395	ppb	14:20:46
1	Cd 226.502†	-187.7	9.2	0.0950	ug/L	0.0950	ppb	14:21:06
1	Co 228.616†	-73.9	-7.8	-0.1459	ug/L	-0.1459	ppb	14:21:06
1	Cr 267.716†	52.3	-26.9	-0.2821	ug/L	-0.2821	ppb	14:21:06
1	Cu 324.752†	6834.6	14.9	0.0437	ug/L	0.0437	ppb	14:20:46
1	Mn 257.610†	459.5	33.0	0.0337	ug/L	0.0337	ppb	14:21:06
1	Mo 202.031†	31.7	13.1	0.8318	ug/L	0.8318	ppb	14:21:06
1	Ni 231.604†	81.5	-5.8	-0.1348	ug/L	-0.1348	ppb	14:21:06
1	P 214.914†	215.4	-10.1	-5.8334	ug/L	-5.8334	ppb	14:21:06
1	Pb 220.353†	-79.5	-10.3	-1.1620	ug/L	-1.1620	ppb	14:21:06
1	S 181.975 Axial†	49.6	7.6	10.649	ug/L	10.649	ppb	14:21:06
1	Sb 206.836†	36.7	2.1	0.6884	ug/L	0.6884	ppb	14:21:06
1	Se 196.026†	-27.8	1.2	0.7741	ug/L	0.7741	ppb	14:21:06
1	Si 251.611†	506.0	51.6	1.5257	ug/L	1.5257	ppb	14:21:06
1	Sn 189.927†	2.4	-2.6	-0.4235	ug/L	-0.4235	ppb	14:21:06
1	Ti 334.940†	-1063.5	61.2	0.0960	ug/L	0.0960	ppb	14:20:46
1	Tl 190.801†	-32.4	0.4	0.1073	ug/L	0.1073	ppb	14:21:06
1	U 409.014†	-2204.8	217.4	5.9861	ug/L	5.9861	ppb	14:20:46
1	V 292.402†	-1225.7	143.9	0.9754	ug/L	0.9754	ppb	14:20:46
1	Zn 213.857†	664.9	37.0	0.3160	ug/L	0.3160	ppb	14:21:06
1	SiO2†	526.4	54.1	3.4289	ug/L	3.4289	ppb	14:22:02
2	Sc Radial	5959.4	5959.4	102	%			14:19:55
2	Y RADIAL	6404.8	6404.8	101.9	%			14:19:55
2	Al 396.153Radial†	-5.4	15.1	10.491	ug/L	10.491	ppb	14:19:55
2	Ca 317.933Radial†	25.8	9.7	14.314	ug/L	14.314	ppb	14:20:15
2	Fe 238.204 Radial†	7.3	0.3	2.9071	ug/L	2.9071	ppb	14:20:15
2	K 766.490 Radial†	2446.3	47.2	8.3442	ug/L	8.3442	ppb	14:19:55
2	Mg 279.077 IEC†	3.8	2.6	90.907	ug/L	90.907	ppb	14:20:15
2	Na 589.592 Radial†	-903.6	201.9	67.746	ug/L	67.746	ppb	14:19:55
2	Sr 421.552†	-25.1	2.8	0.0172	ug/L	0.0172	ppb	14:19:55
2	Sc 361.383	908783.6	908783.6	100.83	%			14:21:12
2	Y 371.029	756729.9	756729.9	100.75	%			14:21:12
2	Ag 328.068†	283.9	-11.2	-0.0528	ug/L	-0.0528	ppb	14:21:12
2	As 188.979†	-25.2	-0.8	-0.3109	ug/L	-0.3109	ppb	14:21:32
2	B 249.677†	-341.6	191.9	4.0240	ug/L	4.0240	ppb	14:21:32
2	Ba 233.527†	0.6	9.0	0.0675	ug/L	0.0675	ppb	14:21:32
2	Be 313.107†	-5046.8	107.9	0.0397	ug/L	0.0397	ppb	14:21:12
2	Cd 226.502†	-188.4	8.3	0.0874	ug/L	0.0874	ppb	14:21:32
2	Co 228.616†	-67.7	-1.7	-0.0324	ug/L	-0.0324	ppb	14:21:32
2	Cr 267.716†	72.1	-7.2	-0.0763	ug/L	-0.0763	ppb	14:21:32
2	Cu 324.752†	6841.1	27.7	0.0795	ug/L	0.0795	ppb	14:21:12
2	Mn 257.610†	445.1	19.1	0.0190	ug/L	0.0190	ppb	14:21:32
2	Mo 202.031†	22.8	4.3	0.2711	ug/L	0.2711	ppb	14:21:32
2	Ni 231.604†	93.9	6.6	0.1531	ug/L	0.1531	ppb	14:21:32

2	P 214.914†	214.6	-10.6	-6.1467	ug/L	-6.1467 ppb	14:21:32
2	Pb 220.353†	-60.6	8.3	0.9438	ug/L	0.9438 ppb	14:21:32
2	S 181.975 Axial†	36.6	-5.3	-7.4290	ug/L	-7.4290 ppb	14:21:32
2	Sb 206.836†	37.6	3.0	0.9719	ug/L	0.9719 ppb	14:21:32
2	Se 196.026†	-20.0	9.0	5.2124	ug/L	5.2124 ppb	14:21:32
2	Si 251.611†	519.1	65.1	1.9397	ug/L	1.9397 ppb	14:21:32
2	Sn 189.927†	7.8	2.7	0.4462	ug/L	0.4462 ppb	14:21:32
2	Ti 334.940†	-1004.7	118.5	0.1881	ug/L	0.1881 ppb	14:21:12
2	Tl 190.801†	-40.0	-7.2	-2.0118	ug/L	-2.0118 ppb	14:21:32
2	U 409.014†	-2272.1	148.5	4.0899	ug/L	4.0899 ppb	14:21:12
2	V 292.402†	-1336.7	32.7	0.2295	ug/L	0.2295 ppb	14:21:12
2	Zn 213.857†	682.4	54.9	0.4756	ug/L	0.4756 ppb	14:21:32
2	SiO2†	512.1	40.5	2.5755	ug/L	2.5755 ppb	14:22:07
3	Sc Radial	5788.7	5788.7	99.1	%		14:20:20
3	Y RADIAL	6193.0	6193.0	98.49	%		14:20:20
3	Al 396.153Radial†	-6.4	14.0	9.6925	ug/L	9.6925 ppb	14:20:20
3	Ca 317.933Radial†	22.9	7.6	11.132	ug/L	11.132 ppb	14:20:40
3	Fe 238.204 Radial†	7.5	0.7	6.8252	ug/L	6.8252 ppb	14:20:40
3	K 766.490 Radial†	2436.9	108.4	19.211	ug/L	19.211 ppb	14:20:20
3	Mg 279.077 IEC†	1.4	0.2	7.9298	ug/L	7.9298 ppb	14:20:40
3	Na 589.592 Radial†	-957.5	121.3	40.692	ug/L	40.692 ppb	14:20:20
3	Sr 421.552†	-28.7	-1.6	-0.0099	ug/L	-0.0099 ppb	14:20:20
3	Sc 361.383	905762.9	905762.9	100.50	%		14:21:37
3	Y 371.029	752952.0	752952.0	100.25	%		14:21:37
3	Ag 328.068†	361.0	66.5	0.2960	ug/L	0.2960 ppb	14:21:37
3	As 188.979†	-25.1	-0.8	-0.2998	ug/L	-0.2998 ppb	14:21:57
3	B 249.677†	-323.7	208.6	4.3734	ug/L	4.3734 ppb	14:21:57
3	Ba 233.527†	-0.1	8.4	0.0620	ug/L	0.0620 ppb	14:21:57
3	Be 313.107†	-5132.6	5.9	0.0023	ug/L	0.0023 ppb	14:21:37
3	Cd 226.502†	-190.0	6.0	0.0629	ug/L	0.0629 ppb	14:21:57
3	Co 228.616†	-72.6	-6.8	-0.1294	ug/L	-0.1294 ppb	14:21:57
3	Cr 267.716†	63.2	-15.8	-0.1685	ug/L	-0.1685 ppb	14:21:57
3	Cu 324.752†	6868.5	77.6	0.2225	ug/L	0.2225 ppb	14:21:37
3	Mn 257.610†	440.9	16.4	0.0181	ug/L	0.0181 ppb	14:21:57
3	Mo 202.031†	18.6	0.2	0.0118	ug/L	0.0118 ppb	14:21:57
3	Ni 231.604†	65.2	-21.6	-0.5012	ug/L	-0.5012 ppb	14:21:57
3	P 214.914†	236.2	11.5	6.6189	ug/L	6.6189 ppb	14:21:57
3	Pb 220.353†	-71.8	-2.9	-0.3313	ug/L	-0.3313 ppb	14:21:57
3	S 181.975 Axial†	40.8	-0.9	-1.3172	ug/L	-1.3172 ppb	14:21:57
3	Sb 206.836†	34.9	0.5	0.1676	ug/L	0.1676 ppb	14:21:57
3	Se 196.026†	-18.1	10.9	6.2998	ug/L	6.2998 ppb	14:21:57
3	Si 251.611†	487.7	35.6	1.0576	ug/L	1.0576 ppb	14:21:57
3	Sn 189.927†	11.0	5.9	0.9712	ug/L	0.9712 ppb	14:21:57
3	Ti 334.940†	-1073.9	46.4	0.0711	ug/L	0.0711 ppb	14:21:37
3	Tl 190.801†	-26.7	6.0	1.6702	ug/L	1.6702 ppb	14:21:57
3	U 409.014†	-2121.2	291.1	8.0187	ug/L	8.0187 ppb	14:21:37
3	V 292.402†	-1378.9	-13.7	-0.0759	ug/L	-0.0759 ppb	14:21:37
3	Zn 213.857†	670.1	44.9	0.3946	ug/L	0.3946 ppb	14:21:57
3	SiO2†	535.4	65.3	4.1658	ug/L	4.1658 ppb	14:22:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908064.7	100.75	%	0.226				0.22%
Sc Radial	5842.6	100.0	%	1.73				1.73%
Y 371.029	755812.9	100.63	%	0.337				0.33%
Y RADIAL	6259.6	99.55	%	2.002				2.01%
Ag 328.068†	60.7	0.2739	ug/L	0.31617	0.2739	ppb	0.31617	115.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.5	4.4856	ug/L	9.71812	4.4856	ppb	9.71812	216.65%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.7	-1.4520	ug/L	1.98609	-1.4520	ppb	1.98609	136.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	208.4	4.3688	ug/L	0.34256	4.3688	ppb	0.34256	7.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.5	0.0196	ug/L	0.07825	0.0196	ppb	0.07825	399.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	73.9	0.0272	ug/L	0.02155	0.0272	ppb	0.02155	79.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.4	13.896	ug/L	2.5799	13.896	ppb	2.5799	18.57%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.8      0.0818 ug/L       0.01677      0.0818 ppb        0.01677  20.51%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.4     -0.1026 ug/L       0.06129     -0.1026 ppb        0.06129  59.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -16.6     -0.1757 ug/L       0.10308     -0.1757 ppb        0.10308  58.68%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                40.1      0.1153 ug/L       0.09462      0.1153 ppb        0.09462  82.09%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2817 ug/L       7.89488      9.2817 ppb        7.89488  85.06%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          90.3      15.993 ug/L        6.6513      15.993 ppb         6.6513  41.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.6      91.186 ug/L       83.3967      91.186 ppb        83.3967  91.46%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.8      0.0236 ug/L       0.00878      0.0236 ppb        0.00878  37.21%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.8      0.3716 ug/L       0.41915      0.3716 ppb        0.41915 112.80%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        161.3      54.119 ug/L       13.5282      54.119 ppb        13.5282  25.00%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.0     -0.1609 ug/L       0.32793     -0.1609 ppb        0.32793 203.75%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.1     -1.7871 ug/L       7.28143     -1.7871 ppb        7.28143 407.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.6     -0.1832 ug/L       1.06072     -0.1832 ppb        1.06072 579.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.6343 ug/L       9.19569      0.6343 ppb        9.19569 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.9      0.6093 ug/L       0.40795      0.6093 ppb        0.40795  66.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 7.0      4.0954 ug/L       2.92732      4.0954 ppb        2.92732  71.48%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                50.8      1.5077 ug/L       0.44134      1.5077 ppb        0.44134  29.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.0      0.3313 ug/L       0.70441      0.3313 ppb        0.70441 212.60%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 5.2      0.0324 ug/L       0.05170      0.0324 ppb        0.05170 159.31%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                75.4      0.1184 ug/L       0.06165      0.1184 ppb        0.06165  52.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.3     -0.0781 ug/L       1.84797     -0.0781 ppb        1.84797 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                219.0      6.0315 ug/L       1.96482      6.0315 ppb        1.96482  32.58%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 54.3      0.3763 ug/L       0.54084      0.3763 ppb        0.54084 143.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                45.6      0.3954 ug/L       0.07979      0.3954 ppb        0.07979  20.18%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      53.3      3.3901 ug/L       0.79588      3.3901 ppb        0.79588  23.48%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, December 14, 2009 12:15:41
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.5211
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	456.0	456.007	16.402	3.6
	Mg	24.0	3812.1	3812.109	29.896	0.8
	Co	58.9	22854.9	22854.868	76.564	0.3
	Rh	102.9	54113.1	54113.102	534.218	1.0
	In	114.9	81827.5	81827.495	685.172	0.8
	Pb	208.0	57905.9	57905.931	606.712	1.0
⌈>	Ba	137.9	66736.5	66736.453	623.139	0.9
⌊	Ba++	69.0	931.9	0.014	0.000	2.3
⌈>	Ce	139.9	82883.2	82883.155	694.967	0.8
⌊	CeO	155.9	1158.5	0.014	0.000	1.4
	Bkgd	220.0	6.8	6.800	2.110	31.0

Current Optimization File Data

Current Value	Description
0.99	Nebulizer Gas Flow
7.50	Lens Voltage
1450.00	ICP RF Power
-1812.00	Analog Stage Voltage
950.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.3	369.3
Co	59	17	8.3	20452.3
In	115	17	9.5	95363.6

ICPMS#3 Instrument Tuning Report

File Name: 091214.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	592	2030	0.686
Be	9.0	9.0	2083	2010	0.703
Mg	24.0	24.0	5704	2090	0.655
Mg	25.0	25.0	5921	2010	0.705
Mg	26.0	26.1	6213	2110	0.668
Co	58.9	59.0	14212	2100	0.666
Rh	102.9	102.9	24910	2150	0.695
In	114.9	114.9	27831	2160	0.695
Ce	139.9	139.9	33911	2200	0.663
Pb	206.0	206.1	50016	2270	0.663
Pb	207.0	207.0	50282	2310	0.631
Pb	208.0	208.0	50498	2290	0.643
U	238.1	238.0	57845	2330	0.680

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 14, 2009 23:48:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\Blank.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		9	
	Be	9		ug/L		5	
	B	11		ug/L		47	
	Na	23		ug/L		3667	
	Mg	24		ug/L		1667	
	Al	27		ug/L		667	
	P	31		ug/L		792	
	K	39		ug/L		150119	
	Ca	43		ug/L		97	
>	Sc	45		ug/L		83310	
	Ti	47		ug/L		53	
	V	51		ug/L		-1533	
	Cr	52		ug/L		1154	
	Cr	53		ug/L		34043	
	Mn	55		ug/L		382	
	Fe	57		ug/L		2320	
	Co	59		ug/L		124	
	Ni	60		ug/L		33	
	Cu	63		ug/L		64	
	Cu	65		ug/L		51	
	Zn	66		ug/L		61	
	Zn	67		ug/L		1381	
	Zn	68		ug/L		234	
>	Ge	74		ug/L		121567	
	As	75		ug/L		277	
	Se	77		ug/L		1717	
	Se	82		ug/L		-4	
	Kr	83		ug/L		38	
	Sr	88		ug/L		115	
	Y	89		ug/L		15	
	Zr	90		ug/L		267	
	Mo	98		ug/L		41	
	Ag	107		ug/L		39	
	Cd	111		ug/L		18	
	Cd	114		ug/L		36	
>	In	115		ug/L		94030	
	Sn	120		ug/L		117	
	Sb	121		ug/L		277	
	Sb	123		ug/L		218	
	Ba	135		ug/L		21	
	Ba	137		ug/L		30	
	Ho	165		ug/L		20	
>	Lu	175		ug/L		168312	
	Tl	205		ug/L		322	
	Pb	208		ug/L		330	
	Th	232		ug/L		372	
	U	238		ug/L		362	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9999
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 14, 2009 23:54:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\Standard 1.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	5.280	549	0.006
	Be	9	10.000	ug/L	4.676	402	0.005
	B	11	20.000	ug/L	1.790	724	0.008
	Na	23	1000.000	ug/L	9.741	436597	5.173
	Mg	24	1000.000	ug/L	10.143	309338	3.670
	Al	27	1000.000	ug/L	5.116	563229	6.718
	P	31	1000.000	ug/L	1.646	42571	0.499
	K	39	1000.000	ug/L	4.814	1150584	11.932
	Ca	43	1000.000	ug/L	3.392	2161	0.025
>	Sc	45		ug/L		83796	83795.606
	Ti	47	10.000	ug/L	4.208	1086	0.012
	V	51	10.000	ug/L	4.658	10411	0.143
	Cr	52	10.000	ug/L	0.800	15113	0.167
	Cr	53		ug/L		37555	0.040
	Mn	55	10.000	ug/L	0.954	25026	0.294
	Fe	57	1000.000	ug/L	1.167	51240	0.584
	Co	59	10.000	ug/L	1.251	17707	0.210
	Ni	60	10.000	ug/L	1.928	3560	0.042
	Cu	63		ug/L		7841	0.093
	Cu	65	10.000	ug/L	3.753	3597	0.042
	Zn	66	10.000	ug/L	2.192	2463	0.020
	Zn	67		ug/L		1898	0.004
	Zn	68		ug/L		2113	0.015
>	Ge	74		ug/L		121575	121575.053
	As	75	10.000	ug/L	4.370	4163	0.032
	Se	77		ug/L		2102	0.003
	Se	82	10.000	ug/L	3.106	309	0.003
	Kr	83		ug/L		38	-0.000
	Sr	88	10.000	ug/L	0.484	38335	0.399
	Y	89		ug/L		20	0.000
	Zr	90	10.000	ug/L	4.955	26907	0.278
	Mo	98	10.000	ug/L	1.450	9979	0.104
	Ag	107	10.000	ug/L	3.340	18921	0.197
	Cd	111	10.000	ug/L	1.368	4564	0.047
	Cd	114		ug/L		11315	0.118
>	In	115		ug/L		95859	95858.882
	Sn	120	10.000	ug/L	1.185	20158	0.209
	Sb	121	10.000	ug/L	5.253	17337	0.178
	Sb	123		ug/L		13411	0.138
	Ba	135		ug/L		4660	0.027
	Ba	137	10.000	ug/L	2.008	8249	0.048
	Ho	165		ug/L		19	-0.000
>	Lu	175		ug/L		171311	171311.099
	Tl	205	10.000	ug/L	1.579	80113	0.466
	Pb	208	10.000	ug/L	1.409	91946	0.535
	Th	232	10.000	ug/L	0.893	107217	0.624
	U	238	10.000	ug/L	1.365	112793	0.656

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 15, 2009 00:00:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\Standard 2.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.002**	ug/L	2.354	5452	0.065
	Be	9	**99.980**	ug/L	2.246	3914	0.046
	B	11	**199.965**	ug/L	3.293	6730	0.079
	Na	23	**9993.723**	ug/L	6.088	4098620	48.642
	Mg	24	**9998.107**	ug/L	5.829	3034465	36.013
	Al	27	**10007.047**	ug/L	2.118	6092537	72.323
	P	31	**9999.302**	ug/L	1.547	417780	4.951
	K	39	**9997.249**	ug/L	7.597	9932134	116.089
	Ca	43	**9996.932**	ug/L	1.405	20215	0.239
>	Sc	45		ug/L		84219	84219.043
	Ti	47	**100.002**	ug/L	2.174	10462	0.124
	V	51	**100.000**	ug/L	3.683	118608	1.427
	Cr	52	**99.967**	ug/L	1.121	136832	1.611
	Cr	53		ug/L		51001	0.197
	Mn	55	**99.997**	ug/L	2.060	247225	2.931
	Fe	57	**9998.191**	ug/L	3.056	485027	5.732
	Co	59	**99.984**	ug/L	1.180	174085	2.066
	Ni	60	**100.000**	ug/L	0.585	35481	0.421
	Cu	63		ug/L		76398	0.906
	Cu	65	**99.994**	ug/L	1.823	35501	0.421
	Zn	66	**99.979**	ug/L	1.499	23801	0.193
	Zn	67		ug/L		5319	0.032
	Zn	68		ug/L		18378	0.148
>	Ge	74		ug/L		122750	122749.706
	As	75	**99.935**	ug/L	2.011	37106	0.300
	Se	77		ug/L		4322	0.021
	Se	82	**99.980**	ug/L	3.596	3098	0.025
	Kr	83		ug/L		39	0.000
	Sr	88	**100.011**	ug/L	0.695	383764	4.032
	Y	89		ug/L		51	0.000
	Zr	90	**99.781**	ug/L	0.584	216550	2.273
	Mo	98	**100.027**	ug/L	1.194	101460	1.066
	Ag	107	**99.991**	ug/L	0.220	185756	1.952
	Cd	111	**100.021**	ug/L	0.440	46093	0.484
	Cd	114		ug/L		112681	1.184
>	In	115		ug/L		95144	95144.356
	Sn	120	**100.003**	ug/L	0.707	199663	2.097
	Sb	121	**100.032**	ug/L	4.197	175308	1.840
	Sb	123		ug/L		135565	1.422
	Ba	135		ug/L		47750	0.279
	Ba	137	**100.002**	ug/L	1.873	82208	0.481
	Ho	165		ug/L		17	-0.000
>	Lu	175		ug/L		171017	171016.587
	Tl	205	**99.980**	ug/L	1.946	781076	4.566
	Pb	208	**99.993**	ug/L	0.887	908891	5.313
	Th	232	**100.001**	ug/L	0.416	1068173	6.244
	U	238	**99.987**	ug/L	1.495	1108644	6.481

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 15, 2009 00:05:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 1.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.847**	ug/L	1.939	2810	0.033
	Be	9	**52.321**	ug/L	1.852	2075	0.024
	B	11	**110.341**	ug/L	4.245	3781	0.044
	Na	23	**4894.618**	ug/L	14.548	2036818	23.823
	Mg	24	**5061.367**	ug/L	6.126	1555952	18.231
	Al	27	**4427.452**	ug/L	8.222	2725079	31.998
	P	31	**4989.019**	ug/L	2.013	211275	2.470
	K	39	**4789.519**	ug/L	3.009	4894177	55.616
	Ca	43	**5035.440**	ug/L	2.729	10352	0.120
>	Sc	45		ug/L		85213	85213.279
	Ti	47	**49.790**	ug/L	3.100	5300	0.062
	V	51	**51.298**	ug/L	2.672	60789	0.732
	Cr	52	**52.538**	ug/L	2.177	73303	0.847
	Cr	53		ug/L		44416	0.113
	Mn	55	**51.786**	ug/L	0.197	129752	1.518
	Fe	57	**5104.453**	ug/L	1.319	251729	2.927
	Co	59	**51.356**	ug/L	1.403	90526	1.061
	Ni	60	**51.096**	ug/L	2.268	18357	0.215
	Cu	63		ug/L		40848	0.479
	Cu	65	**51.878**	ug/L	0.761	18661	0.218
	Zn	66	**51.226**	ug/L	1.740	12566	0.099
	Zn	67		ug/L		3520	0.017
	Zn	68		ug/L		9895	0.077
>	Ge	74		ug/L		126157	126156.855
	As	75	**46.966**	ug/L	1.891	18076	0.141
	Se	77		ug/L		3245	0.012
	Se	82	**49.125**	ug/L	3.150	1562	0.012
	Kr	83		ug/L		37	-0.000
	Sr	88	**49.118**	ug/L	1.429	191526	1.980
	Y	89		ug/L		25	0.000
	Zr	90	**44.098**	ug/L	6.057	97375	1.005
	Mo	98	**49.678**	ug/L	2.541	51201	0.529
	Ag	107	**50.559**	ug/L	1.749	95421	0.987
	Cd	111	**49.967**	ug/L	1.210	23399	0.242
	Cd	114		ug/L		57265	0.592
>	In	115		ug/L		96651	96650.821
	Sn	120	**51.058**	ug/L	0.994	103609	1.071
	Sb	121	**53.286**	ug/L	2.926	95007	0.980
	Sb	123		ug/L		72635	0.749
	Ba	135		ug/L		24541	0.142
	Ba	137	**50.921**	ug/L	3.533	42419	0.245
	Ho	165		ug/L		30	0.000
>	Lu	175		ug/L		173282	173282.466
	Tl	205	**48.364**	ug/L	0.705	383015	2.209
	Pb	208	**51.388**	ug/L	0.959	473406	2.730
	Th	232	**51.776**	ug/L	1.820	560549	3.233
	U	238	**52.451**	ug/L	1.478	589403	3.400

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.695				
	Be	9	104.641				
	B	11	110.341				
	Na	23	97.892				
	Mg	24	101.227				
	Al	27	87.672				
	P	31	99.780				
	K	39	95.790				
	Ca	43	100.709				
>	Sc	45		102.3			
	Ti	47	99.580				
	V	51	102.596				
	Cr	52	105.076				
	Cr	53					
	Mn	55	103.571				
	Fe	57	102.089				
	Co	59	102.712				
	Ni	60	102.192				
	Cu	63					
	Cu	65	103.757				
	Zn	66	102.453				
	Zn	67					
	Zn	68					
>	Ge	74		103.8			
	As	75	93.931				
	Se	77					
	Se	82	98.249				
	Kr	83					
	Sr	88	98.237				
	Y	89					
	Zr	90	88.196				
	Mo	98	99.355				
	Ag	107	101.118				
	Cd	111	99.933				
	Cd	114					
>	In	115		102.8			
	Sn	120	102.115				
	Sb	121	106.571				
	Sb	123					
	Ba	135					
	Ba	137	101.841				
	Ho	165					
>	Lu	175		103.0			
	Tl	205	96.728				
	Pb	208	102.776				
	Th	232	103.551				
	U	238	104.903				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 1	B	11ICV is out of limits (+/- 10%)
QC Std 1	Al	27ICV is out of limits (+/- 10%)
QC Std 1	Zr	90ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 15, 2009 00:11:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 2.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.053**	**ug/L**	114.095	12	0.000
	Be	9	**0.037**	**ug/L**	218.131	7	0.000
	B	11	**3.214**	**ug/L**	13.124	159	0.001
	Na	23	**1.290**	**ug/L**	473.759	4334	0.006
	Mg	24	**-2.322**	**ug/L**	139.897	1000	-0.008
	Al	27	**1.027**	**ug/L**	180.025	1333	0.007
	P	31	**-0.082**	**ug/L**	1341.347	819	-0.000
	K	39	**8.646**	**ug/L**	158.241	164613	0.100
	Ca	43	**-7.608**	**ug/L**	54.634	85	-0.000
>	Sc	45		**ug/L**		86565	86565.369
	Ti	47	**-0.101**	**ug/L**	48.174	44	-0.000
	V	51	**-0.388**	**ug/L**	134.985	-2077	-0.006
	Cr	52	**0.055**	**ug/L**	90.481	1276	0.001
	Cr	53		**ug/L**		34875	-0.006
	Mn	55	**-0.018**	**ug/L**	28.752	351	-0.001
	Fe	57	**1.010**	**ug/L**	88.110	2461	0.001
	Co	59	**0.012**	**ug/L**	50.810	150	0.000
	Ni	60	**0.006**	**ug/L**	368.379	37	0.000
	Cu	63		**ug/L**		73	0.000
	Cu	65	**0.008**	**ug/L**	186.688	56	0.000
	Zn	66	**-0.009**	**ug/L**	186.692	60	-0.000
	Zn	67		**ug/L**		1399	-0.000
	Zn	68		**ug/L**		233	-0.000
>	Ge	74		**ug/L**		124698	124697.558
	As	75	**0.788**	**ug/L**	39.431	580	0.002
	Se	77		**ug/L**		1930	0.001
	Se	82	**0.521**	**ug/L**	67.490	12	0.000
	Kr	83		**ug/L**		33	-0.000
	Sr	88	**0.006**	**ug/L**	68.230	141	0.000
	Y	89		**ug/L**		14	-0.000
	Zr	90	**0.069**	**ug/L**	11.453	426	0.002
	Mo	98	**0.078**	**ug/L**	5.045	122	0.001
	Ag	107	**0.009**	**ug/L**	46.375	57	0.000
	Cd	111	**-0.009**	**ug/L**	48.077	14	-0.000
	Cd	114		**ug/L**		41	0.000
>	In	115		**ug/L**		96306	96306.396
	Sn	120	**0.176**	**ug/L**	10.926	474	0.004
	Sb	121	**0.709**	**ug/L**	7.430	1540	0.013
	Sb	123		**ug/L**		1197	0.010
	Ba	135		**ug/L**		23	0.000
	Ba	137	**0.006**	**ug/L**	104.747	35	0.000
	Ho	165		**ug/L**		20	-0.000
>	Lu	175		**ug/L**		169433	169432.971
	Tl	205	**0.187**	**ug/L**	19.513	1774	0.009
	Pb	208	**0.014**	**ug/L**	43.129	459	0.001
	Th	232	**0.143**	**ug/L**	6.518	1890	0.009
	U	238	**0.017**	**ug/L**	54.200	552	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			102.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			102.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 15, 2009 00:17:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 3.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.926**	ug/L	3.395	602	0.007
	Be	9	**0.572**	ug/L	13.117	27	0.000
	B	11	**17.421**	ug/L	2.101	628	0.007
	Na	23	**252.421**	ug/L	12.790	106734	1.229
	Mg	24	**9.923**	ug/L	52.646	4667	0.036
	Al	27	**33.586**	ug/L	39.653	21017	0.243
	P	31	**55.435**	ug/L	6.632	3101	0.027
	K	39	**322.014**	ug/L	10.072	465140	3.739
	Ca	43	**217.375**	ug/L	6.607	534	0.005
>	Sc	45		ug/L		83946	83946.115
	Ti	47	**9.194**	ug/L	1.850	1007	0.011
	V	51	**10.510**	ug/L	6.241	11039	0.150
	Cr	52	**11.119**	ug/L	1.003	16202	0.179
	Cr	53		ug/L		38716	0.053
	Mn	55	**5.656**	ug/L	2.399	14300	0.166
	Fe	57	**110.002**	ug/L	3.061	7631	0.063
	Co	59	**1.106**	ug/L	2.674	2043	0.023
	Ni	60	**2.181**	ug/L	3.550	804	0.009
	Cu	63		ug/L		904	0.010
	Cu	65	**1.036**	ug/L	1.311	418	0.004
	Zn	66	**11.115**	ug/L	2.359	2731	0.022
	Zn	67		ug/L		1908	0.004
	Zn	68		ug/L		2252	0.016
>	Ge	74		ug/L		124172	124171.755
	As	75	**6.217**	ug/L	5.393	2601	0.019
	Se	77		ug/L		2263	0.004
	Se	82	**4.901**	ug/L	12.061	150	0.001
	Kr	83		ug/L		39	-0.000
	Sr	88	**10.970**	ug/L	0.590	42518	0.442
	Y	89		ug/L		18	0.000
	Zr	90	**2.386**	ug/L	2.643	5483	0.054
	Mo	98	**0.521**	ug/L	5.493	574	0.006
	Ag	107	**1.034**	ug/L	1.445	1974	0.020
	Cd	111	**1.103**	ug/L	7.433	530	0.005
	Cd	114		ug/L		1229	0.012
>	In	115		ug/L		95869	95868.530
	Sn	120	**5.429**	ug/L	0.667	11034	0.114
	Sb	121	**3.338**	ug/L	4.954	6165	0.061
	Sb	123		ug/L		4816	0.048
	Ba	135		ug/L		1007	0.006
	Ba	137	**2.102**	ug/L	1.648	1733	0.010
	Ho	165		ug/L		17	-0.000
>	Lu	175		ug/L		168590	168589.656
	Tl	205	**1.102**	ug/L	0.739	8803	0.050
	Pb	208	**2.138**	ug/L	2.546	19481	0.114
	Th	232	**1.166**	ug/L	3.040	12643	0.073
	U	238	**0.212**	ug/L	4.267	2678	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	109.260				
	Be	9	114.444				
	B	11	116.137				
	Na	23	100.968				
	Mg	24	66.151				
	Al	27	111.952				
	P	31	110.870				
	K	39	107.338				
	Ca	43	108.688				
>	Sc	45			100.8		
	Ti	47	91.943				
	V	51	105.101				
	Cr	52	111.191				
	Cr	53					
	Mn	55	113.117				
	Fe	57	110.002				
	Co	59	110.626				
	Ni	60	109.049				
	Cu	63					
	Cu	65	103.562				
	Zn	66	111.149				
	Zn	67					
	Zn	68					
>	Ge	74			102.1		
	As	75	124.333				
	Se	77					
	Se	82	98.024				
	Kr	83					
	Sr	88	109.704				
	Y	89					
	Zr	90	119.296				
	Mo	98	104.234				
	Ag	107	103.390				
	Cd	111	110.269				
	Cd	114					
>	In	115			102.0		
	Sn	120	108.577				
	Sb	121	111.262				
	Sb	123					
	Ba	135					
	Ba	137	105.118				
	Ho	165					
>	Lu	175			100.2		
	Tl	205	110.153				
	Pb	208	106.911				
	Th	232	116.581				
	U	238	105.973				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Mg	24CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 15, 2009 00:23:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 4.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.047**	ug/L	21.782	11	0.000
	Be	9	**0.272**	ug/L	21.702	14	0.000
	B	11	**1.720**	ug/L	15.859	96	0.001
	Na	23	**94110.586**	ug/L	3.403	35289491	458.062
	Mg	24	**100969.186**	ug/L	12.299	27998650	363.686
	Al	27	**90296.516**	ug/L	8.601	50248328	652.593
	P	31	**98916.480**	ug/L	1.788	3773307	48.978
	K	39	**103303.696**	ug/L	8.237	92503164	1199.575
	Ca	43	**97923.361**	ug/L	0.612	180336	2.340
>	Sc	45		ug/L		77033	77032.912
	Ti	47	**1486.056**	ug/L	1.418	141537	1.837
	V	51	**-1.340**	ug/L	46.947	-2891	-0.019
	Cr	52	**2.821**	ug/L	3.175	4568	0.045
	Cr	53		ug/L		29692	-0.023
	Mn	55	**5.815**	ug/L	1.162	13485	0.170
	Fe	57	**102665.367**	ug/L	0.967	4536548	58.863
	Co	59	**0.206**	ug/L	4.294	442	0.004
	Ni	60	**2.365**	ug/L	3.736	798	0.010
	Cu	63		ug/L		1350	0.017
	Cu	65	**1.970**	ug/L	5.122	686	0.008
	Zn	66	**2.462**	ug/L	2.387	606	0.005
	Zn	67		ug/L		1445	0.001
	Zn	68		ug/L		366	0.001
>	Ge	74		ug/L		115112	115112.074
	As	75	**0.604**	ug/L	120.028	472	0.002
	Se	77		ug/L		2232	0.005
	Se	82	**-0.105**	ug/L	190.777	-7	-0.000
	Kr	83		ug/L		59	0.000
	Sr	88	**1.127**	ug/L	0.351	4100	0.045
	Y	89		ug/L		110	0.001
	Zr	90	**7.025**	ug/L	53.765	14257	0.160
	Mo	98	**1942.500**	ug/L	1.976	1819046	20.701
	Ag	107	**0.037**	ug/L	19.669	99	0.001
	Cd	111	**0.324**	ug/L	33.203	154	0.002
	Cd	114		ug/L		1810	0.020
>	In	115		ug/L		87889	87888.726
	Sn	120	**0.172**	ug/L	13.236	426	0.004
	Sb	121	**0.202**	ug/L	14.649	584	0.004
	Sb	123		ug/L		452	0.003
	Ba	135		ug/L		312	0.002
	Ba	137	**0.651**	ug/L	0.074	531	0.003
	Ho	165		ug/L		391	0.002
>	Lu	175		ug/L		160293	160292.908
	Tl	205	**0.027**	ug/L	4.496	501	0.001
	Pb	208	**0.154**	ug/L	5.012	1623	0.008
	Th	232	**0.158**	ug/L	27.991	1937	0.010
	U	238	**-0.029**	ug/L	3.250	46	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	94.111				
	Mg	24	100.969				
	Al	27	90.297				
	P	31	98.916				
	K	39	103.304				
	Ca	43	97.923				
>	Sc	45			92.5		
	Ti	47	74.303				
	V	51					
	Cr	52	76.234				
	Cr	53					
	Mn	55	100.267				
	Fe	57	102.665				
	Co	59	82.351				
	Ni	60	87.601				
	Cu	63					
	Cu	65	67.937				
	Zn	66	68.377				
	Zn	67					
	Zn	68					
>	Ge	74			94.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	93.892				
	Y	89					
	Zr	90					
	Mo	98	97.125				
	Ag	107					
	Cd	111	81.064				
	Cd	114					
>	In	115			93.5		
	Sn	120					
	Sb	121	201.798				
	Sb	123					
	Ba	135					
	Ba	137	97.232				
	Ho	165					
>	Lu	175			95.2		
	Tl	205					
	Pb	208	76.840				
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits
QC Std 4	Zr	90ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 15, 2009 00:28:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 5.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.461**	**ug/L**	1.820	990	0.013
	Be	9	**20.483**	**ug/L**	1.700	747	0.010
	B	11	**21.948**	**ug/L**	2.891	724	0.009
	Na	23	**94985.158**	**ug/L**	6.373	36110176	462.319
	Mg	24	**96806.238**	**ug/L**	3.562	27217812	348.691
	Al	27	**86572.961**	**ug/L**	3.059	48842781	625.682
	P	31	**97342.217**	**ug/L**	1.522	3762967	48.198
	K	39	**99592.816**	**ug/L**	3.982	90444847	1156.483
	Ca	43	**99706.956**	**ug/L**	0.278	186086	2.383
>	Sc	45		**ug/L**		78065	78064.508
	Ti	47	**1478.005**	**ug/L**	0.841	142657	1.827
	V	51	**20.663**	**ug/L**	2.001	21583	0.295
	Cr	52	**23.852**	**ug/L**	1.527	31081	0.384
	Cr	53		**ug/L**		32746	0.011
	Mn	55	**26.417**	**ug/L**	1.233	60805	0.774
	Fe	57	**101700.868**	**ug/L**	1.277	4553724	58.310
	Co	59	**21.048**	**ug/L**	0.754	34062	0.435
	Ni	60	**22.808**	**ug/L**	3.781	7523	0.096
	Cu	63		**ug/L**		15832	0.202
	Cu	65	**22.086**	**ug/L**	0.933	7306	0.093
	Zn	66	**22.226**	**ug/L**	1.832	5055	0.043
	Zn	67		**ug/L**		2220	0.008
	Zn	68		**ug/L**		3749	0.030
>	Ge	74		**ug/L**		116193	116193.123
	As	75	**20.900**	**ug/L**	2.781	7557	0.063
	Se	77		**ug/L**		2699	0.009
	Se	82	**20.411**	**ug/L**	1.714	596	0.005
	Kr	83		**ug/L**		56	0.000
	Sr	88	**22.833**	**ug/L**	0.784	80930	0.921
	Y	89		**ug/L**		105	0.001
	Zr	90	**22.000**	**ug/L**	1.693	44249	0.501
	Mo	98	**1969.917**	**ug/L**	2.402	1842781	20.993
	Ag	107	**19.875**	**ug/L**	3.267	34090	0.388
	Cd	111	**20.929**	**ug/L**	2.461	8913	0.101
	Cd	114		**ug/L**		23106	0.263
>	In	115		**ug/L**		87806	87805.869
	Sn	120	**20.996**	**ug/L**	3.032	38760	0.440
	Sb	121	**22.487**	**ug/L**	2.155	36559	0.414
	Sb	123		**ug/L**		28612	0.324
	Ba	135		**ug/L**		9529	0.059
	Ba	137	**21.234**	**ug/L**	1.399	16606	0.102
	Ho	165		**ug/L**		368	0.002
>	Lu	175		**ug/L**		162450	162449.713
	Tl	205	**19.838**	**ug/L**	0.979	147471	0.906
	Pb	208	**20.896**	**ug/L**	0.359	180670	1.110
	Th	232	**21.995**	**ug/L**	1.886	223463	1.373
	U	238	**22.789**	**ug/L**	1.299	240302	1.477

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	97.306				
	Be	9	102.416				
	B	11	109.738				
	Na	23	94.985				
	Mg	24	96.806				
	Al	27	86.573				
	P	31	97.342				
	K	39	99.593				
	Ca	43	99.707				
>	Sc	45		93.7			
	Ti	47	73.900				
	V	51	103.317				
	Cr	52	100.643				
	Cr	53					
	Mn	55	102.392				
	Fe	57	101.701				
	Co	59	103.942				
	Ni	60	100.477				
	Cu	63					
	Cu	65	96.447				
	Zn	66	94.178				
	Zn	67					
	Zn	68					
>	Ge	74		95.6			
	As	75	104.500				
	Se	77					
	Se	82	102.056				
	Kr	83					
	Sr	88	107.701				
	Y	89					
	Zr	90	109.999				
	Mo	98	98.496				
	Ag	107	99.375				
	Cd	111	102.591				
	Cd	114					
>	In	115		93.4			
	Sn	120	104.982				
	Sb	121	111.877				
	Sb	123					
	Ba	135					
	Ba	137	102.729				
	Ho	165					
>	Lu	175		96.5			
	Tl	205	99.190				
	Pb	208	103.443				
	Th	232	109.975				
	U	238	113.947				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 00:34:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 6.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.674**	ug/L	2.314	2805	0.033
	Be	9	**55.361**	ug/L	1.561	2199	0.026
	B	11	**103.797**	ug/L	2.178	3564	0.041
	Na	23	**4841.124**	ug/L	10.250	2016007	23.563
	Mg	24	**4757.927**	ug/L	5.697	1464936	17.138
	Al	27	**4575.472**	ug/L	5.703	2823906	33.068
	P	31	**4947.264**	ug/L	1.020	209929	2.450
	K	39	**5131.512**	ug/L	3.710	5240383	59.588
	Ca	43	**5025.384**	ug/L	3.126	10351	0.120
>	Sc	45		ug/L		85371	85370.848
	Ti	47	**51.292**	ug/L	1.867	5467	0.063
	V	51	**51.636**	ug/L	2.407	61329	0.737
	Cr	52	**52.119**	ug/L	2.079	72875	0.840
	Cr	53		ug/L		44446	0.112
	Mn	55	**51.003**	ug/L	1.247	128035	1.495
	Fe	57	**4981.849**	ug/L	1.285	246214	2.856
	Co	59	**50.079**	ug/L	1.807	88453	1.035
	Ni	60	**49.677**	ug/L	1.037	17883	0.209
	Cu	63		ug/L		40033	0.468
	Cu	65	**51.650**	ug/L	1.718	18616	0.217
	Zn	66	**51.434**	ug/L	0.664	12490	0.100
	Zn	67		ug/L		3537	0.017
	Zn	68		ug/L		9990	0.078
>	Ge	74		ug/L		124899	124898.533
	As	75	**47.199**	ug/L	1.833	17984	0.142
	Se	77		ug/L		3225	0.012
	Se	82	**50.043**	ug/L	5.067	1576	0.013
	Kr	83		ug/L		35	-0.000
	Sr	88	**49.166**	ug/L	1.051	190165	1.982
	Y	89		ug/L		33	0.000
	Zr	90	**38.516**	ug/L	12.128	84434	0.877
	Mo	98	**50.520**	ug/L	1.590	51651	0.538
	Ag	107	**51.020**	ug/L	1.858	95519	0.996
	Cd	111	**51.081**	ug/L	2.300	23725	0.247
	Cd	114		ug/L		57318	0.598
>	In	115		ug/L		95872	95872.464
	Sn	120	**50.405**	ug/L	1.964	101458	1.057
	Sb	121	**49.934**	ug/L	4.307	88324	0.918
	Sb	123		ug/L		67264	0.699
	Ba	135		ug/L		23919	0.139
	Ba	137	**49.366**	ug/L	2.174	40874	0.237
	Ho	165		ug/L		43	0.000
>	Lu	175		ug/L		172226	172226.349
	Tl	205	**48.719**	ug/L	2.268	383379	2.225
	Pb	208	**51.488**	ug/L	2.363	471307	2.736
	Th	232	**52.303**	ug/L	3.101	562616	3.266
	U	238	**53.342**	ug/L	2.468	595611	3.457

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.349				
	Be	9	110.722				
	B	11	103.797				
	Na	23	96.822				
	Mg	24	95.159				
	Al	27	90.603				
	P	31	98.945				
	K	39	102.630				
	Ca	43	100.508				
>	Sc	45		102.5			
	Ti	47	102.584				
	V	51	103.272				
	Cr	52	104.237				
	Cr	53					
	Mn	55	102.006				
	Fe	57	99.637				
	Co	59	100.159				
	Ni	60	99.354				
	Cu	63					
	Cu	65	103.301				
	Zn	66	102.869				
	Zn	67					
	Zn	68					
>	Ge	74		102.7			
	As	75	94.398				
	Se	77					
	Se	82	100.086				
	Kr	83					
	Sr	88	98.332				
	Y	89					
	Zr	90	77.032				
	Mo	98	101.040				
	Ag	107	102.040				
	Cd	111	102.163				
	Cd	114					
>	In	115		102.0			
	Sn	120	100.810				
	Sb	121	99.868				
	Sb	123					
	Ba	135					
	Ba	137	98.732				
	Ho	165					
>	Lu	175		102.3			
	Tl	205	97.438				
	Pb	208	102.976				
	Th	232	104.607				
	U	238	106.684				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 00:40:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 7.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.106**	ug/L	18.418	15	0.000
	Be	9	**0.030**	ug/L	342.687	6	0.000
	B	11	**2.680**	ug/L	22.840	139	0.001
	Na	23	**-1.797**	ug/L	134.811	3000	-0.009
	Mg	24	**-4.481**	ug/L	41.515	333	-0.016
	Al	27	**3.734**	ug/L	113.199	3000	0.027
	P	31	**-1.078**	ug/L	20.450	764	-0.001
	K	39	**-8.440**	ug/L	229.000	145075	-0.098
	Ca	43	**-4.679**	ug/L	49.670	90	-0.000
>	Sc	45		ug/L		85144	85143.528
	Ti	47	**0.297**	ug/L	52.918	85	0.000
	V	51	**0.851**	ug/L	138.964	-545	0.012
	Cr	52	**-0.008**	ug/L	617.514	1169	-0.000
	Cr	53		ug/L		34539	-0.003
	Mn	55	**-0.034**	ug/L	10.691	306	-0.001
	Fe	57	**2.450**	ug/L	6.737	2491	0.001
	Co	59	**0.001**	ug/L	714.527	129	0.000
	Ni	60	**-0.005**	ug/L	167.940	32	-0.000
	Cu	63		ug/L		67	0.000
	Cu	65	**-0.004**	ug/L	464.575	51	-0.000
	Zn	66	**-0.024**	ug/L	387.190	56	-0.000
	Zn	67		ug/L		1416	0.000
	Zn	68		ug/L		226	-0.000
>	Ge	74		ug/L		124156	124155.806
	As	75	**0.532**	ug/L	129.033	483	0.002
	Se	77		ug/L		1890	0.001
	Se	82	**0.344**	ug/L	46.252	6	0.000
	Kr	83		ug/L		37	-0.000
	Sr	88	**-0.001**	ug/L	117.480	114	-0.000
	Y	89		ug/L		14	-0.000
	Zr	90	**0.046**	ug/L	22.538	374	0.001
	Mo	98	**0.148**	ug/L	9.386	193	0.002
	Ag	107	**0.007**	ug/L	109.502	53	0.000
	Cd	111	**-0.002**	ug/L	863.794	18	-0.000
	Cd	114		ug/L		37	0.000
>	In	115		ug/L		96165	96165.079
	Sn	120	**0.137**	ug/L	19.517	395	0.003
	Sb	121	**0.585**	ug/L	9.442	1317	0.011
	Sb	123		ug/L		1011	0.008
	Ba	135		ug/L		21	-0.000
	Ba	137	**0.002**	ug/L	261.836	32	0.000
	Ho	165		ug/L		20	-0.000
>	Lu	175		ug/L		169630	169629.961
	Tl	205	**0.108**	ug/L	15.205	1163	0.005
	Pb	208	**0.005**	ug/L	81.288	380	0.000
	Th	232	**0.152**	ug/L	8.150	1981	0.009
	U	238	**0.008**	ug/L	38.789	447	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.8			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 15, 2009 00:45:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 10.197

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**984.750**	ug/L	1.024	50600	0.636
	Be	9	**1022.437**	ug/L	1.091	37740	0.475
	B	11	**1.663**	ug/L	22.593	97	0.001
	Na	23	**50891.822**	ug/L	2.833	19696460	247.704
	Mg	24	**51120.328**	ug/L	3.494	14640729	184.133
	Al	27	**47495.827**	ug/L	0.908	27291050	343.263
	P	31	**23553.134**	ug/L	0.579	927934	11.662
	K	39	**52306.519**	ug/L	12.867	48430976	607.389
	Ca	43	**49105.750**	ug/L	0.685	93383	1.173
>	Sc	45		ug/L		79504	79503.742
	Ti	47	**29.255**	ug/L	4.712	2925	0.036
	V	51	**964.288**	ug/L	0.578	1092447	13.759
	Cr	52	**951.507**	ug/L	0.923	1220035	15.332
	Cr	53		ug/L		185536	1.925
	Mn	55	**987.034**	ug/L	0.870	2300713	28.934
	Fe	57	**50024.794**	ug/L	0.892	2282503	28.682
	Co	59	**917.811**	ug/L	1.692	1507686	18.962
	Ni	60	**956.338**	ug/L	0.472	320040	4.025
	Cu	63		ug/L		675918	8.501
	Cu	65	**942.505**	ug/L	0.484	315499	3.968
	Zn	66	**2344.221**	ug/L	1.346	540678	4.535
	Zn	67		ug/L		86022	0.710
	Zn	68		ug/L		410246	3.439
>	Ge	74		ug/L		119210	119209.509
	As	75	**878.850**	ug/L	1.584	314817	2.639
	Se	77		ug/L		12727	0.093
	Se	82	**464.523**	ug/L	1.632	13997	0.117
	Kr	83		ug/L		47	0.000
	Sr	88	**993.061**	ug/L	0.592	3619704	40.038
	Y	89		ug/L		119	0.001
	Zr	90	**463.402**	ug/L	1.133	954670	10.557
	Mo	98	**986.070**	ug/L	1.666	950031	10.508
	Ag	107	**244.865**	ug/L	0.638	432179	4.780
	Cd	111	**978.583**	ug/L	1.327	428352	4.738
	Cd	114		ug/L		1025982	11.348
>	In	115		ug/L		90404	90404.469
	Sn	120	**968.313**	ug/L	1.503	1836030	20.308
	Sb	121	**247.592**	ug/L	4.914	411882	4.553
	Sb	123		ug/L		313113	3.461
	Ba	135		ug/L		443091	2.613
	Ba	137	**935.764**	ug/L	2.441	762583	4.497
	Ho	165		ug/L		135	0.001
>	Lu	175		ug/L		169602	169601.563
	Tl	205	**461.332**	ug/L	2.582	3572786	21.067
	Pb	208	**4836.679**	ug/L	1.717	43579134	256.975
	Th	232	**2474.478**	ug/L	0.294	26203540	154.501
	U	238	**5168.678**	ug/L	3.119	56808416	335.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	98.475				
	Be	9	102.244				
	B	11					
	Na	23	101.784				
	Mg	24	102.241				
	Al	27	94.992				
	P	31	94.213				
	K	39	104.613				
	Ca	43	98.211				
>	Sc	45		95.4			
	Ti	47					
	V	51	96.429				
	Cr	52	95.151				
	Cr	53					
	Mn	55	98.703				
	Fe	57	100.050				
	Co	59	91.781				
	Ni	60	95.634				
	Cu	63					
	Cu	65	94.251				
	Zn	66	93.769				
	Zn	67					
	Zn	68					
>	Ge	74		98.1			
	As	75	87.885				
	Se	77					
	Se	82	92.905				
	Kr	83					
	Sr	88	99.306				
	Y	89					
	Zr	90	92.680				
	Mo	98	98.607				
	Ag	107	97.946				
	Cd	111	97.858				
	Cd	114					
>	In	115		96.1			
	Sn	120	96.831				
	Sb	121	99.037				
	Sb	123					
	Ba	135					
	Ba	137	93.576				
	Ho	165					
>	Lu	175		100.8			
	Tl	205	92.266				
	Pb	208	96.734				
	Th	232	98.979				
	U	238	103.374				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 10	As	75LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 15, 2009 00:51:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 11.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.315**	ug/L	3.173	2858	0.033
	Be	9	**56.151**	ug/L	2.946	2245	0.026
	B	11	**105.325**	ug/L	2.879	3640	0.042
	Na	23	**4670.834**	ug/L	14.588	1955632	22.734
	Mg	24	**4843.949**	ug/L	11.448	1499976	17.448
	Al	27	**4516.628**	ug/L	11.647	2803775	32.643
	P	31	**4872.637**	ug/L	1.497	208127	2.413
	K	39	**5210.511**	ug/L	3.300	5353893	60.505
	Ca	43	**5019.843**	ug/L	0.306	10408	0.120
>	Sc	45		ug/L		85934	85934.229
	Ti	47	**49.875**	ug/L	0.680	5352	0.062
	V	51	**50.994**	ug/L	2.160	60938	0.728
	Cr	52	**51.505**	ug/L	2.879	72495	0.830
	Cr	53		ug/L		43311	0.095
	Mn	55	**50.543**	ug/L	1.113	127716	1.482
	Fe	57	**4957.155**	ug/L	1.856	246615	2.842
	Co	59	**49.497**	ug/L	2.167	87994	1.023
	Ni	60	**49.980**	ug/L	0.911	18111	0.210
	Cu	63		ug/L		40500	0.471
	Cu	65	**51.191**	ug/L	0.497	18573	0.216
	Zn	66	**51.394**	ug/L	1.580	12573	0.099
	Zn	67		ug/L		3542	0.017
	Zn	68		ug/L		9890	0.077
>	Ge	74		ug/L		125826	125826.287
	As	75	**47.400**	ug/L	2.316	18193	0.142
	Se	77		ug/L		3072	0.010
	Se	82	**48.774**	ug/L	4.114	1547	0.012
	Kr	83		ug/L		36	-0.000
	Sr	88	**49.517**	ug/L	2.748	190968	1.996
	Y	89		ug/L		27	0.000
	Zr	90	**53.793**	ug/L	3.272	117466	1.226
	Mo	98	**50.954**	ug/L	0.459	51960	0.543
	Ag	107	**50.369**	ug/L	1.240	94049	0.983
	Cd	111	**50.523**	ug/L	0.765	23406	0.245
	Cd	114		ug/L		57305	0.599
>	In	115		ug/L		95615	95614.698
	Sn	120	**53.743**	ug/L	1.184	107885	1.127
	Sb	121	**55.669**	ug/L	1.538	98158	1.024
	Sb	123		ug/L		75354	0.786
	Ba	135		ug/L		23768	0.137
	Ba	137	**49.891**	ug/L	2.740	41546	0.240
	Ho	165		ug/L		36	0.000
>	Lu	175		ug/L		173214	173214.404
	Tl	205	**48.675**	ug/L	2.502	385267	2.223
	Pb	208	**51.562**	ug/L	2.824	474706	2.740
	Th	232	**53.017**	ug/L	1.490	573684	3.310
	U	238	**53.725**	ug/L	2.953	603369	3.482

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.631				
	Be	9	112.302				
	B	11	105.325				
	Na	23	93.417				
	Mg	24	96.879				
	Al	27	89.438				
	P	31	97.453				
	K	39	104.210				
	Ca	43	100.397				
>	Sc	45		103.2			
	Ti	47	99.749				
	V	51	101.989				
	Cr	52	103.010				
	Cr	53					
	Mn	55	101.086				
	Fe	57	99.143				
	Co	59	98.994				
	Ni	60	99.960				
	Cu	63					
	Cu	65	102.382				
	Zn	66	102.789				
	Zn	67					
	Zn	68					
>	Ge	74		103.5			
	As	75	94.801				
	Se	77					
	Se	82	97.548				
	Kr	83					
	Sr	88	99.035				
	Y	89					
	Zr	90	107.585				
	Mo	98	101.909				
	Ag	107	100.739				
	Cd	111	101.045				
	Cd	114					
>	In	115		101.7			
	Sn	120	107.485				
	Sb	121	111.338				
	Sb	123					
	Ba	135					
	Ba	137	99.782				
	Ho	165					
>	Lu	175		102.9			
	Tl	205	97.350				
	Pb	208	103.124				
	Th	232	106.034				
	U	238	107.450				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 11	Be	9CCV is out of limits (+/- 10%)
QC Std 11	Al	27CCV is out of limits (+/- 10%)
QC Std 11	Sb	121CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 15, 2009 00:57:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 12.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.133**	**ug/L**	31.531	17	0.000
	Be	9	**0.088**	**ug/L**	115.434	9	0.000
	B	11	**2.389**	**ug/L**	28.794	130	0.001
	Na	23	**8.453**	**ug/L**	40.996	7335	0.041
	Mg	24	**-3.405**	**ug/L**	109.383	667	-0.012
	Al	27	**3.231**	**ug/L**	154.620	2667	0.023
	P	31	**-0.975**	**ug/L**	88.357	776	-0.000
	K	39	**-2.504**	**ug/L**	334.500	152477	-0.029
	Ca	43	**-3.554**	**ug/L**	183.342	93	-0.000
>	Sc	45		**ug/L**		86035	86034.518
	Ti	47	**0.034**	**ug/L**	46.537	58	0.000
	V	51	**-0.448**	**ug/L**	173.728	-2132	-0.006
	Cr	52	**0.005**	**ug/L**	1063.421	1198	0.000
	Cr	53		**ug/L**		34128	-0.012
	Mn	55	**-0.022**	**ug/L**	28.610	338	-0.001
	Fe	57	**0.140**	**ug/L**	275.505	2403	0.000
	Co	59	**0.028**	**ug/L**	50.192	177	0.001
	Ni	60	**0.026**	**ug/L**	24.533	44	0.000
	Cu	63		**ug/L**		107	0.000
	Cu	65	**0.046**	**ug/L**	3.245	70	0.000
	Zn	66	**-0.013**	**ug/L**	127.314	59	-0.000
	Zn	67		**ug/L**		1452	0.000
	Zn	68		**ug/L**		249	0.000
>	Ge	74		**ug/L**		124332	124331.940
	As	75	**1.139**	**ug/L**	42.491	708	0.003
	Se	77		**ug/L**		1799	0.000
	Se	82	**0.322**	**ug/L**	77.890	6	0.000
	Kr	83		**ug/L**		36	-0.000
	Sr	88	**0.013**	**ug/L**	70.808	166	0.001
	Y	89		**ug/L**		16	0.000
	Zr	90	**0.113**	**ug/L**	9.999	516	0.003
	Mo	98	**0.233**	**ug/L**	12.920	278	0.002
	Ag	107	**0.015**	**ug/L**	45.844	67	0.000
	Cd	111	**-0.008**	**ug/L**	266.884	14	-0.000
	Cd	114		**ug/L**		48	0.000
>	In	115		**ug/L**		95358	95358.021
	Sn	120	**0.724**	**ug/L**	9.190	1565	0.015
	Sb	121	**1.275**	**ug/L**	8.727	2515	0.023
	Sb	123		**ug/L**		2006	0.019
	Ba	135		**ug/L**		25	0.000
	Ba	137	**0.001**	**ug/L**	294.808	32	0.000
	Ho	165		**ug/L**		20	-0.000
>	Lu	175		**ug/L**		170897	170896.778
	Tl	205	**0.256**	**ug/L**	13.822	2323	0.012
	Pb	208	**0.052**	**ug/L**	56.074	803	0.003
	Th	232	**0.222**	**ug/L**	9.595	2742	0.014
	U	238	**0.078**	**ug/L**	29.993	1235	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			102.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			101.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.5		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 02:01:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 6.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.185**	**ug/L**	3.719	2850	0.033
	Be	9	**55.952**	**ug/L**	3.552	2236	0.026
	B	11	**108.745**	**ug/L**	4.979	3757	0.043
	Na	23	**5040.691**	**ug/L**	7.288	2112101	24.534
	Mg	24	**5028.523**	**ug/L**	8.525	1559153	18.112
	Al	27	**4600.137**	**ug/L**	3.306	2856849	33.246
	P	31	**4934.110**	**ug/L**	3.332	210669	2.443
	K	39	**5107.175**	**ug/L**	6.468	5249842	59.305
	Ca	43	**5208.062**	**ug/L**	3.194	10791	0.124
>	Sc	45		**ug/L**		85924	85923.516
	Ti	47	**50.002**	**ug/L**	4.972	5363	0.062
	V	51	**50.545**	**ug/L**	4.096	60370	0.721
	Cr	52	**51.826**	**ug/L**	3.198	72922	0.835
	Cr	53		**ug/L**		44332	0.108
	Mn	55	**50.527**	**ug/L**	1.642	127641	1.481
	Fe	57	**4961.722**	**ug/L**	2.469	246797	2.845
	Co	59	**49.823**	**ug/L**	2.428	88559	1.029
	Ni	60	**51.107**	**ug/L**	1.697	18514	0.215
	Cu	63		**ug/L**		40706	0.473
	Cu	65	**51.769**	**ug/L**	0.212	18779	0.218
	Zn	66	**51.212**	**ug/L**	3.995	12593	0.099
	Zn	67		**ug/L**		3574	0.017
	Zn	68		**ug/L**		10044	0.077
>	Ge	74		**ug/L**		126533	126533.070
	As	75	**46.460**	**ug/L**	3.260	17932	0.139
	Se	77		**ug/L**		3221	0.011
	Se	82	**48.800**	**ug/L**	3.207	1556	0.012
	Kr	83		**ug/L**		36	-0.000
	Sr	88	**49.372**	**ug/L**	0.644	192116	1.991
	Y	89		**ug/L**		35	0.000
	Zr	90	**43.798**	**ug/L**	3.910	96566	0.998
	Mo	98	**50.907**	**ug/L**	0.405	52368	0.542
	Ag	107	**50.032**	**ug/L**	1.694	94234	0.977
	Cd	111	**50.808**	**ug/L**	0.358	23747	0.246
	Cd	114		**ug/L**		57059	0.591
>	In	115		**ug/L**		96459	96459.256
	Sn	120	**50.966**	**ug/L**	1.642	103205	1.069
	Sb	121	**49.650**	**ug/L**	4.082	88397	0.913
	Sb	123		**ug/L**		67802	0.700
	Ba	135		**ug/L**		23864	0.138
	Ba	137	**49.913**	**ug/L**	1.138	41604	0.240
	Ho	165		**ug/L**		39	0.000
>	Lu	175		**ug/L**		173338	173337.729
	Tl	205	**48.584**	**ug/L**	1.557	384929	2.219
	Pb	208	**51.638**	**ug/L**	0.350	475900	2.744
	Th	232	**51.300**	**ug/L**	0.120	555594	3.203
	U	238	**53.006**	**ug/L**	1.253	595924	3.436

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.370				
	Be	9	111.904				
	B	11	108.745				
	Na	23	100.814				
	Mg	24	100.570				
	Al	27	91.092				
	P	31	98.682				
	K	39	102.143				
	Ca	43	104.161				
>	Sc	45		103.1			
	Ti	47	100.004				
	V	51	101.089				
	Cr	52	103.651				
	Cr	53					
	Mn	55	101.053				
	Fe	57	99.234				
	Co	59	99.646				
	Ni	60	102.213				
	Cu	63					
	Cu	65	103.538				
	Zn	66	102.423				
	Zn	67					
	Zn	68					
>	Ge	74		104.1			
	As	75	92.920				
	Se	77					
	Se	82	97.600				
	Kr	83					
	Sr	88	98.744				
	Y	89					
	Zr	90	87.597				
	Mo	98	101.813				
	Ag	107	100.064				
	Cd	111	101.615				
	Cd	114					
>	In	115		102.6			
	Sn	120	101.933				
	Sb	121	99.300				
	Sb	123					
	Ba	135					
	Ba	137	99.825				
	Ho	165					
>	Lu	175		103.0			
	Tl	205	97.167				
	Pb	208	103.276				
	Th	232	102.601				
	U	238	106.012				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 02:06:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 7.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.125**	ug/L	46.712	16	0.000
	Be	9	**0.045**	ug/L	56.547	7	0.000
	B	11	**2.913**	ug/L	25.353	149	0.001
	Na	23	**2.013**	ug/L	444.540	4668	0.010
	Mg	24	**-1.285**	ug/L	143.191	1333	-0.005
	Al	27	**2.612**	ug/L	153.506	2334	0.019
	P	31	**-1.642**	ug/L	21.440	753	-0.001
	K	39	**-7.675**	ug/L	184.846	148439	-0.089
	Ca	43	**5.189**	ug/L	109.870	112	0.000
>	Sc	45		ug/L		86655	86654.888
	Ti	47	**-0.088**	ug/L	16.723	46	-0.000
	V	51	**0.042**	ug/L	2165.281	-1543	0.001
	Cr	52	**-0.049**	ug/L	41.585	1132	-0.001
	Cr	53		ug/L		34114	-0.015
	Mn	55	**-0.039**	ug/L	12.055	298	-0.001
	Fe	57	**1.388**	ug/L	68.473	2482	0.001
	Co	59	**0.019**	ug/L	56.508	163	0.000
	Ni	60	**0.004**	ug/L	342.275	36	0.000
	Cu	63		ug/L		80	0.000
	Cu	65	**0.003**	ug/L	430.699	55	0.000
	Zn	66	**0.172**	ug/L	118.359	106	0.000
	Zn	67		ug/L		1456	0.000
	Zn	68		ug/L		262	0.000
>	Ge	74		ug/L		127376	127376.300
	As	75	**0.305**	ug/L	85.142	407	0.001
	Se	77		ug/L		1796	-0.000
	Se	82	**0.304**	ug/L	245.138	5	0.000
	Kr	83		ug/L		37	-0.000
	Sr	88	**0.005**	ug/L	91.176	136	0.000
	Y	89		ug/L		17	0.000
	Zr	90	**0.063**	ug/L	30.869	408	0.001
	Mo	98	**0.072**	ug/L	25.838	114	0.001
	Ag	107	**0.007**	ug/L	83.412	52	0.000
	Cd	111	**-0.012**	ug/L	30.553	13	-0.000
	Cd	114		ug/L		38	0.000
>	In	115		ug/L		95450	95449.991
	Sn	120	**0.162**	ug/L	14.277	443	0.003
	Sb	121	**0.651**	ug/L	14.690	1422	0.012
	Sb	123		ug/L		1086	0.009
	Ba	135		ug/L		23	0.000
	Ba	137	**0.003**	ug/L	41.954	33	0.000
	Ho	165		ug/L		21	0.000
>	Lu	175		ug/L		170384	170383.604
	Tl	205	**0.106**	ug/L	18.550	1149	0.005
	Pb	208	**0.017**	ug/L	24.685	484	0.001
	Th	232	**0.122**	ug/L	7.210	1674	0.008
	U	238	**0.012**	ug/L	13.009	501	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201981201
Sample Date/Time: Tuesday, December 15, 2009 02:12:44
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 926630|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\1201981201.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.149**	ug/L	46.869	17	0.000
	Be	9	**0.068**	ug/L	140.332	8	0.000
	B	11	**2.812**	ug/L	9.147	140	0.001
	Na	23	**12.326**	ug/L	82.888	8670	0.060
	Mg	24	**-4.453**	ug/L	42.852	333	-0.016
	Al	27	**10.570**	ug/L	79.575	7002	0.076
	P	31	**1.549**	ug/L	117.053	856	0.001
	K	39	**5.198**	ug/L	60.727	155172	0.060
	Ca	43	**42.871**	ug/L	9.023	183	0.001
>	Sc	45		ug/L		83316	83316.426
	Ti	47	**0.509**	ug/L	21.770	105	0.001
	V	51	**-3.336**	ug/L	97.650	-5513	-0.048
	Cr	52	**1.238**	ug/L	6.811	2816	0.020
	Cr	53		ug/L		83702	0.596
	Mn	55	**0.158**	ug/L	13.604	768	0.005
	Fe	57	**11.933**	ug/L	17.472	2891	0.007
	Co	59	**0.001**	ug/L	637.029	126	0.000
	Ni	60	**0.103**	ug/L	12.227	69	0.000
	Cu	63		ug/L		258	0.002
	Cu	65	**0.267**	ug/L	18.838	145	0.001
	Zn	66	**1.649**	ug/L	2.022	460	0.003
	Zn	67		ug/L		5158	0.030
	Zn	68		ug/L		748	0.004
>	Ge	74		ug/L		124709	124709.368
	As	75	**3.076**	ug/L	56.258	1444	0.009
	Se	77		ug/L		6020	0.034
	Se	82	**0.299**	ug/L	97.197	5	0.000
	Kr	83		ug/L		33	-0.000
	Sr	88	**0.141**	ug/L	9.591	627	0.006
	Y	89		ug/L		41	0.000
	Zr	90	**1.436**	ug/L	6.490	3232	0.033
	Mo	98	**0.030**	ug/L	45.729	69	0.000
	Ag	107	**-0.007**	ug/L	30.199	25	-0.000
	Cd	111	**-0.035**	ug/L	13.486	2	-0.000
	Cd	114		ug/L		15	-0.000
>	In	115		ug/L		90954	90953.808
	Sn	120	**0.906**	ug/L	22.607	1837	0.019
	Sb	121	**0.442**	ug/L	17.881	1006	0.008
	Sb	123		ug/L		788	0.006
	Ba	135		ug/L		52	0.000
	Ba	137	**0.065**	ug/L	11.826	82	0.000
	Ho	165		ug/L		19	-0.000
>	Lu	175		ug/L		166967	166967.434
	Tl	205	**0.023**	ug/L	20.175	498	0.001
	Pb	208	**0.032**	ug/L	12.051	615	0.002
	Th	232	**0.154**	ug/L	22.227	1977	0.010
	U	238	**-0.018**	ug/L	4.938	166	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201981202
Sample Date/Time: Tuesday, December 15, 2009 02:18:32
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 926630|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\1201981202.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.359**	ug/L	2.389	2801	0.033
	Be	9	**61.321**	ug/L	3.879	2399	0.028
	B	11	**116.876**	ug/L	4.032	3948	0.046
	Na	23	**2000.996**	ug/L	7.248	822761	9.739
	Mg	24	**1960.411**	ug/L	5.743	595873	7.061
	Al	27	**1841.889**	ug/L	5.696	1119962	13.312
	P	31	**2168.703**	ug/L	0.859	91130	1.074
	K	39	**2419.270**	ug/L	3.421	2514249	28.093
	Ca	43	**2238.908**	ug/L	3.046	4598	0.053
>	Sc	45		ug/L		84128	84127.529
	Ti	47	**50.120**	ug/L	3.025	5266	0.062
	V	51	**52.516**	ug/L	7.542	61445	0.749
	Cr	52	**55.613**	ug/L	1.418	76547	0.896
	Cr	53		ug/L		99713	0.777
	Mn	55	**53.984**	ug/L	1.666	133497	1.582
	Fe	57	**2152.720**	ug/L	2.560	106151	1.234
	Co	59	**52.947**	ug/L	2.813	92123	1.094
	Ni	60	**53.835**	ug/L	0.519	19095	0.227
	Cu	63		ug/L		41668	0.495
	Cu	65	**53.593**	ug/L	1.394	19033	0.226
	Zn	66	**53.264**	ug/L	0.678	13139	0.103
	Zn	67		ug/L		8033	0.052
	Zn	68		ug/L		10777	0.083
>	Ge	74		ug/L		126891	126891.019
	As	75	**53.780**	ug/L	2.048	20778	0.161
	Se	77		ug/L		7468	0.045
	Se	82	**50.563**	ug/L	2.125	1617	0.013
	Kr	83		ug/L		36	-0.000
	Sr	88	**52.975**	ug/L	0.818	194301	2.136
	Y	89		ug/L		29	0.000
	Zr	90	**54.415**	ug/L	2.207	112978	1.240
	Mo	98	**54.144**	ug/L	2.091	52496	0.577
	Ag	107	**55.176**	ug/L	0.632	97966	1.077
	Cd	111	**53.883**	ug/L	1.133	23736	0.261
	Cd	114		ug/L		57483	0.632
>	In	115		ug/L		90920	90919.812
	Sn	120	**55.033**	ug/L	2.046	105042	1.154
	Sb	121	**58.145**	ug/L	1.999	97477	1.069
	Sb	123		ug/L		75588	0.829
	Ba	135		ug/L		23442	0.138
	Ba	137	**50.433**	ug/L	2.025	41178	0.242
	Ho	165		ug/L		33	0.000
>	Lu	175		ug/L		169809	169809.365
	Tl	205	**49.818**	ug/L	2.453	386582	2.275
	Pb	208	**53.088**	ug/L	1.110	479256	2.821
	Th	232	**52.661**	ug/L	1.147	558683	3.288
	U	238	**54.562**	ug/L	1.796	600838	3.537

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			101.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			104.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.9		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241713001
Sample Date/Time: Tuesday, December 15, 2009 02:30:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926630|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\241713001.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.558**	ug/L	2.905	37	0.000
	Be	9	**0.090**	ug/L	113.451	8	0.000
	B	11	**2.699**	ug/L	9.627	129	0.001
	Na	23	**240.779**	ug/L	23.963	95662	1.172
	Mg	24	**53.103**	ug/L	23.680	16677	0.191
	Al	27	**349.268**	ug/L	26.209	199438	2.524
	P	31	**3.660**	ug/L	43.863	893	0.002
	K	39	**67.723**	ug/L	30.731	204463	0.786
	Ca	43	**211.567**	ug/L	1.800	491	0.005
>	Sc	45		ug/L		78953	78953.448
	Ti	47	**18.590**	ug/L	59.822	1860	0.023
	V	51	**-3.445**	ug/L	3.389	-5332	-0.049
	Cr	52	**11.724**	ug/L	3.971	15999	0.189
	Cr	53		ug/L		96772	0.817
	Mn	55	**8.589**	ug/L	2.529	20235	0.252
	Fe	57	**341.890**	ug/L	4.506	17664	0.196
	Co	59	**0.250**	ug/L	4.976	525	0.005
	Ni	60	**5.205**	ug/L	4.534	1761	0.022
	Cu	63		ug/L		1069	0.013
	Cu	65	**1.443**	ug/L	11.416	528	0.006
	Zn	66	**4.798**	ug/L	5.456	1178	0.009
	Zn	67		ug/L		5993	0.038
	Zn	68		ug/L		1367	0.009
>	Ge	74		ug/L		120468	120468.392
	As	75	**5.075**	ug/L	21.151	2112	0.015
	Se	77		ug/L		7857	0.051
	Se	82	**0.218**	ug/L	74.696	2	0.000
	Kr	83		ug/L		34	-0.000
	Sr	88	**0.941**	ug/L	1.133	3374	0.038
	Y	89		ug/L		766	0.009
	Zr	90	**0.694**	ug/L	29.512	1608	0.016
	Mo	98	**0.191**	ug/L	13.854	212	0.002
	Ag	107	**0.007**	ug/L	49.384	47	0.000
	Cd	111	**-0.017**	ug/L	14.224	9	-0.000
	Cd	114		ug/L		18	-0.000
>	In	115		ug/L		86174	86173.763
	Sn	120	**0.252**	ug/L	8.997	561	0.005
	Sb	121	**0.128**	ug/L	13.303	456	0.002
	Sb	123		ug/L		345	0.002
	Ba	135		ug/L		1438	0.009
	Ba	137	**3.105**	ug/L	0.791	2500	0.015
	Ho	165		ug/L		92	0.000
>	Lu	175		ug/L		165607	165606.597
	Tl	205	**0.079**	ug/L	8.669	912	0.004
	Pb	208	**0.481**	ug/L	1.397	4559	0.026
	Th	232	**0.110**	ug/L	5.991	1506	0.007
	U	238	**-0.003**	ug/L	73.258	319	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.4		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201981203
Sample Date/Time: Tuesday, December 15, 2009 02:35:59
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 926630|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\1201981203.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.461**	ug/L	27.690	32	0.000
	Be	9	**0.087**	ug/L	60.377	8	0.000
	B	11	**1.511**	ug/L	15.652	93	0.001
	Na	23	**276.817**	ug/L	11.823	110764	1.347
	Mg	24	**53.832**	ug/L	33.209	17011	0.194
	Al	27	**393.433**	ug/L	22.489	226842	2.843
	P	31	**4.521**	ug/L	11.756	935	0.002
	K	39	**87.048**	ug/L	16.110	224082	1.011
	Ca	43	**184.329**	ug/L	9.021	444	0.004
>	Sc	45		ug/L		79644	79643.527
	Ti	47	**12.618**	ug/L	3.666	1293	0.016
	V	51	**-2.919**	ug/L	23.474	-4782	-0.042
	Cr	52	**13.582**	ug/L	2.837	18531	0.219
	Cr	53		ug/L		98609	0.830
	Mn	55	**8.903**	ug/L	1.526	21151	0.261
	Fe	57	**383.036**	ug/L	1.754	19708	0.220
	Co	59	**0.250**	ug/L	4.468	529	0.005
	Ni	60	**4.768**	ug/L	9.467	1629	0.020
	Cu	63		ug/L		822	0.010
	Cu	65	**1.011**	ug/L	3.491	388	0.004
	Zn	66	**4.722**	ug/L	6.462	1158	0.009
	Zn	67		ug/L		6200	0.040
	Zn	68		ug/L		1419	0.010
>	Ge	74		ug/L		120139	120139.323
	As	75	**6.205**	ug/L	21.249	2516	0.019
	Se	77		ug/L		7948	0.052
	Se	82	**0.265**	ug/L	65.515	4	0.000
	Kr	83		ug/L		32	-0.000
	Sr	88	**0.980**	ug/L	2.543	3444	0.040
	Y	89		ug/L		780	0.009
	Zr	90	**0.590**	ug/L	1.652	1377	0.013
	Mo	98	**0.211**	ug/L	14.278	227	0.002
	Ag	107	**0.004**	ug/L	149.172	42	0.000
	Cd	111	**-0.012**	ug/L	83.250	11	-0.000
	Cd	114		ug/L		18	-0.000
>	In	115		ug/L		84552	84552.246
	Sn	120	**0.247**	ug/L	6.650	544	0.005
	Sb	121	**0.087**	ug/L	16.431	384	0.002
	Sb	123		ug/L		308	0.001
	Ba	135		ug/L		1430	0.008
	Ba	137	**3.085**	ug/L	1.855	2510	0.015
	Ho	165		ug/L		113	0.001
>	Lu	175		ug/L		167225	167224.759
	Tl	205	**0.036**	ug/L	15.596	597	0.002
	Pb	208	**0.496**	ug/L	1.646	4732	0.026
	Th	232	**0.118**	ug/L	7.695	1606	0.007
	U	238	**-0.002**	ug/L	52.371	342	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			89.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.4		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201981204
Sample Date/Time: Tuesday, December 15, 2009 02:41:49
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 926630|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\1201981204.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**56.699**	ug/L	1.860	2863	0.037
	Be	9	**68.020**	ug/L	0.984	2465	0.032
	B	11	**120.353**	ug/L	4.907	3764	0.048
	Na	23	**2753.851**	ug/L	3.543	1047753	13.404
	Mg	24	**2399.892**	ug/L	2.948	675274	8.644
	Al	27	**2425.253**	ug/L	8.706	1365098	17.528
	P	31	**2189.623**	ug/L	2.017	85219	1.084
	K	39	**2160.860**	ug/L	6.119	2096689	25.092
	Ca	43	**2314.494**	ug/L	2.128	4401	0.055
>	Sc	45		ug/L		77929	77928.807
	Ti	47	**61.530**	ug/L	2.804	5978	0.076
	V	51	**54.251**	ug/L	4.570	58860	0.774
	Cr	52	**67.073**	ug/L	2.004	85279	1.081
	Cr	53		ug/L		101091	0.889
	Mn	55	**61.430**	ug/L	2.183	140671	1.801
	Fe	57	**2493.214**	ug/L	2.116	113542	1.429
	Co	59	**51.840**	ug/L	2.577	83550	1.071
	Ni	60	**56.127**	ug/L	2.213	18436	0.236
	Cu	63		ug/L		37582	0.482
	Cu	65	**52.174**	ug/L	3.045	17159	0.220
	Zn	66	**54.370**	ug/L	2.469	12422	0.105
	Zn	67		ug/L		7882	0.056
	Zn	68		ug/L		10885	0.091
>	Ge	74		ug/L		117558	117557.629
	As	75	**82.436**	ug/L	2.308	29357	0.248
	Se	77		ug/L		7482	0.050
	Se	82	**19.341**	ug/L	2.402	571	0.005
	Kr	83		ug/L		36	-0.000
	Sr	88	**51.498**	ug/L	0.054	175911	2.076
	Y	89		ug/L		768	0.009
	Zr	90	**53.881**	ug/L	0.992	104187	1.228
	Mo	98	**53.116**	ug/L	3.429	47947	0.566
	Ag	107	**53.923**	ug/L	1.659	89164	1.053
	Cd	111	**10.750**	ug/L	4.003	4421	0.052
	Cd	114		ug/L		10488	0.123
>	In	115		ug/L		84674	84673.675
	Sn	120	**54.008**	ug/L	1.192	96003	1.133
	Sb	121	**228.378**	ug/L	2.963	355743	4.200
	Sb	123		ug/L		276907	3.269
	Ba	135		ug/L		23154	0.139
	Ba	137	**50.607**	ug/L	1.293	40476	0.243
	Ho	165		ug/L		178	0.001
>	Lu	175		ug/L		166342	166341.729
	Tl	205	**90.261**	ug/L	4.024	685572	4.122
	Pb	208	**42.598**	ug/L	1.952	376706	2.263
	Th	232	**53.805**	ug/L	1.434	559095	3.359
	U	238	**55.136**	ug/L	1.175	594729	3.574

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.8		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201981205
Sample Date/Time: Tuesday, December 15, 2009 02:47:38
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 926630|5|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\1201981205.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.153**	ug/L	58.917	16	0.000
	Be	9	**0.060**	ug/L	174.938	7	0.000
	B	11	**2.781**	ug/L	15.810	126	0.001
	Na	23	**47.953**	ug/L	33.540	21016	0.233
	Mg	24	**4.266**	ug/L	51.435	2667	0.015
	Al	27	**69.669**	ug/L	26.309	38722	0.504
	P	31	**2.355**	ug/L	36.617	805	0.001
	K	39	**11.953**	ug/L	131.368	146417	0.139
	Ca	43	**44.747**	ug/L	26.229	169	0.001
>	Sc	45		ug/L		75487	75487.384
	Ti	47	**1.865**	ug/L	17.340	222	0.002
	V	51	**0.455**	ug/L	235.259	-903	0.006
	Cr	52	**2.558**	ug/L	7.863	4154	0.041
	Cr	53		ug/L		52749	0.290
	Mn	55	**1.617**	ug/L	2.446	3924	0.047
	Fe	57	**62.728**	ug/L	12.468	4813	0.036
	Co	59	**0.036**	ug/L	17.371	168	0.001
	Ni	60	**0.921**	ug/L	12.381	323	0.004
	Cu	63		ug/L		240	0.002
	Cu	65	**0.296**	ug/L	2.607	141	0.001
	Zn	66	**1.034**	ug/L	6.301	273	0.002
	Zn	67		ug/L		2390	0.010
	Zn	68		ug/L		494	0.003
>	Ge	74		ug/L		109351	109351.369
	As	75	**2.025**	ug/L	25.119	914	0.006
	Se	77		ug/L		3593	0.019
	Se	82	**0.239**	ug/L	172.280	3	0.000
	Kr	83		ug/L		29	-0.000
	Sr	88	**0.173**	ug/L	7.837	679	0.007
	Y	89		ug/L		161	0.002
	Zr	90	**0.010**	ug/L	79.618	254	0.000
	Mo	98	**0.056**	ug/L	24.081	86	0.001
	Ag	107	**-0.009**	ug/L	42.152	19	-0.000
	Cd	111	**-0.021**	ug/L	41.496	8	-0.000
	Cd	114		ug/L		12	-0.000
>	In	115		ug/L		82928	82928.339
	Sn	120	**0.046**	ug/L	16.100	183	0.001
	Sb	121	**0.348**	ug/L	8.472	775	0.006
	Sb	123		ug/L		623	0.005
	Ba	135		ug/L		270	0.002
	Ba	137	**0.591**	ug/L	6.496	482	0.003
	Ho	165		ug/L		27	0.000
>	Lu	175		ug/L		159576	159576.257
	Tl	205	**1.740**	ug/L	12.236	12988	0.079
	Pb	208	**0.076**	ug/L	0.482	953	0.004
	Th	232	**0.110**	ug/L	18.372	1444	0.007
	U	238	**-0.018**	ug/L	6.306	152	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			90.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			88.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			94.8		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241713002
Sample Date/Time: Tuesday, December 15, 2009 02:53:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926630|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\241713002.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.031**	**ug/L**	214.935	10	0.000
	Be	9	**0.070**	**ug/L**	39.889	7	0.000
	B	11	**1.336**	**ug/L**	18.282	83	0.001
	Na	23	**11.878**	**ug/L**	93.631	7669	0.058
	Mg	24	**-3.084**	**ug/L**	138.766	667	-0.011
	Al	27	**16.654**	**ug/L**	53.017	9670	0.120
	P	31	**1.657**	**ug/L**	89.496	780	0.001
	K	39	**25.090**	**ug/L**	61.031	158210	0.291
	Ca	43	**44.570**	**ug/L**	12.355	169	0.001
>	Sc	45		**ug/L**		75541	75540.963
	Ti	47	**0.538**	**ug/L**	5.481	98	0.001
	V	51	**-2.477**	**ug/L**	79.492	-4064	-0.035
	Cr	52	**3.846**	**ug/L**	5.854	5726	0.062
	Cr	53		**ug/L**		94334	0.840
	Mn	55	**3.737**	**ug/L**	1.220	8622	0.110
	Fe	57	**23.112**	**ug/L**	12.600	3104	0.013
	Co	59	**0.029**	**ug/L**	10.164	158	0.001
	Ni	60	**1.010**	**ug/L**	5.822	351	0.004
	Cu	63		**ug/L**		654	0.008
	Cu	65	**0.838**	**ug/L**	7.084	313	0.004
	Zn	66	**2.376**	**ug/L**	9.628	582	0.005
	Zn	67		**ug/L**		5370	0.036
	Zn	68		**ug/L**		897	0.006
>	Ge	74		**ug/L**		114254	114253.931
	As	75	**3.761**	**ug/L**	21.786	1552	0.011
	Se	77		**ug/L**		8003	0.056
	Se	82	**0.051**	**ug/L**	259.604	-3	0.000
	Kr	83		**ug/L**		30	-0.000
	Sr	88	**0.165**	**ug/L**	5.708	640	0.007
	Y	89		**ug/L**		34	0.000
	Zr	90	**0.012**	**ug/L**	80.010	254	0.000
	Mo	98	**0.118**	**ug/L**	14.911	137	0.001
	Ag	107	**-0.003**	**ug/L**	123.912	29	-0.000
	Cd	111	**-0.028**	**ug/L**	90.142	4	-0.000
	Cd	114		**ug/L**		18	-0.000
>	In	115		**ug/L**		81220	81219.801
	Sn	120	**0.247**	**ug/L**	4.604	522	0.005
	Sb	121	**0.129**	**ug/L**	5.937	432	0.002
	Sb	123		**ug/L**		373	0.002
	Ba	135		**ug/L**		399	0.002
	Ba	137	**0.873**	**ug/L**	4.903	688	0.004
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		157358	157358.400
	Tl	205	**0.705**	**ug/L**	5.685	5364	0.032
	Pb	208	**0.065**	**ug/L**	3.989	849	0.003
	Th	232	**0.069**	**ug/L**	29.829	1022	0.004
	U	238	**-0.013**	**ug/L**	12.855	201	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			94.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			86.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			93.5		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 02:59:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 6.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.629**	**ug/L**	4.608	2662	0.034
	Be	9	**61.240**	**ug/L**	3.798	2223	0.028
	B	11	**107.665**	**ug/L**	3.678	3377	0.043
	Na	23	**4933.616**	**ug/L**	8.749	1875947	24.013
	Mg	24	**5053.950**	**ug/L**	10.194	1423014	18.204
	Al	27	**4871.084**	**ug/L**	5.264	2747040	35.204
	P	31	**5013.930**	**ug/L**	2.325	194461	2.483
	K	39	**4928.796**	**ug/L**	2.597	4606618	57.234
	Ca	43	**5104.297**	**ug/L**	2.927	9609	0.122
>	Sc	45		**ug/L**		78050	78050.136
	Ti	47	**51.146**	**ug/L**	3.065	4984	0.063
	V	51	**55.646**	**ug/L**	2.807	60514	0.794
	Cr	52	**53.587**	**ug/L**	3.170	68445	0.863
	Cr	53		**ug/L**		49163	0.221
	Mn	55	**51.396**	**ug/L**	2.231	117917	1.507
	Fe	57	**5004.376**	**ug/L**	2.664	226038	2.869
	Co	59	**49.440**	**ug/L**	4.137	79794	1.021
	Ni	60	**49.488**	**ug/L**	3.745	16280	0.208
	Cu	63		**ug/L**		36780	0.471
	Cu	65	**51.356**	**ug/L**	2.905	16917	0.216
	Zn	66	**51.129**	**ug/L**	1.458	11775	0.099
	Zn	67		**ug/L**		3733	0.020
	Zn	68		**ug/L**		9526	0.078
>	Ge	74		**ug/L**		118447	118446.596
	As	75	**45.284**	**ug/L**	2.817	16370	0.136
	Se	77		**ug/L**		3434	0.015
	Se	82	**46.130**	**ug/L**	1.746	1377	0.012
	Kr	83		**ug/L**		41	0.000
	Sr	88	**49.315**	**ug/L**	1.502	171055	1.988
	Y	89		**ug/L**		32	0.000
	Zr	90	**40.874**	**ug/L**	8.933	80373	0.931
	Mo	98	**51.183**	**ug/L**	2.076	46934	0.545
	Ag	107	**51.267**	**ug/L**	3.918	86065	1.001
	Cd	111	**50.882**	**ug/L**	2.100	21196	0.246
	Cd	114		**ug/L**		51522	0.599
>	In	115		**ug/L**		85999	85999.440
	Sn	120	**51.105**	**ug/L**	1.278	92267	1.072
	Sb	121	**50.461**	**ug/L**	3.492	80073	0.928
	Sb	123		**ug/L**		61937	0.718
	Ba	135		**ug/L**		21852	0.133
	Ba	137	**47.874**	**ug/L**	0.141	37728	0.230
	Ho	165		**ug/L**		35	0.000
>	Lu	175		**ug/L**		163866	163865.765
	Tl	205	**48.262**	**ug/L**	0.845	361454	2.204
	Pb	208	**52.322**	**ug/L**	0.903	455848	2.780
	Th	232	**52.909**	**ug/L**	2.650	541707	3.303
	U	238	**54.234**	**ug/L**	1.350	576371	3.515

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	105.257				
	Be	9	122.480				
	B	11	107.665				
	Na	23	98.672				
	Mg	24	101.079				
	Al	27	96.457				
	P	31	100.279				
	K	39	98.576				
	Ca	43	102.086				
>	Sc	45		93.7			
	Ti	47	102.292				
	V	51	111.293				
	Cr	52	107.175				
	Cr	53					
	Mn	55	102.793				
	Fe	57	100.088				
	Co	59	98.880				
	Ni	60	98.975				
	Cu	63					
	Cu	65	102.712				
	Zn	66	102.258				
	Zn	67					
	Zn	68					
>	Ge	74		97.4			
	As	75	90.567				
	Se	77					
	Se	82	92.260				
	Kr	83					
	Sr	88	98.630				
	Y	89					
	Zr	90	81.748				
	Mo	98	102.366				
	Ag	107	102.534				
	Cd	111	101.764				
	Cd	114					
>	In	115		91.5			
	Sn	120	102.210				
	Sb	121	100.923				
	Sb	123					
	Ba	135					
	Ba	137	95.749				
	Ho	165					
>	Lu	175		97.4			
	Tl	205	96.523				
	Pb	208	104.645				
	Th	232	105.817				
	U	238	108.468				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	V	51CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 03:04:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091214\QC Std 7.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.035**	**ug/L**	32.694	7	-0.000
	Be	9	**0.091**	**ug/L**	50.414	8	0.000
	B	11	**2.653**	**ug/L**	26.734	126	0.001
	Na	23	**3.242**	**ug/L**	126.057	4667	0.016
	Mg	24	**-5.555**	**ug/L**	0.000	0	-0.020
	Al	27	**1.252**	**ug/L**	163.224	1333	0.009
	P	31	**0.424**	**ug/L**	503.015	759	0.000
	K	39	**-4.336**	**ug/L**	392.352	136993	-0.050
	Ca	43	**-0.008**	**ug/L**	52243.779	91	-0.000
>	Sc	45		**ug/L**		78194	78193.882
	Ti	47	**-0.093**	**ug/L**	85.415	41	-0.000
	V	51	**1.682**	**ug/L**	93.173	448	0.024
	Cr	52	**0.208**	**ug/L**	17.428	1345	0.003
	Cr	53		**ug/L**		35981	0.052
	Mn	55	**-0.016**	**ug/L**	21.284	321	-0.000
	Fe	57	**1.180**	**ug/L**	125.691	2230	0.001
	Co	59	**0.009**	**ug/L**	180.671	130	0.000
	Ni	60	**0.010**	**ug/L**	92.531	35	0.000
	Cu	63		**ug/L**		64	0.000
	Cu	65	**-0.006**	**ug/L**	201.570	46	-0.000
	Zn	66	**-0.050**	**ug/L**	67.527	46	-0.000
	Zn	67		**ug/L**		1550	0.002
	Zn	68		**ug/L**		238	0.000
>	Ge	74		**ug/L**		115677	115676.721
	As	75	**1.070**	**ug/L**	51.198	633	0.003
	Se	77		**ug/L**		2044	0.004
	Se	82	**0.498**	**ug/L**	25.396	10	0.000
	Kr	83		**ug/L**		25	-0.000
	Sr	88	**0.003**	**ug/L**	48.497	117	0.000
	Y	89		**ug/L**		15	0.000
	Zr	90	**0.056**	**ug/L**	34.719	358	0.001
	Mo	98	**0.076**	**ug/L**	16.455	108	0.001
	Ag	107	**0.005**	**ug/L**	64.276	44	0.000
	Cd	111	**-0.005**	**ug/L**	293.025	14	-0.000
	Cd	114		**ug/L**		34	0.000
>	In	115		**ug/L**		86953	86952.794
	Sn	120	**0.120**	**ug/L**	13.572	327	0.003
	Sb	121	**0.619**	**ug/L**	7.215	1246	0.011
	Sb	123		**ug/L**		980	0.009
	Ba	135		**ug/L**		22	0.000
	Ba	137	**-0.005**	**ug/L**	51.946	25	-0.000
	Ho	165		**ug/L**		19	-0.000
>	Lu	175		**ug/L**		163061	163060.615
	Tl	205	**0.494**	**ug/L**	7.777	3991	0.023
	Pb	208	**0.008**	**ug/L**	35.061	388	0.000
	Th	232	**0.160**	**ug/L**	5.046	1988	0.010
	U	238	**0.009**	**ug/L**	9.638	450	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.9		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 15, 2009 10:44:06
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1479
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6274.8	6274.778	72.418	1.2
	Mg	24.0	59560.1	59560.146	1266.808	2.1
	Co	58.9	103040.8	103040.752	1679.204	1.6
	Rh	102.9	191902.2	191902.161	1125.680	0.6
	In	114.9	259256.0	259256.038	2039.519	0.8
	Pb	208.0	187483.7	187483.654	850.927	0.5
⌈>	Ba	137.9	257468.0	257468.047	1349.966	0.5
⌊	Ba++	69.0	4838.8	0.019	0.000	1.9
⌈>	Ce	139.9	316626.0	316625.988	3963.636	1.3
⌊	CeO	155.9	7405.3	0.023	0.001	3.7
	Bkgd	220.0	19.2	19.200	2.660	13.9

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.8	6791.3
Co	59	13	7.3	107826.1
In	115	13	7.8	249879.8

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	591	2060	0.617
Be	9.0	9.0	2053	2070	0.643
Mg	24.0	24.0	5689	2080	0.613
Mg	25.0	25.0	5941	2075	0.625
Mg	26.0	26.0	6176	2070	0.653
Co	58.9	58.9	14169	2110	0.623
Rh	102.9	102.9	24875	2160	0.636
In	114.9	114.9	27789	2180	0.640
Ce	139.9	139.9	33873	2195	0.662
Pb	206.0	206.0	49936	2290	0.593
Pb	207.0	206.9	50159	2260	0.619
Pb	208.0	208.0	50439	2280	0.657
U	238.1	238.0	57720	2270	0.736

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 15, 2009 11:56:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\Be only.mth
Dataset File: c:\elandata\Dataset\091215\Blank.028

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9		ug/L		17	
⌊>	Sc	45		ug/L		656308	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 15, 2009 11:58:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\Standard 1.029

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	10.000	ug/L	2.019	6454	0.010
⌊>	Sc	45		ug/L		656728	656727.680

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 15, 2009 11:59:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\Standard 2.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	100.009	ug/L	3.832	61463	0.099
⌊>	Sc	45		ug/L		621879	621878.790

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 15, 2009 12:01:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 1.031

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	48.415	ug/L	8.072	31726	0.048
⌊>	Sc	45		ug/L		664752	664751.637

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	96.830				
⌊>	Sc	45		101.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 15, 2009 12:03:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 2.032

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.009	ug/L	139.677	21	0.000
⌊>	Sc	45		ug/L		626931	626931.320

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 15, 2009 12:04:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 3.033

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.568	ug/L	5.102	379	0.001
⌊>	Sc	45		ug/L		646439	646439.290

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	113.517				
⌊>	Sc	45		98.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 15, 2009 12:06:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 4.034

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.073**	**ug/L**	21.102	56	0.000
⌊>	Sc	45		**ug/L**		569163	569162.704

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		86.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 15, 2009 12:08:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 5.035

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.595	ug/L	3.774	10932	0.019
Sc	45		ug/L		563794	563794.325

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	97.974				
Sc	45		85.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 12:09:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 6.036

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.089	ug/L	5.468	31267	0.050
Sc	45		ug/L		632203	632202.822

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	100.177				
Sc	45		96.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 12:11:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 7.037

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.002	ug/L	135.253	15	-0.000
⌊>	Sc	45		ug/L		646864	646863.786

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		98.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 15, 2009 12:26:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 8.046

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	45.061	ug/L	1.205	30022	0.045
Sc	45		ug/L		673404	673404.175

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	90.121				
Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 15, 2009 12:28:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 9.047

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.001	ug/L	506.499	18	0.000
⌊>	Sc	45		ug/L		675150	675149.952

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 15, 2009 12:42:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 8.055

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**45.985**	**ug/L**	2.044	29909	0.045
⌊>	Sc	45		**ug/L**		657576	657576.412

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	91.970				
⌊>	Sc	45		100.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 15, 2009 12:43:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 9.056

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.003	ug/L	389.243	19	0.000
Sc	45		ug/L		678500	678499.681

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		103.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 15, 2009 12:55:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 8.063

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.196	ug/L	6.562	30723	0.050
Sc	45		ug/L		620031	620030.929

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	100.392				
Sc	45		94.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 15, 2009 12:57:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 9.064

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.012	ug/L	77.181	24	0.000
Sc	45		ug/L		636804	636803.558

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		97.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 15, 2009 13:07:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 8.070

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.125	ug/L	5.899	30484	0.052
Sc	45		ug/L		592000	592000.088

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	104.249				
Sc	45		90.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 15, 2009 13:09:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 9.071

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.005	ug/L	97.085	19	0.000
Sc	45		ug/L		609757	609757.097

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		92.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 13:13:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 6.073

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**49.843**	**ug/L**	3.911	30226	0.049
⌊>	Sc	45		**ug/L**		613276	613276.299

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	99.685				
⌊>	Sc	45		93.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 13:15:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 7.074

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.009	ug/L	67.520	22	0.000
⌊>	Sc	45		ug/L		627961	627960.534

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981201
Sample Date/Time: Tuesday, December 15, 2009 13:17:08
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 926630|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\1201981201.075

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.005	ug/L	84.529	18	0.000
⌊>	Sc	45		ug/L		601685	601684.810

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		91.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981202
Sample Date/Time: Tuesday, December 15, 2009 13:18:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 926630|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\1201981202.076

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	55.231	ug/L	6.299	33035	0.055
⌊>	Sc	45		ug/L		605694	605693.871

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		92.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241713001
Sample Date/Time: Tuesday, December 15, 2009 13:22:51
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926630|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\241713001.078

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.030	ug/L	26.208	28	0.000
>	Sc	45		ug/L		516559	516559.099

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		78.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981203
Sample Date/Time: Tuesday, December 15, 2009 13:24:33
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 926630|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\1201981203.079

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.025	ug/L	14.613	26	0.000
⌊>	Sc	45		ug/L		530089	530089.378

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		80.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981204
Sample Date/Time: Tuesday, December 15, 2009 13:26:16
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 926630|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\1201981204.080

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	60.977	ug/L	2.305	31760	0.060
⌊>	Sc	45		ug/L		526610	526610.041

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		80.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201981205
Sample Date/Time: Tuesday, December 15, 2009 13:28:00
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 926630|5|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\1201981205.081

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	62.532	19	0.000
Sc	45		ug/L		526339	526338.555

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		80.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241713002
Sample Date/Time: Tuesday, December 15, 2009 13:29:44
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 926630|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\241713002.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.005	ug/L	23.243	16	0.000
⌊>	Sc	45		ug/L		516467	516467.472

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		78.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 13:31:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 6.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**54.651**	**ug/L**	2.422	29513	0.054
⌊>	Sc	45		**ug/L**		545879	545879.084

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	109.301				
⌊>	Sc	45		83.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 13:33:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\091215\QC Std 7.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.015	ug/L	44.454	23	0.000
⌊>	Sc	45		ug/L		560339	560339.318

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		85.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 19, 2009 12:21:03
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1561
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6334.8	6334.805	107.133	1.7
	Mg	24.0	59461.7	59461.697	405.222	0.7
	Co	58.9	133270.0	133269.964	840.392	0.6
	Rh	102.9	240372.2	240372.242	1423.537	0.6
	In	114.9	308636.8	308636.848	3288.415	1.1
	Pb	208.0	326397.2	326397.220	4730.142	1.4
⌈>	Ba	137.9	302993.7	302993.735	1693.484	0.6
⌊	Ba++	69.0	7260.0	0.024	0.000	1.3
⌈>	Ce	139.9	372151.4	372151.389	4448.748	1.2
⌊	CeO	155.9	9171.2	0.025	0.000	1.8
	Bkgd	220.0	23.1	23.100	1.557	6.7

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
7.50	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1200.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.3	7434.9
Co	59	17	8.0	134384.4
In	115	17	9.0	301818.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	597	2065	0.594
Be	9.0	9.0	2044	2070	0.641
Mg	24.0	23.9	5683	2070	0.665
Mg	25.0	25.0	5947	2070	0.685
Mg	26.0	26.0	6173	2070	0.663
Co	58.9	58.9	14188	2105	0.640
Rh	102.9	102.9	24878	2165	0.617
In	114.9	114.9	27792	2185	0.622
Ce	139.9	139.9	33864	2200	0.633
Pb	206.0	206.0	49936	2270	0.634
Pb	207.0	207.0	50183	2235	0.686
Pb	208.0	208.0	50427	2260	0.716
U	238.1	238.1	57728	2275	0.723

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, December 20, 2009 08:31:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\Blank.165

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		7	
>	Sc	45		ug/L		251906	
	Cr	52		ug/L		630	
	Cr	53		ug/L		114263	
	Ni	60		ug/L		69	
	Cu	63		ug/L		190	
	Cu	65		ug/L		148	
>	In	115		ug/L		219868	
	Sb	121		ug/L		439	
	Sb	123		ug/L		361	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
In	115	Linear Thru Zero	
Sb	121	Simple Linear	
Sb	123	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115					
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, December 20, 2009 08:34:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\Standard 1.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	10.000	ug/L	2.210	3600	0.014
>	Sc	45		ug/L		249426	249426.229
	Cr	52	10.000	ug/L	1.359	47910	0.190
	Cr	53		ug/L		103201	-0.040
	Ni	60	10.000	ug/L	0.971	13278	0.053
	Cu	63		ug/L		31284	0.125
	Cu	65	10.000	ug/L	1.331	15615	0.062
>	In	115		ug/L		221545	221544.969
	Sb	121	10.000	ug/L	1.367	42056	0.188
	Sb	123		ug/L		32936	0.147

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115					
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, December 20, 2009 08:36:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\Standard 2.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**100.006**	**ug/L**	2.188	35629	0.145
>	Sc	45		**ug/L**		245692	245691.880
	Cr	52	**100.002**	**ug/L**	1.825	467192	1.899
	Cr	53		**ug/L**		141000	0.120
	Ni	60	**99.972**	**ug/L**	1.137	126627	0.515
	Cu	63		**ug/L**		293246	1.193
	Cu	65	**99.945**	**ug/L**	1.216	144437	0.587
>	In	115		**ug/L**		215869	215869.181
	Sb	121	**100.014**	**ug/L**	1.742	411756	1.906
	Sb	123		**ug/L**		324745	1.503

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115					
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, December 20, 2009 08:38:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 1.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.167**	**ug/L**	3.339	18724	0.074
>	Sc	45		**ug/L**		252351	252350.850
	Cr	52	**50.968**	**ug/L**	0.433	244890	0.968
	Cr	53		**ug/L**		117527	0.012
	Ni	60	**50.942**	**ug/L**	1.367	66310	0.262
	Cu	63		**ug/L**		154195	0.610
	Cu	65	**51.016**	**ug/L**	0.741	75801	0.300
>	In	115		**ug/L**		221022	221021.636
	Sb	121	**50.952**	**ug/L**	0.628	215029	0.971
	Sb	123		**ug/L**		170514	0.770

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	102.335				
>	Sc	45		100.2			
	Cr	52	101.937				
	Cr	53					
	Ni	60	101.883				
	Cu	63					
	Cu	65	102.031				
>	In	115		100.5			
	Sb	121	101.904				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, December 20, 2009 08:40:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 2.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.009**	**ug/L**	72.191	11	0.000
|>	Sc	45		**ug/L**		256632	256632.254
|	Cr	52	**-0.276**	**ug/L**	7.079	-701	-0.005
|	Cr	53		**ug/L**		95050	-0.083
|	Ni	60	**0.002**	**ug/L**	423.158	74	0.000
|	Cu	63		**ug/L**		201	0.000
⌊	Cu	65	**0.009**	**ug/L**	104.259	165	0.000
⌈>	In	115		**ug/L**		221291	221291.457
|	Sb	121	**0.618**	**ug/L**	9.563	3046	0.012
⌊	Sb	123		**ug/L**		2376	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		101.9			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		100.6			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, December 20, 2009 08:42:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 3.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.545**	**ug/L**	8.575	209	0.001
>	Sc	45		**ug/L**		255399	255399.414
	Cr	52	**10.628**	**ug/L**	3.556	52156	0.202
	Cr	53		**ug/L**		106703	-0.036
	Ni	60	**2.149**	**ug/L**	2.145	2899	0.011
	Cu	63		**ug/L**		3713	0.014
	Cu	65	**1.153**	**ug/L**	3.707	1880	0.007
>	In	115		**ug/L**		221738	221738.360
	Sb	121	**3.285**	**ug/L**	2.155	14324	0.063
	Sb	123		**ug/L**		11461	0.050

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	109.054				
>	Sc	45		101.4			
	Cr	52	106.282				
	Cr	53					
	Ni	60	107.466				
	Cu	63					
	Cu	65	115.251				
>	In	115		100.9			
	Sb	121	109.503				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, December 20, 2009 08:44:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 4.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.065**	**ug/L**	6.596	29	0.000
>	Sc	45		**ug/L**		231451	231450.500
	Cr	52	**2.324**	**ug/L**	5.660	10796	0.044
	Cr	53		**ug/L**		78315	-0.115
	Ni	60	**3.897**	**ug/L**	3.803	4711	0.020
	Cu	63		**ug/L**		5488	0.023
	Cu	65	**3.360**	**ug/L**	0.184	4706	0.020
>	In	115		**ug/L**		193755	193754.680
	Sb	121	**0.249**	**ug/L**	4.916	1305	0.005
	Sb	123		**ug/L**		1057	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		91.9			
	Cr	52	62.816				
	Cr	53					
	Ni	60	144.350				
	Cu	63					
	Cu	65	115.861				
>	In	115		88.1			
	Sb	121	248.646				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, December 20, 2009 08:47:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 5.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**19.828**	**ug/L**	3.407	6849	0.029
>	Sc	45		**ug/L**		238102	238102.199
	Cr	52	**22.285**	**ug/L**	2.853	101340	0.423
	Cr	53		**ug/L**		85834	-0.093
	Ni	60	**21.451**	**ug/L**	3.073	26375	0.111
	Cu	63		**ug/L**		54467	0.228
	Cu	65	**20.251**	**ug/L**	0.736	28474	0.119
>	In	115		**ug/L**		198429	198428.520
	Sb	121	**20.831**	**ug/L**	1.197	79152	0.397
	Sb	123		**ug/L**		61966	0.311

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	99.142				
>	Sc	45		94.5			
	Cr	52	94.030				
	Cr	53					
	Ni	60	94.497				
	Cu	63					
	Cu	65	88.434				
>	In	115		90.2			
	Sb	121	103.637				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 20, 2009 08:49:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 6.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**48.520**	**ug/L**	1.888	18887	0.070
>	Sc	45		**ug/L**		268425	268424.522
	Cr	52	**49.195**	**ug/L**	1.654	251427	0.934
	Cr	53		**ug/L**		108132	-0.051
	Ni	60	**47.963**	**ug/L**	1.359	66416	0.247
	Cu	63		**ug/L**		152610	0.568
	Cu	65	**48.154**	**ug/L**	0.586	76117	0.283
>	In	115		**ug/L**		228354	228353.527
	Sb	121	**49.652**	**ug/L**	1.625	216484	0.946
	Sb	123		**ug/L**		169348	0.740

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9	97.041				
>	Sc	45		106.6			
	Cr	52	98.390				
	Cr	53					
	Ni	60	95.927				
	Cu	63					
	Cu	65	96.308				
>	In	115		103.9			
	Sb	121	99.305				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 20, 2009 08:51:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 7.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.026**	ug/L	73.818	18	0.000
>	Sc	45		ug/L		267322	267321.618
	Cr	52	**-0.163**	ug/L	55.112	-156	-0.003
	Cr	53		ug/L		83664	-0.141
	Ni	60	**0.003**	ug/L	264.253	78	0.000
	Cu	63		ug/L		212	0.000
	Cu	65	**0.005**	ug/L	203.032	165	0.000
>	In	115		ug/L		228607	228606.726
	Sb	121	**0.286**	ug/L	3.427	1704	0.005
	Sb	123		ug/L		1330	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		106.1			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		104.0			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Sunday, December 20, 2009 08:53:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 10.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**1005.884**	**ug/L**	1.488	331139	1.458
>	Sc	45		**ug/L**		227098	227097.831
	Cr	52	**863.562**	**ug/L**	0.928	3724810	16.400
	Cr	53		**ug/L**		557120	2.000
	Ni	60	**855.565**	**ug/L**	1.313	1001181	4.408
	Cu	63		**ug/L**		2178056	9.591
	Cu	65	**824.873**	**ug/L**	0.625	1100895	4.847
>	In	115		**ug/L**		191980	191979.758
	Sb	121	**238.592**	**ug/L**	1.932	873138	4.546
	Sb	123		**ug/L**		691489	3.601

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	100.588				
>	Sc	45		90.2			
	Cr	52	86.356				
	Cr	53					
	Ni	60	85.557				
	Cu	63					
	Cu	65	82.487				
>	In	115		87.3			
	Sb	121	95.437				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Sunday, December 20, 2009 08:55:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 11.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.129**	**ug/L**	0.928	19224	0.074
>	Sc	45		**ug/L**		259264	259263.587
	Cr	52	**51.479**	**ug/L**	1.992	254080	0.978
	Cr	53		**ug/L**		107717	-0.038
	Ni	60	**49.363**	**ug/L**	2.318	66004	0.254
	Cu	63		**ug/L**		154020	0.593
	Cu	65	**50.206**	**ug/L**	0.961	76641	0.295
>	In	115		**ug/L**		221476	221476.148
	Sb	121	**53.904**	**ug/L**	1.358	227903	1.027
	Sb	123		**ug/L**		177343	0.799

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	102.258				
>	Sc	45		102.9			
	Cr	52	102.959				
	Cr	53					
	Ni	60	98.725				
	Cu	63					
	Cu	65	100.413				
>	In	115		100.7			
	Sb	121	107.808				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Sunday, December 20, 2009 08:57:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 12.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.054**	**ug/L**	8.162	28	0.000
>	Sc	45		**ug/L**		262354	262354.127
	Cr	52	**-0.067**	**ug/L**	25.681	323	-0.001
	Cr	53		**ug/L**		83212	-0.136
	Ni	60	**0.014**	**ug/L**	22.101	91	0.000
	Cu	63		**ug/L**		370	0.001
	Cu	65	**0.048**	**ug/L**	25.482	229	0.000
>	In	115		**ug/L**		222251	222250.737
	Sb	121	**1.278**	**ug/L**	5.122	5858	0.024
	Sb	123		**ug/L**		4532	0.019

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		104.1			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		101.1			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201999410
Sample Date/Time: Sunday, December 20, 2009 09:01:26
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 934523|1|baj
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\1201999410.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.006**	**ug/L**	60.734	12	0.000
>	Sc	45		**ug/L**		322830	322829.604
	Cr	52	**-0.910**	**ug/L**	20.910	-4773	-0.017
	Cr	53		**ug/L**		280088	0.414
	Ni	60	**0.041**	**ug/L**	9.354	158	0.000
	Cu	63		**ug/L**		702	0.001
	Cu	65	**0.154**	**ug/L**	10.629	482	0.001
>	In	115		**ug/L**		235319	235319.226
	Sb	121	**1.957**	**ug/L**	5.688	9245	0.037
	Sb	123		**ug/L**		7210	0.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		128.2			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		107.0			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201999411
Sample Date/Time: Sunday, December 20, 2009 09:03:38
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 934523|1|baj
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\1201999411.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**52.168**	**ug/L**	3.532	24147	0.076
>	Sc	45		**ug/L**		319289	319289.363
	Cr	52	**46.951**	**ug/L**	2.349	285443	0.892
	Cr	53		**ug/L**		300644	0.488
	Ni	60	**46.626**	**ug/L**	0.945	76793	0.240
	Cu	63		**ug/L**		179918	0.563
	Cu	65	**47.424**	**ug/L**	1.120	89158	0.279
>	In	115		**ug/L**		236226	236226.162
	Sb	121	**53.882**	**ug/L**	0.684	243011	1.027
	Sb	123		**ug/L**		191714	0.810

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		126.7			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		107.4			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 241713001
Sample Date/Time: Sunday, December 20, 2009 09:05:50
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 934523|1|baj
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\241713001.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.023**	ug/L	22.039	20	0.000
>	Sc	45		ug/L		327258	327258.433
	Cr	52	**7.534**	ug/L	3.795	47624	0.143
	Cr	53		ug/L		285386	0.419
	Ni	60	**3.651**	ug/L	4.363	6244	0.019
	Cu	63		ug/L		3313	0.009
	Cu	65	**0.823**	ug/L	1.379	1774	0.005
>	In	115		ug/L		238755	238754.751
	Sb	121	**0.870**	ug/L	2.234	4435	0.017
	Sb	123		ug/L		3534	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		129.9			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		108.6			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201999412
Sample Date/Time: Sunday, December 20, 2009 09:08:00
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 934523|1|baj
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\1201999412.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.020**	**ug/L**	64.358	19	0.000
>	Sc	45		**ug/L**		326923	326923.489
	Cr	52	**7.145**	**ug/L**	6.259	45174	0.136
	Cr	53		**ug/L**		289620	0.432
	Ni	60	**3.628**	**ug/L**	1.768	6201	0.019
	Cu	63		**ug/L**		3439	0.010
	Cu	65	**0.844**	**ug/L**	2.845	1815	0.005
>	In	115		**ug/L**		237925	237925.109
	Sb	121	**0.667**	**ug/L**	1.458	3500	0.013
	Sb	123		**ug/L**		2767	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		129.8			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		108.2			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201999413
Sample Date/Time: Sunday, December 20, 2009 09:10:11
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 934523|1|baj
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\1201999413.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**50.852**	**ug/L**	3.764	24641	0.074
>	Sc	45		**ug/L**		334215	334215.389
	Cr	52	**51.900**	**ug/L**	1.917	330198	0.986
	Cr	53		**ug/L**		313424	0.484
	Ni	60	**47.145**	**ug/L**	1.994	81266	0.243
	Cu	63		**ug/L**		183597	0.549
	Cu	65	**45.746**	**ug/L**	1.731	90027	0.269
>	In	115		**ug/L**		239120	239120.267
	Sb	121	**202.538**	**ug/L**	1.795	923202	3.859
	Sb	123		**ug/L**		736367	3.079

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		132.7			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		108.8			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201999414
Sample Date/Time: Sunday, December 20, 2009 09:12:22
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 934523|5|baj
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\1201999414.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.017**	**ug/L**	130.656	15	0.000
>	Sc	45		**ug/L**		277369	277369.100
	Cr	52	**1.366**	**ug/L**	8.700	7884	0.026
	Cr	53		**ug/L**		147117	0.077
	Ni	60	**0.796**	**ug/L**	4.143	1214	0.004
	Cu	63		**ug/L**		744	0.002
	Cu	65	**0.165**	**ug/L**	8.552	433	0.001
>	In	115		**ug/L**		228638	228638.041
	Sb	121	**0.230**	**ug/L**	11.095	1459	0.004
	Sb	123		**ug/L**		1135	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		110.1			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		104.0			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241713002
Sample Date/Time: Sunday, December 20, 2009 09:14:34
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 934523|1|baj
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\241713002.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.001**	**ug/L**	159.048	10	0.000
>	Sc	45		**ug/L**		320142	320142.472
	Cr	52	**-0.794**	**ug/L**	27.509	-4020	-0.015
	Cr	53		**ug/L**		298506	0.479
	Ni	60	**0.573**	**ug/L**	3.010	1034	0.003
	Cu	63		**ug/L**		2486	0.007
	Cu	65	**0.619**	**ug/L**	3.145	1354	0.004
>	In	115		**ug/L**		237273	237273.460
	Sb	121	**0.447**	**ug/L**	0.100	2497	0.009
	Sb	123		**ug/L**		1996	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		127.1			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		107.9			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, December 20, 2009 09:16:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 6.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**48.783**	**ug/L**	3.265	18264	0.071
>	Sc	45		**ug/L**		258155	258155.479
	Cr	52	**48.749**	**ug/L**	1.508	239613	0.926
	Cr	53		**ug/L**		131694	0.057
	Ni	60	**48.873**	**ug/L**	1.151	65080	0.252
	Cu	63		**ug/L**		149746	0.579
	Cu	65	**48.349**	**ug/L**	1.164	73490	0.284
>	In	115		**ug/L**		223017	223016.530
	Sb	121	**49.550**	**ug/L**	1.642	210999	0.944
	Sb	123		**ug/L**		167558	0.750

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	97.565				
>	Sc	45		102.5			
	Cr	52	97.498				
	Cr	53					
	Ni	60	97.746				
	Cu	63					
	Cu	65	96.698				
>	In	115		101.4			
	Sb	121	99.099				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, December 20, 2009 09:18:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\091219b.mth
Dataset File: C:\elandata\Dataset\091219\QC Std 7.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.018**	**ug/L**	107.450	14	0.000
>	Sc	45		**ug/L**		261365	261365.386
	Cr	52	**-0.307**	**ug/L**	12.814	-873	-0.006
	Cr	53		**ug/L**		102160	-0.063
	Ni	60	**0.002**	**ug/L**	173.136	74	0.000
	Cu	63		**ug/L**		222	0.000
	Cu	65	**-0.013**	**ug/L**	91.562	134	-0.000
>	In	115		**ug/L**		225589	225589.445
	Sb	121	**0.288**	**ug/L**	5.989	1689	0.005
	Sb	123		**ug/L**		1296	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		103.8			
	Cr	52					
	Cr	53					
	Ni	60					
	Cu	63					
	Cu	65					
>	In	115		102.6			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120809W1.SIF
Batch ID:
Results Data Set: 100809W4
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/8/2009 09:51:17**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0021	0.0004	09:52:17	Yes
2		[0.00]	0.0003	0.0001	0.0003	09:52:52	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0001				
%RSD:		0.00	34.40				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/8/2009 09:53:10**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0029	0.0136	0.0032	09:54:11	Yes
2		[0.2]	0.0028	0.0136	0.0032	09:54:46	Yes
Mean:		[0.2]	0.0028				
SD:		0.0	0.0000				
%RSD:		0.0	0.41				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01424 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/8/2009 09:55:05**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0067	0.0304	0.0070	09:56:06	Yes
2		[0.5]	0.0067	0.0305	0.0070	09:56:41	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.27				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999513 Slope: 0.01328 Intercept: 0.00007

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/8/2009 09:57:00**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[2.0]	0.0231	0.1034	0.0234	09:58:02	Yes
2	[2.0]	0.0232	0.1045	0.0236	09:58:37	Yes
Mean:	[2.0]	0.0232				
SD:	0.0	0.0001				
%RSD:	0.0	0.47				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999245 Slope: 0.01141 Intercept: 0.00046

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/8/2009 09:58:57**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0650	0.2803	0.0653	09:59:59	Yes
2		[5.0]	0.0648	0.2800	0.0651	10:00:33	Yes
Mean:		[5.0]	0.0649				
SD:		0.0	0.0001				
%RSD:		0.0	0.22				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.998857 Slope: 0.01287 Intercept: -0.00032

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/8/2009 10:00:54**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1157	0.5157	0.1161	10:01:54	Yes
2		[10.0]	0.1154	0.5121	0.1157	10:02:29	Yes
Mean:		[10.0]	0.1155				
SD:		0.0	0.0002				
%RSD:		0.0	0.21				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.998206 Slope: 0.01170 Intercept: 0.00101

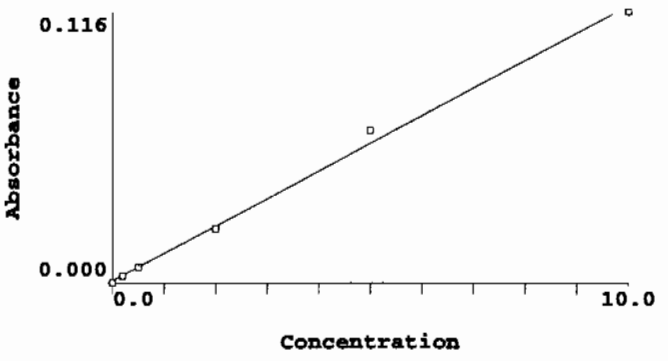

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.087	0.00	34.4
S0.2	0.0028	0.2	0.157	0.00	0.4
S0.5	0.0067	0.5	0.483	0.00	0.3
S2.0	0.0232	2.0	1.893	0.00	0.5
S5.0	0.0649	5.0	5.462	0.00	0.2
S10.0	0.1155	10.0	9.792	0.00	0.2

Correlation Coef.: 0.998206 Slope: 0.01170 Intercept: 0.00101

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/8/2009 10:02:47**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.908	4.908	0.0584	0.2621	0.0588	10:03:49	Yes
2	4.889	4.889	0.0582	0.2585	0.0585	10:04:23	Yes
Mean:	4.898	4.898	0.0583				
SD:	0.013	0.013	0.0002				
%RSD:	0.274	0.274	0.27				

QC value within limits for Hg 253.7 Recovery = 97.96%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/8/2009 10:04:43**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.078	-0.078	0.0001	0.0028	0.0004	10:05:44	Yes
2	-0.085	-0.085	0.0000	0.0013	0.0004	10:06:19	Yes
Mean:	-0.082	-0.082	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	6.033	6.033	96.64				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/8/2009 10:06:39**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0028	0.0141	0.0031	10:07:40	Yes
2	0.178	0.178	0.0031	0.0145	0.0034	10:08:15	Yes
Mean:	0.164	0.164	0.0029				
SD:	0.020	0.020	0.0002				
%RSD:	11.93	11.93	7.81				

QC value within limits for Hg 253.7 Recovery = 82.25%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 10:08:35**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.017	5.017	0.0597	0.2649	0.0600	10:09:35	Yes
2	4.963	4.963	0.0591	0.2620	0.0594	10:10:10	Yes
Mean:	4.990	4.990	0.0594				
SD:	0.038	0.038	0.0004				
%RSD:	0.766	0.766	0.75				

QC value within limits for Hg 253.7 Recovery = 99.79%
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:10:29**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.079	-0.079	0.0001	0.0015	0.0004	10:11:30	Yes
2	-0.074	-0.074	0.0001	0.0018	0.0005	10:12:05	Yes
Mean:	-0.077	-0.077	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.972	3.972	30.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 1201986021|928785|1 **Date Collected: 12/8/2009 10:12:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986021|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0001	0.0007	0.0003	10:13:27	Yes
2	-0.091	-0.091	-0.0000	0.0008	0.0003	10:14:01	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.191	1.191	21.88				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 1201986022|928785|1 **Date Collected: 12/8/2009 10:14:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986022|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.979	1.979	0.0242	0.1085	0.0245	10:15:24	Yes
2	1.990	1.990	0.0243	0.1086	0.0246	10:15:58	Yes
Mean:	1.985	1.985	0.0242				
SD:	0.008	0.008	0.0001				
%RSD:	0.401	0.401	0.38				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 241837002|928785|1 **Date Collected: 12/8/2009 10:16:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241837002|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0000	0.0009	0.0003	10:17:19	Yes
2	-0.085	-0.085	0.0000	0.0015	0.0004	10:17:54	Yes
Mean:	-0.087	-0.087	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.672	2.672	>999.9%				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 1201986023|928785|1 **Date Collected: 12/8/2009 10:18:13**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986023|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0000	0.0011	0.0003	10:19:13	Yes
2	-0.083	-0.083	0.0000	0.0017	0.0004	10:19:49	Yes
Mean:	-0.086	-0.086	0.0000				
SD:	0.004	0.004	0.0000				

1	-0.082	-0.082	0.0001	0.0017	0.0004	10:28:47	Yes
2	-0.112	-0.112	-0.0003	-0.0036	0.0000	10:29:22	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.021	0.021	0.0002				
%RSD:	21.75	21.75	199.27				

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Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 241842007|928788|1 **Date Collected: 12/8/2009 10:29:41**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241842007|928788|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0008	0.0002	10:30:42	Yes
2	-0.095	-0.095	-0.0001	0.0009	0.0003	10:31:17	Yes
Mean:	-0.095	-0.095	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.401	0.401	4.72				

==========

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 10:31:37**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.999	4.999	0.0595	0.2653	0.0598	10:32:37	Yes
2	4.964	4.964	0.0591	0.2626	0.0594	10:33:12	Yes
Mean:	4.981	4.981	0.0593				
SD:	0.025	0.025	0.0003				
%RSD:	0.505	0.505	0.50				

QC value within limits for Hg 253.7 Recovery = 99.63%
All analyte(s) passed QC.

==========

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:33:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.069	-0.069	0.0002	0.0021	0.0005	10:34:32	Yes
2	-0.067	-0.067	0.0002	0.0021	0.0006	10:35:07	Yes
Mean:	-0.068	-0.068	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	2.056	2.056	7.55				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 241842011|928788|1 **Date Collected: 12/8/2009 10:35:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241842011|928788|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0012	0.0068	0.0015	10:36:27	Yes
2	0.017	0.017	0.0012	0.0069	0.0016	10:37:03	Yes
Mean:	0.015	0.015	0.0012				
SD:	0.003	0.003	0.0000				
%RSD:	16.97	16.97	2.52				

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SD:	0.001	0.001	0.0000
%RSD:	0.597	0.597	7.43

Sequence No.: 30
Sample ID: 1201988770|929941|1
Analyst: JXL1
Autosampler Location: 28
Date Collected: 12/8/2009 10:47:04
Data Type: Original

Replicate Data: 1201988770|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0001	0.0010	0.0003	10:48:04	Yes
2	-0.090	-0.090	-0.0000	0.0015	0.0003	10:48:39	Yes
Mean:	-0.091	-0.091	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.150	2.150	42.41				

Sequence No.: 31
Sample ID: 1201988771|929941|1
Analyst: JXL1
Autosampler Location: 29
Date Collected: 12/8/2009 10:48:58
Data Type: Original

Replicate Data: 1201988771|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.983	1.983	0.0242	0.1076	0.0245	10:49:59	Yes
2	1.972	1.972	0.0241	0.1073	0.0244	10:50:34	Yes
Mean:	1.977	1.977	0.0241				
SD:	0.008	0.008	0.0001				
%RSD:	0.398	0.398	0.38				

Sequence No.: 32
Sample ID: 242276001|929941|1
Analyst: JXL1
Autosampler Location: 30
Date Collected: 12/8/2009 10:50:53
Data Type: Original

Replicate Data: 242276001|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0005	0.0002	10:51:54	Yes
2	-0.094	-0.094	-0.0001	0.0011	0.0003	10:52:29	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	3.765	3.765	35.93				

Sequence No.: 33
Sample ID: 1201988772|929941|1
Analyst: JXL1
Autosampler Location: 31
Date Collected: 12/8/2009 10:52:48
Data Type: Original

Replicate Data: 1201988772|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0013	0.0002	10:53:48	Yes
2	-0.096	-0.096	-0.0001	0.0009	0.0002	10:54:23	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.089	0.089	0.93				

Sequence No.: 34
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/8/2009 10:54:43
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.974	4.974	0.0592	0.2626	0.0595	10:55:43	Yes
2	4.983	4.983	0.0593	0.2623	0.0596	10:56:18	Yes
Mean:	4.978	4.978	0.0592				
SD:	0.007	0.007	0.0001				
%RSD:	0.137	0.137	0.13				

QC value within limits for Hg 253.7 Recovery = 99.57%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:56:37**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.067	-0.067	0.0002	0.0024	0.0006	10:57:38	Yes
2	-0.069	-0.069	0.0002	0.0022	0.0006	10:58:13	Yes
Mean:	-0.068	-0.068	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.428	1.428	5.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 1201988773|929941|1 **Date Collected: 12/8/2009 10:58:32**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988773|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.000	2.000	0.0244	0.1089	0.0247	10:59:33	Yes
2	1.994	1.994	0.0243	0.1090	0.0247	11:00:08	Yes
Mean:	1.997	1.997	0.0244				
SD:	0.004	0.004	0.0000				
%RSD:	0.209	0.209	0.20				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 1201988774|929941|5 **Date Collected: 12/8/2009 11:00:28**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988774|929941|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0014	0.0002	11:01:29	Yes
2	-0.095	-0.095	-0.0001	0.0008	0.0002	11:02:03	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.698	0.698	7.33				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 242276002|929941|1 **Date Collected: 12/8/2009 11:02:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242276002|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.057	-0.057	0.0003	0.0040	0.0007	11:03:24	Yes
2	-0.094	-0.094	-0.0001	0.0009	0.0003	11:03:59	Yes
Mean:	-0.076	-0.076	0.0001				
SD:	0.026	0.026	0.0003				
%RSD:	34.26	34.26	233.10				

Mean:	1.794	1.794	0.0220
SD:	0.006	0.006	0.0001
%RSD:	0.312	0.312	0.30

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Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1201987593|929389|5 **Date Collected: 12/8/2009 11:14:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987593|929389|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0008	0.0003	11:15:01	Yes
2	-0.090	-0.090	-0.0000	0.0010	0.0003	11:15:35	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.256	3.256	59.12				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 1201985288|928451|1 **Date Collected: 12/8/2009 11:15:55**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985288|928451|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.084	-0.084	0.0000	0.0015	0.0004	11:16:56	Yes
2	-0.077	-0.077	0.0001	0.0021	0.0005	11:17:31	Yes
Mean:	-0.081	-0.081	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	6.330	6.330	86.01				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 11:17:50**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.953	4.953	0.0589	0.2614	0.0593	11:18:51	Yes
2	4.947	4.947	0.0589	0.2617	0.0592	11:19:26	Yes
Mean:	4.950	4.950	0.0589				
SD:	0.004	0.004	0.0000				
%RSD:	0.085	0.085	0.08				

QC value within limits for Hg 253.7 Recovery = 98.99%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 11:19:45**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0001	-0.0012	0.0003	11:20:46	Yes
2	-0.053	-0.053	0.0004	0.0043	0.0007	11:21:20	Yes
Mean:	-0.073	-0.073	0.0002				
SD:	0.028	0.028	0.0003				
%RSD:	37.89	37.89	194.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 48 **Autosampler Location: 42**
Sample ID: 1201985289|928451|1 **Date Collected: 12/8/2009 11:21:40**

2	-0.084	-0.084	0.0000	0.0019	0.0004	11:40:40	Yes
Mean:	-0.084	-0.084	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.816	0.816	25.85				

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 11:41:00**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.922	4.922	0.0586	0.2622	0.0589	11:42:00	Yes
2	4.913	4.913	0.0585	0.2597	0.0588	11:42:35	Yes
Mean:	4.918	4.918	0.0585				
SD:	0.007	0.007	0.0001				
%RSD:	0.133	0.133	0.13				

QC value within limits for Hg 253.7 Recovery = 98.35%
All analyte(s) passed QC.

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 11:42:54**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0003	0.0028	0.0007	11:43:55	Yes
2	-0.053	-0.053	0.0004	0.0035	0.0007	11:44:30	Yes
Mean:	-0.056	-0.056	0.0004				
SD:	0.004	0.004	0.0001				
%RSD:	7.737	7.737	13.95				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 1201987596|929392|1 **Date Collected: 12/8/2009 11:44:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987596|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0007	0.0002	11:45:50	Yes
2	-0.102	-0.102	-0.0002	0.0006	0.0002	11:46:25	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	1.805	1.805	13.41				

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 1201987599|929392|5 **Date Collected: 12/8/2009 11:46:45**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987599|929392|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.073	-0.073	0.0002	0.0046	0.0005	11:47:46	Yes
2	-0.068	-0.068	0.0002	0.0039	0.0006	11:48:20	Yes
Mean:	-0.070	-0.070	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	4.907	4.907	21.03				

Sequence No.: 62 **Autosampler Location: 54**

%RSD:	0.697	0.697	5.27

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 241089015|929392|1 **Date Collected: 12/8/2009 11:58:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089015|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0015	0.0002	11:59:20	Yes
2	-0.097	-0.097	-0.0001	0.0009	0.0002	11:59:55	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.126	1.126	11.70				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241089016|929392|1 **Date Collected: 12/8/2009 12:00:15**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089016|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0008	0.0002	12:01:16	Yes
2	-0.100	-0.100	-0.0002	0.0010	0.0002	12:01:52	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	0.973	0.973	7.14				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 241089017|929392|1 **Date Collected: 12/8/2009 12:02:12**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089017|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0012	0.0002	12:03:14	Yes
2	-0.099	-0.099	-0.0001	0.0009	0.0002	12:03:48	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.564	1.564	13.46				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 12:04:09**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.920	4.920	0.0586	0.2608	0.0589	12:05:09	Yes
2	4.929	4.929	0.0587	0.2616	0.0590	12:05:44	Yes
Mean:	4.925	4.925	0.0586				
SD:	0.006	0.006	0.0001				
%RSD:	0.129	0.129	0.13				

QC value within limits for Hg 253.7 Recovery = 98.50%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:06:03**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	0.0004	0.0038	0.0008	12:07:04	Yes
2	-0.049	-0.049	0.0004	0.0034	0.0008	12:07:39	Yes
Mean:	-0.049	-0.049	0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.062	0.062	0.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72 **Autosampler Location: 62**
Sample ID: 1201985228|929400|1 **Date Collected: 12/8/2009 12:07:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985228|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0007	0.0002	12:08:59	Yes
2	-0.096	-0.096	-0.0001	0.0013	0.0002	12:09:34	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.030	3.030	25.19				

Sequence No.: 73 **Autosampler Location: 63**
Sample ID: 1201987600|929400|1 **Date Collected: 12/8/2009 12:09:54**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987600|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0006	0.0002	12:10:55	Yes
2	-0.097	-0.097	-0.0001	0.0011	0.0002	12:11:30	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.028	2.028	17.43				

Sequence No.: 74 **Autosampler Location: 64**
Sample ID: 1201987601|929400|1 **Date Collected: 12/8/2009 12:11:50**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987601|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.905	1.905	0.0233	0.1045	0.0236	12:12:51	Yes
2	1.916	1.916	0.0234	0.1047	0.0238	12:13:27	Yes
Mean:	1.911	1.911	0.0234				
SD:	0.008	0.008	0.0001				
%RSD:	0.403	0.403	0.39				

Sequence No.: 75 **Autosampler Location: 65**
Sample ID: 241089018|929400|1 **Date Collected: 12/8/2009 12:13:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089018|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0010	0.0002	12:14:48	Yes
2	-0.098	-0.098	-0.0001	-0.0000	0.0002	12:15:23	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.563	1.563	15.04				

SD:	0.000	0.000	0.0000
%RSD:	0.309	0.309	2.36

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 241089021|929400|1 **Date Collected: 12/8/2009 12:25:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089021|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	12:26:26	Yes
2	-0.099	-0.099	-0.0001	0.0009	0.0002	12:27:00	Yes
Mean:	-0.101	-0.101	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.186	2.186	15.74				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 12:27:20**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.967	4.967	0.0591	0.2642	0.0594	12:28:21	Yes
2	4.936	4.936	0.0588	0.2620	0.0591	12:28:56	Yes
Mean:	4.951	4.951	0.0589				
SD:	0.021	0.021	0.0002				
%RSD:	0.429	0.429	0.42				

QC value within limits for Hg 253.7 Recovery = 99.03%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:29:15**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	0.0006	0.0042	0.0010	12:30:16	Yes
2	-0.036	-0.036	0.0006	0.0041	0.0009	12:30:51	Yes
Mean:	-0.035	-0.035	0.0006				
SD:	0.002	0.002	0.0000				
%RSD:	5.377	5.377	3.59				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 241089022|929400|1 **Date Collected: 12/8/2009 12:31:10**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089022|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0003	0.0002	12:32:12	Yes
2	-0.102	-0.102	-0.0002	0.0006	0.0002	12:32:46	Yes
Mean:	-0.102	-0.102	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.377	0.377	2.57				

==========

Sequence No.: 85 **Autosampler Location: 73**
Sample ID: 241089023|929400|1 **Date Collected: 12/8/2009 12:33:07**
Analyst: JXL1 **Data Type: Original**

Sequence No.: 90
Sample ID: 1201988783|929949|1
Analyst: JXL1
Autosampler Location: 78
Date Collected: 12/8/2009 12:42:49
Data Type: Original

Replicate Data: 1201988783|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0006	0.0002	12:43:51	Yes
2	-0.099	-0.099	-0.0001	0.0006	0.0002	12:44:26	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.440	1.440	11.01				

Sequence No.: 91
Sample ID: 1201988784|929949|1
Analyst: JXL1
Autosampler Location: 79
Date Collected: 12/8/2009 12:44:46
Data Type: Original

Replicate Data: 1201988784|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.918	1.918	0.0235	0.1063	0.0238	12:45:48	Yes
2	1.934	1.934	0.0236	0.1057	0.0240	12:46:23	Yes
Mean:	1.926	1.926	0.0235				
SD:	0.011	0.011	0.0001				
%RSD:	0.581	0.581	0.56				

Sequence No.: 92
Sample ID: 241087014|929949|1
Analyst: JXL1
Autosampler Location: 80
Date Collected: 12/8/2009 12:46:43
Data Type: Original

Replicate Data: 241087014|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0009	0.0003	12:47:44	Yes
2	-0.098	-0.098	-0.0001	0.0010	0.0002	12:48:19	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.544	2.544	25.85				

Sequence No.: 93
Sample ID: 1201985216|929949|1
Analyst: JXL1
Autosampler Location: 81
Date Collected: 12/8/2009 12:48:39
Data Type: Original

Replicate Data: 1201985216|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.000	1.000	0.0127	0.0577	0.0131	12:49:40	Yes
2	1.001	1.001	0.0127	0.0576	0.0131	12:50:15	Yes
Mean:	1.001	1.001	0.0127				
SD:	0.000	0.000	0.0000				
%RSD:	0.044	0.044	0.04				

Sequence No.: 94
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/8/2009 12:50:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.992	4.992	0.0594	0.2644	0.0597	12:51:36	Yes
2	4.958	4.958	0.0590	0.2616	0.0593	12:52:11	Yes

Mean:	4.975	4.975	0.0592
SD:	0.024	0.024	0.0003
%RSD:	0.486	0.486	0.48

QC value within limits for Hg 253.7 Recovery = 99.50%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:52:30**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0005	0.0034	0.0009	12:53:31	Yes
2	-0.037	-0.037	0.0006	0.0043	0.0009	12:54:06	Yes
Mean:	-0.040	-0.040	0.0006				
SD:	0.003	0.003	0.0000				
%RSD:	7.817	7.817	6.57				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 1201988785|929949|1 **Date Collected: 12/8/2009 12:54:25**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988785|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0004	0.0002	12:55:27	Yes
2	-0.099	-0.099	-0.0001	0.0006	0.0002	12:56:02	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.119	1.119	8.47				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 1201988787|929949|5 **Date Collected: 12/8/2009 12:56:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988787|929949|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0005	0.0002	12:57:23	Yes
2	-0.099	-0.099	-0.0001	0.0007	0.0002	12:57:58	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.678	0.678	5.35				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 241087015|929949|1 **Date Collected: 12/8/2009 12:58:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087015|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0006	0.0002	12:59:20	Yes
2	-0.099	-0.099	-0.0001	0.0005	0.0002	12:59:55	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.431	0.431	3.30				

Sequence No.: 99 **Autosampler Location: 85**
Sample ID: 241087016|929949|1 **Date Collected: 12/8/2009 13:00:15**

Sequence No.: 104 Autosampler Location: 90
Sample ID: 241087021|929949|1 Date Collected: 12/8/2009 13:10:00
Analyst: JXL1 Data Type: Original

Replicate Data: 241087021|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0010	0.0002	13:11:01	Yes
2	-0.101	-0.101	-0.0002	0.0005	0.0002	13:11:36	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.974	2.974	23.41				

Sequence No.: 105 Autosampler Location: 91
Sample ID: 241087022|929949|1 Date Collected: 12/8/2009 13:11:56
Analyst: JXL1 Data Type: Original

Replicate Data: 241087022|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0010	0.0002	13:12:58	Yes
2	-0.098	-0.098	-0.0001	0.0009	0.0002	13:13:33	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.266	2.266	21.61				

Sequence No.: 106 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/8/2009 13:13:53
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.939	4.939	0.0588	0.2596	0.0591	13:14:53	Yes
2	4.859	4.859	0.0578	0.2573	0.0582	13:15:28	Yes
Mean:	4.899	4.899	0.0583				
SD:	0.056	0.056	0.0007				
%RSD:	1.153	1.153	1.13				

QC value within limits for Hg 253.7 Recovery = 97.99%
All analyte(s) passed QC.

Sequence No.: 107 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/8/2009 13:15:47
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0006	0.0038	0.0009	13:16:48	Yes
2	-0.041	-0.041	0.0005	0.0037	0.0009	13:17:23	Yes
Mean:	-0.040	-0.040	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	3.294	3.294	2.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 108 Autosampler Location: 92
Sample ID: 241087023|929949|1 Date Collected: 12/8/2009 13:17:42
Analyst: JXL1 Data Type: Original

%RSD: 1.025 1.025 8.78

==========

Sequence No.: 118 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 13:37:13**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.987	4.987	0.0593	0.2617	0.0597	13:38:14	Yes
2	5.002	5.002	0.0595	0.2611	0.0599	13:38:48	Yes
Mean:	4.995	4.995	0.0594				
SD:	0.011	0.011	0.0001				
%RSD:	0.219	0.219	0.22				

QC value within limits for Hg 253.7 Recovery = 99.89%
All analyte(s) passed QC.

==========

Sequence No.: 119 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 13:39:07**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.076	-0.076	0.0001	0.0018	0.0005	13:40:08	Yes
2	-0.073	-0.073	0.0002	0.0024	0.0005	13:40:43	Yes
Mean:	-0.075	-0.075	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.229	2.229	13.71				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 120 **Autosampler Location: 102**
Sample ID: 1201978981|925641|1 **Date Collected: 12/8/2009 13:41:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978981|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.889	1.889	0.0231	0.1042	0.0235	13:42:04	Yes
2	1.888	1.888	0.0231	0.1039	0.0234	13:42:39	Yes
Mean:	1.888	1.888	0.0231				
SD:	0.001	0.001	0.0000				
%RSD:	0.055	0.055	0.05				

==========

Sequence No.: 121 **Autosampler Location: 103**
Sample ID: 1201978982|925641|5 **Date Collected: 12/8/2009 13:42:59**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978982|925641|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	13:44:01	Yes
2	-0.098	-0.098	-0.0001	0.0007	0.0002	13:44:36	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	2.523	2.523	19.36				

==========

Sequence No.: 122 **Autosampler Location: 104**
Sample ID: 241614002|925641|1 **Date Collected: 12/8/2009 13:44:56**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241614002|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0008	0.0002	13:45:58	Yes
2	-0.098	-0.098	-0.0001	0.0009	0.0002	13:46:33	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.719	0.719	6.18				

Sequence No.: 123 Autosampler Location: 105
Sample ID: 241614003|925641|1 Date Collected: 12/8/2009 13:46:54
Analyst: JXL1 Data Type: Original

Replicate Data: 241614003|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0007	0.0002	13:47:56	Yes
2	-0.097	-0.097	-0.0001	0.0012	0.0002	13:48:30	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.186	2.186	18.33				

Sequence No.: 124 Autosampler Location: 106
Sample ID: 241614004|925641|1 Date Collected: 12/8/2009 13:48:51
Analyst: JXL1 Data Type: Original

Replicate Data: 241614004|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.103	-0.103	-0.0002	0.0003	0.0002	13:49:53	Yes
2	-0.101	-0.101	-0.0002	0.0006	0.0002	13:50:28	Yes
Mean:	-0.102	-0.102	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	1.593	1.593	10.80				

Sequence No.: 125 Autosampler Location: 107
Sample ID: 1201981600|926820|1 Date Collected: 12/8/2009 13:50:48
Analyst: JXL1 Data Type: Original

Replicate Data: 1201981600|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0009	0.0002	13:51:50	Yes
2	-0.100	-0.100	-0.0001	0.0005	0.0002	13:52:25	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.951	1.951	16.71				

Sequence No.: 126 Autosampler Location: 108
Sample ID: 1201981601|926820|1 Date Collected: 12/8/2009 13:52:46
Analyst: JXL1 Data Type: Original

Replicate Data: 1201981601|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.895	1.895	0.0232	0.1043	0.0235	13:53:48	Yes
2	1.907	1.907	0.0233	0.1048	0.0237	13:54:23	Yes
Mean:	1.901	1.901	0.0232				
SD:	0.008	0.008	0.0001				
%RSD:	0.417	0.417	0.40				

Sequence No.: 127
Sample ID: 241713001|926820|1
Analyst: JXL1

Autosampler Location: 109
Date Collected: 12/8/2009 13:54:43
Data Type: Original

Replicate Data: 241713001|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0008	0.0002	13:55:45	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	13:56:20	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.082	1.082	8.50				

Sequence No.: 128
Sample ID: 1201981602|926820|1
Analyst: JXL1

Autosampler Location: 110
Date Collected: 12/8/2009 13:56:40
Data Type: Original

Replicate Data: 1201981602|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0006	0.0002	13:57:43	Yes
2	-0.097	-0.097	-0.0001	0.0010	0.0002	13:58:17	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.655	2.655	21.44				

Sequence No.: 129
Sample ID: 1201981603|926820|1
Analyst: JXL1

Autosampler Location: 111
Date Collected: 12/8/2009 13:58:38
Data Type: Original

Replicate Data: 1201981603|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.897	1.897	0.0232	0.1055	0.0235	13:59:40	Yes
2	1.900	1.900	0.0232	0.1056	0.0236	14:00:15	Yes
Mean:	1.898	1.898	0.0232				
SD:	0.002	0.002	0.0000				
%RSD:	0.090	0.090	0.09				

Sequence No.: 130
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 12/8/2009 14:00:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.027	5.027	0.0598	0.2648	0.0601	14:01:36	Yes
2	4.978	4.978	0.0592	0.2637	0.0596	14:02:12	Yes
Mean:	5.003	5.003	0.0595				
SD:	0.034	0.034	0.0004				
%RSD:	0.681	0.681	0.67				

QC value within limits for Hg 253.7 Recovery = 100.05%
All analyte(s) passed QC.

Sequence No.: 131
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 12/8/2009 14:02:31
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.072	-0.072	0.0002	0.0024	0.0005	14:03:31	Yes

2	-0.069	-0.069	0.0002	0.0029	0.0005	14:04:06	Yes
Mean:	-0.070	-0.070	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.444	2.444	10.56				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 132 **Autosampler Location: 112**
Sample ID: 1201981607|926820|5 **Date Collected: 12/8/2009 14:04:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981607|926820|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0007	0.0002	14:05:28	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	14:06:02	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.263	0.263	2.00				

Sequence No.: 133 **Autosampler Location: 113**
Sample ID: 241713002|926820|1 **Date Collected: 12/8/2009 14:06:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241713002|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0001	0.0008	0.0002	14:07:25	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	14:08:00	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.492	1.492	12.03				

Sequence No.: 134 **Autosampler Location: 114**
Sample ID: 1201984328|928040|1 **Date Collected: 12/8/2009 14:08:21**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984328|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0007	0.0002	14:09:23	Yes
2	-0.097	-0.097	-0.0001	0.0008	0.0002	14:09:58	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.134	1.134	9.97				

Sequence No.: 135 **Autosampler Location: 115**
Sample ID: 1201984329|928040|1 **Date Collected: 12/8/2009 14:10:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984329|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.894	1.894	0.0232	0.1045	0.0235	14:11:20	Yes
2	1.896	1.896	0.0232	0.1046	0.0235	14:11:56	Yes
Mean:	1.895	1.895	0.0232				
SD:	0.001	0.001	0.0000				
%RSD:	0.063	0.063	0.06				

Sequence No.: 136 **Autosampler Location: 116**
Sample ID: 241835001|928040|1 **Date Collected: 12/8/2009 14:12:16**
Analyst: JXL1 **Data Type: Original**

Sequence No.: 141
Sample ID: 241835006|928040|1
Analyst: JXL1

Autosampler Location: 121
Date Collected: 12/8/2009 14:22:06
Data Type: Original

Replicate Data: 241835006|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0001	0.0009	0.0002	14:23:08	Yes
2	-0.098	-0.098	-0.0001	0.0009	0.0002	14:23:43	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.783	0.783	6.32				

Sequence No.: 142
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 12/8/2009 14:24:03
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.026	5.026	0.0598	0.2669	0.0601	14:25:04	Yes
2	5.006	5.006	0.0596	0.2658	0.0599	14:25:39	Yes
Mean:	5.016	5.016	0.0597				
SD:	0.014	0.014	0.0002				
%RSD:	0.285	0.285	0.28				

QC value within limits for Hg 253.7 Recovery = 100.32%
All analyte(s) passed QC.

Sequence No.: 143
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 12/8/2009 14:25:58
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.074	-0.074	0.0001	0.0018	0.0005	14:26:59	Yes
2	-0.075	-0.075	0.0001	0.0018	0.0005	14:27:33	Yes
Mean:	-0.075	-0.075	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.007	1.007	6.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 144
Sample ID: 241902001|928040|1
Analyst: JXL1

Autosampler Location: 122
Date Collected: 12/8/2009 14:27:53
Data Type: Original

Replicate Data: 241902001|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0001	0.0009	0.0002	14:28:55	Yes
2	-0.095	-0.095	-0.0001	0.0011	0.0002	14:29:30	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.643	1.643	16.07				

Sequence No.: 145
Sample ID: 241902002|928040|1
Analyst: JXL1

Autosampler Location: 123
Date Collected: 12/8/2009 14:29:50
Data Type: Original

Replicate Data: 241902002|928040|1

Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 926819

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201981601	WHG091207-13	.2	mL
MS	1201981603	WHG091207-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201981600		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
LCS	1201981601		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241713001		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
DUP	1201981602	241713001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
MS	1201981603	241713001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SDILT	1201981607	241713001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241713002		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1236359-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091207-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091207-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091207-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091207-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091207-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091207-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 07-DEC-09 12:10
Digestion End Date: 07-DEC-09 14:10

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 927387

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982721	UI091119-01	.25	mL
LCS	1201982721	UI091119-06	.25	mL
MS	1201982719	UI091119-01	.25	mL
MS	1201982719	UI091119-06	.25	mL
MSD	1201982720	UI091119-01	.25	mL
MSD	1201982720	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201982716		SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER
LCS	1201982721		SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER
SAMPLE	241713001		SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER
DUP	1201982717	241713001	SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER
SDILT	1201982718	241713001	SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER
MS	1201982719	241713001	SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER
MSD	1201982720	241713001	SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER
SAMPLE	241713002		SW846 3005A	04-DEC-2009 07:05	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 926629

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201981202	UI091124-A00	.25	mL
LCS	1201981202	UI091124-B	.25	mL
MS	1201981204	UI090828-A	.25	mL
MS	1201981204	UI090828-B	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201981201		SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	SURFACE WATER
LCS	1201981202		SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	SURFACE WATER
SAMPLE	241703001		SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	SURFACE WATER
SAMPLE	241713001		SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	WATER
DUP	1201981203	241713001	SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	WATER
MS	1201981204	241713001	SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	WATER
SDILT	1201981205	241713001	SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	WATER
SAMPLE	241713002		SW846 3005A	14-DEC-2009 08:00	<2	25 mL	25 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1238343	1.25 mL	HYDROCHLORIC ACID
1234886	.5 mL	Nitric Acid CONC.

Comments

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 934522

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201999411	UI091124-A00	.5	mL
LCS	1201999411	UI091124-B	.5	mL
MS	1201999413	UI090930-A	.5	mL
MS	1201999413	UI090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201999410		SW846 3005A	18-DEC-2009 10:22	<2	50 mL	50 mL	1	WATER
LCS	1201999411		SW846 3005A	18-DEC-2009 10:22	<2	50 mL	50 mL	1	WATER
SAMPLE	241713001		SW846 3005A	18-DEC-2009 10:22	<2	50 mL	50 mL	1	WATER
DUP	1201999412	241713001	SW846 3005A	18-DEC-2009 10:22	<2	50 mL	50 mL	1	WATER
MS	1201999413	241713001	SW846 3005A	18-DEC-2009 10:22	<2	50 mL	50 mL	1	WATER
SDILT	1201999414	241713001	SW846 3005A	18-DEC-2009 10:22	<2	50 mL	50 mL	1	WATER
SAMPLE	241713002		SW846 3005A	18-DEC-2009 10:22	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1238343	2.5 mL	HYDROCHLORIC ACID
1238345	1 mL	Nitric Acid CONC.

Comments

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID:	UI090701-09	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #1	**Received:**	01-JUL-09	**Catalog Number :**	160044-09-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016477
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Master Soln #1				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID:	UI090701-10	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #2	**Received:**	01-JUL-09	**Catalog Number :**	160044-08-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016476
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Soln #2				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID:	UI090701-40	**Opened:**	01-JUL-09	**Amount :**	500 mL
Name:	TRACE ICP Stock PQL Sta	**Received:**	30-JUN-09	**Catalog Number :**	160543-01-03
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016475
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3+TrHF
Supplier:	02si				
Description:	TRACE ICP Stock PQL Standard				
Comments:	None				

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090828-A **Opened:** 28-AUG-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 28-AUG-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090828-B **Opened:** 28-AUG-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 28-AUG-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L

Analyte	Concentration	Analyte	Concentration
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-09 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Standard Logbook

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI091124-A00 **Opened:** 24-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 24-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091124-B **Opened:** 24-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 24-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Standard Logbook

Serial ID:	UI091217-06	**Opened:**	17-DEC-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master A	**Received:**	17-DEC-09	**Catalog Number :**	160055-01
Type:	Source Material	**Expires:**	17-DEC-10	**Lot Number :**	1018209
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV SOLN A - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID:	UI091217-07	**Opened:**	17-DEC-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master B	**Received:**	17-DEC-09	**Catalog Number :**	160054-02
Type:	Source Material	**Expires:**	17-DEC-10	**Lot Number :**	1018210
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV Soln B - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID:	UI091217-08	**Opened:**	17-DEC-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master C	**Received:**	17-DEC-09	**Catalog Number :**	160054-03
Type:	Source Material	**Expires:**	17-DEC-10	**Lot Number :**	1018211
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV Soln C - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091207-01 **Opened:** 07-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 07-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 08-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L

Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091207-02 **Opened:** 07-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 08-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091207-01 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG091207-02 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091207-03 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091207-04 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091207-05 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG091207-06 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091207-13 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091208-42 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091208-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091208-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI091208-43 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI091208-44 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091208-45 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091208-46 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091208-47 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091214-04 **Opened:** 14-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 14-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 15-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1242296
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091214-04A **Opened:** 14-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 14-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091214-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091214-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091214-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091214-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091214-05
Name: ICPMS ICV
Type: Working
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Opened: 14-DEC-09
Received: 14-DEC-09
Expires: 15-DEC-09

Balance Id : 40245216
Pipet Id : 3541598
Solvent : 2%HNO3/1%HCl - 1242296

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091214-06 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 14-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS091214-07 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 14-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 15-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1242296
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091214-08 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 14-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091214-70 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 14-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091215-04 **Opened:** 15-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 15-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 16-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1242296
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091215-04A **Opened:** 15-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 15-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091215-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091215-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091215-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091215-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091215-05 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 15-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091215-06 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 15-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091215-07 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 15-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 16-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1242296
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091215-08 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 15-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091219-04 **Opened:** 19-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 19-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 20-DEC-09 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1242296
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091219-04A **Opened:** 19-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 19-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 20-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091219-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091219-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091219-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091219-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091219-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091219-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091219-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091219-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091219-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091219-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091219-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091219-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091219-05 **Opened:** 19-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 19-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 20-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091219-06 **Opened:** 19-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 19-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 20-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091219-07 **Opened:** 19-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 19-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 20-DEC-09 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1242296
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091219-08 **Opened:** 19-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 19-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 20-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Serial ID: WMS091219-70 **Opened:** 19-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 19-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 20-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Elizabeth Janssen
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER

Standard Logbook

Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1234886 **Opened:** 27-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 27-NOV-09
Type: Reagent/Solvent **Expires:** 27-NOV-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.

Comments: None

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242296 **Opened:** 14-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 14-DEC-09
Type: Reagent/Solvent **Expires:** 21-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-649

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	926535 and 927057	**Method:**	SW846 9012A
Prep Batch :	926534 and 927056	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241711001	RE03-09-13908
241711002	RE03-09-13910
241711003	RE03-09-13911
241711004	RE03-09-13913
241711005	RE03-09-13912
241711006	RE03-09-13909
241711007	RE03-10-7041
1201980988	Method Blank (MB)
1201980989	241714002(WST54-10-4983) Sample Duplicate (DUP)
1201980990	241718001(WST49-10-5425) Sample Duplicate (DUP)
1201980991	241714002(WST54-10-4983) Matrix Spike (MS)
1201980992	241718001(WST49-10-5425) Matrix Spike (MS)
1201980993	241714002(WST54-10-4983) Matrix Spike Duplicate (MSD)
1201980994	241718001(WST49-10-5425) Matrix Spike Duplicate (MSD)
1201980995	Laboratory Control Sample (LCS)
1201982097	Method Blank (MB)
1201982098	241711006(RE03-09-13909) Sample Duplicate (DUP)
1201982099	241711006(RE03-09-13909) Matrix Spike (MS)
1201982100	241711006(RE03-09-13909) Matrix Spike Duplicate (MSD)
1201982101	Laboratory Control Sample (LCS)
1201982530	241913002(WST49-10-5433) Sample Duplicate (DUP)
1201982531	241913002(WST49-10-5433) Matrix Spike (MS)
1201982532	241913002(WST49-10-5433) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 241714002 (WST54-10-4983), 241718001 (WST49-10-5425)- Batch 926535, 241711006 (RE03-09-13909) and 241913002 (WST49-10-5433)- Batch 927057.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The spike recovery falls outside of the client specified acceptance limits due to matrix interference. 1201982099 (RE03-09-13909)- Batch 927057.

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the client specified acceptance limits due to matrix interference: 1201982100 (RE03-09-13909)- Batch 927057.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201980990 (WST49-10-5425)- Batch 926535, 1201982098 (RE03-09-13909) and 241711006 (RE03-09-13909)- Batch 927057.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration: 1201980995 (LCS)- Batch 926535 and 1201982101 (LCS)- Batch 927057.

Sample Re-analysis
The following sample was re-analyzed due to instrument failure: 1201980994 (WST49-10-5425)- Batch 926535.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 765699 1201982099 (RE03-09-13909) and 1201982100 (RE03-09-13909)- Batch 927057.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 18Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-649 GEL Work Order: 241711

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13908	Project:	LANL01004
Sample ID:	241711001	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	12.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	78.0	287	ug/kg	1	AXC2	12/01/09	1356	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13910	Project:	LANL01004
Sample ID:	241711002	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	10.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	66.4	244	ug/kg	1	AXC2 12/01/09	1357	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13911	Project:	LANL01004
Sample ID:	241711003	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	14.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	79.3	291	ug/kg	1	AXC2 12/01/09	1357	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13913	Project:	LANL01004
Sample ID:	241711004	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	14.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.4	270	ug/kg	1	AXC2 12/01/09	1358	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13912	Project:	LANL01004
Sample ID:	241711005	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	13.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.8	253	ug/kg	1	AXC2 12/01/09	1359	926535	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1655	926534

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-09-13909	Project:	LANL01004
Sample ID:	241711006	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	9.63%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2 12/03/09	1138	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-649

Client Sample ID:	RE03-10-7041	Project:	LANL01004
Sample ID:	241711007	Client ID:	LANL010
Matrix:	S		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	174	68.9	253	ug/kg	1	AXC2 12/03/09	1142	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 5, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241711

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 926535										
QC1201980989 241714002 DUP										
Cyanide, Total	U	ND	U	ND	ug/kg	N/A			AXC2	12/01/09 14:01
QC1201980990 241718001 DUP										
Cyanide, Total	U	ND	U	ND	ug/kg	N/A				12/01/09 14:08
QC1201980995 LCS										
Cyanide, Total	67900			58000	ug/kg		85.4	(46%-145%)		12/01/09 13:53
QC1201980988 MB										
Cyanide, Total			U	250	ug/kg					12/01/09 13:48
QC1201980991 241714002 MS										
Cyanide, Total	5070	U	ND	5120	ug/kg		101	(50%-130%)		12/01/09 14:05
QC1201980992 241718001 MS										
Cyanide, Total	4920	U	ND	5070	ug/kg		102	(50%-130%)		12/01/09 14:09
QC1201980993 241714002 MSD										
Cyanide, Total	5470	U	ND	5740	ug/kg	11.4	105	(0%-30%)		12/01/09 14:06
QC1201980994 241718001 MSD										
Cyanide, Total	5310	U	ND	5470	ug/kg	7.69	102	(0%-30%)		12/01/09 14:18
Batch 927057										
QC1201982098 241711006 DUP										
Cyanide, Total	U	ND	U	ND	ug/kg	N/A			AXC2	12/03/09 11:39
QC1201982530 241913002 DUP										
Cyanide, Total	U	ND	U	ND	ug/kg	N/A				12/03/09 11:54
QC1201982101 LCS										
Cyanide, Total	67900			54500	ug/kg		80.3	(46%-145%)		12/03/09 11:38
QC1201982097 MB										
Cyanide, Total			U	250	ug/kg					12/03/09 11:33
QC1201982099 241711006 MS										
Cyanide, Total	5530	U	ND	3030	ug/kg		54.8	(50%-130%)		12/03/09 11:40
QC1201982531 241913002 MS										
Cyanide, Total	5070	U	ND	4430	ug/kg		87.3	(50%-130%)		12/03/09 11:54
QC1201982100 241711006 MSD										
Cyanide, Total	5120	U	ND	3640	ug/kg	18.3	71.1	(0%-30%)		12/03/09 11:41
QC1201982532 241913002 MSD										
Cyanide, Total	4790	U	ND	5130	ug/kg	14.7	107	(0%-30%)		12/03/09 11:55

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

QC Summary

Workorder: 241711

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 05-DEC-2009 10:56

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-649**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**01-DEC-2009 13:10:42**	**OM_12-1-2009_13-00-11**	**153**	**150**	**102**	**(90%-110%)**	**Yes**
CCV	01-DEC-2009 13:37:25	OM_12-1-2009_13-00-11	104	100	104	(90%-110%)	Yes
CCV	01-DEC-2009 13:49:49	OM_12-1-2009_13-00-11	105	100	105	(90%-110%)	Yes
CCV	01-DEC-2009 14:02:20	OM_12-1-2009_13-00-11	106	100	106	(90%-110%)	Yes
CCV	01-DEC-2009 14:14:48	OM_12-1-2009_13-00-11	106	100	106	(90%-110%)	Yes
CCV	01-DEC-2009 14:27:17	OM_12-1-2009_13-00-11	106	100	106	(90%-110%)	Yes
ICV	**03-DEC-2009 10:55:18**	**OM_12-3-2009_10-47-23**	**147**	**150**	**98**	**(90%-110%)**	**Yes**
CCV	03-DEC-2009 11:22:00	OM_12-3-2009_10-47-23	98.2	100	98	(90%-110%)	Yes
CCV	03-DEC-2009 11:34:26	OM_12-3-2009_10-47-23	98.7	100	99	(90%-110%)	Yes
CCV	03-DEC-2009 11:46:56	OM_12-3-2009_10-47-23	97.9	100	98	(90%-110%)	Yes
CCV	03-DEC-2009 11:59:26	OM_12-3-2009_10-47-23	98	100	98	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**01-DEC-2009 13:12:32**	**OM_12-1-2009_13-00-11**	**3.43**	**5**	**Yes**
CCB	01-DEC-2009 13:39:15	OM_12-1-2009_13-00-11	0.953	5	Yes
CCB	01-DEC-2009 13:51:40	OM_12-1-2009_13-00-11	1.78	5	Yes
CCB	01-DEC-2009 14:04:10	OM_12-1-2009_13-00-11	1.74	5	Yes
CCB	01-DEC-2009 14:16:39	OM_12-1-2009_13-00-11	1.74	5	Yes
CCB	01-DEC-2009 14:29:07	OM_12-1-2009_13-00-11	2.22	5	Yes
ICB	**03-DEC-2009 10:57:08**	**OM_12-3-2009_10-47-23**	**2.2**	**5**	**Yes**
CCB	03-DEC-2009 11:23:51	OM_12-3-2009_10-47-23	1	5	Yes
CCB	03-DEC-2009 11:36:16	OM_12-3-2009_10-47-23	0.32	5	Yes
CCB	03-DEC-2009 11:48:48	OM_12-3-2009_10-47-23	1.4	5	Yes
CCB	03-DEC-2009 12:01:15	OM_12-3-2009_10-47-23	0.487	5	Yes

Cyanide, Total

Prep LogBook

Analyst: SXJ1 Verified by:_____

Batch: 927056

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982101	URF1200957-01	.25	g
MS	1201982099	URF1184831-02	.025	mL
MS	1201982531	URF1184831-02	.025	mL
MSD	1201982100	URF1184831-02	.025	mL
MSD	1201982532	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201982097		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
LCS	1201982101		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.25 g	25 mL	100	SOIL
SAMPLE	241711006		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.51 g	25 mL	49.01961	SOIL
DUP	1201982098	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
MS	1201982099	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
MSD	1201982100	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241711007		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241773001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.59 g	25 mL	42.37288	MISC SOLID
SAMPLE	241797001		SW846 9010C Distillation	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOLID
SAMPLE	241832001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241832002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241832003		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241832004		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241838002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241913002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
DUP	1201982530	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
MS	1201982531	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
MSD	1201982532	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241916001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241916002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916003		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	241916004		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	241916005		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241916006		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241916007		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916008		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916009		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	241916010		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091202-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 926534

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201980995	URF1200957-01	.25	g
MS	1201980991	URF1184831-02	.025	mL
MS	1201980992	URF1184831-02	.025	mL
MSD	1201980993	URF1184831-02	.025	mL
MSD	1201980994	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201980988		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.5 g	25 mL	50	SOIL
LCS	1201980995		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241697003		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241697004		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241711001		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241711002		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241711003		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241711004		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241711005		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241714002		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.52 g	25 mL	48.07692	SOIL
DUP	1201980989	241714002	SW846 9010B Prep	30-NOV-2009 16:55	>12	0.55 g	25 mL	45.45455	SOIL
MS	1201980991	241714002	SW846 9010B Prep	30-NOV-2009 16:55	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1201980993	241714002	SW846 9010B Prep	30-NOV-2009 16:55	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241718001		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.57 g	25 mL	43.85965	SOIL
DUP	1201980990	241718001	SW846 9010B Prep	30-NOV-2009 16:55	>12	0.52 g	25 mL	48.07692	SOIL
MS	1201980992	241718001	SW846 9010B Prep	30-NOV-2009 16:55	>12	0.54 g	25 mL	46.2963	SOIL
MSD	1201980994	241718001	SW846 9010B Prep	30-NOV-2009 16:55	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241728002		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241756001		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241756002		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241756003		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241756004		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241756005		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241756006		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241756007		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241756008		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241756009		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241756010		SW846 9010B Prep	30-NOV-2009 16:55	>12	0.53 g	25 mL	47.16981	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091130-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments.

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/1/2009 13:03:33	OM_12-1-2009_13-00-11
150 ppb		1	axc2	12/1/2009 13:04:25	OM_12-1-2009_13-00-11
100 ppb		1	axc2	12/1/2009 13:05:17	OM_12-1-2009_13-00-11
50 ppb		1	axc2	12/1/2009 13:06:10	OM_12-1-2009_13-00-11
10 ppb		1	axc2	12/1/2009 13:07:03	OM_12-1-2009_13-00-11
CRDL 5.0 ppb		1	axc2	12/1/2009 13:07:57	OM_12-1-2009_13-00-11
ICAL-00		1	axc2	12/1/2009 13:08:52	OM_12-1-2009_13-00-11
ICV		1	axc2	12/1/2009 13:10:42	OM_12-1-2009_13-00-11
ICB		1	axc2	12/1/2009 13:12:32	OM_12-1-2009_13-00-11
CRDL		1	axc2	12/1/2009 13:14:22	OM_12-1-2009_13-00-11
1201979063*	925671	1	axc2	12/1/2009 13:16:12	OM_12-1-2009_13-00-11
1201979070	925671	1	axc2	12/1/2009 13:17:05	OM_12-1-2009_13-00-11
1201979063	925671	1	axc2	12/1/2009 13:17:58	OM_12-1-2009_13-00-11
241607001	925671	1	axc2	12/1/2009 13:18:52	OM_12-1-2009_13-00-11
1201979064	925671	1	axc2	12/1/2009 13:19:45	OM_12-1-2009_13-00-11
1201979066	925671	1	axc2	12/1/2009 13:20:38	OM_12-1-2009_13-00-11
1201979068	925671	1	axc2	12/1/2009 13:21:30	OM_12-1-2009_13-00-11
241607002	925671	1	axc2	12/1/2009 13:22:23	OM_12-1-2009_13-00-11
241607003	925671	1	axc2	12/1/2009 13:23:16	OM_12-1-2009_13-00-11
241607004	925671	1	axc2	12/1/2009 13:24:08	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:25:01	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:26:51	OM_12-1-2009_13-00-11
241607005	925671	1	axc2	12/1/2009 13:28:39	OM_12-1-2009_13-00-11
241607006	925671	1	axc2	12/1/2009 13:29:31	OM_12-1-2009_13-00-11
241607007	925671	1	axc2	12/1/2009 13:30:23	OM_12-1-2009_13-00-11
241607008	925671	1	axc2	12/1/2009 13:31:15	OM_12-1-2009_13-00-11
241607009	925671	1	axc2	12/1/2009 13:32:07	OM_12-1-2009_13-00-11
241607010	925671	1	axc2	12/1/2009 13:32:59	OM_12-1-2009_13-00-11
241607011	925671	1	axc2	12/1/2009 13:33:53	OM_12-1-2009_13-00-11
241607012	925671	1	axc2	12/1/2009 13:34:46	OM_12-1-2009_13-00-11
241607013	925671	1	axc2	12/1/2009 13:35:39	OM_12-1-2009_13-00-11
241702007	925671	1	axc2	12/1/2009 13:36:33	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:37:25	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:39:15	OM_12-1-2009_13-00-11
241713001	925671	1	axc2	12/1/2009 13:41:05	OM_12-1-2009_13-00-11
1201979065	925671	1	axc2	12/1/2009 13:41:57	OM_12-1-2009_13-00-11
1201979067	925671	1	axc2	12/1/2009 13:42:51	OM_12-1-2009_13-00-11
1201979069	925671	1	axc2	12/1/2009 13:43:43	OM_12-1-2009_13-00-11
241713002	925671	1	axc2	12/1/2009 13:44:36	OM_12-1-2009_13-00-11
241835001	925671	1	axc2	12/1/2009 13:45:28	OM_12-1-2009_13-00-11
241835002	925671	1	axc2	12/1/2009 13:46:21	OM_12-1-2009_13-00-11
241835003	925671	1	axc2	12/1/2009 13:47:13	OM_12-1-2009_13-00-11
241835004	925671	1	axc2	12/1/2009 13:48:05	OM_12-1-2009_13-00-11
1201980988	926535	1	axc2	12/1/2009 13:48:57	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:49:49	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:51:40	OM_12-1-2009_13-00-11
1201980995	926535	25	axc2	12/1/2009 13:53:27	OM_12-1-2009_13-00-11
241697003	926535	1	axc2	12/1/2009 13:54:22	OM_12-1-2009_13-00-11
241697004	926535	1	axc2	12/1/2009 13:55:16	OM_12-1-2009_13-00-11
241711001	926535	1	axc2	12/1/2009 13:56:09	OM_12-1-2009_13-00-11
241711002	926535	1	axc2	12/1/2009 13:57:02	OM_12-1-2009_13-00-11
241711003	926535	1	axc2	12/1/2009 13:57:56	OM_12-1-2009_13-00-11
241711004	926535	1	axc2	12/1/2009 13:58:49	OM_12-1-2009_13-00-11
241711005	926535	1	axc2	12/1/2009 13:59:42	OM_12-1-2009_13-00-11
241714002	926535	1	axc2	12/1/2009 14:00:35	OM_12-1-2009_13-00-11
1201980989	926535	1	axc2	12/1/2009 14:01:28	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 14:02:20	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 14:04:10	OM_12-1-2009_13-00-11

1201980991	926535	1	axc2	12/1/2009	14:05:59	OM_12-1-2009_13-00-11
1201980993	926535	1	axc2	12/1/2009	14:06:52	OM_12-1-2009_13-00-11
241718001	926535	1	axc2	12/1/2009	14:07:44	OM_12-1-2009_13-00-11
1201980990	926535	1	axc2	12/1/2009	14:08:36	OM_12-1-2009_13-00-11
1201980992	926535	1	axc2	12/1/2009	14:09:29	OM_12-1-2009_13-00-11
1201980994*	926535	1	axc2	12/1/2009	14:10:20	OM_12-1-2009_13-00-11
241728002	926535	1	axc2	12/1/2009	14:11:14	OM_12-1-2009_13-00-11
241756001	926535	1	axc2	12/1/2009	14:12:09	OM_12-1-2009_13-00-11
241756002	926535	1	axc2	12/1/2009	14:13:03	OM_12-1-2009_13-00-11
241756003	926535	1	axc2	12/1/2009	14:13:56	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:14:48	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:16:39	OM_12-1-2009_13-00-11
1201980994	926535	1	axc2	12/1/2009	14:18:28	OM_12-1-2009_13-00-11
241756004	926535	1	axc2	12/1/2009	14:19:21	OM_12-1-2009_13-00-11
241756005	926535	1	axc2	12/1/2009	14:20:15	OM_12-1-2009_13-00-11
241756006	926535	1	axc2	12/1/2009	14:21:08	OM_12-1-2009_13-00-11
241756007	926535	1	axc2	12/1/2009	14:22:01	OM_12-1-2009_13-00-11
241756008	926535	1	axc2	12/1/2009	14:22:54	OM_12-1-2009_13-00-11
241756009	926535	1	axc2	12/1/2009	14:23:47	OM_12-1-2009_13-00-11
241756010	926535	1	axc2	12/1/2009	14:24:40	OM_12-1-2009_13-00-11
1201983851	927798	1	axc2	12/1/2009	14:25:32	OM_12-1-2009_13-00-11
1201983855	927798	1	axc2	12/1/2009	14:26:24	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:27:17	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:29:07	OM_12-1-2009_13-00-11
240971001	927798	1	axc2	12/1/2009	14:30:56	OM_12-1-2009_13-00-11
241923001	927798	1	axc2	12/1/2009	14:31:47	OM_12-1-2009_13-00-11
1201983852	927798	1	axc2	12/1/2009	14:32:42	OM_12-1-2009_13-00-11
1201983853	927798	1	axc2	12/1/2009	14:33:36	OM_12-1-2009_13-00-11
1201983854	927798	1	axc2	12/1/2009	14:34:30	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:35:22	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:37:13	OM_12-1-2009_13-00-11

Author: axc2 Date : 12/2/2009

Original Run Filename: OM_12-1-2009_13-00-11.OMN created 12/1/2009 13:00:11
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-1-2009_13-00-11.OMN last modified 12/1/2009 14:38:18
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091201-01	1	S1	200	7.16	12/1/2009@13:03:33			200 ppb
WCN091201-02	1	S2	150	5.43	12/1/2009@13:04:25			150 ppb
WCN091201-03	1	S3	100	3.55	12/1/2009@13:05:17			100 ppb
WCN091201-04	1	S4	50.0	1.86	12/1/2009@13:06:10			50 ppb
WCN091201-05	1	S5	10.0	0.523	12/1/2009@13:07:03			10 ppb
WCN091201-06	1	S6	5.00	0.254	12/1/2009@13:07:57			CRDL 5.0 ppb
WCN091201-08	1	S7	0.00	0.0388	12/1/2009@13:08:52			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99983 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091201-07	1	S8	153	5.50	12/1/2009@13:10:42			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091201-08	1	S7	3.43	0.208	12/1/2009@13:12:32			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	3.43 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.43 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091201-06	1	S6	4.97	0.262	12/1/2009@13:14:22			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.97 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.97 > 2.50					
		Message	Pass					
		Action	None					
1201979063|925671|MB	1	1	595	21.1	12/1/2009@13:16:12			
1201979070||LCS	1	2	53.1	1.96	12/1/2009@13:17:05			
1201979063|925671|MB	1	1	-0.00784	0.0860	12/1/2009@13:17:58			
241607001	1	3	-1.63	0.0287	12/1/2009@13:18:52			
1201979064||DUP	1	4	-1.90	0.0191	12/1/2009@13:19:45			
1201979066||MS	1	5	107	3.89	12/1/2009@13:20:38			
1201979068||MSD	1	6	109	3.93	12/1/2009@13:21:30			
241607002	1	7	0.166	0.0922	12/1/2009@13:22:23			
241607003	1	8	-1.43	0.0358	12/1/2009@13:23:16			
241607004	1	9	-2.91	-0.0166	12/1/2009@13:24:08			
WCN091201-03	1	S3	105	3.80	12/1/2009@13:25:01			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.78	0.149	12/1/2009@13:26:51			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	1.78 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	1.78 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241607005	1	10	-2.82	-0.0135	12/1/2009@13:28:39			
241607006	1	11	-1.80	0.0228	12/1/2009@13:29:31			
241607007	1	12	-1.84	0.0213	12/1/2009@13:30:23			
241607008	1	13	-2.59	-0.00515	12/1/2009@13:31:15			
241607009	1	14	-3.10	-0.0235	12/1/2009@13:32:07			
241607010	1	15	-2.46	-7.16e-4	12/1/2009@13:32:59			
241607011	1	16	-2.36	0.00287	12/1/2009@13:33:53			
241607012	1	17	-2.53	-0.00327	12/1/2009@13:34:46			
241607013	1	18	-1.77	0.0238	12/1/2009@13:35:39			
241702007	1	19	-0.216	0.0787	12/1/2009@13:36:33			
WCN091201-03	1	S3	104	3.78	12/1/2009@13:37:25			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	0.953	0.120	12/1/2009@13:39:15			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.953 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.953 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241713001	1	20	-1.26	0.0418	12/1/2009@13:41:05			
1201979065||DUP	1	21	-1.91	0.0186	12/1/2009@13:41:57			
1201979067||MS	1	22	109	3.95	12/1/2009@13:42:51			
1201979069||MSD	1	23	112	4.05	12/1/2009@13:43:43			
241713002	1	24	0.877	0.117	12/1/2009@13:44:36			
241835001	1	25	-1.56	0.0311	12/1/2009@13:45:28			
241835002	1	26	-1.93	0.0181	12/1/2009@13:46:21			
241835003	1	27	-2.44	-3.77e-5	12/1/2009@13:47:13			
241835004	1	28	-2.45	-2.86e-4	12/1/2009@13:48:05			
1201980988|926535|MB	1	29	-1.68	0.0268	12/1/2009@13:48:57			
WCN091201-03	1	S3	105	3.82	12/1/2009@13:49:49			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.78	0.149	12/1/2009@13:51:40			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	1.78 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.78 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201980995||LCS	1	30	23.2	0.908	12/1/2009@13:53:27		25.00	
241697003	1	31	-0.298	0.0758	12/1/2009@13:54:22			
241697004	1	32	-0.407	0.0719	12/1/2009@13:55:16			
241711001	1	33	-0.863	0.0558	12/1/2009@13:56:09			
241711002	1	34	0.191	0.0931	12/1/2009@13:57:02			
241711003	1	35	-0.124	0.0819	12/1/2009@13:57:56			
241711004	1	36	-0.622	0.0643	12/1/2009@13:58:49			
241711005	1	37	0.169	0.0923	12/1/2009@13:59:42			
241714002	1	38	-1.37	0.0379	12/1/2009@14:00:35			
1201980989||DUP	1	39	-1.55	0.0314	12/1/2009@14:01:28			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:02:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.74	0.148	12/1/2009@14:04:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201980991||MS	1	40	101	3.68	12/1/2009@14:05:59			
1201980993||MSD	1	41	105	3.80	12/1/2009@14:06:52			
241718001	1	42	0.649	0.109	12/1/2009@14:07:44			
1201980990||DUP	1	43	-1.18	0.0444	12/1/2009@14:08:36			
1201980992||MS	1	44	103	3.75	12/1/2009@14:09:29			
1201980994||MSD	1	45	62.9	2.31	12/1/2009@14:10:20			
241728002	1	46	0.0647	0.0886	12/1/2009@14:11:14			
241756001	1	47	-1.78	0.0234	12/1/2009@14:12:09			
241756002	1	48	-1.24	0.0423	12/1/2009@14:13:03			
241756003	1	49	-2.56	-0.00415	12/1/2009@14:13:56			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:14:48			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.74	0.148	12/1/2009@14:16:39			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1201980994||MSD	1	45	103	3.74	12/1/2009@14:18:28			
241756004	1	50	1.85	0.152	12/1/2009@14:19:21			
241756005	1	51	-1.44	0.0355	12/1/2009@14:20:15			
241756006	1	52	-1.86	0.0205	12/1/2009@14:21:08			
241756007	1	53	-1.36	0.0381	12/1/2009@14:22:01			
241756008	1	54	-1.79	0.0230	12/1/2009@14:22:54			
241756009	1	55	-2.03	0.0145	12/1/2009@14:23:47			
241756010	1	56	-1.52	0.0324	12/1/2009@14:24:40			
1201983851|927798|MB	1	57	-1.88	0.0199	12/1/2009@14:25:32			
1201983855||LCS	1	58	53.6	1.98	12/1/2009@14:26:24			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:27:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	2.22	0.165	12/1/2009@14:29:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.22 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.22 > -5.00					
		Message	CCB Passed					
		Action	Continue					
240971001	1	59	27.8	1.07	12/1/2009@14:30:56			
241923001	1	60	-0.470	0.0697	12/1/2009@14:31:47			
1201983852||DUP	1	61	-1.85	0.0210	12/1/2009@14:32:42			
1201983853||MS	1	62	108	3.90	12/1/2009@14:33:36			
1201983854||MSD	1	63	110	3.97	12/1/2009@14:34:30			
WCN091201-03	1	S3	109	3.94	12/1/2009@14:35:22			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.42	0.137	12/1/2009@14:37:13			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.42 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.42 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-1-2009_13-00-11.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A

Author: axc2

Date : 12/2/2009

Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

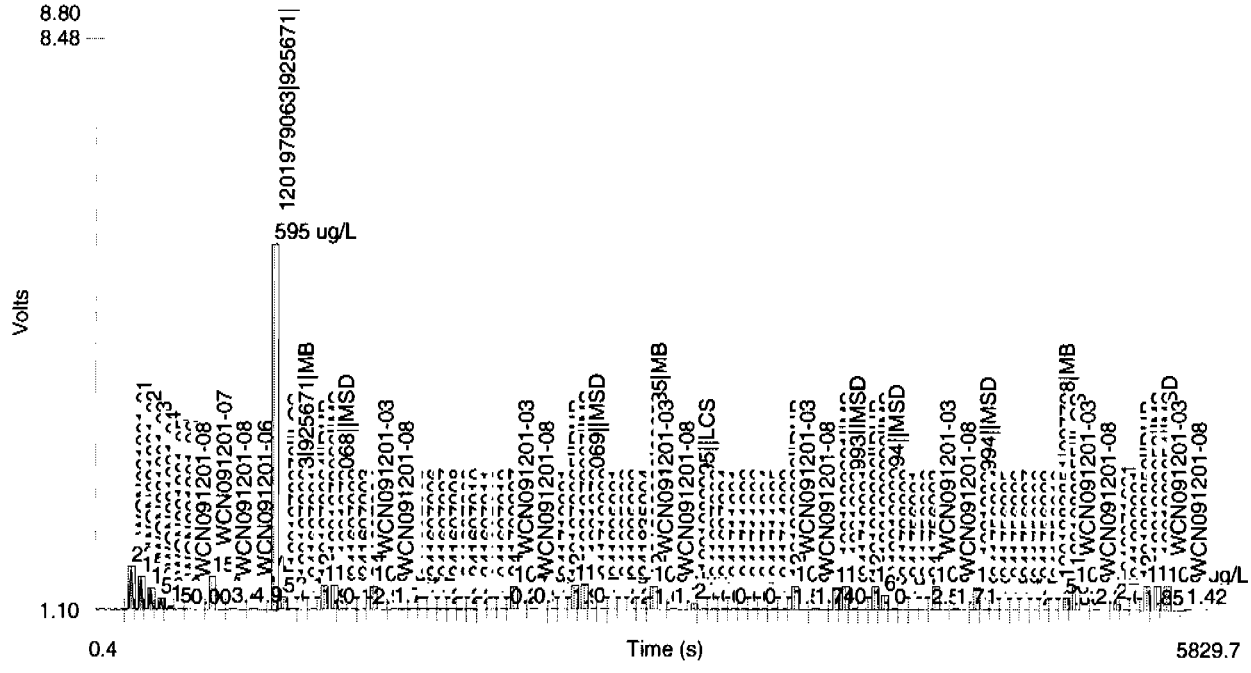

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.16	0.545	0.0	12/1/2009	13:04:36
2	150	1	5.43	0.414	-0.8	12/1/2009	13:05:28
3	100	1	3.55	0.271	2.0	12/1/2009	13:06:20
4	50.0	1	1.86	0.141	-0.4	12/1/2009	13:07:13
5	10.0	1	0.523	0.0389	-18.7	12/1/2009	13:08:06
6	5.00	1	0.254	0.0176	3.9	12/1/2009	13:09:00
7	0.00	1	0.0388	0.00121		12/1/2009	13:09:54

Author: axc2 Date : 12/2/2009

Figure 1: TCYANIDE

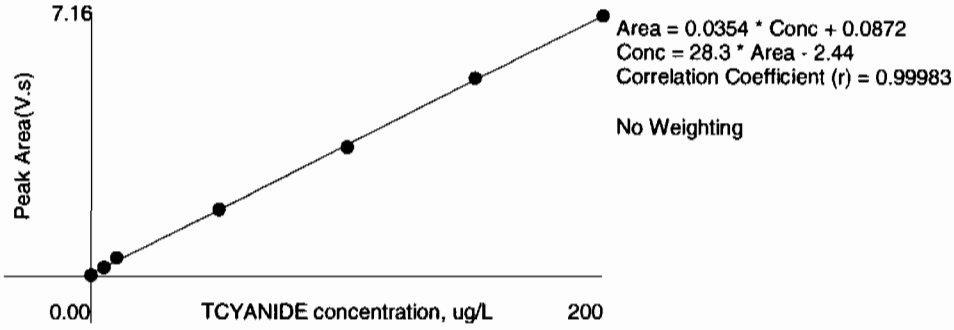

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/3/2009 10:48:08	OM_12-3-2009_10-47-23
150 ppb		1	axc2	12/3/2009 10:49:00	OM_12-3-2009_10-47-23
100 ppb		1	axc2	12/3/2009 10:49:53	OM_12-3-2009_10-47-23
50 ppb		1	axc2	12/3/2009 10:50:46	OM_12-3-2009_10-47-23
10 ppb		1	axc2	12/3/2009 10:51:39	OM_12-3-2009_10-47-23
CRDL 5.0 ppb		1	axc2	12/3/2009 10:52:33	OM_12-3-2009_10-47-23
ICAL-00		1	axc2	12/3/2009 10:53:27	OM_12-3-2009_10-47-23
ICV		1	axc2	12/3/2009 10:55:18	OM_12-3-2009_10-47-23
ICB		1	axc2	12/3/2009 10:57:08	OM_12-3-2009_10-47-23
CRDL		1	axc2	12/3/2009 10:58:58	OM_12-3-2009_10-47-23
1201979071	925673	1	axc2	12/3/2009 11:00:47	OM_12-3-2009_10-47-23
1201979078*	925673	25	axc2	12/3/2009 11:01:41	OM_12-3-2009_10-47-23
241611008	925673	1	axc2	12/3/2009 11:02:34	OM_12-3-2009_10-47-23
1201979072	925673	1	axc2	12/3/2009 11:03:27	OM_12-3-2009_10-47-23
1201979074	925673	1	axc2	12/3/2009 11:04:20	OM_12-3-2009_10-47-23
1201979076	925673	1	axc2	12/3/2009 11:05:13	OM_12-3-2009_10-47-23
1201979078	925673	25	axc2	12/3/2009 11:06:06	OM_12-3-2009_10-47-23
241611009	925673	1	axc2	12/3/2009 11:06:58	OM_12-3-2009_10-47-23
1201979073	925673	1	axc2	12/3/2009 11:07:51	OM_12-3-2009_10-47-23
1201979075	925673	1	axc2	12/3/2009 11:08:43	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:09:36	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:11:26	OM_12-3-2009_10-47-23
1201979077	925673	1	axc2	12/3/2009 11:13:15	OM_12-3-2009_10-47-23
241613001	925673	1	axc2	12/3/2009 11:14:07	OM_12-3-2009_10-47-23
241613002	925673	1	axc2	12/3/2009 11:14:59	OM_12-3-2009_10-47-23
241613003	925673	1	axc2	12/3/2009 11:15:50	OM_12-3-2009_10-47-23
241613004	925673	1	axc2	12/3/2009 11:16:43	OM_12-3-2009_10-47-23
241613005	925673	1	axc2	12/3/2009 11:17:34	OM_12-3-2009_10-47-23
241613006	925673	1	axc2	12/3/2009 11:18:28	OM_12-3-2009_10-47-23
241613007	925673	1	axc2	12/3/2009 11:19:21	OM_12-3-2009_10-47-23
241613008	925673	1	axc2	12/3/2009 11:20:15	OM_12-3-2009_10-47-23
241613009	925673	1	axc2	12/3/2009 11:21:08	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:22:00	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:23:51	OM_12-3-2009_10-47-23
241613010	925673	1	axc2	12/3/2009 11:25:41	OM_12-3-2009_10-47-23
241613011	925673	1	axc2	12/3/2009 11:26:34	OM_12-3-2009_10-47-23
241613012	925673	1	axc2	12/3/2009 11:27:27	OM_12-3-2009_10-47-23
241613013	925673	1	axc2	12/3/2009 11:28:20	OM_12-3-2009_10-47-23
241613014	925673	1	axc2	12/3/2009 11:29:12	OM_12-3-2009_10-47-23
241613015	925673	1	axc2	12/3/2009 11:30:05	OM_12-3-2009_10-47-23
241613016	925673	1	axc2	12/3/2009 11:30:57	OM_12-3-2009_10-47-23
241613017	925673	1	axc2	12/3/2009 11:31:49	OM_12-3-2009_10-47-23
241613018	925673	1	axc2	12/3/2009 11:32:41	OM_12-3-2009_10-47-23
1201982097	927057	1	axc2	12/3/2009 11:33:33	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:34:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:36:16	OM_12-3-2009_10-47-23
1201982101	927057	25	axc2	12/3/2009 11:38:04	OM_12-3-2009_10-47-23
241711006	927057	1	axc2	12/3/2009 11:38:59	OM_12-3-2009_10-47-23
1201982098	927057	1	axc2	12/3/2009 11:39:52	OM_12-3-2009_10-47-23
1201982099	927057	1	axc2	12/3/2009 11:40:45	OM_12-3-2009_10-47-23
1201982100	927057	1	axc2	12/3/2009 11:41:39	OM_12-3-2009_10-47-23
241711007	927057	1	axc2	12/3/2009 11:42:32	OM_12-3-2009_10-47-23
241773001	927057	1	axc2	12/3/2009 11:43:25	OM_12-3-2009_10-47-23
241797001	927057	1	axc2	12/3/2009 11:44:19	OM_12-3-2009_10-47-23
241832001	927057	1	axc2	12/3/2009 11:45:12	OM_12-3-2009_10-47-23
241832002	927057	1	axc2	12/3/2009 11:46:04	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:46:56	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:48:48	OM_12-3-2009_10-47-23

241832003	927057	1	axc2	12/3/2009	11:50:36	OM_12-3-2009_10-47-23
241832004	927057	1	axc2	12/3/2009	11:51:28	OM_12-3-2009_10-47-23
241838002	927057	1	axc2	12/3/2009	11:52:21	OM_12-3-2009_10-47-23
241913002	927057	1	axc2	12/3/2009	11:53:12	OM_12-3-2009_10-47-23
1201982530	927057	1	axc2	12/3/2009	11:54:05	OM_12-3-2009_10-47-23
1201982531	927057	1	axc2	12/3/2009	11:54:57	OM_12-3-2009_10-47-23
1201982532	927057	1	axc2	12/3/2009	11:55:51	OM_12-3-2009_10-47-23
241916001	927057	1	axc2	12/3/2009	11:56:45	OM_12-3-2009_10-47-23
241916002	927057	1	axc2	12/3/2009	11:57:39	OM_12-3-2009_10-47-23
241916003	927057	1	axc2	12/3/2009	11:58:32	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	11:59:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:01:15	OM_12-3-2009_10-47-23
241916004	927057	1	axc2	12/3/2009	12:03:04	OM_12-3-2009_10-47-23
241916005	927057	1	axc2	12/3/2009	12:03:58	OM_12-3-2009_10-47-23
241916006	927057	1	axc2	12/3/2009	12:04:51	OM_12-3-2009_10-47-23
241916007	927057	1	axc2	12/3/2009	12:05:44	OM_12-3-2009_10-47-23
241916008	927057	1	axc2	12/3/2009	12:06:37	OM_12-3-2009_10-47-23
241916009	927057	1	axc2	12/3/2009	12:07:30	OM_12-3-2009_10-47-23
241916010	927057	1	axc2	12/3/2009	12:08:23	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	12:09:15	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:11:05	OM_12-3-2009_10-47-23

Author: axc2 Date : 12/3/2009

Original Run Filename: OM_12-3-2009_10-47-23.OMN created 12/3/2009 10:47:23
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-3-2009_10-47-23.OMN last modified 12/3/2009 12:12:10
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091203-01	1	S1	200	7.99	12/3/2009@10:48:08			200 ppb
WCN091203-02	1	S2	150	6.19	12/3/2009@10:49:00			150 ppb
WCN091203-03	1	S3	100	4.24	12/3/2009@10:49:53			100 ppb
WCN091203-04	1	S4	50.0	2.09	12/3/2009@10:50:46			50 ppb
WCN091203-05	1	S5	10.0	0.592	12/3/2009@10:51:39			10 ppb
WCN091203-06	1	S6	5.00	0.278	12/3/2009@10:52:33			CRDL 5.0 ppb
WCN091203-08	1	S7	0.00	0.0373	12/3/2009@10:53:27			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99957 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091203-07	1	S8	147	6.01	12/3/2009@10:55:18			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091203-08	1	S7	2.20	0.208	12/3/2009@10:57:08			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091203-06	1	S6	4.06	0.283	12/3/2009@10:58:58			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.06 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.06 > 2.50					
		Message	Pass					
		Action	None					
1201979071|925673|MB	1	1	-1.68	0.0532	12/3/2009@11:00:47			
1201979078||LCS	1	2	11.7	0.589	12/3/2009@11:01:41		25.00	
241611008	1	3	-0.599	0.0965	12/3/2009@11:02:34			
1201979072||DUP	1	4	-0.795	0.0887	12/3/2009@11:03:27			
1201979074||MS	1	5	70.9	2.95	12/3/2009@11:04:20			
1201979076||MSD	1	6	80.6	3.34	12/3/2009@11:05:13			
1201979078||LCS	1	2	25.5	1.14	12/3/2009@11:06:06		25.00	
241611009	1	7	17.4	0.817	12/3/2009@11:06:58			
1201979073||DUP	1	8	5.46	0.339	12/3/2009@11:07:51			
1201979075||MS	1	9	88.6	3.66	12/3/2009@11:08:43			
WCN091203-03	1	S3	101	4.15	12/3/2009@11:09:36			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.7 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.780	0.152	12/3/2009@11:11:26			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.780 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.780 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979077|MSD	1	10	82.7	3.43	12/3/2009@11:13:15			
241613001	1	11	0.938	0.158	12/3/2009@11:14:07			
241613002	1	12	-1.31	0.0680	12/3/2009@11:14:59			
241613003	1	13	-0.466	0.102	12/3/2009@11:15:50			
241613004	1	14	-1.77	0.0499	12/3/2009@11:16:43			
241613005	1	15	-2.01	0.0401	12/3/2009@11:17:34			
241613006	1	16	-1.04	0.0791	12/3/2009@11:18:28			
241613007	1	17	-3.14	-0.00502	12/3/2009@11:19:21			
241613008	1	18	-1.19	0.0728	12/3/2009@11:20:15			
241613009	1	19	-1.89	0.0448	12/3/2009@11:21:08			
WCN091203-03	1	S3	98.2	4.05	12/3/2009@11:22:00			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.00	0.161	12/3/2009@11:23:51			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.00 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.00 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241613010	1	20	-1.14	0.0750	12/3/2009@11:25:41			
241613011	1	21	-1.02	0.0798	12/3/2009@11:26:34			
241613012	1	22	-1.37	0.0656	12/3/2009@11:27:27			
241613013	1	23	-1.94	0.0429	12/3/2009@11:28:20			
241613014	1	24	-1.11	0.0762	12/3/2009@11:29:12			
241613015	1	25	-1.39	0.0648	12/3/2009@11:30:05			
241613016	1	26	-2.32	0.0277	12/3/2009@11:30:57			
241613017	1	27	-1.67	0.0537	12/3/2009@11:31:49			
241613018	1	28	-1.71	0.0522	12/3/2009@11:32:41			
1201982097|927057|MB	1	29	-2.09	0.0369	12/3/2009@11:33:33			
WCN091203-03	1	S3	98.7	4.07	12/3/2009@11:34:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.320	0.133	12/3/2009@11:36:16			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	0.320 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.320 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982101||LCS	1	30	21.8	0.993	12/3/2009@11:38:04		25.00	
241711006	1	31	-0.519	0.0997	12/3/2009@11:38:59			
1201982098||DUP	1	32	-1.52	0.0599	12/3/2009@11:39:52			
1201982099||MS	1	33	54.8	2.31	12/3/2009@11:40:45			
1201982100||MSD	1	34	71.1	2.96	12/3/2009@11:41:39			
241711007	1	35	3.43	0.258	12/3/2009@11:42:32			
241773001	1	36	-0.499	0.101	12/3/2009@11:43:25			
241797001	1	37	14.2	0.686	12/3/2009@11:44:19			
241832001	1	38	-1.40	0.0644	12/3/2009@11:45:12			
241832002	1	39	-1.84	0.0467	12/3/2009@11:46:04			
WCN091203-03	1	S3	97.9	4.04	12/3/2009@11:46:56			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.40	0.177	12/3/2009@11:48:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.40 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.40 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241832003	1	40	-1.85	0.0466	12/3/2009@11:50:36			
241832004	1	41	-2.42	0.0238	12/3/2009@11:51:28			
241838002	1	42	-1.55	0.0586	12/3/2009@11:52:21			
241913002	1	43	-1.87	0.0457	12/3/2009@11:53:12			
1201982530||DUP	1	44	-2.04	0.0388	12/3/2009@11:54:05			
1201982531||MS	1	45	87.3	3.61	12/3/2009@11:54:57			
1201982532||MSD	1	46	107	4.40	12/3/2009@11:55:51			
241916001	1	47	4.73	0.309	12/3/2009@11:56:45			
241916002	1	48	-1.83	0.0471	12/3/2009@11:57:39			
241916003	1	49	-0.985	0.0811	12/3/2009@11:58:32			
WCN091203-03	1	S3	98.0	4.04	12/3/2009@11:59:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.487	0.140	12/3/2009@12:01:15			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.487 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.487 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241916004	1	50	0.626	0.145	12/3/2009@12:03:04			
241916005	1	51	1.13	0.166	12/3/2009@12:03:58			
241916006	1	52	0.169	0.127	12/3/2009@12:04:51			
241916007	1	53	1.78	0.192	12/3/2009@12:05:44			
241916008	1	54	-0.0502	0.118	12/3/2009@12:06:37			
241916009	1	55	1.36	0.175	12/3/2009@12:07:30			
241916010	1	56	2.34	0.214	12/3/2009@12:08:23			
WCN091203-03	1	S3	97.4	4.02	12/3/2009@12:09:15			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.892	0.156	12/3/2009@12:11:05			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.892 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.892 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-3-2009_10-47-23.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2

Date : 12/3/2009

Channel 1: Current View

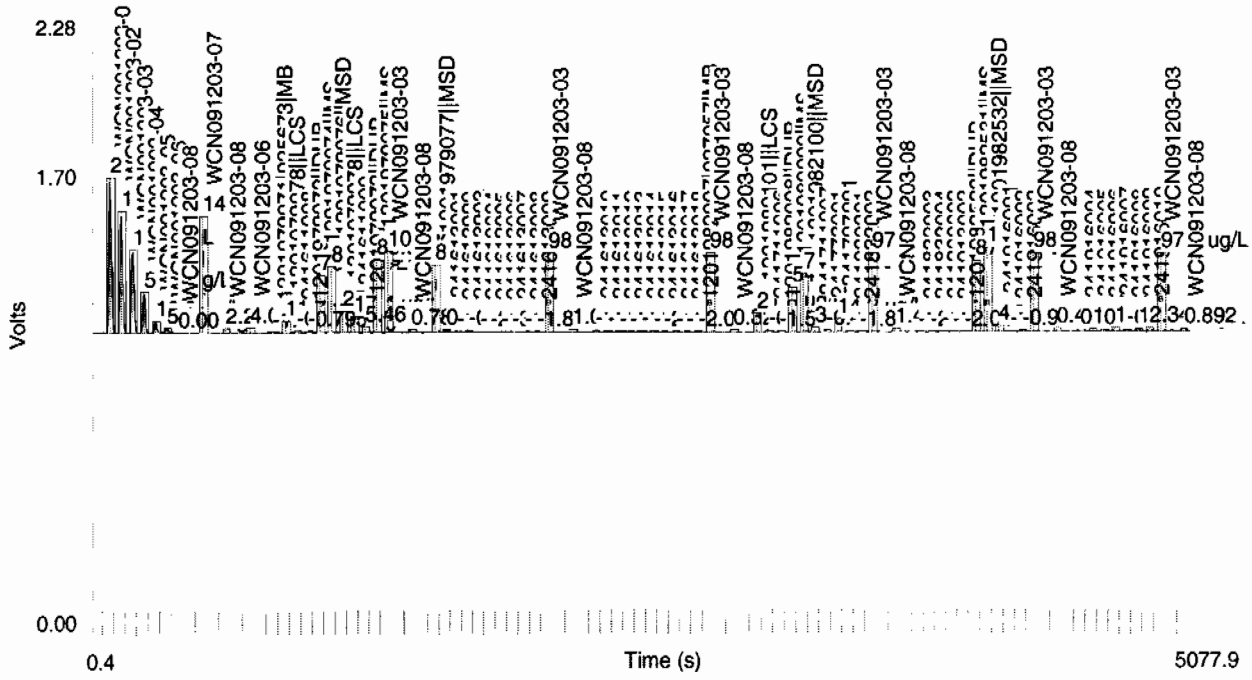

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.99	0.588	1.5	12/3/2009	10:49:12
2	150	1	6.19	0.459	-1.3	12/3/2009	10:50:04
3	100	1	4.24	0.313	-3.1	12/3/2009	10:50:56
4	50.0	1	2.09	0.153	1.3	12/3/2009	10:51:49
5	10.0	1	0.592	0.0436	-13.4	12/3/2009	10:52:42
6	5.00	1	0.278	0.0191	14.0	12/3/2009	10:53:36
7	0.00	1	0.0373	6.20e-4		12/3/2009	10:54:30

Figure 1: TCYANIDE

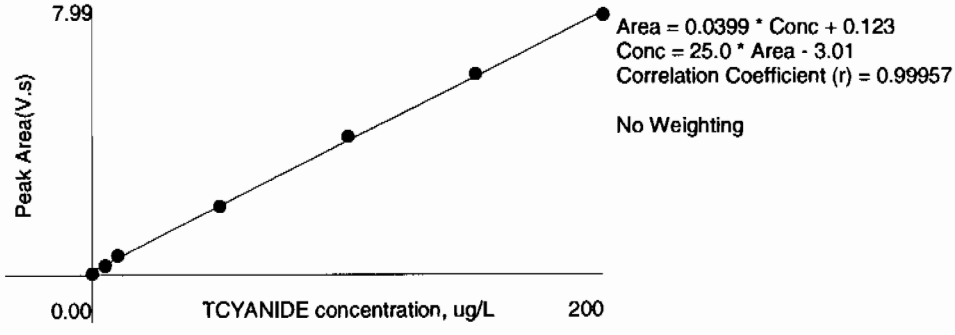

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
04-DEC-09			
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
	SW846 9012A	%Null%	
Batch ID:	**Sample Numbers:**		
927057	1201982099, 1201982100		

Potentially affected work order(s)(SDG): 241711(10-649),241773,241797(EUI-7408),241832(10-669),241838(10-670),241913(10-695),241916(10-697)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. Failed recovery for MS/MSD: QC 1201982099MS QC 1201982100MSD	1. The spike recovery falls outside of the client specified acceptance limits due to matrix interference. The Matrix spike duplicate verified the result with a passing RPD.

Originator's Name:

Ashley Earl 04-DEC-09

Data Validator/Group Leader:

Elzbieta Szulc 04-DEC-09

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-649-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	925671	**Method:**	SW846 9012A
Prep Batch :	925670	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241713001	RE03-10-7042
241713002	RE03-10-7043
1201979063	Method Blank (MB)
1201979065	241713001(RE03-10-7042) Sample Duplicate (DUP)
1201979067	241713001(RE03-10-7042) Matrix Spike (MS)
1201979069	241713001(RE03-10-7042) Matrix Spike Duplicate (MSD)
1201979070	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 241713001 (RE03-10-7042).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery for this sample set was within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201979065 (RE03-10-7042) and 241713001 (RE03-10-7042).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The following sample was re-analyzed due to instrument failure: 1201979063 (MB).

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 18Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-649-1 GEL Work Order: 241713

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-649-1

Client Sample ID: RE03-10-7042
Sample ID: 241713001
Matrix: W
Collect Date: 20-NOV-09 12:00
Receive Date: 24-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1341	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-649-1

Client Sample ID:	RE03-10-7043	Project:	LANL01004
Sample ID:	241713002	Client ID:	LANL010
Matrix:	W		
Collect Date:	20-NOV-09 12:00		
Receive Date:	24-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1344	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 4, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 925671										
QC1201979065 241713001 DUP										
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	12/01/09 13:41
QC1201979070 LCS										
Cyanide, Total	50.0				53.1	ug/L		106	(90%-110%)	12/01/09 13:17
QC1201979063 MB										
Cyanide, Total				U	5.00	ug/L				12/01/09 13:17
QC1201979067 241713001 MS										
Cyanide, Total	100	U	ND		109	ug/L		109	(60%-127%)	12/01/09 13:42
QC1201979069 241713001 MSD										
Cyanide, Total	100	U	ND		112	ug/L	2.71	112	(0%-20%)	12/01/09 13:43

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

QC Summary

Workorder: 241713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 04-DEC-2009 09:16

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-649-1**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**01-DEC-2009 13:10:42**	**OM_12-1-2009_13-00-11**	**153**	**150**	**102**	**(90%-110%)**	**Yes**
CCV	01-DEC-2009 13:25:01	OM_12-1-2009_13-00-11	105	100	105	(90%-110%)	Yes
CCV	01-DEC-2009 13:37:25	OM_12-1-2009_13-00-11	104	100	104	(90%-110%)	Yes
CCV	01-DEC-2009 13:49:49	OM_12-1-2009_13-00-11	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**01-DEC-2009 13:12:32**	**OM_12-1-2009_13-00-11**	**3.43**	**5**	**Yes**
CCB	01-DEC-2009 13:26:51	OM_12-1-2009_13-00-11	1.78	5	Yes
CCB	01-DEC-2009 13:39:15	OM_12-1-2009_13-00-11	0.953	5	Yes
CCB	01-DEC-2009 13:51:40	OM_12-1-2009_13-00-11	1.78	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925670

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979070	URF1184831-02	.0125	mL
MS	1201979066	URF1184831-02	.025	mL
MS	1201979067	URF1184831-02	.025	mL
MSD	1201979068	URF1184831-02	.025	mL
MSD	1201979069	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201979063		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
LCS	1201979070		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607001		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201979064	241607001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
MS	1201979066	241607001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201979068	241607001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607002		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607003		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607004		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607005		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607006		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607007		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607008		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607009		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607010		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607011		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607012		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607013		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241702007		EPA 335.4	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241713001		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
DUP	1201979065	241713001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
MS	1201979067	241713001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
MSD	1201979069	241713001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241713002		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835001		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835002		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835003		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835004		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091130-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/1/2009 13:03:33	OM_12-1-2009_13-00-11
150 ppb		1	axc2	12/1/2009 13:04:25	OM_12-1-2009_13-00-11
100 ppb		1	axc2	12/1/2009 13:05:17	OM_12-1-2009_13-00-11
50 ppb		1	axc2	12/1/2009 13:06:10	OM_12-1-2009_13-00-11
10 ppb		1	axc2	12/1/2009 13:07:03	OM_12-1-2009_13-00-11
CRDL 5.0 ppb		1	axc2	12/1/2009 13:07:57	OM_12-1-2009_13-00-11
ICAL-00		1	axc2	12/1/2009 13:08:52	OM_12-1-2009_13-00-11
ICV		1	axc2	12/1/2009 13:10:42	OM_12-1-2009_13-00-11
ICB		1	axc2	12/1/2009 13:12:32	OM_12-1-2009_13-00-11
CRDL		1	axc2	12/1/2009 13:14:22	OM_12-1-2009_13-00-11
1201979063*	925671	1	axc2	12/1/2009 13:16:12	OM_12-1-2009_13-00-11
1201979070	925671	1	axc2	12/1/2009 13:17:05	OM_12-1-2009_13-00-11
1201979063	925671	1	axc2	12/1/2009 13:17:58	OM_12-1-2009_13-00-11
241607001	925671	1	axc2	12/1/2009 13:18:52	OM_12-1-2009_13-00-11
1201979064	925671	1	axc2	12/1/2009 13:19:45	OM_12-1-2009_13-00-11
1201979066	925671	1	axc2	12/1/2009 13:20:38	OM_12-1-2009_13-00-11
1201979068	925671	1	axc2	12/1/2009 13:21:30	OM_12-1-2009_13-00-11
241607002	925671	1	axc2	12/1/2009 13:22:23	OM_12-1-2009_13-00-11
241607003	925671	1	axc2	12/1/2009 13:23:16	OM_12-1-2009_13-00-11
241607004	925671	1	axc2	12/1/2009 13:24:08	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:25:01	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:26:51	OM_12-1-2009_13-00-11
241607005	925671	1	axc2	12/1/2009 13:28:39	OM_12-1-2009_13-00-11
241607006	925671	1	axc2	12/1/2009 13:29:31	OM_12-1-2009_13-00-11
241607007	925671	1	axc2	12/1/2009 13:30:23	OM_12-1-2009_13-00-11
241607008	925671	1	axc2	12/1/2009 13:31:15	OM_12-1-2009_13-00-11
241607009	925671	1	axc2	12/1/2009 13:32:07	OM_12-1-2009_13-00-11
241607010	925671	1	axc2	12/1/2009 13:32:59	OM_12-1-2009_13-00-11
241607011	925671	1	axc2	12/1/2009 13:33:53	OM_12-1-2009_13-00-11
241607012	925671	1	axc2	12/1/2009 13:34:46	OM_12-1-2009_13-00-11
241607013	925671	1	axc2	12/1/2009 13:35:39	OM_12-1-2009_13-00-11
241702007	925671	1	axc2	12/1/2009 13:36:33	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:37:25	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:39:15	OM_12-1-2009_13-00-11
241713001	925671	1	axc2	12/1/2009 13:41:05	OM_12-1-2009_13-00-11
1201979065	925671	1	axc2	12/1/2009 13:41:57	OM_12-1-2009_13-00-11
1201979067	925671	1	axc2	12/1/2009 13:42:51	OM_12-1-2009_13-00-11
1201979069	925671	1	axc2	12/1/2009 13:43:43	OM_12-1-2009_13-00-11
241713002	925671	1	axc2	12/1/2009 13:44:36	OM_12-1-2009_13-00-11
241835001	925671	1	axc2	12/1/2009 13:45:28	OM_12-1-2009_13-00-11
241835002	925671	1	axc2	12/1/2009 13:46:21	OM_12-1-2009_13-00-11
241835003	925671	1	axc2	12/1/2009 13:47:13	OM_12-1-2009_13-00-11
241835004	925671	1	axc2	12/1/2009 13:48:05	OM_12-1-2009_13-00-11
1201980988	926535	1	axc2	12/1/2009 13:48:57	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:49:49	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:51:40	OM_12-1-2009_13-00-11
1201980995	926535	25	axc2	12/1/2009 13:53:27	OM_12-1-2009_13-00-11
241697003	926535	1	axc2	12/1/2009 13:54:22	OM_12-1-2009_13-00-11
241697004	926535	1	axc2	12/1/2009 13:55:16	OM_12-1-2009_13-00-11
241711001	926535	1	axc2	12/1/2009 13:56:09	OM_12-1-2009_13-00-11
241711002	926535	1	axc2	12/1/2009 13:57:02	OM_12-1-2009_13-00-11
241711003	926535	1	axc2	12/1/2009 13:57:56	OM_12-1-2009_13-00-11
241711004	926535	1	axc2	12/1/2009 13:58:49	OM_12-1-2009_13-00-11
241711005	926535	1	axc2	12/1/2009 13:59:42	OM_12-1-2009_13-00-11
241714002	926535	1	axc2	12/1/2009 14:00:35	OM_12-1-2009_13-00-11
1201980989	926535	1	axc2	12/1/2009 14:01:28	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 14:02:20	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 14:04:10	OM_12-1-2009_13-00-11

1201980991	926535	1	axc2	12/1/2009	14:05:59	OM_12-1-2009_13-00-11
1201980993	926535	1	axc2	12/1/2009	14:06:52	OM_12-1-2009_13-00-11
241718001	926535	1	axc2	12/1/2009	14:07:44	OM_12-1-2009_13-00-11
1201980990	926535	1	axc2	12/1/2009	14:08:36	OM_12-1-2009_13-00-11
1201980992	926535	1	axc2	12/1/2009	14:09:29	OM_12-1-2009_13-00-11
1201980994*	926535	1	axc2	12/1/2009	14:10:20	OM_12-1-2009_13-00-11
241728002	926535	1	axc2	12/1/2009	14:11:14	OM_12-1-2009_13-00-11
241756001	926535	1	axc2	12/1/2009	14:12:09	OM_12-1-2009_13-00-11
241756002	926535	1	axc2	12/1/2009	14:13:03	OM_12-1-2009_13-00-11
241756003	926535	1	axc2	12/1/2009	14:13:56	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:14:48	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:16:39	OM_12-1-2009_13-00-11
1201980994	926535	1	axc2	12/1/2009	14:18:28	OM_12-1-2009_13-00-11
241756004	926535	1	axc2	12/1/2009	14:19:21	OM_12-1-2009_13-00-11
241756005	926535	1	axc2	12/1/2009	14:20:15	OM_12-1-2009_13-00-11
241756006	926535	1	axc2	12/1/2009	14:21:08	OM_12-1-2009_13-00-11
241756007	926535	1	axc2	12/1/2009	14:22:01	OM_12-1-2009_13-00-11
241756008	926535	1	axc2	12/1/2009	14:22:54	OM_12-1-2009_13-00-11
241756009	926535	1	axc2	12/1/2009	14:23:47	OM_12-1-2009_13-00-11
241756010	926535	1	axc2	12/1/2009	14:24:40	OM_12-1-2009_13-00-11
1201983851	927798	1	axc2	12/1/2009	14:25:32	OM_12-1-2009_13-00-11
1201983855	927798	1	axc2	12/1/2009	14:26:24	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:27:17	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:29:07	OM_12-1-2009_13-00-11
240971001	927798	1	axc2	12/1/2009	14:30:56	OM_12-1-2009_13-00-11
241923001	927798	1	axc2	12/1/2009	14:31:47	OM_12-1-2009_13-00-11
1201983852	927798	1	axc2	12/1/2009	14:32:42	OM_12-1-2009_13-00-11
1201983853	927798	1	axc2	12/1/2009	14:33:36	OM_12-1-2009_13-00-11
1201983854	927798	1	axc2	12/1/2009	14:34:30	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:35:22	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:37:13	OM_12-1-2009_13-00-11

Author: axc2 Date : 12/2/2009

Original Run Filename: OM_12-1-2009_13-00-11.OMN created 12/1/2009 13:00:11
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-1-2009_13-00-11.OMN last modified 12/1/2009 14:38:18
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091201-01	1	S1	200	7.16	12/1/2009@13:03:33			200 ppb
WCN091201-02	1	S2	150	5.43	12/1/2009@13:04:25			150 ppb
WCN091201-03	1	S3	100	3.55	12/1/2009@13:05:17			100 ppb
WCN091201-04	1	S4	50.0	1.86	12/1/2009@13:06:10			50 ppb
WCN091201-05	1	S5	10.0	0.523	12/1/2009@13:07:03			10 ppb
WCN091201-06	1	S6	5.00	0.254	12/1/2009@13:07:57			CRDL 5.0 ppb
WCN091201-08	1	S7	0.00	0.0388	12/1/2009@13:08:52			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99983 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091201-07	1	S8	153	5.50	12/1/2009@13:10:42			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091201-08	1	S7	3.43	0.208	12/1/2009@13:12:32			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	3.43 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.43 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091201-06	1	S6	4.97	0.262	12/1/2009@13:14:22			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.97 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.97 > 2.50					
		Message	Pass					
		Action	None					
1201979063|925671|MB	1	1	595	21.1	12/1/2009@13:16:12			
1201979070||LCS	1	2	53.1	1.96	12/1/2009@13:17:05			
1201979063|925671|MB	1	1	-0.00784	0.0860	12/1/2009@13:17:58			
241607001	1	3	-1.63	0.0287	12/1/2009@13:18:52			
1201979064||DUP	1	4	-1.90	0.0191	12/1/2009@13:19:45			
1201979066||MS	1	5	107	3.89	12/1/2009@13:20:38			
1201979068||MSD	1	6	109	3.93	12/1/2009@13:21:30			
241607002	1	7	0.166	0.0922	12/1/2009@13:22:23			
241607003	1	8	-1.43	0.0358	12/1/2009@13:23:16			
241607004	1	9	-2.91	-0.0166	12/1/2009@13:24:08			
WCN091201-03	1	S3	105	3.80	12/1/2009@13:25:01			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.78	0.149	12/1/2009@13:26:51			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.78 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.78 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241607005	1	10	-2.82	-0.0135	12/1/2009@13:28:39			
241607006	1	11	-1.80	0.0228	12/1/2009@13:29:31			
241607007	1	12	-1.84	0.0213	12/1/2009@13:30:23			
241607008	1	13	-2.59	-0.00515	12/1/2009@13:31:15			
241607009	1	14	-3.10	-0.0235	12/1/2009@13:32:07			
241607010	1	15	-2.46	-7.16e-4	12/1/2009@13:32:59			
241607011	1	16	-2.36	0.00287	12/1/2009@13:33:53			
241607012	1	17	-2.53	-0.00327	12/1/2009@13:34:46			
241607013	1	18	-1.77	0.0238	12/1/2009@13:35:39			
241702007	1	19	-0.216	0.0787	12/1/2009@13:36:33			
WCN091201-03	1	S3	104	3.78	12/1/2009@13:37:25			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	0.953	0.120	12/1/2009@13:39:15			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.953 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.953 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241713001	1	20	-1.26	0.0418	12/1/2009@13:41:05			
1201979065||DUP	1	21	-1.91	0.0186	12/1/2009@13:41:57			
1201979067||MS	1	22	109	3.95	12/1/2009@13:42:51			
1201979069||MSD	1	23	112	4.05	12/1/2009@13:43:43			
241713002	1	24	0.877	0.117	12/1/2009@13:44:36			
241835001	1	25	-1.56	0.0311	12/1/2009@13:45:28			
241835002	1	26	-1.93	0.0181	12/1/2009@13:46:21			
241835003	1	27	-2.44	-3.77e-5	12/1/2009@13:47:13			
241835004	1	28	-2.45	-2.86e-4	12/1/2009@13:48:05			
1201980988|926535|MB	1	29	-1.68	0.0268	12/1/2009@13:48:57			
WCN091201-03	1	S3	105	3.82	12/1/2009@13:49:49			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.78	0.149	12/1/2009@13:51:40			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	1.78 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.78 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201980995||LCS	1	30	23.2	0.908	12/1/2009@13:53:27		25.00	
241697003	1	31	-0.298	0.0758	12/1/2009@13:54:22			
241697004	1	32	-0.407	0.0719	12/1/2009@13:55:16			
241711001	1	33	-0.863	0.0558	12/1/2009@13:56:09			
241711002	1	34	0.191	0.0931	12/1/2009@13:57:02			
241711003	1	35	-0.124	0.0819	12/1/2009@13:57:56			
241711004	1	36	-0.622	0.0643	12/1/2009@13:58:49			
241711005	1	37	0.169	0.0923	12/1/2009@13:59:42			
241714002	1	38	-1.37	0.0379	12/1/2009@14:00:35			
1201980989||DUP	1	39	-1.55	0.0314	12/1/2009@14:01:28			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:02:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.74	0.148	12/1/2009@14:04:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201980991||MS	1	40	101	3.68	12/1/2009@14:05:59			
1201980993||MSD	1	41	105	3.80	12/1/2009@14:06:52			
241718001	1	42	0.649	0.109	12/1/2009@14:07:44			
1201980990||DUP	1	43	-1.18	0.0444	12/1/2009@14:08:36			
1201980992||MS	1	44	103	3.75	12/1/2009@14:09:29			
1201980994||MSD	1	45	62.9	2.31	12/1/2009@14:10:20			
241728002	1	46	0.0647	0.0886	12/1/2009@14:11:14			
241756001	1	47	-1.78	0.0234	12/1/2009@14:12:09			
241756002	1	48	-1.24	0.0423	12/1/2009@14:13:03			
241756003	1	49	-2.56	-0.00415	12/1/2009@14:13:56			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:14:48			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.74	0.148	12/1/2009@14:16:39			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1201980994||MSD	1	45	103	3.74	12/1/2009@14:18:28			
241756004	1	50	1.85	0.152	12/1/2009@14:19:21			
241756005	1	51	-1.44	0.0355	12/1/2009@14:20:15			
241756006	1	52	-1.86	0.0205	12/1/2009@14:21:08			
241756007	1	53	-1.36	0.0381	12/1/2009@14:22:01			
241756008	1	54	-1.79	0.0230	12/1/2009@14:22:54			
241756009	1	55	-2.03	0.0145	12/1/2009@14:23:47			
241756010	1	56	-1.52	0.0324	12/1/2009@14:24:40			
1201983851|927798|MB	1	57	-1.88	0.0199	12/1/2009@14:25:32			
1201983855||LCS	1	58	53.6	1.98	12/1/2009@14:26:24			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:27:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	2.22	0.165	12/1/2009@14:29:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.22 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.22 > -5.00					
		Message	CCB Passed					
		Action	Continue					
240971001	1	59	27.8	1.07	12/1/2009@14:30:56			
241923001	1	60	-0.470	0.0697	12/1/2009@14:31:47			
1201983852||DUP	1	61	-1.85	0.0210	12/1/2009@14:32:42			
1201983853||MS	1	62	108	3.90	12/1/2009@14:33:36			
1201983854||MSD	1	63	110	3.97	12/1/2009@14:34:30			
WCN091201-03	1	S3	109	3.94	12/1/2009@14:35:22			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.42	0.137	12/1/2009@14:37:13			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.42 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.42 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-1-2009_13-00-11.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A

Author: axc2

Date : 12/2/2009

Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

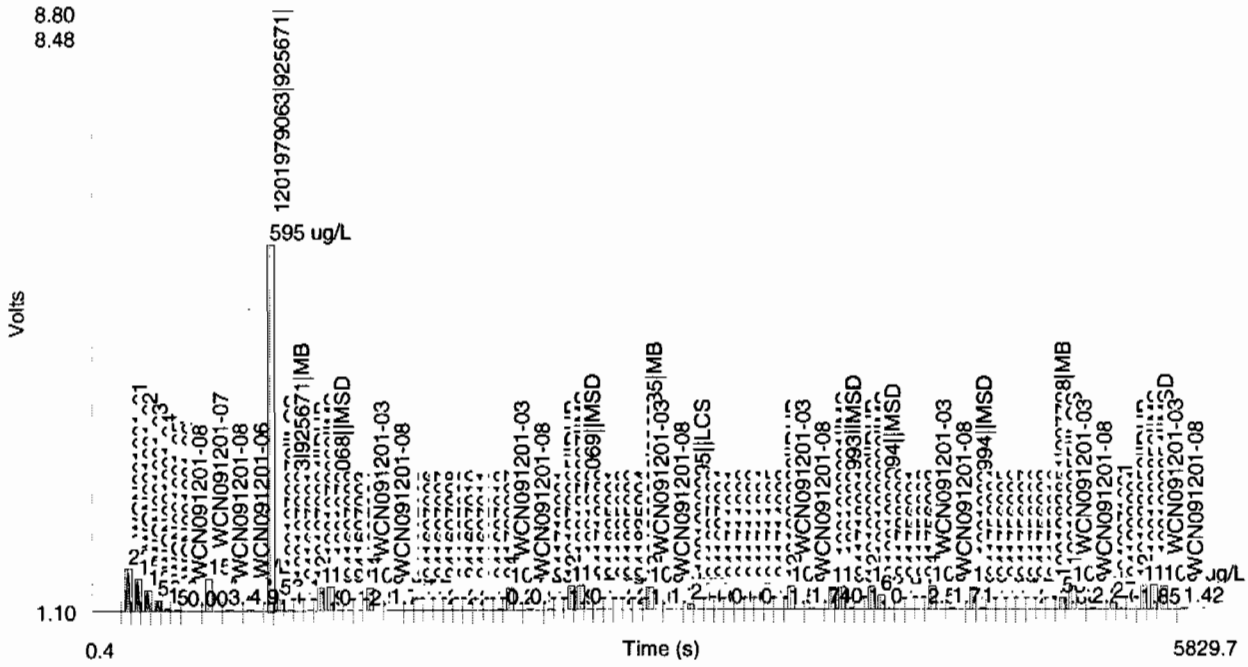

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.16	0.545	0.0	12/1/2009	13:04:36
2	150	1	5.43	0.414	-0.8	12/1/2009	13:05:28
3	100	1	3.55	0.271	2.0	12/1/2009	13:06:20
4	50.0	1	1.86	0.141	-0.4	12/1/2009	13:07:13
5	10.0	1	0.523	0.0389	-18.7	12/1/2009	13:08:06
6	5.00	1	0.254	0.0176	3.9	12/1/2009	13:09:00
7	0.00	1	0.0388	0.00121		12/1/2009	13:09:54

Author: axc2

Date : 12/2/2009

Figure 1: TCYANIDE

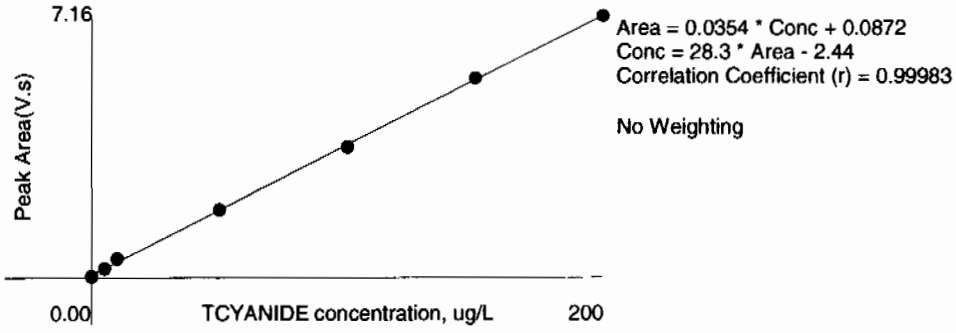

Friday, November 20, 2009

REQUEST NUMBER: 10-644

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-644

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/20/2009

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_PURGEABLE	1	RE03-10-2729	S	11/19/2009	
		2	RE03-10-2729	S	11/19/2009	
	SW-846:8082	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
	SW-846:8260B	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-09-14289	S	11/19/2009	
		2	RE03-09-14289	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		2	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6967	S	11/19/2009	
		2	RE03-10-6967	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
	SW-846:8270C	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	

Final Page of REQUEST NUMBER 10-644

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-644C

REQUEST NUMBER: 10-644

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14108	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14108	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14106	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14106	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14107	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14107	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14109	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14109	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14252	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14252	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14250	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14250	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14255	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14255	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14256	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14256	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14254	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14254	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14249	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14249	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14248	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14248	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14247	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14247	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14246	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14246	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14253	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14253	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14251	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14251	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14257	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14257	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-644C

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14289	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-14289	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-2729	1	GLASS	8260B+TPH-GRO	Ice	S
RE03-10-2729	2	GLASS	8260B+TPH-GRO	Ice	S
RE03-10-2729	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6967	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6967	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6969	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6969	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

11/20/09 3:00

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14249 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1008	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608414		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Roots present. Brown 7.5 YR 5/4

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.3 ppm
Background:
α: 24 dpm
β: 1567 ↓

Samples: & MDA

COLLECTED BY (PRINT) M. Shendo

REVIEWED BY (PRINT) J. Irelan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Irelan	11-19-09	(Printed Name) K. Greene	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14253 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1036	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608415		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Brown 7.5YR 5/3

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-3

FIELD SCREENING/MEASUREMENT RESULTS: PID Background: α 24 dpm β 1567 ↓ Samples: < MDA

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Jurek

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-19-09 1645	(Printed Name) K. Greene	11-19-09 1645
(Signature)		(Signature) [signature]	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14254 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1041	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608415		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Strong Brown 7.5YR5/6

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-3

FIELD SCREENING/MEASUREMENT RESULTS: PID: Background: α: 24 dpm β: 1567 ↓ Samples: 2 MDA

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-19-09	(Printed Name) K. Greene	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6969 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		~~1038~~ 1041	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	~~UNK~~	03-608415	FIELD QC TYPE:	FD	—
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	—
TOP DEPTH:	0	~~0~~ 4'	SAMPLE USAGE:	QC	—
BOTTOM DEPTH:	0	~~4~~ 5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of ~~RE03-09-14259~~ RE03-09-14254 11/19/09

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: ~~NA~~ PID: 0.0 ppm Background α 24 DPM β 1567 DPM Samples: LMA

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/19/09	(Printed Name) K. Greene	11/19/09
(Signature)	16:45	(Signature)	4:45
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6967 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1032	SUB-MEDIA:	OTHER	
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	~~LDW~~	03-608415	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 ~~2~~	UN 11-19-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14252

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) [illegible] REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/19/09 1645	(Printed Name) K. Greene (Signature) [signature]	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14289 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0806	SUB-MEDIA:	OTHER	
PRS ID:	~~C-00-007~~	60-00406	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1-2	NW 11-19-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14138-06 NW 11-19-09

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sherlo

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/19/09 1645	(Printed Name) K. Green (Signature) [signature]	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2742 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0845	SUB-MEDIA:	OTHER	
PRS ID:	~~60-002~~	60-004(b)	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-606399	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14109

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/19/09 1645	(Printed Name) ~~M. Rains~~ K. Greene (Signature) [signature]	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2755 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0921	SUB-MEDIA:	OTHER	
PRS ID:	~~60-002~~	60-004(b)	SAMPLE TECH CODE:	DC	
LOCATION ID:	~~UNK~~	03-608399	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14109

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Mick REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) K. Greene (Signature)	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14251 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	Air/H
TIME COLLECTED (HH:MM)		1017	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608414		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Light Brow 7.5YR 6/4

SAMPLE COMMENTS: NA

LOCATION DESC: 7(a)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.5 ppm Background: α: 24 dpm β: 1567 Samples: < MDA

COLLECTED BY (PRINT) M. Sterbo REVIEWED BY (PRINT) James Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-19-09	(Printed Name) K. Greene	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14252 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	All M
TIME COLLECTED (HH:MM)		1032	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608415		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand. Roots present. Brown 7.5YR 5/3

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-3

FIELD SCREENING/MEASUREMENT RESULTS: PID: Background: α: 24 dpm β: 1567 ↓ Samples: < MDA

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Jude

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) D. Thomas (Signature)	11-19-09 1645	(Printed Name) K. Green (Signature)	11-19-09 1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14106 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0806	SUB-MEDIA:	OTHER	LA
PRS ID:	60-004(b) ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		LA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand w/gravel Pink 5YR7/4

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 dpm

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/19/09	(Printed Name)	11/19/09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14250 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1013	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608414	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand Pinkish gray 7.5YR 6/2

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.6 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 ↓

COLLECTED BY (PRINT) M. Sherda REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-19-09	(Printed Name)	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14257 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1130	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608416		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand 7.5YR 7/1 light gray

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm Samples: 4MDA
Background:
α 24 dpm
β 1567 ↓

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11-19-09 1645	(Printed Name) (Signature)	11-19-09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14256 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AILH
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608416		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Light Brown 7.5YR 6/4

SAMPLE COMMENTS: NA

LOCATION DESC: 7(a)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.3 ppm Samples: < MDA
Background:
α 24 dpm
β 1567 ↓

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11-19-09 1645	(Printed Name) (Signature)	11-19-09 1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2729 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		0806	SUB-MEDIA:	SOIL	
PRS ID:	~~60-002~~	60-004(b)	SAMPLE TECH CODE:	HA	
LOCATION ID:	~~UNK~~	03-608399	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
2		8260B+TPH-GRO	125 ML GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14106

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8 ppm
Background:
α: 24 DPM
β: 1567 DPM
Samples: <MDA

COLLECTED BY (PRINT) M. Sherlo REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) (Signature)	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14109 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	~~NA~~	QB+3
TIME COLLECTED (HH:MM)		0900	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Tuff, QB+3. Pinkish gray 7.5YR 6/2

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 8.0 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 dpm

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 16:45	(Printed Name) (Signature)	11/19/09 4:45
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14255 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1118	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608416		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		—
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Roots present Light Brown 7.5YR 6/3

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: Samples: MDA

Background:
α 24 dpm
β 1567 ↓

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-19-09	(Printed Name)	11-19-09
(Signature)	1645	(Signature) [illegible]	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14108 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0827	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand. Light Brow 7.5YR 6/3

SAMPLE COMMENTS: Tuff hit at 4.5'

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 3.1 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 ↓

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) (Signature)	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14107 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		0817	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand. 7.5YR 4/3 Brown

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.6 ppm
Background:
α: 24 dpm
β: 1567 ↓
Samples: < MDA

COLLECTED BY (PRINT) M. Sparks

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) (Signature)	11/19/09 1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14248 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0955	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608413		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Tuff fill. ~~Fa~~ Silty Sand. Reddish Yellow 7.5YR6/6

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 3.8ppm Background: α: 24 dpm β: 1567 ↓ Samples: < MDA

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-19-09 1645	(Printed Name) M. Green (Signature)	11-19-09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14247 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0950	SUB-MEDIA:	OTHER	OK
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608413		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Brown 7.5YR5/3

SAMPLE COMMENTS: NA

LOCATION DESC: 7a-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8ppm
Background:
α: 24 dpm
β: 1567 ↓

Samples: LMDA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11-19-09 1645	(Printed Name) K. Greek (Signature) [signature]	11-19-09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14246 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	~~NA~~	All
TIME COLLECTED (HH:MM)		0943	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608413		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand fill. Brown 7.5YR5/3

SAMPLE COMMENTS: ~~Tuff at .8'~~ MW 11-19-09

LOCATION DESC: 7(a)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 4.7ppm Samples: 4 MDA
Background:
α: 24 dpm
β: 1015 67 dpm
JLJ 11-19-09

COLLECTED BY (PRINT) C. Horne REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains	11/19/09	(Printed Name) K. Greene	11/19/09
(Signature) Megan R	1645	(Signature)	1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6973 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1057	SUB-MEDIA:	OTHER	
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608416	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14255

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) K. Greene (Signature)	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6971 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1057	SUB-MEDIA:	OTHER	
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608416	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14255

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Bains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Bains (Signature)	1645 11/19/09	(Printed Name) L. Greene (Signature)	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-644 VALIDATION DATE: 1/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Acetone was detected in FTBs RE03-09-14289 and -10-6967. The acetone result for sample -09-14108, associated with FTB -09-14289, was a detect ≤5X the FTB concentration and, thus, was qualified U,V4d. The remaining associated samples 09-14106, -09-14107, -09-14109 and -10-2729 were NDs and, thus, were not qualified. The acetone results for samples 09-14252, 09-14253, -09-14254 and sample 10-6369, associated with FTB 09-6967, were NDs and, thus, were not qualified.
2. In the ICV/CCV associated with sample -09-14249, the %Ds for acetone; 2-butanone; 1,1,1-trichloroethane; carbon tetrachloride; and 2-hexanone were >20%. The associated sample results were NDs and, thus, were qualified UJ,V7c. In the ICV/CCV associated with all other samples, the %Ds for acetone; 2-butanone; 1,1,1-trichloroethane; 1,1-dichloropropene; carbon tetrachloride; and 2-hexanone were >20%. The acetone results for samples -09-14289 and -10-6967 were detects and, thus, were qualified J,V7c. All other associated sample results were NDs and, thus, were qualified UJ,V7c.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 1/28/10

DATA VALIDATION COVER SHEET	
5114-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943
Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615002**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 20:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:08**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n111.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10	
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10	
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52	
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52	
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14106	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:06	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n111.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Flt	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14107	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n112.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.387	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.82	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.42	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.42	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14107	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n112.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.82	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 19:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n110.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.367	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	J	3.11	ug/kg	1.79	5.39 U,V4d
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.39	ug/kg	1.72	5.39
75-09-2	Methylene chloride	U	5.39	ug/kg	2.16	5.39
75-15-0	Carbon disulfide	U	5.39	ug/kg	1.35	5.39
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.39	ug/kg	1.62	5.39 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.356	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.356	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.39	ug/kg	1.35	5.39
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.39	ug/kg	1.62	5.39 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 19:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n110.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.16	ug/kg	0.323	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615004	Date Received:	11/21/2009 09:00	%Moisture:	5.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14109	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	927711	Inst:	VOA4.I	Dilution:	1
Run Date:	11/30/2009 21:01	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/30/2009 18:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n113.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06	
74-87-3	Chloromethane	U	1.06	ug/kg	0.317	1.06	
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.317	1.06	
74-83-9	Bromomethane	U	1.06	ug/kg	0.317	1.06	
75-00-3	Chloroethane	U	1.06	ug/kg	0.317	1.06	
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.317	1.06	
67-64-1	Acetone	U	5.29	ug/kg	1.76	5.29	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.317	1.06	
74-88-4	Iodomethane	U	5.29	ug/kg	1.69	5.29	
75-09-2	Methylene chloride	U	5.29	ug/kg	2.11	5.29	
75-15-0	Carbon disulfide	U	5.29	ug/kg	1.32	5.29	
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.317	1.06	
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.317	1.06	
78-93-3	2-Butanone	U	5.29	ug/kg	1.59	5.29	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.317	1.06	
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.317	1.06	
67-66-3	Chloroform	U	1.06	ug/kg	0.317	1.06	
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.349	1.06	
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.317	1.06	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.317	1.06	
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.317	1.06	
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.317	1.06	
71-43-2	Benzene	U	1.06	ug/kg	0.317	1.06	
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.349	1.06	
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.317	1.06	
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.317	1.06	
74-95-3	Dibromomethane	U	1.06	ug/kg	0.317	1.06	
108-10-1	4-Methyl-2-pentanone	U	5.29	ug/kg	1.32	5.29	
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.317	1.06	
108-88-3	Toluene	U	1.06	ug/kg	0.317	1.06	
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.317	1.06	
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.317	1.06	
591-78-6	2-Hexanone	U	5.29	ug/kg	1.59	5.29	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.317	1.06	
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.317	1.06	
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.317	1.06	
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.317	1.06	
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.317	1.06	

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Volatile
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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n113.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.317	1.06
179601-23-1	m,p-Xylenes	U	2.11	ug/kg	0.317	2.11
95-47-6	o-Xylene	U	1.06	ug/kg	0.317	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.317	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.317	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.317	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.317	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.317	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.317	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.317	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.317	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.317	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.317	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.317	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.317	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.317	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.317	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.317	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.317	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.29	ug/kg	1.69	5.29
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.317	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615013	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14246	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n122.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.369	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.326	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.326	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.326	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.326	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.326	1.09
67-64-1	Acetone	U	5.43	ug/kg	1.80	5.43 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
74-88-4	Iodomethane	U	5.43	ug/kg	1.74	5.43
75-09-2	Methylene chloride	U	5.43	ug/kg	2.17	5.43
75-15-0	Carbon disulfide	U	5.43	ug/kg	1.36	5.43
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.326	1.09
78-93-3	2-Butanone	U	5.43	ug/kg	1.63	5.43 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.326	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.326	1.09 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.326	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.326	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.326	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.326	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.326	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.326	1.09
108-10-1	4-Methyl-2-pentanone	U	5.43	ug/kg	1.36	5.43
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.326	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.326	1.09
591-78-6	2-Hexanone	U	5.43	ug/kg	1.63	5.43 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.326	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.326	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.326	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.326	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.326	1.09

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615013	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14246	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n122.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.326	1.09
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.326	2.17
95-47-6	o-Xylene	U	1.09	ug/kg	0.326	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.326	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.326	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.326	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.326	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.326	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.326	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.326	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.326	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.326	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.326	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.326	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.43	ug/kg	1.74	5.43
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14247	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:40	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n121.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.379	1.12	
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12	
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12	
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12	
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12	
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12	
67-64-1	Acetone	U	5.58	ug/kg	1.85	5.58	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
74-88-4	Iodomethane	U	5.58	ug/kg	1.78	5.58	
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58	
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.39	5.58	
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12	
78-93-3	2-Butanone	U	5.58	ug/kg	1.67	5.58	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12	
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.368	1.12	
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12	
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12	
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12	
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12	
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.368	1.12	
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12	
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12	
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.39	5.58	
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12	
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12	
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12	
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12	
591-78-6	2-Hexanone	U	5.58	ug/kg	1.67	5.58	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12	
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12	
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12	
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14247	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:40	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n121.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.78	5.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615011	Date Received:	11/21/2009 09:00	%Moisture:	10.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14248	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	927711	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 00:13	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/30/2009 18:16	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n120.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12	
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12	
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12	
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12	
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12	
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12	
67-64-1	Acetone	U	5.59	ug/kg	1.86	5.59	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12	
74-88-4	Iodomethane	U	5.59	ug/kg	1.79	5.59	
75-09-2	Methylene chloride	U	5.59	ug/kg	2.24	5.59	
75-15-0	Carbon disulfide	U	5.59	ug/kg	1.40	5.59	
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12	
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12	
78-93-3	2-Butanone	U	5.59	ug/kg	1.68	5.59	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12	
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12	
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12	
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12	
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12	
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12	
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12	
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12	
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12	
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12	
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12	
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12	
108-10-1	4-Methyl-2-pentanone	U	5.59	ug/kg	1.40	5.59	
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12	
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12	
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12	
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12	
591-78-6	2-Hexanone	U	5.59	ug/kg	1.68	5.59	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12	
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12	
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12	
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12	
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14248	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:13	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n120.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.59	ug/kg	1.79	5.59
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615010**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14249**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 20:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 19:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11 UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615010**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14249**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 20:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 19:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.56	ug/kg	1.78	5.56
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615006**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14250**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 21:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n115.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07	
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07	
67-64-1	Acetone	U	5.37	ug/kg	1.78	5.37	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37	
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37	
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.355	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.355	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
591-78-6	2-Hexanone	U	5.37	ug/kg	1.61	5.37	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615006**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14250**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 21:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n115.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
541-05-9	Cyclotrisiloxane, hexamethyl-	12.47	9.25	ug/kg	86	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n124.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n124.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n114.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.78	5.35 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.61	5.35 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.61	5.35 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14252**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 21:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n114.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:35	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:19	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n123.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.50	ug/kg	1.83	5.50 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.50	ug/kg	1.76	5.50
75-09-2	Methylene chloride	U	5.50	ug/kg	2.20	5.50
75-15-0	Carbon disulfide	U	5.50	ug/kg	1.38	5.50
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.50	ug/kg	1.65	5.50 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.50	ug/kg	1.38	5.50
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.50	ug/kg	1.65	5.50 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:35	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:19	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n123.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.50	ug/kg	1.76	5.50
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 23:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n118.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.361	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.319	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.319	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.319	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.319	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.319	1.06
67-64-1	Acetone	U	5.31	ug/kg	1.76	5.31 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
74-88-4	Iodomethane	U	5.31	ug/kg	1.70	5.31
75-09-2	Methylene chloride	U	5.31	ug/kg	2.12	5.31
75-15-0	Carbon disulfide	U	5.31	ug/kg	1.33	5.31
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.319	1.06
78-93-3	2-Butanone	U	5.31	ug/kg	1.59	5.31 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.319	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.319	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.351	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.319	1.06 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.319	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.319	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.319	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.319	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.351	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.319	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.319	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.319	1.06
108-10-1	4-Methyl-2-pentanone	U	5.31	ug/kg	1.33	5.31
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.319	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.319	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.319	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.319	1.06
591-78-6	2-Hexanone	U	5.31	ug/kg	1.59	5.31 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.319	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.319	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.319	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.319	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.319	1.06

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 23:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n118.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.319	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.319	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.319	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.319	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.319	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.319	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.319	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.319	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.319	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.319	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.319	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.319	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.319	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.319	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.319	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.319	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.319	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.319	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.319	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.31	ug/kg	1.70	5.31
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.319	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615007	Date Received:	11/21/2009 09:00	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14255	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	927711	Inst:	VOA4.I	Dilution:	1
Run Date:	11/30/2009 22:23	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/30/2009 18:13	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n116.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10	
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10	
67-64-1	Acetone	U	5.51	ug/kg	1.83	5.51	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
74-88-4	Iodomethane	U	5.51	ug/kg	1.76	5.51	
75-09-2	Methylene chloride	U	5.51	ug/kg	2.20	5.51	
75-15-0	Carbon disulfide	U	5.51	ug/kg	1.38	5.51	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
78-93-3	2-Butanone	U	5.51	ug/kg	1.65	5.51	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.51	ug/kg	1.38	5.51	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
591-78-6	2-Hexanone	U	5.51	ug/kg	1.65	5.51	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n116.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.331	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.51	ug/kg	1.76	5.51
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14256	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:51	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n117.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.371	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.45	ug/kg	1.81	5.45 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.45	ug/kg	1.74	5.45
75-09-2	Methylene chloride	U	5.45	ug/kg	2.18	5.45
75-15-0	Carbon disulfide	U	5.45	ug/kg	1.36	5.45
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.45	ug/kg	1.63	5.45 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.45	ug/kg	1.36	5.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.45	ug/kg	1.63	5.45 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

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Volatile
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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14256	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:51	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n117.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.45	ug/kg	1.74	5.45
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14257	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:29	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n125.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.01	ug/kg	0.344	1.01
74-87-3	Chloromethane	U	1.01	ug/kg	0.303	1.01
75-01-4	Vinyl chloride	U	1.01	ug/kg	0.303	1.01
74-83-9	Bromomethane	U	1.01	ug/kg	0.303	1.01
75-00-3	Chloroethane	U	1.01	ug/kg	0.303	1.01
75-69-4	Trichlorofluoromethane	U	1.01	ug/kg	0.303	1.01
67-64-1	Acetone	U	5.06	ug/kg	1.68	5.06 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
74-88-4	Iodomethane	U	5.06	ug/kg	1.62	5.06
75-09-2	Methylene chloride	U	5.06	ug/kg	2.02	5.06
75-15-0	Carbon disulfide	U	5.06	ug/kg	1.26	5.06
156-60-5	trans-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
75-34-3	1,1-Dichloroethane	U	1.01	ug/kg	0.303	1.01
78-93-3	2-Butanone	U	5.06	ug/kg	1.52	5.06 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
594-20-7	2,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
67-66-3	Chloroform	U	1.01	ug/kg	0.303	1.01
74-97-5	Bromochloromethane	U	1.01	ug/kg	0.334	1.01
71-55-6	1,1,1-Trichloroethane	U	1.01	ug/kg	0.303	1.01 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.01	ug/kg	0.303	1.01
56-23-5	Carbon tetrachloride	U	1.01	ug/kg	0.303	1.01
107-06-2	1,2-Dichloroethane	U	1.01	ug/kg	0.303	1.01
71-43-2	Benzene	U	1.01	ug/kg	0.303	1.01
79-01-6	Trichloroethylene	U	1.01	ug/kg	0.334	1.01
78-87-5	1,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
75-27-4	Bromodichloromethane	U	1.01	ug/kg	0.303	1.01
74-95-3	Dibromomethane	U	1.01	ug/kg	0.303	1.01
108-10-1	4-Methyl-2-pentanone	U	5.06	ug/kg	1.26	5.06
10061-01-5	cis-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
108-88-3	Toluene	U	1.01	ug/kg	0.303	1.01
10061-02-6	trans-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
79-00-5	1,1,2-Trichloroethane	U	1.01	ug/kg	0.303	1.01
591-78-6	2-Hexanone	U	5.06	ug/kg	1.52	5.06 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.01	ug/kg	0.303	1.01
127-18-4	Tetrachloroethylene	U	1.01	ug/kg	0.303	1.01
124-48-1	Dibromochloromethane	U	1.01	ug/kg	0.303	1.01
106-93-4	1,2-Dibromoethane	U	1.01	ug/kg	0.303	1.01
108-90-7	Chlorobenzene	U	1.01	ug/kg	0.303	1.01

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Volatile
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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14257	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:29	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n125.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.01	ug/kg	0.303	1.01
179601-23-1	m,p-Xylenes	U	2.02	ug/kg	0.303	2.02
95-47-6	o-Xylene	U	1.01	ug/kg	0.303	1.01
100-42-5	Styrene	U	1.01	ug/kg	0.303	1.01
75-25-2	Bromoform	U	1.01	ug/kg	0.303	1.01
79-34-5	1,1,2,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
96-18-4	1,2,3-Trichloropropane	U	1.01	ug/kg	0.303	1.01
108-86-1	Bromobenzene	U	1.01	ug/kg	0.303	1.01
103-65-1	n-Propylbenzene	U	1.01	ug/kg	0.303	1.01
95-49-8	2-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-82-8	Isopropylbenzene	U	1.01	ug/kg	0.303	1.01
108-67-8	1,3,5-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
106-43-4	4-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-06-6	tert-Butylbenzene	U	1.01	ug/kg	0.303	1.01
95-63-6	1,2,4-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
135-98-8	sec-Butylbenzene	U	1.01	ug/kg	0.303	1.01
99-87-6	4-Isopropyltoluene	U	1.01	ug/kg	0.303	1.01
541-73-1	1,3-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
106-46-7	1,4-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
104-51-8	n-Butylbenzene	U	1.01	ug/kg	0.303	1.01
96-12-8	1,2-Dibromo-3-chloropropane	U	1.01	ug/kg	0.303	1.01
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.06	ug/kg	1.62	5.06
630-20-6	1,1,1,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
95-50-1	1,2-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615017	**Date Received:**	11/21/2009 09:00		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14289	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 18:44	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:05	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n108.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	2.18	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615017	**Date Received:**	11/21/2009 09:00		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14289	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 18:44	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:05	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n108.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:56	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n126.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:56	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n126.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615019**	**Date Received:**	**11/21/2009 09:00**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6967**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 19:11**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	1.95	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615019	**Date Received:**	11/21/2009 09:00		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6967	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 19:11	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n109.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 03:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n127.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.26	ug/kg	1.74	5.26 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.26	ug/kg	1.68	5.26
75-09-2	Methylene chloride	U	5.26	ug/kg	2.10	5.26
75-15-0	Carbon disulfide	U	5.26	ug/kg	1.31	5.26
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.26	ug/kg	1.58	5.26 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05 UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.26	ug/kg	1.31	5.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.26	ug/kg	1.58	5.26 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 03:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n127.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.26	ug/kg	1.68	5.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

AMF
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DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-644 VALIDATION DATE: 1/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV/CCV %DS for pyridine; benzyl alcohol; hexachlorocyclopentadiene; 3-nitroaniline; and 2-methyl-4,6-dinitrophenol were >20%. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The surrogate %R for 2,4,6-tribromophenol was > the laboratory UAL in the LCS. The infraction occurred in a QC sample, thus, no sample results were qualified.
3. The LCS %R for hexachlorocyclopentadiene was > the laboratory UAL. The associated sample results were NDs and, thus, were not qualified.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 1/28/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☒	☐	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☒	☐	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14106	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 16:02	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110315.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.2	366	
108-95-2	Phenol	U	366	ug/kg	73.2	366	
95-57-8	2-Chlorophenol	U	366	ug/kg	73.2	366	
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.2	366	
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.2	366	
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.2	366	
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6	
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366	
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366	
87-86-5	Pentachlorophenol	U	366	ug/kg	91.5	366	
129-00-0	Pyrene	J	32.3	ug/kg	11.0	36.6	
110-86-1	Pyridine	U	366	ug/kg	73.2	366	UJ,SV7c
62-53-3	Aniline	U	366	ug/kg	110	366	
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.2	366	
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.2	366	
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.2	366	
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.2	366	
95-48-7	o-Cresol	U	366	ug/kg	73.2	366	
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366	
67-72-1	Hexachloroethane	U	366	ug/kg	73.2	366	
98-95-3	Nitrobenzene	U	366	ug/kg	73.2	366	
78-59-1	Isophorone	U	366	ug/kg	73.2	366	
88-75-5	2-Nitrophenol	U	366	ug/kg	73.2	366	
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366	
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.2	366	
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.2	366	
65-85-0	Benzoic acid	U	732	ug/kg	183	732	
91-20-3	Naphthalene	J	16.8	ug/kg	11.0	36.6	
106-47-8	4-Chloroaniline	U	366	ug/kg	73.2	366	
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.2	366	
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.32	36.6	
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.2	366	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.2	366	
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.2	366	
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	366	ug/kg	73.2	366	
99-09-2	3-Nitroaniline	U	366	ug/kg	73.2	366	UJ,SV7c

AMF
1/28/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615002**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14106**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:02**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s110315.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	366	ug/kg	73.2	366	
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366	
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6	
51-28-5	2,4-Dinitrophenol	U	732	ug/kg	139	732	
132-64-9	Dibenzofuran	U	366	ug/kg	73.2	366	
84-66-2	Diethylphthalate	U	366	ug/kg	73.2	366	
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6	
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.2	366	
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.2	366	UJ,SV7c
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	366	ug/kg	73.2	366	
122-66-7	Azobenzene	U	366	ug/kg	73.2	366	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.2	366	
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.2	366	
85-01-8	Phenanthrene		46.4	ug/kg	11.0	36.6	
120-12-7	Anthracene	U	36.6	ug/kg	7.32	36.6	
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.2	366	
206-44-0	Fluoranthene		39.8	ug/kg	11.0	36.6	
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.2	366	
56-55-3	Benzo(a)anthracene	J	18.7	ug/kg	11.0	36.6	
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366	
218-01-9	Chrysene	J	18.0	ug/kg	11.0	36.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.2	366	
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.2	366	
205-99-2	Benzo(b)fluoranthene		122	ug/kg	11.0	36.6	
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6	
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6	
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6	
191-24-2	Benzo(ghi)perylene	J	13.3	ug/kg	11.0	36.6	
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.2	366	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	204	ug/kg		J
	Unknown Aldol Condensate	2.95	1840	ug/kg		JA

AMF
1/28/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615003	Date Received:	11/21/2009 09:00	%Moisture:	12.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14107	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:25	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s110316.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.7	379
108-95-2	Phenol	U	379	ug/kg	75.7	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.7	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.7	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.7	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.7	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.6	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.7	379 UJ,SV7c
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.7	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.7	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.7	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.7	379
95-48-7	o-Cresol	U	379	ug/kg	75.7	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.7	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.7	379
78-59-1	Isophorone	U	379	ug/kg	75.7	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.7	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.7	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.7	379
65-85-0	Benzoic acid	U	757	ug/kg	189	757
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.7	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.7	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.57	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.7	379 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.7	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.7	379
91-58-7	2-Chloronaphthalene	U	37.9	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	379	ug/kg	75.7	379
99-09-2	3-Nitroaniline	U	379	ug/kg	75.7	379 UJ,SV7c

AMF
1/28/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615003	Date Received:	11/21/2009 09:00	%Moisture:	12.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14107	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:25	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s110316.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	379	ug/kg	75.7	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	757	ug/kg	144	757
132-64-9	Dibenzofuran	U	379	ug/kg	75.7	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.7	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.7	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.7	379 UJ,SV7c
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	p-Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.7	379
122-66-7	Azobenzene	U	379	ug/kg	75.7	379
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.7	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.7	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.57	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.7	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.7	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.7	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.7	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.7	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1740	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 15:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110314.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.5	357
108-95-2	Phenol	U	357	ug/kg	71.5	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.5	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.5	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.5	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.5	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.3	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.5	357 UJ,SV7c
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.5	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.5	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.5	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.5	357
95-48-7	o-Cresol	U	357	ug/kg	71.5	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.5	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.5	357
78-59-1	Isophorone	U	357	ug/kg	71.5	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.5	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.5	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.5	357
65-85-0	Benzoic acid	U	715	ug/kg	179	715
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.5	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.5	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.15	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.5	357 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.5	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.5	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	357	ug/kg	71.5	357
99-09-2	3-Nitroaniline	U	357	ug/kg	71.5	357 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615001	Date Received:	11/21/2009 09:00	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14108	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 15:39	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s110314.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	357	ug/kg	71.5	357	
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357	
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7	
51-28-5	2,4-Dinitrophenol	U	715	ug/kg	136	715	
132-64-9	Dibenzofuran	U	357	ug/kg	71.5	357	
84-66-2	Diethylphthalate	U	357	ug/kg	71.5	357	
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7	
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.5	357	
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.5	357	UJ,SV7c
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	357	ug/kg	71.5	357	
122-66-7	Azobenzene	U	357	ug/kg	71.5	357	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.5	357	
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.5	357	
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7	
120-12-7	Anthracene	U	35.7	ug/kg	7.15	35.7	
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.5	357	
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7	
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.5	357	
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7	
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357	
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.5	357	
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.5	357	
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7	
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7	
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7	
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7	
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7	
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.5	357	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.64	310	ug/kg		J
	Unknown	1.78	295	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 15:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110314.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1550	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615004	Date Received:	11/21/2009 09:00	%Moisture:	5.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14109	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:48	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s110317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	351	ug/kg	70.1	351
108-95-2	Phenol	U	351	ug/kg	70.1	351
95-57-8	2-Chlorophenol	U	351	ug/kg	70.1	351
106-46-7	1,4-Dichlorobenzene	U	351	ug/kg	70.1	351
621-64-7	N-Nitrosodipropylamine	U	351	ug/kg	70.1	351
59-50-7	4-Chloro-3-methylphenol	U	351	ug/kg	70.1	351
83-32-9	Acenaphthene	U	35.1	ug/kg	11.6	35.1
121-14-2	2,4-Dinitrotoluene	U	351	ug/kg	35.1	351
100-02-7	4-Nitrophenol	U	351	ug/kg	116	351
87-86-5	Pentachlorophenol	U	351	ug/kg	87.7	351
129-00-0	Pyrene	U	35.1	ug/kg	10.5	35.1
110-86-1	Pyridine	U	351	ug/kg	70.1	351 UJ,SV7c
62-53-3	Aniline	U	351	ug/kg	105	351
111-44-4	bis(2-Chloroethyl) ether	U	351	ug/kg	70.1	351
541-73-1	1,3-Dichlorobenzene	U	351	ug/kg	70.1	351
100-51-6	Benzyl alcohol	U	351	ug/kg	105	351 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	351	ug/kg	70.1	351
108-60-1	bis(2-Chloroisopropyl)ether	U	351	ug/kg	70.1	351
95-48-7	o-Cresol	U	351	ug/kg	70.1	351
65794-96-9	m,p-Cresols	U	351	ug/kg	105	351
67-72-1	Hexachloroethane	U	351	ug/kg	70.1	351
98-95-3	Nitrobenzene	U	351	ug/kg	70.1	351
78-59-1	Isophorone	U	351	ug/kg	70.1	351
88-75-5	2-Nitrophenol	U	351	ug/kg	70.1	351
105-67-9	2,4-Dimethylphenol	U	351	ug/kg	123	351
111-91-1	bis(2-Chloroethoxy)methane	U	351	ug/kg	70.1	351
120-83-2	2,4-Dichlorophenol	U	351	ug/kg	70.1	351
65-85-0	Benzoic acid	U	701	ug/kg	175	701
91-20-3	Naphthalene	U	35.1	ug/kg	10.5	35.1
106-47-8	4-Chloroaniline	U	351	ug/kg	70.1	351
87-68-3	Hexachlorobutadiene	U	351	ug/kg	70.1	351
91-57-6	2-Methylnaphthalene	U	35.1	ug/kg	7.01	35.1
77-47-4	Hexachlorocyclopentadiene	U	351	ug/kg	70.1	351 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	351	ug/kg	70.1	351
95-95-4	2,4,5-Trichlorophenol	U	351	ug/kg	70.1	351
91-58-7	2-Chloronaphthalene	U	35.1	ug/kg	11.6	35.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	351	ug/kg	70.1	351
99-09-2	3-Nitroaniline	U	351	ug/kg	70.1	351 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 16:48	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s110317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	351	ug/kg	70.1	351
606-20-2	2,6-Dinitrotoluene	U	351	ug/kg	35.1	351
208-96-8	Acenaphthylene	U	35.1	ug/kg	10.5	35.1
51-28-5	2,4-Dinitrophenol	U	701	ug/kg	133	701
132-64-9	Dibenzofuran	U	351	ug/kg	70.1	351
84-66-2	Diethylphthalate	U	351	ug/kg	70.1	351
86-73-7	Fluorene	U	35.1	ug/kg	10.5	35.1
7005-72-3	4-Chlorophenylphenylether	U	351	ug/kg	70.1	351
534-52-1	2-Methyl-4,6-dinitrophenol	U	351	ug/kg	70.1	351 UJ,SV7c
100-01-6	4-Nitroaniline	U	351	ug/kg	105	351
	p-Nitroaniline					
122-39-4	Diphenylamine	U	351	ug/kg	70.1	351
122-66-7	Azobenzene	U	351	ug/kg	70.1	351
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	351	ug/kg	70.1	351
118-74-1	Hexachlorobenzene	U	351	ug/kg	70.1	351
85-01-8	Phenanthrene	U	35.1	ug/kg	10.5	35.1
120-12-7	Anthracene	U	35.1	ug/kg	7.01	35.1
84-74-2	Di-n-butylphthalate	U	351	ug/kg	70.1	351
206-44-0	Fluoranthene	U	35.1	ug/kg	10.5	35.1
85-68-7	Butylbenzylphthalate	U	351	ug/kg	70.1	351
56-55-3	Benzo(a)anthracene	U	35.1	ug/kg	10.5	35.1
91-94-1	3,3'-Dichlorobenzidine	U	351	ug/kg	105	351
218-01-9	Chrysene	U	35.1	ug/kg	10.5	35.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	351	ug/kg	70.1	351
117-84-0	Di-n-octylphthalate	U	351	ug/kg	70.1	351
205-99-2	Benzo(b)fluoranthene	U	35.1	ug/kg	10.5	35.1
207-08-9	Benzo(k)fluoranthene	U	35.1	ug/kg	10.5	35.1
50-32-8	Benzo(a)pyrene	U	35.1	ug/kg	10.5	35.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.1	ug/kg	10.5	35.1
53-70-3	Dibenzo(a,h)anthracene	U	35.1	ug/kg	10.5	35.1
191-24-2	Benzo(ghi)perylene	U	35.1	ug/kg	10.5	35.1
120-82-1	1,2,4-Trichlorobenzene	U	351	ug/kg	70.1	351

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	454	ug/kg		J
	Unknown	1.78	268	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 16:48	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s110317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1520	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14246	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 20:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110326.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.4	362
108-95-2	Phenol	U	362	ug/kg	72.4	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.4	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.4	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.4	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.4	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.5	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.4	362 UJ,SV7c
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.4	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.4	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.4	362
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.4	362
95-48-7	o-Cresol	U	362	ug/kg	72.4	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.4	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.4	362
78-59-1	Isophorone	U	362	ug/kg	72.4	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.4	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.4	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.4	362
65-85-0	Benzoic acid	U	724	ug/kg	181	724
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.4	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.4	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.24	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.4	362 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.4	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.4	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	362	ug/kg	72.4	362
99-09-2	3-Nitroaniline	U	362	ug/kg	72.4	362 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14246	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 20:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110326.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	362	ug/kg	72.4	362
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	U	724	ug/kg	138	724
132-64-9	Dibenzofuran	U	362	ug/kg	72.4	362
84-66-2	Diethylphthalate	U	362	ug/kg	72.4	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.4	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.4	362 UJ,SV7c
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
	p-Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.4	362
122-66-7	Azobenzene	U	362	ug/kg	72.4	362
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.4	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.4	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.24	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.4	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.4	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.4	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.4	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.4	362

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	388	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615012	Date Received:	11/21/2009 09:00	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14247	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:55	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s110325.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.3	372	
108-95-2	Phenol	U	372	ug/kg	74.3	372	
95-57-8	2-Chlorophenol	U	372	ug/kg	74.3	372	
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.3	372	
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.3	372	
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.3	372	
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2	
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372	
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372	
87-86-5	Pentachlorophenol	U	372	ug/kg	92.9	372	
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2	
110-86-1	Pyridine	U	372	ug/kg	74.3	372	UJ,SV7c
62-53-3	Aniline	U	372	ug/kg	112	372	
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.3	372	
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.3	372	
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.3	372	
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.3	372	
95-48-7	o-Cresol	U	372	ug/kg	74.3	372	
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372	
67-72-1	Hexachloroethane	U	372	ug/kg	74.3	372	
98-95-3	Nitrobenzene	U	372	ug/kg	74.3	372	
78-59-1	Isophorone	U	372	ug/kg	74.3	372	
88-75-5	2-Nitrophenol	U	372	ug/kg	74.3	372	
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372	
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.3	372	
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.3	372	
65-85-0	Benzoic acid	U	743	ug/kg	186	743	
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2	
106-47-8	4-Chloroaniline	U	372	ug/kg	74.3	372	
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.3	372	
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.43	37.2	
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.3	372	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.3	372	
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.3	372	
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	372	ug/kg	74.3	372	
99-09-2	3-Nitroaniline	U	372	ug/kg	74.3	372	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14247	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 19:55	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s110325.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.3	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	372	ug/kg	74.3	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.3	372
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.3	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.3	372 UJ,SV7c
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.3	372
122-66-7	Azobenzene	U	372	ug/kg	74.3	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.3	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.3	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.43	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.3	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.3	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.3	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.3	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.3	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	375	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615011	Date Received:	11/21/2009 09:00	%Moisture:	10.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14248	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	s110324.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.1	370
108-95-2	Phenol	U	370	ug/kg	74.1	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.1	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.1	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.1	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.1	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.6	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.1	370 UJ,SV7c
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.1	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.1	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.1	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.1	370
95-48-7	o-Cresol	U	370	ug/kg	74.1	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.1	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.1	370
78-59-1	Isophorone	U	370	ug/kg	74.1	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.1	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.1	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.1	370
65-85-0	Benzoic acid	U	741	ug/kg	185	741
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.1	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.1	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.41	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.1	370 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.1	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.1	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	370	ug/kg	74.1	370
99-09-2	3-Nitroaniline	U	370	ug/kg	74.1	370 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615011	Date Received:	11/21/2009 09:00	%Moisture:	10.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14248	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	s110324.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	370	ug/kg	74.1	370	
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370	
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0	
51-28-5	2,4-Dinitrophenol	U	741	ug/kg	141	741	
132-64-9	Dibenzofuran	U	370	ug/kg	74.1	370	
84-66-2	Diethylphthalate	U	370	ug/kg	74.1	370	
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0	
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.1	370	
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.1	370	UJ,SV7c
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	370	ug/kg	74.1	370	
122-66-7	Azobenzene	U	370	ug/kg	74.1	370	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.1	370	
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.1	370	
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0	
120-12-7	Anthracene	U	37.0	ug/kg	7.41	37.0	
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.1	370	
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0	
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.1	370	
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0	
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370	
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.1	370	
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.1	370	
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0	
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0	
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0	
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0	
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0	
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.1	370	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	428	ug/kg		JA
	Unknown	8.58	157	ug/kg		J

AMF
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615011	Date Received:	11/21/2009 09:00	%Moisture:	10.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14248	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	s110324.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.81	167	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14249	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 19:08	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s110323.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.7	369
108-95-2	Phenol	U	369	ug/kg	73.7	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.7	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.7	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.7	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.7	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.1	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.7	369 UJ,SV7c
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.7	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.7	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.7	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.7	369
95-48-7	o-Cresol	U	369	ug/kg	73.7	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.7	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.7	369
78-59-1	Isophorone	U	369	ug/kg	73.7	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.7	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.7	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.7	369
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.7	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.7	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.37	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.7	369 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.7	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.7	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	369	ug/kg	73.7	369
99-09-2	3-Nitroaniline	U	369	ug/kg	73.7	369 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14249	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 19:08	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s110323.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	369	ug/kg	73.7	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	369	ug/kg	73.7	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.7	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.7	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.7	369 UJ,SV7c
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	p-Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.7	369
122-66-7	Azobenzene	U	369	ug/kg	73.7	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.7	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.7	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.37	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.7	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.7	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.7	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.7	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.7	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	300	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	205	ug/kg	96	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615006**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14250**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:35**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s110319.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.5	357
108-95-2	Phenol	U	357	ug/kg	71.5	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.5	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.5	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.5	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.5	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.3	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.5	357 UJ,SV7c
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.5	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.5	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.5	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.5	357
95-48-7	o-Cresol	U	357	ug/kg	71.5	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.5	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.5	357
78-59-1	Isophorone	U	357	ug/kg	71.5	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.5	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.5	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.5	357
65-85-0	Benzoic acid	U	715	ug/kg	179	715
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.5	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.5	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.15	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.5	357 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.5	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.5	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	357	ug/kg	71.5	357
99-09-2	3-Nitroaniline	U	357	ug/kg	71.5	357 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615006	Date Received:	11/21/2009 09:00	%Moisture:	6.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14250	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 17:35	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s110319.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.5	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	715	ug/kg	136	715
132-64-9	Dibenzofuran	U	357	ug/kg	71.5	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.5	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.5	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.5	357 UJ,SV7c
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.5	357
122-66-7	Azobenzene	U	357	ug/kg	71.5	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.5	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.5	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.15	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.5	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.5	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.5	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.5	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.5	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.76	447	ug/kg		J
	Unknown Aldol Condensate	2.95	335	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:35	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s110319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
559-74-0	Friedelan-3-one	8.58	406	ug/kg	96	NJ
	Unknown	11.8	195	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14251	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110330.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.6	368	
108-95-2	Phenol	U	368	ug/kg	73.6	368	
95-57-8	2-Chlorophenol	U	368	ug/kg	73.6	368	
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.6	368	
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.6	368	
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.6	368	
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8	
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368	
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368	
87-86-5	Pentachlorophenol	U	368	ug/kg	92.0	368	
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8	
110-86-1	Pyridine	U	368	ug/kg	73.6	368	UJ,SV7c
62-53-3	Aniline	U	368	ug/kg	110	368	
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.6	368	
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.6	368	
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.6	368	
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.6	368	
95-48-7	o-Cresol	U	368	ug/kg	73.6	368	
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368	
67-72-1	Hexachloroethane	U	368	ug/kg	73.6	368	
98-95-3	Nitrobenzene	U	368	ug/kg	73.6	368	
78-59-1	Isophorone	U	368	ug/kg	73.6	368	
88-75-5	2-Nitrophenol	U	368	ug/kg	73.6	368	
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368	
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.6	368	
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.6	368	
65-85-0	Benzoic acid	U	736	ug/kg	184	736	
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8	
106-47-8	4-Chloroaniline	U	368	ug/kg	73.6	368	
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.6	368	
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.36	36.8	
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.6	368	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.6	368	
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.6	368	
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	368	ug/kg	73.6	368	
99-09-2	3-Nitroaniline	U	368	ug/kg	73.6	368	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14251	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110330.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	368	ug/kg	73.6	368	
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368	
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8	
51-28-5	2,4-Dinitrophenol	U	736	ug/kg	140	736	
132-64-9	Dibenzofuran	U	368	ug/kg	73.6	368	
84-66-2	Diethylphthalate	U	368	ug/kg	73.6	368	
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8	
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.6	368	
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.6	368	UJ,SV7c
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	368	ug/kg	73.6	368	
122-66-7	Azobenzene	U	368	ug/kg	73.6	368	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.6	368	
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.6	368	
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8	
120-12-7	Anthracene	U	36.8	ug/kg	7.36	36.8	
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.6	368	
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8	
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.6	368	
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8	
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368	
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.6	368	
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.6	368	
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8	
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8	
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8	
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8	
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8	
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.6	368	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.95	279	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	153	ug/kg	93	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 21:50	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110330.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	9.53	162	ug/kg	98	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615005	Date Received:	11/21/2009 09:00	%Moisture:	6.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14252	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 17:11	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357 UJ,SV7c
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	357	ug/kg	71.4	357
99-09-2	3-Nitroaniline	U	357	ug/kg	71.4	357 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14252**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:11**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s110318.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357 UJ,SV7c
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.79	165	ug/kg		J
	Unknown Aldol Condensate	2.95	748	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14252**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:11**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s110318.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
638-67-5	Tricosane	9.53	938	ug/kg	96	NJ
112-95-8	Eicosane	10.2	318	ug/kg	96	NJ
629-99-2	Pentacosane	10.39	1080	ug/kg	97	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615014	Date Received:	11/21/2009 09:00	%Moisture:	9.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14253	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:27	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110329.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.3	366
108-95-2	Phenol	U	366	ug/kg	73.3	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.3	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.3	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.3	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.3	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.6	366
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.3	366 UJ,SV7c
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.3	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.3	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.3	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.3	366
95-48-7	o-Cresol	U	366	ug/kg	73.3	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.3	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.3	366
78-59-1	Isophorone	U	366	ug/kg	73.3	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.3	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.3	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.3	366
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.3	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.3	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.33	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.3	366 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.3	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.3	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	366	ug/kg	73.3	366
99-09-2	3-Nitroaniline	U	366	ug/kg	73.3	366 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615014	Date Received:	11/21/2009 09:00	%Moisture:	9.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14253	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:27	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110329.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.3	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	366	ug/kg	73.3	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.3	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.3	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.3	366 UJ,SV7c
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.3	366
122-66-7	Azobenzene	U	366	ug/kg	73.3	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.3	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.3	366
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.33	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.3	366
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.3	366
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.3	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.3	366
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.3	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	332	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	236	ug/kg	97	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 21:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110329.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.81	327	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14254	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:44	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s110322.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.5	353	
108-95-2	Phenol	U	353	ug/kg	70.5	353	
95-57-8	2-Chlorophenol	U	353	ug/kg	70.5	353	
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.5	353	
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.5	353	
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.5	353	
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3	
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353	
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353	
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353	
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3	
110-86-1	Pyridine	U	353	ug/kg	70.5	353	UJ,SV7c
62-53-3	Aniline	U	353	ug/kg	106	353	
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.5	353	
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.5	353	
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.5	353	
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.5	353	
95-48-7	o-Cresol	U	353	ug/kg	70.5	353	
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353	
67-72-1	Hexachloroethane	U	353	ug/kg	70.5	353	
98-95-3	Nitrobenzene	U	353	ug/kg	70.5	353	
78-59-1	Isophorone	U	353	ug/kg	70.5	353	
88-75-5	2-Nitrophenol	U	353	ug/kg	70.5	353	
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	123	353	
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.5	353	
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.5	353	
65-85-0	Benzoic acid	U	705	ug/kg	176	705	
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3	
106-47-8	4-Chloroaniline	U	353	ug/kg	70.5	353	
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.5	353	
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.05	35.3	
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.5	353	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.5	353	
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.5	353	
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	353	ug/kg	70.5	353	
99-09-2	3-Nitroaniline	U	353	ug/kg	70.5	353	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14254	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:44	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Allquot:	30.12 g	Final Volume:	1 mL
Data File:	s110322.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	353	ug/kg	70.5	353	
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353	
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3	
51-28-5	2,4-Dinitrophenol	U	705	ug/kg	134	705	
132-64-9	Dibenzofuran	U	353	ug/kg	70.5	353	
84-66-2	Diethylphthalate	U	353	ug/kg	70.5	353	
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3	
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.5	353	
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.5	353	UJ,SV7c
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	353	ug/kg	70.5	353	
122-66-7	Azobenzene	U	353	ug/kg	70.5	353	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.5	353	
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.5	353	
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3	
120-12-7	Anthracene	U	35.3	ug/kg	7.05	35.3	
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.5	353	
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3	
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.5	353	
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3	
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353	
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.5	353	
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.5	353	
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3	
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3	
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3	
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3	
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3	
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.5	353	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	1.78	281	ug/kg		JA
	Unknown	2.95	387	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14254	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:44	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s110322.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
301-02-0	9-Octadecenamide, (Z)-	8.16	150	ug/kg	93	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615007	Date Received:	11/21/2009 09:00	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14255	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 17:57	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s110320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.1	366	
108-95-2	Phenol	U	366	ug/kg	73.1	366	
95-57-8	2-Chlorophenol	U	366	ug/kg	73.1	366	
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.1	366	
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.1	366	
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.1	366	
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6	
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366	
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366	
87-86-5	Pentachlorophenol	U	366	ug/kg	91.4	366	
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6	
110-86-1	Pyridine	U	366	ug/kg	73.1	366	UJ,SV7c
62-53-3	Aniline	U	366	ug/kg	110	366	
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.1	366	
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.1	366	
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.1	366	
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.1	366	
95-48-7	o-Cresol	U	366	ug/kg	73.1	366	
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366	
67-72-1	Hexachloroethane	U	366	ug/kg	73.1	366	
98-95-3	Nitrobenzene	U	366	ug/kg	73.1	366	
78-59-1	Isophorone	U	366	ug/kg	73.1	366	
88-75-5	2-Nitrophenol	U	366	ug/kg	73.1	366	
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366	
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.1	366	
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.1	366	
65-85-0	Benzoic acid	U	731	ug/kg	183	731	
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6	
106-47-8	4-Chloroaniline	U	366	ug/kg	73.1	366	
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.1	366	UJ,SV7c
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.31	36.6	
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.1	366	
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.1	366	
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.1	366	
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	366	ug/kg	73.1	366	
99-09-2	3-Nitroaniline	U	366	ug/kg	73.1	366	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615007	Date Received:	11/21/2009 09:00	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14255	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 17:57	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s110320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	366	ug/kg	73.1	366	
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366	
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6	
51-28-5	2,4-Dinitrophenol	U	731	ug/kg	139	731	
132-64-9	Dibenzofuran	U	366	ug/kg	73.1	366	
84-66-2	Diethylphthalate	U	366	ug/kg	73.1	366	
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6	
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.1	366	
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.1	366	UJ,SV7c
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	366	ug/kg	73.1	366	
122-66-7	Azobenzene	U	366	ug/kg	73.1	366	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.1	366	
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.1	366	
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6	
120-12-7	Anthracene	U	36.6	ug/kg	7.31	36.6	
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.1	366	
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6	
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.1	366	
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6	
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366	
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.1	366	
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.1	366	
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6	
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6	
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6	
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6	
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6	
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.1	366	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	380	ug/kg		J
	Unknown	1.69	3700	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:57	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s110320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	485	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	185	ug/kg	93	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615008	Date Received:	11/21/2009 09:00	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14256	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:21	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s110321.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	361	ug/kg	72.2	361
108-95-2	Phenol	U	361	ug/kg	72.2	361
95-57-8	2-Chlorophenol	U	361	ug/kg	72.2	361
106-46-7	1,4-Dichlorobenzene	U	361	ug/kg	72.2	361
621-64-7	N-Nitrosodipropylamine	U	361	ug/kg	72.2	361
59-50-7	4-Chloro-3-methylphenol	U	361	ug/kg	72.2	361
83-32-9	Acenaphthene	U	36.1	ug/kg	11.9	36.1
121-14-2	2,4-Dinitrotoluene	U	361	ug/kg	36.1	361
100-02-7	4-Nitrophenol	U	361	ug/kg	119	361
87-86-5	Pentachlorophenol	U	361	ug/kg	90.3	361
129-00-0	Pyrene	U	36.1	ug/kg	10.8	36.1
110-86-1	Pyridine	U	361	ug/kg	72.2	361 UJ,SV7c
62-53-3	Aniline	U	361	ug/kg	108	361
111-44-4	bis(2-Chloroethyl) ether	U	361	ug/kg	72.2	361
541-73-1	1,3-Dichlorobenzene	U	361	ug/kg	72.2	361
100-51-6	Benzyl alcohol	U	361	ug/kg	108	361 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	361	ug/kg	72.2	361
108-60-1	bis(2-Chloroisopropyl)ether	U	361	ug/kg	72.2	361
95-48-7	o-Cresol	U	361	ug/kg	72.2	361
65794-96-9	m,p-Cresols	U	361	ug/kg	108	361
67-72-1	Hexachloroethane	U	361	ug/kg	72.2	361
98-95-3	Nitrobenzene	U	361	ug/kg	72.2	361
78-59-1	Isophorone	U	361	ug/kg	72.2	361
88-75-5	2-Nitrophenol	U	361	ug/kg	72.2	361
105-67-9	2,4-Dimethylphenol	U	361	ug/kg	126	361
111-91-1	bis(2-Chloroethoxy)methane	U	361	ug/kg	72.2	361
120-83-2	2,4-Dichlorophenol	U	361	ug/kg	72.2	361
65-85-0	Benzoic acid	U	722	ug/kg	181	722
91-20-3	Naphthalene	U	36.1	ug/kg	10.8	36.1
106-47-8	4-Chloroaniline	U	361	ug/kg	72.2	361
87-68-3	Hexachlorobutadiene	U	361	ug/kg	72.2	361
91-57-6	2-Methylnaphthalene	U	36.1	ug/kg	7.22	36.1
77-47-4	Hexachlorocyclopentadiene	U	361	ug/kg	72.2	361 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	361	ug/kg	72.2	361
95-95-4	2,4,5-Trichlorophenol	U	361	ug/kg	72.2	361
91-58-7	2-Chloronaphthalene	U	36.1	ug/kg	11.9	36.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	361	ug/kg	72.2	361
99-09-2	3-Nitroaniline	U	361	ug/kg	72.2	361 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615008	Date Received:	11/21/2009 09:00	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14256	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:21	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s110321.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	361	ug/kg	72.2	361
606-20-2	2,6-Dinitrotoluene	U	361	ug/kg	36.1	361
208-96-8	Acenaphthylene	U	36.1	ug/kg	10.8	36.1
51-28-5	2,4-Dinitrophenol	U	722	ug/kg	137	722
132-64-9	Dibenzofuran	U	361	ug/kg	72.2	361
84-66-2	Diethylphthalate	U	361	ug/kg	72.2	361
86-73-7	Fluorene	U	36.1	ug/kg	10.8	36.1
7005-72-3	4-Chlorophenylphenylether	U	361	ug/kg	72.2	361
534-52-1	2-Methyl-4,6-dinitrophenol	U	361	ug/kg	72.2	361 UJ,SV7c
100-01-6	4-Nitroaniline	U	361	ug/kg	108	361
	p-Nitroaniline					
122-39-4	Diphenylamine	U	361	ug/kg	72.2	361
122-66-7	Azobenzene	U	361	ug/kg	72.2	361
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	361	ug/kg	72.2	361
118-74-1	Hexachlorobenzene	U	361	ug/kg	72.2	361
85-01-8	Phenanthrene	U	36.1	ug/kg	10.8	36.1
120-12-7	Anthracene	U	36.1	ug/kg	7.22	36.1
84-74-2	Di-n-butylphthalate	U	361	ug/kg	72.2	361
206-44-0	Fluoranthene	U	36.1	ug/kg	10.8	36.1
85-68-7	Butylbenzylphthalate	U	361	ug/kg	72.2	361
56-55-3	Benzo(a)anthracene	U	36.1	ug/kg	10.8	36.1
91-94-1	3,3'-Dichlorobenzidine	U	361	ug/kg	108	361
218-01-9	Chrysene	U	36.1	ug/kg	10.8	36.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	361	ug/kg	72.2	361
117-84-0	Di-n-octylphthalate	U	361	ug/kg	72.2	361
205-99-2	Benzo(b)fluoranthene	U	36.1	ug/kg	10.8	36.1
207-08-9	Benzo(k)fluoranthene	U	36.1	ug/kg	10.8	36.1
50-32-8	Benzo(a)pyrene	U	36.1	ug/kg	10.8	36.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.1	ug/kg	10.8	36.1
53-70-3	Dibenzo(a,h)anthracene	U	36.1	ug/kg	10.8	36.1
191-24-2	Benzo(ghi)perylene	U	36.1	ug/kg	10.8	36.1
120-82-1	1,2,4-Trichlorobenzene	U	361	ug/kg	72.2	361

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	380	ug/kg		JA
	Unknown	11.8	254	ug/kg		J

AMF
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615016	Date Received:	11/21/2009 09:00	%Moisture:	1.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14257	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:13	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110331.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	337	ug/kg	67.3	337
108-95-2	Phenol	U	337	ug/kg	67.3	337
95-57-8	2-Chlorophenol	U	337	ug/kg	67.3	337
106-46-7	1,4-Dichlorobenzene	U	337	ug/kg	67.3	337
621-64-7	N-Nitrosodipropylamine	U	337	ug/kg	67.3	337
59-50-7	4-Chloro-3-methylphenol	U	337	ug/kg	67.3	337
83-32-9	Acenaphthene	U	33.7	ug/kg	11.1	33.7
121-14-2	2,4-Dinitrotoluene	U	337	ug/kg	33.7	337
100-02-7	4-Nitrophenol	U	337	ug/kg	111	337
87-86-5	Pentachlorophenol	U	337	ug/kg	84.2	337
129-00-0	Pyrene	U	33.7	ug/kg	10.1	33.7
110-86-1	Pyridine	U	337	ug/kg	67.3	337 UJ,SV7c
62-53-3	Aniline	U	337	ug/kg	101	337
111-44-4	bis(2-Chloroethyl) ether	U	337	ug/kg	67.3	337
541-73-1	1,3-Dichlorobenzene	U	337	ug/kg	67.3	337
100-51-6	Benzyl alcohol	U	337	ug/kg	101	337 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	337	ug/kg	67.3	337
108-60-1	bis(2-Chloroisopropyl)ether	U	337	ug/kg	67.3	337
95-48-7	o-Cresol	U	337	ug/kg	67.3	337
65794-96-9	m,p-Cresols	U	337	ug/kg	101	337
67-72-1	Hexachloroethane	U	337	ug/kg	67.3	337
98-95-3	Nitrobenzene	U	337	ug/kg	67.3	337
78-59-1	Isophorone	U	337	ug/kg	67.3	337
88-75-5	2-Nitrophenol	U	337	ug/kg	67.3	337
105-67-9	2,4-Dimethylphenol	U	337	ug/kg	118	337
111-91-1	bis(2-Chloroethoxy)methane	U	337	ug/kg	67.3	337
120-83-2	2,4-Dichlorophenol	U	337	ug/kg	67.3	337
65-85-0	Benzoic acid	U	673	ug/kg	168	673
91-20-3	Naphthalene	U	33.7	ug/kg	10.1	33.7
106-47-8	4-Chloroaniline	U	337	ug/kg	67.3	337
87-68-3	Hexachlorobutadiene	U	337	ug/kg	67.3	337
91-57-6	2-Methylnaphthalene	U	33.7	ug/kg	6.73	33.7
77-47-4	Hexachlorocyclopentadiene	U	337	ug/kg	67.3	337 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	337	ug/kg	67.3	337
95-95-4	2,4,5-Trichlorophenol	U	337	ug/kg	67.3	337
91-58-7	2-Chloronaphthalene	U	33.7	ug/kg	11.1	33.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	337	ug/kg	67.3	337
99-09-2	3-Nitroaniline	U	337	ug/kg	67.3	337 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615016	Date Received:	11/21/2009 09:00	%Moisture:	1.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14257	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:13	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110331.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	337	ug/kg	67.3	337
606-20-2	2,6-Dinitrotoluene	U	337	ug/kg	33.7	337
208-96-8	Acenaphthylene	U	33.7	ug/kg	10.1	33.7
51-28-5	2,4-Dinitrophenol	U	673	ug/kg	128	673
132-64-9	Dibenzofuran	U	337	ug/kg	67.3	337
84-66-2	Diethylphthalate	U	337	ug/kg	67.3	337
86-73-7	Fluorene	U	33.7	ug/kg	10.1	33.7
7005-72-3	4-Chlorophenylphenylether	U	337	ug/kg	67.3	337
534-52-1	2-Methyl-4,6-dinitrophenol	U	337	ug/kg	67.3	337 UJ,SV7c
100-01-6	4-Nitroaniline	U	337	ug/kg	101	337
	p-Nitroaniline					
122-39-4	Diphenylamine	U	337	ug/kg	67.3	337
122-66-7	Azobenzene	U	337	ug/kg	67.3	337
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	337	ug/kg	67.3	337
118-74-1	Hexachlorobenzene	U	337	ug/kg	67.3	337
85-01-8	Phenanthrene	U	33.7	ug/kg	10.1	33.7
120-12-7	Anthracene	U	33.7	ug/kg	6.73	33.7
84-74-2	Di-n-butylphthalate	U	337	ug/kg	67.3	337
206-44-0	Fluoranthene	U	33.7	ug/kg	10.1	33.7
85-68-7	Butylbenzylphthalate	U	337	ug/kg	67.3	337
56-55-3	Benzo(a)anthracene	U	33.7	ug/kg	10.1	33.7
91-94-1	3,3'-Dichlorobenzidine	U	337	ug/kg	101	337
218-01-9	Chrysene	U	33.7	ug/kg	10.1	33.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	337	ug/kg	67.3	337
117-84-0	Di-n-octylphthalate	U	337	ug/kg	67.3	337
205-99-2	Benzo(b)fluoranthene	U	33.7	ug/kg	10.1	33.7
207-08-9	Benzo(k)fluoranthene	U	33.7	ug/kg	10.1	33.7
50-32-8	Benzo(a)pyrene	U	33.7	ug/kg	10.1	33.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.7	ug/kg	10.1	33.7
53-70-3	Dibenzo(a,h)anthracene	U	33.7	ug/kg	10.1	33.7
191-24-2	Benzo(ghi)perylene	U	33.7	ug/kg	10.1	33.7
120-82-1	1,2,4-Trichlorobenzene	U	337	ug/kg	67.3	337

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	311	ug/kg		J
	Unknown Aldol Condensate	2.95	302	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615018	Date Received:	11/21/2009 09:00	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2729	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:36	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s110332.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.8	364
108-95-2	Phenol	U	364	ug/kg	72.8	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.8	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.8	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.8	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.8	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.0	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.8	364 UJ,SV7c
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.8	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.8	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.8	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.8	364
95-48-7	o-Cresol	U	364	ug/kg	72.8	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.8	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.8	364
78-59-1	Isophorone	U	364	ug/kg	72.8	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.8	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	127	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.8	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.8	364
65-85-0	Benzoic acid	U	728	ug/kg	182	728
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.8	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.8	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.28	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.8	364 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.8	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.8	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	364	ug/kg	72.8	364
99-09-2	3-Nitroaniline	U	364	ug/kg	72.8	364 UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 22:36	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s110332.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	364	ug/kg	72.8	364	
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364	
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4	
51-28-5	2,4-Dinitrophenol	U	728	ug/kg	138	728	
132-64-9	Dibenzofuran	U	364	ug/kg	72.8	364	
84-66-2	Diethylphthalate	U	364	ug/kg	72.8	364	
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4	
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.8	364	
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.8	364	UJ,SV7c
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	364	ug/kg	72.8	364	
122-66-7	Azobenzene	U	364	ug/kg	72.8	364	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.8	364	
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.8	364	
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4	
120-12-7	Anthracene	U	36.4	ug/kg	7.28	36.4	
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.8	364	
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4	
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.8	364	
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4	
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364	
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4	
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.8	364	
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.8	364	
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4	
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4	
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4	
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4	
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4	
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.8	364	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	189	ug/kg		J
	Unknown Aldol Condensate	2.95	398	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615020**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**4.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6969**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:59**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s110333.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.7	348	
108-95-2	Phenol	U	348	ug/kg	69.7	348	
95-57-8	2-Chlorophenol	U	348	ug/kg	69.7	348	
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.7	348	
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.7	348	
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.7	348	
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8	
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348	
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348	
87-86-5	Pentachlorophenol	U	348	ug/kg	87.1	348	
129-00-0	Pyrene	U	34.8	ug/kg	10.5	34.8	
110-86-1	Pyridine	U	348	ug/kg	69.7	348	UJ,SV7c
62-53-3	Aniline	U	348	ug/kg	105	348	
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.7	348	
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.7	348	
100-51-6	Benzyl alcohol	U	348	ug/kg	105	348	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.7	348	
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.7	348	
95-48-7	o-Cresol	U	348	ug/kg	69.7	348	
65794-96-9	m,p-Cresols	U	348	ug/kg	105	348	
67-72-1	Hexachloroethane	U	348	ug/kg	69.7	348	
98-95-3	Nitrobenzene	U	348	ug/kg	69.7	348	
78-59-1	Isophorone	U	348	ug/kg	69.7	348	
88-75-5	2-Nitrophenol	U	348	ug/kg	69.7	348	
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348	
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.7	348	
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.7	348	
65-85-0	Benzoic acid	U	697	ug/kg	174	697	
91-20-3	Naphthalene	U	34.8	ug/kg	10.5	34.8	
106-47-8	4-Chloroaniline	U	348	ug/kg	69.7	348	
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.7	348	
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.97	34.8	
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.7	348	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.7	348	
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.7	348	
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.7	348	
99-09-2	3-Nitroaniline	U	348	ug/kg	69.7	348	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 22:59	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110333.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.7	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.5	34.8
51-28-5	2,4-Dinitrophenol	U	697	ug/kg	132	697
132-64-9	Dibenzofuran	U	348	ug/kg	69.7	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.7	348
86-73-7	Fluorene	U	34.8	ug/kg	10.5	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.7	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.7	348 UJ,SV7c
100-01-6	4-Nitroaniline	U	348	ug/kg	105	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.7	348
122-66-7	Azobenzene	U	348	ug/kg	69.7	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.7	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.7	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.5	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.97	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.7	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.5	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.7	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.5	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	105	348
218-01-9	Chrysene	U	34.8	ug/kg	10.5	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	348	ug/kg	69.7	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.7	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.5	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.5	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.5	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.5	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.5	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.5	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.7	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.78	317	ug/kg		J
	Unknown Aldol Condensate	2.95	398	ug/kg		JA

AMF
1/28/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 22:59	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110333.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.16	192	ug/kg	91	NJ

AMF
1/28/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-644 VALIDATION DATE: 1/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 1/28/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615001	Date Received:	11/21/2009 09:00	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14108	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 07:13	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30 g	Final Volume:	1 mL
Data File:	033f3301.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.77	mg/kg	2.34	7.19

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615002	Date Received:	11/21/2009 09:00	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14106	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 07:49	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30 g	Final Volume:	1 mL
Data File:	034f3401.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.58	mg/kg	2.39	7.36

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615003	Date Received:	11/21/2009 09:00	%Moisture:	12.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14107	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 08:26	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30 g	Final Volume:	1 mL
Data File:	035f3501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.49	mg/kg	2.47	7.59

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615004	Date Received:	11/21/2009 09:00	%Moisture:	5.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14109	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 09:02	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	036f3601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.62	mg/kg	2.29	7.05

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615005	Date Received:	11/21/2009 09:00	%Moisture:	6.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14252	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 09:39	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	037f3701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.46	mg/kg	2.32	7.14

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615006	Date Received:	11/21/2009 09:00	%Moisture:	6.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14250	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 10:16	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	038f3801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.92	mg/kg	2.32	7.15

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615007	Date Received:	11/21/2009 09:00	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14255	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 12:07	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	041f4101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.99	mg/kg	2.39	7.34

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615008	Date Received:	11/21/2009 09:00	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14256	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 12:43	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	042f4201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.33	mg/kg	2.36	7.26

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 13:20	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	043f4301.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.50	mg/kg	2.30	7.08

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615010	Date Received:	11/21/2009 09:00	%Moisture:	10.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14249	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 13:56	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	044f4401.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.38	mg/kg	2.40	7.40

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14248	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 14:34	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	045f4501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.99	mg/kg	2.42	7.46

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615012	Date Received:	11/21/2009 09:00	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14247	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 15:11	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	046f4601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.43	mg/kg	2.41	7.43

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14246	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 18:15	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	051f5101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.64	mg/kg	2.35	7.24

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615014	Date Received:	11/21/2009 09:00	%Moisture:	9.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14253	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 18:53	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	052f5201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.86	mg/kg	2.38	7.33

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14251	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 19:30	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30 g	Final Volume:	1 mL
Data File:	053f5301.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.09	mg/kg	2.39	7.36

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615016	Date Received:	11/21/2009 09:00	%Moisture:	1.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14257	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 20:07	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	054f5401.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.58	mg/kg	2.19	6.74

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615018	Date Received:	11/21/2009 09:00	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2729	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 20:44	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	055f5501.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.31	mg/kg	2.36	7.27

AMF
1/28/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615020	Date Received:	11/21/2009 09:00	%Moisture:	4.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–6969	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 21:21	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30 g	Final Volume:	1 mL
Data File:	056f5601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.72	mg/kg	2.28	7.01

AMF
1/28/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-644 VALIDATION DATE: 1/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☒ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 1/28/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615018**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2729**	**Method:**	**SW846 8015A/B VOC**	**SOP Ref:**	**GL-OA-E-004**
Batch ID:	**928567**	**Inst:**	**VOC4A.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:21**	**Analyst:**	**ACJ**	**Aliquot:**	**5 mL**
Prep Date:	**12/02/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n300006.d**	**Column:**	**Rtx-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	54.7	ug/kg	12.3	54.7

AMF
1/28/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-644 VALIDATION DATE: 1/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The surrogate %R for 4-CMX was < the laboratory LAL but ≥10% in the MB associated with all samples except RE03-09-14109, -09-14247, and -10-2729. The infraction occurred in a QC sample, thus, no sample results were qualified.
2. It should be noted that the MS/MSD analyses in the batch that included only samples -09-14109, -09-14247, and -10-2729 were performed on a LANL sample from another RN, and that the raw data for the parent sample was not included in the package. No sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 1/28/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☒	☐	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14106	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 14:35	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	055f5501.d	**Column:**	1 CLP1	**Level:**	LOW
	055b5501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.23	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.23	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.23	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.23	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.23	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.23	3.68	1
11096-82-5	Aroclor-1260	U	3.68	ug/kg	1.23	3.68	1

AMF
1/28/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14107	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 14:47	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	056f5601.d	**Column:**	1 CLP1	**Level:**	LOW
	056b5601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.79	ug/kg	1.26	3.79	1
11104-28-2	Aroclor-1221	U	3.79	ug/kg	1.26	3.79	1
11141-16-5	Aroclor-1232	U	3.79	ug/kg	1.26	3.79	1
53469-21-9	Aroclor-1242	U	3.79	ug/kg	1.26	3.79	1
12672-29-6	Aroclor-1248	U	3.79	ug/kg	1.26	3.79	1
11097-69-1	Aroclor-1254	U	3.79	ug/kg	1.26	3.79	1
11096-82-5	Aroclor-1260	U	3.79	ug/kg	1.26	3.79	1

AMF
1/28/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 14:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	054f5401.d	**Column:**	1 CLP1	**Level:**	LOW
	054b5401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.59	ug/kg	1.20	3.59	1
11104-28-2	Aroclor-1221	U	3.59	ug/kg	1.20	3.59	1
11141-16-5	Aroclor-1232	U	3.59	ug/kg	1.20	3.59	1
53469-21-9	Aroclor-1242	U	3.59	ug/kg	1.20	3.59	1
12672-29-6	Aroclor-1248	U	3.59	ug/kg	1.20	3.59	1
11097-69-1	Aroclor-1254	U	3.59	ug/kg	1.20	3.59	1
11096-82-5	Aroclor-1260	U	3.59	ug/kg	1.20	3.59	1

AMF
1/28/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14109	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	929264	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/05/2009 17:27	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	12/04/2009 20:52	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	045f4501.d	**Column:**	1 CLP1	**Level:**	LOW
	045b4501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.52	ug/kg	1.17	3.52	1
11104–28–2	Aroclor–1221	U	3.52	ug/kg	1.17	3.52	1
11141–16–5	Aroclor–1232	U	3.52	ug/kg	1.17	3.52	1
53469–21–9	Aroclor–1242	U	3.52	ug/kg	1.17	3.52	1
12672–29–6	Aroclor–1248	U	3.52	ug/kg	1.17	3.52	1
11097–69–1	Aroclor–1254	U	3.52	ug/kg	1.17	3.52	1
11096–82–5	Aroclor–1260	U	3.52	ug/kg	1.17	3.52	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615013	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14246	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 17:19	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	068f6801.d	**Column:**	1 CLP1	**Level:**	LOW
	068b6801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.62	ug/kg	1.21	3.62	1
11104-28-2	Aroclor-1221	U	3.62	ug/kg	1.21	3.62	1
11141-16-5	Aroclor-1232	U	3.62	ug/kg	1.21	3.62	1
53469-21-9	Aroclor-1242	U	3.62	ug/kg	1.21	3.62	1
12672-29-6	Aroclor-1248	U	3.62	ug/kg	1.21	3.62	1
11097-69-1	Aroclor-1254	U	3.62	ug/kg	1.21	3.62	1
11096-82-5	Aroclor-1260	U	3.62	ug/kg	1.21	3.62	1

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Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615012**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14247**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**929264**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 17:40**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/04/2009 20:52**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**046f4601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	046b4601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.70	ug/kg	1.23	3.70	1
11104–28–2	Aroclor–1221	U	3.70	ug/kg	1.23	3.70	1
11141–16–5	Aroclor–1232	U	3.70	ug/kg	1.23	3.70	1
53469–21–9	Aroclor–1242	U	3.70	ug/kg	1.23	3.70	1
12672–29–6	Aroclor–1248	U	3.70	ug/kg	1.23	3.70	1
11097–69–1	Aroclor–1254	U	3.70	ug/kg	1.23	3.70	1
11096–82–5	Aroclor–1260	U	3.70	ug/kg	1.23	3.70	1

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Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615011**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14248**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:54**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**066f6601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	066b6601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.73	ug/kg	1.24	3.73	1
11104–28–2	Aroclor–1221	U	3.73	ug/kg	1.24	3.73	1
11141–16–5	Aroclor–1232	U	3.73	ug/kg	1.24	3.73	1
53469–21–9	Aroclor–1242	U	3.73	ug/kg	1.24	3.73	1
12672–29–6	Aroclor–1248	U	3.73	ug/kg	1.24	3.73	1
11097–69–1	Aroclor–1254	U	3.73	ug/kg	1.24	3.73	1
11096–82–5	Aroclor–1260	U	3.73	ug/kg	1.24	3.73	1

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Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615010**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14249**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:41**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**065f6501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	065b6501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.71	ug/kg	1.23	3.71	1
11104–28–2	Aroclor–1221	U	3.71	ug/kg	1.23	3.71	1
11141–16–5	Aroclor–1232	U	3.71	ug/kg	1.23	3.71	1
53469–21–9	Aroclor–1242	U	3.71	ug/kg	1.23	3.71	1
12672–29–6	Aroclor–1248	U	3.71	ug/kg	1.23	3.71	1
11097–69–1	Aroclor–1254	U	3.71	ug/kg	1.23	3.71	1
11096–82–5	Aroclor–1260	U	3.71	ug/kg	1.23	3.71	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 15:25	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	059f5901.d	**Column:**	1 CLP1	**Level:**	LOW
	059b5901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254	U	3.57	ug/kg	1.19	3.57	1
11096-82-5	Aroclor-1260	U	3.57	ug/kg	1.19	3.57	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 18:09	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	072f7201.d	**Column:**	1 CLP1	**Level:**	LOW
	072b7201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.22	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.22	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.22	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.22	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.22	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.22	3.68	1
11096-82-5	Aroclor-1260	U	3.68	ug/kg	1.22	3.68	1

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Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14252**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 15:12**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**058f5801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	058b5801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254	U	3.57	ug/kg	1.19	3.57	1
11096-82-5	Aroclor-1260	U	3.57	ug/kg	1.19	3.57	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A,I	**Dilution:**	1
Run Date:	12/03/2009 17:57	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 16:28	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	064f6401.d	**Column:**	1 CLP1	**Level:**	LOW
	064b6401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.54	ug/kg	1.18	3.54	1
11104-28-2	Aroclor-1221	U	3.54	ug/kg	1.18	3.54	1
11141-16-5	Aroclor-1232	U	3.54	ug/kg	1.18	3.54	1
53469-21-9	Aroclor-1242	U	3.54	ug/kg	1.18	3.54	1
12672-29-6	Aroclor-1248	U	3.54	ug/kg	1.18	3.54	1
11097-69-1	Aroclor-1254	U	3.54	ug/kg	1.18	3.54	1
11096-82-5	Aroclor-1260	U	3.54	ug/kg	1.18	3.54	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 15:38	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	060f6001.d	**Column:**	1 CLP1	**Level:**	LOW
	060b6001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.67	ug/kg	1.22	3.67	1
11104-28-2	Aroclor-1221	U	3.67	ug/kg	1.22	3.67	1
11141-16-5	Aroclor-1232	U	3.67	ug/kg	1.22	3.67	1
53469-21-9	Aroclor-1242	U	3.67	ug/kg	1.22	3.67	1
12672-29-6	Aroclor-1248	U	3.67	ug/kg	1.22	3.67	1
11097-69-1	Aroclor-1254	U	3.67	ug/kg	1.22	3.67	1
11096-82-5	Aroclor-1260	U	3.67	ug/kg	1.22	3.67	1

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Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615008**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14256**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 15:50**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**061f6101.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	061b6101.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.62	ug/kg	1.21	3.62	1
11104-28-2	Aroclor-1221	U	3.62	ug/kg	1.21	3.62	1
11141-16-5	Aroclor-1232	U	3.62	ug/kg	1.21	3.62	1
53469-21-9	Aroclor-1242	U	3.62	ug/kg	1.21	3.62	1
12672-29-6	Aroclor-1248	U	3.62	ug/kg	1.21	3.62	1
11097-69-1	Aroclor-1254	U	3.62	ug/kg	1.21	3.62	1
11096-82-5	Aroclor-1260	U	3.62	ug/kg	1.21	3.62	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14257	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 18:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	073f7301.d	**Column:**	1 CLP1	**Level:**	LOW
	073b7301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.36	ug/kg	1.12	3.36	1
11104-28-2	Aroclor-1221	U	3.36	ug/kg	1.12	3.36	1
11141-16-5	Aroclor-1232	U	3.36	ug/kg	1.12	3.36	1
53469-21-9	Aroclor-1242	U	3.36	ug/kg	1.12	3.36	1
12672-29-6	Aroclor-1248	U	3.36	ug/kg	1.12	3.36	1
11097-69-1	Aroclor-1254	U	3.36	ug/kg	1.12	3.36	1
11096-82-5	Aroclor-1260	U	3.36	ug/kg	1.12	3.36	1

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Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	929264	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/05/2009 17:52	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	12/04/2009 20:52	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	047f4701.d	**Column:**	1 CLP1	**Level:**	LOW
	047b4701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.63	ug/kg	1.21	3.63	1
11104-28-2	Aroclor-1221	U	3.63	ug/kg	1.21	3.63	1
11141-16-5	Aroclor-1232	U	3.63	ug/kg	1.21	3.63	1
53469-21-9	Aroclor-1242	U	3.63	ug/kg	1.21	3.63	1
12672-29-6	Aroclor-1248	U	3.63	ug/kg	1.21	3.63	1
11097-69-1	Aroclor-1254	U	3.63	ug/kg	1.21	3.63	1
11096-82-5	Aroclor-1260	U	3.63	ug/kg	1.21	3.63	1

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Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6969	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 19:12	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.50	ug/kg	1.17	3.50	1
11104–28–2	Aroclor–1221	U	3.50	ug/kg	1.17	3.50	1
11141–16–5	Aroclor–1232	U	3.50	ug/kg	1.17	3.50	1
53469–21–9	Aroclor–1242	U	3.50	ug/kg	1.17	3.50	1
12672–29–6	Aroclor–1248	U	3.50	ug/kg	1.17	3.50	1
11097–69–1	Aroclor–1254	U	3.50	ug/kg	1.17	3.50	1
11096–82–5	Aroclor–1260	U	3.50	ug/kg	1.17	3.50	1

AMF
1/28/10

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-644C

REQUEST NUMBER: 10-644

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 2916151.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14108	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14108	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14106	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14106	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14107	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14107	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14109	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14109	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14252	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14252	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14250	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14250	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14255	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14255	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14256	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14256	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14254	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14254	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14249	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14249	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14248	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14248	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14247	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14247	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14246	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14246	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14253	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14253	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14251	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14251	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14257	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14257	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-644C

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14289	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-14289	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-2729	1	GLASS	8260B+TPH-GRO	Ice	S
RE03-10-2729	2	GLASS	8260B+TPH-GRO	Ice	S
RE03-10-2729	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6967	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6967	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6969	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6969	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		11/20/09	3:00	Greg Tyler	[illegible]	11-21-09	0900
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Friday, November 20, 2009

REQUEST NUMBER: 10-644

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-644

Per Agreement Number: 126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/20/2009

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_PURGEABLE	1	RE03-10-2729	S	11/19/2009	
		2	RE03-10-2729	S	11/19/2009	
	SW-846:8082	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14267	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
	SW-846:8260B	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-09-14269	S	11/19/2009	
		2	RE03-09-14289	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		2	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6967	S	11/19/2009	
		2	RE03-10-6967	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
	SW-846:8270C	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846 8270C	1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6989	S	11/19/2009	

Final Page of REQUEST NUMBER 10-644

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 30, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241615
SDG: 10-644

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 21, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC Volatiles (GRO), GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-644
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241615
SDG: 10-644

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Standards Data..... 1092
Quality Control Data.....1246
Miscellaneous Data.....1300

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241615
SDG # : 10-644

November 30, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 21, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. There were discrepancies with the number of containers received. Please see attached e-mail. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241615001	RE03-09-14108
241615002	RE03-09-14106
241615003	RE03-09-14107
241615004	RE03-09-14109
241615005	RE03-09-14252
241615006	RE03-09-14250
241615007	RE03-09-14255
241615008	RE03-09-14256
241615009	RE03-09-14254
241615010	RE03-09-14249
241615011	RE03-09-14248
241615012	RE03-09-14247
241615013	RE03-09-14246
241615014	RE03-09-14253
241615015	RE03-09-14251
241615016	RE03-09-14257
241615017	RE03-09-14289
241615018	RE03-10-2729
241615019	RE03-10-6967
241615020	RE03-10-6969

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC Volatiles (GRO), GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis

Project Manager

List of current GEL Certifications as of 30 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-644C

REQUEST NUMBER: 10-644

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241615%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14108	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14108	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14106	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14106	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14107	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14107	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14109	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14109	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14252	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14252	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14250	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14250	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14255	1	SEPTUM AMBER GLASS	8260B	Ice	S
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RE03-09-14253	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14251	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14251	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14257	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14257	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-644C

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14289	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-14289	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-2729	1	GLASS	8260B+TPH-GRO	Ice	S
RE03-10-2729	2	GLASS	8260B+TPH-GRO	Ice	S
RE03-10-2729	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6967	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6967	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-6969	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6969	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/20/09	3:00	Greg Tyler		11-21-09	0900
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Friday, November 20, 2009

REQUEST NUMBER: 10-644

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-644

Per Agreement Number: 126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/20/2009

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_PURGEABLE	1	RE03-10-2729	S	11/19/2009	
		2	RE03-10-2729	S	11/19/2009	
	SW-846:8082	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
	SW-846:8260B	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	
		1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-09-14289	S	11/19/2009	
		2	RE03-09-14289	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		2	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6967	S	11/19/2009	
		2	RE03-10-6967	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
	SW-846:8270C	1	RE03-09-14106	S	11/19/2009	
		1	RE03-09-14107	S	11/19/2009	
		1	RE03-09-14108	S	11/19/2009	
		1	RE03-09-14109	S	11/19/2009	
		1	RE03-09-14246	S	11/19/2009	
		1	RE03-09-14247	S	11/19/2009	
		1	RE03-09-14248	S	11/19/2009	
		1	RE03-09-14249	S	11/19/2009	
		1	RE03-09-14250	S	11/19/2009	
		1	RE03-09-14251	S	11/19/2009	
		1	RE03-09-14252	S	11/19/2009	
		1	RE03-09-14253	S	11/19/2009	

Friday, November 20, 2009

REQUEST NUMBER: 10-644

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-14254	S	11/19/2009	
		1	RE03-09-14255	S	11/19/2009	
		1	RE03-09-14256	S	11/19/2009	
		1	RE03-09-14257	S	11/19/2009	
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	

Final Page of REQUEST NUMBER 10-644

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-644**
Received By: Greg Tyler	**Date Received: 11/21/09**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 35 cpm
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other **4C, 6C** **16C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?			X	Sample ID's affected: **RE03-10-14280, 6967 and *2729. The lab rec'd (1) 40ml vial 8260B Trip Blank instead of (2) and *(1) 125ML glass container instead of (2) for 8260B+TPH+GRO as indicated on COC.**
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
Fed Ex Tracking Numbers
7209 7848 9947 4C
7209 7848 9958 4C
7209 7848 9969 4C
7209 7848 9980 6C
7209 7848 9936 6C
7209 7848 0002 6C
7209 7848 9970 6C
7209 7848 9991 16C

PM (or PMA) review: Initials _____ Date 11/23/09

Subject: Sample Receipt for 11/21/09
From: Dionne Francis <Dionne.Francis@gel.com>
Date: Mon, 23 Nov 2009 12:12:19 -0500
To: "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylenev@lanl.gov>, Valerie Davis <vsd@gel.com>

Keith,

RN#10-640, the lab rec'd (1) 40ml vial 8260B container for sample RE03-10-7031 instead of (2) as indicated on COC.

RN#10-638, the lab rec'd (1) 40ml vial 8260B container for sample RE03-10-2886 instead of (2) as indicated on COC.

RN#10-644, the lab rec'd (1) 40ml vial 8260B container each for samples RE03-10-14289 and 6967 instead of (2). Also, (1) amber glass TPH-GRO container for sample RE03-10-2729 was rec'd instead of (2) as indicated on COC.

RN#10-633 and 636, the Gross A/B container will be preserved prior to analysis.

RN#10-635, the lab rec'd (1) 40ml vial 8260B container each for samples CASA-10-3856 and 3859 instead of (2), rec'd (2) 1L amber glass PCB/SVOA/PCB containers for sample CASA-10-3858 instead of (3) each as indicated on the COC. One of the amber glass SVOA containers for sample CASA-10-3861 was rec'd broken. There is sufficient volume to proceed with the analysis.

RN#10-632, the lab rec'd (1) 40ml vial 8260B container each for samples CAMO-10-6939 and 6939 instead of (2), rec'd (2) 1L amber glass PCB/SVOA/PCB/HEXP containers for sample CAMO-10-3150 instead of (3) each as indicated on the COC.

Thanks,
Dionne

--
Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

Let the Bible fill the memory, rule the heart, and guide the feet.

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

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803 1 B 9947 11.21

FedEx Express

2 of 3
MPS# 0263 7209 7848 9947
Mstr# 7209 7848 9936 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

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LOS ALAMOS, NM 87545
UNITED STATES US

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MPS# 0263 7209 7848 9958
Mstr# 7209 7848 9936 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

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SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 28NOV09
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2434

BILL

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

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TRK# 0201 7209 7848 9980
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SATURDAY ### A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE:
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

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TO VALERIE DAVIS
GENERAL ENGINEERING
2040 SAVAGE RD

CHARLESTON SC 2940

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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
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REF: MR1A015AGWK0

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PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9936

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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
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REF: MR1A015AGWK0

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1 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7849 0002

MASTER

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X0 CHSA

Part # 156148-434 NAIT V2 04/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

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2 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9970

Mstr# 7209 7848 9969 0201

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

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2 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9991

Mstr# 7209 7849 9980 0201

29407

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-644

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	927711
Prep Batch Number:	927709

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241615001	RE03-09-14108
241615002	RE03-09-14106
241615003	RE03-09-14107
241615004	RE03-09-14109
241615005	RE03-09-14252
241615006	RE03-09-14250
241615007	RE03-09-14255
241615008	RE03-09-14256
241615009	RE03-09-14254
241615010	RE03-09-14249
241615011	RE03-09-14248
241615012	RE03-09-14247
241615013	RE03-09-14246
241615014	RE03-09-14253
241615015	RE03-09-14251
241615016	RE03-09-14257
241615017	RE03-09-14289
241615018	RE03-10-2729
241615019	RE03-10-6967
241615020	RE03-10-6969
1201983684	Method Blank (MB)
1201983687	Laboratory Control Sample (LCS)
1201983688	Laboratory Control Sample (LCS)
1201991929	Method Blank (MB)
1201991930	Laboratory Control Sample (LCS)
1201991931	Laboratory Control Sample (LCS)
1201983685	241615001(RE03-09-14108) Post Spike (PS)
1201983686	241615001(RE03-09-14108) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 241615 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 018 and 020 in this SDG were analyzed on an "dry weight" basis. Samples 241615 017 and 019 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 241615001 (RE03-09-14108) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
In sample 241615006 (RE03-09-14250), internal standard responses were outside the required acceptance criteria. Sample re-analysis confirmed matrix interference. See NCR 769765.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Samples 241615006 (RE03-09-14250) and 241615010 (RE03-09-14249) were re-analyzed due to unacceptable recoveries in the initial analysis.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 769765 was generated for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-644 GEL Work Order: 241615

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 15 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-644 VOA

This roadmap was analyzed by ACJ on 12-09-2009, 23:35.
This roadmap was reviewed by sar00518 on 12-14-2009, 08:44.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/113009v4/4n108.d	241615017	RE03-09-14289	30-NOV-2009	18:44	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n109.d	241615019	RE03-10-6967	30-NOV-2009	19:11	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n110.d	241615001	RE03-09-14108	30-NOV-2009	19:39	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n111.d	241615002	RE03-09-14106	30-NOV-2009	20:06	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n112.d	241615003	RE03-09-14107	30-NOV-2009	20:34	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n113.d	241615004	RE03-09-14109	30-NOV-2009	21:01	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n114.d	241615005	RE03-09-14252	30-NOV-2009	21:28	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n115.d	241615006	RE03-09-14250	30-NOV-2009	21:56	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n116.d	241615007	RE03-09-14255	30-NOV-2009	22:23	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n117.d	241615008	RE03-09-14256	30-NOV-2009	22:51	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n118.d	241615009	RE03-09-14254	30-NOV-2009	23:18	10-644.sub	1	927711	
■	N	/chem/VOA4.i/113009v4/4n119.d	241615010	RE03-09-14249	30-NOV-2009	23:45	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n120.d	241615011	RE03-09-14248	01-DEC-2009	00:13	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n121.d	241615012	RE03-09-14247	01-DEC-2009	00:40	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n122.d	241615013	RE03-09-14246	01-DEC-2009	01:07	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n123.d	241615014	RE03-09-14253	01-DEC-2009	01:35	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n124.d	241615015	RE03-09-14251	01-DEC-2009	02:01	10-644.sub	1	927711	

☐	N	/chem/VOA4.i/113009v4/4n125.d	241615016	RE03-09-14257	01-DEC-2009	02:29	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n126.d	241615018	RE03-10-2729	01-DEC-2009	02:56	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n127.d	241615020	RE03-10-6969	01-DEC-2009	03:23	10-644.sub	1	927711	
■	N	/chem/VOA4.i/120109v4/4n208.d	241615006	RE03-09-14250	01-DEC-2009	20:15	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/120109v4/4n209.d	241615010	RE03-09-14249	01-DEC-2009	20:43	10-644.sub	1	927711	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/113009v4/4n103LL.d	1201983687	LCS	lcs	30-NOV-2009	16:27	all.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n105SL.d	1201983688	LCS	lcs	30-NOV-2009	17:22	all.sub	1	927711	
☐	N	/chem/VOA4.i/113009v4/4n106BL.d	1201983684	BLANK	mb	30-NOV-2009	17:49	all.sub	1	927711	
☐	N	/chem/VOA4.i/120109v4/4n203la.d	1201991930	LCS	lcs	01-DEC-2009	16:35	all.sub	1	927711	
☐	N	/chem/VOA4.i/120109v4/4n205sa.d	1201991931	LCS	lcs	01-DEC-2009	17:30	all.sub	1	927711	
☐	N	/chem/VOA4.i/120109v4/4n206ba.d	1201991929	BLANK	mb	01-DEC-2009	17:57	all.sub	1	927711	
☐	N	/chem/VOA4.i/120109v4/4n220.d	1201983685	RE03-09-14108MS	ms	02-DEC-2009	01:46	10-644.sub	1	927711	
☐	N	/chem/VOA4.i/120109v4/4n221.d	1201983686	RE03-09-14108MSD	msd	02-DEC-2009	02:13	10-644.sub	1	927711	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14106	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:06	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n111.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14106	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:06	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n111.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14107	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n112.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.387	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.82	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.42	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.42	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14107	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n112.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.82	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615001**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14108**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 19:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n110.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.367	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	J	3.11	ug/kg	1.79	5.39
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.39	ug/kg	1.72	5.39
75-09-2	Methylene chloride	U	5.39	ug/kg	2.16	5.39
75-15-0	Carbon disulfide	U	5.39	ug/kg	1.35	5.39
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.39	ug/kg	1.62	5.39
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.356	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.356	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.39	ug/kg	1.35	5.39
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.39	ug/kg	1.62	5.39
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615001**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14108**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 19:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n110.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.16	ug/kg	0.323	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n113.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.317	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.317	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.317	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.317	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.317	1.06
67-64-1	Acetone	U	5.29	ug/kg	1.76	5.29
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.317	1.06
74-88-4	Iodomethane	U	5.29	ug/kg	1.69	5.29
75-09-2	Methylene chloride	U	5.29	ug/kg	2.11	5.29
75-15-0	Carbon disulfide	U	5.29	ug/kg	1.32	5.29
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.317	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.317	1.06
78-93-3	2-Butanone	U	5.29	ug/kg	1.59	5.29
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.317	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.317	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.317	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.349	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.317	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.317	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.317	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.317	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.317	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.349	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.317	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.317	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.317	1.06
108-10-1	4-Methyl-2-pentanone	U	5.29	ug/kg	1.32	5.29
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.317	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.317	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.317	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.317	1.06
591-78-6	2-Hexanone	U	5.29	ug/kg	1.59	5.29
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.317	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.317	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.317	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.317	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.317	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n113.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.317	1.06
179601-23-1	m,p-Xylenes	U	2.11	ug/kg	0.317	2.11
95-47-6	o-Xylene	U	1.06	ug/kg	0.317	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.317	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.317	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.317	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.317	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.317	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.317	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.317	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.317	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.317	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.317	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.317	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.317	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.317	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.317	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.317	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.317	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.29	ug/kg	1.69	5.29
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.317	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615013**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14246**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 01:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n122.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.369	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.326	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.326	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.326	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.326	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.326	1.09
67-64-1	Acetone	U	5.43	ug/kg	1.80	5.43
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
74-88-4	Iodomethane	U	5.43	ug/kg	1.74	5.43
75-09-2	Methylene chloride	U	5.43	ug/kg	2.17	5.43
75-15-0	Carbon disulfide	U	5.43	ug/kg	1.36	5.43
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.326	1.09
78-93-3	2-Butanone	U	5.43	ug/kg	1.63	5.43
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.326	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.326	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.326	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.326	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.326	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.326	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.326	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.326	1.09
108-10-1	4-Methyl-2-pentanone	U	5.43	ug/kg	1.36	5.43
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.326	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.326	1.09
591-78-6	2-Hexanone	U	5.43	ug/kg	1.63	5.43
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.326	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.326	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.326	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.326	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.326	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615013**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14246**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 01:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n122.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.326	1.09
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.326	2.17
95-47-6	o-Xylene	U	1.09	ug/kg	0.326	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.326	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.326	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.326	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.326	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.326	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.326	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.326	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.326	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.326	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.326	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.326	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.43	ug/kg	1.74	5.43
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615012**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14247**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 00:40**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n121.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.379	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12
67-64-1	Acetone	U	5.58	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
74-88-4	Iodomethane	U	5.58	ug/kg	1.78	5.58
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.39	5.58
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12
78-93-3	2-Butanone	U	5.58	ug/kg	1.67	5.58
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.368	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.368	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.39	5.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12
591-78-6	2-Hexanone	U	5.58	ug/kg	1.67	5.58
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14247	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:40	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n121.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.78	5.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14248	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:13	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n120.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12
67-64-1	Acetone	U	5.59	ug/kg	1.86	5.59
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
74-88-4	Iodomethane	U	5.59	ug/kg	1.79	5.59
75-09-2	Methylene chloride	U	5.59	ug/kg	2.24	5.59
75-15-0	Carbon disulfide	U	5.59	ug/kg	1.40	5.59
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12
78-93-3	2-Butanone	U	5.59	ug/kg	1.68	5.59
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12
108-10-1	4-Methyl-2-pentanone	U	5.59	ug/kg	1.40	5.59
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12
591-78-6	2-Hexanone	U	5.59	ug/kg	1.68	5.59
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14248	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:13	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n120.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.59	ug/kg	1.79	5.59
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615010**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14249**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 20:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 19:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14249	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 20:43	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 19:51	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n209.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.56	ug/kg	1.78	5.56
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615006**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14250**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 21:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n115.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	U	5.37	ug/kg	1.78	5.37
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.355	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.355	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.37	ug/kg	1.61	5.37
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:56	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n115.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
541-05-9	Cyclotrisiloxane, hexamethyl-	12.47	9.25	ug/kg	86	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n124.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615015**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14251**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 02:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:20**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n124.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14252**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 21:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n114.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.78	5.35
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.61	5.35
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.61	5.35
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n114.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:35	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:19	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n123.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.50	ug/kg	1.83	5.50
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.50	ug/kg	1.76	5.50
75-09-2	Methylene chloride	U	5.50	ug/kg	2.20	5.50
75-15-0	Carbon disulfide	U	5.50	ug/kg	1.38	5.50
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.50	ug/kg	1.65	5.50
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.50	ug/kg	1.38	5.50
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.50	ug/kg	1.65	5.50
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:35	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:19	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n123.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.50	ug/kg	1.76	5.50
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 23:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n118.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.361	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.319	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.319	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.319	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.319	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.319	1.06
67-64-1	Acetone	U	5.31	ug/kg	1.76	5.31
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
74-88-4	Iodomethane	U	5.31	ug/kg	1.70	5.31
75-09-2	Methylene chloride	U	5.31	ug/kg	2.12	5.31
75-15-0	Carbon disulfide	U	5.31	ug/kg	1.33	5.31
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.319	1.06
78-93-3	2-Butanone	U	5.31	ug/kg	1.59	5.31
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.319	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.319	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.351	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.319	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.319	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.319	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.319	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.319	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.351	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.319	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.319	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.319	1.06
108-10-1	4-Methyl-2-pentanone	U	5.31	ug/kg	1.33	5.31
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.319	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.319	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.319	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.319	1.06
591-78-6	2-Hexanone	U	5.31	ug/kg	1.59	5.31
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.319	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.319	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.319	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.319	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.319	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615009**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**5.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14254**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 23:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n118.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.319	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.319	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.319	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.319	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.319	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.319	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.319	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.319	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.319	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.319	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.319	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.319	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.319	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.319	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.319	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.319	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.319	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.319	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.319	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.31	ug/kg	1.70	5.31
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.319	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n116.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.51	ug/kg	1.83	5.51
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.51	ug/kg	1.76	5.51
75-09-2	Methylene chloride	U	5.51	ug/kg	2.20	5.51
75-15-0	Carbon disulfide	U	5.51	ug/kg	1.38	5.51
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.51	ug/kg	1.65	5.51
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.51	ug/kg	1.38	5.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.51	ug/kg	1.65	5.51
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n116.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.331	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.51	ug/kg	1.76	5.51
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615008**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14256**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 22:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n117.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.371	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.45	ug/kg	1.81	5.45
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.45	ug/kg	1.74	5.45
75-09-2	Methylene chloride	U	5.45	ug/kg	2.18	5.45
75-15-0	Carbon disulfide	U	5.45	ug/kg	1.36	5.45
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.45	ug/kg	1.63	5.45
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.45	ug/kg	1.36	5.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.45	ug/kg	1.63	5.45
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615008**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14256**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 22:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n117.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.45	ug/kg	1.74	5.45
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14257	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:29	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n125.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.01	ug/kg	0.344	1.01
74-87-3	Chloromethane	U	1.01	ug/kg	0.303	1.01
75-01-4	Vinyl chloride	U	1.01	ug/kg	0.303	1.01
74-83-9	Bromomethane	U	1.01	ug/kg	0.303	1.01
75-00-3	Chloroethane	U	1.01	ug/kg	0.303	1.01
75-69-4	Trichlorofluoromethane	U	1.01	ug/kg	0.303	1.01
67-64-1	Acetone	U	5.06	ug/kg	1.68	5.06
75-35-4	1,1-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
74-88-4	Iodomethane	U	5.06	ug/kg	1.62	5.06
75-09-2	Methylene chloride	U	5.06	ug/kg	2.02	5.06
75-15-0	Carbon disulfide	U	5.06	ug/kg	1.26	5.06
156-60-5	trans-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
75-34-3	1,1-Dichloroethane	U	1.01	ug/kg	0.303	1.01
78-93-3	2-Butanone	U	5.06	ug/kg	1.52	5.06
156-59-2	cis-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
594-20-7	2,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
67-66-3	Chloroform	U	1.01	ug/kg	0.303	1.01
74-97-5	Bromochloromethane	U	1.01	ug/kg	0.334	1.01
71-55-6	1,1,1-Trichloroethane	U	1.01	ug/kg	0.303	1.01
563-58-6	1,1-Dichloropropene	U	1.01	ug/kg	0.303	1.01
56-23-5	Carbon tetrachloride	U	1.01	ug/kg	0.303	1.01
107-06-2	1,2-Dichloroethane	U	1.01	ug/kg	0.303	1.01
71-43-2	Benzene	U	1.01	ug/kg	0.303	1.01
79-01-6	Trichloroethylene	U	1.01	ug/kg	0.334	1.01
78-87-5	1,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
75-27-4	Bromodichloromethane	U	1.01	ug/kg	0.303	1.01
74-95-3	Dibromomethane	U	1.01	ug/kg	0.303	1.01
108-10-1	4-Methyl-2-pentanone	U	5.06	ug/kg	1.26	5.06
10061-01-5	cis-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
108-88-3	Toluene	U	1.01	ug/kg	0.303	1.01
10061-02-6	trans-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
79-00-5	1,1,2-Trichloroethane	U	1.01	ug/kg	0.303	1.01
591-78-6	2-Hexanone	U	5.06	ug/kg	1.52	5.06
142-28-9	1,3-Dichloropropane	U	1.01	ug/kg	0.303	1.01
127-18-4	Tetrachloroethylene	U	1.01	ug/kg	0.303	1.01
124-48-1	Dibromochloromethane	U	1.01	ug/kg	0.303	1.01
106-93-4	1,2-Dibromoethane	U	1.01	ug/kg	0.303	1.01
108-90-7	Chlorobenzene	U	1.01	ug/kg	0.303	1.01

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615016**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**1.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14257**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 02:29**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:21**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n125.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.01	ug/kg	0.303	1.01
179601-23-1	m,p-Xylenes	U	2.02	ug/kg	0.303	2.02
95-47-6	o-Xylene	U	1.01	ug/kg	0.303	1.01
100-42-5	Styrene	U	1.01	ug/kg	0.303	1.01
75-25-2	Bromoform	U	1.01	ug/kg	0.303	1.01
79-34-5	1,1,2,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
96-18-4	1,2,3-Trichloropropane	U	1.01	ug/kg	0.303	1.01
108-86-1	Bromobenzene	U	1.01	ug/kg	0.303	1.01
103-65-1	n-Propylbenzene	U	1.01	ug/kg	0.303	1.01
95-49-8	2-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-82-8	Isopropylbenzene	U	1.01	ug/kg	0.303	1.01
108-67-8	1,3,5-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
106-43-4	4-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-06-6	tert-Butylbenzene	U	1.01	ug/kg	0.303	1.01
95-63-6	1,2,4-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
135-98-8	sec-Butylbenzene	U	1.01	ug/kg	0.303	1.01
99-87-6	4-Isopropyltoluene	U	1.01	ug/kg	0.303	1.01
541-73-1	1,3-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
106-46-7	1,4-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
104-51-8	n-Butylbenzene	U	1.01	ug/kg	0.303	1.01
96-12-8	1,2-Dibromo-3-chloropropane	U	1.01	ug/kg	0.303	1.01
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.06	ug/kg	1.62	5.06
630-20-6	1,1,1,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
95-50-1	1,2-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615017**	**Date Received:**	**11/21/2009 09:00**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14289**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 18:44**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n108.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	2.18	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615017**	**Date Received:**	**11/21/2009 09:00**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14289**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 18:44**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n108.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615018**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2729**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 02:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:23**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n126.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615018**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2729**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 02:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:23**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n126.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615019**	**Date Received:**	**11/21/2009 09:00**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6967**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 19:11**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.95	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615019**	**Date Received:**	**11/21/2009 09:00**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6967**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 19:11**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 03:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n127.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.26	ug/kg	1.74	5.26
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.26	ug/kg	1.68	5.26
75-09-2	Methylene chloride	U	5.26	ug/kg	2.10	5.26
75-15-0	Carbon disulfide	U	5.26	ug/kg	1.31	5.26
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.26	ug/kg	1.58	5.26
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.26	ug/kg	1.31	5.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.26	ug/kg	1.58	5.26
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 03:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n127.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.26	ug/kg	1.68	5.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-644

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201983687	LCS for batch 927709	119	104	102
1201983688	LCS for batch 927709	107	99	100
1201983684	MB for batch 927709	103	97	99
241615017	RE03-09-14289	113	106	109
241615019	RE03-10-6967	126	122	123
241615001	RE03-09-14108	103	101	114
241615002	RE03-09-14106	103	102	106
241615003	RE03-09-14107	97	100	107
241615004	RE03-09-14109	109	104	110
241615005	RE03-09-14252	105	102	109
241615006	RE03-09-14250	103	101	112
241615007	RE03-09-14255	112	106	114
241615008	RE03-09-14256	115	112	121
241615009	RE03-09-14254	102	98	106
241615011	RE03-09-14248	106	101	111
241615012	RE03-09-14247	96	96	101
241615013	RE03-09-14246	112	106	118
241615014	RE03-09-14253	110	111	119
241615015	RE03-09-14251	115	108	122
241615016	RE03-09-14257	116	109	117
241615018	RE03-10-2729	108	104	112
241615020	RE03-10-6969	119	113	127
1201991930	LCS for batch 927709	118	99	105
1201991931	LCS for batch 927709	106	99	101

DCED4 = 1,2-Dichloroethane-d4 (68%-131%)
TOL = Toluene-d8 (75%-129%)
BFB = Bromofluorobenzene (68%-133%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Volatile

Surrogate Recovery Report

SDG Number: 10-644

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201991929	MB for batch 927709	102	99	104
241615010	RE03-09-14249	102	101	108
1201983685	RE03-09-14108PS	114	100	102
1201983686	RE03-09-14108PSD	107	94	96

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14108PS
Lab Sample ID: 1201983685
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 7.2
Analysis Date: 12/02/2009 01:46
Prep Batch ID: 927709
Batch ID: 927711
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	39.4	79	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	39.0	78	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	43.2	86	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	45.2	90	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	45.8	92	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	47.7	95	51-151
67-64-1	PS	Acetone	250	2.88	J	216	85	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	47.4	95	61-125
74-88-4	PS	Iodomethane	250	0.00	U	228	91	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	46.7	93	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	237	95	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	47.6	95	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	48.7	97	62-125
78-93-3	PS	2-Butanone	250	0.00	U	224	89	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	47.9	96	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	49.1	98	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	47.0	94	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	46.3	93	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	50.2	100	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	49.4	99	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	50.3	101	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	47.6	95	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14108PS
Lab Sample ID: 1201983685
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 7.2
Analysis Date: 12/02/2009 01:46
Prep Batch ID: 927709
Batch ID: 927711
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	45.9	92	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	48.2	96	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	47.2	94	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	48.2	96	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	46.8	94	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	229	91	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	47.3	95	54-133
108-88-3	PS	Toluene	50.0	0.00	U	44.2	88	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	46.4	93	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	45.7	91	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	183	73	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	45.2	90	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	42.7	85	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	47.2	94	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	46.5	93	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	45.4	91	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	44.4	89	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	88.4	88	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	44.6	89	52-127
100-42-5	PS	Styrene	50.0	0.00	U	44.6	89	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	45.6	91	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	46.5	93	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14108PS
Lab Sample ID: 1201983685
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 7.2
Analysis Date: 12/02/2009 01:46
Prep Batch ID: 927709
Batch ID: 927711
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	46.6	93	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	43.1	86	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	43.7	87	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	43.4	87	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	44.0	88	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	43.6	87	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	44.2	88	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	44.5	89	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	44.0	88	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	44.6	89	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	44.3	89	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	43.7	87	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	43.7	87	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	44.7	89	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	48.4	97	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	45.6	91	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	44.7	89	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14108PSD
Lab Sample ID: 1201983686
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 7.2
Analysis Date: 12/02/2009 02:13
Dilution: 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	38.3	77	25-149	3	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	39.6	79	39-140	2	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	43.0	86	47-129	1	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	45.2	90	31-135	0	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	44.8	90	53-128	2	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	46.5	93	51-151	3	0-25
67-64-1	PSD	Acetone	250	2.88	J	218	86	21-153	1	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	46.4	93	61-125	2	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	226	90	53-142	1	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	47.3	95	59-136	1	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	238	95	46-129	0	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	48.0	96	56-126	1	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	48.9	98	62-125	0	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	227	91	26-152	2	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	47.8	96	60-130	0	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	48.6	97	55-135	1	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	47.1	94	60-127	0	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	46.8	94	61-131	1	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	50.1	100	59-131	0	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	49.8	100	57-128	1	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	50.5	101	58-136	0	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	47.5	95	58-126	0	0-25

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14108PSD
Lab Sample ID: 1201983686
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 7.2
Analysis Date: 12/02/2009 02:13 **Dilution:** 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	45.9	92	56-123	0	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	48.5	97	51-137	1	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	47.4	95	60-126	1	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	48.4	97	55-138	0	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	47.4	95	60-132	1	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	235	94	58-136	3	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	47.4	95	54-133	0	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	45.2	90	52-128	2	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	46.9	94	53-137	1	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	47.3	95	59-130	3	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	184	74	31-148	1	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	46.3	93	57-127	2	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	44.7	89	51-128	5	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	48.4	97	59-139	3	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	47.6	95	57-133	3	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	46.6	93	53-122	3	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	45.7	91	51-125	3	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	91.9	92	50-126	4	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	46.3	93	52-127	4	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	46.0	92	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	47.8	96	57-149	5	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	47.7	95	63-127	3	0-25

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14108PSD
Lab Sample ID: 1201983686
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 7.2
Analysis Date: 12/02/2009 02:13 **Dilution:** 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	49.0	98	57-149	5	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	45.0	90	49-131	4	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	46.3	93	40-136	6	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	45.5	91	44-135	5	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	46.1	92	44-140	5	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	45.7	91	42-140	5	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	46.3	93	44-132	5	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	46.8	94	42-142	5	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	45.9	92	43-137	4	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	46.8	94	39-139	5	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	46.3	93	38-145	5	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	45.8	92	43-129	5	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	45.3	91	44-125	4	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	46.7	93	36-141	5	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	50.2	100	47-151	4	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	46.8	94	59-131	2	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	45.8	92	43-129	3	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927709
Lab Sample ID: 1201983687
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 16:27
Dilution: 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	50.0	100	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	46.8	94	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	51.7	103	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	53.2	106	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	54.2	108	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	58.5	117	67-151
67-64-1	LCS	Acetone	250	0.0	229	92	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	57.6	115	70-125
74-88-4	LCS	Iodomethane	250	0.0	275	110	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	55.7	111	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	291	117	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	58.3	117	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	57.3	115	75-120
78-93-3	LCS	2-Butanone	250	0.0	240	96	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	56.5	113	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	61.1	122	74-135
67-66-3	LCS	Chloroform	50.0	0.0	55.9	112	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	54.4	109	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	61.7	123	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	61.6	123	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	64.0	128	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	53.4	107	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927709
Lab Sample ID: 1201983687
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 16:27
Dilution: 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	55.3	111	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	58.6	117	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	55.4	111	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	56.1	112	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	53.6	107	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	248	99	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	56.5	113	80-125
108-88-3	LCS	Toluene	50.0	0.0	52.8	106	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.1	106	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	50.4	101	76-120
591-78-6	LCS	2-Hexanone	250	0.0	218	87	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	49.9	100	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	56.9	114	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	54.1	108	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	51.6	103	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	53.5	107	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	52.6	105	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	107	107	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	53.3	107	74-120
100-42-5	LCS	Styrene	50.0	0.0	52.9	106	76-125
75-25-2	LCS	Bromoform	50.0	0.0	52.0	104	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	48.9	98	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927709
Lab Sample ID: 1201983687
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 16:27
Dilution: 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	48.6	97	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	50.3	101	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	51.1	102	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	49.1	98	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	51.2	102	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	50.7	101	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	50.7	101	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	51.9	104	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	50.5	101	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	51.7	103	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	52.1	104	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	51.4	103	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	51.0	102	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	52.7	105	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	52.3	105	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	53.0	106	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	50.2	100	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927709
Lab Sample ID: 1201983688
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 17:22
Dilution: 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	264	106	52-139

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927709
Lab Sample ID: 1201991930
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 16:35
Dilution: 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	47.6	95	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	45.9	92	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	51.1	102	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	50.3	101	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	52.4	105	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	57.0	114	67-151
67-64-1	LCS	Acetone	250	0.0	270	108	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	57.5	115	70-125
74-88-4	LCS	Iodomethane	250	0.0	259	104	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	54.9	110	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	284	113	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	56.7	113	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	55.9	112	75-120
78-93-3	LCS	2-Butanone	250	0.0	280	112	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	55.1	110	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	58.9	118	74-135
67-66-3	LCS	Chloroform	50.0	0.0	54.5	109	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	53.1	106	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	60.2	120	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	59.6	119	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	61.8	124	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	53.9	108	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927709
Lab Sample ID: 1201991930
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 16:35
Dilution: 1
Prep Batch ID: 927709
Batch ID: 927711

CAS No	Parmname		Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	53.7	107	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	56.9	114	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	53.7	107	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	55.6	111	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	54.2	108	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	271	108	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	55.5	111	80-125
108-88-3	LCS	Toluene	50.0	0.0	51.3	103	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.8	108	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	51.7	103	76-120
591-78-6	LCS	2-Hexanone	250	0.0	244	98	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	50.8	102	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	52.6	105	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	53.9	108	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	53.1	106	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	52.7	105	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	52.0	104	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	105	105	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	52.2	104	74-120
100-42-5	LCS	Styrene	50.0	0.0	51.6	103	76-125
75-25-2	LCS	Bromoform	50.0	0.0	53.2	106	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	53.5	107	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 927709
Matrix: SOIL
Lab Sample ID: 1201991930
Instrument: VOA4.I
Analysis Date: 12/01/2009 16:35
Dilution: 1
Analyst: ACJ
Prep Batch ID: 927709
Purge Vol: 5 mL
Batch ID: 927711

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	54.1	108	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	50.6	101	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	53.1	106	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	51.4	103	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	53.0	106	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	52.1	104	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	52.7	105	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	52.5	105	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	51.4	103	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	53.0	106	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	52.7	105	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	50.7	101	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	50.5	101	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	53.8	108	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	54.7	109	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	52.1	104	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	50.1	100	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **10-644**
Client ID: **LCS for batch 927709**
Lab Sample ID: **1201991931**
Instrument: **VOA4.I**
Analyst: **ACJ**
Purge Vol: **5 mL**

Sample Type: **Laboratory Control Sample**
Matrix: **SOIL**
Analysis Date: **12/01/2009 17:30**
Dilution: **1**
Prep Batch ID: **927709**
Batch ID: **927711**

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	265	106	52-139

Method Blank Summary

SDG Number:	10-644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927709	Instrument ID:	VOA4.I	Data File:	4n106BL.d
Lab Sample ID:	1201983684	Prep Date:	11/30/2009 16:30	Analyzed:	11/30/09 17:49
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 927709	1201983687	4n103LL.d	11/30/09	1627
02	LCS for batch 927709	1201983688	4n105SL.d	11/30/09	1722
03	RE03-09-14289	241615017	4n108.d	11/30/09	1844
04	RE03-10-6967	241615019	4n109.d	11/30/09	1911
05	RE03-09-14108	241615001	4n110.d	11/30/09	1939
06	RE03-09-14106	241615002	4n111.d	11/30/09	2006
07	RE03-09-14107	241615003	4n112.d	11/30/09	2034
08	RE03-09-14109	241615004	4n113.d	11/30/09	2101
09	RE03-09-14252	241615005	4n114.d	11/30/09	2128
10	RE03-09-14250	241615006	4n115.d	11/30/09	2156
11	RE03-09-14255	241615007	4n116.d	11/30/09	2223
12	RE03-09-14256	241615008	4n117.d	11/30/09	2251
13	RE03-09-14254	241615009	4n118.d	11/30/09	2318
14	RE03-09-14248	241615011	4n120.d	12/01/09	0013
15	RE03-09-14247	241615012	4n121.d	12/01/09	0040
16	RE03-09-14246	241615013	4n122.d	12/01/09	0107
17	RE03-09-14253	241615014	4n123.d	12/01/09	0135
18	RE03-09-14251	241615015	4n124.d	12/01/09	0201
19	RE03-09-14257	241615016	4n125.d	12/01/09	0229
20	RE03-10-2729	241615018	4n126.d	12/01/09	0256
21	RE03-10-6969	241615020	4n127.d	12/01/09	0323

Method Blank Summary

SDG Number:	10-644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927709	Instrument ID:	VOA4.I	Data File:	4n206ba.d
Lab Sample ID:	1201991929	Prep Date:	12/01/2009 16:30	Analyzed:	12/01/09 17:57
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 927709	1201991930	4n203la.d	12/01/09	1635
02	LCS for batch 927709	1201991931	4n205sa.d	12/01/09	1730
03	RE03-09-14249	241615010	4n209.d	12/01/09	2043
04	RE03-09-14108PS	1201983685	4n220.d	12/02/09	0146
05	RE03-09-14108PSD	1201983686	4n221.d	12/02/09	0213

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: VOA4.I **Injection Date/Time:** 01-DEC-09 15:40

Column Description: DB-624 **Lab File ID** /120109v4/4n201.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	17.5
75	30.0 - 60.0% of mass 95	47.8
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	88.1
175	5.0 -9.0% of mass 174	6.8
176	95.0 - 101.0% of mass 174	95.4
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091201-01	/120109v4/4n202.d	01-DEC-09 16:07
LCS	1201991930	/120109v4/4n203la.d	01-DEC-09 16:35
VSTD250S	UVM091118-08A	/120109v4/4n204.d	01-DEC-09 17:02
LCS	1201991931	/120109v4/4n205sa.d	01-DEC-09 17:30
BLANK	1201991929	/120109v4/4n206ba.d	01-DEC-09 17:57
RE03-09-14249	241615010	/120109v4/4n209.d	01-DEC-09 20:43
RE03-09-14108MS	1201983685	/120109v4/4n220.d	02-DEC-09 01:46
RE03-09-14108MSD	1201983686	/120109v4/4n221.d	02-DEC-09 02:13

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: VOA4.I **Injection Date/Time:** 22-NOV-09 09:20

Column Description: DB-624 **Lab File ID** /112209v4/4I701.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	99.3
175	5.0 -9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W4VM091122-01	/112209v4/4I703.d	22-NOV-09 10:14
VSTD001	W4VM091122-02	/112209v4/4I704.d	22-NOV-09 10:41
VSTD002	W4VM091122-04	/112209v4/4I706.d	22-NOV-09 11:36
VSTD005	W4VM091122-05	/112209v4/4I707.d	22-NOV-09 12:04
VSTD010	W4VM091122-06	/112209v4/4I708.d	22-NOV-09 12:31
VSTD020	W4VM091122-07	/112209v4/4I709.d	22-NOV-09 12:59
VSTD050	W4VM091122-08	/112209v4/4I710.d	22-NOV-09 13:27
VSTD100	W4VM091122-09	/112209v4/4I711.d	22-NOV-09 13:54
VSTD005S	W4VM091122-10	/112209v4/4I713.d	22-NOV-09 14:48
VSTD010S	W4VM091122-11	/112209v4/4I714.d	22-NOV-09 15:16
VSTD025S	W4VM091122-12	/112209v4/4I715.d	22-NOV-09 15:43
VSTD050S	W4VM091122-13	/112209v4/4I716.d	22-NOV-09 16:10
VSTD250S	W4VM091122-15	/112209v4/4I718.d	22-NOV-09 17:04
VSTD500S	W4VM091122-16	/112209v4/4I719.d	22-NOV-09 17:32
SECOND SOURCE	W4VM091122-18	/112209v4/4I722.d	22-NOV-09 18:53
SHORT SECOND SOURCE	W4VM091122-19	/112209v4/4I723.d	22-NOV-09 19:21

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: VOA4.I **Injection Date/Time:** 30-NOV-09 15:32

Column Description: DB-624 **Lab File ID** /113009v4/4n101.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	46.9
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	94.6
175	5.0 -9.0% of mass 174	6.7
176	95.0 - 101.0% of mass 174	99.2
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091130-02	/113009v4/4n103.d	30-NOV-09 16:27
LCS	1201983687	/113009v4/4n103LL.d	30-NOV-09 16:27
VSTD250S	W4VM091130-03	/113009v4/4n104.d	30-NOV-09 16:54
LCS	1201983688	/113009v4/4n105SL.d	30-NOV-09 17:22
BLANK	1201983684	/113009v4/4n106BL.d	30-NOV-09 17:49
RE03-09-14289	241615017	/113009v4/4n108.d	30-NOV-09 18:44
RE03-10-6967	241615019	/113009v4/4n109.d	30-NOV-09 19:11
RE03-09-14108	241615001	/113009v4/4n110.d	30-NOV-09 19:39
RE03-09-14106	241615002	/113009v4/4n111.d	30-NOV-09 20:06
RE03-09-14107	241615003	/113009v4/4n112.d	30-NOV-09 20:34
RE03-09-14109	241615004	/113009v4/4n113.d	30-NOV-09 21:01
RE03-09-14252	241615005	/113009v4/4n114.d	30-NOV-09 21:28
RE03-09-14250	241615006	/113009v4/4n115.d	30-NOV-09 21:56
RE03-09-14255	241615007	/113009v4/4n116.d	30-NOV-09 22:23
RE03-09-14256	241615008	/113009v4/4n117.d	30-NOV-09 22:51
RE03-09-14254	241615009	/113009v4/4n118.d	30-NOV-09 23:18
RE03-09-14248	241615011	/113009v4/4n120.d	01-DEC-09 00:13
RE03-09-14247	241615012	/113009v4/4n121.d	01-DEC-09 00:40
RE03-09-14246	241615013	/113009v4/4n122.d	01-DEC-09 01:07

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: VOA4.I **Injection Date/Time:** 30-NOV-09 15:32

Column Description: DB-624 **Lab File ID** /113009v4/4n101.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	46.9
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	94.6
175	5.0 -9.0% of mass 174	6.7
176	95.0 - 101.0% of mass 174	99.2
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE03-09-14253	241615014	/113009v4/4n123.d	01-DEC-09 01:35
RE03-09-14251	241615015	/113009v4/4n124.d	01-DEC-09 02:01
RE03-09-14257	241615016	/113009v4/4n125.d	01-DEC-09 02:29
RE03-10-2729	241615018	/113009v4/4n126.d	01-DEC-09 02:56
RE03-10-6969	241615020	/113009v4/4n127.d	01-DEC-09 03:23

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-644

STD Analysis Time: 01-DEC-09 16:07

Data File: 4n202.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1523689		10.6	1193564		13.8	804393		16.2
Upper Limit	3047378		11.1	2387128		14.3	1608786		16.7
Lower Limit	761845		10.1	596782		13.3	402197		15.7
Sample ID									
BLK02LCS	1535652		10.6	1225210		13.8	833679		16.2
BLK02SLCS	1508454		10.6	1204435		13.8	808195		16.2
BLK02	1598121		10.6	1211961		13.8	764221		16.2
RE03-09-14249	1604149		10.6	1179464		13.8	683188		16.2
RE03-09-14108MS	1550360		10.6	1208549		13.8	832392		16.2
RE03-09-14108MSD	1596076		10.6	1222296		13.8	840920		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-644

STD Analysis Time: 30-NOV-09 16:27

Data File: 4n103.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1589755		10.6	1280798		13.8	925204		16.2
Upper Limit	3179510		11.1	2561596		14.3	1850408		16.7
Lower Limit	794878		10.1	640399		13.3	462602		15.7
Sample ID									
BLK01LCS	1589755		10.6	1280798		13.8	925204		16.2
BLK01SLCS	1606724		10.6	1273920		13.8	870508		16.2
BLK01	1718448		10.6	1336375		13.8	873583		16.2
RE03-09-14289	1545298		10.6	1166909		13.8	759021		16.2
RE03-10-6967	1375434		10.6	1027210		13.8	658608		16.2
RE03-09-14108	1625524		10.6	1196613		13.8	701894		16.2
RE03-09-14106	1563593		10.6	1171534		13.8	743500		16.2
RE03-09-14107	1620125		10.6	1171581		13.8	709970		16.2
RE03-09-14109	1506171		10.6	1142237		13.8	713710		16.2
RE03-09-14252	1619113		10.6	1199171		13.8	727795		16.2
RE03-09-14250	308103	*	10.6	208171	*	13.8	100836	*	16.2
RE03-09-14255	1461018		10.6	1095071		13.8	646661		16.2
RE03-09-14256	1453269		10.6	1079144		13.8	637683		16.2
RE03-09-14254	1313490		10.6	972443		13.8	577943		16.2
RE03-09-14248	1550807		10.6	1164182		13.8	681863		16.2
RE03-09-14247	1641915		10.6	1181172		13.8	691940		16.2
RE03-09-14246	1406742		10.6	1056404		13.8	615749		16.2
RE03-09-14253	1407326		10.6	986910		13.8	531007		16.2
RE03-09-14251	1119332		10.6	835877		13.8	475879		16.2
RE03-09-14257	1418218		10.6	1050270		13.8	633145		16.2
RE03-10-2729	1456542		10.6	1078407		13.8	637745		16.2
RE03-10-6969	1317486		10.6	972788		13.8	542504		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615002**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 20:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:08**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n111.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14106	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:06	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:08	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n111.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n111.d
Lab Smp Id: 241615002 Client Smp ID: RE03-09-14106
Inj Date : 30-NOV-2009 20:06
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615002|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.44270	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1563593	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1171534	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	743500	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	316913	51.6033	57.0
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1039308	50.9340	56.2
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	457592	53.1492	58.7

ION RATIO REPORT

VOA REPORT

Data file: 4n111.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615002 SampleType: SAMPLE
Injection Date: 30-NOV-2009 20:06
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615002|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	20282	10.62	10.35	80-120	100	(T)
64	3530	10.62	10.35	2- 62	17	(T)
49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	7895	12.25	12.02	80-120	100	(T)
43	5309	12.25	12.02	225-285	67	(QT)
100	725736	12.25	12.02	8- 68	9192	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n111.d
Lab Smp Id: 241615002 Client Smp ID: RE03-09-14106
Inj Date : 30-NOV-2009 20:06
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615002|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n111.d
Date : 30-NOV-2009 20:06
Client ID: RE03-09-14106
Sample Info: !241615002!927711!1!VOAF!1!

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

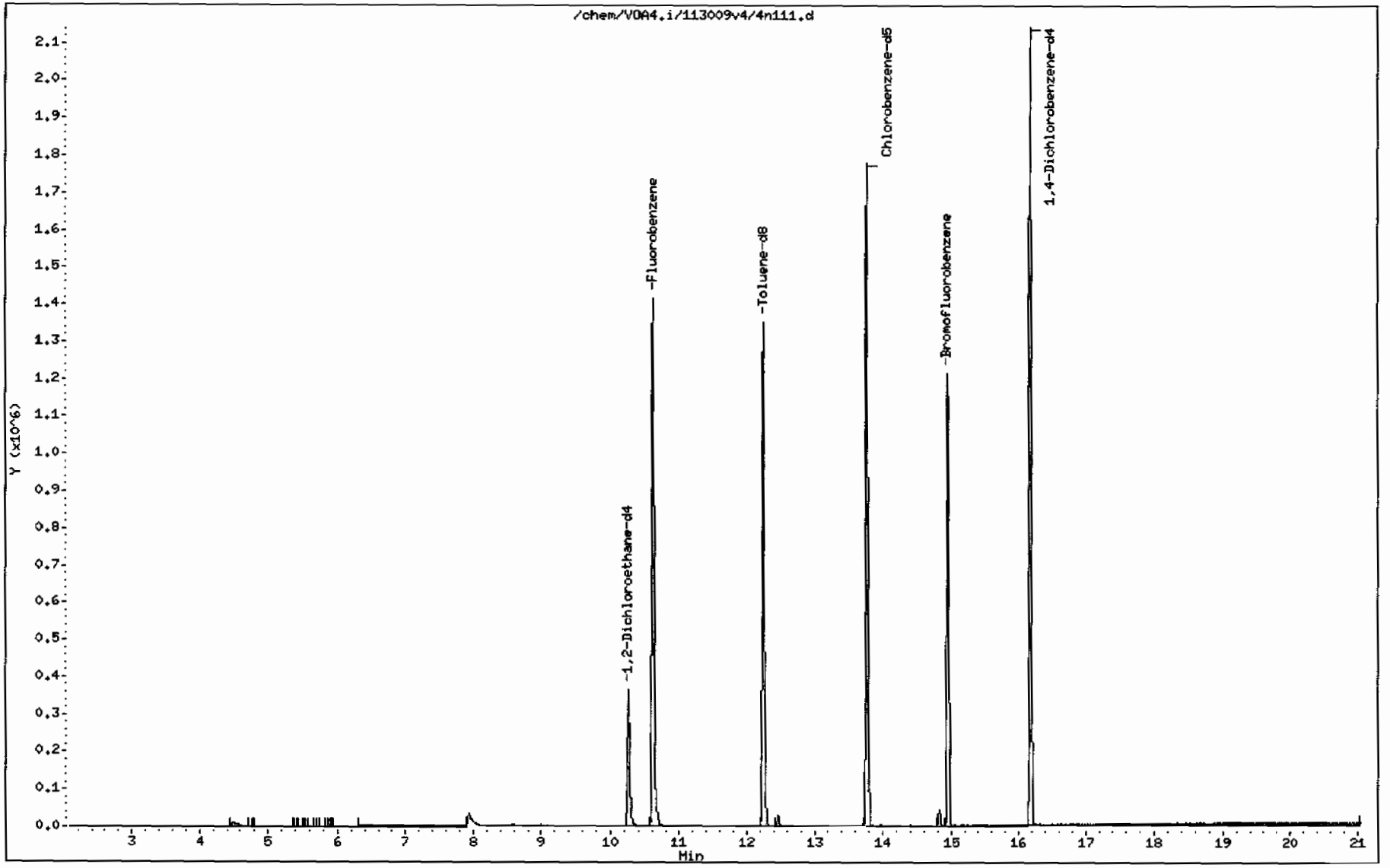

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14107	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n112.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.387	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.82	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.42	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.42	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14107	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 20:34	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n112.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.82	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n112.d
Lab Smp Id: 241615003 Client Smp ID: RE03-09-14107
Inj Date : 30-NOV-2009 20:34
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615003|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.21420	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1620125	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1171581	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	709970	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	309352	48.6145	55.4
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1017210	49.8491	56.8
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	441282	53.6755	61.1

ION RATIO REPORT

VOA REPORT

Data file: 4n112.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615003 SampleType: SAMPLE
Injection Date: 30-NOV-2009 20:34
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615003|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20748	10.61	10.35	80-120	100	(T)
64	3621	10.62	10.35	2- 62	17	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7458	12.25	12.02	80-120	100	(T)
43	5631	12.25	12.02	225-285	76	(QT)
100	706811	12.25	12.02	8- 68	9477	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n112.d
Lab Smp Id: 241615003 Client Smp ID: RE03-09-14107
Inj Date : 30-NOV-2009 20:34
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615003|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n112.d
Date : 30-NOV-2009 20:34
Client ID: RE03-09-14107
Sample Info: |241615003|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

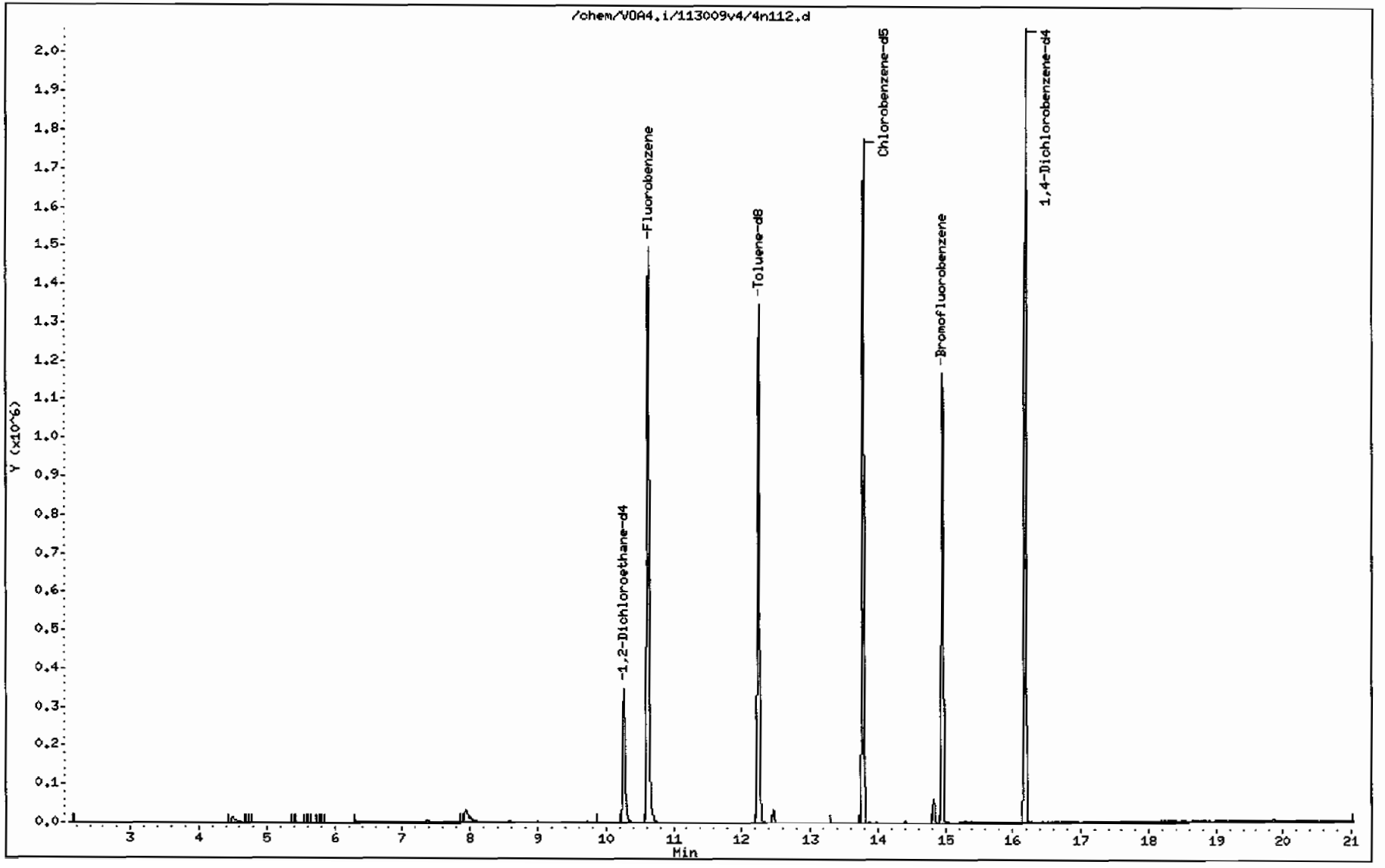

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615001	Date Received:	11/21/2009 09:00	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14108	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	927711	Inst:	VOA4.I	Dilution:	1
Run Date:	11/30/2009 19:39	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/30/2009 18:07	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n110.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.367	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	J	3.11	ug/kg	1.79	5.39
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.39	ug/kg	1.72	5.39
75-09-2	Methylene chloride	U	5.39	ug/kg	2.16	5.39
75-15-0	Carbon disulfide	U	5.39	ug/kg	1.35	5.39
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.39	ug/kg	1.62	5.39
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.356	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.356	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.39	ug/kg	1.35	5.39
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.39	ug/kg	1.62	5.39
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 19:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n110.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.16	ug/kg	0.323	2.16
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n110.d
Lab Smp Id: 241615001 Client Smp ID: RE03-09-14108
Inj Date : 30-NOV-2009 19:39
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615001|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.23270	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1625524	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1196613	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	701894	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	328689	51.4817	55.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1054507	50.5958	54.5
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	461517	56.7827	61.2
10 Acetone	43	7.370	7.358	(0.694)	19037	2.88235	3.1(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n110.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615001 SampleType: SAMPLE
Injection Date: 30-NOV-2009 19:39
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615001|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	19037	7.37	7.36	80-120	100	( )
58	5434	7.36	7.36	1- 61	29	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21361	10.62	10.35	80-120	100	(T)
64	3395	10.61	10.35	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8290	12.26	12.02	80-120	100	(T)
43	5685	12.25	12.02	225-285	69	(QT)
100	735725	12.25	12.02	8- 68	8875	(QT)
66 Bromoform			CAS#: 75-25-2			
173	2350	14.96	14.66	80-120	100	(T)
175	30980	14.95	14.66	19- 79	1318	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n110.d
Lab Smp Id: 241615001 Client Smp ID: RE03-09-14108
Inj Date : 30-NOV-2009 19:39
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615001|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n110.d
Date : 30-NOV-2009 19:39
Client ID: RE03-09-14108
Sample Info: |241615001|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

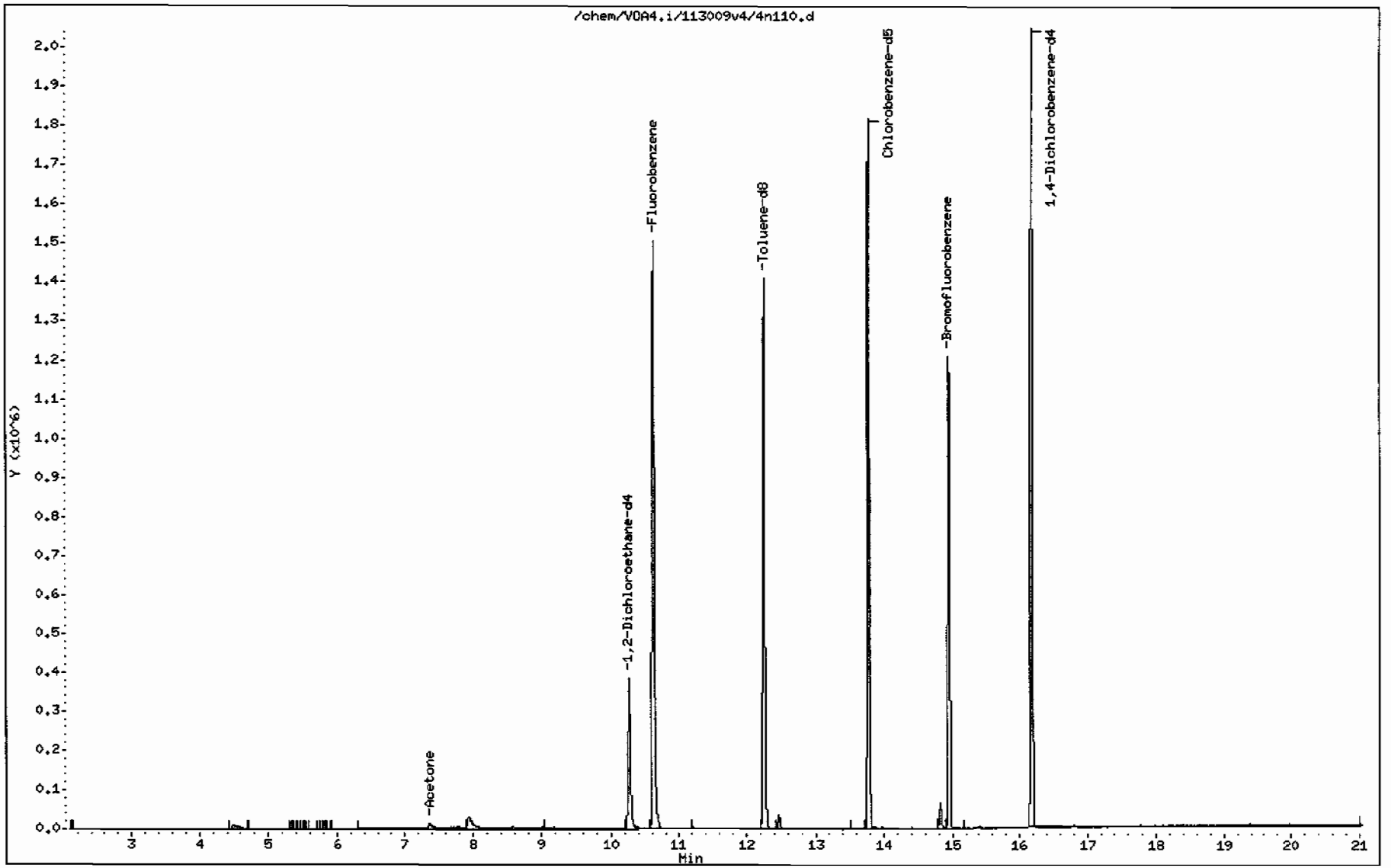

Data File: /chem/VOA4.i/113009v4/4n110.d

Date : 30-NOV-2009 19:39

Client ID: RE03-09-14108

Instrument: VOA4.i

Sample Info: |2416150011927711|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 3.1 ug/Kg

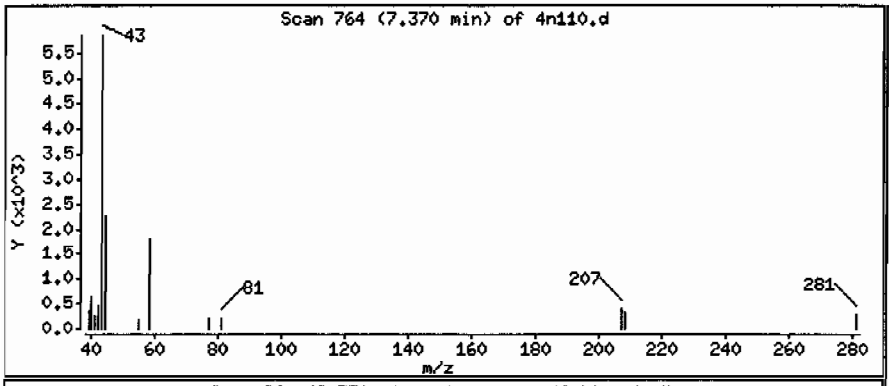

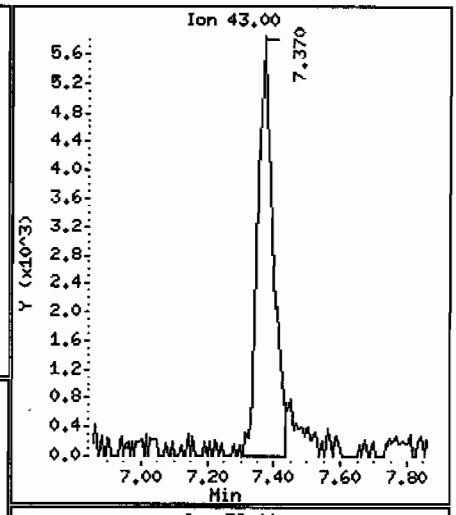

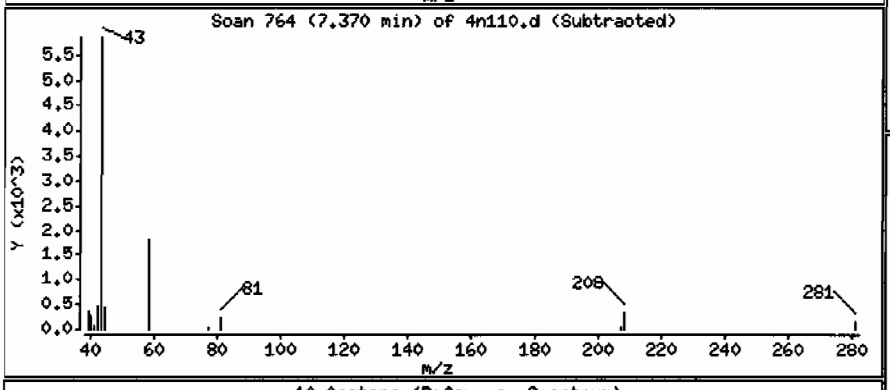

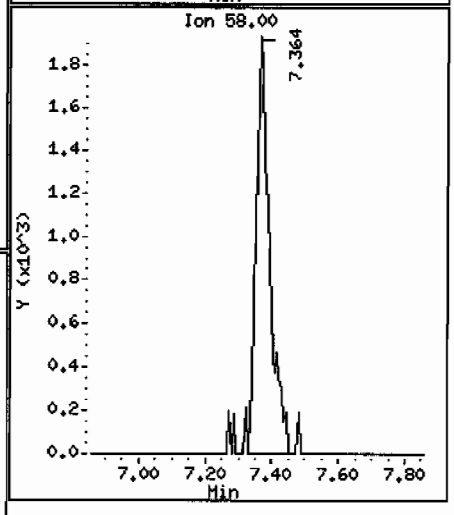

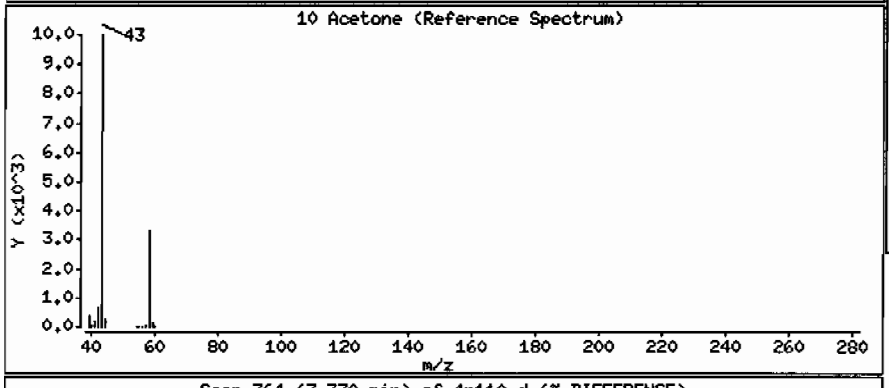

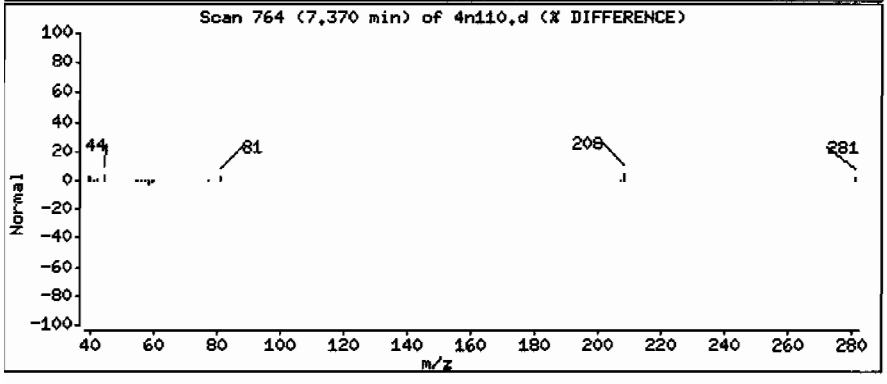

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n113.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.317	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.317	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.317	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.317	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.317	1.06
67-64-1	Acetone	U	5.29	ug/kg	1.76	5.29
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.317	1.06
74-88-4	Iodomethane	U	5.29	ug/kg	1.69	5.29
75-09-2	Methylene chloride	U	5.29	ug/kg	2.11	5.29
75-15-0	Carbon disulfide	U	5.29	ug/kg	1.32	5.29
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.317	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.317	1.06
78-93-3	2-Butanone	U	5.29	ug/kg	1.59	5.29
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.317	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.317	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.317	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.349	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.317	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.317	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.317	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.317	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.317	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.349	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.317	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.317	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.317	1.06
108-10-1	4-Methyl-2-pentanone	U	5.29	ug/kg	1.32	5.29
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.317	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.317	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.317	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.317	1.06
591-78-6	2-Hexanone	U	5.29	ug/kg	1.59	5.29
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.317	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.317	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.317	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.317	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.317	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n113.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.317	1.06
179601-23-1	m,p-Xylenes	U	2.11	ug/kg	0.317	2.11
95-47-6	o-Xylene	U	1.06	ug/kg	0.317	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.317	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.317	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.317	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.317	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.317	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.317	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.317	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.317	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.317	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.317	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.317	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.317	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.317	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.317	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.317	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.317	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.29	ug/kg	1.69	5.29
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.317	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.317	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n113.d
Lab Smp Id: 241615004 Client Smp ID: RE03-09-14109
Inj Date : 30-NOV-2009 21:01
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615004|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.43490	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1506171	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.771	(1.000)	1142237	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	713710	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	322875	54.5785	57.7
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	1037993	52.1743	55.2
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	453016	54.8140	58.0

ION RATIO REPORT

VOA REPORT

Data file: 4n113.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615004 SampleType: SAMPLE
Injection Date: 30-NOV-2009 21:01
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615004|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	19763	10.62	10.35	80-120	100	(T)
64	3543	10.62	10.35	2- 62	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8525	12.25	12.02	80-120	100	(T)
43	5038	12.25	12.02	225-285	59	(QT)
100	724268	12.25	12.02	8- 68	8496	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n113.d
Lab Smp Id: 241615004 Client Smp ID: RE03-09-14109
Inj Date : 30-NOV-2009 21:01
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615004|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n113.d
Date : 30-NOV-2009 21:01
Client ID: RE03-09-14109
Sample Info: |2416150041927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

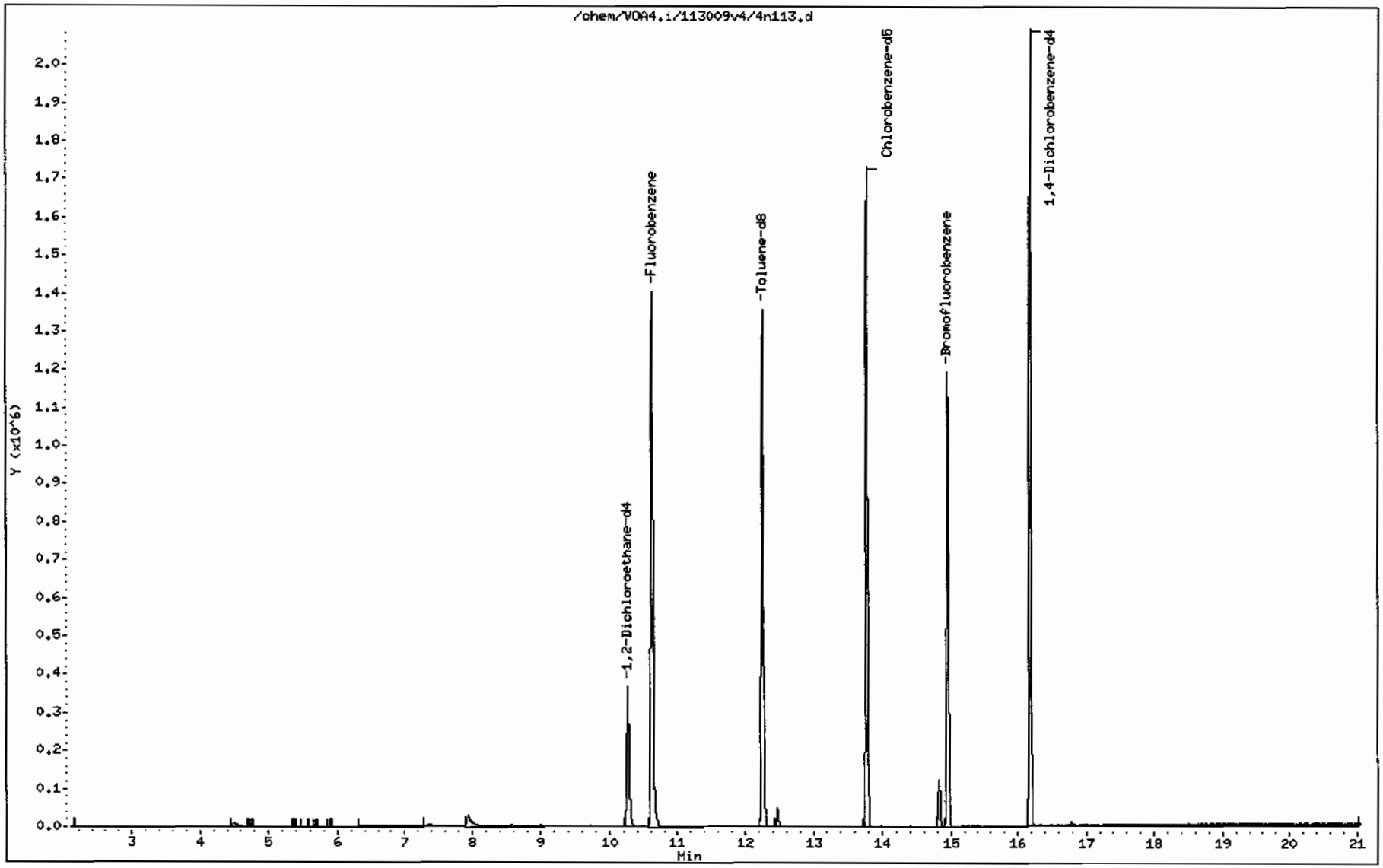

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615013	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14246	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:18	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n122.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.369	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.326	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.326	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.326	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.326	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.326	1.09
67-64-1	Acetone	U	5.43	ug/kg	1.80	5.43
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
74-88-4	Iodomethane	U	5.43	ug/kg	1.74	5.43
75-09-2	Methylene chloride	U	5.43	ug/kg	2.17	5.43
75-15-0	Carbon disulfide	U	5.43	ug/kg	1.36	5.43
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.326	1.09
78-93-3	2-Butanone	U	5.43	ug/kg	1.63	5.43
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.326	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.326	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.326	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.326	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.326	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.326	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.326	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.326	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.326	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.326	1.09
108-10-1	4-Methyl-2-pentanone	U	5.43	ug/kg	1.36	5.43
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.326	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.326	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.326	1.09
591-78-6	2-Hexanone	U	5.43	ug/kg	1.63	5.43
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.326	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.326	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.326	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.326	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.326	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615013**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14246**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 01:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n122.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.326	1.09
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.326	2.17
95-47-6	o-Xylene	U	1.09	ug/kg	0.326	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.326	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.326	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.326	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.326	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.326	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.326	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.326	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.326	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.326	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.326	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.326	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.326	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.326	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.43	ug/kg	1.74	5.43
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.326	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.326	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n122.d
Lab Smp Id: 241615013 Client Smp ID: RE03-09-14246
Inj Date : 01-DEC-2009 01:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615013|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.96850	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1406742	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1056404	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	615749	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	308824	55.8930	60.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	976632	53.0786	57.7
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	421681	59.1398	64.3

ION RATIO REPORT

VOA REPORT

Data file: 4n122.d
Report Date: 12/01/2009 15:00
Lab. ID: 241615013 SampleType: SAMPLE
Injection Date: 01-DEC-2009 01:07
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615013|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	17399	10.61	10.35	80-120	100	(T)
64	3258	10.62	10.35	2- 62	19	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8342	12.25	12.02	80-120	100	(T)
43	4758	12.25	12.02	225-285	57	(QT)
100	672187	12.25	12.02	8- 68	8057	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n122.d
Lab Smp Id: 241615013 Client Smp ID: RE03-09-14246
Inj Date : 01-DEC-2009 01:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615013|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n122.d
Date : 01-DEC-2009 01:07
Client ID: RE03-09-14246
Sample Info: |241615013|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

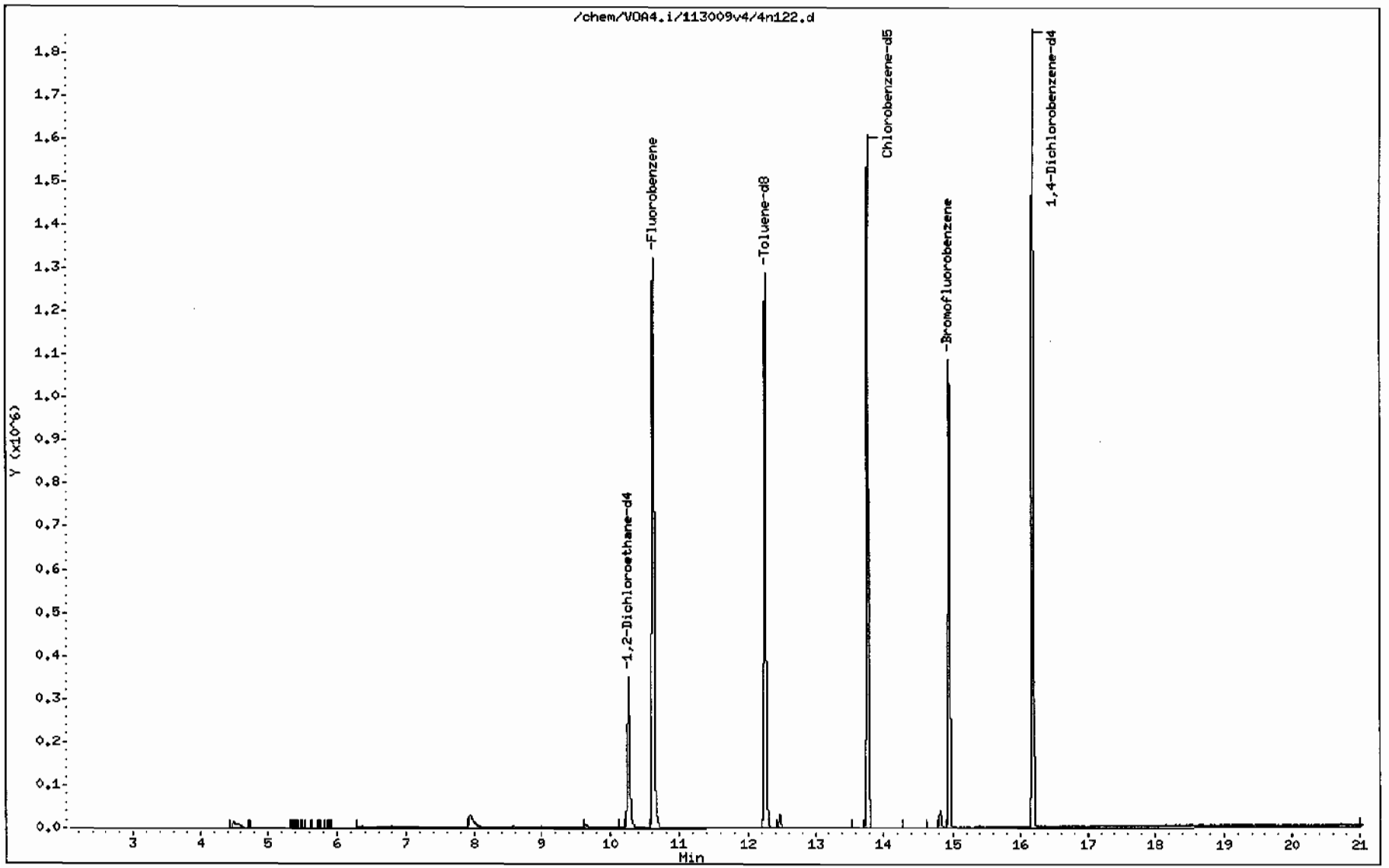

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14247	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:40	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n121.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.379	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12
67-64-1	Acetone	U	5.58	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
74-88-4	Iodomethane	U	5.58	ug/kg	1.78	5.58
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.39	5.58
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12
78-93-3	2-Butanone	U	5.58	ug/kg	1.67	5.58
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.368	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.368	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.39	5.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12
591-78-6	2-Hexanone	U	5.58	ug/kg	1.67	5.58
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14247	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 00:40	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:17	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n121.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.78	5.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n121.d
Lab Smp Id: 241615012 Client Smp ID: RE03-09-14247
Inj Date : 01-DEC-2009 00:40
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615012|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.34860	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1641915	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1181172	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	691940	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	311152	48.2484	53.8
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	983470	47.8043	53.3
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	403245	50.3269	56.1

ION RATIO REPORT

VOA REPORT

Data file: 4n121.d
Report Date: 12/01/2009 15:00
Lab. ID: 241615012 SampleType: SAMPLE
Injection Date: 01-DEC-2009 00:40
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615012|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	21182	10.62	10.35	80-120	100	(T)
64	3719	10.61	10.35	2- 62	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7965	12.25	12.02	80-120	100	(T)
43	5193	12.25	12.02	225-285	65	(QT)
100	676501	12.25	12.02	8- 68	8493	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n121.d
Lab Smp Id: 241615012 Client Smp ID: RE03-09-14247
Inj Date : 01-DEC-2009 00:40
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615012|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n121.d
Date : 01-DEC-2009 00:40
Client ID: RE03-09-14247
Sample Info: |2416150121927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

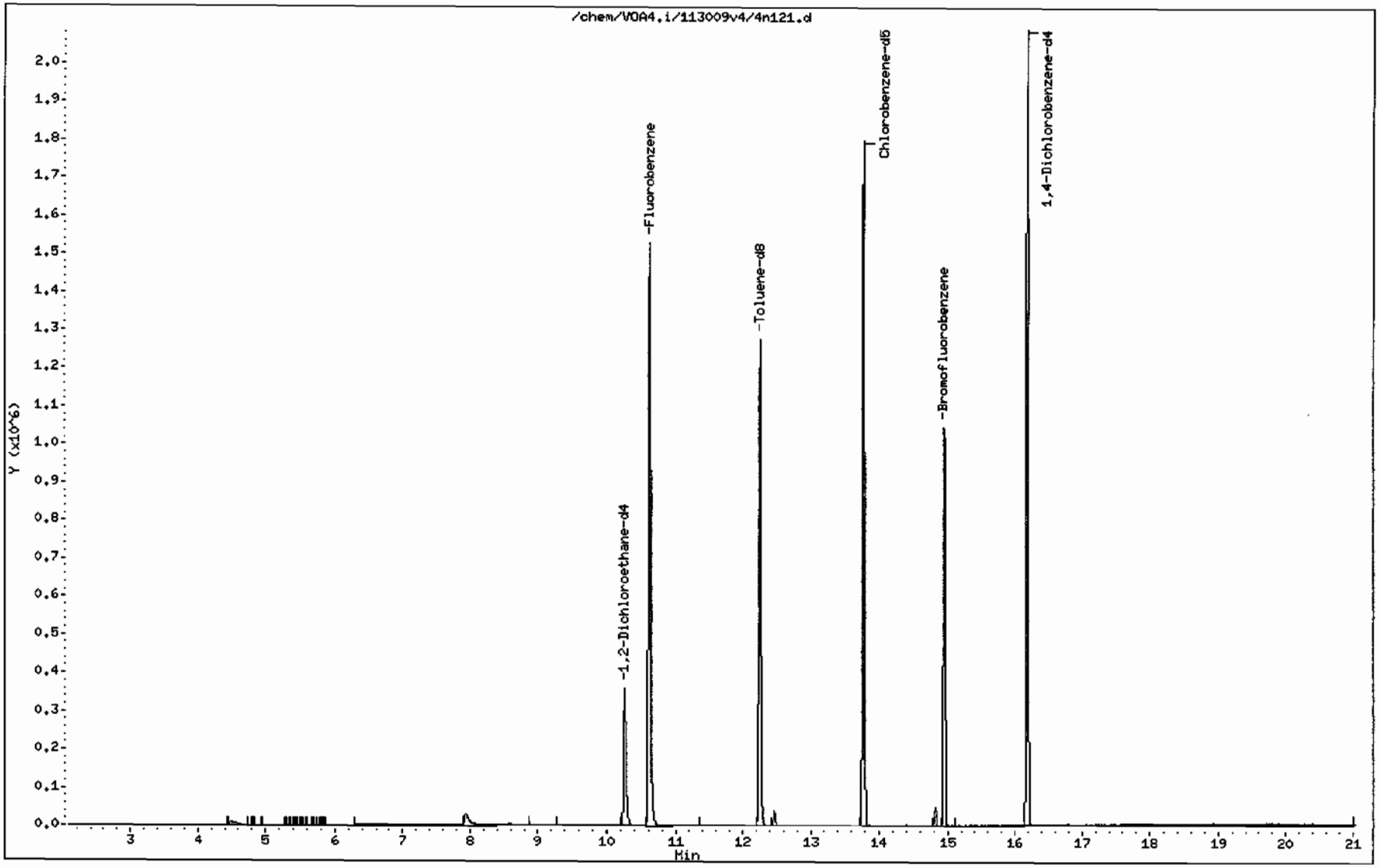

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615011**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14248**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 00:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n120.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.380	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12
67-64-1	Acetone	U	5.59	ug/kg	1.86	5.59
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
74-88-4	Iodomethane	U	5.59	ug/kg	1.79	5.59
75-09-2	Methylene chloride	U	5.59	ug/kg	2.24	5.59
75-15-0	Carbon disulfide	U	5.59	ug/kg	1.40	5.59
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12
78-93-3	2-Butanone	U	5.59	ug/kg	1.68	5.59
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.369	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.369	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12
108-10-1	4-Methyl-2-pentanone	U	5.59	ug/kg	1.40	5.59
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12
591-78-6	2-Hexanone	U	5.59	ug/kg	1.68	5.59
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615011**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14248**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 00:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n120.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.59	ug/kg	1.79	5.59
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n120.d
Lab Smp Id: 241615011 Client Smp ID: RE03-09-14248
Inj Date : 01-DEC-2009 00:13
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615011|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.58700	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1550807	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1164182	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	681863	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	322339	52.9196	59.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1021192	50.3623	56.3
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	436611	55.2964	61.8

ION RATIO REPORT

VOA REPORT

Data file: 4n120.d
Report Date: 12/01/2009 15:00
Lab. ID: 241615011 SampleType: SAMPLE
Injection Date: 01-DEC-2009 00:13
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615011|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	20758	10.62	10.35	80-120	100	(T)
64	2663	10.63	10.35	2- 62	13	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8638	12.25	12.02	80-120	100	(T)
43	5083	12.25	12.02	225-285	59	(QT)
100	700527	12.25	12.02	8- 68	8109	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n120.d
Lab Smp Id: 241615011 Client Smp ID: RE03-09-14248
Inj Date : 01-DEC-2009 00:13
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615011|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n120.d
Date : 01-DEC-2009 00:13
Client ID: REQ3-09-14248
Sample Info: 1241615011192771111VOAF111
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

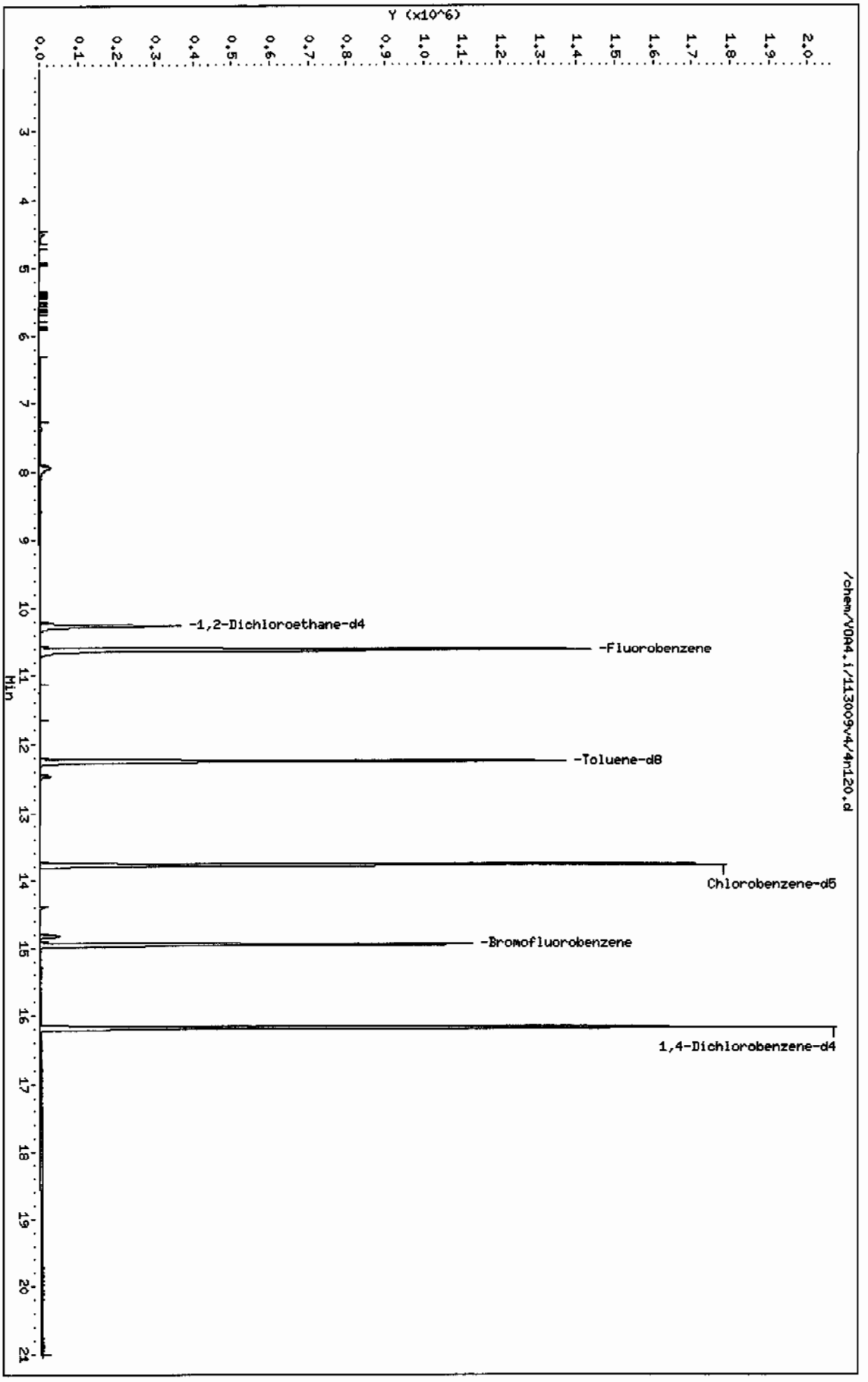

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14249	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 20:43	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 19:51	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n209.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615010**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14249**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 20:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 19:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n209.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.56	ug/kg	1.78	5.56
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n209.d
Lab Smp Id: 241615010 Client Smp ID: RE03-09-14249
Inj Date : 01-DEC-2009 20:43
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615010|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.08880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1604149	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1179464	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	683188	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	320104	50.8051	56.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1042043	50.7247	56.4
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	429136	54.2443	60.3

ION RATIO REPORT

VOA REPORT

Data file: 4n209.d
Report Date: 12/01/2009 20:59
Lab. ID: 241615010 SampleType: SAMPLE
Injection Date: 01-DEC-2009 20:43
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615010|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	20314	10.61	10.34	80-120	100	(T)
64	3763	10.61	10.34	2- 62	19	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8432	12.25	12.02	80-120	100	(T)
43	4866	12.25	12.01	231-291	58	(QT)
100	719009	12.25	12.02	7- 67	8526	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n209.d
Lab Smp Id: 241615010 Client Smp ID: RE03-09-14249
Inj Date : 01-DEC-2009 20:43
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615010|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120109v4/4n209.d
Date : 01-DEC-2009 20:43
Client ID: RE03-09-14249
Sample Info: |241615010|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

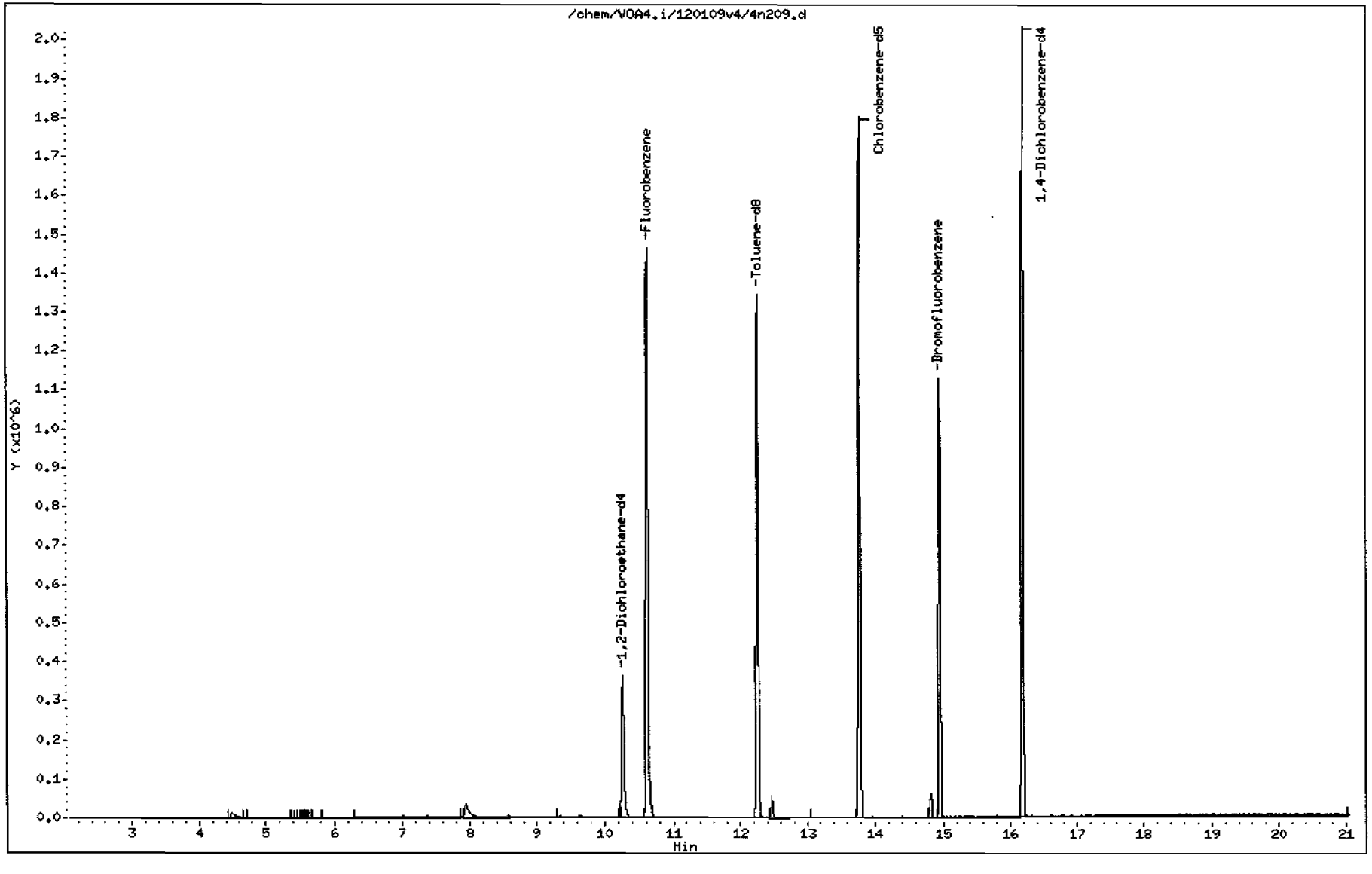

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:56	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n115.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	U	5.37	ug/kg	1.78	5.37
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.355	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.355	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.37	ug/kg	1.61	5.37
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:56	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n115.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
541-05-9	Cyclotrisiloxane, hexamethyl-	12.47	9.25	ug/kg	86	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n115.d
Lab Smp Id: 241615006 Client Smp ID: RE03-09-14250
Inj Date : 30-NOV-2009 21:56
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615006|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.92880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	308103	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.771	(1.000)	208171	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	100836	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	62477	51.6280	55.5
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	183950	50.7339	54.5
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	65387	55.9984	60.2

ION RATIO REPORT

VOA REPORT

Data file: 4n115.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615006 SampleType: SAMPLE
Injection Date: 30-NOV-2009 21:56
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615006|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	3679	10.63	10.35	80-120	100	(T)
64	668	10.61	10.35	2- 62	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	1517	12.25	12.02	80-120	100	(T)
43	1003	12.25	12.02	225-285	66	(QT)
100	122389	12.25	12.02	8- 68	8064	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n115.d
Lab Smp Id: 241615006 Client Smp ID: RE03-09-14250
Inj Date : 30-NOV-2009 21:56
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615006|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.92880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.772	665446	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotrisiloxane, hexamethyl-				CAS #: 541-05-9			
12.473	114571	8.60854690	9.2	86	NIST05.L	73121	61

Data File: /chem/VOA4.i/113009v4/4n115.d
Date : 30-NOV-2009 21:56
Client ID: RE03-09-14250
Sample Info: |241615006|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

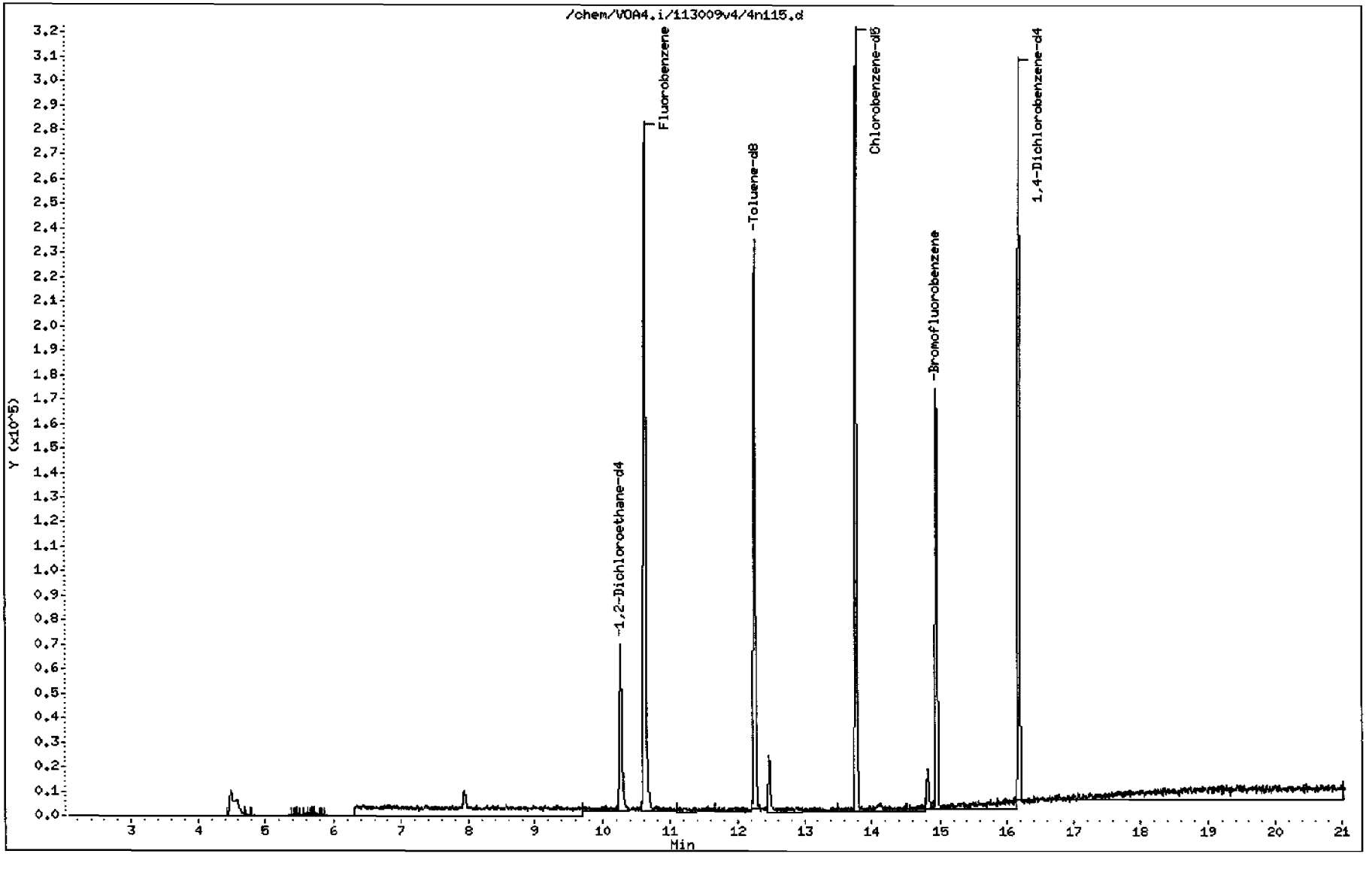

Data File: /chem/VOA4.i/113009v4/4n115.d

Date : 30-NOV-2009 21:56

Client ID: RE03-09-14250

Instrument: VOA4.i

Sample Info: |2416150061927711|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	86	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	83	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73122	72	C6H18O3Si3	222

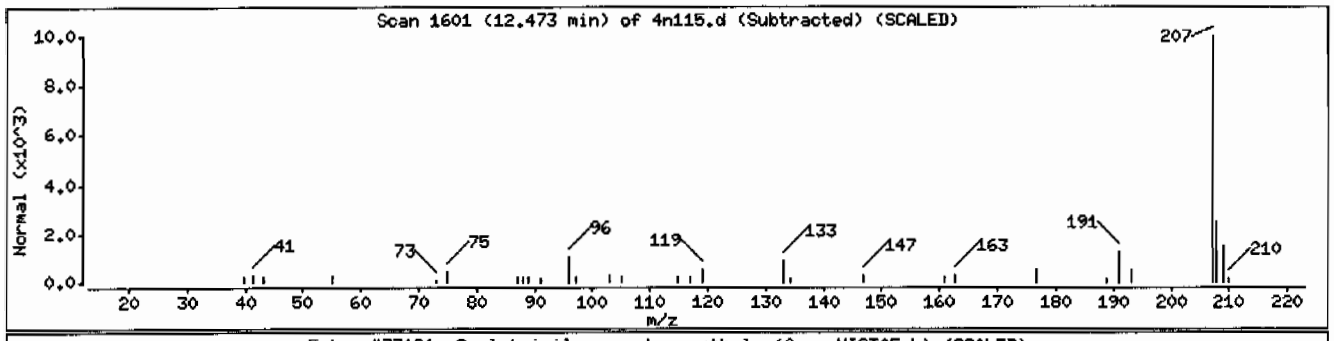

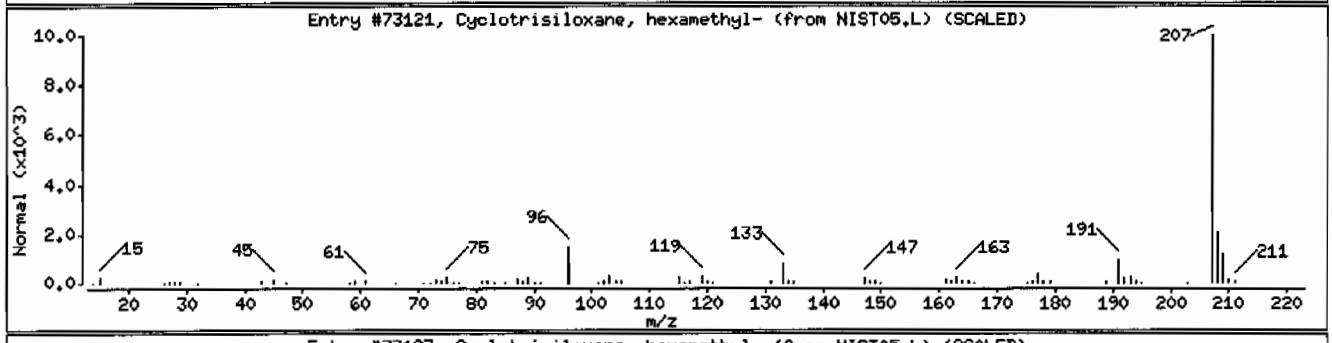

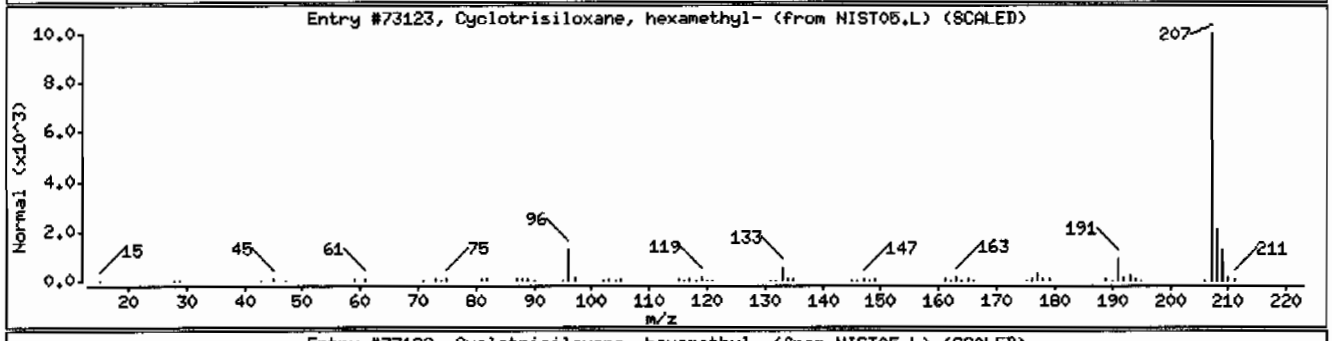

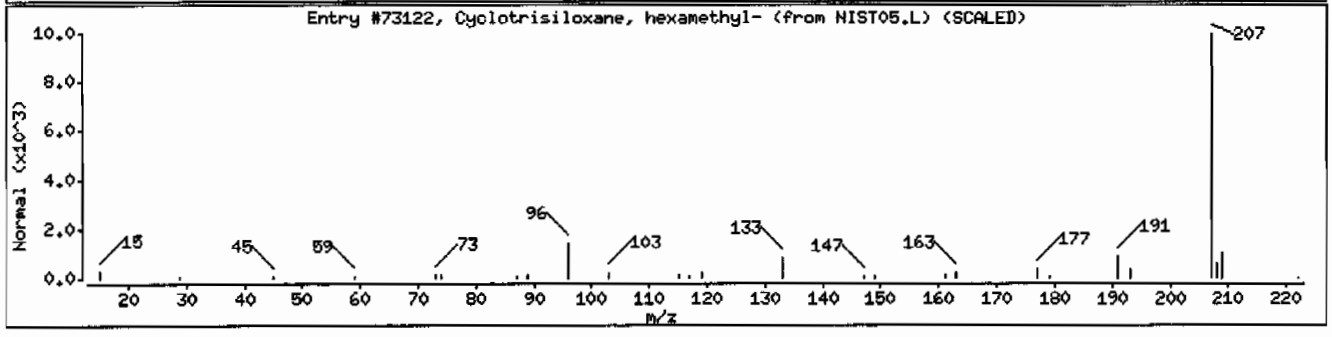

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14251	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	927711	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 02:01	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/30/2009 18:20	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n124.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:01	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:20	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n124.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n124.d
Lab Smp Id: 241615015 Client Smp ID: RE03-09-14251
Inj Date : 01-DEC-2009 02:01
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615015|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.45960	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1119332	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	835877	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	475879	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	253126	57.5757	63.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	789423	54.2233	59.9
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	336040	60.9809	67.4

ION RATIO REPORT

VOA REPORT

Data file: 4n124.d
Report Date: 12/01/2009 15:00
Lab. ID: 241615015 SampleType: SAMPLE
Injection Date: 01-DEC-2009 02:01
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615015|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	14937	10.61	10.35	80-120	100	(T)
64	2686	10.62	10.35	2- 62	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	5984	12.25	12.02	80-120	100	(T)
43	3726	12.25	12.02	225-285	62	(QT)
100	548747	12.25	12.02	8- 68	9169	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n124.d
Lab Smp Id: 241615015 Client Smp ID: RE03-09-14251
Inj Date : 01-DEC-2009 02:01
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615015|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n124.d
Date : 01-DEC-2009 02:01
Client ID: RE03-09-14251
Sample Info: |2416150151927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

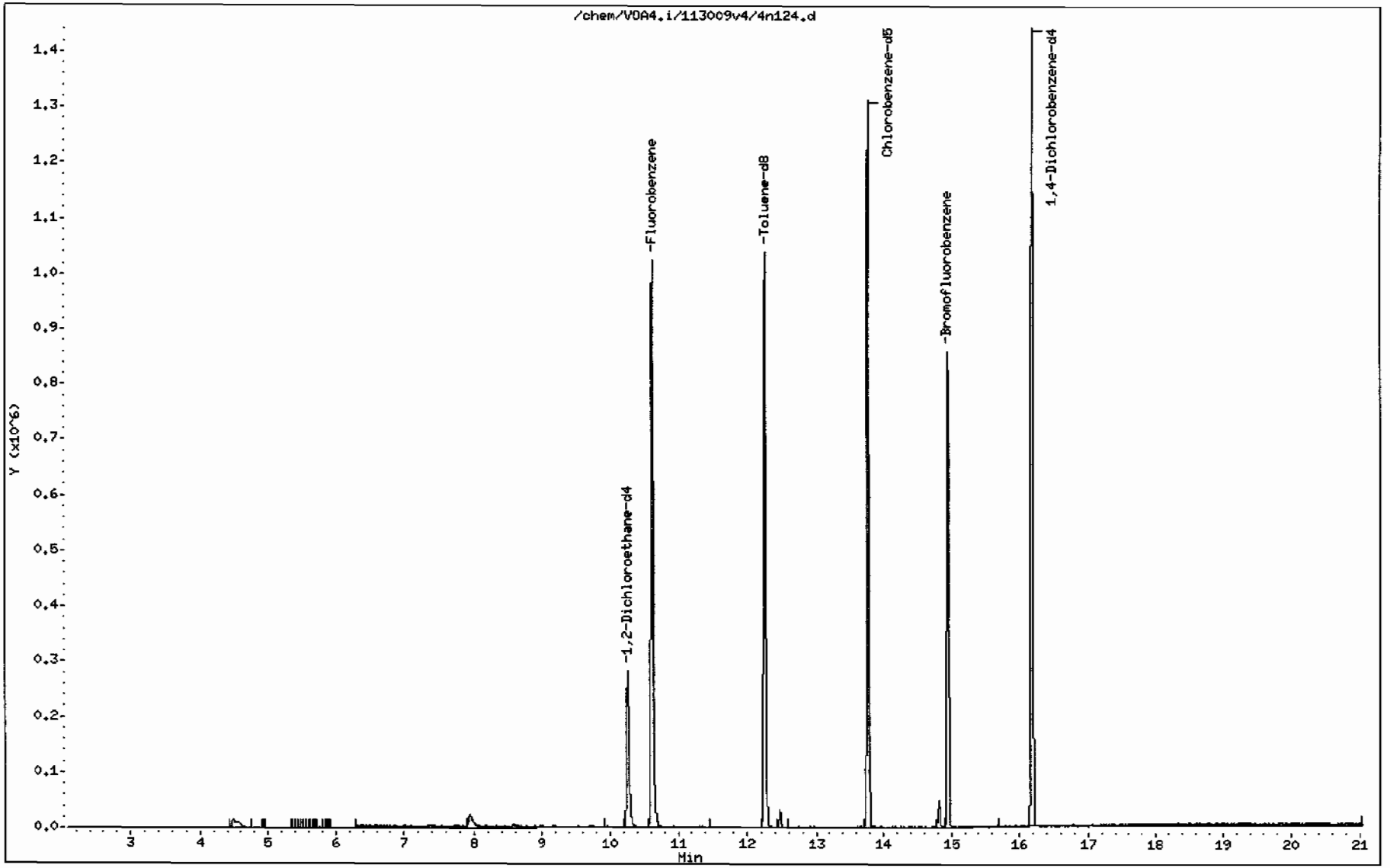

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n114.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.78	5.35
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.61	5.35
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.61	5.35
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 21:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n114.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n114.d
Lab Smp Id: 241615005 Client Smp ID: RE03-09-14252
Inj Date : 30-NOV-2009 21:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615005|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.62750	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1619113	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1199171	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	727795	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	335275	52.7212	56.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1062646	50.8776	54.5
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	458468	54.4001	58.3

ION RATIO REPORT

VOA REPORT

Data file: 4n114.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615005 SampleType: SAMPLE
Injection Date: 30-NOV-2009 21:28
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615005|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	21526	10.62	10.35	80-120	100	(T)
64	3533	10.62	10.35	2- 62	16	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8118	12.25	12.02	80-120	100	(T)
43	5635	12.25	12.02	225-285	69	(QT)
100	739200	12.25	12.02	8- 68	9105	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n114.d
Lab Smp Id: 241615005 Client Smp ID: RE03-09-14252
Inj Date : 30-NOV-2009 21:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615005|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n114.d
Date : 30-NOV-2009 21:28
Client ID: RE03-09-14252
Sample Info: |241615005|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

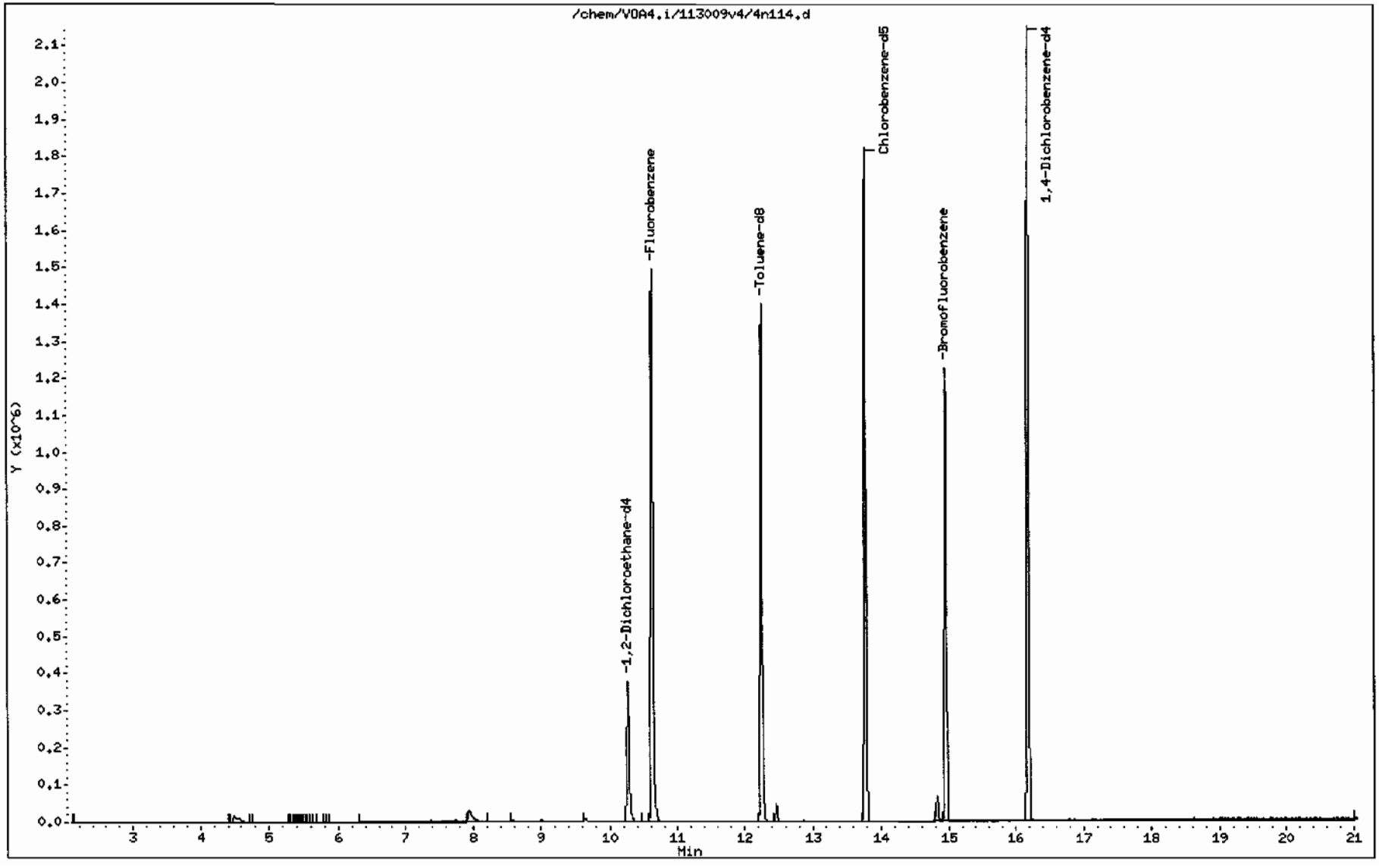

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 01:35	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:19	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n123.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.374	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.330	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.330	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.330	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.330	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.330	1.10
67-64-1	Acetone	U	5.50	ug/kg	1.83	5.50
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
74-88-4	Iodomethane	U	5.50	ug/kg	1.76	5.50
75-09-2	Methylene chloride	U	5.50	ug/kg	2.20	5.50
75-15-0	Carbon disulfide	U	5.50	ug/kg	1.38	5.50
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.330	1.10
78-93-3	2-Butanone	U	5.50	ug/kg	1.65	5.50
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.330	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.330	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.363	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.330	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.330	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.330	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.330	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.330	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.363	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.330	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.330	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.330	1.10
108-10-1	4-Methyl-2-pentanone	U	5.50	ug/kg	1.38	5.50
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.330	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.330	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.330	1.10
591-78-6	2-Hexanone	U	5.50	ug/kg	1.65	5.50
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.330	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.330	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.330	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.330	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.330	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615014**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14253**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 01:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:19**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n123.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.330	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.330	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.330	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.330	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.330	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.330	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.330	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.330	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.330	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.330	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.330	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.330	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.330	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.330	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.330	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.330	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.50	ug/kg	1.76	5.50
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.330	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.330	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n123.d
Lab Smp Id: 241615014 Client Smp ID: RE03-09-14253
Inj Date : 01-DEC-2009 01:35
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615014|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.13030	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1407326	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	986910	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	531007	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	303829	54.9662	60.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	951805	55.3719	60.9
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	365221	59.3957	65.4

ION RATIO REPORT

VOA REPORT

Data file: 4n123.d
Report Date: 12/01/2009 15:00
Lab. ID: 241615014 SampleType: SAMPLE
Injection Date: 01-DEC-2009 01:35
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615014|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	18498	10.62	10.35	80-120	100	(T)
64	3346	10.62	10.35	2- 62	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7744	12.25	12.02	80-120	100	(T)
43	4916	12.26	12.02	225-285	63	(QT)
100	654621	12.25	12.02	8- 68	8453	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n123.d
Lab Smp Id: 241615014 Client Smp ID: RE03-09-14253
Inj Date : 01-DEC-2009 01:35
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615014|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n123.d
Date : 01-DEC-2009 01:35
Client ID: RE03-09-14253
Sample Info: |2416150141927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

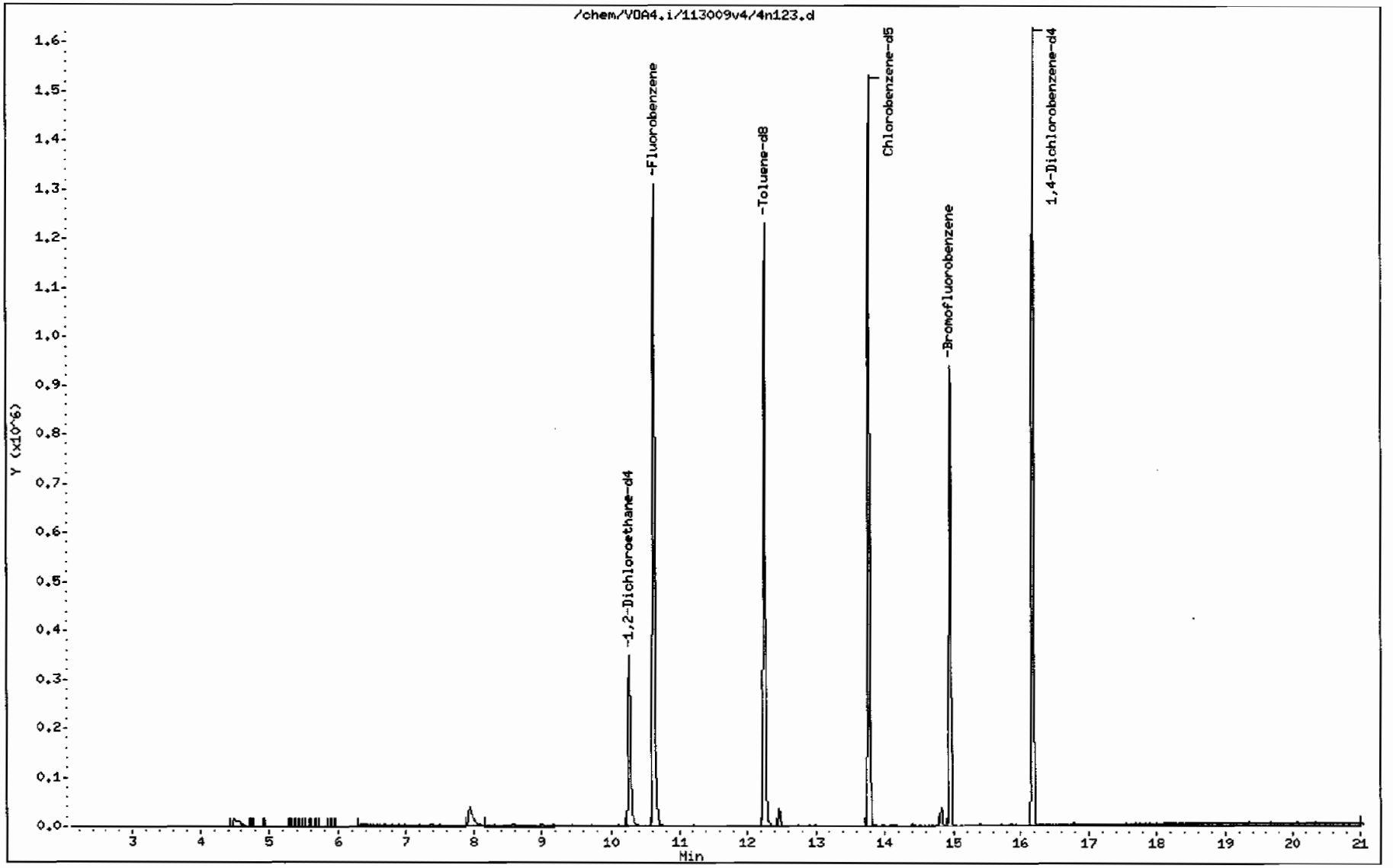

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 23:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n118.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.361	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.319	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.319	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.319	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.319	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.319	1.06
67-64-1	Acetone	U	5.31	ug/kg	1.76	5.31
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
74-88-4	Iodomethane	U	5.31	ug/kg	1.70	5.31
75-09-2	Methylene chloride	U	5.31	ug/kg	2.12	5.31
75-15-0	Carbon disulfide	U	5.31	ug/kg	1.33	5.31
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.319	1.06
78-93-3	2-Butanone	U	5.31	ug/kg	1.59	5.31
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.319	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.319	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.319	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.351	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.319	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.319	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.319	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.319	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.319	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.351	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.319	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.319	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.319	1.06
108-10-1	4-Methyl-2-pentanone	U	5.31	ug/kg	1.33	5.31
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.319	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.319	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.319	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.319	1.06
591-78-6	2-Hexanone	U	5.31	ug/kg	1.59	5.31
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.319	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.319	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.319	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.319	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.319	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 23:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n118.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.319	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.319	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.319	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.319	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.319	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.319	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.319	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.319	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.319	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.319	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.319	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.319	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.319	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.319	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.319	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.319	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.319	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.319	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.319	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.31	ug/kg	1.70	5.31
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.319	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.319	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n118.d
Lab Smp Id: 241615009 Client Smp ID: RE03-09-14254
Inj Date : 30-NOV-2009 23:18
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615009|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.85850	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1313490	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	972443	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	577943	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	263335	51.0438	54.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	832304	49.1402	52.2
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	355397	53.1041	56.4

ION RATIO REPORT

VOA REPORT

Data file: 4n118.d
Report Date: 12/01/2009 15:00
Lab. ID: 241615009 SampleType: SAMPLE
Injection Date: 30-NOV-2009 23:18
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615009|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	16976	10.62	10.35	80-120	100	(T)
64	2928	10.62	10.35	2- 62	17	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	6204	12.25	12.02	80-120	100	(T)
43	4584	12.25	12.02	225-285	74	(QT)
100	574341	12.25	12.02	8- 68	9257	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n118.d
Lab Smp Id: 241615009 Client Smp ID: RE03-09-14254
Inj Date : 30-NOV-2009 23:18
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615009|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n118.d
Date : 30-NOV-2009 23:18
Client ID: RE03-09-14254
Sample Info: |241615009|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

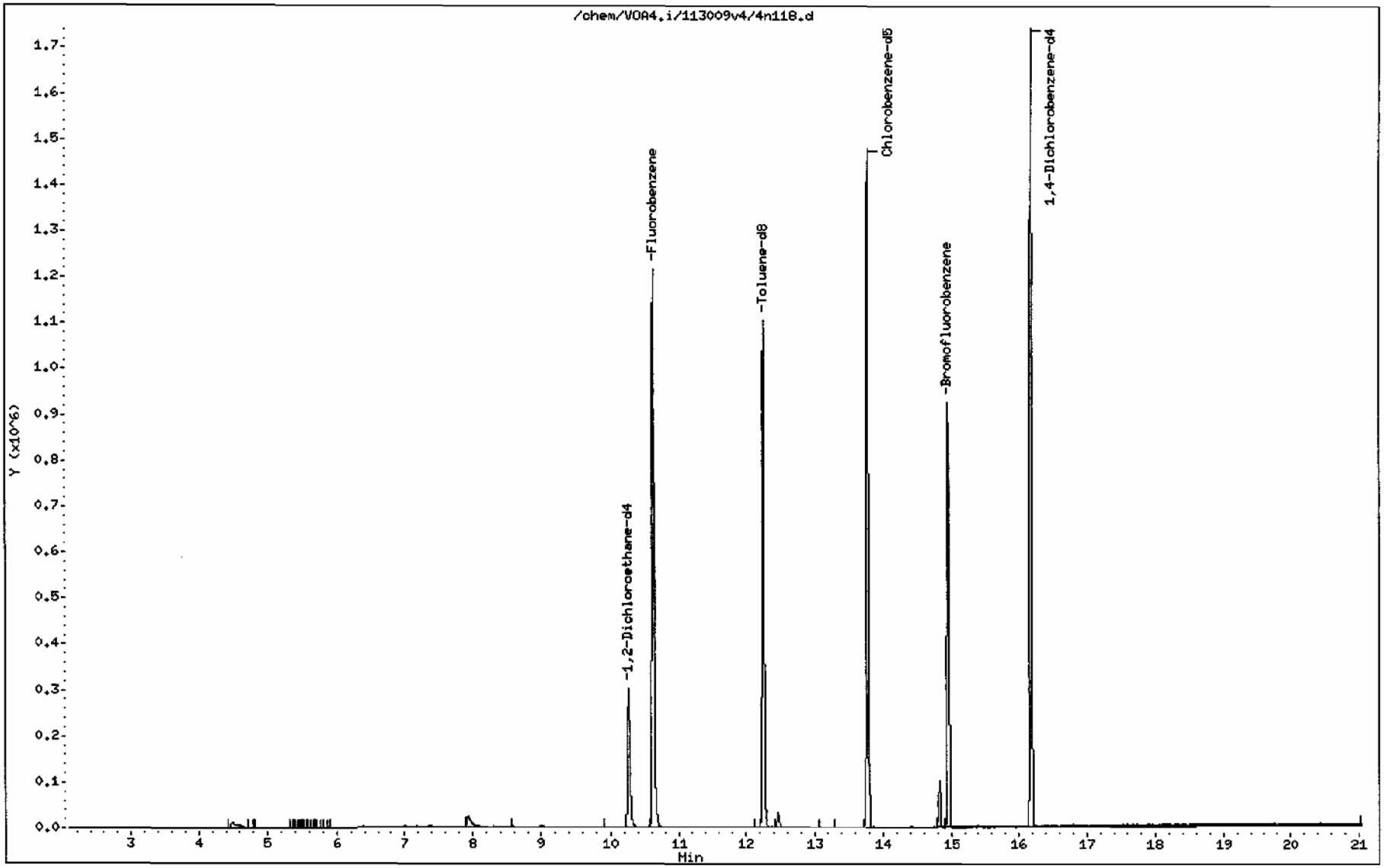

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615007**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14255**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 22:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n116.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.51	ug/kg	1.83	5.51
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.51	ug/kg	1.76	5.51
75-09-2	Methylene chloride	U	5.51	ug/kg	2.20	5.51
75-15-0	Carbon disulfide	U	5.51	ug/kg	1.38	5.51
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.51	ug/kg	1.65	5.51
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.51	ug/kg	1.38	5.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.51	ug/kg	1.65	5.51
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n116.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.20	ug/kg	0.331	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.51	ug/kg	1.76	5.51
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n116.d
Lab Smp Id: 241615007 Client Smp ID: RE03-09-14255
Inj Date : 30-NOV-2009 22:23
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615007|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.25470	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1461018	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1095071	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	646661	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	319958	55.7569	61.4
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1015211	53.2271	58.6
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	428558	57.2312	63.1

ION RATIO REPORT

VOA REPORT

Data file: 4n116.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615007 SampleType: SAMPLE
Injection Date: 30-NOV-2009 22:23
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615007|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	18574	10.62	10.35	80-120	100	(T)
64	3420	10.61	10.35	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8447	12.26	12.02	80-120	100	(T)
43	5162	12.25	12.02	225-285	61	(QT)
100	696809	12.25	12.02	8- 68	8248	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n116.d
Lab Smp Id: 241615007 Client Smp ID: RE03-09-14255
Inj Date : 30-NOV-2009 22:23
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615007|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n116.d
Date : 30-NOV-2009 22:23
Client ID: RE03-09-14255
Sample Info: |2416150071927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

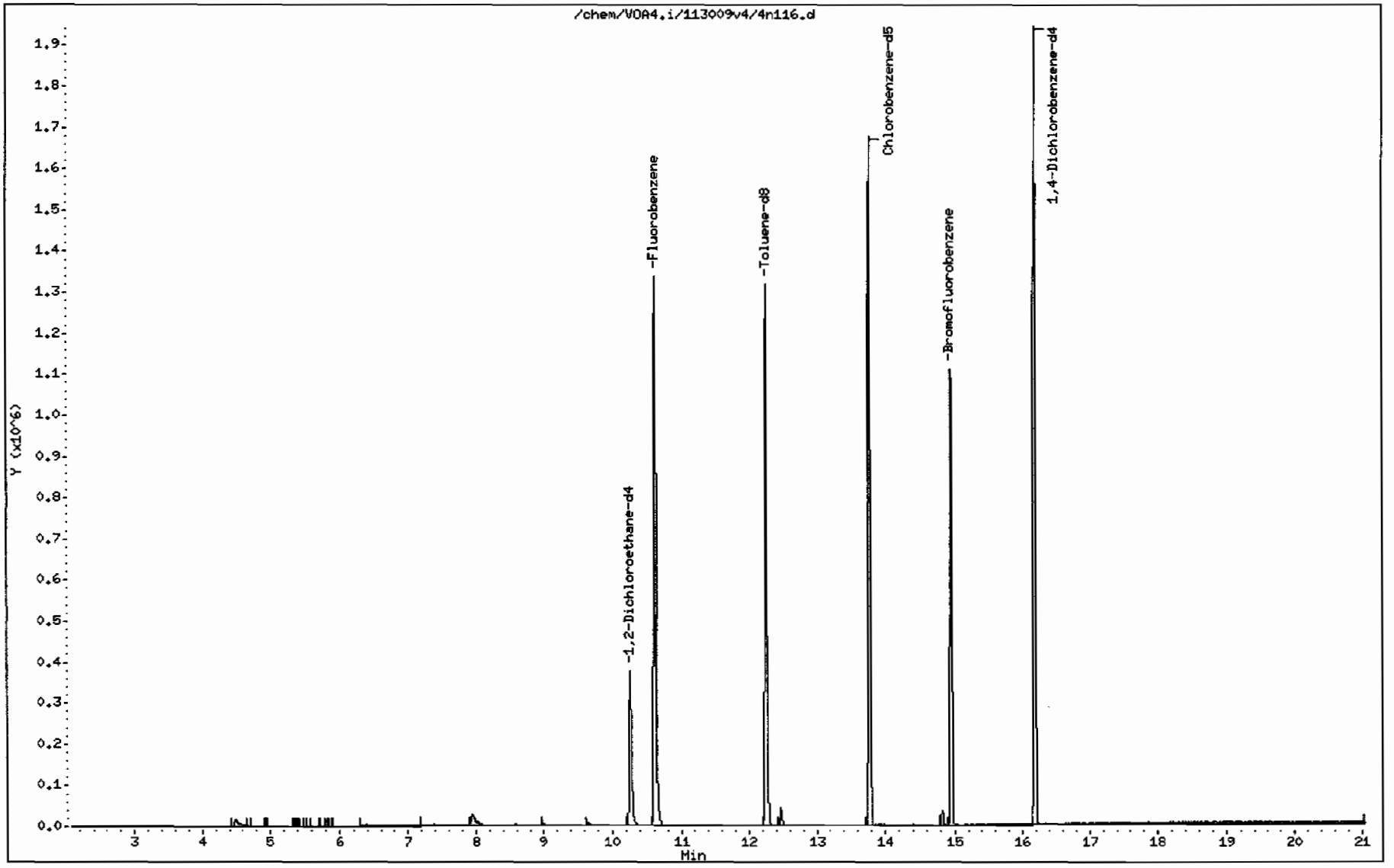

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14256	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:51	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n117.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.371	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.45	ug/kg	1.81	5.45
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.45	ug/kg	1.74	5.45
75-09-2	Methylene chloride	U	5.45	ug/kg	2.18	5.45
75-15-0	Carbon disulfide	U	5.45	ug/kg	1.36	5.45
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.45	ug/kg	1.63	5.45
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.45	ug/kg	1.36	5.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.45	ug/kg	1.63	5.45
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14256	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 22:51	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n117.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.45	ug/kg	1.74	5.45
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n117.d
Lab Smp Id: 241615008 Client Smp ID: RE03-09-14256
Inj Date : 30-NOV-2009 22:51
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615008|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.24640	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1453269	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1079144	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	637683	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	329360	57.7014	62.9
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1056774	56.2240	61.3
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	448119	60.6859	66.1

ION RATIO REPORT

VOA REPORT

Data file: 4n117.d
Report Date: 12/01/2009 14:59
Lab. ID: 241615008 SampleType: SAMPLE
Injection Date: 30-NOV-2009 22:51
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615008|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	18961	10.62	10.35	80-120	100	(T)
64	3464	10.62	10.35	2- 62	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8096	12.26	12.02	80-120	100	(T)
43	5135	12.25	12.02	225-285	63	(QT)
100	729237	12.25	12.02	8- 68	9007	(QT)
66 Bromoform				CAS#: 75-25-2		
173	2167	14.95	14.66	80-120	100	(T)
175	27187	14.96	14.66	19- 79	1254	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n117.d
Lab Smp Id: 241615008 Client Smp ID: RE03-09-14256
Inj Date : 30-NOV-2009 22:51
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615008|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n117.d
Date : 30-NOV-2009 22:51
Client ID: RE03-09-14256
Sample Info: |2416150081927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

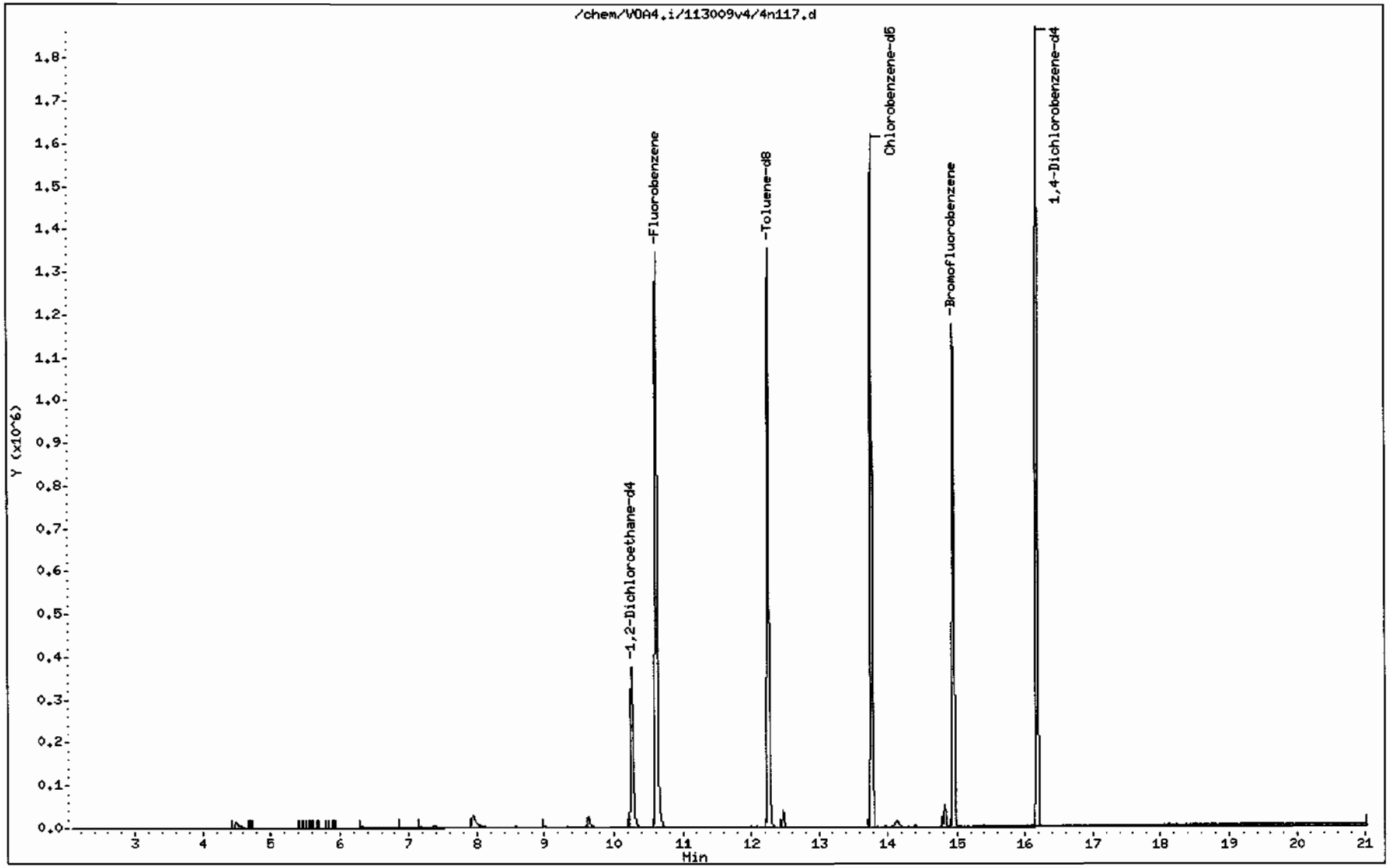

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14257	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:29	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:21	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n125.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.01	ug/kg	0.344	1.01
74-87-3	Chloromethane	U	1.01	ug/kg	0.303	1.01
75-01-4	Vinyl chloride	U	1.01	ug/kg	0.303	1.01
74-83-9	Bromomethane	U	1.01	ug/kg	0.303	1.01
75-00-3	Chloroethane	U	1.01	ug/kg	0.303	1.01
75-69-4	Trichlorofluoromethane	U	1.01	ug/kg	0.303	1.01
67-64-1	Acetone	U	5.06	ug/kg	1.68	5.06
75-35-4	1,1-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
74-88-4	Iodomethane	U	5.06	ug/kg	1.62	5.06
75-09-2	Methylene chloride	U	5.06	ug/kg	2.02	5.06
75-15-0	Carbon disulfide	U	5.06	ug/kg	1.26	5.06
156-60-5	trans-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
75-34-3	1,1-Dichloroethane	U	1.01	ug/kg	0.303	1.01
78-93-3	2-Butanone	U	5.06	ug/kg	1.52	5.06
156-59-2	cis-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
594-20-7	2,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
67-66-3	Chloroform	U	1.01	ug/kg	0.303	1.01
74-97-5	Bromochloromethane	U	1.01	ug/kg	0.334	1.01
71-55-6	1,1,1-Trichloroethane	U	1.01	ug/kg	0.303	1.01
563-58-6	1,1-Dichloropropene	U	1.01	ug/kg	0.303	1.01
56-23-5	Carbon tetrachloride	U	1.01	ug/kg	0.303	1.01
107-06-2	1,2-Dichloroethane	U	1.01	ug/kg	0.303	1.01
71-43-2	Benzene	U	1.01	ug/kg	0.303	1.01
79-01-6	Trichloroethylene	U	1.01	ug/kg	0.334	1.01
78-87-5	1,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
75-27-4	Bromodichloromethane	U	1.01	ug/kg	0.303	1.01
74-95-3	Dibromomethane	U	1.01	ug/kg	0.303	1.01
108-10-1	4-Methyl-2-pentanone	U	5.06	ug/kg	1.26	5.06
10061-01-5	cis-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
108-88-3	Toluene	U	1.01	ug/kg	0.303	1.01
10061-02-6	trans-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
79-00-5	1,1,2-Trichloroethane	U	1.01	ug/kg	0.303	1.01
591-78-6	2-Hexanone	U	5.06	ug/kg	1.52	5.06
142-28-9	1,3-Dichloropropane	U	1.01	ug/kg	0.303	1.01
127-18-4	Tetrachloroethylene	U	1.01	ug/kg	0.303	1.01
124-48-1	Dibromochloromethane	U	1.01	ug/kg	0.303	1.01
106-93-4	1,2-Dibromoethane	U	1.01	ug/kg	0.303	1.01
108-90-7	Chlorobenzene	U	1.01	ug/kg	0.303	1.01

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615016**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**1.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14257**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 02:29**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:21**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n125.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.01	ug/kg	0.303	1.01
179601-23-1	m,p-Xylenes	U	2.02	ug/kg	0.303	2.02
95-47-6	o-Xylene	U	1.01	ug/kg	0.303	1.01
100-42-5	Styrene	U	1.01	ug/kg	0.303	1.01
75-25-2	Bromoform	U	1.01	ug/kg	0.303	1.01
79-34-5	1,1,2,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
96-18-4	1,2,3-Trichloropropane	U	1.01	ug/kg	0.303	1.01
108-86-1	Bromobenzene	U	1.01	ug/kg	0.303	1.01
103-65-1	n-Propylbenzene	U	1.01	ug/kg	0.303	1.01
95-49-8	2-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-82-8	Isopropylbenzene	U	1.01	ug/kg	0.303	1.01
108-67-8	1,3,5-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
106-43-4	4-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-06-6	tert-Butylbenzene	U	1.01	ug/kg	0.303	1.01
95-63-6	1,2,4-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
135-98-8	sec-Butylbenzene	U	1.01	ug/kg	0.303	1.01
99-87-6	4-Isopropyltoluene	U	1.01	ug/kg	0.303	1.01
541-73-1	1,3-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
106-46-7	1,4-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
104-51-8	n-Butylbenzene	U	1.01	ug/kg	0.303	1.01
96-12-8	1,2-Dibromo-3-chloropropane	U	1.01	ug/kg	0.303	1.01
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.06	ug/kg	1.62	5.06
630-20-6	1,1,1,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
95-50-1	1,2-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n125.d
Lab Smp Id: 241615016 Client Smp ID: RE03-09-14257
Inj Date : 01-DEC-2009 02:29
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615016|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	1.10350	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1418218	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1050270	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	633145	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	321689	57.7503	58.4
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	998052	54.5596	55.2
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	428928	58.5034	59.2

ION RATIO REPORT

VOA REPORT

Data file: 4n125.d
Report Date: 12/01/2009 15:00
Lab. ID: 241615016 SampleType: SAMPLE
Injection Date: 01-DEC-2009 02:29
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615016|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	18707	10.62	10.35	80-120	100	(T)
64	3077	10.62	10.35	2- 62	16	(T)
49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	7725	12.25	12.02	80-120	100	(T)
43	5297	12.25	12.02	225-285	69	(QT)
100	679136	12.25	12.02	8- 68	8791	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n125.d
Lab Smp Id: 241615016 Client Smp ID: RE03-09-14257
Inj Date : 01-DEC-2009 02:29
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615016|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n125.d
Date : 01-DEC-2009 02:29
Client ID: RE03-09-14257
Sample Info: |24161501619277111|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

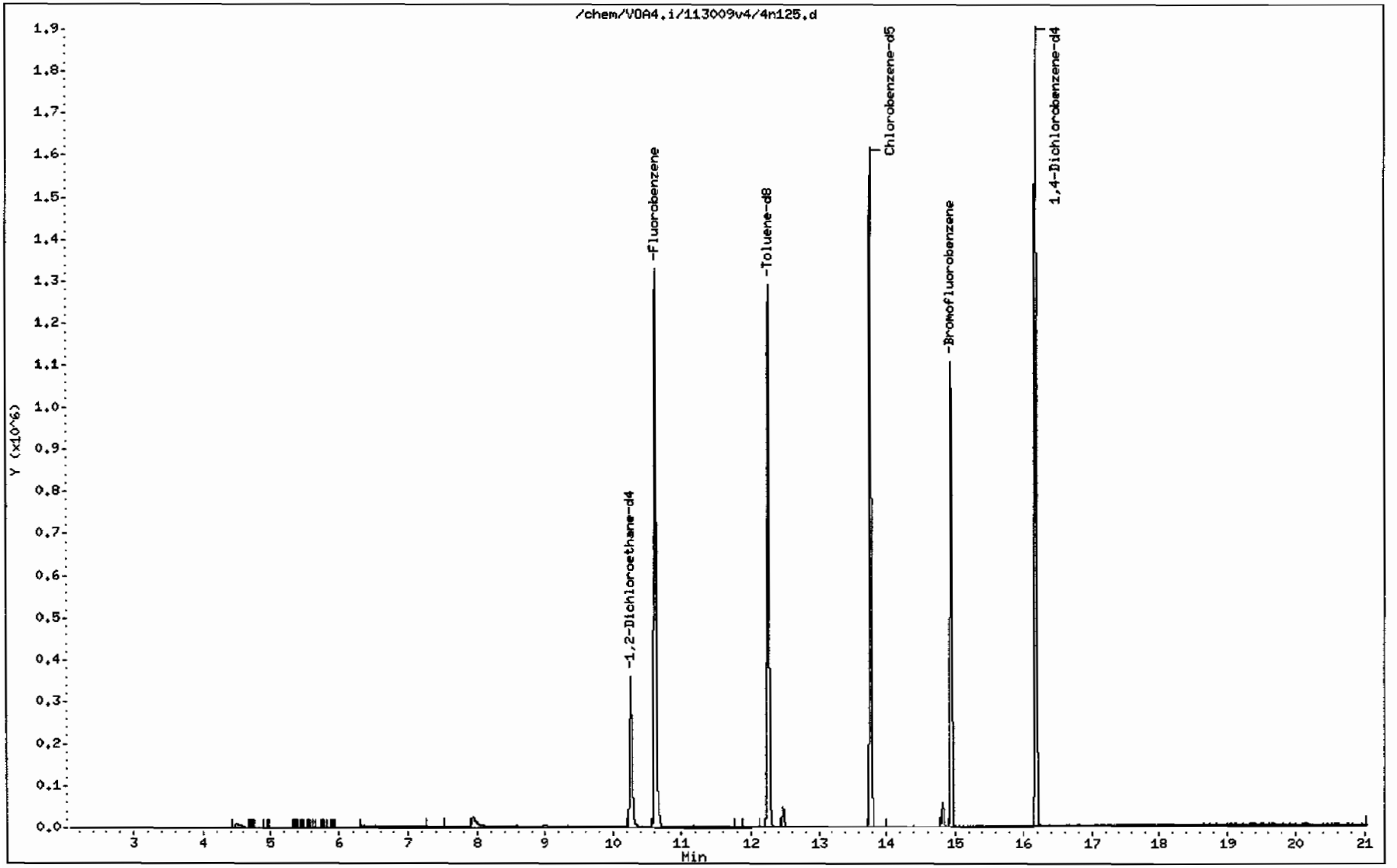

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615017**	**Date Received:**	**11/21/2009 09:00**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14289**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 18:44**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n108.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	2.18	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615017**	**Date Received:**	**11/21/2009 09:00**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14289**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 18:44**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n108.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n108.d
Lab Smp Id: 241615017 Client Smp ID: RE03-09-14289
Inj Date : 30-NOV-2009 18:44
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615017|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1545298	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1166909	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	759021	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	342049	56.3556	56.4
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1081985	53.2357	53.2
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	478757	54.4705	54.5
10 Acetone	43	7.376	7.358	(0.695)	13717	2.18468	2.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n108.d
Report Date: 11/30/2009 19:25
Lab. ID: 241615017 SampleType: SAMPLE
Injection Date: 30-NOV-2009 18:44
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615017|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	13717	7.38	7.36	80-120	100	( )
58	3857	7.38	7.36	1- 61	28	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20422	10.62	10.35	80-120	100	(T)
64	3331	10.61	10.35	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8173	12.25	12.02	80-120	100	(T)
43	4810	12.26	12.02	225-285	59	(QT)
100	754928	12.25	12.02	8- 68	9236	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n108.d
Lab Smp Id: 241615017 Client Smp ID: RE03-09-14289
Inj Date : 30-NOV-2009 18:44
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615017|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n108.d
Date : 30-NOV-2009 18:44
Client ID: RE03-09-14289
Sample Info: |2416150171927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

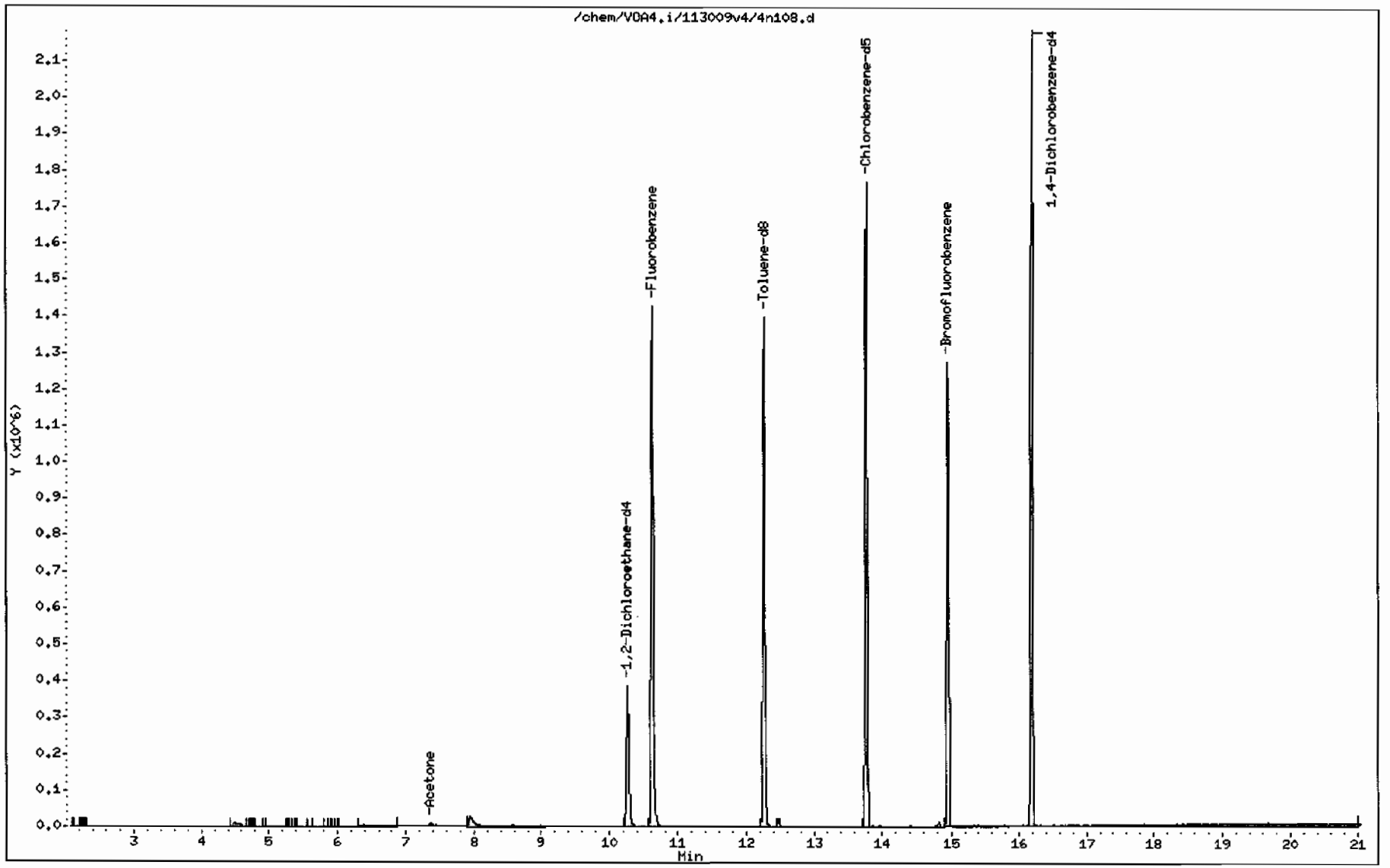

Data File: /chem/VOA4.i/113009v4/4n108.d

Date : 30-NOV-2009 18:44

Client ID: RE03-09-14289

Instrument: VOA4.i

Sample Info: |2416150171927711|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.2 ug/Kg

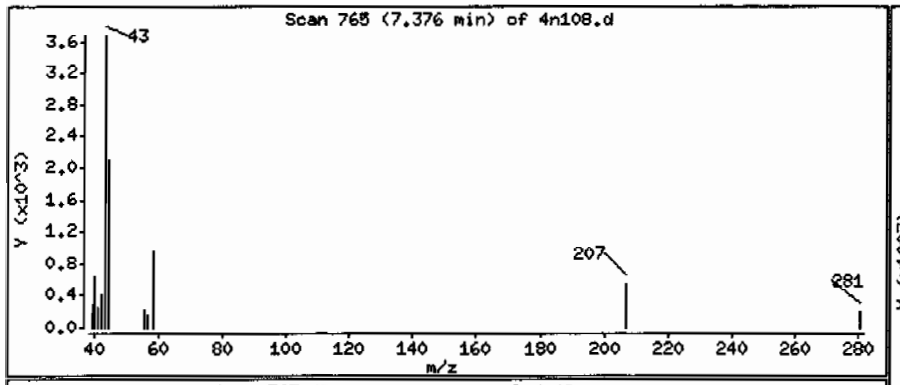

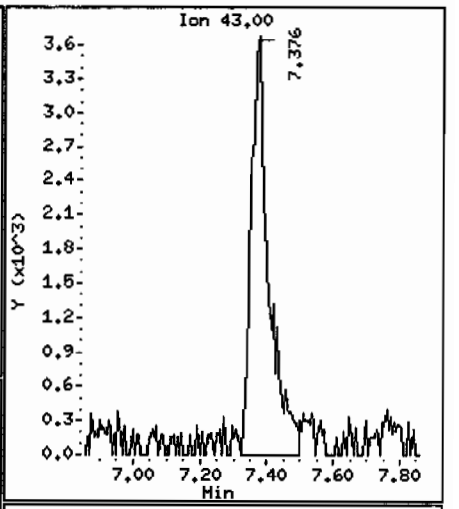

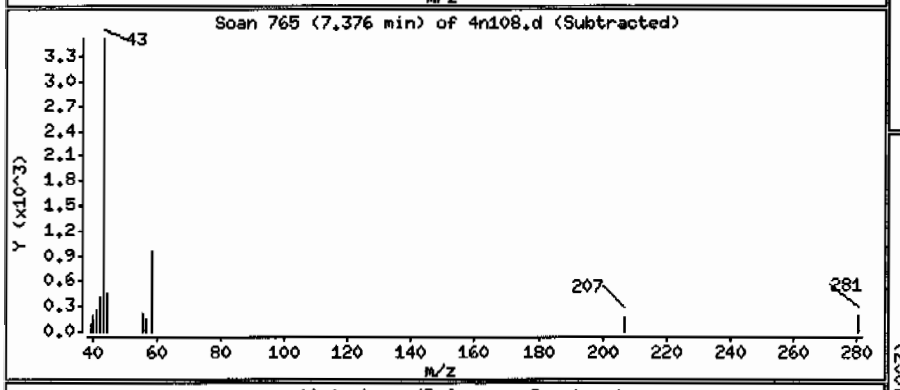

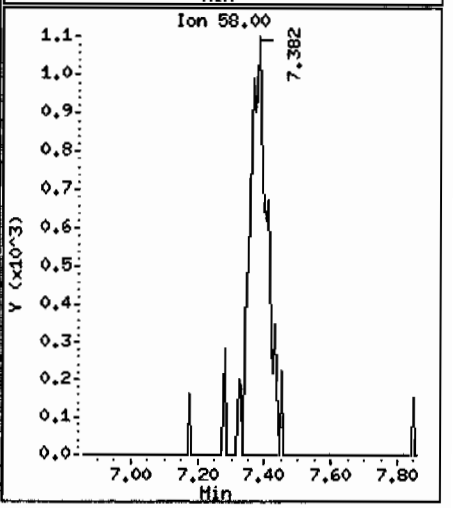

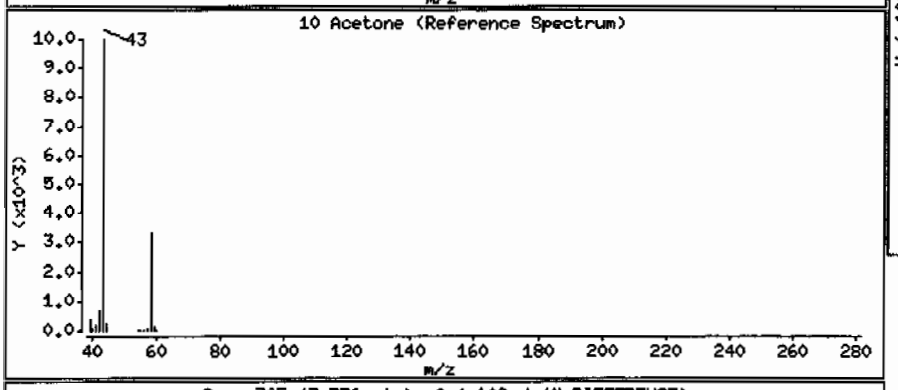

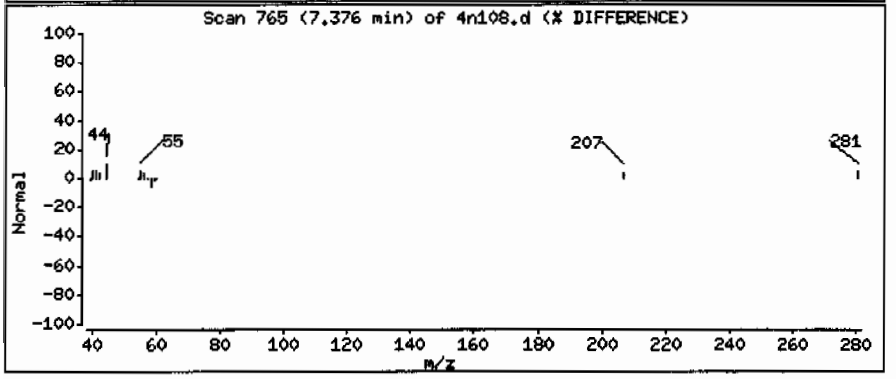

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 02:56	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n126.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.372	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.328	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.328	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.328	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.328	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.328	1.09
67-64-1	Acetone	U	5.47	ug/kg	1.82	5.47
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
74-88-4	Iodomethane	U	5.47	ug/kg	1.75	5.47
75-09-2	Methylene chloride	U	5.47	ug/kg	2.19	5.47
75-15-0	Carbon disulfide	U	5.47	ug/kg	1.37	5.47
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.328	1.09
78-93-3	2-Butanone	U	5.47	ug/kg	1.64	5.47
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.328	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.328	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.361	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.328	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.328	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.328	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.328	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.328	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.361	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.328	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.328	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.328	1.09
108-10-1	4-Methyl-2-pentanone	U	5.47	ug/kg	1.37	5.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.328	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.328	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.328	1.09
591-78-6	2-Hexanone	U	5.47	ug/kg	1.64	5.47
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.328	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.328	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.328	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.328	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.328	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615018**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2729**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 02:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:23**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n126.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.328	1.09
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.328	2.19
95-47-6	o-Xylene	U	1.09	ug/kg	0.328	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.328	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.328	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.328	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.328	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.328	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.328	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.328	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.328	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.328	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.328	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.328	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.328	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.328	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.47	ug/kg	1.75	5.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.328	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.328	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n126.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 01-DEC-2009 02:56
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615018|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.61540	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1456542	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1078407	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	637745	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	309936	54.1764	59.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	973358	51.8213	56.7
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	413088	55.9365	61.2

ION RATIO REPORT

VOA REPORT

Data file: 4n126.d
Report Date: 12/01/2009 15:01
Lab. ID: 241615018 SampleType: SAMPLE
Injection Date: 01-DEC-2009 02:56
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615018|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	19905	10.62	10.35	80-120	100	(T)
64	3385	10.62	10.35	2- 62	17	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7583	12.25	12.02	80-120	100	(T)
43	4597	12.25	12.02	225-285	61	(QT)
100	665362	12.25	12.02	8- 68	8773	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n126.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 01-DEC-2009 02:56
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615018|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n126.d
Date : 01-DEC-2009 02:56
Client ID: RE03-10-2729
Sample Info: |2416150181927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

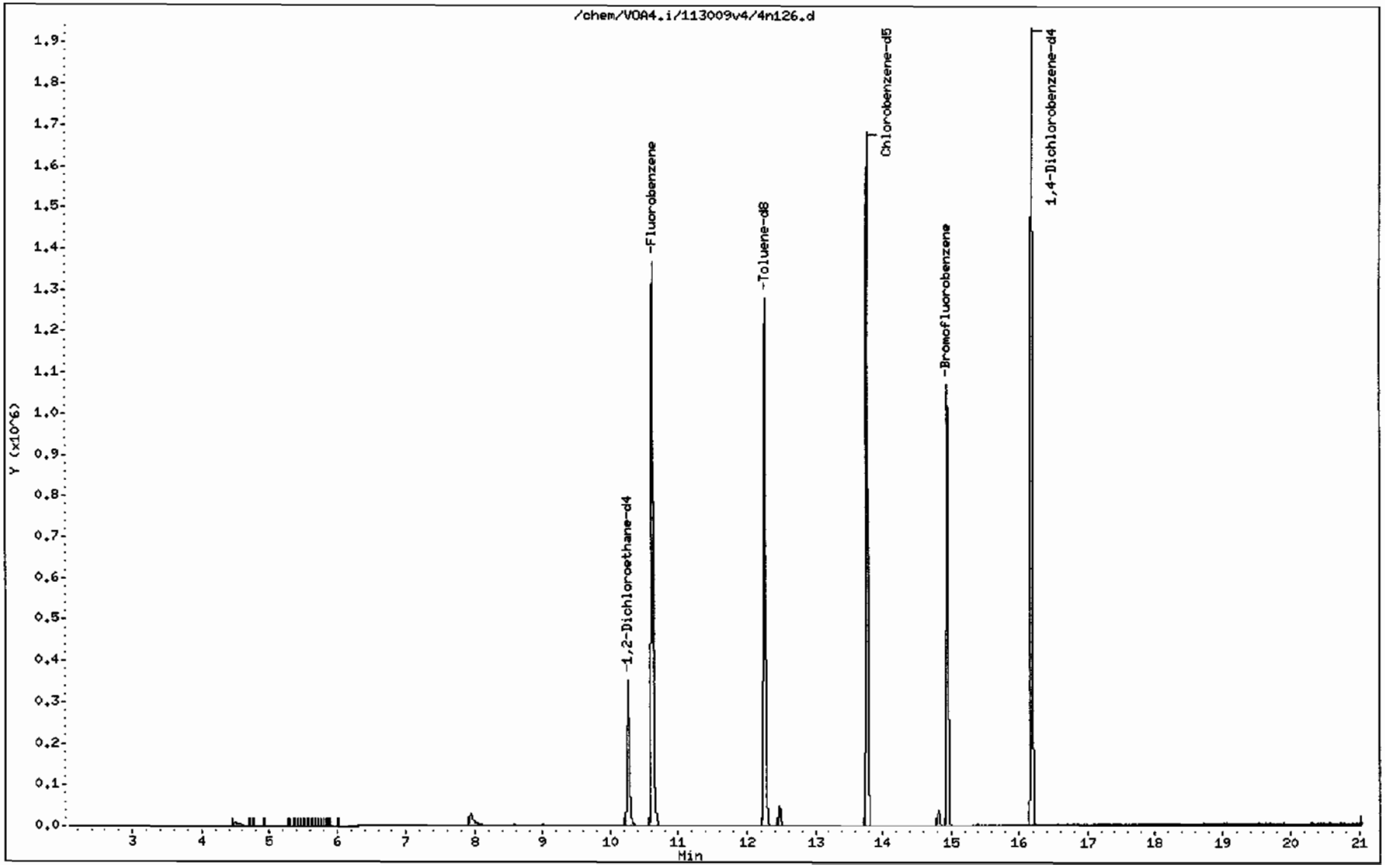

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615019	**Date Received:**	11/21/2009 09:00		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6967	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 19:11	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n109.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.95	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615019	**Date Received:**	11/21/2009 09:00		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6967	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 19:11	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:06	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n109.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n109.d
Lab Smp Id: 241615019 Client Smp ID: RE03-10-6967
Inj Date : 30-NOV-2009 19:11
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615019|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1375434	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1027210	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.179	(1.000)	658608	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	339709	62.8823	62.9
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1088450	60.8370	60.8
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	470374	61.6760	61.7
10 Acetone	43	7.375	7.358	(0.695)	10878	1.94649	1.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n109.d
Report Date: 11/30/2009 19:25
Lab. ID: 241615019 SampleType: SAMPLE
Injection Date: 30-NOV-2009 19:11
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615019|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	10878	7.38	7.36	80-120	100	( )
58	2359	7.37	7.36	1- 61	22	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	17549	10.62	10.35	80-120	100	(T)
64	2978	10.62	10.35	2- 62	17	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8245	12.25	12.02	80-120	100	(T)
43	5669	12.25	12.02	225-285	69	(QT)
100	760474	12.25	12.02	8- 68	9223	(QT)
66 Bromoform			CAS#: 75-25-2			
173	2384	14.97	14.66	80-120	100	(T)
175	30850	14.95	14.66	19- 79	1294	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n109.d
Lab Smp Id: 241615019 Client Smp ID: RE03-10-6967
Inj Date : 30-NOV-2009 19:11
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615019|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n109.d
Date : 30-NOV-2009 19:11
Client ID: RE03-10-6967
Sample Info: |24161501919277111|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

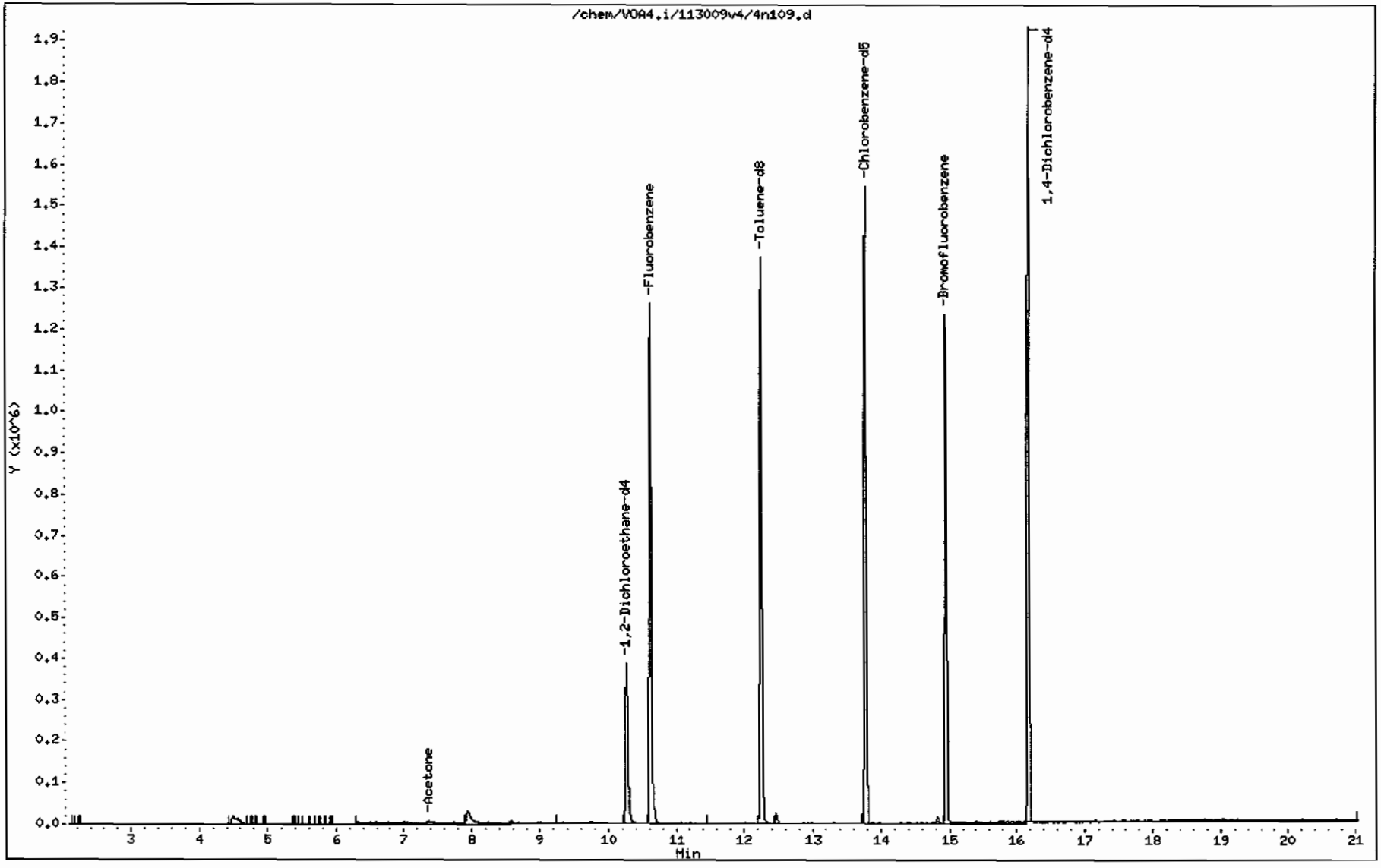

Data File: /chem/VOA4.i/113009v4/4n109.d

Page 2

Date : 30-NOV-2009 19:11

Client ID: RE03-10-6967

Instrument: VOA4.i

Sample Info: |24161501919277111|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 1.9 ug/Kg

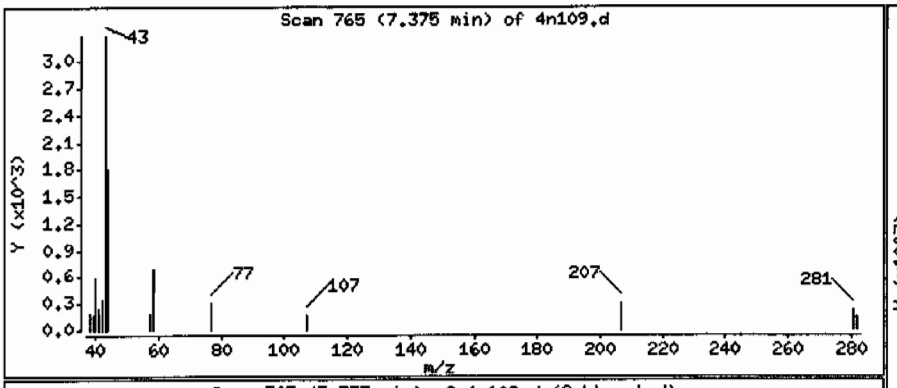

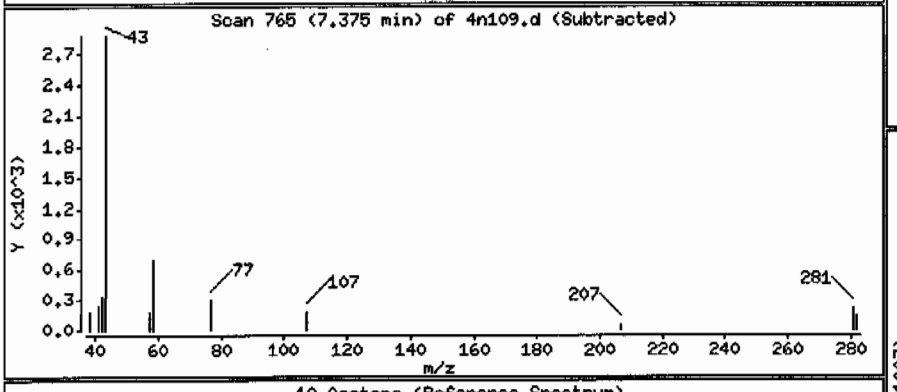

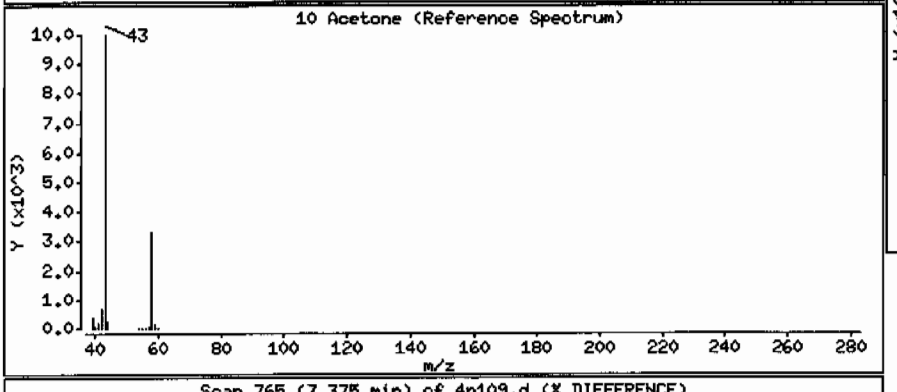

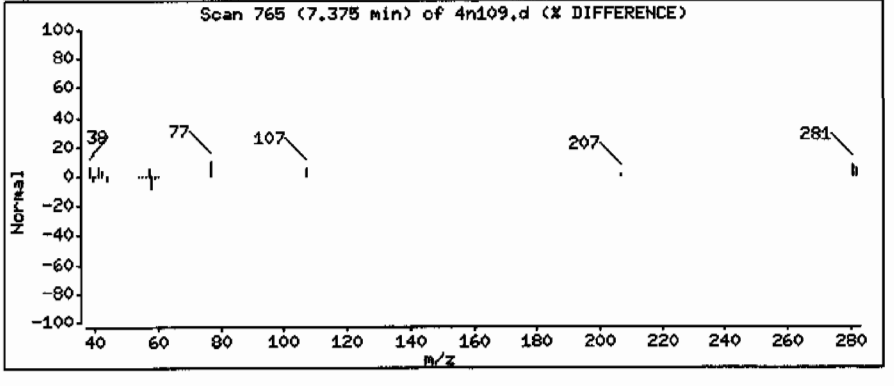

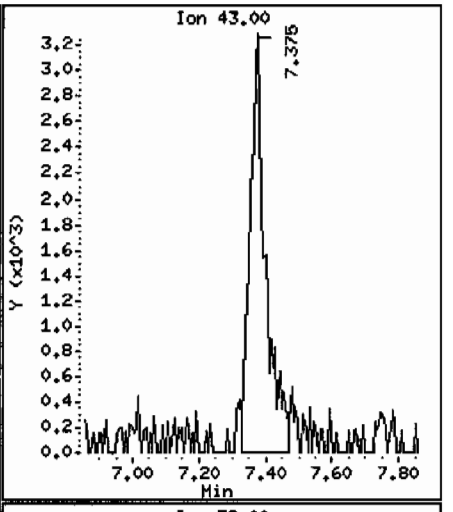

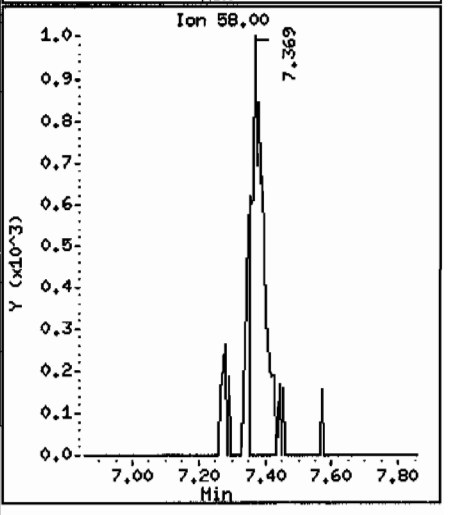

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615020**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**4.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6969**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 03:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 18:24**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n127.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone	U	5.26	ug/kg	1.74	5.26
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.26	ug/kg	1.68	5.26
75-09-2	Methylene chloride	U	5.26	ug/kg	2.10	5.26
75-15-0	Carbon disulfide	U	5.26	ug/kg	1.31	5.26
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone	U	5.26	ug/kg	1.58	5.26
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.26	ug/kg	1.31	5.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.26	ug/kg	1.58	5.26
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 03:23	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 18:24	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n127.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.26	ug/kg	1.68	5.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n127.d
Lab Smp Id: 241615020 Client Smp ID: RE03-10-6969
Inj Date : 01-DEC-2009 03:23
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615020|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.86100	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1317486	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	972788	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	542504	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	306746	59.2781	62.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	960206	56.6715	59.6
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	399888	63.6554	66.9

ION RATIO REPORT

VOA REPORT

Data file: 4n127.d
Report Date: 12/01/2009 15:01
Lab. ID: 241615020 SampleType: SAMPLE
Injection Date: 01-DEC-2009 03:23
Operator: ACJ Instrument: VOA4.i
Sample Info: |241615020|927711|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	17378	10.61	10.35	80-120	100	(T)
64	3285	10.61	10.35	2- 62	19	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7882	12.25	12.02	80-120	100	(T)
43	4790	12.25	12.02	225-285	61	(QT)
100	662309	12.25	12.02	8- 68	8402	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n127.d
Lab Smp Id: 241615020 Client Smp ID: RE03-10-6969
Inj Date : 01-DEC-2009 03:23
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241615020|927711|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n127.d
Date : 01-DEC-2009 03:23
Client ID: RE03-10-6969
Sample Info: |241615020|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

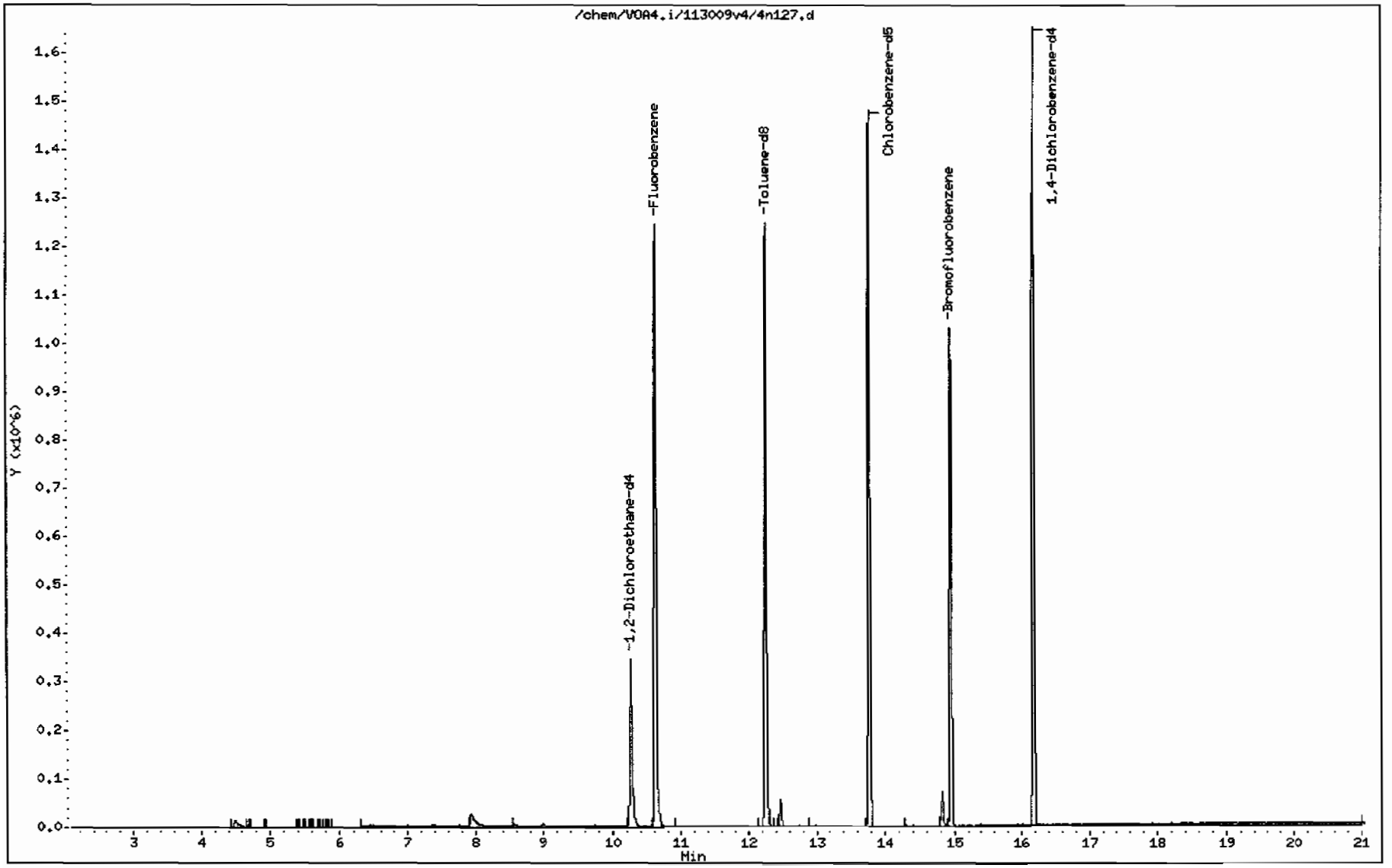

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 04-Dec-2009 17:22

Calibration History

Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Start Cal Date: 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
22-NOV-2009 14:48	ICALsubS	/chem/VOA4.i/112209v4/41713.d
22-NOV-2009 10:41	CALsubL+	/chem/VOA4.i/112209v4/41704.d
Cal Level: 2 , Cal Amount: 2.00000		
22-NOV-2009 15:16	ICALsubS	/chem/VOA4.i/112209v4/41714.d
22-NOV-2009 11:36	CALsubL+	/chem/VOA4.i/112209v4/41706.d
Cal Level: 3 , Cal Amount: 5.00000		
22-NOV-2009 15:43	ICALsubS	/chem/VOA4.i/112209v4/41715.d
22-NOV-2009 12:04	CALsubL+	/chem/VOA4.i/112209v4/41707.d
Cal Level: 4 , Cal Amount: 10.00000		
22-NOV-2009 16:10	ICALsubS	/chem/VOA4.i/112209v4/41716.d
22-NOV-2009 12:31	CALsubL+	/chem/VOA4.i/112209v4/41708.d
Cal Level: 5 , Cal Amount: 20.00000		
22-NOV-2009 16:37	ICALsubS	/chem/VOA4.i/112209v4/41717.d
22-NOV-2009 12:59	CALsubL+	/chem/VOA4.i/112209v4/41709.d
Cal Level: 6 , Cal Amount: 50.00000		
22-NOV-2009 17:04	ICALsubS	/chem/VOA4.i/112209v4/41718.d
22-NOV-2009 13:27	CALsubL+	/chem/VOA4.i/112209v4/41710.d
Cal Level: 7 , Cal Amount: 100.00000		
22-NOV-2009 17:32	ICALsubS	/chem/VOA4.i/112209v4/41719.d
22-NOV-2009 13:54	CALsubL+	/chem/VOA4.i/112209v4/41711.d
Cal Level: 8 , Cal Amount: 200.00000		
22-NOV-2009 10:14	BENZENE+	/chem/VOA4.i/112209v4/41703.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

| Ccal Level: 6 , Ccal Amount: 50.0 |

30-NOV-2009 16:27	CALsubL+	/chem/VOA4.i/113009v4/4n103.d
Ccal Level: 6 , Ccal Amount: 50.0		
30-NOV-2009 16:54	CALsubS+SS	/chem/VOA4.i/113009v4/4n104.d
Ccal Level: 6 , Ccal Amount: 50.0		
30-NOV-2009 15:59	CALsubL+	/chem/VOA4.i/113009v4/4n102.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Calibration File Names:
Level 1: /chem/VOA4.i/112209v4/41713.d
Level 2: /chem/VOA4.i/112209v4/41714.d
Level 3: /chem/VOA4.i/112209v4/41715.d
Level 4: /chem/VOA4.i/112209v4/41716.d
Level 5: /chem/VOA4.i/112209v4/41717.d
Level 6: /chem/VOA4.i/112209v4/41718.d
Level 7: /chem/VOA4.i/112209v4/41719.d
Level 8: /chem/VOA4.i/112209v4/41703.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.70135	0.67482	0.71847	0.71001	0.64315	0.71607					
	0.60192	+++++					AVRG		0.68083		6.46217
M 2 1,2-Dichloroethylene (total)	0.39740	0.38742	0.40356	0.41339	0.36979	0.42144					
	0.36963	+++++					AVRG		0.39466		5.12263
M 135 1,3-Dichloropropylene	0.41350	0.40551	0.44628	0.45853	0.42258	0.48108					
	0.42557	+++++					AVRG		0.43615		6.18797
153 Chlorotrifluoroethylene	0.13143	0.18372	0.17447	0.18248	+++++	0.19006					
	+++++	+++++					AVRG		0.17243		13.67715
154 2-Chloro-1,1,1-trifluoroethan	0.26186	0.25912	0.25634	0.25645	+++++	0.26647					
	0.25722	+++++					AVRG		0.25958		1.52910

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
3 Dichlorodifluoromethane	0.21952	0.20478	0.24778	0.23830	0.25344	0.24626					
	0.22084	+++++					AVRG		0.23299		7.76928
4 Chloromethane	0.36252	0.34713	0.37649	0.35126	0.36111	0.38641					
	0.33300	+++++					AVRG		0.35970		5.00875
5 Vinyl chloride	0.33360	0.31585	0.35122	0.33159	0.33730	0.35659					
	0.30468	+++++					AVRG		0.33298		5.49023
6 Bromomethane	0.26744	0.25913	0.27384	0.26317	0.25533	0.28190					
	0.23741	+++++					AVRG		0.26260		5.43369
7 Chloroethane	0.24641	0.22492	0.25216	0.24499	0.24862	0.26778					
	0.22546	+++++					AVRG		0.24433		6.17830
8 Trichlorofluoromethane	0.39788	0.40451	0.41714	0.40395	0.41072	0.45146					
	0.39022	+++++					AVRG		0.41084		4.83812
134 Ethyl Ether	0.20013	0.22799	0.22695	0.23007	0.22323	0.24848					
	0.21817	+++++					AVRG		0.22500		6.43554
9 Acrolein	0.05592	0.05545	0.05313	0.05620	+++++	0.05350					
	0.05200	+++++					AVRG		0.05437		3.16611
12 Trichlorotrifluoroethane	0.10763	0.09987	0.09425	0.09433	+++++	0.08318					
	0.08283	+++++					AVRG		0.09368		10.25666

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
10 Acetone	0.21715	0.21091	0.19514	0.20925	0.18498	0.22820					
	0.17644	+++++					AVRG		0.20316		9.05187
11 1,1-Dichloroethylene	0.43010	0.40719	0.43561	0.43488	0.39281	0.46160					
	0.40074	+++++					AVRG		0.42328		5.70354
147 Isopropyl Alcohol	0.02541	0.02962	0.02587	0.02812	+++++	0.02700					
	0.02584	+++++					AVRG		0.02698		6.03712
13 Iodomethane	0.49411	0.49115	0.52557	0.53262	0.47737	0.55006					
	0.47344	+++++					AVRG		0.50633		5.85556
15 Acetonitrile	0.04684	0.04644	0.04649	0.04892	0.04391	0.04889					
	0.03979	+++++					AVRG		0.04590		6.94320
128 Methyl acetate	0.25731	0.23806	0.23684	0.24780	0.21890	0.24259					
	0.19845	+++++					AVRG		0.23428		8.40002
14 Carbon disulfide	0.91167	0.87511	0.91689	0.92639	0.82243	0.92593					
	0.76534	+++++					AVRG		0.87768		7.06555
16 Allyl chloride	0.47481	0.44851	0.43469	0.44980	+++++	0.41236					
	0.38471	+++++					AVRG		0.43415		7.30172
148 tert-Butyl Alcohol	0.03756	0.04508	0.03881	0.04200	+++++	0.04059					
	0.03810	+++++					AVRG		0.04036		7.04178

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	ml	m2	%RSD or R^2
	100 Level 7	200 Level 8									
17 Methylene chloride	+++++	89613	104945	156326	244699	561681					
	1084465	+++++					LINR	-0.13197	0.29325		0.99269
18 Acrylonitrile	0.10599	0.11761	0.10731	0.11347	+++++	0.10855					
	0.10484	+++++					AVRG		0.10963		4.48945
20 tert-Butyl methyl ether	0.79558	0.87853	0.81726	0.87060	0.77996	0.85442					
	0.74022	+++++					AVRG		0.81951		6.25004
21 trans-1,2-Dichloroethylene	0.35735	0.37592	0.38478	0.39437	0.35468	0.40358					
	0.35165	+++++					AVRG		0.37462		5.51097
23 Vinyl acetate	0.49838	0.54680	0.57711	0.57802	0.55244	0.60012					
	0.46080	+++++					AVRG		0.54481		9.01724
149 Isopropyl ether	0.95978	0.92001	0.90178	0.92165	+++++	0.89996					
	0.89878	+++++					AVRG		0.91700		2.54124
22 1,1-Dichloroethane	0.46140	0.44295	0.49088	0.48216	0.44328	0.50152					
	0.43956	+++++					AVRG		0.46596		5.47805
24 2-Chloro-1,3-butadiene	0.42752	0.41435	0.41736	0.41116	+++++	0.40092					
	0.40151	+++++					AVRG		0.41214		2.44686
150 Ethyl tert-butyl ether	0.84482	0.84737	0.83195	0.85512	+++++	0.82219					
	0.83043	+++++					AVRG		0.83865		1.47845

GEL Laboratories LLC

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Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
30 2-Butanone	0.23385	0.23579	0.22472	0.23959	0.21992	0.26519					
	0.21714	+++++					AVRG		0.23374		6.93171
26 Ethyl acetate	0.32623	0.34240	0.30347	0.31352	+++++	0.29024					
	0.26820	+++++					AVRG		0.30734		8.56310
31 cis-1,2-Dichloroethylene	0.43746	0.39893	0.42234	0.43240	0.38490	0.43930					
	0.38761	+++++					AVRG		0.41470		5.71138
25 2,2-Dichloropropane	0.29466	0.25782	0.28219	0.27714	0.24901	0.27503					
	0.24787	+++++					AVRG		0.26910		6.62310
28 Propionitrile	0.04376	0.05227	0.04399	0.04681	+++++	0.04559					
	0.04383	+++++					AVRG		0.04604		7.13467
27 Methacrylonitrile	0.17978	0.19710	0.18112	0.18893	+++++	0.17963					
	0.16721	+++++					AVRG		0.18229		5.51523
29 Bromochloromethane	0.14402	0.13910	0.15114	0.15508	0.13476	0.15841					
	0.14035	+++++					AVRG		0.14612		6.07266
32 Chloroform	0.50037	0.46709	0.47945	0.48569	0.43681	0.49308					
	0.43321	+++++					AVRG		0.47081		5.65257
72 Tetrahydrofuran	28285	49603	91261	180946	+++++	811740					
	1542403	+++++					LINR	-0.21156	0.17273		0.99744

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INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
36 1,1,1-Trichloroethane	0.34177	0.33797	0.36697	0.35793	0.32888	0.37723					
	0.33495	+++++					AVRG		0.34939		5.19290
19 Isobutyl alcohol	0.01333	0.01535	0.01335	0.01471	+++++	0.01411					
	0.01295	+++++					AVRG		0.01397		6.66101
129 Cyclohexane	0.43240	0.40010	0.41453	0.40591	0.37242	0.42674					
	0.37265	+++++					AVRG		0.40354		5.92718
34 1,1-Dichloropropene	0.34396	0.33259	0.36640	0.35168	0.33247	0.37748					
	0.32857	+++++					AVRG		0.34759		5.37228
33 Carbon tetrachloride	0.33357	0.32239	0.34241	0.34257	0.31834	0.36936					
	0.33037	+++++					AVRG		0.33700		5.03062
37 1,2-Dichloroethane	0.36646	0.37339	0.38216	0.38288	0.34836	0.39447					
	0.34689	+++++					AVRG		0.37066		4.84641
38 Benzene	1.08632	1.03953	1.11726	1.09466	0.97346	1.10695					
	0.94618	1.20943					AVRG		1.07172		7.84406
151 Methyl tert-amyl ether	0.84827	0.86006	0.82129	0.84576	+++++	0.81709					
	0.82104	+++++					AVRG		0.83559		2.15534
139 Cyclohexene	0.52887	0.49537	0.52023	0.51530	0.47626	0.53834					
	0.47205	+++++					AVRG		0.50663		5.09965

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Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01024	0.01084	0.01043	0.01203	0.00875	0.01249					
	0.01024	0.01084					AVRG		0.01073		10.73836
39 Trichloroethylene	0.27049	0.26768	0.27901	0.28025	0.25066	0.28409					
	0.25133	+++++					AVRG		0.26907		5.04764
42 Methyl methacrylate	0.20522	0.21958	0.20097	0.21212	+++++	0.19781					
	0.18497	+++++					AVRG		0.20344		5.89043
130 Methylcyclohexane	0.45782	0.40944	0.44364	0.43070	0.40942	0.45487					
	0.39748	+++++					AVRG		0.42905		5.61039
41 1,2-Dichloropropane	0.28007	0.27751	0.28731	0.29540	0.26480	0.30111					
	0.26062	+++++					AVRG		0.28098		5.32401
97 1,4-Dioxane	0.00367	0.00391	0.00331	0.00381	+++++	0.00364					
	0.00350	+++++					AVRG		0.00364		5.86751
43 Dibromomethane	0.17297	0.16928	0.17293	0.18369	0.16407	0.18681					
	0.16513	+++++					AVRG		0.17355		5.03688
45 Bromodichloromethane	0.35810	0.34545	0.37438	0.36950	0.34403	0.39092					
	0.34862	+++++					AVRG		0.36157		4.83779
48 2-Nitropropane	0.09325	0.09886	0.08717	0.09749	+++++	0.09739					
	0.09420	+++++					AVRG		0.09473		4.51184

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Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
44 2-Chloroethylvinyl ether	0.15167	0.15840	0.16203	0.16999	0.15822	0.17712					
	0.14523	+++++					AVRG		0.16038		6.68189
46 cis-1,3-Dichloropropylene	0.42560	0.42436	0.46605	0.47362	0.43654	0.49344					
	0.43654	+++++					AVRG		0.45088		5.94621
49 4-Methyl-2-pentanone	0.16704	0.16573	0.16058	0.16558	0.15177	0.17455					
	0.14456	+++++					AVRG		0.16140		6.28749
50 Toluene	0.95599	0.89242	0.92210	0.90343	0.80436	0.89036					
	0.76529	+++++					AVRG		0.87628		7.67500
51 Ethyl methacrylate	0.52301	0.54250	0.51464	0.52715	+++++	0.46530					
	0.41126	+++++					AVRG		0.49731		9.98259
53 trans-1,3-Dichloropropylene	0.55667	0.52412	0.57667	0.58556	0.53379	0.60809					
	0.53039	+++++					AVRG		0.55933		5.70215
54 1,1,2-Trichloroethane	0.28664	0.26669	0.29062	0.29122	0.26059	0.29539					
	0.25448	+++++					AVRG		0.27795		6.04778
55 2-Hexanone	0.44966	0.43839	0.43114	0.45156	0.41544	0.47289					
	0.38534	+++++					AVRG		0.43492		6.50323
52 1,3-Dichloropropane	0.58992	0.56247	0.59158	0.58963	0.53126	0.58281					
	0.48934	+++++					AVRG		0.56243		6.91458

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
56 Tetrachloroethylene	0.36707	0.34242	0.34742	0.34437	0.31600	0.35293					
	0.31257	+++++					AVRG		0.34040		5.76135
57 Dibromochloromethane	0.36430	0.36503	0.37424	0.40158	0.37199	0.42902					
	0.38635	+++++					AVRG		0.38465		6.12123
59 1,2-Dibromoethane	0.34061	0.33398	0.36106	0.36598	0.34272	0.38240					
	0.33925	+++++					AVRG		0.35228		5.05692
152 1-Chlorohexane	0.27943	0.25644	0.23756	0.24653	+++++	0.25264					
	0.25465	+++++					AVRG		0.25454		5.49819
62 Chlorobenzene	1.00079	1.01568	1.05757	1.06100	0.94511	1.07380					
	0.92098	+++++					AVRG		1.01070		5.87902
60 1,1,1,2-Tetrachloroethane	0.39361	0.35697	0.40153	0.39299	0.36161	0.40793					
	0.35713	+++++					AVRG		0.38168		5.82855
58 Ethylbenzene	1.84025	1.71034	1.78402	1.76603	1.58732	1.73971					
	1.41449	+++++					AVRG		1.69174		8.58326
63 m,p-Xylenes	0.70030	0.66453	0.70747	0.70329	0.63579	0.70407					
	0.59219	+++++					AVRG		0.67252		6.59440
64 o-Xylene	0.70344	0.69541	0.74047	0.72343	0.65786	0.74007					
	0.62137	+++++					AVRG		0.69744		6.34185

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Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	1.21077	1.15199	1.23797	1.24119	1.13289	1.27542					
	1.05111	+++++					AVRG		1.18591		6.57939
66 Bromoform	0.49404	0.47895	0.51340	0.55884	0.52075	0.63851					
	0.57125	+++++					AVRG		0.53939		10.14098
67 Isopropylbenzene	2.81546	2.75017	2.84421	2.84280	2.56688	2.84161					
	2.30776	+++++					AVRG		2.70984		7.50228
68 cis-1,4-Dichloro-2-butene	0.20831	0.23800	0.22368	0.22817	+++++	0.22092					
	0.20566	+++++					AVRG		0.22079		5.52375
70 Cyclohexanone	0.03515	0.04094	0.03660	0.04054	+++++	0.03802					
	0.03639	+++++					AVRG		0.03794		6.20501
73 1,1,2,2-Tetrachloroethane	0.75747	0.79219	0.83626	0.84224	0.76143	0.85606					
	0.71570	+++++					AVRG		0.79448		6.59872
69 trans-1,4-Dichloro-2-butene	0.21501	0.23443	0.20845	0.21973	+++++	0.20938					
	0.19312	+++++					AVRG		0.21335		6.41608
74 1,2,3-Trichloropropane	0.20845	0.20706	0.21761	0.22120	0.20235	0.23283					
	0.19379	+++++					AVRG		0.21190		6.12869
75 Bromobenzene	0.86711	0.84553	0.88263	0.88735	0.79663	0.92286					
	0.79096	+++++					AVRG		0.85615		5.67234

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
76 n-Propylbenzene	3.39349	3.26326	3.49629	3.38979	3.04662	3.32860					
	2.61397	+++++					AVRG		3.21886		9.37389
78 1,3,5-Trimethylbenzene	2.48326	2.44997	2.58869	2.55937	2.29300	2.53053					
	2.01793	+++++					AVRG		2.41754		8.32003
77 2-Chlorotoluene	2.50052	2.28701	2.46919	2.41383	2.13859	2.33326					
	1.85746	+++++					AVRG		2.28570		9.84026
80 4-Chlorotoluene	2.21104	2.08272	2.22413	2.19063	1.96458	2.21541					
	1.81428	+++++					AVRG		2.10040		7.51638
81 tert-Butylbenzene	2.56778	2.48368	2.56772	2.56479	2.28412	2.57734					
	2.10600	+++++					AVRG		2.45020		7.52754
79 1,2,4-Trimethylbenzene	2.72525	2.55215	2.74018	2.72725	2.37980	2.63816					
	2.14623	+++++					AVRG		2.55843		8.70457
82 Pentachloroethane	0.50501	0.48269	0.48049	0.45126	+++++	0.35124					
	0.40108	+++++					AVRG		0.44529		13.11002
83 sec-Butylbenzene	3.45534	3.21255	3.53229	3.46947	3.10653	3.41341					
	2.68756	+++++					AVRG		3.26817		9.11754
84 4-Isopropyltoluene	2.82093	2.66835	2.87406	2.82119	2.51181	2.79014					
	2.27080	+++++					AVRG		2.67961		8.13997

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	1.63923	1.59498	1.69316	1.70724	1.50639	1.69998					
	1.43192	+++++					AVRG		1.61041		6.61020
87 1,4-Dichlorobenzene	1.71875	1.59053	1.69010	1.67669	1.50062	1.69539					
	1.44149	+++++					AVRG		1.61622		6.70439
88 Benzyl chloride	1.30649	1.38444	1.30279	1.33389	+++++	1.17735					
	0.96630	+++++					AVRG		1.24521		12.26968
89 n-Butylbenzene	2.60812	2.52813	2.66438	2.61551	2.36712	2.57681					
	2.08133	+++++					AVRG		2.49163		8.21192
90 1,2-Dichlorobenzene	1.64359	1.51915	1.65273	1.62268	1.47619	1.63698					
	1.39061	+++++					AVRG		1.56313		6.54277
91 bis(2-Chloroisopropyl)ether	0.37069	0.42630	0.35573	0.38220	+++++	0.37313					
	0.32169	+++++					AVRG		0.37162		9.20525
92 1,2-Dibromo-3-chloropropane	0.16090	0.17023	0.16881	0.18391	0.17674	0.19572					
	0.17820	+++++					AVRG		0.17636		6.41964
93 1,2,4-Trichlorobenzene	0.86804	0.82729	0.90400	0.95532	0.88491	0.92567					
	0.83336	+++++					AVRG		0.88551		5.30559
94 Hexachlorobutadiene	0.65645	0.61705	0.64747	0.65029	0.59424	0.63287					
	0.57806	+++++					AVRG		0.62520		4.80208

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	1.52349	1.43037	1.51173	1.63279	1.54736	1.60261					
	1.40026	++++++					AVRG		1.52123		5.54782
96 1,2,3-Trichlorobenzene	0.70644	0.66598	0.72623	0.74703	0.68968	0.70642					
	0.65102	++++++					AVRG		0.69897		4.75877
$ 138 1,2-Dichloroethane-d4	0.17578	0.18570	0.19564	0.20439	0.18848	0.20826					
	0.21644	++++++					AVRG		0.19639		7.22804
$ 47 Toluene-d8	0.83900	0.85325	0.89204	0.90684	0.83870	0.92761					
	0.83861	++++++					AVRG		0.87087		4.28714
$ 71 Bromofluorobenzene	0.52483	0.55505	0.58369	0.61009	0.55725	0.63913					
	0.58288	++++++					AVRG		0.57899		6.53887

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Cal Date : 30-Nov-2009 17:23 amj

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.69132	0.69132	0.050	1.54202	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.40630	0.40630	0.050	2.95007	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.43846	0.43846	0.050	0.52968	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.21510	0.21510	0.050	-7.67900	30.00000	Averaged	
4 Chloromethane	0.35970	0.31949	0.31949	0.100	-11.17813	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.32061	0.32061	0.050	-3.71515	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.24826	0.24826	0.050	-5.45987	30.00000	Averaged	
7 Chloroethane	0.24433	0.23602	0.23602	0.050	-3.40156	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.40966	0.40966	0.050	-0.28572	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.21166	0.21166	0.001	-5.93017	30.00000	Averaged	
10 Acetone	0.20316	0.14150	0.14150	0.050	-30.34976	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04069	0.04069	0.010	-11.34196	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.42893	0.42893	0.050	1.33577	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.19676	0.19676	0.010	-16.01466	40.00000	Averaged	
13 Iodomethane	0.50633	0.51727	0.51727	0.050	2.16046	30.00000	Averaged	
17 Methylene chloride	51.31291	50.00000	0.33965	0.050	2.62581	30.00000	Linear	
14 Carbon disulfide	0.87768	0.91718	0.91718	0.050	4.50062	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.75110	0.75110	0.050	-8.34781	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.38832	0.38832	0.050	3.65819	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.49355	0.49355	0.010	-9.40872	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.48122	0.48122	0.100	3.27446	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.17581	0.17581	0.030	-24.78714	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.42429	0.42429	0.050	2.31050	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.27404	0.27404	0.050	1.83530	30.00000	Averaged	
32 Chloroform	0.47081	0.47569	0.47569	0.010	1.03561	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.14549	0.14549	0.010	-0.43079	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.36751	0.36751	0.010	5.18800	30.00000	Averaged	
129 Cyclohexane	0.40354	0.42421	0.42421	0.010	5.12308	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.36893	0.36893	0.010	6.13735	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01040	0.01040	0.001	-3.06093	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.35930	0.35930	0.010	6.61503	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.20547	0.20547	0.001	4.62716	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.35941	0.35941	0.010	-3.03368	30.00000	Averaged	
38 Benzene	1.07172	1.07229	1.07229	0.010	0.05259	30.00000	Averaged	
139 Cyclohexene	0.50663	0.51278	0.51278	0.001	1.21436	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
39 Trichloroethylene	0.26907	0.28019	0.28019	0.010	4.13279	30.00000	Averaged	
41 1,2-Dichloropropane	0.28098	0.28134	0.28134	0.010	0.13000	20.00000	Averaged	ccc
130 Methylcyclohexane	0.42905	0.44411	0.44411	0.010	3.50875	30.00000	Averaged	
45 Bromodichloromethane	0.36157	0.36895	0.36895	0.010	2.04004	30.00000	Averaged	
43 Dibromomethane	0.17355	0.16757	0.16757	0.010	-3.44731	30.00000	Averaged	
44 2-Chloroethylvinyl ether	0.16038	0.14096	0.14096	0.005	-12.11088	30.00000	Averaged	
49 4-Methyl-2-pentanone	0.16140	0.13941	0.13941	0.010	-13.62299	40.00000	Averaged	
46 cis-1,3-Dichloropropylene	0.45088	0.45323	0.45323	0.010	0.52137	30.00000	Averaged	
$ 47 Toluene-d8	0.87087	0.86829	0.86829	0.010	-0.29589	30.00000	Averaged	
50 Toluene	0.87628	0.86307	0.86307	0.010	-1.50792	20.00000	Averaged	ccc
53 trans-1,3-Dichloropropylene	0.55933	0.54837	0.54837	0.010	-1.95885	30.00000	Averaged	
54 1,1,2-Trichloroethane	0.27795	0.26103	0.26103	0.010	-6.08674	30.00000	Averaged	
55 2-Hexanone	0.43492	0.29367	0.29367	0.010	-32.47630	40.00000	Averaged	
52 1,3-Dichloropropane	0.56243	0.53703	0.53703	0.010	-4.51590	30.00000	Averaged	
56 Tetrachloroethylene	0.34040	0.34775	0.34775	0.010	2.16113	30.00000	Averaged	
57 Dibromochloromethane	0.38465	0.38777	0.38777	0.010	0.81133	30.00000	Averaged	
59 1,2-Dibromoethane	0.35228	0.34520	0.34520	0.010	-2.00984	30.00000	Averaged	
62 Chlorobenzene	1.01070	1.03137	1.03137	0.300	2.04472	30.00000	Averaged	spcc
60 1,1,1,2-Tetrachloroethane	0.38168	0.38883	0.38883	0.010	1.87227	30.00000	Averaged	
58 Ethylbenzene	1.69174	1.67584	1.67584	0.010	-0.93937	20.00000	Averaged	ccc
63 m,p-Xylenes	0.67252	0.68291	0.68291	0.010	1.54543	30.00000	Averaged	
64 o-Xylene	0.69744	0.70815	0.70815	0.010	1.53566	30.00000	Averaged	
65 Styrene	1.18591	1.21191	1.21191	0.010	2.19258	30.00000	Averaged	
66 Bromoform	0.53939	0.54722	0.54722	0.100	1.45063	30.00000	Averaged	spcc
67 Isopropylbenzene	2.70984	2.67215	2.67215	0.010	-1.39091	30.00000	Averaged	
73 1,1,2,2-Tetrachloroethane	0.79448	0.72562	0.72562	0.300	-8.66743	30.00000	Averaged	spcc
$ 71 Bromofluorobenzene	0.57899	0.58218	0.58218	0.010	0.55182	30.00000	Averaged	
74 1,2,3-Trichloropropane	0.21190	0.19674	0.19674	0.010	-7.15485	30.00000	Averaged	
75 Bromobenzene	0.85615	0.86007	0.86007	0.010	0.45779	30.00000	Averaged	
76 n-Propylbenzene	3.21886	3.16972	3.16972	0.010	-1.52666	30.00000	Averaged	
77 2-Chlorotoluene	2.28570	2.21699	2.21699	0.010	-3.00590	30.00000	Averaged	
78 1,3,5-Trimethylbenzene	2.41754	2.39741	2.39741	0.010	-0.83248	30.00000	Averaged	
80 4-Chlorotoluene	2.10040	2.09083	2.09083	0.010	-0.45555	30.00000	Averaged	
81 tert-Butylbenzene	2.45020	2.46685	2.46685	0.010	0.67956	30.00000	Averaged	
79 1,2,4-Trimethylbenzene	2.55843	2.51478	2.51478	0.010	-1.70627	30.00000	Averaged	
83 sec-Butylbenzene	3.26817	3.26146	3.26146	0.010	-0.20528	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 41722.d
Analysis Type: WATER
Lab Sample ID: W4VM091122-18
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Injection Date: 22-NOV-2009 18:53
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.67217	2.67217	0.010	-0.27751	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.61689	1.61689	0.010	0.40229	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.59751	1.59751	0.010	-1.15795	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.47231	2.47231	0.010	-0.77540	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.53519	1.53519	0.010	-1.78760	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17202	0.17202	0.010	-2.46241	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.94077	0.94077	0.010	6.24058	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66766	0.66766	0.010	6.79105	30.00000	Averaged
95 Naphthalene	1.52123	1.56791	1.56791	0.010	3.06878	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.76536	0.76536	0.010	9.49837	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41722.d
Lab Smp Id: W4VM091122-18 Client Smp ID: SECOND SOURCE
Inj Date : 22-NOV-2009 18:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-18|ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01C/IVM091122-01
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2583514	150.000	152
M 2 1,2-Dichloroethylene (total)	96				1310123	100.000	103
M 135 1,3-Dichloropropylene	75				1413814	100.000	100
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	346786	50.0000	46.2
4 Chloromethane	50	5.299	5.299	(0.499)	515104	50.0000	44.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	516895	50.0000	48.1
6 Bromomethane	94	6.138	6.138	(0.578)	400262	50.0000	47.3
7 Chloroethane	64	6.288	6.288	(0.592)	380525	50.0000	48.3
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	660479	50.0000	49.8
134 Ethyl Ether	59	7.003	7.003	(0.660)	341247	50.0000	47.0
10 Acetone	43	7.357	7.357	(0.693)	1140649	250.000	174
15 Acetonitrile	41	7.705	7.705	(0.726)	1640110	1250.00	1110
11 1,1-Dichloroethylene	61	7.394	7.394	(0.696)	691539	50.0000	50.7
128 Methyl acetate	43	7.753	7.753	(0.730)	1586132	250.000	210
13 Iodomethane	142	7.631	7.631	(0.719)	4169845	250.000	255
17 Methylene chloride	84	7.942	7.942	(0.748)	547607	50.0000	51.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7393616	250.000	261
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1210958	50.0000	45.8
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	626069	50.0000	51.8
23 Vinyl acetate	43	8.710	8.710	(0.820)	3978626	250.000	226
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	775846	50.0000	51.6
30 2-Butanone	43	9.326	9.326	(0.878)	1417213	250.000	188
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	684054	50.0000	51.2
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	441819	50.0000	50.9
32 Chloroform	83	9.692	9.692	(0.913)	766928	50.0000	50.5
29 Bromochloromethane	128	9.662	9.662	(0.910)	234568	50.0000	49.8
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	592518	50.0000	52.6
129 Cyclohexane	56	10.082	10.082	(0.949)	683928	50.0000	52.6
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	594801	50.0000	53.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1677330	5000.00	4850
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	579271	50.0000	53.3
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	331271	50.0000	52.3
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	579461	50.0000	48.5
38 Benzene	78	10.375	10.375	(0.977)	1728792	50.0000	50.0
139 Cyclohexene	67	10.497	10.497	(0.989)	826734	50.0000	50.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1612245	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	451741	50.0000	52.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	453589	50.0000	50.1
130 Methylcyclohexane	83	11.265	11.265	(1.061)	716009	50.0000	51.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	594832	50.0000	51.0
43 Dibromomethane	93	11.375	11.375	(1.071)	270167	50.0000	48.3
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1136285	250.000	220
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	868329	250.000	216
46 cis-1,3-Dichloropropylene	75	11.935	11.935	(1.124)	730715	50.0000	50.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1081613	50.0000	49.8
50 Toluene	92	12.326	12.326	(0.895)	1075108	50.0000	49.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	683099	50.0000	49.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	325158	50.0000	47.0
55 2-Hexanone	43	12.856	12.856	(0.934)	1829103	250.000	169
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	668969	50.0000	47.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	433189	50.0000	51.1
57 Dibromochloromethane	129	13.149	13.149	(0.955)	483033	50.0000	50.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	430015	50.0000	49.0
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1245683	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1284761	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	484356	50.0000	50.9
58 Ethylbenzene	91	13.862	13.862	(1.007)	2087570	50.0000	49.5
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1701387	100.000	102
64 o-Xylene	106	14.404	14.404	(1.046)	882126	50.0000	50.8
65 Styrene	104	14.404	14.404	(1.046)	1509654	50.0000	51.1
66 Bromoform	173	14.661	14.661	(0.906)	479720	50.0000	50.7
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2342561	50.0000	49.3
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	636119	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	510376	50.0000	50.3
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	172470	50.0000	46.4
75 Bromobenzene	156	15.167	15.167	(0.937)	753987	50.0000	50.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2778758	50.0000	49.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1943541	50.0000	48.5
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2101707	50.0000	49.6
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1832943	50.0000	49.8
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2162586	50.0000	50.3
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2204597	50.0000	49.1
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	2859180	50.0000	49.9
84 4-Isopropyltoluene	119	16.050	16.050	(0.992)	2342581	50.0000	49.9
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1417460	50.0000	50.2
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	876657	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1400467	50.0000	49.4
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2167366	50.0000	49.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1345835	50.0000	49.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	150799	50.0000	48.8
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	824735	50.0000	53.1
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	585310	50.0000	53.4
95 Naphthalene	128	19.032	19.032	(1.176)	1374522	50.0000	51.5
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	670958	50.0000	54.7

Data File: /chem/VOA4.i/112209v4/41722.d
Date : 22-NOV-2009 18:53
Client ID: SECOND SOURCE
Sample Info: IW4VH091122-18|ICV|1|VOAF|2|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

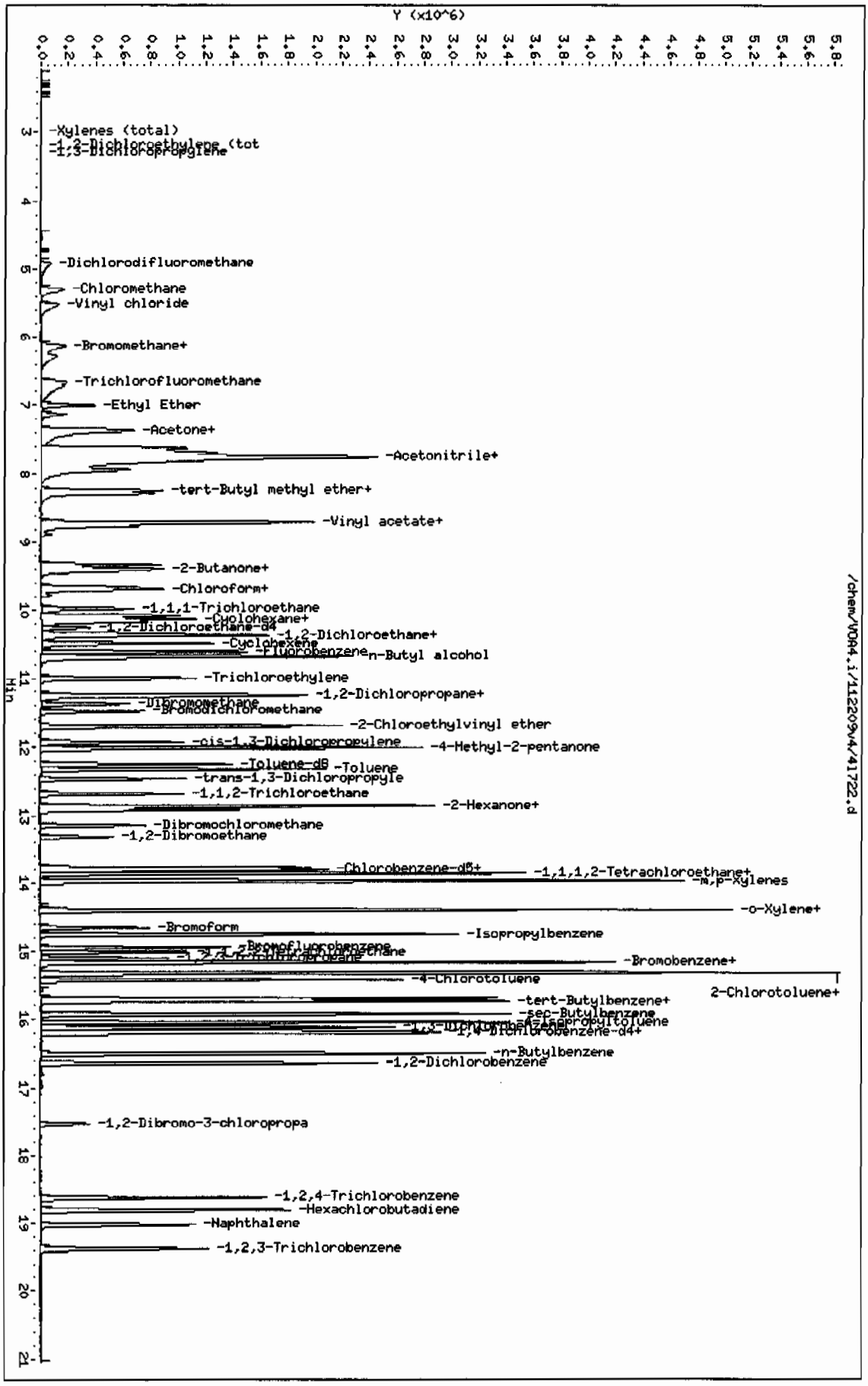

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	0.17243	0.13061	0.13061	0.010	-24.25152	30.00000	Averaged
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.25736	0.25736	0.010	-0.85465	30.00000	Averaged
9 Acrolein	0.05437	0.04991	0.04991	0.001	-8.19106	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.10008	0.10008	0.050	6.83147	30.00000	Averaged
147 Isopropyl Alcohol	0.02698	0.02517	0.02517	0.010	-6.71050	40.00000	Averaged
16 Allyl chloride	0.43415	0.41792	0.41792	0.010	-3.73840	30.00000	Averaged
148 tert-Butyl Alcohol	0.04036	0.03739	0.03739	0.010	-7.33967	40.00000	Averaged
18 Acrylonitrile	0.10963	0.10530	0.10530	0.010	-3.94603	30.00000	Averaged
149 Isopropyl ether	0.91700	0.84326	0.84326	0.010	-8.04141	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.40649	0.40649	0.010	-1.36927	30.00000	Averaged
150 Ethyl tert-butyl ether	0.83865	0.77645	0.77645	0.010	-7.41578	30.00000	Averaged
28 Propionitrile	0.04604	0.04193	0.04193	0.010	-8.93871	30.00000	Averaged
26 Ethyl acetate	0.30734	0.26429	0.26429	0.010	-14.00741	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.17171	0.17171	0.010	-5.80832	30.00000	Averaged
72 Tetrahydrofuran	255	250	0.18327	0.010	1.87504	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01249	0.01249	0.005	-10.58475	40.00000	Averaged
151 Methyl tert-amyl ether	0.83559	0.76954	0.76954	0.010	-7.90398	30.00000	Averaged
42 Methyl methacrylate	0.20344	0.18796	0.18796	0.010	-7.61187	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.45252	0.45252	0.010	-9.00773	30.00000	Averaged
152 1-Chlorohexane	0.25454	0.23444	0.23444	0.010	-7.89735	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00345	0.00345	0.001	-5.31429	40.00000	Averaged
48 2-Nitropropane	0.09473	0.09142	0.09142	0.010	-3.49078	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.21768	0.21768	0.010	-1.40961	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02005	0.02005	0.005	-47.14610	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20712	0.20712	0.010	-2.91969	30.00000	Averaged
82 Pentachloroethane	0.44529	0.35466	0.35466	0.010	-20.35311	30.00000	Averaged
88 Benzyl chloride	1.24521	1.01385	1.01385	0.010	-18.57992	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.34611	0.34611	0.010	-6.86391	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.19105	0.19105	0.001	-2.71473	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.87045	0.87045	0.010	-0.04734	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.57621	0.57621	0.010	-0.48047	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 41723.d
Analysis Type: WATER
Lab Sample ID: W4VM091122-19
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Injection Date: 22-NOV-2009 19:21
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

Average %D / Drift Results.
Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41723.d
Lab Smp Id: W4VM091122-19 Client Smp ID: SHORT SECOND SOURCE
Inj Date : 22-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02B/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	635460	150.000	114
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1252089	150.000	149
9 Acrolein	56	7.186	7.186	(0.677)	404736	250.000	230
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	811524	250.000	267
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2040774	2500.00	2330
16 Allyl chloride	41	7.802	7.802	(0.735)	3388727	250.000	241
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3032185	2500.00	2320
18 Acrylonitrile	53	8.180	8.180	(0.770)	853858	250.000	240
149 Isopropyl ether	45	8.747	8.747	(0.824)	1367530	50.0000	46.0
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	659221	50.0000	49.3
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1259195	50.0000	46.3
28 Propionitrile	54	9.393	9.393	(0.885)	339970	250.000	228
26 Ethyl acetate	43	9.345	9.345	(0.880)	2143053	250.000	215
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1392303	250.000	235
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	777504	250.000	255
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1012586	2500.00	2240

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1247986	50.0000	46.0
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1524080	250.000	231
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2794372	250.000	227
152 1-Chlorohexane	55	13.667	13.667	(1.287)	380193	50.0000	46.0
97 1,4-Dioxane	88	11.332	11.332	(1.067)	279362	2500.00	2370
48 2-Nitropropane	43	11.673	11.673	(1.099)	741303	250.000	241
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	923462	250.000	246
70 Cyclohexanone	42	14.904	14.904	(1.082)	619165	1250.00	661
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	878692	250.000	243
82 Pentachloroethane	167	15.776	15.776	(0.975)	1504604	250.000	199
88 Benzyl chloride	91	16.319	16.319	(1.009)	4301119	250.000	204
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1468339	250.000	233
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1621726	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1235040	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	848470	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	309837	50.0000	48.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1075045	50.0000	50.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	488894	50.0000	49.8

Data File: /chem/VOA4.i/112209v4/41723.d
Date : 22-NOV-2009 19:21
Client ID: SHORT SECOND SOURCE
Sample Info: IW4VN091122-19|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

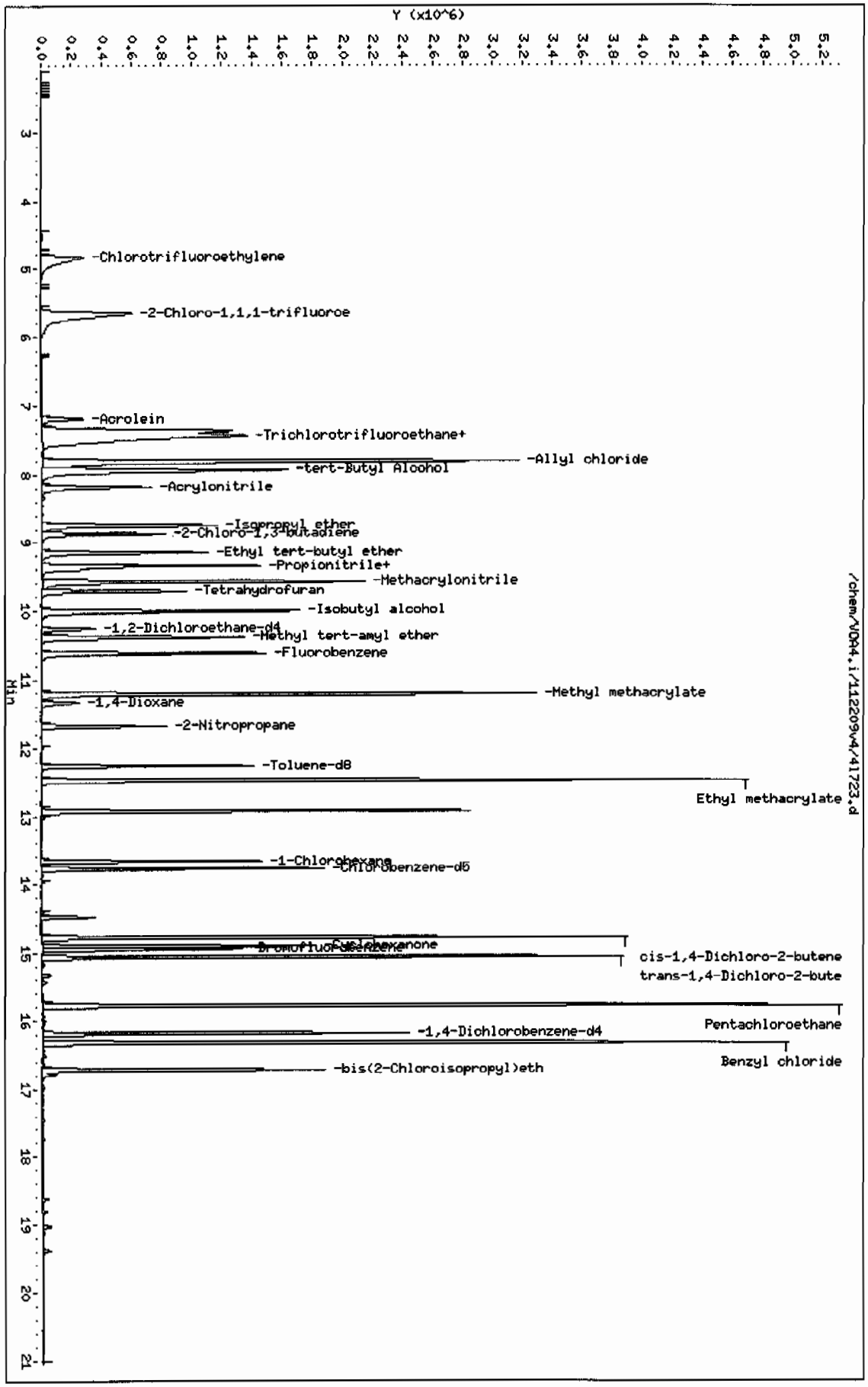

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 30-NOV-2009 16:27
Lab File ID: 4n103.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091130-02 Quant Type: ISTD
Method: /chem/VOA4.i/113009v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.72898	0.72898	0.050	7.07302	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.45280	0.45280	0.050	14.73145	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.49407	0.49407	0.050	13.28042	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.23310	0.23310	0.050	0.04891	30.00000	Averaged	
4 Chloromethane	0.35970	0.33674	0.33674	0.100	-6.38268	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.34420	0.34420	0.050	3.37180	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.27934	0.27934	0.050	6.37494	30.00000	Averaged	
7 Chloroethane	0.24433	0.26475	0.26475	0.050	8.35702	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.48100	0.48100	0.050	17.07839	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.23474	0.23474	0.001	4.32796	30.00000	Averaged	
10 Acetone	0.20316	0.18622	0.18622	0.050	-8.33391	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04701	0.04701	0.010	2.42177	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.48757	0.48757	0.050	15.18952	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.22702	0.22702	0.010	-3.10040	40.00000	Averaged	
13 Iodomethane	0.50633	0.55648	0.55648	0.050	9.90414	30.00000	Averaged	
17 Methylene chloride	55.66283	50.00000	0.36517	0.050	11.32567	30.00000	Linear	
14 Carbon disulfide	0.87768	1.02272	1.02272	0.050	16.52467	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.84795	0.84795	0.050	3.47005	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.43684	0.43684	0.050	16.60860	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.62428	0.62428	0.010	14.58736	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.53396	0.53396	0.100	14.59211	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.22400	0.22400	0.030	-4.16750	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.46877	0.46877	0.050	13.03588	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.32871	0.32871	0.050	22.15070	30.00000	Averaged	
32 Chloroform	0.47081	0.52658	0.52658	0.010	11.84412	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.15905	0.15905	0.010	8.84904	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.43114	0.43114	0.010	23.39947	30.00000	Averaged	
129 Cyclohexane	0.40354	0.49921	0.49921	0.010	23.70998	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.42831	0.42831	0.010	23.22243	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01253	0.01253	0.001	16.71859	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.43155	0.43155	0.010	28.05632	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.23457	0.23457	0.001	19.44419	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.39568	0.39568	0.010	6.75076	30.00000	Averaged	
38 Benzene	1.07172	1.18508	1.18508	0.010	10.57669	30.00000	Averaged	
139 Cyclohexene	0.50663	0.60264	0.60264	0.001	18.94978	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n103.d
Analysis Type: WATER
Lab Sample ID: W4VM091130-02
Method: /chem/VOA4.i/113009v4/VOA4-8260-112209.m

Injection Date: 30-NOV-2009 16:27
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.31544	0.31544	0.010	17.23271	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.31128	0.31128	0.010	10.78723	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.53501	0.53501	0.010	24.69550	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.40603	0.40603	0.010	12.29548	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.18600	0.18600	0.010	7.16907	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14623	0.14623	0.005	-8.82239	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.16036	0.16036	0.010	-0.64301	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.50958	0.50958	0.010	13.01889	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.90731	0.90731	0.010	4.18483	30.00000	Averaged	
	50 Toluene	0.87628	0.92536	0.92536	0.010	5.60037	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.59401	0.59401	0.010	6.20084	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.28036	0.28036	0.010	0.86689	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.37886	0.37886	0.010	-12.88782	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.56075	0.56075	0.010	-0.29815	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.38711	0.38711	0.010	13.72383	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.41600	0.41600	0.010	8.15187	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.36329	0.36329	0.010	3.12304	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.08094	1.08094	0.300	6.94912	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.40457	0.40457	0.010	5.99735	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.78091	1.78091	0.010	5.27105	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.72185	0.72185	0.010	7.33509	30.00000	Averaged	
	64 o-Xylene	0.69744	0.74324	0.74324	0.010	6.56783	30.00000	Averaged	
	65 Styrene	1.18591	1.25466	1.25466	0.010	5.79738	30.00000	Averaged	
	66 Bromoform	0.53939	0.56064	0.56064	0.100	3.93944	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.77396	2.77396	0.010	2.36613	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.77671	0.77671	0.300	-2.23681	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.59289	0.59289	0.010	2.40142	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.20576	0.20576	0.010	-2.89556	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.86129	0.86129	0.010	0.60030	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.28767	3.28767	0.010	2.13782	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.24362	2.24362	0.010	-1.84080	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.45273	2.45273	0.010	1.45581	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.12967	2.12967	0.010	1.39348	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.54145	2.54145	0.010	3.72400	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.58256	2.58256	0.010	0.94307	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.37701	3.37701	0.010	3.33059	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n103.d
Analysis Type: WATER
Lab Sample ID: W4VM091130-02
Method: /chem/VOA4.i/113009v4/VOA4-8260-112209.m

Injection Date: 30-NOV-2009 16:27
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.79070	2.79070	0.010	4.14580	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.65513	1.65513	0.010	2.77649	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.65014	1.65014	0.010	2.09870	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.62424	2.62424	0.010	5.32229	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.56940	1.56940	0.010	0.40092	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.18433	0.18433	0.010	4.51812	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.98556	0.98556	0.010	11.29836	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.68422	0.68422	0.010	9.43987	30.00000	Averaged
95 Naphthalene	1.52123	1.61472	1.61472	0.010	6.14548	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.75049	0.75049	0.010	7.37097	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.62176
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n103.d
Lab Smp Id: W4VM091130-02 Client Smp ID: VSTD050
Inj Date : 30-NOV-2009 16:27
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091130-02|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2801032	150.000	161
M 2 1,2-Dichloroethylene (total)	96				1439684	100.000	115
M 135 1,3-Dichloropropylene	75				1570912	100.000	113
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	370572	50.0000	50.0
4 Chloromethane	50	5.299	5.299	(0.499)	535341	50.0000	46.8
5 Vinyl chloride	62	5.521	5.521	(0.520)	547200	50.0000	51.7
6 Bromomethane	94	6.130	6.130	(0.577)	444086	50.0000	53.2
7 Chloroethane	64	6.288	6.288	(0.592)	420891	50.0000	54.2
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	764676	50.0000	58.5
134 Ethyl Ether	59	7.004	7.004	(0.660)	373180	50.0000	52.2
10 Acetone	43	7.358	7.358	(0.693)	1480257	250.000	229
15 Acetonitrile	41	7.705	7.705	(0.726)	1868299	1250.00	1280
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	775115	50.0000	57.6
128 Methyl acetate	43	7.754	7.754	(0.730)	1804500	250.000	242
13 Iodomethane	142	7.632	7.632	(0.719)	4423339	250.000	275
17 Methylene chloride	84	7.943	7.943	(0.748)	580527	50.0000	55.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.773	7.773	(0.732)	8129333	250.000	291
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1348031	50.0000	51.7
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	694462	50.0000	58.3
23 Vinyl acetate	43	8.711	8.711	(0.820)	4962294	250.000	286
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	848861	50.0000	57.3
30 2-Butanone	43	9.327	9.327	(0.878)	1780553	250.000	240
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	745222	50.0000	56.5
25 2,2-Dichloropropane	77	9.425	9.425	(0.887)	522566	50.0000	61.1
32 Chloroform	83	9.693	9.693	(0.913)	837129	50.0000	55.9
29 Bromochloromethane	128	9.662	9.662	(0.910)	252853	50.0000	54.4
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	685406	50.0000	61.7
129 Cyclohexane	56	10.083	10.083	(0.949)	793627	50.0000	61.8
34 1,1-Dichloropropene	75	10.138	10.138	(0.955)	680914	50.0000	61.6
131 n-Butyl alcohol	56	10.693	10.693	(1.007)	1991401	5000.00	5840
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	686063	50.0000	64.0
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	372910	50.0000	59.7
37 1,2-Dichloroethane	62	10.345	10.345	(0.974)	629033	50.0000	53.4
38 Benzene	78	10.376	10.376	(0.977)	1883983	50.0000	55.3
139 Cyclohexene	67	10.498	10.498	(0.989)	958047	50.0000	59.5
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1589755	50.0000	
39 Trichloroethylene	95	11.010	11.010	(1.037)	501476	50.0000	58.6
41 1,2-Dichloropropane	63	11.248	11.248	(1.059)	494866	50.0000	55.4
130 Methylcyclohexane	83	11.266	11.266	(1.061)	850534	50.0000	62.3
45 Bromodichloromethane	83	11.485	11.485	(1.082)	645484	50.0000	56.1
43 Dibromomethane	93	11.376	11.376	(1.071)	295690	50.0000	53.6
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1162357	250.000	228
49 4-Methyl-2-pentanone	58	12.022	12.022	(0.873)	1026970	250.000	248
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	810102	50.0000	56.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1162081	50.0000	52.1
50 Toluene	92	12.327	12.327	(0.895)	1185194	50.0000	52.8
53 trans-1,3-Dichloropropylene	75	12.467	12.467	(0.905)	760810	50.0000	53.1
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	359079	50.0000	50.4
55 2-Hexanone	43	12.863	12.863	(0.934)	2426241	250.000	218
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	718210	50.0000	49.8
56 Tetrachloroethylene	164	12.924	12.924	(0.938)	495812	50.0000	56.9
57 Dibromochloromethane	129	13.150	13.150	(0.955)	532813	50.0000	54.1
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	465297	50.0000	51.6
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1280798	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1384465	50.0000	53.5
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	518176	50.0000	53.0
58 Ethylbenzene	91	13.863	13.863	(1.007)	2280983	50.0000	52.6
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1849088	100.000	107
64 o-Xylene	106	14.405	14.405	(1.046)	951944	50.0000	53.3
65 Styrene	104	14.405	14.405	(1.046)	1606964	50.0000	52.9
66 Bromoform	173	14.661	14.661	(0.906)	518706	50.0000	52.0
67 Isopropylbenzene	105	14.759	14.759	(0.912)	2566480	50.0000	51.2
73 1,1,2,2-Tetrachloroethane	83	15.021	15.021	(0.928)	718614	50.0000	48.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	548547	50.0000	51.2
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	190372	50.0000	48.6
75 Bromobenzene	156	15.167	15.167	(0.937)	796870	50.0000	50.3
76 n-Propylbenzene	91	15.186	15.186	(0.939)	3041769	50.0000	51.1
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	2075807	50.0000	49.1
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	2269276	50.0000	50.7
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1970378	50.0000	50.7
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2351359	50.0000	51.9
79 1,2,4-Trimethylbenzene	105	15.747	15.747	(0.973)	2389393	50.0000	50.5
83 sec-Butylbenzene	105	15.936	15.936	(0.985)	3124427	50.0000	51.7
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	2581968	50.0000	52.1
85 1,3-Dichlorobenzene	146	16.125	16.125	(0.997)	1531329	50.0000	51.4
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	925204	50.0000	
87 1,4-Dichlorobenzene	146	16.210	16.210	(1.002)	1526719	50.0000	51.0
89 n-Butylbenzene	91	16.503	16.503	(1.020)	2427956	50.0000	52.7
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1452014	50.0000	50.2
92 1,2-Dibromo-3-chloropropane	157	17.533	17.533	(1.084)	170540	50.0000	52.2
93 1,2,4-Trichlorobenzene	180	18.636	18.636	(1.152)	911844	50.0000	55.6
94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	633045	50.0000	54.7
95 Naphthalene	128	19.033	19.033	(1.176)	1493942	50.0000	53.1
96 1,2,3-Trichlorobenzene	180	19.392	19.392	(1.199)	694356	50.0000	53.7

Data File: /chem/VOA4.i/113009v4/4n103.d
Date : 30-NOV-2009 16:27
Client ID: VSTD050
Sample Info: IW4WH091130-02ICCV/LCS111VOAF111
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

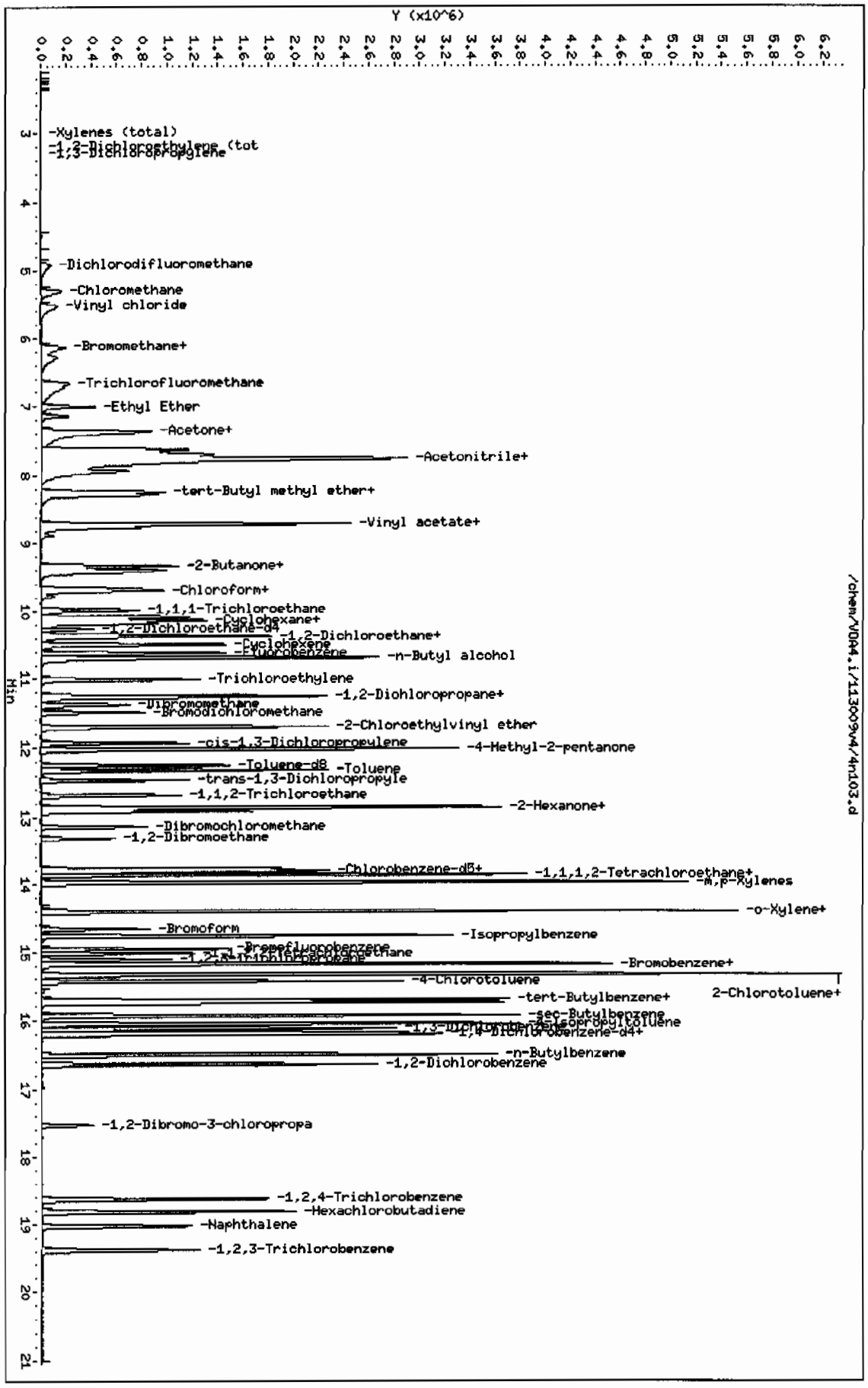

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 30-NOV-2009 16:54
Lab File ID: 4n104.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091130-03 Quant Type: ISTD
Method: /chem/VOA4.i/113009v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
153 Chlorotrifluoroethylene	0.17243	0.15201	0.15201	0.010	-11.84098	30.00000	Averaged	
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.30797	0.30797	0.010	18.64489	30.00000	Averaged	
9 Acrolein	0.05437	0.05277	0.05277	0.001	-2.93739	30.00000	Averaged	
12 Trichlorotrifluoroethane	0.09368	0.10261	0.10261	0.050	9.53035	30.00000	Averaged	
147 Isopropyl Alcohol	0.02698	0.02756	0.02756	0.010	2.14309	40.00000	Averaged	
16 Allyl chloride	0.43415	0.40873	0.40873	0.010	-5.85454	30.00000	Averaged	
148 tert-Butyl Alcohol	0.04036	0.04128	0.04128	0.010	2.30003	40.00000	Averaged	
18 Acrylonitrile	0.10963	0.10375	0.10375	0.010	-5.35891	30.00000	Averaged	
149 Isopropyl ether	0.91700	0.89386	0.89386	0.010	-2.52318	30.00000	Averaged	
24 2-Chloro-1,3-butadiene	0.41214	0.41321	0.41321	0.010	0.26121	30.00000	Averaged	
150 Ethyl tert-butyl ether	0.83865	0.80645	0.80645	0.010	-3.83867	30.00000	Averaged	
28 Propionitrile	0.04604	0.04288	0.04288	0.010	-6.86752	30.00000	Averaged	
26 Ethyl acetate	0.30734	0.25918	0.25918	0.010	-15.67208	40.00000	Averaged	
27 Methacrylonitrile	0.18229	0.16499	0.16499	0.010	-9.49017	30.00000	Averaged	
72 Tetrahydrofuran	249	250	0.17917	0.010	-0.50142	30.00000	Linear	
19 Isobutyl alcohol	0.01397	0.01287	0.01287	0.005	-7.86833	40.00000	Averaged	
151 Methyl tert-amyl ether	0.83559	0.79898	0.79898	0.010	-4.38128	30.00000	Averaged	
42 Methyl methacrylate	0.20344	0.17941	0.17941	0.010	-11.81390	30.00000	Averaged	
51 Ethyl methacrylate	0.49731	0.42602	0.42602	0.010	-14.33633	30.00000	Averaged	
152 1-Chlorohexane	0.25454	0.27383	0.27383	0.010	7.58049	30.00000	Averaged	
97 1,4-Dioxane	0.00364	0.00356	0.00356	0.001	-2.26291	40.00000	Averaged	
48 2-Nitropropane	0.09473	0.09096	0.09096	0.010	-3.97423	30.00000	Averaged	
68 cis-1,4-Dichloro-2-butene	0.22079	0.21612	0.21612	0.010	-2.11663	30.00000	Averaged	
70 Cyclohexanone	0.03794	0.02173	0.02173	0.005	-42.72580	40.00000	Averaged	<-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20675	0.20675	0.010	-3.09286	30.00000	Averaged	
82 Pentachloroethane	0.44529	0.40887	0.40887	0.010	-8.17879	30.00000	Averaged	
88 Benzyl chloride	1.24521	1.21911	1.21911	0.010	-2.09596	30.00000	Averaged	
91 bis(2-Chloroisopropyl)ether	0.37162	0.34823	0.34823	0.010	-6.29428	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.19620	0.19620	0.001	-0.09351	30.00000	Averaged	
$ 47 Toluene-d8	0.87087	0.86748	0.86748	0.010	-0.38922	30.00000	Averaged	
$ 71 Bromofluorobenzene	0.57899	0.56038	0.56038	0.010	-3.21336	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n104.d
Analysis Type: WATER
Lab Sample ID: W4VM091130-03
Method: /chem/VOA4.i/113009v4/VOA4-8260-112209.m

Injection Date: 30-NOV-2009 16:54
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

Average %D / Drift Results.
Calculated Average %D/Drift = 8.62176
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n104.d
Lab Smp Id: W4VM091130-03 Client Smp ID: VSTD250S
Inj Date : 30-NOV-2009 16:54
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091130-03|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	722597	150.000	132
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1463953	150.000	178
9 Acrolein	56	7.186	7.186	(0.677)	418075	250.000	243
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	812927	250.000	274
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2183163	2500.00	2550
16 Allyl chloride	41	7.802	7.802	(0.735)	3238157	250.000	235
148 tert-Butyl Alcohol	59	7.936	7.936	(0.747)	3270790	2500.00	2560
18 Acrylonitrile	53	8.180	8.180	(0.770)	821987	250.000	237
149 Isopropyl ether	45	8.747	8.747	(0.824)	1416319	50.0000	48.7
24 2-Chloro-1,3-butadiene	53	8.875	8.875	(0.836)	654736	50.0000	50.1
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1277825	50.0000	48.1
28 Propionitrile	54	9.399	9.399	(0.885)	339722	250.000	233
26 Ethyl acetate	43	9.344	9.344	(0.880)	2053327	250.000	211
27 Methacrylonitrile	41	9.582	9.582	(0.902)	1307170	250.000	226
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	752985	250.000	249
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1019399	2500.00	2300

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1265980	50.0000	47.8
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1421368	250.000	220
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2576657	250.000	214
152 1-Chlorohexane	55	13.667	13.667	(1.287)	433891	50.0000	53.8
97 1,4-Dioxane	88	11.332	11.332	(1.067)	281746	2500.00	2440
48 2-Nitropropane	43	11.673	11.673	(1.099)	720659	250.000	240
68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	908268	250.000	245
70 Cyclohexanone	42	14.904	14.904	(1.082)	657156	1250.00	716
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	868924	250.000	242
82 Pentachloroethane	167	15.776	15.776	(0.975)	1718371	250.000	230
88 Benzyl chloride	91	16.319	16.319	(1.009)	5123554	250.000	245
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1463508	250.000	234
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1584501	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1209654	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.179	(1.000)	840538	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	310881	50.0000	50.0
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1049346	50.0000	49.8
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	471024	50.0000	48.4

Data File: /chem/VOA4.i/113009v4/4n104.d
Date : 30-NOV-2009 16:54
Client ID: VSTD250S
Sample Info: IW4VH091130-031SHORT11VOAF111
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

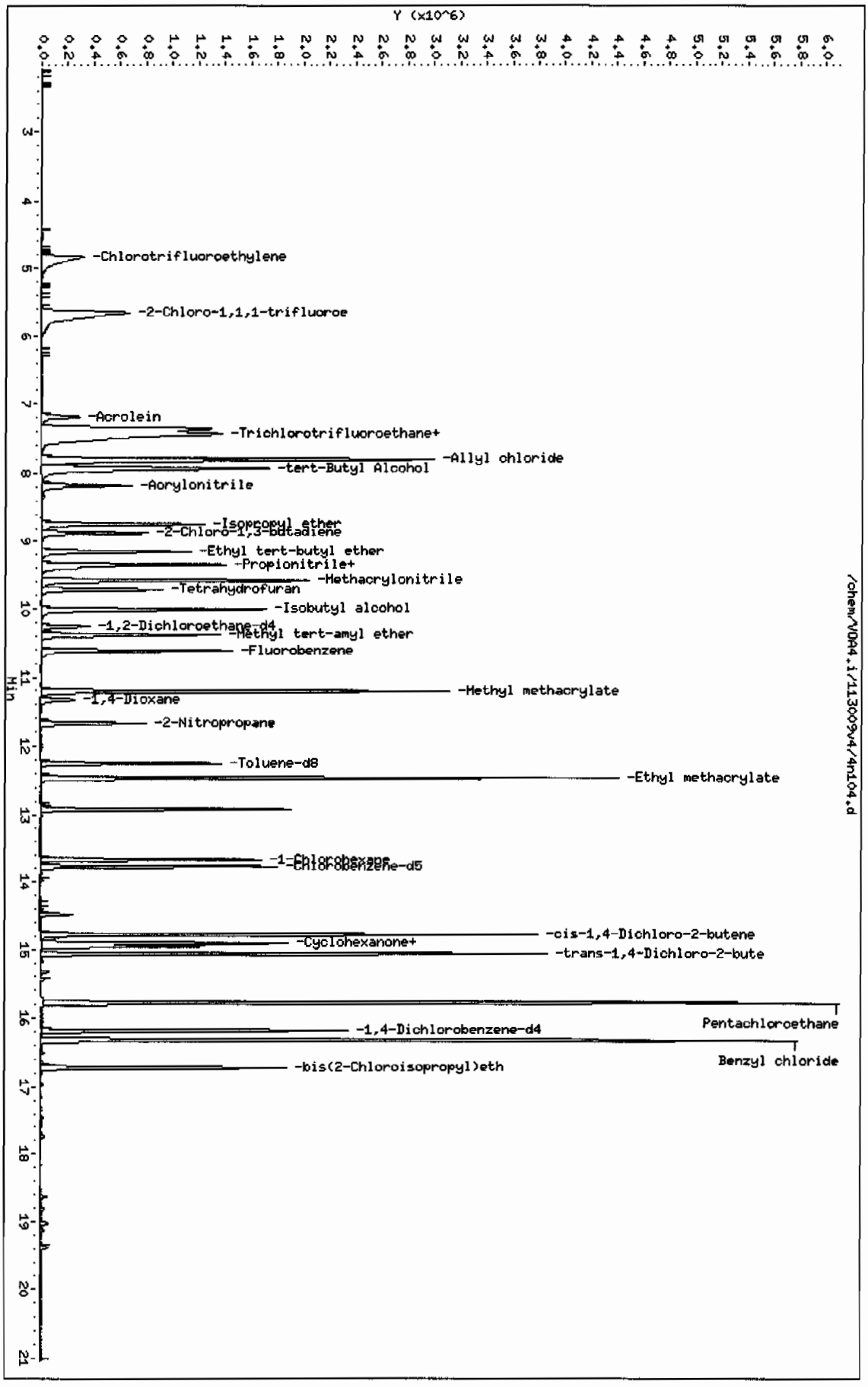

Page 1

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 01-DEC-2009 16:07
Lab File ID: 4n202.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091201-01 Quant Type: ISTD
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.68083	0.70153	0.70153	0.050	3.04147	30.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.39466	0.44016	0.44016	0.050	11.52948	30.00000	Averaged
M 135 1,3-Dichloropropylene	0.43615	0.45092	0.45092	0.050	3.38640	30.00000	Averaged
3 Dichlorodifluoromethane	0.23299	0.22504	0.22504	0.050	-3.40857	30.00000	Averaged
4 Chloromethane	0.35970	0.33938	0.33938	0.100	-5.65096	30.00000	Averaged spcc
5 Vinyl chloride	0.33298	0.33677	0.33677	0.050	1.13927	20.00000	Averaged ccc
6 Bromomethane	0.26260	0.26303	0.26303	0.050	0.16212	30.00000	Averaged
7 Chloroethane	0.24433	0.25613	0.25613	0.050	4.82698	30.00000	Averaged
8 Trichlorofluoromethane	0.41084	0.46649	0.46649	0.050	13.54621	30.00000	Averaged
134 Ethyl Ether	0.22500	0.22020	0.22020	0.001	-2.13396	30.00000	Averaged
10 Acetone	0.20316	0.18746	0.18746	0.050	-7.72769	40.00000	Averaged
15 Acetonitrile	0.04590	0.04424	0.04424	0.010	-3.61743	30.00000	Averaged
11 1,1-Dichloroethylene	0.42328	0.47547	0.47547	0.050	12.33076	20.00000	Averaged ccc
128 Methyl acetate	0.23428	0.21272	0.21272	0.010	-9.20203	40.00000	Averaged
13 Iodomethane	0.50633	0.49999	0.49999	0.050	-1.25242	30.00000	Averaged
17 Methylene chloride	52.43475	50.00000	0.34623	0.050	4.86951	30.00000	Linear
14 Carbon disulfide	0.87768	0.99324	0.99324	0.050	13.16639	30.00000	Averaged
20 tert-Butyl methyl ether	0.81951	0.76499	0.76499	0.050	-6.65235	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.37462	0.42746	0.42746	0.050	14.10562	30.00000	Averaged
23 Vinyl acetate	0.54481	0.58649	0.58649	0.010	7.65042	40.00000	Averaged
22 1,1-Dichloroethane	0.46596	0.51699	0.51699	0.100	10.94983	30.00000	Averaged spcc
30 2-Butanone	0.23374	0.22086	0.22086	0.030	-5.51079	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.41470	0.45287	0.45287	0.050	9.20248	30.00000	Averaged
25 2,2-Dichloropropane	0.26910	0.32097	0.32097	0.050	19.27587	30.00000	Averaged
32 Chloroform	0.47081	0.50251	0.50251	0.010	6.73225	20.00000	Averaged ccc
29 Bromochloromethane	0.14612	0.14138	0.14138	0.010	-3.24344	30.00000	Averaged
36 1,1,1-Trichloroethane	0.34939	0.42443	0.42443	0.010	21.47888	30.00000	Averaged
129 Cyclohexane	0.40354	0.48876	0.48876	0.010	21.11867	30.00000	Averaged
34 1,1-Dichloropropene	0.34759	0.41348	0.41348	0.010	18.95394	30.00000	Averaged
131 n-Butyl alcohol	0.01073	0.01107	0.01107	0.001	3.11227	40.00000	Averaged
33 Carbon tetrachloride	0.33700	0.41025	0.41025	0.010	21.73638	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.21546	0.21546	0.001	9.71160	30.00000	Averaged
37 1,2-Dichloroethane	0.37066	0.37780	0.37780	0.010	1.92822	30.00000	Averaged
38 Benzene	1.07172	1.12456	1.12456	0.010	4.92965	30.00000	Averaged
139 Cyclohexene	0.50663	0.58125	0.58125	0.001	14.72773	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n202.d
Analysis Type: WATER
Lab Sample ID: W4VM091201-01
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

Injection Date: 01-DEC-2009 16:07
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.30167	0.30167	0.010	12.11398	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.29306	0.29306	0.010	4.30218	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.50851	0.50851	0.010	18.51921	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.37681	0.37681	0.010	4.21349	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.17172	0.17172	0.010	-1.05949	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.12444	0.12444	0.005	-22.40685	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.15111	0.15111	0.010	-6.37816	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.46491	0.46491	0.010	3.11196	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.82672	0.82672	0.010	-5.06941	30.00000	Averaged	
	50 Toluene	0.87628	0.89251	0.89251	0.010	1.85148	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.55778	0.55778	0.010	-0.27642	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26342	0.26342	0.010	-5.22585	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.36437	0.36437	0.010	-16.21974	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.52533	0.52533	0.010	-6.59648	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.34467	0.34467	0.010	1.25679	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38281	0.38281	0.010	-0.47582	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.33827	0.33827	0.010	-3.97942	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.03211	1.03211	0.300	2.11795	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.37819	0.37819	0.010	-0.91488	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.75417	1.75417	0.010	3.69035	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.69906	0.69906	0.010	3.94661	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70648	0.70648	0.010	1.29607	30.00000	Averaged	
	65 Styrene	1.18591	1.19175	1.19175	0.010	0.49279	30.00000	Averaged	
	66 Bromoform	0.53939	0.50804	0.50804	0.100	-5.81289	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.87915	2.87915	0.010	6.24800	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.77362	0.77362	0.300	-2.62613	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.57678	0.57678	0.010	-0.38085	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.20627	0.20627	0.010	-2.65365	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.81698	0.81698	0.010	-4.57561	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.46207	3.46207	0.010	7.55584	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.32912	2.32912	0.010	1.89983	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.51484	2.51484	0.010	4.02505	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.20884	2.20884	0.010	5.16274	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.59113	2.59113	0.010	5.75178	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.59760	2.59760	0.010	1.53095	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.48040	3.48040	0.010	6.49388	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 01-DEC-2009 16:07
Lab File ID: 4n202.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091201-01 Quant Type: ISTD
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.80281	2.80281	0.010	4.59761	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.57945	1.57945	0.010	-1.92248	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.56211	1.56211	0.010	-3.34793	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.67048	2.67048	0.010	7.17819	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.47114	1.47114	0.010	-5.88523	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.15834	0.15834	0.010	-10.21472	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.78992	0.78992	0.010	-10.79467	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.57471	0.57471	0.010	-8.07649	30.00000	Averaged
95 Naphthalene	1.52123	1.33114	1.33114	0.010	-12.49576	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.59465	0.59465	0.010	-14.92527	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.93436
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n202.d
Lab Smp Id: W4VM091201-01 Client Smp ID: VSTD050
Inj Date : 01-DEC-2009 16:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091201-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2511974	150.000	154
M 2 1,2-Dichloroethylene (total)	96				1341345	100.000	112
M 135 1,3-Dichloropropylene	75				1374126	100.000	103
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	342898	50.0000	48.3
4 Chloromethane	50	5.299	5.299	(0.499)	517104	50.0000	47.2
5 Vinyl chloride	62	5.521	5.521	(0.520)	513133	50.0000	50.6
6 Bromomethane	94	6.130	6.130	(0.577)	400772	50.0000	50.1
7 Chloroethane	64	6.281	6.281	(0.592)	390258	50.0000	52.4
8 Trichlorofluoromethane	101	6.662	6.662	(0.627)	710787	50.0000	56.8
134 Ethyl Ether	59	6.997	6.997	(0.659)	335518	50.0000	48.9
10 Acetone	43	7.357	7.357	(0.693)	1428124	250.000	231
15 Acetonitrile	41	7.699	7.699	(0.725)	1685073	1250.00	1200
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	724466	50.0000	56.2
128 Methyl acetate	43	7.747	7.747	(0.730)	1620605	250.000	227
13 Iodomethane	142	7.632	7.632	(0.719)	3809156	250.000	247
17 Methylene chloride	84	7.936	7.936	(0.747)	527554	50.0000	52.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7566946	250.000	283
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1165614	50.0000	46.7
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	651315	50.0000	57.0
23 Vinyl acetate	43	8.711	8.711	(0.820)	4468149	250.000	269
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	787725	50.0000	55.5
30 2-Butanone	43	9.326	9.326	(0.878)	1682637	250.000	236
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	690030	50.0000	54.6
25 2,2-Dichloropropane	77	9.418	9.418	(0.887)	489062	50.0000	59.6
32 Chloroform	83	9.692	9.692	(0.913)	765669	50.0000	53.4
29 Bromochloromethane	128	9.662	9.662	(0.910)	215422	50.0000	48.4
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	646698	50.0000	60.7
129 Cyclohexane	56	10.082	10.082	(0.949)	744713	50.0000	60.6
34 1,1-Dichloropropene	75	10.131	10.131	(0.954)	630010	50.0000	59.5
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1686146	5000.00	5160
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	625100	50.0000	60.9
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	328290	50.0000	54.8
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	575656	50.0000	51.0
38 Benzene	78	10.375	10.375	(0.977)	1713475	50.0000	52.5
139 Cyclohexene	67	10.497	10.497	(0.989)	885641	50.0000	57.4
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1523689	50.0000	
39 Trichloroethylene	95	11.003	11.003	(1.036)	459650	50.0000	56.0
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	446537	50.0000	52.2
130 Methylcyclohexane	83	11.265	11.265	(1.061)	774811	50.0000	59.2
45 Bromodichloromethane	83	11.484	11.484	(1.082)	574134	50.0000	52.1
43 Dibromomethane	93	11.375	11.375	(1.071)	261642	50.0000	49.5
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	948071	250.000	194
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	901782	250.000	234
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	708376	50.0000	51.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	986741	50.0000	47.5
50 Toluene	92	12.326	12.326	(0.895)	1065262	50.0000	50.9
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	665750	50.0000	49.9
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	314410	50.0000	47.4
55 2-Hexanone	43	12.856	12.856	(0.934)	2174512	250.000	209
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	627013	50.0000	46.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	411391	50.0000	50.6
57 Dibromochloromethane	129	13.149	13.149	(0.955)	456914	50.0000	49.8
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	403742	50.0000	48.0
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1193564	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1231890	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	451394	50.0000	49.5
58 Ethylbenzene	91	13.862	13.862	(1.007)	2093710	50.0000	51.8
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1668750	100.000	104
64 o-Xylene	106	14.405	14.405	(1.046)	843224	50.0000	50.6
65 Styrene	104	14.405	14.405	(1.046)	1422431	50.0000	50.2
66 Bromoform	173	14.661	14.661	(0.906)	408661	50.0000	47.1
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2315971	50.0000	53.1
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	622291	50.0000	48.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	463961	50.0000	49.8
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	165926	50.0000	48.7
75 Bromobenzene	156	15.167	15.167	(0.937)	657171	50.0000	47.7
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2784867	50.0000	53.8
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1873528	50.0000	50.9
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2022922	50.0000	52.0
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1776774	50.0000	52.6
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2084290	50.0000	52.9
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2089490	50.0000	50.8
83 sec-Butylbenzene	105	15.929	15.929	(0.985)	2799606	50.0000	53.2
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	2254559	50.0000	52.3
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1270501	50.0000	49.0
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	804393	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1256553	50.0000	48.3
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2148116	50.0000	53.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1183373	50.0000	47.0
92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	127371	50.0000	44.9
93 1,2,4-Trichlorobenzene	180	18.635	18.635	(1.152)	635409	50.0000	44.6
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	462292	50.0000	46.0
95 Naphthalene	128	19.032	19.032	(1.176)	1070760	50.0000	43.8
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	478329	50.0000	42.5

Data File: /chem/VOA4.i/120109v4/4n202.d
Date : 01-DEC-2009 16:07
Client ID: VSTD050
Sample Info: IW4VH091201-01|CCV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

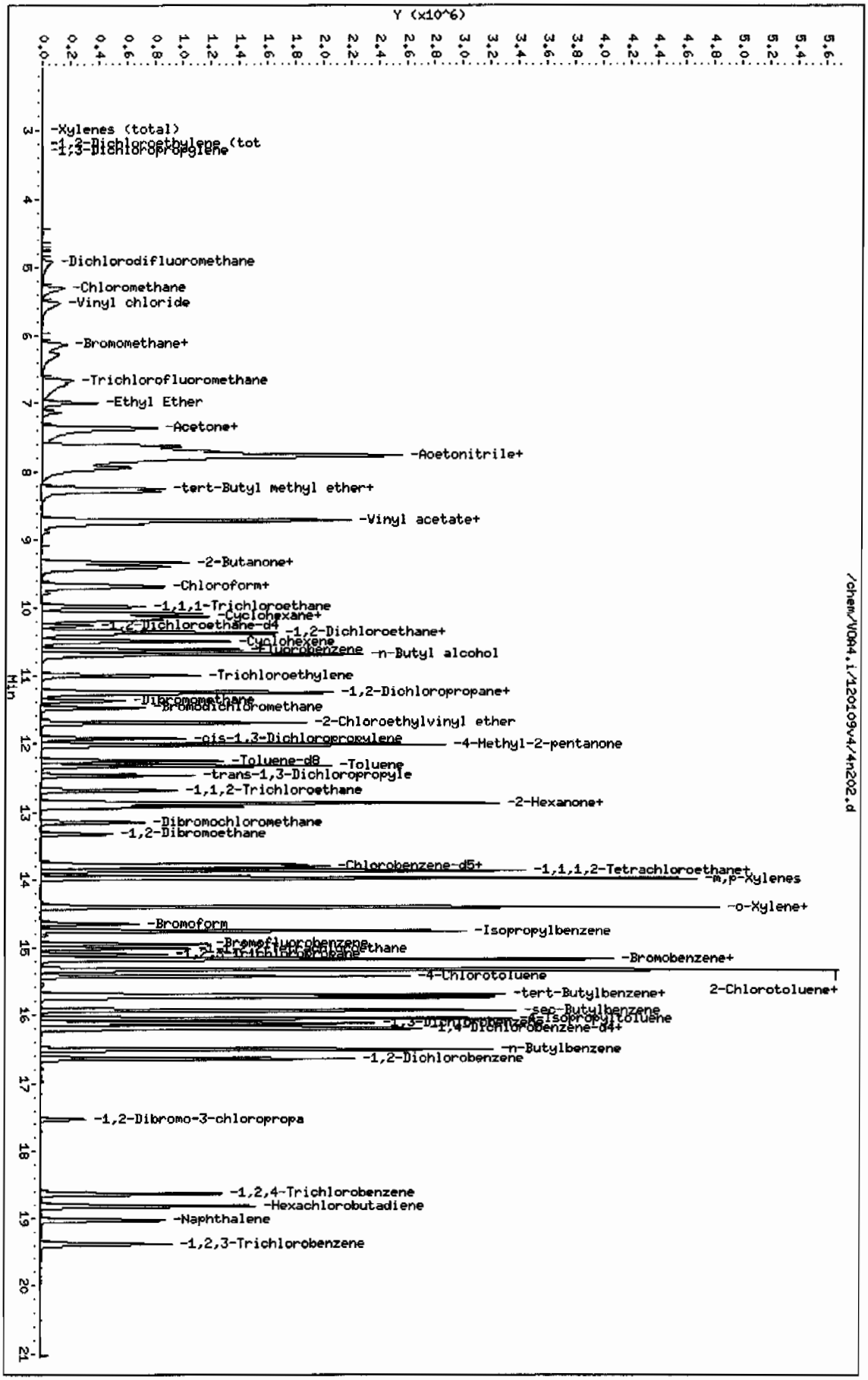

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 01-DEC-2009 17:02
Lab File ID: 4n204.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
9 Acrolein	0.05437	0.05700	0.05700	0.001	4.84065	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.11040	0.11040	0.050	17.84370	30.00000	Averaged
16 Allyl chloride	0.43415	0.46299	0.46299	0.010	6.64294	30.00000	Averaged
18 Acrylonitrile	0.10963	0.11069	0.11069	0.010	0.96637	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.45552	0.45552	0.010	10.52741	30.00000	Averaged
28 Propionitrile	0.04604	0.04487	0.04487	0.010	-2.53842	30.00000	Averaged
26 Ethyl acetate	0.30734	0.27865	0.27865	0.010	-9.33655	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.17981	0.17981	0.010	-1.36458	30.00000	Averaged
72 Tetrahydrofuran	275	250	0.19723	0.010	9.95829	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01366	0.01366	0.005	-2.22434	40.00000	Averaged
42 Methyl methacrylate	0.20344	0.19292	0.19292	0.010	-5.17040	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.44684	0.44684	0.010	-10.14826	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00362	0.00362	0.001	-0.48716	40.00000	Averaged
48 2-Nitropropane	0.09473	0.09804	0.09804	0.010	3.49373	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.24441	0.24441	0.010	10.69650	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02368	0.02368	0.005	-37.59876	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.21335	0.23193	0.23193	0.010	8.70861	30.00000	Averaged
82 Pentachloroethane	0.44529	0.48024	0.48024	0.010	7.84850	30.00000	Averaged
88 Benzyl chloride	1.24521	1.34740	1.34740	0.010	8.20654	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.37938	0.37938	0.010	2.08792	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.21211	0.21211	0.001	8.00799	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.93542	0.93542	0.010	7.41286	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.62760	0.62760	0.010	8.39553	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.93436
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n204.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 01-DEC-2009 17:02
Operator : ACJ Inst ID: VOA4.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9 Acrolein	56	7.186	7.186	(0.677)	400162	250.000	262
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	775046	250.000	295
16 Allyl chloride	41	7.802	7.802	(0.735)	3250383	250.000	267
18 Acrylonitrile	53	8.180	8.180	(0.770)	777081	250.000	252
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	639599	50.0000	55.3
28 Propionitrile	54	9.393	9.393	(0.885)	315036	250.000	244
26 Ethyl acetate	43	9.345	9.345	(0.880)	1956244	250.000	227
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1262331	250.000	246
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	706141	250.000	275
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	958672	2500.00	2440
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1354423	250.000	237
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2437612	250.000	225
97 1,4-Dioxane	88	11.326	11.326	(1.067)	254204	2500.00	2490
48 2-Nitropropane	43	11.673	11.673	(1.099)	688272	250.000	259
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	875027	250.000	277
70 Cyclohexanone	42	14.904	14.904	(1.082)	645775	1250.00	780

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	830372	250.000	272
82 Pentachloroethane	167	15.776	15.776	(0.975)	1719375	250.000	270(A)
88 Benzyl chloride	91	16.319	16.319	(1.009)	4823992	250.000	270
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1358269	250.000	255
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1404095	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1091037	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	716044	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	297825	50.0000	54.0
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1020580	50.0000	53.7
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	449388	50.0000	54.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/120109v4/4n204.d
Date : 01-DEC-2009 17:02
Client ID: VSTD250S
Sample Info: IUVN091118-08A|SHORT|4|VOAF|4|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

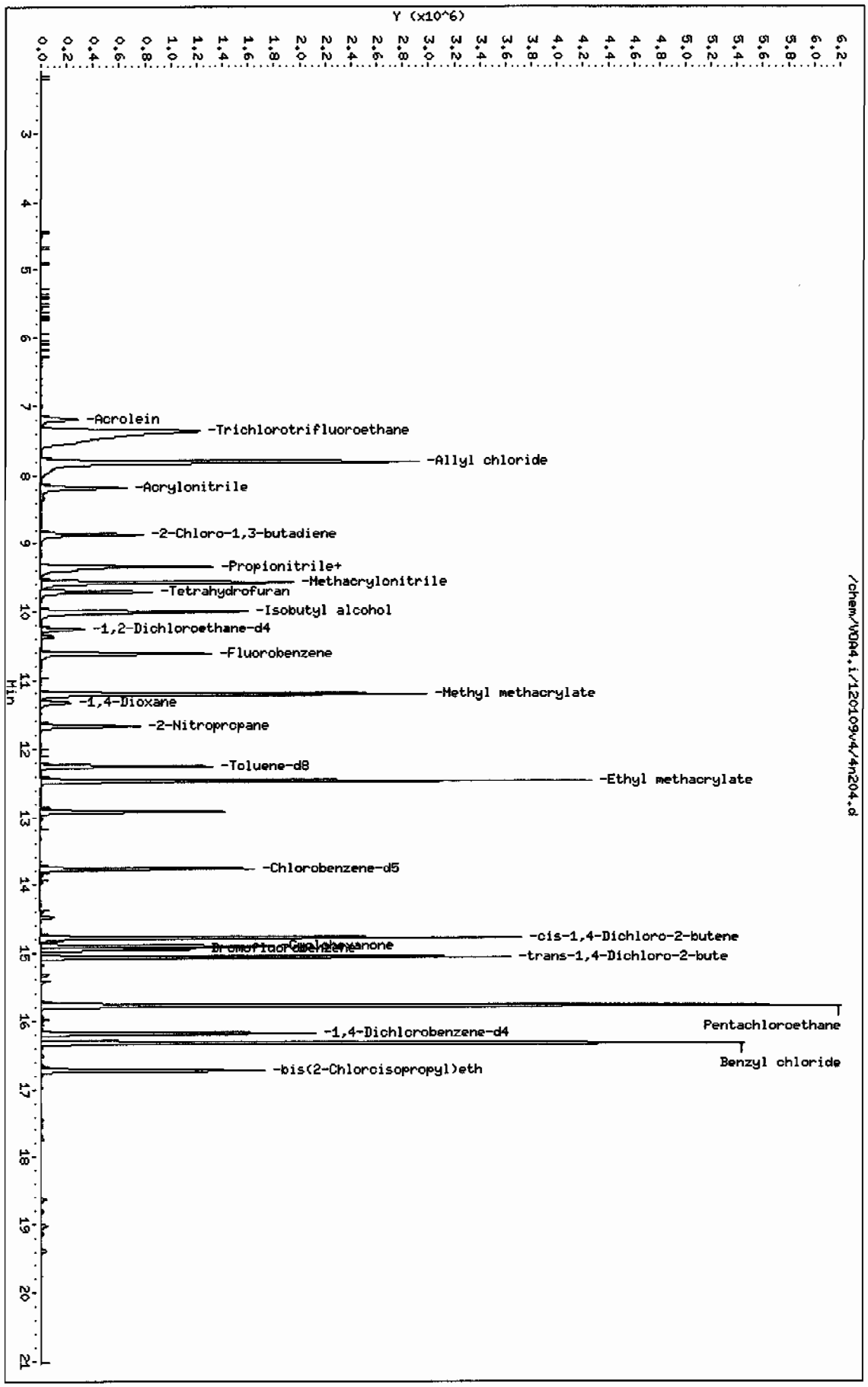

Page 1

QC Data

Data File: /chem/VOA4.i/112209v4/41701.d

Page 1

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

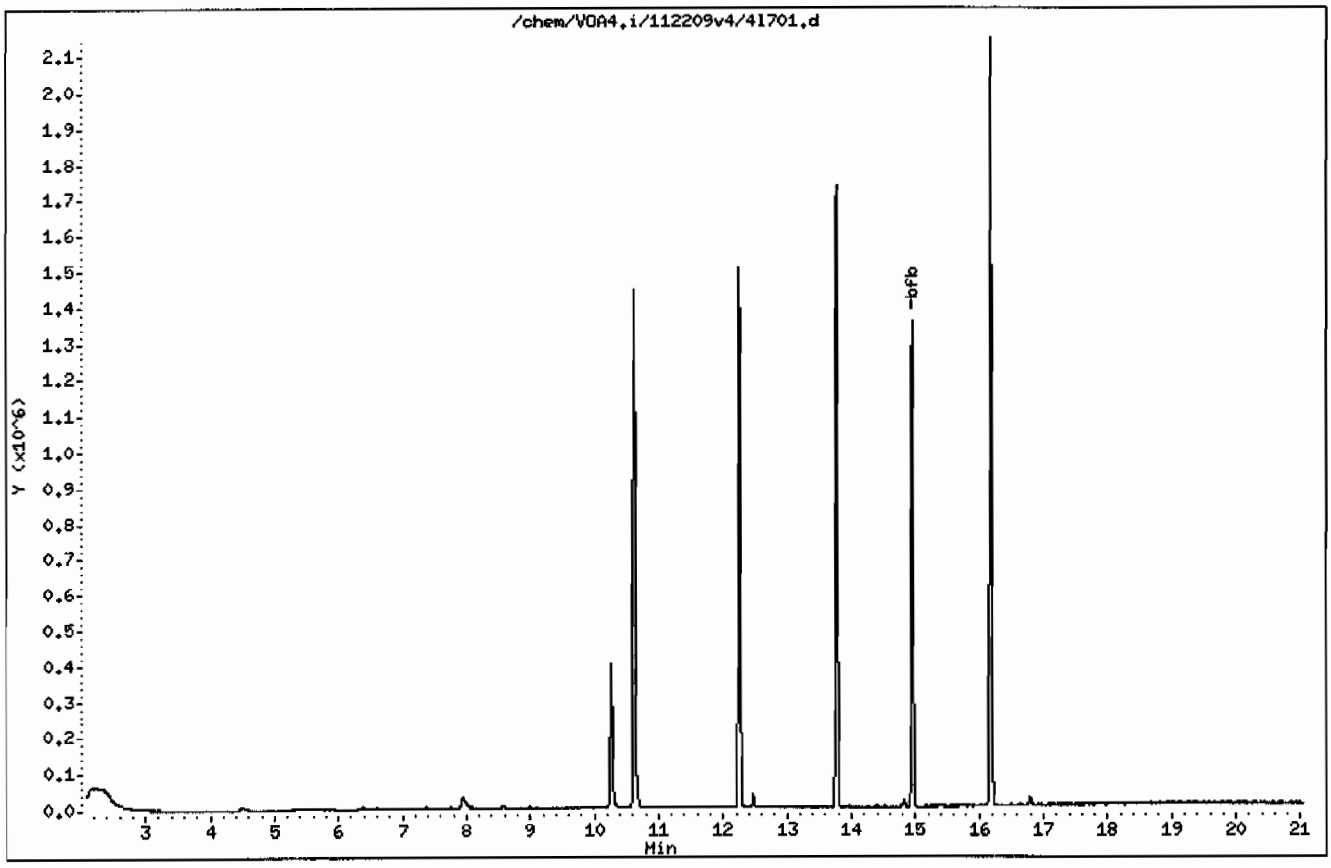

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

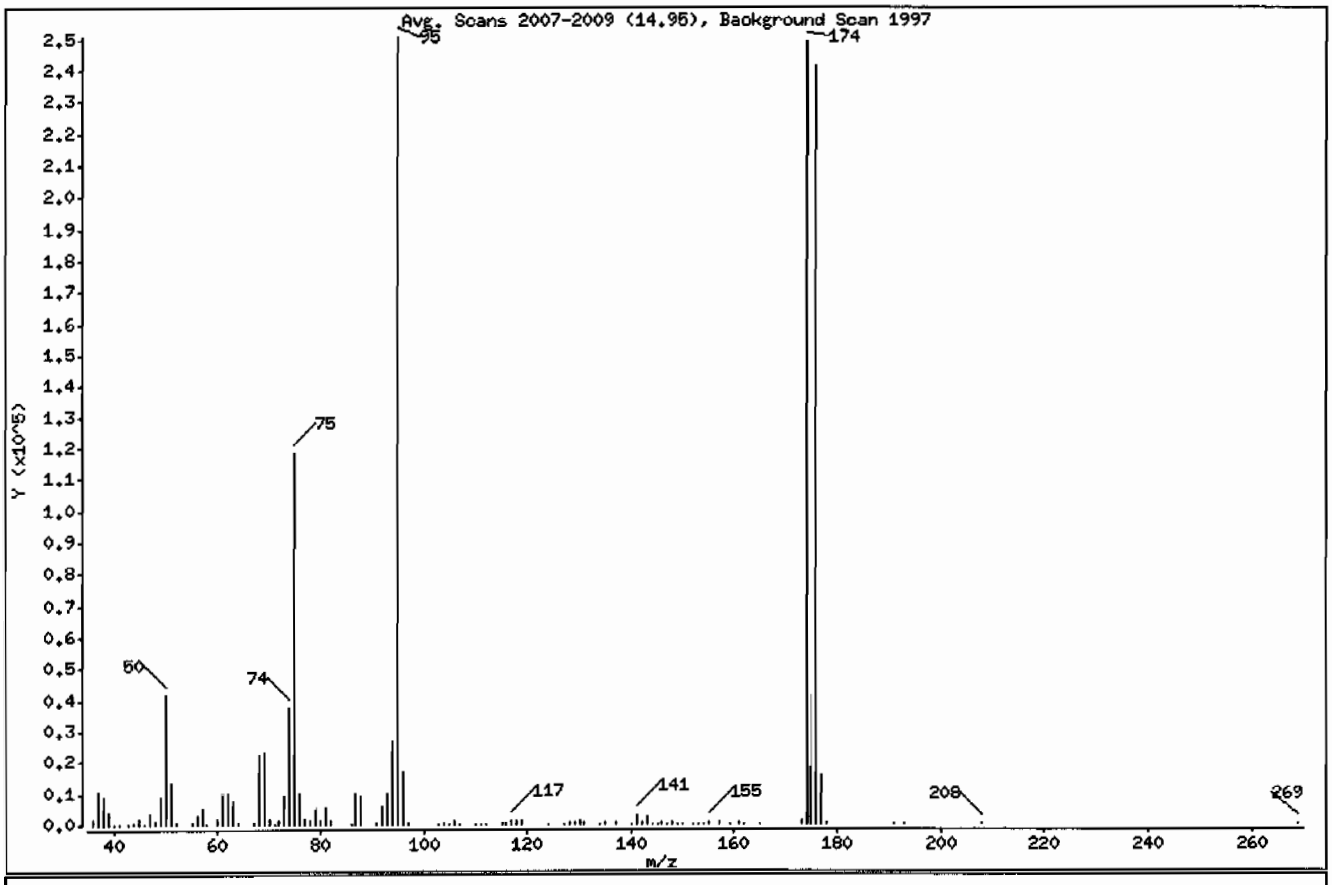

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.45
75	30.00 - 60.00% of mass 95	47.01
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.43 (0.43)
174	50.00 - 100.00% of mass 95	99.29
175	5.00 - 9.00% of mass 174	7.09 (7.14)
176	95.00 - 101.00% of mass 174	96.07 (96.76)
177	5.00 - 9.00% of mass 176	6.11 (6.36)

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 41701.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1997
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1862	68.00	22712	104.00	786	145.00	227
37.00	10469	69.00	23288	105.00	216	146.00	338
38.00	8405	70.00	1742	106.00	913	147.00	212
39.00	4011	71.00	281	107.00	271	148.00	588
40.00	10	72.00	1018	110.00	50	149.00	261
41.00	174	73.00	9172	111.00	93	150.00	273
43.00	32	74.00	37232	112.00	54	152.00	51
44.00	673	75.00	118008	113.00	294	153.00	133
45.00	1913	76.00	10049	116.00	814	154.00	263
46.00	181	77.00	1447	117.00	1364	155.00	862
47.00	3182	78.00	1010	118.00	999	157.00	488
48.00	1157	79.00	4497	119.00	1228	159.00	282
49.00	8549	80.00	1297	124.00	61	161.00	368
50.00	41280	81.00	4964	127.00	56	162.00	58
51.00	13197	82.00	981	128.00	697	165.00	62
52.00	604	86.00	130	129.00	382	173.00	1069
55.00	416	87.00	9653	130.00	872	174.00	249216
56.00	2604	88.00	9450	131.00	389	175.00	17792
57.00	5395	91.00	777	134.00	55	176.00	241152
58.00	216	92.00	6052	135.00	375	177.00	15329
60.00	1746	93.00	9586	137.00	534	178.00	346
61.00	9083	94.00	26584	140.00	119	191.00	57
62.00	9883	95.00	251008	141.00	2645	193.00	50
63.00	7531	96.00	16696	142.00	321	208.00	106
64.00	738	97.00	497	143.00	2485	269.00	58
67.00	656	103.00	132	144.00	135		

Data File: /chem/VOA4.i/113009v4/4n101.d

Page 1

Date : 30-NOV-2009 15:32

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

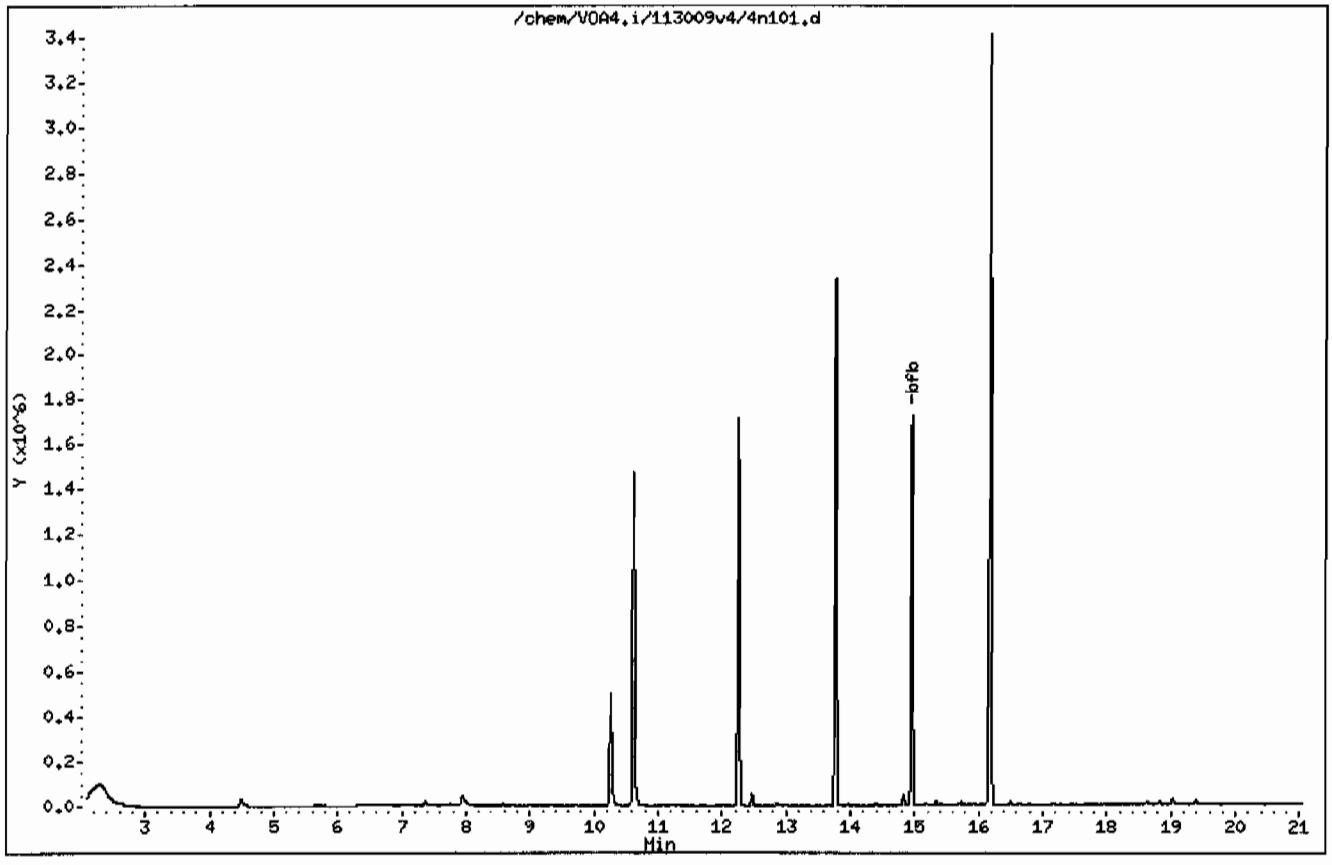

Data File: /chem/VOA4.i/113009v4/4n101.d

Date : 30-NOV-2009 15:32

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

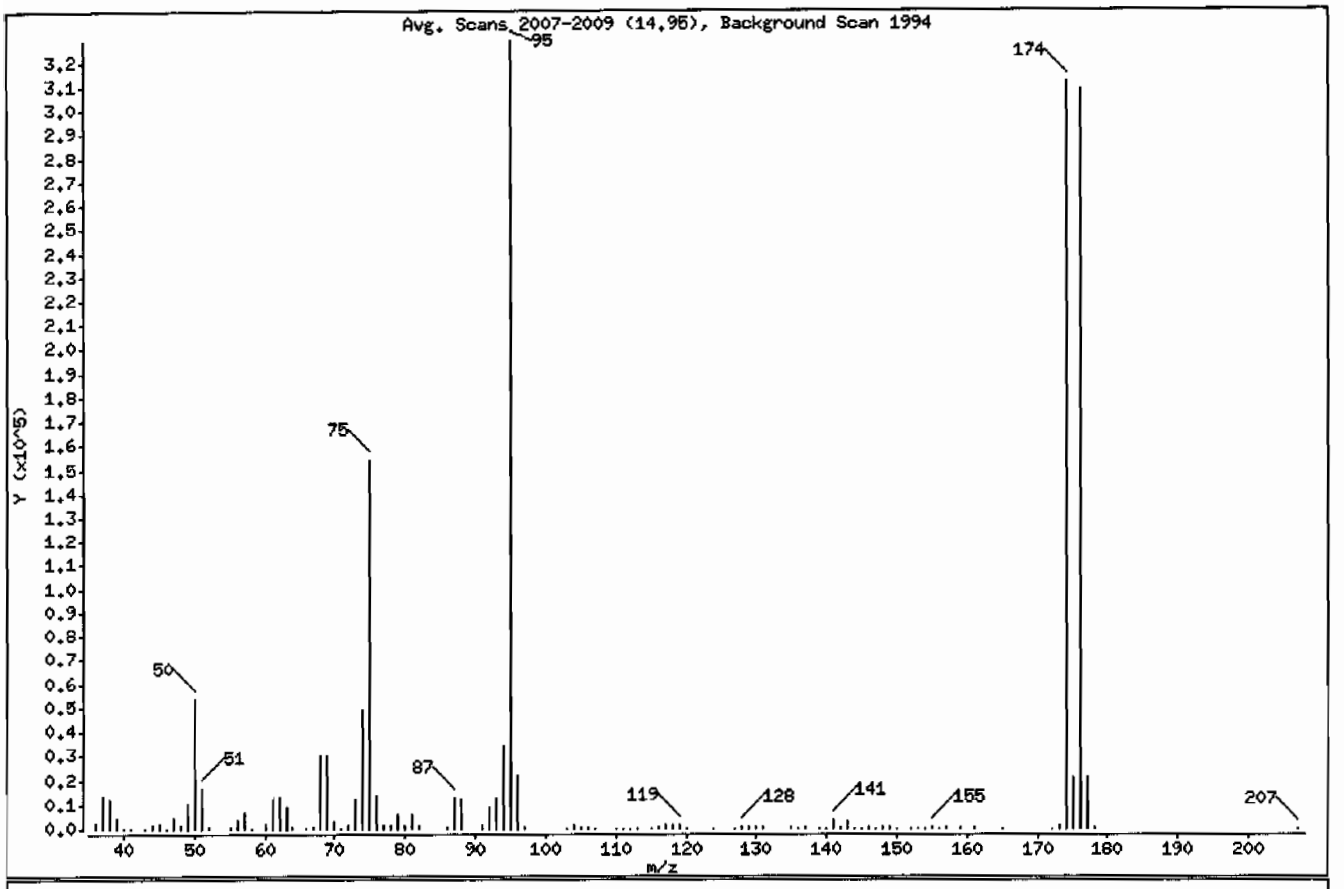

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.36
75	30.00 - 60.00% of mass 95	46.89
96	5.00 - 9.00% of mass 95	6.58
173	Less than 2.00% of mass 174	0.51 (0.53)
174	50.00 - 100.00% of mass 95	94.65
175	5.00 - 9.00% of mass 174	6.34 (6.70)
176	95.00 - 101.00% of mass 174	93.85 (99.16)
177	5.00 - 9.00% of mass 176	6.39 (6.81)

Data File: /chem/VOA4.i/113009v4/4n101.d

Date : 30-NOV-2009 15:32

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4n101.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1994
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2285	68.00	30072	105.00	480	144.00	158
37.00	13831	69.00	30032	106.00	1105	145.00	246
38.00	11989	70.00	2705	107.00	197	146.00	452
39.00	4608	71.00	77	110.00	115	147.00	82
40.00	279	72.00	1308	111.00	310	148.00	810
41.00	162	73.00	12322	112.00	64	149.00	388
43.00	168	74.00	49064	113.00	230	150.00	331
44.00	1486	75.00	154176	115.00	338	152.00	72
45.00	2330	76.00	13264	116.00	1087	153.00	278
46.00	185	77.00	1763	117.00	1719	154.00	349
47.00	4370	78.00	1194	118.00	1197	155.00	738
48.00	1664	79.00	6069	119.00	1721	156.00	61
49.00	10925	80.00	1764	120.00	59	157.00	558
50.00	53808	81.00	6032	124.00	151	159.00	537
51.00	16400	82.00	1371	127.00	200	161.00	409
52.00	737	86.00	440	128.00	1127	165.00	70
55.00	661	87.00	13100	129.00	613	172.00	57
56.00	3521	88.00	12232	130.00	1068	173.00	1665
57.00	6967	91.00	1167	131.00	469	174.00	311232
58.00	336	92.00	8726	135.00	581	175.00	20856
60.00	2294	93.00	12538	136.00	116	176.00	308608
61.00	12398	94.00	34104	137.00	655	177.00	21024
62.00	12731	95.00	328832	139.00	232	178.00	764
63.00	9372	96.00	21648	140.00	346	207.00	280
64.00	918	97.00	610	141.00	3489		
66.00	50	103.00	123	142.00	456		
67.00	816	104.00	1222	143.00	3379		

Data File: /chem/VOA4.i/120109v4/4n201.d

Date : 01-DEC-2009 15:40

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

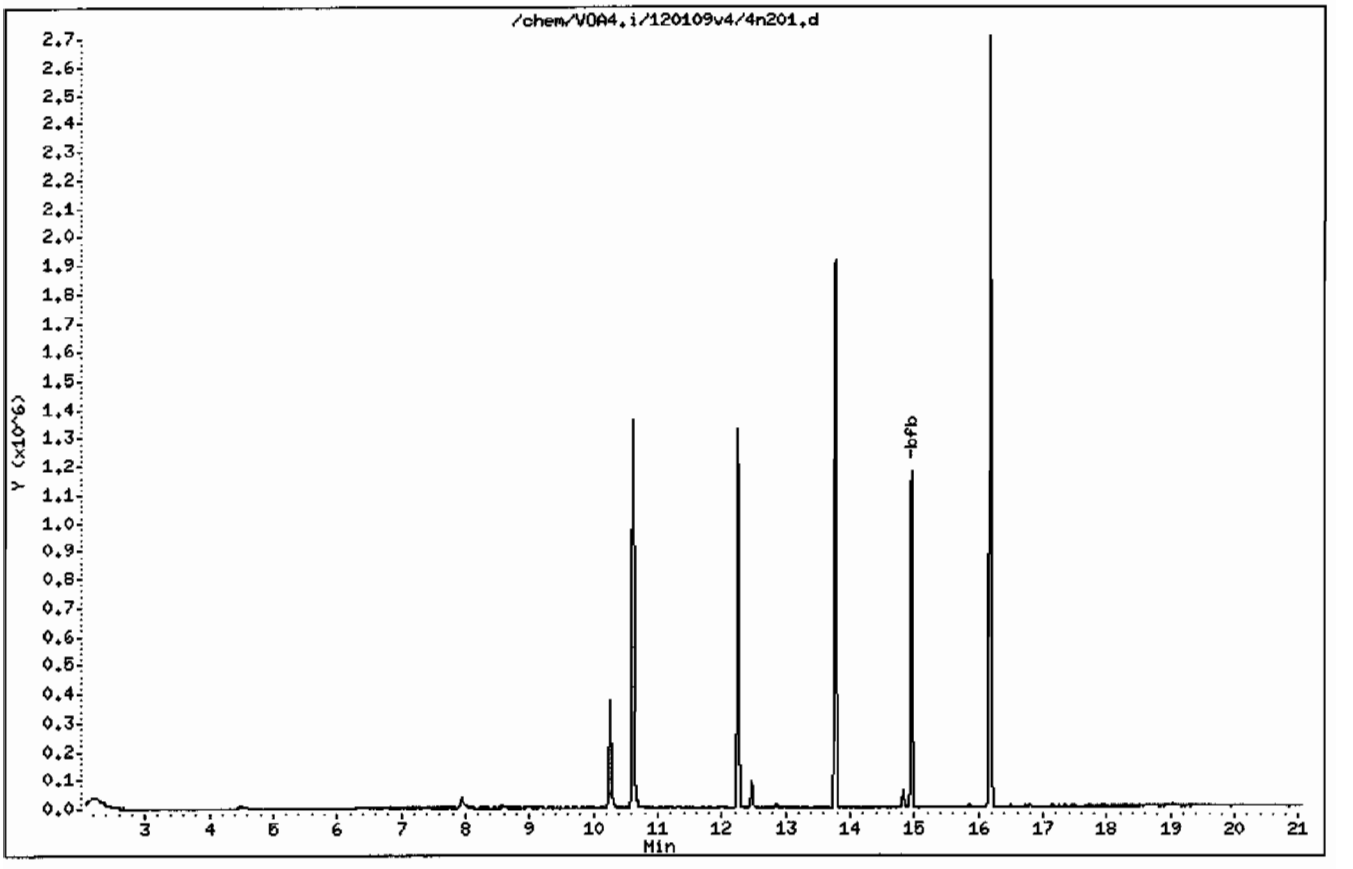

Data File: /chem/VOA4.i/120109v4/4n201.d

Date : 01-DEC-2009 15:40

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

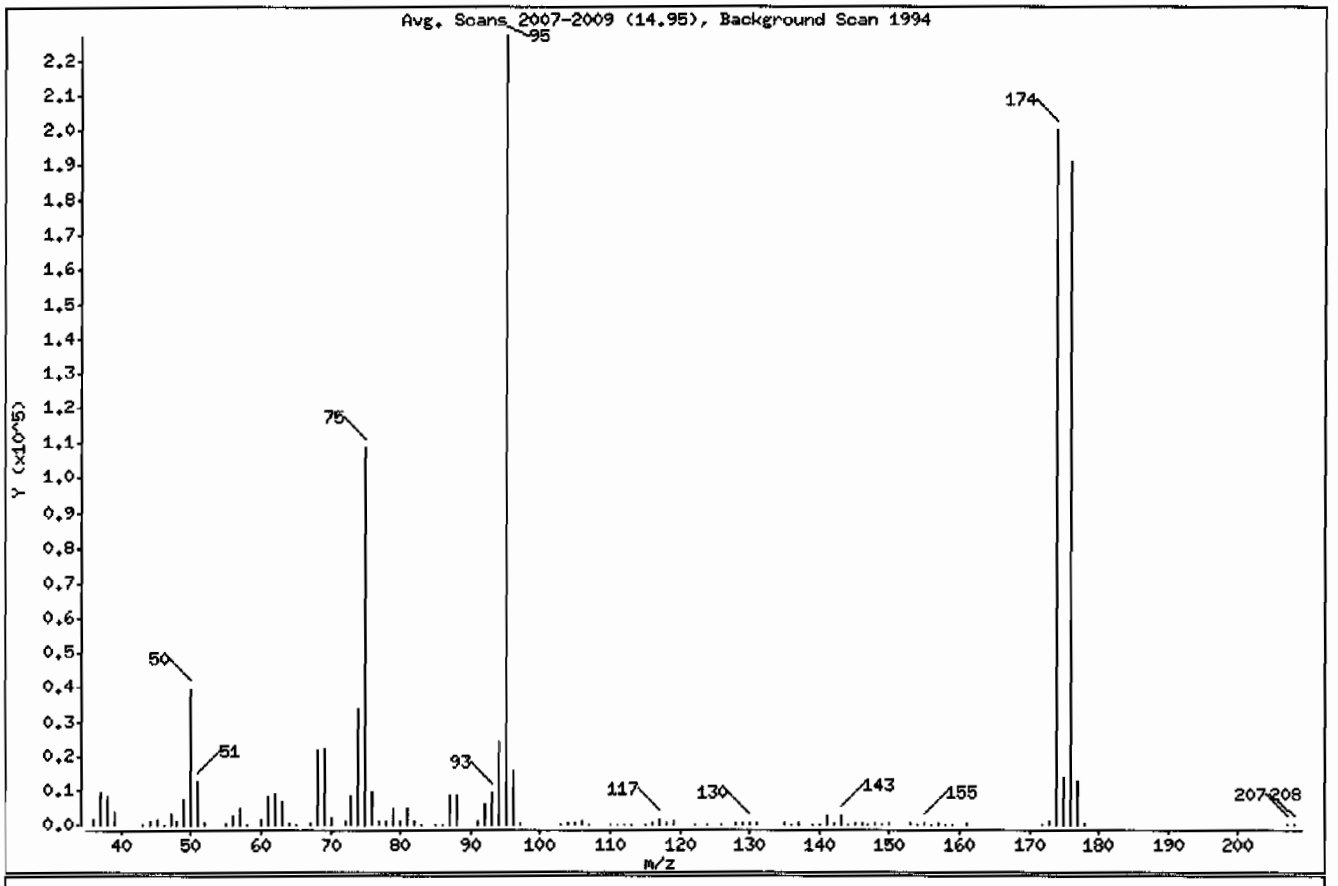

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.54
75	30.00 - 60.00% of mass 95	47.76
96	5.00 - 9.00% of mass 95	6.94
173	Less than 2.00% of mass 174	0.47 (0.54)
174	50.00 - 100.00% of mass 95	88.11
175	5.00 - 9.00% of mass 174	5.99 (6.80)
176	95.00 - 101.00% of mass 174	84.08 (95.43)
177	5.00 - 9.00% of mass 176	5.60 (6.66)

Data File: /chem/VOA4.i/120109v4/4n201.d

Date : 01-DEC-2009 15:40

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4n201.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1994
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1598	70.00	1918	106.00	842	145.00	271
37.00	9579	72.00	1016	107.00	220	146.00	336
38.00	8531	73.00	8380	110.00	68	147.00	208
39.00	3605	74.00	34024	111.00	79	148.00	511
43.00	226	75.00	108456	112.00	53	149.00	88
44.00	907	76.00	9360	113.00	165	150.00	280
45.00	1432	77.00	1146	115.00	215	153.00	266
46.00	59	78.00	891	116.00	702	154.00	70
47.00	2878	79.00	4547	117.00	1318	155.00	545
48.00	1112	80.00	1289	118.00	716	156.00	128
49.00	7530	81.00	4748	119.00	1145	157.00	301
50.00	39824	82.00	979	122.00	63	158.00	73
51.00	12561	83.00	219	124.00	176	159.00	231
52.00	472	85.00	56	126.00	57	161.00	338
55.00	404	86.00	184	128.00	649	172.00	155
56.00	2727	87.00	8404	129.00	354	173.00	1075
57.00	4895	88.00	8107	130.00	676	174.00	200064
58.00	233	91.00	810	131.00	333	175.00	13612
60.00	1736	92.00	5699	135.00	432	176.00	190912
61.00	8441	93.00	9227	136.00	69	177.00	12714
62.00	9015	94.00	23880	137.00	438	178.00	306
63.00	6909	95.00	227072	139.00	52	207.00	58
64.00	668	96.00	15755	140.00	107	208.00	62
65.00	224	97.00	471	141.00	2502		
67.00	467	103.00	118	142.00	275		
68.00	21504	104.00	772	143.00	2609		
69.00	21720	105.00	343	144.00	131		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201983684				
Client Sample:	QC for batch 927709	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 927709	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 17:49	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 16:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n106BL.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201983684				
Client Sample:	QC for batch 927709	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 927709	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 17:49	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 16:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n106BL.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n106BL.d
Lab Smp Id: 1201983684 Client Smp ID: BLANK
Inj Date : 30-NOV-2009 17:49
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201983684|927711|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	346088	51.2757	51.3
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1718448	50.0000	
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1126832	48.4116	48.4
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1336375	50.0000	
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	501178	49.5436	49.5
69 trans-1,4-Dichloro-2-butene	53	15.063	15.069	(0.931)	2748	0.73720	0.74(a)
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	873583	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	24910	1.14498	1.1(a)
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	12240	1.88515	1.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n106BL.d
Lab Smp Id: 1201983684 Client Smp ID: BLANK
Inj Date : 30-NOV-2009 17:49
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201983684|927711|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/113009v4/4n106BL.d
Date : 30-NOV-2009 17:49
Client ID: BLANK
Sample Info: |120198368|927711|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

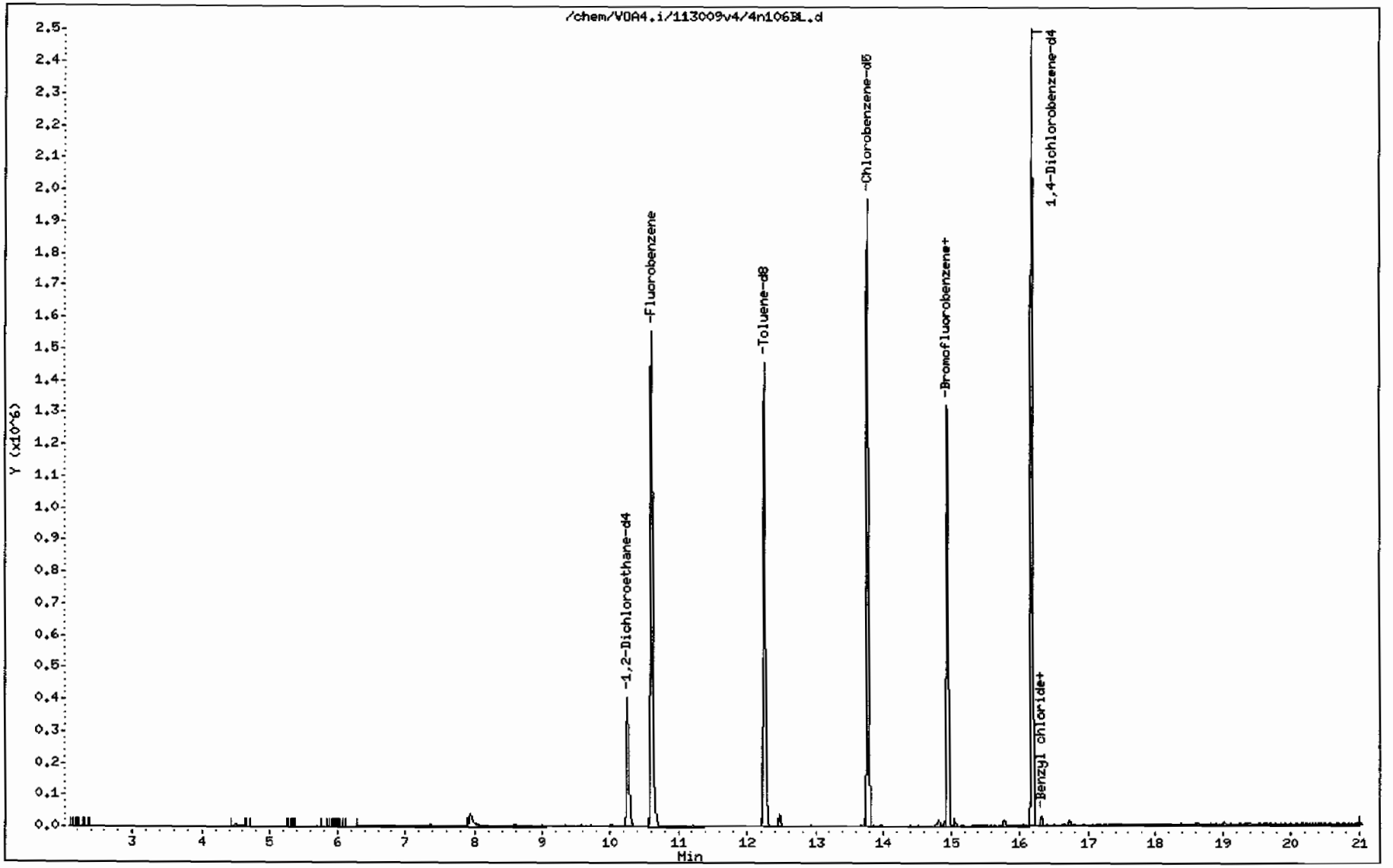

Data File: /chem/VOA4.i/113009v4/4n106BL.d

Date : 30-NOV-2009 17:49

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201983684|927711|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

69 trans-1,4-Dichloro-2-butene

Concentration: 0.74 ug/Kg

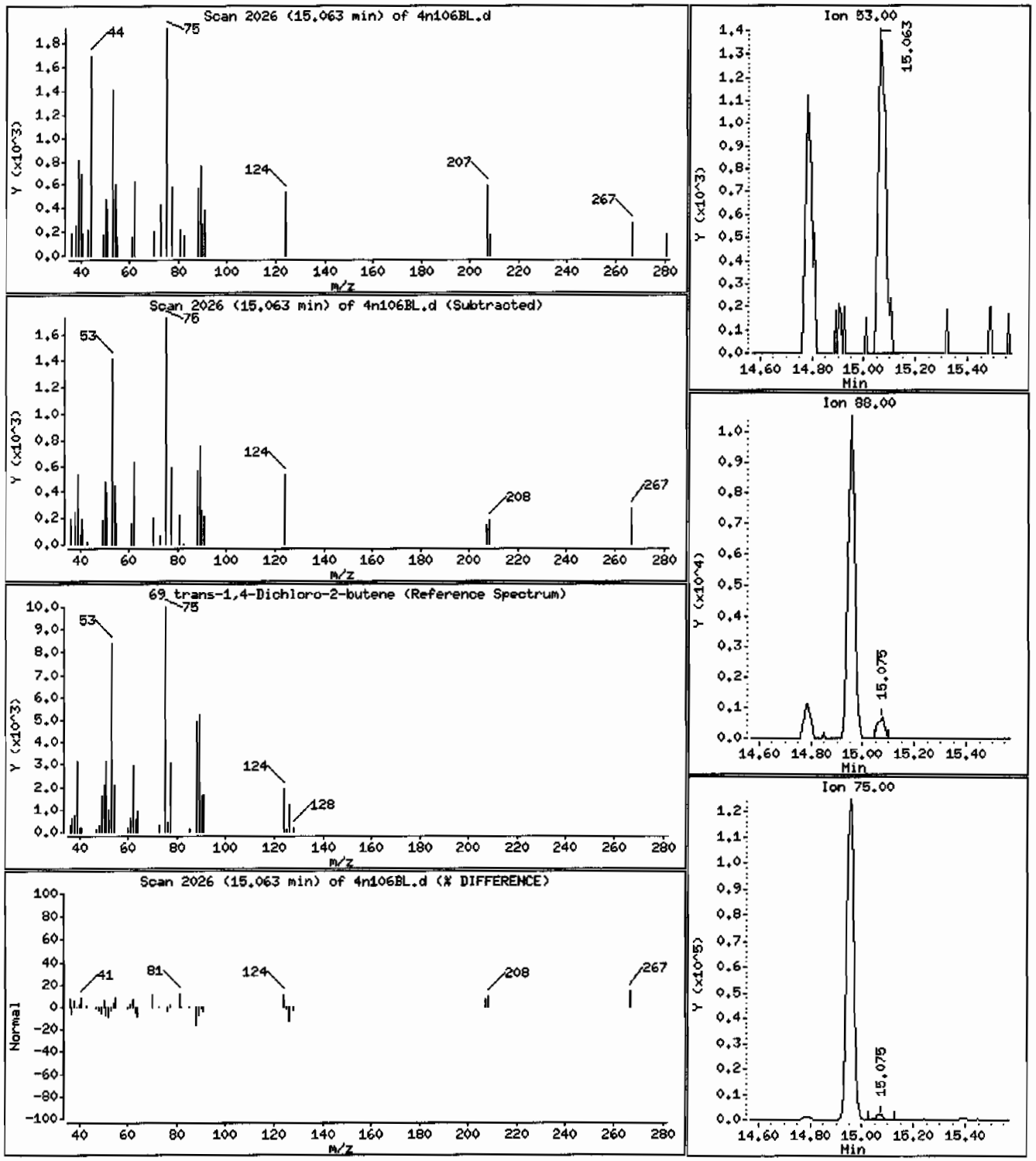

Data File: /chem/VOA4.i/113009v4/4n106BL.d

Date : 30-NOV-2009 17:49

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201983684192771111|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

88 Benzyl chloride

Concentration: 1.1 ug/Kg

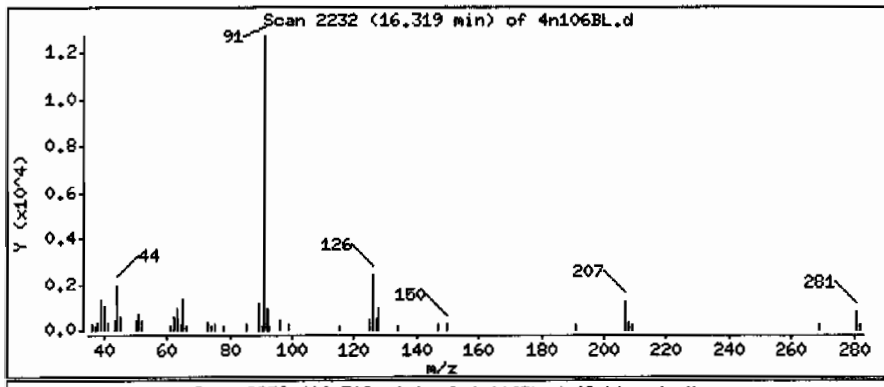

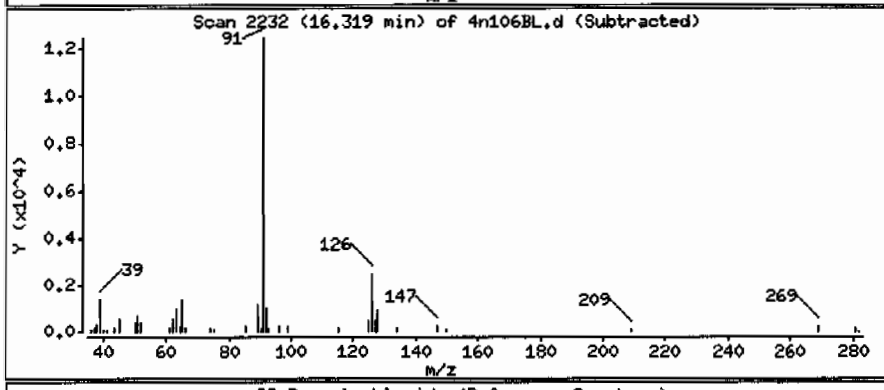

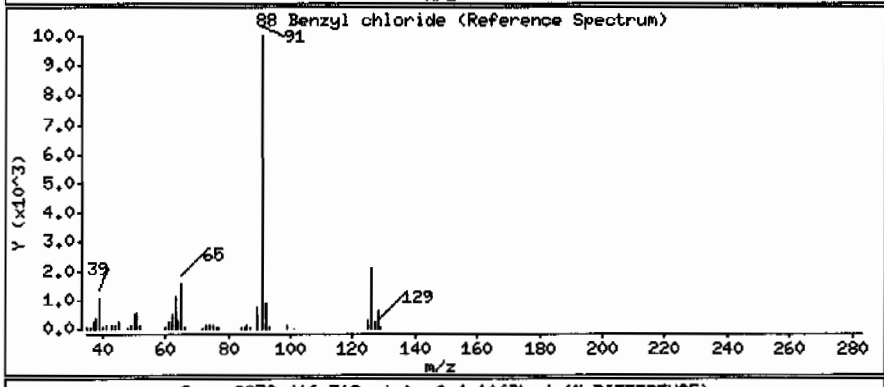

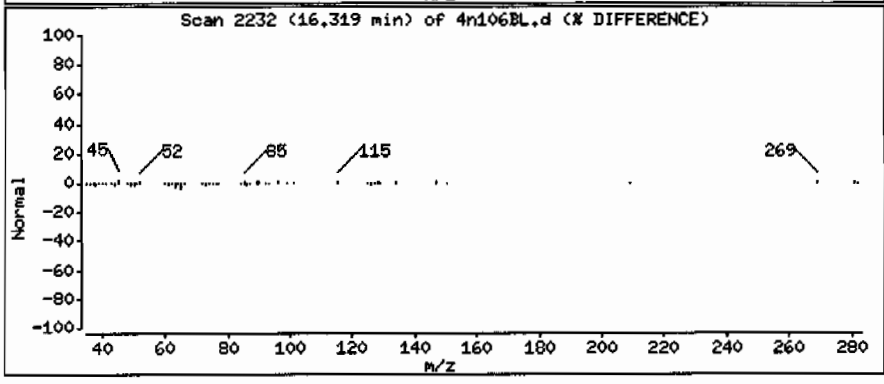

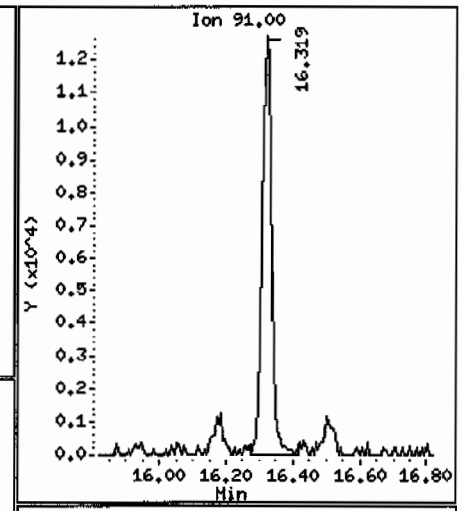

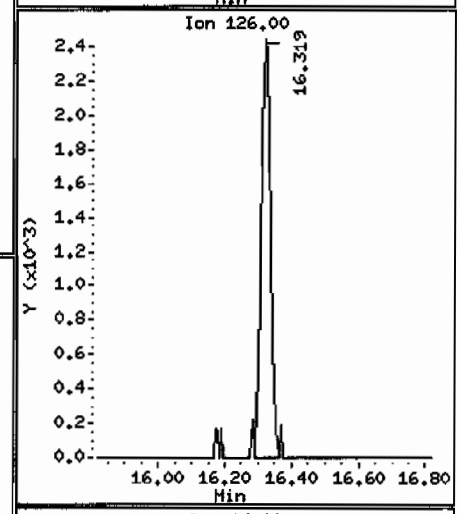

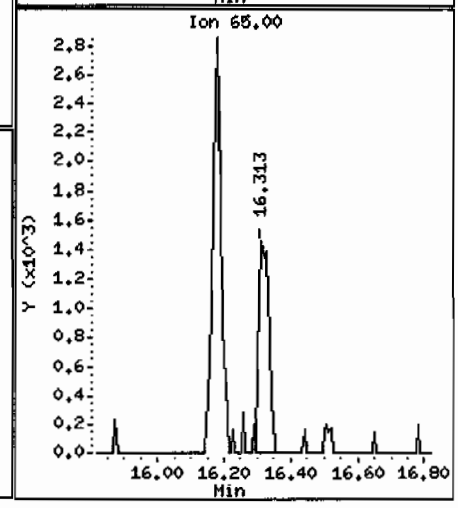

Data File: /chem/VOA4.i/113009v4/4n106BL.d

Date : 30-NOV-2009 17:49

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120198368419277111|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 1.9 ug/Kg

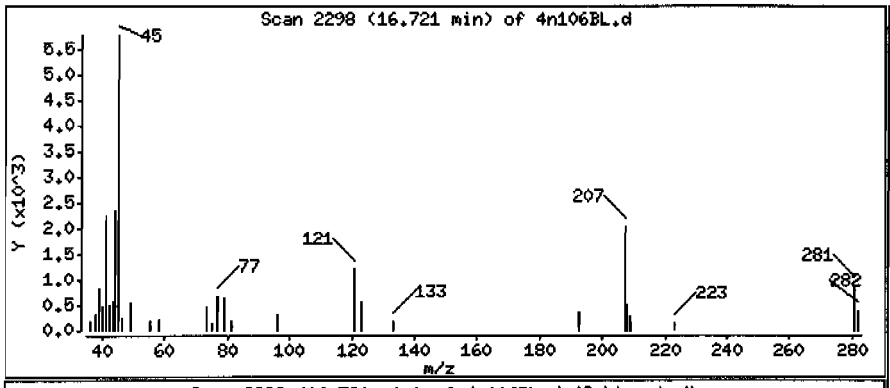

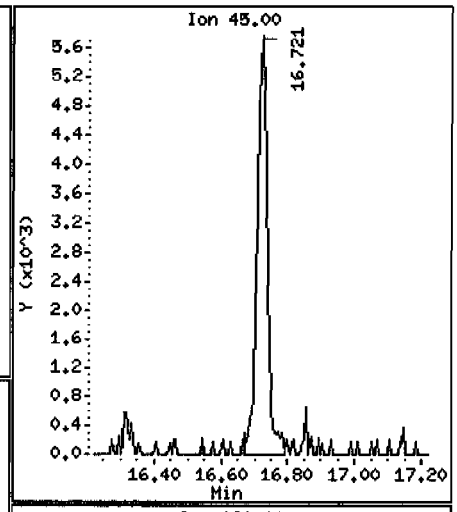

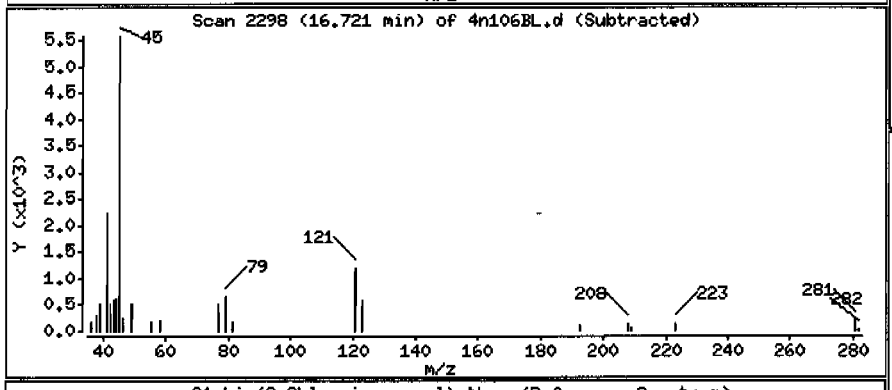

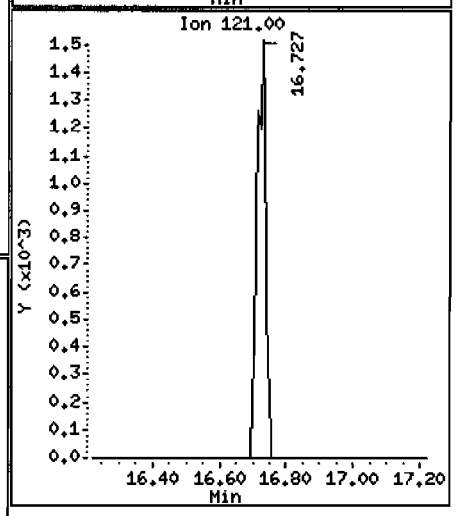

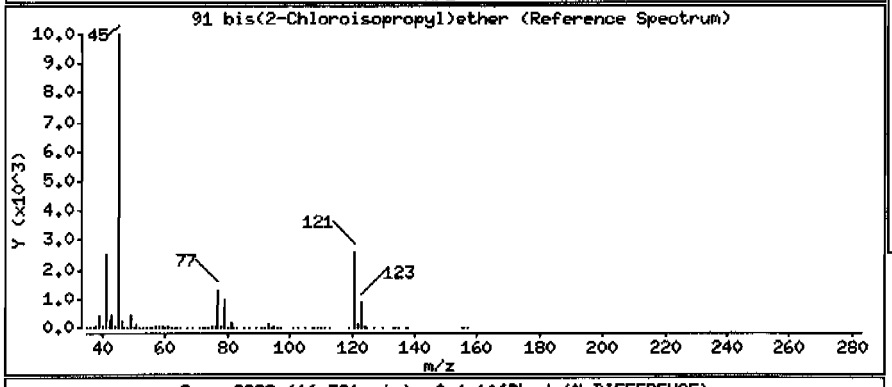

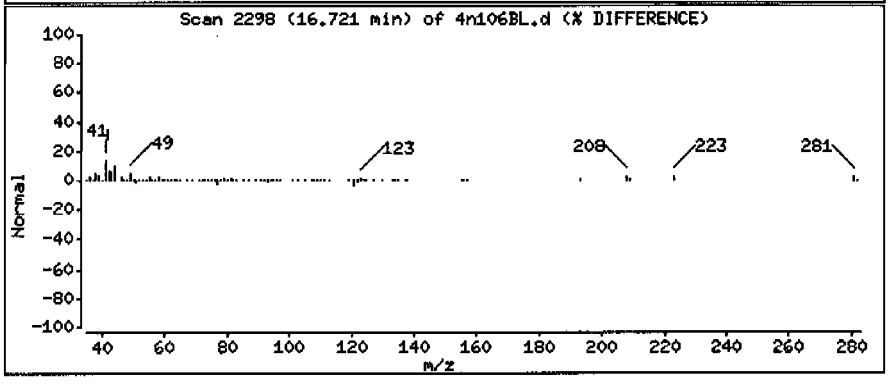

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201991929**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n206ba.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201991929**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n206ba.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n206ba.d
Lab Smp Id: 1201991929 Client Smp ID: BLANK
Inj Date : 01-DEC-2009 17:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201991929|927711|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.266	10.259	(0.967)	320536	51.0656	51.1
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1598121	50.0000	
97 1,4-Dioxane	88	11.339	11.326	(1.068)	2007	17.2572	17.2(a)
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	1043162	49.4176	49.4
* 61 Chlorobenzene-d5	117	13.772	13.771	(1.000)	1211961	50.0000	
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	460330	52.0176	52.0
69 trans-1,4-Dichloro-2-butene	53	15.064	15.069	(0.931)	2583	0.79209	0.79(a)
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	764221	50.0000	
88 Benzyl chloride	91	16.320	16.319	(1.009)	22707	1.19307	1.2(a)
91 bis(2-Chloroisopropyl)ether	45	16.716	16.721	(1.033)	10995	1.93573	1.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n206ba.d
Lab Smp Id: 1201991929 Client Smp ID: BLANK
Inj Date : 01-DEC-2009 17:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201991929|927711|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120109v4/4n206ba.d
Date : 01-DEC-2009 17:57
Client ID: BLANK
Sample Info: |120199192919277111|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

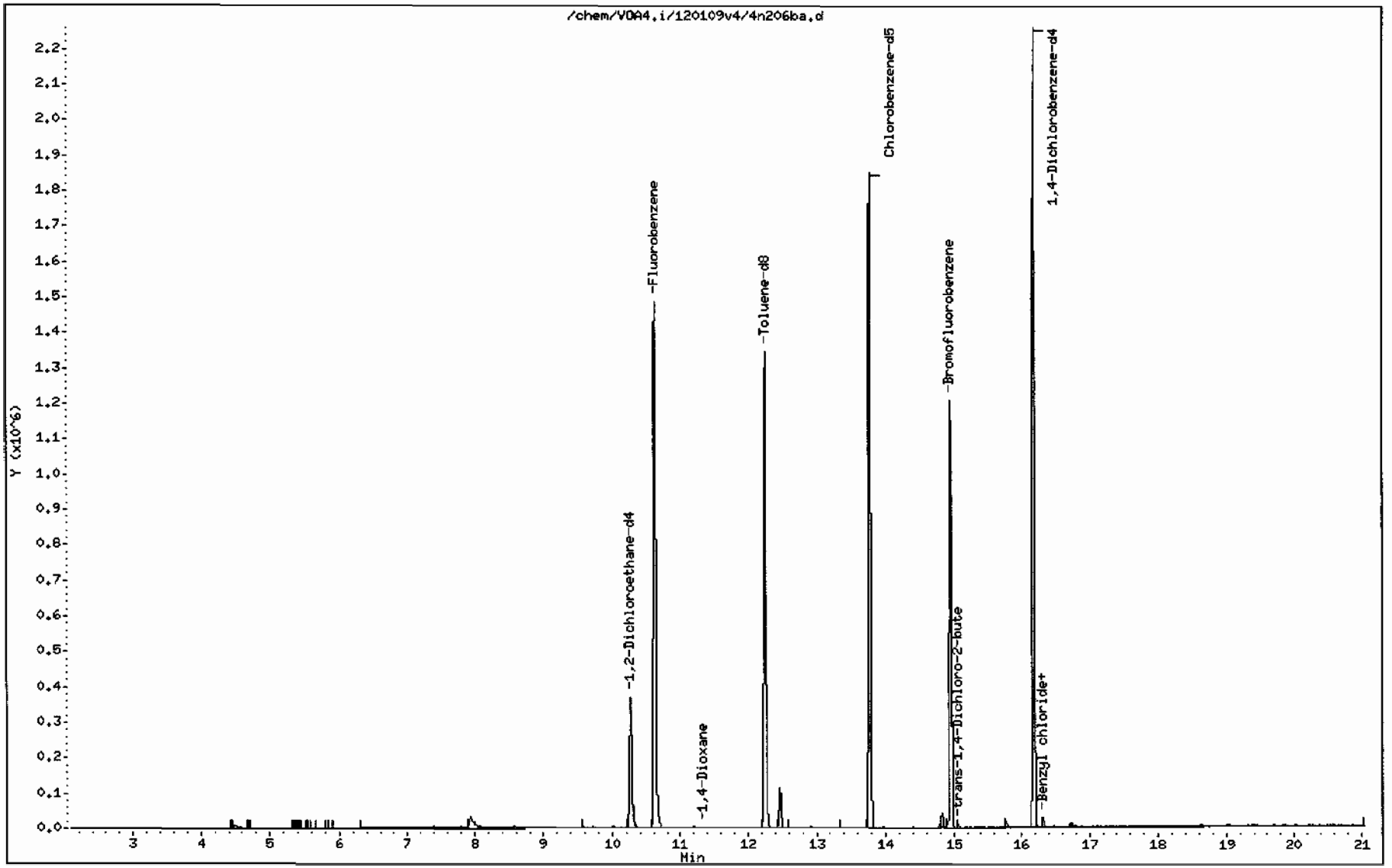

Data File: /chem/VOA4.i/120109v4/4n206ba.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120199192919277111|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

97 1,4-Dioxane

Concentration: 17.2 ug/Kg

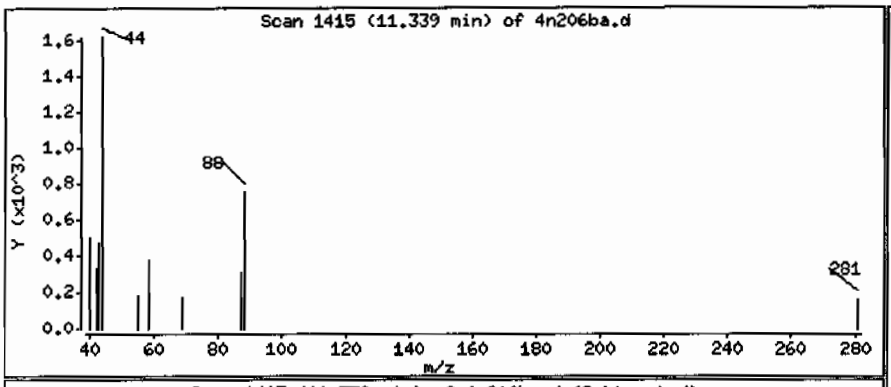

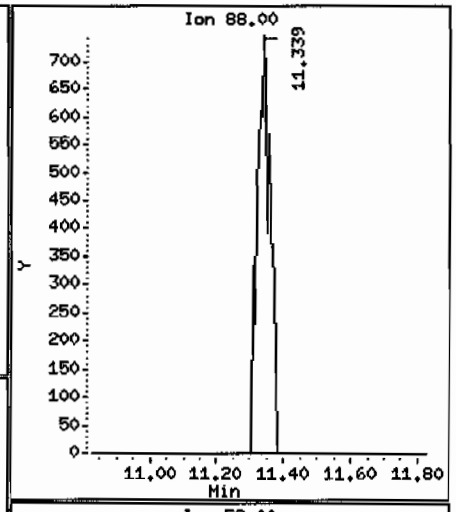

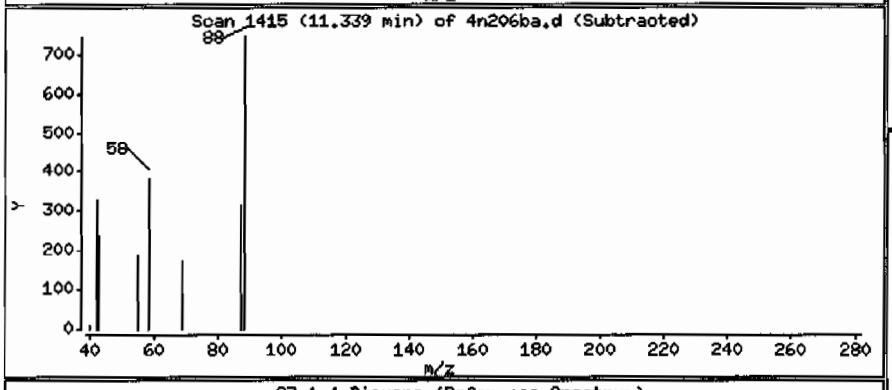

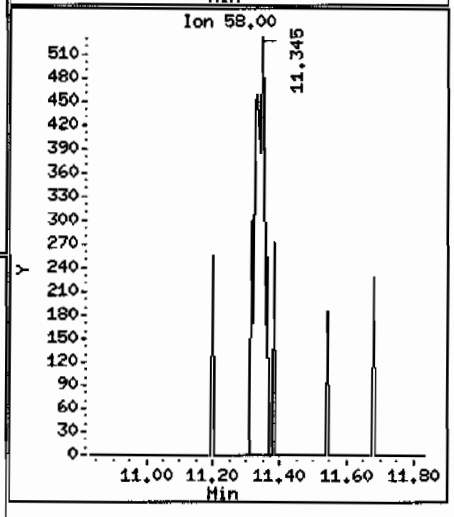

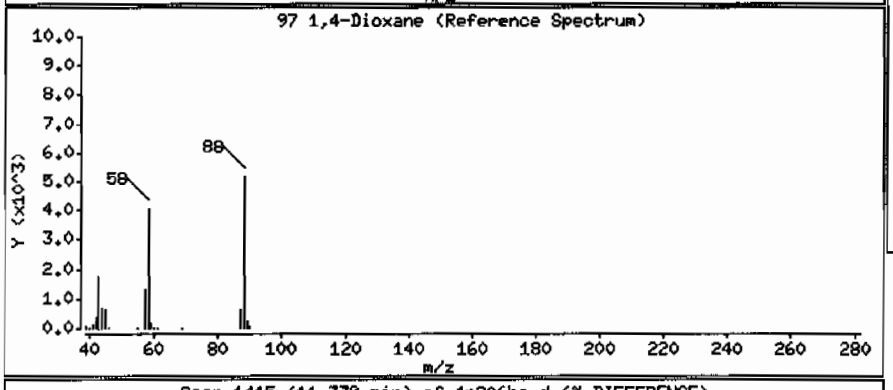

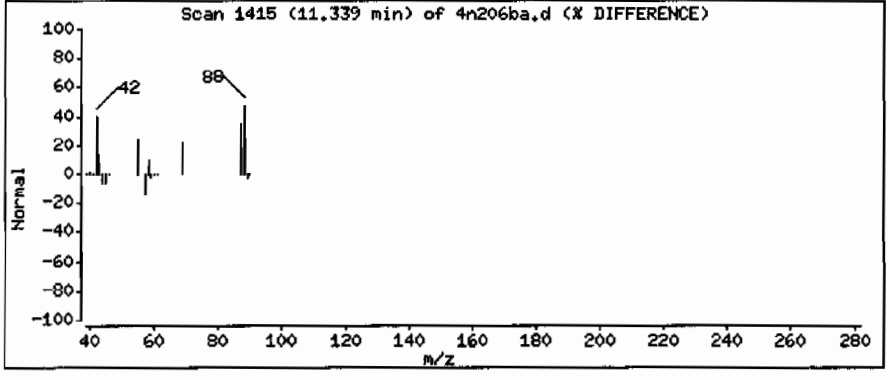

Data File: /chem/VOA4.i/120109v4/4n206ba.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120199192919277111|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

69 trans-1,4-Dichloro-2-butene

Concentration: 0.79 ug/Kg

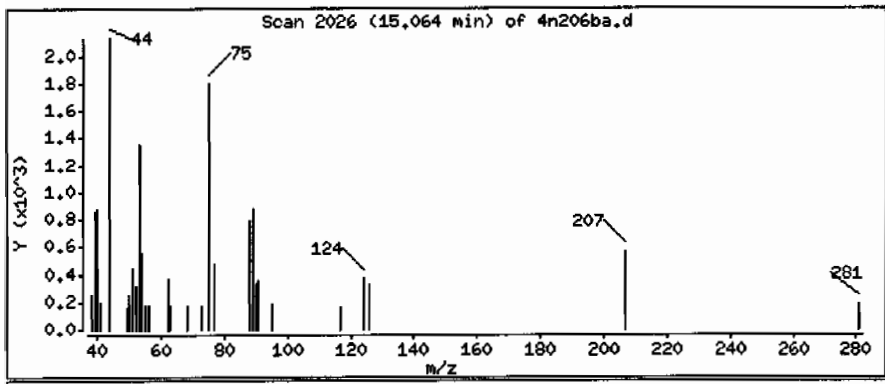

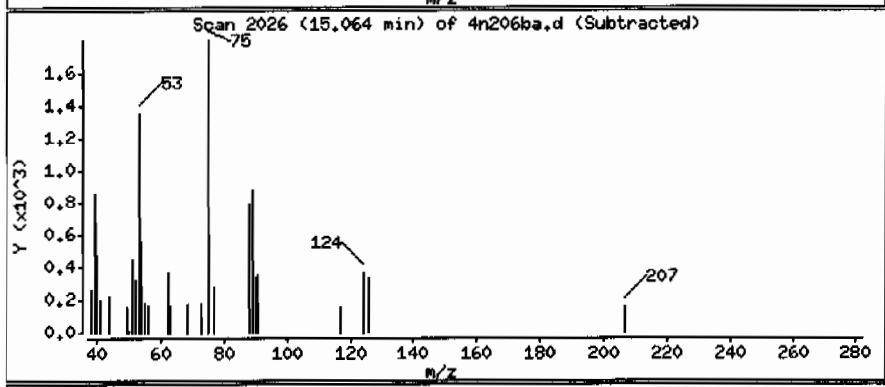

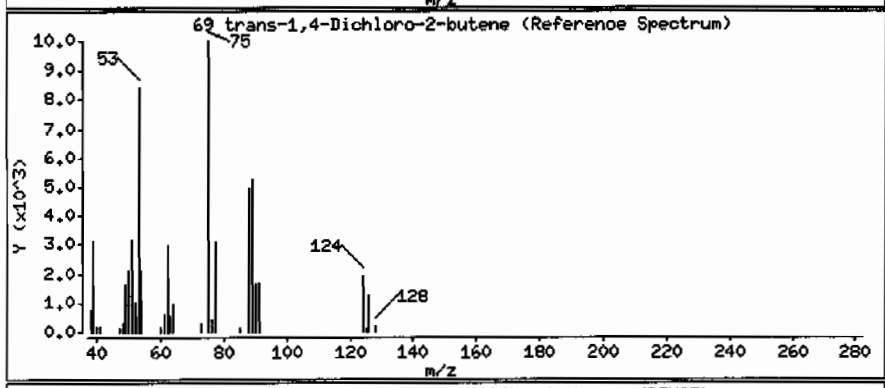

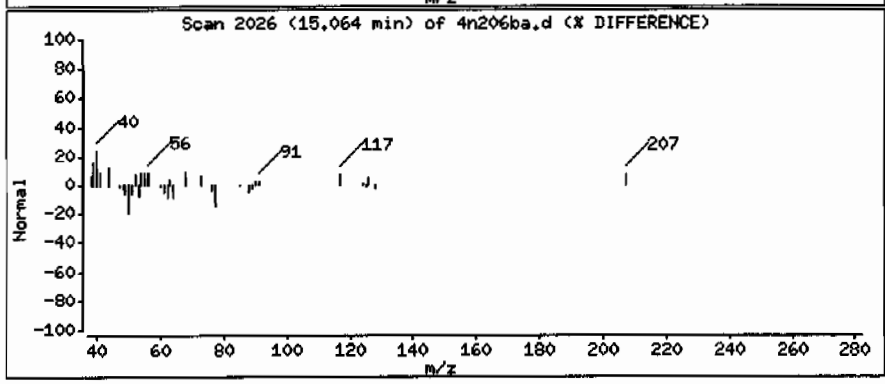

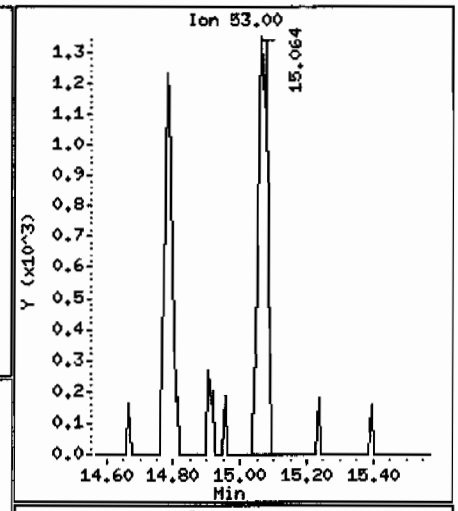

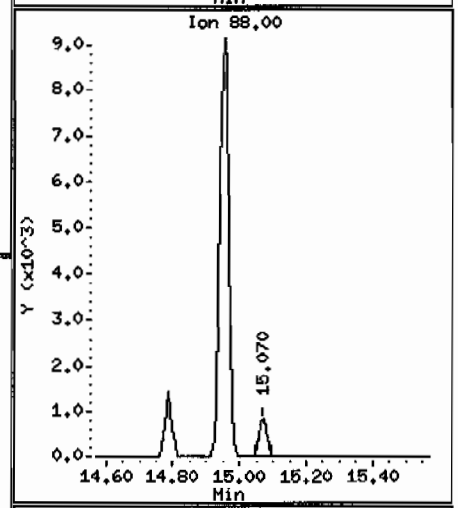

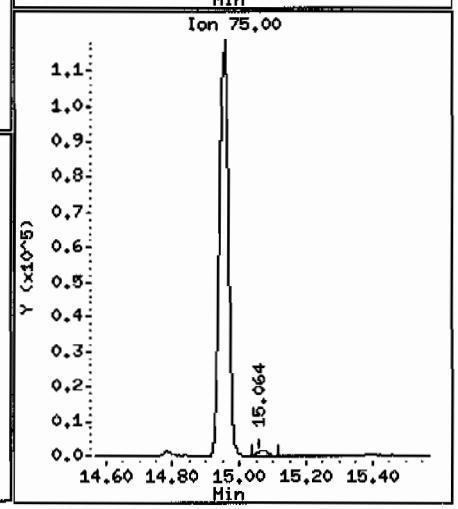

Data File: /chem/VOA4.i/120109v4/4n206ba.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120199192919277111|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

88 Benzyl chloride

Concentration: 1.2 ug/Kg

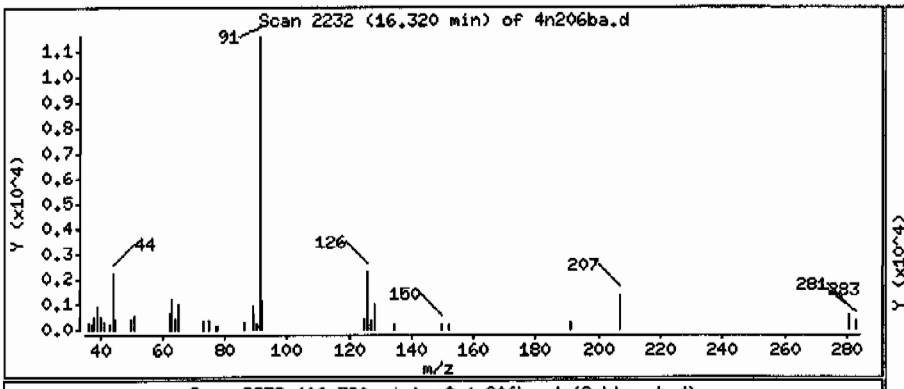

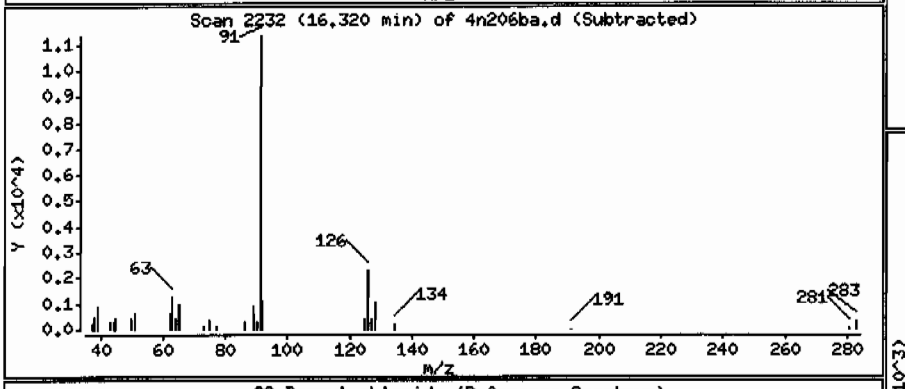

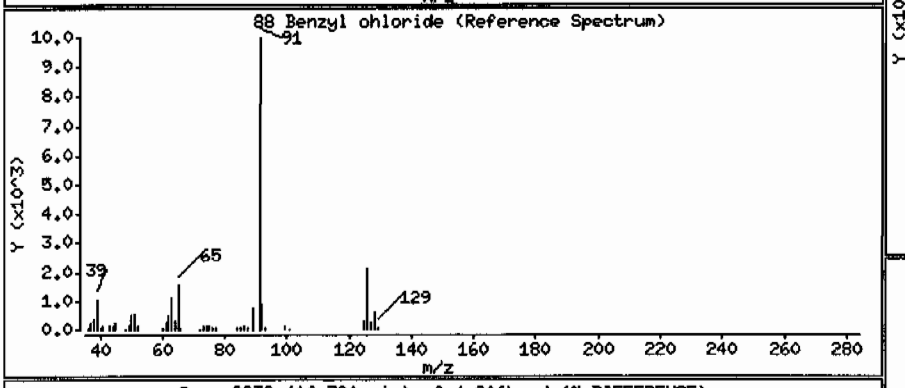

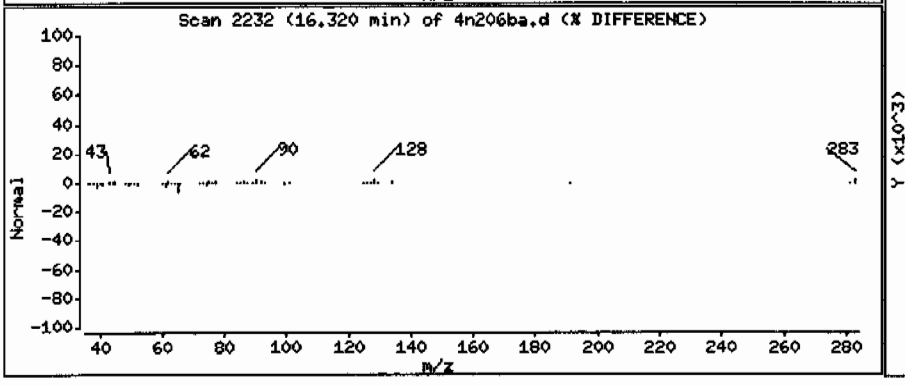

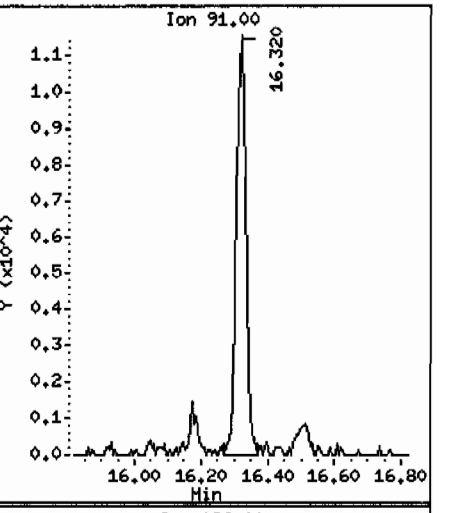

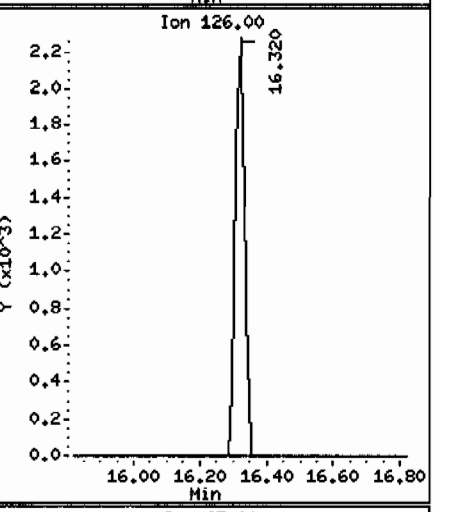

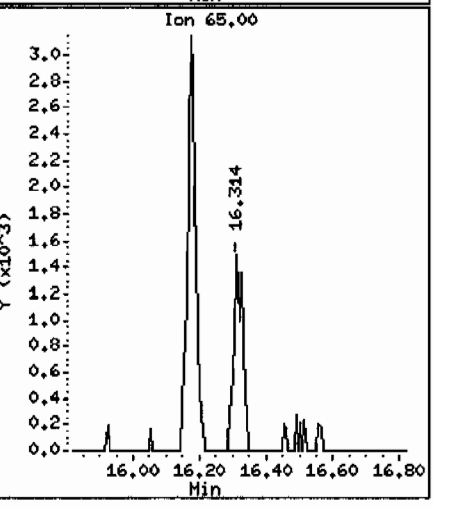

Data File: /chem/VOA4.i/120109v4/4n206ba.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120199192919277111|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 1.9 ug/Kg

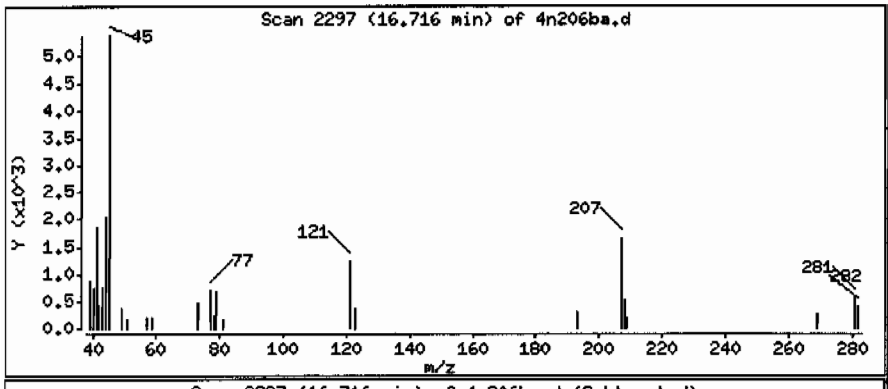

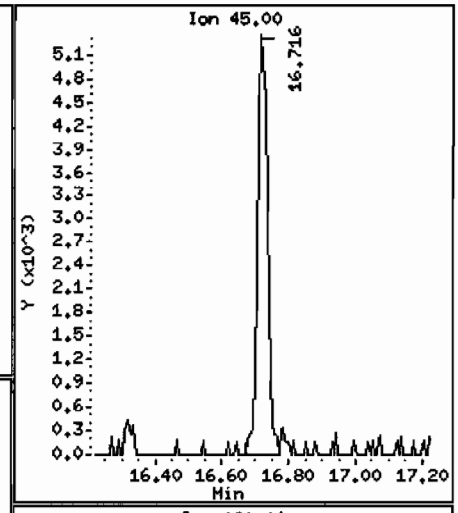

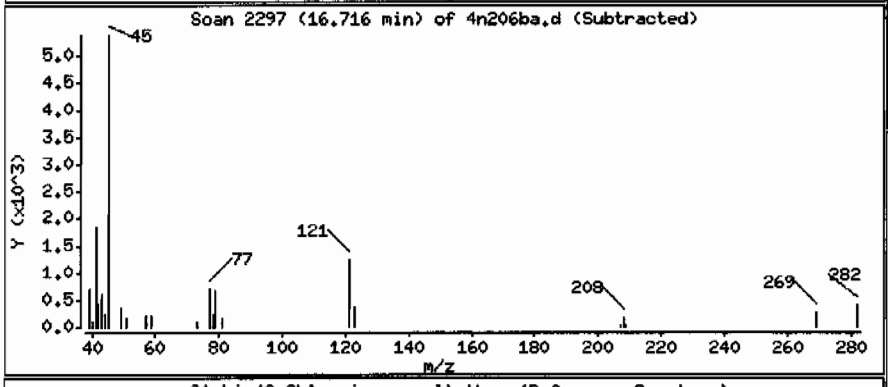

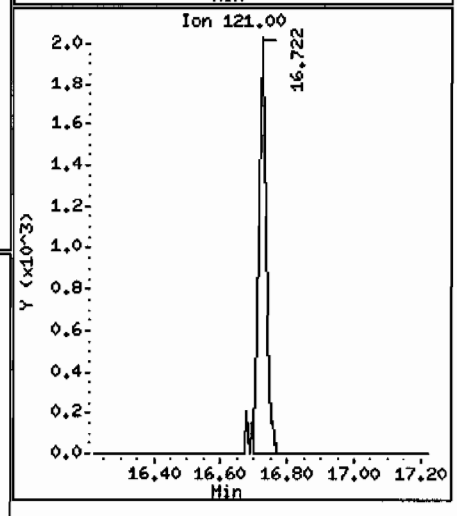

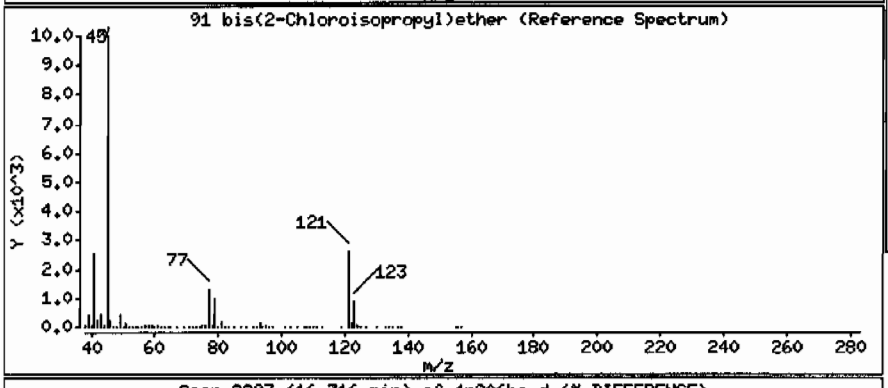

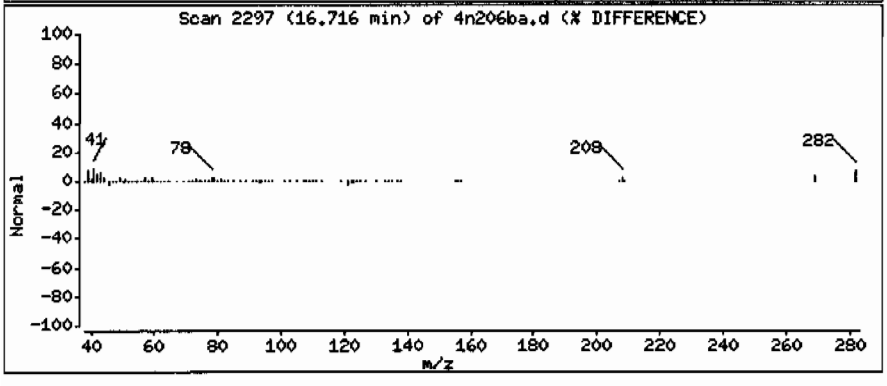

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201983687**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 16:27**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n103LL.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		50.0	ug/kg	0.340	1.00
74-87-3	Chloromethane		46.8	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		51.7	ug/kg	0.300	1.00
74-83-9	Bromomethane		53.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		54.2	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		58.5	ug/kg	0.300	1.00
67-64-1	Acetone		229	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		57.6	ug/kg	0.300	1.00
74-88-4	Iodomethane		275	ug/kg	1.60	5.00
75-09-2	Methylene chloride		55.7	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		291	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		58.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		57.3	ug/kg	0.300	1.00
78-93-3	2-Butanone		240	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		56.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		61.1	ug/kg	0.300	1.00
67-66-3	Chloroform		55.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		54.4	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		61.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		61.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		64.0	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		53.4	ug/kg	0.300	1.00
71-43-2	Benzene		55.3	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		58.6	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		55.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		56.1	ug/kg	0.300	1.00
74-95-3	Dibromomethane		53.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		248	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		56.5	ug/kg	0.300	1.00
108-88-3	Toluene		52.8	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.1	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.4	ug/kg	0.300	1.00
591-78-6	2-Hexanone		218	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.9	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		56.9	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		54.1	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		51.6	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		53.5	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201983687**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/30/2009 16:27**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/30/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n103LL.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		107	ug/kg	0.300	2.00
95-47-6	o-Xylene		53.3	ug/kg	0.300	1.00
100-42-5	Styrene		52.9	ug/kg	0.300	1.00
75-25-2	Bromoform		52.0	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		48.9	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		48.6	ug/kg	0.300	1.00
108-86-1	Bromobenzene		50.3	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		51.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		49.1	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		51.2	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		50.7	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		50.7	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		51.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		50.5	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		51.7	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		52.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		51.4	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		51.0	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		52.7	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.3	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		53.0	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		50.2	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n103LL.d
Lab Smp Id: 1201983687 Client Smp ID: LCS
Inj Date : 30-NOV-2009 16:27
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201983687|927711|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2801032	160.619	161
M 2 1,2-Dichloroethylene (total)	96				1439684	114.822	115
M 135 1,3-Dichloropropylene	75				1570912	113.280	113
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	370572	50.0245	50.0
4 Chloromethane	50	5.299	5.299	(0.499)	535341	46.8087	46.8
5 Vinyl chloride	62	5.521	5.521	(0.520)	547200	51.6859	51.7
6 Bromomethane	94	6.130	6.130	(0.577)	444086	53.1875	53.2
7 Chloroethane	64	6.288	6.288	(0.592)	420891	54.1785	54.2
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	764676	58.5392	58.5
134 Ethyl Ether	59	7.004	7.004	(0.660)	373180	52.1640	52.2
10 Acetone	43	7.358	7.358	(0.693)	1480257	229.165	229
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	775115	57.5948	57.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.632	7.632	(0.719)	4423339	274.760	275
15 Acetonitrile	41	7.705	7.705	(0.726)	1868299	1280.27	1280
128 Methyl acetate	43	7.754	7.754	(0.730)	1804500	242.249	242
14 Carbon disulfide	76	7.773	7.773	(0.732)	8129333	291.312	291
17 Methylene chloride	84	7.943	7.943	(0.748)	580527	55.6628	55.7
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1348031	51.7350	51.7
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	694462	58.3043	58.3
23 Vinyl acetate	43	8.711	8.711	(0.820)	4962294	286.468	286
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	848861	57.2961	57.3
30 2-Butanone	43	9.327	9.327	(0.878)	1780553	239.581	240
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	745222	56.5179	56.5
25 2,2-Dichloropropane	77	9.425	9.425	(0.887)	522566	61.0754	61.1
29 Bromochloromethane	128	9.662	9.662	(0.910)	252853	54.4245	54.4
32 Chloroform	83	9.693	9.693	(0.913)	837129	55.9221	55.9
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	685406	61.6997	61.7
129 Cyclohexane	56	10.083	10.083	(0.949)	793627	61.8550	61.8
34 1,1-Dichloropropene	75	10.138	10.138	(0.955)	680914	61.6112	61.6
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	686063	64.0282	64.0
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	372910	59.7221	59.7
37 1,2-Dichloroethane	62	10.345	10.345	(0.974)	629033	53.3754	53.4
38 Benzene	78	10.376	10.376	(0.977)	1883983	55.2883	55.3
139 Cyclohexene	67	10.498	10.498	(0.989)	958047	59.4749	59.5
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1589755	50.0000	
131 n-Butyl alcohol	56	10.693	10.693	(1.007)	1991401	5835.93	5840
39 Trichloroethylene	95	11.010	11.010	(1.037)	501476	58.6164	58.6
130 Methylcyclohexane	83	11.266	11.266	(1.061)	850534	62.3477	62.3
41 1,2-Dichloropropane	63	11.248	11.248	(1.059)	494866	55.3936	55.4
43 Dibromomethane	93	11.376	11.376	(1.071)	295690	53.5845	53.6
45 Bromodichloromethane	83	11.485	11.485	(1.082)	645484	56.1477	56.1
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1162357	227.944	228
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	810102	56.5094	56.5
49 4-Methyl-2-pentanone	58	12.022	12.022	(0.873)	1026970	248.392	248
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1162081	52.0924	52.1
50 Toluene	92	12.327	12.327	(0.895)	1185194	52.8002	52.8
53 trans-1,3-Dichloropropylene	75	12.467	12.467	(0.905)	760810	53.1004	53.1
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	359079	50.4334	50.4
55 2-Hexanone	43	12.863	12.863	(0.934)	2426241	217.780	218
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	718210	49.8509	49.8
56 Tetrachloroethylene	164	12.924	12.924	(0.938)	495812	56.8619	56.9
57 Dibromochloromethane	129	13.150	13.150	(0.955)	532813	54.0759	54.1
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	465297	51.5615	51.6
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1280798	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1384465	53.4746	53.5
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	518176	52.9987	53.0
58 Ethylbenzene	91	13.863	13.863	(1.007)	2280983	52.6355	52.6
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1849088	107.335	107
64 o-Xylene	106	14.405	14.405	(1.046)	951944	53.2839	53.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	65 Styrene	104	14.405	14.405	(1.046)	1606964	52.8987	52.9
	66 Bromoform	173	14.661	14.661	(0.906)	518706	51.9697	52.0
	67 Isopropylbenzene	105	14.759	14.759	(0.912)	2566480	51.1831	51.2
$	71 Bromofluorobenzene	95	14.954	14.954	(0.924)	548547	51.2007	51.2
	73 1,1,2,2-Tetrachloroethane	83	15.021	15.021	(0.928)	718614	48.8816	48.9
	74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	190372	48.5522	48.6
	75 Bromobenzene	156	15.167	15.167	(0.937)	796870	50.3001	50.3
	76 n-Propylbenzene	91	15.186	15.186	(0.939)	3041769	51.0689	51.1
	78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	2269276	50.7279	50.7
	77 2-Chlorotoluene	91	15.332	15.332	(0.948)	2075807	49.0796	49.1
	80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1970378	50.6967	50.7
	81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2351359	51.8620	51.9
	79 1,2,4-Trimethylbenzene	105	15.747	15.747	(0.973)	2389393	50.4715	50.5
	83 sec-Butylbenzene	105	15.936	15.936	(0.985)	3124427	51.6653	51.7
	84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	2581968	52.0729	52.1
	85 1,3-Dichlorobenzene	146	16.125	16.125	(0.997)	1531329	51.3882	51.4
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	925204	50.0000	
	87 1,4-Dichlorobenzene	146	16.210	16.210	(1.002)	1526719	51.0494	51.0
	89 n-Butylbenzene	91	16.503	16.503	(1.020)	2427956	52.6611	52.7
	90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1452014	50.2005	50.2
	92 1,2-Dibromo-3-chloropropane	157	17.533	17.533	(1.084)	170540	52.2591	52.2
	93 1,2,4-Trichlorobenzene	180	18.636	18.636	(1.152)	911844	55.6492	55.6
	94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	633045	54.7199	54.7
	95 Naphthalene	128	19.033	19.033	(1.176)	1493942	53.0727	53.1
	96 1,2,3-Trichlorobenzene	180	19.392	19.392	(1.199)	694356	53.6855	53.7

Data File: /chem/VOA4.i/113009v4/4n103LL.d
Date : 30-NOV-2009 16:27
Client ID: LCS
Sample Info: 1120198368719277111!VOAF!1!
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

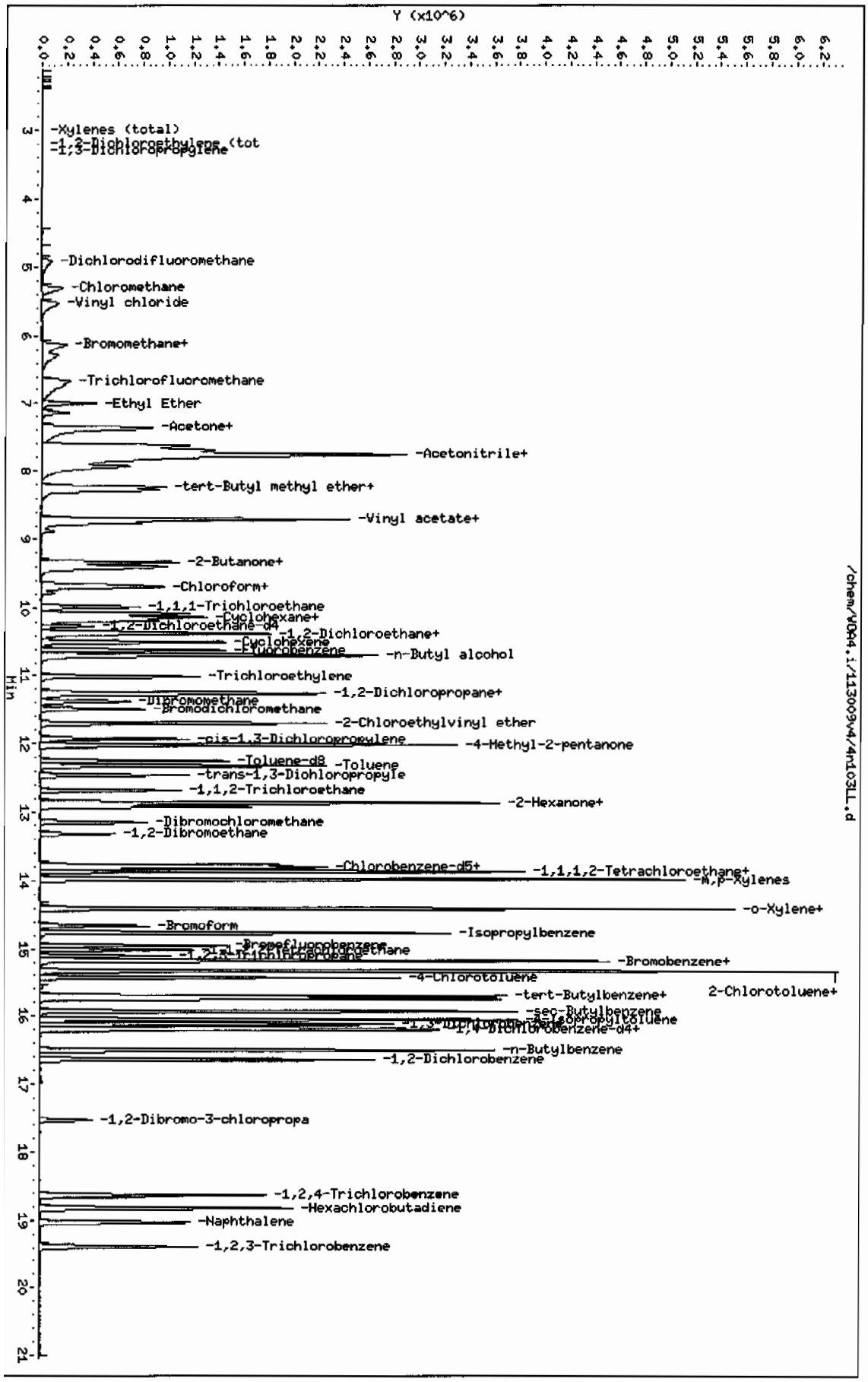

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201983688				
Client Sample:	QC for batch 927709	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927709	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 17:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 16:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n105SL.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201983688				
Client Sample:	QC for batch 927709	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927709	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/30/2009 17:22	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/30/2009 16:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n105SL.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		264	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/113009v4/4n105SL.d
Lab Smp Id: 1201983688 Client Smp ID: LCS
Inj Date : 30-NOV-2009 17:22
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201983688|927711|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/113009v4/VOA4-8260-112209.m
Meth Date : 30-Nov-2009 17:23 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	734278	132.518	132
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1452086	174.083	174
9 Acrolein	56	7.187	7.186	(0.677)	441443	252.676	253
12 Trichlorotrifluoroethane	85	7.364	7.363	(0.693)	795618	264.289	264
147 Isopropyl Alcohol	45	7.437	7.436	(0.700)	2314839	2670.15	2670
16 Allyl chloride	41	7.803	7.802	(0.735)	3184783	228.283	228
148 tert-Butyl Alcohol	59	7.931	7.936	(0.747)	3528348	2720.73	2720
18 Acrylonitrile	53	8.181	8.180	(0.770)	878341	249.327	249
149 Isopropyl ether	45	8.748	8.747	(0.824)	1437680	48.7892	48.8
24 2-Chloro-1,3-butadiene	53	8.876	8.875	(0.836)	641035	48.4027	48.4
150 Ethyl tert-butyl ether	59	9.150	9.149	(0.862)	1313124	48.7254	48.7
26 Ethyl acetate	43	9.345	9.344	(0.880)	2197894	222.542	222

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
28 Propionitrile	54	9.394	9.399	(0.885)	358929	242.592	242
27 Methacrylonitrile	41	9.577	9.582	(0.902)	1394911	238.123	238
72 Tetrahydrofuran	42	9.717	9.716	(0.601)	808325	258.221	258
19 Isobutyl alcohol	41	10.010	10.009	(0.943)	1151527	2565.84	2560
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	336905	53.3860	53.4
151 Methyl tert-amyl ether	73	10.394	10.387	(0.979)	1323741	49.2993	49.3
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1606724	50.0000	
42 Methyl methacrylate	69	11.211	11.210	(1.056)	1534839	234.773	235
97 1,4-Dioxane	88	11.333	11.332	(1.067)	298366	2551.77	2550
48 2-Nitropropane	43	11.674	11.673	(1.099)	776582	255.115	255
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1097967	49.4841	49.5
51 Ethyl methacrylate	69	12.467	12.466	(0.905)	2778159	219.258	219
152 1-Chlorohexane	55	13.662	13.667	(1.286)	434352	53.1026	53.1
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1273920	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.783	14.782	(0.914)	976290	253.979	254
70 Cyclohexanone	42	14.905	14.904	(1.082)	741981	767.560	768
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	504460	50.0442	50.0
69 trans-1,4-Dichloro-2-butene	53	15.064	15.069	(0.931)	932869	251.142	251
82 Pentachloroethane	167	15.777	15.776	(0.975)	1572318	202.811	203
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	870508	50.0000	
88 Benzyl chloride	91	16.320	16.319	(1.009)	5267897	242.992	243
91 bis(2-Chloroisopropyl)ether	45	16.722	16.721	(1.034)	1596075	246.688	247

Data File: /chem/VOA4.i/113009v4/4n1055L.d
Date : 30-NOV-2009 17:22
Client ID: LCS
Sample Info: 1120198368819277111IVOAFI1I
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

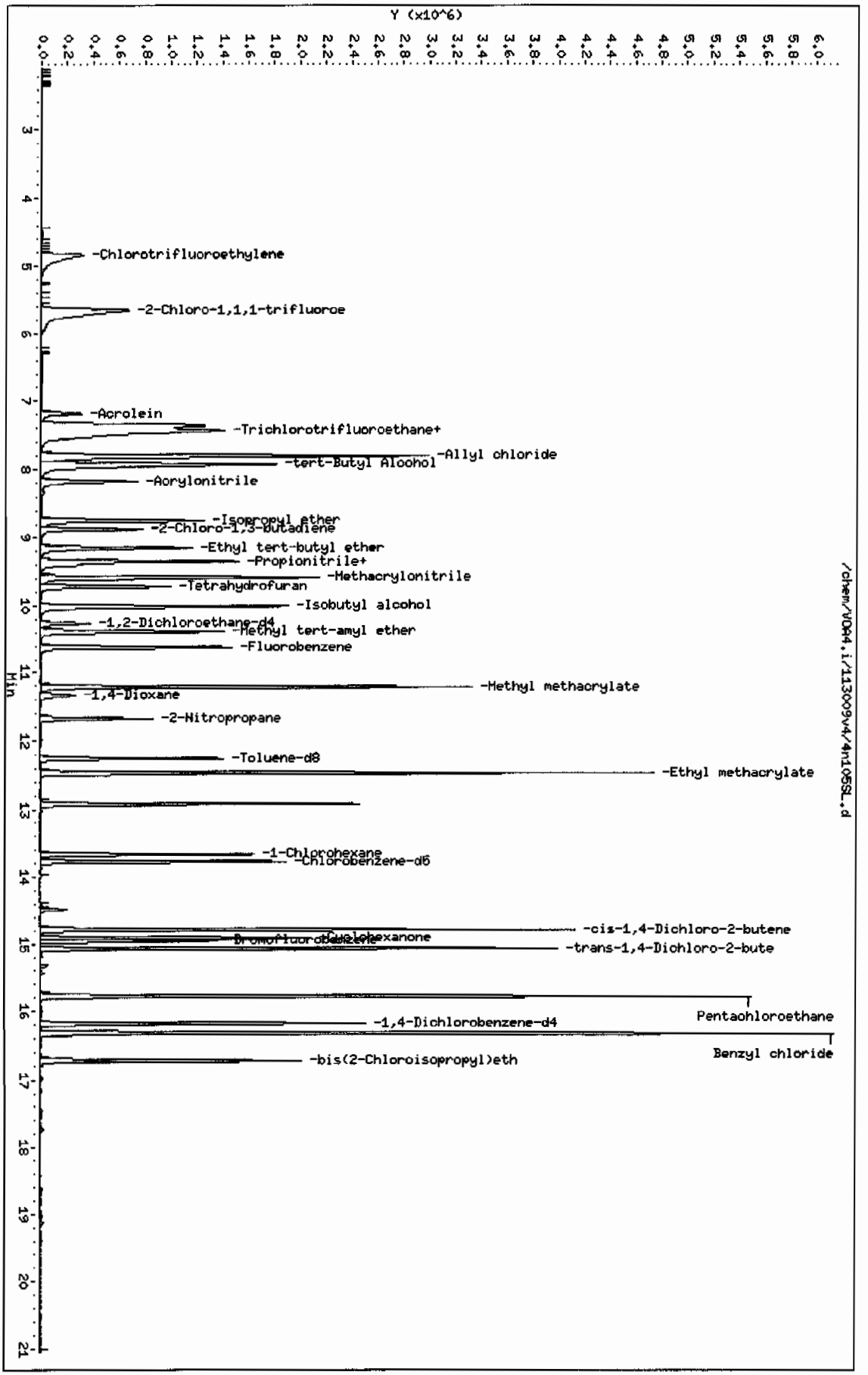

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201991930**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 16:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n203la.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		47.6	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.9	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		51.1	ug/kg	0.300	1.00
74-83-9	Bromomethane		50.3	ug/kg	0.300	1.00
75-00-3	Chloroethane		52.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		57.0	ug/kg	0.300	1.00
67-64-1	Acetone		270	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		57.5	ug/kg	0.300	1.00
74-88-4	Iodomethane		259	ug/kg	1.60	5.00
75-09-2	Methylene chloride		54.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		284	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		56.7	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		55.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		280	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		55.1	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		58.9	ug/kg	0.300	1.00
67-66-3	Chloroform		54.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		53.1	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		60.2	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		59.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		61.8	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		53.9	ug/kg	0.300	1.00
71-43-2	Benzene		53.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		56.9	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		53.7	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		55.6	ug/kg	0.300	1.00
74-95-3	Dibromomethane		54.2	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		271	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		55.5	ug/kg	0.300	1.00
108-88-3	Toluene		51.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.8	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		51.7	ug/kg	0.300	1.00
591-78-6	2-Hexanone		244	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		50.8	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		52.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		53.9	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		53.1	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		52.7	ug/kg	0.300	1.00

Volatile
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Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201991930**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 16:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n203la.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.0	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		105	ug/kg	0.300	2.00
95-47-6	o-Xylene		52.2	ug/kg	0.300	1.00
100-42-5	Styrene		51.6	ug/kg	0.300	1.00
75-25-2	Bromoform		53.2	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		53.5	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		54.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		50.6	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		53.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		51.4	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		53.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		52.1	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		52.7	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		52.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		51.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		53.0	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		52.7	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		50.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		50.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		53.8	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		54.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		52.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		50.1	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n2031a.d
Lab Smp Id: 1201991930 Client Smp ID: LCS
Inj Date : 01-DEC-2009 16:35
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201991930|927711|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2623167	157.245	157
M 2 1,2-Dichloroethylene (total)	96				1353825	111.773	112
M 135 1,3-Dichloropropylene	75				1506450	112.459	112
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	340376	47.5670	47.6
4 Chloromethane	50	5.299	5.299	(0.499)	506614	45.8575	45.8
5 Vinyl chloride	62	5.521	5.521	(0.520)	522894	51.1301	51.1
6 Bromomethane	94	6.138	6.130	(0.578)	405502	50.2774	50.3
7 Chloroethane	64	6.288	6.281	(0.592)	393188	52.3956	52.4
8 Trichlorofluoromethane	101	6.662	6.662	(0.627)	719803	57.0454	57.0
134 Ethyl Ether	59	7.004	6.997	(0.660)	368834	53.3729	53.4
10 Acetone	43	7.357	7.357	(0.693)	1685091	270.068	270
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	746892	57.4529	57.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.631	7.632	(0.719)	4025515	258.859	259
15 Acetonitrile	41	7.705	7.699	(0.726)	1929325	1368.67	1370
128 Methyl acetate	43	7.753	7.747	(0.730)	1864454	259.116	259
14 Carbon disulfide	76	7.772	7.772	(0.732)	7647629	283.705	284
17 Methylene chloride	84	7.949	7.936	(0.749)	553876	54.8974	54.9
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1314761	52.2359	52.2
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	652345	56.6979	56.7
23 Vinyl acetate	43	8.711	8.711	(0.820)	4824530	288.328	288
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	799533	55.8678	55.9
30 2-Butanone	43	9.326	9.326	(0.878)	2013255	280.436	280
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	701480	55.0749	55.1
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	486941	58.9167	58.9
29 Bromochloromethane	128	9.655	9.662	(0.909)	238458	53.1344	53.1
32 Chloroform	83	9.692	9.692	(0.913)	787794	54.4805	54.5
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	646100	60.2105	60.2
129 Cyclohexane	56	10.082	10.082	(0.949)	756364	61.0276	61.0
34 1,1-Dichloropropene	75	10.137	10.131	(0.955)	636065	59.5808	59.6
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	639455	61.7809	61.8
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	355635	58.9621	59.0
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	613394	53.8821	53.9
38 Benzene	78	10.375	10.375	(0.977)	1766343	53.6623	53.7
139 Cyclohexene	67	10.497	10.497	(0.989)	894870	57.5101	57.5
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1535652	50.0000	
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	2080364	6311.43	6310
39 Trichloroethylene	95	11.009	11.003	(1.037)	470428	56.9245	56.9
130 Methylcyclohexane	83	11.265	11.265	(1.061)	793709	60.2321	60.2
41 1,2-Dichloropropane	63	11.241	11.247	(1.059)	463071	53.6608	53.7
43 Dibromomethane	93	11.375	11.375	(1.071)	289172	54.2496	54.2
45 Bromodichloromethane	83	11.484	11.484	(1.082)	617668	55.6211	55.6
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1035171	210.154	210
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	769234	55.5491	55.5
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	1072440	271.159	271
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1060555	49.6983	49.7
50 Toluene	92	12.326	12.326	(0.895)	1101664	51.3057	51.3
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	737216	53.7882	53.8
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	352405	51.7417	51.7
55 2-Hexanone	43	12.856	12.856	(0.934)	2603388	244.283	244
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	700049	50.7949	50.8
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	439000	52.6307	52.6
57 Dibromochloromethane	129	13.149	13.149	(0.955)	507580	53.8522	53.8
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	458670	53.1332	53.1
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1225210	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1304771	52.6829	52.7
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	486968	52.0665	52.1
58 Ethylbenzene	91	13.862	13.862	(1.007)	2155627	51.9997	52.0
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1731869	105.092	105
64 o-Xylene	106	14.405	14.405	(1.046)	891298	52.1528	52.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
65 Styrene	104	14.405	14.405	(1.046)	1498075	51.5516	51.6
66 Bromoform	173	14.661	14.661	(0.906)	478702	53.2271	53.2
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2396247	53.0345	53.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	505349	52.3470	52.3
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	708718	53.5010	53.5
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	191020	54.0659	54.1
75 Bromobenzene	156	15.167	15.167	(0.937)	722181	50.5902	50.6
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2851292	53.1264	53.1
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2099531	52.0859	52.1
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1958491	51.3895	51.4
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1846923	52.7373	52.7
81 tert-Butylbenzene	119	15.709	15.703	(0.971)	2143132	52.4587	52.4
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2191856	51.3818	51.4
83 sec-Butylbenzene	105	15.935	15.929	(0.985)	2886002	52.9619	53.0
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	2355365	52.7179	52.7
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1361223	50.6948	50.7
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	833679	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1361545	50.5245	50.5
89 n-Butylbenzene	91	16.508	16.502	(1.020)	2233476	53.7613	53.8
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1306122	50.1140	50.1
92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	160714	54.6547	54.6
93 1,2,4-Trichlorobenzene	180	18.629	18.635	(1.151)	744921	50.4530	50.4
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	506064	48.5462	48.5
95 Naphthalene	128	19.032	19.032	(1.176)	1343782	52.9792	53.0
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	584292	50.1353	50.1

Data File: /chem/VOA4.i/120109v4/4n2031a.d
Date : 01-DEC-2009 16:35
Client ID: LCS
Sample Info: 1120199193019277111|VOAF|1|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

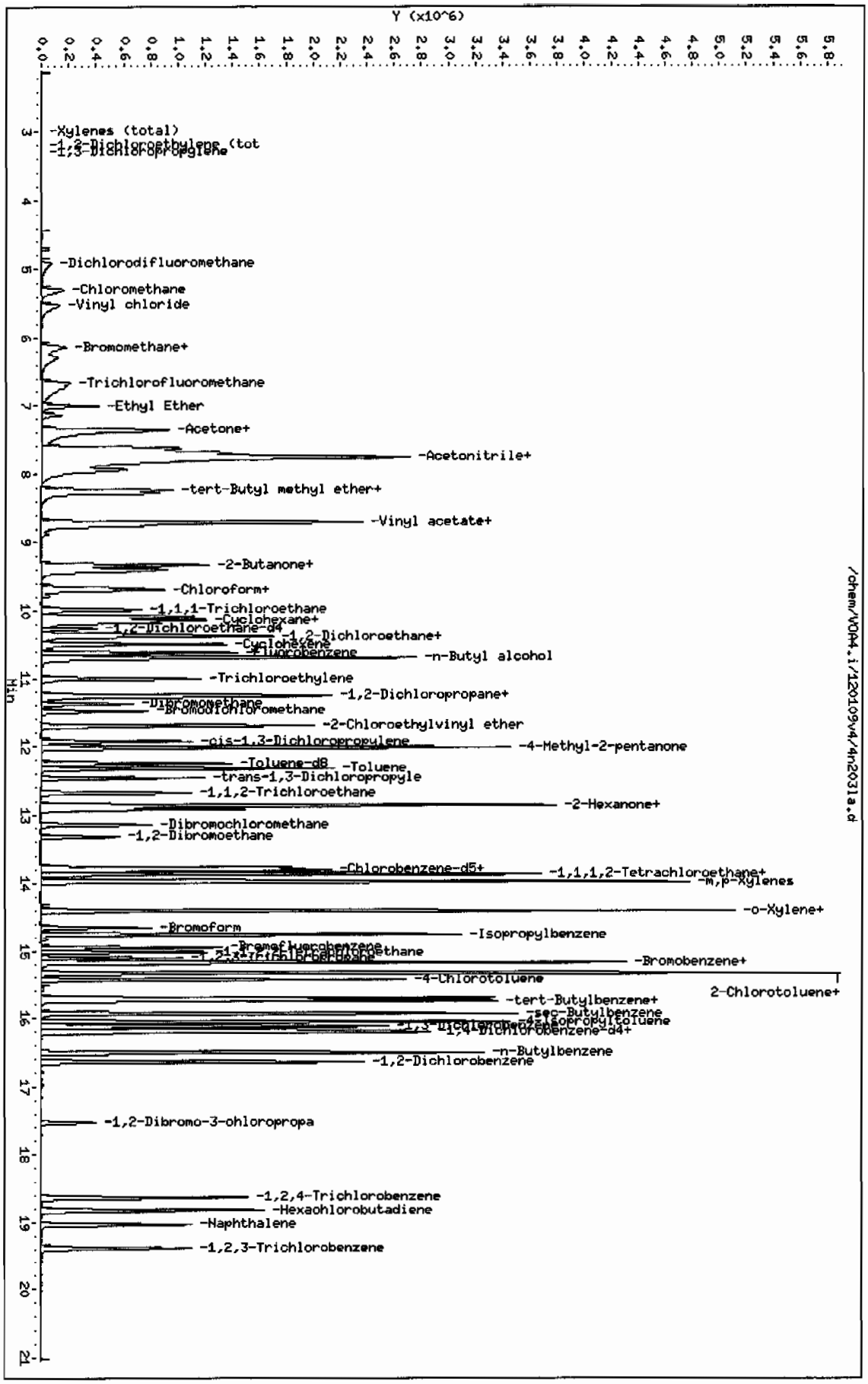

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Volatile
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Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201991931**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:30**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n205sa.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201991931**				
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927709**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:30**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n205sa.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		265	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n205sa.d
Lab Smp Id: 1201991931 Client Smp ID: LCS
Inj Date : 01-DEC-2009 17:30
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201991931|927711|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
9 Acrolein	56	7.186	7.186	(0.677)	416173	253.730	254
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	749306	265.120	265
16 Allyl chloride	41	7.802	7.802	(0.735)	3175914	242.477	242
18 Acrylonitrile	53	8.180	8.180	(0.770)	796814	240.919	241
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	620939	49.9397	49.9
26 Ethyl acetate	43	9.338	9.345	(0.879)	2042053	220.232	220
28 Propionitrile	54	9.393	9.393	(0.885)	325377	234.242	234
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1298787	236.158	236
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	738786	254.039	254
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1017174	2414.13	2410
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	313889	52.9792	53.0
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1508454	50.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1414375	230.440	230
97 1,4-Dioxane	88	11.326	11.326	(1.067)	268704	2447.80	2450
48 2-Nitropropane	43	11.673	11.673	(1.099)	722930	252.962	253
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1036938	49.4297	49.4
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2590306	216.227	216
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1204435	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	925433	259.311	259
70 Cyclohexanone	42	14.904	14.904	(1.082)	685180	749.692	750
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	474415	50.6923	50.7
69 trans-1,4-Dichloro-2-butene	53	15.063	15.069	(0.931)	883558	256.206	256
82 Pentachloroethane	167	15.776	15.776	(0.975)	1652812	229.631	230
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	808195	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	5037085	250.259	250
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1487821	247.687	248

Data File: /chem/VOA4.i/120109v4/4n205sa.d
Date : 01-DEC-2009 17:30
Client ID: LCS
Sample Info: 1120199193119277111111VOAF111
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

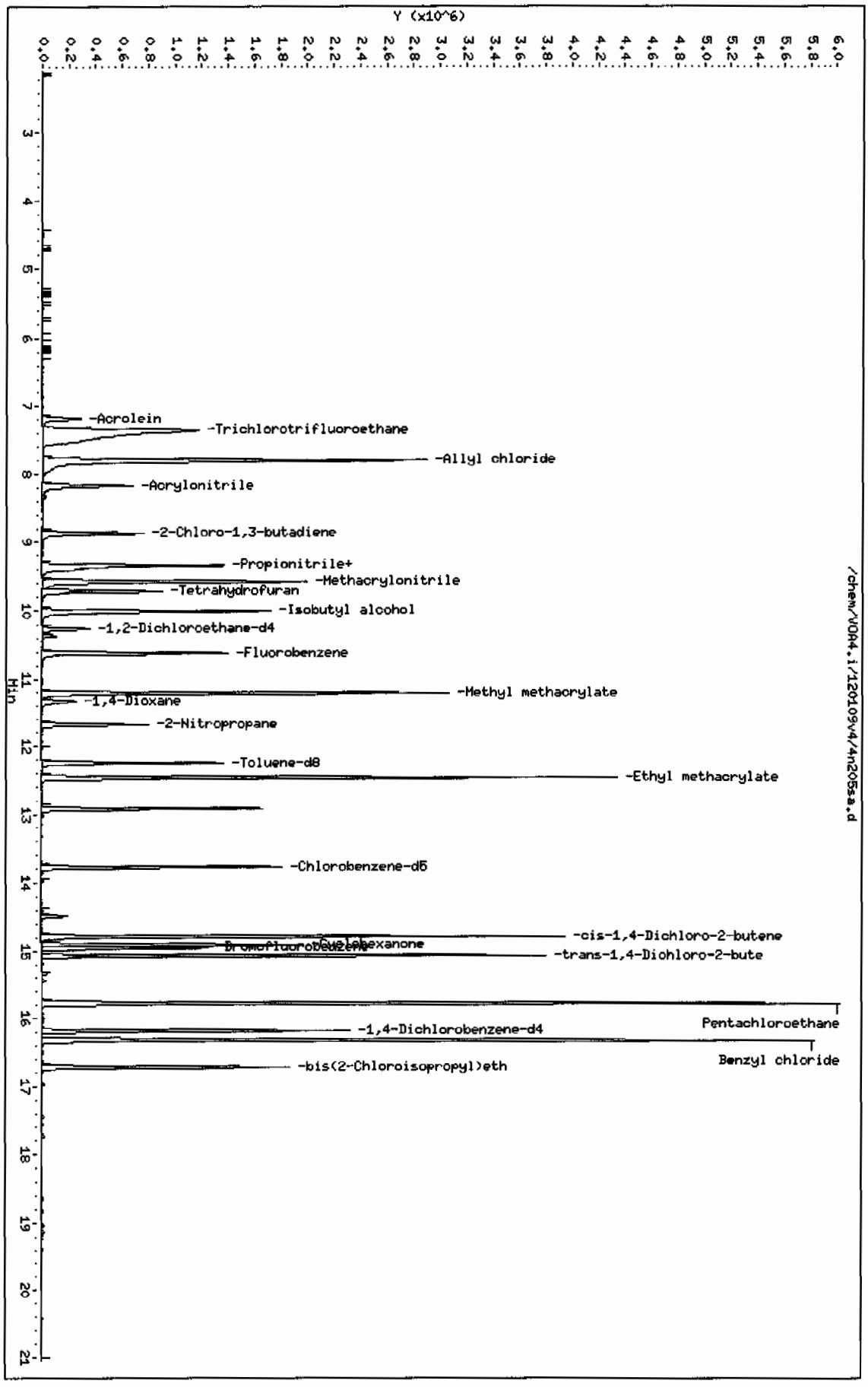

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201983685	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
Client Sample:	QC for batch 927709	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14108PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 01:46	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 20:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n220.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		42.4	ug/kg	0.367	1.08
74-87-3	Chloromethane		42.0	ug/kg	0.323	1.08
75-01-4	Vinyl chloride		46.6	ug/kg	0.323	1.08
74-83-9	Bromomethane		48.7	ug/kg	0.323	1.08
75-00-3	Chloroethane		49.4	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane		51.4	ug/kg	0.323	1.08
67-64-1	Acetone		233	ug/kg	1.79	5.39
75-35-4	1,1-Dichloroethylene		51.1	ug/kg	0.323	1.08
74-88-4	Iodomethane		245	ug/kg	1.72	5.39
75-09-2	Methylene chloride		50.3	ug/kg	2.16	5.39
75-15-0	Carbon disulfide		256	ug/kg	1.35	5.39
156-60-5	trans-1,2-Dichloroethylene		51.3	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane		52.5	ug/kg	0.323	1.08
78-93-3	2-Butanone		241	ug/kg	1.62	5.39
156-59-2	cis-1,2-Dichloroethylene		51.6	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane		52.9	ug/kg	0.323	1.08
67-66-3	Chloroform		50.7	ug/kg	0.323	1.08
74-97-5	Bromochloromethane		49.9	ug/kg	0.356	1.08
71-55-6	1,1,1-Trichloroethane		54.2	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene		53.2	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride		54.2	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane		51.3	ug/kg	0.323	1.08
71-43-2	Benzene		49.5	ug/kg	0.323	1.08
79-01-6	Trichloroethylene		51.9	ug/kg	0.356	1.08
78-87-5	1,2-Dichloropropane		50.8	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane		51.9	ug/kg	0.323	1.08
74-95-3	Dibromomethane		50.5	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone		246	ug/kg	1.35	5.39
10061-01-5	cis-1,3-Dichloropropylene		50.9	ug/kg	0.323	1.08
108-88-3	Toluene		47.6	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene		50.0	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane		49.3	ug/kg	0.323	1.08
591-78-6	2-Hexanone		197	ug/kg	1.62	5.39
142-28-9	1,3-Dichloropropane		48.8	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene		46.0	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane		50.9	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane		50.1	ug/kg	0.323	1.08
108-90-7	Chlorobenzene		48.9	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201983685**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**7.2**
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14108PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 01:46**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 20:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n220.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.9	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes		95.3	ug/kg	0.323	2.16
95-47-6	o-Xylene		48.0	ug/kg	0.323	1.08
100-42-5	Styrene		48.0	ug/kg	0.323	1.08
75-25-2	Bromoform		49.2	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane		50.1	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane		50.2	ug/kg	0.323	1.08
108-86-1	Bromobenzene		46.4	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene		47.2	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene		46.8	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene		47.4	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene		47.0	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene		47.6	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene		47.9	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene		47.4	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene		48.1	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene		47.7	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene		47.1	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene		47.1	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene		48.1	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane		52.1	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39
630-20-6	1,1,1,2-Tetrachloroethane		49.2	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene		48.2	ug/kg	0.323	1.08

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n220.d
Lab Smp Id: 1201983685 Client Smp ID: RE03-09-14108MS
Inj Date : 02-DEC-2009 01:46
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201983685|927711|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241615001
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.23270	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1550360	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1208549	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	832392	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	345766	56.7820	61.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1054761	50.1082	54.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	490875	50.9264	54.9
3 Dichlorodifluoromethane	85	4.919	4.912	(0.463)	284432	39.3719	42.4
4 Chloromethane	50	5.299	5.299	(0.499)	434527	38.9592	42.0
5 Vinyl chloride	62	5.528	5.521	(0.521)	445936	43.1913	46.6
6 Bromomethane	94	6.145	6.130	(0.579)	367681	45.1555	48.7
7 Chloroethane	64	6.295	6.281	(0.593)	346923	45.7918	49.4
8 Trichlorofluoromethane	101	6.668	6.662	(0.628)	607522	47.6902	51.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.357	7.357	(0.693)	1362850	216.350	233
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	621601	47.3616	51.0
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1175149	43.6751	47.1
13 Iodomethane	142	7.632	7.632	(0.719)	3575109	227.715	245
17 Methylene chloride	84	7.942	7.936	(0.748)	484654	46.7013	50.3
14 Carbon disulfide	76	7.772	7.772	(0.732)	6458942	237.335	256
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	552530	47.5670	51.3
22 1,1-Dichloroethane	63	8.765	8.759	(0.825)	704068	48.7304	52.5
30 2-Butanone	43	9.326	9.326	(0.878)	1621275	223.693	241
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	615752	47.8855	51.6
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1171672	43.7030	47.1
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	409670	49.0972	52.9
32 Chloroform	83	9.692	9.692	(0.913)	685971	46.9888	50.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1163492	44.7105	48.2
29 Bromochloromethane	128	9.662	9.662	(0.910)	209674	46.2774	49.9
36 1,1,1-Trichloroethane	97	9.985	9.979	(0.940)	544358	50.2479	54.2
34 1,1-Dichloropropene	75	10.137	10.131	(0.955)	532344	49.3921	53.2
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	525752	50.3136	54.2
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	547381	47.6272	51.3
38 Benzene	78	10.375	10.375	(0.977)	1525554	45.9073	49.5
39 Trichloroethylene	95	11.009	11.003	(1.037)	402031	48.1865	51.9
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	410790	47.1509	50.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	540079	48.1728	51.9
43 Dibromomethane	93	11.375	11.375	(1.071)	252042	46.8353	50.5
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	892035	228.654	246
46 cis-1,3-Dichloropropylene	75	11.936	11.929	(1.124)	660587	47.2508	50.9
50 Toluene	92	12.326	12.326	(0.895)	936136	44.1979	47.6
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	627099	46.3846	50.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	307049	45.7038	49.3
55 2-Hexanone	43	12.862	12.856	(0.934)	1921334	182.770	197
52 1,3-Dichloropropane	76	12.881	12.880	(0.935)	614852	45.2281	48.8
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	350971	42.6572	46.0
57 Dibromochloromethane	129	13.149	13.149	(0.955)	439174	47.2370	50.9
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	395554	46.4534	50.1
62 Chlorobenzene	112	13.801	13.801	(1.002)	1109186	45.4032	48.9
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	421113	45.6460	49.2
58 Ethylbenzene	91	13.862	13.862	(1.007)	1816980	44.4348	47.9
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1436818	88.3898	95.3
64 o-Xylene	106	14.405	14.405	(1.046)	751159	44.5587	48.0
65 Styrene	104	14.405	14.405	(1.046)	1277263	44.5590	48.0
66 Bromoform	173	14.661	14.661	(0.906)	409566	45.6103	49.2
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	615132	46.5080	50.1
74 1,2,3-Trichloropropane	110	15.112	15.106	(0.934)	164253	46.5617	50.2
75 Bromobenzene	156	15.167	15.167	(0.937)	614025	43.0802	46.4
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2343891	43.7399	47.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1650641	43.3787	46.8
67 Isopropylbenzene	105	14.758	14.758	(0.912)	1985654	44.0151	47.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1754561	43.5951	47.0
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1544657	44.1745	47.6
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	1814023	44.4716	47.9
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	1872282	43.9582	47.4
83 sec-Butylbenzene	105	15.935	15.929	(0.985)	2429272	44.6493	48.1
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	1974593	44.2637	47.7
89 n-Butylbenzene	91	16.508	16.502	(1.020)	1852694	44.6645	48.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.526	(1.084)	142021	48.3724	52.1

Data File: /chem/VOA4.i/120109v4/4n220.d
Date : 02-DEC-2009 01:46
Client ID: REO3-09-14108MS
Sample Info: 1120198368519277111|1|VOAF|1|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

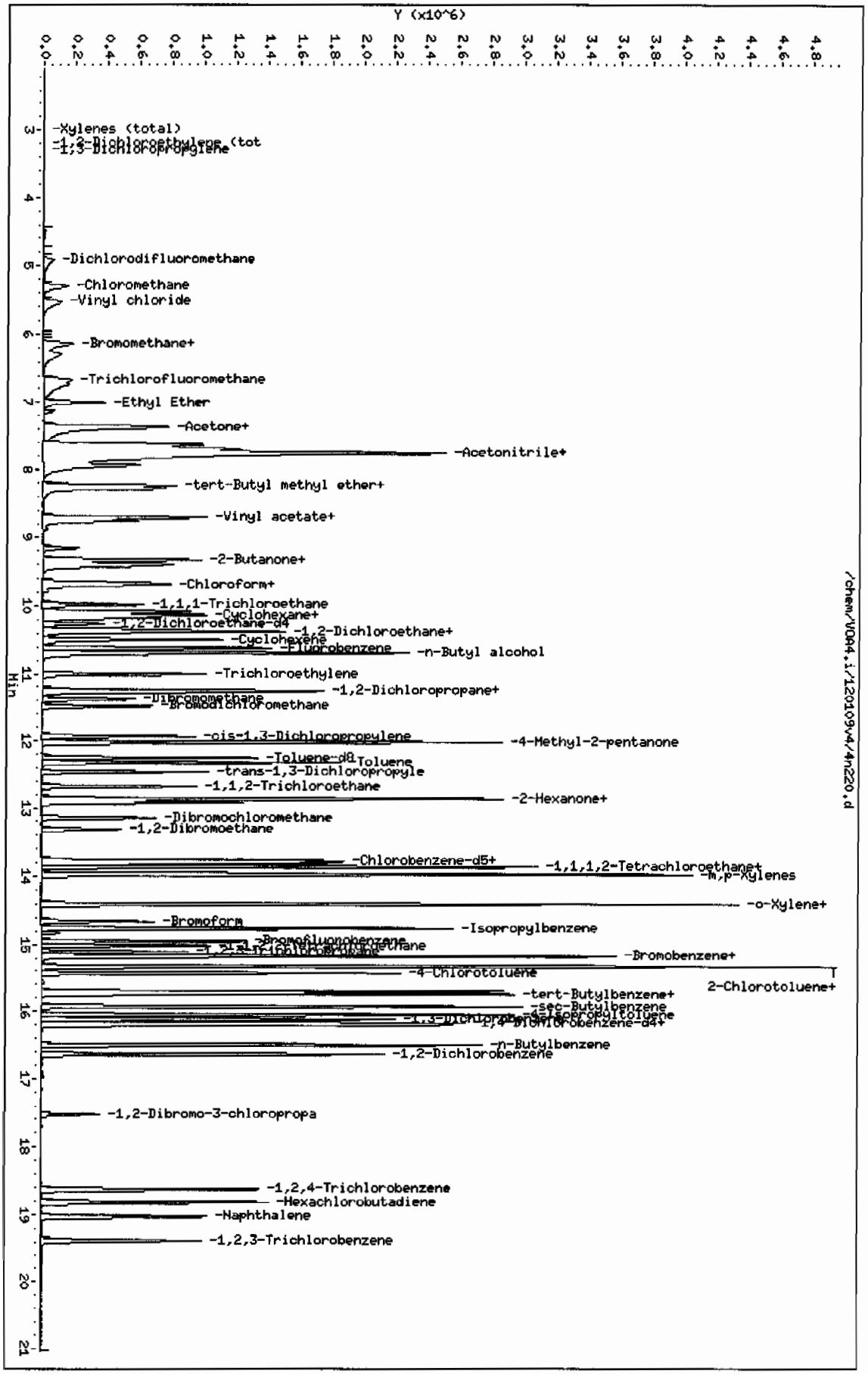

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201983686	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
Client Sample:	QC for batch 927709	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14108PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927711	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 02:13	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 20:31	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n221.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.2	ug/kg	0.367	1.08
74-87-3	Chloromethane		42.6	ug/kg	0.323	1.08
75-01-4	Vinyl chloride		46.3	ug/kg	0.323	1.08
74-83-9	Bromomethane		48.7	ug/kg	0.323	1.08
75-00-3	Chloroethane		48.3	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane		50.1	ug/kg	0.323	1.08
67-64-1	Acetone		235	ug/kg	1.79	5.39
75-35-4	1,1-Dichloroethylene		50.0	ug/kg	0.323	1.08
74-88-4	Iodomethane		244	ug/kg	1.72	5.39
75-09-2	Methylene chloride		50.9	ug/kg	2.16	5.39
75-15-0	Carbon disulfide		257	ug/kg	1.35	5.39
156-60-5	trans-1,2-Dichloroethylene		51.7	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane		52.8	ug/kg	0.323	1.08
78-93-3	2-Butanone		245	ug/kg	1.62	5.39
156-59-2	cis-1,2-Dichloroethylene		51.6	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane		52.4	ug/kg	0.323	1.08
67-66-3	Chloroform		50.8	ug/kg	0.323	1.08
74-97-5	Bromochloromethane		50.5	ug/kg	0.356	1.08
71-55-6	1,1,1-Trichloroethane		54.0	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene		53.6	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride		54.5	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane		51.2	ug/kg	0.323	1.08
71-43-2	Benzene		49.5	ug/kg	0.323	1.08
79-01-6	Trichloroethylene		52.2	ug/kg	0.356	1.08
78-87-5	1,2-Dichloropropane		51.1	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane		52.2	ug/kg	0.323	1.08
74-95-3	Dibromomethane		51.1	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone		253	ug/kg	1.35	5.39
10061-01-5	cis-1,3-Dichloropropylene		51.1	ug/kg	0.323	1.08
108-88-3	Toluene		48.7	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene		50.6	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane		51.0	ug/kg	0.323	1.08
591-78-6	2-Hexanone		199	ug/kg	1.62	5.39
142-28-9	1,3-Dichloropropane		49.9	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene		48.2	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane		52.2	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane		51.4	ug/kg	0.323	1.08
108-90-7	Chlorobenzene		50.3	ug/kg	0.323	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201983686**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**7.2**
Client Sample:	**QC for batch 927709**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14108PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927711**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 02:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 20:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n221.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		49.3	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes		99.1	ug/kg	0.323	2.16
95-47-6	o-Xylene		49.9	ug/kg	0.323	1.08
100-42-5	Styrene		49.6	ug/kg	0.323	1.08
75-25-2	Bromoform		51.5	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane		51.5	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane		52.8	ug/kg	0.323	1.08
108-86-1	Bromobenzene		48.5	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene		49.9	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene		49.1	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene		49.7	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene		49.3	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene		49.9	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene		50.4	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene		49.5	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene		50.4	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene		49.9	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene		49.3	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene		48.8	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene		50.4	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane		54.1	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.39	ug/kg	1.72	5.39
630-20-6	1,1,1,2-Tetrachloroethane		50.4	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene		49.4	ug/kg	0.323	1.08

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n221.d
Lab Smp Id: 1201983686 Client Smp ID: RE03-09-14108MSD
Inj Date : 02-DEC-2009 02:13
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201983686|927711|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241615001
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.23270	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1596076	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1222296	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	840920	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	336160	53.6233	57.8
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1004224	47.1708	50.8
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	469153	48.1792	51.9
3 Dichlorodifluoromethane	85	4.919	4.912	(0.463)	284538	38.2584	41.2
4 Chloromethane	50	5.299	5.299	(0.499)	454175	39.5545	42.6
5 Vinyl chloride	62	5.521	5.521	(0.520)	456607	42.9581	46.3
6 Bromomethane	94	6.138	6.130	(0.578)	378847	45.1942	48.7
7 Chloroethane	64	6.288	6.281	(0.592)	349319	44.7874	48.3
8 Trichlorofluoromethane	101	6.668	6.662	(0.628)	609945	46.5090	50.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.357	7.357	(0.693)	1410883	217.560	234
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	626371	46.3580	50.0
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1231645	45.3106	48.8
13 Iodomethane	142	7.632	7.632	(0.719)	3656411	226.222	244
17 Methylene chloride	84	7.942	7.936	(0.748)	504169	47.2593	50.9
14 Carbon disulfide	76	7.772	7.772	(0.732)	6669007	238.035	256
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	573918	47.9931	51.7
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	728003	48.9438	52.8
30 2-Butanone	43	9.326	9.326	(0.878)	1695929	227.291	245
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	633211	47.8328	51.6
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1239846	45.7768	49.3
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	417449	48.5965	52.4
32 Chloroform	83	9.692	9.692	(0.913)	708526	47.1436	50.8
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1205302	45.8475	49.4
29 Bromochloromethane	128	9.662	9.662	(0.910)	218468	46.8372	50.5
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	558273	50.0563	54.0
34 1,1-Dichloropropene	75	10.137	10.131	(0.955)	552149	49.7623	53.6
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	543593	50.5310	54.5
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	562381	47.5308	51.2
38 Benzene	78	10.375	10.375	(0.977)	1569598	45.8798	49.4
39 Trichloroethylene	95	11.009	11.003	(1.037)	416197	48.4556	52.2
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	425328	47.4212	51.1
45 Bromodichloromethane	83	11.484	11.484	(1.082)	558557	48.3939	52.2
43 Dibromomethane	93	11.375	11.375	(1.071)	262836	47.4421	51.1
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	927097	234.969	253
46 cis-1,3-Dichloropropylene	75	11.936	11.929	(1.124)	681662	47.3617	51.0
50 Toluene	92	12.326	12.326	(0.895)	967940	45.1855	48.7
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	641751	46.9345	50.6
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	321308	47.2884	51.0
55 2-Hexanone	43	12.862	12.856	(0.934)	1960733	184.420	199
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	636611	46.3020	49.9
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	372242	44.7336	48.2
57 Dibromochloromethane	129	13.149	13.149	(0.955)	455442	48.4358	52.2
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	410283	47.6413	51.4
62 Chlorobenzene	112	13.807	13.801	(1.003)	1151846	46.6191	50.2
60 1,1,1,2-Tetrachloroethane	131	13.856	13.850	(1.006)	436282	46.7584	50.4
58 Ethylbenzene	91	13.862	13.862	(1.007)	1890337	45.7089	49.3
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1510935	91.9039	99.1
64 o-Xylene	106	14.405	14.405	(1.046)	789603	46.3125	49.9
65 Styrene	104	14.405	14.405	(1.046)	1334147	46.0200	49.6
66 Bromoform	173	14.661	14.661	(0.906)	433247	47.7581	51.5
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	637907	47.7408	51.5
74 1,2,3-Trichloropropane	110	15.112	15.106	(0.934)	174687	49.0173	52.8
75 Bromobenzene	156	15.167	15.167	(0.937)	648269	45.0215	48.5
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2504930	46.2710	49.9
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1750626	45.5397	49.1
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2100679	46.0926	49.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1858394	45.7067	49.3
80 4-Chlorotoluene	91	15.435	15.429	(0.954)	1635772	46.3059	49.9
81 tert-Butylbenzene	119	15.709	15.703	(0.971)	1927241	46.7680	50.4
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	1975884	45.9201	49.5
83 sec-Butylbenzene	105	15.935	15.929	(0.985)	2571650	46.7868	50.4
84 4-Isopropyltoluene	119	16.057	16.051	(0.992)	2086549	46.2991	49.9
89 n-Butylbenzene	91	16.508	16.502	(1.020)	1957744	46.7184	50.4
92 1,2-Dibromo-3-chloropropane	157	17.532	17.526	(1.084)	148857	50.1866	54.1

Data File: /chem/VOA4.i/120109v4/4n221.d
Date : 02-DEC-2009 02:13
Client ID: RE03-09-14108WSD
Sample Info: 1120198368619277141111VOAF11!
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

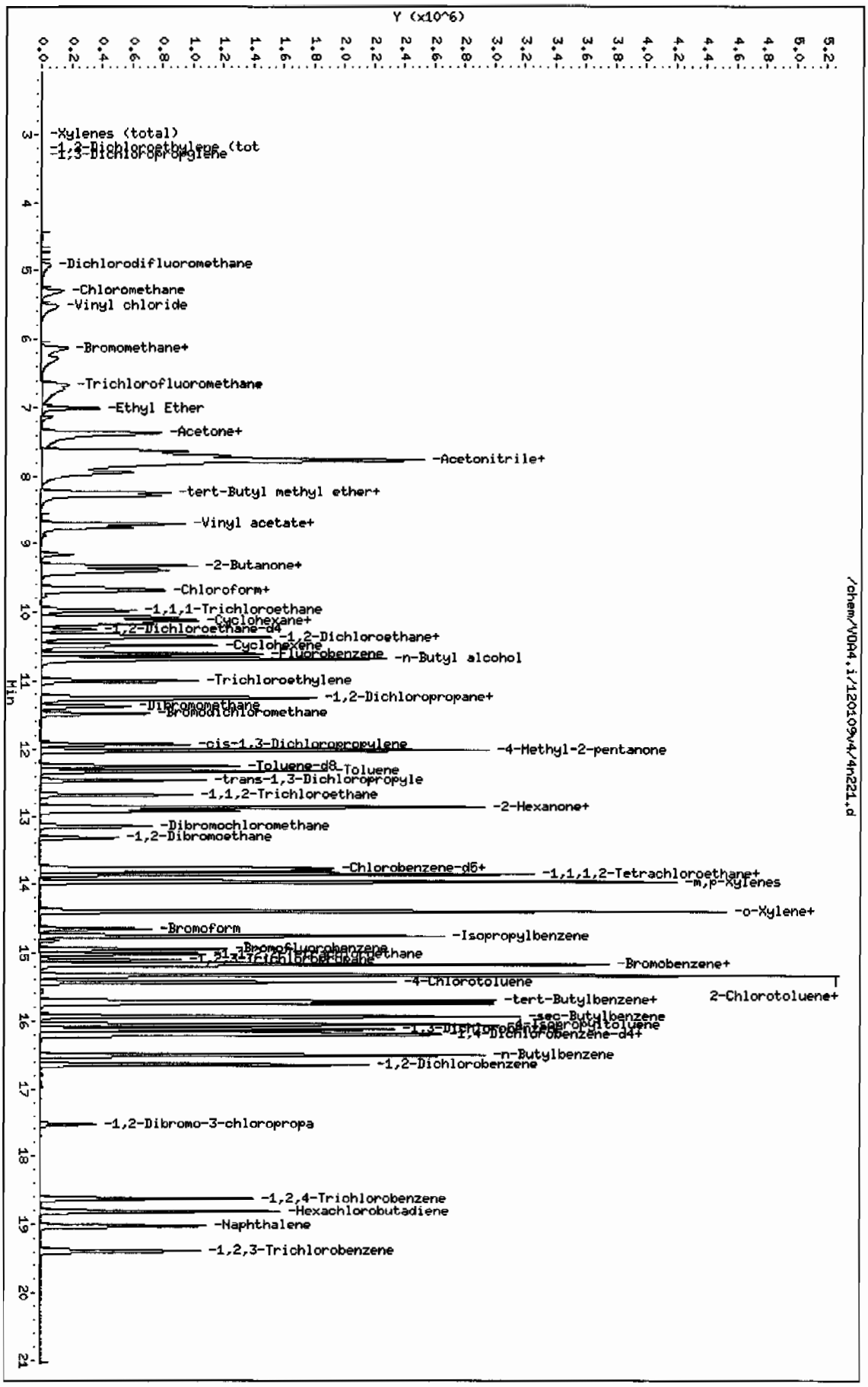

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **927709** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201991930 LCS	01-DEC-2009 16:00:00	Soil	5	5	1	
1201991931 LCS	01-DEC-2009 16:15:00	Soil	5	5	1	
1201991929 MB	01-DEC-2009 16:30:00	Soil	5	5	1	
241615010	01-DEC-2009 19:51:00	Soil	5	5	1	
1201983685 PS (241615001)	01-DEC-2009 20:30:00	Soil	5	5	1	
1201983686 PSD (241615001)	01-DEC-2009 20:31:00	Soil	5	5	1	
1201983687 LCS	30-NOV-2009 16:00:00	Soil	5	5	1	
1201983688 LCS	30-NOV-2009 16:15:00	Soil	5	5	1	
1201983684 MB	30-NOV-2009 16:30:00	Soil	5	5	1	
241615017	30-NOV-2009 18:05:00	Soil	5	5	1	
241615019	30-NOV-2009 18:06:00	Soil	5	5	1	
241615001	30-NOV-2009 18:07:00	Soil	5	5	1	
241615002	30-NOV-2009 18:08:00	Soil	5	5	1	
241615003	30-NOV-2009 18:09:00	Soil	5	5	1	
241615004	30-NOV-2009 18:10:00	Soil	5	5	1	
241615005	30-NOV-2009 18:11:00	Soil	5	5	1	
241615006	30-NOV-2009 18:12:00	Soil	5	5	1	
241615007	30-NOV-2009 18:13:00	Soil	5	5	1	
241615008	30-NOV-2009 18:14:00	Soil	5	5	1	
241615009	30-NOV-2009 18:15:00	Soil	5	5	1	
241615011	30-NOV-2009 18:16:00	Soil	5	5	1	
241615012	30-NOV-2009 18:17:00	Soil	5	5	1	
241615013	30-NOV-2009 18:18:00	Soil	5	5	1	
241615014	30-NOV-2009 18:19:00	Soil	5	5	1	
241615015	30-NOV-2009 18:20:00	Soil	5	5	1	
241615016	30-NOV-2009 18:21:00	Soil	5	5	1	

Prep Logbook

Batch ID: **927709** Verified by: _____

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
241615018	30-NOV-2009 18:23:00	Soil	5	5	1	
241615020	30-NOV-2009 18:24:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/22/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

CI test lot # 81710

Sequence Number: 112209V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS					
BFB	UVM091020-02				1
SHORT					
DHEC					

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable (O/X)	Comments
11/22/2009 9:20	4L701.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/22/2009 9:47	4L702.D	12019----	GEL	BLANK	5ML	1	N/A	2	w	ACJ	N/A	X	
11/22/2009 10:14	4L703.D	W4VM091122-01	GEL	VSTD0005	5ML	1	N/A	3	w	ACJ	N/A	O	UVM090911-01C/UVM091116-01A
11/22/2009 10:41	4L704.D	W4VM091122-02	GEL	VSTD001	5ML	1	N/A	4	w	ACJ	N/A	X	UVM090911-02C/UVM091116-02A;NOT NEEDED
11/22/2009 11:09	4L705.D	W4VM091122-03	GEL	VSTD001	5ML	1	N/A	5	w	ACJ	N/A	O	UVM090911-02C/UVM091116-02A
11/22/2009 11:36	4L706.D	W4VM091122-04	GEL	VSTD002	5ML	1	N/A	6	w	ACJ	N/A	O	UVM090911-03C/UVM091116-03A
11/22/2009 12:04	4L707.D	W4VM091122-05	GEL	VSTD005	5ML	1	N/A	7	w	ACJ	N/A	O	UVM090911-04C/UVM091116-04A
11/22/2009 12:31	4L708.D	W4VM091122-06	GEL	VSTD010	5ML	1	N/A	8	w	ACJ	N/A	O	UVM090911-05C/UVM091116-05A
11/22/2009 12:59	4L709.D	W4VM091122-07	GEL	VSTD020	5ML	1	N/A	9	w	ACJ	N/A	O	UVM090911-06C/UVM091116-06A
11/22/2009 13:27	4L710.D	W4VM091122-08	GEL	VSTD050	5ML	1	N/A	10	w	ACJ	N/A	O	UVM090911-07C/UVM091116-07A
11/22/2009 13:54	4L711.D	W4VM091122-09	GEL	VSTD100	5ML	1	N/A	11	w	ACJ	N/A	O	UVM090911-08C/UVM091116-08A
11/22/2009 14:21	4L712.D	12019----	GEL	BLANK	5ML	1	N/A	12	w	ACJ	N/A	X	
11/22/2009 14:48	4L713.D	W4VM091122-10	GEL	VSTD005S	5ML	1	N/A	13	w	ACJ	N/A	O	UVM091110-01A/UVM091118-01
11/22/2009 15:16	4L714.D	W4VM091122-11	GEL	VSTD010S	5ML	1	N/A	14	w	ACJ	N/A	O	UVM091110-02A/UVM091118-02
11/22/2009 15:43	4L715.D	W4VM091122-12	GEL	VSTD025S	5ML	1	N/A	15	w	ACJ	N/A	O	UVM091110-03A/UVM091118-03
11/22/2009 16:10	4L716.D	W4VM091122-13	GEL	VSTD050S	5ML	1	N/A	16	w	ACJ	N/A	O	UVM091110-04A/UVM091118-04
11/22/2009 16:37	4L717.D	W4VM091122-14	GEL	VSTD100S	5ML	1	N/A	17	w	ACJ	N/A	X	UVM091110-05A/UVM091118-05; chlorotrifluoroethylene high
11/22/2009 17:04	4L718.D	W4VM091122-15	GEL	VSTD250S	5ML	1	N/A	18	w	ACJ	N/A	O	UVM091110-06A/UVM091118-06
11/22/2009 17:32	4L719.D	W4VM091122-16	GEL	VSTD500S	5ML	1	N/A	19	w	ACJ	N/A	O	UVM091110-07A/UVM091118-07
11/22/2009 17:59	4L720.D	12019----	GEL	BLANK	5ML	1	N/A	20	w	ACJ	N/A	X	
11/22/2009 18:26	4L721.D	W4VM091122-17	GEL	ICV	5ML	1	N/A	21	w	ACJ	N/A	X	UVM091105-01A/IVM091122-01
11/22/2009 18:53	4L722.D	W4VM091122-18	GEL	ICV	5ML	1	N/A	22	w	ACJ	N/A	O	UVM091111-01C/IVM091122-01
11/22/2009 19:21	4L723.D	W4VM091122-19	GEL	SHORTICV	5ML	1	N/A	23	w	ACJ	N/A	O	UVM091105-02B/UVM091118-08A

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/30/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 113009V4

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091130-02		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W4VM091130-02			5+5	
BFB	UVM091021-02				1
SHORT	W4VM091130-03/04		5+5	5+5	
DHEC				5	

Purge Amount

5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/30/2009	15:32	4N101.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/30/2009	15:59	4N102.D	W4VM091130-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	X	UVM091111-01E/IVM091130-01
11/30/2009	16:27	4N103.D	W4VM091130-02	GEL	CCV/LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091111-01E/IVM091130-01
11/30/2009	16:54	4N104.D	W4VM091130-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/30/2009	17:22	4N105.D	W4VM091130-04	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/30/2009	17:49	4N106.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
11/30/2009	18:17	4N107.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	X	NOT NEEDED
11/30/2009	18:44	4N108.D	241615017	LANL	927711	5G	1	N/A	8	S	ACJ	N/A	O	
11/30/2009	19:11	4N109.D	241615019	LANL	927711	5G	1	N/A	9	S	ACJ	N/A	O	
11/30/2009	19:39	4N110.D	241615001	LANL	927711	5G	1	N/A	10	S	ACJ	N/A	O	
11/30/2009	20:06	4N111.D	241615002	LANL	927711	5G	1	N/A	11	S	ACJ	N/A	O	
11/30/2009	20:34	4N112.D	241615003	LANL	927711	5G	1	N/A	12	S	ACJ	N/A	O	
11/30/2009	21:01	4N113.D	241615004	LANL	927711	5G	1	N/A	13	S	ACJ	N/A	O	
11/30/2009	21:28	4N114.D	241615005	LANL	927711	5G	1	N/A	14	S	ACJ	N/A	O	
11/30/2009	21:56	4N115.D	241615006	LANL	927711	5G	1	N/A	15	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4N208
11/30/2009	22:23	4N116.D	241615007	LANL	927711	5G	1	N/A	16	S	ACJ	N/A	O	
11/30/2009	22:51	4N117.D	241615008	LANL	927711	5G	1	N/A	17	S	ACJ	N/A	O	
11/30/2009	23:18	4N118.D	241615009	LANL	927711	5G	1	N/A	18	S	ACJ	N/A	O	
11/30/2009	23:45	4N119.D	241615010	LANL	927711	5G	1	N/A	19	S	ACJ	N/A	X	IS LOW; SEE 4N209
1 Dec 2009	00:13	4N120.D	241615011	LANL	927711	5G	1	N/A	20	S	ACJ	N/A	O	
1 Dec 2009	00:40	4N121.D	241615012	LANL	927711	5G	1	N/A	21	S	ACJ	N/A	O	
1 Dec 2009	01:07	4N122.D	241615013	LANL	927711	5G	1	N/A	22	S	ACJ	N/A	O	
1 Dec 2009	01:35	4N123.D	241615014	LANL	927711	5G	1	N/A	23	S	ACJ	N/A	O	
1 Dec 2009	02:01	4N124.D	241615015	LANL	927711	5G	1	N/A	24	S	ACJ	N/A	O	
1 Dec 2009	02:29	4N125.D	241615016	LANL	927711	5G	1	N/A	25	S	ACJ	N/A	O	
1 Dec 2009	02:56	4N126.D	241615018	LANL	927711	5G	1	N/A	26	S	ACJ	N/A	O	
1 Dec 2009	03:23	4N127.D	241615020	LANL	927711	5G	1	N/A	27	S	ACJ	N/A	O	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 12/1/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # _____

Sequence Number: 120109V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091201-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W4VM091201-01/02			5+5	
BFB	UVM091021-02				1
SHORT	UVM091118-08A		5	5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
1 Dec 2009 15:40	4N201.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
1 Dec 2009 16:07	4N202.D	W4VM091201-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091111-01E/IVM091130-01
1 Dec 2009 16:35	4N203.D	W4VM091201-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091111-01E/IVM091130-01
1 Dec 2009 17:02	4N204.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	
1 Dec 2009 17:30	4N205.D	UVM091118-08A	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	
1 Dec 2009 17:57	4N206.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
1 Dec 2009 18:24	4N207.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	O	
1 Dec 2009 20:15	4N208.D	241615006	LANL	927711	5G	1	N/A	8	S	ACJ	N/A	X	CONFIRMS 4N115
1 Dec 2009 20:43	4N209.D	241615010	LANL	927711	5G	1	N/A	9	S	ACJ	N/A	O	
1 Dec 2009 21:12	4N210.D	241752001	WSRS	928131	5ML	1	PH7	10	W	ACJ	N	O	
1 Dec 2009 21:40	4N211.D	12019----	GEL	BLANK	5ML	1	N/A	11	W	ACJ	N/A	X	
1 Dec 2009 22:07	4N212.D	241827001	LANL	928135	5G	1	N/A	12	S	ACJ	N/A	O	
1 Dec 2009 22:35	4N213.D	241827002	LANL	928135	5G	1	N/A	13	S	ACJ	N/A	O	
1 Dec 2009 23:02	4N214.D	241827003	LANL	928135	5G	1	N/A	14	S	ACJ	N/A	O	
1 Dec 2009 23:30	4N215.D	241827004	LANL	928135	5G	1	N/A	15	S	ACJ	N/A	O	
1 Dec 2009 23:57	4N216.D	241827005	LANL	928135	5G	1	N/A	16	S	ACJ	N/A	O	
2 Dec 2009 00:24	4N217.D	241827006	LANL	928135	5G	1	N/A	17	S	ACJ	N/A	O	
2 Dec 2009 00:51	4N218.D	1201984531	LANL	928135	5G	1	N/A	18	S	ACJ	N/A	O	MS 241827001
2 Dec 2009 01:18	4N219.D	1201984532	LANL	928135	5G	1	N/A	19	S	ACJ	N/A	O	MSD 241827001; IS LOW; confirmed by 4n325
2 Dec 2009 01:46	4N220.D	1201983685	LANL	927711	5G	1	N/A	20	S	ACJ	N/A	O	MS 241615001
2 Dec 2009 02:13	4N221.D	1201983686	LANL	927711	5G	1	N/A	21	S	ACJ	N/A	O	MSD 241615001
2 Dec 2009 02:40	4N222.D	1201984527	WSRS	928131	5ML	1	PH7	22	W	ACJ	N	O	MS 241752001
2 Dec 2009 03:07	4N223.D	1201984528	WSRS	928131	5ML	1	PH7	23	W	ACJ	N	O	MSD 241752001

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
14-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
927711	241615006		

Potentially affected work order(s)(SDG): 241615(10-644)

Application Issues:

Other

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Sample 241615006 was below the internal standard response recovery acceptance criteria (limits -50% tp +100%): Fluorobenzene -80.62% Chlorobenzene-d5 -83.75% 1,4-Dichlorobenzene-d4 -89.10%	1. Narrate and report data. The sample was reanalyzed with similar results. It is believed matrix interference has been demonstrated.

Originator's Name:

Amy Jamison 14-DEC-09

Data Validator/Group Leader:

Sarah Kozlik 14-DEC-09

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-644

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	927155
Prep Batch Number:	927154

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241615001	RE03-09-14108
241615002	RE03-09-14106
241615003	RE03-09-14107
241615004	RE03-09-14109
241615005	RE03-09-14252
241615006	RE03-09-14250
241615007	RE03-09-14255
241615008	RE03-09-14256
241615009	RE03-09-14254
241615010	RE03-09-14249
241615011	RE03-09-14248
241615012	RE03-09-14247
241615013	RE03-09-14246
241615014	RE03-09-14253
241615015	RE03-09-14251
241615016	RE03-09-14257
241615018	RE03-10-2729
241615020	RE03-10-6969
1201982264	Method Blank (MB)
1201982265	241615013(RE03-09-14246) Matrix Spike (MS)
1201982266	241615013(RE03-09-14246) Matrix Spike Duplicate (MSD)
1201982267	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories

LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

The LCS (1201982267LCS) recovered the acid surrogate 2,4,6-Tribromophenol at 113% (limits: 37%-118%). All other samples and QC met acceptance criteria for for this surrogate compound. In addition, there was no detection of acid target analytes in the associated samples. Therefore the reported data were not adversely impacted by the surrogate recovery failure.

Laboratory Control Sample (LCS) Recovery
The LCS (1201982267) recovered Hexachlorocyclopentadiene at 139% (limits: (24%-135%). As that analyte was not detected in the associated client samples, the reported data were adversely impacted by the biased high spike recovery.

QC Sample Designation
Sample 241615013 (RE03-09-14246) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 766359. It is located in the Miscellaneous Section of the data report.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD1.I	HP 5973 Mass Spectrometer	HP6890/HP5973	ZB-5ms	25m x 0.2mm, 0.33um (5% Polysilarylene-95% Polydimethylsiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: Dan Beachum **Date:** 12-8-09

Roadmap for LANL 10-644 SVOA

This roadmap was analyzed by amy01291 on 12-06-2009, 11:09.
This roadmap was reviewed by dan01134 on 12-07-2009, 11:10.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD1.i/s120309.b/s110314.d	241615001	03-DEC-2009	15:39	10-644.sub	RE03-09-14108	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110315.d	241615002	03-DEC-2009	16:02	10-644.sub	RE03-09-14106	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110316.d	241615003	03-DEC-2009	16:25	10-644.sub	RE03-09-14107	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110317.d	241615004	03-DEC-2009	16:48	10-644.sub	RE03-09-14109	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110318.d	241615005	03-DEC-2009	17:11	10-644.sub	RE03-09-14252	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110319.d	241615006	03-DEC-2009	17:35	10-644.sub	RE03-09-14250	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110320.d	241615007	03-DEC-2009	17:57	10-644.sub	RE03-09-14255	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110321.d	241615008	03-DEC-2009	18:21	10-644.sub	RE03-09-14256	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110322.d	241615009	03-DEC-2009	18:44	10-644.sub	RE03-09-14254	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110323.d	241615010	03-DEC-2009	19:08	10-644.sub	RE03-09-14249	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110324.d	241615011	03-DEC-2009	19:32	10-644.sub	RE03-09-14248	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110325.d	241615012	03-DEC-2009	19:55	10-644.sub	RE03-09-14247	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110326.d	241615013	03-DEC-2009	20:19	10-644.sub	RE03-09-14246	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110329.d	241615014	03-DEC-2009	21:27	10-644.sub	RE03-09-14253	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110330.d	241615015	03-DEC-2009	21:50	10-644.sub	RE03-09-14251	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110331.d	241615016	03-DEC-2009	22:13	10-644.sub	RE03-09-14257	1	927155	REPORT
☐	N	/chem/MSD1.i/s120309.b/s110332.d	241615018	03-DEC-2009	22:36	10-644.sub	RE03-10-2729	1	927155	REPORT

☐	N	/chem/MSD1.i/s120309.b/s110333.d	241615020	03-DEC-2009	22:59	10-644.sub	RE03-10-6969	1	927155	REPORT

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	Y	/chem/MSD1.i/s120309.b/s110310.d	1201982264	mb	03-DEC-2009	13:58	10-644.sub	SBLK01	1.00000	927155	
☐	Y	/chem/MSD1.i/s120309.b/s110311.d	1201982267	lcs	03-DEC-2009	14:21	10-644.sub	SBLK01LCS	1.00000	927155	
☐	Y	/chem/MSD1.i/s120309.b/s110327.d	1201982265	ms	03-DEC-2009	20:41	10-644.sub	RE03-09-14246MS	1.00000	40	
☐	Y	/chem/MSD1.i/s120309.b/s110328.d	1201982266	msd	03-DEC-2009	21:04	10-644.sub	RE03-09-14246MSD	1.00000	40	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615002**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14106**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:02**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0315.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.2	366
108-95-2	Phenol	U	366	ug/kg	73.2	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.2	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.2	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.2	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.2	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.5	366
129-00-0	Pyrene	J	32.3	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.2	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.2	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.2	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.2	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.2	366
95-48-7	o-Cresol	U	366	ug/kg	73.2	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.2	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.2	366
78-59-1	Isophorone	U	366	ug/kg	73.2	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.2	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.2	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.2	366
65-85-0	Benzoic acid	U	732	ug/kg	183	732
91-20-3	Naphthalene	J	16.8	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.2	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.2	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.32	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.2	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.2	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.2	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline	U	366	ug/kg	73.2	366
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	366	ug/kg	73.2	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14106	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 16:02	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110315.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.2	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	732	ug/kg	139	732
132-64-9	Dibenzofuran	U	366	ug/kg	73.2	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.2	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.2	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.2	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.2	366
122-66-7	Azobenzene	U	366	ug/kg	73.2	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.2	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.2	366
85-01-8	Phenanthrene		46.4	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.32	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.2	366
206-44-0	Fluoranthene		39.8	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.2	366
56-55-3	Benzo(a)anthracene	J	18.7	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	J	18.0	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.2	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.2	366
205-99-2	Benzo(b)fluoranthene		122	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	J	13.3	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.2	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	204	ug/kg		J
	Unknown Aldol Condensate	2.95	1840	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615003	Date Received:	11/21/2009 09:00	%Moisture:	12.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14107	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:25	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s1l0316.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.7	379
108-95-2	Phenol	U	379	ug/kg	75.7	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.7	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.7	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.7	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.7	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.6	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.7	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.7	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.7	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.7	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.7	379
95-48-7	o-Cresol	U	379	ug/kg	75.7	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.7	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.7	379
78-59-1	Isophorone	U	379	ug/kg	75.7	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.7	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.7	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.7	379
65-85-0	Benzoic acid	U	757	ug/kg	189	757
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.7	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.7	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.57	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.7	379
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.7	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.7	379
91-58-7	2-Chloronaphthalene	U	37.9	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.7	379
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	379	ug/kg	75.7	379

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615003	Date Received:	11/21/2009 09:00	%Moisture:	12.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14107	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:25	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s110316.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	379	ug/kg	75.7	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	757	ug/kg	144	757
132-64-9	Dibenzofuran	U	379	ug/kg	75.7	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.7	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.7	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.7	379
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	p-Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.7	379
122-66-7	Azobenzene	U	379	ug/kg	75.7	379
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.7	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.7	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.57	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.7	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.7	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.7	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.7	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.7	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1740	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615001	Date Received:	11/21/2009 09:00	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14108	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 15:39	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s110314.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.5	357
108-95-2	Phenol	U	357	ug/kg	71.5	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.5	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.5	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.5	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.5	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.3	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.5	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.5	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.5	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.5	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.5	357
95-48-7	o-Cresol	U	357	ug/kg	71.5	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.5	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.5	357
78-59-1	Isophorone	U	357	ug/kg	71.5	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.5	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.5	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.5	357
65-85-0	Benzoic acid	U	715	ug/kg	179	715
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.5	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.5	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.15	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.5	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.5	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.5	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	357	ug/kg	71.5	357
99-09-2	3-Nitroaniline	U	357	ug/kg	71.5	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615001**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14108**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 15:39**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s110314.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.5	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	715	ug/kg	136	715
132-64-9	Dibenzofuran	U	357	ug/kg	71.5	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.5	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.5	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.5	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.5	357
122-66-7	Azobenzene	U	357	ug/kg	71.5	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.5	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.5	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.15	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.5	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.5	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.5	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.5	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.5	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.64	310	ug/kg		J
	Unknown	1.78	295	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 15:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110314.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1550	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615004**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**5.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14109**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:48**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.15 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0317.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	351	ug/kg	70.1	351
108-95-2	Phenol	U	351	ug/kg	70.1	351
95-57-8	2-Chlorophenol	U	351	ug/kg	70.1	351
106-46-7	1,4-Dichlorobenzene	U	351	ug/kg	70.1	351
621-64-7	N-Nitrosodipropylamine	U	351	ug/kg	70.1	351
59-50-7	4-Chloro-3-methylphenol	U	351	ug/kg	70.1	351
83-32-9	Acenaphthene	U	35.1	ug/kg	11.6	35.1
121-14-2	2,4-Dinitrotoluene	U	351	ug/kg	35.1	351
100-02-7	4-Nitrophenol	U	351	ug/kg	116	351
87-86-5	Pentachlorophenol	U	351	ug/kg	87.7	351
129-00-0	Pyrene	U	35.1	ug/kg	10.5	35.1
110-86-1	Pyridine	U	351	ug/kg	70.1	351
62-53-3	Aniline	U	351	ug/kg	105	351
111-44-4	bis(2-Chloroethyl) ether	U	351	ug/kg	70.1	351
541-73-1	1,3-Dichlorobenzene	U	351	ug/kg	70.1	351
100-51-6	Benzyl alcohol	U	351	ug/kg	105	351
95-50-1	1,2-Dichlorobenzene	U	351	ug/kg	70.1	351
108-60-1	bis(2-Chloroisopropyl)ether	U	351	ug/kg	70.1	351
95-48-7	o-Cresol	U	351	ug/kg	70.1	351
65794-96-9	m,p-Cresols	U	351	ug/kg	105	351
67-72-1	Hexachloroethane	U	351	ug/kg	70.1	351
98-95-3	Nitrobenzene	U	351	ug/kg	70.1	351
78-59-1	Isophorone	U	351	ug/kg	70.1	351
88-75-5	2-Nitrophenol	U	351	ug/kg	70.1	351
105-67-9	2,4-Dimethylphenol	U	351	ug/kg	123	351
111-91-1	bis(2-Chloroethoxy)methane	U	351	ug/kg	70.1	351
120-83-2	2,4-Dichlorophenol	U	351	ug/kg	70.1	351
65-85-0	Benzoic acid	U	701	ug/kg	175	701
91-20-3	Naphthalene	U	35.1	ug/kg	10.5	35.1
106-47-8	4-Chloroaniline	U	351	ug/kg	70.1	351
87-68-3	Hexachlorobutadiene	U	351	ug/kg	70.1	351
91-57-6	2-Methylnaphthalene	U	35.1	ug/kg	7.01	35.1
77-47-4	Hexachlorocyclopentadiene	U	351	ug/kg	70.1	351
88-06-2	2,4,6-Trichlorophenol	U	351	ug/kg	70.1	351
95-95-4	2,4,5-Trichlorophenol	U	351	ug/kg	70.1	351
91-58-7	2-Chloronaphthalene	U	35.1	ug/kg	11.6	35.1
88-74-4	2-Nitroaniline	U	351	ug/kg	70.1	351
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	351	ug/kg	70.1	351

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 16:48	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s110317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	351	ug/kg	70.1	351
606-20-2	2,6-Dinitrotoluene	U	351	ug/kg	35.1	351
208-96-8	Acenaphthylene	U	35.1	ug/kg	10.5	35.1
51-28-5	2,4-Dinitrophenol	U	701	ug/kg	133	701
132-64-9	Dibenzofuran	U	351	ug/kg	70.1	351
84-66-2	Diethylphthalate	U	351	ug/kg	70.1	351
86-73-7	Fluorene	U	35.1	ug/kg	10.5	35.1
7005-72-3	4-Chlorophenylphenylether	U	351	ug/kg	70.1	351
534-52-1	2-Methyl-4,6-dinitrophenol	U	351	ug/kg	70.1	351
100-01-6	4-Nitroaniline	U	351	ug/kg	105	351
	p-Nitroaniline					
122-39-4	Diphenylamine	U	351	ug/kg	70.1	351
122-66-7	Azobenzene	U	351	ug/kg	70.1	351
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	351	ug/kg	70.1	351
118-74-1	Hexachlorobenzene	U	351	ug/kg	70.1	351
85-01-8	Phenanthrene	U	35.1	ug/kg	10.5	35.1
120-12-7	Anthracene	U	35.1	ug/kg	7.01	35.1
84-74-2	Di-n-butylphthalate	U	351	ug/kg	70.1	351
206-44-0	Fluoranthene	U	35.1	ug/kg	10.5	35.1
85-68-7	Butylbenzylphthalate	U	351	ug/kg	70.1	351
56-55-3	Benzo(a)anthracene	U	35.1	ug/kg	10.5	35.1
91-94-1	3,3'-Dichlorobenzidine	U	351	ug/kg	105	351
218-01-9	Chrysene	U	35.1	ug/kg	10.5	35.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	351	ug/kg	70.1	351
117-84-0	Di-n-octylphthalate	U	351	ug/kg	70.1	351
205-99-2	Benzo(b)fluoranthene	U	35.1	ug/kg	10.5	35.1
207-08-9	Benzo(k)fluoranthene	U	35.1	ug/kg	10.5	35.1
50-32-8	Benzo(a)pyrene	U	35.1	ug/kg	10.5	35.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.1	ug/kg	10.5	35.1
53-70-3	Dibenzo(a,h)anthracene	U	35.1	ug/kg	10.5	35.1
191-24-2	Benzo(ghi)perylene	U	35.1	ug/kg	10.5	35.1
120-82-1	1,2,4-Trichlorobenzene	U	351	ug/kg	70.1	351

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	454	ug/kg		J
	Unknown	1.78	268	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 16:48	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s1l0317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1520	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14246	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 20:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s1l0326.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.4	362
108-95-2	Phenol	U	362	ug/kg	72.4	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.4	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.4	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.4	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.4	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.5	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.4	362
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.4	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.4	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.4	362
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.4	362
95-48-7	o-Cresol	U	362	ug/kg	72.4	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.4	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.4	362
78-59-1	Isophorone	U	362	ug/kg	72.4	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.4	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.4	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.4	362
65-85-0	Benzoic acid	U	724	ug/kg	181	724
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.4	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.4	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.24	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.4	362
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.4	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.4	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline	U	362	ug/kg	72.4	362
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	362	ug/kg	72.4	362

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615013**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14246**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 20:19**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0326.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	362	ug/kg	72.4	362
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	U	724	ug/kg	138	724
132-64-9	Dibenzofuran	U	362	ug/kg	72.4	362
84-66-2	Diethylphthalate	U	362	ug/kg	72.4	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.4	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.4	362
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
	p-Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.4	362
122-66-7	Azobenzene	U	362	ug/kg	72.4	362
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.4	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.4	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.24	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.4	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.4	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.4	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.4	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.4	362

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	388	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615012	Date Received:	11/21/2009 09:00	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14247	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:55	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s1l0325.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.3	372
108-95-2	Phenol	U	372	ug/kg	74.3	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.3	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.3	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.3	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.3	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	92.9	372
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2
110-86-1	Pyridine	U	372	ug/kg	74.3	372
62-53-3	Aniline	U	372	ug/kg	112	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.3	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.3	372
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.3	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.3	372
95-48-7	o-Cresol	U	372	ug/kg	74.3	372
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.3	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.3	372
78-59-1	Isophorone	U	372	ug/kg	74.3	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.3	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.3	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.3	372
65-85-0	Benzoic acid	U	743	ug/kg	186	743
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.3	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.3	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.43	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.3	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.3	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.3	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	372	ug/kg	74.3	372
99-09-2	3-Nitroaniline	U	372	ug/kg	74.3	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615012**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14247**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:55**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s110325.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.3	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	372	ug/kg	74.3	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.3	372
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.3	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.3	372
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.3	372
122-66-7	Azobenzene	U	372	ug/kg	74.3	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.3	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.3	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.43	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.3	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.3	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.3	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.3	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.3	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	375	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615011	Date Received:	11/21/2009 09:00	%Moisture:	10.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14248	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:32	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	s110324.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.1	370
108-95-2	Phenol	U	370	ug/kg	74.1	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.1	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.1	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.1	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.1	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.6	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.1	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.1	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.1	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.1	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.1	370
95-48-7	o-Cresol	U	370	ug/kg	74.1	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.1	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.1	370
78-59-1	Isophorone	U	370	ug/kg	74.1	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.1	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.1	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.1	370
65-85-0	Benzoic acid	U	741	ug/kg	185	741
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.1	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.1	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.41	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.1	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.1	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.1	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.1	370
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	370	ug/kg	74.1	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615011**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14248**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:32**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.19 g**	**Final Volume:**	**1 mL**
Data File:	**s110324.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.1	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	741	ug/kg	141	741
132-64-9	Dibenzofuran	U	370	ug/kg	74.1	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.1	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.1	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.1	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.1	370
122-66-7	Azobenzene	U	370	ug/kg	74.1	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.1	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.1	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.41	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.1	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.1	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.1	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.1	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.1	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	428	ug/kg		JA
	Unknown	8.58	157	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14248	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 19:32	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	s1l0324.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.81	167	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615010	Date Received:	11/21/2009 09:00	%Moisture:	10.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14249	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:08	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s110323.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.7	369
108-95-2	Phenol	U	369	ug/kg	73.7	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.7	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.7	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.7	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.7	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.1	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.7	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.7	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.7	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.7	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.7	369
95-48-7	o-Cresol	U	369	ug/kg	73.7	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.7	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.7	369
78-59-1	Isophorone	U	369	ug/kg	73.7	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.7	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.7	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.7	369
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.7	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.7	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.37	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.7	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.7	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.7	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.7	369
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	369	ug/kg	73.7	369

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615010	Date Received:	11/21/2009 09:00	%Moisture:	10.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14249	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:08	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s110323.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	369	ug/kg	73.7	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	369	ug/kg	73.7	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.7	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.7	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.7	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	p-Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.7	369
122-66-7	Azobenzene	U	369	ug/kg	73.7	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.7	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.7	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.37	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.7	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.7	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.7	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.7	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.7	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	300	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	205	ug/kg	96	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615006	Date Received:	11/21/2009 09:00	%Moisture:	6.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14250	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 17:35	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s1l0319.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.5	357
108-95-2	Phenol	U	357	ug/kg	71.5	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.5	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.5	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.5	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.5	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.3	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.5	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.5	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.5	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.5	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.5	357
95-48-7	o-Cresol	U	357	ug/kg	71.5	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.5	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.5	357
78-59-1	Isophorone	U	357	ug/kg	71.5	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.5	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.5	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.5	357
65-85-0	Benzoic acid	U	715	ug/kg	179	715
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.5	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.5	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.15	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.5	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.5	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.5	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.5	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.5	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:35	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s110319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.5	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	715	ug/kg	136	715
132-64-9	Dibenzofuran	U	357	ug/kg	71.5	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.5	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.5	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.5	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.5	357
122-66-7	Azobenzene	U	357	ug/kg	71.5	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.5	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.5	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.15	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.5	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.5	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.5	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.5	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.5	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.76	447	ug/kg		J
	Unknown Aldol Condensate	2.95	335	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615006**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14250**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:35**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s110319.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
559-74-0	Friedelan-3-one	8.58	406	ug/kg	96	NJ
	Unknown	11.8	195	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14251	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110330.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.6	368
108-95-2	Phenol	U	368	ug/kg	73.6	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.6	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.6	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.6	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.6	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	92.0	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.6	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.6	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.6	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.6	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.6	368
95-48-7	o-Cresol	U	368	ug/kg	73.6	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.6	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.6	368
78-59-1	Isophorone	U	368	ug/kg	73.6	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.6	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.6	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.6	368
65-85-0	Benzoic acid	U	736	ug/kg	184	736
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.6	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.6	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.36	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.6	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.6	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.6	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	368	ug/kg	73.6	368
99-09-2	3-Nitroaniline	U	368	ug/kg	73.6	368

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14251	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110330.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.6	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	736	ug/kg	140	736
132-64-9	Dibenzofuran	U	368	ug/kg	73.6	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.6	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.6	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.6	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	p-Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.6	368
122-66-7	Azobenzene	U	368	ug/kg	73.6	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.6	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.6	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.36	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.6	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.6	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.6	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.6	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.6	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	279	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	153	ug/kg	93	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615015**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14251**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:50**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0330.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	9.53	162	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14252**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:11**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s110318.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	357	ug/kg	71.4	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:11	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110318.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.79	165	ug/kg		J
	Unknown Aldol Condensate	2.95	748	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:11	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110318.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
638-67-5	Tricosane	9.53	938	ug/kg	96	NJ
112-95-8	Eicosane	10.2	318	ug/kg	96	NJ
629-99-2	Pentacosane	10.39	1080	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 21:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110329.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.3	366
108-95-2	Phenol	U	366	ug/kg	73.3	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.3	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.3	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.3	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.3	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.6	366
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.3	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.3	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.3	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.3	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.3	366
95-48-7	o-Cresol	U	366	ug/kg	73.3	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.3	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.3	366
78-59-1	Isophorone	U	366	ug/kg	73.3	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.3	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.3	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.3	366
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.3	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.3	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.33	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.3	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.3	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.3	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline	U	366	ug/kg	73.3	366
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	366	ug/kg	73.3	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 21:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s1l0329.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.3	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	366	ug/kg	73.3	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.3	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.3	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.3	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.3	366
122-66-7	Azobenzene	U	366	ug/kg	73.3	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.3	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.3	366
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.33	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.3	366
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.3	366
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.3	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.3	366
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.3	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	332	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	236	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615014**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14253**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:27**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s110329.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.81	327	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14254	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:44	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s110322.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.5	353
108-95-2	Phenol	U	353	ug/kg	70.5	353
95-57-8	2-Chlorophenol	U	353	ug/kg	70.5	353
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.5	353
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.5	353
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.5	353
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3
110-86-1	Pyridine	U	353	ug/kg	70.5	353
62-53-3	Aniline	U	353	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.5	353
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.5	353
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.5	353
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.5	353
95-48-7	o-Cresol	U	353	ug/kg	70.5	353
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353
67-72-1	Hexachloroethane	U	353	ug/kg	70.5	353
98-95-3	Nitrobenzene	U	353	ug/kg	70.5	353
78-59-1	Isophorone	U	353	ug/kg	70.5	353
88-75-5	2-Nitrophenol	U	353	ug/kg	70.5	353
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	123	353
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.5	353
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.5	353
65-85-0	Benzoic acid	U	705	ug/kg	176	705
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline	U	353	ug/kg	70.5	353
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.5	353
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.05	35.3
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.5	353
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.5	353
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.5	353
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline	U	353	ug/kg	70.5	353
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	353	ug/kg	70.5	353

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14254	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:44	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s110322.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	353	ug/kg	70.5	353
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol	U	705	ug/kg	134	705
132-64-9	Dibenzofuran	U	353	ug/kg	70.5	353
84-66-2	Diethylphthalate	U	353	ug/kg	70.5	353
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.5	353
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.5	353
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353
	p-Nitroaniline					
122-39-4	Diphenylamine	U	353	ug/kg	70.5	353
122-66-7	Azobenzene	U	353	ug/kg	70.5	353
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.5	353
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.5	353
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3
120-12-7	Anthracene	U	35.3	ug/kg	7.05	35.3
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.5	353
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.5	353
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.5	353
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.5	353
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.5	353

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	1.78	281	ug/kg		JA
	Unknown	2.95	387	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 18:44	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s110322.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.16	150	ug/kg	93	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615007	Date Received:	11/21/2009 09:00	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14255	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.1	Dilution:	1
Run Date:	12/03/2009 17:57	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1l0320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.1	366
108-95-2	Phenol	U	366	ug/kg	73.1	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.1	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.1	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.1	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.1	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.4	366
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.1	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.1	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.1	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.1	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.1	366
95-48-7	o-Cresol	U	366	ug/kg	73.1	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.1	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.1	366
78-59-1	Isophorone	U	366	ug/kg	73.1	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.1	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.1	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.1	366
65-85-0	Benzoic acid	U	731	ug/kg	183	731
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.1	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.1	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.31	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.1	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.1	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.1	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline	U	366	ug/kg	73.1	366
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	366	ug/kg	73.1	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615007**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14255**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:57**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s110320.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.1	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	731	ug/kg	139	731
132-64-9	Dibenzofuran	U	366	ug/kg	73.1	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.1	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.1	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.1	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.1	366
122-66-7	Azobenzene	U	366	ug/kg	73.1	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.1	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.1	366
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.31	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.1	366
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.1	366
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.1	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.1	366
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.1	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	380	ug/kg		J
	Unknown	1.69	3700	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615007**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14255**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:57**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s110320.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	485	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	185	ug/kg	93	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14256	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 18:21	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s110321.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	361	ug/kg	72.2	361
108-95-2	Phenol	U	361	ug/kg	72.2	361
95-57-8	2-Chlorophenol	U	361	ug/kg	72.2	361
106-46-7	1,4-Dichlorobenzene	U	361	ug/kg	72.2	361
621-64-7	N-Nitrosodipropylamine	U	361	ug/kg	72.2	361
59-50-7	4-Chloro-3-methylphenol	U	361	ug/kg	72.2	361
83-32-9	Acenaphthene	U	36.1	ug/kg	11.9	36.1
121-14-2	2,4-Dinitrotoluene	U	361	ug/kg	36.1	361
100-02-7	4-Nitrophenol	U	361	ug/kg	119	361
87-86-5	Pentachlorophenol	U	361	ug/kg	90.3	361
129-00-0	Pyrene	U	36.1	ug/kg	10.8	36.1
110-86-1	Pyridine	U	361	ug/kg	72.2	361
62-53-3	Aniline	U	361	ug/kg	108	361
111-44-4	bis(2-Chloroethyl) ether	U	361	ug/kg	72.2	361
541-73-1	1,3-Dichlorobenzene	U	361	ug/kg	72.2	361
100-51-6	Benzyl alcohol	U	361	ug/kg	108	361
95-50-1	1,2-Dichlorobenzene	U	361	ug/kg	72.2	361
108-60-1	bis(2-Chloroisopropyl)ether	U	361	ug/kg	72.2	361
95-48-7	o-Cresol	U	361	ug/kg	72.2	361
65794-96-9	m,p-Cresols	U	361	ug/kg	108	361
67-72-1	Hexachloroethane	U	361	ug/kg	72.2	361
98-95-3	Nitrobenzene	U	361	ug/kg	72.2	361
78-59-1	Isophorone	U	361	ug/kg	72.2	361
88-75-5	2-Nitrophenol	U	361	ug/kg	72.2	361
105-67-9	2,4-Dimethylphenol	U	361	ug/kg	126	361
111-91-1	bis(2-Chloroethoxy)methane	U	361	ug/kg	72.2	361
120-83-2	2,4-Dichlorophenol	U	361	ug/kg	72.2	361
65-85-0	Benzoic acid	U	722	ug/kg	181	722
91-20-3	Naphthalene	U	36.1	ug/kg	10.8	36.1
106-47-8	4-Chloroaniline	U	361	ug/kg	72.2	361
87-68-3	Hexachlorobutadiene	U	361	ug/kg	72.2	361
91-57-6	2-Methylnaphthalene	U	36.1	ug/kg	7.22	36.1
77-47-4	Hexachlorocyclopentadiene	U	361	ug/kg	72.2	361
88-06-2	2,4,6-Trichlorophenol	U	361	ug/kg	72.2	361
95-95-4	2,4,5-Trichlorophenol	U	361	ug/kg	72.2	361
91-58-7	2-Chloronaphthalene	U	36.1	ug/kg	11.9	36.1
88-74-4	2-Nitroaniline	U	361	ug/kg	72.2	361
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	361	ug/kg	72.2	361

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615008**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14256**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 18:21**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**s1l0321.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	361	ug/kg	72.2	361
606-20-2	2,6-Dinitrotoluene	U	361	ug/kg	36.1	361
208-96-8	Acenaphthylene	U	36.1	ug/kg	10.8	36.1
51-28-5	2,4-Dinitrophenol	U	722	ug/kg	137	722
132-64-9	Dibenzofuran	U	361	ug/kg	72.2	361
84-66-2	Diethylphthalate	U	361	ug/kg	72.2	361
86-73-7	Fluorene	U	36.1	ug/kg	10.8	36.1
7005-72-3	4-Chlorophenylphenylether	U	361	ug/kg	72.2	361
534-52-1	2-Methyl-4,6-dinitrophenol	U	361	ug/kg	72.2	361
100-01-6	4-Nitroaniline	U	361	ug/kg	108	361
	p-Nitroaniline					
122-39-4	Diphenylamine	U	361	ug/kg	72.2	361
122-66-7	Azobenzene	U	361	ug/kg	72.2	361
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	361	ug/kg	72.2	361
118-74-1	Hexachlorobenzene	U	361	ug/kg	72.2	361
85-01-8	Phenanthrene	U	36.1	ug/kg	10.8	36.1
120-12-7	Anthracene	U	36.1	ug/kg	7.22	36.1
84-74-2	Di-n-butylphthalate	U	361	ug/kg	72.2	361
206-44-0	Fluoranthene	U	36.1	ug/kg	10.8	36.1
85-68-7	Butylbenzylphthalate	U	361	ug/kg	72.2	361
56-55-3	Benzo(a)anthracene	U	36.1	ug/kg	10.8	36.1
91-94-1	3,3'-Dichlorobenzidine	U	361	ug/kg	108	361
218-01-9	Chrysene	U	36.1	ug/kg	10.8	36.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	361	ug/kg	72.2	361
117-84-0	Di-n-octylphthalate	U	361	ug/kg	72.2	361
205-99-2	Benzo(b)fluoranthene	U	36.1	ug/kg	10.8	36.1
207-08-9	Benzo(k)fluoranthene	U	36.1	ug/kg	10.8	36.1
50-32-8	Benzo(a)pyrene	U	36.1	ug/kg	10.8	36.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.1	ug/kg	10.8	36.1
53-70-3	Dibenzo(a,h)anthracene	U	36.1	ug/kg	10.8	36.1
191-24-2	Benzo(ghi)perylene	U	36.1	ug/kg	10.8	36.1
120-82-1	1,2,4-Trichlorobenzene	U	361	ug/kg	72.2	361

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	380	ug/kg		JA
	Unknown	11.8	254	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615016	Date Received:	11/21/2009 09:00	%Moisture:	1.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14257	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:13	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110331.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	337	ug/kg	67.3	337
108-95-2	Phenol	U	337	ug/kg	67.3	337
95-57-8	2-Chlorophenol	U	337	ug/kg	67.3	337
106-46-7	1,4-Dichlorobenzene	U	337	ug/kg	67.3	337
621-64-7	N-Nitrosodipropylamine	U	337	ug/kg	67.3	337
59-50-7	4-Chloro-3-methylphenol	U	337	ug/kg	67.3	337
83-32-9	Acenaphthene	U	33.7	ug/kg	11.1	33.7
121-14-2	2,4-Dinitrotoluene	U	337	ug/kg	33.7	337
100-02-7	4-Nitrophenol	U	337	ug/kg	111	337
87-86-5	Pentachlorophenol	U	337	ug/kg	84.2	337
129-00-0	Pyrene	U	33.7	ug/kg	10.1	33.7
110-86-1	Pyridine	U	337	ug/kg	67.3	337
62-53-3	Aniline	U	337	ug/kg	101	337
111-44-4	bis(2-Chloroethyl) ether	U	337	ug/kg	67.3	337
541-73-1	1,3-Dichlorobenzene	U	337	ug/kg	67.3	337
100-51-6	Benzyl alcohol	U	337	ug/kg	101	337
95-50-1	1,2-Dichlorobenzene	U	337	ug/kg	67.3	337
108-60-1	bis(2-Chloroisopropyl)ether	U	337	ug/kg	67.3	337
95-48-7	o-Cresol	U	337	ug/kg	67.3	337
65794-96-9	m,p-Cresols	U	337	ug/kg	101	337
67-72-1	Hexachloroethane	U	337	ug/kg	67.3	337
98-95-3	Nitrobenzene	U	337	ug/kg	67.3	337
78-59-1	Isophorone	U	337	ug/kg	67.3	337
88-75-5	2-Nitrophenol	U	337	ug/kg	67.3	337
105-67-9	2,4-Dimethylphenol	U	337	ug/kg	118	337
111-91-1	bis(2-Chloroethoxy)methane	U	337	ug/kg	67.3	337
120-83-2	2,4-Dichlorophenol	U	337	ug/kg	67.3	337
65-85-0	Benzoic acid	U	673	ug/kg	168	673
91-20-3	Naphthalene	U	33.7	ug/kg	10.1	33.7
106-47-8	4-Chloroaniline	U	337	ug/kg	67.3	337
87-68-3	Hexachlorobutadiene	U	337	ug/kg	67.3	337
91-57-6	2-Methylnaphthalene	U	33.7	ug/kg	6.73	33.7
77-47-4	Hexachlorocyclopentadiene	U	337	ug/kg	67.3	337
88-06-2	2,4,6-Trichlorophenol	U	337	ug/kg	67.3	337
95-95-4	2,4,5-Trichlorophenol	U	337	ug/kg	67.3	337
91-58-7	2-Chloronaphthalene	U	33.7	ug/kg	11.1	33.7
88-74-4	2-Nitroaniline	U	337	ug/kg	67.3	337
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	337	ug/kg	67.3	337

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615016	Date Received:	11/21/2009 09:00	%Moisture:	1.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14257	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:13	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110331.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	337	ug/kg	67.3	337
606-20-2	2,6-Dinitrotoluene	U	337	ug/kg	33.7	337
208-96-8	Acenaphthylene	U	33.7	ug/kg	10.1	33.7
51-28-5	2,4-Dinitrophenol	U	673	ug/kg	128	673
132-64-9	Dibenzofuran	U	337	ug/kg	67.3	337
84-66-2	Diethylphthalate	U	337	ug/kg	67.3	337
86-73-7	Fluorene	U	33.7	ug/kg	10.1	33.7
7005-72-3	4-Chlorophenylphenylether	U	337	ug/kg	67.3	337
534-52-1	2-Methyl-4,6-dinitrophenol	U	337	ug/kg	67.3	337
100-01-6	4-Nitroaniline	U	337	ug/kg	101	337
	p-Nitroaniline					
122-39-4	Diphenylamine	U	337	ug/kg	67.3	337
122-66-7	Azobenzene	U	337	ug/kg	67.3	337
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	337	ug/kg	67.3	337
118-74-1	Hexachlorobenzene	U	337	ug/kg	67.3	337
85-01-8	Phenanthrene	U	33.7	ug/kg	10.1	33.7
120-12-7	Anthracene	U	33.7	ug/kg	6.73	33.7
84-74-2	Di-n-butylphthalate	U	337	ug/kg	67.3	337
206-44-0	Fluoranthene	U	33.7	ug/kg	10.1	33.7
85-68-7	Butylbenzylphthalate	U	337	ug/kg	67.3	337
56-55-3	Benzo(a)anthracene	U	33.7	ug/kg	10.1	33.7
91-94-1	3,3'-Dichlorobenzidine	U	337	ug/kg	101	337
218-01-9	Chrysene	U	33.7	ug/kg	10.1	33.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	337	ug/kg	67.3	337
117-84-0	Di-n-octylphthalate	U	337	ug/kg	67.3	337
205-99-2	Benzo(b)fluoranthene	U	33.7	ug/kg	10.1	33.7
207-08-9	Benzo(k)fluoranthene	U	33.7	ug/kg	10.1	33.7
50-32-8	Benzo(a)pyrene	U	33.7	ug/kg	10.1	33.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.7	ug/kg	10.1	33.7
53-70-3	Dibenzo(a,h)anthracene	U	33.7	ug/kg	10.1	33.7
191-24-2	Benzo(ghi)perylene	U	33.7	ug/kg	10.1	33.7
120-82-1	1,2,4-Trichlorobenzene	U	337	ug/kg	67.3	337

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	311	ug/kg		J
	Unknown Aldol Condensate	2.95	302	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615018	Date Received:	11/21/2009 09:00	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2729	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:36	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s110332.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.8	364
108-95-2	Phenol	U	364	ug/kg	72.8	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.8	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.8	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.8	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.8	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.0	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.8	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.8	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.8	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.8	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.8	364
95-48-7	o-Cresol	U	364	ug/kg	72.8	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.8	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.8	364
78-59-1	Isophorone	U	364	ug/kg	72.8	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.8	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	127	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.8	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.8	364
65-85-0	Benzoic acid	U	728	ug/kg	182	728
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.8	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.8	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.28	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.8	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.8	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.8	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.8	364
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	364	ug/kg	72.8	364

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615018**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2729**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:36**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s110332.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	364	ug/kg	72.8	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	728	ug/kg	138	728
132-64-9	Dibenzofuran	U	364	ug/kg	72.8	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.8	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.8	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.8	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	p-Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.8	364
122-66-7	Azobenzene	U	364	ug/kg	72.8	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.8	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.8	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.28	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.8	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.8	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.8	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.8	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.8	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	189	ug/kg		J
	Unknown Aldol Condensate	2.95	398	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615020	Date Received:	11/21/2009 09:00	%Moisture:	4.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6969	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:59	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1l0333.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.7	348
108-95-2	Phenol	U	348	ug/kg	69.7	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.7	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.7	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.7	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.7	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	87.1	348
129-00-0	Pyrene	U	34.8	ug/kg	10.5	34.8
110-86-1	Pyridine	U	348	ug/kg	69.7	348
62-53-3	Aniline	U	348	ug/kg	105	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.7	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.7	348
100-51-6	Benzyl alcohol	U	348	ug/kg	105	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.7	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.7	348
95-48-7	o-Cresol	U	348	ug/kg	69.7	348
65794-96-9	m,p-Cresols	U	348	ug/kg	105	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.7	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.7	348
78-59-1	Isophorone	U	348	ug/kg	69.7	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.7	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.7	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.7	348
65-85-0	Benzoic acid	U	697	ug/kg	174	697
91-20-3	Naphthalene	U	34.8	ug/kg	10.5	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.7	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.7	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.97	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.7	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.7	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.7	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.7	348
99-09-2	3-Nitroaniline	U	348	ug/kg	69.7	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615020	Date Received:	11/21/2009 09:00	%Moisture:	4.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6969	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:59	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s110333.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.7	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.5	34.8
51-28-5	2,4-Dinitrophenol	U	697	ug/kg	132	697
132-64-9	Dibenzofuran	U	348	ug/kg	69.7	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.7	348
86-73-7	Fluorene	U	34.8	ug/kg	10.5	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.7	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.7	348
100-01-6	4-Nitroaniline	U	348	ug/kg	105	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.7	348
122-66-7	Azobenzene	U	348	ug/kg	69.7	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.7	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.7	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.5	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.97	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.7	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.5	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.7	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.5	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	105	348
218-01-9	Chrysene	U	34.8	ug/kg	10.5	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	348	ug/kg	69.7	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.7	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.5	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.5	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.5	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.5	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.5	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.5	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.7	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	317	ug/kg		J
	Unknown Aldol Condensate	2.95	398	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 22:59	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110333.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.16	192	ug/kg	91	NJ

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-644

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201982264	MB for batch 927154	80	77	86	95	103	105
1201982267	LCS for batch 927154	79	74	77	93	113 *	102
241615001	RE03-09-14108	57	53	62	68	70	76
241615002	RE03-09-14106	62	60	66	75	91	89
241615003	RE03-09-14107	68	64	73	81	82	86
241615004	RE03-09-14109	61	53	66	76	75	79
241615005	RE03-09-14252	68	67	73	83	98	97
241615006	RE03-09-14250	57	55	62	68	77	83
241615007	RE03-09-14255	72	64	79	87	103	104
241615008	RE03-09-14256	63	59	67	78	82	87
241615009	RE03-09-14254	65	63	73	82	86	89
241615010	RE03-09-14249	59	58	65	74	80	82
241615011	RE03-09-14248	63	58	68	76	83	84
241615012	RE03-09-14247	65	60	71	78	83	93
241615013	RE03-09-14246	64	62	71	80	94	97
1201982265	RE03-09-14246MS	58	58	59	74	88	82
1201982266	RE03-09-14246MSD	48	49	48	60	73	71
241615014	RE03-09-14253	62	59	70	80	91	90
241615015	RE03-09-14251	58	54	64	70	79	77
241615016	RE03-09-14257	56	54	65	71	77	88
241615018	RE03-10-2729	60	58	66	77	90	96
241615020	RE03-10-6969	56	54	64	71	77	92

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MS
Lab Sample ID: 1201982265
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 20:41
Prep Batch ID: 927154
Batch ID: 927155
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1810	0.00	U	851	47	32-90
108-95-2	MS	Phenol	1810	0.00	U	955	53	32-105
95-57-8	MS	2-Chlorophenol	1810	0.00	U	964	53	33-106
106-46-7	MS	1,4-Dichlorobenzene	1810	0.00	U	993	55	33-95
621-64-7	MS	N-Nitrosodipropylamine	1810	0.00	U	812	45	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1810	0.00	U	1110	61	38-119
83-32-9	MS	Acenaphthene	1810	0.00	U	1190	66	39-100
121-14-2	MS	2,4-Dinitrotoluene	1810	0.00	U	1150	64	42-107
100-02-7	MS	4-Nitrophenol	1810	0.00	U	881	49	24-120
87-86-5	MS	Pentachlorophenol	1810	0.00	U	977	54	26-121
129-00-0	MS	Pyrene	1810	0.00	U	1220	67	34-120
110-86-1	MS	Pyridine	1810	0.00	U	757	42	30-95
62-53-3	MS	Aniline	1810	0.00	U	1080	60	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1810	0.00	U	944	52	34-101
541-73-1	MS	1,3-Dichlorobenzene	1810	0.00	U	952	53	31-97
100-51-6	MS	Benzyl alcohol	1810	0.00	U	365	20	17-120
95-50-1	MS	1,2-Dichlorobenzene	1810	0.00	U	1030	57	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1810	0.00	U	890	49	32-113
95-48-7	MS	o-Cresol	1810	0.00	U	1070	59	31-119
65794-96-9	MS	m,p-Cresols	1810	0.00	U	1320	73	35-125
67-72-1	MS	Hexachloroethane	1810	0.00	U	949	52	30-100
98-95-3	MS	Nitrobenzene	1810	0.00	U	1100	61	33-108

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-644

Client ID: RE03-09-14246MS

Lab Sample ID: 1201982265

Instrument: MSD1.I

Analyst: AMY

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: S

%Moisture: 8

Analysis Date: 12/03/2009 20:41

Dilution: 1

Prep Batch ID: 927154

Batch ID: 927155

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1810	0.00	U	1170	65	34-110
88-75-5	MS	2-Nitrophenol	1810	0.00	U	1030	57	32-108
105-67-9	MS	2,4-Dimethylphenol	1810	0.00	U	900	50	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1810	0.00	U	993	55	35-108
120-83-2	MS	2,4-Dichlorophenol	1810	0.00	U	1050	58	38-110
65-85-0	MS	Benzoic acid	3620	0.00	U	1450	40	18-134
91-20-3	MS	Naphthalene	1810	0.00	U	1070	59	31-105
106-47-8	MS	4-Chloroaniline	1810	0.00	U	1060	59	29-123
87-68-3	MS	Hexachlorobutadiene	1810	0.00	U	1130	62	31-109
91-57-6	MS	2-Methylnaphthalene	1810	0.00	U	1140	63	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1810	0.00	U	1470	81	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1810	0.00	U	1120	62	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1810	0.00	U	1310	72	37-116
91-58-7	MS	2-Chloronaphthalene	1810	0.00	U	1110	61	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1810	0.00	U	981	54	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1810	0.00	U	1060	59	39-117
131-11-3	MS	Dimethylphthalate	1810	0.00	U	1270	70	41-105
606-20-2	MS	2,6-Dinitrotoluene	1810	0.00	U	1180	65	41-103
208-96-8	MS	Acenaphthylene	1810	0.00	U	1200	67	41-103
51-28-5	MS	2,4-Dinitrophenol	1810	0.00	U	601	33	25-104
132-64-9	MS	Dibenzofuran	1810	0.00	U	1410	78	40-114
84-66-2	MS	Diethylphthalate	1810	0.00	U	1400	77	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MS
Lab Sample ID: 1201982265
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 20:41
Prep Batch ID 927154
Batch ID: 927155
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1810	0.00	U	1250	69	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1810	0.00	U	1380	76	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1810	0.00	U	844	47	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1810	0.00	U	1100	61	35-139
122-39-4	MS	Diphenylamine	1810	0.00	U	1150	64	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1810	0.00	U	1140	63	37-118
101-55-3	MS	4-Bromophenylphenylether	1810	0.00	U	1470	81	39-112
118-74-1	MS	Hexachlorobenzene	1810	0.00	U	1270	70	38-113
85-01-8	MS	Phenanthrene	1810	0.00	U	1190	66	38-110
120-12-7	MS	Anthracene	1810	0.00	U	1190	66	38-112
84-74-2	MS	Di-n-butylphthalate	1810	0.00	U	1530	85	42-119
206-44-0	MS	Fluoranthene	1810	0.00	U	1320	73	38-119
85-68-7	MS	Butylbenzylphthalate	1810	0.00	U	1470	81	39-126
56-55-3	MS	Benzo(a)anthracene	1810	0.00	U	1150	64	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1810	0.00	U	1170	65	35-106
218-01-9	MS	Chrysene	1810	0.00	U	1240	68	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1810	0.00	U	1480	82	40-125
117-84-0	MS	Di-n-octylphthalate	1810	0.00	U	1510	83	30-147
205-99-2	MS	Benzo(b)fluoranthene	1810	0.00	U	1260	70	38-117
207-08-9	MS	Benzo(k)fluoranthene	1810	0.00	U	1240	68	39-120
50-32-8	MS	Benzo(a)pyrene	1810	0.00	U	1250	69	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1810	0.00	U	1110	61	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MS
Lab Sample ID: 1201982265
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 20:41
Prep Batch ID: 927154
Batch ID: 927155
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1810	0.00	U	1120	62	32-124
191-24-2	MS	Benzo(ghi)perylene	1810	0.00	U	1100	61	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1810	0.00	U	1080	60	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MSD
Lab Sample ID: 1201982266
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 21:04
Dilution: 1
Prep Batch ID: 927154
Batch ID: 927155

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1800	0.00	U	709	39	32-90	18	0-30
108-95-2	MSD Phenol	1800	0.00	U	805	45	32-105	17	0-30
95-57-8	MSD 2-Chlorophenol	1800	0.00	U	859	48	33-106	12	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1800	0.00	U	818	45	33-95	19	0-30
621-64-7	MSD N-Nitrosodipropylamine	1800	0.00	U	724	40	31-109	11	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1800	0.00	U	947	52	38-119	16	0-30
83-32-9	MSD Acenaphthene	1800	0.00	U	949	53	39-100	22	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1800	0.00	U	953	53	42-107	19	0-30
100-02-7	MSD 4-Nitrophenol	1800	0.00	U	739	41	24-120	18	0-30
87-86-5	MSD Pentachlorophenol	1800	0.00	U	822	46	26-121	17	0-30
129-00-0	MSD Pyrene	1800	0.00	U	1040	58	34-120	15	0-30
110-86-1	MSD Pyridine	1800	0.00	U	571	32	30-95	28	0-30
62-53-3	MSD Aniline	1800	0.00	U	829	46	34-111	26	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1800	0.00	U	780	43	34-101	19	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1800	0.00	U	771	43	31-97	21	0-30
100-51-6	MSD Benzyl alcohol	1800	0.00	U	339	19	17-120	7	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1800	0.00	U	840	47	32-102	20	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1800	0.00	U	737	41	32-113	19	0-30
95-48-7	MSD o-Cresol	1800	0.00	U	1020	57	31-119	4	0-30
65794-96-9	MSD m,p-Cresols	1800	0.00	U	1080	60	35-125	20	0-30
67-72-1	MSD Hexachloroethane	1800	0.00	U	764	42	30-100	22	0-30
98-95-3	MSD Nitrobenzene	1800	0.00	U	883	49	33-108	22	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MSD
Lab Sample ID: 1201982266
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 21:04
Prep Batch ID: 927154
Batch ID: 927155
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1800	0.00	U	964	53	34-110	19	0-30
88-75-5	MSD 2-Nitrophenol	1800	0.00	U	837	46	32-108	21	0-30
105-67-9	MSD 2,4-Dimethylphenol	1800	0.00	U	751	42	32-115	18	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1800	0.00	U	816	45	35-108	20	0-30
120-83-2	MSD 2,4-Dichlorophenol	1800	0.00	U	892	49	38-110	16	0-30
65-85-0	MSD Benzoic acid	3610	0.00	U	1160	32	18-134	22	0-30
91-20-3	MSD Naphthalene	1800	0.00	U	877	49	31-105	20	0-30
106-47-8	MSD 4-Chloroaniline	1800	0.00	U	870	48	29-123	20	0-30
87-68-3	MSD Hexachlorobutadiene	1800	0.00	U	937	52	31-109	18	0-30
91-57-6	MSD 2-Methylnaphthalene	1800	0.00	U	932	52	32-110	20	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1800	0.00	U	1120	62	21-122	27	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1800	0.00	U	1010	56	37-108	10	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1800	0.00	U	1070	59	37-116	20	0-30
91-58-7	MSD 2-Chloronaphthalene	1800	0.00	U	895	50	37-103	21	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1800	0.00	U	798	44	36-115	21	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1800	0.00	U	804	45	39-117	28	0-30
131-11-3	MSD Dimethylphthalate	1800	0.00	U	1030	57	41-105	21	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1800	0.00	U	966	54	41-103	20	0-30
208-96-8	MSD Acenaphthylene	1800	0.00	U	969	54	41-103	22	0-30
51-28-5	MSD 2,4-Dinitrophenol	1800	0.00	U	513	28	25-104	16	0-30
132-64-9	MSD Dibenzofuran	1800	0.00	U	1160	64	40-114	19	0-30
84-66-2	MSD Diethylphthalate	1800	0.00	U	1130	63	43-110	21	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MSD
Lab Sample ID: 1201982266
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 21:04
Dilution: 1
Prep Batch ID 927154
Batch ID: 927155

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1800	0.00	U	1030	57	48-99	20	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1800	0.00	U	1120	62	42-111	21	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1800	0.00	U	625	35	19-118	30	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1800	0.00	U	855	47	35-139	25	0-30
122-39-4	MSD	Diphenylamine	1800	0.00	U	950	53	41-112	19	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1800	0.00	U	962	53	37-118	17	0-30
101-55-3	MSD	4-Bromophenylphenylether	1800	0.00	U	1240	69	39-112	17	0-30
118-74-1	MSD	Hexachlorobenzene	1800	0.00	U	1070	59	38-113	17	0-30
85-01-8	MSD	Phenanthrene	1800	0.00	U	997	55	38-110	18	0-30
120-12-7	MSD	Anthracene	1800	0.00	U	999	55	38-112	17	0-30
84-74-2	MSD	Di-n-butylphthalate	1800	0.00	U	1260	70	42-119	19	0-30
206-44-0	MSD	Fluoranthene	1800	0.00	U	1070	59	38-119	21	0-30
85-68-7	MSD	Butylbenzylphthalate	1800	0.00	U	1270	70	39-126	15	0-30
56-55-3	MSD	Benzo(a)anthracene	1800	0.00	U	981	54	39-110	16	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1800	0.00	U	988	55	35-106	17	0-30
218-01-9	MSD	Chrysene	1800	0.00	U	1030	57	39-109	18	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1800	0.00	U	1240	69	40-125	18	0-30
117-84-0	MSD	Di-n-octylphthalate	1800	0.00	U	1360	75	30-147	10	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1800	0.00	U	1020	56	38-117	22	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1800	0.00	U	1170	65	39-120	5	0-30
50-32-8	MSD	Benzo(a)pyrene	1800	0.00	U	1040	58	40-115	19	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1800	0.00	U	877	49	32-120	24	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MSD
Lab Sample ID: 1201982266
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 21:04
Dilution: 1
Prep Batch ID: 927154
Batch ID: 927155

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1800	0.00	U	878	49	32-124	24	0-30
191-24-2	MSD Benzo(ghi)perylene	1800	0.00	U	858	48	28-119	25	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1800	0.00	U	887	49	31-105	20	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927154
Lab Sample ID: 1201982267
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 14:21
Dilution: 1
Prep Batch ID: 927154
Batch ID: 927155

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1140	68	31-95
108-95-2	LCS	Phenol	1670	0.0	1220	73	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1250	75	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1220	73	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1090	65	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1210	72	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1350	81	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1350	81	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1140	69	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1490	90	38-116
129-00-0	LCS	Pyrene	1670	0.0	1360	81	43-108
110-86-1	LCS	Pyridine	1670	0.0	990	59	13-129
62-53-3	LCS	Aniline	1670	0.0	1130	68	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1180	71	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1160	70	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1080	65	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1250	75	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1120	67	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1370	82	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1330	80	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1180	71	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1280	77	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927154
Lab Sample ID: 1201982267
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 14:21
Prep Batch ID: 927154
Batch ID: 927155
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1390	83	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1230	74	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1150	69	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1200	72	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1230	74	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	2940	88	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1260	75	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1140	68	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1330	80	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1310	79	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	2320	139 *	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1450	87	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1460	87	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1250	75	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1150	69	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1150	69	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1430	86	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1350	81	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1360	81	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1620	97	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1610	97	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1530	92	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 927154 **Matrix:** SOIL

Lab Sample ID: 1201982267

Instrument: MSD1.I **Analysis Date:** 12/03/2009 14:21 **Dilution:** 1

Analyst: AMY **Prep Batch ID** 927154

Inj. Vol: .5 uL **Batch ID:** 927155

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1410	85	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1560	93	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1400	84	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1260	75	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1300	78	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1310	79	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1680	101	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1480	89	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1350	81	45-107
120-12-7	LCS	Anthracene	1670	0.0	1340	80	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1670	100	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1450	87	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1610	97	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1320	79	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1380	83	45-98
218-01-9	LCS	Chrysene	1670	0.0	1320	79	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1610	97	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1600	96	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1430	86	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1400	84	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1420	85	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1460	87	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927154
Lab Sample ID: 1201982267
Instrument: MSD1.I
Analyst: AMY
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 14:21
Dilution: 1
Prep Batch ID: 927154
Batch ID: 927155

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1450	87	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1520	91	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1270	76	36-109

Method Blank Summary

SDG Number:	10-644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927154	Instrument ID:	MSD1.I	Data File:	s1l0310-1.d
Lab Sample ID:	1201982264	Prep Date:	11/30/2009 22:54	Analyzed:	12/03/09 13:58
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 927154	1201982267	s1l0311-1.d	12/03/09	1421
02	RE03-09-14108	241615001	s1l0314.d	12/03/09	1539
03	RE03-09-14106	241615002	s1l0315.d	12/03/09	1602
04	RE03-09-14107	241615003	s1l0316.d	12/03/09	1625
05	RE03-09-14109	241615004	s1l0317.d	12/03/09	1648
06	RE03-09-14252	241615005	s1l0318.d	12/03/09	1711
07	RE03-09-14250	241615006	s1l0319.d	12/03/09	1735
08	RE03-09-14255	241615007	s1l0320.d	12/03/09	1757
09	RE03-09-14256	241615008	s1l0321.d	12/03/09	1821
10	RE03-09-14254	241615009	s1l0322.d	12/03/09	1844
11	RE03-09-14249	241615010	s1l0323.d	12/03/09	1908
12	RE03-09-14248	241615011	s1l0324.d	12/03/09	1932
13	RE03-09-14247	241615012	s1l0325.d	12/03/09	1955
14	RE03-09-14246	241615013	s1l0326.d	12/03/09	2019
15	RE03-09-14246MS	1201982265	s1l0327.d	12/03/09	2041
16	RE03-09-14246MSD	1201982266	s1l0328.d	12/03/09	2104
17	RE03-09-14253	241615014	s1l0329.d	12/03/09	2127
18	RE03-09-14251	241615015	s1l0330.d	12/03/09	2150
19	RE03-09-14257	241615016	s1l0331.d	12/03/09	2213
20	RE03-10-2729	241615018	s1l0332.d	12/03/09	2236
21	RE03-10-6969	241615020	s1l0333.d	12/03/09	2259

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: MSD1.I **Injection Date/Time:** 03-DEC-09 11:41

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s120309.b/s110305.d

m/e	Ion Abundance Criteria	% Relative Abundance
441	Present, but less than mass 443	73.2
442	Greater than 40% of mass 198	79.7
443	17 - 23% of mass 442	19.3
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.8
68	Less than 2% of mass 69	2
69	Mass 69 Relative Abundance	41.3
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	1
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	24.8
365	Greater than 1% of mass 198	2.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091111-17.4	/chem/MSD1.i/s120309.b/s110306	03-DEC-09 11:56
APCVS	WBN091201-08.2	/chem/MSD1.i/s120309.b/s110307	03-DEC-09 12:43
SBLK01	1201982264	/chem/MSD1.i/s120309.b/s110310	03-DEC-09 13:58
SBLK01LCS	1201982267	/chem/MSD1.i/s120309.b/s110311	03-DEC-09 14:21
RE03-09-14108	241615001	/chem/MSD1.i/s120309.b/s110314	03-DEC-09 15:39
RE03-09-14106	241615002	/chem/MSD1.i/s120309.b/s110315	03-DEC-09 16:02
RE03-09-14107	241615003	/chem/MSD1.i/s120309.b/s110316	03-DEC-09 16:25
RE03-09-14109	241615004	/chem/MSD1.i/s120309.b/s110317	03-DEC-09 16:48
RE03-09-14252	241615005	/chem/MSD1.i/s120309.b/s110318	03-DEC-09 17:11
RE03-09-14250	241615006	/chem/MSD1.i/s120309.b/s110319	03-DEC-09 17:35
RE03-09-14255	241615007	/chem/MSD1.i/s120309.b/s110320	03-DEC-09 17:57
RE03-09-14256	241615008	/chem/MSD1.i/s120309.b/s110321	03-DEC-09 18:21
RE03-09-14254	241615009	/chem/MSD1.i/s120309.b/s110322	03-DEC-09 18:44
RE03-09-14249	241615010	/chem/MSD1.i/s120309.b/s110323	03-DEC-09 19:08
RE03-09-14248	241615011	/chem/MSD1.i/s120309.b/s110324	03-DEC-09 19:32
RE03-09-14247	241615012	/chem/MSD1.i/s120309.b/s110325	03-DEC-09 19:55

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: MSD1.I **Injection Date/Time:** 03-DEC-09 11:41

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s120309.b/s110305.d

m/e	Ion Abundance Criteria	% Relative Abundance
441	Present, but less than mass 443	73.2
442	Greater than 40% of mass 198	79.7
443	17 - 23% of mass 442	19.3
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.8
68	Less than 2% of mass 69	2
69	Mass 69 Relative Abundance	41.3
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	1
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	24.8
365	Greater than 1% of mass 198	2.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE03-09-14246	241615013	/chem/MSD1.i/s120309.b/s110326	03-DEC-09 20:19
RE03-09-14246MS	1201982265	/chem/MSD1.i/s120309.b/s110327	03-DEC-09 20:41
RE03-09-14246MSD	1201982266	/chem/MSD1.i/s120309.b/s110328	03-DEC-09 21:04
RE03-09-14253	241615014	/chem/MSD1.i/s120309.b/s110329	03-DEC-09 21:27
RE03-09-14251	241615015	/chem/MSD1.i/s120309.b/s110330	03-DEC-09 21:50
RE03-09-14257	241615016	/chem/MSD1.i/s120309.b/s110331	03-DEC-09 22:13
RE03-10-2729	241615018	/chem/MSD1.i/s120309.b/s110332	03-DEC-09 22:36
RE03-10-6969	241615020	/chem/MSD1.i/s120309.b/s110333	03-DEC-09 22:59

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: MSD1.I **Injection Date/Time:** 14-NOV-09 17:38

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.3
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	36.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.3
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	77.4
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091111-16	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:22
MEGA010	WBN091111-15	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 18:51
MEGA020	WBN091111-14	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:21
MEGA040	WBN091111-13.1	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 19:50
MEGA050	WBN091111-12	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:19
MEGA080	WBN091111-11	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 20:47
MEGA100	WBN091111-10	/chem/MSD1.i/s111409.b/s1k120	14-NOV-09 21:16
MEGA120	WBN091111-09	/chem/MSD1.i/s111409.b/s1k121	14-NOV-09 21:45

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: MSD1.I **Injection Date/Time:** 15-NOV-09 14:50

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1213.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	45.1
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	39.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.2
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	72.7
442	Greater than 40% of mass 198	70.7
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP010	WBN091111-01	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:28
AP020	WBN091111-02	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 15:51
AP040	WBN091111-03.1	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:14
AP050	WBN091111-04	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 16:38
AP080	WBN091111-05	/chem/MSD1.i/s111409.b/s1k121	15-NOV-09 17:01
AP100	WBN091111-06	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:24
AP120	WBN091111-07	/chem/MSD1.i/s111409.b/s1k122	15-NOV-09 17:47
APICV	WBN091111-08.1	/chem/MSD1.i/s111409.b/s1k123	15-NOV-09 23:17

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-644

Instrument ID: MSD1.I **Injection Date/Time:** 17-NOV-09 15:48

Column Description: J&W DB-5MS **Lab File ID** /chem/MSD1.i/s111409.b/s1k1259.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.2
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.5
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	72.4
442	Greater than 40% of mass 198	78.9
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICV	WBN091027-09.3	/chem/MSD1.i/s111409.b/s1k126	17-NOV-09 16:27

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-644

Instrument: MSD1.I

STD Analysis Time: 03-DEC-09 11:56

GC Column: J&W DB-5MS

Data File: s110306.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	355858		3.92	1575251		4.78	843663		6.03	1514255		7.01	1346768		8.67	1159145		10.1
Upper Limit	711716		4.42	3150502		5.28	1687326		6.53	3028510		7.51	2693536		9.17	2318290		10.6
Lower Limit	177929		3.42	787626		4.28	421832		5.53	757128		6.51	673384		8.17	579573		9.63
Sample ID																		
BLK01	339927		3.92	1345956		4.78	760389		6.02	1288792		7	1109639		8.67	948722		10.1
BLK01LCS	403537		3.92	1747037		4.78	905312		6.03	1584646		7.01	1450828		8.67	1270259		10.1
RE03-09-14108	423581		3.92	1679078		4.78	956255		6.02	1618260		7	1360348		8.67	1166325		10.1
RE03-09-14106	446835		3.92	1803253		4.78	1030846		6.02	1760730		7	1590890		8.67	1457493		10.1
RE03-09-14107	389956		3.92	1544404		4.78	866450		6.02	1487170		7	1299678		8.66	1171104		10.1
RE03-09-14109	424748		3.92	1664356		4.78	932240		6.02	1613201		7	1457765		8.66	1283926		10.1
RE03-09-14252	393432		3.92	1559096		4.78	888302		6.02	1534874		7	1343778		8.66	1200230		10.1
RE03-09-14250	392611		3.92	1558317		4.78	890831		6.03	1517142		7	1352070		8.66	1217340		10.1
RE03-09-14255	364539		3.92	1423370		4.78	814723		6.02	1390970		7	1219022		8.66	1088070		10.1
RE03-09-14256	365608		3.92	1444605		4.78	812651		6.02	1400101		7	1245377		8.66	1108892		10.1
RE03-09-14254	382273		3.92	1503874		4.78	847513		6.02	1482104		7	1288621		8.66	1140879		10.1
RE03-09-14249	379518		3.92	1522584		4.78	867727		6.02	1494504		7	1312399		8.66	1166595		10.1
RE03-09-14248	442329		3.92	1765528		4.78	998710		6.02	1743669		7	1645178		8.66	1512001		10.1
RE03-09-14247	320760		3.92	1255568		4.78	729086		6.02	1247593		7	1065771		8.66	928550		10.1
RE03-09-14246	375683		3.92	1502854		4.78	864726		6.02	1497609		7	1303028		8.66	1111655		10.1
RE03-09-14246MS	329600		3.92	1407418		4.78	741204		6.03	1301663		7	1201776		8.67	1012256		10.1
RE03-09-14246MSD	453063		3.92	1946842		4.78	1052451		6.03	1811048		7	1581628		8.67	1229254		10.1
RE03-09-14253	350203		3.92	1393082		4.78	795443		6.02	1403972		7	1282951		8.67	1064200		10.1
RE03-09-14251	373680		3.92	1479329		4.78	864547		6.02	1531615		7	1375875		8.66	1106868		10.1
RE03-09-14257	425935		3.92	1676231		4.78	974510		6.03	1683836		7	1484934		8.66	1156211		10.1
RE03-10-2729	405157		3.92	1606966		4.78	934284		6.02	1631579		7	1348052		8.66	935485		10.1
RE03-10-6969	400255		3.92	1581500		4.78	923794		6.02	1632228		7	1417157		8.66	1077022		10.1

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615002	Date Received:	11/21/2009 09:00	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14106	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:02	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s110315.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.2	366
108-95-2	Phenol	U	366	ug/kg	73.2	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.2	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.2	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.2	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.2	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.5	366
129-00-0	Pyrene	J	32.3	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.2	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.2	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.2	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.2	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.2	366
95-48-7	o-Cresol	U	366	ug/kg	73.2	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.2	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.2	366
78-59-1	Isophorone	U	366	ug/kg	73.2	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.2	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.2	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.2	366
65-85-0	Benzoic acid	U	732	ug/kg	183	732
91-20-3	Naphthalene	J	16.8	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.2	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.2	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.32	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.2	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.2	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.2	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline	U	366	ug/kg	73.2	366
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	366	ug/kg	73.2	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615002	Date Received:	11/21/2009 09:00	%Moisture:	9.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14106	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:02	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s110315.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.2	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	732	ug/kg	139	732
132-64-9	Dibenzofuran	U	366	ug/kg	73.2	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.2	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.2	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.2	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.2	366
122-66-7	Azobenzene	U	366	ug/kg	73.2	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.2	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.2	366
85-01-8	Phenanthrene		46.4	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.32	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.2	366
206-44-0	Fluoranthene		39.8	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.2	366
56-55-3	Benzo(a)anthracene	J	18.7	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	J	18.0	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.2	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.2	366
205-99-2	Benzo(b)fluoranthene		122	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	J	13.3	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.2	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	204	ug/kg		J
	Unknown Aldol Condensate	2.95	1840	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110315.d
Lab Smp Id: 241615002 Client Smp ID: RE03-09-14106
Inj Date : 03-DEC-2009 16:02
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615002|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	9.44270	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	446835	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1803253	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	1030846	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1760730	40.0000	
* 91 Chrysene-d12	240	8.669	8.675	(1.000)	1590890	40.0000	
* 98 Perylene-d12	264	10.122	10.127	(1.000)	1457493	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	725174	62.1339	2270
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	847470	59.7434	2190
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	392543	33.0323	1210
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	924991	37.4661	1370
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	261510	90.8497	3320
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.913)	1111574	44.5129	1630

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.869	7.875	(0.908)	37254	0.88123	32.2(a)
30 Naphthalene	128	4.798	4.798	(1.004)	17294	0.45952	16.8(aQ)
68 Phenanthrene	178	7.016	7.022	(1.002)	50729	1.26778	46.4
76 Fluoranthene	202	7.728	7.733	(1.103)	42001	1.08742	39.8
89 Benzo(a)anthracene	228	8.657	8.663	(0.999)	19467	0.51031	18.7(aH)
92 Chrysene	228	8.686	8.698	(1.002)	17519	0.49135	18.0(a)
95 Benzo(b)fluoranthene	252	9.651	9.663	(0.954)	26588	3.33556	122
101 Benzo(ghi)perylene	276	12.233	12.257	(1.209)	9933	0.36268	13.3(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s110315.d
Report Date: 12/03/2009 16:36
Lab. ID: 241615002 SampleType: SAMPLE
Injection Date: 03-DEC-2009 16:02
Operator: AMY Instrument: MSD1.i
Sample Info: |241615002|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	41142	3.64	3.70	80-120	100	(T)
93	198	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	52766	4.28	4.16	80-120	100	(T)
42	33974	4.28	4.16	48-108	64	(T)
30 Naphthalene			CAS#: 91-20-3			
128	17294	4.80	4.80	80-120	100	( )
129	2061	4.79	4.80	0- 42	12	( )
127	2121	4.80	4.80	15- 75	12	(Q)
43 Dimethylphthalate			CAS#: 131-11-3			
163	182024	6.03	5.80	80-120	100	(T)
164	1030846	6.02	5.80	0- 40	566	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	132218	6.02	5.85	80-120	100	(T)
63	1609	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	132218	6.02	6.13	80-120	100	(T)
89	1478	6.02	6.13	33- 93	1	(QT)
63	1609	6.02	6.13	16- 76	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	15729	6.56	6.40	80-120	100	(T)
165	16547	6.56	6.40	64-124	105	(T)
167	5212	6.56	6.40	0- 43	33	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	16275	6.56	6.70	80-120	100	(T)
141	100272	6.56	6.70	47-107	616	(QT)
250	30688	6.56	6.70	68-128	189	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	50729	7.02	7.02	80-120	100	( )
179	8805	7.02	7.02	0- 45	17	( )
176	9379	7.02	7.02	0- 48	18	( )
69 Anthracene			CAS#: 120-12-7			
178	50729	7.02	7.06	80-120	100	( )
179	8805	7.02	7.06	0- 45	17	( )
176	9379	7.02	7.06	0- 48	18	( )
76 Fluoranthene			CAS#: 206-44-0			
202	42001	7.73	7.73	80-120	100	( )
203	7584	7.73	7.73	0- 47	18	( )
101	5813	7.73	7.73	0- 44	14	( )
79 Pyrene			CAS#: 129-00-0			
202	37254	7.87	7.87	80-120	100	( )
200	7652	7.87	7.87	0- 50	21	( )
101	6422	7.87	7.87	0- 47	17	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	19467	8.66	8.66	80-120	100	( )
226	5165	8.66	8.66	0- 55	27	( )
229	4875	8.66	8.66	0- 50	25	( )
92 Chrysene			CAS#: 218-01-9			
228	17519	8.69	8.70	80-120	100	( )
229	4199	8.69	8.70	0- 49	24	( )
226	5166	8.69	8.70	0- 58	29	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	26588	9.65	9.66	80-120	100	( )
253	3989	9.66	9.66	0- 52	15	( )
125	3671	9.66	9.66	0- 45	14	( )
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	26588	9.65	9.70	80-120	100	( )
253	3989	9.66	9.70	0- 52	15	( )
125	3671	9.66	9.69	0- 44	14	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
101	Benzo(ghi)perylene			CAS#: 191-24-2		
276	9933	12.23	12.26	80-120	100	( )
138	3318	12.23	12.26	7- 67	33	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110315.d
Lab Smp Id: 241615002 Client Smp ID: RE03-09-14106
Inj Date : 03-DEC-2009 16:02
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615002|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	9.44270	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2634339	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.628	366323	5.56227350	204	0		0	10
Unknown Aldol Condensate				CAS #:			
2.951	3302682	50.1481699	1840	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110315.d
Date : 03-DEC-2009 16:02
Client ID: RE03-09-14106
Sample Info: |2416150021927155|1|SVHF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AHY
Column diameter: 0.20

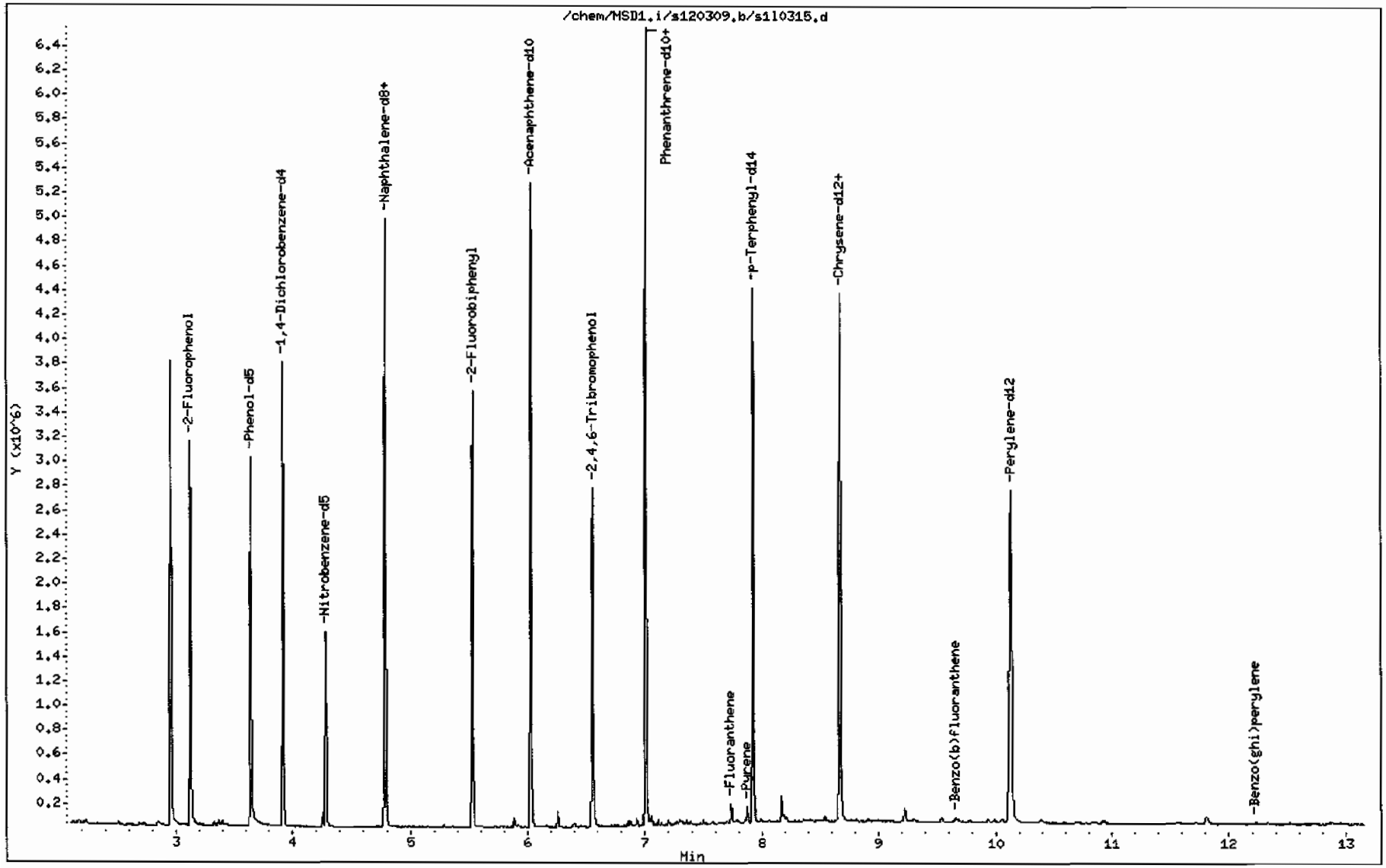

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: 1241615002192715511ISVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 32.2 ug/Kg

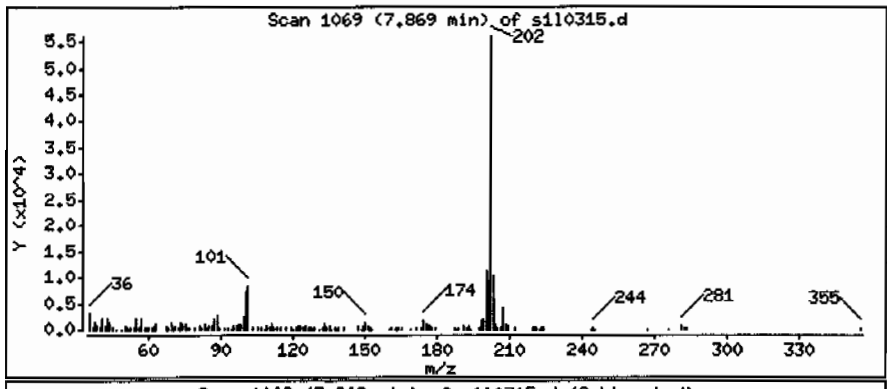

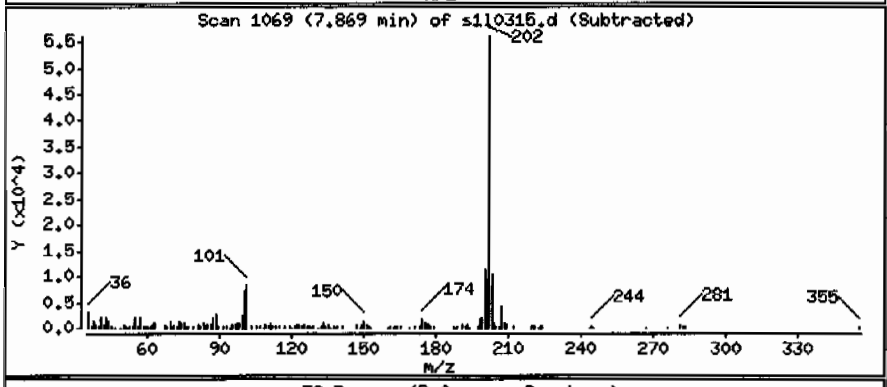

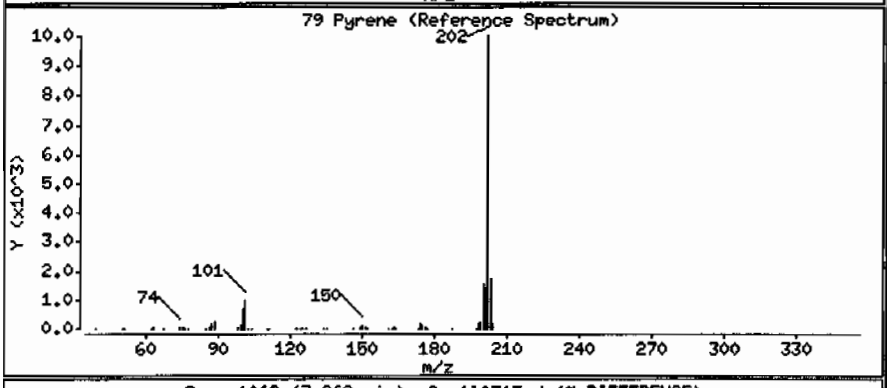

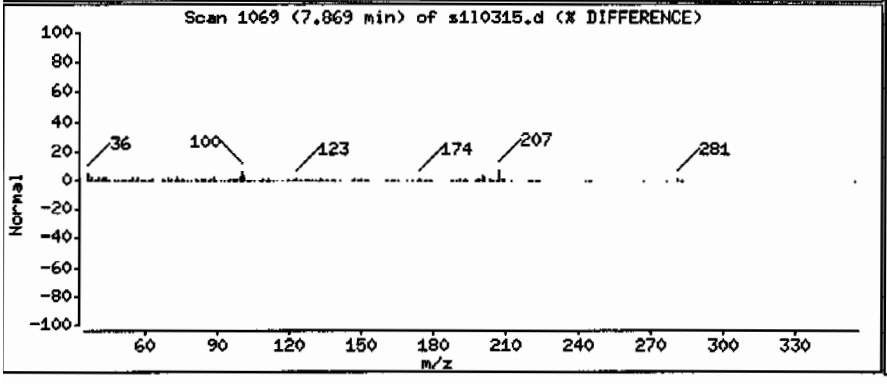

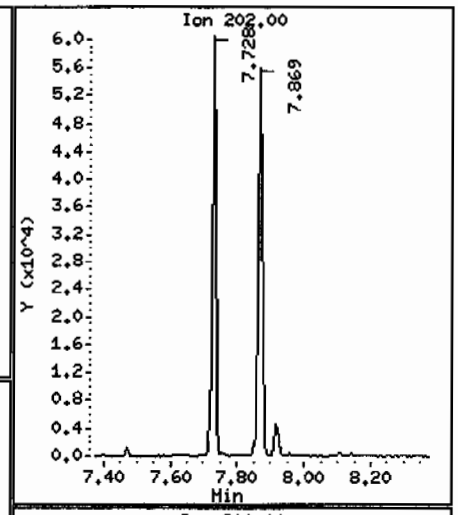

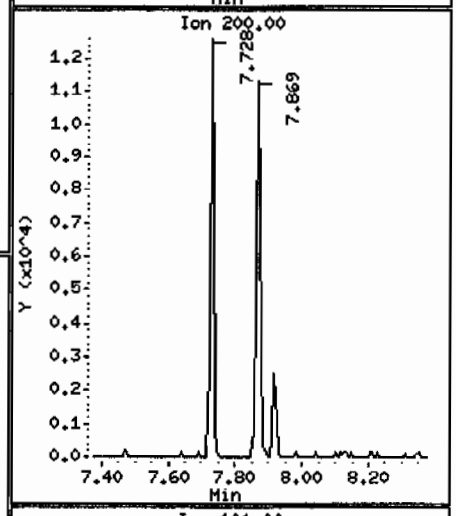

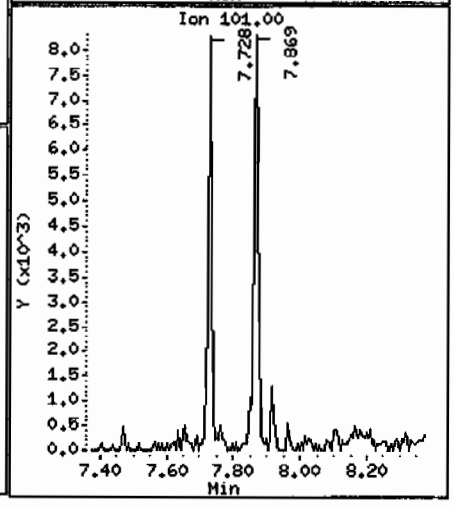

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: |24161500219271551|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

30 Naphthalene

Concentration: 16.8 ug/Kg

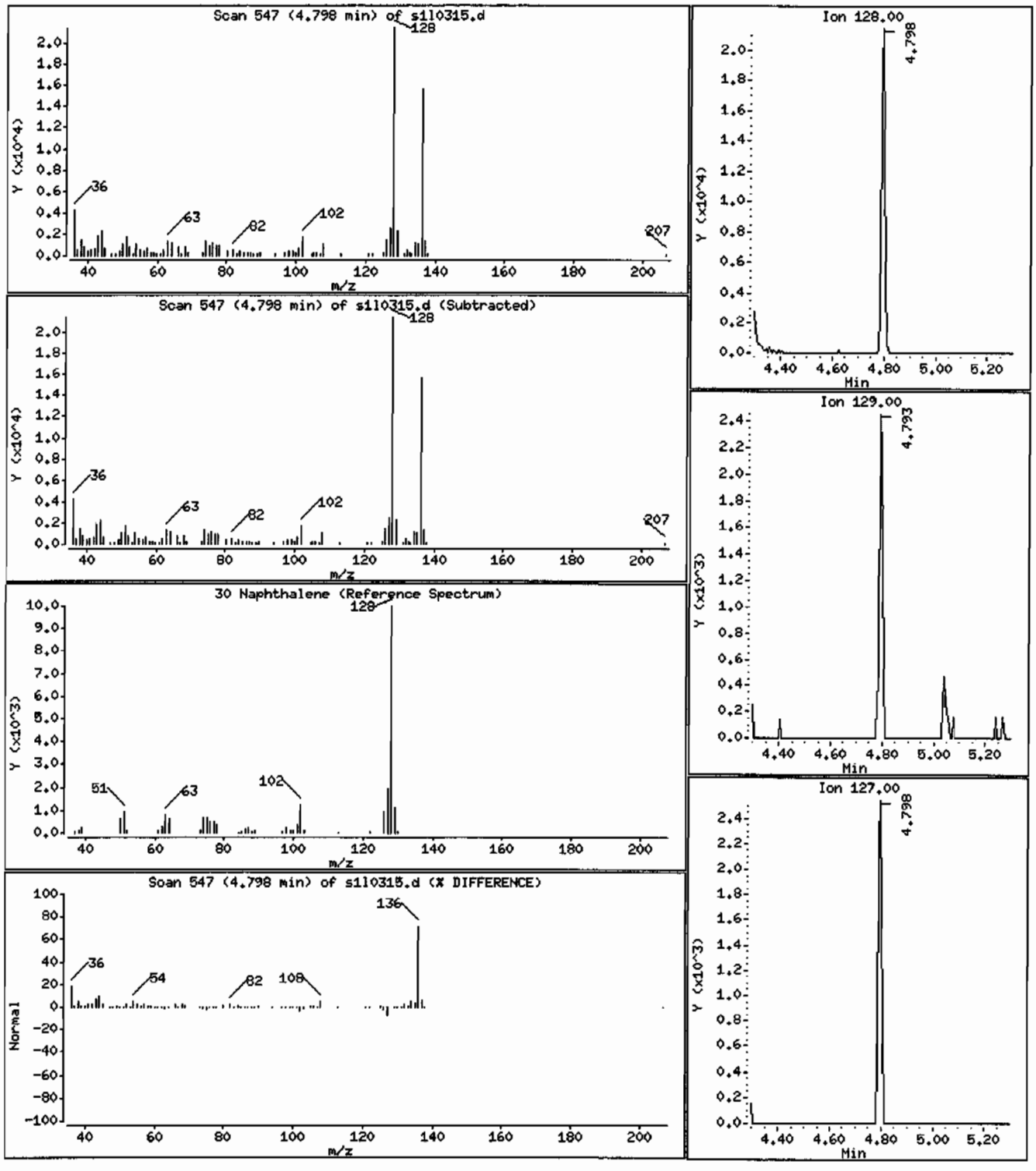

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: |2416150021927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 46.4 ug/Kg

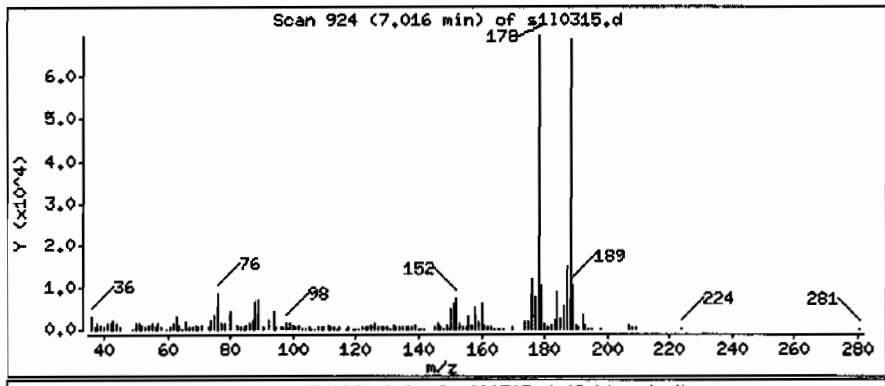

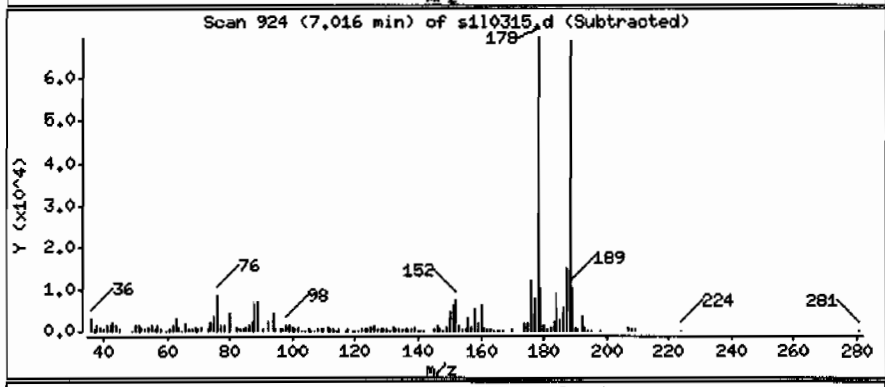

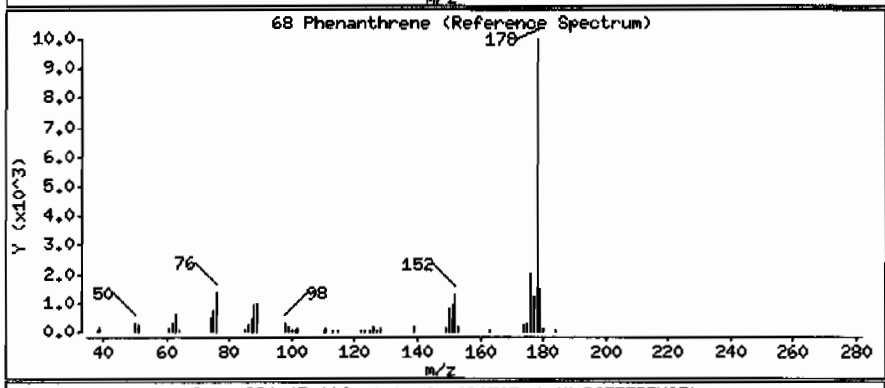

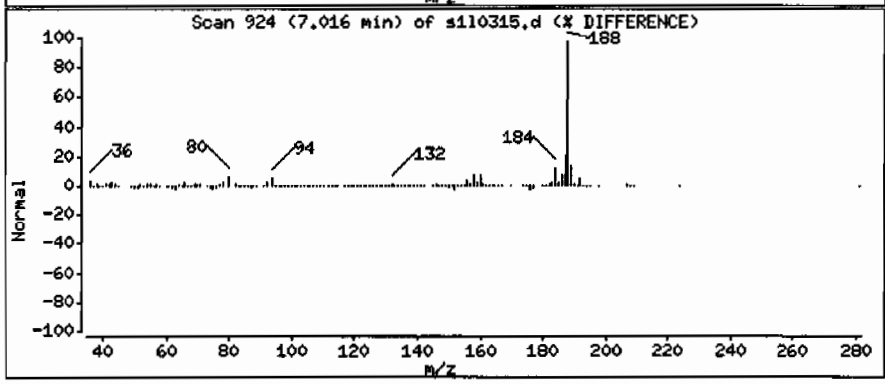

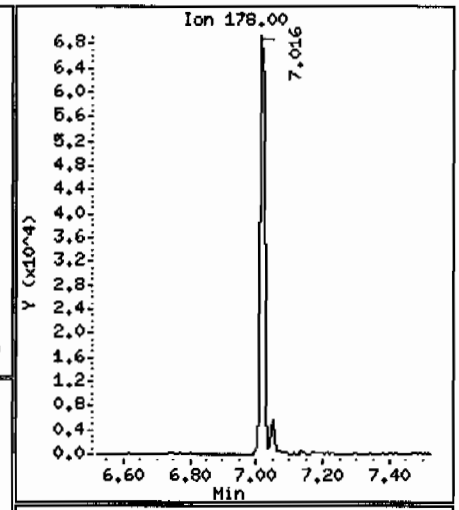

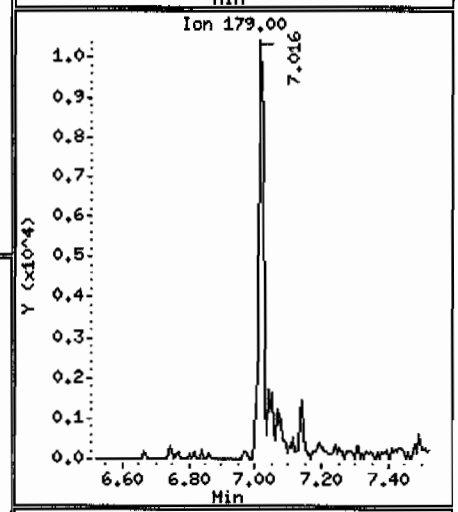

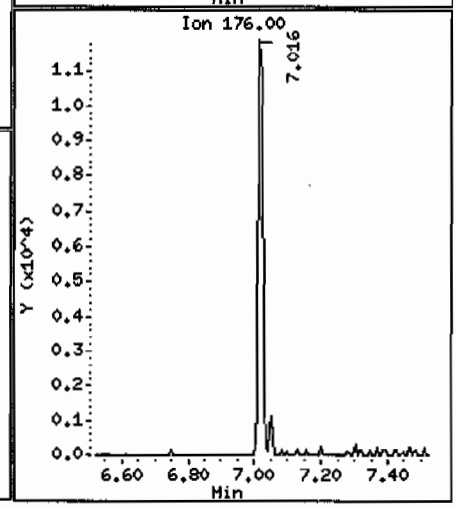

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: 1241615002|927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 39.8 ug/Kg

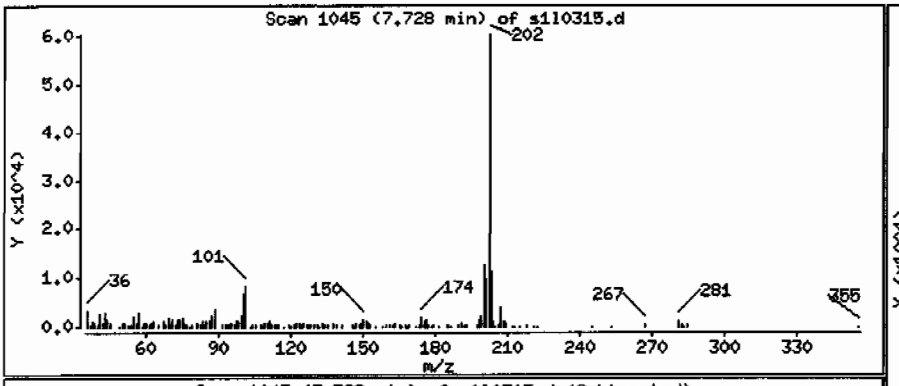

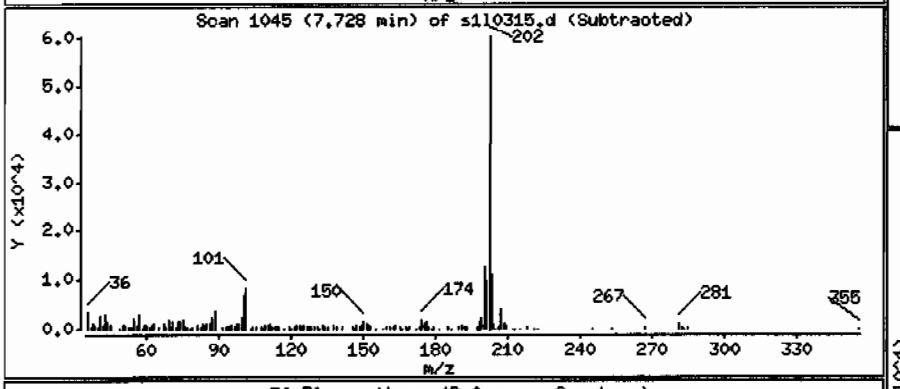

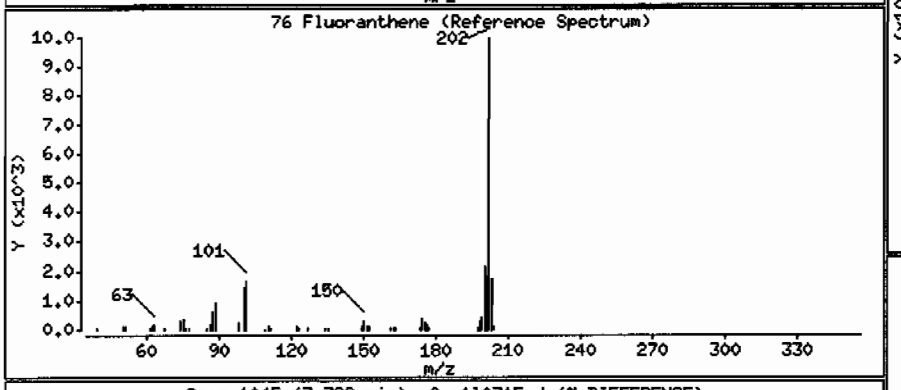

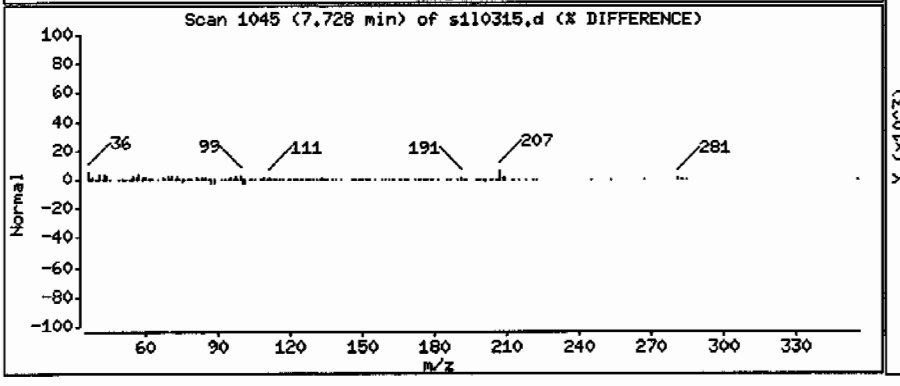

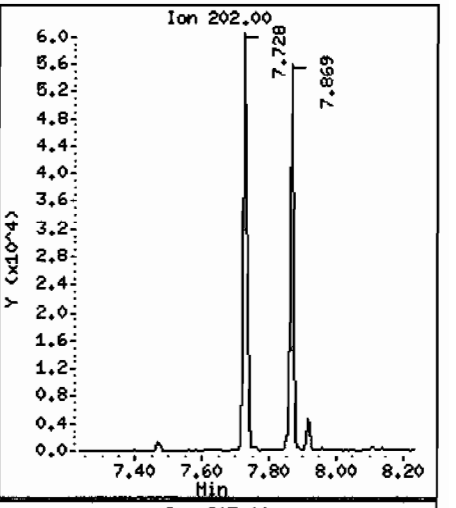

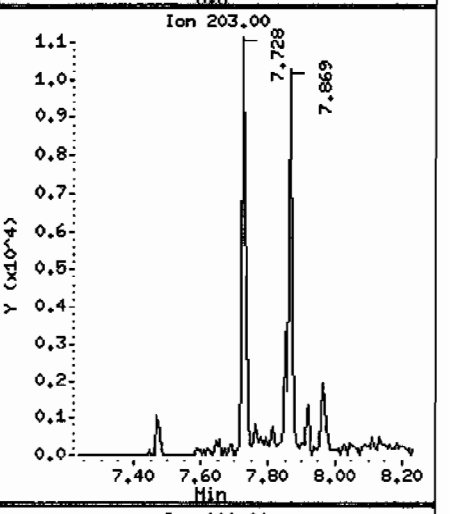

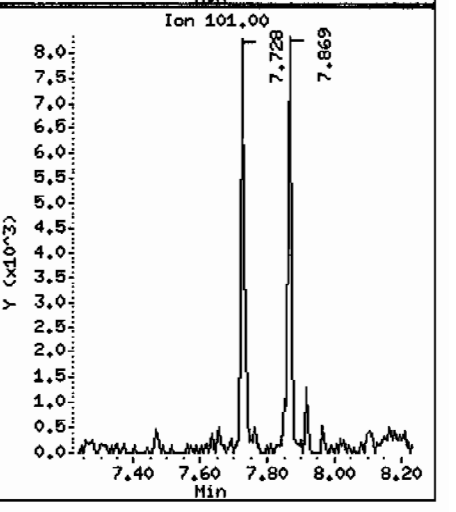

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: |2416150021927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 18.7 ug/Kg

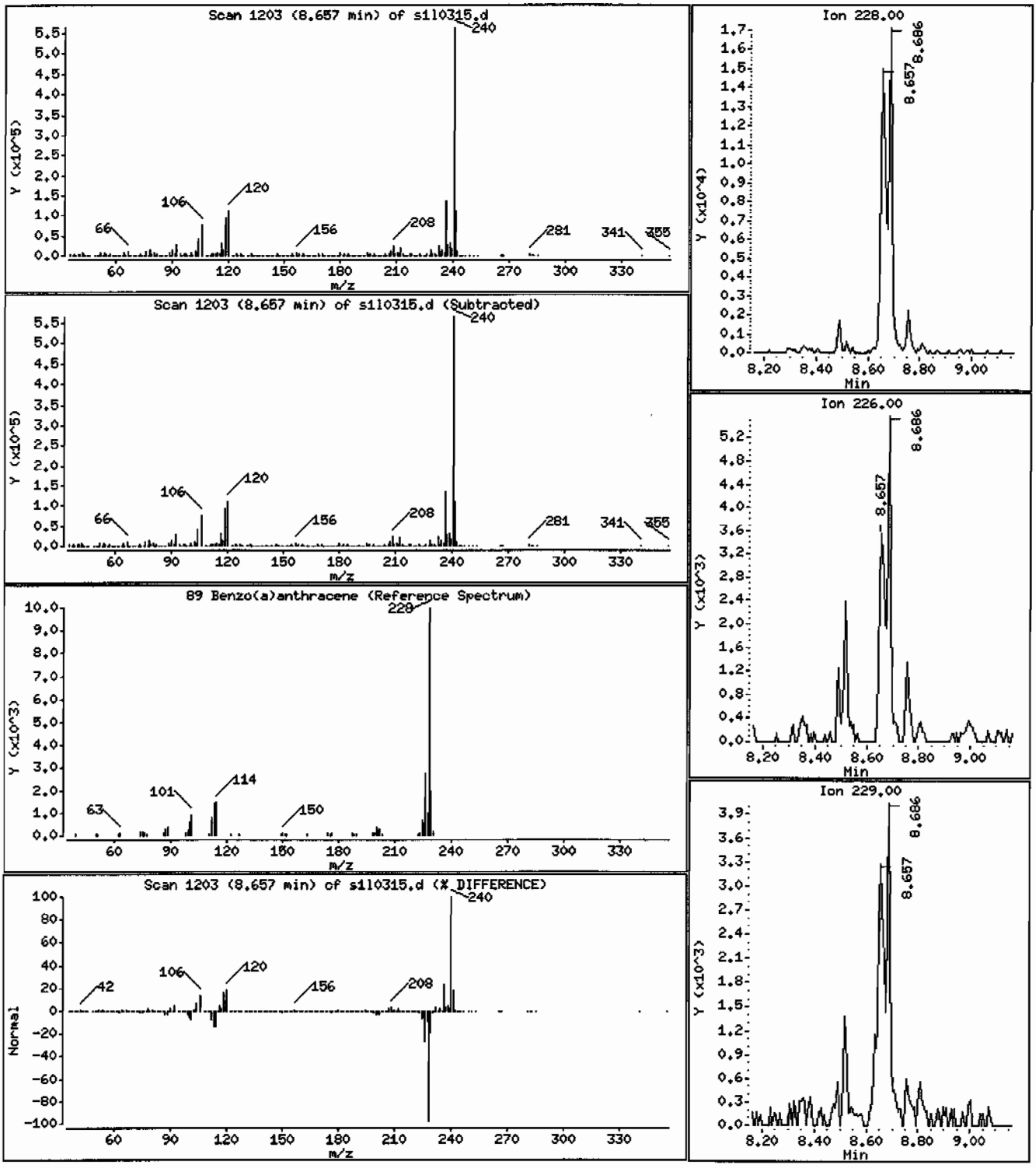

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: |2416150021927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 18.0 ug/Kg

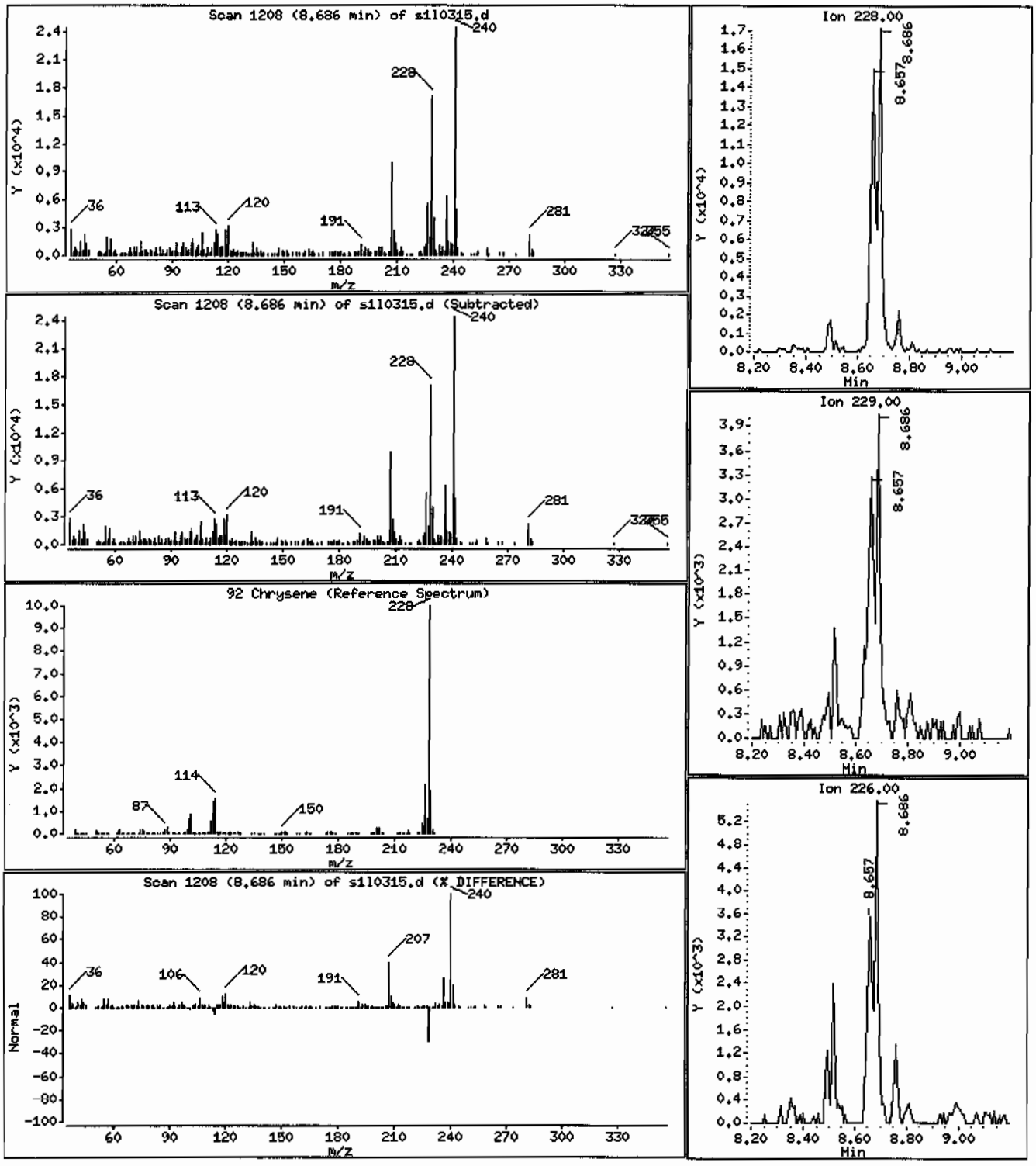

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: |2416150021927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 122 ug/Kg

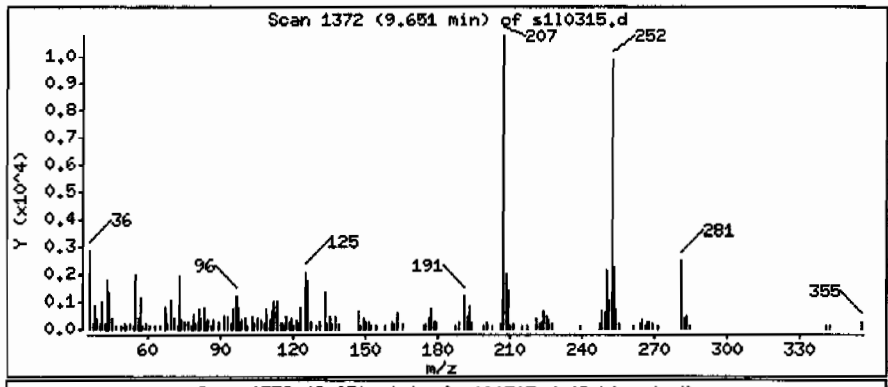

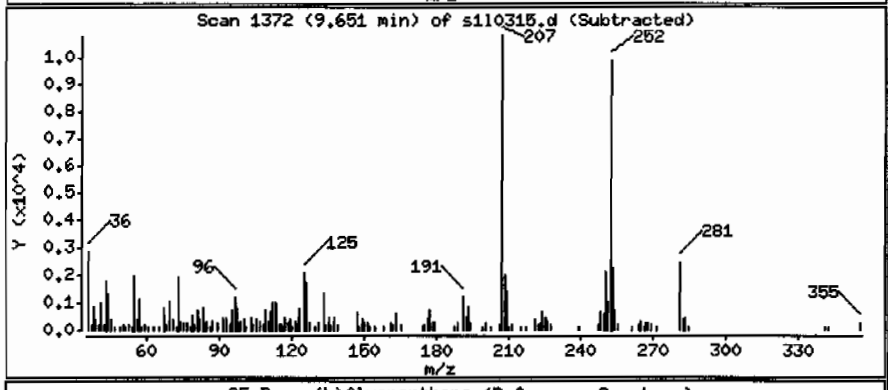

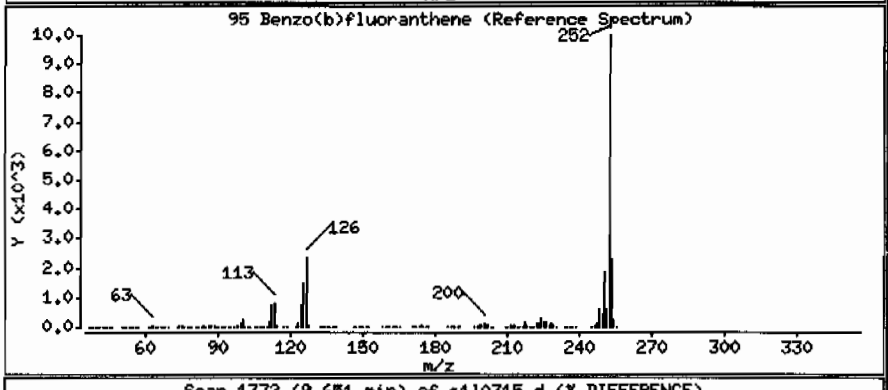

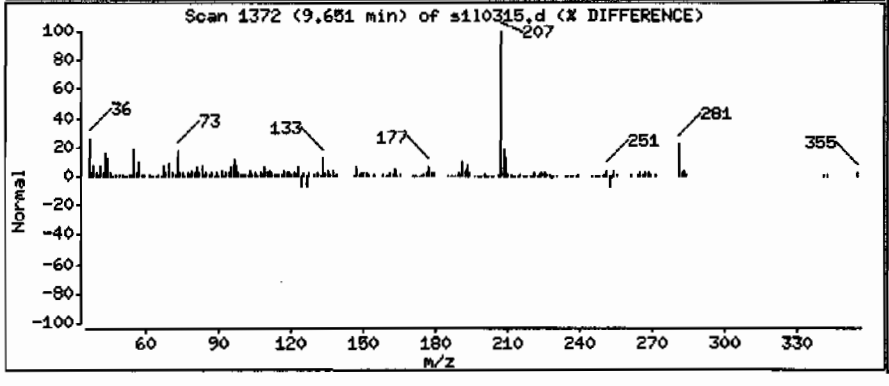

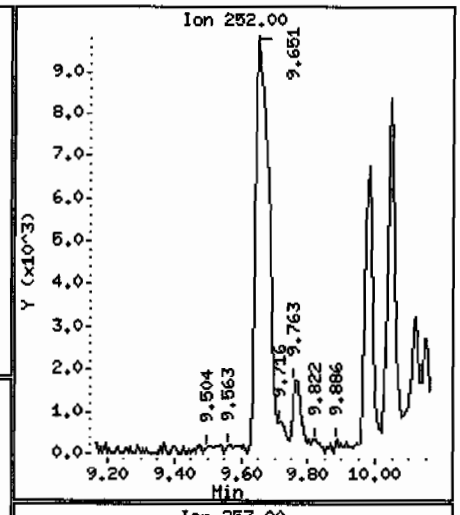

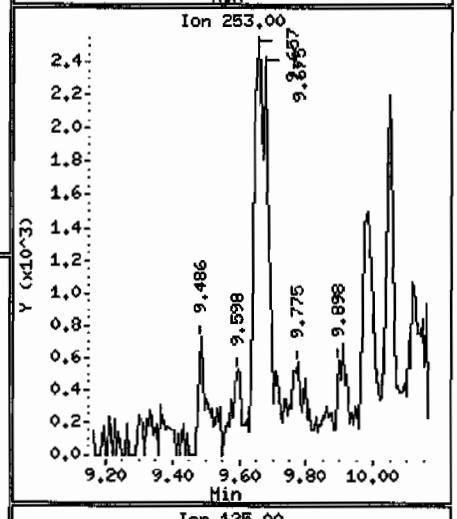

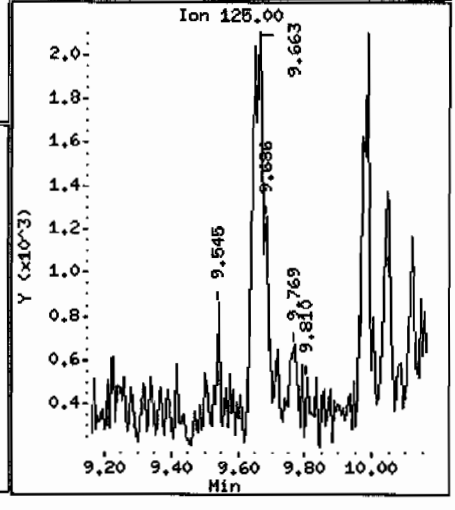

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106 Instrument: MSD1.i

Sample Info: |2416150021927155111SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

101 Benzo(ghi)perylene Concentration: 13.3 ug/Kg

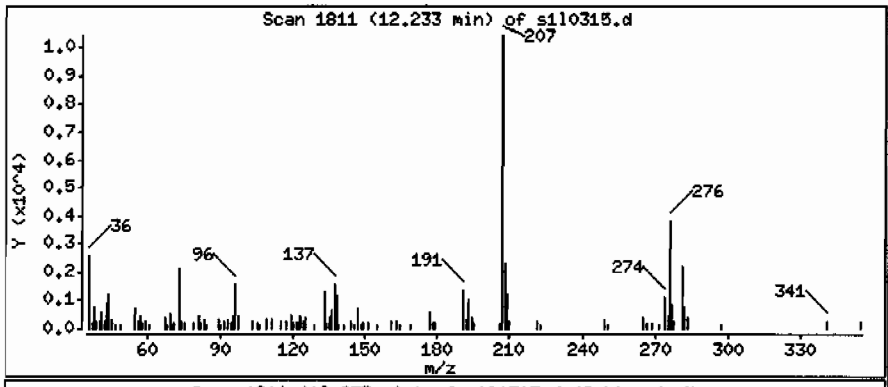

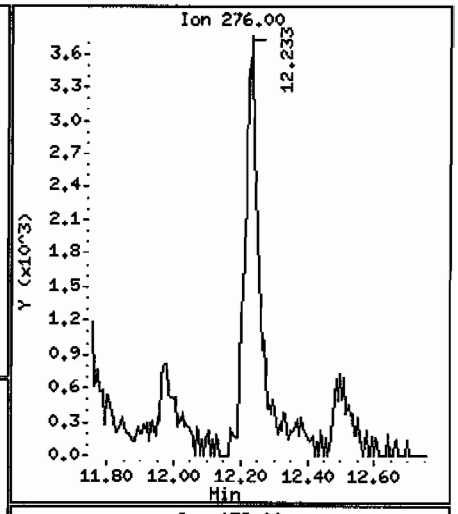

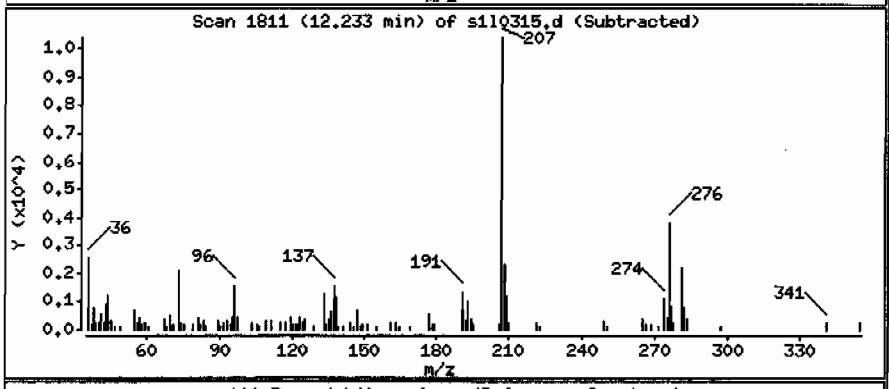

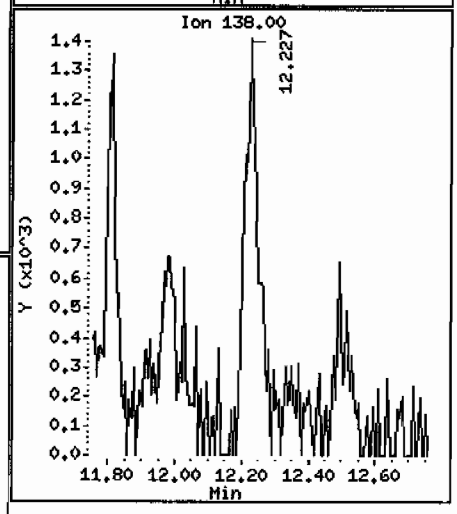

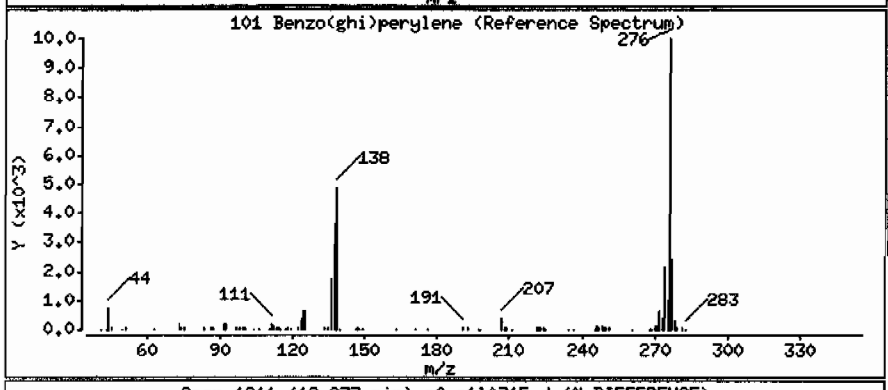

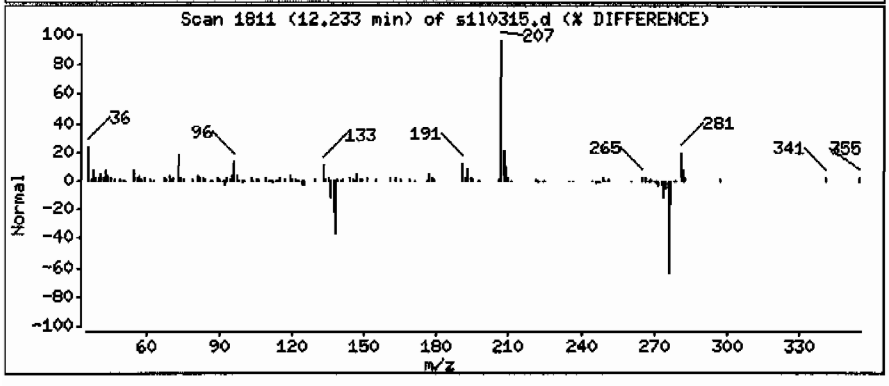

Data File: /chem/MSD1.i/s120309.b/s110315.d

Page 1

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: |2416150021927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl Chloride	75-00-3	NIST05.L	342	4	C2H5Cl	64
2-Butanone, 1-chloro-	616-27-3	NIST05.L	4875	2	C4H7ClO	106
S-(Buthoxythiocarbonyl)thiohydroxylamine	35659-81-5	NIST05.L	32811	2	C5H11NOS2	165

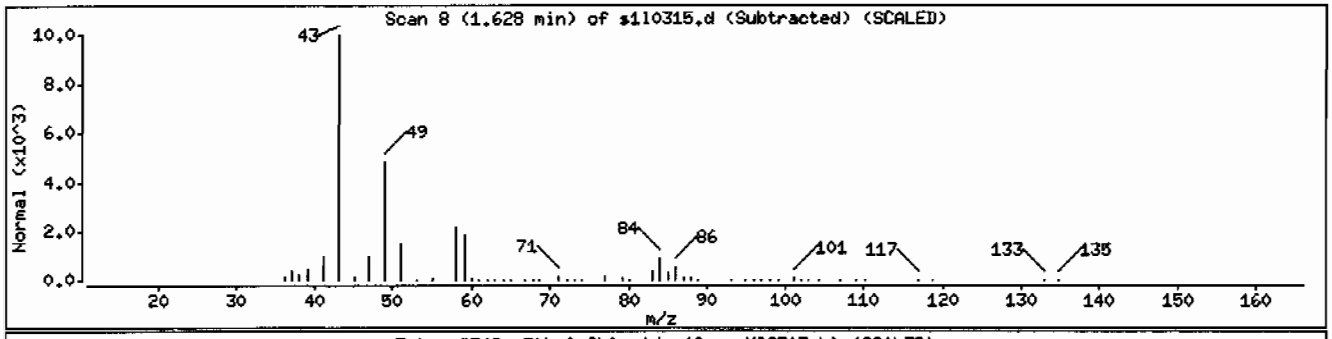

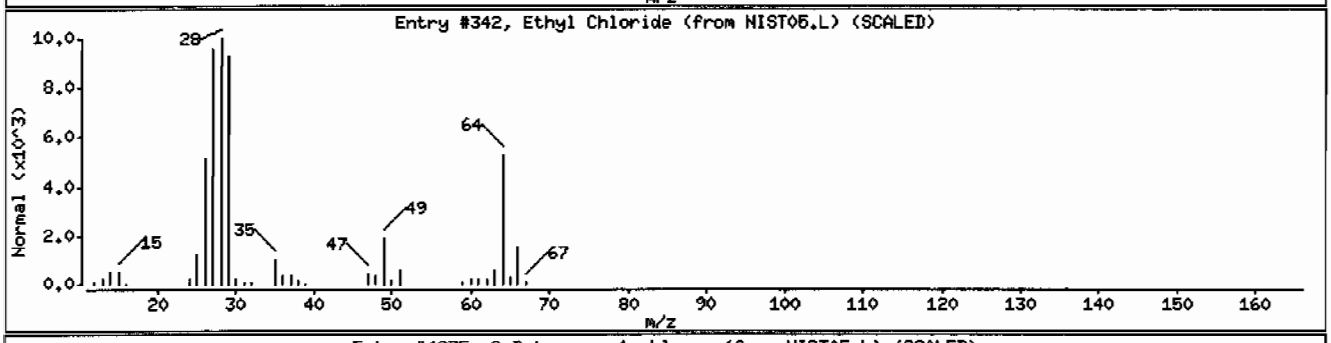

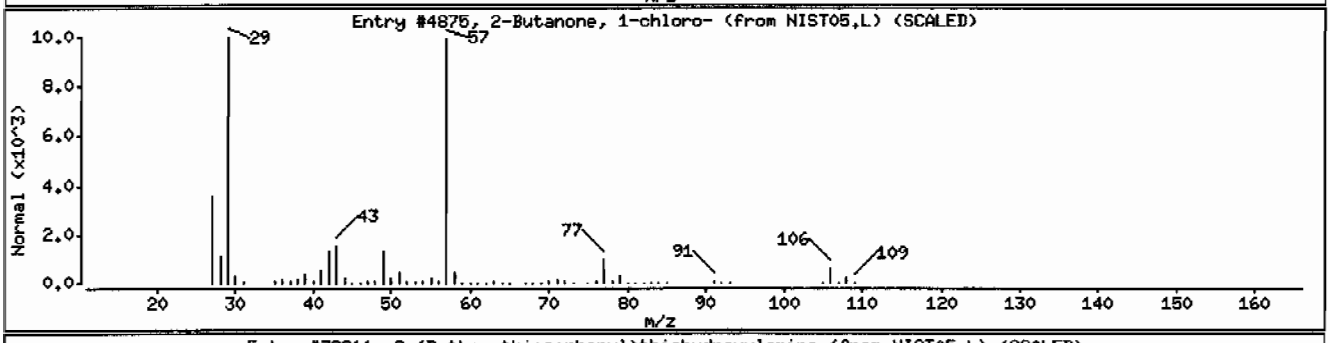

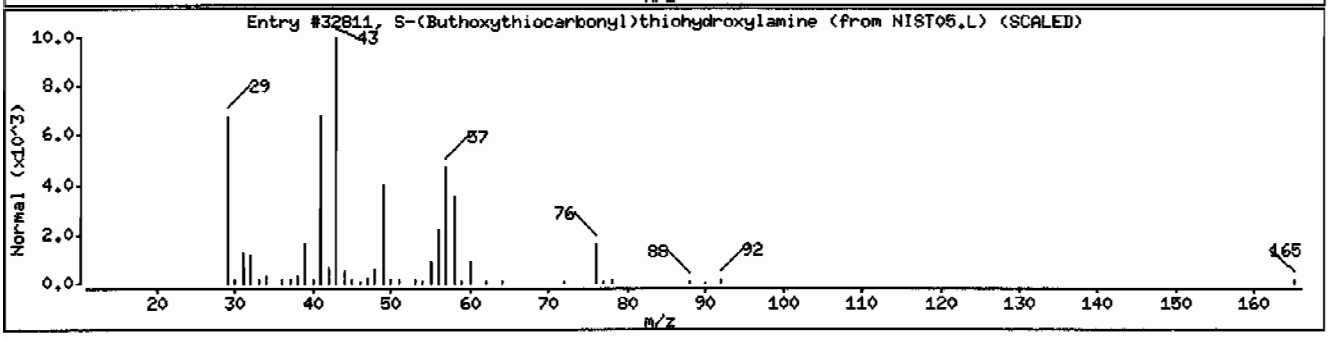

Data File: /chem/MSD1.i/s120309.b/s110315.d

Date : 03-DEC-2009 16:02

Client ID: RE03-09-14106

Instrument: MSD1.i

Sample Info: |2416150021927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	38	C4H7NO2	101

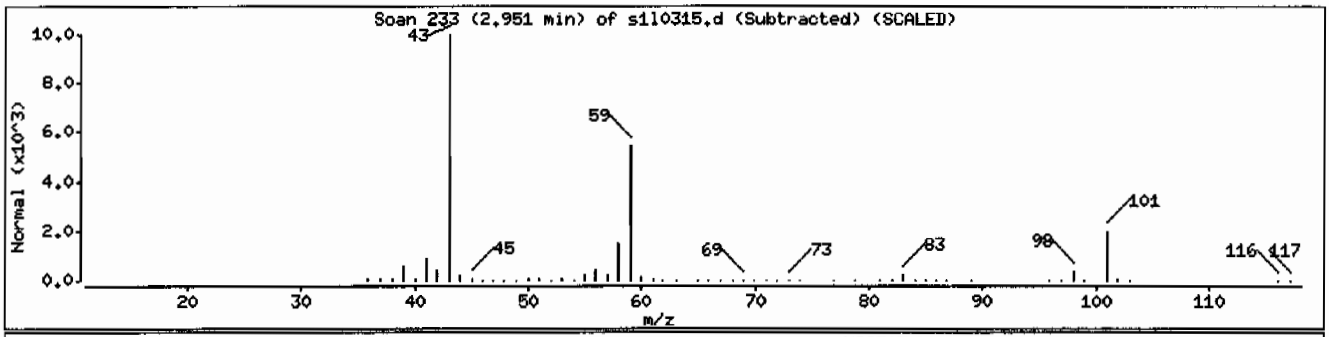

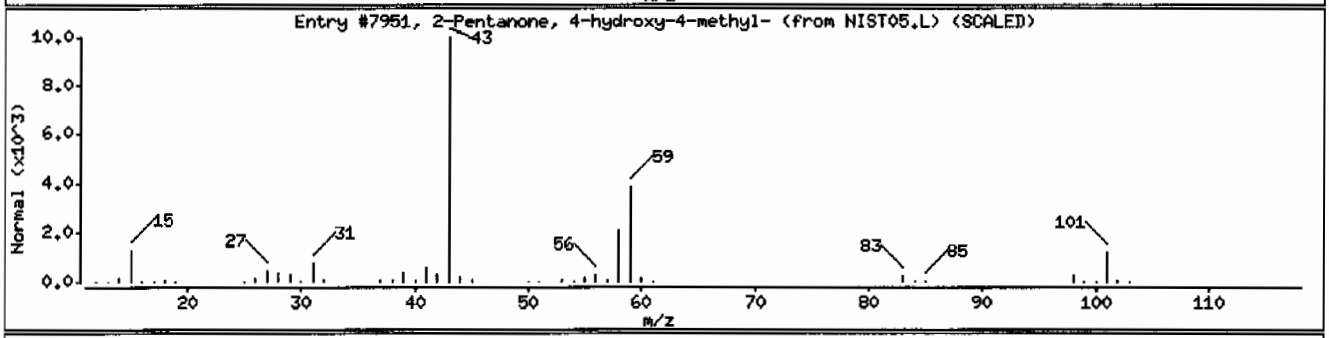

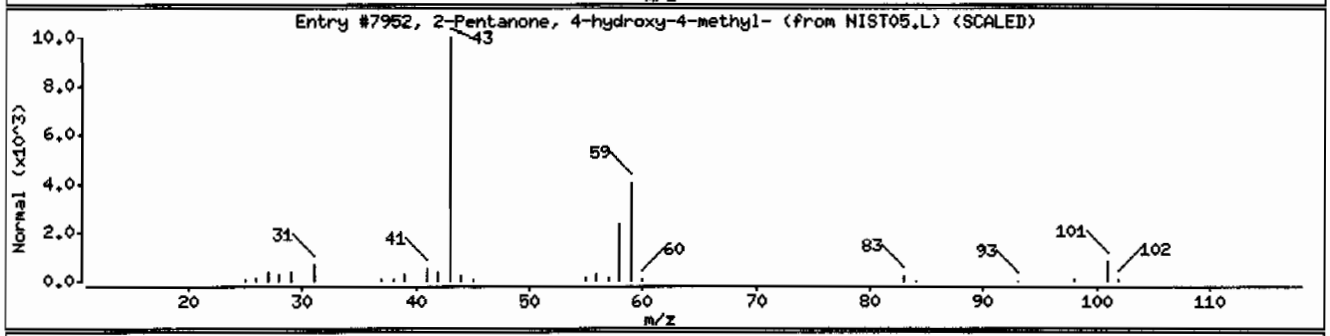

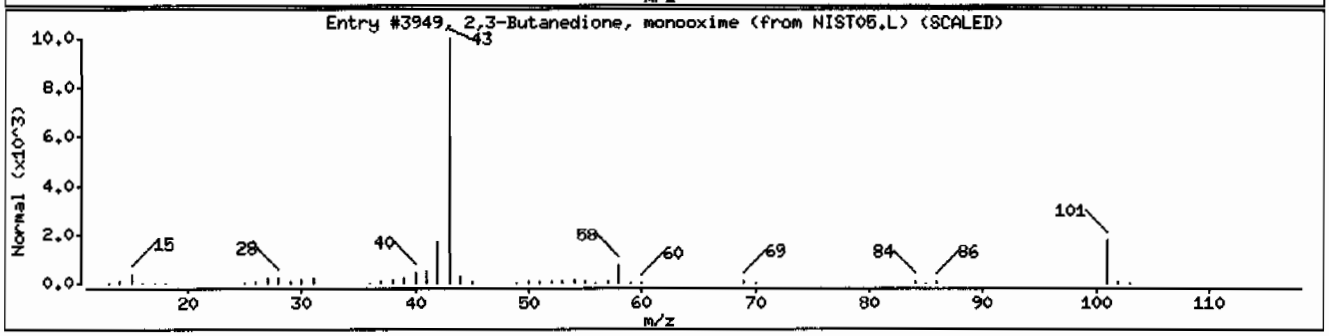

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615003	Date Received:	11/21/2009 09:00	%Moisture:	12.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14107	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:25	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s110316.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.7	379
108-95-2	Phenol	U	379	ug/kg	75.7	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.7	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.7	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.7	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.7	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.6	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.7	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.7	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.7	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.7	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.7	379
95-48-7	o-Cresol	U	379	ug/kg	75.7	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.7	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.7	379
78-59-1	Isophorone	U	379	ug/kg	75.7	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.7	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.7	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.7	379
65-85-0	Benzoic acid	U	757	ug/kg	189	757
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.7	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.7	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.57	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.7	379
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.7	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.7	379
91-58-7	2-Chloronaphthalene	U	37.9	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.7	379
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	379	ug/kg	75.7	379

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615003**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**12.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14107**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:25**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s110316.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	379	ug/kg	75.7	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	757	ug/kg	144	757
132-64-9	Dibenzofuran	U	379	ug/kg	75.7	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.7	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.7	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.7	379
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	p-Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.7	379
122-66-7	Azobenzene	U	379	ug/kg	75.7	379
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.7	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.7	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.57	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.7	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.7	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.7	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.7	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.7	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1740	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110316.d
Lab Smp Id: 241615003 Client Smp ID: RE03-09-14107
Inj Date : 03-DEC-2009 16:25
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615003|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	12.21420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	389956	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1544404	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	866450	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1487170	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1299678	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1171104	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	688072	67.5541	2560
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	790914	63.8890	2420
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	368959	36.2515	1370
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	840683	40.5120	1530
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	199299	82.3741	3120
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	876894	42.9832	1630

ION RATIO REPORT

SV REPORT

Data file: s110316.d
Report Date: 12/04/2009 07:26
Lab. ID: 241615003 SampleType: SAMPLE
Injection Date: 03-DEC-2009 16:25
Operator: AMY Instrument: MSD1.i
Sample Info: |241615003|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	36990	3.64	3.70	80-120	100	(T)
93	232	3.59	3.72	409-469	1	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	49950	4.28	4.16	80-120	100	(T)
42	31571	4.28	4.16	48-108	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	156398	6.03	5.80	80-120	100	(T)
164	866450	6.02	5.80	0- 40	554	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	112030	6.02	5.85	80-120	100	(T)
63	1153	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	112030	6.02	6.13	80-120	100	(T)
89	1460	6.02	6.13	33- 93	1	(QT)
63	1153	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	12146	6.56	6.40	80-120	100	(T)
165	13099	6.56	6.40	64-124	108	(T)
167	4247	6.56	6.40	0- 43	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	12127	6.56	6.70	80-120	100	(T)
141	76654	6.56	6.70	47-107	632	(QT)
250	24481	6.56	6.70	68-128	202	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	424	9.66	9.66	80-120	100	( )
253	192	9.65	9.66	0- 52	45	( )
125	323	9.64	9.66	0- 45	76	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110316.d
Lab Smp Id: 241615003 Client Smp ID: RE03-09-14107
Inj Date : 03-DEC-2009 16:25
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615003|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	12.21420	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2284370	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.946	2629204	46.0381454	1740	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110316.d
Date : 03-DEC-2009 16:25
Client ID: RE03-09-14107
Sample Info: |24161500319271551|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

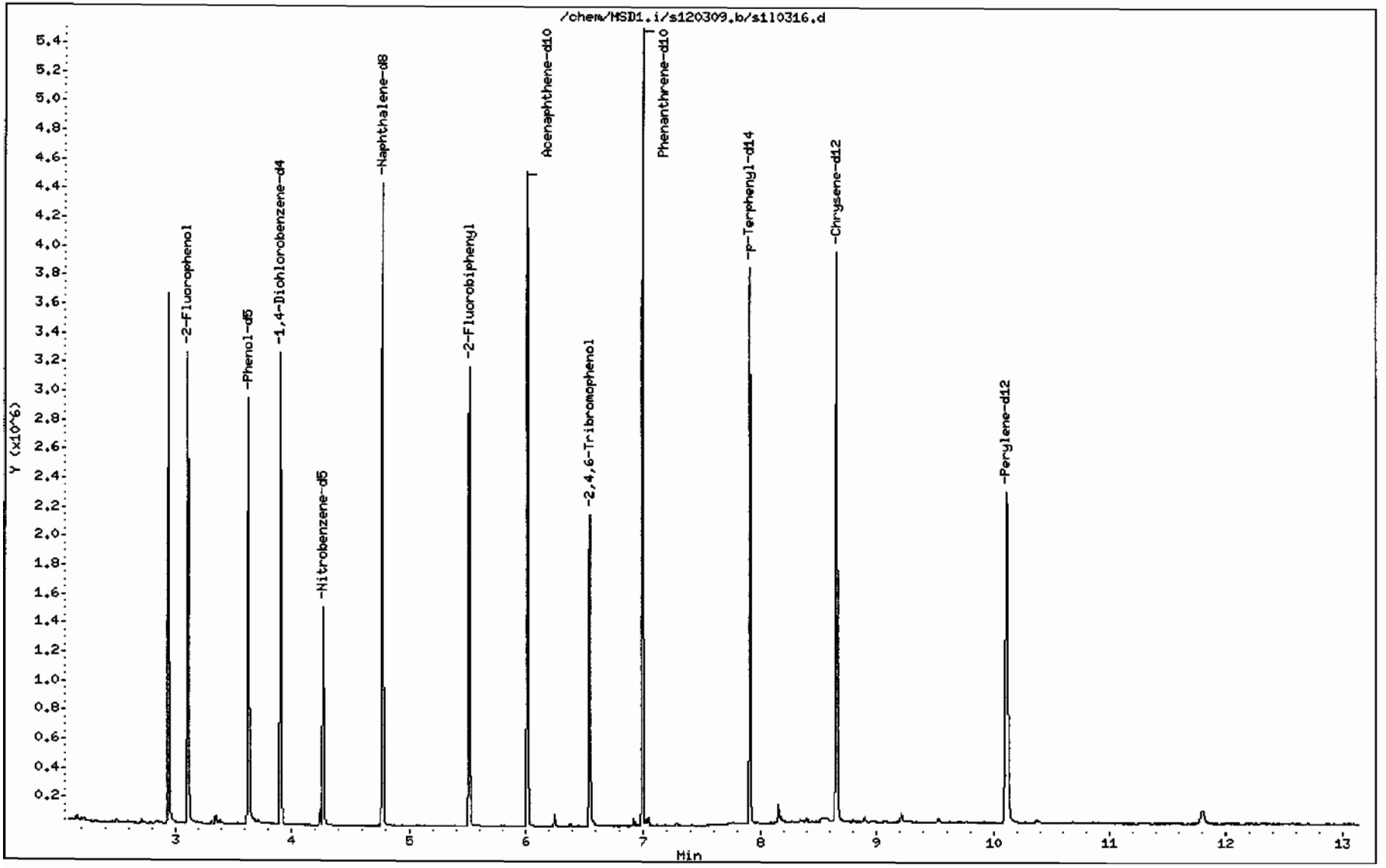

Data File: /chem/MSD1.i/s120309.b/s110316.d

Date : 03-DEC-2009 16:25

Client ID: RE03-09-14107

Instrument: MSD1.i

Sample Info: |2416150031927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	23	C7H11NO2	141

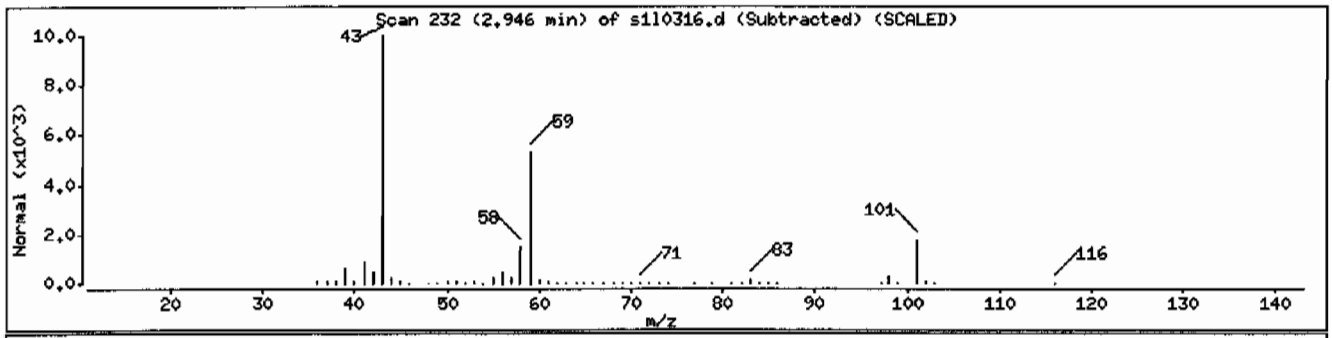

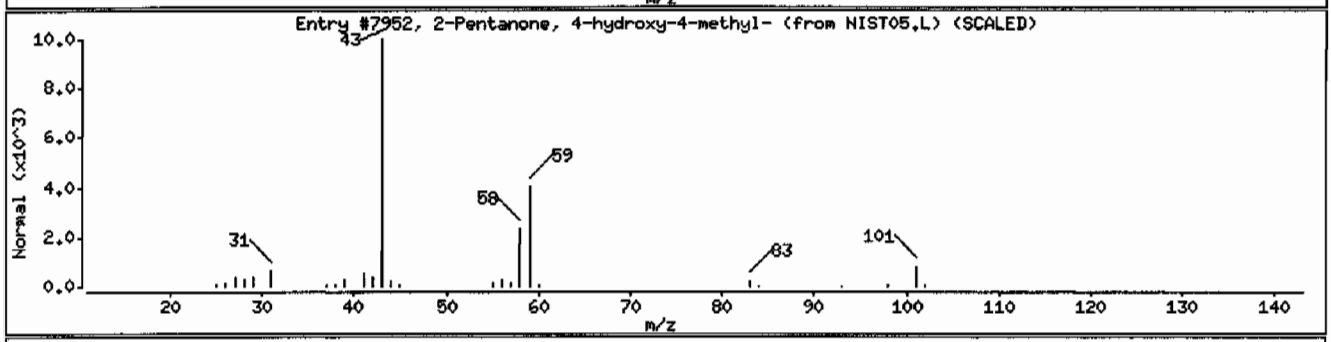

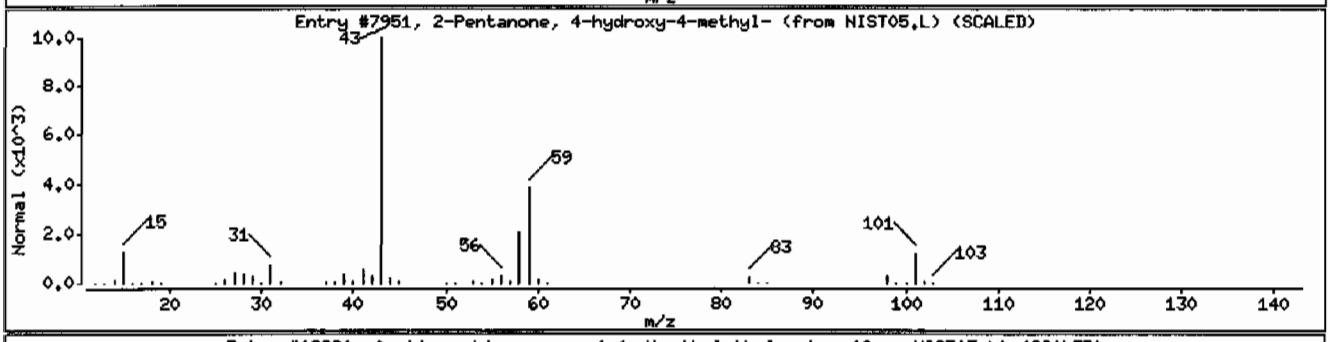

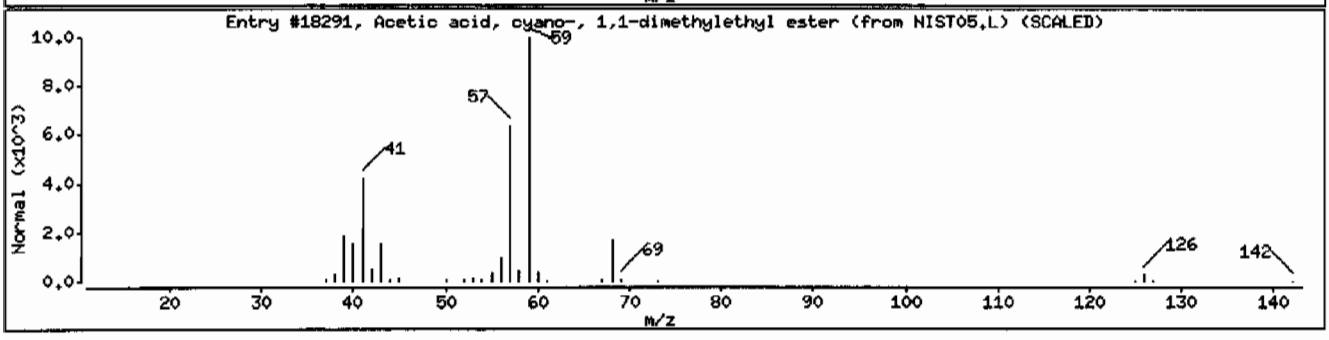

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615001	Date Received:	11/21/2009 09:00	%Moisture:	7.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14108	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 15:39	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s110314.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.5	357
108-95-2	Phenol	U	357	ug/kg	71.5	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.5	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.5	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.5	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.5	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.3	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.5	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.5	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.5	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.5	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.5	357
95-48-7	o-Cresol	U	357	ug/kg	71.5	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.5	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.5	357
78-59-1	Isophorone	U	357	ug/kg	71.5	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.5	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.5	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.5	357
65-85-0	Benzoic acid	U	715	ug/kg	179	715
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.5	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.5	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.15	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.5	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.5	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.5	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.5	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.5	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615001**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14108**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 15:39**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s110314.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.5	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	715	ug/kg	136	715
132-64-9	Dibenzofuran	U	357	ug/kg	71.5	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.5	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.5	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.5	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.5	357
122-66-7	Azobenzene	U	357	ug/kg	71.5	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.5	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.5	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.15	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.5	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.5	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.5	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.5	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.5	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.64	310	ug/kg		J
	Unknown	1.78	295	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 15:39	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110314.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1550	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110314.d
Lab Smp Id: 241615001 Client Smp ID: RE03-09-14108
Inj Date : 03-DEC-2009 15:39
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615001|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	7.23270	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	423581	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1679078	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	956255	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1618260	40.0000	
* 91 Chrysene-d12	240	8.669	8.675	(1.000)	1360348	40.0000	
* 98 Perylene-d12	264	10.122	10.127	(1.000)	1166325	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	635956	57.4809	2050
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	706641	52.5503	1880
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	341944	30.9024	1100
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	779177	34.0218	1220
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	186186	69.7272	2490
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.913)	816571	38.2412	1370

ION RATIO REPORT

SV REPORT

Data file: s110314.d
Report Date: 12/03/2009 16:06
Lab. ID: 241615001 SampleType: SAMPLE
Injection Date: 03-DEC-2009 15:39
Operator: AMY Instrument: MSD1.i
Sample Info: |241615001|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	35201	3.64	3.70	80-120	100	(T)
93	151	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	46947	4.28	4.16	80-120	100	(T)
42	29572	4.28	4.16	48-108	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	168740	6.03	5.80	80-120	100	(T)
164	956255	6.02	5.80	0- 40	567	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	121338	6.02	5.85	80-120	100	(T)
63	1342	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	121338	6.02	6.13	80-120	100	(T)
89	1230	6.02	6.13	33- 93	1	(QT)
63	1342	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	11253	6.55	6.40	80-120	100	(T)
165	11556	6.56	6.40	64-124	103	(T)
167	3931	6.55	6.40	0- 43	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	11454	6.56	6.70	80-120	100	(T)
141	72647	6.55	6.70	47-107	634	(QT)
250	22361	6.56	6.70	68-128	195	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	455	9.65	9.66	80-120	100	( )
253	180	9.67	9.66	0- 52	40	( )
125	190	9.65	9.66	0- 45	42	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110314.d
Lab Smp Id: 241615001 Client Smp ID: RE03-09-14108
Inj Date : 03-DEC-2009 15:39
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615001|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	7.23270	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2475835	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.640	537474	8.68351617	310	0		0	10
Unknown				CAS #:			
1.775	511782	8.26843458	295	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.946	2688818	43.4409857	1550	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110314.d
Date : 03-DEC-2009 15:39
Client ID: RE03-09-14108
Sample Info: |241615001|9271551|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

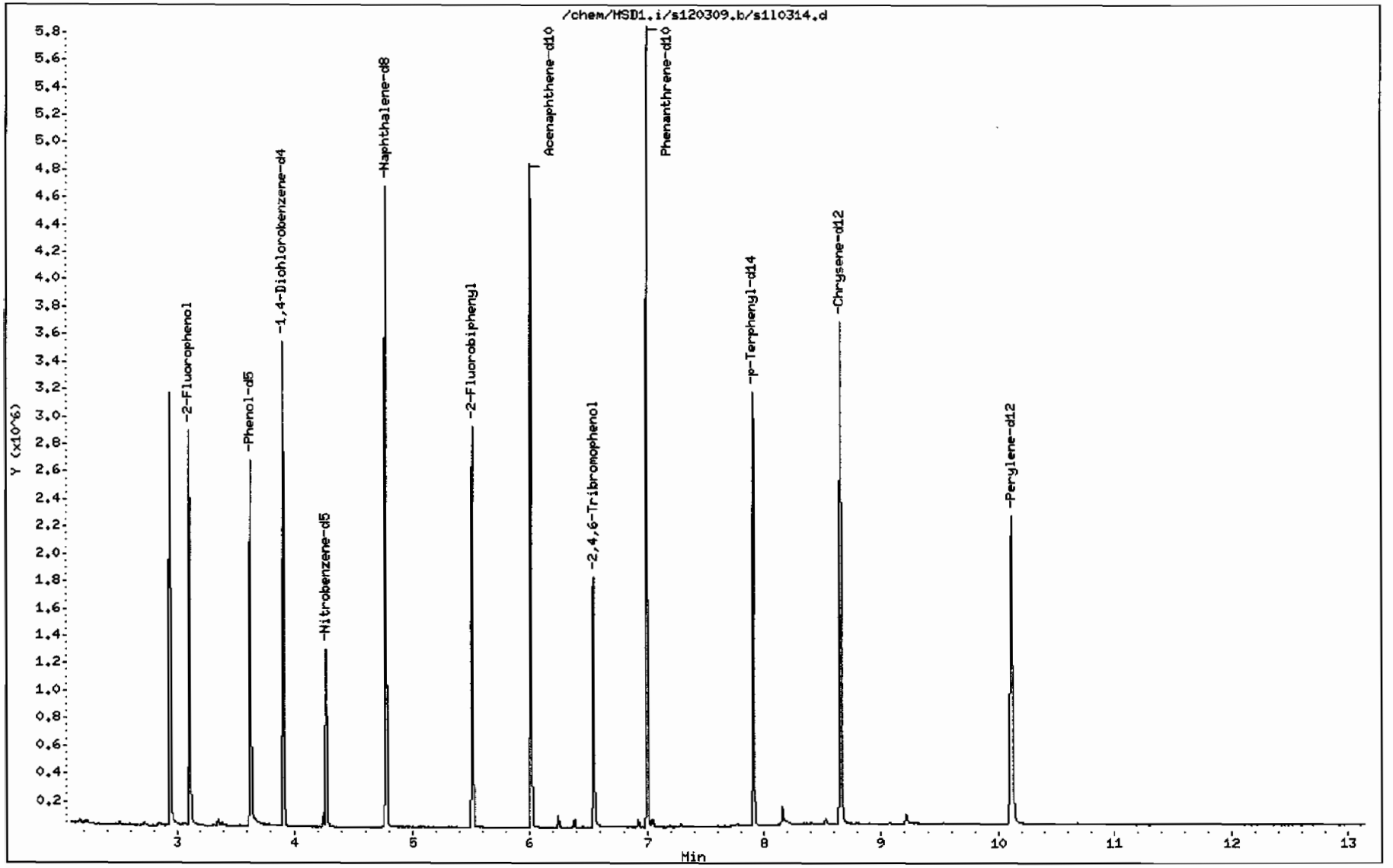

Data File: /chem/MSD1.i/s120309.b/s110314.d

Date : 03-DEC-2009 15:39

Client ID: RE03-09-14108

Instrument: MSD1.i

Sample Info: |2416150011927158|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl Chloride	75-00-3	NIST05.L	342	2	C2H5Cl	64
S-(Buthoxythiocarbonyl)thiohydroxylamine	35659-81-5	NIST05.L	32811	2	C5H11NOS2	165
2-Butanone, 1-chloro-	616-27-3	NIST05.L	4875	2	C4H7ClO	106

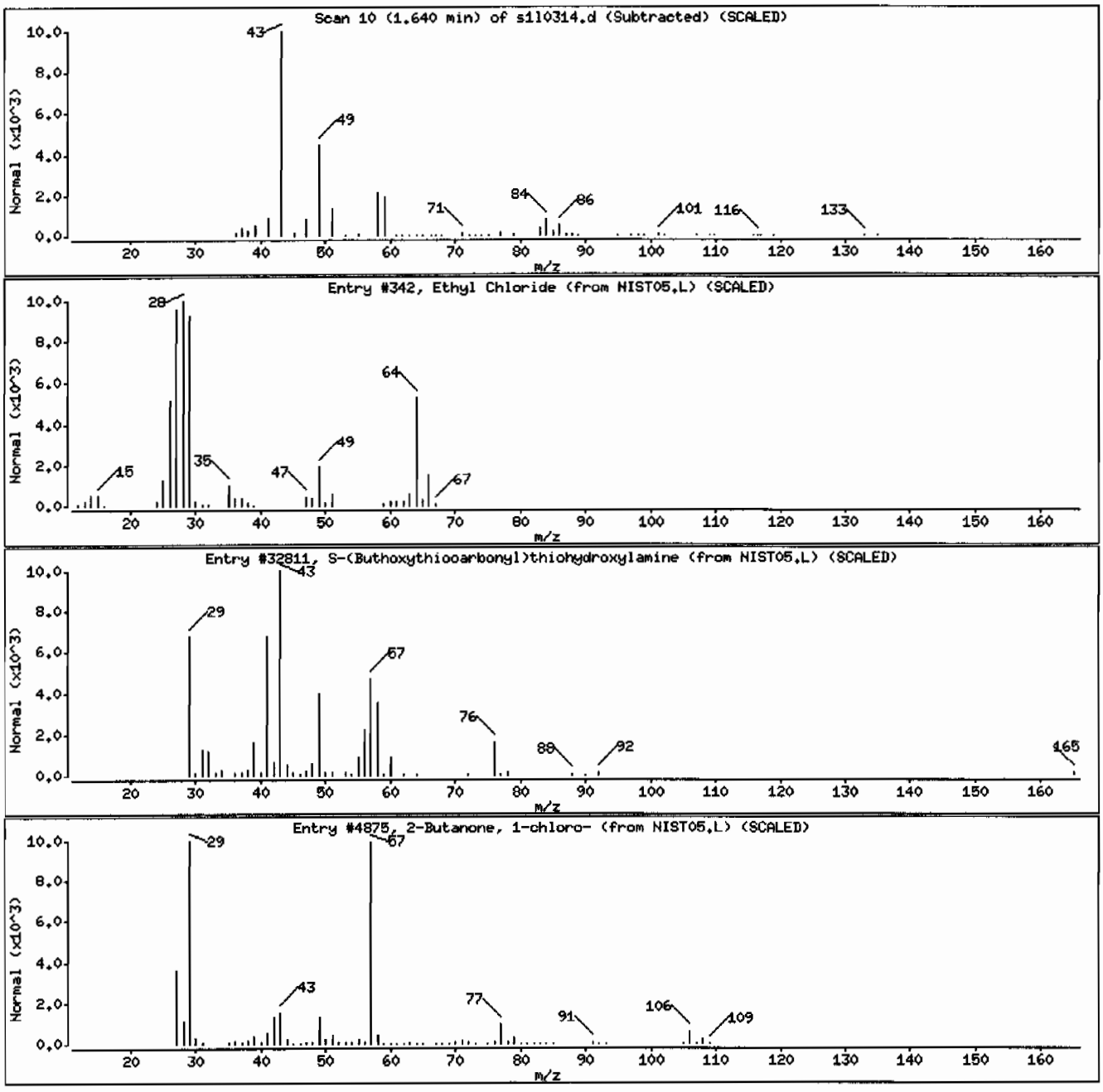

Data File: /chem/MSD1.i/s120309.b/s110314.d

Date : 03-DEC-2009 15:39

Client ID: RE03-09-14108

Instrument: MSD1.i

Sample Info: |241615001|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanal, 2-methyl-	78-84-2	NIST05.L	671	10	C4H8O	72
2-Pentanone	107-87-9	NIST05.L	1683	10	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	10	C5H10O	86

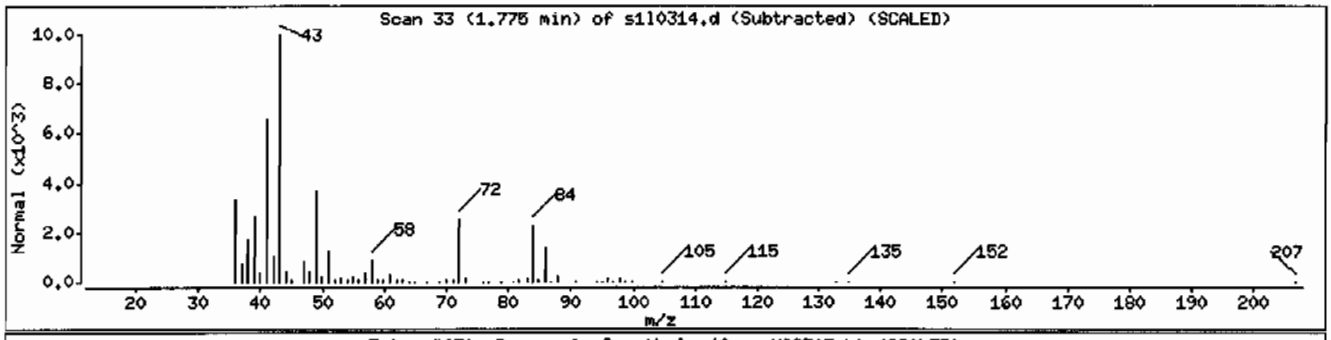

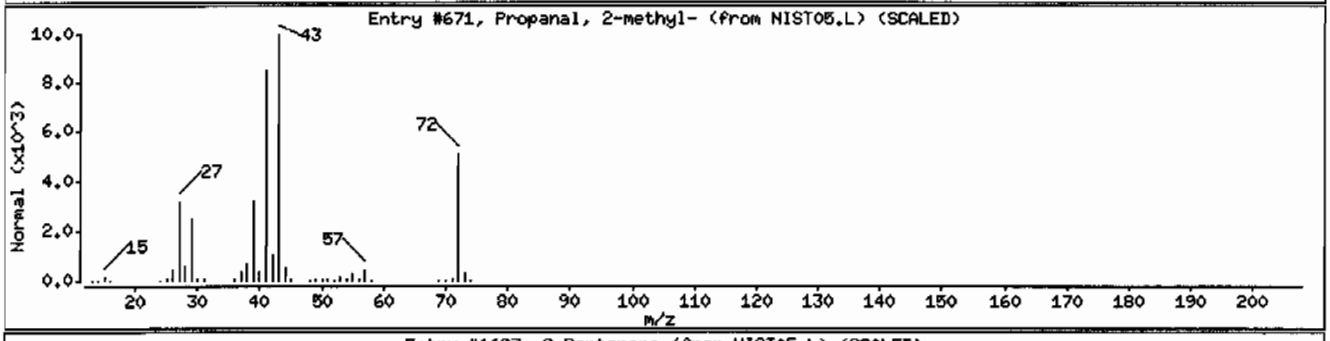

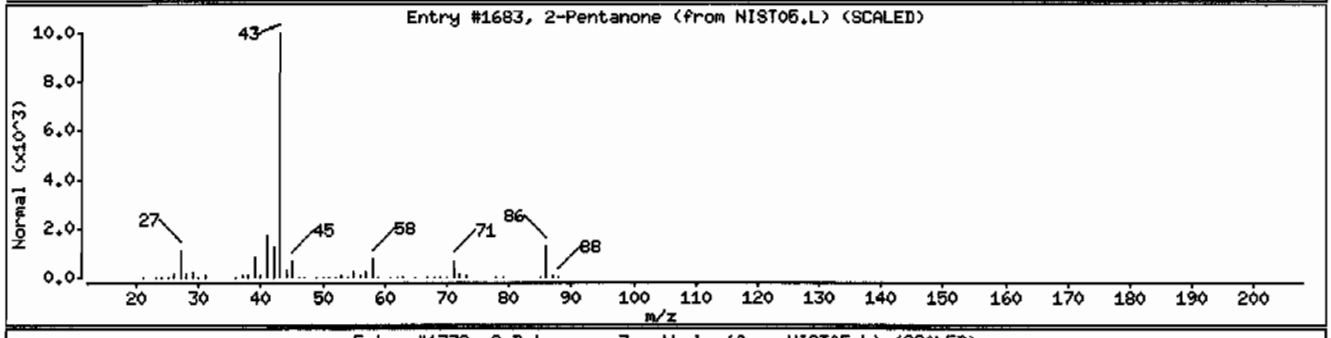

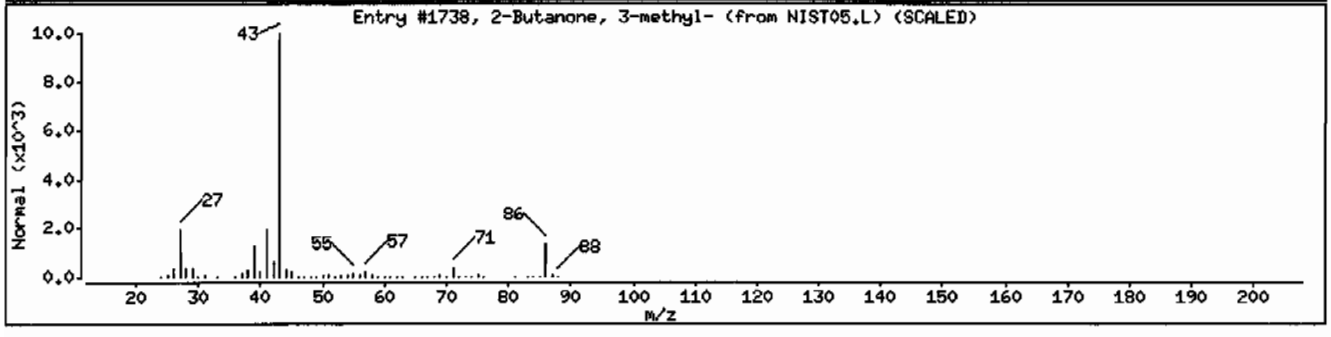

Data File: /chem/MSD1.i/s120309.b/s110314.d

Date : 03-DEC-2009 15:39

Client ID: RE03-09-14108

Instrument: MSD1.i

Sample Info: |241615001|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	23	C7H11NO2	141

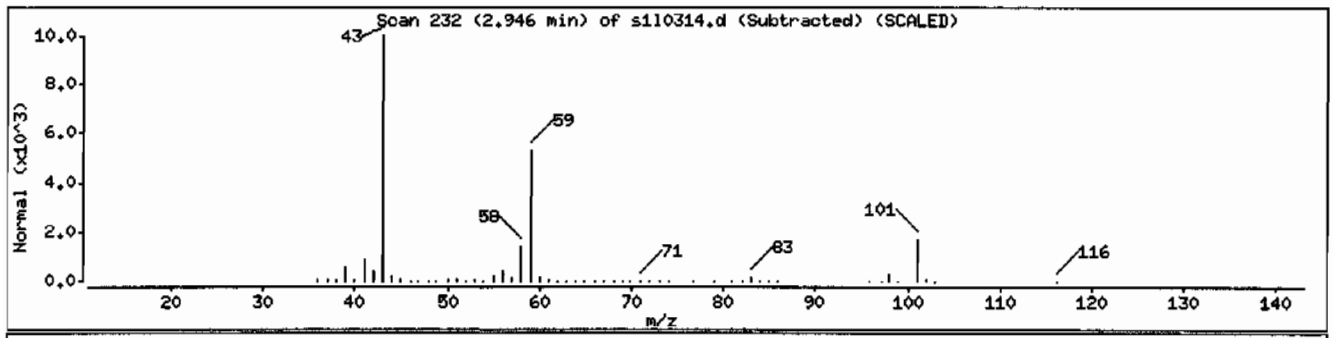

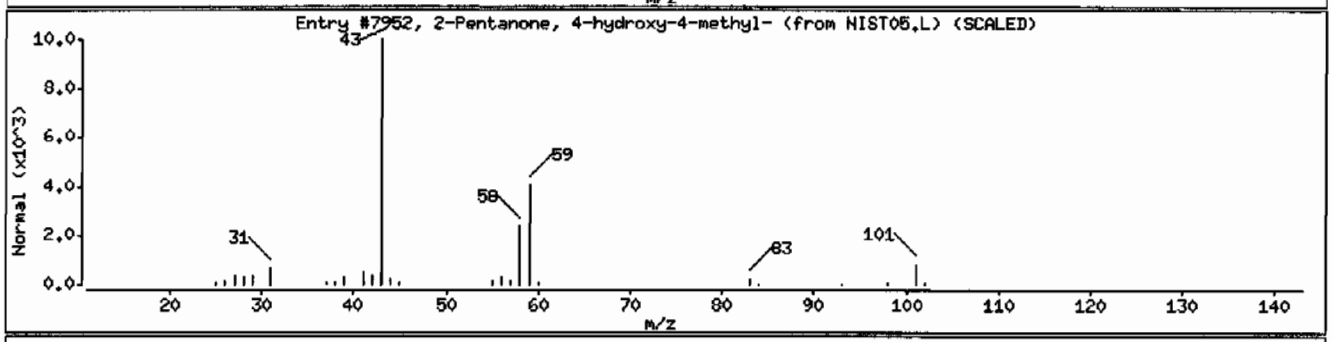

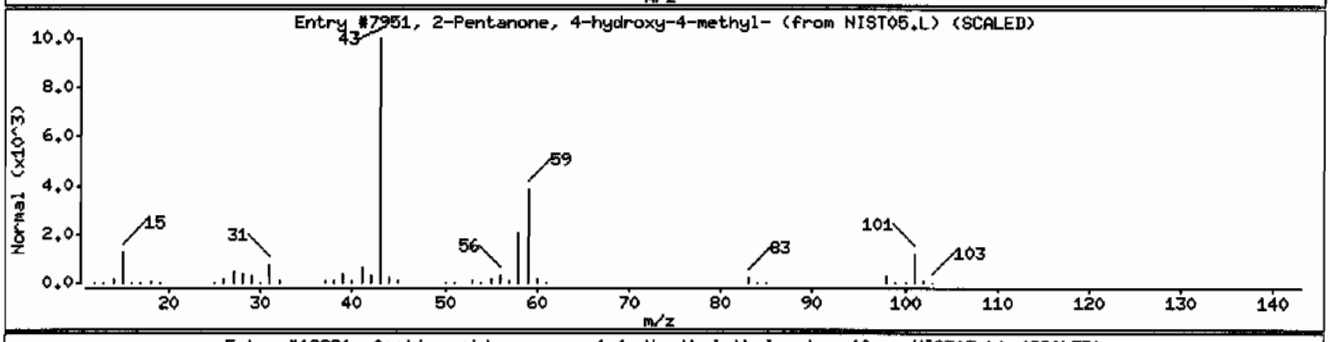

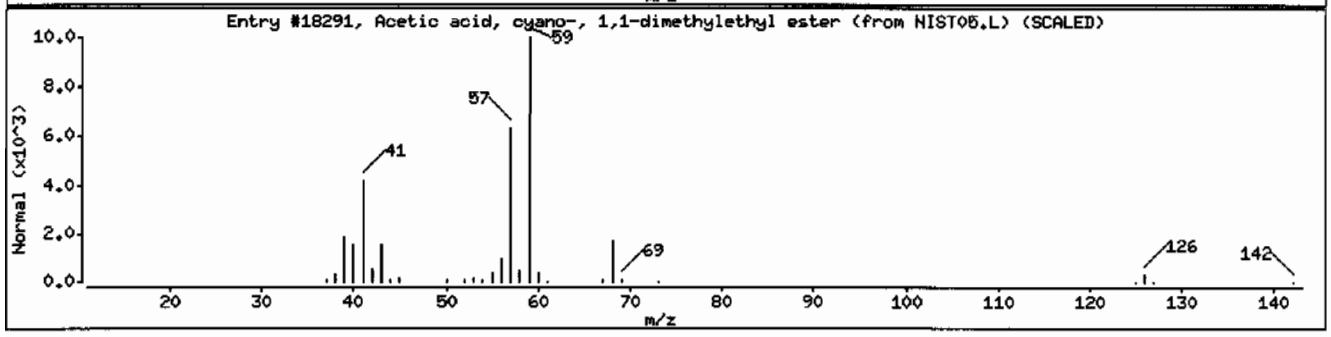

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615004	Date Received:	11/21/2009 09:00	%Moisture:	5.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14109	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:48	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s1l0317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	351	ug/kg	70.1	351
108-95-2	Phenol	U	351	ug/kg	70.1	351
95-57-8	2-Chlorophenol	U	351	ug/kg	70.1	351
106-46-7	1,4-Dichlorobenzene	U	351	ug/kg	70.1	351
621-64-7	N-Nitrosodipropylamine	U	351	ug/kg	70.1	351
59-50-7	4-Chloro-3-methylphenol	U	351	ug/kg	70.1	351
83-32-9	Acenaphthene	U	35.1	ug/kg	11.6	35.1
121-14-2	2,4-Dinitrotoluene	U	351	ug/kg	35.1	351
100-02-7	4-Nitrophenol	U	351	ug/kg	116	351
87-86-5	Pentachlorophenol	U	351	ug/kg	87.7	351
129-00-0	Pyrene	U	35.1	ug/kg	10.5	35.1
110-86-1	Pyridine	U	351	ug/kg	70.1	351
62-53-3	Aniline	U	351	ug/kg	105	351
111-44-4	bis(2-Chloroethyl) ether	U	351	ug/kg	70.1	351
541-73-1	1,3-Dichlorobenzene	U	351	ug/kg	70.1	351
100-51-6	Benzyl alcohol	U	351	ug/kg	105	351
95-50-1	1,2-Dichlorobenzene	U	351	ug/kg	70.1	351
108-60-1	bis(2-Chloroisopropyl)ether	U	351	ug/kg	70.1	351
95-48-7	o-Cresol	U	351	ug/kg	70.1	351
65794-96-9	m,p-Cresols	U	351	ug/kg	105	351
67-72-1	Hexachloroethane	U	351	ug/kg	70.1	351
98-95-3	Nitrobenzene	U	351	ug/kg	70.1	351
78-59-1	Isophorone	U	351	ug/kg	70.1	351
88-75-5	2-Nitrophenol	U	351	ug/kg	70.1	351
105-67-9	2,4-Dimethylphenol	U	351	ug/kg	123	351
111-91-1	bis(2-Chloroethoxy)methane	U	351	ug/kg	70.1	351
120-83-2	2,4-Dichlorophenol	U	351	ug/kg	70.1	351
65-85-0	Benzoic acid	U	701	ug/kg	175	701
91-20-3	Naphthalene	U	35.1	ug/kg	10.5	35.1
106-47-8	4-Chloroaniline	U	351	ug/kg	70.1	351
87-68-3	Hexachlorobutadiene	U	351	ug/kg	70.1	351
91-57-6	2-Methylnaphthalene	U	35.1	ug/kg	7.01	35.1
77-47-4	Hexachlorocyclopentadiene	U	351	ug/kg	70.1	351
88-06-2	2,4,6-Trichlorophenol	U	351	ug/kg	70.1	351
95-95-4	2,4,5-Trichlorophenol	U	351	ug/kg	70.1	351
91-58-7	2-Chloronaphthalene	U	35.1	ug/kg	11.6	35.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	351	ug/kg	70.1	351
99-09-2	3-Nitroaniline	U	351	ug/kg	70.1	351

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615004	Date Received:	11/21/2009 09:00	%Moisture:	5.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14109	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 16:48	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	s1l0317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	351	ug/kg	70.1	351
606-20-2	2,6-Dinitrotoluene	U	351	ug/kg	35.1	351
208-96-8	Acenaphthylene	U	35.1	ug/kg	10.5	35.1
51-28-5	2,4-Dinitrophenol	U	701	ug/kg	133	701
132-64-9	Dibenzofuran	U	351	ug/kg	70.1	351
84-66-2	Diethylphthalate	U	351	ug/kg	70.1	351
86-73-7	Fluorene	U	35.1	ug/kg	10.5	35.1
7005-72-3	4-Chlorophenylphenylether	U	351	ug/kg	70.1	351
534-52-1	2-Methyl-4,6-dinitrophenol	U	351	ug/kg	70.1	351
100-01-6	4-Nitroaniline	U	351	ug/kg	105	351
	p-Nitroaniline					
122-39-4	Diphenylamine	U	351	ug/kg	70.1	351
122-66-7	Azobenzene	U	351	ug/kg	70.1	351
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	351	ug/kg	70.1	351
118-74-1	Hexachlorobenzene	U	351	ug/kg	70.1	351
85-01-8	Phenanthrene	U	35.1	ug/kg	10.5	35.1
120-12-7	Anthracene	U	35.1	ug/kg	7.01	35.1
84-74-2	Di-n-butylphthalate	U	351	ug/kg	70.1	351
206-44-0	Fluoranthene	U	35.1	ug/kg	10.5	35.1
85-68-7	Butylbenzylphthalate	U	351	ug/kg	70.1	351
56-55-3	Benzo(a)anthracene	U	35.1	ug/kg	10.5	35.1
91-94-1	3,3'-Dichlorobenzidine	U	351	ug/kg	105	351
218-01-9	Chrysene	U	35.1	ug/kg	10.5	35.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	351	ug/kg	70.1	351
117-84-0	Di-n-octylphthalate	U	351	ug/kg	70.1	351
205-99-2	Benzo(b)fluoranthene	U	35.1	ug/kg	10.5	35.1
207-08-9	Benzo(k)fluoranthene	U	35.1	ug/kg	10.5	35.1
50-32-8	Benzo(a)pyrene	U	35.1	ug/kg	10.5	35.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.1	ug/kg	10.5	35.1
53-70-3	Dibenzo(a,h)anthracene	U	35.1	ug/kg	10.5	35.1
191-24-2	Benzo(ghi)perylene	U	35.1	ug/kg	10.5	35.1
120-82-1	1,2,4-Trichlorobenzene	U	351	ug/kg	70.1	351

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	454	ug/kg		J
	Unknown	1.78	268	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 16:48	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	s1l0317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	1520	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110317.d
Lab Smp Id: 241615004 Client Smp ID: RE03-09-14109
Inj Date : 03-DEC-2009 16:48
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615004|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	5.43490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	424748	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1664356	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	932240	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1613201	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1457765	40.0000	
* 98 Perylene-d12	264	10.122	10.127	(1.000)	1283926	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	677711	61.0867	2140
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	708185	52.5204	1840
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	362285	33.0303	1160
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	843666	37.7866	1320
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	195584	75.1337	2640
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	906534	39.6172	1390

ION RATIO REPORT

SV REPORT

Data file: s110317.d
Report Date: 12/04/2009 07:27
Lab. ID: 241615004 SampleType: SAMPLE
Injection Date: 03-DEC-2009 16:48
Operator: AMY Instrument: MSD1.i
Sample Info: |241615004|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	35174	3.64	3.70	80-120	100	(T)
93	107	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	49854	4.28	4.16	80-120	100	(T)
42	31511	4.28	4.16	48-108	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	165013	6.03	5.80	80-120	100	(T)
164	932240	6.02	5.80	0- 40	565	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	121041	6.02	5.85	80-120	100	(T)
63	1323	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	121041	6.02	6.13	80-120	100	(T)
89	1441	6.02	6.13	33- 93	1	(QT)
63	1323	6.02	6.13	16- 76	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	12784	6.56	6.40	80-120	100	(T)
165	12742	6.56	6.40	64-124	100	(T)
167	4143	6.56	6.40	0- 43	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	12015	6.56	6.70	80-120	100	(T)
141	78708	6.56	6.70	47-107	655	(QT)
250	24554	6.56	6.70	68-128	204	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	382	9.65	9.66	80-120	100	( )
253	104	9.63	9.66	0- 52	27	( )
125	259	9.65	9.66	0- 45	68	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110317.d
Lab Smp Id: 241615004 Client Smp ID: RE03-09-14109
Inj Date : 03-DEC-2009 16:48
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615004|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	5.43490	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2483755	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.634	802972	12.9315802	454	0		0	10
Unknown				CAS #:			
1.775	474526	7.64207480	268	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.946	2696891	43.4324822	1520	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110317.d
Date : 03-DEC-2009 16:48
Client ID: RE03-09-14109
Sample Info: 1241615004|9271551|1|SVHF1|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

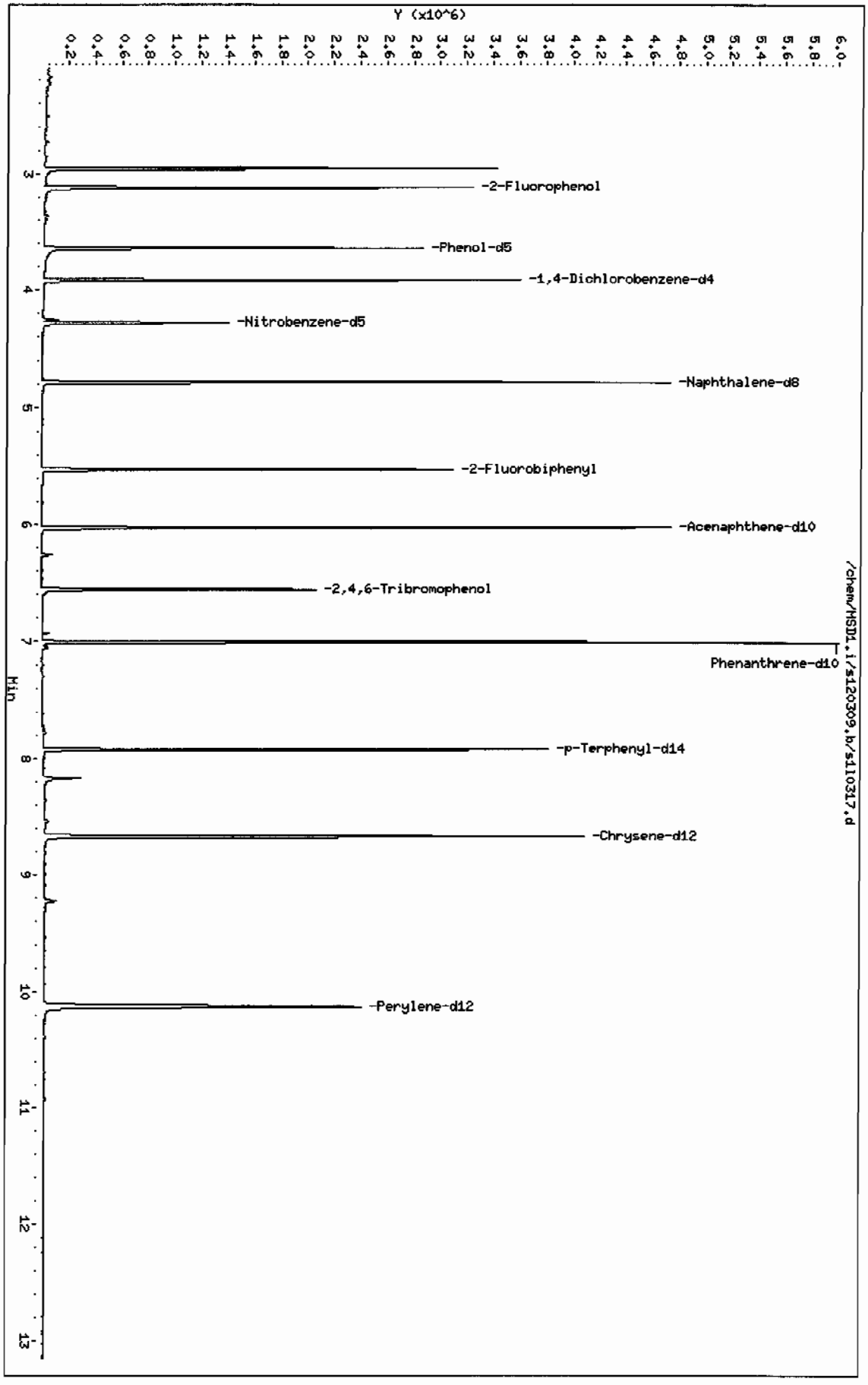

Page 1

Data File: /chem/MSD1.i/s120309.b/s110317.d

Date : 03-DEC-2009 16:48

Client ID: RE03-09-14109

Instrument: MSD1.i

Sample Info: |2416150041927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl Chloride	75-00-3	NIST05.L	342	4	C2H5Cl	64
Oxirane, (propoxymethyl)-	3126-95-2	NIST05.L	7894	2	C6H12O2	116
S-(Buthoxythiocarbonyl)thiohydroxylamine	35659-81-5	NIST05.L	32811	2	C5H11NOS2	165

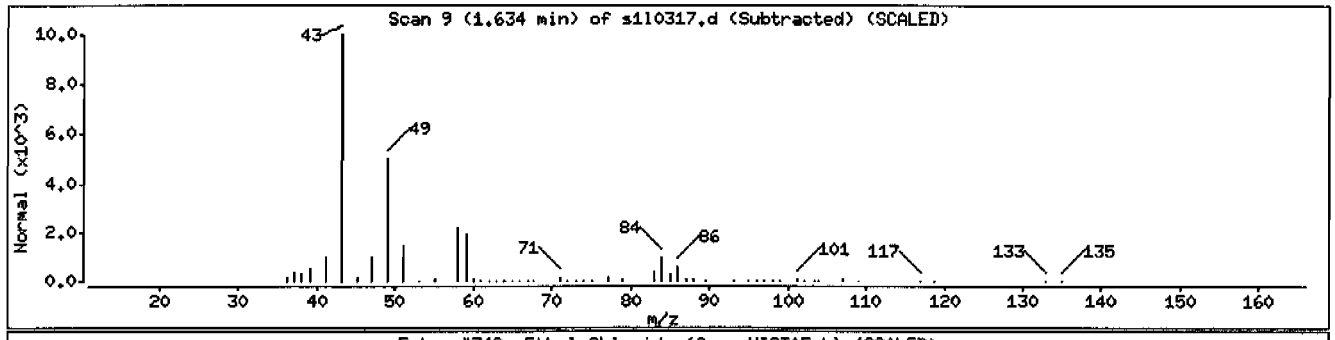

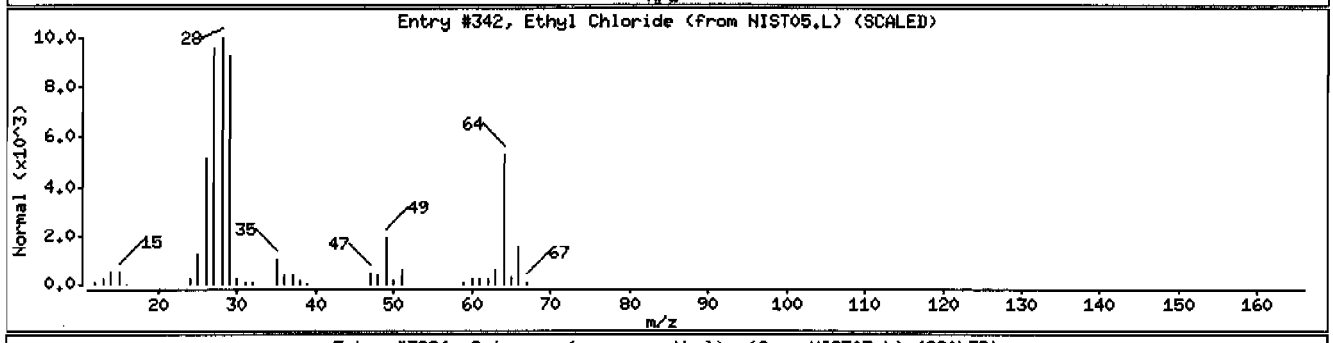

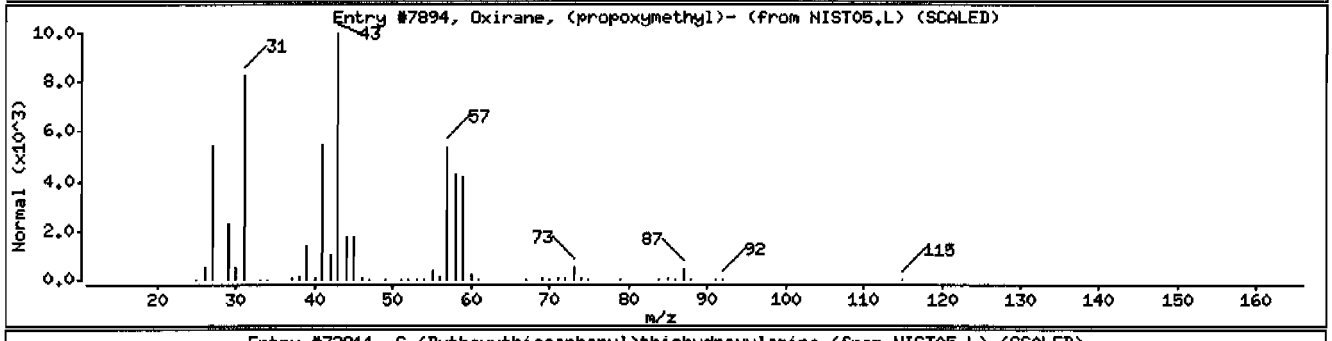

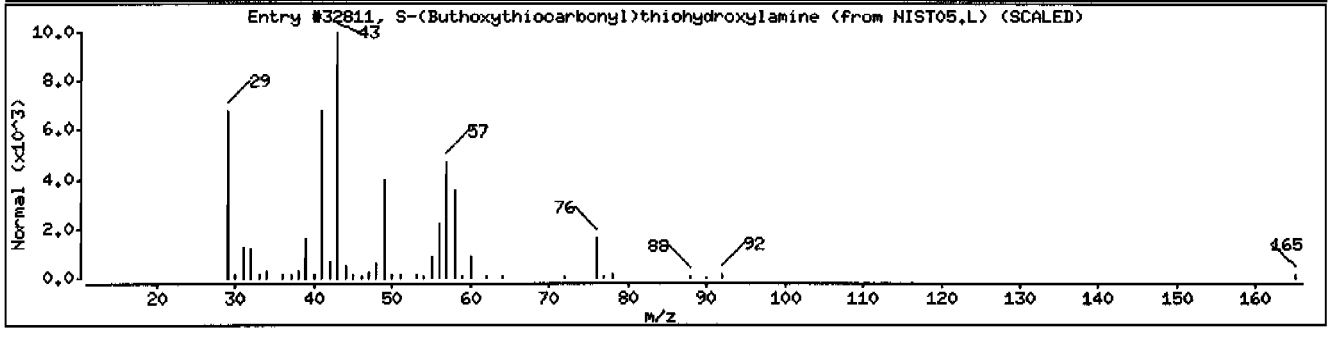

Data File: /chem/MSD1.i/s120309.b/s110317.d

Date : 03-DEC-2009 16:48

Client ID: RE03-09-14109

Instrument: MSD1.i

Sample Info: |2416150041927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Buten-2-one, 3-methyl-	814-78-8	NIST05.L	1406	11	C5H8O	84
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	10	C5H10O	86
Ethanone, 1-cyclopropyl-	765-43-5	NIST05.L	1404	10	C5H8O	84

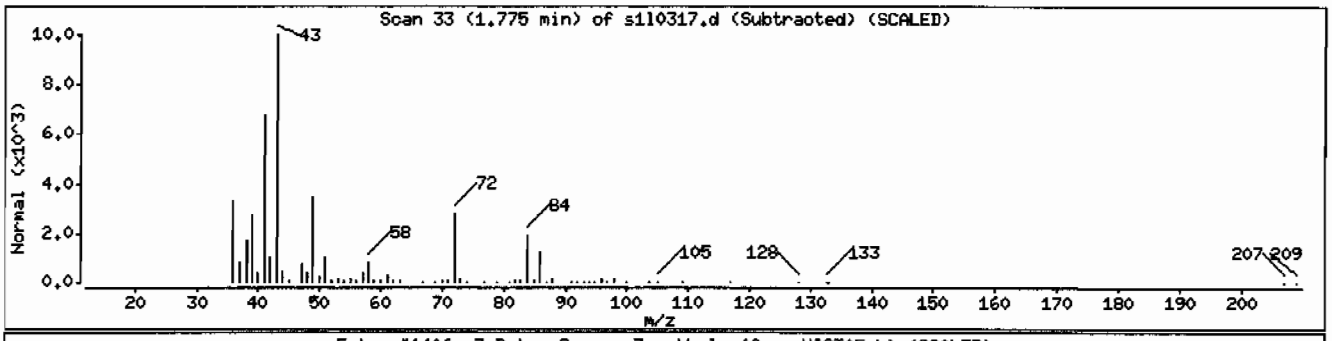

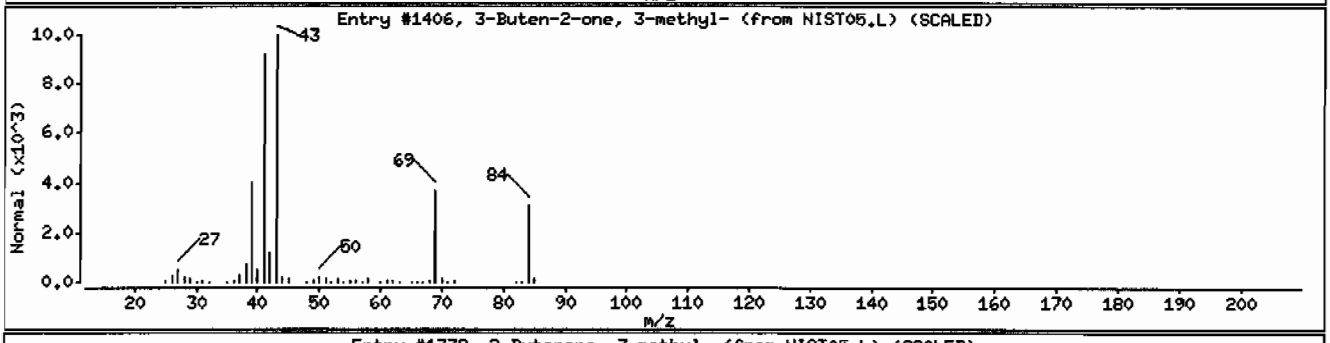

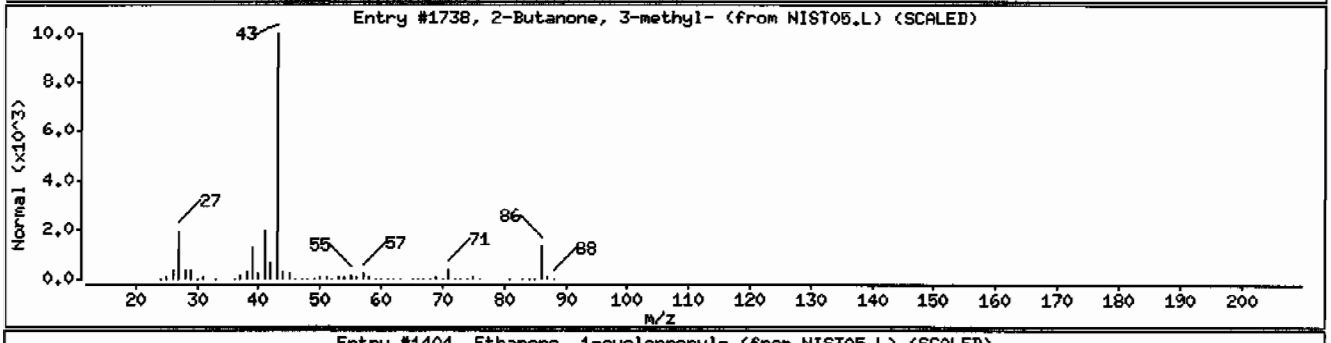

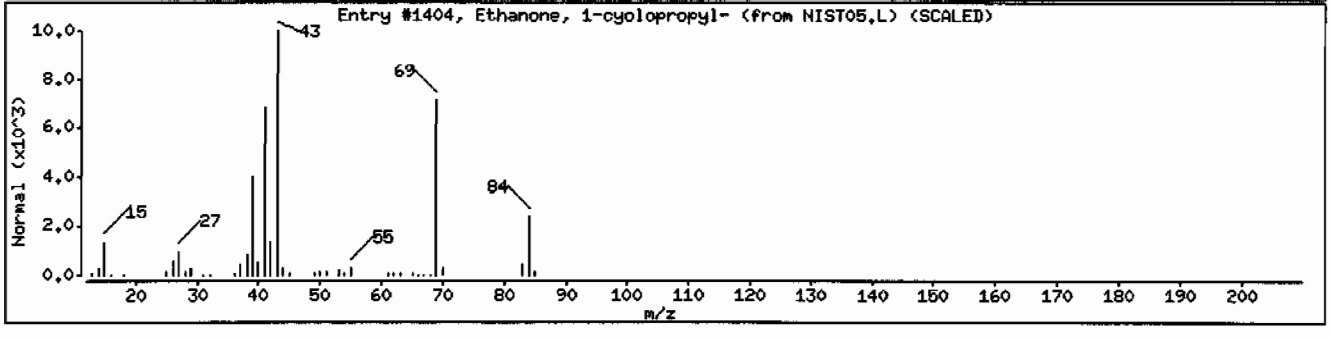

Data File: /chem/HSD1.i/s120309.b/s110317.d

Date : 03-DEC-2009 16:48

Client ID: RE03-09-14109 Instrument: MSD1.i

Sample Info: |2416150041927155111SVMF11|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	23	C7H11NO2	141

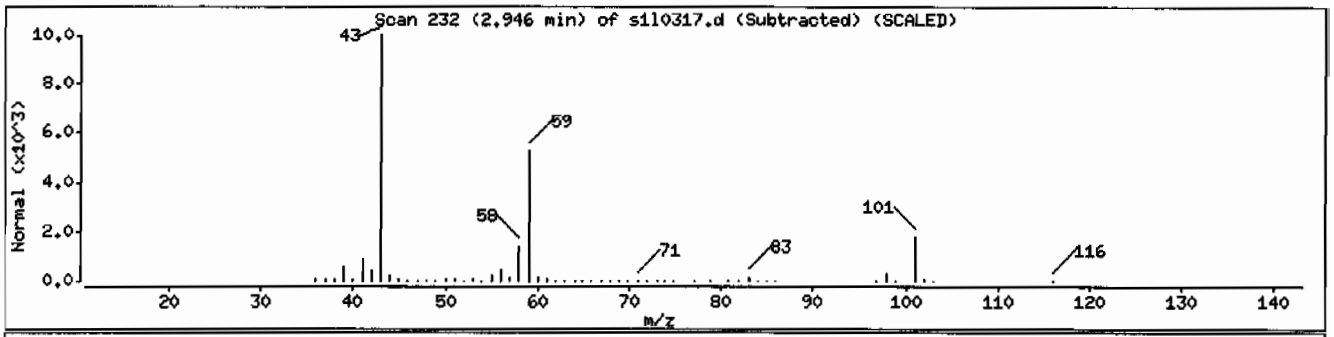

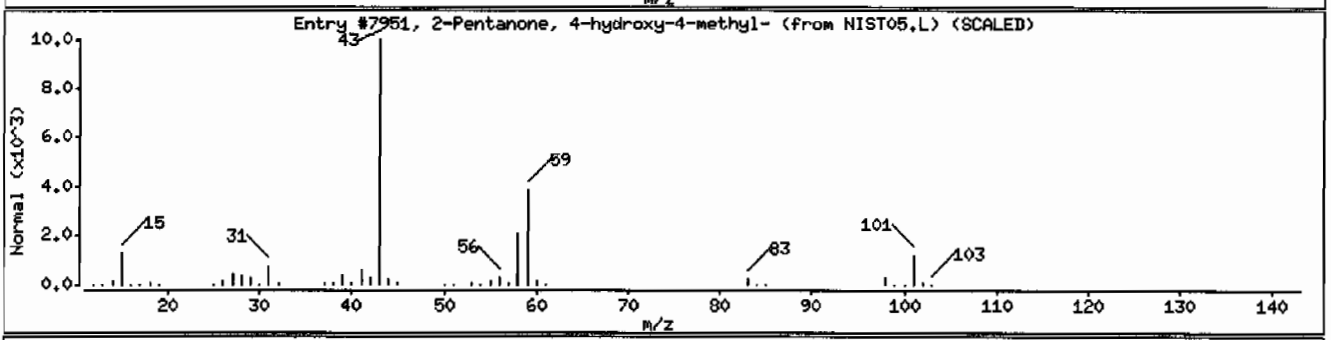

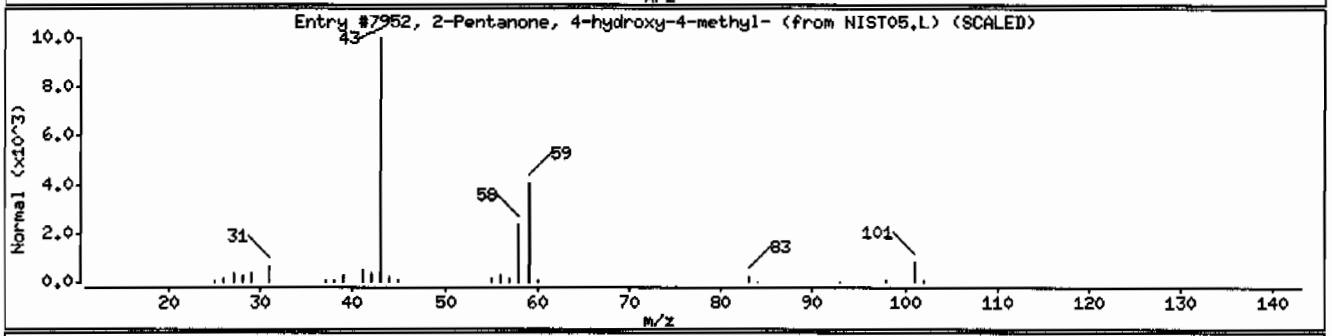

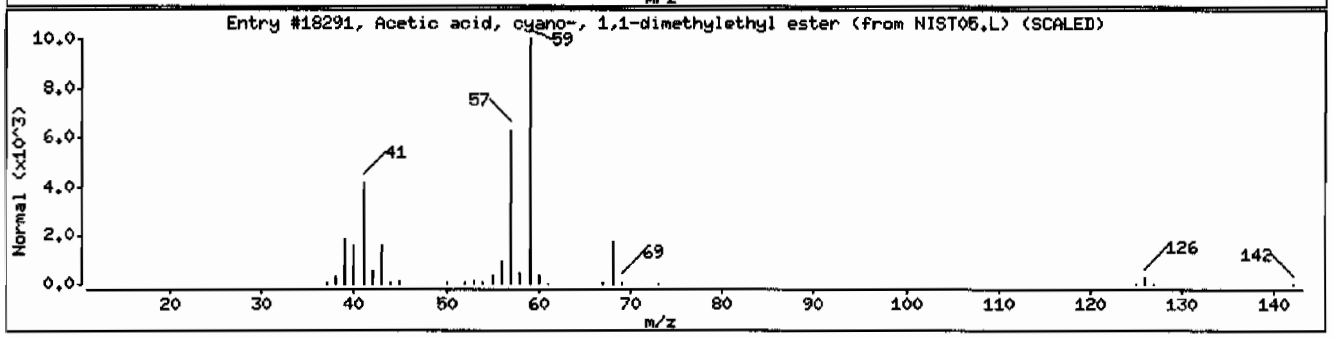

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14246	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 20:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110326.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.4	362
108-95-2	Phenol	U	362	ug/kg	72.4	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.4	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.4	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.4	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.4	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.5	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.4	362
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.4	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.4	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.4	362
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.4	362
95-48-7	o-Cresol	U	362	ug/kg	72.4	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.4	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.4	362
78-59-1	Isophorone	U	362	ug/kg	72.4	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.4	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.4	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.4	362
65-85-0	Benzoic acid	U	724	ug/kg	181	724
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.4	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.4	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.24	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.4	362
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.4	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.4	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline	U	362	ug/kg	72.4	362
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	362	ug/kg	72.4	362

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14246	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 20:19	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110326.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	362	ug/kg	72.4	362
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	U	724	ug/kg	138	724
132-64-9	Dibenzofuran	U	362	ug/kg	72.4	362
84-66-2	Diethylphthalate	U	362	ug/kg	72.4	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.4	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.4	362
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
	p-Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.4	362
122-66-7	Azobenzene	U	362	ug/kg	72.4	362
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.4	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.4	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.24	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.4	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.4	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.4	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.4	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.4	362

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	388	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110326.d
Lab Smp Id: 241615013 Client Smp ID: RE03-09-14246
Inj Date : 03-DEC-2009 20:19
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615013|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	7.96850	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	375683	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1502854	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	864726	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1497609	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1303028	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1111655	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	628807	64.0810	2320
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	744962	62.4633	2260
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	350973	35.4377	1280
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	830597	40.1058	1450
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	226408	93.7653	3390
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	990503	48.4272	1750

ION RATIO REPORT

SV REPORT

Data file: s110326.d
Report Date: 12/04/2009 07:30
Lab. ID: 241615013 SampleType: SAMPLE
Injection Date: 03-DEC-2009 20:19
Operator: AMY Instrument: MSD1.i
Sample Info: |241615013|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	34074	3.64	3.70	80-120	100	(T)
93	141	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	48005	4.28	4.16	80-120	100	(T)
42	28862	4.28	4.16	48-108	60	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	153803	6.03	5.80	80-120	100	(T)
164	864726	6.02	5.80	0- 40	562	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	111226	6.02	5.85	80-120	100	(T)
63	1256	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	111226	6.02	6.13	80-120	100	(T)
89	1467	6.02	6.13	33- 93	1	(QT)
63	1256	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	14393	6.56	6.40	80-120	100	(T)
165	14346	6.56	6.40	64-124	100	(T)
167	5154	6.55	6.40	0- 43	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	14256	6.56	6.70	80-120	100	(T)
141	91182	6.56	6.70	47-107	640	(QT)
250	27896	6.56	6.70	68-128	196	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	621	9.67	9.66	80-120	100	( )
253	508	9.65	9.66	0- 52	82	(Q)
125	644	9.66	9.66	0- 45	104	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110326.d
Lab Smp Id: 241615013 Client Smp ID: RE03-09-14246
Inj Date : 03-DEC-2009 20:19
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615013|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	7.96850	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2216078	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.946	593242	10.7079543	388	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110326.d
Date : 03-DEC-2009 20:19
Client ID: RE03-09-14246
Sample Info: |24161501319271551|1|SVHF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

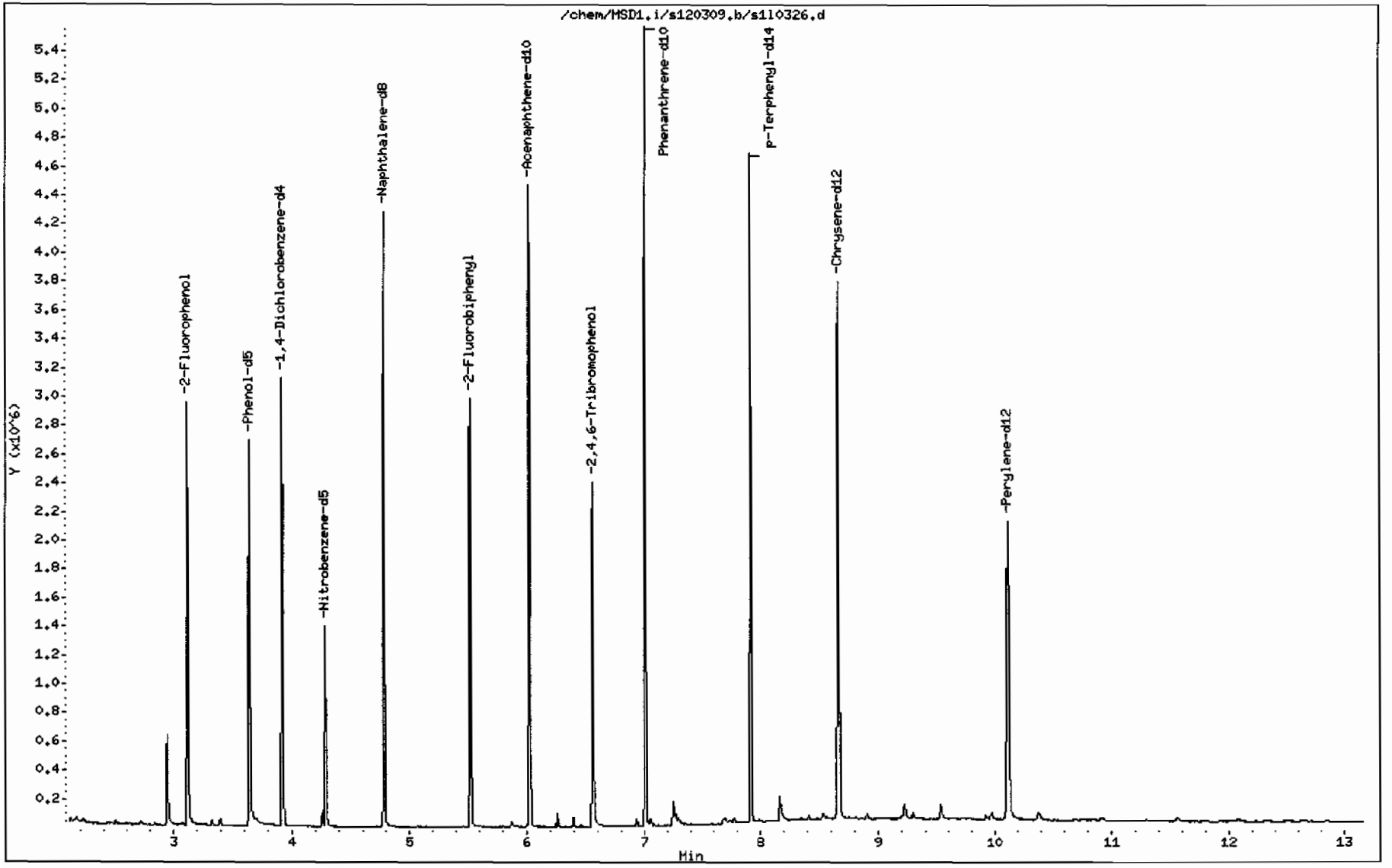

Data File: /chem/MSD1.i/s120309.b/s110326.d

Date : 03-DEC-2009 20:19

Client ID: RE03-09-14246

Instrument: MSD1.i

Sample Info: |2416150131927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116

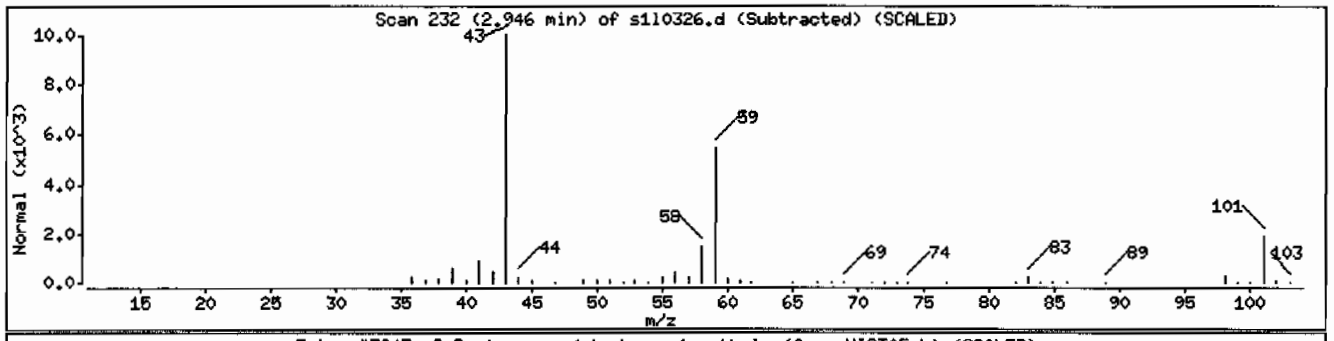

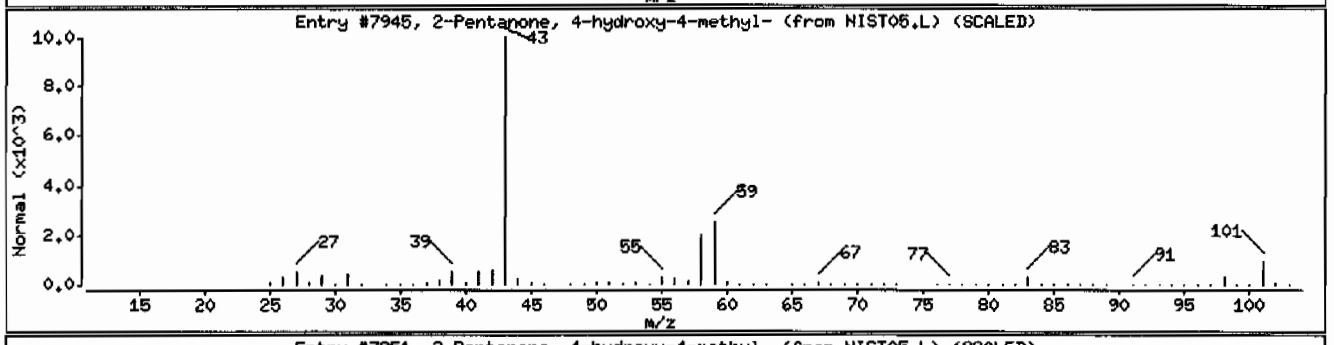

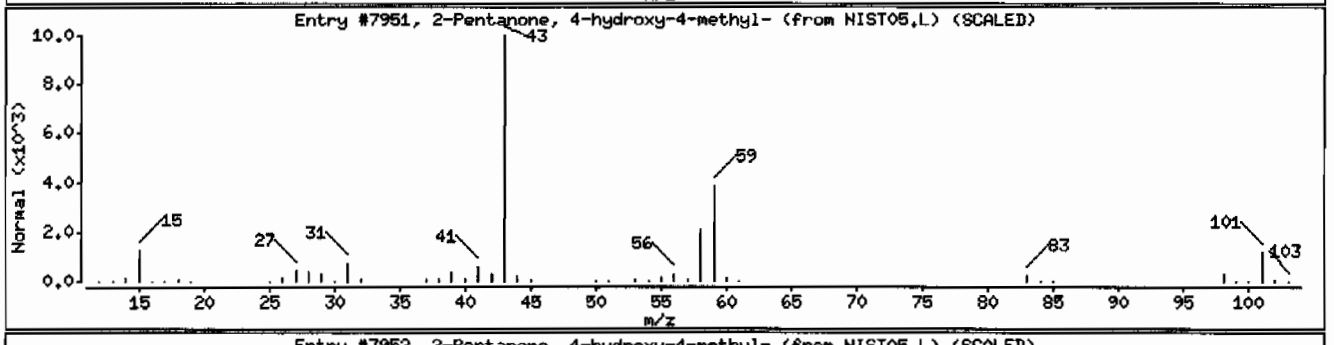

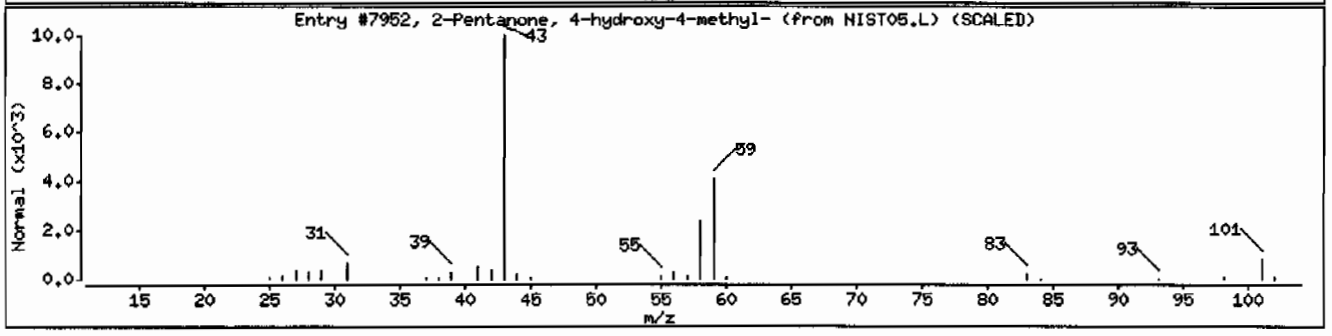

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615012	Date Received:	11/21/2009 09:00	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14247	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:55	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s1l0325.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	372	ug/kg	74.3	372
108-95-2	Phenol	U	372	ug/kg	74.3	372
95-57-8	2-Chlorophenol	U	372	ug/kg	74.3	372
106-46-7	1,4-Dichlorobenzene	U	372	ug/kg	74.3	372
621-64-7	N-Nitrosodipropylamine	U	372	ug/kg	74.3	372
59-50-7	4-Chloro-3-methylphenol	U	372	ug/kg	74.3	372
83-32-9	Acenaphthene	U	37.2	ug/kg	12.3	37.2
121-14-2	2,4-Dinitrotoluene	U	372	ug/kg	37.2	372
100-02-7	4-Nitrophenol	U	372	ug/kg	123	372
87-86-5	Pentachlorophenol	U	372	ug/kg	92.9	372
129-00-0	Pyrene	U	37.2	ug/kg	11.2	37.2
110-86-1	Pyridine	U	372	ug/kg	74.3	372
62-53-3	Aniline	U	372	ug/kg	112	372
111-44-4	bis(2-Chloroethyl) ether	U	372	ug/kg	74.3	372
541-73-1	1,3-Dichlorobenzene	U	372	ug/kg	74.3	372
100-51-6	Benzyl alcohol	U	372	ug/kg	112	372
95-50-1	1,2-Dichlorobenzene	U	372	ug/kg	74.3	372
108-60-1	bis(2-Chloroisopropyl)ether	U	372	ug/kg	74.3	372
95-48-7	o-Cresol	U	372	ug/kg	74.3	372
65794-96-9	m,p-Cresols	U	372	ug/kg	112	372
67-72-1	Hexachloroethane	U	372	ug/kg	74.3	372
98-95-3	Nitrobenzene	U	372	ug/kg	74.3	372
78-59-1	Isophorone	U	372	ug/kg	74.3	372
88-75-5	2-Nitrophenol	U	372	ug/kg	74.3	372
105-67-9	2,4-Dimethylphenol	U	372	ug/kg	130	372
111-91-1	bis(2-Chloroethoxy)methane	U	372	ug/kg	74.3	372
120-83-2	2,4-Dichlorophenol	U	372	ug/kg	74.3	372
65-85-0	Benzoic acid	U	743	ug/kg	186	743
91-20-3	Naphthalene	U	37.2	ug/kg	11.2	37.2
106-47-8	4-Chloroaniline	U	372	ug/kg	74.3	372
87-68-3	Hexachlorobutadiene	U	372	ug/kg	74.3	372
91-57-6	2-Methylnaphthalene	U	37.2	ug/kg	7.43	37.2
77-47-4	Hexachlorocyclopentadiene	U	372	ug/kg	74.3	372
88-06-2	2,4,6-Trichlorophenol	U	372	ug/kg	74.3	372
95-95-4	2,4,5-Trichlorophenol	U	372	ug/kg	74.3	372
91-58-7	2-Chloronaphthalene	U	37.2	ug/kg	12.3	37.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	372	ug/kg	74.3	372
99-09-2	3-Nitroaniline	U	372	ug/kg	74.3	372

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615012	Date Received:	11/21/2009 09:00	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14247	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:55	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s1l0325.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	372	ug/kg	74.3	372
606-20-2	2,6-Dinitrotoluene	U	372	ug/kg	37.2	372
208-96-8	Acenaphthylene	U	37.2	ug/kg	11.2	37.2
51-28-5	2,4-Dinitrophenol	U	743	ug/kg	141	743
132-64-9	Dibenzofuran	U	372	ug/kg	74.3	372
84-66-2	Diethylphthalate	U	372	ug/kg	74.3	372
86-73-7	Fluorene	U	37.2	ug/kg	11.2	37.2
7005-72-3	4-Chlorophenylphenylether	U	372	ug/kg	74.3	372
534-52-1	2-Methyl-4,6-dinitrophenol	U	372	ug/kg	74.3	372
100-01-6	4-Nitroaniline	U	372	ug/kg	112	372
	p-Nitroaniline					
122-39-4	Diphenylamine	U	372	ug/kg	74.3	372
122-66-7	Azobenzene	U	372	ug/kg	74.3	372
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	372	ug/kg	74.3	372
118-74-1	Hexachlorobenzene	U	372	ug/kg	74.3	372
85-01-8	Phenanthrene	U	37.2	ug/kg	11.2	37.2
120-12-7	Anthracene	U	37.2	ug/kg	7.43	37.2
84-74-2	Di-n-butylphthalate	U	372	ug/kg	74.3	372
206-44-0	Fluoranthene	U	37.2	ug/kg	11.2	37.2
85-68-7	Butylbenzylphthalate	U	372	ug/kg	74.3	372
56-55-3	Benzo(a)anthracene	U	37.2	ug/kg	11.2	37.2
91-94-1	3,3'-Dichlorobenzidine	U	372	ug/kg	112	372
218-01-9	Chrysene	U	37.2	ug/kg	11.2	37.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	372	ug/kg	74.3	372
117-84-0	Di-n-octylphthalate	U	372	ug/kg	74.3	372
205-99-2	Benzo(b)fluoranthene	U	37.2	ug/kg	11.2	37.2
207-08-9	Benzo(k)fluoranthene	U	37.2	ug/kg	11.2	37.2
50-32-8	Benzo(a)pyrene	U	37.2	ug/kg	11.2	37.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.2	ug/kg	11.2	37.2
53-70-3	Dibenzo(a,h)anthracene	U	37.2	ug/kg	11.2	37.2
191-24-2	Benzo(ghi)perylene	U	37.2	ug/kg	11.2	37.2
120-82-1	1,2,4-Trichlorobenzene	U	372	ug/kg	74.3	372

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	375	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110325.d
Lab Smp Id: 241615012 Client Smp ID: RE03-09-14247
Inj Date : 03-DEC-2009 19:55
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615012|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	10.34860	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	320760	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1255568	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	729086	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1247593	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1065771	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	928550	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	540615	64.5270	2400
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	607807	59.6895	2220
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	294850	35.6344	1320
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	680541	38.9736	1450
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	168145	82.5913	3070
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	781768	46.7306	1740

ION RATIO REPORT

SV REPORT

Data file: s110325.d
Report Date: 12/04/2009 07:29
Lab. ID: 241615012 SampleType: SAMPLE
Injection Date: 03-DEC-2009 19:55
Operator: AMY Instrument: MSD1.i
Sample Info: |241615012|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	28239	3.64	3.70	80-120	100	(T)
93	126	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	40941	4.28	4.16	80-120	100	(T)
42	26033	4.28	4.16	48-108	64	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	127276	6.02	5.80	80-120	100	(T)
164	729086	6.02	5.80	0- 40	573	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	92514	6.02	5.85	80-120	100	(T)
63	1367	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	92514	6.02	6.13	80-120	100	(T)
89	1184	6.02	6.13	33- 93	1	(QT)
63	1367	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	10679	6.56	6.40	80-120	100	(T)
165	10710	6.56	6.40	64-124	100	(T)
167	3170	6.56	6.40	0- 43	30	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	10496	6.56	6.70	80-120	100	(T)
141	68448	6.56	6.70	47-107	652	(QT)
250	20612	6.56	6.70	68-128	196	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110325.d
Lab Smp Id: 241615012 Client Smp ID: RE03-09-14247
Inj Date : 03-DEC-2009 19:55
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615012|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	10.34860	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	1886917	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.946	475754	10.0853169	375	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110325.d
Date : 03-DEC-2009 19:55
Client ID: RE03-09-14247
Sample Info: |241615012|927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

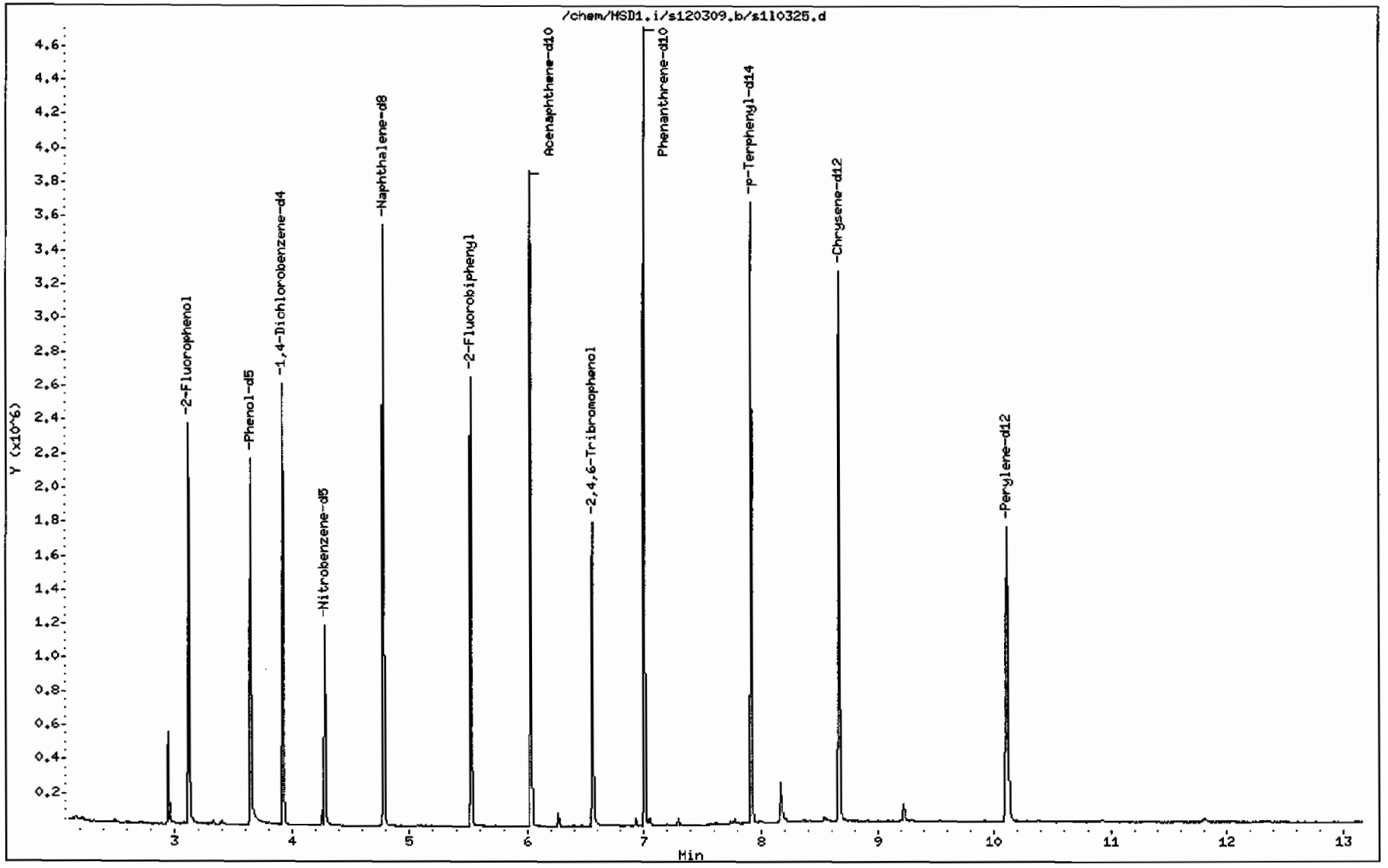

Data File: /chem/MSD1.i/s120309.b/s110325.d

Date : 03-DEC-2009 19:55

Client ID: RE03-09-14247

Instrument: MSD1.i

Sample Info: |2416150121927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	38	C7H11NO2	141

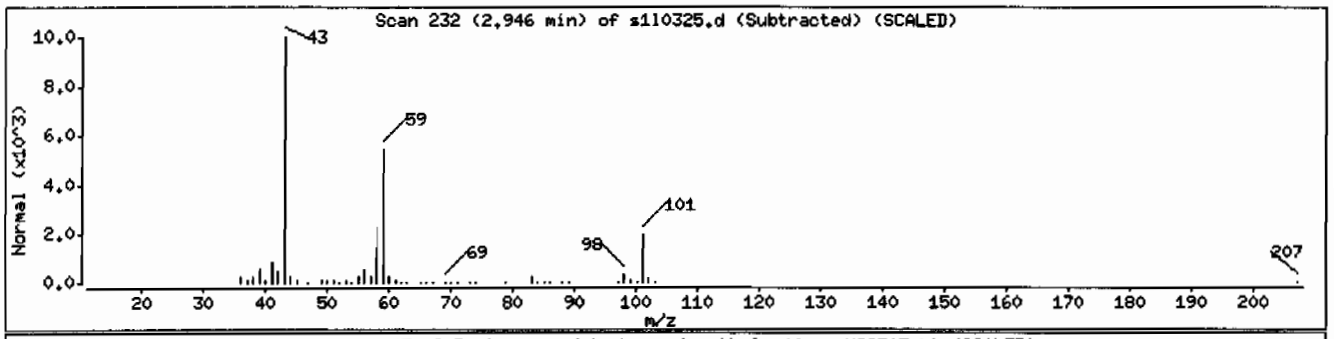

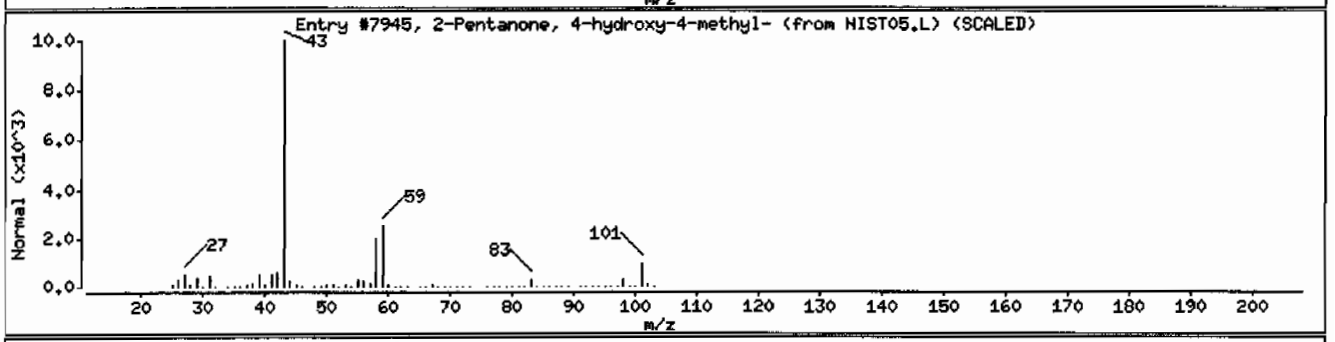

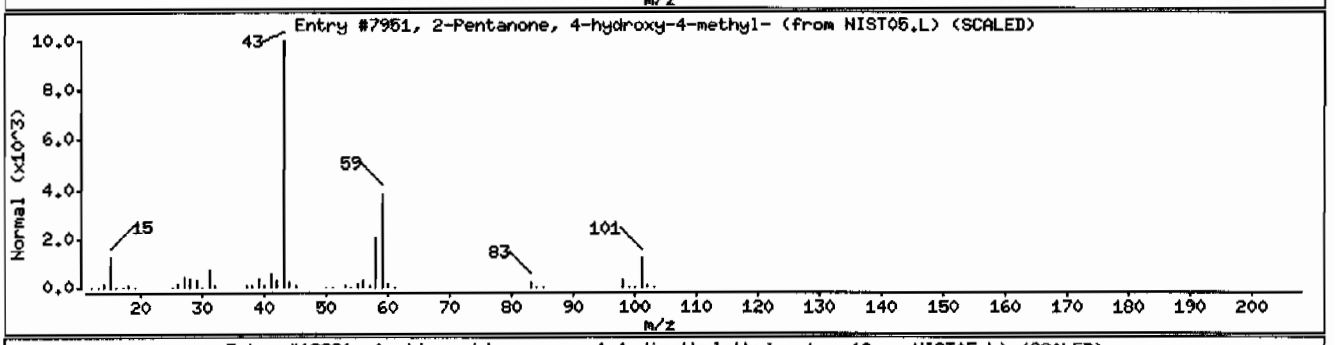

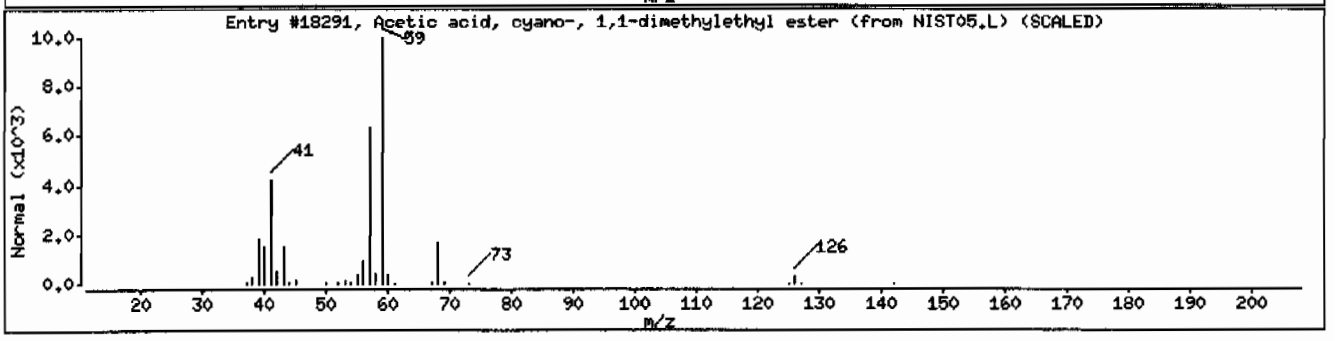

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615011**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14248**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:32**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.19 g**	**Final Volume:**	**1 mL**
Data File:	**s110324.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.1	370
108-95-2	Phenol	U	370	ug/kg	74.1	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.1	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.1	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.1	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.1	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.6	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.1	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.1	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.1	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.1	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.1	370
95-48-7	o-Cresol	U	370	ug/kg	74.1	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.1	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.1	370
78-59-1	Isophorone	U	370	ug/kg	74.1	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.1	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.1	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.1	370
65-85-0	Benzoic acid	U	741	ug/kg	185	741
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.1	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.1	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.41	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.1	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.1	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.1	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.1	370
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	370	ug/kg	74.1	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14248	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 19:32	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	s1l0324.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.1	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	741	ug/kg	141	741
132-64-9	Dibenzofuran	U	370	ug/kg	74.1	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.1	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.1	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.1	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.1	370
122-66-7	Azobenzene	U	370	ug/kg	74.1	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.1	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.1	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.41	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.1	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.1	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.1	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.1	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.1	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	428	ug/kg		JA
	Unknown	8.58	157	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14248	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 19:32	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	s110324.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.81	167	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110324.d
Lab Smp Id: 241615011 Client Smp ID: RE03-09-14248
Inj Date : 03-DEC-2009 19:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615011|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	10.58700	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	442329	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1765528	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	998710	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1743669	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1645178	40.0000	
* 98 Perylene-d12	264	10.121	10.127	(1.000)	1512001	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	724038	62.6685	2320
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	819834	58.3839	2160
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	394414	33.8989	1260
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	908195	37.9695	1410
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	232252	83.2816	3080
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	1086822	42.0856	1560

ION RATIO REPORT

SV REPORT

Data file: s110324.d
Report Date: 12/04/2009 07:29
Lab. ID: 241615011 SampleType: SAMPLE
Injection Date: 03-DEC-2009 19:32
Operator: AMY Instrument: MSD1.i
Sample Info: |241615011|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	39320	3.64	3.70	80-120	100	(T)
93	187	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	51756	4.28	4.16	80-120	100	(T)
42	32606	4.28	4.16	48-108	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	175202	6.03	5.80	80-120	100	(T)
164	998710	6.02	5.80	0- 40	570	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	127761	6.02	5.85	80-120	100	(T)
63	1592	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	127605	6.02	6.13	80-120	100	(T)
89	1529	6.02	6.13	33- 93	1	(QT)
63	1592	6.02	6.13	16- 76	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	14195	6.56	6.40	80-120	100	(T)
165	14217	6.56	6.40	64-124	100	(T)
167	4354	6.56	6.40	0- 43	31	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	14526	6.56	6.70	80-120	100	(T)
141	89295	6.56	6.70	47-107	615	(QT)
250	28284	6.56	6.70	68-128	195	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110324.d
Lab Smp Id: 241615011 Client Smp ID: RE03-09-14248
Inj Date : 03-DEC-2009 19:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615011|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	10.58700	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2585650	40.000
* 91 Chrysene-d12	8.663	4371682	40.000
* 98 Perylene-d12	10.121	4206626	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.945	746210	11.5438667	428	0		0	10
Unknown				CAS #:			
8.580	462591	4.23261615	157	0		0	91
Unknown				CAS #:			
11.810	475012	4.51679790	167	0		0	98

Data File: /chem/MSD1.i/s120309.b/s110324.d
Date : 03-DEC-2009 19:32
Client ID: RE03-09-14248
Sample Info: |241615011|927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

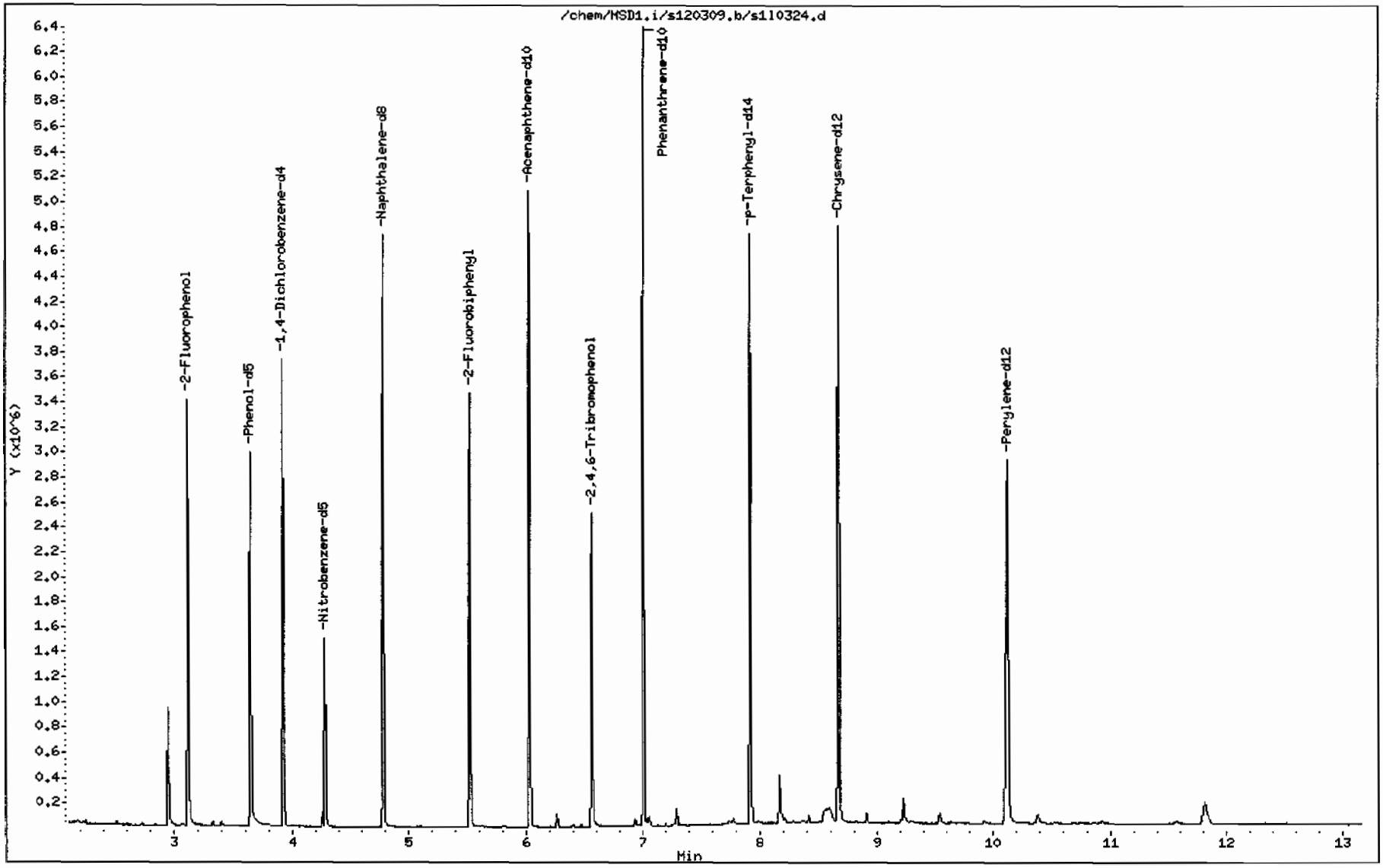

Data File: /chem/MSD1.i/s120309.b/s110324.d

Date : 03-DEC-2009 19:32

Client ID: RE03-09-14248

Instrument: MSD1.i

Sample Info: |2416150111|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141

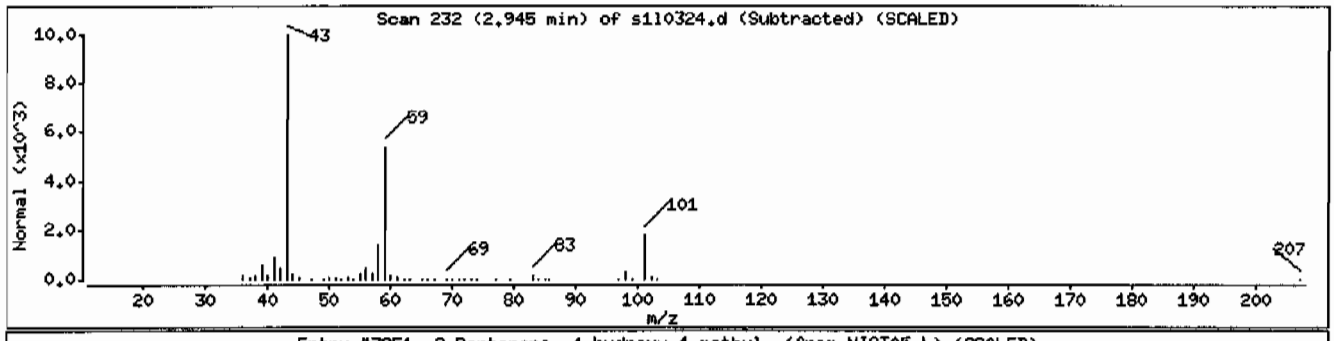

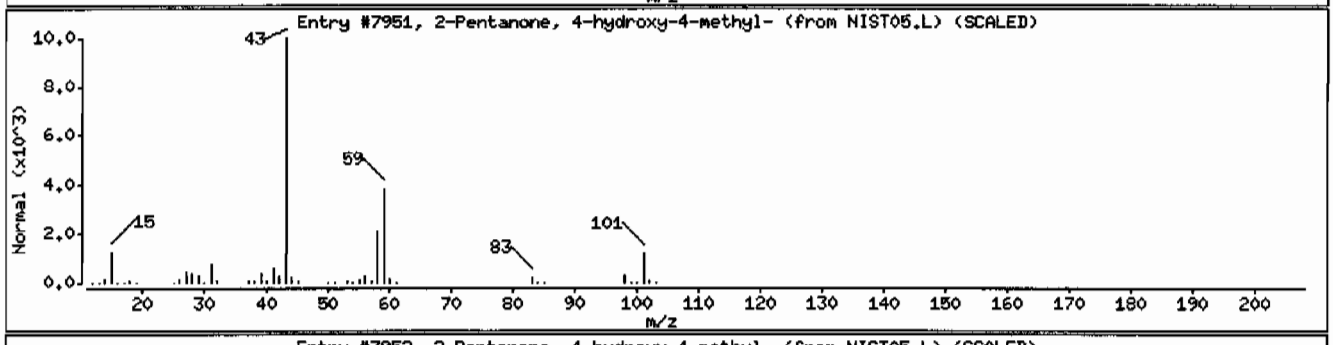

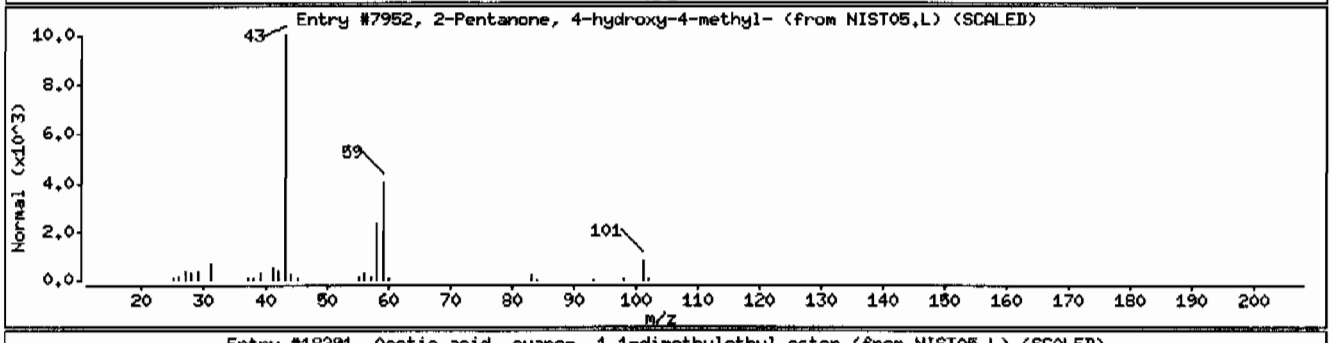

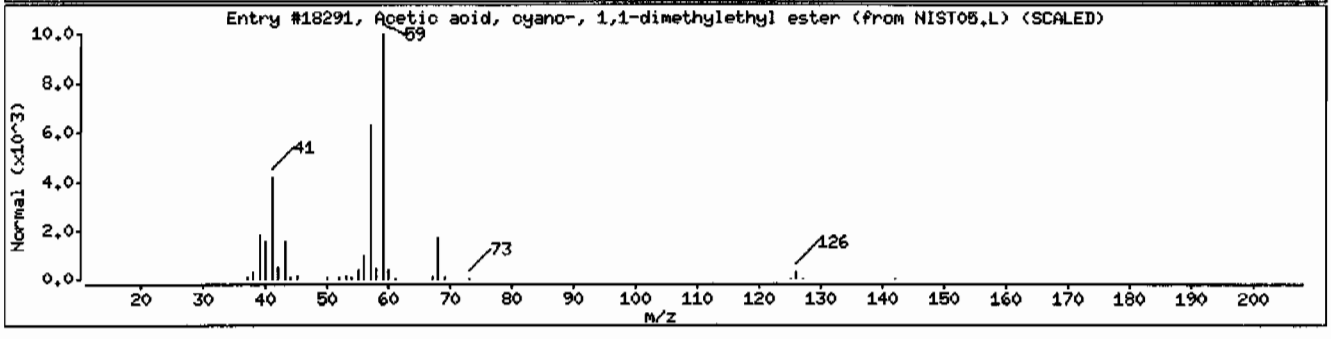

Data File: /chem/MSD1.i/s120309.b/s110324.d

Date : 03-DEC-2009 19:32

Client ID: RE03-09-14248

Instrument: MSD1.i

Sample Info: |241618011|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Friedelan-3-one	559-74-0	NIST05.L	176566	35	C30H50O	426
Propanamide, N-(4-methoxyphenyl)-2,2-dim	56619-94-4	NIST05.L	62127	27	C12H17NO2	207
3,5-Ethanoquinolin-10-one, decahydro-1,7	21041-42-9	NIST05.L	62203	27	C13H21NO	207

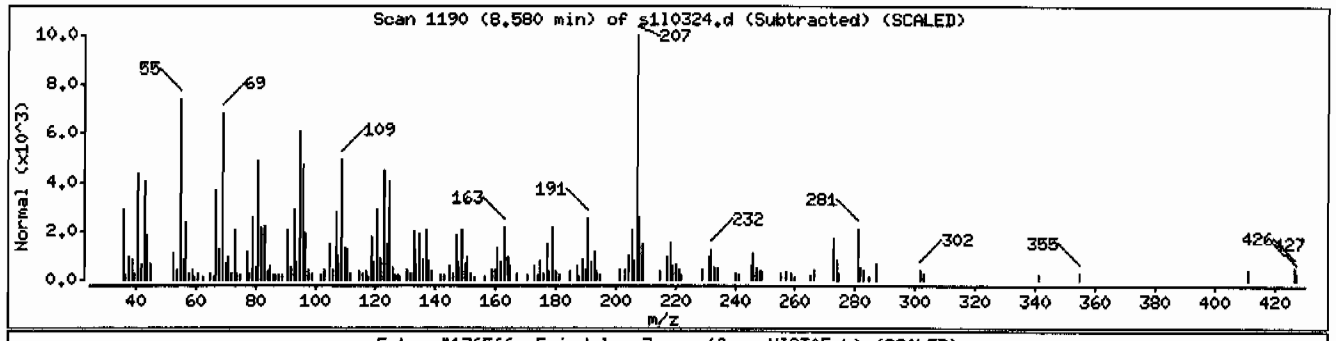

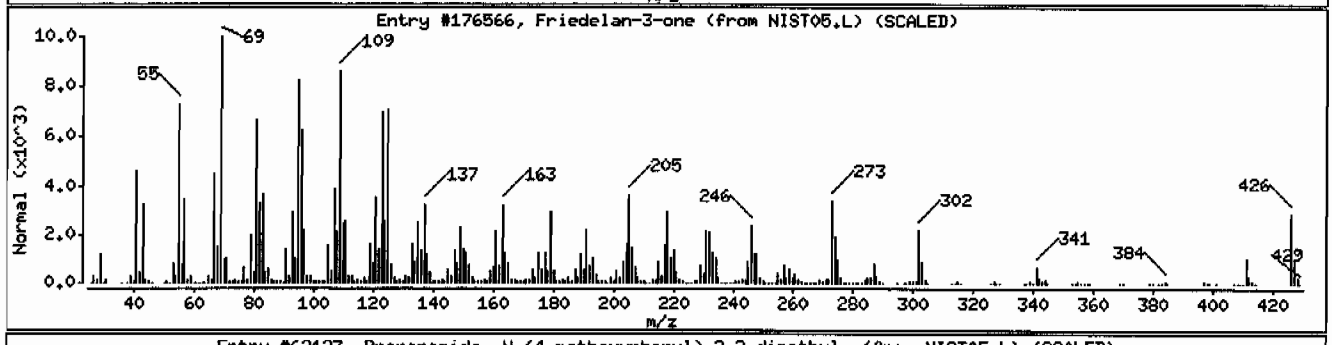

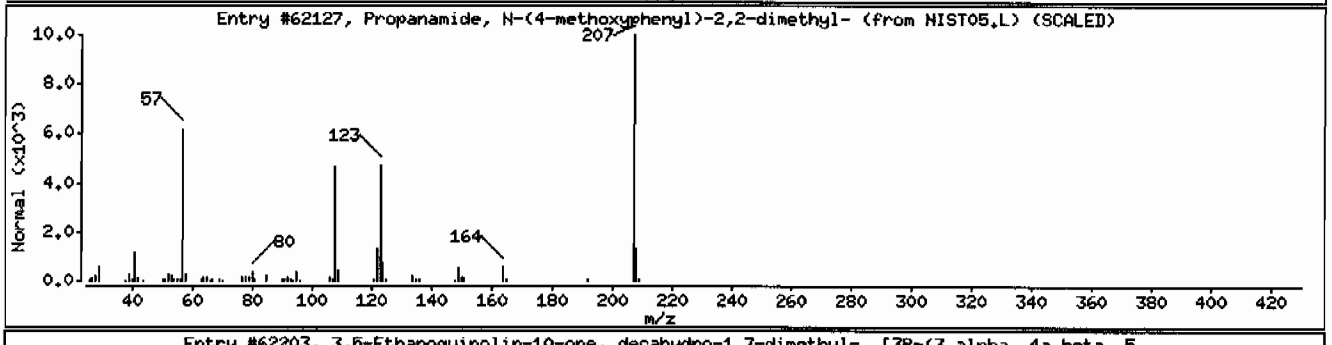

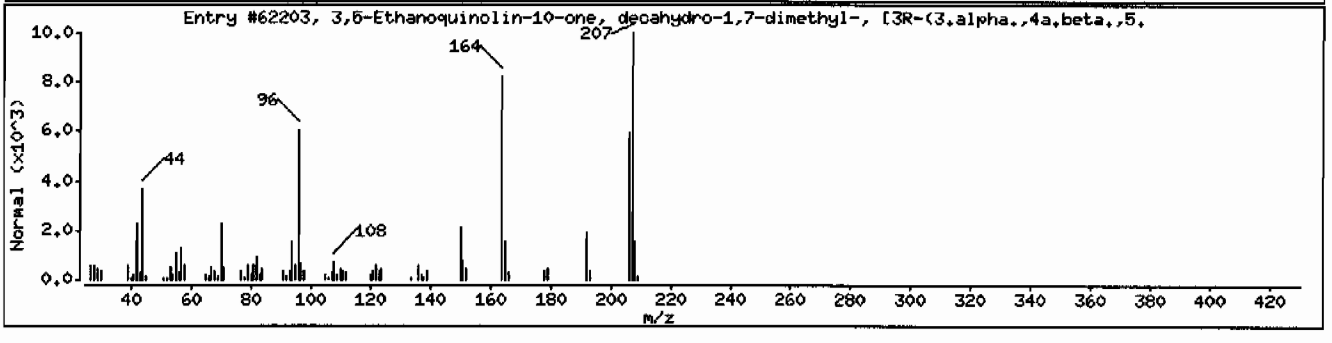

Data File: /chem/MSD1.i/s120309.b/s110324.d

Date : 03-DEC-2009 19:32

Client ID: RE03-09-14248

Instrument: MSD1.i

Sample Info: |2416150111927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9,19-Cyclolanost-24-en-3-ol, (3.beta.)-	469-38-5	NIST05.L	176585	59	C30H50O	426
Tetracosapentaene, 2,6,10,15,19,23-hexam	26266-08-0	NIST05.L	173973	46	C30H52	412
Acridine-9-carbaldehyde	1000318-45-4	NIST05.L	62218	15	C14H9NO	207

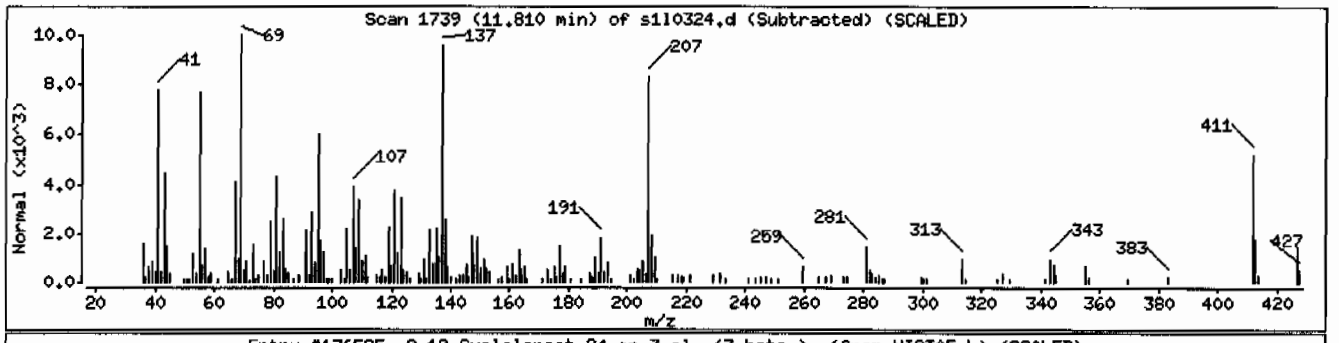

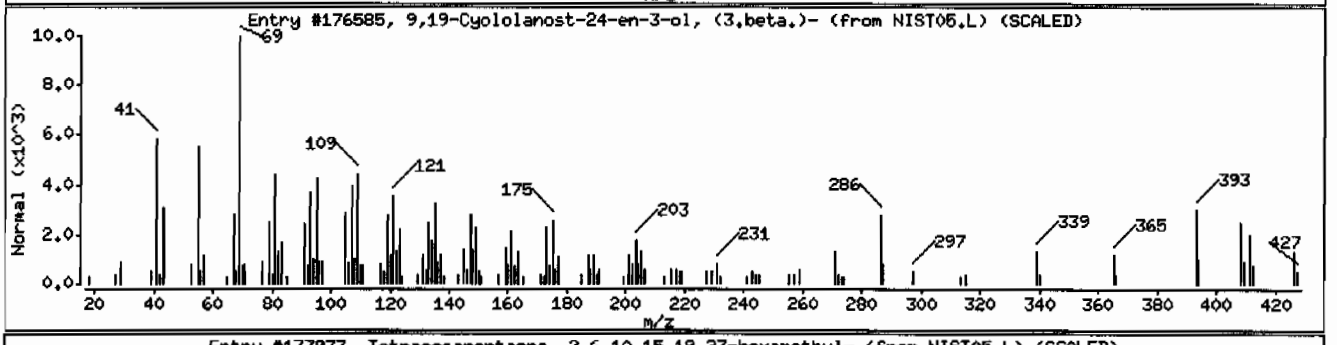

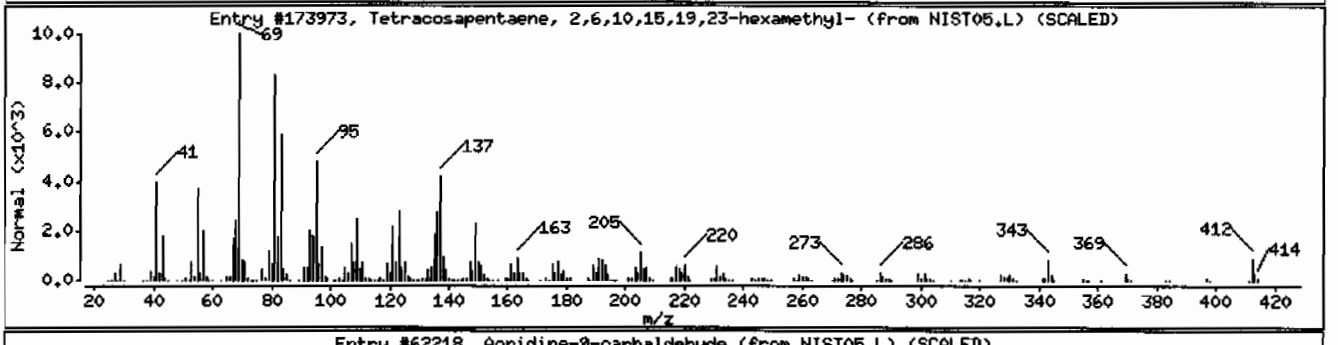

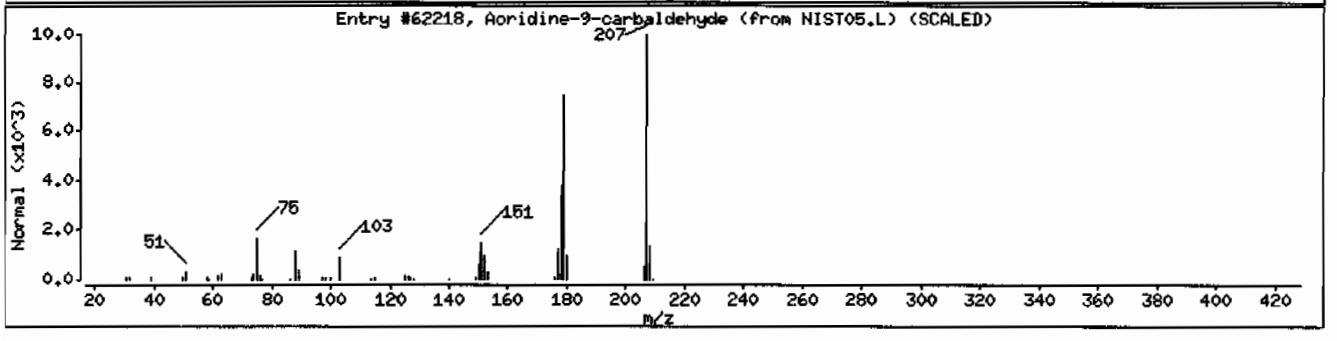

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615010	Date Received:	11/21/2009 09:00	%Moisture:	10.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14249	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:08	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s1l0323.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.7	369
108-95-2	Phenol	U	369	ug/kg	73.7	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.7	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.7	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.7	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.7	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.1	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.7	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.7	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.7	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.7	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.7	369
95-48-7	o-Cresol	U	369	ug/kg	73.7	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.7	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.7	369
78-59-1	Isophorone	U	369	ug/kg	73.7	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.7	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.7	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.7	369
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.7	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.7	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.37	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.7	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.7	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.7	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	369	ug/kg	73.7	369
99-09-2	3-Nitroaniline	U	369	ug/kg	73.7	369

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615010	Date Received:	11/21/2009 09:00	%Moisture:	10.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14249	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 19:08	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s110323.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	369	ug/kg	73.7	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	369	ug/kg	73.7	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.7	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.7	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.7	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	p-Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.7	369
122-66-7	Azobenzene	U	369	ug/kg	73.7	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.7	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.7	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.37	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.7	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.7	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.7	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.7	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.7	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	300	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	205	ug/kg	96	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110323.d
Lab Smp Id: 241615010 Client Smp ID: RE03-09-14249
Inj Date : 03-DEC-2009 19:08
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615010|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	10.08880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	379518	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1522584	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	867727	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1494504	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1312399	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1166595	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	584924	59.0066	2170
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	696511	57.8107	2130
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	327139	32.6031	1200
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	769647	37.0343	1360
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	194186	80.1427	2950
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	847863	41.1573	1520

ION RATIO REPORT

SV REPORT

Data file: s110323.d
Report Date: 12/04/2009 07:29
Lab. ID: 241615010 SampleType: SAMPLE
Injection Date: 03-DEC-2009 19:08
Operator: AMY Instrument: MSD1.i
Sample Info: |241615010|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	32501	3.64	3.70	80-120	100	(T)
93	255	3.73	3.72	409-469	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45388	4.28	4.16	80-120	100	(T)
42	26595	4.28	4.16	48-108	59	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	154897	6.03	5.80	80-120	100	(T)
164	867727	6.02	5.80	0- 40	560	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	110436	6.02	5.85	80-120	100	(T)
63	1379	6.03	5.85	46-106	1	(QT)
47 Acenaphthene			CAS#: 83-32-9			
154	8454	6.00	6.05	80-120	100	( )
153	9026	6.00	6.05	73-133	107	( )
152	8733	6.00	6.05	18- 78	103	(Q)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	110436	6.02	6.13	80-120	100	(T)
89	1254	6.02	6.13	33- 93	1	(QT)
63	1379	6.03	6.13	16- 76	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	12140	6.56	6.40	80-120	100	(T)
165	12240	6.56	6.40	64-124	101	(T)
167	4436	6.56	6.40	0- 43	37	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	11606	6.56	6.70	80-120	100	(T)
141	75585	6.56	6.70	47-107	651	(QT)
250	23167	6.56	6.70	68-128	200	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	1998	9.65	9.66	80-120	100	( )
253	754	9.65	9.66	0- 52	38	( )
125	536	9.64	9.66	0- 45	27	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110323.d
Lab Smp Id: 241615010 Client Smp ID: RE03-09-14249
Inj Date : 03-DEC-2009 19:08
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615010|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	10.08880	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2241753	40.000
* 91 Chrysene-d12	8.663	3539135	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.946	456777	8.15034942	300	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.163	492726	5.56888142	205	96	NIST05.L	112656	91

Data File: /chem/MSD1.i/s120309.b/s110323.d

Date : 03-DEC-2009 19:08

Client ID: RE03-09-14249

Sample Info: |2416150101927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20

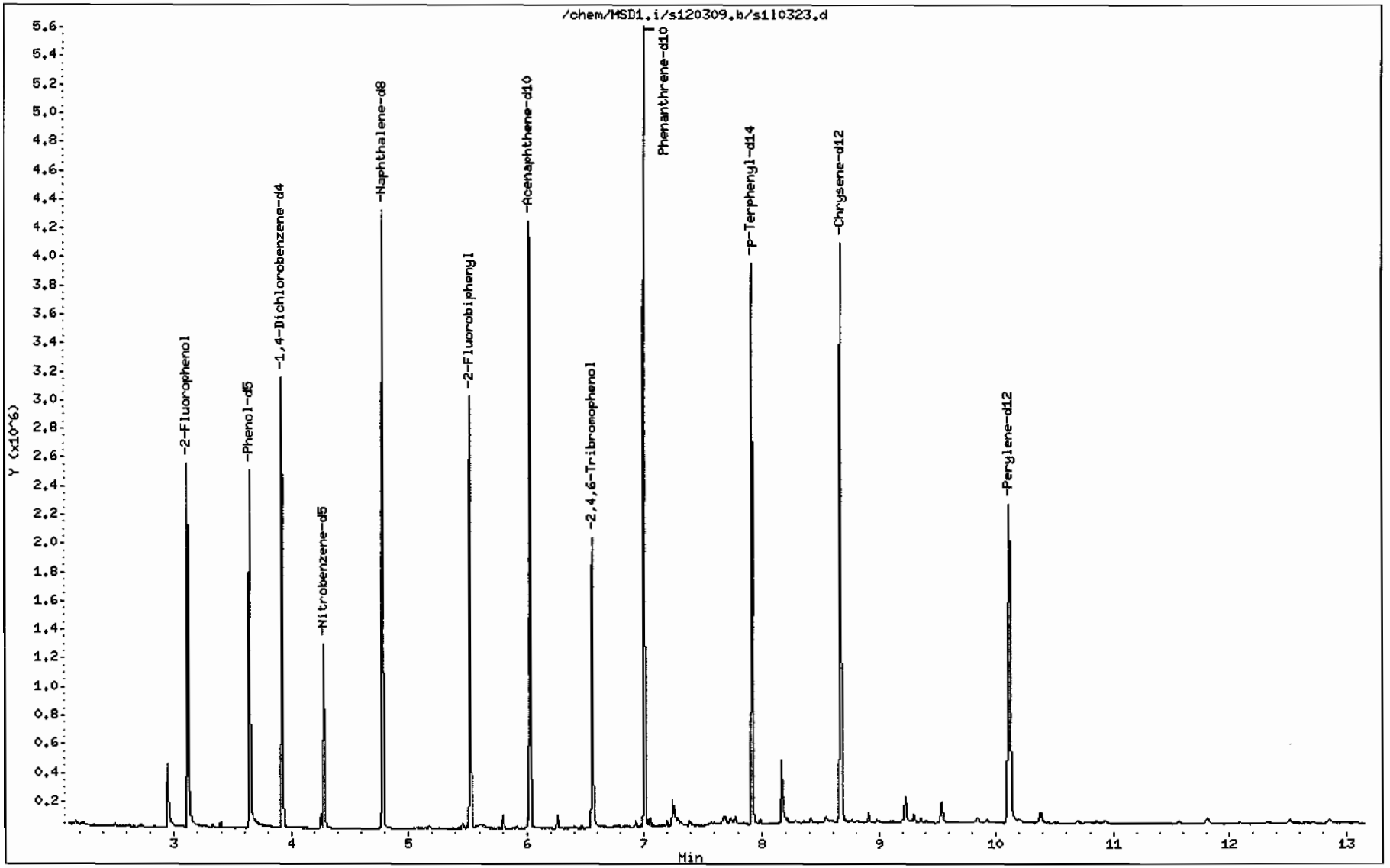

Data File: /chem/MSD1.i/s120309.b/s110323.d

Date : 03-DEC-2009 19:08

Client ID: RE03-09-14249 Instrument: MSD1.i

Sample Info: |2416150101927156|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	37	C7H11NO2	141

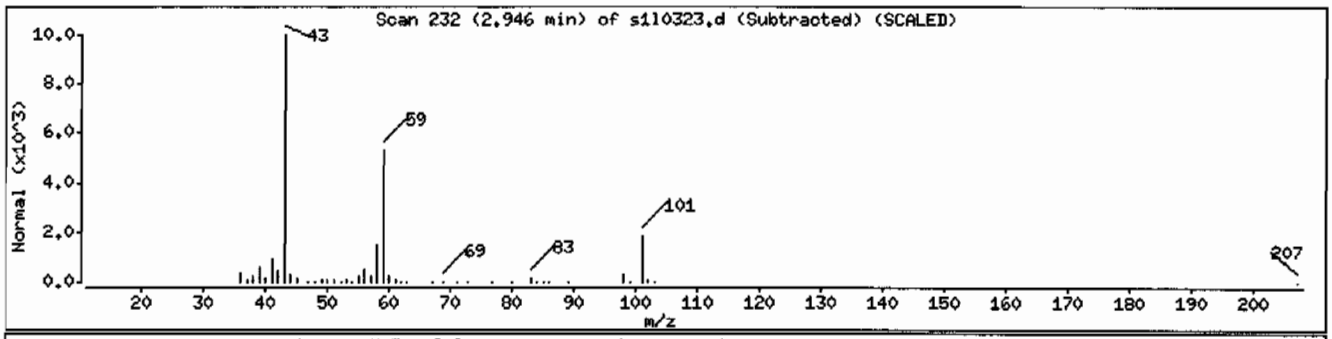

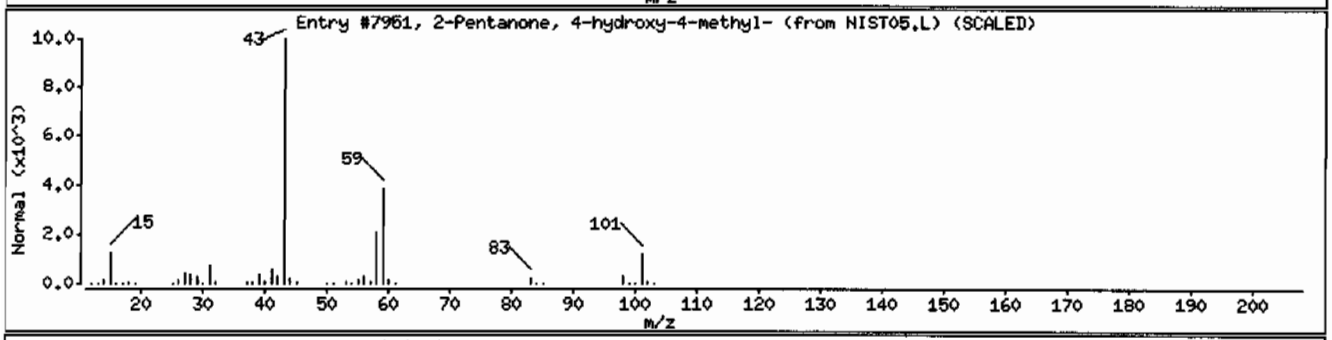

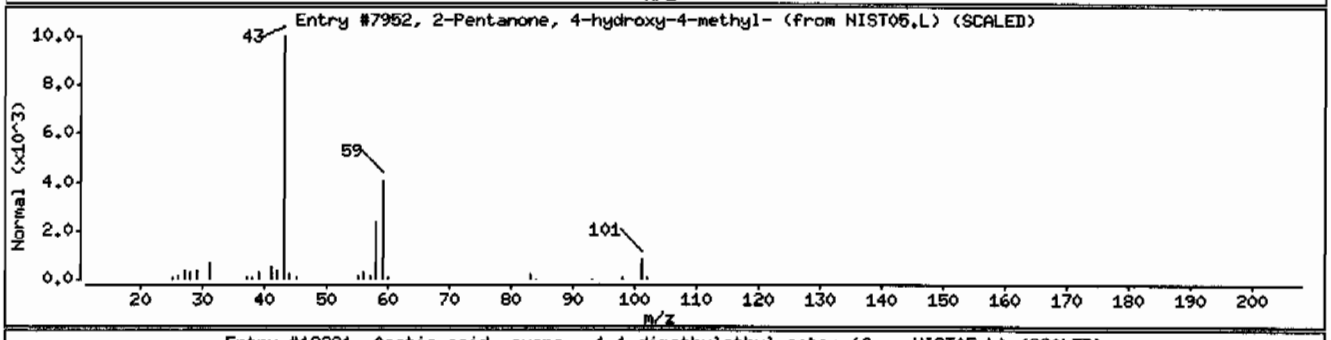

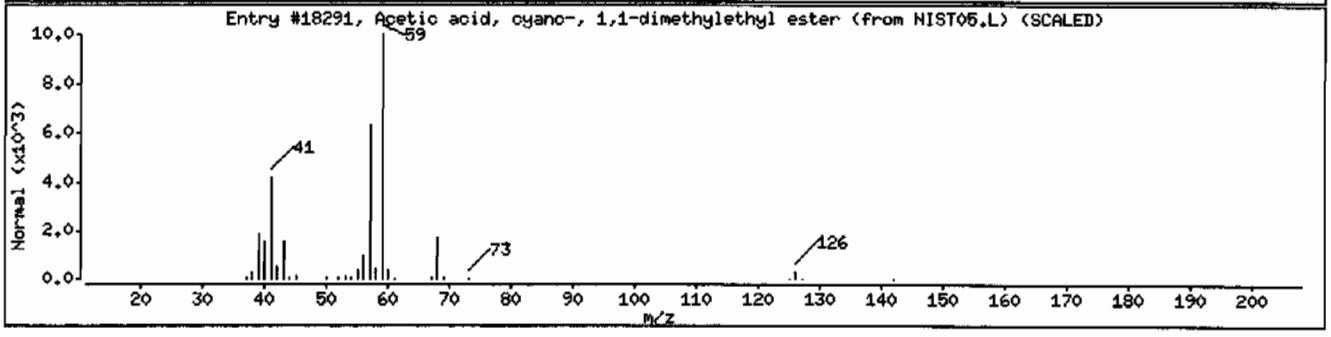

Data File: /chem/MSD1.i/s120309.b/s110323.d

Date : 03-DEC-2009 19:08

Client ID: RE03-09-14249 Instrument: MSD1.i

Sample Info: |2416150101927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	96	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	95	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	87	C18H35NO	281

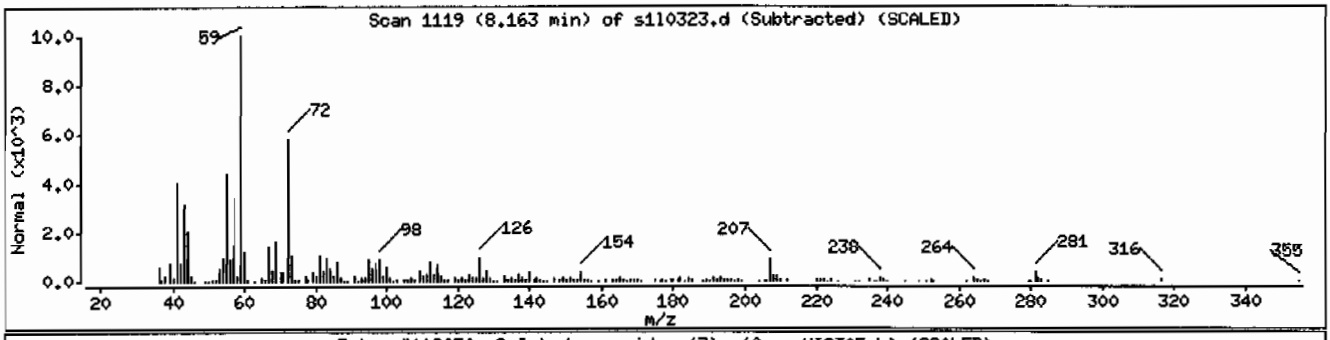

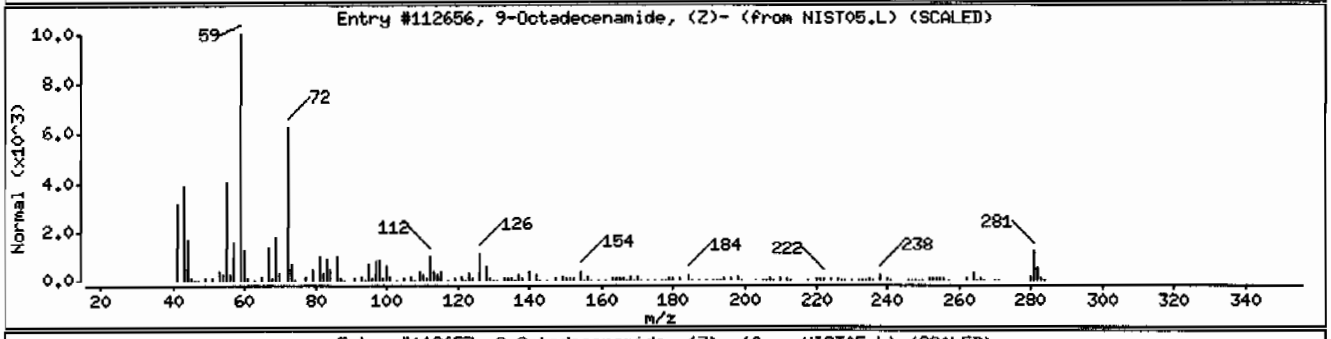

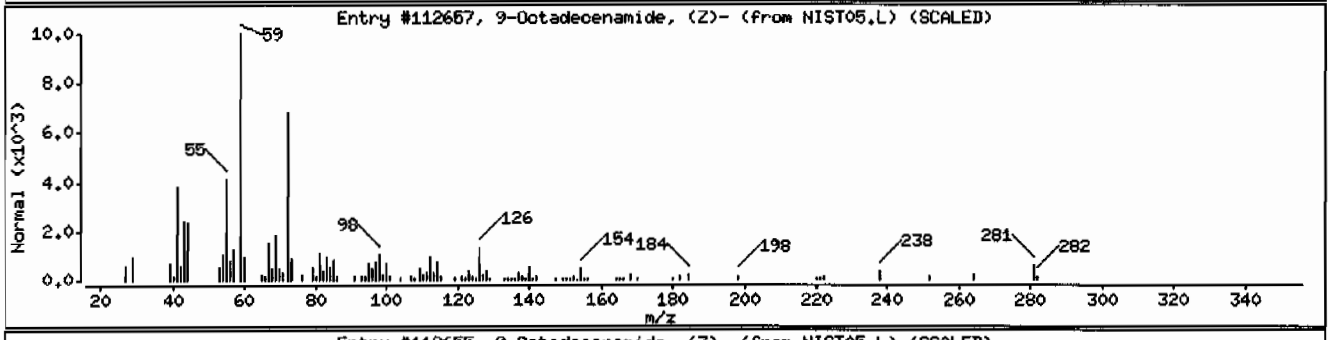

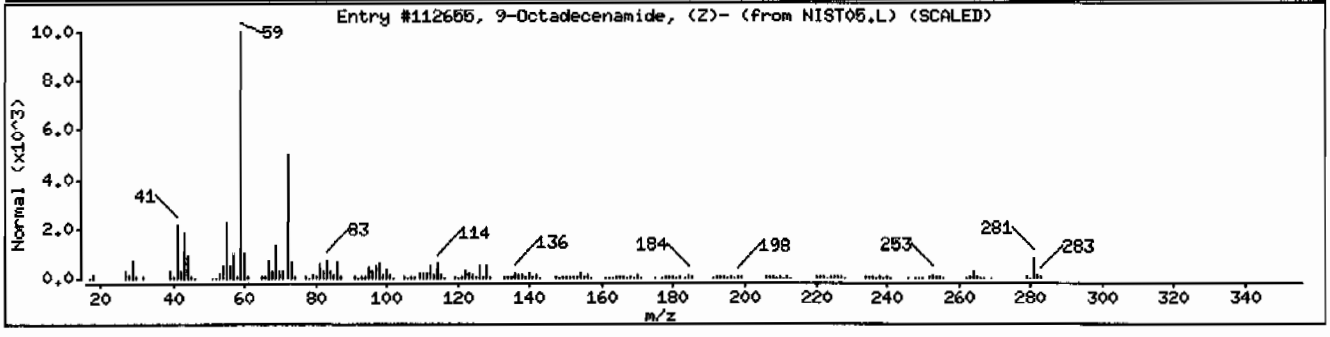

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615006**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14250**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:35**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s110319.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.5	357
108-95-2	Phenol	U	357	ug/kg	71.5	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.5	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.5	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.5	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.5	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.3	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.5	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.5	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.5	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.5	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.5	357
95-48-7	o-Cresol	U	357	ug/kg	71.5	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.5	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.5	357
78-59-1	Isophorone	U	357	ug/kg	71.5	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.5	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.5	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.5	357
65-85-0	Benzoic acid	U	715	ug/kg	179	715
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.5	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.5	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.15	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.5	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.5	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.5	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.5	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.5	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:35	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s110319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.5	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	715	ug/kg	136	715
132-64-9	Dibenzofuran	U	357	ug/kg	71.5	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.5	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.5	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.5	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.5	357
122-66-7	Azobenzene	U	357	ug/kg	71.5	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.5	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.5	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.15	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.5	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.5	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.5	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.5	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.5	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.76	447	ug/kg		J
	Unknown Aldol Condensate	2.95	335	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:35	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s110319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
559-74-0	Friedelan-3-one	8.58	406	ug/kg	96	NJ
	Unknown	11.8	195	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110319.d
Lab Smp Id: 241615006 Client Smp ID: RE03-09-14250
Inj Date : 03-DEC-2009 17:35
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615006|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	6.92880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	392611	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1558317	40.0000	
* 46 Acenaphthene-d10	164	6.028	6.028	(1.000)	890831	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1517142	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1352070	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1217340	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	583858	56.9348	2030
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	691487	55.4797	1980
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	317269	30.8944	1100
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.916)	726632	34.0576	1220
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.088)	192115	77.2316	2760
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	879963	41.4622	1480

ION RATIO REPORT

SV REPORT

Data file: s110319.d
Report Date: 12/04/2009 07:27
Lab. ID: 241615006 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:35
Operator: AMY Instrument: MSD1.i
Sample Info: |241615006|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	31848	3.64	3.70	80-120	100	(T)
93	232	3.59	3.72	409-469	1	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	44228	4.28	4.16	80-120	100	(T)
42	25378	4.28	4.16	48-108	57	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	159340	6.03	5.80	80-120	100	(T)
164	890831	6.03	5.80	0- 40	559	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	114239	6.03	5.85	80-120	100	(T)
63	1427	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	114239	6.03	6.13	80-120	100	(T)
89	1282	6.02	6.13	33- 93	1	(QT)
63	1427	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	12421	6.56	6.40	80-120	100	(T)
165	12598	6.56	6.40	64-124	101	(T)
167	3537	6.56	6.40	0- 43	28	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	10781	6.56	6.70	80-120	100	(T)
141	77497	6.56	6.70	47-107	719	(QT)
250	23165	6.56	6.70	68-128	215	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	217	9.67	9.66	80-120	100	( )
253	127	9.63	9.66	0- 52	59	(Q)
125	309	9.63	9.66	0- 45	142	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110319.d
Lab Smp Id: 241615006 Client Smp ID: RE03-09-14250
Inj Date : 03-DEC-2009 17:35
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615006|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	6.92880	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2323673	40.000
* 91 Chrysene-d12	8.663	3642012	40.000
* 98 Perylene-d12	10.116	3379828	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.763	727368	12.5209967	447	0		0	10
Unknown Aldol Condensate				CAS #:			
2.945	544318	9.36995891	335	0		0	10
Friedelan-3-one				CAS #: 559-74-0			
8.580	1034271	11.3593387	406	96	NIST05.L	176566	91
Unknown				CAS #:			
11.804	460329	5.44795178	195	0		0	98

Data File: /chem/MSD1.i/s120309.b/s110319.d
Date : 03-DEC-2009 17:35
Client ID: RE03-09-14250
Sample Info: |2416150061927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

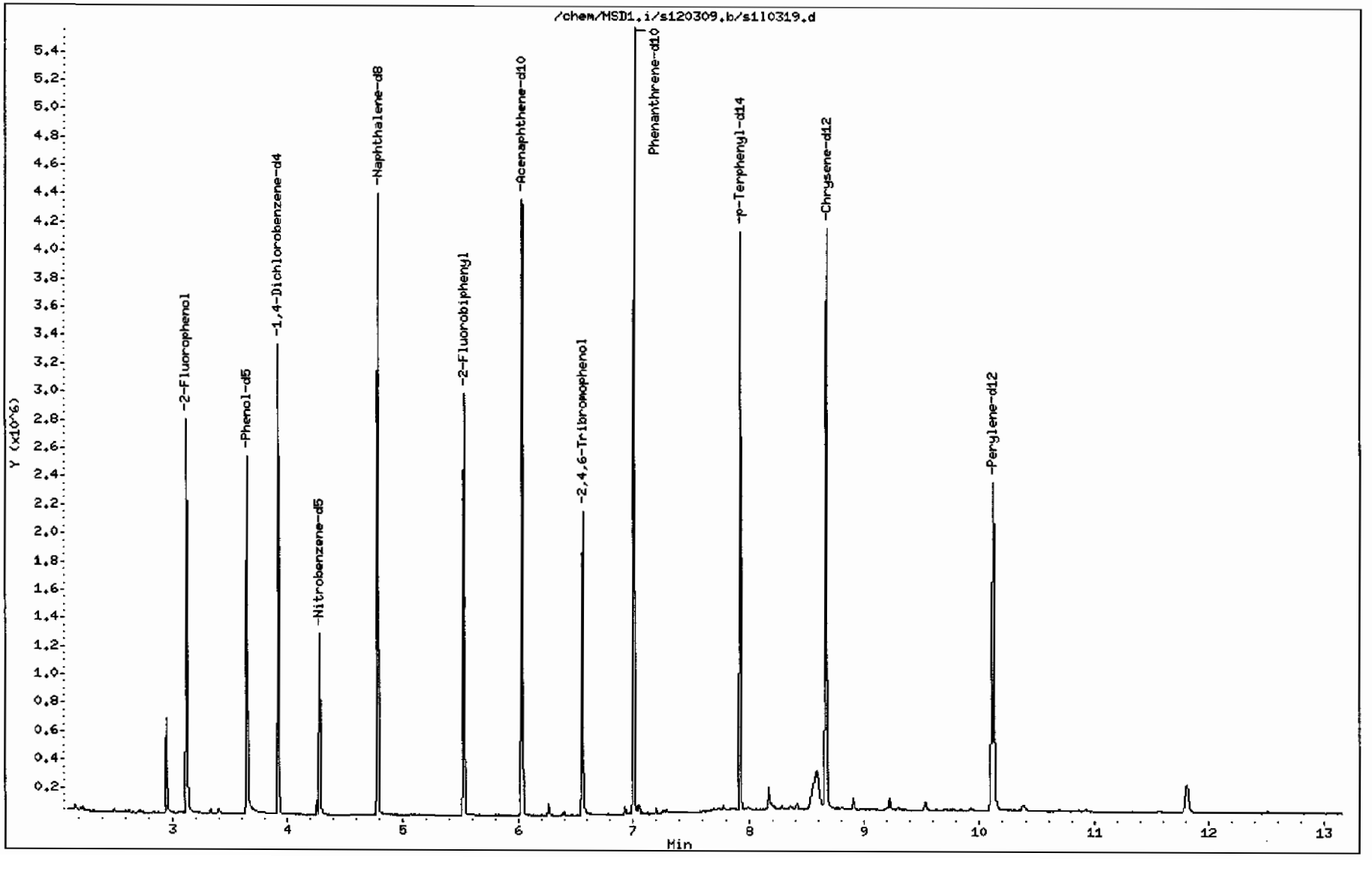

Data File: /chem/MSD1.i/s120309.b/s110319.d

Date : 03-DEC-2009 17:35

Client ID: RE03-09-14250

Instrument: MSD1.i

Sample Info: |2416150061927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-ethylbutyl ester	10031-87-5	NIST05.L	20139	4	C8H16O2	144
S-(Isopropoxythiocarbonyl)thiohydroxylam	35659-80-4	NIST05.L	23661	4	C4H9NOS2	151
S-(Buthoxythiocarbonyl)thiohydroxylamine	35659-81-5	NIST05.L	32811	4	C5H11NOS2	165

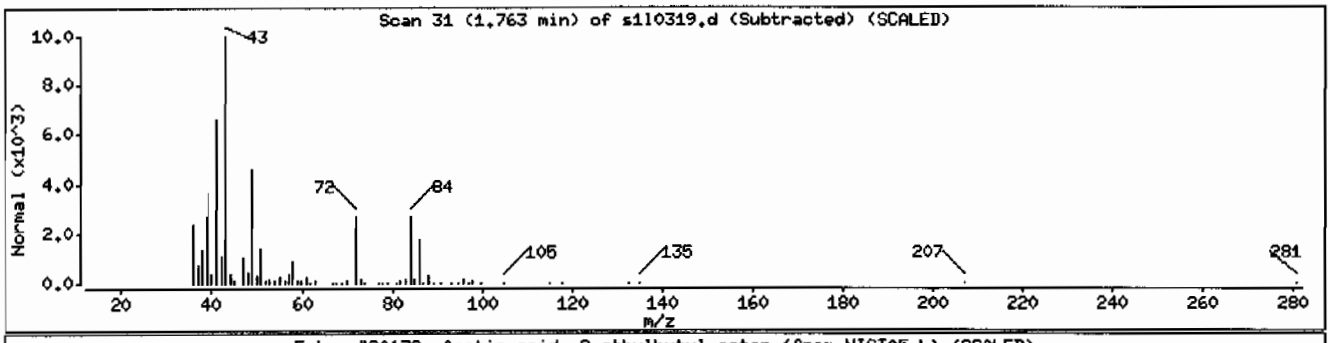

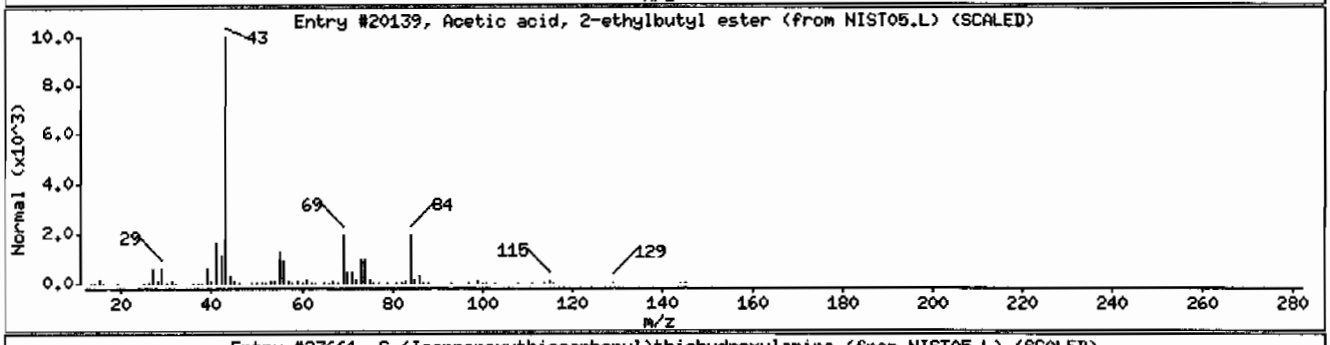

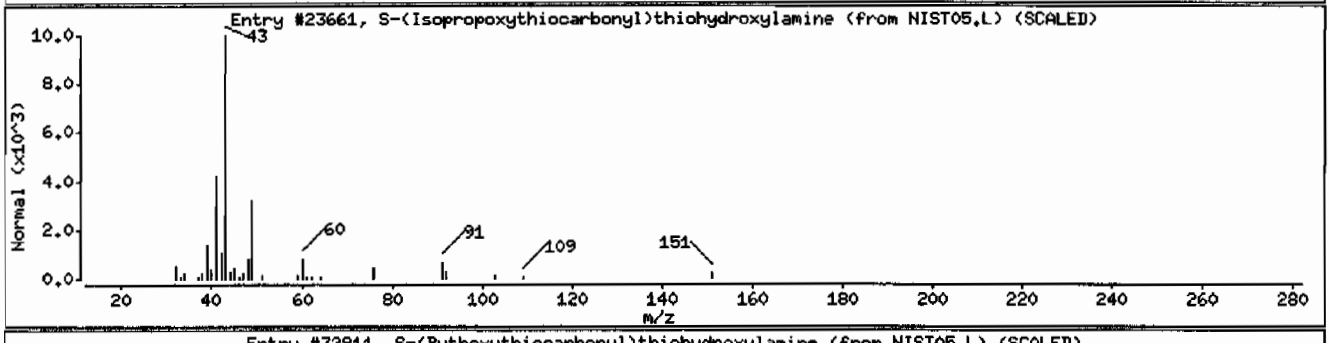

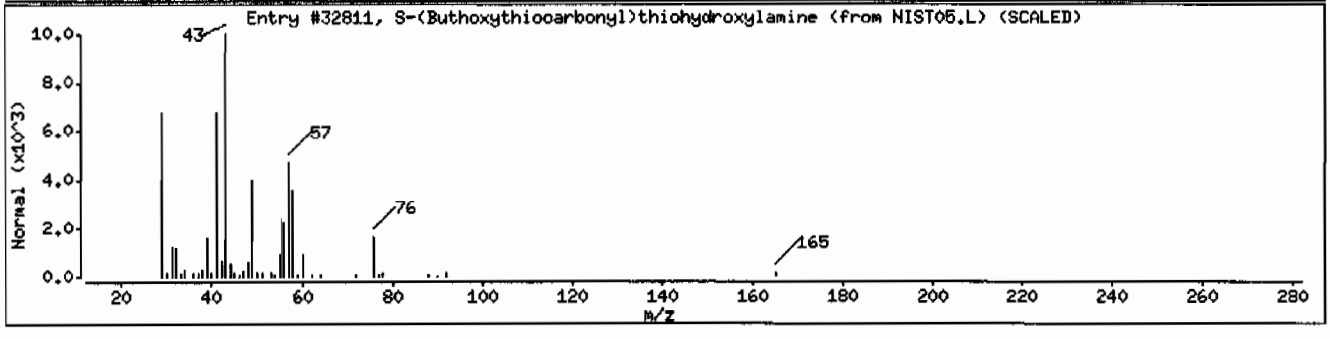

Data File: /chem/MSD1.i/s120309.b/s110319.d

Date : 03-DEC-2009 17:35

Client ID: RE03-09-14250

Instrument: MSD1.i

Sample Info: |2416150061927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

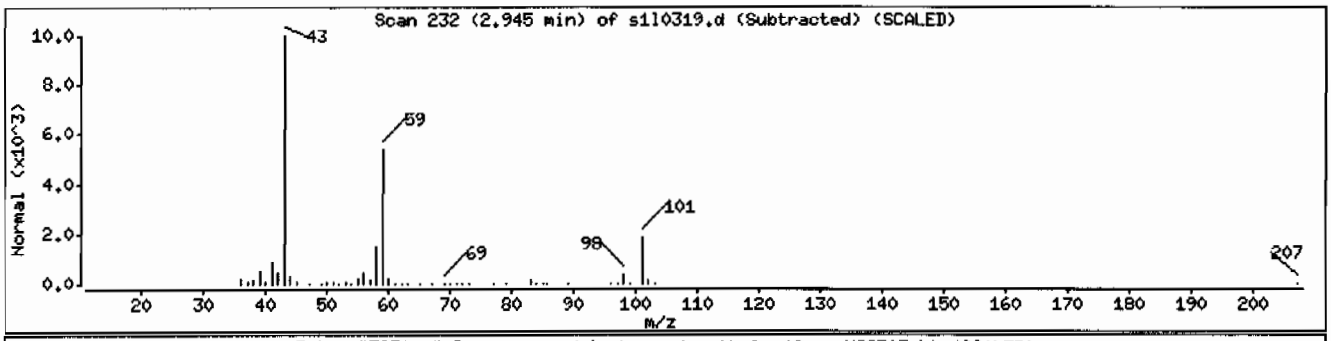

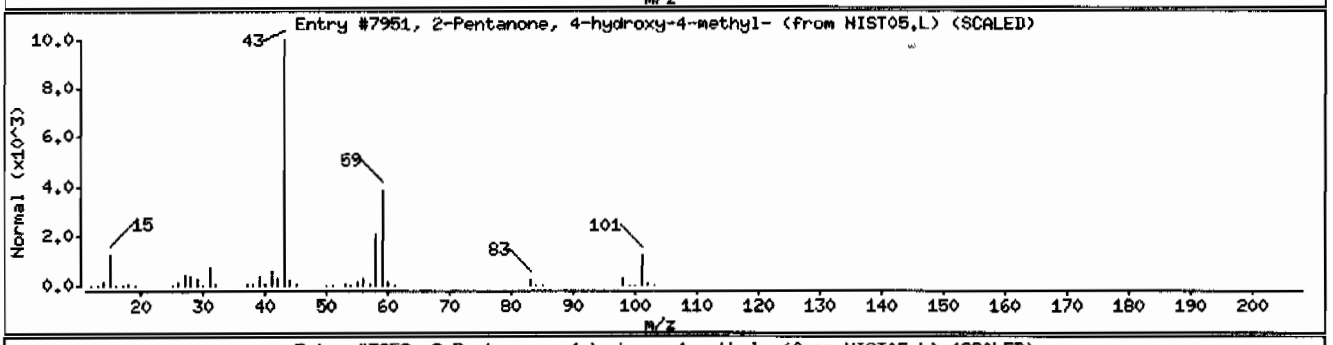

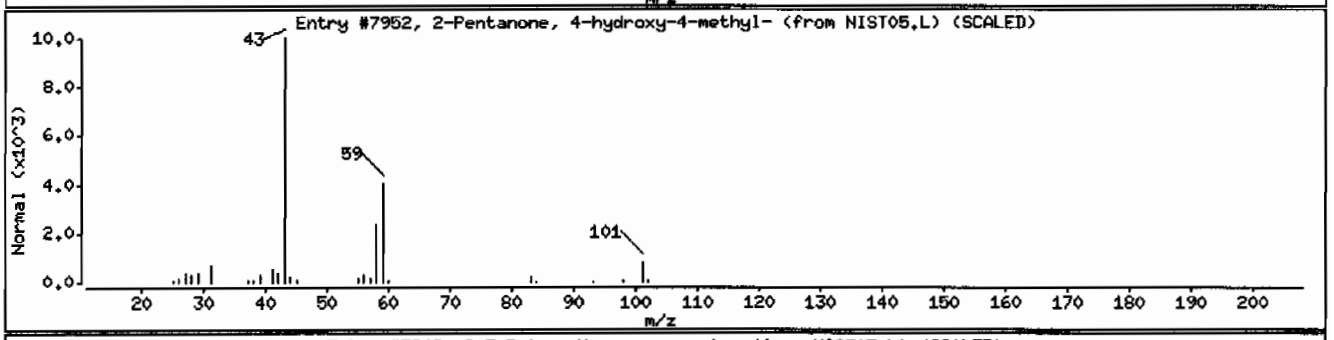

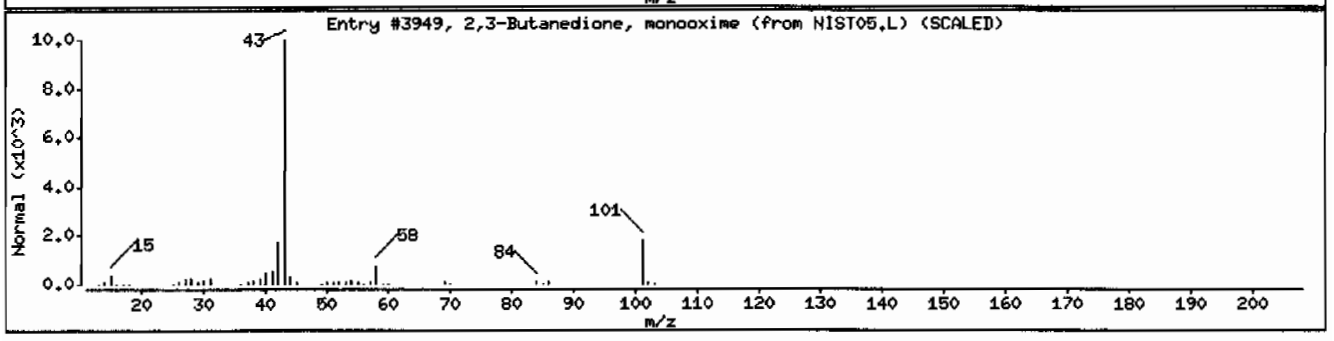

Data File: /chem/MSD1.i/s120309.b/s110319.d

Date : 03-DEC-2009 17:35

Client ID: RE03-09-14250 Instrument: MSD1.i

Sample Info: |241615006|927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	96	C30H50O	426
7-Tetradecyne	35216-11-6	NIST05.L	52908	55	C14H26	194
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	1000188-72-8	NIST05.L	69963	38	C15H22O	218

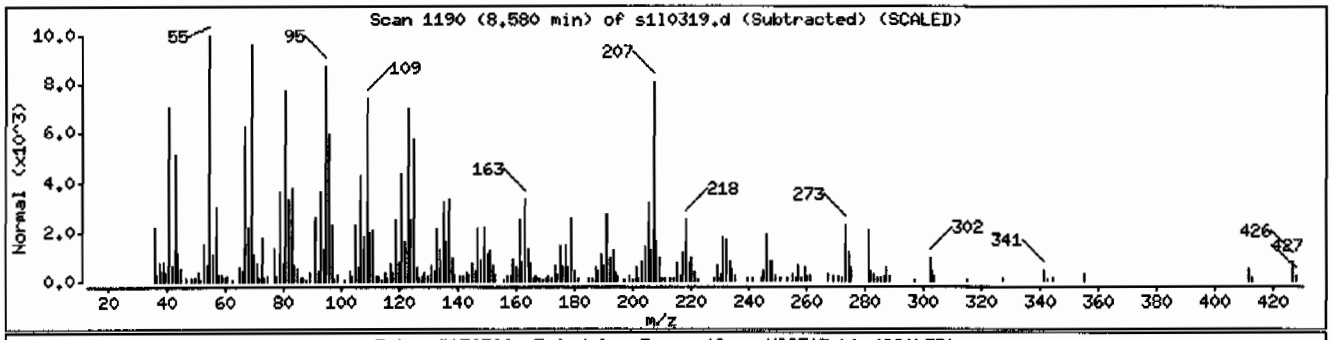

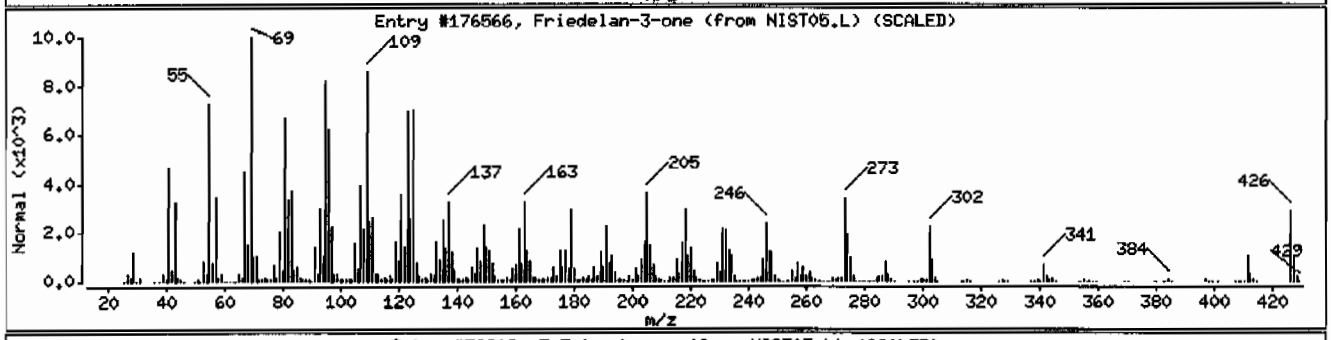

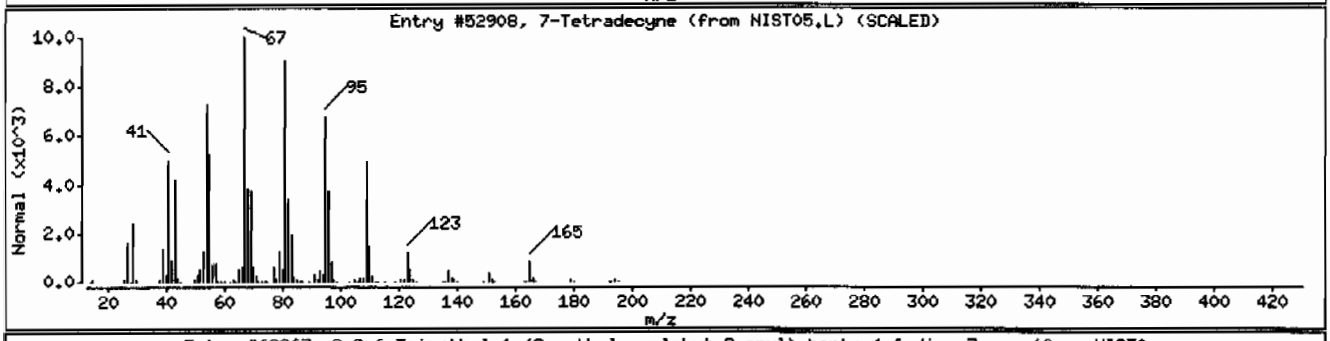

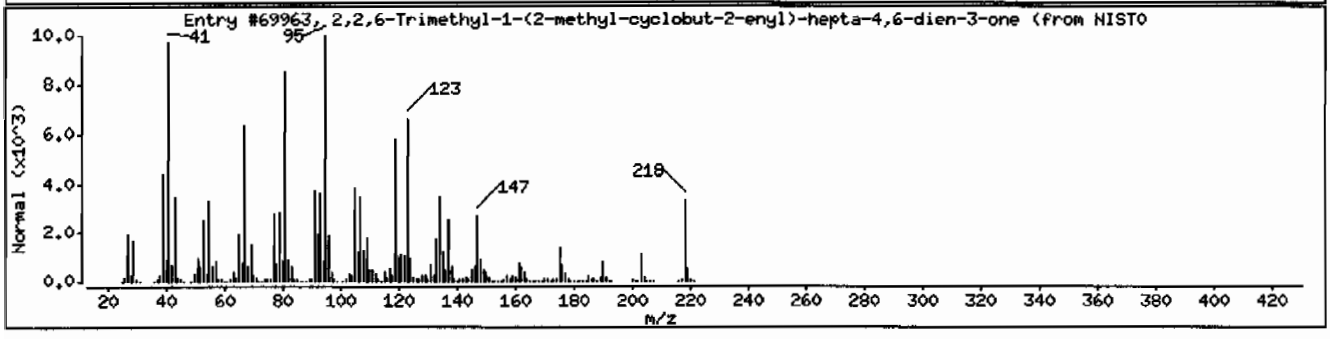

Data File: /chem/MSD1.i/s120309.b/s110319.d

Date : 03-DEC-2009 17:35

Client ID: RE03-09-14250

Instrument: MSD1.i

Sample Info: 1241615006192715511ISVHF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, methylphenylbis[(1,7,7-trimethyl	74806-99-8	NIST05.L	176524	50	C27H42O2Si	426
Tetracosapentaene, 2,6,10,15,19,23-hexam	26266-08-0	NIST05.L	173973	45	C30H52	412
Lanosterol	79-63-0	NIST05.L	176558	43	C30H50O	426

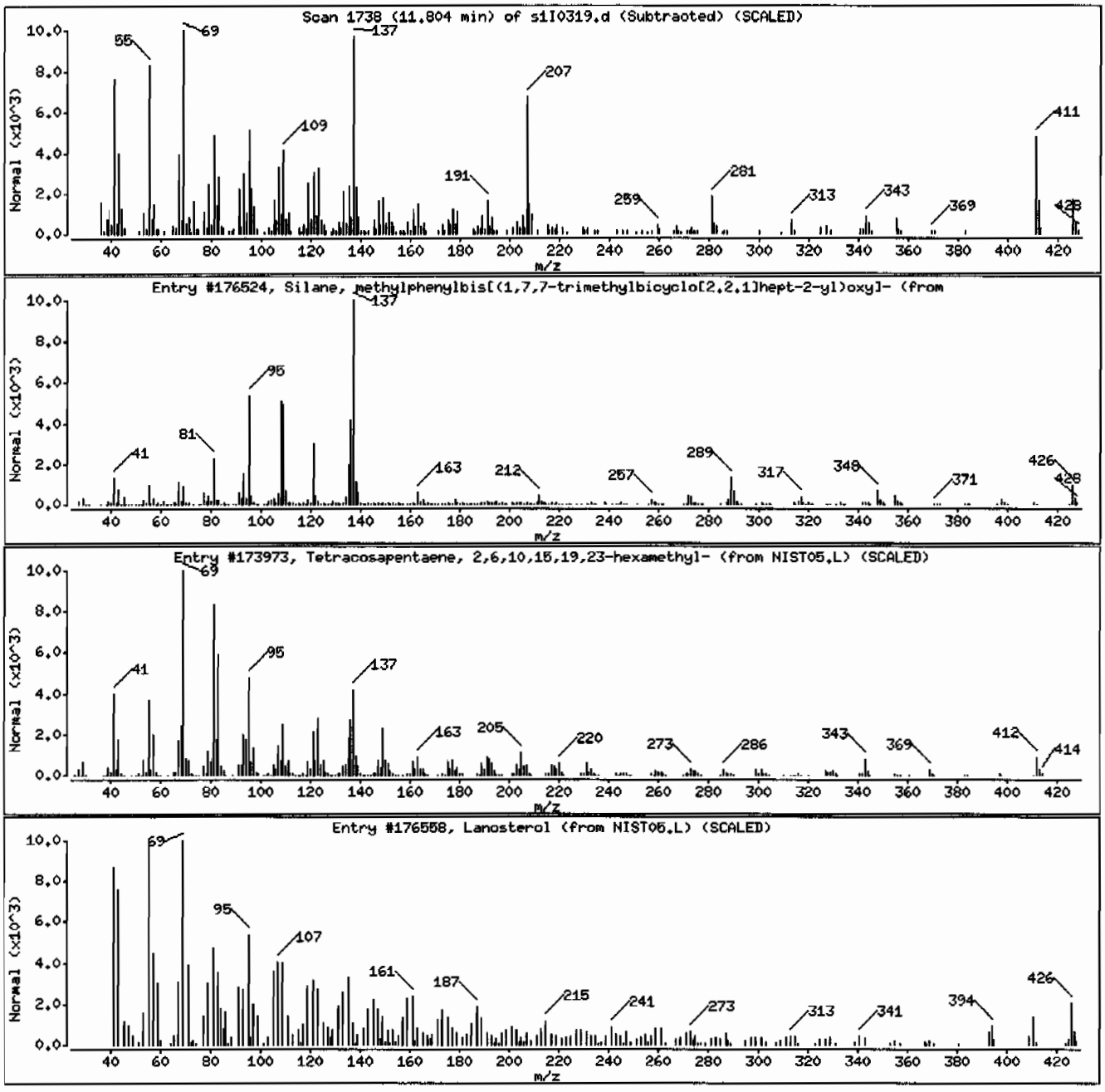

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14251	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110330.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.6	368
108-95-2	Phenol	U	368	ug/kg	73.6	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.6	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.6	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.6	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.6	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	92.0	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.6	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.6	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.6	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.6	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.6	368
95-48-7	o-Cresol	U	368	ug/kg	73.6	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.6	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.6	368
78-59-1	Isophorone	U	368	ug/kg	73.6	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.6	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.6	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.6	368
65-85-0	Benzoic acid	U	736	ug/kg	184	736
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.6	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.6	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.36	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.6	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.6	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.6	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.6	368
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	368	ug/kg	73.6	368

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615015	Date Received:	11/21/2009 09:00	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14251	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:50	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110330.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.6	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	736	ug/kg	140	736
132-64-9	Dibenzofuran	U	368	ug/kg	73.6	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.6	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.6	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.6	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	p-Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.6	368
122-66-7	Azobenzene	U	368	ug/kg	73.6	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.6	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.6	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.36	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.6	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.6	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.6	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.6	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.6	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	279	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	153	ug/kg	93	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 21:50	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110330.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	9.53	162	ug/kg	98	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110330.d
Lab Smp Id: 241615015 Client Smp ID: RE03-09-14251
Inj Date : 03-DEC-2009 21:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615015|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.45960	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	373680	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1479329	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	864547	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1531615	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1375875	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1106868	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	563911	57.7755	2120
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	639869	53.9391	1980
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	309859	31.7839	1170
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	726850	35.1036	1290
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	190109	78.7487	2900
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	835548	38.6883	1420

ION RATIO REPORT

SV REPORT

Data file: s110330.d
Report Date: 12/04/2009 07:32
Lab. ID: 241615015 SampleType: SAMPLE
Injection Date: 03-DEC-2009 21:50
Operator: AMY Instrument: MSD1.i
Sample Info: |241615015|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	28788	3.64	3.70	80-120	100	(T)
93	226	3.73	3.72	409-469	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	42992	4.28	4.16	80-120	100	(T)
42	26899	4.28	4.16	48-108	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	153761	6.02	5.80	80-120	100	(T)
164	865004	6.02	5.80	0- 40	563	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	113001	6.02	5.85	80-120	100	(T)
63	1388	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	113001	6.02	6.13	80-120	100	(T)
89	1259	6.02	6.13	33- 93	1	(QT)
63	1388	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	10982	6.56	6.40	80-120	100	(T)
165	10726	6.56	6.40	64-124	98	(T)
167	3549	6.56	6.40	0- 43	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	10854	6.56	6.70	80-120	100	(T)
141	72915	6.56	6.70	47-107	672	(QT)
250	21460	6.56	6.70	68-128	198	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	407	9.67	9.66	80-120	100	( )
253	249	9.68	9.66	0- 52	61	(Q)
125	391	9.66	9.66	0- 45	96	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110330.d
Lab Smp Id: 241615015 Client Smp ID: RE03-09-14251
Inj Date : 03-DEC-2009 21:50
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615015|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.45960	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2213289	40.000
* 91 Chrysene-d12	8.663	3692789	40.000
* 98 Perylene-d12	10.116	3069469	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUANT QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.946	419607	7.58340652	279	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.163	383494	4.15398000	153	93	NIST05.L	112657	91
Eicosane				CAS #: 112-95-8			
9.527	338599	4.41247273	162	98	NIST05.L	113490	98

Data File: /chem/MSD1.i/s120309.b/s110330.d
Date : 03-DEC-2009 21:50
Client ID: RE03-09-14251
Sample Info: |2416150151927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

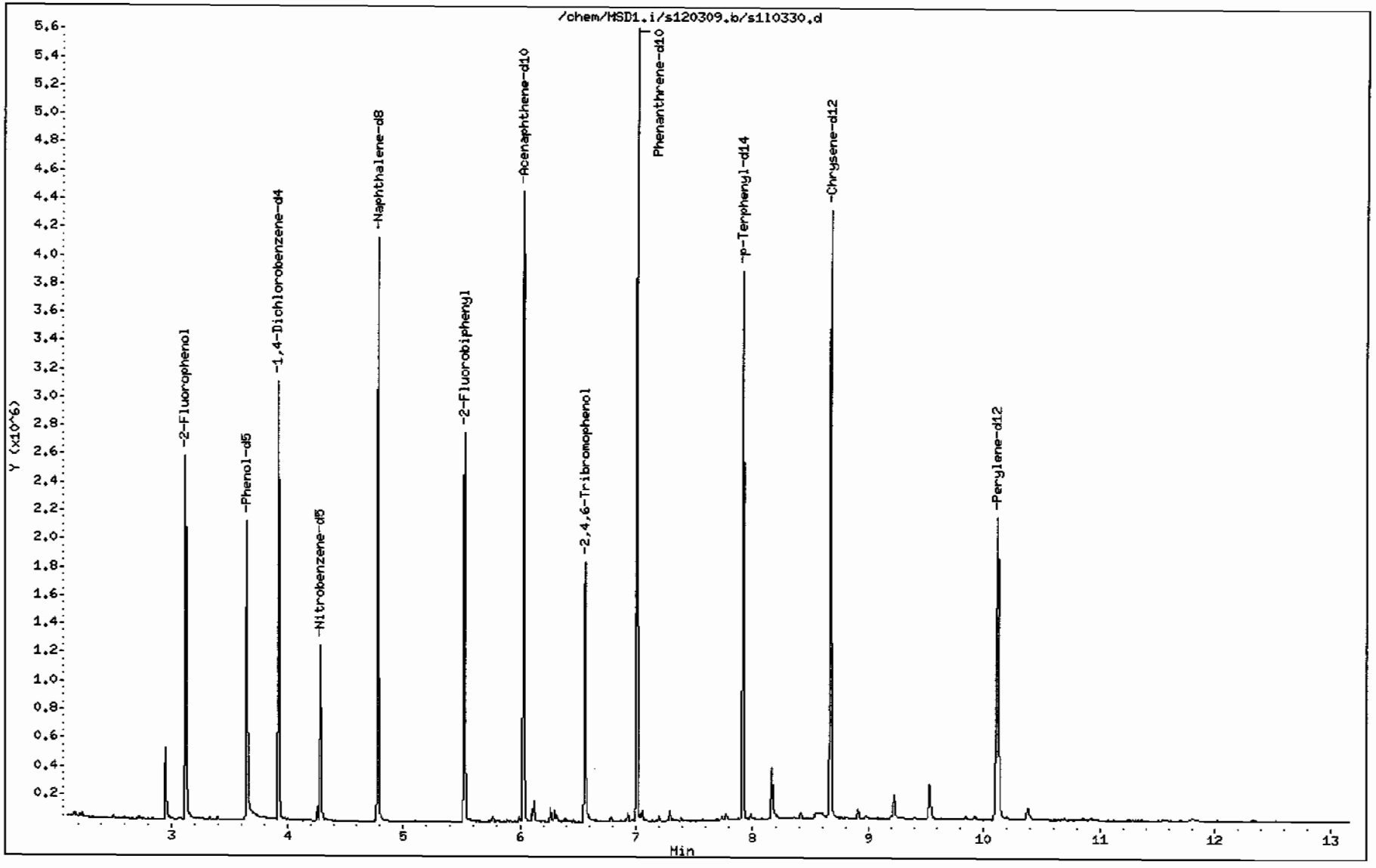

Data File: /chem/MSD1.i/s120309.b/s110330.d

Date : 03-DEC-2009 21:50

Client ID: RE03-09-14251

Instrument: MSD1.i

Sample Info: |24161501519271551|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	36	C6H12O2	116

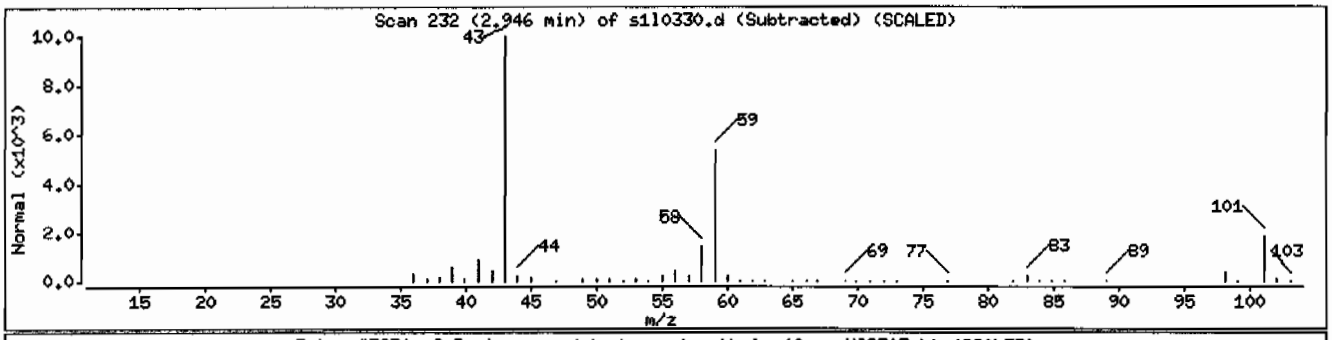

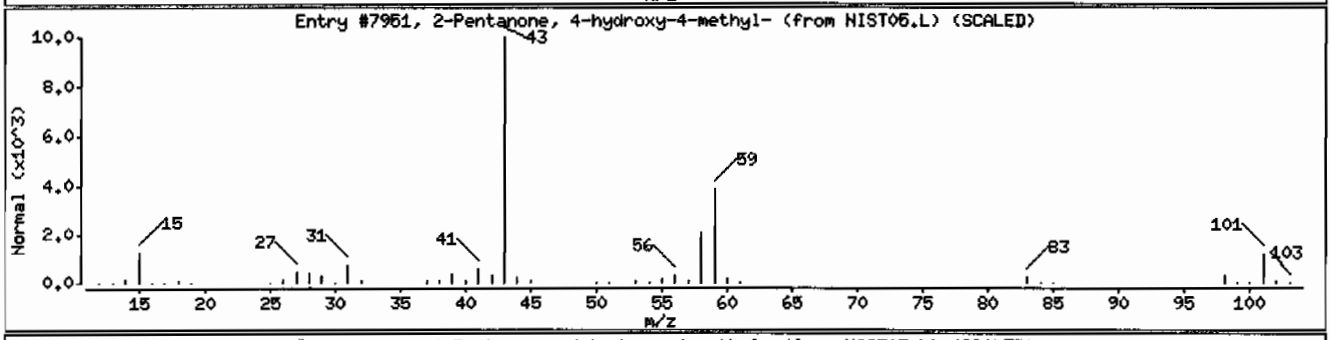

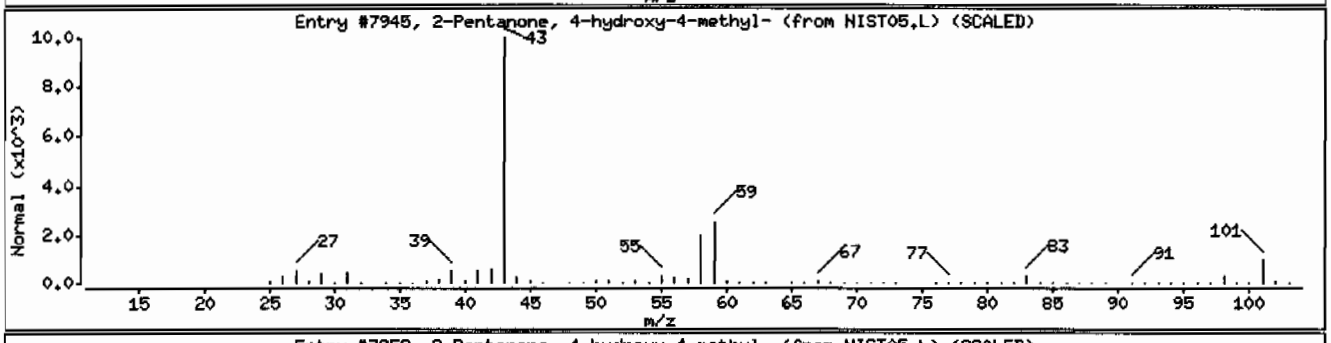

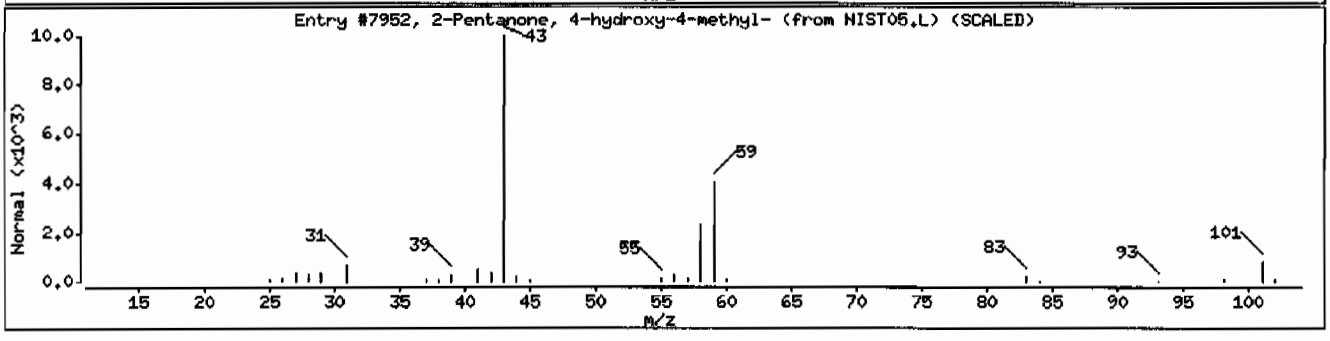

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Date : 03-DEC-2009 21:50

Client ID: RE03-09-14251

Instrument: MSD1.i

Sample Info: |2416150151927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
Benzeneethanamine, 2-fluoro-.beta.,3,4-t	61338-98-5	NIST05.L	77768	64	C11H16FNO3	229

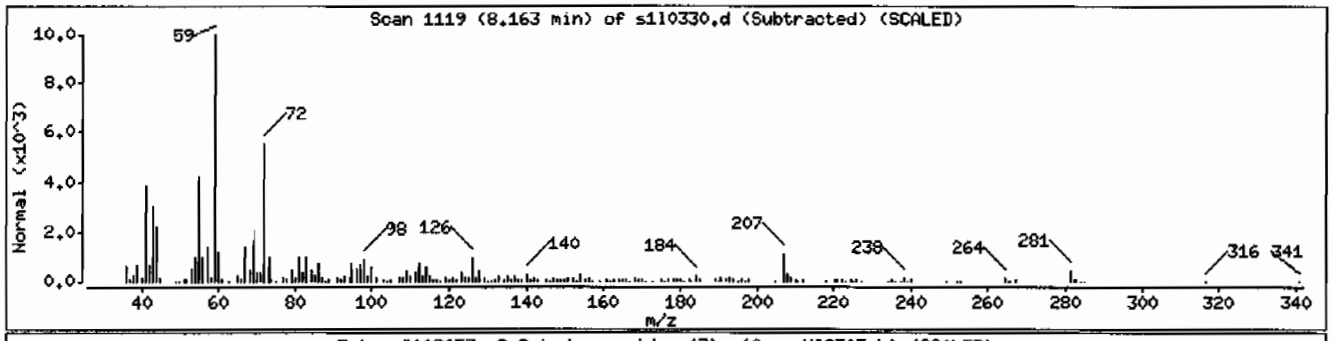

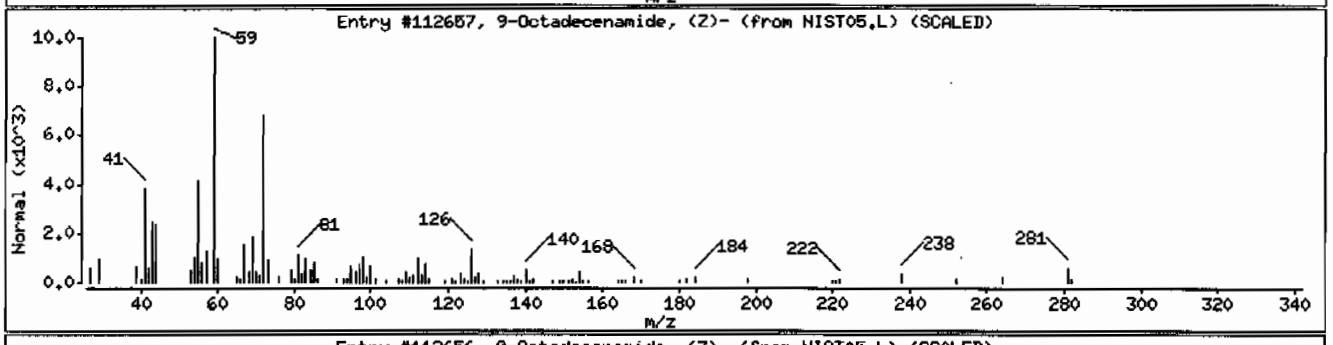

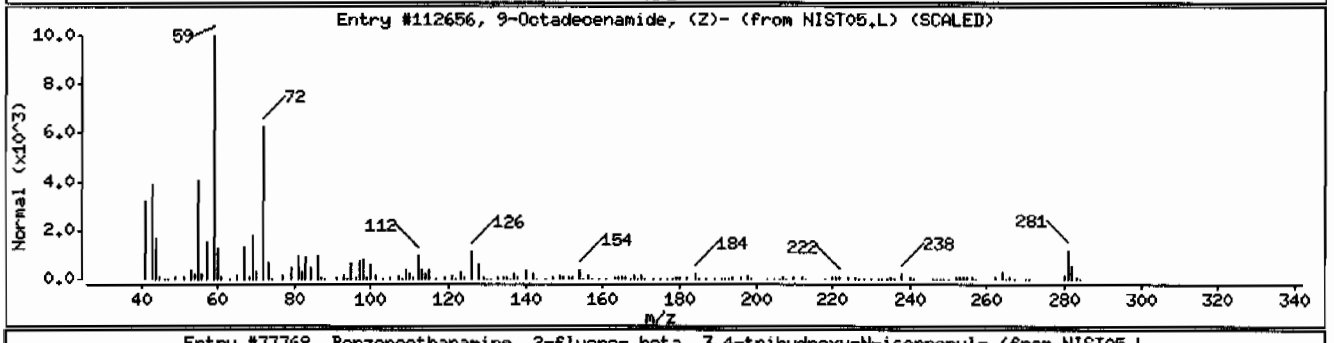

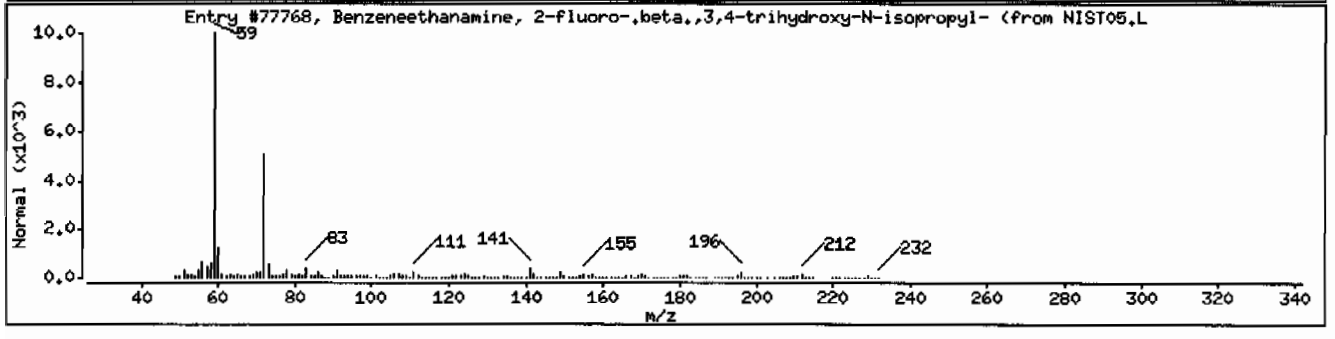

Data File: /chem/MSD1.i/s120309.b/s110330.d

Date : 03-DEC-2009 21:50

Client ID: RE03-09-14251

Instrument: MSD1.i

Sample Info: |24161501519271551|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	96	C20H42	282
Heptacosane	593-49-7	NIST05.L	165300	87	C27H56	380

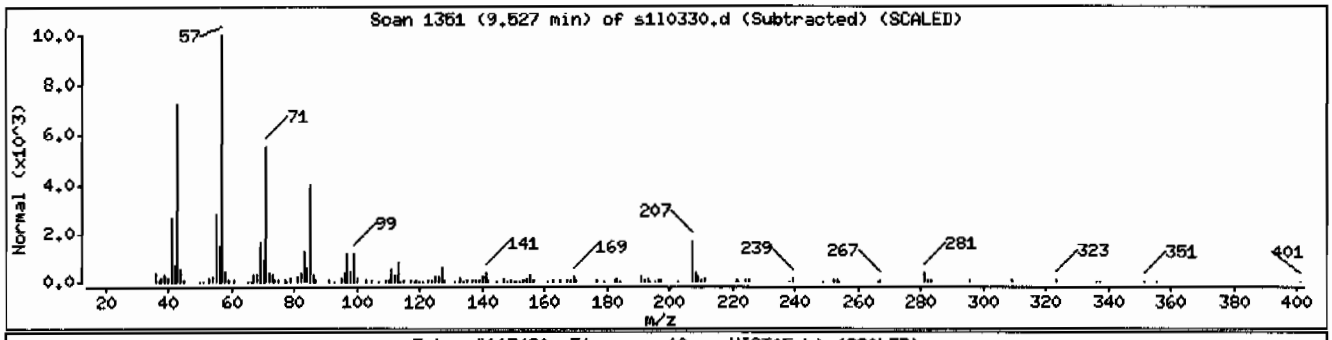

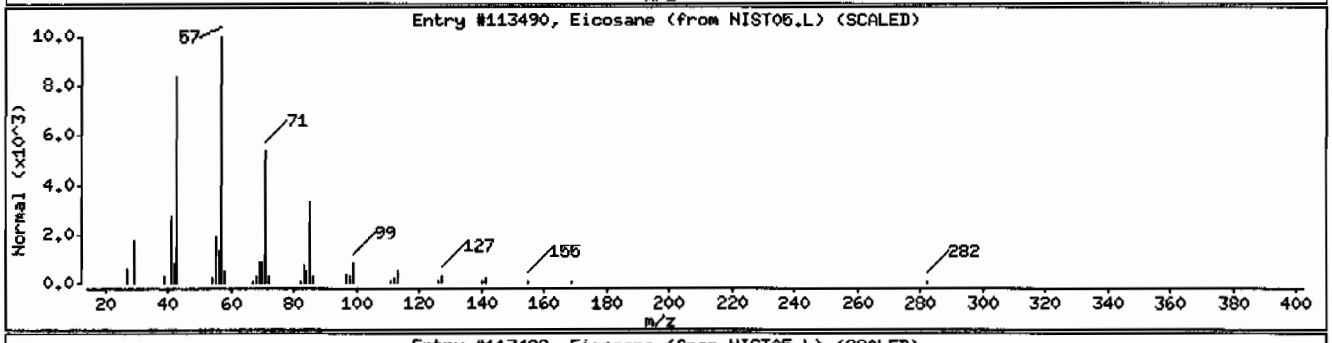

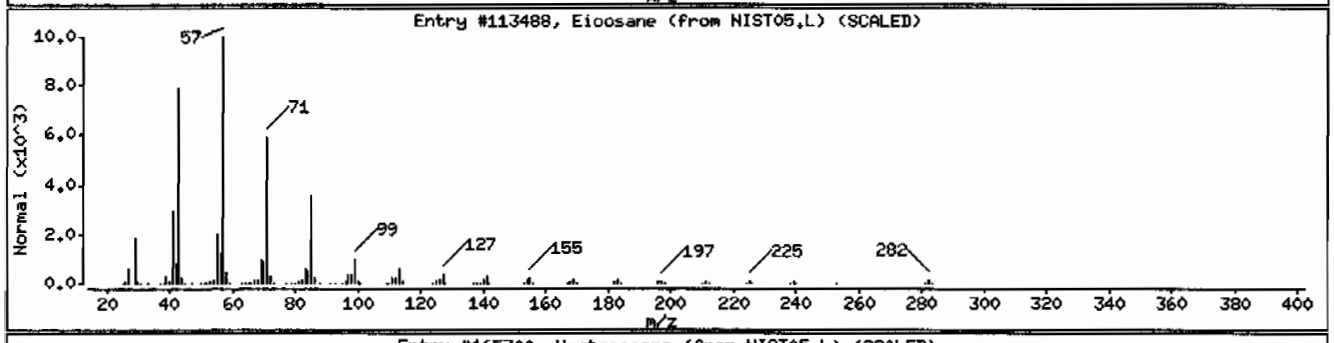

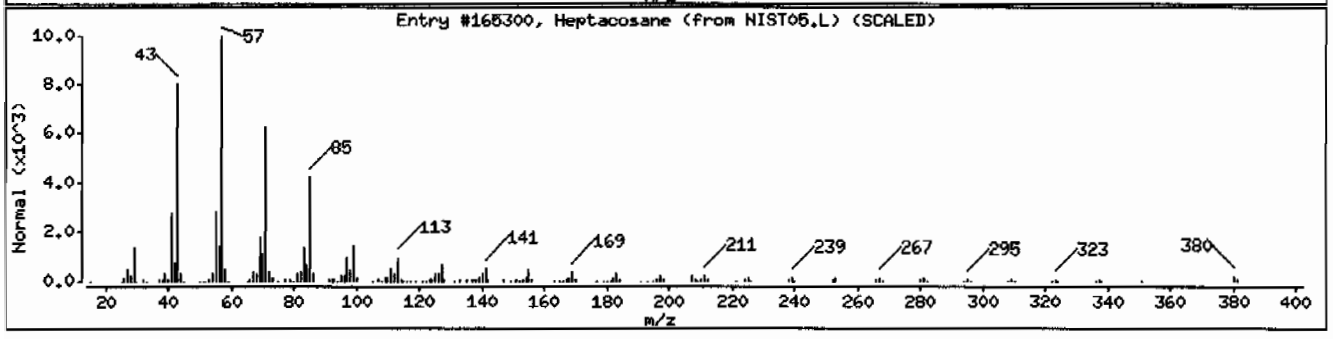

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615005	Date Received:	11/21/2009 09:00	%Moisture:	6.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14252	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 17:11	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s110318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.4	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:11	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110318.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.79	165	ug/kg		J
	Unknown Aldol Condensate	2.95	748	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14252	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:11	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s110318.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
638-67-5	Tricosane	9.53	938	ug/kg	96	NJ
112-95-8	Eicosane	10.2	318	ug/kg	96	NJ
629-99-2	Pentacosane	10.39	1080	ug/kg	97	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110318.d
Lab Smp Id: 241615005 Client Smp ID: RE03-09-14252
Inj Date : 03-DEC-2009 17:11
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615005|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 16:15 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	6.62750	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.887	(1.000)	393432	40.0000	
* 29 Naphthalene-d8	136	4.781	4.751	(1.000)	1559096	40.0000	
* 46 Acenaphthene-d10	164	6.022	5.998	(1.000)	888302	40.0000	
* 67 Phenanthrene-d10	188	7.004	6.980	(1.000)	1534874	40.0000	
* 91 Chrysene-d12	240	8.663	8.639	(1.000)	1343778	40.0000	
* 98 Perylene-d12	264	10.122	10.074	(1.000)	1200230	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	699295	68.0494	2430
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	830816	66.5193	2370
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	373847	36.3856	1300
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	885594	41.6264	1480
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	243048	97.9852	3500
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	1018523	48.2871	1720

ION RATIO REPORT

SV REPORT

Data file: s110318.d
Report Date: 12/04/2009 07:27
Lab. ID: 241615005 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:11
Operator: AMY Instrument: MSD1.i
Sample Info: |241615005|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	36494	3.64	3.70	80-120	100	(T)
93	266	3.68	3.72	409-469	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	51009	4.28	4.16	80-120	100	(T)
42	31267	4.28	4.16	48-108	61	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	158377	6.02	5.80	80-120	100	(T)
164	888128	6.02	5.80	0- 40	561	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	116190	6.02	5.85	80-120	100	(T)
63	1355	6.02	5.85	46-106	1	(QT)
45 Acenaphthylene				CAS#: 208-96-8		
152	136007	6.00	5.93	80-120	100	(T)
151	35982	6.00	5.93	0- 49	26	(T)
153	141115	6.00	5.93	0- 43	104	(QT)
47 Acenaphthene				CAS#: 83-32-9		
154	119376	6.00	6.05	80-120	100	( )
153	141115	6.00	6.05	73-133	118	( )
152	136007	6.00	6.05	18- 78	114	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	116190	6.02	6.13	80-120	100	(T)
89	1481	6.02	6.13	33- 93	1	(QT)
63	1355	6.02	6.13	16- 76	1	(QT)
52 4-Nitrophenol			CAS#: 100-02-7			
139	21447	6.00	6.07	80-120	100	(T)
109	773	6.00	6.07	32- 92	4	(QT)
65	3280	6.00	6.07	69-129	15	(QT)
53 Fluorene			CAS#: 86-73-7			
166	14883	6.56	6.40	80-120	100	(T)
165	15238	6.56	6.40	64-124	102	(T)
167	5032	6.56	6.40	0- 43	34	(T)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	14905	6.56	6.70	80-120	100	(T)
141	92020	6.56	6.70	47-107	617	(QT)
250	29392	6.56	6.70	68-128	197	(QT)
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	3523	9.65	9.66	80-120	100	( )
253	453	9.65	9.66	0- 52	13	( )
125	474	9.66	9.66	0- 45	13	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110318.d
Lab Smp Id: 241615005 Client Smp ID: RE03-09-14252
Inj Date : 03-DEC-2009 17:11
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615005|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 16:15 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	6.62750	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2328933	40.000
* 98 Perylene-d12	10.122	3339365	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.793	269042	4.62085588	165	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.946	1221101	20.9727109	748	0		0	10
Tricosane					CAS #: 638-67-5		
9.534	2196031	26.3047735	938	96	NIST05.L	139233	98
Eicosane					CAS #: 112-95-8		
10.204	743707	8.90836578	318	96	NIST05.L	113490	98
Pentacosane					CAS #: 629-99-2		
10.386	2523944	30.2326181	1080	97	NIST05.L	153747	98

Data File: /chem/MSD1.i/s120309.b/s110318.d
Date : 03-DEC-2009 17:11
Client ID: RE03-09-14252
Sample Info: |2416150051927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

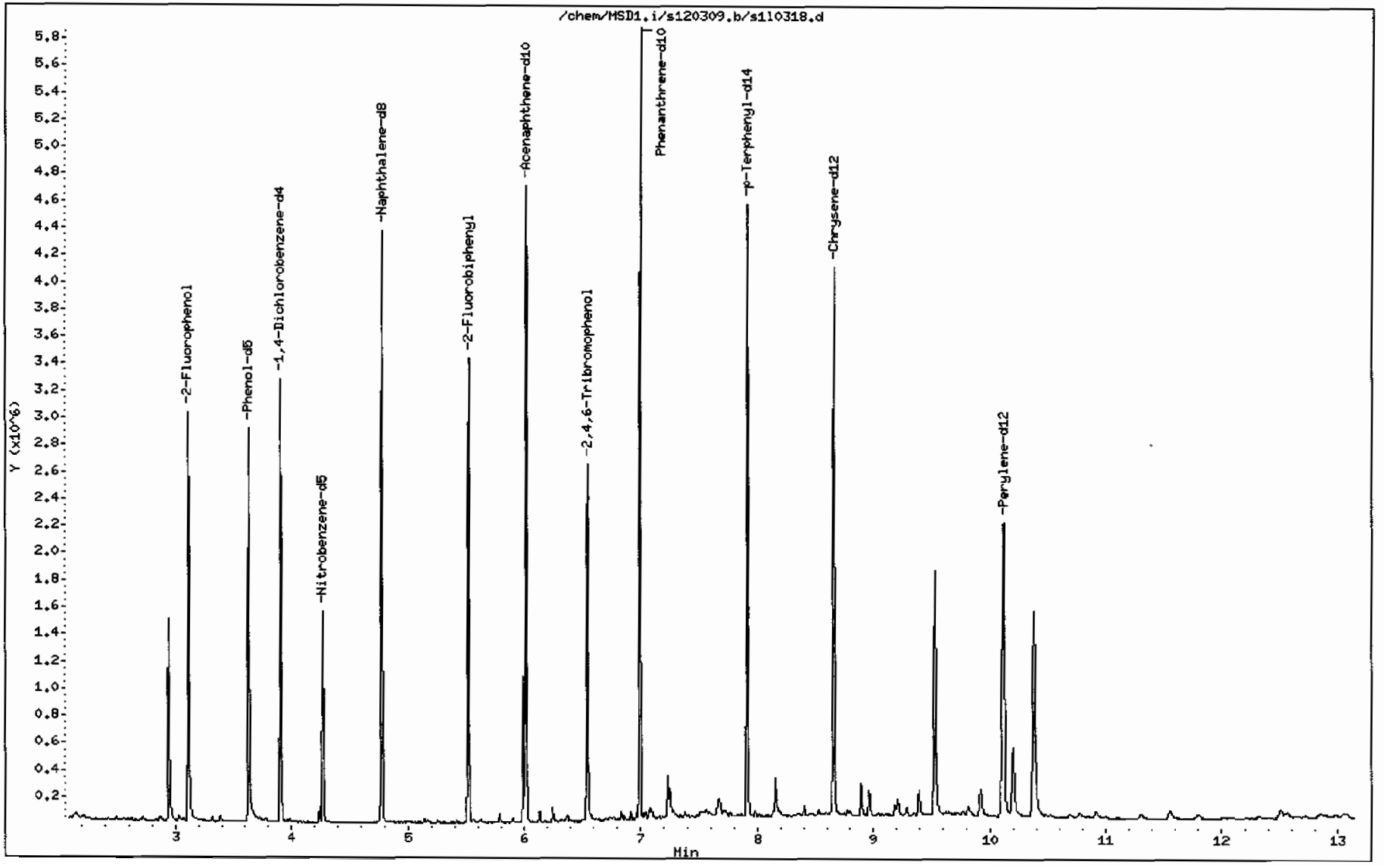

Data File: /chem/MSD1.i/s120309.b/s110318.d

Date : 03-DEC-2009 17:11

Client ID: RE03-09-14252

Instrument: MSD1.i

Sample Info: 1241615005|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid	64-19-7	NIST05.L	257	10	C2H4O2	60
3-Buten-2-ol, 3-methyl-	10473-14-0	NIST05.L	1748	10	C5H10O	86
Acetic acid	64-19-7	NIST05.L	255	9	C2H4O2	60

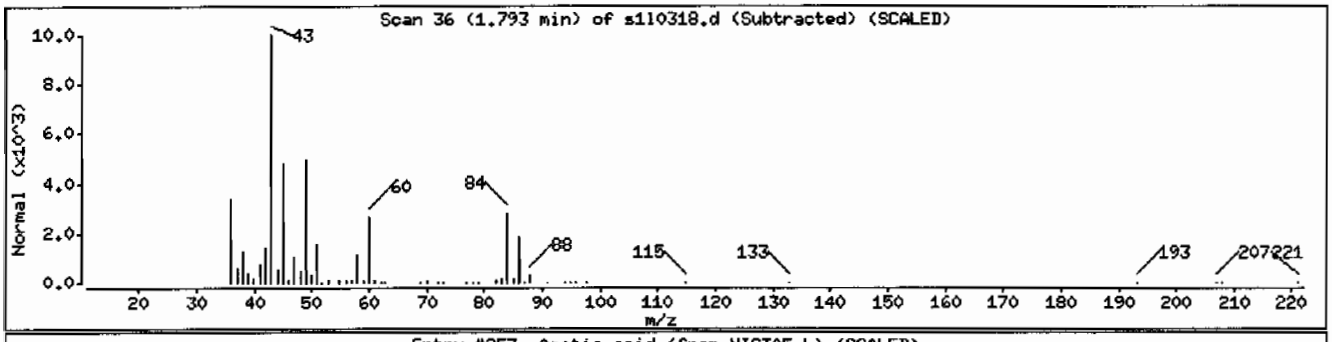

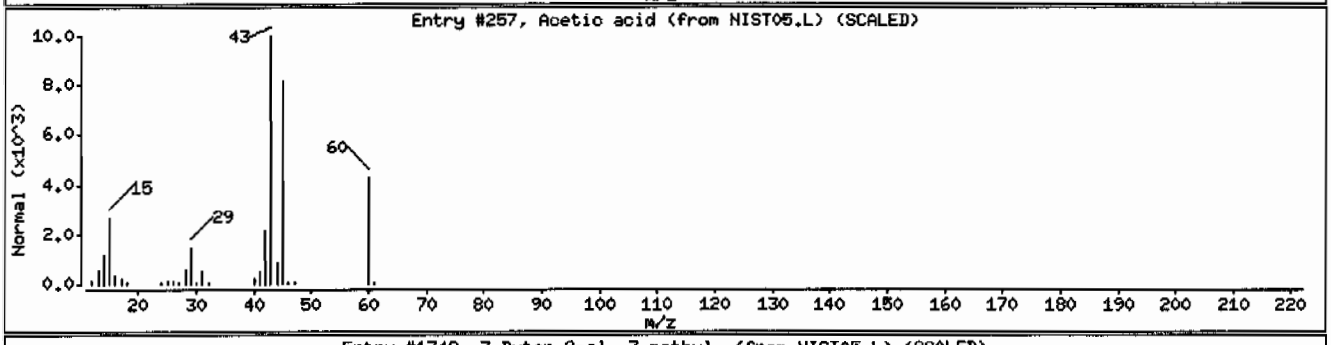

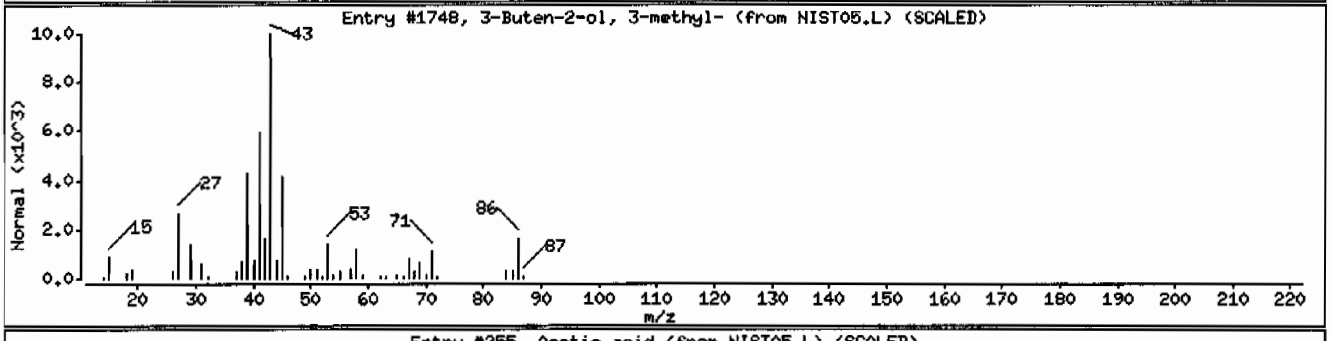

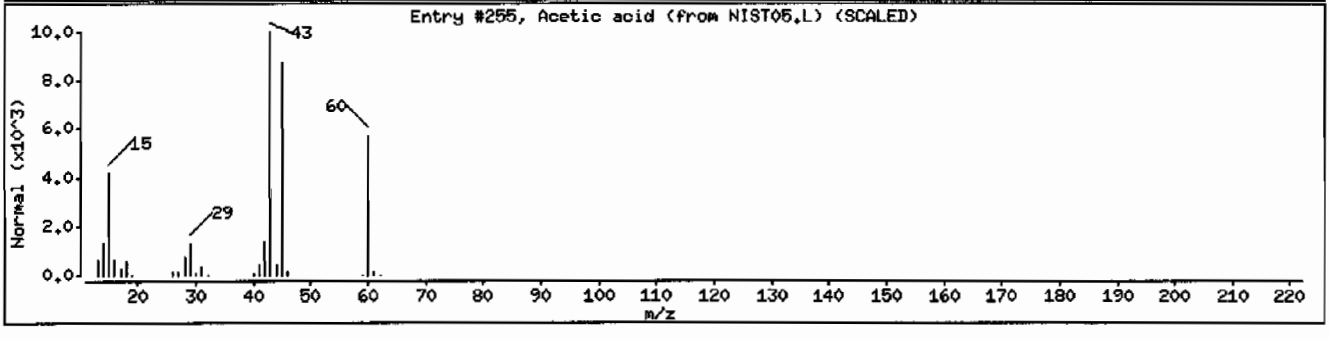

Data File: /chem/MSD1.i/s120309.b/s110318.d

Date : 03-DEC-2009 17:11

Client ID: RE03-09-14252 Instrument: MSD1.i

Sample Info: |241615005|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

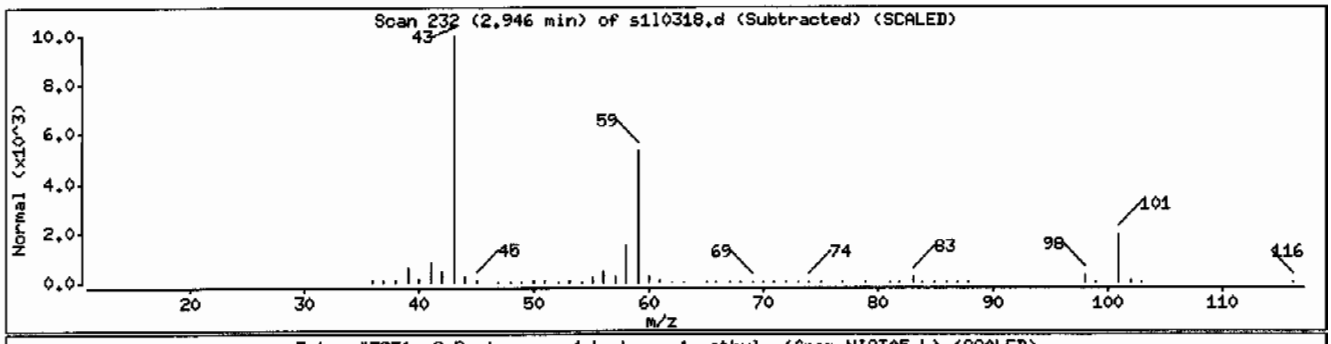

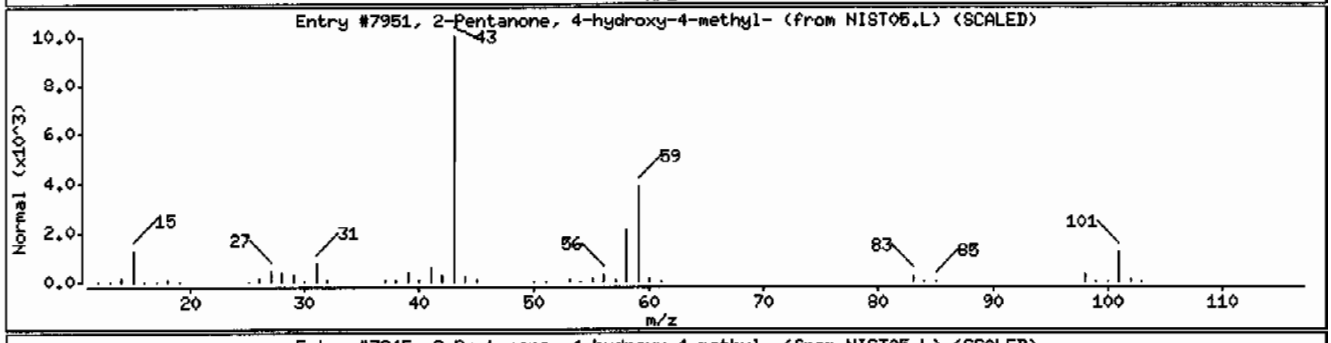

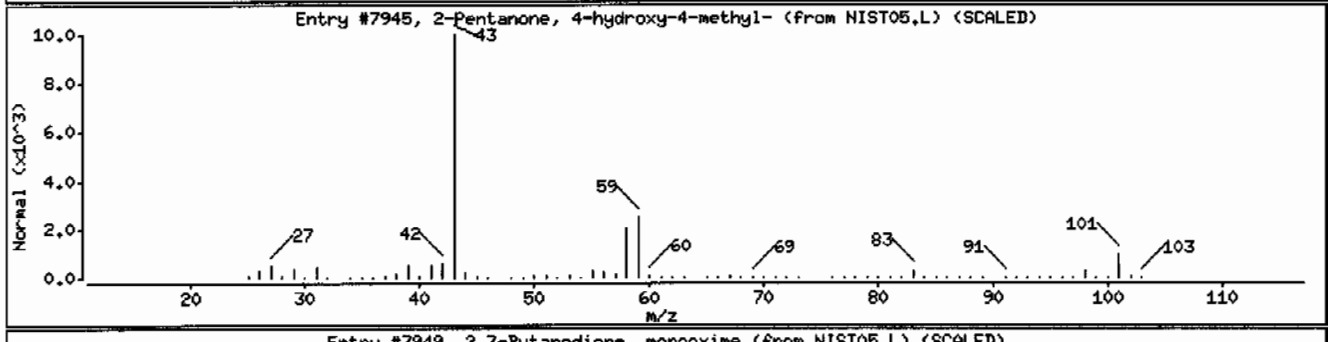

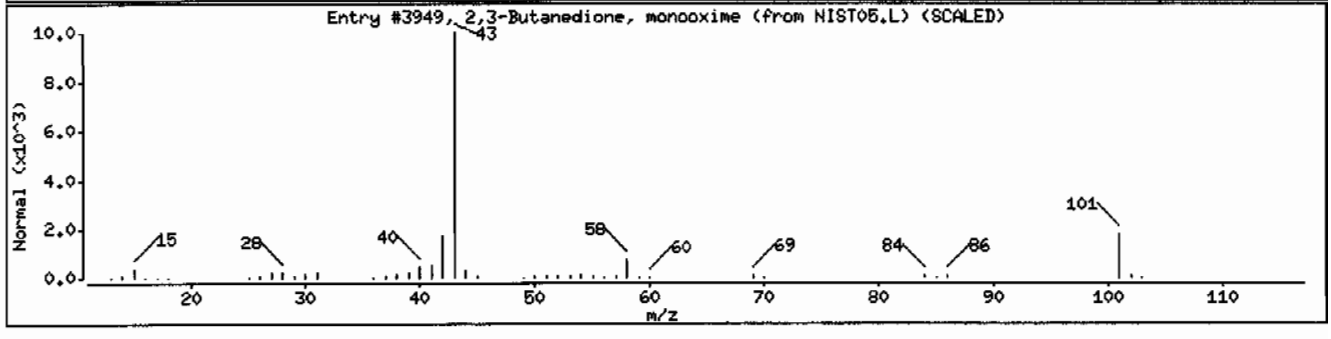

Data File: /chem/MSD1.i/s120309.b/s110318.d

Date : 03-DEC-2009 17:11

Client ID: RE03-09-14252

Instrument: MSD1.i

Sample Info: 1241615005|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricosane	638-67-5	NIST05.L	139233	96	C23H48	324
Pentacosane	629-99-2	NIST05.L	153747	96	C25H52	352
Heneicosane	629-94-7	NIST05.L	122436	96	C21H44	296

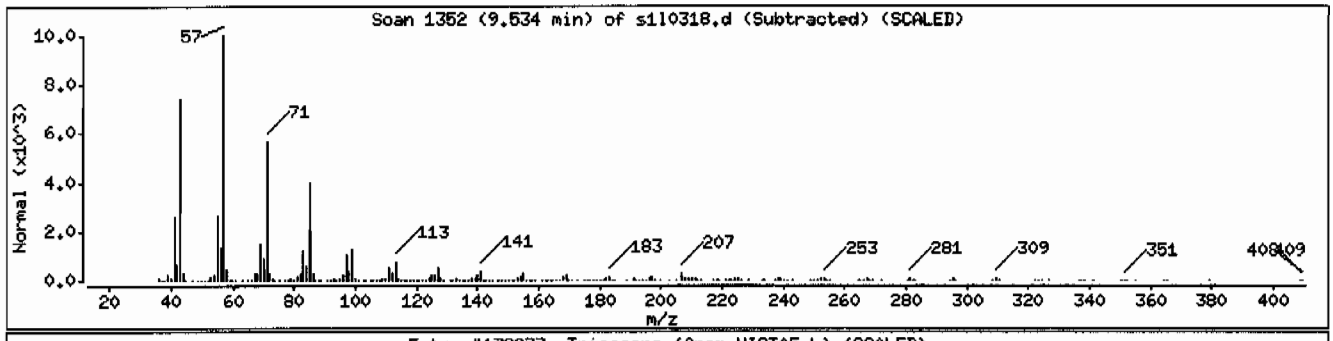

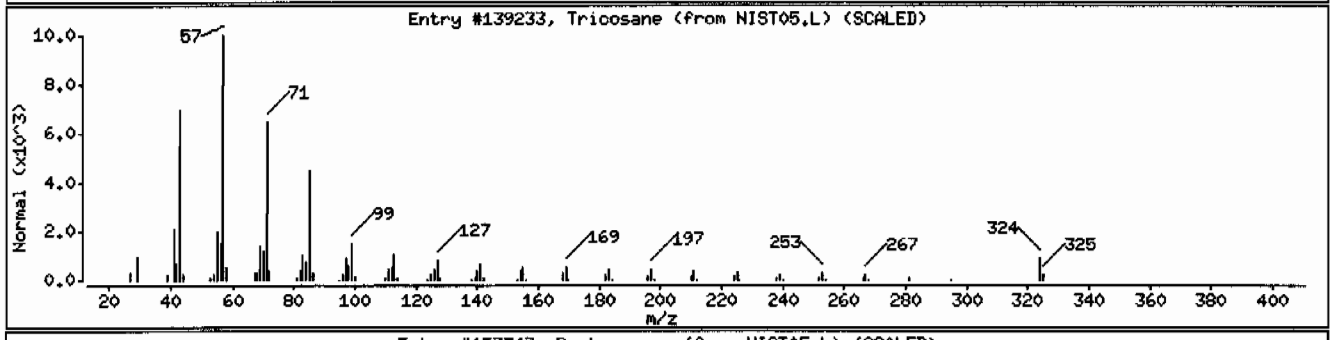

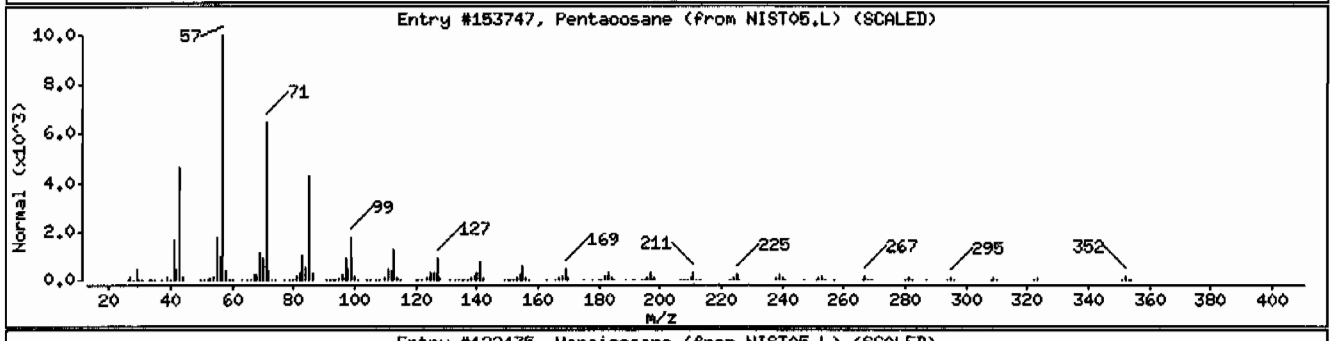

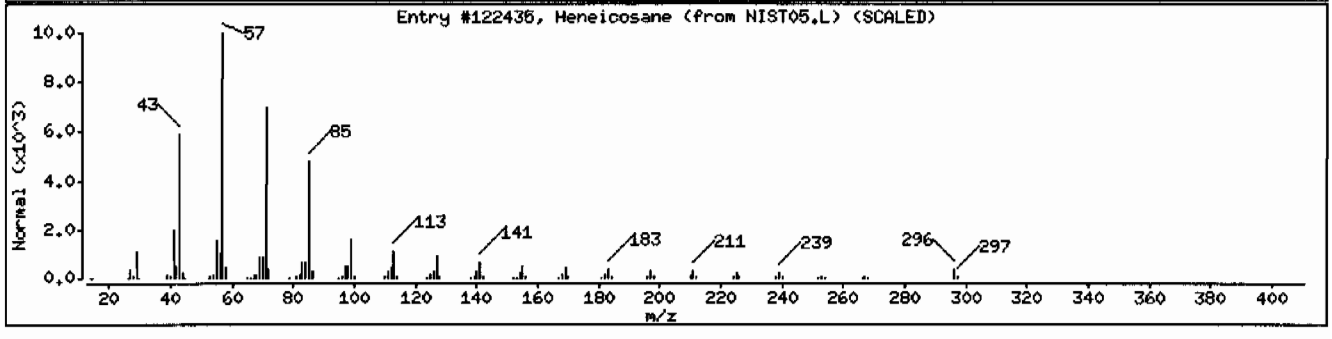

Data File: /chem/MSD1.i/s120309.b/s110318.d

Date : 03-DEC-2009 17:11

Client ID: RE03-09-14252 Instrument: MSD1.i

Sample Info: |2416150051927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Hexadecane	544-76-3	NIST05.L	76090	93	C16H34	226
Octadecane, 2-methyl-	1560-88-9	NIST05.L	104280	93	C19H40	268

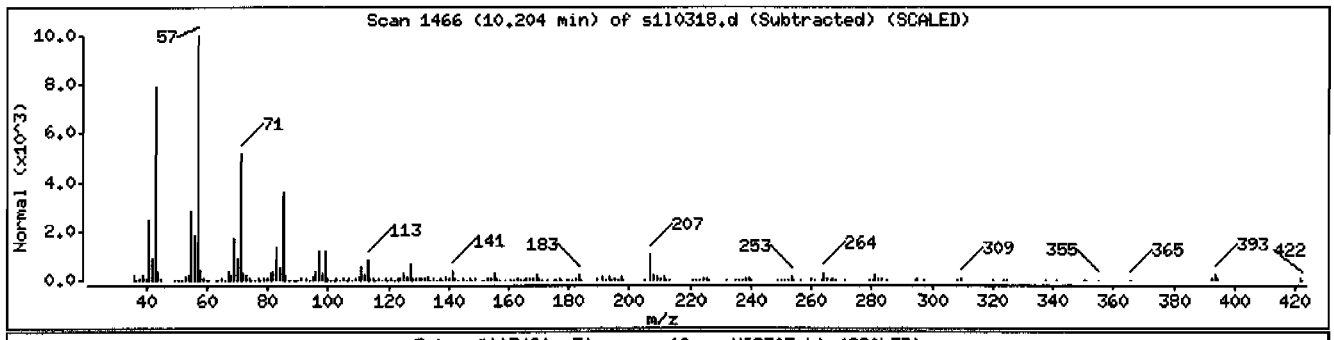

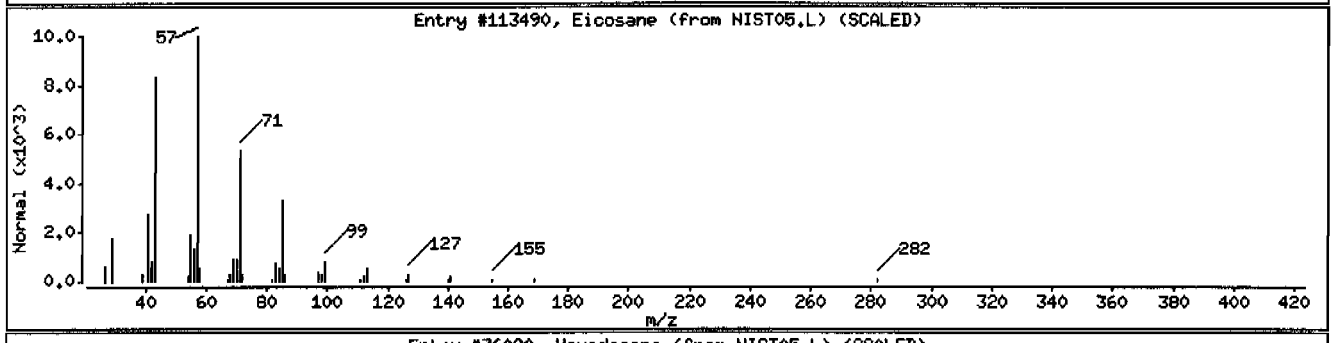

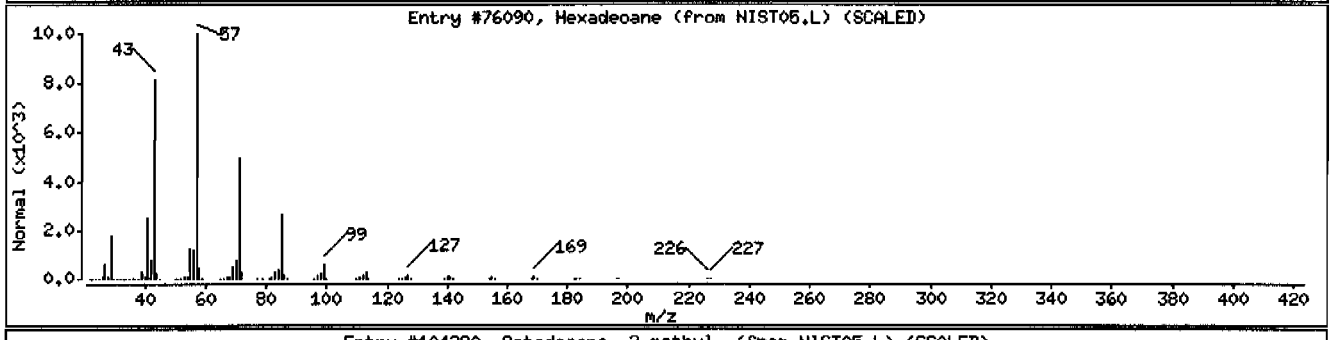

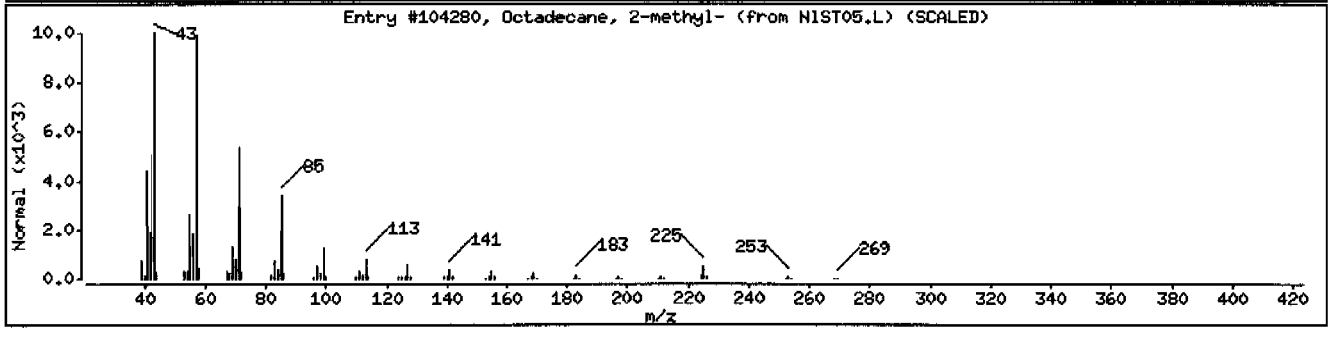

Data File: /chem/MSD1.i/s120309.b/s110318.d

Date : 03-DEC-2009 17:11

Client ID: RE03-09-14252

Instrument: MSD1.i

Sample Info: |241615005|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentacosane	629-99-2	NIST05.L	153747	97	C25H52	352
Hexacosane	630-01-3	NIST05.L	159837	97	C26H54	366
Tricosane	638-67-5	NIST05.L	139233	96	C23H48	324

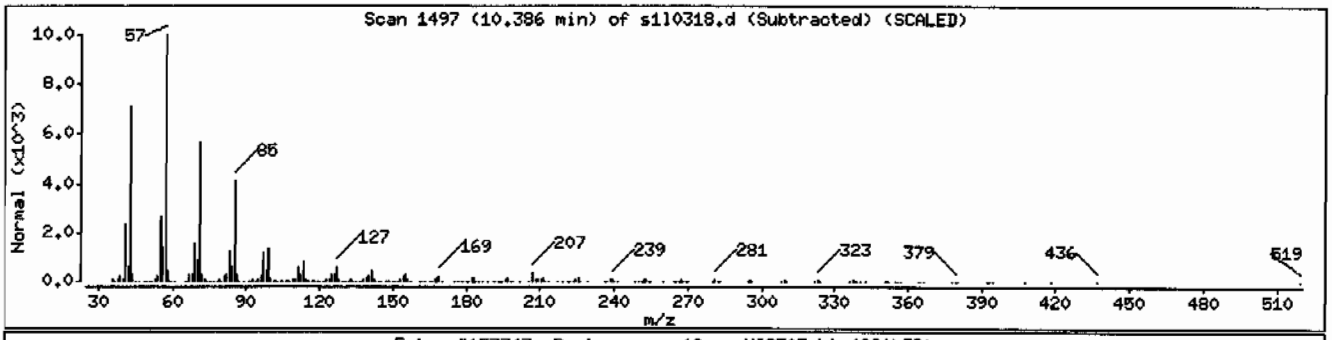

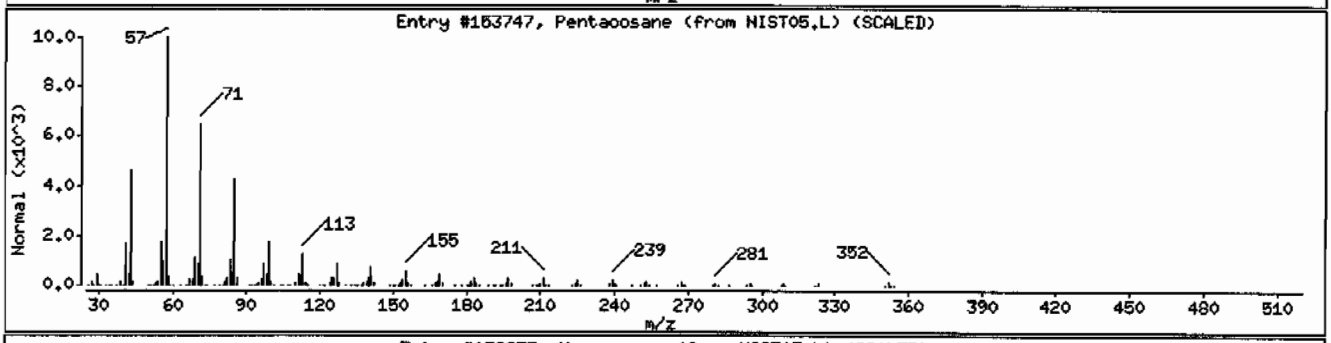

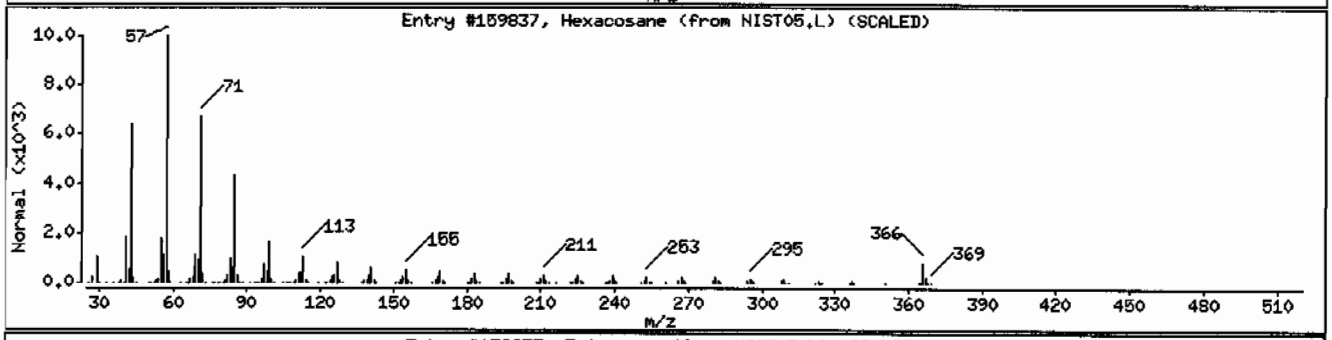

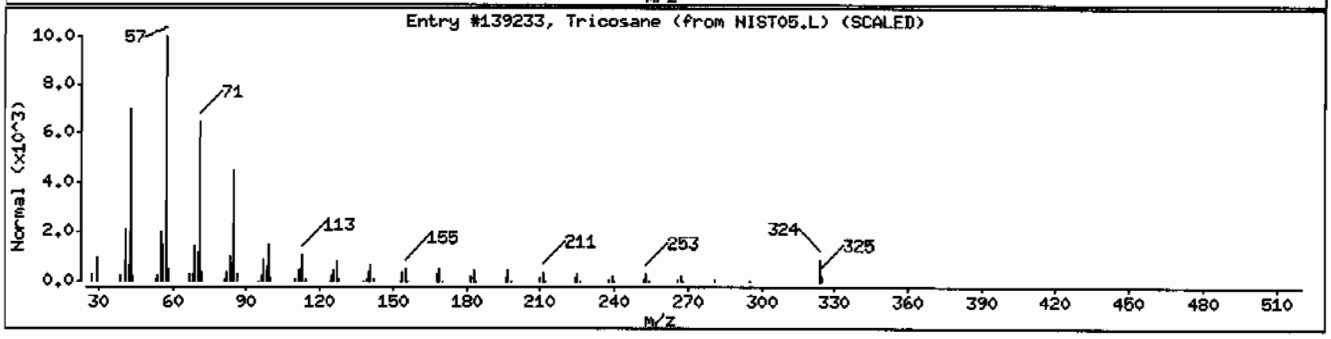

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615014	Date Received:	11/21/2009 09:00	%Moisture:	9.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14253	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:27	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s1l0329.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.3	366
108-95-2	Phenol	U	366	ug/kg	73.3	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.3	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.3	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.3	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.3	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.6	366
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.3	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.3	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.3	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.3	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.3	366
95-48-7	o-Cresol	U	366	ug/kg	73.3	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.3	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.3	366
78-59-1	Isophorone	U	366	ug/kg	73.3	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.3	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.3	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.3	366
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.3	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.3	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.33	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.3	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.3	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.3	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	366	ug/kg	73.3	366
99-09-2	3-Nitroaniline	U	366	ug/kg	73.3	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 21:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s1l0329.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.3	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	366	ug/kg	73.3	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.3	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.3	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.3	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.3	366
122-66-7	Azobenzene	U	366	ug/kg	73.3	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.3	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.3	366
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.33	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.3	366
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.3	366
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.3	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.3	366
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.3	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	332	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	236	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 21:27	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110329.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.81	327	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110329.d
Lab Smp Id: 241615014 Client Smp ID: RE03-09-14253
Inj Date : 03-DEC-2009 21:27
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615014|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.13030	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	350203	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1393082	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	795443	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1403972	40.0000	
* 91 Chrysene-d12	240	8.669	8.675	(1.000)	1282951	40.0000	
* 98 Perylene-d12	264	10.122	10.127	(1.000)	1064200	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	564059	61.6649	2260
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	651801	58.6283	2150
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	322329	35.1100	1290
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	758066	39.7918	1460
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	202656	91.2388	3340
$ 81 p-Terphenyl-d14	244	7.922	7.922	(0.914)	906906	45.0339	1650

ION RATIO REPORT

SV REPORT

Data file: s110329.d
Report Date: 12/04/2009 07:32
Lab. ID: 241615014 SampleType: SAMPLE
Injection Date: 03-DEC-2009 21:27
Operator: AMY Instrument: MSD1.i
Sample Info: |241615014|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	31691	3.64	3.70	80-120	100	(T)
93	143	3.70	3.72	409-469	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	43808	4.28	4.16	80-120	100	(T)
42	27024	4.28	4.16	48-108	62	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	142111	6.03	5.80	80-120	100	(T)
164	795443	6.02	5.80	0- 40	560	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	102864	6.02	5.85	80-120	100	(T)
63	1220	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	102864	6.02	6.13	80-120	100	(T)
89	1340	6.02	6.13	33- 93	1	(QT)
63	1220	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	11642	6.56	6.40	80-120	100	(T)
165	12404	6.56	6.40	64-124	107	(T)
167	3889	6.56	6.40	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	12275	6.56	6.70	80-120	100	(T)
141	74575	6.56	6.70	47-107	607	(QT)
250	24338	6.56	6.70	68-128	198	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	434	9.67	9.66	80-120	100	( )
253	359	9.67	9.66	0- 52	83	(Q)
125	410	9.66	9.66	0- 45	94	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110329.d
Lab Smp Id: 241615014 Client Smp ID: RE03-09-14253
Inj Date : 03-DEC-2009 21:27
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615014|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.13030	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2065105	40.000
* 91 Chrysene-d12	8.669	3478832	40.000
* 98 Perylene-d12	10.122	2949611	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.946	467381	9.05292956	332	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.163	558939	6.42673704	236	97	NIST05.L	112657	91
Unknown				CAS #:			
11.810	658036	8.92370467	327	0		0	98

Data File: /chem/MSD1.i/s120309.b/s110329.d
Date : 03-DEC-2009 21:27
Client ID: RE03-09-14253
Sample Info: |24161501419271551|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

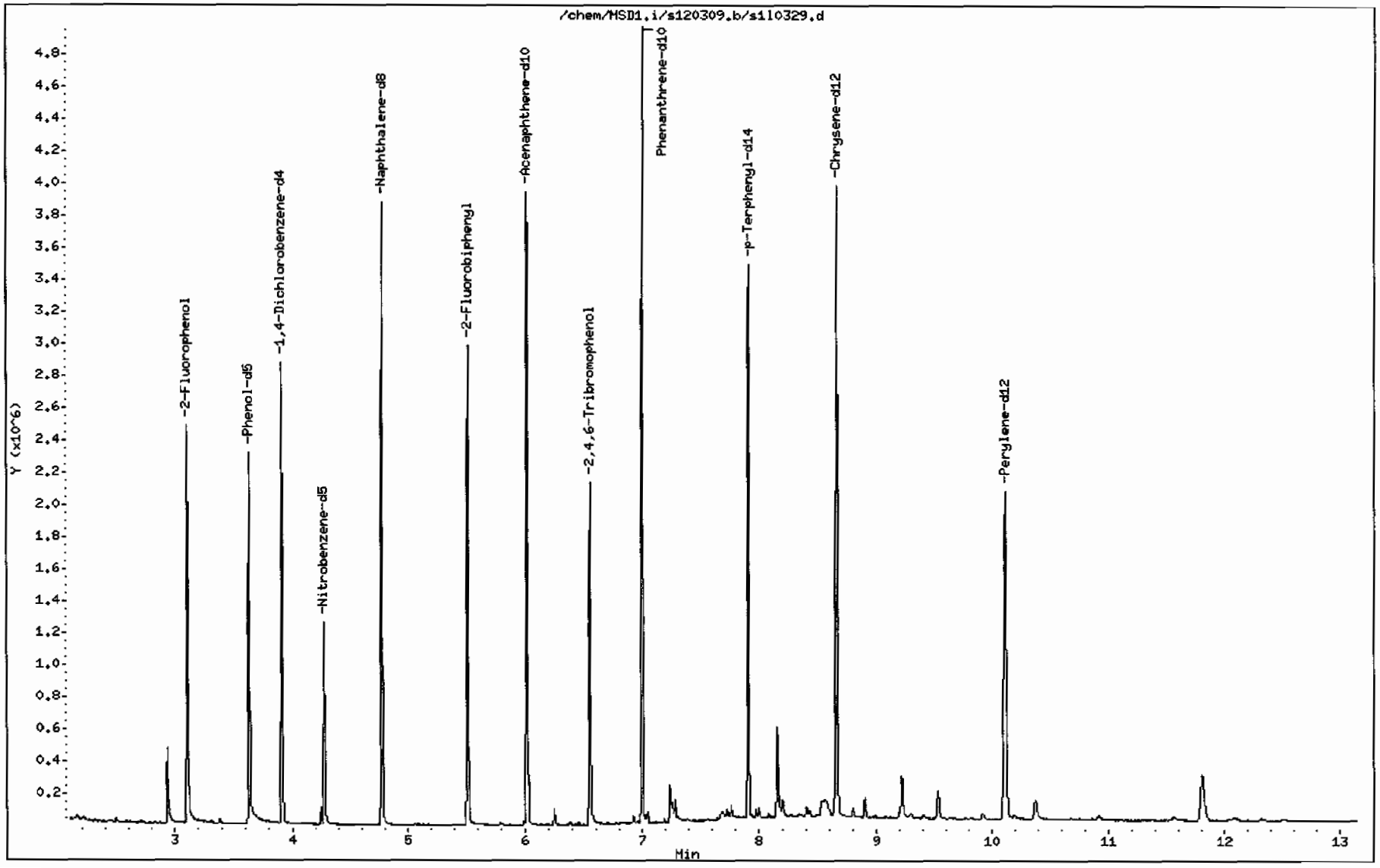

Data File: /chem/MSD1.i/s120309.b/s110329.d

Date : 03-DEC-2009 21:27

Client ID: RE03-09-14253

Instrument: MSD1.i

Sample Info: |2416150141927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116

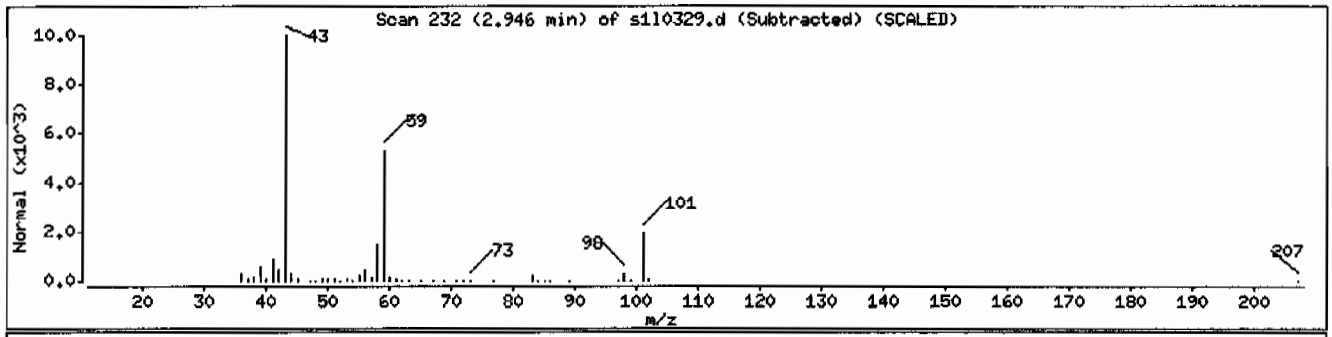

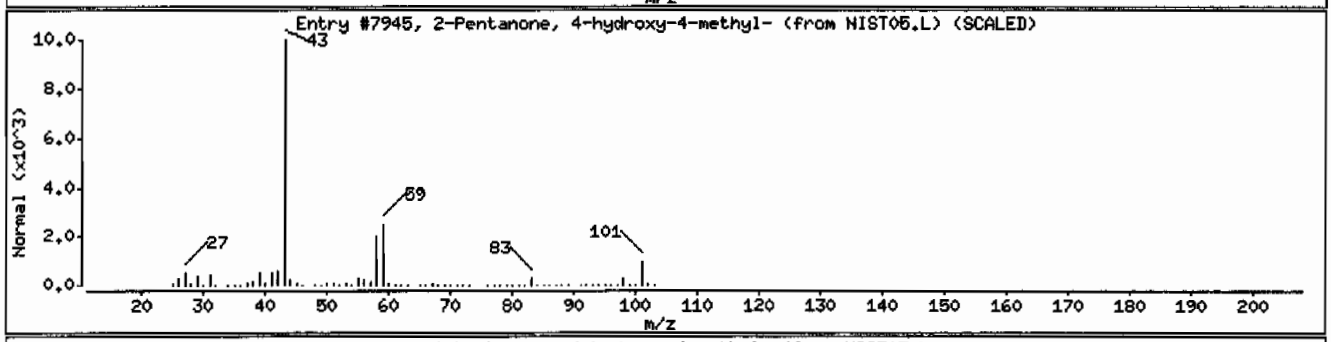

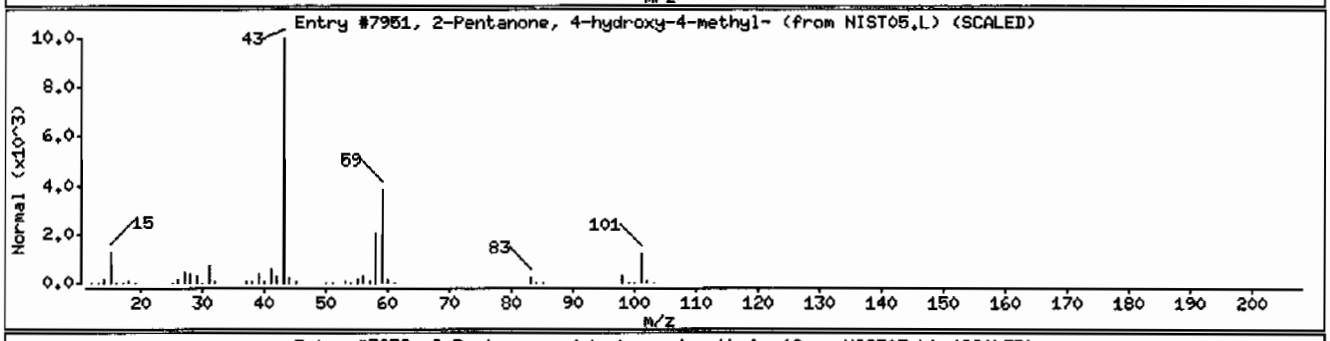

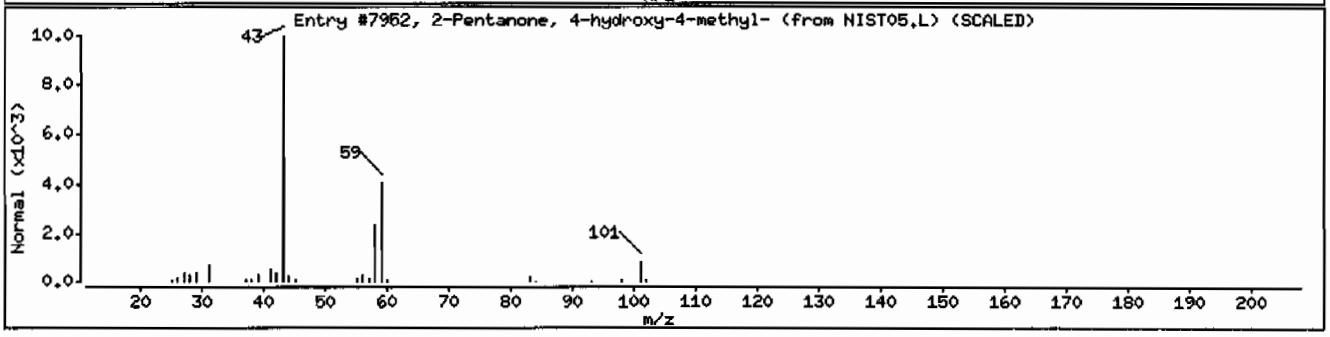

Data File: /chem/MSD1.i/s120309.b/s110329.d

Date : 03-DEC-2009 21:27

Client ID: RE03-09-14253

Instrument: MSD1.i

Sample Info: |2416150141927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	97	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	84	C18H35NO	281

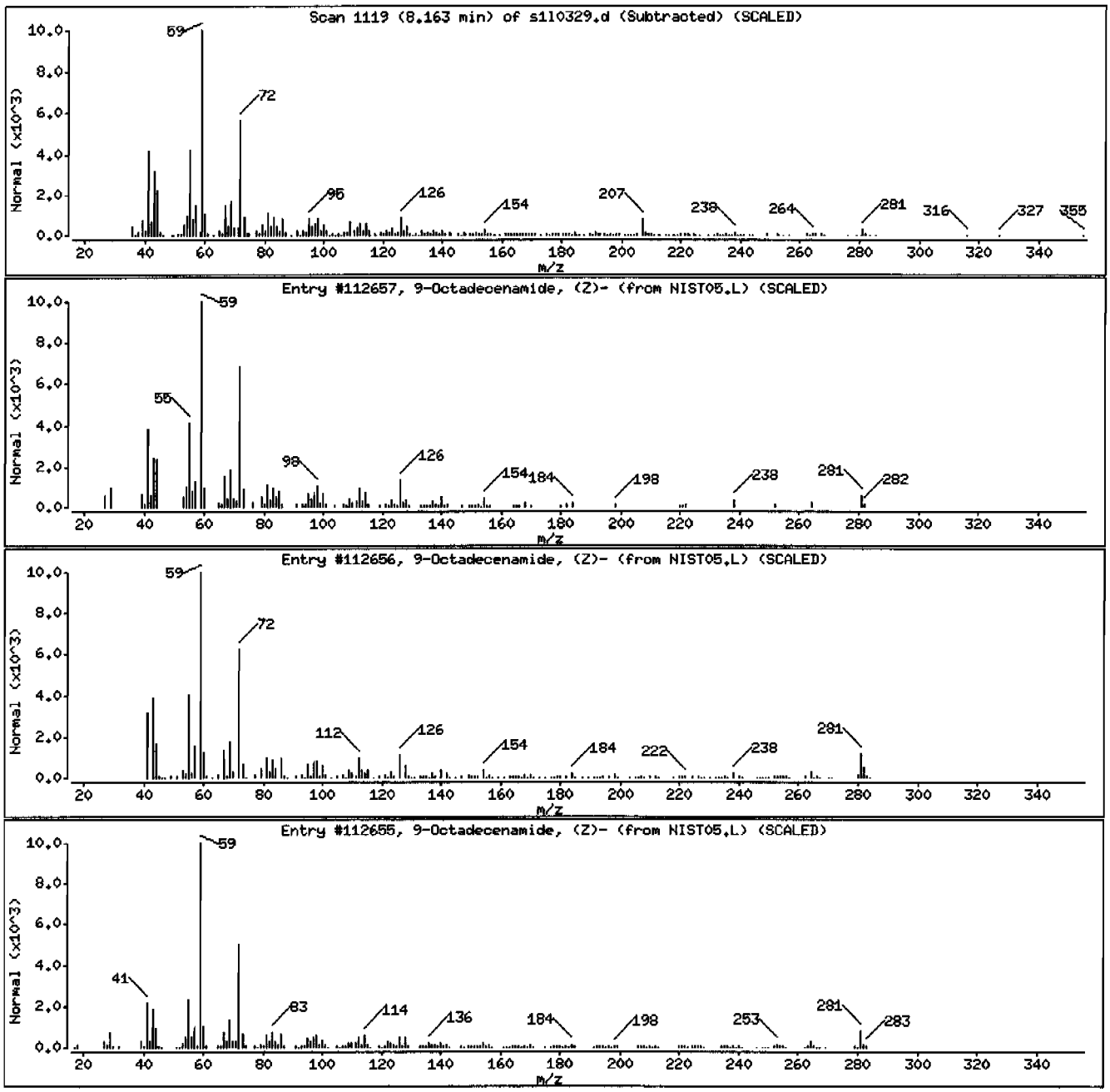

Data File: /chem/MSD1.i/s120309.b/s110329.d

Date : 03-DEC-2009 21:27

Client ID: RE03-09-14253 Instrument: MSD1.i

Sample Info: |241615014|927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AHY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetracosapentaene, 2,6,10,15,19,23-hexam	26266-08-0	NIST05.L	173973	70	C30H52	412
D:B-Friedo-18,19-secolup-19-ene, 3,10-ep	35060-26-5	NIST05.L	176604	50	C30H50O	426
9,19-Cyololanost-24-en-3-ol, (3.beta.)-	469-38-5	NIST05.L	176585	46	C30H50O	426

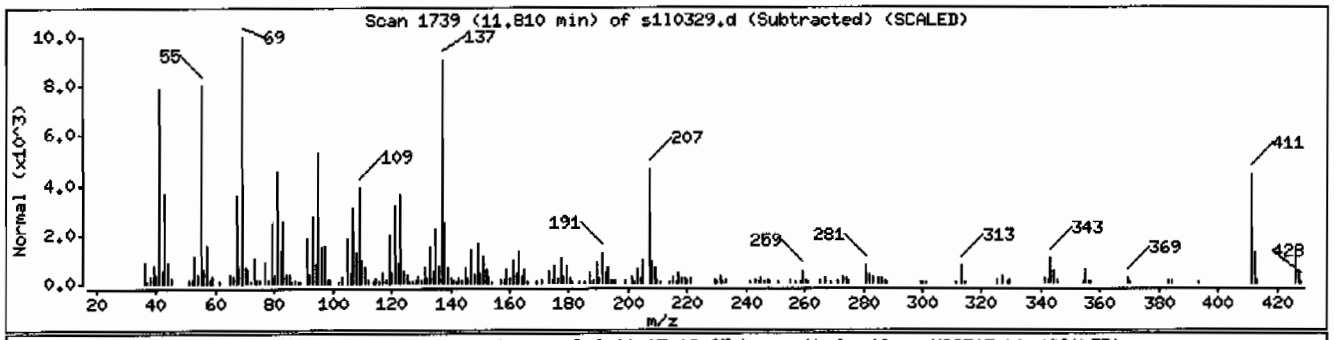

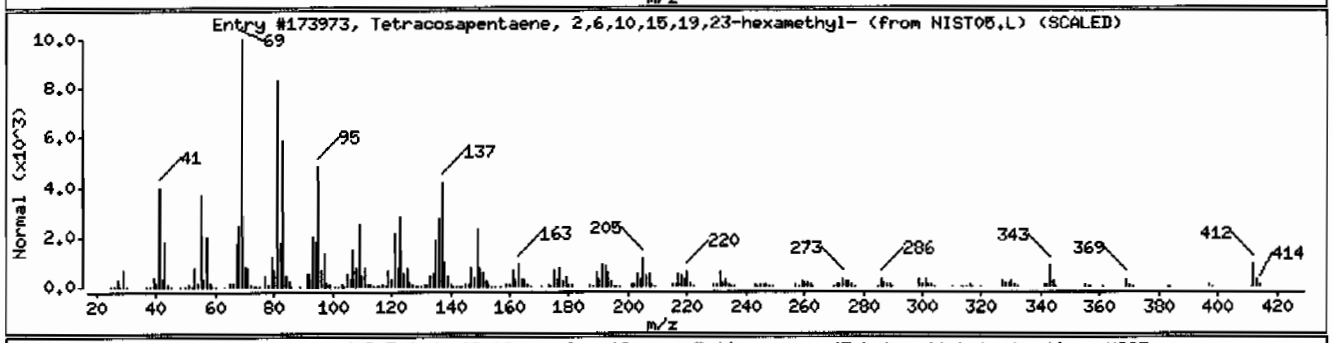

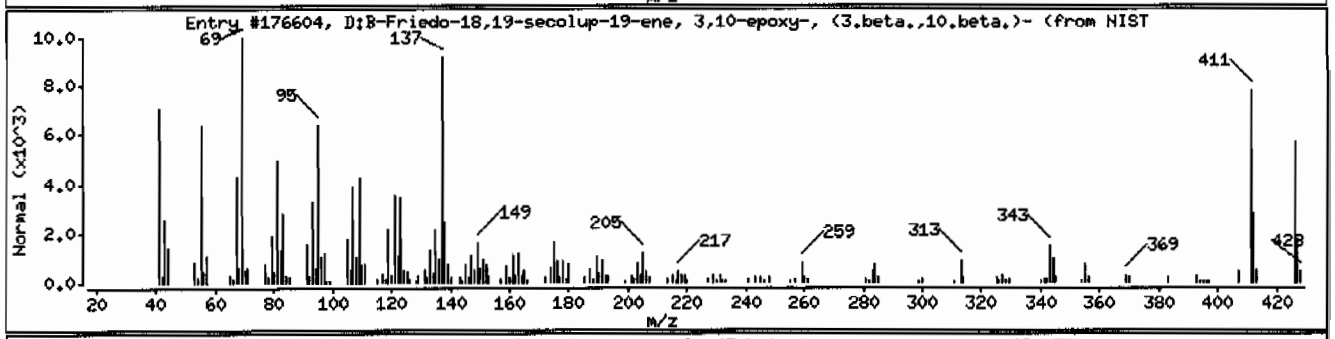

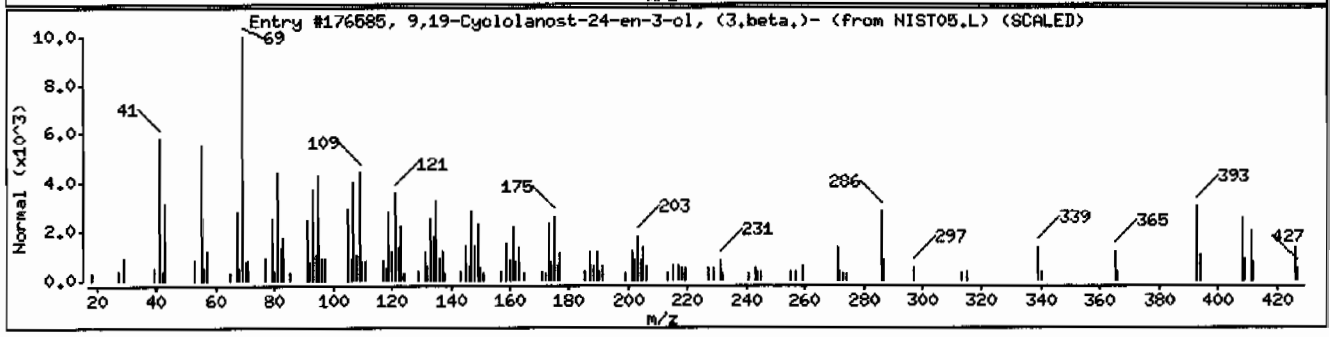

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 18:44	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s1l0322.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.5	353
108-95-2	Phenol	U	353	ug/kg	70.5	353
95-57-8	2-Chlorophenol	U	353	ug/kg	70.5	353
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.5	353
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.5	353
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.5	353
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3
110-86-1	Pyridine	U	353	ug/kg	70.5	353
62-53-3	Aniline	U	353	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.5	353
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.5	353
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.5	353
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.5	353
95-48-7	o-Cresol	U	353	ug/kg	70.5	353
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353
67-72-1	Hexachloroethane	U	353	ug/kg	70.5	353
98-95-3	Nitrobenzene	U	353	ug/kg	70.5	353
78-59-1	Isophorone	U	353	ug/kg	70.5	353
88-75-5	2-Nitrophenol	U	353	ug/kg	70.5	353
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	123	353
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.5	353
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.5	353
65-85-0	Benzoic acid	U	705	ug/kg	176	705
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline	U	353	ug/kg	70.5	353
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.5	353
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.05	35.3
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.5	353
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.5	353
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.5	353
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline	U	353	ug/kg	70.5	353
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	353	ug/kg	70.5	353

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14254	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:44	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s110322.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	353	ug/kg	70.5	353
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol	U	705	ug/kg	134	705
132-64-9	Dibenzofuran	U	353	ug/kg	70.5	353
84-66-2	Diethylphthalate	U	353	ug/kg	70.5	353
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.5	353
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.5	353
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353
	p-Nitroaniline					
122-39-4	Diphenylamine	U	353	ug/kg	70.5	353
122-66-7	Azobenzene	U	353	ug/kg	70.5	353
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.5	353
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.5	353
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3
120-12-7	Anthracene	U	35.3	ug/kg	7.05	35.3
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.5	353
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.5	353
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.5	353
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.5	353
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.5	353

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	1.78	281	ug/kg		JA
	Unknown	2.95	387	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14254	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 18:44	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s1l0322.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.16	150	ug/kg	93	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110322.d
Lab Smp Id: 241615009 Client Smp ID: RE03-09-14254
Inj Date : 03-DEC-2009 18:44
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615009|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	5.85850	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	382273	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1503874	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	847513	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1482104	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1288621	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1140879	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	648697	64.9683	2290
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	769593	63.4162	2240
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	360772	36.4024	1280
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	827491	40.7673	1440
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	203727	86.0858	3040
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	899657	44.4774	1570

ION RATIO REPORT

SV REPORT

Data file: s110322.d
Report Date: 12/04/2009 07:29
Lab. ID: 241615009 SampleType: SAMPLE
Injection Date: 03-DEC-2009 18:44
Operator: AMY Instrument: MSD1.i
Sample Info: |241615009|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	35474	3.64	3.70	80-120	100	(T)
93	317	3.49	3.72	409-469	1	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	50140	4.28	4.16	80-120	100	(T)
42	30977	4.27	4.16	48-108	62	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	150567	6.02	5.80	80-120	100	(T)
164	847513	6.02	5.80	0- 40	563	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	108366	6.02	5.85	80-120	100	(T)
63	1309	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	108366	6.02	6.13	80-120	100	(T)
89	1240	6.02	6.13	33- 93	1	(QT)
63	1309	6.02	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	12735	6.56	6.40	80-120	100	(T)
165	12867	6.56	6.40	64-124	101	(T)
167	4388	6.55	6.40	0- 43	34	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	12094	6.56	6.70	80-120	100	(T)
141	81909	6.55	6.70	47-107	677	(QT)
250	24125	6.56	6.70	68-128	199	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	171	9.67	9.66	80-120	100	( )
253	123	9.66	9.66	0- 52	72	(Q)
125	210	9.69	9.66	0- 45	122	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110322.d
Lab Smp Id: 241615009 Client Smp ID: RE03-09-14254
Inj Date : 03-DEC-2009 18:44
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615009|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	5.85850	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2246734	40.000
* 91 Chrysene-d12	8.663	3431661	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
1.775	447678	7.97028749	281	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.946	615848	10.9643118	387	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.163	364633	4.25022551	150	93	NIST05.L	112657	91

Data File: /chem/MSD1.i/s120309.b/s110322.d
Date : 03-DEC-2009 18:44
Client ID: RE03-09-14254
Sample Info: |241615009|927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

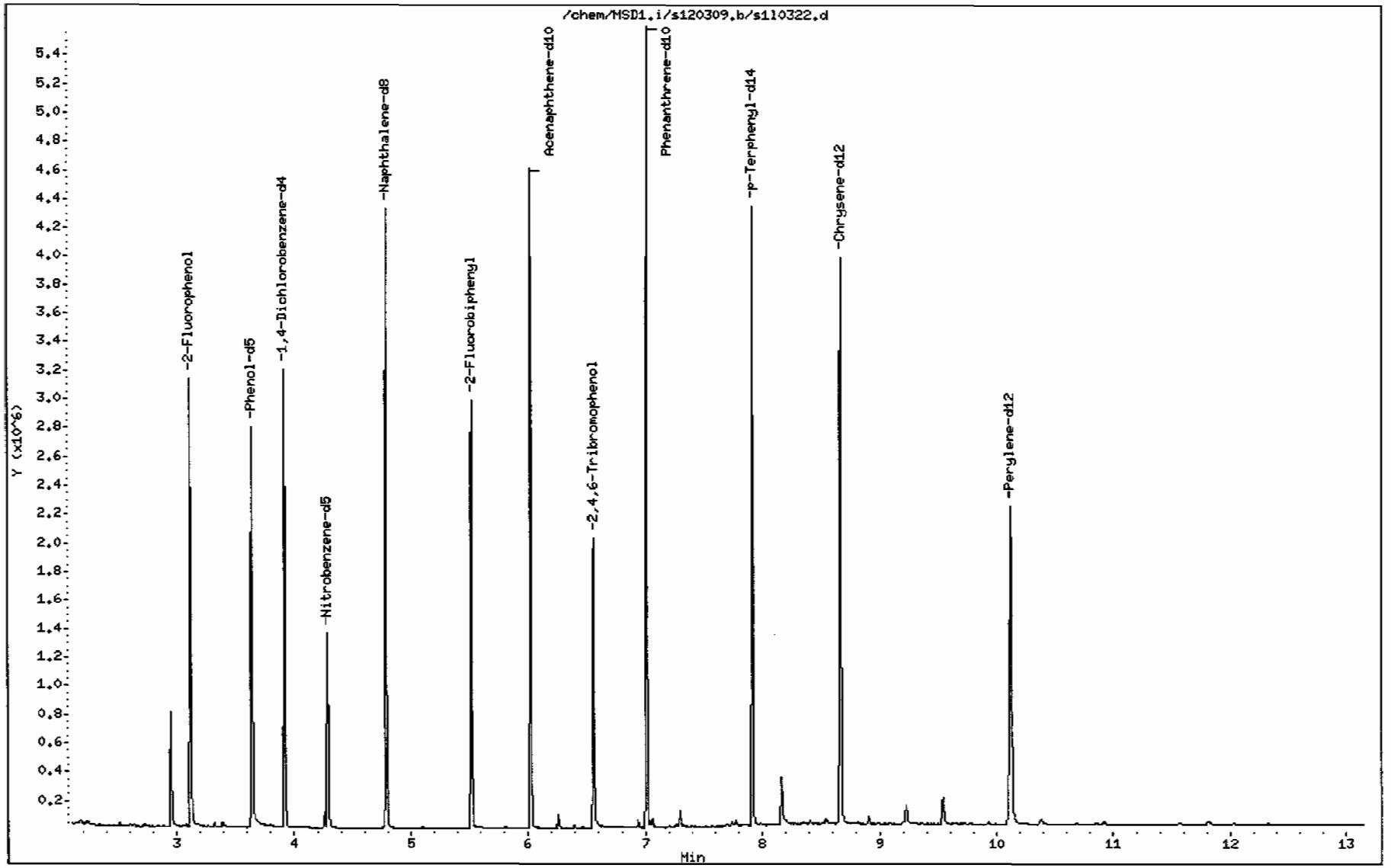

Data File: /chem/MSD1.i/s120309.b/s110322.d

Date : 03-DEC-2009 18:44

Client ID: RE03-09-14254

Instrument: MSD1.i

Sample Info: |2416150091927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone	107-87-9	NIST05.L	1683	10	C5H10O	86
4-Penten-2-one	13891-87-7	NIST05.L	1372	9	C5H8O	84
Ethanone, 1-cyclopropyl-	765-43-5	NIST05.L	1410	9	C5H8O	84

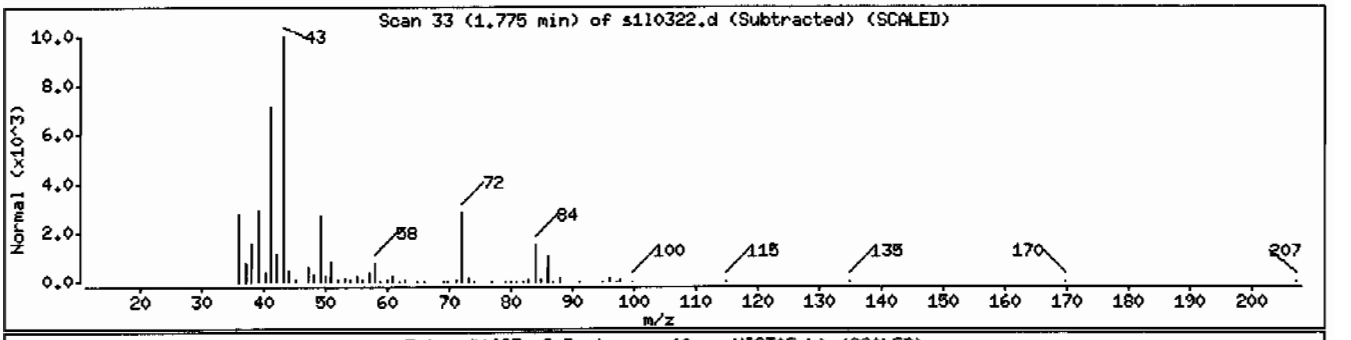

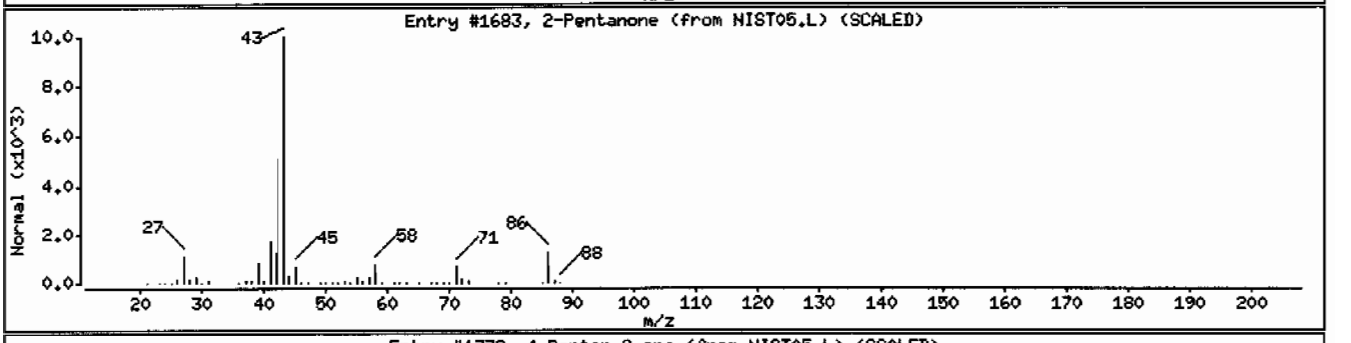

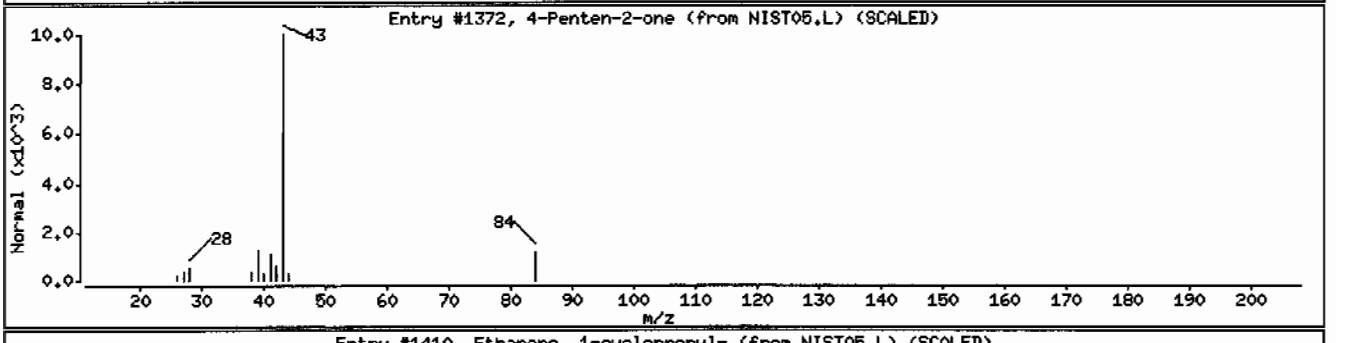

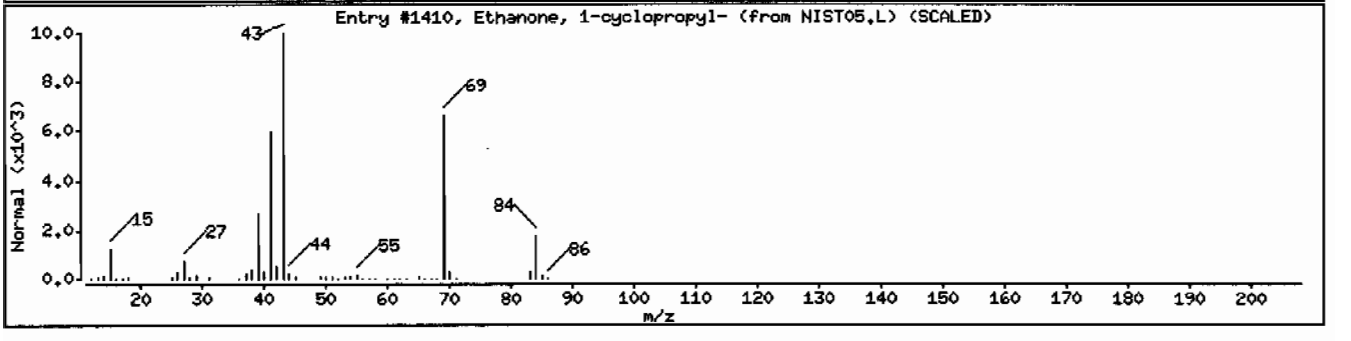

Data File: /chem/MSD1.i/s120309.b/s110322.d

Date : 03-DEC-2009 18:44

Client ID: RE03-09-14254 Instrument: MSD1.i

Sample Info: |2416150091927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

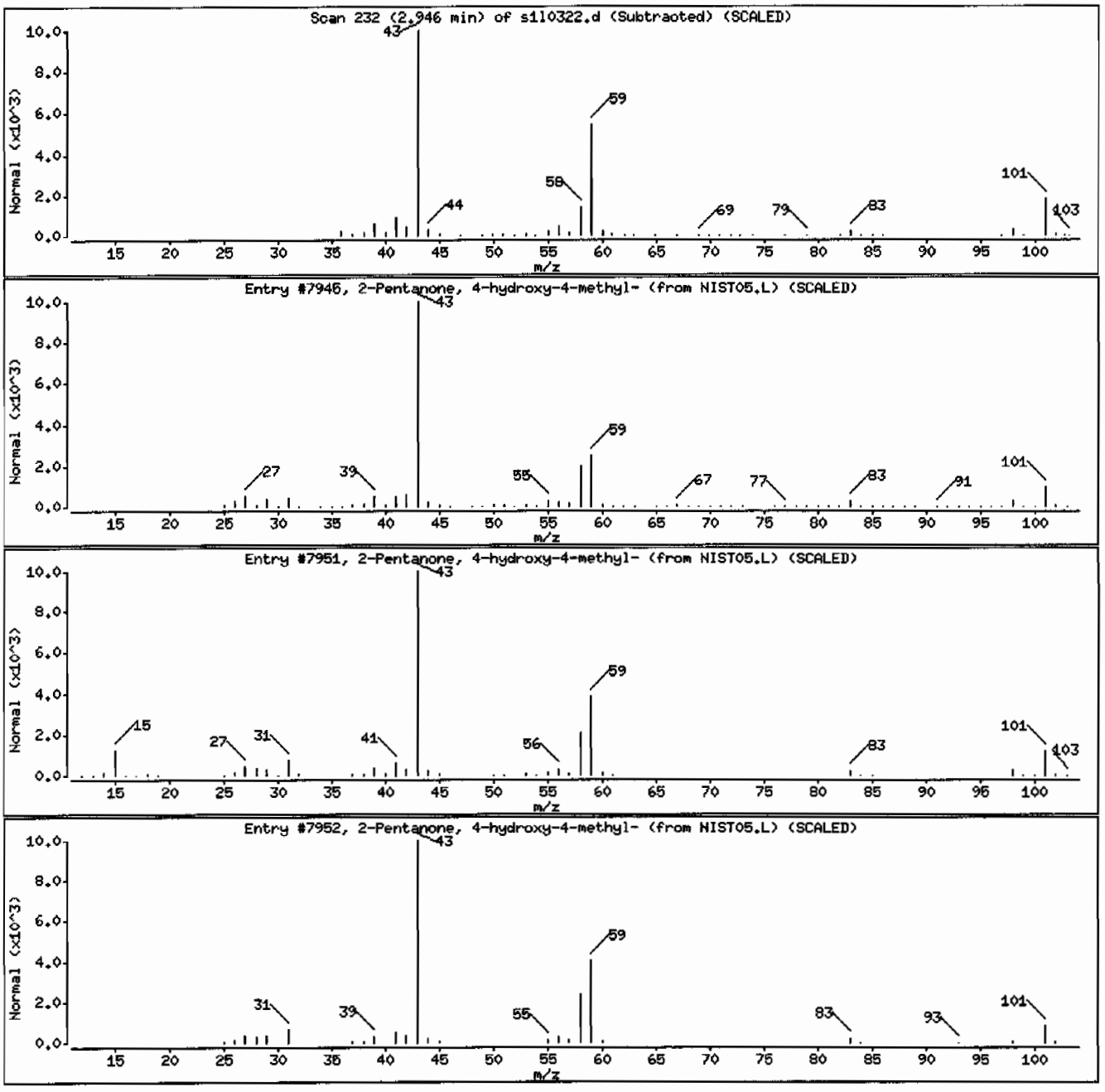

Data File: /chem/MSD1.i/s120309.b/s110322.d

Date : 03-DEC-2009 18:44

Client ID: RE03-09-14254

Instrument: MSD1.i

Sample Info: |2416150091927155|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	86	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	81	C18H35NO	281

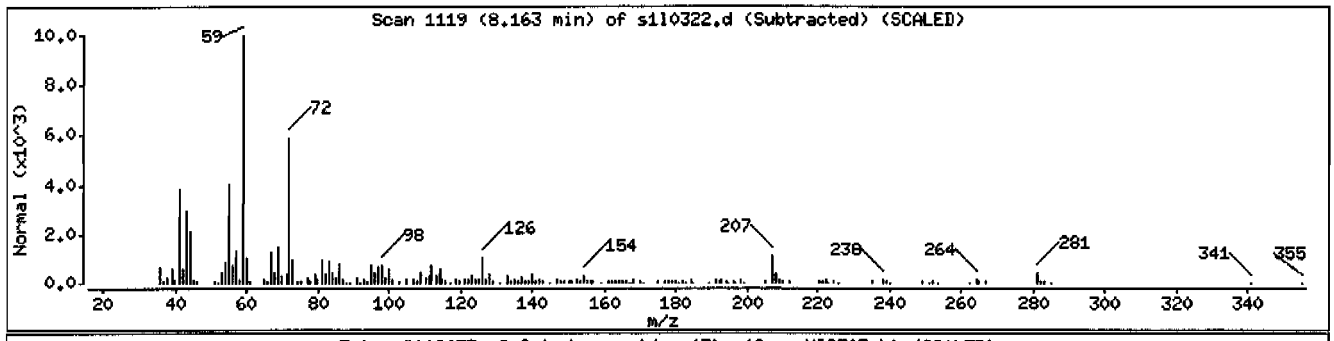

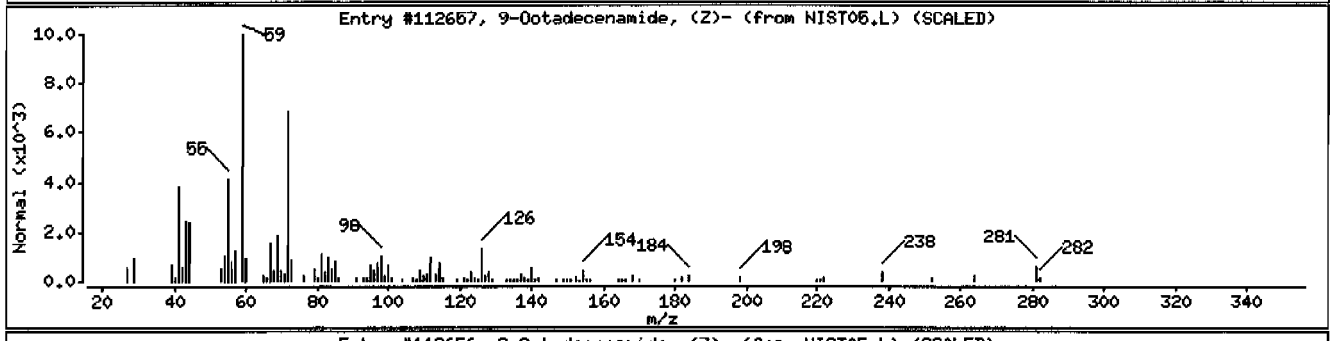

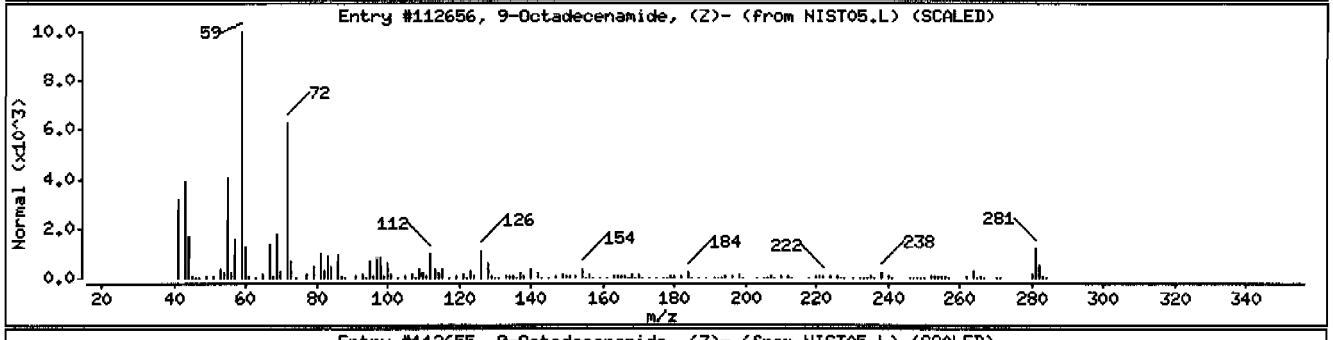

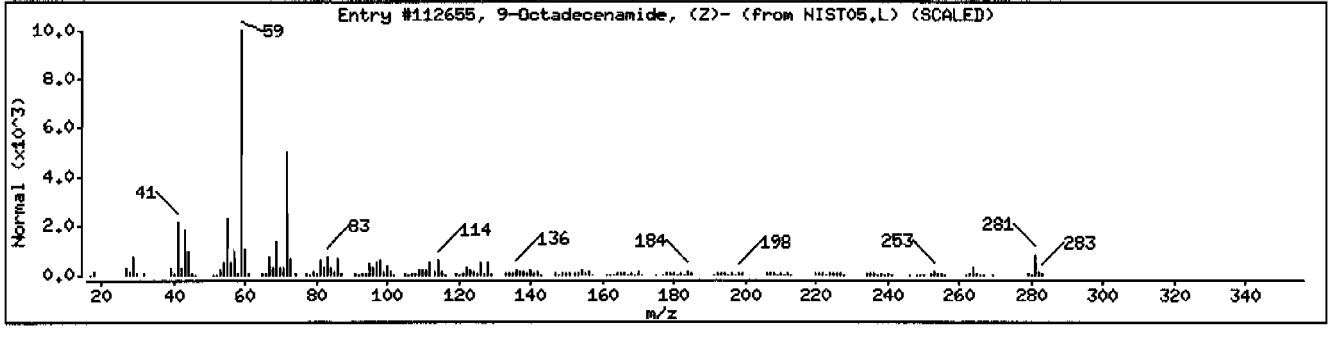

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:57	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s1l0320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	366	ug/kg	73.1	366
108-95-2	Phenol	U	366	ug/kg	73.1	366
95-57-8	2-Chlorophenol	U	366	ug/kg	73.1	366
106-46-7	1,4-Dichlorobenzene	U	366	ug/kg	73.1	366
621-64-7	N-Nitrosodipropylamine	U	366	ug/kg	73.1	366
59-50-7	4-Chloro-3-methylphenol	U	366	ug/kg	73.1	366
83-32-9	Acenaphthene	U	36.6	ug/kg	12.1	36.6
121-14-2	2,4-Dinitrotoluene	U	366	ug/kg	36.6	366
100-02-7	4-Nitrophenol	U	366	ug/kg	121	366
87-86-5	Pentachlorophenol	U	366	ug/kg	91.4	366
129-00-0	Pyrene	U	36.6	ug/kg	11.0	36.6
110-86-1	Pyridine	U	366	ug/kg	73.1	366
62-53-3	Aniline	U	366	ug/kg	110	366
111-44-4	bis(2-Chloroethyl) ether	U	366	ug/kg	73.1	366
541-73-1	1,3-Dichlorobenzene	U	366	ug/kg	73.1	366
100-51-6	Benzyl alcohol	U	366	ug/kg	110	366
95-50-1	1,2-Dichlorobenzene	U	366	ug/kg	73.1	366
108-60-1	bis(2-Chloroisopropyl)ether	U	366	ug/kg	73.1	366
95-48-7	o-Cresol	U	366	ug/kg	73.1	366
65794-96-9	m,p-Cresols	U	366	ug/kg	110	366
67-72-1	Hexachloroethane	U	366	ug/kg	73.1	366
98-95-3	Nitrobenzene	U	366	ug/kg	73.1	366
78-59-1	Isophorone	U	366	ug/kg	73.1	366
88-75-5	2-Nitrophenol	U	366	ug/kg	73.1	366
105-67-9	2,4-Dimethylphenol	U	366	ug/kg	128	366
111-91-1	bis(2-Chloroethoxy)methane	U	366	ug/kg	73.1	366
120-83-2	2,4-Dichlorophenol	U	366	ug/kg	73.1	366
65-85-0	Benzoic acid	U	731	ug/kg	183	731
91-20-3	Naphthalene	U	36.6	ug/kg	11.0	36.6
106-47-8	4-Chloroaniline	U	366	ug/kg	73.1	366
87-68-3	Hexachlorobutadiene	U	366	ug/kg	73.1	366
91-57-6	2-Methylnaphthalene	U	36.6	ug/kg	7.31	36.6
77-47-4	Hexachlorocyclopentadiene	U	366	ug/kg	73.1	366
88-06-2	2,4,6-Trichlorophenol	U	366	ug/kg	73.1	366
95-95-4	2,4,5-Trichlorophenol	U	366	ug/kg	73.1	366
91-58-7	2-Chloronaphthalene	U	36.6	ug/kg	12.1	36.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	366	ug/kg	73.1	366
99-09-2	3-Nitroaniline	U	366	ug/kg	73.1	366

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615007	Date Received:	11/21/2009 09:00	%Moisture:	9.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14255	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 17:57	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	s1l0320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	366	ug/kg	73.1	366
606-20-2	2,6-Dinitrotoluene	U	366	ug/kg	36.6	366
208-96-8	Acenaphthylene	U	36.6	ug/kg	11.0	36.6
51-28-5	2,4-Dinitrophenol	U	731	ug/kg	139	731
132-64-9	Dibenzofuran	U	366	ug/kg	73.1	366
84-66-2	Diethylphthalate	U	366	ug/kg	73.1	366
86-73-7	Fluorene	U	36.6	ug/kg	11.0	36.6
7005-72-3	4-Chlorophenylphenylether	U	366	ug/kg	73.1	366
534-52-1	2-Methyl-4,6-dinitrophenol	U	366	ug/kg	73.1	366
100-01-6	4-Nitroaniline	U	366	ug/kg	110	366
	p-Nitroaniline					
122-39-4	Diphenylamine	U	366	ug/kg	73.1	366
122-66-7	Azobenzene	U	366	ug/kg	73.1	366
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	366	ug/kg	73.1	366
118-74-1	Hexachlorobenzene	U	366	ug/kg	73.1	366
85-01-8	Phenanthrene	U	36.6	ug/kg	11.0	36.6
120-12-7	Anthracene	U	36.6	ug/kg	7.31	36.6
84-74-2	Di-n-butylphthalate	U	366	ug/kg	73.1	366
206-44-0	Fluoranthene	U	36.6	ug/kg	11.0	36.6
85-68-7	Butylbenzylphthalate	U	366	ug/kg	73.1	366
56-55-3	Benzo(a)anthracene	U	36.6	ug/kg	11.0	36.6
91-94-1	3,3'-Dichlorobenzidine	U	366	ug/kg	110	366
218-01-9	Chrysene	U	36.6	ug/kg	11.0	36.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	366	ug/kg	73.1	366
117-84-0	Di-n-octylphthalate	U	366	ug/kg	73.1	366
205-99-2	Benzo(b)fluoranthene	U	36.6	ug/kg	11.0	36.6
207-08-9	Benzo(k)fluoranthene	U	36.6	ug/kg	11.0	36.6
50-32-8	Benzo(a)pyrene	U	36.6	ug/kg	11.0	36.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.6	ug/kg	11.0	36.6
53-70-3	Dibenzo(a,h)anthracene	U	36.6	ug/kg	11.0	36.6
191-24-2	Benzo(ghi)perylene	U	36.6	ug/kg	11.0	36.6
120-82-1	1,2,4-Trichlorobenzene	U	366	ug/kg	73.1	366

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	380	ug/kg		J
	Unknown	1.69	3700	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14255	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 17:57	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s110320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	485	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	8.16	185	ug/kg	93	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110320.d
Lab Smp Id: 241615007 Client Smp ID: RE03-09-14255
Inj Date : 03-DEC-2009 17:57
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615007|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 16:15 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	9.25470	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.887	(1.000)	364539	40.0000	
* 29 Naphthalene-d8	136	4.781	4.751	(1.000)	1423370	40.0000	
* 46 Acenaphthene-d10	164	6.022	5.998	(1.000)	814723	40.0000	
* 67 Phenanthrene-d10	188	7.004	6.980	(1.000)	1390970	40.0000	
* 91 Chrysene-d12	240	8.663	8.639	(1.000)	1219022	40.0000	
* 98 Perylene-d12	264	10.116	10.074	(1.000)	1088070	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	681208	71.5433	2620
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	736821	63.6694	2330
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	370330	39.4802	1440
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	849609	43.5416	1590
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	233385	102.587	3750
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	992121	51.8490	1900

ION RATIO REPORT

SV REPORT

Data file: s110320.d
Report Date: 12/04/2009 07:28
Lab. ID: 241615007 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:57
Operator: AMY Instrument: MSD1.i
Sample Info: |241615007|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	37154	3.64	3.70	80-120	100	(T)
93	127	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	49446	4.28	4.16	80-120	100	(T)
42	30507	4.28	4.16	48-108	62	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	144364	6.02	5.80	80-120	100	(T)
164	814723	6.02	5.80	0- 40	564	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	103758	6.02	5.85	80-120	100	(T)
63	1518	6.02	5.85	46-106	1	(QT)
45 Acenaphthylene				CAS#: 208-96-8		
152	26407	6.00	5.93	80-120	100	(T)
151	7306	6.00	5.93	0- 49	28	(T)
153	29305	6.00	5.93	0- 43	111	(QT)
47 Acenaphthene				CAS#: 83-32-9		
154	23520	6.00	6.05	80-120	100	( )
153	29305	6.00	6.05	73-133	125	( )
152	26407	6.00	6.05	18- 78	112	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	103758	6.02	6.13	80-120	100	(T)
89	1390	6.02	6.13	33- 93	1	(QT)
63	1518	6.02	6.13	16- 76	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	14054	6.56	6.40	80-120	100	(T)
165	14553	6.56	6.40	64-124	104	(T)
167	4894	6.56	6.40	0- 43	35	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	13666	6.56	6.70	80-120	100	(T)
141	92655	6.55	6.70	47-107	678	(QT)
250	27422	6.56	6.70	68-128	201	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	2146	9.66	9.66	80-120	100	( )
253	1044	9.65	9.66	0- 52	49	( )
125	1173	9.66	9.66	0- 45	55	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110320.d
Lab Smp Id: 241615007 Client Smp ID: RE03-09-14255
Inj Date : 03-DEC-2009 17:57
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615007|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 16:15 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	9.25470	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2143433	40.000
* 91 Chrysene-d12	8.663	3315178	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.634	557242	10.3990465	380	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.687	5417882	101.106614	3700	0		0	10
Unknown Aldol Condensate				CAS #:			
2.946	710548	13.2599929	485	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.163	419744	5.06451488	185	93	NIST05.L	112656	91

Data File: /chem/MSD1.i/s120309.b/s110320.d
Date : 03-DEC-2009 17:57
Client ID: RE03-09-14255
Sample Info: |2416150071927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

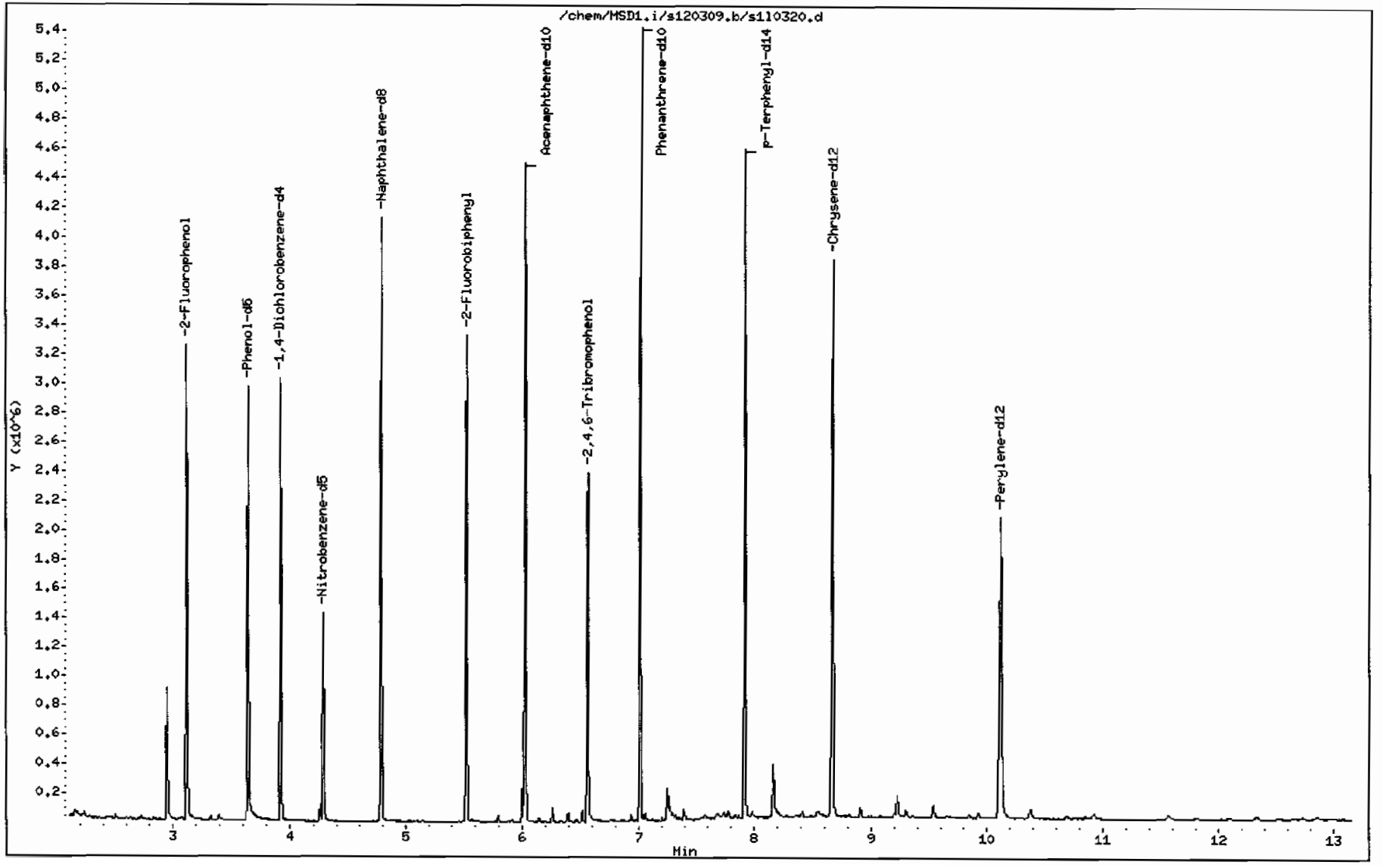

Data File: /chem/MSD1.i/s120309.b/s110320.d

Date : 03-DEC-2009 17:57

Client ID: RE03-09-14255

Instrument: MSD1.i

Sample Info: |2416150071927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl Chloride	75-00-3	NIST05.L	342	2	C2H5Cl	64
2-Butanone, 1-chloro-	616-27-3	NIST05.L	4875	2	C4H7ClO	106
S-(Buthoxythiocarbonyl)thiohydroxylamine	35659-81-5	NIST05.L	32811	2	C5H11NOS2	165

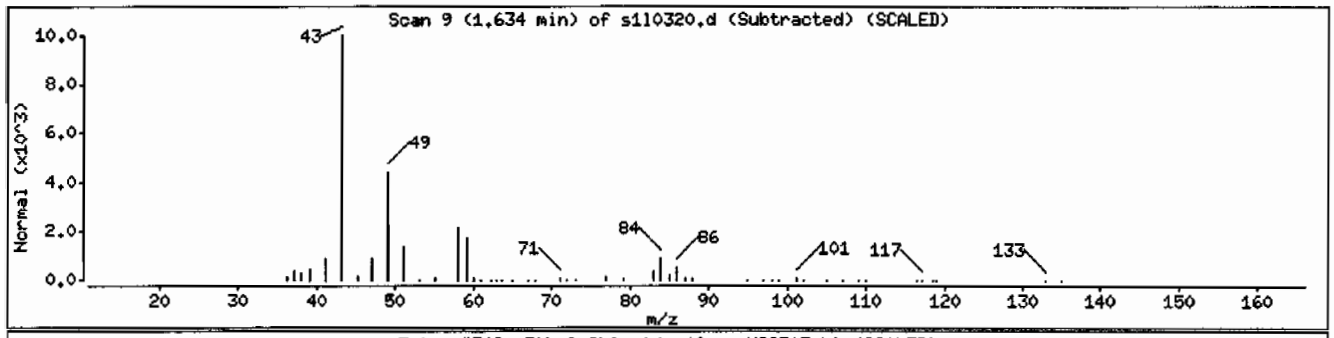

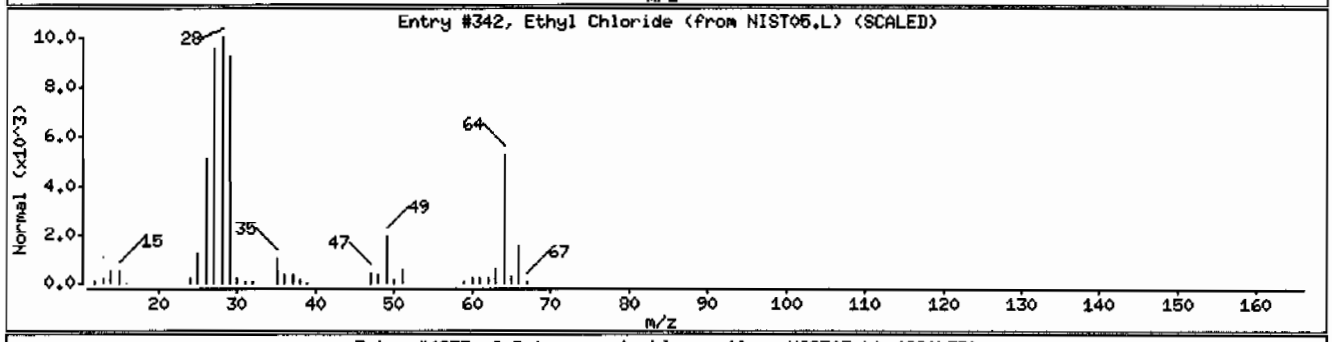

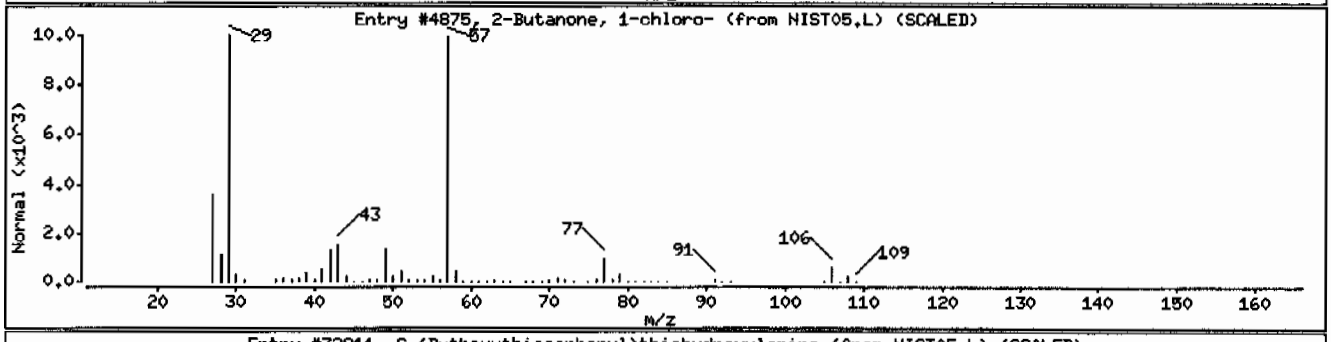

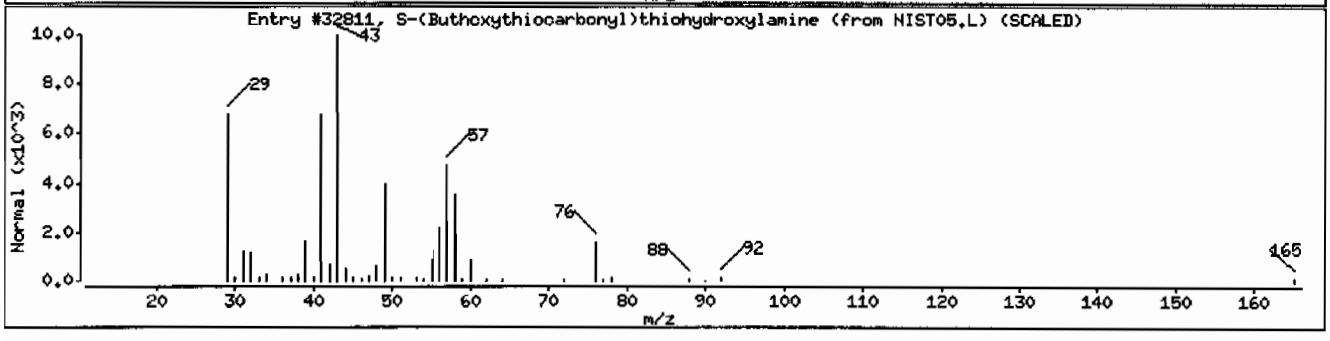

Data File: /chem/MSD1.i/s120309.b/s110320.d

Date : 03-DEC-2009 17:57

Client ID: RE03-09-14255 Instrument: MSD1.i

Sample Info: |24161500719271551|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dichloroacetaldehyde	79-02-7	NIST05.L	6013	43	C2H2Cl2O	112
Methylene Chloride	75-09-2	NIST05.L	1499	38	CH2Cl2	84
Acetic acid, bromochloro-	5589-96-8	NIST05.L	37900	9	C2H2BrClO2	172

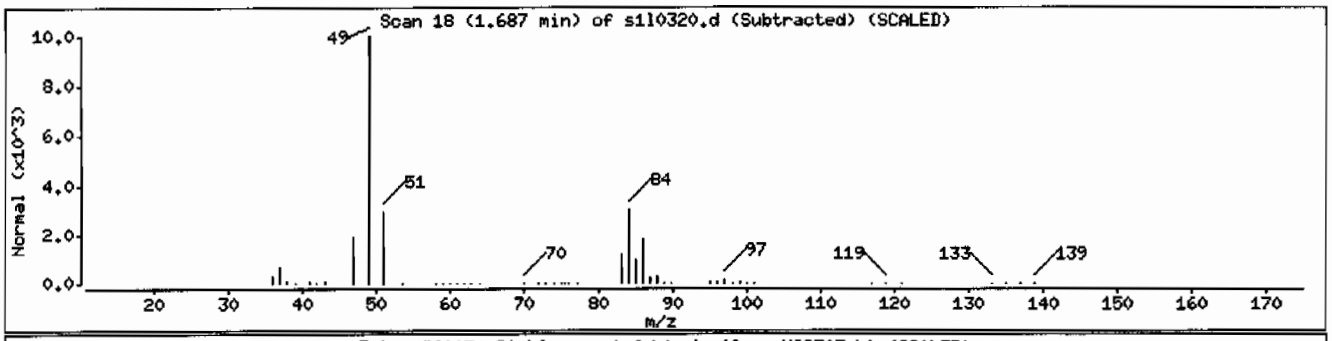

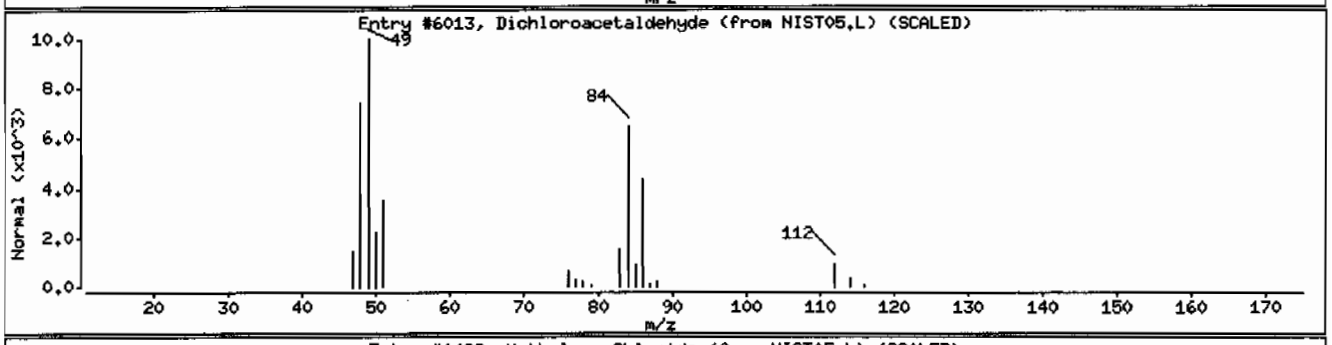

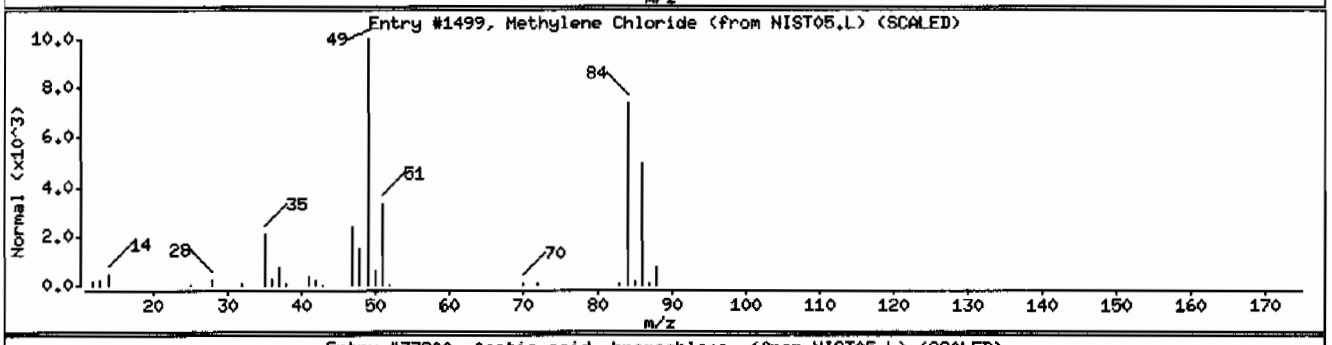

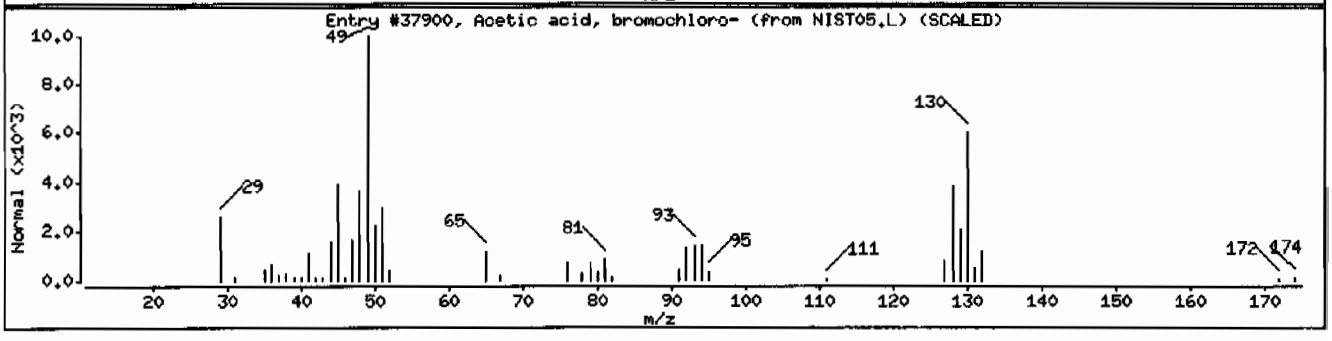

Data File: /chem/MSD1.i/s120309.b/s110320.d

Date : 03-DEC-2009 17:57

Client ID: RE03-09-14255

Instrument: MSD1.i

Sample Info: |2416150071927155|1|SVMFI1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

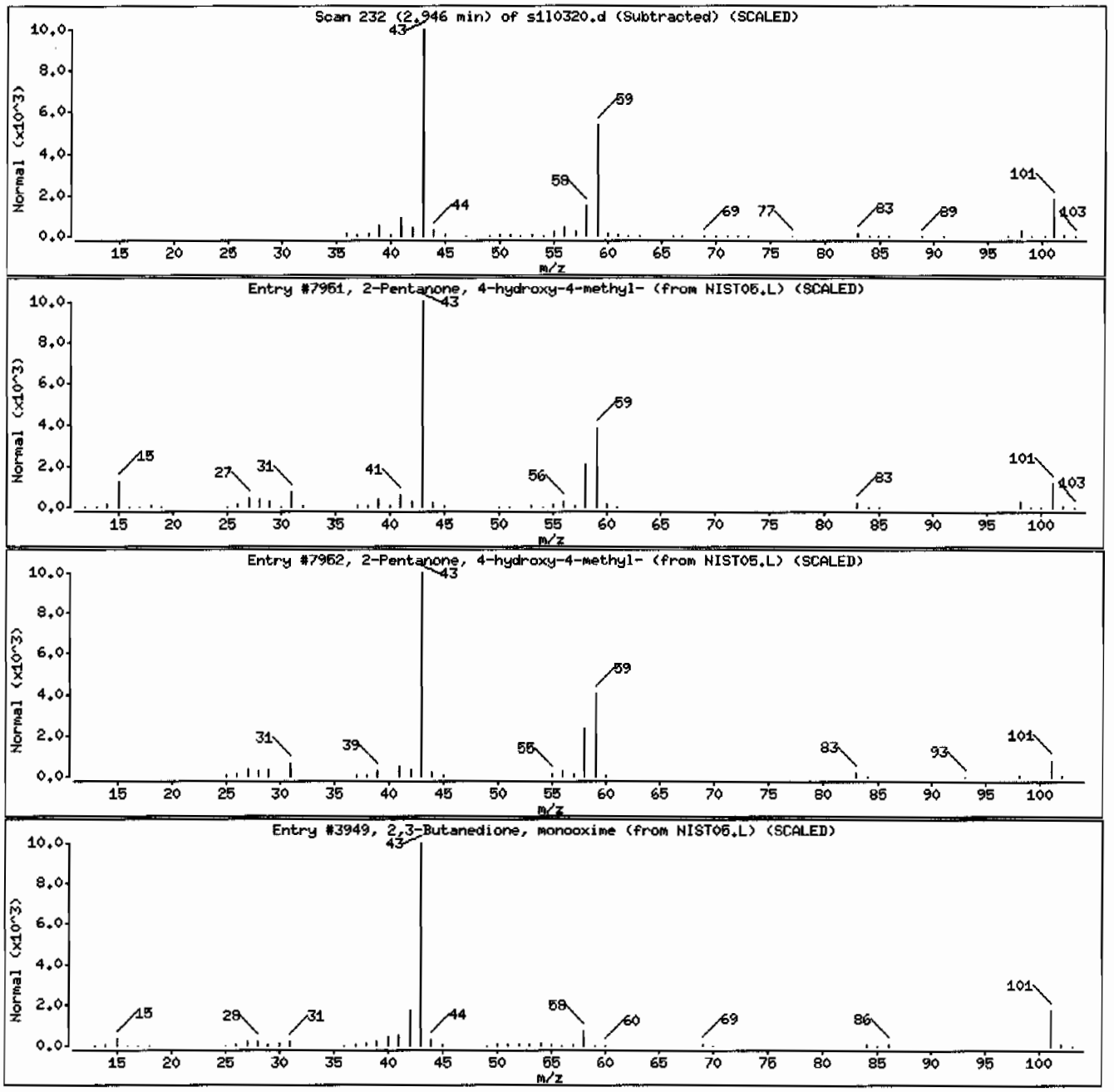

Data File: /chem/MSD1.i/s120309.b/s110320.d

Date : 03-DEC-2009 17:57

Client ID: RE03-09-14255

Instrument: MSD1.i

Sample Info: 1241615007192715511ISVMF11LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	91	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	81	C18H35NO	281

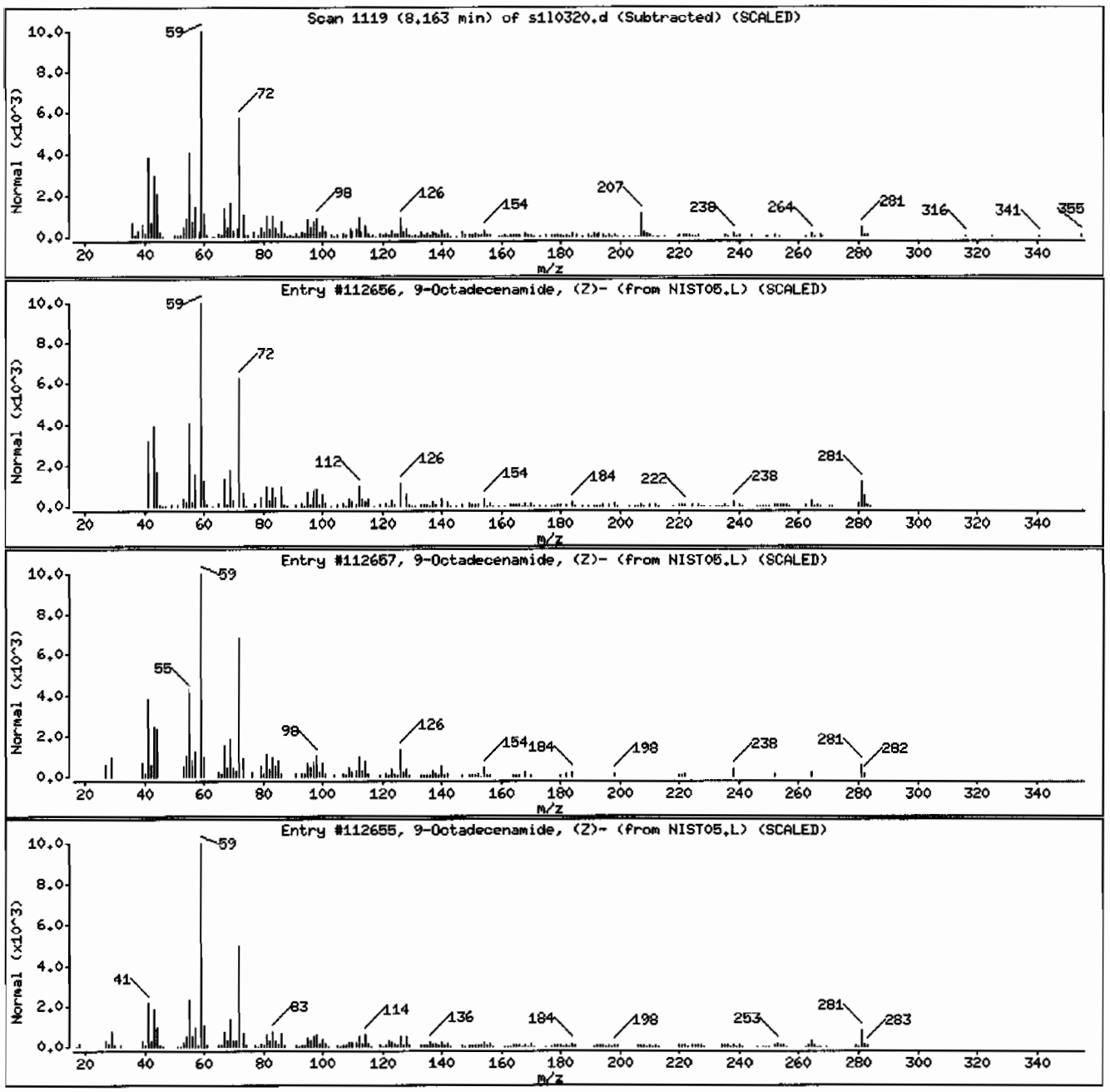

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615008	Date Received:	11/21/2009 09:00	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14256	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 18:21	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s1l0321.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	361	ug/kg	72.2	361
108-95-2	Phenol	U	361	ug/kg	72.2	361
95-57-8	2-Chlorophenol	U	361	ug/kg	72.2	361
106-46-7	1,4-Dichlorobenzene	U	361	ug/kg	72.2	361
621-64-7	N-Nitrosodipropylamine	U	361	ug/kg	72.2	361
59-50-7	4-Chloro-3-methylphenol	U	361	ug/kg	72.2	361
83-32-9	Acenaphthene	U	36.1	ug/kg	11.9	36.1
121-14-2	2,4-Dinitrotoluene	U	361	ug/kg	36.1	361
100-02-7	4-Nitrophenol	U	361	ug/kg	119	361
87-86-5	Pentachlorophenol	U	361	ug/kg	90.3	361
129-00-0	Pyrene	U	36.1	ug/kg	10.8	36.1
110-86-1	Pyridine	U	361	ug/kg	72.2	361
62-53-3	Aniline	U	361	ug/kg	108	361
111-44-4	bis(2-Chloroethyl) ether	U	361	ug/kg	72.2	361
541-73-1	1,3-Dichlorobenzene	U	361	ug/kg	72.2	361
100-51-6	Benzyl alcohol	U	361	ug/kg	108	361
95-50-1	1,2-Dichlorobenzene	U	361	ug/kg	72.2	361
108-60-1	bis(2-Chloroisopropyl)ether	U	361	ug/kg	72.2	361
95-48-7	o-Cresol	U	361	ug/kg	72.2	361
65794-96-9	m,p-Cresols	U	361	ug/kg	108	361
67-72-1	Hexachloroethane	U	361	ug/kg	72.2	361
98-95-3	Nitrobenzene	U	361	ug/kg	72.2	361
78-59-1	Isophorone	U	361	ug/kg	72.2	361
88-75-5	2-Nitrophenol	U	361	ug/kg	72.2	361
105-67-9	2,4-Dimethylphenol	U	361	ug/kg	126	361
111-91-1	bis(2-Chloroethoxy)methane	U	361	ug/kg	72.2	361
120-83-2	2,4-Dichlorophenol	U	361	ug/kg	72.2	361
65-85-0	Benzoic acid	U	722	ug/kg	181	722
91-20-3	Naphthalene	U	36.1	ug/kg	10.8	36.1
106-47-8	4-Chloroaniline	U	361	ug/kg	72.2	361
87-68-3	Hexachlorobutadiene	U	361	ug/kg	72.2	361
91-57-6	2-Methylnaphthalene	U	36.1	ug/kg	7.22	36.1
77-47-4	Hexachlorocyclopentadiene	U	361	ug/kg	72.2	361
88-06-2	2,4,6-Trichlorophenol	U	361	ug/kg	72.2	361
95-95-4	2,4,5-Trichlorophenol	U	361	ug/kg	72.2	361
91-58-7	2-Chloronaphthalene	U	36.1	ug/kg	11.9	36.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	361	ug/kg	72.2	361
99-09-2	3-Nitroaniline	U	361	ug/kg	72.2	361

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14256	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 18:21	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s110321.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	361	ug/kg	72.2	361
606-20-2	2,6-Dinitrotoluene	U	361	ug/kg	36.1	361
208-96-8	Acenaphthylene	U	36.1	ug/kg	10.8	36.1
51-28-5	2,4-Dinitrophenol	U	722	ug/kg	137	722
132-64-9	Dibenzofuran	U	361	ug/kg	72.2	361
84-66-2	Diethylphthalate	U	361	ug/kg	72.2	361
86-73-7	Fluorene	U	36.1	ug/kg	10.8	36.1
7005-72-3	4-Chlorophenylphenylether	U	361	ug/kg	72.2	361
534-52-1	2-Methyl-4,6-dinitrophenol	U	361	ug/kg	72.2	361
100-01-6	4-Nitroaniline	U	361	ug/kg	108	361
	p-Nitroaniline					
122-39-4	Diphenylamine	U	361	ug/kg	72.2	361
122-66-7	Azobenzene	U	361	ug/kg	72.2	361
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	361	ug/kg	72.2	361
118-74-1	Hexachlorobenzene	U	361	ug/kg	72.2	361
85-01-8	Phenanthrene	U	36.1	ug/kg	10.8	36.1
120-12-7	Anthracene	U	36.1	ug/kg	7.22	36.1
84-74-2	Di-n-butylphthalate	U	361	ug/kg	72.2	361
206-44-0	Fluoranthene	U	36.1	ug/kg	10.8	36.1
85-68-7	Butylbenzylphthalate	U	361	ug/kg	72.2	361
56-55-3	Benzo(a)anthracene	U	36.1	ug/kg	10.8	36.1
91-94-1	3,3'-Dichlorobenzidine	U	361	ug/kg	108	361
218-01-9	Chrysene	U	36.1	ug/kg	10.8	36.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	361	ug/kg	72.2	361
117-84-0	Di-n-octylphthalate	U	361	ug/kg	72.2	361
205-99-2	Benzo(b)fluoranthene	U	36.1	ug/kg	10.8	36.1
207-08-9	Benzo(k)fluoranthene	U	36.1	ug/kg	10.8	36.1
50-32-8	Benzo(a)pyrene	U	36.1	ug/kg	10.8	36.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.1	ug/kg	10.8	36.1
53-70-3	Dibenzo(a,h)anthracene	U	36.1	ug/kg	10.8	36.1
191-24-2	Benzo(ghi)perylene	U	36.1	ug/kg	10.8	36.1
120-82-1	1,2,4-Trichlorobenzene	U	361	ug/kg	72.2	361

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	380	ug/kg		JA
	Unknown	11.8	254	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110321.d
Lab Smp Id: 241615008 Client Smp ID: RE03-09-14256
Inj Date : 03-DEC-2009 18:21
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615008|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	8.24640	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	365608	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1444605	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	812651	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1400101	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1245377	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1108892	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	598232	62.6451	2260
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	679766	58.5674	2120
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	320640	33.6804	1220
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	761438	39.1224	1410
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	185257	81.6394	2950
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	853184	43.6445	1580

ION RATIO REPORT

SV REPORT

Data file: s110321.d
Report Date: 12/04/2009 07:28
Lab. ID: 241615008 SampleType: SAMPLE
Injection Date: 03-DEC-2009 18:21
Operator: AMY Instrument: MSD1.i
Sample Info: |241615008|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	31611	3.64	3.70	80-120	100	(T)
93	340	3.49	3.72	409-469	1	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	44343	4.28	4.16	80-120	100	(T)
42	28228	4.28	4.16	48-108	64	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	145840	6.02	5.80	80-120	100	(T)
164	812651	6.02	5.80	0- 40	557	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	104495	6.02	5.85	80-120	100	(T)
63	1380	6.02	5.85	46-106	1	(QT)
45 Acenaphthylene			CAS#: 208-96-8			
152	11116	6.00	5.93	80-120	100	(T)
151	2756	6.00	5.93	0- 49	25	(T)
153	10887	6.00	5.93	0- 43	98	(QT)
47 Acenaphthene			CAS#: 83-32-9			
154	9452	6.00	6.05	80-120	100	( )
153	10887	6.00	6.05	73-133	115	( )
152	11116	6.00	6.05	18- 78	118	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	104495	6.02	6.13	80-120	100	(T)
89	1283	6.02	6.13	33- 93	1	(QT)
63	1380	6.02	6.13	16- 76	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	11405	6.56	6.40	80-120	100	(T)
165	11782	6.56	6.40	64-124	103	(T)
167	4015	6.56	6.40	0- 43	35	(T)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	10931	6.56	6.70	80-120	100	(T)
141	72973	6.55	6.70	47-107	668	(QT)
250	22591	6.56	6.70	68-128	207	(QT)
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	103	9.67	9.66	80-120	100	( )
253	120	9.53	9.66	0- 52	116	(QT)
125	273	9.69	9.66	0- 45	265	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110321.d
Lab Smp Id: 241615008 Client Smp ID: RE03-09-14256
Inj Date : 03-DEC-2009 18:21
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615008|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	8.24640	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2147284	40.000
* 98 Perylene-d12	10.116	3082021	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.946	565167	10.5280303	380	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	========	=========	======
Unknown				CAS #:			
11.804	542440	7.04004919	254	0		0	98

Data File: /chem/MSD1.i/s120309.b/s110321.d
Date : 03-DEC-2009 18:21
Client ID: RE03-09-14256
Sample Info: |241615008|927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

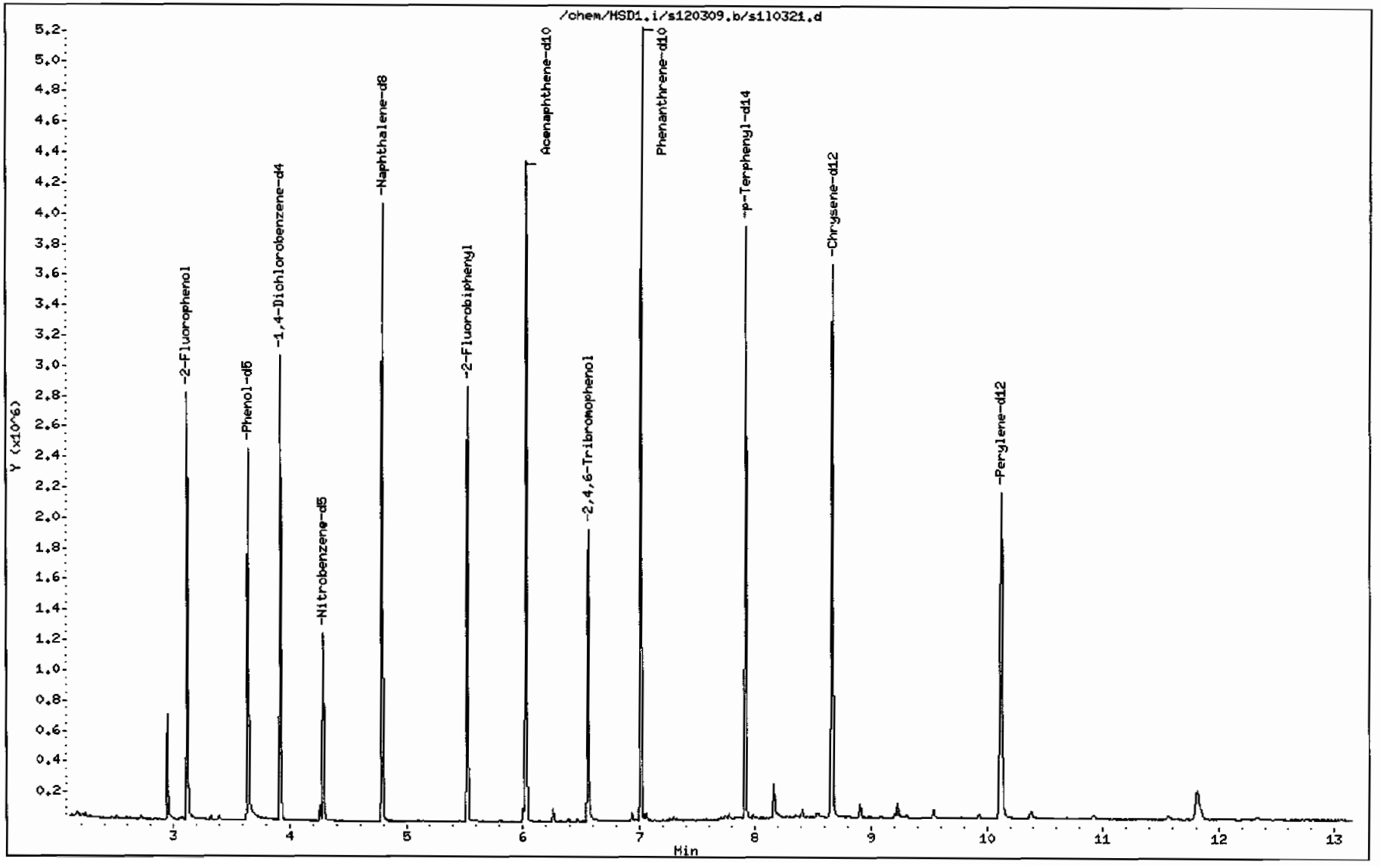

Data File: /chem/MSD1.i/s120309.b/s110321.d

Date : 03-DEC-2009 18:21

Client ID: RE03-09-14256

Instrument: MSD1.i

Sample Info: |2416150081927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	36	C6H12O2	116

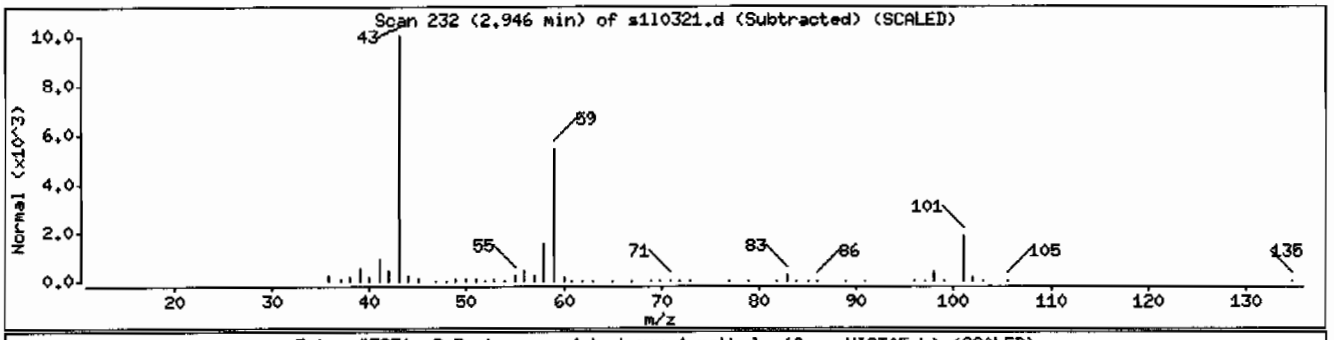

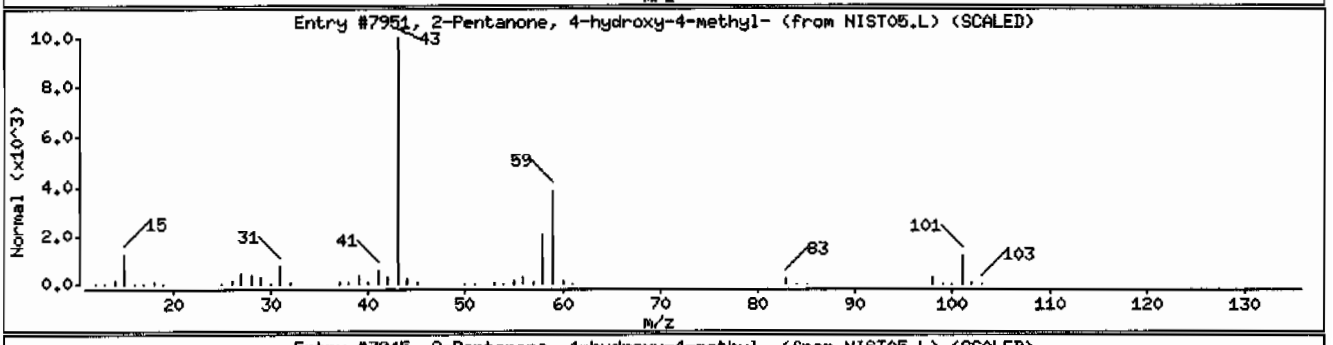

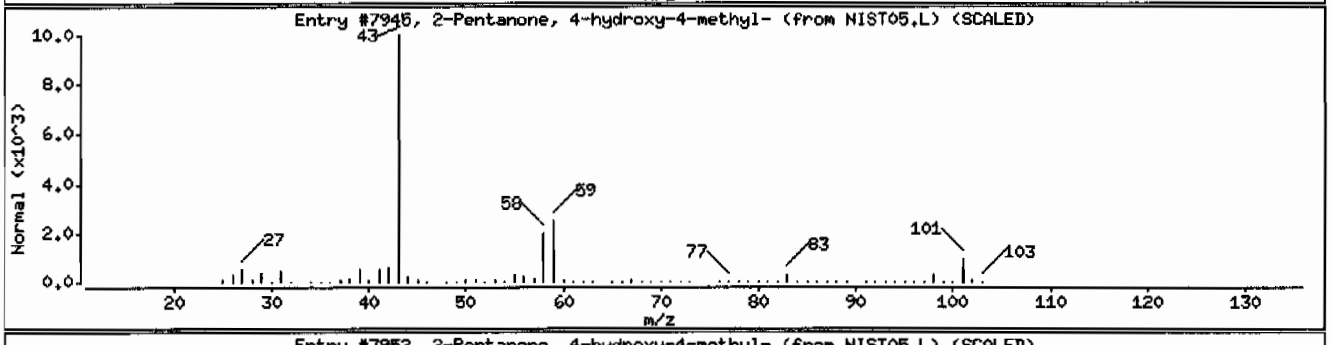

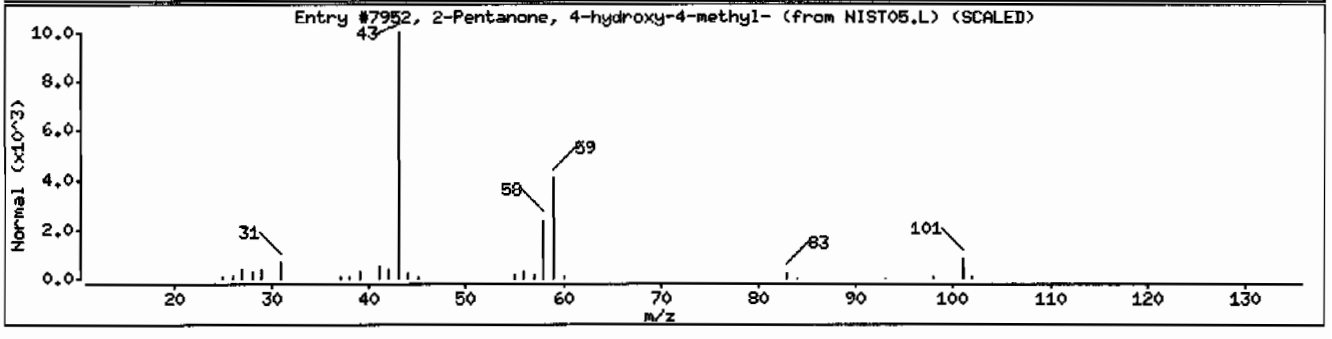

Data File: /chem/MSD1.i/s120309.b/s110321.d

Date : 03-DEC-2009 18:21

Client ID: RE03-09-14256

Instrument: MSD1.i

Sample Info: |2416150081927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetracosapentaene, 2,6,10,15,19,23-hexam	26266-08-0	NIST05.L	173973	64	C30H52	412
D:B-Friedo-18,19-secolup-19-ene, 3,10-ep	35060-26-5	NIST05.L	176604	50	C30H50O	426
Silane, methylphenylbis[(1,7,7-trimethyl	74806-99-8	NIST05.L	176524	45	C27H42O2Si	426

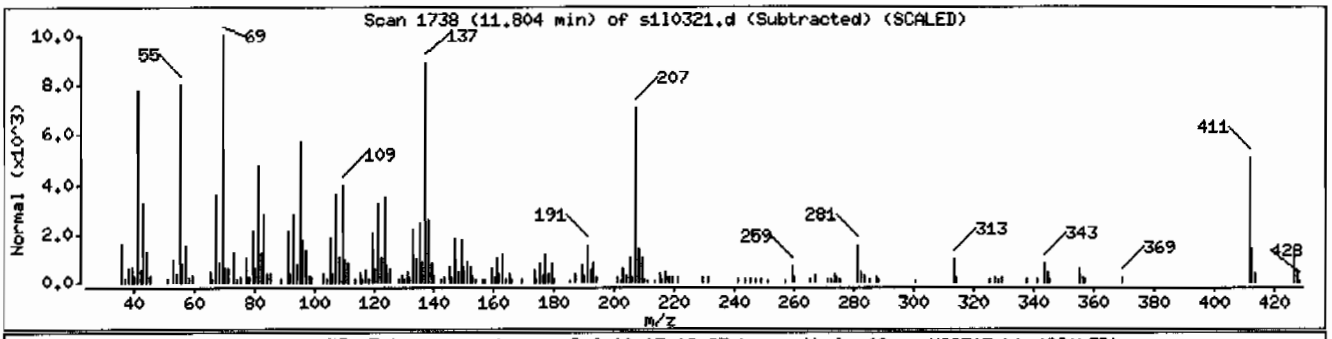

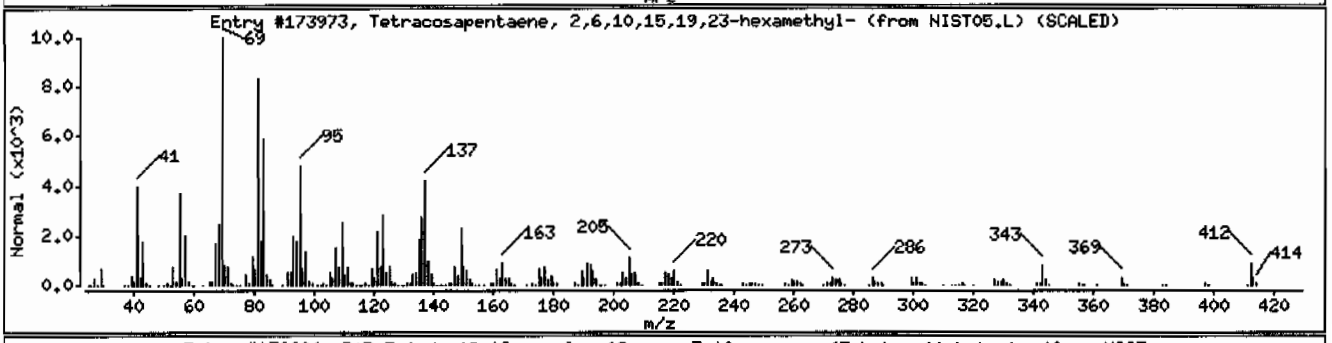

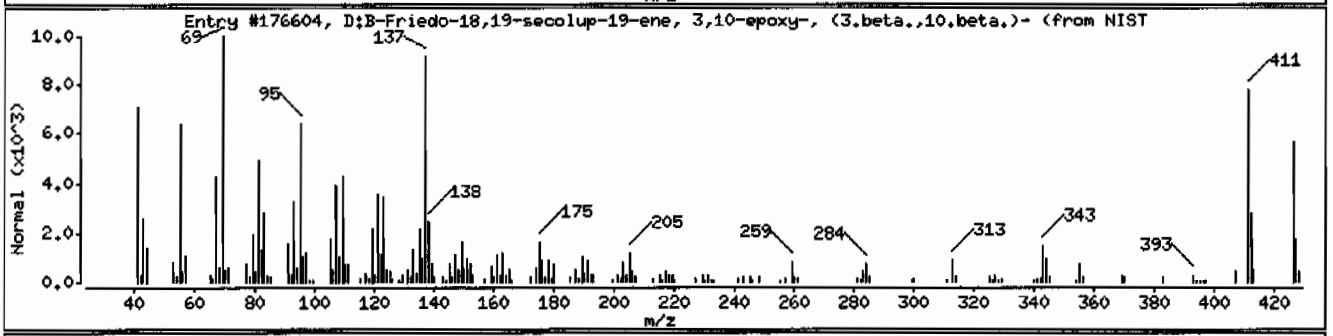

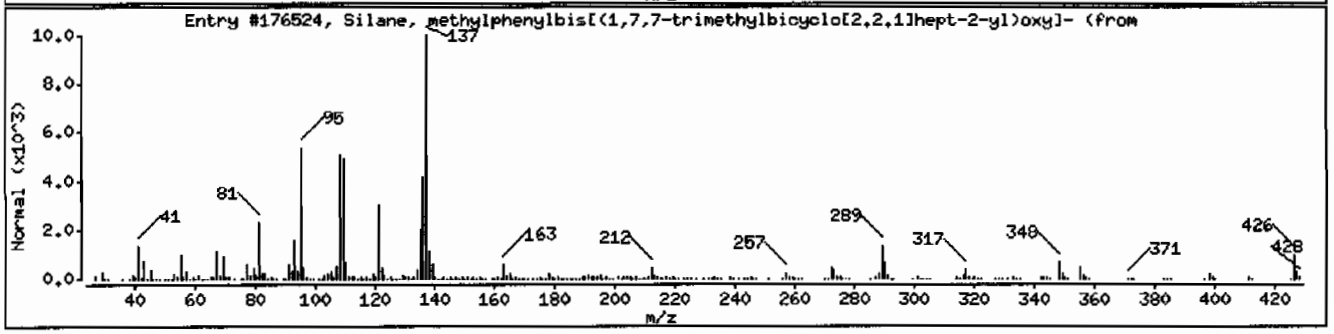

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615016	Date Received:	11/21/2009 09:00	%Moisture:	1.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14257	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:13	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110331.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	337	ug/kg	67.3	337
108-95-2	Phenol	U	337	ug/kg	67.3	337
95-57-8	2-Chlorophenol	U	337	ug/kg	67.3	337
106-46-7	1,4-Dichlorobenzene	U	337	ug/kg	67.3	337
621-64-7	N-Nitrosodipropylamine	U	337	ug/kg	67.3	337
59-50-7	4-Chloro-3-methylphenol	U	337	ug/kg	67.3	337
83-32-9	Acenaphthene	U	33.7	ug/kg	11.1	33.7
121-14-2	2,4-Dinitrotoluene	U	337	ug/kg	33.7	337
100-02-7	4-Nitrophenol	U	337	ug/kg	111	337
87-86-5	Pentachlorophenol	U	337	ug/kg	84.2	337
129-00-0	Pyrene	U	33.7	ug/kg	10.1	33.7
110-86-1	Pyridine	U	337	ug/kg	67.3	337
62-53-3	Aniline	U	337	ug/kg	101	337
111-44-4	bis(2-Chloroethyl) ether	U	337	ug/kg	67.3	337
541-73-1	1,3-Dichlorobenzene	U	337	ug/kg	67.3	337
100-51-6	Benzyl alcohol	U	337	ug/kg	101	337
95-50-1	1,2-Dichlorobenzene	U	337	ug/kg	67.3	337
108-60-1	bis(2-Chloroisopropyl)ether	U	337	ug/kg	67.3	337
95-48-7	o-Cresol	U	337	ug/kg	67.3	337
65794-96-9	m,p-Cresols	U	337	ug/kg	101	337
67-72-1	Hexachloroethane	U	337	ug/kg	67.3	337
98-95-3	Nitrobenzene	U	337	ug/kg	67.3	337
78-59-1	Isophorone	U	337	ug/kg	67.3	337
88-75-5	2-Nitrophenol	U	337	ug/kg	67.3	337
105-67-9	2,4-Dimethylphenol	U	337	ug/kg	118	337
111-91-1	bis(2-Chloroethoxy)methane	U	337	ug/kg	67.3	337
120-83-2	2,4-Dichlorophenol	U	337	ug/kg	67.3	337
65-85-0	Benzoic acid	U	673	ug/kg	168	673
91-20-3	Naphthalene	U	33.7	ug/kg	10.1	33.7
106-47-8	4-Chloroaniline	U	337	ug/kg	67.3	337
87-68-3	Hexachlorobutadiene	U	337	ug/kg	67.3	337
91-57-6	2-Methylnaphthalene	U	33.7	ug/kg	6.73	33.7
77-47-4	Hexachlorocyclopentadiene	U	337	ug/kg	67.3	337
88-06-2	2,4,6-Trichlorophenol	U	337	ug/kg	67.3	337
95-95-4	2,4,5-Trichlorophenol	U	337	ug/kg	67.3	337
91-58-7	2-Chloronaphthalene	U	33.7	ug/kg	11.1	33.7
88-74-4	2-Nitroaniline	U	337	ug/kg	67.3	337
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	337	ug/kg	67.3	337

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14257	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 22:13	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s110331.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	337	ug/kg	67.3	337
606-20-2	2,6-Dinitrotoluene	U	337	ug/kg	33.7	337
208-96-8	Acenaphthylene	U	33.7	ug/kg	10.1	33.7
51-28-5	2,4-Dinitrophenol	U	673	ug/kg	128	673
132-64-9	Dibenzofuran	U	337	ug/kg	67.3	337
84-66-2	Diethylphthalate	U	337	ug/kg	67.3	337
86-73-7	Fluorene	U	33.7	ug/kg	10.1	33.7
7005-72-3	4-Chlorophenylphenylether	U	337	ug/kg	67.3	337
534-52-1	2-Methyl-4,6-dinitrophenol	U	337	ug/kg	67.3	337
100-01-6	4-Nitroaniline	U	337	ug/kg	101	337
	p-Nitroaniline					
122-39-4	Diphenylamine	U	337	ug/kg	67.3	337
122-66-7	Azobenzene	U	337	ug/kg	67.3	337
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	337	ug/kg	67.3	337
118-74-1	Hexachlorobenzene	U	337	ug/kg	67.3	337
85-01-8	Phenanthrene	U	33.7	ug/kg	10.1	33.7
120-12-7	Anthracene	U	33.7	ug/kg	6.73	33.7
84-74-2	Di-n-butylphthalate	U	337	ug/kg	67.3	337
206-44-0	Fluoranthene	U	33.7	ug/kg	10.1	33.7
85-68-7	Butylbenzylphthalate	U	337	ug/kg	67.3	337
56-55-3	Benzo(a)anthracene	U	33.7	ug/kg	10.1	33.7
91-94-1	3,3'-Dichlorobenzidine	U	337	ug/kg	101	337
218-01-9	Chrysene	U	33.7	ug/kg	10.1	33.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	337	ug/kg	67.3	337
117-84-0	Di-n-octylphthalate	U	337	ug/kg	67.3	337
205-99-2	Benzo(b)fluoranthene	U	33.7	ug/kg	10.1	33.7
207-08-9	Benzo(k)fluoranthene	U	33.7	ug/kg	10.1	33.7
50-32-8	Benzo(a)pyrene	U	33.7	ug/kg	10.1	33.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.7	ug/kg	10.1	33.7
53-70-3	Dibenzo(a,h)anthracene	U	33.7	ug/kg	10.1	33.7
191-24-2	Benzo(ghi)perylene	U	33.7	ug/kg	10.1	33.7
120-82-1	1,2,4-Trichlorobenzene	U	337	ug/kg	67.3	337

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	311	ug/kg		J
	Unknown Aldol Condensate	2.95	302	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110331.d
Lab Smp Id: 241615016 Client Smp ID: RE03-09-14257
Inj Date : 03-DEC-2009 22:13
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615016|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	1.10350	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	425935	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1676231	40.0000	
* 46 Acenaphthene-d10	164	6.028	6.028	(1.000)	974510	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1683836	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1484934	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1156211	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	617901	55.5404	1870
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	724197	53.5582	1800
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	360645	32.6478	1100
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.916)	824549	35.3285	1190
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.088)	209679	77.0545	2590
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	1025700	44.0049	1480

ION RATIO REPORT

SV REPORT

Data file: s110331.d
Report Date: 12/04/2009 07:32
Lab. ID: 241615016 SampleType: SAMPLE
Injection Date: 03-DEC-2009 22:13
Operator: AMY Instrument: MSD1.i
Sample Info: |241615016|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	33968	3.64	3.70	80-120	100	(T)
93	263	3.49	3.72	409-469	1	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	50525	4.28	4.16	80-120	100	(T)
42	31886	4.28	4.16	48-108	63	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	170914	6.03	5.80	80-120	100	(T)
164	974510	6.03	5.80	0- 40	570	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	124208	6.02	5.85	80-120	100	(T)
63	1470	6.03	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	124208	6.02	6.13	80-120	100	(T)
89	1342	6.03	6.13	33- 93	1	(QT)
63	1470	6.03	6.13	16- 76	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	12593	6.56	6.40	80-120	100	(T)
165	13053	6.56	6.40	64-124	104	(T)
167	4168	6.56	6.40	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	12663	6.56	6.70	80-120	100	(T)
141	83514	6.56	6.70	47-107	659	(QT)
250	25323	6.56	6.70	68-128	200	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110331.d
Lab Smp Id: 241615016 Client Smp ID: RE03-09-14257
Inj Date : 03-DEC-2009 22:13
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615016|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	1.10350	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2501109	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.781	577160	9.23045751	311	0		0	10
Unknown Aldol Condensate				CAS #:			
2.945	560615	8.96586436	302	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110331.d

Date : 03-DEC-2009 22:13

Client ID: RE03-09-14257

Sample Info: !241615016!927155!1!SVMF!1!LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20

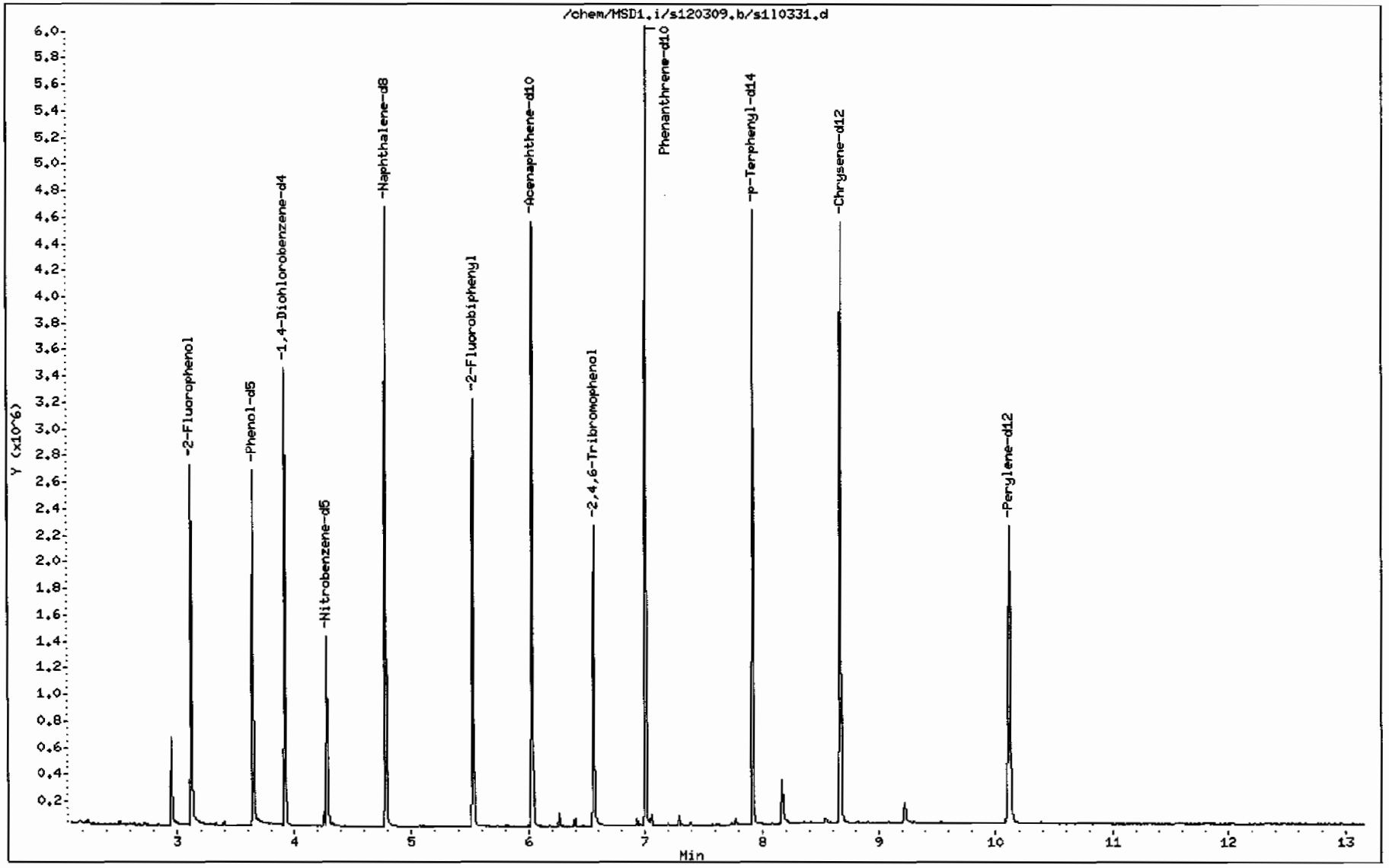

Data File: /chem/MSD1.i/s120309.b/s110331.d

Date : 03-DEC-2009 22:13

Client ID: RE03-09-14257

Instrument: MSD1.i

Sample Info: |2416150161927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanal, 2-methyl-	78-84-2	NIST05.L	669	22	C4H8O	72
Propanal, 2-methyl-	78-84-2	NIST05.L	671	22	C4H8O	72
Butanenitrile, 4-chloro-	628-20-6	NIST05.L	4424	17	C4H6ClN	103

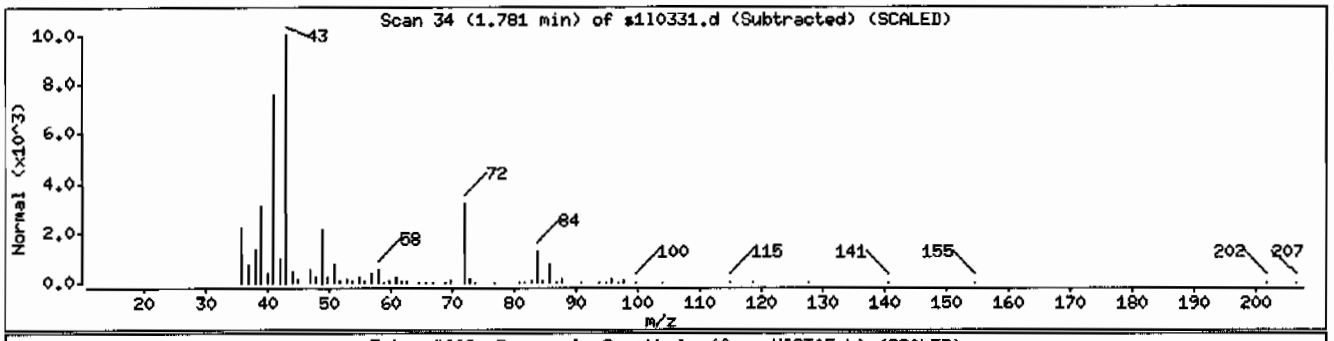

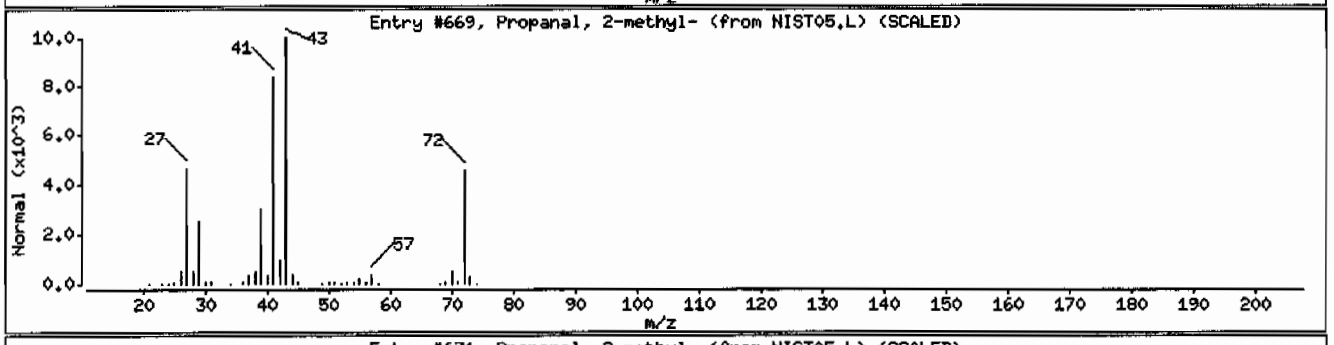

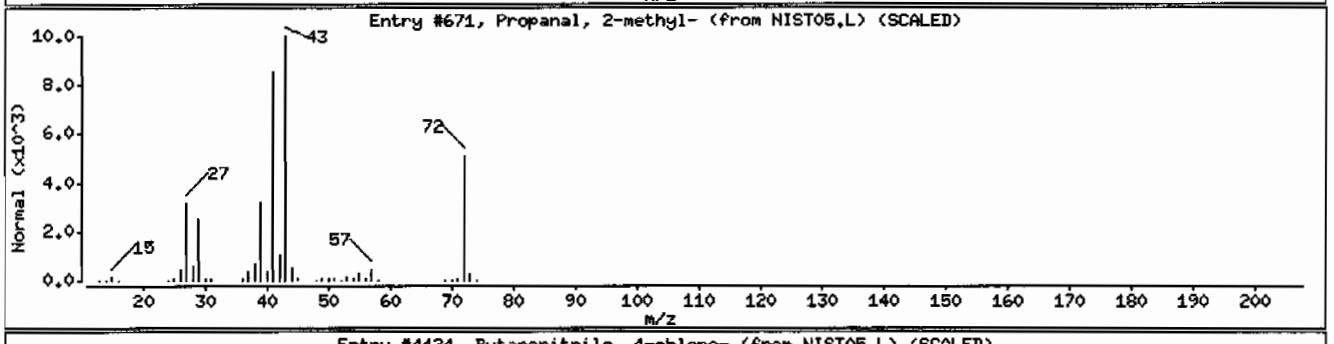

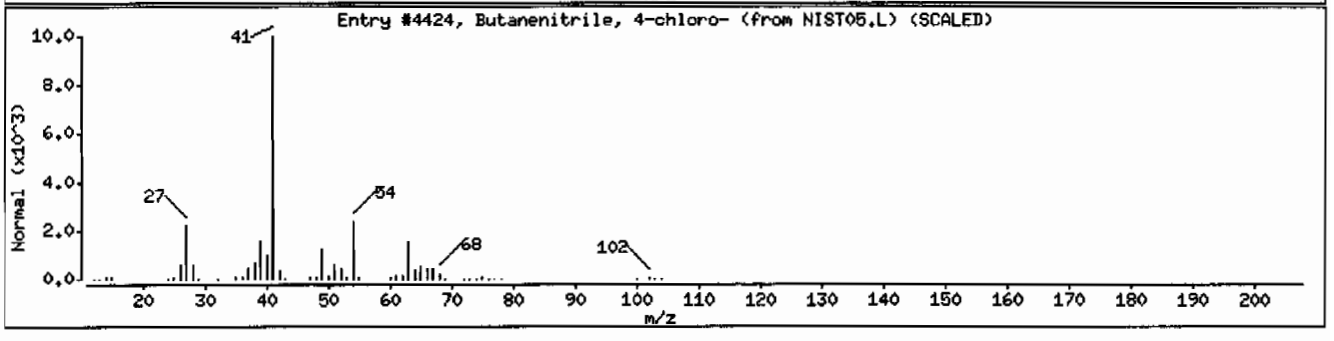

Data File: /chem/MSD1.i/s120309.b/s110331.d

Date : 03-DEC-2009 22:13

Client ID: RE03-09-14257 Instrument: MSD1.i

Sample Info: |24161501619271551|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141

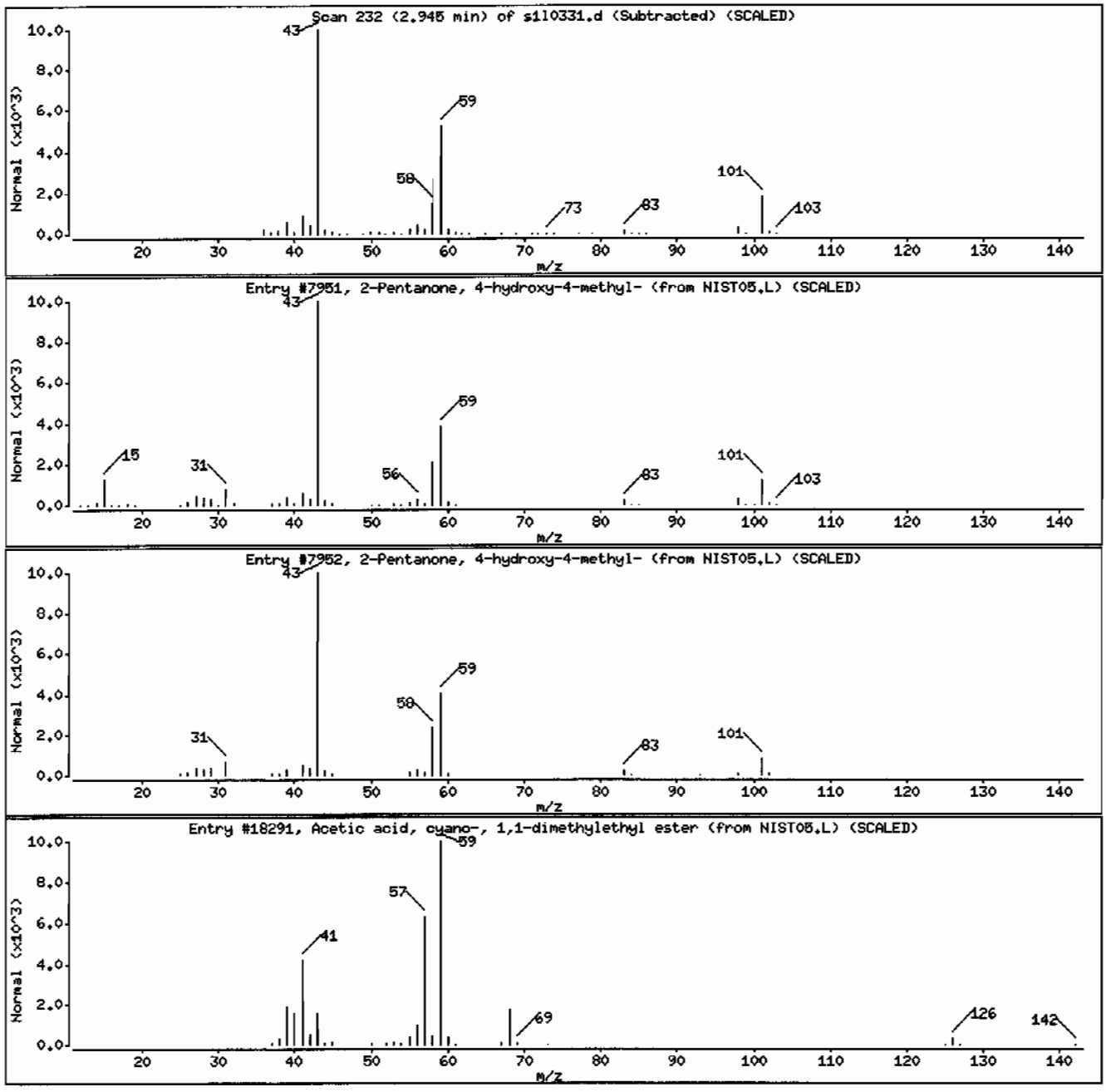

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615018	Date Received:	11/21/2009 09:00	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2729	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:36	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s1l0332.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.8	364
108-95-2	Phenol	U	364	ug/kg	72.8	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.8	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.8	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.8	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.8	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.0	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.8	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.8	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.8	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.8	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.8	364
95-48-7	o-Cresol	U	364	ug/kg	72.8	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.8	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.8	364
78-59-1	Isophorone	U	364	ug/kg	72.8	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.8	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	127	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.8	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.8	364
65-85-0	Benzoic acid	U	728	ug/kg	182	728
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.8	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.8	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.28	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.8	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.8	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.8	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	364	ug/kg	72.8	364
99-09-2	3-Nitroaniline	U	364	ug/kg	72.8	364

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615018	Date Received:	11/21/2009 09:00	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2729	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:36	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s110332.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	364	ug/kg	72.8	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	728	ug/kg	138	728
132-64-9	Dibenzofuran	U	364	ug/kg	72.8	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.8	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.8	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.8	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	p-Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.8	364
122-66-7	Azobenzene	U	364	ug/kg	72.8	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.8	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.8	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.28	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.8	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.8	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.8	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.8	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.8	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	189	ug/kg		J
	Unknown Aldol Condensate	2.95	398	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110332.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 03-DEC-2009 22:36
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615018|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	8.61540	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	405157	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1606966	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	934284	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1631579	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1348052	40.0000	
* 98 Perylene-d12	264	10.110	10.127	(1.000)	935485	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	630498	59.5791	2170
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	750135	58.3215	2120
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	350028	33.0525	1200
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	856001	38.2552	1390
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	234385	89.8421	3270
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	1014668	47.9518	1740

ION RATIO REPORT

SV REPORT

Data file: s110332.d
Report Date: 12/04/2009 07:33
Lab. ID: 241615018 SampleType: SAMPLE
Injection Date: 03-DEC-2009 22:36
Operator: AMY Instrument: MSD1.i
Sample Info: |241615018|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	33407	3.64	3.70	80-120	100	(T)
93	229	3.69	3.72	409-469	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	48033	4.28	4.16	80-120	100	(T)
42	29727	4.27	4.16	48-108	62	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	166654	6.03	5.80	80-120	100	(T)
164	934284	6.02	5.80	0- 40	561	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	118247	6.02	5.85	80-120	100	(T)
63	1319	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	118247	6.02	6.13	80-120	100	(T)
89	1579	6.02	6.13	33- 93	1	(QT)
63	1319	6.02	6.13	16- 76	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	14299	6.56	6.40	80-120	100	(T)
165	14200	6.56	6.40	64-124	99	(T)
167	4547	6.56	6.40	0- 43	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	13280	6.56	6.70	80-120	100	(T)
141	90060	6.56	6.70	47-107	678	(QT)
250	26356	6.56	6.70	68-128	198	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	1567	9.67	9.66	80-120	100	( )
253	647	9.67	9.66	0- 52	41	( )
125	372	9.67	9.66	0- 45	24	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110332.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 03-DEC-2009 22:36
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615018|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	8.61540	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2387757	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.781	309834	5.19036819	189	0		0	10
Unknown Aldol Condensate				CAS #:			
2.946	652970	10.9386322	398	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110332.d
Date : 03-DEC-2009 22:36
Client ID: RE03-10-2729
Sample Info: |241615018|927155|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

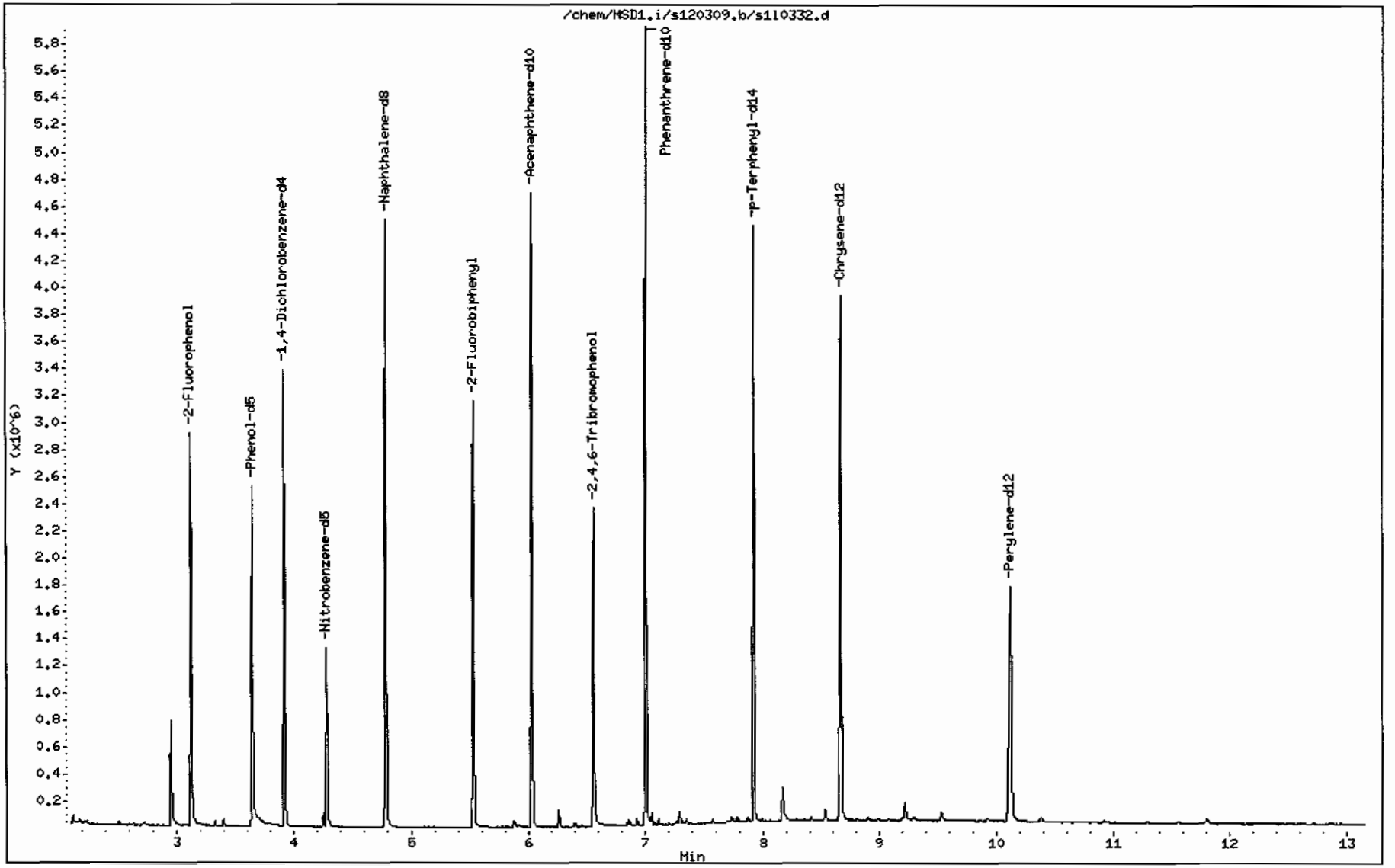

Data File: /chem/MSD1.i/s120309.b/s110332.d

Page 1

Date : 03-DEC-2009 22:36

Client ID: RE03-10-2729

Instrument: MSD1.i

Sample Info: |24161501819271551|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanal, 2-methyl-	78-84-2	NIST05.L	671	11	C4H8O	72
2-Pentanone	107-87-9	NIST05.L	1683	10	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	9	C5H10O	86

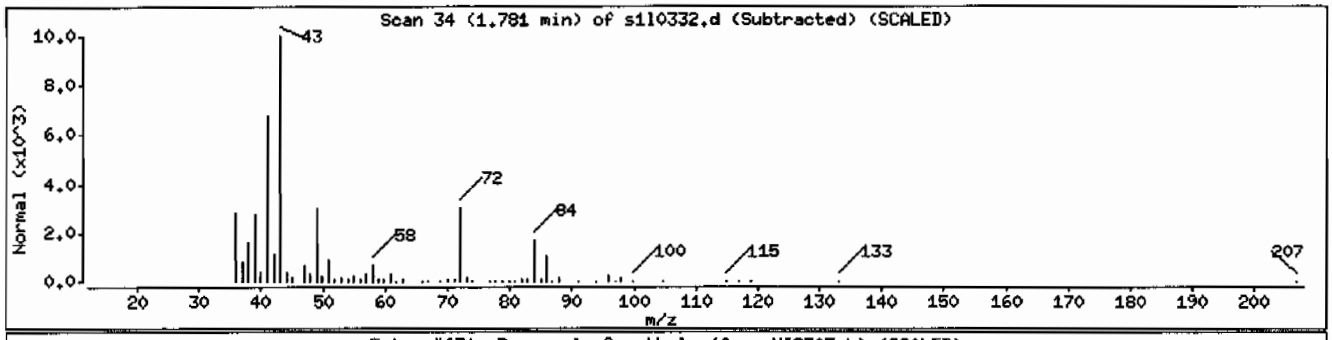

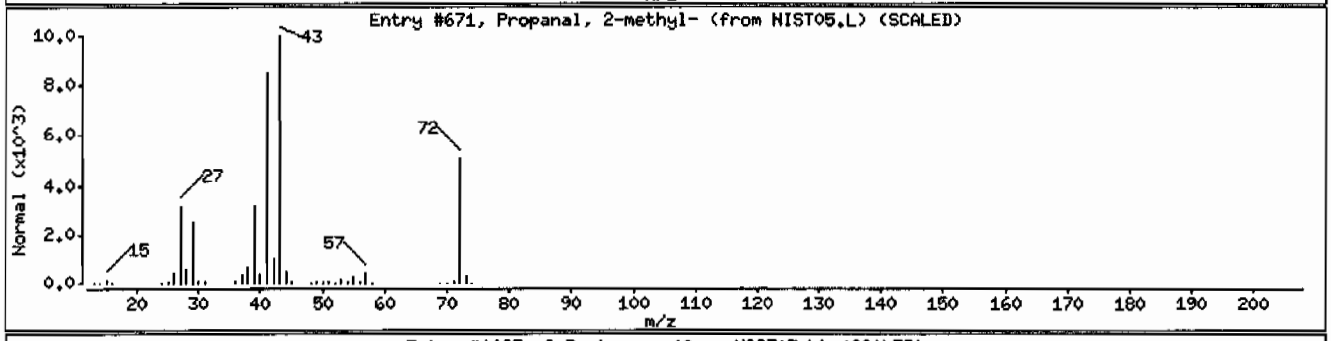

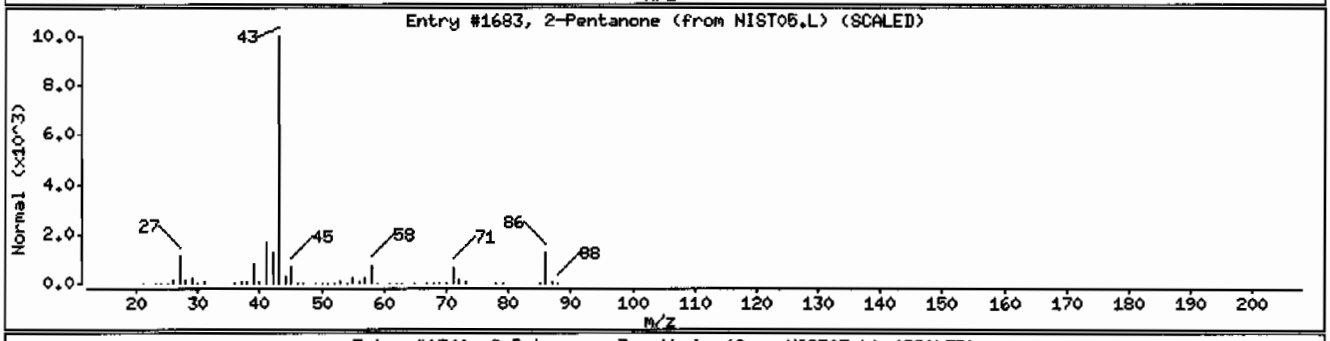

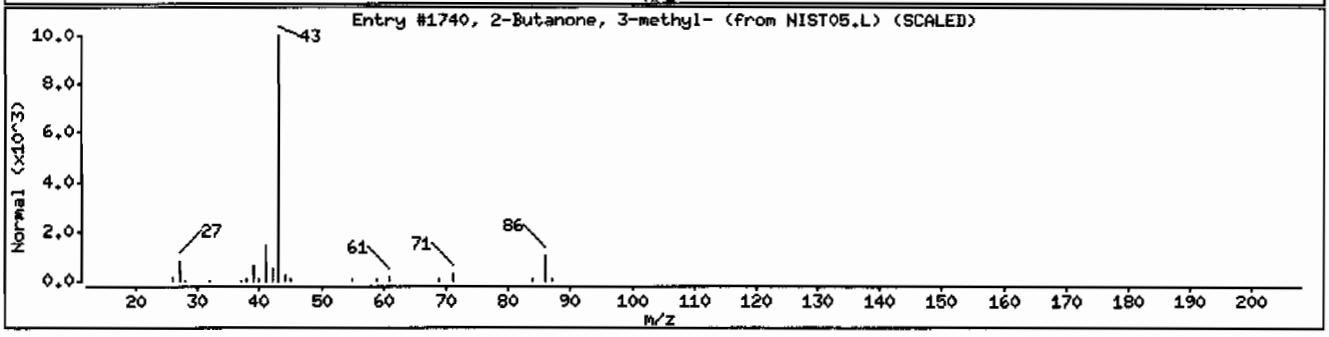

Data File: /chem/MSD1.i/s120309.b/s110332.d

Date : 03-DEC-2009 22:36

Client ID: RE03-10-2729

Instrument: MSD1.i

Sample Info: |24161501819271551|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

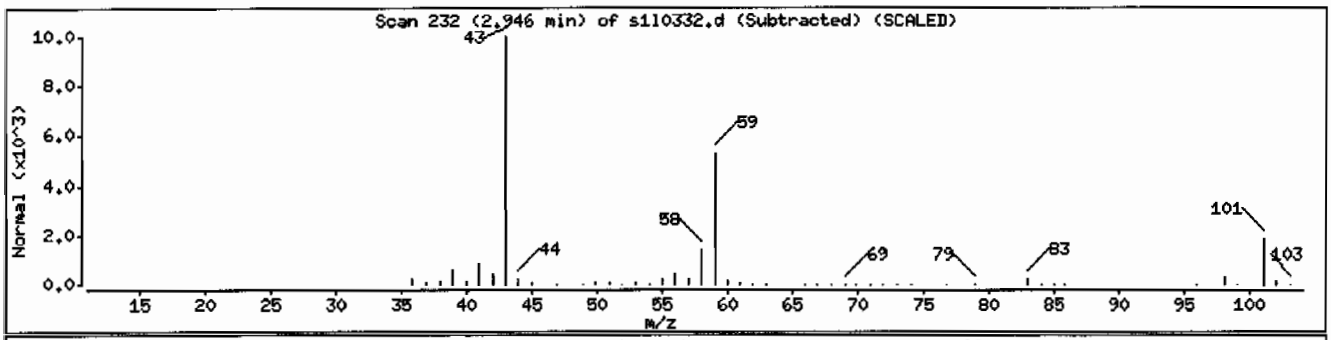

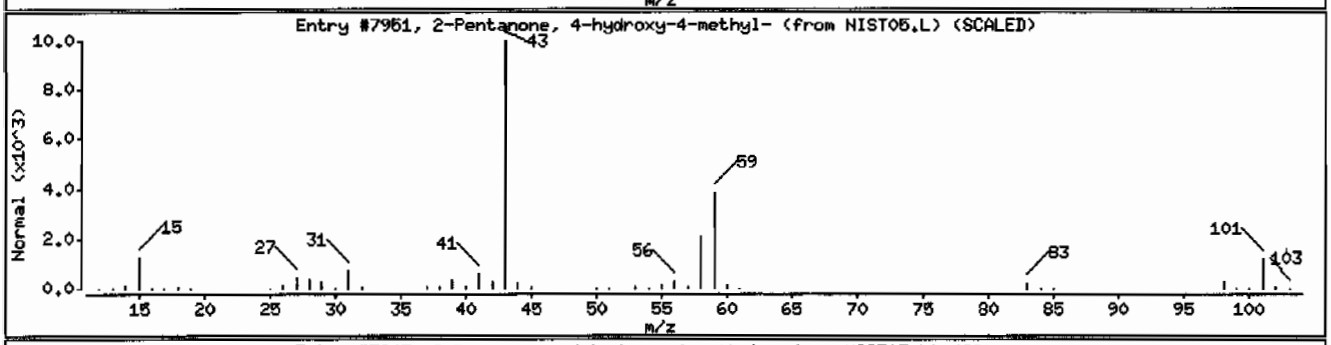

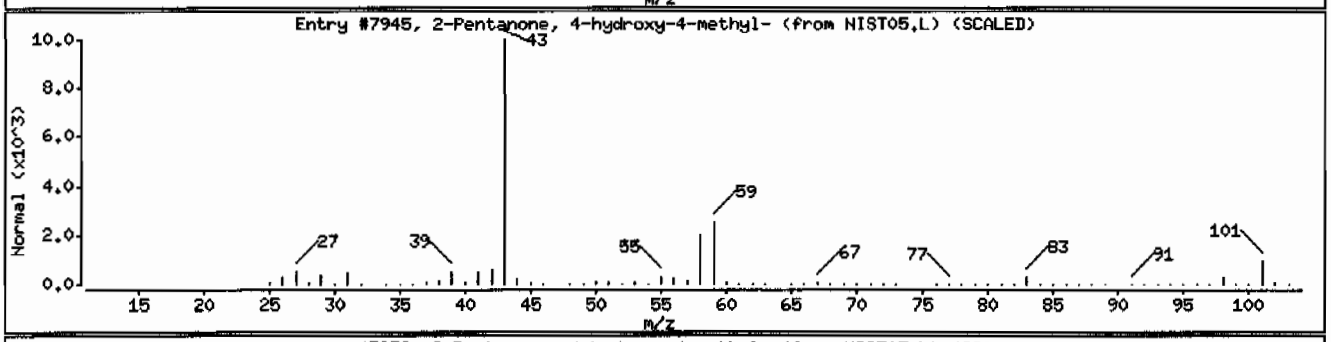

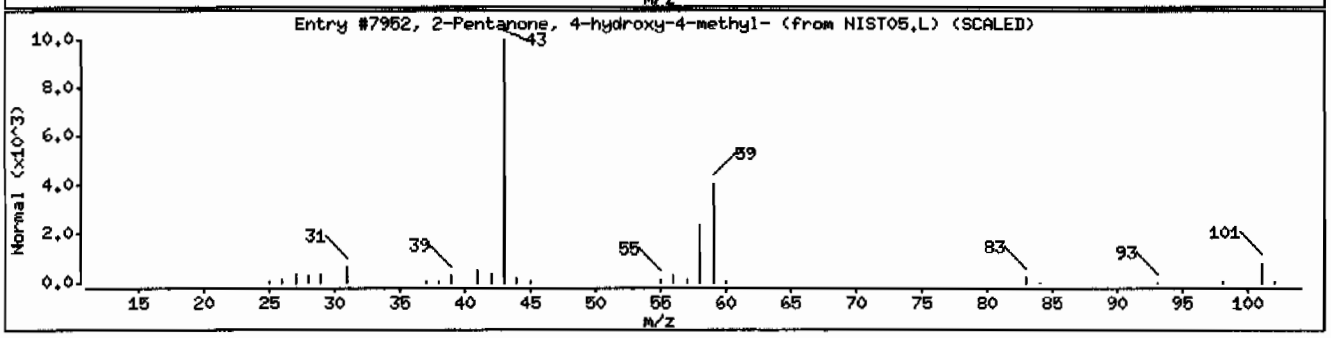

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615020	Date Received:	11/21/2009 09:00	%Moisture:	4.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6969	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:59	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s1l0333.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.7	348
108-95-2	Phenol	U	348	ug/kg	69.7	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.7	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.7	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.7	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.7	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	87.1	348
129-00-0	Pyrene	U	34.8	ug/kg	10.5	34.8
110-86-1	Pyridine	U	348	ug/kg	69.7	348
62-53-3	Aniline	U	348	ug/kg	105	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.7	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.7	348
100-51-6	Benzyl alcohol	U	348	ug/kg	105	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.7	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.7	348
95-48-7	o-Cresol	U	348	ug/kg	69.7	348
65794-96-9	m,p-Cresols	U	348	ug/kg	105	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.7	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.7	348
78-59-1	Isophorone	U	348	ug/kg	69.7	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.7	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.7	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.7	348
65-85-0	Benzoic acid	U	697	ug/kg	174	697
91-20-3	Naphthalene	U	34.8	ug/kg	10.5	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.7	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.7	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.97	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.7	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.7	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.7	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.7	348
99-09-2	3-Nitroaniline	U	348	ug/kg	69.7	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615020	Date Received:	11/21/2009 09:00	%Moisture:	4.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6969	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 22:59	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	s110333.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.7	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.5	34.8
51-28-5	2,4-Dinitrophenol	U	697	ug/kg	132	697
132-64-9	Dibenzofuran	U	348	ug/kg	69.7	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.7	348
86-73-7	Fluorene	U	34.8	ug/kg	10.5	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.7	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.7	348
100-01-6	4-Nitroaniline	U	348	ug/kg	105	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.7	348
122-66-7	Azobenzene	U	348	ug/kg	69.7	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.7	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.7	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.5	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.97	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.7	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.5	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.7	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.5	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	105	348
218-01-9	Chrysene	U	34.8	ug/kg	10.5	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	348	ug/kg	69.7	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.7	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.5	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.5	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.5	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.5	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.5	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.5	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.7	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.78	317	ug/kg		J
	Unknown Aldol Condensate	2.95	398	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 22:59	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	s110333.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-	8.16	192	ug/kg	91	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110333.d
Lab Smp Id: 241615020 Client Smp ID: RE03-10-6969
Inj Date : 03-DEC-2009 22:59
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615020|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	4.86100	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	400255	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1581500	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	923794	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1632228	40.0000	
* 91 Chrysene-d12	240	8.663	8.675	(1.000)	1417157	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1077022	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	585840	56.0371	1950
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	681738	53.6529	1870
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	331614	31.8179	1110
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	780515	35.2778	1230
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	199594	77.3751	2700
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.914)	1017922	45.7598	1590

ION RATIO REPORT

SV REPORT

Data file: s110333.d
Report Date: 12/04/2009 07:33
Lab. ID: 241615020 SampleType: SAMPLE
Injection Date: 03-DEC-2009 22:59
Operator: AMY Instrument: MSD1.i
Sample Info: |241615020|927155|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270|WBN091106-10|
Comment:
Method used: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-644
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	31113	3.64	3.70	80-120	100	(T)
93	121	3.59	3.72	409-469	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	46930	4.28	4.16	80-120	100	(T)
42	28615	4.28	4.16	48-108	61	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	163830	6.03	5.80	80-120	100	(T)
164	923794	6.02	5.80	0- 40	564	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	119722	6.02	5.85	80-120	100	(T)
63	1166	6.02	5.85	46-106	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	119722	6.02	6.13	80-120	100	(T)
89	1403	6.02	6.13	33- 93	1	(QT)
63	1166	6.02	6.13	16- 76	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	12107	6.56	6.40	80-120	100	(T)
165	12793	6.56	6.40	64-124	106	(T)
167	4296	6.56	6.40	0- 43	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	12644	6.56	6.70	80-120	100	(T)
141	81348	6.56	6.70	47-107	643	(QT)
250	23442	6.56	6.70	68-128	185	(QT)
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	251	9.66	9.66	80-120	100	( )
253	154	9.67	9.66	0- 52	61	(Q)
125	772	9.54	9.66	0- 45	307	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110333.d
Lab Smp Id: 241615020 Client Smp ID: RE03-10-6969
Inj Date : 03-DEC-2009 22:59
Operator : AMY Inst ID: MSD1.i
Smp Info : |241615020|927155|1|SVMF|1|LANL
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 15:41 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	4.86100	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2372777	40.000
* 91 Chrysene-d12	8.663	3824755	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.775	539566	9.09593409	317	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.946	676992	11.4126437	398	0		0	10
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.163	525767	5.49856493	192	91	NIST05.L	112657	91

Data File: /chem/MSD1.i/s120309.b/s110333.d
Date : 03-DEC-2009 22:59
Client ID: RE03-10-6969
Sample Info: 1241615020192715511ISVHF11ILANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AHY
Column diameter: 0.20

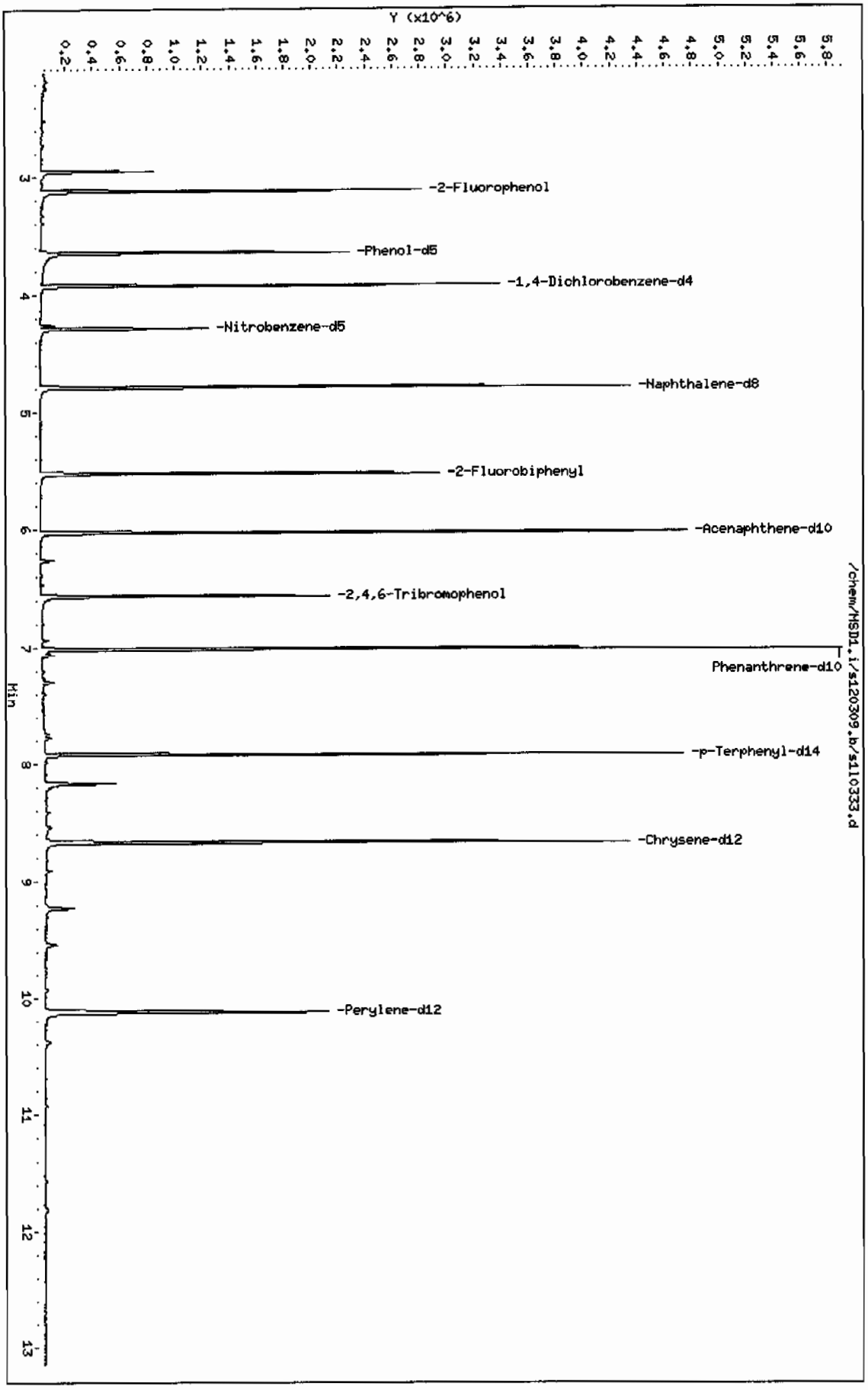

Data File: /chem/MSD1.i/s120309.b/s110333.d

Date : 03-DEC-2009 22:59

Client ID: RE03-10-6969 Instrument: MSD1.i

Sample Info: 1241615020192715511ISVMF11LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone	107-87-9	NIST05.L	1683	10	C5H10O	86
3-Buten-2-one, 3-methyl-	814-78-8	NIST05.L	1403	10	C5H8O	84
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	10	C5H10O	86

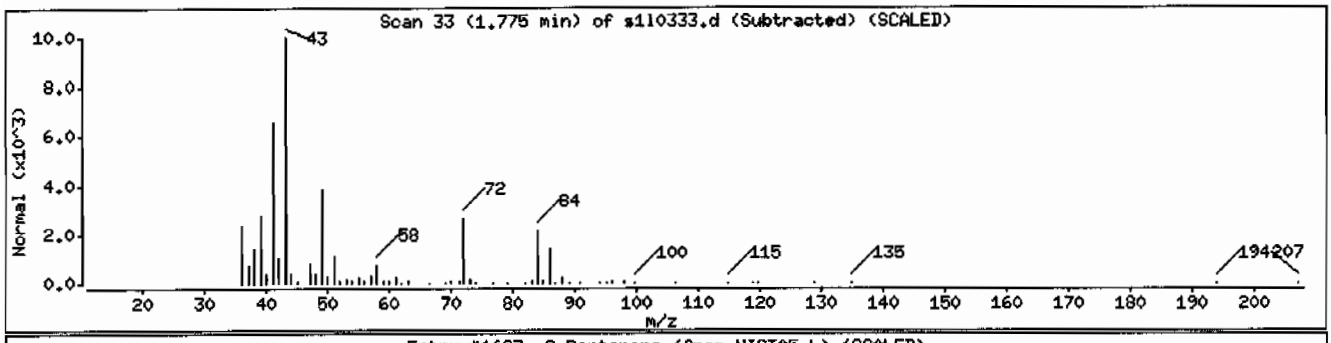

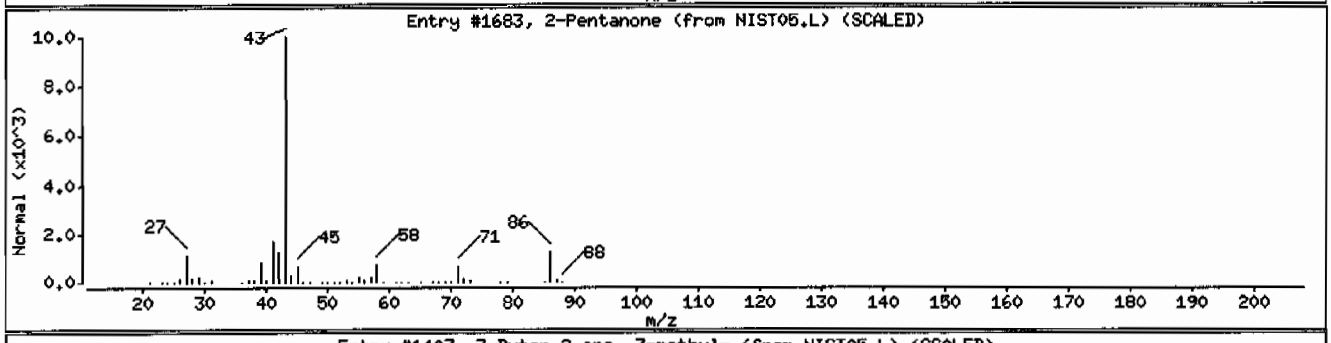

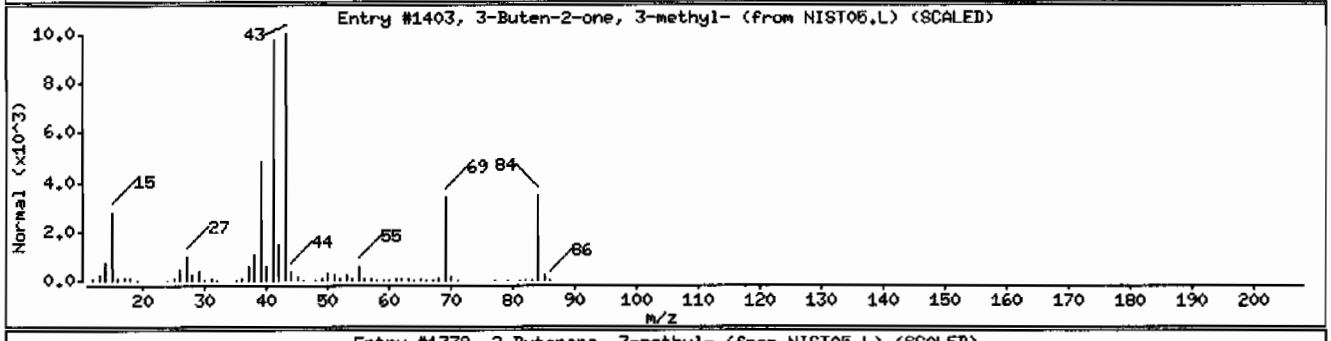

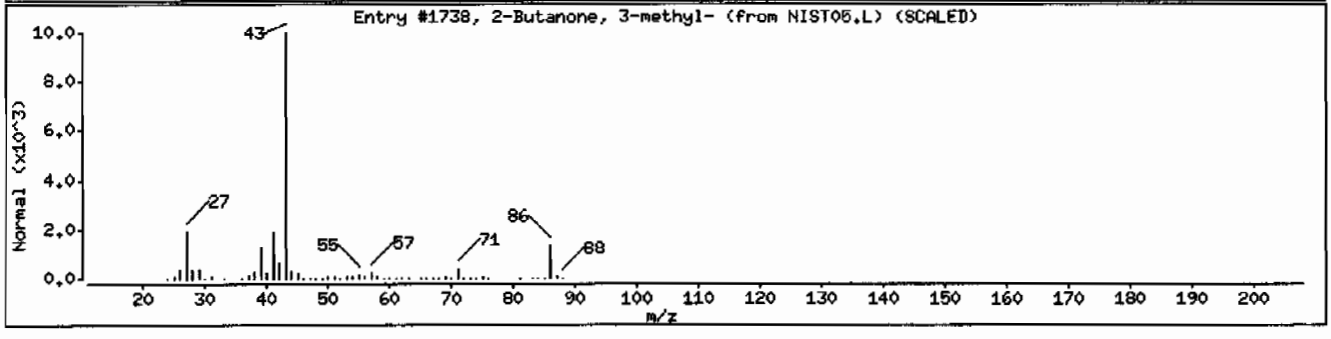

Data File: /chem/MSD1.i/s120309.b/s110333.d

Date : 03-DEC-2009 22:59

Client ID: RE03-10-6969 Instrument: MSD1.i

Sample Info: |24161502019271551|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116

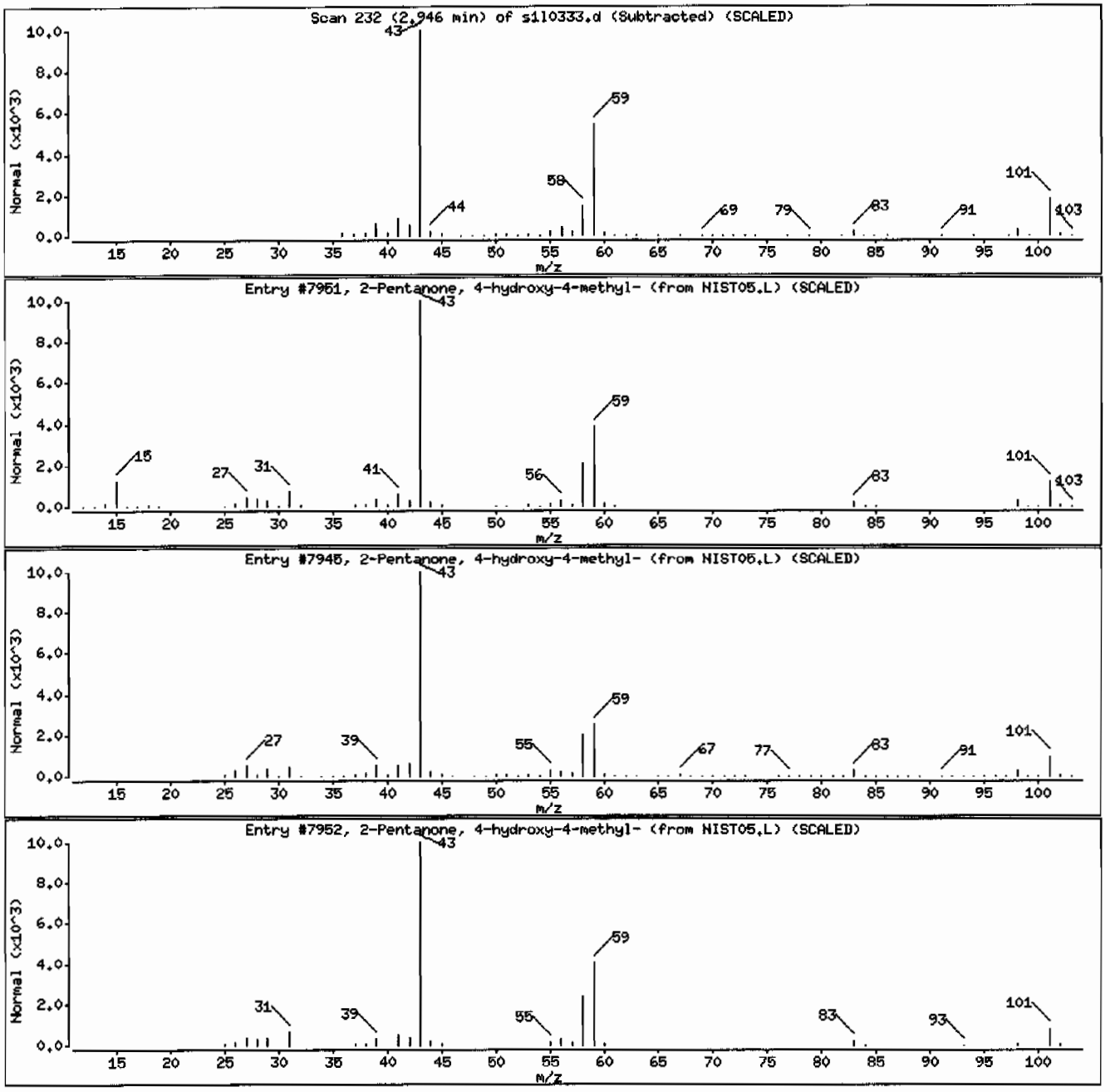

Data File: /chem/MSD1.i/s120309.b/s110333.d

Date : 03-DEC-2009 22:59

Client ID: RE03-10-6969

Instrument: MSD1.i

Sample Info: |2416150201927155|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	91	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	83	C18H35NO	281
Heptanamide, 4-ethyl-5-methyl-	54789-40-1	NIST05.L	37060	64	C10H21NO	171

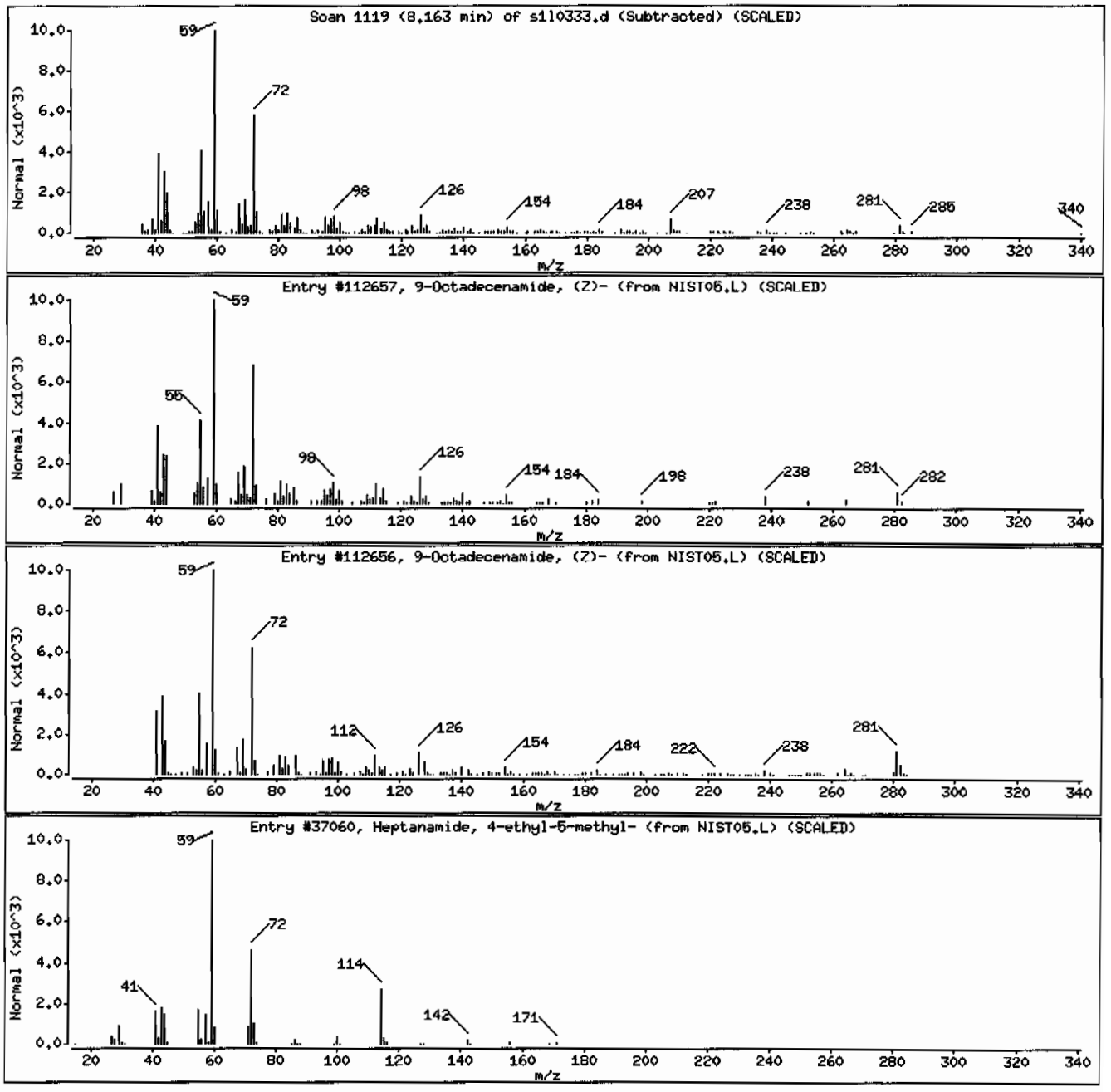

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghl)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 03-Dec-2009 14:34

Calibration History

Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Start Cal Date: 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
14-NOV-2009 18:22	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1203.d
Cal Level: 2 , Cal Amount: 10.00000		
17-NOV-2009 16:56	nev	/chem/MSD1.i/s111409.b/s1k1262.d
15-NOV-2009 20:55	hex	/chem/MSD1.i/s111409.b/s1k1229.d
15-NOV-2009 18:11	pest	/chem/MSD1.i/s111409.b/s1k1222.d
15-NOV-2009 15:28	ap12	/chem/MSD1.i/s111409.b/s1k1215.d
14-NOV-2009 18:51	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1204.d
Cal Level: 3 , Cal Amount: 20.00000		
17-NOV-2009 17:19	nev	/chem/MSD1.i/s111409.b/s1k1263.d
15-NOV-2009 21:18	hex	/chem/MSD1.i/s111409.b/s1k1230.d
15-NOV-2009 18:35	pest	/chem/MSD1.i/s111409.b/s1k1223.d
15-NOV-2009 15:51	ap12	/chem/MSD1.i/s111409.b/s1k1216.d
14-NOV-2009 19:21	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1205.d
Cal Level: 4 , Cal Amount: 40.00000		
17-NOV-2009 17:42	nev	/chem/MSD1.i/s111409.b/s1k1264.d
15-NOV-2009 21:42	hex	/chem/MSD1.i/s111409.b/s1k1231.d
15-NOV-2009 18:58	pest	/chem/MSD1.i/s111409.b/s1k1224.d
15-NOV-2009 16:14	ap12	/chem/MSD1.i/s111409.b/s1k1217.d
14-NOV-2009 19:50	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1206.d
Cal Level: 5 , Cal Amount: 50.00000		
17-NOV-2009 18:05	nev	/chem/MSD1.i/s111409.b/s1k1265.d
15-NOV-2009 22:06	hex	/chem/MSD1.i/s111409.b/s1k1232.d
15-NOV-2009 19:21	pest	/chem/MSD1.i/s111409.b/s1k1225.d
15-NOV-2009 16:38	ap12	/chem/MSD1.i/s111409.b/s1k1218.d
14-NOV-2009 20:19	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1207.d
Cal Level: 6 , Cal Amount: 80.00000		
17-NOV-2009 18:28	nev	/chem/MSD1.i/s111409.b/s1k1266.d
15-NOV-2009 22:30	hex	/chem/MSD1.i/s111409.b/s1k1233.d
15-NOV-2009 19:45	pest	/chem/MSD1.i/s111409.b/s1k1226.d
15-NOV-2009 17:01	ap12	/chem/MSD1.i/s111409.b/s1k1219.d
14-NOV-2009 20:47	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1208.d
Cal Level: 7 , Cal Amount: 100.00000		

17-NOV-2009 18:52	nev	/chem/MSD1.i/s111409.b/s1k1267.d
15-NOV-2009 22:53	hex	/chem/MSD1.i/s111409.b/s1k1234.d
15-NOV-2009 20:09	pest	/chem/MSD1.i/s111409.b/s1k1227.d
15-NOV-2009 17:24	ap12	/chem/MSD1.i/s111409.b/s1k1220.d
14-NOV-2009 21:16	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1209.d

Cal Level: 8 , Cal Amount: 120.00000		
17-NOV-2009 19:15	nev	/chem/MSD1.i/s111409.b/s1k1268.d
15-NOV-2009 20:31	pest	/chem/MSD1.i/s111409.b/s1k1228.d
15-NOV-2009 17:47	ap12	/chem/MSD1.i/s111409.b/s1k1221.d
14-NOV-2009 21:45	MEGAIICARE	/chem/MSD1.i/s111409.b/s1k1210.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 12:43	ap12	/chem/MSD1.i/s120309.b/s110307.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 12:43	241773	/chem/MSD1.i/s120309.b/s110307-DSSI.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 12:43	241773	/chem/MSD1.i/s120309.b/s110307-DSSI.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 12:43	10-644	/chem/MSD1.i/s120309.b/s110307-LANL.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 12:43	10-644	/chem/MSD1.i/s120309.b/s110307-LANL.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 12:43	241773	/chem/MSD1.i/s120309.b/s110307-DSSI.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 13:30	pest	/chem/MSD1.i/s120309.b/s110309.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 13:07	nev	/chem/MSD1.i/s120309.b/s110308.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 11:56	241773	/chem/MSD1.i/s120309.b/s110306-DSSI.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 11:56	MEGAIICARE	/chem/MSD1.i/s120309.b/s110306.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 08:47	MEGAIICARE	/chem/MSD1.i/s120309.b/s110303.d
Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 08:07	MEGAIICARE	/chem/MSD1.i/s120309.b/s110302.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Calibration File Names:
Level 1: /chem/MSD1.i/s111409.b/s1k1203.d
Level 2: /chem/MSD1.i/s111409.b/s1k1262.d
Level 3: /chem/MSD1.i/s111409.b/s1k1263.d
Level 4: /chem/MSD1.i/s111409.b/s1k1264.d
Level 5: /chem/MSD1.i/s111409.b/s1k1265.d
Level 6: /chem/MSD1.i/s111409.b/s1k1266.d
Level 7: /chem/MSD1.i/s111409.b/s1k1267.d
Level 8: /chem/MSD1.i/s111409.b/s1k1268.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.54039	0.59425	0.56483	0.56773	0.57115					
	0.58358	0.54985					AVRG		0.56740		3.25055
2 Pyridine	+++++	0.93895	1.06231	1.03607	0.88870	0.86312					
	1.01434	0.86615					AVRG		0.95281		8.83991
4 Aniline	+++++	0.52437	0.56877	0.55954	0.56752	0.56439					
	0.57920	0.54312					AVRG		0.55813		3.31324
209 Benzaldehyde	+++++	0.85863	0.89515	0.82459	0.84178	+++++					
	0.78498	0.73887					AVRG		0.82400		6.72378
6 Phenol	+++++	1.30044	1.37922	1.37450	1.34330	1.33206					
	1.36293	1.27353					AVRG		1.33800		2.93989

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Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.97066	0.92013	0.97374	0.95071	0.94120	0.92474					
	0.92138	0.84393					AVRG		0.93081		4.39644
8 2-Chlorophenol	+++++	1.10018	1.18374	1.15316	1.14675	1.13425					
	1.15576	1.08633					AVRG		1.13717		2.96542
203 n-Decane	+++++	1.60577	1.68138	1.52755	1.45137	1.35767					
	1.27260	1.12485					AVRG		1.43160		13.59167
9 1,3-Dichlorobenzene	+++++	1.34153	1.44138	1.36782	1.35778	1.32788					
	1.29449	1.20929					AVRG		1.33431		5.33878
11 1,4-Dichlorobenzene	+++++	1.33212	1.41388	1.35420	1.32607	1.29299					
	1.26993	1.16675					AVRG		1.30799		5.91221
12 Benzyl alcohol	+++++	0.65002	0.69243	0.70051	0.67929	0.68651					
	0.73179	0.69932					AVRG		0.69141		3.57264
13 1,2-Dichlorobenzene	+++++	1.29605	1.34639	1.26381	1.21944	1.15866					
	1.13607	1.03545					AVRG		1.20798		8.78247
14 bis(2-Chloroisopropyl)ether	+++++	2.32509	2.42028	2.31148	2.26329	2.15456					
	2.11135	1.93355					AVRG		2.21709		7.35350
15 o-Cresol	+++++	0.90774	0.91911	0.87727	0.85502	0.81471					
	0.80779	0.74384					AVRG		0.84650		7.32849

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Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.16435	1.20208	1.12556	1.15316	+++++					
	1.08411	1.04352					AVRG		1.12880		5.09017
17 N-Nitrosodipropylamine	0.81293	0.75653	0.80116	0.77693	0.78822	0.71050					
	0.77452	0.67823					AVRG		0.76238		6.05014
18 m,p-Cresols	+++++	1.13181	1.16963	1.17353	1.13669	1.14618					
	1.18516	1.11948					AVRG		1.15179		2.12873
19 Hexachloroethane	+++++	0.47556	0.50281	0.48245	0.48088	0.46955					
	0.46206	0.42193					AVRG		0.47075		5.31168
21 Nitrobenzene	+++++	0.28437	0.30442	0.28298	0.28351	0.27052					
	0.25822	0.23858					AVRG		0.27466		7.74785
22 Isophorone	+++++	0.49709	0.51707	0.49540	0.49196	0.47802					
	0.46730	0.41658					AVRG		0.48049		6.70733
23 2-Nitrophenol	+++++	0.14839	0.15989	0.15609	0.15578	0.14421					
	0.13558	0.12065					AVRG		0.14580		9.49803
24 2,4-Dimethylphenol	+++++	0.25377	0.24260	0.23030	0.24361	0.23323					
	0.21824	0.21248					AVRG		0.23346		6.25831
25 bis(2-Chloroethoxy)methane	+++++	0.32659	0.33857	0.32017	0.31630	0.30271					
	0.29085	0.27012					AVRG		0.30933		7.51487

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Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.21991	0.23451	0.22671	0.22578	0.22138					
	0.21025	0.19507					AVRG		0.21909		5.89795
27 Benzoic acid	+++++	+++++	0.12652	0.15647	0.17043	0.17939					
	0.17420	0.15820					AVRG		0.16087		11.85426
28 1,2,4-Trichlorobenzene	+++++	0.25324	0.26639	0.25283	0.25336	0.23817					
	0.22476	0.20597					AVRG		0.24210		8.56147
30 Naphthalene	1.00192	0.89427	0.93446	0.86563	0.83102	0.76369					
	0.73215	0.65539					AVRG		0.83482		13.59329
204 alpha-Terpineol	+++++	0.21791	0.22387	0.20802	0.18690	0.18694					
	0.18377	0.16707					AVRG		0.19635		10.50339
31 4-Chloroaniline	+++++	0.39677	0.40757	0.39487	0.39324	0.37614					
	0.36195	0.33806					AVRG		0.38123		6.35973
189 Caprolactam	+++++	0.06846	0.07656	0.07363	0.07653	+++++					
	0.06782	0.06711					AVRG		0.07169		6.15581
32 Hexachlorobutadiene	+++++	0.13511	0.14100	0.13045	0.12864	0.12021					
	0.11205	0.10277					AVRG		0.12432		10.80535
33 4-Chloro-3-methylphenol	+++++	0.21530	0.22699	0.22627	0.22610	0.21202					
	0.21204	0.17967					AVRG		0.21406		7.75567

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Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.63189	0.59091	0.61031	0.56805	0.55492	0.51261					
	0.47801	0.44368					AVRG		0.54880		11.97650
35 1-Methylnaphthalene	0.57039	0.52594	0.54774	0.50754	0.49716	0.46294					
	0.43668	0.39804					AVRG		0.49330		11.71827
36 Hexachlorocyclopentadiene	+++++	0.10604	0.13033	0.13014	0.13942	0.12687					
	0.11688	0.10523					AVRG		0.12213		10.70285
208 1,1'-Biphenyl	+++++	1.17951	1.24377	1.14549	1.13585	+++++					
	1.04839	0.97002					AVRG		1.12050		8.68804
205 2,3-Dichloroaniline	+++++	0.46645	0.48933	0.47427	0.46997	0.44649					
	0.43405	0.39749					AVRG		0.45401		6.79831
37 2,4,6-Trichlorophenol	+++++	0.26977	0.29094	0.27785	0.27904	0.25743					
	0.25024	0.23713					AVRG		0.26606		7.03474
38 2,4,5-Trichlorophenol	+++++	0.26905	0.31036	0.32159	0.23043	0.31171					
	0.26900	0.26816					AVRG		0.28290		11.57703
40 2-Chloronaphthalene	1.06866	1.01017	1.06218	1.02382	1.00740	0.95458					
	0.92971	0.84336					AVRG		0.98748		7.61587
42 o-Nitroaniline	+++++	0.29397	0.31274	0.31408	0.31185	0.30784					
	0.31350	0.28932					AVRG		0.30619		3.33957

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	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.27156	0.28234	0.28082	0.27143	0.25979					
	0.28219	0.24573					AVRG		0.27055		5.03620
43 Dimethylphthalate	+++++	1.09522	1.14427	1.12702	1.11254	1.08188					
	1.07235	0.99634					AVRG		1.08995		4.43176
44 2,6-Dinitrotoluene	+++++	0.26660	0.28518	0.28098	0.27933	0.27123					
	0.26992	0.24768					AVRG		0.27156		4.59036
45 Acenaphthylene	1.62784	1.60004	1.67564	1.59865	1.57380	1.47905					
	1.44269	1.32968					AVRG		1.54092		7.42836
47 Acenaphthene	1.00456	0.99034	1.02942	0.97302	0.94853	0.86787					
	0.82882	0.73816					AVRG		0.92259		10.97291
48 2,4-Dinitrophenol	+++++	+++++	0.08843	0.11349	0.11534	0.11082					
	0.11305	0.10198					AVRG		0.10718		9.63049
49 Dibenzofuran	+++++	1.40383	1.45777	1.40759	1.36431	1.30285					
	1.24923	1.15395					AVRG		1.33422		7.92638
50 2,4-Dinitrotoluene	+++++	0.34056	0.36497	0.37079	0.37131	0.36633					
	0.36565	0.33990					AVRG		0.35993		3.80091
51 Diethylphthalate	+++++	1.04278	1.09197	1.06193	1.04018	0.99480					
	0.99307	0.88837					AVRG		1.01616		6.53371

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	0.13809	0.17287	0.18777	0.19477	0.20369					
	0.21665	0.20716					AVRG		0.18871		14.01343
53 Fluorene	1.22796	1.15355	1.19493	1.10753	1.06188	0.99894					
	0.97721	0.88428					AVRG		1.07578		10.93658
54 4-Chlorophenylphenylether	+++++	0.47537	0.49720	0.47503	0.46785	0.44264					
	0.43218	0.38915					AVRG		0.45420		7.92169
55 2-Methyl-4,6-dinitrophenol	+++++	0.08375	0.09608	0.10582	0.10320	0.10771					
	0.10908	0.10272					AVRG		0.10120		8.67983
56 p-Nitroaniline	+++++	0.24392	0.26348	0.26430	0.28144	0.26774					
	0.27465	0.25651					AVRG		0.26458		4.60021
133 Diphenylamine	+++++	0.55588	0.57977	0.55886	0.54789	0.52659					
	0.50269	0.46310					AVRG		0.53354		7.43632
58 1,2-Diphenylhydrazine	+++++	0.69850	0.71486	0.68099	0.66427	0.63670					
	0.61324	0.54832					AVRG		0.65098		8.77582
59 Tributylphosphate	+++++	1.22698	1.16066	1.10479	1.12684	1.06119					
	1.01440	0.96114					AVRG		1.09371		8.21068
61 4-Bromophenylphenylether	+++++	0.13960	0.14381	0.14105	0.13893	0.13903					
	0.13474	0.12486					AVRG		0.13743		4.49074

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	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.18056	0.18610	0.17775	0.16888	0.16686					
	0.15868	0.14199					AVRG		0.16869		8.86819
207 Atrazine	+++++	0.04275	0.04402	0.04191	0.04036	+++++					
	0.03698	0.03447					AVRG		0.04008		9.14364
65 Pentachlorophenol	+++++	0.08713	0.10123	0.10564	0.10198	0.10716					
	0.10688	0.09814					AVRG		0.10117		6.93558
206 n-Octadecane	+++++	0.49445	0.50531	0.45683	0.42873	0.36788					
	0.34975	+++++					AVRG		0.43383		14.85243
68 Phenanthrene	1.08140	0.97577	0.96718	0.91676	0.90684	0.85016					
	0.82329	0.75087					AVRG		0.90903		11.26824
69 Anthracene	1.05572	0.98071	1.00934	0.97561	0.92329	0.88140					
	0.83261	0.73707					AVRG		0.92447		11.24280
72 Di-n-butylphthalate	+++++	1.06714	1.12314	1.06117	1.02135	0.94081					
	0.88726	0.80148					AVRG		0.98605		11.57265
76 Fluoranthene	0.94603	0.94387	0.96313	0.92832	0.88364	0.83514					
	0.79976	0.71979					AVRG		0.87746		9.80038
77 Benzidine	+++++	0.28582	0.36970	0.35152	0.36897	+++++					
	0.43187	0.36504					AVRG		0.36215		12.90005

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	1.12921	1.08043	1.13184	1.09423	1.03887	1.05677					
	1.02924	0.94284					AVRG		1.06293		5.79953
85 Butylbenzylphthalate	+++++	0.53253	0.56219	0.50335	0.46569	0.43331					
	0.40529	+++++					AVRG		0.48372		12.38419
89 Benzo(a)anthracene	1.00602	0.91134	0.98073	0.96992	0.98002	0.96903					
	0.95763	0.89850					AVRG		0.95915		3.79585
90 3,3'-Dichlorobenzidine	+++++	0.24634	0.28908	0.28847	0.28710	+++++					
	0.28231	0.25909					AVRG		0.27540		6.60230
92 Chrysene	0.98731	0.93210	0.94599	0.88032	0.86729	0.85456					
	0.87955	0.82465					AVRG		0.89647		6.00506
93 bis(2-Ethylhexyl)phthalate	0.57061	0.72394	0.78180	0.75934	0.74451	0.72196					
	0.68855	0.63132					AVRG		0.70275		10.02985
94 Di-n-octylphthalate	+++++	1.17035	1.39716	1.40560	1.36840	1.34274					
	1.30766	1.16752					AVRG		1.30849		7.70640
95 Benzo(b)fluoranthene	21625	340509	730849	1739197	2305837	3304287					
	3978698	5127789					LINR	0.06661	1.08695		0.99870
96 Benzo(k)fluoranthene	1.03711	1.06722	1.12263	1.01575	1.02623	1.00211					
	0.97020	0.78256					AVRG		1.00298		9.96839

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	20918	319721	688146	1504125	2094282	2912657					
	3398226	3934490					LINR	-0.00385	0.87033		0.99612
99 Indeno(1,2,3-cd)pyrene	21578	336515	700258	1580353	2201480	3025334					
	3523403	4020592					LINR	-0.01092	0.89653		0.99431
100 Dibenzo(a,h)anthracene	16162	268427	581631	1325626	1846286	2532762					
	2946699	3397425					LINR	-0.00445	0.75511		0.99519
101 Benzo(ghi)perylene	0.56462	0.70452	0.77602	0.81299	0.83023	0.80394					
	0.79303	0.72783					AVRG		0.75165		11.54879
102 1,4-Dioxane	+++++	0.32550	0.33716	0.30934	0.31455	+++++					
	0.30805	0.28861					AVRG		0.31387		5.27573
103 Methyl methacrylate	+++++	0.17774	0.19107	0.17805	0.17495	+++++					
	0.17326	0.16336					AVRG		0.17640		5.08144
104 Ethyl methacrylate	+++++	0.73346	0.76622	0.70794	0.70643	+++++					
	0.69714	0.66675					AVRG		0.71299		4.73943
105 2-Picoline	+++++	1.18802	1.23130	1.15065	1.15312	+++++					
	1.12223	1.07774					AVRG		1.15384		4.58113
106 N-Nitrosomethylethylamine	+++++	0.42951	0.48460	0.44623	0.45222	+++++					
	0.46395	0.44906					AVRG		0.45426		4.08577

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.43204	0.45674	0.42468	0.43227	+++++					
	0.41648	0.39202					AVRG		0.42570		5.00242
108 N-Nitrosodiethylamine	+++++	0.47915	0.50719	0.47065	0.48068	+++++					
	0.47830	0.46128					AVRG		0.47954		3.20356
109 Ethyl Methanesulfonate	+++++	0.59343	0.63202	0.58286	0.59990	+++++					
	0.59568	0.57362					AVRG		0.59625		3.34808
110 Pentachloroethane	+++++	0.30094	0.30775	0.28811	0.28717	+++++					
	0.28774	0.27522					AVRG		0.29115		3.95122
111 N-Nitrosopyrrolidine	+++++	0.47773	0.52978	0.49561	0.51566	+++++					
	0.41369	0.41806					AVRG		0.47509		10.34926
113 N-Nitrosomorpholine	+++++	0.63587	0.69755	0.63481	0.65791	+++++					
	0.54487	0.53392					AVRG		0.61749		10.47980
114 o-Toluidine	+++++	1.64551	1.76888	1.61850	1.65178	+++++					
	1.65679	1.57817					AVRG		1.65327		3.85302
115 N-Nitrosopiperidine	+++++	0.12931	0.13922	0.12850	0.13280	+++++					
	0.13244	0.12709					AVRG		0.13156		3.32124
116 a,a-Dimethylphenethylamine	+++++	0.70597	0.78545	0.76293	0.79408	+++++					
	0.79335	0.76628					AVRG		0.76801		4.32000

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	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.12812	0.12428	0.12751	0.12901	0.12488					
	0.12021	0.11633					AVRG		0.12433		3.70966
118 2,6-Dichlorophenol	+++++	0.18796	0.20530	0.19528	0.20193	+++++					
	0.20014	0.19147					AVRG		0.19701		3.35416
119 Hexachloropropene	+++++	0.07891	0.09539	0.09133	0.09091	+++++					
	0.09225	0.08492					AVRG		0.08895		6.72708
120 p-Phenylenediamine	+++++	0.17417	0.23091	0.21919	0.22009	+++++					
	0.19257	0.17231					AVRG		0.20154		12.55674
121 N-Nitrosodi-n-butylamine	+++++	0.16926	0.19309	0.16843	0.17454	+++++					
	0.16640	0.15862					AVRG		0.17172		6.79719
122 Safrole	+++++	0.18021	0.18852	0.17847	0.18253	+++++					
	0.17443	0.16766					AVRG		0.17864		3.98501
123 1,2,4,5-Tetrachlorobenzene	+++++	0.38048	0.40351	0.37295	0.37017	+++++					
	0.35065	0.32500					AVRG		0.36713		7.29953
124 Isosafrole	+++++	0.32136	0.34935	0.32718	0.32927	+++++					
	0.32898	0.30952					AVRG		0.32761		3.96520
125 1,4-Naphthoquinone	+++++	0.37346	0.38046	0.31457	0.30180	+++++					
	0.18844	0.22186					AVRG		0.29676		26.34996 <-

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126 m-Dinitrobenzene	+++++	0.17349	0.18721	0.19120	0.19440	0.19057					
	0.19238	0.17644					AVRG		0.18653		4.41251
127 Pentachlorobenzene	+++++	0.32992	0.34557	0.31675	0.31835	+++++					
	0.29677	0.27972					AVRG		0.31451		7.45207
128 1-Naphthylamine	+++++	0.82636	0.98891	0.93384	0.93443	+++++					
	0.87178	0.80990					AVRG		0.89420		7.80762
129 2-Naphthylamine	+++++	0.96588	1.05556	1.00159	1.00599	+++++					
	0.94403	0.87535					AVRG		0.97473		6.34557
130 2,3,4,6-Tetrachlorophenol	+++++	0.20567	0.22518	0.22987	0.20102	0.22712					
	0.21818	0.20523					AVRG		0.21604		5.51582
131 5-Nitro-o-toluidine	+++++	0.25535	0.29363	0.28574	0.29496	+++++					
	0.29982	0.28219					AVRG		0.28528		5.60973
132 Thionazin	+++++	0.16358	0.16364	0.16630	0.16880	0.16339					
	0.15554	0.14821					AVRG		0.16135		4.38820
134 Sulfotepp	+++++	0.08562	0.08304	0.08303	0.08467	0.07953					
	0.07427	0.07214					AVRG		0.08033		6.54838
135 Phorate	+++++	0.36567	0.35586	0.35721	0.36683	0.34385					
	0.32742	0.31541					AVRG		0.34747		5.65187

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	0.10196	0.12348	0.12395	0.12006	+++++					
	0.11894	0.10898					AVRG		0.11623		7.60291
137 Phenacetin	+++++	0.22684	0.26317	0.26291	0.26441	+++++					
	0.26599	0.25918					AVRG		0.25708		5.83046
138 Diallate	+++++	0.24760	0.24927	0.23322	0.23010	+++++					
	0.21802	0.20853					AVRG		0.23112		6.94549
139 Dimethoate	+++++	0.21461	0.21994	0.23007	0.23724	0.23858					
	0.23513	0.22967					AVRG		0.22932		3.92960
140 4-Aminobiphenyl	+++++	0.53696	0.55369	0.57677	0.59426	+++++					
	0.49840	0.45674					AVRG		0.53614		9.53476
141 Pentachloronitrobenzene	+++++	0.05720	0.06067	0.05490	0.05533	+++++					
	0.04673	0.04463					AVRG		0.05324		11.71339
142 Pronamide	+++++	0.24822	0.26125	0.24154	0.23765	+++++					
	0.17973	+++++					AVRG		0.23368		13.46482
143 Dinoseb	+++++	0.10297	0.12216	0.13126	0.12950	0.13024					
	0.13017	0.12500					AVRG		0.12447		8.06727
144 Disulfoton	+++++	0.32280	0.31415	0.31231	0.32231	0.30214					
	0.27306	0.26345					AVRG		0.30146		7.92046

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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.18413	0.18908	0.19611	0.20206	0.20472					
	0.19613	0.19053					AVRG		0.19468		3.74715
146 4-Nitroquinoline-1-oxide	+++++	0.00831	0.00998	0.00800	0.01074	+++++					
	0.01133	0.01046					AVRG		0.00980		13.77700
147 Methapyrilene	+++++	0.36466	0.38869	0.39386	0.38311	+++++					
	0.36077	0.31821					AVRG		0.36822		7.55340
148 Isodrin	+++++	0.09085	0.09372	0.08925	0.08743	+++++					
	0.07960	0.07570					AVRG		0.08609		8.09255
149 Aramite	+++++	0.04141	0.04570	0.04371	0.04272	+++++					
	0.04204	0.03972					AVRG		0.04255		4.79399
150 Kepone	+++++	0.06055	0.06732	0.06349	0.06380	+++++					
	0.06458	0.05876					AVRG		0.06308		4.80408
151 p-(Dimethylamino)azobenzene	+++++	0.28782	0.31583	0.29702	0.29097	+++++					
	0.26535	0.24656					AVRG		0.28392		8.62091
152 Chlorobenzilate	+++++	0.21991	0.23787	0.22800	0.23044	+++++					
	0.20814	0.19524					AVRG		0.21994		7.17760
153 3,3'-Dimethylbenzidine	+++++	0.45675	0.51768	0.48413	0.48879	+++++					
	0.49372	0.43564					AVRG		0.47945		6.05117

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
154 Famphur	+++++	0.29819	0.30032	0.31780	0.33430	0.32440						
	0.30595	0.30061					AVRG		0.31165		4.49495	
155 2-Acetylaminofluorene	+++++	0.23107	0.30345	0.31881	0.32045	+++++						
	0.34822	0.32608					AVRG		0.30801		13.11206	
157 7,12Dimethylbenz(a)anthracene	+++++	0.41118	0.44192	0.42666	0.43253	+++++						
	0.40970	0.40537					AVRG		0.42123		3.47443	
158 3-Methylcholanthrene	+++++	0.29680	0.36865	0.37932	0.38459	+++++						
	0.39125	0.38204					AVRG		0.36711		9.59696	
26 Phthalic anhydride	+++++	30283	90214	245905	320454	497228						
	555160	687649					LINR	0.08413	0.10332		0.99692	
173 Carbazole	0.90246	0.82255	0.80875	0.81414	0.83946	0.78812						
	0.78058	0.70109					AVRG		0.80714		7.06036	
174 Hexachlorophene	+++++	0.03640	0.04820	0.05180	0.05353	0.05136						
	0.04905	+++++					AVRG		0.04839		12.77621	
179 Dibenzo(a,e)pyrene	+++++	117900	312429	817402	1225621	1557621						
	1812574	+++++					LINR	0.07449	0.50549		0.99368	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	2462	14132	46568	48315	83536					
	96111	113764					LINR	0.17192	0.08067		0.99223
191 Parathion	+++++	0.06169	0.06089	0.06449	0.06621	0.06308					
	0.06173	0.06112					AVRG		0.06274		3.14637
192 Methoxychlor	+++++	0.32535	0.36631	0.33959	0.33867	0.27894					
	0.25594	+++++					AVRG		0.31747		13.10686
210 m-Toluidine	+++++	0.77272	0.88703	0.90355	0.94226	1.01524					
	0.94351	+++++					AVRG		0.91072		8.87324
211 p-Toluidine	+++++	0.69169	0.70617	0.72166	0.71562	0.68688					
	+++++	+++++					AVRG		0.70440		2.12367
212 Cis Diallate	+++++	0.23437	0.24880	0.23465	0.23944	+++++					
	0.24434	0.23833					AVRG		0.23999		2.35508
213 Trans Diallate	+++++	0.29129	0.29326	0.27438	0.27070	+++++					
	0.25649	0.24533					AVRG		0.27191		6.94549
214 1,4-Dinitrobenzene	+++++	0.16000	0.17119	0.17754	0.17866	0.17639					
	0.17966	0.16860					AVRG		0.17315		4.08379
215 2-Ethoxyethanol	+++++	0.57555	0.62918	0.65385	0.56961	0.58718					
	0.62071	0.58595					AVRG		0.60315		5.24047

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INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.11447	0.12909	0.13171	0.13536	0.13420					
	0.13376	0.12587					AVRG		0.12921		5.63660
229 2,2'-Dichlorobenzil	+++++	0.67948	0.77608	0.71487	+++++	0.73565					
	+++++	0.63422					AVRG		0.70806		7.63914
230 4-Chlorothioanisole	+++++	0.23155	0.23520	0.23685	+++++	0.23140					
	+++++	0.22159					AVRG		0.23132		2.56050
231 4-Chlorothiophenol	+++++	0.15409	0.17482	0.19368	+++++	0.19893					
	+++++	0.19703					AVRG		0.18371		10.41669
232 bis(p-Chlorophenyl)sulfone	+++++	0.39430	0.43698	0.38579	+++++	0.39600					
	+++++	0.34721					AVRG		0.39206		8.15529
233 bis(p-Chlorophenyl)disulfide	+++++	0.10045	0.11150	0.11707	+++++	0.12020					
	+++++	0.10635					AVRG		0.11111		7.18003
234 Diphenyl disulfide	+++++	0.17804	0.18209	0.18631	+++++	0.17491					
	+++++	0.16341					AVRG		0.17695		4.91531
235 Diphenyl sulfide	+++++	0.71955	0.73103	0.70874	+++++	0.65333					
	+++++	0.61709					AVRG		0.68595		7.09988
236 Phenyl sulfone	+++++	0.43275	0.44078	0.42799	+++++	0.41905					
	+++++	0.39177					AVRG		0.42247		4.46830

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INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
237 Hydroxymethyl phthalimide	+++++	0.12384	0.15720	0.10384	+++++	0.13032						
	+++++	0.12669					AVRG		0.12838		14.88299	
238 Phthalic acid	+++++	24604	70600	163991	+++++	411903						
	+++++	634014					LINR	0.25540	0.11087		0.99102	
239 Thiophenol	+++++	0.94048	1.03561	1.08365	+++++	1.12900						
	+++++	1.09332					AVRG		1.05641		6.89893	
240 bis(Chloromethyl)ether	+++++	0.78790	0.79417	0.76917	+++++	0.75455						
	+++++	0.73576					AVRG		0.76831		3.12263	
241 Octachlorostyrene	+++++	0.06103	0.06315	0.05827	+++++	0.05420						
	+++++	0.04861					AVRG		0.05705		10.14342	
M 225 Trichlorophenols	+++++	0.26941	0.30065	0.29972	0.25473	0.28457						
	0.25962	0.25265					AVRG		0.27448		7.49129	
M 226 Tetrachlorophenols	+++++	0.20567	0.22518	0.22987	0.20102	0.22712						
	0.21818	0.20523					AVRG		0.21604		5.51582	
M 227 Benzo(b,k)fluoranthene	0.78278	0.93887	1.02131	1.01324	1.00976	1.01479						
	1.00963	0.93381					AVRG		0.96552		8.47131	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.97776	1.06271	1.06423	1.06306	1.07281						
	1.07136	1.00157					AVRG		1.04478		3.68308	
$ 5 Phenol-d5	+++++	1.21974	1.33050	1.28249	1.27680	1.26954						
	1.29216	1.21764					AVRG		1.26984		3.15351	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27426	0.28571	0.27066	0.27231	0.25884						
	0.24945	0.23400					AVRG		0.26360		6.62019	
$ 39 2-Fluorobiphenyl	+++++	0.99823	1.04801	1.00239	0.98618	0.93991						
	0.91199	0.81928					AVRG		0.95800		7.87748	
$ 60 2,4,6-Tribromophenol	+++++	0.10924	0.11530	0.11503	0.10898	0.11186						
	0.11271	0.10874					AVRG		0.11169		2.51418	
$ 81 p-Terphenyl-d14	+++++	0.64452	0.67675	0.65301	0.63863	0.61256						
	0.60853	0.56112					AVRG		0.62787		5.98666	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-2009 18:22
End Cal Date : 17-NOV-2009 19:15
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Cal Date : 03-Dec-2009 14:34 amy01291

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 15-NOV-2009 23:17
Lab File ID: s1k1235.d Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 22:53
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.82400	0.71239	0.71239	0.000	-13.54468	60.00000	Averaged
16 Acetophenone	1.12880	1.15012	1.15012	0.000	1.88924	60.00000	Averaged
189 Caprolactam	0.07169	0.08295	0.08295	0.000	15.71078	60.00000	Averaged
208 1,1'-Biphenyl	1.12050	1.24126	1.24126	0.000	10.77724	60.00000	Averaged
207 Atrazine	0.04008	0.04737	0.04737	0.000	18.18184	60.00000	Averaged
77 Benzidine	0.36215	0.33951	0.33951	0.000	-6.25196	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27540	0.29917	0.29917	0.000	8.63115	60.00000	Averaged
102 1,4-Dioxane	0.31387	0.37981	0.37981	0.000	21.00923	60.00000	Averaged
103 Methyl methacrylate	0.17640	0.20821	0.20821	0.000	18.03005	60.00000	Averaged
104 Ethyl methacrylate	0.71299	0.86659	0.86659	0.000	21.54329	60.00000	Averaged
105 2-Picoline	1.15384	1.13306	1.13306	0.000	-1.80140	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.45426	0.46463	0.46463	0.000	2.28123	60.00000	Averaged
107 Methyl methanesulfonate	0.42570	0.48978	0.48978	0.000	15.05276	60.00000	Averaged
108 N-Nitrosodiethylamine	0.47954	0.49102	0.49102	0.000	2.39384	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59625	0.74183	0.74183	0.000	24.41607	60.00000	Averaged
110 Pentachloroethane	0.29115	0.40985	0.40985	0.000	40.76840	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.47509	0.50932	0.50932	0.000	7.20593	60.00000	Averaged
113 N-Nitrosomorpholine	0.61749	0.67896	0.67896	0.000	9.95518	60.00000	Averaged
114 o-Toluidine	1.65327	1.64031	1.64031	0.000	-0.78415	60.00000	Averaged
115 N-Nitrosopiperidine	0.13156	0.13273	0.13273	0.000	0.88789	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.76801	0.79273	0.79273	0.000	3.21891	60.00000	Averaged
118 2,6-Dichlorophenol	0.19701	0.21797	0.21797	0.000	10.63653	60.00000	Averaged
119 Hexachloropropene	0.08895	0.13367	0.13367	0.000	50.27176	60.00000	Averaged
120 p-Phenylenediamine	0.20154	0.18980	0.18980	0.000	-5.82557	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17172	0.17829	0.17829	0.000	3.82057	60.00000	Averaged
122 Safrole	0.17864	0.21665	0.21665	0.000	21.27785	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.42376	0.42376	0.000	15.42574	60.00000	Averaged
124 Isosafrole	0.32761	0.46202	0.46202	0.000	41.02664	60.00000	Averaged
125 1,4-Naphthoquinone	0.29676	0.32067	0.32067	0.000	8.05637	60.00000	Averaged
127 Pentachlorobenzene	0.31451	0.35074	0.35074	0.000	11.51805	60.00000	Averaged
128 1-Naphthylamine	0.89420	0.98926	0.98926	0.000	10.62991	60.00000	Averaged
129 2-Naphthylamine	0.97473	1.09077	1.09077	0.000	11.90459	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28528	0.30775	0.30775	0.000	7.87638	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.11623	0.15168	0.15168	0.000	30.50015	60.00000	Averaged
137 Phenacetin	0.25708	0.29576	0.29576	0.000	15.04579	60.00000	Averaged
138 Diallate	0.23112	0.23284	0.23284	0.000	0.74457	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1235.d
Analysis Type:
Lab Sample ID: WBN091111-08.1
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 15-NOV-2009 23:17
Init. Cal. Date(s): 14-NOV-2009 15-NOV-2009
Init. Cal. Times: 18:22 22:53
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.23999	0.31739	0.31739	0.000	32.25095	60.00000	Averaged
213 Trans Diallate	0.27191	0.27393	0.27393	0.000	0.74457	60.00000	Averaged
140 4-Aminobiphenyl	0.53614	0.62569	0.62569	0.000	16.70322	60.00000	Averaged
141 Pentachloronitrobenzene	0.05324	0.06215	0.06215	0.000	16.73283	60.00000	Averaged
142 Pronamide	0.23368	0.26726	0.26726	0.000	14.37225	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00980	0.00923	0.00923	0.000	-5.86960	60.00000	Averaged
147 Methapyrilene	0.36822	0.29090	0.29090	0.000	-20.99905	60.00000	Averaged
148 Isodrin	0.08609	0.08812	0.08812	0.000	2.35297	60.00000	Averaged
149 Aramite	0.04255	0.04327	0.04327	0.000	1.67534	60.00000	Averaged
150 Kepone	0.06308	0.07178	0.07178	0.000	13.77677	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.28392	0.29411	0.29411	0.000	3.58893	60.00000	Averaged
152 Chlorobenzilate	0.21994	0.24578	0.24578	0.000	11.75217	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.47945	0.47257	0.47257	0.000	-1.43591	60.00000	Averaged
155 2-Acetylaminofluorene	0.30801	0.33042	0.33042	0.000	7.27461	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42123	0.42978	0.42978	0.000	2.03140	60.00000	Averaged
158 3-Methylcholanthrene	0.36711	0.40048	0.40048	0.000	9.08958	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s111409.b/s1k1235.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: APICV
Inj Date : 15-NOV-2009 23:17
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091111-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 10:44 nat00999 Quant Type: ISTD
Cal Date : 15-NOV-2009 21:42 Cal File: s1k1231.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: apl2.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.957	3.940	(1.000)	601939	40.0000		
* 29 Naphthalene-d8	136	4.828	4.810	(1.000)	2374945	40.0000		
* 46 Acenaphthene-d10	164	6.075	6.057	(1.000)	1270499	40.0000		
* 67 Phenanthrene-d10	188	7.057	7.040	(1.000)	2114263	40.0000		
* 91 Chrysene-d12	240	8.739	8.722	(1.000)	1927170	40.0000		
* 98 Perylene-d12	264	10.251	10.222	(1.000)	1696025	40.0000		(H)
209 Benzaldehyde	77	3.681	3.681	(0.930)	428816	40.0000	34.6	
16 Acetophenone	105	4.210	4.210	(1.064)	692304	40.0000	40.8	
189 Caprolactam	113	5.104	5.122	(1.057)	197001	40.0000	46.3	
208 1,1'-Biphenyl	154	5.646	5.651	(0.929)	1577025	40.0000	44.3	
207 Atrazine	173	6.822	6.834	(0.967)	100151	40.0000	47.3	
77 Benzidine	184	7.828	7.834	(0.896)	654298	40.0000	37.5	
90 3,3'-Dichlorobenzidine	252	8.663	8.669	(0.991)	576557	40.0000	43.4	
102 1,4-Dioxane	88	2.281	2.287	(0.576)	228622	40.0000	48.4	
103 Methyl methacrylate	100	2.275	2.275	(0.575)	125330	40.0000	47.2	
104 Ethyl methacrylate	69	2.652	2.652	(0.670)	521635	40.0000	48.6	
105 2-Picoline	93	2.846	2.846	(0.719)	682032	40.0000	39.3	
106 N-Nitrosomethylethylamine	88	2.887	2.893	(0.729)	279676	40.0000	40.9	
107 Methyl methanesulfonate	80	3.046	3.052	(0.770)	294820	40.0000	46.0	
108 N-Nitrosodiethylamine	102	3.281	3.287	(0.829)	295564	40.0000	41.0	
109 Ethyl Methanesulfonate	79	3.440	3.446	(0.869)	446538	40.0000	49.8	
110 Pentachloroethane	167	3.781	3.781	(0.955)	246707	40.0000	56.3	
111 N-Nitrosopyrrolidine	100	4.199	4.216	(1.061)	306582	40.0000	42.9	
113 N-Nitrosomorpholine	56	4.216	4.228	(1.065)	408692	40.0000	44.0	
114 o-Toluidine	106	4.234	4.246	(1.070)	987365	40.0000	39.7	
115 N-Nitrosopiperidine	114	4.434	4.446	(0.918)	315224	40.0000	40.4	
116 a,a-Dimethylphenethylamine	58	4.681	4.681	(0.970)	1882697	40.0000	41.3	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.869	4.875	(1.009)	517655	40.0000	44.2
119 Hexachloropropene	213	4.899	4.898	(1.015)	317465	40.0000	60.1
120 p-Phenylenediamine	108	5.104	5.116	(1.057)	450756	40.0000	37.7
121 N-Nitrosodi-n-butylamine	84	5.069	5.075	(1.050)	423419	40.0000	41.5(T)
122 Safrole	162	5.234	5.240	(1.084)	514526	40.0000	48.5
123 1,2,4,5-Tetrachlorobenzene	216	5.440	5.446	(0.895)	538386	40.0000	46.2
124 Isosafrole	162	5.604	5.610	(0.923)	586994	40.0000	56.4
125 1,4-Naphthoquinone	158	5.793	5.793	(0.954)	407413	40.0000	43.2
127 Pentachlorobenzene	250	6.181	6.187	(1.017)	445615	40.0000	44.6
128 1-Naphthylamine	143	6.263	6.269	(1.031)	1256848	40.0000	44.2
129 2-Naphthylamine	143	6.316	6.322	(1.040)	1385825	40.0000	44.8
131 5-Nitro-o-toluidine	152	6.434	6.445	(1.059)	390998	40.0000	43.2
136 1,3,5-Trinitrobenzene	75	6.645	6.651	(0.942)	320686	40.0000	52.2
137 Phenacetin	108	6.687	6.698	(0.947)	625324	40.0000	46.0
138 Diallate	86	6.669	6.675	(0.945)	492291	40.0000	40.3
212 Cis Diallate	86	6.734	6.734	(0.954)	100656	6.00000	7.9
213 Trans Diallate	86	6.669	6.675	(0.945)	492291	34.0000	34.2
140 4-Aminobiphenyl	169	6.910	6.916	(0.979)	1322873	40.0000	46.7
141 Pentachloronitrobenzene	237	6.934	6.940	(0.982)	131405	40.0000	46.7
142 Pronamide	173	6.922	6.928	(0.981)	565063	40.0000	45.7
146 4-Nitroquinoline-1-oxide	101	7.516	7.522	(1.065)	19512	40.0000	37.6
147 Methapyrilene	58	7.534	7.539	(1.067)	615031	40.0000	31.6
148 Isodrin	193	7.692	7.692	(1.090)	186303	40.0000	40.9
149 Aramite	185	7.916	7.916	(1.122)	91474	40.0000	40.7
150 Kepone	272	8.351	8.363	(1.183)	151752	40.0000	45.5
151 p-(Dimethylamino)azobenzene	120	8.045	8.051	(0.921)	566806	40.0000	41.4
152 Chlorobenzilate	251	8.057	8.063	(0.922)	473667	40.0000	44.7
153 3,3'-Dimethylbenzidine	212	8.257	8.263	(0.945)	910722	40.0000	39.4
155 2-Acetylaminofluorene	181	8.445	8.457	(0.966)	636774	40.0000	42.9
157 7,12Dimethylbenz(a)anthracene	256	9.733	9.745	(0.945)	728922	40.0000	40.8
158 3-Methylcholanthrene	268	10.622	10.639	(1.031)	679223	40.0000	43.6

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1235.d
Date : 15-NOV-2009 23:17
Client ID: APICV
Sample Info: IWBN091111-08.1|40 PPM|1|SVHF|1|APICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

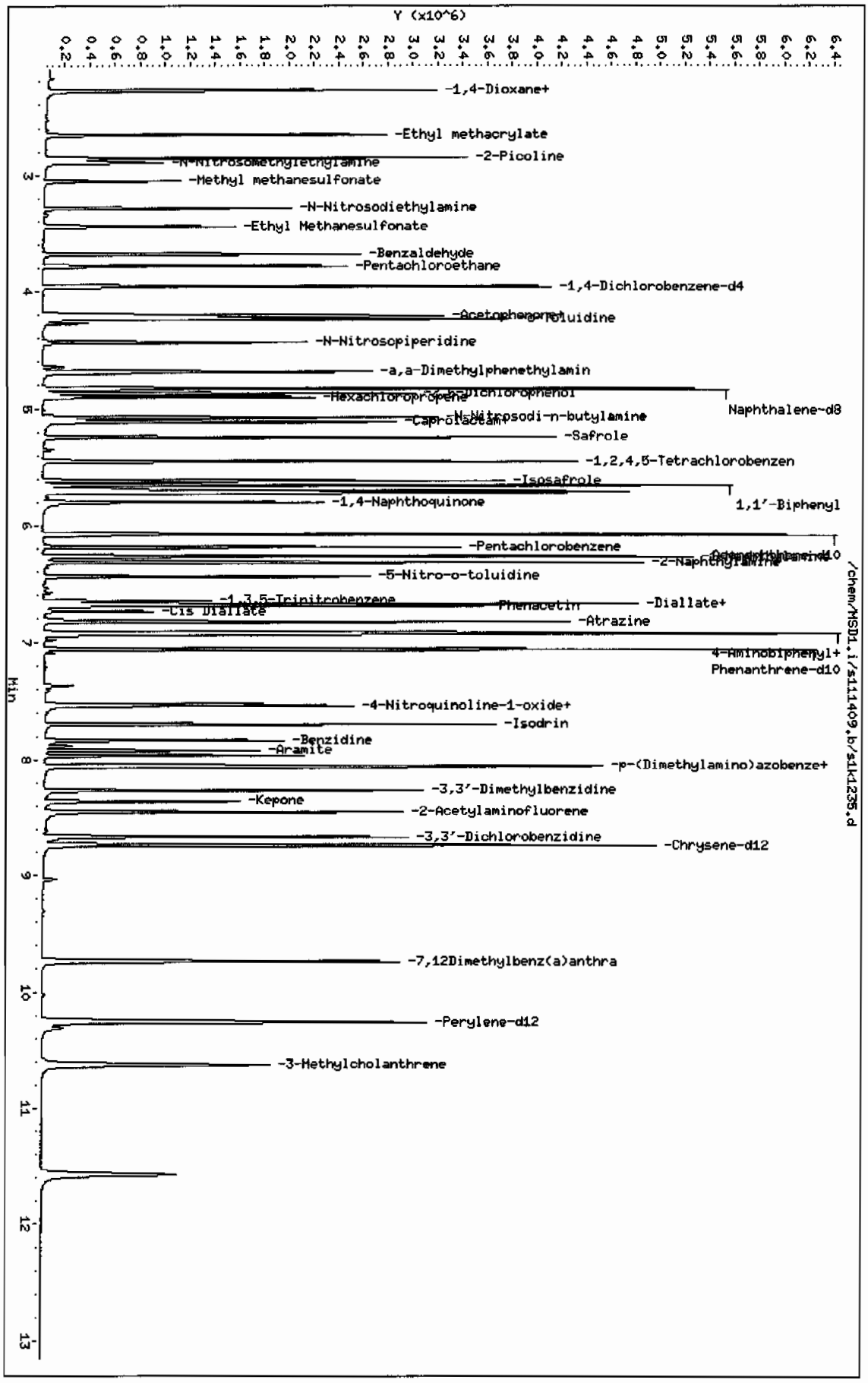

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	1.04478	0.92701	0.92701	0.000	-11.27306	60.00000	Averaged
$ 5 Phenol-d5	1.26984	1.11829	1.11829	0.000	-11.93416	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.26360	0.25882	0.25882	0.000	-1.81289	60.00000	Averaged
$ 39 2-Fluorobiphenyl	0.95800	0.95545	0.95545	0.000	-0.26619	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.11169	0.11397	0.11397	0.000	2.04032	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.62787	0.61091	0.61091	0.000	-2.70233	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.56740	0.52259	0.52259	0.000	-7.89719	60.00000	Averaged
2 Pyridine	0.95281	0.72054	0.72054	0.000	-24.37721	60.00000	Averaged
4 Aniline	0.55813	0.46069	0.46069	0.000	-17.45935	60.00000	Averaged
6 Phenol	1.33800	1.13102	1.13102	0.001	-15.46941	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.93081	0.78725	0.78725	0.000	-15.42323	60.00000	Averaged
8 2-Chlorophenol	1.13717	0.96631	0.96631	0.000	-15.02517	60.00000	Averaged
203 n-Decane	1.43160	1.33489	1.33489	0.000	-6.75532	60.00000	Averaged
9 1,3-Dichlorobenzene	1.33431	1.14485	1.14485	0.000	-14.19930	60.00000	Averaged
11 1,4-Dichlorobenzene	1.30799	1.12905	1.12905	0.001	-13.68038	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.20798	1.02631	1.02631	0.000	-15.03923	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.21709	1.93928	1.93928	0.000	-12.53006	60.00000	Averaged
12 Benzyl alcohol	0.69141	0.59629	0.59629	0.000	-13.75808	60.00000	Averaged
15 o-Cresol	0.84650	0.72216	0.72216	0.000	-14.68816	60.00000	Averaged
18 m,p-Cresols	1.15179	1.00178	1.00178	0.000	-13.02332	60.00000	Averaged
17 N-Nitrosodipropylamine	0.76238	0.61385	0.61385	0.050	-19.48192	60.00000	Averaged spcc
19 Hexachloroethane	0.47075	0.38923	0.38923	0.000	-17.31682	60.00000	Averaged
21 Nitrobenzene	0.27466	0.23975	0.23975	0.000	-12.70858	60.00000	Averaged
22 Isophorone	0.48049	0.42824	0.42824	0.000	-10.87384	60.00000	Averaged
23 2-Nitrophenol	0.14580	0.12443	0.12443	0.001	-14.65471	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.23346	0.23407	0.23407	0.000	0.25935	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30933	0.25445	0.25445	0.000	-17.74126	60.00000	Averaged
26 2,4-Dichlorophenol	0.21909	0.18847	0.18847	0.001	-13.97781	20.00000	Averaged ccc
27 Benzoic acid	0.16087	0.16553	0.16553	0.000	2.89975	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24210	0.21218	0.21218	0.000	-12.36169	60.00000	Averaged
30 Naphthalene	0.83482	0.76679	0.76679	0.000	-8.14910	60.00000	Averaged
204 alpha-Terpineol	0.19635	0.19249	0.19249	0.000	-1.96852	60.00000	Averaged
31 4-Chloroaniline	0.38123	0.34324	0.34324	0.000	-9.96471	60.00000	Averaged
32 Hexachlorobutadiene	0.12432	0.10582	0.10582	0.001	-14.87841	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.21406	0.17276	0.17276	0.001	-19.29025	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.54880	0.51972	0.51972	0.000	-5.29812	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s1k1261.d
Analysis Type:
Lab Sample ID: WBN091027-09.3
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

Injection Date: 17-NOV-2009 16:27
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 12:38
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.47920	0.47920	0.000	-2.85884	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.12462	0.12462	0.050	2.03810	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.44519	0.44519	0.000	-1.94238	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.24935	0.24935	0.001	-6.28041	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.25595	0.25595	0.000	-9.52679	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.82050	0.82050	0.000	-16.91018	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.24946	0.24946	0.000	-18.52571	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.22438	0.22438	0.000	-17.06469	60.00000	Averaged
43 Dimethylphthalate	1.08995	0.95932	0.95932	0.000	-11.98438	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.22271	0.22271	0.000	-17.99006	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.29440	0.29440	0.000	-18.20706	60.00000	Averaged
45 Acenaphthylene	1.54092	1.46812	1.46812	0.000	-4.72441	60.00000	Averaged
47 Acenaphthene	0.92259	0.85781	0.85781	0.001	-7.02192	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.09229	0.09229	0.050	-13.89853	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.12564	1.12564	0.000	-15.63294	60.00000	Averaged
51 Diethylphthalate	1.01616	0.93320	0.93320	0.000	-8.16403	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.18660	0.18660	0.050	-1.12202	60.00000	Averaged spcc
53 Fluorene	1.07578	0.99783	0.99783	0.000	-7.24582	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.42578	0.42578	0.000	-6.25867	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.09844	0.09844	0.000	-2.71965	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.21819	0.21819	0.000	-17.53206	60.00000	Averaged
133 Diphenylamine	0.53354	0.46493	0.46493	0.001	-12.85961	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.55777	0.55777	0.000	-14.31896	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.14126	0.14126	0.000	2.79050	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.14433	0.14433	0.000	-14.43782	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.09042	0.09042	0.001	-10.61921	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.42570	0.42570	0.000	-1.87309	60.00000	Averaged
68 Phenanthrene	0.90903	0.83581	0.83581	0.000	-8.05558	60.00000	Averaged
69 Anthracene	0.92447	0.85110	0.85110	0.000	-7.93592	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	0.95396	0.95396	0.000	-3.25457	60.00000	Averaged
76 Fluoranthene	0.87746	0.81704	0.81704	0.001	-6.88555	20.00000	Averaged ccc
79 Pyrene	1.06293	0.98267	0.98267	0.000	-7.55079	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.46739	0.46739	0.000	-3.37649	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.87571	0.87571	0.000	-8.69930	60.00000	Averaged
92 Chrysene	0.89647	0.82199	0.82199	0.000	-8.30767	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.65271	0.65271	0.000	-7.12169	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 17-NOV-2009 16:27
Lab File ID: s1k1261.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 12:38
Lab Sample ID: WBN091027-09.3 Quant Type: ISTD
Method: /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.19375	1.19375	0.001	-8.76858	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	34.69168	40.00000	0.87030	0.000	-13.27080	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	0.95633	0.95633	0.000	-4.65112	60.00000	Averaged	
	97 Benzo(a)pyrene	37.92700	40.00000	0.82858	0.001	-5.18249	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	35.83759	40.00000	0.81303	0.000	-10.40601	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	35.09981	40.00000	0.66597	0.000	-12.25048	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.69836	0.69836	0.000	-7.08991	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.15696	0.15696	0.000	-15.84920	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
	143 Dinoseb	0.12447	0.10965	0.10965	0.000	-11.90708	60.00000	Averaged	
	173 Carbazole	0.80714	0.69773	0.69773	0.000	-13.55506	60.00000	Averaged	
	184 p-Benzoquinone	40.49777	40.00000	0.06781	0.000	1.24442	60.00000	Linear	
	192 Methoxychlor	0.31747	0.36177	0.36177	0.000	13.95477	60.00000	Averaged	
	211 p-Toluidine	0.70440	0.95402	0.95402	0.000	35.43664	60.00000	Averaged	
	210 m-Toluidine	0.91072	0.95200	0.95200	0.000	4.53333	60.00000	Averaged	
	26 Phthalic anhydride	42.71723	40.00000	0.10164	0.000	6.79306	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	24.88814	40.00000	0.27687	0.000	-37.77964	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.14504	0.14504	0.000	-16.23762	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.59707	0.59707	0.000	-1.00765	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.12373	0.12373	0.000	-4.23543	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.25265	0.25265	0.000	-7.95340	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.19708	0.19708	0.000	-8.77777	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	0.91331	0.91331	0.000	-5.40733	60.00000	Averaged	

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Data file : /chem/MSD1.i/s111409.b/s1k1261.d
Lab Smp Id: WBN091027-09.3 Client Smp ID: MEGAICV
Inj Date : 17-NOV-2009 16:27
Operator : amy Inst ID: MSD1.i
Smp Info : |WBN091027-09.3|40 PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s111409.b/MSD1-M8270AQA-111409.m
Meth Date : 17-Nov-2009 16:47 11o00884 Quant Type: ISTD
Cal Date : 17-NOV-2009 12:38 Cal File: s1k1256.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.928	3.928	(1.000)	530038	40.0000		
* 29 Naphthalene-d8	136	4.793	4.793	(1.000)	2205306	40.0000		
* 46 Acenaphthene-d10	164	6.040	6.040	(1.000)	1135267	40.0000		
* 67 Phenanthrene-d10	188	7.022	7.022	(1.000)	1874551	40.0000		(H)
* 91 Chrysene-d12	240	8.704	8.704	(1.000)	1621760	40.0000		
* 98 Perylene-d12	264	10.198	10.198	(1.000)	1481649	40.0000		
$ 3 2-Fluorophenol	112	3.104	3.104	(0.790)	491348	40.0000	35.5	
$ 5 Phenol-d5	99	3.640	3.640	(0.927)	592737	40.0000	35.2	
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	570788	40.0000	39.3	
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.916)	1084689	40.0000	39.9	
$ 60 2,4,6-Tribromophenol	329	6.575	6.575	(1.089)	129390	40.0000	40.8	
$ 81 p-Terphenyl-d14	244	7.939	7.939	(0.912)	990744	40.0000	38.9	
1 N-Methyl-N-nitrosomethylamine	74	2.410	2.410	(0.614)	276992	40.0000	36.8	
2 Pyridine	79	2.446	2.446	(0.623)	381913	40.0000	30.2	
4 Aniline	66	3.710	3.710	(0.945)	244181	40.0000	33.0	
6 Phenol	94	3.646	3.646	(0.928)	599483	40.0000	33.8	
7 bis(2-Chloroethyl) ether	63	3.722	3.722	(0.948)	417273	40.0000	33.8	
8 2-Chlorophenol	128	3.787	3.787	(0.964)	512179	40.0000	34.0	
203 n-Decane	43	3.775	3.775	(0.961)	707542	40.0000	37.3	
9 1,3-Dichlorobenzene	146	3.893	3.893	(0.991)	606813	40.0000	34.3	
11 1,4-Dichlorobenzene	146	3.934	3.934	(1.001)	598440	40.0000	34.5	
13 1,2-Dichlorobenzene	146	4.040	4.040	(1.028)	543984	40.0000	34.0	
14 bis(2-Chloroisopropyl)ether	45	4.069	4.069	(1.036)	1027894	40.0000	35.0	
12 Benzyl alcohol	108	3.993	3.993	(1.016)	316054	40.0000	34.5	
15 o-Cresol	107	4.040	4.040	(1.028)	382773	40.0000	34.1	
18 m,p-Cresols	107	4.146	4.146	(1.055)	530984	40.0000	34.8	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.163	4.163	(1.060)	325364	40.0000	32.2
19 Hexachloroethane	117	4.269	4.269	(1.087)	206306	40.0000	33.1
21 Nitrobenzene	77	4.304	4.304	(0.898)	528723	40.0000	34.9
22 Isophorone	82	4.457	4.457	(0.930)	944401	40.0000	35.6
23 2-Nitrophenol	139	4.516	4.516	(0.942)	274410	40.0000	34.1
24 2,4-Dimethylphenol	122	4.504	4.504	(0.940)	516190	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.575	4.575	(0.955)	561140	40.0000	32.9
26 2,4-Dichlorophenol	162	4.681	4.681	(0.977)	415624	40.0000	34.4
27 Benzoic acid	105	4.575	4.575	(0.955)	365053	40.0000	41.2
28 1,2,4-Trichlorobenzene	180	4.745	4.745	(0.990)	467914	40.0000	35.0
30 Naphthalene	128	4.810	4.810	(1.004)	1690998	40.0000	36.7
204 alpha-Terpineol	59	4.787	4.787	(0.999)	424496	40.0000	39.2
31 4-Chloroaniline	127	4.822	4.822	(1.006)	756952	40.0000	36.0
32 Hexachlorobutadiene	225	4.875	4.875	(1.017)	233369	40.0000	34.0
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	380998	40.0000	32.3
34 2-Methylnaphthalene	142	5.293	5.293	(1.104)	1146146	40.0000	37.9
35 1-Methylnaphthalene	142	5.363	5.363	(1.119)	1056787	40.0000	38.8
36 Hexachlorocyclopentadiene	237	5.393	5.393	(0.893)	141475	40.0000	40.8
205 2,3-Dichloroaniline	161	5.487	5.487	(0.908)	505408	40.0000	39.2
37 2,4,6-Trichlorophenol	196	5.475	5.475	(0.906)	283075	40.0000	37.5(H)
38 2,4,5-Trichlorophenol	196	5.504	5.504	(0.911)	290570	40.0000	36.2
40 2-Chloronaphthalene	162	5.645	5.645	(0.935)	931485	40.0000	33.2
42 o-Nitroaniline	65	5.698	5.698	(0.944)	283207	40.0000	32.6
41 m-Nitroaniline	138	5.992	5.992	(0.992)	254734	40.0000	33.2
43 Dimethylphthalate	163	5.810	5.810	(0.962)	1089088	40.0000	35.2
44 2,6-Dinitrotoluene	165	5.863	5.863	(0.971)	252831	40.0000	32.8
50 2,4-Dinitrotoluene	165	6.145	6.145	(1.018)	334220	40.0000	32.7
45 Acenaphthylene	152	5.945	5.945	(0.984)	1666713	40.0000	38.1
47 Acenaphthene	154	6.063	6.063	(1.004)	973838	40.0000	37.2
48 2,4-Dinitrophenol	184	6.057	6.057	(1.003)	104771	40.0000	34.4(Q)
49 Dibenzofuran	168	6.181	6.181	(1.023)	1277902	40.0000	33.7
51 Diethylphthalate	149	6.287	6.287	(1.041)	1059428	40.0000	36.7
52 4-Nitrophenol	139	6.075	6.075	(1.006)	211838	40.0000	39.6
53 Fluorene	166	6.416	6.416	(1.062)	1132809	40.0000	37.1
54 4-Chlorophenylphenylether	204	6.392	6.392	(1.058)	483371	40.0000	37.5
55 2-Methyl-4,6-dinitrophenol	198	6.428	6.428	(0.911)	184539	40.0000	38.9
56 p-Nitroaniline	138	6.410	6.410	(1.061)	247705	40.0000	33.0
133 Diphenylamine	169	6.469	6.469	(0.917)	871532	40.0000	34.8
58 1,2-Diphenylhydrazine	77	6.498	6.498	(0.921)	1045567	40.0000	34.3
61 4-Bromophenylphenylether	248	6.716	6.716	(0.952)	264808	40.0000	41.1(H)
63 Hexachlorobenzene	284	6.775	6.775	(0.960)	270561	40.0000	34.2
65 Pentachlorophenol	266	6.892	6.892	(0.977)	169503	40.0000	35.8
206 n-Octadecane	57	6.869	6.869	(0.973)	797995	40.0000	39.2
68 Phenanthrene	178	7.039	7.039	(0.997)	1566761	40.0000	36.8
69 Anthracene	178	7.069	7.069	(1.002)	1595437	40.0000	36.8
72 Di-n-butylphthalate	149	7.310	7.310	(1.036)	1788243	40.0000	38.7
76 Fluoranthene	202	7.751	7.751	(1.098)	1531590	40.0000	37.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.892	7.892	(0.907)	1593654	40.0000	37.0
85 Butylbenzylphthalate	149	8.204	8.204	(0.943)	757996	40.0000	38.6
89 Benzo(a)anthracene	228	8.692	8.692	(0.999)	1420191	40.0000	36.5(H)
92 Chrysene	228	8.728	8.728	(1.003)	1333078	40.0000	36.7
93 bis(2-Ethylhexyl)phthalate	149	8.569	8.569	(0.984)	1058534	40.0000	37.2(H)
94 Di-n-octylphthalate	149	9.110	9.110	(0.893)	1768724	40.0000	36.5
95 Benzo(b)fluoranthene	252	9.716	9.716	(0.953)	1289484	40.0000	34.7(H)
96 Benzo(k)fluoranthene	252	9.745	9.745	(0.956)	1416940	40.0000	38.1
97 Benzo(a)pyrene	252	10.122	10.122	(0.992)	1227658	40.0000	37.9
99 Indeno(1,2,3-cd)pyrene	276	11.863	11.863	(1.163)	1204623	40.0000	35.8(H)
100 Dibenzo(a,h)anthracene	278	11.863	11.863	(1.163)	986733	40.0000	35.1
101 Benzo(ghi)perylene	276	12.380	12.380	(1.214)	1034720	40.0000	37.2
126 m-Dinitrobenzene	168	5.845	5.845	(0.968)	178196	40.0000	33.7
130 2,3,4,6-Tetrachlorophenol	232	6.251	6.251	(1.035)	223733	40.0000	36.5
143 Dinoseb	211	6.981	6.981	(0.989)	205546	40.0000	35.2
173 Carbazole	167	7.151	7.151	(1.013)	1307938	40.0000	34.6
184 p-Benzoquinone	54	3.404	3.404	(0.867)	35940	40.0000	40.5
192 Methoxychlor	227	8.557	8.557	(0.983)	586700	40.0000	45.6
211 p-Toluidine	106	4.204	4.204	(1.070)	505668	40.0000	54.2(H)
210 m-Toluidine	106	4.228	4.228	(1.076)	504598	40.0000	41.8
26 Phthalic anhydride	104	5.322	5.322	(1.110)	224154	40.0000	42.7
179 Dibenzo(a,e)pyrene	302	16.327	16.327	(1.601)	410219	40.0000	24.9(H)
214 1,4-Dinitrobenzene	168	5.787	5.787	(0.958)	164654	40.0000	33.5
215 2-Ethoxyethanol	59	2.257	2.257	(0.575)	316469	40.0000	39.6
216 Methylenebis(2-chloroaniline)	231	8.622	8.622	(0.991)	200666	40.0000	38.3
M 225 Trichlorophenols	196				573645	80.0000	73.6
M 226 Tetrachlorophenols	232				223733	40.0000	36.5
M 227 Benzo(b,k)fluoranthene	252				2706424	80.0000	75.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s111409.b/s1k1261.d
Date : 17-NOV-2009 16:27
Client ID: MEGAICV
Sample Info: IWBN091027-09.3140 PPM|1|SWMF11|MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: amy
Column diameter: 0.20

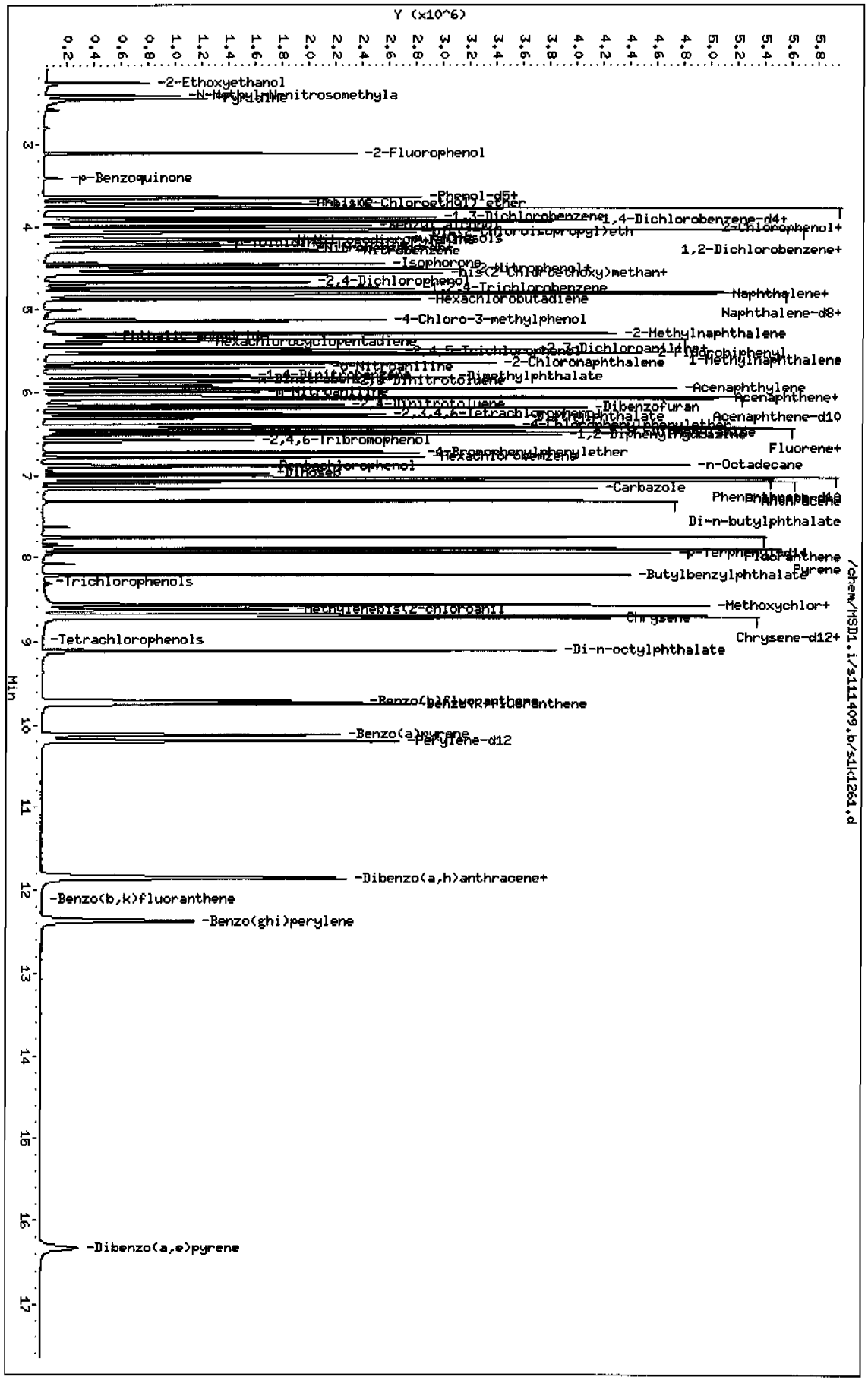

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 03-DEC-2009 11:56
Lab File ID: s110306.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-17.4 Quant Type: ISTD
Method: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.04478	0.97936	0.97936	0.000	-6.26202	60.00000	Averaged	
$ 5 Phenol-d5	1.26984	1.21427	1.21427	0.000	-4.37597	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.26360	0.26525	0.26525	0.000	0.62542	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	0.95800	1.14214	1.14214	0.000	19.22133	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.11169	0.15337	0.15337	0.000	37.31063	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.62787	0.74210	0.74210	0.000	18.19258	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.56740	0.48252	0.48252	0.000	-14.95888	60.00000	Averaged	
2 Pyridine	0.95281	0.72321	0.72321	0.000	-24.09659	60.00000	Averaged	
4 Aniline	0.55813	0.51489	0.51489	0.000	-7.74801	60.00000	Averaged	
6 Phenol	1.33800	1.24655	1.24655	0.001	-6.83475	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	0.93081	0.87499	0.87499	0.000	-5.99723	60.00000	Averaged	
8 2-Chlorophenol	1.13717	1.11858	1.11858	0.000	-1.63495	60.00000	Averaged	
203 n-Decane	1.43160	1.49936	1.49936	0.000	4.73344	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.33431	1.32979	1.32979	0.000	-0.33870	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.30799	1.32363	1.32363	0.001	1.19574	20.00000	Averaged	ccc
13 1,2-Dichlorobenzene	1.20798	1.27346	1.27346	0.000	5.42040	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	2.21709	1.96846	1.96846	0.000	-11.21386	60.00000	Averaged	
12 Benzyl alcohol	0.69141	0.52412	0.52412	0.000	-24.19564	60.00000	Averaged	
15 o-Cresol	0.84650	0.89562	0.89562	0.000	5.80369	60.00000	Averaged	
18 m,p-Cresols	1.15179	1.16605	1.16605	0.000	1.23817	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.76238	0.61177	0.61177	0.050	-19.75489	60.00000	Averaged	spcc
19 Hexachloroethane	0.47075	0.47007	0.47007	0.000	-0.14395	60.00000	Averaged	
21 Nitrobenzene	0.27466	0.27548	0.27548	0.000	0.30143	60.00000	Averaged	
22 Isophorone	0.48049	0.48545	0.48545	0.000	1.03279	60.00000	Averaged	
23 2-Nitrophenol	0.14580	0.14083	0.14083	0.001	-3.40422	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	0.23346	0.22087	0.22087	0.000	-5.39534	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.30933	0.28818	0.28818	0.000	-6.83573	60.00000	Averaged	
26 2,4-Dichlorophenol	0.21909	0.20961	0.20961	0.001	-4.32797	20.00000	Averaged	ccc
27 Benzoic acid	0.16087	0.15540	0.15540	0.000	-3.39856	60.00000	Averaged	
28 1,2,4-Trichlorobenzene	0.24210	0.24786	0.24786	0.000	2.37833	60.00000	Averaged	
30 Naphthalene	0.83482	0.88583	0.88583	0.000	6.11113	60.00000	Averaged	
204 alpha-Terpineol	0.19635	0.21318	0.21318	0.000	8.57000	60.00000	Averaged	
31 4-Chloroaniline	0.38123	0.36330	0.36330	0.000	-4.70256	60.00000	Averaged	
32 Hexachlorobutadiene	0.12432	0.13289	0.13289	0.001	6.89145	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.21406	0.20951	0.20951	0.001	-2.12350	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.54880	0.61761	0.61761	0.000	12.53825	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 03-DEC-2009 11:56
Lab File ID: s110306.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091111-17.4 Quant Type: ISTD
Method: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49330	0.57310	0.57310	0.000	16.17650	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.12213	0.16068	0.16068	0.050	31.56684	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.45401	0.50374	0.50374	0.000	10.95371	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.26606	0.28816	0.28816	0.001	8.30760	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.28290	0.31325	0.31325	0.000	10.72971	60.00000	Averaged
40 2-Chloronaphthalene	0.98748	0.93560	0.93560	0.000	-5.25405	60.00000	Averaged
42 o-Nitroaniline	0.30619	0.26763	0.26763	0.000	-12.59101	60.00000	Averaged
41 m-Nitroaniline	0.27055	0.20641	0.20641	0.000	-23.70737	60.00000	Averaged
43 Dimethylphthalate	1.08995	1.14021	1.14021	0.000	4.61123	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27156	0.25551	0.25551	0.000	-5.90870	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35993	0.33981	0.33981	0.000	-5.58915	60.00000	Averaged
45 Acenaphthylene	1.54092	1.67922	1.67922	0.000	8.97514	60.00000	Averaged
47 Acenaphthene	0.92259	1.03079	1.03079	0.001	11.72784	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.10718	0.11900	0.11900	0.050	11.02791	60.00000	Averaged spcc
49 Dibenzofuran	1.33422	1.33616	1.33616	0.000	0.14561	60.00000	Averaged
51 Diethylphthalate	1.01616	1.15666	1.15666	0.000	13.82680	60.00000	Averaged
52 4-Nitrophenol	0.18871	0.15876	0.15876	0.050	-15.87308	60.00000	Averaged spcc
53 Fluorene	1.07578	1.21268	1.21268	0.000	12.72485	60.00000	Averaged
54 4-Chlorophenylphenylether	0.45420	0.51531	0.51531	0.000	13.45304	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10120	0.12374	0.12374	0.000	22.28085	60.00000	Averaged
56 p-Nitroaniline	0.26458	0.17149	0.17149	0.000	-35.18226	60.00000	Averaged
133 Diphenylamine	0.53354	0.45897	0.45897	0.001	-13.97546	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.65098	0.59768	0.59768	0.000	-8.18873	60.00000	Averaged
61 4-Bromophenylphenylether	0.13743	0.16208	0.16208	0.000	17.93973	60.00000	Averaged
63 Hexachlorobenzene	0.16869	0.17694	0.17694	0.000	4.88974	60.00000	Averaged
65 Pentachlorophenol	0.10117	0.11357	0.11357	0.001	12.26203	20.00000	Averaged ccc
206 n-Octadecane	0.43383	0.45540	0.45540	0.000	4.97380	60.00000	Averaged
68 Phenanthrene	0.90903	0.94108	0.94108	0.000	3.52498	60.00000	Averaged
69 Anthracene	0.92447	0.95614	0.95614	0.000	3.42563	60.00000	Averaged
72 Di-n-butylphthalate	0.98605	1.17163	1.17163	0.000	18.82074	60.00000	Averaged
76 Fluoranthene	0.87746	0.97137	0.97137	0.001	10.70182	20.00000	Averaged ccc
79 Pyrene	1.06293	1.11998	1.11998	0.000	5.36767	60.00000	Averaged
85 Butylbenzylphthalate	0.48372	0.55272	0.55272	0.000	14.26421	60.00000	Averaged
89 Benzo(a)anthracene	0.95915	0.95927	0.95927	0.000	0.01307	60.00000	Averaged
92 Chrysene	0.89647	0.94731	0.94731	0.000	5.67060	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70275	0.82956	0.82956	0.000	18.04338	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s110306.d
Analysis Type:
Lab Sample ID: WBN091111-17.4 Quant Type: ISTD
Method: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m

Injection Date: 03-DEC-2009 11:56
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.30849	1.56568	1.56568	0.001	19.65517	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	41.63751	40.00000	1.05905	0.000	4.09377	60.00000	Linear	
	96 Benzo(k)fluoranthene	1.00298	1.08683	1.08683	0.000	8.36064	60.00000	Averaged	
	97 Benzo(a)pyrene	41.86594	40.00000	0.91428	0.001	4.66485	20.00000	Linear	ccc
	99 Indeno(1,2,3-cd)pyrene	39.99802	40.00000	0.90628	0.000	-0.00494	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	38.98840	40.00000	0.73938	0.000	-2.52901	60.00000	Linear	
	101 Benzo(ghi)perylene	0.75165	0.76197	0.76197	0.000	1.37314	60.00000	Averaged	
	126 m-Dinitrobenzene	0.18653	0.17881	0.17881	0.000	-4.13553	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21604	0.25496	0.25496	0.000	18.01522	60.00000	Averaged	
	143 Dinoseb	0.12447	0.14578	0.14578	0.000	17.12261	60.00000	Averaged	
	173 Carbazole	0.80714	0.56711	0.56711	0.000	-29.73883	60.00000	Averaged	
	184 p-Benzoquinone	64.59927	40.00000	0.11641	0.000	61.49817	60.00000	Linear	<-
	192 Methoxychlor	0.31747	0.52194	0.52194	0.000	64.40682	60.00000	Averaged	<-
	211 p-Toluidine	0.70440	0.91311	0.91311	0.000	29.62879	60.00000	Averaged	
	210 m-Toluidine	0.91072	1.13112	1.13112	0.000	24.20093	60.00000	Averaged	
	26 Phthalic anhydride	46.64660	40.00000	0.11179	0.000	16.61651	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	24.11233	40.00000	0.26706	0.000	-39.71917	60.00000	Linear	
	214 1,4-Dinitrobenzene	0.17315	0.16177	0.16177	0.000	-6.57113	60.00000	Averaged	
	215 2-Ethoxyethanol	0.60315	0.50875	0.50875	0.000	-15.65144	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.12921	0.10736	0.10736	0.000	-16.90667	60.00000	Averaged	
M	225 Trichlorophenols	0.27448	0.30071	0.30071	0.000	9.55582	60.00000	Averaged	
M	226 Tetrachlorophenols	0.21604	0.25496	0.25496	0.000	18.01522	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.96552	1.07294	1.07294	0.000	11.12507	60.00000	Averaged	

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Data file : /chem/MSD1.i/s120309.b/s110306.d
Lab Smp Id: WBN091111-17.4 Client Smp ID: MEGACVS
Inj Date : 03-DEC-2009 11:56
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091111-17.4|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 11:20 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	355858	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1575251	40.0000	
* 46 Acenaphthene-d10	164	6.028	6.028	(1.000)	843663	40.0000	
* 67 Phenanthrene-d10	188	7.010	7.010	(1.000)	1514255	40.0000	
* 91 Chrysene-d12	240	8.675	8.675	(1.000)	1346768	40.0000	
* 98 Perylene-d12	264	10.127	10.127	(1.000)	1159145	40.0000	
$ 3 2-Fluorophenol	112	3.110	3.110	(0.794)	348513	40.0000	37.5
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	432107	40.0000	38.2
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	417839	40.0000	40.2
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.916)	963580	40.0000	47.7
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.088)	129391	40.0000	54.9
$ 81 p-Terphenyl-d14	244	7.922	7.922	(0.913)	999437	40.0000	47.3
1 N-Methyl-N-nitrosomethylamine	74	2.422	2.422	(0.618)	171709	40.0000	34.0
2 Pyridine	79	2.457	2.457	(0.627)	257361	40.0000	30.4
4 Aniline	66	3.704	3.704	(0.946)	183227	40.0000	36.9
6 Phenol	94	3.651	3.651	(0.932)	443595	40.0000	37.3
7 bis(2-Chloroethyl) ether	63	3.722	3.722	(0.950)	311372	40.0000	37.6
8 2-Chlorophenol	128	3.787	3.787	(0.967)	398054	40.0000	39.3
203 n-Decane	43	3.763	3.763	(0.961)	533560	40.0000	41.9
9 1,3-Dichlorobenzene	146	3.887	3.887	(0.992)	473217	40.0000	39.9
11 1,4-Dichlorobenzene	146	3.928	3.928	(1.003)	471024	40.0000	40.5
13 1,2-Dichlorobenzene	146	4.034	4.034	(1.030)	453171	40.0000	42.2
14 bis(2-Chloroisopropyl)ether	45	4.063	4.063	(1.038)	700494	40.0000	35.5
12 Benzyl alcohol	108	3.987	3.987	(1.018)	186512	40.0000	30.3
15 o-Cresol	107	4.040	4.040	(1.032)	318715	40.0000	42.3
18 m,p-Cresols	107	4.140	4.140	(1.057)	414947	40.0000	40.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.157	4.157	(1.062)	217703	40.0000	32.1
19 Hexachloroethane	117	4.263	4.263	(1.089)	167278	40.0000	39.9
21 Nitrobenzene	77	4.298	4.298	(0.899)	433955	40.0000	40.1
22 Isophorone	82	4.445	4.445	(0.930)	764706	40.0000	40.4
23 2-Nitrophenol	139	4.510	4.510	(0.943)	221850	40.0000	38.6
24 2,4-Dimethylphenol	122	4.504	4.504	(0.942)	347919	40.0000	37.8
25 bis(2-Chloroethoxy)methane	93	4.569	4.569	(0.956)	453962	40.0000	37.3
26 2,4-Dichlorophenol	162	4.669	4.669	(0.977)	330184	40.0000	38.3
27 Benzoic acid	105	4.563	4.563	(0.954)	244797	40.0000	38.6
28 1,2,4-Trichlorobenzene	180	4.734	4.734	(0.990)	390446	40.0000	41.0
30 Naphthalene	128	4.798	4.798	(1.004)	1395409	40.0000	42.4(Q)
204 alpha-Terpineol	59	4.775	4.775	(0.999)	335814	40.0000	43.4
31 4-Chloroaniline	127	4.816	4.816	(1.007)	572292	40.0000	38.1
32 Hexachlorobutadiene	225	4.863	4.863	(1.017)	209328	40.0000	42.8
33 4-Chloro-3-methylphenol	107	5.128	5.128	(1.073)	330032	40.0000	39.2
34 2-Methylnaphthalene	142	5.275	5.275	(1.103)	972887	40.0000	45.0
35 1-Methylnaphthalene	142	5.351	5.351	(1.119)	902783	40.0000	46.5
36 Hexachlorocyclopentadiene	237	5.381	5.381	(0.893)	135561	40.0000	52.6
205 2,3-Dichloroaniline	161	5.475	5.475	(0.908)	424985	40.0000	44.4
37 2,4,6-Trichlorophenol	196	5.469	5.469	(0.907)	243109	40.0000	43.3
38 2,4,5-Trichlorophenol	196	5.492	5.492	(0.911)	264281	40.0000	44.3
40 2-Chloronaphthalene	162	5.628	5.628	(0.934)	789332	40.0000	37.9
42 o-Nitroaniline	65	5.692	5.692	(0.944)	225793	40.0000	35.0
41 m-Nitroaniline	138	5.981	5.981	(0.992)	174141	40.0000	30.5
43 Dimethylphthalate	163	5.798	5.798	(0.962)	961950	40.0000	41.8
44 2,6-Dinitrotoluene	165	5.851	5.851	(0.971)	215568	40.0000	37.6
50 2,4-Dinitrotoluene	165	6.133	6.133	(1.018)	286688	40.0000	37.8
45 Acenaphthylene	152	5.934	5.934	(0.984)	1416699	40.0000	43.6
47 Acenaphthene	154	6.051	6.051	(1.004)	869638	40.0000	44.7
48 2,4-Dinitrophenol	184	6.051	6.051	(1.004)	100400	40.0000	44.4
49 Dibenzofuran	168	6.163	6.163	(1.022)	1127269	40.0000	40.0
51 Diethylphthalate	149	6.275	6.275	(1.041)	975830	40.0000	45.5
52 4-Nitrophenol	139	6.075	6.075	(1.008)	133940	40.0000	33.6
53 Fluorene	166	6.398	6.398	(1.061)	1023090	40.0000	45.1
54 4-Chlorophenylphenylether	204	6.375	6.375	(1.058)	434747	40.0000	45.4
55 2-Methyl-4,6-dinitrophenol	198	6.416	6.416	(0.915)	187380	40.0000	48.9
56 p-Nitroaniline	138	6.404	6.404	(1.062)	144682	40.0000	25.9
133 Diphenylamine	169	6.451	6.451	(0.920)	695005	40.0000	34.4
58 1,2-Diphenylhydrazine	77	6.486	6.486	(0.925)	905034	40.0000	36.7
61 4-Bromophenylphenylether	248	6.698	6.698	(0.956)	245437	40.0000	47.2
63 Hexachlorobenzene	284	6.757	6.757	(0.964)	267928	40.0000	42.0
65 Pentachlorophenol	266	6.875	6.875	(0.981)	171976	40.0000	44.9
206 n-Octadecane	57	6.851	6.851	(0.977)	689596	40.0000	42.0
68 Phenanthrene	178	7.022	7.022	(1.002)	1425031	40.0000	41.4
69 Anthracene	178	7.057	7.057	(1.007)	1447836	40.0000	41.4
72 Di-n-butylphthalate	149	7.292	7.292	(1.040)	1774149	40.0000	47.5
76 Fluoranthene	202	7.733	7.733	(1.103)	1470896	40.0000	44.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	7.875	7.875	(0.908)	1508358	40.0000	42.1
85 Butylbenzylphthalate	149	8.186	8.186	(0.944)	744390	40.0000	45.7
89 Benzo(a)anthracene	228	8.663	8.663	(0.999)	1291920	40.0000	40.0
92 Chrysene	228	8.698	8.698	(1.003)	1275801	40.0000	42.3
93 bis(2-Ethylhexyl)phthalate	149	8.545	8.545	(0.985)	1117219	40.0000	47.2
94 Di-n-octylphthalate	149	9.069	9.069	(0.895)	1814845	40.0000	47.9
95 Benzo(b)fluoranthene	252	9.663	9.663	(0.954)	1227589	40.0000	41.6
96 Benzo(k)fluoranthene	252	9.698	9.698	(0.958)	1259795	40.0000	43.3
97 Benzo(a)pyrene	252	10.063	10.063	(0.994)	1059783	40.0000	41.9
99 Indeno(1,2,3-cd)pyrene	276	11.751	11.751	(1.160)	1050507	40.0000	40.0
100 Dibenzo(a,h)anthracene	278	11.751	11.751	(1.160)	857046	40.0000	39.0
101 Benzo(ghi)perylene	276	12.257	12.257	(1.210)	883233	40.0000	40.5
126 m-Dinitrobenzene	168	5.834	5.834	(0.968)	150858	40.0000	38.3
130 2,3,4,6-Tetrachlorophenol	232	6.239	6.239	(1.035)	215099	40.0000	47.2
143 Dinoseb	211	6.963	6.963	(0.993)	220755	40.0000	46.8
173 Carbazole	167	7.139	7.139	(1.018)	858746	40.0000	28.1
184 p-Benzoquinone	54	3.410	3.410	(0.871)	41427	40.0000	64.6
192 Methoxychlor	227	8.533	8.533	(0.984)	702926	40.0000	65.8
211 p-Toluidine	106	4.198	4.198	(1.072)	324938	40.0000	51.8
210 m-Toluidine	106	4.222	4.222	(1.078)	402518	40.0000	49.7
26 Phthalic anhydride	104	5.316	5.316	(1.112)	176101	40.0000	46.6
179 Dibenzo(a,e)pyrene	302	16.086	16.086	(1.588)	309564	40.0000	24.1
214 1,4-Dinitrobenzene	168	5.781	5.781	(0.959)	136482	40.0000	37.4
215 2-Ethoxyethanol	59	2.263	2.263	(0.578)	181041	40.0000	33.7
216 Methylenebis(2-chloroaniline)	231	8.598	8.598	(0.991)	144591	40.0000	33.2
M 225 Trichlorophenols	196				507390	80.0000	87.6
M 226 Tetrachlorophenols	232				215099	40.0000	47.2
M 227 Benzo(b,k)fluoranthene	252				2487384	80.0000	88.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s120309.b/s110306.d
Date : 03-DEC-2009 11:56
Client ID: MEGACVS
Sample Info: IWBN091111-17,4140 FPM|1|SVMF11|MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

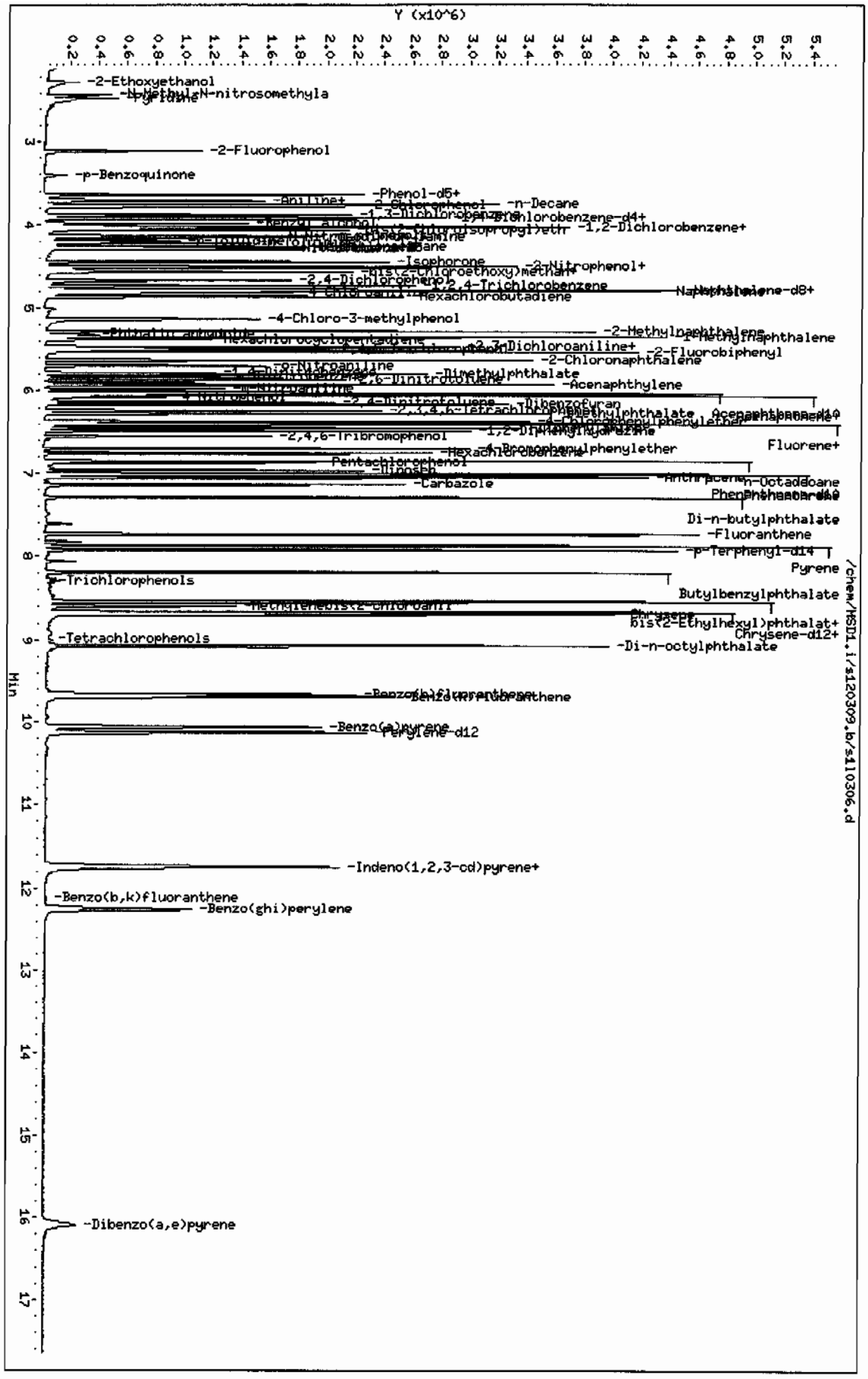

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 03-DEC-2009 12:43
Lab File ID: s110307.d Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Analysis Type: Init. Cal. Times: 18:22 19:15
Lab Sample ID: WBN091201-08.2 Quant Type: ISTD
Method: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
209 Benzaldehyde	0.82400	0.68453	0.68453	0.000	-16.92593	60.00000	Averaged	
16 Acetophenone	1.12880	1.15660	1.15660	0.000	2.46340	60.00000	Averaged	
189 Caprolactam	0.07169	0.07812	0.07812	0.000	8.97314	60.00000	Averaged	
208 1,1'-Biphenyl	1.12050	1.20542	1.20542	0.000	7.57804	60.00000	Averaged	
207 Atrazine	0.04008	0.02293	0.02293	0.000	-42.78919	60.00000	Averaged	
77 Benzidine	0.36215	0.19967	0.19967	0.000	-44.86606	60.00000	Averaged	
90 3,3'-Dichlorobenzidine	0.27540	0.26507	0.26507	0.000	-3.75089	60.00000	Averaged	
102 1,4-Dioxane	0.31387	0.35227	0.35227	0.000	12.23351	60.00000	Averaged	
103 Methyl methacrylate	0.17640	0.20316	0.20316	0.000	15.16948	60.00000	Averaged	
104 Ethyl methacrylate	0.71299	0.80784	0.80784	0.000	13.30359	60.00000	Averaged	
105 2-Picoline	1.15384	1.03782	1.03782	0.000	-10.05525	60.00000	Averaged	
106 N-Nitrosomethylethylamine	0.45426	0.38216	0.38216	0.000	-15.87275	60.00000	Averaged	
107 Methyl methanesulfonate	0.42570	0.43634	0.43634	0.000	2.49741	60.00000	Averaged	
108 N-Nitrosodiethylamine	0.47954	0.38901	0.38901	0.000	-18.87853	60.00000	Averaged	
109 Ethyl Methanesulfonate	0.59625	0.67169	0.67169	0.000	12.65138	60.00000	Averaged	
110 Pentachloroethane	0.29115	0.42250	0.42250	0.000	45.11249	60.00000	Averaged	
111 N-Nitrosopyrrolidine	0.47509	0.40583	0.40583	0.000	-14.57860	60.00000	Averaged	
113 N-Nitrosomorpholine	0.61749	0.51119	0.51119	0.000	-17.21406	60.00000	Averaged	
114 o-Toluidine	1.65327	1.56385	1.56385	0.000	-5.40883	60.00000	Averaged	
115 N-Nitrosopiperidine	0.13156	0.11495	0.11495	0.000	-12.62957	60.00000	Averaged	
116 a,a-Dimethylphenethylamine	0.76801	0.22485	0.22485	0.000	-70.72313	60.00000	Averaged	<-
118 2,6-Dichlorophenol	0.19701	0.21526	0.21526	0.000	9.26334	60.00000	Averaged	
119 Hexachloropropene	0.08895	0.14612	0.14612	0.000	64.26125	60.00000	Averaged	<-
120 p-Phenylenediamine	0.20154	0.08744	0.08744	0.000	-56.61411	60.00000	Averaged	
121 N-Nitrosodi-n-butylamine	0.17172	0.13535	0.13535	0.000	-21.18179	60.00000	Averaged	
122 Safrole	0.17864	0.22368	0.22368	0.000	25.21449	60.00000	Averaged	
123 1,2,4,5-Tetrachlorobenzene	0.36713	0.42703	0.42703	0.000	16.31689	60.00000	Averaged	
124 Isosafrole	0.32761	0.42300	0.42300	0.000	29.11542	60.00000	Averaged	
125 1,4-Naphthoquinone	0.29676	0.33702	0.33702	0.000	13.56656	60.00000	Averaged	
127 Pentachlorobenzene	0.31451	0.37035	0.37035	0.000	17.75450	60.00000	Averaged	
128 1-Naphthylamine	0.89420	0.73685	0.73685	0.000	-17.59654	60.00000	Averaged	
129 2-Naphthylamine	0.97473	0.57657	0.57657	0.000	-40.84875	60.00000	Averaged	
131 5-Nitro-o-toluidine	0.28528	0.26243	0.26243	0.000	-8.01061	60.00000	Averaged	
136 1,3,5-Trinitrobenzene	0.11623	0.14041	0.14041	0.000	20.80821	60.00000	Averaged	
137 Phenacetin	0.25708	0.25133	0.25133	0.000	-2.23959	60.00000	Averaged	
138 Diallate	0.23112	0.20063	0.20063	0.000	-13.19318	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i
Lab File ID: s110307.d
Analysis Type:
Lab Sample ID: WBN091201-08.2
Method: /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m

Injection Date: 03-DEC-2009 12:43
Init. Cal. Date(s): 14-NOV-2009 17-NOV-2009
Init. Cal. Times: 18:22 19:15
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
212 Cis Diallate	0.23999	0.26204	0.26204	0.000	9.18685	60.00000	Averaged	
213 Trans Diallate	0.27191	0.23603	0.23603	0.000	-13.19318	60.00000	Averaged	
140 4-Aminobiphenyl	0.53614	0.37679	0.37679	0.000	-29.72221	60.00000	Averaged	
141 Pentachloronitrobenzene	0.05324	0.06508	0.06508	0.000	22.23956	60.00000	Averaged	
142 Pronamide	0.23368	0.27054	0.27054	0.000	15.77594	60.00000	Averaged	
146 4-Nitroquinoline-1-oxide	0.00980	0.01584	0.01584	0.000	61.60758	60.00000	Averaged	<-
147 Methapyrilene	0.36822	0.35588	0.35588	0.000	-3.34989	60.00000	Averaged	
148 Isodrin	0.08609	0.08733	0.08733	0.000	1.44107	60.00000	Averaged	
149 Aramite	0.04255	0.03962	0.03962	0.000	-6.88752	60.00000	Averaged	
150 Kepone	0.06308	0.06434	0.06434	0.000	1.98991	60.00000	Averaged	
151 p-(Dimethylamino)azobenzene	0.28392	0.27375	0.27375	0.000	-3.58341	60.00000	Averaged	
152 Chlorobenzilate	0.21994	0.30466	0.30466	0.000	38.52363	60.00000	Averaged	
153 3,3'-Dimethylbenzidine	0.47945	0.42334	0.42334	0.000	-11.70436	60.00000	Averaged	
155 2-Acetylaminofluorene	0.30801	0.30556	0.30556	0.000	-0.79693	60.00000	Averaged	
157 7,12Dimethylbenz(a)anthrace	0.42123	0.45029	0.45029	0.000	6.90033	60.00000	Averaged	
158 3-Methylcholanthrene	0.36711	0.42682	0.42682	0.000	16.26385	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110307.d
Lab Smp Id: WBN091201-08.2 Client Smp ID: APCVS
Inj Date : 03-DEC-2009 12:43
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN091201-08.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 03-Dec-2009 14:34 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: apl2.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	423539	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1712206	40.0000	
* 46 Acenaphthene-d10	164	6.028	6.028	(1.000)	1007896	40.0000	
* 67 Phenanthrene-d10	188	7.010	7.010	(1.000)	1790543	40.0000	
* 91 Chrysene-d12	240	8.669	8.669	(1.000)	1511285	40.0000	
* 98 Perylene-d12	264	10.122	10.122	(1.000)	1289122	40.0000	
209 Benzaldehyde	77	3.646	3.646	(0.931)	289925	40.0000	33.2
16 Acetophenone	105	4.169	4.169	(1.065)	489867	40.0000	41.0
189 Caprolactam	113	5.057	5.057	(1.058)	133757	40.0000	43.6
208 1,1'-Biphenyl	154	5.604	5.604	(0.930)	1214935	40.0000	43.0
207 Atrazine	173	6.775	6.775	(0.966)	41059	40.0000	22.9
77 Benzidine	184	7.786	7.786	(0.898)	301758	40.0000	22.0
90 3,3'-Dichlorobenzidine	252	8.598	8.598	(0.992)	400600	40.0000	38.5
102 1,4-Dioxane	88	2.263	2.263	(0.578)	149198	40.0000	44.9
103 Methyl methacrylate	100	2.252	2.252	(0.575)	86048	40.0000	46.1
104 Ethyl methacrylate	69	2.622	2.622	(0.670)	342153	40.0000	45.3
105 2-Picoline	93	2.822	2.822	(0.721)	439558	40.0000	36.0
106 N-Nitrosomethylethylamine	88	2.869	2.869	(0.733)	161859	40.0000	33.6
107 Methyl methanesulfonate	80	3.028	3.028	(0.773)	184805	40.0000	41.0
108 N-Nitrosodiethylamine	102	3.251	3.251	(0.830)	164761	40.0000	32.4
109 Ethyl Methanesulfonate	79	3.410	3.410	(0.871)	284485	40.0000	45.1
110 Pentachloroethane	167	3.746	3.746	(0.956)	178946	40.0000	58.0
111 N-Nitrosopyrrolidine	100	4.157	4.157	(1.062)	171884	40.0000	34.2
113 N-Nitrosomorpholine	56	4.181	4.181	(1.068)	216510	40.0000	33.1
114 o-Toluidine	106	4.198	4.198	(1.072)	662351	40.0000	37.8
115 N-Nitrosopiperidine	114	4.398	4.398	(0.920)	196810	40.0000	34.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.651	4.651	(0.973)	384989	40.0000	11.7
118 2,6-Dichlorophenol	162	4.828	4.828	(1.010)	368569	40.0000	43.7
119 Hexachloropropene	213	4.851	4.851	(1.015)	250182	40.0000	65.7
120 p-Phenylenediamine	108	4.781	4.781	(1.000)	149713	40.0000	17.4
121 N-Nitrosodi-n-butylamine	84	5.028	5.028	(1.052)	231748	40.0000	31.5(T)
122 Safrole	162	5.193	5.193	(1.086)	382986	40.0000	50.1
123 1,2,4,5-Tetrachlorobenzene	216	5.393	5.393	(0.895)	430403	40.0000	46.5
124 Isosafrole	162	5.563	5.563	(0.923)	426336	40.0000	51.6
125 1,4-Naphthoquinone	158	5.751	5.751	(0.954)	339685	40.0000	45.4
127 Pentachlorobenzene	250	6.134	6.134	(1.018)	373279	40.0000	47.1
128 1-Naphthylamine	143	6.216	6.216	(1.031)	742672	40.0000	33.0
129 2-Naphthylamine	143	6.269	6.269	(1.040)	581120	40.0000	23.7
131 5-Nitro-o-toluidine	152	6.392	6.392	(1.060)	264501	40.0000	36.8
136 1,3,5-Trinitrobenzene	75	6.610	6.610	(0.943)	251415	40.0000	48.3
137 Phenacetin	108	6.639	6.639	(0.947)	450011	40.0000	39.1
138 Diallate	86	6.628	6.628	(0.945)	359236	40.0000	34.7
212 Cis Diallate	86	6.687	6.687	(0.954)	70378	6.00000	6.6
213 Trans Diallate	86	6.628	6.628	(0.945)	359236	34.0000	29.5
140 4-Aminobiphenyl	169	6.869	6.869	(0.980)	674651	40.0000	28.1
141 Pentachloronitrobenzene	237	6.887	6.887	(0.982)	116535	40.0000	48.9
142 Pronamide	173	6.875	6.875	(0.981)	484418	40.0000	46.3
146 4-Nitroquinoline-1-oxide	101	7.475	7.475	(1.066)	28370	40.0000	64.6
147 Methapyrilene	58	7.486	7.486	(1.068)	637225	40.0000	38.7
148 Isodrin	193	7.645	7.645	(1.091)	156372	40.0000	40.6
149 Aramite	185	7.875	7.875	(1.123)	70944	40.0000	37.2
150 Kepone	272	8.292	8.292	(1.183)	115203	40.0000	40.8
151 p-(Dimethylamino)azobenzene	120	7.998	7.998	(0.923)	413713	40.0000	38.6
152 Chlorobenzilate	251	8.010	8.010	(0.924)	460434	40.0000	55.4
153 3,3'-Dimethylbenzidine	212	8.210	8.210	(0.947)	639783	40.0000	35.3
155 2-Acetylaminofluorene	181	8.386	8.386	(0.967)	461785	40.0000	39.7
157 7,12Dimethylbenz(a)anthracene	256	9.628	9.628	(0.951)	580481	40.0000	42.8
158 3-Methylcholanthrene	268	10.475	10.475	(1.035)	550219	40.0000	46.5

QC Flag Legend

T - Target compound detected outside RT window.

Data File: /chem/MSD1.i/s120309.b/s110307.d
Date : 03-DEC-2009 12:43
Client ID: APCVS
Sample Info: IWBN091201-08,2140 PPM|1|SVHF|1|APCVS
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

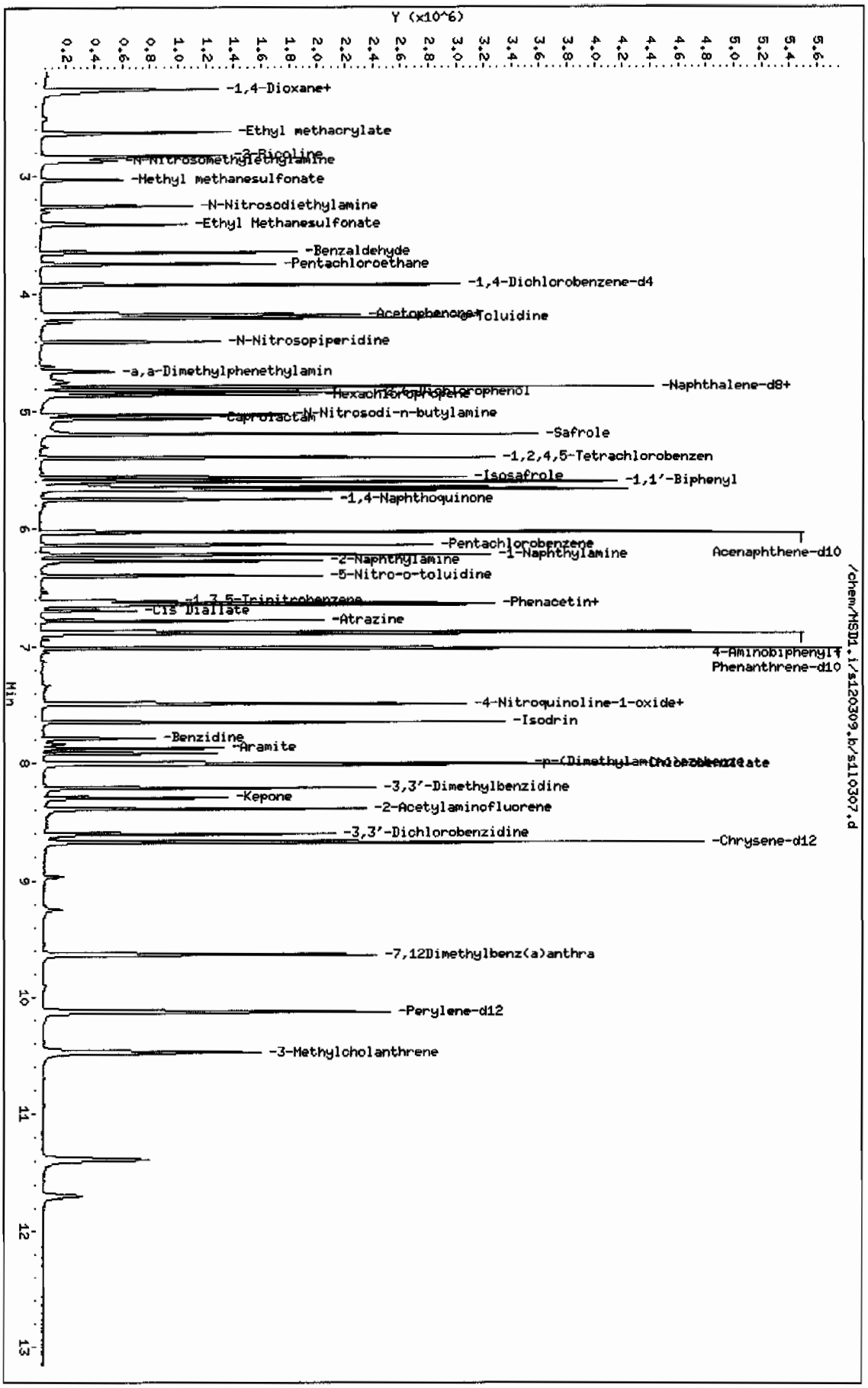

QC Data

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Page 1

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

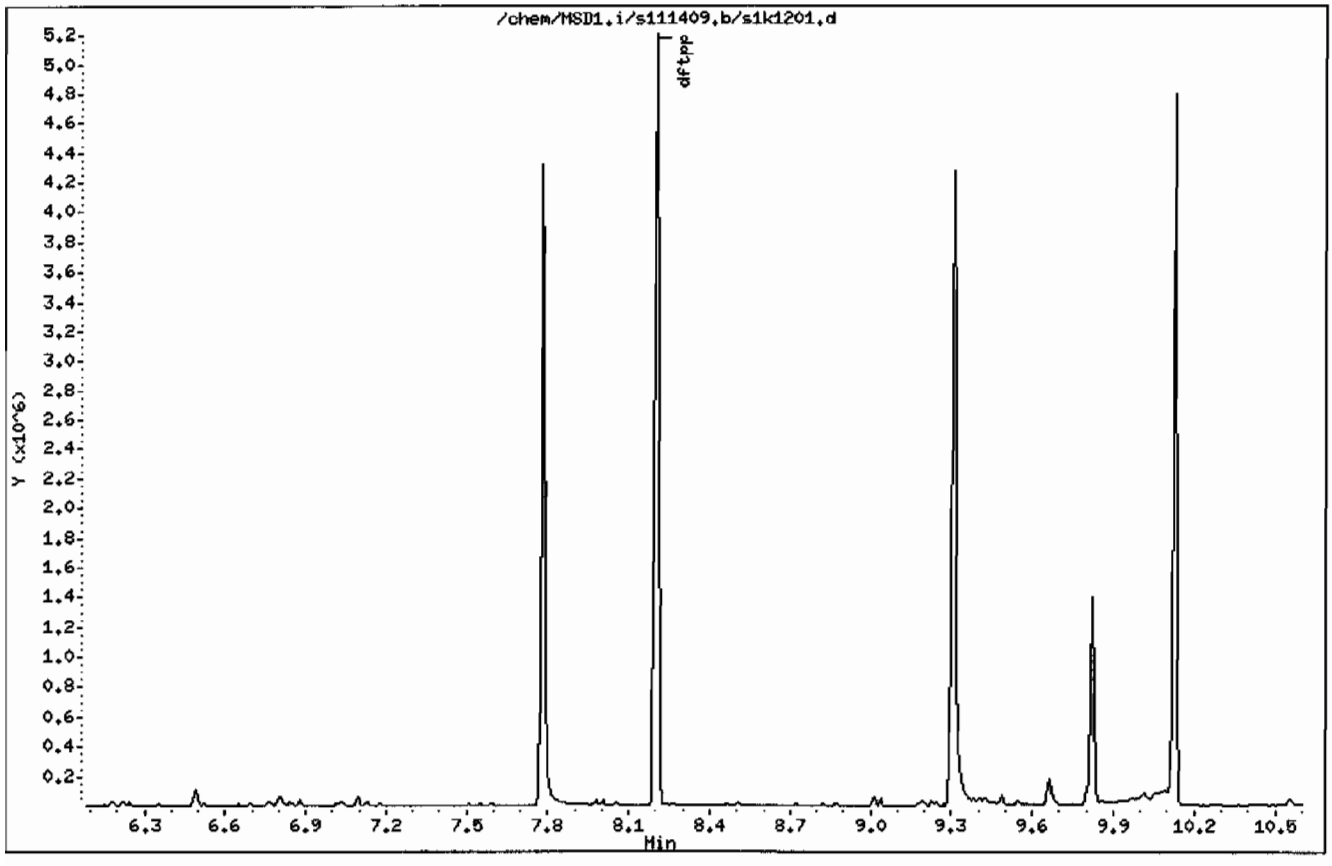

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

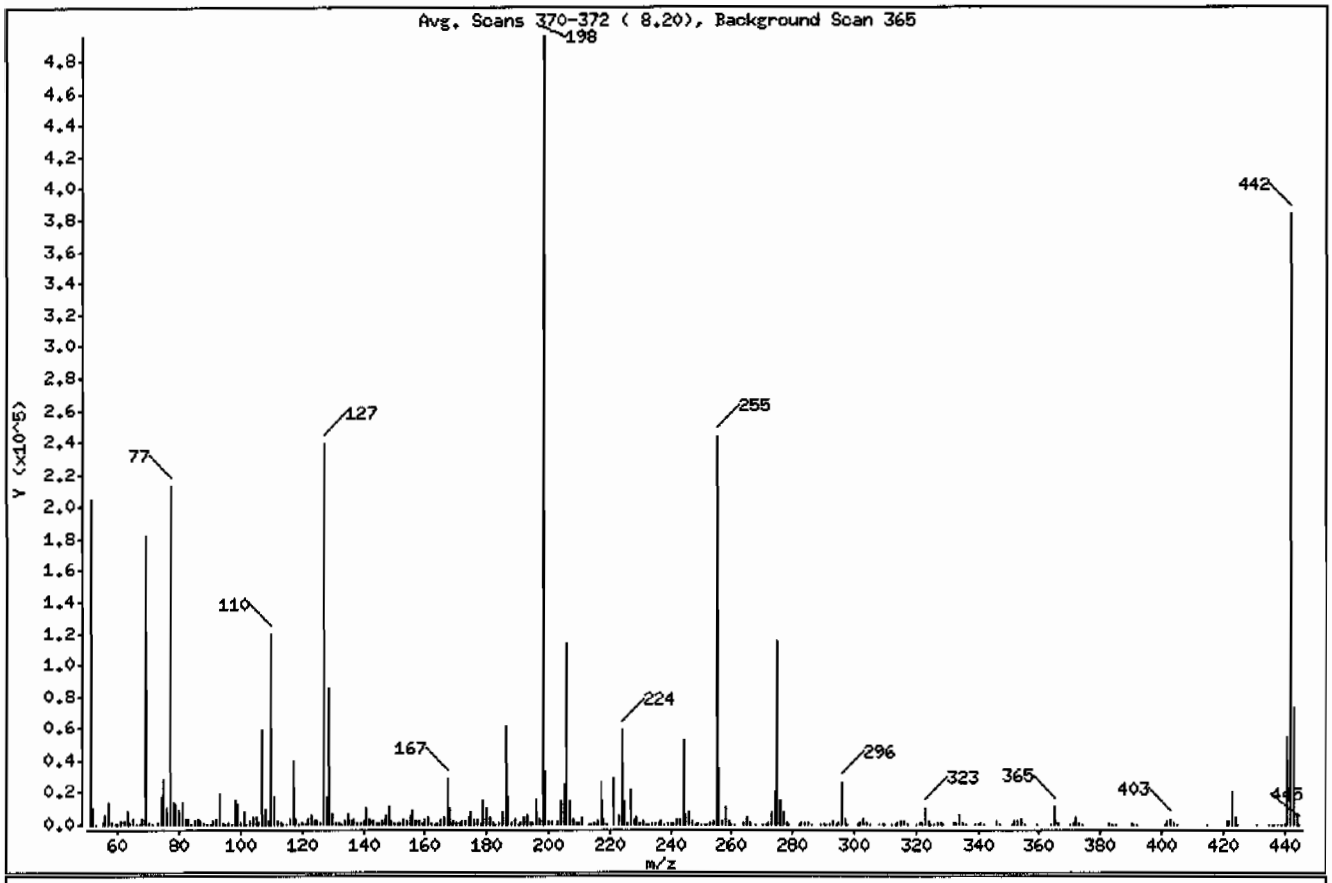

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.33
68	Less than 2.00% of mass 69	0.66 (1.81)
69	Mass 69 relative abundance	36.68
70	Less than 2.00% of mass 69	0.20 (0.55)
127	40.00 - 60.00% of mass 198	48.32
197	Less than 1.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.31
365	Greater than 1.00% of mass 198	2.23
441	Present, but less than mass 443	11.00
442	Greater than 40.00% of mass 198	77.37
443	17.00 - 23.00% of mass 442	14.83 (19.16)

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	204544	132.00	849	213.00	322	304.00	857
52.00	10058	133.00	398	214.00	81	305.00	126
53.00	476	134.00	2213	215.00	1065	308.00	339
55.00	808	135.00	6445	216.00	2209	309.00	249
56.00	5675	136.00	2682	217.00	25976	310.00	361
57.00	13163	137.00	3409	218.00	3600	312.00	52
58.00	676	138.00	864	219.00	390	313.00	288
59.00	142	139.00	1285	221.00	28416	314.00	1372
60.00	58	140.00	1711	223.00	5970	315.00	2833
61.00	2414	141.00	10495	224.00	59288	316.00	1731
62.00	2627	142.00	3783	225.00	15318	317.00	279
63.00	7561	143.00	2378	226.00	1533	320.00	54
64.00	1048	144.00	706	227.00	21184	321.00	903
65.00	3902	145.00	666	228.00	3165	322.00	596
66.00	263	146.00	1908	229.00	4804	323.00	9908
67.00	264	147.00	5356	230.00	759	324.00	1942
68.00	3280	148.00	10849	231.00	2133	325.00	119
69.00	181568	149.00	2326	232.00	408	326.00	93
70.00	999	150.00	640	233.00	450	327.00	1701
71.00	119	151.00	1554	234.00	1483	328.00	891
73.00	1219	152.00	808	235.00	1658	329.00	88
74.00	17536	153.00	3187	236.00	1183	332.00	578
75.00	28056	154.00	2701	237.00	1728	333.00	855
76.00	9746	155.00	5991	238.00	324	334.00	5817
77.00	212736	156.00	9066	239.00	813	335.00	1475
78.00	13840	157.00	1942	240.00	775	336.00	75
79.00	12099	158.00	1971	241.00	1214	339.00	62
80.00	9416	159.00	1574	242.00	3186	340.00	77
81.00	13432	160.00	3233	243.00	3508	341.00	1027
82.00	3448	161.00	4832	244.00	51832	342.00	243
83.00	3440	162.00	1519	245.00	6691	346.00	2015
84.00	276	163.00	414	246.00	8221	347.00	283
85.00	2469	164.00	763	247.00	1725	351.00	182
86.00	3499	165.00	3823	248.00	403	352.00	2745
87.00	1914	166.00	4542	249.00	1698	353.00	2043

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	945	167.00	28056	250.00	338	354.00	3347
89.00	408	168.00	9882	251.00	378	355.00	568
90.00	81	169.00	1949	252.00	461	359.00	68
91.00	2811	170.00	666	253.00	965	364.00	82
92.00	3305	171.00	868	254.00	2194	365.00	11049
93.00	19392	172.00	1736	255.00	243712	366.00	1525
94.00	1530	173.00	2151	256.00	34792	370.00	312
95.00	401	174.00	4365	257.00	2654	371.00	749
96.00	1021	175.00	8331	258.00	11699	372.00	5103
97.00	481	176.00	2950	259.00	1976	373.00	1317
98.00	14829	177.00	3734	260.00	354	374.00	211
99.00	12143	178.00	1429	261.00	488	383.00	1475
100.00	1081	179.00	14903	264.00	588	384.00	413
101.00	7582	180.00	10676	265.00	4651	385.00	112
102.00	501	181.00	5074	266.00	630	390.00	664
103.00	2806	182.00	848	268.00	97	391.00	481
104.00	4764	183.00	484	270.00	316	392.00	349
105.00	4470	184.00	1118	271.00	565	401.00	323
106.00	1531	185.00	7578	272.00	574	402.00	2059
107.00	58720	186.00	61632	273.00	7763	403.00	3027
108.00	9198	187.00	16824	274.00	20360	404.00	981
109.00	1983	188.00	1678	275.00	115400	405.00	157
110.00	119360	189.00	3368	276.00	14998	415.00	61
111.00	17336	190.00	542	277.00	8371	421.00	2728
112.00	2224	191.00	1652	278.00	1328	422.00	2498
113.00	793	192.00	4637	279.00	337	423.00	19928
114.00	277	193.00	5425	282.00	172	424.00	3991
115.00	405	194.00	1196	283.00	908	425.00	403
116.00	3276	195.00	960	284.00	671	431.00	50
117.00	39312	196.00	15938	285.00	1513	435.00	182
118.00	2868	197.00	3428	286.00	245	436.00	64
119.00	376	198.00	494976	289.00	275	437.00	123
120.00	724	199.00	32528	290.00	365	438.00	300
121.00	279	200.00	2387	291.00	237	439.00	370
122.00	3763	201.00	2747	292.00	481	440.00	354

Data File: /chem/MSD1.i/s111409.b/s1k1201.d

Date : 14-NOV-2009 17:38

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1201.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 365
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	6008	203.00	2693	293.00	2054	441.00	54440
124.00	2602	204.00	14604	294.00	532	442.00	382976
125.00	2647	205.00	25208	295.00	657	443.00	73384
126.00	904	206.00	113680	296.00	26240	444.00	6543
127.00	239168	207.00	14454	297.00	3789	445.00	363
128.00	17576	208.00	3160	298.00	253		
129.00	85072	209.00	1021	301.00	417		
130.00	7156	210.00	801	302.00	580		
131.00	1445	211.00	4362	303.00	3041		

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

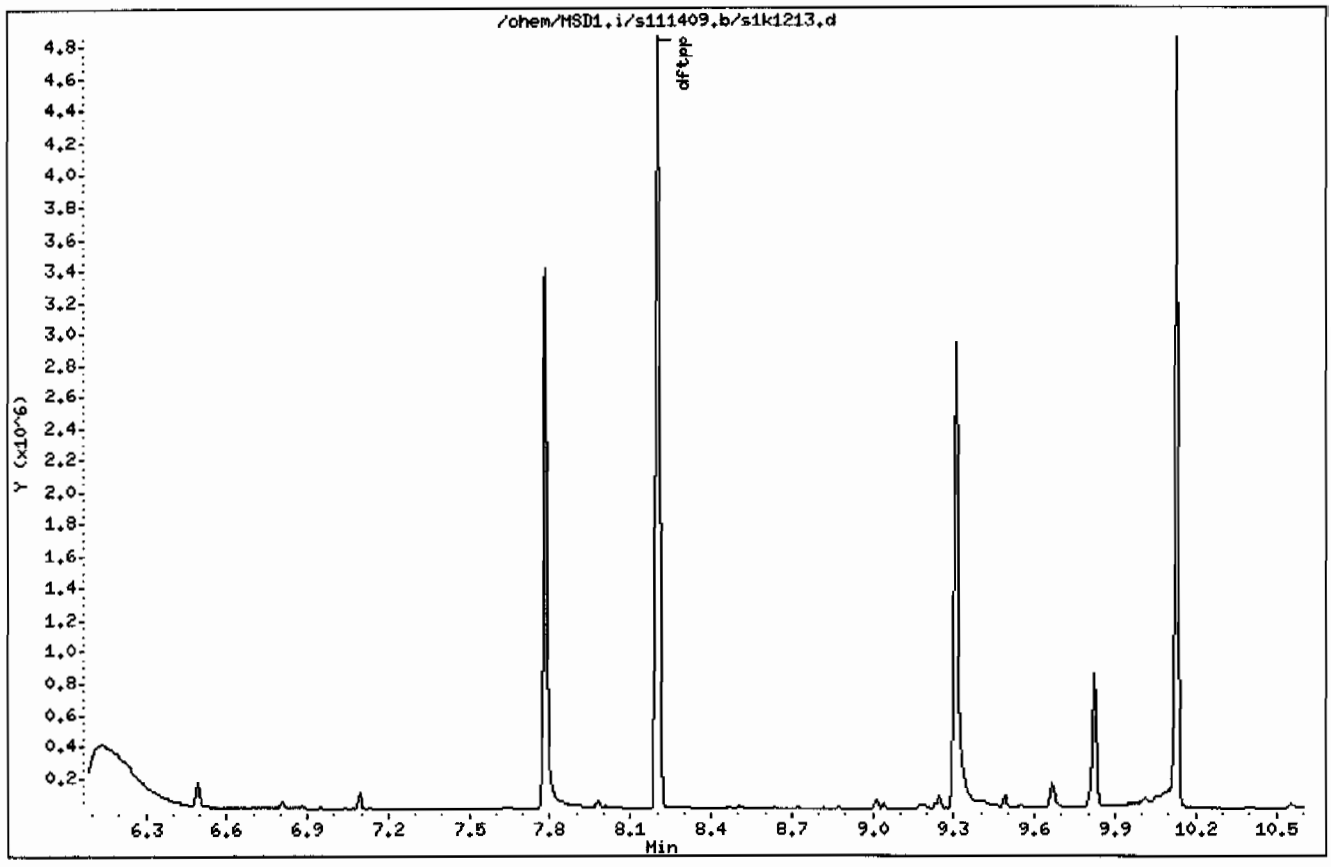

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

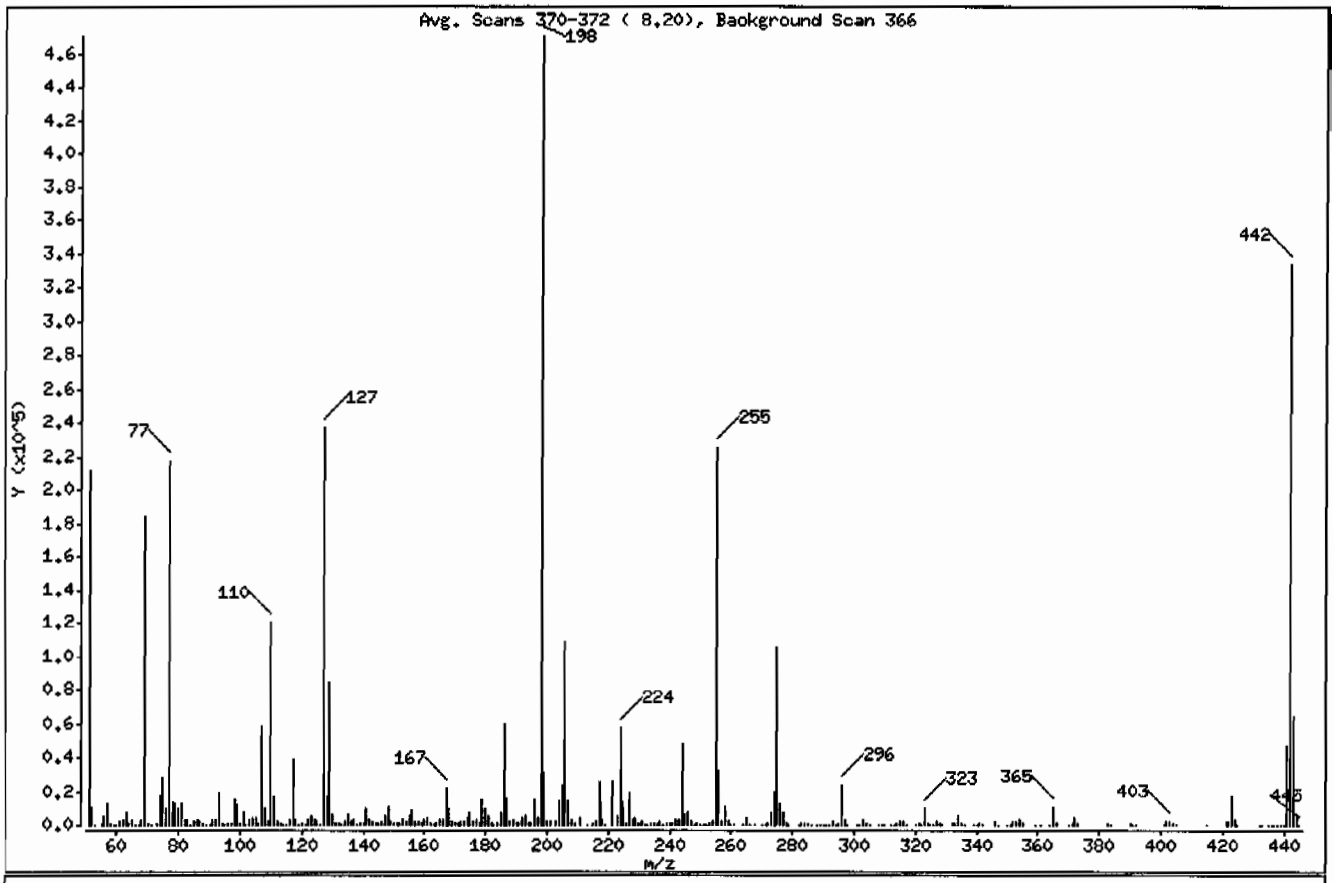

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.07
68	Less than 2.00% of mass 69	0.69 (1.77)
69	Mass 69 relative abundance	39.06
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	50.24
197	Less than 1.00% of mass 198	0.94
199	5.00 - 9.00% of mass 198	6.64
275	10.00 - 30.00% of mass 198	22.36
365	Greater than 1.00% of mass 198	2.27
441	Present, but less than mass 443	9.91
442	Greater than 40.00% of mass 198	70.70
443	17.00 - 23.00% of mass 442	13.63 (19.28)

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	212096	132.00	898	215.00	1069	305.00	54
52.00	10563	133.00	158	216.00	2175	308.00	369
53.00	539	134.00	2246	217.00	25096	309.00	234
55.00	827	135.00	6673	218.00	3427	310.00	330
56.00	5710	136.00	2589	219.00	310	312.00	53
57.00	13040	137.00	3388	221.00	26264	313.00	225
58.00	622	138.00	481	223.00	5732	314.00	1148
59.00	197	139.00	738	224.00	57128	315.00	2673
60.00	264	140.00	1183	225.00	14268	316.00	1636
61.00	2458	141.00	10022	226.00	1583	317.00	257
62.00	2719	142.00	3500	227.00	19912	320.00	120
63.00	7568	143.00	2527	228.00	3016	321.00	868
64.00	1100	144.00	604	229.00	4436	322.00	443
65.00	3684	145.00	642	230.00	645	323.00	9345
66.00	306	146.00	1966	231.00	2162	324.00	1574
67.00	172	147.00	5499	232.00	373	325.00	117
68.00	3245	148.00	10590	233.00	410	326.00	63
69.00	183808	149.00	2267	234.00	1277	327.00	1667
70.00	937	150.00	711	235.00	1617	328.00	859
71.00	201	151.00	1389	236.00	1067	329.00	66
73.00	1312	152.00	1009	237.00	1713	332.00	666
74.00	16976	153.00	3123	238.00	252	333.00	761
75.00	27896	154.00	2582	239.00	815	334.00	5270
76.00	9904	155.00	5732	240.00	635	335.00	1342
77.00	217344	156.00	8806	241.00	1337	336.00	127
78.00	14484	157.00	1860	242.00	2922	339.00	65
79.00	12543	158.00	1872	243.00	3255	340.00	61
80.00	9582	159.00	1459	244.00	47840	341.00	1023
81.00	13483	160.00	3146	245.00	6361	342.00	289
82.00	3494	161.00	4861	246.00	7662	346.00	1844
83.00	3404	162.00	1440	247.00	1632	347.00	399
84.00	268	163.00	441	248.00	425	350.00	54
85.00	2429	164.00	756	249.00	1557	351.00	146
86.00	3717	165.00	3644	250.00	323	352.00	2683
87.00	1777	166.00	3330	251.00	376	353.00	1903

Date : 15-NOV-2009 14:50

Client ID: DFTPP Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	858	167.00	21384	252.00	497	354.00	2848
89.00	353	168.00	9329	253.00	1026	355.00	645
90.00	52	169.00	1925	254.00	2307	359.00	128
91.00	2960	170.00	698	255.00	224896	361.00	54
92.00	3280	171.00	771	256.00	32856	364.00	139
93.00	19472	172.00	1741	257.00	2457	365.00	10703
94.00	1413	173.00	2444	258.00	11321	366.00	1552
95.00	284	174.00	4219	259.00	1877	370.00	274
96.00	1152	175.00	8099	260.00	305	371.00	720
97.00	591	176.00	2630	261.00	356	372.00	4645
98.00	14679	177.00	3711	264.00	230	373.00	1151
99.00	12313	178.00	1199	265.00	4470	383.00	1268
100.00	1108	179.00	14622	266.00	429	384.00	380
101.00	7679	180.00	10168	268.00	129	390.00	651
102.00	505	181.00	5015	270.00	325	391.00	487
103.00	2879	182.00	784	271.00	443	392.00	279
104.00	4625	183.00	540	272.00	688	401.00	276
105.00	4311	184.00	1176	273.00	7045	402.00	1862
106.00	1512	185.00	7084	274.00	19240	403.00	2656
107.00	58544	186.00	59904	275.00	105256	404.00	848
108.00	9265	187.00	16158	276.00	13094	405.00	140
109.00	1897	188.00	1716	277.00	7627	415.00	133
110.00	119952	189.00	3108	278.00	1312	421.00	2323
111.00	16904	190.00	572	279.00	308	422.00	2190
112.00	2240	191.00	1592	282.00	136	423.00	16944
113.00	758	192.00	4599	283.00	867	424.00	3191
114.00	126	193.00	5084	284.00	734	425.00	414
115.00	267	194.00	1198	285.00	1299	432.00	51
116.00	3229	195.00	880	286.00	172	433.00	63
117.00	38800	196.00	15085	288.00	53	435.00	138
118.00	2837	197.00	4415	289.00	263	436.00	193
119.00	448	198.00	470656	290.00	271	437.00	144
120.00	769	199.00	31248	291.00	161	438.00	208
121.00	319	200.00	2323	292.00	403	439.00	422
122.00	3761	201.00	2603	293.00	1968	440.00	420

Data File: /chem/MSD1.i/s111409.b/s1k1213.d

Date : 15-NOV-2009 14:50

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1213.d
Spectrum: Avg. Scans 370-372 (8.20), Background Scan 366
Location of Maximum: 198.00
Number of points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	5880	203.00	2606	294.00	491	441.00	46632
124.00	2783	204.00	13871	295.00	593	442.00	332736
125.00	2563	205.00	24136	296.00	24248	443.00	64136
126.00	365	206.00	107936	297.00	3568	444.00	5493
127.00	236480	207.00	13718	298.00	201	445.00	305
128.00	17448	208.00	3264	301.00	372		
129.00	84656	209.00	932	302.00	462		
130.00	6942	211.00	4014	303.00	2821		
131.00	1354	213.00	308	304.00	785		

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

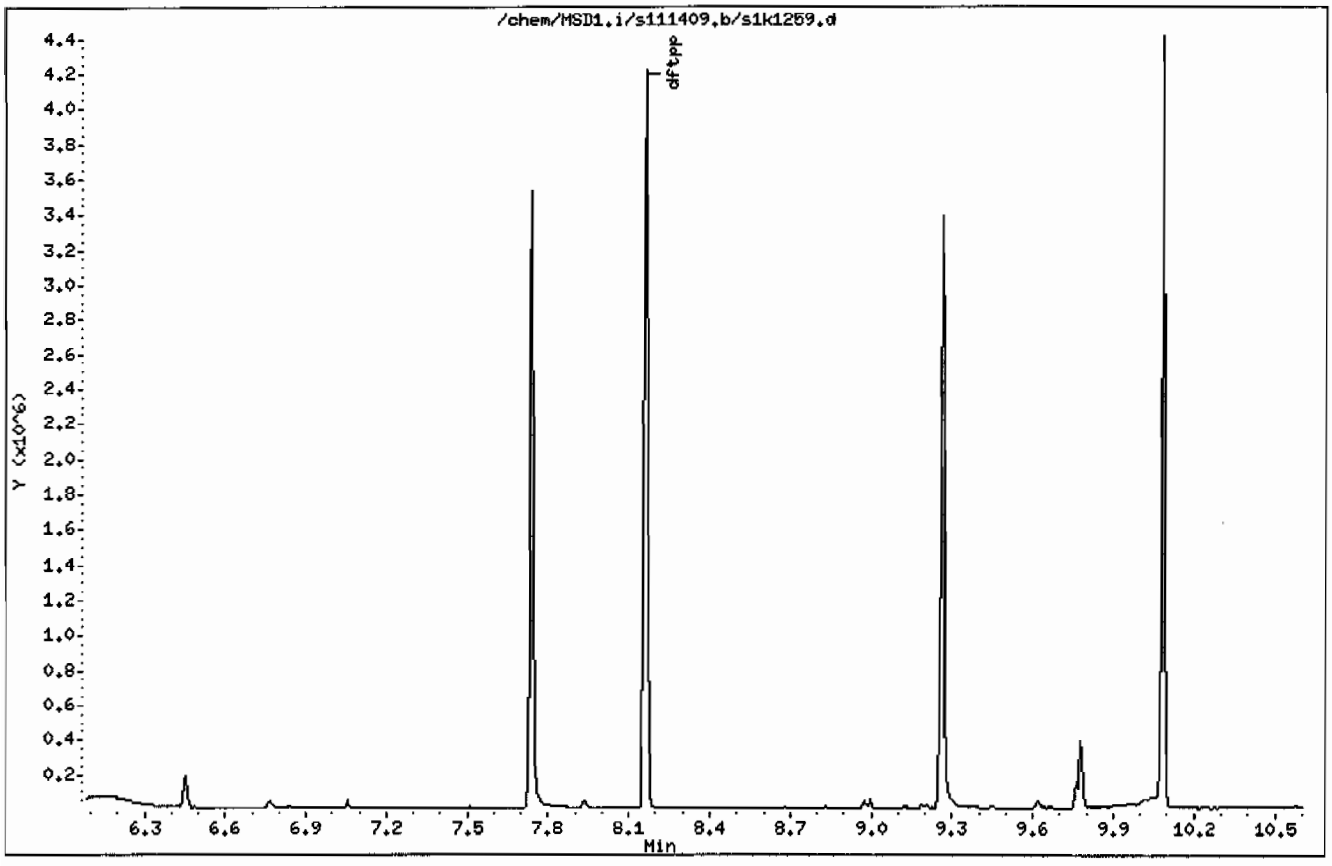

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

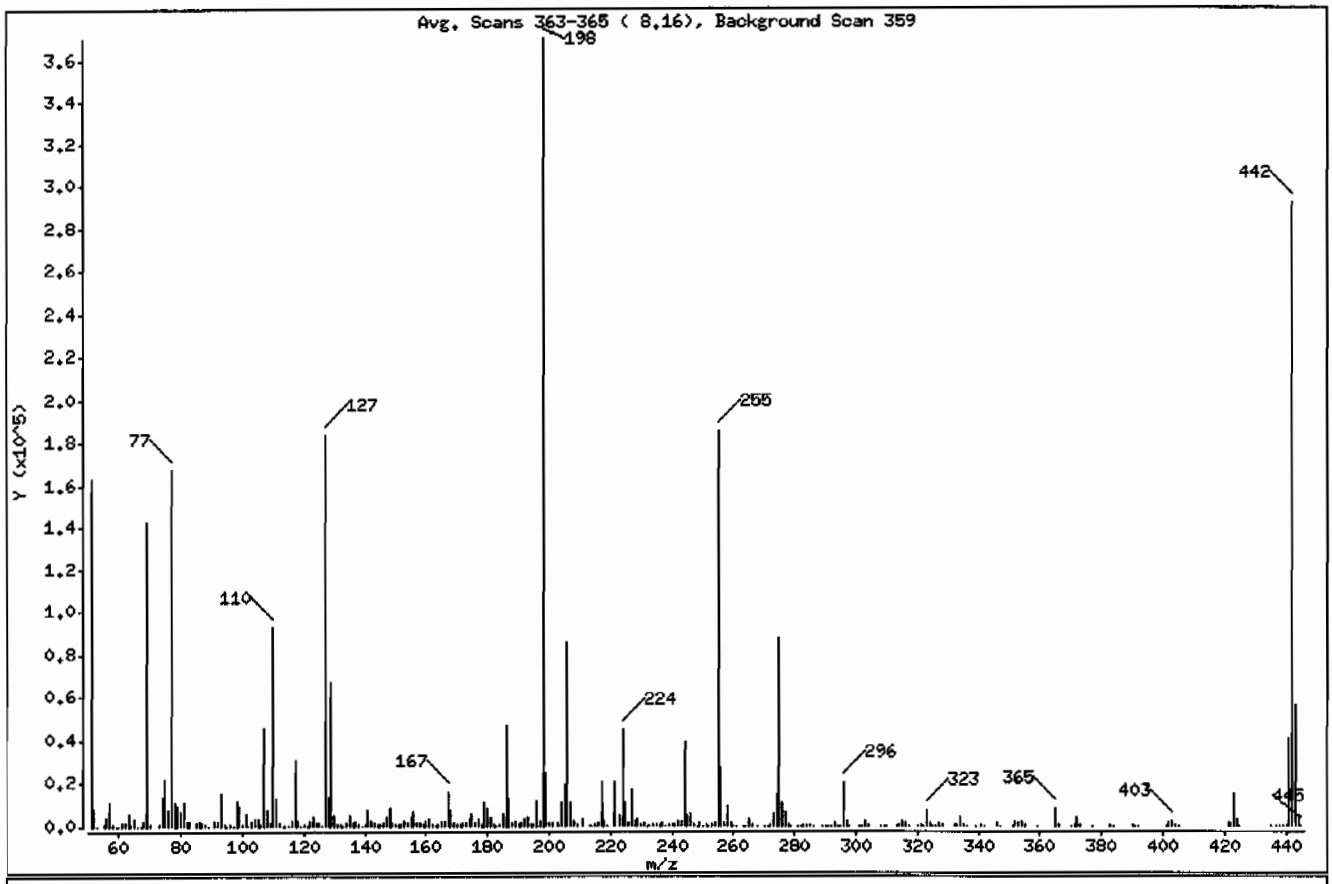

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.19
68	Less than 2.00% of mass 69	0.70 (1.82)
69	Mass 69 relative abundance	38.52
70	Less than 2.00% of mass 69	0.22 (0.58)
127	40.00 - 60.00% of mass 198	49.61
197	Less than 1.00% of mass 198	0.73
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	23.76
365	Greater than 1.00% of mass 198	2.39
441	Present, but less than mass 443	10.94
442	Greater than 40.00% of mass 198	78.91
443	17.00 - 23.00% of mass 442	15.11 (19.15)

Data File: /chem/HSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: HSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVHF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d

Spectrum: Avg, Scans 363-365 (8.16), Background Scan 359

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	163520	132.00	696	209.00	894	295.00	409
52.00	8218	133.00	165	211.00	3176	296.00	20504
53.00	278	134.00	1736	213.00	157	297.00	2961
55.00	768	135.00	5284	214.00	60	298.00	242
56.00	4517	136.00	1990	215.00	896	301.00	228
57.00	10646	137.00	2882	216.00	1633	302.00	377
58.00	485	138.00	608	217.00	20280	303.00	2440
59.00	173	139.00	322	218.00	2791	304.00	779
60.00	130	140.00	728	219.00	287	308.00	333
61.00	1880	141.00	8017	221.00	20640	309.00	180
62.00	1926	142.00	2864	223.00	4752	310.00	288
63.00	5930	143.00	1765	224.00	45496	313.00	172
64.00	771	144.00	446	225.00	11459	314.00	1000
65.00	3009	145.00	462	226.00	1320	315.00	2189
66.00	190	146.00	1638	227.00	16640	316.00	1304
67.00	147	147.00	4131	228.00	2433	317.00	255
68.00	2590	148.00	8419	229.00	3596	320.00	58
69.00	142592	149.00	1752	230.00	541	321.00	701
70.00	823	150.00	512	231.00	1631	322.00	395
73.00	1236	151.00	1272	232.00	323	323.00	7827
74.00	13875	152.00	886	233.00	236	324.00	1465
75.00	21824	153.00	2474	234.00	1059	325.00	55
76.00	7905	154.00	2034	235.00	1215	326.00	117
77.00	167296	155.00	4599	236.00	846	327.00	1319
78.00	11034	156.00	6876	237.00	1279	328.00	683
79.00	9492	157.00	1450	238.00	168	332.00	545
80.00	7131	158.00	1509	239.00	670	333.00	652
81.00	10804	159.00	1113	240.00	518	334.00	4627
82.00	2610	160.00	2655	241.00	1019	335.00	1148
83.00	2719	161.00	3658	242.00	2369	336.00	50
85.00	1896	162.00	1109	243.00	2744	339.00	57
86.00	2616	163.00	339	244.00	39256	341.00	855
87.00	1519	164.00	493	245.00	4982	342.00	192
88.00	684	165.00	2904	246.00	6349	346.00	1554
89.00	219	166.00	2427	247.00	1255	347.00	356

Data File: /chem/HSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: HSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d
Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	2379	167.00	16176	248.00	341	351.00	56
92.00	2447	168.00	7387	249.00	1305	352.00	2339
93.00	14969	169.00	1311	250.00	210	353.00	1624
94.00	1163	170.00	539	251.00	450	354.00	2500
95.00	287	171.00	706	252.00	278	355.00	434
96.00	810	172.00	1473	253.00	769	359.00	83
97.00	388	173.00	1748	254.00	1972	365.00	8863
98.00	11810	174.00	3414	255.00	185216	366.00	1195
99.00	9686	175.00	6350	256.00	27176	370.00	215
100.00	914	176.00	2063	257.00	2039	371.00	581
101.00	5933	177.00	3047	258.00	9022	372.00	4002
102.00	375	178.00	995	259.00	1444	373.00	996
103.00	2163	179.00	11274	260.00	214	377.00	51
104.00	3736	180.00	8159	261.00	279	383.00	974
105.00	3394	181.00	4009	263.00	55	384.00	323
106.00	1190	182.00	670	264.00	157	390.00	592
107.00	46232	183.00	413	265.00	3712	391.00	375
108.00	7538	184.00	909	266.00	481	392.00	323
109.00	1503	185.00	5852	268.00	53	401.00	231
110.00	92872	186.00	47008	270.00	282	402.00	1478
111.00	12963	187.00	12615	271.00	380	403.00	2390
112.00	1503	188.00	1316	272.00	540	404.00	821
113.00	406	189.00	2602	273.00	5676	405.00	134
114.00	121	190.00	427	274.00	15599	421.00	2054
115.00	133	191.00	1281	275.00	87936	422.00	1867
116.00	2637	192.00	3712	276.00	11240	423.00	15373
117.00	30336	193.00	4225	277.00	6439	424.00	3047
118.00	2397	194.00	901	278.00	950	425.00	291
119.00	332	195.00	603	279.00	182	435.00	71
120.00	620	196.00	12028	281.00	60	437.00	71
121.00	175	197.00	2717	282.00	68	438.00	134
122.00	2801	198.00	370176	283.00	713	439.00	238
123.00	4622	199.00	24728	284.00	493	440.00	191
124.00	2083	200.00	1826	285.00	1250	441.00	40480
125.00	1949	201.00	2072	286.00	254	442.00	292096

Data File: /chem/MSD1.i/s111409.b/s1k1259.d

Date : 17-NOV-2009 15:48

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1k1259.d

Spectrum: Avg. Scans 363-365 (8.16), Background Scan 359

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	136	203.00	2082	289.00	243	443.00	65944
127.00	183616	204.00	10956	290.00	235	444.00	5034
128.00	13544	205.00	19552	291.00	131	445.00	311
129.00	66872	206.00	85904	292.00	339		
130.00	5516	207.00	10725	293.00	1482		
131.00	1048	208.00	2576	294.00	389		

Data File: /chem/MSD1.i/s120309.b/s110305.d

Date : 03-DEC-2009 11:41

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

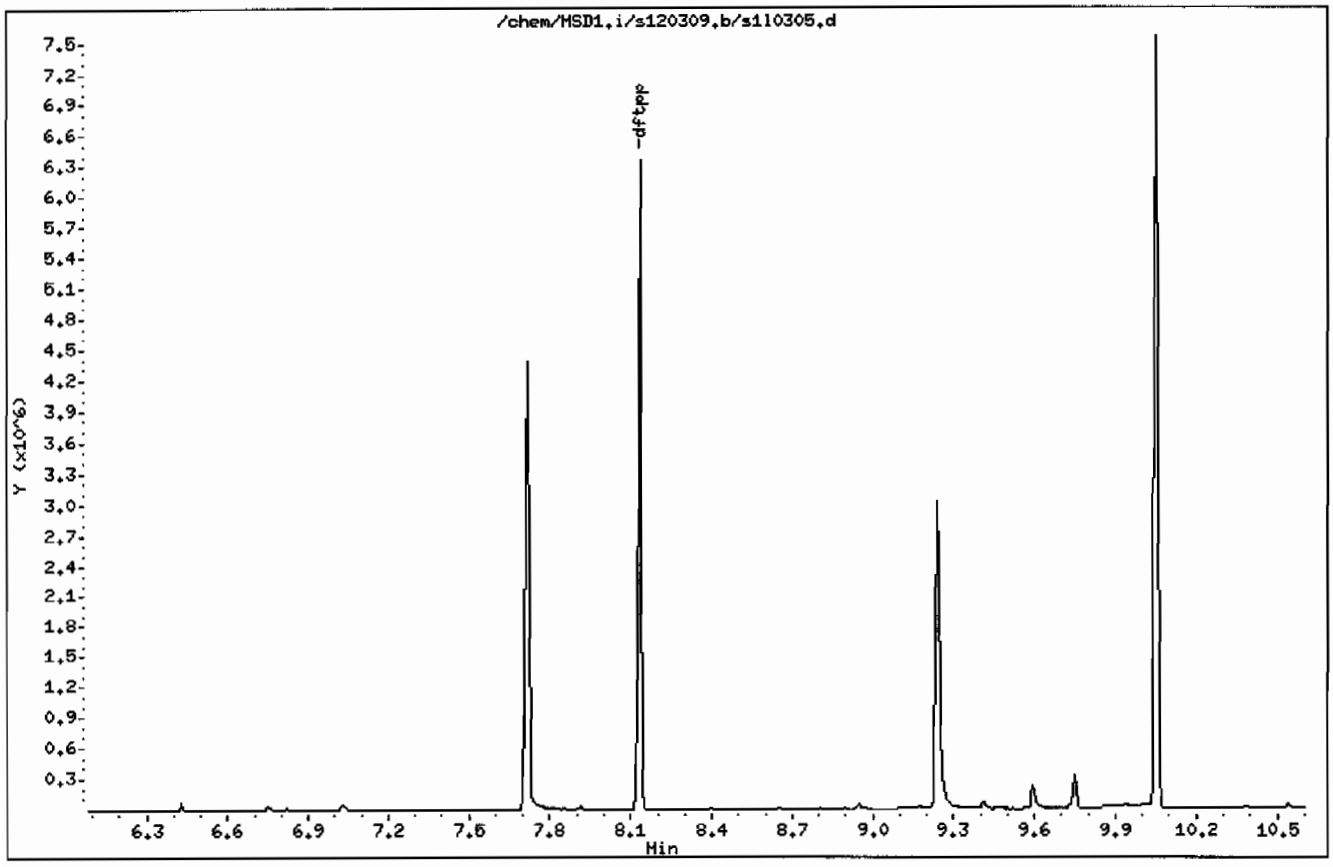

Data File: /chem/MSD1.i/s120309.b/s110305.d

Date : 03-DEC-2009 11:41

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp

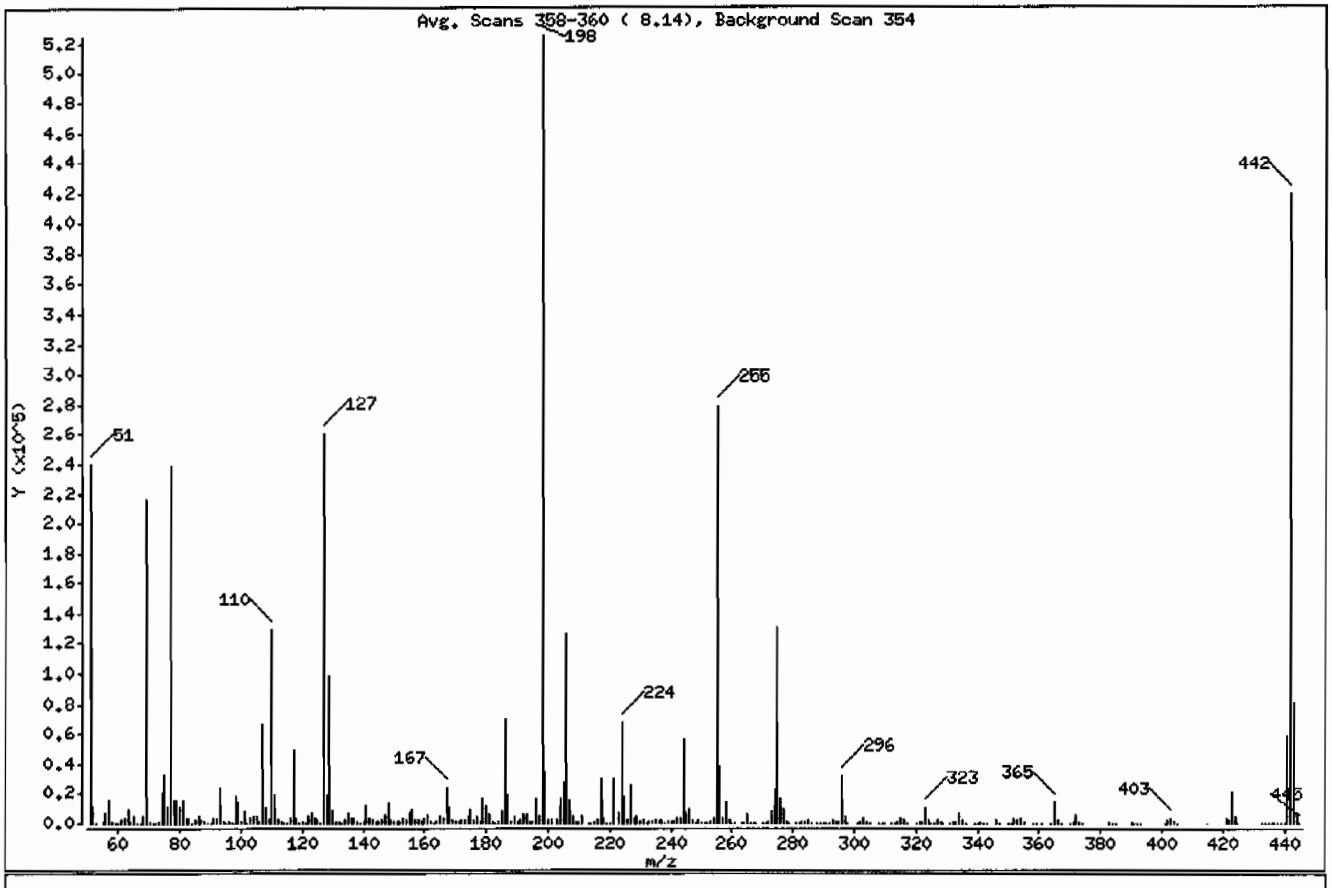

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.78
68	Less than 2.00% of mass 69	0.81 (1.98)
69	Mass 69 relative abundance	41.25
70	Less than 2.00% of mass 69	0.18 (0.45)
127	40.00 - 60.00% of mass 198	49.64
197	Less than 1.00% of mass 198	0.98
199	5.00 - 9.00% of mass 198	6.63
275	10.00 - 30.00% of mass 198	24.85
365	Greater than 1.00% of mass 198	2.68
441	Present, but less than mass 443	11.29
442	Greater than 40.00% of mass 198	79.72
443	17.00 - 23.00% of mass 442	15.42 (19.35)

Data File: /chem/MSD1.i/s120309.b/s110305.d

Date : 03-DEC-2009 11:41

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110305.d
Spectrum: Avg. Scans 358-360 (8.14), Background Scan 354
Location of Maximum: 198.00
Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	240128	134.00	2658	218.00	4045	309.00	379
52.00	12101	135.00	7753	219.00	354	310.00	489
53.00	516	136.00	3070	220.00	117	312.00	110
55.00	1118	137.00	3942	221.00	30160	313.00	286
56.00	6886	138.00	908	223.00	6684	314.00	1572
57.00	15322	139.00	553	224.00	67048	315.00	3394
58.00	666	140.00	1076	225.00	17656	316.00	2177
59.00	202	141.00	11677	226.00	1896	317.00	412
60.00	162	142.00	4054	227.00	25464	320.00	67
61.00	2823	143.00	2730	228.00	3573	321.00	1053
62.00	3066	144.00	696	229.00	5381	322.00	731
63.00	9119	145.00	747	230.00	708	323.00	11251
64.00	1492	146.00	2302	231.00	2635	324.00	1812
65.00	4416	147.00	6158	232.00	468	325.00	178
66.00	281	148.00	12887	233.00	632	326.00	231
67.00	108	149.00	2647	234.00	1616	327.00	2107
68.00	4274	150.00	772	235.00	2025	328.00	1099
69.00	216384	151.00	1631	236.00	1198	329.00	127
70.00	970	152.00	1260	237.00	2512	331.00	63
71.00	124	153.00	3819	238.00	359	332.00	759
72.00	51	154.00	2910	239.00	1135	333.00	1176
73.00	1431	155.00	6881	240.00	776	334.00	6884
74.00	20504	156.00	9548	241.00	1440	335.00	1889
75.00	32992	157.00	2116	242.00	3608	336.00	188
76.00	11443	158.00	2523	243.00	4066	339.00	163
77.00	238400	159.00	1710	244.00	57168	340.00	152
78.00	15601	160.00	3485	245.00	7499	341.00	1233
79.00	15130	161.00	5712	246.00	9289	342.00	456
80.00	11053	162.00	1731	247.00	2039	343.00	54
81.00	16258	163.00	443	248.00	509	346.00	2397
82.00	3947	164.00	671	249.00	1840	347.00	519
83.00	3543	165.00	4553	250.00	445	350.00	63
84.00	496	166.00	3906	251.00	564	351.00	281
85.00	3000	167.00	23544	252.00	476	352.00	3425
86.00	4233	168.00	10260	253.00	1419	353.00	2238

Date : 03-DEC-2009 11:41

Client ID: DFTPP Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s110305.d
Spectrum: Avg. Scans 358-360 (8.14), Background Scan 354
Location of Maximum: 198.00
Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	2095	169.00	2084	254.00	3182	354.00	3782
88.00	920	170.00	806	255.00	278976	355.00	754
89.00	389	171.00	1000	256.00	39088	358.00	50
90.00	118	172.00	1948	257.00	3118	359.00	208
91.00	3643	173.00	2728	258.00	14635	361.00	51
92.00	3923	174.00	5130	259.00	2459	364.00	157
93.00	23856	175.00	9300	260.00	530	365.00	14035
94.00	1714	176.00	2999	261.00	530	366.00	2003
95.00	437	177.00	4386	263.00	82	367.00	54
96.00	1309	178.00	1536	264.00	501	370.00	397
97.00	543	179.00	17008	265.00	6163	371.00	828
98.00	18488	180.00	12220	266.00	538	372.00	6292
99.00	14234	181.00	5646	267.00	107	373.00	1460
100.00	1247	182.00	1031	268.00	8	374.00	117
101.00	9013	183.00	521	270.00	369	383.00	1432
102.00	587	184.00	1328	271.00	539	384.00	433
103.00	3376	185.00	8317	272.00	833	385.00	120
104.00	5371	186.00	69744	273.00	8261	390.00	751
105.00	5142	187.00	18704	274.00	22728	391.00	584
106.00	1787	188.00	1780	275.00	130344	392.00	382
107.00	66496	189.00	4298	276.00	16824	393.00	53
108.00	10575	190.00	809	277.00	9511	401.00	367
109.00	2189	191.00	1840	278.00	1631	402.00	2117
110.00	129104	192.00	5459	279.00	358	403.00	3615
111.00	19080	193.00	6082	281.00	41	404.00	1246
112.00	2458	194.00	1554	282.00	240	405.00	253
113.00	834	195.00	986	283.00	1349	415.00	95
114.00	82	196.00	17032	284.00	713	421.00	3189
115.00	311	197.00	5149	285.00	1831	422.00	2509
116.00	4175	198.00	524608	286.00	413	423.00	21488
117.00	49000	199.00	34768	288.00	70	424.00	4235
118.00	3471	200.00	2397	289.00	481	425.00	438
119.00	533	201.00	2912	290.00	358	433.00	80
120.00	845	203.00	2955	291.00	224	434.00	61
121.00	375	204.00	17024	292.00	473	435.00	95

Data File: /chem/MSD1.i/s120309.b/s110305.d

Date : 03-DEC-2009 11:41

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: |WBN091101-01|50 PPM|1|SVMF|1|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s110305.d
Spectrum: Avg. Scans 358-360 (8.14), Background Scan 354
Location of Maximum: 198.00
Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	4426	205.00	28080	293.00	2224	436.00	163
123.00	6874	206.00	127112	294.00	610	437.00	252
124.00	3143	207.00	15987	295.00	854	438.00	141
125.00	3000	208.00	4240	296.00	32352	439.00	297
126.00	368	209.00	1381	297.00	4491	440.00	304
127.00	260352	210.00	1124	298.00	349	441.00	59208
128.00	18984	211.00	5026	301.00	440	442.00	418176
129.00	98704	213.00	404	302.00	707	443.00	80904
130.00	7863	214.00	59	303.00	3655	444.00	7349
131.00	1593	215.00	1360	304.00	1023	445.00	451
132.00	847	216.00	2610	305.00	118		
133.00	528	217.00	30632	308.00	479		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982264**				
Client Sample:	**QC for batch 927154**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927154**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 13:58**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30 g**	**Final Volume:**	**.965 mL**
Data File:	**s110310-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	322	ug/kg	64.3	322
108-95-2	Phenol	U	322	ug/kg	64.3	322
95-57-8	2-Chlorophenol	U	322	ug/kg	64.3	322
106-46-7	1,4-Dichlorobenzene	U	322	ug/kg	64.3	322
621-64-7	N-Nitrosodipropylamine	U	322	ug/kg	64.3	322
59-50-7	4-Chloro-3-methylphenol	U	322	ug/kg	64.3	322
83-32-9	Acenaphthene	U	32.2	ug/kg	10.6	32.2
121-14-2	2,4-Dinitrotoluene	U	322	ug/kg	32.2	322
100-02-7	4-Nitrophenol	U	322	ug/kg	106	322
87-86-5	Pentachlorophenol	U	322	ug/kg	80.4	322
129-00-0	Pyrene	U	32.2	ug/kg	9.65	32.2
110-86-1	Pyridine	U	322	ug/kg	64.3	322
62-53-3	Aniline	U	322	ug/kg	96.5	322
111-44-4	bis(2-Chloroethyl) ether	U	322	ug/kg	64.3	322
541-73-1	1,3-Dichlorobenzene	U	322	ug/kg	64.3	322
100-51-6	Benzyl alcohol	U	322	ug/kg	96.5	322
95-50-1	1,2-Dichlorobenzene	U	322	ug/kg	64.3	322
108-60-1	bis(2-Chloroisopropyl)ether	U	322	ug/kg	64.3	322
95-48-7	o-Cresol	U	322	ug/kg	64.3	322
65794-96-9	m,p-Cresols	U	322	ug/kg	96.5	322
67-72-1	Hexachloroethane	U	322	ug/kg	64.3	322
98-95-3	Nitrobenzene	U	322	ug/kg	64.3	322
78-59-1	Isophorone	U	322	ug/kg	64.3	322
88-75-5	2-Nitrophenol	U	322	ug/kg	64.3	322
105-67-9	2,4-Dimethylphenol	U	322	ug/kg	113	322
111-91-1	bis(2-Chloroethoxy)methane	U	322	ug/kg	64.3	322
120-83-2	2,4-Dichlorophenol	U	322	ug/kg	64.3	322
65-85-0	Benzoic acid	U	643	ug/kg	161	643
91-20-3	Naphthalene	U	32.2	ug/kg	9.65	32.2
106-47-8	4-Chloroaniline	U	322	ug/kg	64.3	322
87-68-3	Hexachlorobutadiene	U	322	ug/kg	64.3	322
91-57-6	2-Methylnaphthalene	U	32.2	ug/kg	6.43	32.2
77-47-4	Hexachlorocyclopentadiene	U	322	ug/kg	64.3	322
88-06-2	2,4,6-Trichlorophenol	U	322	ug/kg	64.3	322
95-95-4	2,4,5-Trichlorophenol	U	322	ug/kg	64.3	322
91-58-7	2-Chloronaphthalene	U	32.2	ug/kg	10.6	32.2
88-74-4	2-Nitroaniline	U	322	ug/kg	64.3	322
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	322	ug/kg	64.3	322

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982264**				
Client Sample:	**QC for batch 927154**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927154**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 13:58**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30 g**	**Final Volume:**	**.965 mL**
Data File:	**s1l0310-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	322	ug/kg	64.3	322
606-20-2	2,6-Dinitrotoluene	U	322	ug/kg	32.2	322
208-96-8	Acenaphthylene	U	32.2	ug/kg	9.65	32.2
51-28-5	2,4-Dinitrophenol	U	643	ug/kg	122	643
132-64-9	Dibenzofuran	U	322	ug/kg	64.3	322
84-66-2	Diethylphthalate	U	322	ug/kg	64.3	322
86-73-7	Fluorene	U	32.2	ug/kg	9.65	32.2
7005-72-3	4-Chlorophenylphenylether	U	322	ug/kg	64.3	322
534-52-1	2-Methyl-4,6-dinitrophenol	U	322	ug/kg	64.3	322
100-01-6	4-Nitroaniline	U	322	ug/kg	96.5	322
	p-Nitroaniline					
122-39-4	Diphenylamine	U	322	ug/kg	64.3	322
122-66-7	Azobenzene	U	322	ug/kg	64.3	322
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	322	ug/kg	64.3	322
118-74-1	Hexachlorobenzene	U	322	ug/kg	64.3	322
85-01-8	Phenanthrene	U	32.2	ug/kg	9.65	32.2
120-12-7	Anthracene	U	32.2	ug/kg	6.43	32.2
84-74-2	Di-n-butylphthalate	U	322	ug/kg	64.3	322
206-44-0	Fluoranthene	U	32.2	ug/kg	9.65	32.2
85-68-7	Butylbenzylphthalate	U	322	ug/kg	64.3	322
56-55-3	Benzo(a)anthracene	U	32.2	ug/kg	9.65	32.2
91-94-1	3,3'-Dichlorobenzidine	U	322	ug/kg	96.5	322
218-01-9	Chrysene	U	32.2	ug/kg	9.65	32.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	322	ug/kg	64.3	322
117-84-0	Di-n-octylphthalate	U	322	ug/kg	64.3	322
205-99-2	Benzo(b)fluoranthene	U	32.2	ug/kg	9.65	32.2
207-08-9	Benzo(k)fluoranthene	U	32.2	ug/kg	9.65	32.2
50-32-8	Benzo(a)pyrene	U	32.2	ug/kg	9.65	32.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	32.2	ug/kg	9.65	32.2
53-70-3	Dibenzo(a,h)anthracene	U	32.2	ug/kg	9.65	32.2
191-24-2	Benzo(ghi)perylene	U	32.2	ug/kg	9.65	32.2
120-82-1	1,2,4-Trichlorobenzene	U	322	ug/kg	64.3	322

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.62	218	ug/kg		J
	Unknown	2.02	724	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982264**				
Client Sample:	**QC for batch 927154**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927154**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 13:58**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30 g**	**Final Volume:**	**.965 mL**
Data File:	**s110310-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	2420	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110310.d
Lab Smp Id: 1201982264 Client Smp ID: SBLK01
Inj Date : 03-DEC-2009 13:58
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201982264|927155|1|SVMF|1|SBLK01
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 11:52 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	0.96500	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	339927	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1345956	40.0000	
* 46 Acenaphthene-d10	164	6.022	6.028	(1.000)	760389	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1288792	40.0000	
* 91 Chrysene-d12	240	8.669	8.675	(1.000)	1109639	40.0000	
* 98 Perylene-d12	264	10.122	10.127	(1.000)	948722	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	737971	83.1164	2670
$ 5 Phenol-d5	99	3.640	3.640	(0.929)	864873	80.1455	2580
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	394513	44.4774	1430
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.917)	893914	49.0857	1580
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.089)	227528	107.159	3450
$ 81 p-Terphenyl-d14	244	7.922	7.922	(0.914)	948380	54.4488	1750

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110310.d
Lab Smp Id: 1201982264 Client Smp ID: SBLK01
Inj Date : 03-DEC-2009 13:58
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201982264|927155|1|SVMF|1|SBLK01
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 11:52 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	0.96500	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.916	2015452	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Oxetane, 2,2-dimethyl-				CAS #: 6245-99-4			
1.616	341522	6.77807033	218	7	NIST05.L	1741	10
Unknown				CAS #:			
2.016	1133342	22.4930510	724	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.946	3786769	75.1546967	2420	0		0	10

Data File: /chem/MSD1.i/s120309.b/s110310.d
Date : 03-DEC-2009 13:58
Client ID: SBLK01
Sample Info: |120198226|927155|1|SVMF|1|SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD1.i

Operator: AMY
Column diameter: 0.20

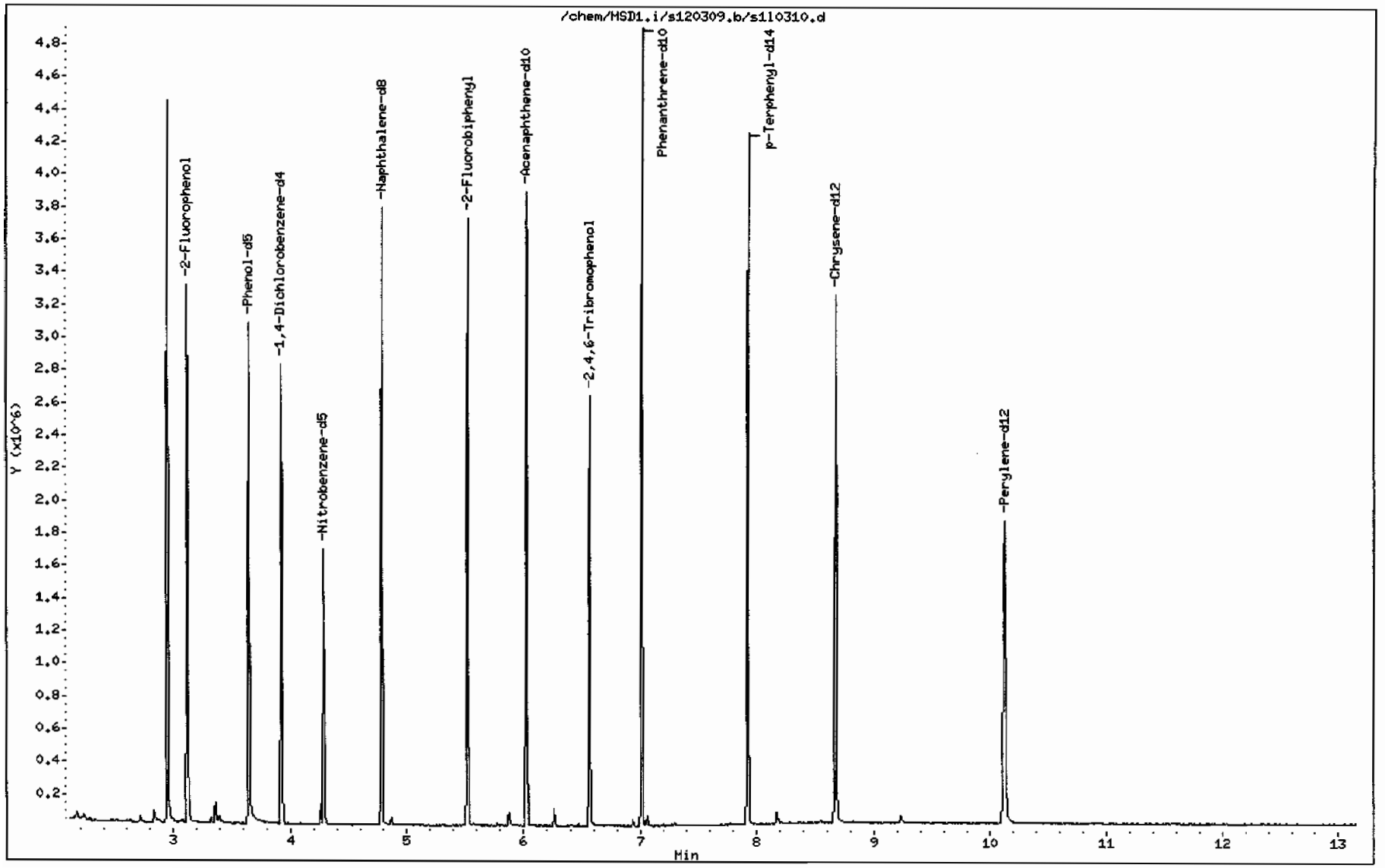

Data File: /chem/MSD1.i/s120309.b/s110310.d

Date : 03-DEC-2009 13:58

Client ID: SBLK01

Instrument: MSD1.i

Sample Info: |1201982264|927155|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oxetane, 2,2-dimethyl-	6245-99-4	NIST05.L	1741	7	C5H10O	86
Acetone	67-64-1	NIST05.L	209	5	C3H6O	58
Acetone	67-64-1	NIST05.L	212	5	C3H6O	58

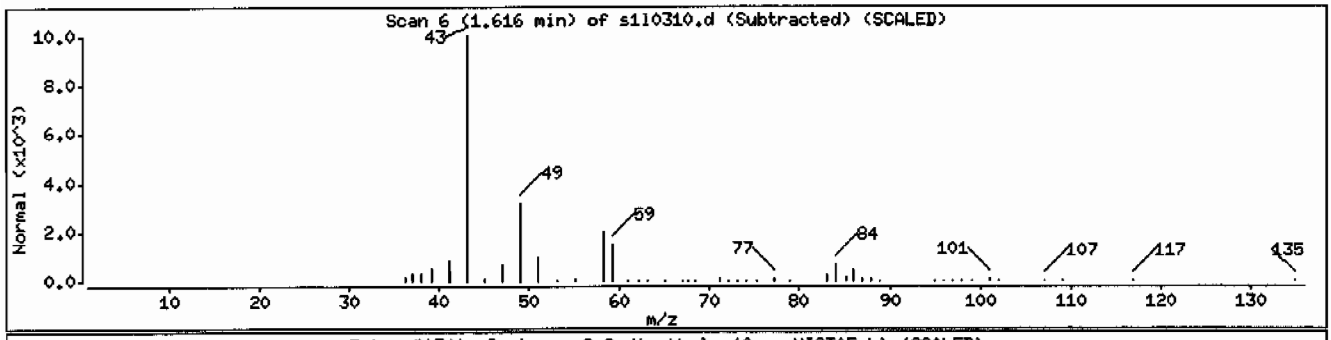

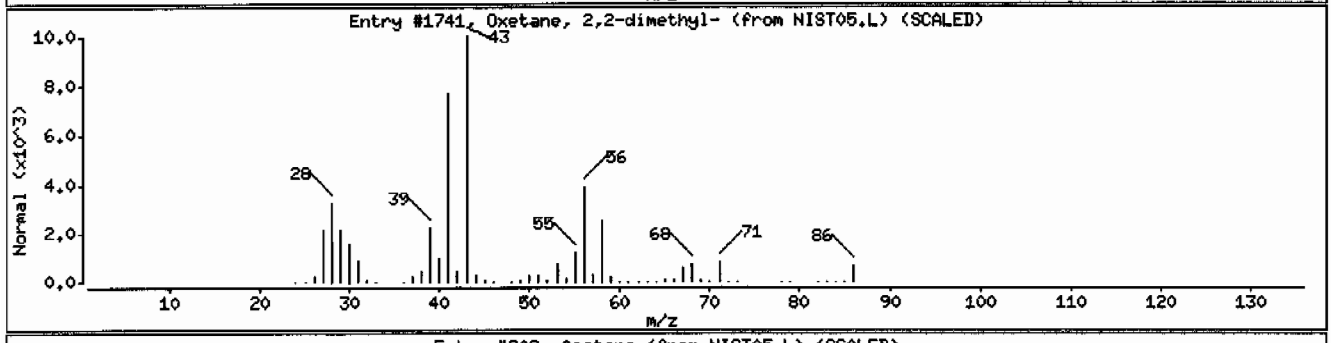

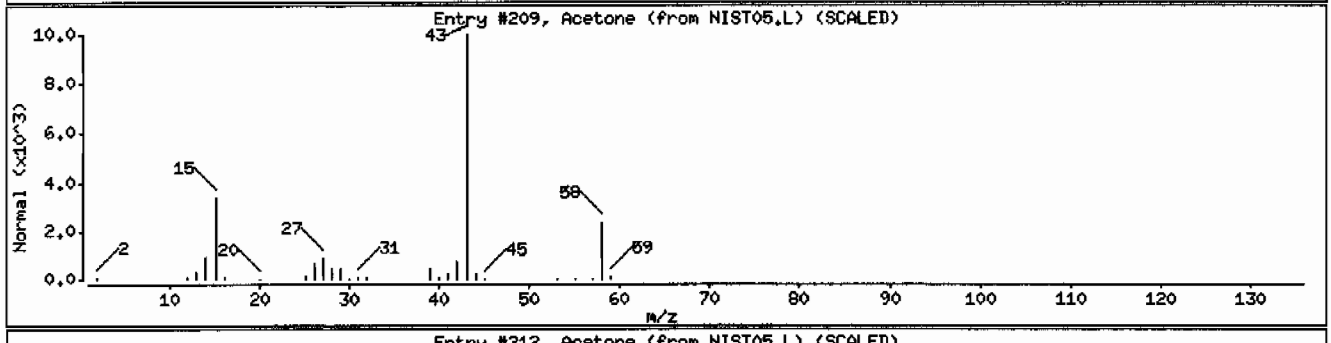

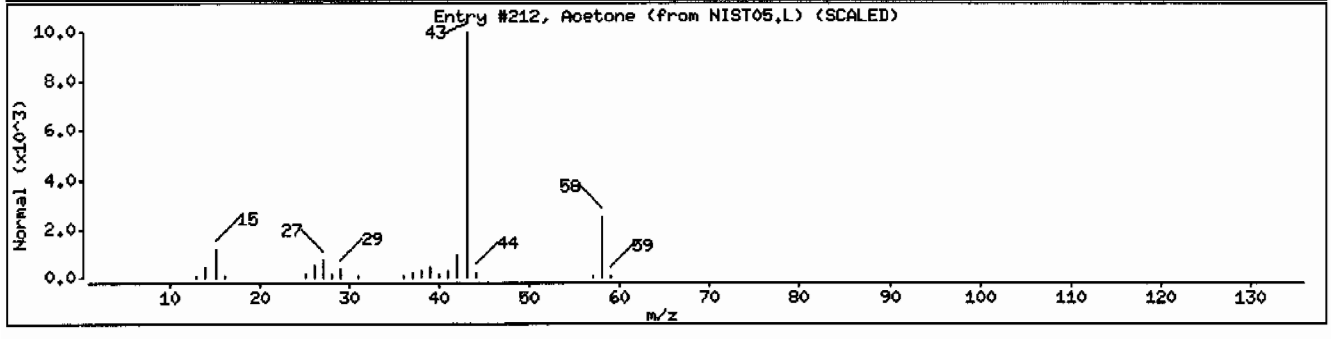

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Date : 03-DEC-2009 13:58

Client ID: SBLK01 | Instrument: MSD1.i

Sample Info: |120198226419271551|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5 | Operator: AMY

Column phase: J&W DB-5MS | Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	40	C5H12O2	104

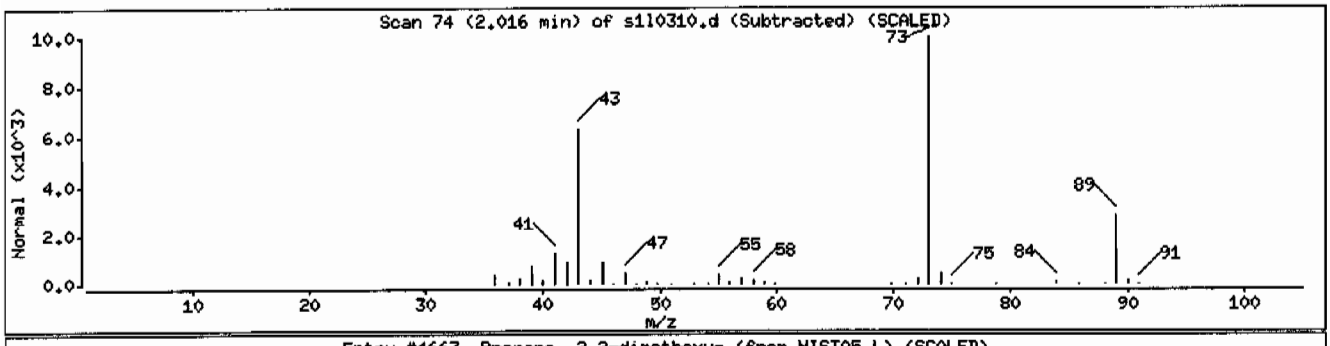

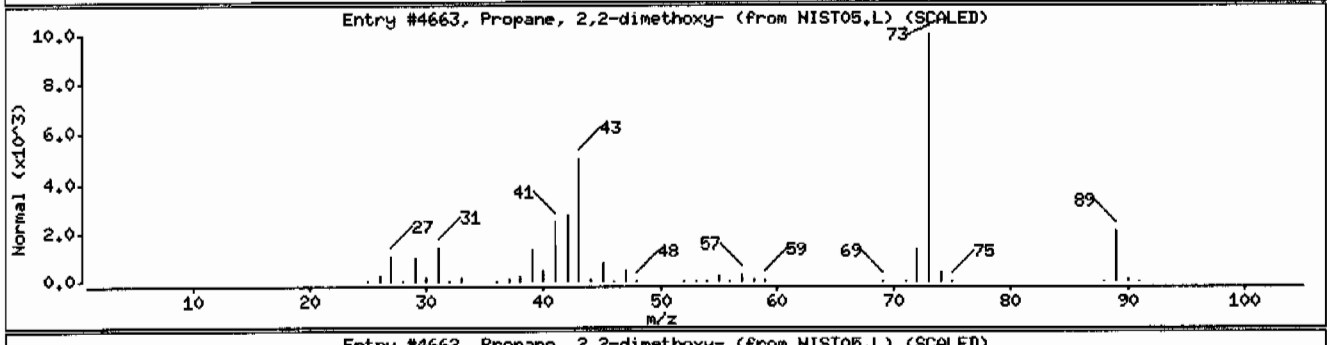

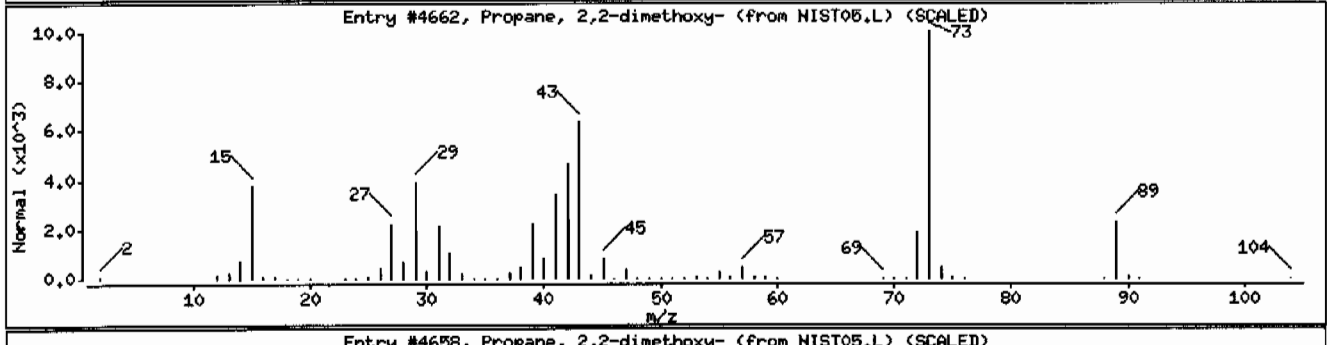

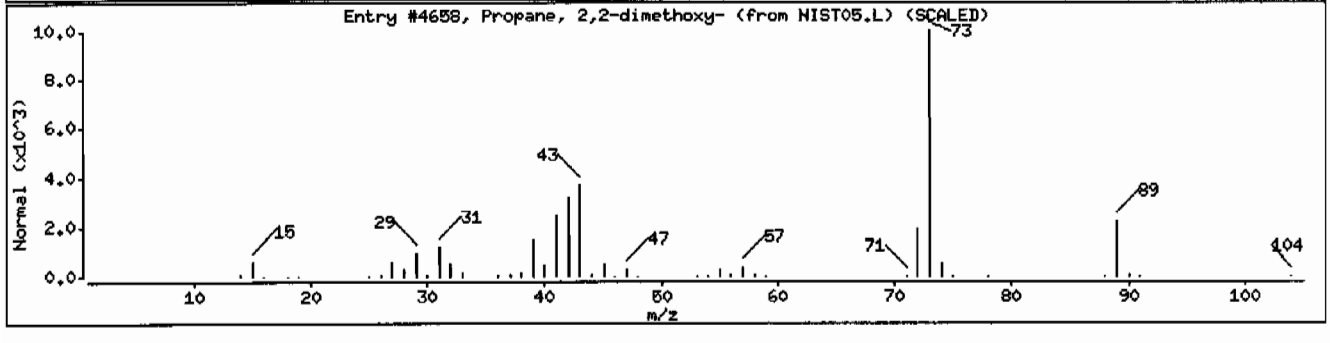

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Date : 03-DEC-2009 13:58

Client ID: SBLK01 Instrument: MSD1.i

Sample Info: |120198226419271551|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5 Operator: AMY

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141

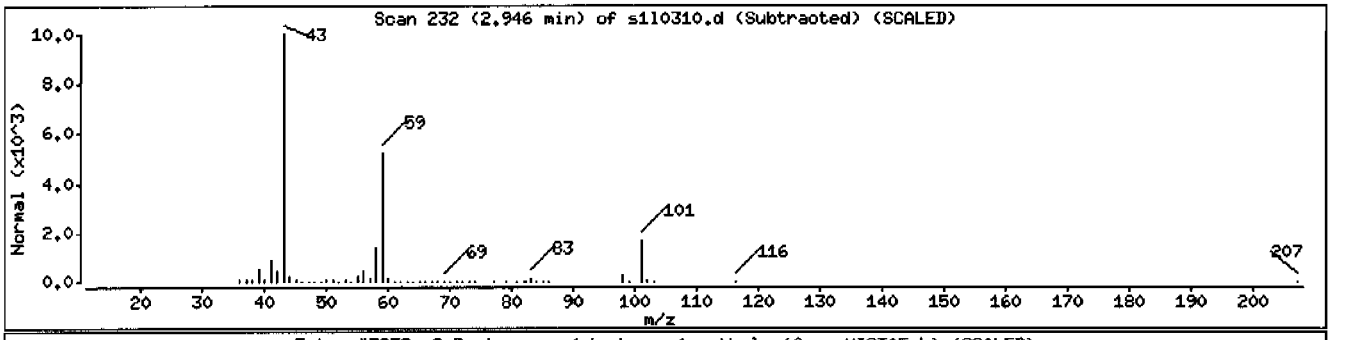

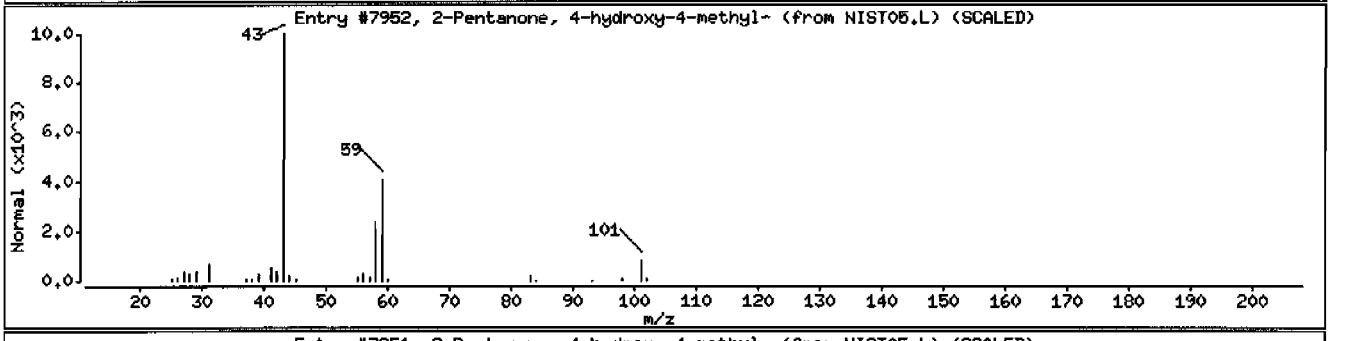

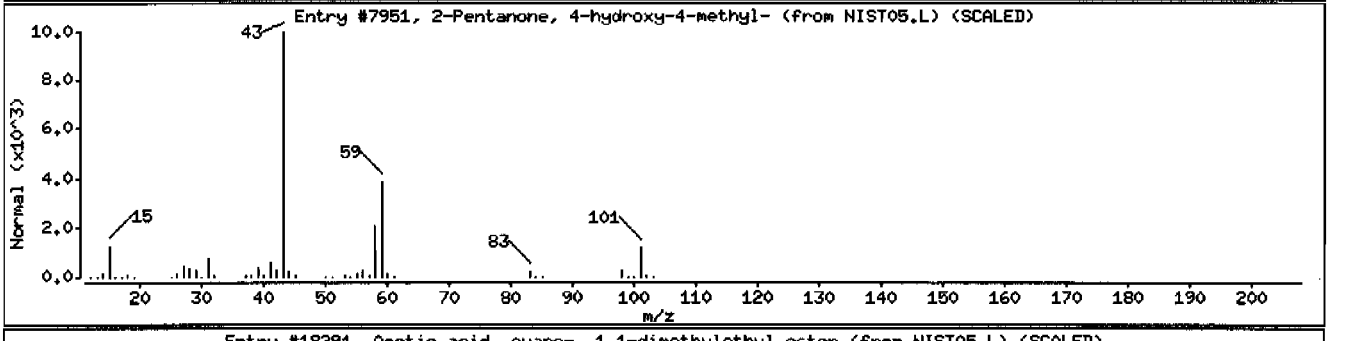

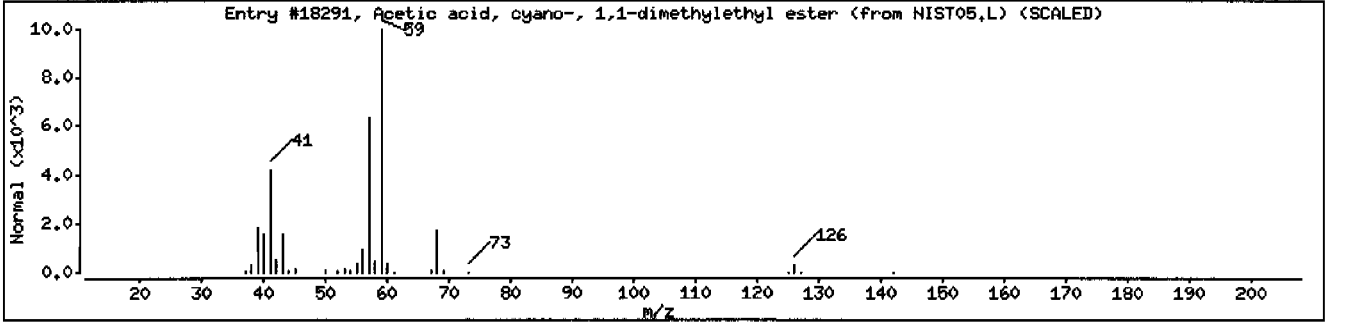

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644			Matrix:	SOIL
Lab Sample ID:	1201982267				
Client Sample:	QC for batch 927154	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 927154	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 14:21	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30 g	Final Volume:	.96 mL
Data File:	s1l0311-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1140	ug/kg	64.0	320
108-95-2	Phenol		1220	ug/kg	64.0	320
95-57-8	2-Chlorophenol		1250	ug/kg	64.0	320
106-46-7	1,4-Dichlorobenzene		1220	ug/kg	64.0	320
621-64-7	N-Nitrosodipropylamine		1090	ug/kg	64.0	320
59-50-7	4-Chloro-3-methylphenol		1210	ug/kg	64.0	320
83-32-9	Acenaphthene		1350	ug/kg	10.6	32.0
121-14-2	2,4-Dinitrotoluene		1350	ug/kg	32.0	320
100-02-7	4-Nitrophenol		1140	ug/kg	106	320
87-86-5	Pentachlorophenol		1490	ug/kg	80.0	320
129-00-0	Pyrene		1360	ug/kg	9.60	32.0
110-86-1	Pyridine		990	ug/kg	64.0	320
62-53-3	Aniline		1130	ug/kg	96.0	320
111-44-4	bis(2-Chloroethyl) ether		1180	ug/kg	64.0	320
541-73-1	1,3-Dichlorobenzene		1160	ug/kg	64.0	320
100-51-6	Benzyl alcohol		1080	ug/kg	96.0	320
95-50-1	1,2-Dichlorobenzene		1250	ug/kg	64.0	320
108-60-1	bis(2-Chloroisopropyl)ether		1120	ug/kg	64.0	320
95-48-7	o-Cresol		1370	ug/kg	64.0	320
65794-96-9	m,p-Cresols		1330	ug/kg	96.0	320
67-72-1	Hexachloroethane		1180	ug/kg	64.0	320
98-95-3	Nitrobenzene		1280	ug/kg	64.0	320
78-59-1	Isophorone		1390	ug/kg	64.0	320
88-75-5	2-Nitrophenol		1230	ug/kg	64.0	320
105-67-9	2,4-Dimethylphenol		1150	ug/kg	112	320
111-91-1	bis(2-Chloroethoxy)methane		1200	ug/kg	64.0	320
120-83-2	2,4-Dichlorophenol		1230	ug/kg	64.0	320
65-85-0	Benzoic acid		2940	ug/kg	160	640
91-20-3	Naphthalene		1260	ug/kg	9.60	32.0
106-47-8	4-Chloroaniline		1140	ug/kg	64.0	320
87-68-3	Hexachlorobutadiene		1330	ug/kg	64.0	320
91-57-6	2-Methylnaphthalene		1310	ug/kg	6.40	32.0
77-47-4	Hexachlorocyclopentadiene		2320	ug/kg	64.0	320
88-06-2	2,4,6-Trichlorophenol		1450	ug/kg	64.0	320
95-95-4	2,4,5-Trichlorophenol		1460	ug/kg	64.0	320
91-58-7	2-Chloronaphthalene		1250	ug/kg	10.6	32.0
88-74-4	2-Nitroaniline		1150	ug/kg	64.0	320
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1150	ug/kg	64.0	320

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982267**				
Client Sample:	**QC for batch 927154**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927154**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 14:21**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30 g**	**Final Volume:**	**.96 mL**
Data File:	**s1l0311-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1430	ug/kg	64.0	320
606-20-2	2,6-Dinitrotoluene		1350	ug/kg	32.0	320
208-96-8	Acenaphthylene		1360	ug/kg	9.60	32.0
51-28-5	2,4-Dinitrophenol		1620	ug/kg	122	640
132-64-9	Dibenzofuran		1610	ug/kg	64.0	320
84-66-2	Diethylphthalate		1530	ug/kg	64.0	320
86-73-7	Fluorene		1410	ug/kg	9.60	32.0
7005-72-3	4-Chlorophenylphenylether		1560	ug/kg	64.0	320
534-52-1	2-Methyl-4,6-dinitrophenol		1400	ug/kg	64.0	320
100-01-6	4-Nitroaniline		1260	ug/kg	96.0	320
	p-Nitroaniline					
122-39-4	Diphenylamine		1300	ug/kg	64.0	320
122-66-7	Azobenzene		1310	ug/kg	64.0	320
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1680	ug/kg	64.0	320
118-74-1	Hexachlorobenzene		1480	ug/kg	64.0	320
85-01-8	Phenanthrene		1350	ug/kg	9.60	32.0
120-12-7	Anthracene		1340	ug/kg	6.40	32.0
84-74-2	Di-n-butylphthalate		1670	ug/kg	64.0	320
206-44-0	Fluoranthene		1450	ug/kg	9.60	32.0
85-68-7	Butylbenzylphthalate		1610	ug/kg	64.0	320
56-55-3	Benzo(a)anthracene		1320	ug/kg	9.60	32.0
91-94-1	3,3'-Dichlorobenzidine		1380	ug/kg	96.0	320
218-01-9	Chrysene		1320	ug/kg	9.60	32.0
117-81-7	bis(2-Ethylhexyl)phthalate		1610	ug/kg	64.0	320
117-84-0	Di-n-octylphthalate		1600	ug/kg	64.0	320
205-99-2	Benzo(b)fluoranthene		1430	ug/kg	9.60	32.0
207-08-9	Benzo(k)fluoranthene		1400	ug/kg	9.60	32.0
50-32-8	Benzo(a)pyrene		1420	ug/kg	9.60	32.0
193-39-5	Indeno(1,2,3-cd)pyrene		1460	ug/kg	9.60	32.0
53-70-3	Dibenzo(a,h)anthracene		1450	ug/kg	9.60	32.0
191-24-2	Benzo(ghi)perylene		1520	ug/kg	9.60	32.0
120-82-1	1,2,4-Trichlorobenzene		1270	ug/kg	64.0	320

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Data file : /chem/MSD1.i/s120309.b/s110311.d
Lab Smp Id: 1201982267 Client Smp ID: SBLK01LCS
Inj Date : 03-DEC-2009 14:21
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201982267|927155|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 04-Dec-2009 11:52 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	0.96000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	403537	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1747037	40.0000	
* 46 Acenaphthene-d10	164	6.028	6.028	(1.000)	905312	40.0000	
* 67 Phenanthrene-d10	188	7.010	7.010	(1.000)	1584646	40.0000	
* 91 Chrysene-d12	240	8.675	8.675	(1.000)	1450828	40.0000	(H)
* 98 Perylene-d12	264	10.127	10.127	(1.000)	1270259	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	865108	82.0768	2630
$ 5 Phenol-d5	99	3.646	3.640	(0.931)	990651	77.3303	2470
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	461917	40.1209	1280 (H)
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.916)	1050538	48.4517	1550
$ 60 2,4,6-Tribromophenol	329	6.563	6.557	(1.089)	298600	118.119	3780 (R)
$ 81 p-Terphenyl-d14	244	7.922	7.922	(0.920)	1204125	52.8741	1690

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.651	3.651	(0.932)	515600	38.1974	1220
8 2-Chlorophenol	128	3.787	3.787	(0.967)	447641	39.0195	1250
11 1,4-Dichlorobenzene	146	3.928	3.928	(1.003)	501911	38.0364	1220(H)
17 N-Nitrosodipropylamine	70	4.157	4.157	(1.062)	261075	33.9448	1090(Q)
28 1,2,4-Trichlorobenzene	180	4.734	4.734	(0.990)	419969	39.7166	1270
33 4-Chloro-3-methylphenol	107	5.134	5.128	(1.074)	352499	37.7040	1210
47 Acenaphthene	154	6.051	6.051	(1.004)	879619	42.1258	1350
50 2,4-Dinitrotoluene	165	6.134	6.133	(1.018)	342826	42.0840	1350
52 4-Nitrophenol	139	6.075	6.075	(1.008)	152460	35.6953	1140
65 Pentachlorophenol	266	6.881	6.875	(0.982)	186892	46.6318	1490
79 Pyrene	202	7.875	7.875	(0.915)	1635558	42.4234	1360(H)
2 Pyridine	79	2.475	2.457	(0.632)	297252	30.9241	990
4 Aniline	66	3.704	3.704	(0.946)	198895	35.3235	1130
7 bis(2-Chloroethyl) ether	63	3.716	3.722	(0.949)	346228	36.8703	1180
9 1,3-Dichlorobenzene	146	3.887	3.887	(0.992)	489885	36.3927	1160
12 Benzyl alcohol	108	3.987	3.987	(1.018)	235579	33.7736	1080
13 1,2-Dichlorobenzene	146	4.034	4.034	(1.030)	475078	38.9835	1250
14 bis(2-Chloroisopropyl)ether	45	4.057	4.063	(1.036)	785682	35.1270	1120
15 o-Cresol	107	4.046	4.040	(1.033)	364345	42.6643	1360(H)
18 m,p-Cresols	107	4.140	4.140	(1.057)	484218	41.6722	1330
19 Hexachloroethane	117	4.263	4.263	(1.089)	174911	36.8304	1180
21 Nitrobenzene	77	4.293	4.298	(0.898)	478158	39.8604	1280
22 Isophorone	82	4.446	4.445	(0.930)	908847	43.3078	1380
23 2-Nitrophenol	139	4.510	4.510	(0.943)	244894	38.4578	1230
24 2,4-Dimethylphenol	122	4.504	4.504	(0.942)	367297	36.0213	1150
25 bis(2-Chloroethoxy)methane	93	4.569	4.569	(0.956)	504919	37.3731	1200
26 2,4-Dichlorophenol	162	4.675	4.669	(0.978)	366957	38.3488	1230
27 Benzoic acid	105	4.587	4.563	(0.959)	646105	91.9577	2940
30 Naphthalene	128	4.798	4.798	(1.004)	1431258	39.2541	1260(Q)
31 4-Chloroaniline	127	4.816	4.816	(1.007)	593330	35.6342	1140
32 Hexachlorobutadiene	225	4.863	4.863	(1.017)	224856	41.4121	1320
34 2-Methylnaphthalene	142	5.275	5.275	(1.103)	983923	41.0494	1310
36 Hexachlorocyclopentadiene	237	5.381	5.381	(0.893)	200457	72.5210	2320(R)
37 2,4,6-Trichlorophenol	196	5.469	5.469	(0.907)	273513	45.4220	1450
38 2,4,5-Trichlorophenol	196	5.498	5.492	(0.912)	291636	45.5481	1460(H)
40 2-Chloronaphthalene	162	5.628	5.628	(0.934)	875737	39.1837	1250
42 o-Nitroaniline	65	5.692	5.692	(0.944)	249933	36.0662	1150
41 m-Nitroaniline	138	5.981	5.981	(0.992)	219532	35.8517	1150
43 Dimethylphthalate	163	5.792	5.798	(0.961)	1098800	44.5426	1420
44 2,6-Dinitrotoluene	165	5.851	5.851	(0.971)	258661	42.0850	1350(H)
45 Acenaphthylene	152	5.934	5.934	(0.984)	1477973	42.3786	1360
48 2,4-Dinitrophenol	184	6.051	6.051	(1.004)	122602	50.5390	1620(Q)
49 Dibenzofuran	168	6.169	6.163	(1.023)	1520569	50.3548	1610
51 Diethylphthalate	149	6.275	6.275	(1.041)	1096281	47.6676	1520
53 Fluorene	166	6.398	6.398	(1.061)	1074627	44.1361	1410
54 4-Chlorophenylphenylether	204	6.375	6.375	(1.058)	500241	48.6620	1560
55 2-Methyl-4,6-dinitrophenol	198	6.416	6.416	(0.915)	174886	43.6231	1400

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.404	6.404	(1.062)	234968	39.2391	1260
133 Diphenylamine	169	6.457	6.451	(0.921)	860373	40.7050	1300
58 1,2-Diphenylhydrazine	77	6.487	6.486	(0.925)	1057484	41.0045	1310(H)
61 4-Bromophenylphenylether	248	6.698	6.698	(0.956)	286301	52.5859	1680
63 Hexachlorobenzene	284	6.757	6.757	(0.964)	308190	46.1169	1480
68 Phenanthrene	178	7.022	7.022	(1.002)	1516458	42.1093	1350
69 Anthracene	178	7.051	7.057	(1.006)	1530999	41.8033	1340(H)
72 Di-n-butylphthalate	149	7.292	7.292	(1.040)	2038823	52.1925	1670
76 Fluoranthene	202	7.734	7.733	(1.103)	1577582	45.3828	1450
85 Butylbenzylphthalate	149	8.186	8.186	(0.951)	883956	50.3822	1610(H)
89 Benzo(a)anthracene	228	8.663	8.663	(1.006)	1435495	41.2629	1320(H)
90 3,3'-Dichlorobenzidine	252	8.604	8.598	(0.999)	430630	43.1102	1380
92 Chrysene	228	8.692	8.698	(1.010)	1336340	41.0984	1320(H)
93 bis(2-Ethylhexyl)phthalate	149	8.539	8.545	(0.992)	1286298	50.4640	1610(H)
94 Di-n-octylphthalate	149	9.069	9.069	(0.895)	2079435	50.0429	1600
95 Benzo(b)fluoranthene	252	9.663	9.663	(0.954)	1450350	44.6819	1430
96 Benzo(k)fluoranthene	252	9.692	9.698	(0.957)	1393124	43.7388	1400(H)
97 Benzo(a)pyrene	252	10.063	10.063	(0.994)	1230137	44.3539	1420
99 Indeno(1,2,3-cd)pyrene	276	11.757	11.751	(1.161)	1307327	45.4816	1460
100 Dibenzo(a,h)anthracene	278	11.757	11.751	(1.161)	1089017	45.2360	1450
101 Benzo(ghi)perylene	276	12.257	12.257	(1.210)	1131534	47.4046	1520
1 N-Methyl-N-nitrosomethylamine	74	2.434	2.422	(0.622)	203454	35.5431	1140

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD1.i/s120309.b/s110311.d
Date : 03-DEC-2009 14:21
Client ID: SBLK01LCS
Sample Info: |120198226|927155|1|SVMF|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

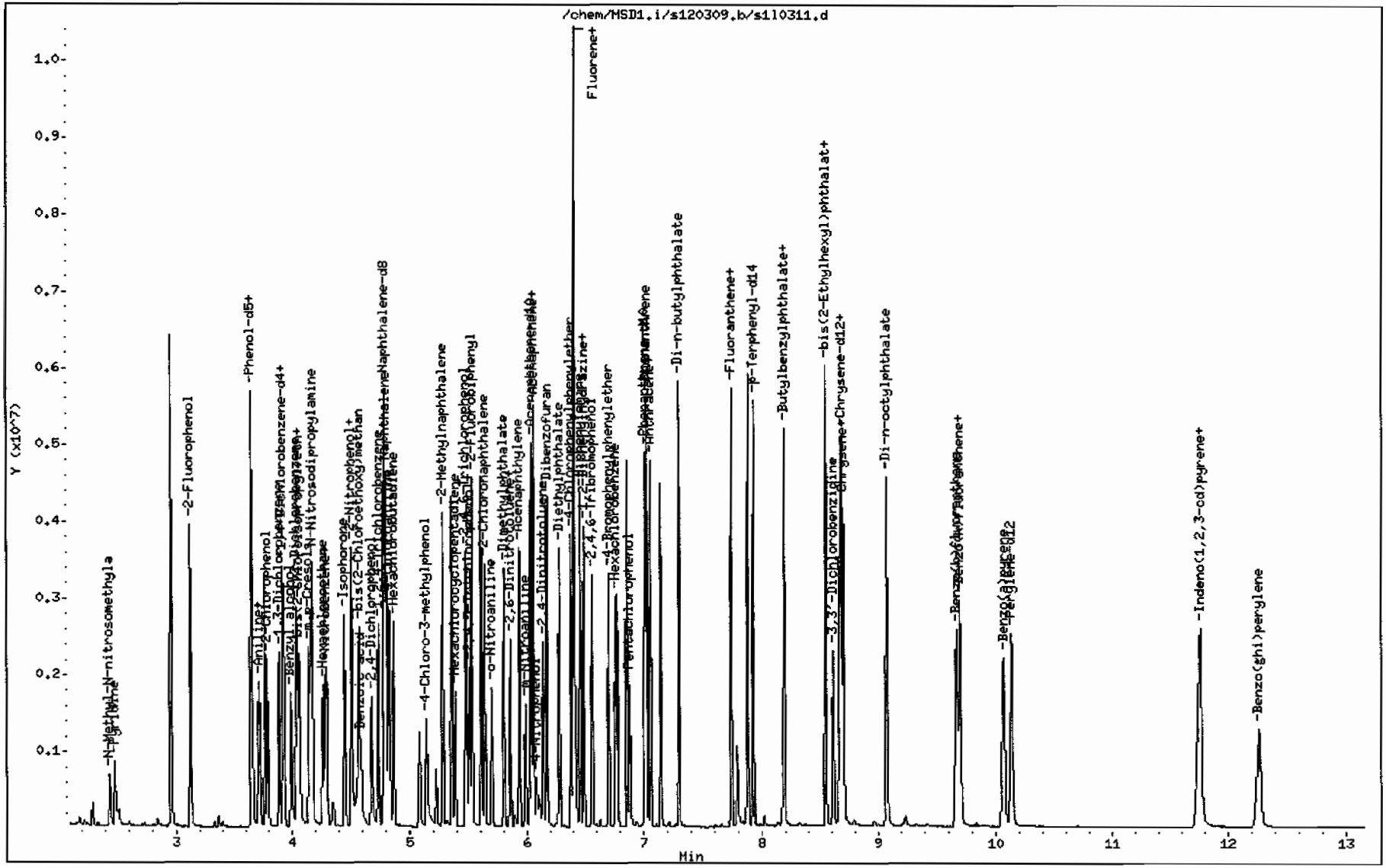

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982265	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8
Client Sample:	QC for batch 927154	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14246MS	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	927155	**Inst:**	MSD1.I	**Dilution:**	1
Run Date:	12/03/2009 20:41	**Analyst:**	AMY	**Inj. Vol:**	.5 uL
Prep Date:	11/30/2009 22:54	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s1l0327.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		851	ug/kg	72.4	362
108-95-2	Phenol		955	ug/kg	72.4	362
95-57-8	2-Chlorophenol		964	ug/kg	72.4	362
106-46-7	1,4-Dichlorobenzene		993	ug/kg	72.4	362
621-64-7	N-Nitrosodipropylamine		812	ug/kg	72.4	362
59-50-7	4-Chloro-3-methylphenol		1110	ug/kg	72.4	362
83-32-9	Acenaphthene		1190	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene		1150	ug/kg	36.2	362
100-02-7	4-Nitrophenol		881	ug/kg	119	362
87-86-5	Pentachlorophenol		977	ug/kg	90.5	362
129-00-0	Pyrene		1220	ug/kg	10.9	36.2
110-86-1	Pyridine		757	ug/kg	72.4	362
62-53-3	Aniline		1080	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether		944	ug/kg	72.4	362
541-73-1	1,3-Dichlorobenzene		952	ug/kg	72.4	362
100-51-6	Benzyl alcohol		365	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene		1030	ug/kg	72.4	362
108-60-1	bis(2-Chloroisopropyl)ether		890	ug/kg	72.4	362
95-48-7	o-Cresol		1070	ug/kg	72.4	362
65794-96-9	m,p-Cresols		1320	ug/kg	109	362
67-72-1	Hexachloroethane		949	ug/kg	72.4	362
98-95-3	Nitrobenzene		1100	ug/kg	72.4	362
78-59-1	Isophorone		1170	ug/kg	72.4	362
88-75-5	2-Nitrophenol		1030	ug/kg	72.4	362
105-67-9	2,4-Dimethylphenol		900	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane		993	ug/kg	72.4	362
120-83-2	2,4-Dichlorophenol		1050	ug/kg	72.4	362
65-85-0	Benzoic acid		1450	ug/kg	181	724
91-20-3	Naphthalene		1070	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline		1060	ug/kg	72.4	362
87-68-3	Hexachlorobutadiene		1130	ug/kg	72.4	362
91-57-6	2-Methylnaphthalene		1140	ug/kg	7.24	36.2
77-47-4	Hexachlorocyclopentadiene		1470	ug/kg	72.4	362
88-06-2	2,4,6-Trichlorophenol		1120	ug/kg	72.4	362
95-95-4	2,4,5-Trichlorophenol		1310	ug/kg	72.4	362
91-58-7	2-Chloronaphthalene		1110	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline		981	ug/kg	72.4	362
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1060	ug/kg	72.4	362

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	1201982265	Date Received:	11/21/2009 09:00	%Moisture:	8
Client Sample:	QC for batch 927154	Client:	LANL010	Project:	QC
Client ID:	RE03-09-14246MS	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 20:41	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s110327.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1270	ug/kg	72.4	362
606-20-2	2,6-Dinitrotoluene		1180	ug/kg	36.2	362
208-96-8	Acenaphthylene		1200	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	J	601	ug/kg	137	724
132-64-9	Dibenzofuran		1410	ug/kg	72.4	362
84-66-2	Diethylphthalate		1400	ug/kg	72.4	362
86-73-7	Fluorene		1250	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether		1380	ug/kg	72.4	362
534-52-1	2-Methyl-4,6-dinitrophenol		844	ug/kg	72.4	362
100-01-6	4-Nitroaniline		1100	ug/kg	109	362
	p-Nitroaniline					
122-39-4	Diphenylamine		1150	ug/kg	72.4	362
122-66-7	Azobenzene		1140	ug/kg	72.4	362
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1470	ug/kg	72.4	362
118-74-1	Hexachlorobenzene		1270	ug/kg	72.4	362
85-01-8	Phenanthrene		1190	ug/kg	10.9	36.2
120-12-7	Anthracene		1190	ug/kg	7.24	36.2
84-74-2	Di-n-butylphthalate		1530	ug/kg	72.4	362
206-44-0	Fluoranthene		1320	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate		1470	ug/kg	72.4	362
56-55-3	Benzo(a)anthracene		1150	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine		1170	ug/kg	109	362
218-01-9	Chrysene		1240	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate		1480	ug/kg	72.4	362
117-84-0	Di-n-octylphthalate		1510	ug/kg	72.4	362
205-99-2	Benzo(b)fluoranthene		1260	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene		1240	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene		1250	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene		1110	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene		1120	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene		1100	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene		1080	ug/kg	72.4	362

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110327.d
Lab Smp Id: 1201982265 Client Smp ID: RE03-09-14246MS
Inj Date : 03-DEC-2009 20:41
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201982265|927155|1|SVMF|1|MS
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 11:20 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	7.96850	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	329600	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1407418	40.0000	
* 46 Acenaphthene-d10	164	6.028	6.028	(1.000)	741204	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1301663	40.0000	
* 91 Chrysene-d12	240	8.669	8.675	(1.000)	1201776	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1012256	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.110	(0.796)	501289	58.2283	2110
$ 5 Phenol-d5	99	3.646	3.640	(0.931)	611430	58.4349	2110
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	273347	29.4713	1070
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.916)	660989	37.2350	1350
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.088)	181496	87.6917	3170
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.913)	775407	41.1049	1490

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.651	3.651	(0.932)	291093	26.4027	955
8 2-Chlorophenol	128	3.787	3.787	(0.967)	249524	26.6294	964
11 1,4-Dichlorobenzene	146	3.928	3.928	(1.003)	295821	27.4472	993
17 N-Nitrosodipropylamine	70	4.151	4.157	(1.060)	140906	22.4302	812(Q)
28 1,2,4-Trichlorobenzene	180	4.734	4.734	(0.990)	255033	29.9385	1080
33 4-Chloro-3-methylphenol	107	5.140	5.128	(1.075)	230415	30.5928	1110
47 Acenaphthene	154	6.051	6.051	(1.004)	560549	32.7890	1190
50 2,4-Dinitrotoluene	165	6.134	6.133	(1.018)	211947	31.7783	1150
52 4-Nitrophenol	139	6.081	6.075	(1.009)	85148	24.3495	881
65 Pentachlorophenol	266	6.881	6.875	(0.982)	88916	27.0088	977
79 Pyrene	202	7.869	7.875	(0.908)	1072643	33.5883	1220
2 Pyridine	79	2.469	2.457	(0.630)	164212	20.9157	757
4 Aniline	66	3.704	3.704	(0.946)	136993	29.7875	1080
7 bis(2-Chloroethyl) ether	63	3.716	3.722	(0.949)	200161	26.0970	944
9 1,3-Dichlorobenzene	146	3.887	3.887	(0.992)	289173	26.3011	952
12 Benzyl alcohol	108	3.993	3.987	(1.020)	57435	10.0812	365
13 1,2-Dichlorobenzene	146	4.034	4.034	(1.030)	283824	28.5142	1030
14 bis(2-Chloroisopropyl)ether	45	4.063	4.063	(1.038)	449322	24.5951	890
15 o-Cresol	107	4.046	4.040	(1.033)	206020	29.5364	1070
18 m,p-Cresols	107	4.140	4.140	(1.057)	345390	36.3924	1320
19 Hexachloroethane	117	4.263	4.263	(1.089)	101759	26.2336	949
21 Nitrobenzene	77	4.293	4.298	(0.898)	294644	30.4892	1100
22 Isophorone	82	4.446	4.445	(0.930)	545822	32.2854	1170
23 2-Nitrophenol	139	4.510	4.510	(0.943)	146327	28.5240	1030
24 2,4-Dimethylphenol	122	4.504	4.504	(0.942)	204276	24.8679	900
25 bis(2-Chloroethoxy)methane	93	4.563	4.569	(0.954)	298806	27.4540	993
26 2,4-Dichlorophenol	162	4.675	4.669	(0.978)	223156	28.9484	1050
27 Benzoic acid	105	4.563	4.563	(0.954)	226692	40.0498	1450
30 Naphthalene	128	4.798	4.798	(1.004)	865957	29.4810	1070(Q)
31 4-Chloroaniline	127	4.816	4.816	(1.007)	394182	29.3864	1060
32 Hexachlorobutadiene	225	4.863	4.863	(1.017)	136075	31.1086	1120
34 2-Methylnaphthalene	142	5.275	5.275	(1.103)	605951	31.3806	1140
36 Hexachlorocyclopentadiene	237	5.381	5.381	(0.893)	91820	40.5733	1470
37 2,4,6-Trichlorophenol	196	5.469	5.469	(0.907)	152066	30.8448	1120
38 2,4,5-Trichlorophenol	196	5.498	5.492	(0.912)	189403	36.1307	1310
40 2-Chloronaphthalene	162	5.628	5.628	(0.934)	559641	30.5845	1110
42 o-Nitroaniline	65	5.687	5.692	(0.943)	153872	27.1204	981
41 m-Nitroaniline	138	5.981	5.981	(0.992)	147454	29.4123	1060
43 Dimethylphthalate	163	5.793	5.798	(0.961)	711179	35.2124	1270
44 2,6-Dinitrotoluene	165	5.851	5.851	(0.971)	163466	32.4851	1180
45 Acenaphthylene	152	5.928	5.934	(0.983)	950714	33.2959	1200
48 2,4-Dinitrophenol	184	6.051	6.051	(1.004)	32995	16.6126	601(aQ)
49 Dibenzofuran	168	6.163	6.163	(1.022)	960691	38.8579	1410
51 Diethylphthalate	149	6.275	6.275	(1.041)	727045	38.6121	1400
53 Fluorene	166	6.398	6.398	(1.061)	691356	34.6816	1250
54 4-Chlorophenylphenylether	204	6.375	6.375	(1.058)	320562	38.0875	1380
55 2-Methyl-4,6-dinitrophenol	198	6.410	6.416	(0.915)	76816	23.3264	844

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.398	6.404	(1.061)	148866	30.3645	1100
133 Diphenylamine	169	6.451	6.451	(0.921)	552208	31.8052	1150
58 1,2-Diphenylhydrazine	77	6.481	6.486	(0.925)	670073	31.6311	1140
61 4-Bromophenylphenylether	248	6.698	6.698	(0.956)	181142	40.5042	1460
63 Hexachlorobenzene	284	6.757	6.757	(0.965)	192429	35.0547	1270
68 Phenanthrene	178	7.022	7.022	(1.003)	972854	32.8874	1190
69 Anthracene	178	7.051	7.057	(1.007)	988315	32.8522	1190
72 Di-n-butylphthalate	149	7.292	7.292	(1.041)	1356427	42.2726	1530
76 Fluoranthene	202	7.728	7.733	(1.103)	1041626	36.4792	1320
85 Butylbenzylphthalate	149	8.181	8.186	(0.944)	589657	40.5731	1470
89 Benzo(a)anthracene	228	8.657	8.663	(0.999)	918979	31.8901	1150
90 3,3'-Dichlorobenzidine	252	8.598	8.569	(0.992)	268060	32.3967	1170
92 Chrysene	228	8.686	8.698	(1.002)	920532	34.1774	1240
93 bis(2-Ethylhexyl)phthalate	149	8.534	8.545	(0.984)	861996	40.8261	1480
94 Di-n-octylphthalate	149	9.057	9.069	(0.895)	1377766	41.6078	1500
95 Benzo(b)fluoranthene	252	9.651	9.663	(0.954)	887112	34.9150	1260
96 Benzo(k)fluoranthene	252	9.680	9.698	(0.957)	866573	34.1416	1240
97 Benzo(a)pyrene	252	10.051	10.063	(0.994)	764864	34.5732	1250
99 Indeno(1,2,3-cd)pyrene	276	11.733	11.751	(1.160)	707066	30.7280	1110
100 Dibenzo(a,h)anthracene	278	11.733	11.751	(1.160)	595815	31.0014	1120
101 Benzo(ghi)perylene	276	12.239	12.257	(1.210)	580892	30.5387	1100
1 N-Methyl-N-nitrosomethylamine	74	2.428	2.422	(0.620)	109923	23.5112	851

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /ohem/MSD1.i/s120309.b/s110327.d
Date : 03-DEC-2009 20:41
Client ID: REC3-09-14246MS
Sample Info: 1120198226519271551 1 1 SVMF 1 1 1 MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

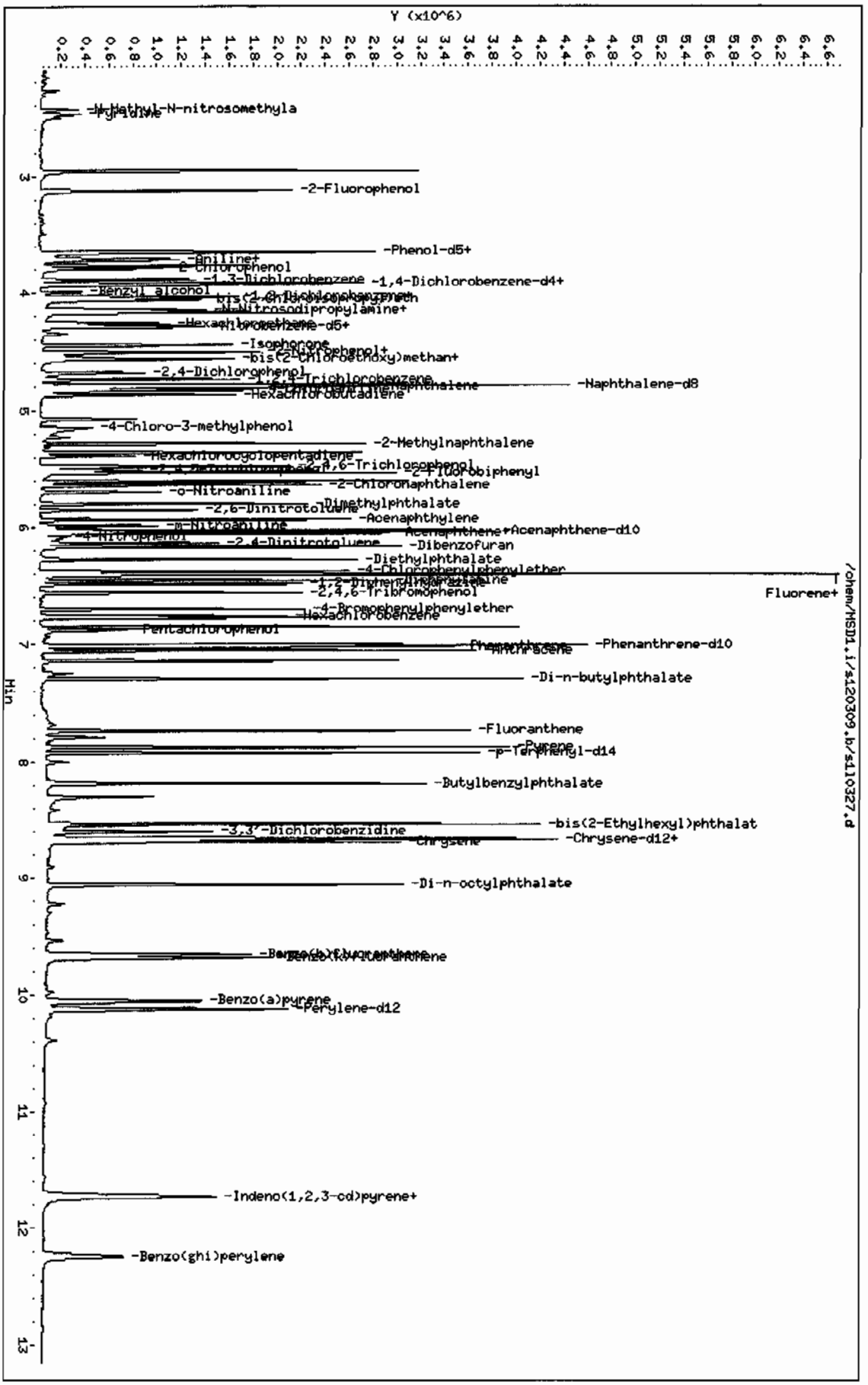

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201982266**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8**
Client Sample:	**QC for batch 927154**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14246MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**927155**	**Inst:**	**MSD1.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:04**	**Analyst:**	**AMY**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/30/2009 22:54**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s110328.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		709	ug/kg	72.2	361
108-95-2	Phenol		805	ug/kg	72.2	361
95-57-8	2-Chlorophenol		859	ug/kg	72.2	361
106-46-7	1,4-Dichlorobenzene		818	ug/kg	72.2	361
621-64-7	N-Nitrosodipropylamine		724	ug/kg	72.2	361
59-50-7	4-Chloro-3-methylphenol		947	ug/kg	72.2	361
83-32-9	Acenaphthene		949	ug/kg	11.9	36.1
121-14-2	2,4-Dinitrotoluene		953	ug/kg	36.1	361
100-02-7	4-Nitrophenol		739	ug/kg	119	361
87-86-5	Pentachlorophenol		822	ug/kg	90.2	361
129-00-0	Pyrene		1040	ug/kg	10.8	36.1
110-86-1	Pyridine		571	ug/kg	72.2	361
62-53-3	Aniline		829	ug/kg	108	361
111-44-4	bis(2-Chloroethyl) ether		780	ug/kg	72.2	361
541-73-1	1,3-Dichlorobenzene		771	ug/kg	72.2	361
100-51-6	Benzyl alcohol	J	339	ug/kg	108	361
95-50-1	1,2-Dichlorobenzene		840	ug/kg	72.2	361
108-60-1	bis(2-Chloroisopropyl)ether		737	ug/kg	72.2	361
95-48-7	o-Cresol		1020	ug/kg	72.2	361
65794-96-9	m,p-Cresols		1080	ug/kg	108	361
67-72-1	Hexachloroethane		764	ug/kg	72.2	361
98-95-3	Nitrobenzene		883	ug/kg	72.2	361
78-59-1	Isophorone		964	ug/kg	72.2	361
88-75-5	2-Nitrophenol		837	ug/kg	72.2	361
105-67-9	2,4-Dimethylphenol		751	ug/kg	126	361
111-91-1	bis(2-Chloroethoxy)methane		816	ug/kg	72.2	361
120-83-2	2,4-Dichlorophenol		892	ug/kg	72.2	361
65-85-0	Benzoic acid		1160	ug/kg	180	722
91-20-3	Naphthalene		877	ug/kg	10.8	36.1
106-47-8	4-Chloroaniline		870	ug/kg	72.2	361
87-68-3	Hexachlorobutadiene		937	ug/kg	72.2	361
91-57-6	2-Methylnaphthalene		932	ug/kg	7.22	36.1
77-47-4	Hexachlorocyclopentadiene		1120	ug/kg	72.2	361
88-06-2	2,4,6-Trichlorophenol		1010	ug/kg	72.2	361
95-95-4	2,4,5-Trichlorophenol		1070	ug/kg	72.2	361
91-58-7	2-Chloronaphthalene		895	ug/kg	11.9	36.1
88-74-4	2-Nitroaniline		798	ug/kg	72.2	361
99-09-2	*o-Nitroaniline* 3-Nitroaniline		804	ug/kg	72.2	361

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	1201982266	Date Received:	11/21/2009 09:00	%Moisture:	8
Client Sample:	QC for batch 927154	Client:	LANL010	Project:	QC
Client ID:	RE03-09-14246MSD	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	927155	Inst:	MSD1.I	Dilution:	1
Run Date:	12/03/2009 21:04	Analyst:	AMY	Inj. Vol:	.5 uL
Prep Date:	11/30/2009 22:54	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	s1l0328.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1030	ug/kg	72.2	361
606-20-2	2,6-Dinitrotoluene		966	ug/kg	36.1	361
208-96-8	Acenaphthylene		969	ug/kg	10.8	36.1
51-28-5	2,4-Dinitrophenol	J	513	ug/kg	137	722
132-64-9	Dibenzofuran		1160	ug/kg	72.2	361
84-66-2	Diethylphthalate		1130	ug/kg	72.2	361
86-73-7	Fluorene		1030	ug/kg	10.8	36.1
7005-72-3	4-Chlorophenylphenylether		1120	ug/kg	72.2	361
534-52-1	2-Methyl-4,6-dinitrophenol		625	ug/kg	72.2	361
100-01-6	4-Nitroaniline		855	ug/kg	108	361
	p-Nitroaniline					
122-39-4	Diphenylamine		950	ug/kg	72.2	361
122-66-7	Azobenzene		962	ug/kg	72.2	361
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1240	ug/kg	72.2	361
118-74-1	Hexachlorobenzene		1070	ug/kg	72.2	361
85-01-8	Phenanthrene		997	ug/kg	10.8	36.1
120-12-7	Anthracene		999	ug/kg	7.22	36.1
84-74-2	Di-n-butylphthalate		1260	ug/kg	72.2	361
206-44-0	Fluoranthene		1070	ug/kg	10.8	36.1
85-68-7	Butylbenzylphthalate		1270	ug/kg	72.2	361
56-55-3	Benzo(a)anthracene		981	ug/kg	10.8	36.1
91-94-1	3,3'-Dichlorobenzidine		988	ug/kg	108	361
218-01-9	Chrysene		1030	ug/kg	10.8	36.1
117-81-7	bis(2-Ethylhexyl)phthalate		1240	ug/kg	72.2	361
117-84-0	Di-n-octylphthalate		1360	ug/kg	72.2	361
205-99-2	Benzo(b)fluoranthene		1020	ug/kg	10.8	36.1
207-08-9	Benzo(k)fluoranthene		1170	ug/kg	10.8	36.1
50-32-8	Benzo(a)pyrene		1040	ug/kg	10.8	36.1
193-39-5	Indeno(1,2,3-cd)pyrene		877	ug/kg	10.8	36.1
53-70-3	Dibenzo(a,h)anthracene		878	ug/kg	10.8	36.1
191-24-2	Benzo(ghi)perylene		858	ug/kg	10.8	36.1
120-82-1	1,2,4-Trichlorobenzene		887	ug/kg	72.2	361

GEL Laboratories LLC

Data file : /chem/MSD1.i/s120309.b/s110328.d
Lab Smp Id: 1201982266 Client Smp ID: RE03-09-14246MSD
Inj Date : 03-DEC-2009 21:04
Operator : AMY Inst ID: MSD1.i
Smp Info : |1201982266|927155|1|SVMF|1|MSD
Misc Info : |MSD8270|WBN091106-10|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s120309.b/MSD1-M8270AQA-111409.m
Meth Date : 06-Dec-2009 11:20 amy01291 Quant Type: ISTD
Cal Date : 17-NOV-2009 17:42 Cal File: s1k1264.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-644.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	7.96850	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.916	3.916	(1.000)	453063	40.0000	
* 29 Naphthalene-d8	136	4.781	4.781	(1.000)	1946842	40.0000	
* 46 Acenaphthene-d10	164	6.028	6.028	(1.000)	1052451	40.0000	
* 67 Phenanthrene-d10	188	7.004	7.010	(1.000)	1811048	40.0000	
* 91 Chrysene-d12	240	8.669	8.675	(1.000)	1581628	40.0000	
* 98 Perylene-d12	264	10.116	10.127	(1.000)	1229254	40.0000	
$ 3 2-Fluorophenol	112	3.122	3.110	(0.797)	568581	48.0471	1730
$ 5 Phenol-d5	99	3.646	3.640	(0.931)	698509	48.5653	1750
$ 20 Nitrobenzene-d5	82	4.281	4.281	(0.895)	309101	24.0923	869
$ 39 2-Fluorobiphenyl	172	5.522	5.522	(0.916)	754847	29.9469	1080
$ 60 2,4,6-Tribromophenol	329	6.557	6.557	(1.088)	215849	73.4475	2650
$ 81 p-Terphenyl-d14	244	7.916	7.922	(0.913)	878680	35.3927	1280

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.651	3.651	(0.932)	338245	22.3191	805
8 2-Chlorophenol	128	3.787	3.787	(0.967)	306487	23.7952	859
11 1,4-Dichlorobenzene	146	3.928	3.928	(1.003)	336018	22.6809	818
17 N-Nitrosodipropylamine	70	4.151	4.157	(1.060)	173281	20.0670	724(Q)
28 1,2,4-Trichlorobenzene	180	4.734	4.734	(0.990)	289546	24.5722	887
33 4-Chloro-3-methylphenol	107	5.140	5.128	(1.075)	273337	26.2361	947
47 Acenaphthene	154	6.051	6.051	(1.004)	638292	26.2948	949
50 2,4-Dinitrotoluene	165	6.134	6.133	(1.018)	250075	26.4064	953
52 4-Nitrophenol	139	6.081	6.075	(1.009)	101630	20.4679	739
65 Pentachlorophenol	266	6.881	6.875	(0.982)	104313	22.7736	822
79 Pyrene	202	7.869	7.875	(0.908)	1217004	28.9563	1040
2 Pyridine	79	2.481	2.457	(0.634)	170744	15.8213	571
4 Aniline	66	3.704	3.704	(0.946)	145264	22.9785	829
7 bis(2-Chloroethyl) ether	63	3.716	3.722	(0.949)	227737	21.6009	780
9 1,3-Dichlorobenzene	146	3.887	3.887	(0.992)	322911	21.3662	771
12 Benzyl alcohol	108	3.987	3.987	(1.018)	73641	9.40341	339(a)
13 1,2-Dichlorobenzene	146	4.034	4.034	(1.030)	318625	23.2874	840
14 bis(2-Chloroisopropyl)ether	45	4.057	4.063	(1.036)	512587	20.4120	737
15 o-Cresol	107	4.046	4.040	(1.033)	272267	28.3969	1020
18 m,p-Cresols	107	4.140	4.140	(1.057)	390671	29.9461	1080
19 Hexachloroethane	117	4.263	4.263	(1.089)	112814	21.1581	764
21 Nitrobenzene	77	4.293	4.298	(0.898)	327148	24.4729	883
22 Isophorone	82	4.446	4.445	(0.930)	625001	26.7256	964
23 2-Nitrophenol	139	4.510	4.510	(0.943)	164615	23.1978	837
24 2,4-Dimethylphenol	122	4.504	4.504	(0.942)	236613	20.8234	751
25 bis(2-Chloroethoxy)methane	93	4.563	4.569	(0.954)	340505	22.6169	816
26 2,4-Dichlorophenol	162	4.675	4.669	(0.978)	263628	24.7229	892
27 Benzoic acid	105	4.563	4.563	(0.954)	252674	32.2713	1160
30 Naphthalene	128	4.798	4.798	(1.004)	987505	24.3040	877(Q)
31 4-Chloroaniline	127	4.816	4.816	(1.007)	447260	24.1048	870
32 Hexachlorobutadiene	225	4.863	4.863	(1.017)	157114	25.9663	937
34 2-Methylnaphthalene	142	5.275	5.275	(1.103)	689564	25.8161	932
36 Hexachlorocyclopentadiene	237	5.381	5.381	(0.893)	99632	31.0054	1120
37 2,4,6-Trichlorophenol	196	5.469	5.469	(0.907)	195514	27.9295	1010
38 2,4,5-Trichlorophenol	196	5.498	5.492	(0.912)	220362	29.6048	1070
40 2-Chloronaphthalene	162	5.628	5.628	(0.934)	644673	24.8123	895
42 o-Nitroaniline	65	5.693	5.692	(0.944)	178178	22.1170	798
41 m-Nitroaniline	138	5.981	5.981	(0.992)	158560	22.2742	804
43 Dimethylphthalate	163	5.793	5.798	(0.961)	817595	28.5096	1030
44 2,6-Dinitrotoluene	165	5.851	5.851	(0.971)	191238	26.7650	966
45 Acenaphthylene	152	5.928	5.934	(0.983)	1088617	26.8505	969
48 2,4-Dinitrophenol	184	6.051	6.051	(1.004)	40084	14.2134	513(aQ)
49 Dibenzofuran	168	6.163	6.163	(1.022)	1129151	32.1650	1160
51 Diethylphthalate	149	6.275	6.275	(1.041)	836476	31.2861	1130
53 Fluorene	166	6.398	6.398	(1.061)	805322	28.4513	1030
54 4-Chlorophenylphenylether	204	6.375	6.375	(1.058)	371057	31.0490	1120
55 2-Methyl-4,6-dinitrophenol	198	6.416	6.416	(0.916)	79334	17.3150	625

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.404	6.404	(1.062)	165024	23.7057	855
133 Diphenylamine	169	6.451	6.451	(0.921)	636137	26.3338	950
58 1,2-Diphenylhydrazine	77	6.481	6.486	(0.925)	786006	26.6677	962
61 4-Bromophenylphenylether	248	6.698	6.698	(0.956)	213201	34.2640	1240
63 Hexachlorobenzene	284	6.757	6.757	(0.965)	226627	29.6726	1070
68 Phenanthrene	178	7.022	7.022	(1.003)	1136833	27.6215	997
69 Anthracene	178	7.051	7.057	(1.007)	1159124	27.6929	999
72 Di-n-butylphthalate	149	7.292	7.292	(1.041)	1557319	34.8826	1260
76 Fluoranthene	202	7.728	7.733	(1.103)	1175106	29.5787	1070
85 Butylbenzylphthalate	149	8.181	8.186	(0.944)	673202	35.1968	1270
89 Benzo(a)anthracene	228	8.657	8.663	(0.999)	1031496	27.1980	981
90 3,3'-Dichlorobenzidine	252	8.598	8.569	(0.992)	298287	27.3919	988
92 Chrysene	228	8.686	8.698	(1.002)	1012558	28.5654	1030
93 bis(2-Ethylhexyl)phthalate	149	8.534	8.545	(0.984)	954891	34.3641	1240
94 Di-n-octylphthalate	149	9.057	9.069	(0.895)	1511521	37.5891	1360
95 Benzo(b)fluoranthene	252	9.651	9.663	(0.954)	851349	28.1512	1020
96 Benzo(k)fluoranthene	252	9.680	9.698	(0.957)	1002373	32.5205	1170
97 Benzo(a)pyrene	252	10.045	10.063	(0.993)	773514	28.7663	1040
99 Indeno(1,2,3-cd)pyrene	276	11.727	11.751	(1.159)	681630	24.3033	877
100 Dibenzo(a,h)anthracene	278	11.733	11.751	(1.160)	568599	24.3246	878
101 Benzo(ghi)perylene	276	12.239	12.257	(1.210)	549222	23.7767	858
1 N-Methyl-N-nitrosomethylamine	74	2.434	2.422	(0.622)	126287	19.6505	709

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s120309.b/s110328.d
Date : 03-DEC-2009 21:04
Client ID: RE03-09-14246HSD
Sample Info: !120198226619271551!1!SVMF!1!HSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

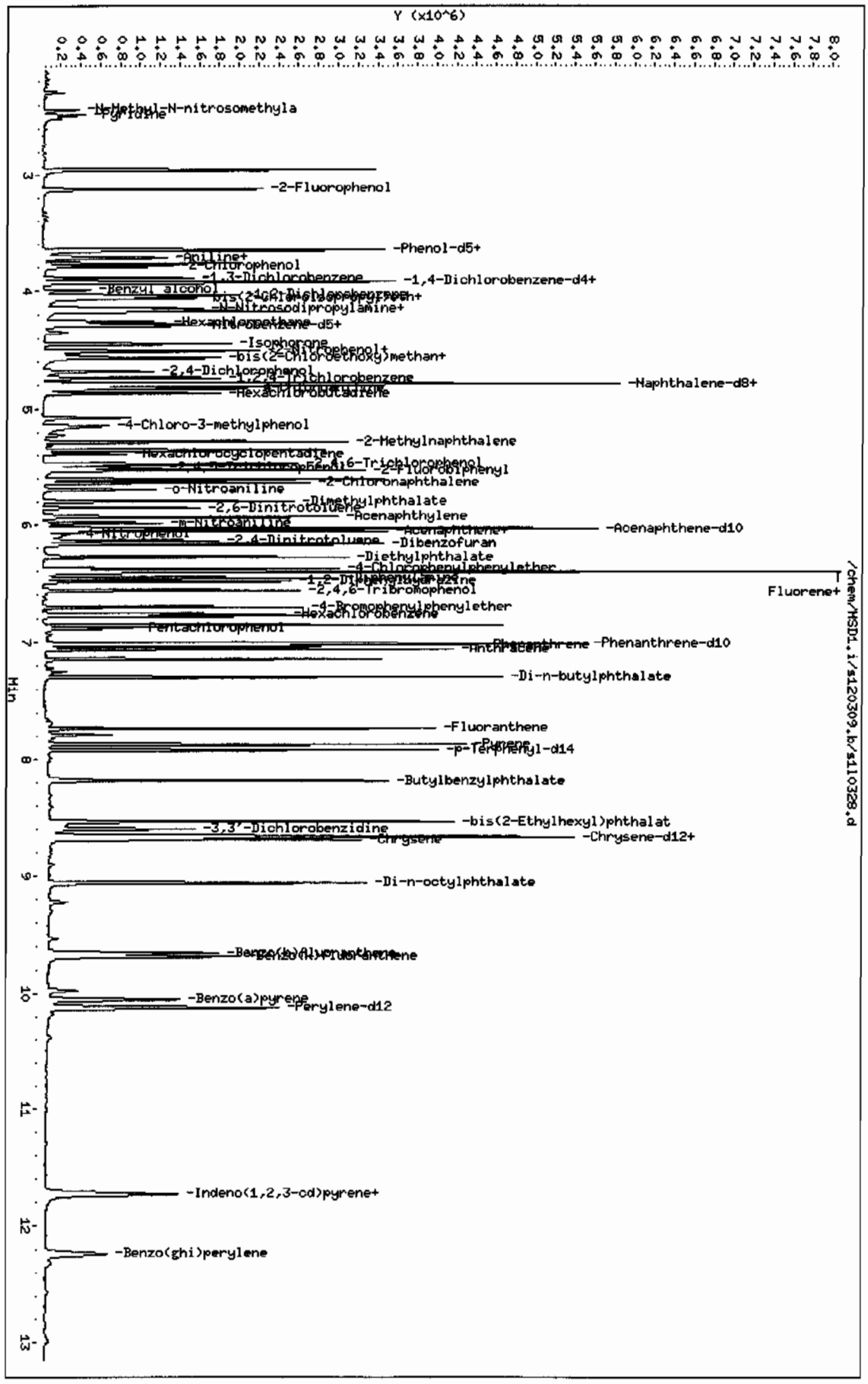

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927154 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982264 MB	30-NOV-2009 22:54:04	30	0.965	0.03217
1201982267 LCS	30-NOV-2009 22:54:04	30	0.96	0.032
241615001	30-NOV-2009 22:54:04	30.17	1	0.03315
241615002	30-NOV-2009 22:54:04	30.17	1	0.03315
241615003	30-NOV-2009 22:54:04	30.09	1	0.03323
241615004	30-NOV-2009 22:54:04	30.15	1	0.03317
241615005	30-NOV-2009 22:54:04	30.02	1	0.03331
241615006	30-NOV-2009 22:54:04	30.07	1	0.03326
241615007	30-NOV-2009 22:54:04	30.13	1	0.03319
241615008	30-NOV-2009 22:54:04	30.18	1	0.03313
241615009	30-NOV-2009 22:54:04	30.12	1	0.0332
241615010	30-NOV-2009 22:54:04	30.18	1	0.03313
241615011	30-NOV-2009 22:54:04	30.19	1	0.03312
241615012	30-NOV-2009 22:54:04	30.01	1	0.03332
241615013	30-NOV-2009 22:54:04	30.02	1	0.03331
1201982265 MS (241615013)	30-NOV-2009 22:54:04	30.03	1	0.0333
1201982266 MSD (241615013)	30-NOV-2009 22:54:04	30.11	1	0.03321
241615014	30-NOV-2009 22:54:04	30.03	1	0.0333
241615015	30-NOV-2009 22:54:04	30.02	1	0.03331
241615016	30-NOV-2009 22:54:04	30.03	1	0.0333
241615018	30-NOV-2009 22:54:04	30.07	1	0.03326
241615020	30-NOV-2009 22:54:04	30.17	1	0.03315
241697003	30-NOV-2009 22:54:04	30.01	1	0.03332
241697004	30-NOV-2009 22:54:04	30.02	1	0.03331

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982267	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201982267	BENZIDINE LCS	UE091117-20	1	mL
MS	1201982265	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201982265	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201982266	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201982266	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091117-09	1	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	Methylene Chloride	1234878-D	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 12/03/2009 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1318 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091106-10
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s110301.d	WBN091101-01	AMY	03-DEC-2009 07:51	50 PPM	s120309	1.0	DFTPP	DUSE-check fails
s110302.d	WBN091111-17.4	AMY	03-DEC-2009 08:07	40 PPM	MEGACVS	1.0	MEGACVS	DUSE-check fails
s110303.d	WBN091111-17.4	AMY	03-DEC-2009 08:47	40 PPM	MEGAIICARE	1.0	MEGACVS	DUSE-check fails
s110304.d	WBN091101-01	AMY	03-DEC-2009 11:22	50 PPM	s120309	1.0	DFTPP	DUSE-tune fails
s110305.d	WBN091101-01	AMY	03-DEC-2009 11:41	50 PPM	s120309	1.0	DFTPP	PASSING
s110306.d	WBN091111-17.4	AMY	03-DEC-2009 11:56	40 PPM	MEGAIICARE	1.0	MEGACVS	PASSING
s110307-LANL.d	WBN091201-08.2	AMY	03-DEC-2009 12:43	40 PPM	ap12	1.0	APCVS	DUSE-LANL test
s110307.d	WBN091201-08.2	AMY	03-DEC-2009 12:43	40 PPM	ap12	1.0	APCVS	PASSING
s110308.d	WBN091117-08.1	AMY	03-DEC-2009 13:07	40 PPM	nev	1.0	NEVCVS	PASSING
s110309.d	WBN091029-23.4	AMY	03-DEC-2009 13:30	40 PPM	pest	1.0	PESTCVS	PASSING
s110310.d	1201982264	AMY	03-DEC-2009 13:58	40 PPM	10-644	1.0	SBLK01	REPORT
s110311.d	1201982267	AMY	03-DEC-2009 14:21	40 PPM	10-644	1.0	SBLK01LCS	REPORT $ c. 60 high, c. 36 high
s110312.d	1201984925	AMY	03-DEC-2009 14:44	928276		1.0	SBLK01	DUSE-not enough time in tune window for this batch.
s110313.d	GPC LCS SCREEN	AMY	03-DEC-2009 15:15	1	all	1.0		SCREEN
s110314.d	241615001	AMY	03-DEC-2009 15:39	927155	10-644	1.0	LANL	REPORT
s110315.d	241615002	AMY	03-DEC-2009 16:02	927155	10-644	1.0	LANL	REPORT
s110316.d	241615003	AMY	03-DEC-2009 16:25	927155	10-644	1.0	LANL	REPORT
s110317.d	241615004	AMY	03-DEC-2009 16:48	927155	10-644	1.0	LANL	REPORT
s110318.d	241615005	AMY	03-DEC-2009 17:11	927155	10-644	1.0	LANL	REPORT

s110319.d	241615006	AMY	03-DEC-2009 17:35	927155	10-644		1.0	LANL	REPORT
s110320.d	241615007	AMY	03-DEC-2009 17:57	927155	10-644		1.0	LANL	REPORT
s110321.d	241615008	AMY	03-DEC-2009 18:21	927155	10-644		1.0	LANL	REPORT
s110322.d	241615009	AMY	03-DEC-2009 18:44	927155	10-644		1.0	LANL	REPORT
s110323.d	241615010	AMY	03-DEC-2009 19:08	927155	10-644		1.0	LANL	REPORT
s110324.d	241615011	AMY	03-DEC-2009 19:32	927155	10-644		1.0	LANL	REPORT
s110325.d	241615012	AMY	03-DEC-2009 19:55	927155	10-644		1.0	LANL	REPORT
s110326.d	241615013	AMY	03-DEC-2009 20:19	927155	10-644		1.0	LANL	REPORT
s110327.d	1201982265	AMY	03-DEC-2009 20:41	40 PPM	10-644		1.0	MS	REPORT
s110328.d	1201982266	AMY	03-DEC-2009 21:04	40 PPM	10-644		1.0	MSD	REPORT
s110329.d	241615014	AMY	03-DEC-2009 21:27	927155	10-644		1.0	LANL	REPORT
s110330.d	241615015	AMY	03-DEC-2009 21:50	927155	10-644		1.0	LANL	REPORT
s110331.d	241615016	AMY	03-DEC-2009 22:13	927155	10-644		1.0	LANL	REPORT
s110332.d	241615018	AMY	03-DEC-2009 22:36	927155	10-644		1.0	LANL	REPORT
s110333.d	241615020	AMY	03-DEC-2009 22:59	927155	10-644		1.0	LANL	REPORT
s110334.d	241697003	AMY	03-DEC-2009 23:23	927155	10-648		1.0	LANL	REPORT
s110335.d	241697004	AMY	03-DEC-2009 23:46	927155	10-648		1.0	LANL	REPORT

Instrument Batch: /chem/MSD1.i/s120309.b

Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD1

DATE: 11/14/2009 METHOD: See raw data OPERATOR: AMY REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:116462-D
Multiplier Voltage: 1400 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091006-01 Internal Std ID: WBN091024-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD1.i/s111409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s1k1201-D.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1201.d	WBN091101-01	AMY	14-NOV-2009 17:38	50 PPM	s111409	1.0	DFTPP	TUNE-MEGA ICAL
s1k1202.d	INST BLK	amy	14-NOV-2009 17:53	-----	s111409	1.0	INST BLK	
s1k1203.d	WBN091111-16	amy	14-NOV-2009 18:22	1 PPM	s111409	1.0	MEGA001	
s1k1204.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	
s1k1204MRQ.d	WBN091111-15	amy	14-NOV-2009 18:51	10 PPM	s111409	1.0	MEGA010	pass linearity for c26 and c184
s1k1205.d	WBN091111-14	amy	14-NOV-2009 19:21	20 PPM	s111409	1.0	MEGA020	
s1k1206.d	WBN091111-13.1	amy	14-NOV-2009 19:50	40 PPM	s111409	1.0	MEGA040	
s1k1207.d	WBN091111-12	amy	14-NOV-2009 20:19	50 PPM	s111409	1.0	MEGA050	
s1k1208.d	WBN091111-11	amy	14-NOV-2009 20:47	80 PPM	s111409	1.0	MEGA080	
s1k1209.d	WBN091111-10	amy	14-NOV-2009 21:16	100 PPM	s111409	1.0	MEGA100	
s1k1210.d	WBN091111-09	amy	14-NOV-2009 21:45	120 PPM	s111409	1.0	MEGA120	
s1k1211.d	INST BLK	amy	14-NOV-2009 22:14	-----	s111409	1.0	INST BLK	
s1k1212-BOE.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212-D.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE-fail c65
s1k1212.d	WBN091111-17.1	amy	14-NOV-2009 22:43	40 PPM	s111409	1.0	MEGAICV	DUSE: fails c65
s1k1213-D.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1213.d	WBN091101-01	AMY	15-NOV-2009 14:50	50 PPM	s111409	1.0	DFTPP	TUNE-AP/PEST/HEX ICALS
s1k1214.d	INST BLK	amy	15-NOV-2009 15:05	-----	s111409	1.0	INST BLK	

s1k1215.d	WBN091111-01	amy	15-NOV-2009 15:28	10 PPM	s111409	1.0	AP010	
s1k1216.d	WBN091111-02	amy	15-NOV-2009 15:51	20 PPM	s111409	1.0	AP020	
s1k1217.d	WBN091111-03.1	amy	15-NOV-2009 16:14	40 PPM	s111409	1.0	AP040	
s1k1218.d	WBN091111-04	amy	15-NOV-2009 16:38	50 PPM	s111409	1.0	AP050	
s1k1219.d	WBN091111-05	amy	15-NOV-2009 17:01	80 PPM	s111409	1.0	AP080	
s1k1220.d	WBN09111I-06	amy	15-NOV-2009 17:24	100 PPM	s111409	1.0	AP100	
s1k1221.d	WBN091111-07	amy	15-NOV-2009 17:47	120 PPM	s111409	1.0	AP120	
s1k1222.d	WBN091029-25	amy	15-NOV-2009 18:11	10 PPM	s111409	1.0	PEST010	
s1k1223.d	WBN091029-24	amy	15-NOV-2009 18:35	20 PPM	s111409	1.0	PEST020	
s1k1224.d	WBN091029-23.1	amy	15-NOV-2009 18:58	40 PPM	s111409	1.0	PEST040	
s1k1225.d	WBN091029-22	amy	15-NOV-2009 19:21	50 PPM	s111409	1.0	PEST050	
s1k1226.d	WBN091029-21	amy	15-NOV-2009 19:45	80 PPM	s111409	1.0	PEST080	
s1k1227.d	WBN091029-20	amy	15-NOV-2009 20:09	100 PPM	s111409	1.0	PEST100	
s1k1228.d	WBN091029-19	amy	15-NOV-2009 20:31	120 PPM	s111409	1.0	PEST120	
s1k1229.d	WBN091016-16	amy	15-NOV-2009 20:55	500 PPM	s111409	1.0	HEX500	
s1k1230.d	WBN091016-15	amy	15-NOV-2009 21:18	1000 PPM	s111409	1.0	HEX1000	
s1k1231.d	WBN091016-14	amy	15-NOV-2009 21:42	1250 PPM	s111409	1.0	HEX1250	
s1k1232.d	WBN091016-13	amy	15-NOV-2009 22:06	1500 PPM	s111409	1.0	HEX503	
s1k1233.d	WBN091016-12	amy	15-NOV-2009 22:30	1750 PPM	s111409	1.0	HEX504	
s1k1234.d	UBN090825-02.4	amy	15-NOV-2009 22:53	2000 PPM	s111409	1.0	HEX2000	
s1k1235-D.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1235.d	WBN091111-08.1	amy	15-NOV-2009 23:17	40 PPM	s111409	1.0	APICV	
s1k1236-D.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1236.d	WBN091029-26.1	amy	15-NOV-2009 23:40	40 PPM	s111409	1.0	PESTICV	
s1k1237-D.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1237.d	WBN091016-10.2	amy	16-NOV-2009 00:03	1250 PPM	s111409	1.0	HEXICV	
s1k1238-D.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown

s1k1238.d	WBN091101-01	AMY	16-NOV-2009 00:27	50 PPM	s111409	1.0	DFTPP	DUSE: fails breakdown
s1k1239.d	INST BLK	amy	16-NOV-2009 00:43	-----	s111409	1.0	INST BLK	
s1k1240.d	UBN090924-01	amy	16-NOV-2009 01:05	10 PPM	s111409	1.0	NEV010	DUSE
s1k1241.d	UBN090924-02	amy	16-NOV-2009 01:28	20 PPM	s111409	1.0	NEV020	DUSE
s1k1242.d	UBN090924-03	amy	16-NOV-2009 01:51	40 PPM	s111409	1.0	NEV040	DUSE
s1k1243.d	UBN090924-04	amy	16-NOV-2009 02:14	50 PPM	s111409	1.0	NEV050	DUSE
s1k1244.d	UBN090924-05	amy	16-NOV-2009 02:38	80 PPM	s111409	1.0	NEV080	DUSE
s1k1245.d	UBN090924-06	amy	16-NOV-2009 03:01	100 PPM	s111409	1.0	NEV100	DUSE
s1k1246.d	UBN090924-07	amy	16-NOV-2009 03:23	120 PPM	s111409	1.0	NEV120	DUSE
s1k1247-D.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1247.d	WBN091101-01	AMY	17-NOV-2009 09:05	50 PPM	s111409	1.0	DFTPP	DUSE
s1k1248.d	INST BLK	amy	17-NOV-2009 09:20	-----	s111409	1.0	INST BLK	
s1k1249.d	WBN091027-09.2	amy	17-NOV-2009 09:48	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails
s1k1250.d	UBN090924-01	amy	17-NOV-2009 10:17	10 PPM	s111409	1.0	NEV010	DUSE
s1k1251.d	UBN090924-02	amy	17-NOV-2009 10:41	20 PPM	s111409	1.0	NEV020	DUSE
s1k1252.d	UBN090924-03	amy	17-NOV-2009 11:04	40 PPM	s111409	1.0	NEV040	DUSE
s1k1253.d	UBN090924-04	amy	17-NOV-2009 11:27	50 PPM	s111409	1.0	NEV050	DUSE
s1k1254.d	UBN090924-05	amy	17-NOV-2009 11:50	80 PPM	s111409	1.0	NEV080	DUSE
s1k1255.d	UBN090924-06	amy	17-NOV-2009 12:14	100 PPM	s111409	1.0	NEV100	DUSE
s1k1256.d	UBN090924-07	amy	17-NOV-2009 12:38	120 PPM	s111409	1.0	NEV120	DUSE
s1k1257.d	WBN091027-09.1	amy	17-NOV-2009 13:02	40 PPM	s111409	1.0	MEGAICV	DUSE: c65 fails /clean inj port
s1k1259-D.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1259.d	WBN091101-01	AMY	17-NOV-2009 15:48	50 PPM	s111409	1.0	DFTPP	TUNE-MEGAICV/NEV ICAL
s1k1260.d	INST BLK	amy	17-NOV-2009 16:04	-----	s111409	1.0	INST BLK	
s1k1261-BOE.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261-D.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	
s1k1261.d	WBN091027-09.3	amy	17-NOV-2009 16:27	40 PPM	s111409	1.0	MEGAICV	pass 530038

s1k1262.d	UBN091117-01	amy	17-NOV-2009 16:56	10 PPM	s111409	1.0	NEV010	
s1k1263.d	UBN091117-02	amy	17-NOV-2009 17:19	20 PPM	s111409	1.0	NEV020	
s1k1264.d	UBN091117-03	amy	17-NOV-2009 17:42	40 PPM	s111409	1.0	NEV040	
s1k1265.d	UBN091117-04	amy	17-NOV-2009 18:05	50 PPM	s111409	1.0	NEV050	DUSE
s1k1266.d	UBN091117-05	amy	17-NOV-2009 18:28	80 PPM	s111409	1.0	NEV080	
s1k1267.d	UBN091117-06	amy	17-NOV-2009 18:52	100 PPM	s111409	1.0	NEV100	DUSE
s1k1268.d	UBN091117-07	amy	17-NOV-2009 19:15	120 PPM	s111409	1.0	NEV120	

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
06-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
927155	See Below		

Potentially affected work order(s)(SDG): 241615(10-644),241697(10-648)

Application Issues:

Failed Recovery for LCS/LCSD

Failed Yield for Surrogates

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS (1201982267LCS) recovered the acid surrogate 2,4,6-Tribromophenol at 113% (limits: 37%-118%).	1. All other samples and QC met acceptance criteria for for this surrogate compound. In addition, there was no detection of acid target analytes in the associated samples. Therefore the reported data were not adversely impacted by the surrogate recovery failure.
2. The LCS (1201982267) recovered Hexachlorocyclopentadiene at 139% (limits: (24%-135%).	2. As that analyte was not detected in the associated client samples, the reported data were adversely impacted by the biased high spike recovery.

Originator's Name:

Amy Carroll 06-DEC-09

Data Validator/Group Leader:

Daniel Beacham 07-DEC-09

GC SEMIVOLATILE DRO ANALYSIS

FID Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-644

Method/Analysis Information

Procedure:	**Analysis of Non-Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	927152
Prep Batch Number:	927151

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	**Client ID**
241615001	RE03-09-14108
241615002	RE03-09-14106
241615003	RE03-09-14107
241615004	RE03-09-14109
241615005	RE03-09-14252
241615006	RE03-09-14250
241615007	RE03-09-14255
241615008	RE03-09-14256
241615009	RE03-09-14254
241615010	RE03-09-14249
241615011	RE03-09-14248
241615012	RE03-09-14247
241615013	RE03-09-14246
241615014	RE03-09-14253
241615015	RE03-09-14251
241615016	RE03-09-14257
241615018	RE03-10-2729
241615020	RE03-10-6969
1201982260	Method Blank (MB)

1201982261	241615012(RE03-09-14247) Matrix Spike (MS)
1201982262	241615012(RE03-09-14247) Matrix Spike Duplicate (MSD)
1201982263	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241615012 (RE03-09-14247) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID7.I	Agilent GC FID	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock **Date:** 12-14-2009

Roadmap for LANL 10-644 DRO

This roadmap was analyzed by kev01577 on 12-03-2009, 10:55.
This roadmap was reviewed by jcb on 12-07-2009, 10:35.
This roadmap was packaged by jim01140 on 12-11-2009, 15:26.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid7.i/120109dr/033f3301.d	241615001	02-DEC-2009	07:13	10-644.sub	RE03-09-14108	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/034f3401.d	241615002	02-DEC-2009	07:49	10-644.sub	RE03-09-14106	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/035f3501.d	241615003	02-DEC-2009	08:26	10-644.sub	RE03-09-14107	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/036f3601.d	241615004	02-DEC-2009	09:02	10-644.sub	RE03-09-14109	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/037f3701.d	241615005	02-DEC-2009	09:39	10-644.sub	RE03-09-14252	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/038f3801.d	241615006	02-DEC-2009	10:16	10-644.sub	RE03-09-14250	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/041f4101.d	241615007	02-DEC-2009	12:07	10-644.sub	RE03-09-14255	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/042f4201.d	241615008	02-DEC-2009	12:43	10-644.sub	RE03-09-14256	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/043f4301.d	241615009	02-DEC-2009	13:20	10-644.sub	RE03-09-14254	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/044f4401.d	241615010	02-DEC-2009	13:56	10-644.sub	RE03-09-14249	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/045f4501.d	241615011	02-DEC-2009	14:34	10-644.sub	RE03-09-14248	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/046f4601.d	241615012	02-DEC-2009	15:11	10-644.sub	RE03-09-14247	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/051f5101.d	241615013	02-DEC-2009	18:15	10-644.sub	RE03-09-14246	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/052f5201.d	241615014	02-DEC-2009	18:53	10-644.sub	RE03-09-14253	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/053f5301.d	241615015	02-DEC-2009	19:30	10-644.sub	RE03-09-14251	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/054f5401.d	241615016	02-DEC-2009	20:07	10-644.sub	RE03-09-14257	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/055f5501.d	241615018	02-DEC-2009	20:44	10-644.sub	RE03-10-2729	1.00000	927152	USE

☐	N	/chem/fid7.i/120109dr/056f5601.d	241615020	02-DEC-2009	21:21	10-644.sub	RE03-10-6969	1.00000	927152	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid7.i/120109dr/031f3101.d	1201982260	mb	02-DEC-2009	05:58	10-644.sub	DBLK01	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/032f3201.d	1201982263	lcs	02-DEC-2009	06:36	10-644.sub	DBLK01LCS	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/047f4701.d	1201982261	ms	02-DEC-2009	15:47	10-644.sub	RE03-09-14247MS	1.00000	927152	USE
☐	N	/chem/fid7.i/120109dr/048f4801.d	1201982262	msd	02-DEC-2009	16:25	10-644.sub	RE03-09-14247MSD	1.00000	927152	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14108	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 07:13	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	033f3301.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.77	mg/kg	2.34	7.19

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14106	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 07:49	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	034f3401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.58	mg/kg	2.39	7.36

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14107	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 08:26	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	035f3501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.49	mg/kg	2.47	7.59

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14109	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 09:02	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.62	mg/kg	2.29	7.05

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615005	Date Received:	11/21/2009 09:00	%Moisture:	6.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14252	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 09:39	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	037f3701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.46	mg/kg	2.32	7.14

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14250	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 10:16	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	038f3801.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.92	mg/kg	2.32	7.15

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14255	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 12:07	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	041f4101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.99	mg/kg	2.39	7.34

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615008	Date Received:	11/21/2009 09:00	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14256	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 12:43	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	042f4201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.33	mg/kg	2.36	7.26

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14254	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 13:20	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	043f4301.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.50	mg/kg	2.30	7.08

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14249	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 13:56	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	044f4401.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.38	mg/kg	2.40	7.40

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615011	Date Received:	11/21/2009 09:00	%Moisture:	10.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14248	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 14:34	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30 g	Final Volume:	1 mL
Data File:	045f4501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.99	mg/kg	2.42	7.46

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615012	Date Received:	11/21/2009 09:00	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14247	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 15:11	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	046f4601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.43	mg/kg	2.41	7.43

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14246	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7,I	Dilution:	1
Run Date:	12/02/2009 18:15	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	051f5101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.64	mg/kg	2.35	7.24

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14253	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 18:53	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	052f5201.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.86	mg/kg	2.38	7.33

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 19:30	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	053f5301.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.09	mg/kg	2.39	7.36

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14257	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 20:07	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	054f5401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.58	mg/kg	2.19	6.74

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615018	Date Received:	11/21/2009 09:00	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–2729	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 20:44	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	055f5501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.31	mg/kg	2.36	7.27

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6969	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 21:21	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	056f5601.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.72	mg/kg	2.28	7.01

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10–644

Matrix Type: SOLID

CAP Column (1) : DB–5MS

Sample ID	Client ID	OTP %REC
1201982260	MB for batch 927151	53
1201982263	LCS for batch 927151	90
241615001	RE03–09–14108	62
241615002	RE03–09–14106	61
241615003	RE03–09–14107	42
241615004	RE03–09–14109	59
241615005	RE03–09–14252	59
241615006	RE03–09–14250	59
241615007	RE03–09–14255	52
241615008	RE03–09–14256	63
241615009	RE03–09–14254	59
241615010	RE03–09–14249	56
241615011	RE03–09–14248	50
241615012	RE03–09–14247	36
1201982261	RE03–09–14247MS	70
1201982262	RE03–09–14247MSD	58
241615013	RE03–09–14246	64
241615014	RE03–09–14253	60
241615015	RE03–09–14251	59
241615016	RE03–09–14257	60
241615018	RE03–10–2729	63
241615020	RE03–10–6969	68

Surrogate	Acceptance Limits
OTP = o–Terphenyl	(24%–124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10–644
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 927151
Matrix: SOIL
Lab Sample ID: 1201982263
Instrument: FID7.I
Analysis Date: 12/02/2009 06:36
Dilution: 1
Analyst: KXR2
Prep Batch ID 927151
Inj. Vol: 1 uL
Batch ID: 927152

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	26.4	79	53–114

Flame Ionization Detector

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–644**	**Sample Type:**	**Matrix Spike**	
Client ID:	**RE03–09–14247MS**	**Matrix:**	**S**	
Lab Sample ID:	**1201982261**	**%Moisture:**	**10.3**	
Instrument:	**FID7.I**	**Analysis Date:**	**12/02/2009 15:47**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID:**	**927151**	
Inj. Vol:	**1 uL**	**Batch ID:**	**927152**	

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	37.2	0.00	U	22.5	61	21–122

Flame Ionization Detector

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–644**	**Sample Type:**	**Matrix Spike Duplicate**	
Client ID:	**RE03–09–14247MSD**	**Matrix:**	**S**	
Lab Sample ID:	**1201982262**	**%Moisture:**	**10.3**	
Instrument:	**FID7.I**	**Analysis Date:**	**12/02/2009 16:25**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID:**	**927151**	
Inj. Vol:	**1 uL**	**Batch ID:**	**927152**	

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	37.2	0.00	U	18.6	50	21–122	19	0–30

Method Blank Summary

SDG Number:	10-644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927151	Instrument ID:	FID7.I	Data File:	031f3101.d
Lab Sample ID:	1201982260	Prep Date:	11/30/2009 11:58	Analyzed:	12/02/09 05:58
Column:	DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 927151	1201982263	032f3201.d	12/02/09	0636
02	RE03-09-14108	241615001	033f3301.d	12/02/09	0713
03	RE03-09-14106	241615002	034f3401.d	12/02/09	0749
04	RE03-09-14107	241615003	035f3501.d	12/02/09	0826
05	RE03-09-14109	241615004	036f3601.d	12/02/09	0902
06	RE03-09-14252	241615005	037f3701.d	12/02/09	0939
07	RE03-09-14250	241615006	038f3801.d	12/02/09	1016
08	RE03-09-14255	241615007	041f4101.d	12/02/09	1207
09	RE03-09-14256	241615008	042f4201.d	12/02/09	1243
10	RE03-09-14254	241615009	043f4301.d	12/02/09	1320
11	RE03-09-14249	241615010	044f4401.d	12/02/09	1356
12	RE03-09-14248	241615011	045f4501.d	12/02/09	1434
13	RE03-09-14247	241615012	046f4601.d	12/02/09	1511
14	RE03-09-14247MS	1201982261	047f4701.d	12/02/09	1547
15	RE03-09-14247MSD	1201982262	048f4801.d	12/02/09	1625
16	RE03-09-14246	241615013	051f5101.d	12/02/09	1815
17	RE03-09-14253	241615014	052f5201.d	12/02/09	1853
18	RE03-09-14251	241615015	053f5301.d	12/02/09	1930
19	RE03-09-14257	241615016	054f5401.d	12/02/09	2007
20	RE03-10-2729	241615018	055f5501.d	12/02/09	2044
21	RE03-10-6969	241615020	056f5601.d	12/02/09	2121

SAMPLE DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14108	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 07:13	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	033f3301.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.77	mg/kg	2.34	7.19

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/033f3301.d
Lab Smp Id: 241615001 Client Smp ID: RE03-09-14108
Inj Date : 02-DEC-2009 07:13
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615001|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 33
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	7.23270	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			2275861	160.576	5.8	(a)
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.609	13.616	-0.007	312474	12.4465	0.45	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/033f3301.d
Date : 02-DEC-2009 07:13
Client ID: RE03-09-14108
Sample Info: |241615001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

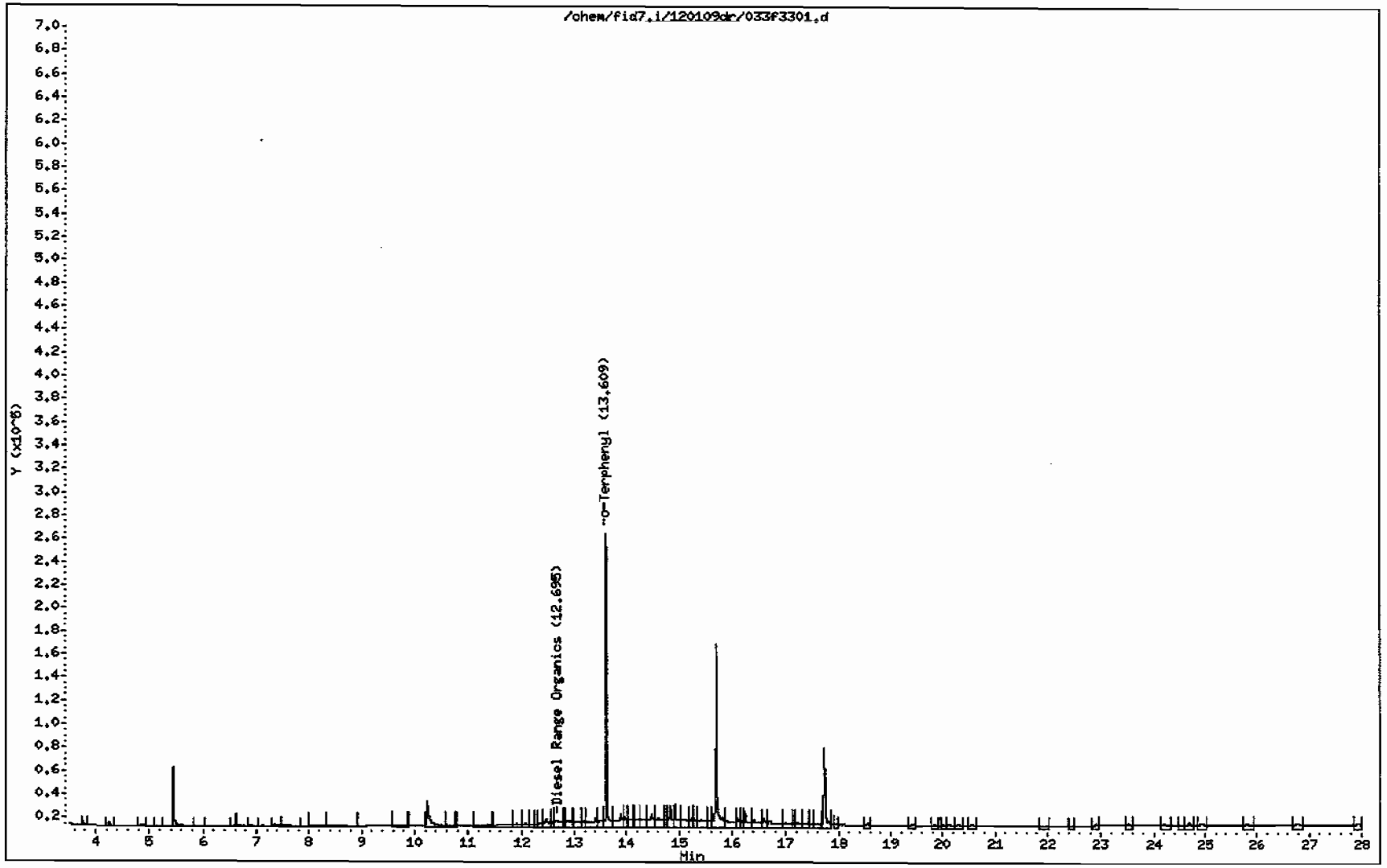

Data File: /chem/fid7.i/120109dr/033f3301.d
Injection Date: 02-DEC-2009 07:13
Instrument: fid7.i
Client Sample ID: RE03-09-14108

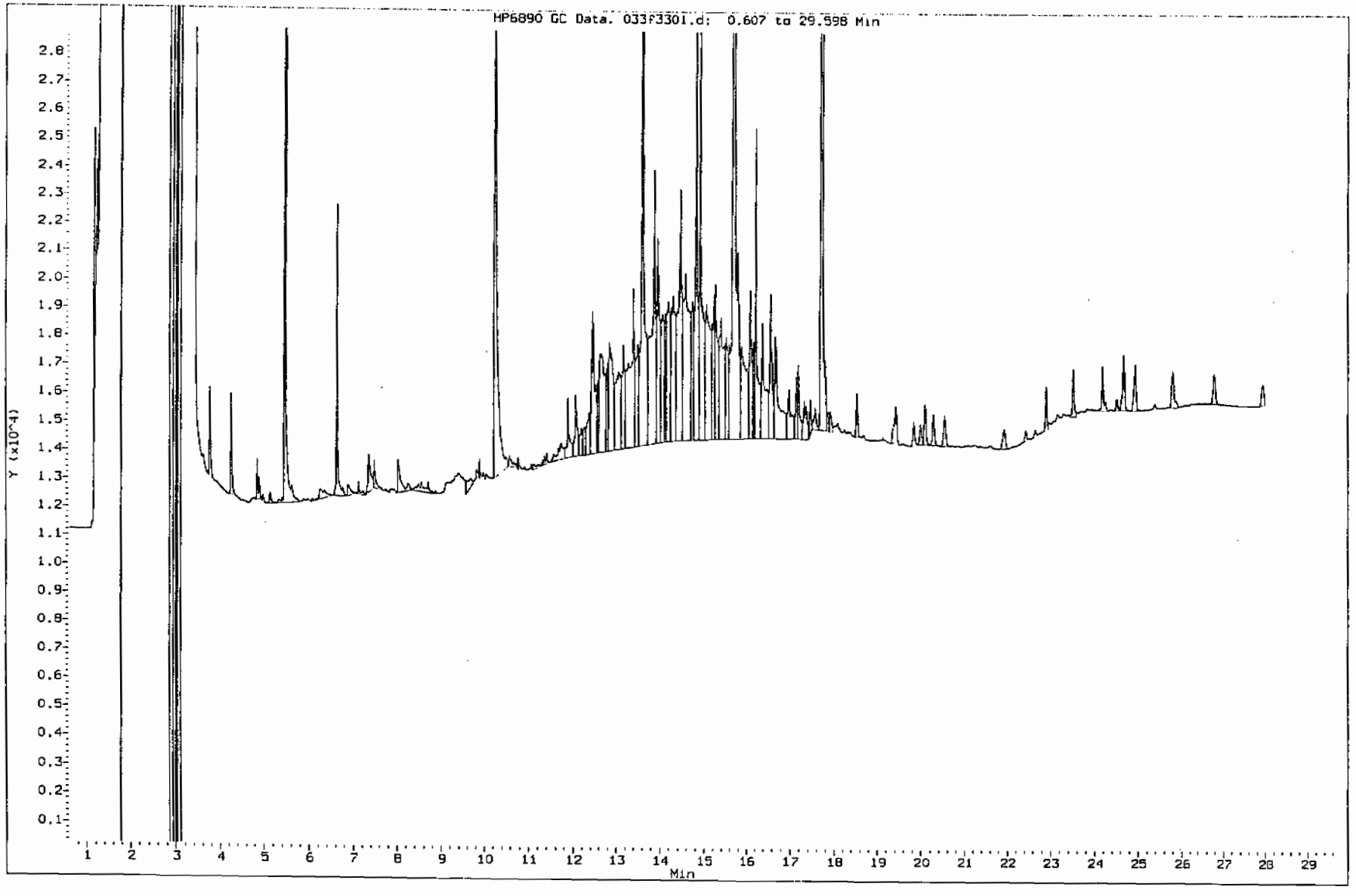

Data File: /chem/fid7.i/120109dr/033f3301.d
Injection Date: 02-DEC-2009 07:13
Instrument: fid7.i
Client Sample ID: RE03-09-14108

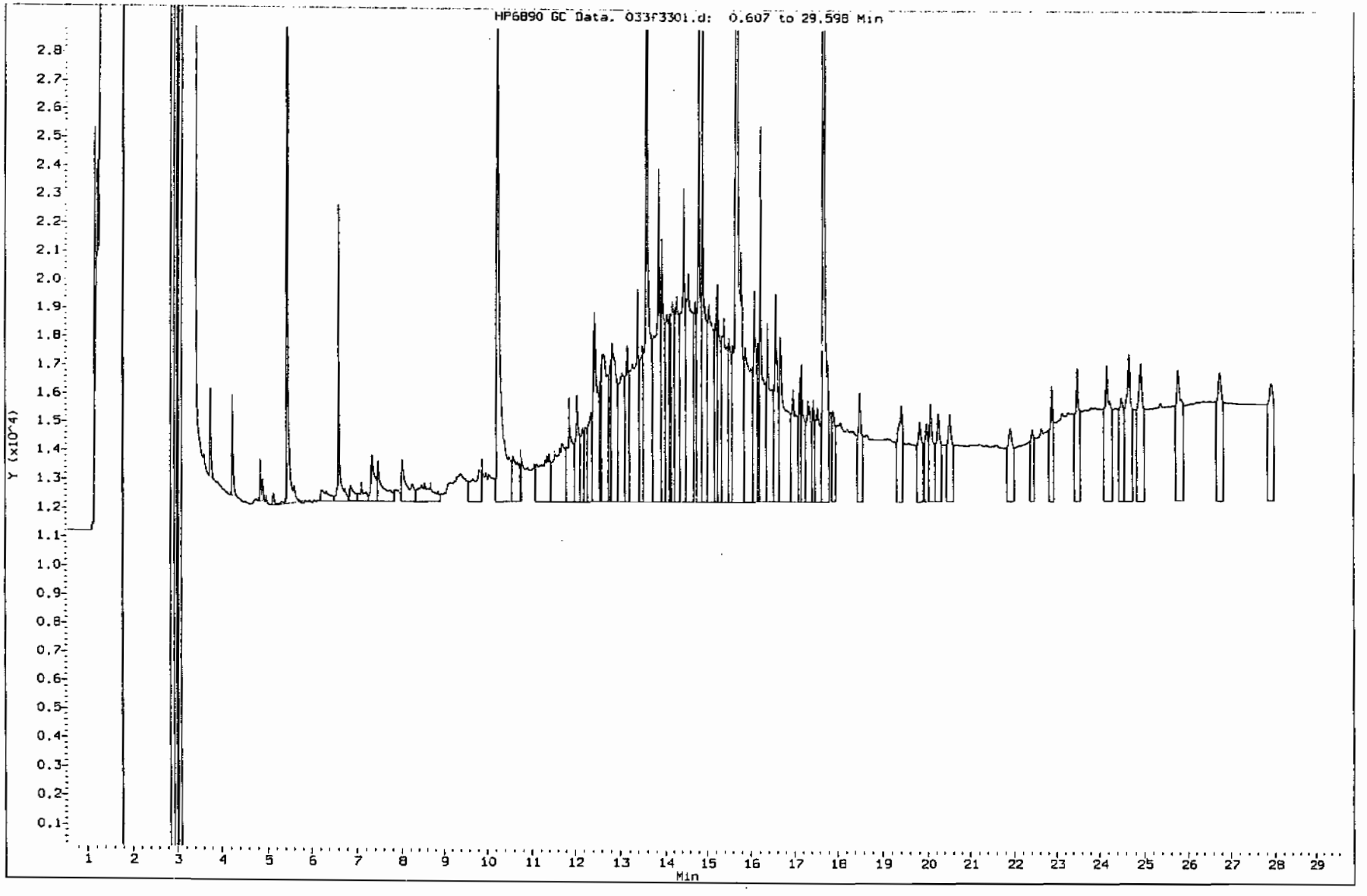

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14106	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 07:49	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	034f3401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.58	mg/kg	2.39	7.36

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/034f3401.d
Lab Smp Id: 241615002 Client Smp ID: RE03-09-14106
Inj Date : 02-DEC-2009 07:49
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615002|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 34
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	9.44270	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501~ 17.890			2150000	151.695	5.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.610	13.616	-0.006	305042	12.1505	0.45	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/034f3401.d

Date : 02-DEC-2009 07:49

Client ID: RE03-09-14106

Sample Info: |241615002|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

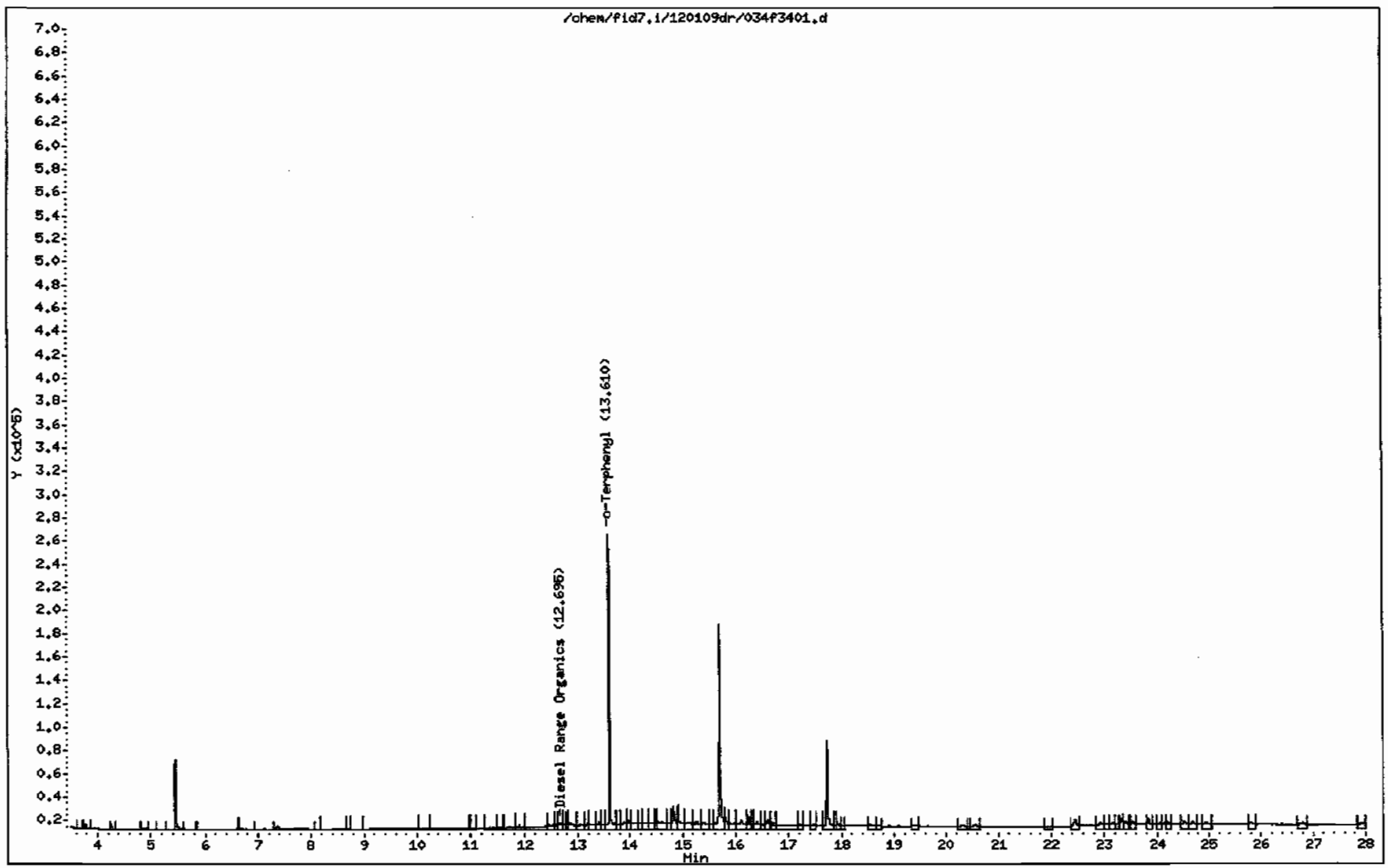

Data File: /chem/fid7.i/120109dr/034f3401.d
Injection Date: 02-DEC-2009 07:49
Instrument: fid7.i
Client Sample ID: RE03-09-14106

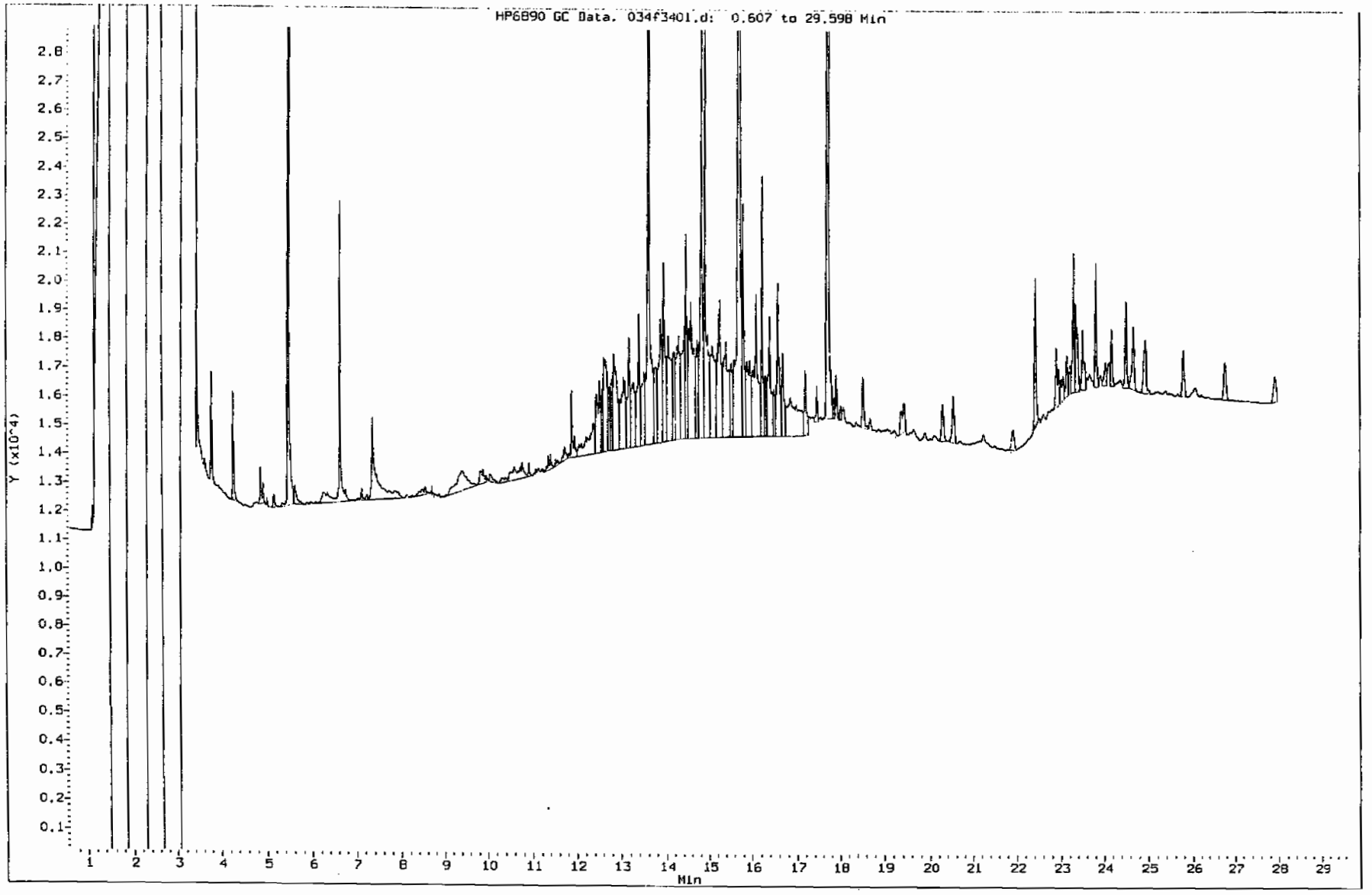

Data File: /chem/fid7.i/120109dr/034f3401.d
Injection Date: 02-DEC-2009 07:49
Instrument: fid7.i
Client Sample ID: RE03-09-14106

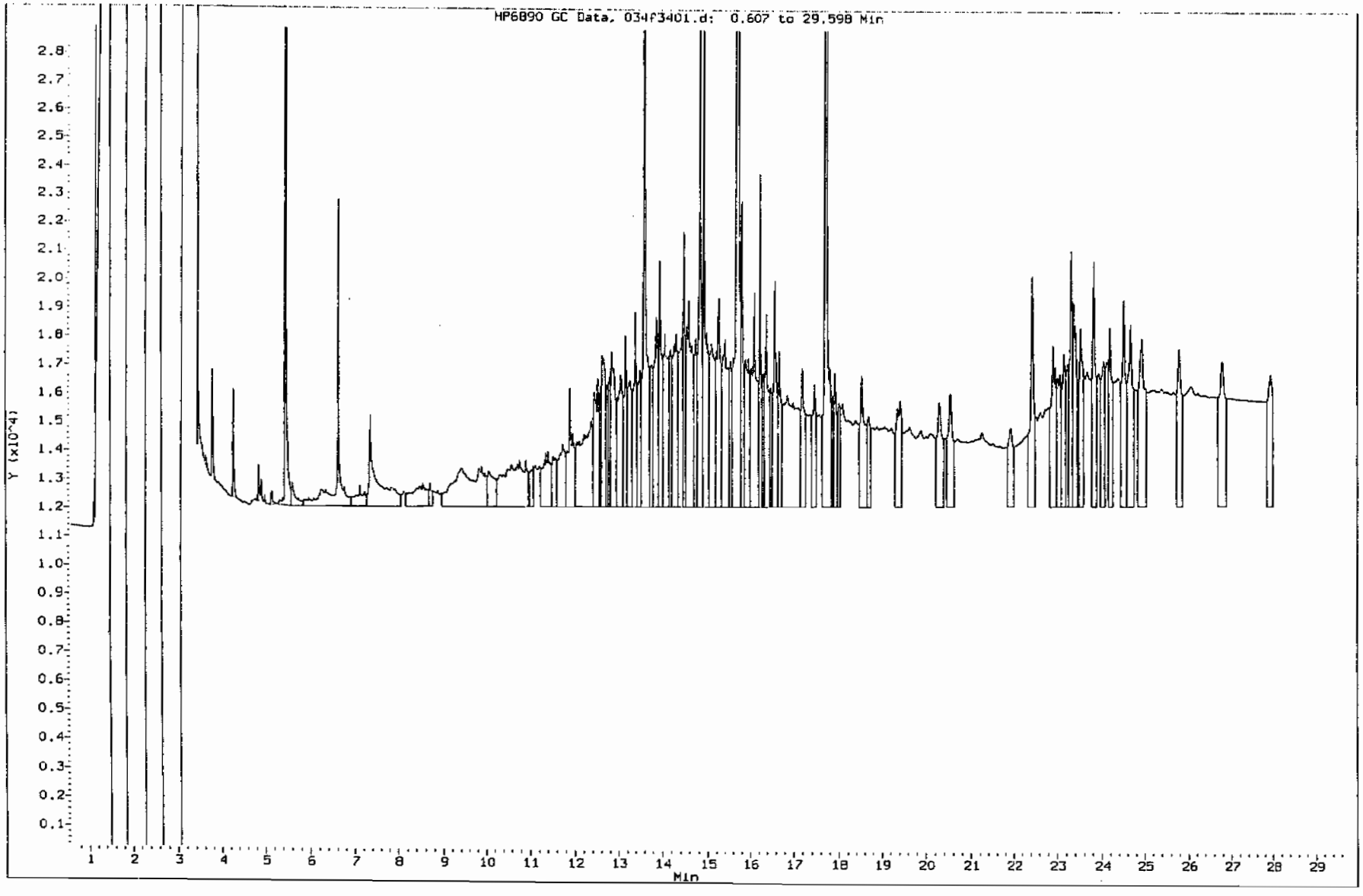

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14107	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 08:26	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	035f3501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.49	mg/kg	2.47	7.59

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/035f3501.d
Lab Smp Id: 241615003 Client Smp ID: RE03-09-14107
Inj Date : 02-DEC-2009 08:26
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615003|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 35
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	12.21420	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			1303505	91.9701	3.5	(a)
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.609	13.616	-0.007	213017	8.48495	0.32	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/035f3501.d
Date : 02-DEC-2009 08:26
Client ID: RE03-09-14107
Sample Info: |241615003|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

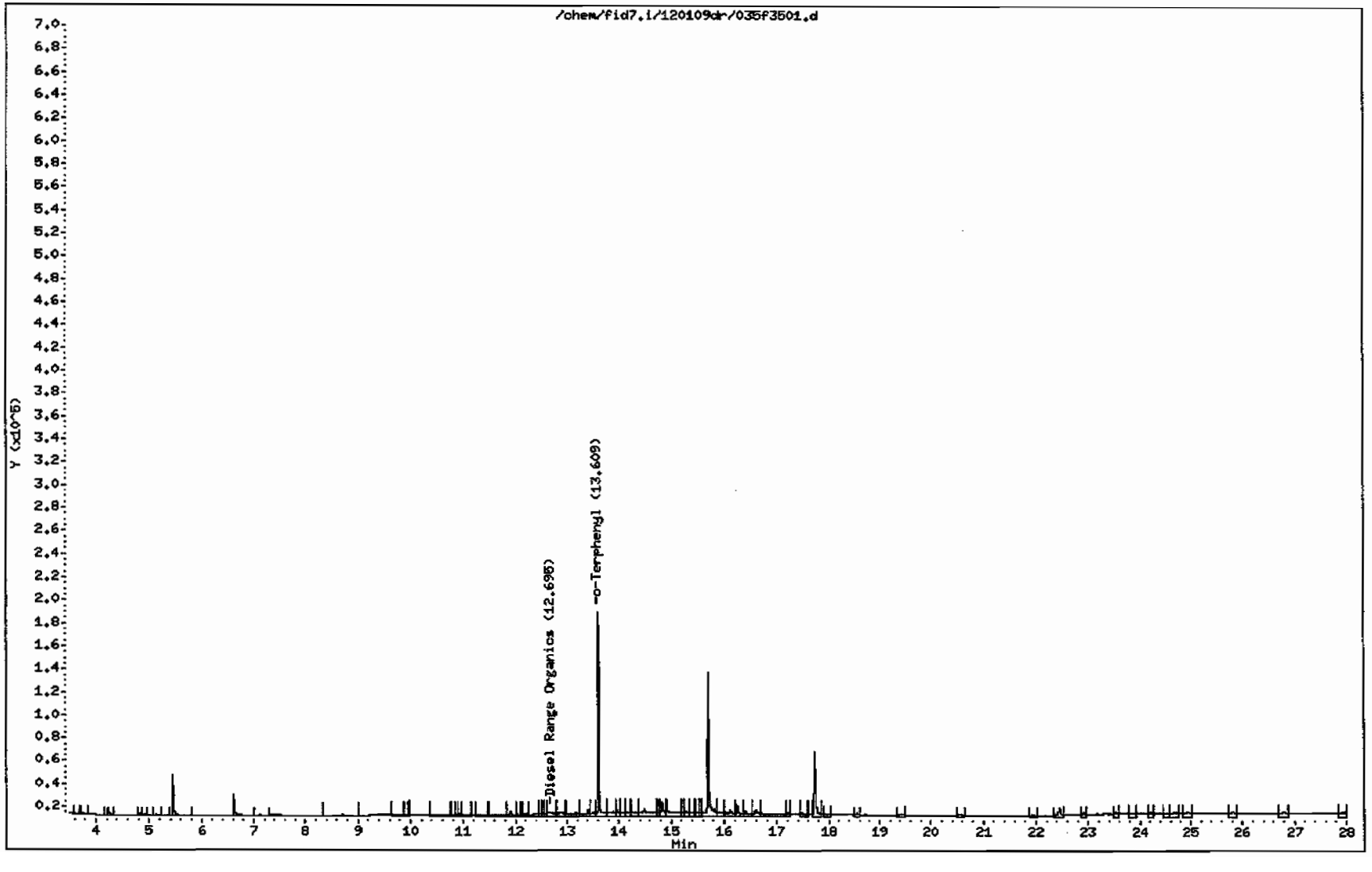

Data File: /chem/fid7.i/120109dr/035f3501.d
Injection Date: 02-DEC-2009 08:26
Instrument: fid7.i
Client Sample ID: RE03-09-14107

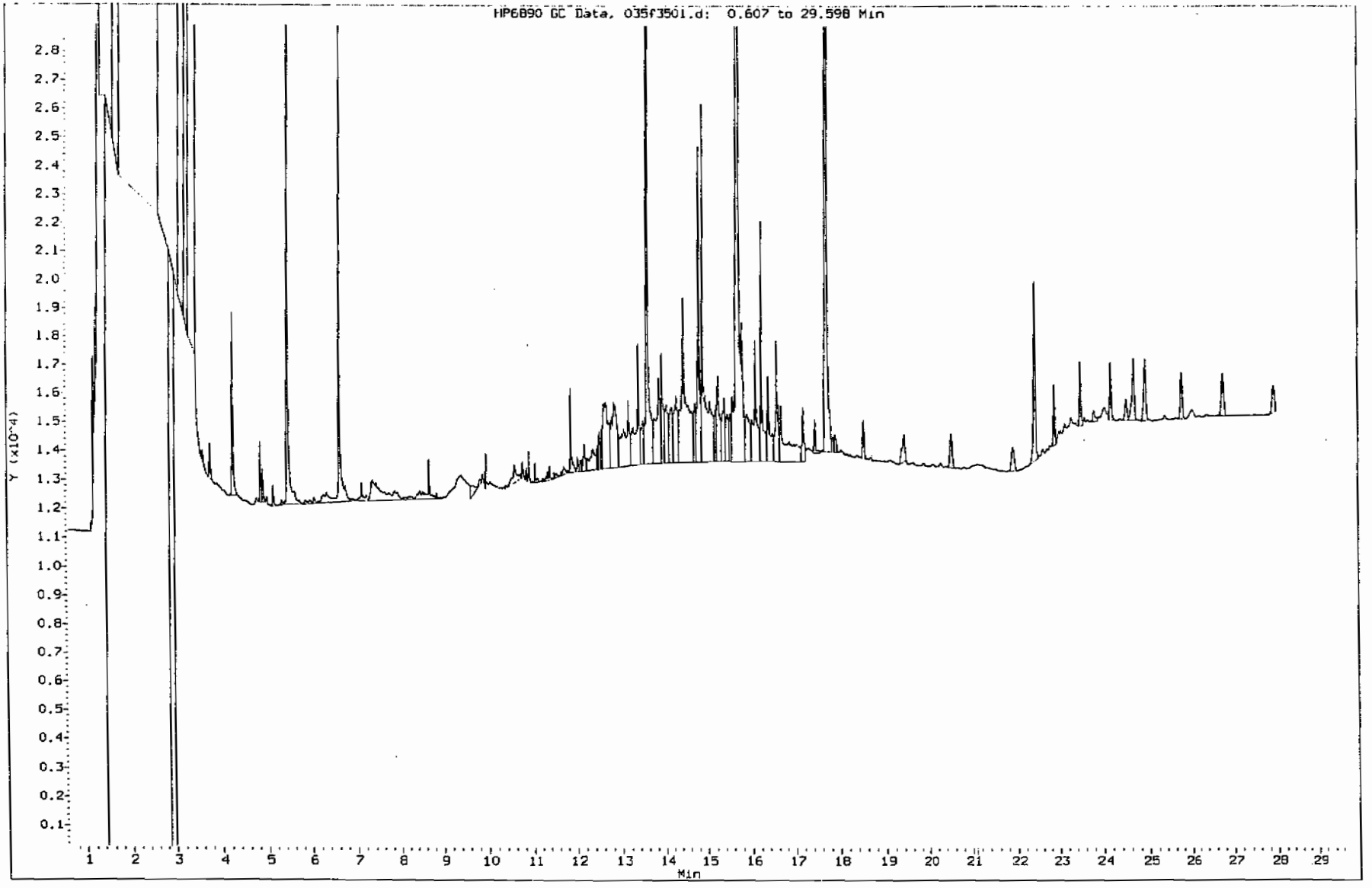

Data File: /chem/fid7.i/120109dr/035f3501.d
Injection Date: 02-DEC-2009 08:26
Instrument: fid7.i
Client Sample ID: RE03-09-14107

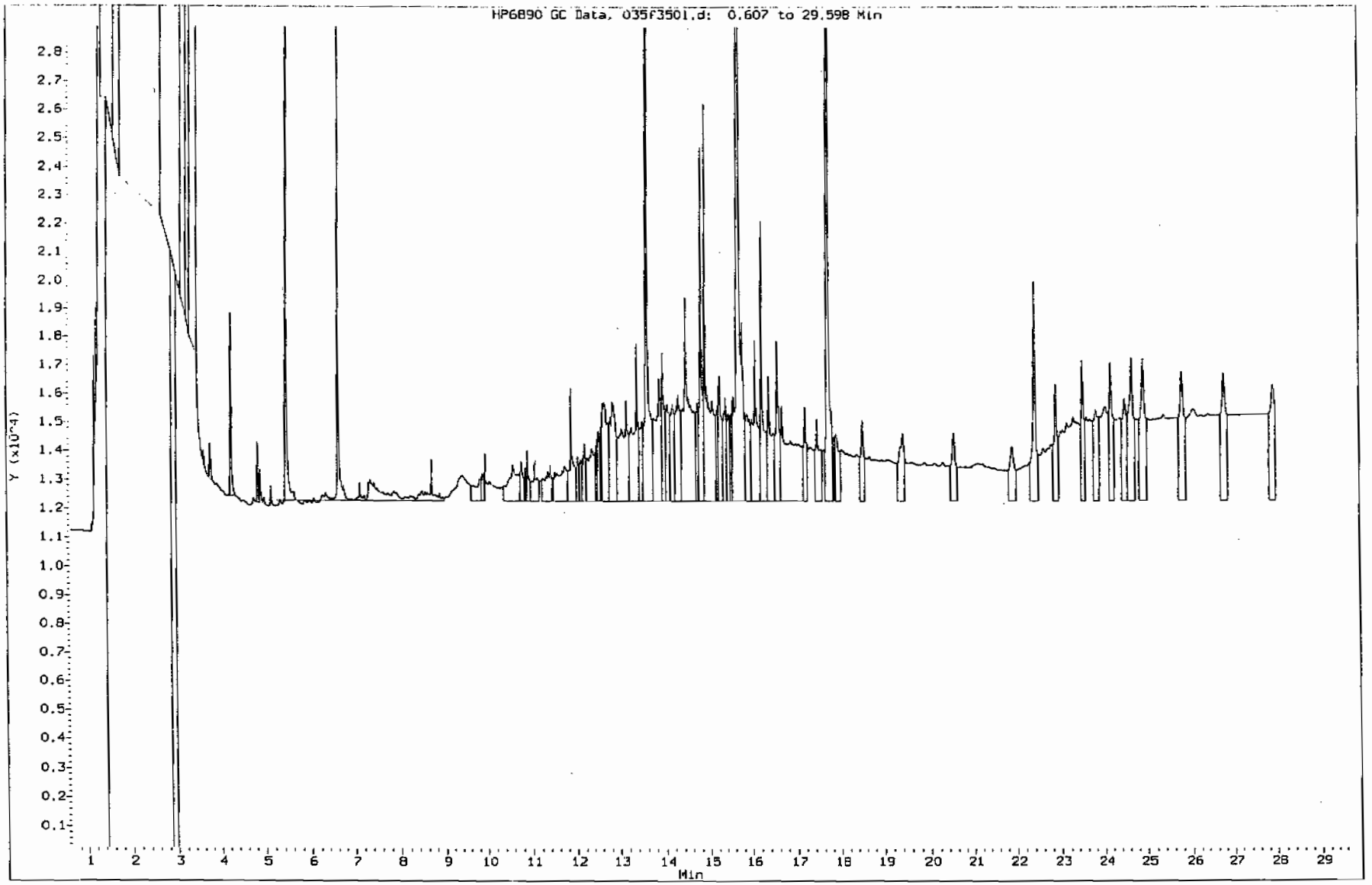

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14109	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 09:02	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	036f3601.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.62	mg/kg	2.29	7.05

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/036f3601.d
Lab Smp Id: 241615004 Client Smp ID: RE03-09-14109
Inj Date : 02-DEC-2009 09:02
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615004|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weigth of sample extracted (g)
M	5.43490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1455717	102.710	3.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.609	13.616	-0.007	295072	11.7533	0.41	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/036f3601.d
Date : 02-DEC-2009 09:02
Client ID: RE03-09-14109
Sample Info: |241615004|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

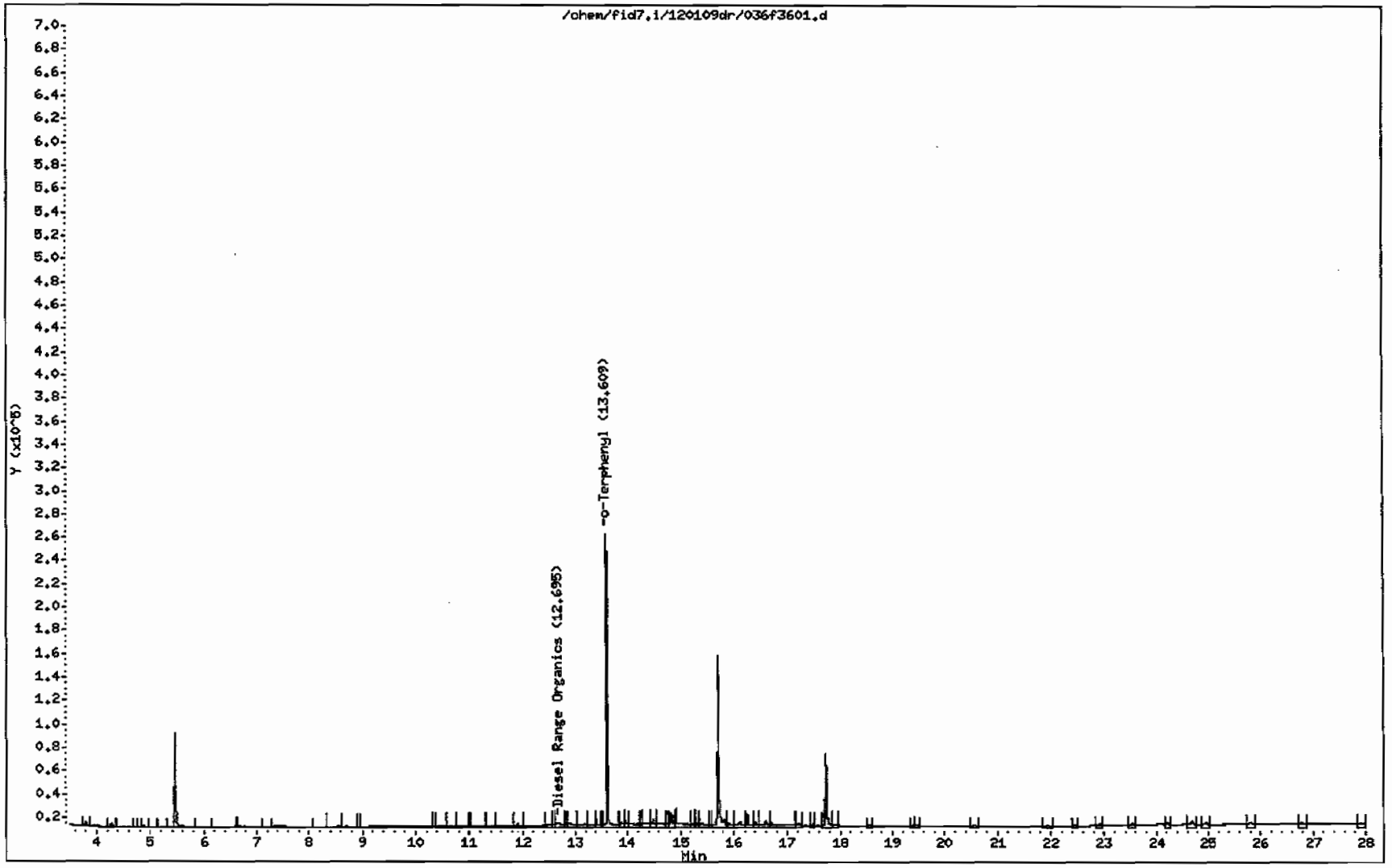

Data File: /chem/fid7.i/120109dr/036f3601.d
Injection Date: 02-DEC-2009 09:02
Instrument: fid7.i
Client Sample ID: RE03-09-14109

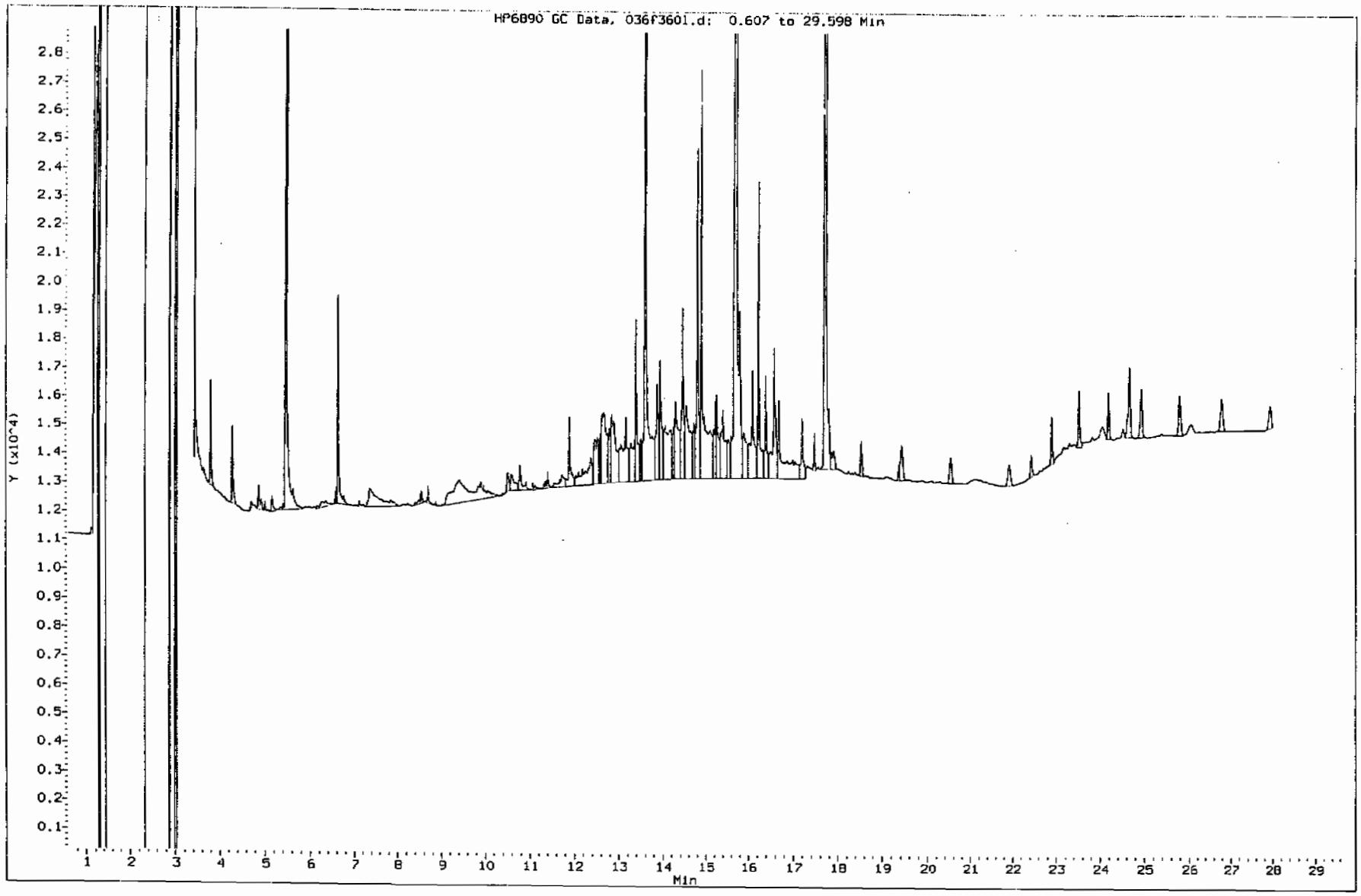

Data File: /chem/fid7.i/120109dr/036f3601.d
Injection Date: 02-DEC-2009 09:02
Instrument: fid7.i
Client Sample ID: RE03-09-14109

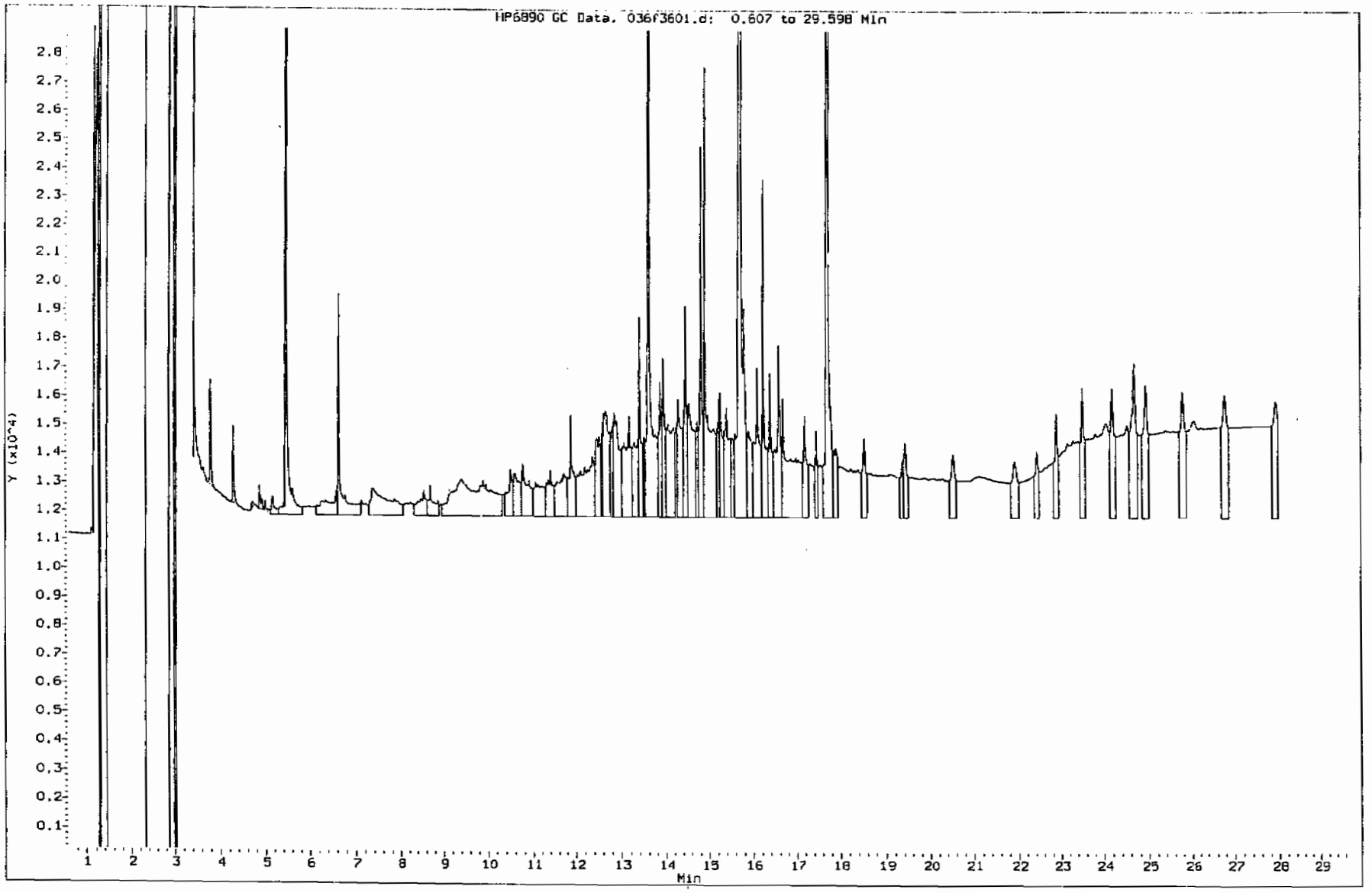

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14252**	**Method:**	**SW846 8015A/B SVOC**	**SOP Ref:**	**GL-OA-E-003**
Batch ID:	**927152**	**Inst:**	**FID7.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 09:39**	**Analyst:**	**KXR2**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:58**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**037f3701.d**	**Column:**	**DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.46	mg/kg	2.32	7.14

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/037f3701.d
Lab Smp Id: 241615005 Client Smp ID: RE03-09-14252
Inj Date : 02-DEC-2009 09:39
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615005|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weigth of sample extracted (g)
M	6.62750	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			2564417	180.935	6.4	(a)
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.609	13.616	-0.007	294367	11.7253	0.42	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/037f3701.d
Date : 02-DEC-2009 09:39
Client ID: RE03-09-14252
Sample Info: |241615005|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

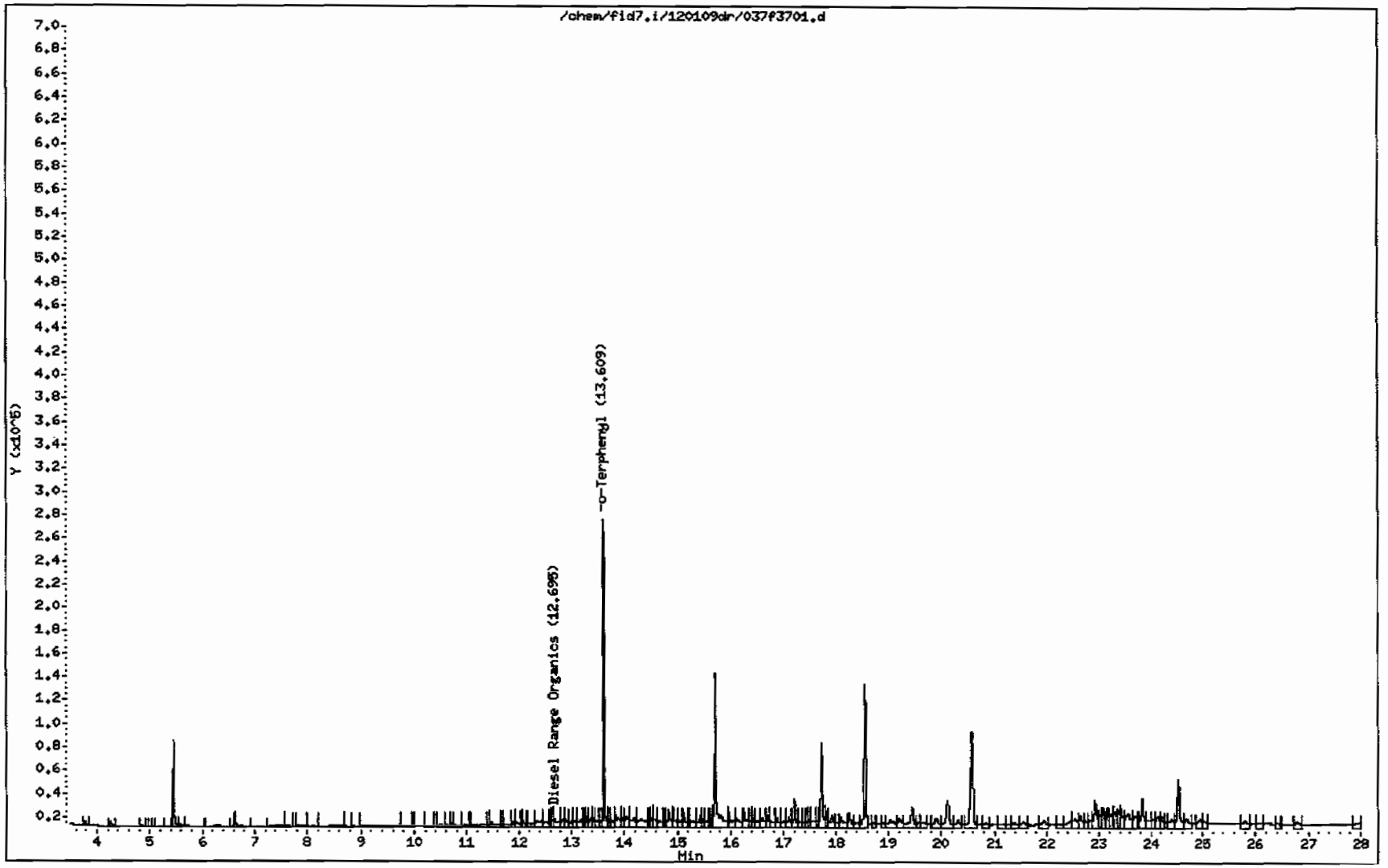

Data File: /chem/fid7.i/120109dr/037f3701.d
Injection Date: 02-DEC-2009 09:39
Instrument: fid7.i
Client Sample ID: RE03-09-14252

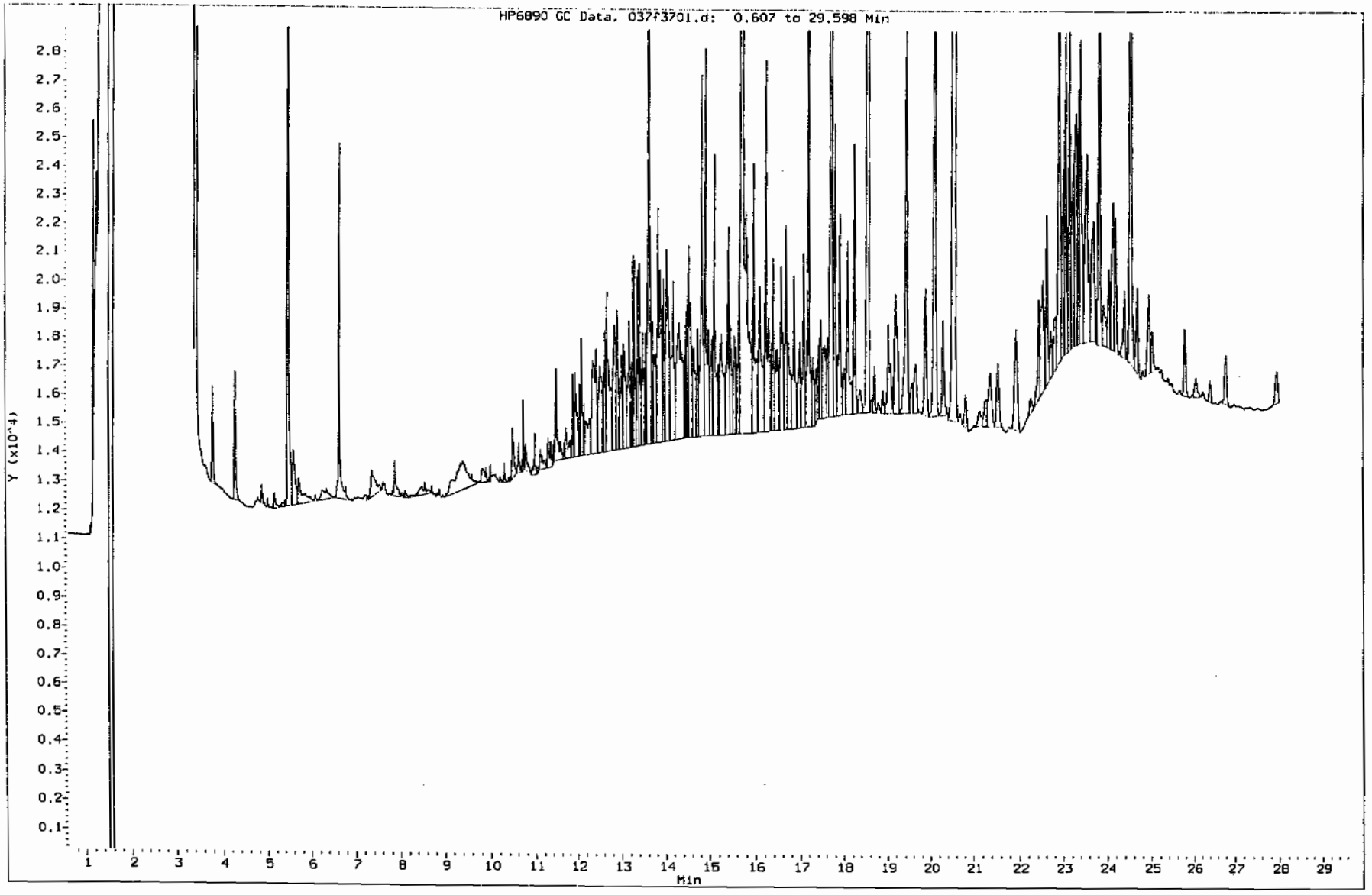

Data File: /chem/fid7.i/120109dr/037f3701.d
Injection Date: 02-DEC-2009 09:39
Instrument: fid7.i
Client Sample ID: RE03-09-14252

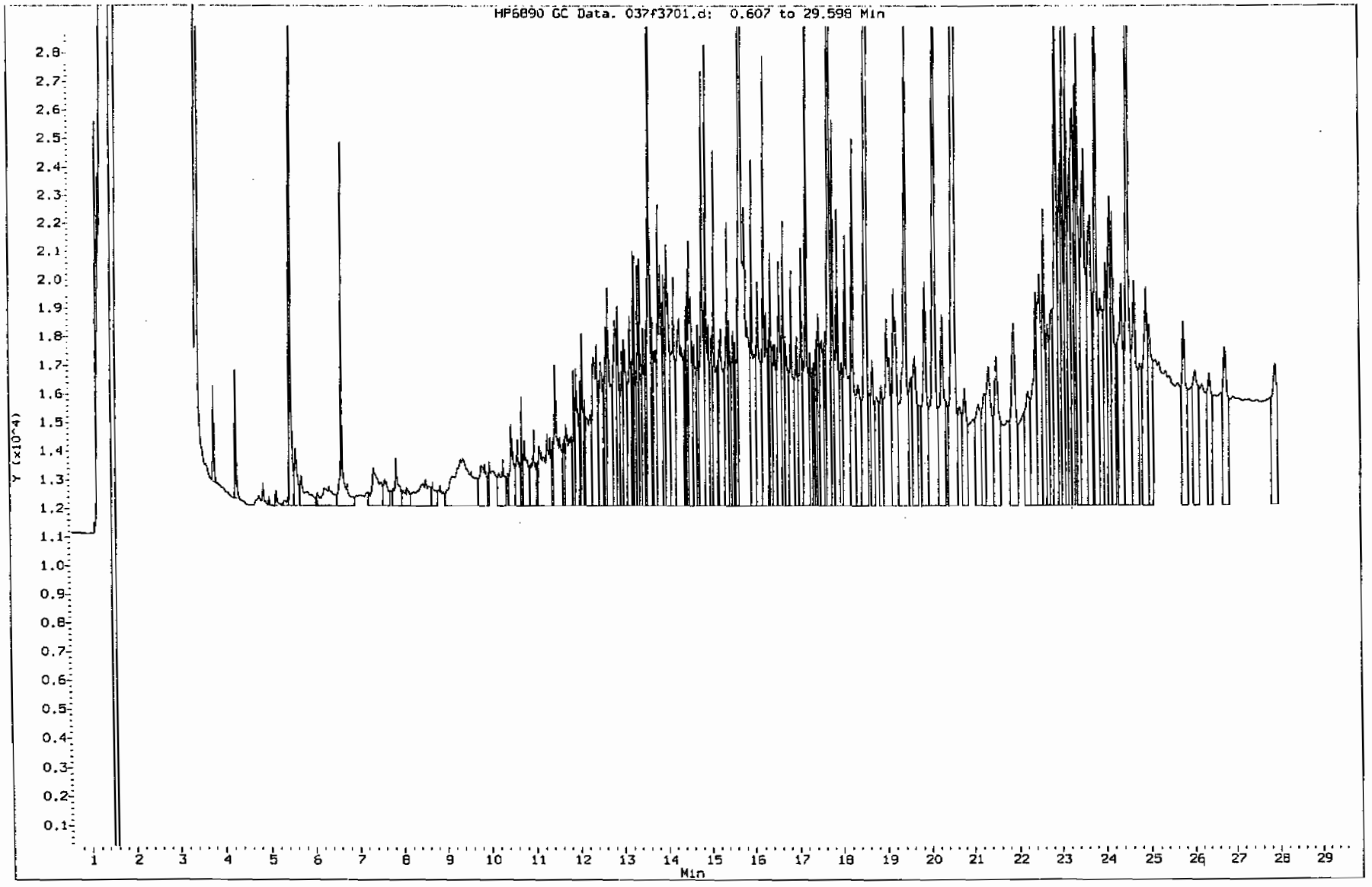

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14250	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 10:16	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	038f3801.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.92	mg/kg	2.32	7.15

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/038f3801.d
Lab Smp Id: 241615006 Client Smp ID: RE03-09-14250
Inj Date : 02-DEC-2009 10:16
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615006|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 38
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	6.92880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1156035	81.5653	2.9	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.609	13.616	-0.007	296969	11.8289	0.42	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/038f3801.d
Date : 02-DEC-2009 10:16
Client ID: RE03-09-14250
Sample Info: |241615006|1|
Volume Injected (uL): 1.0
Column phase: DB-5HS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

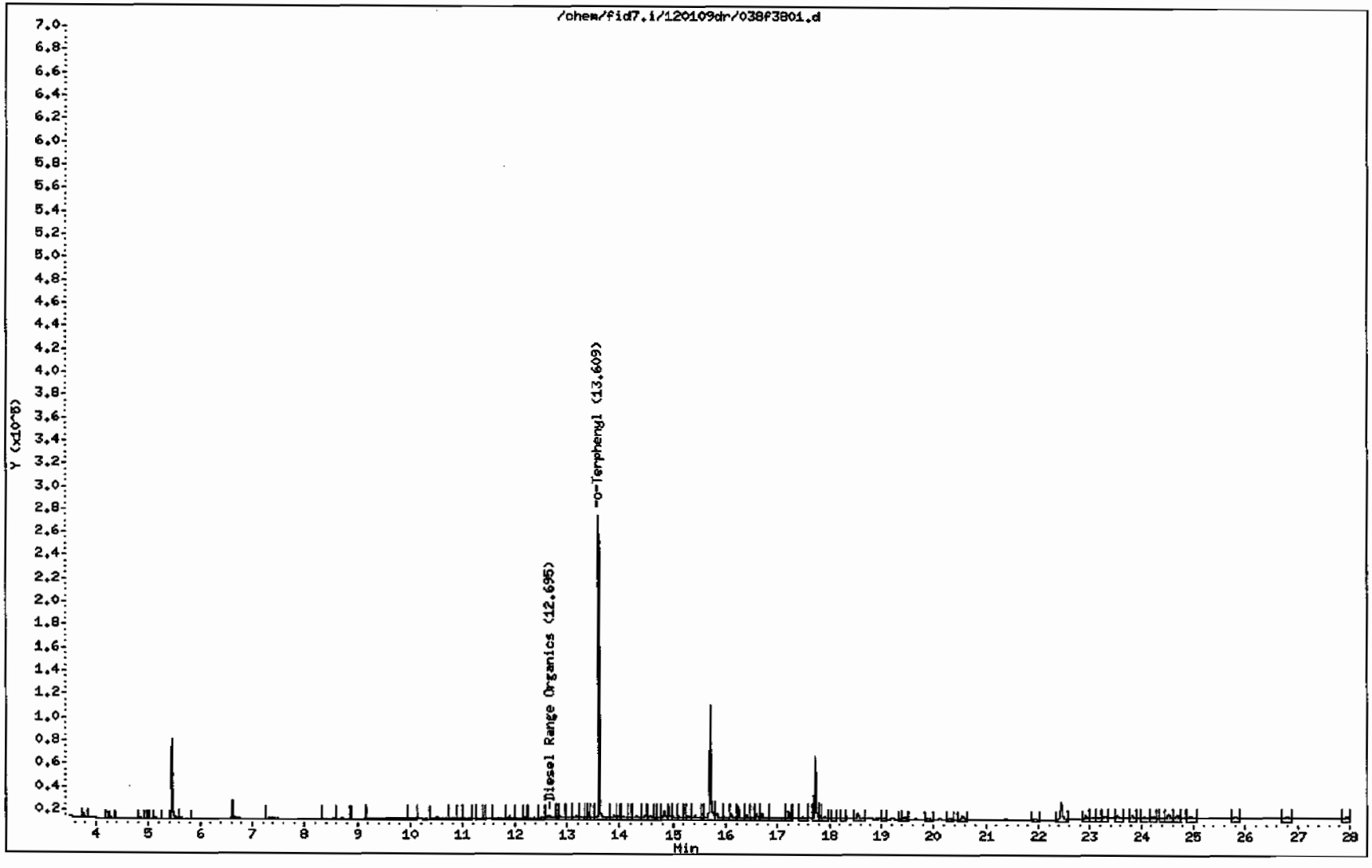

Data File: /chem/fid7.i/120109dr/038f3801.d
Injection Date: 02-DEC-2009 10:16
Instrument: fid7.i
Client Sample ID: RE03-09-14250

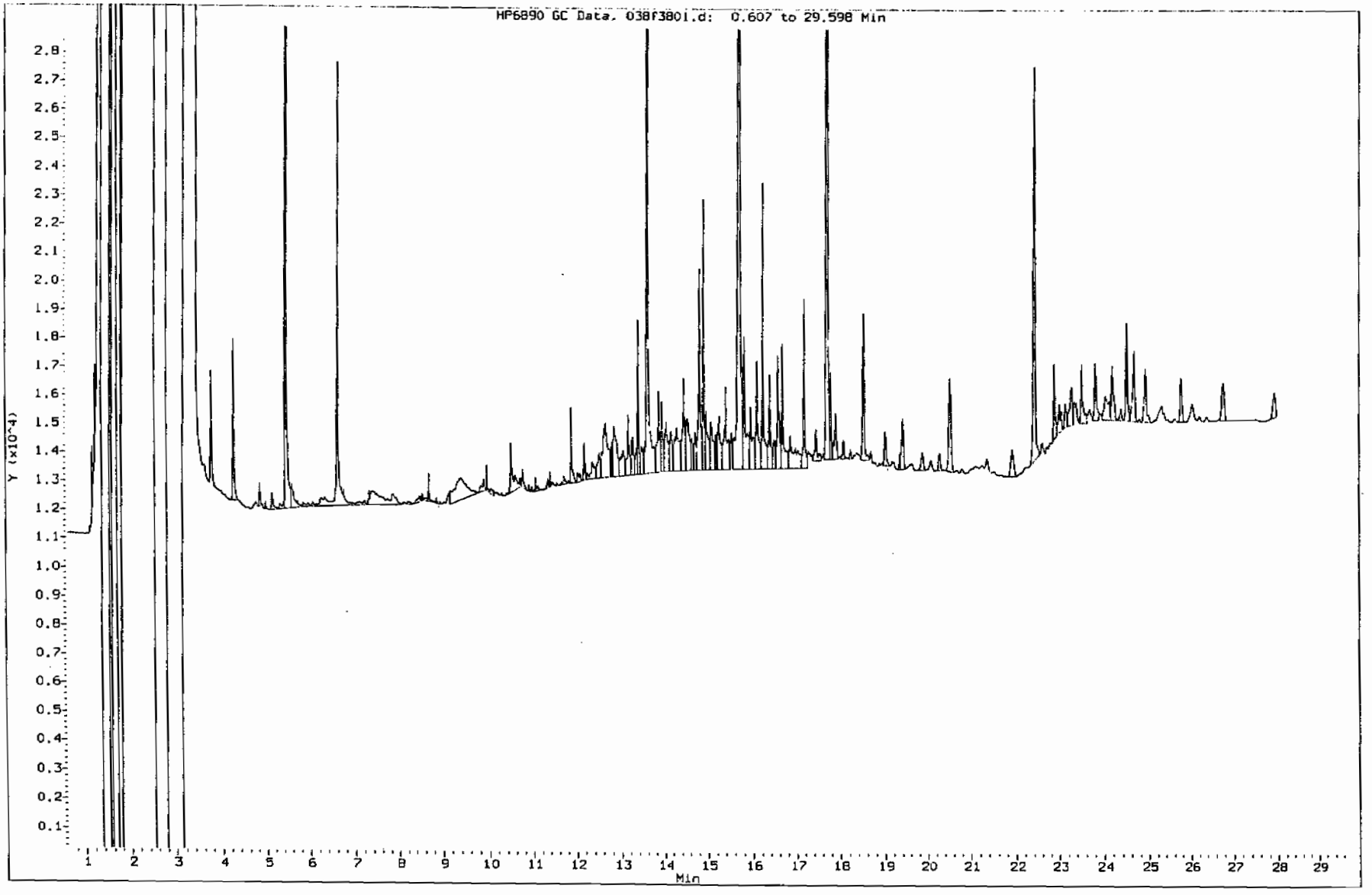

Data File: /chem/fid7.i/120109dr/038f3801.d
Injection Date: 02-DEC-2009 10:16
Instrument: fid7.i
Client Sample ID: RE03-09-14250

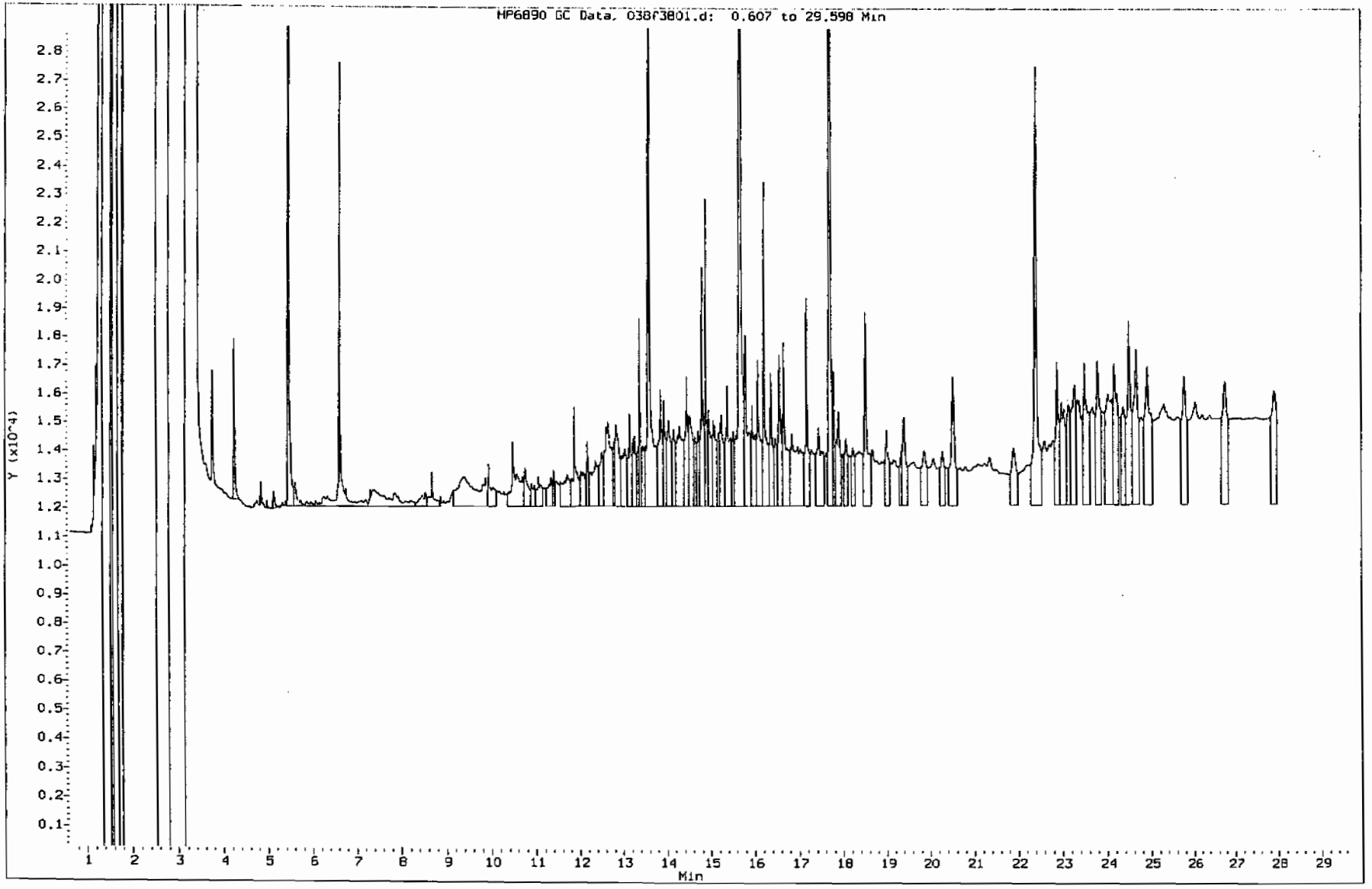

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14255	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 12:07	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	041f4101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.99	mg/kg	2.39	7.34

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/041f4101.d
Lab Smp Id: 241615007 Client Smp ID: RE03-09-14255
Inj Date : 02-DEC-2009 12:07
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615007|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 41
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	9.25470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1539247	108.603	4.0	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.608	13.616	-0.008	259465	10.3351	0.38	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/041f4101.d
Date : 02-DEC-2009 12:07
Client ID: RE03-09-14255
Sample Info: |2416150071|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

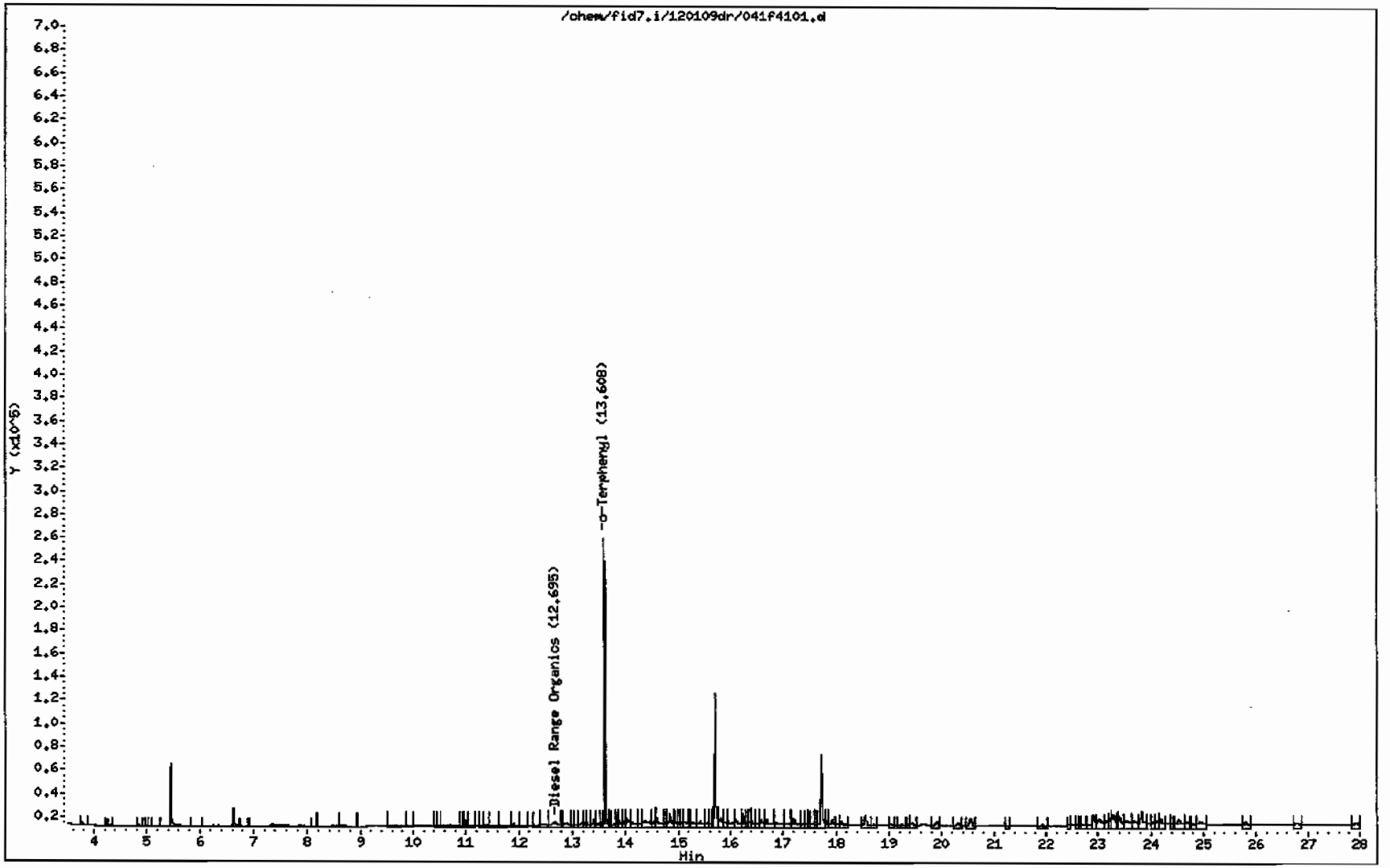

Data File: /chem/fid7.i/120109dr/041f4101.d
Injection Date: 02-DEC-2009 12:07
Instrument: fid7.i
Client Sample ID: RE03-09-14255

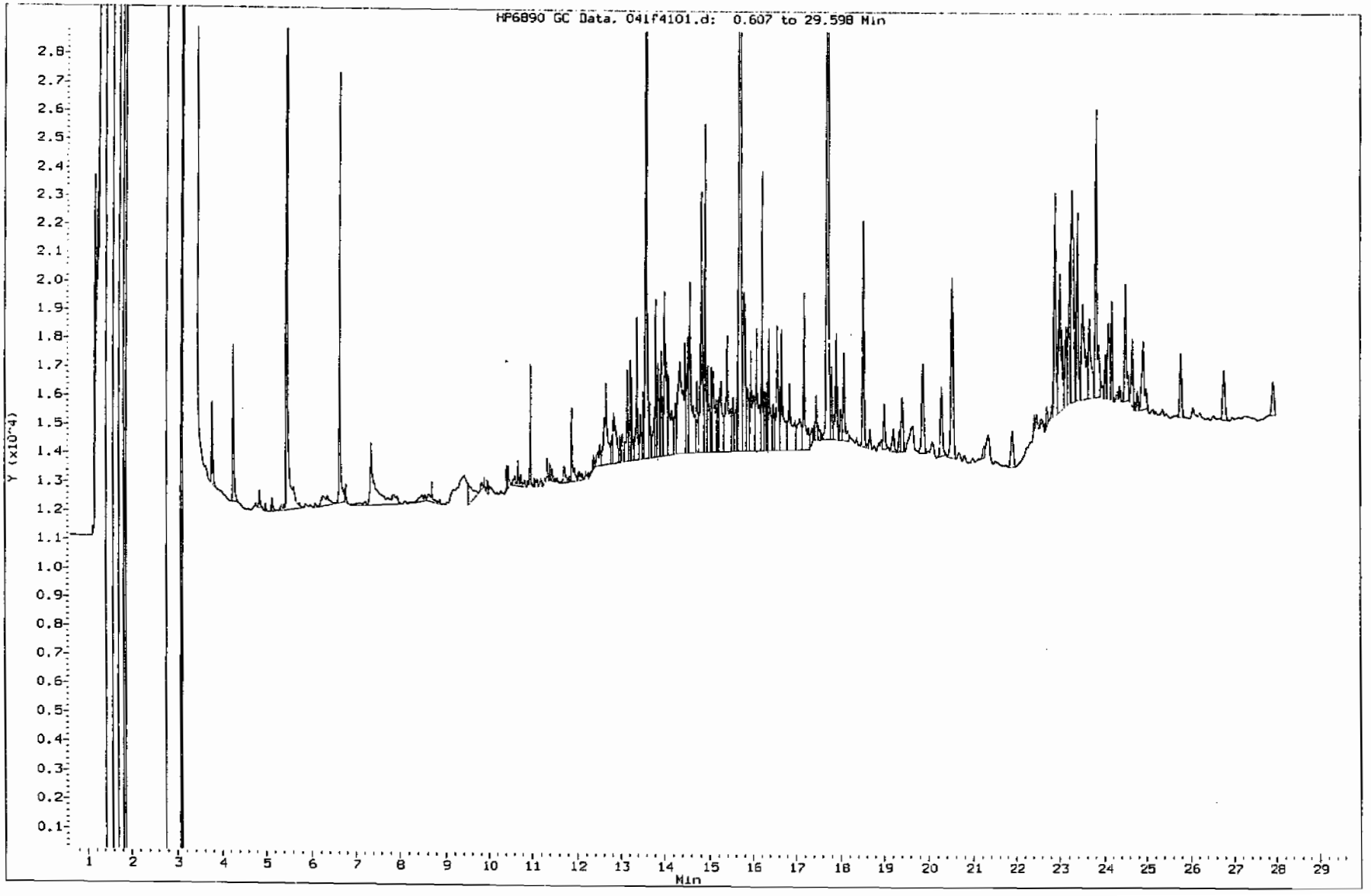

Data File: /chem/fid7.i/120109dr/041f4101.d
Injection Date: 02-DEC-2009 12:07
Instrument: fid7.i
Client Sample ID: RE03-09-14255

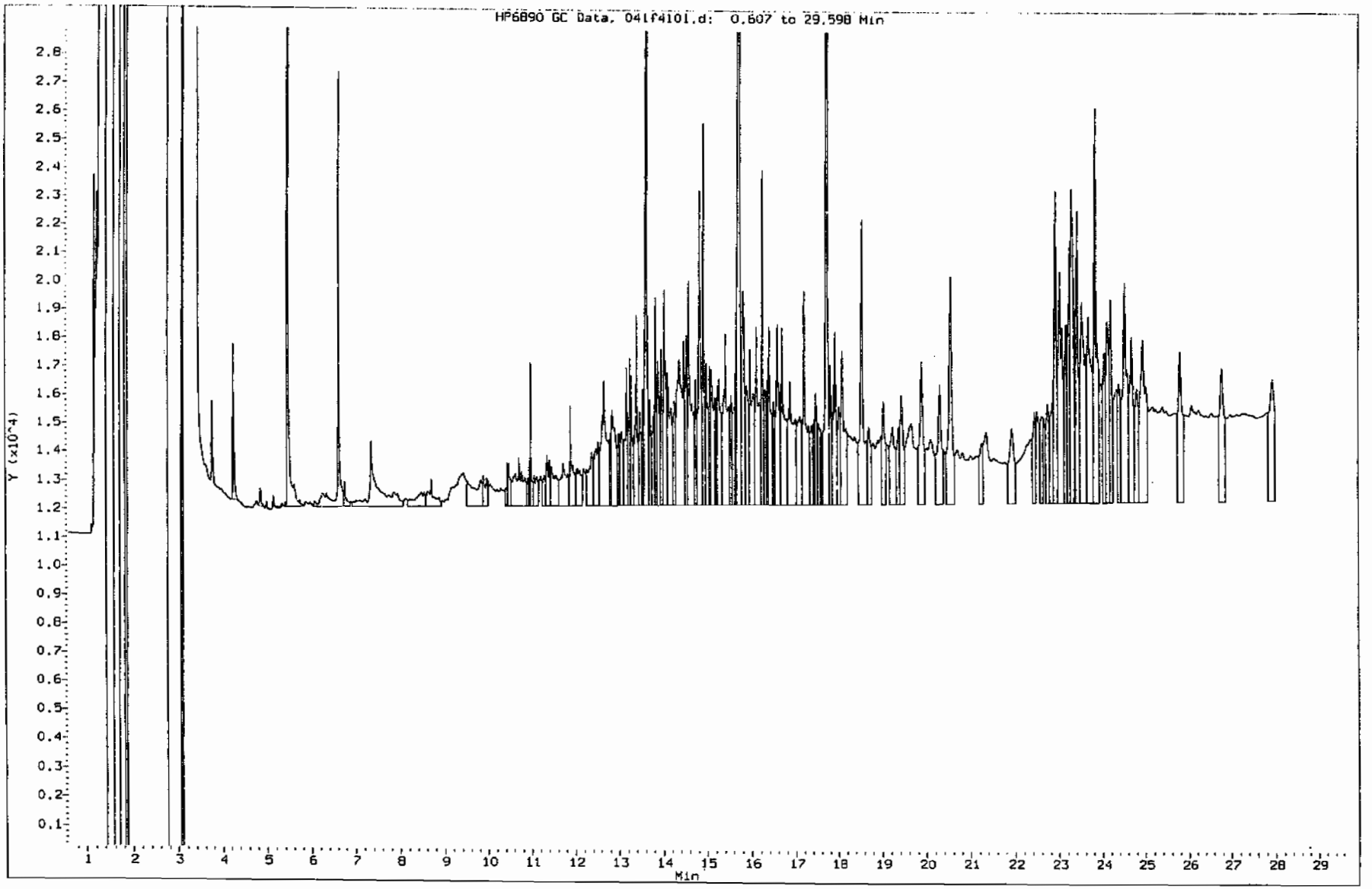

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14256	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 12:43	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	042f4201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.33	mg/kg	2.36	7.26

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/042f4201.d
Lab Smp Id: 241615008 Client Smp ID: RE03-09-14256
Inj Date : 02-DEC-2009 12:43
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615008|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 42
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	8.24640	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1300812	91.7802	3.3	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.610	13.616	-0.006	314643	12.5329	0.45	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/042f4201.d
Date : 02-DEC-2009 12:43
Client ID: RE03-09-14256
Sample Info: |241615008|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

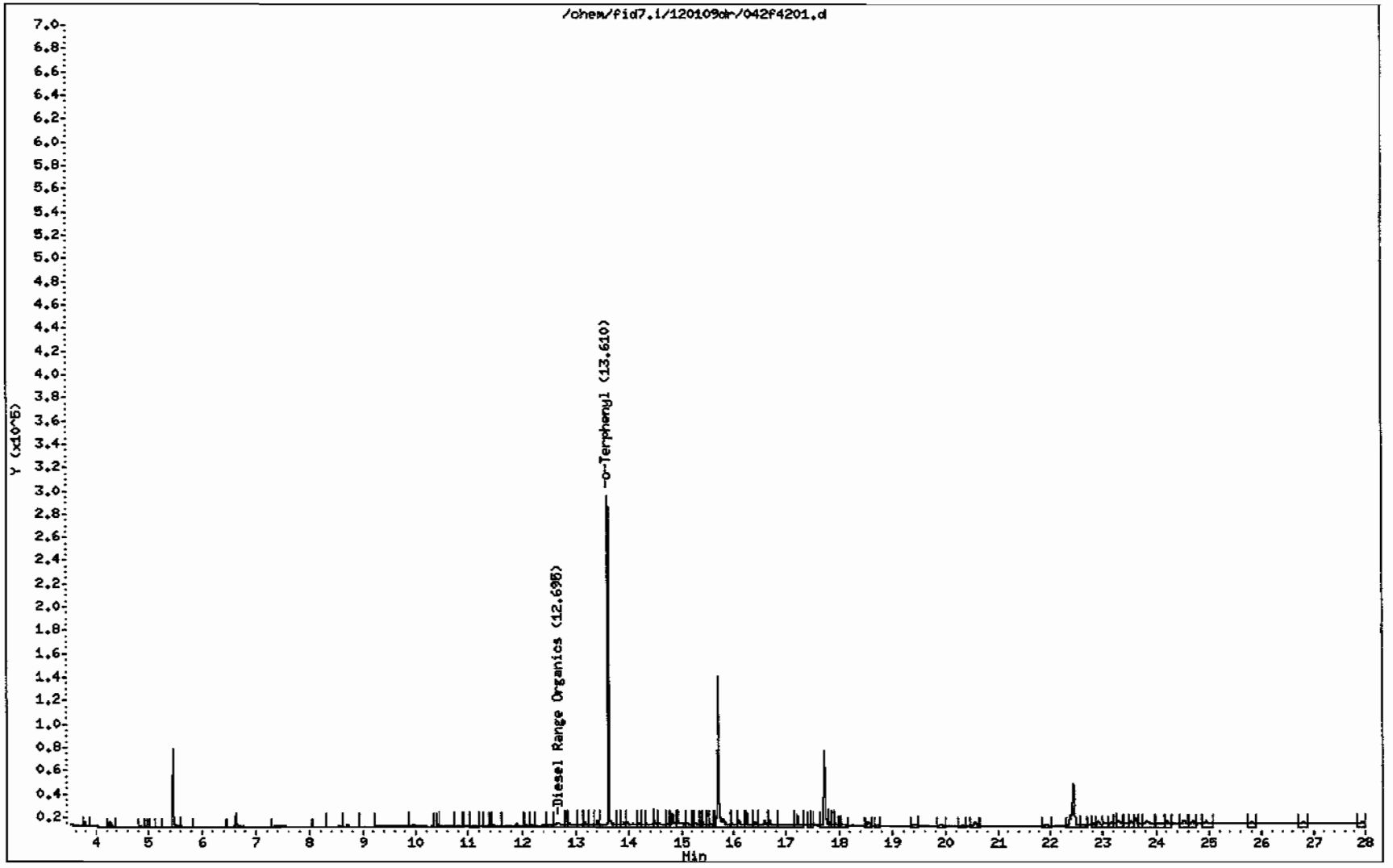

Data File: /chem/fid7.i/120109dr/042f4201.d
Injection Date: 02-DEC-2009 12:43
Instrument: fid7.i
Client Sample ID: RE03-09-14256

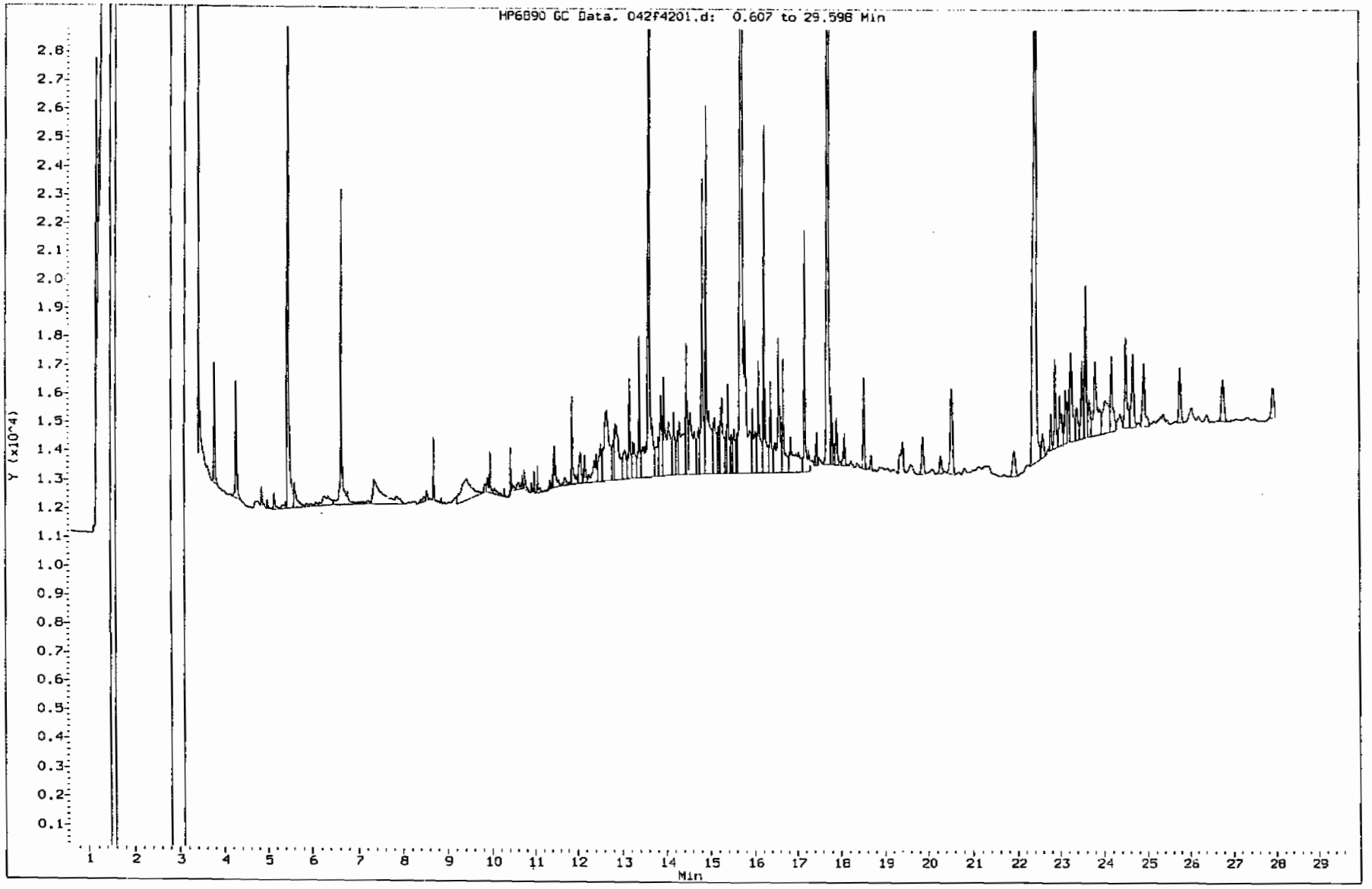

Data File: /chem/fid7.i/120109dr/042f4201.d
Injection Date: 02-DEC-2009 12:43
Instrument: fid7.i
Client Sample ID: RE03-09-14256

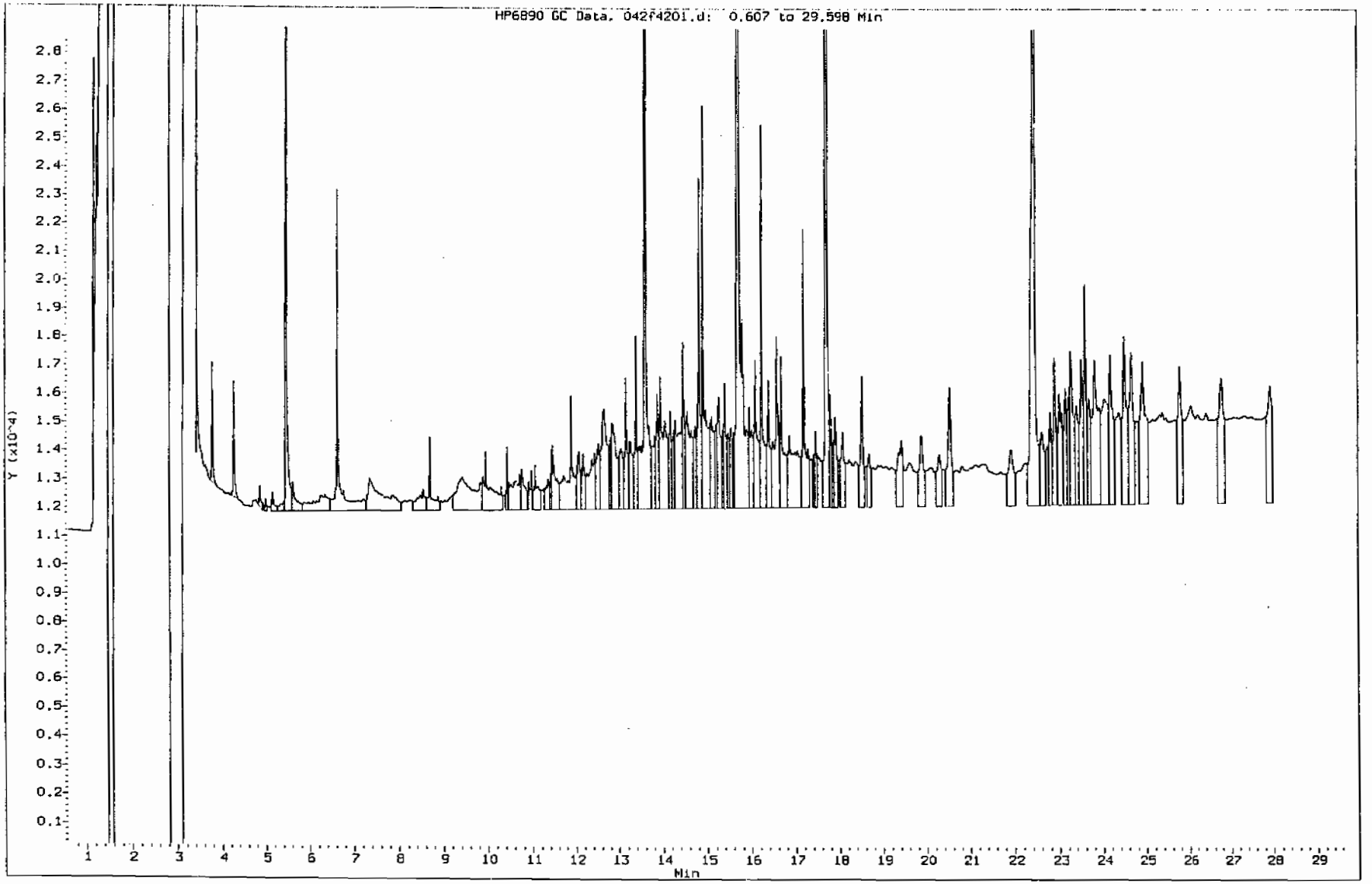

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14254	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 13:20	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	043f4301.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.50	mg/kg	2.30	7.08

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/043f4301.d
Lab Smp Id: 241615009 Client Smp ID: RE03-09-14254
Inj Date : 02-DEC-2009 13:20
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615009|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 43
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	5.85850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1402623	98.9635	3.5	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.609	13.616	-0.007	298565	11.8925	0.42	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/043f4301.d
Date : 02-DEC-2009 13:20
Client ID: RE03-09-14254
Sample Info: |241618009|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

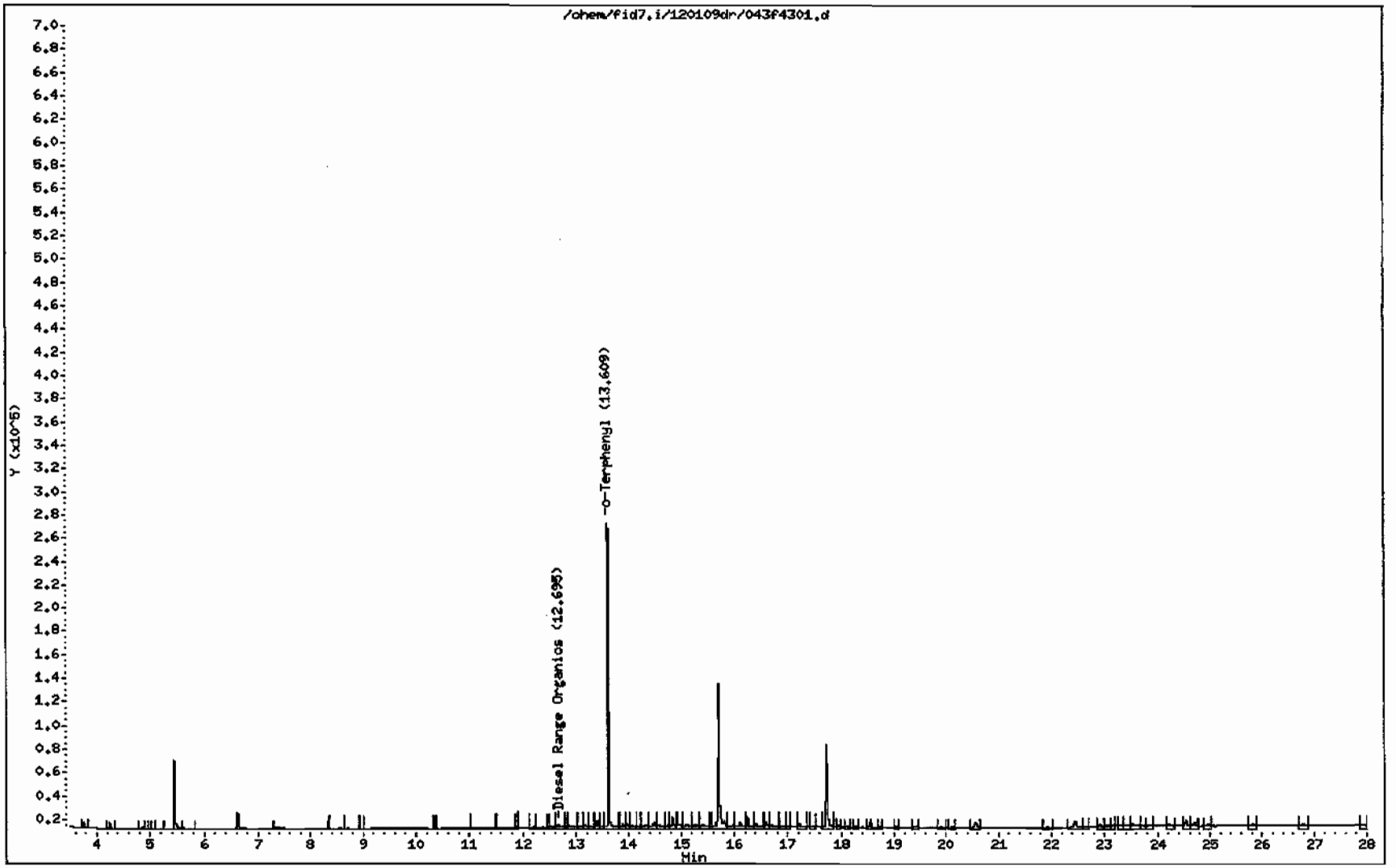

Data File: /chem/fid7.i/120109dr/043f4301.d
Injection Date: 02-DEC-2009 13:20
Instrument: fid7.i
Client Sample ID: RE03-09-14254

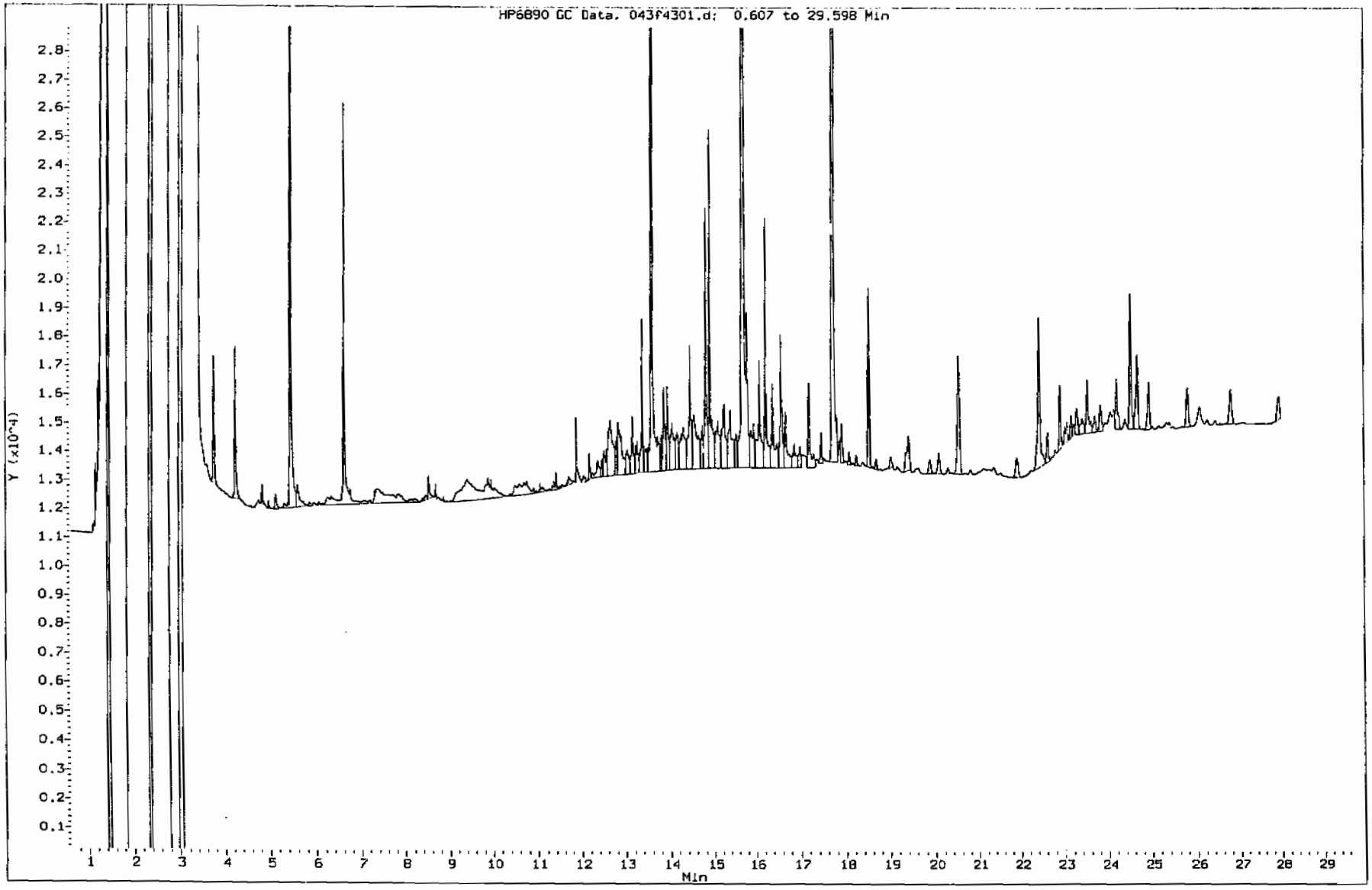

Data File: /chem/fid7.i/120109dr/043f4301.d
Injection Date: 02-DEC-2009 13:20
Instrument: fid7.i
Client Sample ID: RE03-09-14254

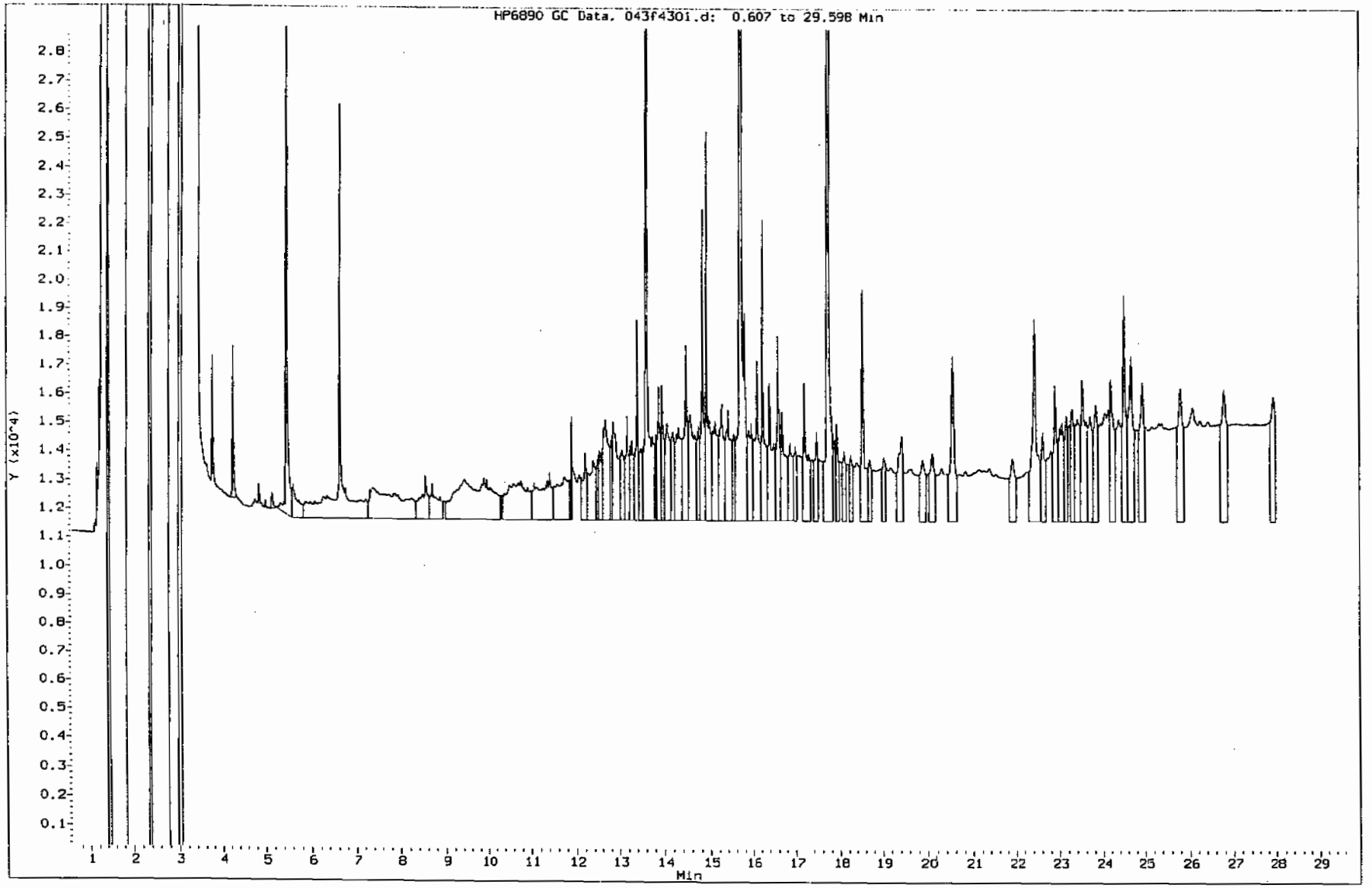

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14249	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.1	**Dilution:**	1
Run Date:	12/02/2009 13:56	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	044f4401.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.38	mg/kg	2.40	7.40

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/044f4401.d
Lab Smp Id: 241615010 Client Smp ID: RE03-09-14249
Inj Date : 02-DEC-2009 13:56
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615010|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 44
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weigth of sample extracted (g)
M	10.08880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1677258	118.341	4.4	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.609	13.616	-0.007	278752	11.1033	0.41	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/044f4401.d
Date : 02-DEC-2009 13:56
Client ID: RE03-09-14249
Sample Info: |2416150101|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

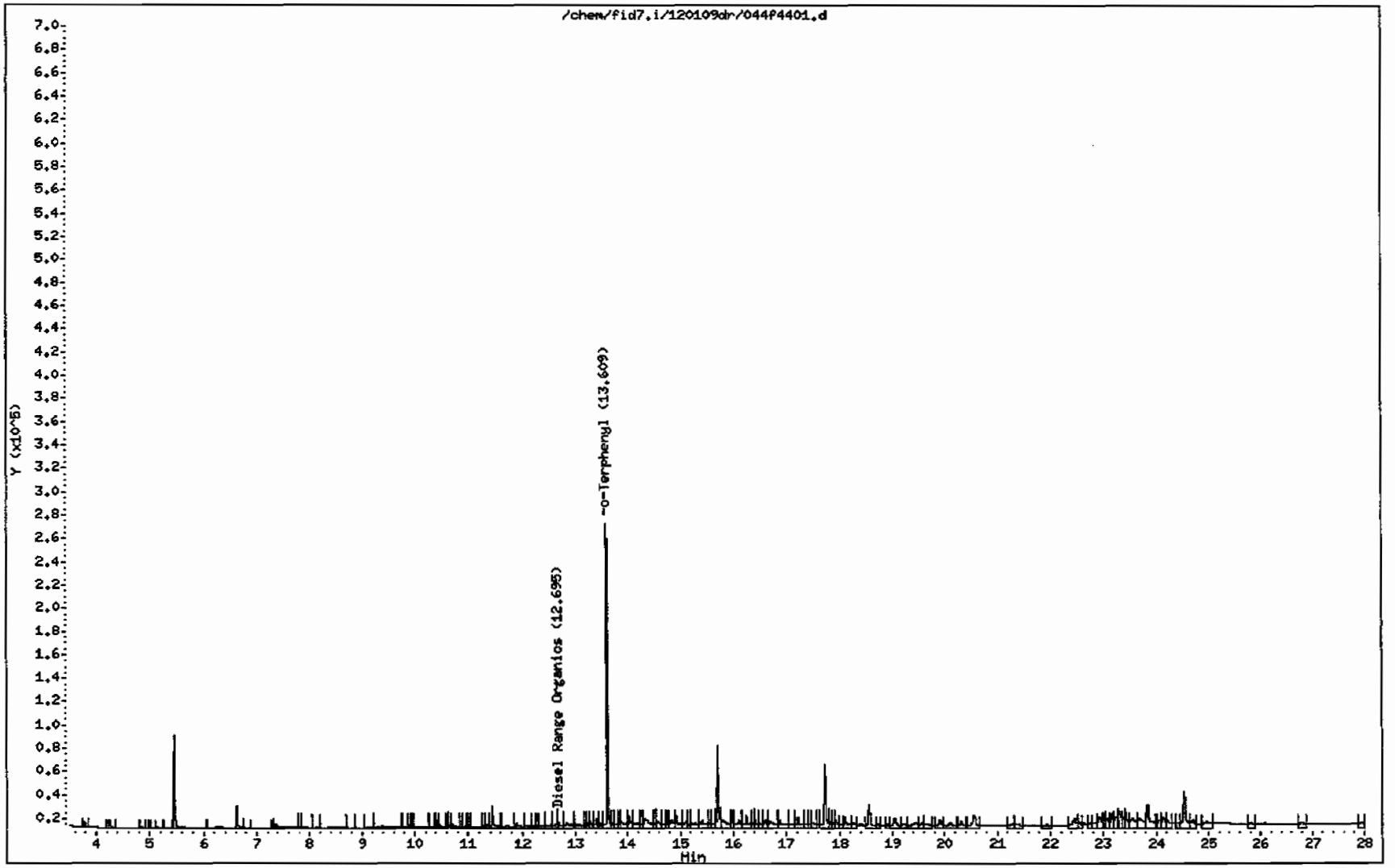

Data File: /chem/fid7.i/120109dr/044f4401.d
Injection Date: 02-DEC-2009 13:56
Instrument: fid7.i
Client Sample ID: RE03-09-14249

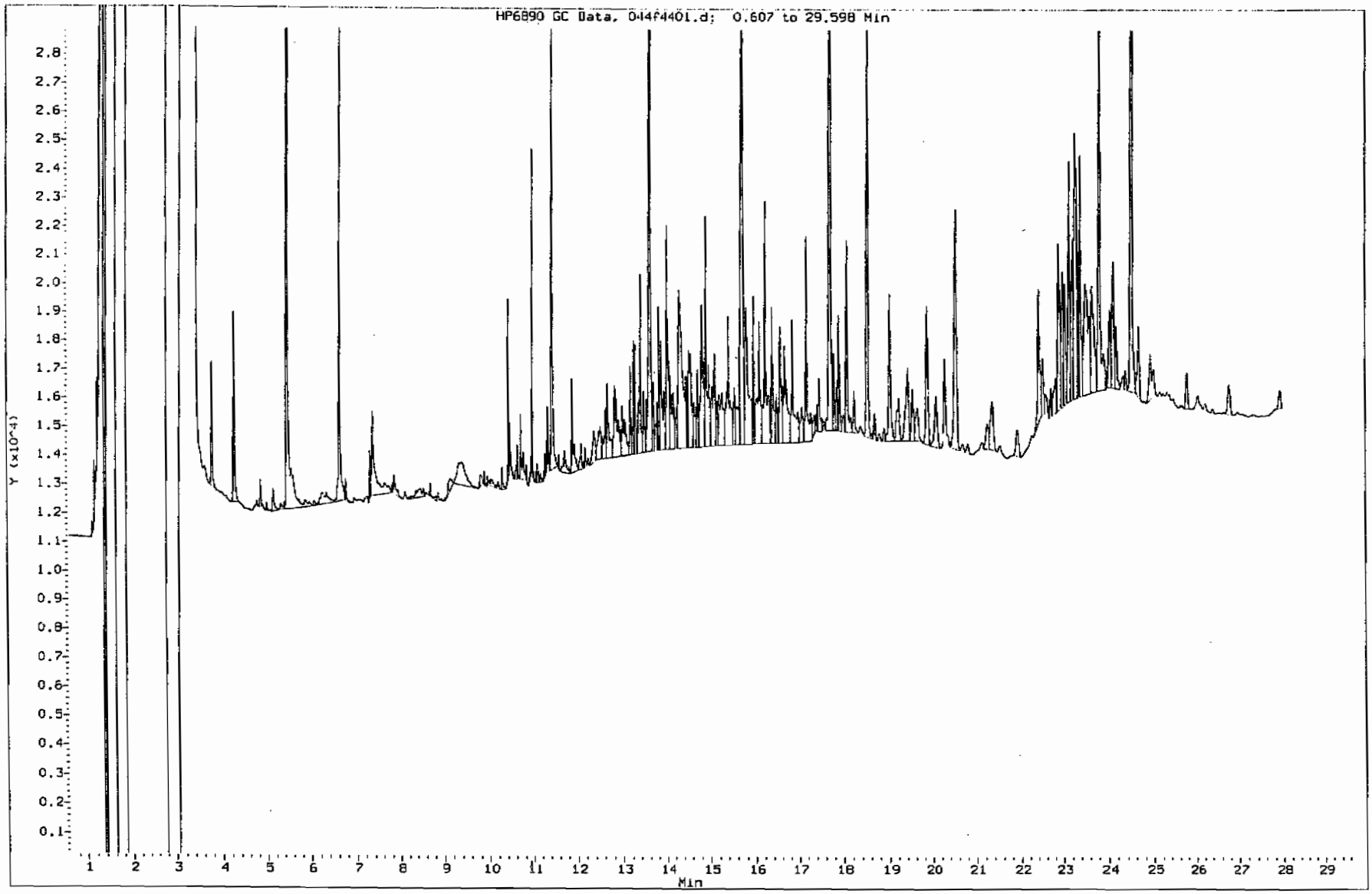

Data File: /chem/fid7.i/120109dr/044f4401.d
Injection Date: 02-DEC-2009 13:56
Instrument: fid7.i
Client Sample ID: RE03-09-14249

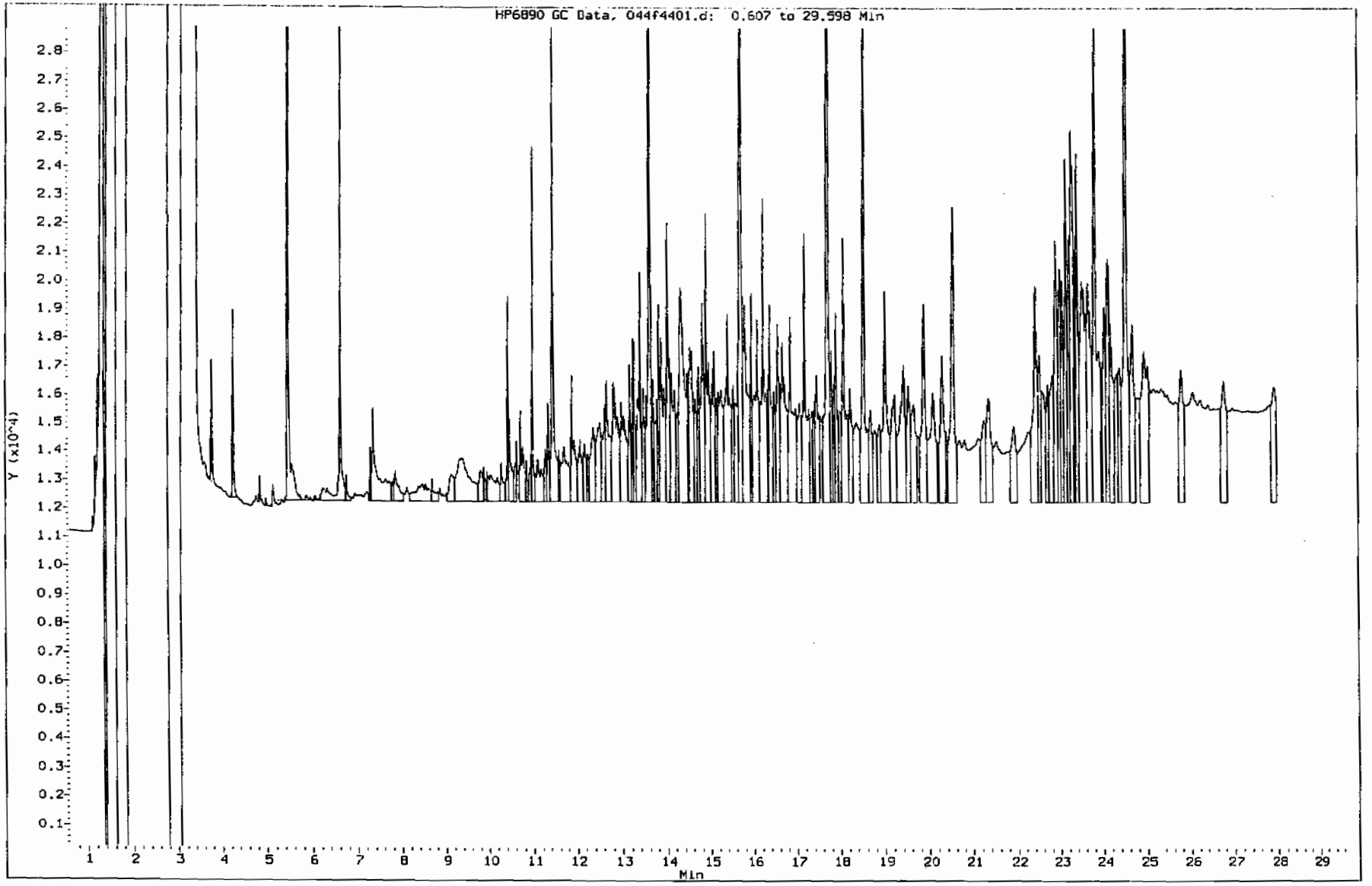

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14248	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 14:34	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	045f4501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.99	mg/kg	2.42	7.46

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/045f4501.d
Lab Smp Id: 241615011 Client Smp ID: RE03-09-14248
Inj Date : 02-DEC-2009 14:34
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615011|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	10.58700	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			1134912	80.0749	3.0	(a)
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.609	13.616	-0.007	249513	9.93867	0.37	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/045f4501.d
Date : 02-DEC-2009 14:34
Client ID: RE03-09-14248
Sample Info: |241615011|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

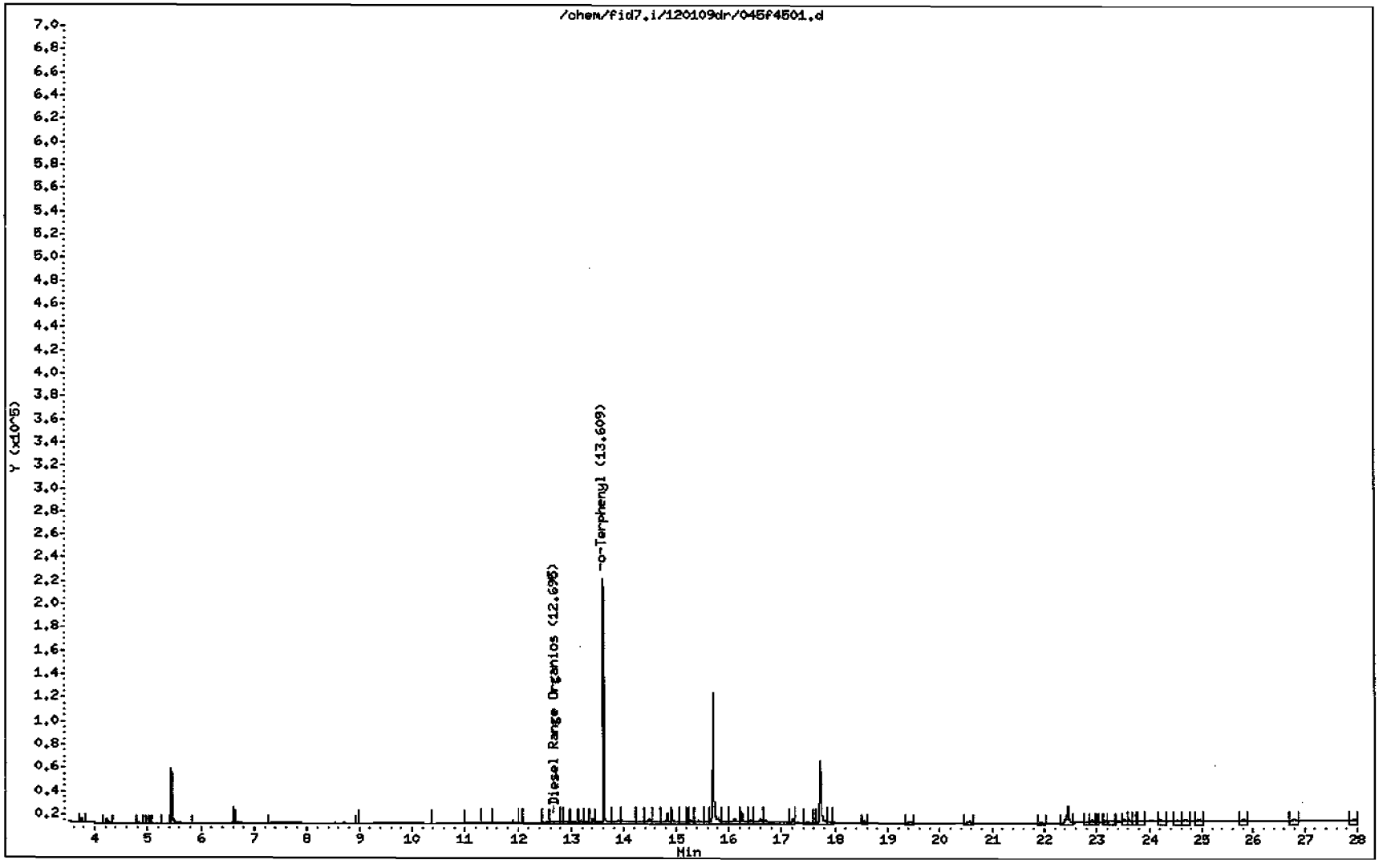

Data File: /chem/fid7.i/120109dr/045f4501.d
Injection Date: 02-DEC-2009 14:34
Instrument: fid7.i
Client Sample ID: RE03-09-14248

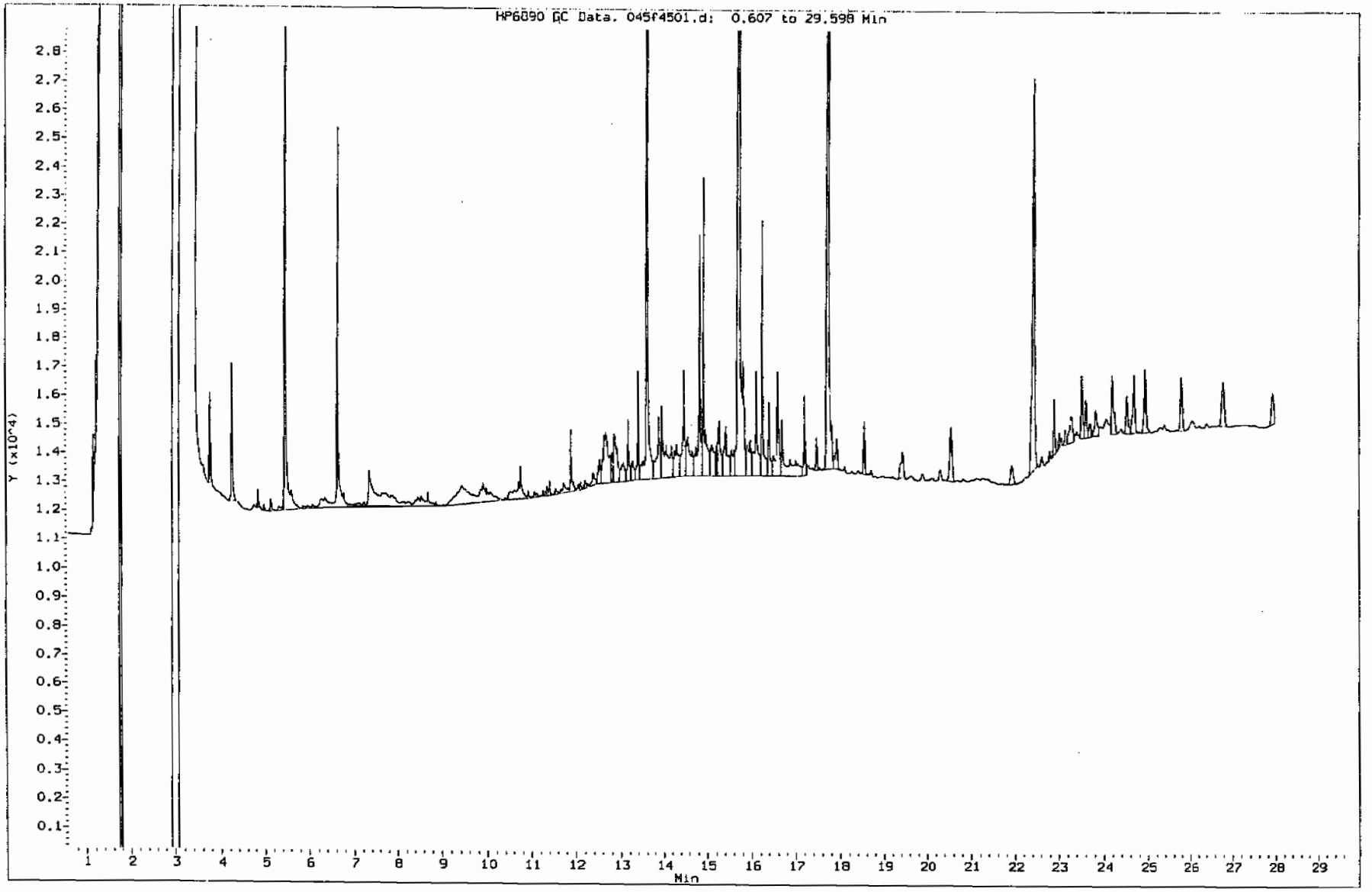

Data File: /chem/fid7.i/120109dr/045f4501.d
Injection Date: 02-DEC-2009 14:34
Instrument: fid7.i
Client Sample ID: RE03-09-14248

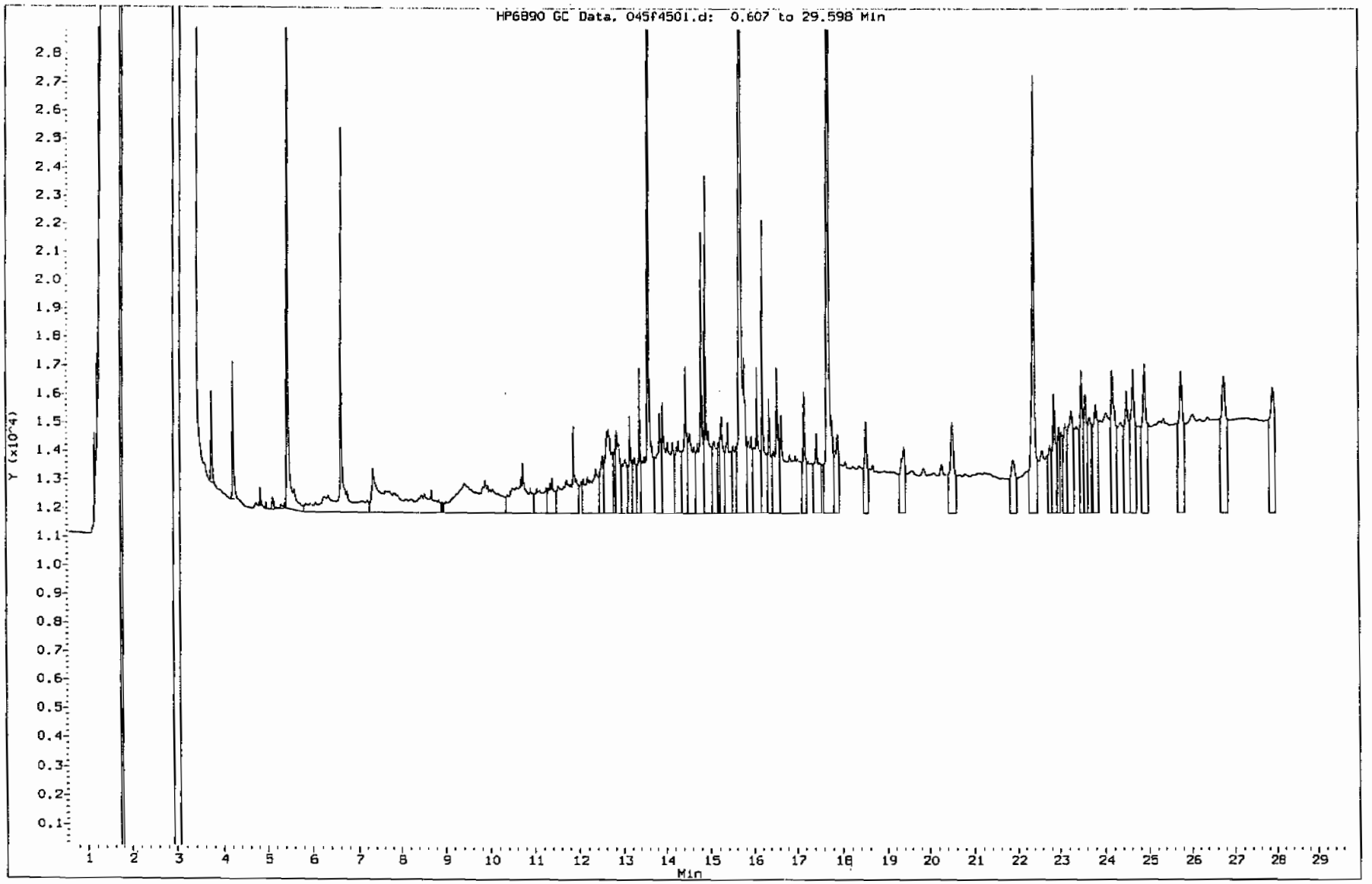

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14247	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 15:11	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	046f4601.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.43	mg/kg	2.41	7.43

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/046f4601.d
Lab Smp Id: 241615012 Client Smp ID: RE03-09-14247
Inj Date : 02-DEC-2009 15:11
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615012|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	10.34860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.608	13.616	-0.008	181181	7.21686	0.27

Data File: /chem/fid7.i/120109dr/046f4601.d

Date : 02-DEC-2009 15:11

Client ID: RE03-09-14247

Sample Info: |24161501211|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

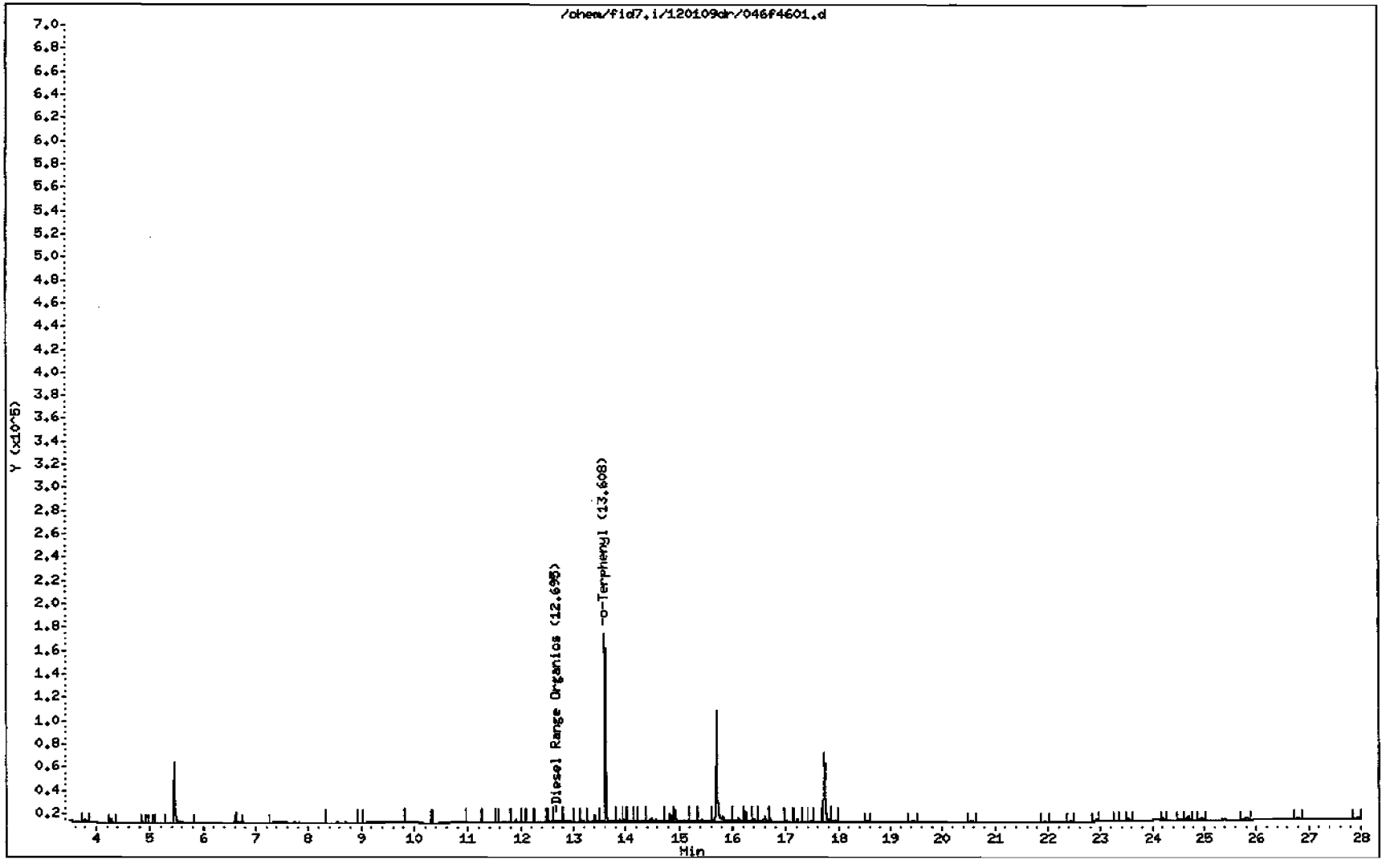

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615013	Date Received:	11/21/2009 09:00	%Moisture:	8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14246	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 18:15	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	051f5101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.64	mg/kg	2.35	7.24

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/051f5101.d
Lab Smp Id: 241615013 Client Smp ID: RE03-09-14246
Inj Date : 02-DEC-2009 18:15
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615013|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	7.96850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501	17.890		1817824	128.258	4.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.610	13.616	-0.006	320344	12.7600	0.46	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/051f5101.d
Date : 02-DEC-2009 18:15
Client ID: RE03-09-14246
Sample Info: |241615013|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

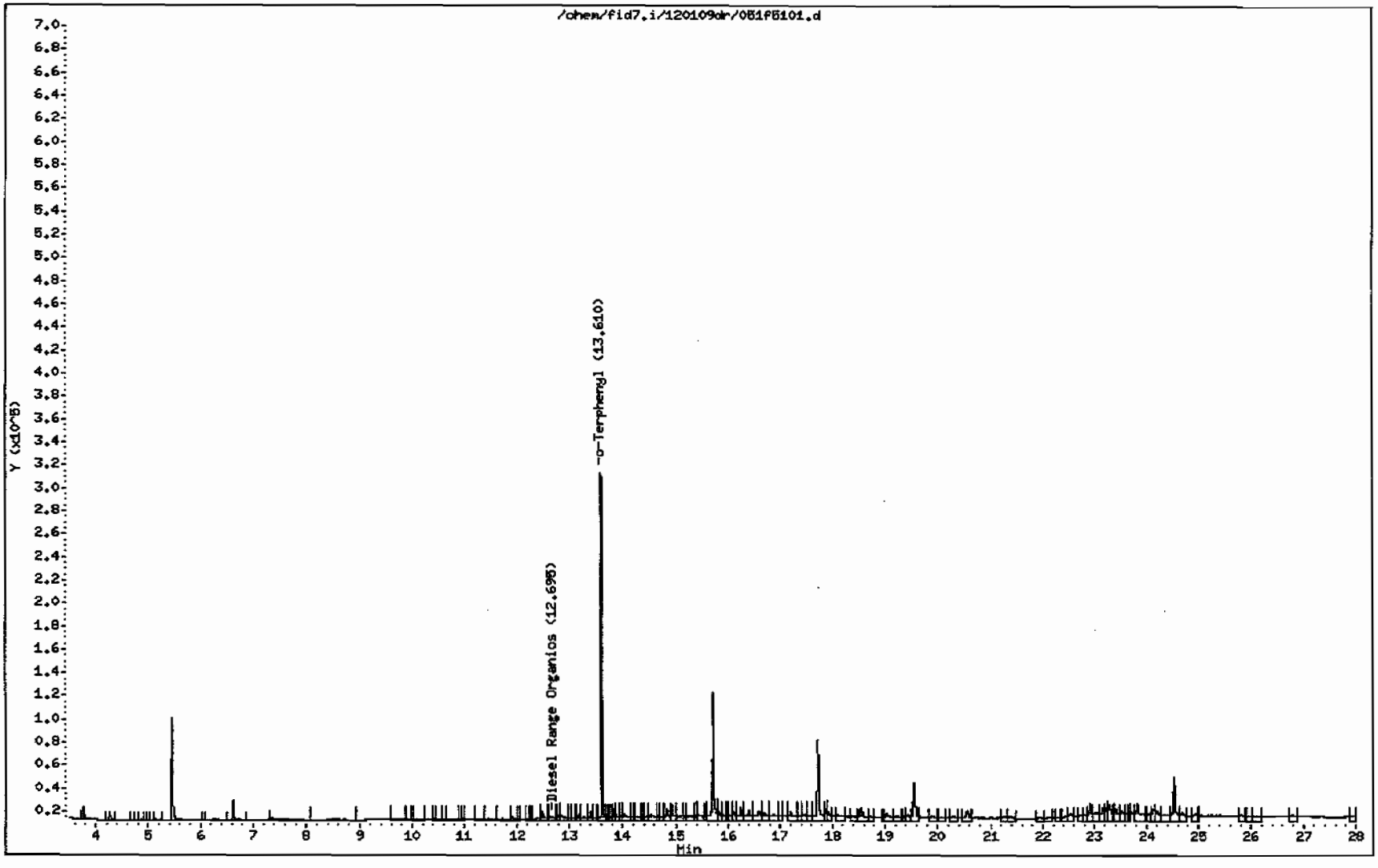

Data File: /chem/fid7.i/120109dr/051f5101.d
Injection Date: 02-DEC-2009 18:15
Instrument: fid7.i
Client Sample ID: RE03-09-14246

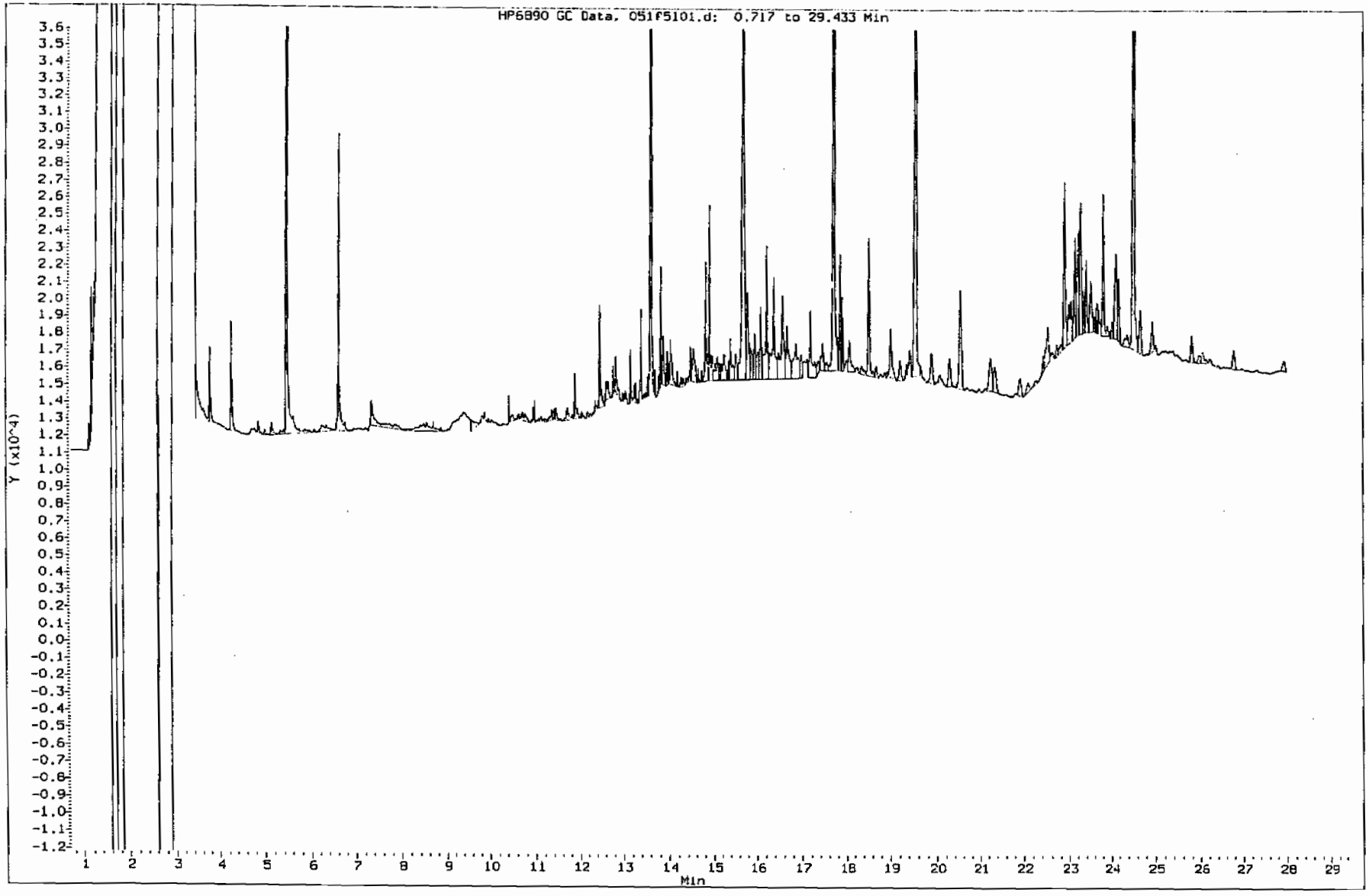

Data File: /chem/fid7.i/120109dr/051f5101.d
Injection Date: 02-DEC-2009 18:15
Instrument: fid7.i
Client Sample ID: RE03-09-14246

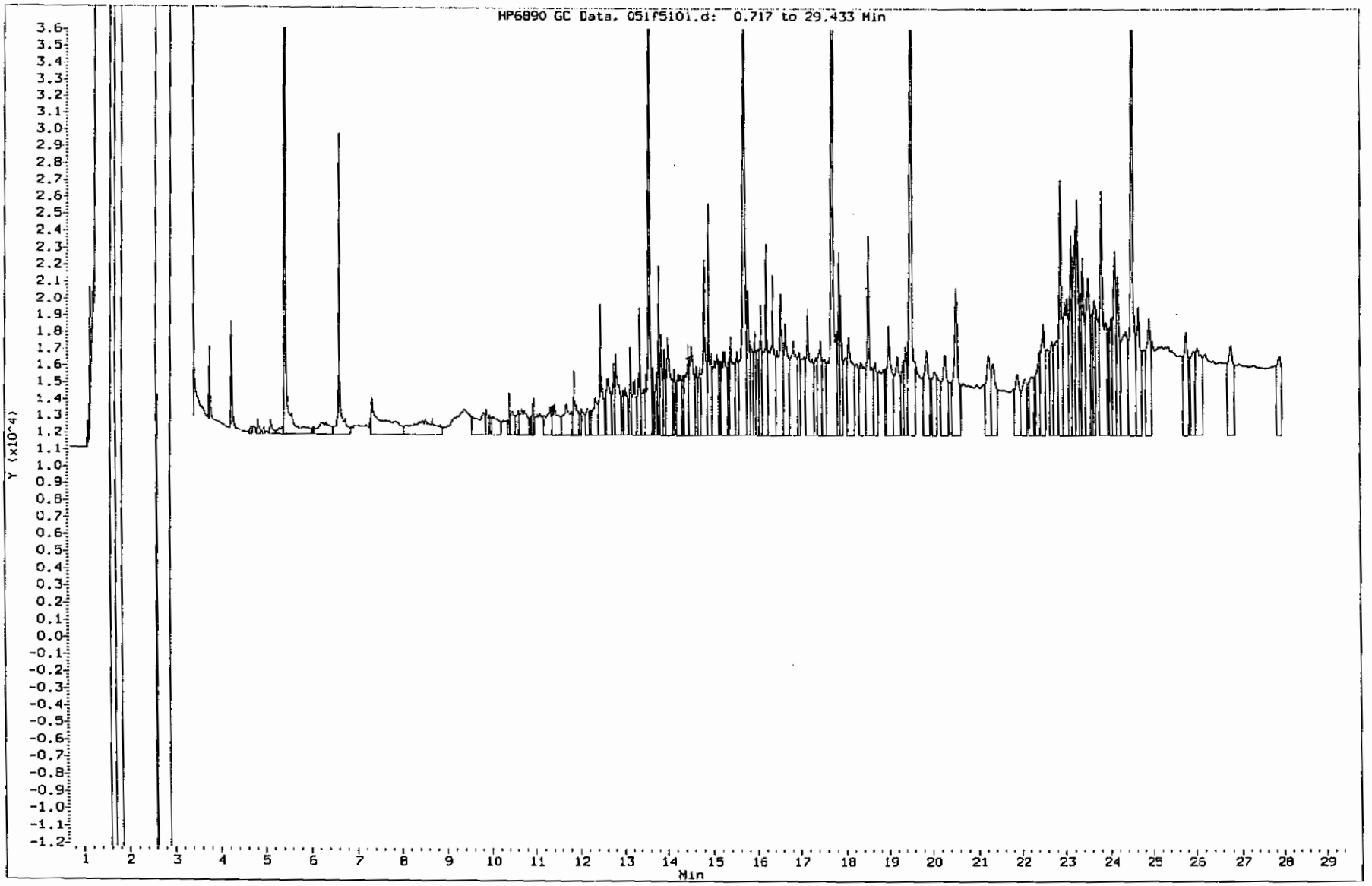

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615014	Date Received:	11/21/2009 09:00	%Moisture:	9.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14253	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 18:53	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	052f5201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.86	mg/kg	2.38	7.33

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/052f5201.d
Lab Smp Id: 241615014 Client Smp ID: RE03-09-14253
Inj Date : 02-DEC-2009 18:53
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615014|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 52
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	9.13030	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	CONCENTRATIONS FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1105349	77.9890	2.8	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.610	13.616	-0.006	301786	12.0208	0.44	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/052f5201.d
Date : 02-DEC-2009 18:53
Client ID: RE03-09-14253
Sample Info: |241615014|1|
Volume Injected (uL): 1.0
Column phase: DB-5HS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

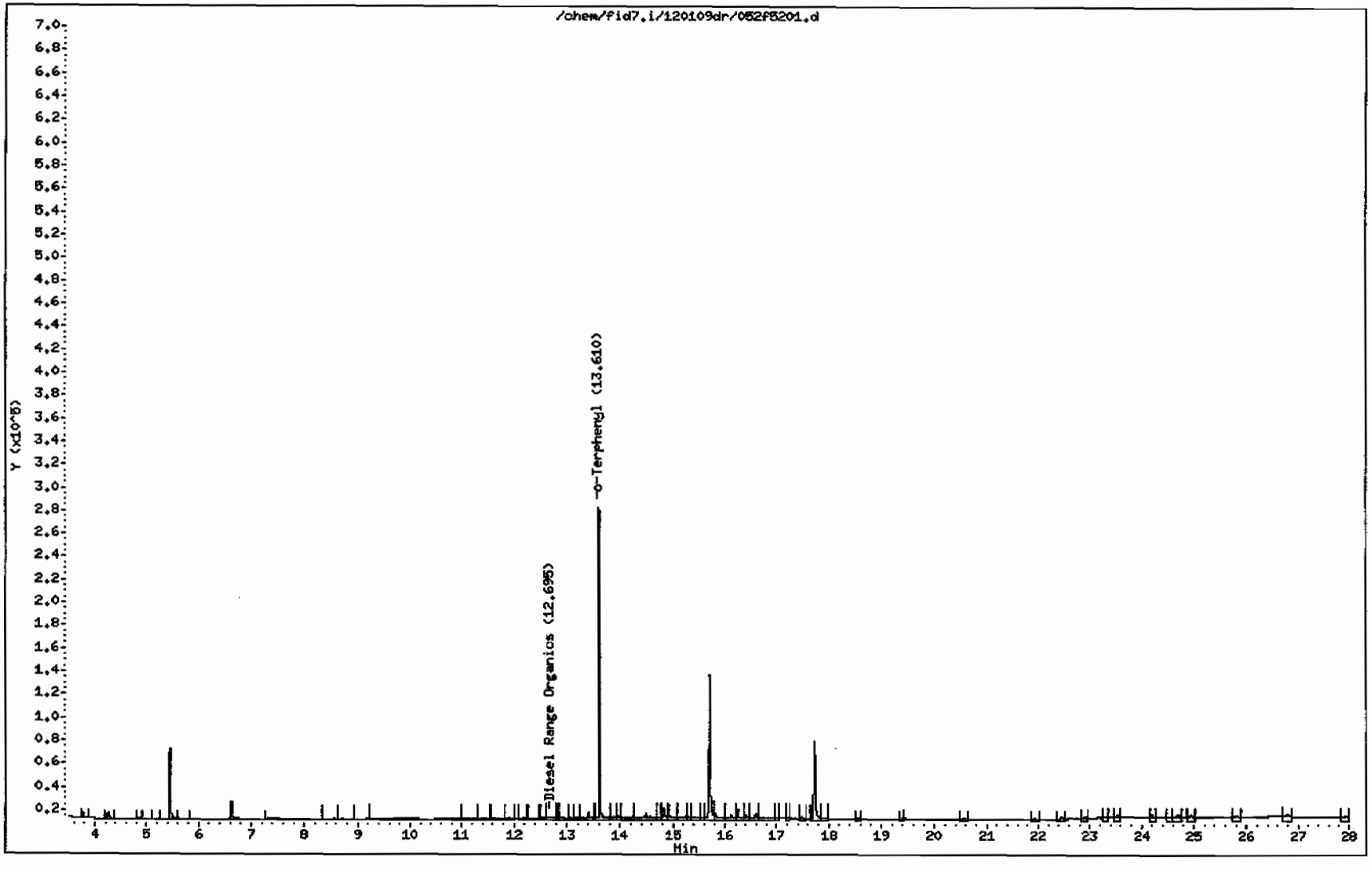

Before BTM 12/9/15

Data File: /chem/fid7.i/120109dr/052f5201.d
Injection Date: 02-DEC-2009 18:53
Instrument: fid7.i
Client Sample ID: RE03-09-14253

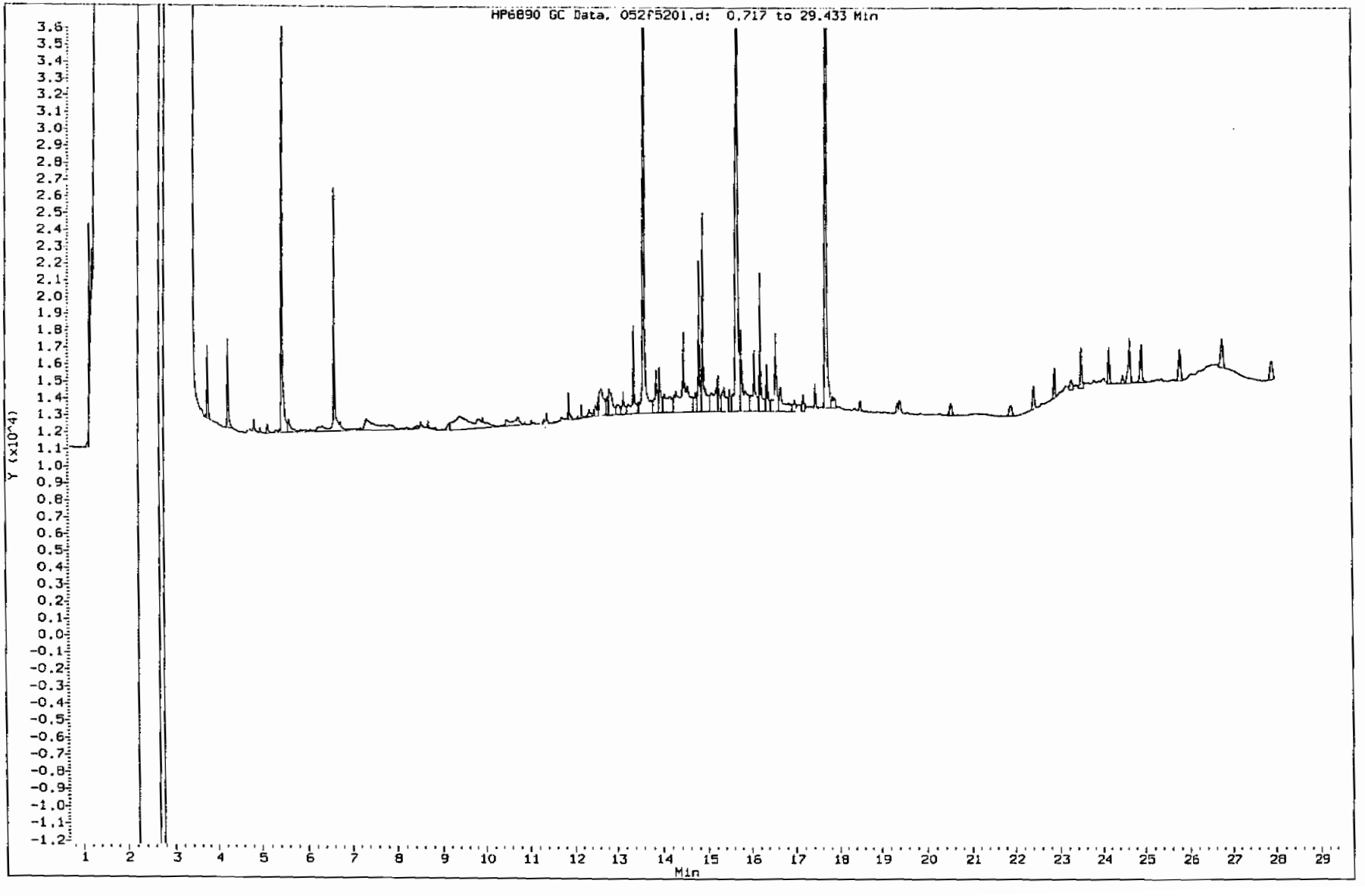

Data File: /chem/fid7.i/120109dr/052f5201.d
Injection Date: 02-DEC-2009 18:53
Instrument: fid7.i
Client Sample ID: RE03-09-14253

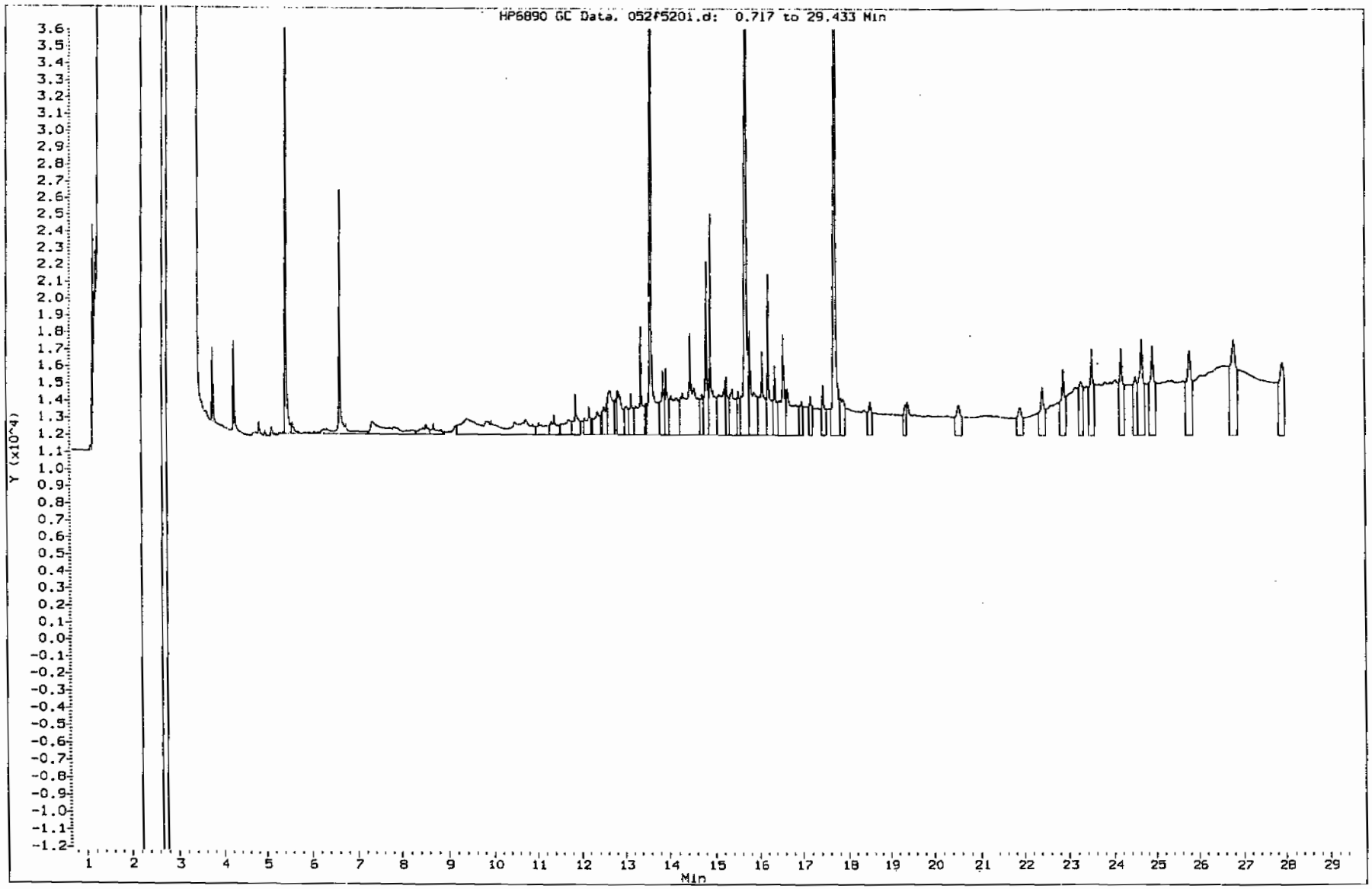

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615015	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14251	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 19:30	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	053f5301.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	3.09	mg/kg	2.39	7.36

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/053f5301.d
Lab Smp Id: 241615015 Client Smp ID: RE03-09-14251
Inj Date : 02-DEC-2009 19:30
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615015|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 53
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	9.45960	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1191054	84.0361	3.1	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.610	13.616	-0.006	297946	11.8678	0.44	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/053f5301.d
Date : 02-DEC-2009 19:30
Client ID: RE03-09-14251
Sample Info: |241615015|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

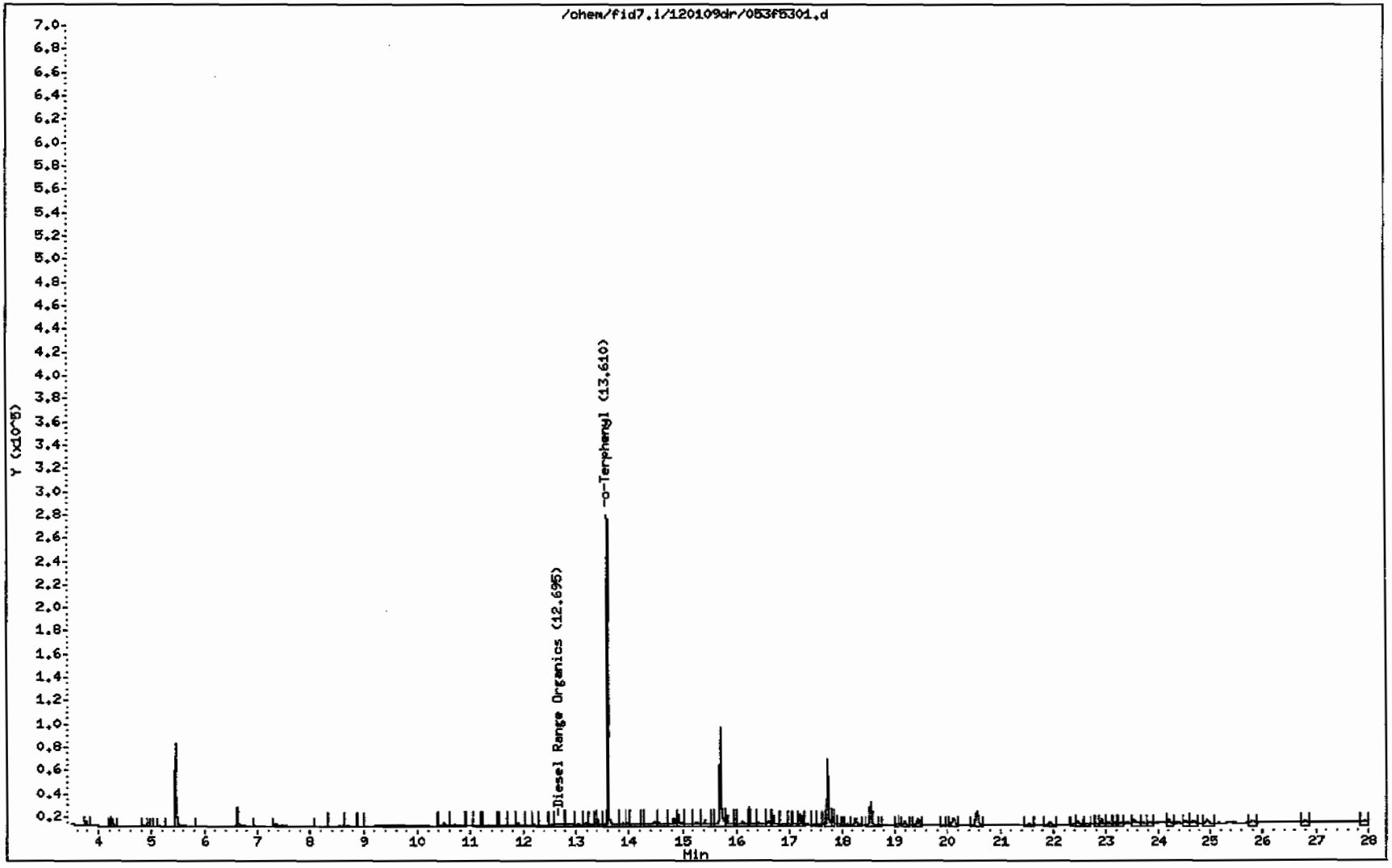

Data File: /chem/fid7.i/120109dr/053f5301.d
Injection Date: 02-DEC-2009 19:30
Instrument: fid7.i
Client Sample ID: RE03-09-14251

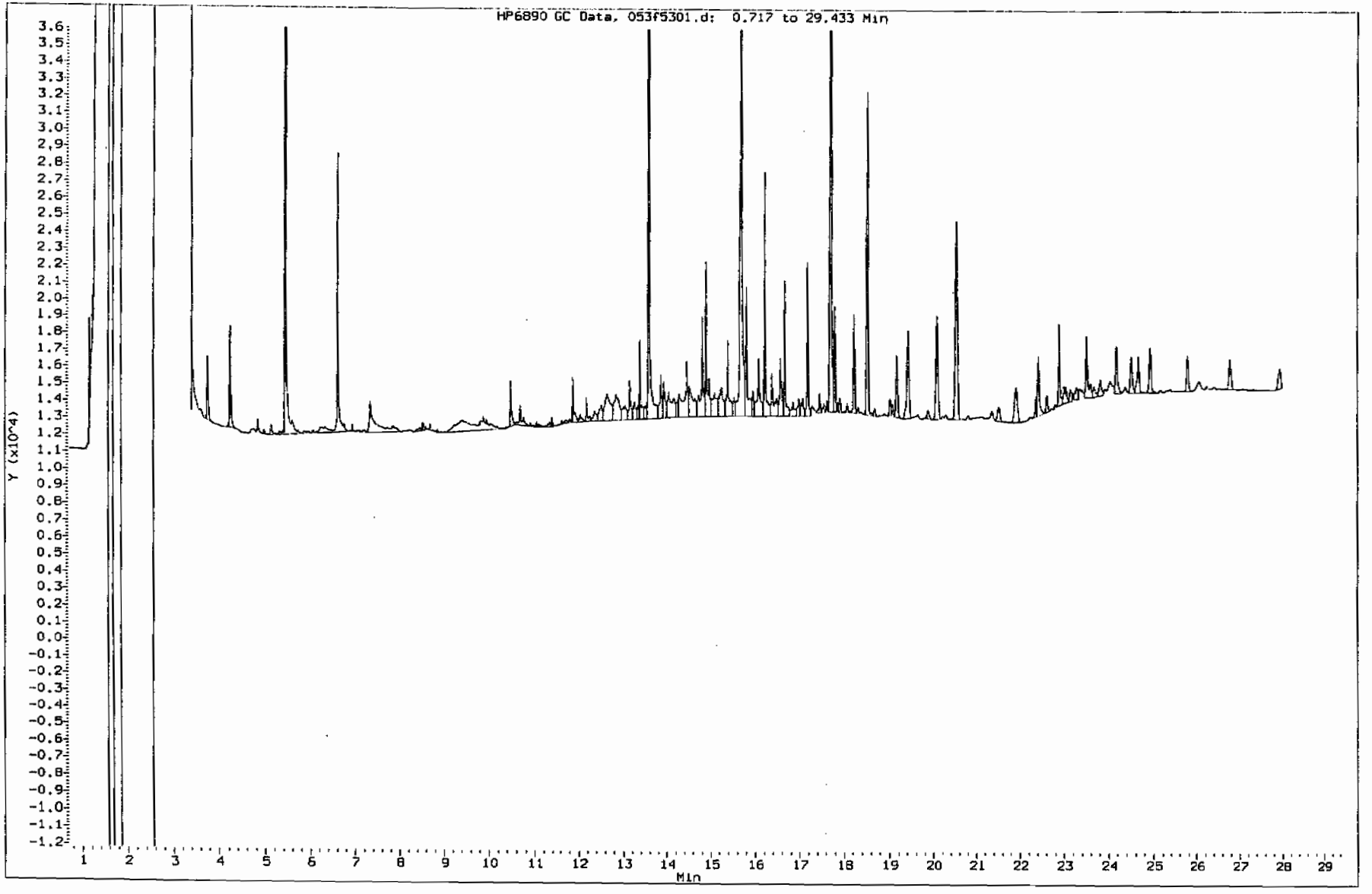

Data File: /chem/fid7.i/120109dr/053f5301.d
Injection Date: 02-DEC-2009 19:30
Instrument: fid7.i
Client Sample ID: RE03-09-14251

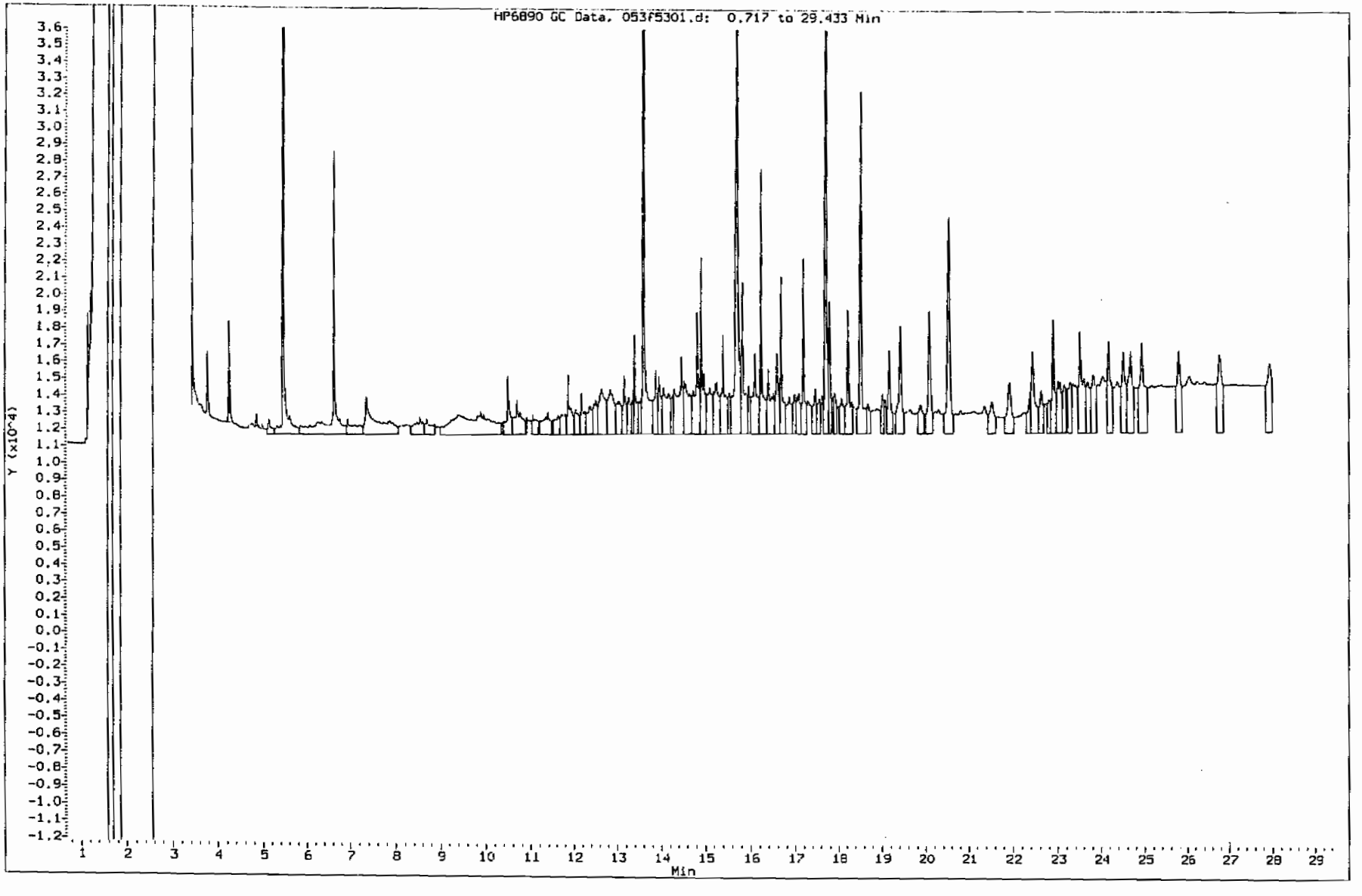

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14257	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 20:07	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	054f5401.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.58	mg/kg	2.19	6.74

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/054f5401.d
Lab Smp Id: 241615016 Client Smp ID: RE03-09-14257
Inj Date : 02-DEC-2009 20:07
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615016|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	1.10350	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			1086111	76.6317	2.6	(a)
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.610	13.616	-0.006	300788	11.9810	0.40	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/054f5401.d
Date : 02-DEC-2009 20:07
Client ID: RE03-09-14257
Sample Info: |24161501611|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

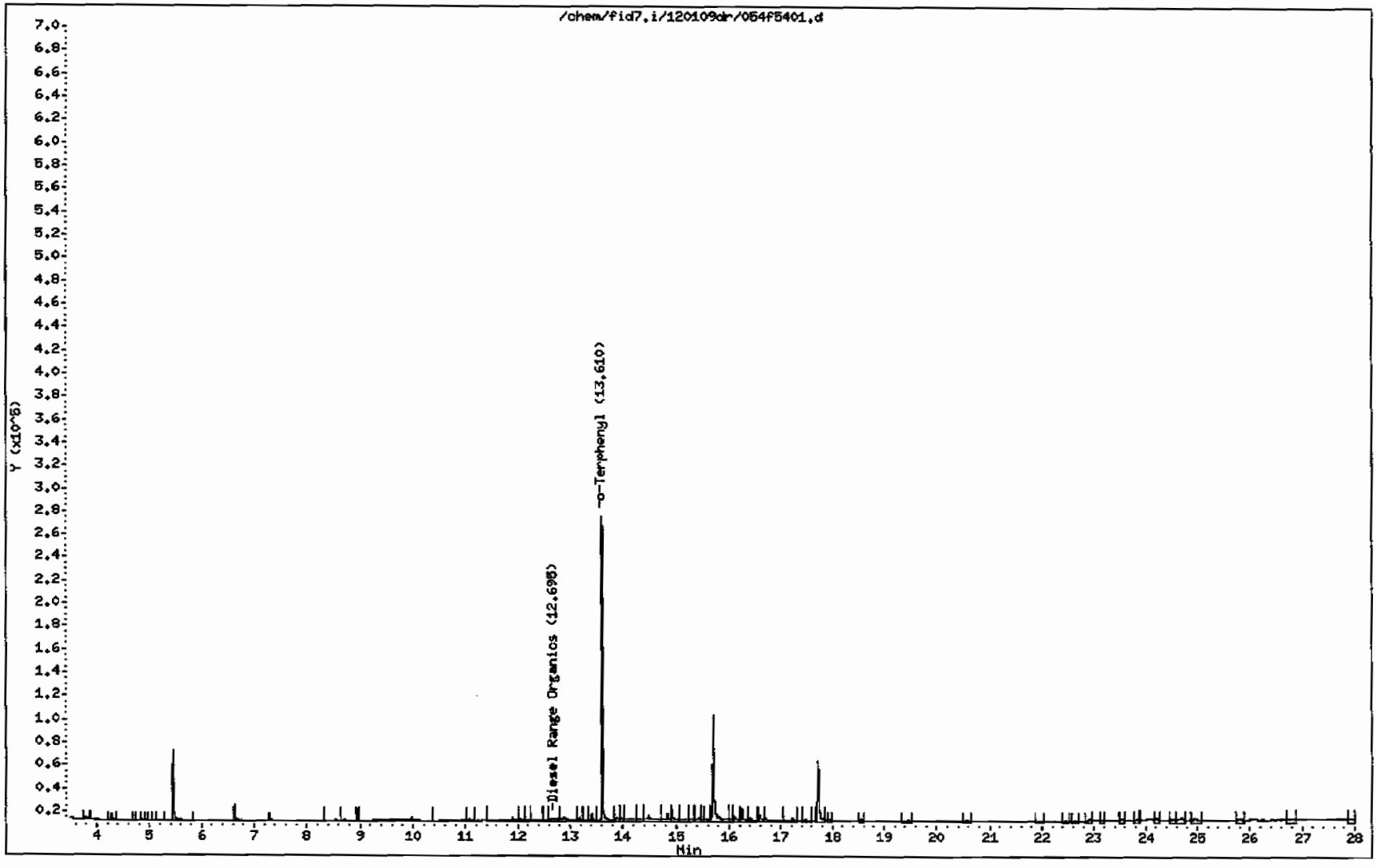

Pctom
2/2/09

Data File: /chem/fid7.i/120109dr/054f5401.d
Injection Date: 02-DEC-2009 20:07
Instrument: fid7.i
Client Sample ID: RE03-09-14257

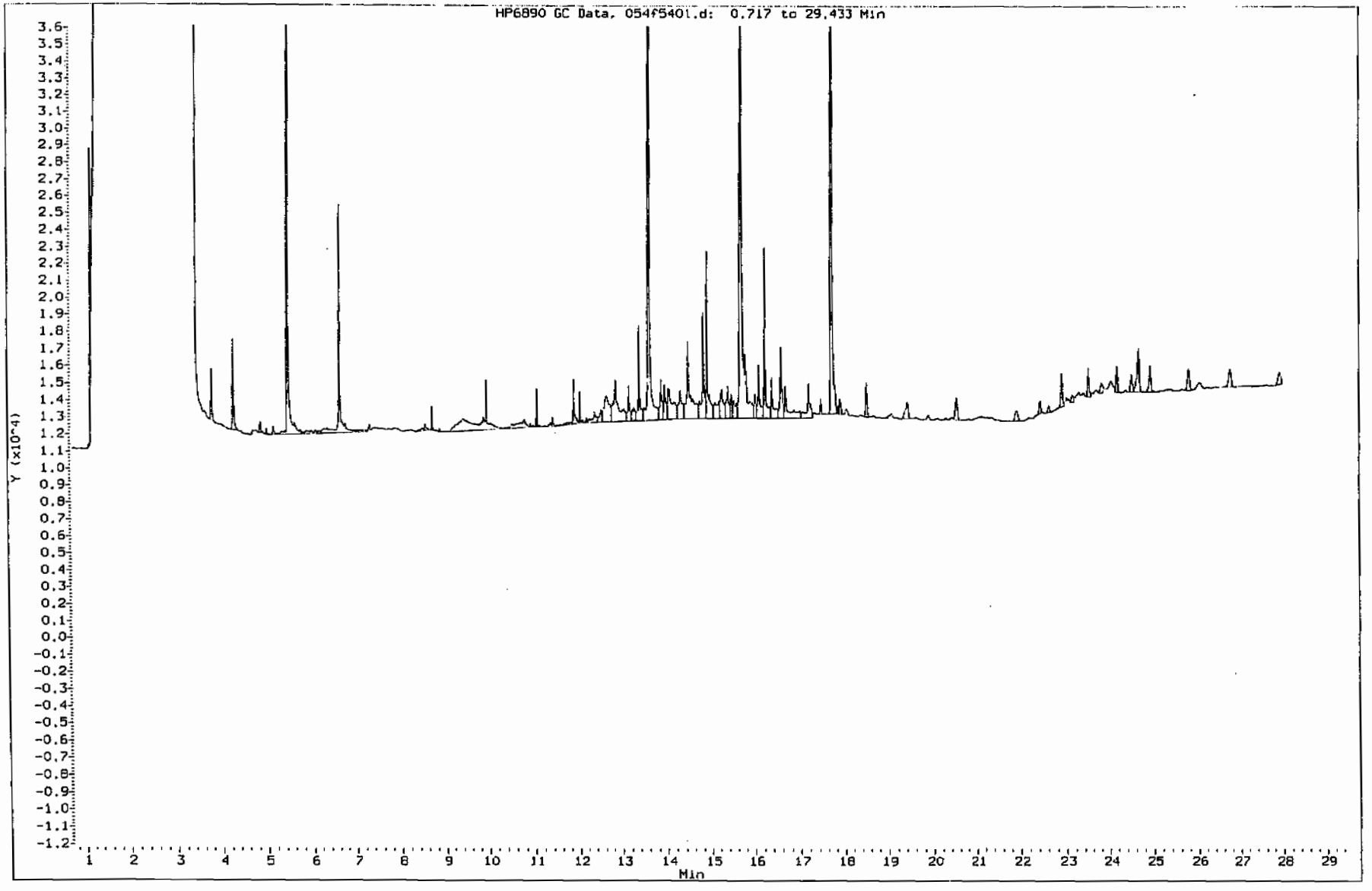

Data File: /chem/fid7.i/120109dr/054f5401.d
Injection Date: 02-DEC-2009 20:07
Instrument: fid7.i
Client Sample ID: RE03-09-14257

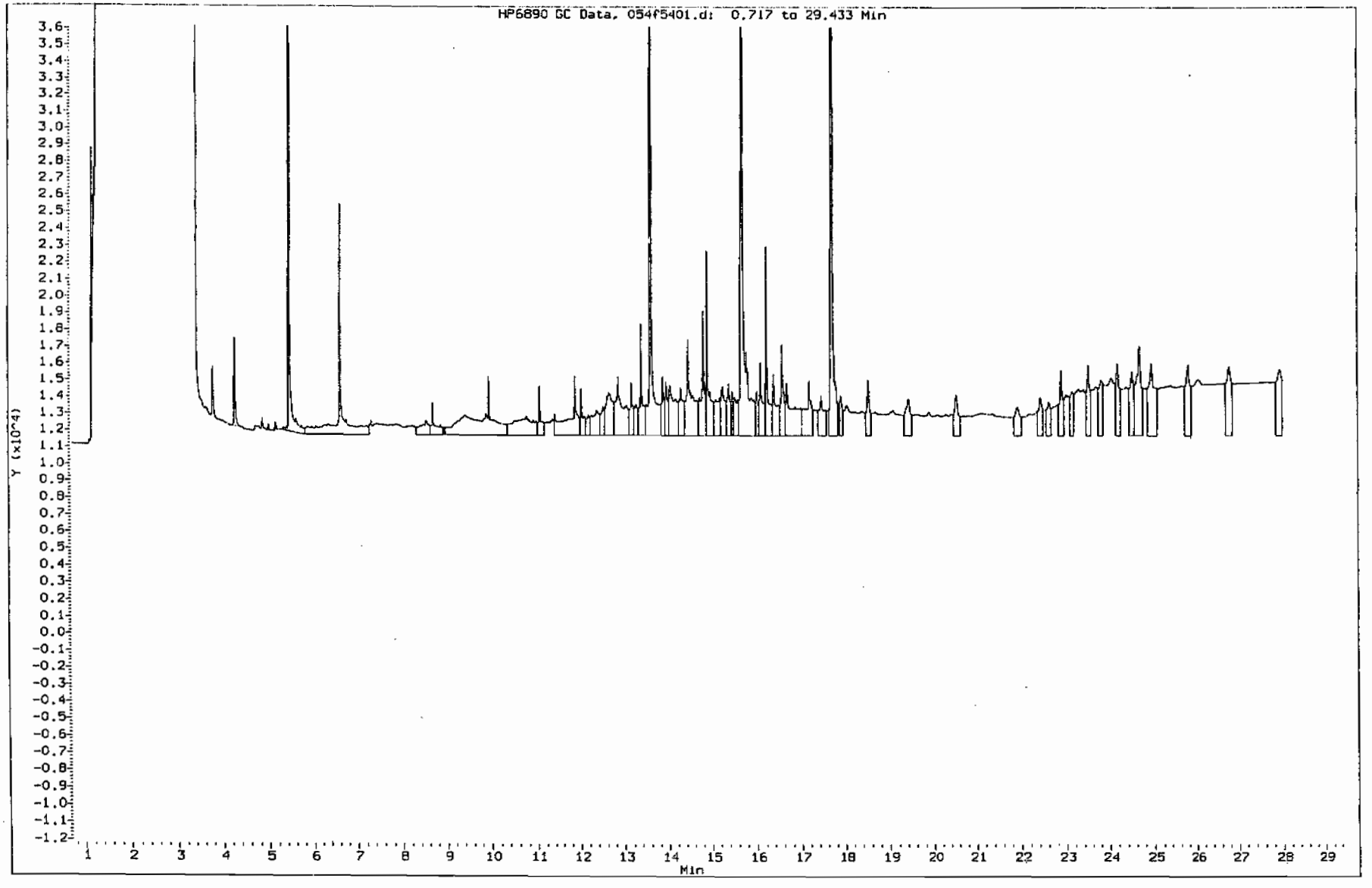

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615018	Date Received:	11/21/2009 09:00	%Moisture:	8.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–2729	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 20:44	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	055f5501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	6.31	mg/kg	2.36	7.27

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/055f5501.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 02-DEC-2009 20:44
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615018|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 55
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weigth of sample extracted (g)
M	8.61540	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			2458598	173.469	6.3	(a)
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.610	13.616	-0.006	313992	12.5070	0.45	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/055f5501.d
Date : 02-DEC-2009 20:44
Client ID: RE03-10-2729
Sample Info: 1241615018111
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

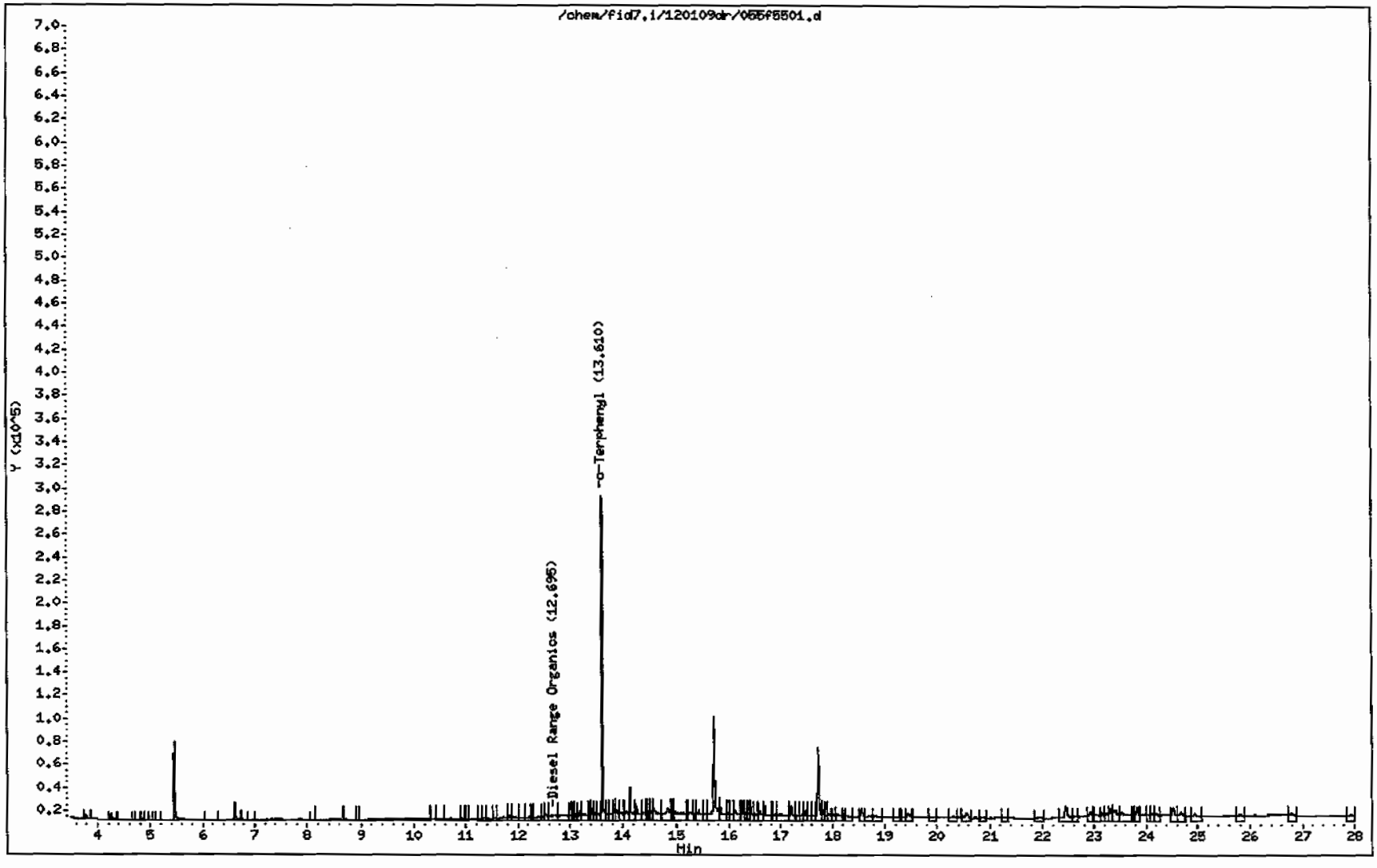

Data File: /chem/fid7.i/120109dr/055f5501.d
Injection Date: 02-DEC-2009 20:44
Instrument: fid7.i
Client Sample ID: RE03-10-2729

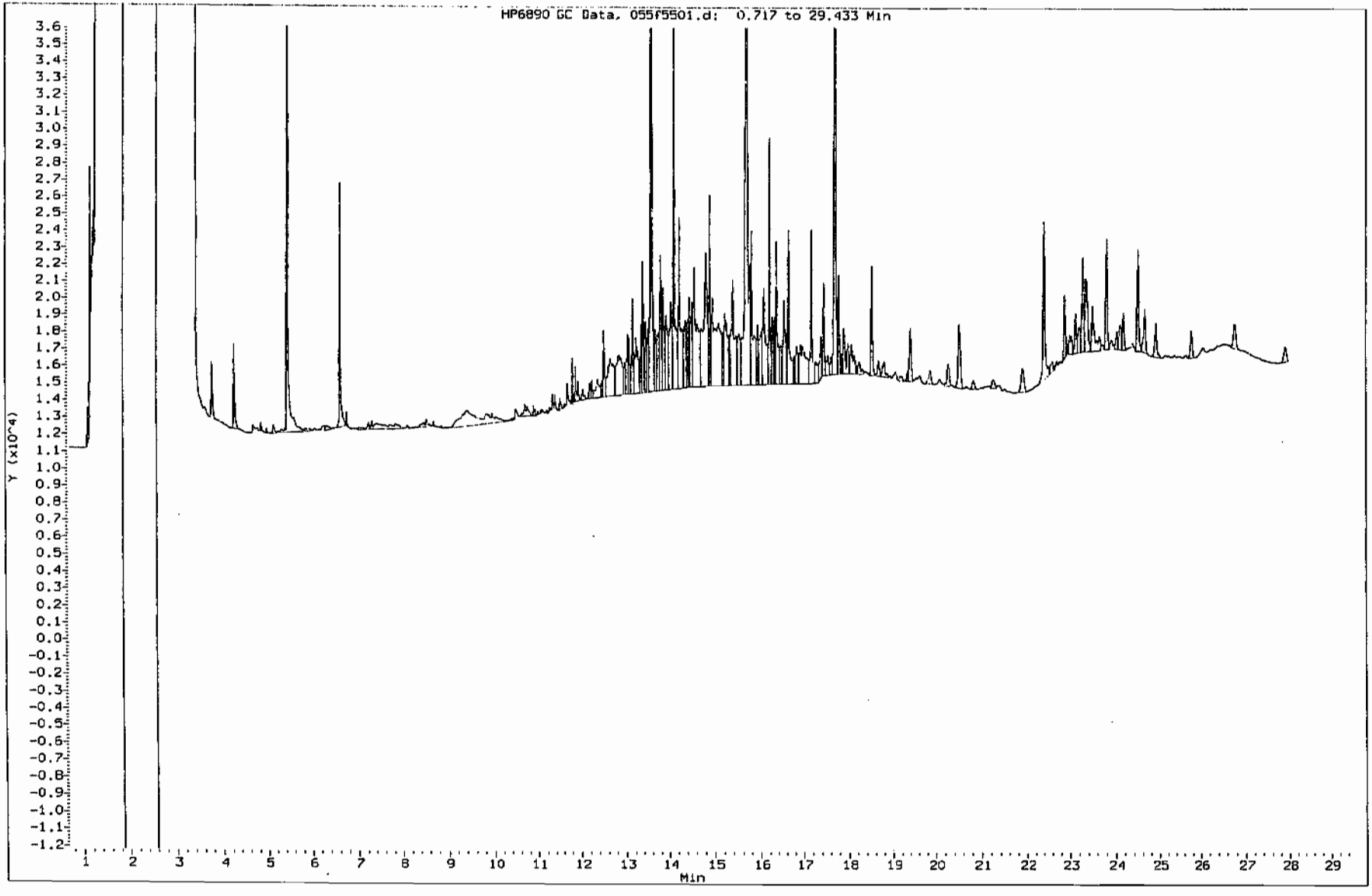

Data File: /chem/fid7.i/120109dr/055f5501.d
Injection Date: 02-DEC-2009 20:44
Instrument: fid7.i
Client Sample ID: RE03-10-2729

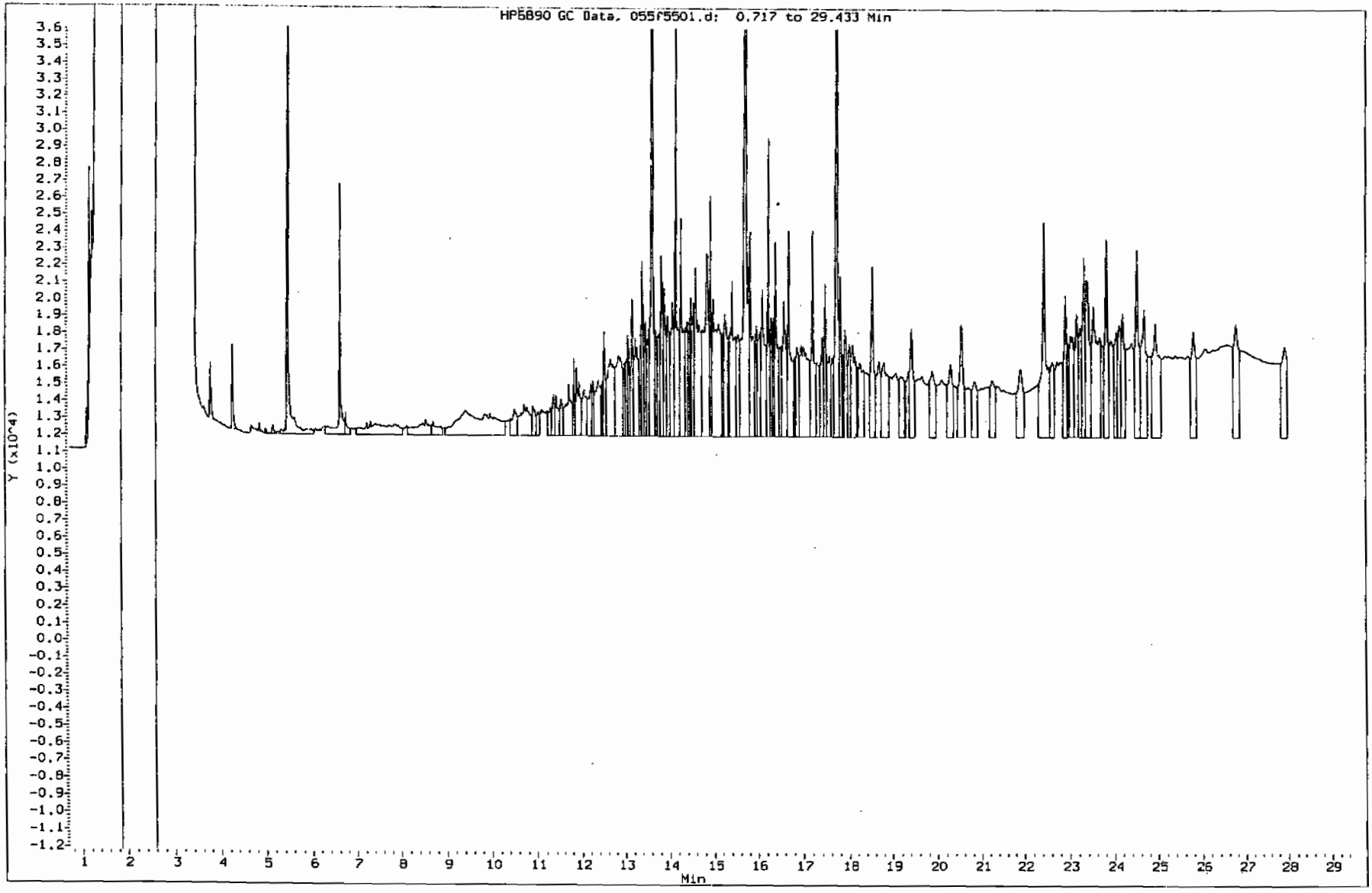

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6969	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 21:21	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	056f5601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.72	mg/kg	2.28	7.01

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/056f5601.d
Lab Smp Id: 241615020 Client Smp ID: RE03-10-6969
Inj Date : 02-DEC-2009 21:21
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241615020|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	4.86100	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1908824	134.679	4.7	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.611	13.616	-0.005	340331	13.5561	0.47	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/056f5601.d
Date : 02-DEC-2009 21:21
Client ID: RE03-10-6969
Sample Info: |2416150201|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

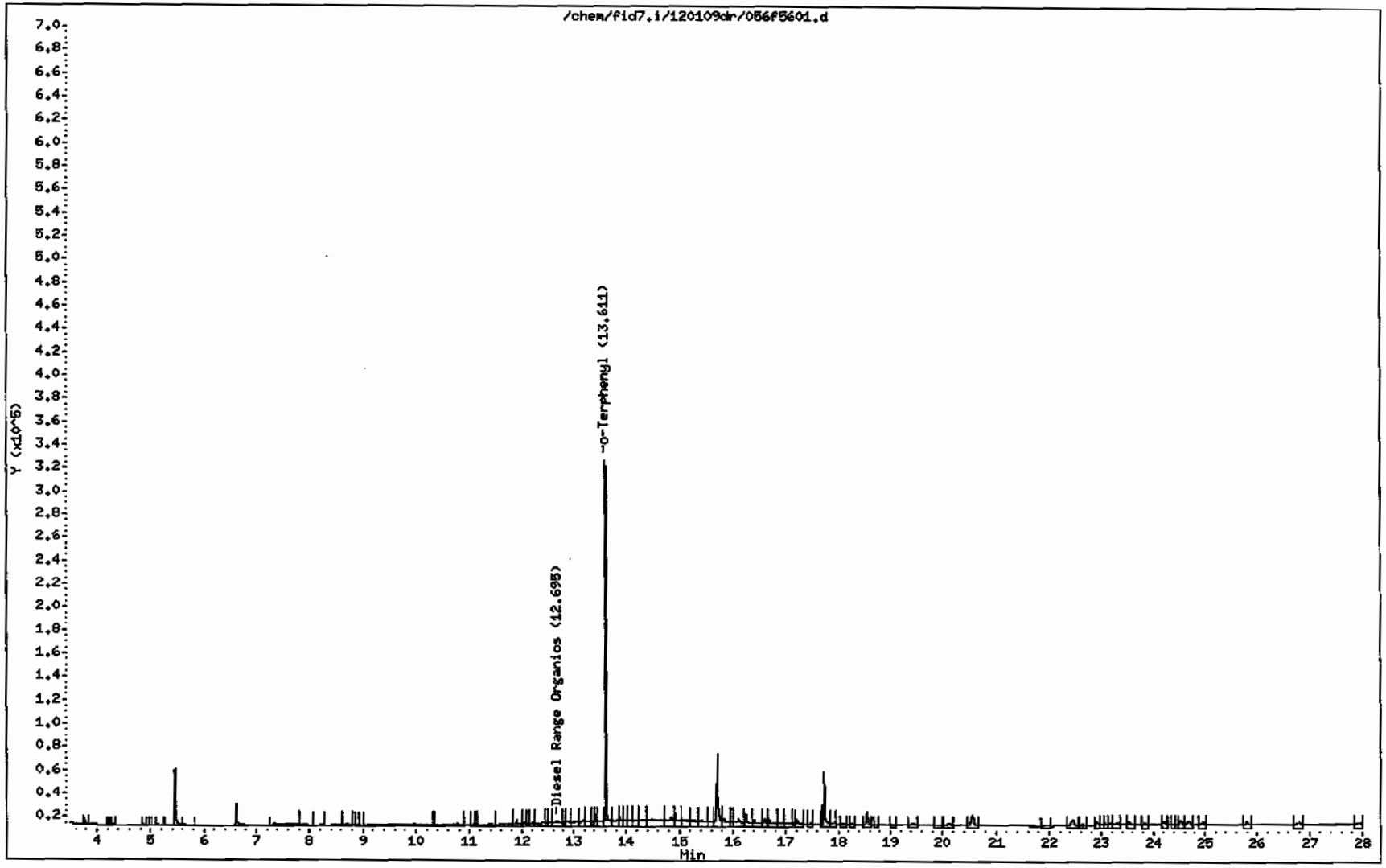

Data File: /chem/fid7.i/120109dr/056f5601.d
Injection Date: 02-DEC-2009 21:21
Instrument: fid7.i
Client Sample ID: RE03-10-6969

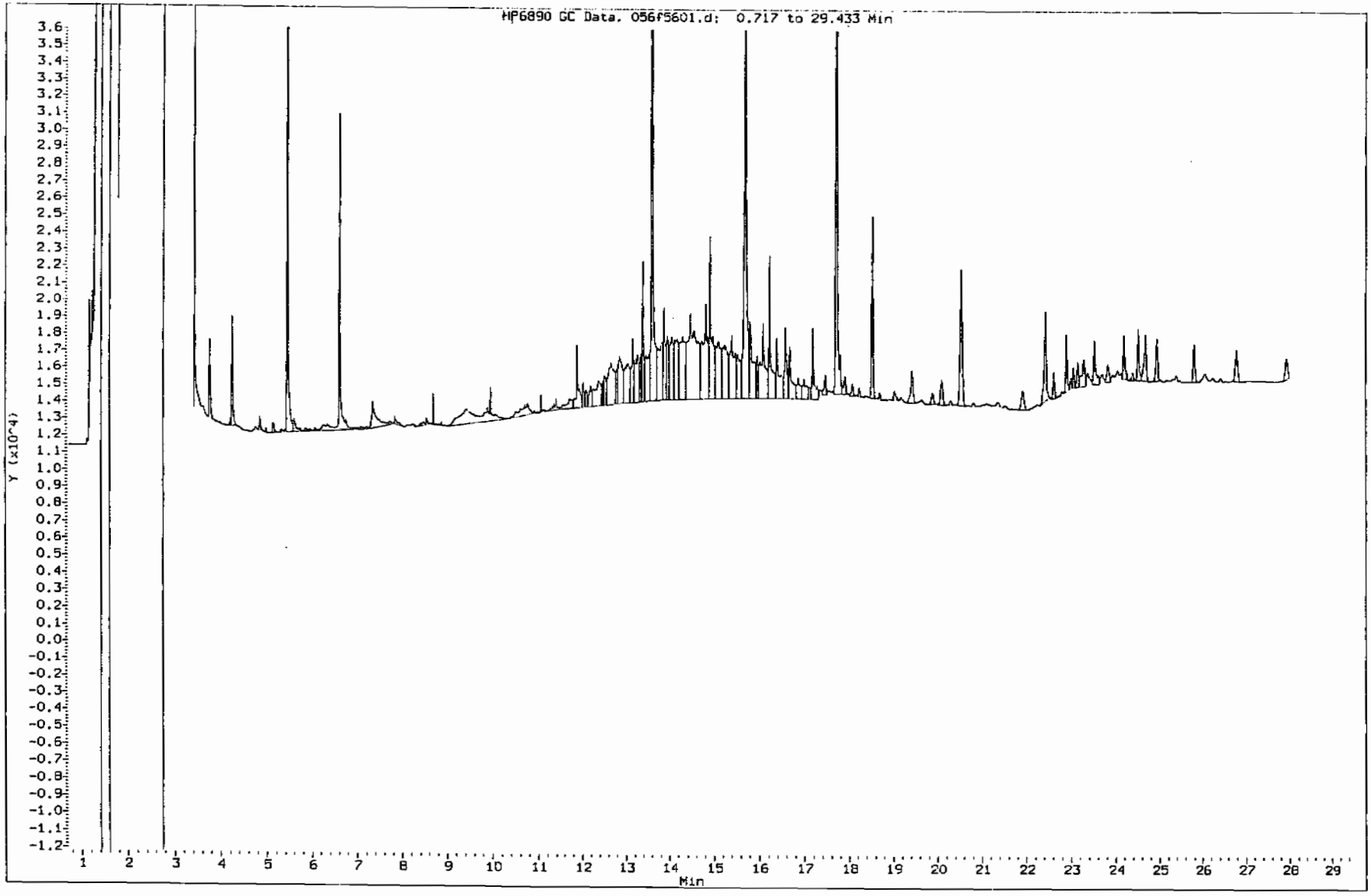

Data File: /chem/fid7.i/120109dr/056f5601.d
Injection Date: 02-DEC-2009 21:21
Instrument: fid7.i
Client Sample ID: RE03-10-6969

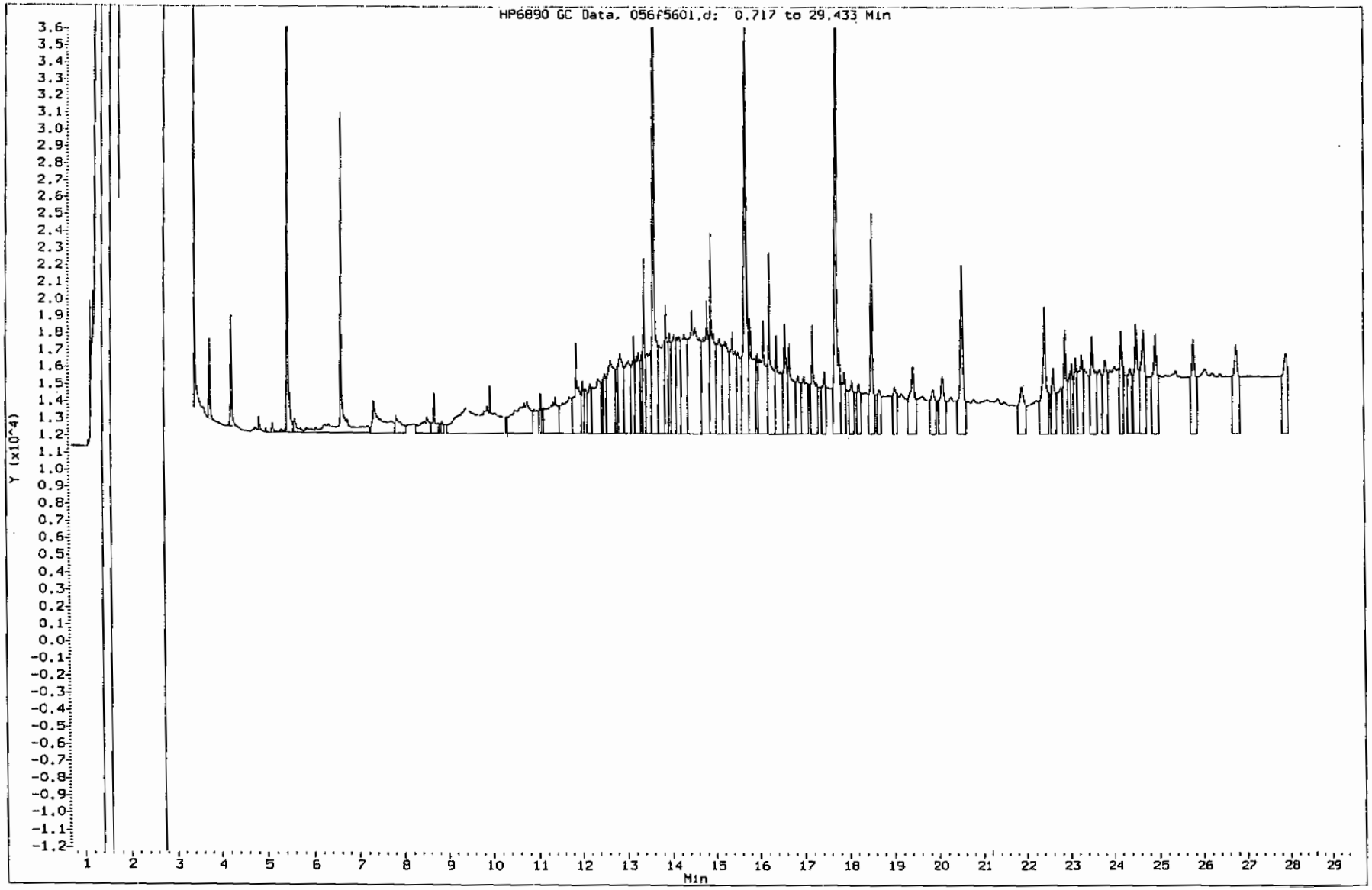

STANDARDS DATA

Report Date: 15-Dec-2009 15:38

Calibration History

Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Start Cal Date: 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
18-NOV-2009 21:40	dro	/chem/fid7.i/111809dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
18-NOV-2009 22:17	dro	/chem/fid7.i/111809dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
18-NOV-2009 22:54	dro	/chem/fid7.i/111809dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
18-NOV-2009 23:31	dro	/chem/fid7.i/111809dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
19-NOV-2009 00:07	dro	/chem/fid7.i/111809dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 02:17	dro	/chem/fid7.i/120109dr/064f6401.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 23:12	dro	/chem/fid7.i/120109dr/059f5901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 17:01	dro	/chem/fid7.i/120109dr/049f4901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 10:53	dro	/chem/fid7.i/120109dr/039f3901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 04:45	dro	/chem/fid7.i/120109dr/029f2901.d

Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 21:58	dro	/chem/fid7.i/120109dr/018f1801.d
Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 15:12	dro	/chem/fid7.i/120109dr/007f0701.d
Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 12:45	dro	/chem/fid7.i/120109dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 08:42 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	100.000000
Initial:End Threshold	50.000000
Initial:Area Threshold	100.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	11.000000
Initial:Negative Peaks	OFF
Initial:Tension	7.000000
5.000:Force Cluster ON	n/a
17.000:Force Cluster OFF	n/a
17.371:Tension	1.000000

	Compound	RT	RT Window	RF
	3 Decane (C10)	7.525	7.495-7.555	
S	1 Diesel Range Organics	12.695	7.501-17.890	1.417e+04
$	2 o-Terphenyl	13.616	13.586-13.646	2.511e+04
	4 Octacosane (C28)	17.861	17.831-17.891	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Cal Date : 03-Dec-2009 08:42 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid7.i/111809dr/003f0301.d
Level 4: /chem/fid7.i/111809dr/004f0401.d
Level 5: /chem/fid7.i/111809dr/005f0501.d
Level 6: /chem/fid7.i/111809dr/006f0601.d
Level 7: /chem/fid7.i/111809dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	14564	14133	13971	14374	13824	14173	2.108
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JF-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	26761	28259	25829	22405	22273	25105	10.638

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: FID7 Calibration Date: 12/01/09 Time: 1245

Lab File ID: 003F0301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13229.911	0.01	-6.6	15.0
o-Terphenyl	25105.366	23768.181	0.01	-5.3	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: FID7 Calibration Date: 12/02/09 Time: 0445

Lab File ID: 029F2901 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13289.426	0.01	-6.2	15.0
o-Terphenyl	25105.366	23523.391	0.01	-6.3	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: FID7 Calibration Date: 12/02/09 Time: 1053

Lab File ID: 039F3901 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13850.876	0.01	-2.3	15.0
o-Terphenyl	25105.366	24468.199	0.01	-2.5	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: FID7 Calibration Date: 12/02/09 Time: 1701

Lab File ID: 049F4901 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14008.110	0.01	-1.2	15.0
o-Terphenyl	25105.366	21647.560	0.01	-13.8	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: FID7 Calibration Date: 12/02/09 Time: 2312

Lab File ID: 059F5901 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13985.150	0.01	-1.3	15.0
o-Terphenyl	25105.366	21661.320	0.01	-13.7	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/003f0301.d
Lab Smp Id: WFI091118-02 D1 Client Smp ID: DSTD01
Inj Date : 01-DEC-2009 12:45
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	ON-COL (mg/L)
$	1 Diesel Range Organics					CAS #:
	7.501- 17.890			13229911	1000.00	933
$	2 o-Terphenyl					CAS #: 84-15-1
	13.616	13.616	0.000	594204	25.0000	23.7

Data File: /chem/fid7.i/120109dr/003f0301.d
Date : 01-DEC-2009 12:45
Client ID: DSTD01
Sample Info: IWFI091118-02 D1

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

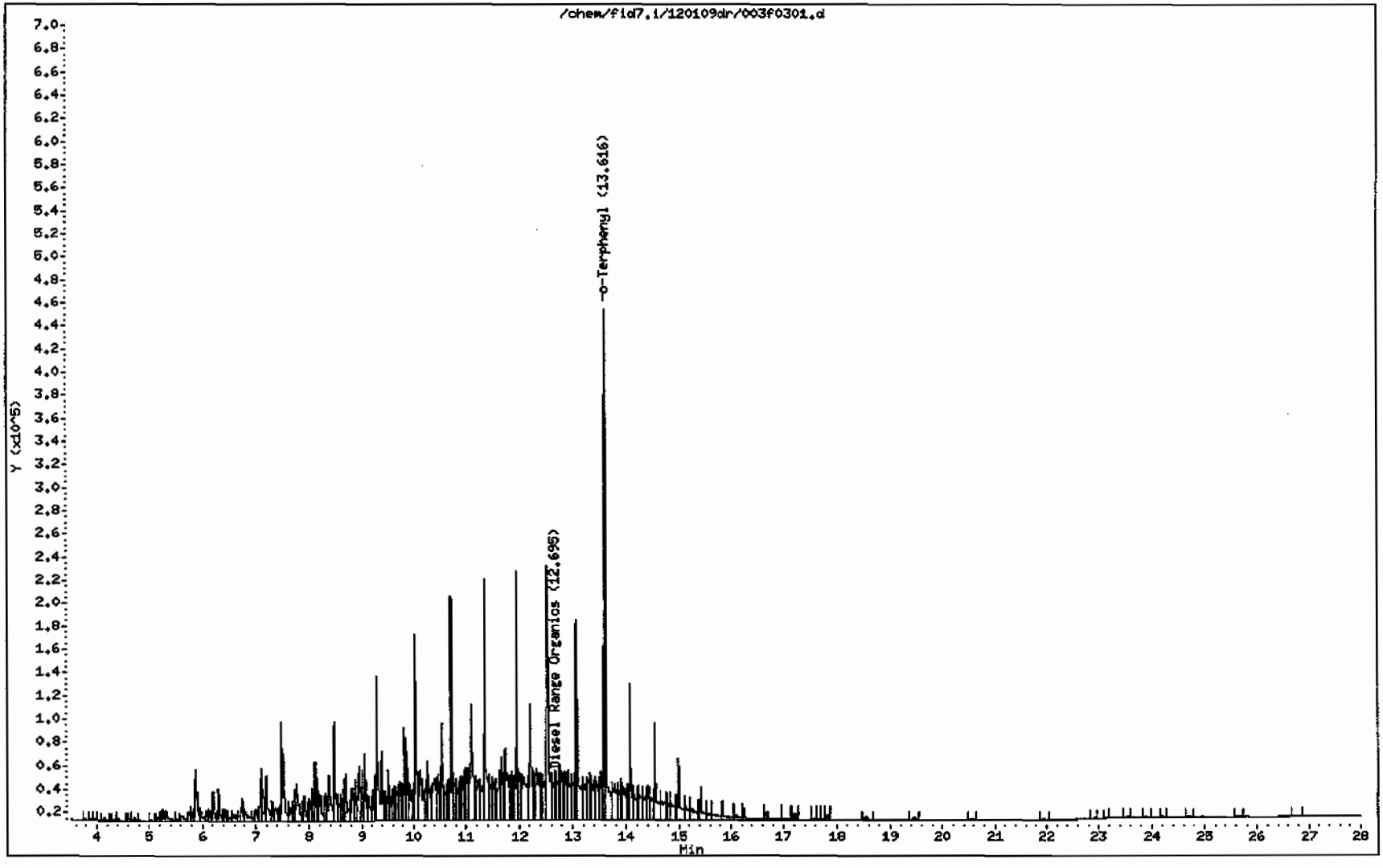

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/029f2901.d
Lab Smp Id: WFI091118-02 D4 Client Smp ID: DSTD04
Inj Date : 02-DEC-2009 04:45
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D4
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	7.501- 17.890			13289426	1000.00		938
$	2 o-Terphenyl						CAS #: 84-15-1
	13.613	13.616	-0.003	588084	25.0000		23.4

Data File: /chem/fid7.i/120109dr/029f2901.d

Date : 02-DEC-2009 04:45

Client ID: DSTD04

Sample Info: |WFI091118-02 D4

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

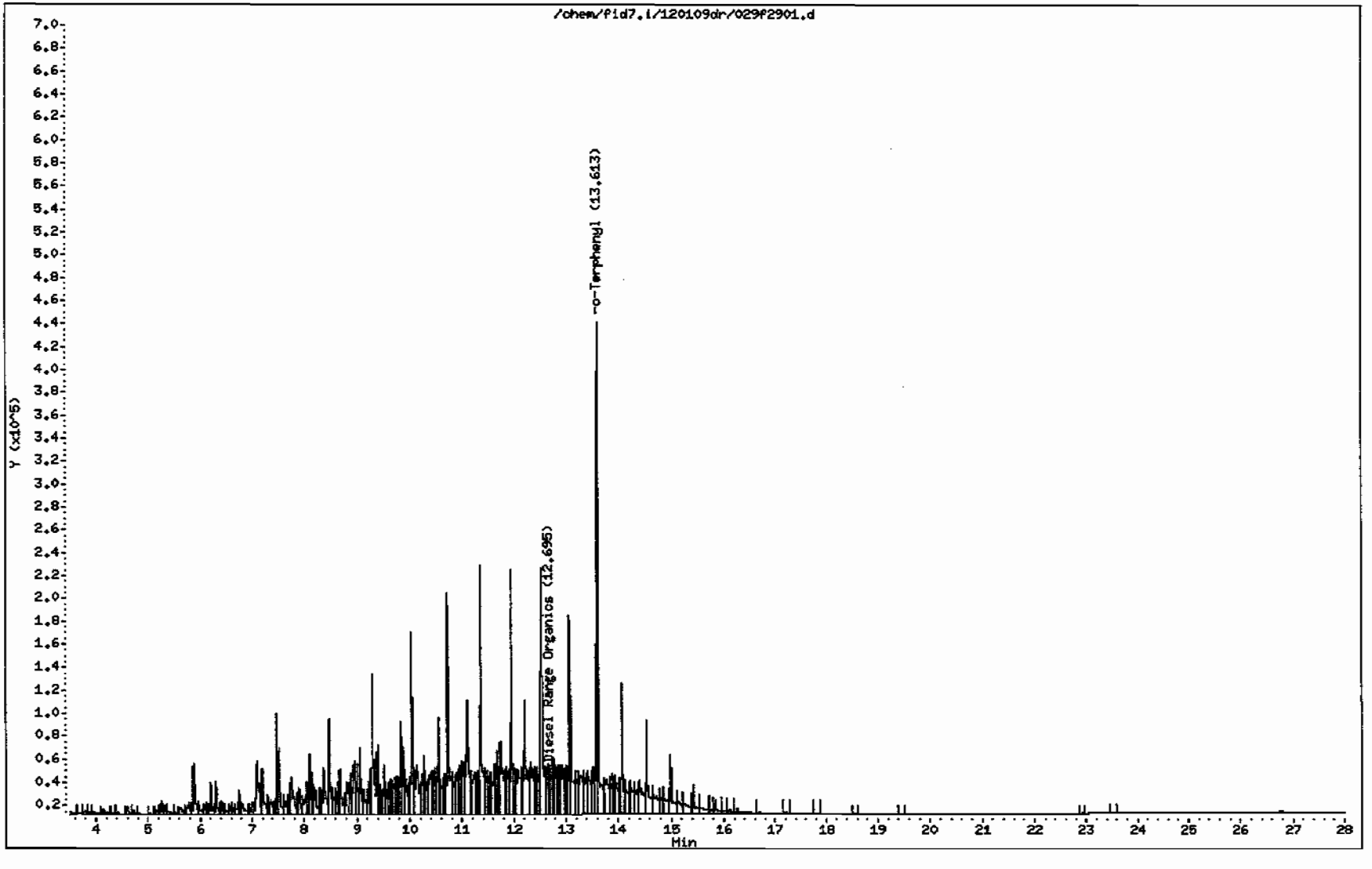

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/039f3901.d
Lab Smp Id: WFI091118-02 D5 Client Smp ID: DSTD05
Inj Date : 02-DEC-2009 10:53
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D5
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 39 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
$ 1 Diesel Range Organics					CAS #:
7.501-	17.890		13850876	1000.00	977
$ 2 o-Terphenyl					CAS #: 84-15-1
13.614	13.616	-0.002	611704	25.0000	24.4

Data File: /chem/fid7.i/120109dr/039f3901.d
Date : 02-DEC-2009 10:53
Client ID: DSTD05
Sample Info: IWFI091118-02 D5

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

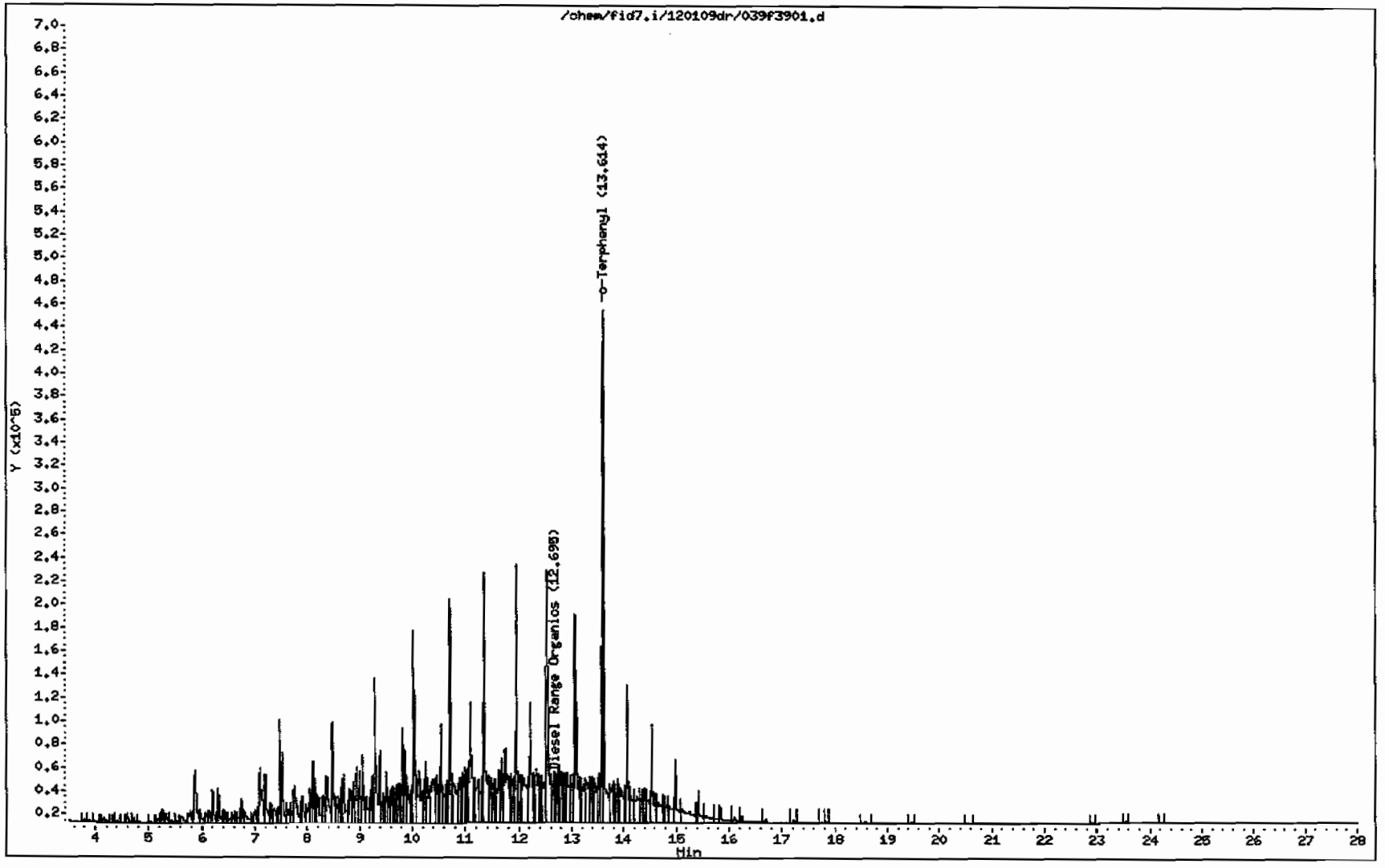

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/049f4901.d
Lab Smp Id: WFI091118-02 D6 Client Smp ID: DSTD06
Inj Date : 02-DEC-2009 17:01
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D6
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 49 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
$ 1 Diesel Range Organics					CAS #:	
7.501- 17.890			14008110	1000.00	988	(M)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.614	13.616	-0.002	541189	25.0000	21.6	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/049f4901.d
Date : 02-DEC-2009 17:01
Client ID: DSTD06
Sample Info: !WFI091118-02 D6

Column phase: DB-5HS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

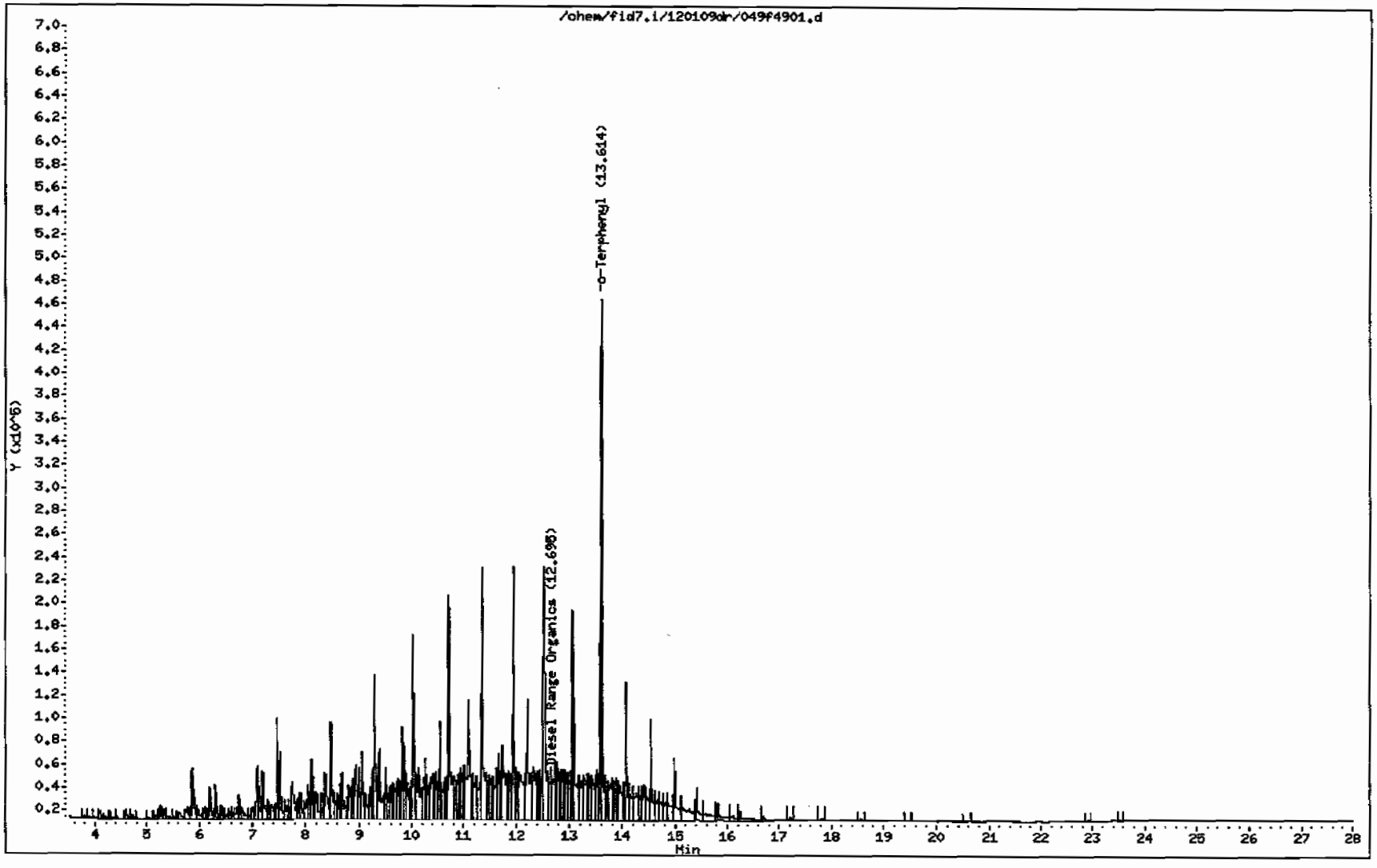

Data File: /chem/fid7.i/120109dr/049f4901.d
Injection Date: 02-DEC-2009 17:01
Instrument: fid7.i
Client Sample ID: DSTD06

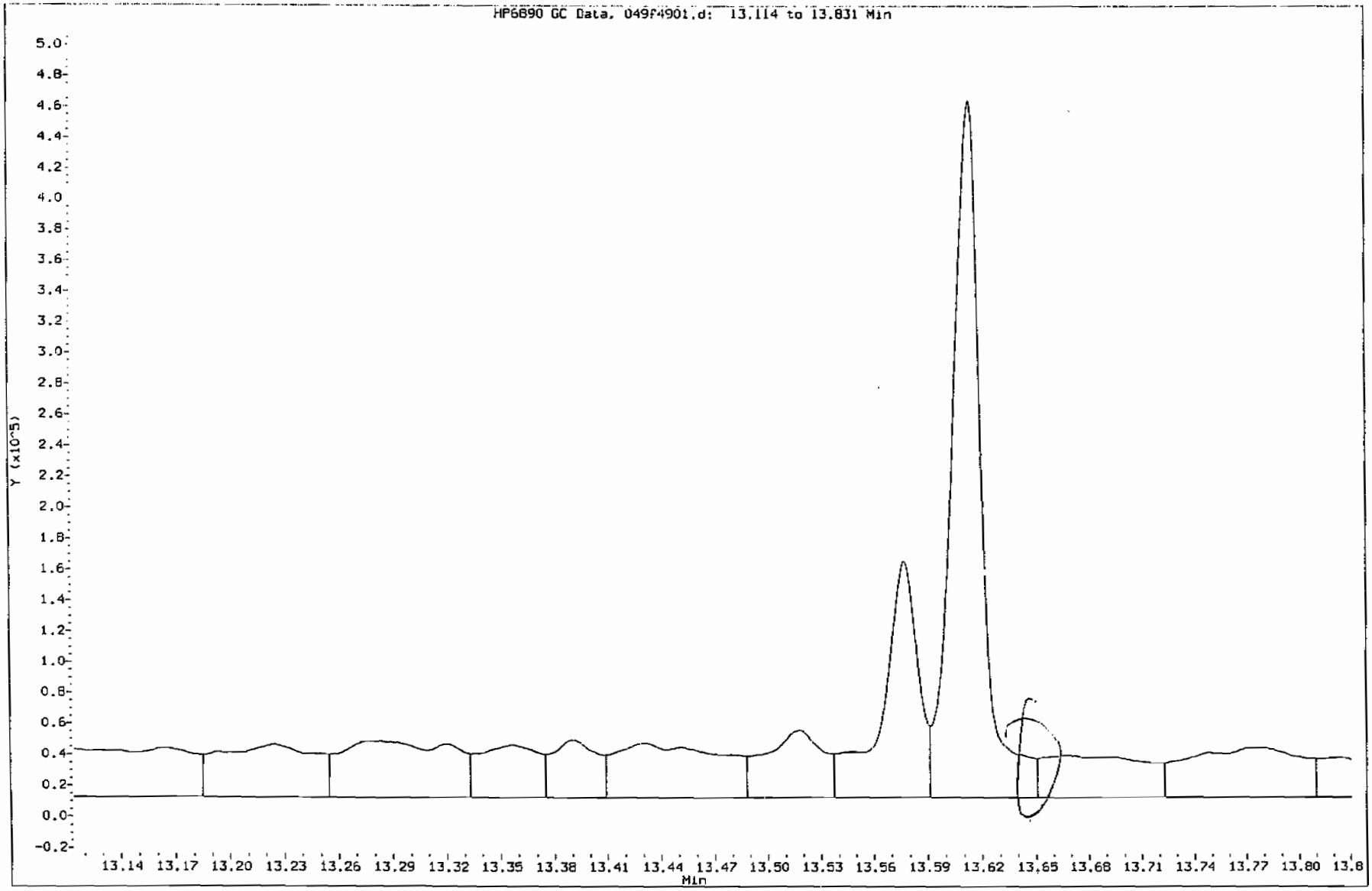

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Injection Date: 02-DEC-2009 17:01
Instrument: fid7.i
Client Sample ID: DSTD06

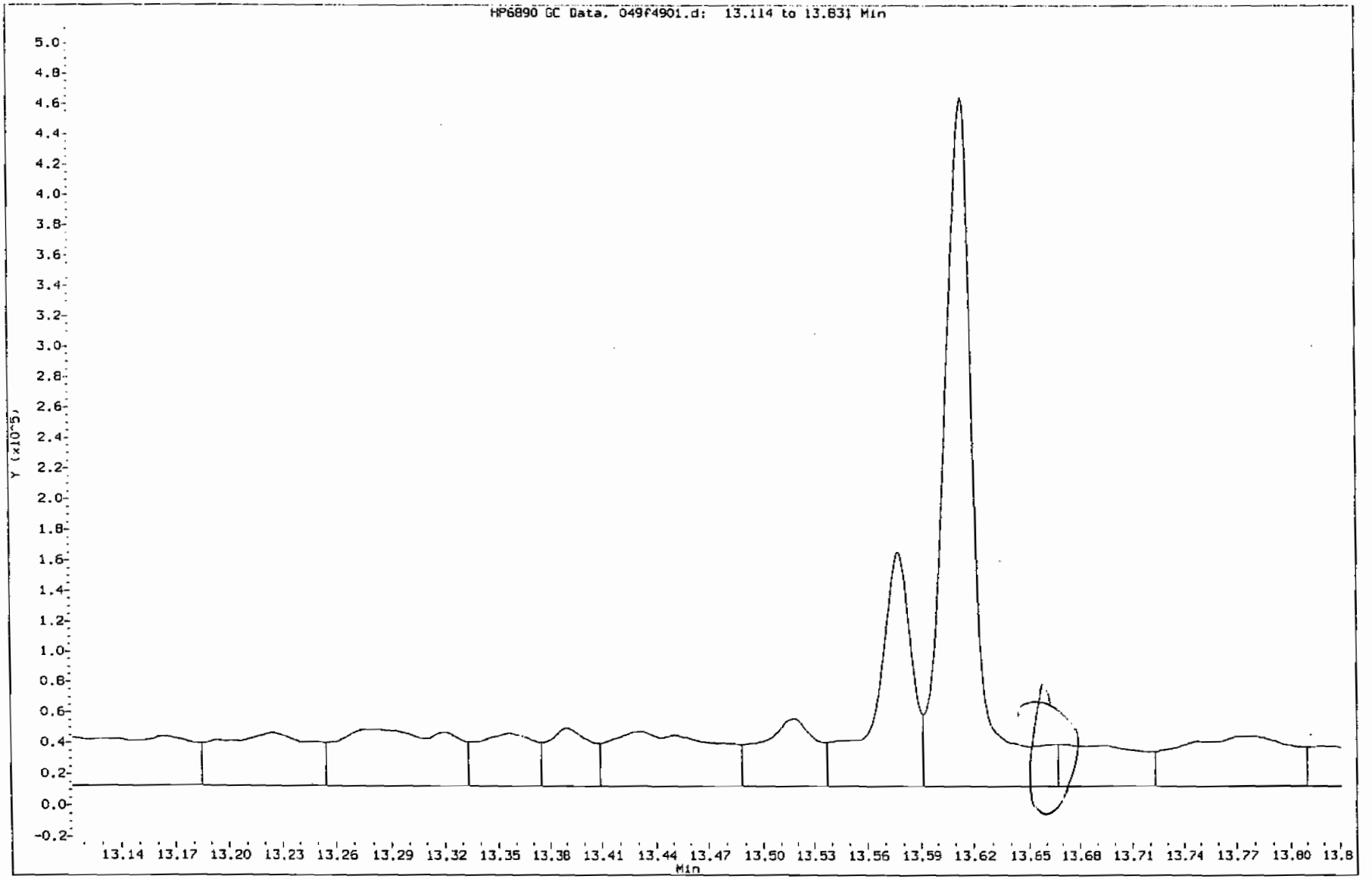

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DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/059f5901.d
Lab Smp Id: WFI091118-02 D7 Client Smp ID: DSTD07
Inj Date : 02-DEC-2009 23:12
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D7
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 59 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
$ 1 Diesel Range Organics					CAS #:	
7.501- 17.890			13985150	1000.00	987	(M)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.613	13.616	-0.003	541533	25.0000	21.6	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/059f5901.d
Date : 02-DEC-2009 23:12
Client ID: DSTD07
Sample Info: IWFI091118-02 D7

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

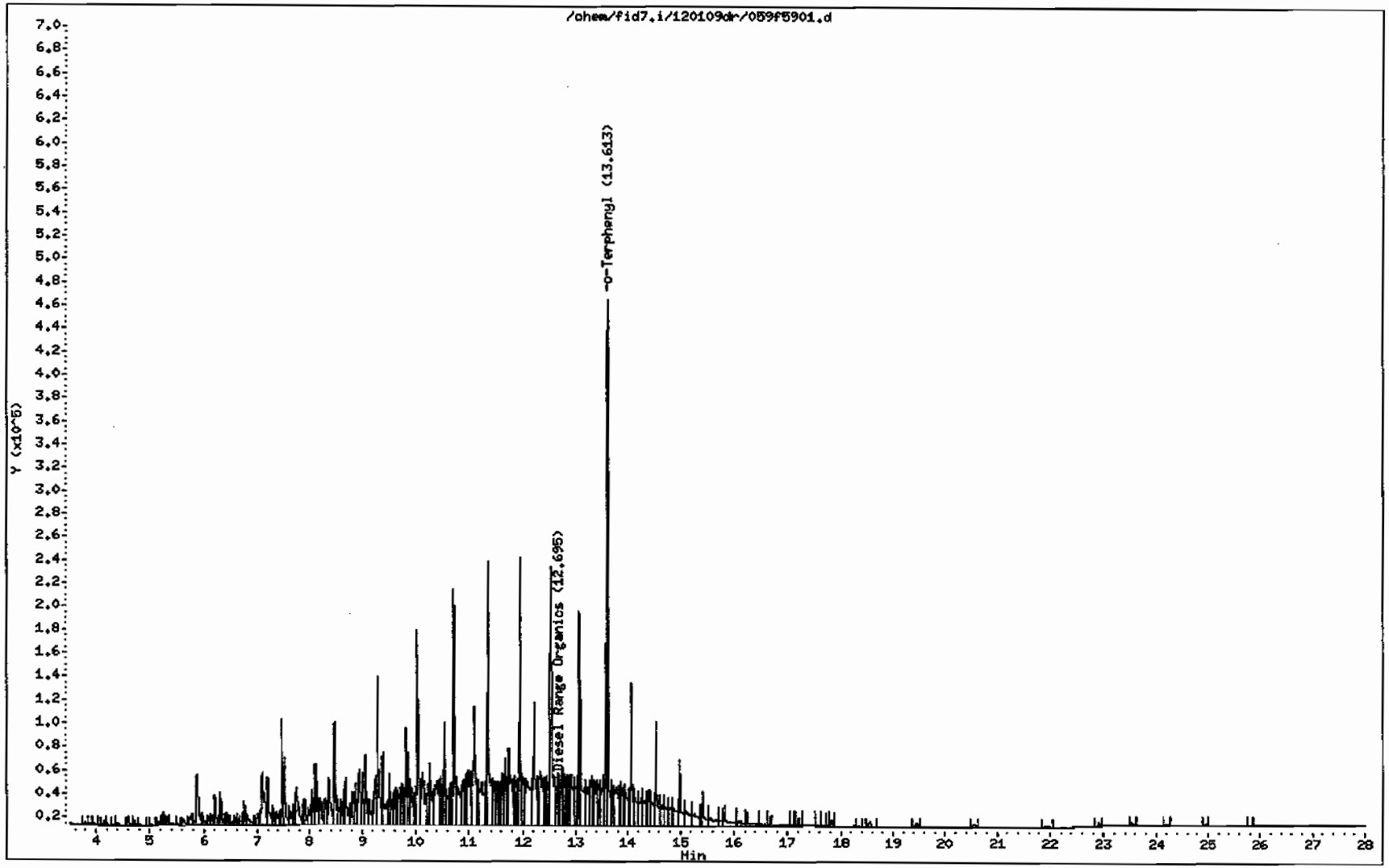

Below RTH 12/7/09

Data File: /chem/fid7.i/120109dr/059f5901.d
Injection Date: 02-DEC-2009 23:12
Instrument: fid7.i
Client Sample ID: DSTD07

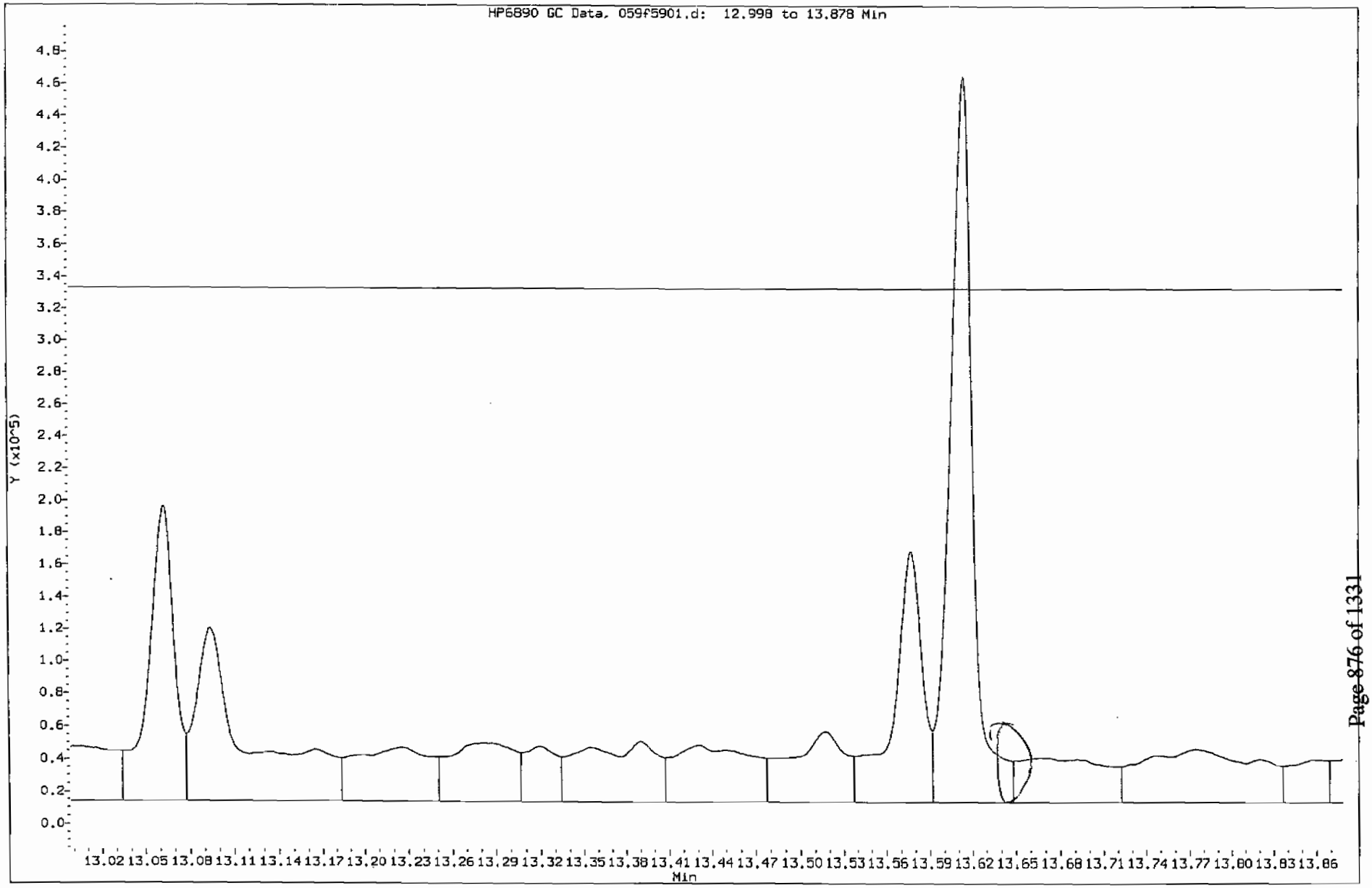

Data File: /chem/fid7.i/120109dr/059f5901.d
Injection Date: 02-DEC-2009 23:12
Instrument: fid7.i
Client Sample ID: DSTD07

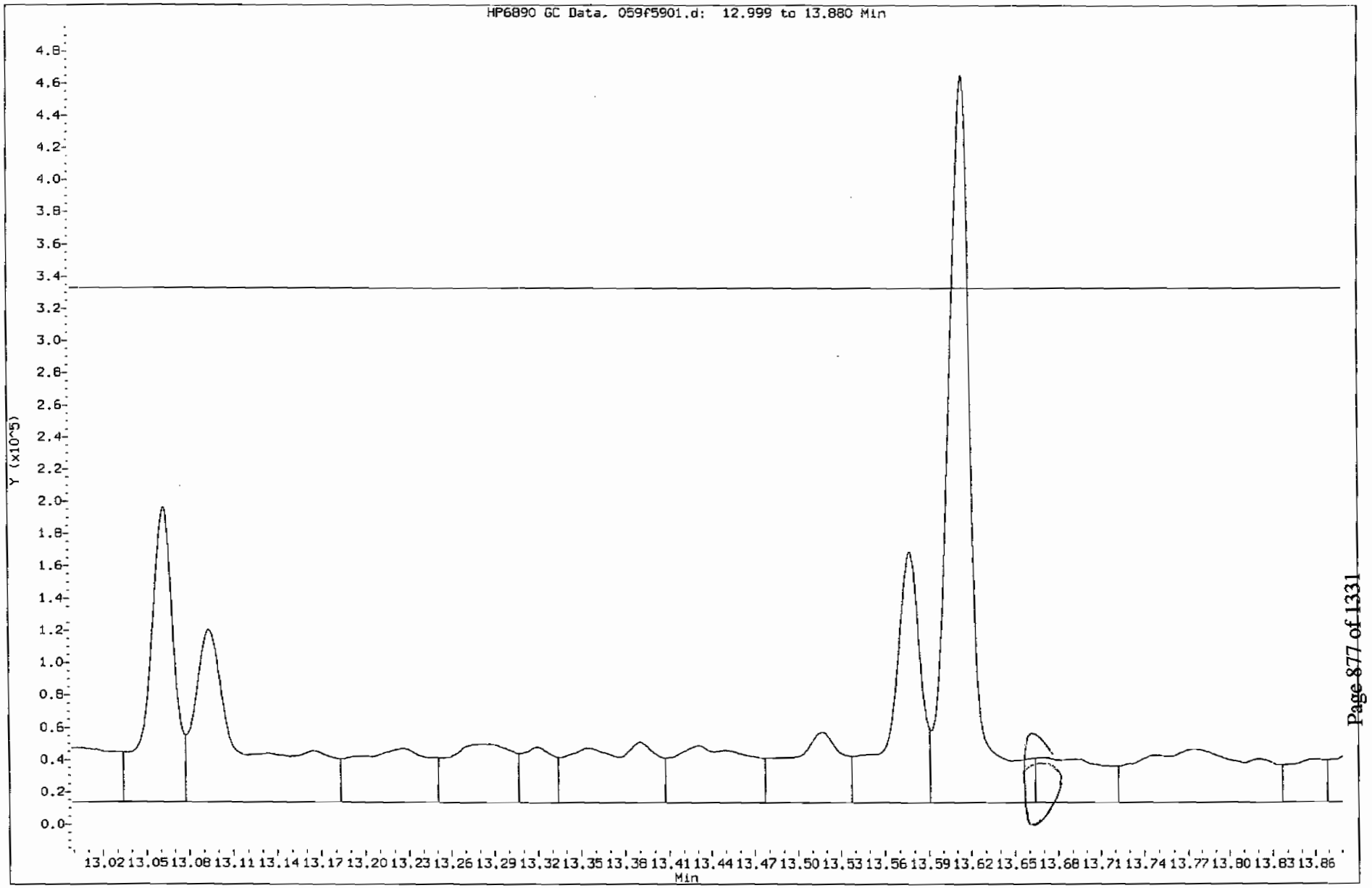

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/18/09	2026	13.61	
02	RTMARKER	UFI091013-03	11/18/09	2103		
03	CSTD01	UFI090827-10	11/18/09	2140	13.61	
04	CSTD02	UFI090827-11	11/18/09	2217	13.61	
05	CSTD03	UFI090827-12	11/18/09	2254	13.62	
06	CSTD04	UFI090827-13	11/18/09	2331	13.63	
07	CSTD05	UFI090827-14	11/19/09	0007	13.64	
08	DSTD01	WFI090928-01	11/19/09	0044	13.62	
09	DIBLK02	WFI090723-06	11/19/09	0121	13.61	
10	ZZZZZ	ZZZZZ	11/19/09	0158	13.61	
11	ZZZZZ	ZZZZZ	11/19/09	0236	13.61	
12	ZZZZZ	ZZZZZ	11/19/09	0313	13.61	
13	ZZZZZ	ZZZZZ	11/19/09	0350	13.61	
14	ZZZZZ	ZZZZZ	11/19/09	0427	13.62	
15	ZZZZZ	ZZZZZ	11/19/09	0504	13.62	
16	ZZZZZ	ZZZZZ	11/19/09	0541	13.61	
17	ZZZZZ	ZZZZZ	11/19/09	0618	13.61	
18	ZZZZZ	ZZZZZ	11/19/09	0655	13.62	
19	ZZZZZ	ZZZZZ	11/19/09	0731	13.62	
20	ZZZZZ	ZZZZZ	11/19/09	0809	13.62	
21	DSTD02	UFI090911-02	11/19/09	0846	13.62	
22	DIBLK03	WFI090723-06	11/19/09	0923	13.62	
23	ZZZZZ	ZZZZZ	11/19/09	1000	13.58*	
24	ZZZZZ	ZZZZZ	11/19/09	1037	13.62	
25	ZZZZZ	ZZZZZ	11/19/09	1114	13.61	
26	ZZZZZ	ZZZZZ	11/19/09	1150	13.61	
27	ZZZZZ	ZZZZZ	11/19/09	1227	13.61	
28	ZZZZZ	ZZZZZ	11/19/09	1304	13.61	
29	ZZZZZ	ZZZZZ	11/19/09	1341	13.61	
30	ZZZZZ	ZZZZZ	11/19/09	1418	13.62	
31	ZZZZZ	ZZZZZ	11/19/09	1455	13.62	
32	ZZZZZ	ZZZZZ	11/19/09	1531	13.62	

S1 = o-Terphenyl

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT
01	DIBLK01	WFI091130-06	12/01/09	1132	13.61		
02	RTMARKER	UFI091013-03	12/01/09	1208			
03	DSTD01	WFI091118-02	12/01/09	1245	13.62		
04	DIBLK02	WFI091130-06	12/01/09	1322	13.61		
05	ZZZZZ	ZZZZZ	12/01/09	1359	13.61		
06	ZZZZZ	ZZZZZ	12/01/09	1435	13.61		
07	DSTD02	WFI091118-02	12/01/09	1512	13.61		
08	DIBLK03	WFI091130-06	12/01/09	1549	13.61		
09	ZZZZZ	ZZZZZ	12/01/09	1626	13.61		
10	ZZZZZ	ZZZZZ	12/01/09	1703	13.61		
11	ZZZZZ	ZZZZZ	12/01/09	1740	13.61		
12	ZZZZZ	ZZZZZ	12/01/09	1817	13.61		
13	ZZZZZ	ZZZZZ	12/01/09	1854	13.61		
14	ZZZZZ	ZZZZZ	12/01/09	1931	13.61		
15	ZZZZZ	ZZZZZ	12/01/09	2008	13.61		
16	ZZZZZ	ZZZZZ	12/01/09	2044	13.61		
17	ZZZZZ	ZZZZZ	12/01/09	2121	13.61		
18	DSTD03	WFI091118-02	12/01/09	2158	13.61		
19	DIBLK04	WFI091130-06	12/01/09	2235	13.61		
20	ZZZZZ	ZZZZZ	12/01/09	2312	13.61		
21	ZZZZZ	ZZZZZ	12/01/09	2349	13.61		
22	ZZZZZ	ZZZZZ	12/02/09	0026	13.61		
23	ZZZZZ	ZZZZZ	12/02/09	0103	13.61		
24	ZZZZZ	ZZZZZ	12/02/09	0140	13.61		
25	ZZZZZ	ZZZZZ	12/02/09	0216	13.61		
26	ZZZZZ	ZZZZZ	12/02/09	0253	13.62		
27	ZZZZZ	ZZZZZ	12/02/09	0331	13.62		
28	ZZZZZ	ZZZZZ	12/02/09	0408	13.61		
29	DSTD04	WFI091118-02	12/02/09	0445	13.61		
30	DIBLK05	WFI091130-06	12/02/09	0522	13.61		
31	DBLK01	1201982260	12/02/09	0558	13.61		
32	DBLK01LCS	1201982263	12/02/09	0636	13.61		

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	RE03-09-14108	241615001	12/02/09	0713	13.61	
02	RE03-09-14106	241615002	12/02/09	0749	13.61	
03	RE03-09-14107	241615003	12/02/09	0826	13.61	
04	RE03-09-14109	241615004	12/02/09	0902	13.61	
05	RE03-09-14252	241615005	12/02/09	0939	13.61	
06	RE03-09-14250	241615006	12/02/09	1016	13.61	
07	DSTD05	WFI091118-02	12/02/09	1053	13.61	
08	DIBLK06	WFI091130-06	12/02/09	1129	13.61	
09	RE03-09-14255	241615007	12/02/09	1207	13.61	
10	RE03-09-14256	241615008	12/02/09	1243	13.61	
11	RE03-09-14254	241615009	12/02/09	1320	13.61	
12	RE03-09-14249	241615010	12/02/09	1356	13.61	
13	RE03-09-14248	241615011	12/02/09	1434	13.61	
14	RE03-09-14247	241615012	12/02/09	1511	13.61	
15	RE03-09-14247MS	1201982261	12/02/09	1547	13.61	
16	RE03-09-14247MSD	1201982262	12/02/09	1625	13.61	
17	DSTD06	WFI091118-02	12/02/09	1701	13.61	
18	DIBLK07	WFI091130-06	12/02/09	1738	13.61	
19	RE03-09-14246	241615013	12/02/09	1815	13.61	
20	RE03-09-14253	241615014	12/02/09	1853	13.61	
21	RE03-09-14251	241615015	12/02/09	1930	13.61	
22	RE03-09-14257	241615016	12/02/09	2007	13.61	
23	RE03-10-2729	241615018	12/02/09	2044	13.61	
24	RE03-10-6969	241615020	12/02/09	2121	13.61	
25	ZZZZZ	ZZZZZ	12/02/09	2158	13.61	
26	ZZZZZ	ZZZZZ	12/02/09	2235	13.61	
27	DSTD07	WFI091118-02	12/02/09	2312	13.61	
28	DIBLK08	WFI091130-06	12/02/09	2349	13.61	
29	ZZZZZ	ZZZZZ	12/03/09	0026		
30	ZZZZZ	ZZZZZ	12/03/09	0103		
31	ZZZZZ	ZZZZZ	12/03/09	0140		
32	DSTD08	WFI091118-02	12/03/09	0217	13.61	

S1 = o-Terphenyl

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–644			**Matrix:**	SOIL
Lab Sample ID:	1201982260				
Client Sample:	QC for batch 927151	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 927151	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 05:58	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	031f3101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/031f3101.d
Lab Smp Id: 1201982260 Client Smp ID: DBLK01
Inj Date : 02-DEC-2009 05:58
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201982260|1|
Misc Info : |FIDDRO_SF|927152|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 31 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.610	13.616	-0.006	265605	10.5796	0.35

Data File: /chem/fid7.i/120109dr/031f3101.d
Date : 02-DEC-2009 05:58
Client ID: DBLK01
Sample Info: |120198226011|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

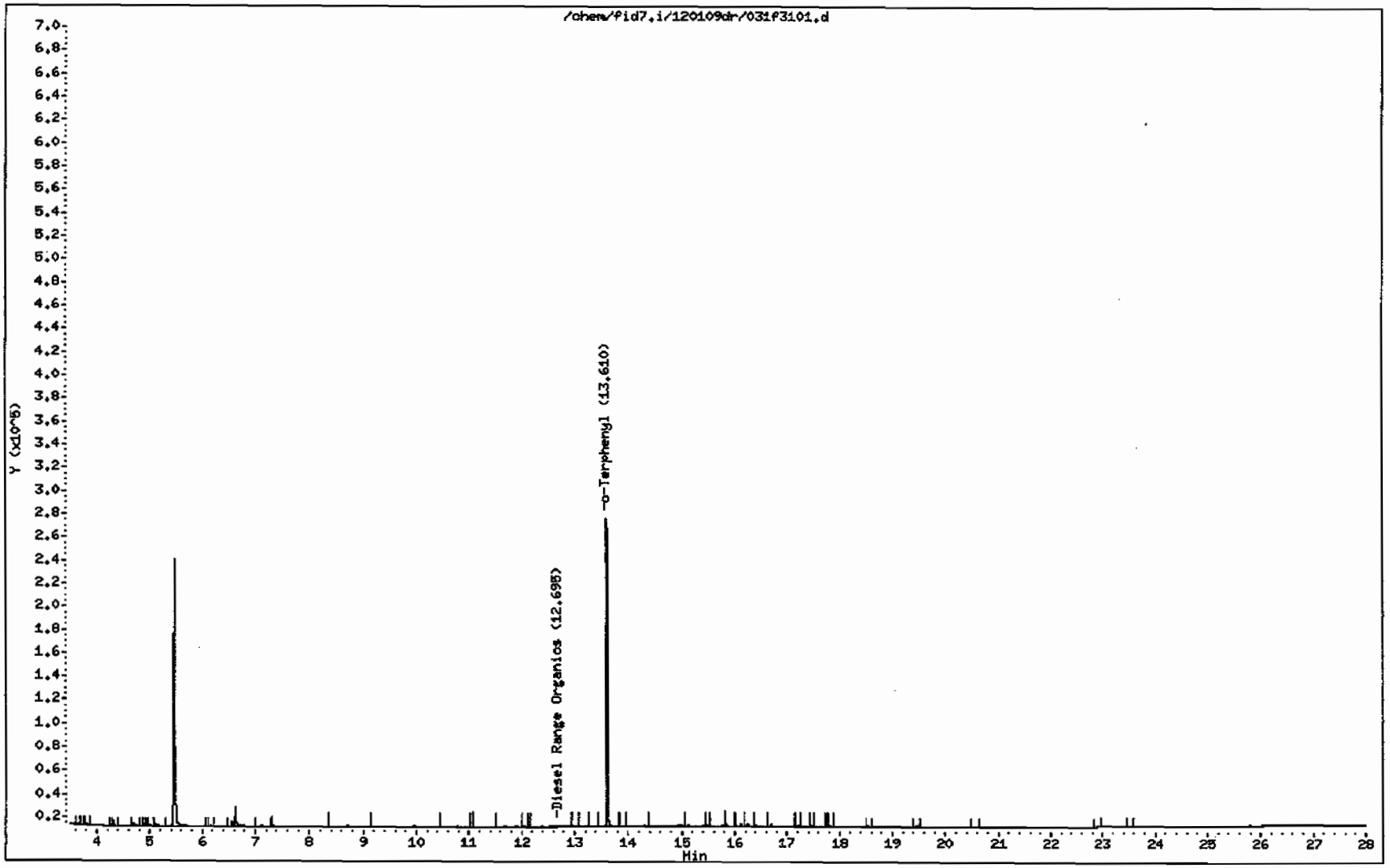

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201982263				
Client Sample:	QC for batch 927151	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927151	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 06:36	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	032f3201.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		26.4	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/032f3201.d
Lab Smp Id: 1201982263 Client Smp ID: DBLK01LCS
Inj Date : 02-DEC-2009 06:36
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201982263|1|
Misc Info : |FIDDRO_SF|927152|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 32 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 1 Diesel Range Organics					CAS #:
7.501- 17.890			11217100	791.434	26.4
$ 2 o-Terphenyl					CAS #: 84-15-1
13.611	13.616	-0.005	450394	17.9402	0.60

Data File: /chem/fid7.i/120109dr/032f3201.d
Date : 02-DEC-2009 06:36
Client ID: DBLK01LCS
Sample Info: |120198226311|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

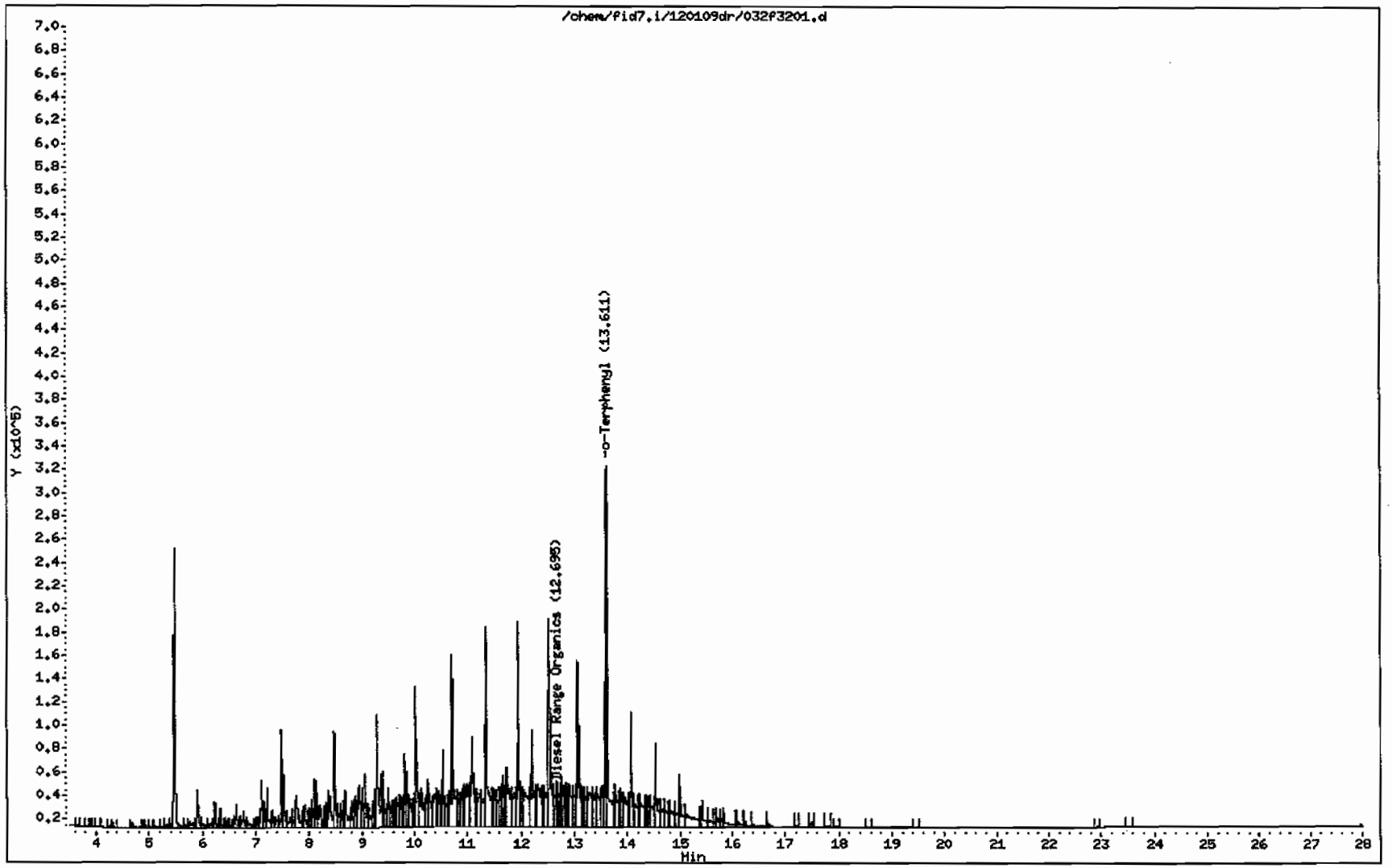

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	1201982261	Date Received:	11/21/2009 09:00	%Moisture:	10.3
Client Sample:	QC for batch 927151	Client:	LANL010	Project:	QC
Client ID:	RE03-09-14247MS	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927152	Inst:	FID7.I	Dilution:	1
Run Date:	12/02/2009 15:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:58	Aliquot:	30 g	Final Volume:	1 mL
Data File:	047f4701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		22.5	mg/kg	2.42	7.44

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/047f4701.d
Lab Smp Id: 1201982261 Client Smp ID: RE03-09-14247MS
Inj Date : 02-DEC-2009 15:47
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201982261|1|
Misc Info : |FIDDRO_SF|927152|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 47 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	10.34860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
7.501- 17.890			8584627	605.697	22.5
$ 2 o-Terphenyl					CAS #: 84-15-1
13.610	13.616	-0.006	352399	14.0368	0.52

Data File: /chem/fid7.i/120109dr/047f4701.d
Date : 02-DEC-2009 15:47
Client ID: RE03-09-14247HS
Sample Info: |120198226111|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

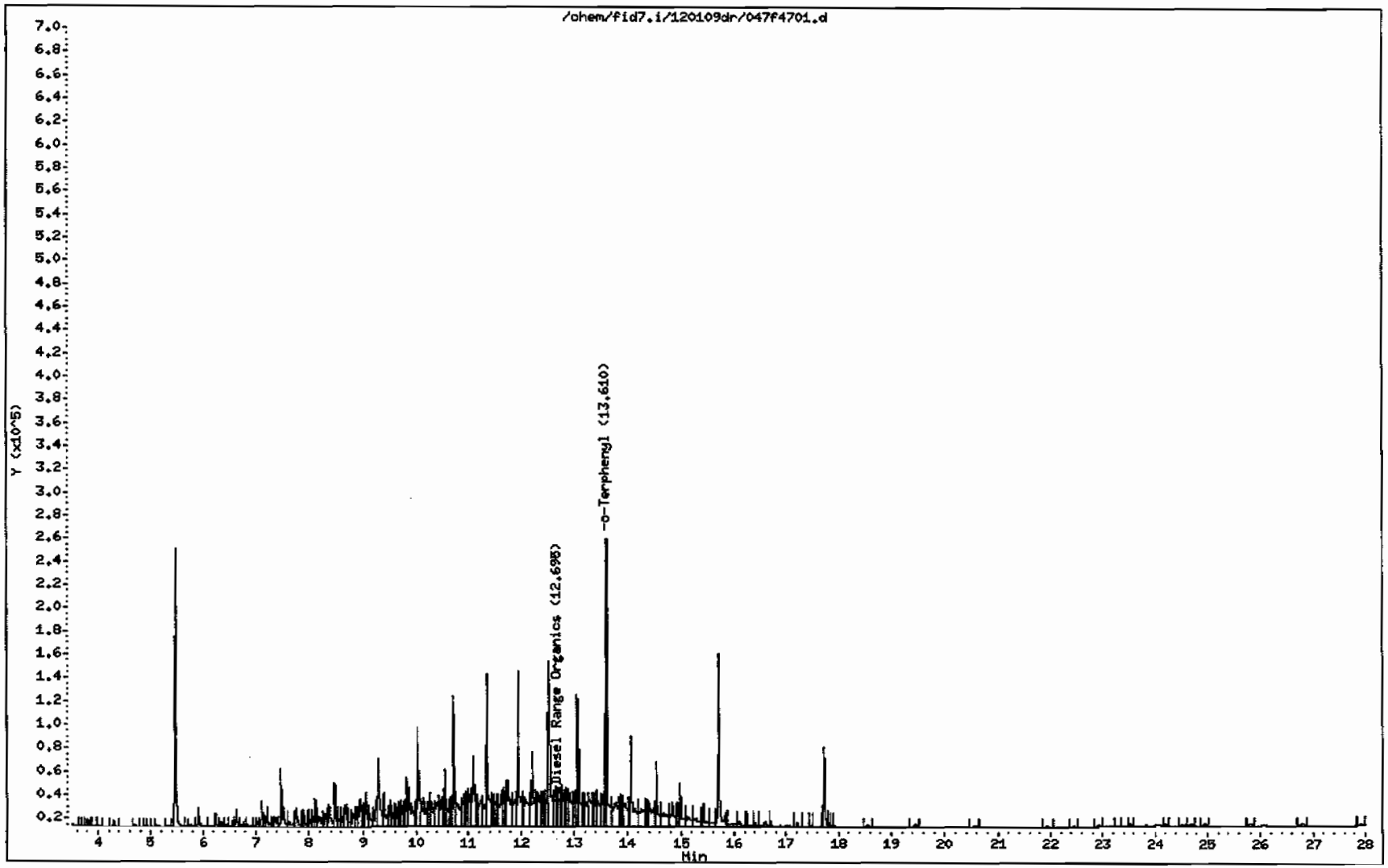

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982262	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
Client Sample:	QC for batch 927151	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14247MSD	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927152	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/02/2009 16:25	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:58	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	048f4801.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		18.6	mg/kg	2.42	7.44

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/048f4801.d
Lab Smp Id: 1201982262 Client Smp ID: RE03-09-14247MSD
Inj Date : 02-DEC-2009 16:25
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201982262|1|
Misc Info : |FIDDRO_SF|927152|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 48 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	10.34860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
7.501- 17.890			7091237	500.330	18.6
$ 2 o-Terphenyl					CAS #: 84-15-1
13.609	13.616	-0.007	290315	11.5639	0.43

Data File: /chem/fid7.i/120109dr/048f4801.d
Date : 02-DEC-2009 16:25
Client ID: RE03-09-14247MSD
Sample Info: |120198226211|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

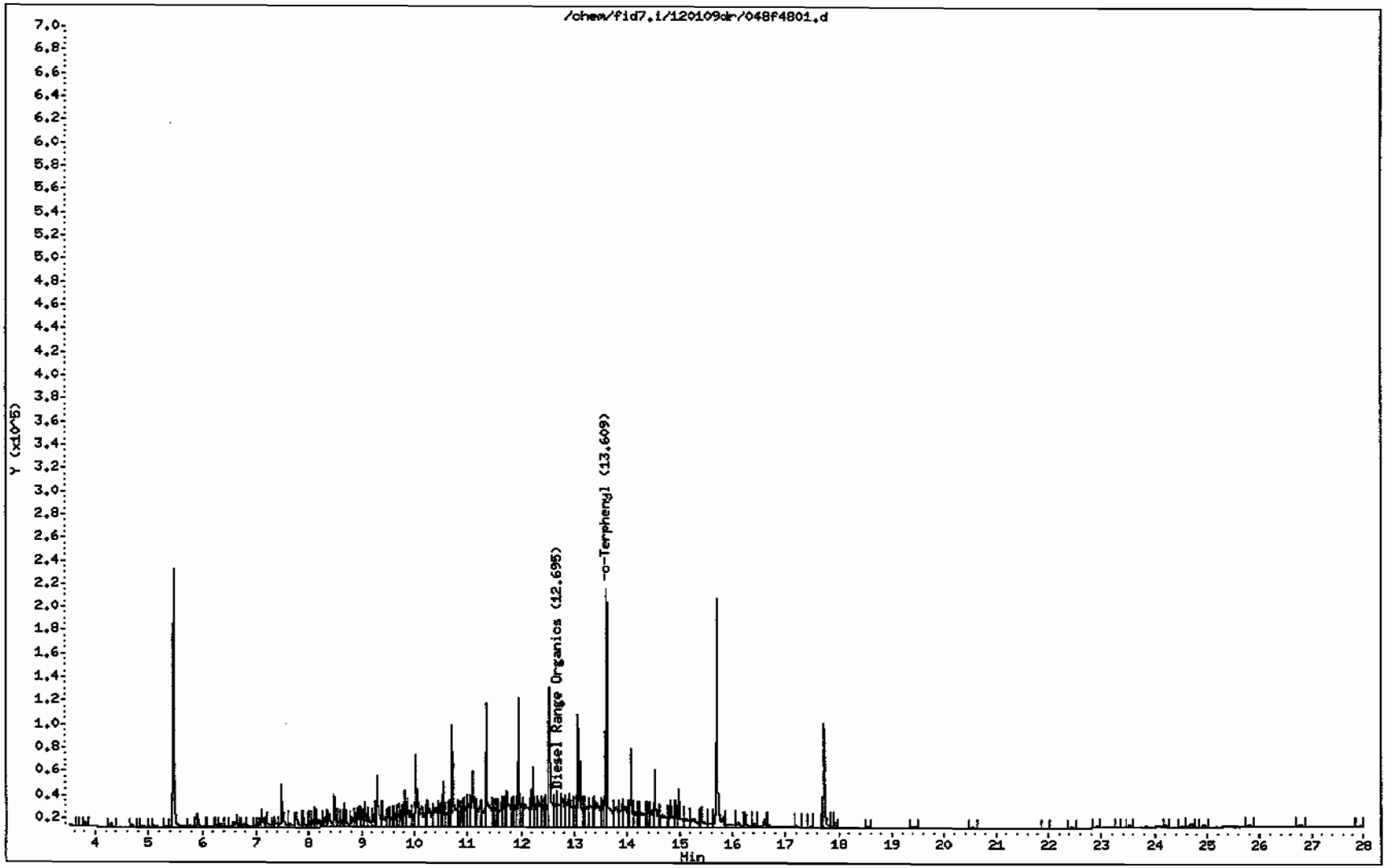

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 11/20/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111809DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	18-NOV-2009 20:26		SDGa07719	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	18-NOV-2009 21:03		SDGa00208	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	18-NOV-2009 21:40		SDGa07719	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	18-NOV-2009 22:17		SDGa07719	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	18-NOV-2009 22:54		SDGa07719	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	18-NOV-2009 23:31		SDGa07719	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	19-NOV-2009 00:07		SDGa07719	1.0		CAL. LEVEL 5
008f0801.d	WFI090928-01 D1	KXR2	19-NOV-2009 00:44		SDGa07719	1.0		PASSES, SECOND VENDOR ICV
009f0901.d	WFI090723-06 B2	KXR2	19-NOV-2009 01:21		SDGa07719	1.0		CLEAN
010f1001.d	1201974631	KXR2	19-NOV-2009 01:58	923777	10-435	1.0	MB	USE
011f1101.d	1201974632	KXR2	19-NOV-2009 02:36	923777	10-435	1.0	LCS	USE
012f1201.d	240828001	KXR2	19-NOV-2009 03:13	923777	10-435	1.0	LANL	USE
013f1301.d	240828002	KXR2	19-NOV-2009 03:50	923777	10-435	1.0	LANL	USE
014f1401.d	240828003	KXR2	19-NOV-2009 04:27	923777	10-435	1.0	LANL	USE
015f1501.d	240828004	KXR2	19-NOV-2009 05:04	923777	10-435	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	240828005	KXR2	19-NOV-2009 05:41	923777	10-435	1.0	LANL	USE

017f1701.d	240828006	KXR2	19-NOV-2009 06:18	923777	10-435		1.0	LANL	USE
018f1801.d	240828007	KXR2	19-NOV-2009 06:55	923777	10-435		1.0	LANL	USE
019f1901.d	240828008	KXR2	19-NOV-2009 07:31	923777	10-435		1.0	LANL	DUSE,OVERRANGE RERUN @10X SEE FILE 35
020f2001.d	240828009	KXR2	19-NOV-2009 08:09	923777	10-435		1.0	LANL	DUSE,SEE FILE 36
021f2101.d	UFI090911-02 D2	KXR2	19-NOV-2009 08:46		SDGa07719		1.0		PASSES
022f2201.d	WFI090723-06 B3	KXR2	19-NOV-2009 09:23		SDGa07719		1.0		CLEAN
023f2301.d	240828010	KXR2	19-NOV-2009 10:00	923777	10-435		20.0	LANL	USE
024f2401.d	240828011	KXR2	19-NOV-2009 10:37	923777	10-435		1.0	LANL	USE
025f2501.d	240865001	KXR2	19-NOV-2009 11:14	923777	10-444		1.0	LANL	USE
026f2601.d	240865002	KXR2	19-NOV-2009 11:50	923777	10-444		1.0	LANL	USE
027f2701.d	240865003	KXR2	19-NOV-2009 12:27	923777	10-444		1.0	LANL	USE
028f2801.d	240866001	KXR2	19-NOV-2009 13:04	923777	10-445		1.0	LANL	USE
029f2901.d	240866002	KXR2	19-NOV-2009 13:41	923777	10-445		1.0	LANL	USE
030f3001.d	241038002	KXR2	19-NOV-2009 14:18	923777	10-462		1.0	LANL	USE
031f3101.d	1201974633	KXR2	19-NOV-2009 14:55	923777	10-462		1.0	MS	USE
032f3201.d	1201974634	KXR2	19-NOV-2009 15:31	923777	10-462		1.0	MSD	USE
033f3301.d	UFI090911-02 D3	KXR2	19-NOV-2009 16:08		SDGa07719		1.0		PASSES
034f3401.d	WFI090723-06 B4	KXR2	19-NOV-2009 16:44		SDGa07719		1.0		CLEAN
035f3501.d	240828008	KXR2	19-NOV-2009 17:21	923777	10-435		10.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	240828009	KXR2	19-NOV-2009 17:59	923777	10-435	1.0	LANL	USE
037f3701.d	UFI091118-01 D4	KXR2	19-NOV-2009 18:36		SDGa07719	1.0		PASSES
038f3801.d	WFI090723-06 B5	KXR2	19-NOV-2009 19:13		SDGa07719	1.0		CLEAN
039f3901.d	1201975287	KXR2	19-NOV-2009 19:49	924008	241212	1.0	MB	USE
040f4001.d	1201975288	KXR2	19-NOV-2009 20:27	924008	241212	1.0	LCS	USE
041f4101.d	1201975292	KXR2	19-NOV-2009 21:04	924008	241212	1.0	LCSD	USE

042f4201.d	241212001	KXR2	19-NOV-2009 21:40	924008	241212	1.0	CONT	USE
043f4301.d	UFI091118-01 D5	KXR2	19-NOV-2009 22:18		SDGa07719	1.0		PASSES
044f4401.d	WFI090723-06 B6	KXR2	19-NOV-2009 22:54		SDGa07719	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 12/03/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:120109DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	01-DEC-2009 11:32		SDGa14584	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	01-DEC-2009 12:08		SDGa14584	1.0		RTMARKER
003f0301.d	WFI091118-02 D1	KXR2	01-DEC-2009 12:45		SDGa14584	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	01-DEC-2009 13:22		SDGa14584	1.0		CLEAN
005f0501.d	241540016	KXR2	01-DEC-2009 13:59	926874	10-604	10.0	LANL	USE
006f0601.d	241559001	KXR2	01-DEC-2009 14:35	926874	10-608-1	1.0	LANL	USE
007f0701.d	WFI091118-02 D2	KXR2	01-DEC-2009 15:12		SDGa14584	1.0		PASSES
008f0801.d	WFI091130-06 B3	KXR2	01-DEC-2009 15:49		SDGa14584	1.0		CLEAN
009f0901.d	1201983217	KXR2	01-DEC-2009 16:26	927561	10-650	1.0	MB	USE
010f1001.d	1201983218	KXR2	01-DEC-2009 17:03	927561	10-650	1.0	LCS	USE
011f1101.d	241714002	KXR2	01-DEC-2009 17:40	927561	10-650	1.0	LANL	USE
012f1201.d	241718001	KXR2	01-DEC-2009 18:17	927561	10-653	1.0	LANL	USE
013f1301.d	241728002	KXR2	01-DEC-2009 18:54	927561	10-654	1.0	LANL	USE
014f1401.d	241750002	KXR2	01-DEC-2009 19:31	927561	10-655	1.0	LANL	USE
015f1501.d	241750003	KXR2	01-DEC-2009 20:08	927561	10-655	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241750004	KXR2	01-DEC-2009 20:44	927561	10-655	1.0	LANL	USE

017f1701.d	241750005	KXR2	01-DEC-2009 21:21	927561	10-655		1.0	LANL	USE
018f1801.d	WFI091118-02 D3	KXR2	01-DEC-2009 21:58		SDGa14584		1.0		PASSES
019f1901.d	WFI091130-06 B4	KXR2	01-DEC-2009 22:35		SDGa14584		1.0		CLEAN
020f2001.d	241750006	KXR2	01-DEC-2009 23:12	927561	10-655		1.0	LANL	USE
021f2101.d	241750007	KXR2	01-DEC-2009 23:49	927561	10-655		1.0	LANL	USE
022f2201.d	241750008	KXR2	02-DEC-2009 00:26	927561	10-655		1.0	LANL	USE
023f2301.d	241750009	KXR2	02-DEC-2009 01:03	927561	10-655		1.0	LANL	USE
024f2401.d	241750010	KXR2	02-DEC-2009 01:40	927561	10-655		1.0	LANL	USE
025f2501.d	241750011	KXR2	02-DEC-2009 02:16	927561	10-655		1.0	LANL	USE
026f2601.d	241899001	KXR2	02-DEC-2009 02:53	927561	10-687		20.0	LANL	DUSE,OVERRANGE RERUN @ 200X
027f2701.d	1201983219	KXR2	02-DEC-2009 03:31	927561	10-687		20.0	MS	DUSE,OVERRANGE RERUN @ 200X
028f2801.d	1201983220	KXR2	02-DEC-2009 04:08	927561	10-687		20.0	MSD	DUSE,OVERRANGE RERUN @ 200X
029f2901.d	WFI091118-02 D4	KXR2	02-DEC-2009 04:45		SDGa14584		1.0		PASSES
030f3001.d	WFI091130-06 B5	KXR2	02-DEC-2009 05:22		SDGa14584		1.0		CLEAN
031f3101.d	1201982260	KXR2	02-DEC-2009 05:58	927152	10-644		1.0	MB	USE
032f3201.d	1201982263	KXR2	02-DEC-2009 06:36	927152	10-644		1.0	LCS	USE
033f3301.d	241615001	KXR2	02-DEC-2009 07:13	927152	10-644		1.0	LANL	USE
034f3401.d	241615002	KXR2	02-DEC-2009 07:49	927152	10-644		1.0	LANL	USE
035f3501.d	241615003	KXR2	02-DEC-2009 08:26	927152	10-644		1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241615004	KXR2	02-DEC-2009 09:02	927152	10-644	1.0	LANL	USE
037f3701.d	241615005	KXR2	02-DEC-2009 09:39	927152	10-644	1.0	LANL	USE
038f3801.d	241615006	KXR2	02-DEC-2009 10:16	927152	10-644	1.0	LANL	USE
039f3901.d	WFI091118-02 D5	KXR2	02-DEC-2009 10:53		SDGa14584	1.0		PASSES
040f4001.d	WFI091130-06 B6	KXR2	02-DEC-2009 11:29		SDGa14584	1.0		CLEAN
041f4101.d	241615007	KXR2	02-DEC-2009 12:07	927152	10-644	1.0	LANL	USE

042f4201.d	241615008	KXR2	02-DEC-2009 12:43	927152	10-644		1.0	LANL	USE
043f4301.d	241615009	KXR2	02-DEC-2009 13:20	927152	10-644		1.0	LANL	USE
044f4401.d	241615010	KXR2	02-DEC-2009 13:56	927152	10-644		1.0	LANL	USE
045f4501.d	241615011	KXR2	02-DEC-2009 14:34	927152	10-644		1.0	LANL	USE
046f4601.d	241615012	KXR2	02-DEC-2009 15:11	927152	10-644		1.0	LANL	USE
047f4701.d	1201982261	KXR2	02-DEC-2009 15:47	927152	10-644		1.0	MS	USE
048f4801.d	1201982262	KXR2	02-DEC-2009 16:25	927152	10-644		1.0	MSD	USE
049f4901.d	WFI091118-02 D6	KXR2	02-DEC-2009 17:01		SDGa14584		1.0		PASSES
050f5001.d	WFI091130-06 B7	KXR2	02-DEC-2009 17:38		SDGa14584		1.0		CLEAN
051f5101.d	241615013	KXR2	02-DEC-2009 18:15	927152	10-644		1.0	LANL	USE
052f5201.d	241615014	KXR2	02-DEC-2009 18:53	927152	10-644		1.0	LANL	USE
053f5301.d	241615015	KXR2	02-DEC-2009 19:30	927152	10-644		1.0	LANL	USE
054f5401.d	241615016	KXR2	02-DEC-2009 20:07	927152	10-644		1.0	LANL	USE
055f5501.d	241615018	KXR2	02-DEC-2009 20:44	927152	10-644		1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241615020	KXR2	02-DEC-2009 21:21	927152	10-644	1.0	LANL	USE
057f5701.d	241697003	KXR2	02-DEC-2009 21:58	927152	10-648	1.0	LANL	USE
058f5801.d	241697004	KXR2	02-DEC-2009 22:35	927152	10-648	1.0	LANL	USE
059f5901.d	WFI091118-02 D7	KXR2	02-DEC-2009 23:12		SDGa14584	1.0		PASSES
060f6001.d	WFI091130-06 B8	KXR2	02-DEC-2009 23:49		SDGa14584	1.0		CLEAN
061f6101.d	241899001	KXR2	03-DEC-2009 00:26	927561	10-687	200.0	LANL	USE
062f6201.d	1201983219	KXR2	03-DEC-2009 01:03	927561	10-687	200.0	MS	USE
063f6301.d	1201983220	KXR2	03-DEC-2009 01:40	927561	10-687	200.0	MSD	USE
064f6401.d	WFI091118-02 D8	KXR2	03-DEC-2009 02:17		SDGa14584	1.0		PASSES
065f6501.d	WFI091130-06 B9	KXR2	03-DEC-2009 02:54		SDGa14584	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927151 **Verified by:** _____

Analyst: Robin Hunt

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982260 MB	30-NOV-2009 11:58:32	30	1	0.03333
1201982263 LCS	30-NOV-2009 11:58:32	30	1	0.03333
241615001	30-NOV-2009 11:58:32	30	1	0.03333
241615002	30-NOV-2009 11:58:32	30	1	0.03333
241615003	30-NOV-2009 11:58:32	30	1	0.03333
241615004	30-NOV-2009 11:58:32	30.01	1	0.03332
241615005	30-NOV-2009 11:58:32	30.01	1	0.03332
241615006	30-NOV-2009 11:58:32	30.04	1	0.03329
241615007	30-NOV-2009 11:58:32	30.03	1	0.0333
241615008	30-NOV-2009 11:58:32	30.03	1	0.0333
241615009	30-NOV-2009 11:58:32	30.02	1	0.03331
241615010	30-NOV-2009 11:58:32	30.07	1	0.03326
241615011	30-NOV-2009 11:58:32	30	1	0.03333
241615012	30-NOV-2009 11:58:32	30.03	1	0.0333
1201982261 MS (241615012)	30-NOV-2009 11:58:32	30	1	0.03333
1201982262 MSD (241615012)	30-NOV-2009 11:58:32	30	1	0.03333
241615013	30-NOV-2009 11:58:32	30.02	1	0.03331
241615014	30-NOV-2009 11:58:32	30.04	1	0.03329
241615015	30-NOV-2009 11:58:32	30	1	0.03333
241615016	30-NOV-2009 11:58:32	30.02	1	0.03331
241615018	30-NOV-2009 11:58:32	30.09	1	0.03323
241615020	30-NOV-2009 11:58:32	30	1	0.03333
241697003	30-NOV-2009 11:58:32	30	1	0.03333
241697004	30-NOV-2009 11:58:32	30	1	0.03333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982263	TPH DRO LCS	UE091030-08	1	mL
MS	1201982261	TPH DRO LCS	UE091030-08	1	mL
MSD	1201982262	TPH DRO LCS	UE091030-08	1	mL
SURR	All	20 ppm surrogate	WE091121-04	1	mL
REGNT	All	Methylene Chloride	1234878-D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: JAM

Final Solvent: CH2Cl2

GC Volatile GRO Analysis

GC Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-644

Method/Analysis Information

Procedure:	Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector
Analytical Method:	SW846 8015B VOC
Prep Method:	SW846 8015B PREP
Analytical Batch Number:	928567
Prep Batch Number:	928566

Sample Analysis

The following client and quality control samples were analyzed to complete this sample delivery group/work order using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241615018	RE03-10-2729
1201985572	Method Blank (MB)
1201985575	Laboratory Control Sample (LCS)
1201985573	241615018(RE03-10-2729) Post Spike (PS)
1201985574	241615018(RE03-10-2729) Post Spike Duplicate (PSD)

The samples in this SDG were analyzed on a "dry weight" basis.

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Gasoline Range Organics will be designated as GRO throughout this case narrative.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 20.2.6.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-004 REV# 18.

Calibration Information

Due to the limited capacity of software, all of the current initial calibration files may not be displayed. If necessary, a calibration history report was inserted, prior to the appropriate Form 6, in the Standards section in the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries, in all samples and quality control samples, were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241615018 (RE03-10-2729) was selected for analysis as the matrix spike.

Matrix Spike (PS) Recovery Statement
The GRO recovery was within the acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The GRO recovery was within the acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD between the matrix spike pair met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A NCR was not required for this sample delivery group/work order.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check(s), and samples may have been manually integrated to correct misidentification of peaks by the integration software.

Additional Comments
Additional comments were not required for this SDG.

System Configuration
The GRO Organics analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOC4A.I	Agilent 6890N FID	HP6890N GC/FID	DB-624	0.53mm x 3.0u x 15m	Tekmar #1

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-644 GEL Work Order: 241615

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 12 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-644 GRO

This roadmap was analyzed by ACJ on 12-04-2009, 16:49.
This roadmap was reviewed by kel00587 on 12-07-2009, 10:17.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/voc4a.i/120209/4n300006.d	241615018	02-DEC-2009	17:21	GRO.sub	RE03-10-2729	1	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/voc4a.i/120209/4n300013.d	1201985573	ms	02-DEC-2009	20:49	GRO.sub	RE03-10-2729MS	1	
☐	N	/chem/voc4a.i/120209/4n300014.d	1201985574	msd	02-DEC-2009	21:19	GRO.sub	RE03-10-2729MSD	1	
☐	Y	/chem/voc4a.i/120209/4n300002LL.d	1201985575	lcs	02-DEC-2009	11:34	GRO.sub	LCS	1.00000	
☐	Y	/chem/voc4a.i/120209/4n300003BL.d	1201985572	mb	02-DEC-2009	12:04	GRO.sub	BLANK	1.00000	

Sample Data Summary

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	928567	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/02/2009 17:21	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/02/2009 16:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n300006.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	54.7	ug/kg	12.3	54.7

QC Summary

GC Volatiles (GRO)

Surrogate Recovery Report

SDG Number: 10-644

Matrix Type: SOLID

CAP Column (1) : Rtx-Volatiles

Sample ID	Client ID	BFB %REC
1201985575	LCS for batch 928566	94
1201985572	MB for batch 928566	96
241615018	RE03-10-2729	82
1201985573	RE03-10-2729PS	81
1201985574	RE03-10-2729PSD	81

Surrogate	Acceptance Limits
BFB = Bromofluorobenzene	(26%-143%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-10-2729PS
Lab Sample ID: 1201985573
Instrument: VOC4A.I
Analyst: ACJ
Aliquot: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 8.6
Analysis Date: 12/02/2009 20:49
Prep Batch ID: 928566
Batch ID: 928567

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
	PS	Gasoline Range Organics	500	0.00	U	476	95	5-138

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-10-2729PSD
Lab Sample ID: 1201985574
Instrument: VOC4A.I
Analyst: ACJ
Aliquot: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 8.6
Analysis Date: 12/02/2009 21:19
Prep Batch ID: 928566
Batch ID: 928567
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
PSD	Gasoline Range Organics	500	0.00	U	421	84	5-138	12	0-30

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number: 10-644

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 928566

Matrix: SOIL

Lab Sample ID: 1201985575

Instrument: VOC4A.I

Analysis Date: 12/02/2009 11:34

Dilution: 1

Analyst: ACJ

Prep Batch ID: 928566

Aliquot: 5 mL

Batch ID: 928567

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
	LCS	Gasoline Range Organics	500	0.0	538	108	85-123

Method Blank Summary

SDG Number:	10-644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928566	Instrument ID:	VOC4A.I	Data File:	4n300003BL.d
Lab Sample ID:	1201985572	Prep Date:	12/02/2009 11:30	Analyzed:	12/02/09 12:04
Column:	Rtx-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 928566	1201985575	4n300002LL.d	12/02/09	1134
02	RE03-10-2729	241615018	4n300006.d	12/02/09	1721
03	RE03-10-2729PS	1201985573	4n300013.d	12/02/09	2049
04	RE03-10-2729PSD	1201985574	4n300014.d	12/02/09	2119

Sample Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	928567	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/02/2009 17:21	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/02/2009 16:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n300006.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	54.7	ug/kg	12.3	54.7

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SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300006.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 02-DEC-2009 17:21
Operator : ACJ Inst ID: voc4a.i
Smp Info : |241615018|1|
Misc Info : |VOC8015_LF|928567|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.61540	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.512	9.513	-0.001	37800454	40.9093	44.8

Data File: /chem/voc4a.i/120209/4n300006.d
Date : 02-DEC-2009 17:21
Client ID: RE03-10-2729
Sample Info: |241615018|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

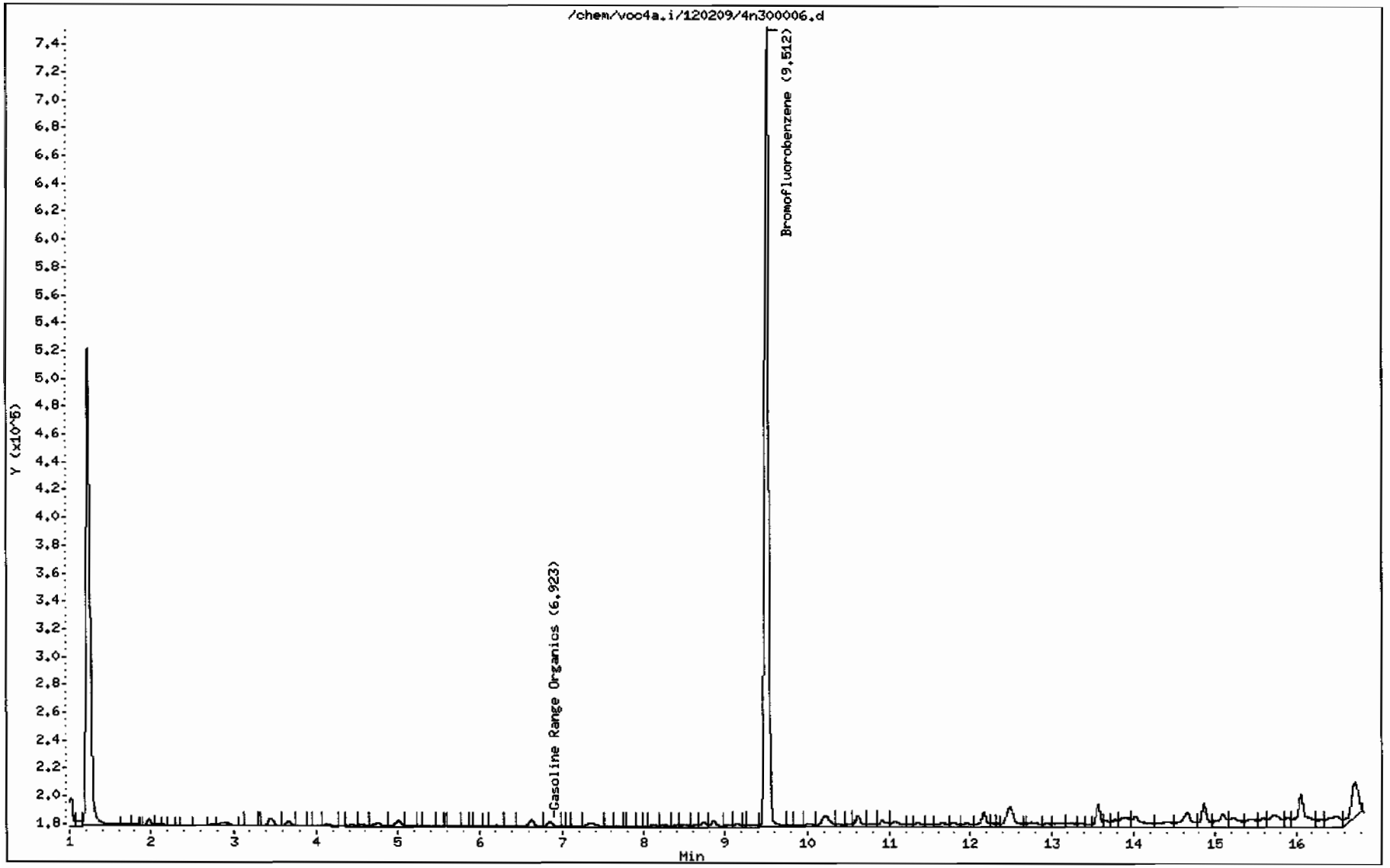

Standard Data

Report Date: 03-Dec-2009 22:03

Calibration History

Method : /chem/voc4a.i/120209/8015GRO-111909.m
Start Cal Date: 19-NOV-2009 23:12
End Cal Date : 20-NOV-2009 02:10

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 50.00000		
19-NOV-2009 23:12	GRO	/chem/voc4a.i/111909/41400011.d
Cal Level: 2 , Cal Amount: 100.00000		
19-NOV-2009 23:42	GRO	/chem/voc4a.i/111909/41400012.d
Cal Level: 3 , Cal Amount: 250.00000		
20-NOV-2009 00:12	GRO	/chem/voc4a.i/111909/41400013.d
Cal Level: 4 , Cal Amount: 500.00000		
20-NOV-2009 00:42	GRO	/chem/voc4a.i/111909/41400014.d
Cal Level: 5 , Cal Amount: 750.00000		
20-NOV-2009 01:11	GRO	/chem/voc4a.i/111909/41400015.d
Cal Level: 6 , Cal Amount: 1000.00000		
20-NOV-2009 01:41	GRO	/chem/voc4a.i/111909/41400016.d
Cal Level: 7 , Cal Amount: 2000.00000		
20-NOV-2009 02:10	GRO	/chem/voc4a.i/111909/41400017.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 500		
03-DEC-2009 01:51	GRO	/chem/voc4a.i/120209/4n300023.d
Ccal Level: 4 , Ccal Amount: 500		
02-DEC-2009 22:23	GRO	/chem/voc4a.i/120209/4n300016.d
Ccal Level: 4 , Ccal Amount: 500		
02-DEC-2009 21:48	GRO	/chem/voc4a.i/120209/4n300015.d
Ccal Level: 4 , Ccal Amount: 500		

02-DEC-2009 13:13	GRO	/chem/voc4a.i/120209/4n300005.d
Ccal Level: 4 , Ccal Amount: 500		
02-DEC-2009 11:34	GRO	/chem/voc4a.i/120209/4n300002.d

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INITIAL CALIBRATION DATA

Start Cal Date : 19-NOV-2009 23:12
End Cal Date : 20-NOV-2009 02:10
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem/voc4a.i/120209/8015GRO-111909.m
Cal Date : 03-Dec-2009 15:40 amj
Curve Type : Average

Calibration File Names:
Level 1: /chem/voc4a.i/111909/41400011.d
Level 2: /chem/voc4a.i/111909/41400012.d
Level 3: /chem/voc4a.i/111909/41400013.d
Level 4: /chem/voc4a.i/111909/41400014.d
Level 5: /chem/voc4a.i/111909/41400015.d
Level 6: /chem/voc4a.i/111909/41400016.d
Level 7: /chem/voc4a.i/111909/41400017.d

Compound	50.000 Level 1	100.000 Level 2	250.000 Level 3	500.000 Level 4	750.000 Level 5	1000.000 Level 6	2000.000 Level 7	___ RRF	% RSD
S 1 Gasoline Range Organics	1255205	1274066	1246296	1312469	1288300	1298519	1299511	1282052	1.911
2 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 3 Bromofluorobenzene	+++++	992384	952106	929271	921927	925641	822707	924006	6.076

Data File: /chem/voc4a.i/111909/41400019.d
Report Date: 20-Nov-2009 11:25

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i
Lab File ID: 41400019.d
Analysis Type: WATER
Lab Sample ID: GROICV
Method: /chem/voc4a.i/111909/8015GRO-111909.m

Injection Date: 20-NOV-2009 03:10
Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Init. Cal. Times: 23:12 02:10
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 Gasoline Range Organics	1282052	1304800	0.010	1.77435	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	927628	0.010	0.39196	15.00000	Averaged

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SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/111909/41400019.d
Lab Smp Id: GROICV Client Smp ID: VSTD0500
Inj Date : 20-NOV-2009 03:10
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROICV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/111909/8015GRO-111909.m
Meth Date : 20-Nov-2009 11:25 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics						CAS #:
	2.888-	10.945		652400203	500.000	509
$ 3 Bromofluorobenzene						CAS #: 460-00-4
	9.513	9.513	0.000	46381387	50.0000	50.2

Data File: /chem/voc4a.i/111909/41400019.d
Date : 20-NOV-2009 03:10
Client ID: VSTD0500
Sample Info: IGROICVI
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i
Operator: ACJ
Column diameter: 0.25

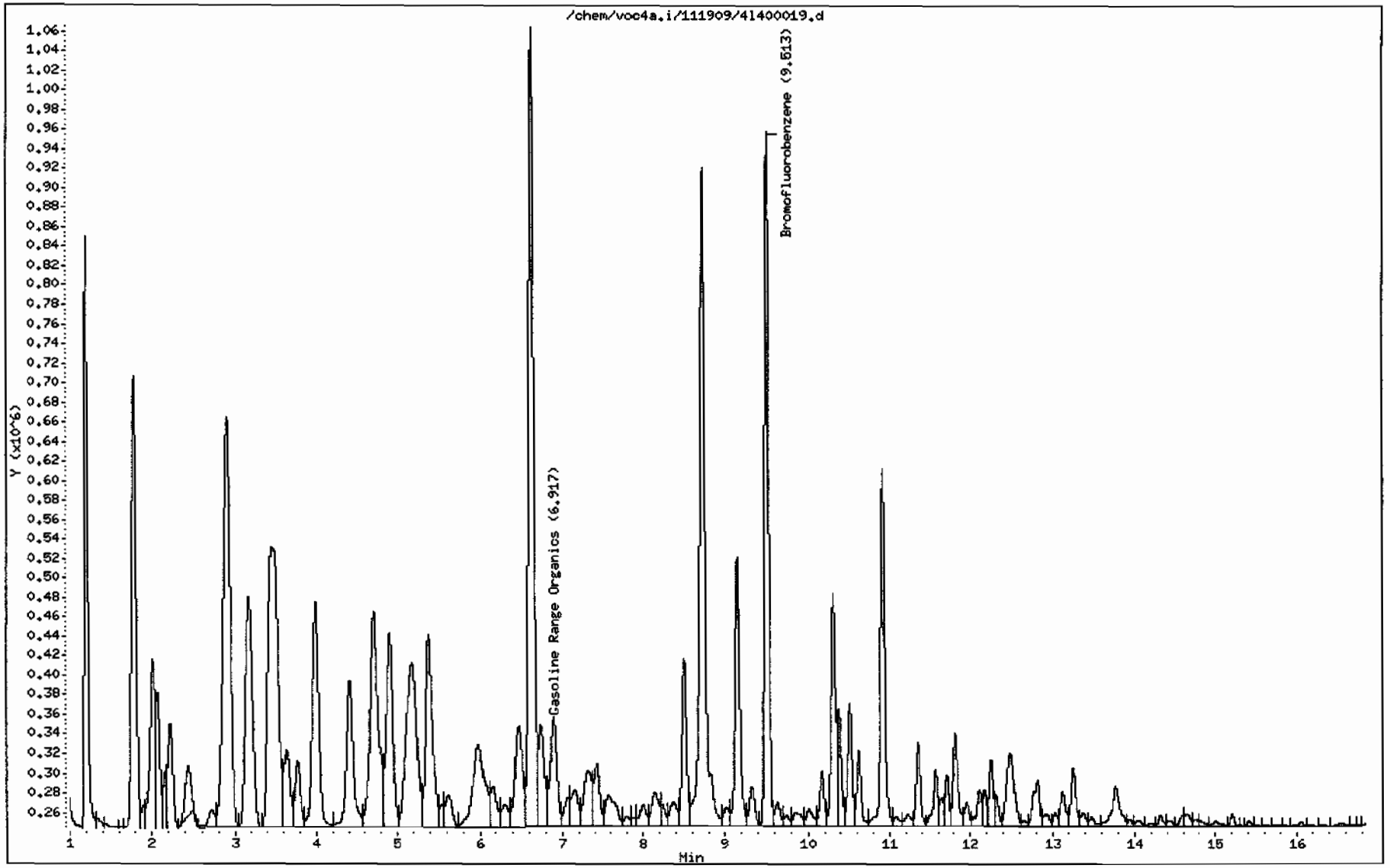

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i Injection Date: 02-DEC-2009 11:34
Lab File ID: 4n300002.d Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:12 02:10
Lab Sample ID: GROCCV/LCS Quant Type: ESTD
Method: /chem/voc4a.i/120209/8015GRO-111909.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1378614	0.010	7.53184	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	870269	0.010	-5.81569	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300002.d
Lab Smp Id: GROCCV/LCS Client Smp ID: VSTD0500
Inj Date : 02-DEC-2009 11:34
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV/LCS|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics					CAS #:
2.903- 10.944			689307212	500.000	538
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.513	9.513	0.000	43513433	50.0000	47.1

Data File: /chem/voc4a.i/120209/4n300002.d
Date : 02-DEC-2009 11:34
Client ID: VSTD0500
Sample Info: IGROCCV/LCSI
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

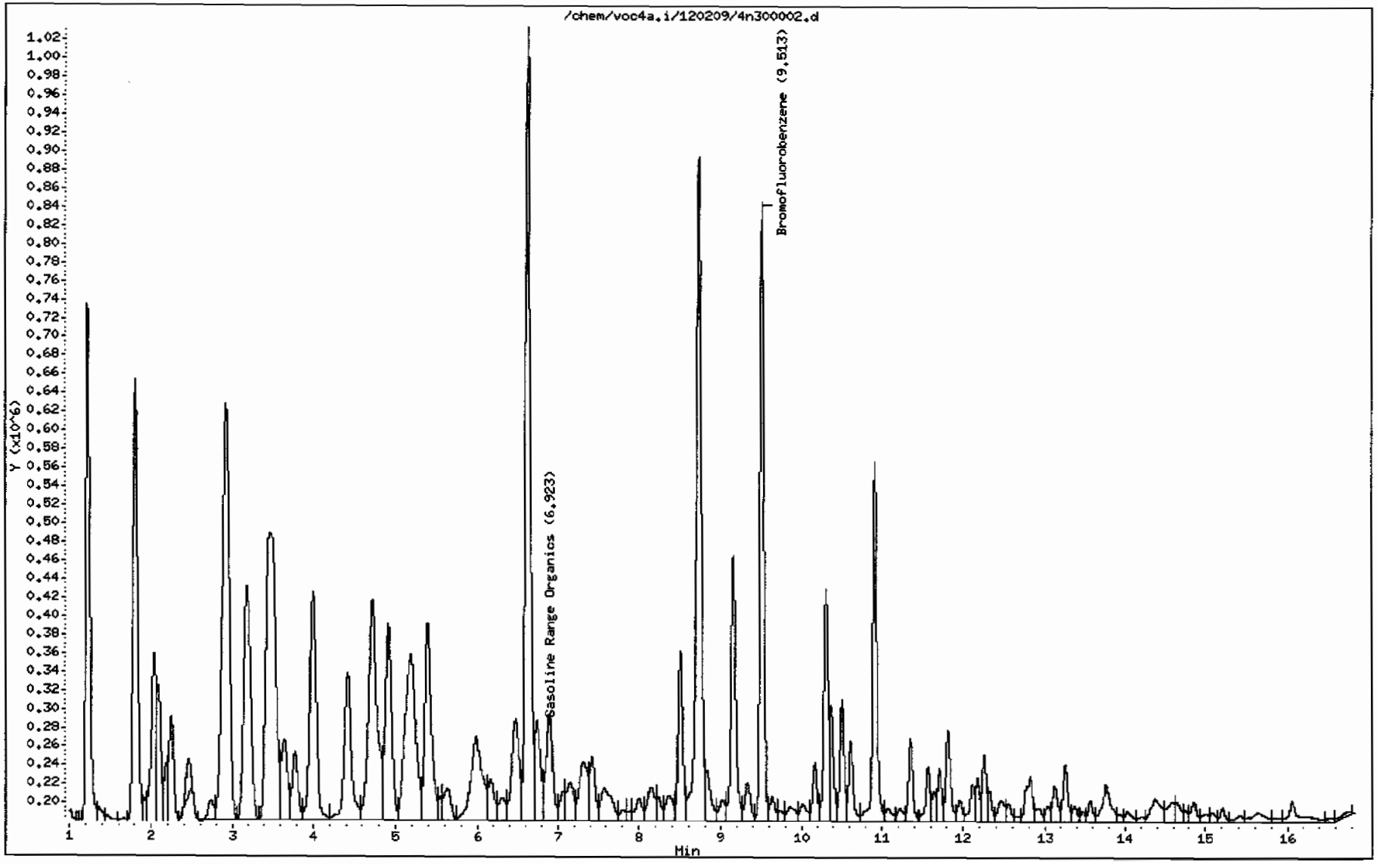

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i Injection Date: 02-DEC-2009 13:13
Lab File ID: 4n300005.d Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Analysis Type: WATER Init. Cal. Times: 23:12 02:10
Lab Sample ID: GROCCV Quant Type: ESTD
Method: /chem/voc4a.i/120209/8015GRO-111909.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1354025	0.010	5.61388	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	819806	0.010	-11.27703	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300005.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 02-DEC-2009 13:13
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 Gasoline Range Organics					CAS #:
	2.903-	10.944		677012592	500.000	528
$	3 Bromofluorobenzene					CAS #: 460-00-4
	9.513	9.513	0.000	40990280	50.0000	44.4

Data File: /chem/voc4a.i/120209/4n300005.d

Date : 02-DEC-2009 13:13

Client ID: VSTD0500

Sample Info: |GROCCV|

Purge Volume: 5.0

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

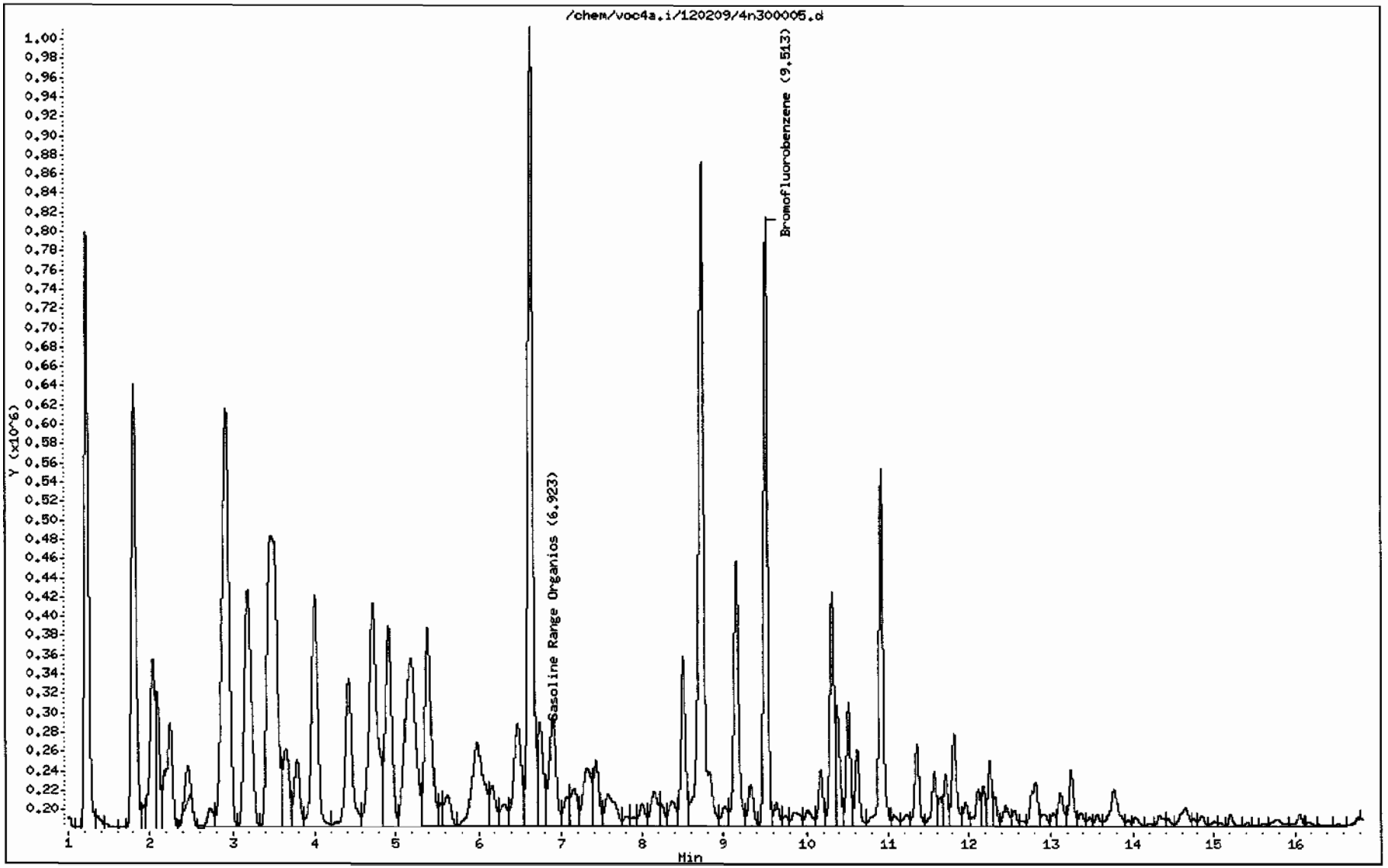

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i
Lab File ID: 4n300016.d
Analysis Type: WATER
Lab Sample ID: GROCCV
Method: /chem/voc4a.i/120209/8015GRO-111909.m

Injection Date: 02-DEC-2009 22:23
Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Init. Cal. Times: 23:12 02:10
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1466718	0.010	14.40395	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	895045	0.010	-3.13424	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300016.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 02-DEC-2009 22:23
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics						CAS #:
	2.903-	10.944		733359233	500.000	572
$ 3 Bromofluorobenzene						CAS #: 460-00-4
	9.514	9.513	0.001	44752274	50.0000	48.4

Data File: /chem/voc4a.i/120209/4n300016.d
Date : 02-DEC-2009 22:23
Client ID: VSTD0500
Sample Info: IGROCCVI
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i
Operator: ACJ
Column diameter: 0.25

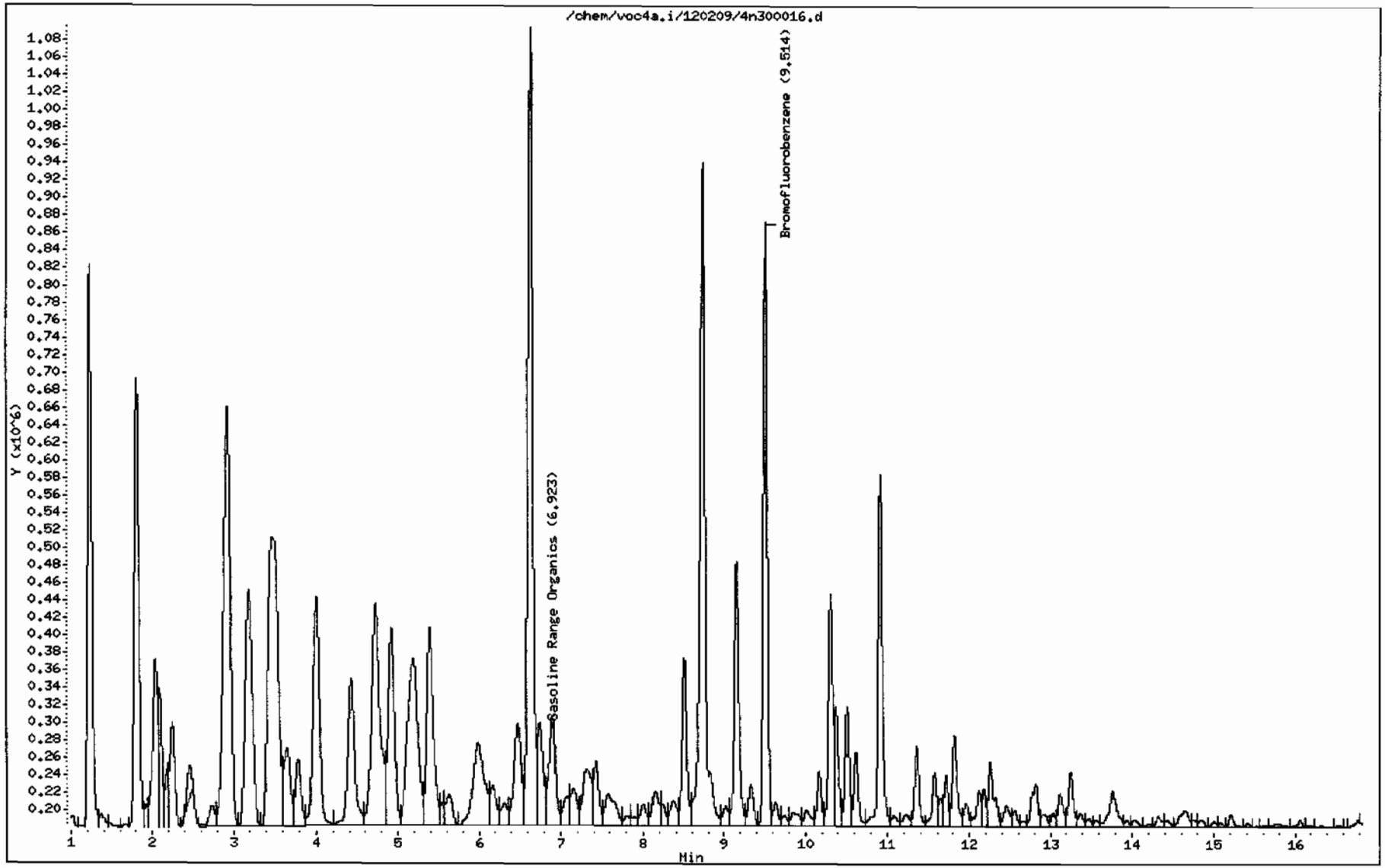

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i
Lab File ID: 4n300023.d
Analysis Type: WATER
Lab Sample ID: GROCCV
Method: /chem/voc4a.i/120209/8015GRO-111909.m

Injection Date: 03-DEC-2009 01:51
Init. Cal. Date(s): 19-NOV-2009 20-NOV-2009
Init. Cal. Times: 23:12 02:10
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1282052	1449252	0.010	13.04160	15.00000	Averaged
$ 3 Bromofluorobenzene	924006	1021546	0.010	10.55616	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300023.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 03-DEC-2009 01:51
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics					CAS #:
2.903-	10.944		724626229	500.000	565
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.515	9.513	0.002	51077281	50.0000	55.3

Data File: /chem/voc4a.i/120209/4n300023.d
Date : 03-DEC-2009 01:51
Client ID: VSTD0500
Sample Info: |GROCCV|
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i
Operator: ACJ
Column diameter: 0.25

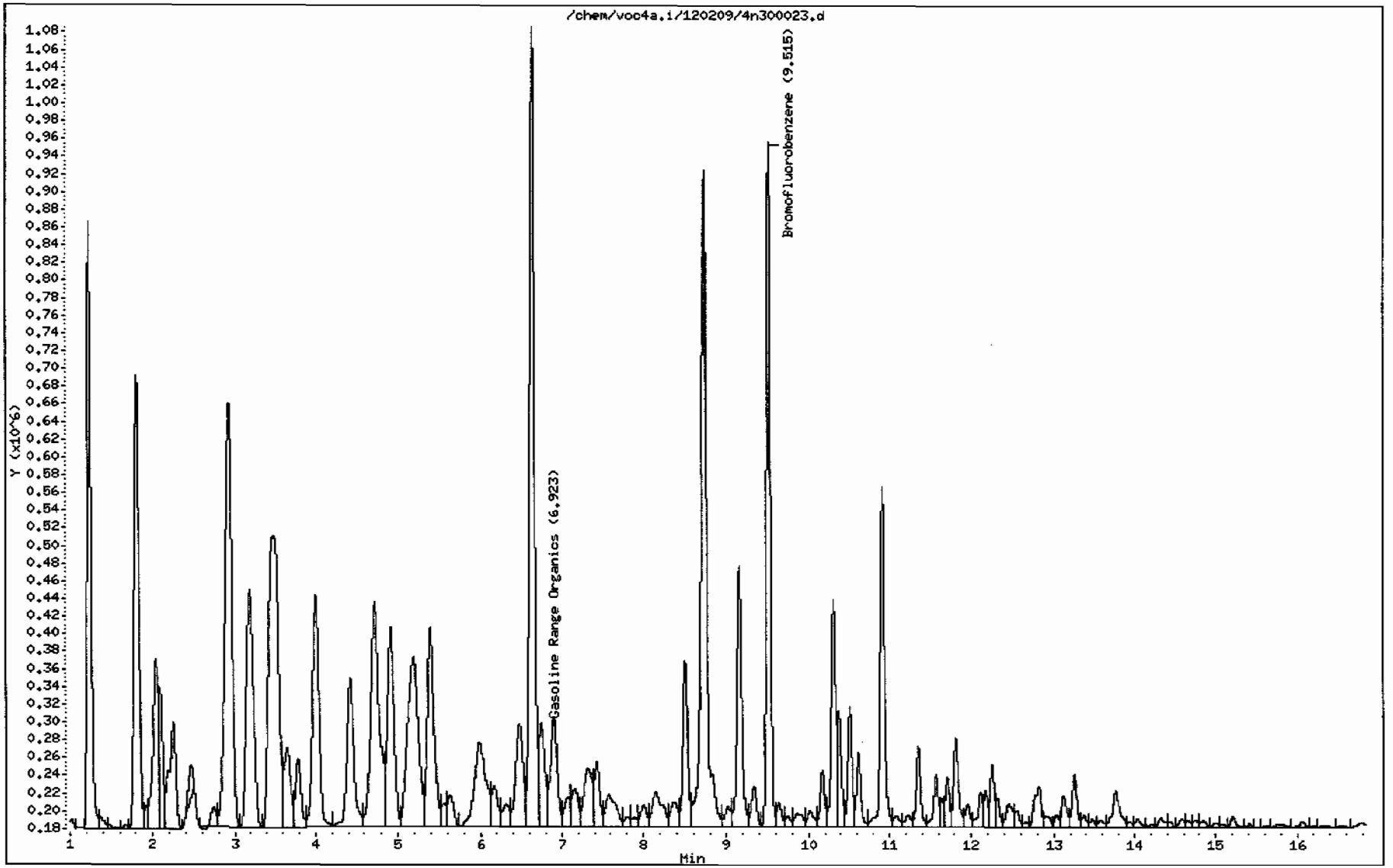

Analytical Sequence

Lab Name: GEL Laboratories LLC **Client SDG:** 10-644

GC Column: Rtx-Volatiles **Init. Calibration Dates:** 19-NOV-09 23:12 - 20-NOV-09 02:10

Instrument ID: VOC4A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

	Mean Surrogate RT From Initial Calibration:			9.51
	RT Range Based on Calibration Verification:			9.48 9.54 #
	Sample Number	**Lab Sample ID**	**Analysis Date**	**Bromofluorobenzene**
1	VSTD0050	VSTD0050	19-NOV-09 23:12	9.51
2	VSTD0100	VSTD0100	19-NOV-09 23:42	9.51
3	VSTD0250	VSTD0250	20-NOV-09 00:12	9.51
4	VSTD0500	VSTD0500	20-NOV-09 00:42	9.51
5	VSTD0750	VSTD0750	20-NOV-09 01:11	9.51
6	VSTD1000	VSTD1000	20-NOV-09 01:41	9.51
7	VSTD2000	VSTD2000	20-NOV-09 02:10	9.51
8	VSTD0500	GROICV	20-NOV-09 03:10	9.51

Column used to flag retention time values with an asterisk.

Analytical Sequence

Lab Name: GEL Laboratories LLC **Client SDG:** 10-644

GC Column: Rtx-Volatiles **Init. Calibration Dates:** 19-NOV-09 23:12 - 20-NOV-09 02:10

Instrument ID: VOC4A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

	Mean Surrogate RT From Initial Calibration: RT Range Based on Calibration Verification:			9.51 9.48 9.54 #
	Sample Number	**Lab Sample ID**	**Analysis Date**	**Bromofluorobenzene**
1	VSTD0500	GROCCV/LCS	02-DEC-09 11:34	9.51
2	ZZZZZZZ	ZZZZZZZ	02-DEC-09 11:34	9.51
3	BLK01LCS	1201985575	02-DEC-09 11:34	9.51
4	ZZZZZZZ	ZZZZZZZ	02-DEC-09 12:04	9.51
5	BLANK	1201985572	02-DEC-09 12:04	9.51
6	ZZZZZZZ	ZZZZZZZ	02-DEC-09 12:41	9.51
7	VSTD0500	GROCCV	02-DEC-09 13:13	9.51
8	RE03-10-2729	241615018	02-DEC-09 17:21	9.51
9	ZZZZZZZ	ZZZZZZZ	02-DEC-09 17:51	9.51
10	ZZZZZZZ	ZZZZZZZ	02-DEC-09 18:21	9.51
11	ZZZZZZZ	ZZZZZZZ	02-DEC-09 18:50	9.51
12	ZZZZZZZ	ZZZZZZZ	02-DEC-09 19:20	9.51
13	ZZZZZZZ	ZZZZZZZ	02-DEC-09 19:50	9.51
14	ZZZZZZZ	ZZZZZZZ	02-DEC-09 20:20	9.51
15	RE03-10-2729PS	1201985573	02-DEC-09 20:49	9.51
16	RE03-10-2729PSD	1201985574	02-DEC-09 21:19	9.51
17	ZZZZZZZ	ZZZZZZZ	02-DEC-09 21:48	9.51
18	VSTD0500	GROCCV	02-DEC-09 22:23	9.51
19	ZZZZZZZ	ZZZZZZZ	02-DEC-09 22:52	9.51
20	ZZZZZZZ	ZZZZZZZ	02-DEC-09 23:22	9.51
21	ZZZZZZZ	ZZZZZZZ	02-DEC-09 23:52	9.51
22	ZZZZZZZ	ZZZZZZZ	03-DEC-09 00:22	9.51
23	ZZZZZZZ	ZZZZZZZ	03-DEC-09 00:52	9.52
24	ZZZZZZZ	ZZZZZZZ	03-DEC-09 01:22	9.52
25	VSTD0500	GROCCV	03-DEC-09 01:51	9.51

Column used to flag retention time values with an asterisk.

QC Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201985572				
Client Sample:	QC for batch 928566	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 928566	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	928567	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/02/2009 12:04	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/02/2009 11:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n300003BL.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	50.0	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300003BL.d
Lab Smp Id: 1201985572 Client Smp ID: BLANK
Inj Date : 02-DEC-2009 12:04
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201985572|1|
Misc Info : |VOC8015_LF|928567|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.513	9.513	0.000	44367631	48.0166	48.0

Data File: /chem/voc4a.i/120209/4n300003BL.d
Date : 02-DEC-2009 12:04
Client ID: BLANK
Sample Info: |1201985572|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

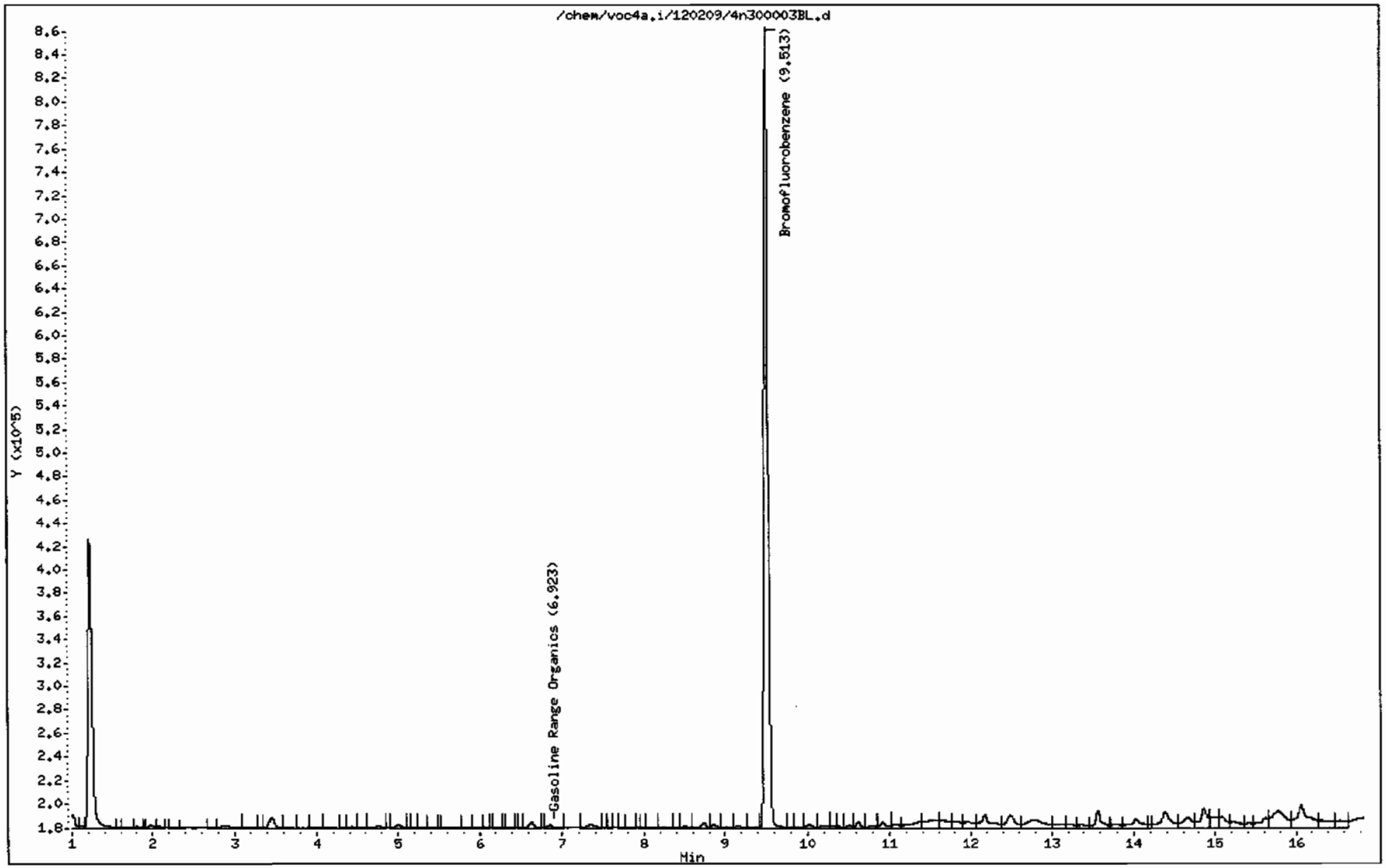

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201985575				
Client Sample:	QC for batch 928566	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 928566	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	928567	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/02/2009 11:34	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/02/2009 11:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n300002LL.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		538	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300002LL.d
Lab Smp Id: 1201985575 Client Smp ID: LCS
Inj Date : 02-DEC-2009 11:34
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201985575|1|
Misc Info : |VOC8015_LF|928567|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.903-	10.944		689307212	537.659	538
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.513	9.513	0.000	43513433	47.0922	47.1

Data File: /chem/voc4a.i/120209/4n300002LL.d
Date : 02-DEC-2009 11:34
Client ID: LCS
Sample Info: |120198557511|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

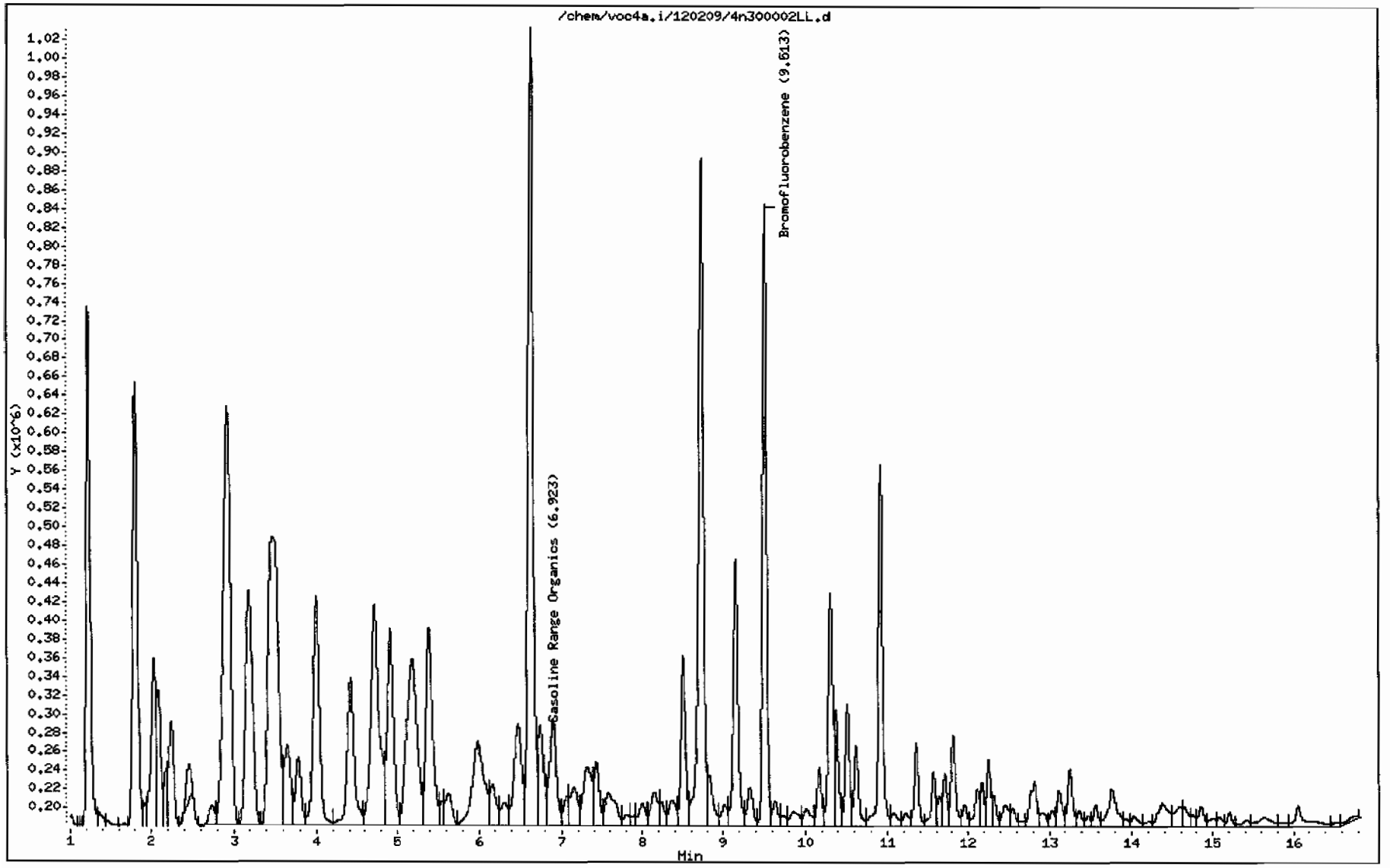

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201985573	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
Client Sample:	QC for batch 928566	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-10-2729PS	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	928567	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/02/2009 20:49	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/02/2009 16:31	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n300013.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		521	ug/kg	12.3	54.7

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300013.d
Lab Smp Id: 1201985573 Client Smp ID: RE03-10-2729MS
Inj Date : 02-DEC-2009 20:49
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201985573|1|
Misc Info : |VOC8015_LF|928567|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.61540	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S	1 Gasoline Range Organics					CAS #:
	2.903-	10.944		610833061	476.449	521
$	3 Bromofluorobenzene					CAS #: 460-00-4
	9.514	9.513	0.001	37602267	40.6948	44.5

Data File: /chem/voc4a.i/120209/4n300013.d
Date : 02-DEC-2009 20:49
Client ID: RE03-10-2729MS
Sample Info: |120198557311|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

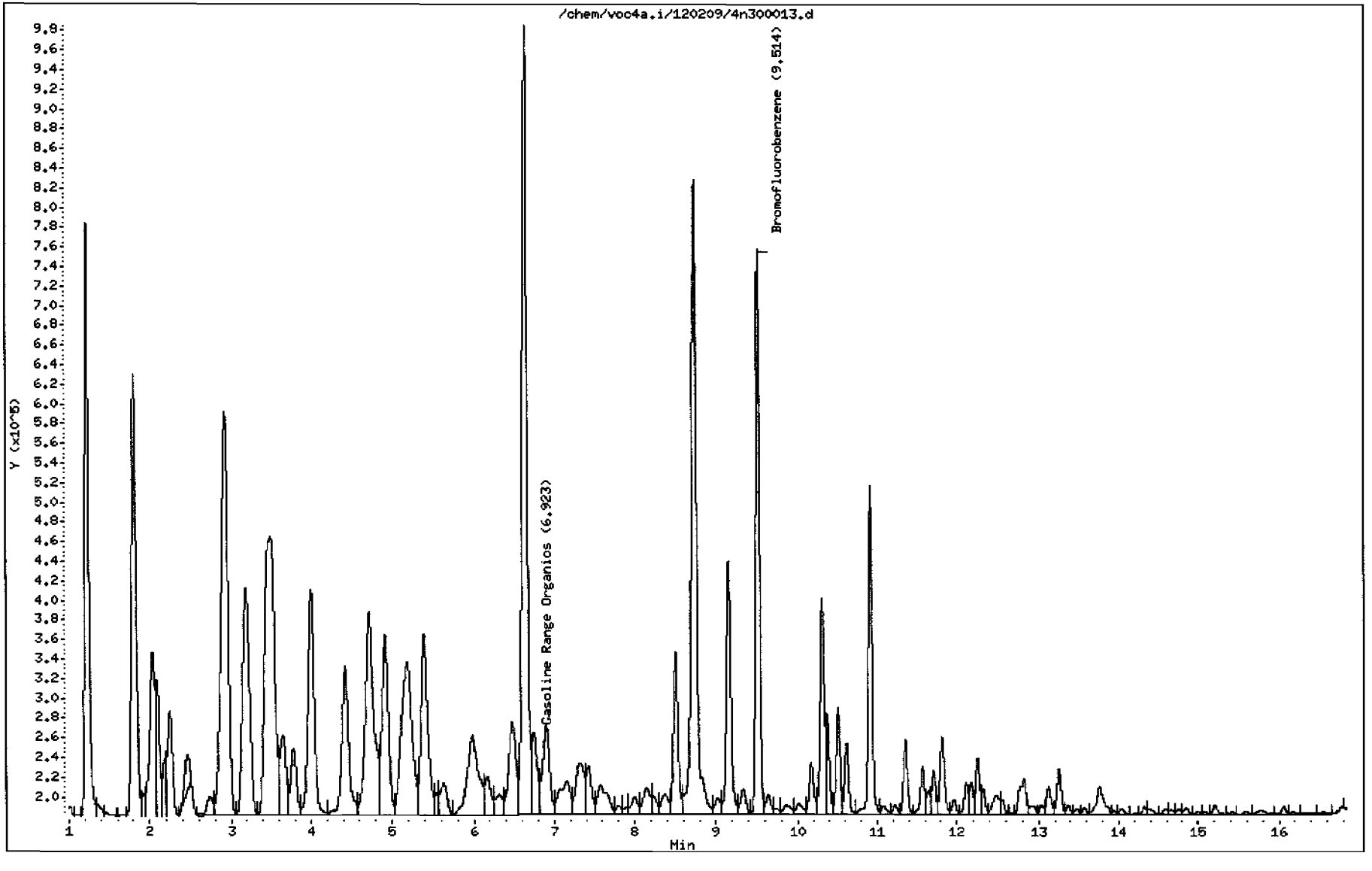

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201985574	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
Client Sample:	QC for batch 928566	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-10-2729PSD	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	928567	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/02/2009 21:19	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/02/2009 16:32	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n300014.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		461	ug/kg	12.3	54.7

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120209/4n300014.d
Lab Smp Id: 1201985574 Client Smp ID: RE03-10-2729MSD
Inj Date : 02-DEC-2009 21:19
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201985574|1|
Misc Info : |VOC8015_LF|928567|GROF|
Comment : FID
Method : /chem/voc4a.i/120209/8015GRO-111909.m
Meth Date : 03-Dec-2009 15:40 amj Quant Type: ESTD
Cal Date : 20-NOV-2009 02:10 Cal File: 41400017.d
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.61540	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S	1 Gasoline Range Organics					CAS #:
	2.903-	10.944		539713605	420.976	461
$	3 Bromofluorobenzene					CAS #: 460-00-4
	9.515	9.513	0.002	37355632	40.4279	44.2

Data File: /ohem/voc4a.i/120209/4n300014.d
Date : 02-DEC-2009 21:19
Client ID: RE03-10-2729MSD
Sample Info: |120198557411|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

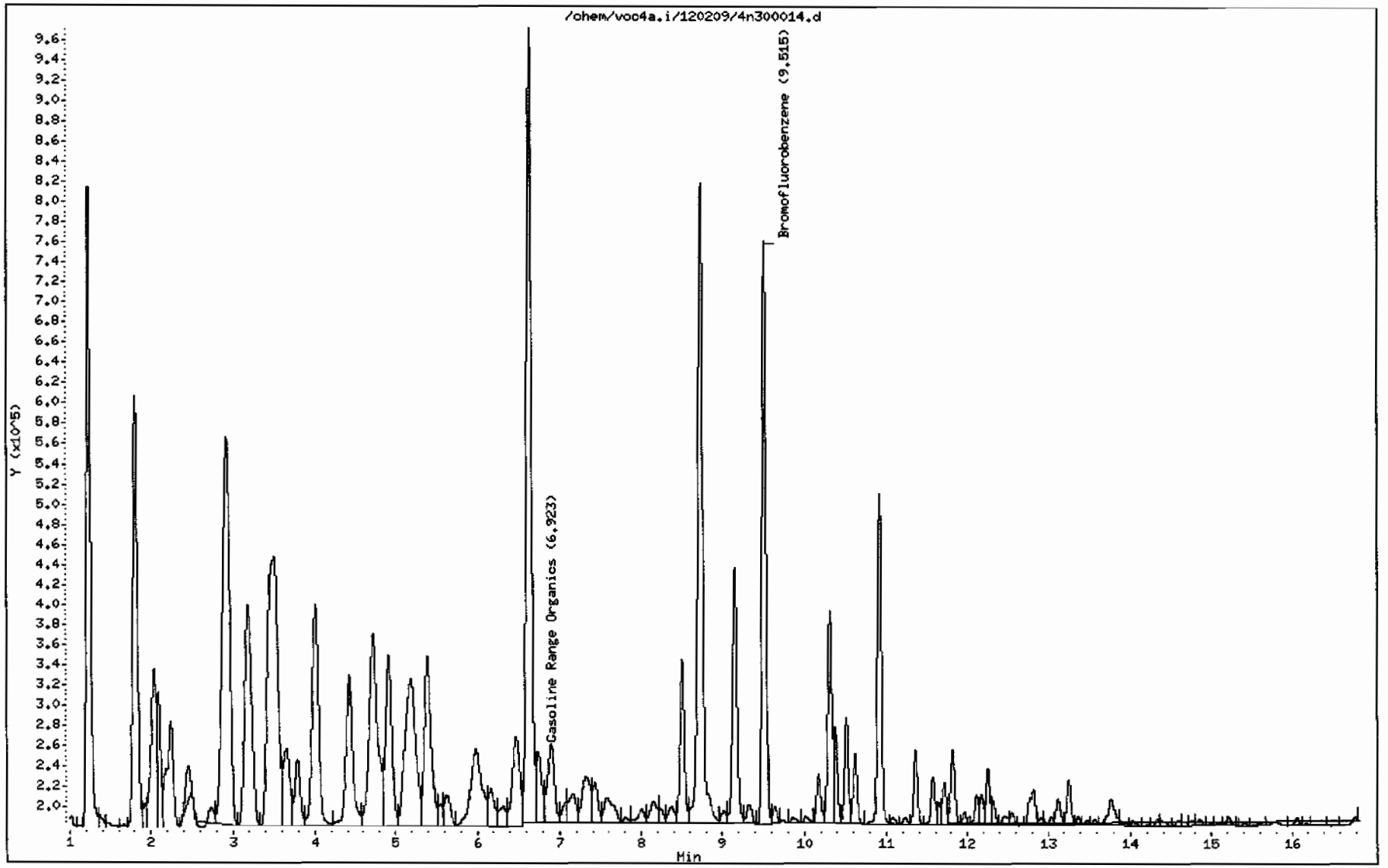

Miscellaneous Data

Prep Logbook

Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector

Batch ID: **928566** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Amy Jamison
Method: SW846 8015A/B PREP
Lab SOP: GL-OA-E-004 REV# 18
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201985575 LCS	02-DEC-2009 11:00:00	Soil	5	5	1	
1201985572 MB	02-DEC-2009 11:30:00	Soil	5	5	1	
241615018	02-DEC-2009 16:30:00	Soil	5	5	1	
1201985573 PS (241615018)	02-DEC-2009 16:31:00	Soil	5	5	1	
1201985574 PSD (241615018)	02-DEC-2009 16:32:00	Soil	5	5	1	
241718001	02-DEC-2009 16:33:00	Soil	5	5	1	
241728002	02-DEC-2009 16:34:00	Soil	5	5	1	
241750002	02-DEC-2009 16:35:00	Soil	5	5	1	
241750003	02-DEC-2009 16:36:00	Soil	5	5	1	
241750004	02-DEC-2009 16:37:00	Soil	5	5	1	
241750005	02-DEC-2009 16:38:00	Soil	5	5	1	
241750006	02-DEC-2009 16:39:00	Soil	5	5	1	
241750007	02-DEC-2009 16:40:00	Soil	5	5	1	
241750008	02-DEC-2009 16:41:00	Soil	5	5	1	
241750009	02-DEC-2009 16:42:00	Soil	5	5	1	
241750010	02-DEC-2009 16:43:00	Soil	5	5	1	
241750011	02-DEC-2009 16:44:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 11/19/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009

(See pg. 118 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: VOC4A 111909

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG090714-02E		5		
IS	N/A				
SS	UVG091022-01C	2.5	2.5	2.5	2.5
LCS/MS	UVG090714-02E			5	
RTCHECK	WVG09119-02				5+5
C5/C12 RTCHECK	N/A				5

Purge Amount	
5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
11/19/2009 16:30	4L400001.D	WVG091119-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	X	UVG090909-01A/UVG081212-02B
11/19/2009 17:00	4L400002.D	UVG090915-01B	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	X	
11/19/2009 17:30	4L400003.D	UVG090714-02E	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	X	
11/19/2009 17:59	4L400004.D	BLANK	GEL	BLANK	5G	1	N/A	4	S	ACJ	N/A	X	
11/19/2009 19:46	4L400005.D	240862002	LANL	923800	4.9G	1	N/A	5	S	ACJ	N/A	X	
11/19/2009 20:13	4L400006.D	1201974683	LANL	923800	5G	1	N/A	6	S	ACJ	N/A	X	
11/19/2009 20:43	4L400007.D	1201974684	LANL	923800	5G	1	N/A	7	S	ACJ	N/A	X	
11/19/2009 21:13	4L400008.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	8	W	ACJ	N/A	X	
11/19/2009 21:48	4L400009.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	9	W	ACJ	N/A	X	
11/19/2009 22:43	4L400010.D	WVG091119-02	GEL	RTCHECK	5ML	1	N/A	10	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
11/19/2009 23:12	4L400011.D	VSTD0050	GEL	ICAL	5ML	1	N/A	11	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/19/2009 23:42	4L400012.D	VSTD0100	GEL	ICAL	5ML	1	N/A	12	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 0:12	4L400013.D	VSTD0250	GEL	ICAL	5ML	1	N/A	13	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 0:42	4L400014.D	VSTD0500	GEL	ICAL	5ML	1	N/A	14	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 1:11	4L400015.D	VSTD0750	GEL	ICAL	5ML	1	N/A	15	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 1:41	4L400016.D	VSTD1000	GEL	ICAL	5ML	1	N/A	16	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 2:10	4L400017.D	VSTD2000	GEL	ICAL	5ML	1	N/A	17	W	ACJ	N/A	O	UVG090915-01B/UVG091022-01C
11/20/2009 2:40	4L400018.D	BLANK	GEL	BLANK	5ML	1	N/A	18	W	ACJ	N/A	X	
11/20/2009 3:10	4L400019.D	UVG090714-02E	GEL	ICV/CCV	5ML	1	N/A	19	W	ACJ	N/A	O	
11/20/2009 3:40	4L400020.D	UVG090714-02E	GEL	LCS	5G	1	N/A	20	S	ACJ	N/A	O	
11/20/2009 4:09	4L400021.D	BLANK	GEL	BLANK	5G	1	N/A	21	S	ACJ	N/A	O	
11/20/2009 4:39	4L400022.D	1201974683	LANL	923800	5G	1	N/A	22	S	ACJ	N/A	O	
11/20/2009 5:08	4L400023.D	1201974684	LANL	923800	5G	1	N/A	23	S	ACJ	N/A	O	
11/20/2009 5:38	4L400024.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	24	W	ACJ	N/A	O	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 12/2/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/19/2009

(See pg. 118 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: VOC4A 120209

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG090714-02E		5		
IS	N/A				
SS	UVG091022-01C	2.5	2.5	2.5	2.5
LCS/MS	UVG090714-02E			5	
RTCHECK	WVG091202-01				5+5
C5/C12 RTCHECK	N/A				5

Purge Amount	
5	Water Purge Vol:
VARIED	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
12/2/2009 11:05	4N300001.D	WVG091202-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
12/2/2009 11:34	4N300002.D	UVG090714-02E	GEL	CCV/LCS	5G	1	N/A	3	S	ACJ	N/A	O	
12/2/2009 12:04	4N300003.D	BLANK	GEL	BLANK	5G	1	N/A	3	S	ACJ	N/A	O	
12/2/2009 12:41	4N300004.D	1201984508	SLAC	928125	5.7G	1	N/A	4	S	ACJ	N/A	O	
12/2/2009 13:13	4N300005.D	UVG090714-02E	GEL	CCV/LCS	5ML	1	N/A	5	W	ACJ	N/A	O	
12/2/2009 17:21	4N300006.D	241615018	LANL	928567	5G	1	N/A	6	S	ACJ	N/A	O	
12/2/2009 17:51	4N300007.D	241718001	LANL	928567	5G	1	N/A	7	S	ACJ	N/A	O	
12/2/2009 18:21	4N300008.D	241728002	LANL	928567	5G	1	N/A	8	S	ACJ	N/A	O	
12/2/2009 18:50	4N300009.D	241750002	LANL	928567	5G	1	N/A	9	S	ACJ	N/A	O	
12/2/2009 19:20	4N300010.D	241750003	LANL	928567	5G	1	N/A	10	S	ACJ	N/A	O	
12/2/2009 19:50	4N300011.D	241750004	LANL	928567	5G	1	N/A	11	S	ACJ	N/A	O	
12/2/2009 20:20	4N300012.D	241750005	LANL	928567	5G	1	N/A	12	S	ACJ	N/A	O	
12/2/2009 20:49	4N300013.D	1201985573	LANL	928567	5G	1	N/A	13	S	ACJ	N/A	O	
12/2/2009 21:19	4N300014.D	1201985574	LANL	928567	5G	1	N/A	14	S	ACJ	N/A	O	
12/2/2009 21:48	4N300015.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	15	W	ACJ	N/A	X	GRO HIGH
12/2/2009 22:23	4N300016.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	16	W	ACJ	N/A	O	
12/2/2009 22:52	4N300017.D	241750006	LANL	928567	5G	1	N/A	17	S	ACJ	N/A	O	
12/2/2009 23:22	4N300018.D	241750007	LANL	928567	5G	1	N/A	18	S	ACJ	N/A	O	
12/2/2009 23:52	4N300019.D	241750008	LANL	928567	5G	1	N/A	19	S	ACJ	N/A	O	
12/3/2009 0:22	4N300020.D	241750009	LANL	928567	5G	1	N/A	20	S	ACJ	N/A	O	
12/3/2009 0:52	4N300021.D	241750010	LANL	928567	5G	1	N/A	21	S	ACJ	N/A	O	
12/3/2009 1:22	4N300022.D	241750011	LANL	928567	5G	1	N/A	22	S	ACJ	N/A	O	
12/3/2009 1:51	4N300023.D	UVG090714-02E	GEL	CCV	5ML	1	N/A	23	W	ACJ	N/A	O	

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-644

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927093, 929264
Prep Batch Number:	927091, 929263

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241615001	RE03-09-14108
241615002	RE03-09-14106
241615003	RE03-09-14107
241615005	RE03-09-14252
241615006	RE03-09-14250
241615007	RE03-09-14255
241615008	RE03-09-14256
241615009	RE03-09-14254
241615010	RE03-09-14249
241615011	RE03-09-14248
241615013	RE03-09-14246
241615014	RE03-09-14253
241615015	RE03-09-14251
241615016	RE03-09-14257
241615020	RE03-10-6969
1201982160	Method Blank (MB) in batch 927093
1201982163	Laboratory Control Sample (LCS) in batch 927093
1201982161	241615013(RE03-09-14246) Matrix Spike (MS) in batch 927093

1201982162	241615013(RE03-09-14246) Matrix Spike Duplicate (MSD) in batch 927093
241615004	RE03-09-14109
241615012	RE03-09-14247
241615018	RE03-10-2729
1201987325	Method Blank (MB) in batch 929264
1201987326	Laboratory Control Sample (LCS) in batch 929264
1201987330	Laboratory Control Sample Duplicate (LCSD) in batch 929264
1201987327	241033004(RE03-09-13593) Matrix Spike (MS) in batch 929264
1201987328	241033004(RE03-09-13593) Matrix Spike Duplicate (MSD) in batch 929264

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
QC sample 1201982160 (MB) in batch 927093 did not meet the surrogate recovery acceptance criteria; however this had no adverse effects on the data as all LANL reportable samples associated with this QC samples met surrogate recovery acceptance criteria. See NCR 765618 in the Miscellaneous Data section.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD between the LCS and LCSD met the acceptance limits.

QC Sample Designation
Sample 241615013(RE03-09-14246) was selected for the matrix spike and matrix spike duplicate analysis in batch 927093.

A LANL sample of similar matrix form another SDG (10-460) was selected for the matrix spike and matrix spike duplicate analysis in batch 929264.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Samples 241615004 (RE03-09-14109) and 241615018 (RE03-10-2729) were extracted and analyzed three times. The second analysis was reported. Sample 241615012 (RE03-09-14247) was extracted and analyzed twice. The second analysis was reported.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation

Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. NCR#765618 was generated for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the LCSD are from the same analytical column as the LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/18/09

Roadmap for LANL 10-644 PCB

This roadmap was analyzed by yip00818 on 12-08-2009, 14:07.
This roadmap was reviewed by jos00786 on 12-09-2009, 09:06.
This roadmap was packaged by sha01289 on 12-17-2009, 20:29.
This roadmap was validated by jim01140 on 12-18-2009, 14:58.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120309.b/054f5401.d	241615001	sample	03-DEC-2009	14:22	10-644.sub	RE03-09-14108	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/055f5501.d	241615002	sample	03-DEC-2009	14:35	10-644.sub	RE03-09-14106	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/056f5601.d	241615003	sample	03-DEC-2009	14:47	10-644.sub	RE03-09-14107	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
■	N	/chem/ecd1a.i/120309.b/057f5701.d	241615004	sample	03-DEC-2009	15:00	10-644.sub	RE03-09-14109	1.00000	927093	DUSE RE HAD HITS
☐	N	/chem/ecd1a.i/120509.b/045f4501.d	241615004	sample	05-DEC-2009	17:27	10-644.sub	RE03-09-14109	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/058f5801.d	241615005	sample	03-DEC-2009	15:12	10-644.sub	RE03-09-14252	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/059f5901.d	241615006	sample	03-DEC-2009	15:25	10-644.sub	RE03-09-14250	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/060f6001.d	241615007	sample	03-DEC-2009	15:38	10-644.sub	RE03-09-14255	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/061f6101.d	241615008	sample	03-DEC-2009	15:50	10-644.sub	RE03-09-14256	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/064f6401.d	241615009	sample	03-DEC-2009	16:28	10-644.sub	RE03-09-14254	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/065f6501.d	241615010	sample	03-DEC-2009	16:41	10-644.sub	RE03-09-14249	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/066f6601.d	241615011	sample	03-DEC-2009	16:54	10-644.sub	RE03-09-14248	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
■	N	/chem/ecd1a.i/120309.b/067f6701.d	241615012	sample	03-DEC-2009	17:06	10-644.sub	RE03-09-14247	1.00000	927093	DUSE RE 4CMX LOW
☐	N	/chem/ecd1a.i/120509.b/046f4601.d	241615012	sample	05-DEC-2009	17:40	10-644.sub	RE03-09-14247	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/068f6801.d	241615013	sample	03-DEC-2009	17:19	10-644.sub	RE03-09-14246	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/071f7101.d	241615014	sample	03-DEC-2009	17:57	10-644.sub	RE03-09-14253	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/072f7201.d	241615015	sample	03-DEC-2009	18:09	10-644.sub	RE03-09-14251	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/073f7301.d	241615016	sample	03-DEC-2009	18:22	10-644.sub	RE03-09-14257	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
■	N	/chem/ecd1a.i/120309.b/076f7601.d	241615018	sample	03-DEC-2009	19:00	10-644.sub	RE03-10-2729	1.00000	927093	DUSE RE HAD HITS
☐	N	/chem/ecd1a.i/120509.b/047f4701.d	241615018	sample	05-DEC-2009	17:52	10-644.sub	RE03-10-2729	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/077f7701.d	241615020	sample	03-DEC-2009	19:12	10-644.sub	RE03-10-6969	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120309.b/054b5401.d	241615001	sample	03-DEC-2009	14:22	10-644.sub	RE03-09-14108	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER

☐	N	/chem/ecd1a.i/120309.b/055b5501.d	241615002	sample	03-DEC-2009	14:35	10-644.sub	RE03-09-14106	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/056b5601.d	241615003	sample	03-DEC-2009	14:47	10-644.sub	RE03-09-14107	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
■	N	/chem/ecd1a.i/120309.b/057b5701.d	241615004	sample	03-DEC-2009	15:00	10-644.sub	RE03-09-14109	1.00000	927093	DUSE RE HAD HITS
☐	N	/chem/ecd1a.i/120509.b/045b4501.d	241615004	sample	05-DEC-2009	17:27	10-644.sub	RE03-09-14109	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/058b5801.d	241615005	sample	03-DEC-2009	15:12	10-644.sub	RE03-09-14252	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/059b5901.d	241615006	sample	03-DEC-2009	15:25	10-644.sub	RE03-09-14250	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/060b6001.d	241615007	sample	03-DEC-2009	15:38	10-644.sub	RE03-09-14255	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/061b6101.d	241615008	sample	03-DEC-2009	15:50	10-644.sub	RE03-09-14256	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/064b6401.d	241615009	sample	03-DEC-2009	16:28	10-644.sub	RE03-09-14254	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/065b6501.d	241615010	sample	03-DEC-2009	16:41	10-644.sub	RE03-09-14249	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/066b6601.d	241615011	sample	03-DEC-2009	16:54	10-644.sub	RE03-09-14248	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
■	N	/chem/ecd1a.i/120309.b/067b6701.d	241615012	sample	03-DEC-2009	17:06	10-644.sub	RE03-09-14247	1.00000	927093	DUSE RE 4CMX LOW
☐	N	/chem/ecd1a.i/120509.b/046b4601.d	241615012	sample	05-DEC-2009	17:40	10-644.sub	RE03-09-14247	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/068b6801.d	241615013	sample	03-DEC-2009	17:19	10-644.sub	RE03-09-14246	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/071b7101.d	241615014	sample	03-DEC-2009	17:57	10-644.sub	RE03-09-14253	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/072b7201.d	241615015	sample	03-DEC-2009	18:09	10-644.sub	RE03-09-14251	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/073b7301.d	241615016	sample	03-DEC-2009	18:22	10-644.sub	RE03-09-14257	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER

■	N	/chem/ecd1a.i/120309.b/076b7601.d	241615018	sample	03-DEC-2009	19:00	10-644.sub	RE03-10-2729	1.00000	927093	DUSE RE HAD HITS
□	N	/chem/ecd1a.i/120509.b/047b4701.d	241615018	sample	05-DEC-2009	17:52	10-644.sub	RE03-10-2729	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120309.b/077b7701.d	241615020	sample	03-DEC-2009	19:12	10-644.sub	RE03-10-6969	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd1a.i/120309.b/052f5201.d	1201982160	mb	03-DEC-2009	14:01	10-644.sub	PBLK01	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120509.b/039f3901.d	1201987325	mb	05-DEC-2009	16:12	10-644.sub	PBLK02	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120309.b/053f5301.d	1201982163	lcs	03-DEC-2009	14:11	10-644.sub	PBLK01LCS	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120509.b/040f4001.d	1201987326	lcs	05-DEC-2009	16:24	10-644.sub	PBLK02LCS	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120509.b/041f4101.d	1201987330	lcsd	05-DEC-2009	16:37	10-644.sub	PBLK02LCSD	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120309.b/069f6901.d	1201982161	ms	03-DEC-2009	17:31	10-644.sub	RE03-09-14246MS	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120309.b/070f7001.d	1201982162	msd	03-DEC-2009	17:44	10-644.sub	RE03-09-14246MSD	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd1a.i/120309.b/052h5201.d	1201982160	mb	03-DEC-2009	14:01	10-644.sub	PBLK01	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120509.b/039h3901.d	1201987325	mb	05-DEC-2009	16:12	10-644.sub	PBLK02	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120309.b/053h5301.d	1201982163	lcs	03-DEC-2009	14:11	10-644.sub	PBLK01LCS	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120509.b/040h4001.d	1201987326	lcs	05-DEC-2009	16:24	10-644.sub	PBLK02LCS	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/120509.b/041h4101.d	1201987330	lcsd	05-DEC-2009	16:37	10-644.sub	PBLK02LCSD	1.00000	929264	UPLOAD BOTH COLUMNS, USE HIGHER

☐	N	/chem/ecd1a.i/120309.b/069b6901.d	1201982161	ms	03-DEC-2009	17:31	10-644.sub	RE03-09-14246MS	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120309.b/070b7001.d	1201982162	msd	03-DEC-2009	17:44	10-644.sub	RE03-09-14246MSD	1.00000	927093	UPLOAD BOTH COLUMNS, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14106	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 14:35	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	055f5501.d	**Column:**	1 CLP1	**Level:**	LOW
	055b5501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.68	ug/kg	1.23	3.68	1
11104–28–2	Aroclor–1221	U	3.68	ug/kg	1.23	3.68	1
11141–16–5	Aroclor–1232	U	3.68	ug/kg	1.23	3.68	1
53469–21–9	Aroclor–1242	U	3.68	ug/kg	1.23	3.68	1
12672–29–6	Aroclor–1248	U	3.68	ug/kg	1.23	3.68	1
11097–69–1	Aroclor–1254	U	3.68	ug/kg	1.23	3.68	1
11096–82–5	Aroclor–1260	U	3.68	ug/kg	1.23	3.68	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615003**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**12.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14107**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 14:47**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**056f5601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	056b5601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254	U	3.79	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260	U	3.79	ug/kg	1.26	3.79	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615001**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**7.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14108**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 14:22**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**054f5401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	054b5401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.59	ug/kg	1.20	3.59	1
11104–28–2	Aroclor–1221	U	3.59	ug/kg	1.20	3.59	1
11141–16–5	Aroclor–1232	U	3.59	ug/kg	1.20	3.59	1
53469–21–9	Aroclor–1242	U	3.59	ug/kg	1.20	3.59	1
12672–29–6	Aroclor–1248	U	3.59	ug/kg	1.20	3.59	1
11097–69–1	Aroclor–1254	U	3.59	ug/kg	1.20	3.59	1
11096–82–5	Aroclor–1260	U	3.59	ug/kg	1.20	3.59	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615004**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**5.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14109**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**929264**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 17:27**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/04/2009 20:52**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**045f4501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	045b4501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.52	ug/kg	1.17	3.52	1
11104–28–2	Aroclor–1221	U	3.52	ug/kg	1.17	3.52	1
11141–16–5	Aroclor–1232	U	3.52	ug/kg	1.17	3.52	1
53469–21–9	Aroclor–1242	U	3.52	ug/kg	1.17	3.52	1
12672–29–6	Aroclor–1248	U	3.52	ug/kg	1.17	3.52	1
11097–69–1	Aroclor–1254	U	3.52	ug/kg	1.17	3.52	1
11096–82–5	Aroclor–1260	U	3.52	ug/kg	1.17	3.52	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615013**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14246**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:19**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**068f6801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	068b6801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.62	ug/kg	1.21	3.62	1
11104–28–2	Aroclor–1221	U	3.62	ug/kg	1.21	3.62	1
11141–16–5	Aroclor–1232	U	3.62	ug/kg	1.21	3.62	1
53469–21–9	Aroclor–1242	U	3.62	ug/kg	1.21	3.62	1
12672–29–6	Aroclor–1248	U	3.62	ug/kg	1.21	3.62	1
11097–69–1	Aroclor–1254	U	3.62	ug/kg	1.21	3.62	1
11096–82–5	Aroclor–1260	U	3.62	ug/kg	1.21	3.62	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14247	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	929264	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/05/2009 17:40	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	12/04/2009 20:52	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	046f4601.d	**Column:**	1 CLP1	**Level:**	LOW
	046b4601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.70	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254	U	3.70	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260	U	3.70	ug/kg	1.23	3.70	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615011	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14248	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 16:54	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	066f6601.d	**Column:**	1 CLP1	**Level:**	LOW
	066b6601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.73	ug/kg	1.24	3.73	1
11104–28–2	Aroclor–1221	U	3.73	ug/kg	1.24	3.73	1
11141–16–5	Aroclor–1232	U	3.73	ug/kg	1.24	3.73	1
53469–21–9	Aroclor–1242	U	3.73	ug/kg	1.24	3.73	1
12672–29–6	Aroclor–1248	U	3.73	ug/kg	1.24	3.73	1
11097–69–1	Aroclor–1254	U	3.73	ug/kg	1.24	3.73	1
11096–82–5	Aroclor–1260	U	3.73	ug/kg	1.24	3.73	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14249	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 16:41	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.71	ug/kg	1.23	3.71	1
11104–28–2	Aroclor–1221	U	3.71	ug/kg	1.23	3.71	1
11141–16–5	Aroclor–1232	U	3.71	ug/kg	1.23	3.71	1
53469–21–9	Aroclor–1242	U	3.71	ug/kg	1.23	3.71	1
12672–29–6	Aroclor–1248	U	3.71	ug/kg	1.23	3.71	1
11097–69–1	Aroclor–1254	U	3.71	ug/kg	1.23	3.71	1
11096–82–5	Aroclor–1260	U	3.71	ug/kg	1.23	3.71	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615006	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14250	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 15:25	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	059f5901.d	**Column:**	1 CLP1	**Level:**	LOW
	059b5901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254	U	3.57	ug/kg	1.19	3.57	1
11096-82-5	Aroclor-1260	U	3.57	ug/kg	1.19	3.57	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615015**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14251**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 18:09**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**072f7201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	072b7201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.68	ug/kg	1.22	3.68	1
11104–28–2	Aroclor–1221	U	3.68	ug/kg	1.22	3.68	1
11141–16–5	Aroclor–1232	U	3.68	ug/kg	1.22	3.68	1
53469–21–9	Aroclor–1242	U	3.68	ug/kg	1.22	3.68	1
12672–29–6	Aroclor–1248	U	3.68	ug/kg	1.22	3.68	1
11097–69–1	Aroclor–1254	U	3.68	ug/kg	1.22	3.68	1
11096–82–5	Aroclor–1260	U	3.68	ug/kg	1.22	3.68	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615005**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14252**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.1**	**Dilution:**	**1**
Run Date:	**12/03/2009 15:12**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**058f5801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	058b5801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.57	ug/kg	1.19	3.57	1
11104–28–2	Aroclor–1221	U	3.57	ug/kg	1.19	3.57	1
11141–16–5	Aroclor–1232	U	3.57	ug/kg	1.19	3.57	1
53469–21–9	Aroclor–1242	U	3.57	ug/kg	1.19	3.57	1
12672–29–6	Aroclor–1248	U	3.57	ug/kg	1.19	3.57	1
11097–69–1	Aroclor–1254	U	3.57	ug/kg	1.19	3.57	1
11096–82–5	Aroclor–1260	U	3.57	ug/kg	1.19	3.57	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14253	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 17:57	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.66	ug/kg	1.22	3.66	1
11104–28–2	Aroclor–1221	U	3.66	ug/kg	1.22	3.66	1
11141–16–5	Aroclor–1232	U	3.66	ug/kg	1.22	3.66	1
53469–21–9	Aroclor–1242	U	3.66	ug/kg	1.22	3.66	1
12672–29–6	Aroclor–1248	U	3.66	ug/kg	1.22	3.66	1
11097–69–1	Aroclor–1254	U	3.66	ug/kg	1.22	3.66	1
11096–82–5	Aroclor–1260	U	3.66	ug/kg	1.22	3.66	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	Date Collected:	11/19/2009 12:00	Matrix:	S
Lab Sample ID:	241615009	Date Received:	11/21/2009 09:00	%Moisture:	5.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14254	Method:	SW846 8082	SOP Ref:	GL–OA–E–040
Batch ID:	927093	Inst:	ECD1A.I	Dilution:	1
Run Date:	12/03/2009 16:28	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	11/30/2009 11:38	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	064f6401.d	Column:	1 CLP1	Level:	LOW
	064b6401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.54	ug/kg	1.18	3.54	1
11104–28–2	Aroclor–1221	U	3.54	ug/kg	1.18	3.54	1
11141–16–5	Aroclor–1232	U	3.54	ug/kg	1.18	3.54	1
53469–21–9	Aroclor–1242	U	3.54	ug/kg	1.18	3.54	1
12672–29–6	Aroclor–1248	U	3.54	ug/kg	1.18	3.54	1
11097–69–1	Aroclor–1254	U	3.54	ug/kg	1.18	3.54	1
11096–82–5	Aroclor–1260	U	3.54	ug/kg	1.18	3.54	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14255	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A,I	**Dilution:**	1
Run Date:	12/03/2009 15:38	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	060f6001.d	**Column:**	1 CLP1	**Level:**	LOW
	060b6001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.67	ug/kg	1.22	3.67	1
11104–28–2	Aroclor–1221	U	3.67	ug/kg	1.22	3.67	1
11141–16–5	Aroclor–1232	U	3.67	ug/kg	1.22	3.67	1
53469–21–9	Aroclor–1242	U	3.67	ug/kg	1.22	3.67	1
12672–29–6	Aroclor–1248	U	3.67	ug/kg	1.22	3.67	1
11097–69–1	Aroclor–1254	U	3.67	ug/kg	1.22	3.67	1
11096–82–5	Aroclor–1260	U	3.67	ug/kg	1.22	3.67	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14256	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 15:50	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	061f6101.d	**Column:**	1 CLP1	**Level:**	LOW
	061b6101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.62	ug/kg	1.21	3.62	1
11104–28–2	Aroclor–1221	U	3.62	ug/kg	1.21	3.62	1
11141–16–5	Aroclor–1232	U	3.62	ug/kg	1.21	3.62	1
53469–21–9	Aroclor–1242	U	3.62	ug/kg	1.21	3.62	1
12672–29–6	Aroclor–1248	U	3.62	ug/kg	1.21	3.62	1
11097–69–1	Aroclor–1254	U	3.62	ug/kg	1.21	3.62	1
11096–82–5	Aroclor–1260	U	3.62	ug/kg	1.21	3.62	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14257	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 18:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	073f7301.d	**Column:**	1 CLP1	**Level:**	LOW
	073b7301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.36	ug/kg	1.12	3.36	1
11104–28–2	Aroclor–1221	U	3.36	ug/kg	1.12	3.36	1
11141–16–5	Aroclor–1232	U	3.36	ug/kg	1.12	3.36	1
53469–21–9	Aroclor–1242	U	3.36	ug/kg	1.12	3.36	1
12672–29–6	Aroclor–1248	U	3.36	ug/kg	1.12	3.36	1
11097–69–1	Aroclor–1254	U	3.36	ug/kg	1.12	3.36	1
11096–82–5	Aroclor–1260	U	3.36	ug/kg	1.12	3.36	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615018	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2729	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	929264	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/05/2009 17:52	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	12/04/2009 20:52	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	047f4701.d	**Column:**	1 CLP1	**Level:**	LOW
	047b4701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.63	ug/kg	1.21	3.63	1
11104-28-2	Aroclor-1221	U	3.63	ug/kg	1.21	3.63	1
11141-16-5	Aroclor-1232	U	3.63	ug/kg	1.21	3.63	1
53469-21-9	Aroclor-1242	U	3.63	ug/kg	1.21	3.63	1
12672-29-6	Aroclor-1248	U	3.63	ug/kg	1.21	3.63	1
11097-69-1	Aroclor-1254	U	3.63	ug/kg	1.21	3.63	1
11096-82-5	Aroclor-1260	U	3.63	ug/kg	1.21	3.63	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6969	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 19:12	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.50	ug/kg	1.17	3.50	1
11104–28–2	Aroclor–1221	U	3.50	ug/kg	1.17	3.50	1
11141–16–5	Aroclor–1232	U	3.50	ug/kg	1.17	3.50	1
53469–21–9	Aroclor–1242	U	3.50	ug/kg	1.17	3.50	1
12672–29–6	Aroclor–1248	U	3.50	ug/kg	1.17	3.50	1
11097–69–1	Aroclor–1254	U	3.50	ug/kg	1.17	3.50	1
11096–82–5	Aroclor–1260	U	3.50	ug/kg	1.17	3.50	1

QUALITY CONTROL SUMMARY

Surrogate Recovery Report

SDG Number: 10–644

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201982160	MB for batch 927091	26 *	27 *	61	62
1201982163	LCS for batch 927091	55	56	66	66
241615001	RE03–09–14108	38	40	52	53
241615002	RE03–09–14106	46	47	45	45
241615003	RE03–09–14107	55	56	52	64
241615005	RE03–09–14252	43	43	42	41
241615006	RE03–09–14250	54	54	58	59
241615007	RE03–09–14255	50	50	43	45
241615008	RE03–09–14256	51	52	57	57
241615009	RE03–09–14254	53	53	53	57
241615010	RE03–09–14249	57	57	55	55
241615011	RE03–09–14248	44	46	50	53
241615013	RE03–09–14246	44	46	43	45
1201982161	RE03–09–14246MS	54	55	51	52
1201982162	RE03–09–14246MSD	52	53	49	50
241615014	RE03–09–14253	42	43	55	56
241615015	RE03–09–14251	43	44	52	53
241615016	RE03–09–14257	45	46	54	55
241615020	RE03–10–6969	50	50	51	54
1201987325	MB for batch 929263	58	58	55	70
1201987326	LCS for batch 929263	60	59	55	69
1201987330	LCSD for batch 929263	58	58	54	69
241615004	RE03–09–14109	67	67	65	71
241615012	RE03–09–14247	60	61	57	68

4CMX = 4cmx (34%–105%)
DCB = Decachlorobiphenyl (33%–115%)

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

PCB

Surrogate Recovery Report

SDG Number: 10-644

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
241615018	RE03-10-2729	56	56	58	66

Surrogate		Acceptance Limits
4CMX	= 4cmx	(34%-105%)
DCB	= Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 927091
Lab Sample ID: 1201982163
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 14:11
Dilution: 1
Prep Batch ID: 927091
Batch ID: 927093

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	21.4	64	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	23.8	71	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCS for batch 929263
Lab Sample ID: 1201987326
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 16:24
Dilution: 1
Prep Batch ID: 929263
Batch ID: 929264

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	24.5	74	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	20.9	63	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: LCSD for batch 929263
Lab Sample ID: 1201987330
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample Duplicate
Matrix: SOIL
Analysis Date: 12/05/2009 16:37
Dilution: 1
Prep Batch ID: 929263
Batch ID: 929264

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	LCSD Aroclor-1016	33.3	0.0	23.9	72	41-110	2	0-25
11096-82-5	LCSD Aroclor-1260	33.3	0.0	21.1	63	48-110	1	0-25

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–460**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03–09–13593MS**	**Matrix:**	**S**
Lab Sample ID:	**1201987327**	**%Moisture:**	**13**
Instrument:	**ECD1A.I**	**Analysis Date:**	**12/05/2009 17:02**
Analyst:	**YS1**	**Prep Batch ID:**	**929263**
Inj. Vol:	**1 uL**	**Batch ID:**	**929264**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	MS	Aroclor–1016	38.1	0.00	U	21.0	55	23–117
11096–82–5	MS	Aroclor–1260	38.1	14.8		29.8	39	27–116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-460
Client ID: RE03-09-13593MSD
Lab Sample ID: 1201987328
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 13
Analysis Date: 12/05/2009 17:15
Dilution: 1
Prep Batch ID: 929263
Batch ID: 929264

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	38.1	0.00	U	22.7	60	23-117	8	0-30
11096-82-5	MSD Aroclor-1260	38.1	14.8		30.8	42	27-116	3	0-30

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–644**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03–09–14246MS**	**Matrix:**	**S**
Lab Sample ID:	**1201982161**	**%Moisture:**	**8**
Instrument:	**ECD1A.I**	**Analysis Date:**	**12/03/2009 17:31**
Analyst:	**YS1**	**Prep Batch ID:**	**927091**
Inj. Vol:	**1 uL**	**Batch ID:**	**927093**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	MS	Aroclor–1016	36.2	0.00	U	18.2	50	23–117
11096–82–5	MS	Aroclor–1260	36.2	0.00	U	19.9	55	27–116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-644
Client ID: RE03-09-14246MSD
Lab Sample ID: 1201982162
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 8
Analysis Date: 12/03/2009 17:44
Dilution: 1
Prep Batch ID: 927091
Batch ID: 927093

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	36.1	0.00	U	15.8	44	23-117	14	0-30
11096-82-5	MSD Aroclor-1260	36.1	0.00	U	17.6	49	27-116	12	0-30

Method Blank Summary

SDG Number:	10-644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927091	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	052b5201-1.d 052f5201-1.d
Lab Sample ID:	1201982160				
Column:	CLP2 CLP1	Prep Date:	11/30/2009 11:38	Analyzed:	12/03/09 14:01
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927091	1201982163	053f5301-1.d 053b5301-1.d	12/03/09	1411
02 RE03-09-14108	241615001	054f5401.d 054b5401.d	12/03/09	1422
03 RE03-09-14106	241615002	055f5501.d 055b5501.d	12/03/09	1435
04 RE03-09-14107	241615003	056f5601.d 056b5601.d	12/03/09	1447
05 RE03-09-14252	241615005	058f5801.d 058b5801.d	12/03/09	1512
06 RE03-09-14250	241615006	059f5901.d 059b5901.d	12/03/09	1525
07 RE03-09-14255	241615007	060f6001.d 060b6001.d	12/03/09	1538
08 RE03-09-14256	241615008	061f6101.d 061b6101.d	12/03/09	1550
09 RE03-09-14254	241615009	064f6401.d 064b6401.d	12/03/09	1628
10 RE03-09-14249	241615010	065f6501.d 065b6501.d	12/03/09	1641
11 RE03-09-14248	241615011	066f6601.d 066b6601.d	12/03/09	1654
12 RE03-09-14246	241615013	068f6801.d 068b6801.d	12/03/09	1719
13 RE03-09-14246MS	1201982161	069f6901.d 069b6901.d	12/03/09	1731
14 RE03-09-14246MSD	1201982162	070f7001.d 070b7001.d	12/03/09	1744
15 RE03-09-14253	241615014	071f7101.d 071b7101.d	12/03/09	1757
16 RE03-09-14251	241615015	072f7201.d 072b7201.d	12/03/09	1809
17 RE03-09-14257	241615016	073f7301.d 073b7301.d	12/03/09	1822

Method Blank Summary

SDG Number:	10–644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927091	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	052b5201–1.d 052f5201–1.d
Lab Sample ID:	1201982160				
Column:	CLP2 CLP1	Prep Date:	11/30/2009 11:38	Analyzed:	12/03/09 14:01
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
18 RE03–10–6969	241615020	077f7701.d 077b7701.d	12/03/09	1912

Method Blank Summary

SDG Number:	10–644	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 929263	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	039b3901–1.d 039f3901–1.d
Lab Sample ID:	1201987325				
Column:	CLP2 CLP1	Prep Date:	12/04/2009 20:52	Analyzed:	12/05/09 16:12
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 929263	1201987326	040f4001–1.d 040b4001–1.d	12/05/09	1624
02 LCSD for batch 929263	1201987330	041f4101–1.d 041b4101–1.d	12/05/09	1637
05 RE03–09–14109	241615004	045f4501.d 045b4501.d	12/05/09	1727
06 RE03–09–14247	241615012	046f4601.d 046b4601.d	12/05/09	1740
07 RE03–10–2729	241615018	047f4701.d 047b4701.d	12/05/09	1752

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615002	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14106	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 14:35	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	055f5501.d	**Column:**	1 CLP1	**Level:**	LOW
	055b5501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.68	ug/kg	1.23	3.68	1
11104–28–2	Aroclor–1221	U	3.68	ug/kg	1.23	3.68	1
11141–16–5	Aroclor–1232	U	3.68	ug/kg	1.23	3.68	1
53469–21–9	Aroclor–1242	U	3.68	ug/kg	1.23	3.68	1
12672–29–6	Aroclor–1248	U	3.68	ug/kg	1.23	3.68	1
11097–69–1	Aroclor–1254	U	3.68	ug/kg	1.23	3.68	1
11096–82–5	Aroclor–1260	U	3.68	ug/kg	1.23	3.68	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/055f5501.d
Lab Smp Id: 241615002 Client Smp ID: RE03-09-14106
Inj Date : 03-DEC-2009 14:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615002|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14106|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 55
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	9.44270	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	41054244	91.9934	3.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	36699399	89.7831	3.3	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/055f5501.d
Date : 03-DEC-2009 14:35
Client ID: RE03-09-14106
Sample Info: |241615002|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

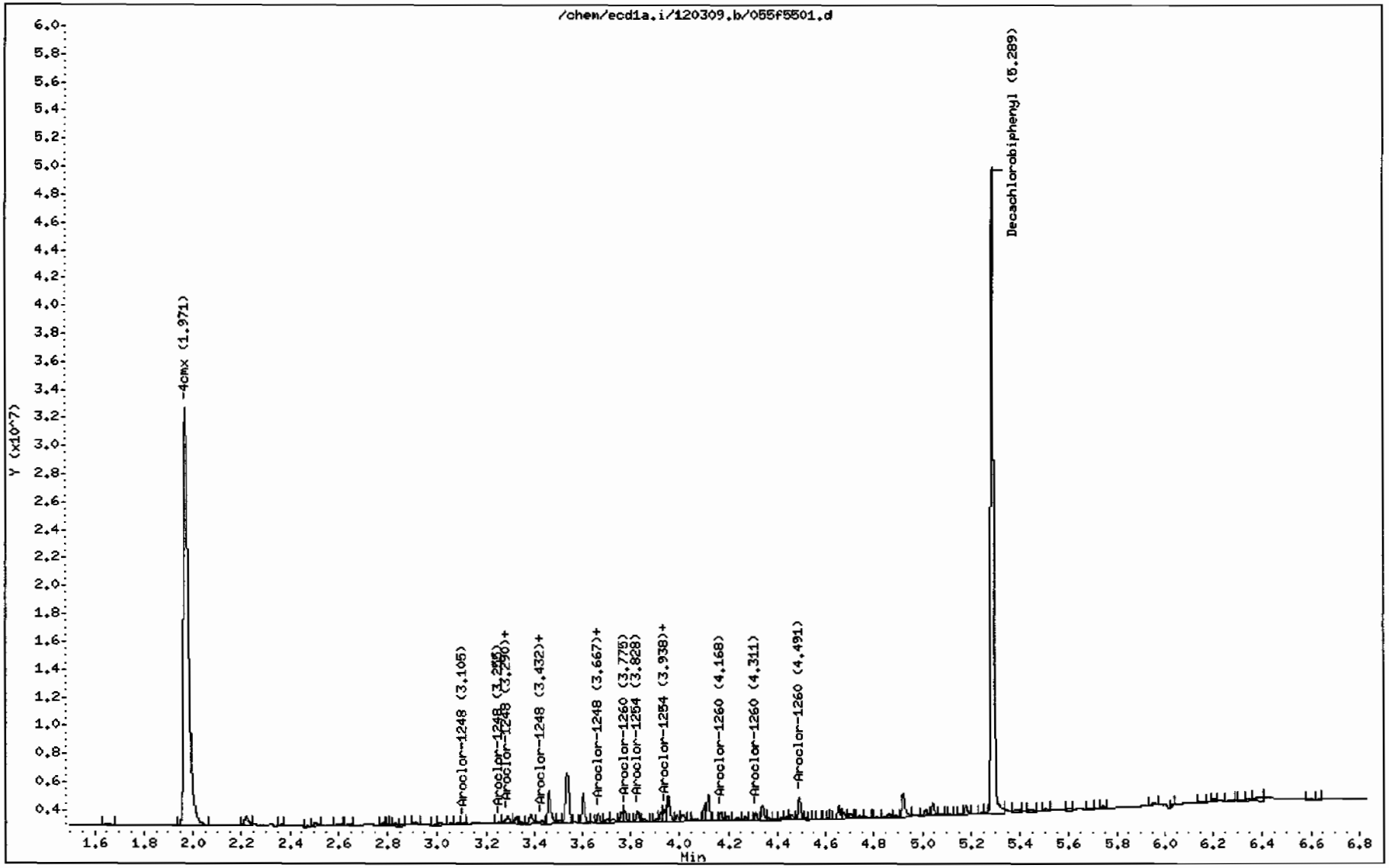

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/055b5501.d
Lab Smp Id: 241615002 Client Smp ID: RE03-09-14106
Inj Date : 03-DEC-2009 14:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615002|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14106|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 55
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	9.44270	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	34878614	93.9375	3.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	27265014	90.7085	3.3	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/055b5501.d
Date : 03-DEC-2009 14:35
Client ID: RE03-09-14106
Sample Info: |241615002|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

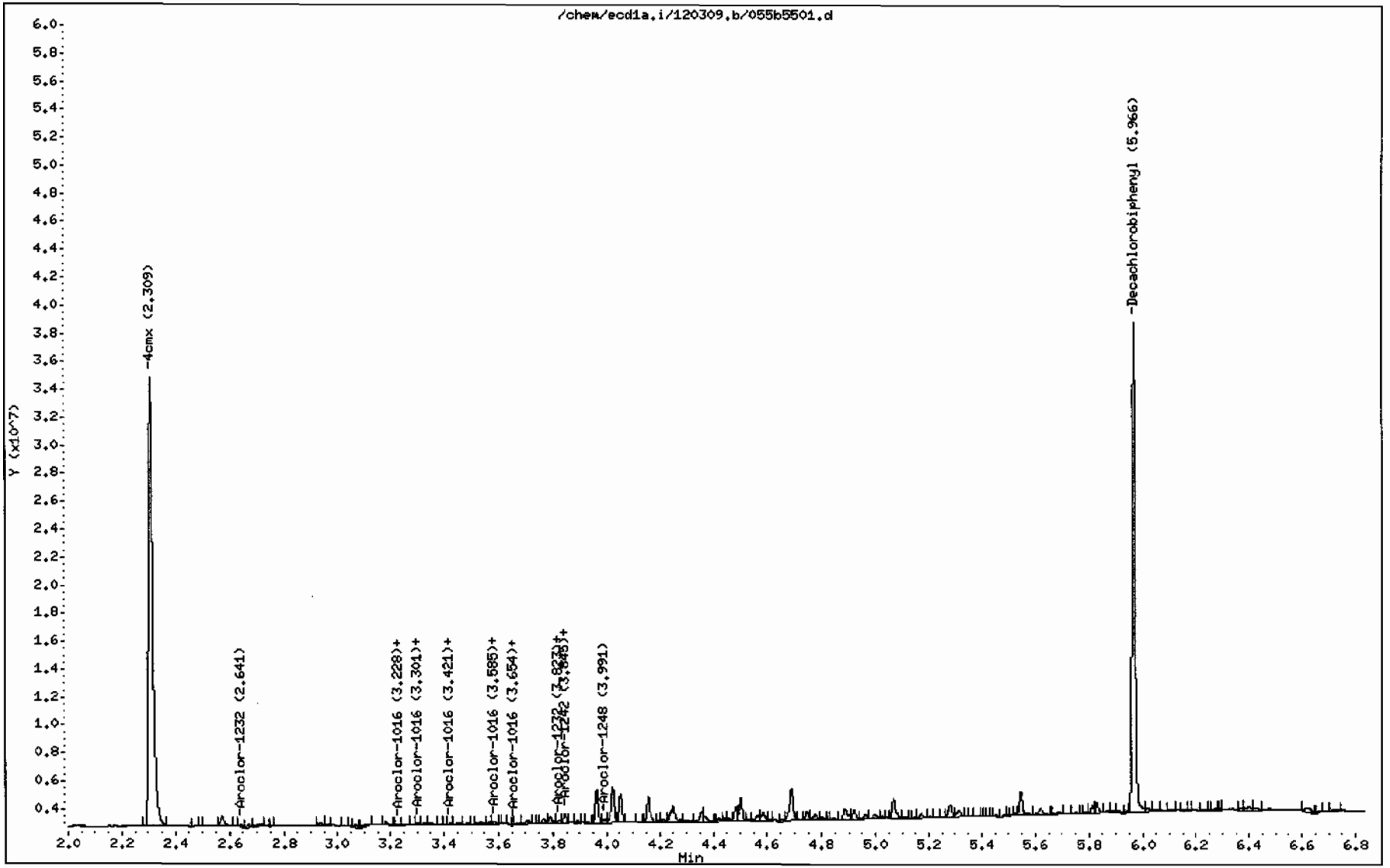

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615003	**Date Received:**	11/21/2009 09:00	**%Moisture:**	12.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14107	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A,I	**Dilution:**	1
Run Date:	12/03/2009 14:47	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	056f5601.d	**Column:**	1 CLP1	**Level:**	LOW
	056b5601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254	U	3.79	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260	U	3.79	ug/kg	1.26	3.79	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/056f5601.d
Lab Smp Id: 241615003 Client Smp ID: RE03-09-14107
Inj Date : 03-DEC-2009 14:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615003|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14107|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 14:53 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	12.21420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	49273960	110.412	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	42230400	103.314	3.9	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/056f5601.d

Page 1

Date : 03-DEC-2009 14:47

Client ID: RE03-09-14107

Instrument: ecd1a.i

Sample Info: |241615003|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

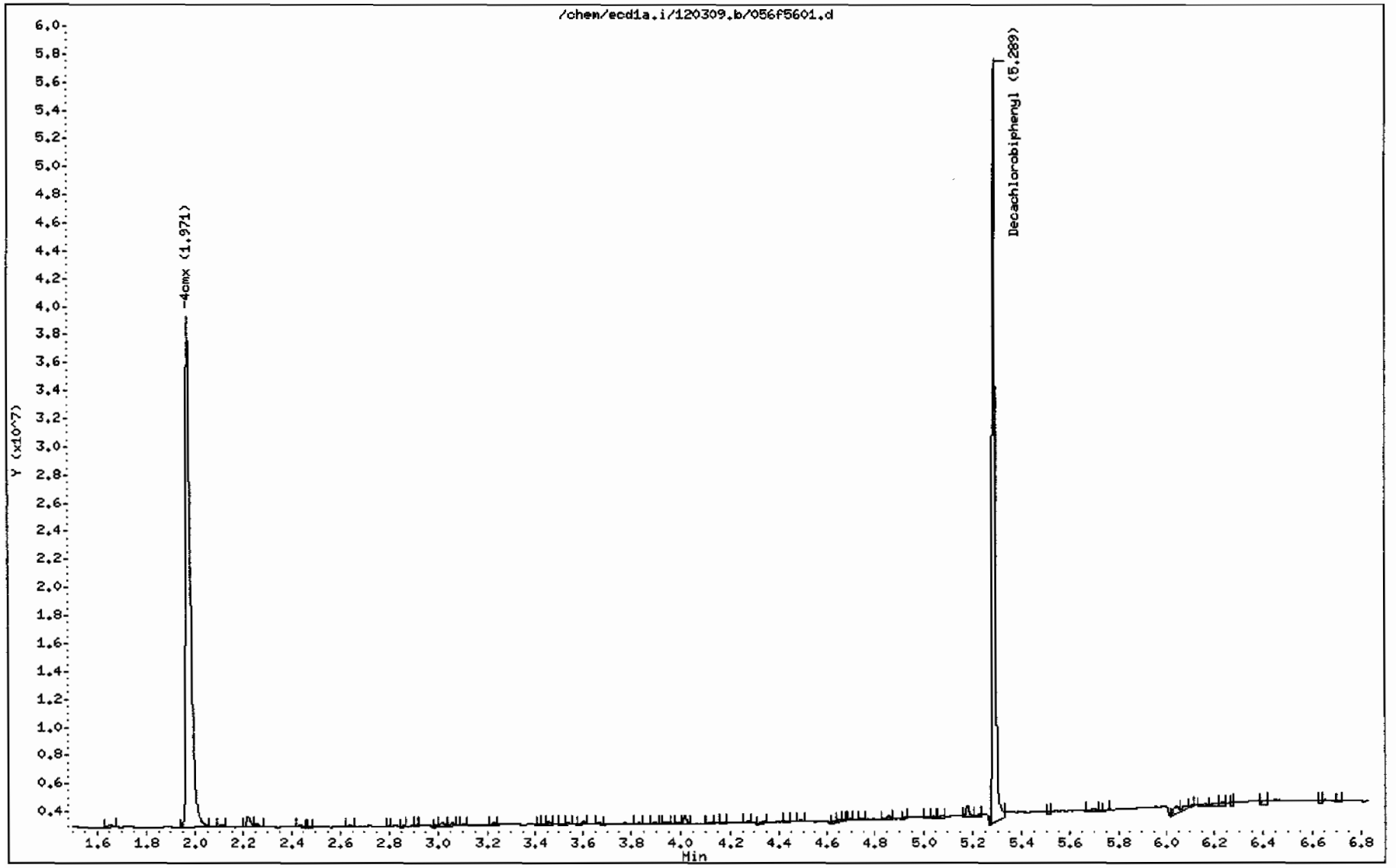

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/056b5601.d
Lab Smp Id: 241615003 Client Smp ID: RE03-09-14107
Inj Date : 03-DEC-2009 14:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615003|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14107|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 14:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	12.21420	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	41578943	111.983	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	38361262	127.625	4.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/056b5601.d
Date : 03-DEC-2009 14:47
Client ID: RE03-09-14107
Sample Info: |241615003|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

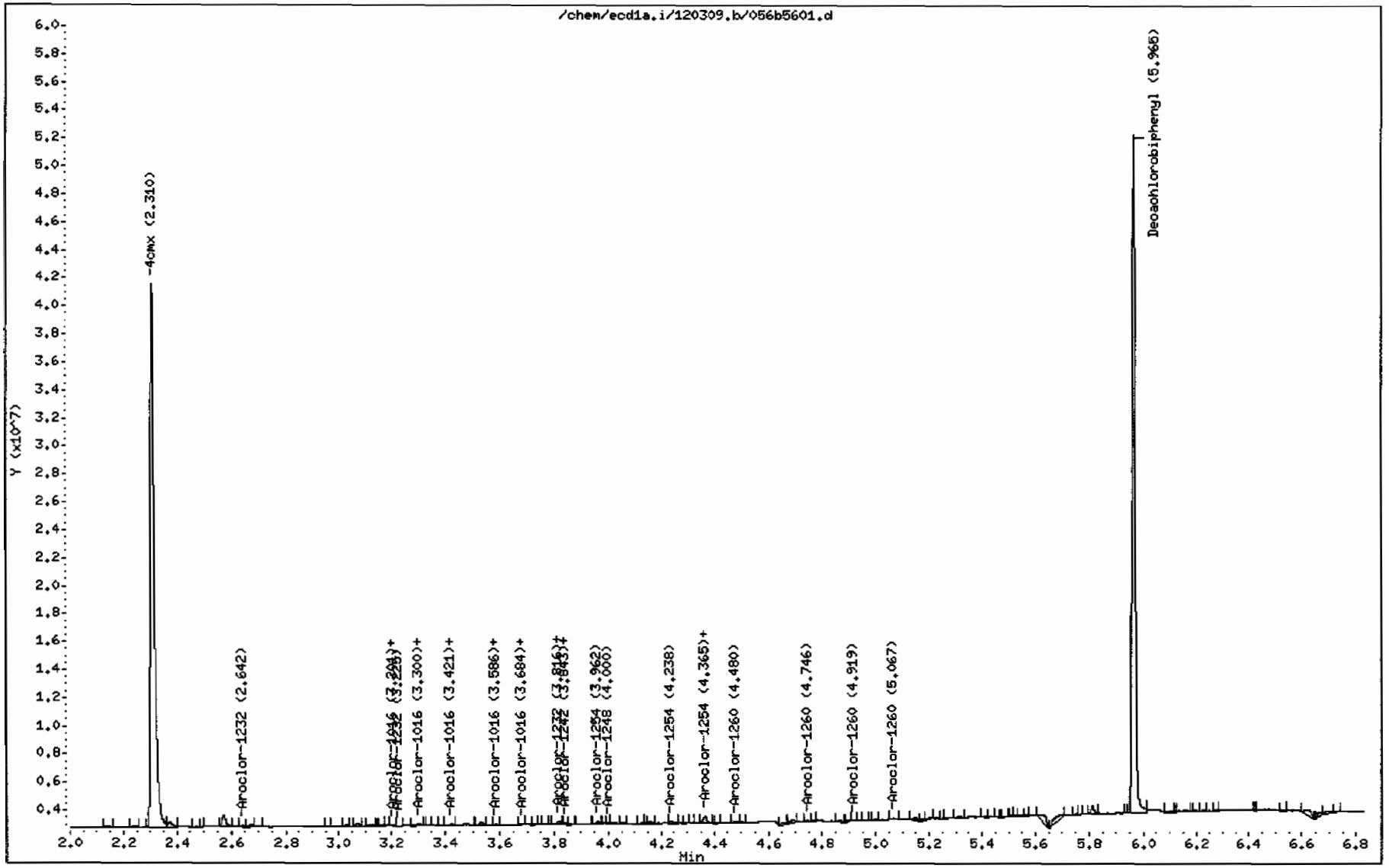

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615001	**Date Received:**	11/21/2009 09:00	**%Moisture:**	7.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14108	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 14:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	054f5401.d	**Column:**	1 CLP1	**Level:**	LOW
	054b5401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.59	ug/kg	1.20	3.59	1
11104–28–2	Aroclor–1221	U	3.59	ug/kg	1.20	3.59	1
11141–16–5	Aroclor–1232	U	3.59	ug/kg	1.20	3.59	1
53469–21–9	Aroclor–1242	U	3.59	ug/kg	1.20	3.59	1
12672–29–6	Aroclor–1248	U	3.59	ug/kg	1.20	3.59	1
11097–69–1	Aroclor–1254	U	3.59	ug/kg	1.20	3.59	1
11096–82–5	Aroclor–1260	U	3.59	ug/kg	1.20	3.59	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/054f5401.d
Lab Smp Id: 241615001 Client Smp ID: RE03-09-14108
Inj Date : 03-DEC-2009 14:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615001|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14108|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	7.23270	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	34355530	76.9831	2.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	42391451	103.708	3.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/054f5401.d
Date : 03-DEC-2009 14:22
Client ID: RE03-09-14108
Sample Info: |241615001|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

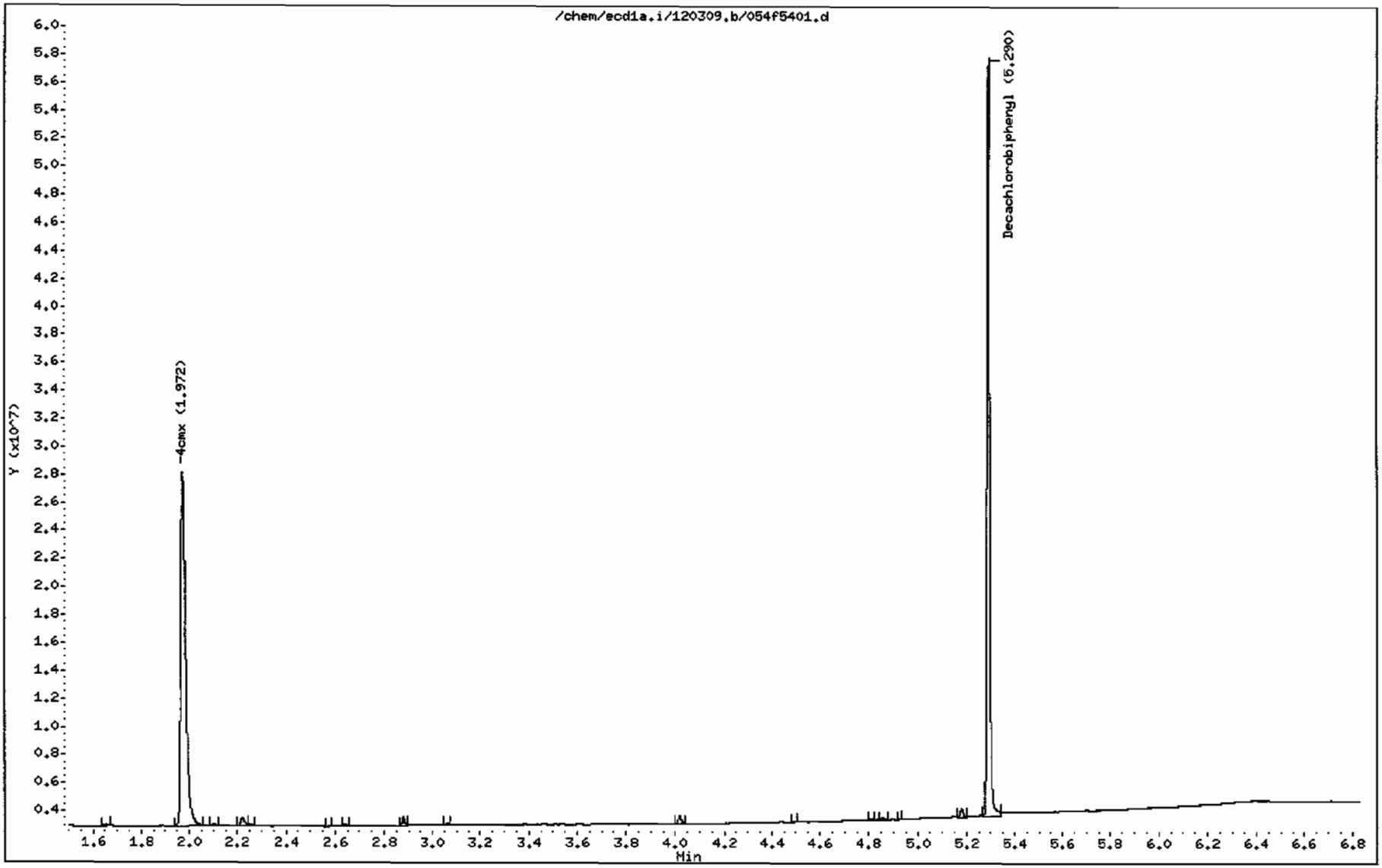

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/054b5401.d
Lab Smp Id: 241615001 Client Smp ID: RE03-09-14108
Inj Date : 03-DEC-2009 14:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615001|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14108|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	7.23270	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	29368222	79.0965	2.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	31732363	105.571	3.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/054b5401.d
Date : 03-DEC-2009 14:22
Client ID: RE03-09-14108
Sample Info: |24161500|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

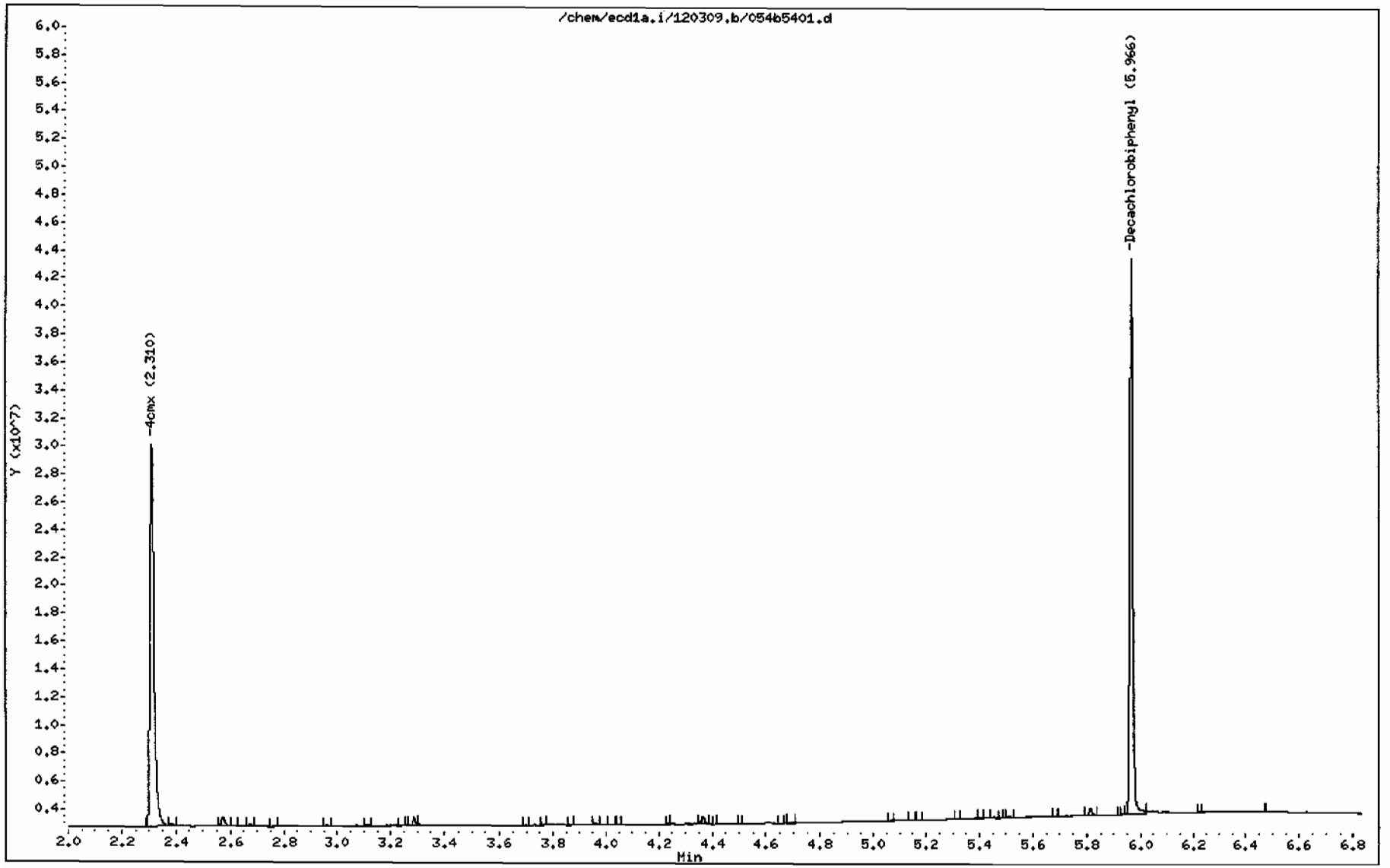

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615004	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14109	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	929264	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/05/2009 17:27	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	12/04/2009 20:52	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	045f4501.d	**Column:**	1 CLP1	**Level:**	LOW
	045b4501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.52	ug/kg	1.17	3.52	1
11104–28–2	Aroclor–1221	U	3.52	ug/kg	1.17	3.52	1
11141–16–5	Aroclor–1232	U	3.52	ug/kg	1.17	3.52	1
53469–21–9	Aroclor–1242	U	3.52	ug/kg	1.17	3.52	1
12672–29–6	Aroclor–1248	U	3.52	ug/kg	1.17	3.52	1
11097–69–1	Aroclor–1254	U	3.52	ug/kg	1.17	3.52	1
11096–82–5	Aroclor–1260	U	3.52	ug/kg	1.17	3.52	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/045f4501.d
Lab Smp Id: 241615004 Client Smp ID: RE03-09-14109
Inj Date : 05-DEC-2009 17:27
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615004|1|
Misc Info : |ECD82P_1S|929264|SVAF|LANL|SOIL|RE03-09-14109|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	5.43490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	59733331	133.849	4.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	52894111	129.403	4.6	80.00- 120.00	100.00

Data File: /chem/ecdia.i/120509.b/045f4501.d
Date : 05-DEC-2009 17:27
Client ID: REQ3-09-14109
Sample Info: |241615004|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

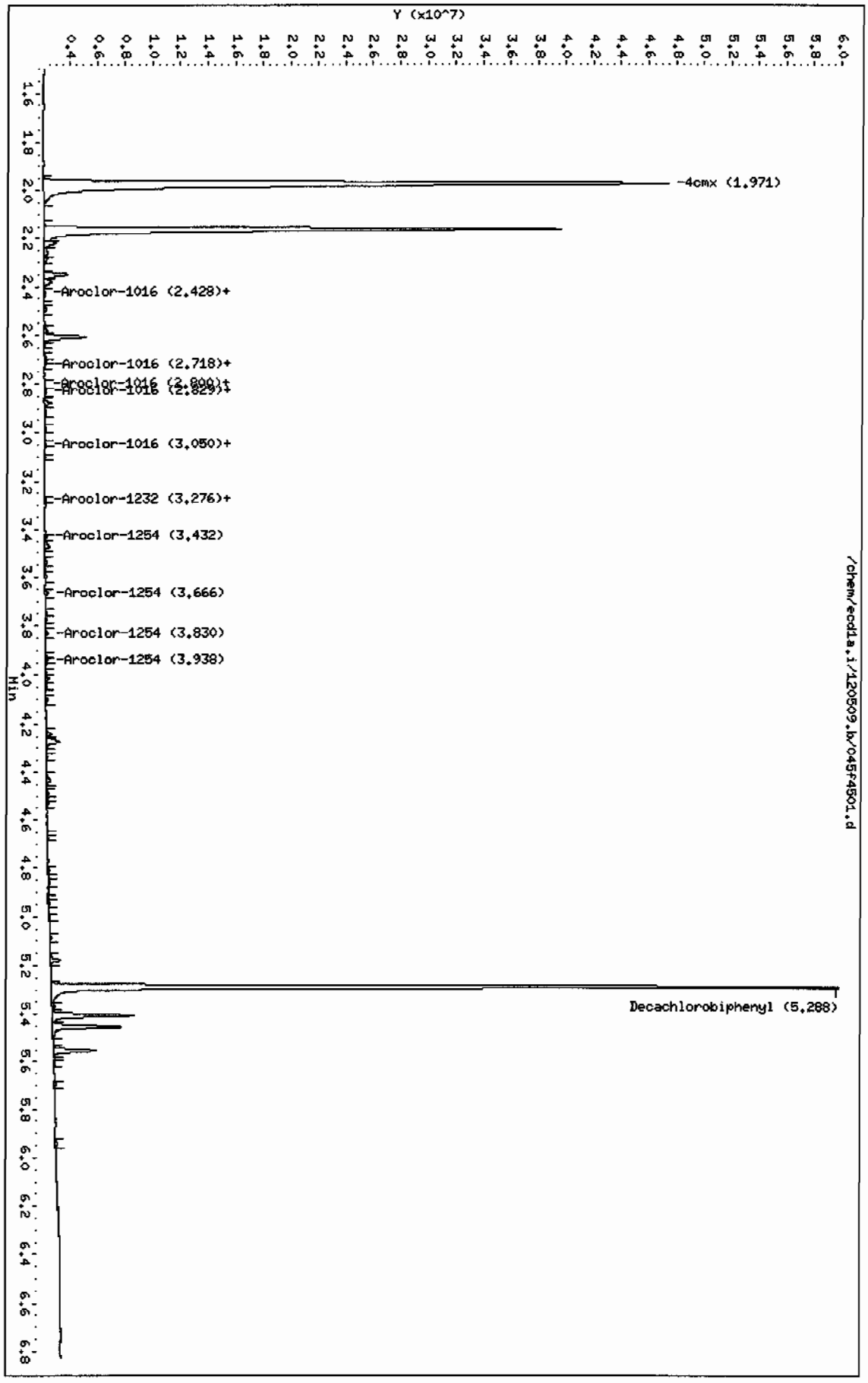

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/045b4501.d
Lab Smp Id: 241615004 Client Smp ID: RE03-09-14109
Inj Date : 05-DEC-2009 17:27
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615004|1|
Misc Info : |ECD82P_1S|929264|SVAF|LANL|SOIL|RE03-09-14109|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	5.43490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	50107390	134.953	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.962	5.964	-0.002	42436318	141.182	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120509.b/045b4501.d
Date : 05-DEC-2009 17:27
Client ID: RE03-09-14109
Sample Info: |241615004|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Page 1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

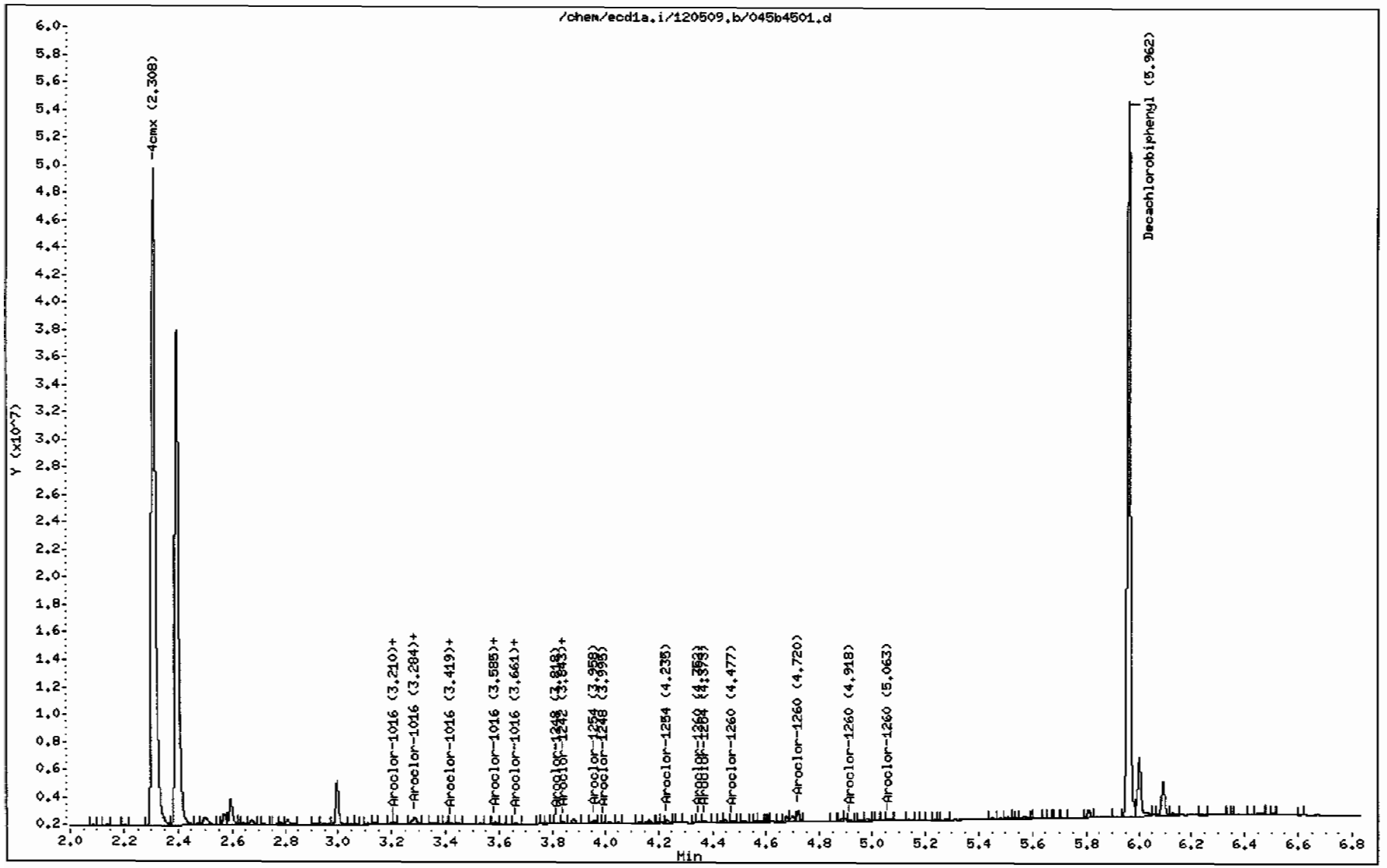

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615013**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14246**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:19**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**068f6801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	068b6801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.62	ug/kg	1.21	3.62	1
11104-28-2	Aroclor-1221	U	3.62	ug/kg	1.21	3.62	1
11141-16-5	Aroclor-1232	U	3.62	ug/kg	1.21	3.62	1
53469-21-9	Aroclor-1242	U	3.62	ug/kg	1.21	3.62	1
12672-29-6	Aroclor-1248	U	3.62	ug/kg	1.21	3.62	1
11097-69-1	Aroclor-1254	U	3.62	ug/kg	1.21	3.62	1
11096-82-5	Aroclor-1260	U	3.62	ug/kg	1.21	3.62	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/068f6801.d
Lab Smp Id: 241615013 Client Smp ID: RE03-09-14246
Inj Date : 03-DEC-2009 17:19
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615013|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14246|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 68
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	7.96850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	39661414	88.8724	3.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	35552184	86.9765	3.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/068f6801.d

Page 1

Date : 03-DEC-2009 17:19

Client ID: RE03-09-14246

Instrument: ecd1a.i

Sample Info: |241615013|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

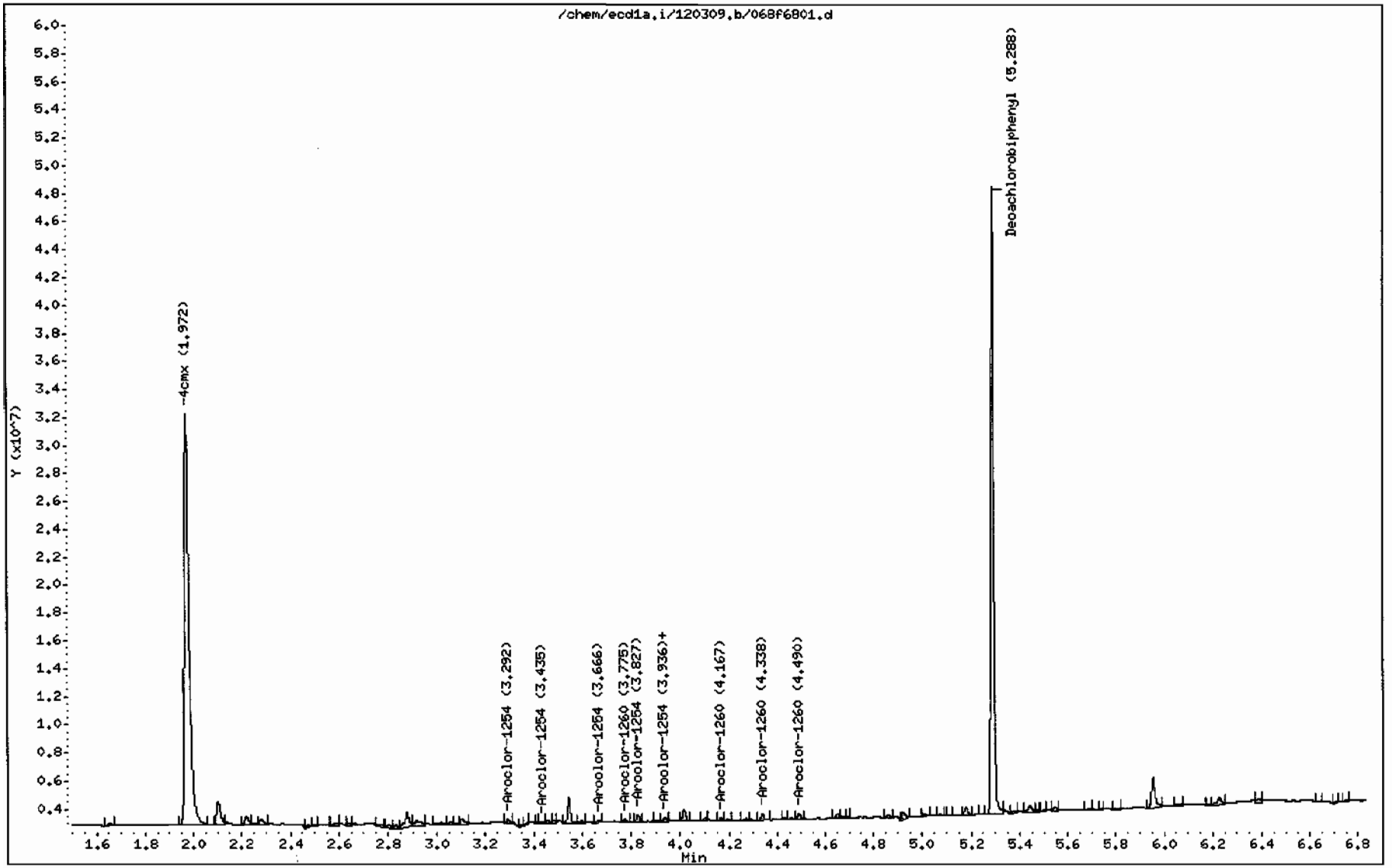

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/068b6801.d
Lab Smp Id: 241615013 Client Smp ID: RE03-09-14246
Inj Date : 03-DEC-2009 17:19
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615013|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14246|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 68
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	7.96850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	33842337	91.1465	3.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	26840605	89.2965	3.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/068b6801.d
Date : 03-DEC-2009 17:19
Client ID: RE03-09-14246
Sample Info: |241615013|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

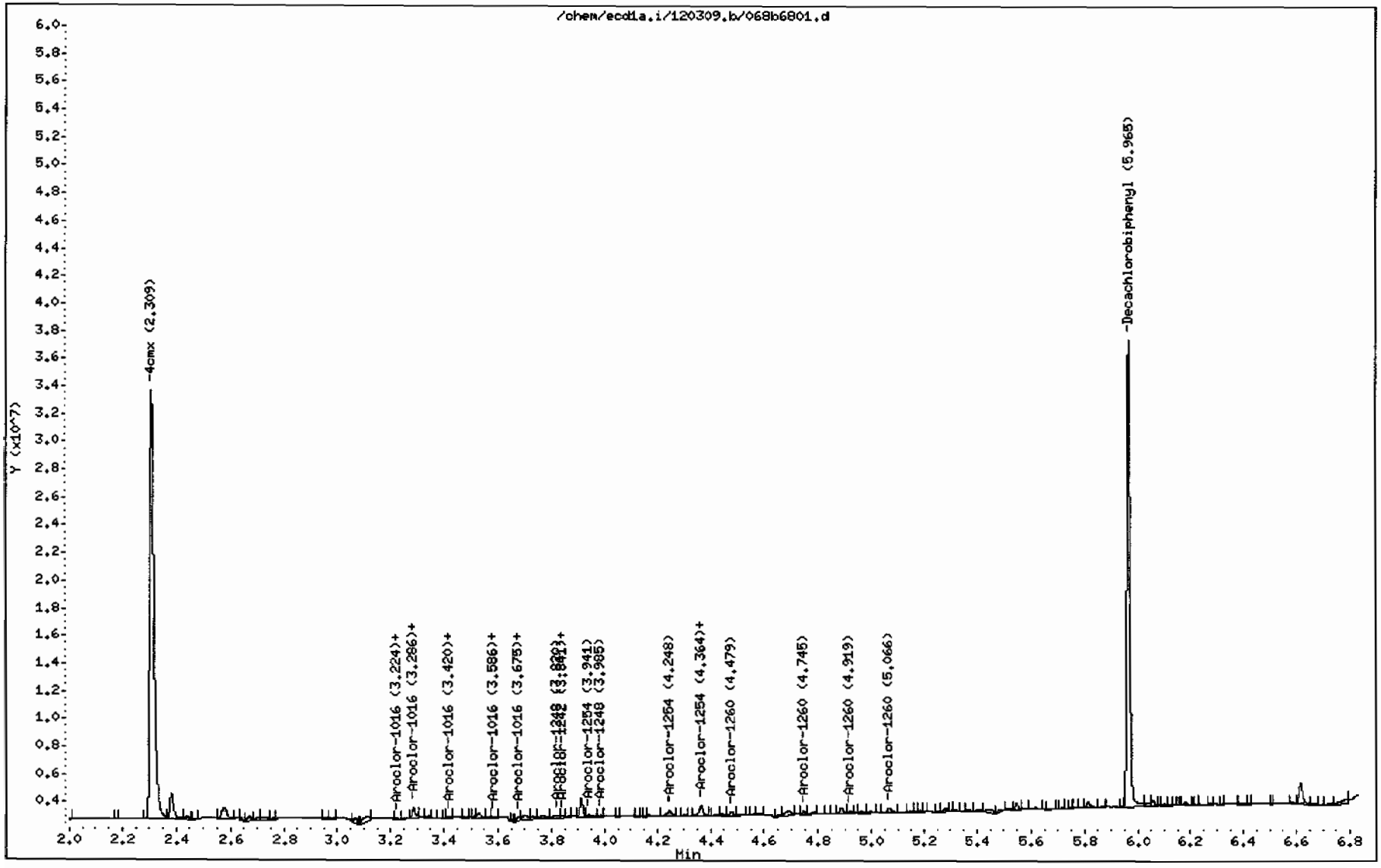

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615012	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14247	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	929264	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/05/2009 17:40	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	12/04/2009 20:52	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	046f4601.d	**Column:**	1 CLP1	**Level:**	LOW
	046b4601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.70	ug/kg	1.23	3.70	1
11104–28–2	Aroclor–1221	U	3.70	ug/kg	1.23	3.70	1
11141–16–5	Aroclor–1232	U	3.70	ug/kg	1.23	3.70	1
53469–21–9	Aroclor–1242	U	3.70	ug/kg	1.23	3.70	1
12672–29–6	Aroclor–1248	U	3.70	ug/kg	1.23	3.70	1
11097–69–1	Aroclor–1254	U	3.70	ug/kg	1.23	3.70	1
11096–82–5	Aroclor–1260	U	3.70	ug/kg	1.23	3.70	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/046f4601.d
Lab Smp Id: 241615012 Client Smp ID: RE03-09-14247
Inj Date : 05-DEC-2009 17:40
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615012|1|
Misc Info : |ECD82P_1S|929264|SVAF|LANL|SOIL|RE03-09-14247|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	10.34860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	53985008	120.968	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	46758459	114.392	4.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120509.b/046f4601.d
Date : 05-DEC-2009 17:40
Client ID: RE03-09-14247
Sample Info: |241615012|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

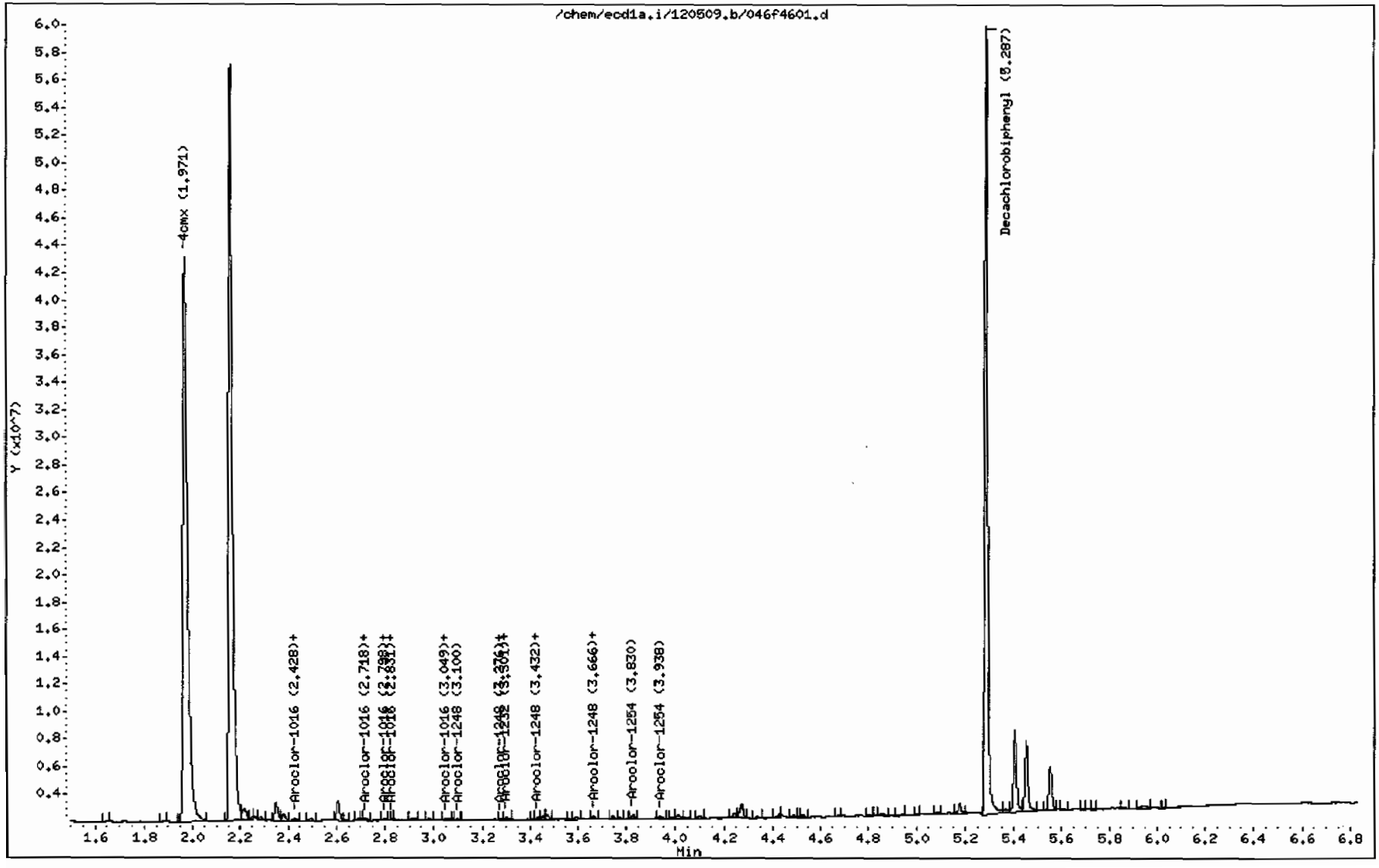

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/046b4601.d
Lab Smp Id: 241615012 Client Smp ID: RE03-09-14247
Inj Date : 05-DEC-2009 17:40
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615012|1|
Misc Info : |ECD82P_1S|929264|SVAF|LANL|SOIL|RE03-09-14247|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	10.34860	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.307	2.309	-0.002	44977172	121.136	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.961	5.964	-0.003	40788134	135.699	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120509.b/046b4601.d
Date : 05-DEC-2009 17:40
Client ID: RE03-09-14247
Sample Info: 1241615012|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

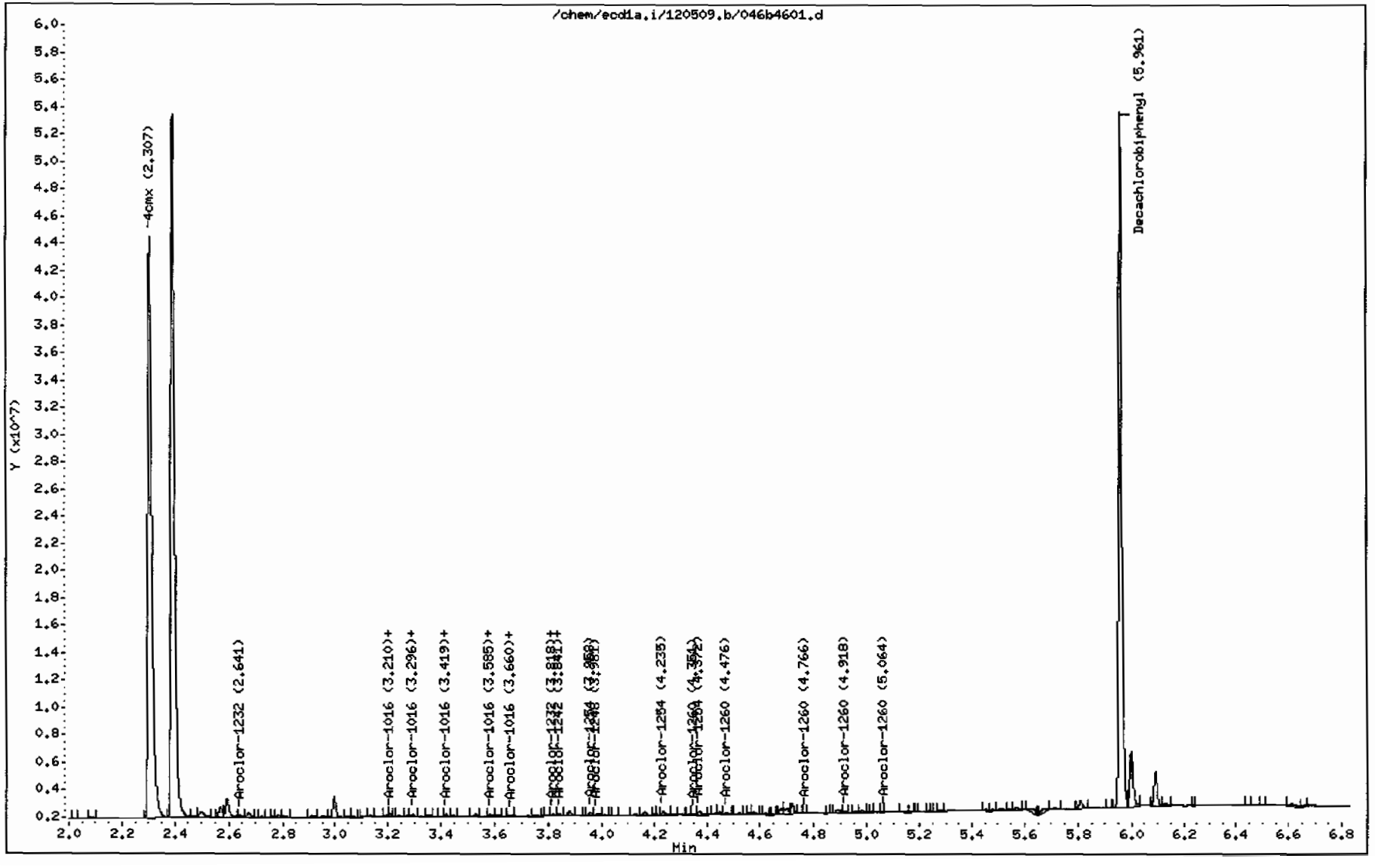

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615011**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**10.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14248**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 16:54**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**066f6601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	066b6601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.73	ug/kg	1.24	3.73	1
11104–28–2	Aroclor–1221	U	3.73	ug/kg	1.24	3.73	1
11141–16–5	Aroclor–1232	U	3.73	ug/kg	1.24	3.73	1
53469–21–9	Aroclor–1242	U	3.73	ug/kg	1.24	3.73	1
12672–29–6	Aroclor–1248	U	3.73	ug/kg	1.24	3.73	1
11097–69–1	Aroclor–1254	U	3.73	ug/kg	1.24	3.73	1
11096–82–5	Aroclor–1260	U	3.73	ug/kg	1.24	3.73	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/066f6601.d
Lab Smp Id: 241615011 Client Smp ID: RE03-09-14248
Inj Date : 03-DEC-2009 16:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615011|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14248|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:18 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	10.58700	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.972	-0.002	39669486	88.8905	3.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	40845362	99.9260	3.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/066f6601.d
Date : 03-DEC-2009 16:54
Client ID: RE03-09-14248
Sample Info: |241615011|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

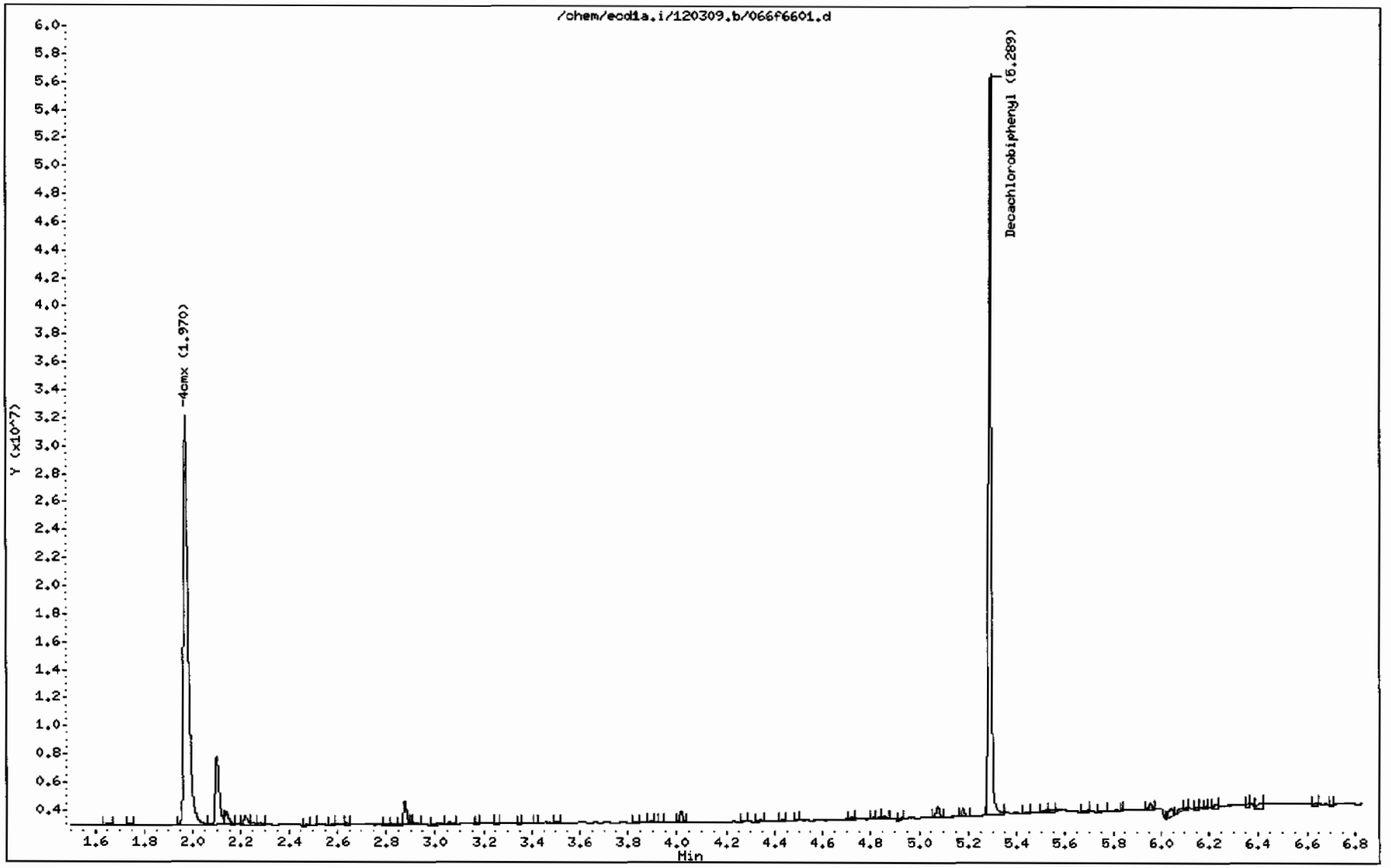

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/066b6601.d
Lab Smp Id: 241615011 Client Smp ID: RE03-09-14248
Inj Date : 03-DEC-2009 16:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615011|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14248|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	10.58700	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	33812227	91.0654	3.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	31898509	106.124	4.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/066b6601.d

Date : 03-DEC-2009 16:54

Client ID: RE03-09-14248

Sample Info: |241615011|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

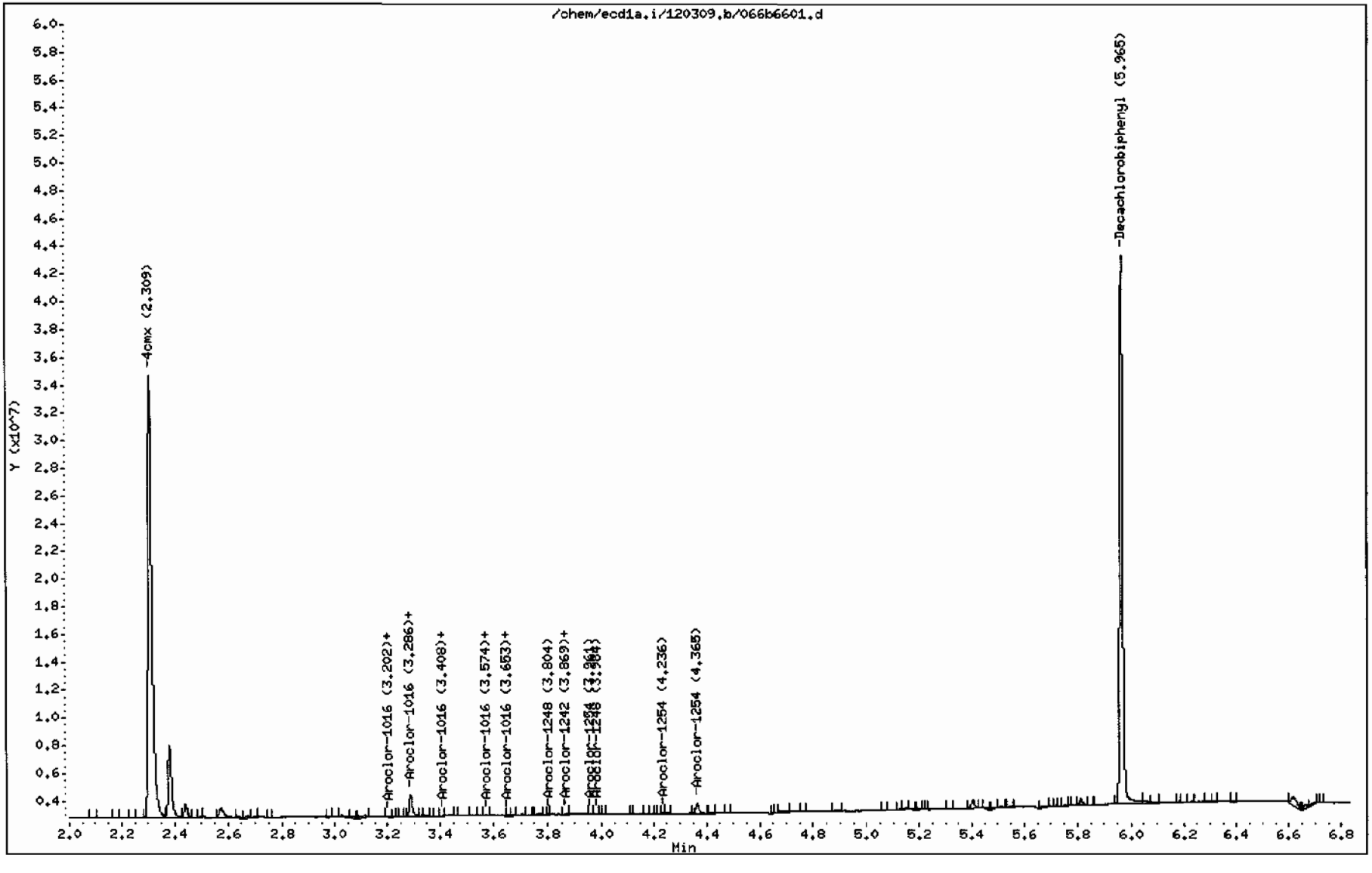

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615010	**Date Received:**	11/21/2009 09:00	**%Moisture:**	10.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14249	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 16:41	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.71	ug/kg	1.23	3.71	1
11104–28–2	Aroclor–1221	U	3.71	ug/kg	1.23	3.71	1
11141–16–5	Aroclor–1232	U	3.71	ug/kg	1.23	3.71	1
53469–21–9	Aroclor–1242	U	3.71	ug/kg	1.23	3.71	1
12672–29–6	Aroclor–1248	U	3.71	ug/kg	1.23	3.71	1
11097–69–1	Aroclor–1254	U	3.71	ug/kg	1.23	3.71	1
11096–82–5	Aroclor–1260	U	3.71	ug/kg	1.23	3.71	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/065f6501.d
Lab Smp Id: 241615010 Client Smp ID: RE03-09-14249
Inj Date : 03-DEC-2009 16:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615010|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14249|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	10.08880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.972	-0.002	50461647	113.073	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	44955150	109.980	4.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/065f6501.d
Date : 03-DEC-2009 16:41
Client ID: RE03-09-14249
Sample Info: |241615010|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

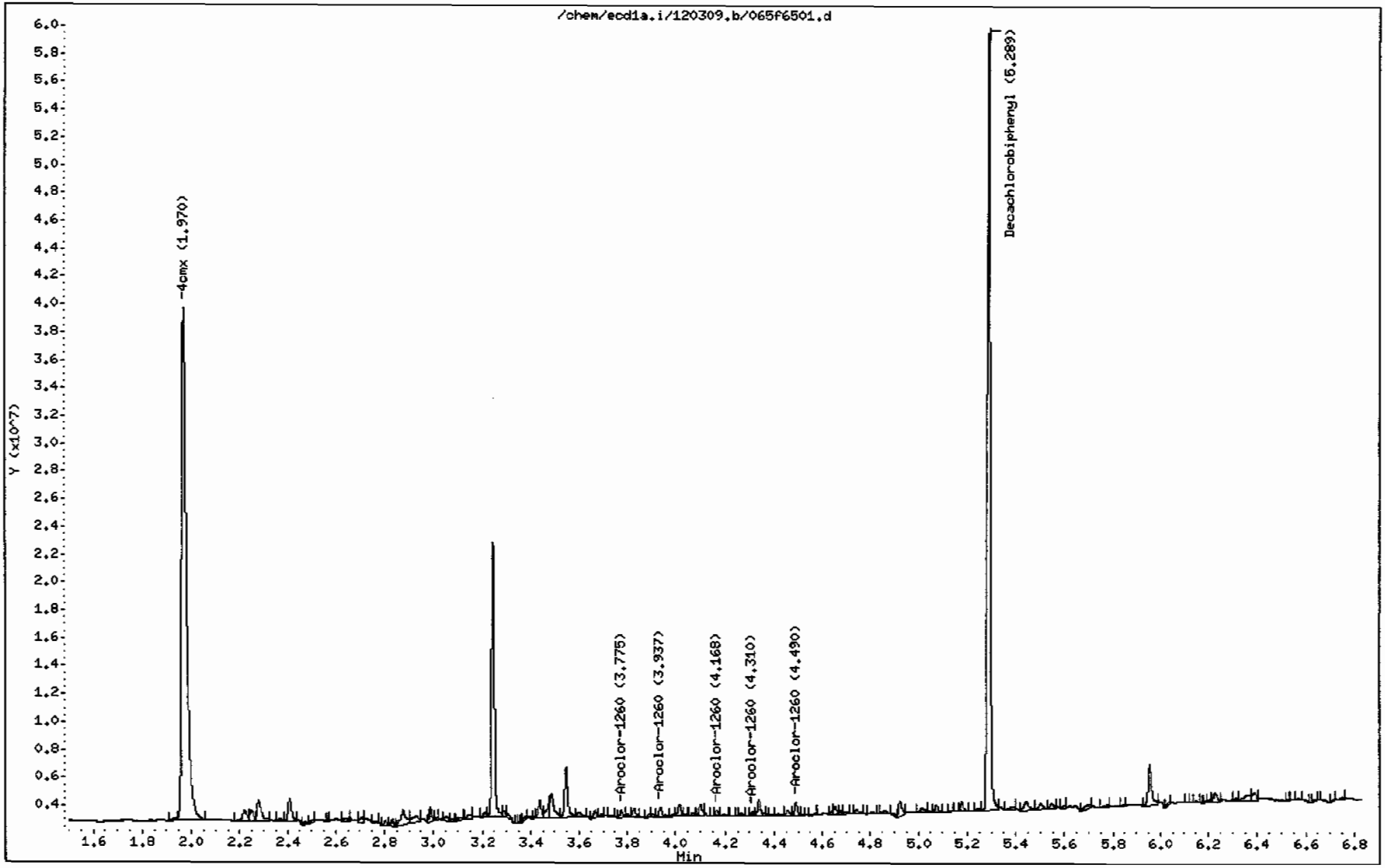

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/065b6501.d
Lab Smp Id: 241615010 Client Smp ID: RE03-09-14249
Inj Date : 03-DEC-2009 16:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615010|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14249|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	10.08880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	42285296	113.886	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	33162411	110.329	4.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/065b6501.d
Date : 03-DEC-2009 16:41
Client ID: RE03-09-14249
Sample Info: |241615010|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

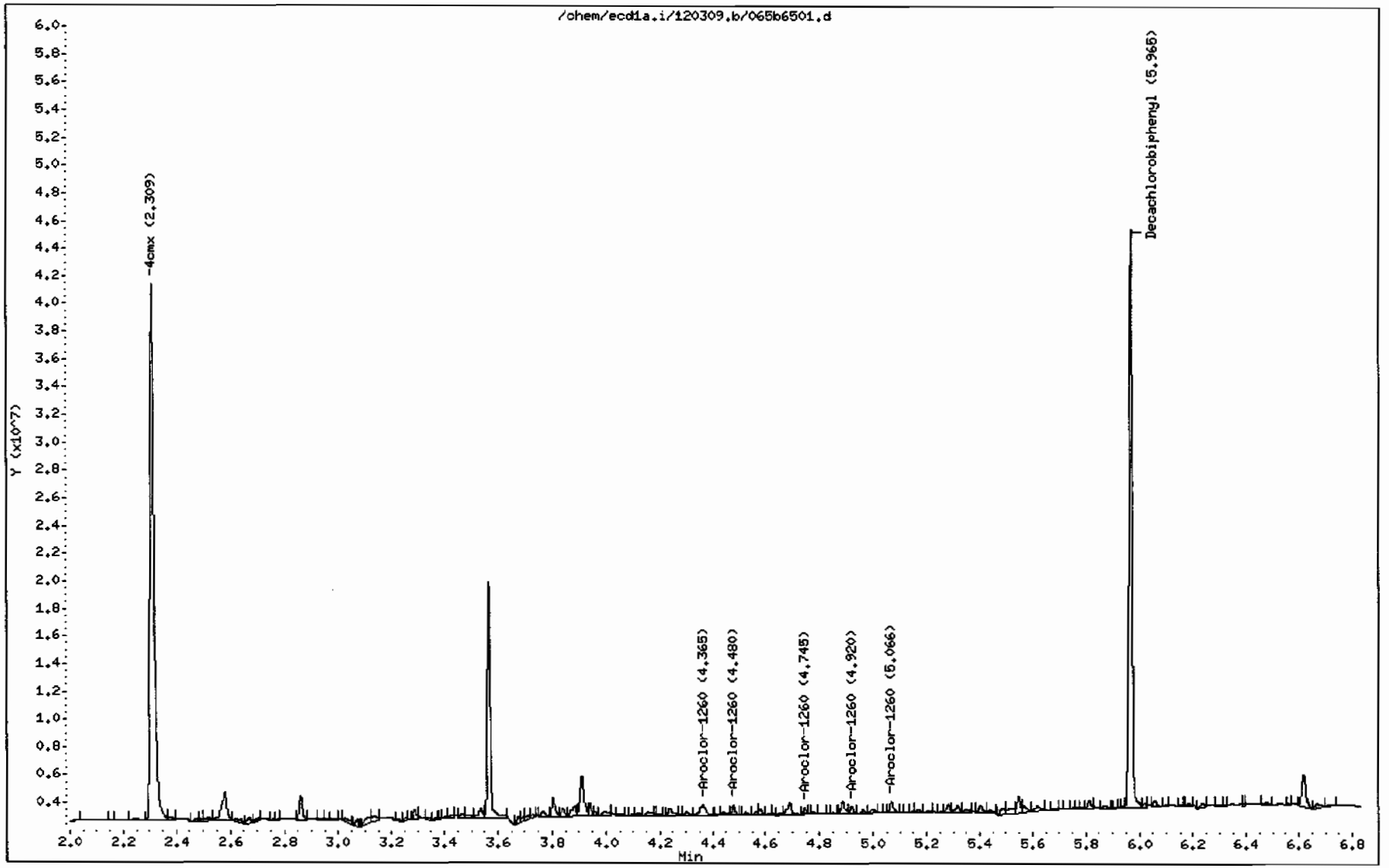

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615006**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**6.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14250**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 15:25**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**059f5901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	059b5901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.57	ug/kg	1.19	3.57	1
11104–28–2	Aroclor–1221	U	3.57	ug/kg	1.19	3.57	1
11141–16–5	Aroclor–1232	U	3.57	ug/kg	1.19	3.57	1
53469–21–9	Aroclor–1242	U	3.57	ug/kg	1.19	3.57	1
12672–29–6	Aroclor–1248	U	3.57	ug/kg	1.19	3.57	1
11097–69–1	Aroclor–1254	U	3.57	ug/kg	1.19	3.57	1
11096–82–5	Aroclor–1260	U	3.57	ug/kg	1.19	3.57	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/059f5901.d
Lab Smp Id: 241615006 Client Smp ID: RE03-09-14250
Inj Date : 03-DEC-2009 15:25
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615006|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14250|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:20 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	6.92880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	47975343	107.502	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	47214731	115.508	4.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/059f5901.d
Date : 03-DEC-2009 15:25
Client ID: RE03-09-14250
Sample Info: |241615006|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

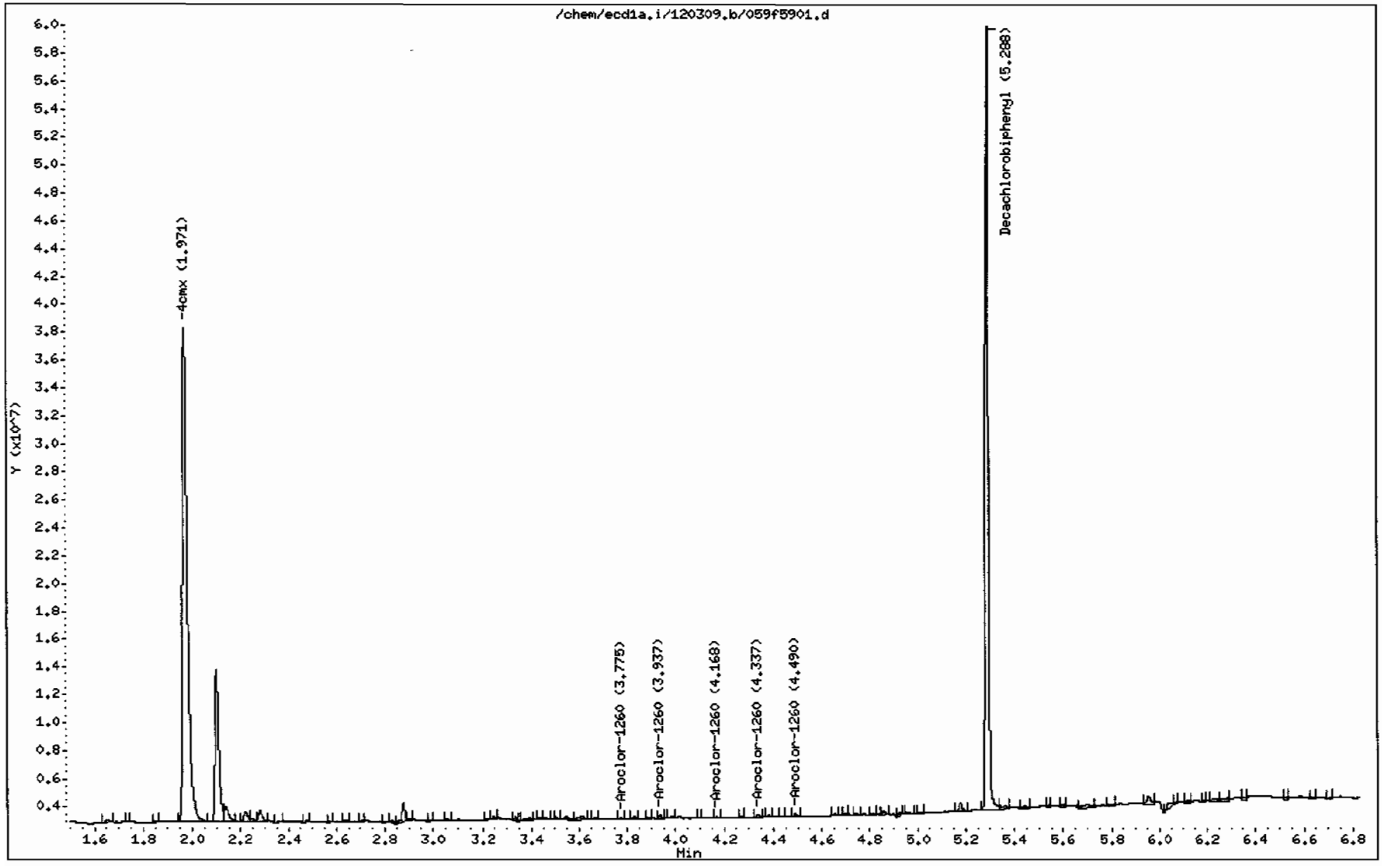

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/059b5901.d
Lab Smp Id: 241615006 Client Smp ID: RE03-09-14250
Inj Date : 03-DEC-2009 15:25
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615006|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14250|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	6.92880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40179528	108.214	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	35320663	117.509	4.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/059b5901.d
Date : 03-DEC-2009 15:25
Client ID: RE03-09-14250
Sample Info: |241615006|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

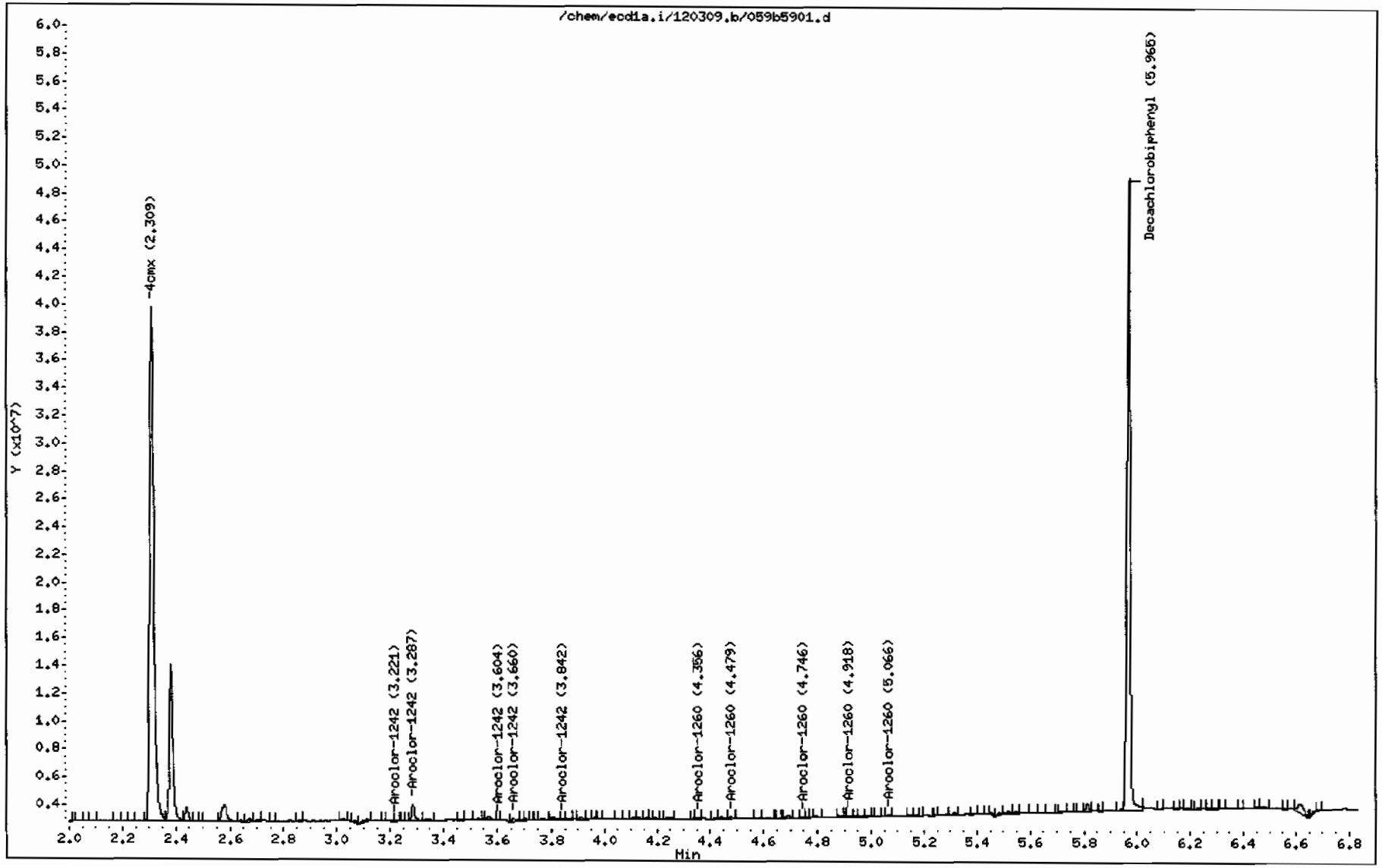

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615015**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14251**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 18:09**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**072f7201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	072b7201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.22	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.22	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.22	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.22	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.22	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.22	3.68	1
11096-82-5	Aroclor-1260	U	3.68	ug/kg	1.22	3.68	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/072f7201.d
Lab Smp Id: 241615015 Client Smp ID: RE03-09-14251
Inj Date : 03-DEC-2009 18:09
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615015|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14251|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	9.45960	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	38597892	86.4893	3.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	42717935	104.507	3.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/072f7201.d
Date : 03-DEC-2009 18:09
Client ID: RE03-09-14251
Sample Info: |241615015|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

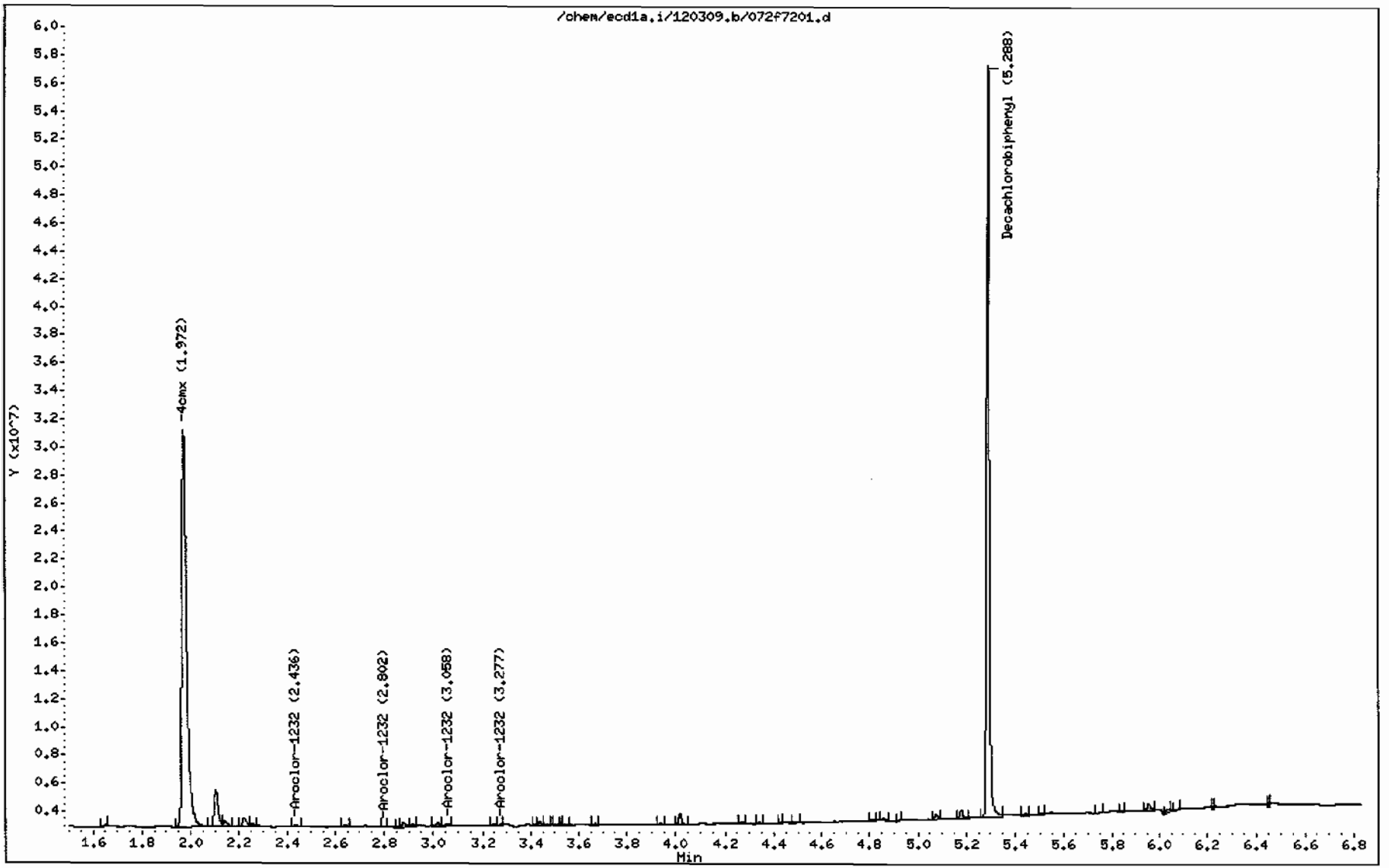

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/072b7201.d
Lab Smp Id: 241615015 Client Smp ID: RE03-09-14251
Inj Date : 03-DEC-2009 18:09
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615015|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14251|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	9.45960	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	32836856	88.4385	3.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	31784020	105.743	3.9	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/072b7201.d
Date : 03-DEC-2009 18:09
Client ID: RE03-09-14251
Sample Info: |241615015|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

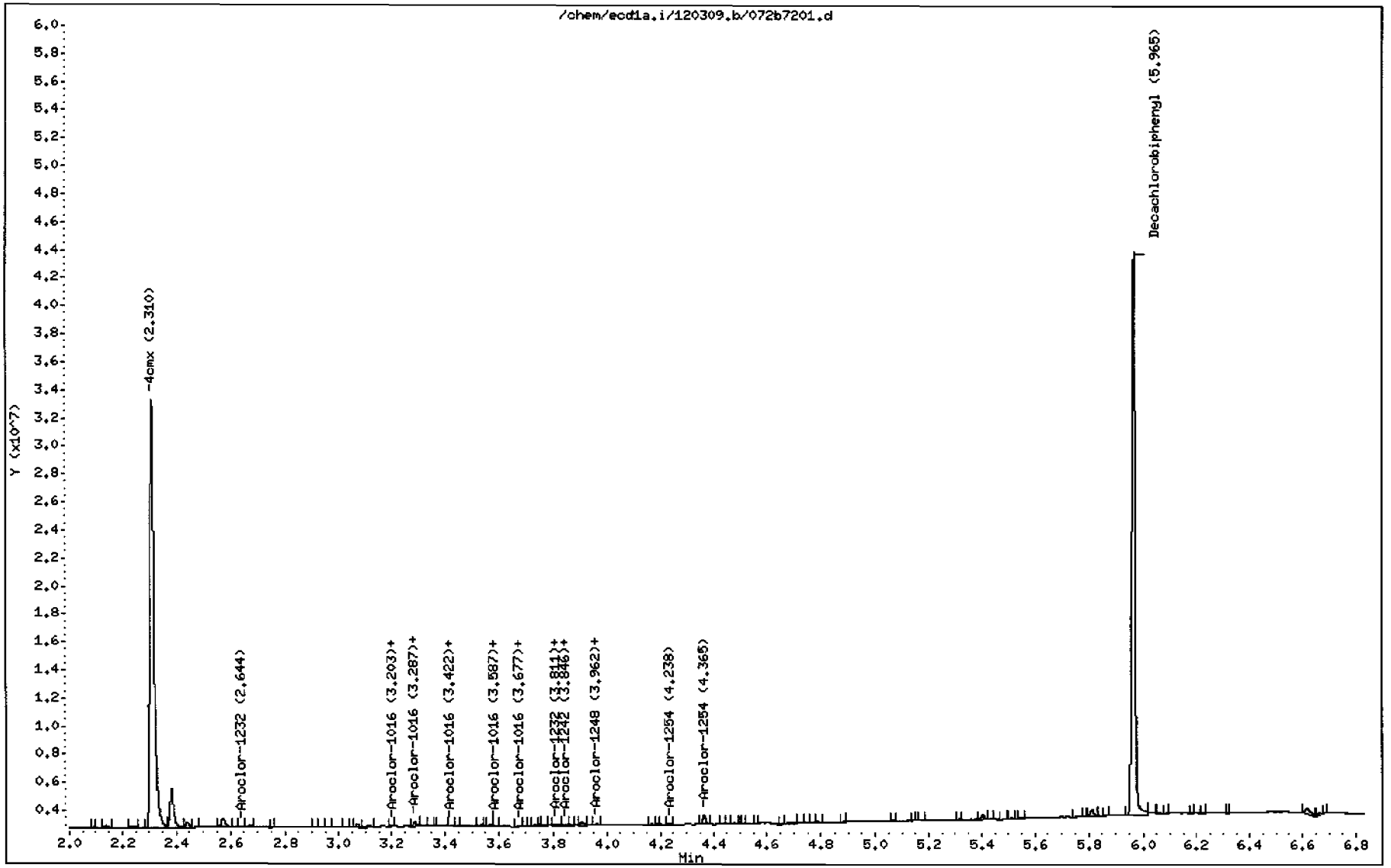

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615005	**Date Received:**	11/21/2009 09:00	**%Moisture:**	6.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14252	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 15:12	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	058f5801.d	**Column:**	1 CLP1	**Level:**	LOW
	058b5801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.57	ug/kg	1.19	3.57	1
11104–28–2	Aroclor–1221	U	3.57	ug/kg	1.19	3.57	1
11141–16–5	Aroclor–1232	U	3.57	ug/kg	1.19	3.57	1
53469–21–9	Aroclor–1242	U	3.57	ug/kg	1.19	3.57	1
12672–29–6	Aroclor–1248	U	3.57	ug/kg	1.19	3.57	1
11097–69–1	Aroclor–1254	U	3.57	ug/kg	1.19	3.57	1
11096–82–5	Aroclor–1260	U	3.57	ug/kg	1.19	3.57	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/058f5801.d
Lab Smp Id: 241615005 Client Smp ID: RE03-09-14252
Inj Date : 03-DEC-2009 15:12
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615005|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14252|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	6.62750	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	38494727	86.2581	3.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	34550018	84.5248	3.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/058f5801.d
Date : 03-DEC-2009 15:12
Client ID: RE03-09-14252
Sample Info: |241615005|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

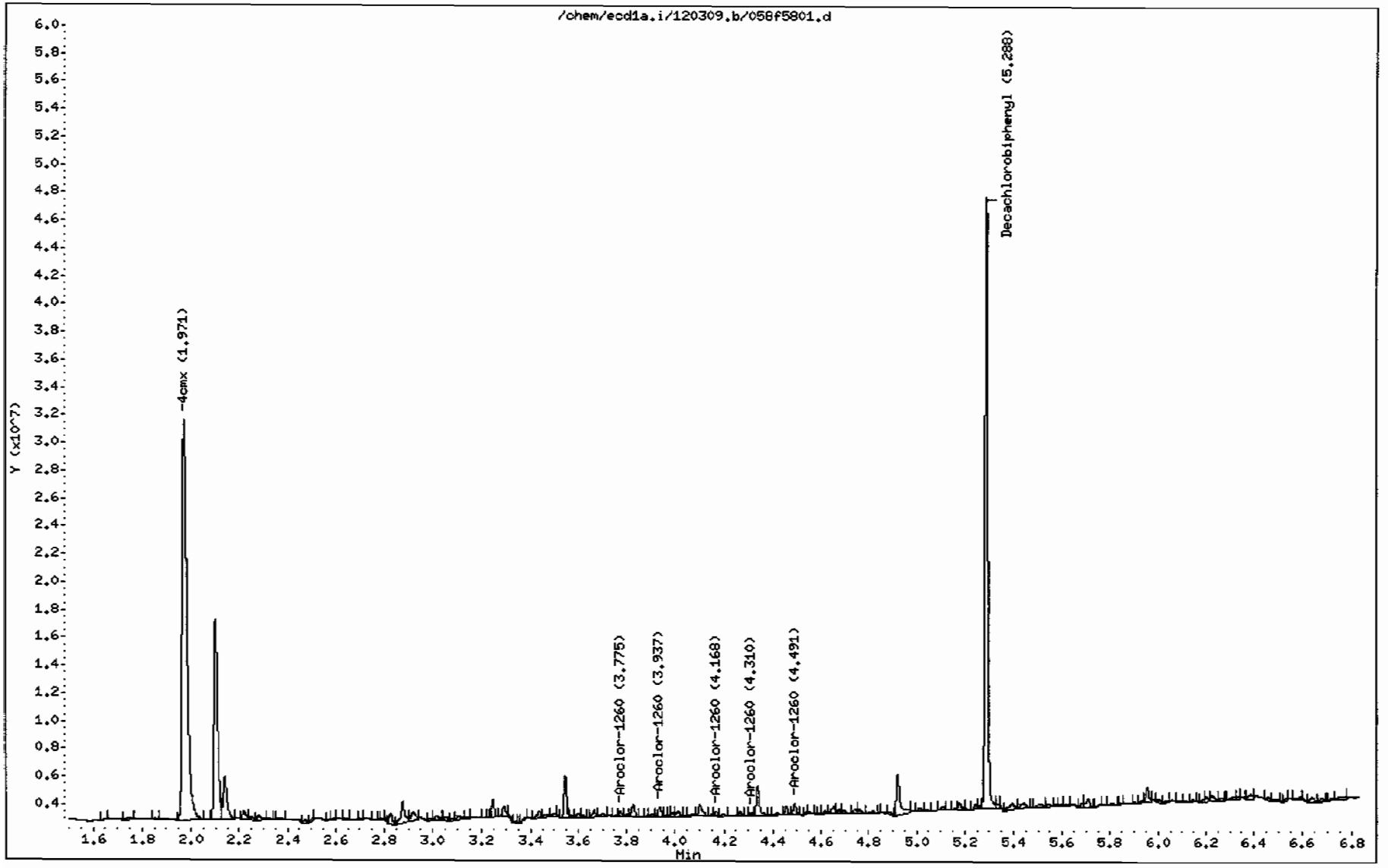

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/058b5801.d
Lab Smp Id: 241615005 Client Smp ID: RE03-09-14252
Inj Date : 03-DEC-2009 15:12
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615005|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14252|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	6.62750	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	31722312	85.4367	3.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	24521651	81.5816	2.9	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/058b5801.d

Date : 03-DEC-2009 15:12

Client ID: RE03-09-14252

Sample Info: |2416150051|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

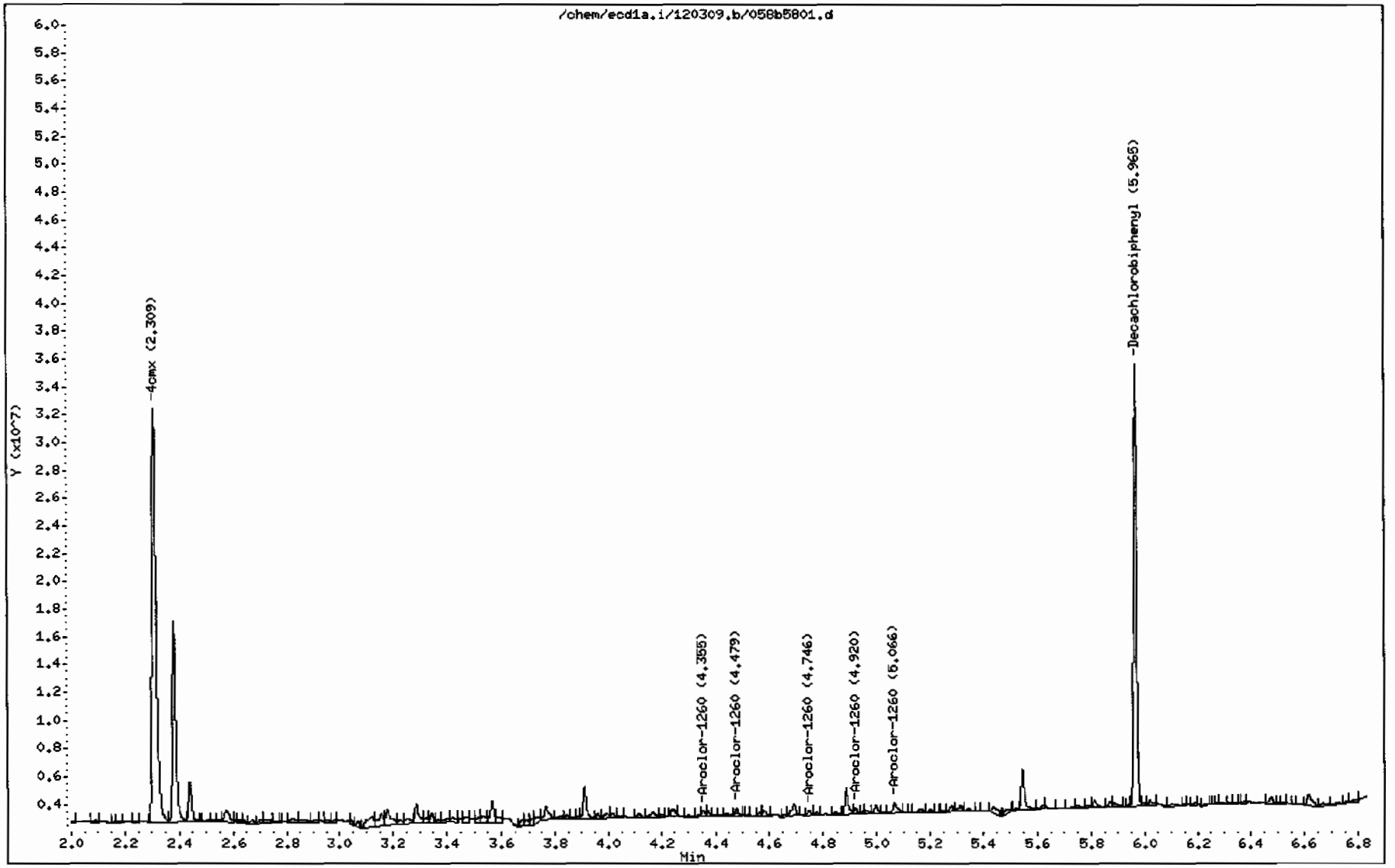

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615014	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14253	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 17:57	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.66	ug/kg	1.22	3.66	1
11104–28–2	Aroclor–1221	U	3.66	ug/kg	1.22	3.66	1
11141–16–5	Aroclor–1232	U	3.66	ug/kg	1.22	3.66	1
53469–21–9	Aroclor–1242	U	3.66	ug/kg	1.22	3.66	1
12672–29–6	Aroclor–1248	U	3.66	ug/kg	1.22	3.66	1
11097–69–1	Aroclor–1254	U	3.66	ug/kg	1.22	3.66	1
11096–82–5	Aroclor–1260	U	3.66	ug/kg	1.22	3.66	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/071f7101.d
Lab Smp Id: 241615014 Client Smp ID: RE03-09-14253
Inj Date : 03-DEC-2009 17:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615014|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14253|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	9.13030	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.969	1.972	-0.003	37260805	83.4932	3.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	45084622	110.297	4.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/071f7101.d
Date : 03-DEC-2009 17:57
Client ID: RE03-09-14253
Sample Info: |241615014|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

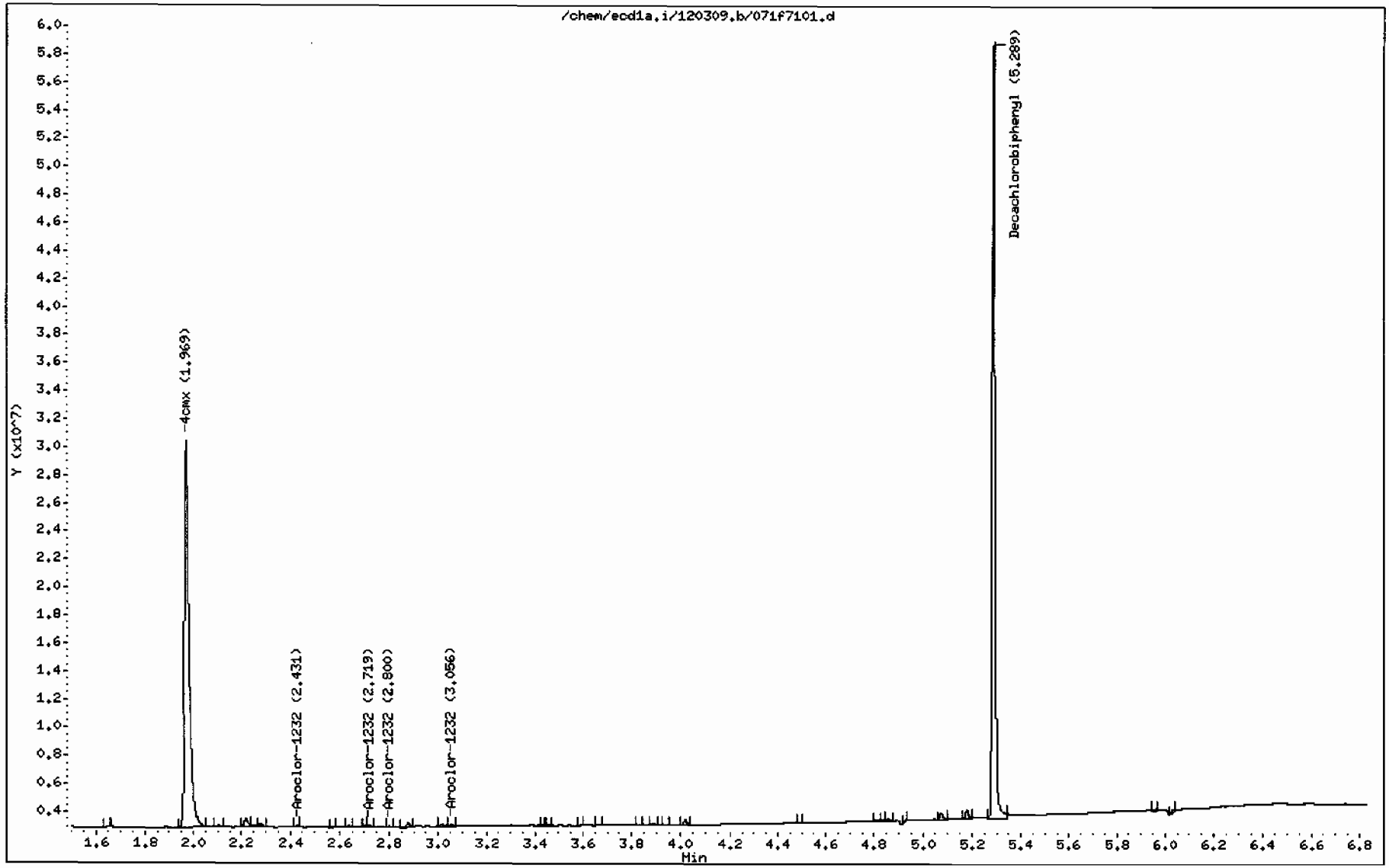

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/071b7101.d
Lab Smp Id: 241615014 Client Smp ID: RE03-09-14253
Inj Date : 03-DEC-2009 17:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615014|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14253|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	9.13030	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	31927514	85.9894	3.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	33429585	111.218	4.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/071b7101.d
Date : 03-DEC-2009 17:57
Client ID: RE03-09-14253
Sample Info: |241615014|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

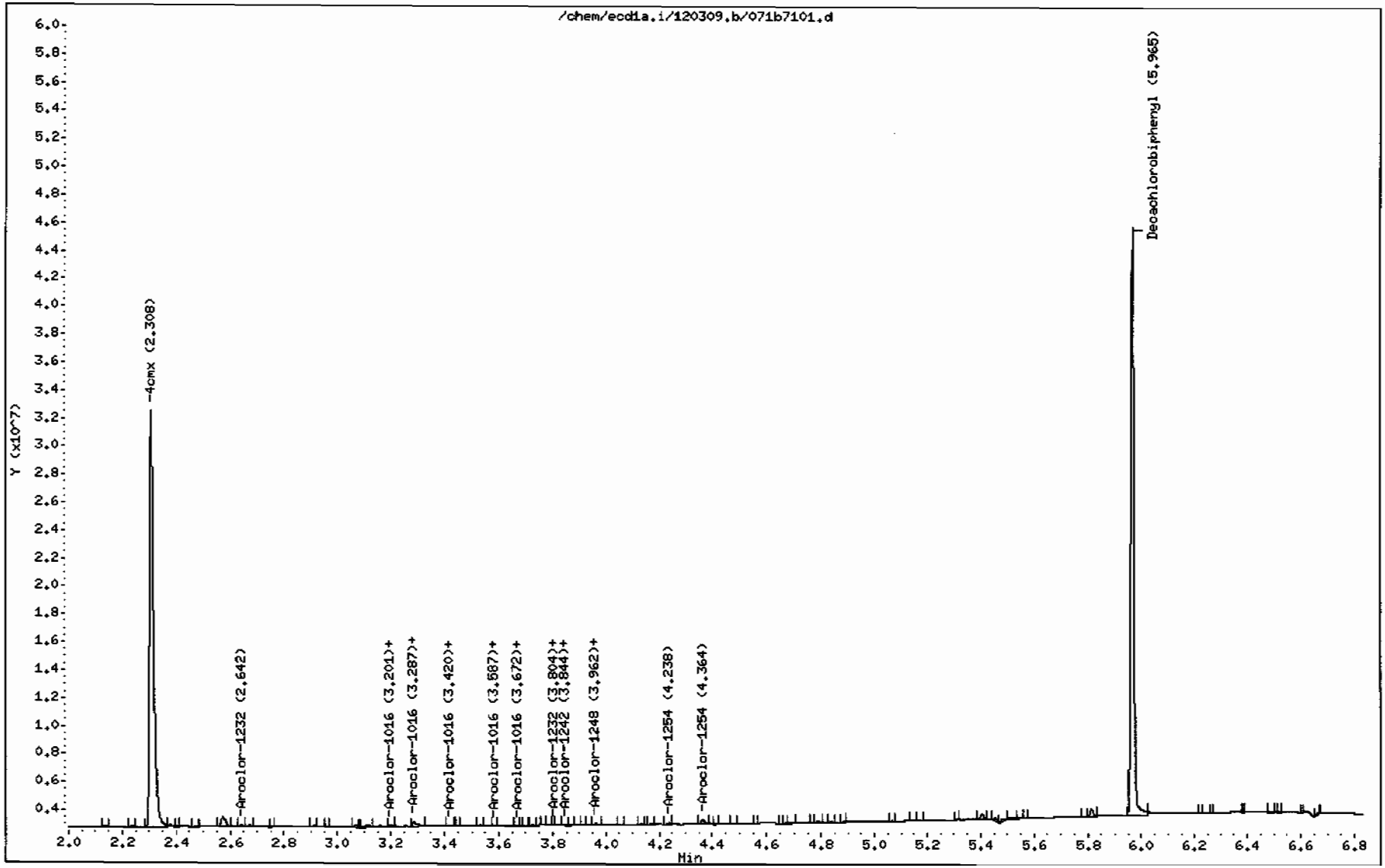

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615009	**Date Received:**	11/21/2009 09:00	**%Moisture:**	5.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14254	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 16:28	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	064f6401.d	**Column:**	1 CLP1	**Level:**	LOW
	064b6401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.54	ug/kg	1.18	3.54	1
11104–28–2	Aroclor–1221	U	3.54	ug/kg	1.18	3.54	1
11141–16–5	Aroclor–1232	U	3.54	ug/kg	1.18	3.54	1
53469–21–9	Aroclor–1242	U	3.54	ug/kg	1.18	3.54	1
12672–29–6	Aroclor–1248	U	3.54	ug/kg	1.18	3.54	1
11097–69–1	Aroclor–1254	U	3.54	ug/kg	1.18	3.54	1
11096–82–5	Aroclor–1260	U	3.54	ug/kg	1.18	3.54	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/064f6401.d
Lab Smp Id: 241615009 Client Smp ID: RE03-09-14254
Inj Date : 03-DEC-2009 16:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615009|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14254|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 64
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	5.85850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	47072955	105.480	3.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	43198514	105.683	3.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/064f6401.d
Date : 03-DEC-2009 16:28
Client ID: RE03-09-14254
Sample Info: |241615009|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

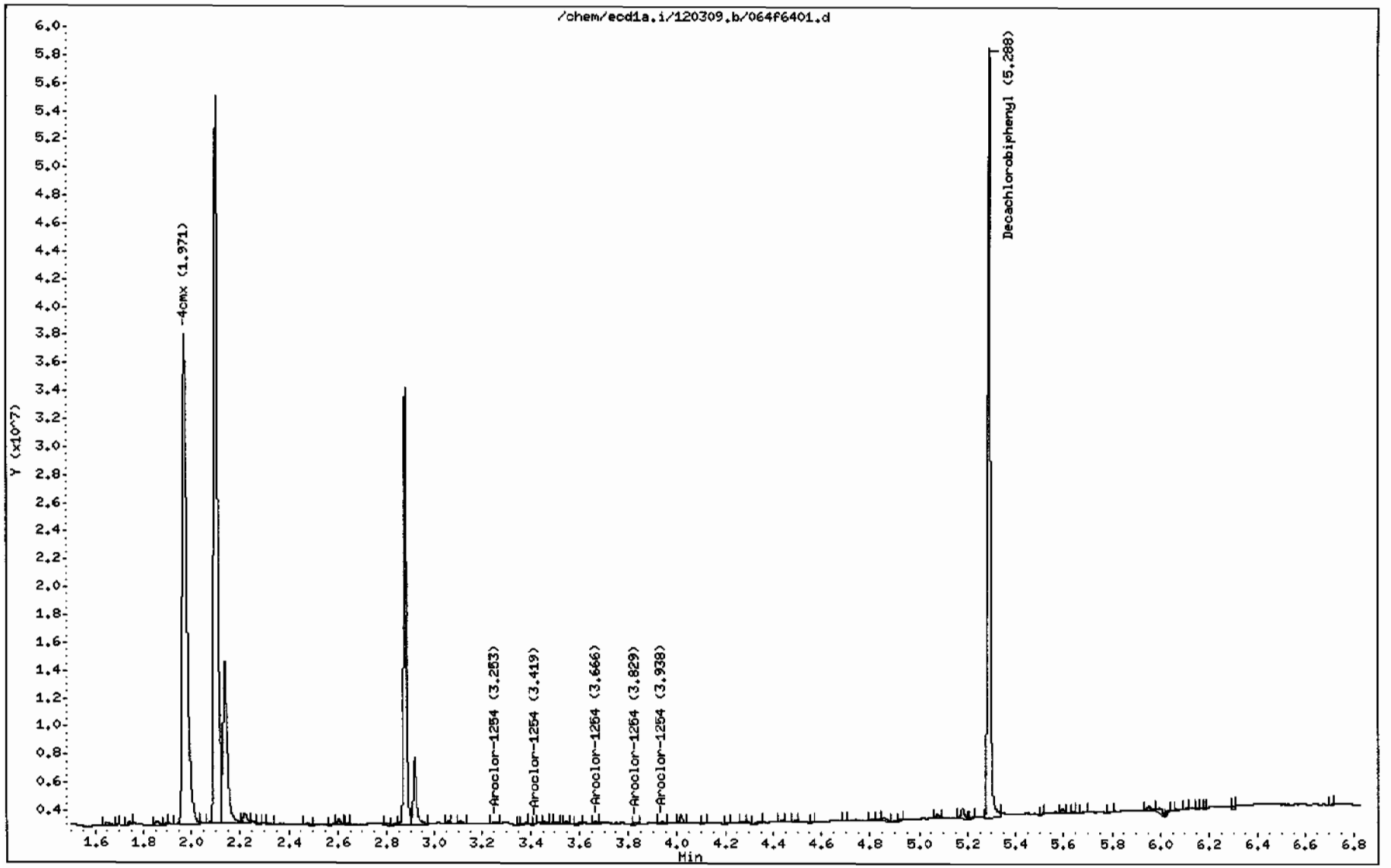

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/064b6401.d
Lab Smp Id: 241615009 Client Smp ID: RE03-09-14254
Inj Date : 03-DEC-2009 16:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615009|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14254|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 64
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	5.85850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	39449456	106.248	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	34561062	114.982	4.1	80.00- 120.00	100.00

Data File: /ohem/ecd1a.i/120309.b/064b6401.d
Date : 03-DEC-2009 16:28
Client ID: RE03-09-14254
Sample Info: |241615009|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

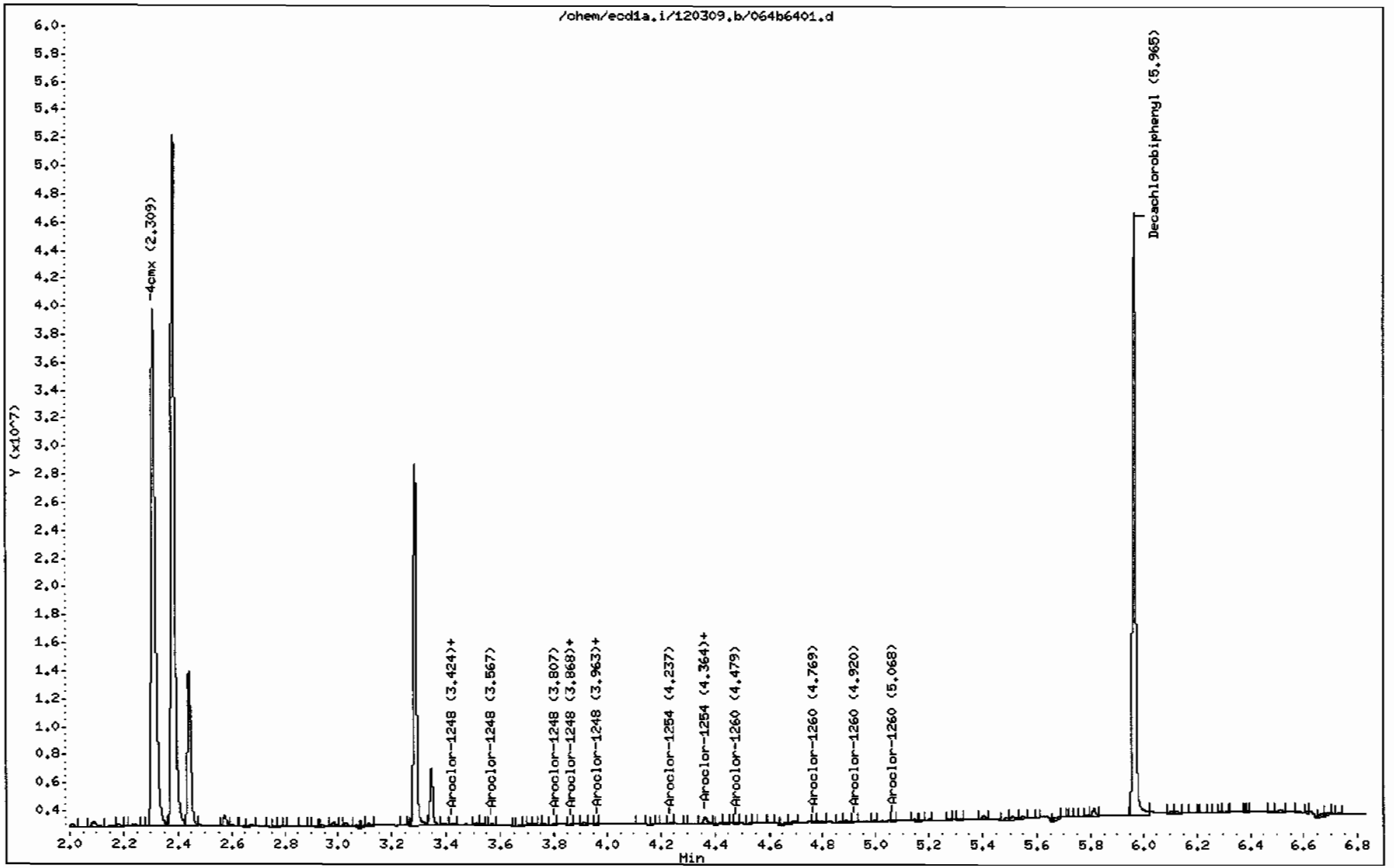

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615007	**Date Received:**	11/21/2009 09:00	**%Moisture:**	9.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14255	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 15:38	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	060f6001.d	**Column:**	1 CLP1	**Level:**	LOW
	060b6001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.67	ug/kg	1.22	3.67	1
11104–28–2	Aroclor–1221	U	3.67	ug/kg	1.22	3.67	1
11141–16–5	Aroclor–1232	U	3.67	ug/kg	1.22	3.67	1
53469–21–9	Aroclor–1242	U	3.67	ug/kg	1.22	3.67	1
12672–29–6	Aroclor–1248	U	3.67	ug/kg	1.22	3.67	1
11097–69–1	Aroclor–1254	U	3.67	ug/kg	1.22	3.67	1
11096–82–5	Aroclor–1260	U	3.67	ug/kg	1.22	3.67	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/060f6001.d
Lab Smp Id: 241615007 Client Smp ID: RE03-09-14255
Inj Date : 03-DEC-2009 15:38
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615007|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14255|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 60
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	9.25470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	44299284	99.2648	3.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	35056695	85.7643	3.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/060f6001.d
Date : 03-DEC-2009 15:38
Client ID: RE03-09-14255
Sample Info: 1241615007141
Volume Injected (ul): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

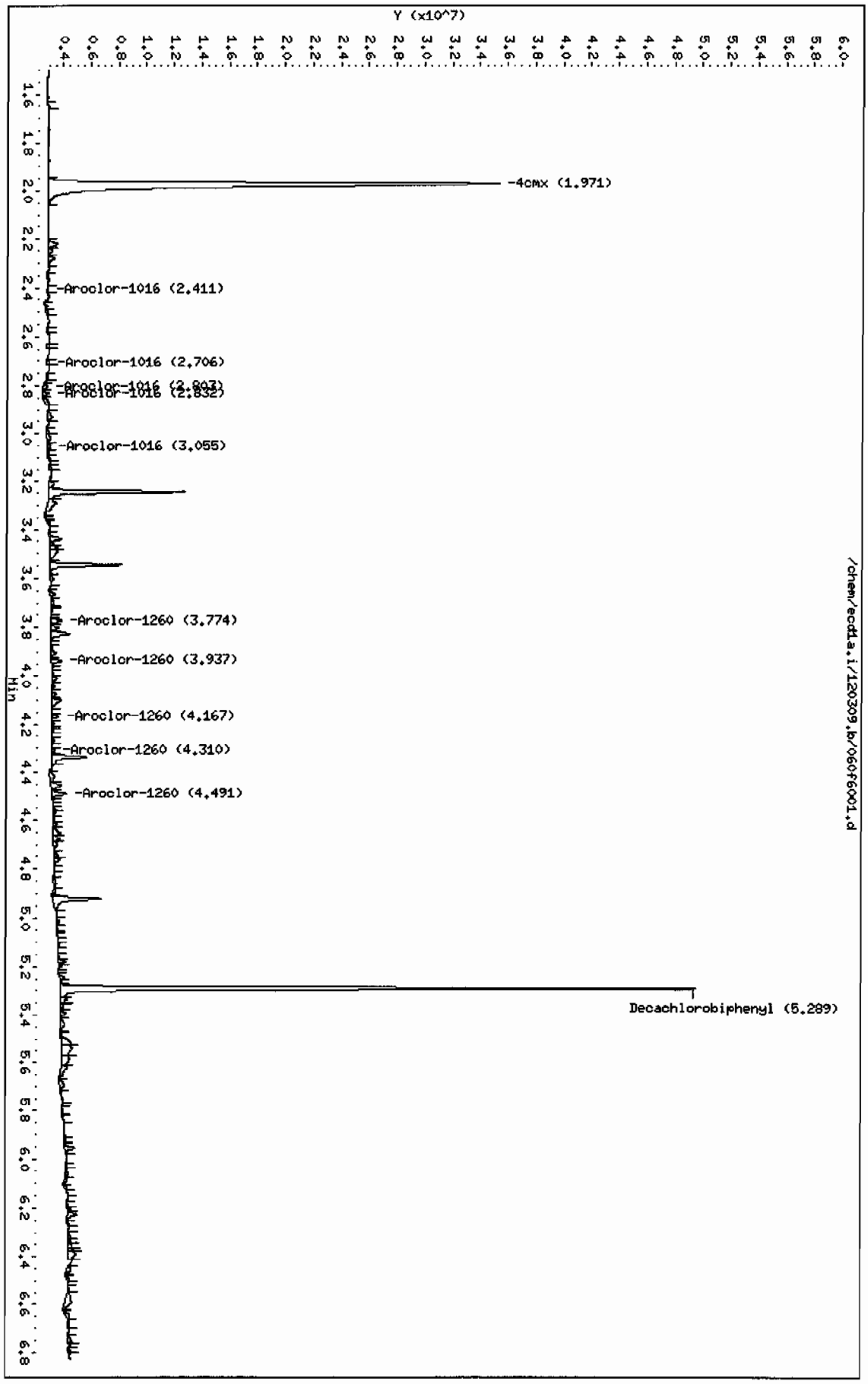

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/060b6001.d
Lab Smp Id: 241615007 Client Smp ID: RE03-09-14255
Inj Date : 03-DEC-2009 15:38
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615007|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14255|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 60
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	9.25470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	37317383	100.506	3.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	27275126	90.7422	3.3	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/060b6001.d
Date : 03-DEC-2009 15:38
Client ID: RE03-09-14255
Sample Info: |241615007|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

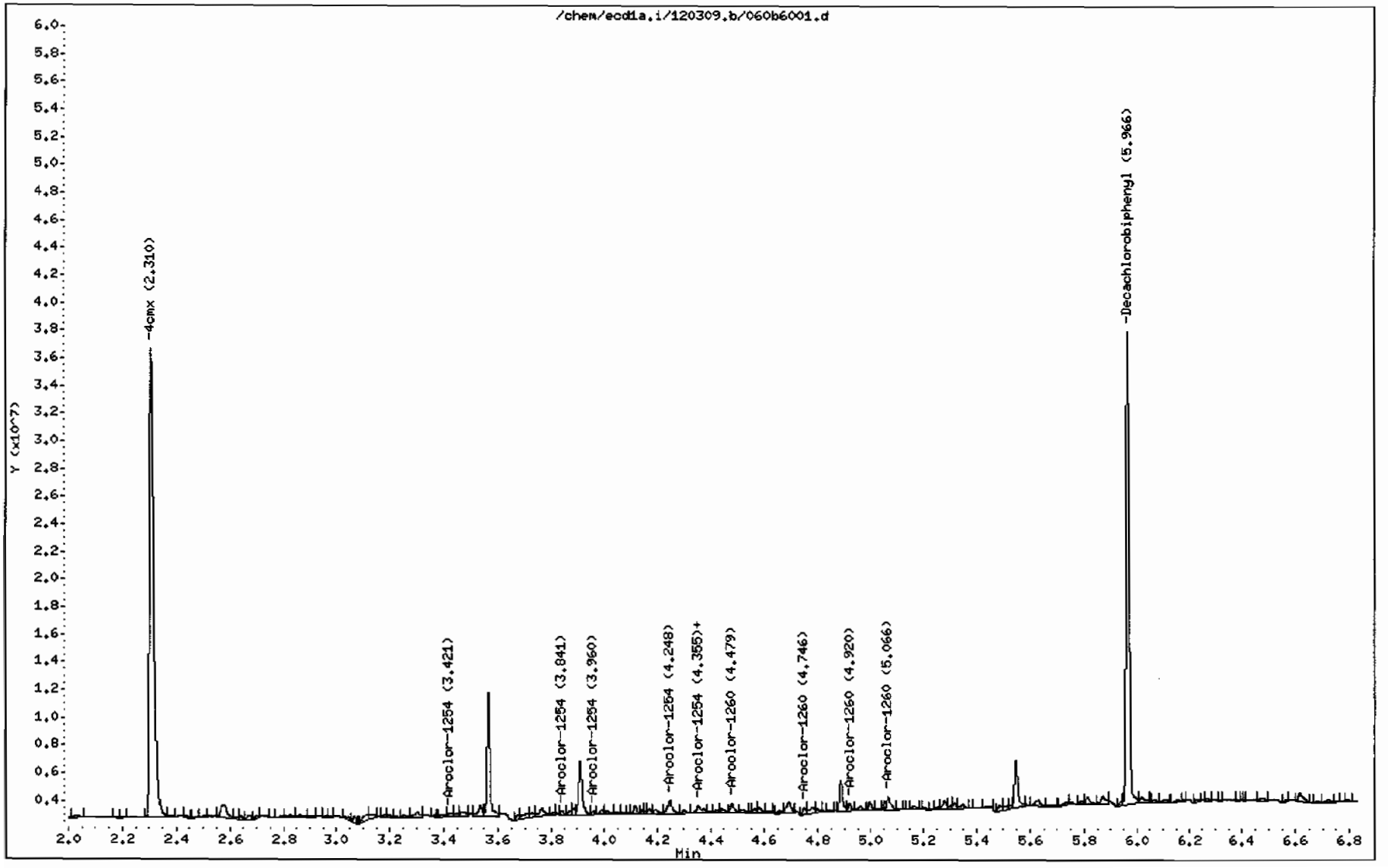

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615008	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14256	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 15:50	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	061f6101.d	**Column:**	1 CLP1	**Level:**	LOW
	061b6101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.62	ug/kg	1.21	3.62	1
11104–28–2	Aroclor–1221	U	3.62	ug/kg	1.21	3.62	1
11141–16–5	Aroclor–1232	U	3.62	ug/kg	1.21	3.62	1
53469–21–9	Aroclor–1242	U	3.62	ug/kg	1.21	3.62	1
12672–29–6	Aroclor–1248	U	3.62	ug/kg	1.21	3.62	1
11097–69–1	Aroclor–1254	U	3.62	ug/kg	1.21	3.62	1
11096–82–5	Aroclor–1260	U	3.62	ug/kg	1.21	3.62	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/061f6101.d
Lab Smp Id: 241615008 Client Smp ID: RE03-09-14256
Inj Date : 03-DEC-2009 15:50
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615008|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14256|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:20 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 61
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	8.24640	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	45572655	102.118	3.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	46487191	113.728	4.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/061f6101.d

Date : 03-DEC-2009 15:50

Client ID: RE03-09-14256

Sample Info: |241615008|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

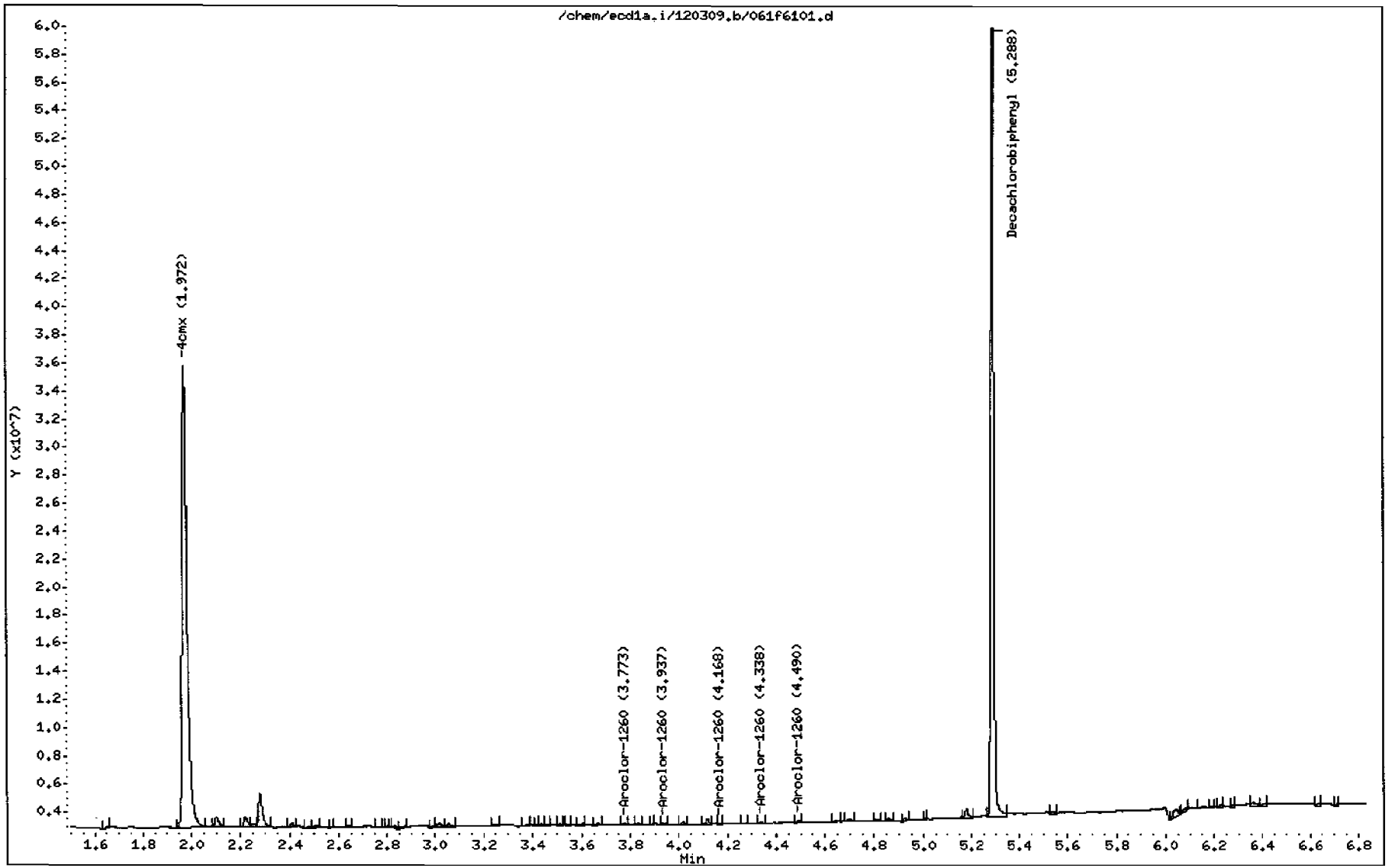

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/061b6101.d
Lab Smp Id: 241615008 Client Smp ID: RE03-09-14256
Inj Date : 03-DEC-2009 15:50
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615008|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14256|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 61
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	8.24640	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38620064	104.014	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	34240954	113.917	4.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/061b6101.d

Date : 03-DEC-2009 15:50

Client ID: RE03-09-14256

Sample Info: |241615008|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

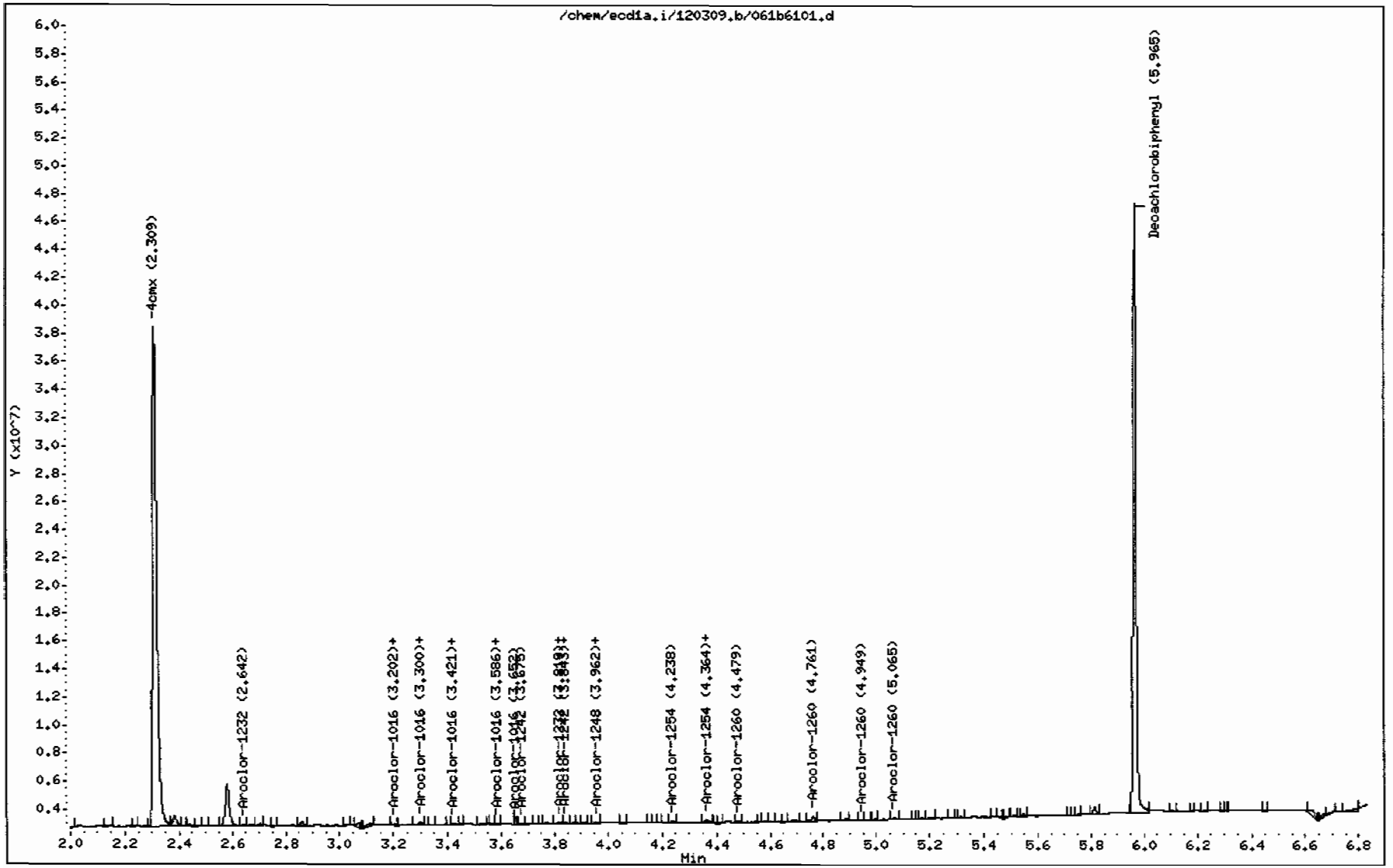

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615016	**Date Received:**	11/21/2009 09:00	**%Moisture:**	1.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14257	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 18:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	073f7301.d	**Column:**	1 CLP1	**Level:**	LOW
	073b7301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.36	ug/kg	1.12	3.36	1
11104-28-2	Aroclor-1221	U	3.36	ug/kg	1.12	3.36	1
11141-16-5	Aroclor-1232	U	3.36	ug/kg	1.12	3.36	1
53469-21-9	Aroclor-1242	U	3.36	ug/kg	1.12	3.36	1
12672-29-6	Aroclor-1248	U	3.36	ug/kg	1.12	3.36	1
11097-69-1	Aroclor-1254	U	3.36	ug/kg	1.12	3.36	1
11096-82-5	Aroclor-1260	U	3.36	ug/kg	1.12	3.36	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/073f7301.d
Lab Smp Id: 241615016 Client Smp ID: RE03-09-14257
Inj Date : 03-DEC-2009 18:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615016|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14257|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	1.10350	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	40280294	90.2592	3.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	43928052	107.468	3.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/073f7301.d
Date : 03-DEC-2009 18:22
Client ID: RE03-09-14257
Sample Info: |241615016|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

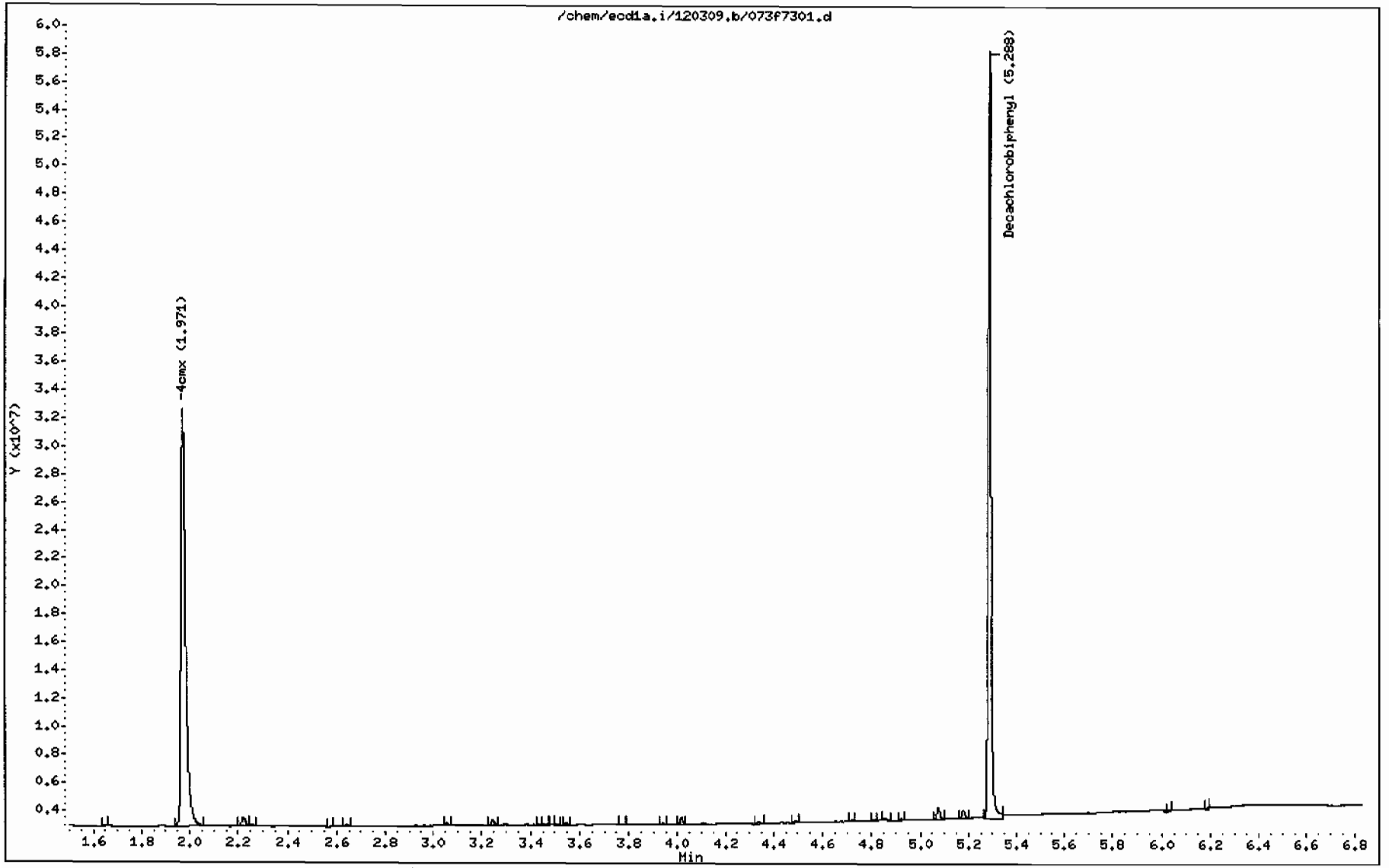

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/073b7301.d
Lab Smp Id: 241615016 Client Smp ID: RE03-09-14257
Inj Date : 03-DEC-2009 18:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615016|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-09-14257|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	1.10350	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	34286235	92.3421	3.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	32799285	109.121	3.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/073b7301.d

Date : 03-DEC-2009 18:22

Client ID: RE03-09-14257

Sample Info: |241615016|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

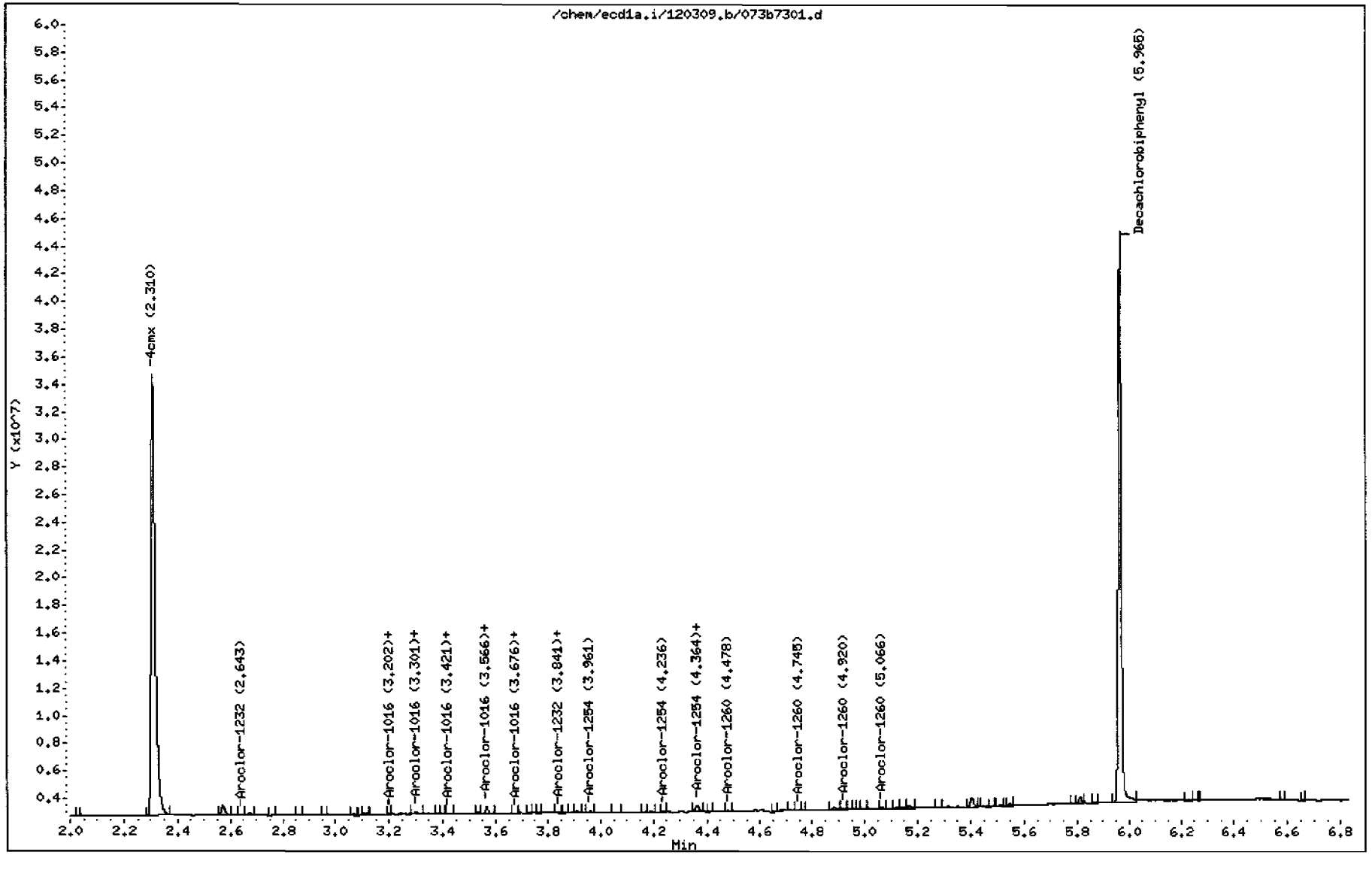

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**	**Date Collected:**	**11/19/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241615018**	**Date Received:**	**11/21/2009 09:00**	**%Moisture:**	**8.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–10–2729**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**929264**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 17:52**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/04/2009 20:52**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**047f4701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	047b4701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.63	ug/kg	1.21	3.63	1
11104–28–2	Aroclor–1221	U	3.63	ug/kg	1.21	3.63	1
11141–16–5	Aroclor–1232	U	3.63	ug/kg	1.21	3.63	1
53469–21–9	Aroclor–1242	U	3.63	ug/kg	1.21	3.63	1
12672–29–6	Aroclor–1248	U	3.63	ug/kg	1.21	3.63	1
11097–69–1	Aroclor–1254	U	3.63	ug/kg	1.21	3.63	1
11096–82–5	Aroclor–1260	U	3.63	ug/kg	1.21	3.63	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/047f4701.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 05-DEC-2009 17:52
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615018|1|
Misc Info : |ECD82P_1S|929264|SVAF|LANL|SOIL|RE03-10-2729|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	8.61540	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	49703627	111.375	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	47243217	115.578	4.2	80.00- 120.00	100.00

Data File: /chem/ecdla.i/120509.b/047f4701.d
Date : 05-DEC-2009 17:52
Client ID: RE03-10-2729
Sample Info: 1241615018111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdla.i
Operator: YS1
Column diameter: 0.25

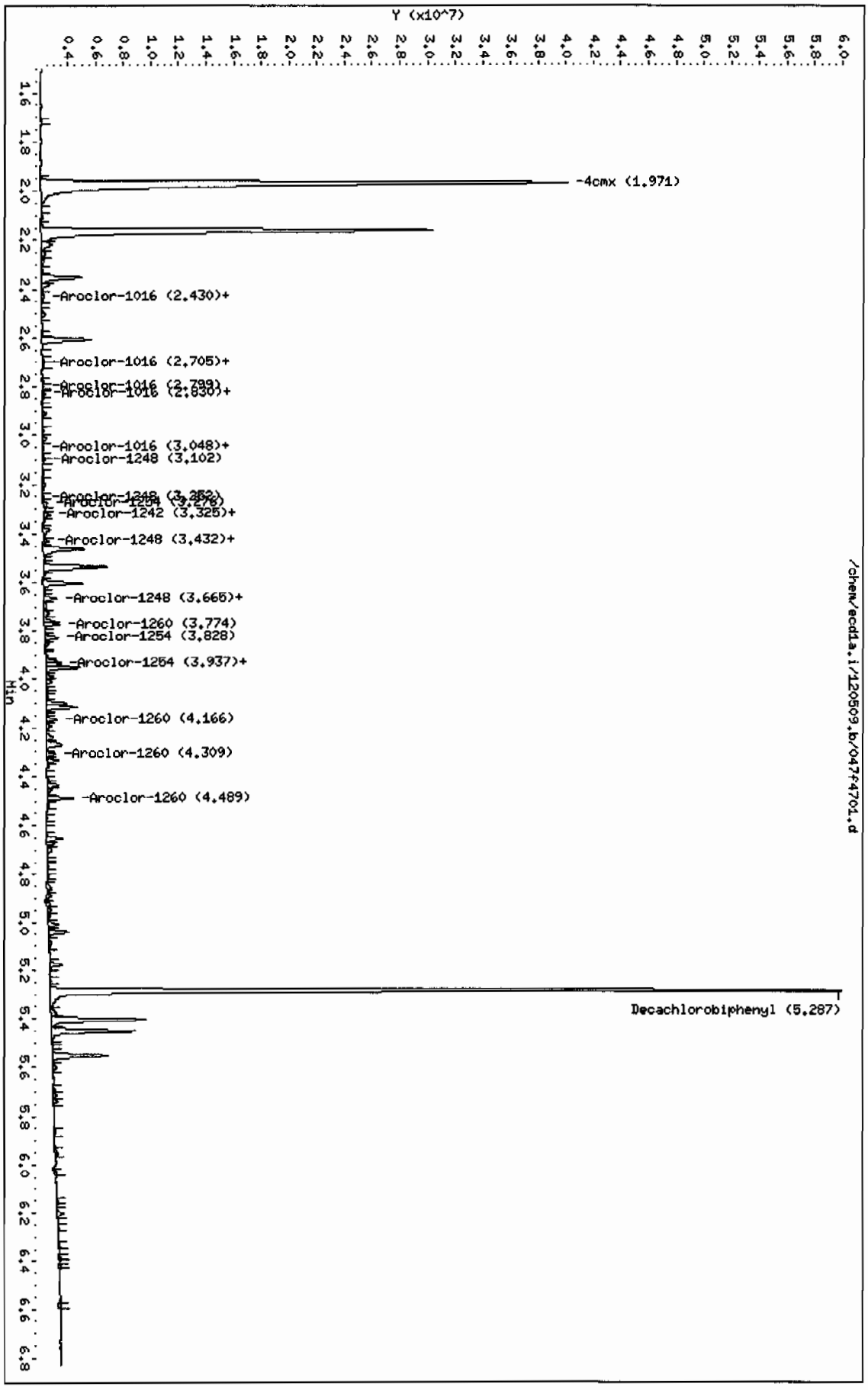

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/120509.b/047b4701.d
Lab Smp Id: 241615018 Client Smp ID: RE03-10-2729
Inj Date : 05-DEC-2009 17:52
Operator : YS1 Inst ID: ecdla.i
Smp Info : |241615018|1|
Misc Info : |ECD82P_1S|929264|SVAF|LANL|SOIL|RE03-10-2729|||
Comment :
Method : /chem/ecdla.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	8.61540	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	41578930	111.983	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.961	5.964	-0.003	39650923	131.915	4.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120509.b/047b4701.d
Date : 05-DEC-2009 17:52
Client ID: RE03-10-2729
Sample Info: |241615018|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

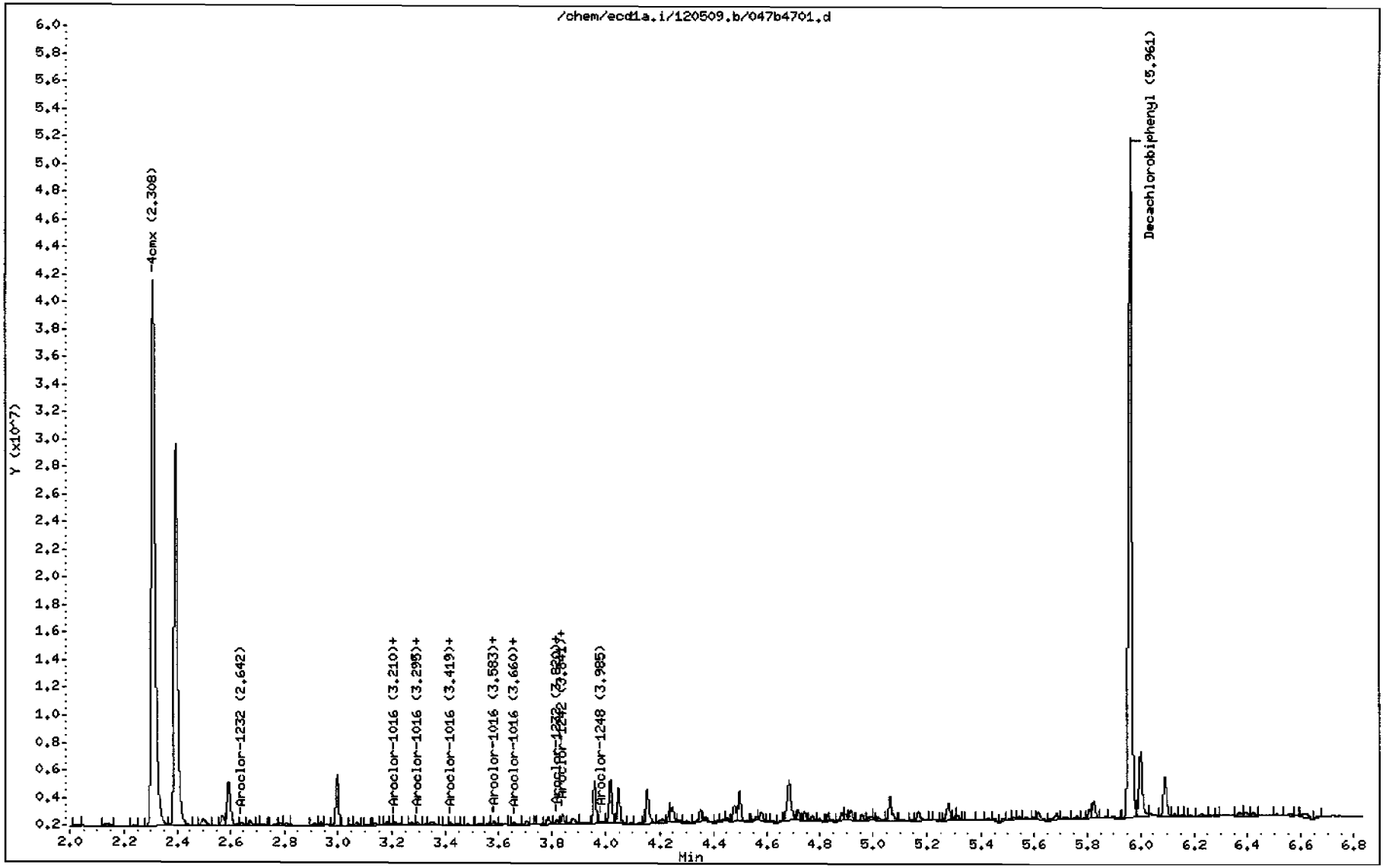

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	241615020	**Date Received:**	11/21/2009 09:00	**%Moisture:**	4.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6969	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 19:12	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.50	ug/kg	1.17	3.50	1
11104–28–2	Aroclor–1221	U	3.50	ug/kg	1.17	3.50	1
11141–16–5	Aroclor–1232	U	3.50	ug/kg	1.17	3.50	1
53469–21–9	Aroclor–1242	U	3.50	ug/kg	1.17	3.50	1
12672–29–6	Aroclor–1248	U	3.50	ug/kg	1.17	3.50	1
11097–69–1	Aroclor–1254	U	3.50	ug/kg	1.17	3.50	1
11096–82–5	Aroclor–1260	U	3.50	ug/kg	1.17	3.50	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/077f7701.d
Lab Smp Id: 241615020 Client Smp ID: RE03-10-6969
Inj Date : 03-DEC-2009 19:12
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615020|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-10-6969|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:38 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	4.86100	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.969	1.972	-0.003	44256164	99.1682	3.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	41393047	101.266	3.5	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/077f7701.d

Date : 03-DEC-2009 19:12

Client ID: RE03-10-6969

Sample Info: |241615020|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

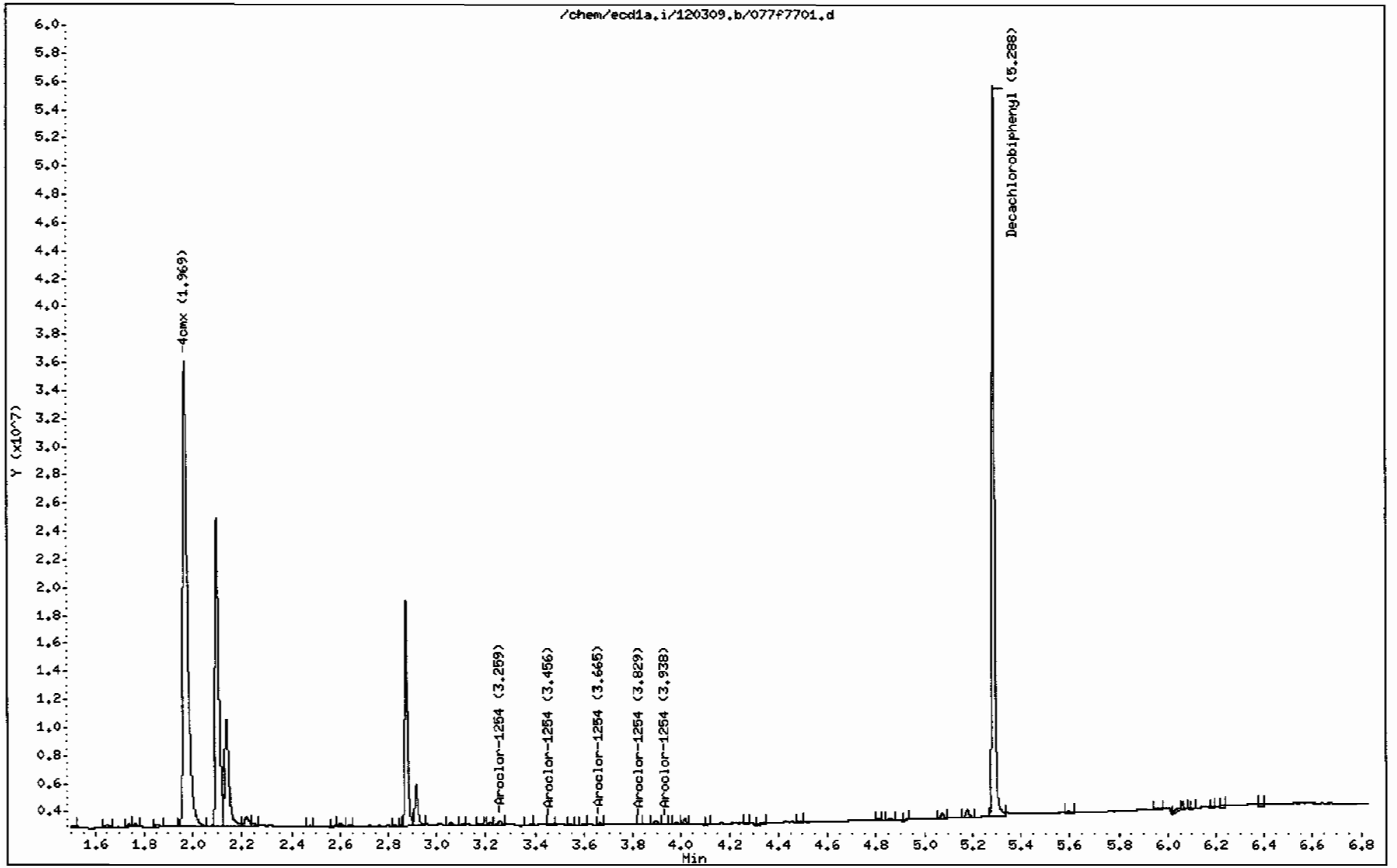

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/077b7701.d
Lab Smp Id: 241615020 Client Smp ID: RE03-10-6969
Inj Date : 03-DEC-2009 19:12
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241615020|1|
Misc Info : |ECD82P_1SF|927093|SVAF|LANL|SOIL|RE03-10-6969|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:38 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	4.86100	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37273667	100.388	3.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	32334563	107.574	3.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120309.b/077b7701.d

Date : 03-DEC-2009 19:12

Client ID: RE03-10-6969

Sample Info: |241615020|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

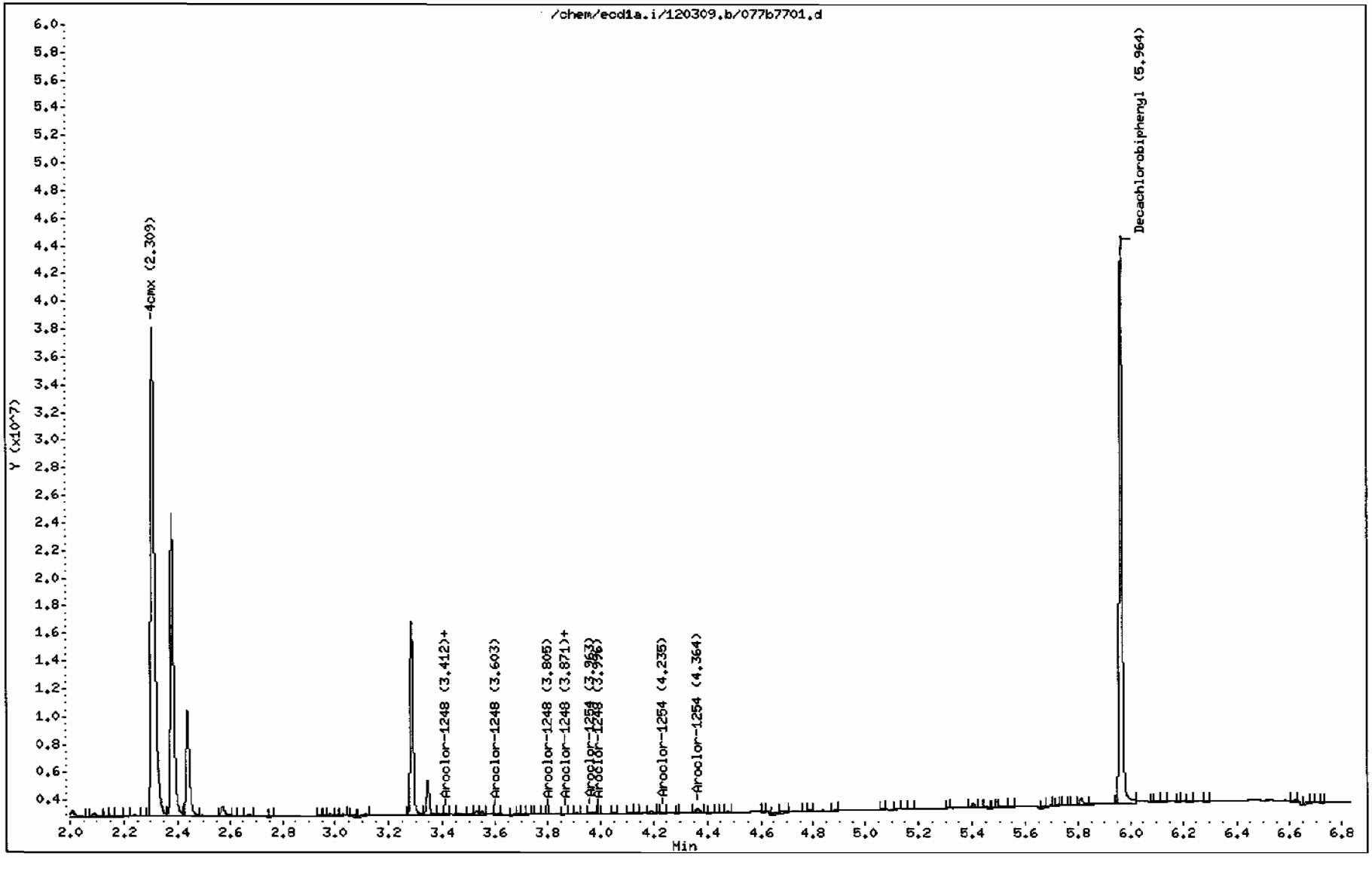

STANDARDS DATA

Report Date: 04-Dec-2009 10:05

Calibration History

Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Start Cal Date: 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010f1001.d
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029f2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023f2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017f1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011f1101.d
Cal Level: 2 , Cal Amount: 200.00000		
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011f1101.d
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030f3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024f2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018f1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012f1201.d
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031f3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025f2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019f1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014f1401.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032f3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026f2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020f2001.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010f1001.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013f1301.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008f0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007f0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006f0601.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013f1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014f1401.d
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033f3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027f2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021f2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 23:25	AR1660	/chem/ecd1a.i/120309.b/097f9701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 22:21	AR1660	/chem/ecd1a.i/120309.b/092f9201.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 19:50	AR1660	/chem/ecd1a.i/120309.b/080f8001.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 18:34	AR1660	/chem/ecd1a.i/120309.b/074f7401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 16:03	AR1660	/chem/ecd1a.i/120309.b/062f6201.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 13:40	AR1660	/chem/ecd1a.i/120309.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 12:20	AR1660	/chem/ecd1a.i/120309.b/043f4301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 10:31	AR1660	/chem/ecd1a.i/120309.b/034f3401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:03	AR1660	/chem/ecd1a.i/120309.b/022f2201.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 05:40	DDTANALOGSTD	/chem/ecd1a.i/120309.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 05:30	AR1268	/chem/ecd1a.i/120309.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 05:19	AR1262	/chem/ecd1a.i/120309.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 05:09	AR1221	/chem/ecd1a.i/120309.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:58	AR1232	/chem/ecd1a.i/120309.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:48	AR1248	/chem/ecd1a.i/120309.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:37	AR1242	/chem/ecd1a.i/120309.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:27	AR1254	/chem/ecd1a.i/120309.b/003f0301.d

| Ccal Level: 4 , Ccal Amount: 1000 |

03-DEC-2009 04:16	AR1660	/chem/ecd1a.i/120309.b/002f0201.d

Report Date: 04-Dec-2009 10:05

Calibration History

Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Start Cal Date: 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029b2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023b2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017b1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011b1101.d
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010b1001.d
Cal Level: 2 , Cal Amount: 200.00000		
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030b3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024b2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018b1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012b1201.d
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011b1101.d
Cal Level: 3 , Cal Amount: 500.00000		
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031b3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025b2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019b1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014b1401.d
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012b1201.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032b3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026b2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020b2001.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013b1301.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010b1001.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008b0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007b0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006b0601.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013b1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033b3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027b2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021b2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015b1501.d
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014b1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 22:21	AR1660	/chem/ecd1a.i/120309.b/092b9201.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 19:50	AR1660	/chem/ecd1a.i/120309.b/080b8001.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 18:34	AR1660	/chem/ecd1a.i/120309.b/074b7401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 16:03	AR1660	/chem/ecd1a.i/120309.b/062b6201.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 23:25	AR1660	/chem/ecd1a.i/120309.b/097b9701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 13:40	AR1660	/chem/ecd1a.i/120309.b/050b5001.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 12:20	AR1660	/chem/ecd1a.i/120309.b/043b4301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 10:31	AR1660	/chem/ecd1a.i/120309.b/034b3401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 08:03	AR1660	/chem/ecd1a.i/120309.b/022b2201.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 05:30	AR1268	/chem/ecd1a.i/120309.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 05:19	AR1262	/chem/ecd1a.i/120309.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 05:09	AR1221	/chem/ecd1a.i/120309.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:58	AR1232	/chem/ecd1a.i/120309.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:48	AR1248	/chem/ecd1a.i/120309.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:37	AR1242	/chem/ecd1a.i/120309.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:27	AR1254	/chem/ecd1a.i/120309.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
03-DEC-2009 04:16	AR1660	/chem/ecd1a.i/120309.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 05:42 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.431	2.401-2.461	1.709e+04
	2.720	2.690-2.750	2.124e+04
	2.801	2.771-2.831	1.403e+04
	2.839	2.809-2.869	8.417e+03
	3.050	3.020-3.080	1.079e+04
63 4,4-DDD	3.956	3.936-3.976	4.873e+05
64 4,4-DDE	3.607	3.587-3.627	4.621e+05
62 4,4-DDT	4.119	4.099-4.139	1.399e+05
2 Aroclor-1221	2.085	2.055-2.115	5.950e+03
	2.179	2.149-2.209	3.282e+03
	2.205	2.175-2.235	1.440e+04
3 Aroclor-1232	2.431	2.401-2.461	7.786e+03
	2.720	2.690-2.750	1.025e+04
	2.801	2.771-2.831	6.616e+03
	3.050	3.020-3.080	4.921e+03
	3.304	3.274-3.334	4.520e+03
4 Aroclor-1242	2.431	2.401-2.461	1.503e+04
	2.720	2.690-2.750	1.854e+04
	2.839	2.809-2.869	7.392e+03
	3.050	3.020-3.080	9.592e+03
	3.304	3.274-3.334	9.387e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.102	3.072-3.132	9.766e+03
	3.252	3.222-3.282	8.699e+03
	3.304	3.274-3.334	1.693e+04
	3.436	3.406-3.466	1.387e+04
	3.668	3.638-3.698	9.663e+03
6 Aroclor-1254	3.279	3.249-3.309	1.533e+04
	3.434	3.404-3.464	2.093e+04
	3.668	3.638-3.698	2.652e+04
	3.832	3.802-3.862	2.040e+04
	3.940	3.910-3.970	2.023e+04
7 Aroclor-1260	3.777	3.747-3.807	2.145e+04
	3.939	3.909-3.969	3.220e+04
	4.169	4.139-4.199	2.046e+04
	4.312	4.282-4.342	2.008e+04
	4.492	4.462-4.522	4.630e+04
8 Aroclor-1262	3.777	3.747-3.807	1.805e+04
	3.938	3.908-3.968	2.434e+04
	4.169	4.139-4.199	3.192e+04
	4.312	4.282-4.342	2.761e+04
	4.492	4.462-4.522	5.903e+04
9 Aroclor-1268	4.677	4.647-4.707	6.476e+04
	4.699	4.669-4.729	6.428e+04
	4.812	4.782-4.842	4.874e+04
	5.015	4.985-5.045	2.069e+04
	5.181	5.151-5.211	1.402e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.972	1.942-2.002	4.463e+05
$ 12 Decachlorobiphenyl	5.290	5.260-5.320	4.088e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 06:02 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.212	3.182-3.242	1.686e+04
	3.297	3.267-3.327	1.154e+04
	3.422	3.392-3.452	6.951e+03
	3.587	3.557-3.617	9.181e+03
	3.663	3.633-3.693	8.509e+03
62 4,4-DDT	4.695	4.675-4.715	8.846e+04
63 4,4-DDE	4.163	4.143-4.183	3.629e+05
64 4,4-DDD	4.509	4.489-4.529	3.599e+05
2 Aroclor-1221	2.508	2.478-2.538	5.108e+03
	2.604	2.574-2.634	3.283e+03
	2.645	2.615-2.675	1.145e+04
3 Aroclor-1232	2.645	2.615-2.675	7.297e+03
	3.213	3.183-3.243	8.233e+03
	3.296	3.266-3.326	5.504e+03
	3.588	3.558-3.618	4.272e+03
	3.822	3.792-3.852	4.143e+03
4 Aroclor-1242	3.213	3.183-3.243	1.482e+04
	3.296	3.266-3.326	1.016e+04
	3.588	3.558-3.618	8.262e+03
	3.664	3.634-3.694	7.732e+03
	3.850	3.820-3.880	9.404e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.422	3.392-3.452	1.037e+04
	3.587	3.557-3.617	1.280e+04
	3.822	3.792-3.852	1.461e+04
	3.849	3.819-3.879	1.623e+04
	3.987	3.957-4.017	1.566e+04
6 Aroclor-1254	3.423	3.393-3.453	8.334e+03
	3.846	3.816-3.876	1.495e+04
	3.963	3.933-3.993	1.638e+04
	4.239	4.209-4.269	2.215e+04
	4.375	4.345-4.405	1.687e+04
7 Aroclor-1260	4.355	4.325-4.385	1.807e+04
	4.479	4.449-4.509	2.216e+04
	4.746	4.716-4.776	1.768e+04
	4.920	4.890-4.950	1.721e+04
	5.067	5.037-5.097	3.863e+04
8 Aroclor-1262	4.480	4.450-4.510	1.838e+04
	4.747	4.717-4.777	2.607e+04
	4.921	4.891-4.951	2.257e+04
	5.068	5.038-5.098	4.615e+04
	5.281	5.251-5.311	3.242e+04
9 Aroclor-1268	5.279	5.249-5.309	5.681e+04
	5.307	5.277-5.337	5.436e+04
	5.457	5.427-5.487	4.114e+04
	5.621	5.591-5.651	1.776e+04
	5.814	5.784-5.844	1.099e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.309	2.279-2.339	3.713e+05
$ 12 Decachlorobiphenyl	5.966	5.936-5.996	3.006e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 05:42 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/110909.b/010f1001.d
Level 2: /chem/ecd1a.i/110909.b/011f1101.d
Level 3: /chem/ecd1a.i/110909.b/012f1201.d
Level 4: /chem/ecd1a.i/111009b.b/032f3201.d
Level 5: /chem/ecd1a.i/110909.b/014f1401.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20658	18482	17001	15583	13722	17089	15.563
(2)	24543	22131	20883	20176	18452	21237	10.722
(3)	16548	15095	13829	12774	11916	14032	13.123
(4)	9698	9043	8332	7728	7282	8417	11.585
(5)	12784	11504	10586	9800	9293	10793	12.897
63 4,4-DDD	+++++	+++++	+++++	487303	+++++	487303	0.000
64 4,4-DDE	+++++	+++++	+++++	462145	+++++	462145	0.000
62 4,4-DDT	+++++	+++++	+++++	139891	+++++	139891	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5950	+++++	5950	0.000
(2)	+++++	+++++	+++++	3282	+++++	3282	0.000
(3)	+++++	+++++	+++++	14405	+++++	14405	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7786	+++++	7786	0.000
(2)	+++++	+++++	+++++	10255	+++++	10255	0.000
(3)	+++++	+++++	+++++	6616	+++++	6616	0.000
(4)	+++++	+++++	+++++	4921	+++++	4921	0.000
(5)	+++++	+++++	+++++	4520	+++++	4520	0.000
4 Aroclor-1242(1)	17412	15553	15178	14343	12670	15031	11.528
(2)	20986	19324	18457	17508	16436	18542	9.380
(3)	8533	7719	7363	6848	6494	7392	10.720
(4)	11366	9954	9518	8750	8373	9592	12.199
(5)	10712	9680	9208	8779	8557	9387	9.120
5 Aroclor-1248(1)	11448	10174	9548	8978	8682	9766	11.261
(2)	10027	9078	8468	8103	7821	8699	10.098
(3)	19335	17548	16321	15814	15622	16928	9.102
(4)	16098	14147	13625	13026	12432	13866	10.125
(5)	11252	10016	9528	9039	8481	9663	10.921

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 05:42 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	17517	15970	14901	14485	13761	15327	9.541
(2)	23476	21771	20197	19941	19266	20930	8.092
(3)	28419	27206	25987	25832	25135	26516	4.901
(4)	21904	21069	19942	19739	19343	20399	5.185
(5)	21473	21181	19923	19591	18991	20232	5.235
7 Aroclor-1260(1)	24604	22318	20876	20266	19173	21447	9.785
(2)	35844	33345	31633	30611	29543	32195	7.686
(3)	22847	21262	20066	19413	18699	20458	7.992
(4)	22180	20845	19753	19032	18598	20082	7.215
(5)	49574	47568	45834	44759	43761	46299	4.992
8 Aroclor-1262(1)	+++++	+++++	+++++	18047	+++++	18047	0.000
(2)	+++++	+++++	+++++	24345	+++++	24345	0.000
(3)	+++++	+++++	+++++	31917	+++++	31917	0.000
(4)	+++++	+++++	+++++	27612	+++++	27612	0.000
(5)	+++++	+++++	+++++	59026	+++++	59026	0.000
9 Aroclor-1268(1)	68327	66126	65237	63266	60847	64761	4.392
(2)	68601	64443	65877	62667	59795	64277	5.158
(3)	52175	49424	49256	47362	45464	48736	5.146
(4)	22181	21170	20804	20096	19178	20686	5.461
(5)	146769	142521	141652	137032	132906	140176	3.807
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	466250	545108	422258	406785	390967	446274	13.887
$ 12 Decachlorobiphenyl	430420	504395	383103	370310	355553	408756	14.772

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 06:02 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/111009b.b/029b2901.d
Level 2: /chem/ecd1a.i/111009b.b/030b3001.d
Level 3: /chem/ecd1a.i/111009b.b/031b3101.d
Level 4: /chem/ecd1a.i/111009b.b/032b3201.d
Level 5: /chem/ecd1a.i/111009b.b/033b3301.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20143	17832	16713	15449	14165	16860	13.590
(2)	14035	12488	11357	10499	9300	11536	15.783
(3)	8596	7569	6813	6230	5549	6951	17.011
(4)	11079	9913	9060	8322	7528	9181	15.037
(5)	10190	9095	8398	7765	7096	8509	14.067
62 4,4-DDT	+++++	+++++	+++++	88461	+++++	88461	0.000
63 4,4-DDE	+++++	+++++	+++++	362852	+++++	362852	0.000
64 4,4-DDD	+++++	+++++	+++++	359922	+++++	359922	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5108	+++++	5108	0.000
(2)	+++++	+++++	+++++	3283	+++++	3283	0.000
(3)	+++++	+++++	+++++	11452	+++++	11452	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7297	+++++	7297	0.000
(2)	+++++	+++++	+++++	8233	+++++	8233	0.000
(3)	+++++	+++++	+++++	5504	+++++	5504	0.000
(4)	+++++	+++++	+++++	4272	+++++	4272	0.000
(5)	+++++	+++++	+++++	4143	+++++	4143	0.000
4 Aroclor-1242(1)	17172	15118	14593	14231	12964	14816	10.382
(2)	12255	10735	10080	9299	8450	10164	14.252
(3)	9734	8902	8100	7577	6997	8262	13.081
(4)	9161	8279	7511	7126	6585	7732	13.052
(5)	11158	9837	9355	8577	8092	9404	12.659
5 Aroclor-1248(1)	12701	11102	10208	9399	8419	10366	15.810
(2)	15478	13606	12645	11722	10563	12803	14.618
(3)	17430	15245	14486	13522	12342	14605	13.123
(4)	19368	17007	16145	14983	13634	16227	13.342
(5)	18762	16275	15487	14453	13334	15662	13.124

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 06:02 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	10034	8978	8141	7651	6863	8334	14.663
(2)	17568	15909	14674	13904	12711	14953	12.491
(3)	19039	17387	16070	15329	14072	16379	11.670
(4)	24937	23339	21906	20911	19635	22146	9.335
(5)	19077	18105	16810	15765	14609	16873	10.573
7 Aroclor-1260(1)	22503	19003	17476	16529	14825	18067	16.085
(2)	25650	23506	21850	21066	18712	22157	11.763
(3)	20595	18951	17412	16547	14884	17678	12.422
(4)	20138	18349	16944	16067	14572	17214	12.395
(5)	44064	40843	38492	36572	33174	38629	10.709
8 Aroclor-1262(1)	+++++	+++++	+++++	18376	+++++	18376	0.000
(2)	+++++	+++++	+++++	26068	+++++	26068	0.000
(3)	+++++	+++++	+++++	22571	+++++	22571	0.000
(4)	+++++	+++++	+++++	46151	+++++	46151	0.000
(5)	+++++	+++++	+++++	32422	+++++	32422	0.000
9 Aroclor-1268(1)	64233	59607	57611	53879	48726	56811	10.321
(2)	60168	56519	56119	51372	47642	54364	8.990
(3)	46456	42771	41694	38901	35867	41138	9.727
(4)	19817	18449	17847	16818	15872	17760	8.524
(5)	122099	114124	111138	104603	97770	109947	8.427
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	404105	466906	350017	331939	303513	371296	17.462
$ 12 Decachlorobiphenyl	328640	378740	282742	266616	246153	300578	17.707

Report Date: 07-Dec-2009 08:54

Calibration History

Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Start Cal Date: 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010f1001.d
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029f2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023f2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017f1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011f1101.d
Cal Level: 2 , Cal Amount: 200.00000		
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011f1101.d
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030f3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024f2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018f1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012f1201.d
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031f3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025f2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019f1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014f1401.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032f3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026f2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020f2001.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010f1001.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013f1301.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008f0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007f0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006f0601.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013f1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014f1401.d
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033f3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027f2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021f2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
06-DEC-2009 02:04	AR1660	/chem/ecd1a.i/120509.b/086f8601.d
Ccal Level: 4 , Ccal Amount: 1000		
06-DEC-2009 00:23	AR1660	/chem/ecd1a.i/120509.b/078f7801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 23:08	AR1660	/chem/ecd1a.i/120509.b/072f7201.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 20:36	AR1660	/chem/ecd1a.i/120509.b/060f6001.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 18:05	AR1660	/chem/ecd1a.i/120509.b/048f4801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 15:51	AR1660	/chem/ecd1a.i/120509.b/037f3701.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 14:06	AR1660	/chem/ecd1a.i/120509.b/028f2801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 12:10	AR1660	/chem/ecd1a.i/120509.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 10:29	AR1268	/chem/ecd1a.i/120509.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 10:19	AR1262	/chem/ecd1a.i/120509.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 10:08	AR1221	/chem/ecd1a.i/120509.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:58	AR1232	/chem/ecd1a.i/120509.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:47	AR1248	/chem/ecd1a.i/120509.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:37	AR1242	/chem/ecd1a.i/120509.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:26	AR1254	/chem/ecd1a.i/120509.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:15	AR1660	/chem/ecd1a.i/120509.b/002f0201.d

Report Date: 07-Dec-2009 08:54

Calibration History

Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Start Cal Date: 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029b2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023b2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017b1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011b1101.d
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010b1001.d
Cal Level: 2 , Cal Amount: 200.00000		
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030b3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024b2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018b1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012b1201.d
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011b1101.d
Cal Level: 3 , Cal Amount: 500.00000		
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031b3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025b2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019b1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014b1401.d
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012b1201.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032b3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026b2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020b2001.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013b1301.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010b1001.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008b0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007b0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006b0601.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013b1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033b3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027b2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021b2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015b1501.d
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014b1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
06-DEC-2009 00:23	AR1660	/chem/ecd1a.i/120509.b/078b7801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 23:08	AR1660	/chem/ecd1a.i/120509.b/072b7201.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 20:36	AR1660	/chem/ecd1a.i/120509.b/060b6001.d
Ccal Level: 4 , Ccal Amount: 1000		
06-DEC-2009 02:04	AR1660	/chem/ecd1a.i/120509.b/086b8601.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 18:05	AR1660	/chem/ecd1a.i/120509.b/048b4801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 15:51	AR1660	/chem/ecd1a.i/120509.b/037b3701.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 14:06	AR1660	/chem/ecd1a.i/120509.b/028b2801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 12:10	AR1660	/chem/ecd1a.i/120509.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 10:29	AR1268	/chem/ecd1a.i/120509.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 10:19	AR1262	/chem/ecd1a.i/120509.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 10:08	AR1221	/chem/ecd1a.i/120509.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:58	AR1232	/chem/ecd1a.i/120509.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:47	AR1248	/chem/ecd1a.i/120509.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:37	AR1242	/chem/ecd1a.i/120509.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:26	AR1254	/chem/ecd1a.i/120509.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 09:15	AR1660	/chem/ecd1a.i/120509.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 07-Dec-2009 11:34 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.430	2.400-2.460	1.709e+04
	2.720	2.690-2.750	2.124e+04
	2.801	2.771-2.831	1.403e+04
	2.838	2.808-2.868	8.417e+03
	3.049	3.019-3.079	1.079e+04
63 4,4-DDD	3.956	3.936-3.976	4.873e+05
64 4,4-DDE	3.607	3.587-3.627	4.621e+05
62 4,4-DDT	4.119	4.099-4.139	1.399e+05
2 Aroclor-1221	2.085	2.055-2.115	5.950e+03
	2.178	2.148-2.208	3.282e+03
	2.205	2.175-2.235	1.440e+04
3 Aroclor-1232	2.430	2.400-2.460	7.786e+03
	2.720	2.690-2.750	1.025e+04
	2.800	2.770-2.830	6.616e+03
	3.050	3.020-3.080	4.921e+03
	3.303	3.273-3.333	4.520e+03
4 Aroclor-1242	2.430	2.400-2.460	1.503e+04
	2.719	2.689-2.749	1.854e+04
	2.837	2.807-2.867	7.392e+03
	3.049	3.019-3.079	9.592e+03
	3.303	3.273-3.333	9.387e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.101	3.071-3.131	9.766e+03
	3.252	3.222-3.282	8.699e+03
	3.303	3.272-3.332	1.693e+04
	3.435	3.405-3.465	1.387e+04
	3.668	3.638-3.697	9.663e+03
6 Aroclor-1254	3.278	3.248-3.308	1.533e+04
	3.433	3.403-3.463	2.093e+04
	3.667	3.637-3.697	2.652e+04
	3.831	3.801-3.861	2.040e+04
	3.939	3.909-3.969	2.023e+04
7 Aroclor-1260	3.776	3.746-3.806	2.145e+04
	3.938	3.908-3.968	3.220e+04
	4.168	4.138-4.198	2.046e+04
	4.311	4.281-4.341	2.008e+04
	4.491	4.461-4.521	4.630e+04
8 Aroclor-1262	3.776	3.746-3.806	1.805e+04
	3.939	3.909-3.969	2.434e+04
	4.169	4.139-4.199	3.192e+04
	4.311	4.281-4.341	2.761e+04
	4.491	4.461-4.521	5.903e+04
9 Aroclor-1268	4.675	4.645-4.705	6.476e+04
	4.698	4.668-4.728	6.428e+04
	4.810	4.780-4.840	4.874e+04
	5.013	4.983-5.043	2.069e+04
	5.179	5.149-5.209	1.402e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.973	1.943-2.003	4.463e+05
$ 12 Decachlorobiphenyl	5.289	5.259-5.319	4.088e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 07-Dec-2009 06:49 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.212	3.182-3.242	1.686e+04
	3.295	3.265-3.325	1.154e+04
	3.421	3.391-3.451	6.951e+03
	3.587	3.557-3.617	9.181e+03
	3.663	3.633-3.693	8.509e+03
62 4,4-DDT	4.695	4.675-4.715	8.846e+04
63 4,4-DDE	4.163	4.143-4.183	3.629e+05
64 4,4-DDD	4.509	4.489-4.529	3.599e+05
2 Aroclor-1221	2.507	2.477-2.537	5.108e+03
	2.603	2.573-2.633	3.283e+03
	2.644	2.614-2.674	1.145e+04
3 Aroclor-1232	2.644	2.614-2.674	7.297e+03
	3.211	3.181-3.241	8.233e+03
	3.295	3.265-3.325	5.504e+03
	3.587	3.557-3.617	4.272e+03
	3.820	3.790-3.850	4.143e+03
4 Aroclor-1242	3.211	3.181-3.241	1.482e+04
	3.295	3.265-3.325	1.016e+04
	3.586	3.556-3.616	8.262e+03
	3.662	3.632-3.692	7.732e+03
	3.848	3.818-3.878	9.404e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.421	3.391-3.451	1.037e+04
	3.586	3.556-3.616	1.280e+04
	3.820	3.790-3.850	1.461e+04
	3.848	3.817-3.878	1.623e+04
	3.986	3.956-4.016	1.566e+04
6 Aroclor-1254	3.421	3.391-3.451	8.334e+03
	3.844	3.814-3.874	1.495e+04
	3.961	3.931-3.991	1.638e+04
	4.237	4.207-4.267	2.215e+04
	4.374	4.344-4.404	1.687e+04
7 Aroclor-1260	4.353	4.323-4.383	1.807e+04
	4.478	4.448-4.508	2.216e+04
	4.744	4.714-4.774	1.768e+04
	4.918	4.888-4.948	1.721e+04
	5.065	5.035-5.095	3.863e+04
8 Aroclor-1262	4.478	4.448-4.508	1.838e+04
	4.744	4.714-4.774	2.607e+04
	4.918	4.888-4.948	2.257e+04
	5.066	5.036-5.096	4.615e+04
	5.279	5.249-5.309	3.242e+04
9 Aroclor-1268	5.277	5.247-5.307	5.681e+04
	5.304	5.274-5.334	5.436e+04
	5.454	5.424-5.484	4.114e+04
	5.618	5.588-5.648	1.776e+04
	5.812	5.782-5.842	1.099e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.309	2.279-2.339	3.713e+05
$ 12 Decachlorobiphenyl	5.964	5.934-5.994	3.006e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Cal Date : 07-Dec-2009 06:15 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/110909.b/010f1001.d
Level 2: /chem/ecd1a.i/110909.b/011f1101.d
Level 3: /chem/ecd1a.i/110909.b/012f1201.d
Level 4: /chem/ecd1a.i/111009b.b/032f3201.d
Level 5: /chem/ecd1a.i/110909.b/014f1401.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20658	18482	17001	15583	13722	17089	15.563
(2)	24543	22131	20883	20176	18452	21237	10.722
(3)	16548	15095	13829	12774	11916	14032	13.123
(4)	9698	9043	8332	7728	7282	8417	11.585
(5)	12784	11504	10586	9800	9293	10793	12.897
63 4,4-DDD	+++++	+++++	+++++	487303	+++++	487303	0.000
64 4,4-DDE	+++++	+++++	+++++	462145	+++++	462145	0.000
62 4,4-DDT	+++++	+++++	+++++	139891	+++++	139891	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5950	+++++	5950	0.000
(2)	+++++	+++++	+++++	3282	+++++	3282	0.000
(3)	+++++	+++++	+++++	14405	+++++	14405	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7786	+++++	7786	0.000
(2)	+++++	+++++	+++++	10255	+++++	10255	0.000
(3)	+++++	+++++	+++++	6616	+++++	6616	0.000
(4)	+++++	+++++	+++++	4921	+++++	4921	0.000
(5)	+++++	+++++	+++++	4520	+++++	4520	0.000
4 Aroclor-1242(1)	17412	15553	15178	14343	12670	15031	11.528
(2)	20986	19324	18457	17508	16436	18542	9.380
(3)	8533	7719	7363	6848	6494	7392	10.720
(4)	11366	9954	9518	8750	8373	9592	12.199
(5)	10712	9680	9208	8779	8557	9387	9.120
5 Aroclor-1248(1)	11448	10174	9548	8978	8682	9766	11.261
(2)	10027	9078	8468	8103	7821	8699	10.098
(3)	19335	17548	16321	15814	15622	16928	9.102
(4)	16098	14147	13625	13026	12432	13866	10.125
(5)	11252	10016	9528	9039	8481	9663	10.921

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Cal Date : 07-Dec-2009 06:15 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254 (1)	17517	15970	14901	14485	13761	15327	9.541
(2)	23476	21771	20197	19941	19266	20930	8.092
(3)	28419	27206	25987	25832	25135	26516	4.901
(4)	21904	21069	19942	19739	19343	20399	5.185
(5)	21473	21181	19923	19591	18991	20232	5.235
7 Aroclor-1260 (1)	24604	22318	20876	20266	19173	21447	9.785
(2)	35844	33345	31633	30611	29543	32195	7.686
(3)	22847	21262	20066	19413	18699	20458	7.992
(4)	22180	20845	19753	19032	18598	20082	7.215
(5)	49574	47568	45834	44759	43761	46299	4.992
8 Aroclor-1262 (1)	+++++	+++++	+++++	18047	+++++	18047	0.000
(2)	+++++	+++++	+++++	24345	+++++	24345	0.000
(3)	+++++	+++++	+++++	31917	+++++	31917	0.000
(4)	+++++	+++++	+++++	27612	+++++	27612	0.000
(5)	+++++	+++++	+++++	59026	+++++	59026	0.000
9 Aroclor-1268 (1)	68327	66126	65237	63266	60847	64761	4.392
(2)	68601	64443	65877	62667	59795	64277	5.158
(3)	52175	49424	49256	47362	45464	48736	5.146
(4)	22181	21170	20804	20096	19178	20686	5.461
(5)	146769	142521	141652	137032	132906	140176	3.807
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	466250	545108	422258	406785	390967	446274	13.887
$ 12 Decachlorobiphenyl	430420	504395	383103	370310	355553	408756	14.772

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Cal Date : 07-Dec-2009 06:49 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/111009b.b/029b2901.d
Level 2: /chem/ecd1a.i/111009b.b/030b3001.d
Level 3: /chem/ecd1a.i/111009b.b/031b3101.d
Level 4: /chem/ecd1a.i/111009b.b/032b3201.d
Level 5: /chem/ecd1a.i/111009b.b/033b3301.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20143	17832	16713	15449	14165	16860	13.590
(2)	14035	12488	11357	10499	9300	11536	15.783
(3)	8596	7569	6813	6230	5549	6951	17.011
(4)	11079	9913	9060	8322	7528	9181	15.037
(5)	10190	9095	8398	7765	7096	8509	14.067
62 4,4-DDT	+++++	+++++	+++++	88461	+++++	88461	0.000
63 4,4-DDE	+++++	+++++	+++++	362852	+++++	362852	0.000
64 4,4-DDD	+++++	+++++	+++++	359922	+++++	359922	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5108	+++++	5108	0.000
(2)	+++++	+++++	+++++	3283	+++++	3283	0.000
(3)	+++++	+++++	+++++	11452	+++++	11452	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7297	+++++	7297	0.000
(2)	+++++	+++++	+++++	8233	+++++	8233	0.000
(3)	+++++	+++++	+++++	5504	+++++	5504	0.000
(4)	+++++	+++++	+++++	4272	+++++	4272	0.000
(5)	+++++	+++++	+++++	4143	+++++	4143	0.000
4 Aroclor-1242(1)	17172	15118	14593	14231	12964	14816	10.382
(2)	12255	10735	10080	9299	8450	10164	14.252
(3)	9734	8902	8100	7577	6997	8262	13.081
(4)	9161	8279	7511	7126	6585	7732	13.052
(5)	11158	9837	9355	8577	8092	9404	12.659
5 Aroclor-1248(1)	12701	11102	10208	9399	8419	10366	15.810
(2)	15478	13606	12645	11722	10563	12803	14.618
(3)	17430	15245	14486	13522	12342	14605	13.123
(4)	19368	17007	16145	14983	13634	16227	13.342
(5)	18762	16275	15487	14453	13334	15662	13.124

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Cal Date : 07-Dec-2009 06:49 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254 (1)	10034	8978	8141	7651	6863	8334	14.663
(2)	17568	15909	14674	13904	12711	14953	12.491
(3)	19039	17387	16070	15329	14072	16379	11.670
(4)	24937	23339	21906	20911	19635	22146	9.335
(5)	19077	18105	16810	15765	14609	16873	10.573
7 Aroclor-1260 (1)	22503	19003	17476	16529	14825	18067	16.085
(2)	25650	23506	21850	21066	18712	22157	11.763
(3)	20595	18951	17412	16547	14884	17678	12.422
(4)	20138	18349	16944	16067	14572	17214	12.395
(5)	44064	40843	38492	36572	33174	38629	10.709
8 Aroclor-1262 (1)	+++++	+++++	+++++	18376	+++++	18376	0.000
(2)	+++++	+++++	+++++	26068	+++++	26068	0.000
(3)	+++++	+++++	+++++	22571	+++++	22571	0.000
(4)	+++++	+++++	+++++	46151	+++++	46151	0.000
(5)	+++++	+++++	+++++	32422	+++++	32422	0.000
9 Aroclor-1268 (1)	64233	59607	57611	53879	48726	56811	10.321
(2)	60168	56519	56119	51372	47642	54364	8.990
(3)	46456	42771	41694	38901	35867	41138	9.727
(4)	19817	18449	17847	16818	15872	17760	8.524
(5)	122099	114124	111138	104603	97770	109947	8.427
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	404105	466906	350017	331939	303513	371296	17.462
$ 12 Decachlorobiphenyl	328640	378740	282742	266616	246153	300578	17.707

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 0416

Lab File ID: 002F0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	15150.007	0.01	-11.3	15.0
(2)	21236.796	19845.947	0.01	-6.5	15.0
(3)	14032.402	12672.904	0.01	-9.7	15.0
(4)	8416.650	7683.937	0.01	-8.7	15.0
(5)	10793.469	9836.398	0.01	-8.9	15.0
Aroclor-1260	21447.416	20478.440	0.01	-4.5	15.0
(2)	32195.147	30862.062	0.01	-4.1	15.0
(3)	20457.594	19332.740	0.01	-5.5	15.0
(4)	20081.764	19517.714	0.01	-2.8	15.0
(5)	46299.014	45521.395	0.01	-1.7	15.0
4cmx	446273.70	450058.68	0.01	0.8	15.0
Decachlorobiphenyl	408756.19	423829.98	0.01	3.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 0416

Lab File ID: 002B0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16418.209	0.01	-2.6	15.0
(2)	11535.631	10624.370	0.01	-7.9	15.0
(3)	6951.234	6426.633	0.01	-7.5	15.0
(4)	9180.580	8562.001	0.01	-6.7	15.0
(5)	8508.868	7919.945	0.01	-6.9	15.0
Aroclor-1260	18066.901	17316.032	0.01	-4.2	15.0
(2)	22157.029	21949.168	0.01	-0.9	15.0
(3)	17677.720	17395.701	0.01	-1.6	15.0
(4)	17213.904	17185.654	0.01	-0.2	15.0
(5)	38629.119	39361.808	0.01	1.9	15.0
4cmx	371295.92	376438.67	0.01	1.4	15.0
Decachlorobiphenyl	300578.33	320991.69	0.01	6.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1340

Lab File ID: 050F5001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16183.472	0.01	-5.3	15.0
(2)	21236.796	20769.926	0.01	-2.2	15.0
(3)	14032.402	12913.353	0.01	-8.0	15.0
(4)	8416.650	7816.458	0.01	-7.1	15.0
(5)	10793.469	10027.093	0.01	-7.1	15.0
Aroclor-1260	21447.416	20448.444	0.01	-4.6	15.0
(2)	32195.147	31182.424	0.01	-3.1	15.0
(3)	20457.594	19464.604	0.01	-4.8	15.0
(4)	20081.764	19901.867	0.01	-0.9	15.0
(5)	46299.014	46158.433	0.01	-0.3	15.0
4cmx	446273.70	458728.11	0.01	2.8	15.0
Decachlorobiphenyl	408756.19	408060.11	0.01	-0.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1340

Lab File ID: 050B5001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16859.038	0.01	-0.0	15.0
(2)	11535.631	10895.552	0.01	-5.5	15.0
(3)	6951.234	6507.081	0.01	-6.4	15.0
(4)	9180.580	8739.733	0.01	-4.8	15.0
(5)	8508.868	8030.955	0.01	-5.6	15.0
Aroclor-1260	18066.901	17595.987	0.01	-2.6	15.0
(2)	22157.029	22209.155	0.01	0.2	15.0
(3)	17677.720	17506.009	0.01	-1.0	15.0
(4)	17213.904	17268.786	0.01	0.3	15.0
(5)	38629.119	39620.992	0.01	2.6	15.0
4cmx	371295.92	384733.00	0.01	3.6	15.0
Decachlorobiphenyl	300578.33	304886.19	0.01	1.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1603

Lab File ID: 062F6201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16318.517	0.01	-4.5	15.0
(2)	21236.796	20975.916	0.01	-1.2	15.0
(3)	14032.402	13007.113	0.01	-7.3	15.0
(4)	8416.650	7953.786	0.01	-5.5	15.0
(5)	10793.469	10241.542	0.01	-5.1	15.0
Aroclor-1260	21447.416	20695.906	0.01	-3.5	15.0
(2)	32195.147	31514.508	0.01	-2.1	15.0
(3)	20457.594	19745.644	0.01	-3.5	15.0
(4)	20081.764	20028.518	0.01	-0.3	15.0
(5)	46299.014	46633.831	0.01	0.7	15.0
4cmx	446273.70	462590.69	0.01	3.6	15.0
Decachlorobiphenyl	408756.19	423217.33	0.01	3.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1603

Lab File ID: 062B6201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	17019.184	0.01	0.9	15.0
(2)	11535.631	10885.532	0.01	-5.6	15.0
(3)	6951.234	6558.836	0.01	-5.6	15.0
(4)	9180.580	8750.635	0.01	-4.7	15.0
(5)	8508.868	8209.591	0.01	-3.5	15.0
Aroclor-1260	18066.901	17686.046	0.01	-2.1	15.0
(2)	22157.029	22431.225	0.01	1.2	15.0
(3)	17677.720	17786.669	0.01	0.6	15.0
(4)	17213.904	17586.124	0.01	2.2	15.0
(5)	38629.119	40393.460	0.01	4.6	15.0
4cmx	371295.92	386137.03	0.01	4.0	15.0
Decachlorobiphenyl	300578.33	311633.64	0.01	3.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1834

Lab File ID: 074F7401 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16066.285	0.01	-6.0	15.0
(2)	21236.796	20147.202	0.01	-5.1	15.0
(3)	14032.402	12783.434	0.01	-8.9	15.0
(4)	8416.650	7833.417	0.01	-6.9	15.0
(5)	10793.469	9898.210	0.01	-8.3	15.0
Aroclor-1260	21447.416	20234.062	0.01	-5.6	15.0
(2)	32195.147	30824.445	0.01	-4.2	15.0
(3)	20457.594	19165.835	0.01	-6.3	15.0
(4)	20081.764	19549.068	0.01	-2.6	15.0
(5)	46299.014	45713.342	0.01	-1.3	15.0
4cmx	446273.70	453650.51	0.01	1.6	15.0
Decachlorobiphenyl	408756.19	414038.30	0.01	1.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1834

Lab File ID: 074B7401 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16613.743	0.01	-1.5	15.0
(2)	11535.631	10721.831	0.01	-7.0	15.0
(3)	6951.234	6427.496	0.01	-7.5	15.0
(4)	9180.580	8786.944	0.01	-4.3	15.0
(5)	8508.868	8176.783	0.01	-3.9	15.0
Aroclor-1260	18066.901	17423.123	0.01	-3.6	15.0
(2)	22157.029	22085.373	0.01	-0.3	15.0
(3)	17677.720	17506.794	0.01	-1.0	15.0
(4)	17213.904	17333.060	0.01	0.7	15.0
(5)	38629.119	39749.034	0.01	2.9	15.0
4cmx	371295.92	380407.67	0.01	2.4	15.0
Decachlorobiphenyl	300578.33	311941.90	0.01	3.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1950

Lab File ID: 080F8001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	14996.758	0.01	-12.2	15.0
(2)	21236.796	19945.132	0.01	-6.1	15.0
(3)	14032.402	12608.889	0.01	-10.1	15.0
(4)	8416.650	7621.583	0.01	-9.4	15.0
(5)	10793.469	9844.862	0.01	-8.8	15.0
Aroclor-1260	21447.416	20269.700	0.01	-5.5	15.0
(2)	32195.147	30603.528	0.01	-4.9	15.0
(3)	20457.594	18978.275	0.01	-7.2	15.0
(4)	20081.764	19444.405	0.01	-3.2	15.0
(5)	46299.014	45119.212	0.01	-2.5	15.0
4cmx	446273.70	447358.76	0.01	0.2	15.0
Decachlorobiphenyl	408756.19	412683.99	0.01	1.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/03/09 Time: 1950

Lab File ID: 080B8001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	15981.671	0.01	-5.2	15.0
(2)	11535.631	10540.805	0.01	-8.6	15.0
(3)	6951.234	6321.573	0.01	-9.0	15.0
(4)	9180.580	8463.945	0.01	-7.8	15.0
(5)	8508.868	7909.228	0.01	-7.0	15.0
Aroclor-1260	18066.901	17148.008	0.01	-5.1	15.0
(2)	22157.029	21692.331	0.01	-2.1	15.0
(3)	17677.720	17156.375	0.01	-2.9	15.0
(4)	17213.904	16943.965	0.01	-1.6	15.0
(5)	38629.119	39061.898	0.01	1.1	15.0
4cmx	371295.92	375521.18	0.01	1.1	15.0
Decachlorobiphenyl	300578.33	308945.54	0.01	2.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/05/09 Time: 0915

Lab File ID: 002F0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	15698.584	0.01	-8.1	15.0
(2)	21236.796	20272.013	0.01	-4.5	15.0
(3)	14032.402	12486.576	0.01	-11.0	15.0
(4)	8416.650	7530.286	0.01	-10.5	15.0
(5)	10793.469	9660.174	0.01	-10.5	15.0
Aroclor-1260	21447.416	20433.828	0.01	-4.7	15.0
(2)	32195.147	30938.986	0.01	-3.9	15.0
(3)	20457.594	19151.518	0.01	-6.4	15.0
(4)	20081.764	19630.102	0.01	-2.2	15.0
(5)	46299.014	46061.430	0.01	-0.5	15.0
4cmx	446273.70	439009.24	0.01	-1.6	15.0
Decachlorobiphenyl	408756.19	395612.56	0.01	-3.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/05/09 Time: 0915

Lab File ID: 002B0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	15859.442	0.01	-5.9	15.0
(2)	11535.631	10360.880	0.01	-10.2	15.0
(3)	6951.234	6167.975	0.01	-11.3	15.0
(4)	9180.580	8308.555	0.01	-9.5	15.0
(5)	8508.868	7615.861	0.01	-10.5	15.0
Aroclor-1260	18066.901	17167.533	0.01	-5.0	15.0
(2)	22157.029	21633.217	0.01	-2.4	15.0
(3)	17677.720	17110.032	0.01	-3.2	15.0
(4)	17213.904	16973.066	0.01	-1.4	15.0
(5)	38629.119	39210.639	0.01	1.5	15.0
4cmx	371295.92	367160.68	0.01	-1.1	15.0
Decachlorobiphenyl	300578.33	295173.82	0.01	-1.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/05/09 Time: 1551

Lab File ID: 037F3701 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	15765.870	0.01	-7.7	15.0
(2)	21236.796	20328.380	0.01	-4.3	15.0
(3)	14032.402	12872.338	0.01	-8.3	15.0
(4)	8416.650	7770.550	0.01	-7.7	15.0
(5)	10793.469	9938.893	0.01	-7.9	15.0
Aroclor-1260	21447.416	21002.095	0.01	-2.1	15.0
(2)	32195.147	31808.837	0.01	-1.2	15.0
(3)	20457.594	19795.715	0.01	-3.2	15.0
(4)	20081.764	20581.643	0.01	2.5	15.0
(5)	46299.014	47196.500	0.01	1.9	15.0
4cmx	446273.70	453657.38	0.01	1.6	15.0
Decachlorobiphenyl	408756.19	412349.06	0.01	0.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/05/09 Time: 1551

Lab File ID: 037B3701 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16543.197	0.01	-1.9	15.0
(2)	11535.631	10801.294	0.01	-6.4	15.0
(3)	6951.234	6463.166	0.01	-7.0	15.0
(4)	9180.580	8867.714	0.01	-3.4	15.0
(5)	8508.868	8147.440	0.01	-4.2	15.0
Aroclor-1260	18066.901	17774.113	0.01	-1.6	15.0
(2)	22157.029	22438.550	0.01	1.3	15.0
(3)	17677.720	17770.736	0.01	0.5	15.0
(4)	17213.904	17669.936	0.01	2.6	15.0
(5)	38629.119	40808.230	0.01	5.6	15.0
4cmx	371295.92	375292.68	0.01	1.1	15.0
Decachlorobiphenyl	300578.33	313749.26	0.01	4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/05/09 Time: 1805

Lab File ID: 048F4801 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16093.270	0.01	-5.8	15.0
(2)	21236.796	20553.377	0.01	-3.2	15.0
(3)	14032.402	12788.465	0.01	-8.9	15.0
(4)	8416.650	7703.764	0.01	-8.5	15.0
(5)	10793.469	9980.726	0.01	-7.5	15.0
Aroclor-1260	21447.416	20843.716	0.01	-2.8	15.0
(2)	32195.147	31523.156	0.01	-2.1	15.0
(3)	20457.594	19458.287	0.01	-4.9	15.0
(4)	20081.764	19872.796	0.01	-1.0	15.0
(5)	46299.014	46328.264	0.01	0.1	15.0
4cmx	446273.70	450927.28	0.01	1.0	15.0
Decachlorobiphenyl	408756.19	389755.93	0.01	-4.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

Instrument ID: ECD1A Calibration Date: 12/05/09 Time: 1805

Lab File ID: 048B4801 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	17074.584	0.01	1.3	15.0
(2)	11535.631	10806.432	0.01	-6.3	15.0
(3)	6951.234	6396.149	0.01	-8.0	15.0
(4)	9180.580	8632.560	0.01	-6.0	15.0
(5)	8508.868	8084.066	0.01	-5.0	15.0
Aroclor-1260	18066.901	17563.363	0.01	-2.8	15.0
(2)	22157.029	22178.519	0.01	0.1	15.0
(3)	17677.720	17454.585	0.01	-1.3	15.0
(4)	17213.904	17197.419	0.01	-0.1	15.0
(5)	38629.119	39794.243	0.01	3.0	15.0
4cmx	371295.92	378806.77	0.01	2.0	15.0
Decachlorobiphenyl	300578.33	297101.91	0.01	-1.2	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/002f0201.d
Lab Smp Id: WAR091102-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 04:16
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	45005868	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	42382998	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.431	2.431	0.000	15150007	1000.00	886	80.00- 120.00	100.00
2.720	2.720	0.000	19845947	1000.00	934	107.58- 147.58	131.00
2.801	2.801	0.000	12672904	1000.00	903	59.73- 99.73	83.65
2.839	2.839	0.000	7683937	1000.00	913	28.59- 68.59	50.72
3.050	3.050	0.000	9836398	1000.00	911	41.65- 81.65	64.93
Average of Peak Amounts =					910		
7 Aroclor-1260					CAS #: 11096-82-5		
3.777	3.777	0.000	20478440	1000.00	955	80.00- 120.00	100.00
3.939	3.939	0.000	30862062	1000.00	958	132.51- 172.51	150.71
4.169	4.169	0.000	19332740	1000.00	945	75.52- 115.52	94.41
4.312	4.312	0.000	19517714	1000.00	972	77.42- 117.42	95.31
4.492	4.492	0.000	45521395	1000.00	983	206.60- 246.60	222.29
Average of Peak Amounts =					963		

Data File: /chem/ecdia.i/120309.b/002F0201.d
Date : 03-DEC-2009 04:16
Client ID: AR166001
Sample Info: IWAR091102-60 01
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

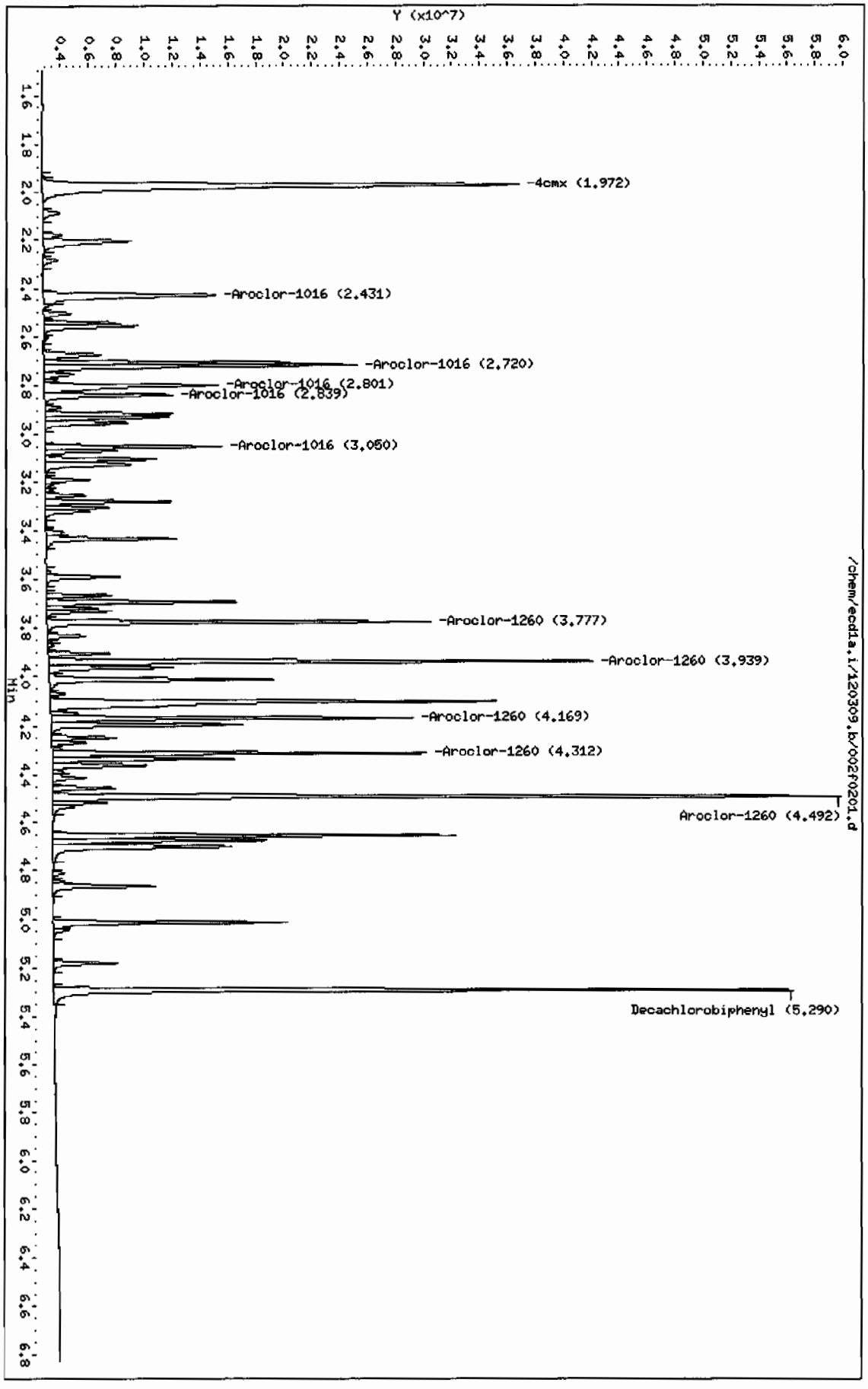

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/002b0201.d
Lab Smp Id: WAR091102-60 01 Client Smp ID: AR166001
Inj Date : 03-DEC-2009 04:16
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37643867	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	32099169	100.000	107	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	16418209	1000.00	974	80.00- 120.00	100.00(M)
3.297	3.297	0.000	10624370	1000.00	921	44.86- 84.86	64.71
3.422	3.422	0.000	6426633	1000.00	924	18.80- 58.80	39.14
3.587	3.587	0.000	8562001	1000.00	933	33.74- 73.74	52.15
3.663	3.663	0.000	7919945	1000.00	931	29.46- 69.46	48.24
Average of Peak Amounts =					937		
7 Aroclor-1260					CAS #: 11096-82-5		
4.355	4.355	0.000	17316032	1000.00	958	80.00- 120.00	100.00
4.479	4.479	0.000	21949168	1000.00	991	106.70- 146.70	126.76
4.746	4.746	0.000	17395701	1000.00	984	80.26- 120.26	100.46
4.920	4.920	0.000	17185654	1000.00	998	79.56- 119.56	99.25
5.067	5.067	0.000	39361808	1000.00	1020	209.21- 249.21	227.31
Average of Peak Amounts =					990		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120309.b/002b0201.d

Date : 03-DEC-2009 04:16

Client ID: AR166001

Sample Info: IWAR091102-60 01

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

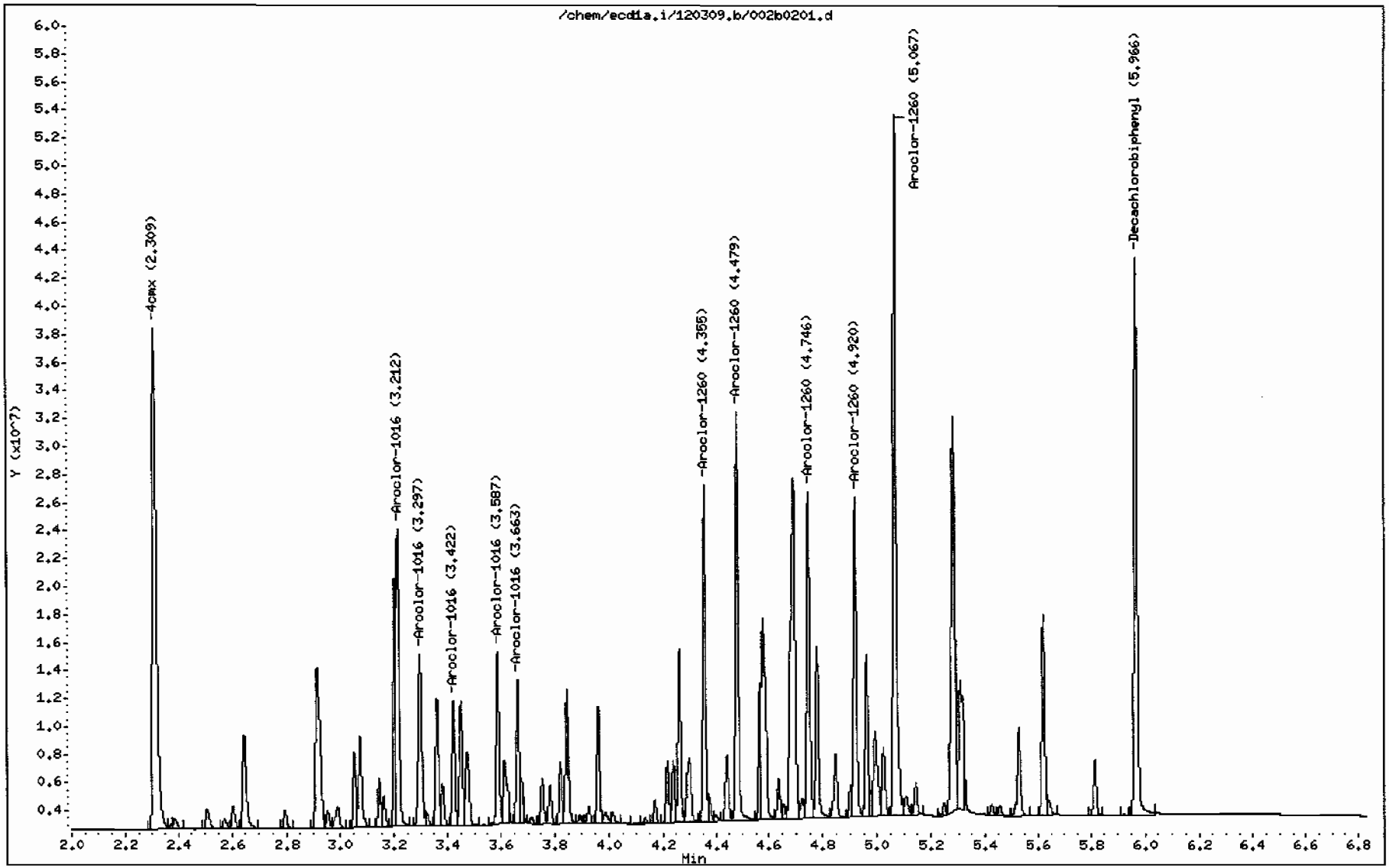

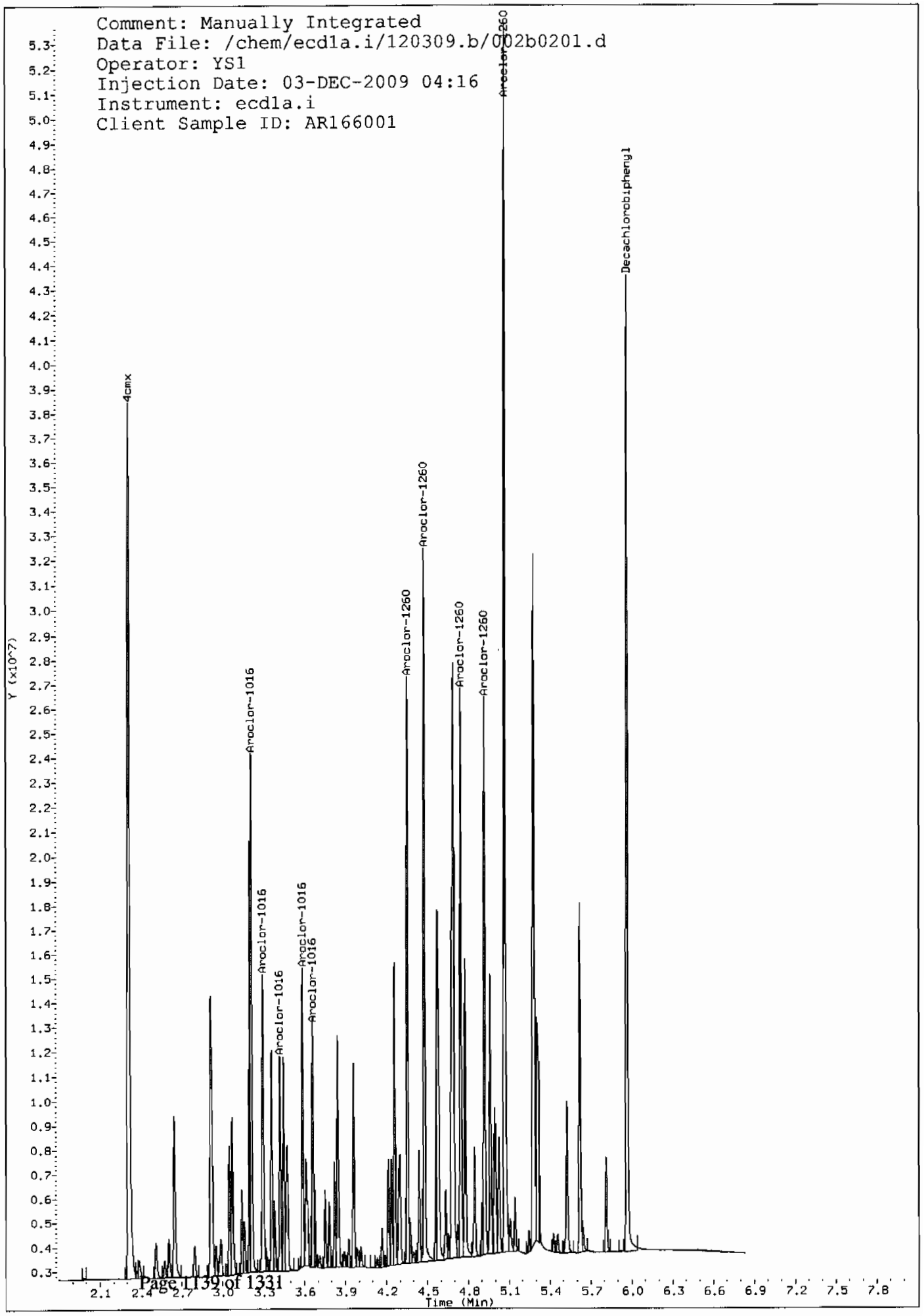
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Operator: YS1
Injection Date: 03-DEC-2009 04:16
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

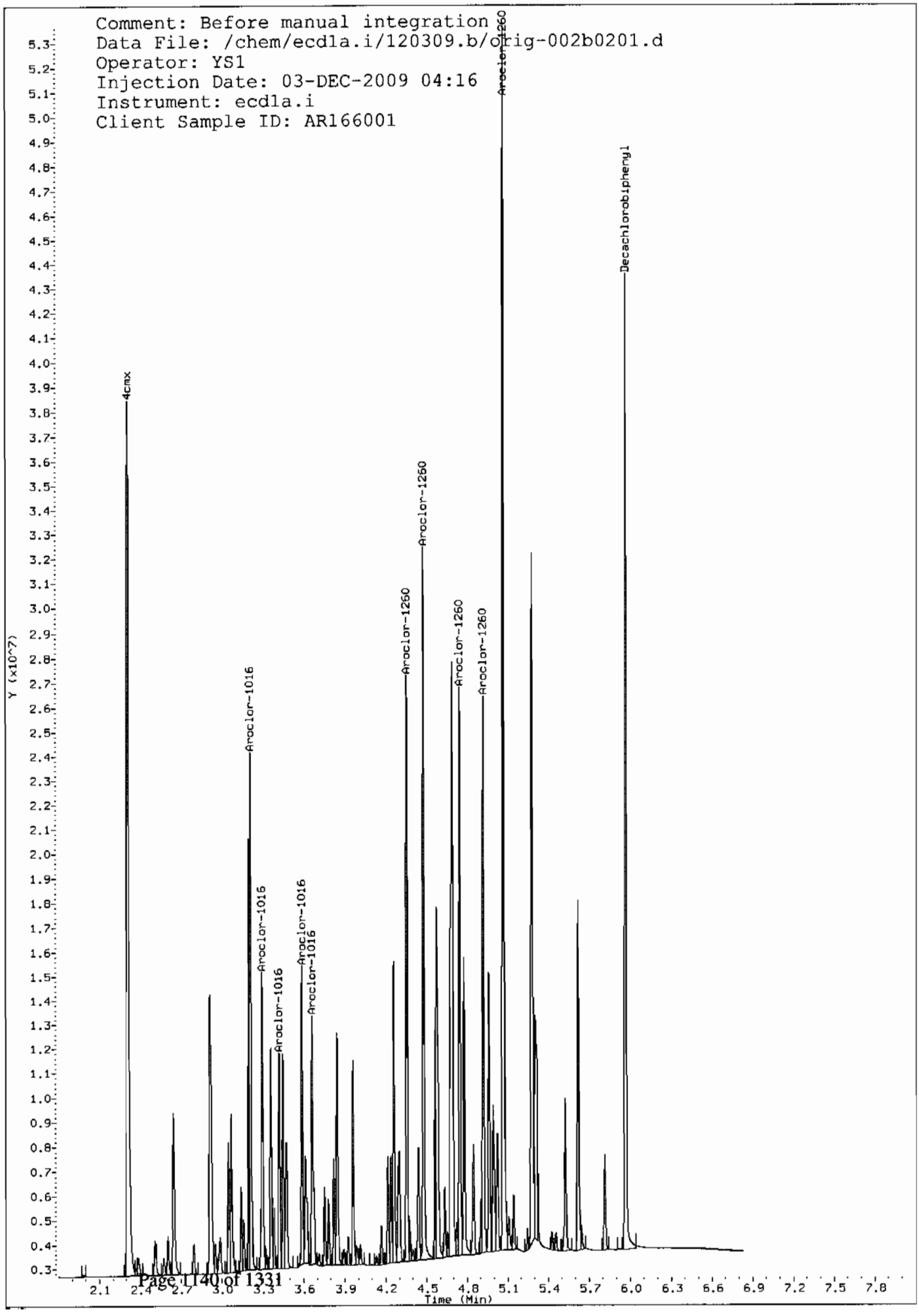
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Operator: YS1
Injection Date: 03-DEC-2009 04:16
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 04:27
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	41547370	100.000	93.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	39249163	100.000	96.0	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.279	3.279	0.000	13306688	1000.00	868	80.00- 120.00	100.00
3.434	3.434	0.000	18290791	1000.00	874	117.46- 157.46	137.46
3.668	3.668	0.000	23736695	1000.00	895	158.38- 198.38	178.38
3.832	3.832	0.000	17856412	1000.00	875	114.19- 154.19	134.19
3.940	3.940	0.000	18028369	1000.00	891	115.48- 155.48	135.48
Average of Peak Amounts =					881		

Data File: /chem/ecd1a.i/120309.b/003f0301.d

Page 1

Date : 03-DEC-2009 04:27

Client ID: AR125401

Instrument: ecd1a.i

Sample Info: IWAR091102-54

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

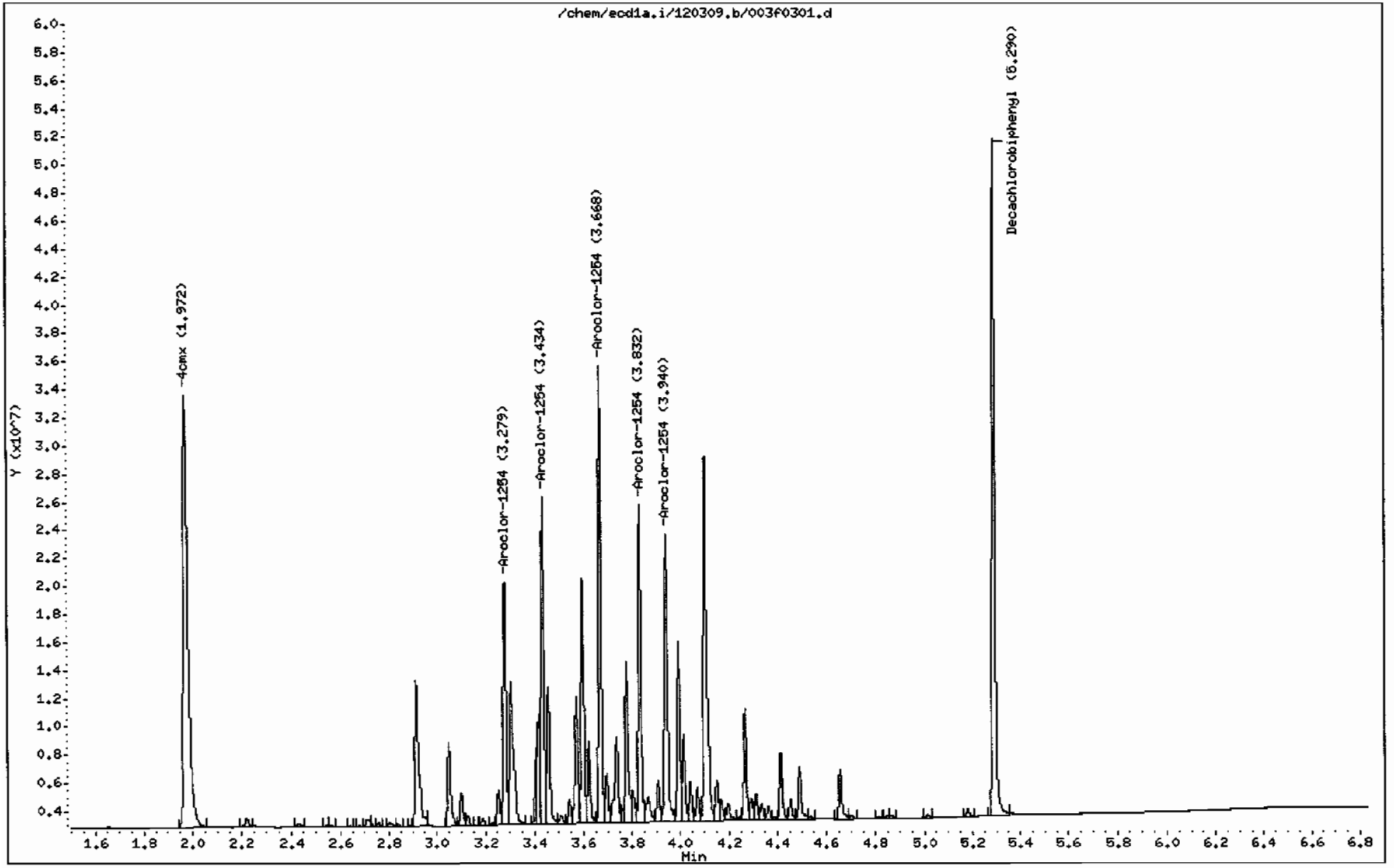

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 03-DEC-2009 04:27
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	34807796	100.000	93.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	29612467	100.000	98.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.423	3.423	0.000	7230852	1000.00	868	80.00- 120.00	100.00
3.846	3.846	0.000	13310614	1000.00	890	164.08- 204.08	184.08
3.963	3.963	0.000	14531939	1000.00	887	180.97- 220.97	200.97
4.239	4.239	0.000	19871899	1000.00	897	254.82- 294.82	274.82
4.375	4.375	0.000	14924122	1000.00	884	186.40- 226.40	206.40
		Average of Peak Amounts =			885		

Data File: /chem/ecd1a.i/120309.b/003b0301.d
Date : 03-DEC-2009 04:27
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

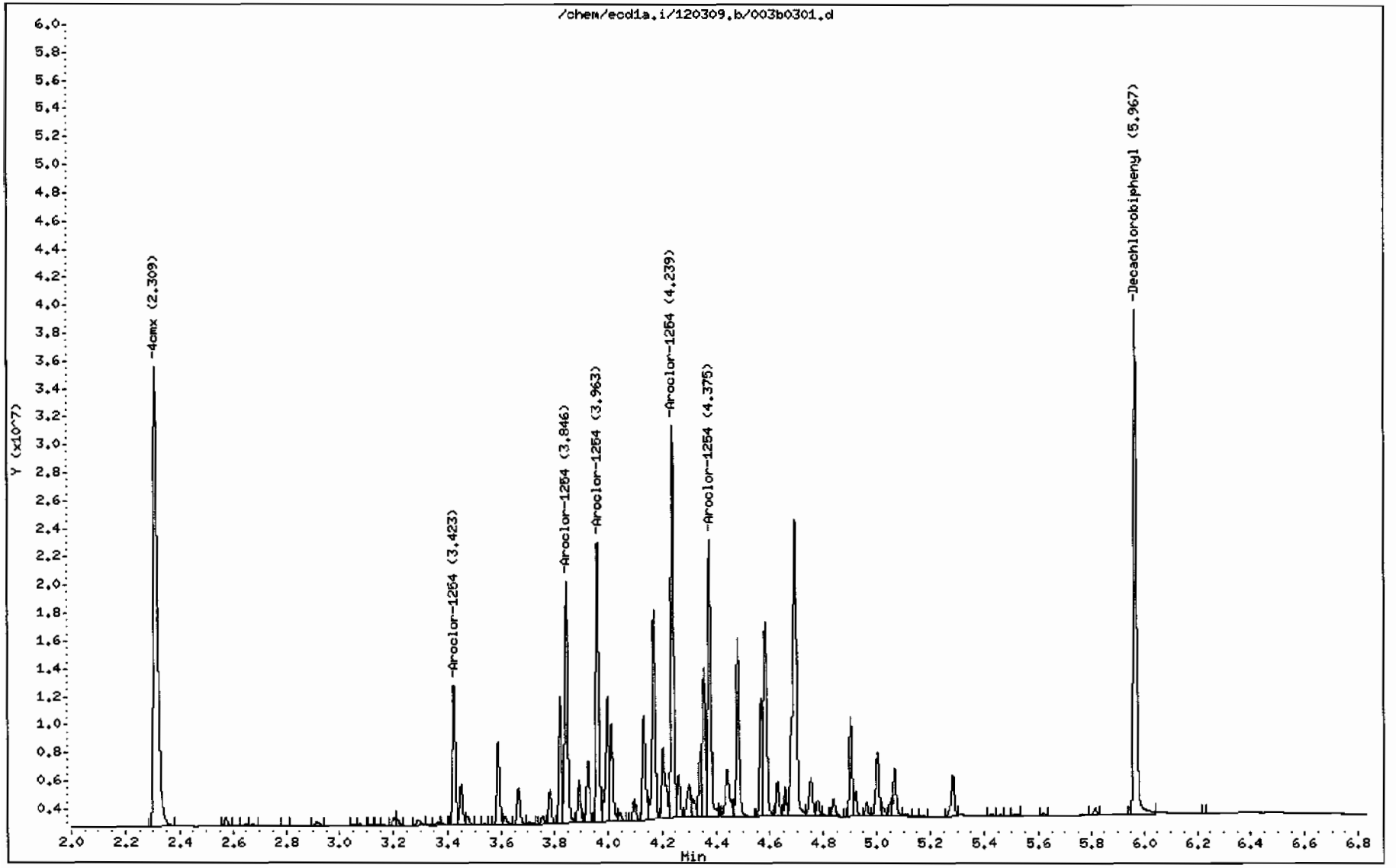

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 04:37
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	46995252	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.290	0.001	41554249	100.000	102	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.431	2.431	0.000	13345732	1000.00	888	80.00- 120.00	100.00
2.720	2.720	0.000	16943901	1000.00	914	106.96- 146.96	126.96
2.839	2.839	0.000	6577232	1000.00	890	29.28- 69.28	49.28
3.050	3.050	0.000	8628913	1000.00	900	44.66- 84.66	64.66
3.304	3.304	0.000	8471511	1000.00	902	43.48- 83.48	63.48
			Average of Peak Amounts =		899		

Data File: /chem/ecd1a.i/120309.b/004f0401.d
Date : 03-DEC-2009 04:37
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

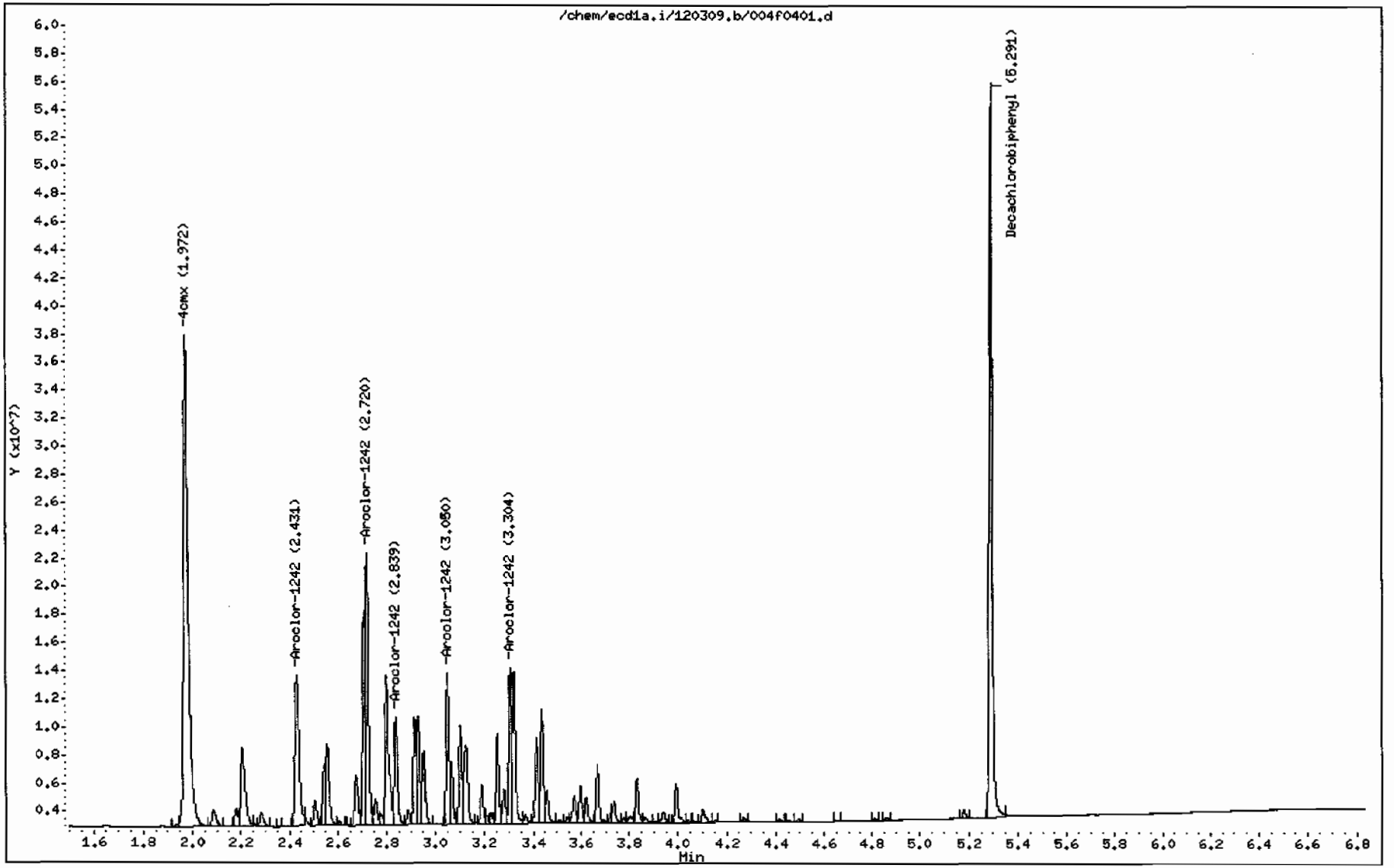

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 03-DEC-2009 04:37
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38888771	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	33536142	100.000	112	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.213	3.213	0.000	13837727	1000.00	934	80.00- 120.00	100.00
3.296	3.296	0.000	9069159	1000.00	892	45.54- 85.54	65.54
3.588	3.588	0.000	7383447	1000.00	894	33.36- 73.36	53.36
3.664	3.664	0.000	6939643	1000.00	897	30.15- 70.15	50.15
3.850	3.850	0.000	8528615	1000.00	907	41.63- 81.63	61.63
Average of Peak Amounts =					905		

Data File: /chem/ecd1a.i/120309.b/004b0401.d
Date : 03-DEC-2009 04:37
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

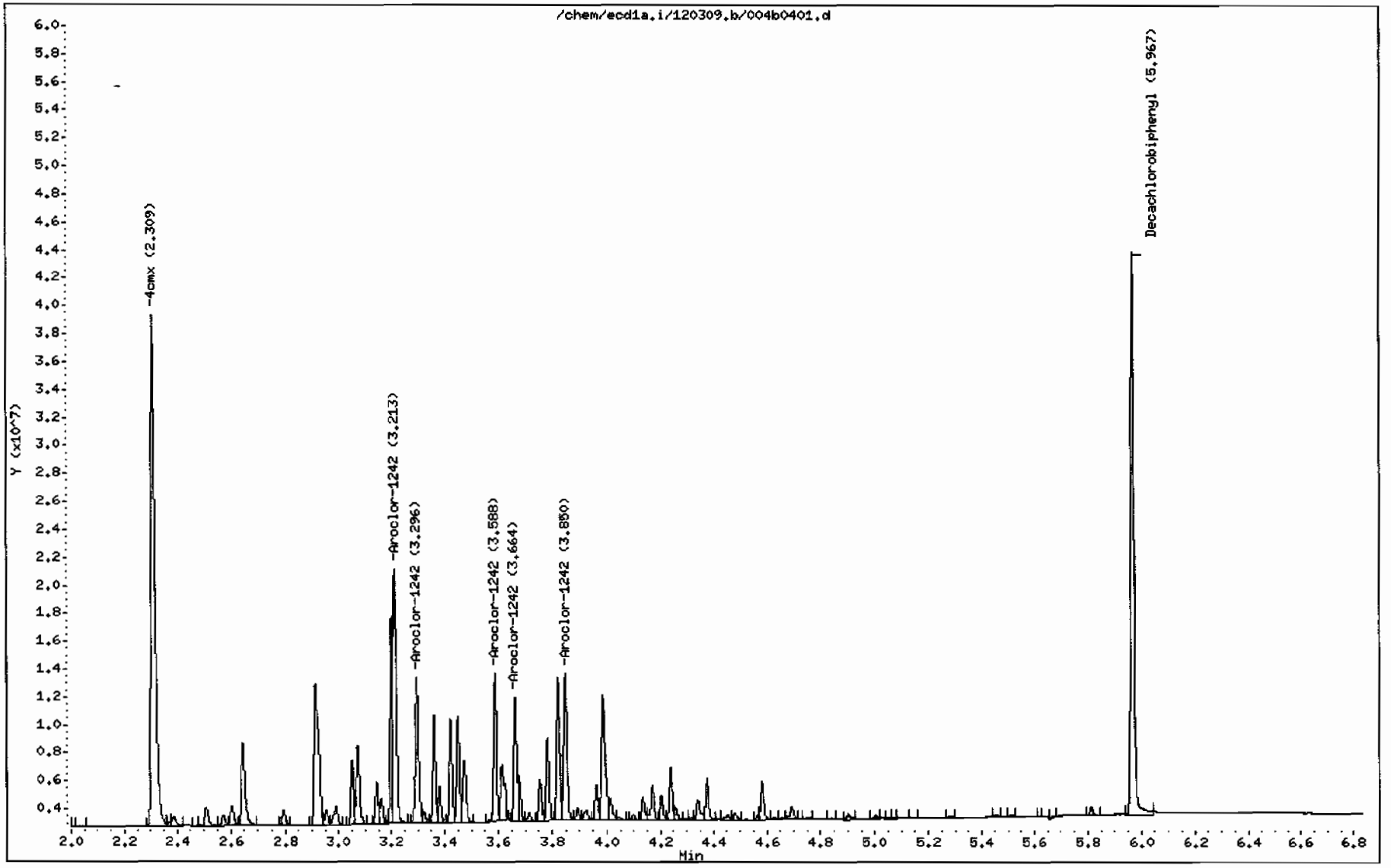

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 04:48
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	47053194	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	44526319	100.000	109	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.102	3.102	0.000	10785600	1000.00	1100	80.00- 120.00	100.00
3.252	3.252	0.000	9239957	1000.00	1060	65.67- 105.67	85.67
3.304	3.304	0.000	18127289	1000.00	1070	148.07- 188.07	168.07
3.436	3.436	0.000	14811323	1000.00	1070	117.32- 157.32	137.32
3.668	3.668	0.000	9876101	1000.00	1020	71.57- 111.57	91.57

Average of Peak Amounts = 1.07e+03

Data File: /chem/ecd1a.i/120309.b/005f0501.d
Date : 03-DEC-2009 04:48
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

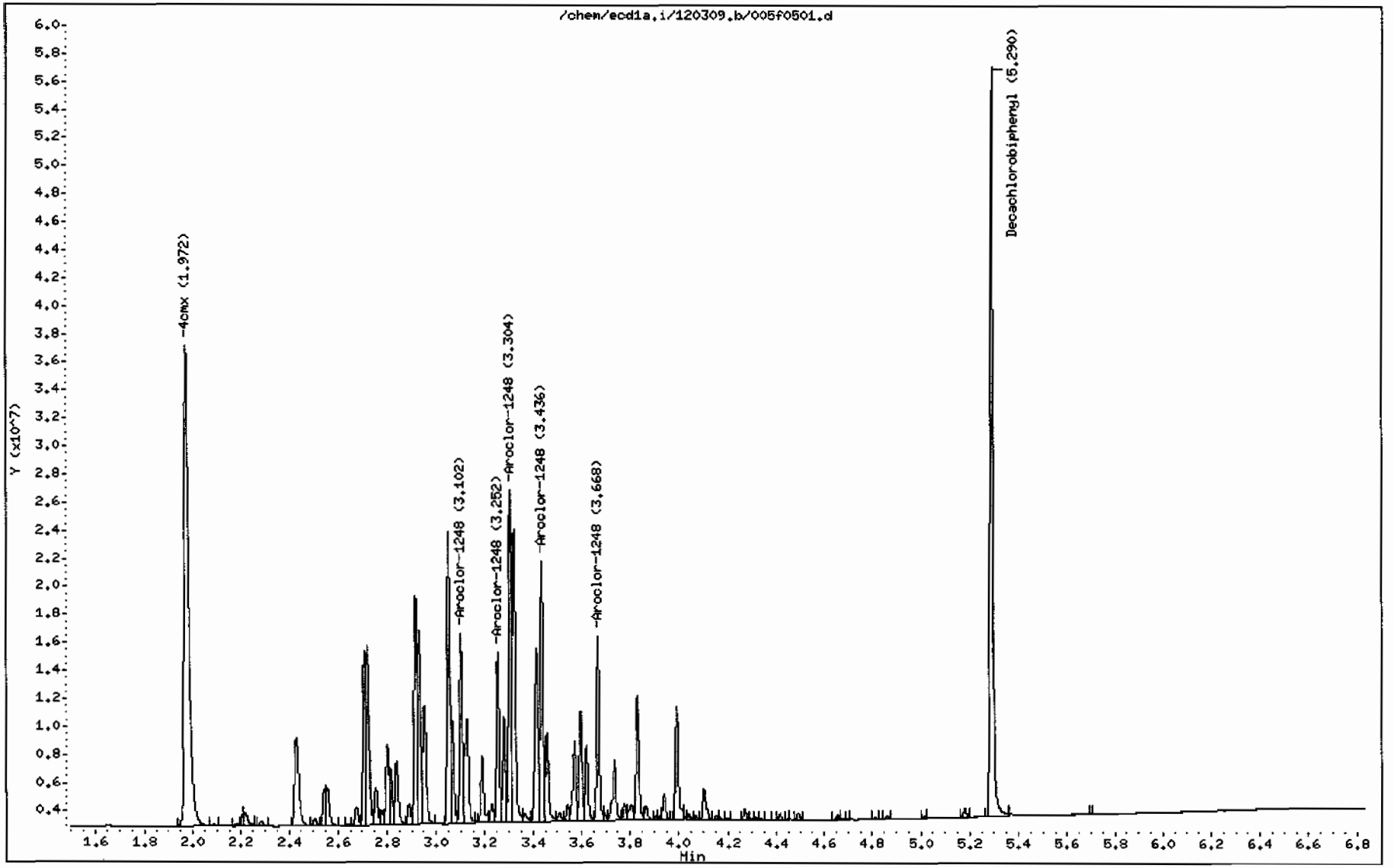

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 03-DEC-2009 04:48
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	39242045	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	33319541	100.000	111	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.422	3.422	0.000	11235697	1000.00	1080	80.00- 120.00	100.00
3.587	3.587	0.000	14061200	1000.00	1100	105.15- 145.15	125.15
3.822	3.822	0.000	15927566	1000.00	1090	121.76- 161.76	141.76
3.849	3.849	0.000	17822369	1000.00	1100	138.62- 178.62	158.62
3.987	3.987	0.000	17038356	1000.00	1090	131.64- 171.64	151.64

Average of Peak Amounts = 1.09e+03

Data File: /chem/ecd1a.i/120309.b/005b0501.d
Date : 03-DEC-2009 04:48
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

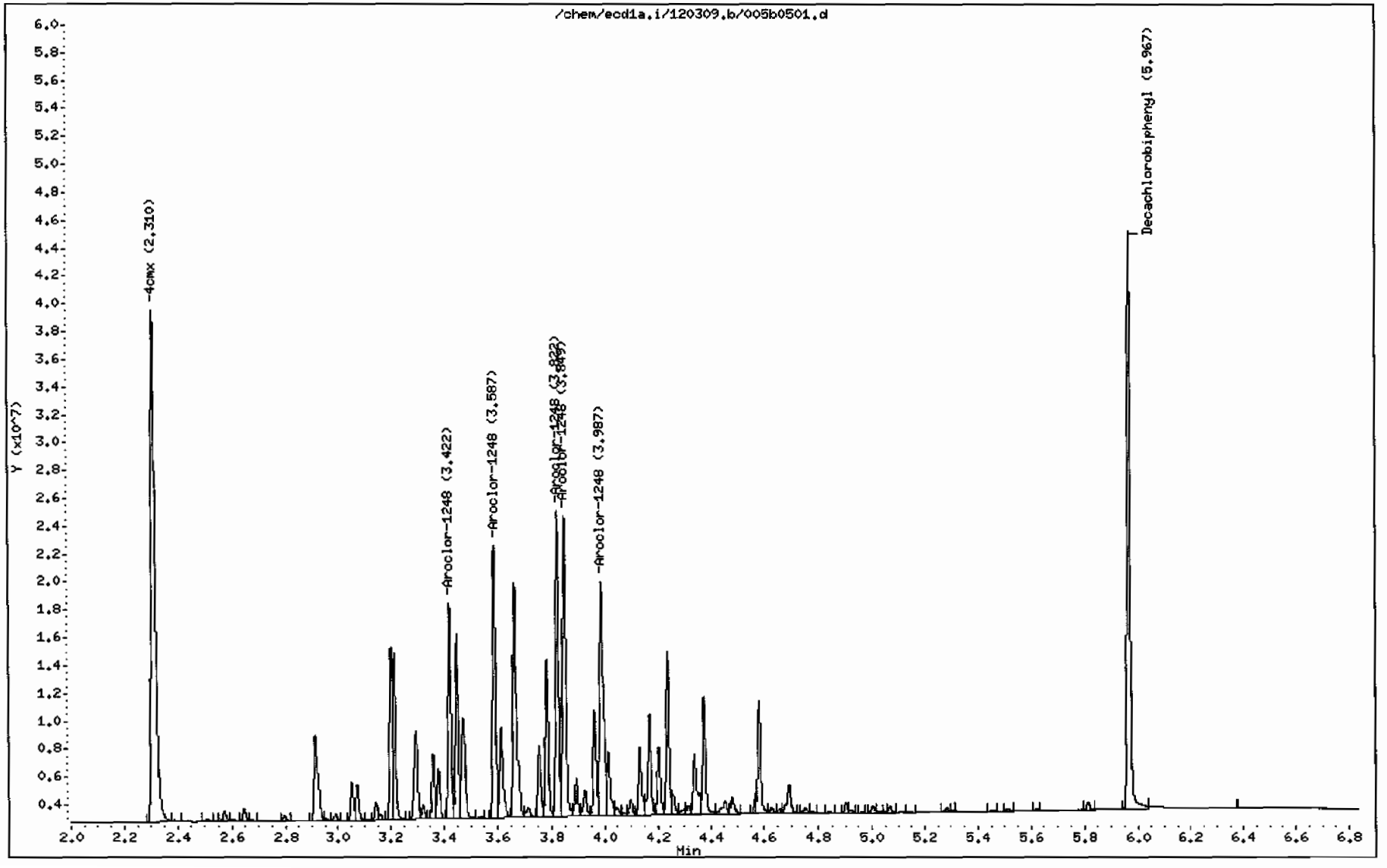

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 04:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	58954962	100.000	132	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.290	0.001	54524525	100.000	133	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.431	2.431	0.000	8164114	1000.00	1050	80.00- 120.00	100.00
2.720	2.720	0.000	10831083	1000.00	1060	112.67- 152.67	132.67
2.801	2.801	0.000	6820308	1000.00	1030	63.54- 103.54	83.54
3.050	3.050	0.000	5092270	1000.00	1030	42.37- 82.37	62.37
3.304	3.304	0.000	4550257	1000.00	1010	35.73- 75.73	55.73

Average of Peak Amounts = 1.04e+03

Data File: /chem/ecd1a.i/120309.b/006f0601.d

Date : 03-DEC-2009 04:58

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

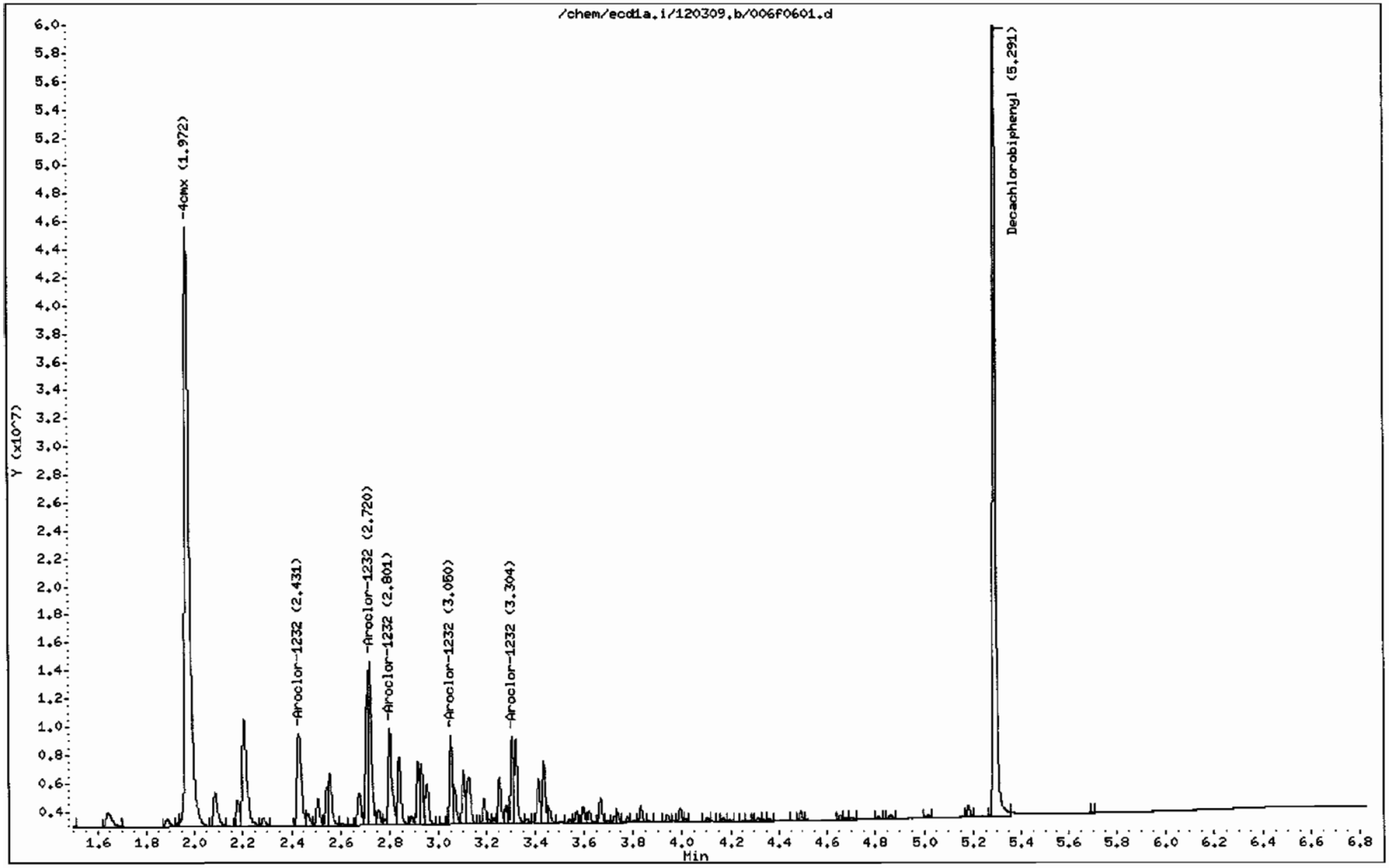

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 03-DEC-2009 04:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	48274360	100.000	130	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	40927012	100.000	136	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.645	2.645	0.000	7808949	1000.00	1070	80.00- 120.00	100.00
3.213	3.213	0.000	8779779	1000.00	1070	92.43- 132.43	112.43
3.296	3.296	0.000	5858604	1000.00	1060	55.02- 95.02	75.02
3.588	3.588	0.000	4402060	1000.00	1030	36.37- 76.37	56.37
3.822	3.822	0.000	4300979	1000.00	1040	35.08- 75.08	55.08

Average of Peak Amounts = 1.05e+03

Data File: /chem/ecd1a.i/120309.b/006b0601.d

Date : 03-DEC-2009 04:58

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

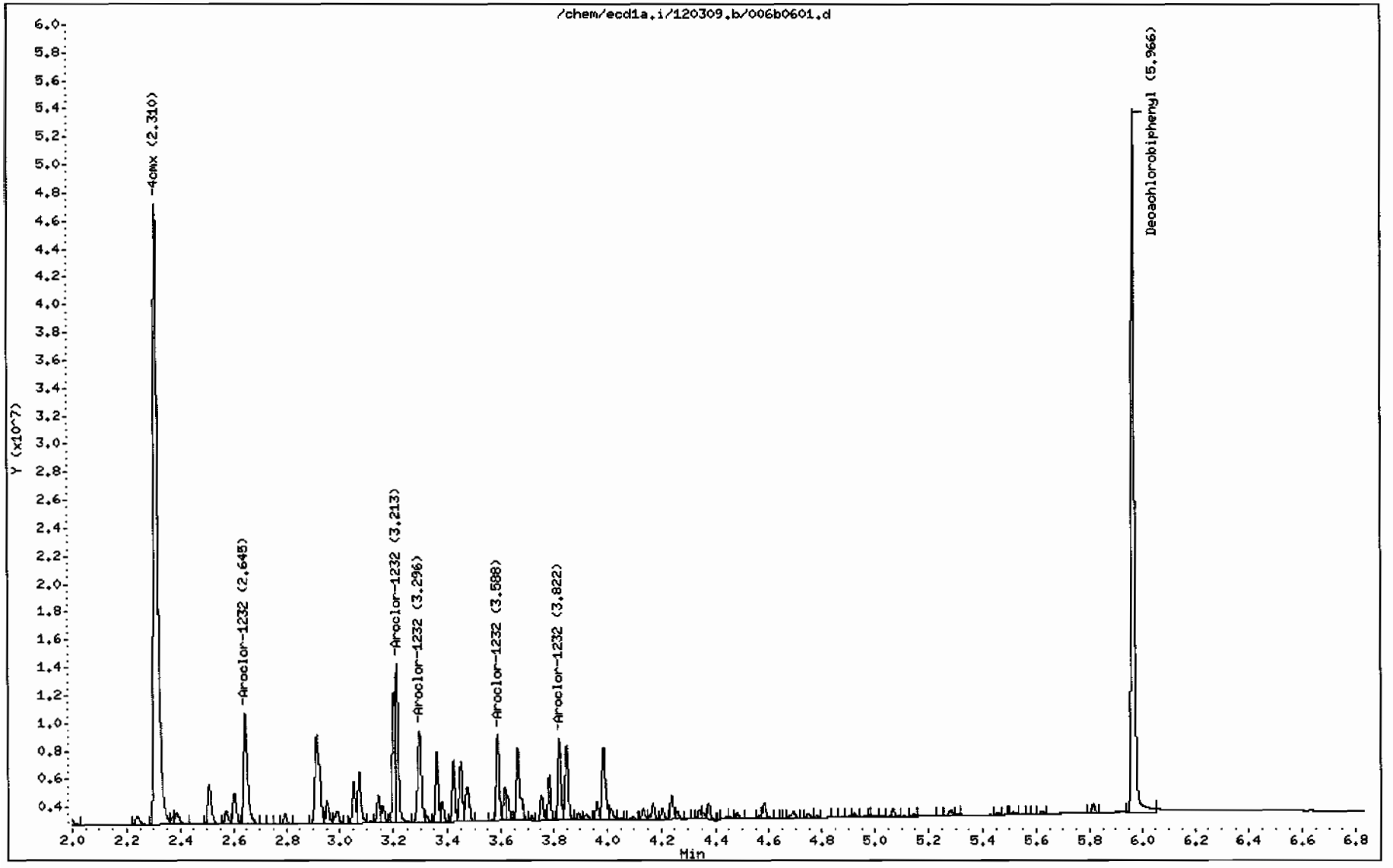

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/007f0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 05:09
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	47491887	100.000	106	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.290	0.001	44163841	100.000	108	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.085	2.085	0.000	5675011	1000.00	954	80.00- 120.00	100.00
2.179	2.179	0.000	2963974	1000.00	903	32.23- 72.23	52.23
2.205	2.205	0.000	13634340	1000.00	946	220.25- 260.25	240.25
Average of Peak Amounts =					934		

Data File: /chem/ecd1a.i/120309.b/007f0701.d

Date : 03-DEC-2009 05:09

Client ID: AR122101

Sample Info: IWAR090803-21

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

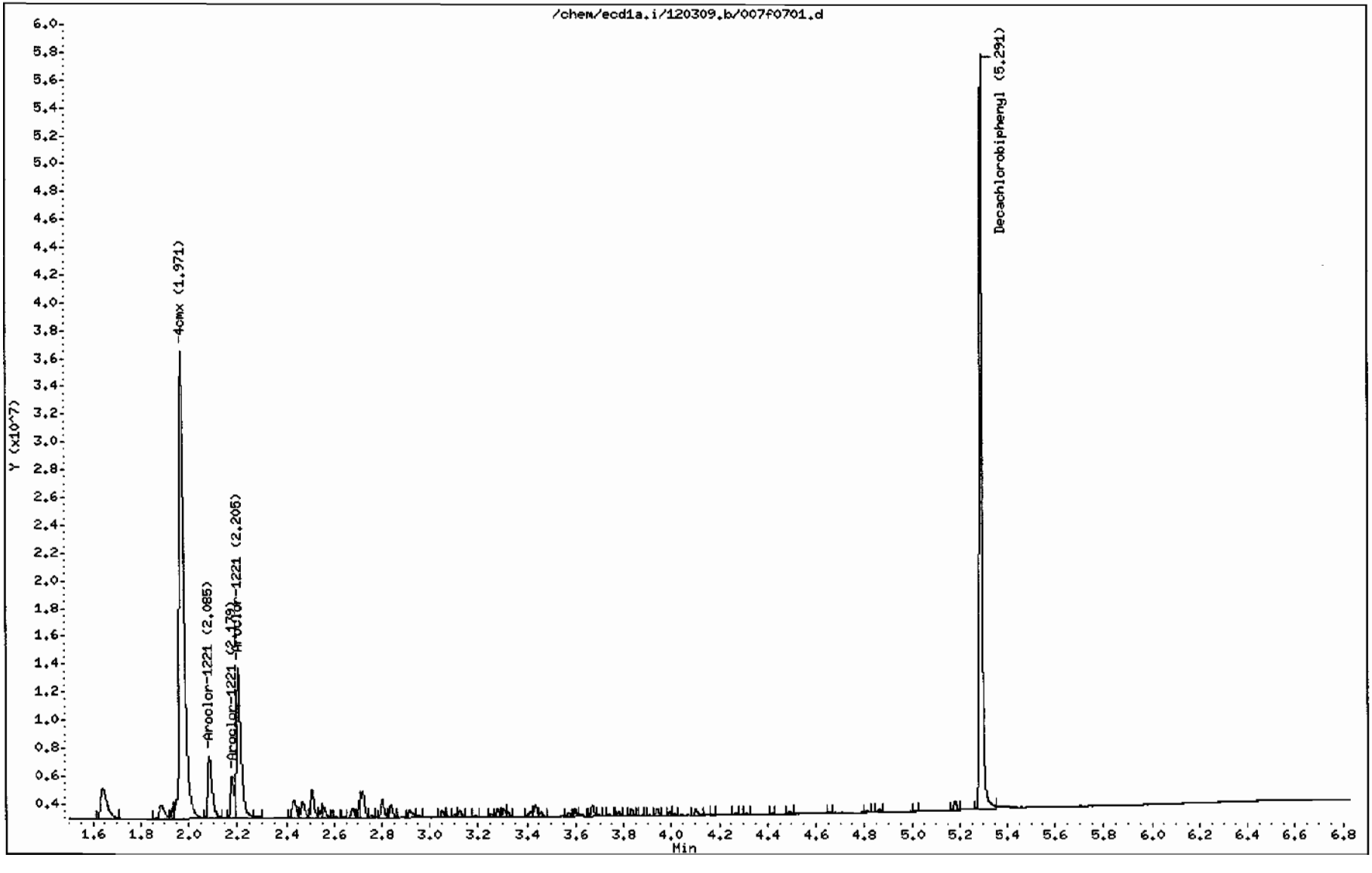

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/007b0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 03-DEC-2009 05:09
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38667806	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	32935680	100.000	110	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.508	2.508	0.000	4914141	1000.00	962	80.00- 120.00	100.00
2.604	2.604	0.000	3163415	1000.00	964	44.37- 84.37	64.37
2.645	2.645	0.000	10883146	1000.00	950	201.47- 241.47	221.47
Average of Peak Amounts =					959		

Data File: /chem/ecd1a.i/120309.b/007b0701.d

Date : 03-DEC-2009 05:09

Client ID: AR122101

Sample Info: IWAR090803-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

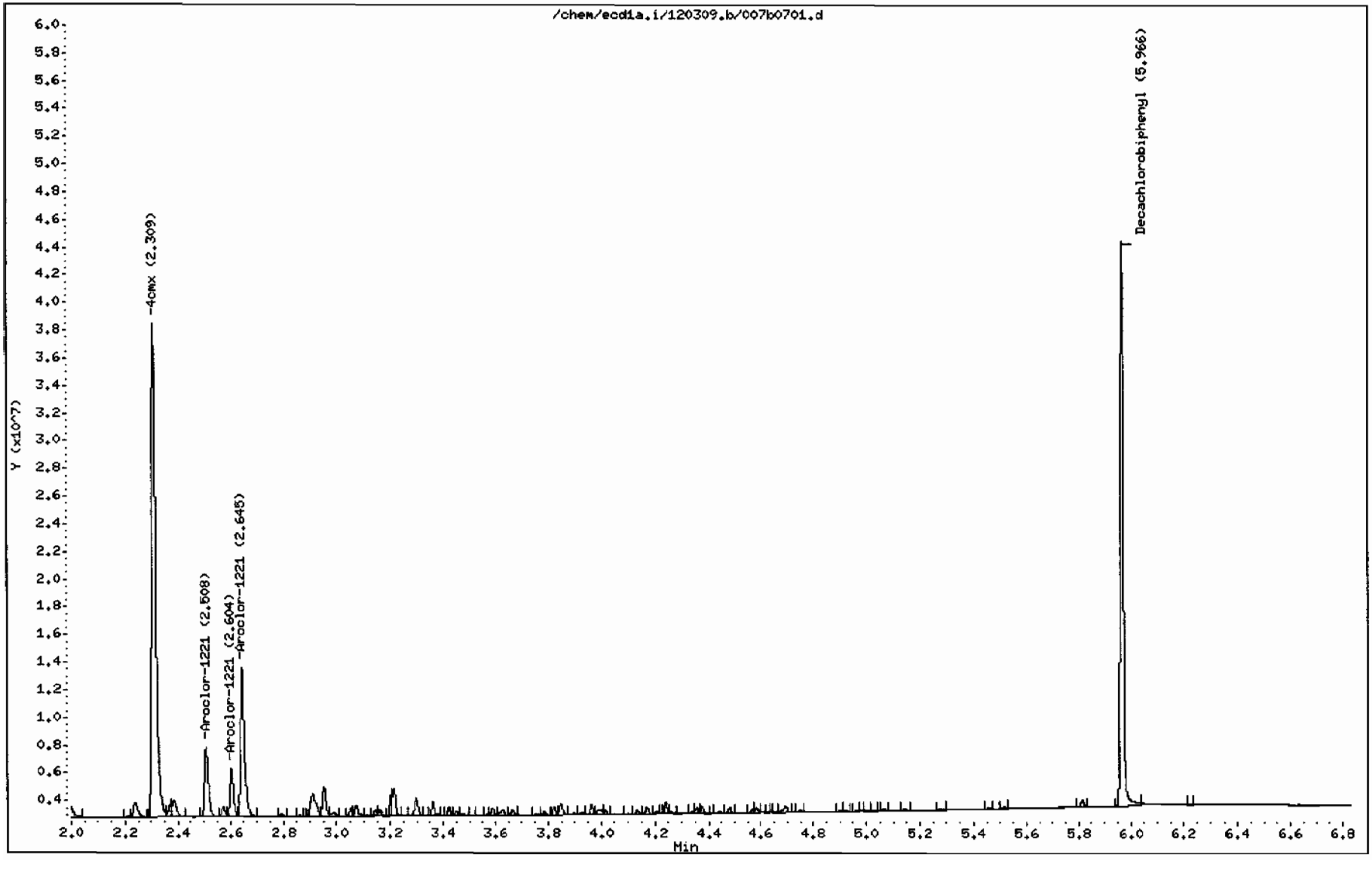

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/050f5001.d
Lab Smp Id: WAR091102-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 13:40
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 14:53 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 50 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.972	-0.002	45872811	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	40806011	100.000	99.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	16183472	1000.00	947	80.00- 120.00	100.00
2.718	2.720	-0.002	20769926	1000.00	978	108.34- 148.34	128.34
2.799	2.801	-0.002	12913353	1000.00	920	59.79- 99.79	79.79
2.837	2.839	-0.002	7816458	1000.00	929	28.30- 68.30	48.30
3.048	3.050	-0.002	10027093	1000.00	929	41.96- 81.96	61.96
Average of Peak Amounts =					941		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.777	-0.002	20448444	1000.00	953	80.00- 120.00	100.00
3.937	3.939	-0.002	31182424	1000.00	968	132.49- 172.49	152.49
4.168	4.169	-0.001	19464604	1000.00	951	75.19- 115.19	95.19
4.310	4.312	-0.002	19901867	1000.00	991	77.33- 117.33	97.33
4.490	4.492	-0.002	46158433	1000.00	997	205.73- 245.73	225.73
Average of Peak Amounts =					972		

Data File: /chem/ecdia.i/120309.b/050f5001.d
Date : 03-DEC-2009 13:40
Client ID: AR166005
Sample Info: IWAR091102-60 05

Instrument: ecdia.i
Operator: YSI
Column diameter: 0.25

Column phase: CLP1

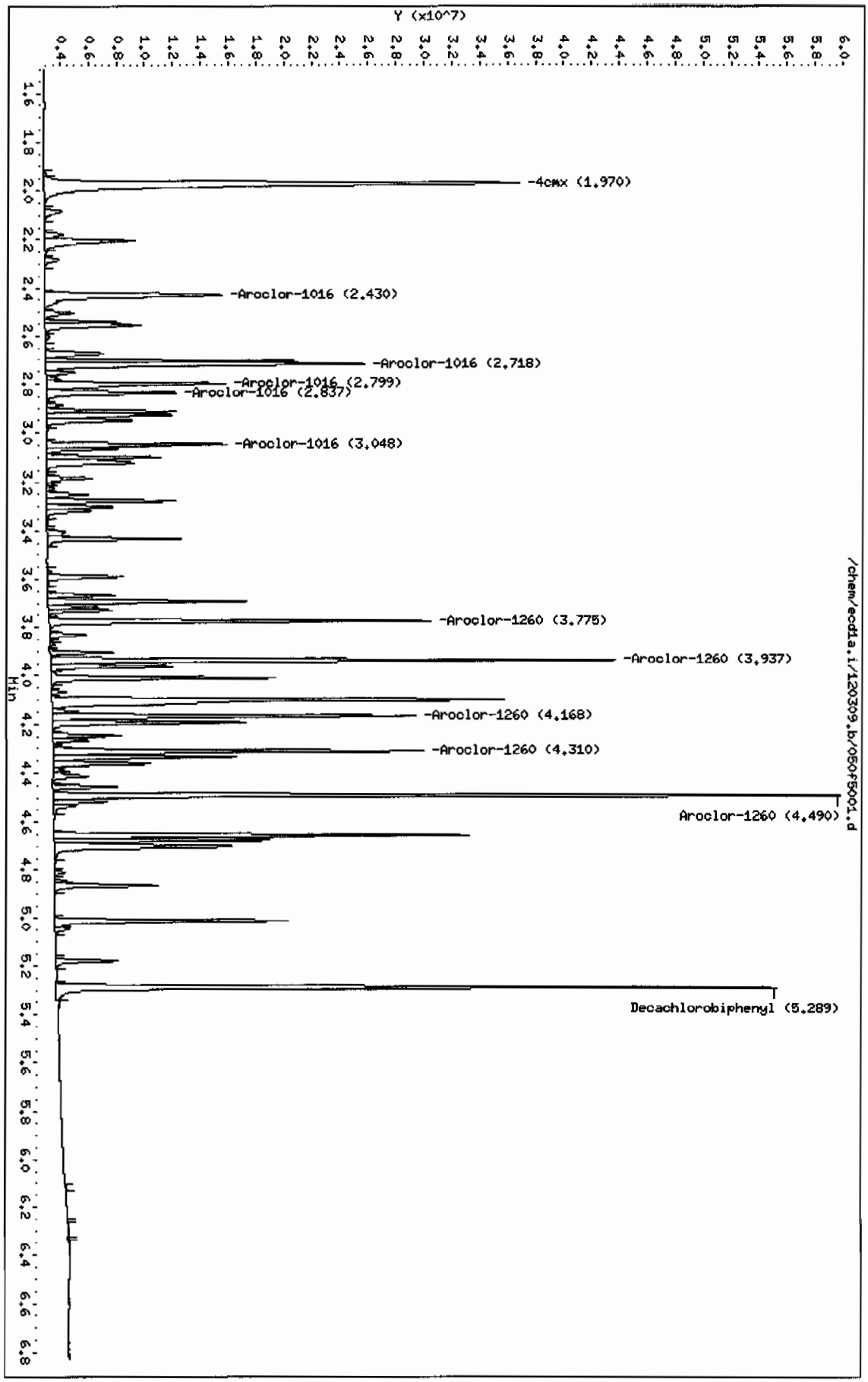

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/050b5001.d
Lab Smp Id: WAR091102-60 05 Client Smp ID: AR166005
Inj Date : 03-DEC-2009 13:40
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 14:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 50 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38473300	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	30488619	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.212	-0.001	16859038	1000.00	1000	80.00- 120.00	100.00
3.295	3.297	-0.002	10895552	1000.00	944	44.63- 84.63	64.63
3.420	3.422	-0.002	6507081	1000.00	936	18.60- 58.60	38.60
3.587	3.587	0.000	8739733	1000.00	952	31.84- 71.84	51.84
3.662	3.663	-0.001	8030955	1000.00	944	27.64- 67.64	47.64
Average of Peak Amounts =					955		
7 Aroclor-1260					CAS #: 11096-82-5		
4.355	4.355	0.000	17595987	1000.00	974	80.00- 120.00	100.00
4.479	4.479	0.000	22209155	1000.00	1000	106.22- 146.22	126.22
4.745	4.746	-0.001	17506009	1000.00	990	79.49- 119.49	99.49
4.920	4.920	0.000	17268786	1000.00	1000	78.14- 118.14	98.14
5.066	5.067	-0.001	39620992	1000.00	1020	205.17- 245.17	225.17
Average of Peak Amounts =					999		

Data File: /chem/ecd1a.i/120309.b/050b5001.d
Date : 03-DEC-2009 13:40
Client ID: AR166005
Sample Info: IWAR091102-60 05

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

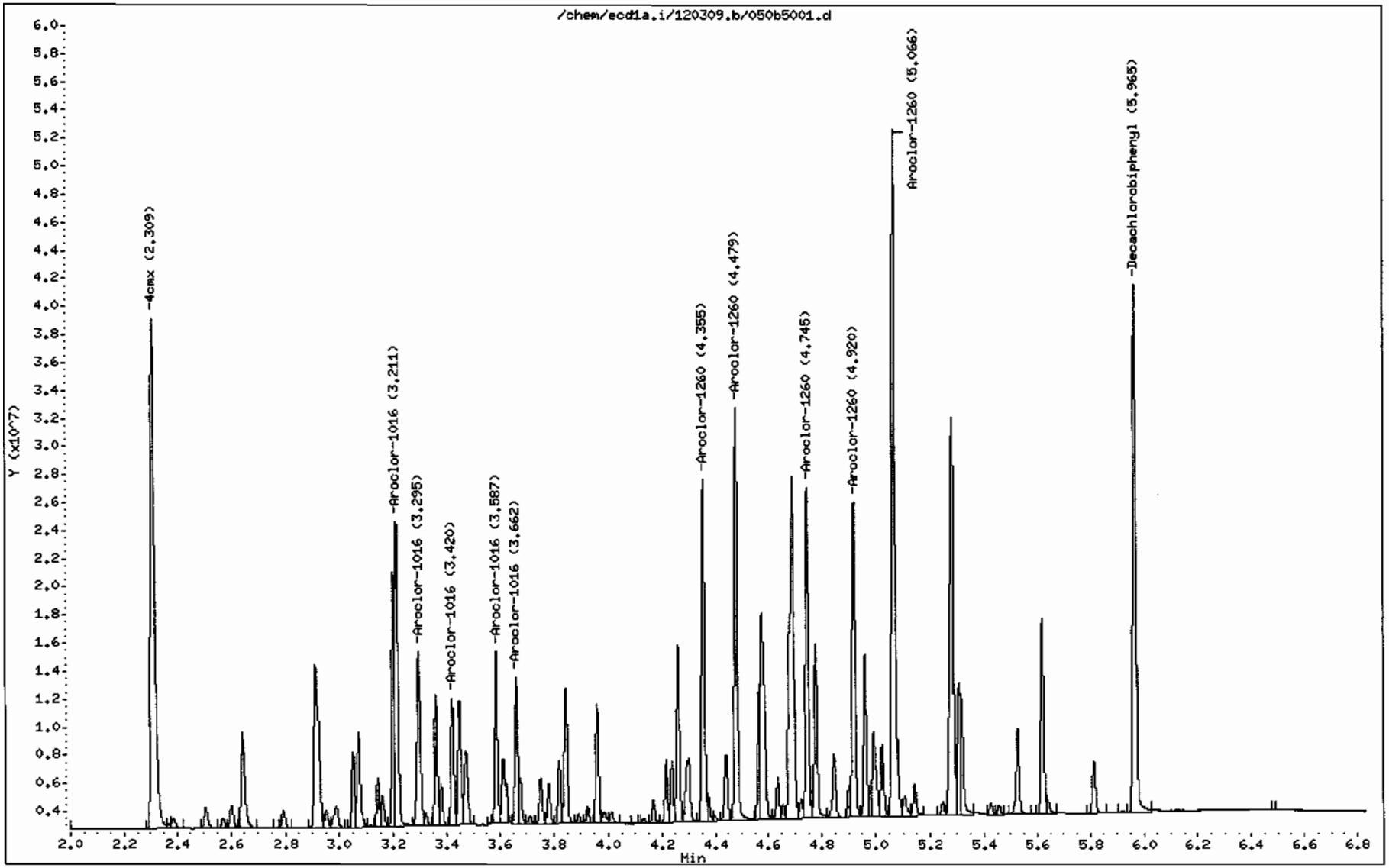

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/062f6201.d
Lab Smp Id: WAR091102-60 06 Client Smp ID: AR166006
Inj Date : 03-DEC-2009 16:03
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:35 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 62 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	46259069	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	42321733	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	16318516	1000.00	955	80.00- 120.00	100.00
2.718	2.720	-0.002	20975915	1000.00	988	108.54- 148.54	128.54
2.800	2.801	-0.001	13007112	1000.00	927	59.71- 99.71	79.71
2.838	2.839	-0.001	7953786	1000.00	945	28.74- 68.74	48.74
3.049	3.050	-0.001	10241542	1000.00	949	42.76- 82.76	62.76
Average of Peak Amounts =					953		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.777	-0.002	20695905	1000.00	965	80.00- 120.00	100.00
3.938	3.939	-0.001	31514508	1000.00	979	132.27- 172.27	152.27
4.168	4.169	-0.001	19745643	1000.00	965	75.41- 115.41	95.41
4.311	4.312	-0.001	20028518	1000.00	997	76.78- 116.78	96.78
4.490	4.492	-0.002	46633830	1000.00	1010	205.33- 245.33	225.33
Average of Peak Amounts =					983		

Data File: /chem/ecd1a.i/120309.b/062f6201.d
Date : 03-DEC-2009 16:03
Client ID: AR166006
Sample Info: IWAR091102-60 06

Column phase: CLP1

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Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

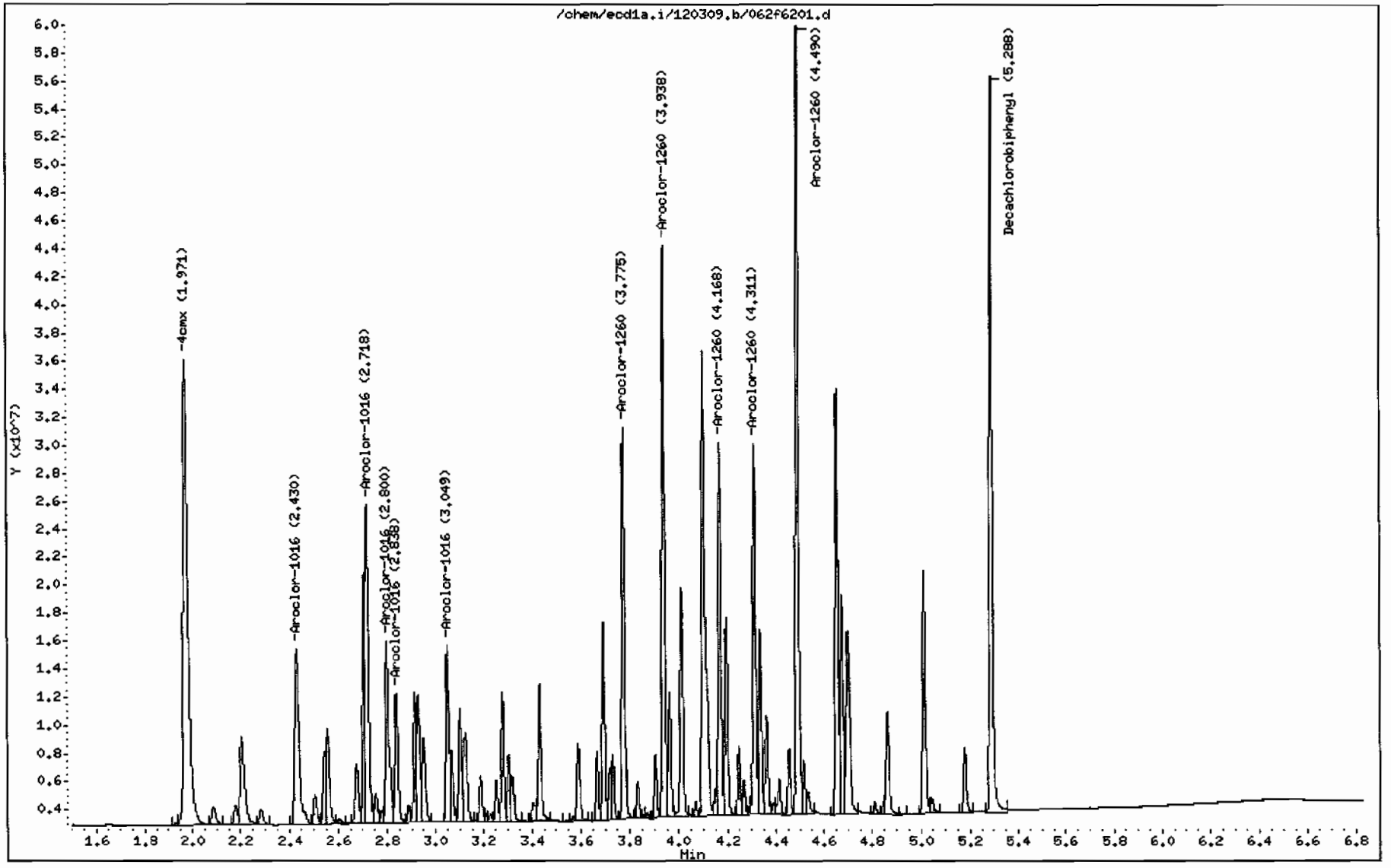

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/062b6201.d
Lab Smp Id: WAR091102-60 06 Client Smp ID: AR166006
Inj Date : 03-DEC-2009 16:03
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 62 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38613703	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	31163364	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	17019184	1000.00	1010	80.00- 120.00	100.00(M)
3.296	3.297	-0.001	10885532	1000.00	944	43.96- 83.96	63.96
3.422	3.422	0.000	6558836	1000.00	944	18.54- 58.54	38.54
3.587	3.587	0.000	8750635	1000.00	953	31.42- 71.42	51.42
3.662	3.663	-0.001	8209591	1000.00	965	28.24- 68.24	57.62
Average of Peak Amounts =					963		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	17686046	1000.00	979	80.00- 120.00	100.00
4.479	4.479	0.000	22431225	1000.00	1010	106.83- 146.83	126.83
4.745	4.746	-0.001	17786669	1000.00	1010	80.57- 120.57	100.57
4.919	4.920	-0.001	17586124	1000.00	1020	79.44- 119.44	99.44
5.067	5.067	0.000	40393460	1000.00	1040	208.39- 248.39	228.39
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120309.b/062b6201.d

Date : 03-DEC-2009 16:03

Client ID: AR166006

Sample Info: IWAR091102-60 06

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

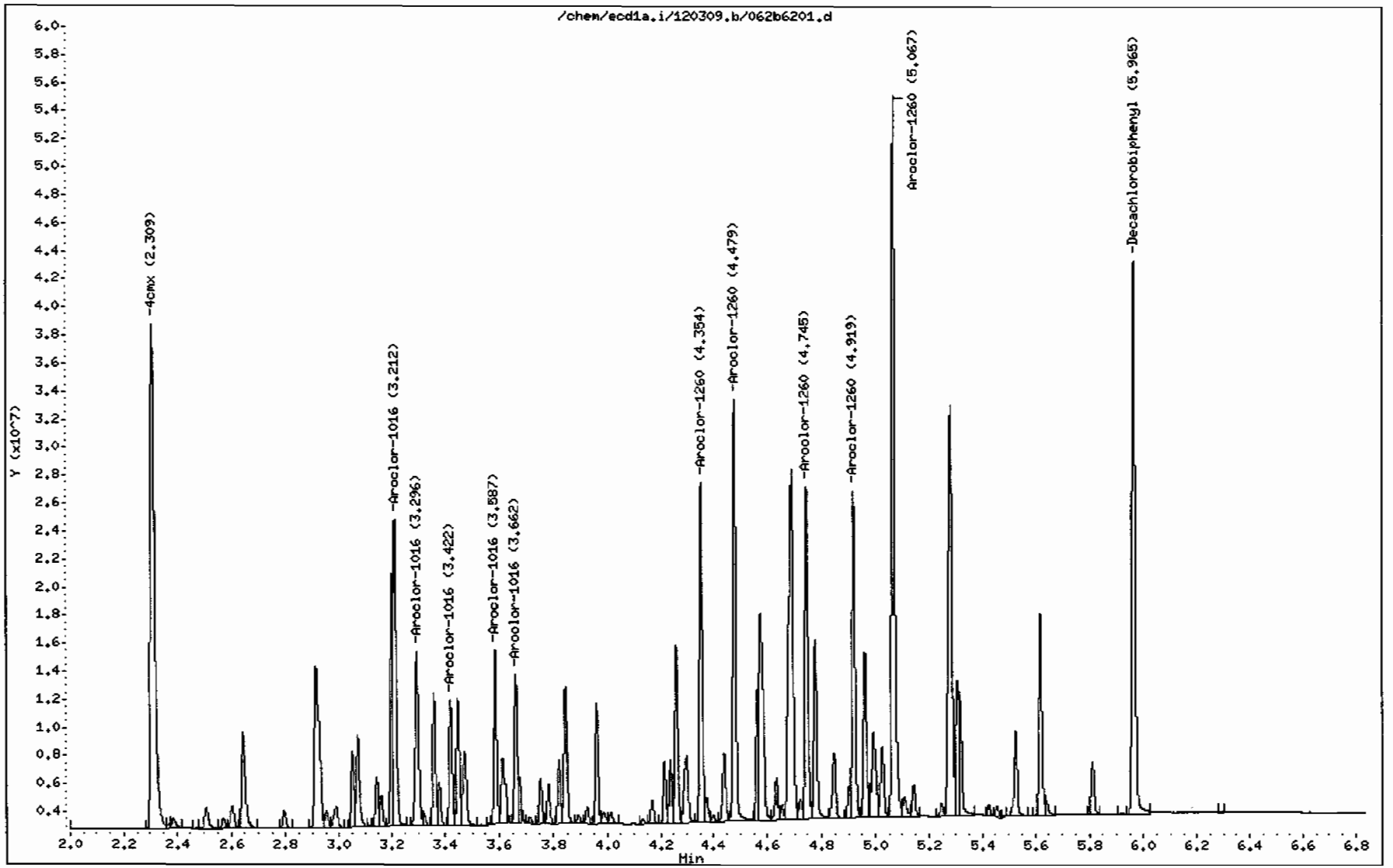

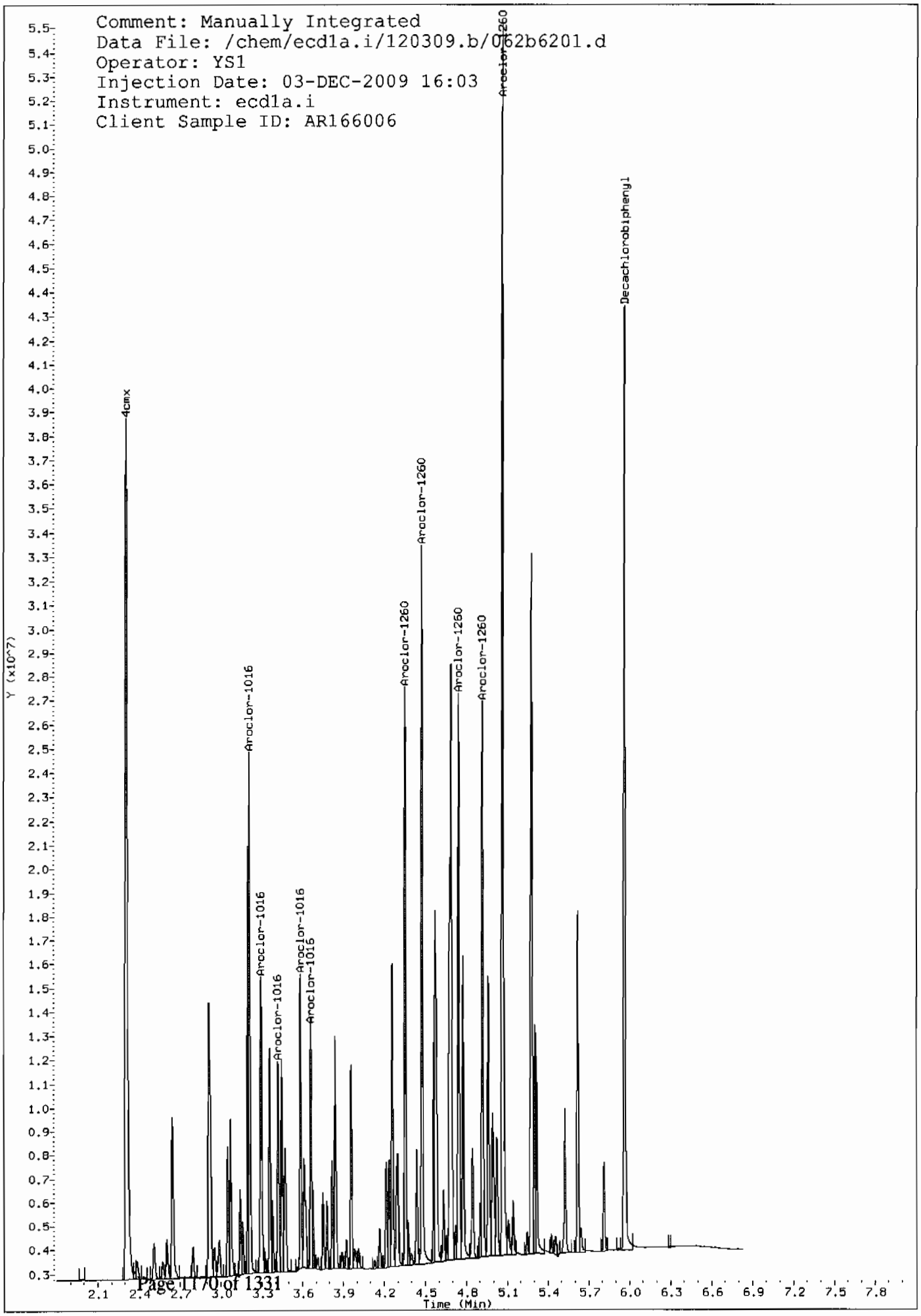
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120309.b/062b6201.d
Operator: YS1
Injection Date: 03-DEC-2009 16:03
Instrument: ecd1a.i
Client Sample ID: AR166006
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

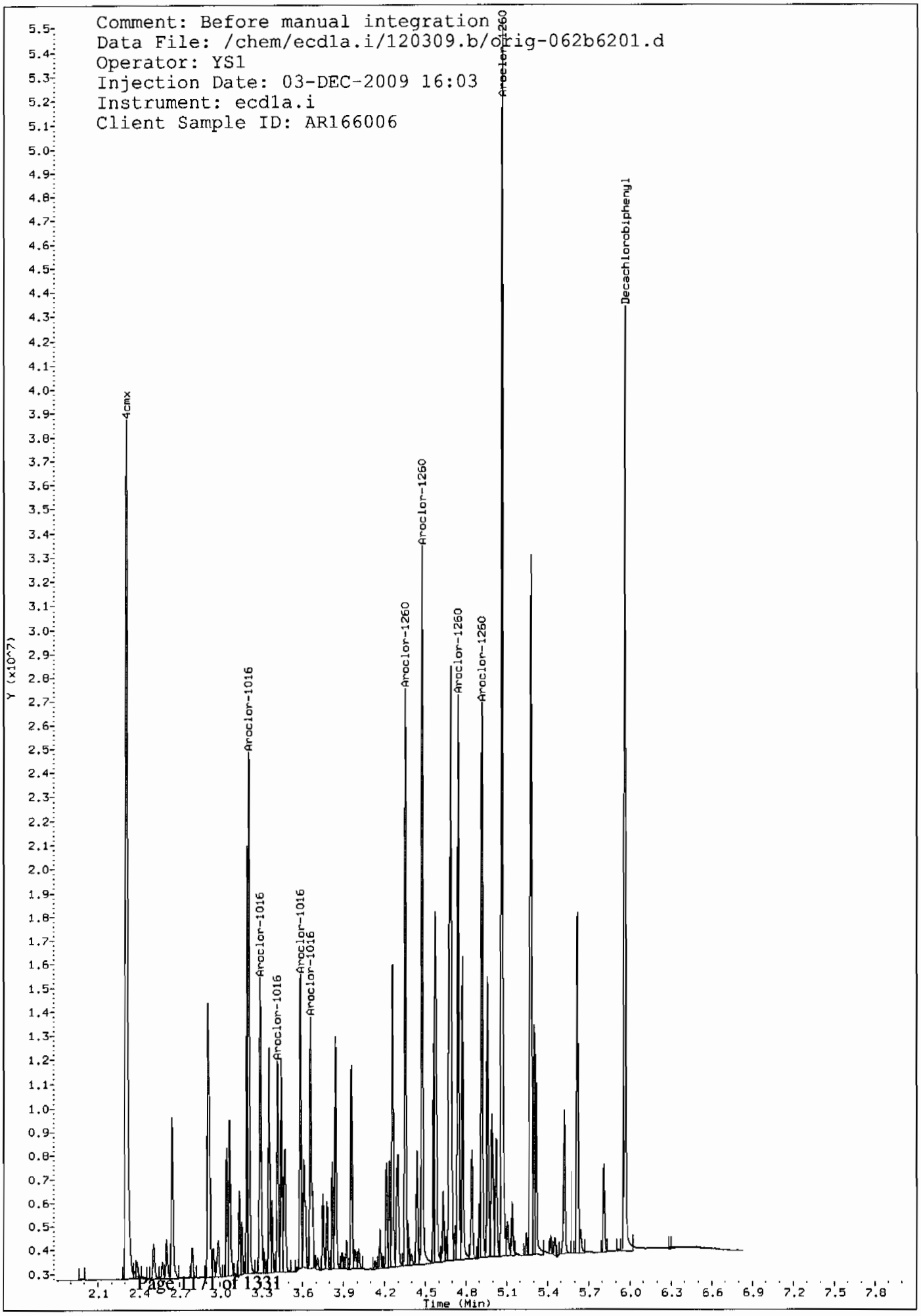
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Data File: /chem/ecd1a.i/120309.b/orig-062b6201.d
Operator: YS1
Injection Date: 03-DEC-2009 16:03
Instrument: ecd1a.i
Client Sample ID: AR166006
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/074f7401.d
Lab Smp Id: WAR091102-60 07 Client Smp ID: AR166007
Inj Date : 03-DEC-2009 18:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:38 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 74 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	45365051	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	41403830	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	16066284	1000.00	940	80.00- 120.00	100.00
2.719	2.720	-0.001	20147202	1000.00	949	105.40- 145.40	125.40
2.800	2.801	-0.001	12783433	1000.00	911	59.57- 99.57	79.57
2.837	2.839	-0.002	7833417	1000.00	931	28.76- 68.76	48.76
3.048	3.050	-0.002	9898210	1000.00	917	41.61- 81.61	61.61
Average of Peak Amounts =					930		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.777	-0.002	20234062	1000.00	943	80.00- 120.00	100.00
3.937	3.939	-0.002	30824444	1000.00	957	132.34- 172.34	152.34
4.167	4.169	-0.002	19165835	1000.00	937	74.72- 114.72	94.72
4.311	4.312	-0.001	19549068	1000.00	973	76.61- 116.61	96.61
4.490	4.492	-0.002	45713341	1000.00	987	205.92- 245.92	225.92
Average of Peak Amounts =					960		

Data File: /chem/ecd1a.i/120309.b/074f7401.d
Date : 03-DEC-2009 18:34
Client ID: AR166007
Sample Info: IWAR091102-60 07

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

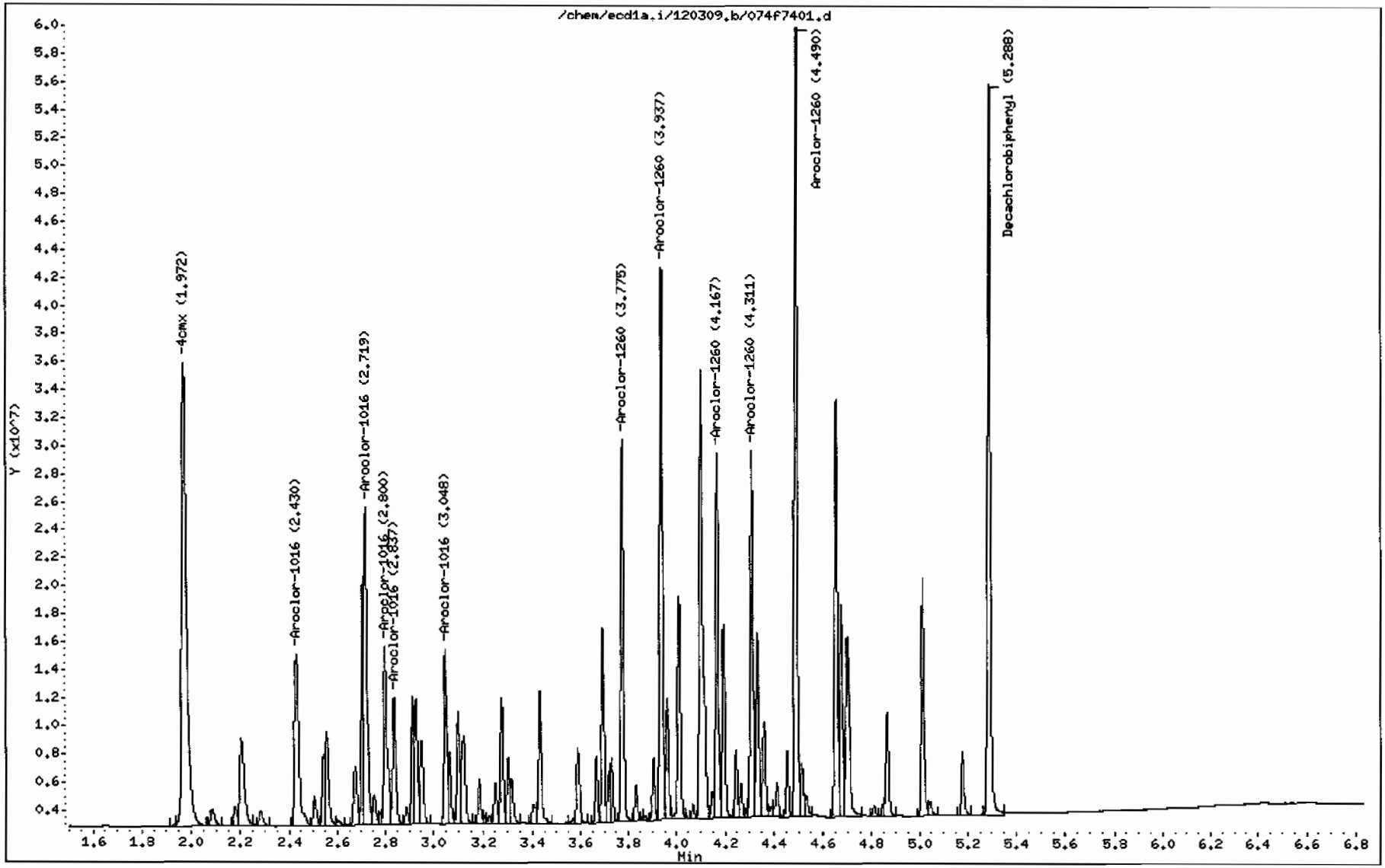

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/074b7401.d
Lab Smp Id: WAR091102-60 07 Client Smp ID: AR166007
Inj Date : 03-DEC-2009 18:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 74 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	38040767	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	31194190	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	16613743	1000.00	985	80.00- 120.00	100.00(M)
3.296	3.297	-0.001	10721831	1000.00	929	44.54- 84.54	64.54
3.421	3.422	-0.001	6427496	1000.00	925	18.69- 58.69	38.69
3.587	3.587	0.000	8786944	1000.00	957	32.89- 72.89	52.89
3.662	3.663	-0.001	8176783	1000.00	961	29.22- 69.22	58.59
Average of Peak Amounts =					952		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	17423123	1000.00	964	80.00- 120.00	100.00
4.479	4.479	0.000	22085373	1000.00	997	106.76- 146.76	126.76
4.745	4.746	-0.001	17506794	1000.00	990	80.48- 120.48	100.48
4.919	4.920	-0.001	17333060	1000.00	1010	79.48- 119.48	99.48
5.067	5.067	0.000	39749034	1000.00	1030	208.14- 248.14	228.14
Average of Peak Amounts =					997		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120309.b/074b7401.d
Date : 03-DEC-2009 18:34
Client ID: AR166007
Sample Info: IWAR091102-60 07

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

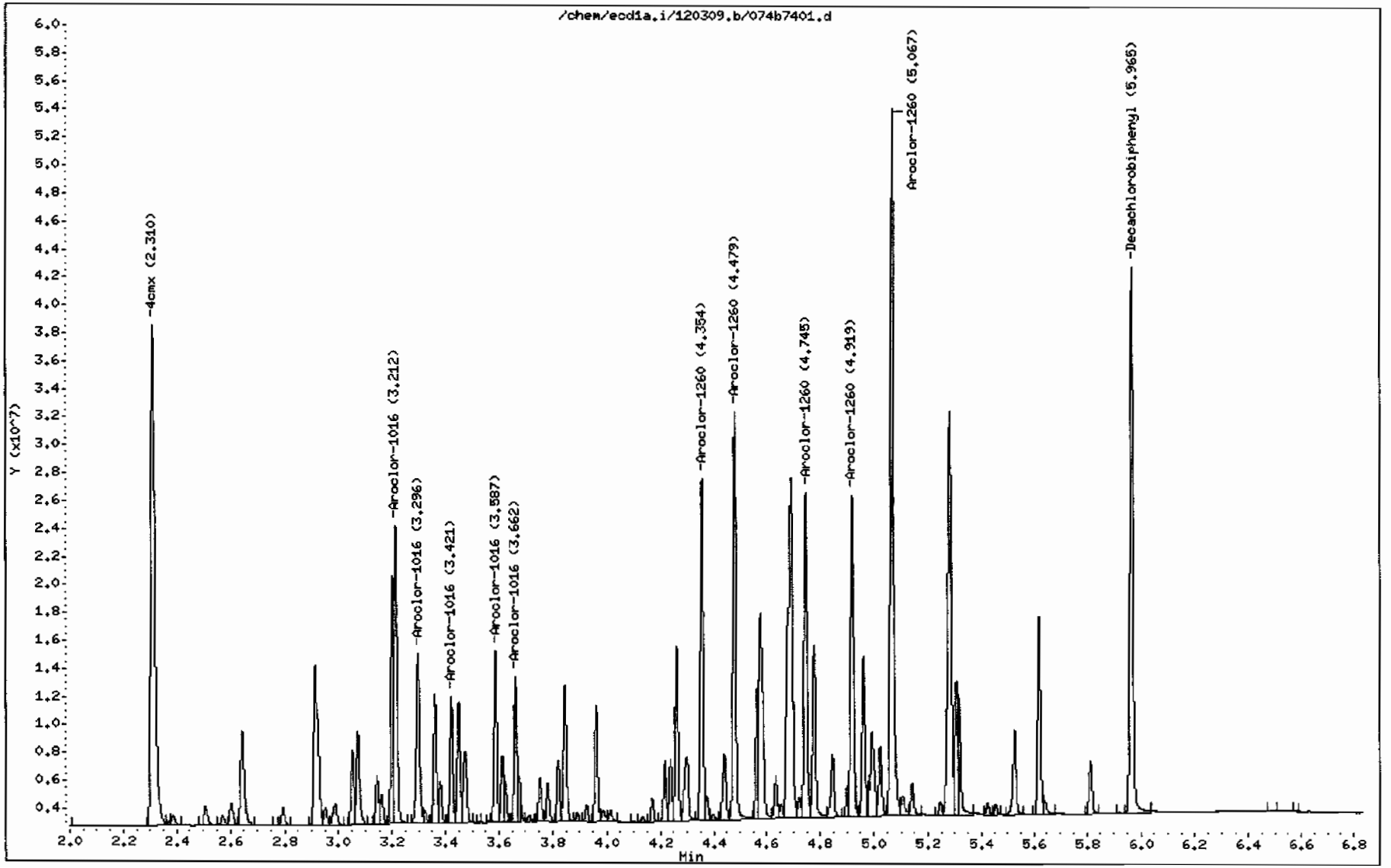

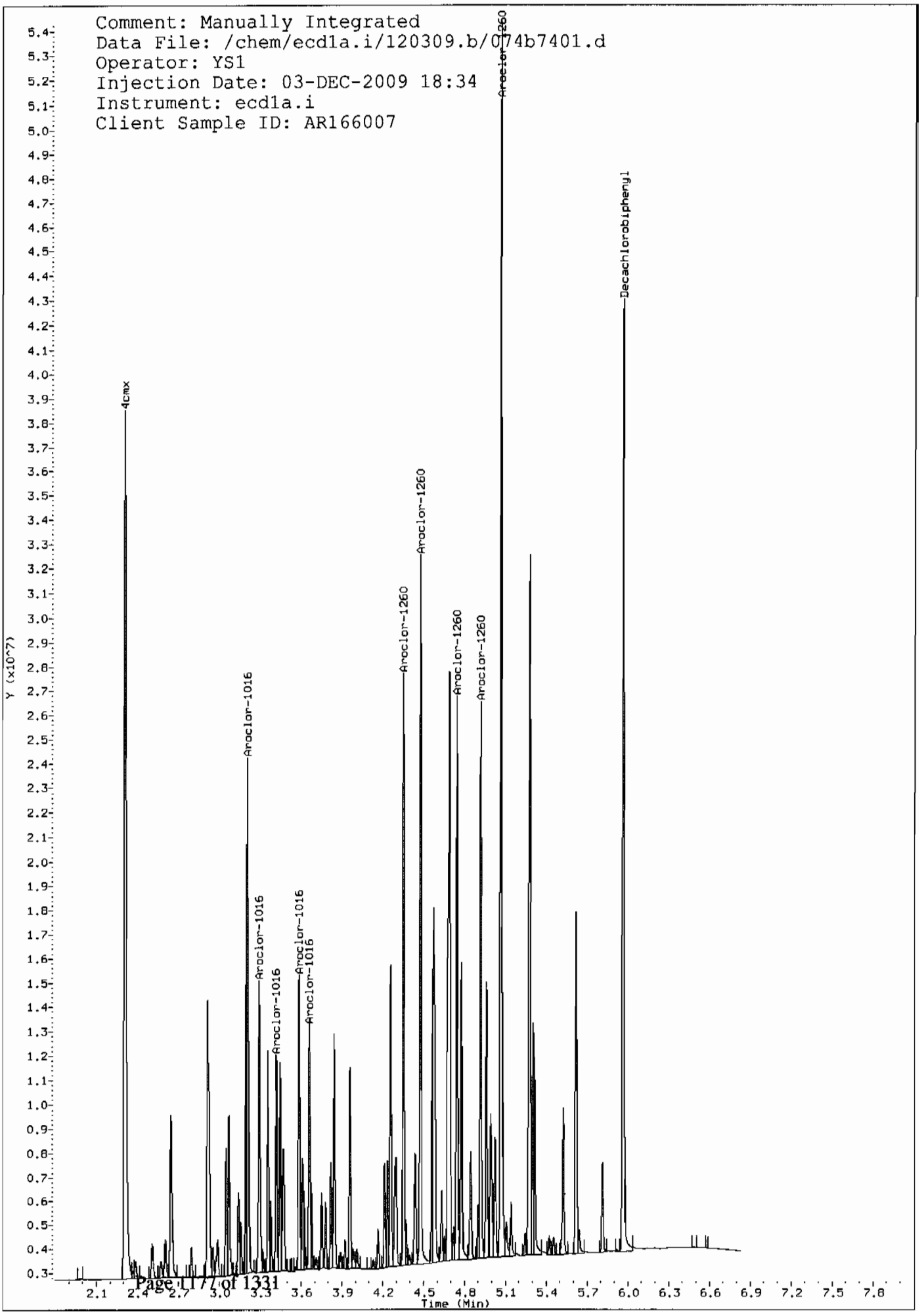
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Operator: YS1
Injection Date: 03-DEC-2009 18:34
Instrument: ecd1a.i
Client Sample ID: AR166007
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
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Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

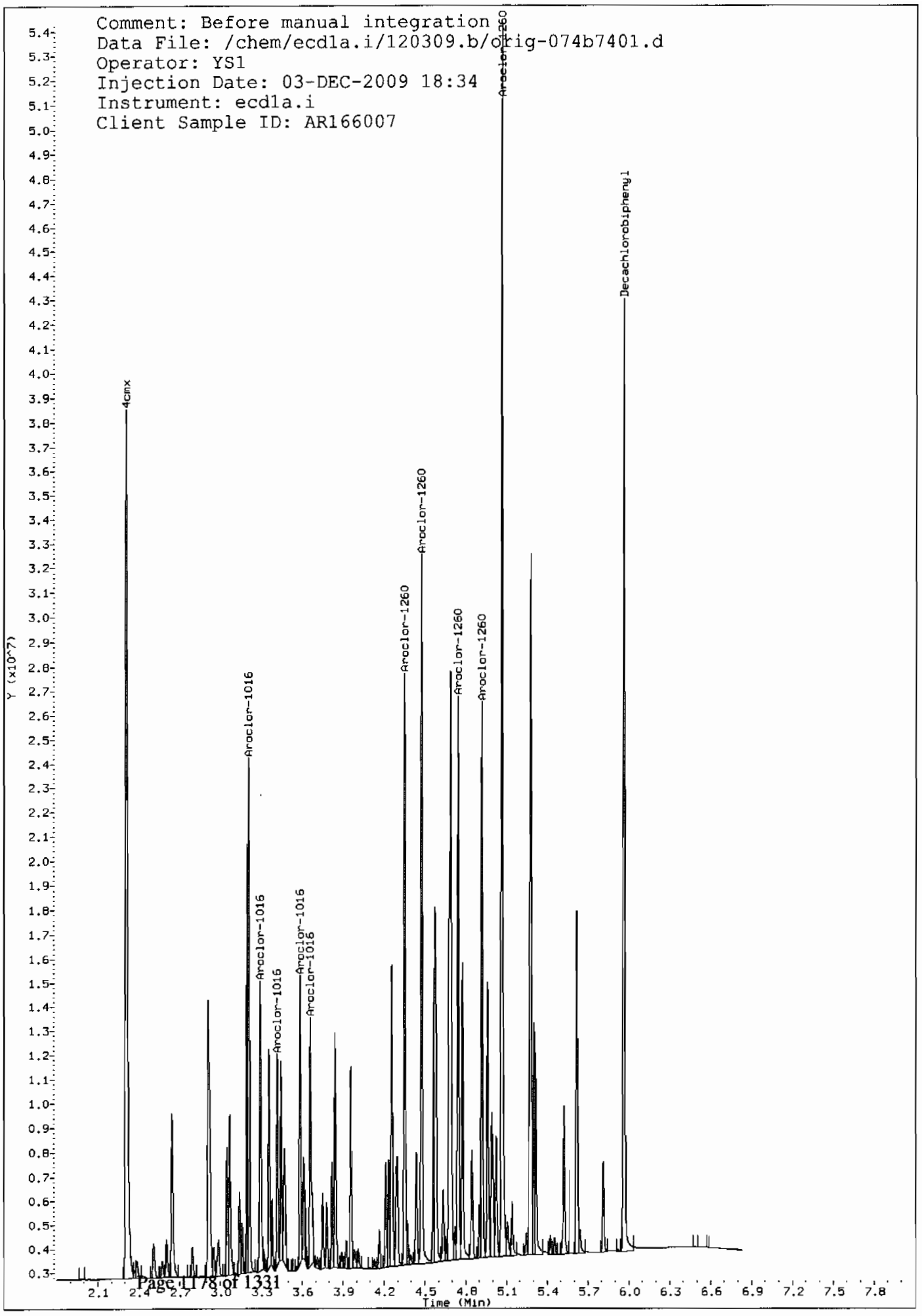
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Operator: YS1
Injection Date: 03-DEC-2009 18:34
Instrument: ecd1a.i
Client Sample ID: AR166007
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/080f8001.d
Lab Smp Id: WAR091102-60 08 Client Smp ID: AR166008
Inj Date : 03-DEC-2009 19:50
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 08
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 80 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	44735876	100.000	100	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	41268399	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.431	-0.002	14996758	1000.00	878	80.00- 120.00	100.00
2.718	2.720	-0.002	19945131	1000.00	939	107.58- 147.58	133.00
2.799	2.801	-0.002	12608889	1000.00	898	59.73- 99.73	84.08
2.836	2.839	-0.003	7621583	1000.00	906	28.59- 68.59	50.82
3.048	3.050	-0.002	9844862	1000.00	912	41.65- 81.65	65.65
Average of Peak Amounts =					907		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.777	-0.003	20269699	1000.00	945	80.00- 120.00	100.00
3.937	3.939	-0.002	30603527	1000.00	950	132.51- 172.51	150.98
4.166	4.169	-0.003	18978275	1000.00	928	75.52- 115.52	93.63
4.310	4.312	-0.002	19444405	1000.00	968	77.42- 117.42	95.93
4.489	4.492	-0.003	45119211	1000.00	974	206.60- 246.60	222.59
Average of Peak Amounts =					953		

Data File: /chem/ecd1a.i/120309.b/080f8001.d
Date : 03-DEC-2009 19:50
Client ID: AR166008
Sample Info: IWAR091102-60 08

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

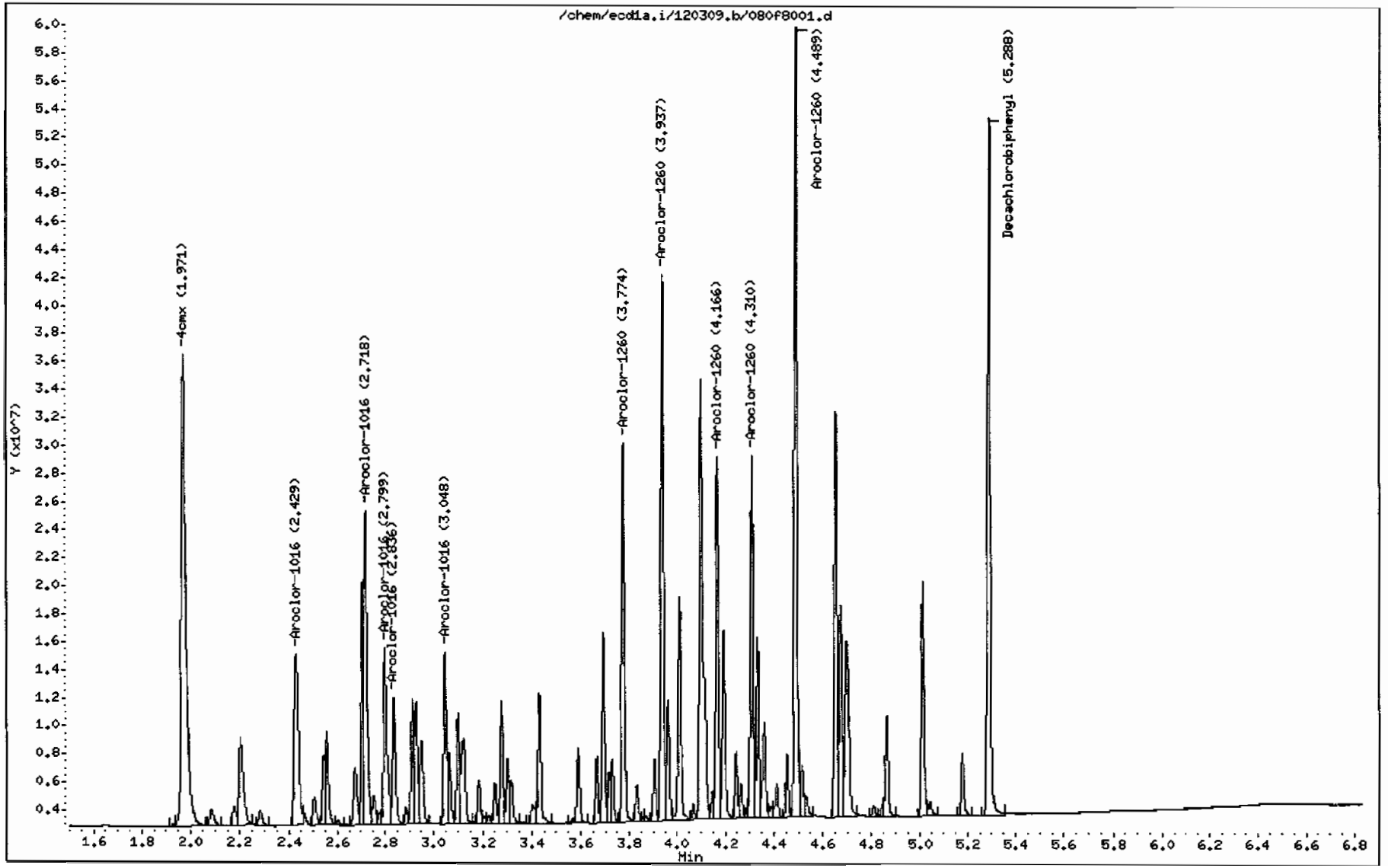

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/080b8001.d
Lab Smp Id: WAR091102-60 08 Client Smp ID: AR166008
Inj Date : 03-DEC-2009 19:50
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-60 08
Misc Info :
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 80 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37552118	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	30894554	100.000	103	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.212	-0.001	15981671	1000.00	948	80.00- 120.00	100.00(M)
3.295	3.297	-0.002	10540805	1000.00	914	45.96- 85.96	65.96
3.421	3.422	-0.001	6321573	1000.00	909	19.56- 59.56	39.56
3.586	3.587	-0.001	8463945	1000.00	922	32.96- 72.96	52.96
3.662	3.663	-0.001	7909228	1000.00	930	29.49- 69.49	59.38
Average of Peak Amounts =					925		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.355	-0.002	17148008	1000.00	949	80.00- 120.00	100.00
4.478	4.479	-0.001	21692331	1000.00	979	106.50- 146.50	126.50
4.744	4.746	-0.002	17156375	1000.00	970	80.05- 120.05	100.05
4.918	4.920	-0.002	16943965	1000.00	984	78.81- 118.81	98.81
5.066	5.067	-0.001	39061898	1000.00	1010	207.79- 247.79	227.79
Average of Peak Amounts =					979		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120309.b/080b8001.d
Date : 03-DEC-2009 19:50
Client ID: AR166008
Sample Info: IWAR091102-60 08

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

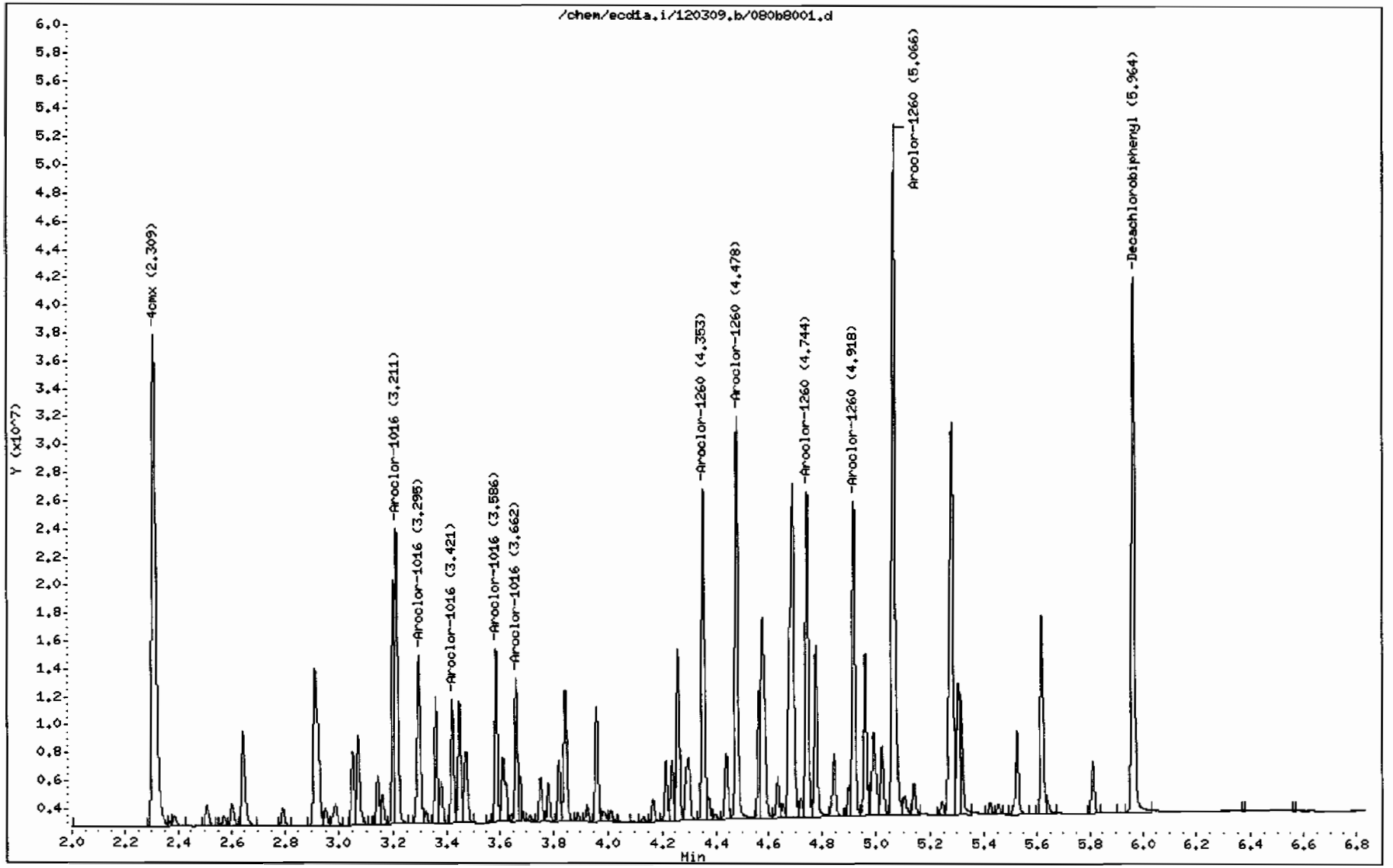

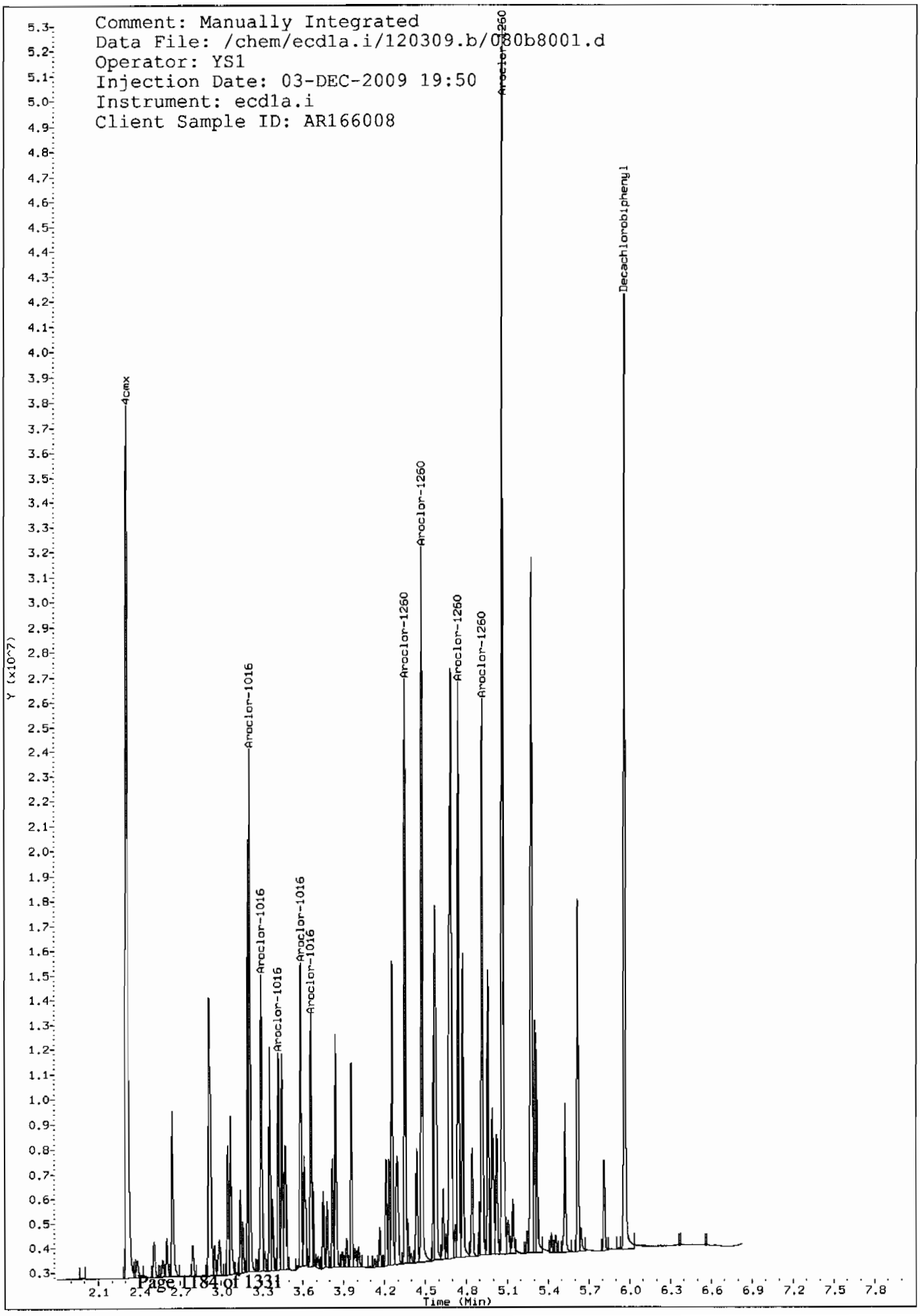
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Operator: YS1
Injection Date: 03-DEC-2009 19:50
Instrument: ecd1a.i
Client Sample ID: AR166008
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

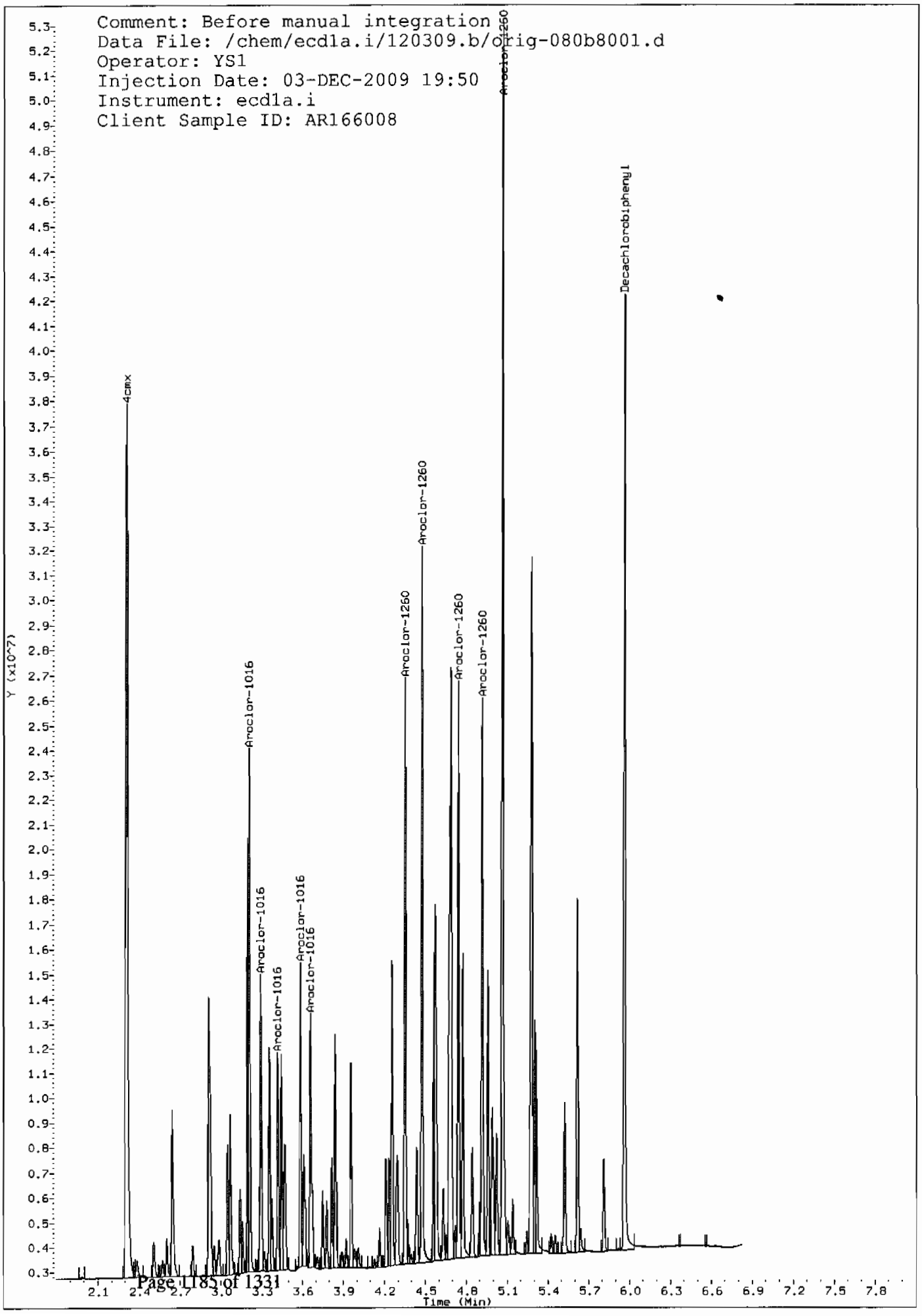
Comment: Before manual integration
Data File: /chem/ecd1a.i/120309.b/orig-080b8001.d
Operator: YS1
Injection Date: 03-DEC-2009 19:50
Instrument: ecd1a.i
Client Sample ID: AR166008
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 05-DEC-2009 09:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:24 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.973	1.973	0.000	43900924	100.000	98.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	39561256	100.000	96.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.430	0.000	15698584	1000.00	919	80.00- 120.00	100.00
2.720	2.720	0.000	20272013	1000.00	954	109.13- 149.13	129.13
2.801	2.801	0.000	12486576	1000.00	890	59.54- 99.54	79.54
2.838	2.838	0.000	7530286	1000.00	895	27.97- 67.97	47.97
3.049	3.049	0.000	9660174	1000.00	895	41.54- 81.54	61.54
Average of Peak Amounts =					911		
7 Aroclor-1260					CAS #: 11096-82-5		
3.776	3.776	0.000	20433828	1000.00	953	80.00- 120.00	100.00
3.938	3.938	0.000	30938986	1000.00	961	131.41- 171.41	151.41
4.168	4.168	0.000	19151518	1000.00	936	73.72- 113.72	93.72
4.311	4.311	0.000	19630102	1000.00	978	76.07- 116.07	96.07
4.491	4.491	0.000	46061430	1000.00	995	205.42- 245.42	225.42
Average of Peak Amounts =					964		

Data File: /chem/ecd1a.i/120509.b/002f0201.d

Date : 05-DEC-2009 09:15

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

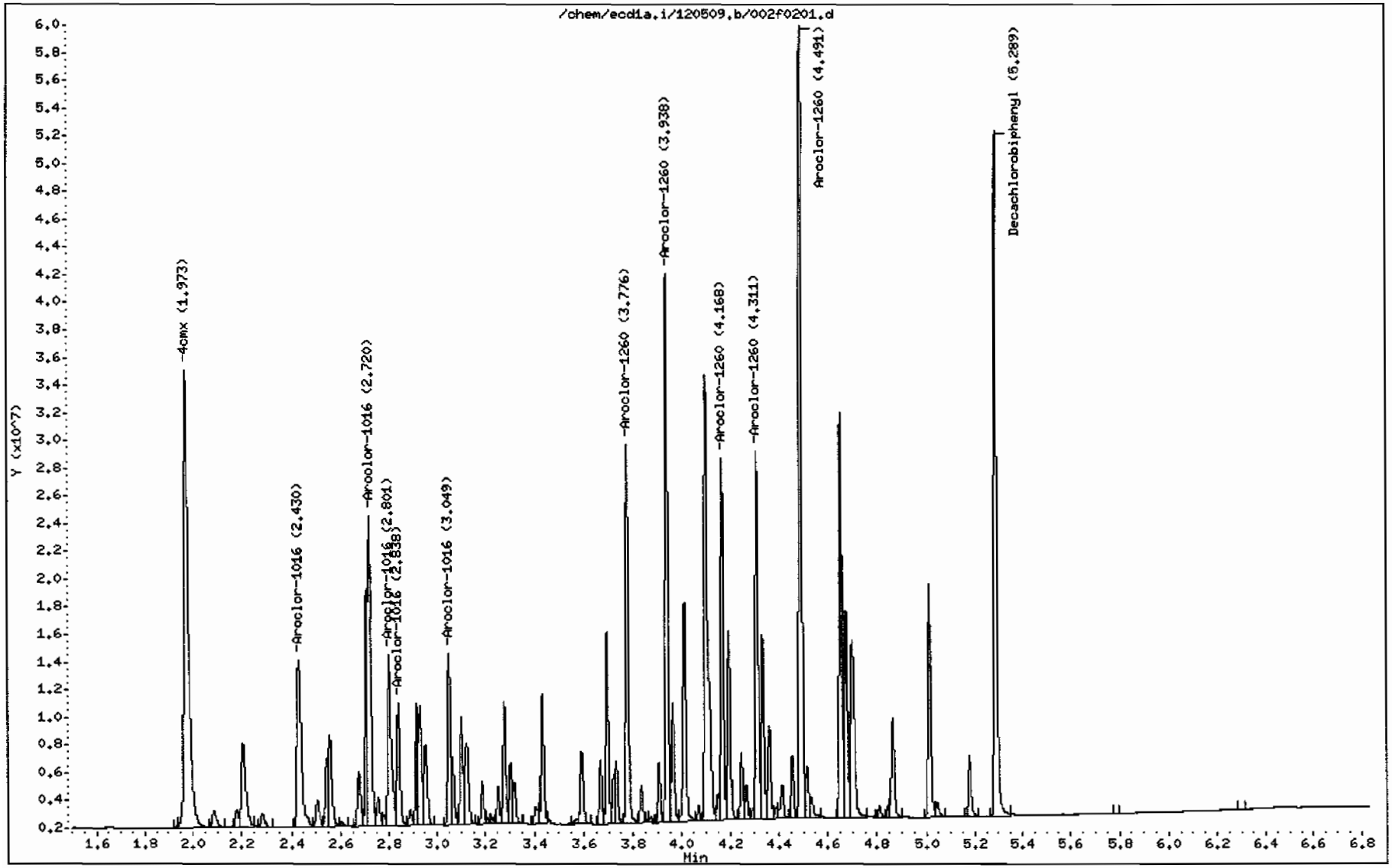

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 05-DEC-2009 09:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 11:34 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	36716068	100.000	98.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.964	0.000	29517382	100.000	98.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	15859442	1000.00	941	80.00- 120.00	100.00(M)
3.295	3.295	0.000	10360880	1000.00	898	45.33- 85.33	65.33
3.421	3.421	0.000	6167975	1000.00	887	18.89- 58.89	38.89
3.587	3.587	0.000	8308555	1000.00	905	32.39- 72.39	52.39
3.663	3.663	0.000	7615861	1000.00	895	28.02- 68.02	48.02
Average of Peak Amounts =					905		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.353	0.000	17167533	1000.00	950	80.00- 120.00	100.00
4.478	4.478	0.000	21633217	1000.00	976	106.01- 146.01	126.01
4.744	4.744	0.000	17110032	1000.00	968	79.67- 119.67	99.67
4.918	4.918	0.000	16973066	1000.00	986	78.87- 118.87	98.87
5.065	5.065	0.000	39210639	1000.00	1020	208.40- 248.40	228.40
Average of Peak Amounts =					979		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120509.b/002b0201.d
Date : 05-DEC-2009 09:15
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

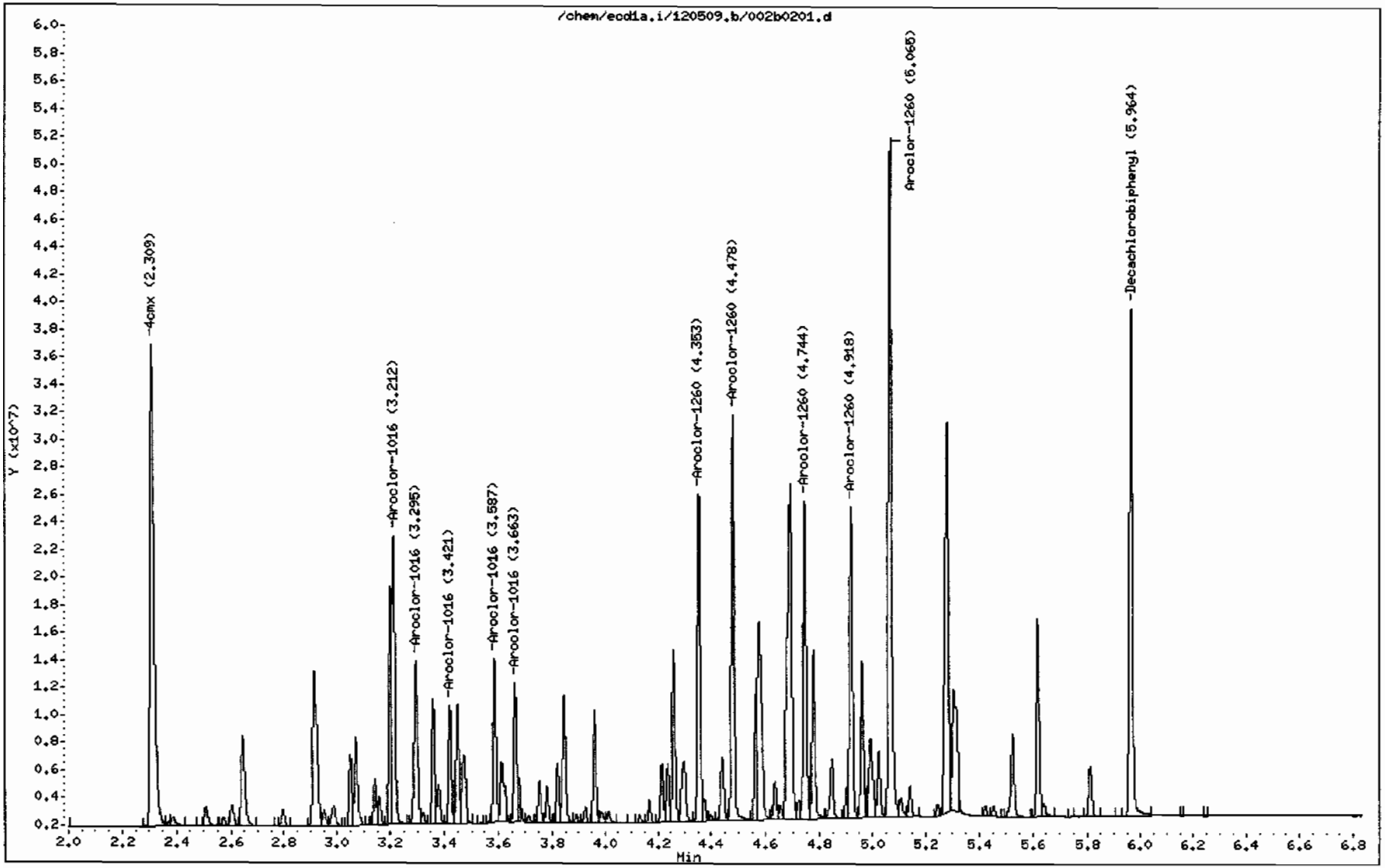

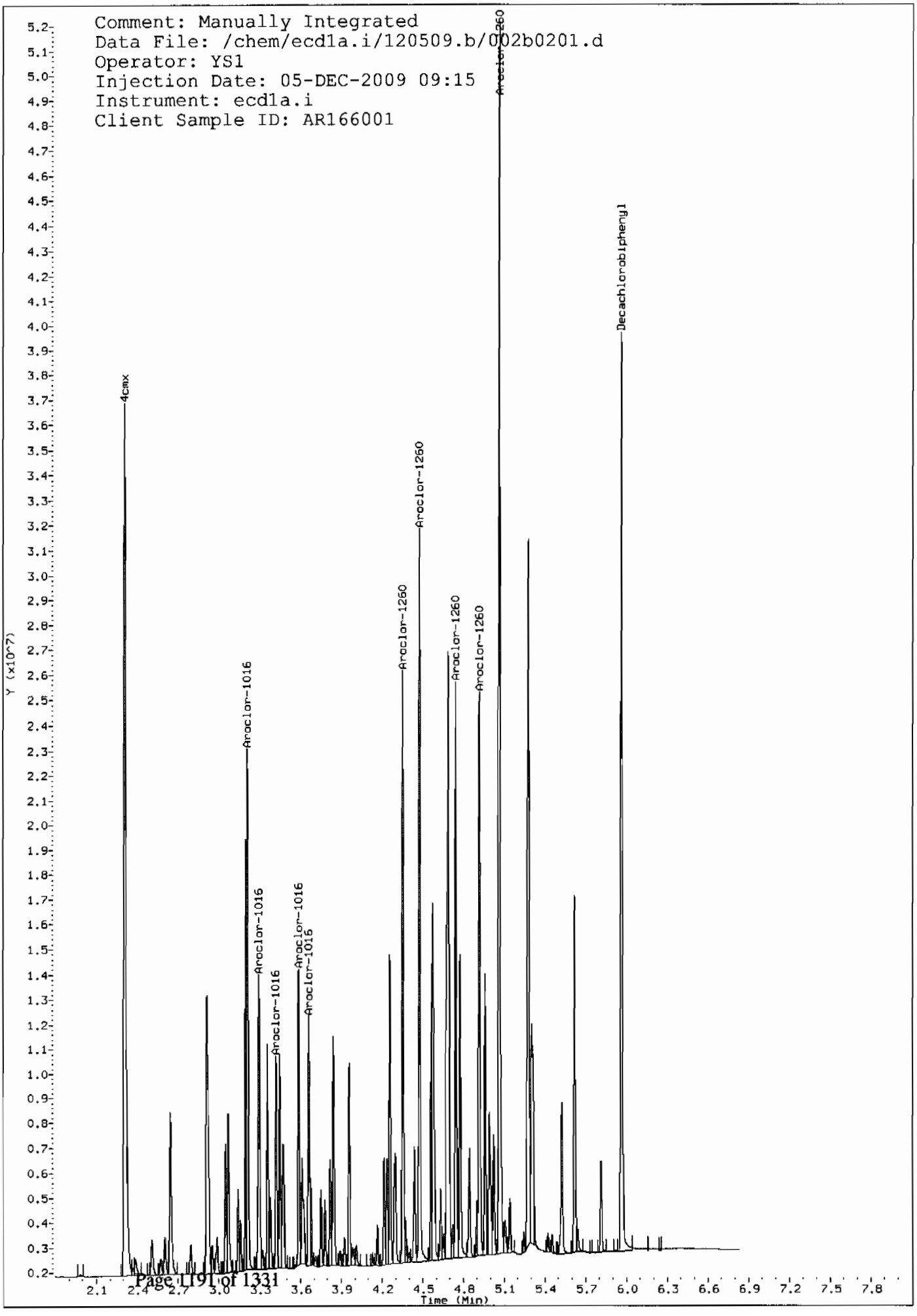
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120509.b/002b0201.d
Operator: YS1
Injection Date: 05-DEC-2009 09:15
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

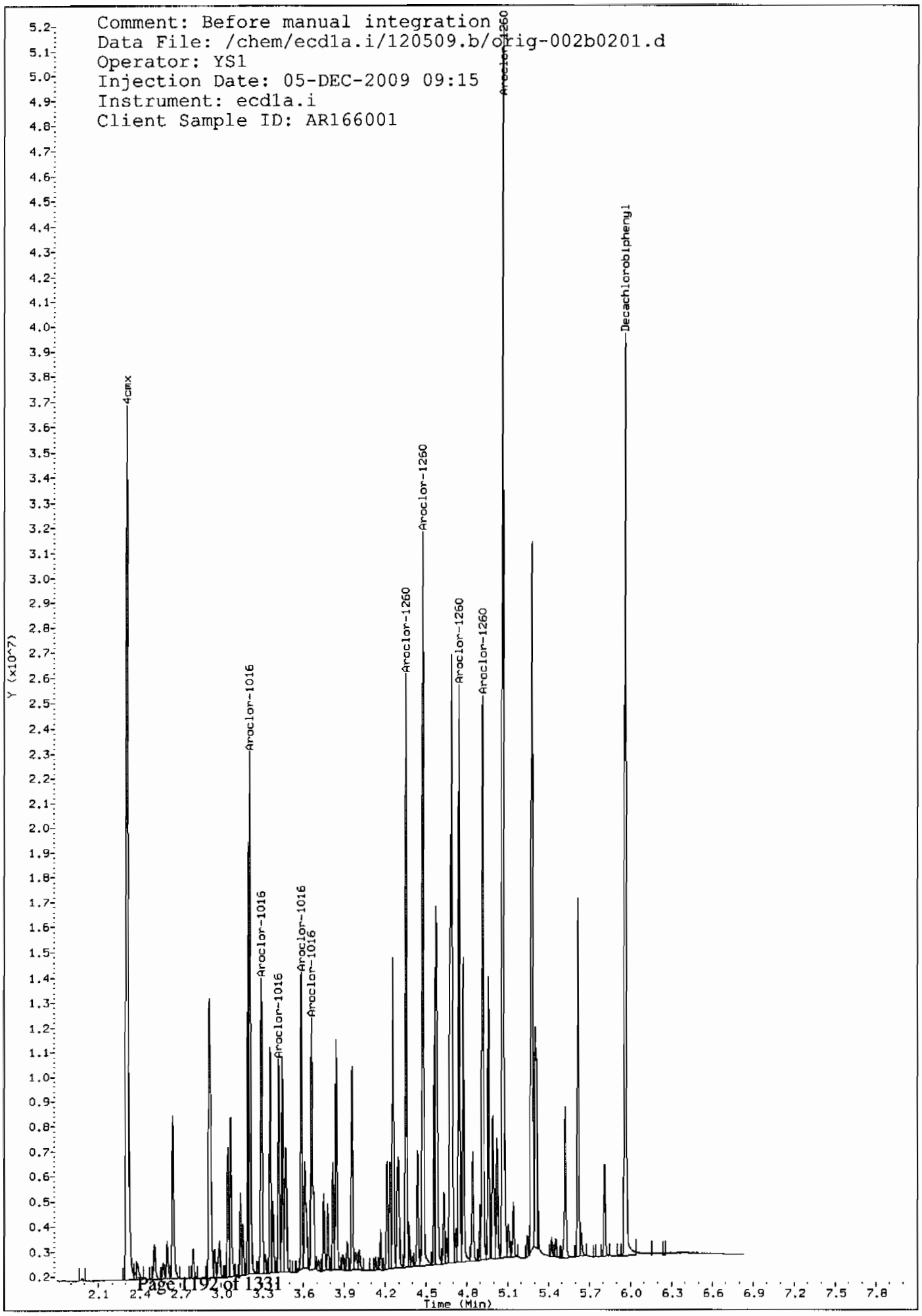
Comment: Before manual integration
Data File: /chem/ecd1a.i/120509.b/orig-002b0201.d
Operator: YS1
Injection Date: 05-DEC-2009 09:15
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 05-DEC-2009 09:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 11:37 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	40678102	100.000	91.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	38243488	100.000	93.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.278	3.278	0.000	13077474	1000.00	853	80.00- 120.00	100.00
3.433	3.433	0.000	17750261	1000.00	848	115.73- 155.73	135.73
3.667	3.667	0.000	23433414	1000.00	884	159.19- 199.19	179.19
3.831	3.831	0.000	17540757	1000.00	860	114.13- 154.13	134.13
3.939	3.939	0.000	17587211	1000.00	869	114.48- 154.48	134.48
Average of Peak Amounts =					863		

Data File: /chem/ecdia.i/120509.b/003f0301.d
Date : 05-DEC-2009 09:26
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecdia.i

Operator: YS1
Column diameter: 0.25

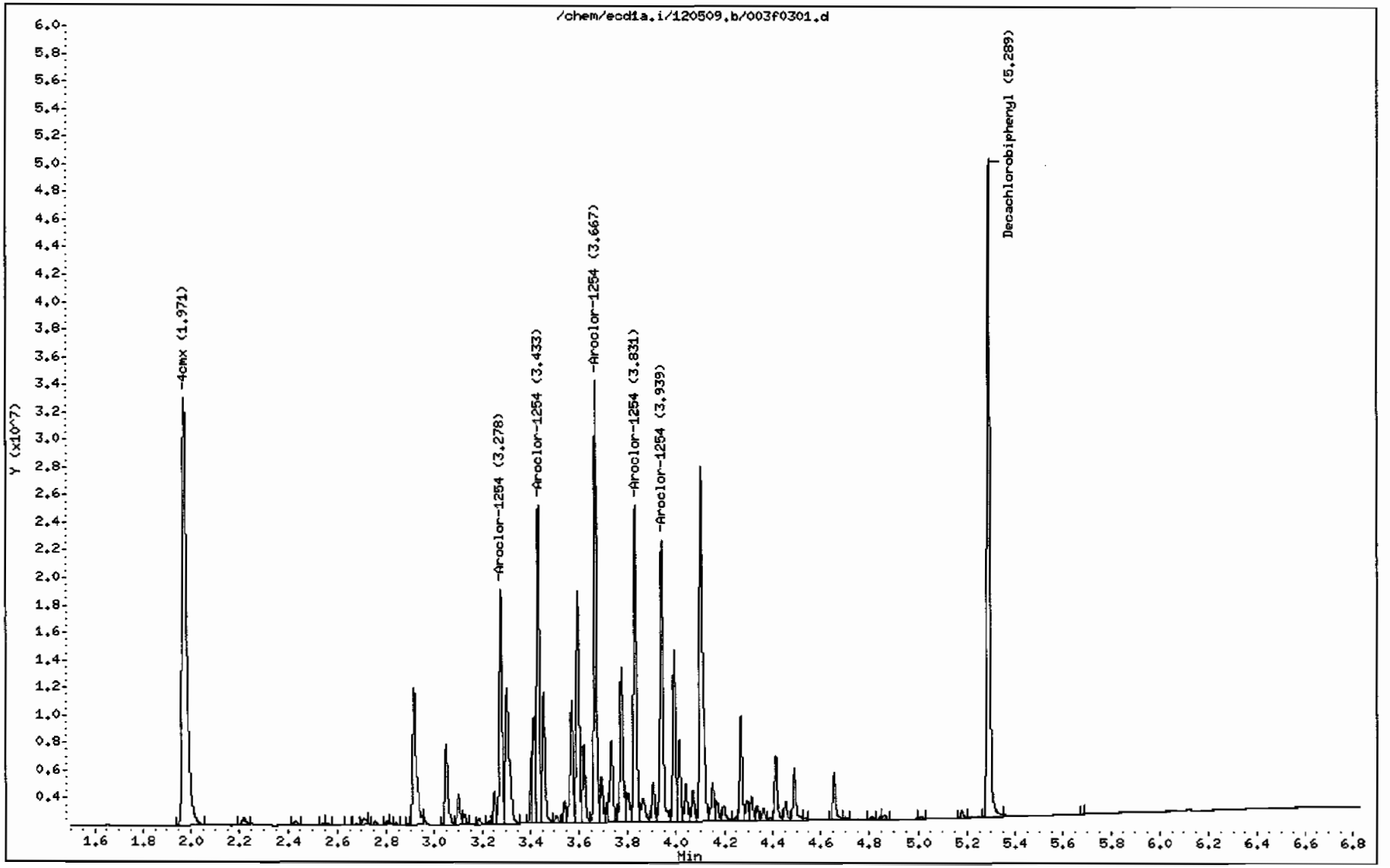

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 05-DEC-2009 09:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 11:34 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	34404536	100.000	92.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.964	0.000	28387398	100.000	94.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.421	3.421	0.000	6990095	1000.00	839	80.00- 120.00	100.00
3.844	3.844	0.000	12781053	1000.00	855	162.85- 202.85	182.85
3.961	3.961	0.000	14081404	1000.00	860	181.45- 221.45	201.45
4.237	4.237	0.000	19713699	1000.00	890	262.02- 302.02	282.02
4.374	4.374	0.000	14795411	1000.00	877	191.66- 231.66	211.66
			Average of Peak Amounts =		864		

Data File: /chem/ecd1a.i/120509.b/003b0301.d
Date : 05-DEC-2009 09:26
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

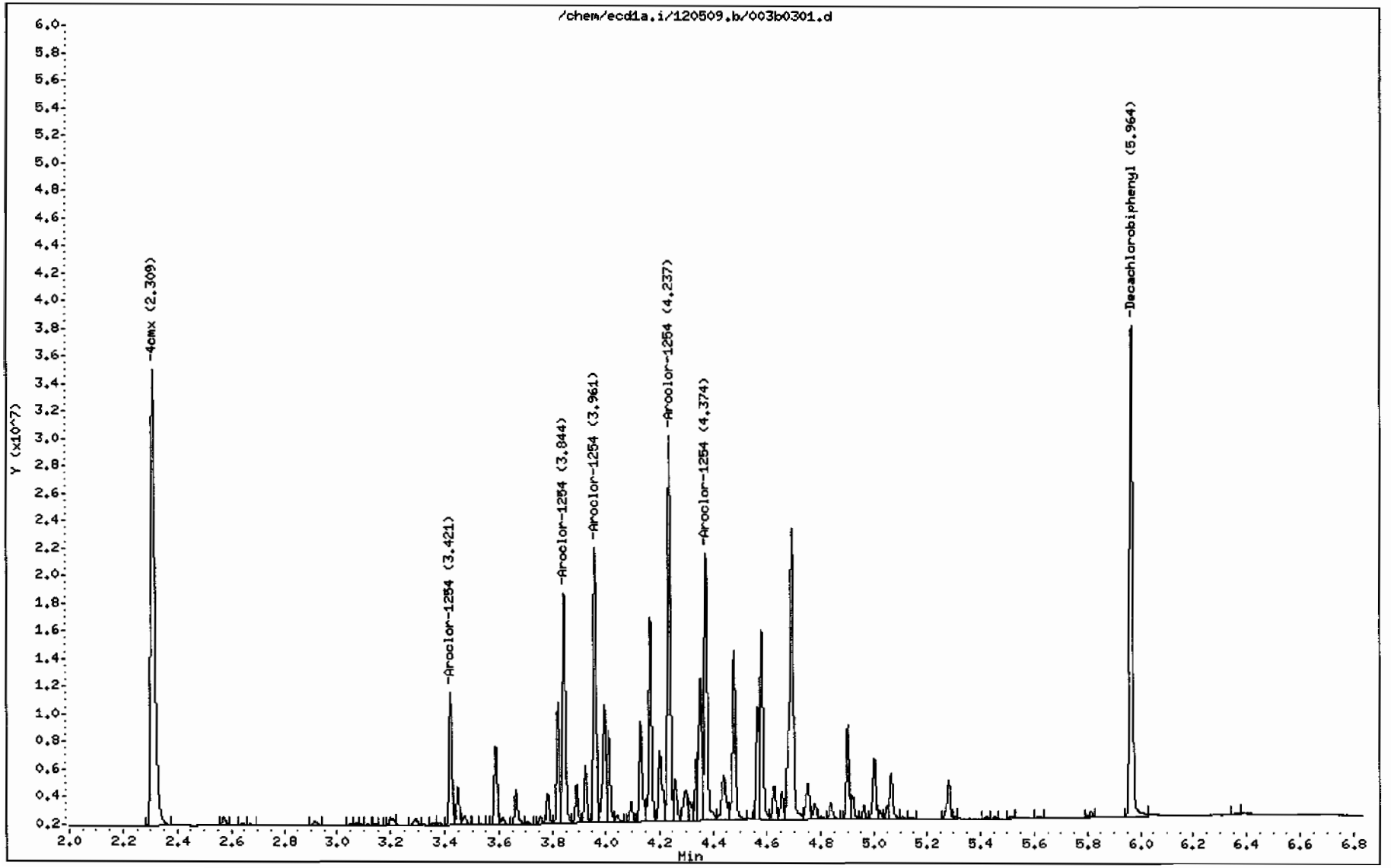

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 05-DEC-2009 09:37
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 11:37 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	48405904	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	44904095	100.000	110	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.430	2.430	0.000	13478904	1000.00	897	80.00- 120.00	100.00
2.719	2.719	0.000	17277193	1000.00	932	108.18- 148.18	128.18
2.837	2.837	0.000	6618368	1000.00	895	29.10- 69.10	49.10
3.049	3.049	0.000	8684942	1000.00	905	44.43- 84.43	64.43
3.303	3.303	0.000	8631351	1000.00	919	44.04- 84.04	64.04
			Average of Peak Amounts =		910		

Data File: /chem/ecd1a.i/120509.b/004f0401.d
Date : 05-DEC-2009 09:37
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

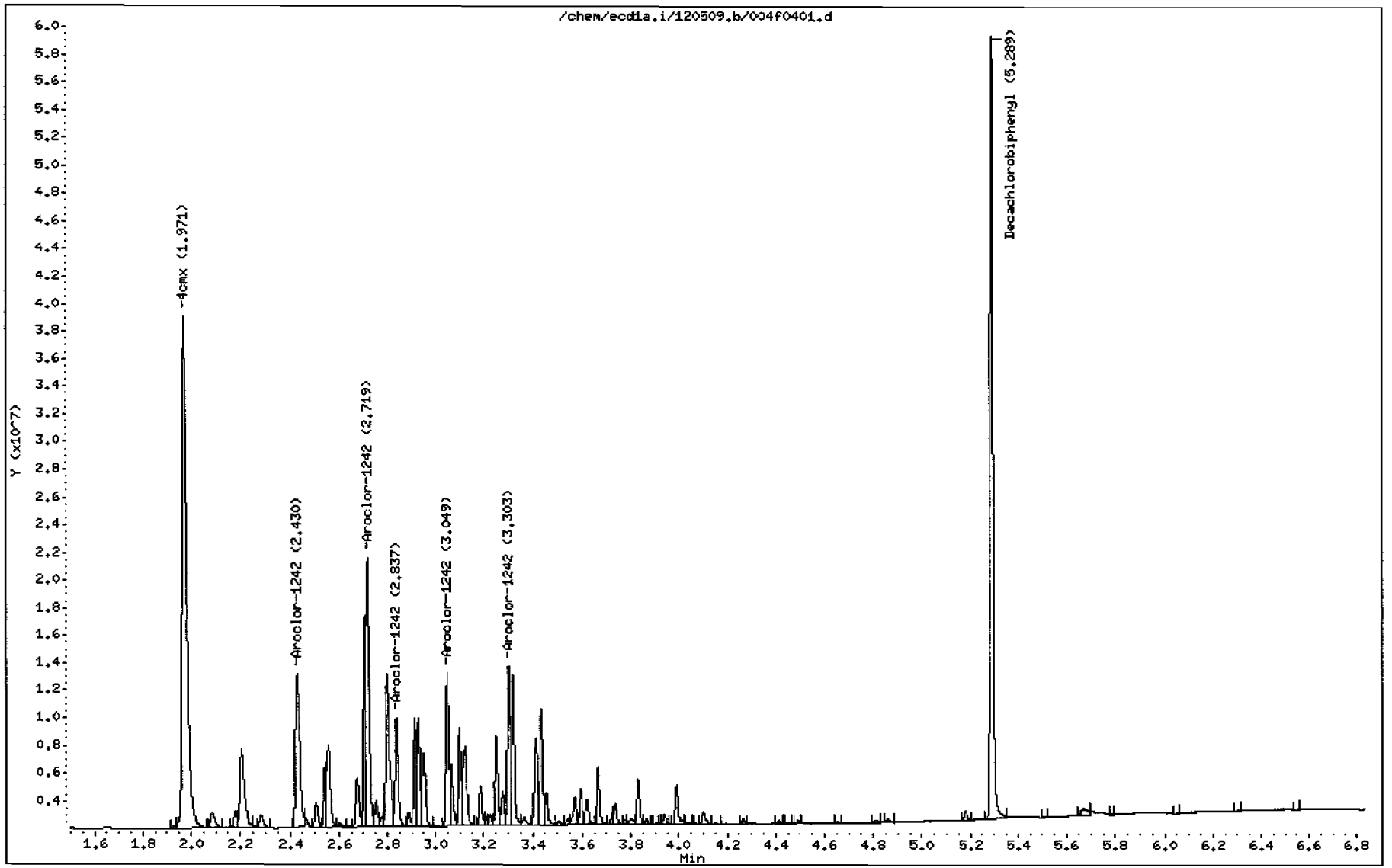

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 05-DEC-2009 09:37
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 11:34 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40399740	100.000	109	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.964	0.001	33213799	100.000	110	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.211	3.211	0.000	14055400	1000.00	949	80.00- 120.00	100.00
3.295	3.295	0.000	9279396	1000.00	913	46.02- 86.02	66.02
3.586	3.586	0.000	7569435	1000.00	916	33.85- 73.85	53.85
3.662	3.662	0.000	7039889	1000.00	910	30.09- 70.09	50.09
3.848	3.848	0.000	8697883	1000.00	925	41.88- 81.88	61.88
Average of Peak Amounts =					923		

Data File: /chem/ecd1a.i/120509.b/004b0401.d

Date : 05-DEC-2009 09:37

Client ID: AR124201

Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

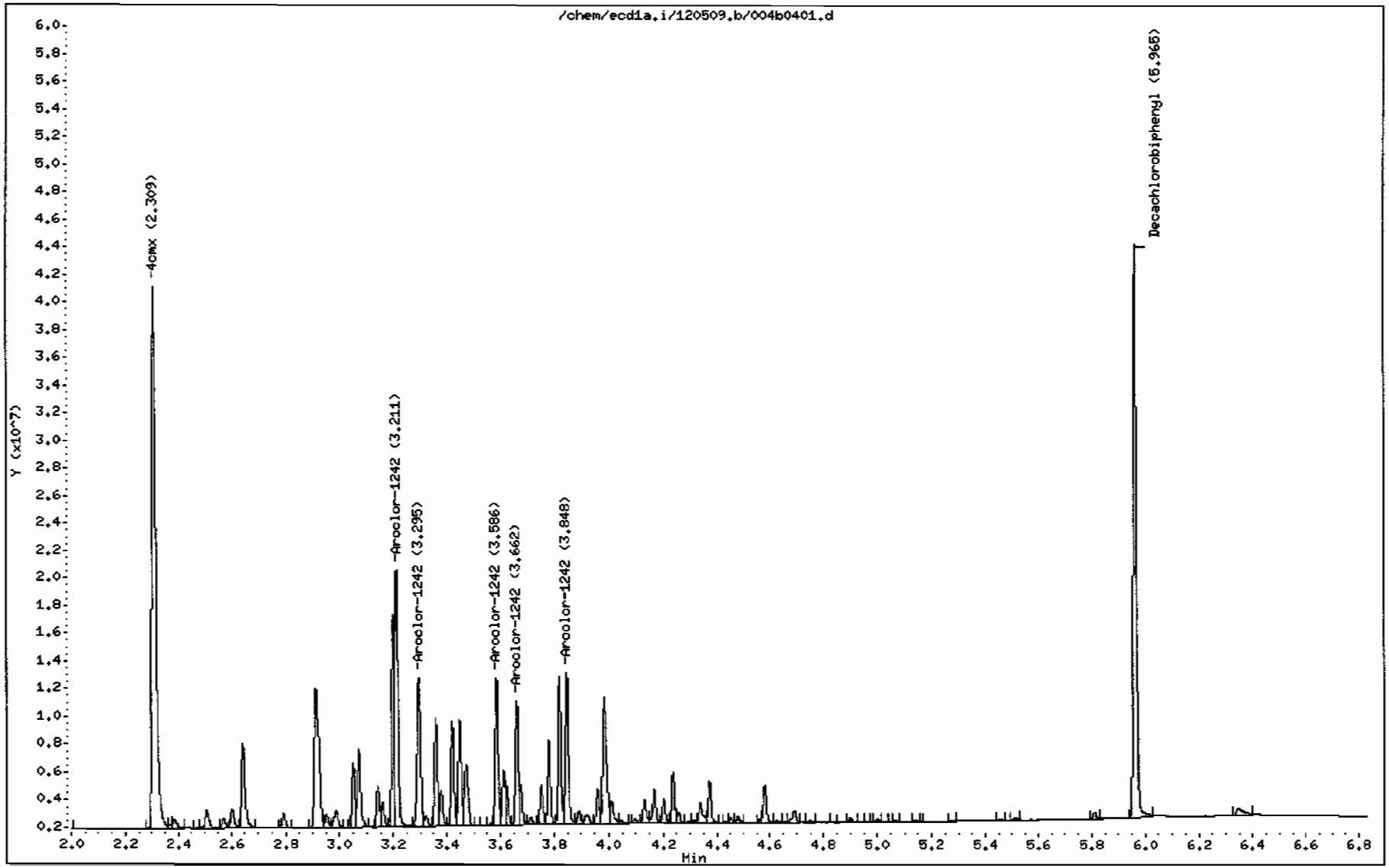

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 05-DEC-2009 09:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 11:38 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	43467094	100.000	97.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	41026862	100.000	100	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.101	3.101	0.000	9704083	1000.00	994	80.00- 120.00	100.00
3.252	3.252	0.000	8425221	1000.00	968	66.82- 106.82	86.82
3.303	3.303	0.000	17054269	1000.00	1010	155.74- 195.74	175.74
3.435	3.435	0.000	13611797	1000.00	982	120.27- 160.27	140.27
3.668	3.668	0.000	8957637	1000.00	927	72.31- 112.31	92.31
			Average of Peak Amounts =		976		

Data File: /chem/ecd1a.i/120509.b/005f0501.d
Date : 05-DEC-2009 09:47
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

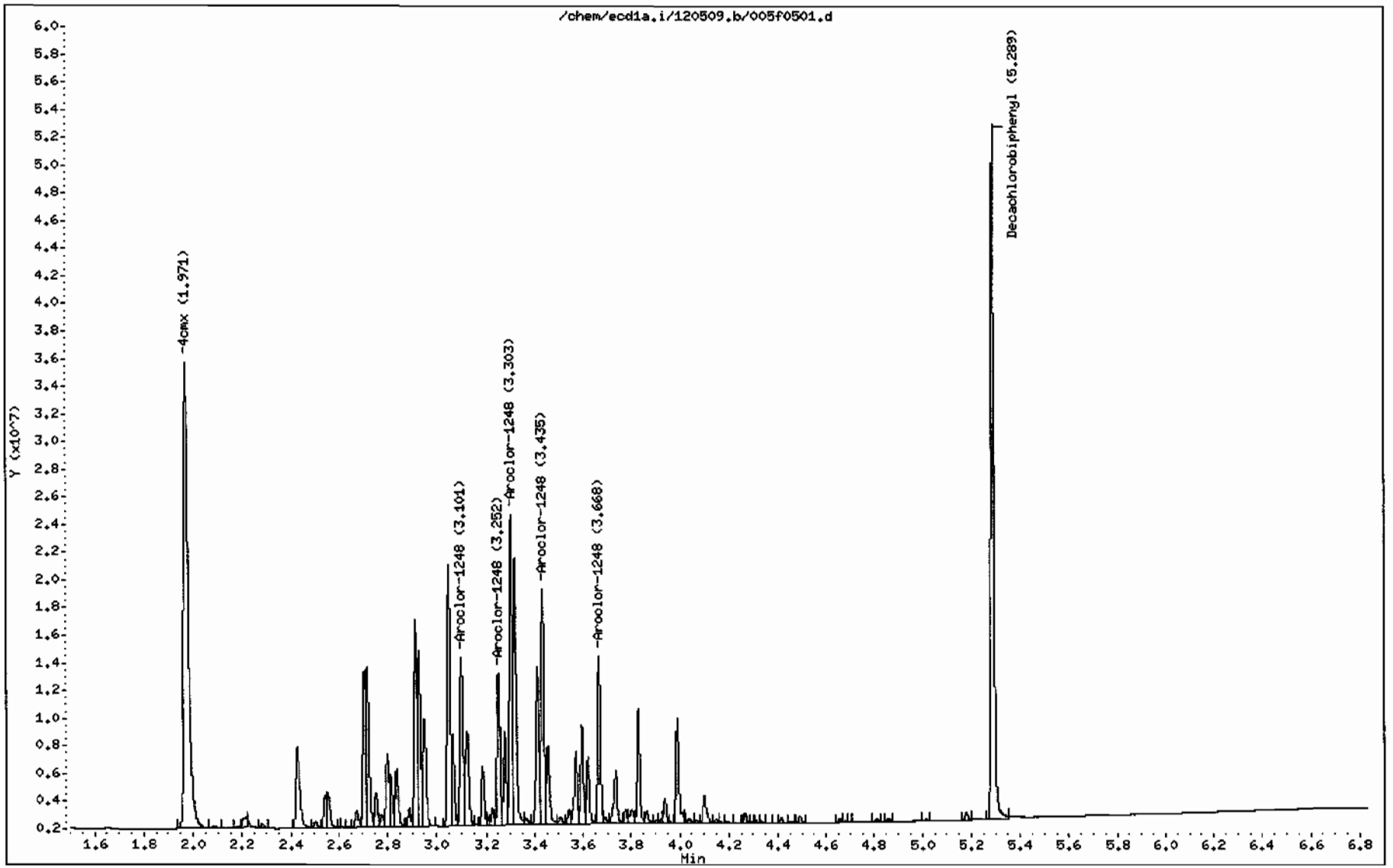

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 05-DEC-2009 09:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 11:34 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	36654848	100.000	98.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.964	0.000	30283732	100.000	101	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.421	3.421	0.000	10274229	1000.00	991	80.00- 120.00	100.00
3.586	3.586	0.000	12904024	1000.00	1010	105.60- 145.60	125.60
3.820	3.820	0.000	14529464	1000.00	995	121.42- 161.42	141.42
3.848	3.848	0.000	16562255	1000.00	1020	141.20- 181.20	161.20
3.986	3.986	0.000	15557421	1000.00	993	131.42- 171.42	151.42

Average of Peak Amounts = 1e+03

Data File: /chem/ecd1a.i/120509.b/005b0501.d
Date : 05-DEC-2009 09:47
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

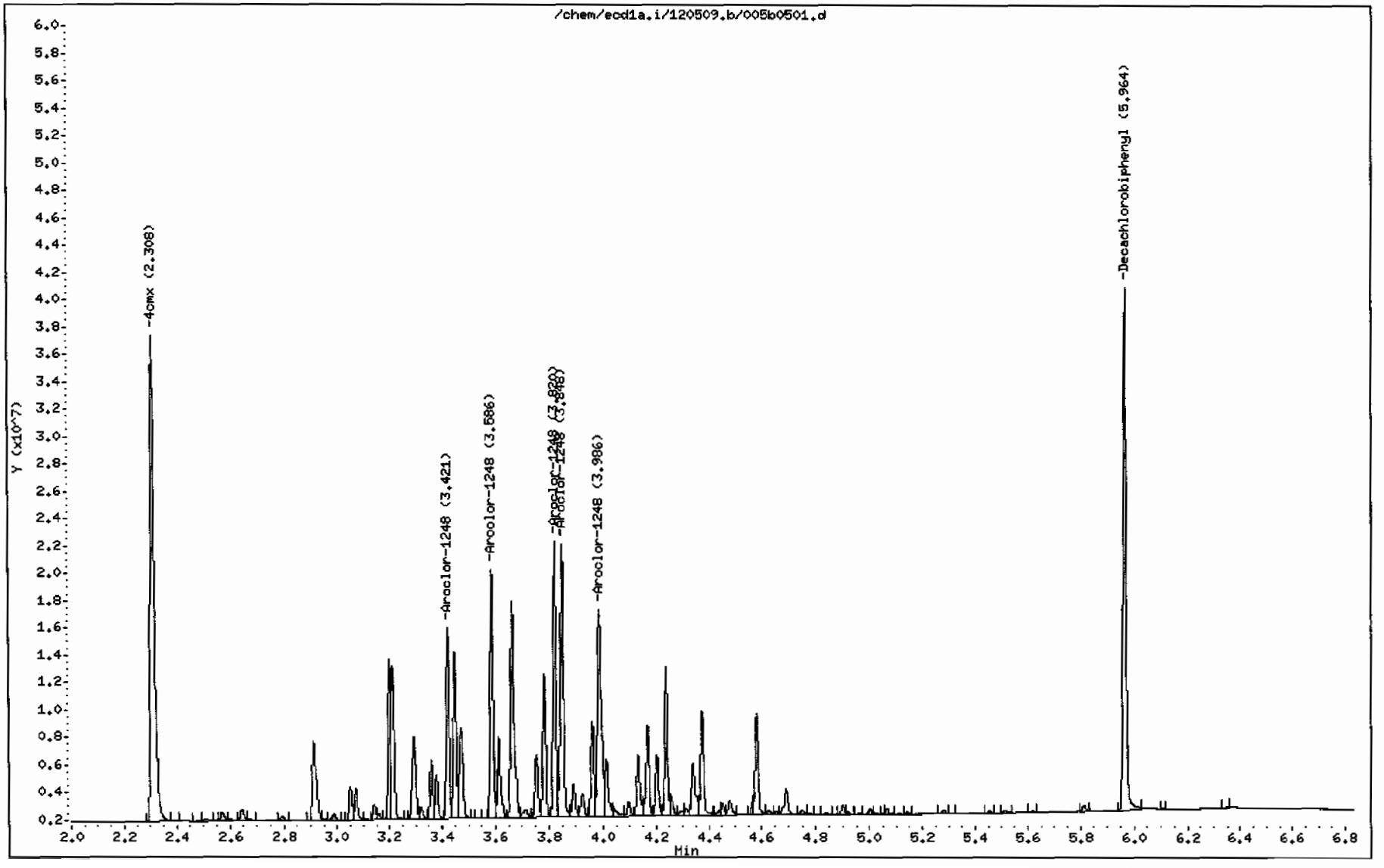

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 05-DEC-2009 09:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 11:38 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	50575336	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	47057176	100.000	115	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.430	2.430	0.000	6867581	1000.00	882	80.00- 120.00	100.00
2.720	2.720	0.000	8901635	1000.00	868	109.62- 149.62	129.62
2.800	2.800	0.000	5763393	1000.00	871	63.92- 103.92	83.92
3.050	3.050	0.000	4321312	1000.00	878	42.92- 82.92	62.92
3.303	3.303	0.000	3868081	1000.00	856	36.32- 76.32	56.32
Average of Peak Amounts =					871		

Data File: /chem/ecd1a.i/120509.b/006f0601.d
Date : 05-DEC-2009 09:58
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

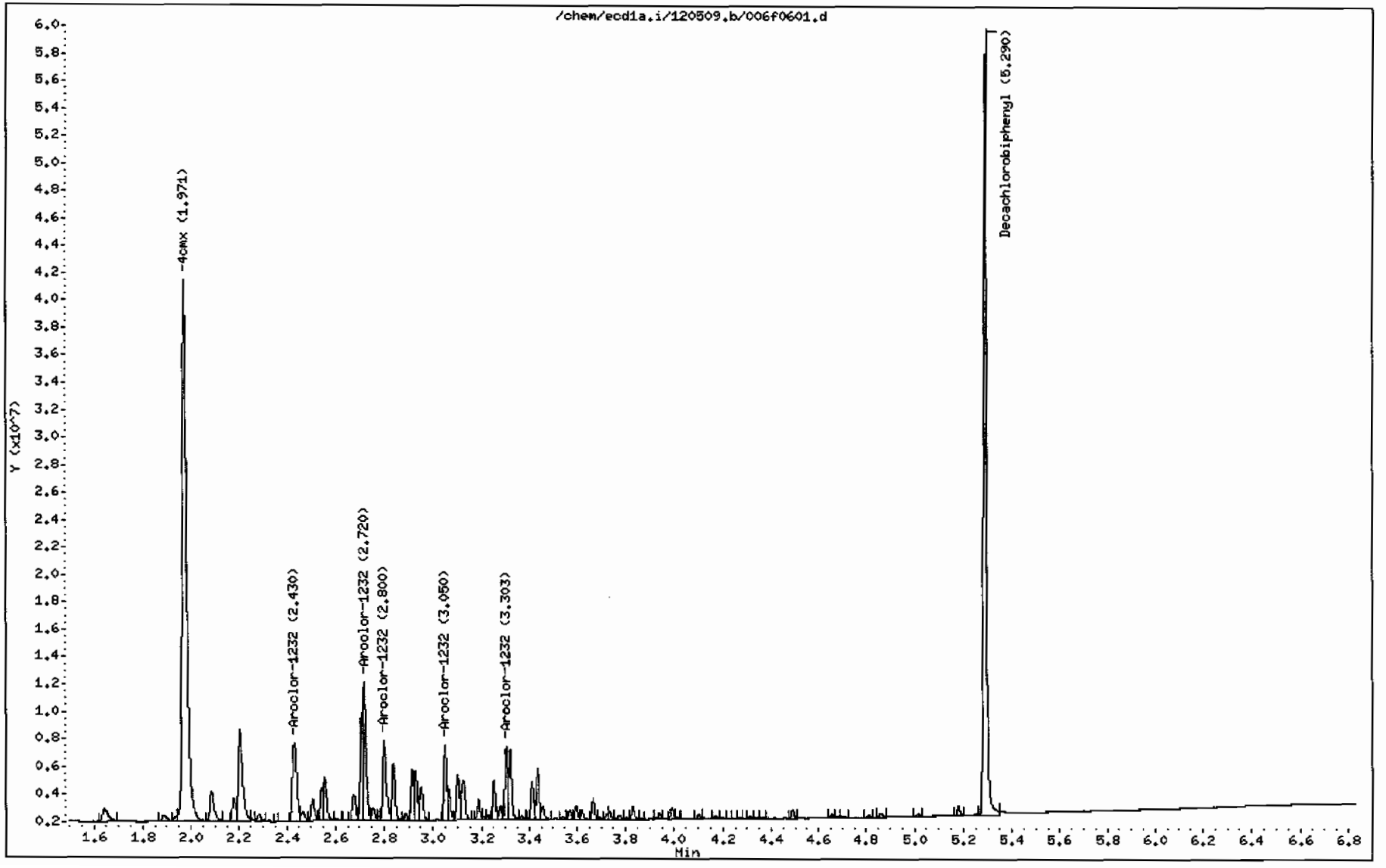

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 05-DEC-2009 09:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 11:34 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	42004355	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.964	0.001	34691345	100.000	115	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.644	2.644	0.000	6708825	1000.00	919	80.00- 120.00	100.00
3.211	3.211	0.000	7409755	1000.00	900	90.45- 130.45	110.45
3.295	3.295	0.000	4919596	1000.00	894	53.33- 93.33	73.33
3.587	3.587	0.000	3696003	1000.00	865	35.09- 75.09	55.09
3.820	3.820	0.000	3593787	1000.00	867	33.57- 73.57	53.57
			Average of Peak Amounts =		889		

Data File: /chem/ecd1a.i/120509.b/006b0601.d
Date : 05-DEC-2009 09:58
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

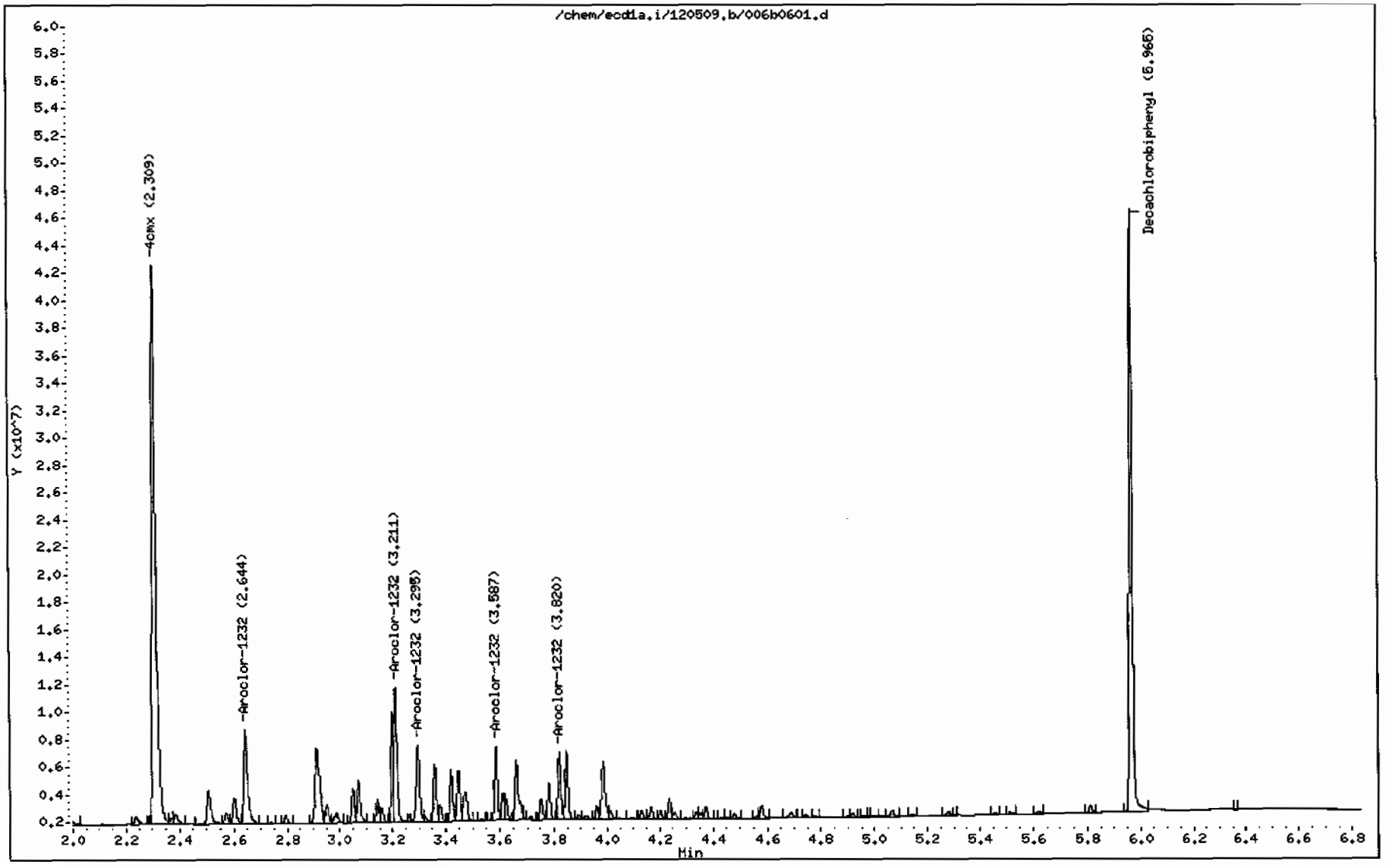

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/007f0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 05-DEC-2009 10:08
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 11:38 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	40850354	100.000	91.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	37853094	100.000	92.6	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.085	2.085	0.000	4721786	1000.00	794	80.00- 120.00	100.00
2.178	2.178	0.000	2491430	1000.00	759	32.76- 72.76	52.76
2.205	2.205	0.000	11584285	1000.00	804	225.34- 265.34	245.34
Average of Peak Amounts =					786		

Data File: /chem/ecd1a.i/120509.b/007f0701.d

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Date : 05-DEC-2009 10:08

Client ID: AR122101

Instrument: ecd1a.i

Sample Info: IWAR090803-21

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

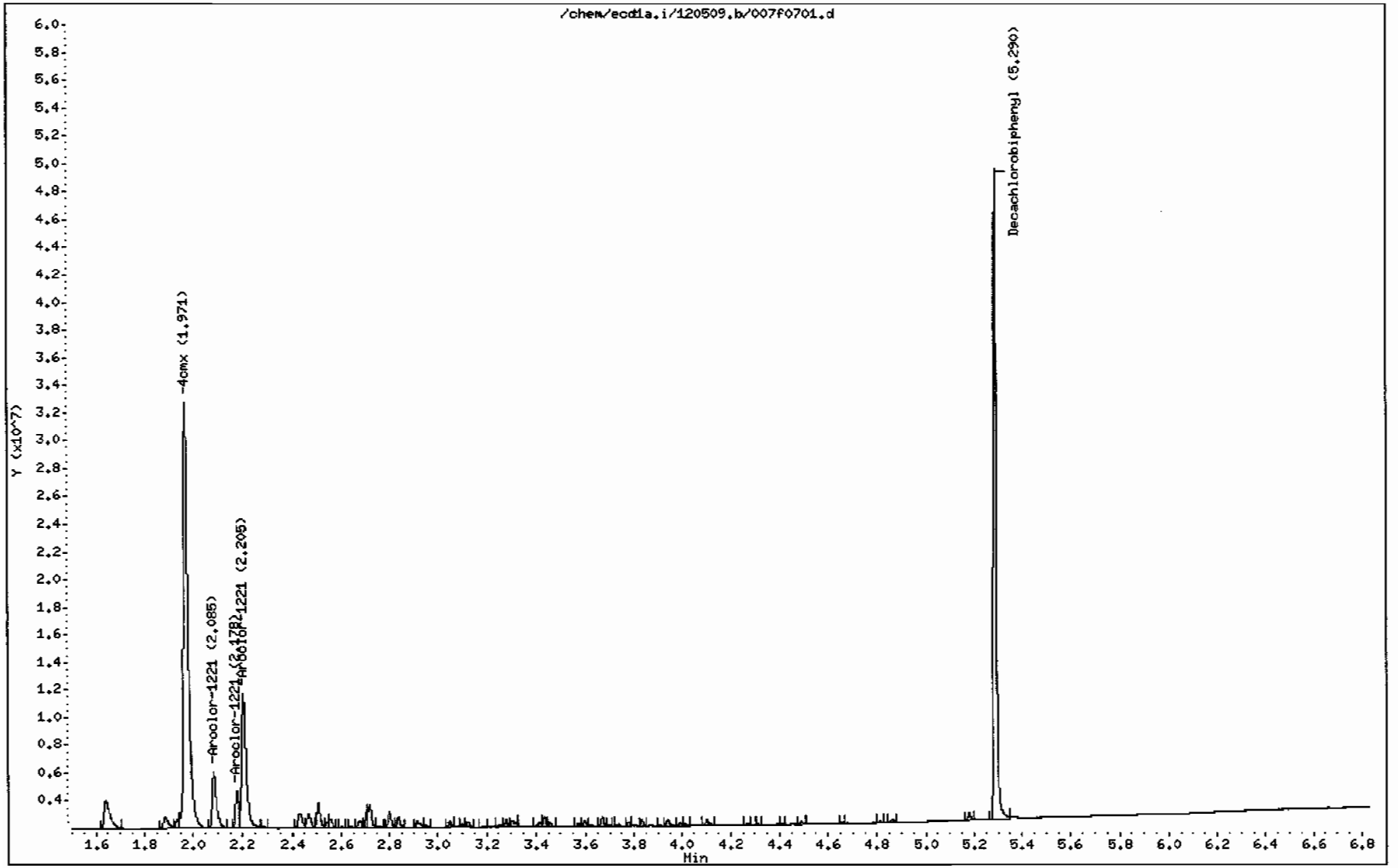

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/007b0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 05-DEC-2009 10:08
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 11:34 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	33637360	100.000	90.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.964	0.001	28230223	100.000	93.9	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.507	2.507	0.000	4168682	1000.00	816	80.00- 120.00	100.00
2.603	2.603	0.000	2675241	1000.00	815	44.17- 84.17	64.17
2.644	2.644	0.000	9375775	1000.00	819	204.91- 244.91	224.91
Average of Peak Amounts =					817		

Data File: /chem/ecd1a.i/120509.b/007b0701.d

Date : 05-DEC-2009 10:08

Client ID: AR122101

Sample Info: IWAR090803-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

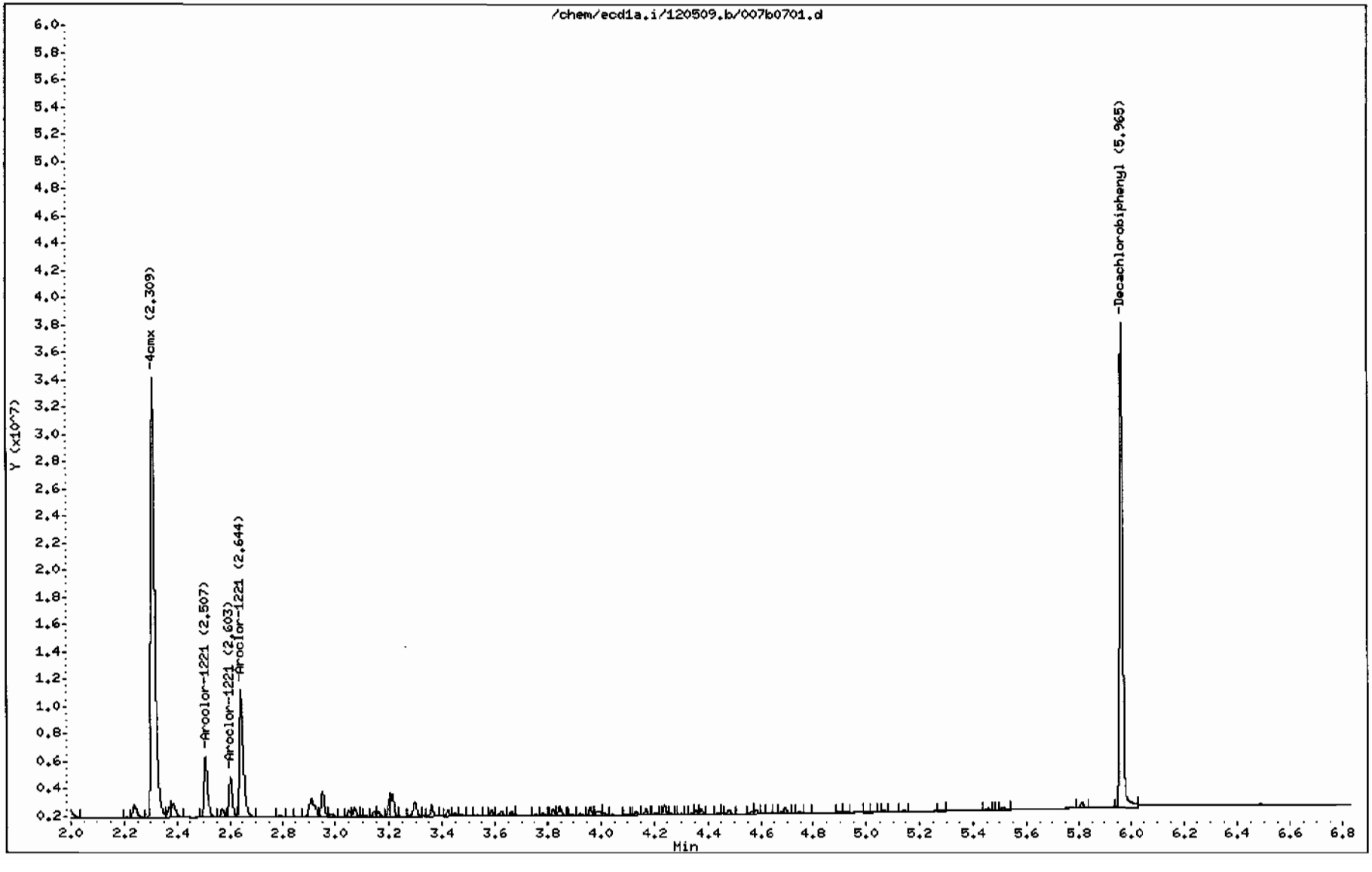

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/037f3701.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 05-DEC-2009 15:51
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 37 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	45365738	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	41234906	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.430	0.000	15765870	1000.00	922	80.00- 120.00	100.00
2.718	2.720	-0.002	20328380	1000.00	957	108.94- 148.94	128.94
2.799	2.801	-0.002	12872338	1000.00	917	61.65- 101.65	81.65
2.836	2.838	-0.002	7770550	1000.00	923	29.29- 69.29	49.29
3.047	3.049	-0.002	9938893	1000.00	921	43.04- 83.04	63.04
Average of Peak Amounts =					928		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21002095	1000.00	979	80.00- 120.00	100.00
3.937	3.938	-0.001	31808837	1000.00	988	131.46- 171.46	151.46
4.166	4.168	-0.002	19795715	1000.00	968	74.26- 114.26	94.26
4.310	4.311	-0.001	20581643	1000.00	1020	78.00- 118.00	98.00
4.489	4.491	-0.002	47196500	1000.00	1020	204.72- 244.72	224.72
Average of Peak Amounts =					996		

Data File: /chem/ecd1a.i/120509.b/037f3701.d
Date : 05-DEC-2009 15:51
Client ID: AR166004
Sample Info: IWAR091119-60 04

Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

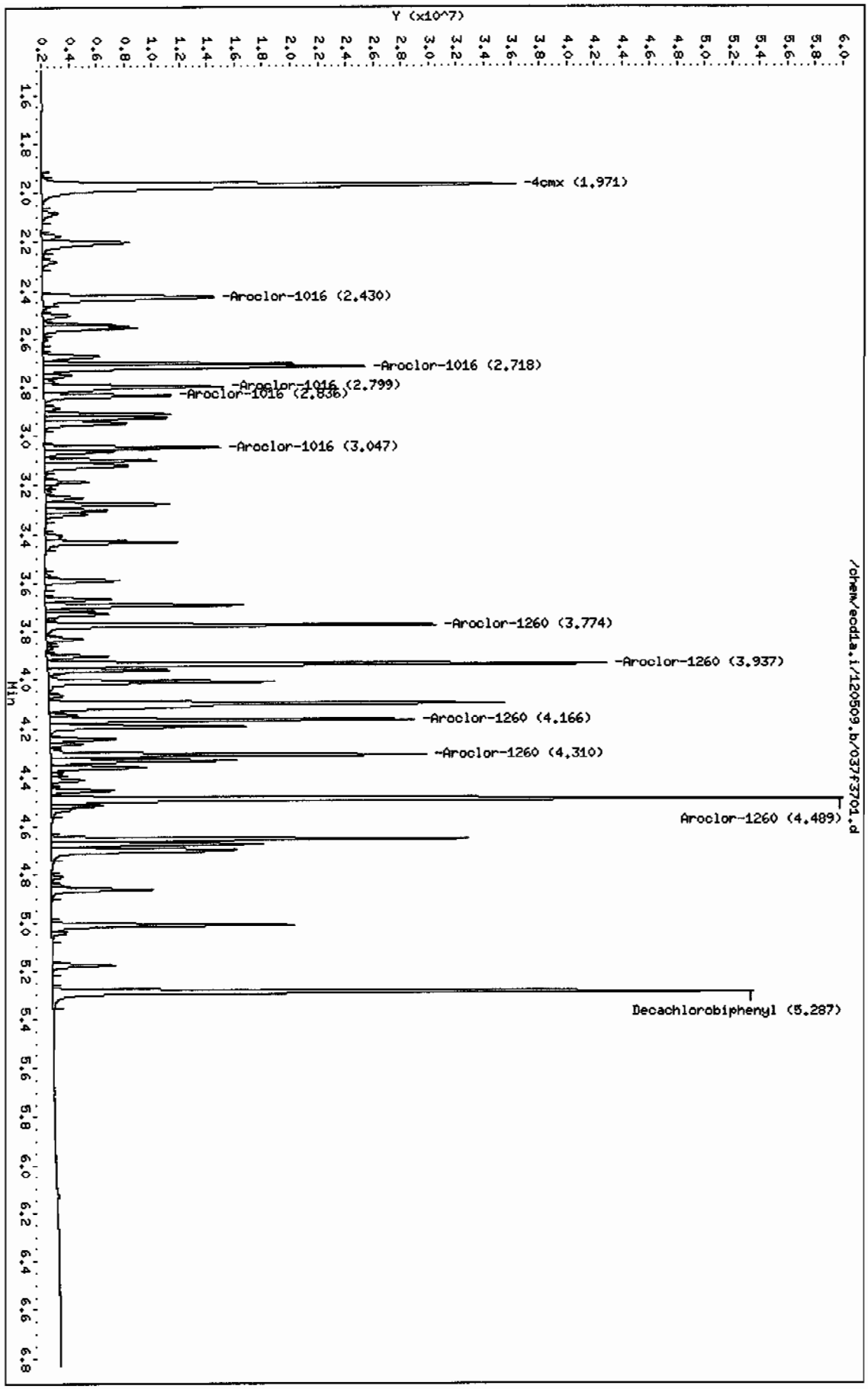

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/037b3701.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 05-DEC-2009 15:51
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 16:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 37 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	37529268	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.962	5.964	-0.002	31374926	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.210	3.212	-0.002	16543197	1000.00	981	80.00- 120.00	100.00(M)
3.293	3.295	-0.002	10801294	1000.00	936	45.29- 85.29	65.29
3.419	3.421	-0.002	6463166	1000.00	930	19.07- 59.07	39.07
3.585	3.587	-0.002	8867714	1000.00	966	33.60- 73.60	53.60
3.661	3.663	-0.002	8147440	1000.00	958	29.25- 69.25	49.25
Average of Peak Amounts =					954		
7 Aroclor-1260					CAS #: 11096-82-5		
4.352	4.353	-0.001	17774113	1000.00	984	80.00- 120.00	100.00
4.476	4.478	-0.002	22438550	1000.00	1010	106.24- 146.24	126.24
4.742	4.744	-0.002	17770736	1000.00	1000	79.98- 119.98	99.98
4.916	4.918	-0.002	17669936	1000.00	1030	79.41- 119.41	99.41
5.064	5.065	-0.001	40808230	1000.00	1060	209.59- 249.59	229.59
Average of Peak Amounts =					1.02e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdia.i/120509.b/037b3701.d
Date : 05-DEC-2009 15:51
Client ID: AR166004
Sample Info: IWAR091119-60 04
Column phase: CLP2

Instrument: ecdia.i
Operator: YSI
Column diameter: 0.25

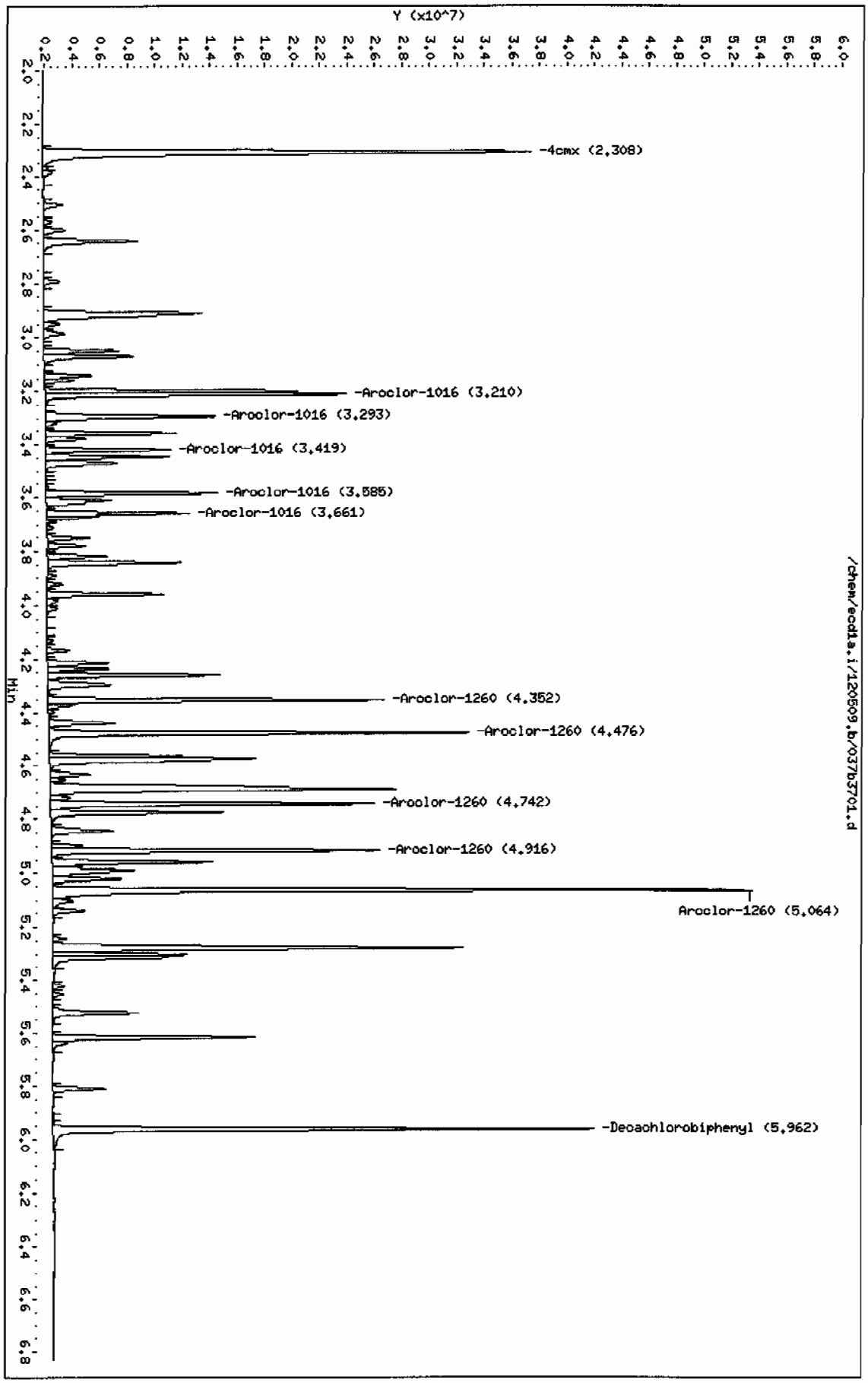

Page 1

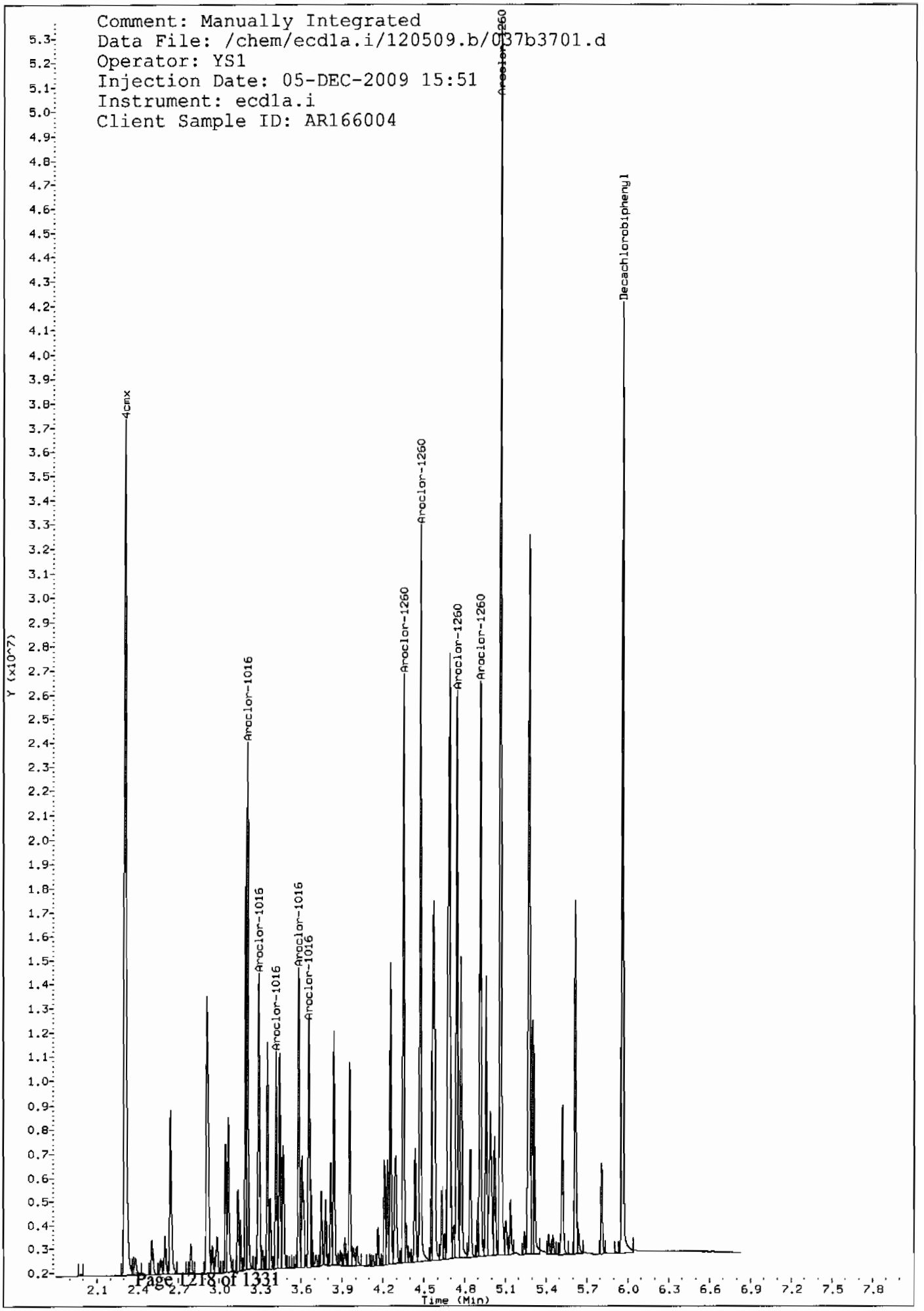
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120509.b/037b3701.d
Operator: YS1
Injection Date: 05-DEC-2009 15:51
Instrument: ecd1a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

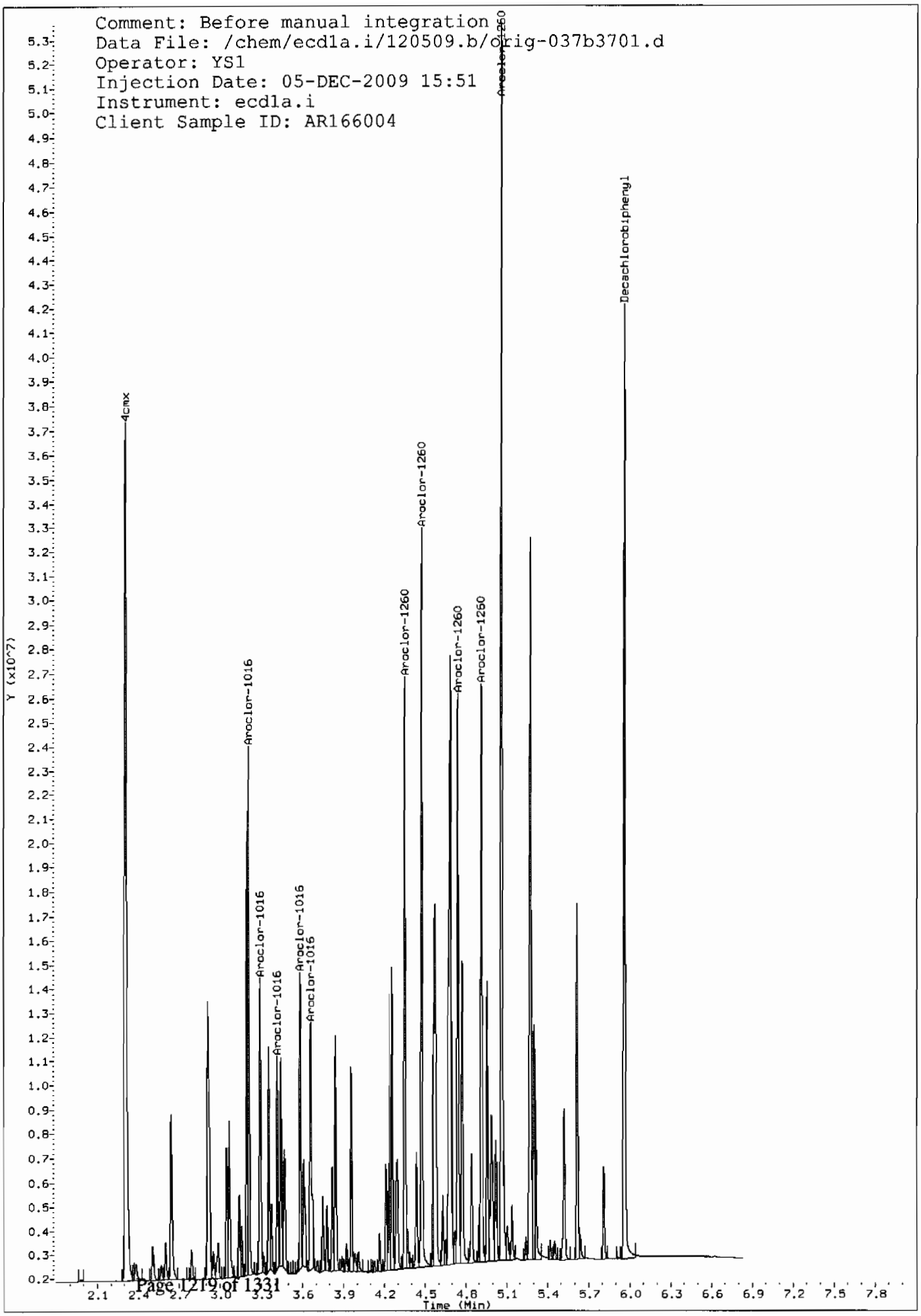
Comment: Before manual integration
Data File: /chem/ecd1a.i/120509.b/orig-037b3701.d
Operator: YS1
Injection Date: 05-DEC-2009 15:51
Instrument: ecd1a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/048f4801.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 05-DEC-2009 18:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:30 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 48 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	45092728	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	38975593	100.000	95.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16093270	1000.00	942	80.00- 120.00	100.00
2.718	2.720	-0.002	20553377	1000.00	968	107.71- 147.71	127.71
2.798	2.801	-0.003	12788465	1000.00	911	59.46- 99.46	79.46
2.837	2.838	-0.001	7703764	1000.00	915	27.87- 67.87	47.87
3.048	3.049	-0.001	9980726	1000.00	925	42.02- 82.02	62.02
Average of Peak Amounts =					932		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	20843716	1000.00	972	80.00- 120.00	100.00
3.937	3.938	-0.001	31523156	1000.00	979	131.24- 171.24	151.24
4.166	4.168	-0.002	19458287	1000.00	951	73.35- 113.35	93.35
4.309	4.311	-0.002	19872796	1000.00	990	75.34- 115.34	95.34
4.488	4.491	-0.003	46328264	1000.00	1000	202.26- 242.26	222.26
Average of Peak Amounts =					978		

Data File: /chem/ecd1a.i/120509.b/048f4801.d
Date : 05-DEC-2009 18:05
Client ID: AR166005
Sample Info: IWAR091119-60 05

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

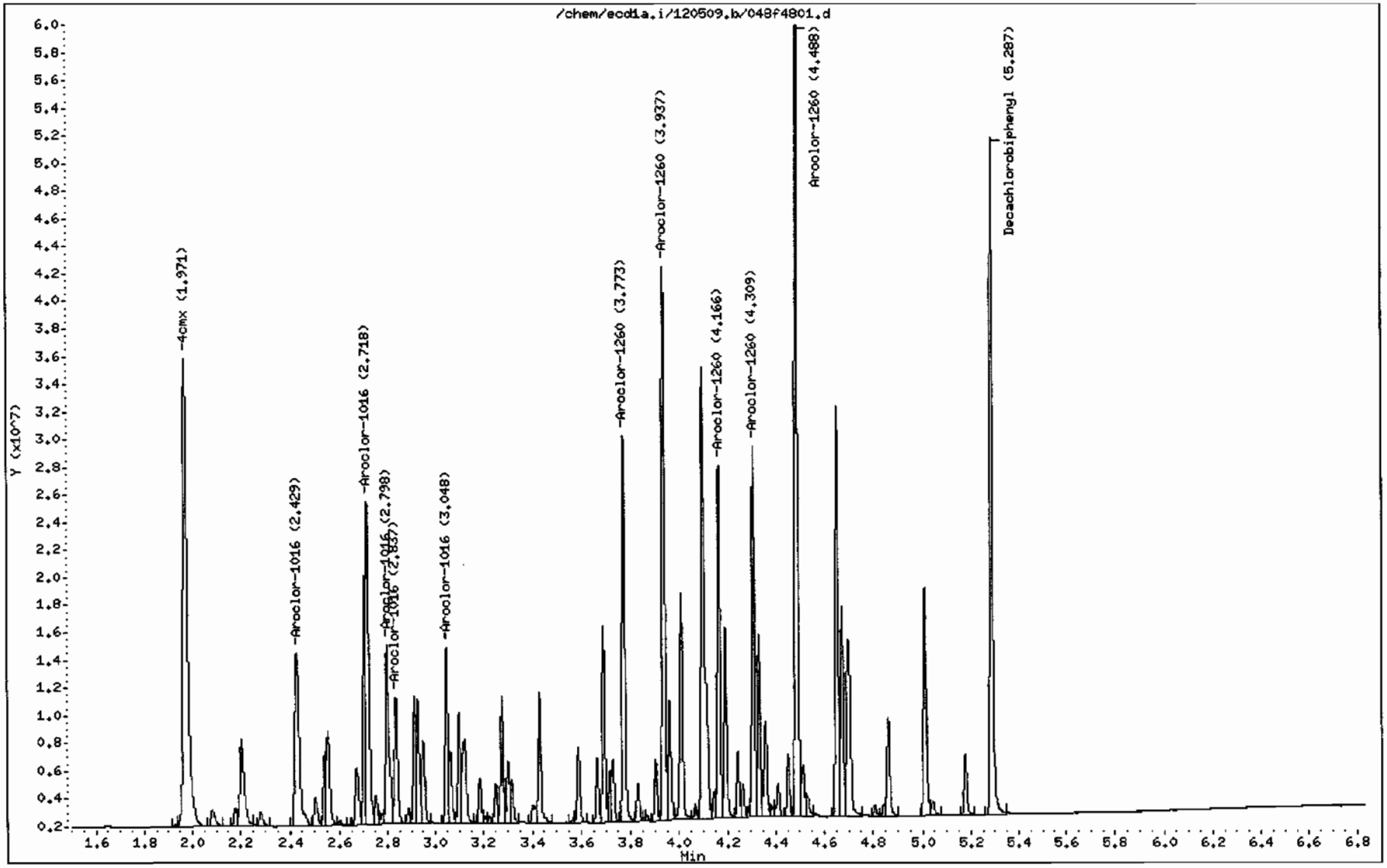

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/048b4801.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 05-DEC-2009 18:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 06:07 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 48 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	37880677	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.962	5.964	-0.002	29710191	100.000	98.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.209	3.212	-0.003	17074584	1000.00	1010	80.00- 120.00	100.00(M)
3.293	3.295	-0.002	10806432	1000.00	937	43.29- 83.29	63.29
3.418	3.421	-0.003	6396149	1000.00	920	17.46- 57.46	37.46
3.584	3.587	-0.003	8632560	1000.00	940	30.56- 70.56	50.56
3.660	3.663	-0.003	8084066	1000.00	950	27.35- 67.35	47.35
Average of Peak Amounts =					952		
7 Aroclor-1260					CAS #: 11096-82-5		
4.351	4.353	-0.002	17563363	1000.00	972	80.00- 120.00	100.00
4.475	4.478	-0.003	22178519	1000.00	1000	106.28- 146.28	126.28
4.742	4.744	-0.002	17454585	1000.00	987	79.38- 119.38	99.38
4.915	4.918	-0.003	17197419	1000.00	999	77.92- 117.92	97.92
5.063	5.065	-0.002	39794243	1000.00	1030	206.58- 246.58	226.58
Average of Peak Amounts =					998		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120509.b/048b4801.d

Page 1

Date : 05-DEC-2009 18:05

Client ID: AR166005

Instrument: ecd1a.i

Sample Info: !WAR091119-60 05

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

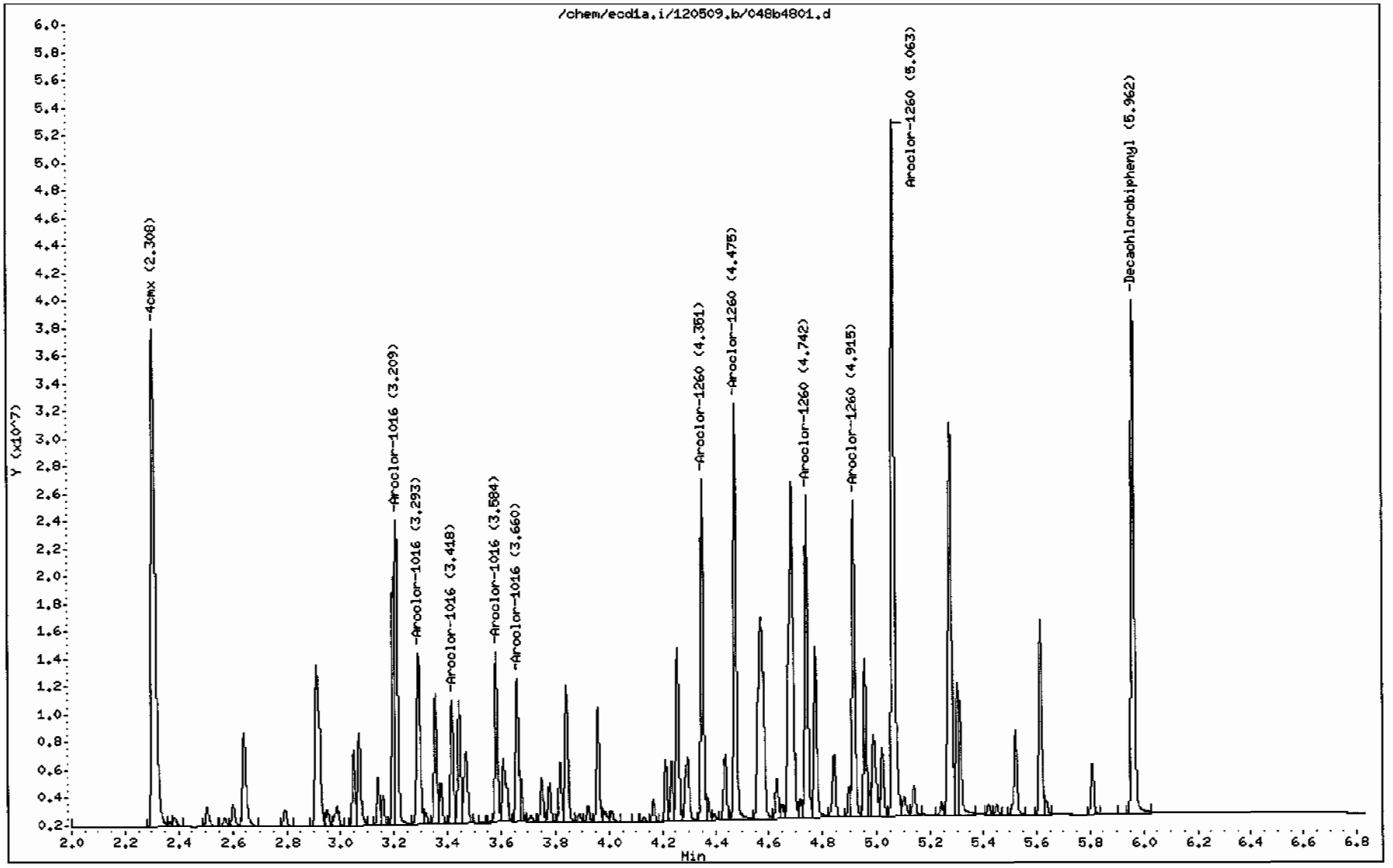

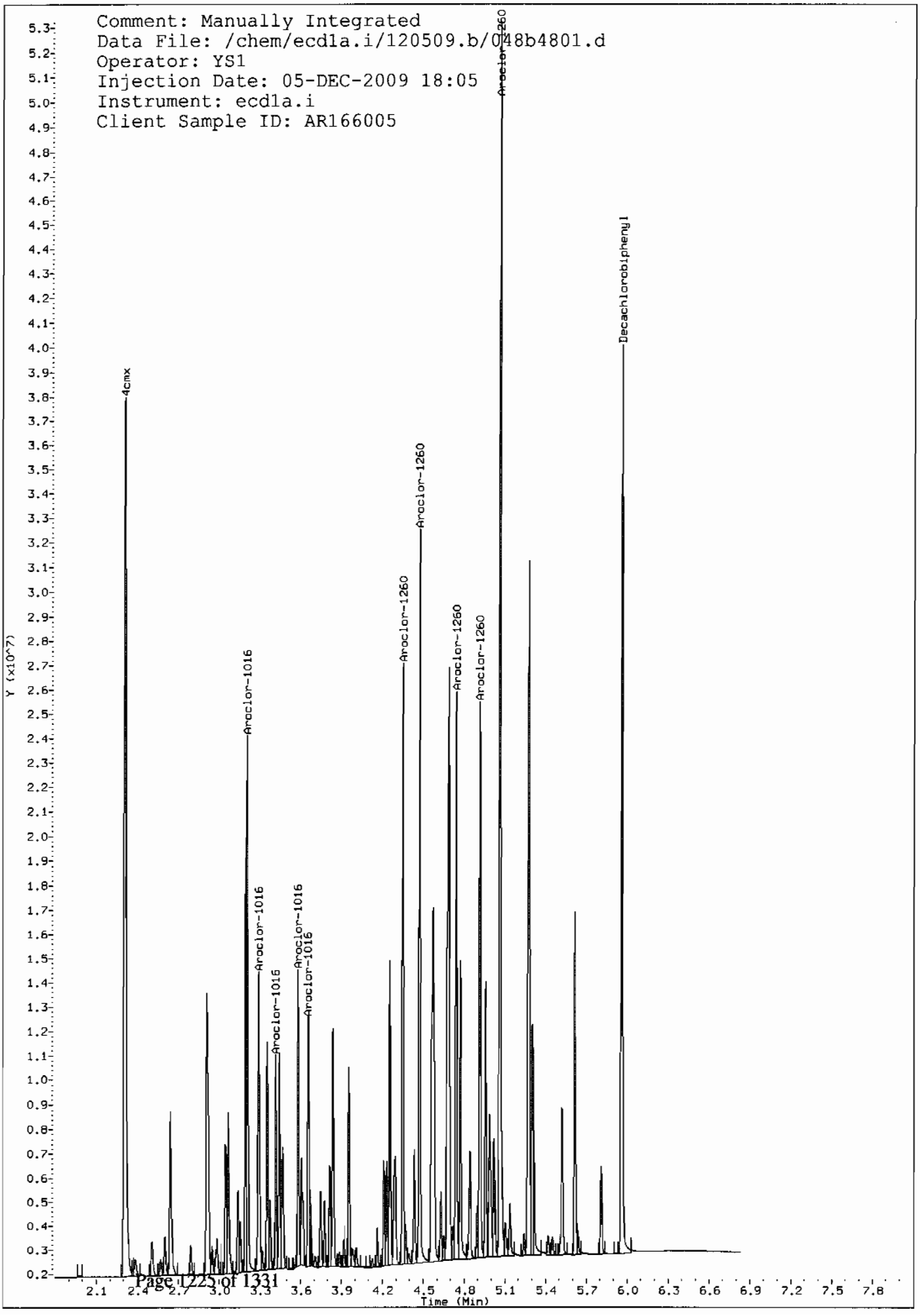
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120509.b/048b4801.d
Operator: YS1
Injection Date: 05-DEC-2009 18:05
Instrument: ecd1a.i
Client Sample ID: AR166005
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
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Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

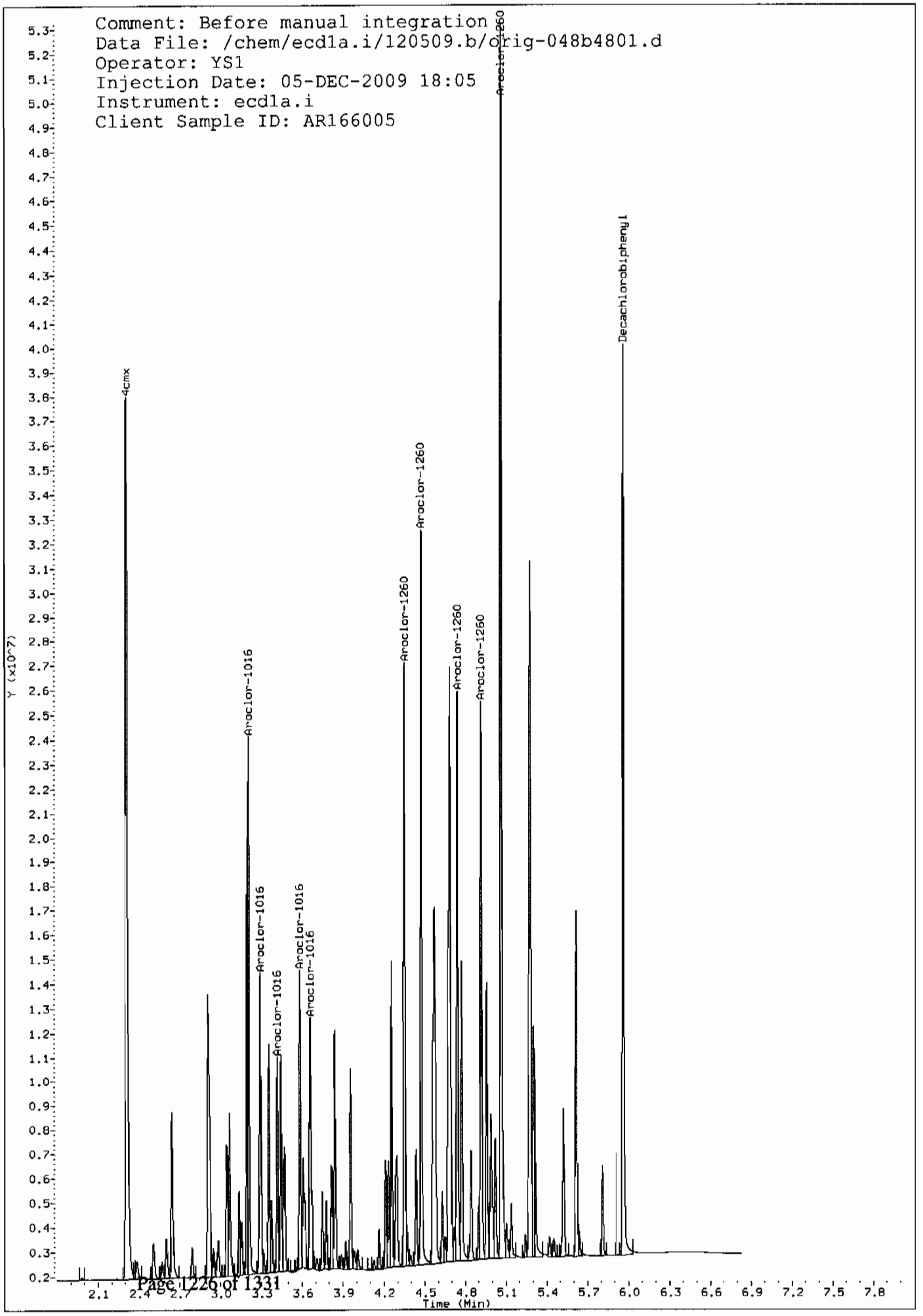
Comment: Before manual integration
Data File: /chem/ecd1a.i/120509.b/orig-048b4801.d
Operator: YS1
Injection Date: 05-DEC-2009 18:05
Instrument: ecd1a.i
Client Sample ID: AR166005
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	1.97	5.29
02	ZZZZZ	ZZZZZ	11/10/09	0814	1.97	5.29
03	ZZZZZ	ZZZZZ	11/10/09	0825	1.98	5.29
04	ZZZZZ	ZZZZZ	11/10/09	0835	1.98	5.29
05	ZZZZZ	ZZZZZ	11/10/09	0846	1.98	5.30
06	AR123201	WAR090930-32	11/10/09	0856	1.98	5.29
07	AR122101	WAR090803-21	11/10/09	0907	1.97	5.30
08	AR126201	WAR090803-62	11/10/09	0917	1.98	5.29
09	AR126801	WAR091106-68	11/10/09	0928	1.98	5.29
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	1.98	5.30
12	AR166002	WAR091110-02	11/10/09	0959	1.98	5.30
13	AR166003	WAR091110-04	11/10/09	1010	1.98	5.30
14	AR166004	WAR091110-03	11/10/09	1021	1.98	5.30
15	AR166005	IAR091102-01	11/10/09	1031	1.98	5.29
16	AR166001	WAR091102-60	11/10/09	1042	1.98	5.30
17	AR125401	WAR091110-05	11/10/09	1052	1.97	5.30
18	AR125402	WAR091110-06	11/10/09	1103	1.98	5.30
19	AR125403	WAR091110-07	11/10/09	1113	1.98	5.29
20	AR125404	WAR091110-08	11/10/09	1124	1.98	5.30
21	AR125405	IAR091027-01	11/10/09	1134	1.98	5.30
22	AR125401	WAR091102-54	11/10/09	1145	1.98	5.30
23	AR124201	WAR091110-09	11/10/09	1155	1.98	5.30
24	AR124202	WAR091110-10	11/10/09	1206	1.98	5.29
25	AR124203	WAR091110-11	11/10/09	1217	1.98	5.30
26	AR124204	WAR091110-12	11/10/09	1227	1.98	5.30
27	AR124205	IAR090914-01	11/10/09	1238	1.98	5.30
28	AR124201	WAR091102-42	11/10/09	1248	1.98	5.30
29	AR124801	WAR091110-13	11/10/09	1259	1.98	5.30
30	AR124802	WAR091110-14	11/10/09	1309	1.98	5.30
31	AR124803	WAR091110-15	11/10/09	1320	1.98	5.29
32	AR124804	WAR091110-16	11/10/09	1330	1.98	5.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	1.98	5.29
02	AR124801	WAR091027-48	11/10/09	1351	1.98	5.30
03	PIBLK02	WAR090916-99	11/10/09	1402	1.98	5.30
04	ZZZZZ	ZZZZZ	11/10/09	1412	1.98	5.30
05	ZZZZZ	ZZZZZ	11/10/09	1423	1.98	5.30
06	ZZZZZ	ZZZZZ	11/10/09	1433	1.98	5.30
07	ZZZZZ	ZZZZZ	11/10/09	1444	1.98	5.30
08	ZZZZZ	ZZZZZ	11/10/09	1457	1.97	5.30
09	ZZZZZ	ZZZZZ	11/10/09	1509	1.97	5.29
10	ZZZZZ	ZZZZZ	11/10/09	1522	1.97	5.29
11	AR166002	WAR091102-60	11/10/09	1534	1.98	5.29
12	PIBLK003	WAR090916-99	11/10/09	1545	1.98	5.30
13	ZZZZZ	ZZZZZ	11/10/09	1555	1.97	5.30
14	ZZZZZ	ZZZZZ	11/10/09	1608	1.97	5.29
15	ZZZZZ	ZZZZZ	11/10/09	1620	1.98	5.29
16	ZZZZZ	ZZZZZ	11/10/09	1633	1.97	5.29
17	ZZZZZ	ZZZZZ	11/10/09	1645	1.97	5.29
18	ZZZZZ	ZZZZZ	11/10/09	1658	1.98	5.29
19	ZZZZZ	ZZZZZ	11/10/09	1711	1.97	5.29
20	ZZZZZ	ZZZZZ	11/10/09	1723	1.98	5.29
21	ZZZZZ	ZZZZZ	11/10/09	1736	1.97	5.29
22	ZZZZZ	ZZZZZ	11/10/09	1748	1.98	5.29
23	AR166003	WAR091102-60	11/10/09	1801	1.98	5.29
24	PIBLK04	WAR090916-99	11/10/09	1812	1.98	5.30
25	ZZZZZ	ZZZZZ	11/10/09	1822	1.98	5.30
26	ZZZZZ	ZZZZZ	11/10/09	1835	1.98	5.29
27	ZZZZZ	ZZZZZ	11/10/09	1847	1.98	5.29
28	ZZZZZ	ZZZZZ	11/10/09	1900	1.98	5.29
29	ZZZZZ	ZZZZZ	11/10/09	1912	1.98	5.29
30	ZZZZZ	ZZZZZ	11/10/09	1925	1.98	5.29
31	ZZZZZ	ZZZZZ	11/10/09	1938	1.97	5.29
32	ZZZZZ	ZZZZZ	11/10/09	1950	1.98	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	2.31	5.97
02	ZZZZZ	ZZZZZ	11/10/09	0814	2.31	5.97
03	ZZZZZ	ZZZZZ	11/10/09	0825	2.32	5.97
04	ZZZZZ	ZZZZZ	11/10/09	0835	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	0846	2.31	5.97
06	AR123201	WAR090930-32	11/10/09	0856	2.31	5.97
07	AR122101	WAR090803-21	11/10/09	0907	2.31	5.97
08	AR126201	WAR090803-62	11/10/09	0917	2.31	5.97
09	AR126801	WAR091106-68	11/10/09	0928	2.31	5.97
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	2.31	5.97
12	AR166002	WAR091110-02	11/10/09	0959	2.31	5.97
13	AR166003	WAR091110-04	11/10/09	1010	2.31	5.97
14	AR166004	WAR091110-03	11/10/09	1021	2.31	5.97
15	AR166005	IAR091102-01	11/10/09	1031	2.31	5.97
16	AR166001	WAR091102-60	11/10/09	1042	2.31	5.97
17	AR125401	WAR091110-05	11/10/09	1052	2.31	5.97
18	AR125402	WAR091110-06	11/10/09	1103	2.31	5.97
19	AR125403	WAR091110-07	11/10/09	1113	2.31	5.97
20	AR125404	WAR091110-08	11/10/09	1124	2.32	5.97
21	AR125405	IAR091027-01	11/10/09	1134	2.32	5.97
22	AR125401	WAR091102-54	11/10/09	1145	2.32	5.97
23	AR124201	WAR091110-09	11/10/09	1155	2.32	5.97
24	AR124202	WAR091110-10	11/10/09	1206	2.31	5.97
25	AR124203	WAR091110-11	11/10/09	1217	2.31	5.97
26	AR124204	WAR091110-12	11/10/09	1227	2.32	5.97
27	AR124205	IAR090914-01	11/10/09	1238	2.32	5.97
28	AR124201	WAR091102-42	11/10/09	1248	2.32	5.97
29	AR124801	WAR091110-13	11/10/09	1259	2.31	5.97
30	AR124802	WAR091110-14	11/10/09	1309	2.31	5.97
31	AR124803	WAR091110-15	11/10/09	1320	2.31	5.97
32	AR124804	WAR091110-16	11/10/09	1330	2.31	5.97

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	2.31	5.97
02	AR124801	WAR091027-48	11/10/09	1351	2.31	5.97
03	PIBLK02	WAR090916-99	11/10/09	1402	2.31	5.97
04	ZZZZZ	ZZZZZ	11/10/09	1412	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	1423	2.31	5.97
06	ZZZZZ	ZZZZZ	11/10/09	1433	2.31	5.97
07	ZZZZZ	ZZZZZ	11/10/09	1444	2.31	5.97
08	ZZZZZ	ZZZZZ	11/10/09	1457	2.31	5.97
09	ZZZZZ	ZZZZZ	11/10/09	1509	2.31	5.97
10	ZZZZZ	ZZZZZ	11/10/09	1522	2.31	5.97
11	AR166002	WAR091102-60	11/10/09	1534	2.31	5.97
12	PIBLK03	WAR090916-99	11/10/09	1545	2.31	5.97
13	ZZZZZ	ZZZZZ	11/10/09	1555	2.31	5.97
14	ZZZZZ	ZZZZZ	11/10/09	1608	2.31	5.97
15	ZZZZZ	ZZZZZ	11/10/09	1620	2.31	5.97
16	ZZZZZ	ZZZZZ	11/10/09	1633	2.31	5.97
17	ZZZZZ	ZZZZZ	11/10/09	1645	2.31	5.97
18	ZZZZZ	ZZZZZ	11/10/09	1658	2.31	5.97
19	ZZZZZ	ZZZZZ	11/10/09	1711	2.31	5.97
20	ZZZZZ	ZZZZZ	11/10/09	1723	2.31	5.97
21	ZZZZZ	ZZZZZ	11/10/09	1736	2.31	5.97
22	ZZZZZ	ZZZZZ	11/10/09	1748	2.31	5.97
23	AR166003	WAR091102-60	11/10/09	1801	2.31	5.97
24	PIBLK04	WAR090916-99	11/10/09	1812	2.31	5.97
25	ZZZZZ	ZZZZZ	11/10/09	1822	2.31	5.97
26	ZZZZZ	ZZZZZ	11/10/09	1835	2.31	5.97
27	ZZZZZ	ZZZZZ	11/10/09	1847	2.31	5.97
28	ZZZZZ	ZZZZZ	11/10/09	1900	2.31	5.97
29	ZZZZZ	ZZZZZ	11/10/09	1912	2.31	5.97
30	ZZZZZ	ZZZZZ	11/10/09	1925	2.31	5.97
31	ZZZZZ	ZZZZZ	11/10/09	1938	2.31	5.97
32	ZZZZZ	ZZZZZ	11/10/09	1950	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0406	1.97	5.29
02	AR166001	WAR091102-60	12/03/09	0416	1.97	5.29
03	AR125401	WAR091102-54	12/03/09	0427	1.97	5.29
04	AR124201	WAR091102-42	12/03/09	0437	1.97	5.29
05	AR124801	WAR091027-48	12/03/09	0448	1.97	5.29
06	AR123201	WAR090930-32	12/03/09	0458	1.97	5.29
07	AR122101	WAR090803-21	12/03/09	0509	1.97	5.29
08	AR126201	WAR090803-62	12/03/09	0519	1.97	5.29
09	AR126801	WAR091106-68	12/03/09	0530	1.97	5.29
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0540		
11	PIBLK02	WAR090916-99	12/03/09	0551	1.97	5.29
12	ZZZZZ	ZZZZZ	12/03/09	0601	1.97	5.29
13	ZZZZZ	ZZZZZ	12/03/09	0612	1.97	5.29
14	ZZZZZ	ZZZZZ	12/03/09	0623	1.97	5.29
15	ZZZZZ	ZZZZZ	12/03/09	0635	1.97	5.29
16	ZZZZZ	ZZZZZ	12/03/09	0648	1.97	5.29
17	ZZZZZ	ZZZZZ	12/03/09	0700	1.97	5.29
18	ZZZZZ	ZZZZZ	12/03/09	0713	1.97	5.29
19	ZZZZZ	ZZZZZ	12/03/09	0726	1.97	5.29
20	ZZZZZ	ZZZZZ	12/03/09	0738	1.97	5.29
21	ZZZZZ	ZZZZZ	12/03/09	0751	1.97	5.29
22	AR166002	WAR091102-60	12/03/09	0803	1.97	5.29
23	PIBLK03	WAR090916-99	12/03/09	0814	1.97	5.29
24	ZZZZZ	ZZZZZ	12/03/09	0825	1.97	5.29
25	ZZZZZ	ZZZZZ	12/03/09	0837	1.97	5.29
26	ZZZZZ	ZZZZZ	12/03/09	0850	1.97	5.29
27	ZZZZZ	ZZZZZ	12/03/09	0902	1.97	5.29
28	ZZZZZ	ZZZZZ	12/03/09	0915	1.97	5.29
29	ZZZZZ	ZZZZZ	12/03/09	0928	1.97	5.29
30	ZZZZZ	ZZZZZ	12/03/09	0940	1.97	5.29
31	ZZZZZ	ZZZZZ	12/03/09	0953	1.97	5.29
32	ZZZZZ	ZZZZZ	12/03/09	1005	1.97	5.29

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/03/09	1018	1.97	5.29
02	AR166003	WAR091102-60	12/03/09	1031	1.97	5.29
03	PIBLK04	WAR090916-99	12/03/09	1041	1.97	5.29
04	ZZZZZ	ZZZZZ	12/03/09	1052	1.97	5.29
05	ZZZZZ	ZZZZZ	12/03/09	1104	1.97	5.29
06	ZZZZZ	ZZZZZ	12/03/09	1117	1.97	5.29
07	ZZZZZ	ZZZZZ	12/03/09	1130	1.97	5.29
08	ZZZZZ	ZZZZZ	12/03/09	1142	1.97	5.29
09	ZZZZZ	ZZZZZ	12/03/09	1155	1.97	5.29
10	ZZZZZ	ZZZZZ	12/03/09	1207	1.97	5.29
11	AR166004	WAR091102-60	12/03/09	1220	1.97	5.29
12	PIBLK05	WAR090916-99	12/03/09	1230	1.97	5.29
13	ZZZZZ	ZZZZZ	12/03/09	1241	1.97	5.29
14	ZZZZZ	ZZZZZ	12/03/09	1251	1.97	5.29
15	ZZZZZ	ZZZZZ	12/03/09	1302	1.97	5.29
16	ZZZZZ	ZZZZZ	12/03/09	1315	1.97	5.29
17	ZZZZZ	ZZZZZ	12/03/09	1327	1.97	5.29
18	AR166005	WAR091102-60	12/03/09	1340	1.97	5.29
19	PIBLK06	WAR090916-99	12/03/09	1350	1.97	5.29
20	PBLK01	1201982160	12/03/09	1401	1.97	5.29
21	PBLK01LCS	1201982163	12/03/09	1411	1.97	5.29
22	RE03-09-14108	241615001	12/03/09	1422	1.97	5.29
23	RE03-09-14106	241615002	12/03/09	1435	1.97	5.29
24	RE03-09-14107	241615003	12/03/09	1447	1.97	5.29
25	ZZZZZ	ZZZZZ	12/03/09	1500	1.97	5.29
26	RE03-09-14252	241615005	12/03/09	1512	1.97	5.29
27	RE03-09-14250	241615006	12/03/09	1525	1.97	5.29
28	RE03-09-14255	241615007	12/03/09	1538	1.97	5.29
29	RE03-09-14256	241615008	12/03/09	1550	1.97	5.29
30	AR166006	WAR091102-60	12/03/09	1603	1.97	5.29
31	PIBLK07	WAR090916-99	12/03/09	1616	1.97	5.29
32	RE03-09-14254	241615009	12/03/09	1628	1.97	5.29

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	RE03-09-14249	241615010	12/03/09	1641	1.97	5.29
02	RE03-09-14248	241615011	12/03/09	1654	1.97	5.29
03	ZZZZZ	ZZZZZ	12/03/09	1706	1.97	5.29
04	RE03-09-14246	241615013	12/03/09	1719	1.97	5.29
05	RE03-09-14246MS	1201982161	12/03/09	1731	1.97	5.29
06	RE03-09-14246MSD	1201982162	12/03/09	1744	1.97	5.29
07	RE03-09-14253	241615014	12/03/09	1757	1.97	5.29
08	RE03-09-14251	241615015	12/03/09	1809	1.97	5.29
09	RE03-09-14257	241615016	12/03/09	1822	1.97	5.29
10	AR166007	WAR091102-60	12/03/09	1834	1.97	5.29
11	PIBLK08	WAR090916-99	12/03/09	1847	1.97	5.29
12	ZZZZZ	ZZZZZ	12/03/09	1900	1.97	5.29
13	RE03-10-6969	241615020	12/03/09	1912	1.97	5.29
14	ZZZZZ	ZZZZZ	12/03/09	1925	1.97	5.29
15	ZZZZZ	ZZZZZ	12/03/09	1937	1.97	5.29
16	AR166008	WAR091102-60	12/03/09	1950	1.97	5.29
17	PIBLK09	WAR090916-99	12/03/09	2003	1.97	5.29
18	ZZZZZ	ZZZZZ	12/03/09	2015	1.97	5.29
19	ZZZZZ	ZZZZZ	12/03/09	2028	1.97	5.29
20	ZZZZZ	ZZZZZ	12/03/09	2041	1.97	5.29
21	ZZZZZ	ZZZZZ	12/03/09	2053	1.97	5.29
22	ZZZZZ	ZZZZZ	12/03/09	2106	1.97	5.29
23	ZZZZZ	ZZZZZ	12/03/09	2118	1.97	5.29
24	ZZZZZ	ZZZZZ	12/03/09	2131	1.97	5.29
25	ZZZZZ	ZZZZZ	12/03/09	2144	1.97	5.29
26	ZZZZZ	ZZZZZ	12/03/09	2156	1.97	5.29
27	ZZZZZ	ZZZZZ	12/03/09	2209	1.97	5.29
28	AR166009	WAR091102-60	12/03/09	2221	1.97	5.29
29	PIBLK10	WAR090916-99	12/03/09	2234	1.97	5.29
30	ZZZZZ	ZZZZZ	12/03/09	2247	1.97	5.29
31	ZZZZZ	ZZZZZ	12/03/09	2259	1.97	5.29
32	ZZZZZ	ZZZZZ	12/03/09	2312	1.97	5.29

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/03/09	0406	2.31	5.96
02	AR166001	WAR091102-60	12/03/09	0416	2.31	5.97
03	AR125401	WAR091102-54	12/03/09	0427	2.31	5.97
04	AR124201	WAR091102-42	12/03/09	0437	2.31	5.97
05	AR124801	WAR091027-48	12/03/09	0448	2.31	5.97
06	AR123201	WAR090930-32	12/03/09	0458	2.31	5.97
07	AR122101	WAR090803-21	12/03/09	0509	2.31	5.97
08	AR126201	WAR090803-62	12/03/09	0519	2.31	5.97
09	AR126801	WAR091106-68	12/03/09	0530	2.31	5.97
10	DDTANALOGSTD	WAR091020-DD	12/03/09	0540		
11	PIBLK02	WAR090916-99	12/03/09	0551	2.31	5.97
12	ZZZZZ	ZZZZZ	12/03/09	0601	2.31	5.97
13	ZZZZZ	ZZZZZ	12/03/09	0612	2.31	5.97
14	ZZZZZ	ZZZZZ	12/03/09	0623	2.31	5.97
15	ZZZZZ	ZZZZZ	12/03/09	0635	2.31	5.97
16	ZZZZZ	ZZZZZ	12/03/09	0648	2.31	5.97
17	ZZZZZ	ZZZZZ	12/03/09	0700	2.31	5.97
18	ZZZZZ	ZZZZZ	12/03/09	0713	2.31	5.97
19	ZZZZZ	ZZZZZ	12/03/09	0726	2.31	5.96
20	ZZZZZ	ZZZZZ	12/03/09	0738	2.31	5.97
21	ZZZZZ	ZZZZZ	12/03/09	0751	2.31	5.97
22	AR166002	WAR091102-60	12/03/09	0803	2.31	5.96
23	PIBLK03	WAR090916-99	12/03/09	0814	2.31	5.97
24	ZZZZZ	ZZZZZ	12/03/09	0825	2.31	5.97
25	ZZZZZ	ZZZZZ	12/03/09	0837	2.31	5.96
26	ZZZZZ	ZZZZZ	12/03/09	0850	2.31	5.96
27	ZZZZZ	ZZZZZ	12/03/09	0902	2.31	5.96
28	ZZZZZ	ZZZZZ	12/03/09	0915	2.31	5.96
29	ZZZZZ	ZZZZZ	12/03/09	0928	2.31	5.97
30	ZZZZZ	ZZZZZ	12/03/09	0940	2.31	5.96
31	ZZZZZ	ZZZZZ	12/03/09	0953	2.31	5.96
32	ZZZZZ	ZZZZZ	12/03/09	1005	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/03/09	1018	2.31	5.96
02	AR166003	WAR091102-60	12/03/09	1031	2.31	5.96
03	PIBLK04	WAR090916-99	12/03/09	1041	2.31	5.97
04	ZZZZZ	ZZZZZ	12/03/09	1052	2.31	5.97
05	ZZZZZ	ZZZZZ	12/03/09	1104	2.31	5.97
06	ZZZZZ	ZZZZZ	12/03/09	1117	2.31	5.97
07	ZZZZZ	ZZZZZ	12/03/09	1130	2.31	5.97
08	ZZZZZ	ZZZZZ	12/03/09	1142	2.31	5.97
09	ZZZZZ	ZZZZZ	12/03/09	1155	2.31	5.97
10	ZZZZZ	ZZZZZ	12/03/09	1207	2.31	5.97
11	AR166004	WAR091102-60	12/03/09	1220	2.31	5.97
12	PIBLK05	WAR090916-99	12/03/09	1230	2.31	5.97
13	ZZZZZ	ZZZZZ	12/03/09	1241	2.31	5.97
14	ZZZZZ	ZZZZZ	12/03/09	1251	2.31	5.97
15	ZZZZZ	ZZZZZ	12/03/09	1302	2.31	5.97
16	ZZZZZ	ZZZZZ	12/03/09	1315	2.31	5.97
17	ZZZZZ	ZZZZZ	12/03/09	1327	2.31	5.96
18	AR166005	WAR091102-60	12/03/09	1340	2.31	5.97
19	PIBLK06	WAR090916-99	12/03/09	1350	2.31	5.97
20	PBLK01	1201982160	12/03/09	1401	2.31	5.97
21	PBLK01LCS	1201982163	12/03/09	1411	2.31	5.97
22	RE03-09-14108	241615001	12/03/09	1422	2.31	5.97
23	RE03-09-14106	241615002	12/03/09	1435	2.31	5.97
24	RE03-09-14107	241615003	12/03/09	1447	2.31	5.97
25	ZZZZZ	ZZZZZ	12/03/09	1500	2.31	5.97
26	RE03-09-14252	241615005	12/03/09	1512	2.31	5.96
27	RE03-09-14250	241615006	12/03/09	1525	2.31	5.96
28	RE03-09-14255	241615007	12/03/09	1538	2.31	5.97
29	RE03-09-14256	241615008	12/03/09	1550	2.31	5.97
30	AR166006	WAR091102-60	12/03/09	1603	2.31	5.96
31	PIBLK07	WAR090916-99	12/03/09	1616	2.31	5.96
32	RE03-09-14254	241615009	12/03/09	1628	2.31	5.97

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	RE03-09-14249	241615010	12/03/09	1641	2.31	5.97
02	RE03-09-14248	241615011	12/03/09	1654	2.31	5.97
03	ZZZZZ	ZZZZZ	12/03/09	1706	2.31	5.97
04	RE03-09-14246	241615013	12/03/09	1719	2.31	5.96
05	RE03-09-14246MS	1201982161	12/03/09	1731	2.31	5.97
06	RE03-09-14246MSD	1201982162	12/03/09	1744	2.31	5.96
07	RE03-09-14253	241615014	12/03/09	1757	2.31	5.97
08	RE03-09-14251	241615015	12/03/09	1809	2.31	5.96
09	RE03-09-14257	241615016	12/03/09	1822	2.31	5.96
10	AR166007	WAR091102-60	12/03/09	1834	2.31	5.96
11	PIBLK08	WAR090916-99	12/03/09	1847	2.31	5.96
12	ZZZZZ	ZZZZZ	12/03/09	1900	2.31	5.96
13	RE03-10-6969	241615020	12/03/09	1912	2.31	5.96
14	ZZZZZ	ZZZZZ	12/03/09	1925	2.31	5.96
15	ZZZZZ	ZZZZZ	12/03/09	1937	2.31	5.96
16	AR166008	WAR091102-60	12/03/09	1950	2.31	5.96
17	PIBLK09	WAR090916-99	12/03/09	2003	2.31	5.96
18	ZZZZZ	ZZZZZ	12/03/09	2015	2.31	5.96
19	ZZZZZ	ZZZZZ	12/03/09	2028	2.31	5.97
20	ZZZZZ	ZZZZZ	12/03/09	2041	2.31	5.97
21	ZZZZZ	ZZZZZ	12/03/09	2053	2.31	5.97
22	ZZZZZ	ZZZZZ	12/03/09	2106	2.31	5.97
23	ZZZZZ	ZZZZZ	12/03/09	2118	2.31	5.97
24	ZZZZZ	ZZZZZ	12/03/09	2131	2.31	5.97
25	ZZZZZ	ZZZZZ	12/03/09	2144	2.31	5.96
26	ZZZZZ	ZZZZZ	12/03/09	2156	2.31	5.97
27	ZZZZZ	ZZZZZ	12/03/09	2209	2.31	5.96
28	AR166009	WAR091102-60	12/03/09	2221	2.31	5.96
29	PIBLK10	WAR090916-99	12/03/09	2234	2.31	5.96
30	ZZZZZ	ZZZZZ	12/03/09	2247	2.31	5.96
31	ZZZZZ	ZZZZZ	12/03/09	2259	2.31	5.97
32	ZZZZZ	ZZZZZ	12/03/09	2312	2.31	5.97

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/05/09	0905	1.97	5.29
02	AR166001	WAR091119-60	12/05/09	0915	1.97	5.29
03	AR125401	WAR091102-54	12/05/09	0926	1.97	5.29
04	AR124201	WAR091102-42	12/05/09	0937	1.97	5.29
05	AR124801	WAR091027-48	12/05/09	0947	1.97	5.29
06	AR123201	WAR090930-32	12/05/09	0958	1.97	5.29
07	AR122101	WAR090803-21	12/05/09	1008	1.97	5.29
08	AR126201	WAR090803-62	12/05/09	1019	1.97	5.29
09	AR126801	WAR091106-68	12/05/09	1029	1.97	5.29
10	DDTANALOGSTD	WAR091020-DD	12/05/09	1040		
11	PIBLK02	WAR090916-99	12/05/09	1050	1.97	5.29
12	ZZZZZ	ZZZZZ	12/05/09	1101	1.97	5.29
13	ZZZZZ	ZZZZZ	12/05/09	1111	1.97	5.29
14	ZZZZZ	ZZZZZ	12/05/09	1122	1.97	5.29
15	ZZZZZ	ZZZZZ	12/05/09	1132		
16	ZZZZZ	ZZZZZ	12/05/09	1145	1.95	
17	ZZZZZ	ZZZZZ	12/05/09	1157	1.95	
18	AR166002	WAR091119-60	12/05/09	1210	1.97	5.29
19	PIBLK03	WAR090916-99	12/05/09	1221	1.97	5.29
20	ZZZZZ	ZZZZZ	12/05/09	1231	1.97	5.29
21	ZZZZZ	ZZZZZ	12/05/09	1241	1.97	5.29
22	ZZZZZ	ZZZZZ	12/05/09	1252	1.97	5.29
23	ZZZZZ	ZZZZZ	12/05/09	1303	1.95	
24	ZZZZZ	ZZZZZ	12/05/09	1315	1.95	
25	ZZZZZ	ZZZZZ	12/05/09	1328		
26	ZZZZZ	ZZZZZ	12/05/09	1340		
27	ZZZZZ	ZZZZZ	12/05/09	1353		
28	AR166003	WAR091119-60	12/05/09	1406	1.97	5.29
29	PIBLK04	WAR090916-99	12/05/09	1418	1.97	5.29
30	ZZZZZ	ZZZZZ	12/05/09	1429	1.95	5.29
31	ZZZZZ	ZZZZZ	12/05/09	1441	1.97	5.29
32	ZZZZZ	ZZZZZ	12/05/09	1452	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/05/09	1502	1.97	5.29
02	ZZZZZ	ZZZZZ	12/05/09	1513	1.97	5.29
03	ZZZZZ	ZZZZZ	12/05/09	1526	1.97	5.29
04	ZZZZZ	ZZZZZ	12/05/09	1538	1.97	5.29
05	AR166004	WAR091119-60	12/05/09	1551	1.97	5.29
06	PIBLK05	WAR090916-99	12/05/09	1601	1.97	5.29
07	PBLK02	1201987325	12/05/09	1612	1.97	5.29
08	PBLK02LCS	1201987326	12/05/09	1624	1.97	5.29
09	PBLK02LCSD	1201987330	12/05/09	1637	1.97	5.29
10	ZZZZZ	ZZZZZ	12/05/09	1649	1.97	5.29
11	ZZZZZ	ZZZZZ	12/05/09	1702	1.97	5.29
12	ZZZZZ	ZZZZZ	12/05/09	1715	1.97	5.29
13	RE03-09-14109	241615004	12/05/09	1727	1.97	5.29
14	RE03-09-14247	241615012	12/05/09	1740	1.97	5.29
15	RE03-10-2729	241615018	12/05/09	1752	1.97	5.29
16	AR166005	WAR091119-60	12/05/09	1805	1.97	5.29
17	PIBLK06	WAR090916-99	12/05/09	1818	1.97	5.29
18	ZZZZZ	ZZZZZ	12/05/09	1830	1.97	5.29
19	ZZZZZ	ZZZZZ	12/05/09	1843	1.97	5.29
20	ZZZZZ	ZZZZZ	12/05/09	1855	1.97	5.29
21	ZZZZZ	ZZZZZ	12/05/09	1908	1.97	5.29
22	ZZZZZ	ZZZZZ	12/05/09	1921	1.97	5.29
23	ZZZZZ	ZZZZZ	12/05/09	1933	1.97	5.29
24	ZZZZZ	ZZZZZ	12/05/09	1946	1.97	5.29
25	ZZZZZ	ZZZZZ	12/05/09	1959	1.97	5.29
26	ZZZZZ	ZZZZZ	12/05/09	2011	1.97	5.29
27	ZZZZZ	ZZZZZ	12/05/09	2024	1.97	5.29
28	AR166006	WAR091119-60	12/05/09	2036	1.97	5.29
29	PIBLK07	WAR090916-99	12/05/09	2049	1.97	5.29
30	ZZZZZ	ZZZZZ	12/05/09	2102	1.97	5.29
31	ZZZZZ	ZZZZZ	12/05/09	2114	1.97	5.29
32	ZZZZZ	ZZZZZ	12/05/09	2127	1.97	5.29

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/05/09	0905	2.31	5.96
02	AR166001	WAR091119-60	12/05/09	0915	2.31	5.96
03	AR125401	WAR091102-54	12/05/09	0926	2.31	5.96
04	AR124201	WAR091102-42	12/05/09	0937	2.31	5.96
05	AR124801	WAR091027-48	12/05/09	0947	2.31	5.96
06	AR123201	WAR090930-32	12/05/09	0958	2.31	5.96
07	AR122101	WAR090803-21	12/05/09	1008	2.31	5.97
08	AR126201	WAR090803-62	12/05/09	1019	2.31	5.96
09	AR126801	WAR091106-68	12/05/09	1029	2.31	5.96
10	DDTANALOGSTD	WAR091020-DD	12/05/09	1040		
11	PIBLK02	WAR090916-99	12/05/09	1050	2.31	5.96
12	ZZZZZ	ZZZZZ	12/05/09	1101	2.31	5.96
13	ZZZZZ	ZZZZZ	12/05/09	1111	2.31	5.96
14	ZZZZZ	ZZZZZ	12/05/09	1122	2.31	5.96
15	ZZZZZ	ZZZZZ	12/05/09	1132		
16	ZZZZZ	ZZZZZ	12/05/09	1145		
17	ZZZZZ	ZZZZZ	12/05/09	1157		5.96
18	AR166002	WAR091119-60	12/05/09	1210	2.31	5.96
19	PIBLK03	WAR090916-99	12/05/09	1221	2.31	5.96
20	ZZZZZ	ZZZZZ	12/05/09	1231	2.31	5.96
21	ZZZZZ	ZZZZZ	12/05/09	1241	2.31	5.96
22	ZZZZZ	ZZZZZ	12/05/09	1252	2.31	5.96
23	ZZZZZ	ZZZZZ	12/05/09	1303		
24	ZZZZZ	ZZZZZ	12/05/09	1315		5.96
25	ZZZZZ	ZZZZZ	12/05/09	1328		
26	ZZZZZ	ZZZZZ	12/05/09	1340		
27	ZZZZZ	ZZZZZ	12/05/09	1353		
28	AR166003	WAR091119-60	12/05/09	1406	2.31	5.96
29	PIBLK04	WAR090916-99	12/05/09	1418	2.31	5.96
30	ZZZZZ	ZZZZZ	12/05/09	1429		5.96
31	ZZZZZ	ZZZZZ	12/05/09	1441	2.31	5.96
32	ZZZZZ	ZZZZZ	12/05/09	1452	2.31	5.96

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-644

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/05/09	1502	2.31	5.96
02	ZZZZZ	ZZZZZ	12/05/09	1513	2.31	5.96
03	ZZZZZ	ZZZZZ	12/05/09	1526	2.31	5.96
04	ZZZZZ	ZZZZZ	12/05/09	1538	2.31	5.96
05	AR166004	WAR091119-60	12/05/09	1551	2.31	5.96
06	PIBLK05	WAR090916-99	12/05/09	1601	2.31	5.96
07	PBLK02	1201987325	12/05/09	1612	2.31	5.96
08	PBLK02LCS	1201987326	12/05/09	1624	2.31	5.96
09	PBLK02LCSD	1201987330	12/05/09	1637	2.31	5.96
10	ZZZZZ	ZZZZZ	12/05/09	1649	2.31	5.96
11	ZZZZZ	ZZZZZ	12/05/09	1702	2.31	5.96
12	ZZZZZ	ZZZZZ	12/05/09	1715	2.31	5.96
13	RE03-09-14109	241615004	12/05/09	1727	2.31	5.96
14	RE03-09-14247	241615012	12/05/09	1740	2.31	5.96
15	RE03-10-2729	241615018	12/05/09	1752	2.31	5.96
16	AR166005	WAR091119-60	12/05/09	1805	2.31	5.96
17	PIBLK06	WAR090916-99	12/05/09	1818	2.31	5.96
18	ZZZZZ	ZZZZZ	12/05/09	1830	2.31	5.96
19	ZZZZZ	ZZZZZ	12/05/09	1843	2.31	5.96
20	ZZZZZ	ZZZZZ	12/05/09	1855	2.31	5.96
21	ZZZZZ	ZZZZZ	12/05/09	1908	2.31	5.96
22	ZZZZZ	ZZZZZ	12/05/09	1921	2.31	5.96
23	ZZZZZ	ZZZZZ	12/05/09	1933	2.31	5.96
24	ZZZZZ	ZZZZZ	12/05/09	1946	2.31	5.96
25	ZZZZZ	ZZZZZ	12/05/09	1959	2.31	5.96
26	ZZZZZ	ZZZZZ	12/05/09	2011	2.31	5.96
27	ZZZZZ	ZZZZZ	12/05/09	2024	2.31	5.96
28	AR166006	WAR091119-60	12/05/09	2036	2.31	5.96
29	PIBLK07	WAR090916-99	12/05/09	2049	2.31	5.96
30	ZZZZZ	ZZZZZ	12/05/09	2102	2.31	5.96
31	ZZZZZ	ZZZZZ	12/05/09	2114	2.31	5.96
32	ZZZZZ	ZZZZZ	12/05/09	2127	2.31	5.96

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–644 **Client ID:** LCS for batch 927091

Lab Sample ID: 1201982163

Data File:	053f5301.d	**Data File:**	053b5301.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 14:11	**Analyzed:**	03–DEC–09 14:11

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							6.2
Column 1	1	2.43	2.4 – 2.46	19.7		ug/kg	
	2	2.72	2.69 – 2.75	20.8		ug/kg	
	3	2.8	2.77 – 2.83	19.6		ug/kg	
	4	2.84	2.81 – 2.87	19.9		ug/kg	
	5	3.05	3.02 – 3.08	20.5		ug/kg	
					20.1		
Column 2	1	3.21	3.18 – 3.24	21.7		ug/kg	
	2	3.3	3.27 – 3.33	20.8		ug/kg	
	3	3.42	3.39 – 3.45	20.9		ug/kg	
	4	3.59	3.56 – 3.62	21.7		ug/kg	
	5	3.66	3.63 – 3.69	22		ug/kg	
					21.4		
Aroclor–1260							3.52
Column 1	1	3.78	3.75 – 3.81	22.3		ug/kg	
	2	3.94	3.91 – 3.97	22.7		ug/kg	
	3	4.17	4.14 – 4.2	22.5		ug/kg	
	4	4.31	4.28 – 4.34	23.7		ug/kg	
	5	4.49	4.46 – 4.52	23.8		ug/kg	
					23		
Column 2	1	4.36	4.32 – 4.38	22.8		ug/kg	
	2	4.48	4.45 – 4.51	23.7		ug/kg	
	3	4.75	4.72 – 4.78	23.7		ug/kg	
	4	4.92	4.89 – 4.95	24.1		ug/kg	
	5	5.07	5.04 – 5.1	24.8		ug/kg	
					23.8		

Identification Summary

SDG Number: 10–644 **Client ID:** LCS for batch 929263

Lab Sample ID: 1201987326

Data File:	040f4001.d	**Data File:**	040b4001.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	05–DEC–09 16:24	**Analyzed:**	05–DEC–09 16:24

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							25.3
Column 1	1	2.43	2.4 – 2.46	19.9		ug/kg	
	2	2.72	2.69 – 2.75	21.9		ug/kg	
	3	2.8	2.77 – 2.83	38.7		ug/kg	
	4	2.84	2.81 – 2.87	22		ug/kg	
	5	3.05	3.02 – 3.08	19.8		ug/kg	
					24.5		
Column 2	1	3.21	3.18 – 3.24	19.4		ug/kg	
	2	3.29	3.27 – 3.33	19		ug/kg	
	3	3.42	3.39 – 3.45	18.7		ug/kg	
	4	3.59	3.56 – 3.62	18.8		ug/kg	
	5	3.66	3.63 – 3.69	18.9		ug/kg	
					19		
Aroclor–1260							6.53
Column 1	1	3.77	3.74 – 3.8	19.3		ug/kg	
	2	3.94	3.91 – 3.97	20.2		ug/kg	
	3	4.17	4.14 – 4.2	20		ug/kg	
	4	4.31	4.28 – 4.34	16.5		ug/kg	
	5	4.49	4.46 – 4.52	21.9		ug/kg	
					19.6		
Column 2	1	4.35	4.32 – 4.38	20.2		ug/kg	
	2	4.48	4.45 – 4.51	20.5		ug/kg	
	3	4.74	4.71 – 4.77	20.5		ug/kg	
	4	4.92	4.89 – 4.95	21.2		ug/kg	
	5	5.06	5.04 – 5.1	22.2		ug/kg	
					20.9		

Identification Summary

SDG Number: 10–644 **Client ID:** LCSD for batch 929263

Lab Sample ID: 1201987330

Data File:	041f4101.d	**Data File:**	041b4101.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	05–DEC–09 16:37	**Analyzed:**	05–DEC–09 16:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							13.5
Column 1	1	2.43	2.4 – 2.46	19.7		ug/kg	
	2	2.72	2.69 – 2.75	21.3		ug/kg	
	3	2.8	2.77 – 2.83	39.2		ug/kg	
	4	2.84	2.81 – 2.87	20.5		ug/kg	
	5	3.05	3.02 – 3.08	18.8		ug/kg	
					23.9		
Column 2	1	3.21	3.18 – 3.24	20.1		ug/kg	
	2	3.29	3.27 – 3.33	21.1		ug/kg	
	3	3.42	3.39 – 3.45	22.3		ug/kg	
	4	3.59	3.56 – 3.62	20.8		ug/kg	
	5	3.66	3.63 – 3.69	20		ug/kg	
					20.9		
Aroclor–1260							12.3
Column 1	1	3.77	3.74 – 3.8	18.9		ug/kg	
	2	3.94	3.91 – 3.97	19.9		ug/kg	
	3	4.17	4.14 – 4.2	18.5		ug/kg	
	4	4.31	4.28 – 4.34	14.9		ug/kg	
	5	4.49	4.46 – 4.52	21.2		ug/kg	
					18.7		
Column 2	1	4.35	4.32 – 4.38	20.5		ug/kg	
	2	4.48	4.45 – 4.51	21		ug/kg	
	3	4.74	4.71 – 4.77	20.7		ug/kg	
	4	4.92	4.89 – 4.95	21.3		ug/kg	
	5	5.06	5.04 – 5.1	22.2		ug/kg	
					21.1		

Identification Summary

SDG Number: 10–644 **Client ID:** RE03–09–14246MS

Lab Sample ID: 1201982161

Data File:	069f6901.d	**Data File:**	069b6901.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 17:31	**Analyzed:**	03–DEC–09 17:31

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							3.53
Column 1	1	2.43	2.4 – 2.46	19.4		ug/kg	
	2	2.72	2.69 – 2.75	21.1		ug/kg	
	3	2.8	2.77 – 2.83	16.4		ug/kg	
	4	2.84	2.81 – 2.87	14.9		ug/kg	
	5	3.05	3.02 – 3.08	19.4		ug/kg	
					18.2		
Column 2	1	3.21	3.18 – 3.24	17.6		ug/kg	
	2	3.3	3.27 – 3.33	20.6		ug/kg	
	3	3.42	3.39 – 3.45	20.5		ug/kg	
	4	3.59	3.56 – 3.62	20.3		ug/kg	
	5	3.66	3.63 – 3.69	15.5		ug/kg	
					18.9		
Aroclor–1260							4.19
Column 1	1	3.78	3.75 – 3.81	20.1		ug/kg	
	2	3.94	3.91 – 3.97	20.1		ug/kg	
	3	4.17	4.14 – 4.2	19.6		ug/kg	
	4	4.31	4.28 – 4.34	19.3		ug/kg	
	5	4.49	4.46 – 4.52	20.6		ug/kg	
					19.9		
Column 2	1	4.35	4.32 – 4.38	20.6		ug/kg	
	2	4.48	4.45 – 4.51	21		ug/kg	
	3	4.75	4.72 – 4.78	19.8		ug/kg	
	4	4.92	4.89 – 4.95	21		ug/kg	
	5	5.07	5.04 – 5.1	21.5		ug/kg	
					20.8		

Identification Summary

SDG Number: 10–644 **Client ID:** RE03–09–14246MSD

Lab Sample ID: 1201982162

Data File:	070f7001.d	**Data File:**	070b7001.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	03–DEC–09 17:44	**Analyzed:**	03–DEC–09 17:44

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							9.7
Column 1	1	2.43	2.4 – 2.46	18.1		ug/kg	
	2	2.72	2.69 – 2.75	18.1		ug/kg	
	3	2.8	2.77 – 2.83	14.1		ug/kg	
	4	2.84	2.81 – 2.87	12.1		ug/kg	
	5	3.05	3.02 – 3.08	17		ug/kg	
					15.8		
Column 2	1	3.21	3.18 – 3.24	16.4		ug/kg	
	2	3.29	3.27 – 3.33	19.8		ug/kg	
	3	3.42	3.39 – 3.45	18.5		ug/kg	
	4	3.59	3.56 – 3.62	18.7		ug/kg	
	5	3.66	3.63 – 3.69	14		ug/kg	
					17.5		
Aroclor–1260							5.87
Column 1	1	3.77	3.75 – 3.81	17.6		ug/kg	
	2	3.94	3.91 – 3.97	17.8		ug/kg	
	3	4.17	4.14 – 4.2	17.4		ug/kg	
	4	4.31	4.28 – 4.34	17.1		ug/kg	
	5	4.49	4.46 – 4.52	18.3		ug/kg	
					17.6		
Column 2	1	4.35	4.32 – 4.38	18.5		ug/kg	
	2	4.48	4.45 – 4.51	18.8		ug/kg	
	3	4.74	4.72 – 4.78	18.3		ug/kg	
	4	4.92	4.89 – 4.95	18.6		ug/kg	
	5	5.07	5.04 – 5.1	19.2		ug/kg	
					18.7		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982160**				
Client Sample:	**QC for batch 927091**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927091**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 14:01**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**052f5201–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	052b5201–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/052f5201.d
Lab Smp Id: 1201982160 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 14:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982160|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 52 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	23131971	51.8336	1.7	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.290	0.001	50091617	122.546	4.1	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd1a.i/120309.b/052f5201.d
Date : 03-DEC-2009 14:01
Client ID: PBLK01
Sample Info: |120198216011|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

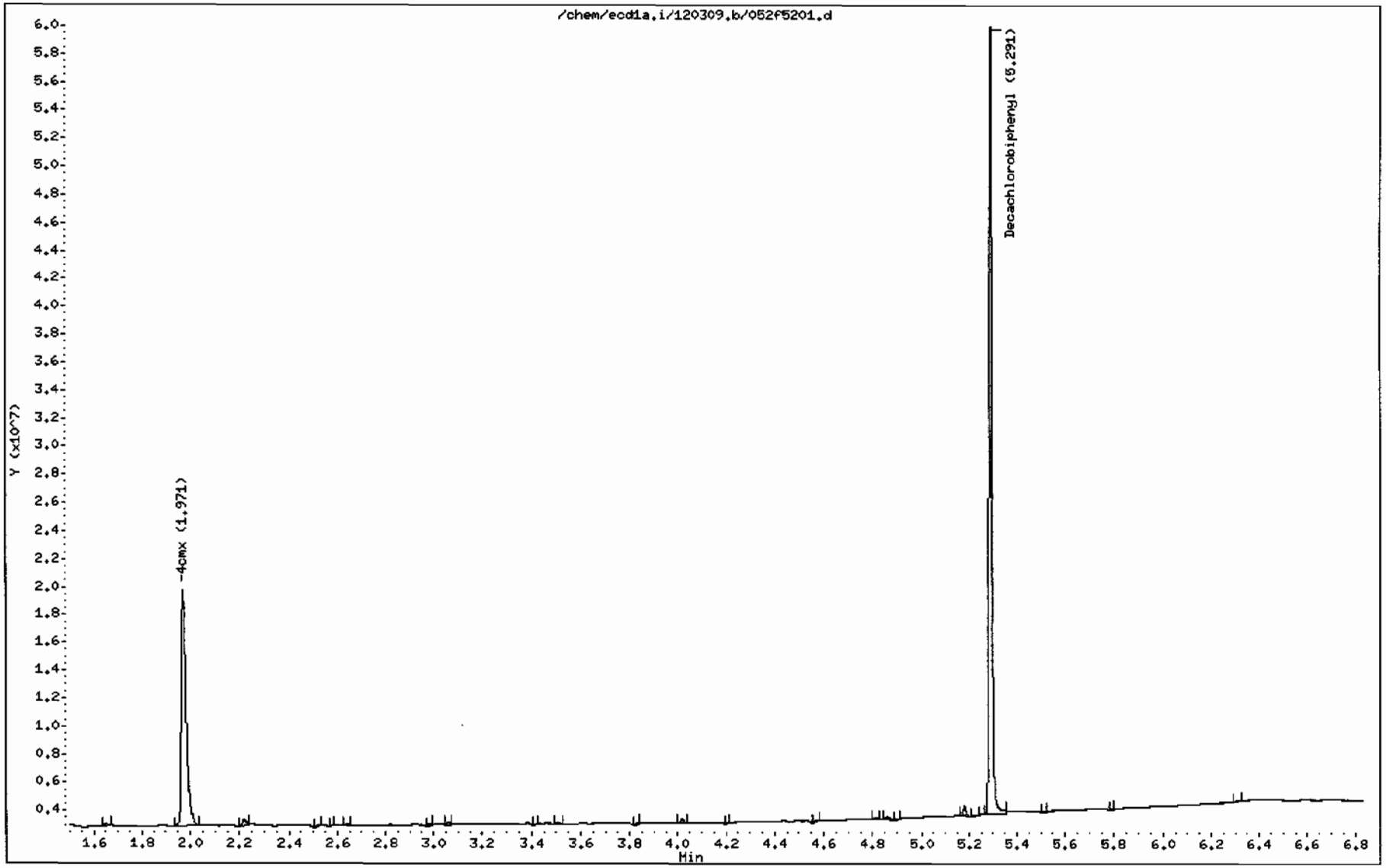

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/052b5201.d
Lab Smp Id: 1201982160 Client Smp ID: PBLK01
Inj Date : 03-DEC-2009 14:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982160|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 52 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	20361055	54.8378	1.8	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	37306583	124.116	4.1	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd1a.i/120309.b/052b5201.d

Page 1

Date : 03-DEC-2009 14:01

Client ID: PBLK01

Instrument: ecd1a.i

Sample Info: |120198216011|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

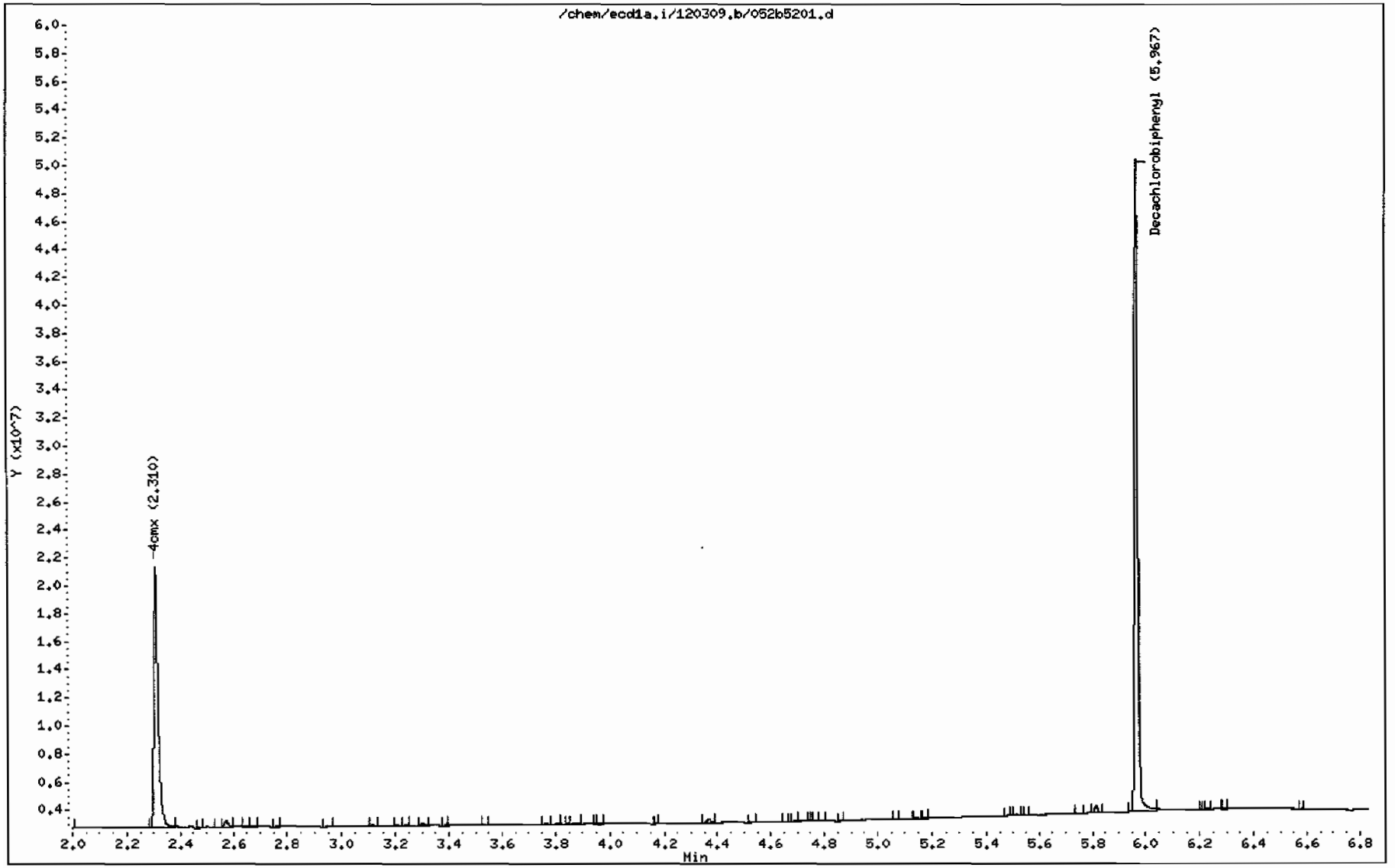

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-644			**Matrix:**	SOIL
Lab Sample ID:	1201987325				
Client Sample:	QC for batch 929263	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 929263	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	929264	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/05/2009 16:12	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	12/04/2009 20:52	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	039f3901-1.d	**Column:**	1 CLP1	**Level:**	LOW
	039b3901-1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/039f3901.d
Lab Smp Id: 1201987325 Client Smp ID: PBLK02
Inj Date : 05-DEC-2009 16:12
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987325|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 39 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	51464133	115.320	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	44672053	109.288	3.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120509.b/039f3901.d
Date : 05-DEC-2009 16:12
Client ID: PBLK02
Sample Info: |1201987325|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

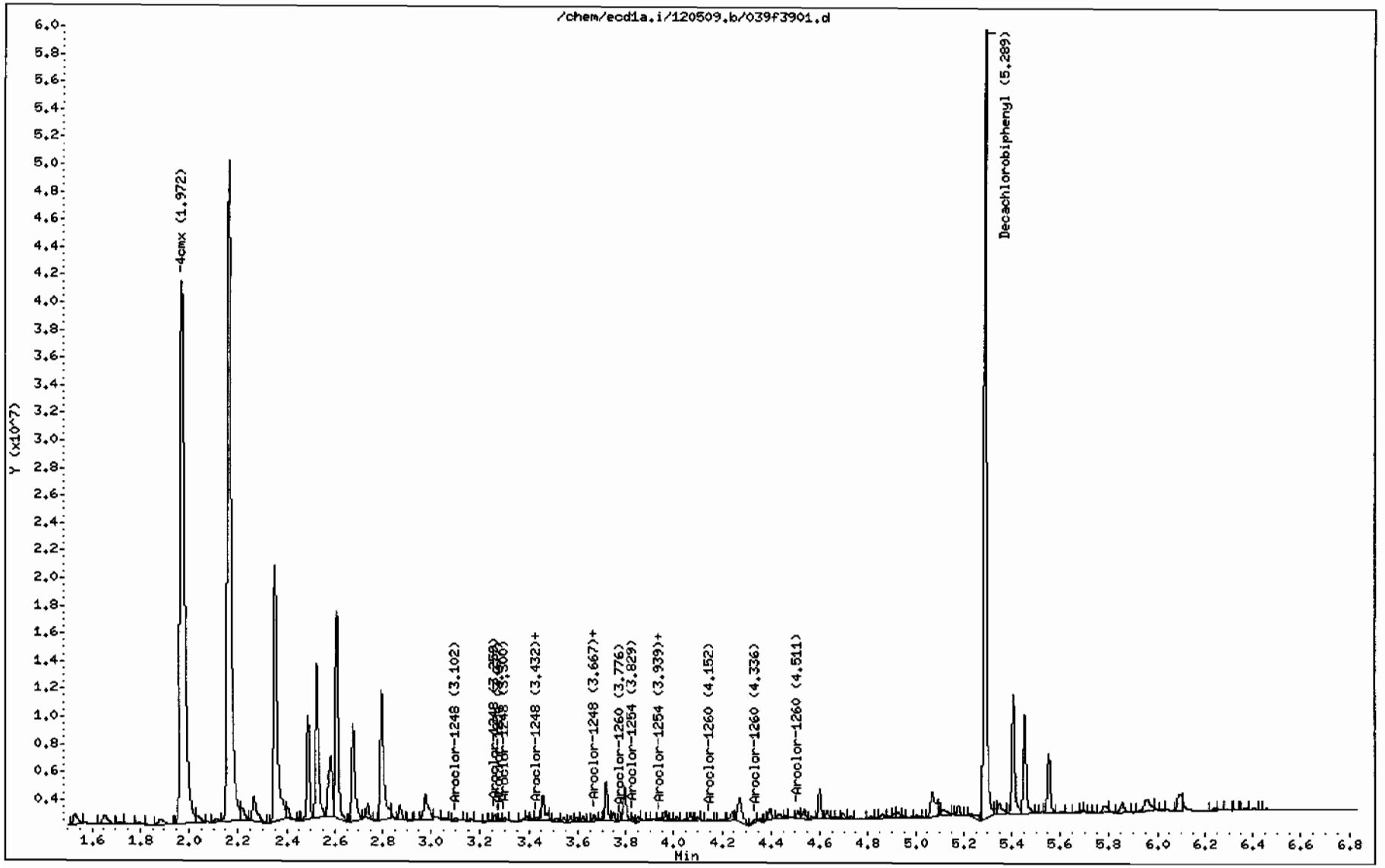

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/039b3901.d
Lab Smp Id: 1201987325 Client Smp ID: PBLK02
Inj Date : 05-DEC-2009 16:12
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987325|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 39 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	42723430	115.066	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.962	5.964	-0.002	42072259	139.971	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120509.b/039b3901.d
Date : 05-DEC-2009 16:12
Client ID: PBLK02
Sample Info: |120198732511|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

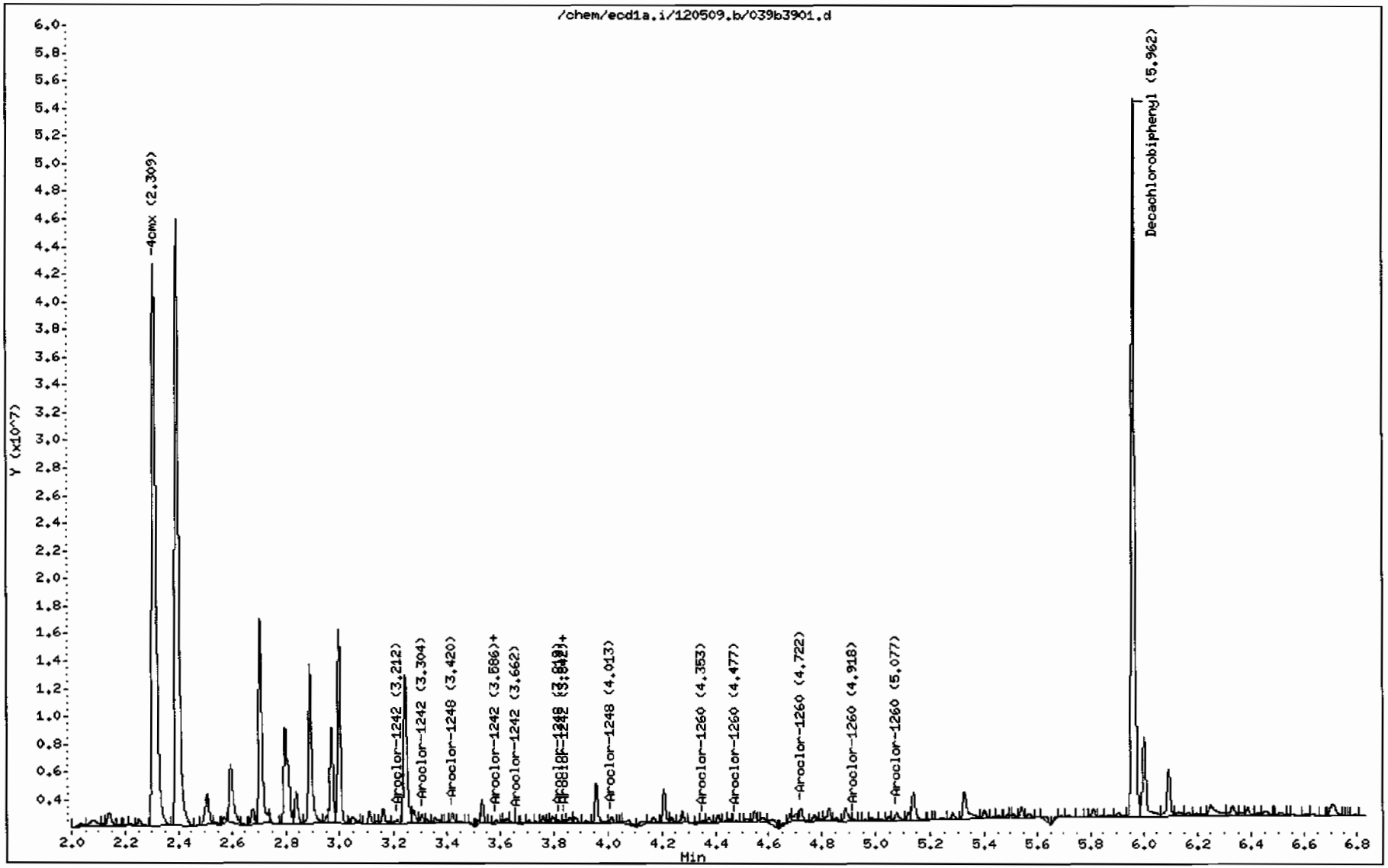

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982163**				
Client Sample:	**QC for batch 927091**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927091**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927093**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 14:11**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/30/2009 11:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**053f5301-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	053b5301-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		21.4	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		23.8	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/053f5301.d
Lab Smp Id: 1201982163 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 14:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982163|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 53 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.972	0.000	49038151	109.884	3.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.290	0.000	54042556	132.212	4.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	10121988	592.299	19.7	80.00- 120.00	100.00
2.720	2.720	0.000	13273706	625.033	20.8	108.34- 148.34	131.14
2.801	2.801	0.000	8265336	589.018	19.6	59.79- 99.79	81.66
2.839	2.839	0.000	5015210	595.868	19.9	28.30- 68.30	49.55

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.050	3.050	0.000	6650851	616.192	20.5	41.96- 81.96	65.71
Average of Peak Concentrations =					20.1		
7 Aroclor-1260					CAS #: 11096-82-5		
3.777	3.777	0.000	14317582	667.567	22.2	80.00- 120.00	100.00
3.939	3.939	0.000	21957844	682.023	22.7	132.49- 172.49	153.36
4.169	4.169	0.000	13817513	675.422	22.5	75.19- 115.19	96.51
4.312	4.312	0.000	14281320	711.159	23.7	77.33- 117.33	99.75
4.491	4.492	-0.001	33066248	714.189	23.8	205.73- 245.73	230.95
Average of Peak Concentrations =					23.0		

Data File: /chem/ecd1a.i/120309.b/053f5301.d
Date : 03-DEC-2009 14:11
Client ID: PBLK01LCS
Sample Info: |120198216311|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

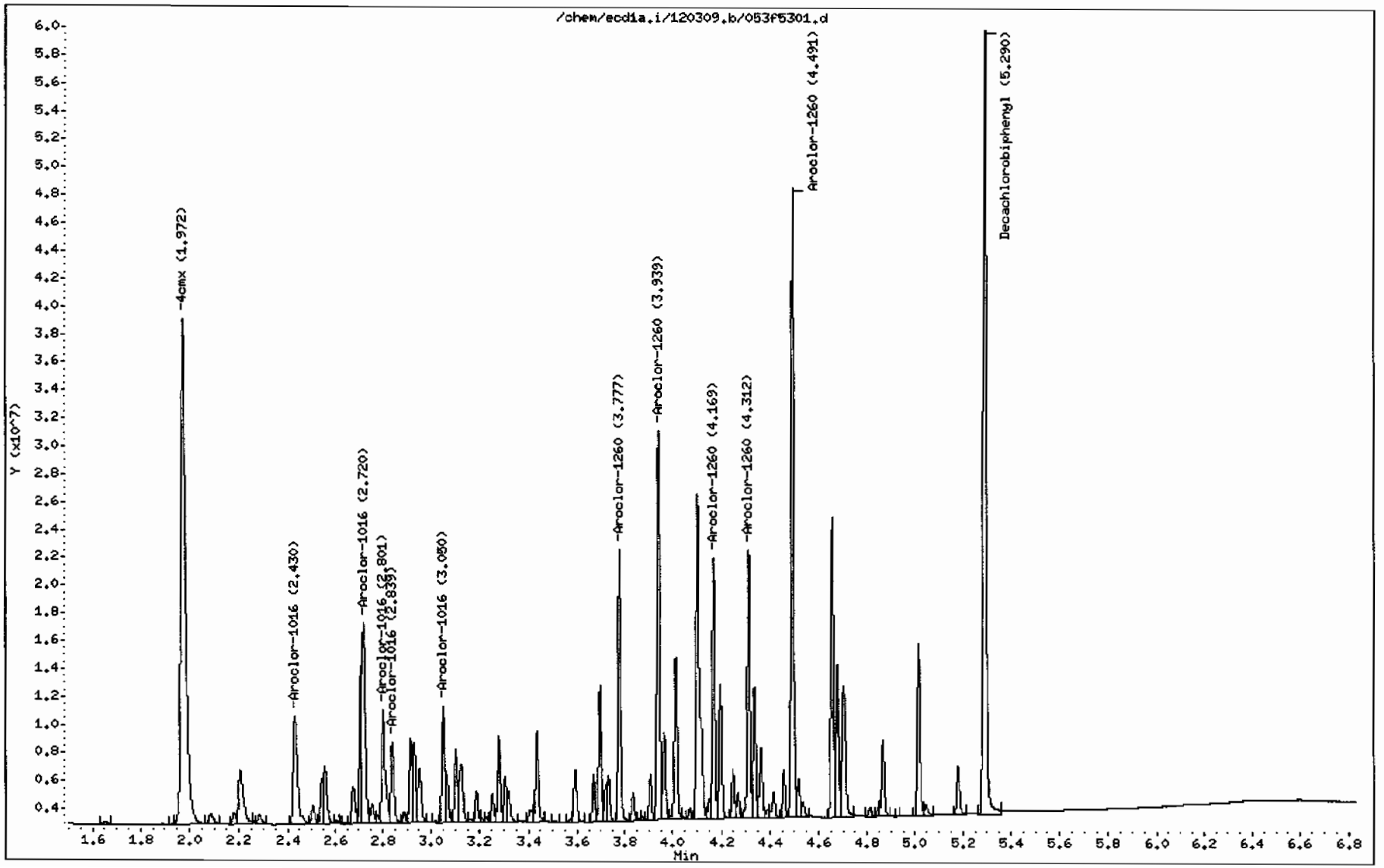

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/053b5301.d
Lab Smp Id: 1201982163 Client Smp ID: PBLK01LCS
Inj Date : 03-DEC-2009 14:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982163|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 03-Dec-2009 13:59 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 53 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	41377774	111.441	3.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	39852327	132.585	4.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.213	3.212	0.001	10954286	649.702	21.6	80.00- 120.00	100.00(M)
3.296	3.297	-0.001	7190997	623.373	20.8	44.63- 84.63	65.65
3.422	3.422	0.000	4369207	628.551	21.0	18.60- 58.60	39.89
3.588	3.587	0.001	5979067	651.273	21.7	31.84- 71.84	54.58

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.664	3.663	0.001	5605239	658.753	22.0	27.64- 67.64	61.14
Average of Peak Concentrations =					21.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.355	4.355	0.000	12383132	685.404	22.8	80.00- 120.00	100.00
4.480	4.479	0.001	15752764	710.960	23.7	106.22- 146.22	127.21
4.746	4.746	0.000	12582699	711.783	23.7	79.49- 119.49	101.61
4.920	4.920	0.000	12435103	722.387	24.1	78.14- 118.14	100.42
5.067	5.067	0.000	28722238	743.539	24.8	205.17- 245.17	231.95
Average of Peak Concentrations =					23.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdia.i/120309.b/053b5301.d
Date : 03-DEC-2009 14:11
Client ID: PBLK01LCS
Sample Info: 1120198216311
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdia.i
Operator: YSI
Column diameter: 0.25

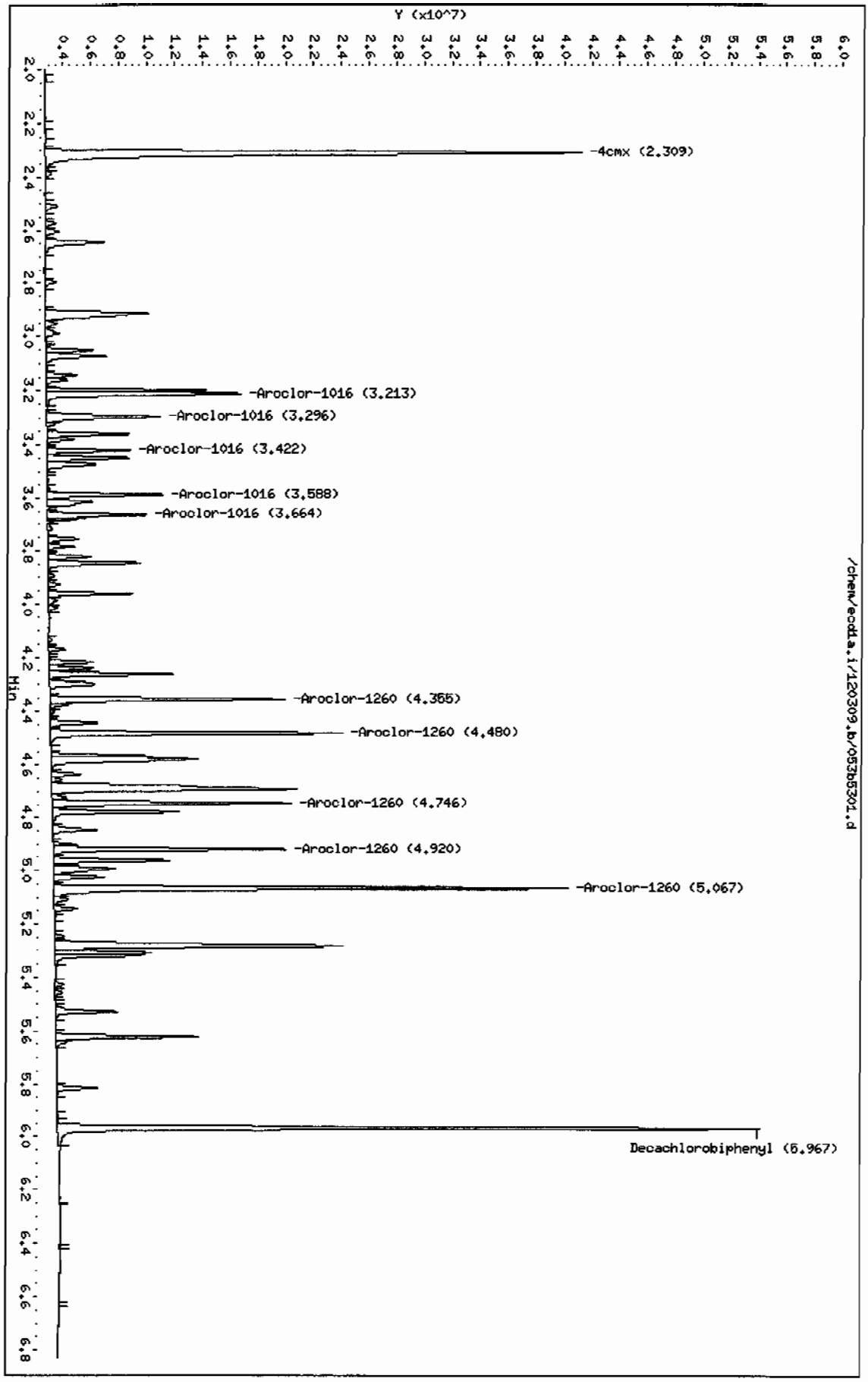

Page 1

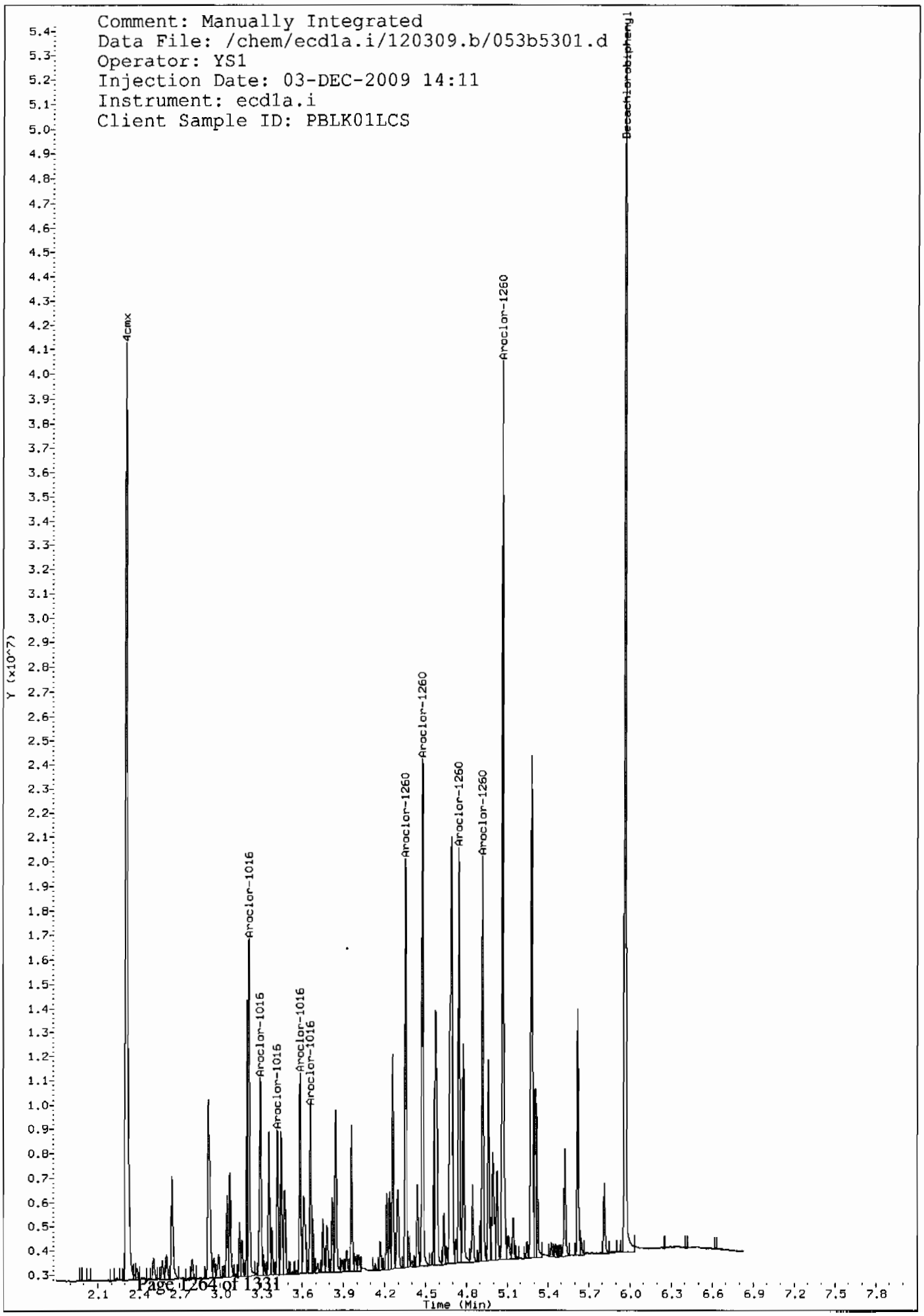
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120309.b/053b5301.d
Operator: YS1
Injection Date: 03-DEC-2009 14:11
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

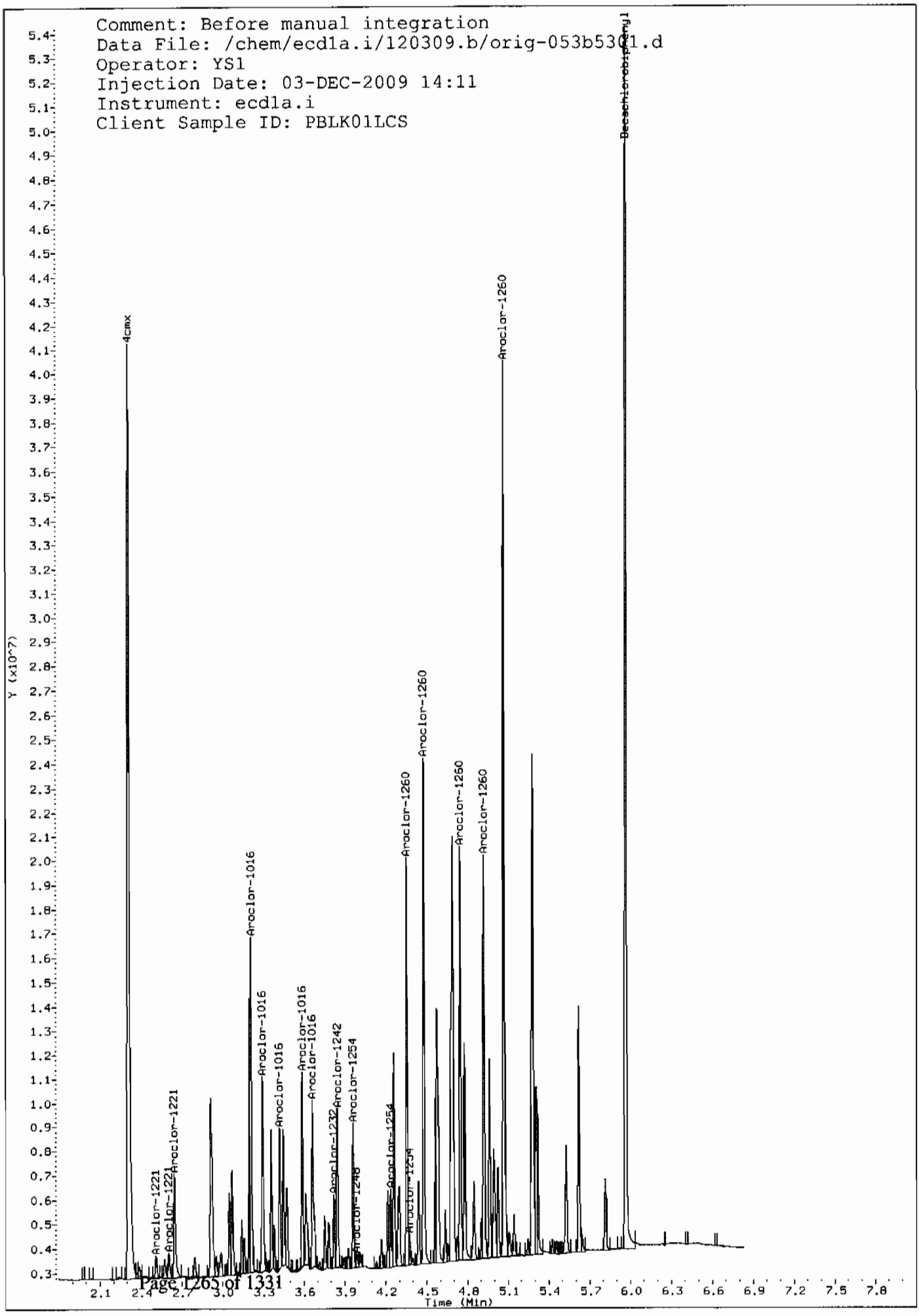
Comment: Before manual integration
Data File: /chem/ecd1a.i/120309.b/orig-053b53(1.d
Operator: YS1
Injection Date: 03-DEC-2009 14:11
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
Y (x10^7)
Time (Min)
4cmx
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1242
Aroclor-1232
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201987326**				
Client Sample:	**QC for batch 929263**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 929263**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**929264**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 16:24**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/04/2009 20:52**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**040f4001–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	040b4001–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		24.5	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		20.9	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/040f4001.d
Lab Smp Id: 1201987326 Client Smp ID: PBLK02LCS
Inj Date : 05-DEC-2009 16:24
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987326|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 40 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	53164436	119.130	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	45234202	110.663	3.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	10182792	595.857	19.9	80.00- 120.00	100.00
2.718	2.720	-0.002	13985518	658.551	22.0	108.94- 148.94	137.34
2.797	2.801	-0.004	16278710	1160.08	38.7	61.65- 101.65	159.86
2.836	2.838	-0.002	5548296	659.205	22.0	29.29- 69.29	54.49

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	6425263	595.292	19.8	43.04- 83.04	63.10
Average of Peak Concentrations =					24.4		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	12446700	580.336	19.3	80.00- 120.00	100.00
3.937	3.938	-0.001	19534065	606.739	20.2	131.46- 171.46	156.94
4.167	4.168	-0.001	12301929	601.338	20.0	74.26- 114.26	98.84
4.309	4.311	-0.002	9943642	495.158	16.5	78.00- 118.00	79.89
4.488	4.491	-0.003	30440703	657.481	21.9	204.72- 244.72	244.57
Average of Peak Concentrations =					19.6		

Data File: /chem/ecd1a.i/120509.b/040f4001.d

Page 1

Date : 05-DEC-2009 16:24

Client ID: PBLK02LCS

Instrument: ecd1a.i

Sample Info: |120198732611|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

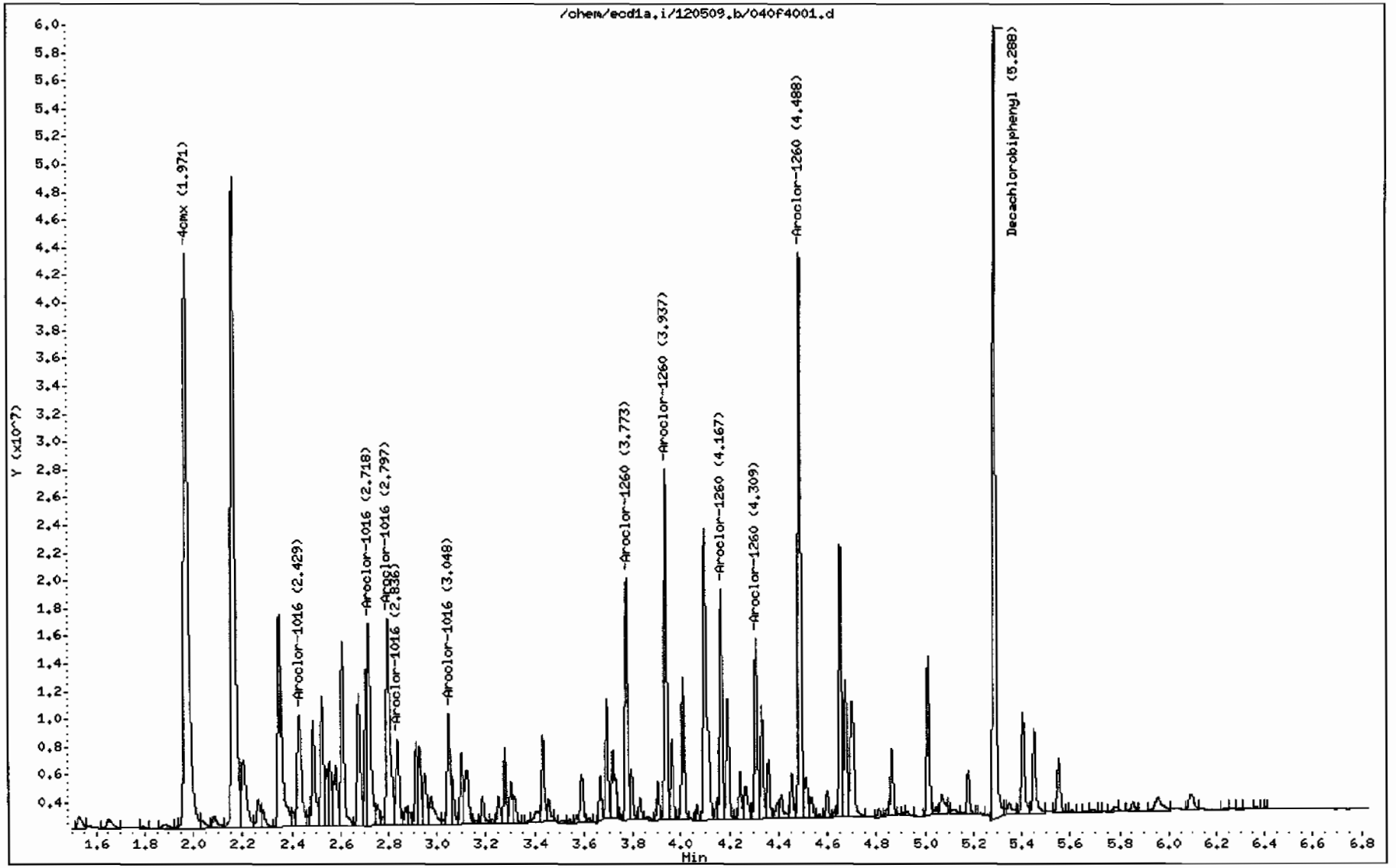

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/040b4001.d
Lab Smp Id: 1201987326 Client Smp ID: PBLK02LCS
Inj Date : 05-DEC-2009 16:24
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987326|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 40 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	44124347	118.839	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.962	5.964	-0.002	41381192	137.672	4.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.210	3.212	-0.002	9803472	581.447	19.4	80.00- 120.00	100.00
3.293	3.295	-0.002	6566804	569.263	19.0	43.56- 83.56	66.98
3.419	3.421	-0.002	3907658	562.153	18.7	17.92- 57.92	39.86
3.585	3.587	-0.002	5185241	564.805	18.8	31.42- 71.42	52.89

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.660	3.663	-0.003	4833900	568.101	18.9	27.68- 67.68	49.31
Average of Peak Concentrations =					19.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.352	4.353	-0.001	10954202	606.313	20.2	80.00- 120.00	100.00
4.476	4.478	-0.002	13639040	615.563	20.5	106.38- 146.38	124.51
4.743	4.744	-0.001	10888490	615.944	20.5	79.62- 119.62	99.40
4.917	4.918	-0.001	10965725	637.027	21.2	78.89- 118.89	100.11
5.063	5.065	-0.002	25680296	664.791	22.2	208.18- 248.18	234.43
Average of Peak Concentrations =					20.9		

Data File: /chem/ecd1a.i/120509.b/040b4001.d

Date : 05-DEC-2009 16:24

Client ID: PBLK02LCS

Sample Info: |1201987326|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

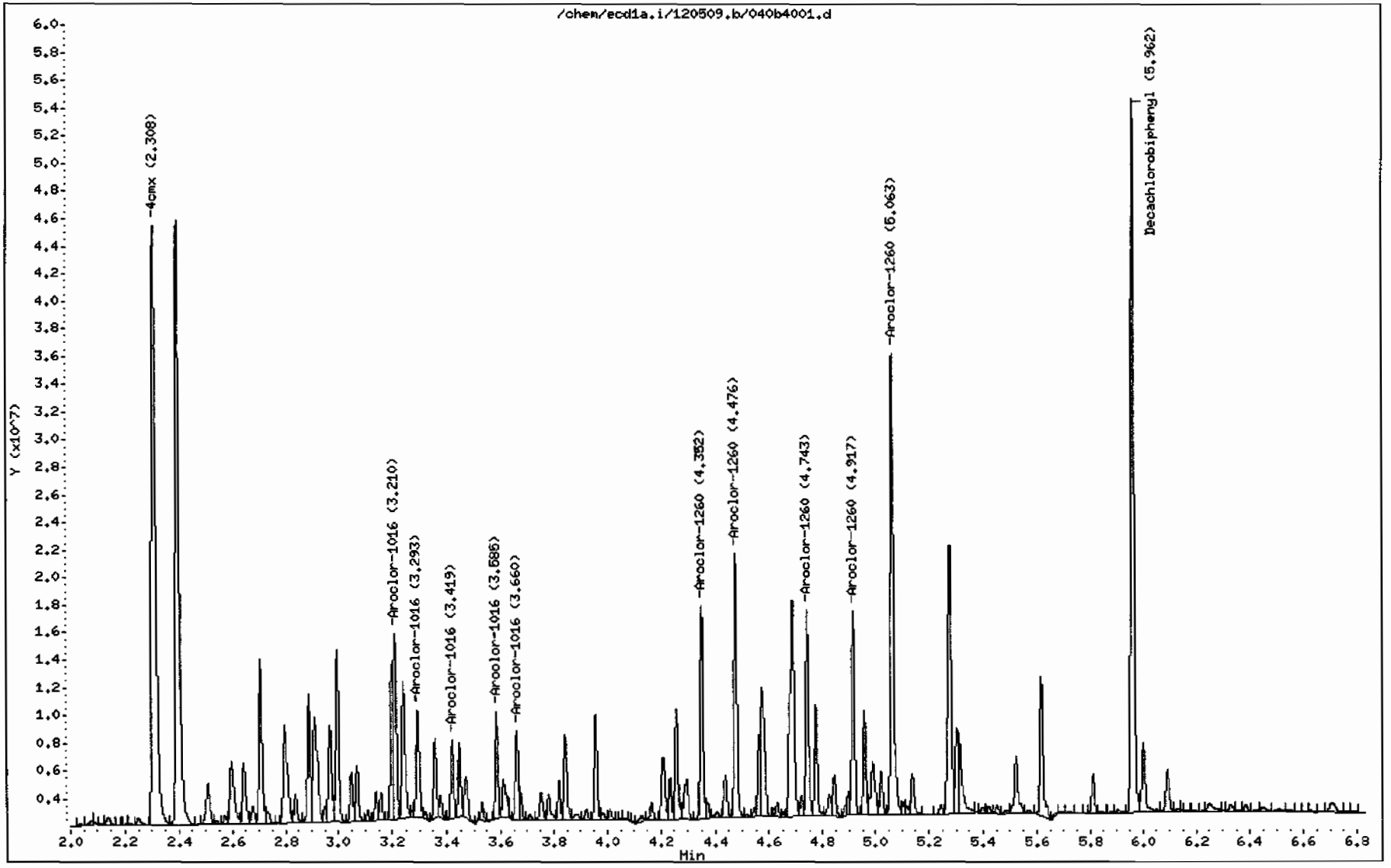

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-644**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201987330**				
Client Sample:	**QC for batch 929263**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCSD for batch 929263**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**929264**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 16:37**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/04/2009 20:52**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**041f4101-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	041b4101-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		23.9	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		21.1	ug/kg	1.11	3.33	2

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/041f4101.d
Lab Smp Id: 1201987330 Client Smp ID: PBLK02LCSD
Inj Date : 05-DEC-2009 16:37
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987330|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|LCSD|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 41 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	51670823	115.783	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	44173712	108.069	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	10090279	590.444	19.7	80.00- 120.00	100.00
2.718	2.720	-0.002	13571703	639.065	21.3	108.94- 148.94	134.50
2.797	2.801	-0.004	16487833	1174.98	39.2	61.65- 101.65	163.40
2.836	2.838	-0.002	5165055	613.671	20.4	29.29- 69.29	51.19

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	6090889	564.312	18.8	43.04- 83.04	60.36
Average of Peak Concentrations =					23.9		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	12134136	565.762	18.8	80.00- 120.00	100.00
3.937	3.938	-0.001	19191429	596.097	19.9	131.46- 171.46	158.16
4.167	4.168	-0.001	11376579	556.105	18.5	74.26- 114.26	93.76
4.310	4.311	-0.001	9000702	448.203	14.9	78.00- 118.00	74.18
4.488	4.491	-0.003	29443467	635.942	21.2	204.72- 244.72	242.65
Average of Peak Concentrations =					18.7		

Data File: /chem/ecd1a.i/120509.b/041f4101.d

Date : 05-DEC-2009 16:37

Client ID: PBLK02LCSD

Sample Info: |120198733011|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

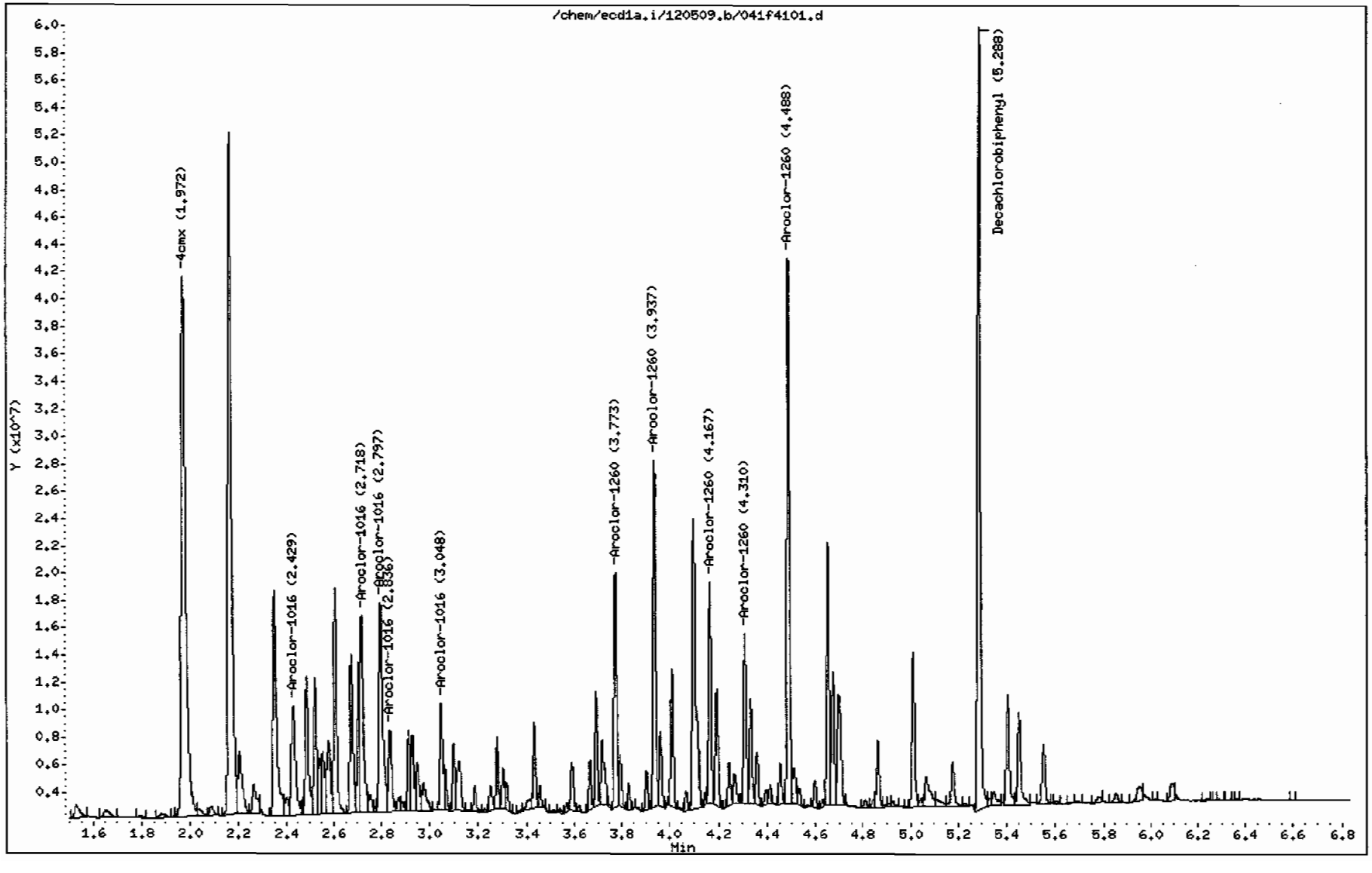

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/041b4101.d
Lab Smp Id: 1201987330 Client Smp ID: PBLK02LCSD
Inj Date : 05-DEC-2009 16:37
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987330|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|LCSD|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 41 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	42948026	115.671	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.962	5.964	-0.002	41245019	137.219	4.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.210	3.212	-0.002	10170367	603.208	20.1	80.00- 120.00	100.00(M)
3.293	3.295	-0.002	7296551	632.523	21.1	43.24- 83.24	71.74
3.418	3.421	-0.003	4648703	668.760	22.3	17.73- 57.73	45.71
3.585	3.587	-0.002	5723841	623.473	20.8	30.67- 70.67	56.28

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.660	3.663	-0.003	5115338	601.177	20.0	36.89- 76.89	61.30
Average of Peak Concentrations =					20.9		
7 Aroclor-1260					CAS #: 11096-82-5		
4.352	4.353	-0.001	11106469	614.741	20.5	80.00- 120.00	100.00
4.476	4.478	-0.002	13936174	628.973	21.0	106.46- 146.46	125.48
4.743	4.744	-0.001	10959930	619.985	20.7	79.85- 119.85	98.68
4.917	4.918	-0.001	11024346	640.433	21.3	78.54- 118.54	99.26
5.063	5.065	-0.002	25751954	666.646	22.2	207.34- 247.34	231.86
Average of Peak Concentrations =					21.1		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120509.b/041b4101.d
Date : 05-DEC-2009 16:37
Client ID: PBLK02LCSD
Sample Info: |1201987330|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

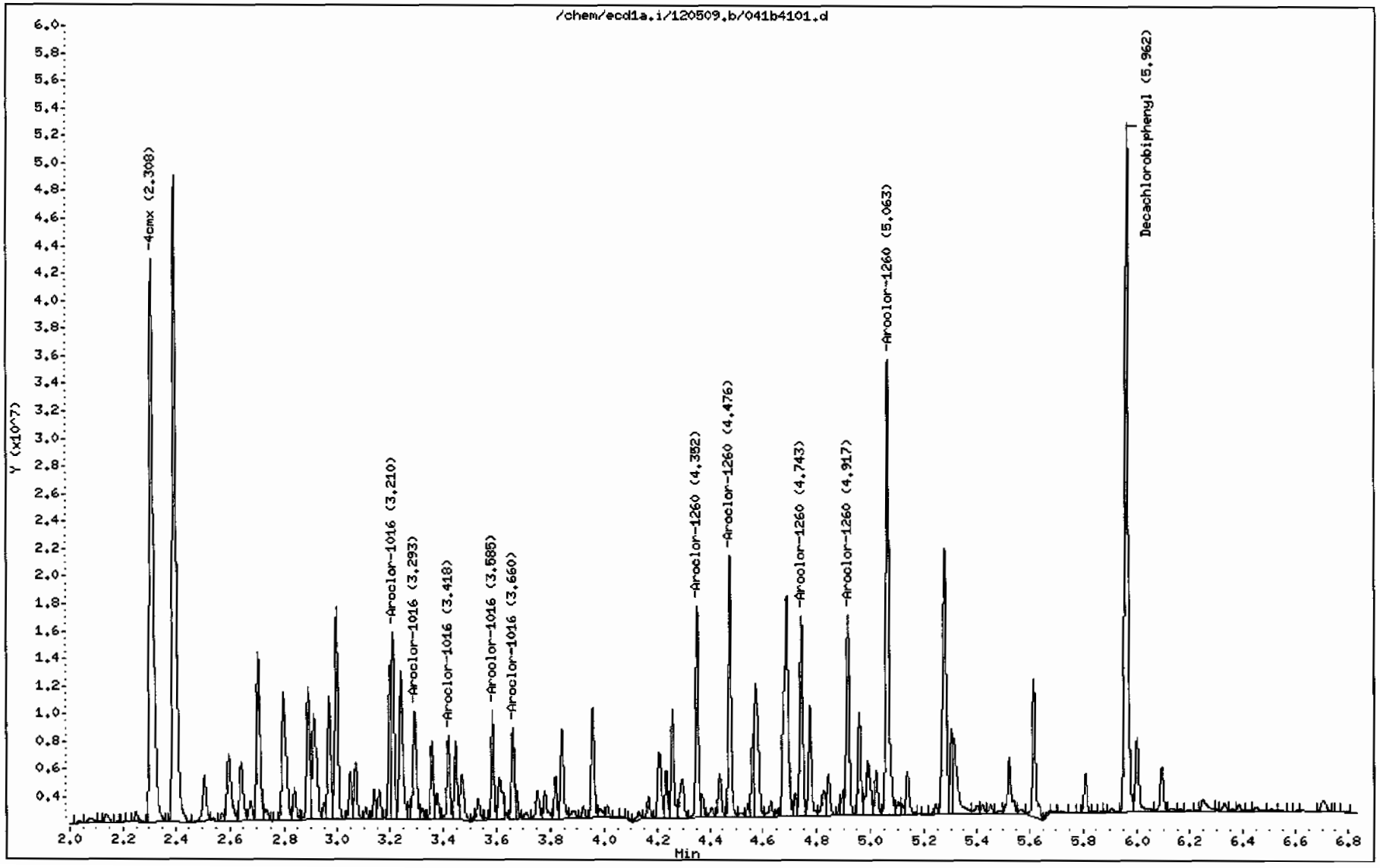

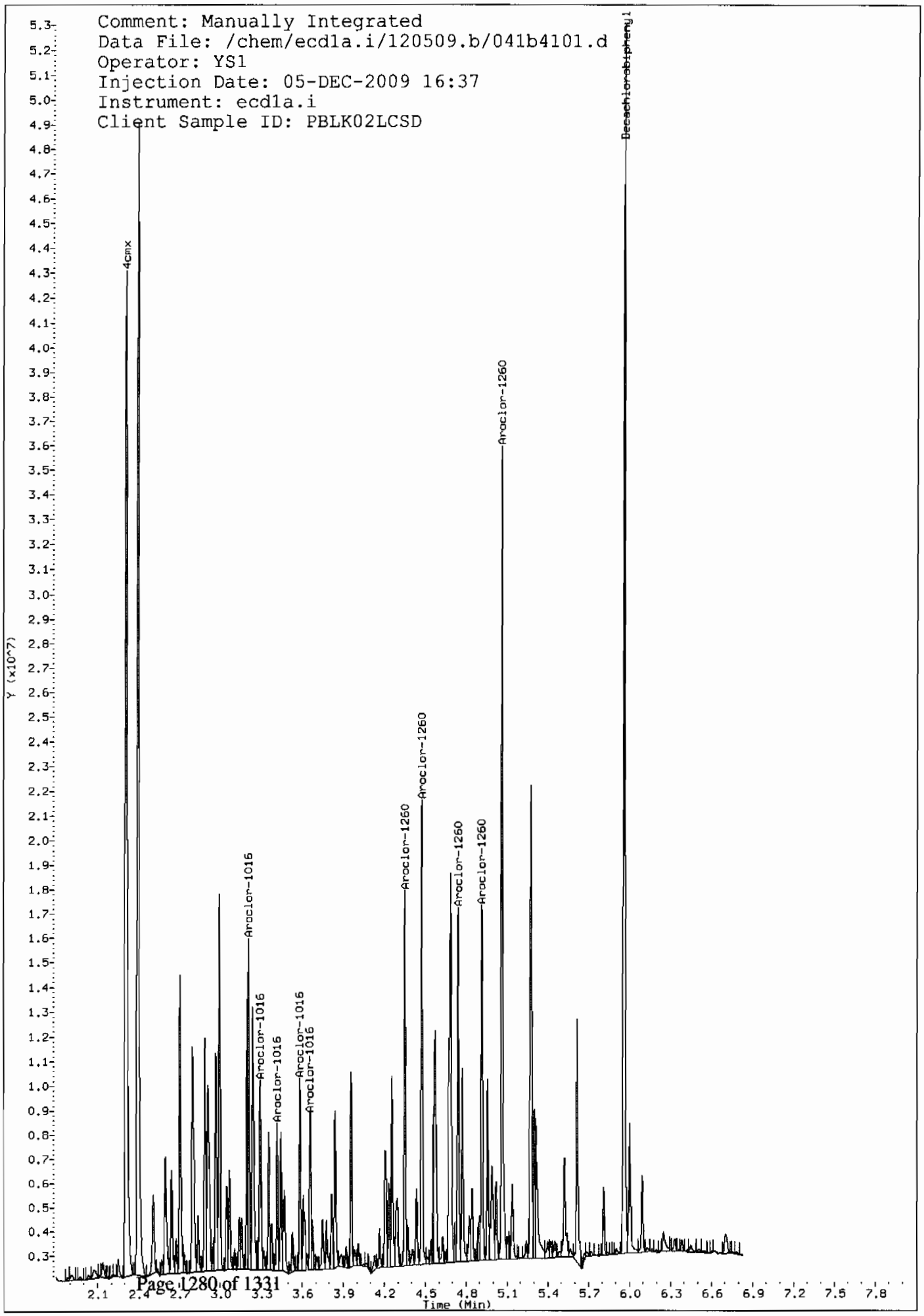
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120509.b/041b4101.d
Operator: YS1
Injection Date: 05-DEC-2009 16:37
Instrument: ecd1a.i
Client Sample ID: PBLK02LCSD
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

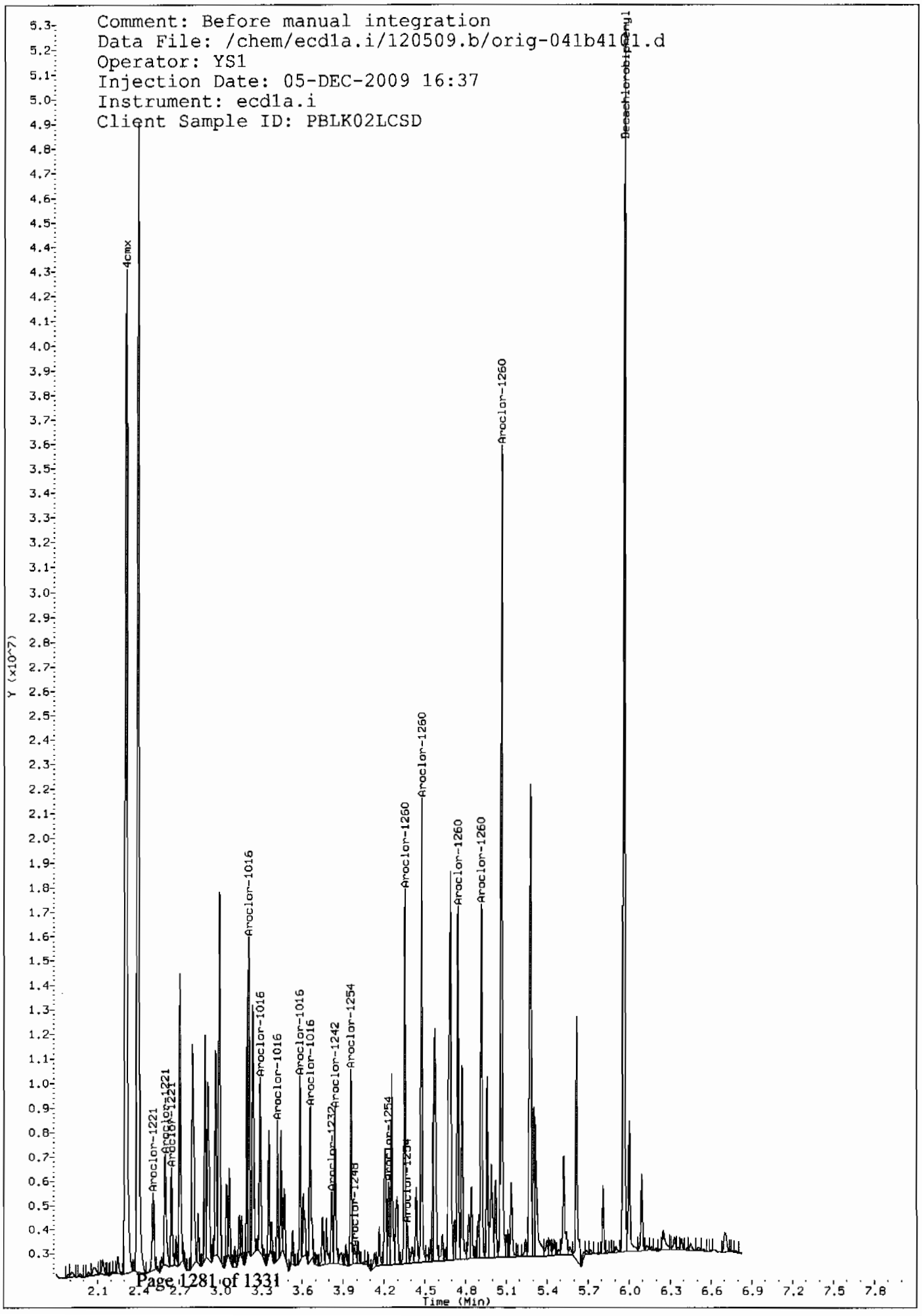
Comment: Before manual integration
Data File: /chem/ecd1a.i/120509.b/orig-041b41C1.d
Operator: YS1
Injection Date: 05-DEC-2009 16:37
Instrument: ecd1a.i
Client Sample ID: PBLK02LCSD
4cmx
Decachlorobiphenyl
Aroclor-1260
Aroclor-1016
Aroclor-1221
Aroclor-1242
Aroclor-1254
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982161	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8
Client Sample:	QC for batch 927091	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–14246MS	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 17:31	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	069f6901.d	**Column:**	1 CLP1	**Level:**	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		18.2	ug/kg	1.20	3.62	1
11104–28–2	Aroclor–1221	U	3.62	ug/kg	1.20	3.62	1
11141–16–5	Aroclor–1232	U	3.62	ug/kg	1.20	3.62	1
53469–21–9	Aroclor–1242	U	3.62	ug/kg	1.20	3.62	1
12672–29–6	Aroclor–1248	U	3.62	ug/kg	1.20	3.62	1
11097–69–1	Aroclor–1254	U	3.62	ug/kg	1.20	3.62	1
11096–82–5	Aroclor–1260		19.9	ug/kg	1.20	3.62	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/069f6901.d
Lab Smp Id: 1201982161 Client Smp ID: RE03-09-14246MS
Inj Date : 03-DEC-2009 17:31
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982161|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 69 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	7.96850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	48007353	107.574	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.290	-0.001	41910574	102.532	3.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.431	-0.001	9168233	536.489	19.4	80.00- 120.00	100.00
2.719	2.720	-0.001	12366885	582.333	21.1	107.58- 147.58	134.89
2.800	2.801	-0.001	6376294	454.398	16.4	59.73- 99.73	69.55
2.836	2.839	-0.003	3462441	411.380	14.9	28.59- 68.59	37.77

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.049	3.050	-0.001	5783120	535.798	19.4	41.65- 81.65	63.08
		Average of Peak Concentrations =			18.2		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.777	-0.002	11947336	557.052	20.1	80.00- 120.00	100.00
3.938	3.939	-0.001	17866586	554.947	20.1	132.51- 172.51	149.54
4.168	4.169	-0.001	11068969	541.069	19.6	75.52- 115.52	92.65
4.311	4.312	-0.001	10709396	533.290	19.3	77.42- 117.42	89.64
4.490	4.492	-0.002	26313005	568.328	20.6	206.60- 246.60	220.24
		Average of Peak Concentrations =			19.9		

Data File: /chem/ecdia.i/120309.b/069f6901.d
Date : 03-DEC-2009 17:31
Client ID: RE03-09-14246MS
Sample Info: !120198216!1!
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

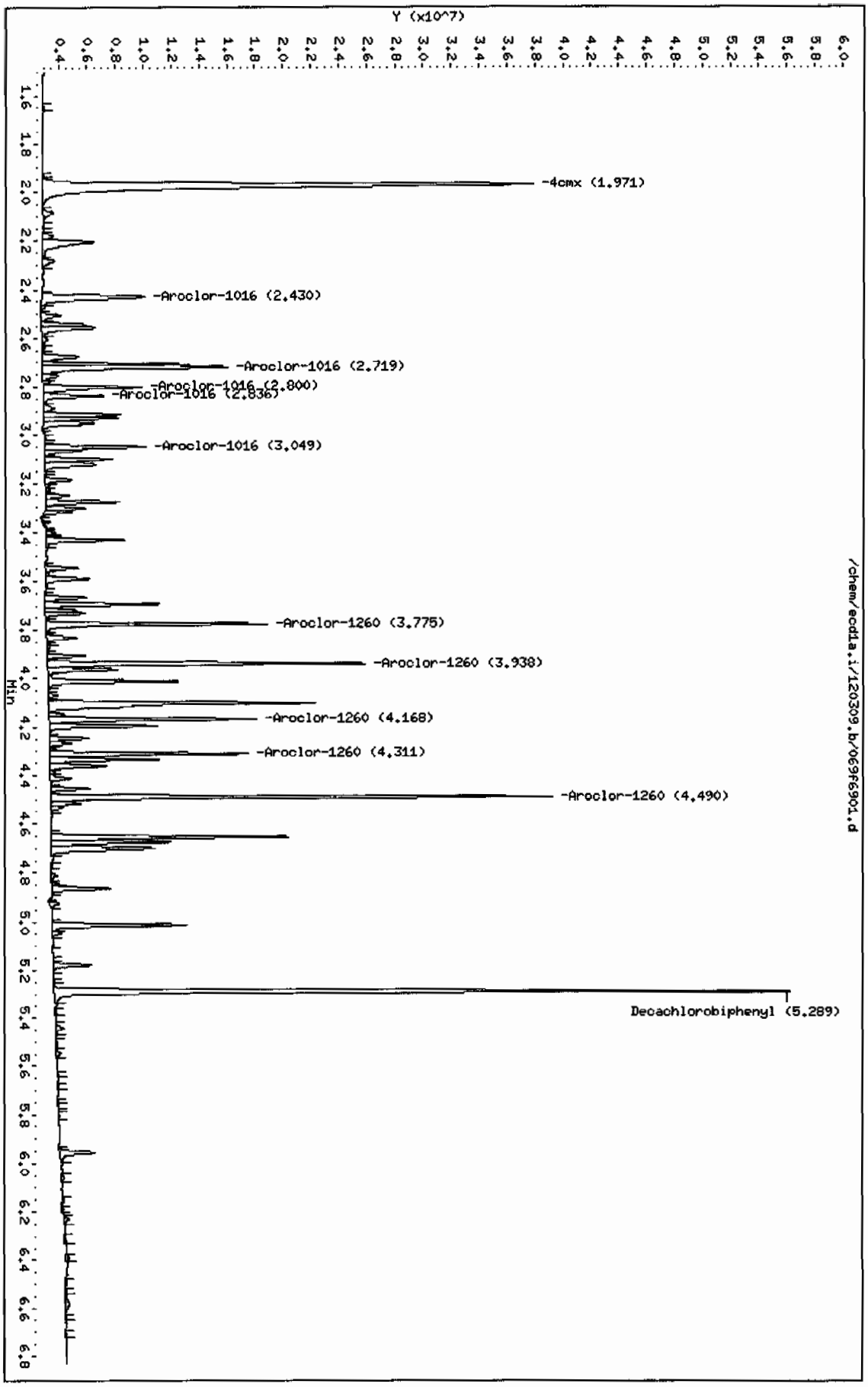

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/069b6901.d
Lab Smp Id: 1201982161 Client Smp ID: RE03-09-14246MS
Inj Date : 03-DEC-2009 17:31
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982161|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 69 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	7.96850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40540810	109.187	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	31101081	103.471	3.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	8214397	487.198	17.6	80.00- 120.00	100.00(M)
3.295	3.297	-0.002	6566883	569.270	20.6	43.96- 83.96	79.94
3.421	3.422	-0.001	3933817	565.916	20.5	18.54- 58.54	47.89
3.587	3.587	0.000	5151480	561.128	20.3	31.42- 71.42	62.71

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.664	3.663	0.001	3636479	427.375	15.4	28.24- 68.24	55.22
Average of Peak Concentrations =					18.9		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	10276750	568.816	20.6	80.00- 120.00	100.00
4.479	4.479	0.000	12855408	580.195	21.0	106.83- 146.83	125.09
4.745	4.746	-0.001	9691711	548.244	19.8	80.57- 120.57	94.31
4.919	4.920	-0.001	9984195	580.008	21.0	79.44- 119.44	97.15
5.066	5.067	-0.001	22992404	595.209	21.5	208.39- 248.39	223.73
Average of Peak Concentrations =					20.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120309.b/069b6901.d

Date : 03-DEC-2009 17:31

Client ID: RE03-09-14246MS

Sample Info: |120198216|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

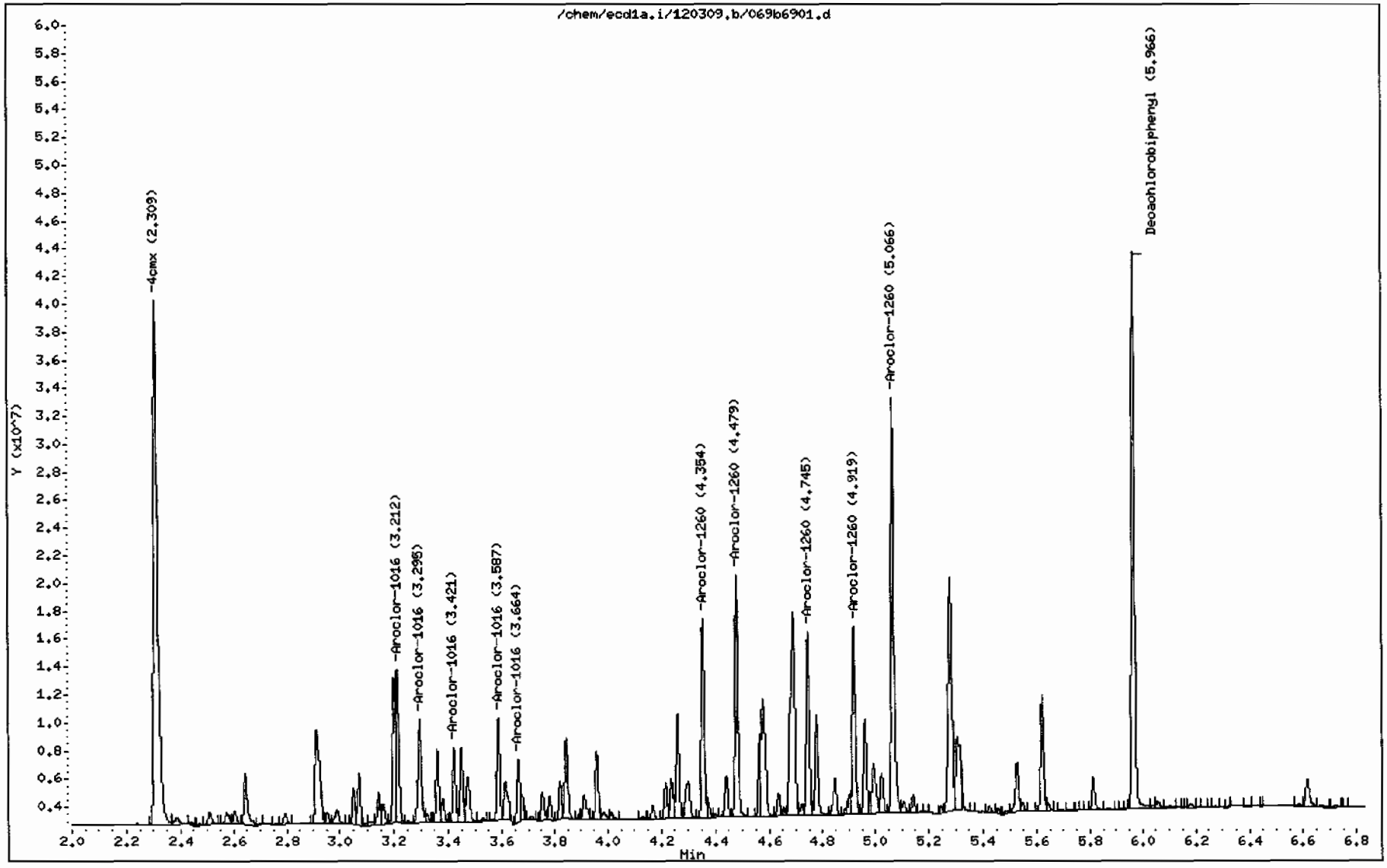

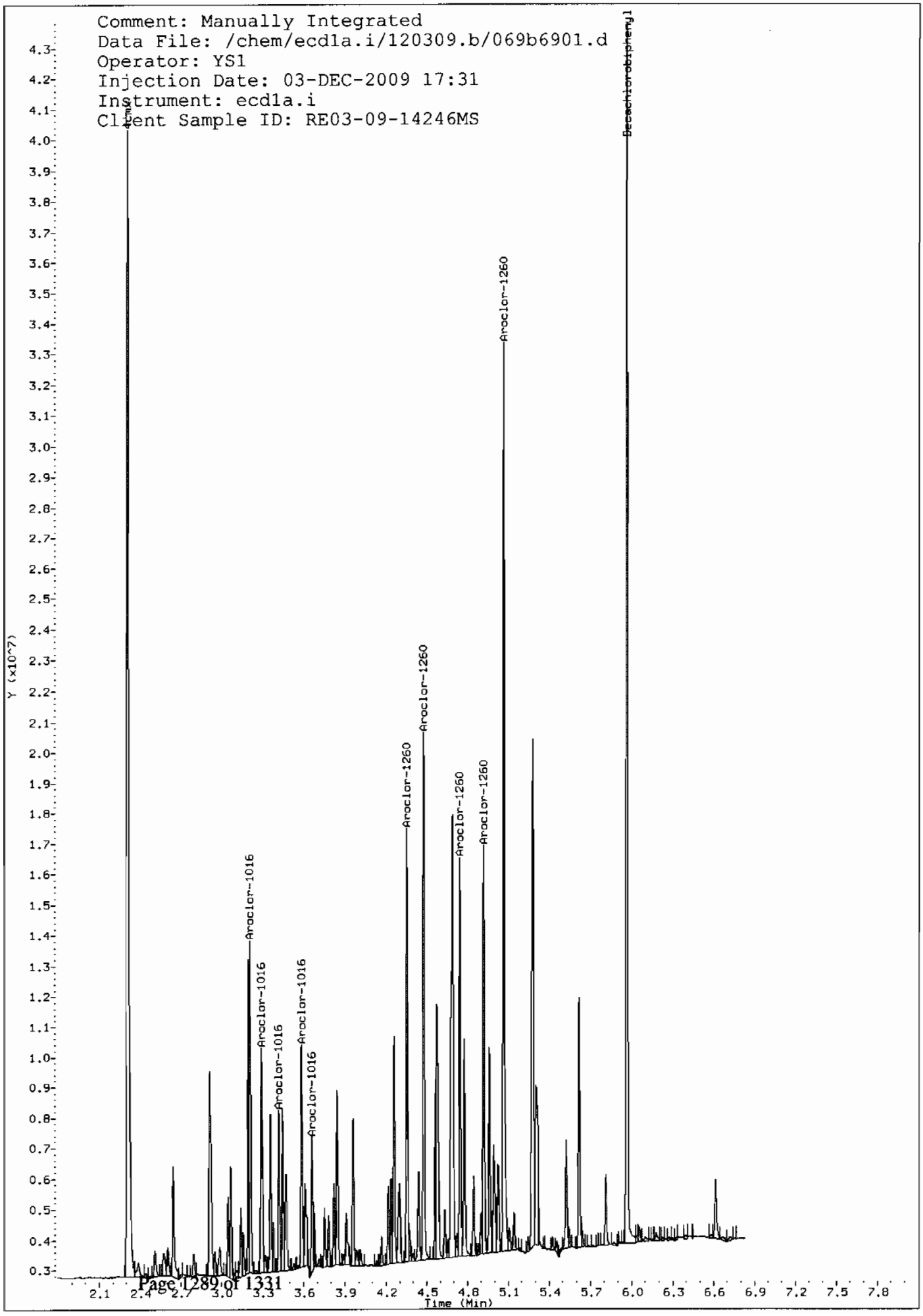
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120309.b/069b6901.d
Operator: YS1
Injection Date: 03-DEC-2009 17:31
Instrument: ecd1a.i
Client Sample ID: RE03-09-14246MS
Tcmx
Decachlorobiphenyl
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
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Y (x10^7)
Time (Min)

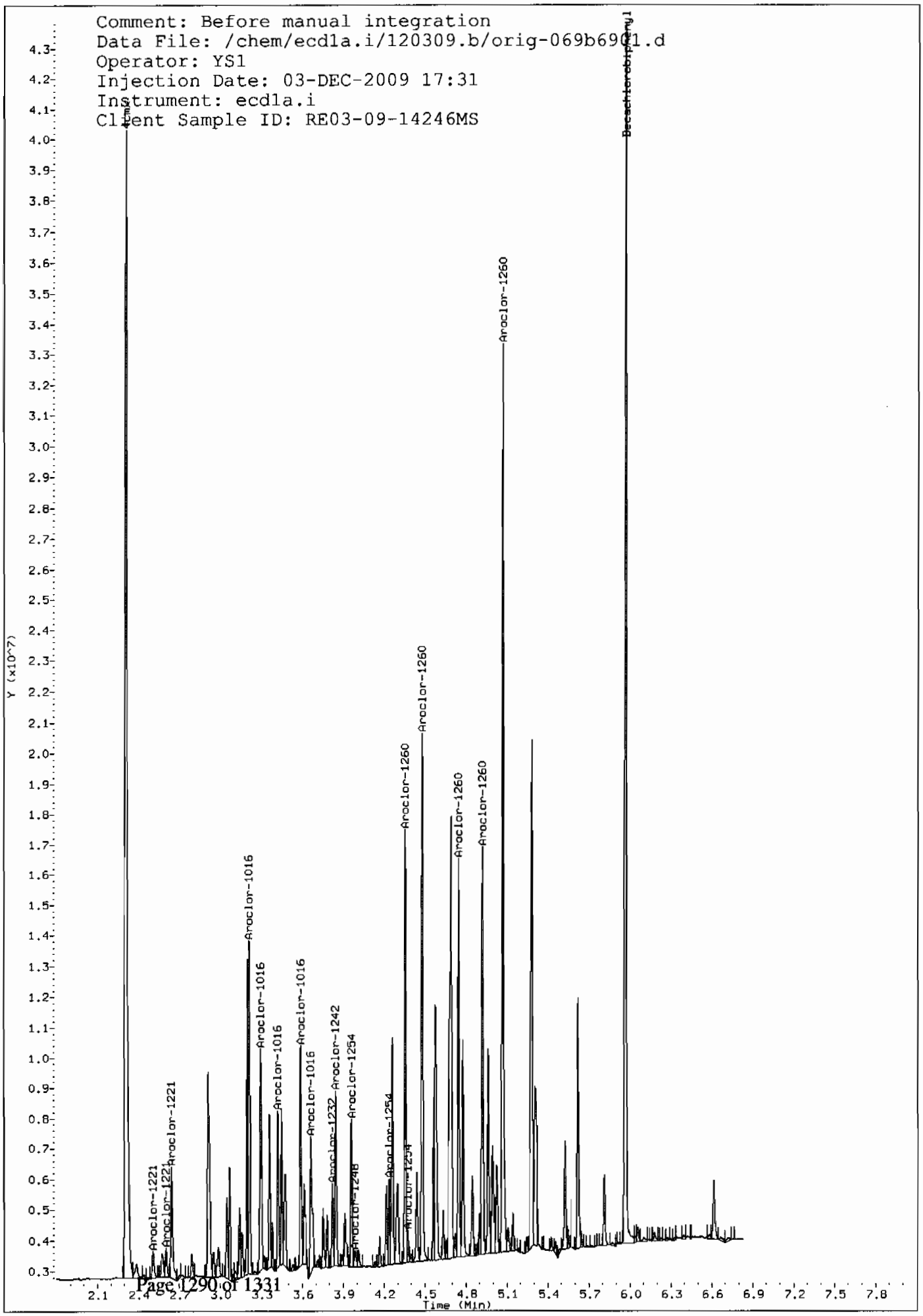
Comment: Before manual integration
Data File: /chem/ecd1a.i/120309.b/orig-069b69C1.d
Operator: YS1
Injection Date: 03-DEC-2009 17:31
Instrument: ecd1a.i
Client Sample ID: RE03-09-14246MS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1016
Aroclor-1221
Aroclor-1232
Aroclor-1242
Aroclor-1254
Aroclor-1248
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–644	**Date Collected:**	11/19/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982162	**Date Received:**	11/21/2009 09:00	**%Moisture:**	8
Client Sample:	QC for batch 927091	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–14246MSD	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927093	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/03/2009 17:44	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/30/2009 11:38	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		15.8	ug/kg	1.20	3.61	1
11104–28–2	Aroclor–1221	U	3.61	ug/kg	1.20	3.61	1
11141–16–5	Aroclor–1232	U	3.61	ug/kg	1.20	3.61	1
53469–21–9	Aroclor–1242	U	3.61	ug/kg	1.20	3.61	1
12672–29–6	Aroclor–1248	U	3.61	ug/kg	1.20	3.61	1
11097–69–1	Aroclor–1254	U	3.61	ug/kg	1.20	3.61	1
11096–82–5	Aroclor–1260		17.6	ug/kg	1.20	3.61	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/070f7001.d
Lab Smp Id: 1201982162 Client Smp ID: RE03-09-14246MSD
Inj Date : 03-DEC-2009 17:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982162|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 70 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	7.96850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.972	-0.001	46817135	104.907	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.290	-0.002	40164215	98.2596	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.431	-0.002	8550656	500.351	18.1	80.00- 120.00	100.00
2.718	2.720	-0.002	10613503	499.770	18.1	107.58- 147.58	124.13
2.800	2.801	-0.001	5454129	388.681	14.0	59.73- 99.73	63.79
2.836	2.839	-0.003	2805786	333.361	12.0	28.59- 68.59	32.81

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.050	-0.002	5069034	469.639	17.0	41.65- 81.65	59.28
Average of Peak Concentrations =					15.8		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.777	-0.002	10431959	486.397	17.6	80.00- 120.00	100.00
3.938	3.939	-0.001	15829793	491.683	17.8	132.51- 172.51	151.74
4.167	4.169	-0.002	9850451	481.506	17.4	75.52- 115.52	94.43
4.310	4.312	-0.002	9494273	472.781	17.1	77.42- 117.42	91.01
4.490	4.492	-0.002	23384830	505.083	18.2	206.60- 246.60	224.17
Average of Peak Concentrations =					17.6		

Data File: /chem/ecd1a.i/120309.b/070f7001.d
Date : 03-DEC-2009 17:44
Client ID: RE03-09-14246MSD
Sample Info: |120198216211|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

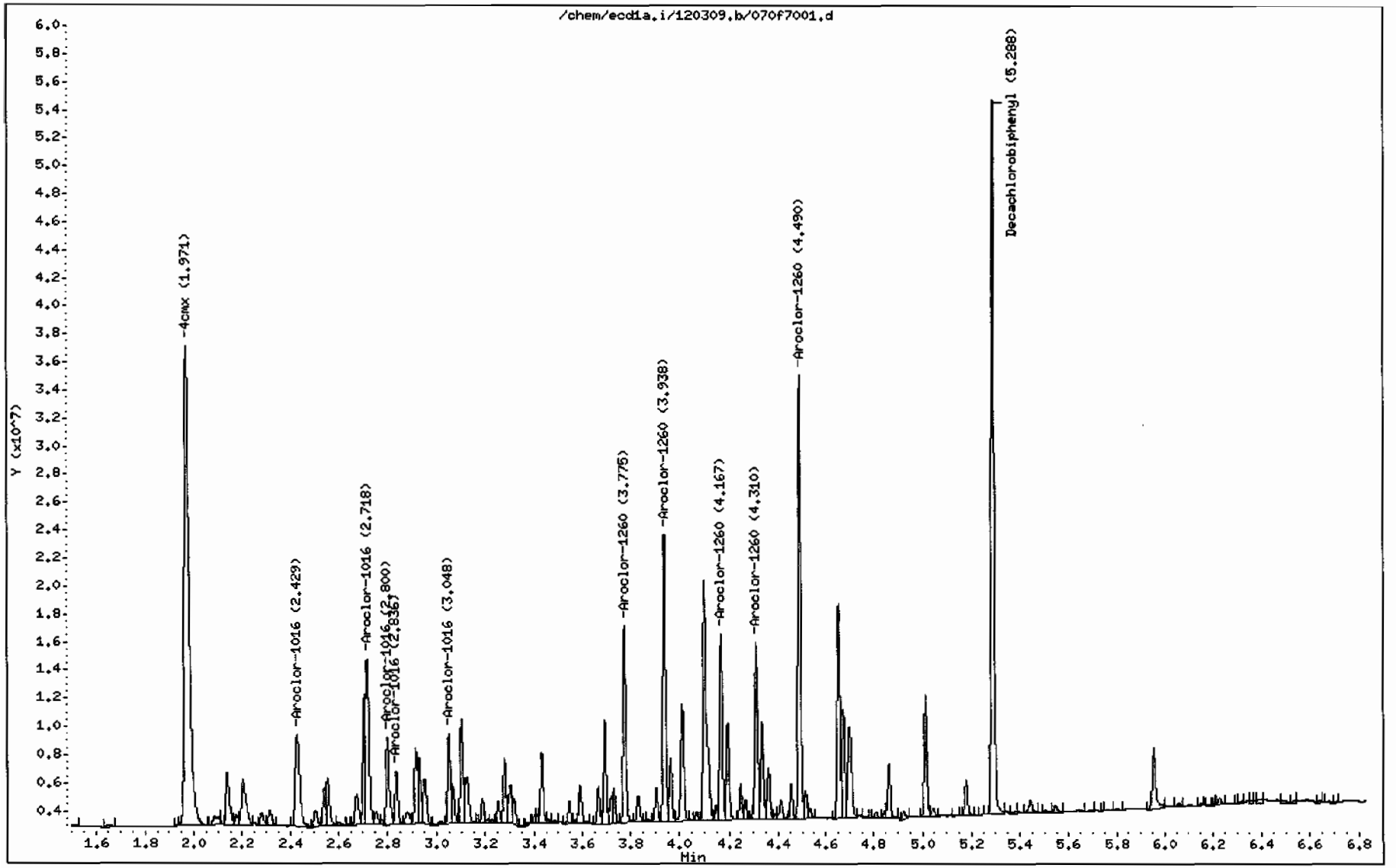

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120309.b/070b7001.d
Lab Smp Id: 1201982162 Client Smp ID: RE03-09-14246MSD
Inj Date : 03-DEC-2009 17:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982162|1|
Misc Info : |ECD82P_1SF|927093|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120309.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 05:42 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 70 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-644.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	7.96850	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	39650858	106.790	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	29769885	99.0420	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.212	0.000	7666161	454.682	16.4	80.00- 120.00	100.00(M)
3.295	3.297	-0.002	6316781	547.589	19.8	43.96- 83.96	82.40
3.421	3.422	-0.001	3548119	510.430	18.4	18.54- 58.54	46.28
3.587	3.587	0.000	4739708	516.276	18.7	31.42- 71.42	61.83

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.663	3.663	0.000	3287712	386.387	14.0	28.24- 68.24	54.63
Average of Peak Concentrations =					17.5		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.355	-0.001	9255704	512.302	18.5	80.00- 120.00	100.00
4.479	4.479	0.000	11539308	520.797	18.8	106.83- 146.83	124.67
4.745	4.746	-0.001	8953581	506.490	18.3	80.57- 120.57	96.74
4.919	4.920	-0.001	8858000	514.584	18.6	79.44- 119.44	95.70
5.067	5.067	0.000	20500270	530.695	19.2	208.39- 248.39	221.49
Average of Peak Concentrations =					18.7		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120309.b/070b7001.d
Date : 03-DEC-2009 17:44
Client ID: REO3-09-14246MSD
Sample Info: 1120199216211
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

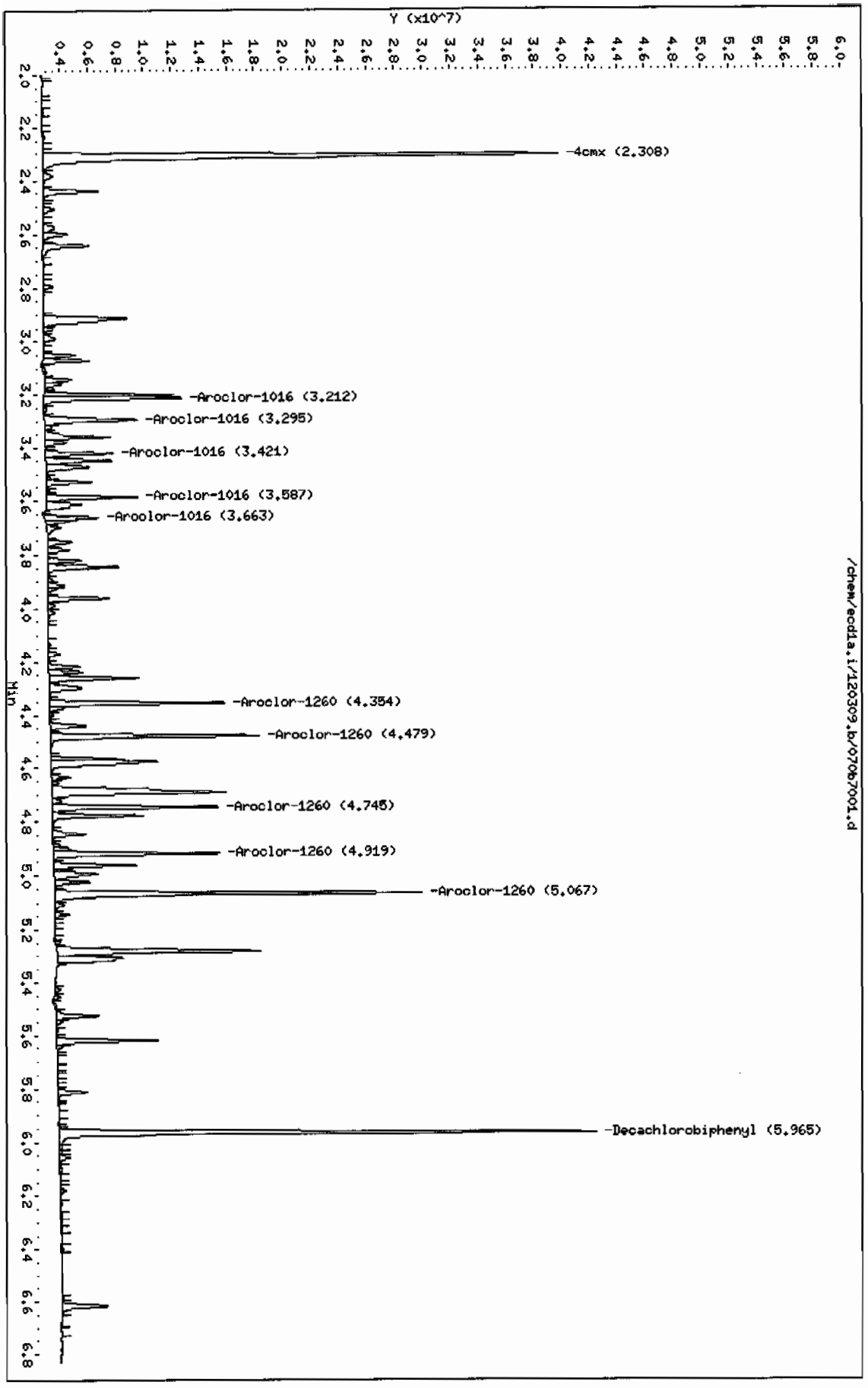

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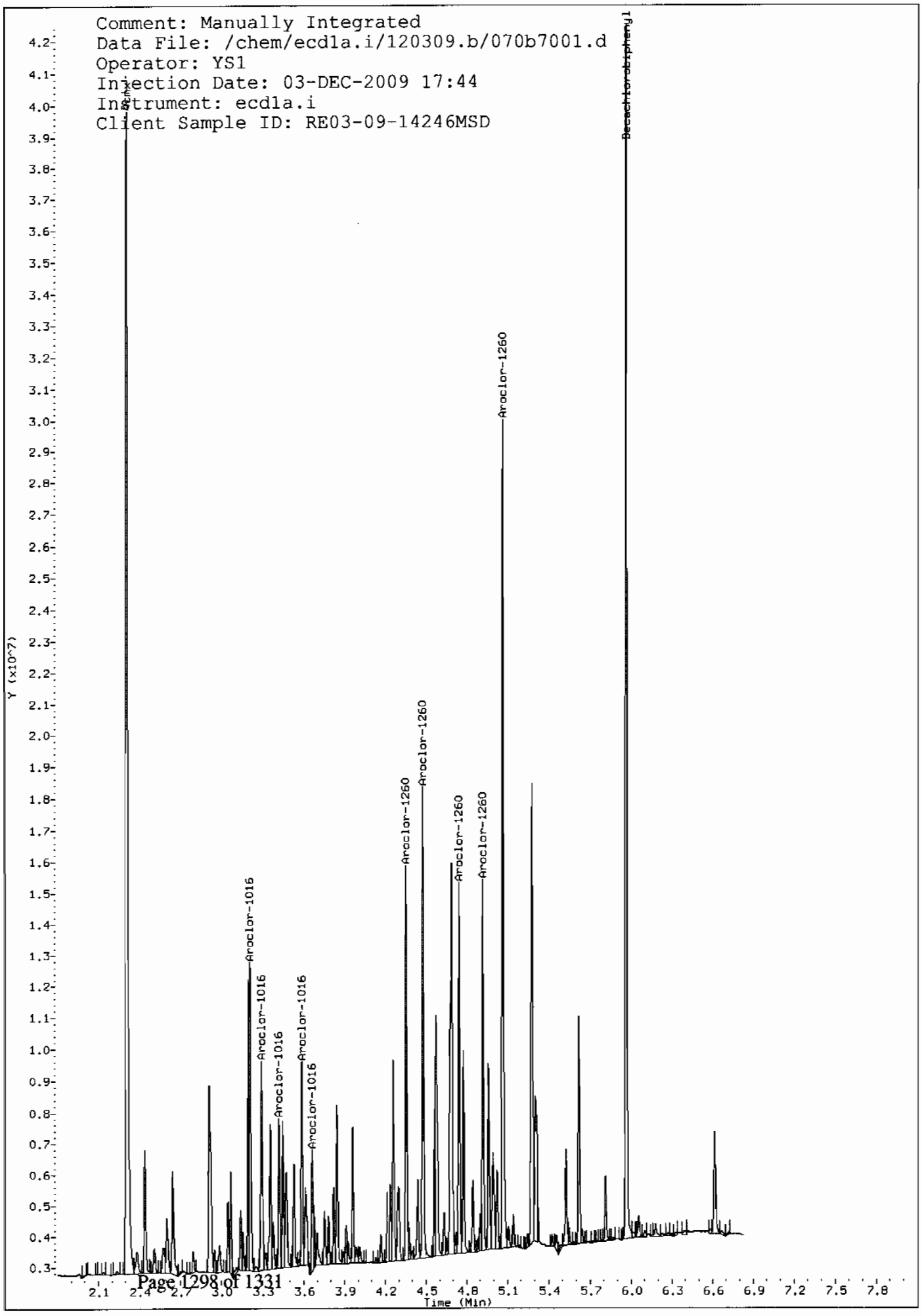
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120309.b/070b7001.d
Operator: YS1
Injection Date: 03-DEC-2009 17:44
Instrument: ecd1a.i
Client Sample ID: RE03-09-14246MSD
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
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Aroclor-1016
Aroclor-1016
Y (x10^7)
Time (Min)

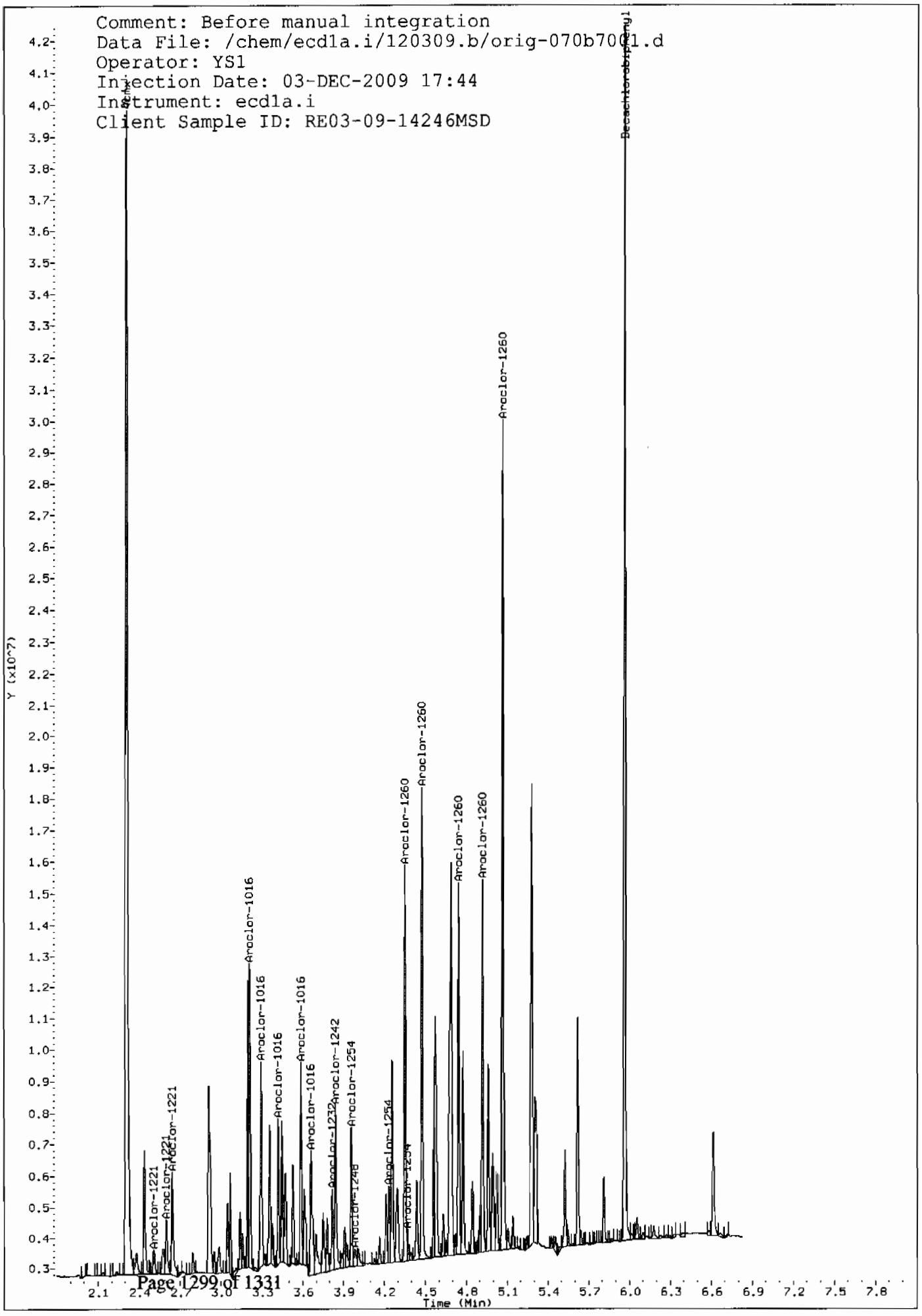
Comment: Before manual integration
Data File: /chem/ecd1a.i/120309.b/orig-070b70[illegible]1.d
Operator: YS1
Injection Date: 03-DEC-2009 17:44
Instrument: ecd1a.i
Client Sample ID: RE03-09-14246MSD
Decachlorobiphenyl
Aroclor-1260
Aroclor-1016
Aroclor-1221
Aroclor-1242
Aroclor-1254
Y (x10^7)
Time (Min)

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 11/11/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ600
ALUMINA LOT 1193715-A
COPPER LOT 091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/111009b.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	10-NOV-2009 08:02		111009b	1.0		CLEAN
002f0201.d	WAR091102-60	YS1	10-NOV-2009 08:14		111009b	1.0		DUSE RE-I-CAL
003f0301.d	WAR091102-54	YS1	10-NOV-2009 08:25		111009b	1.0		DUSE RE-I-CAL
004f0401.d	WAR091102-42	YS1	10-NOV-2009 08:35		111009b	1.0		DUSE RE-I-CAL
005f0501.d	WAR091027-48	YS1	10-NOV-2009 08:46		111009b	1.0		DUSE RE-I-CAL
006f0601.d	WAR090930-32	YS1	10-NOV-2009 08:56		111009b	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	10-NOV-2009 09:07		111009b	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	10-NOV-2009 09:17		111009b	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	10-NOV-2009 09:28		111009b	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	YS1	10-NOV-2009 09:38		111009b	1.0		DDT ANALOG STANDARD
011f1101.d	WAR091110-01 60	YS1	10-NOV-2009 09:49		111009b	1.0		AR1660 I-CAL LEVEL 1
012f1201.d	WAR091110-02 60	YS1	10-NOV-2009 09:59		111009b	1.0		AR1660 I-CAL LEVEL 2
013f1301.d	WAR091110-04 60	YS1	10-NOV-2009 10:10		111009b	1.0		AR1660 I-CAL LEVEL 4
014f1401.d	WAR091110-03 60	YS1	10-NOV-2009 10:21		111009b	1.0		AR1660 I-CAL LEVEL 3
015f1501.d	IAR091102-01	YS1	10-NOV-2009 10:31		111009b	1.0		AR1660 I-CAL LEVEL 5

Instrument Batch: /chem/ecd1a.i/111009b.b Page: 1

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments |

016f1601.d	WAR091102-60	YS1	10-NOV-2009 10:42		111009b	1.0		PASSED ON BOTH COLUMNS
017f1701.d	WAR091110-05 54	YS1	10-NOV-2009 10:52		111009b	1.0		AR1254 I-CAL LEVEL 1
018f1801.d	WAR091110-06 54	YS1	10-NOV-2009 11:03		111009b	1.0		AR1254 I-CAL LEVEL 2
019f1901.d	WAR091110-07 54	YS1	10-NOV-2009 11:13		111009b	1.0		AR1254 I-CAL LEVEL 3
020f2001.d	WAR091110-08 54	YS1	10-NOV-2009 11:24		111009b	1.0		AR1254 I-CAL LEVEL 4
021f2101.d	IAR091027-01	YS1	10-NOV-2009 11:34		111009b	1.0		AR1254 I-CAL LEVEL 5
022f2201.d	WAR091102-54	YS1	10-NOV-2009 11:45		111009b	1.0		PASSED ON BOTH COLUMNS
023f2301.d	WAR091110-09 42	YS1	10-NOV-2009 11:55		111009b	1.0		AR1242 I-CAL LEVEL 1
024f2401.d	WAR091110-10 42	YS1	10-NOV-2009 12:06		111009b	1.0		AR1242 I-CAL LEVEL 2
025f2501.d	WAR091110-11 42	YS1	10-NOV-2009 12:17		111009b	1.0		AR1242 I-CAL LEVEL 3
026f2601.d	WAR091110-12 42	YS1	10-NOV-2009 12:27		111009b	1.0		AR1242 I-CAL LEVEL 4
027f2701.d	IAR090914-01	YS1	10-NOV-2009 12:38		111009b	1.0		AR1242 I-CAL LEVEL 5
028f2801.d	WAR091102-42	YS1	10-NOV-2009 12:48		111009b	1.0		PASSED ON BOTH COLUMNS
029f2901.d	WAR091110-13 48	YS1	10-NOV-2009 12:59		111009b	1.0		AR1248 I-CAL LEVEL 1
030f3001.d	WAR091110-14 48	YS1	10-NOV-2009 13:09		111009b	1.0		AR1248 I-CAL LEVEL 2
031f3101.d	WAR091110-15 48	YS1	10-NOV-2009 13:20		111009b	1.0		AR1248 I-CAL LEVEL 3
032f3201.d	WAR091110-16 48	YS1	10-NOV-2009 13:30		111009b	1.0		AR1248 I-CAL LEVEL 4
033f3301.d	IAR091027-02	YS1	10-NOV-2009 13:41		111009b	1.0		AR1248 I-CAL LEVEL 5
034f3401.d	WAR091027-48	YS1	10-NOV-2009 13:51		111009b	1.0		PASSED ON BOTH COLUMNS
035f3501.d	WAR090916-99 02	YS1	10-NOV-2009 14:02		111009b	1.0		CLEAN

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201966793	YS1	10-NOV-2009 14:12	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	1201966796	YS1	10-NOV-2009 14:23	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	1201966797	YS1	10-NOV-2009 14:33	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	240542001	YS1	10-NOV-2009 14:44	920460	EUI-7374	25.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	240610001	YS1	10-NOV-2009 14:57	920460	EUI-7377	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201966794	YS1	10-NOV-2009 15:09	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1201966795	YS1	10-NOV-2009 15:22	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	WAR091102-60 02	YS1	10-NOV-2009 15:34		111009b	1.0		PASSED ON BOTH COLUMNS
044f4401.d	WAR090916-99 03	YS1	10-NOV-2009 15:45		111009b	1.0		CLEAN
045f4501.d	1201966802	YS1	10-NOV-2009 15:55	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1201966803	YS1	10-NOV-2009 16:08	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	240151001	YS1	10-NOV-2009 16:20	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	1201966804	YS1	10-NOV-2009 16:33	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201966805	YS1	10-NOV-2009 16:45	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	240151002	YS1	10-NOV-2009 16:58	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	240151003	YS1	10-NOV-2009 17:11	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	240151004	YS1	10-NOV-2009 17:23	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	240151005	YS1	10-NOV-2009 17:36	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	240151006	YS1	10-NOV-2009 17:48	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	WAR091102-60 03	YS1	10-NOV-2009 18:01		111009b	1.0		PASSED ON BOTH COLUMNS

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 04	YS1	10-NOV-2009 18:12		111009b	1.0		CLEAN
057f5701.d	240151007	YS1	10-NOV-2009 18:22	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	240151008	YS1	10-NOV-2009 18:35	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	240151009	YS1	10-NOV-2009 18:47	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	240151010	YS1	10-NOV-2009 19:00	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	240151011	YS1	10-NOV-2009 19:12	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	240151012	YS1	10-NOV-2009 19:25	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	240151013	YS1	10-NOV-2009 19:38	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	240151014	YS1	10-NOV-2009 19:50	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	240151015	YS1	10-NOV-2009 20:03	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	240151016	YS1	10-NOV-2009 20:15	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	WAR091102-60 04	YS1	10-NOV-2009 20:28		111009b	1.0		PASSED ON BOTH COLUMNS
068f6801.d	WAR090916-99 05	YS1	10-NOV-2009 20:39		111009b	1.0		CLEAN
069f6901.d	240151017	YS1	10-NOV-2009 20:49	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	240151018	YS1	10-NOV-2009 21:02	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	240151019	YS1	10-NOV-2009 21:14	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	240151020	YS1	10-NOV-2009 21:27	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091102-60 05	YS1	10-NOV-2009 21:40		111009b	1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 06	YS1	10-NOV-2009 21:50		111009b	1.0		CLEAN
075f7501.d	1201967438	YS1	10-NOV-2009 22:00	920740	111009b	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201967439	YS1	10-NOV-2009 22:13	920740	240688	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	240688001	YS1	10-NOV-2009 22:26	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	1201967440	YS1	10-NOV-2009 22:38	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	1201967441	YS1	10-NOV-2009 22:51	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	240688002	YS1	10-NOV-2009 23:04	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	WAR091102-60 06	YS1	10-NOV-2009 23:16		111009b	1.0		PASSED ON BOTH COLUMNS
082f8201.d	WAR090916-99 07	YS1	10-NOV-2009 23:27		111009b	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 12/04/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ454
ALUMINA LOT 1230997-A
COPPER LOT 207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time, BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/120309.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	03-DEC-2009 04:06		120309	1.0		CLEAN
002f0201.d	WAR091102-60 01	YS1	03-DEC-2009 04:16		120309	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR091102-54	YS1	03-DEC-2009 04:27		120309	1.0		PASSED ON BOTH COLUMNS
004f0401.d	WAR091102-42	YS1	03-DEC-2009 04:37		120309	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091027-48	YS1	03-DEC-2009 04:48		120309	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR090930-32	YS1	03-DEC-2009 04:58		120309	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	03-DEC-2009 05:09		120309	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	03-DEC-2009 05:19		120309	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	03-DEC-2009 05:30		120309	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	YS1	03-DEC-2009 05:40		120309	1.0		DDT ANALOG STANDARD
011f1101.d	WAR090916-99 02	YS1	03-DEC-2009 05:51		120309	1.0		CLEAN
012f1201.d	1201980403	YS1	03-DEC-2009 06:01	926234	10-487	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
013f1301.d	1201980406	YS1	03-DEC-2009 06:12	926234	10-487	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	241098001	YS1	03-DEC-2009 06:23	926234	10-487	1.0	LANL	DUSE RR 5X
015f1501.d	241098002	YS1	03-DEC-2009 06:35	926234	10-487	1.0	LANL	DUSE RR

Instrument Batch: /chem/ecd1a.i/120309.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	241098003	YS1	03-DEC-2009 06:48	926234	10-487	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	1201980404	YS1	03-DEC-2009 07:00	926234	10-487	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
018f1801.d	1201980405	YS1	03-DEC-2009 07:13	926234	10-487	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d	241098004	YS1	03-DEC-2009 07:26	926234	10-487	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	241098005	YS1	03-DEC-2009 07:38	926234	10-487	1.0	LANL	DUSE RR 5X
021f2101.d	241098006	YS1	03-DEC-2009 07:51	926234	10-487	5.0	LANL	DUSE RR
022f2201.d	WAR091102-60 02	YS1	03-DEC-2009 08:03		120309	1.0		PASSED ON BOTH COLUMNS
023f2301.d	WAR090916-99 03	YS1	03-DEC-2009 08:14		120309	1.0		CLEAN
024f2401.d	241098007	YS1	03-DEC-2009 08:25	926234	10-487	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	241098008	YS1	03-DEC-2009 08:37	926234	10-487	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	241098010	YS1	03-DEC-2009 08:50	926234	10-487	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	241098011	YS1	03-DEC-2009 09:02	926234	10-487	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	241098012	YS1	03-DEC-2009 09:15	926234	10-487	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	241098013	YS1	03-DEC-2009 09:28	926234	10-487	20.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	241098014	YS1	03-DEC-2009 09:40	926234	10-487	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	241098015	YS1	03-DEC-2009 09:53	926234	10-487	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	241107001	YS1	03-DEC-2009 10:05	926234	10-484	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	241107002	YS1	03-DEC-2009 10:18	926234	10-484	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
034f3401.d	WAR091102-60 03	YS1	03-DEC-2009 10:31		120309	1.0		PASSED ON BOTH COLUMNS
035f3501.d	WAR090916-99 04	YS1	03-DEC-2009 10:41		120309	1.0		CLEAN

Instrument Batch: /chem/ecd1a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241107003	YS1	03-DEC-2009 10:52	926234	10-484	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	241107004	YS1	03-DEC-2009 11:04	926234	10-484	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	241107006	YS1	03-DEC-2009 11:17	926234	10-484	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	241098001	YS1	03-DEC-2009 11:30	926234	10-487	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	241098002	YS1	03-DEC-2009 11:42	926234	10-487	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	241098005	YS1	03-DEC-2009 11:55	926234	10-487		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	241098006	YS1	03-DEC-2009 12:07	926234	10-487		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	WAR091102-60 04	YS1	03-DEC-2009 12:20		120309		1.0		PASSED ON BOTH COLUMNS
044f4401.d	WAR090916-99 05	YS1	03-DEC-2009 12:30		120309		1.0		CLEAN
045f4501.d	1201984919	YS1	03-DEC-2009 12:41	928274	120309		1.0	QC A	DUSE
046f4601.d	1201984920	YS1	03-DEC-2009 12:51	928274	120309		1.0	QC A	DUSE HIGH
047f4701.d	241763005	YS1	03-DEC-2009 13:02	928274	241763		5.0	IMPA	DUSE HIGH
048f4801.d	1201984921	YS1	03-DEC-2009 13:15	928274	3005MS)		5.0	QC A	DUSE
049f4901.d	1201984922	YS1	03-DEC-2009 13:27	928274	3005MSD)		5.0	QC A	DUSE
050f5001.d	WAR091102-60 05	YS1	03-DEC-2009 13:40		120309		1.0		PASSED ON BOTH COLUMNS
051f5101.d	WAR090916-99 06	YS1	03-DEC-2009 13:50		120309		1.0		CLEAN
052f5201.d	1201982160	YS1	03-DEC-2009 14:01	927093	10-644		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	1201982163	YS1	03-DEC-2009 14:11	927093	10-644		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	241615001	YS1	03-DEC-2009 14:22	927093	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	241615002	YS1	03-DEC-2009 14:35	927093	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241615003	YS1	03-DEC-2009 14:47	927093	10-644	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	241615004	YS1	03-DEC-2009 15:00	927093	10-644	1.0	LANL	DUSE RE HAD HITS
058f5801.d	241615005	YS1	03-DEC-2009 15:12	927093	10-644	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	241615006	YS1	03-DEC-2009 15:25	927093	10-644	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	241615007	YS1	03-DEC-2009 15:38	927093	10-644	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	241615008	YS1	03-DEC-2009 15:50	927093	10-644	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	WAR091102-60 06	YS1	03-DEC-2009 16:03		120309	1.0		PASSED ON BOTH COLUMNS
063f6301.d	WAR090916-99 07	YS1	03-DEC-2009 16:16		120309	1.0		CLEAN
064f6401.d	241615009	YS1	03-DEC-2009 16:28	927093	10-644	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	241615010	YS1	03-DEC-2009 16:41	927093	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	241615011	YS1	03-DEC-2009 16:54		10-644		1.0		UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	241615012	YS1	03-DEC-2009 17:06	927093	10-644		1.0	LANL	DUSE RE 4CMX LOW
068f6801.d	241615013	YS1	03-DEC-2009 17:19	927093	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	1201982161	YS1	03-DEC-2009 17:31	927093	10-644		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	1201982162	YS1	03-DEC-2009 17:44	927093	10-644		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	241615014	YS1	03-DEC-2009 17:57	927093	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	241615015	YS1	03-DEC-2009 18:09	927093	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	241615016	YS1	03-DEC-2009 18:22	927093	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
074f7401.d	WAR091102-60 07	YS1	03-DEC-2009 18:34		120309		1.0		PASSED ON BOTH COLUMNS
075f7501.d	WAR090916-99 08	YS1	03-DEC-2009 18:47		120309		1.0		CLEAN

Instrument Batch: /chem/ecd1a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241615018	YS1	03-DEC-2009 19:00	927093	10-644	1.0	LANL	DUSE RE HAD HITS
077f7701.d	241615020	YS1	03-DEC-2009 19:12	927093	10-644	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	241697003	YS1	03-DEC-2009 19:25	927093	10-648	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	241697004	YS1	03-DEC-2009 19:37	927093	10-648	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	WAR091102-60 08	YS1	03-DEC-2009 19:50		120309	1.0		PASSED ON BOTH COLUMNS
081f8101.d	WAR090916-99 09	YS1	03-DEC-2009 20:03		120309	1.0		CLEAN
082f8201.d	1201984433	YS1	03-DEC-2009 20:15	928091	120309	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	1201984434	YS1	03-DEC-2009 20:28	928091	241726	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	1201984435	YS1	03-DEC-2009 20:41	928091	241726	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	241726001	YS1	03-DEC-2009 20:53	928091	241726	1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
086f8601.d	241726002	YS1	03-DEC-2009 21:06	928091	241726	1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
087f8701.d	241726003	YS1	03-DEC-2009 21:18	928091	241726	1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	241726004	YS1	03-DEC-2009 21:31	928091	241726	1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
089f8901.d	241726005	YS1	03-DEC-2009 21:44	928091	241726	1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER

090f9001.d	241726006	YS1	03-DEC-2009 21:56	928091	241726		1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
091f9101.d	241726007	YS1	03-DEC-2009 22:09	928091	241726		1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
092f9201.d	WAR091102-60 09	YS1	03-DEC-2009 22:21		120309		1.0		PASSED ON BOTH COLUMNS
093f9301.d	WAR090916-99 10	YS1	03-DEC-2009 22:34		120309		1.0		CLEAN
094f9401.d	241726008	YS1	03-DEC-2009 22:47	928091	241726		1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
095f9501.d	241726009	YS1	03-DEC-2009 22:59	928091	241726		1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
096f9601.d	241726010	YS1	03-DEC-2009 23:12	928091	241726		1.0	HTSI	UPLOAD BOTH COLUMNS, USE HIGHER
097f9701.d	WAR091102-60 10	YS1	03-DEC-2009 23:25		120309		1.0		PASSED ON BOTH COLUMNS
098f9801.d	1660screen1	YS1	03-DEC-2009 23:37		120309		1.0		SCREEN
099f9901.d	1660screen2	YS1	03-DEC-2009 23:50		120309		1.0		SCREEN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 12/07/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ454
ALUMINA LOT 1230997-A
COPPER LOT 207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/120509.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	05-DEC-2009 09:05		120509	1.0		CLEAN
002f0201.d	WAR091119-60 01	YS1	05-DEC-2009 09:15		120509	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR091102-54	YS1	05-DEC-2009 09:26		120509	1.0		PASSED ON BOTH COLUMNS
004f0401.d	WAR091102-42	YS1	05-DEC-2009 09:37		120509	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091027-48	YS1	05-DEC-2009 09:47		120509	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR090930-32	YS1	05-DEC-2009 09:58		120509	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	05-DEC-2009 10:08		120509	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	05-DEC-2009 10:19		120509	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	05-DEC-2009 10:29		120509	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	YS1	05-DEC-2009 10:40		120509	1.0		DDT ANALOG STANDARD
011f1101.d	WAR090916-99 02	YS1	05-DEC-2009 10:50		120509	1.0		CLEAN
012f1201.d	1201987313	YS1	05-DEC-2009 11:01	929255	EUI-73980	1.0	QC A	DUS RE THE SAMPLE
013f1301.d	1201987314	YS1	05-DEC-2009 11:11	929255	EUI-73980	1.0	QC A	DUSE
014f1401.d	1201987317	YS1	05-DEC-2009 11:22	929255	EUI-73980	1.0	QC A	DUSE DID NOT SPIKE AR1660
015f1501.d	241627001	YS1	05-DEC-2009 11:32	929255	EUI-73980	10000.0	CARE	DUSE

Instrument Batch: /chem/ecd1a.i/120509.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	1201987315	YS1	05-DEC-2009 11:45	929255	EUI-7398O	10000.0	QC A	DUSE
017f1701.d	1201987316	YS1	05-DEC-2009 11:57	929255	EUI-7398O	10000.0	QC A	DUSE
018f1801.d	WAR091119-60 02	YS1	05-DEC-2009 12:10		120509	1.0		PASSED ON BOTH COLUMNS
019f1901.d	WAR090916-99 03	YS1	05-DEC-2009 12:21		120509	1.0		CLEAN
020f2001.d	1201986775	YS1	05-DEC-2009 12:31	929041	EUI-7398F	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	1201986776	YS1	05-DEC-2009 12:41	929041	EUI-7398F	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	1201986779	YS1	05-DEC-2009 12:52	929041	EUI-7398F	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	241625001	YS1	05-DEC-2009 13:03	929041	EUI-7398F	500000.0	CARE	DUSE RR 100000X
024f2401.d	1201986777	YS1	05-DEC-2009 13:15	929041	25001MS)	500000.0	QC A	DUSE RR 100000X
025f2501.d	241625001	YS1	05-DEC-2009 13:28	929041	EUI-7398F	100000.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	1201986777	YS1	05-DEC-2009 13:40	929041	EUI-7398F	100000.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	1201986778	YS1	05-DEC-2009 13:53	929041	EUI-7398F	100000.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	WAR091119-60 03	YS1	05-DEC-2009 14:06		120509	1.0		PASSED ON BOTH COLUMNS
029f2901.d	WAR090916-99 04	YS1	05-DEC-2009 14:18		120509	1.0		CLEAN
030f3001.d	1201986777	YS1	05-DEC-2009 14:29	929041	25001MS)	1000.0	QC A	DUSE USE FILE 26
031f3101.d	1201987319	YS1	05-DEC-2009 14:41		120509	1.0		DUSE
032f3201.d	1201987320	YS1	05-DEC-2009 14:52	929259		1.0	QC A	DUSE LOS FAILED LOW
033f3301.d	1201987323	YS1	05-DEC-2009 15:02	929259	8	1.0	QC A	DUSE
034f3401.d	242107001	YS1	05-DEC-2009 15:13	929259	EUI-7411	10.0	CARE	DUSE RE
035f3501.d	1201987321	YS1	05-DEC-2009 15:26	929259	(242107001MS)	10.0	QC A	DUSE

Instrument Batch: /chem/ecd1a.i/120509.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201987322	YS1	05-DEC-2009 15:38	929259	(242107001MSD)	10.0	QC A	DUSE
037f3701.d	WAR091119-60 04	YS1	05-DEC-2009 15:51		120509	1.0		PASSED ON BOTH COLUMNS
038f3801.d	WAR090916-99 05	YS1	05-DEC-2009 16:01		120509	1.0		CLEAN
039f3901.d	1201987325	YS1	05-DEC-2009 16:12	929264	10-644	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	1201987326	YS1	05-DEC-2009 16:24	929264	10-644	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201987330	YS1	05-DEC-2009 16:37	929264	10-644		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	241033004	YS1	05-DEC-2009 16:49	929264	10-460		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	1201987327	YS1	05-DEC-2009 17:02	929264	10-460		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	1201987328	YS1	05-DEC-2009 17:15	929264	10-460		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	241615004	YS1	05-DEC-2009 17:27	929264	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	241615012	YS1	05-DEC-2009 17:40	929264	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	241615018	YS1	05-DEC-2009 17:52	929264	10-644		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	WAR091119-60 05	YS1	05-DEC-2009 18:05		120509		1.0		PASSED ON BOTH COLUMNS
049f4901.d	WAR090916-99 06	YS1	05-DEC-2009 18:18		120509		1.0		CLEAN
050f5001.d	1201986061	YS1	05-DEC-2009 18:30	928796	241856		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	1201986062	YS1	05-DEC-2009 18:43	928796	241856		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	241856001	YS1	05-DEC-2009 18:55	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	1201986063	YS1	05-DEC-2009 19:08	928796	241856		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	1201986064	YS1	05-DEC-2009 19:21	928796	241856		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	241856002	YS1	05-DEC-2009 19:33	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120509.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241856003	YS1	05-DEC-2009 19:46	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	241856004	YS1	05-DEC-2009 19:59	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	241856005	YS1	05-DEC-2009 20:11	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	241856006	YS1	05-DEC-2009 20:24	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	WAR091119-60 06	YS1	05-DEC-2009 20:36		120509		1.0		PASSED ON BOTH COLUMNS
061f6101.d	WAR090916-99 07	YS1	05-DEC-2009 20:49		120509		1.0		CLEAN
062f6201.d	241856007	YS1	05-DEC-2009 21:02	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	241856008	YS1	05-DEC-2009 21:14	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	241856009	YS1	05-DEC-2009 21:27	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	241856010	YS1	05-DEC-2009 21:40	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	241856011	YS1	05-DEC-2009 21:52	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	241856012	YS1	05-DEC-2009 22:05	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
068f6801.d	241856013	YS1	05-DEC-2009 22:17	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	241856014	YS1	05-DEC-2009 22:30	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	241856015	YS1	05-DEC-2009 22:43	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	241856016	YS1	05-DEC-2009 22:55	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	WAR091119-60 06	YS1	05-DEC-2009 23:08		120509		1.0		PASSED ON BOTH COLUMNS
073f7301.d	WAR090916-99 07	YS1	05-DEC-2009 23:20		120509		1.0		CLEAN
074f7401.d	241856017	YS1	05-DEC-2009 23:33	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
075f7501.d	241856018	YS1	05-DEC-2009 23:46	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120509.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241856019	YS1	05-DEC-2009 23:58	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	241856020	YS1	06-DEC-2009 00:11	928796	241856		1.0	NREA	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	WAR091119-60 07	YS1	06-DEC-2009 00:23		120509		1.0		PASSED ON BOTH COLUMNS
079f7901.d	WAR090916-99 08	YS1	06-DEC-2009 00:36		120509		1.0		CLEAN
080f8001.d	MB	YS1	06-DEC-2009 00:49		120509		1.0		SJ LCS STARTUPS
081f8101.d	LCS1	YS1	06-DEC-2009 01:01		120509		1.0		SJ LCS STARTUPS
082f8201.d	LCS2	YS1	06-DEC-2009 01:14		120509		1.0		SJ LCS STARTUPS
083f8301.d	LCS3	YS1	06-DEC-2009 01:26		120509		1.0		SJ LCS STARTUPS
084f8401.d	LCS4	YS1	06-DEC-2009 01:39		120509		1.0		SJ LCS STARTUPS
085f8501.d	LCS5	YS1	06-DEC-2009 01:52		120509		1.0		SJ LCS STARTUPS
086f8601.d	WAR091119-60 08	YS1	06-DEC-2009 02:04		120509		1.0		PASSED ON BOTH COLUMNS
087f8701.d	WAR090916-99 09	YS1	06-DEC-2009 02:17		120509		1.0		CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/043b4301.d
Lab Smp Id: 1201987327 Client Smp ID: RE03-09-13593MS
Inj Date : 05-DEC-2009 17:02
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987327|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 43 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-460.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.00710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	38043373	102.461	3.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.962	5.964	-0.002	34422811	114.522	4.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.209	3.212	-0.003	10613944	629.516	24.0	80.00- 120.00	100.00(M)
3.293	3.295	-0.002	6744215	584.642	22.3	43.24- 83.24	63.54
3.419	3.421	-0.002	5327603	766.426	29.2	17.73- 57.73	50.19
3.584	3.587	-0.003	5621073	612.279	23.4	30.67- 70.67	52.96

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.660	3.663	-0.003	5205709	611.798	23.3	36.89- 76.89	59.51
Average of Peak Concentrations =					24.4		
6 Aroclor-1254					CAS #: 11097-69-1		
3.419	3.421	-0.002	5327603	639.299	24.4	80.00- 120.00	100.00(M)
3.843	3.844	-0.001	8036163	537.421	20.5	162.85- 202.85	150.84
3.959	3.961	-0.002	7998868	488.348	18.6	181.45- 221.45	150.14
4.235	4.237	-0.002	10135978	457.697	17.4	262.02- 302.02	190.25
4.371	4.374	-0.003	4097568	242.843	9.3	191.66- 231.66	76.91
Average of Peak Concentrations =					18.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.351	4.353	-0.002	16797605	929.745	35.4	80.00- 120.00	100.00
4.476	4.478	-0.002	14813013	668.547	25.5	106.46- 146.46	88.19
4.742	4.744	-0.002	13651358	772.235	29.4	79.85- 119.85	81.27
4.916	4.918	-0.002	12876309	748.018	28.5	78.54- 118.54	76.66
5.063	5.065	-0.002	30541354	790.630	30.2	207.34- 247.34	181.82
Average of Peak Concentrations =					29.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120509.b/043b4301.d

Date : 05-DEC-2009 17:02

Client ID: RE03-09-13593MS

Sample Info: |1201987327|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

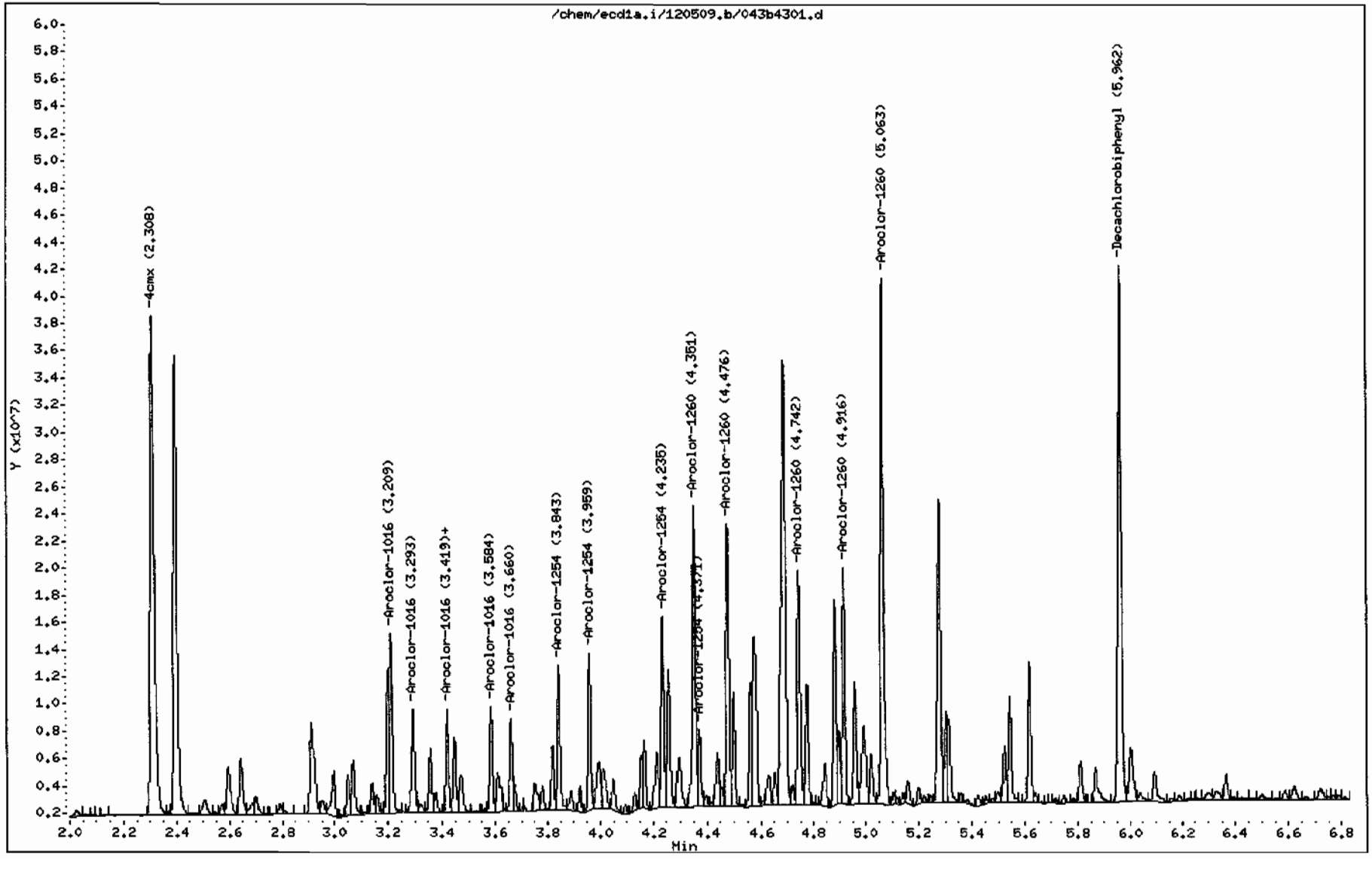

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/043f4301.d
Lab Smp Id: 1201987327 Client Smp ID: RE03-09-13593MS
Inj Date : 05-DEC-2009 17:02
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987327|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 43 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-460.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.00710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	46236713	103.606	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	38362921	93.8528	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	9589690	561.151	21.4	80.00- 120.00	100.00
2.717	2.720	-0.003	11598127	546.134	20.8	108.94- 148.94	120.94
2.799	2.801	-0.002	7299262	520.172	19.8	61.65- 101.65	76.12
2.836	2.838	-0.002	4327297	514.135	19.6	29.29- 69.29	45.12

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.047	3.049	-0.002	6673841	618.322	23.6	43.04- 83.04	69.59
Average of Peak Concentrations =					21.0		
6 Aroclor-1254					CAS #: 11097-69-1		
3.276	3.278	-0.002	8155475	532.103	20.3	80.00- 120.00	100.00
3.432	3.433	-0.001	7869380	375.983	14.3	115.73- 155.73	96.49
3.665	3.667	-0.002	10316651	389.077	14.8	159.19- 199.19	126.50
3.829	3.831	-0.002	6089254	298.503	11.4	114.13- 154.13	74.66
3.936	3.939	-0.003	25355944	1253.29	47.8	114.48- 154.48	310.91
Average of Peak Concentrations =					21.7		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	19443704	906.576	34.6	80.00- 120.00	100.00
3.936	3.938	-0.002	25355944	787.570	30.0	131.46- 171.46	130.41
4.166	4.168	-0.002	13622210	665.875	25.4	74.26- 114.26	70.06
4.309	4.311	-0.002	14365929	715.372	27.3	78.00- 118.00	73.88
4.489	4.491	-0.002	34806514	751.777	28.7	204.72- 244.72	179.01
Average of Peak Concentrations =					29.2		

Data File: /chem/ecd1a.i/120509.b/043f4301.d
Date : 05-DEC-2009 17:02
Client ID: RE03-09-13593MS
Sample Info: |1201987327|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

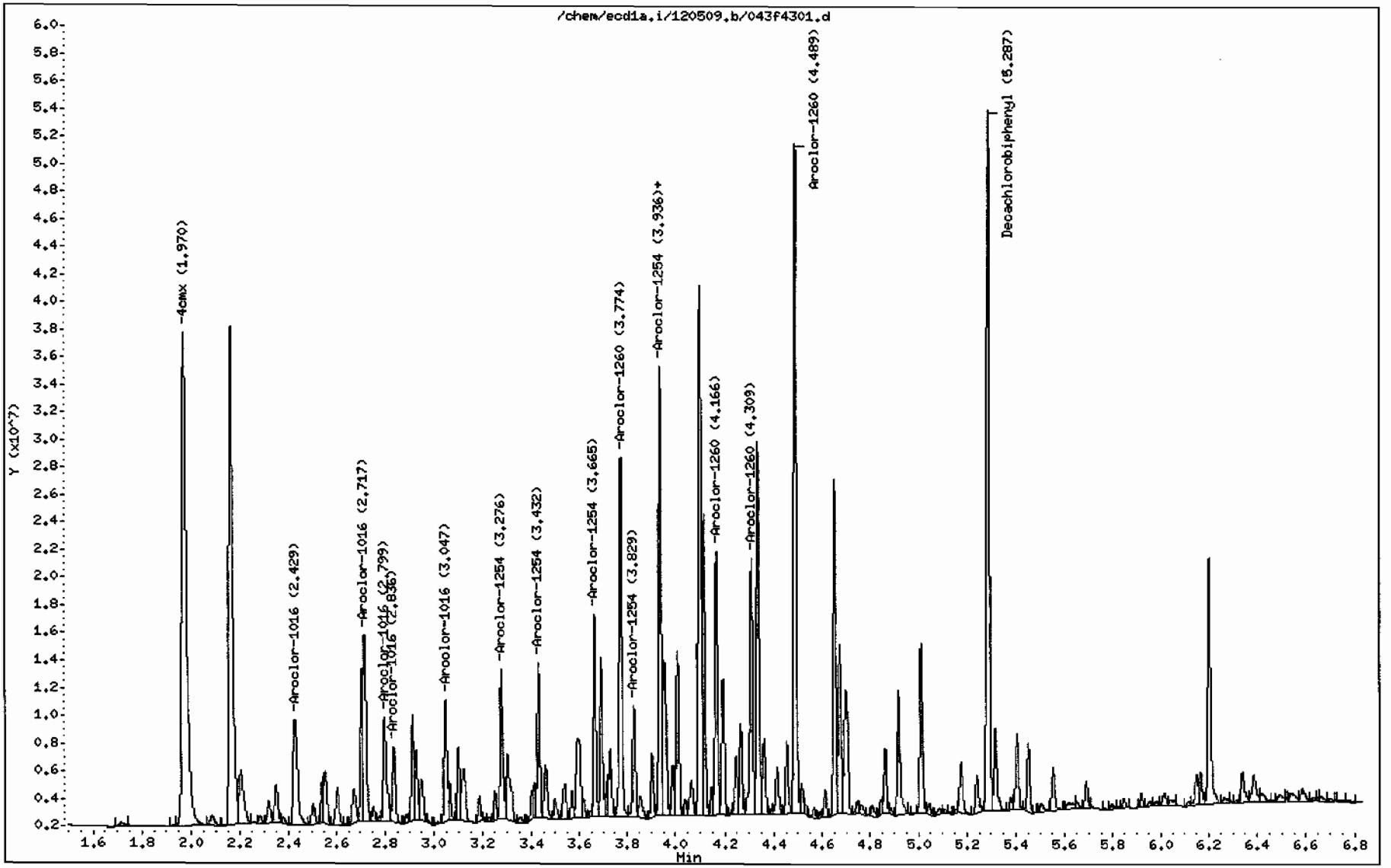

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/044b4401.d
Lab Smp Id: 1201987328 Client Smp ID: RE03-09-13593MSD
Inj Date : 05-DEC-2009 17:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987328|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-B-8082-111009B.m
Meth Date : 07-Dec-2009 05:53 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-460.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.00710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40297598	108.532	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.961	5.964	-0.003	34326832	114.203	4.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.212	-0.001	10951393	649.530	24.8	80.00- 120.00	100.00(M)
3.294	3.295	-0.001	7037123	610.034	23.3	43.24- 83.24	64.26
3.419	3.421	-0.002	5268462	757.918	28.9	17.73- 57.73	48.11
3.585	3.587	-0.002	5780630	629.659	24.0	30.67- 70.67	52.78

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.661	3.663	-0.002	5375665	631.772	24.1	36.89- 76.89	58.92
		Average of Peak Concentrations =			25.0		
6 Aroclor-1254					CAS #: 11097-69-1		
3.419	3.421	-0.002	5268462	632.202	24.1	80.00- 120.00	100.00(M)
3.842	3.844	-0.002	7316554	489.297	18.7	162.85- 202.85	138.87
3.959	3.961	-0.002	7035316	429.521	16.4	181.45- 221.45	133.54
4.235	4.237	-0.002	7885420	356.071	13.6	262.02- 302.02	149.67
4.371	4.374	-0.003	3236503	191.812	7.3	191.66- 231.66	61.43
		Average of Peak Concentrations =			16.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.351	4.353	-0.002	16372316	906.205	34.6	80.00- 120.00	100.00
4.476	4.478	-0.002	15869496	716.229	27.3	106.46- 146.46	96.93
4.741	4.744	-0.003	14714566	832.379	31.7	79.85- 119.85	89.87
4.916	4.918	-0.002	13128930	762.693	29.1	78.54- 118.54	80.19
5.062	5.065	-0.003	31861595	824.808	31.4	207.34- 247.34	194.61
		Average of Peak Concentrations =			30.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120509.b/044b4401.d
Date : 05-DEC-2009 17:15
Client ID: RE03-09-13593MSD
Sample Info: |1201987328|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

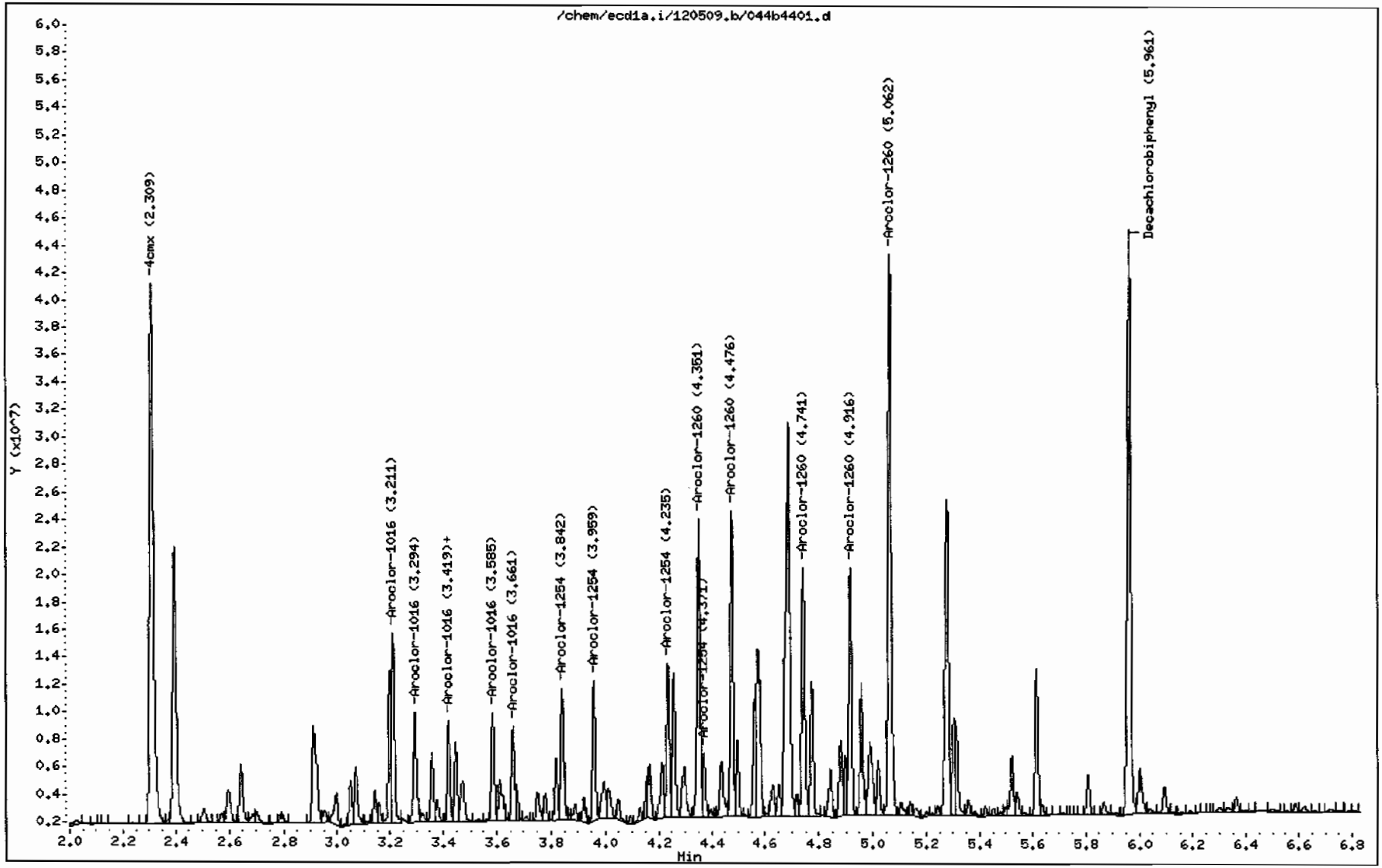

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120509.b/044f4401.d
Lab Smp Id: 1201987328 Client Smp ID: RE03-09-13593MSD
Inj Date : 05-DEC-2009 17:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201987328|1|
Misc Info : |ECD82P_1S|929264|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120509.b/ECD1-F-8082-111009B.m
Meth Date : 07-Dec-2009 11:29 jos00786 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-460.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	13.00710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	49146166	110.126	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.286	5.289	-0.003	40234827	98.4323	3.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	9928911	581.001	22.2	80.00- 120.00	100.00
2.718	2.720	-0.002	12745674	600.169	22.9	108.94- 148.94	128.37
2.799	2.801	-0.002	8064155	574.681	21.9	61.65- 101.65	81.22
2.836	2.838	-0.002	4624529	549.450	21.0	29.29- 69.29	46.58

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.047	3.049	-0.002	7152313	662.652	25.3	43.04- 83.04	72.04
			Average of Peak Concentrations =		22.6		
6 Aroclor-1254					CAS #: 11097-69-1		
3.276	3.278	-0.002	7512505	490.153	18.7	80.00- 120.00	100.00
3.431	3.433	-0.002	7655403	365.759	13.9	115.73- 155.73	101.90
3.666	3.667	-0.001	8606257	324.572	12.4	159.19- 199.19	114.56
3.829	3.831	-0.002	5361725	262.839	10.0	114.13- 154.13	71.37
3.936	3.939	-0.003	26704862	1319.96	50.3	114.48- 154.48	355.47
			Average of Peak Concentrations =		21.1		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	19726074	919.741	35.1	80.00- 120.00	100.00
3.936	3.938	-0.002	26704862	829.469	31.6	131.46- 171.46	135.38
4.166	4.168	-0.002	15166425	741.359	28.3	74.26- 114.26	76.89
4.309	4.311	-0.002	15988479	796.169	30.4	78.00- 118.00	81.05
4.488	4.491	-0.003	36751381	793.783	30.3	204.72- 244.72	186.31
			Average of Peak Concentrations =		31.1		

Data File: /chem/ecd1a.i/120509.b/044f4401.d
Date : 05-DEC-2009 17:15
Client ID: RE03-09-13593MSD
Sample Info: |1201987328|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

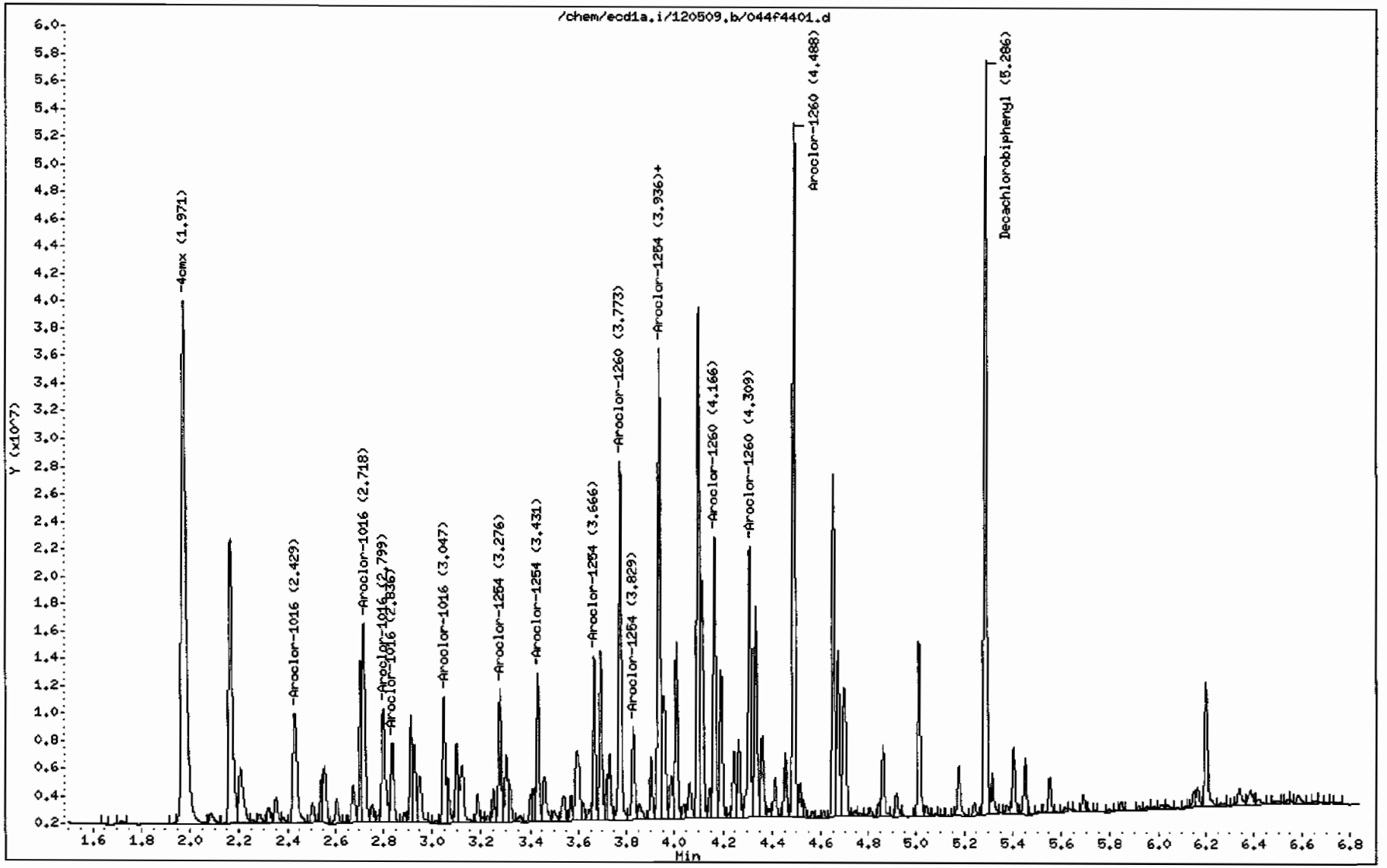

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927091 **Verified by:** _____

Analyst: Joshua McCartney

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982160 MB	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
1201982163 LCS	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241615001	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241615002	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241615003	30-NOV-2009 11:38:52	30.04	H2SO4/KMn1		1	8	1	0.03329
241615004	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241615005	30-NOV-2009 11:38:52	30.02	H2SO4/KMn1		1	8	1	0.03331
241615006	30-NOV-2009 11:38:52	30.09	H2SO4/KMn1		1	8	1	0.03323
241615007	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241615008	30-NOV-2009 11:38:52	30.07	H2SO4/KMn1		1	8	1	0.03326
241615009	30-NOV-2009 11:38:52	30.01	H2SO4/KMn1		1	8	1	0.03332
241615010	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241615011	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241615012	30-NOV-2009 11:38:52	30.08	H2SO4/KMn1		1	8	1	0.03324
241615013	30-NOV-2009 11:38:52	30.01	H2SO4/KMn1		1	8	1	0.03332
1201982161 MS (241615013)	30-NOV-2009 11:38:52	30.04	H2SO4/KMn1		1	8	1	0.03329
1201982162 MSD (241615013)	30-NOV-2009 11:38:52	30.06	H2SO4/KMn1		1	8	1	0.03327
241615014	30-NOV-2009 11:38:52	30.09	H2SO4/KMn1		1	8	1	0.03323
241615015	30-NOV-2009 11:38:52	30.03	H2SO4/KMn1		1	8	1	0.0333
241615016	30-NOV-2009 11:38:52	30.06	H2SO4/KMn1		1	8	1	0.03327
241615018	30-NOV-2009 11:38:52	30.02	H2SO4/KMn1		1	8	1	0.03331
241615020	30-NOV-2009 11:38:52	30	H2SO4/KMn1		1	8	1	0.03333
241697003	30-NOV-2009 11:38:52	30.09	H2SO4/KMn1		1	8	1	0.03323
241697004	30-NOV-2009 11:38:52	30.03	H2SO4/KMn1		1	8	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982163	PCB Laboratory Control	WE091120-07	1	mL
MS	1201982161	PCB Laboratory Control	WE091120-07	1	mL
MSD	1201982162	PCB Laboratory Control	WE091120-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091117-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/30/2009

Clean up Initials: JAM

Verified By: RWH

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 929263 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201987325 MB	04-DEC-2009 20:52:28	30	H2SO4/KMn2		2	9	1	0.03333
1201987326 LCS	04-DEC-2009 20:52:28	30	H2SO4/KMn2		2	9	1	0.03333
1201987330 LCSD	04-DEC-2009 20:52:28	30	H2SO4/KMn2		2	9	1	0.03333
241033004 - 2	04-DEC-2009 20:52:28	30.13	H2SO4/KMn2		2	9	1	0.03319
1201987327 - 2 MS (241033004)	04-DEC-2009 20:52:28	30.14	H2SO4/KMn2		2	9	1	0.03318
1201987328 - 2 MSD (241033004)	04-DEC-2009 20:52:28	30.14	H2SO4/KMn2		2	9	1	0.03318
241615004 - 2	04-DEC-2009 20:52:28	30.02	H2SO4/KMn2		2	9	1	0.03331
241615012 - 2	04-DEC-2009 20:52:28	30.18	H2SO4/KMn2		2	9	1	0.03313
241615018 - 2	04-DEC-2009 20:52:28	30.12	H2SO4/KMn2		2	9	1	0.0332

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201987326	PCB Laboratory Control	WE091120-07	1	mL
LCSD	1201987330	PCB Laboratory Control	WE091120-07	1	mL
MS	1201987327	PCB Laboratory Control	WE091120-07	1	mL
MSD	1201987328	PCB Laboratory Control	WE091120-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1237409	30	g

Comments:

Clean up Date: 12/04/09
Clean up Initials: AJS
Verified By: AV
Final Solvent: Hexane
Clean Up SOP: GL-OA-E-037

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
04-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8082	Solid	LANL
Batch ID:	**Sample Numbers:**		
927093	See Below		

Potentially affected work order(s)(SDG): 241615(10-644),241697(10-648)

Application Issues:

Failed Yield for Surrogates

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The MB(1201982160) did not meet the surrogate recovery acceptance limits.	1. Samples with detected presences of target analytes or failing surrogate recoveries were re-extracted for confirmation. Samples 2411615004, 2411615012 and 2411615018 were re-extracted within holding as part of batch 929264. These re-extracted samples met all surrogate recoveries and did not contain any target analyte hits. Data for these three samples are reported from batch 9929264. Data for all other samples are reported from batch 927093.

Originator's Name:

Yiping Shi 04-DEC-09

Data Validator/Group Leader:

Josh Brooks 09-DEC-09

Friday, November 20, 2009

REQUEST NUMBER: 10-643

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-643
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 11/20/2009
TURNAROUND/REPORT DUE: 12/20/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14106	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14107	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14108	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14109	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14246	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14247	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14248	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14249	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14250	S	11/19/2009	Plus, B, Li, Si, Ti, U

Friday, November 20, 2009

REQUEST NUMBER: 10-643

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14251	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14252	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14253	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14254	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14255	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14256	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14257	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	
	SW-846:6020	1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	
	SW-846:9012A	1	RE03-09-14106	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14107	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14108	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14109	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14246	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14247	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14248	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14249	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14250	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14251	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14252	S	11/19/2009	Plus, B, Li, Si, Ti, U

Friday, November 20, 2009

REQUEST NUMBER: 10-643

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-14253	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14254	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14255	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14256	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14257	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	

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LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-643C

REQUEST NUMBER: 10-643

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14108	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14106	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14107	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14109	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14252	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14250	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14255	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14256	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14254	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14249	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14248	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14247	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14246	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14253	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14251	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14257	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2729	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2742	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2742	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2755	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2755	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6971	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6971	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6973	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6973	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6969	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/20/09	3:00				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14249 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1008	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608414		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Roots present. Brown 7.5 YR 5/4

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1-3 ppm Samples: &MDA
Background:
α: 24 dpm
β: 1567 ↓

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-19-09	(Printed Name) K. Greene	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14253 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1036	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608415		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Brown 7.5YR 5/3

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-3

FIELD SCREENING/MEASUREMENT RESULTS: PID Background: α 24 dpm β 1567 ↓ Samples: < MDA

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** J. Jude

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jude	11-19-09	(Printed Name) K. Greene	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14254 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1041	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608415		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Strong Brown 7.5YR5/6

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-3

FIELD SCREENING/MEASUREMENT RESULTS: PID: Background: α: 24 dpm β: 1567 ↓ Samples: ↓ MDA

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-19-09	(Printed Name) K. Greene	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6969 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIR
TIME COLLECTED (HH:MM)		~~1038~~ 1041	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	~~UNK~~	03-608415	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	~~0~~ 4'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	~~4~~ 5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of ~~RE03-09-14253~~ RE03-09-14254 MR 11/19/09

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: ~~NA~~ MW PID: 0.0 ppm Background α 24 DPM β 1567 DPM Samples: LMA

COLLECTED BY (PRINT) D. Thomas

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/19/09	(Printed Name) K. Greene	11/19/09
(Signature) [signature]	16:45	(Signature) [signature]	4:45
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6967 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1032	SUB-MEDIA:	OTHER	
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	~~UNK~~	03-608415	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 ~~2~~	MN 11-19-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14252

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Black

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/19/09 1645	(Printed Name) K. Greene (Signature) [signature]	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14289 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0806	SUB-MEDIA:	OTHER	
PRS ID:	~~C-09-007~~	60-004(b)	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1-2	NEW 11-19-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14138-06 MJ 11-19-09

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) H. Sherdo

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) K. Gocek (Signature)	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2742 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0845	SUB-MEDIA:	OTHER	
PRS ID:	~~60-002~~	60-004(b)	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	UN	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14109

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) Megan R.	11/19/09 1645	(Printed Name) ~~M. Rains~~ K. Greene (Signature)	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2755 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-17-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0921	SUB-MEDIA:	OTHER	↓
PRS ID:	~~60-002~~	60-004(b)	SAMPLE TECH CODE:	DC	↓
LOCATION ID:	~~UNK~~	03-608399	FIELD QC TYPE:	FR	↓
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	↓
TOP DEPTH:	0	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	↓	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14109

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NT

COLLECTED BY (PRINT) M. Mack REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11/19/09 1645	(Printed Name) K. Greene (Signature) [signature]	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14251 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1017	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608414	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Light Brow 7.5YR 6/4

SAMPLE COMMENTS: NA

LOCATION DESC: 7(a)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.5 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 ↓

COLLECTED BY (PRINT) M. Sterdo REVIEWED BY (PRINT) James Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-19-09	(Printed Name) K. Greene	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14252 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	All M
TIME COLLECTED (HH:MM)		1032	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608415		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand. Roots present. Brown 7.5YR 5/3

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-3

FIELD SCREENING/MEASUREMENT RESULTS: PID: Background: α: 24 dpm β: 1567 ↓ Samples: < MDA

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Jude

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) D. Thomas (Signature)	11-19-09 1645	(Printed Name) K. Green (Signature)	11-19-09 1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14106 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0806	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b) ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand w/gravel Pink 5YR 7/4

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 dpm

COLLECTED BY (PRINT) M. Stando REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) (Signature)	11/19/09 1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14250 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1013	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608414	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand Pinkish gray 7.5YR 6/2

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-2

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.6 ppm samples: < MDA
Background:
α: 24 dpm
β: 1567 ↓

COLLECTED BY (PRINT) M. Sfrondo REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-19-09	(Printed Name)	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14257 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1130	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608416		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand 7.5YR 7/1 light gray

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0ppm Background: α 24 dpm β 1567 ↓ Samples: 4/MDA

COLLECTED BY (PRINT) M. Sherado **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11-19-09 1645	(Printed Name) (Signature)	11-19-09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14256 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608416		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Light Brown 7.5YR 6/4

SAMPLE COMMENTS: NA

LOCATION DESC: 7(a)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.3 ppm Samples: < MDA
Background:
α 24 dpm
β 1567 ↓

COLLECTED BY (PRINT) M. Sherdo **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11-19-09 1645	(Printed Name)	11-19-09 1645
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2729 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		0806	SUB-MEDIA:	SOIL	
PRS ID:	~~60-002~~	60-004(b)	SAMPLE TECH CODE:	HA	
LOCATION ID:	~~UNK~~	03-608399	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
2		8260B+TPH-GRO	125 ML GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14106

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8 ppm
Background:
α: 24 DPM
β: 1567 DPM
Samples: <MDA

COLLECTED BY (PRINT) M. Sherdo

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) (Signature)	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14109 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	~~NA~~	QBt3
TIME COLLECTED (HH:MM)		0900	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Tuff, QBt3. Pinkish gray 7.5YR 6/2

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 8.0 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 dpm

COLLECTED BY (PRINT) D. Thomas

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains	11/19/09	(Printed Name)	11/19/09
(Signature)	16:45	(Signature)	4:45
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14255 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1118	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608416		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Roots present Light Brown 7.5YR 6/3

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: Samples: MDA

Background:
α 24 dpm
β 1567 ↓

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-19-09	(Printed Name)	11-19-09
(Signature)	1645	(Signature) [illegible]	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14108 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0827	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand. Light Brow 7.5YR 6/3

SAMPLE COMMENTS: Tuff hit at 4.5'

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 3.1 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 ↓

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) (Signature)	11/19/09 1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14107 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		0817	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand. 7.5YR 4/3 Brown

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.6 ppm Samples: < MDA
Background:
α: 24 dpm
β: 1567 ↓

COLLECTED BY (PRINT) M. Sparks **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) (Signature)	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14248 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0955	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608413		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Tuff fill. ~~Ta~~ Silty Sand. Reddish Yellow 7.5YR6/6

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 3.8ppm Background: α: 24 dpm β: 1567 ↓ Samples: < MDA

COLLECTED BY (PRINT) L. Hoppe REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-19-09	(Printed Name) M. Green	11-19-09
(Signature)	1645	(Signature)	1645
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14247 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		0950	SUB-MEDIA:	OTHER	OK
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608413		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. Brown 7.5YR5/3

SAMPLE COMMENTS: NA

LOCATION DESC: Ta-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 2.8ppm
Background:
α: 24 dpm
β: 1567 ↓
Samples: LMDA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature) [signature]	11-19-09 1645	(Printed Name) K. Greek (Signature) [signature]	11-19-09 1645
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14246 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	~~NA~~	All
TIME COLLECTED (HH:MM)		0943	SUB-MEDIA:	OTHER	NA
PRS ID:	60-007(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608413		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand fill. Brown 7.5YR5/3

SAMPLE COMMENTS: ~~Tuff at .8'~~ MW 11-19-09

LOCATION DESC: 7(a)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 4.7ppm Samples: 4 MDA
Background:
α: 24 dpm
β: 40567 dpm
JLJ 11-19-09

COLLECTED BY (PRINT) C. Horne **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Megan Rains	11/19/09	(Printed Name) K. Green	11/19/09
(Signature) Megan R	1645	(Signature)	1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6973 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1057	SUB-MEDIA:	OTHER	
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608416	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14255

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Rains (Signature)	11/19/09 1645	(Printed Name) K. Greene (Signature)	11/19/09 1645
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-6971 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-19-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1057	SUB-MEDIA:	OTHER	
PRS ID:	60-007(a)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608416	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14255

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Bains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Bains (Signature)	1645 11/19/09	(Printed Name) K. Greene (Signature)	11/19/09 1645
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-643 VALIDATION DATE: 1/20/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☒ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the soil MB, Na was detected. The associated sample results were detects >5X but ≤50X the MB concentration but only those that were not qualified ND due to FTB detects were qualified J,I4a. In the aqueous MB, Zn was detected. The Zn results for samples RE03-10-2755 and -10-6971 were detects ≤5X the MB concentration and, thus, were qualified U,I4. All the other associated sample results were NDs and, thus, were not qualified.
2. In the CCBs associated with all the soil samples, Tl and Na were detected. The Tl result for sample RE03-09-14257 and all the associated Na sample results were either NDs or detects >5X the greatest blank concentration and, thus, were not qualified. All other associated sample results were detects ≤5X the greatest blank concentrations and, thus, were qualified U,I4b. In the ICB and/or CCBs associated with the aqueous samples, Sb and Tl were detected. The associated sample results were NDs and, thus, were not qualified.
3. In the FTBs, samples -10-2755 and -106971, associated with all the other samples, Al, Ba, Ca, Cr, Fe, Pb, Mn, Ni,

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K, Si, Na and Ti were detected. The associated sample results that were detects ≤5X the greatest blank concentrations were qualified U,I4d. All the other associated sample results were either NDs or detects >5X the greatest blank concentrations and, thus, were not qualified.

4. In the CCV associated with sample -10-14248, the %D for Li was >110%. The associated sample result was a detect and, thus, was qualified J,I7c.

5. In the MS associated with all the soil samples, the %Rs were > the laboratory's UAL for K, Ti and Mg. The associated sample results were detects and, thus, were qualified J+,I6b. In the MS associated with all the soil samples, the %R was < the laboratory's LAL but ≥10% for Si. The associated sample results were detects and, thus, were qualified J-,I6a. In the MS associated with all the soil samples except -09-14248, the %R was < the laboratory's LAL but ≥10% for Se. The associated sample results were NDs and, thus, were qualified UJ,I6a. In the MS associated with all the soil samples, the %Rs were also > the laboratory's UAL for Al, Mn and Fe. However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.

6. It should be noted that the ICP-MS matrix QC analyses associated with sample -10-14248 were performed on a LANL sample from a different RN. No sample data were qualified.

Reviewed by: Mary Donivan Level: I Date: 01/20/10

VALIDATOR'S SIGNATURE: Eric T. Mik DATE: 1/20/10

Form 5118-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☒	☐	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613001 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14108 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5090000	ug/Kg		7320	21500	21500	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-36-0	Antimony	699	ug/Kg	J	338	1020	1020	1	P	HSC	12/15/09 07:27	121509-1	932724
7440-38-2	Arsenic	0.664	mg/kg	J	0.213	1.06	1.06	2	MS	PRB	12/11/09 02:10	091210-3	925484
7440-39-3	Barium	48400	ug/Kg		108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-41-7	Beryllium	0.468	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	12/12/09 13:24	091212-8	925484
7440-42-8	Boron	2060	ug/Kg	J	1080	5380	5380	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-70-2	Calcium	915000	ug/Kg		8610	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-47-3	Chromium	3630	ug/Kg		161	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-48-4	Cobalt	1360	ug/Kg		161	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-50-8	Copper	2680	ug/Kg		323	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-89-6	Iron	9270000	ug/Kg		8610	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-92-1	Lead	11100	ug/Kg		269	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-93-2	Lithium	7.19	mg/kg		0.425	2.13	2.13	2	MS	PRB	12/11/09 02:10	091210-3	925484
7439-95-4	Magnesium J+,I6b	901000	ug/Kg	N	9140	32300	32300	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-96-5	Manganese	265000	ug/Kg	*	215	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-97-6	Mercury	7.23	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/07/09 12:04	120709S1-9	925646
7440-02-0	Nickel	3.89	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/11/09 02:10	091210-3	925484
7440-09-7	Potassium J+,I6b	501000	ug/Kg	N	6890	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.532	1.06	1.06	2	MS	PRB	12/11/09 02:10	091210-3	925484
7440-21-3	Silicon J-,I6a	817000	ug/Kg	N	1540	10200	10200	1	P	HSC	12/15/09 07:27	121509-1	932724
7440-22-4	Silver	270	ug/Kg	J	108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-23-5	Sodium J,I4a	194000	ug/Kg		7530	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-28-0	Thallium U,I4b	0.130	mg/kg	J	0.0638	0.213	0.213	2	MS	PRB	12/11/09 16:51	091211-4	925484
7440-32-6	Titanium J+,I6b	204000	ug/Kg	N	108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-61-1	Uranium	0.602	mg/kg		0.014	0.0425	0.0425	2	MS	PRB	12/11/09 16:51	091211-4	925484
7440-62-2	Vanadium	7440	ug/Kg		108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-66-6	Zinc	32700	ug/Kg		355	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.507	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.51	g	30	mL	12/04/09	TXB3

ETM
1/20/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613002 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14106 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2210000	ug/Kg		7180	21100	21100	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-36-0	Antimony	521	ug/Kg	J	357	1080	1080	1	P	HSC	12/15/09 07:44	121509-1	932724
7440-38-2	Arsenic	0.241	mg/kg	J	0.221	1.1	1.1	2	MS	PRB	12/11/09 02:51	091210-3	925484
7440-39-3	Barium	50300	ug/Kg		106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-41-7	Beryllium	0.368	mg/kg		0.0221	0.11	0.11	2	MS	BAJ	12/12/09 13:33	091212-8	925484
7440-42-8	Boron	1300	ug/Kg	J	1060	5280	5280	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-70-2	Calcium	1250000	ug/Kg		8450	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-47-3	Chromium	2580	ug/Kg		158	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-48-4	Cobalt	1210	ug/Kg		158	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-50-8	Copper	3470	ug/Kg		317	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-89-6	Iron	7160000	ug/Kg		8450	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-92-1	Lead	4330	ug/Kg		264	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-93-2	Lithium	8.1	mg/kg		0.442	2.21	2.21	2	MS	PRB	12/11/09 02:51	091210-3	925484
7439-95-4	Magnesium J+,I6b	716000	ug/Kg	N	8970	31700	31700	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-96-5	Manganese	210000	ug/Kg	*	211	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-97-6	Mercury	4.26	ug/kg	J	3.81	11.2	11.2	1	AV	JXL1	12/07/09 12:16	120709S1-9	925646
7440-02-0	Nickel	2.18	mg/kg		0.11	0.442	0.442	2	MS	PRB	12/11/09 02:51	091210-3	925484
7440-09-7	Potassium J+,I6b	389000	ug/Kg	N	6760	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.1	mg/kg	UN	0.552	1.1	1.1	2	MS	PRB	12/11/09 02:51	091210-3	925484
7440-21-3	Silicon J-,I6a	658000	ug/Kg	N	1620	10800	10800	1	P	HSC	12/15/09 07:44	121509-1	932724
7440-22-4	Silver	201	ug/Kg	J	106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-23-5	Sodium J,I4a	245000	ug/Kg		7390	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-28-0	Thallium U,I4b	0.0709	mg/kg	J	0.0663	0.221	0.221	2	MS	PRB	12/11/09 17:12	091211-4	925484
7440-32-6	Titanium J+,I6b	238000	ug/Kg	N	106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-61-1	Uranium	0.391	mg/kg		0.0146	0.0442	0.0442	2	MS	PRB	12/11/09 17:12	091211-4	925484
7440-62-2	Vanadium	8650	ug/Kg		106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-66-6	Zinc	27100	ug/Kg		348	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.523	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.591	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613003 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14107 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9500000	ug/Kg		7720	22700	22700	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-36-0	Antimony	1450	ug/Kg		364	1100	1100	1	P	HSC	12/15/09 07:55	121509-1	932724
7440-38-2	Arsenic	1.65	mg/kg		0.217	1.09	1.09	2	MS	PRB	12/11/09 02:56	091210-3	925484
7440-39-3	Barium	168000	ug/Kg		113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-41-7	Beryllium	0.909	mg/kg		0.0217	0.109	0.109	2	MS	BAJ	12/12/09 13:35	091212-8	925484
7440-42-8	Boron	3110	ug/Kg	J	1130	5670	5670	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-43-9	Cadmium	128	ug/Kg	J	113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-70-2	Calcium	2190000	ug/Kg		9080	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-47-3	Chromium	10100	ug/Kg		170	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-48-4	Cobalt	6040	ug/Kg		170	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-50-8	Copper	7580	ug/Kg		340	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-89-6	Iron	14100000	ug/Kg		9080	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-92-1	Lead	12700	ug/Kg		284	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-93-2	Lithium	12.5	mg/kg		0.435	2.17	2.17	2	MS	PRB	12/11/09 02:56	091210-3	925484
7439-95-4	Magnesium J+,I6b	2190000	ug/Kg	N	9640	34000	34000	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-96-5	Manganese	392000	ug/Kg	*	227	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-97-6	Mercury	13.4	ug/kg		4.1	12.1	12.1	1	AV	JXL1	12/07/09 12:18	120709S1-9	925646
7440-02-0	Nickel	8.01	mg/kg		0.109	0.435	0.435	2	MS	PRB	12/11/09 02:56	091210-3	925484
7440-09-7	Potassium J+,I6b	1510000	ug/Kg	N	7260	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.09	mg/kg	UN	0.543	1.09	1.09	2	MS	PRB	12/11/09 02:56	091210-3	925484
7440-21-3	Silicon J-,I6a	863000	ug/Kg	N	1650	11000	11000	1	P	HSC	12/15/09 07:55	121509-1	932724
7440-22-4	Silver	389	ug/Kg	J	113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-23-5	Sodium U,I4d	199000	ug/Kg		7940	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-28-0	Thallium U,I4b	0.192	mg/kg	J	0.0652	0.217	0.217	2	MS	PRB	12/11/09 17:15	091211-4	925484
7440-32-6	Titanium J+,I6b	438000	ug/Kg	N	113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-61-1	Uranium	0.804	mg/kg		0.0143	0.0435	0.0435	2	MS	PRB	12/11/09 17:15	091211-4	925484
7440-62-2	Vanadium	26300	ug/Kg		113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-66-6	Zinc	29100	ug/Kg		374	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.524	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.567	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613004 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14109 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1950000	ug/Kg		7130	21000	21000	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-36-0	Antimony	1030	ug/Kg	U	341	1030	1030	1	P	HSC	12/15/09 07:58	121509-1	932724
7440-38-2	Arsenic	1.02	mg/kg	U	0.204	1.02	1.02	2	MS	PRB	12/11/09 03:02	091210-3	925484
7440-39-3	Barium	18100	ug/Kg		105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-41-7	Beryllium	0.391	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	12/12/09 13:40	091212-8	925484
7440-42-8	Boron	1310	ug/Kg	J	1050	5250	5250	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-70-2	Calcium	498000	ug/Kg		8390	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-47-3	Chromium	3970	ug/Kg		157	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-48-4	Cobalt	466	ug/Kg	J	157	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-50-8	Copper	2050	ug/Kg		315	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-89-6	Iron	7020000	ug/Kg		8390	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-92-1	Lead	6520	ug/Kg		262	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-93-2	Lithium	5.06	mg/kg		0.408	2.04	2.04	2	MS	PRB	12/11/09 03:02	091210-3	925484
7439-95-4	Magnesium J+,I6b	537000	ug/Kg	N	8920	31500	31500	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-96-5	Manganese	241000	ug/Kg	*	210	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-97-6	Mercury	4.51	ug/kg	J	4.21	12.4	12.4	1	AV	JXL1	12/07/09 12:19	120709S1-9	925646
7440-02-0	Nickel	2.78	mg/kg		0.102	0.408	0.408	2	MS	PRB	12/11/09 03:02	091210-3	925484
7440-09-7	Potassium J+,I6b	329000	ug/Kg	N	6710	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.02	mg/kg	UN	0.51	1.02	1.02	2	MS	PRB	12/11/09 03:02	091210-3	925484
7440-21-3	Silicon J-,I6a	838000	ug/Kg	N	1550	10300	10300	1	P	HSC	12/15/09 07:58	121509-1	932724
7440-22-4	Silver	203	ug/Kg	J	105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-23-5	Sodium J,I4a	210000	ug/Kg		7340	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-28-0	Thallium U,I4b	0.0619	mg/kg	J	0.0612	0.204	0.204	2	MS	PRB	12/11/09 17:18	091211-4	925484
7440-32-6	Titanium J+,I6b	132000	ug/Kg	N	105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-61-1	Uranium	0.490	mg/kg		0.0135	0.0408	0.0408	2	MS	PRB	12/11/09 17:18	091211-4	925484
7440-62-2	Vanadium	3290	ug/Kg		105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-66-6	Zinc	35900	ug/Kg		346	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.518	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.513	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613005 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14252 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3030000	ug/Kg		6980	20500	20500	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-36-0	Antimony	989	ug/Kg	J	339	1030	1030	1	P	HSC	12/15/09 08:01	121509-1	932724
7440-38-2	Arsenic	0.691	mg/kg	J	0.212	1.06	1.06	2	MS	PRB	12/11/09 03:08	091210-3	925484
7440-39-3	Barium	92700	ug/Kg		103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-41-7	Beryllium	0.448	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 13:42	091212-8	925484
7440-42-8	Boron	1760	ug/Kg	J	1030	5130	5130	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-43-9	Cadmium	119	ug/Kg	J	103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-70-2	Calcium	1070000	ug/Kg		8210	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-47-3	Chromium	3080	ug/Kg		154	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-48-4	Cobalt	1420	ug/Kg		154	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-50-8	Copper	3460	ug/Kg		308	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-89-6	Iron	7860000	ug/Kg		8210	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-92-1	Lead	6300	ug/Kg		256	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-93-2	Lithium	9.47	mg/kg		0.425	2.12	2.12	2	MS	PRB	12/11/09 03:08	091210-3	925484
7439-95-4	Magnesium J+,I6b	777000	ug/Kg	N	8720	30800	30800	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-96-5	Manganese	248000	ug/Kg	*	205	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-97-6	Mercury	7.85	ug/kg	J	4.05	11.9	11.9	1	AV	JXL1	12/07/09 12:21	120709S1-9	925646
7440-02-0	Nickel	3.71	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/11/09 03:08	091210-3	925484
7440-09-7	Potassium J+,I6b	497000	ug/Kg	N	6570	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	12/11/09 03:08	091210-3	925484
7440-21-3	Silicon J-,I6a	743000	ug/Kg	N	1540	10300	10300	1	P	HSC	12/15/09 08:01	121509-1	932724
7440-22-4	Silver	179	ug/Kg	J	103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-23-5	Sodium U,I4d	106000	ug/Kg		7180	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-28-0	Thallium U,I4b	0.0922	mg/kg	J	0.0637	0.212	0.212	2	MS	PRB	12/11/09 17:21	091211-4	925484
7440-32-6	Titanium J+,I6b	275000	ug/Kg	N	103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-61-1	Uranium	0.436	mg/kg		0.014	0.0425	0.0425	2	MS	PRB	12/11/09 17:21	091211-4	925484
7440-62-2	Vanadium	8880	ug/Kg		103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-66-6	Zinc	27200	ug/Kg		339	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.522	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.54	g	30	mL	12/04/09	TXB3

ETM
1/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613006 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14250 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6950000	ug/Kg		7290	21400	21400	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-36-0	Antimony	1660	ug/Kg		336	1020	1020	1	P	HSC	12/15/09 08:05	121509-1	932724
7440-38-2	Arsenic	1.08	mg/kg		0.212	1.06	1.06	2	MS	PRB	12/11/09 03:14	091210-3	925484
7440-39-3	Barium	113000	ug/Kg		107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-41-7	Beryllium	0.657	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 13:43	091212-8	925484
7440-42-8	Boron	2250	ug/Kg	J	1070	5360	5360	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-43-9	Cadmium	536	ug/Kg	U	107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-70-2	Calcium	1530000	ug/Kg		8580	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-47-3	Chromium	7040	ug/Kg		161	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-48-4	Cobalt	4250	ug/Kg		161	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-50-8	Copper	4710	ug/Kg		322	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-89-6	Iron	11300000	ug/Kg		8580	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-92-1	Lead	10100	ug/Kg		268	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-93-2	Lithium	10.7	mg/kg		0.424	2.12	2.12	2	MS	PRB	12/11/09 03:14	091210-3	925484
7439-95-4	Magnesium J+,I6b	1400000	ug/Kg	N	9110	32200	32200	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-96-5	Manganese	375000	ug/Kg	*	214	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-97-6	Mercury	9.51	ug/kg	J	4.07	12	12	1	AV	JXL1	12/07/09 12:23	120709S1-9	925646
7440-02-0	Nickel	5.27	mg/kg		0.106	0.424	0.424	2	MS	PRB	12/11/09 03:14	091210-3	925484
7440-09-7	Potassium J+,I6b	1240000	ug/Kg	N	6860	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.53	1.06	1.06	2	MS	PRB	12/11/09 03:14	091210-3	925484
7440-21-3	Silicon J-,I6a	823000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/15/09 08:05	121509-1	932724
7440-22-4	Silver	281	ug/Kg	J	107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-23-5	Sodium U,I4d	178000	ug/Kg		7510	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-28-0	Thallium U,I4b	0.141	mg/kg	J	0.0636	0.212	0.212	2	MS	PRB	12/11/09 17:24	091211-4	925484
7440-32-6	Titanium J+,I6b	412000	ug/Kg	N	107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-61-1	Uranium	0.713	mg/kg		0.014	0.0424	0.0424	2	MS	PRB	12/11/09 17:24	091211-4	925484
7440-62-2	Vanadium	17300	ug/Kg		107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-66-6	Zinc	29400	ug/Kg		354	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.507	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.539	g	30	mL	12/04/09	TXB3

ETM
1/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613007 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14255 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.7

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum		3320000	ug/Kg		7480	22000	22000	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-36-0	Antimony		971	ug/Kg	J	348	1060	1060	1	P	HSC	12/15/09 08:08	121509-1	932724
7440-38-2	Arsenic		0.790	mg/kg	J	0.216	1.08	1.08	2	MS	PRB	12/11/09 03:20	091210-3	925484
7440-39-3	Barium		71100	ug/Kg		110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-41-7	Beryllium		0.455	mg/kg		0.0216	0.108	0.108	2	MS	BAJ	12/12/09 13:45	091212-8	925484
7440-42-8	Boron		3060	ug/Kg	J	1100	5500	5500	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-43-9	Cadmium		550	ug/Kg	U	110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-70-2	Calcium		1070000	ug/Kg		8800	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-47-3	Chromium		3410	ug/Kg		165	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-48-4	Cobalt		1820	ug/Kg		165	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-50-8	Copper		3720	ug/Kg		330	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-89-6	Iron		8470000	ug/Kg		8800	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-92-1	Lead		11100	ug/Kg		275	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-93-2	Lithium		8.42	mg/kg		0.431	2.16	2.16	2	MS	PRB	12/11/09 03:20	091210-3	925484
7439-95-4	Magnesium	J+,I6b	806000	ug/Kg	N	9350	33000	33000	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-96-5	Manganese		523000	ug/Kg	*	220	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-97-6	Mercury		6.49	ug/kg	J	4.01	11.8	11.8	1	AV	JXL1	12/07/09 12:24	120709S1-9	925646
7440-02-0	Nickel		3.25	mg/kg		0.108	0.431	0.431	2	MS	PRB	12/11/09 03:20	091210-3	925484
7440-09-7	Potassium	J+,I6b	560000	ug/Kg	N	7040	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7782-49-2	Selenium	UJ,I6a	1.08	mg/kg	UN	0.539	1.08	1.08	2	MS	PRB	12/11/09 03:20	091210-3	925484
7440-21-3	Silicon	J-,I6a	683000	ug/Kg	N	1580	10600	10600	1	P	HSC	12/15/09 08:08	121509-1	932724
7440-22-4	Silver		289	ug/Kg	J	110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-23-5	Sodium	U,I4d	93000	ug/Kg		7700	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-28-0	Thallium	U,I4b	0.0791	mg/kg	J	0.0647	0.216	0.216	2	MS	PRB	12/11/09 17:26	091211-4	925484
7440-32-6	Titanium	J+,I6b	281000	ug/Kg	N	110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-61-1	Uranium		0.463	mg/kg		0.0142	0.0431	0.0431	2	MS	PRB	12/11/09 17:26	091211-4	925484
7440-62-2	Vanadium		9310	ug/Kg		110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-66-6	Zinc		29100	ug/Kg		363	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.511	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.56	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613008 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14256 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12200000	ug/Kg		7320	21500	21500	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-36-0	Antimony	1900	ug/Kg		354	1070	1070	1	P	HSC	12/15/09 08:11	121509-1	932724
7440-38-2	Arsenic	1.72	mg/kg		0.21	1.05	1.05	2	MS	PRB	12/11/09 03:25	091210-3	925484
7440-39-3	Barium	186000	ug/Kg		108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-41-7	Beryllium	1.07	mg/kg		0.021	0.105	0.105	2	MS	BAJ	12/12/09 13:47	091212-8	925484
7440-42-8	Boron	2910	ug/Kg	J	1080	5380	5380	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-43-9	Cadmium	128	ug/Kg	J	108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-70-2	Calcium	4740000	ug/Kg		8620	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-47-3	Chromium	9350	ug/Kg		162	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-48-4	Cobalt	4640	ug/Kg		162	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-50-8	Copper	6650	ug/Kg		323	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-89-6	Iron	12800000	ug/Kg		8620	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-92-1	Lead	11600	ug/Kg		269	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-93-2	Lithium	15.7	mg/kg		0.42	2.1	2.1	2	MS	PRB	12/11/09 03:25	091210-3	925484
7439-95-4	Magnesium J+,I6b	2110000	ug/Kg	N	9150	32300	32300	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-96-5	Manganese	280000	ug/Kg	*	215	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-97-6	Mercury	20	ug/kg		4.27	12.6	12.6	1	AV	JXL1	12/07/09 12:26	120709S1-9	925646
7440-02-0	Nickel	7.82	mg/kg		0.105	0.42	0.42	2	MS	PRB	12/11/09 03:25	091210-3	925484
7440-09-7	Potassium J+,I6b	1710000	ug/Kg	N	6890	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.05	mg/kg	UN	0.525	1.05	1.05	2	MS	PRB	12/11/09 03:25	091210-3	925484
7440-21-3	Silicon J-,I6a	830000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/15/09 08:11	121509-1	932724
7440-22-4	Silver	410	ug/Kg	J	108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-23-5	Sodium J,I4a	225000	ug/Kg		7540	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-28-0	Thallium U,I4b	0.20	mg/kg	J	0.063	0.21	0.21	2	MS	PRB	12/11/09 17:29	091211-4	925484
7440-32-6	Titanium J+,I6b	503000	ug/Kg	N	108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-61-1	Uranium	0.618	mg/kg		0.0139	0.042	0.042	2	MS	PRB	12/11/09 17:29	091211-4	925484
7440-62-2	Vanadium	23700	ug/Kg		108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-66-6	Zinc	22500	ug/Kg		355	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.506	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.519	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.521	g	30	mL	12/04/09	TXB3

ETM
1/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613009 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14254 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.1

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum		7010000	ug/Kg		7100	20900	20900	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-36-0	Antimony		1510	ug/Kg		347	1050	1050	1	P	HSC	12/15/09 08:14	121509-1	932724
7440-38-2	Arsenic		1.62	mg/kg		0.212	1.06	1.06	2	MS	PRB	12/11/09 03:31	091210-3	925484
7440-39-3	Barium		152000	ug/Kg		104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-41-7	Beryllium		0.681	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 13:49	091212-8	925484
7440-42-8	Boron		2310	ug/Kg	J	1040	5220	5220	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-43-9	Cadmium		522	ug/Kg	U	104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-70-2	Calcium		6900000	ug/Kg		8350	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-47-3	Chromium		8340	ug/Kg		157	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-48-4	Cobalt		8440	ug/Kg		157	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-50-8	Copper		6780	ug/Kg		313	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-89-6	Iron		12000000	ug/Kg		8350	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-92-1	Lead		10900	ug/Kg		261	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-93-2	Lithium		8.53	mg/kg		0.423	2.12	2.12	2	MS	PRB	12/11/09 03:31	091210-3	925484
7439-95-4	Magnesium	J+,I6b	1930000	ug/Kg	N	8870	31300	31300	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-96-5	Manganese		397000	ug/Kg	*	209	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-97-6	Mercury		10.5	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/07/09 12:28	120709S1-9	925646
7440-02-0	Nickel		6.68	mg/kg		0.106	0.423	0.423	2	MS	PRB	12/11/09 03:31	091210-3	925484
7440-09-7	Potassium	J+,I6b	1580000	ug/Kg	N	6680	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7782-49-2	Selenium	UJ,I6a	1.06	mg/kg	UN	0.529	1.06	1.06	2	MS	PRB	12/11/09 03:31	091210-3	925484
7440-21-3	Silicon	J-,I6a	933000	ug/Kg	N	1580	10500	10500	1	P	HSC	12/15/09 08:14	121509-1	932724
7440-22-4	Silver		254	ug/Kg	J	104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-23-5	Sodium	U,I4d	155000	ug/Kg		7300	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-28-0	Thallium	U,I4b	0.217	mg/kg		0.0635	0.212	0.212	2	MS	PRB	12/11/09 17:32	091211-4	925484
7440-32-6	Titanium	J+,I6b	296000	ug/Kg	N	104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-61-1	Uranium		0.619	mg/kg		0.014	0.0423	0.0423	2	MS	PRB	12/11/09 17:32	091211-4	925484
7440-62-2	Vanadium		21900	ug/Kg		104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-66-6	Zinc		26100	ug/Kg		344	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.509	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.503	g	30	mL	12/04/09	TXB3

ETM
1/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613010 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14249 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5760000	ug/Kg		7520	22100	22100	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-36-0	Antimony	1020	ug/Kg	J	346	1050	1050	1	P	HSC	12/15/09 08:17	121509-1	932724
7440-38-2	Arsenic	0.776	mg/kg	J	0.215	1.07	1.07	2	MS	PRB	12/11/09 03:37	091210-3	925484
7440-39-3	Barium	111000	ug/Kg		111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-41-7	Beryllium	0.504	mg/kg		0.0215	0.107	0.107	2	MS	BAJ	12/12/09 13:50	091212-8	925484
7440-42-8	Boron	1990	ug/Kg	J	1110	5530	5530	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-70-2	Calcium	2020000	ug/Kg		8840	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-47-3	Chromium	5610	ug/Kg		166	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-48-4	Cobalt	2810	ug/Kg		166	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-50-8	Copper	4950	ug/Kg		332	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-89-6	Iron	9630000	ug/Kg		8840	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-92-1	Lead	8110	ug/Kg		276	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-93-2	Lithium	10.2	mg/kg		0.429	2.15	2.15	2	MS	PRB	12/11/09 03:37	091210-3	925484
7439-95-4	Magnesium J+,I6b	1330000	ug/Kg	N	9400	33200	33200	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-96-5	Manganese	263000	ug/Kg	*	221	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-97-6	Mercury	9.52	ug/kg	J	4.2	12.4	12.4	1	AV	JXL1	12/07/09 12:30	120709S1-9	925646
7440-02-0	Nickel	4.52	mg/kg		0.107	0.429	0.429	2	MS	PRB	12/11/09 03:37	091210-3	925484
7440-09-7	Potassium J+,I6b	804000	ug/Kg	N	7080	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.07	mg/kg	UN	0.537	1.07	1.07	2	MS	PRB	12/11/09 03:37	091210-3	925484
7440-21-3	Silicon J-,I6a	783000	ug/Kg	N	1570	10500	10500	1	P	HSC	12/15/09 08:17	121509-1	932724
7440-22-4	Silver	270	ug/Kg	J	111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-23-5	Sodium U,I4d	141000	ug/Kg		7740	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-28-0	Thallium U,I4b	0.0981	mg/kg	J	0.0644	0.215	0.215	2	MS	PRB	12/11/09 17:35	091211-4	925484
7440-32-6	Titanium J+,I6b	345000	ug/Kg	N	111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-61-1	Uranium	0.550	mg/kg		0.0142	0.0429	0.0429	2	MS	PRB	12/11/09 17:35	091211-4	925484
7440-62-2	Vanadium	15500	ug/Kg		111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-66-6	Zinc	25500	ug/Kg		365	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.503	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.518	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.54	g	30	mL	12/04/09	TXB3

ETM
1/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613011 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14248 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum		12900000	ug/Kg		7590	22300	22300	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-36-0	Antimony		1670	ug/Kg		363	1100	1100	1	P	HSC	12/15/09 08:28	121509-1	932724
7440-38-2	Arsenic		1.4	mg/kg		0.221	1.11	1.11	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-39-3	Barium		199000	ug/Kg		112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-41-7	Beryllium		0.978	mg/kg		0.0221	0.111	0.111	2	MS	BAJ	12/05/09 16:08	091205-7	925488
7440-42-8	Boron		2800	ug/Kg	J	1120	5580	5580	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-43-9	Cadmium		131	ug/Kg	J	112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-70-2	Calcium		2160000	ug/Kg		8930	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-47-3	Chromium		9340	ug/Kg		167	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-48-4	Cobalt		4500	ug/Kg		167	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-50-8	Copper		6200	ug/Kg		335	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-89-6	Iron		12200000	ug/Kg		8930	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-92-1	Lead		10900	ug/Kg		279	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-93-2	Lithium	J,I7c	15.2	mg/kg		0.443	2.21	2.21	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7439-95-4	Magnesium	J+,I6b	1990000	ug/Kg	N	9490	33500	33500	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-96-5	Manganese		305000	ug/Kg	*	223	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-97-6	Mercury		16.5	ug/kg		4.27	12.6	12.6	1	AV	JXL1	12/07/09 12:35	120709S1-9	925646
7440-02-0	Nickel		6.62	mg/kg		0.111	0.443	0.443	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-09-7	Potassium	J+,I6b	1760000	ug/Kg	N	7140	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7782-49-2	Selenium		1.11	mg/kg	UN	0.554	1.11	1.11	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-21-3	Silicon	J-,I6a	994000	ug/Kg	N	1650	11000	11000	1	P	HSC	12/15/09 08:28	121509-1	932724
7440-22-4	Silver		249	ug/Kg	J	112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-23-5	Sodium	J,I4a	279000	ug/Kg		7810	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-28-0	Thallium	U,I4b	0.251	mg/kg		0.0664	0.221	0.221	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-32-6	Titanium	J+,I6b	530000	ug/Kg	N	112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-61-1	Uranium		0.604	mg/kg		0.0146	0.0443	0.0443	2	MS	BAJ	12/05/09 23:43	091205-5	925488
7440-62-2	Vanadium		21900	ug/Kg		112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-66-6	Zinc		24400	ug/Kg		368	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925488	925487	SW846 3050B	0.505	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.534	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613012 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14247 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2380000	ug/Kg		7550	22200	22200	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-36-0	Antimony	1070	ug/Kg	U	355	1070	1070	1	P	HSC	12/15/09 08:31	121509-1	932724
7440-38-2	Arsenic	0.611	mg/kg	J	0.223	1.12	1.12	2	MS	PRB	12/11/09 03:54	091210-3	925484
7440-39-3	Barium	32600	ug/Kg		111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-41-7	Beryllium	0.462	mg/kg		0.0223	0.112	0.112	2	MS	BAJ	12/12/09 13:57	091212-8	925484
7440-42-8	Boron	1540	ug/Kg	J	1110	5550	5550	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-43-9	Cadmium	555	ug/Kg	U	111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-70-2	Calcium	744000	ug/Kg		8890	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-47-3	Chromium	2460	ug/Kg		167	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-48-4	Cobalt	803	ug/Kg		167	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-50-8	Copper	2370	ug/Kg		333	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-89-6	Iron	7800000	ug/Kg		8890	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-92-1	Lead	6820	ug/Kg		278	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-93-2	Lithium	8.33	mg/kg		0.446	2.23	2.23	2	MS	PRB	12/11/09 03:54	091210-3	925484
7439-95-4	Magnesium J+,I6b	564000	ug/Kg	N	9440	33300	33300	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-96-5	Manganese	224000	ug/Kg	*	222	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-97-6	Mercury	5.78	ug/kg	J	4.37	12.8	12.8	1	AV	JXL1	12/07/09 12:36	120709S1-9	925646
7440-02-0	Nickel	3.04	mg/kg		0.112	0.446	0.446	2	MS	PRB	12/11/09 03:54	091210-3	925484
7440-09-7	Potassium J+,I6b	405000	ug/Kg	N	7110	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.12	mg/kg	UN	0.558	1.12	1.12	2	MS	PRB	12/11/09 03:54	091210-3	925484
7440-21-3	Silicon J-,I6a	670000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/15/09 08:31	121509-1	932724
7440-22-4	Silver	197	ug/Kg	J	111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-23-5	Sodium U,I4d	97200	ug/Kg		7780	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-28-0	Thallium U,I4b	0.0883	mg/kg	J	0.0669	0.223	0.223	2	MS	PRB	12/11/09 17:44	091211-4	925484
7440-32-6	Titanium J+,I6b	257000	ug/Kg	N	111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-61-1	Uranium	0.502	mg/kg		0.0147	0.0446	0.0446	2	MS	PRB	12/11/09 17:44	091211-4	925484
7440-62-2	Vanadium	5080	ug/Kg		111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-66-6	Zinc	31800	ug/Kg		367	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.521	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613013 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14246 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 92

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3520000	ug/Kg		7200	21200	21200	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-36-0	Antimony	956	ug/Kg	J	345	1040	1040	1	P	HSC	12/15/09 08:35	121509-1	932724
7440-38-2	Arsenic	0.562	mg/kg	J	0.217	1.08	1.08	2	MS	PRB	12/11/09 04:00	091210-3	925484
7440-39-3	Barium	86300	ug/Kg		106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-41-7	Beryllium	0.371	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/12/09 13:59	091212-8	925484
7440-42-8	Boron	1960	ug/Kg	J	1060	5300	5300	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-43-9	Cadmium	530	ug/Kg	U	106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-70-2	Calcium	3910000	ug/Kg		8470	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-47-3	Chromium	4660	ug/Kg		159	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-48-4	Cobalt	2020	ug/Kg		159	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-50-8	Copper	5330	ug/Kg		318	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-89-6	Iron	8240000	ug/Kg		8470	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-92-1	Lead	5660	ug/Kg		265	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-93-2	Lithium	9.27	mg/kg		0.434	2.17	2.17	2	MS	PRB	12/11/09 04:00	091210-3	925484
7439-95-4	Magnesium J+,I6b	1590000	ug/Kg	N	9000	31800	31800	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-96-5	Manganese	256000	ug/Kg	*	212	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-97-6	Mercury	12.7	ug/kg	U	4.33	12.7	12.7	1	AV	JXL1	12/07/09 12:38	120709S1-9	925646
7440-02-0	Nickel	3.77	mg/kg		0.108	0.434	0.434	2	MS	PRB	12/11/09 04:00	091210-3	925484
7440-09-7	Potassium J+,I6b	803000	ug/Kg	N	6780	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/11/09 04:00	091210-3	925484
7440-21-3	Silicon J-,I6a	892000	ug/Kg	N	1570	10400	10400	1	P	HSC	12/15/09 08:35	121509-1	932724
7440-22-4	Silver	155	ug/Kg	J	106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-23-5	Sodium U,I4d	102000	ug/Kg		7410	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-28-0	Thallium U,I4b	0.0668	mg/kg	J	0.0651	0.217	0.217	2	MS	PRB	12/11/09 17:47	091211-4	925484
7440-32-6	Titanium J+,I6b	245000	ug/Kg	N	106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-61-1	Uranium	0.508	mg/kg		0.0143	0.0434	0.0434	2	MS	PRB	12/11/09 17:47	091211-4	925484
7440-62-2	Vanadium	11900	ug/Kg		106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-66-6	Zinc	30600	ug/Kg		349	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.513	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.512	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613014 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14253 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11400000	ug/Kg		7420	21800	21800	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-36-0	Antimony	1440	ug/Kg		351	1060	1060	1	P	HSC	12/15/09 08:38	121509-1	932724
7440-38-2	Arsenic	1.61	mg/kg		0.22	1.1	1.1	2	MS	PRB	12/11/09 04:06	091210-3	925484
7440-39-3	Barium	154000	ug/Kg		109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-41-7	Beryllium	0.978	mg/kg		0.022	0.11	0.11	2	MS	BAJ	12/12/09 14:01	091212-8	925484
7440-42-8	Boron	3060	ug/Kg	J	1090	5460	5460	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-70-2	Calcium	2200000	ug/Kg		8730	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-47-3	Chromium	10300	ug/Kg		164	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-48-4	Cobalt	4920	ug/Kg		164	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-50-8	Copper	6930	ug/Kg		328	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-89-6	Iron	13900000	ug/Kg		8730	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-92-1	Lead	12200	ug/Kg		273	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-93-2	Lithium	15.8	mg/kg		0.44	2.2	2.2	2	MS	PRB	12/11/09 04:06	091210-3	925484
7439-95-4	Magnesium J+,I6b	2020000	ug/Kg	N	9280	32800	32800	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-96-5	Manganese	271000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-97-6	Mercury	15.4	ug/kg		4.05	11.9	11.9	1	AV	JXLI	12/07/09 12:40	120709S1-9	925646
7440-02-0	Nickel	8.01	mg/kg		0.11	0.44	0.44	2	MS	PRB	12/11/09 04:06	091210-3	925484
7440-09-7	Potassium J+,I6b	1830000	ug/Kg	N	6990	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.1	mg/kg	UN	0.55	1.1	1.1	2	MS	PRB	12/11/09 04:06	091210-3	925484
7440-21-3	Silicon J-,I6a	966000	ug/Kg	N	1590	10600	10600	1	P	HSC	12/15/09 08:38	121509-1	932724
7440-22-4	Silver	383	ug/Kg	J	109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-23-5	Sodium U,I4d	189000	ug/Kg		7640	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-28-0	Thallium U,I4b	0.187	mg/kg	J	0.066	0.22	0.22	2	MS	PRB	12/11/09 17:50	091211-4	925484
7440-32-6	Titanium J+,I6b	503000	ug/Kg	N	109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-61-1	Uranium	0.858	mg/kg		0.0145	0.044	0.044	2	MS	PRB	12/11/09 17:50	091211-4	925484
7440-62-2	Vanadium	24900	ug/Kg		109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-66-6	Zinc	28100	ug/Kg		360	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.554	g	30	mL	12/04/09	TXB3

ETM
1/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613015 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14251 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12900000	ug/Kg		7450	21900	21900	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-36-0	Antimony	1100	ug/Kg		350	1060	1060	1	P	HSC	12/15/09 08:41	121509-1	932724
7440-38-2	Arsenic	1.99	mg/kg		0.217	1.08	1.08	2	MS	PRB	12/11/09 04:12	091210-3	925484
7440-39-3	Barium	166000	ug/Kg		110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-41-7	Beryllium	1.09	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/12/09 14:02	091212-8	925484
7440-42-8	Boron	2670	ug/Kg	J	1100	5480	5480	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-43-9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-70-2	Calcium	3040000	ug/Kg		8770	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-47-3	Chromium	9590	ug/Kg		164	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-48-4	Cobalt	3820	ug/Kg		164	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-50-8	Copper	5630	ug/Kg		329	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-89-6	Iron	11500000	ug/Kg		8770	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-92-1	Lead	9210	ug/Kg		274	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-93-2	Lithium	14.9	mg/kg		0.433	2.17	2.17	2	MS	PRB	12/11/09 04:12	091210-3	925484
7439-95-4	Magnesium J+,I6b	1950000	ug/Kg	N	9310	32900	32900	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-96-5	Manganese	256000	ug/Kg	*	219	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-97-6	Mercury	15.5	ug/kg		4.2	12.4	12.4	1	AV	JXL1	12/07/09 12:41	120709S1-9	925646
7440-02-0	Nickel	10.5	mg/kg		0.108	0.433	0.433	2	MS	PRB	12/11/09 04:12	091210-3	925484
7440-09-7	Potassium J+,I6b	1670000	ug/Kg	N	7010	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.08	mg/kg	UN	0.541	1.08	1.08	2	MS	PRB	12/11/09 04:12	091210-3	925484
7440-21-3	Silicon J-,I6a	763000	ug/Kg	N	1590	10600	10600	1	P	HSC	12/15/09 08:41	121509-1	932724
7440-22-4	Silver	253	ug/Kg	J	110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-23-5	Sodium J,I4a	221000	ug/Kg		7670	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-28-0	Thallium U,I4b	0.209	mg/kg	J	0.065	0.217	0.217	2	MS	PRB	12/11/09 17:53	091211-4	925484
7440-32-6	Titanium J+,I6b	474000	ug/Kg	N	110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-61-1	Uranium	0.575	mg/kg		0.0143	0.0433	0.0433	2	MS	PRB	12/11/09 17:53	091211-4	925484
7440-62-2	Vanadium	20700	ug/Kg		110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-66-6	Zinc	21500	ug/Kg		362	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.51	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.536	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613016 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14257 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 98.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1230000	ug/Kg		6850	20100	20100	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-36-0	Antimony	999	ug/Kg		322	976	976	1	P	HSC	12/15/09 08:44	121509-1	932724
7440-38-2	Arsenic	0.287	mg/kg	J	0.202	1.01	1.01	2	MS	PRB	12/11/09 04:18	091210-3	925484
7440-39-3	Barium	28600	ug/Kg		101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-41-7	Beryllium	0.256	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/12/09 14:04	091212-8	925484
7440-42-8	Boron	1030	ug/Kg	J	1010	5040	5040	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-43-9	Cadmium	504	ug/Kg	U	101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-70-2	Calcium	724000	ug/Kg		8060	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-47-3	Chromium	1930	ug/Kg		151	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-48-4	Cobalt	537	ug/Kg		151	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-50-8	Copper	1690	ug/Kg		302	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-89-6	Iron	6570000	ug/Kg		8060	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-92-1	Lead	3380	ug/Kg		252	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-93-2	Lithium	10.6	mg/kg		0.404	2.02	2.02	2	MS	PRB	12/11/09 04:18	091210-3	925484
7439-95-4	Magnesium J+,I6b	378000	ug/Kg	N	8560	30200	30200	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-96-5	Manganese	187000	ug/Kg	*	201	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-97-6	Mercury	10.7	ug/kg	U	3.64	10.7	10.7	1	AV	JXL1	12/07/09 12:43	120709S1-9	925646
7440-02-0	Nickel	2.44	mg/kg		0.101	0.404	0.404	2	MS	PRB	12/11/09 04:18	091210-3	925484
7440-09-7	Potassium J+,I6b	311000	ug/Kg	N	6450	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.01	mg/kg	UN	0.506	1.01	1.01	2	MS	PRB	12/11/09 04:18	091210-3	925484
7440-21-3	Silicon J-,I6a	482000	ug/Kg	N	1460	9760	9760	1	P	HSC	12/15/09 08:44	121509-1	932724
7440-22-4	Silver	147	ug/Kg	J	101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-23-5	Sodium U,I4d	165000	ug/Kg		7050	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-28-0	Thallium	0.202	mg/kg	U	0.0607	0.202	0.202	2	MS	PRB	12/11/09 17:56	091211-4	925484
7440-32-6	Titanium J+,I6b	283000	ug/Kg	N	101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-61-1	Uranium	0.610	mg/kg		0.0133	0.0404	0.0404	2	MS	PRB	12/11/09 17:56	091211-4	925484
7440-62-2	Vanadium	3550	ug/Kg		101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-66-6	Zinc	28600	ug/Kg		332	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.566	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613017 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-2729 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2960000	ug/Kg		7270	21400	21400	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-36-0	Antimony	907	ug/Kg	J	355	1070	1070	1	P	HSC	12/15/09 08:48	121509-1	932724
7440-38-2	Arsenic	0.509	mg/kg	J	0.212	1.06	1.06	2	MS	PRB	12/11/09 04:23	091210-3	925484
7440-39-3	Barium	76500	ug/Kg		107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-41-7	Beryllium	0.365	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 14:06	091212-8	925484
7440-42-8	Boron	1470	ug/Kg	J	1070	5340	5340	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-43-9	Cadmium	109	ug/Kg	J	107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-70-2	Calcium	2410000	ug/Kg		8550	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-47-3	Chromium	4130	ug/Kg		160	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-48-4	Cobalt	1900	ug/Kg		160	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-50-8	Copper	5800	ug/Kg		321	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-89-6	Iron	8540000	ug/Kg		8550	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-92-1	Lead	6000	ug/Kg		267	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-93-2	Lithium	8.4	mg/kg		0.424	2.12	2.12	2	MS	PRB	12/11/09 04:23	091210-3	925484
7439-95-4	Magnesium J+,I6b	1010000	ug/Kg	N	9080	32100	32100	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-96-5	Manganese	222000	ug/Kg	*	214	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-97-6	Mercury	11.7	ug/kg	U	3.97	11.7	11.7	1	AV	JXL1	12/07/09 12:45	120709S1-9	925646
7440-02-0	Nickel	4.17	mg/kg		0.106	0.424	0.424	2	MS	PRB	12/11/09 04:23	091210-3	925484
7440-09-7	Potassium J+,I6b	603000	ug/Kg	N	6840	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.53	1.06	1.06	2	MS	PRB	12/11/09 04:23	091210-3	925484
7440-21-3	Silicon J-,I6a	659000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/15/09 08:48	121509-1	932724
7440-22-4	Silver	144	ug/Kg	J	107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-23-5	Sodium J,I4a	275000	ug/Kg		7480	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-28-0	Thallium U,I4b	0.0702	mg/kg	J	0.0636	0.212	0.212	2	MS	PRB	12/11/09 17:59	091211-4	925484
7440-32-6	Titanium J+,I6b	295000	ug/Kg	N	107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-61-1	Uranium	0.516	mg/kg		0.014	0.0424	0.0424	2	MS	PRB	12/11/09 17:59	091211-4	925484
7440-62-2	Vanadium	13600	ug/Kg		107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-66-6	Zinc	28900	ug/Kg		353	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.512	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.516	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.562	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613018 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-6969 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6780000	ug/Kg		7050	20700	20700	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-36-0	Antimony	1780	ug/Kg		343	1040	1040	1	P	HSC	12/15/09 08:52	121509-1	932724
7440-38-2	Arsenic	1.72	mg/kg		0.205	1.03	1.03	2	MS	PRB	12/11/09 04:29	091210-3	925484
7440-39-3	Barium	113000	ug/Kg		104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-41-7	Beryllium	0.730	mg/kg		0.0205	0.103	0.103	2	MS	BAJ	12/12/09 14:07	091212-8	925484
7440-42-8	Boron	2230	ug/Kg	J	1040	5180	5180	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-43-9	Cadmium	518	ug/Kg	U	104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-70-2	Calcium	5840000	ug/Kg		8290	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-47-3	Chromium	8020	ug/Kg		155	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-48-4	Cobalt	4730	ug/Kg		155	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-50-8	Copper	6450	ug/Kg		311	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-89-6	Iron	11600000	ug/Kg		8290	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-92-1	Lead	8800	ug/Kg		259	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-93-2	Lithium	9.31	mg/kg		0.411	2.05	2.05	2	MS	PRB	12/11/09 04:29	091210-3	925484
7439-95-4	Magnesium J+,I6b	1920000	ug/Kg	N	8810	31100	31100	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-96-5	Manganese	258000	ug/Kg	*	207	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-97-6	Mercury	12.5	ug/kg		4.18	12.3	12.3	1	AV	JXL1	12/07/09 12:46	120709S1-9	925646
7440-02-0	Nickel	6.63	mg/kg		0.103	0.411	0.411	2	MS	PRB	12/11/09 04:29	091210-3	925484
7440-09-7	Potassium J+,I6b	1530000	ug/Kg	N	6630	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7782-49-2	Selenium UJ,I6a	1.03	mg/kg	UN	0.513	1.03	1.03	2	MS	PRB	12/11/09 04:29	091210-3	925484
7440-21-3	Silicon J-,I6a	898000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/15/09 08:52	121509-1	932724
7440-22-4	Silver	261	ug/Kg	J	104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-23-5	Sodium U,I4d	148000	ug/Kg		7260	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-28-0	Thallium U,I4b	0.189	mg/kg	J	0.0616	0.205	0.205	2	MS	PRB	12/11/09 18:02	091211-4	925484
7440-32-6	Titanium J+,I6b	280000	ug/Kg	N	104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-61-1	Uranium	0.609	mg/kg		0.0135	0.0411	0.0411	2	MS	PRB	12/11/09 18:02	091211-4	925484
7440-62-2	Vanadium	21000	ug/Kg		104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-66-6	Zinc	25000	ug/Kg		342	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.507	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.512	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.513	g	30	mL	12/04/09	TXB3

ETM
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614001 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-2742 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 14:45	120409A-1	925431
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 14:45	120409A-1	925431
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/07/09 21:52	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 21:52	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 14:45	120409A-1	925431
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	12/07/09 21:52	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:34	100809W4-3	925641
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 14:45	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-21-3	Silicon U,I4d	50.3	ug/L	J	25	100	100	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 14:45	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

ETM
1/20/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614002 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-2755 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	222	ug/L		68	200	200	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-39-3	Barium	3.5	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-70-2	Calcium	160	ug/L	J	50	200	200	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-47-3	Chromium	1.42	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 15:27	120409A-1	925431
7439-89-6	Iron	152	ug/L		30	100	100	1	P	HSC	12/04/09 15:27	120409A-1	925431
7439-92-1	Lead	0.50	ug/L	J	0.5	2	2	1	MS	PRB	12/07/09 22:16	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 22:16	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 15:27	120409A-1	925431
7439-96-5	Manganese	4.42	ug/L	J	1	5	5	1	MS	PRB	12/07/09 22:16	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:46	100809W4-3	925641
7440-02-0	Nickel	1.53	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-09-7	Potassium	128	ug/L	J	50	150	150	1	P	HSC	12/04/09 15:27	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-21-3	Silicon	546	ug/L		25	100	100	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-23-5	Sodium	377	ug/L		100	300	300	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-32-6	Titanium	3.14	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-66-6	Zinc U,I4	3.41	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 15:27	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

ETM
1/20/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614003 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-6971 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	142	ug/L	J	68	200	200	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-39-3	Barium	2.06	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-70-2	Calcium	95.1	ug/L	J	50	200	200	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-47-3	Chromium	1.39	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 15:34	120409A-1	925431
7439-89-6	Iron	141	ug/L		30	100	100	1	P	HSC	12/04/09 15:34	120409A-1	925431
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/07/09 22:22	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 22:22	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 15:34	120409A-1	925431
7439-96-5	Manganese	4.37	ug/L	J	1	5	5	1	MS	PRB	12/07/09 22:22	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:48	100809W4-3	925641
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 15:34	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-21-3	Silicon	269	ug/L		25	100	100	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-23-5	Sodium	320	ug/L		100	300	300	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-32-6	Titanium	2.46	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-66-6	Zinc U,I4	5.2	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 15:34	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

ETM
1/20/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614004 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-6973 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 15:41	120409A-1	925431
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 15:41	120409A-1	925431
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/07/09 22:27	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 22:27	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 15:41	120409A-1	925431
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	12/07/09 22:27	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:50	100809W4-3	925641
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 15:41	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-21-3	Silicon U,I4d	49.2	ug/L	J	25	100	100	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 15:41	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

ETM
1/20/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-643 VALIDATION DATE: 01/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: John A. Bailey ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): total cyanide only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Total Cyanide was detected in the ICB's. All associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the parent samples for Total Cyanide were LANL samples from other RNs. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/20/10

VALIDATOR'S SIGNATURE: John Bailey DATE: 01/19/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 **General Chemistry Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14108	Project:	LANL01004
Sample ID:	241613001	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	7.23%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.9	250	ug/kg	1	AXC2 12/03/09	1114	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14106	Project:	LANL01004
Sample ID:	241613002	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.44%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.6	271	ug/kg	1	AXC2 12/03/09	1114	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14107	Project:	LANL01004
Sample ID:	241613003	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	12.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	77.5	285	ug/kg	1	AXC2 12/03/09	1115	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14109	Project:	LANL01004
Sample ID:	241613004	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	5.43%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.4	240	ug/kg	1	AXC2 12/03/09	1116	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14252	Project:	LANL01004
Sample ID:	241613005	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	6.63%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.0	257	ug/kg	1	AXC2 12/03/09	1117	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14250	Project:	LANL01004
Sample ID:	241613006	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	6.93%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.9	253	ug/kg	1	AXC2 12/03/09	1118	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14255	Project:	LANL01004
Sample ID:	241613007	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.25%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.9	275	ug/kg	1	AXC2 12/03/09	1119	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14256	Project:	LANL01004
Sample ID:	241613008	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	8.25%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.7	267	ug/kg	1	AXC2 12/03/09	1120	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14254	Project:	LANL01004
Sample ID:	241613009	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	5.86%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.7	241	ug/kg	1	AXC2 12/03/09	1121	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14249	Project:	LANL01004
Sample ID:	241613010	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	10.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.3	262	ug/kg	1	AXC2 12/03/09	1125	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14248	Project:	LANL01004
Sample ID:	241613011	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	10.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	66.7	245	ug/kg	1	AXC2 12/03/09	1126	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14247	Project:	LANL01004
Sample ID:	241613012	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.2	258	ug/kg	1	AXC2 12/03/09	1127	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14246	Project:	LANL01004
Sample ID:	241613013	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	7.97%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.4	266	ug/kg	1	AXC2 12/03/09	1128	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14253	Project:	LANL01004
Sample ID:	241613014	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.13%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.6	241	ug/kg	1	AXC2 12/03/09	1129	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14251	Project:	LANL01004
Sample ID:	241613015	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.46%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.1	276	ug/kg	1	AXC2 12/03/09	1130	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14257	Project:	LANL01004
Sample ID:	241613016	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	1.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.8	253	ug/kg	1	AXC2 12/03/09	1130	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-10-2729	Project:	LANL01004
Sample ID:	241613017	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	8.62%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.4	274	ug/kg	1	AXC2 12/03/09	1131	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-10-6969	Project:	LANL01004
Sample ID:	241613018	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	4.86%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.1	258	ug/kg	1	AXC2 12/03/09	1132	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID:	RE03-10-2742	Project:	LANL01004
Sample ID:	241614001	Client ID:	LANL010
Matrix:	W		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1111	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID:	RE03-10-2755	Project:	LANL01004
Sample ID:	241614002	Client ID:	LANL010
Matrix:	W		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1112	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

JAB
01/19/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID:	RE03-10-6971	Project:	LANL01004
Sample ID:	241614003	Client ID:	LANL010
Matrix:	W		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1112	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

JAB
01/19/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID:	RE03-10-6973	Project:	LANL01004
Sample ID:	241614004	Client ID:	LANL010
Matrix:	W		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1113	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

JAB
01/19/10

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-643C

REQUEST NUMBER: 10-643

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241613%, 241614%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14108	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14106	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14107	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14109	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14252	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14250	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14255	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14256	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14254	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14249	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14248	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14247	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14246	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14253	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14251	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14257	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2729	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2742	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2742	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2755	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2755	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6971	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6971	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6973	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6973	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6969	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/20/09	3:00	Greg Tyler		11-21-09	0900
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Friday, November 20, 2009

REQUEST NUMBER: 10-643

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-643
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 11/20/2009
TURNAROUND/REPORT DUE: 12/20/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14106	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14107	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14108	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14109	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14246	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14247	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14248	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14249	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14250	S	11/19/2009	Plus, B, Li, Si, Ti, U

Friday, November 20, 2009

REQUEST NUMBER: 10-643

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14251	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14252	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14253	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14254	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14255	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14256	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14257	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	
	SW-846:6020	1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	
	SW-846:9012A	1	RE03-09-14106	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14107	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14108	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14109	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14246	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14247	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14248	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14249	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14250	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14251	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14252	S	11/19/2009	Plus, B, Li, Si, Ti, U

Friday, November 20, 2009

REQUEST NUMBER: 10-643

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-14253	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14254	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14255	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14256	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14257	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	

Final Page of REQUEST NUMBER 10-643

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 30, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241613 241614
SDG: 10-643

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 21, 2009, and analyzed for General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-643
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241613 and 241614
SDG: 10-643

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- Miscellaneous 1487

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- Quality Control Summary 1544
- Instrument QC Data Summary 1547
- Cyanide, Total 1549
- Miscellaneous 1559

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- Sample Data Summary 1567
- Quality Control Summary 1573
- Instrument QC Data Summary 1576
- Cyanide, Total 1578

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241613 and 241614
SDG # : 10-643

November 30, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 21, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241613001	RE03-09-14108
241613002	RE03-09-14106
241613003	RE03-09-14107
241613004	RE03-09-14109
241613005	RE03-09-14252
241613006	RE03-09-14250
241613007	RE03-09-14255
241613008	RE03-09-14256
241613009	RE03-09-14254
241613010	RE03-09-14249
241613011	RE03-09-14248
241613012	RE03-09-14247
241613013	RE03-09-14246
241613014	RE03-09-14253
241613015	RE03-09-14251
241613016	RE03-09-14257
241613017	RE03-10-2729
241613018	RE03-10-6969
241614001	RE03-10-2742
241614002	RE03-10-2755
241614003	RE03-10-6971
241614004	RE03-10-6973

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for D Francis

Valerie Davis

Project Manager

List of current GEL Certifications as of 30 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Friday, November 20, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-643C

REQUEST NUMBER: 10-643

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/20/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241613%, 241614%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14108	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14106	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14107	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14109	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14252	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14250	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14255	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14256	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14254	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14249	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14248	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14247	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14246	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14253	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14251	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14257	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2729	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2742	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2742	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2755	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2755	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6971	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6971	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6973	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-6973	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-6969	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/20/09	3:00	Greg Tyler		11-21-09	0900
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Friday, November 20, 2009

REQUEST NUMBER: 10-643

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-643
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/20/2009
TURNAROUND/REPORT DUE: 12/20/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14106	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14107	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14108	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14109	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14246	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14247	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14248	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14249	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14250	S	11/19/2009	Plus, B, Li, Si, Ti, U

Friday, November 20, 2009

REQUEST NUMBER: 10-643

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14251	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14252	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14253	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14254	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14255	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14256	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14257	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	
	SW-846:6020	1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	
	SW-846:9012A	1	RE03-09-14106	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14107	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14108	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14109	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14246	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14247	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14248	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14249	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14250	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14251	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14252	S	11/19/2009	Plus, B, Li, Si, Ti, U

Friday, November 20, 2009

REQUEST NUMBER: 10-643

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-14253	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14254	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14255	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14256	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14257	S	11/19/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2729	S	11/19/2009	
		1	RE03-10-2742	W	11/19/2009	
		1	RE03-10-2755	W	11/19/2009	
		1	RE03-10-6969	S	11/19/2009	
		1	RE03-10-6971	W	11/19/2009	
		1	RE03-10-6973	W	11/19/2009	

Final Page of REQUEST NUMBER 10-643

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-643**
Received By: Greg Tyler	**Date Received: 11/21/09**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 35 cpm
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other 4C, 6C 16C
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
Fed Ex Tracking Numbers
7209 7848 9947 4C
7209 7848 9958 4C
7209 7848 9969 4C
7209 7848 9980 6C
7209 7848 9936 6C
7209 7848 0002 6C
7209 7848 9970 6C
7209 7848 9991 16C

PM (or PMA) review: Initials _____ Date 11/23/09

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

4°

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9947
11.21

RT 803

FedEx Express

2 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9947
Mstr# 7209 7848 9936 0201

X0 CHSA

29407
SC-US
CHS

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

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FedEx Express

3 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9958
Mstr# 7209 7848 9936 0201

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 28NOV99
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2434

BILL

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

6°

803

FedEx Express

1 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9980
MASTER

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 28NOV99
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

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FedEx Express

1 of 2

SATURDAY
PRIORITY OVERNIG

TRK# 0201 7209 7848 9969
MASTER

X0 CHSA

294
S
C

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

6°

FedEx Express

1 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7848 9936

MASTER

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

6°

803

1 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7849 0002

MASTER

X0 CHSA

29407
SC-US
CHS

Part # 156148-434 NMIT V3.0: 09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

6°

FedEx Express

2 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9970

Matr# 7209 7848 9969 0201

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 20NOV09
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: MR1A015AGWK0

16°

FedEx Express

2 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7848 9991

Matr# 7209 7848 9980 0201

VA AIPA

29407

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-643

Sample Analysis

Sample ID	Client ID
241613001	RE03-09-14108
241613002	RE03-09-14106
241613003	RE03-09-14107
241613004	RE03-09-14109
241613005	RE03-09-14252
241613006	RE03-09-14250
241613007	RE03-09-14255
241613008	RE03-09-14256
241613009	RE03-09-14254
241613010	RE03-09-14249
241613011	RE03-09-14248
241613012	RE03-09-14247
241613013	RE03-09-14246
241613014	RE03-09-14253
241613015	RE03-09-14251
241613016	RE03-09-14257
241613017	RE03-10-2729
241613018	RE03-10-6969
1201978607	Method Blank (MB) **ICP**
1201995284	Method Blank (MB) **ICP**

1201978612	Laboratory Control Sample (LCS)
1201995285	Laboratory Control Sample (LCS)
1201978609	241613001(RE03-09-14108L) Serial Dilution (SD)
1201978608	241613001(RE03-09-14108D) Sample Duplicate (DUP)
1201978610	241613001(RE03-09-14108S) Matrix Spike (MS)
1201978611	241613001(RE03-09-14108SD) Matrix Spike Duplicate (MSD)
1201978613	Method Blank (MB) **ICP-MS**
1201978625	Method Blank (MB) **ICP-MS**
1201978618	Laboratory Control Sample (LCS)
1201978630	Laboratory Control Sample (LCS)
1201978627	241611001(RE03-09-13919L) Serial Dilution (SD)
1201978615	241613001(RE03-09-14108L) Serial Dilution (SD)
1201978626	241611001(RE03-09-13919D) Sample Duplicate (DUP)
1201978614	241613001(RE03-09-14108D) Sample Duplicate (DUP)
1201978628	241611001(RE03-09-13919S) Matrix Spike (MS)
1201978616	241613001(RE03-09-14108S) Matrix Spike (MS)
1201978629	241611001(RE03-09-13919SD) Matrix Spike Duplicate (MSD)
1201978617	241613001(RE03-09-14108SD) Matrix Spike Duplicate (MSD)
1201978991	Method Blank (MB) **CVAA**
1201978992	Laboratory Control Sample (LCS)
1201978995	241613001(RE03-09-14108L) Serial Dilution (SD)
1201978993	241613001(RE03-09-14108D) Sample Duplicate (DUP)
1201978994	241613001(RE03-09-14108S) Matrix Spike (MS)
1201978996	241613001(RE03-09-14108SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925482, 932724, 925484, 925488 and 925646
Prep Batch :	925481, 932723, 925483, 925487 and 925644
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits with the exception of iron, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The laboratory control sample (LCS) met the recommended acceptance criteria.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241613001 and 241611001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of magnesium, potassium, silicon, titanium and selenium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of magnesium, potassium, silicon and titanium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of manganese, as indicated by the "*" qualifier.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 769427, 769439 and 770358. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson **Date:** 12/17/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613001 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14108 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5090000	ug/Kg		7320	21500	21500	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-36-0	Antimony	699	ug/Kg	J	338	1020	1020	1	P	HSC	12/15/09 07:27	121509-1	932724
7440-38-2	Arsenic	0.664	mg/kg	J	0.213	1.06	1.06	2	MS	PRB	12/11/09 02:10	091210-3	925484
7440-39-3	Barium	48400	ug/Kg		108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-41-7	Beryllium	0.468	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	12/12/09 13:24	091212-8	925484
7440-42-8	Boron	2060	ug/Kg	J	1080	5380	5380	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-70-2	Calcium	915000	ug/Kg		8610	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-47-3	Chromium	3630	ug/Kg		161	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-48-4	Cobalt	1360	ug/Kg		161	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-50-8	Copper	2680	ug/Kg		323	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-89-6	Iron	9270000	ug/Kg		8610	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-92-1	Lead	11100	ug/Kg		269	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-93-2	Lithium	7.19	mg/kg		0.425	2.13	2.13	2	MS	PRB	12/11/09 02:10	091210-3	925484
7439-95-4	Magnesium	901000	ug/Kg	N	9140	32300	32300	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-96-5	Manganese	265000	ug/Kg	*	215	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482
7439-97-6	Mercury	7.23	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/07/09 12:04	120709S1-9	925646
7440-02-0	Nickel	3.89	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/11/09 02:10	091210-3	925484
7440-09-7	Potassium	501000	ug/Kg	N	6890	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7782-49-2	Selenium	1.06	mg/kg	UN	0.532	1.06	1.06	2	MS	PRB	12/11/09 02:10	091210-3	925484
7440-21-3	Silicon	817000	ug/Kg	N	1540	10200	10200	1	P	HSC	12/15/09 07:27	121509-1	932724
7440-22-4	Silver	270	ug/Kg	J	108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-23-5	Sodium	194000	ug/Kg		7530	26900	26900	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-28-0	Thallium	0.130	mg/kg	J	0.0638	0.213	0.213	2	MS	PRB	12/11/09 16:51	091211-4	925484
7440-32-6	Titanium	204000	ug/Kg	N	108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-61-1	Uranium	0.602	mg/kg		0.014	0.0425	0.0425	2	MS	PRB	12/11/09 16:51	091211-4	925484
7440-62-2	Vanadium	7440	ug/Kg		108	538	538	1	P	HSC	12/09/09 03:52	120809-2	925482
7440-66-6	Zinc	32700	ug/Kg		355	1080	1080	1	P	HSC	12/09/09 03:52	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.507	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.51	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.526	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613002 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14106 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2210000	ug/Kg		7180	21100	21100	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-36-0	Antimony	521	ug/Kg	J	357	1080	1080	1	P	HSC	12/15/09 07:44	121509-1	932724
7440-38-2	Arsenic	0.241	mg/kg	J	0.221	1.1	1.1	2	MS	PRB	12/11/09 02:51	091210-3	925484
7440-39-3	Barium	50300	ug/Kg		106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-41-7	Beryllium	0.368	mg/kg		0.0221	0.11	0.11	2	MS	BAJ	12/12/09 13:33	091212-8	925484
7440-42-8	Boron	1300	ug/Kg	J	1060	5280	5280	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-70-2	Calcium	1250000	ug/Kg		8450	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-47-3	Chromium	2580	ug/Kg		158	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-48-4	Cobalt	1210	ug/Kg		158	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-50-8	Copper	3470	ug/Kg		317	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-89-6	Iron	7160000	ug/Kg		8450	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-92-1	Lead	4330	ug/Kg		264	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-93-2	Lithium	8.1	mg/kg		0.442	2.21	2.21	2	MS	PRB	12/11/09 02:51	091210-3	925484
7439-95-4	Magnesium	716000	ug/Kg	N	8970	31700	31700	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-96-5	Manganese	210000	ug/Kg	*	211	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482
7439-97-6	Mercury	4.26	ug/kg	J	3.81	11.2	11.2	1	AV	JXL1	12/07/09 12:16	120709S1-9	925646
7440-02-0	Nickel	2.18	mg/kg		0.11	0.442	0.442	2	MS	PRB	12/11/09 02:51	091210-3	925484
7440-09-7	Potassium	389000	ug/Kg	N	6760	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7782-49-2	Selenium	1.1	mg/kg	UN	0.552	1.1	1.1	2	MS	PRB	12/11/09 02:51	091210-3	925484
7440-21-3	Silicon	658000	ug/Kg	N	1620	10800	10800	1	P	HSC	12/15/09 07:44	121509-1	932724
7440-22-4	Silver	201	ug/Kg	J	106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-23-5	Sodium	245000	ug/Kg		7390	26400	26400	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-28-0	Thallium	0.0709	mg/kg	J	0.0663	0.221	0.221	2	MS	PRB	12/11/09 17:12	091211-4	925484
7440-32-6	Titanium	238000	ug/Kg	N	106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-61-1	Uranium	0.391	mg/kg		0.0146	0.0442	0.0442	2	MS	PRB	12/11/09 17:12	091211-4	925484
7440-62-2	Vanadium	8650	ug/Kg		106	528	528	1	P	HSC	12/09/09 04:27	120809-2	925482
7440-66-6	Zinc	27100	ug/Kg		348	1060	1060	1	P	HSC	12/09/09 04:27	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.523	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.591	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.51	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613003 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14107 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9500000	ug/Kg		7720	22700	22700	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-36-0	Antimony	1450	ug/Kg		364	1100	1100	1	P	HSC	12/15/09 07:55	121509-1	932724
7440-38-2	Arsenic	1.65	mg/kg		0.217	1.09	1.09	2	MS	PRB	12/11/09 02:56	091210-3	925484
7440-39-3	Barium	168000	ug/Kg		113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-41-7	Beryllium	0.909	mg/kg		0.0217	0.109	0.109	2	MS	BAJ	12/12/09 13:35	091212-8	925484
7440-42-8	Boron	3110	ug/Kg	J	1130	5670	5670	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-43-9	Cadmium	128	ug/Kg	J	113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-70-2	Calcium	2190000	ug/Kg		9080	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-47-3	Chromium	10100	ug/Kg		170	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-48-4	Cobalt	6040	ug/Kg		170	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-50-8	Copper	7580	ug/Kg		340	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-89-6	Iron	14100000	ug/Kg		9080	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-92-1	Lead	12700	ug/Kg		284	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-93-2	Lithium	12.5	mg/kg		0.435	2.17	2.17	2	MS	PRB	12/11/09 02:56	091210-3	925484
7439-95-4	Magnesium	2190000	ug/Kg	N	9640	34000	34000	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-96-5	Manganese	392000	ug/Kg	*	227	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482
7439-97-6	Mercury	13.4	ug/kg		4.1	12.1	12.1	1	AV	JXL1	12/07/09 12:18	120709S1-9	925646
7440-02-0	Nickel	8.01	mg/kg		0.109	0.435	0.435	2	MS	PRB	12/11/09 02:56	091210-3	925484
7440-09-7	Potassium	1510000	ug/Kg	N	7260	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7782-49-2	Selenium	1.09	mg/kg	UN	0.543	1.09	1.09	2	MS	PRB	12/11/09 02:56	091210-3	925484
7440-21-3	Silicon	863000	ug/Kg	N	1650	11000	11000	1	P	HSC	12/15/09 07:55	121509-1	932724
7440-22-4	Silver	389	ug/Kg	J	113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-23-5	Sodium	199000	ug/Kg		7940	28400	28400	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-28-0	Thallium	0.192	mg/kg	J	0.0652	0.217	0.217	2	MS	PRB	12/11/09 17:15	091211-4	925484
7440-32-6	Titanium	438000	ug/Kg	N	113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-61-1	Uranium	0.804	mg/kg		0.0143	0.0435	0.0435	2	MS	PRB	12/11/09 17:15	091211-4	925484
7440-62-2	Vanadium	26300	ug/Kg		113	567	567	1	P	HSC	12/09/09 04:49	120809-2	925482
7440-66-6	Zinc	29100	ug/Kg		374	1130	1130	1	P	HSC	12/09/09 04:49	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.524	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.567	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.517	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613004 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14109 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1950000	ug/Kg		7130	21000	21000	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-36-0	Antimony	1030	ug/Kg	U	341	1030	1030	1	P	HSC	12/15/09 07:58	121509-1	932724
7440-38-2	Arsenic	1.02	mg/kg	U	0.204	1.02	1.02	2	MS	PRB	12/11/09 03:02	091210-3	925484
7440-39-3	Barium	18100	ug/Kg		105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-41-7	Beryllium	0.391	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	12/12/09 13:40	091212-8	925484
7440-42-8	Boron	1310	ug/Kg	J	1050	5250	5250	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-70-2	Calcium	498000	ug/Kg		8390	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-47-3	Chromium	3970	ug/Kg		157	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-48-4	Cobalt	466	ug/Kg	J	157	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-50-8	Copper	2050	ug/Kg		315	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-89-6	Iron	7020000	ug/Kg		8390	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-92-1	Lead	6520	ug/Kg		262	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-93-2	Lithium	5.06	mg/kg		0.408	2.04	2.04	2	MS	PRB	12/11/09 03:02	091210-3	925484
7439-95-4	Magnesium	537000	ug/Kg	N	8920	31500	31500	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-96-5	Manganese	241000	ug/Kg	*	210	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482
7439-97-6	Mercury	4.51	ug/kg	J	4.21	12.4	12.4	1	AV	JXL1	12/07/09 12:19	120709S1-9	925646
7440-02-0	Nickel	2.78	mg/kg		0.102	0.408	0.408	2	MS	PRB	12/11/09 03:02	091210-3	925484
7440-09-7	Potassium	329000	ug/Kg	N	6710	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7782-49-2	Selenium	1.02	mg/kg	UN	0.51	1.02	1.02	2	MS	PRB	12/11/09 03:02	091210-3	925484
7440-21-3	Silicon	838000	ug/Kg	N	1550	10300	10300	1	P	HSC	12/15/09 07:58	121509-1	932724
7440-22-4	Silver	203	ug/Kg	J	105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-23-5	Sodium	210000	ug/Kg		7340	26200	26200	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-28-0	Thallium	0.0619	mg/kg	J	0.0612	0.204	0.204	2	MS	PRB	12/11/09 17:18	091211-4	925484
7440-32-6	Titanium	132000	ug/Kg	N	105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-61-1	Uranium	0.490	mg/kg		0.0135	0.0408	0.0408	2	MS	PRB	12/11/09 17:18	091211-4	925484
7440-62-2	Vanadium	3290	ug/Kg		105	525	525	1	P	HSC	12/09/09 04:56	120809-2	925482
7440-66-6	Zinc	35900	ug/Kg		346	1050	1050	1	P	HSC	12/09/09 04:56	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.518	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.513	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.511	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613005 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14252 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3030000	ug/Kg		6980	20500	20500	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-36-0	Antimony	989	ug/Kg	J	339	1030	1030	1	P	HSC	12/15/09 08:01	121509-1	932724
7440-38-2	Arsenic	0.691	mg/kg	J	0.212	1.06	1.06	2	MS	PRB	12/11/09 03:08	091210-3	925484
7440-39-3	Barium	92700	ug/Kg		103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-41-7	Beryllium	0.448	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 13:42	091212-8	925484
7440-42-8	Boron	1760	ug/Kg	J	1030	5130	5130	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-43-9	Cadmium	119	ug/Kg	J	103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-70-2	Calcium	1070000	ug/Kg		8210	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-47-3	Chromium	3080	ug/Kg		154	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-48-4	Cobalt	1420	ug/Kg		154	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-50-8	Copper	3460	ug/Kg		308	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-89-6	Iron	7860000	ug/Kg		8210	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-92-1	Lead	6300	ug/Kg		256	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-93-2	Lithium	9.47	mg/kg		0.425	2.12	2.12	2	MS	PRB	12/11/09 03:08	091210-3	925484
7439-95-4	Magnesium	777000	ug/Kg	N	8720	30800	30800	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-96-5	Manganese	248000	ug/Kg	*	205	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482
7439-97-6	Mercury	7.85	ug/kg	J	4.05	11.9	11.9	1	AV	JXL1	12/07/09 12:21	120709S1-9	925646
7440-02-0	Nickel	3.71	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/11/09 03:08	091210-3	925484
7440-09-7	Potassium	497000	ug/Kg	N	6570	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7782-49-2	Selenium	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	12/11/09 03:08	091210-3	925484
7440-21-3	Silicon	743000	ug/Kg	N	1540	10300	10300	1	P	HSC	12/15/09 08:01	121509-1	932724
7440-22-4	Silver	179	ug/Kg	J	103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-23-5	Sodium	106000	ug/Kg		7180	25600	25600	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-28-0	Thallium	0.0922	mg/kg	J	0.0637	0.212	0.212	2	MS	PRB	12/11/09 17:21	091211-4	925484
7440-32-6	Titanium	275000	ug/Kg	N	103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-61-1	Uranium	0.436	mg/kg		0.014	0.0425	0.0425	2	MS	PRB	12/11/09 17:21	091211-4	925484
7440-62-2	Vanadium	8880	ug/Kg		103	513	513	1	P	HSC	12/09/09 05:03	120809-2	925482
7440-66-6	Zinc	27200	ug/Kg		339	1030	1030	1	P	HSC	12/09/09 05:03	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.522	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.54	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.522	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613006 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14250 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6950000	ug/Kg		7290	21400	21400	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-36-0	Antimony	1660	ug/Kg		336	1020	1020	1	P	HSC	12/15/09 08:05	121509-1	932724
7440-38-2	Arsenic	1.08	mg/kg		0.212	1.06	1.06	2	MS	PRB	12/11/09 03:14	091210-3	925484
7440-39-3	Barium	113000	ug/Kg		107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-41-7	Beryllium	0.657	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 13:43	091212-8	925484
7440-42-8	Boron	2250	ug/Kg	J	1070	5360	5360	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-43-9	Cadmium	536	ug/Kg	U	107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-70-2	Calcium	1530000	ug/Kg		8580	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-47-3	Chromium	7040	ug/Kg		161	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-48-4	Cobalt	4250	ug/Kg		161	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-50-8	Copper	4710	ug/Kg		322	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-89-6	Iron	11300000	ug/Kg		8580	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-92-1	Lead	10100	ug/Kg		268	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-93-2	Lithium	10.7	mg/kg		0.424	2.12	2.12	2	MS	PRB	12/11/09 03:14	091210-3	925484
7439-95-4	Magnesium	1400000	ug/Kg	N	9110	32200	32200	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-96-5	Manganese	375000	ug/Kg	*	214	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482
7439-97-6	Mercury	9.51	ug/kg	J	4.07	12	12	1	AV	JXL1	12/07/09 12:23	120709S1-9	925646
7440-02-0	Nickel	5.27	mg/kg		0.106	0.424	0.424	2	MS	PRB	12/11/09 03:14	091210-3	925484
7440-09-7	Potassium	1240000	ug/Kg	N	6860	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7782-49-2	Selenium	1.06	mg/kg	UN	0.53	1.06	1.06	2	MS	PRB	12/11/09 03:14	091210-3	925484
7440-21-3	Silicon	823000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/15/09 08:05	121509-1	932724
7440-22-4	Silver	281	ug/Kg	J	107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-23-5	Sodium	178000	ug/Kg		7510	26800	26800	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-28-0	Thallium	0.141	mg/kg	J	0.0636	0.212	0.212	2	MS	PRB	12/11/09 17:24	091211-4	925484
7440-32-6	Titanium	412000	ug/Kg	N	107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-61-1	Uranium	0.713	mg/kg		0.014	0.0424	0.0424	2	MS	PRB	12/11/09 17:24	091211-4	925484
7440-62-2	Vanadium	17300	ug/Kg		107	536	536	1	P	HSC	12/09/09 05:11	120809-2	925482
7440-66-6	Zinc	29400	ug/Kg		354	1070	1070	1	P	HSC	12/09/09 05:11	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.507	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.539	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.528	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613007 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14255 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3320000	ug/Kg		7480	22000	22000	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-36-0	Antimony	971	ug/Kg	J	348	1060	1060	1	P	HSC	12/15/09 08:08	121509-1	932724
7440-38-2	Arsenic	0.790	mg/kg	J	0.216	1.08	1.08	2	MS	PRB	12/11/09 03:20	091210-3	925484
7440-39-3	Barium	71100	ug/Kg		110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-41-7	Beryllium	0.455	mg/kg		0.0216	0.108	0.108	2	MS	BAJ	12/12/09 13:45	091212-8	925484
7440-42-8	Boron	3060	ug/Kg	J	1100	5500	5500	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-43-9	Cadmium	550	ug/Kg	U	110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-70-2	Calcium	1070000	ug/Kg		8800	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-47-3	Chromium	3410	ug/Kg		165	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-48-4	Cobalt	1820	ug/Kg		165	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-50-8	Copper	3720	ug/Kg		330	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-89-6	Iron	8470000	ug/Kg		8800	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-92-1	Lead	11100	ug/Kg		275	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-93-2	Lithium	8.42	mg/kg		0.431	2.16	2.16	2	MS	PRB	12/11/09 03:20	091210-3	925484
7439-95-4	Magnesium	806000	ug/Kg	N	9350	33000	33000	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-96-5	Manganese	523000	ug/Kg	*	220	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482
7439-97-6	Mercury	6.49	ug/kg	J	4.01	11.8	11.8	1	AV	JXL1	12/07/09 12:24	120709S1-9	925646
7440-02-0	Nickel	3.25	mg/kg		0.108	0.431	0.431	2	MS	PRB	12/11/09 03:20	091210-3	925484
7440-09-7	Potassium	560000	ug/Kg	N	7040	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7782-49-2	Selenium	1.08	mg/kg	UN	0.539	1.08	1.08	2	MS	PRB	12/11/09 03:20	091210-3	925484
7440-21-3	Silicon	683000	ug/Kg	N	1580	10600	10600	1	P	HSC	12/15/09 08:08	121509-1	932724
7440-22-4	Silver	289	ug/Kg	J	110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-23-5	Sodium	93000	ug/Kg		7700	27500	27500	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-28-0	Thallium	0.0791	mg/kg	J	0.0647	0.216	0.216	2	MS	PRB	12/11/09 17:26	091211-4	925484
7440-32-6	Titanium	281000	ug/Kg	N	110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-61-1	Uranium	0.463	mg/kg		0.0142	0.0431	0.0431	2	MS	PRB	12/11/09 17:26	091211-4	925484
7440-62-2	Vanadium	9310	ug/Kg		110	550	550	1	P	HSC	12/09/09 05:18	120809-2	925482
7440-66-6	Zinc	29100	ug/Kg		363	1100	1100	1	P	HSC	12/09/09 05:18	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.511	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.56	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.522	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613008 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14256 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12200000	ug/Kg		7320	21500	21500	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-36-0	Antimony	1900	ug/Kg		354	1070	1070	1	P	HSC	12/15/09 08:11	121509-1	932724
7440-38-2	Arsenic	1.72	mg/kg		0.21	1.05	1.05	2	MS	PRB	12/11/09 03:25	091210-3	925484
7440-39-3	Barium	186000	ug/Kg		108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-41-7	Beryllium	1.07	mg/kg		0.021	0.105	0.105	2	MS	BAJ	12/12/09 13:47	091212-8	925484
7440-42-8	Boron	2910	ug/Kg	J	1080	5380	5380	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-43-9	Cadmium	128	ug/Kg	J	108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-70-2	Calcium	4740000	ug/Kg		8620	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-47-3	Chromium	9350	ug/Kg		162	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-48-4	Cobalt	4640	ug/Kg		162	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-50-8	Copper	6650	ug/Kg		323	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-89-6	Iron	12800000	ug/Kg		8620	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-92-1	Lead	11600	ug/Kg		269	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-93-2	Lithium	15.7	mg/kg		0.42	2.1	2.1	2	MS	PRB	12/11/09 03:25	091210-3	925484
7439-95-4	Magnesium	2110000	ug/Kg	N	9150	32300	32300	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-96-5	Manganese	280000	ug/Kg	*	215	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482
7439-97-6	Mercury	20	ug/kg		4.27	12.6	12.6	1	AV	JXL1	12/07/09 12:26	120709S1-9	925646
7440-02-0	Nickel	7.82	mg/kg		0.105	0.42	0.42	2	MS	PRB	12/11/09 03:25	091210-3	925484
7440-09-7	Potassium	1710000	ug/Kg	N	6890	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7782-49-2	Selenium	1.05	mg/kg	UN	0.525	1.05	1.05	2	MS	PRB	12/11/09 03:25	091210-3	925484
7440-21-3	Silicon	830000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/15/09 08:11	121509-1	932724
7440-22-4	Silver	410	ug/Kg	J	108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-23-5	Sodium	225000	ug/Kg		7540	26900	26900	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-28-0	Thallium	0.20	mg/kg	J	0.063	0.21	0.21	2	MS	PRB	12/11/09 17:29	091211-4	925484
7440-32-6	Titanium	503000	ug/Kg	N	108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-61-1	Uranium	0.618	mg/kg		0.0139	0.042	0.042	2	MS	PRB	12/11/09 17:29	091211-4	925484
7440-62-2	Vanadium	23700	ug/Kg		108	538	538	1	P	HSC	12/09/09 05:25	120809-2	925482
7440-66-6	Zinc	22500	ug/Kg		355	1080	1080	1	P	HSC	12/09/09 05:25	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.506	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.519	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.521	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.508	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613009 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14254 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7010000	ug/Kg		7100	20900	20900	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-36-0	Antimony	1510	ug/Kg		347	1050	1050	1	P	HSC	12/15/09 08:14	121509-1	932724
7440-38-2	Arsenic	1.62	mg/kg		0.212	1.06	1.06	2	MS	PRB	12/11/09 03:31	091210-3	925484
7440-39-3	Barium	152000	ug/Kg		104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-41-7	Beryllium	0.681	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 13:49	091212-8	925484
7440-42-8	Boron	2310	ug/Kg	J	1040	5220	5220	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-43-9	Cadmium	522	ug/Kg	U	104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-70-2	Calcium	6900000	ug/Kg		8350	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-47-3	Chromium	8340	ug/Kg		157	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-48-4	Cobalt	8440	ug/Kg		157	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-50-8	Copper	6780	ug/Kg		313	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-89-6	Iron	12000000	ug/Kg		8350	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-92-1	Lead	10900	ug/Kg		261	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-93-2	Lithium	8.53	mg/kg		0.423	2.12	2.12	2	MS	PRB	12/11/09 03:31	091210-3	925484
7439-95-4	Magnesium	1930000	ug/Kg	N	8870	31300	31300	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-96-5	Manganese	397000	ug/Kg	*	209	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482
7439-97-6	Mercury	10.5	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/07/09 12:28	120709S1-9	925646
7440-02-0	Nickel	6.68	mg/kg		0.106	0.423	0.423	2	MS	PRB	12/11/09 03:31	091210-3	925484
7440-09-7	Potassium	1580000	ug/Kg	N	6680	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7782-49-2	Selenium	1.06	mg/kg	UN	0.529	1.06	1.06	2	MS	PRB	12/11/09 03:31	091210-3	925484
7440-21-3	Silicon	933000	ug/Kg	N	1580	10500	10500	1	P	HSC	12/15/09 08:14	121509-1	932724
7440-22-4	Silver	254	ug/Kg	J	104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-23-5	Sodium	155000	ug/Kg		7300	26100	26100	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-28-0	Thallium	0.217	mg/kg		0.0635	0.212	0.212	2	MS	PRB	12/11/09 17:32	091211-4	925484
7440-32-6	Titanium	296000	ug/Kg	N	104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-61-1	Uranium	0.619	mg/kg		0.014	0.0423	0.0423	2	MS	PRB	12/11/09 17:32	091211-4	925484
7440-62-2	Vanadium	21900	ug/Kg		104	522	522	1	P	HSC	12/09/09 05:32	120809-2	925482
7440-66-6	Zinc	26100	ug/Kg		344	1040	1040	1	P	HSC	12/09/09 05:32	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.509	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.503	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.505	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613010 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14249 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5760000	ug/Kg		7520	22100	22100	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-36-0	Antimony	1020	ug/Kg	J	346	1050	1050	1	P	HSC	12/15/09 08:17	121509-1	932724
7440-38-2	Arsenic	0.776	mg/kg	J	0.215	1.07	1.07	2	MS	PRB	12/11/09 03:37	091210-3	925484
7440-39-3	Barium	111000	ug/Kg		111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-41-7	Beryllium	0.504	mg/kg		0.0215	0.107	0.107	2	MS	BAJ	12/12/09 13:50	091212-8	925484
7440-42-8	Boron	1990	ug/Kg	J	1110	5530	5530	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-70-2	Calcium	2020000	ug/Kg		8840	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-47-3	Chromium	5610	ug/Kg		166	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-48-4	Cobalt	2810	ug/Kg		166	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-50-8	Copper	4950	ug/Kg		332	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-89-6	Iron	9630000	ug/Kg		8840	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-92-1	Lead	8110	ug/Kg		276	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-93-2	Lithium	10.2	mg/kg		0.429	2.15	2.15	2	MS	PRB	12/11/09 03:37	091210-3	925484
7439-95-4	Magnesium	1330000	ug/Kg	N	9400	33200	33200	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-96-5	Manganese	263000	ug/Kg	*	221	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482
7439-97-6	Mercury	9.52	ug/kg	J	4.2	12.4	12.4	1	AV	JXL1	12/07/09 12:30	120709S1-9	925646
7440-02-0	Nickel	4.52	mg/kg		0.107	0.429	0.429	2	MS	PRB	12/11/09 03:37	091210-3	925484
7440-09-7	Potassium	804000	ug/Kg	N	7080	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7782-49-2	Selenium	1.07	mg/kg	UN	0.537	1.07	1.07	2	MS	PRB	12/11/09 03:37	091210-3	925484
7440-21-3	Silicon	783000	ug/Kg	N	1570	10500	10500	1	P	HSC	12/15/09 08:17	121509-1	932724
7440-22-4	Silver	270	ug/Kg	J	111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-23-5	Sodium	141000	ug/Kg		7740	27600	27600	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-28-0	Thallium	0.0981	mg/kg	J	0.0644	0.215	0.215	2	MS	PRB	12/11/09 17:35	091211-4	925484
7440-32-6	Titanium	345000	ug/Kg	N	111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-61-1	Uranium	0.550	mg/kg		0.0142	0.0429	0.0429	2	MS	PRB	12/11/09 17:35	091211-4	925484
7440-62-2	Vanadium	15500	ug/Kg		111	553	553	1	P	HSC	12/09/09 05:39	120809-2	925482
7440-66-6	Zinc	25500	ug/Kg		365	1110	1110	1	P	HSC	12/09/09 05:39	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.503	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.518	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.54	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.531	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613011 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14248 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12900000	ug/Kg		7590	22300	22300	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-36-0	Antimony	1670	ug/Kg		363	1100	1100	1	P	HSC	12/15/09 08:28	121509-1	932724
7440-38-2	Arsenic	1.4	mg/kg		0.221	1.11	1.11	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-39-3	Barium	199000	ug/Kg		112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-41-7	Beryllium	0.978	mg/kg		0.0221	0.111	0.111	2	MS	BAJ	12/05/09 16:08	091205-7	925488
7440-42-8	Boron	2800	ug/Kg	J	1120	5580	5580	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-43-9	Cadmium	131	ug/Kg	J	112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-70-2	Calcium	2160000	ug/Kg		8930	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-47-3	Chromium	9340	ug/Kg		167	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-48-4	Cobalt	4500	ug/Kg		167	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-50-8	Copper	6200	ug/Kg		335	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-89-6	Iron	12200000	ug/Kg		8930	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-92-1	Lead	10900	ug/Kg		279	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-93-2	Lithium	15.2	mg/kg		0.443	2.21	2.21	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7439-95-4	Magnesium	1990000	ug/Kg	N	9490	33500	33500	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-96-5	Manganese	305000	ug/Kg	*	223	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482
7439-97-6	Mercury	16.5	ug/kg		4.27	12.6	12.6	1	AV	JXL1	12/07/09 12:35	120709S1-9	925646
7440-02-0	Nickel	6.62	mg/kg		0.111	0.443	0.443	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-09-7	Potassium	1760000	ug/Kg	N	7140	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7782-49-2	Selenium	1.11	mg/kg	UN	0.554	1.11	1.11	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-21-3	Silicon	994000	ug/Kg	N	1650	11000	11000	1	P	HSC	12/15/09 08:28	121509-1	932724
7440-22-4	Silver	249	ug/Kg	J	112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-23-5	Sodium	279000	ug/Kg		7810	27900	27900	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-28-0	Thallium	0.251	mg/kg		0.0664	0.221	0.221	2	MS	BAJ	12/04/09 23:50	091204-6	925488
7440-32-6	Titanium	530000	ug/Kg	N	112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-61-1	Uranium	0.604	mg/kg		0.0146	0.0443	0.0443	2	MS	BAJ	12/05/09 23:43	091205-5	925488
7440-62-2	Vanadium	21900	ug/Kg		112	558	558	1	P	HSC	12/09/09 06:00	120809-2	925482
7440-66-6	Zinc	24400	ug/Kg		368	1120	1120	1	P	HSC	12/09/09 06:00	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925488	925487	SW846 3050B	0.505	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.534	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.509	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613012 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14247 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2380000	ug/Kg		7550	22200	22200	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-36-0	Antimony	1070	ug/Kg	U	355	1070	1070	1	P	HSC	12/15/09 08:31	121509-1	932724
7440-38-2	Arsenic	0.611	mg/kg	J	0.223	1.12	1.12	2	MS	PRB	12/11/09 03:54	091210-3	925484
7440-39-3	Barium	32600	ug/Kg		111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-41-7	Beryllium	0.462	mg/kg		0.0223	0.112	0.112	2	MS	BAJ	12/12/09 13:57	091212-8	925484
7440-42-8	Boron	1540	ug/Kg	J	1110	5550	5550	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-43-9	Cadmium	555	ug/Kg	U	111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-70-2	Calcium	744000	ug/Kg		8890	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-47-3	Chromium	2460	ug/Kg		167	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-48-4	Cobalt	803	ug/Kg		167	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-50-8	Copper	2370	ug/Kg		333	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-89-6	Iron	7800000	ug/Kg		8890	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-92-1	Lead	6820	ug/Kg		278	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-93-2	Lithium	8.33	mg/kg		0.446	2.23	2.23	2	MS	PRB	12/11/09 03:54	091210-3	925484
7439-95-4	Magnesium	564000	ug/Kg	N	9440	33300	33300	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-96-5	Manganese	224000	ug/Kg	*	222	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482
7439-97-6	Mercury	5.78	ug/kg	J	4.37	12.8	12.8	1	AV	JXL1	12/07/09 12:36	120709S1-9	925646
7440-02-0	Nickel	3.04	mg/kg		0.112	0.446	0.446	2	MS	PRB	12/11/09 03:54	091210-3	925484
7440-09-7	Potassium	405000	ug/Kg	N	7110	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7782-49-2	Selenium	1.12	mg/kg	UN	0.558	1.12	1.12	2	MS	PRB	12/11/09 03:54	091210-3	925484
7440-21-3	Silicon	670000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/15/09 08:31	121509-1	932724
7440-22-4	Silver	197	ug/Kg	J	111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-23-5	Sodium	97200	ug/Kg		7780	27800	27800	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-28-0	Thallium	0.0883	mg/kg	J	0.0669	0.223	0.223	2	MS	PRB	12/11/09 17:44	091211-4	925484
7440-32-6	Titanium	257000	ug/Kg	N	111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-61-1	Uranium	0.502	mg/kg		0.0147	0.0446	0.0446	2	MS	PRB	12/11/09 17:44	091211-4	925484
7440-62-2	Vanadium	5080	ug/Kg		111	555	555	1	P	HSC	12/09/09 06:07	120809-2	925482
7440-66-6	Zinc	31800	ug/Kg		367	1110	1110	1	P	HSC	12/09/09 06:07	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.521	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.519	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613013 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14246 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 92

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3520000	ug/Kg		7200	21200	21200	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-36-0	Antimony	956	ug/Kg	J	345	1040	1040	1	P	HSC	12/15/09 08:35	121509-1	932724
7440-38-2	Arsenic	0.562	mg/kg	J	0.217	1.08	1.08	2	MS	PRB	12/11/09 04:00	091210-3	925484
7440-39-3	Barium	86300	ug/Kg		106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-41-7	Beryllium	0.371	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/12/09 13:59	091212-8	925484
7440-42-8	Boron	1960	ug/Kg	J	1060	5300	5300	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-43-9	Cadmium	530	ug/Kg	U	106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-70-2	Calcium	3910000	ug/Kg		8470	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-47-3	Chromium	4660	ug/Kg		159	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-48-4	Cobalt	2020	ug/Kg		159	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-50-8	Copper	5330	ug/Kg		318	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-89-6	Iron	8240000	ug/Kg		8470	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-92-1	Lead	5660	ug/Kg		265	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-93-2	Lithium	9.27	mg/kg		0.434	2.17	2.17	2	MS	PRB	12/11/09 04:00	091210-3	925484
7439-95-4	Magnesium	1590000	ug/Kg	N	9000	31800	31800	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-96-5	Manganese	256000	ug/Kg	*	212	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482
7439-97-6	Mercury	12.7	ug/kg	U	4.33	12.7	12.7	1	AV	JXL1	12/07/09 12:38	120709S1-9	925646
7440-02-0	Nickel	3.77	mg/kg		0.108	0.434	0.434	2	MS	PRB	12/11/09 04:00	091210-3	925484
7440-09-7	Potassium	803000	ug/Kg	N	6780	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7782-49-2	Selenium	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/11/09 04:00	091210-3	925484
7440-21-3	Silicon	892000	ug/Kg	N	1570	10400	10400	1	P	HSC	12/15/09 08:35	121509-1	932724
7440-22-4	Silver	155	ug/Kg	J	106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-23-5	Sodium	102000	ug/Kg		7410	26500	26500	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-28-0	Thallium	0.0668	mg/kg	J	0.0651	0.217	0.217	2	MS	PRB	12/11/09 17:47	091211-4	925484
7440-32-6	Titanium	245000	ug/Kg	N	106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-61-1	Uranium	0.508	mg/kg		0.0143	0.0434	0.0434	2	MS	PRB	12/11/09 17:47	091211-4	925484
7440-62-2	Vanadium	11900	ug/Kg		106	530	530	1	P	HSC	12/09/09 06:14	120809-2	925482
7440-66-6	Zinc	30600	ug/Kg		349	1060	1060	1	P	HSC	12/09/09 06:14	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.513	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.501	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.512	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.52	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613014 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14253 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11400000	ug/Kg		7420	21800	21800	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-36-0	Antimony	1440	ug/Kg		351	1060	1060	1	P	HSC	12/15/09 08:38	121509-1	932724
7440-38-2	Arsenic	1.61	mg/kg		0.22	1.1	1.1	2	MS	PRB	12/11/09 04:06	091210-3	925484
7440-39-3	Barium	154000	ug/Kg		109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-41-7	Beryllium	0.978	mg/kg		0.022	0.11	0.11	2	MS	BAJ	12/12/09 14:01	091212-8	925484
7440-42-8	Boron	3060	ug/Kg	J	1090	5460	5460	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-70-2	Calcium	2200000	ug/Kg		8730	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-47-3	Chromium	10300	ug/Kg		164	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-48-4	Cobalt	4920	ug/Kg		164	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-50-8	Copper	6930	ug/Kg		328	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-89-6	Iron	13900000	ug/Kg		8730	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-92-1	Lead	12200	ug/Kg		273	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-93-2	Lithium	15.8	mg/kg		0.44	2.2	2.2	2	MS	PRB	12/11/09 04:06	091210-3	925484
7439-95-4	Magnesium	2020000	ug/Kg	N	9280	32800	32800	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-96-5	Manganese	271000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482
7439-97-6	Mercury	15.4	ug/kg		4.05	11.9	11.9	1	AV	JXL1	12/07/09 12:40	120709S1-9	925646
7440-02-0	Nickel	8.01	mg/kg		0.11	0.44	0.44	2	MS	PRB	12/11/09 04:06	091210-3	925484
7440-09-7	Potassium	1830000	ug/Kg	N	6990	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7782-49-2	Selenium	1.1	mg/kg	UN	0.55	1.1	1.1	2	MS	PRB	12/11/09 04:06	091210-3	925484
7440-21-3	Silicon	966000	ug/Kg	N	1590	10600	10600	1	P	HSC	12/15/09 08:38	121509-1	932724
7440-22-4	Silver	383	ug/Kg	J	109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-23-5	Sodium	189000	ug/Kg		7640	27300	27300	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-28-0	Thallium	0.187	mg/kg	J	0.066	0.22	0.22	2	MS	PRB	12/11/09 17:50	091211-4	925484
7440-32-6	Titanium	503000	ug/Kg	N	109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-61-1	Uranium	0.858	mg/kg		0.0145	0.044	0.044	2	MS	PRB	12/11/09 17:50	091211-4	925484
7440-62-2	Vanadium	24900	ug/Kg		109	546	546	1	P	HSC	12/09/09 06:22	120809-2	925482
7440-66-6	Zinc	28100	ug/Kg		360	1090	1090	1	P	HSC	12/09/09 06:22	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.554	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.518	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613015 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14251 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12900000	ug/Kg		7450	21900	21900	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-36-0	Antimony	1100	ug/Kg		350	1060	1060	1	P	HSC	12/15/09 08:41	121509-1	932724
7440-38-2	Arsenic	1.99	mg/kg		0.217	1.08	1.08	2	MS	PRB	12/11/09 04:12	091210-3	925484
7440-39-3	Barium	166000	ug/Kg		110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-41-7	Beryllium	1.09	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/12/09 14:02	091212-8	925484
7440-42-8	Boron	2670	ug/Kg	J	1100	5480	5480	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-43-9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-70-2	Calcium	3040000	ug/Kg		8770	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-47-3	Chromium	9590	ug/Kg		164	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-48-4	Cobalt	3820	ug/Kg		164	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-50-8	Copper	5630	ug/Kg		329	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-89-6	Iron	11500000	ug/Kg		8770	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-92-1	Lead	9210	ug/Kg		274	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-93-2	Lithium	14.9	mg/kg		0.433	2.17	2.17	2	MS	PRB	12/11/09 04:12	091210-3	925484
7439-95-4	Magnesium	1950000	ug/Kg	N	9310	32900	32900	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-96-5	Manganese	256000	ug/Kg	*	219	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482
7439-97-6	Mercury	15.5	ug/kg		4.2	12.4	12.4	1	AV	JXL1	12/07/09 12:41	120709S1-9	925646
7440-02-0	Nickel	10.5	mg/kg		0.108	0.433	0.433	2	MS	PRB	12/11/09 04:12	091210-3	925484
7440-09-7	Potassium	1670000	ug/Kg	N	7010	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7782-49-2	Selenium	1.08	mg/kg	UN	0.541	1.08	1.08	2	MS	PRB	12/11/09 04:12	091210-3	925484
7440-21-3	Silicon	763000	ug/Kg	N	1590	10600	10600	1	P	HSC	12/15/09 08:41	121509-1	932724
7440-22-4	Silver	253	ug/Kg	J	110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-23-5	Sodium	221000	ug/Kg		7670	27400	27400	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-28-0	Thallium	0.209	mg/kg	J	0.065	0.217	0.217	2	MS	PRB	12/11/09 17:53	091211-4	925484
7440-32-6	Titanium	474000	ug/Kg	N	110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-61-1	Uranium	0.575	mg/kg		0.0143	0.0433	0.0433	2	MS	PRB	12/11/09 17:53	091211-4	925484
7440-62-2	Vanadium	20700	ug/Kg		110	548	548	1	P	HSC	12/09/09 06:29	120809-2	925482
7440-66-6	Zinc	21500	ug/Kg		362	1100	1100	1	P	HSC	12/09/09 06:29	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.504	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.51	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.536	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.52	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613016 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-09-14257 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 98.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1230000	ug/Kg		6850	20100	20100	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-36-0	Antimony	999	ug/Kg		322	976	976	1	P	HSC	12/15/09 08:44	121509-1	932724
7440-38-2	Arsenic	0.287	mg/kg	J	0.202	1.01	1.01	2	MS	PRB	12/11/09 04:18	091210-3	925484
7440-39-3	Barium	28600	ug/Kg		101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-41-7	Beryllium	0.256	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/12/09 14:04	091212-8	925484
7440-42-8	Boron	1030	ug/Kg	J	1010	5040	5040	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-43-9	Cadmium	504	ug/Kg	U	101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-70-2	Calcium	724000	ug/Kg		8060	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-47-3	Chromium	1930	ug/Kg		151	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-48-4	Cobalt	537	ug/Kg		151	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-50-8	Copper	1690	ug/Kg		302	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-89-6	Iron	6570000	ug/Kg		8060	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-92-1	Lead	3380	ug/Kg		252	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-93-2	Lithium	10.6	mg/kg		0.404	2.02	2.02	2	MS	PRB	12/11/09 04:18	091210-3	925484
7439-95-4	Magnesium	378000	ug/Kg	N	8560	30200	30200	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-96-5	Manganese	187000	ug/Kg	*	201	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482
7439-97-6	Mercury	10.7	ug/kg	U	3.64	10.7	10.7	1	AV	JXL1	12/07/09 12:43	120709S1-9	925646
7440-02-0	Nickel	2.44	mg/kg		0.101	0.404	0.404	2	MS	PRB	12/11/09 04:18	091210-3	925484
7440-09-7	Potassium	311000	ug/Kg	N	6450	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7782-49-2	Selenium	1.01	mg/kg	UN	0.506	1.01	1.01	2	MS	PRB	12/11/09 04:18	091210-3	925484
7440-21-3	Silicon	482000	ug/Kg	N	1460	9760	9760	1	P	HSC	12/15/09 08:44	121509-1	932724
7440-22-4	Silver	147	ug/Kg	J	101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-23-5	Sodium	165000	ug/Kg		7050	25200	25200	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-28-0	Thallium	0.202	mg/kg	U	0.0607	0.202	0.202	2	MS	PRB	12/11/09 17:56	091211-4	925484
7440-32-6	Titanium	283000	ug/Kg	N	101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-61-1	Uranium	0.610	mg/kg		0.0133	0.0404	0.0404	2	MS	PRB	12/11/09 17:56	091211-4	925484
7440-62-2	Vanadium	3550	ug/Kg		101	504	504	1	P	HSC	12/09/09 06:36	120809-2	925482
7440-66-6	Zinc	28600	ug/Kg		332	1010	1010	1	P	HSC	12/09/09 06:36	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.502	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.5	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.566	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.518	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613017 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-2729 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2960000	ug/Kg		7270	21400	21400	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-36-0	Antimony	907	ug/Kg	J	355	1070	1070	1	P	HSC	12/15/09 08:48	121509-1	932724
7440-38-2	Arsenic	0.509	mg/kg	J	0.212	1.06	1.06	2	MS	PRB	12/11/09 04:23	091210-3	925484
7440-39-3	Barium	76500	ug/Kg		107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-41-7	Beryllium	0.365	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/12/09 14:06	091212-8	925484
7440-42-8	Boron	1470	ug/Kg	J	1070	5340	5340	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-43-9	Cadmium	109	ug/Kg	J	107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-70-2	Calcium	2410000	ug/Kg		8550	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-47-3	Chromium	4130	ug/Kg		160	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-48-4	Cobalt	1900	ug/Kg		160	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-50-8	Copper	5800	ug/Kg		321	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-89-6	Iron	8540000	ug/Kg		8550	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-92-1	Lead	6000	ug/Kg		267	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-93-2	Lithium	8.4	mg/kg		0.424	2.12	2.12	2	MS	PRB	12/11/09 04:23	091210-3	925484
7439-95-4	Magnesium	1010000	ug/Kg	N	9080	32100	32100	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-96-5	Manganese	222000	ug/Kg	*	214	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482
7439-97-6	Mercury	11.7	ug/kg	U	3.97	11.7	11.7	1	AV	JXL1	12/07/09 12:45	120709S1-9	925646
7440-02-0	Nickel	4.17	mg/kg		0.106	0.424	0.424	2	MS	PRB	12/11/09 04:23	091210-3	925484
7440-09-7	Potassium	603000	ug/Kg	N	6840	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7782-49-2	Selenium	1.06	mg/kg	UN	0.53	1.06	1.06	2	MS	PRB	12/11/09 04:23	091210-3	925484
7440-21-3	Silicon	659000	ug/Kg	N	1610	10700	10700	1	P	HSC	12/15/09 08:48	121509-1	932724
7440-22-4	Silver	144	ug/Kg	J	107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-23-5	Sodium	275000	ug/Kg		7480	26700	26700	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-28-0	Thallium	0.0702	mg/kg	J	0.0636	0.212	0.212	2	MS	PRB	12/11/09 17:59	091211-4	925484
7440-32-6	Titanium	295000	ug/Kg	N	107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-61-1	Uranium	0.516	mg/kg		0.014	0.0424	0.0424	2	MS	PRB	12/11/09 17:59	091211-4	925484
7440-62-2	Vanadium	13600	ug/Kg		107	534	534	1	P	HSC	12/09/09 06:43	120809-2	925482
7440-66-6	Zinc	28900	ug/Kg		353	1070	1070	1	P	HSC	12/09/09 06:43	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.512	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.516	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.562	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.509	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241613018 **BASIS:** Dry Weight **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-6969 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6780000	ug/Kg		7050	20700	20700	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-36-0	Antimony	1780	ug/Kg		343	1040	1040	1	P	HSC	12/15/09 08:52	121509-1	932724
7440-38-2	Arsenic	1.72	mg/kg		0.205	1.03	1.03	2	MS	PRB	12/11/09 04:29	091210-3	925484
7440-39-3	Barium	113000	ug/Kg		104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-41-7	Beryllium	0.730	mg/kg		0.0205	0.103	0.103	2	MS	BAJ	12/12/09 14:07	091212-8	925484
7440-42-8	Boron	2230	ug/Kg	J	1040	5180	5180	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-43-9	Cadmium	518	ug/Kg	U	104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-70-2	Calcium	5840000	ug/Kg		8290	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-47-3	Chromium	8020	ug/Kg		155	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-48-4	Cobalt	4730	ug/Kg		155	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-50-8	Copper	6450	ug/Kg		311	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-89-6	Iron	11600000	ug/Kg		8290	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-92-1	Lead	8800	ug/Kg		259	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-93-2	Lithium	9.31	mg/kg		0.411	2.05	2.05	2	MS	PRB	12/11/09 04:29	091210-3	925484
7439-95-4	Magnesium	1920000	ug/Kg	N	8810	31100	31100	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-96-5	Manganese	258000	ug/Kg	*	207	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482
7439-97-6	Mercury	12.5	ug/kg		4.18	12.3	12.3	1	AV	JXL1	12/07/09 12:46	120709S1-9	925646
7440-02-0	Nickel	6.63	mg/kg		0.103	0.411	0.411	2	MS	PRB	12/11/09 04:29	091210-3	925484
7440-09-7	Potassium	1530000	ug/Kg	N	6630	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7782-49-2	Selenium	1.03	mg/kg	UN	0.513	1.03	1.03	2	MS	PRB	12/11/09 04:29	091210-3	925484
7440-21-3	Silicon	898000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/15/09 08:52	121509-1	932724
7440-22-4	Silver	261	ug/Kg	J	104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-23-5	Sodium	148000	ug/Kg		7260	25900	25900	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-28-0	Thallium	0.189	mg/kg	J	0.0616	0.205	0.205	2	MS	PRB	12/11/09 18:02	091211-4	925484
7440-32-6	Titanium	280000	ug/Kg	N	104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-61-1	Uranium	0.609	mg/kg		0.0135	0.0411	0.0411	2	MS	PRB	12/11/09 18:02	091211-4	925484
7440-62-2	Vanadium	21000	ug/Kg		104	518	518	1	P	HSC	12/09/09 06:50	120809-2	925482
7440-66-6	Zinc	25000	ug/Kg		342	1040	1040	1	P	HSC	12/09/09 06:50	120809-2	925482

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925482	925481	SW846 3050B	0.507	g	50	mL	11/23/09	FGA
925484	925483	SW846 3050B	0.512	g	50	mL	11/23/09	FGA
925646	925644	SW846 7471A Prep	0.513	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932724	932723	SW846 3050B	0.505	g	50	mL	12/14/09	FGA

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	47.9	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	04–DEC–09 20:59	091204–6
	Lithium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	04–DEC–09 20:59	091204–6
	Nickel	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	04–DEC–09 20:59	091204–6
	Selenium	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	04–DEC–09 20:59	091204–6
	Thallium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	04–DEC–09 20:59	091204–6
	Beryllium	54.2	ug/L	50	ug/L	108.3	90.0 – 110.0	MS	05–DEC–09 15:26	091205–7
	Uranium	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	05–DEC–09 23:02	091205–5
	Mercury	5.14	ug/L	5	ug/L	102.8	90.0 – 110.0	AV	07–DEC–09 09:45	120709S1–9
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Cadmium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Calcium	4840	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Chromium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Manganese	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Potassium	2440	ug/L	2500	ug/L	97.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Silver	258	ug/L	250	ug/L	103.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Sodium	2370	ug/L	2500	ug/L	94.8	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Zinc	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Arsenic	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	10–DEC–09 23:12	091210–3
	Lithium	48.9	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	10–DEC–09 23:12	091210–3
	Nickel	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	10–DEC–09 23:12	091210–3
	Selenium	49.1	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	10–DEC–09 23:12	091210–3

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	11–DEC–09 15:45	091211–4
	Uranium	53.9	ug/L	50	ug/L	107.8	90.0 – 110.0	MS	11–DEC–09 15:45	091211–4
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	12–DEC–09 11:13	091212–8
	Antimony	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	15–DEC–09 03:24	121509–1
	Silicon	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	15–DEC–09 03:24	121509–1
CCV01										
	Arsenic	47.2	ug/L	50	ug/L	94.3	90.0 – 110.0	MS	04–DEC–09 21:29	091204–6
	Lithium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	04–DEC–09 21:29	091204–6
	Nickel	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	04–DEC–09 21:29	091204–6
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	04–DEC–09 21:29	091204–6
	Thallium	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	04–DEC–09 21:29	091204–6
	Beryllium	54.2	ug/L	50	ug/L	108.4	90.0 – 110.0	MS	05–DEC–09 15:34	091205–7
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	05–DEC–09 23:10	091205–5
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	07–DEC–09 09:50	120709S1–9
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Boron	510	ug/L	500	ug/L	102	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Cadmium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Potassium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Sodium	9150	ug/L	10000	ug/L	91.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Titanium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08–DEC–09 08:47	120809–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Zinc	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08-DEC-09 08:47	120809-2
	Arsenic	48.2	ug/L	50	ug/L	96.4	90.0 – 110.0	MS	10-DEC-09 23:40	091210-3
	Lithium	49.4	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	10-DEC-09 23:40	091210-3
	Nickel	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	10-DEC-09 23:40	091210-3
	Selenium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	10-DEC-09 23:40	091210-3
	Thallium	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	11-DEC-09 16:00	091211-4
	Uranium	51.6	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	11-DEC-09 16:00	091211-4
	Beryllium	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	12-DEC-09 11:21	091212-8
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	15-DEC-09 03:47	121509-1
	Silicon	2450	ug/L	2500	ug/L	97.8	90.0 – 110.0	P	15-DEC-09 03:47	121509-1
CCV02										
	Arsenic	48.5	ug/L	50	ug/L	97	90.0 – 110.0	MS	04-DEC-09 21:48	091204-6
	Lithium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	04-DEC-09 21:48	091204-6
	Nickel	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	04-DEC-09 21:48	091204-6
	Selenium	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	04-DEC-09 21:48	091204-6
	Thallium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	04-DEC-09 21:48	091204-6
	Beryllium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	05-DEC-09 15:51	091205-7
	Uranium	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	05-DEC-09 23:27	091205-5
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	07-DEC-09 10:10	120709S1-9
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Barium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Boron	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	08-DEC-09 09:11	120809-2
	Lead	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08-DEC-09 09:11	120809-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Silver	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Sodium	9430	ug/L	10000	ug/L	94.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Titanium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Arsenic	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	10–DEC–09 23:58	091210–3
	Lithium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	10–DEC–09 23:58	091210–3
	Nickel	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	10–DEC–09 23:58	091210–3
	Selenium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	10–DEC–09 23:58	091210–3
	Thallium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	11–DEC–09 16:08	091211–4
	Uranium	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	11–DEC–09 16:08	091211–4
	Beryllium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	12–DEC–09 11:33	091212–8
	Antimony	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	15–DEC–09 04:34	121509–1
	Silicon	2480	ug/L	2500	ug/L	99.1	90.0 – 110.0	P	15–DEC–09 04:34	121509–1
CCV03										
	Arsenic	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	04–DEC–09 22:49	091204–6
	Lithium	53.3	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	04–DEC–09 22:49	091204–6
	Nickel	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	04–DEC–09 22:49	091204–6
	Selenium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	04–DEC–09 22:49	091204–6
	Thallium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	04–DEC–09 22:49	091204–6
	Beryllium	54.1	ug/L	50	ug/L	108.1	90.0 – 110.0	MS	05–DEC–09 16:10	091205–7
	Uranium	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	05–DEC–09 23:44	091205–5
	Mercury	5.19	ug/L	5	ug/L	103.8	80.0 – 120.0	AV	07–DEC–09 10:30	120709S1–9
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Boron	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Cobalt	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Sodium	9300	ug/L	10000	ug/L	93	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Zinc	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Arsenic	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	11–DEC–09 00:44	091210–3
	Lithium	48.9	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	11–DEC–09 00:44	091210–3
	Nickel	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	11–DEC–09 00:44	091210–3
	Selenium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	11–DEC–09 00:44	091210–3
	Thallium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	11–DEC–09 16:43	091211–4
	Uranium	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	11–DEC–09 16:43	091211–4
	Beryllium	49.6	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	12–DEC–09 11:49	091212–8
	Antimony	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	15–DEC–09 05:19	121509–1
	Silicon	2460	ug/L	2500	ug/L	98.6	90.0 – 110.0	P	15–DEC–09 05:19	121509–1
CCV04										
	Arsenic	47.7	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	04–DEC–09 23:56	091204–6
	Lithium	55.2	ug/L	50	ug/L	110.5	90.0 – 110.0	MS	04–DEC–09 23:56	091204–6
	Nickel	49.9	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	04–DEC–09 23:56	091204–6
	Selenium	49.1	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	04–DEC–09 23:56	091204–6
	Thallium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	04–DEC–09 23:56	091204–6
	Mercury	5.15	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	07–DEC–09 10:50	120709S1–9

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Boron	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Calcium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Iron	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Lead	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Manganese	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Potassium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Sodium	9450	ug/L	10000	ug/L	94.5	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Titanium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 10:55	120809-2
	Arsenic	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	11-DEC-09 01:41	091210-3
	Lithium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	11-DEC-09 01:41	091210-3
	Nickel	49.8	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	11-DEC-09 01:41	091210-3
	Selenium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	11-DEC-09 01:41	091210-3
	Thallium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	11-DEC-09 17:06	091211-4
	Uranium	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	11-DEC-09 17:06	091211-4
	Beryllium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	12-DEC-09 12:04	091212-8
	Antimony	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	15-DEC-09 05:33	121509-1
	Silicon	2370	ug/L	2500	ug/L	94.9	90.0 – 110.0	P	15-DEC-09 05:33	121509-1
CCV05										
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 – 120.0	AV	07-DEC-09 11:10	120709S1-9
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 11:57	120809-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Cadmium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Chromium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Lead	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Manganese	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Sodium	9490	ug/L	10000	ug/L	94.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Vanadium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Arsenic	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	11–DEC–09 02:39	091210–3
	Lithium	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	11–DEC–09 02:39	091210–3
	Nickel	48.6	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	11–DEC–09 02:39	091210–3
	Selenium	48	ug/L	50	ug/L	96	90.0 – 110.0	MS	11–DEC–09 02:39	091210–3
	Thallium	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	11–DEC–09 17:38	091211–4
	Uranium	52.2	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	11–DEC–09 17:38	091211–4
	Beryllium	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	12–DEC–09 12:11	091212–8
	Antimony	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	15–DEC–09 06:00	121509–1
	Silicon	2430	ug/L	2500	ug/L	97.2	90.0 – 110.0	P	15–DEC–09 06:00	121509–1
CCV06										
	Mercury	5.21	ug/L	5	ug/L	104.2	80.0 – 120.0	AV	07–DEC–09 11:31	120709S1–9
	Aluminum	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 12:54	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Lead	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Manganese	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Sodium	9480	ug/L	10000	ug/L	94.8	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Titanium	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Arsenic	48.5	ug/L	50	ug/L	97	90.0 – 110.0	MS	11–DEC–09 03:43	091210–3
	Lithium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	11–DEC–09 03:43	091210–3
	Nickel	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	11–DEC–09 03:43	091210–3
	Selenium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	11–DEC–09 03:43	091210–3
	Thallium	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	11–DEC–09 18:05	091211–4
	Uranium	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	11–DEC–09 18:05	091211–4
	Beryllium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	12–DEC–09 12:30	091212–8
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	15–DEC–09 06:39	121509–1
	Silicon	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	15–DEC–09 06:39	121509–1
CCV07										
	Mercury	5.21	ug/L	5	ug/L	104.2	80.0 – 120.0	AV	07–DEC–09 11:51	120709S1–9
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Boron	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	08–DEC–09 14:10	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Cobalt	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Iron	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Lead	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Manganese	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 14:10	120809–2
	Arsenic	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	11–DEC–09 04:35	091210–3
	Lithium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	11–DEC–09 04:35	091210–3
	Nickel	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	11–DEC–09 04:35	091210–3
	Selenium	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	11–DEC–09 04:35	091210–3
	Beryllium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	12–DEC–09 12:49	091212–8
	Antimony	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	15–DEC–09 07:13	121509–1
	Silicon	2460	ug/L	2500	ug/L	98.6	90.0 – 110.0	P	15–DEC–09 07:13	121509–1
CCV08										
	Mercury	5.18	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	07–DEC–09 12:11	120709S1–9
	Aluminum	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Barium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Boron	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Cadmium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Calcium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Chromium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 14:50	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Copper	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Magnesium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Manganese	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Potassium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Zinc	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 14:50	120809–2
	Beryllium	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	12–DEC–09 13:03	091212–8
	Antimony	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	15–DEC–09 07:47	121509–1
	Silicon	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	15–DEC–09 07:47	121509–1
CCV09										
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 – 120.0	AV	07–DEC–09 12:31	120709S1–9
	Aluminum	4790	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Barium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Boron	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Cadmium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Calcium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Chromium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Copper	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Iron	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Lead	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Magnesium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Manganese	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Potassium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 16:07	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Sodium	9590	ug/L	10000	ug/L	95.9	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Titanium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Vanadium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Zinc	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Beryllium	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	12–DEC–09 13:18	091212–8
	Antimony	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	15–DEC–09 08:21	121509–1
	Silicon	2470	ug/L	2500	ug/L	98.6	90.0 – 110.0	P	15–DEC–09 08:21	121509–1
CCV10										
	Mercury	5.13	ug/L	5	ug/L	102.5	80.0 – 120.0	AV	07–DEC–09 12:51	120709S1–9
	Aluminum	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Barium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Boron	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Calcium	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Chromium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Cobalt	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Copper	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Iron	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Lead	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Magnesium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Sodium	9780	ug/L	10000	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Vanadium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Zinc	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	12–DEC–09 13:37	091212–8
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	15–DEC–09 08:54	121509–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	15–DEC–09 08:54	121509–1
CCV11										
	Aluminum	4810	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Barium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Boron	475	ug/L	500	ug/L	95	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Cadmium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Chromium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Copper	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Iron	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Potassium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Sodium	10300	ug/L	10000	ug/L	102.7	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Vanadium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Zinc	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Beryllium	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	12–DEC–09 13:52	091212–8
CCV12										
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Barium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Boron	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Cadmium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Calcium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Cobalt	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Copper	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 19:52	120809–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Lead	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Magnesium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Silver	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Sodium	9370	ug/L	10000	ug/L	93.7	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Titanium	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Vanadium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08-DEC-09 19:52	120809-2
	Beryllium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	12-DEC-09 14:09	091212-8
CCV13										
	Aluminum	4630	ug/L	5000	ug/L	92.6	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Barium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Boron	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Cadmium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Calcium	4770	ug/L	5000	ug/L	95.5	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Iron	4950	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Lead	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Magnesium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Manganese	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Titanium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08-DEC-09 21:17	120809-2
	Zinc	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08-DEC-09 21:17	120809-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV14										
	Aluminum	4840	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Barium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Boron	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Cadmium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Copper	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Lead	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Magnesium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Manganese	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Potassium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Titanium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Zinc	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
CCV15										
	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Iron	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Lead	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	09–DEC–09 00:06	120809–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09-DEC-09 00:06	120809-2
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	09-DEC-09 00:06	120809-2
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	09-DEC-09 00:06	120809-2
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	09-DEC-09 00:06	120809-2
	Titanium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	09-DEC-09 00:06	120809-2
	Vanadium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09-DEC-09 00:06	120809-2
	Zinc	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09-DEC-09 00:06	120809-2
CCV16										
	Aluminum	4800	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Barium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Boron	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Cadmium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Chromium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Copper	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Magnesium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Potassium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Titanium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	09-DEC-09 01:16	120809-2
CCV17										
	Aluminum	4780	ug/L	5000	ug/L	95.5	90.0 – 110.0	P	09-DEC-09 02:20	120809-2
	Barium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09-DEC-09 02:20	120809-2
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	09-DEC-09 02:20	120809-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Calcium	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Chromium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Cobalt	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Copper	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Magnesium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Potassium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Titanium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Zinc	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
CCV18										
	Aluminum	4750	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Boron	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Calcium	4950	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Chromium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Cobalt	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Copper	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Iron	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Lead	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Manganese	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Potassium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Silver	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	10300	ug/L	10000	ug/L	103.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Titanium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Vanadium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
CCV19										
	Aluminum	4750	ug/L	5000	ug/L	94.9	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Barium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Boron	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Chromium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Cobalt	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Copper	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Iron	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Lead	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Magnesium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Manganese	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Potassium	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Titanium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Vanadium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
	Zinc	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	09–DEC–09 04:34	120809–2
CCV20										
	Aluminum	4740	ug/L	5000	ug/L	94.8	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Boron	475	ug/L	500	ug/L	95	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Cadmium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Calcium	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	09–DEC–09 05:46	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Copper	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Magnesium	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Manganese	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Potassium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Silver	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Sodium	9870	ug/L	10000	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Vanadium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
	Zinc	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	09–DEC–09 05:46	120809–2
CCV21										
	Aluminum	4790	ug/L	5000	ug/L	95.8	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Boron	477	ug/L	500	ug/L	95.3	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Iron	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Lead	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Magnesium	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Manganese	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Potassium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Silver	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Titanium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	09–DEC–09 06:57	120809–2
	Vanadium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	09–DEC–09 06:57	120809–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	09-DEC-09 06:57	120809-2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.14	ug/L	2	ug/L	107.1	70.0 – 130.0	MS	04-DEC-09 21:11	091204-6
	Thallium	1.17	ug/L	1	ug/L	116.6	70.0 – 130.0	MS	04-DEC-09 21:11	091204-6
	Arsenic	5.02	ug/L	5	ug/L	100.4	70.0 – 130.0	MS	04-DEC-09 21:11	091204-6
	Lithium	11	ug/L	10	ug/L	110.1	70.0 – 130.0	MS	04-DEC-09 21:11	091204-6
	Selenium	5.37	ug/L	5	ug/L	107.4	70.0 – 130.0	MS	04-DEC-09 21:11	091204-6
	Beryllium	.498	ug/L	.5	ug/L	99.6	70.0 – 130.0	MS	05-DEC-09 15:29	091205-7
	Uranium	.227	ug/L	.2	ug/L	113.5	70.0 – 130.0	MS	05-DEC-09 23:05	091205-5
	Mercury	.185	ug/L	.2	ug/L	92.5	70.0 – 130.0	AV	07-DEC-09 09:48	120709S1-9
	Nickel	2.18	ug/L	2	ug/L	108.8	70.0 – 130.0	MS	10-DEC-09 23:23	091210-3
	Arsenic	5.19	ug/L	5	ug/L	103.7	70.0 – 130.0	MS	10-DEC-09 23:23	091210-3
	Selenium	4.8	ug/L	5	ug/L	95.9	70.0 – 130.0	MS	10-DEC-09 23:23	091210-3
	Lithium	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	MS	10-DEC-09 23:23	091210-3
	Thallium	1.09	ug/L	1	ug/L	109.1	70.0 – 130.0	MS	11-DEC-09 15:51	091211-4
	Uranium	.231	ug/L	.2	ug/L	115.5	70.0 – 130.0	MS	11-DEC-09 15:51	091211-4
	Beryllium	.528	ug/L	.5	ug/L	105.6	70.0 – 130.0	MS	12-DEC-09 11:16	091212-8
PQL01										
	Aluminum	196	ug/L	200	ug/L	97.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Magnesium	317	ug/L	300	ug/L	105.7	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Manganese	10.3	ug/L	10	ug/L	102.8	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Lead	9.88	ug/L	10	ug/L	98.8	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Iron	132	ug/L	100	ug/L	131.6	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Potassium	161	ug/L	150	ug/L	107.2	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Sodium	274	ug/L	300	ug/L	91.4	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Titanium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Boron	49.5	ug/L	50	ug/L	98.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Calcium	204	ug/L	200	ug/L	102.1	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Zinc	10.1	ug/L	10	ug/L	100.6	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Vanadium	5.23	ug/L	5	ug/L	104.5	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Copper	9.87	ug/L	10	ug/L	98.7	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Cobalt	4.76	ug/L	5	ug/L	95.3	70.0 – 130.0	P	08-DEC-09 08:15	120809-2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Chromium	4.82	ug/L	5	ug/L	96.4	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Cadmium	4.96	ug/L	5	ug/L	99.2	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Barium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Silver	5.13	ug/L	5	ug/L	102.5	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Antimony	11.4	ug/L	10	ug/L	114.3	70.0 – 130.0	P	15-DEC-09 03:31	121509-1
	Silicon	104	ug/L	100	ug/L	104.3	70.0 – 130.0	P	15-DEC-09 03:31	121509-1
PQL02										
	Antimony	8.21	ug/L	10	ug/L	82.1	70.0 – 130.0	P	15-DEC-09 04:38	121509-1
	Silicon	103	ug/L	100	ug/L	102.8	70.0 – 130.0	P	15-DEC-09 04:38	121509-1
PQL03										
	Antimony	8.71	ug/L	10	ug/L	87.1	70.0 – 130.0	P	15-DEC-09 05:22	121509-1
	Silicon	104	ug/L	100	ug/L	103.8	70.0 – 130.0	P	15-DEC-09 05:22	121509-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	04–DEC–09 21:05	091204–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	04–DEC–09 21:05	091204–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	04–DEC–09 21:05	091204–6
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	04–DEC–09 21:05	091204–6
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	04–DEC–09 21:05	091204–6
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	05–DEC–09 15:27	091205–7
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	05–DEC–09 23:03	091205–5
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 09:47	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 08:08	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 08:08	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 08:08	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 08:08	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 08:08	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 08:08	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 08:08	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 08:08	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 08:08	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 08:08	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 08:08	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 08:08	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:08	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 08:08	120809–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	10–DEC–09 23:18	091210–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	10–DEC–09 23:18	091210–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	10–DEC–09 23:18	091210–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	10–DEC–09 23:18	091210–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	11–DEC–09 15:48	091211–4

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	11-DEC-09 15:48	091211-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	12-DEC-09 11:14	091212-8
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	15-DEC-09 03:28	121509-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 03:28	121509-1
CCB01										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	04-DEC-09 21:35	091204-6
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	04-DEC-09 21:35	091204-6
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	04-DEC-09 21:35	091204-6
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	04-DEC-09 21:35	091204-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	04-DEC-09 21:35	091204-6
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	05-DEC-09 15:36	091205-7
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	05-DEC-09 23:12	091205-5
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 09:52	120709S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 08:54	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Boron	16.85	+/-50	J	10.0	50.0	SOL	P	08-DEC-09 08:54	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 08:54	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 08:54	120809-2
	Potassium	138.07	+/-250	J	64.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 08:54	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:54	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 08:54	120809-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	10–DEC–09 23:46	091210–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	10–DEC–09 23:46	091210–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	10–DEC–09 23:46	091210–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	10–DEC–09 23:46	091210–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	11–DEC–09 16:03	091211–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	11–DEC–09 16:03	091211–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 11:23	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 03:51	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 03:51	121509–1
CCB02										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	04–DEC–09 21:54	091204–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	04–DEC–09 21:54	091204–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	04–DEC–09 21:54	091204–6
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	04–DEC–09 21:54	091204–6
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	04–DEC–09 21:54	091204–6
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	05–DEC–09 15:53	091205–7
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	05–DEC–09 23:29	091205–5
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 10:12	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 09:18	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 09:18	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 09:18	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 09:18	120809–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	11–DEC–09 00:03	091210–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	11–DEC–09 00:03	091210–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	11–DEC–09 00:03	091210–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	11–DEC–09 00:03	091210–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	11–DEC–09 16:11	091211–4
	Uranium	0.098	+/–.2	J	0.066	0.2	SOL	MS	11–DEC–09 16:11	091211–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 11:34	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 04:42	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 04:42	121509–1
CCB03										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	04–DEC–09 22:55	091204–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	04–DEC–09 22:55	091204–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	04–DEC–09 22:55	091204–6
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	04–DEC–09 22:55	091204–6
	Thallium	0.527	+/–1	J	0.3	1.0	SOL	MS	04–DEC–09 22:55	091204–6
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	05–DEC–09 16:12	091205–7
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	05–DEC–09 23:46	091205–5
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 10:32	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 09:59	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 09:59	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 09:59	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 09:59	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 09:59	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:59	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:59	120809–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	11–DEC–09 00:49	091210–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	11–DEC–09 00:49	091210–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	11–DEC–09 00:49	091210–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	11–DEC–09 00:49	091210–3
	Thallium	0.369	+/–1	J	0.3	1.0	SOL	MS	11–DEC–09 16:46	091211–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	11–DEC–09 16:46	091211–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 11:51	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 05:26	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 05:26	121509–1
CCB04										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	05–DEC–09 00:02	091204–6
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	05–DEC–09 00:02	091204–6
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	05–DEC–09 00:02	091204–6
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	05–DEC–09 00:02	091204–6
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	05–DEC–09 00:02	091204–6
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 10:52	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 11:02	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 11:02	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 11:02	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 11:02	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 11:02	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 11:02	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 11:02	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	11–DEC–09 01:47	091210–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	11–DEC–09 01:47	091210–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	11–DEC–09 01:47	091210–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	11–DEC–09 01:47	091210–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	11–DEC–09 17:09	091211–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	11–DEC–09 17:09	091211–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 12:06	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 05:37	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 05:37	121509–1
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 11:12	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 12:04	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 12:04	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 12:04	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 12:04	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	11–DEC–09 02:45	091210–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	11–DEC–09 02:45	091210–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	11–DEC–09 02:45	091210–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	11–DEC–09 02:45	091210–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	11–DEC–09 17:41	091211–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	11–DEC–09 17:41	091211–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 12:13	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 06:04	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 06:04	121509–1
CCB06										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 11:32	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 13:01	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 13:01	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 13:01	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 13:01	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 13:01	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 13:01	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 13:01	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 13:01	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-DEC-09 03:49	091210-3
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	11-DEC-09 03:49	091210-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	11-DEC-09 03:49	091210-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-DEC-09 03:49	091210-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-DEC-09 18:08	091211-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	11-DEC-09 18:08	091211-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	12-DEC-09 12:32	091212-8
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	15-DEC-09 06:42	121509-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 06:42	121509-1
CCB07										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 11:52	120709S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 14:17	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 14:17	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 14:17	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 14:17	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 14:17	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 14:17	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 14:17	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 14:17	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 14:17	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 14:17	120809-2
	Magnesium	91.19	+/-300	J	85.0	300	SOL	P	08-DEC-09 14:17	120809-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 14:17	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 14:17	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:17	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 14:17	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:17	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:17	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 14:17	120809–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	11–DEC–09 04:41	091210–3
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	11–DEC–09 04:41	091210–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	11–DEC–09 04:41	091210–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	11–DEC–09 04:41	091210–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 12:51	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 07:17	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 07:17	121509–1
CCB08										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:13	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 14:57	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 14:57	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 14:57	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 14:57	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 14:57	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 14:57	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 14:57	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 13:04	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 07:51	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 07:51	121509–1
CCB09										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:33	120709S1–9
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 16:14	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 16:14	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 16:14	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 13:19	091212–8
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–DEC–09 08:25	121509–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 08:25	121509–1
CCB10										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:53	120709S1–9

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 17:25	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 17:25	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 17:25	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 17:25	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 17:25	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 17:25	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 17:25	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 17:25	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 17:25	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 17:25	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 17:25	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 17:25	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 17:25	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 17:25	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 17:25	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 17:25	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 17:25	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 17:25	120809-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	12-DEC-09 13:38	091212-8
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	15-DEC-09 08:58	121509-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 08:58	121509-1
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 18:35	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 18:35	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 18:35	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 18:35	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 18:35	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 18:35	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 18:35	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 18:35	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 18:35	120809-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 18:35	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 18:35	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 18:35	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 18:35	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 18:35	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 18:35	120809–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 13:54	091212–8
CCB12										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 19:59	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 19:59	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 19:59	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Sodium	73.04	+/–250	J	70.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–DEC–09 14:11	091212–8

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB13										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 21:24	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 21:24	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 21:24	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 21:24	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 21:24	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 21:24	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 21:24	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 21:24	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 21:24	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 21:24	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 21:24	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 21:24	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 21:24	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 21:24	120809-2
	Sodium	94.18	+/-250	J	70.0	250	SOL	P	08-DEC-09 21:24	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 21:24	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 21:24	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 21:24	120809-2
CCB14										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 22:48	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 22:48	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 22:48	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 22:48	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 22:48	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 22:48	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 22:48	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 22:48	120809-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 22:48	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Sodium	120.49	+/-250	J	70.0	250	SOL	P	08-DEC-09 22:48	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 22:48	120809-2
CCB15										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 00:13	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 00:13	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 00:13	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 00:13	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	09-DEC-09 00:13	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 00:13	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Sodium	118.31	+/-250	J	70.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 00:13	120809-2
CCB16										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 01:23	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 01:23	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 01:23	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 01:23	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 01:23	120809-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 01:23	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 01:23	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 01:23	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 01:23	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 01:23	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 01:23	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Sodium	154.13	+/–250	J	70.0	250	SOL	P	09–DEC–09 01:23	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 01:23	120809–2
CCB17										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 02:27	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 02:27	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 02:27	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 02:27	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 02:27	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 02:27	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Sodium	149.09	+/–250	J	70.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 02:27	120809–2
CCB18										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 03:31	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 03:31	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 03:31	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 03:31	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 03:31	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 03:31	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Sodium	155.19	+/–250	J	70.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 03:31	120809–2
CCB19										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 04:41	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 04:41	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 04:41	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 04:41	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 04:41	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 04:41	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 04:41	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 04:41	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 04:41	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 04:41	120809–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 04:41	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 04:41	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 04:41	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 04:41	120809–2
	Sodium	166.45	+/–250	J	70.0	250	SOL	P	09–DEC–09 04:41	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 04:41	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 04:41	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 04:41	120809–2
CCB20										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 05:53	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 05:53	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 05:53	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 05:53	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 05:53	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 05:53	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 05:53	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 05:53	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 05:53	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 05:53	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 05:53	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 05:53	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 05:53	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 05:53	120809–2
	Sodium	158.55	+/–250	J	70.0	250	SOL	P	09–DEC–09 05:53	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 05:53	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 05:53	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 05:53	120809–2
CCB21										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 07:04	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 07:04	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 07:04	120809–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–643

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 07:04	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 07:04	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 07:04	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 07:04	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 07:04	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 07:04	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 07:04	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 07:04	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 07:04	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 07:04	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 07:04	120809–2
	Sodium	160.87	+/–250	J	70.0	250	SOL	P	09–DEC–09 07:04	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 07:04	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 07:04	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 07:04	120809–2

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–643

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978607								
	Copper	291	ug/Kg	+/–968.992	U	P	291	969
	Iron	7750	ug/Kg	+/–24224.806	U	P	7750	24200
	Lead	242	ug/Kg	+/–968.992	U	P	242	969
	Magnesium	8240	ug/Kg	+/–29069.767	U	P	8240	29100
	Manganese	194	ug/Kg	+/–968.992	U	P	194	969
	Potassium	6200	ug/Kg	+/–24224.806	U	P	6200	24200
	Silver	96.9	ug/Kg	+/–484.496	U	P	96.9	484
	Sodium	16900	ug/Kg	+/–24224.806	J	P	6780	24200
	Titanium	96.9	ug/Kg	+/–484.496	U	P	96.9	484
	Cobalt	145	ug/Kg	+/–484.496	U	P	145	484
	Chromium	145	ug/Kg	+/–484.496	U	P	145	484
	Calcium	7750	ug/Kg	+/–24224.806	U	P	7750	24200
	Cadmium	96.9	ug/Kg	+/–484.496	U	P	96.9	484
	Boron	969	ug/Kg	+/–4844.961	U	P	969	4840
	Barium	96.9	ug/Kg	+/–484.496	U	P	96.9	484
	Aluminum	6590	ug/Kg	+/–19379.845	U	P	6590	19400
	Vanadium	96.9	ug/Kg	+/–484.496	U	P	96.9	484
	Zinc	320	ug/Kg	+/–968.992	U	P	320	969
1201978613								
	Arsenic	0.198	mg/kg	+/–0.992	U	MS	0.198	0.992
	Beryllium	0.0198	mg/kg	+/–0.099	U	MS	0.0198	0.0992
	Lithium	0.397	mg/kg	+/–1.984	U	MS	0.397	1.98
	Nickel	0.0992	mg/kg	+/–0.397	U	MS	0.0992	0.397
	Selenium	0.496	mg/kg	+/–0.992	U	MS	0.496	0.992
	Thallium	0.0595	mg/kg	+/–0.198	U	MS	0.0595	0.198
	Uranium	0.0131	mg/kg	+/–0.04	U	MS	0.0131	0.0397
1201978625								
	Arsenic	0.199	mg/kg	+/–0.996	U	MS	0.199	0.996
	Beryllium	0.0199	mg/kg	+/–0.1	U	MS	0.0199	0.0996
	Lithium	0.398	mg/kg	+/–1.992	U	MS	0.398	1.99
	Nickel	0.0996	mg/kg	+/–0.398	U	MS	0.0996	0.398
	Selenium	0.498	mg/kg	+/–0.996	U	MS	0.498	0.996
	Thallium	0.0598	mg/kg	+/–0.199	U	MS	0.0598	0.199
	Uranium	0.0132	mg/kg	+/–0.04	U	MS	0.0132	0.0398
1201978991								
	Mercury	3.78	ug/kg	+/–11.132	U	AV	3.78	11.1
1201995284								

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-643
Contract: LANL01004
Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
	Antimony	320	ug/Kg	+/-968.992	U	P	320	969
	Silicon	1450	ug/Kg	+/-9689.922	U	P	1450	9690

METALS
–4–
Interference Check Sample

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	7.46	ug/L					15–DEC–09 03:35	121509–1
	Silicon	20.7	ug/L					15–DEC–09 03:35	121509–1
ICSAB01									
	Antimony	500	ug/L	500	ug/L	99.9	80.0 – 120.0	15–DEC–09 03:38	121509–1
	Silicon	5140	ug/L	5000	ug/L	103	80.0 – 120.0	15–DEC–09 03:38	121509–1

METALS
–4–
Interference Check Sample

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Barium	2.42	ug/L					08–DEC–09 08:22	120809–2
	Boron	–2.81	ug/L					08–DEC–09 08:22	120809–2
	Cadmium	2.22	ug/L					08–DEC–09 08:22	120809–2
	Calcium	481000	ug/L	500000	ug/L	96.1	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Chromium	1.17	ug/L					08–DEC–09 08:22	120809–2
	Cobalt	–1.69	ug/L					08–DEC–09 08:22	120809–2
	Copper	3.23	ug/L					08–DEC–09 08:22	120809–2
	Iron	183000	ug/L	200000	ug/L	91.5	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Lead	–0.012	ug/L					08–DEC–09 08:22	120809–2
	Magnesium	486000	ug/L	500000	ug/L	97.1	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Manganese	8.2	ug/L					08–DEC–09 08:22	120809–2
	Potassium	36.8	ug/L					08–DEC–09 08:22	120809–2
	Silver	–2.89	ug/L					08–DEC–09 08:22	120809–2
	Sodium	12.2	ug/L					08–DEC–09 08:22	120809–2
	Titanium	–3.82	ug/L					08–DEC–09 08:22	120809–2
	Vanadium	–1.05	ug/L					08–DEC–09 08:22	120809–2
	Zinc	–4.58	ug/L					08–DEC–09 08:22	120809–2
ICSAB01									
	Aluminum	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Barium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Boron	497	ug/L	500	ug/L	99.4	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Cadmium	448	ug/L	500	ug/L	89.7	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Calcium	461000	ug/L	500000	ug/L	92.1	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Chromium	472	ug/L	500	ug/L	94.4	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Cobalt	433	ug/L	500	ug/L	86.5	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Copper	544	ug/L	500	ug/L	109	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Iron	180000	ug/L	200000	ug/L	90	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Lead	452	ug/L	500	ug/L	90.3	80.0 – 120.0	08–DEC–09 08:28	120809–2

METALS
–4–
Interference Check Sample

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Manganese	479	ug/L	500	ug/L	95.8	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Potassium	5370	ug/L	5000	ug/L	107	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Silver	270	ug/L	250	ug/L	108	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Sodium	5100	ug/L	5000	ug/L	102	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Titanium	511	ug/L	500	ug/L	102	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Vanadium	496	ug/L	500	ug/L	99.2	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Zinc	476	ug/L	500	ug/L	95.2	80.0 – 120.0	08–DEC–09 08:28	120809–2

METALS
-4-
Interference Check Sample

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.14	ug/L					10-DEC-09 23:29	091210-3
	Lithium	0.142	ug/L					10-DEC-09 23:29	091210-3
	Nickel	2.5	ug/L					10-DEC-09 23:29	091210-3
	Selenium	-0.654	ug/L					10-DEC-09 23:29	091210-3
ICSAB01									
	Arsenic	21.4	ug/L	20	ug/L	107	80.0 - 120.0	10-DEC-09 23:35	091210-3
	Lithium	19.8	ug/L	20	ug/L	98.8	80.0 - 120.0	10-DEC-09 23:35	091210-3
	Nickel	23.0	ug/L	22.7	ug/L	101	80.0 - 120.0	10-DEC-09 23:35	091210-3
	Selenium	20.4	ug/L	20	ug/L	102	80.0 - 120.0	10-DEC-09 23:35	091210-3

METALS
-4-
Interference Check Sample

SDG No: 10-643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	0.046	ug/L					11-DEC-09 15:54	091211-4
	Uranium	0.002	ug/L					11-DEC-09 15:54	091211-4
ICSAB01									
	Thallium	19.5	ug/L	20	ug/L	97.7	80.0 - 120.0	11-DEC-09 15:57	091211-4
	Uranium	22.2	ug/L	20	ug/L	111	80.0 - 120.0	11-DEC-09 15:57	091211-4

METALS
–4–
Interference Check Sample

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	–0.002	ug/L					05–DEC–09 23:07	091205–5
ICSAB01									
	Uranium	21.4	ug/L	20	ug/L	107	80.0 – 120.0	05–DEC–09 23:09	091205–5

METALS
–4–
Interference Check Sample

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.372	ug/L					04–DEC–09 21:17	091204–6
	Lithium	0.143	ug/L					04–DEC–09 21:17	091204–6
	Nickel	2.85	ug/L					04–DEC–09 21:17	091204–6
	Selenium	–0.804	ug/L					04–DEC–09 21:17	091204–6
	Thallium	0.036	ug/L					04–DEC–09 21:17	091204–6
ICSAB01									
	Arsenic	21.0	ug/L	20	ug/L	105	80.0 – 120.0	04–DEC–09 21:23	091204–6
	Lithium	20.3	ug/L	20	ug/L	102	80.0 – 120.0	04–DEC–09 21:23	091204–6
	Nickel	22.6	ug/L	22.7	ug/L	99.6	80.0 – 120.0	04–DEC–09 21:23	091204–6
	Selenium	20.1	ug/L	20	ug/L	100	80.0 – 120.0	04–DEC–09 21:23	091204–6
	Thallium	21.7	ug/L	20	ug/L	108	80.0 – 120.0	04–DEC–09 21:23	091204–6

METALS
–4–
Interference Check Sample

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.069	ug/L					05–DEC–09 15:31	091205–7
ICSAB01									
	Beryllium	21.1	ug/L	20	ug/L	106	80.0 – 120.0	05–DEC–09 15:32	091205–7

METALS
–4–
Interference Check Sample

SDG No: 10–643

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.068	ug/L					12–DEC–09 11:18	091212–8
ICSAB01									
	Beryllium	20.4	ug/L	20	ug/L	102	80.0 – 120.0	12–DEC–09 11:19	091212–8

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–643 **Client ID** RE03–09–14108S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.8

Sample ID: 241613001 **Spike ID:** 1201978610

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/Kg	75–125	49500		108	U	52600	93.8		P
Calcium	ug/Kg	75–125	1540000		915000		526000	118		P
Chromium	ug/Kg	75–125	54100		3630		52600	95.9		P
Cobalt	ug/Kg	75–125	50300		1360		52600	93		P
Copper	ug/Kg	75–125	56400		2680		52600	102		P
Iron	ug/Kg		11900000		9270000		526000	497	N/A	P
Lead	ug/Kg	75–125	61200		11100		52600	95.2		P
Magnesium	ug/Kg	75–125	1940000		901000		526000	198	N	P
Manganese	ug/Kg		356000		265000		52600	173	N/A	P
Potassium	ug/Kg	75–125	1450000		501000		526000	180	N	P
Silicon	ug/Kg	75–125	1200000		817000		526000	73.2	N	P
Silver	ug/Kg	75–125	52200		270	J	52600	98.6		P
Sodium	ug/Kg	75–125	730000		194000		526000	102		P
Titanium	ug/Kg	75–125	324000		204000		52600	227	N	P
Vanadium	ug/Kg	75–125	60000		7440		52600	99.9		P
Zinc	ug/Kg	75–125	88400		32700		52600	106		P
Aluminum	ug/Kg		10100000		5090000		526000	950	N/A	P
Antimony	ug/Kg	75–125	50500		699	J	52600	94.7		P
Barium	ug/Kg	75–125	97400		48400		52600	93.1		P
Boron	ug/Kg	75–125	51400		2060	J	52600	93.8		P

METALS
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Matrix Spike Duplicate Summary

SDG NO. 10–643 **Client ID** RE03–09–14108SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.8

Sample ID: 241613001 **Spike ID:** 1201978611

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		8600000		5090000		528000	664	N/A	P
Antimony	ug/Kg	75–125	49300		699	J	51800	93.8		P
Barium	ug/Kg	75–125	99500		48400		52800	96.7		P
Boron	ug/Kg	75–125	51000		2060	J	52800	92.7		P
Cadmium	ug/Kg	75–125	49800		108	U	52800	94.1		P
Calcium	ug/Kg	75–125	1400000		915000		528000	91.8		P
Chromium	ug/Kg	75–125	53500		3630		52800	94.3		P
Cobalt	ug/Kg	75–125	50600		1360		52800	93.1		P
Copper	ug/Kg	75–125	55900		2680		52800	101		P
Iron	ug/Kg		10400000		9270000		528000	206	N/A	P
Lead	ug/Kg	75–125	60800		11100		52800	94.1		P
Magnesium	ug/Kg	75–125	1730000		901000		528000	158	N	P
Manganese	ug/Kg		329000		265000		52800	121	N/A	P
Potassium	ug/Kg	75–125	1310000		501000		528000	154	N	P
Silicon	ug/Kg	75–125	1140000		817000		518000	62.6	N	P
Silver	ug/Kg	75–125	52300		270	J	52800	98.4		P
Sodium	ug/Kg	75–125	720000		194000		528000	99.6		P
Titanium	ug/Kg	75–125	283000		204000		52800	148	N	P
Vanadium	ug/Kg	75–125	58500		7440		52800	96.6		P
Zinc	ug/Kg	75–125	82800		32700		52800	94.8		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-643 **Client ID** RE03-09-14108S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.8

Sample ID: 241613001 **Spike ID:** 1201978616

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	7.94		0.664	J	8.56	85		MS
Beryllium	mg/kg	75-125	5.35		0.468		5.35	91.3		MS
Lithium	mg/kg	75-125	12.8		7.19		5.35	105		MS
Nickel	mg/kg	75-125	9.24		3.89		5.35	100		MS
Selenium	mg/kg	75-125	1.58		0.532	U	2.14	67.8	N	MS
Thallium	mg/kg	75-125	9.87		0.13	J	10.7	91.1		MS
Uranium	mg/kg	75-125	6.01		0.602		5.35	101		MS

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-643 **Client ID** RE03-09-14108SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.8

Sample ID: 241613001 **Spike ID:** 1201978617

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	8.32		0.664	J	8.61	89		MS
Beryllium	mg/kg	75-125	5.6		0.468		5.38	95.5		MS
Lithium	mg/kg	75-125	12.6		7.19		5.38	101		MS
Nickel	mg/kg	75-125	8.64		3.89		5.38	88.4		MS
Selenium	mg/kg	75-125	1.86		0.532	U	2.15	80.6		MS
Thallium	mg/kg	75-125	9.82		0.13	J	10.8	90.1		MS
Uranium	mg/kg	75-125	6.09		0.602		5.38	102		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–643 **Client ID** RE03–09–13919S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 85

Sample ID: 241611001 **Spike ID:** 1201978628

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	8.91		0.33	J	9.11	94.2		MS
Beryllium	mg/kg	75–125	5.93		0.387		5.69	97.3		MS
Lithium	mg/kg	75–125	10.7		3.57		5.69	125		MS
Nickel	mg/kg	75–125	5.82		0.67		5.69	90.4		MS
Selenium	mg/kg	75–125	2.16		0.584	U	2.28	90.3		MS
Thallium	mg/kg	75–125	11.2		0.107	J	11.4	97.2		MS
Uranium	mg/kg	75–125	6.5		0.523		5.69	105		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–643 **Client ID** RE03–09–13919SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 85

Sample ID: 241611001 **Spike ID:** 1201978629

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	8.85		0.33	J	9.07	93.9		MS
Beryllium	mg/kg	75–125	5.94		0.387		5.67	98		MS
Lithium	mg/kg	75–125	10.3		3.57		5.67	119		MS
Nickel	mg/kg	75–125	5.92		0.67		5.67	92.6		MS
Selenium	mg/kg	75–125	2.19		0.584	U	2.27	92.1		MS
Thallium	mg/kg	75–125	10.9		0.107	J	11.3	95.2		MS
Uranium	mg/kg	75–125	6.37		0.523		5.67	103		MS

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-643 **Client ID** RE03-09-14108S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.8

Sample ID: 241613001 **Spike ID:** 1201978994

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75--125	136		7.23	J	120	107		AV

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-643 **Client ID** RE03-09-14108SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 92.8

Sample ID: 241613001 **Spike ID:** 1201978996

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	142		7.23	J	125	108		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14108D

Sample ID: 241613001 **Duplicate ID:** 1201978608 **Percent Solids for Dup:** 92.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	5090000		5030000		1.15		P
Antimony	ug/Kg	+/–1020	699	J	734	J	4.8		P
Barium	ug/Kg	+/–20%	48400		45400		6.24		P
Boron	ug/Kg	+/–5180	2060	J	1870	J	9.33		P
Cadmium	ug/Kg		108	U	104	U			P
Calcium	ug/Kg	+/–20%	915000		876000		4.38		P
Chromium	ug/Kg	+/–20%	3630		3580		1.34		P
Cobalt	ug/Kg	+/–518	1360		1180		13.9		P
Copper	ug/Kg	+/–1040	2680		2580		3.65		P
Iron	ug/Kg	+/–20%	9270000		8940000		3.72		P
Lead	ug/Kg	+/–20%	11100		9280		17.7		P
Magnesium	ug/Kg	+/–20%	901000		915000		1.6		P
Manganese	ug/Kg	+/–20%	265000		214000		21.3	*	P
Potassium	ug/Kg	+/–20%	501000		492000		1.83		P
Silicon	ug/Kg	+/–20%	817000		780000		4.67		P
Silver	ug/Kg	+/–518	270	J	262	J	2.9		P
Sodium	ug/Kg	+/–20%	194000		195000		.599		P
Titanium	ug/Kg	+/–20%	204000		185000		9.94		P
Vanadium	ug/Kg	+/–20%	7440		7100		4.71		P
Zinc	ug/Kg	+/–20%	32700		31100		5.1		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14108SD

Sample ID: 1201978610 **Duplicate ID:** 1201978611 **Percent Solids for Dup:** 92.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	10100000		8600000		15.9		P
Antimony	ug/Kg	+/–20	50500		49300		2.41		P
Barium	ug/Kg	+/–20	97400		99500		2.11		P
Boron	ug/Kg	+/–20	51400		51000		.716		P
Cadmium	ug/Kg	+/–20	49500		49800		.632		P
Calcium	ug/Kg	+/–20	1540000		1400000		9.19		P
Chromium	ug/Kg	+/–20	54100		53500		1.2		P
Cobalt	ug/Kg	+/–20	50300		50600		.498		P
Copper	ug/Kg	+/–20	56400		55900		1.01		P
Iron	ug/Kg	+/–20	11900000		10400000		13.7		P
Lead	ug/Kg	+/–20	61200		60800		.62		P
Magnesium	ug/Kg	+/–20	1940000		1730000		11.5		P
Manganese	ug/Kg	+/–20	356000		329000		7.88		P
Potassium	ug/Kg	+/–20	1450000		1310000		9.81		P
Silicon	ug/Kg	+/–20	1200000		1140000		5.17		P
Silver	ug/Kg	+/–20	52200		52300		.131		P
Sodium	ug/Kg	+/–20	730000		720000		1.35		P
Titanium	ug/Kg	+/–20	324000		283000		13.5		P
Vanadium	ug/Kg	+/–20	60000		58500		2.57		P
Zinc	ug/Kg	+/–20	88400		82800		6.53		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14108D

Sample ID: 241613001 **Duplicate ID:** 1201978614 **Percent Solids for Dup:** 92.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.07	0.664	J	0.553	J	18.2		MS
Beryllium	mg/kg	+/–.107	0.468		0.475		1.34		MS
Lithium	mg/kg	+/–2.13	7.19		7.51		4.3		MS
Nickel	mg/kg	+/–20%	3.89		3.62		7.26		MS
Selenium	mg/kg		0.532	U	0.534	U			MS
Thallium	mg/kg	+/–.213	0.13	J	0.115	J	12.3		MS
Uranium	mg/kg	+/–20%	0.602		0.574		4.89		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14108SD

Sample ID: 1201978616 **Duplicate ID:** 1201978617 **Percent Solids for Dup:** 92.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	7.94		8.32		4.69		MS
Beryllium	mg/kg	+/–20	5.35		5.6		4.65		MS
Lithium	mg/kg	+/–20	12.8		12.6		1.68		MS
Nickel	mg/kg	+/–20	9.24		8.64		6.65		MS
Selenium	mg/kg	+/–20	1.58		1.86		16.5		MS
Thallium	mg/kg	+/–20	9.87		9.82		.475		MS
Uranium	mg/kg	+/–20	6.01		6.09		1.31		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13919D

Sample ID: 241611001 **Duplicate ID:** 1201978626 **Percent Solids for Dup:** 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.15	0.33	J	0.357	J	7.8		MS
Beryllium	mg/kg	+/–.115	0.387		0.431		10.9		MS
Lithium	mg/kg	+/–2.3	3.57		4.05		12.8		MS
Nickel	mg/kg	+/–.46	0.67		0.628		6.57		MS
Selenium	mg/kg		0.584	U	0.575	U			MS
Thallium	mg/kg	+/–.23	0.107	J	0.0729	J	37.9		MS
Uranium	mg/kg	+/–20%	0.523		0.603		14.3		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13919SD

Sample ID: 1201978628 **Duplicate ID:** 1201978629 **Percent Solids for Dup:** 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	8.91		8.85		.717		MS
Beryllium	mg/kg	+/–20	5.93		5.94		.278		MS
Lithium	mg/kg	+/–20	10.7		10.3		3.83		MS
Nickel	mg/kg	+/–20	5.82		5.92		1.8		MS
Selenium	mg/kg	+/–20	2.16		2.19		1.54		MS
Thallium	mg/kg	+/–20	11.2		10.9		2.41		MS
Uranium	mg/kg	+/–20	6.5		6.37		1.92		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14108D

Sample ID: 241613001 **Duplicate ID:** 1201978993 **Percent Solids for Dup:** 92.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–12.7	7.23	J	8.69	J	18.3		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14108SD

Sample ID: 1201978994 **Duplicate ID:** 1201978996 **Percent Solids for Dup:** 92.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	136		142		4.66		AV

METALS
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Laboratory Control Sample Summary

SDG NO. 10–643

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978612								
	Aluminum	ug/Kg	7290000	6420000		88	56–144	P
	Barium	ug/Kg	475000	450000		94.7	80–120	P
	Boron	ug/Kg	139000	126000		90.3	75–125	P
	Cadmium	ug/Kg	116000	110000		95.2	81–120	P
	Calcium	ug/Kg	3720000	3370000		90.7	83–117	P
	Chromium	ug/Kg	84000	71700		85.3	80–120	P
	Cobalt	ug/Kg	83000	78400		94.5	81–120	P
	Copper	ug/Kg	105000	97900		93.2	81–118	P
	Iron	ug/Kg	20000000	17600000		88.1	51–149	P
	Lead	ug/Kg	161000	157000		97.8	79–121	P
	Magnesium	ug/Kg	2980000	2840000		95.3	79–122	P
	Manganese	ug/Kg	398000	352000		88.6	81–119	P
	Potassium	ug/Kg	2390000	2230000		93.6	74–127	P
	Silver	ug/Kg	133000	128000		96.2	66–134	P
	Sodium	ug/Kg	614000	596000		97.1	74–127	P
	Titanium	ug/Kg	382000	328000		85.9	39–161	P
	Vanadium	ug/Kg	166000	140000		84.4	79–121	P
	Zinc	ug/Kg	195000	186000		95.5	80–121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-643

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978618								
	Arsenic	mg/kg	255	247		96.9	83-120	MS
	Beryllium	mg/kg	86.4	89.7		104	81.2-126.8	MS
	Lithium	mg/kg	8.01	8.1	J	101	66.7-133.7	MS
	Nickel	mg/kg	101	102		101	83.3-121.4	MS
	Selenium	mg/kg	171	174		102	80.2-125.9	MS
	Thallium	mg/kg	203	208		103	78-123.2	MS
	Uranium	mg/kg	2.12	1.91		90.2	61.9-130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-643

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978630								
	Arsenic	mg/kg	255	253		99.4	83-120	MS
	Beryllium	mg/kg	86.4	101		117	81.2-126.8	MS
	Lithium	mg/kg	8.01	8.03	J	100	66.7-133.7	MS
	Nickel	mg/kg	101	106		105	83.3-121.4	MS
	Selenium	mg/kg	171	186		109	80.2-125.9	MS
	Thallium	mg/kg	203	217		107	78-123.2	MS
	Uranium	mg/kg	2.12	1.76		83.1	61.9-130.7	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–643

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978992								
	Mercury	ug/kg	5150	5030		97.6	71.6–128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-643

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201995285								
	Antimony	ug/Kg	173000	186000		107	71-130	P
	Silicon	ug/Kg	1210000	1040000		85.6	10-190	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-643 **Client ID** RE03-09-14108L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241613001 **Serial Dilution ID:** 1201978609

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	47300		46600		1.59		10	P
Antimony	6.83	J	16.5	U	100			P
Barium	450		460		2.11		10	P
Boron	19.1	J	50	U	100			P
Cadmium	1	U	5	U				P
Calcium	8510		8550		.47		10	P
Chromium	33.7		33.9		.593			P
Cobalt	12.6		12.4	J	1.59			P
Copper	24.9		26.2	J	5.02			P
Iron	86200		88500		2.67		10	P
Lead	103		99.5		3.4			P
Magnesium	8370		8550		2.15		10	P
Manganese	2460		2550		3.66		10	P
Potassium	4660		4560		2.15		10	P
Silicon	7980		8150		2.13		10	P
Silver	2.51	J	5	U	100			P
Sodium	1800		2440		35.3			P
Titanium	1900		1910		.263		10	P
Vanadium	69.1		72		4.2		10	P
Zinc	304		304		.164		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-643 **Client ID** RE03-09-14108L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241613001 **Serial Dilution ID:** 1201978615

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	3.12	J	5	U	100			MS
Beryllium	2.2		2.63		19.3			MS
Lithium	33.8		35.8	J	5.92			MS
Nickel	18.3		19.4		5.74			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.613	J	1.93	J	214			MS
Uranium	2.83		3.02		6.71			MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-643 **Client ID** RE03-09-13919L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241611001 **Serial Dilution ID:** 1201978627

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	1.41	J	5	U	100			MS
Beryllium	1.66		1.73	J	4.22			MS
Lithium	15.3		16.1	J	4.9			MS
Nickel	2.87		3.18	J	10.6			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.458	J	3.48	J	660			MS
Uranium	2.24		2.23		.67			MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–643 **Client ID** RE03–09–14108L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241613001 **Serial Dilution ID:** 1201978995

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.114	J	.34	U	100			AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–643 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925481						
1201978607	MB for batch 925481	MB	S	23–NOV–09	.516g	50mL	
1201978612	LCS for batch 925481	LCS	S	23–NOV–09	.503g	50mL	
1201978610	RE03–09–14108S	MS	S	23–NOV–09	.512g	50mL	
1201978611	RE03–09–14108SD	MSD	S	23–NOV–09	.51g	50mL	
1201978608	RE03–09–14108D	DUP	S	23–NOV–09	.52g	50mL	
241613001	RE03–09–14108	SAMPLE	S	23–NOV–09	.501g	50mL	
241613002	RE03–09–14106	SAMPLE	S	23–NOV–09	.523g	50mL	
241613003	RE03–09–14107	SAMPLE	S	23–NOV–09	.502g	50mL	
241613004	RE03–09–14109	SAMPLE	S	23–NOV–09	.504g	50mL	
241613005	RE03–09–14252	SAMPLE	S	23–NOV–09	.522g	50mL	
241613006	RE03–09–14250	SAMPLE	S	23–NOV–09	.501g	50mL	
241613007	RE03–09–14255	SAMPLE	S	23–NOV–09	.501g	50mL	
241613008	RE03–09–14256	SAMPLE	S	23–NOV–09	.506g	50mL	
241613009	RE03–09–14254	SAMPLE	S	23–NOV–09	.509g	50mL	
241613010	RE03–09–14249	SAMPLE	S	23–NOV–09	.503g	50mL	
241613011	RE03–09–14248	SAMPLE	S	23–NOV–09	.501g	50mL	
241613012	RE03–09–14247	SAMPLE	S	23–NOV–09	.502g	50mL	
241613013	RE03–09–14246	SAMPLE	S	23–NOV–09	.513g	50mL	
241613014	RE03–09–14253	SAMPLE	S	23–NOV–09	.504g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-643 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241613015	RE03-09-14251	SAMPLE	S	23-NOV-09	.504g	50mL	
241613016	RE03-09-14257	SAMPLE	S	23-NOV-09	.502g	50mL	
241613017	RE03-10-2729	SAMPLE	S	23-NOV-09	.512g	50mL	
241613018	RE03-10-6969	SAMPLE	S	23-NOV-09	.507g	50mL	
Batch Number	932723						
1201995284	MB for batch 932723	MB	S	14-DEC-09	.516g	50mL	
1201995285	LCS for batch 932723	LCS	S	14-DEC-09	.517g	50mL	
1201978610	RE03-09-14108S	MS	S	14-DEC-09	.512g	50mL	
1201978611	RE03-09-14108SD	MSD	S	14-DEC-09	.52g	50mL	
1201978608	RE03-09-14108D	DUP	S	14-DEC-09	.526g	50mL	
241613001	RE03-09-14108	SAMPLE	S	14-DEC-09	.526g	50mL	
241613002	RE03-09-14106	SAMPLE	S	14-DEC-09	.51g	50mL	
241613003	RE03-09-14107	SAMPLE	S	14-DEC-09	.517g	50mL	
241613004	RE03-09-14109	SAMPLE	S	14-DEC-09	.511g	50mL	
241613005	RE03-09-14252	SAMPLE	S	14-DEC-09	.522g	50mL	
241613006	RE03-09-14250	SAMPLE	S	14-DEC-09	.528g	50mL	
241613007	RE03-09-14255	SAMPLE	S	14-DEC-09	.522g	50mL	
241613008	RE03-09-14256	SAMPLE	S	14-DEC-09	.508g	50mL	
241613009	RE03-09-14254	SAMPLE	S	14-DEC-09	.505g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-643 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241613010	RE03-09-14249	SAMPLE	S	14-DEC-09	.531g	50mL	
241613011	RE03-09-14248	SAMPLE	S	14-DEC-09	.509g	50mL	
241613012	RE03-09-14247	SAMPLE	S	14-DEC-09	.519g	50mL	
241613013	RE03-09-14246	SAMPLE	S	14-DEC-09	.52g	50mL	
241613014	RE03-09-14253	SAMPLE	S	14-DEC-09	.518g	50mL	
241613015	RE03-09-14251	SAMPLE	S	14-DEC-09	.52g	50mL	
241613016	RE03-09-14257	SAMPLE	S	14-DEC-09	.518g	50mL	
241613017	RE03-10-2729	SAMPLE	S	14-DEC-09	.509g	50mL	
241613018	RE03-10-6969	SAMPLE	S	14-DEC-09	.505g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–643 **Method Type**: MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925483							
1201978613	MB for batch 925483	MB	S	23–NOV–09	.504g	50mL	
1201978618	LCS for batch 925483	LCS	S	23–NOV–09	.523g	50mL	
1201978616	RE03–09–14108S	MS	S	23–NOV–09	.504g	50mL	
1201978617	RE03–09–14108SD	MSD	S	23–NOV–09	.501g	50mL	
1201978614	RE03–09–14108D	DUP	S	23–NOV–09	.505g	50mL	
241613001	RE03–09–14108	SAMPLE	S	23–NOV–09	.507g	50mL	
241613002	RE03–09–14106	SAMPLE	S	23–NOV–09	.5g	50mL	
241613003	RE03–09–14107	SAMPLE	S	23–NOV–09	.524g	50mL	
241613004	RE03–09–14109	SAMPLE	S	23–NOV–09	.518g	50mL	
241613005	RE03–09–14252	SAMPLE	S	23–NOV–09	.504g	50mL	
241613006	RE03–09–14250	SAMPLE	S	23–NOV–09	.507g	50mL	
241613007	RE03–09–14255	SAMPLE	S	23–NOV–09	.511g	50mL	
241613008	RE03–09–14256	SAMPLE	S	23–NOV–09	.519g	50mL	
241613009	RE03–09–14254	SAMPLE	S	23–NOV–09	.502g	50mL	
241613010	RE03–09–14249	SAMPLE	S	23–NOV–09	.518g	50mL	
241613012	RE03–09–14247	SAMPLE	S	23–NOV–09	.5g	50mL	
241613013	RE03–09–14246	SAMPLE	S	23–NOV–09	.501g	50mL	
241613014	RE03–09–14253	SAMPLE	S	23–NOV–09	.5g	50mL	
241613015	RE03–09–14251	SAMPLE	S	23–NOV–09	.51g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-643 **Method Type**: MS

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241613016	RE03-09-14257	SAMPLE	S	23-NOV-09	.5g	50mL	
241613017	RE03-10-2729	SAMPLE	S	23-NOV-09	.516g	50mL	
241613018	RE03-10-6969	SAMPLE	S	23-NOV-09	.512g	50mL	
Batch Number	925487						
1201978625	MB for batch 925487	MB	S	23-NOV-09	.502g	50mL	
1201978630	LCS for batch 925487	LCS	S	23-NOV-09	.52g	50mL	
1201978628	RE03-09-13919S	MS	S	23-NOV-09	.519g	50mL	
1201978629	RE03-09-13919SD	MSD	S	23-NOV-09	.521g	50mL	
1201978626	RE03-09-13919D	DUP	S	23-NOV-09	.514g	50mL	
241613011	RE03-09-14248	SAMPLE	S	23-NOV-09	.505g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-643 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925644							
1201978991	MB for batch 925644	MB	S	04-DEC-09	.539g	30mL	
1201978992	LCS for batch 925644	LCS	S	04-DEC-09	.2g	30mL	
1201978994	RE03-09-14108S	MS	S	04-DEC-09	.538g	30mL	
1201978996	RE03-09-14108SD	MSD	S	04-DEC-09	.516g	30mL	
1201978993	RE03-09-14108D	DUP	S	04-DEC-09	.51g	30mL	
241613001	RE03-09-14108	SAMPLE	S	04-DEC-09	.51g	30mL	
241613002	RE03-09-14106	SAMPLE	S	04-DEC-09	.591g	30mL	
241613003	RE03-09-14107	SAMPLE	S	04-DEC-09	.567g	30mL	
241613004	RE03-09-14109	SAMPLE	S	04-DEC-09	.513g	30mL	
241613005	RE03-09-14252	SAMPLE	S	04-DEC-09	.54g	30mL	
241613006	RE03-09-14250	SAMPLE	S	04-DEC-09	.539g	30mL	
241613007	RE03-09-14255	SAMPLE	S	04-DEC-09	.56g	30mL	
241613008	RE03-09-14256	SAMPLE	S	04-DEC-09	.521g	30mL	
241613009	RE03-09-14254	SAMPLE	S	04-DEC-09	.503g	30mL	
241613010	RE03-09-14249	SAMPLE	S	04-DEC-09	.54g	30mL	
241613011	RE03-09-14248	SAMPLE	S	04-DEC-09	.534g	30mL	
241613012	RE03-09-14247	SAMPLE	S	04-DEC-09	.521g	30mL	
241613013	RE03-09-14246	SAMPLE	S	04-DEC-09	.512g	30mL	
241613014	RE03-09-14253	SAMPLE	S	04-DEC-09	.554g	30mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–643 **Method Type**: AV

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241613015	RE03–09–14251	SAMPLE	S	04–DEC–09	.536g	30mL	
241613016	RE03–09–14257	SAMPLE	S	04–DEC–09	.566g	30mL	
241613017	RE03–10–2729	SAMPLE	S	04–DEC–09	.562g	30mL	
241613018	RE03–10–6969	SAMPLE	S	04–DEC–09	.513g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 04–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–643
Method MS
Data File: 091204–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	20:40			X											X				X		X				X				
S10	1	20:47			X											X				X		X				X				
S100	1	20:53			X											X				X		X				X				
ICV01	1	20:59			X											X				X		X				X				
ICB01	1	21:05			X											X				X		X				X				
CRDL01	1	21:11			X											X				X		X				X				
ICSA01	1	21:17			X											X				X		X				X				
ICSAB01	1	21:23			X											X				X		X				X				
CCV01	1	21:29			X											X				X		X				X				
CCB01	1	21:35			X											X				X		X				X				
LR01	1	21:42			X											X				X		X				X				
CCV02	1	21:48			X											X				X		X				X				
CCB02	1	21:54			X											X				X		X				X				
1201978625	2	22:00			X											X				X		X				X				
1201978630	20	22:06														X														
1201978630	40	22:12			X															X		X				X				
ZZZZZZ	2	22:18																												
1201978626	2	22:24			X											X				X		X				X				
1201978628	2	22:30			X											X				X		X				X				
1201978629	2	22:36			X											X				X		X				X				
1201978627	10	22:43			X											X				X		X				X				
CCV03	1	22:49			X											X				X		X				X				
CCB03	1	22:55			X											X				X		X				X				
ZZZZZZ	2	23:01																												
ZZZZZZ	2	23:07																												
ZZZZZZ	2	23:13																												
ZZZZZZ	2	23:19																												
ZZZZZZ	2	23:25																												
ZZZZZZ	2	23:32																												
ZZZZZZ	2	23:38																												
ZZZZZZ	2	23:44																												
241613011	2	23:50			X											X				X		X				X				
CCV04	1	23:56			X											X				X		X				X				
CCB04	1	00:02			X											X				X		X				X				

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 05–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–643
Method MS
Data File: 091205–7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	15:20					X																							
S10	1	15:22					X																							
S100	1	15:24					X																							
ICV01	1	15:26					X																							
ICB01	1	15:27					X																							
CRDL01	1	15:29					X																							
ICSA01	1	15:31					X																							
ICSAB01	1	15:32					X																							
CCV01	1	15:34					X																							
CCB01	1	15:36					X																							
1201978625	2	15:38					X																							
ZZZZZZ	20	15:39																												
1201978630	40	15:41					X																							
ZZZZZZ	2	15:43																												
1201978626	2	15:44					X																							
1201978628	2	15:46					X																							
1201978629	2	15:48					X																							
1201978627	10	15:49					X																							
CCV02	1	15:51					X																							
CCB02	1	15:53					X																							
ZZZZZZ	2	15:55																												
ZZZZZZ	2	15:56																												
ZZZZZZ	2	15:58																												
ZZZZZZ	2	16:00																												
ZZZZZZ	2	16:01																												
ZZZZZZ	2	16:03																												
ZZZZZZ	2	16:05																												
ZZZZZZ	2	16:07																												
241613011	2	16:08					X																							
CCV03	1	16:10					X																							
CCB03	1	16:12					X																							

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 12–DEC–09 **End Date:** 12–DEC–09

Client Sdg: 10–643
Method MS
Data File: 091212–8

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	11:08					X																							
S10	1	11:09					X																							
S100	1	11:11					X																							
ICV01	1	11:13					X																							
ICB01	1	11:14					X																							
CRDL01	1	11:16					X																							
ICSA01	1	11:18					X																							
ICSAB01	1	11:19					X																							
CCV01	1	11:21					X																							
CCB01	1	11:23					X																							
ZZZZZZ	1	11:24																												
ZZZZZZ	1	11:26																												
ZZZZZZ	1	11:28																												
ZZZZZZ	1	11:29																												
ZZZZZZ	5	11:31																												
CCV02	1	11:33					X																							
CCB02	1	11:34					X																							
ZZZZZZ	1	11:36																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:40																												
ZZZZZZ	1	11:41																												
ZZZZZZ	5	11:44																												
ZZZZZZ	1	11:46																												
ZZZZZZ	1	11:47																												
CCV03	1	11:49					X																							
CCB03	1	11:51					X																							
ZZZZZZ	1	11:53																												
ZZZZZZ	1	11:54																												
ZZZZZZ	1	11:56																												
ZZZZZZ	1	11:58																												
ZZZZZZ	1	11:59																												
ZZZZZZ	1	12:01																												
ZZZZZZ	1	12:03																												
CCV04	1	12:04					X																							
CCB04	1	12:06					X																							
ZZZZZZ	1	12:09																												
CCV05	1	12:11					X																							
CCB05	1	12:13					X																							
ZZZZZZ	1	12:15																												
ZZZZZZ	1	12:17																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	12:18																											
ZZZZZZ	1	12:20																											
ZZZZZZ	5	12:22																											
ZZZZZZ	1	12:23																											
ZZZZZZ	1	12:25																											
ZZZZZZ	1	12:27																											
ZZZZZZ	1	12:29																											
CCV06	1	12:30					X																						
CCB06	1	12:32					X																						
ZZZZZZ	1	12:34																											
ZZZZZZ	1	12:35																											
ZZZZZZ	1	12:37																											
ZZZZZZ	1	12:39																											
ZZZZZZ	1	12:40																											
ZZZZZZ	1	12:42																											
ZZZZZZ	1	12:44																											
ZZZZZZ	5	12:46																											
ZZZZZZ	1	12:47																											
CCV07	1	12:49					X																						
CCB07	1	12:51					X																						
ZZZZZZ	1	12:52																											
ZZZZZZ	1	12:54																											
ZZZZZZ	1	12:56																											
ZZZZZZ	1	12:58																											
ZZZZZZ	1	12:59																											
ZZZZZZ	1	13:01																											
CCV08	1	13:03					X																						
CCB08	1	13:04					X																						
ZZZZZZ	1	13:07																											
ZZZZZZ	1	13:09																											
ZZZZZZ	1	13:11																											
ZZZZZZ	1	13:12																											
ZZZZZZ	1	13:14																											
ZZZZZZ	1	13:16																											
CCV09	1	13:18					X																						
CCB09	1	13:19					X																						
1201978613	2	13:21					X																						
1201978618	40	13:23					X																						
241613001	2	13:24					X																						
1201978614	2	13:26					X																						

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
1201978616	2	13:28					X																							
1201978617	2	13:30					X																							
1201978615	10	13:31					X																							
241613002	2	13:33					X																							
241613003	2	13:35					X																							
CCV10	1	13:37					X																							
CCB10	1	13:38					X																							
241613004	2	13:40					X																							
241613005	2	13:42					X																							
241613006	2	13:43					X																							
241613007	2	13:45					X																							
241613008	2	13:47					X																							
241613009	2	13:49					X																							
241613010	2	13:50					X																							
CCV11	1	13:52					X																							
CCB11	1	13:54					X																							
241613012	2	13:57					X																							
241613013	2	13:59					X																							
241613014	2	14:01					X																							
241613015	2	14:02					X																							
241613016	2	14:04					X																							
241613017	2	14:06					X																							
241613018	2	14:07					X																							
CCV12	1	14:09					X																							
CCB12	1	14:11					X																							

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 08-DEC-09 **End Date:** 09-DEC-09

Client Sdg: 10-643
Method P
Data File: 120809-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:28	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	07:35				X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	07:41	X			X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	07:48	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	07:55	X							X				X			X								X					
ICV01	1	08:01	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	08:08	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	08:15	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	08:22	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	08:28	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	08:34	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	08:40	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV01	1	08:47	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	08:54	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	09:04	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	09:11	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	09:18	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	20	09:25																												
ZZZZZZ	20	09:32																												
ZZZZZZ	20	09:38																												
ZZZZZZ	20	09:45																												
CCV03	1	09:52	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	09:59	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:06																												
ZZZZZZ	2	10:13																												
ZZZZZZ	1	10:20																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:41																												
ZZZZZZ	5	10:48																												
CCV04	1	10:55	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	11:02	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:15																												
ZZZZZZ	1	11:23																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:36																												
ZZZZZZ	1	11:43																												
ZZZZZZ	1	11:50																												
CCV05	1	11:57	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	12:04	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	12:11																												
ZZZZZZ	1	12:18																												
ZZZZZZ	1	12:26																												
ZZZZZZ	1	12:33																												
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:47																												
CCV06	1	12:54	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	13:01	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	13:08																												
ZZZZZZ	1	13:15																												
ZZZZZZ	1	13:22																												
ZZZZZZ	1	13:28																												
ZZZZZZ	1	13:35																												
ZZZZZZ	1	13:42																												
ZZZZZZ	5	13:49																												
ZZZZZZ	1	13:56																												
ZZZZZZ	5	14:03																												
CCV07	1	14:10	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	14:17	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV08	1	14:50	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	14:57	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	15:05																												
ZZZZZZ	2	15:12																												
ZZZZZZ	1	15:19																												
ZZZZZZ	1	15:26																												
ZZZZZZ	1	15:33																												
ZZZZZZ	1	15:40																												
ZZZZZZ	5	15:46																												
ZZZZZZ	1	15:53																												
ZZZZZZ	1	16:00																												
CCV09	1	16:07	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	16:14	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	16:21																												
ZZZZZZ	1	16:28																												
ZZZZZZ	1	16:35																												
ZZZZZZ	1	16:42																												
ZZZZZZ	1	16:49																												
ZZZZZZ	1	16:56																												
ZZZZZZ	1	17:04																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	17:11																												
CCV10	1	17:18	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB10	1	17:25	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	17:32																												
ZZZZZZ	1	17:39																												
ZZZZZZ	1	17:46																												
ZZZZZZ	1	17:53																												
ZZZZZZ	1	18:00																												
ZZZZZZ	1	18:07																												
ZZZZZZ	1	18:14																												
ZZZZZZ	1	18:21																												
CCV11	1	18:28	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB11	1	18:35	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	18:42																												
ZZZZZZ	2	18:49																												
ZZZZZZ	1	18:56																												
ZZZZZZ	1	19:03																												
ZZZZZZ	1	19:10																												
ZZZZZZ	1	19:17																												
ZZZZZZ	5	19:24																												
ZZZZZZ	1	19:31																												
ZZZZZZ	1	19:38																												
ZZZZZZ	1	19:45																												
CCV12	1	19:52	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB12	1	19:59	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	20:06																												
ZZZZZZ	1	20:13																												
ZZZZZZ	1	20:21																												
ZZZZZZ	1	20:28																												
ZZZZZZ	1	20:35																												
ZZZZZZ	1	20:42																												
ZZZZZZ	1	20:49																												
ZZZZZZ	1	20:56																												
ZZZZZZ	1	21:03																												
ZZZZZZ	1	21:10																												
CCV13	1	21:17	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB13	1	21:24	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	21:31																												
ZZZZZZ	2	21:38																												
ZZZZZZ	1	21:45																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	21:52																											
ZZZZZZ	1	21:59																											
ZZZZZZ	1	22:06																											
ZZZZZZ	1	22:13																											
ZZZZZZ	1	22:20																											
ZZZZZZ	1	22:27																											
ZZZZZZ	1	22:34																											
CCV14	1	22:41	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB14	1	22:48	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	22:55																											
ZZZZZZ	1	23:02																											
ZZZZZZ	1	23:10																											
ZZZZZZ	1	23:17																											
ZZZZZZ	1	23:24																											
ZZZZZZ	1	23:31																											
ZZZZZZ	1	23:38																											
ZZZZZZ	1	23:45																											
ZZZZZZ	5	23:52																											
ZZZZZZ	1	23:59																											
CCV15	1	00:06	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB15	1	00:13	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	00:20																											
ZZZZZZ	2	00:27																											
ZZZZZZ	1	00:34																											
ZZZZZZ	1	00:41																											
ZZZZZZ	1	00:48																											
ZZZZZZ	1	00:55																											
ZZZZZZ	5	01:02																											
ZZZZZZ	1	01:09																											
CCV16	1	01:16	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB16	1	01:23	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	01:30																											
ZZZZZZ	1	01:37																											
ZZZZZZ	1	01:44																											
ZZZZZZ	1	01:51																											
ZZZZZZ	1	01:58																											
ZZZZZZ	1	02:06																											
ZZZZZZ	1	02:13																											
CCV17	1	02:20	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB17	1	02:27	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	02:34																												
ZZZZZZ	1	02:41																												
ZZZZZZ	1	02:48																												
ZZZZZZ	1	02:55																												
ZZZZZZ	1	03:02																												
ZZZZZZ	1	03:09																												
ZZZZZZ	1	03:17																												
CCV18	1	03:24	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB18	1	03:31	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978607	1	03:38	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978612	2	03:45	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613001	1	03:52	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978608	1	03:59	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978610	1	04:06	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978611	1	04:13	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978609	5	04:20	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613002	1	04:27	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV19	1	04:34	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB19	1	04:41	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613003	1	04:49	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613004	1	04:56	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613005	1	05:03	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613006	1	05:11	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613007	1	05:18	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613008	1	05:25	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613009	1	05:32	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613010	1	05:39	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV20	1	05:46	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB20	1	05:53	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613011	1	06:00	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613012	1	06:07	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613013	1	06:14	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613014	1	06:22	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613015	1	06:29	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613016	1	06:36	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613017	1	06:43	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241613018	1	06:50	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV21	1	06:57	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB21	1	07:04	X			X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–643
Method AV
Data File: 120709S1–9

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:28																	X											
S0.2	1	09:30																	X											
S0.5	1	09:32																	X											
S2.0	1	09:33																	X											
S5.0	1	09:35																	X											
S10.0	1	09:37																	X											
ZZZZZZ	1	09:38																												
ZZZZZZ	1	09:40																												
ZZZZZZ	1	09:42																												
ZZZZZZ	1	09:43																												
ICV01	1	09:45																	X											
ICB01	1	09:47																	X											
CRDL01	1	09:48																	X											
CCV01	1	09:50																	X											
CCB01	1	09:52																	X											
ZZZZZZ	1	09:53																												
ZZZZZZ	1	09:55																												
ZZZZZZ	1	09:57																												
ZZZZZZ	1	09:58																												
ZZZZZZ	1	10:00																												
ZZZZZZ	1	10:02																												
ZZZZZZ	1	10:03																												
ZZZZZZ	1	10:05																												
ZZZZZZ	1	10:07																												
ZZZZZZ	1	10:08																												
CCV02	1	10:10																	X											
CCB02	1	10:12																	X											
ZZZZZZ	1	10:13																												
ZZZZZZ	1	10:15																												
ZZZZZZ	1	10:17																												
ZZZZZZ	1	10:18																												
ZZZZZZ	1	10:20																												
ZZZZZZ	1	10:22																												
ZZZZZZ	1	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	5	10:28																												
CCV03	1	10:30																	X											
CCB03	1	10:32																	X											
ZZZZZZ	1	10:33																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
ZZZZZZ	1	10:35																												
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:38																												
ZZZZZZ	1	10:40																												
ZZZZZZ	1	10:42																												
ZZZZZZ	1	10:44																												
ZZZZZZ	5	10:45																												
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
CCV04	1	10:50																X												
CCB04	1	10:52																X												
ZZZZZZ	1	10:54																												
ZZZZZZ	1	10:55																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	10:59																												
ZZZZZZ	1	11:00																												
ZZZZZZ	1	11:02																												
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												
ZZZZZZ	1	11:09																												
CCV05	1	11:10																X												
CCB05	1	11:12																X												
ZZZZZZ	1	11:14																												
ZZZZZZ	1	11:15																												
ZZZZZZ	1	11:17																												
ZZZZZZ	1	11:19																												
ZZZZZZ	1	11:20																												
ZZZZZZ	1	11:22																												
ZZZZZZ	5	11:24																												
ZZZZZZ	1	11:25																												
ZZZZZZ	1	11:27																												
ZZZZZZ	1	11:29																												
CCV06	1	11:31																X												
CCB06	1	11:32																X												
ZZZZZZ	1	11:34																												
ZZZZZZ	1	11:36																												
ZZZZZZ	1	11:37																												
ZZZZZZ	1	11:39																												
ZZZZZZ	1	11:41																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	11:42																												
ZZZZZZ	1	11:44																												
ZZZZZZ	1	11:46																												
ZZZZZZ	5	11:47																												
ZZZZZZ	1	11:49																												
CCV07	1	11:51																	X											
CCB07	1	11:52																	X											
ZZZZZZ	1	11:54																												
ZZZZZZ	1	11:56																												
ZZZZZZ	1	11:57																												
ZZZZZZ	1	11:59																												
1201978991	1	12:01																	X											
1201978992	10	12:03																	X											
241613001	1	12:04																	X											
1201978993	1	12:06																	X											
1201978994	1	12:08																	X											
1201978996	1	12:09																	X											
CCV08	1	12:11																	X											
CCB08	1	12:13																	X											
1201978995	5	12:14																	X											
241613002	1	12:16																	X											
241613003	1	12:18																	X											
241613004	1	12:19																	X											
241613005	1	12:21																	X											
241613006	1	12:23																	X											
241613007	1	12:24																	X											
241613008	1	12:26																	X											
241613009	1	12:28																	X											
241613010	1	12:30																	X											
CCV09	1	12:31																	X											
CCB09	1	12:33																	X											
241613011	1	12:35																	X											
241613012	1	12:36																	X											
241613013	1	12:38																	X											
241613014	1	12:40																	X											
241613015	1	12:41																	X											
241613016	1	12:43																	X											
241613017	1	12:45																	X											
241613018	1	12:46																	X											
ZZZZZZ	1	12:48																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	12:50																											
CCV10	1	12:51																X											
CCB10	1	12:53																X											

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 10–DEC–09 **End Date:** 11–DEC–09

Client Sdg: 10–643
Method MS
Data File: 091210–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	22:55			X											X				X		X								
S10	1	23:00			X											X				X		X								
S100	1	23:06			X											X				X		X								
ICV01	1	23:12			X											X				X		X								
ICB01	1	23:18			X											X				X		X								
CRDL01	1	23:23			X											X				X		X								
ICSA01	1	23:29			X											X				X		X								
ICSAB01	1	23:35			X											X				X		X								
CCV01	1	23:40			X											X				X		X								
CCB01	1	23:46			X											X				X		X								
LR01	1	23:52			X											X				X		X								
CCV02	1	23:58			X											X				X		X								
CCB02	1	00:03			X											X				X		X								
ZZZZZZ	1	00:09																												
ZZZZZZ	1	00:15																												
ZZZZZZ	1	00:21																												
ZZZZZZ	1	00:26																												
ZZZZZZ	1	00:32																												
ZZZZZZ	5	00:38																												
CCV03	1	00:44			X											X				X		X								
CCB03	1	00:49			X											X				X		X								
ZZZZZZ	1	00:55																												
ZZZZZZ	1	01:01																												
ZZZZZZ	1	01:07																												
ZZZZZZ	1	01:13																												
ZZZZZZ	5	01:18																												
ZZZZZZ	1	01:24																												
ZZZZZZ	1	01:30																												
ZZZZZZ	1	01:36																												
CCV04	1	01:41			X											X				X		X								
CCB04	1	01:47			X											X				X		X								
1201978613	2	01:53			X											X				X		X								
1201978618	20	01:59														X														
1201978618	40	02:04			X															X		X								
241613001	2	02:10			X											X				X		X								
1201978614	2	02:16			X											X				X		X								
1201978616	2	02:22			X											X				X		X								
1201978617	2	02:28			X											X				X		X								
1201978615	10	02:33			X											X				X		X								
CCV05	1	02:39			X											X				X		X								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
CCB05	1	02:45			X										X				X		X								
241613002	2	02:51			X										X				X		X								
241613003	2	02:56			X										X				X		X								
241613004	2	03:02			X										X				X		X								
241613005	2	03:08			X										X				X		X								
241613006	2	03:14			X										X				X		X								
241613007	2	03:20			X										X				X		X								
241613008	2	03:25			X										X				X		X								
241613009	2	03:31			X										X				X		X								
241613010	2	03:37			X										X				X		X								
CCV06	1	03:43			X										X				X		X								
CCB06	1	03:49			X										X				X		X								
241613012	2	03:54			X										X				X		X								
241613013	2	04:00			X										X				X		X								
241613014	2	04:06			X										X				X		X								
241613015	2	04:12			X										X				X		X								
241613016	2	04:18			X										X				X		X								
241613017	2	04:23			X										X				X		X								
241613018	2	04:29			X										X				X		X								
CCV07	1	04:35			X										X				X		X								
CCB07	1	04:41			X										X				X		X								

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 11-DEC-09 **End Date:** 11-DEC-09

Client Sdg: 10-643
Method MS
Data File: 091211-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	15:37																								X		X		
S10	1	15:40																								X		X		
S100	1	15:42																								X		X		
ICV01	1	15:45																								X		X		
ICB01	1	15:48																								X		X		
CRDL01	1	15:51																								X		X		
ICSA01	1	15:54																								X		X		
ICSAB01	1	15:57																								X		X		
CCV01	1	16:00																								X		X		
CCB01	1	16:03																								X		X		
LR01	1	16:06																								X		X		
CCV02	1	16:08																								X		X		
CCB02	1	16:11																								X		X		
ZZZZZZ	1	16:14																												
ZZZZZZ	1	16:17																												
ZZZZZZ	1	16:20																												
ZZZZZZ	1	16:23																												
ZZZZZZ	1	16:26																												
ZZZZZZ	5	16:28																												
1201978613	2	16:31																								X		X		
ZZZZZZ	20	16:37																												
1201978618	40	16:40																								X		X		
CCV03	1	16:43																								X		X		
CCB03	1	16:46																								X		X		
241613001	2	16:51																								X		X		
1201978614	2	16:54																								X		X		
1201978616	2	16:57																								X		X		
1201978617	2	17:00																								X		X		
1201978615	10	17:03																								X		X		
CCV04	1	17:06																								X		X		
CCB04	1	17:09																								X		X		
241613002	2	17:12																								X		X		
241613003	2	17:15																								X		X		
241613004	2	17:18																								X		X		
241613005	2	17:21																								X		X		
241613006	2	17:24																								X		X		
241613007	2	17:26																								X		X		
241613008	2	17:29																								X		X		
241613009	2	17:32																								X		X		
241613010	2	17:35																								X		X		

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																											
CCV05	1	17:38																							X		X		
CCB05	1	17:41																							X		X		
241613012	2	17:44																							X		X		
241613013	2	17:47																							X		X		
241613014	2	17:50																							X		X		
241613015	2	17:53																							X		X		
241613016	2	17:56																							X		X		
241613017	2	17:59																							X		X		
241613018	2	18:02																							X		X		
CCV06	1	18:05																							X		X		
CCB06	1	18:08																							X		X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 05–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–643
Method MS
Data File: 091205–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	22:57																										X		
S10	1	22:58																										X		
S100	1	23:00																										X		
ICV01	1	23:02																										X		
ICB01	1	23:03																										X		
CRDL01	1	23:05																										X		
ICSA01	1	23:07																										X		
ICSAB01	1	23:09																										X		
CCV01	1	23:10																										X		
CCB01	1	23:12																										X		
1201978625	2	23:14																										X		
1201978630	40	23:15																										X		
ZZZZZZ	2	23:17																												
1201978626	2	23:19																										X		
1201978628	2	23:20																										X		
1201978629	2	23:22																										X		
1201978627	10	23:24																										X		
ZZZZZZ	2	23:26																												
CCV02	1	23:27																										X		
CCB02	1	23:29																										X		
ZZZZZZ	2	23:31																												
ZZZZZZ	2	23:32																												
ZZZZZZ	2	23:34																												
ZZZZZZ	2	23:36																												
ZZZZZZ	2	23:37																												
ZZZZZZ	2	23:39																												
ZZZZZZ	2	23:41																												
241613011	2	23:43																										X		
CCV03	1	23:44																										X		
CCB03	1	23:46																										X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 15-DEC-09 **End Date:** 15-DEC-09

Client Sdg: 10-643
Method P
Data File: 121509-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	03:09		X																			X							
S0.1	1	03:13		X																			X							
S0.5	1	03:15		X																			X							
SCAL	1	03:19		X																			X							
S10	1	03:23																												
ICV01	1	03:24		X																			X							
ICB01	1	03:28		X																			X							
PQL01	1	03:31		X																			X							
ICSA01	1	03:35		X																			X							
ICSAB01	1	03:38		X																			X							
LR01	1	03:41		X																			X							
LR02	1	03:43		X																			X							
CCV01	1	03:47		X																			X							
CCB01	1	03:51		X																			X							
ZZZZZZ	1	04:01																												
ZZZZZZ	1	04:04																												
ZZZZZZ	1	04:08																												
ZZZZZZ	1	04:12																												
ZZZZZZ	1	04:16																												
ZZZZZZ	1	04:19																												
ZZZZZZ	5	04:23																												
ZZZZZZ	1	04:27																												
ZZZZZZ	1	04:30																												
CCV02	1	04:34		X																			X							
PQL02	1	04:38		X																			X							
CCB02	1	04:42		X																			X							
ZZZZZZ	1	04:45																												
ZZZZZZ	1	04:49																												
ZZZZZZ	1	04:53																												
ZZZZZZ	1	04:57																												
ZZZZZZ	1	05:00																												
ZZZZZZ	1	05:04																												
ZZZZZZ	1	05:08																												
ZZZZZZ	1	05:11																												
ZZZZZZ	1	05:15																												
CCV03	1	05:19		X																			X							
PQL03	1	05:22		X																			X							
CCB03	1	05:26		X																			X							
ZZZZZZ	100	05:30																												
CCV04	1	05:33		X																			X							

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
CCB04	1	05:37		X																			X						
CCV05	1	06:00		X																			X						
CCB05	1	06:04		X																			X						
ZZZZZZ	1	06:08																											
ZZZZZZ	1	06:11																											
ZZZZZZ	1	06:15																											
ZZZZZZ	1	06:18																											
ZZZZZZ	1	06:22																											
ZZZZZZ	5	06:26																											
ZZZZZZ	1	06:29																											
ZZZZZZ	1	06:33																											
ZZZZZZ	1	06:36																											
CCV06	1	06:39		X																			X						
CCB06	1	06:42		X																			X						
ZZZZZZ	1	06:46																											
ZZZZZZ	1	06:50																											
ZZZZZZ	1	06:52																											
ZZZZZZ	1	06:56																											
ZZZZZZ	1	07:00																											
ZZZZZZ	1	07:03																											
ZZZZZZ	5	07:06																											
ZZZZZZ	1	07:09																											
CCV07	1	07:13		X																			X						
CCB07	1	07:17		X																			X						
1201995284	1	07:20		X																			X						
1201995285	1	07:24		X																			X						
241613001	1	07:27		X																			X						
1201978608	1	07:30		X																			X						
1201978610	1	07:34		X																			X						
1201978611	1	07:37		X																			X						
1201978609	5	07:40		X																			X						
241613002	1	07:44		X																			X						
CCV08	1	07:47		X																			X						
CCB08	1	07:51		X																			X						
241613003	1	07:55		X																			X						
241613004	1	07:58		X																			X						
241613005	1	08:01		X																			X						
241613006	1	08:05		X																			X						
241613007	1	08:08		X																			X						
241613008	1	08:11		X																			X						

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
241613009	1	08:14		X																			X							
241613010	1	08:17		X																			X							
CCV09	1	08:21		X																			X							
CCB09	1	08:25		X																			X							
241613011	1	08:28		X																			X							
241613012	1	08:31		X																			X							
241613013	1	08:35		X																			X							
241613014	1	08:38		X																			X							
241613015	1	08:41		X																			X							
241613016	1	08:44		X																			X							
241613017	1	08:48		X																			X							
241613018	1	08:52		X																			X							
CCV10	1	08:54		X																			X							
CCB10	1	08:58		X																			X							

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-643

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-643

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-643

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-643
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-643
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-643
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-643
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-643
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-643
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-643

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–643

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–643

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–643

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–643

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

Raw Data

Method: Hg_ReAlign
Result: 121509B

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

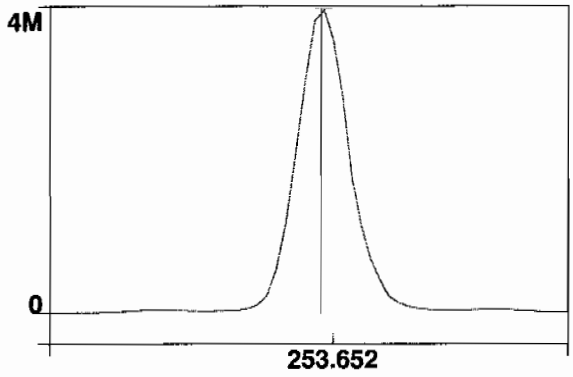

Intensity: 4063582.6 cps
Conc:

1

12/15/2009 03:03:33 Hg ReAlign... Actual peak offset (nm): 0.006
Drift (nm): -0.000 Slit adjustment: -3

Analysis Begun

Start Time: 12/15/2009 03:09:39 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409E.SIF
Batch ID:
Results Data Set: 121509
Results Library: c:\pe\optima1\Results\Results.mdb

Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/14/2009 14:51:32**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/15/2009 03:09:41**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time

1	Sc RADIAL	111965.5	111965.5	101	%	03:10:16
1	Al 396.153Radial†	149.3	148.4	[0.00]	µg/L	03:10:16
1	Ca 317.933Radial†	417.8	415.3	[0.00]	µg/L	03:10:36
1	Fe 238.204 Radial†	5.2	5.2	[0.00]	µg/L	03:10:36
1	K 766.490 Radial†	821.1	816.2	[0.00]	µg/L	03:10:16
1	Mg 279.077 IEC†	14.1	14.0	[0.00]	µg/L	03:10:36
1	Na 589.592 Radial†	-496.6	-493.6	[0.00]	µg/L	03:10:16
1	Sr 421.552†	-92.5	-92.0	[0.00]	µg/L	03:10:16
1	Sc 361.383	1946827.1	1946827.1	100.11	%	03:11:38
1	Y 371.029	1182437.6	1182437.6	100.10	%	03:11:38
1	Ag 328.068†	-72.1	-72.0	[0.00]	µg/L	03:11:43
1	As 188.979†	4.9	4.9	[0.00]	µg/L	03:12:04
1	B 249.677†	164.1	163.9	[0.00]	µg/L	03:11:43
1	Ba 233.527†	-83.7	-83.6	[0.00]	µg/L	03:12:04
1	Be 313.107†	3646.3	3642.3	[0.00]	µg/L	03:11:43
1	Cd 226.502†	-90.5	-90.4	[0.00]	µg/L	03:12:04
1	Co 228.616†	-67.1	-67.0	[0.00]	µg/L	03:12:04
1	Cr 267.716†	-147.8	-147.6	[0.00]	µg/L	03:11:43
1	Cu 324.752†	3268.7	3265.1	[0.00]	µg/L	03:11:43
1	Mn 257.610†	-220.7	-220.5	[0.00]	µg/L	03:12:04
1	Mo 202.031†	-2.6	-2.6	[0.00]	µg/L	03:12:04
1	Ni 231.604†	278.8	278.5	[0.00]	µg/L	03:12:04
1	P 214.914†	204.6	204.4	[0.00]	µg/L	03:12:04
1	Pb 220.353†	56.8	56.7	[0.00]	µg/L	03:12:04
1	S 181.975 Axial†	40.6	40.5	[0.00]	µg/L	03:12:04
1	Sb 206.836†	15.1	15.1	[0.00]	µg/L	03:12:04
1	Se 196.026†	5.7	5.7	[0.00]	µg/L	03:12:04
1	SiO2†	2075.3	2073.0	[0.00]	µg/L	03:11:43
1	Si 251.611†	310.4	310.0	[0.00]	µg/L	03:12:04
1	Sn 189.927†	20.7	20.7	[0.00]	µg/L	03:12:04
1	Ti 334.940†	815.5	814.6	[0.00]	µg/L	03:11:43
1	Tl 190.801†	-22.0	-21.9	[0.00]	µg/L	03:12:04
1	U 409.014†	818.8	817.9	[0.00]	µg/L	03:11:43
1	V 292.402†	-49.5	-49.4	[0.00]	µg/L	03:11:43
1	Zn 213.857†	509.8	509.2	[0.00]	µg/L	03:12:04
2	Sc RADIAL	111350.2	111350.2	100	%	03:10:42
2	Al 396.153Radial†	156.6	156.5	[0.00]	µg/L	03:10:42
2	Ca 317.933Radial†	386.9	386.7	[0.00]	µg/L	03:11:02
2	Fe 238.204 Radial†	7.6	7.6	[0.00]	µg/L	03:11:02
2	K 766.490 Radial†	837.0	836.5	[0.00]	µg/L	03:10:42
2	Mg 279.077 IEC†	16.5	16.5	[0.00]	µg/L	03:11:02
2	Na 589.592 Radial†	-522.1	-521.8	[0.00]	µg/L	03:10:42
2	Sr 421.552†	-89.2	-89.1	[0.00]	µg/L	03:10:42
2	Sc 361.383	1940993.2	1940993.2	99.810	%	03:12:09
2	Y 371.029	1179302.3	1179302.3	99.834	%	03:12:09
2	Ag 328.068†	-131.3	-131.6	[0.00]	µg/L	03:12:15
2	As 188.979†	8.3	8.3	[0.00]	µg/L	03:12:35
2	B 249.677†	170.3	170.6	[0.00]	µg/L	03:12:15
2	Ba 233.527†	-72.4	-72.6	[0.00]	µg/L	03:12:35
2	Be 313.107†	3686.8	3693.8	[0.00]	µg/L	03:12:15
2	Cd 226.502†	-97.7	-97.9	[0.00]	µg/L	03:12:35
2	Co 228.616†	-64.6	-64.8	[0.00]	µg/L	03:12:35
2	Cr 267.716†	-108.9	-109.1	[0.00]	µg/L	03:12:15
2	Cu 324.752†	3234.2	3240.3	[0.00]	µg/L	03:12:15
2	Mn 257.610†	-234.9	-235.3	[0.00]	µg/L	03:12:35
2	Mo 202.031†	-2.4	-2.4	[0.00]	µg/L	03:12:35
2	Ni 231.604†	277.8	278.3	[0.00]	µg/L	03:12:35
2	P 214.914†	201.9	202.3	[0.00]	µg/L	03:12:35
2	Pb 220.353†	53.3	53.4	[0.00]	µg/L	03:12:35
2	S 181.975 Axial†	37.8	37.9	[0.00]	µg/L	03:12:35
2	Sb 206.836†	17.0	17.0	[0.00]	µg/L	03:12:35
2	Se 196.026†	12.2	12.3	[0.00]	µg/L	03:12:35
2	SiO2†	2074.9	2078.8	[0.00]	µg/L	03:12:15
2	Si 251.611†	312.8	313.4	[0.00]	µg/L	03:12:35
2	Sn 189.927†	27.4	27.5	[0.00]	µg/L	03:12:35
2	Ti 334.940†	811.3	812.8	[0.00]	µg/L	03:12:15
2	Tl 190.801†	-16.4	-16.4	[0.00]	µg/L	03:12:35
2	U 409.014†	800.6	802.1	[0.00]	µg/L	03:12:15
2	V 292.402†	-110.7	-110.9	[0.00]	µg/L	03:12:15
2	Zn 213.857†	517.3	518.2	[0.00]	µg/L	03:12:35
3	Sc RADIAL	110559.1	110559.1	99.3	%	03:11:07

3	Al 396.153Radial†	184.0	185.2	[0.00]	µg/L	03:11:07
3	Ca 317.933Radial†	417.4	420.2	[0.00]	µg/L	03:11:28
3	Fe 238.204 Radial†	8.1	8.1	[0.00]	µg/L	03:11:28
3	K 766.490 Radial†	861.3	867.1	[0.00]	µg/L	03:11:07
3	Mg 279.077 IEC†	15.6	15.7	[0.00]	µg/L	03:11:28
3	Na 589.592 Radial†	-499.5	-502.9	[0.00]	µg/L	03:11:07
3	Sr 421.552†	-66.4	-66.8	[0.00]	µg/L	03:11:07
3	Sc 361.383	1946222.1	1946222.1	100.08	%	03:12:41
3	Y 371.029	1182037.9	1182037.9	100.07	%	03:12:41
3	Ag 328.068†	-100.2	-100.2	[0.00]	µg/L	03:12:47
3	As 188.979†	2.1	2.1	[0.00]	µg/L	03:13:07
3	B 249.677†	119.1	119.0	[0.00]	µg/L	03:12:47
3	Ba 233.527†	-81.5	-81.4	[0.00]	µg/L	03:13:07
3	Be 313.107†	3663.7	3660.8	[0.00]	µg/L	03:12:47
3	Cd 226.502†	-104.2	-104.1	[0.00]	µg/L	03:13:07
3	Co 228.616†	-70.4	-70.3	[0.00]	µg/L	03:13:07
3	Cr 267.716†	-124.9	-124.8	[0.00]	µg/L	03:12:47
3	Cu 324.752†	3295.3	3292.7	[0.00]	µg/L	03:12:47
3	Mn 257.610†	-238.1	-237.9	[0.00]	µg/L	03:13:07
3	Mo 202.031†	-9.6	-9.5	[0.00]	µg/L	03:13:07
3	Ni 231.604†	288.5	288.3	[0.00]	µg/L	03:13:07
3	P 214.914†	206.0	205.8	[0.00]	µg/L	03:13:07
3	Pb 220.353†	57.9	57.9	[0.00]	µg/L	03:13:07
3	S 181.975 Axial†	38.1	38.1	[0.00]	µg/L	03:13:07
3	Sb 206.836†	24.8	24.7	[0.00]	µg/L	03:13:07
3	Se 196.026†	14.5	14.5	[0.00]	µg/L	03:13:07
3	SiO2†	2076.8	2075.2	[0.00]	µg/L	03:12:47
3	Si 251.611†	320.8	320.5	[0.00]	µg/L	03:13:07
3	Sn 189.927†	24.9	24.9	[0.00]	µg/L	03:13:07
3	Ti 334.940†	763.1	762.5	[0.00]	µg/L	03:12:47
3	Tl 190.801†	-19.6	-19.6	[0.00]	µg/L	03:13:07
3	U 409.014†	857.1	856.4	[0.00]	µg/L	03:12:47
3	V 292.402†	-69.4	-69.4	[0.00]	µg/L	03:12:47
3	Zn 213.857†	527.6	527.2	[0.00]	µg/L	03:13:07

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1944680.8	3207.83	0.16%	100.00	%
Sc RADIAL	111291.6	705.05	0.63%	100	%
Y 371.029	1181259.3	1706.54	0.14%	100.000	%
Ag 328.068†	-101.3	29.80	29.42%	[0.00]	µg/L
Al 396.153Radial†	163.4	19.36	11.85%	[0.00]	µg/L
As 188.979†	5.1	3.12	60.97%	[0.00]	µg/L
B 249.677†	151.2	28.06	18.56%	[0.00]	µg/L
Ba 233.527†	-79.2	5.83	7.36%	[0.00]	µg/L
Be 313.107†	3665.6	26.07	0.71%	[0.00]	µg/L
Ca 317.933Radial†	407.4	18.08	4.44%	[0.00]	µg/L
Cd 226.502†	-97.5	6.83	7.01%	[0.00]	µg/L
Co 228.616†	-67.4	2.80	4.15%	[0.00]	µg/L
Cr 267.716†	-127.2	19.35	15.22%	[0.00]	µg/L
Cu 324.752†	3266.0	26.19	0.80%	[0.00]	µg/L
Fe 238.204 Radial†	7.0	1.58	22.72%	[0.00]	µg/L
K 766.490 Radial†	839.9	25.60	3.05%	[0.00]	µg/L
Mg 279.077 IEC†	15.4	1.29	8.35%	[0.00]	µg/L
Mn 257.610†	-231.2	9.40	4.07%	[0.00]	µg/L
Mo 202.031†	-4.8	4.07	83.96%	[0.00]	µg/L
Na 589.592 Radial†	-506.1	14.35	2.84%	[0.00]	µg/L
Ni 231.604†	281.7	5.70	2.02%	[0.00]	µg/L
P 214.914†	204.1	1.80	0.88%	[0.00]	µg/L
Pb 220.353†	56.0	2.31	4.13%	[0.00]	µg/L
S 181.975 Axial†	38.8	1.46	3.77%	[0.00]	µg/L
Sb 206.836†	18.9	5.13	27.09%	[0.00]	µg/L
Se 196.026†	10.8	4.57	42.22%	[0.00]	µg/L
SiO2†	2075.7	2.93	0.14%	[0.00]	µg/L
Si 251.611†	314.7	5.36	1.70%	[0.00]	µg/L
Sn 189.927†	24.4	3.42	14.04%	[0.00]	µg/L
Sr 421.552†	-82.6	13.79	16.69%	[0.00]	µg/L
Ti 334.940†	796.6	29.58	3.71%	[0.00]	µg/L
Tl 190.801†	-19.3	2.77	14.35%	[0.00]	µg/L

U 409.014†	825.5	27.92	3.38%	[0.00] µg/L
V 292.402†	-76.6	31.36	40.95%	[0.00] µg/L
Zn 213.857†	518.2	8.99	1.73%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/15/2009 03:13:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113735.0	113735.0	102	%	03:13:51
1	K 766.490 Radial†	2687.8	1790.1	[1000]	µg/L	03:13:51
1	Sr 421.552†	17850.4	17549.5	[100]	µg/L	03:13:51
1	Sc 361.383	1952351.7	1952351.7	100.39	%	03:14:13
1	Y 371.029	1184654.8	1184654.8	100.29	%	03:14:13
1	Ag 328.068†	10581.1	10640.8	[100]	µg/L	03:14:18
1	As 188.979†	55.3	49.9	[100]	µg/L	03:14:39
1	B 249.677†	2263.4	2103.4	[100]	µg/L	03:14:18
1	Ba 233.527†	3746.7	3811.1	[100]	µg/L	03:14:18
1	Be 313.107†	156310.4	152030.7	[100]	µg/L	03:14:13
1	Cd 226.502†	3581.1	3664.5	[100]	µg/L	03:14:18
1	Co 228.616†	1924.8	1984.6	[100]	µg/L	03:14:39
1	Cr 267.716†	4474.9	4584.6	[100]	µg/L	03:14:18
1	Cu 324.752†	17090.9	13757.7	[100]	µg/L	03:14:18
1	Mn 257.610†	30352.4	30464.3	[100]	µg/L	03:14:18
1	Mo 202.031†	833.1	834.7	[100]	µg/L	03:14:39
1	Ni 231.604†	2067.2	1777.4	[100]	µg/L	03:14:18
1	P 214.914†	427.5	221.7	[500]	µg/L	03:14:39
1	Pb 220.353†	436.8	379.1	[100]	µg/L	03:14:39
1	S 181.975 Axial†	78.5	39.4	[200]	µg/L	03:14:39
1	Sb 206.836†	113.4	94.0	[100]	µg/L	03:14:39
1	Se 196.026†	84.1	72.9	[100]	µg/L	03:14:39
1	SiO2†	7389.4	5284.7	[1069.5]	µg/L	03:14:18
1	Si 251.611†	6579.3	6238.8	[500]	µg/L	03:14:18
1	Sn 189.927†	216.0	190.8	[100]	µg/L	03:14:39
1	Ti 334.940†	42787.6	41822.9	[100]	µg/L	03:14:18
1	Tl 190.801†	46.2	65.3	[100]	µg/L	03:14:39
1	U 409.014†	1906.5	1073.6	[100]	µg/L	03:14:18
1	V 292.402†	8287.2	8331.2	[100]	µg/L	03:14:18
1	Zn 213.857†	4165.9	3631.3	[100]	µg/L	03:14:18
2	Sc RADIAL	113693.4	113693.4	102	%	03:13:57
2	K 766.490 Radial†	2658.6	1762.5	[1000]	µg/L	03:13:57
2	Sr 421.552†	17920.7	17624.8	[100]	µg/L	03:13:57
2	Sc 361.383	1938752.5	1938752.5	99.695	%	03:14:45
2	Y 371.029	1175789.0	1175789.0	99.537	%	03:14:45
2	Ag 328.068†	10802.5	10936.8	[100]	µg/L	03:14:50
2	As 188.979†	52.7	47.7	[100]	µg/L	03:15:11
2	B 249.677†	2252.9	2108.6	[100]	µg/L	03:14:50
2	Ba 233.527†	3790.8	3881.6	[100]	µg/L	03:14:50
2	Be 313.107†	156151.9	152963.7	[100]	µg/L	03:14:45
2	Cd 226.502†	3604.9	3713.4	[100]	µg/L	03:14:50
2	Co 228.616†	1923.8	1997.1	[100]	µg/L	03:15:11
2	Cr 267.716†	4501.7	4642.7	[100]	µg/L	03:14:50
2	Cu 324.752†	17215.8	14002.4	[100]	µg/L	03:14:50
2	Mn 257.610†	30658.9	30983.8	[100]	µg/L	03:14:50
2	Mo 202.031†	841.8	849.2	[100]	µg/L	03:15:11
2	Ni 231.604†	2099.2	1823.9	[100]	µg/L	03:14:50
2	P 214.914†	425.7	222.8	[500]	µg/L	03:15:11
2	Pb 220.353†	447.2	392.6	[100]	µg/L	03:15:11
2	S 181.975 Axial†	80.4	41.8	[200]	µg/L	03:15:11
2	Sb 206.836†	117.3	98.8	[100]	µg/L	03:15:11
2	Se 196.026†	79.9	69.3	[100]	µg/L	03:15:11
2	SiO2†	7462.5	5409.7	[1069.5]	µg/L	03:14:50
2	Si 251.611†	6641.9	6347.6	[500]	µg/L	03:14:50
2	Sn 189.927†	216.0	192.3	[100]	µg/L	03:15:11
2	Ti 334.940†	43165.9	42501.2	[100]	µg/L	03:14:50
2	Tl 190.801†	47.7	67.2	[100]	µg/L	03:15:11
2	U 409.014†	1945.8	1126.2	[100]	µg/L	03:14:50
2	V 292.402†	8453.6	8556.0	[100]	µg/L	03:14:50

2	Zn 213.857†	4211.9	3706.6	[100]	µg/L	03:14:50
3	Sc RADIAL	113280.3	113280.3	102	%	03:14:03
3	K 766.490 Radial†	2693.6	1806.4	[1000]	µg/L	03:14:03
3	Sr 421.552†	17962.3	17729.6	[100]	µg/L	03:14:03
3	Sc 361.383	1928873.5	1928873.5	99.187	%	03:15:17
3	Y 371.029	1170741.2	1170741.2	99.110	%	03:15:17
3	Ag 328.068†	10538.6	10726.3	[100]	µg/L	03:15:22
3	As 188.979†	51.6	47.0	[100]	µg/L	03:15:43
3	B 249.677†	2266.8	2134.2	[100]	µg/L	03:15:22
3	Ba 233.527†	3724.3	3834.0	[100]	µg/L	03:15:22
3	Be 313.107†	155187.0	152793.1	[100]	µg/L	03:15:17
3	Cd 226.502†	3563.0	3689.6	[100]	µg/L	03:15:22
3	Co 228.616†	1925.2	2008.4	[100]	µg/L	03:15:43
3	Cr 267.716†	4473.6	4637.4	[100]	µg/L	03:15:22
3	Cu 324.752†	17081.5	13955.4	[100]	µg/L	03:15:22
3	Mn 257.610†	30247.0	30726.1	[100]	µg/L	03:15:22
3	Mo 202.031†	840.1	851.9	[100]	µg/L	03:15:43
3	Ni 231.604†	2055.1	1790.2	[100]	µg/L	03:15:22
3	P 214.914†	427.7	227.1	[500]	µg/L	03:15:43
3	Pb 220.353†	432.9	380.4	[100]	µg/L	03:15:43
3	S 181.975 Axial†	76.7	38.5	[200]	µg/L	03:15:43
3	Sb 206.836†	112.1	94.1	[100]	µg/L	03:15:43
3	Se 196.026†	82.2	72.1	[100]	µg/L	03:15:43
3	SiO2†	7413.0	5398.1	[1069.5]	µg/L	03:15:22
3	Si 251.611†	6564.9	6304.0	[500]	µg/L	03:15:22
3	Sn 189.927†	218.1	195.5	[100]	µg/L	03:15:43
3	Ti 334.940†	42680.9	42234.0	[100]	µg/L	03:15:22
3	Tl 190.801†	47.2	66.9	[100]	µg/L	03:15:43
3	U 409.014†	1911.0	1101.1	[100]	µg/L	03:15:22
3	V 292.402†	8309.9	8454.6	[100]	µg/L	03:15:22
3	Zn 213.857†	4150.7	3666.5	[100]	µg/L	03:15:22

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1939992.6	11788.11	0.61%	99.759	%
Sc RADIAL	113569.6	251.38	0.22%	102	%
Y 371.029	1177061.7	7043.56	0.60%	99.645	%
Ag 328.068†	10768.0	152.35	1.41%	[100]	µg/L
As 188.979†	48.2	1.54	3.20%	[100]	µg/L
B 249.677†	2115.4	16.49	0.78%	[100]	µg/L
Ba 233.527†	3842.2	35.96	0.94%	[100]	µg/L
Be 313.107†	152595.8	496.82	0.33%	[100]	µg/L
Cd 226.502†	3689.1	24.46	0.66%	[100]	µg/L
Co 228.616†	1996.7	11.90	0.60%	[100]	µg/L
Cr 267.716†	4621.5	32.13	0.70%	[100]	µg/L
Cu 324.752†	13905.2	129.86	0.93%	[100]	µg/L
K 766.490 Radial†	1786.3	22.21	1.24%	[1000]	µg/L
Mn 257.610†	30724.7	259.75	0.85%	[100]	µg/L
Mo 202.031†	845.2	9.26	1.10%	[100]	µg/L
Ni 231.604†	1797.2	24.04	1.34%	[100]	µg/L
P 214.914†	223.9	2.84	1.27%	[500]	µg/L
Pb 220.353†	384.0	7.44	1.94%	[100]	µg/L
S 181.975 Axial†	39.9	1.69	4.24%	[200]	µg/L
Sb 206.836†	95.6	2.73	2.86%	[100]	µg/L
Se 196.026†	71.4	1.88	2.64%	[100]	µg/L
SiO2†	5364.1	69.07	1.29%	[1069.5]	µg/L
Si 251.611†	6296.8	54.74	0.87%	[500]	µg/L
Sn 189.927†	192.9	2.41	1.25%	[100]	µg/L
Sr 421.552†	17634.6	90.43	0.51%	[100]	µg/L
Ti 334.940†	42186.1	341.71	0.81%	[100]	µg/L
Tl 190.801†	66.5	1.02	1.53%	[100]	µg/L
U 409.014†	1100.3	26.35	2.39%	[100]	µg/L
V 292.402†	8447.3	112.60	1.33%	[100]	µg/L
Zn 213.857†	3668.1	37.69	1.03%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/15/2009 03:15:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112021.2	112021.2	101	%	03:16:24
1	Al 396.153Radial†	10024.6	9796.0	[5000]	µg/L	03:16:24
1	Ca 317.933Radial†	13293.5	12799.5	[5000]	µg/L	03:16:45
1	K 766.490 Radial†	10014.4	9109.3	[5000]	µg/L	03:16:24
1	Mg 279.077 IEC†	953.7	932.1	[5000]	µg/L	03:16:45
1	Sr 421.552†	88704.7	88209.5	[500]	µg/L	03:16:24
1	Sc 361.383	1959942.4	1959942.4	100.78	%	03:17:48
1	Y 371.029	1184979.2	1184979.2	100.31	%	03:17:48
1	Ag 328.068†	53674.6	53357.9	[500]	µg/L	03:17:54
1	As 188.979†	257.9	250.7	[500]	µg/L	03:18:14
1	B 249.677†	11029.5	10792.4	[500]	µg/L	03:17:54
1	Ba 233.527†	19021.9	18953.0	[500]	µg/L	03:17:54
1	Be 313.107†	769495.2	759837.7	[500]	µg/L	03:17:48
1	Cd 226.502†	18219.0	18174.6	[500]	µg/L	03:17:54
1	Co 228.616†	10084.6	10073.4	[500]	µg/L	03:17:54
1	Cr 267.716†	22828.7	22778.1	[500]	µg/L	03:17:54
1	Cu 324.752†	72002.0	68175.3	[500]	µg/L	03:17:54
1	Mn 257.610†	152407.8	151452.2	[500]	µg/L	03:17:48
1	Mo 202.031†	4203.5	4175.7	[500]	µg/L	03:18:14
1	Ni 231.604†	9200.8	8847.5	[500]	µg/L	03:17:54
1	P 214.914†	1329.0	1114.5	[2500]	µg/L	03:18:14
1	Pb 220.353†	1970.7	1899.4	[500]	µg/L	03:18:14
1	S 181.975 Axial†	227.4	186.8	[1000]	µg/L	03:18:14
1	Sb 206.836†	502.7	479.9	[500]	µg/L	03:18:14
1	Se 196.026†	360.3	346.7	[500]	µg/L	03:18:14
1	SiO2†	28694.3	26395.1	[5347.5]	µg/L	03:17:54
1	Si 251.611†	31556.4	30996.0	[2500]	µg/L	03:17:54
1	Sn 189.927†	993.1	961.0	[500]	µg/L	03:18:14
1	Ti 334.940†	216509.5	214027.0	[500]	µg/L	03:17:48
1	Tl 190.801†	295.3	312.3	[500]	µg/L	03:18:14
1	U 409.014†	5899.8	5028.4	[500]	µg/L	03:17:54
1	V 292.402†	42260.9	42008.4	[500]	µg/L	03:17:54
1	Zn 213.857†	18841.8	18176.9	[500]	µg/L	03:17:54
2	Sc RADIAL	112027.8	112027.8	101	%	03:16:50
2	Al 396.153Radial†	10134.1	9904.1	[5000]	µg/L	03:16:50
2	Ca 317.933Radial†	13271.2	12776.5	[5000]	µg/L	03:17:11
2	K 766.490 Radial†	9958.8	9053.4	[5000]	µg/L	03:16:50
2	Mg 279.077 IEC†	949.3	927.7	[5000]	µg/L	03:17:11
2	Sr 421.552†	89655.1	89148.6	[500]	µg/L	03:16:50
2	Sc 361.383	1968190.0	1968190.0	101.21	%	03:18:22
2	Y 371.029	1188870.2	1188870.2	100.64	%	03:18:22
2	Ag 328.068†	53475.1	52937.7	[500]	µg/L	03:18:27
2	As 188.979†	261.6	253.3	[500]	µg/L	03:18:48
2	B 249.677†	10937.5	10655.7	[500]	µg/L	03:18:27
2	Ba 233.527†	18942.9	18795.8	[500]	µg/L	03:18:27
2	Be 313.107†	766039.8	753224.2	[500]	µg/L	03:18:22
2	Cd 226.502†	18103.7	17984.9	[500]	µg/L	03:18:27
2	Co 228.616†	10021.2	9968.9	[500]	µg/L	03:18:27
2	Cr 267.716†	22721.2	22577.0	[500]	µg/L	03:18:27
2	Cu 324.752†	71646.6	67524.8	[500]	µg/L	03:18:27
2	Mn 257.610†	151631.4	150051.4	[500]	µg/L	03:18:22
2	Mo 202.031†	4200.1	4154.8	[500]	µg/L	03:18:48
2	Ni 231.604†	9140.6	8749.7	[500]	µg/L	03:18:27
2	P 214.914†	1325.7	1105.7	[2500]	µg/L	03:18:48
2	Pb 220.353†	1951.9	1872.6	[500]	µg/L	03:18:48
2	S 181.975 Axial†	221.9	180.4	[1000]	µg/L	03:18:48
2	Sb 206.836†	499.1	474.2	[500]	µg/L	03:18:48
2	Se 196.026†	351.7	336.7	[500]	µg/L	03:18:48
2	SiO2†	28658.2	26240.2	[5347.5]	µg/L	03:18:27

2	Si 251.611†	31512.8	30821.7	[2500]	µg/L	03:18:27
2	Sn 189.927†	989.1	952.9	[500]	µg/L	03:18:48
2	Ti 334.940†	215609.7	212237.7	[500]	µg/L	03:18:22
2	Tl 190.801†	295.4	311.2	[500]	µg/L	03:18:48
2	U 409.014†	5863.2	4967.7	[500]	µg/L	03:18:27
2	V 292.402†	42108.3	41682.0	[500]	µg/L	03:18:27
2	Zn 213.857†	18739.3	17997.2	[500]	µg/L	03:18:27
3	Sc RADIAL	111791.6	111791.6	100	%	03:17:16
3	Al 396.153Radial†	10086.5	9878.0	[5000]	µg/L	03:17:16
3	Ca 317.933Radial†	13341.4	12874.3	[5000]	µg/L	03:17:37
3	K 766.490 Radial†	10035.2	9150.4	[5000]	µg/L	03:17:16
3	Mg 279.077 IEC†	949.3	929.6	[5000]	µg/L	03:17:37
3	Sr 421.552†	89405.8	89088.5	[500]	µg/L	03:17:16
3	Sc 361.383	1951288.7	1951288.7	100.34	%	03:18:55
3	Y 371.029	1179176.0	1179176.0	99.824	%	03:18:55
3	Ag 328.068†	54060.0	53978.2	[500]	µg/L	03:19:00
3	As 188.979†	256.3	250.3	[500]	µg/L	03:19:21
3	B 249.677†	11048.0	10859.4	[500]	µg/L	03:19:00
3	Ba 233.527†	19195.4	19209.5	[500]	µg/L	03:19:00
3	Be 313.107†	766774.1	760511.8	[500]	µg/L	03:18:55
3	Cd 226.502†	18338.4	18373.8	[500]	µg/L	03:19:00
3	Co 228.616†	10096.3	10129.4	[500]	µg/L	03:19:00
3	Cr 267.716†	22941.1	22990.6	[500]	µg/L	03:19:00
3	Cu 324.752†	72328.0	68817.1	[500]	µg/L	03:19:00
3	Mn 257.610†	151736.4	151453.8	[500]	µg/L	03:18:55
3	Mo 202.031†	4193.6	4184.2	[500]	µg/L	03:19:21
3	Ni 231.604†	9284.5	8971.4	[500]	µg/L	03:19:00
3	P 214.914†	1326.7	1118.1	[2500]	µg/L	03:19:21
3	Pb 220.353†	1953.4	1890.8	[500]	µg/L	03:19:21
3	S 181.975 Axial†	229.4	189.8	[1000]	µg/L	03:19:21
3	Sb 206.836†	496.0	475.4	[500]	µg/L	03:19:21
3	Se 196.026†	360.7	348.6	[500]	µg/L	03:19:21
3	SiO2†	28987.2	26813.3	[5347.5]	µg/L	03:19:00
3	Si 251.611†	31774.6	31352.3	[2500]	µg/L	03:19:00
3	Sn 189.927†	994.6	966.9	[500]	µg/L	03:19:21
3	Ti 334.940†	215756.8	214229.5	[500]	µg/L	03:18:55
3	Tl 190.801†	297.4	315.7	[500]	µg/L	03:19:21
3	U 409.014†	5904.4	5059.0	[500]	µg/L	03:19:00
3	V 292.402†	42600.2	42532.5	[500]	µg/L	03:19:00
3	Zn 213.857†	18934.7	18352.4	[500]	µg/L	03:19:00

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1959807.0	8451.51	0.43%	100.78	%
Sc RADIAL	111946.9	134.50	0.12%	101	%
Y 371.029	1184341.8	4878.41	0.41%	100.26	%
Ag 328.068†	53424.6	523.48	0.98%	[500]	µg/L
Al 396.153Radial†	9859.4	56.45	0.57%	[5000]	µg/L
As 188.979†	251.5	1.65	0.66%	[500]	µg/L
B 249.677†	10769.2	103.86	0.96%	[500]	µg/L
Ba 233.527†	18986.1	208.83	1.10%	[500]	µg/L
Be 313.107†	757857.9	4027.05	0.53%	[500]	µg/L
Ca 317.933Radial†	12816.8	51.13	0.40%	[5000]	µg/L
Cd 226.502†	18177.8	194.48	1.07%	[500]	µg/L
Co 228.616†	10057.3	81.49	0.81%	[500]	µg/L
Cr 267.716†	22781.9	206.87	0.91%	[500]	µg/L
Cu 324.752†	68172.4	646.12	0.95%	[500]	µg/L
K 766.490 Radial†	9104.4	48.68	0.53%	[5000]	µg/L
Mg 279.077 IEC†	929.8	2.23	0.24%	[5000]	µg/L
Mn 257.610†	150985.8	809.19	0.54%	[500]	µg/L
Mo 202.031†	4171.6	15.14	0.36%	[500]	µg/L
Ni 231.604†	8856.2	111.11	1.25%	[500]	µg/L
P 214.914†	1112.8	6.35	0.57%	[2500]	µg/L
Pb 220.353†	1887.6	13.68	0.72%	[500]	µg/L
S 181.975 Axial†	185.6	4.79	2.58%	[1000]	µg/L
Sb 206.836†	476.5	2.99	0.63%	[500]	µg/L
Se 196.026†	344.0	6.38	1.86%	[500]	µg/L
SiO2†	26482.9	296.46	1.12%	[5347.5]	µg/L
Si 251.611†	31056.7	270.42	0.87%	[2500]	µg/L

Sn 189.927†	960.3	7.01	0.73%	[500] µg/L
Sr 421.552†	88815.5	525.67	0.59%	[500] µg/L
Ti 334.940†	213498.1	1096.22	0.51%	[500] µg/L
Tl 190.801†	313.1	2.32	0.74%	[500] µg/L
U 409.014†	5018.4	46.47	0.93%	[500] µg/L
V 292.402†	42074.3	429.07	1.02%	[500] µg/L
Zn 213.857†	18175.5	177.59	0.98%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/15/2009 03:19:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112968.3	112968.3	102	%	03:20:03
1	Al 396.153Radial†	19892.8	19434.2	[10000]	µg/L	03:20:03
1	Ca 317.933Radial†	26156.5	25360.8	[10000]	µg/L	03:20:23
1	Fe 238.204 Radial†	2004.3	1967.6	[10000]	µg/L	03:20:23
1	K 766.490 Radial†	18871.4	17751.4	[10000]	µg/L	03:20:03
1	Mg 279.077 IEC†	1867.7	1824.5	[10000]	µg/L	03:20:23
1	Na 589.592 Radial†	36349.1	36315.7	[10000]	µg/L	03:20:03
1	Sr 421.552†	177625.6	175071.9	[1000]	µg/L	03:20:03
1	Sc 361.383	1960537.7	1960537.7	100.82	%	03:21:28
1	Y 371.029	1182592.3	1182592.3	100.11	%	03:21:28
1	Ag 328.068†	103325.0	102590.6	[1000]	µg/L	03:21:33
1	As 188.979†	507.1	497.9	[1000]	µg/L	03:21:54
1	B 249.677†	21186.4	20863.8	[1000]	µg/L	03:21:33
1	Ba 233.527†	36655.6	36438.4	[1000]	µg/L	03:21:33
1	Be 313.107†	1514521.7	1498606.6	[1000]	µg/L	03:21:28
1	Cd 226.502†	34737.9	34554.4	[1000]	µg/L	03:21:33
1	Co 228.616†	19274.6	19186.1	[1000]	µg/L	03:21:33
1	Cr 267.716†	44135.8	43906.0	[1000]	µg/L	03:21:33
1	Cu 324.752†	135452.7	131091.1	[1000]	µg/L	03:21:33
1	Mn 257.610†	301081.6	298877.6	[1000]	µg/L	03:21:28
1	Mo 202.031†	8243.5	8181.7	[1000]	µg/L	03:21:33
1	Ni 231.604†	17327.8	16905.9	[1000]	µg/L	03:21:33
1	P 214.914†	2410.0	2186.3	[5000]	µg/L	03:21:54
1	Pb 220.353†	3802.7	3715.9	[1000]	µg/L	03:21:54
1	S 181.975 Axial†	415.1	372.9	[2000]	µg/L	03:21:54
1	Sb 206.836†	962.7	936.0	[1000]	µg/L	03:21:54
1	Se 196.026†	673.7	657.4	[1000]	µg/L	03:21:54
1	SiO2†	53980.4	51468.1	[10695]	µg/L	03:21:33
1	Si 251.611†	61022.9	60214.7	[5000]	µg/L	03:21:33
1	Sn 189.927†	1949.0	1908.9	[1000]	µg/L	03:21:54
1	Ti 334.940†	429737.4	425465.1	[1000]	µg/L	03:21:28
1	Tl 190.801†	605.9	620.4	[1000]	µg/L	03:21:54
1	U 409.014†	10493.3	9583.0	[1000]	µg/L	03:21:33
1	V 292.402†	81611.6	81028.1	[1000]	µg/L	03:21:33
1	Zn 213.857†	35200.3	34397.4	[1000]	µg/L	03:21:33
2	Sc RADIAL	113193.7	113193.7	102	%	03:20:29
2	Al 396.153Radial†	19798.6	19302.5	[10000]	µg/L	03:20:29
2	Ca 317.933Radial†	26321.4	25471.7	[10000]	µg/L	03:20:49
2	Fe 238.204 Radial†	2008.5	1967.8	[10000]	µg/L	03:20:49
2	K 766.490 Radial†	18830.2	17673.9	[10000]	µg/L	03:20:29
2	Mg 279.077 IEC†	1877.4	1830.4	[10000]	µg/L	03:20:49
2	Na 589.592 Radial†	36304.2	36200.2	[10000]	µg/L	03:20:29
2	Sr 421.552†	176933.7	174043.2	[1000]	µg/L	03:20:29
2	Sc 361.383	1961017.0	1961017.0	100.84	%	03:22:01
2	Y 371.029	1184075.6	1184075.6	100.24	%	03:22:01
2	Ag 328.068†	106263.5	105479.5	[1000]	µg/L	03:22:07
2	As 188.979†	505.6	496.3	[1000]	µg/L	03:22:27
2	B 249.677†	21801.7	21468.8	[1000]	µg/L	03:22:07
2	Ba 233.527†	37792.2	37556.5	[1000]	µg/L	03:22:07
2	Be 313.107†	1518104.5	1501792.3	[1000]	µg/L	03:22:01
2	Cd 226.502†	35952.9	35750.9	[1000]	µg/L	03:22:07
2	Co 228.616†	19902.1	19803.6	[1000]	µg/L	03:22:07
2	Cr 267.716†	45461.3	45209.8	[1000]	µg/L	03:22:07
2	Cu 324.752†	138799.3	134377.0	[1000]	µg/L	03:22:07
2	Mn 257.610†	301776.1	299493.4	[1000]	µg/L	03:22:01
2	Mo 202.031†	8442.3	8376.8	[1000]	µg/L	03:22:07
2	Ni 231.604†	17813.3	17383.2	[1000]	µg/L	03:22:07
2	P 214.914†	2439.0	2214.5	[5000]	µg/L	03:22:27
2	Pb 220.353†	3818.3	3730.5	[1000]	µg/L	03:22:27

2	S 181.975 Axial†	417.1	374.8	[2000]	µg/L	03:22:27
2	Sb 206.836†	974.2	947.2	[1000]	µg/L	03:22:27
2	Se 196.026†	676.6	660.1	[1000]	µg/L	03:22:27
2	SiO2†	55551.8	53013.3	[10695]	µg/L	03:22:07
2	Si 251.611†	62863.9	62025.6	[5000]	µg/L	03:22:07
2	Sn 189.927†	1964.4	1923.7	[1000]	µg/L	03:22:27
2	Ti 334.940†	430555.9	426172.5	[1000]	µg/L	03:22:01
2	Tl 190.801†	607.0	621.3	[1000]	µg/L	03:22:27
2	U 409.014†	10864.1	9948.1	[1000]	µg/L	03:22:07
2	V 292.402†	84036.1	83412.6	[1000]	µg/L	03:22:07
2	Zn 213.857†	36269.6	35449.2	[1000]	µg/L	03:22:07
3	Sc RADIAL	112527.5	112527.5	101	%	03:20:55
3	Al 396.153Radial†	19727.2	19347.1	[10000]	µg/L	03:20:55
3	Ca 317.933Radial†	26255.9	25560.1	[10000]	µg/L	03:21:15
3	Fe 238.204 Radial†	2007.5	1978.5	[10000]	µg/L	03:21:15
3	K 766.490 Radial†	18805.2	17758.8	[10000]	µg/L	03:20:55
3	Mg 279.077 IEC†	1882.9	1846.8	[10000]	µg/L	03:21:15
3	Na 589.592 Radial†	36194.6	36303.2	[10000]	µg/L	03:20:55
3	Sr 421.552†	176171.7	174319.4	[1000]	µg/L	03:20:55
3	Sc 361.383	1950071.9	1950071.9	100.28	%	03:22:34
3	Y 371.029	1177507.0	1177507.0	99.682	%	03:22:34
3	Ag 328.068†	105870.4	105678.9	[1000]	µg/L	03:22:40
3	As 188.979†	513.8	507.2	[1000]	µg/L	03:23:00
3	B 249.677†	21703.5	21492.3	[1000]	µg/L	03:22:40
3	Ba 233.527†	37647.6	37622.7	[1000]	µg/L	03:22:40
3	Be 313.107†	1506521.0	1498690.5	[1000]	µg/L	03:22:34
3	Cd 226.502†	35811.8	35810.2	[1000]	µg/L	03:22:40
3	Co 228.616†	19827.6	19840.2	[1000]	µg/L	03:22:40
3	Cr 267.716†	45247.7	45249.8	[1000]	µg/L	03:22:40
3	Cu 324.752†	138328.8	134680.4	[1000]	µg/L	03:22:40
3	Mn 257.610†	299256.1	298660.0	[1000]	µg/L	03:22:34
3	Mo 202.031†	8446.2	8427.7	[1000]	µg/L	03:22:40
3	Ni 231.604†	17771.8	17440.9	[1000]	µg/L	03:22:40
3	P 214.914†	2431.2	2220.3	[5000]	µg/L	03:23:00
3	Pb 220.353†	3804.6	3738.1	[1000]	µg/L	03:23:00
3	S 181.975 Axial†	415.8	375.8	[2000]	µg/L	03:23:00
3	Sb 206.836†	974.6	953.0	[1000]	µg/L	03:23:00
3	Se 196.026†	680.0	667.3	[1000]	µg/L	03:23:00
3	SiO2†	55349.0	53120.3	[10695]	µg/L	03:22:40
3	Si 251.611†	62604.5	62116.8	[5000]	µg/L	03:22:40
3	Sn 189.927†	1961.9	1932.1	[1000]	µg/L	03:23:00
3	Ti 334.940†	427118.2	425140.8	[1000]	µg/L	03:22:34
3	Tl 190.801†	608.2	625.8	[1000]	µg/L	03:23:00
3	U 409.014†	10809.5	9954.1	[1000]	µg/L	03:22:40
3	V 292.402†	83670.2	83515.5	[1000]	µg/L	03:22:40
3	Zn 213.857†	36140.9	35522.8	[1000]	µg/L	03:22:40

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1957208.8	6185.45	0.32%	100.64	%
Sc RADIAL	112896.5	338.82	0.30%	101	%
Y 371.029	1181391.6	3444.96	0.29%	100.01	%
Ag 328.068†	104583.0	1728.36	1.65%	[1000]	µg/L
Al 396.153Radial†	19361.3	66.98	0.35%	[10000]	µg/L
As 188.979†	500.5	5.91	1.18%	[1000]	µg/L
B 249.677†	21275.0	356.28	1.67%	[1000]	µg/L
Ba 233.527†	37205.9	665.49	1.79%	[1000]	µg/L
Be 313.107†	1499696.5	1815.54	0.12%	[1000]	µg/L
Ca 317.933Radial†	25464.2	99.83	0.39%	[10000]	µg/L
Cd 226.502†	35371.8	708.55	2.00%	[1000]	µg/L
Co 228.616†	19610.0	367.53	1.87%	[1000]	µg/L
Cr 267.716†	44788.5	764.54	1.71%	[1000]	µg/L
Cu 324.752†	133382.8	1990.47	1.49%	[1000]	µg/L
Fe 238.204 Radial†	1971.3	6.25	0.32%	[10000]	µg/L
K 766.490 Radial†	17728.0	47.02	0.27%	[10000]	µg/L
Mg 279.077 IEC†	1833.9	11.55	0.63%	[10000]	µg/L
Mn 257.610†	299010.3	432.26	0.14%	[1000]	µg/L
Mo 202.031†	8328.7	129.84	1.56%	[1000]	µg/L
Na 589.592 Radial†	36273.0	63.37	0.17%	[10000]	µg/L

Ni 231.604†	17243.3	293.63	1.70%	[1000]	µg/L
P 214.914†	2207.1	18.18	0.82%	[5000]	µg/L
Pb 220.353†	3728.2	11.27	0.30%	[1000]	µg/L
S 181.975 Axial†	374.5	1.47	0.39%	[2000]	µg/L
Sb 206.836†	945.4	8.65	0.91%	[1000]	µg/L
Se 196.026†	661.6	5.12	0.77%	[1000]	µg/L
SiO2†	52533.9	924.54	1.76%	[10695]	µg/L
Si 251.611†	61452.4	1072.80	1.75%	[5000]	µg/L
Sn 189.927†	1921.6	11.78	0.61%	[1000]	µg/L
Sr 421.552†	174478.2	532.43	0.31%	[1000]	µg/L
Ti 334.940†	425592.8	527.60	0.12%	[1000]	µg/L
Tl 190.801†	622.5	2.91	0.47%	[1000]	µg/L
U 409.014†	9828.4	212.55	2.16%	[1000]	µg/L
V 292.402†	82652.1	1407.32	1.70%	[1000]	µg/L
Zn 213.857†	35123.1	629.61	1.79%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/15/2009 03:23:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113208.9	113208.9	102	%	03:23:42
1	Al 396.153Radial†	98217.9	96391.1	[50000]	µg/L	03:23:42
1	Ca 317.933Radial†	129949.4	127341.2	[50000]	µg/L	03:23:42
1	Fe 238.204 Radial†	3955.3	3881.3	[20000]	µg/L	03:23:47
1	Mg 279.077 IEC†	9149.7	8979.3	[50000]	µg/L	03:23:47
1	Na 589.592 Radial†	72514.5	71792.5	[20000]	µg/L	03:23:42
1	Sc 361.383	1968602.7	1968602.7	101.23	%	03:24:21
1	Y 371.029	1179730.7	1179730.7	99.871	%	03:24:21
2	Sc RADIAL	113830.4	113830.4	102	%	03:23:53
2	Al 396.153Radial†	98518.4	96157.7	[50000]	µg/L	03:23:53
2	Ca 317.933Radial†	130703.3	127380.8	[50000]	µg/L	03:23:53
2	Fe 238.204 Radial†	3951.1	3856.0	[20000]	µg/L	03:23:58
2	Mg 279.077 IEC†	9113.5	8894.8	[50000]	µg/L	03:23:58
2	Na 589.592 Radial†	72804.8	71687.1	[20000]	µg/L	03:23:53
2	Sc 361.383	1967223.4	1967223.4	101.16	%	03:24:29
2	Y 371.029	1179417.3	1179417.3	99.844	%	03:24:29
3	Sc RADIAL	113662.2	113662.2	102	%	03:24:04
3	Al 396.153Radial†	97503.1	95306.1	[50000]	µg/L	03:24:04
3	Ca 317.933Radial†	129151.1	126050.0	[50000]	µg/L	03:24:04
3	Fe 238.204 Radial†	3989.2	3899.0	[20000]	µg/L	03:24:09
3	Mg 279.077 IEC†	9176.8	8969.9	[50000]	µg/L	03:24:09
3	Na 589.592 Radial†	72124.1	71125.9	[20000]	µg/L	03:24:04
3	Sc 361.383	1974024.1	1974024.1	101.51	%	03:24:37
3	Y 371.029	1183546.3	1183546.3	100.19	%	03:24:37

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1969950.1	3594.98	0.18%	101.30	%
Sc RADIAL	113567.2	321.47	0.28%	102	%
Y 371.029	1180898.1	2298.73	0.19%	99.969	%
Al 396.153Radial†	95951.7	571.12	0.60%	[50000]	µg/L
Ca 317.933Radial†	126924.0	757.15	0.60%	[50000]	µg/L
Fe 238.204 Radial†	3878.8	21.63	0.56%	[20000]	µg/L
Mg 279.077 IEC†	8948.0	46.31	0.52%	[50000]	µg/L
Na 589.592 Radial†	71535.1	358.32	0.50%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	105.1	0.00000	0.999961	
Al 396.153Radial	3	Lin Thru 0	0.0	1.920	0.00000	0.999995	
As 188.979	3	Lin Thru 0	0.0	0.5008	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	21.33	0.00000	0.999988	
Ba 233.527	3	Lin Thru 0	0.0	37.37	0.00000	0.999963	
Be 313.107	3	Lin Thru 0	0.0	1503	0.00000	0.999990	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.539	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	35.58	0.00000	0.999934	
Co 228.616	3	Lin Thru 0	0.0	19.71	0.00000	0.999947	
Cr 267.716	3	Lin Thru 0	0.0	44.95	0.00000	0.999973	
Cu 324.752	3	Lin Thru 0	0.0	134.0	0.00000	0.999956	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1946	0.00000	0.999979	
K 766.490 Radial	3	Lin Thru 0	0.0	1.782	0.00000	0.999942	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1792	0.00000	0.999982	
Mn 257.610	3	Lin Thru 0	0.0	299.7	0.00000	0.999990	
Mo 202.031	3	Lin Thru 0	0.0	8.333	0.00000	0.999999	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.587	0.00000	0.999984	

Ni 231.604	3	Lin Thru 0	0.0	17.34	0.00000	0.999937
P 214.914	3	Lin Thru 0	0.0	0.4422	0.00000	0.999994
Pb 220.353	3	Lin Thru 0	0.0	3.738	0.00000	0.999984
S 181.975 Axial	3	Lin Thru 0	0.0	0.1870	0.00000	0.999977
Sb 206.836	3	Lin Thru 0	0.0	0.9470	0.00000	0.999994
Se 196.026	3	Lin Thru 0	0.0	0.6673	0.00000	0.999856
SiO2	3	Lin Thru 0	0.0	4.921	0.00000	0.999993
Si 251.611	3	Lin Thru 0	0.0	12.32	0.00000	0.999989
Sn 189.927	3	Lin Thru 0	0.0	1.921	0.00000	1.000000
Sr 421.552	3	Lin Thru 0	0.0	175.1	0.00000	0.999974
Ti 334.940	3	Lin Thru 0	0.0	425.8	0.00000	0.999999
Tl 190.801	3	Lin Thru 0	0.0	0.6235	0.00000	0.999980
U 409.014	3	Lin Thru 0	0.0	9.879	0.00000	0.999913
V 292.402	3	Lin Thru 0	0.0	82.96	0.00000	0.999973
Zn 213.857	3	Lin Thru 0	0.0	35.38	0.00000	0.999899

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/15/2009 03:24:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112766.8	112766.8	101	%			03:25:19
1	Al 396.153Radial†	9993.6	9699.4	5031.6	µg/L	5031.6	ppb	03:25:19
1	Ca 317.933Radial†	13042.9	12464.9	4909.3	µg/L	4909.3	ppb	03:25:39
1	Fe 238.204 Radial†	1002.4	982.3	5065.2	µg/L	5065.2	ppb	03:25:39
1	K 766.490 Radial†	5103.1	4196.4	2354.3	µg/L	2354.3	ppb	03:25:19
1	Mg 279.077 IEC†	945.5	917.7	5126.8	µg/L	5126.8	ppb	03:25:39
1	Na 589.592 Radial†	8475.2	8870.4	2473.0	µg/L	2473.0	ppb	03:25:19
1	Sr 421.552†	92131.4	91008.8	519.70	µg/L	519.70	ppb	03:25:19
1	Sc 361.383	1969687.2	1969687.2	101.29	%			03:26:43
1	Y 371.029	1191883.9	1191883.9	100.90	%			03:26:43
1	Ag 328.068†	26571.9	26335.9	254.48	µg/L	254.48	ppb	03:26:49
1	As 188.979†	246.2	238.0	474.02	µg/L	474.02	ppb	03:27:10
1	B 249.677†	11223.7	10930.0	510.92	µg/L	510.92	ppb	03:26:49
1	Ba 233.527†	19072.6	18909.6	507.09	µg/L	507.09	ppb	03:26:49
1	Be 313.107†	392240.8	383595.5	255.03	µg/L	255.03	ppb	03:26:43
1	Cd 226.502†	17720.8	17593.2	494.96	µg/L	494.96	ppb	03:26:49
1	Co 228.616†	9992.7	9933.2	504.09	µg/L	504.09	ppb	03:26:49
1	Cr 267.716†	21955.2	21803.7	486.19	µg/L	486.19	ppb	03:26:49
1	Cu 324.752†	71580.1	67405.3	504.05	µg/L	504.05	ppb	03:26:49
1	Mn 257.610†	151354.9	149664.6	500.08	µg/L	500.08	ppb	03:26:43
1	Mo 202.031†	4367.8	4317.2	518.32	µg/L	518.32	ppb	03:27:10
1	Ni 231.604†	8871.6	8477.3	488.80	µg/L	488.80	ppb	03:26:49
1	P 214.914†	1317.7	1096.8	2425.9	µg/L	2425.9	ppb	03:27:10
1	Pb 220.353†	1917.4	1837.0	492.22	µg/L	492.22	ppb	03:27:10
1	S 181.975 Axial†	490.6	445.6	2381.0	µg/L	2381.0	ppb	03:27:10
1	Sb 206.836†	495.1	469.9	494.77	µg/L	494.77	ppb	03:27:10
1	Se 196.026†	1674.5	1642.4	2463.5	µg/L	2463.5	ppb	03:27:10
1	SiO2†	54139.6	51376.6	10441	µg/L	10441	ppb	03:26:49
1	Si 251.611†	61159.1	60068.0	4828.6	µg/L	4828.6	ppb	03:26:49
1	Sn 189.927†	1044.8	1007.2	526.91	µg/L	526.91	ppb	03:27:10
1	Ti 334.940†	209391.5	205936.5	483.32	µg/L	483.32	ppb	03:26:43
1	Tl 190.801†	303.5	319.0	513.80	µg/L	513.80	ppb	03:27:10
1	U 409.014†	5543.6	4647.8	469.64	µg/L	469.64	ppb	03:26:49
1	V 292.402†	41674.7	41222.1	501.66	µg/L	501.66	ppb	03:26:49
1	Zn 213.857†	18369.6	17618.2	494.04	µg/L	494.04	ppb	03:26:49
2	Sc RADIAL	113886.2	113886.2	102	%			03:25:45
2	Al 396.153Radial†	10022.6	9630.9	4995.6	µg/L	4995.6	ppb	03:25:45
2	Ca 317.933Radial†	13090.4	12384.8	4877.8	µg/L	4877.8	ppb	03:26:06
2	Fe 238.204 Radial†	1011.9	981.9	5062.9	µg/L	5062.9	ppb	03:26:06
2	K 766.490 Radial†	5139.1	4182.1	2346.2	µg/L	2346.2	ppb	03:25:45
2	Mg 279.077 IEC†	950.6	913.5	5103.8	µg/L	5103.8	ppb	03:26:06
2	Na 589.592 Radial†	8440.0	8753.8	2440.5	µg/L	2440.5	ppb	03:25:45
2	Sr 421.552†	92221.5	90203.1	515.10	µg/L	515.10	ppb	03:25:45
2	Sc 361.383	1962806.4	1962806.4	100.93	%			03:27:17
2	Y 371.029	1188120.6	1188120.6	100.58	%			03:27:17
2	Ag 328.068†	26627.5	26482.9	255.89	µg/L	255.89	ppb	03:27:23
2	As 188.979†	242.7	235.3	468.74	µg/L	468.74	ppb	03:27:43
2	B 249.677†	11228.4	10973.5	512.97	µg/L	512.97	ppb	03:27:23
2	Ba 233.527†	19008.4	18912.1	507.16	µg/L	507.16	ppb	03:27:23
2	Be 313.107†	389692.3	382428.1	254.25	µg/L	254.25	ppb	03:27:17
2	Cd 226.502†	17692.2	17626.3	495.89	µg/L	495.89	ppb	03:27:23
2	Co 228.616†	9952.9	9928.3	503.87	µg/L	503.87	ppb	03:27:23
2	Cr 267.716†	21935.7	21860.3	487.45	µg/L	487.45	ppb	03:27:23
2	Cu 324.752†	71543.3	67616.6	505.63	µg/L	505.63	ppb	03:27:23
2	Mn 257.610†	150571.9	149412.6	499.24	µg/L	499.24	ppb	03:27:17
2	Mo 202.031†	4429.3	4393.2	527.43	µg/L	527.43	ppb	03:27:43
2	Ni 231.604†	8876.0	8512.3	490.82	µg/L	490.82	ppb	03:27:23
2	P 214.914†	1329.9	1113.5	2463.5	µg/L	2463.5	ppb	03:27:43
2	Pb 220.353†	1948.5	1874.5	502.27	µg/L	502.27	ppb	03:27:43

2	S 181.975 Axial†	495.7	452.3	2417.0 µg/L	2417.0 ppb	03:27:43
2	Sb 206.836†	487.1	463.7	488.16 µg/L	488.16 ppb	03:27:43
2	Se 196.026†	1696.0	1669.6	2504.2 µg/L	2504.2 ppb	03:27:43
2	SiO2†	54221.4	51645.0	10495 µg/L	10495 ppb	03:27:23
2	Si 251.611†	61071.4	60192.8	4838.5 µg/L	4838.5 ppb	03:27:23
2	Sn 189.927†	1048.0	1014.0	530.41 µg/L	530.41 ppb	03:27:43
2	Ti 334.940†	208377.3	205656.5	482.67 µg/L	482.67 ppb	03:27:17
2	Tl 190.801†	308.3	324.7	523.06 µg/L	523.06 ppb	03:27:43
2	U 409.014†	5516.1	4639.7	468.82 µg/L	468.82 ppb	03:27:23
2	V 292.402†	41630.0	41322.1	502.92 µg/L	502.92 ppb	03:27:23
2	Zn 213.857†	18269.1	17582.1	493.01 µg/L	493.01 ppb	03:27:23
3	Sc RADIAL	114298.6	114298.6	103 %		03:26:11
3	Al 396.153Radial†	10070.0	9641.7	5001.4 µg/L	5001.4 ppb	03:26:11
3	Ca 317.933Radial†	13050.0	12299.3	4844.1 µg/L	4844.1 ppb	03:26:32
3	Fe 238.204 Radial†	1006.0	972.6	5015.2 µg/L	5015.2 ppb	03:26:32
3	K 766.490 Radial†	5217.0	4239.9	2378.7 µg/L	2378.7 ppb	03:26:11
3	Mg 279.077 IEC†	940.2	900.0	5028.3 µg/L	5028.3 ppb	03:26:32
3	Na 589.592 Radial†	8531.1	8812.7	2456.9 µg/L	2456.9 ppb	03:26:11
3	Sr 421.552†	92869.5	90508.9	516.84 µg/L	516.84 ppb	03:26:11
3	Sc 361.383	1961077.1	1961077.1	100.84 %		03:27:50
3	Y 371.029	1186344.2	1186344.2	100.43 %		03:27:50
3	Ag 328.068†	26928.5	26804.6	258.99 µg/L	258.99 ppb	03:27:56
3	As 188.979†	235.1	228.0	454.22 µg/L	454.22 ppb	03:28:17
3	B 249.677†	11312.2	11066.5	517.34 µg/L	517.34 ppb	03:27:56
3	Ba 233.527†	19192.7	19111.4	512.50 µg/L	512.50 ppb	03:27:56
3	Be 313.107†	388610.0	381695.3	253.76 µg/L	253.76 ppb	03:27:50
3	Cd 226.502†	17925.3	17872.8	502.84 µg/L	502.84 ppb	03:27:56
3	Co 228.616†	10063.5	10046.8	509.86 µg/L	509.86 ppb	03:27:56
3	Cr 267.716†	22223.3	22164.7	494.24 µg/L	494.24 ppb	03:27:56
3	Cu 324.752†	72220.1	68350.3	511.09 µg/L	511.09 ppb	03:27:56
3	Mn 257.610†	150161.3	149137.0	498.31 µg/L	498.31 ppb	03:27:50
3	Mo 202.031†	4363.6	4332.0	520.08 µg/L	520.08 ppb	03:28:17
3	Ni 231.604†	8955.6	8599.0	495.82 µg/L	495.82 ppb	03:27:56
3	P 214.914†	1310.9	1095.8	2422.7 µg/L	2422.7 ppb	03:28:17
3	Pb 220.353†	1915.5	1843.5	493.95 µg/L	493.95 ppb	03:28:17
3	S 181.975 Axial†	487.8	444.8	2377.1 µg/L	2377.1 ppb	03:28:17
3	Sb 206.836†	488.7	465.7	490.28 µg/L	490.28 ppb	03:28:17
3	Se 196.026†	1674.6	1649.8	2474.5 µg/L	2474.5 ppb	03:28:17
3	SiO2†	54703.6	52170.6	10602 µg/L	10602 ppb	03:27:56
3	Si 251.611†	61648.1	60818.0	4889.5 µg/L	4889.5 ppb	03:27:56
3	Sn 189.927†	1042.2	1009.1	527.84 µg/L	527.84 ppb	03:28:17
3	Ti 334.940†	207565.9	205033.8	481.21 µg/L	481.21 ppb	03:27:50
3	Tl 190.801†	306.2	323.0	520.22 µg/L	520.22 ppb	03:28:17
3	U 409.014†	5580.4	4708.3	475.78 µg/L	475.78 ppb	03:27:56
3	V 292.402†	42052.6	41777.5	508.37 µg/L	508.37 ppb	03:27:56
3	Zn 213.857†	18520.2	17847.1	500.47 µg/L	500.47 ppb	03:27:56

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1964523.6	101.02	%	0.234				0.23%
Sc RADIAL	113650.5	102	%	0.7				0.70%
Y 371.029	1188782.9	100.64	%	0.239				0.24%
Ag 328.068†	26541.1	256.45	µg/L	2.304	256.45	ppb	2.304	0.90%
QC value within limits for Ag 328.068 Recovery = 102.58%								
Al 396.153Radial†	9657.3	5009.5	µg/L	19.34	5009.5	ppb	19.34	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.19%								
As 188.979†	233.8	465.66	µg/L	10.254	465.66	ppb	10.254	2.20%
QC value within limits for As 188.979 Recovery = 93.13%								
B 249.677†	10990.0	513.74	µg/L	3.277	513.74	ppb	3.277	0.64%
QC value within limits for B 249.677 Recovery = 102.75%								
Ba 233.527†	18977.7	508.92	µg/L	3.107	508.92	ppb	3.107	0.61%
QC value within limits for Ba 233.527 Recovery = 101.78%								
Be 313.107†	382572.9	254.35	µg/L	0.637	254.35	ppb	0.637	0.25%
QC value within limits for Be 313.107 Recovery = 101.74%								
Ca 317.933Radial†	12383.0	4877.1	µg/L	32.63	4877.1	ppb	32.63	0.67%
QC value within limits for Ca 317.933Radial Recovery = 97.54%								
Cd 226.502†	17697.5	497.90	µg/L	4.303	497.90	ppb	4.303	0.86%
QC value within limits for Cd 226.502 Recovery = 99.58%								
Co 228.616†	9969.4	505.94	µg/L	3.397	505.94	ppb	3.397	0.67%

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   QC value within limits for Co 228.616  Recovery = 101.19%
Cr 267.716†            21942.9      489.29 µg/L         4.327      489.29 ppb          4.327   0.88%
   QC value within limits for Cr 267.716  Recovery = 97.86%
Cu 324.752†            67790.7      506.92 µg/L         3.695      506.92 ppb          3.695   0.73%
   QC value within limits for Cu 324.752  Recovery = 101.38%
Fe 238.204 Radial†       978.9      5047.8 µg/L         28.19      5047.8 ppb          28.19   0.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.96%
K 766.490 Radial†       4206.1      2359.7 µg/L         16.89      2359.7 ppb          16.89   0.72%
   QC value within limits for K 766.490 Radial  Recovery = 94.39%
Mg 279.077 IEC†          910.4      5086.3 µg/L         51.56      5086.3 ppb          51.56   1.01%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.73%
Mn 257.610†           149404.7      499.21 µg/L         0.884      499.21 ppb          0.884   0.18%
   QC value within limits for Mn 257.610  Recovery = 99.84%
Mo 202.031†            4347.5      521.94 µg/L         4.836      521.94 ppb          4.836   0.93%
   QC value within limits for Mo 202.031  Recovery = 104.39%
Na 589.592 Radial†      8812.3      2456.8 µg/L         16.25      2456.8 ppb          16.25   0.66%
   QC value within limits for Na 589.592 Radial  Recovery = 98.27%
Ni 231.604†            8529.5      491.82 µg/L         3.614      491.82 ppb          3.614   0.73%
   QC value within limits for Ni 231.604  Recovery = 98.36%
P 214.914†             1102.0      2437.4 µg/L         22.66      2437.4 ppb          22.66   0.93%
   QC value within limits for P 214.914  Recovery = 97.49%
Pb 220.353†            1851.7      496.14 µg/L         5.373      496.14 ppb          5.373   1.08%
   QC value within limits for Pb 220.353  Recovery = 99.23%
S 181.975 Axial†         447.6      2391.7 µg/L         21.96      2391.7 ppb          21.96   0.92%
   QC value within limits for S 181.975 Axial  Recovery = 95.67%
Sb 206.836†              466.4      491.07 µg/L         3.378      491.07 ppb          3.378   0.69%
   QC value within limits for Sb 206.836  Recovery = 98.21%
Se 196.026†            1653.9      2480.7 µg/L         21.04      2480.7 ppb          21.04   0.85%
   QC value within limits for Se 196.026  Recovery = 99.23%
SiO2†                 51730.7       10513 µg/L          82.1       10513 ppb           82.1   0.78%
   QC value within limits for SiO2  Recovery = 98.29%
Si 251.611†           60359.6      4852.2 µg/L         32.68      4852.2 ppb          32.68   0.67%
   QC value within limits for Si 251.611  Recovery = 97.04%
Sn 189.927†            1010.1      528.39 µg/L         1.811      528.39 ppb          1.811   0.34%
   QC value within limits for Sn 189.927  Recovery = 105.68%
Sr 421.552†           90573.6      517.21 µg/L         2.323      517.21 ppb          2.323   0.45%
   QC value within limits for Sr 421.552  Recovery = 103.44%
Ti 334.940†          205542.3      482.40 µg/L         1.083      482.40 ppb          1.083   0.22%
   QC value within limits for Ti 334.940  Recovery = 96.48%
Tl 190.801†              322.2      519.03 µg/L         4.742      519.03 ppb          4.742   0.91%
   QC value within limits for Tl 190.801  Recovery = 103.81%
U 409.014†             4665.2      471.41 µg/L         3.801      471.41 ppb          3.801   0.81%
   QC value within limits for U 409.014  Recovery = 94.28%
V 292.402†            41440.6      504.32 µg/L         3.566      504.32 ppb          3.566   0.71%
   QC value within limits for V 292.402  Recovery = 100.86%
Zn 213.857†           17682.5      495.84 µg/L         4.045      495.84 ppb          4.045   0.82%
   QC value within limits for Zn 213.857  Recovery = 99.17%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/15/2009 03:28:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110840.2	110840.2	99.6	%			03:28:58
1	Al 396.153Radial†	151.5	-11.3	-5.8740	µg/L	-5.8740	ppb	03:28:58
1	Ca 317.933Radial†	419.5	13.8	5.4418	µg/L	5.4418	ppb	03:29:19
1	Fe 238.204 Radial†	7.1	0.2	1.0295	µg/L	1.0295	ppb	03:29:19
1	K 766.490 Radial†	837.6	1.1	0.6323	µg/L	0.6323	ppb	03:28:58
1	Mg 279.077 IEC†	16.0	0.7	3.7477	µg/L	3.7477	ppb	03:29:19
1	Na 589.592 Radial†	-581.1	-77.4	-21.575	µg/L	-21.575	ppb	03:28:58
1	Sr 421.552†	-62.4	20.0	0.1140	µg/L	0.1140	ppb	03:28:58
1	Sc 361.383	1947270.4	1947270.4	100.13	%			03:30:20
1	Y 371.029	1183083.7	1183083.7	100.15	%			03:30:20
1	Ag 328.068†	-42.2	59.2	0.5637	µg/L	0.5637	ppb	03:30:26
1	As 188.979†	2.7	-2.4	-4.8305	µg/L	-4.8305	ppb	03:30:47
1	B 249.677†	150.7	-0.7	-0.0330	µg/L	-0.0330	ppb	03:30:26
1	Ba 233.527†	-69.1	10.2	0.2724	µg/L	0.2724	ppb	03:30:47
1	Be 313.107†	3650.2	-20.3	-0.0136	µg/L	-0.0136	ppb	03:30:26
1	Cd 226.502†	-85.8	11.8	0.3231	µg/L	0.3231	ppb	03:30:47
1	Co 228.616†	-74.7	-7.2	-0.3669	µg/L	-0.3669	ppb	03:30:47
1	Cr 267.716†	-103.1	24.2	0.5387	µg/L	0.5387	ppb	03:30:26
1	Cu 324.752†	3271.0	0.7	0.0052	µg/L	0.0052	ppb	03:30:26
1	Mn 257.610†	-207.3	24.2	0.0809	µg/L	0.0809	ppb	03:30:47
1	Mo 202.031†	-4.6	0.2	0.0248	µg/L	0.0248	ppb	03:30:47
1	Ni 231.604†	285.0	2.9	0.1665	µg/L	0.1665	ppb	03:30:47
1	P 214.914†	205.9	1.5	3.4808	µg/L	3.4808	ppb	03:30:47
1	Pb 220.353†	51.8	-4.3	-1.1434	µg/L	-1.1434	ppb	03:30:47
1	S 181.975 Axial†	39.9	1.0	5.3472	µg/L	5.3472	ppb	03:30:47
1	Sb 206.836†	15.3	-3.7	-3.8700	µg/L	-3.8700	ppb	03:30:47
1	Se 196.026†	9.9	-0.9	-1.3975	µg/L	-1.3975	ppb	03:30:47
1	SiO2†	2017.4	-60.9	-12.382	µg/L	-12.382	ppb	03:30:26
1	Si 251.611†	365.8	50.6	4.0632	µg/L	4.0632	ppb	03:30:47
1	Sn 189.927†	26.2	1.8	0.9637	µg/L	0.9637	ppb	03:30:47
1	Ti 334.940†	896.8	99.0	0.2321	µg/L	0.2321	ppb	03:30:26
1	Tl 190.801†	-19.3	0.0	0.0147	µg/L	0.0147	ppb	03:30:47
1	U 409.014†	722.3	-104.1	-10.538	µg/L	-10.538	ppb	03:30:26
1	V 292.402†	-70.7	5.9	0.0549	µg/L	0.0549	ppb	03:30:26
1	Zn 213.857†	515.4	-3.5	-0.1000	µg/L	-0.1000	ppb	03:30:47
2	Sc RADIAL	110874.2	110874.2	99.6	%			03:29:24
2	Al 396.153Radial†	145.2	-17.6	-9.1691	µg/L	-9.1691	ppb	03:29:24
2	Ca 317.933Radial†	409.7	3.9	1.5179	µg/L	1.5179	ppb	03:29:44
2	Fe 238.204 Radial†	10.3	3.4	17.221	µg/L	17.221	ppb	03:29:44
2	K 766.490 Radial†	813.9	-23.0	-12.901	µg/L	-12.901	ppb	03:29:24
2	Mg 279.077 IEC†	17.6	2.2	12.447	µg/L	12.447	ppb	03:29:44
2	Na 589.592 Radial†	-558.7	-54.7	-15.259	µg/L	-15.259	ppb	03:29:24
2	Sr 421.552†	-32.8	49.7	0.2841	µg/L	0.2841	ppb	03:29:24
2	Sc 361.383	1955518.5	1955518.5	100.56	%			03:30:53
2	Y 371.029	1187921.1	1187921.1	100.56	%			03:30:53
2	Ag 328.068†	-69.3	32.4	0.3091	µg/L	0.3091	ppb	03:30:58
2	As 188.979†	0.5	-4.7	-9.3188	µg/L	-9.3188	ppb	03:31:19
2	B 249.677†	148.2	-3.8	-0.1818	µg/L	-0.1818	ppb	03:30:58
2	Ba 233.527†	-65.8	13.7	0.3670	µg/L	0.3670	ppb	03:31:19
2	Be 313.107†	3665.1	-20.8	-0.0138	µg/L	-0.0138	ppb	03:30:58
2	Cd 226.502†	-92.8	5.2	0.1354	µg/L	0.1354	ppb	03:31:19
2	Co 228.616†	-72.0	-4.3	-0.2154	µg/L	-0.2154	ppb	03:31:19
2	Cr 267.716†	-158.4	-30.3	-0.6750	µg/L	-0.6750	ppb	03:30:58
2	Cu 324.752†	3273.8	-10.3	-0.0733	µg/L	-0.0733	ppb	03:30:58
2	Mn 257.610†	-206.7	25.7	0.0879	µg/L	0.0879	ppb	03:31:19
2	Mo 202.031†	-4.3	0.6	0.0736	µg/L	0.0736	ppb	03:31:19
2	Ni 231.604†	282.3	-1.0	-0.0568	µg/L	-0.0568	ppb	03:31:19
2	P 214.914†	197.5	-7.8	-17.554	µg/L	-17.554	ppb	03:31:19
2	Pb 220.353†	59.1	2.8	0.7568	µg/L	0.7568	ppb	03:31:19

2	S 181.975 Axial†	39.6	0.5	2.9302	µg/L	2.9302 ppb	03:31:19
2	Sb 206.836†	20.7	1.7	1.7462	µg/L	1.7462 ppb	03:31:19
2	Se 196.026†	9.6	-1.3	-1.9307	µg/L	-1.9307 ppb	03:31:19
2	SiO2†	2025.6	-61.3	-12.456	µg/L	-12.456 ppb	03:30:58
2	Si 251.611†	362.9	46.3	3.7481	µg/L	3.7481 ppb	03:31:19
2	Sn 189.927†	25.4	0.9	0.4673	µg/L	0.4673 ppb	03:31:19
2	Ti 334.940†	729.6	-71.0	-0.1669	µg/L	-0.1669 ppb	03:30:58
2	Tl 190.801†	-20.4	-1.0	-1.5307	µg/L	-1.5307 ppb	03:31:19
2	U 409.014†	702.9	-126.5	-12.804	µg/L	-12.804 ppb	03:30:58
2	V 292.402†	-83.4	-6.4	-0.0960	µg/L	-0.0960 ppb	03:30:58
2	Zn 213.857†	519.4	-1.7	-0.0498	µg/L	-0.0498 ppb	03:31:19
3	Sc RADIAL	110376.4	110376.4	99.2	%		03:29:50
3	Al 396.153Radial†	158.8	-3.3	-1.7001	µg/L	-1.7001 ppb	03:29:50
3	Ca 317.933Radial†	402.5	-1.6	-0.6108	µg/L	-0.6108 ppb	03:30:10
3	Fe 238.204 Radial†	8.1	1.2	6.4096	µg/L	6.4096 ppb	03:30:10
3	K 766.490 Radial†	797.8	-35.5	-19.944	µg/L	-19.944 ppb	03:29:50
3	Mg 279.077 IEC†	22.8	7.6	42.346	µg/L	42.346 ppb	03:30:10
3	Na 589.592 Radial†	-606.7	-105.6	-29.453	µg/L	-29.453 ppb	03:29:50
3	Sr 421.552†	-87.0	-5.1	-0.0290	µg/L	-0.0290 ppb	03:29:50
3	Sc 361.383	1954900.2	1954900.2	100.53	%		03:31:25
3	Y 371.029	1187921.3	1187921.3	100.56	%		03:31:25
3	Ag 328.068†	-73.5	28.1	0.2693	µg/L	0.2693 ppb	03:31:30
3	As 188.979†	-1.9	-7.0	-13.942	µg/L	-13.942 ppb	03:31:51
3	B 249.677†	167.2	15.2	0.7101	µg/L	0.7101 ppb	03:31:30
3	Ba 233.527†	-77.6	2.0	0.0535	µg/L	0.0535 ppb	03:31:51
3	Be 313.107†	3756.5	71.2	0.0474	µg/L	0.0474 ppb	03:31:30
3	Cd 226.502†	-91.1	6.8	0.1844	µg/L	0.1844 ppb	03:31:51
3	Co 228.616†	-63.7	4.1	0.2048	µg/L	0.2048 ppb	03:31:51
3	Cr 267.716†	-131.7	-3.8	-0.0836	µg/L	-0.0836 ppb	03:31:30
3	Cu 324.752†	3252.6	-30.4	-0.2258	µg/L	-0.2258 ppb	03:31:30
3	Mn 257.610†	-201.7	30.5	0.1027	µg/L	0.1027 ppb	03:31:51
3	Mo 202.031†	-7.3	-2.4	-0.2884	µg/L	-0.2884 ppb	03:31:51
3	Ni 231.604†	282.7	-0.4	-0.0251	µg/L	-0.0251 ppb	03:31:51
3	P 214.914†	202.0	-3.2	-7.2671	µg/L	-7.2671 ppb	03:31:51
3	Pb 220.353†	51.1	-5.2	-1.3783	µg/L	-1.3783 ppb	03:31:51
3	S 181.975 Axial†	38.4	-0.6	-3.3613	µg/L	-3.3613 ppb	03:31:51
3	Sb 206.836†	21.7	2.7	2.8420	µg/L	2.8420 ppb	03:31:51
3	Se 196.026†	9.3	-1.5	-2.3035	µg/L	-2.3035 ppb	03:31:51
3	SiO2†	2021.1	-65.2	-13.240	µg/L	-13.240 ppb	03:31:30
3	Si 251.611†	357.9	41.4	3.4914	µg/L	3.4914 ppb	03:31:51
3	Sn 189.927†	18.6	-5.9	-3.0410	µg/L	-3.0410 ppb	03:31:51
3	Ti 334.940†	800.9	0.1	0.0003	µg/L	0.0003 ppb	03:31:30
3	Tl 190.801†	-20.5	-1.1	-1.7971	µg/L	-1.7971 ppb	03:31:51
3	U 409.014†	741.0	-88.4	-8.9446	µg/L	-8.9446 ppb	03:31:30
3	V 292.402†	-64.5	12.4	0.1340	µg/L	0.1340 ppb	03:31:30
3	Zn 213.857†	508.9	-11.9	-0.3383	µg/L	-0.3383 ppb	03:31:51

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1952563.1	100.41	%	0.236				0.24%
Sc RADIAL	110696.9	99.5	%	0.25				0.25%
Y 371.029	1186308.7	100.43	%	0.236				0.24%
Ag 328.068†	39.9	0.3807	µg/L	0.15974	0.3807	ppb	0.15974	41.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.7	-5.5811	µg/L	3.74309	-5.5811	ppb	3.74309	67.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.7	-9.3636	µg/L	4.55570	-9.3636	ppb	4.55570	48.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	3.6	0.1651	µg/L	0.47779	0.1651	ppb	0.47779	289.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.6	0.2309	µg/L	0.16082	0.2309	ppb	0.16082	69.64%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	10.0	0.0067	µg/L	0.03526	0.0067	ppb	0.03526	528.41%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.4	2.1163	µg/L	3.07037	2.1163	ppb	3.07037	145.08%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.9	0.2143	µg/L	0.09737	0.2143	ppb	0.09737	45.44%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.5	-0.1259	µg/L	0.29618	-0.1259	ppb	0.29618	235.34%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.3     -0.0733 µg/L       0.60688     -0.0733 ppb        0.60688 827.88%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -13.4     -0.0980 µg/L       0.11745     -0.0980 ppb        0.11745 119.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       1.6      8.2198 µg/L       8.24593      8.2198 ppb        8.24593 100.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -19.1     -10.737 µg/L       10.4571     -10.737 ppb        10.4571  97.39%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          3.5      19.514 µg/L       20.2465      19.514 ppb        20.2465 103.76%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             26.8      0.0905 µg/L       0.01113      0.0905 ppb        0.01113  12.30%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.5     -0.0633 µg/L       0.19644     -0.0633 ppb        0.19644 310.30%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -79.3     -22.096 µg/L        7.1114     -22.096 ppb         7.1114  32.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              0.5      0.0282 µg/L       0.12082      0.0282 ppb        0.12082 428.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -3.1     -7.1134 µg/L      10.51815     -7.1134 ppb       10.51815 147.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -2.2     -0.5883 µg/L       1.17077     -0.5883 ppb        1.17077 199.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         0.3      1.6387 µg/L       4.49559      1.6387 ppb        4.49559 274.33%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              0.2      0.2394 µg/L       3.60074      0.2394 ppb        3.60074 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.3     -1.8772 µg/L       0.45533     -1.8772 ppb        0.45533  24.26%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -62.5     -12.693 µg/L        0.4753     -12.693 ppb         0.4753   3.74%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              46.1      3.7676 µg/L       0.28636      3.7676 ppb        0.28636   7.60%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.0     -0.5367 µg/L       2.18300     -0.5367 ppb        2.18300 406.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              21.5      0.1230 µg/L       0.15675      0.1230 ppb        0.15675 127.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               9.3      0.0218 µg/L       0.20038      0.0218 ppb        0.20038 918.34%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.7     -1.1044 µg/L       0.97828     -1.1044 ppb        0.97828  88.58%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -106.3     -10.762 µg/L        1.9393     -10.762 ppb         1.9393  18.02%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                4.0      0.0310 µg/L       0.11684      0.0310 ppb        0.11684 377.41%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -5.7     -0.1627 µg/L       0.15416     -0.1627 ppb        0.15416  94.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/15/2009 03:31:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110960.7	110960.7	99.7	%			03:32:32
1	Al 396.153Radial†	573.3	411.7	214.00	µg/L	214.00	ppb	03:32:32
1	Ca 317.933Radial†	926.2	521.5	205.41	µg/L	205.41	ppb	03:32:52
1	Fe 238.204 Radial†	30.4	23.5	120.87	µg/L	120.87	ppb	03:32:52
1	K 766.490 Radial†	1131.5	294.9	165.47	µg/L	165.47	ppb	03:32:32
1	Mg 279.077 IEC†	72.6	57.4	320.46	µg/L	320.46	ppb	03:32:52
1	Na 589.592 Radial†	576.3	1084.1	302.24	µg/L	302.24	ppb	03:32:32
1	Sr 421.552†	835.8	920.9	5.2588	µg/L	5.2588	ppb	03:32:32
1	Sc 361.383	1965685.2	1965685.2	101.08	%			03:33:55
1	Y 371.029	1194564.6	1194564.6	101.13	%			03:33:55
1	Ag 328.068†	420.3	517.0	4.9658	µg/L	4.9658	ppb	03:34:00
1	As 188.979†	17.9	12.6	25.031	µg/L	25.031	ppb	03:34:21
1	B 249.677†	1224.3	1060.0	49.666	µg/L	49.666	ppb	03:34:00
1	Ba 233.527†	104.3	182.4	4.8924	µg/L	4.8924	ppb	03:34:21
1	Be 313.107†	11247.8	7461.9	4.9626	µg/L	4.9626	ppb	03:34:00
1	Cd 226.502†	84.4	180.9	5.1148	µg/L	5.1148	ppb	03:34:21
1	Co 228.616†	27.8	94.9	4.8276	µg/L	4.8276	ppb	03:34:21
1	Cr 267.716†	154.1	279.7	6.2329	µg/L	6.2329	ppb	03:34:00
1	Cu 324.752†	4643.2	1327.6	9.9323	µg/L	9.9323	ppb	03:34:00
1	Mn 257.610†	2929.6	3129.5	10.459	µg/L	10.459	ppb	03:34:00
1	Mo 202.031†	79.6	83.6	10.043	µg/L	10.043	ppb	03:34:21
1	Ni 231.604†	380.8	95.1	5.4817	µg/L	5.4817	ppb	03:34:21
1	P 214.914†	270.6	63.5	142.52	µg/L	142.52	ppb	03:34:21
1	Pb 220.353†	95.0	38.0	10.149	µg/L	10.149	ppb	03:34:21
1	S 181.975 Axial†	53.3	13.9	74.135	µg/L	74.135	ppb	03:34:21
1	Sb 206.836†	26.4	7.2	7.5382	µg/L	7.5382	ppb	03:34:21
1	Se 196.026†	29.7	18.5	27.769	µg/L	27.769	ppb	03:34:21
1	SiO2†	3108.5	999.6	203.14	µg/L	203.14	ppb	03:34:00
1	Si 251.611†	1615.1	1283.1	103.56	µg/L	103.56	ppb	03:34:00
1	Sn 189.927†	34.1	9.3	4.9886	µg/L	4.9886	ppb	03:34:21
1	Ti 334.940†	2921.6	2093.8	4.9053	µg/L	4.9053	ppb	03:34:00
1	Tl 190.801†	-2.6	16.7	26.863	µg/L	26.863	ppb	03:34:21
1	U 409.014†	1297.3	458.0	46.341	µg/L	46.341	ppb	03:34:00
1	V 292.402†	347.8	420.6	5.2249	µg/L	5.2249	ppb	03:34:00
1	Zn 213.857†	896.9	369.1	10.367	µg/L	10.367	ppb	03:34:21
2	Sc RADIAL	110566.6	110566.6	99.3	%			03:32:58
2	Al 396.153Radial†	580.5	420.9	218.81	µg/L	218.81	ppb	03:32:58
2	Ca 317.933Radial†	921.1	519.8	204.71	µg/L	204.71	ppb	03:33:18
2	Fe 238.204 Radial†	31.2	24.5	125.92	µg/L	125.92	ppb	03:33:18
2	K 766.490 Radial†	1159.3	327.0	183.44	µg/L	183.44	ppb	03:32:58
2	Mg 279.077 IEC†	74.0	59.1	329.84	µg/L	329.84	ppb	03:33:18
2	Na 589.592 Radial†	565.0	1074.8	299.64	µg/L	299.64	ppb	03:32:58
2	Sr 421.552†	875.5	963.9	5.5042	µg/L	5.5042	ppb	03:32:58
2	Sc 361.383	1956897.5	1956897.5	100.63	%			03:34:27
2	Y 371.029	1189435.2	1189435.2	100.69	%			03:34:27
2	Ag 328.068†	493.4	591.6	5.6743	µg/L	5.6743	ppb	03:34:32
2	As 188.979†	17.1	11.9	23.750	µg/L	23.750	ppb	03:34:53
2	B 249.677†	1215.1	1056.4	49.494	µg/L	49.494	ppb	03:34:32
2	Ba 233.527†	111.7	190.2	5.0991	µg/L	5.0991	ppb	03:34:53
2	Be 313.107†	11364.8	7628.2	5.0731	µg/L	5.0731	ppb	03:34:32
2	Cd 226.502†	89.9	186.8	5.2777	µg/L	5.2777	ppb	03:34:53
2	Co 228.616†	28.6	95.8	4.8730	µg/L	4.8730	ppb	03:34:53
2	Cr 267.716†	102.2	228.8	5.1012	µg/L	5.1012	ppb	03:34:32
2	Cu 324.752†	4740.0	1444.4	10.805	µg/L	10.805	ppb	03:34:32
2	Mn 257.610†	2945.8	3158.6	10.556	µg/L	10.556	ppb	03:34:32
2	Mo 202.031†	78.4	82.7	9.9333	µg/L	9.9333	ppb	03:34:53
2	Ni 231.604†	364.2	80.2	4.6248	µg/L	4.6248	ppb	03:34:53
2	P 214.914†	274.8	68.9	154.63	µg/L	154.63	ppb	03:34:53
2	Pb 220.353†	90.1	33.6	8.9746	µg/L	8.9746	ppb	03:34:53

2	S 181.975 Axial†	59.3	20.1	107.28 µg/L	107.28 ppb	03:34:53
2	Sb 206.836†	33.5	14.3	15.114 µg/L	15.114 ppb	03:34:53
2	Se 196.026†	29.6	18.6	27.857 µg/L	27.857 ppb	03:34:53
2	SiO2†	3156.9	1061.5	215.71 µg/L	215.71 ppb	03:34:32
2	Si 251.611†	1634.9	1310.1	105.64 µg/L	105.64 ppb	03:34:32
2	Sn 189.927†	38.7	14.1	7.4424 µg/L	7.4424 ppb	03:34:53
2	Ti 334.940†	2991.8	2176.5	5.0994 µg/L	5.0994 ppb	03:34:32
2	Tl 190.801†	-9.6	9.8	15.751 µg/L	15.751 ppb	03:34:53
2	U 409.014†	1262.1	428.7	43.379 µg/L	43.379 ppb	03:34:32
2	V 292.402†	326.4	400.9	4.9819 µg/L	4.9819 ppb	03:34:32
2	Zn 213.857†	883.8	360.0	10.114 µg/L	10.114 ppb	03:34:53
3	Sc RADIAL	110713.7	110713.7	99.5 %		03:33:24
3	Al 396.153Radial†	582.1	421.7	219.25 µg/L	219.25 ppb	03:33:24
3	Ca 317.933Radial†	911.0	508.4	200.23 µg/L	200.23 ppb	03:33:44
3	Fe 238.204 Radial†	33.0	26.2	134.83 µg/L	134.83 ppb	03:33:44
3	K 766.490 Radial†	1075.5	241.1	135.29 µg/L	135.29 ppb	03:33:24
3	Mg 279.077 IEC†	72.3	57.3	319.56 µg/L	319.56 ppb	03:33:44
3	Na 589.592 Radial†	557.2	1066.2	297.25 µg/L	297.25 ppb	03:33:24
3	Sr 421.552†	854.9	942.0	5.3790 µg/L	5.3790 ppb	03:33:24
3	Sc 361.383	1974075.8	1974075.8	101.51 %		03:34:59
3	Y 371.029	1199056.6	1199056.6	101.51 %		03:34:59
3	Ag 328.068†	466.1	560.4	5.3799 µg/L	5.3799 ppb	03:35:05
3	As 188.979†	17.8	12.4	24.710 µg/L	24.710 ppb	03:35:25
3	B 249.677†	1235.2	1065.6	49.924 µg/L	49.924 ppb	03:35:05
3	Ba 233.527†	118.6	196.0	5.2561 µg/L	5.2561 ppb	03:35:25
3	Be 313.107†	11255.5	7422.2	4.9361 µg/L	4.9361 ppb	03:35:05
3	Cd 226.502†	83.1	179.4	5.0643 µg/L	5.0643 ppb	03:35:25
3	Co 228.616†	33.1	100.0	5.0840 µg/L	5.0840 ppb	03:35:25
3	Cr 267.716†	101.2	226.9	5.0592 µg/L	5.0592 ppb	03:35:05
3	Cu 324.752†	4683.4	1347.7	10.085 µg/L	10.085 ppb	03:35:05
3	Mn 257.610†	2939.1	3126.6	10.451 µg/L	10.451 ppb	03:35:05
3	Mo 202.031†	80.9	84.6	10.155 µg/L	10.155 ppb	03:35:25
3	Ni 231.604†	386.7	99.2	5.7200 µg/L	5.7200 ppb	03:35:25
3	P 214.914†	265.1	57.0	127.82 µg/L	127.82 ppb	03:35:25
3	Pb 220.353†	95.0	37.6	10.052 µg/L	10.052 ppb	03:35:25
3	S 181.975 Axial†	55.7	16.0	85.371 µg/L	85.371 ppb	03:35:25
3	Sb 206.836†	30.4	11.0	11.636 µg/L	11.636 ppb	03:35:25
3	Se 196.026†	28.8	17.6	26.315 µg/L	26.315 ppb	03:35:25
3	SiO2†	3127.8	1005.5	204.33 µg/L	204.33 ppb	03:35:05
3	Si 251.611†	1626.2	1287.4	103.78 µg/L	103.78 ppb	03:35:05
3	Sn 189.927†	40.7	15.8	8.3376 µg/L	8.3376 ppb	03:35:25
3	Ti 334.940†	2990.8	2149.7	5.0368 µg/L	5.0368 ppb	03:35:05
3	Tl 190.801†	-7.8	11.7	18.740 µg/L	18.740 ppb	03:35:25
3	U 409.014†	1221.6	377.9	38.232 µg/L	38.232 ppb	03:35:05
3	V 292.402†	355.5	426.8	5.2882 µg/L	5.2882 ppb	03:35:05
3	Zn 213.857†	879.8	348.5	9.7829 µg/L	9.7829 ppb	03:35:25

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1965552.8	101.07	%	0.442				0.44%
Sc RADIAL	110747.0	99.5	%	0.18				0.18%
Y 371.029	1194352.1	101.11	%	0.408				0.40%
Ag 328.068†	556.3	5.3400	µg/L	0.35595	5.3400	ppb	0.35595	6.67%
QC value within limits for Ag 328.068 Recovery = 106.80%								
Al 396.153Radial†	418.1	217.35	µg/L	2.912	217.35	ppb	2.912	1.34%
QC value within limits for Al 396.153Radial Recovery = 108.68%								
As 188.979†	12.3	24.497	µg/L	0.6668	24.497	ppb	0.6668	2.72%
QC value within limits for As 188.979 Recovery = 81.66%								
B 249.677†	1060.7	49.695	µg/L	0.2166	49.695	ppb	0.2166	0.44%
QC value within limits for B 249.677 Recovery = 99.39%								
Ba 233.527†	189.5	5.0825	µg/L	0.18240	5.0825	ppb	0.18240	3.59%
QC value within limits for Ba 233.527 Recovery = 101.65%								
Be 313.107†	7504.1	4.9906	µg/L	0.07267	4.9906	ppb	0.07267	1.46%
QC value within limits for Be 313.107 Recovery = 99.81%								
Ca 317.933Radial†	516.6	203.45	µg/L	2.809	203.45	ppb	2.809	1.38%
QC value within limits for Ca 317.933Radial Recovery = 101.72%								
Cd 226.502†	182.4	5.1523	µg/L	0.11151	5.1523	ppb	0.11151	2.16%
QC value within limits for Cd 226.502 Recovery = 103.05%								
Co 228.616†	96.9	4.9282	µg/L	0.13685	4.9282	ppb	0.13685	2.78%

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   QC value within limits for Co 228.616  Recovery = 98.56%
Cr 267.716†              245.1      5.4644 µg/L       0.66583      5.4644 ppb        0.66583  12.18%
   QC value within limits for Cr 267.716  Recovery = 109.29%
Cu 324.752†             1373.2      10.274 µg/L        0.4659      10.274 ppb         0.4659   4.53%
   QC value within limits for Cu 324.752  Recovery = 102.74%
Fe 238.204 Radial†        24.7      127.21 µg/L         7.070      127.21 ppb          7.070   5.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 127.21%
K 766.490 Radial†        287.7      161.40 µg/L        24.333      161.40 ppb         24.333  15.08%
   QC value within limits for K 766.490 Radial  Recovery = 107.60%
Mg 279.077 IEC†           57.9      323.29 µg/L         5.695      323.29 ppb          5.695   1.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.76%
Mn 257.610†             3138.2      10.489 µg/L        0.0589      10.489 ppb         0.0589   0.56%
   QC value within limits for Mn 257.610  Recovery = 104.89%
Mo 202.031†               83.6      10.044 µg/L        0.1107      10.044 ppb         0.1107   1.10%
   QC value within limits for Mo 202.031  Recovery = 100.44%
Na 589.592 Radial†      1075.0      299.71 µg/L         2.498      299.71 ppb          2.498   0.83%
   QC value within limits for Na 589.592 Radial  Recovery = 99.90%
Ni 231.604†               91.5      5.2755 µg/L       0.57598      5.2755 ppb        0.57598  10.92%
   QC value within limits for Ni 231.604  Recovery = 105.51%
P 214.914†                63.2      141.66 µg/L        13.425      141.66 ppb         13.425   9.48%
   QC value within limits for P 214.914  Recovery = 94.44%
Pb 220.353†               36.4      9.7253 µg/L       0.65188      9.7253 ppb        0.65188   6.70%
   QC value within limits for Pb 220.353  Recovery = 97.25%
S 181.975 Axial†          16.6      88.930 µg/L       16.8585      88.930 ppb        16.8585  18.96%
   QC value within limits for S 181.975 Axial  Recovery = 88.93%
Sb 206.836†               10.8      11.429 µg/L        3.7923      11.429 ppb         3.7923  33.18%
   QC value within limits for Sb 206.836  Recovery = 114.29%
Se 196.026†               18.2      27.313 µg/L        0.8658      27.313 ppb         0.8658   3.17%
   QC value within limits for Se 196.026  Recovery = 91.04%
SiO2†                   1022.2      207.73 µg/L         6.936      207.73 ppb          6.936   3.34%
   QC value within limits for SiO2  Recovery = 97.52%
Si 251.611†             1293.5      104.33 µg/L         1.142      104.33 ppb          1.142   1.09%
   QC value within limits for Si 251.611  Recovery = 104.33%
Sn 189.927†               13.1      6.9228 µg/L       1.73391      6.9228 ppb        1.73391  25.05%
   QC value less than the lower limit for Sn 189.927  Recovery = 69.23%
Sr 421.552†              942.3      5.3807 µg/L       0.12270      5.3807 ppb        0.12270   2.28%
   QC value within limits for Sr 421.552  Recovery = 107.61%
Ti 334.940†             2140.0      5.0138 µg/L       0.09910      5.0138 ppb        0.09910   1.98%
   QC value within limits for Ti 334.940  Recovery = 100.28%
Tl 190.801†               12.7      20.451 µg/L        5.7506      20.451 ppb         5.7506  28.12%
   QC value within limits for Tl 190.801  Recovery = 102.26%
U 409.014†               421.5      42.651 µg/L        4.1028      42.651 ppb         4.1028   9.62%
   QC value within limits for U 409.014  Recovery = 85.30%
V 292.402†               416.1      5.1650 µg/L       0.16167      5.1650 ppb        0.16167   3.13%
   QC value within limits for V 292.402  Recovery = 103.30%
Zn 213.857†              359.2      10.088 µg/L        0.2931      10.088 ppb         0.2931   2.91%
   QC value within limits for Zn 213.857  Recovery = 100.88%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/15/2009 03:35:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107316.5	107316.5	96.4	%			03:36:16
1	Al 396.153Radial†	962855.1	998356.8	519930	µg/L	519930	ppb	03:36:10
1	Ca 317.933Radial†	1211802.4	1256281.3	494790	µg/L	494790	ppb	03:36:10
1	Fe 238.204 Radial†	36070.5	37399.6	192210	µg/L	192210	ppb	03:36:16
1	K 766.490 Radial†	794.3	-16.2	-9.1047	µg/L	-9.1047	ppb	03:36:16
1	Mg 279.077 IEC†	85065.1	88200.6	491920	µg/L	491920	ppb	03:36:16
1	Na 589.592 Radial†	-466.1	22.7	6.3306	µg/L	6.3306	ppb	03:36:16
1	Sr 421.552†	501.3	602.5	3.4407	µg/L	3.4407	ppb	03:36:16
1	Sc 361.383	1805186.3	1805186.3	92.827	%			03:36:50
1	Y 371.029	1081767.1	1081767.1	91.577	%			03:36:50
1	Ag 328.068†	-1937.3	-1985.7	-3.8319	µg/L	-3.8319	ppb	03:36:50
1	As 188.979†	53.2	52.2	1.1575	µg/L	1.1575	ppb	03:37:11
1	B 249.677†	1977.7	1979.3	32.370	µg/L	32.370	ppb	03:36:50
1	Ba 233.527†	118.7	207.0	5.5111	µg/L	5.5111	ppb	03:37:11
1	Be 313.107†	2633.3	-828.9	-0.5610	µg/L	-0.5610	ppb	03:36:50
1	Cd 226.502†	469.4	603.2	2.0757	µg/L	2.0757	ppb	03:37:11
1	Co 228.616†	-90.8	-30.5	-1.6327	µg/L	-1.6327	ppb	03:37:11
1	Cr 267.716†	-226.4	-116.7	-2.6293	µg/L	-2.6293	ppb	03:37:11
1	Cu 324.752†	-1210.5	-4570.0	7.1861	µg/L	7.1861	ppb	03:36:50
1	Mn 257.610†	-2147.9	-2082.7	17.211	µg/L	17.211	ppb	03:36:50
1	Mo 202.031†	-109.3	-112.9	-5.9972	µg/L	-5.9972	ppb	03:37:11
1	Ni 231.604†	254.6	-7.4	-0.4269	µg/L	-0.4269	ppb	03:37:11
1	P 214.914†	200.4	11.8	-8.4280	µg/L	-8.4280	ppb	03:37:11
1	Pb 220.353†	-45.1	-104.6	14.921	µg/L	14.921	ppb	03:37:11
1	S 181.975 Axial†	72.6	39.4	111.96	µg/L	111.96	ppb	03:37:11
1	Sb 206.836†	71.8	58.4	15.342	µg/L	15.342	ppb	03:37:11
1	Se 196.026†	16.8	7.2	11.939	µg/L	11.939	ppb	03:37:11
1	SiO2†	1734.4	-207.3	-42.120	µg/L	-42.120	ppb	03:37:11
1	Si 251.611†	422.5	140.5	19.681	µg/L	19.681	ppb	03:37:11
1	Sn 189.927†	-392.4	-447.1	-1.9304	µg/L	-1.9304	ppb	03:37:11
1	Ti 334.940†	10984.0	11036.2	-1.9059	µg/L	-1.9059	ppb	03:36:50
1	Tl 190.801†	19.0	39.8	-2.1480	µg/L	-2.1480	ppb	03:37:11
1	U 409.014†	992.9	244.2	0.5525	µg/L	0.5525	ppb	03:36:50
1	V 292.402†	-1148.2	-1160.3	1.6398	µg/L	1.6398	ppb	03:36:50
1	Zn 213.857†	1636.6	1244.9	1.3497	µg/L	1.3497	ppb	03:37:11
2	Sc RADIAL	107035.4	107035.4	96.2	%			03:36:27
2	Al 396.153Radial†	963495.6	1001644.8	521640	µg/L	521640	ppb	03:36:22
2	Ca 317.933Radial†	1207462.4	1255068.7	494310	µg/L	494310	ppb	03:36:22
2	Fe 238.204 Radial†	36266.9	37702.1	193760	µg/L	193760	ppb	03:36:27
2	K 766.490 Radial†	808.5	0.7	0.4173	µg/L	0.4173	ppb	03:36:27
2	Mg 279.077 IEC†	85655.3	89045.9	496630	µg/L	496630	ppb	03:36:27
2	Na 589.592 Radial†	-483.8	3.0	0.8427	µg/L	0.8427	ppb	03:36:27
2	Sr 421.552†	526.1	629.7	3.5956	µg/L	3.5956	ppb	03:36:27
2	Sc 361.383	1784623.0	1784623.0	91.769	%			03:37:18
2	Y 371.029	1069765.8	1069765.8	90.561	%			03:37:18
2	Ag 328.068†	-1960.6	-2035.2	-4.1781	µg/L	-4.1781	ppb	03:37:18
2	As 188.979†	52.0	51.6	-0.1833	µg/L	-0.1833	ppb	03:37:38
2	B 249.677†	1926.3	1947.9	30.406	µg/L	30.406	ppb	03:37:18
2	Ba 233.527†	131.5	222.5	5.9256	µg/L	5.9256	ppb	03:37:38
2	Be 313.107†	2623.4	-806.9	-0.5465	µg/L	-0.5465	ppb	03:37:18
2	Cd 226.502†	448.5	586.2	1.4757	µg/L	1.4757	ppb	03:37:38
2	Co 228.616†	-87.4	-27.9	-1.4987	µg/L	-1.4987	ppb	03:37:38
2	Cr 267.716†	-221.5	-114.2	-2.5723	µg/L	-2.5723	ppb	03:37:38
2	Cu 324.752†	-1144.1	-4512.8	7.9473	µg/L	7.9473	ppb	03:37:18
2	Mn 257.610†	-2127.9	-2087.5	17.390	µg/L	17.390	ppb	03:37:18
2	Mo 202.031†	-102.0	-106.3	-5.1372	µg/L	-5.1372	ppb	03:37:38
2	Ni 231.604†	252.5	-6.6	-0.3802	µg/L	-0.3802	ppb	03:37:38
2	P 214.914†	186.8	-0.6	-37.753	µg/L	-37.753	ppb	03:37:38
2	Pb 220.353†	-56.0	-117.0	11.719	µg/L	11.719	ppb	03:37:38

2	S 181.975 Axial†	81.2	49.6	165.78 µg/L	165.78	ppb	03:37:38
2	Sb 206.836†	65.5	52.5	9.1379 µg/L	9.1379	ppb	03:37:38
2	Se 196.026†	29.4	21.2	31.897 µg/L	31.897	ppb	03:37:38
2	SiO2†	1736.6	-183.3	-37.250 µg/L	-37.250	ppb	03:37:38
2	Si 251.611†	423.5	146.8	20.488 µg/L	20.488	ppb	03:37:38
2	Sn 189.927†	-402.4	-462.8	-9.0809 µg/L	-9.0809	ppb	03:37:38
2	Ti 334.940†	10942.3	11127.1	-1.6656 µg/L	-1.6656	ppb	03:37:18
2	Tl 190.801†	18.9	39.9	-1.9407 µg/L	-1.9407	ppb	03:37:38
2	U 409.014†	954.4	214.5	-2.7555 µg/L	-2.7555	ppb	03:37:18
2	V 292.402†	-1115.5	-1139.0	2.0250 µg/L	2.0250	ppb	03:37:18
2	Zn 213.857†	1642.6	1271.8	1.8144 µg/L	1.8144	ppb	03:37:38
3	Sc RADIAL	106210.9	106210.9	95.4 %			03:36:39
3	Al 396.153Radial†	963473.0	1009398.1	525680 µg/L	525680	ppb	03:36:34
3	Ca 317.933Radial†	1210057.5	1267534.2	499220 µg/L	499220	ppb	03:36:34
3	Fe 238.204 Radial†	36261.7	37989.4	195240 µg/L	195240	ppb	03:36:39
3	K 766.490 Radial†	811.5	10.3	5.8054 µg/L	5.8054	ppb	03:36:39
3	Mg 279.077 IEC†	85497.8	89572.2	499570 µg/L	499570	ppb	03:36:39
3	Na 589.592 Radial†	-479.0	4.2	1.1741 µg/L	1.1741	ppb	03:36:39
3	Sr 421.552†	504.8	611.6	3.4927 µg/L	3.4927	ppb	03:36:39
3	Sc 361.383	1782612.0	1782612.0	91.666 %			03:37:45
3	Y 371.029	1069076.9	1069076.9	90.503 %			03:37:45
3	Ag 328.068†	-2036.5	-2120.4	-4.8767 µg/L	-4.8767	ppb	03:37:45
3	As 188.979†	58.5	58.7	13.039 µg/L	13.039	ppb	03:38:06
3	B 249.677†	1968.0	1995.7	32.184 µg/L	32.184	ppb	03:37:45
3	Ba 233.527†	116.5	206.2	5.4894 µg/L	5.4894	ppb	03:38:06
3	Be 313.107†	2663.5	-760.0	-0.5155 µg/L	-0.5155	ppb	03:37:45
3	Cd 226.502†	458.6	597.7	1.6897 µg/L	1.6897	ppb	03:38:06
3	Co 228.616†	-81.1	-21.1	-1.1598 µg/L	-1.1598	ppb	03:38:06
3	Cr 267.716†	-198.6	-89.5	-2.0236 µg/L	-2.0236	ppb	03:38:06
3	Cu 324.752†	-1285.6	-4668.5	7.1021 µg/L	7.1021	ppb	03:37:45
3	Mn 257.610†	-2154.3	-2119.0	17.471 µg/L	17.471	ppb	03:37:45
3	Mo 202.031†	-112.2	-117.6	-6.4366 µg/L	-6.4366	ppb	03:38:06
3	Ni 231.604†	254.6	-3.9	-0.2250 µg/L	-0.2250	ppb	03:38:06
3	P 214.914†	209.6	24.5	19.017 µg/L	19.017	ppb	03:38:06
3	Pb 220.353†	-43.5	-103.5	15.678 µg/L	15.678	ppb	03:38:06
3	S 181.975 Axial†	75.8	43.8	134.19 µg/L	134.19	ppb	03:38:06
3	Sb 206.836†	56.1	42.3	-2.0896 µg/L	-2.0896	ppb	03:38:06
3	Se 196.026†	27.7	19.4	29.700 µg/L	29.700	ppb	03:38:06
3	SiO2†	1728.0	-190.6	-38.724 µg/L	-38.724	ppb	03:38:06
3	Si 251.611†	440.4	165.8	21.859 µg/L	21.859	ppb	03:38:06
3	Sn 189.927†	-394.3	-454.6	-2.9449 µg/L	-2.9449	ppb	03:38:06
3	Ti 334.940†	11169.3	11388.1	-1.3286 µg/L	-1.3286	ppb	03:37:45
3	Tl 190.801†	19.3	40.4	-1.8362 µg/L	-1.8362	ppb	03:38:06
3	U 409.014†	999.6	265.0	2.1993 µg/L	2.1993	ppb	03:37:45
3	V 292.402†	-1157.8	-1186.5	1.5716 µg/L	1.5716	ppb	03:37:45
3	Zn 213.857†	1636.9	1267.5	1.4579 µg/L	1.4579	ppb	03:38:06

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1790807.1	92.087	%	0.6424				0.70%
Sc RADIAL	106854.3	96.0	%	0.52				0.54%
Y 371.029	1073536.6	90.881	%	0.6041				0.66%
Ag 328.068†	-2047.1	-4.2956	µg/L	0.53223	-4.2956	ppb	0.53223	12.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1003133.2	522410	µg/L	2952.4	522410	ppb	2952.4	0.57%
QC value within limits for Al 396.153Radial Recovery = 104.48%								
As 188.979†	54.1	4.6709	µg/L	7.27754	4.6709	ppb	7.27754	155.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1974.3	31.653	µg/L	1.0843	31.653	ppb	1.0843	3.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	211.9	5.6420	µg/L	0.24585	5.6420	ppb	0.24585	4.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-798.6	-0.5410	µg/L	0.02326	-0.5410	ppb	0.02326	4.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1259628.1	496110	µg/L	2707.2	496110	ppb	2707.2	0.55%
QC value within limits for Ca 317.933Radial Recovery = 99.22%								
Cd 226.502†	595.7	1.7471	µg/L	0.30409	1.7471	ppb	0.30409	17.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-26.5	-1.4304	µg/L	0.24374	-1.4304	ppb	0.24374	17.04%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -106.8     -2.4084 µg/L      0.33444     -2.4084 ppb       0.33444  13.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4583.8      7.4118 µg/L      0.46561      7.4118 ppb       0.46561   6.28%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    37697.0      193740 µg/L       1515.7      193740 ppb        1515.7   0.78%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.87%
K 766.490 Radial†        -1.7     -0.9607 µg/L      7.54995     -0.9607 ppb       7.54995 785.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       88939.6      496040 µg/L       3859.2      496040 ppb        3859.2   0.78%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.21%
Mn 257.610†           -2096.4      17.357 µg/L       0.1331      17.357 ppb        0.1331   0.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -112.2     -5.8570 µg/L      0.66094     -5.8570 ppb       0.66094  11.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       10.0      2.7825 µg/L      3.07721      2.7825 ppb       3.07721 110.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -6.0     -0.3440 µg/L      0.10569     -0.3440 ppb       0.10569  30.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               11.9     -9.0546 µg/L     28.39029     -9.0546 ppb      28.39029 313.55%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -108.4      14.106 µg/L       2.1013      14.106 ppb        2.1013  14.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         44.3      137.31 µg/L       27.046      137.31 ppb        27.046  19.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              51.0      7.4635 µg/L      8.83559      7.4635 ppb       8.83559 118.38%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              15.9      24.512 µg/L      10.9436      24.512 ppb       10.9436  44.65%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -193.7     -39.365 µg/L       2.4972     -39.365 ppb        2.4972   6.34%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             151.0      20.676 µg/L       1.1007      20.676 ppb        1.1007   5.32%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -454.8     -4.6520 µg/L      3.86888     -4.6520 ppb       3.86888  83.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             614.6      3.5097 µg/L      0.07885      3.5097 ppb       0.07885   2.25%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11183.8     -1.6334 µg/L      0.29003     -1.6334 ppb       0.29003  17.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              40.0     -1.9749 µg/L      0.15870     -1.9749 ppb       0.15870   8.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              241.2     -0.0012 µg/L      2.52338     -0.0012 ppb       2.52338 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1161.9      1.7455 µg/L      0.24446      1.7455 ppb       0.24446  14.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1261.4      1.5406 µg/L      0.24315      1.5406 ppb       0.24315  15.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/15/2009 03:38:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107260.3	107260.3	96.4	%			03:38:54
1	Al 396.153Radial†	961185.3	997147.1	519280	µg/L	519280	ppb	03:38:48
1	Ca 317.933Radial†	1205650.3	1250556.1	492540	µg/L	492540	ppb	03:38:48
1	Fe 238.204 Radial†	36145.4	37496.9	192720	µg/L	192720	ppb	03:38:54
1	K 766.490 Radial†	9750.3	9276.9	5204.6	µg/L	5204.6	ppb	03:38:54
1	Mg 279.077 IEC†	85880.3	89092.6	496910	µg/L	496910	ppb	03:38:54
1	Na 589.592 Radial†	17457.5	18619.7	5191.1	µg/L	5191.1	ppb	03:38:54
1	Sr 421.552†	85882.5	89192.9	509.33	µg/L	509.33	ppb	03:38:54
1	Sc 361.383	1796346.4	1796346.4	92.372	%			03:39:28
1	Y 371.029	1078440.2	1078440.2	91.296	%			03:39:28
1	Ag 328.068†	23743.4	25805.3	264.25	µg/L	264.25	ppb	03:39:34
1	As 188.979†	278.3	296.2	489.13	µg/L	489.13	ppb	03:39:55
1	B 249.677†	12175.1	13029.2	550.35	µg/L	550.35	ppb	03:39:34
1	Ba 233.527†	17135.3	18629.5	499.59	µg/L	499.59	ppb	03:39:34
1	Be 313.107†	341978.0	366551.4	243.67	µg/L	243.67	ppb	03:39:28
1	Cd 226.502†	15921.5	17333.7	473.07	µg/L	473.07	ppb	03:39:34
1	Co 228.616†	7852.1	8567.9	434.66	µg/L	434.66	ppb	03:39:55
1	Cr 267.716†	19797.3	21559.3	480.76	µg/L	480.76	ppb	03:39:34
1	Cu 324.752†	67085.7	69359.3	558.94	µg/L	558.94	ppb	03:39:34
1	Mn 257.610†	128141.8	138954.4	487.93	µg/L	487.93	ppb	03:39:34
1	Mo 202.031†	3699.5	4009.8	488.80	µg/L	488.80	ppb	03:39:55
1	Ni 231.604†	7301.6	7622.8	439.54	µg/L	439.54	ppb	03:39:55
1	P 214.914†	1232.7	1130.3	2463.3	µg/L	2463.3	ppb	03:39:55
1	Pb 220.353†	1580.5	1655.0	485.88	µg/L	485.88	ppb	03:39:55
1	S 181.975 Axial†	522.9	527.2	2719.4	µg/L	2719.4	ppb	03:39:55
1	Sb 206.836†	495.3	517.3	499.24	µg/L	499.24	ppb	03:39:55
1	Se 196.026†	1461.9	1571.8	2354.7	µg/L	2354.7	ppb	03:39:55
1	SiO2†	52147.6	54378.1	11051	µg/L	11051	ppb	03:39:34
1	Si 251.611†	59288.2	63869.4	5145.2	µg/L	5145.2	ppb	03:39:34
1	Sn 189.927†	497.5	514.3	498.96	µg/L	498.96	ppb	03:39:55
1	Ti 334.940†	207218.3	223532.9	497.22	µg/L	497.22	ppb	03:39:34
1	Tl 190.801†	295.1	338.8	480.89	µg/L	480.89	ppb	03:39:55
1	U 409.014†	5019.1	4608.1	442.14	µg/L	442.14	ppb	03:39:34
1	V 292.402†	38112.2	41335.9	518.07	µg/L	518.07	ppb	03:39:34
1	Zn 213.857†	17336.2	18249.5	478.72	µg/L	478.72	ppb	03:39:34
2	Sc RADIAL	108732.2	108732.2	97.7	%			03:39:06
2	Al 396.153Radial†	957603.7	979980.6	510340	µg/L	510340	ppb	03:39:00
2	Ca 317.933Radial†	1200299.8	1228145.2	483710	µg/L	483710	ppb	03:39:00
2	Fe 238.204 Radial†	36917.5	37779.5	194180	µg/L	194180	ppb	03:39:06
2	K 766.490 Radial†	9901.5	9294.6	5214.5	µg/L	5214.5	ppb	03:39:06
2	Mg 279.077 IEC†	87439.4	89482.1	499080	µg/L	499080	ppb	03:39:06
2	Na 589.592 Radial†	17790.5	18715.3	5217.7	µg/L	5217.7	ppb	03:39:06
2	Sr 421.552†	87452.3	89593.4	511.62	µg/L	511.62	ppb	03:39:06
2	Sc 361.383	1791516.6	1791516.6	92.124	%			03:40:01
2	Y 371.029	1075771.5	1075771.5	91.070	%			03:40:01
2	Ag 328.068†	23645.2	25768.0	264.01	µg/L	264.01	ppb	03:40:07
2	As 188.979†	286.4	305.8	509.36	µg/L	509.36	ppb	03:40:28
2	B 249.677†	12176.8	13066.7	551.65	µg/L	551.65	ppb	03:40:07
2	Ba 233.527†	17083.5	18623.2	499.43	µg/L	499.43	ppb	03:40:07
2	Be 313.107†	340676.3	366136.5	243.40	µg/L	243.40	ppb	03:40:01
2	Cd 226.502†	15793.5	17241.2	470.36	µg/L	470.36	ppb	03:40:07
2	Co 228.616†	7846.4	8584.6	435.51	µg/L	435.51	ppb	03:40:28
2	Cr 267.716†	19774.5	21592.3	481.49	µg/L	481.49	ppb	03:40:07
2	Cu 324.752†	66987.1	69448.0	559.92	µg/L	559.92	ppb	03:40:07
2	Mn 257.610†	127628.7	138771.4	487.50	µg/L	487.50	ppb	03:40:07
2	Mo 202.031†	3678.8	3998.2	487.45	µg/L	487.45	ppb	03:40:28
2	Ni 231.604†	7293.6	7635.5	440.26	µg/L	440.26	ppb	03:40:28
2	P 214.914†	1253.8	1156.8	2518.1	µg/L	2518.1	ppb	03:40:28
2	Pb 220.353†	1584.7	1664.2	487.54	µg/L	487.54	ppb	03:40:28

2	S 181.975 Axial†	526.2	532.3	2746.3	µg/L	2746.3 ppb	03:40:28
2	Sb 206.836†	489.7	512.7	495.21	µg/L	495.21 ppb	03:40:28
2	Se 196.026†	1446.6	1559.5	2335.1	µg/L	2335.1 ppb	03:40:28
2	SiO2†	51853.4	54210.9	11017	µg/L	11017 ppb	03:40:07
2	Si 251.611†	59032.3	63764.6	5136.9	µg/L	5136.9 ppb	03:40:07
2	Sn 189.927†	486.5	503.8	492.17	µg/L	492.17 ppb	03:40:28
2	Ti 334.940†	206581.8	223446.7	497.52	µg/L	497.52 ppb	03:40:07
2	Tl 190.801†	273.4	316.1	445.60	µg/L	445.60 ppb	03:40:28
2	U 409.014†	5051.3	4657.7	446.68	µg/L	446.68 ppb	03:40:07
2	V 292.402†	38065.9	41396.9	518.92	µg/L	518.92 ppb	03:40:07
2	Zn 213.857†	17254.4	18211.4	477.42	µg/L	477.42 ppb	03:40:07
3	Sc RADIAL	107673.5	107673.5	96.7	%		03:39:17
3	Al 396.153Radial†	965660.3	997945.1	519690	µg/L	519690 ppb	03:39:12
3	Ca 317.933Radial†	1213047.7	1253401.2	493660	µg/L	493660 ppb	03:39:12
3	Fe 238.204 Radial†	36036.3	37240.2	191410	µg/L	191410 ppb	03:39:17
3	K 766.490 Radial†	9697.6	9183.6	5152.2	µg/L	5152.2 ppb	03:39:17
3	Mg 279.077 IEC†	85520.0	88378.2	492920	µg/L	492920 ppb	03:39:17
3	Na 589.592 Radial†	17417.7	18509.1	5160.2	µg/L	5160.2 ppb	03:39:17
3	Sr 421.552†	85489.5	88444.8	505.06	µg/L	505.06 ppb	03:39:17
3	Sc 361.383	1799071.6	1799071.6	92.512	%		03:40:34
3	Y 371.029	1080091.5	1080091.5	91.436	%		03:40:34
3	Ag 328.068†	23709.9	25730.1	263.43	µg/L	263.43 ppb	03:40:40
3	As 188.979†	281.7	299.4	495.54	µg/L	495.54 ppb	03:41:00
3	B 249.677†	12229.8	13068.5	552.60	µg/L	552.60 ppb	03:40:40
3	Ba 233.527†	17177.2	18646.6	500.05	µg/L	500.05 ppb	03:40:40
3	Be 313.107†	339624.6	363446.8	241.61	µg/L	241.61 ppb	03:40:34
3	Cd 226.502†	15903.4	17288.0	471.89	µg/L	471.89 ppb	03:40:40
3	Co 228.616†	7852.6	8555.5	434.02	µg/L	434.02 ppb	03:41:00
3	Cr 267.716†	19929.7	21669.9	483.22	µg/L	483.22 ppb	03:40:40
3	Cu 324.752†	67307.9	69489.6	559.63	µg/L	559.63 ppb	03:40:40
3	Mn 257.610†	128281.4	138895.2	487.56	µg/L	487.56 ppb	03:40:40
3	Mo 202.031†	3675.1	3977.4	484.86	µg/L	484.86 ppb	03:41:00
3	Ni 231.604†	7292.5	7601.0	438.28	µg/L	438.28 ppb	03:41:00
3	P 214.914†	1237.9	1134.0	2473.2	µg/L	2473.2 ppb	03:41:00
3	Pb 220.353†	1592.1	1665.0	488.58	µg/L	488.58 ppb	03:41:00
3	S 181.975 Axial†	515.7	518.6	2674.3	µg/L	2674.3 ppb	03:41:00
3	Sb 206.836†	500.5	522.1	504.18	µg/L	504.18 ppb	03:41:00
3	Se 196.026†	1454.7	1561.6	2340.2	µg/L	2340.2 ppb	03:41:00
3	SiO2†	52195.6	54344.4	11044	µg/L	11044 ppb	03:40:40
3	Si 251.611†	59400.6	63893.6	5147.2	µg/L	5147.2 ppb	03:40:40
3	Sn 189.927†	497.8	513.8	497.99	µg/L	497.99 ppb	03:41:00
3	Ti 334.940†	207454.8	223448.7	496.96	µg/L	496.96 ppb	03:40:40
3	Tl 190.801†	292.5	335.4	475.34	µg/L	475.34 ppb	03:41:00
3	U 409.014†	5125.2	4714.5	453.18	µg/L	453.18 ppb	03:40:40
3	V 292.402†	38179.4	41346.1	518.08	µg/L	518.08 ppb	03:40:40
3	Zn 213.857†	17368.6	18256.1	479.16	µg/L	479.16 ppb	03:40:40

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1795644.9	92.336	%	0.1967				0.21%
Sc RADIAL	107888.7	96.9	%	0.68				0.70%
Y 371.029	1078101.1	91.267	%	0.1845				0.20%
Ag 328.068†	25767.8	263.90	µg/L	0.422	263.90	ppb	0.422	0.16%
QC value within limits for Ag 328.068 Recovery = 105.56%								
Al 396.153Radial†	991691.0	516440	µg/L	5285.6	516440	ppb	5285.6	1.02%
QC value within limits for Al 396.153Radial Recovery = 103.29%								
As 188.979†	300.4	498.01	µg/L	10.336	498.01	ppb	10.336	2.08%
QC value within limits for As 188.979 Recovery = 99.60%								
B 249.677†	13054.8	551.53	µg/L	1.131	551.53	ppb	1.131	0.21%
QC value within limits for B 249.677 Recovery = 110.31%								
Ba 233.527†	18633.1	499.69	µg/L	0.324	499.69	ppb	0.324	0.06%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	365378.2	242.89	µg/L	1.121	242.89	ppb	1.121	0.46%
QC value within limits for Be 313.107 Recovery = 97.16%								
Ca 317.933Radial†	1244034.2	489970	µg/L	5448.4	489970	ppb	5448.4	1.11%
QC value within limits for Ca 317.933Radial Recovery = 97.99%								
Cd 226.502†	17287.6	471.77	µg/L	1.358	471.77	ppb	1.358	0.29%
QC value within limits for Cd 226.502 Recovery = 94.35%								
Co 228.616†	8569.4	434.73	µg/L	0.744	434.73	ppb	0.744	0.17%

QC value within limits for Co 228.616 Recovery = 86.95%

Cr 267.716†	21607.2	481.82 µg/L	1.263	481.82 ppb	1.263	0.26%

QC value within limits for Cr 267.716 Recovery = 96.36%

Cu 324.752†	69432.3	559.50 µg/L	0.501	559.50 ppb	0.501	0.09%

QC value within limits for Cu 324.752 Recovery = 111.90%

Fe 238.204 Radial†	37505.5	192770 µg/L	1386.3	192770 ppb	1386.3	0.72%

QC value within limits for Fe 238.204 Radial Recovery = 96.38%

K 766.490 Radial†	9251.7	5190.4 µg/L	33.47	5190.4 ppb	33.47	0.64%

QC value within limits for K 766.490 Radial Recovery = 103.81%

Mg 279.077 IEC†	88984.3	496300 µg/L	3122.2	496300 ppb	3122.2	0.63%

QC value within limits for Mg 279.077 IEC Recovery = 99.26%

Mn 257.610†	138873.6	487.66 µg/L	0.231	487.66 ppb	0.231	0.05%

QC value within limits for Mn 257.610 Recovery = 97.53%

Mo 202.031†	3995.1	487.04 µg/L	2.004	487.04 ppb	2.004	0.41%

QC value within limits for Mo 202.031 Recovery = 97.41%

Na 589.592 Radial†	18614.7	5189.7 µg/L	28.78	5189.7 ppb	28.78	0.55%

QC value within limits for Na 589.592 Radial Recovery = 103.79%

Ni 231.604†	7619.8	439.36 µg/L	1.004	439.36 ppb	1.004	0.23%

QC value within limits for Ni 231.604 Recovery = 87.87%

P 214.914†	1140.4	2484.9 µg/L	29.18	2484.9 ppb	29.18	1.17%

QC value within limits for P 214.914 Recovery = 99.40%

Pb 220.353†	1661.4	487.33 µg/L	1.364	487.33 ppb	1.364	0.28%

QC value within limits for Pb 220.353 Recovery = 97.47%

S 181.975 Axial†	526.0	2713.3 µg/L	36.37	2713.3 ppb	36.37	1.34%

QC value within limits for S 181.975 Axial Recovery = 108.53%

Sb 206.836†	517.3	499.54 µg/L	4.493	499.54 ppb	4.493	0.90%

QC value within limits for Sb 206.836 Recovery = 99.91%

Se 196.026†	1564.3	2343.3 µg/L	10.15	2343.3 ppb	10.15	0.43%

QC value within limits for Se 196.026 Recovery = 93.73%

SiO2†	54311.1	11037 µg/L	18.0	11037 ppb	18.0	0.16%

QC value within limits for SiO2 Recovery = 103.20%

Si 251.611†	63842.5	5143.1 µg/L	5.47	5143.1 ppb	5.47	0.11%

QC value within limits for Si 251.611 Recovery = 102.86%

Sn 189.927†	510.6	496.38 µg/L	3.674	496.38 ppb	3.674	0.74%

QC value within limits for Sn 189.927 Recovery = 99.28%

Sr 421.552†	89077.0	508.67 µg/L	3.329	508.67 ppb	3.329	0.65%

QC value within limits for Sr 421.552 Recovery = 101.73%

Ti 334.940†	223476.1	497.24 µg/L	0.278	497.24 ppb	0.278	0.06%

QC value within limits for Ti 334.940 Recovery = 99.45%

Tl 190.801†	330.1	467.28 µg/L	18.973	467.28 ppb	18.973	4.06%

QC value within limits for Tl 190.801 Recovery = 93.46%

U 409.014†	4660.1	447.33 µg/L	5.552	447.33 ppb	5.552	1.24%

QC value within limits for U 409.014 Recovery = 89.47%

V 292.402†	41359.6	518.36 µg/L	0.490	518.36 ppb	0.490	0.09%

QC value within limits for V 292.402 Recovery = 103.67%

Zn 213.857†	18239.0	478.43 µg/L	0.903	478.43 ppb	0.903	0.19%

QC value within limits for Zn 213.857 Recovery = 95.69%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/15/2009 03:41:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106846.8	106846.8	96.0	%			03:41:51
1	Al 396.153Radial†	946898.4	986125.3	513560	µg/L	513560	ppb	03:41:45
1	Ca 317.933Radial†	1197647.7	1247061.6	491160	µg/L	491160	ppb	03:41:45
1	Fe 238.204 Radial†	87548.3	91183.3	468620	µg/L	468620	ppb	03:41:51
1	K 766.490 Radial†	836.5	31.3	17.582	µg/L	17.582	ppb	03:41:51
1	Mg 279.077 IEC†	84793.7	88305.7	492100	µg/L	492100	ppb	03:41:51
1	Na 589.592 Radial†	1707204.9	1778729.5	495900	µg/L	495900	ppb	03:41:45
1	Sr 421.552†	856.0	974.2	5.5630	µg/L	5.5630	ppb	03:41:51
1	Sc 361.383	1759164.6	1759164.6	90.460	%			03:42:28
1	Y 371.029	1048091.0	1048091.0	88.727	%			03:42:28
1	Ag 328.068†	-3919.9	-4232.0	-3.6767	µg/L	-3.6767	ppb	03:42:28
1	As 188.979†	46.3	46.1	-50.630	µg/L	-50.630	ppb	03:42:48
1	B 249.677†	4577.3	4908.8	82.813	µg/L	82.813	ppb	03:42:28
1	Ba 233.527†	240.8	345.4	9.1306	µg/L	9.1306	ppb	03:42:48
1	Be 313.107†	-1893.4	-5758.7	-3.8469	µg/L	-3.8469	ppb	03:42:28
1	Cd 226.502†	1184.6	1407.0	13.806	µg/L	13.806	ppb	03:42:28
1	Co 228.616†	33.3	104.1	5.1347	µg/L	5.1347	ppb	03:42:48
1	Cr 267.716†	-229.8	-126.8	-2.9465	µg/L	-2.9465	ppb	03:42:48
1	Cu 324.752†	-8384.6	-12534.8	7.1279	µg/L	7.1279	ppb	03:42:28
1	Mn 257.610†	-12978.4	-14115.8	11.800	µg/L	11.800	ppb	03:42:28
1	Mo 202.031†	-198.5	-214.5	-7.3310	µg/L	-7.3310	ppb	03:42:48
1	Ni 231.604†	237.7	-19.0	-1.0945	µg/L	-1.0945	ppb	03:42:48
1	P 214.914†	361.2	195.2	84.902	µg/L	84.902	ppb	03:42:48
1	Pb 220.353†	45.6	-5.6	24.978	µg/L	24.978	ppb	03:42:48
1	S 181.975 Axial†	89.4	60.0	180.93	µg/L	180.93	ppb	03:42:48
1	Sb 206.836†	55.1	42.0	6.7817	µg/L	6.7817	ppb	03:42:48
1	Se 196.026†	-101.7	-123.3	9.3013	µg/L	9.3013	ppb	03:42:48
1	SiO2†	1629.3	-274.6	-55.797	µg/L	-55.797	ppb	03:42:48
1	Si 251.611†	-220.6	-558.5	-36.250	µg/L	-36.250	ppb	03:42:48
1	Sn 189.927†	-436.6	-507.1	-1.4305	µg/L	-1.4305	ppb	03:42:48
1	Ti 334.940†	17051.3	18052.9	14.776	µg/L	14.776	ppb	03:42:28
1	Tl 190.801†	13.7	34.5	-10.343	µg/L	-10.343	ppb	03:42:48
1	U 409.014†	133315.6	146549.1	14758	µg/L	14758	ppb	03:42:28
1	V 292.402†	-4100.6	-4456.5	8.3319	µg/L	8.3319	ppb	03:42:28
1	Zn 213.857†	2772.1	2546.2	8.7726	µg/L	8.7726	ppb	03:42:48
2	Sc RADIAL	106233.8	106233.8	95.5	%			03:42:03
2	Al 396.153Radial†	938784.8	983317.2	512100	µg/L	512100	ppb	03:41:58
2	Ca 317.933Radial†	1183320.8	1239251.8	488080	µg/L	488080	ppb	03:41:58
2	Fe 238.204 Radial†	87475.0	91632.7	470930	µg/L	470930	ppb	03:42:03
2	K 766.490 Radial†	789.7	-12.6	-7.0653	µg/L	-7.0653	ppb	03:42:03
2	Mg 279.077 IEC†	84786.1	88807.3	494890	µg/L	494890	ppb	03:42:03
2	Na 589.592 Radial†	1693038.7	1774151.0	494620	µg/L	494620	ppb	03:41:58
2	Sr 421.552†	884.8	1009.5	5.7648	µg/L	5.7648	ppb	03:42:03
2	Sc 361.383	1745068.3	1745068.3	89.735	%			03:42:55
2	Y 371.029	1039428.7	1039428.7	87.993	%			03:42:55
2	Ag 328.068†	-3859.1	-4199.3	-3.1735	µg/L	-3.1735	ppb	03:42:55
2	As 188.979†	36.2	35.3	-72.046	µg/L	-72.046	ppb	03:43:16
2	B 249.677†	4553.2	4922.8	82.742	µg/L	82.742	ppb	03:42:55
2	Ba 233.527†	260.3	369.3	9.7724	µg/L	9.7724	ppb	03:43:16
2	Be 313.107†	-1959.0	-5848.7	-3.9068	µg/L	-3.9068	ppb	03:42:55
2	Cd 226.502†	1144.3	1372.7	12.720	µg/L	12.720	ppb	03:42:55
2	Co 228.616†	48.5	121.4	6.0092	µg/L	6.0092	ppb	03:43:16
2	Cr 267.716†	-222.9	-121.2	-2.8190	µg/L	-2.8190	ppb	03:43:16
2	Cu 324.752†	-8184.4	-12386.6	8.7301	µg/L	8.7301	ppb	03:42:55
2	Mn 257.610†	-12993.0	-14248.0	11.650	µg/L	11.650	ppb	03:42:55
2	Mo 202.031†	-203.1	-221.5	-8.0705	µg/L	-8.0705	ppb	03:43:16
2	Ni 231.604†	261.1	9.3	0.5365	µg/L	0.5365	ppb	03:43:16
2	P 214.914†	354.0	190.3	70.617	µg/L	70.617	ppb	03:43:16
2	Pb 220.353†	34.3	-17.7	21.512	µg/L	21.512	ppb	03:43:16

2	S 181.975 Axial†	76.6	46.5	108.18 µg/L	108.18 ppb	03:43:16
2	Sb 206.836†	51.0	38.0	2.8115 µg/L	2.8115 ppb	03:43:16
2	Se 196.026†	-92.5	-113.9	23.384 µg/L	23.384 ppb	03:43:16
2	SiO2†	1666.5	-218.6	-44.415 µg/L	-44.415 ppb	03:43:16
2	Si 251.611†	-142.3	-473.2	-29.318 µg/L	-29.318 ppb	03:43:16
2	Sn 189.927†	-432.0	-505.8	-0.5933 µg/L	-0.5933 ppb	03:43:16
2	Ti 334.940†	16828.8	17957.1	14.724 µg/L	14.724 ppb	03:42:55
2	Tl 190.801†	1.6	21.1	-31.432 µg/L	-31.432 ppb	03:43:16
2	U 409.014†	132939.5	147320.6	14836 µg/L	14836 ppb	03:42:55
2	V 292.402†	-3964.7	-4341.7	10.025 µg/L	10.025 ppb	03:42:55
2	Zn 213.857†	2776.0	2575.3	9.2626 µg/L	9.2626 ppb	03:43:16
3	Sc RADIAL	106507.7	106507.7	95.7 %		03:42:16
3	Al 396.153Radial†	948525.6	990966.4	516080 µg/L	516080 ppb	03:42:11
3	Ca 317.933Radial†	1197687.1	1251075.3	492740 µg/L	492740 ppb	03:42:11
3	Fe 238.204 Radial†	87855.7	91794.8	471770 µg/L	471770 ppb	03:42:16
3	K 766.490 Radial†	850.5	48.8	27.367 µg/L	27.367 ppb	03:42:16
3	Mg 279.077 IEC†	85029.0	88832.7	495030 µg/L	495030 ppb	03:42:16
3	Na 589.592 Radial†	1710493.7	1787828.7	498440 µg/L	498440 ppb	03:42:11
3	Sr 421.552†	886.8	1009.3	5.7633 µg/L	5.7633 ppb	03:42:16
3	Sc 361.383	1765063.2	1765063.2	90.764 %		03:43:22
3	Y 371.029	1050978.9	1050978.9	88.971 %		03:43:22
3	Ag 328.068†	-3793.2	-4077.9	-1.9559 µg/L	-1.9559 ppb	03:43:22
3	As 188.979†	33.2	31.4	-80.566 µg/L	-80.566 ppb	03:43:43
3	B 249.677†	4558.5	4871.2	80.061 µg/L	80.061 ppb	03:43:22
3	Ba 233.527†	274.5	381.6	10.101 µg/L	10.101 ppb	03:43:43
3	Be 313.107†	-2079.0	-5956.2	-3.9781 µg/L	-3.9781 ppb	03:43:22
3	Cd 226.502†	1194.1	1413.1	13.680 µg/L	13.680 ppb	03:43:22
3	Co 228.616†	47.3	119.5	5.9147 µg/L	5.9147 ppb	03:43:43
3	Cr 267.716†	-224.0	-119.6	-2.7855 µg/L	-2.7855 ppb	03:43:43
3	Cu 324.752†	-8187.0	-12286.1	9.6586 µg/L	9.6586 ppb	03:43:22
3	Mn 257.610†	-12965.8	-14054.0	12.402 µg/L	12.402 ppb	03:43:22
3	Mo 202.031†	-194.1	-209.0	-6.5467 µg/L	-6.5467 ppb	03:43:43
3	Ni 231.604†	246.0	-10.6	-0.6121 µg/L	-0.6121 ppb	03:43:43
3	P 214.914†	365.7	198.8	90.194 µg/L	90.194 ppb	03:43:43
3	Pb 220.353†	34.4	-18.1	21.888 µg/L	21.888 ppb	03:43:43
3	S 181.975 Axial†	79.4	48.6	119.44 µg/L	119.44 ppb	03:43:43
3	Sb 206.836†	50.2	36.4	0.6331 µg/L	0.6331 ppb	03:43:43
3	Se 196.026†	-104.3	-125.8	6.7734 µg/L	6.7734 ppb	03:43:43
3	SiO2†	1596.9	-316.3	-64.275 µg/L	-64.275 ppb	03:43:43
3	Si 251.611†	-234.1	-572.6	-37.464 µg/L	-37.464 ppb	03:43:43
3	Sn 189.927†	-434.3	-502.9	2.0476 µg/L	2.0476 ppb	03:43:43
3	Ti 334.940†	16836.4	17753.0	13.983 µg/L	13.983 ppb	03:43:22
3	Tl 190.801†	10.9	31.4	-15.510 µg/L	-15.510 ppb	03:43:43
3	U 409.014†	133092.5	145810.8	14683 µg/L	14683 ppb	03:43:22
3	V 292.402†	-4049.7	-4385.2	9.3312 µg/L	9.3312 ppb	03:43:22
3	Zn 213.857†	2759.0	2521.5	7.6553 µg/L	7.6553 ppb	03:43:43

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1756432.0	90.320	%	0.5283				0.58%
Sc RADIAL	106529.4	95.7	%	0.28				0.29%
Y 371.029	1046166.2	88.564	%	0.5089				0.57%
Ag 328.068†	-4169.7	-2.9354	µg/L	0.88478	-2.9354	ppb	0.88478	30.14%
Al 396.153Radial†	986803.0	513910	µg/L	2015.1	513910	ppb	2015.1	0.39%
QC value within limits for Al 396.153Radial Recovery = 102.78%								
As 188.979†	37.6	-67.747	µg/L	15.4240	-67.747	ppb	15.4240	22.77%
B 249.677†	4900.9	81.872	µg/L	1.5691	81.872	ppb	1.5691	1.92%
Ba 233.527†	365.4	9.6681	µg/L	0.49366	9.6681	ppb	0.49366	5.11%
Be 313.107†	-5854.5	-3.9106	µg/L	0.06565	-3.9106	ppb	0.06565	1.68%
Ca 317.933Radial†	1245796.2	490660	µg/L	2368.0	490660	ppb	2368.0	0.48%
QC value within limits for Ca 317.933Radial Recovery = 98.13%								
Cd 226.502†	1397.6	13.402	µg/L	0.5940	13.402	ppb	0.5940	4.43%
Co 228.616†	115.0	5.6862	µg/L	0.47993	5.6862	ppb	0.47993	8.44%
Cr 267.716†	-122.5	-2.8503	µg/L	0.08500	-2.8503	ppb	0.08500	2.98%
Cu 324.752†	-12402.5	8.5055	µg/L	1.28019	8.5055	ppb	1.28019	15.05%
Fe 238.204 Radial†	91536.9	470440	µg/L	1628.4	470440	ppb	1628.4	0.35%
QC value within limits for Fe 238.204 Radial Recovery = 94.09%								
K 766.490 Radial†	22.5	12.628	µg/L	17.7427	12.628	ppb	17.7427	140.50%
Mg 279.077 IEC†	88648.6	494010	µg/L	1656.4	494010	ppb	1656.4	0.34%

QC value within limits for Mg 279.077 IEC Recovery = 98.80%

Mn 257.610†	-14139.3	11.951 µg/L	0.3980	11.951 ppb	0.3980	3.33%
Mo 202.031†	-215.0	-7.3161 µg/L	0.76202	-7.3161 ppb	0.76202	10.42%
Na 589.592 Radial†	1780236.4	496320 µg/L	1941.0	496320 ppb	1941.0	0.39%

QC value within limits for Na 589.592 Radial Recovery = 99.26%

Ni 231.604†	-6.8	-0.3901 µg/L	0.83786	-0.3901 ppb	0.83786	214.80%
P 214.914†	194.8	81.904 µg/L	10.1270	81.904 ppb	10.1270	12.36%
Pb 220.353†	-13.8	22.792 µg/L	1.9019	22.792 ppb	1.9019	8.34%
S 181.975 Axial†	51.7	136.19 µg/L	39.158	136.19 ppb	39.158	28.75%
Sb 206.836†	38.8	3.4088 µg/L	3.11751	3.4088 ppb	3.11751	91.45%
Se 196.026†	-121.0	13.153 µg/L	8.9502	13.153 ppb	8.9502	68.05%
SiO2†	-269.8	-54.829 µg/L	9.9655	-54.829 ppb	9.9655	18.18%
Si 251.611†	-534.7	-34.344 µg/L	4.3945	-34.344 ppb	4.3945	12.80%
Sn 189.927†	-505.2	0.0079 µg/L	1.81529	0.0079 ppb	1.81529	>999.9%
Sr 421.552†	997.7	5.6970 µg/L	0.11603	5.6970 ppb	0.11603	2.04%
Ti 334.940†	17921.0	14.494 µg/L	0.4436	14.494 ppb	0.4436	3.06%
Tl 190.801†	29.0	-19.095 µg/L	10.9919	-19.095 ppb	10.9919	57.56%
U 409.014†	146560.2	14759 µg/L	76.4	14759 ppb	76.4	0.52%

QC value within limits for U 409.014 Recovery = 98.39%

V 292.402†	-4394.5	9.2293 µg/L	0.85105	9.2293 ppb	0.85105	9.22%
Zn 213.857†	2547.7	8.5635 µg/L	0.82381	8.5635 ppb	0.82381	9.62%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/15/2009 03:43:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109681.4	109681.4	98.6	%			03:44:35
1	Al 396.153Radial†	881.7	731.3	8.3462	µg/L	8.3462	ppb	03:44:35
1	Ca 317.933Radial†	733.4	336.7	132.61	µg/L	132.61	ppb	03:44:55
1	Fe 238.204 Radial†	-2.9	-9.9	268.27	µg/L	268.27	ppb	03:44:55
1	K 766.490 Radial†	537964.0	545021.8	305770	µg/L	305770	ppb	03:44:29
1	Mg 279.077 IEC†	-31.0	-46.8	-16.757	µg/L	-16.757	ppb	03:44:55
1	Na 589.592 Radial†	-139.0	365.0	101.77	µg/L	101.77	ppb	03:44:35
1	Sr 421.552†	1728629.0	1754089.3	10017	µg/L	10017	ppb	03:44:29
1	Sc 361.383	1945251.8	1945251.8	100.03	%			03:46:27
1	Y 371.029	1165798.0	1165798.0	98.691	%			03:46:27
1	Ag 328.068†	-7106.0	-7002.6	2.7486	µg/L	2.7486	ppb	03:46:27
1	As 188.979†	5010.7	5004.1	10001	µg/L	10001	ppb	03:46:32
1	B 249.677†	105959.8	105777.5	4960.0	µg/L	4960.0	ppb	03:46:27
1	Ba 233.527†	539592.3	539513.2	14459	µg/L	14459	ppb	03:46:27
1	Be 313.107†	4474640.1	4469661.1	2970.0	µg/L	2970.0	ppb	03:46:16
1	Cd 226.502†	350125.1	350119.8	9851.4	µg/L	9851.4	ppb	03:46:27
1	Co 228.616†	190085.2	190096.8	9645.2	µg/L	9645.2	ppb	03:46:27
1	Cr 267.716†	1098616.3	1098421.0	24458	µg/L	24458	ppb	03:46:27
1	Cu 324.752†	2782515.0	2778432.3	20732	µg/L	20732	ppb	03:46:27
1	Mn 257.610†	2849171.3	2848566.3	9505.9	µg/L	9505.9	ppb	03:46:27
1	Mo 202.031†	81637.7	81618.5	9795.1	µg/L	9795.1	ppb	03:46:27
1	Ni 231.604†	170675.6	170343.8	9822.1	µg/L	9822.1	ppb	03:46:27
1	P 214.914†	8358.7	8152.1	16118	µg/L	16118	ppb	03:46:32
1	Pb 220.353†	93310.4	93227.0	24938	µg/L	24938	ppb	03:46:27
1	S 181.975 Axial†	9503.3	9461.6	50592	µg/L	50592	ppb	03:46:32
1	Sb 206.836†	9590.7	9569.0	10012	µg/L	10012	ppb	03:46:32
1	Se 196.026†	6538.5	6525.8	9780.0	µg/L	9780.0	ppb	03:46:32
1	SiO2†	495659.3	493438.1	100280	µg/L	100280	ppb	03:46:27
1	Si 251.611†	575223.5	574740.0	45602	µg/L	45602	ppb	03:46:27
1	Sn 189.927†	20408.9	20378.6	10606	µg/L	10606	ppb	03:46:32
1	Ti 334.940†	4266102.4	4264053.6	10013	µg/L	10013	ppb	03:46:16
1	Tl 190.801†	5997.6	6015.1	9708.0	µg/L	9708.0	ppb	03:46:32
1	U 409.014†	1860.3	1034.3	104.71	µg/L	104.71	ppb	03:46:27
1	V 292.402†	840555.9	840385.8	10198	µg/L	10198	ppb	03:46:27
1	Zn 213.857†	530607.1	529933.1	14898	µg/L	14898	ppb	03:46:27
2	Sc RADIAL	111197.6	111197.6	99.9	%			03:45:07
2	Al 396.153Radial†	835.3	672.6	-15.160	µg/L	-15.160	ppb	03:45:07
2	Ca 317.933Radial†	588.9	182.0	71.673	µg/L	71.673	ppb	03:45:27
2	Fe 238.204 Radial†	-10.2	-17.2	224.59	µg/L	224.59	ppb	03:45:27
2	K 766.490 Radial†	540524.9	540141.8	303030	µg/L	303030	ppb	03:45:01
2	Mg 279.077 IEC†	-47.9	-63.3	-113.47	µg/L	-113.47	ppb	03:45:27
2	Na 589.592 Radial†	-257.6	248.3	69.227	µg/L	69.227	ppb	03:45:07
2	Sr 421.552†	1739938.0	1741490.9	9944.6	µg/L	9944.6	ppb	03:45:01
2	Sc 361.383	1957777.6	1957777.6	100.67	%			03:46:52
2	Y 371.029	1173337.7	1173337.7	99.329	%			03:46:52
2	Ag 328.068†	-7041.7	-6893.3	2.5584	µg/L	2.5584	ppb	03:46:52
2	As 188.979†	4991.1	4952.6	9898.3	µg/L	9898.3	ppb	03:46:57
2	B 249.677†	104816.7	103964.3	4875.0	µg/L	4875.0	ppb	03:46:52
2	Ba 233.527†	532964.4	529478.2	14190	µg/L	14190	ppb	03:46:52
2	Be 313.107†	4466378.2	4432834.1	2945.5	µg/L	2945.5	ppb	03:46:41
2	Cd 226.502†	345535.5	343321.4	9660.1	µg/L	9660.1	ppb	03:46:52
2	Co 228.616†	187669.3	186481.3	9461.5	µg/L	9461.5	ppb	03:46:52
2	Cr 267.716†	1085158.9	1078026.8	24004	µg/L	24004	ppb	03:46:52
2	Cu 324.752†	2753375.0	2731689.8	20383	µg/L	20383	ppb	03:46:52
2	Mn 257.610†	2814863.7	2796264.5	9331.3	µg/L	9331.3	ppb	03:46:52
2	Mo 202.031†	80605.9	80071.5	9609.5	µg/L	9609.5	ppb	03:46:52
2	Ni 231.604†	168308.6	166901.0	9623.6	µg/L	9623.6	ppb	03:46:52
2	P 214.914†	8358.6	8098.5	16039	µg/L	16039	ppb	03:46:57
2	Pb 220.353†	92120.1	91447.9	24462	µg/L	24462	ppb	03:46:52

2	S 181.975 Axial†	9588.1	9485.1	50718 µg/L	50718 ppb		03:46:57
2	Sb 206.836†	9647.5	9564.0	10009 µg/L	10009 ppb		03:46:57
2	Se 196.026†	6516.2	6461.8	9684.1 µg/L	9684.1 ppb		03:46:57
2	SiO2†	489844.7	484492.1	98457 µg/L	98457 ppb		03:46:52
2	Si 251.611†	568531.0	564413.1	44773 µg/L	44773 ppb		03:46:52
2	Sn 189.927†	20472.5	20311.2	10571 µg/L	10571 ppb		03:46:57
2	Ti 334.940†	4256796.3	4227523.2	9927.5 µg/L	9927.5 ppb		03:46:41
2	Tl 190.801†	6037.1	6016.0	9709.1 µg/L	9709.1 ppb		03:46:57
2	U 409.014†	1792.9	955.4	96.732 µg/L	96.732 ppb		03:46:52
2	V 292.402†	831000.5	825518.0	10018 µg/L	10018 ppb		03:46:52
2	Zn 213.857†	523563.5	519542.9	14605 µg/L	14605 ppb		03:46:52
3	Sc RADIAL	111960.7	111960.7	101 %			03:45:39
3	Al 396.153Radial†	761.5	593.5	-68.030 µg/L	-68.030 ppb		03:45:39
3	Ca 317.933Radial†	592.1	181.1	71.345 µg/L	71.345 ppb		03:45:59
3	Fe 238.204 Radial†	-13.5	-20.4	218.10 µg/L	218.10 ppb		03:45:59
3	K 766.490 Radial†	543539.2	539451.2	302650 µg/L	302650 ppb		03:45:33
3	Mg 279.077 IEC†	-40.9	-56.1	-65.345 µg/L	-65.345 ppb		03:45:59
3	Na 589.592 Radial†	-307.8	200.1	55.783 µg/L	55.783 ppb		03:45:39
3	Sr 421.552†	1749981.7	1739606.7	9933.9 µg/L	9933.9 ppb		03:45:33
3	Sc 361.383	1959469.0	1959469.0	100.76 %			03:47:17
3	Y 371.029	1173630.8	1173630.8	99.354 %			03:47:17
3	Ag 328.068†	-7309.5	-7153.1	2.1349 µg/L	2.1349 ppb		03:47:17
3	As 188.979†	5039.9	4996.8	9985.9 µg/L	9985.9 ppb		03:47:22
3	B 249.677†	108270.5	107302.2	5031.5 µg/L	5031.5 ppb		03:47:17
3	Ba 233.527†	550240.6	546167.1	14638 µg/L	14638 ppb		03:47:17
3	Be 313.107†	4459066.5	4421748.0	2938.1 µg/L	2938.1 ppb		03:47:06
3	Cd 226.502†	357533.6	354932.8	9986.8 µg/L	9986.8 ppb		03:47:17
3	Co 228.616†	193804.9	192409.6	9763.0 µg/L	9763.0 ppb		03:47:17
3	Cr 267.716†	1119468.9	1111147.4	24742 µg/L	24742 ppb		03:47:17
3	Cu 324.752†	2834813.2	2810152.7	20969 µg/L	20969 ppb		03:47:17
3	Mn 257.610†	2902941.5	2881264.0	9615.0 µg/L	9615.0 ppb		03:47:17
3	Mo 202.031†	83254.7	82631.2	9916.7 µg/L	9916.7 ppb		03:47:17
3	Ni 231.604†	173852.2	172258.5	9932.5 µg/L	9932.5 ppb		03:47:17
3	P 214.914†	8426.9	8159.1	16106 µg/L	16106 ppb		03:47:22
3	Pb 220.353†	95249.3	94474.5	25272 µg/L	25272 ppb		03:47:17
3	S 181.975 Axial†	9673.1	9561.3	51125 µg/L	51125 ppb		03:47:22
3	Sb 206.836†	9761.2	9668.6	10115 µg/L	10115 ppb		03:47:22
3	Se 196.026†	6560.3	6500.0	9741.3 µg/L	9741.3 ppb		03:47:22
3	SiO2†	505742.8	499850.2	101580 µg/L	101580 ppb		03:47:17
3	Si 251.611†	586841.9	582098.3	46200 µg/L	46200 ppb		03:47:17
3	Sn 189.927†	20675.0	20494.7	10666 µg/L	10666 ppb		03:47:22
3	Ti 334.940†	4251424.3	4218541.9	9906.4 µg/L	9906.4 ppb		03:47:06
3	Tl 190.801†	6087.9	6061.2	9781.1 µg/L	9781.1 ppb		03:47:22
3	U 409.014†	1848.6	1009.2	102.17 µg/L	102.17 ppb		03:47:17
3	V 292.402†	856733.9	850344.6	10319 µg/L	10319 ppb		03:47:17
3	Zn 213.857†	540433.6	535836.7	15064 µg/L	15064 ppb		03:47:17

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1954166.1	100.49	%	0.399				0.40%
Sc RADIAL	110946.6	99.7	%	1.04				1.05%
Y 371.029	1170922.1	99.125	%	0.3759				0.38%
Ag 328.068†	-7016.3	2.4807	µg/L	0.31415	2.4807	ppb	0.31415	12.66%
Al 396.153Radial†	665.8	-24.948	µg/L	39.1178	-24.948	ppb	39.1178	156.80%
As 188.979†	4984.5	9961.7	µg/L	55.49	9961.7	ppb	55.49	0.56%
QC value within limits for As 188.979 Recovery = 99.62%								
B 249.677†	105681.3	4955.5	µg/L	78.36	4955.5	ppb	78.36	1.58%
QC value within limits for B 249.677 Recovery = 99.11%								
Ba 233.527†	538386.2	14429	µg/L	225.1	14429	ppb	225.1	1.56%
QC value within limits for Ba 233.527 Recovery = 96.19%								
Be 313.107†	4441414.4	2951.2	µg/L	16.67	2951.2	ppb	16.67	0.56%
QC value within limits for Be 313.107 Recovery = 98.37%								
Ca 317.933Radial†	233.3	91.878	µg/L	35.2798	91.878	ppb	35.2798	38.40%
Cd 226.502†	349458.0	9832.8	µg/L	164.14	9832.8	ppb	164.14	1.67%
QC value within limits for Cd 226.502 Recovery = 98.33%								
Co 228.616†	189662.6	9623.2	µg/L	151.94	9623.2	ppb	151.94	1.58%
QC value within limits for Co 228.616 Recovery = 96.23%								
Cr 267.716†	1095865.1	24401	µg/L	372.0	24401	ppb	372.0	1.52%
QC value within limits for Cr 267.716 Recovery = 97.61%								

Cu 324.752†	2773425.0	20695 µg/L	294.5	20695 ppb	294.5	1.42%
QC value within limits for Cu 324.752 Recovery = 103.47%						
Fe 238.204 Radial†	-15.8	236.99 µg/L	27.285	236.99 ppb	27.285	11.51%
K 766.490 Radial†	541538.2	303820 µg/L	1703.6	303820 ppb	1703.6	0.56%
QC value within limits for K 766.490 Radial Recovery = 101.27%						
Mg 279.077 IEC†	-55.4	-65.189 µg/L	48.3546	-65.189 ppb	48.3546	74.18%
Mn 257.610†	2842031.6	9484.1 µg/L	143.08	9484.1 ppb	143.08	1.51%
QC value within limits for Mn 257.610 Recovery = 94.84%						
Mo 202.031†	81440.4	9773.7 µg/L	154.71	9773.7 ppb	154.71	1.58%
QC value within limits for Mo 202.031 Recovery = 97.74%						
Na 589.592 Radial†	271.1	75.594 µg/L	23.6464	75.594 ppb	23.6464	31.28%
Ni 231.604†	169834.4	9792.8 µg/L	156.54	9792.8 ppb	156.54	1.60%
QC value within limits for Ni 231.604 Recovery = 97.93%						
P 214.914†	8136.6	16088 µg/L	42.6	16088 ppb	42.6	0.26%
QC value within limits for P 214.914 Recovery = 107.25%						
Pb 220.353†	93049.8	24891 µg/L	406.9	24891 ppb	406.9	1.63%
QC value within limits for Pb 220.353 Recovery = 99.56%						
S 181.975 Axial†	9502.7	50812 µg/L	278.6	50812 ppb	278.6	0.55%
QC value within limits for S 181.975 Axial Recovery = 101.62%						
Sb 206.836†	9600.5	10045 µg/L	60.6	10045 ppb	60.6	0.60%
QC value within limits for Sb 206.836 Recovery = 100.45%						
Se 196.026†	6495.9	9735.1 µg/L	48.23	9735.1 ppb	48.23	0.50%
QC value within limits for Se 196.026 Recovery = 97.35%						
SiO2†	492593.5	100100 µg/L	1567.6	100100 ppb	1567.6	1.57%
QC value within limits for SiO2 Recovery = 93.55%						
Si 251.611†	573750.5	45525 µg/L	716.9	45525 ppb	716.9	1.57%
QC value within limits for Si 251.611 Recovery = 91.05%						
Sn 189.927†	20394.8	10614 µg/L	48.3	10614 ppb	48.3	0.45%
QC value within limits for Sn 189.927 Recovery = 106.14%						
Sr 421.552†	1745062.3	9965.0 µg/L	44.96	9965.0 ppb	44.96	0.45%
QC value within limits for Sr 421.552 Recovery = 99.65%						
Ti 334.940†	4236706.2	9949.0 µg/L	56.60	9949.0 ppb	56.60	0.57%
QC value within limits for Ti 334.940 Recovery = 99.49%						
Tl 190.801†	6030.8	9732.7 µg/L	41.86	9732.7 ppb	41.86	0.43%
QC value within limits for Tl 190.801 Recovery = 97.33%						
U 409.014†	999.6	101.20 µg/L	4.076	101.20 ppb	4.076	4.03%
V 292.402†	838749.5	10178 µg/L	151.7	10178 ppb	151.7	1.49%
QC value within limits for V 292.402 Recovery = 101.78%						
Zn 213.857†	528437.6	14856 µg/L	231.9	14856 ppb	231.9	1.56%
QC value within limits for Zn 213.857 Recovery = 99.04%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 03:47:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115792.8	115792.8	104	%			03:48:09
1	Al 396.153Radial†	10284.2	9721.1	5043.5	µg/L	5043.5	ppb	03:48:09
1	Ca 317.933Radial†	13941.1	12991.7	5116.8	µg/L	5116.8	ppb	03:48:09
1	Fe 238.204 Radial†	1049.7	1001.9	5166.1	µg/L	5166.1	ppb	03:48:30
1	K 766.490 Radial†	10131.9	8898.1	4992.1	µg/L	4992.1	ppb	03:48:09
1	Mg 279.077 IEC†	987.3	933.5	5214.5	µg/L	5214.5	ppb	03:48:30
1	Na 589.592 Radial†	37109.6	36173.1	10085	µg/L	10085	ppb	03:48:09
1	Sr 421.552†	91231.9	87768.0	501.19	µg/L	501.19	ppb	03:48:09
1	Sc 361.383	1996771.4	1996771.4	102.68	%			03:49:34
1	Y 371.029	1207097.6	1207097.6	102.19	%			03:49:34
1	Ag 328.068†	54470.0	53150.3	509.79	µg/L	509.79	ppb	03:49:39
1	As 188.979†	267.2	255.2	508.40	µg/L	508.40	ppb	03:50:00
1	B 249.677†	11201.8	10758.4	502.85	µg/L	502.85	ppb	03:49:39
1	Ba 233.527†	19412.5	18985.3	509.13	µg/L	509.13	ppb	03:49:39
1	Be 313.107†	788508.6	764272.9	508.28	µg/L	508.28	ppb	03:49:34
1	Cd 226.502†	18528.4	18142.5	510.43	µg/L	510.43	ppb	03:49:39
1	Co 228.616†	10233.5	10033.9	509.11	µg/L	509.11	ppb	03:49:39
1	Cr 267.716†	23283.4	22803.2	508.45	µg/L	508.45	ppb	03:49:39
1	Cu 324.752†	73192.0	68016.6	508.63	µg/L	508.63	ppb	03:49:39
1	Mn 257.610†	156342.6	152495.2	509.54	µg/L	509.54	ppb	03:49:34
1	Mo 202.031†	4286.4	4179.4	501.78	µg/L	501.78	ppb	03:50:00
1	Ni 231.604†	9294.7	8770.6	505.72	µg/L	505.72	ppb	03:49:39
1	P 214.914†	1343.8	1104.6	2442.4	µg/L	2442.4	ppb	03:50:00
1	Pb 220.353†	2006.7	1898.3	508.55	µg/L	508.55	ppb	03:50:00
1	S 181.975 Axial†	244.2	199.0	1062.7	µg/L	1062.7	ppb	03:50:00
1	Sb 206.836†	512.7	480.4	505.86	µg/L	505.86	ppb	03:50:00
1	Se 196.026†	358.3	338.1	508.84	µg/L	508.84	ppb	03:50:00
1	SiO2†	29246.0	26407.4	5366.4	µg/L	5366.4	ppb	03:49:39
1	Si 251.611†	32161.6	31007.9	2468.9	µg/L	2468.9	ppb	03:49:39
1	Sn 189.927†	1019.7	968.7	506.97	µg/L	506.97	ppb	03:50:00
1	Ti 334.940†	222580.2	215977.0	506.89	µg/L	506.89	ppb	03:49:34
1	Tl 190.801†	309.3	320.5	516.47	µg/L	516.47	ppb	03:50:00
1	U 409.014†	5826.7	4849.2	490.02	µg/L	490.02	ppb	03:49:39
1	V 292.402†	43029.2	41983.3	510.76	µg/L	510.76	ppb	03:49:39
1	Zn 213.857†	19140.6	18123.1	508.20	µg/L	508.20	ppb	03:49:39
2	Sc RADIAL	116258.9	116258.9	104	%			03:48:35
2	Al 396.153Radial†	10350.0	9744.4	5055.5	µg/L	5055.5	ppb	03:48:35
2	Ca 317.933Radial†	13985.9	12980.9	5112.6	µg/L	5112.6	ppb	03:48:35
2	Fe 238.204 Radial†	1051.9	1000.0	5156.2	µg/L	5156.2	ppb	03:48:56
2	K 766.490 Radial†	10093.0	8821.9	4949.3	µg/L	4949.3	ppb	03:48:35
2	Mg 279.077 IEC†	987.6	930.0	5194.9	µg/L	5194.9	ppb	03:48:56
2	Na 589.592 Radial†	37174.5	36092.3	10062	µg/L	10062	ppb	03:48:35
2	Sr 421.552†	91415.4	87592.2	500.19	µg/L	500.19	ppb	03:48:35
2	Sc 361.383	2002962.4	2002962.4	103.00	%			03:50:07
2	Y 371.029	1210662.5	1210662.5	102.49	%			03:50:07
2	Ag 328.068†	54277.6	52799.5	506.43	µg/L	506.43	ppb	03:50:12
2	As 188.979†	263.3	250.5	499.17	µg/L	499.17	ppb	03:50:33
2	B 249.677†	11203.1	10726.0	501.33	µg/L	501.33	ppb	03:50:12
2	Ba 233.527†	19413.3	18927.6	507.58	µg/L	507.58	ppb	03:50:12
2	Be 313.107†	779330.6	752988.2	500.78	µg/L	500.78	ppb	03:50:07
2	Cd 226.502†	18516.3	18075.0	508.53	µg/L	508.53	ppb	03:50:12
2	Co 228.616†	10205.7	9976.1	506.20	µg/L	506.20	ppb	03:50:12
2	Cr 267.716†	23341.0	22789.0	508.12	µg/L	508.12	ppb	03:50:12
2	Cu 324.752†	73386.8	67985.4	508.40	µg/L	508.40	ppb	03:50:12
2	Mn 257.610†	154932.5	150655.5	503.40	µg/L	503.40	ppb	03:50:07
2	Mo 202.031†	4329.5	4208.3	505.25	µg/L	505.25	ppb	03:50:33
2	Ni 231.604†	9342.0	8788.4	506.75	µg/L	506.75	ppb	03:50:12
2	P 214.914†	1360.7	1116.9	2470.4	µg/L	2470.4	ppb	03:50:33
2	Pb 220.353†	2027.0	1912.0	512.23	µg/L	512.23	ppb	03:50:33

2	S 181.975 Axial†	242.1	196.2	1047.8 µg/L	1047.8 ppb	03:50:33
2	Sb 206.836†	515.3	481.4	506.90 µg/L	506.90 ppb	03:50:33
2	Se 196.026†	360.2	338.9	510.05 µg/L	510.05 ppb	03:50:33
2	SiO2†	29174.1	26249.5	5334.3 µg/L	5334.3 ppb	03:50:12
2	Si 251.611†	32080.2	30832.1	2454.7 µg/L	2454.7 ppb	03:50:12
2	Sn 189.927†	1027.7	973.4	509.39 µg/L	509.39 ppb	03:50:33
2	Ti 334.940†	220404.8	213194.9	500.36 µg/L	500.36 ppb	03:50:07
2	Tl 190.801†	306.0	316.4	509.79 µg/L	509.79 ppb	03:50:33
2	U 409.014†	5837.7	4842.3	489.32 µg/L	489.32 ppb	03:50:12
2	V 292.402†	42942.5	41769.5	508.20 µg/L	508.20 ppb	03:50:12
2	Zn 213.857†	19087.6	18014.0	505.11 µg/L	505.11 ppb	03:50:12
3	Sc RADIAL	116269.3	116269.3	104 %		03:49:01
3	Al 396.153Radial†	10302.2	9697.8	5031.5 µg/L	5031.5 ppb	03:49:01
3	Ca 317.933Radial†	13930.7	12926.9	5091.3 µg/L	5091.3 ppb	03:49:01
3	Fe 238.204 Radial†	1040.3	988.8	5098.1 µg/L	5098.1 ppb	03:49:22
3	K 766.490 Radial†	10080.3	8808.9	4942.0 µg/L	4942.0 ppb	03:49:01
3	Mg 279.077 IEC†	981.8	924.3	5163.1 µg/L	5163.1 ppb	03:49:22
3	Na 589.592 Radial†	37050.3	35970.2	10028 µg/L	10028 ppb	03:49:01
3	Sr 421.552†	90930.4	87120.1	497.49 µg/L	497.49 ppb	03:49:01
3	Sc 361.383	2014240.8	2014240.8	103.58 %		03:50:40
3	Y 371.029	1217696.4	1217696.4	103.08 %		03:50:40
3	Ag 328.068†	53957.9	52195.8	500.63 µg/L	500.63 ppb	03:50:46
3	As 188.979†	265.5	251.3	500.64 µg/L	500.64 ppb	03:51:06
3	B 249.677†	11090.3	10556.1	493.38 µg/L	493.38 ppb	03:50:46
3	Ba 233.527†	19199.4	18615.5	499.22 µg/L	499.22 ppb	03:50:46
3	Be 313.107†	790108.4	759157.1	504.88 µg/L	504.88 ppb	03:50:40
3	Cd 226.502†	18295.2	17760.8	499.69 µg/L	499.69 ppb	03:50:46
3	Co 228.616†	10090.3	9809.2	497.71 µg/L	497.71 ppb	03:50:46
3	Cr 267.716†	23013.2	22345.6	498.25 µg/L	498.25 ppb	03:50:46
3	Cu 324.752†	72625.0	66850.9	499.92 µg/L	499.92 ppb	03:50:46
3	Mn 257.610†	156959.0	151769.7	507.11 µg/L	507.11 ppb	03:50:40
3	Mo 202.031†	4286.5	4143.3	497.44 µg/L	497.44 ppb	03:51:06
3	Ni 231.604†	9216.7	8616.7	496.84 µg/L	496.84 ppb	03:50:46
3	P 214.914†	1341.5	1091.1	2412.8 µg/L	2412.8 ppb	03:51:06
3	Pb 220.353†	2006.4	1881.1	503.95 µg/L	503.95 ppb	03:51:06
3	S 181.975 Axial†	242.7	195.5	1043.9 µg/L	1043.9 ppb	03:51:06
3	Sb 206.836†	504.8	468.4	493.25 µg/L	493.25 ppb	03:51:06
3	Se 196.026†	352.5	329.5	495.96 µg/L	495.96 ppb	03:51:06
3	SiO2†	28919.9	25845.5	5252.3 µg/L	5252.3 ppb	03:50:46
3	Si 251.611†	31728.6	30318.2	2413.4 µg/L	2413.4 ppb	03:50:46
3	Sn 189.927†	1013.4	954.1	499.31 µg/L	499.31 ppb	03:51:06
3	Ti 334.940†	223233.4	214727.6	503.96 µg/L	503.96 ppb	03:50:40
3	Tl 190.801†	299.4	308.4	497.03 µg/L	497.03 ppb	03:51:06
3	U 409.014†	5868.5	4840.3	489.13 µg/L	489.13 ppb	03:50:46
3	V 292.402†	42583.3	41189.3	501.15 µg/L	501.15 ppb	03:50:46
3	Zn 213.857†	18923.2	17751.5	497.77 µg/L	497.77 ppb	03:50:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2004658.2	103.08	%	0.455				0.44%
Sc RADIAL	116107.0	104	%	0.2				0.23%
Y 371.029	1211818.8	102.59	%	0.457				0.45%
Ag 328.068†	52715.2	505.62	µg/L	4.632	505.62	ppb	4.632	0.92%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	9721.1	5043.5	µg/L	11.99	5043.5	ppb	11.99	0.24%
QC value within limits for Al 396.153Radial Recovery = 100.87%								
As 188.979†	252.3	502.74	µg/L	4.963	502.74	ppb	4.963	0.99%
QC value within limits for As 188.979 Recovery = 100.55%								
B 249.677†	10680.2	499.19	µg/L	5.083	499.19	ppb	5.083	1.02%
QC value within limits for B 249.677 Recovery = 99.84%								
Ba 233.527†	18842.8	505.31	µg/L	5.334	505.31	ppb	5.334	1.06%
QC value within limits for Ba 233.527 Recovery = 101.06%								
Be 313.107†	758806.1	504.65	µg/L	3.758	504.65	ppb	3.758	0.74%
QC value within limits for Be 313.107 Recovery = 100.93%								
Ca 317.933Radial†	12966.5	5106.9	µg/L	13.68	5106.9	ppb	13.68	0.27%
QC value within limits for Ca 317.933Radial Recovery = 102.14%								
Cd 226.502†	17992.8	506.22	µg/L	5.728	506.22	ppb	5.728	1.13%
QC value within limits for Cd 226.502 Recovery = 101.24%								
Co 228.616†	9939.7	504.34	µg/L	5.924	504.34	ppb	5.924	1.17%

```
   QC value within limits for Co 228.616  Recovery = 100.87%
Cr 267.716†            22645.9      504.94 µg/L        5.799      504.94 ppb          5.799   1.15%
   QC value within limits for Cr 267.716  Recovery = 100.99%
Cu 324.752†            67617.6      505.65 µg/L        4.964      505.65 ppb          4.964   0.98%
   QC value within limits for Cu 324.752  Recovery = 101.13%
Fe 238.204 Radial†       996.9      5140.1 µg/L       36.75      5140.1 ppb         36.75   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.80%
K 766.490 Radial†       8843.0      4961.1 µg/L       27.05      4961.1 ppb         27.05   0.55%
   QC value within limits for K 766.490 Radial  Recovery = 99.22%
Mg 279.077 IEC†          929.3      5190.8 µg/L       25.98      5190.8 ppb         25.98   0.50%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.82%
Mn 257.610†           151640.2      506.68 µg/L       3.092      506.68 ppb         3.092   0.61%
   QC value within limits for Mn 257.610  Recovery = 101.34%
Mo 202.031†             4177.0      501.49 µg/L       3.911      501.49 ppb         3.911   0.78%
   QC value within limits for Mo 202.031  Recovery = 100.30%
Na 589.592 Radial†     36078.5       10059 µg/L        28.5       10059 ppb          28.5   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 100.59%
Ni 231.604†             8725.2      503.10 µg/L       5.445      503.10 ppb         5.445   1.08%
   QC value within limits for Ni 231.604  Recovery = 100.62%
P 214.914†              1104.2      2441.9 µg/L       28.82      2441.9 ppb         28.82   1.18%
   QC value within limits for P 214.914  Recovery = 97.67%
Pb 220.353†             1897.2      508.24 µg/L       4.146      508.24 ppb         4.146   0.82%
   QC value within limits for Pb 220.353  Recovery = 101.65%
S 181.975 Axial†         196.9      1051.5 µg/L        9.87      1051.5 ppb          9.87   0.94%
   QC value within limits for S 181.975 Axial  Recovery = 105.15%
Sb 206.836†              476.8      502.00 µg/L       7.599      502.00 ppb         7.599   1.51%
   QC value within limits for Sb 206.836  Recovery = 100.40%
Se 196.026†              335.5      504.95 µg/L       7.811      504.95 ppb         7.811   1.55%
   QC value within limits for Se 196.026  Recovery = 100.99%
SiO2†                   26167.4      5317.7 µg/L       58.89      5317.7 ppb         58.89   1.11%
   QC value within limits for SiO2  Recovery = 99.44%
Si 251.611†             30719.4      2445.7 µg/L       28.83      2445.7 ppb         28.83   1.18%
   QC value within limits for Si 251.611  Recovery = 97.83%
Sn 189.927†              965.4      505.22 µg/L       5.261      505.22 ppb         5.261   1.04%
   QC value within limits for Sn 189.927  Recovery = 101.04%
Sr 421.552†             87493.4      499.62 µg/L       1.913      499.62 ppb         1.913   0.38%
   QC value within limits for Sr 421.552  Recovery = 99.92%
Ti 334.940†            214633.2      503.73 µg/L       3.272      503.73 ppb         3.272   0.65%
   QC value within limits for Ti 334.940  Recovery = 100.75%
Tl 190.801†              315.1      507.76 µg/L       9.878      507.76 ppb         9.878   1.95%
   QC value within limits for Tl 190.801  Recovery = 101.55%
U 409.014†              4844.0      489.49 µg/L       0.467      489.49 ppb         0.467   0.10%
   QC value within limits for U 409.014  Recovery = 97.90%
V 292.402†              41647.4      506.70 µg/L       4.976      506.70 ppb         4.976   0.98%
   QC value within limits for V 292.402  Recovery = 101.34%
Zn 213.857†             17962.8      503.69 µg/L       5.361      503.69 ppb         5.361   1.06%
   QC value within limits for Zn 213.857  Recovery = 100.74%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 03:51:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113831.0	113831.0	102	%			03:51:48
1	Al 396.153Radial†	225.4	57.0	29.637	µg/L	29.637	ppb	03:51:48
1	Ca 317.933Radial†	507.3	88.5	34.870	µg/L	34.870	ppb	03:52:08
1	Fe 238.204 Radial†	12.7	5.4	27.979	µg/L	27.979	ppb	03:52:08
1	K 766.490 Radial†	822.6	-35.6	-19.988	µg/L	-19.988	ppb	03:51:48
1	Mg 279.077 IEC†	24.9	8.9	49.742	µg/L	49.742	ppb	03:52:08
1	Na 589.592 Radial†	-556.5	-38.0	-10.599	µg/L	-10.599	ppb	03:51:48
1	Sr 421.552†	15.8	98.1	0.5600	µg/L	0.5600	ppb	03:51:48
1	Sc 361.383	1993600.9	1993600.9	102.52	%			03:53:11
1	Y 371.029	1210616.8	1210616.8	102.49	%			03:53:11
1	Ag 328.068†	-14.3	87.3	0.8374	µg/L	0.8374	ppb	03:53:16
1	As 188.979†	3.1	-2.1	-4.2524	µg/L	-4.2524	ppb	03:53:37
1	B 249.677†	227.7	70.9	3.3158	µg/L	3.3158	ppb	03:53:16
1	Ba 233.527†	-37.6	42.5	1.1379	µg/L	1.1379	ppb	03:53:37
1	Be 313.107†	4044.1	279.2	0.1854	µg/L	0.1854	ppb	03:53:16
1	Cd 226.502†	-60.4	38.6	1.0741	µg/L	1.0741	ppb	03:53:37
1	Co 228.616†	-59.6	9.2	0.4662	µg/L	0.4662	ppb	03:53:37
1	Cr 267.716†	-17.5	110.1	2.4500	µg/L	2.4500	ppb	03:53:16
1	Cu 324.752†	3456.5	105.6	0.7941	µg/L	0.7941	ppb	03:53:16
1	Mn 257.610†	11.3	242.2	0.8118	µg/L	0.8118	ppb	03:53:37
1	Mo 202.031†	-0.1	4.8	0.5748	µg/L	0.5748	ppb	03:53:37
1	Ni 231.604†	305.8	16.6	0.9590	µg/L	0.9590	ppb	03:53:37
1	P 214.914†	197.4	-11.6	-26.478	µg/L	-26.478	ppb	03:53:37
1	Pb 220.353†	55.6	-1.7	-0.4516	µg/L	-0.4516	ppb	03:53:37
1	S 181.975 Axial†	40.9	1.0	5.5001	µg/L	5.5001	ppb	03:53:37
1	Sb 206.836†	17.5	-1.8	-1.9377	µg/L	-1.9377	ppb	03:53:37
1	Se 196.026†	15.4	4.2	6.2985	µg/L	6.2985	ppb	03:53:37
1	SiO2†	2104.4	-23.0	-4.6683	µg/L	-4.6683	ppb	03:53:16
1	Si 251.611†	395.6	71.2	5.8403	µg/L	5.8403	ppb	03:53:37
1	Sn 189.927†	20.2	-4.6	-2.3826	µg/L	-2.3826	ppb	03:53:37
1	Ti 334.940†	1221.0	394.4	0.9241	µg/L	0.9241	ppb	03:53:16
1	Tl 190.801†	-16.7	3.1	4.9312	µg/L	4.9312	ppb	03:53:37
1	U 409.014†	726.9	-116.4	-11.786	µg/L	-11.786	ppb	03:53:16
1	V 292.402†	-31.8	45.6	0.5366	µg/L	0.5366	ppb	03:53:16
1	Zn 213.857†	562.5	30.5	0.8519	µg/L	0.8519	ppb	03:53:37
2	Sc RADIAL	113812.4	113812.4	102	%			03:52:14
2	Al 396.153Radial†	224.5	56.1	29.206	µg/L	29.206	ppb	03:52:14
2	Ca 317.933Radial†	494.1	75.7	29.820	µg/L	29.820	ppb	03:52:34
2	Fe 238.204 Radial†	14.2	6.9	35.528	µg/L	35.528	ppb	03:52:34
2	K 766.490 Radial†	826.3	-31.9	-17.923	µg/L	-17.923	ppb	03:52:14
2	Mg 279.077 IEC†	22.9	6.9	38.658	µg/L	38.658	ppb	03:52:34
2	Na 589.592 Radial†	-569.9	-51.2	-14.265	µg/L	-14.265	ppb	03:52:14
2	Sr 421.552†	38.9	120.7	0.6891	µg/L	0.6891	ppb	03:52:14
2	Sc 361.383	1991815.5	1991815.5	102.42	%			03:53:43
2	Y 371.029	1210794.5	1210794.5	102.50	%			03:53:43
2	Ag 328.068†	-98.1	5.5	0.0562	µg/L	0.0562	ppb	03:53:48
2	As 188.979†	0.7	-4.4	-8.7729	µg/L	-8.7729	ppb	03:54:09
2	B 249.677†	191.1	35.4	1.6496	µg/L	1.6496	ppb	03:53:48
2	Ba 233.527†	-49.7	30.6	0.8200	µg/L	0.8200	ppb	03:54:09
2	Be 313.107†	4005.6	245.2	0.1630	µg/L	0.1630	ppb	03:53:48
2	Cd 226.502†	-70.1	29.0	0.8029	µg/L	0.8029	ppb	03:54:09
2	Co 228.616†	-56.1	12.6	0.6394	µg/L	0.6394	ppb	03:54:09
2	Cr 267.716†	-57.3	71.3	1.5859	µg/L	1.5859	ppb	03:53:48
2	Cu 324.752†	3384.9	38.8	0.2972	µg/L	0.2972	ppb	03:53:48
2	Mn 257.610†	-32.6	199.4	0.6699	µg/L	0.6699	ppb	03:54:09
2	Mo 202.031†	2.3	7.1	0.8497	µg/L	0.8497	ppb	03:54:09
2	Ni 231.604†	284.6	-3.8	-0.2200	µg/L	-0.2200	ppb	03:54:09
2	P 214.914†	202.2	-6.7	-15.181	µg/L	-15.181	ppb	03:54:09
2	Pb 220.353†	60.6	3.2	0.8634	µg/L	0.8634	ppb	03:54:09

2	S 181.975 Axial†	41.8	2.0	10.594 µg/L	10.594 ppb	03:54:09
2	Sb 206.836†	19.5	0.1	0.0972 µg/L	0.0972 ppb	03:54:09
2	Se 196.026†	12.6	1.5	2.2589 µg/L	2.2589 ppb	03:54:09
2	SiO2†	2060.8	-63.6	-12.934 µg/L	-12.934 ppb	03:53:48
2	Si 251.611†	420.8	96.2	7.7537 µg/L	7.7537 ppb	03:54:09
2	Sn 189.927†	26.5	1.5	0.7961 µg/L	0.7961 ppb	03:54:09
2	Ti 334.940†	1047.2	225.8	0.5286 µg/L	0.5286 ppb	03:53:48
2	Tl 190.801†	-18.6	1.2	1.9204 µg/L	1.9204 ppb	03:54:09
2	U 409.014†	701.9	-140.2	-14.197 µg/L	-14.197 ppb	03:53:48
2	V 292.402†	-61.0	17.0	0.1907 µg/L	0.1907 ppb	03:53:48
2	Zn 213.857†	563.1	31.6	0.8878 µg/L	0.8878 ppb	03:54:09
3	Sc RADIAL	112529.7	112529.7	101 %		03:52:40
3	Al 396.153Radial†	247.0	80.9	42.154 µg/L	42.154 ppb	03:52:40
3	Ca 317.933Radial†	510.0	97.0	38.191 µg/L	38.191 ppb	03:53:00
3	Fe 238.204 Radial†	13.8	6.6	34.188 µg/L	34.188 ppb	03:53:00
3	K 766.490 Radial†	848.5	-0.7	-0.4198 µg/L	-0.4198 ppb	03:52:40
3	Mg 279.077 IEC†	25.1	9.4	52.127 µg/L	52.127 ppb	03:53:00
3	Na 589.592 Radial†	-542.6	-30.6	-8.5226 µg/L	-8.5226 ppb	03:52:40
3	Sr 421.552†	48.2	130.3	0.7443 µg/L	0.7443 ppb	03:52:40
3	Sc 361.383	1983398.1	1983398.1	101.99 %		03:54:15
3	Y 371.029	1204482.0	1204482.0	101.97 %		03:54:15
3	Ag 328.068†	-81.5	21.4	0.2099 µg/L	0.2099 ppb	03:54:20
3	As 188.979†	0.8	-4.3	-8.6878 µg/L	-8.6878 ppb	03:54:41
3	B 249.677†	201.2	46.1	2.1494 µg/L	2.1494 ppb	03:54:20
3	Ba 233.527†	-42.2	37.8	1.0133 µg/L	1.0133 ppb	03:54:41
3	Be 313.107†	3894.4	152.7	0.1013 µg/L	0.1013 ppb	03:54:20
3	Cd 226.502†	-67.7	31.0	0.8631 µg/L	0.8631 ppb	03:54:41
3	Co 228.616†	-60.0	8.5	0.4302 µg/L	0.4302 ppb	03:54:41
3	Cr 267.716†	-25.3	102.4	2.2786 µg/L	2.2786 ppb	03:54:20
3	Cu 324.752†	3348.2	16.8	0.1326 µg/L	0.1326 ppb	03:54:20
3	Mn 257.610†	-29.4	202.4	0.6796 µg/L	0.6796 ppb	03:54:41
3	Mo 202.031†	-6.6	-1.6	-0.1903 µg/L	-0.1903 ppb	03:54:41
3	Ni 231.604†	289.5	2.1	0.1228 µg/L	0.1228 ppb	03:54:41
3	P 214.914†	195.6	-12.4	-28.102 µg/L	-28.102 ppb	03:54:41
3	Pb 220.353†	61.5	4.3	1.1507 µg/L	1.1507 ppb	03:54:41
3	S 181.975 Axial†	40.6	1.0	5.2816 µg/L	5.2816 ppb	03:54:41
3	Sb 206.836†	23.4	4.0	4.1900 µg/L	4.1900 ppb	03:54:41
3	Se 196.026†	1.6	-9.3	-13.931 µg/L	-13.931 ppb	03:54:41
3	SiO2†	2025.3	-89.9	-18.271 µg/L	-18.271 ppb	03:54:20
3	Si 251.611†	384.0	61.8	5.0101 µg/L	5.0101 ppb	03:54:41
3	Sn 189.927†	24.0	-0.8	-0.4096 µg/L	-0.4096 ppb	03:54:41
3	Ti 334.940†	1144.3	325.3	0.7618 µg/L	0.7618 ppb	03:54:20
3	Tl 190.801†	-19.3	0.4	0.6354 µg/L	0.6354 ppb	03:54:41
3	U 409.014†	749.5	-90.6	-9.1731 µg/L	-9.1731 ppb	03:54:20
3	V 292.402†	-29.3	47.9	0.5636 µg/L	0.5636 ppb	03:54:20
3	Zn 213.857†	551.1	22.1	0.6196 µg/L	0.6196 ppb	03:54:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1989604.8	102.31	%	0.280				0.27%
Sc RADIAL	113391.0	102	%	0.7				0.66%
Y 371.029	1208631.1	102.32	%	0.304				0.30%
Ag 328.068†	38.1	0.3678	µg/L	0.41382	0.3678	ppb	0.41382	112.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	64.7	33.666	µg/L	7.3542	33.666	ppb	7.3542	21.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.2377	µg/L	2.58571	-7.2377	ppb	2.58571	35.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	50.8	2.3716	µg/L	0.85502	2.3716	ppb	0.85502	36.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	37.0	0.9904	µg/L	0.16018	0.9904	ppb	0.16018	16.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	225.7	0.1499	µg/L	0.04354	0.1499	ppb	0.04354	29.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	87.1	34.293	µg/L	4.2152	34.293	ppb	4.2152	12.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	32.9	0.9134	µg/L	0.14240	0.9134	ppb	0.14240	15.59%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	10.1	0.5119	µg/L	0.11184	0.5119	ppb	0.11184	21.85%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                94.6      2.1048 µg/L       0.45750      2.1048 ppb        0.45750  21.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                53.7      0.4080 µg/L       0.34443      0.4080 ppb        0.34443  84.43%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          6.3      32.565 µg/L        4.0273      32.565 ppb         4.0273  12.37%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -22.8     -12.777 µg/L       10.7511     -12.777 ppb        10.7511  84.15%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             8.4      46.843 µg/L        7.1875      46.843 ppb         7.1875  15.34%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               214.7      0.7204 µg/L       0.07930      0.7204 ppb        0.07930  11.01%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.4      0.4114 µg/L       0.53894      0.4114 ppb        0.53894 131.00%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -39.9     -11.129 µg/L        2.9078     -11.129 ppb         2.9078  26.13%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.0      0.2873 µg/L       0.60646      0.2873 ppb        0.60646 211.13%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -10.2     -23.254 µg/L        7.0380     -23.254 ppb         7.0380  30.27%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.9      0.5208 µg/L       0.85429      0.5208 ppb        0.85429 164.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.3      7.1254 µg/L       3.00627      7.1254 ppb        3.00627  42.19%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.8      0.7832 µg/L       3.12094      0.7832 ppb        3.12094 398.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.2     -1.7912 µg/L      10.70562     -1.7912 ppb       10.70562 597.68%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -58.8     -11.958 µg/L        6.8539     -11.958 ppb         6.8539  57.32%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                76.4      6.2014 µg/L       1.40704      6.2014 ppb        1.40704  22.69%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.3     -0.6654 µg/L       1.60469     -0.6654 ppb        1.60469 241.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               116.4      0.6644 µg/L       0.09457      0.6644 ppb        0.09457  14.23%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               315.2      0.7382 µg/L       0.19883      0.7382 ppb        0.19883  26.94%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.6      2.4957 µg/L       2.20493      2.4957 ppb        2.20493  88.35%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -115.7     -11.719 µg/L        2.5125     -11.719 ppb         2.5125  21.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                36.8      0.4303 µg/L       0.20792      0.4303 ppb        0.20792  48.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               28.1      0.7864 µg/L       0.14562      0.7864 ppb        0.14562  18.52%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 04:34:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111534.1	111534.1	100	%			04:35:22
1	Al 396.153Radial†	10314.3	10128.5	5255.4	µg/L	5255.4	ppb	04:35:22
1	Ca 317.933Radial†	13514.5	13077.8	5150.7	µg/L	5150.7	ppb	04:35:43
1	Fe 238.204 Radial†	1044.3	1035.1	5336.4	µg/L	5336.4	ppb	04:35:43
1	K 766.490 Radial†	10184.9	9322.8	5230.3	µg/L	5230.3	ppb	04:35:22
1	Mg 279.077 IEC†	983.7	966.1	5396.3	µg/L	5396.3	ppb	04:35:43
1	Na 589.592 Radial†	36895.3	37321.2	10405	µg/L	10405	ppb	04:35:22
1	Sr 421.552†	90247.4	90133.8	514.70	µg/L	514.70	ppb	04:35:22
1	Sc 361.383	1958966.7	1958966.7	100.73	%			04:36:46
1	Y 371.029	1184212.7	1184212.7	100.25	%			04:36:46
1	Ag 328.068†	54229.6	53935.3	517.30	µg/L	517.30	ppb	04:36:52
1	As 188.979†	260.6	253.6	505.30	µg/L	505.30	ppb	04:37:12
1	B 249.677†	11006.7	10775.2	503.58	µg/L	503.58	ppb	04:36:52
1	Ba 233.527†	19121.1	19060.9	511.16	µg/L	511.16	ppb	04:36:52
1	Be 313.107†	774359.1	765046.4	508.80	µg/L	508.80	ppb	04:36:46
1	Cd 226.502†	18181.2	18146.1	510.52	µg/L	510.52	ppb	04:36:52
1	Co 228.616†	10065.0	10059.0	510.39	µg/L	510.39	ppb	04:36:52
1	Cr 267.716†	22870.7	22831.1	509.08	µg/L	509.08	ppb	04:36:52
1	Cu 324.752†	72754.8	68958.2	515.70	µg/L	515.70	ppb	04:36:52
1	Mn 257.610†	153477.1	152589.0	509.87	µg/L	509.87	ppb	04:36:46
1	Mo 202.031†	4258.3	4232.1	508.11	µg/L	508.11	ppb	04:37:12
1	Ni 231.604†	9217.1	8868.2	511.35	µg/L	511.35	ppb	04:36:52
1	P 214.914†	1325.0	1111.2	2456.5	µg/L	2456.5	ppb	04:37:12
1	Pb 220.353†	1967.1	1896.7	508.14	µg/L	508.14	ppb	04:37:12
1	S 181.975 Axial†	217.6	177.1	945.55	µg/L	945.55	ppb	04:37:12
1	Sb 206.836†	513.9	491.2	517.26	µg/L	517.26	ppb	04:37:12
1	Se 196.026†	353.8	340.4	512.35	µg/L	512.35	ppb	04:37:12
1	SiO2†	28871.0	26584.8	5402.5	µg/L	5402.5	ppb	04:36:52
1	Si 251.611†	31776.6	31230.2	2486.5	µg/L	2486.5	ppb	04:36:52
1	Sn 189.927†	1008.1	976.4	510.99	µg/L	510.99	ppb	04:37:12
1	Ti 334.940†	219105.3	216710.9	508.61	µg/L	508.61	ppb	04:36:46
1	Tl 190.801†	304.4	321.5	517.99	µg/L	517.99	ppb	04:37:12
1	U 409.014†	5795.9	4928.2	497.98	µg/L	497.98	ppb	04:36:52
1	V 292.402†	42549.5	42315.7	514.83	µg/L	514.83	ppb	04:36:52
1	Zn 213.857†	18790.0	18134.8	508.47	µg/L	508.47	ppb	04:36:52
2	Sc RADIAL	111458.0	111458.0	100	%			04:35:48
2	Al 396.153Radial†	10234.7	10056.1	5217.8	µg/L	5217.8	ppb	04:35:48
2	Ca 317.933Radial†	13508.8	13081.2	5152.1	µg/L	5152.1	ppb	04:36:09
2	Fe 238.204 Radial†	1036.0	1027.5	5297.5	µg/L	5297.5	ppb	04:36:09
2	K 766.490 Radial†	10146.3	9291.3	5212.6	µg/L	5212.6	ppb	04:35:48
2	Mg 279.077 IEC†	975.9	959.0	5356.7	µg/L	5356.7	ppb	04:36:09
2	Na 589.592 Radial†	36791.2	37242.3	10383	µg/L	10383	ppb	04:35:48
2	Sr 421.552†	89957.9	89906.2	513.40	µg/L	513.40	ppb	04:35:48
2	Sc 361.383	1971856.7	1971856.7	101.40	%			04:37:20
2	Y 371.029	1191315.0	1191315.0	100.85	%			04:37:20
2	Ag 328.068†	54330.2	53682.7	514.88	µg/L	514.88	ppb	04:37:25
2	As 188.979†	264.0	255.3	508.63	µg/L	508.63	ppb	04:37:46
2	B 249.677†	11116.5	10812.1	505.32	µg/L	505.32	ppb	04:37:25
2	Ba 233.527†	19172.1	18987.0	509.18	µg/L	509.18	ppb	04:37:25
2	Be 313.107†	783035.7	768578.4	511.15	µg/L	511.15	ppb	04:37:20
2	Cd 226.502†	18230.0	18076.2	508.56	µg/L	508.56	ppb	04:37:25
2	Co 228.616†	10085.7	10014.1	508.11	µg/L	508.11	ppb	04:37:25
2	Cr 267.716†	22976.9	22787.4	508.10	µg/L	508.10	ppb	04:37:25
2	Cu 324.752†	72826.3	68556.6	512.69	µg/L	512.69	ppb	04:37:25
2	Mn 257.610†	155143.8	153236.8	512.03	µg/L	512.03	ppb	04:37:20
2	Mo 202.031†	4270.9	4216.9	506.28	µg/L	506.28	ppb	04:37:46
2	Ni 231.604†	9237.8	8828.8	509.07	µg/L	509.07	ppb	04:37:25
2	P 214.914†	1332.3	1109.8	2453.6	µg/L	2453.6	ppb	04:37:46
2	Pb 220.353†	1979.9	1896.7	508.11	µg/L	508.11	ppb	04:37:46

2	S 181.975 Axial†	227.5	185.5	990.35 µg/L	990.35 ppb	04:37:46
2	Sb 206.836†	508.1	482.2	507.76 µg/L	507.76 ppb	04:37:46
2	Se 196.026†	352.9	337.2	507.59 µg/L	507.59 ppb	04:37:46
2	SiO2†	28992.8	26517.5	5388.8 µg/L	5388.8 ppb	04:37:25
2	Si 251.611†	31812.6	31059.6	2472.9 µg/L	2472.9 ppb	04:37:25
2	Sn 189.927†	1003.6	965.4	505.30 µg/L	505.30 ppb	04:37:46
2	Ti 334.940†	221363.3	217515.9	510.50 µg/L	510.50 ppb	04:37:20
2	Tl 190.801†	301.9	317.1	510.99 µg/L	510.99 ppb	04:37:46
2	U 409.014†	5894.2	4987.5	503.99 µg/L	503.99 ppb	04:37:25
2	V 292.402†	42650.6	42139.4	512.70 µg/L	512.70 ppb	04:37:25
2	Zn 213.857†	18849.9	18071.9	506.71 µg/L	506.71 ppb	04:37:25
3	Sc RADIAL	112764.1	112764.1	101 %		04:36:14
3	Al 396.153Radial†	10330.5	10032.2	5205.3 µg/L	5205.3 ppb	04:36:14
3	Ca 317.933Radial†	13510.4	12926.6	5091.2 µg/L	5091.2 ppb	04:36:34
3	Fe 238.204 Radial†	1034.4	1013.9	5227.9 µg/L	5227.9 ppb	04:36:34
3	K 766.490 Radial†	10229.7	9256.2	5193.0 µg/L	5193.0 ppb	04:36:14
3	Mg 279.077 IEC†	983.6	955.4	5336.3 µg/L	5336.3 ppb	04:36:34
3	Na 589.592 Radial†	36943.6	36967.3	10306 µg/L	10306 ppb	04:36:14
3	Sr 421.552†	90674.6	89573.1	511.50 µg/L	511.50 ppb	04:36:14
3	Sc 361.383	1965620.4	1965620.4	101.08 %		04:37:53
3	Y 371.029	1187943.6	1187943.6	100.57 %		04:37:53
3	Ag 328.068†	54225.3	53748.9	515.51 µg/L	515.51 ppb	04:37:58
3	As 188.979†	266.1	258.2	514.44 µg/L	514.44 ppb	04:38:19
3	B 249.677†	11032.9	10764.2	503.10 µg/L	503.10 ppb	04:37:58
3	Ba 233.527†	19111.6	18987.2	509.19 µg/L	509.19 ppb	04:37:58
3	Be 313.107†	778263.9	766307.5	509.63 µg/L	509.63 ppb	04:37:53
3	Cd 226.502†	18161.7	18065.6	508.27 µg/L	508.27 ppb	04:37:58
3	Co 228.616†	10070.1	10030.2	508.93 µg/L	508.93 ppb	04:37:58
3	Cr 267.716†	22876.0	22759.5	507.48 µg/L	507.48 ppb	04:37:58
3	Cu 324.752†	72870.5	68828.2	514.70 µg/L	514.70 ppb	04:37:58
3	Mn 257.610†	154330.6	152917.8	510.95 µg/L	510.95 ppb	04:37:53
3	Mo 202.031†	4272.6	4232.0	508.09 µg/L	508.09 ppb	04:38:19
3	Ni 231.604†	9170.0	8790.6	506.87 µg/L	506.87 ppb	04:37:58
3	P 214.914†	1334.0	1115.6	2466.6 µg/L	2466.6 ppb	04:38:19
3	Pb 220.353†	1971.9	1894.9	507.65 µg/L	507.65 ppb	04:38:19
3	S 181.975 Axial†	221.7	180.5	963.39 µg/L	963.39 ppb	04:38:19
3	Sb 206.836†	506.9	482.6	508.19 µg/L	508.19 ppb	04:38:19
3	Se 196.026†	355.4	340.8	512.92 µg/L	512.92 ppb	04:38:19
3	SiO2†	28860.2	26477.1	5380.6 µg/L	5380.6 ppb	04:37:58
3	Si 251.611†	31733.9	31081.2	2474.5 µg/L	2474.5 ppb	04:37:58
3	Sn 189.927†	1007.3	972.2	508.78 µg/L	508.78 ppb	04:38:19
3	Ti 334.940†	220182.1	217039.9	509.39 µg/L	509.39 ppb	04:37:53
3	Tl 190.801†	299.5	315.6	508.63 µg/L	508.63 ppb	04:38:19
3	U 409.014†	5888.0	4999.8	505.25 µg/L	505.25 ppb	04:37:58
3	V 292.402†	42506.7	42130.4	512.60 µg/L	512.60 ppb	04:37:58
3	Zn 213.857†	18828.4	18109.6	507.80 µg/L	507.80 ppb	04:37:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1965481.3	101.07	%	0.331				0.33%
Sc RADIAL	111918.8	101	%	0.7				0.66%
Y 371.029	1187823.8	100.56	%	0.301				0.30%
Ag 328.068†	53789.0	515.90	µg/L	1.258	515.90	ppb	1.258	0.24%
QC value within limits for Ag 328.068 Recovery = 103.18%								
Al 396.153Radial†	10072.3	5226.2	µg/L	26.11	5226.2	ppb	26.11	0.50%
QC value within limits for Al 396.153Radial Recovery = 104.52%								
As 188.979†	255.7	509.46	µg/L	4.628	509.46	ppb	4.628	0.91%
QC value within limits for As 188.979 Recovery = 101.89%								
B 249.677†	10783.8	504.00	µg/L	1.169	504.00	ppb	1.169	0.23%
QC value within limits for B 249.677 Recovery = 100.80%								
Ba 233.527†	19011.7	509.84	µg/L	1.143	509.84	ppb	1.143	0.22%
QC value within limits for Ba 233.527 Recovery = 101.97%								
Be 313.107†	766644.1	509.86	µg/L	1.190	509.86	ppb	1.190	0.23%
QC value within limits for Be 313.107 Recovery = 101.97%								
Ca 317.933Radial†	13028.5	5131.3	µg/L	34.77	5131.3	ppb	34.77	0.68%
QC value within limits for Ca 317.933Radial Recovery = 102.63%								
Cd 226.502†	18096.0	509.12	µg/L	1.224	509.12	ppb	1.224	0.24%
QC value within limits for Cd 226.502 Recovery = 101.82%								
Co 228.616†	10034.4	509.15	µg/L	1.157	509.15	ppb	1.157	0.23%

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   QC value within limits for Co 228.616  Recovery = 101.83%
Cr 267.716†            22792.7      508.22 µg/L        0.806      508.22 ppb          0.806   0.16%
   QC value within limits for Cr 267.716  Recovery = 101.64%
Cu 324.752†            68781.0      514.36 µg/L        1.531      514.36 ppb          1.531   0.30%
   QC value within limits for Cu 324.752  Recovery = 102.87%
Fe 238.204 Radial†      1025.5      5287.3 µg/L       55.01      5287.3 ppb         55.01   1.04%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.75%
K 766.490 Radial†       9290.1      5212.0 µg/L       18.69      5212.0 ppb         18.69   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 104.24%
Mg 279.077 IEC†          960.2      5363.1 µg/L       30.51      5363.1 ppb         30.51   0.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.26%
Mn 257.610†           152914.5      510.95 µg/L        1.078      510.95 ppb          1.078   0.21%
   QC value within limits for Mn 257.610  Recovery = 102.19%
Mo 202.031†             4227.0      507.49 µg/L        1.047      507.49 ppb          1.047   0.21%
   QC value within limits for Mo 202.031  Recovery = 101.50%
Na 589.592 Radial†     37176.9       10365 µg/L        51.8       10365 ppb          51.8   0.50%
   QC value within limits for Na 589.592 Radial  Recovery = 103.65%
Ni 231.604†             8829.2      509.10 µg/L        2.237      509.10 ppb          2.237   0.44%
   QC value within limits for Ni 231.604  Recovery = 101.82%
P 214.914†              1112.2      2458.9 µg/L        6.82      2458.9 ppb          6.82   0.28%
   QC value within limits for P 214.914  Recovery = 98.35%
Pb 220.353†             1896.1      507.97 µg/L        0.274      507.97 ppb          0.274   0.05%
   QC value within limits for Pb 220.353  Recovery = 101.59%
S 181.975 Axial†         181.0      966.43 µg/L       22.554      966.43 ppb         22.554   2.33%
   QC value within limits for S 181.975 Axial  Recovery = 96.64%
Sb 206.836†              485.3      511.07 µg/L        5.363      511.07 ppb          5.363   1.05%
   QC value within limits for Sb 206.836  Recovery = 102.21%
Se 196.026†              339.5      510.95 µg/L        2.928      510.95 ppb          2.928   0.57%
   QC value within limits for Se 196.026  Recovery = 102.19%
SiO2†                  26526.5      5390.6 µg/L       11.06      5390.6 ppb         11.06   0.21%
   QC value within limits for SiO2  Recovery = 100.81%
Si 251.611†            31123.7      2478.0 µg/L        7.46      2478.0 ppb          7.46   0.30%
   QC value within limits for Si 251.611  Recovery = 99.12%
Sn 189.927†              971.3      508.36 µg/L        2.869      508.36 ppb          2.869   0.56%
   QC value within limits for Sn 189.927  Recovery = 101.67%
Sr 421.552†            89871.1      513.20 µg/L        1.610      513.20 ppb          1.610   0.31%
   QC value within limits for Sr 421.552  Recovery = 102.64%
Ti 334.940†           217088.9      509.50 µg/L        0.950      509.50 ppb          0.950   0.19%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†              318.1      512.54 µg/L        4.870      512.54 ppb          4.870   0.95%
   QC value within limits for Tl 190.801  Recovery = 102.51%
U 409.014†              4971.8      502.41 µg/L        3.883      502.41 ppb          3.883   0.77%
   QC value within limits for U 409.014  Recovery = 100.48%
V 292.402†             42195.2      513.38 µg/L        1.260      513.38 ppb          1.260   0.25%
   QC value within limits for V 292.402  Recovery = 102.68%
Zn 213.857†            18105.5      507.66 µg/L        0.885      507.66 ppb          0.885   0.17%
   QC value within limits for Zn 213.857  Recovery = 101.53%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/15/2009 04:38:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111753.6	111753.6	100	%			04:39:02
1	Al 396.153Radial†	606.8	440.9	229.23	µg/L	229.23	ppb	04:39:02
1	Ca 317.933Radial†	943.1	531.8	209.43	µg/L	209.43	ppb	04:39:23
1	Fe 238.204 Radial†	28.8	21.8	111.97	µg/L	111.97	ppb	04:39:23
1	K 766.490 Radial†	1031.5	187.3	105.07	µg/L	105.07	ppb	04:39:02
1	Mg 279.077 IEC†	82.8	67.0	374.22	µg/L	374.22	ppb	04:39:23
1	Na 589.592 Radial†	583.9	1087.6	303.22	µg/L	303.22	ppb	04:39:02
1	Sr 421.552†	864.7	943.7	5.3890	µg/L	5.3890	ppb	04:39:02
1	Sc 361.383	2011530.6	2011530.6	103.44	%			04:40:25
1	Y 371.029	1223829.6	1223829.6	103.60	%			04:40:25
1	Ag 328.068†	481.0	566.3	5.4332	µg/L	5.4332	ppb	04:40:30
1	As 188.979†	15.9	10.3	20.503	µg/L	20.503	ppb	04:40:51
1	B 249.677†	1254.5	1061.7	49.747	µg/L	49.747	ppb	04:40:30
1	Ba 233.527†	141.0	215.5	5.7768	µg/L	5.7768	ppb	04:40:51
1	Be 313.107†	11404.5	7359.8	4.8947	µg/L	4.8947	ppb	04:40:30
1	Cd 226.502†	91.9	186.3	5.2603	µg/L	5.2603	ppb	04:40:51
1	Co 228.616†	24.2	90.8	4.6201	µg/L	4.6201	ppb	04:40:51
1	Cr 267.716†	98.5	222.4	4.9590	µg/L	4.9590	ppb	04:40:30
1	Cu 324.752†	4706.7	1284.2	9.6067	µg/L	9.6067	ppb	04:40:30
1	Mn 257.610†	3009.6	3140.8	10.495	µg/L	10.495	ppb	04:40:30
1	Mo 202.031†	84.6	86.7	10.404	µg/L	10.404	ppb	04:40:51
1	Ni 231.604†	365.2	71.3	4.1140	µg/L	4.1140	ppb	04:40:51
1	P 214.914†	265.9	52.9	118.59	µg/L	118.59	ppb	04:40:51
1	Pb 220.353†	101.6	42.3	11.308	µg/L	11.308	ppb	04:40:51
1	S 181.975 Axial†	55.2	14.5	77.363	µg/L	77.363	ppb	04:40:51
1	Sb 206.836†	24.5	4.8	5.0569	µg/L	5.0569	ppb	04:40:51
1	Se 196.026†	29.5	17.7	26.537	µg/L	26.537	ppb	04:40:51
1	SiO2†	3148.8	968.4	196.80	µg/L	196.80	ppb	04:40:30
1	Si 251.611†	1649.8	1280.3	103.31	µg/L	103.31	ppb	04:40:51
1	Sn 189.927†	37.0	11.4	6.0867	µg/L	6.0867	ppb	04:40:51
1	Ti 334.940†	2997.7	2101.5	4.9231	µg/L	4.9231	ppb	04:40:30
1	Tl 190.801†	-5.5	14.0	22.524	µg/L	22.524	ppb	04:40:51
1	U 409.014†	1264.2	396.7	40.138	µg/L	40.138	ppb	04:40:30
1	V 292.402†	343.0	408.2	5.0668	µg/L	5.0668	ppb	04:40:30
1	Zn 213.857†	897.0	348.9	9.8057	µg/L	9.8057	ppb	04:40:51
2	Sc RADIAL	110263.0	110263.0	99.1	%			04:39:28
2	Al 396.153Radial†	605.8	448.1	232.98	µg/L	232.98	ppb	04:39:28
2	Ca 317.933Radial†	935.0	536.3	211.22	µg/L	211.22	ppb	04:39:49
2	Fe 238.204 Radial†	28.9	22.2	114.50	µg/L	114.50	ppb	04:39:49
2	K 766.490 Radial†	1061.3	231.3	129.77	µg/L	129.77	ppb	04:39:28
2	Mg 279.077 IEC†	73.4	58.6	327.26	µg/L	327.26	ppb	04:39:49
2	Na 589.592 Radial†	517.8	1028.7	286.80	µg/L	286.80	ppb	04:39:28
2	Sr 421.552†	893.3	984.2	5.6203	µg/L	5.6203	ppb	04:39:28
2	Sc 361.383	1977581.0	1977581.0	101.69	%			04:40:57
2	Y 371.029	1202241.1	1202241.1	101.78	%			04:40:57
2	Ag 328.068†	538.5	630.8	6.0478	µg/L	6.0478	ppb	04:41:03
2	As 188.979†	21.1	15.6	31.164	µg/L	31.164	ppb	04:41:23
2	B 249.677†	1244.4	1072.5	50.256	µg/L	50.256	ppb	04:41:03
2	Ba 233.527†	131.1	208.1	5.5794	µg/L	5.5794	ppb	04:41:23
2	Be 313.107†	11407.2	7551.8	5.0223	µg/L	5.0223	ppb	04:41:03
2	Cd 226.502†	86.0	182.0	5.1456	µg/L	5.1456	ppb	04:41:23
2	Co 228.616†	36.3	103.1	5.2435	µg/L	5.2435	ppb	04:41:23
2	Cr 267.716†	114.7	240.0	5.3511	µg/L	5.3511	ppb	04:41:03
2	Cu 324.752†	4719.5	1375.0	10.284	µg/L	10.284	ppb	04:41:03
2	Mn 257.610†	3031.7	3212.4	10.735	µg/L	10.735	ppb	04:41:03
2	Mo 202.031†	80.4	83.9	10.078	µg/L	10.078	ppb	04:41:23
2	Ni 231.604†	389.7	101.5	5.8543	µg/L	5.8543	ppb	04:41:23
2	P 214.914†	264.9	56.4	126.35	µg/L	126.35	ppb	04:41:23
2	Pb 220.353†	97.7	40.0	10.705	µg/L	10.705	ppb	04:41:23

2	S 181.975 Axial†	52.4	12.7	67.995 µg/L	67.995 ppb		04:41:23
2	Sb 206.836†	28.8	9.4	9.8883 µg/L	9.8883 ppb		04:41:23
2	Se 196.026†	30.3	19.0	28.402 µg/L	28.402 ppb		04:41:23
2	SiO2†	3131.1	1003.3	203.88 µg/L	203.88 ppb		04:41:03
2	Si 251.611†	1615.9	1274.3	102.66 µg/L	102.66 ppb		04:41:23
2	Sn 189.927†	44.0	18.9	9.9637 µg/L	9.9637 ppb		04:41:23
2	Ti 334.940†	2992.4	2146.0	5.0275 µg/L	5.0275 ppb		04:41:03
2	Tl 190.801†	-7.0	12.4	19.958 µg/L	19.958 ppb		04:41:23
2	U 409.014†	1281.0	434.2	43.938 µg/L	43.938 ppb		04:41:03
2	V 292.402†	347.8	418.6	5.1958 µg/L	5.1958 ppb		04:41:03
2	Zn 213.857†	883.6	350.7	9.8450 µg/L	9.8450 ppb		04:41:23
3	Sc RADIAL	111080.8	111080.8	99.8 %			04:39:54
3	Al 396.153Radial†	554.3	392.0	203.77 µg/L	203.77 ppb		04:39:54
3	Ca 317.933Radial†	937.1	531.4	209.31 µg/L	209.31 ppb		04:40:15
3	Fe 238.204 Radial†	28.4	21.4	110.40 µg/L	110.40 ppb		04:40:15
3	K 766.490 Radial†	1073.5	235.6	132.20 µg/L	132.20 ppb		04:39:54
3	Mg 279.077 IEC†	85.1	69.8	389.58 µg/L	389.58 ppb		04:40:15
3	Na 589.592 Radial†	556.0	1063.1	296.40 µg/L	296.40 ppb		04:39:54
3	Sr 421.552†	855.9	940.2	5.3688 µg/L	5.3688 ppb		04:39:54
3	Sc 361.383	1991721.4	1991721.4	102.42 %			04:41:29
3	Y 371.029	1210632.9	1210632.9	102.49 %			04:41:29
3	Ag 328.068†	544.3	632.7	6.0668 µg/L	6.0668 ppb		04:41:35
3	As 188.979†	18.1	12.6	25.010 µg/L	25.010 ppb		04:41:56
3	B 249.677†	1204.4	1024.8	48.017 µg/L	48.017 ppb		04:41:35
3	Ba 233.527†	146.8	222.5	5.9648 µg/L	5.9648 ppb		04:41:56
3	Be 313.107†	11356.1	7422.2	4.9361 µg/L	4.9361 ppb		04:41:35
3	Cd 226.502†	91.9	187.2	5.2855 µg/L	5.2855 ppb		04:41:56
3	Co 228.616†	34.5	101.1	5.1389 µg/L	5.1389 ppb		04:41:56
3	Cr 267.716†	120.1	244.5	5.4505 µg/L	5.4505 ppb		04:41:35
3	Cu 324.752†	4676.4	1300.0	9.7238 µg/L	9.7238 ppb		04:41:35
3	Mn 257.610†	3008.7	3168.9	10.589 µg/L	10.589 ppb		04:41:35
3	Mo 202.031†	76.9	79.9	9.5942 µg/L	9.5942 ppb		04:41:56
3	Ni 231.604†	369.2	78.8	4.5425 µg/L	4.5425 ppb		04:41:56
3	P 214.914†	268.1	57.6	129.19 µg/L	129.19 ppb		04:41:56
3	Pb 220.353†	98.3	39.9	10.684 µg/L	10.684 ppb		04:41:56
3	S 181.975 Axial†	48.2	8.2	43.700 µg/L	43.700 ppb		04:41:56
3	Sb 206.836†	28.8	9.2	9.6712 µg/L	9.6712 ppb		04:41:56
3	Se 196.026†	28.3	16.8	25.119 µg/L	25.119 ppb		04:41:56
3	SiO2†	3132.7	983.0	199.76 µg/L	199.76 ppb		04:41:35
3	Si 251.611†	1622.3	1269.4	102.39 µg/L	102.39 ppb		04:41:56
3	Sn 189.927†	38.1	12.8	6.8163 µg/L	6.8163 ppb		04:41:56
3	Ti 334.940†	3003.8	2136.3	5.0048 µg/L	5.0048 ppb		04:41:35
3	Tl 190.801†	-3.2	16.2	25.999 µg/L	25.999 ppb		04:41:56
3	U 409.014†	1248.9	393.9	39.858 µg/L	39.858 ppb		04:41:35
3	V 292.402†	359.7	427.8	5.2969 µg/L	5.2969 ppb		04:41:35
3	Zn 213.857†	883.5	344.5	9.6764 µg/L	9.6764 ppb		04:41:56

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1993611.0	102.52	%	0.877				0.86%
Sc RADIAL	111032.5	99.8	%	0.67				0.67%
Y 371.029	1212234.5	102.62	%	0.921				0.90%
Ag 328.068†	609.9	5.8492	µg/L	0.36047	5.8492	ppb	0.36047	6.16%
QC value within limits for Ag 328.068 Recovery = 116.98%								
Al 396.153Radial†	427.0	221.99	µg/L	15.889	221.99	ppb	15.889	7.16%
QC value within limits for Al 396.153Radial Recovery = 111.00%								
As 188.979†	12.8	25.559	µg/L	5.3514	25.559	ppb	5.3514	20.94%
QC value within limits for As 188.979 Recovery = 85.20%								
B 249.677†	1053.0	49.340	µg/L	1.1733	49.340	ppb	1.1733	2.38%
QC value within limits for B 249.677 Recovery = 98.68%								
Ba 233.527†	215.4	5.7737	µg/L	0.19270	5.7737	ppb	0.19270	3.34%
QC value within limits for Ba 233.527 Recovery = 115.47%								
Be 313.107†	7444.6	4.9511	µg/L	0.06513	4.9511	ppb	0.06513	1.32%
QC value within limits for Be 313.107 Recovery = 99.02%								
Ca 317.933Radial†	533.2	209.99	µg/L	1.069	209.99	ppb	1.069	0.51%
QC value within limits for Ca 317.933Radial Recovery = 104.99%								
Cd 226.502†	185.2	5.2305	µg/L	0.07460	5.2305	ppb	0.07460	1.43%
QC value within limits for Cd 226.502 Recovery = 104.61%								
Co 228.616†	98.3	5.0009	µg/L	0.33383	5.0009	ppb	0.33383	6.68%

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   QC value within limits for Co 228.616  Recovery = 100.02%
Cr 267.716†              235.6      5.2535 µg/L       0.25988      5.2535 ppb        0.25988   4.95%
   QC value within limits for Cr 267.716  Recovery = 105.07%
Cu 324.752†             1319.7      9.8716 µg/L       0.36214      9.8716 ppb        0.36214   3.67%
   QC value within limits for Cu 324.752  Recovery = 98.72%
Fe 238.204 Radial†        21.8      112.29 µg/L         2.067      112.29 ppb          2.067   1.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 112.29%
K 766.490 Radial†        218.1      122.35 µg/L        15.015      122.35 ppb         15.015  12.27%
   QC value within limits for K 766.490 Radial  Recovery = 81.57%
Mg 279.077 IEC†           65.2      363.69 µg/L        32.465      363.69 ppb         32.465   8.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 121.23%
Mn 257.610†             3174.0      10.606 µg/L        0.1206      10.606 ppb         0.1206   1.14%
   QC value within limits for Mn 257.610  Recovery = 106.06%
Mo 202.031†               83.5      10.025 µg/L        0.4076      10.025 ppb         0.4076   4.07%
   QC value within limits for Mo 202.031  Recovery = 100.25%
Na 589.592 Radial†      1059.8      295.47 µg/L         8.249      295.47 ppb          8.249   2.79%
   QC value within limits for Na 589.592 Radial  Recovery = 98.49%
Ni 231.604†               83.9      4.8369 µg/L       0.90677      4.8369 ppb        0.90677  18.75%
   QC value within limits for Ni 231.604  Recovery = 96.74%
P 214.914†                55.6      124.71 µg/L         5.491      124.71 ppb          5.491   4.40%
   QC value within limits for P 214.914  Recovery = 83.14%
Pb 220.353†               40.7      10.899 µg/L        0.3548      10.899 ppb         0.3548   3.26%
   QC value within limits for Pb 220.353  Recovery = 108.99%
S 181.975 Axial†          11.8      63.020 µg/L       17.3744      63.020 ppb        17.3744  27.57%
   QC value less than the lower limit for S 181.975 Axial  Recovery = 63.02%
Sb 206.836†                7.8      8.2055 µg/L       2.72893      8.2055 ppb        2.72893  33.26%
   QC value within limits for Sb 206.836  Recovery = 82.05%
Se 196.026†               17.8      26.686 µg/L        1.6466      26.686 ppb         1.6466   6.17%
   QC value within limits for Se 196.026  Recovery = 88.95%
SiO2†                    984.9      200.15 µg/L         3.555      200.15 ppb          3.555   1.78%
   QC value within limits for SiO2  Recovery = 93.97%
Si 251.611†             1274.7      102.79 µg/L         0.471      102.79 ppb          0.471   0.46%
   QC value within limits for Si 251.611  Recovery = 102.79%
Sn 189.927†               14.4      7.6222 µg/L       2.06035      7.6222 ppb        2.06035  27.03%
   QC value within limits for Sn 189.927  Recovery = 76.22%
Sr 421.552†              956.0      5.4594 µg/L       0.13975      5.4594 ppb        0.13975   2.56%
   QC value within limits for Sr 421.552  Recovery = 109.19%
Ti 334.940†             2127.9      4.9851 µg/L       0.05493      4.9851 ppb        0.05493   1.10%
   QC value within limits for Ti 334.940  Recovery = 99.70%
Tl 190.801†               14.2      22.827 µg/L        3.0319      22.827 ppb         3.0319  13.28%
   QC value within limits for Tl 190.801  Recovery = 114.14%
U 409.014†               408.3      41.311 µg/L        2.2790      41.311 ppb         2.2790   5.52%
   QC value within limits for U 409.014  Recovery = 82.62%
V 292.402†               418.2      5.1865 µg/L       0.11533      5.1865 ppb        0.11533   2.22%
   QC value within limits for V 292.402  Recovery = 103.73%
Zn 213.857†              348.0      9.7757 µg/L       0.08823      9.7757 ppb        0.08823   0.90%
   QC value within limits for Zn 213.857  Recovery = 97.76%
QC Failed.  Continue with analysis.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 04:42:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111568.2	111568.2	100	%			04:42:38
1	Al 396.153Radial†	140.5	-23.2	-12.086	µg/L	-12.086	ppb	04:42:38
1	Ca 317.933Radial†	425.3	16.8	6.6268	µg/L	6.6268	ppb	04:42:58
1	Fe 238.204 Radial†	6.9	-0.1	-0.4164	µg/L	-0.4164	ppb	04:42:58
1	K 766.490 Radial†	756.0	-85.8	-48.146	µg/L	-48.146	ppb	04:42:38
1	Mg 279.077 IEC†	13.6	-1.8	-10.253	µg/L	-10.253	ppb	04:42:58
1	Na 589.592 Radial†	-618.0	-110.4	-30.781	µg/L	-30.781	ppb	04:42:38
1	Sr 421.552†	-46.7	36.1	0.2059	µg/L	0.2059	ppb	04:42:38
1	Sc 361.383	1986441.4	1986441.4	102.15	%			04:44:00
1	Y 371.029	1207282.2	1207282.2	102.20	%			04:44:00
1	Ag 328.068†	-26.9	74.9	0.7109	µg/L	0.7109	ppb	04:44:06
1	As 188.979†	4.5	-0.8	-1.5157	µg/L	-1.5157	ppb	04:44:26
1	B 249.677†	153.1	-1.3	-0.0588	µg/L	-0.0588	ppb	04:44:26
1	Ba 233.527†	-80.8	0.1	0.0026	µg/L	0.0026	ppb	04:44:26
1	Be 313.107†	3543.5	-196.6	-0.1307	µg/L	-0.1307	ppb	04:44:06
1	Cd 226.502†	-96.1	3.4	0.0865	µg/L	0.0865	ppb	04:44:26
1	Co 228.616†	-70.3	-1.5	-0.0755	µg/L	-0.0755	ppb	04:44:26
1	Cr 267.716†	-125.4	4.4	0.0973	µg/L	0.0973	ppb	04:44:06
1	Cu 324.752†	3261.0	-73.6	-0.5492	µg/L	-0.5492	ppb	04:44:06
1	Mn 257.610†	-216.5	19.3	0.0644	µg/L	0.0644	ppb	04:44:26
1	Mo 202.031†	-4.3	0.6	0.0751	µg/L	0.0751	ppb	04:44:26
1	Ni 231.604†	290.8	3.0	0.1711	µg/L	0.1711	ppb	04:44:26
1	P 214.914†	198.6	-9.8	-22.079	µg/L	-22.079	ppb	04:44:26
1	Pb 220.353†	61.2	3.9	1.0465	µg/L	1.0465	ppb	04:44:26
1	S 181.975 Axial†	33.0	-6.6	-35.207	µg/L	-35.207	ppb	04:44:26
1	Sb 206.836†	20.7	1.3	1.3620	µg/L	1.3620	ppb	04:44:26
1	Se 196.026†	10.3	-0.7	-1.0976	µg/L	-1.0976	ppb	04:44:26
1	SiO2†	1998.8	-118.9	-24.171	µg/L	-24.171	ppb	04:44:06
1	Si 251.611†	334.3	12.6	1.1640	µg/L	1.1640	ppb	04:44:26
1	Sn 189.927†	18.8	-6.0	-3.0982	µg/L	-3.0982	ppb	04:44:26
1	Ti 334.940†	745.3	-67.0	-0.1577	µg/L	-0.1577	ppb	04:44:06
1	Tl 190.801†	-21.3	-1.6	-2.5052	µg/L	-2.5052	ppb	04:44:26
1	U 409.014†	728.2	-112.6	-11.394	µg/L	-11.394	ppb	04:44:06
1	V 292.402†	-107.1	-28.3	-0.3587	µg/L	-0.3587	ppb	04:44:06
1	Zn 213.857†	508.2	-20.7	-0.5843	µg/L	-0.5843	ppb	04:44:26
2	Sc RADIAL	111477.9	111477.9	100	%			04:43:04
2	Al 396.153Radial†	172.6	9.0	4.6791	µg/L	4.6791	ppb	04:43:04
2	Ca 317.933Radial†	408.1	-0.0	-0.0094	µg/L	-0.0094	ppb	04:43:24
2	Fe 238.204 Radial†	8.2	1.2	6.1970	µg/L	6.1970	ppb	04:43:24
2	K 766.490 Radial†	731.7	-109.4	-61.383	µg/L	-61.383	ppb	04:43:04
2	Mg 279.077 IEC†	12.4	-3.0	-16.824	µg/L	-16.824	ppb	04:43:24
2	Na 589.592 Radial†	-597.0	-89.9	-25.058	µg/L	-25.058	ppb	04:43:04
2	Sr 421.552†	-47.8	35.0	0.1996	µg/L	0.1996	ppb	04:43:04
2	Sc 361.383	1984705.6	1984705.6	102.06	%			04:44:32
2	Y 371.029	1205602.5	1205602.5	102.06	%			04:44:32
2	Ag 328.068†	-25.5	76.3	0.7291	µg/L	0.7291	ppb	04:44:38
2	As 188.979†	1.9	-3.3	-6.5332	µg/L	-6.5332	ppb	04:44:59
2	B 249.677†	150.2	-4.0	-0.1909	µg/L	-0.1909	ppb	04:44:59
2	Ba 233.527†	-63.9	16.6	0.4437	µg/L	0.4437	ppb	04:44:59
2	Be 313.107†	3633.6	-105.3	-0.0701	µg/L	-0.0701	ppb	04:44:38
2	Cd 226.502†	-89.0	10.2	0.2765	µg/L	0.2765	ppb	04:44:59
2	Co 228.616†	-68.5	0.2	0.0113	µg/L	0.0113	ppb	04:44:59
2	Cr 267.716†	-115.3	14.2	0.3170	µg/L	0.3170	ppb	04:44:38
2	Cu 324.752†	3197.9	-132.6	-0.9884	µg/L	-0.9884	ppb	04:44:38
2	Mn 257.610†	-199.2	36.0	0.1211	µg/L	0.1211	ppb	04:44:59
2	Mo 202.031†	-6.1	-1.2	-0.1397	µg/L	-0.1397	ppb	04:44:59
2	Ni 231.604†	286.6	-0.9	-0.0516	µg/L	-0.0516	ppb	04:44:59
2	P 214.914†	196.3	-11.8	-26.679	µg/L	-26.679	ppb	04:44:59
2	Pb 220.353†	63.1	5.9	1.5829	µg/L	1.5829	ppb	04:44:59

2	S 181.975 Axial†	34.9	-4.7	-24.900 µg/L	-24.900 ppb	04:44:59
2	Sb 206.836†	13.9	-5.3	-5.6102 µg/L	-5.6102 ppb	04:44:59
2	Se 196.026†	13.9	2.8	4.2154 µg/L	4.2154 ppb	04:44:59
2	SiO2†	2044.6	-72.3	-14.701 µg/L	-14.701 ppb	04:44:38
2	Si 251.611†	346.7	25.1	2.1430 µg/L	2.1430 ppb	04:44:59
2	Sn 189.927†	20.7	-4.1	-2.1185 µg/L	-2.1185 ppb	04:44:59
2	Ti 334.940†	795.0	-17.7	-0.0415 µg/L	-0.0415 ppb	04:44:38
2	Tl 190.801†	-18.0	1.7	2.6585 µg/L	2.6585 ppb	04:44:59
2	U 409.014†	701.0	-138.6	-14.034 µg/L	-14.034 ppb	04:44:38
2	V 292.402†	-48.9	28.6	0.3219 µg/L	0.3219 ppb	04:44:38
2	Zn 213.857†	504.0	-24.4	-0.6888 µg/L	-0.6888 ppb	04:44:59
3	Sc RADIAL	112027.7	112027.7	101 %		04:43:30
3	Al 396.153Radial†	187.1	22.5	11.712 µg/L	11.712 ppb	04:43:30
3	Ca 317.933Radial†	405.6	-4.5	-1.7546 µg/L	-1.7546 ppb	04:43:50
3	Fe 238.204 Radial†	7.9	0.9	4.7087 µg/L	4.7087 ppb	04:43:50
3	K 766.490 Radial†	796.2	-49.0	-27.493 µg/L	-27.493 ppb	04:43:30
3	Mg 279.077 IEC†	18.7	3.2	17.749 µg/L	17.749 ppb	04:43:50
3	Na 589.592 Radial†	-601.0	-91.0	-25.365 µg/L	-25.365 ppb	04:43:30
3	Sr 421.552†	-31.0	51.8	0.2960 µg/L	0.2960 ppb	04:43:30
3	Sc 361.383	1983231.4	1983231.4	101.98 %		04:45:05
3	Y 371.029	1205290.5	1205290.5	102.03 %		04:45:05
3	Ag 328.068†	-8.4	93.0	0.8808 µg/L	0.8808 ppb	04:45:10
3	As 188.979†	3.2	-1.9	-3.8864 µg/L	-3.8864 ppb	04:45:31
3	B 249.677†	149.3	-4.8	-0.2277 µg/L	-0.2277 ppb	04:45:31
3	Ba 233.527†	-51.4	28.8	0.7700 µg/L	0.7700 ppb	04:45:31
3	Be 313.107†	3504.0	-229.7	-0.1529 µg/L	-0.1529 ppb	04:45:10
3	Cd 226.502†	-85.7	13.4	0.3695 µg/L	0.3695 ppb	04:45:31
3	Co 228.616†	-65.4	3.2	0.1652 µg/L	0.1652 ppb	04:45:31
3	Cr 267.716†	-124.5	5.1	0.1112 µg/L	0.1112 ppb	04:45:10
3	Cu 324.752†	3196.1	-132.1	-0.9844 µg/L	-0.9844 ppb	04:45:10
3	Mn 257.610†	-195.5	39.5	0.1323 µg/L	0.1323 ppb	04:45:31
3	Mo 202.031†	-3.4	1.5	0.1853 µg/L	0.1853 ppb	04:45:31
3	Ni 231.604†	275.5	-11.6	-0.6674 µg/L	-0.6674 ppb	04:45:31
3	P 214.914†	201.7	-6.4	-14.355 µg/L	-14.355 ppb	04:45:31
3	Pb 220.353†	49.5	-7.4	-1.9783 µg/L	-1.9783 ppb	04:45:31
3	S 181.975 Axial†	34.3	-5.2	-27.689 µg/L	-27.689 ppb	04:45:31
3	Sb 206.836†	15.1	-4.1	-4.3735 µg/L	-4.3735 ppb	04:45:31
3	Se 196.026†	17.5	6.3	9.4882 µg/L	9.4882 ppb	04:45:31
3	SiO2†	2032.0	-83.2	-16.914 µg/L	-16.914 ppb	04:45:10
3	Si 251.611†	367.2	45.4	3.7683 µg/L	3.7683 ppb	04:45:31
3	Sn 189.927†	21.1	-3.7	-1.9254 µg/L	-1.9254 ppb	04:45:31
3	Ti 334.940†	830.5	17.7	0.0417 µg/L	0.0417 ppb	04:45:10
3	Tl 190.801†	-20.2	-0.5	-0.7889 µg/L	-0.7889 ppb	04:45:31
3	U 409.014†	737.6	-102.2	-10.348 µg/L	-10.348 ppb	04:45:10
3	V 292.402†	-141.3	-61.9	-0.7617 µg/L	-0.7617 ppb	04:45:10
3	Zn 213.857†	506.5	-21.5	-0.6047 µg/L	-0.6047 ppb	04:45:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984792.8	102.06	%	0.083				0.08%
Sc RADIAL	111691.3	100	%	0.3				0.26%
Y 371.029	1206058.4	102.10	%	0.091				0.09%
Ag 328.068†	81.4	0.7736	µg/L	0.09328	0.7736	ppb	0.09328	12.06%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.8	1.4351	µg/L	12.22637	1.4351	ppb	12.22637	851.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-3.9784	µg/L	2.51003	-3.9784	ppb	2.51003	63.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.4	-0.1592	µg/L	0.08882	-0.1592	ppb	0.08882	55.81%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.4054	µg/L	0.38513	0.4054	ppb	0.38513	95.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-177.2	-0.1179	µg/L	0.04287	-0.1179	ppb	0.04287	36.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.1	1.6209	µg/L	4.42217	1.6209	ppb	4.42217	272.82%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.0	0.2441	µg/L	0.14424	0.2441	ppb	0.14424	59.08%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.7	0.0337	µg/L	0.12192	0.0337	ppb	0.12192	362.31%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.9      0.1752 µg/L       0.12303      0.1752 ppb        0.12303  70.22%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -112.8     -0.8407 µg/L       0.25242     -0.8407 ppb        0.25242  30.03%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.7      3.4964 µg/L       3.46932      3.4964 ppb        3.46932  99.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -81.4     -45.674 µg/L      17.0799     -45.674 ppb       17.0799  37.40%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.6     -3.1092 µg/L      18.36042     -3.1092 ppb       18.36042 590.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               31.6      0.1059 µg/L       0.03642      0.1059 ppb        0.03642  34.38%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.3      0.0402 µg/L       0.16524      0.0402 ppb        0.16524 410.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -97.1     -27.068 µg/L       3.2194     -27.068 ppb        3.2194  11.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -3.2     -0.1826 µg/L       0.43435     -0.1826 ppb        0.43435 237.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.3     -21.038 µg/L       6.2277     -21.038 ppb        6.2277  29.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                0.8      0.2170 µg/L       1.92008      0.2170 ppb        1.92008 884.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.5     -29.265 µg/L       5.3311     -29.265 ppb        5.3311  18.22%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.7     -2.8739 µg/L       3.72015     -2.8739 ppb        3.72015 129.45%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.8      4.2020 µg/L       5.29287      4.2020 ppb        5.29287 125.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -91.5     -18.595 µg/L       4.9538     -18.595 ppb        4.9538  26.64%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               27.7      2.3584 µg/L       1.31547      2.3584 ppb        1.31547  55.78%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -4.6     -2.3807 µg/L       0.62884     -2.3807 ppb        0.62884  26.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               40.9      0.2338 µg/L       0.05390      0.2338 ppb        0.05390  23.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -22.3     -0.0525 µg/L       0.10016     -0.0525 ppb        0.10016 190.69%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.1     -0.2119 µg/L       2.62978     -0.2119 ppb        2.62978 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -117.8     -11.925 µg/L       1.8994     -11.925 ppb        1.8994  15.93%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -20.5     -0.2662 µg/L       0.54767     -0.2662 ppb        0.54767 205.76%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -22.2     -0.6259 µg/L       0.05538     -0.6259 ppb        0.05538   8.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 05:19:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114062.3	114062.3	102	%			05:19:43
1	Al 396.153Radial†	10267.1	9854.3	5112.8	µg/L	5112.8	ppb	05:19:43
1	Ca 317.933Radial†	13462.0	12727.6	5012.8	µg/L	5012.8	ppb	05:20:03
1	Fe 238.204 Radial†	1028.4	996.4	5137.9	µg/L	5137.9	ppb	05:20:03
1	K 766.490 Radial†	10018.4	8935.2	5012.9	µg/L	5012.9	ppb	05:19:43
1	Mg 279.077 IEC†	983.2	943.9	5272.6	µg/L	5272.6	ppb	05:20:03
1	Na 589.592 Radial†	36872.4	36482.8	10171	µg/L	10171	ppb	05:19:43
1	Sr 421.552†	89801.0	87702.3	500.82	µg/L	500.82	ppb	05:19:43
1	Sc 361.383	1992103.7	1992103.7	102.44	%			05:21:07
1	Y 371.029	1204847.5	1204847.5	102.00	%			05:21:07
1	Ag 328.068†	54632.7	53433.4	512.49	µg/L	512.49	ppb	05:21:13
1	As 188.979†	262.0	250.7	499.51	µg/L	499.51	ppb	05:21:33
1	B 249.677†	11127.6	10711.5	500.66	µg/L	500.66	ppb	05:21:13
1	Ba 233.527†	19337.2	18956.1	508.35	µg/L	508.35	ppb	05:21:13
1	Be 313.107†	781319.6	759054.3	504.81	µg/L	504.81	ppb	05:21:07
1	Cd 226.502†	18402.9	18062.3	508.18	µg/L	508.18	ppb	05:21:13
1	Co 228.616†	10178.7	10003.8	507.59	µg/L	507.59	ppb	05:21:13
1	Cr 267.716†	23160.0	22735.8	506.95	µg/L	506.95	ppb	05:21:13
1	Cu 324.752†	73358.2	68345.8	511.08	µg/L	511.08	ppb	05:21:13
1	Mn 257.610†	154773.4	151320.2	505.61	µg/L	505.61	ppb	05:21:07
1	Mo 202.031†	4292.8	4195.5	503.70	µg/L	503.70	ppb	05:21:33
1	Ni 231.604†	9276.2	8773.7	505.89	µg/L	505.89	ppb	05:21:13
1	P 214.914†	1328.7	1093.0	2415.8	µg/L	2415.8	ppb	05:21:33
1	Pb 220.353†	1971.8	1868.9	500.68	µg/L	500.68	ppb	05:21:33
1	S 181.975 Axial†	220.6	176.5	942.10	µg/L	942.10	ppb	05:21:33
1	Sb 206.836†	511.0	479.9	505.33	µg/L	505.33	ppb	05:21:33
1	Se 196.026†	352.2	333.0	501.20	µg/L	501.20	ppb	05:21:33
1	SiO2†	29240.3	26468.5	5378.9	µg/L	5378.9	ppb	05:21:13
1	Si 251.611†	32080.6	31002.2	2468.6	µg/L	2468.6	ppb	05:21:13
1	Sn 189.927†	1011.3	962.9	503.90	µg/L	503.90	ppb	05:21:33
1	Ti 334.940†	220973.4	214916.4	504.40	µg/L	504.40	ppb	05:21:07
1	Tl 190.801†	298.3	310.5	500.46	µg/L	500.46	ppb	05:21:33
1	U 409.014†	5895.6	4929.7	498.17	µg/L	498.17	ppb	05:21:13
1	V 292.402†	43034.2	42086.3	512.02	µg/L	512.02	ppb	05:21:13
1	Zn 213.857†	19038.3	18066.8	506.61	µg/L	506.61	ppb	05:21:13
2	Sc RADIAL	113647.8	113647.8	102	%			05:20:09
2	Al 396.153Radial†	10337.7	9960.0	5167.9	µg/L	5167.9	ppb	05:20:09
2	Ca 317.933Radial†	13401.1	12715.9	5008.2	µg/L	5008.2	ppb	05:20:30
2	Fe 238.204 Radial†	1033.5	1005.1	5182.2	µg/L	5182.2	ppb	05:20:30
2	K 766.490 Radial†	10161.9	9111.3	5111.7	µg/L	5111.7	ppb	05:20:09
2	Mg 279.077 IEC†	978.4	942.7	5265.6	µg/L	5265.6	ppb	05:20:30
2	Na 589.592 Radial†	37004.1	36743.0	10244	µg/L	10244	ppb	05:20:09
2	Sr 421.552†	90359.9	88569.1	505.77	µg/L	505.77	ppb	05:20:09
2	Sc 361.383	1989340.7	1989340.7	102.30	%			05:21:41
2	Y 371.029	1202856.9	1202856.9	101.83	%			05:21:41
2	Ag 328.068†	53991.7	52880.9	507.19	µg/L	507.19	ppb	05:21:46
2	As 188.979†	259.1	248.2	494.46	µg/L	494.46	ppb	05:22:07
2	B 249.677†	10954.7	10557.6	493.43	µg/L	493.43	ppb	05:21:46
2	Ba 233.527†	19049.9	18701.4	501.52	µg/L	501.52	ppb	05:21:46
2	Be 313.107†	778441.2	757299.9	503.64	µg/L	503.64	ppb	05:21:41
2	Cd 226.502†	18125.4	17815.9	501.24	µg/L	501.24	ppb	05:21:46
2	Co 228.616†	10023.5	9865.8	500.60	µg/L	500.60	ppb	05:21:46
2	Cr 267.716†	22784.6	22400.2	499.47	µg/L	499.47	ppb	05:21:46
2	Cu 324.752†	72404.7	67513.2	504.88	µg/L	504.88	ppb	05:21:46
2	Mn 257.610†	154032.7	150806.0	503.90	µg/L	503.90	ppb	05:21:41
2	Mo 202.031†	4279.7	4188.5	502.87	µg/L	502.87	ppb	05:22:07
2	Ni 231.604†	9126.3	8639.7	498.17	µg/L	498.17	ppb	05:21:46
2	P 214.914†	1325.7	1091.8	2413.8	µg/L	2413.8	ppb	05:22:07
2	Pb 220.353†	1969.5	1869.3	500.80	µg/L	500.80	ppb	05:22:07

2	S 181.975 Axial†	224.8	180.9	966.03 µg/L	966.03 ppb	05:22:07
2	Sb 206.836†	511.4	481.0	506.51 µg/L	506.51 ppb	05:22:07
2	Se 196.026†	366.0	346.9	522.06 µg/L	522.06 ppb	05:22:07
2	SiO2†	28730.4	26009.7	5285.6 µg/L	5285.6 ppb	05:21:46
2	Si 251.611†	31601.7	30577.6	2434.2 µg/L	2434.2 ppb	05:21:46
2	Sn 189.927†	1005.7	958.8	501.75 µg/L	501.75 ppb	05:22:07
2	Ti 334.940†	220116.6	214378.5	503.14 µg/L	503.14 ppb	05:21:41
2	Tl 190.801†	301.4	313.9	505.90 µg/L	505.90 ppb	05:22:07
2	U 409.014†	5825.4	4869.1	492.03 µg/L	492.03 ppb	05:21:46
2	V 292.402†	42332.7	41459.0	504.45 µg/L	504.45 ppb	05:21:46
2	Zn 213.857†	18772.8	17833.1	500.05 µg/L	500.05 ppb	05:21:46
3	Sc RADIAL	113921.8	113921.8	102 %		05:20:35
3	Al 396.153Radial†	10272.9	9872.4	5122.3 µg/L	5122.3 ppb	05:20:35
3	Ca 317.933Radial†	13461.7	12743.5	5019.0 µg/L	5019.0 ppb	05:20:56
3	Fe 238.204 Radial†	1036.1	1005.2	5183.0 µg/L	5183.0 ppb	05:20:56
3	K 766.490 Radial†	9990.5	8919.9	5004.3 µg/L	5004.3 ppb	05:20:35
3	Mg 279.077 IEC†	979.2	941.2	5257.2 µg/L	5257.2 ppb	05:20:56
3	Na 589.592 Radial†	36758.1	36415.5	10152 µg/L	10152 ppb	05:20:35
3	Sr 421.552†	89565.9	87580.7	500.12 µg/L	500.12 ppb	05:20:35
3	Sc 361.383	1971136.0	1971136.0	101.36 %		05:22:14
3	Y 371.029	1191965.6	1191965.6	100.91 %		05:22:14
3	Ag 328.068†	54618.4	53986.6	517.79 µg/L	517.79 ppb	05:22:20
3	As 188.979†	254.9	246.4	490.91 µg/L	490.91 ppb	05:22:40
3	B 249.677†	11132.9	10832.3	506.31 µg/L	506.31 ppb	05:22:20
3	Ba 233.527†	19331.1	19150.8	513.57 µg/L	513.57 ppb	05:22:20
3	Be 313.107†	774161.8	760105.9	505.51 µg/L	505.51 ppb	05:22:14
3	Cd 226.502†	18392.3	18242.9	513.27 µg/L	513.27 ppb	05:22:20
3	Co 228.616†	10141.3	10072.5	511.07 µg/L	511.07 ppb	05:22:20
3	Cr 267.716†	23142.0	22958.6	511.92 µg/L	511.92 ppb	05:22:20
3	Cu 324.752†	73279.0	69029.5	516.20 µg/L	516.20 ppb	05:22:20
3	Mn 257.610†	153255.8	151430.2	505.98 µg/L	505.98 ppb	05:22:14
3	Mo 202.031†	4219.7	4167.9	500.40 µg/L	500.40 ppb	05:22:40
3	Ni 231.604†	9293.3	8886.9	512.42 µg/L	512.42 ppb	05:22:20
3	P 214.914†	1318.9	1097.0	2424.3 µg/L	2424.3 ppb	05:22:40
3	Pb 220.353†	1936.8	1854.8	496.89 µg/L	496.89 ppb	05:22:40
3	S 181.975 Axial†	224.0	182.1	972.44 µg/L	972.44 ppb	05:22:40
3	Sb 206.836†	501.8	476.1	501.32 µg/L	501.32 ppb	05:22:40
3	Se 196.026†	344.5	329.1	495.29 µg/L	495.29 ppb	05:22:40
3	SiO2†	29159.0	26692.0	5424.3 µg/L	5424.3 ppb	05:22:20
3	Si 251.611†	32014.4	31270.1	2490.4 µg/L	2490.4 ppb	05:22:20
3	Sn 189.927†	1000.4	962.7	503.79 µg/L	503.79 ppb	05:22:40
3	Ti 334.940†	218840.0	215106.3	504.85 µg/L	504.85 ppb	05:22:14
3	Tl 190.801†	296.7	312.1	502.87 µg/L	502.87 ppb	05:22:40
3	U 409.014†	5974.3	5068.7	512.23 µg/L	512.23 ppb	05:22:20
3	V 292.402†	42902.8	42403.6	515.85 µg/L	515.85 ppb	05:22:20
3	Zn 213.857†	18970.2	18197.3	510.25 µg/L	510.25 ppb	05:22:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984193.5	102.03	%	0.586				0.57%
Sc RADIAL	113877.3	102	%	0.2				0.19%
Y 371.029	1199890.0	101.58	%	0.587				0.58%
Ag 328.068†	53433.7	512.49	µg/L	5.301	512.49	ppb	5.301	1.03%
QC value within limits for Ag 328.068 Recovery = 102.50%								
Al 396.153Radial†	9895.6	5134.3	µg/L	29.44	5134.3	ppb	29.44	0.57%
QC value within limits for Al 396.153Radial Recovery = 102.69%								
As 188.979†	248.4	494.96	µg/L	4.319	494.96	ppb	4.319	0.87%
QC value within limits for As 188.979 Recovery = 98.99%								
B 249.677†	10700.5	500.13	µg/L	6.457	500.13	ppb	6.457	1.29%
QC value within limits for B 249.677 Recovery = 100.03%								
Ba 233.527†	18936.1	507.81	µg/L	6.043	507.81	ppb	6.043	1.19%
QC value within limits for Ba 233.527 Recovery = 101.56%								
Be 313.107†	758820.0	504.66	µg/L	0.943	504.66	ppb	0.943	0.19%
QC value within limits for Be 313.107 Recovery = 100.93%								
Ca 317.933Radial†	12729.0	5013.3	µg/L	5.45	5013.3	ppb	5.45	0.11%
QC value within limits for Ca 317.933Radial Recovery = 100.27%								
Cd 226.502†	18040.4	507.56	µg/L	6.039	507.56	ppb	6.039	1.19%
QC value within limits for Cd 226.502 Recovery = 101.51%								
Co 228.616†	9980.7	506.42	µg/L	5.335	506.42	ppb	5.335	1.05%

```
   QC value within limits for Co 228.616  Recovery = 101.28%
Cr 267.716†            22698.2      506.11 µg/L        6.266      506.11 ppb        6.266   1.24%
   QC value within limits for Cr 267.716  Recovery = 101.22%
Cu 324.752†            68296.2      510.72 µg/L        5.666      510.72 ppb        5.666   1.11%
   QC value within limits for Cu 324.752  Recovery = 102.14%
Fe 238.204 Radial†      1002.2      5167.7 µg/L       25.83      5167.7 ppb       25.83   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.35%
K 766.490 Radial†       8988.8      5042.9 µg/L       59.67      5042.9 ppb       59.67   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 100.86%
Mg 279.077 IEC†          942.6      5265.1 µg/L        7.70      5265.1 ppb        7.70   0.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.30%
Mn 257.610†           151185.4      505.17 µg/L        1.111      505.17 ppb       1.111   0.22%
   QC value within limits for Mn 257.610  Recovery = 101.03%
Mo 202.031†            4184.0      502.32 µg/L        1.718      502.32 ppb       1.718   0.34%
   QC value within limits for Mo 202.031  Recovery = 100.46%
Na 589.592 Radial†     36547.1       10189 µg/L       48.2        10189 ppb        48.2   0.47%
   QC value within limits for Na 589.592 Radial  Recovery = 101.89%
Ni 231.604†            8766.7      505.49 µg/L        7.134      505.49 ppb       7.134   1.41%
   QC value within limits for Ni 231.604  Recovery = 101.10%
P 214.914†             1093.9      2418.0 µg/L        5.58      2418.0 ppb        5.58   0.23%
   QC value within limits for P 214.914  Recovery = 96.72%
Pb 220.353†            1864.3      499.46 µg/L        2.224      499.46 ppb       2.224   0.45%
   QC value within limits for Pb 220.353  Recovery = 99.89%
S 181.975 Axial†        179.9      960.19 µg/L       15.988      960.19 ppb      15.988   1.67%
   QC value within limits for S 181.975 Axial  Recovery = 96.02%
Sb 206.836†             479.0      504.38 µg/L        2.720      504.38 ppb       2.720   0.54%
   QC value within limits for Sb 206.836  Recovery = 100.88%
Se 196.026†             336.3      506.18 µg/L       14.060      506.18 ppb      14.060   2.78%
   QC value within limits for Se 196.026  Recovery = 101.24%
SiO2†                  26390.1      5362.9 µg/L       70.68      5362.9 ppb       70.68   1.32%
   QC value within limits for SiO2  Recovery = 100.29%
Si 251.611†            30950.0      2464.4 µg/L       28.31      2464.4 ppb       28.31   1.15%
   QC value within limits for Si 251.611  Recovery = 98.58%
Sn 189.927†             961.4      503.15 µg/L        1.208      503.15 ppb       1.208   0.24%
   QC value within limits for Sn 189.927  Recovery = 100.63%
Sr 421.552†            87950.7      502.24 µg/L        3.078      502.24 ppb       3.078   0.61%
   QC value within limits for Sr 421.552  Recovery = 100.45%
Ti 334.940†           214800.4      504.13 µg/L        0.886      504.13 ppb       0.886   0.18%
   QC value within limits for Ti 334.940  Recovery = 100.83%
Tl 190.801†             312.2      503.08 µg/L        2.728      503.08 ppb       2.728   0.54%
   QC value within limits for Tl 190.801  Recovery = 100.62%
U 409.014†             4955.9      500.81 µg/L       10.355      500.81 ppb      10.355   2.07%
   QC value within limits for U 409.014  Recovery = 100.16%
V 292.402†             41983.0      510.77 µg/L        5.802      510.77 ppb       5.802   1.14%
   QC value within limits for V 292.402  Recovery = 102.15%
Zn 213.857†            18032.4      505.64 µg/L        5.171      505.64 ppb       5.171   1.02%
   QC value within limits for Zn 213.857  Recovery = 101.13%
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 12/15/2009 05:22:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112172.6	112172.6	101	%			05:23:27
1	Al 396.153Radial†	564.5	396.7	206.22	µg/L	206.22	ppb	05:23:27
1	Ca 317.933Radial†	935.0	520.2	204.89	µg/L	204.89	ppb	05:23:47
1	Fe 238.204 Radial†	26.9	19.8	101.68	µg/L	101.68	ppb	05:23:47
1	K 766.490 Radial†	1104.4	255.8	143.49	µg/L	143.49	ppb	05:23:27
1	Mg 279.077 IEC†	71.5	55.5	309.85	µg/L	309.85	ppb	05:23:47
1	Na 589.592 Radial†	588.0	1089.5	303.75	µg/L	303.75	ppb	05:23:27
1	Sr 421.552†	849.5	925.4	5.2845	µg/L	5.2845	ppb	05:23:27
1	Sc 361.383	1974609.4	1974609.4	101.54	%			05:24:49
1	Y 371.029	1200113.7	1200113.7	101.60	%			05:24:49
1	Ag 328.068†	505.8	599.4	5.7477	µg/L	5.7477	ppb	05:24:55
1	As 188.979†	20.5	15.1	30.102	µg/L	30.102	ppb	05:25:15
1	B 249.677†	1230.5	1060.7	49.705	µg/L	49.705	ppb	05:24:55
1	Ba 233.527†	112.9	190.3	5.1043	µg/L	5.1043	ppb	05:25:15
1	Be 313.107†	11502.2	7662.2	5.0957	µg/L	5.0957	ppb	05:24:55
1	Cd 226.502†	81.4	177.6	5.0194	µg/L	5.0194	ppb	05:25:15
1	Co 228.616†	36.5	103.3	5.2503	µg/L	5.2503	ppb	05:25:15
1	Cr 267.716†	116.6	242.0	5.3950	µg/L	5.3950	ppb	05:24:55
1	Cu 324.752†	4618.6	1282.6	9.5922	µg/L	9.5922	ppb	05:24:55
1	Mn 257.610†	3030.9	3216.2	10.745	µg/L	10.745	ppb	05:24:55
1	Mo 202.031†	76.3	80.0	9.6021	µg/L	9.6021	ppb	05:25:15
1	Ni 231.604†	372.3	85.0	4.9001	µg/L	4.9001	ppb	05:25:15
1	P 214.914†	279.5	71.1	159.77	µg/L	159.77	ppb	05:25:15
1	Pb 220.353†	88.6	31.3	8.3564	µg/L	8.3564	ppb	05:25:15
1	S 181.975 Axial†	51.9	12.3	65.638	µg/L	65.638	ppb	05:25:15
1	Sb 206.836†	27.0	7.7	8.0927	µg/L	8.0927	ppb	05:25:15
1	Se 196.026†	35.8	24.4	36.560	µg/L	36.560	ppb	05:25:15
1	SiO2†	3147.5	1024.1	208.11	µg/L	208.11	ppb	05:24:55
1	Si 251.611†	1627.2	1287.9	103.80	µg/L	103.80	ppb	05:25:15
1	Sn 189.927†	42.0	17.0	8.9823	µg/L	8.9823	ppb	05:25:15
1	Ti 334.940†	3079.2	2235.9	5.2391	µg/L	5.2391	ppb	05:24:55
1	Tl 190.801†	-5.3	14.1	22.655	µg/L	22.655	ppb	05:25:15
1	U 409.014†	1267.1	422.4	42.747	µg/L	42.747	ppb	05:24:55
1	V 292.402†	340.4	411.8	5.1080	µg/L	5.1080	ppb	05:24:55
1	Zn 213.857†	896.6	364.8	10.252	µg/L	10.252	ppb	05:25:15
2	Sc RADIAL	111571.0	111571.0	100	%			05:23:53
2	Al 396.153Radial†	589.3	424.4	220.63	µg/L	220.63	ppb	05:23:53
2	Ca 317.933Radial†	931.4	521.7	205.47	µg/L	205.47	ppb	05:24:13
2	Fe 238.204 Radial†	29.4	22.4	115.07	µg/L	115.07	ppb	05:24:13
2	K 766.490 Radial†	1025.6	183.1	102.73	µg/L	102.73	ppb	05:23:53
2	Mg 279.077 IEC†	78.1	62.5	348.69	µg/L	348.69	ppb	05:24:13
2	Na 589.592 Radial†	518.2	1023.0	285.22	µg/L	285.22	ppb	05:23:53
2	Sr 421.552†	871.8	952.3	5.4380	µg/L	5.4380	ppb	05:23:53
2	Sc 361.383	1973989.8	1973989.8	101.51	%			05:25:21
2	Y 371.029	1200109.8	1200109.8	101.60	%			05:25:21
2	Ag 328.068†	482.5	576.6	5.5286	µg/L	5.5286	ppb	05:25:27
2	As 188.979†	16.9	11.5	22.925	µg/L	22.925	ppb	05:25:48
2	B 249.677†	1214.8	1045.6	48.991	µg/L	48.991	ppb	05:25:27
2	Ba 233.527†	127.3	204.6	5.4844	µg/L	5.4844	ppb	05:25:48
2	Be 313.107†	11426.5	7591.2	5.0486	µg/L	5.0486	ppb	05:25:27
2	Cd 226.502†	92.2	188.2	5.3132	µg/L	5.3132	ppb	05:25:48
2	Co 228.616†	28.7	95.6	4.8638	µg/L	4.8638	ppb	05:25:48
2	Cr 267.716†	94.2	220.0	4.9039	µg/L	4.9039	ppb	05:25:27
2	Cu 324.752†	4655.0	1319.8	9.8730	µg/L	9.8730	ppb	05:25:27
2	Mn 257.610†	3001.9	3188.5	10.655	µg/L	10.655	ppb	05:25:27
2	Mo 202.031†	84.5	88.1	10.572	µg/L	10.572	ppb	05:25:48
2	Ni 231.604†	368.9	81.7	4.7110	µg/L	4.7110	ppb	05:25:48
2	P 214.914†	262.5	54.5	122.13	µg/L	122.13	ppb	05:25:48
2	Pb 220.353†	93.6	36.2	9.6910	µg/L	9.6910	ppb	05:25:48

2	S 181.975 Axial†	58.6	18.8	100.68 µg/L	100.68 ppb	05:25:48
2	Sb 206.836†	30.7	11.4	11.967 µg/L	11.967 ppb	05:25:48
2	Se 196.026†	33.3	21.9	32.858 µg/L	32.858 ppb	05:25:48
2	SiO2†	3113.1	991.2	201.43 µg/L	201.43 ppb	05:25:27
2	Si 251.611†	1625.3	1286.5	103.77 µg/L	103.77 ppb	05:25:48
2	Sn 189.927†	38.3	13.4	7.0845 µg/L	7.0845 ppb	05:25:48
2	Ti 334.940†	2943.5	2103.2	4.9273 µg/L	4.9273 ppb	05:25:27
2	Tl 190.801†	-0.8	18.5	29.675 µg/L	29.675 ppb	05:25:48
2	U 409.014†	1202.1	358.8	36.300 µg/L	36.300 ppb	05:25:27
2	V 292.402†	306.2	378.2	4.7002 µg/L	4.7002 ppb	05:25:27
2	Zn 213.857†	888.7	357.3	10.040 µg/L	10.040 ppb	05:25:48
3	Sc RADIAL	111886.5	111886.5	101 %		05:24:19
3	Al 396.153Radial†	582.9	416.5	216.50 µg/L	216.50 ppb	05:24:19
3	Ca 317.933Radial†	927.6	515.3	202.94 µg/L	202.94 ppb	05:24:39
3	Fe 238.204 Radial†	31.0	23.9	122.81 µg/L	122.81 ppb	05:24:39
3	K 766.490 Radial†	1072.6	226.9	127.32 µg/L	127.32 ppb	05:24:19
3	Mg 279.077 IEC†	70.8	55.0	306.87 µg/L	306.87 ppb	05:24:39
3	Na 589.592 Radial†	525.0	1028.3	286.69 µg/L	286.69 ppb	05:24:19
3	Sr 421.552†	836.6	914.7	5.2236 µg/L	5.2236 ppb	05:24:19
3	Sc 361.383	1970395.2	1970395.2	101.32 %		05:25:54
3	Y 371.029	1197857.3	1197857.3	101.41 %		05:25:54
3	Ag 328.068†	463.8	559.0	5.3611 µg/L	5.3611 ppb	05:25:59
3	As 188.979†	9.7	4.5	8.9148 µg/L	8.9148 ppb	05:26:20
3	B 249.677†	1232.5	1065.2	49.909 µg/L	49.909 ppb	05:25:59
3	Ba 233.527†	120.0	197.7	5.2990 µg/L	5.2990 ppb	05:26:20
3	Be 313.107†	11427.4	7612.6	5.0628 µg/L	5.0628 ppb	05:25:59
3	Cd 226.502†	89.3	185.6	5.2443 µg/L	5.2443 ppb	05:26:20
3	Co 228.616†	29.0	96.0	4.8815 µg/L	4.8815 ppb	05:26:20
3	Cr 267.716†	111.9	237.6	5.2968 µg/L	5.2968 ppb	05:25:59
3	Cu 324.752†	4706.1	1378.6	10.313 µg/L	10.313 ppb	05:25:59
3	Mn 257.610†	3020.7	3212.5	10.736 µg/L	10.736 ppb	05:25:59
3	Mo 202.031†	81.7	85.5	10.268 µg/L	10.268 ppb	05:26:20
3	Ni 231.604†	379.1	92.4	5.3282 µg/L	5.3282 ppb	05:26:20
3	P 214.914†	262.4	54.8	122.84 µg/L	122.84 ppb	05:26:20
3	Pb 220.353†	95.3	38.1	10.178 µg/L	10.178 ppb	05:26:20
3	S 181.975 Axial†	51.2	11.7	62.448 µg/L	62.448 ppb	05:26:20
3	Sb 206.836†	25.0	5.8	6.0787 µg/L	6.0787 ppb	05:26:20
3	Se 196.026†	33.5	22.2	33.324 µg/L	33.324 ppb	05:26:20
3	SiO2†	3128.0	1011.5	205.55 µg/L	205.55 ppb	05:25:59
3	Si 251.611†	1622.4	1286.6	103.75 µg/L	103.75 ppb	05:26:20
3	Sn 189.927†	38.9	14.0	7.4160 µg/L	7.4160 ppb	05:26:20
3	Ti 334.940†	3031.0	2194.8	5.1426 µg/L	5.1426 ppb	05:25:59
3	Tl 190.801†	-4.1	15.2	24.447 µg/L	24.447 ppb	05:26:20
3	U 409.014†	1286.0	443.7	44.896 µg/L	44.896 ppb	05:25:59
3	V 292.402†	291.8	364.6	4.5484 µg/L	4.5484 ppb	05:25:59
3	Zn 213.857†	887.5	357.7	10.047 µg/L	10.047 ppb	05:26:20

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1972998.2	101.46	%	0.117				0.12%
Sc RADIAL	111876.7	101	%	0.3				0.27%
Y 371.029	1199360.3	101.53	%	0.110				0.11%
Ag 328.068†	578.4	5.5458	µg/L	0.19387	5.5458	ppb	0.19387	3.50%
QC value within limits for Ag 328.068 Recovery = 110.92%								
Al 396.153Radial†	412.5	214.45	µg/L	7.424	214.45	ppb	7.424	3.46%
QC value within limits for Al 396.153Radial Recovery = 107.22%								
As 188.979†	10.4	20.647	µg/L	10.7758	20.647	ppb	10.7758	52.19%
QC value less than the lower limit for As 188.979 Recovery = 68.82%								
B 249.677†	1057.2	49.535	µg/L	0.4821	49.535	ppb	0.4821	0.97%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	197.5	5.2959	µg/L	0.19005	5.2959	ppb	0.19005	3.59%
QC value within limits for Ba 233.527 Recovery = 105.92%								
Be 313.107†	7622.0	5.0690	µg/L	0.02418	5.0690	ppb	0.02418	0.48%
QC value within limits for Be 313.107 Recovery = 101.38%								
Ca 317.933Radial†	519.1	204.43	µg/L	1.323	204.43	ppb	1.323	0.65%
QC value within limits for Ca 317.933Radial Recovery = 102.22%								
Cd 226.502†	183.8	5.1923	µg/L	0.15362	5.1923	ppb	0.15362	2.96%
QC value within limits for Cd 226.502 Recovery = 103.85%								
Co 228.616†	98.3	4.9986	µg/L	0.21822	4.9986	ppb	0.21822	4.37%

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   QC value within limits for Co 228.616  Recovery = 99.97%
Cr 267.716†              233.2      5.1986 µg/L       0.25985      5.1986 ppb        0.25985   5.00%
   QC value within limits for Cr 267.716  Recovery = 103.97%
Cu 324.752†             1327.0      9.9263 µg/L       0.36355      9.9263 ppb        0.36355   3.66%
   QC value within limits for Cu 324.752  Recovery = 99.26%
Fe 238.204 Radial†        22.0      113.19 µg/L        10.692      113.19 ppb         10.692   9.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 113.19%
K 766.490 Radial†        221.9      124.52 µg/L        20.527      124.52 ppb         20.527  16.49%
   QC value within limits for K 766.490 Radial  Recovery = 83.01%
Mg 279.077 IEC†           57.7      321.80 µg/L        23.334      321.80 ppb         23.334   7.25%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.27%
Mn 257.610†             3205.7      10.712 µg/L        0.0497      10.712 ppb         0.0497   0.46%
   QC value within limits for Mn 257.610  Recovery = 107.12%
Mo 202.031†               84.5      10.147 µg/L        0.4961      10.147 ppb         0.4961   4.89%
   QC value within limits for Mo 202.031  Recovery = 101.47%
Na 589.592 Radial†      1047.0      291.88 µg/L        10.302      291.88 ppb         10.302   3.53%
   QC value within limits for Na 589.592 Radial  Recovery = 97.29%
Ni 231.604†               86.4      4.9798 µg/L       0.31626      4.9798 ppb        0.31626   6.35%
   QC value within limits for Ni 231.604  Recovery = 99.60%
P 214.914†                60.1      134.91 µg/L        21.530      134.91 ppb         21.530  15.96%
   QC value within limits for P 214.914  Recovery = 89.94%
Pb 220.353†               35.2      9.4086 µg/L       0.94323      9.4086 ppb        0.94323  10.03%
   QC value within limits for Pb 220.353  Recovery = 94.09%
S 181.975 Axial†          14.3      76.255 µg/L        21.2110      76.255 ppb        21.2110  27.82%
   QC value within limits for S 181.975 Axial  Recovery = 76.25%
Sb 206.836†                8.3      8.7128 µg/L       2.99270      8.7128 ppb        2.99270  34.35%
   QC value within limits for Sb 206.836  Recovery = 87.13%
Se 196.026†               22.9      34.247 µg/L        2.0166      34.247 ppb         2.0166   5.89%
   QC value within limits for Se 196.026  Recovery = 114.16%
SiO2†                   1008.9      205.03 µg/L         3.370      205.03 ppb          3.370   1.64%
   QC value within limits for SiO2  Recovery = 96.26%
Si 251.611†             1287.0      103.77 µg/L         0.026      103.77 ppb          0.026   0.02%
   QC value within limits for Si 251.611  Recovery = 103.77%
Sn 189.927†               14.8      7.8276 µg/L       1.01361      7.8276 ppb        1.01361  12.95%
   QC value within limits for Sn 189.927  Recovery = 78.28%
Sr 421.552†              930.8      5.3153 µg/L       0.11048      5.3153 ppb        0.11048   2.08%
   QC value within limits for Sr 421.552  Recovery = 106.31%
Ti 334.940†             2178.0      5.1030 µg/L       0.15962      5.1030 ppb        0.15962   3.13%
   QC value within limits for Ti 334.940  Recovery = 102.06%
Tl 190.801†               15.9      25.592 µg/L        3.6471      25.592 ppb         3.6471  14.25%
   QC value within limits for Tl 190.801  Recovery = 127.96%
U 409.014†               408.3      41.314 µg/L        4.4732      41.314 ppb         4.4732  10.83%
   QC value within limits for U 409.014  Recovery = 82.63%
V 292.402†               384.8      4.7855 µg/L       0.28938      4.7855 ppb        0.28938   6.05%
   QC value within limits for V 292.402  Recovery = 95.71%
Zn 213.857†              360.0      10.113 µg/L        0.1206      10.113 ppb         0.1206   1.19%
   QC value within limits for Zn 213.857  Recovery = 101.13%
QC Failed.  Continue with analysis.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 05:26:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112335.8	112335.8	101	%			05:27:07
1	Al 396.153Radial†	180.7	15.6	8.1159	µg/L	8.1159	ppb	05:27:07
1	Ca 317.933Radial†	415.1	3.8	1.5101	µg/L	1.5101	ppb	05:27:28
1	Fe 238.204 Radial†	8.0	1.0	4.8962	µg/L	4.8962	ppb	05:27:28
1	K 766.490 Radial†	763.6	-83.4	-46.799	µg/L	-46.799	ppb	05:27:07
1	Mg 279.077 IEC†	13.6	-2.0	-11.162	µg/L	-11.162	ppb	05:27:28
1	Na 589.592 Radial†	-595.0	-83.4	-23.246	µg/L	-23.246	ppb	05:27:07
1	Sr 421.552†	-98.2	-14.7	-0.0837	µg/L	-0.0837	ppb	05:27:07
1	Sc 361.383	1988635.1	1988635.1	102.26	%			05:28:29
1	Y 371.029	1207903.6	1207903.6	102.26	%			05:28:29
1	Ag 328.068†	-78.1	24.9	0.2348	µg/L	0.2348	ppb	05:28:35
1	As 188.979†	2.6	-2.6	-5.1097	µg/L	-5.1097	ppb	05:28:56
1	B 249.677†	144.0	-10.4	-0.4894	µg/L	-0.4894	ppb	05:28:35
1	Ba 233.527†	-88.8	-7.7	-0.2059	µg/L	-0.2059	ppb	05:28:56
1	Be 313.107†	3568.9	-175.6	-0.1168	µg/L	-0.1168	ppb	05:28:35
1	Cd 226.502†	-100.1	-0.4	-0.0196	µg/L	-0.0196	ppb	05:28:56
1	Co 228.616†	-65.6	3.2	0.1638	µg/L	0.1638	ppb	05:28:56
1	Cr 267.716†	-147.5	-17.1	-0.3809	µg/L	-0.3809	ppb	05:28:35
1	Cu 324.752†	3249.3	-88.5	-0.6597	µg/L	-0.6597	ppb	05:28:35
1	Mn 257.610†	-221.0	15.1	0.0509	µg/L	0.0509	ppb	05:28:56
1	Mo 202.031†	-3.5	1.4	0.1713	µg/L	0.1713	ppb	05:28:56
1	Ni 231.604†	285.9	-2.2	-0.1246	µg/L	-0.1246	ppb	05:28:56
1	P 214.914†	194.5	-13.9	-31.414	µg/L	-31.414	ppb	05:28:56
1	Pb 220.353†	56.5	-0.7	-0.1785	µg/L	-0.1785	ppb	05:28:56
1	S 181.975 Axial†	32.4	-7.2	-38.268	µg/L	-38.268	ppb	05:28:56
1	Sb 206.836†	15.7	-3.6	-3.8236	µg/L	-3.8236	ppb	05:28:56
1	Se 196.026†	10.4	-0.6	-0.9512	µg/L	-0.9512	ppb	05:28:56
1	SiO2†	2010.1	-110.0	-22.363	µg/L	-22.363	ppb	05:28:35
1	Si 251.611†	349.8	27.4	2.3631	µg/L	2.3631	ppb	05:28:56
1	Sn 189.927†	18.6	-6.2	-3.2357	µg/L	-3.2357	ppb	05:28:56
1	Ti 334.940†	821.8	7.0	0.0164	µg/L	0.0164	ppb	05:28:35
1	Tl 190.801†	-20.7	-0.9	-1.4421	µg/L	-1.4421	ppb	05:28:56
1	U 409.014†	749.5	-92.5	-9.3650	µg/L	-9.3650	ppb	05:28:35
1	V 292.402†	-114.4	-35.3	-0.4396	µg/L	-0.4396	ppb	05:28:35
1	Zn 213.857†	516.4	-13.2	-0.3712	µg/L	-0.3712	ppb	05:28:56
2	Sc RADIAL	112390.5	112390.5	101	%			05:27:33
2	Al 396.153Radial†	138.1	-26.6	-13.843	µg/L	-13.843	ppb	05:27:33
2	Ca 317.933Radial†	414.1	2.6	1.0326	µg/L	1.0326	ppb	05:27:53
2	Fe 238.204 Radial†	3.7	-3.3	-17.151	µg/L	-17.151	ppb	05:27:53
2	K 766.490 Radial†	840.5	-7.6	-4.2604	µg/L	-4.2604	ppb	05:27:33
2	Mg 279.077 IEC†	16.7	1.1	6.3228	µg/L	6.3228	ppb	05:27:53
2	Na 589.592 Radial†	-626.5	-114.3	-31.874	µg/L	-31.874	ppb	05:27:33
2	Sr 421.552†	-35.3	47.7	0.2723	µg/L	0.2723	ppb	05:27:33
2	Sc 361.383	1961357.0	1961357.0	100.86	%			05:29:02
2	Y 371.029	1192322.5	1192322.5	100.94	%			05:29:02
2	Ag 328.068†	17.0	118.1	1.1207	µg/L	1.1207	ppb	05:29:07
2	As 188.979†	-0.7	-5.8	-11.587	µg/L	-11.587	ppb	05:29:28
2	B 249.677†	142.8	-9.6	-0.4438	µg/L	-0.4438	ppb	05:29:07
2	Ba 233.527†	-72.8	7.0	0.1863	µg/L	0.1863	ppb	05:29:28
2	Be 313.107†	3559.3	-136.6	-0.0909	µg/L	-0.0909	ppb	05:29:07
2	Cd 226.502†	-99.4	-1.1	-0.0347	µg/L	-0.0347	ppb	05:29:28
2	Co 228.616†	-63.6	4.3	0.2175	µg/L	0.2175	ppb	05:29:28
2	Cr 267.716†	-128.5	-0.2	-0.0053	µg/L	-0.0053	ppb	05:29:07
2	Cu 324.752†	3225.8	-67.6	-0.5085	µg/L	-0.5085	ppb	05:29:07
2	Mn 257.610†	-193.8	39.1	0.1283	µg/L	0.1283	ppb	05:29:28
2	Mo 202.031†	-7.3	-2.4	-0.2911	µg/L	-0.2911	ppb	05:29:28
2	Ni 231.604†	279.4	-4.7	-0.2717	µg/L	-0.2717	ppb	05:29:28
2	P 214.914†	200.4	-5.5	-12.283	µg/L	-12.283	ppb	05:29:28
2	Pb 220.353†	54.3	-2.2	-0.5813	µg/L	-0.5813	ppb	05:29:28

2	S 181.975 Axial†	33.9	-5.3	-28.129 µg/L	-28.129 ppb	05:29:28
2	Sb 206.836†	17.3	-1.8	-1.8688 µg/L	-1.8688 ppb	05:29:28
2	Se 196.026†	13.2	2.2	3.3320 µg/L	3.3320 ppb	05:29:28
2	SiO2†	2005.1	-87.7	-17.815 µg/L	-17.815 ppb	05:29:07
2	Si 251.611†	345.8	28.2	2.3189 µg/L	2.3189 ppb	05:29:28
2	Sn 189.927†	23.4	-1.1	-0.5865 µg/L	-0.5865 ppb	05:29:28
2	Ti 334.940†	794.0	-9.3	-0.0220 µg/L	-0.0220 ppb	05:29:07
2	Tl 190.801†	-22.5	-3.0	-4.8270 µg/L	-4.8270 ppb	05:29:28
2	U 409.014†	770.4	-61.6	-6.2303 µg/L	-6.2303 ppb	05:29:07
2	V 292.402†	-106.3	-28.8	-0.3610 µg/L	-0.3610 ppb	05:29:07
2	Zn 213.857†	509.8	-12.8	-0.3571 µg/L	-0.3571 ppb	05:29:28
3	Sc RADIAL	111266.3	111266.3	100.0 %		05:27:59
3	Al 396.153Radial†	183.8	20.4	10.661 µg/L	10.661 ppb	05:27:59
3	Ca 317.933Radial†	421.9	14.5	5.7261 µg/L	5.7261 ppb	05:28:19
3	Fe 238.204 Radial†	5.3	-1.6	-8.3398 µg/L	-8.3398 ppb	05:28:19
3	K 766.490 Radial†	840.0	0.3	0.1480 µg/L	0.1480 ppb	05:27:59
3	Mg 279.077 IEC†	15.1	-0.4	-2.0645 µg/L	-2.0645 ppb	05:28:19
3	Na 589.592 Radial†	-618.7	-112.7	-31.426 µg/L	-31.426 ppb	05:27:59
3	Sr 421.552†	-45.2	37.4	0.2136 µg/L	0.2136 ppb	05:27:59
3	Sc 361.383	2043522.5	2043522.5	105.08 %		05:29:34
3	Y 371.029	1241046.2	1241046.2	105.06 %		05:29:34
3	Ag 328.068†	-29.7	73.0	0.6952 µg/L	0.6952 ppb	05:29:39
3	As 188.979†	3.6	-1.7	-3.3397 µg/L	-3.3397 ppb	05:30:00
3	B 249.677†	167.1	7.8	0.3682 µg/L	0.3682 ppb	05:29:39
3	Ba 233.527†	-64.8	17.6	0.4699 µg/L	0.4699 ppb	05:30:00
3	Be 313.107†	3502.0	-333.0	-0.2215 µg/L	-0.2215 ppb	05:29:39
3	Cd 226.502†	-94.3	7.7	0.2077 µg/L	0.2077 ppb	05:30:00
3	Co 228.616†	-63.2	7.2	0.3637 µg/L	0.3637 ppb	05:30:00
3	Cr 267.716†	-122.1	11.0	0.2448 µg/L	0.2448 ppb	05:29:39
3	Cu 324.752†	3276.8	-147.7	-1.1038 µg/L	-1.1038 ppb	05:29:39
3	Mn 257.610†	-198.1	42.7	0.1415 µg/L	0.1415 ppb	05:30:00
3	Mo 202.031†	-10.0	-4.6	-0.5555 µg/L	-0.5555 ppb	05:30:00
3	Ni 231.604†	279.8	-15.4	-0.8895 µg/L	-0.8895 ppb	05:30:00
3	P 214.914†	196.1	-17.6	-39.604 µg/L	-39.604 ppb	05:30:00
3	Pb 220.353†	67.6	8.3	2.2372 µg/L	2.2372 ppb	05:30:00
3	S 181.975 Axial†	32.0	-8.3	-44.638 µg/L	-44.638 ppb	05:30:00
3	Sb 206.836†	17.1	-2.7	-2.8156 µg/L	-2.8156 ppb	05:30:00
3	Se 196.026†	8.9	-2.4	-3.5437 µg/L	-3.5437 ppb	05:30:00
3	SiO2†	2046.6	-128.1	-26.023 µg/L	-26.023 ppb	05:29:39
3	Si 251.611†	344.0	12.7	1.0841 µg/L	1.0841 ppb	05:30:00
3	Sn 189.927†	23.3	-2.1	-1.1190 µg/L	-1.1190 ppb	05:30:00
3	Ti 334.940†	789.1	-45.7	-0.1075 µg/L	-0.1075 ppb	05:29:39
3	Tl 190.801†	-28.4	-7.7	-12.292 µg/L	-12.292 ppb	05:30:00
3	U 409.014†	753.5	-108.4	-10.973 µg/L	-10.973 ppb	05:29:39
3	V 292.402†	-72.0	8.0	0.0745 µg/L	0.0745 ppb	05:29:39
3	Zn 213.857†	504.8	-37.8	-1.0610 µg/L	-1.0610 ppb	05:30:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1997838.2	102.73	%	2.152				2.09%
Sc RADIAL	111997.6	101	%	0.6				0.57%
Y 371.029	1213757.4	102.75	%	2.107				2.05%
Ag 328.068†	72.0	0.6836	µg/L	0.44304	0.6836	ppb	0.44304	64.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	1.6447	µg/L	13.47308	1.6447	ppb	13.47308	819.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-6.6787	µg/L	4.34169	-6.6787	ppb	4.34169	65.01%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-4.1	-0.1883	µg/L	0.48253	-0.1883	ppb	0.48253	256.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.6	0.1501	µg/L	0.33937	0.1501	ppb	0.33937	226.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-215.1	-0.1431	µg/L	0.06916	-0.1431	ppb	0.06916	48.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	7.0	2.7563	µg/L	2.58301	2.7563	ppb	2.58301	93.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.0	0.0511	µg/L	0.13580	0.0511	ppb	0.13580	265.53%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.9	0.2483	µg/L	0.10345	0.2483	ppb	0.10345	41.66%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -2.1     -0.0471 µg/L       0.31493     -0.0471 ppb        0.31493 668.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -101.3     -0.7573 µg/L       0.30944     -0.7573 ppb        0.30944  40.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.3     -6.8649 µg/L      11.09734     -6.8649 ppb       11.09734 161.65%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -30.2     -16.970 µg/L       25.9259     -16.970 ppb        25.9259 152.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4     -2.3012 µg/L       8.74472     -2.3012 ppb        8.74472 380.01%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              32.3      0.1069 µg/L       0.04895      0.1069 ppb        0.04895  45.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.9     -0.2251 µg/L       0.36787     -0.2251 ppb        0.36787 163.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -103.5     -28.849 µg/L        4.8570     -28.849 ppb         4.8570  16.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -7.4     -0.4286 µg/L       0.40587     -0.4286 ppb        0.40587  94.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -12.3     -27.767 µg/L       14.0206     -27.767 ppb        14.0206  50.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.8      0.4925 µg/L       1.52437      0.4925 ppb        1.52437 309.53%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.9     -37.012 µg/L        8.3261     -37.012 ppb         8.3261  22.50%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.7     -2.8360 µg/L       0.97753     -2.8360 ppb        0.97753  34.47%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.3     -0.3877 µg/L       3.47235     -0.3877 ppb        3.47235 895.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -108.6     -22.067 µg/L        4.1120     -22.067 ppb         4.1120  18.63%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              22.8      1.9220 µg/L       0.72599      1.9220 ppb        0.72599  37.77%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -3.2     -1.6471 µg/L       1.40129     -1.6471 ppb        1.40129  85.08%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              23.5      0.1341 µg/L       0.19086      0.1341 ppb        0.19086 142.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -16.0     -0.0377 µg/L       0.06343     -0.0377 ppb        0.06343 168.13%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.9     -6.1869 µg/L       5.55113     -6.1869 ppb        5.55113  89.72%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -87.5     -8.8562 µg/L       2.41210     -8.8562 ppb        2.41210  27.24%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.7     -0.2421 µg/L       0.27691     -0.2421 ppb        0.27691 114.40%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -21.2     -0.5964 µg/L       0.40241     -0.5964 ppb        0.40241  67.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 26
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 05:33:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113970.9	113970.9	102	%			05:34:19
1	Al 396.153Radial†	10227.0	9823.2	5096.9	µg/L	5096.9	ppb	05:34:19
1	Ca 317.933Radial†	13415.7	12692.9	4999.1	µg/L	4999.1	ppb	05:34:40
1	Fe 238.204 Radial†	1035.3	1004.0	5176.3	µg/L	5176.3	ppb	05:34:40
1	K 766.490 Radial†	9983.4	8908.8	4998.1	µg/L	4998.1	ppb	05:34:19
1	Mg 279.077 IEC†	981.5	943.0	5267.0	µg/L	5267.0	ppb	05:34:40
1	Na 589.592 Radial†	36633.8	36278.6	10114	µg/L	10114	ppb	05:34:19
1	Sr 421.552†	89333.6	87316.1	498.61	µg/L	498.61	ppb	05:34:19
1	Sc 361.383	1989871.5	1989871.5	102.32	%			05:35:43
1	Y 371.029	1202401.8	1202401.8	101.79	%			05:35:43
1	Ag 328.068†	54150.3	53021.8	508.53	µg/L	508.53	ppb	05:35:49
1	As 188.979†	254.7	243.8	485.76	µg/L	485.76	ppb	05:36:10
1	B 249.677†	11032.4	10630.7	496.86	µg/L	496.86	ppb	05:35:49
1	Ba 233.527†	19064.1	18710.3	501.76	µg/L	501.76	ppb	05:35:49
1	Be 313.107†	780956.9	759555.5	505.14	µg/L	505.14	ppb	05:35:43
1	Cd 226.502†	18140.2	17825.6	501.51	µg/L	501.51	ppb	05:35:49
1	Co 228.616†	10036.9	9876.4	501.11	µg/L	501.11	ppb	05:35:49
1	Cr 267.716†	22804.6	22413.9	499.77	µg/L	499.77	ppb	05:35:49
1	Cu 324.752†	72684.9	67768.2	506.78	µg/L	506.78	ppb	05:35:49
1	Mn 257.610†	154392.4	151117.3	504.94	µg/L	504.94	ppb	05:35:43
1	Mo 202.031†	4218.9	4127.9	495.60	µg/L	495.60	ppb	05:36:10
1	Ni 231.604†	9163.2	8673.4	500.11	µg/L	500.11	ppb	05:35:49
1	P 214.914†	1320.5	1086.3	2401.2	µg/L	2401.2	ppb	05:36:10
1	Pb 220.353†	1951.2	1850.9	495.85	µg/L	495.85	ppb	05:36:10
1	S 181.975 Axial†	221.8	177.9	949.71	µg/L	949.71	ppb	05:36:10
1	Sb 206.836†	500.5	470.2	495.12	µg/L	495.12	ppb	05:36:10
1	Se 196.026†	353.3	334.5	503.40	µg/L	503.40	ppb	05:36:10
1	SiO2†	28798.3	26068.6	5297.6	µg/L	5297.6	ppb	05:35:49
1	Si 251.611†	31604.0	30571.6	2434.0	µg/L	2434.0	ppb	05:35:49
1	Sn 189.927†	1000.8	953.7	499.13	µg/L	499.13	ppb	05:36:10
1	Ti 334.940†	220588.9	214782.6	504.09	µg/L	504.09	ppb	05:35:43
1	Tl 190.801†	294.2	306.8	494.54	µg/L	494.54	ppb	05:36:10
1	U 409.014†	5796.6	4839.5	489.03	µg/L	489.03	ppb	05:35:49
1	V 292.402†	42443.9	41556.5	505.57	µg/L	505.57	ppb	05:35:49
1	Zn 213.857†	18812.9	17867.4	501.00	µg/L	501.00	ppb	05:35:49
2	Sc RADIAL	113856.9	113856.9	102	%			05:34:45
2	Al 396.153Radial†	10214.0	9820.4	5095.5	µg/L	5095.5	ppb	05:34:45
2	Ca 317.933Radial†	13430.1	12720.0	5009.8	µg/L	5009.8	ppb	05:35:06
2	Fe 238.204 Radial†	1035.1	1004.9	5180.9	µg/L	5180.9	ppb	05:35:06
2	K 766.490 Radial†	10040.2	8974.1	5034.7	µg/L	5034.7	ppb	05:34:45
2	Mg 279.077 IEC†	973.6	936.3	5229.5	µg/L	5229.5	ppb	05:35:06
2	Na 589.592 Radial†	36627.8	36308.6	10123	µg/L	10123	ppb	05:34:45
2	Sr 421.552†	89507.5	87573.4	500.08	µg/L	500.08	ppb	05:34:45
2	Sc 361.383	1998071.5	1998071.5	102.75	%			05:36:17
2	Y 371.029	1206699.5	1206699.5	102.15	%			05:36:17
2	Ag 328.068†	54341.4	52990.6	508.23	µg/L	508.23	ppb	05:36:22
2	As 188.979†	257.8	245.8	489.69	µg/L	489.69	ppb	05:36:43
2	B 249.677†	11049.8	10603.3	495.57	µg/L	495.57	ppb	05:36:22
2	Ba 233.527†	19123.9	18692.1	501.27	µg/L	501.27	ppb	05:36:22
2	Be 313.107†	770487.3	746233.4	496.28	µg/L	496.28	ppb	05:36:17
2	Cd 226.502†	18191.5	17802.9	500.87	µg/L	500.87	ppb	05:36:22
2	Co 228.616†	10058.5	9857.1	500.15	µg/L	500.15	ppb	05:36:22
2	Cr 267.716†	22895.2	22410.6	499.70	µg/L	499.70	ppb	05:36:22
2	Cu 324.752†	72967.8	67752.0	506.66	µg/L	506.66	ppb	05:36:22
2	Mn 257.610†	152666.1	148817.9	497.27	µg/L	497.27	ppb	05:36:17
2	Mo 202.031†	4233.0	4124.7	495.22	µg/L	495.22	ppb	05:36:43
2	Ni 231.604†	9180.4	8653.4	498.96	µg/L	498.96	ppb	05:36:22
2	P 214.914†	1329.2	1089.5	2408.3	µg/L	2408.3	ppb	05:36:43
2	Pb 220.353†	1968.3	1859.7	498.20	µg/L	498.20	ppb	05:36:43

2	S 181.975 Axial†	222.7	177.9	949.50 µg/L	949.50 ppb	05:36:43
2	Sb 206.836†	506.1	473.6	498.71 µg/L	498.71 ppb	05:36:43
2	Se 196.026†	359.4	338.9	510.12 µg/L	510.12 ppb	05:36:43
2	SiO2†	28895.6	26047.8	5293.4 µg/L	5293.4 ppb	05:36:22
2	Si 251.611†	31709.9	30547.9	2432.3 µg/L	2432.3 ppb	05:36:22
2	Sn 189.927†	1005.8	954.6	499.59 µg/L	499.59 ppb	05:36:43
2	Ti 334.940†	218428.3	211795.1	497.07 µg/L	497.07 ppb	05:36:17
2	Tl 190.801†	298.5	309.8	499.23 µg/L	499.23 ppb	05:36:43
2	U 409.014†	5796.6	4816.3	486.68 µg/L	486.68 ppb	05:36:22
2	V 292.402†	42580.3	41519.0	505.11 µg/L	505.11 ppb	05:36:22
2	Zn 213.857†	18841.2	17819.5	499.66 µg/L	499.66 ppb	05:36:22
3	Sc RADIAL	114329.6	114329.6	103 %		05:35:11
3	Al 396.153Radial†	10261.3	9825.3	5097.9 µg/L	5097.9 ppb	05:35:11
3	Ca 317.933Radial†	13361.5	12599.0	4962.2 µg/L	4962.2 ppb	05:35:32
3	Fe 238.204 Radial†	1029.4	995.1	5129.7 µg/L	5129.7 ppb	05:35:32
3	K 766.490 Radial†	9973.9	8869.0	4975.7 µg/L	4975.7 ppb	05:35:11
3	Mg 279.077 IEC†	977.0	935.6	5226.3 µg/L	5226.3 ppb	05:35:32
3	Na 589.592 Radial†	36761.4	36290.7	10118 µg/L	10118 ppb	05:35:11
3	Sr 421.552†	89449.5	87155.2	497.69 µg/L	497.69 ppb	05:35:11
3	Sc 361.383	1977428.3	1977428.3	101.68 %		05:36:50
3	Y 371.029	1195383.6	1195383.6	101.20 %		05:36:50
3	Ag 328.068†	49911.8	49186.5	471.78 µg/L	471.78 ppb	05:36:56
3	As 188.979†	254.1	244.8	487.73 µg/L	487.73 ppb	05:37:16
3	B 249.677†	10149.7	9830.4	459.34 µg/L	459.34 ppb	05:36:56
3	Ba 233.527†	17589.8	17377.7	466.02 µg/L	466.02 ppb	05:36:56
3	Be 313.107†	775388.4	758881.9	504.70 µg/L	504.70 ppb	05:36:50
3	Cd 226.502†	16604.7	16427.1	462.15 µg/L	462.15 ppb	05:36:56
3	Co 228.616†	9250.5	9164.7	465.02 µg/L	465.02 ppb	05:36:56
3	Cr 267.716†	21036.8	20815.6	464.14 µg/L	464.14 ppb	05:36:56
3	Cu 324.752†	67384.5	63002.6	471.21 µg/L	471.21 ppb	05:36:56
3	Mn 257.610†	153472.1	151161.7	505.08 µg/L	505.08 ppb	05:36:50
3	Mo 202.031†	4221.0	4155.9	498.96 µg/L	498.96 ppb	05:37:16
3	Ni 231.604†	8457.2	8035.4	463.33 µg/L	463.33 ppb	05:36:56
3	P 214.914†	1315.9	1089.9	2413.8 µg/L	2413.8 ppb	05:37:16
3	Pb 220.353†	1956.0	1867.6	500.41 µg/L	500.41 ppb	05:37:16
3	S 181.975 Axial†	223.7	181.1	966.86 µg/L	966.86 ppb	05:37:16
3	Sb 206.836†	503.8	476.6	501.98 µg/L	501.98 ppb	05:37:16
3	Se 196.026†	349.7	333.1	501.34 µg/L	501.34 ppb	05:37:16
3	SiO2†	26622.1	24105.5	4898.7 µg/L	4898.7 ppb	05:36:56
3	Si 251.611†	29125.5	28328.5	2251.7 µg/L	2251.7 ppb	05:36:56
3	Sn 189.927†	1000.5	959.5	502.13 µg/L	502.13 ppb	05:37:16
3	Ti 334.940†	219283.2	214855.1	504.26 µg/L	504.26 ppb	05:36:50
3	Tl 190.801†	301.9	316.2	509.75 µg/L	509.75 ppb	05:37:16
3	U 409.014†	5445.3	4529.7	457.67 µg/L	457.67 ppb	05:36:56
3	V 292.402†	39169.2	38597.1	469.87 µg/L	469.87 ppb	05:36:56
3	Zn 213.857†	17222.2	16418.7	460.31 µg/L	460.31 ppb	05:36:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1988457.1	102.25	%	0.534				0.52%
Sc RADIAL	114052.5	102	%	0.2				0.22%
Y 371.029	1201495.0	101.71	%	0.484				0.48%
Ag 328.068†	51733.0	496.18	µg/L	21.134	496.18	ppb	21.134	4.26%
QC value within limits for Ag 328.068 Recovery = 99.24%								
Al 396.153Radial†	9823.0	5096.7	µg/L	1.19	5096.7	ppb	1.19	0.02%
QC value within limits for Al 396.153Radial Recovery = 101.93%								
As 188.979†	244.8	487.73	µg/L	1.964	487.73	ppb	1.964	0.40%
QC value within limits for As 188.979 Recovery = 97.55%								
B 249.677†	10354.8	483.92	µg/L	21.296	483.92	ppb	21.296	4.40%
QC value within limits for B 249.677 Recovery = 96.78%								
Ba 233.527†	18260.0	489.69	µg/L	20.494	489.69	ppb	20.494	4.19%
QC value within limits for Ba 233.527 Recovery = 97.94%								
Be 313.107†	754890.3	502.04	µg/L	4.991	502.04	ppb	4.991	0.99%
QC value within limits for Be 313.107 Recovery = 100.41%								
Ca 317.933Radial†	12670.7	4990.4	µg/L	25.01	4990.4	ppb	25.01	0.50%
QC value within limits for Ca 317.933Radial Recovery = 99.81%								
Cd 226.502†	17351.9	488.18	µg/L	22.545	488.18	ppb	22.545	4.62%
QC value within limits for Cd 226.502 Recovery = 97.64%								
Co 228.616†	9632.7	488.76	µg/L	20.567	488.76	ppb	20.567	4.21%

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   QC value within limits for Co 228.616  Recovery = 97.75%
Cr 267.716†            21880.0      487.87 µg/L        20.553      487.87 ppb        20.553   4.21%
   QC value within limits for Cr 267.716  Recovery = 97.57%
Cu 324.752†            66174.3      494.89 µg/L        20.502      494.89 ppb        20.502   4.14%
   QC value within limits for Cu 324.752  Recovery = 98.98%
Fe 238.204 Radial†      1001.3      5162.3 µg/L         28.30      5162.3 ppb         28.30   0.55%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.25%
K 766.490 Radial†       8917.3      5002.8 µg/L         29.76      5002.8 ppb         29.76   0.59%
   QC value within limits for K 766.490 Radial  Recovery = 100.06%
Mg 279.077 IEC†          938.3      5241.0 µg/L         22.65      5241.0 ppb         22.65   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.82%
Mn 257.610†           150365.6      502.43 µg/L         4.472      502.43 ppb         4.472   0.89%
   QC value within limits for Mn 257.610  Recovery = 100.49%
Mo 202.031†             4136.2      496.59 µg/L         2.059      496.59 ppb         2.059   0.41%
   QC value within limits for Mo 202.031  Recovery = 99.32%
Na 589.592 Radial†     36292.6       10118 µg/L           4.2       10118 ppb           4.2   0.04%
   QC value within limits for Na 589.592 Radial  Recovery = 101.18%
Ni 231.604†             8454.1      487.47 µg/L        20.913      487.47 ppb        20.913   4.29%
   QC value within limits for Ni 231.604  Recovery = 97.49%
P 214.914†              1088.6      2407.8 µg/L          6.32      2407.8 ppb          6.32   0.26%
   QC value within limits for P 214.914  Recovery = 96.31%
Pb 220.353†             1859.4      498.16 µg/L         2.283      498.16 ppb         2.283   0.46%
   QC value within limits for Pb 220.353  Recovery = 99.63%
S 181.975 Axial†         179.0      955.36 µg/L         9.965      955.36 ppb         9.965   1.04%
   QC value within limits for S 181.975 Axial  Recovery = 95.54%
Sb 206.836†              473.5      498.60 µg/L         3.433      498.60 ppb         3.433   0.69%
   QC value within limits for Sb 206.836  Recovery = 99.72%
Se 196.026†              335.5      504.95 µg/L         4.589      504.95 ppb         4.589   0.91%
   QC value within limits for Se 196.026  Recovery = 100.99%
SiO2†                  25407.3      5163.2 µg/L        229.11      5163.2 ppb        229.11   4.44%
   QC value within limits for SiO2  Recovery = 96.55%
Si 251.611†            29816.0      2372.7 µg/L        104.74      2372.7 ppb        104.74   4.41%
   QC value within limits for Si 251.611  Recovery = 94.91%
Sn 189.927†              956.0      500.29 µg/L         1.617      500.29 ppb         1.617   0.32%
   QC value within limits for Sn 189.927  Recovery = 100.06%
Sr 421.552†            87348.2      498.79 µg/L         1.204      498.79 ppb         1.204   0.24%
   QC value within limits for Sr 421.552  Recovery = 99.76%
Ti 334.940†           213810.9      501.81 µg/L         4.101      501.81 ppb         4.101   0.82%
   QC value within limits for Ti 334.940  Recovery = 100.36%
Tl 190.801†              311.0      501.17 µg/L         7.789      501.17 ppb         7.789   1.55%
   QC value within limits for Tl 190.801  Recovery = 100.23%
U 409.014†              4728.5      477.79 µg/L        17.463      477.79 ppb        17.463   3.66%
   QC value within limits for U 409.014  Recovery = 95.56%
V 292.402†             40557.6      493.51 µg/L        20.482      493.51 ppb        20.482   4.15%
   QC value within limits for V 292.402  Recovery = 98.70%
Zn 213.857†            17368.6      486.99 µg/L        23.118      486.99 ppb        23.118   4.75%
   QC value within limits for Zn 213.857  Recovery = 97.40%
All analyte(s) passed QC.
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Sequence No.: 27
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 05:37:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111744.9	111744.9	100	%			05:37:58
1	Al 396.153Radial†	193.2	29.1	15.138	µg/L	15.138	ppb	05:37:58
1	Ca 317.933Radial†	403.6	-5.5	-2.1494	µg/L	-2.1494	ppb	05:38:18
1	Fe 238.204 Radial†	8.3	1.3	6.8799	µg/L	6.8799	ppb	05:38:18
1	K 766.490 Radial†	735.0	-107.9	-60.547	µg/L	-60.547	ppb	05:37:58
1	Mg 279.077 IEC†	18.1	2.6	14.307	µg/L	14.307	ppb	05:38:18
1	Na 589.592 Radial†	-585.3	-76.8	-21.416	µg/L	-21.416	ppb	05:37:58
1	Sr 421.552†	-82.3	0.7	0.0040	µg/L	0.0040	ppb	05:37:58
1	Sc 361.383	1967501.5	1967501.5	101.17	%			05:39:21
1	Y 371.029	1196023.5	1196023.5	101.25	%			05:39:21
1	Ag 328.068†	-54.4	47.5	0.4505	µg/L	0.4505	ppb	05:39:26
1	As 188.979†	3.5	-1.6	-3.2194	µg/L	-3.2194	ppb	05:39:47
1	B 249.677†	133.6	-19.2	-0.9012	µg/L	-0.9012	ppb	05:39:26
1	Ba 233.527†	-73.4	6.6	0.1757	µg/L	0.1757	ppb	05:39:47
1	Be 313.107†	3745.1	36.0	0.0240	µg/L	0.0240	ppb	05:39:26
1	Cd 226.502†	-92.9	5.6	0.1546	µg/L	0.1546	ppb	05:39:47
1	Co 228.616†	-65.2	2.9	0.1490	µg/L	0.1490	ppb	05:39:47
1	Cr 267.716†	-86.4	41.8	0.9293	µg/L	0.9293	ppb	05:39:26
1	Cu 324.752†	3283.6	-20.5	-0.1516	µg/L	-0.1516	ppb	05:39:26
1	Mn 257.610†	-213.0	20.7	0.0700	µg/L	0.0700	ppb	05:39:47
1	Mo 202.031†	-3.2	1.7	0.1998	µg/L	0.1998	ppb	05:39:47
1	Ni 231.604†	288.4	3.3	0.1926	µg/L	0.1926	ppb	05:39:47
1	P 214.914†	195.0	-11.4	-25.882	µg/L	-25.882	ppb	05:39:47
1	Pb 220.353†	58.0	1.3	0.3593	µg/L	0.3593	ppb	05:39:47
1	S 181.975 Axial†	35.7	-3.6	-18.992	µg/L	-18.992	ppb	05:39:47
1	Sb 206.836†	21.8	2.6	2.7411	µg/L	2.7411	ppb	05:39:47
1	Se 196.026†	12.3	1.3	1.9843	µg/L	1.9843	ppb	05:39:47
1	SiO2†	2011.8	-87.2	-17.723	µg/L	-17.723	ppb	05:39:26
1	Si 251.611†	330.8	12.3	1.0825	µg/L	1.0825	ppb	05:39:47
1	Sn 189.927†	21.5	-3.1	-1.6333	µg/L	-1.6333	ppb	05:39:47
1	Ti 334.940†	809.3	3.3	0.0079	µg/L	0.0079	ppb	05:39:26
1	Tl 190.801†	-18.6	0.9	1.4663	µg/L	1.4663	ppb	05:39:47
1	U 409.014†	787.1	-47.5	-4.8055	µg/L	-4.8055	ppb	05:39:26
1	V 292.402†	-104.5	-26.7	-0.3276	µg/L	-0.3276	ppb	05:39:26
1	Zn 213.857†	518.6	-5.6	-0.1599	µg/L	-0.1599	ppb	05:39:47
2	Sc RADIAL	112615.7	112615.7	101	%			05:38:24
2	Al 396.153Radial†	161.2	-4.1	-2.1196	µg/L	-2.1196	ppb	05:38:24
2	Ca 317.933Radial†	421.0	8.6	3.3849	µg/L	3.3849	ppb	05:38:44
2	Fe 238.204 Radial†	6.9	-0.2	-0.7609	µg/L	-0.7609	ppb	05:38:44
2	K 766.490 Radial†	793.9	-55.4	-31.067	µg/L	-31.067	ppb	05:38:24
2	Mg 279.077 IEC†	10.9	-4.6	-25.723	µg/L	-25.723	ppb	05:38:44
2	Na 589.592 Radial†	-606.1	-92.9	-25.888	µg/L	-25.888	ppb	05:38:24
2	Sr 421.552†	-66.1	17.3	0.0991	µg/L	0.0991	ppb	05:38:24
2	Sc 361.383	1988637.7	1988637.7	102.26	%			05:39:53
2	Y 371.029	1208971.9	1208971.9	102.35	%			05:39:53
2	Ag 328.068†	-9.7	91.7	0.8714	µg/L	0.8714	ppb	05:39:58
2	As 188.979†	2.2	-2.9	-5.8497	µg/L	-5.8497	ppb	05:40:19
2	B 249.677†	194.6	39.1	1.8326	µg/L	1.8326	ppb	05:39:58
2	Ba 233.527†	-76.5	4.4	0.1161	µg/L	0.1161	ppb	05:40:19
2	Be 313.107†	3635.3	-110.6	-0.0736	µg/L	-0.0736	ppb	05:39:58
2	Cd 226.502†	-97.3	2.3	0.0569	µg/L	0.0569	ppb	05:40:19
2	Co 228.616†	-59.4	9.3	0.4725	µg/L	0.4725	ppb	05:40:19
2	Cr 267.716†	-152.6	-22.0	-0.4905	µg/L	-0.4905	ppb	05:39:58
2	Cu 324.752†	3249.8	-88.1	-0.6572	µg/L	-0.6572	ppb	05:39:58
2	Mn 257.610†	-210.2	25.7	0.0857	µg/L	0.0857	ppb	05:40:19
2	Mo 202.031†	-4.9	0.0	0.0036	µg/L	0.0036	ppb	05:40:19
2	Ni 231.604†	276.6	-11.2	-0.6461	µg/L	-0.6461	ppb	05:40:19
2	P 214.914†	197.3	-11.2	-25.377	µg/L	-25.377	ppb	05:40:19
2	Pb 220.353†	48.3	-8.7	-2.3302	µg/L	-2.3302	ppb	05:40:19

2	S 181.975 Axial†	32.6	-7.0	-37.251 µg/L	-37.251 ppb	05:40:19
2	Sb 206.836†	17.3	-2.0	-2.1529 µg/L	-2.1529 ppb	05:40:19
2	Se 196.026†	12.4	1.3	1.9036 µg/L	1.9036 ppb	05:40:19
2	SiO2†	2003.6	-116.4	-23.651 µg/L	-23.651 ppb	05:39:58
2	Si 251.611†	338.2	16.1	1.3943 µg/L	1.3943 ppb	05:40:19
2	Sn 189.927†	21.2	-3.7	-1.9087 µg/L	-1.9087 ppb	05:40:19
2	Ti 334.940†	786.9	-27.1	-0.0639 µg/L	-0.0639 ppb	05:39:58
2	Tl 190.801†	-19.5	0.3	0.4182 µg/L	0.4182 ppb	05:40:19
2	U 409.014†	750.5	-91.6	-9.2699 µg/L	-9.2699 ppb	05:39:58
2	V 292.402†	-100.2	-21.5	-0.2737 µg/L	-0.2737 ppb	05:39:58
2	Zn 213.857†	514.6	-15.0	-0.4184 µg/L	-0.4184 ppb	05:40:19
3	Sc RADIAL	110635.6	110635.6	99.4 %		05:38:50
3	Al 396.153Radial†	173.5	11.2	5.8457 µg/L	5.8457 ppb	05:38:50
3	Ca 317.933Radial†	415.6	10.7	4.1947 µg/L	4.1947 ppb	05:39:10
3	Fe 238.204 Radial†	7.3	0.4	1.9517 µg/L	1.9517 ppb	05:39:10
3	K 766.490 Radial†	785.1	-50.1	-28.129 µg/L	-28.129 ppb	05:38:50
3	Mg 279.077 IEC†	20.6	5.3	29.604 µg/L	29.604 ppb	05:39:10
3	Na 589.592 Radial†	-605.8	-103.3	-28.796 µg/L	-28.796 ppb	05:38:50
3	Sr 421.552†	-37.9	44.5	0.2542 µg/L	0.2542 ppb	05:38:50
3	Sc 361.383	1989526.6	1989526.6	102.31 %		05:40:25
3	Y 371.029	1209301.3	1209301.3	102.37 %		05:40:25
3	Ag 328.068†	-4.9	96.5	0.9190 µg/L	0.9190 ppb	05:40:30
3	As 188.979†	-2.1	-7.2	-14.300 µg/L	-14.300 ppb	05:40:51
3	B 249.677†	147.4	-7.1	-0.3332 µg/L	-0.3332 ppb	05:40:30
3	Ba 233.527†	-68.4	12.3	0.3290 µg/L	0.3290 ppb	05:40:51
3	Be 313.107†	3593.1	-153.5	-0.1021 µg/L	-0.1021 ppb	05:40:30
3	Cd 226.502†	-93.5	6.0	0.1610 µg/L	0.1610 ppb	05:40:51
3	Co 228.616†	-77.6	-8.5	-0.4321 µg/L	-0.4321 ppb	05:40:51
3	Cr 267.716†	-88.3	40.9	0.9091 µg/L	0.9091 ppb	05:40:30
3	Cu 324.752†	3208.7	-129.6	-0.9667 µg/L	-0.9667 ppb	05:40:30
3	Mn 257.610†	-209.4	26.5	0.0887 µg/L	0.0887 ppb	05:40:51
3	Mo 202.031†	-8.2	-3.2	-0.3847 µg/L	-0.3847 ppb	05:40:51
3	Ni 231.604†	278.9	-9.0	-0.5216 µg/L	-0.5216 ppb	05:40:51
3	P 214.914†	192.8	-15.7	-35.357 µg/L	-35.357 ppb	05:40:51
3	Pb 220.353†	59.5	2.2	0.5911 µg/L	0.5911 ppb	05:40:51
3	S 181.975 Axial†	31.9	-7.6	-40.799 µg/L	-40.799 ppb	05:40:51
3	Sb 206.836†	17.4	-1.9	-1.9958 µg/L	-1.9958 ppb	05:40:51
3	Se 196.026†	12.2	1.1	1.6078 µg/L	1.6078 ppb	05:40:51
3	SiO2†	2000.2	-120.6	-24.500 µg/L	-24.500 ppb	05:40:30
3	Si 251.611†	339.3	17.0	1.5323 µg/L	1.5323 ppb	05:40:51
3	Sn 189.927†	17.9	-6.9	-3.5864 µg/L	-3.5864 ppb	05:40:51
3	Ti 334.940†	813.2	-1.8	-0.0044 µg/L	-0.0044 ppb	05:40:30
3	Tl 190.801†	-12.6	7.0	11.233 µg/L	11.233 ppb	05:40:51
3	U 409.014†	734.3	-107.8	-10.908 µg/L	-10.908 ppb	05:40:30
3	V 292.402†	-68.7	9.4	0.0936 µg/L	0.0936 ppb	05:40:30
3	Zn 213.857†	512.5	-17.3	-0.4859 µg/L	-0.4859 ppb	05:40:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1981888.6	101.91	%	0.641				0.63%
Sc RADIAL	111665.4	100	%	0.9				0.89%
Y 371.029	1204765.6	101.99	%	0.641				0.63%
Ag 328.068†	78.6	0.7470	µg/L	0.25786	0.7470	ppb	0.25786	34.52%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.1	6.2881	µg/L	8.63739	6.2881	ppb	8.63739	137.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.9	-7.7898	µg/L	5.78957	-7.7898	ppb	5.78957	74.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4.3	0.1994	µg/L	1.44261	0.1994	ppb	1.44261	723.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.7	0.2070	µg/L	0.10984	0.2070	ppb	0.10984	53.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-76.0	-0.0506	µg/L	0.06612	-0.0506	ppb	0.06612	130.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.6	1.8101	µg/L	3.45286	1.8101	ppb	3.45286	190.76%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.6	0.1242	µg/L	0.05833	0.1242	ppb	0.05833	46.98%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.2	0.0631	µg/L	0.45838	0.0631	ppb	0.45838	726.31%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              20.2      0.4493 µg/L       0.81395      0.4493 ppb        0.81395 181.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -79.4     -0.5918 µg/L       0.41148     -0.5918 ppb        0.41148  69.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      2.6903 µg/L       3.87357      2.6903 ppb        3.87357 143.98%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -71.1     -39.914 µg/L       17.9286     -39.914 ppb        17.9286  44.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.1      6.0625 µg/L      28.56989      6.0625 ppb       28.56989 471.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              24.3      0.0815 µg/L       0.01005      0.0815 ppb        0.01005  12.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.5     -0.0604 µg/L       0.29745     -0.0604 ppb        0.29745 492.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -91.0     -25.367 µg/L        3.7178     -25.367 ppb         3.7178  14.66%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.6     -0.3250 µg/L       0.45254     -0.3250 ppb        0.45254 139.23%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -12.8     -28.872 µg/L        5.6217     -28.872 ppb         5.6217  19.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -1.7     -0.4599 µg/L       1.62384     -0.4599 ppb        1.62384 353.09%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.0     -32.347 µg/L       11.7013     -32.347 ppb        11.7013  36.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -0.4     -0.4692 µg/L       2.78128     -0.4692 ppb        2.78128 592.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.2      1.8319 µg/L       0.19823      1.8319 ppb        0.19823  10.82%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -108.1     -21.958 µg/L        3.6920     -21.958 ppb         3.6920  16.81%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              15.1      1.3364 µg/L       0.23042      1.3364 ppb        0.23042  17.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -4.6     -2.3761 µg/L       1.05715     -2.3761 ppb        1.05715  44.49%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              20.9      0.1191 µg/L       0.12632      0.1191 ppb        0.12632 106.07%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -8.5     -0.0201 µg/L       0.03836     -0.0201 ppb        0.03836 190.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.7      4.3723 µg/L       5.96417      4.3723 ppb        5.96417 136.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -82.3     -8.3277 µg/L       3.15833     -8.3277 ppb        3.15833  37.93%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -12.9     -0.1692 µg/L       0.22920     -0.1692 ppb        0.22920 135.46%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -12.6     -0.3547 µg/L       0.17209     -0.3547 ppb        0.17209  48.52%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/15/2009 06:00:41 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121509A.sif
Batch ID:
Results Data Set: 121509
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/15/2009 06:00:44**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112361.1	112361.1	101	%			06:01:24
1	Al 396.153Radial†	10265.1	10004.0	5190.9	µg/L	5190.9	ppb	06:01:24
1	Ca 317.933Radial†	13273.3	12739.5	5017.5	µg/L	5017.5	ppb	06:01:44
1	Fe 238.204 Radial†	1021.5	1004.8	5180.6	µg/L	5180.6	ppb	06:01:44
1	K 766.490 Radial†	10014.0	9078.8	5093.4	µg/L	5093.4	ppb	06:01:24
1	Mg 279.077 IEC†	964.8	940.2	5251.7	µg/L	5251.7	ppb	06:01:44
1	Na 589.592 Radial†	36346.1	36506.2	10178	µg/L	10178	ppb	06:01:24
1	Sr 421.552†	88903.3	88139.7	503.31	µg/L	503.31	ppb	06:01:24
1	Sc 361.383	1985476.1	1985476.1	102.10	%			06:02:47
1	Y 371.029	1197687.8	1197687.8	101.39	%			06:02:47
1	Ag 328.068†	53652.7	52651.6	504.97	µg/L	504.97	ppb	06:02:53
1	As 188.979†	261.6	251.1	500.41	µg/L	500.41	ppb	06:03:13
1	B 249.677†	10862.3	10487.9	490.16	µg/L	490.16	ppb	06:02:53
1	Ba 233.527†	18819.2	18511.7	496.44	µg/L	496.44	ppb	06:02:53
1	Be 313.107†	770455.7	750959.7	499.43	µg/L	499.43	ppb	06:02:47
1	Cd 226.502†	17861.3	17591.8	494.93	µg/L	494.93	ppb	06:02:53
1	Co 228.616†	9898.2	9762.2	495.33	µg/L	495.33	ppb	06:02:53
1	Cr 267.716†	22511.6	22176.2	494.47	µg/L	494.47	ppb	06:02:53
1	Cu 324.752†	71894.6	67151.3	502.18	µg/L	502.18	ppb	06:02:53
1	Mn 257.610†	153472.5	150550.3	503.05	µg/L	503.05	ppb	06:02:47
1	Mo 202.031†	4239.8	4157.6	499.16	µg/L	499.16	ppb	06:03:13
1	Ni 231.604†	9015.7	8548.7	492.92	µg/L	492.92	ppb	06:02:53
1	P 214.914†	1318.8	1087.5	2404.5	µg/L	2404.5	ppb	06:03:13
1	Pb 220.353†	1962.2	1865.9	499.88	µg/L	499.88	ppb	06:03:13
1	S 181.975 Axial†	217.9	174.6	932.18	µg/L	932.18	ppb	06:03:13
1	Sb 206.836†	506.1	476.8	502.13	µg/L	502.13	ppb	06:03:13
1	Se 196.026†	356.5	338.3	509.20	µg/L	509.20	ppb	06:03:13
1	SiO2†	28460.0	25799.5	5242.9	µg/L	5242.9	ppb	06:02:53
1	Si 251.611†	31177.2	30221.9	2405.6	µg/L	2405.6	ppb	06:02:53
1	Sn 189.927†	1000.6	955.7	500.17	µg/L	500.17	ppb	06:03:13
1	Ti 334.940†	218838.7	213545.6	501.19	µg/L	501.19	ppb	06:02:47
1	Tl 190.801†	299.2	312.3	503.34	µg/L	503.34	ppb	06:03:13
1	U 409.014†	5769.0	4825.0	487.56	µg/L	487.56	ppb	06:02:53
1	V 292.402†	41854.9	41071.5	499.74	µg/L	499.74	ppb	06:02:53
1	Zn 213.857†	18562.6	17662.9	495.27	µg/L	495.27	ppb	06:02:53
2	Sc RADIAL	112377.0	112377.0	101	%			06:01:50
2	Al 396.153Radial†	10108.8	9847.8	5109.9	µg/L	5109.9	ppb	06:01:50
2	Ca 317.933Radial†	13277.5	12741.9	5018.4	µg/L	5018.4	ppb	06:02:10
2	Fe 238.204 Radial†	1018.3	1001.5	5163.8	µg/L	5163.8	ppb	06:02:10
2	K 766.490 Radial†	10029.7	9092.9	5101.3	µg/L	5101.3	ppb	06:01:50
2	Mg 279.077 IEC†	970.1	945.3	5280.1	µg/L	5280.1	ppb	06:02:10
2	Na 589.592 Radial†	36216.4	36372.7	10141	µg/L	10141	ppb	06:01:50
2	Sr 421.552†	88274.7	87504.7	499.69	µg/L	499.69	ppb	06:01:50
2	Sc 361.383	1971318.6	1971318.6	101.37	%			06:03:19
2	Y 371.029	1188997.1	1188997.1	100.66	%			06:03:19
2	Ag 328.068†	53858.1	53231.6	510.55	µg/L	510.55	ppb	06:03:25
2	As 188.979†	248.4	239.9	478.01	µg/L	478.01	ppb	06:03:45

2	B 249.677†	10962.8	10663.5	498.40	µg/L	498.40 ppb	06:03:25
2	Ba 233.527†	18960.7	18783.7	503.73	µg/L	503.73 ppb	06:03:25
2	Be 313.107†	768265.7	754218.8	501.59	µg/L	501.59 ppb	06:03:19
2	Cd 226.502†	17997.2	17851.5	502.24	µg/L	502.24 ppb	06:03:25
2	Co 228.616†	9944.0	9877.0	501.14	µg/L	501.14 ppb	06:03:25
2	Cr 267.716†	22678.9	22499.6	501.69	µg/L	501.69 ppb	06:03:25
2	Cu 324.752†	72284.4	68041.7	508.82	µg/L	508.82 ppb	06:03:25
2	Mn 257.610†	152923.4	151088.2	504.84	µg/L	504.84 ppb	06:03:19
2	Mo 202.031†	4149.6	4098.3	492.05	µg/L	492.05 ppb	06:03:45
2	Ni 231.604†	9073.5	8669.2	499.87	µg/L	499.87 ppb	06:03:25
2	P 214.914†	1295.4	1073.8	2372.5	µg/L	2372.5 ppb	06:03:45
2	Pb 220.353†	1921.2	1839.2	492.71	µg/L	492.71 ppb	06:03:45
2	S 181.975 Axial†	222.1	180.2	962.25	µg/L	962.25 ppb	06:03:45
2	Sb 206.836†	499.0	473.3	498.39	µg/L	498.39 ppb	06:03:45
2	Se 196.026†	348.4	332.9	501.04	µg/L	501.04 ppb	06:03:45
2	SiO2†	28639.8	26177.1	5319.6	µg/L	5319.6 ppb	06:03:25
2	Si 251.611†	31398.6	30659.6	2441.3	µg/L	2441.3 ppb	06:03:25
2	Sn 189.927†	982.3	944.6	494.41	µg/L	494.41 ppb	06:03:45
2	Ti 334.940†	218239.3	214493.7	503.41	µg/L	503.41 ppb	06:03:19
2	Tl 190.801†	289.8	305.2	491.85	µg/L	491.85 ppb	06:03:45
2	U 409.014†	5773.1	4869.6	492.08	µg/L	492.08 ppb	06:03:25
2	V 292.402†	42271.6	41777.0	508.20	µg/L	508.20 ppb	06:03:25
2	Zn 213.857†	18656.4	17886.1	501.53	µg/L	501.53 ppb	06:03:25
3	Sc RADIAL	112994.0	112994.0	102	%		06:02:16
3	Al 396.153Radial†	10185.0	9868.2	5120.1	µg/L	5120.1 ppb	06:02:16
3	Ca 317.933Radial†	13248.3	12641.3	4978.8	µg/L	4978.8 ppb	06:02:36
3	Fe 238.204 Radial†	1022.0	999.7	5154.3	µg/L	5154.3 ppb	06:02:36
3	K 766.490 Radial†	10062.4	9070.9	5089.0	µg/L	5089.0 ppb	06:02:16
3	Mg 279.077 IEC†	962.0	932.1	5206.3	µg/L	5206.3 ppb	06:02:36
3	Na 589.592 Radial†	36337.7	36296.3	10119	µg/L	10119 ppb	06:02:16
3	Sr 421.552†	88570.9	87319.1	498.63	µg/L	498.63 ppb	06:02:16
3	Sc 361.383	1967794.2	1967794.2	101.19	%		06:03:51
3	Y 371.029	1187602.9	1187602.9	100.54	%		06:03:51
3	Ag 328.068†	53944.0	53411.7	512.27	µg/L	512.27 ppb	06:03:57
3	As 188.979†	252.9	244.8	487.67	µg/L	487.67 ppb	06:04:18
3	B 249.677†	10944.3	10664.6	498.45	µg/L	498.45 ppb	06:03:57
3	Ba 233.527†	18980.7	18837.0	505.16	µg/L	505.16 ppb	06:03:57
3	Be 313.107†	761989.4	749373.5	498.37	µg/L	498.37 ppb	06:03:51
3	Cd 226.502†	18050.8	17936.3	504.64	µg/L	504.64 ppb	06:03:57
3	Co 228.616†	9978.8	9929.0	503.80	µg/L	503.80 ppb	06:03:57
3	Cr 267.716†	22701.1	22561.7	503.07	µg/L	503.07 ppb	06:03:57
3	Cu 324.752†	72532.0	68414.0	511.60	µg/L	511.60 ppb	06:03:57
3	Mn 257.610†	151700.8	150150.1	501.71	µg/L	501.71 ppb	06:03:51
3	Mo 202.031†	4226.4	4181.6	502.05	µg/L	502.05 ppb	06:04:18
3	Ni 231.604†	9135.8	8746.8	504.35	µg/L	504.35 ppb	06:03:57
3	P 214.914†	1315.4	1095.8	2422.1	µg/L	2422.1 ppb	06:04:18
3	Pb 220.353†	1952.0	1873.1	501.79	µg/L	501.79 ppb	06:04:18
3	S 181.975 Axial†	219.9	178.4	952.59	µg/L	952.59 ppb	06:04:18
3	Sb 206.836†	498.3	473.5	498.55	µg/L	498.55 ppb	06:04:18
3	Se 196.026†	351.6	336.6	506.61	µg/L	506.61 ppb	06:04:18
3	SiO2†	28718.1	26305.1	5345.6	µg/L	5345.6 ppb	06:03:57
3	Si 251.611†	31378.5	30695.3	2443.8	µg/L	2443.8 ppb	06:03:57
3	Sn 189.927†	1000.2	964.1	504.51	µg/L	504.51 ppb	06:04:18
3	Ti 334.940†	216476.6	213137.2	500.23	µg/L	500.23 ppb	06:03:51
3	Tl 190.801†	298.5	314.3	506.48	µg/L	506.48 ppb	06:04:18
3	U 409.014†	5867.6	4973.2	502.56	µg/L	502.56 ppb	06:03:57
3	V 292.402†	42290.3	41870.1	509.41	µg/L	509.41 ppb	06:03:57
3	Zn 213.857†	18711.7	17973.7	503.98	µg/L	503.98 ppb	06:03:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1974863.0	101.55	%	0.481				0.47%
Sc RADIAL	112577.4	101	%	0.3				0.32%
Y 371.029	1191429.3	100.86	%	0.463				0.46%
Ag 328.068†	53098.3	509.26	µg/L	3.815	509.26	ppb	3.815	0.75%
QC value within limits for Ag 328.068 Recovery = 101.85%								
Al 396.153Radial†	9906.7	5140.3	µg/L	44.15	5140.3	ppb	44.15	0.86%
QC value within limits for Al 396.153Radial Recovery = 102.81%								
As 188.979†	245.3	488.70	µg/L	11.234	488.70	ppb	11.234	2.30%

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   QC value within limits for As 188.979  Recovery = 97.74%
B 249.677†            10605.3      495.67 µg/L        4.771      495.67 ppb          4.771   0.96%
   QC value within limits for B 249.677  Recovery = 99.13%
Ba 233.527†           18710.8      501.78 µg/L        4.679      501.78 ppb          4.679   0.93%
   QC value within limits for Ba 233.527  Recovery = 100.36%
Be 313.107†          751517.3      499.80 µg/L        1.643      499.80 ppb          1.643   0.33%
   QC value within limits for Be 313.107  Recovery = 99.96%
Ca 317.933Radial†     12707.6      5004.9 µg/L       22.60      5004.9 ppb          22.60   0.45%
   QC value within limits for Ca 317.933Radial  Recovery = 100.10%
Cd 226.502†           17793.2      500.60 µg/L        5.057      500.60 ppb          5.057   1.01%
   QC value within limits for Cd 226.502  Recovery = 100.12%
Co 228.616†            9856.1      500.09 µg/L        4.330      500.09 ppb          4.330   0.87%
   QC value within limits for Co 228.616  Recovery = 100.02%
Cr 267.716†           22412.5      499.74 µg/L        4.616      499.74 ppb          4.616   0.92%
   QC value within limits for Cr 267.716  Recovery = 99.95%
Cu 324.752†           67869.0      507.53 µg/L        4.838      507.53 ppb          4.838   0.95%
   QC value within limits for Cu 324.752  Recovery = 101.51%
Fe 238.204 Radial†     1002.0      5166.2 µg/L       13.31      5166.2 ppb          13.31   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.32%
K 766.490 Radial†      9080.8      5094.6 µg/L        6.25      5094.6 ppb           6.25   0.12%
   QC value within limits for K 766.490 Radial  Recovery = 101.89%
Mg 279.077 IEC†         939.2      5246.0 µg/L       37.19      5246.0 ppb          37.19   0.71%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.92%
Mn 257.610†          150596.2      503.20 µg/L        1.571      503.20 ppb          1.571   0.31%
   QC value within limits for Mn 257.610  Recovery = 100.64%
Mo 202.031†            4145.8      497.75 µg/L        5.145      497.75 ppb          5.145   1.03%
   QC value within limits for Mo 202.031  Recovery = 99.55%
Na 589.592 Radial†    36391.7       10146 µg/L         29.6       10146 ppb           29.6   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 101.46%
Ni 231.604†            8654.9      499.05 µg/L        5.755      499.05 ppb          5.755   1.15%
   QC value within limits for Ni 231.604  Recovery = 99.81%
P 214.914†             1085.7      2399.7 µg/L       25.18      2399.7 ppb          25.18   1.05%
   QC value within limits for P 214.914  Recovery = 95.99%
Pb 220.353†            1859.4      498.13 µg/L        4.786      498.13 ppb          4.786   0.96%
   QC value within limits for Pb 220.353  Recovery = 99.63%
S 181.975 Axial†        177.8      949.01 µg/L       15.352      949.01 ppb         15.352   1.62%
   QC value within limits for S 181.975 Axial  Recovery = 94.90%
Sb 206.836†             474.5      499.69 µg/L        2.112      499.69 ppb          2.112   0.42%
   QC value within limits for Sb 206.836  Recovery = 99.94%
Se 196.026†             335.9      505.62 µg/L        4.170      505.62 ppb          4.170   0.82%
   QC value within limits for Se 196.026  Recovery = 101.12%
SiO2†                  26093.9      5302.7 µg/L       53.41      5302.7 ppb          53.41   1.01%
   QC value within limits for SiO2  Recovery = 99.16%
Si 251.611†            30525.6      2430.2 µg/L       21.41      2430.2 ppb          21.41   0.88%
   QC value within limits for Si 251.611  Recovery = 97.21%
Sn 189.927†             954.8      499.70 µg/L        5.066      499.70 ppb          5.066   1.01%
   QC value within limits for Sn 189.927  Recovery = 99.94%
Sr 421.552†            87654.5      500.54 µg/L        2.457      500.54 ppb          2.457   0.49%
   QC value within limits for Sr 421.552  Recovery = 100.11%
Ti 334.940†           213725.5      501.61 µg/L        1.633      501.61 ppb          1.633   0.33%
   QC value within limits for Ti 334.940  Recovery = 100.32%
Tl 190.801†             310.6      500.56 µg/L        7.701      500.56 ppb          7.701   1.54%
   QC value within limits for Tl 190.801  Recovery = 100.11%
U 409.014†             4889.3      494.07 µg/L        7.698      494.07 ppb          7.698   1.56%
   QC value within limits for U 409.014  Recovery = 98.81%
V 292.402†            41572.8      505.79 µg/L        5.268      505.79 ppb          5.268   1.04%
   QC value within limits for V 292.402  Recovery = 101.16%
Zn 213.857†           17840.9      500.26 µg/L        4.494      500.26 ppb          4.494   0.90%
   QC value within limits for Zn 213.857  Recovery = 100.05%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 06:04:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111064.6	111064.6	99.8	%			06:05:01
1	Al 396.153Radial†	151.1	-12.0	-6.2774	µg/L	-6.2774	ppb	06:05:01
1	Ca 317.933Radial†	423.6	17.1	6.7261	µg/L	6.7261	ppb	06:05:21
1	Fe 238.204 Radial†	5.5	-1.5	-7.5099	µg/L	-7.5099	ppb	06:05:21
1	K 766.490 Radial†	780.9	-57.5	-32.236	µg/L	-32.236	ppb	06:05:01
1	Mg 279.077 IEC†	12.0	-3.4	-19.059	µg/L	-19.059	ppb	06:05:21
1	Na 589.592 Radial†	-625.4	-120.6	-33.620	µg/L	-33.620	ppb	06:05:01
1	Sr 421.552†	-72.1	10.4	0.0595	µg/L	0.0595	ppb	06:05:01
1	Sc 361.383	1983722.6	1983722.6	102.01	%			06:06:23
1	Y 371.029	1204934.1	1204934.1	102.00	%			06:06:23
1	Ag 328.068†	-65.5	37.1	0.3518	µg/L	0.3518	ppb	06:06:29
1	As 188.979†	0.3	-4.8	-9.6507	µg/L	-9.6507	ppb	06:06:49
1	B 249.677†	149.8	-4.3	-0.1994	µg/L	-0.1994	ppb	06:06:49
1	Ba 233.527†	-72.0	8.6	0.2295	µg/L	0.2295	ppb	06:06:49
1	Be 313.107†	3624.1	-112.9	-0.0750	µg/L	-0.0750	ppb	06:06:29
1	Cd 226.502†	-84.0	15.1	0.4248	µg/L	0.4248	ppb	06:06:49
1	Co 228.616†	-75.0	-6.2	-0.3110	µg/L	-0.3110	ppb	06:06:49
1	Cr 267.716†	-124.9	4.8	0.1061	µg/L	0.1061	ppb	06:06:29
1	Cu 324.752†	3206.3	-122.8	-0.9182	µg/L	-0.9182	ppb	06:06:29
1	Mn 257.610†	-207.5	27.8	0.0919	µg/L	0.0919	ppb	06:06:49
1	Mo 202.031†	1.4	6.2	0.7449	µg/L	0.7449	ppb	06:06:49
1	Ni 231.604†	281.5	-5.8	-0.3322	µg/L	-0.3322	ppb	06:06:49
1	P 214.914†	192.6	-15.3	-34.603	µg/L	-34.603	ppb	06:06:49
1	Pb 220.353†	55.5	-1.6	-0.4233	µg/L	-0.4233	ppb	06:06:49
1	S 181.975 Axial†	29.7	-9.7	-52.088	µg/L	-52.088	ppb	06:06:49
1	Sb 206.836†	19.0	-0.3	-0.2872	µg/L	-0.2872	ppb	06:06:49
1	Se 196.026†	15.7	4.6	6.9137	µg/L	6.9137	ppb	06:06:49
1	SiO2†	2029.3	-86.3	-17.537	µg/L	-17.537	ppb	06:06:29
1	Si 251.611†	317.7	-3.2	-0.1224	µg/L	-0.1224	ppb	06:06:49
1	Sn 189.927†	18.6	-6.2	-3.2094	µg/L	-3.2094	ppb	06:06:49
1	Ti 334.940†	679.4	-130.6	-0.3071	µg/L	-0.3071	ppb	06:06:29
1	Tl 190.801†	-17.2	2.4	3.8884	µg/L	3.8884	ppb	06:06:49
1	U 409.014†	850.2	8.0	0.8150	µg/L	0.8150	ppb	06:06:29
1	V 292.402†	-81.3	-3.1	-0.0316	µg/L	-0.0316	ppb	06:06:29
1	Zn 213.857†	506.1	-22.1	-0.6203	µg/L	-0.6203	ppb	06:06:49
2	Sc RADIAL	112275.3	112275.3	101	%			06:05:26
2	Al 396.153Radial†	161.9	-2.9	-1.5275	µg/L	-1.5275	ppb	06:05:26
2	Ca 317.933Radial†	412.2	1.2	0.4649	µg/L	0.4649	ppb	06:05:47
2	Fe 238.204 Radial†	9.8	2.8	14.144	µg/L	14.144	ppb	06:05:47
2	K 766.490 Radial†	699.3	-146.7	-82.327	µg/L	-82.327	ppb	06:05:26
2	Mg 279.077 IEC†	15.6	0.0	0.2595	µg/L	0.2595	ppb	06:05:47
2	Na 589.592 Radial†	-643.7	-131.9	-36.786	µg/L	-36.786	ppb	06:05:26
2	Sr 421.552†	-45.0	38.0	0.2169	µg/L	0.2169	ppb	06:05:26
2	Sc 361.383	1976212.3	1976212.3	101.62	%			06:06:55
2	Y 371.029	1200297.5	1200297.5	101.61	%			06:06:55
2	Ag 328.068†	-0.7	100.6	0.9582	µg/L	0.9582	ppb	06:07:01
2	As 188.979†	3.2	-1.9	-3.8792	µg/L	-3.8792	ppb	06:07:21
2	B 249.677†	133.9	-19.4	-0.9138	µg/L	-0.9138	ppb	06:07:21
2	Ba 233.527†	-70.9	9.4	0.2521	µg/L	0.2521	ppb	06:07:21
2	Be 313.107†	3725.8	0.8	0.0005	µg/L	0.0005	ppb	06:07:01
2	Cd 226.502†	-85.2	13.6	0.3714	µg/L	0.3714	ppb	06:07:21
2	Co 228.616†	-70.2	-1.7	-0.0846	µg/L	-0.0846	ppb	06:07:21
2	Cr 267.716†	-125.9	3.3	0.0739	µg/L	0.0739	ppb	06:07:01
2	Cu 324.752†	3157.8	-158.6	-1.1806	µg/L	-1.1806	ppb	06:07:01
2	Mn 257.610†	-213.4	21.2	0.0725	µg/L	0.0725	ppb	06:07:21
2	Mo 202.031†	0.7	5.5	0.6604	µg/L	0.6604	ppb	06:07:21
2	Ni 231.604†	275.4	-10.7	-0.6167	µg/L	-0.6167	ppb	06:07:21
2	P 214.914†	201.7	-5.7	-12.792	µg/L	-12.792	ppb	06:07:21
2	Pb 220.353†	53.8	-3.0	-0.7949	µg/L	-0.7949	ppb	06:07:21

2	S 181.975 Axial†	36.5	-2.9	-15.640 µg/L	-15.640 ppb	06:07:21
2	Sb 206.836†	22.5	3.2	3.3697 µg/L	3.3697 ppb	06:07:21
2	Se 196.026†	16.9	5.8	8.7494 µg/L	8.7494 ppb	06:07:21
2	SiO2†	1998.9	-108.7	-22.094 µg/L	-22.094 ppb	06:07:01
2	Si 251.611†	327.9	8.0	0.7484 µg/L	0.7484 ppb	06:07:21
2	Sn 189.927†	20.8	-3.9	-2.0166 µg/L	-2.0166 ppb	06:07:21
2	Ti 334.940†	809.5	0.0	0.0000 µg/L	0.0000 ppb	06:07:01
2	Tl 190.801†	-22.6	-2.9	-4.7061 µg/L	-4.7061 ppb	06:07:21
2	U 409.014†	693.0	-143.5	-14.529 µg/L	-14.529 ppb	06:07:01
2	V 292.402†	-82.2	-4.3	-0.0693 µg/L	-0.0693 ppb	06:07:01
2	Zn 213.857†	503.0	-23.2	-0.6526 µg/L	-0.6526 ppb	06:07:21
3	Sc RADIAL	112057.6	112057.6	101 %		06:05:52
3	Al 396.153Radial†	171.0	6.4	3.3340 µg/L	3.3340 ppb	06:05:52
3	Ca 317.933Radial†	410.5	0.2	0.0979 µg/L	0.0979 ppb	06:06:13
3	Fe 238.204 Radial†	5.9	-1.1	-5.5072 µg/L	-5.5072 ppb	06:06:13
3	K 766.490 Radial†	748.5	-96.5	-54.135 µg/L	-54.135 ppb	06:05:52
3	Mg 279.077 IEC†	18.0	2.5	13.695 µg/L	13.695 ppb	06:06:13
3	Na 589.592 Radial†	-633.9	-123.5	-34.436 µg/L	-34.436 ppb	06:05:52
3	Sr 421.552†	-60.9	22.1	0.1262 µg/L	0.1262 ppb	06:05:52
3	Sc 361.383	1983922.9	1983922.9	102.02 %		06:07:27
3	Y 371.029	1204631.4	1204631.4	101.98 %		06:07:27
3	Ag 328.068†	-102.1	1.2	0.0094 µg/L	0.0094 ppb	06:07:33
3	As 188.979†	-2.4	-7.5	-14.990 µg/L	-14.990 ppb	06:07:53
3	B 249.677†	139.9	-14.1	-0.6588 µg/L	-0.6588 ppb	06:07:53
3	Ba 233.527†	-71.5	9.1	0.2443 µg/L	0.2443 ppb	06:07:53
3	Be 313.107†	3650.3	-87.5	-0.0582 µg/L	-0.0582 ppb	06:07:33
3	Cd 226.502†	-86.0	13.1	0.3592 µg/L	0.3592 ppb	06:07:53
3	Co 228.616†	-80.6	-11.7	-0.5920 µg/L	-0.5920 ppb	06:07:53
3	Cr 267.716†	-123.3	6.3	0.1406 µg/L	0.1406 ppb	06:07:33
3	Cu 324.752†	3192.4	-136.8	-1.0219 µg/L	-1.0219 ppb	06:07:33
3	Mn 257.610†	-213.2	22.2	0.0734 µg/L	0.0734 ppb	06:07:53
3	Mo 202.031†	-4.3	0.7	0.0809 µg/L	0.0809 ppb	06:07:53
3	Ni 231.604†	278.9	-8.3	-0.4813 µg/L	-0.4813 ppb	06:07:53
3	P 214.914†	200.2	-7.9	-17.944 µg/L	-17.944 ppb	06:07:53
3	Pb 220.353†	48.5	-8.5	-2.2613 µg/L	-2.2613 ppb	06:07:53
3	S 181.975 Axial†	27.6	-11.8	-63.192 µg/L	-63.192 ppb	06:07:53
3	Sb 206.836†	22.2	2.9	3.0393 µg/L	3.0393 ppb	06:07:53
3	Se 196.026†	18.4	7.2	10.854 µg/L	10.854 ppb	06:07:53
3	SiO2†	1955.5	-158.9	-32.290 µg/L	-32.290 ppb	06:07:33
3	Si 251.611†	331.2	10.0	1.0145 µg/L	1.0145 ppb	06:07:53
3	Sn 189.927†	15.8	-8.8	-4.5938 µg/L	-4.5938 ppb	06:07:53
3	Ti 334.940†	747.5	-63.9	-0.1501 µg/L	-0.1501 ppb	06:07:33
3	Tl 190.801†	-20.6	-0.8	-1.3548 µg/L	-1.3548 ppb	06:07:53
3	U 409.014†	699.7	-139.6	-14.132 µg/L	-14.132 ppb	06:07:33
3	V 292.402†	-96.8	-18.3	-0.2437 µg/L	-0.2437 ppb	06:07:33
3	Zn 213.857†	505.7	-22.5	-0.6329 µg/L	-0.6329 ppb	06:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1981285.9	101.88	%	0.226				0.22%
Sc RADIAL	111799.2	100	%	0.6				0.58%
Y 371.029	1203287.7	101.86	%	0.220				0.22%
Ag 328.068†	46.3	0.4398	µg/L	0.48052	0.4398	ppb	0.48052	109.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.8	-1.4903	µg/L	4.80578	-1.4903	ppb	4.80578	322.46%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.8	-9.5065	µg/L	5.55670	-9.5065	ppb	5.55670	58.45%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-12.6	-0.5907	µg/L	0.36203	-0.5907	ppb	0.36203	61.29%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.1	0.2420	µg/L	0.01150	0.2420	ppb	0.01150	4.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-66.5	-0.0442	µg/L	0.03963	-0.0442	ppb	0.03963	89.64%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.2	2.4296	µg/L	3.72536	2.4296	ppb	3.72536	153.33%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	14.0	0.3851	µg/L	0.03490	0.3851	ppb	0.03490	9.06%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-6.5	-0.3292	µg/L	0.25420	-0.3292	ppb	0.25420	77.22%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                4.8      0.1069 µg/L       0.03335      0.1069 ppb        0.03335  31.21%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -139.4     -1.0402 µg/L       0.13218     -1.0402 ppb        0.13218  12.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.1      0.3757 µg/L      11.96585      0.3757 ppb       11.96585 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -100.2     -56.232 µg/L       25.1113     -56.232 ppb        25.1113  44.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3     -1.7014 µg/L      16.46457     -1.7014 ppb       16.46457 967.69%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               23.7      0.0793 µg/L       0.01096      0.0793 ppb        0.01096  13.82%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.1      0.4954 µg/L       0.36144      0.4954 ppb        0.36144  72.96%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -125.4     -34.947 µg/L        1.6440     -34.947 ppb         1.6440   4.70%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -8.3     -0.4767 µg/L       0.14229     -0.4767 ppb        0.14229  29.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.7     -21.780 µg/L       11.4000     -21.780 ppb        11.4000  52.34%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.4     -1.1598 µg/L       0.97180     -1.1598 ppb        0.97180  83.79%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -8.2     -43.640 µg/L       24.8762     -43.640 ppb        24.8762  57.00%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                1.9      2.0406 µg/L       2.02269      2.0406 ppb        2.02269  99.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.9      8.8390 µg/L       1.97165      8.8390 ppb        1.97165  22.31%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -118.0     -23.974 µg/L        7.5537     -23.974 ppb         7.5537  31.51%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                5.0      0.5468 µg/L       0.59467      0.5468 ppb        0.59467 108.75%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -6.3     -3.2733 µg/L       1.28979     -3.2733 ppb        1.28979  39.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               23.5      0.1342 µg/L       0.07898      0.1342 ppb        0.07898  58.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -64.8     -0.1524 µg/L       0.15357     -0.1524 ppb        0.15357 100.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.5     -0.7242 µg/L       4.33183     -0.7242 ppb        4.33183 598.19%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -91.7     -9.2819 µg/L       8.74649     -9.2819 ppb        8.74649  94.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -8.6     -0.1149 µg/L       0.11318     -0.1149 ppb        0.11318  98.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -22.6     -0.6353 µg/L       0.01629     -0.6353 ppb        0.01629   2.56%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 06:39:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111222.4	111222.4	99.9	%			06:39:42
1	Al 396.153Radial†	10291.9	10135.0	5259.0	µg/L	5259.0	ppb	06:39:42
1	Ca 317.933Radial†	13257.6	12858.5	5064.4	µg/L	5064.4	ppb	06:40:03
1	Fe 238.204 Radial†	1027.2	1020.8	5263.2	µg/L	5263.2	ppb	06:40:03
1	K 766.490 Radial†	10010.3	9176.6	5148.3	µg/L	5148.3	ppb	06:39:42
1	Mg 279.077 IEC†	980.3	965.4	5392.4	µg/L	5392.4	ppb	06:40:03
1	Na 589.592 Radial†	36150.1	36678.7	10226	µg/L	10226	ppb	06:39:42
1	Sr 421.552†	87975.1	88112.5	503.16	µg/L	503.16	ppb	06:39:42
1	Sc 361.383	1987270.5	1987270.5	102.19	%			06:41:06
1	Y 371.029	1201281.6	1201281.6	101.69	%			06:41:06
1	Ag 328.068†	54218.4	53157.7	509.86	µg/L	509.86	ppb	06:41:12
1	As 188.979†	260.5	249.8	497.67	µg/L	497.67	ppb	06:41:32
1	B 249.677†	11031.2	10643.6	497.44	µg/L	497.44	ppb	06:41:12
1	Ba 233.527†	19128.2	18797.4	504.10	µg/L	504.10	ppb	06:41:12
1	Be 313.107†	778277.1	757932.0	504.06	µg/L	504.06	ppb	06:41:06
1	Cd 226.502†	18220.5	17927.4	504.38	µg/L	504.38	ppb	06:41:12
1	Co 228.616†	10086.5	9937.7	504.24	µg/L	504.24	ppb	06:41:12
1	Cr 267.716†	22918.7	22554.7	502.91	µg/L	502.91	ppb	06:41:12
1	Cu 324.752†	72857.0	68029.6	508.75	µg/L	508.75	ppb	06:41:12
1	Mn 257.610†	154228.1	151154.0	505.07	µg/L	505.07	ppb	06:41:06
1	Mo 202.031†	4268.2	4181.6	502.05	µg/L	502.05	ppb	06:41:32
1	Ni 231.604†	9181.9	8703.4	501.84	µg/L	501.84	ppb	06:41:12
1	P 214.914†	1332.1	1099.4	2430.5	µg/L	2430.5	ppb	06:41:32
1	Pb 220.353†	1981.6	1883.2	504.50	µg/L	504.50	ppb	06:41:32
1	S 181.975 Axial†	217.7	174.2	929.71	µg/L	929.71	ppb	06:41:32
1	Sb 206.836†	512.7	482.8	508.42	µg/L	508.42	ppb	06:41:32
1	Se 196.026†	350.1	331.7	499.32	µg/L	499.32	ppb	06:41:32
1	SiO2†	28949.6	26253.5	5335.2	µg/L	5335.2	ppb	06:41:12
1	Si 251.611†	31765.9	30770.4	2449.8	µg/L	2449.8	ppb	06:41:12
1	Sn 189.927†	1007.9	962.0	503.48	µg/L	503.48	ppb	06:41:32
1	Ti 334.940†	220370.9	214851.4	504.25	µg/L	504.25	ppb	06:41:06
1	Tl 190.801†	304.8	317.6	511.71	µg/L	511.71	ppb	06:41:32
1	U 409.014†	5925.2	4972.8	502.50	µg/L	502.50	ppb	06:41:12
1	V 292.402†	42654.6	41817.0	508.78	µg/L	508.78	ppb	06:41:12
1	Zn 213.857†	18897.5	17974.3	504.00	µg/L	504.00	ppb	06:41:12
2	Sc RADIAL	111310.1	111310.1	100	%			06:40:08
2	Al 396.153Radial†	10271.0	10105.9	5243.9	µg/L	5243.9	ppb	06:40:08
2	Ca 317.933Radial†	13310.0	12900.4	5080.8	µg/L	5080.8	ppb	06:40:28
2	Fe 238.204 Radial†	1030.2	1023.1	5275.0	µg/L	5275.0	ppb	06:40:28
2	K 766.490 Radial†	10016.9	9175.4	5147.6	µg/L	5147.6	ppb	06:40:08
2	Mg 279.077 IEC†	980.4	964.8	5389.1	µg/L	5389.1	ppb	06:40:28
2	Na 589.592 Radial†	36090.2	36590.3	10201	µg/L	10201	ppb	06:40:08
2	Sr 421.552†	88095.4	88163.4	503.45	µg/L	503.45	ppb	06:40:08
2	Sc 361.383	1964770.9	1964770.9	101.03	%			06:41:40
2	Y 371.029	1188198.3	1188198.3	100.59	%			06:41:40
2	Ag 328.068†	54117.2	53665.1	514.71	µg/L	514.71	ppb	06:41:45
2	As 188.979†	258.8	251.0	500.10	µg/L	500.10	ppb	06:42:06
2	B 249.677†	11053.1	10788.9	504.24	µg/L	504.24	ppb	06:41:45
2	Ba 233.527†	19077.0	18961.1	508.49	µg/L	508.49	ppb	06:41:45
2	Be 313.107†	766868.6	755361.6	502.36	µg/L	502.36	ppb	06:41:40
2	Cd 226.502†	18147.8	18059.7	508.11	µg/L	508.11	ppb	06:41:45
2	Co 228.616†	10070.9	10035.3	509.19	µg/L	509.19	ppb	06:41:45
2	Cr 267.716†	22839.5	22733.2	506.89	µg/L	506.89	ppb	06:41:45
2	Cu 324.752†	72697.2	68687.9	513.67	µg/L	513.67	ppb	06:41:45
2	Mn 257.610†	152127.4	150803.1	503.90	µg/L	503.90	ppb	06:41:40
2	Mo 202.031†	4221.6	4183.3	502.25	µg/L	502.25	ppb	06:42:06
2	Ni 231.604†	9166.8	8791.4	506.92	µg/L	506.92	ppb	06:41:45
2	P 214.914†	1316.4	1098.8	2428.5	µg/L	2428.5	ppb	06:42:06
2	Pb 220.353†	1947.8	1871.9	501.46	µg/L	501.46	ppb	06:42:06

2	S 181.975 Axial†	216.7	175.7	937.68 µg/L	937.68 ppb	06:42:06
2	Sb 206.836†	493.6	469.6	494.46 µg/L	494.46 ppb	06:42:06
2	Se 196.026†	345.0	330.6	497.66 µg/L	497.66 ppb	06:42:06
2	SiO2†	28912.9	26541.6	5393.7 µg/L	5393.7 ppb	06:41:45
2	Si 251.611†	31662.0	31023.6	2470.4 µg/L	2470.4 ppb	06:41:45
2	Sn 189.927†	996.2	961.6	503.29 µg/L	503.29 ppb	06:42:06
2	Ti 334.940†	217204.2	214186.6	502.69 µg/L	502.69 ppb	06:41:40
2	Tl 190.801†	300.3	316.6	510.08 µg/L	510.08 ppb	06:42:06
2	U 409.014†	5980.4	5093.8	514.75 µg/L	514.75 ppb	06:41:45
2	V 292.402†	42493.8	42135.9	512.65 µg/L	512.65 ppb	06:41:45
2	Zn 213.857†	18835.7	18124.9	508.22 µg/L	508.22 ppb	06:41:45
3	Sc RADIAL	111369.2	111369.2	100 %		06:40:34
3	Al 396.153Radial†	10275.0	10104.5	5243.2 µg/L	5243.2 ppb	06:40:34
3	Ca 317.933Radial†	13378.9	12962.2	5105.2 µg/L	5105.2 ppb	06:40:54
3	Fe 238.204 Radial†	1030.1	1022.4	5271.4 µg/L	5271.4 ppb	06:40:54
3	K 766.490 Radial†	10122.8	9275.8	5204.0 µg/L	5204.0 ppb	06:40:34
3	Mg 279.077 IEC†	987.9	971.8	5427.7 µg/L	5427.7 ppb	06:40:54
3	Na 589.592 Radial†	36269.4	36750.2	10246 µg/L	10246 ppb	06:40:34
3	Sr 421.552†	88311.8	88332.9	504.42 µg/L	504.42 ppb	06:40:34
3	Sc 361.383	1974259.4	1974259.4	101.52 %		06:42:13
3	Y 371.029	1193562.9	1193562.9	101.04 %		06:42:13
3	Ag 328.068†	54283.2	53571.2	513.82 µg/L	513.82 ppb	06:42:18
3	As 188.979†	260.8	251.8	501.69 µg/L	501.69 ppb	06:42:39
3	B 249.677†	11011.8	10695.7	499.87 µg/L	499.87 ppb	06:42:18
3	Ba 233.527†	19120.3	18913.0	507.20 µg/L	507.20 ppb	06:42:18
3	Be 313.107†	772114.8	756881.3	503.37 µg/L	503.37 ppb	06:42:13
3	Cd 226.502†	18161.2	17986.5	506.04 µg/L	506.04 ppb	06:42:18
3	Co 228.616†	10045.1	9962.0	505.47 µg/L	505.47 ppb	06:42:18
3	Cr 267.716†	22911.9	22695.8	506.06 µg/L	506.06 ppb	06:42:18
3	Cu 324.752†	72922.3	68563.8	512.74 µg/L	512.74 ppb	06:42:18
3	Mn 257.610†	153129.4	151066.4	504.78 µg/L	504.78 ppb	06:42:13
3	Mo 202.031†	4229.2	4170.6	500.73 µg/L	500.73 ppb	06:42:39
3	Ni 231.604†	9153.6	8734.8	503.65 µg/L	503.65 ppb	06:42:18
3	P 214.914†	1313.7	1089.9	2408.5 µg/L	2408.5 ppb	06:42:39
3	Pb 220.353†	1970.2	1884.6	504.88 µg/L	504.88 ppb	06:42:39
3	S 181.975 Axial†	221.2	179.1	955.98 µg/L	955.98 ppb	06:42:39
3	Sb 206.836†	504.8	478.4	503.70 µg/L	503.70 ppb	06:42:39
3	Se 196.026†	349.9	333.9	502.51 µg/L	502.51 ppb	06:42:39
3	SiO2†	28894.6	26386.0	5362.1 µg/L	5362.1 ppb	06:42:18
3	Si 251.611†	31735.9	30945.8	2464.2 µg/L	2464.2 ppb	06:42:18
3	Sn 189.927†	994.3	955.1	499.89 µg/L	499.89 ppb	06:42:39
3	Ti 334.940†	218591.1	214519.5	503.47 µg/L	503.47 ppb	06:42:13
3	Tl 190.801†	303.0	317.8	512.12 µg/L	512.12 ppb	06:42:39
3	U 409.014†	5940.5	5026.0	507.89 µg/L	507.89 ppb	06:42:18
3	V 292.402†	42654.7	42092.2	512.10 µg/L	512.10 ppb	06:42:18
3	Zn 213.857†	18853.4	18052.7	506.20 µg/L	506.20 ppb	06:42:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1975433.6	101.58	%	0.581				0.57%
Sc RADIAL	111300.6	100	%	0.1				0.07%
Y 371.029	1194347.6	101.11	%	0.557				0.55%
Ag 328.068†	53464.7	512.79	µg/L	2.584	512.79	ppb	2.584	0.50%
QC value within limits for Ag 328.068 Recovery = 102.56%								
Al 396.153Radial†	10115.1	5248.7	µg/L	8.94	5248.7	ppb	8.94	0.17%
QC value within limits for Al 396.153Radial Recovery = 104.97%								
As 188.979†	250.9	499.82	µg/L	2.024	499.82	ppb	2.024	0.40%
QC value within limits for As 188.979 Recovery = 99.96%								
B 249.677†	10709.4	500.52	µg/L	3.450	500.52	ppb	3.450	0.69%
QC value within limits for B 249.677 Recovery = 100.10%								
Ba 233.527†	18890.5	506.60	µg/L	2.256	506.60	ppb	2.256	0.45%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	756725.0	503.26	µg/L	0.859	503.26	ppb	0.859	0.17%
QC value within limits for Be 313.107 Recovery = 100.65%								
Ca 317.933Radial†	12907.0	5083.5	µg/L	20.55	5083.5	ppb	20.55	0.40%
QC value within limits for Ca 317.933Radial Recovery = 101.67%								
Cd 226.502†	17991.2	506.18	µg/L	1.869	506.18	ppb	1.869	0.37%
QC value within limits for Cd 226.502 Recovery = 101.24%								
Co 228.616†	9978.3	506.30	µg/L	2.579	506.30	ppb	2.579	0.51%

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   QC value within limits for Co 228.616  Recovery = 101.26%
Cr 267.716†            22661.2      505.29 µg/L        2.099      505.29 ppb          2.099   0.42%
   QC value within limits for Cr 267.716  Recovery = 101.06%
Cu 324.752†            68427.1      511.72 µg/L        2.611      511.72 ppb          2.611   0.51%
   QC value within limits for Cu 324.752  Recovery = 102.34%
Fe 238.204 Radial†      1022.1      5269.8 µg/L         6.05      5269.8 ppb           6.05   0.11%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.40%
K 766.490 Radial†       9209.2      5166.6 µg/L        32.33      5166.6 ppb          32.33   0.63%
   QC value within limits for K 766.490 Radial  Recovery = 103.33%
Mg 279.077 IEC†          967.3      5403.1 µg/L        21.38      5403.1 ppb          21.38   0.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.06%
Mn 257.610†           151007.8      504.59 µg/L        0.609      504.59 ppb          0.609   0.12%
   QC value within limits for Mn 257.610  Recovery = 100.92%
Mo 202.031†             4178.5      501.67 µg/L        0.824      501.67 ppb          0.824   0.16%
   QC value within limits for Mo 202.031  Recovery = 100.33%
Na 589.592 Radial†     36673.1       10224 µg/L         22.3       10224 ppb           22.3   0.22%
   QC value within limits for Na 589.592 Radial  Recovery = 102.24%
Ni 231.604†             8743.2      504.14 µg/L        2.572      504.14 ppb          2.572   0.51%
   QC value within limits for Ni 231.604  Recovery = 100.83%
P 214.914†              1096.0      2422.5 µg/L        12.17      2422.5 ppb          12.17   0.50%
   QC value within limits for P 214.914  Recovery = 96.90%
Pb 220.353†             1879.9      503.61 µg/L        1.873      503.61 ppb          1.873   0.37%
   QC value within limits for Pb 220.353  Recovery = 100.72%
S 181.975 Axial†         176.3      941.12 µg/L       13.469      941.12 ppb         13.469   1.43%
   QC value within limits for S 181.975 Axial  Recovery = 94.11%
Sb 206.836†              476.9      502.20 µg/L        7.101      502.20 ppb          7.101   1.41%
   QC value within limits for Sb 206.836  Recovery = 100.44%
Se 196.026†              332.1      499.83 µg/L        2.462      499.83 ppb          2.462   0.49%
   QC value within limits for Se 196.026  Recovery = 99.97%
SiO2†                  26393.7      5363.7 µg/L        29.30      5363.7 ppb          29.30   0.55%
   QC value within limits for SiO2  Recovery = 100.30%
Si 251.611†            30913.3      2461.4 µg/L        10.57      2461.4 ppb          10.57   0.43%
   QC value within limits for Si 251.611  Recovery = 98.46%
Sn 189.927†              959.5      502.22 µg/L        2.021      502.22 ppb          2.021   0.40%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            88202.9      503.68 µg/L        0.659      503.68 ppb          0.659   0.13%
   QC value within limits for Sr 421.552  Recovery = 100.74%
Ti 334.940†           214519.2      503.47 µg/L        0.781      503.47 ppb          0.781   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.69%
Tl 190.801†              317.3      511.30 µg/L        1.078      511.30 ppb          1.078   0.21%
   QC value within limits for Tl 190.801  Recovery = 102.26%
U 409.014†              5030.8      508.38 µg/L        6.139      508.38 ppb          6.139   1.21%
   QC value within limits for U 409.014  Recovery = 101.68%
V 292.402†             42015.0      511.18 µg/L        2.092      511.18 ppb          2.092   0.41%
   QC value within limits for V 292.402  Recovery = 102.24%
Zn 213.857†            18050.6      506.14 µg/L        2.112      506.14 ppb          2.112   0.42%
   QC value within limits for Zn 213.857  Recovery = 101.23%
All analyte(s) passed QC.
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Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 06:42:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110738.7	110738.7	99.5	%			06:43:21
1	Al 396.153Radial†	283.3	121.4	63.179	µg/L	63.179	ppb	06:43:21
1	Ca 317.933Radial†	518.9	114.1	44.938	µg/L	44.938	ppb	06:43:42
1	Fe 238.204 Radial†	11.7	4.8	24.404	µg/L	24.404	ppb	06:43:42
1	K 766.490 Radial†	802.9	-33.0	-18.527	µg/L	-18.527	ppb	06:43:21
1	Mg 279.077 IEC†	20.5	5.2	28.947	µg/L	28.947	ppb	06:43:42
1	Na 589.592 Radial†	-601.8	-98.7	-27.510	µg/L	-27.510	ppb	06:43:21
1	Sr 421.552†	-63.5	18.9	0.1077	µg/L	0.1077	ppb	06:43:21
1	Sc 361.383	1975477.9	1975477.9	101.58	%			06:44:44
1	Y 371.029	1200878.9	1200878.9	101.66	%			06:44:44
1	Ag 328.068†	-13.0	88.5	0.8470	µg/L	0.8470	ppb	06:44:49
1	As 188.979†	-0.8	-5.9	-11.781	µg/L	-11.781	ppb	06:45:10
1	B 249.677†	141.1	-12.2	-0.5817	µg/L	-0.5817	ppb	06:45:10
1	Ba 233.527†	-67.2	13.0	0.3486	µg/L	0.3486	ppb	06:45:10
1	Be 313.107†	3733.9	10.1	0.0067	µg/L	0.0067	ppb	06:44:49
1	Cd 226.502†	-92.5	6.4	0.1631	µg/L	0.1631	ppb	06:45:10
1	Co 228.616†	-78.2	-9.6	-0.4852	µg/L	-0.4852	ppb	06:45:10
1	Cr 267.716†	-113.9	15.0	0.3351	µg/L	0.3351	ppb	06:44:49
1	Cu 324.752†	3262.2	-54.7	-0.4027	µg/L	-0.4027	ppb	06:44:49
1	Mn 257.610†	-190.5	43.7	0.1488	µg/L	0.1488	ppb	06:45:10
1	Mo 202.031†	1.2	6.0	0.7263	µg/L	0.7263	ppb	06:45:10
1	Ni 231.604†	275.2	-10.8	-0.6199	µg/L	-0.6199	ppb	06:45:10
1	P 214.914†	201.8	-5.5	-12.502	µg/L	-12.502	ppb	06:45:10
1	Pb 220.353†	50.8	-6.0	-1.5908	µg/L	-1.5908	ppb	06:45:10
1	S 181.975 Axial†	30.7	-8.6	-45.862	µg/L	-45.862	ppb	06:45:10
1	Sb 206.836†	25.1	5.8	6.0560	µg/L	6.0560	ppb	06:45:10
1	Se 196.026†	14.8	3.8	5.6345	µg/L	5.6345	ppb	06:45:10
1	SiO2†	2045.4	-62.2	-12.642	µg/L	-12.642	ppb	06:44:49
1	Si 251.611†	358.0	37.8	3.1426	µg/L	3.1426	ppb	06:45:10
1	Sn 189.927†	20.3	-4.4	-2.2840	µg/L	-2.2840	ppb	06:45:10
1	Ti 334.940†	874.7	64.4	0.1487	µg/L	0.1487	ppb	06:44:49
1	Tl 190.801†	-18.0	1.6	2.5551	µg/L	2.5551	ppb	06:45:10
1	U 409.014†	635.3	-200.0	-20.253	µg/L	-20.253	ppb	06:44:49
1	V 292.402†	-45.2	32.1	0.3613	µg/L	0.3613	ppb	06:44:49
1	Zn 213.857†	510.5	-15.7	-0.4423	µg/L	-0.4423	ppb	06:45:10
2	Sc RADIAL	110278.0	110278.0	99.1	%			06:43:47
2	Al 396.153Radial†	264.2	103.3	53.773	µg/L	53.773	ppb	06:43:47
2	Ca 317.933Radial†	513.5	110.8	43.656	µg/L	43.656	ppb	06:44:07
2	Fe 238.204 Radial†	12.1	5.3	27.179	µg/L	27.179	ppb	06:44:07
2	K 766.490 Radial†	828.4	-3.9	-2.1971	µg/L	-2.1971	ppb	06:43:47
2	Mg 279.077 IEC†	19.8	4.5	25.122	µg/L	25.122	ppb	06:44:07
2	Na 589.592 Radial†	-620.0	-119.6	-33.351	µg/L	-33.351	ppb	06:43:47
2	Sr 421.552†	-28.0	54.4	0.3108	µg/L	0.3108	ppb	06:43:47
2	Sc 361.383	1959738.6	1959738.6	100.77	%			06:45:16
2	Y 371.029	1190675.3	1190675.3	100.80	%			06:45:16
2	Ag 328.068†	-74.6	27.2	0.2615	µg/L	0.2615	ppb	06:45:21
2	As 188.979†	3.2	-1.9	-3.8666	µg/L	-3.8666	ppb	06:45:42
2	B 249.677†	139.5	-12.8	-0.6085	µg/L	-0.6085	ppb	06:45:42
2	Ba 233.527†	-75.0	4.7	0.1264	µg/L	0.1264	ppb	06:45:42
2	Be 313.107†	3675.8	-18.0	-0.0120	µg/L	-0.0120	ppb	06:45:21
2	Cd 226.502†	-86.7	11.4	0.3058	µg/L	0.3058	ppb	06:45:42
2	Co 228.616†	-73.4	-5.5	-0.2784	µg/L	-0.2784	ppb	06:45:42
2	Cr 267.716†	-103.5	24.4	0.5438	µg/L	0.5438	ppb	06:45:21
2	Cu 324.752†	3190.1	-100.5	-0.7438	µg/L	-0.7438	ppb	06:45:21
2	Mn 257.610†	-168.7	63.8	0.2164	µg/L	0.2164	ppb	06:45:42
2	Mo 202.031†	-2.7	2.1	0.2561	µg/L	0.2561	ppb	06:45:42
2	Ni 231.604†	278.5	-5.4	-0.3106	µg/L	-0.3106	ppb	06:45:42
2	P 214.914†	193.1	-12.5	-28.195	µg/L	-28.195	ppb	06:45:42
2	Pb 220.353†	55.8	-0.6	-0.1511	µg/L	-0.1511	ppb	06:45:42

2	S 181.975 Axial†	27.5	-11.5	-61.658 µg/L	-61.658 ppb	06:45:42
2	Sb 206.836†	24.1	5.0	5.2609 µg/L	5.2609 ppb	06:45:42
2	Se 196.026†	10.4	-0.5	-0.7397 µg/L	-0.7397 ppb	06:45:42
2	SiO2†	2037.9	-53.4	-10.857 µg/L	-10.857 ppb	06:45:21
2	Si 251.611†	361.8	44.3	3.6433 µg/L	3.6433 ppb	06:45:42
2	Sn 189.927†	21.9	-2.6	-1.3541 µg/L	-1.3541 ppb	06:45:42
2	Ti 334.940†	852.3	49.1	0.1129 µg/L	0.1129 ppb	06:45:21
2	Tl 190.801†	-20.0	-0.5	-0.8653 µg/L	-0.8653 ppb	06:45:42
2	U 409.014†	664.8	-165.8	-16.788 µg/L	-16.788 ppb	06:45:21
2	V 292.402†	-77.7	-0.5	-0.0294 µg/L	-0.0294 ppb	06:45:21
2	Zn 213.857†	512.6	-9.5	-0.2697 µg/L	-0.2697 ppb	06:45:42
3	Sc RADIAL	111500.2	111500.2	100 %		06:44:13
3	Al 396.153Radial†	403.0	238.9	124.40 µg/L	124.40 ppb	06:44:13
3	Ca 317.933Radial†	509.9	101.6	40.000 µg/L	40.000 ppb	06:44:33
3	Fe 238.204 Radial†	12.7	5.7	29.444 µg/L	29.444 ppb	06:44:33
3	K 766.490 Radial†	789.0	-52.4	-29.409 µg/L	-29.409 ppb	06:44:13
3	Mg 279.077 IEC†	25.1	9.6	53.431 µg/L	53.431 ppb	06:44:33
3	Na 589.592 Radial†	-595.2	-88.0	-24.541 µg/L	-24.541 ppb	06:44:13
3	Sr 421.552†	-101.8	-19.0	-0.1082 µg/L	-0.1082 ppb	06:44:13
3	Sc 361.383	1968916.5	1968916.5	101.25 %		06:45:48
3	Y 371.029	1196610.0	1196610.0	101.30 %		06:45:48
3	Ag 328.068†	-56.3	45.7	0.4364 µg/L	0.4364 ppb	06:45:53
3	As 188.979†	-2.2	-7.3	-14.541 µg/L	-14.541 ppb	06:46:14
3	B 249.677†	140.1	-12.8	-0.6087 µg/L	-0.6087 ppb	06:46:14
3	Ba 233.527†	-70.8	9.3	0.2474 µg/L	0.2474 ppb	06:46:14
3	Be 313.107†	3743.9	32.2	0.0215 µg/L	0.0215 ppb	06:45:53
3	Cd 226.502†	-93.4	5.2	0.1364 µg/L	0.1364 ppb	06:46:14
3	Co 228.616†	-56.3	11.8	0.5983 µg/L	0.5983 ppb	06:46:14
3	Cr 267.716†	-107.7	20.8	0.4632 µg/L	0.4632 ppb	06:45:53
3	Cu 324.752†	3278.8	-27.6	-0.1997 µg/L	-0.1997 ppb	06:45:53
3	Mn 257.610†	-171.5	61.9	0.2102 µg/L	0.2102 ppb	06:46:14
3	Mo 202.031†	-5.7	-0.8	-0.0972 µg/L	-0.0972 ppb	06:46:14
3	Ni 231.604†	280.1	-5.0	-0.2889 µg/L	-0.2889 ppb	06:46:14
3	P 214.914†	202.7	-3.9	-8.8873 µg/L	-8.8873 ppb	06:46:14
3	Pb 220.353†	62.8	6.0	1.6283 µg/L	1.6283 ppb	06:46:14
3	S 181.975 Axial†	31.9	-7.4	-39.440 µg/L	-39.440 ppb	06:46:14
3	Sb 206.836†	14.6	-4.5	-4.7750 µg/L	-4.7750 ppb	06:46:14
3	Se 196.026†	17.5	6.4	9.6218 µg/L	9.6218 ppb	06:46:14
3	SiO2†	2049.9	-51.0	-10.360 µg/L	-10.360 ppb	06:45:53
3	Si 251.611†	402.4	82.8	6.7934 µg/L	6.7934 ppb	06:46:14
3	Sn 189.927†	21.9	-2.7	-1.3901 µg/L	-1.3901 ppb	06:46:14
3	Ti 334.940†	735.1	-70.5	-0.1679 µg/L	-0.1679 ppb	06:45:53
3	Tl 190.801†	-16.6	3.0	4.7390 µg/L	4.7390 ppb	06:46:14
3	U 409.014†	729.7	-104.8	-10.610 µg/L	-10.610 ppb	06:45:53
3	V 292.402†	-87.7	-10.0	-0.1360 µg/L	-0.1360 ppb	06:45:53
3	Zn 213.857†	519.0	-5.6	-0.1611 µg/L	-0.1611 ppb	06:46:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1968044.4	101.20	%	0.407				0.40%
Sc RADIAL	110839.0	99.6	%	0.55				0.56%
Y 371.029	1196054.7	101.25	%	0.434				0.43%
Ag 328.068†	53.8	0.5149	µg/L	0.30058	0.5149	ppb	0.30058	58.37%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	154.5	80.451	µg/L	38.3518	80.451	ppb	38.3518	47.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.0	-10.063	µg/L	5.5406	-10.063	ppb	5.5406	55.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-12.6	-0.5996	µg/L	0.01552	-0.5996	ppb	0.01552	2.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.0	0.2408	µg/L	0.11129	0.2408	ppb	0.11129	46.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	8.1	0.0054	µg/L	0.01679	0.0054	ppb	0.01679	313.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	108.8	42.865	µg/L	2.5623	42.865	ppb	2.5623	5.98%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.7	0.2018	µg/L	0.09106	0.2018	ppb	0.09106	45.13%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.1	-0.0551	µg/L	0.57520	-0.0551	ppb	0.57520	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              20.1      0.4474 µg/L       0.10526      0.4474 ppb        0.10526  23.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -60.9     -0.4487 µg/L       0.27492     -0.4487 ppb        0.27492  61.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        5.3      27.009 µg/L        2.5240      27.009 ppb         2.5240   9.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -29.8     -16.711 µg/L       13.6964     -16.711 ppb        13.6964  81.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           6.4      35.834 µg/L       15.3597      35.834 ppb        15.3597  42.86%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              56.4      0.1918 µg/L       0.03736      0.1918 ppb        0.03736  19.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.4      0.2951 µg/L       0.41312      0.2951 ppb        0.41312 140.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -102.1     -28.467 µg/L        4.4827     -28.467 ppb         4.4827  15.75%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -7.0     -0.4065 µg/L       0.18517     -0.4065 ppb        0.18517  45.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.3     -16.528 µg/L       10.2642     -16.528 ppb        10.2642  62.10%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -0.2     -0.0379 µg/L       1.61255     -0.0379 ppb        1.61255 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -9.2     -48.987 µg/L       11.4338     -48.987 ppb        11.4338  23.34%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.1      2.1806 µg/L       6.03686      2.1806 ppb        6.03686 276.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.2      4.8389 µg/L       5.22637      4.8389 ppb        5.22637 108.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -55.5     -11.286 µg/L        1.1999     -11.286 ppb         1.1999  10.63%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              55.0      4.5264 µg/L       1.97914      4.5264 ppb        1.97914  43.72%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -3.3     -1.6761 µg/L       0.52678     -1.6761 ppb        0.52678  31.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.1      0.1034 µg/L       0.20953      0.1034 ppb        0.20953 202.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              14.3      0.0312 µg/L       0.17339      0.0312 ppb        0.17339 555.23%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.3      2.1430 µg/L       2.82479      2.1430 ppb        2.82479 131.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -156.9     -15.884 µg/L        4.8845     -15.884 ppb         4.8845  30.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                7.2      0.0653 µg/L       0.26185      0.0653 ppb        0.26185 401.06%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -10.3     -0.2911 µg/L       0.14179     -0.2911 ppb        0.14179  48.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 07:13:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111977.2	111977.2	101	%			07:14:01
1	Al 396.153Radial†	10264.8	10038.6	5208.9	µg/L	5208.9	ppb	07:14:01
1	Ca 317.933Radial†	13177.5	12689.4	4997.8	µg/L	4997.8	ppb	07:14:21
1	Fe 238.204 Radial†	1031.5	1018.2	5249.7	µg/L	5249.7	ppb	07:14:21
1	K 766.490 Radial†	9986.7	9085.6	5097.3	µg/L	5097.3	ppb	07:14:01
1	Mg 279.077 IEC†	965.5	944.1	5273.5	µg/L	5273.5	ppb	07:14:21
1	Na 589.592 Radial†	36381.5	36664.8	10222	µg/L	10222	ppb	07:14:01
1	Sr 421.552†	88837.9	88376.6	504.67	µg/L	504.67	ppb	07:14:01
1	Sc 361.383	1966763.4	1966763.4	101.14	%			07:15:24
1	Y 371.029	1189118.2	1189118.2	100.67	%			07:15:24
1	Ag 328.068†	54166.1	53659.2	514.64	µg/L	514.64	ppb	07:15:30
1	As 188.979†	256.7	248.7	495.48	µg/L	495.48	ppb	07:15:50
1	B 249.677†	10928.2	10654.3	497.94	µg/L	497.94	ppb	07:15:30
1	Ba 233.527†	19035.6	18901.1	506.88	µg/L	506.88	ppb	07:15:30
1	Be 313.107†	766107.4	753840.0	501.34	µg/L	501.34	ppb	07:15:24
1	Cd 226.502†	17950.9	17846.8	502.11	µg/L	502.11	ppb	07:15:30
1	Co 228.616†	9988.5	9943.7	504.54	µg/L	504.54	ppb	07:15:30
1	Cr 267.716†	22703.3	22575.6	503.38	µg/L	503.38	ppb	07:15:30
1	Cu 324.752†	72642.1	68560.4	512.71	µg/L	512.71	ppb	07:15:30
1	Mn 257.610†	152355.7	150876.3	504.14	µg/L	504.14	ppb	07:15:24
1	Mo 202.031†	4218.5	4176.0	501.37	µg/L	501.37	ppb	07:15:50
1	Ni 231.604†	9109.5	8725.5	503.12	µg/L	503.12	ppb	07:15:30
1	P 214.914†	1322.3	1103.3	2438.7	µg/L	2438.7	ppb	07:15:50
1	Pb 220.353†	1957.4	1879.4	503.48	µg/L	503.48	ppb	07:15:50
1	S 181.975 Axial†	216.3	175.0	934.19	µg/L	934.19	ppb	07:15:50
1	Sb 206.836†	504.6	480.0	505.50	µg/L	505.50	ppb	07:15:50
1	Se 196.026†	343.7	329.0	495.28	µg/L	495.28	ppb	07:15:50
1	SiO2†	28839.9	26440.4	5373.1	µg/L	5373.1	ppb	07:15:30
1	Si 251.611†	31643.5	30973.6	2466.5	µg/L	2466.5	ppb	07:15:30
1	Sn 189.927†	989.1	953.6	499.10	µg/L	499.10	ppb	07:15:50
1	Ti 334.940†	217856.5	214613.8	503.69	µg/L	503.69	ppb	07:15:24
1	Tl 190.801†	300.4	316.3	509.73	µg/L	509.73	ppb	07:15:50
1	U 409.014†	5862.9	4971.6	502.39	µg/L	502.39	ppb	07:15:30
1	V 292.402†	42354.6	41955.6	510.45	µg/L	510.45	ppb	07:15:30
1	Zn 213.857†	18667.7	17939.9	503.02	µg/L	503.02	ppb	07:15:30
2	Sc RADIAL	111871.4	111871.4	101	%			07:14:26
2	Al 396.153Radial†	10191.8	9975.6	5176.1	µg/L	5176.1	ppb	07:14:26
2	Ca 317.933Radial†	13210.5	12734.6	5015.6	µg/L	5015.6	ppb	07:14:47
2	Fe 238.204 Radial†	1028.4	1016.1	5238.7	µg/L	5238.7	ppb	07:14:47
2	K 766.490 Radial†	10058.6	9166.5	5142.7	µg/L	5142.7	ppb	07:14:26
2	Mg 279.077 IEC†	968.3	947.9	5294.4	µg/L	5294.4	ppb	07:14:47
2	Na 589.592 Radial†	36237.4	36555.6	10192	µg/L	10192	ppb	07:14:26
2	Sr 421.552†	88621.6	88245.0	503.92	µg/L	503.92	ppb	07:14:26
2	Sc 361.383	1978971.9	1978971.9	101.76	%			07:15:58
2	Y 371.029	1196366.0	1196366.0	101.28	%			07:15:58
2	Ag 328.068†	54398.7	53557.3	513.67	µg/L	513.67	ppb	07:16:03
2	As 188.979†	258.0	248.5	495.04	µg/L	495.04	ppb	07:16:24
2	B 249.677†	10968.8	10627.5	496.69	µg/L	496.69	ppb	07:16:03
2	Ba 233.527†	19099.6	18847.9	505.45	µg/L	505.45	ppb	07:16:03
2	Be 313.107†	771967.9	754925.8	502.06	µg/L	502.06	ppb	07:15:58
2	Cd 226.502†	18122.0	17905.5	503.76	µg/L	503.76	ppb	07:16:03
2	Co 228.616†	10083.8	9976.4	506.19	µg/L	506.19	ppb	07:16:03
2	Cr 267.716†	22796.3	22528.5	502.33	µg/L	502.33	ppb	07:16:03
2	Cu 324.752†	73099.1	68566.4	512.75	µg/L	512.75	ppb	07:16:03
2	Mn 257.610†	153379.5	150953.0	504.40	µg/L	504.40	ppb	07:15:58
2	Mo 202.031†	4224.8	4156.4	499.02	µg/L	499.02	ppb	07:16:24
2	Ni 231.604†	9204.6	8763.4	505.30	µg/L	505.30	ppb	07:16:03
2	P 214.914†	1322.7	1095.6	2421.3	µg/L	2421.3	ppb	07:16:24
2	Pb 220.353†	1957.9	1868.0	500.43	µg/L	500.43	ppb	07:16:24

2	S 181.975 Axial†	217.1	174.5	931.49 µg/L	931.49 ppb	07:16:24
2	Sb 206.836†	501.1	473.5	498.64 µg/L	498.64 ppb	07:16:24
2	Se 196.026†	342.9	326.2	490.99 µg/L	490.99 ppb	07:16:24
2	SiO2†	28956.5	26379.1	5360.7 µg/L	5360.7 ppb	07:16:03
2	Si 251.611†	31827.4	30961.2	2465.6 µg/L	2465.6 ppb	07:16:03
2	Sn 189.927†	991.3	949.8	497.08 µg/L	497.08 ppb	07:16:24
2	Ti 334.940†	219428.4	214829.5	504.20 µg/L	504.20 ppb	07:15:58
2	Tl 190.801†	301.0	315.1	507.75 µg/L	507.75 ppb	07:16:24
2	U 409.014†	5868.4	4941.3	499.32 µg/L	499.32 ppb	07:16:03
2	V 292.402†	42577.4	41916.2	509.95 µg/L	509.95 ppb	07:16:03
2	Zn 213.857†	18819.5	17975.2	504.01 µg/L	504.01 ppb	07:16:03
3	Sc RADIAL	111268.3	111268.3	100.0 %		07:14:52
3	Al 396.153Radial†	10198.2	10037.0	5208.2 µg/L	5208.2 ppb	07:14:52
3	Ca 317.933Radial†	13197.2	12792.5	5038.4 µg/L	5038.4 ppb	07:15:13
3	Fe 238.204 Radial†	1023.3	1016.6	5241.1 µg/L	5241.1 ppb	07:15:13
3	K 766.490 Radial†	10015.8	9178.0	5149.1 µg/L	5149.1 ppb	07:14:52
3	Mg 279.077 IEC†	963.5	948.3	5296.7 µg/L	5296.7 ppb	07:15:13
3	Na 589.592 Radial†	36109.2	36622.8	10210 µg/L	10210 ppb	07:14:52
3	Sr 421.552†	88198.7	88299.8	504.23 µg/L	504.23 ppb	07:14:52
3	Sc 361.383	1973342.4	1973342.4	101.47 %		07:16:31
3	Y 371.029	1192253.8	1192253.8	100.93 %		07:16:31
3	Ag 328.068†	54072.3	53388.2	512.05 µg/L	512.05 ppb	07:16:37
3	As 188.979†	258.4	249.6	497.24 µg/L	497.24 ppb	07:16:57
3	B 249.677†	10944.9	10634.8	497.03 µg/L	497.03 ppb	07:16:37
3	Ba 233.527†	18979.5	18783.0	503.72 µg/L	503.72 ppb	07:16:37
3	Be 313.107†	765969.8	751178.9	499.57 µg/L	499.57 ppb	07:16:31
3	Cd 226.502†	17970.0	17806.4	500.97 µg/L	500.97 ppb	07:16:37
3	Co 228.616†	9970.1	9892.6	501.95 µg/L	501.95 ppb	07:16:37
3	Cr 267.716†	22776.2	22572.6	503.31 µg/L	503.31 ppb	07:16:37
3	Cu 324.752†	72666.5	68345.0	511.10 µg/L	511.10 ppb	07:16:37
3	Mn 257.610†	152125.0	150146.7	501.71 µg/L	501.71 ppb	07:16:31
3	Mo 202.031†	4199.3	4143.1	497.42 µg/L	497.42 ppb	07:16:57
3	Ni 231.604†	9115.0	8701.0	501.70 µg/L	501.70 ppb	07:16:37
3	P 214.914†	1301.6	1078.5	2382.9 µg/L	2382.9 ppb	07:16:57
3	Pb 220.353†	1963.1	1878.6	503.27 µg/L	503.27 ppb	07:16:57
3	S 181.975 Axial†	217.1	175.1	934.88 µg/L	934.88 ppb	07:16:57
3	Sb 206.836†	504.1	477.9	503.21 µg/L	503.21 ppb	07:16:57
3	Se 196.026†	341.9	326.1	490.90 µg/L	490.90 ppb	07:16:57
3	SiO2†	28822.1	26327.7	5350.3 µg/L	5350.3 ppb	07:16:37
3	Si 251.611†	31698.9	30923.8	2462.7 µg/L	2462.7 ppb	07:16:37
3	Sn 189.927†	984.4	945.8	495.02 µg/L	495.02 ppb	07:16:57
3	Ti 334.940†	217756.8	213797.4	501.78 µg/L	501.78 ppb	07:16:31
3	Tl 190.801†	299.1	314.1	506.18 µg/L	506.18 ppb	07:16:57
3	U 409.014†	5746.8	4837.9	488.86 µg/L	488.86 ppb	07:16:37
3	V 292.402†	42387.2	41848.1	509.10 µg/L	509.10 ppb	07:16:37
3	Zn 213.857†	18640.8	17851.9	500.54 µg/L	500.54 ppb	07:16:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1973025.9	101.46	%	0.314				0.31%
Sc RADIAL	111705.6	100	%	0.3				0.34%
Y 371.029	1192579.3	100.96	%	0.308				0.30%
Ag 328.068†	53534.9	513.45	µg/L	1.308	513.45	ppb	1.308	0.25%
QC value within limits for Ag 328.068 Recovery = 102.69%								
Al 396.153Radial†	10017.1	5197.7	µg/L	18.69	5197.7	ppb	18.69	0.36%
QC value within limits for Al 396.153Radial Recovery = 103.95%								
As 188.979†	248.9	495.92	µg/L	1.163	495.92	ppb	1.163	0.23%
QC value within limits for As 188.979 Recovery = 99.18%								
B 249.677†	10638.9	497.22	µg/L	0.648	497.22	ppb	0.648	0.13%
QC value within limits for B 249.677 Recovery = 99.44%								
Ba 233.527†	18844.0	505.35	µg/L	1.584	505.35	ppb	1.584	0.31%
QC value within limits for Ba 233.527 Recovery = 101.07%								
Be 313.107†	753314.9	500.99	µg/L	1.282	500.99	ppb	1.282	0.26%
QC value within limits for Be 313.107 Recovery = 100.20%								
Ca 317.933Radial†	12738.8	5017.2	µg/L	20.36	5017.2	ppb	20.36	0.41%
QC value within limits for Ca 317.933Radial Recovery = 100.34%								
Cd 226.502†	17852.9	502.28	µg/L	1.405	502.28	ppb	1.405	0.28%
QC value within limits for Cd 226.502 Recovery = 100.46%								
Co 228.616†	9937.6	504.23	µg/L	2.142	504.23	ppb	2.142	0.42%

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   QC value within limits for Co 228.616  Recovery = 100.85%
Cr 267.716†            22558.9      503.01 µg/L        0.586      503.01 ppb          0.586   0.12%
   QC value within limits for Cr 267.716  Recovery = 100.60%
Cu 324.752†            68490.6      512.19 µg/L        0.941      512.19 ppb          0.941   0.18%
   QC value within limits for Cu 324.752  Recovery = 102.44%
Fe 238.204 Radial†      1016.9      5243.1 µg/L         5.77      5243.1 ppb           5.77   0.11%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.86%
K 766.490 Radial†       9143.4      5129.7 µg/L        28.25      5129.7 ppb          28.25   0.55%
   QC value within limits for K 766.490 Radial  Recovery = 102.59%
Mg 279.077 IEC†          946.8      5288.2 µg/L        12.78      5288.2 ppb          12.78   0.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.76%
Mn 257.610†           150658.6      503.42 µg/L        1.485      503.42 ppb          1.485   0.30%
   QC value within limits for Mn 257.610  Recovery = 100.68%
Mo 202.031†            4158.5      499.27 µg/L        1.986      499.27 ppb          1.986   0.40%
   QC value within limits for Mo 202.031  Recovery = 99.85%
Na 589.592 Radial†     36614.4       10208 µg/L         15.4       10208 ppb           15.4   0.15%
   QC value within limits for Na 589.592 Radial  Recovery = 102.08%
Ni 231.604†            8730.0      503.37 µg/L        1.814      503.37 ppb          1.814   0.36%
   QC value within limits for Ni 231.604  Recovery = 100.67%
P 214.914†             1092.5      2414.3 µg/L        28.55      2414.3 ppb          28.55   1.18%
   QC value within limits for P 214.914  Recovery = 96.57%
Pb 220.353†            1875.3      502.39 µg/L        1.705      502.39 ppb          1.705   0.34%
   QC value within limits for Pb 220.353  Recovery = 100.48%
S 181.975 Axial†        174.9      933.52 µg/L        1.792      933.52 ppb          1.792   0.19%
   QC value within limits for S 181.975 Axial  Recovery = 93.35%
Sb 206.836†             477.2      502.45 µg/L        3.492      502.45 ppb          3.492   0.69%
   QC value within limits for Sb 206.836  Recovery = 100.49%
Se 196.026†             327.1      492.39 µg/L        2.507      492.39 ppb          2.507   0.51%
   QC value within limits for Se 196.026  Recovery = 98.48%
SiO2†                  26382.4      5361.4 µg/L        11.46      5361.4 ppb          11.46   0.21%
   QC value within limits for SiO2  Recovery = 100.26%
Si 251.611†            30952.9      2464.9 µg/L         1.96      2464.9 ppb           1.96   0.08%
   QC value within limits for Si 251.611  Recovery = 98.60%
Sn 189.927†             949.7      497.07 µg/L        2.041      497.07 ppb          2.041   0.41%
   QC value within limits for Sn 189.927  Recovery = 99.41%
Sr 421.552†            88307.1      504.27 µg/L        0.378      504.27 ppb          0.378   0.07%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†           214413.6      503.22 µg/L        1.279      503.22 ppb          1.279   0.25%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†             315.2      507.89 µg/L        1.778      507.89 ppb          1.778   0.35%
   QC value within limits for Tl 190.801  Recovery = 101.58%
U 409.014†             4916.9      496.85 µg/L        7.094      496.85 ppb          7.094   1.43%
   QC value within limits for U 409.014  Recovery = 99.37%
V 292.402†             41906.6      509.83 µg/L        0.680      509.83 ppb          0.680   0.13%
   QC value within limits for V 292.402  Recovery = 101.97%
Zn 213.857†            17922.3      502.52 µg/L        1.785      502.52 ppb          1.785   0.36%
   QC value within limits for Zn 213.857  Recovery = 100.50%
All analyte(s) passed QC.
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Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 07:17:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111029.7	111029.7	99.8	%			07:17:39
1	Al 396.153Radial†	178.1	15.2	7.8988	µg/L	7.8988	ppb	07:17:39
1	Ca 317.933Radial†	415.0	8.6	3.3774	µg/L	3.3774	ppb	07:18:00
1	Fe 238.204 Radial†	10.7	3.8	19.461	µg/L	19.461	ppb	07:18:00
1	K 766.490 Radial†	703.7	-134.5	-75.477	µg/L	-75.477	ppb	07:17:39
1	Mg 279.077 IEC†	17.9	2.5	13.976	µg/L	13.976	ppb	07:18:00
1	Na 589.592 Radial†	-666.4	-161.9	-45.125	µg/L	-45.125	ppb	07:17:39
1	Sr 421.552†	-71.7	10.7	0.0614	µg/L	0.0614	ppb	07:17:39
1	Sc 361.383	1978829.3	1978829.3	101.76	%			07:19:02
1	Y 371.029	1202067.8	1202067.8	101.76	%			07:19:02
1	Ag 328.068†	-91.5	11.4	0.1092	µg/L	0.1092	ppb	07:19:07
1	As 188.979†	0.3	-4.9	-9.7207	µg/L	-9.7207	ppb	07:19:28
1	B 249.677†	132.2	-21.3	-1.0035	µg/L	-1.0035	ppb	07:19:28
1	Ba 233.527†	-73.1	7.3	0.1959	µg/L	0.1959	ppb	07:19:28
1	Be 313.107†	3640.0	-88.5	-0.0590	µg/L	-0.0590	ppb	07:19:07
1	Cd 226.502†	-87.5	11.4	0.3074	µg/L	0.3074	ppb	07:19:28
1	Co 228.616†	-64.6	3.9	0.1987	µg/L	0.1987	ppb	07:19:28
1	Cr 267.716†	-117.5	11.7	0.2609	µg/L	0.2609	ppb	07:19:07
1	Cu 324.752†	3228.7	-93.1	-0.6902	µg/L	-0.6902	ppb	07:19:07
1	Mn 257.610†	-154.9	79.0	0.2660	µg/L	0.2660	ppb	07:19:28
1	Mo 202.031†	-2.0	2.9	0.3513	µg/L	0.3513	ppb	07:19:28
1	Ni 231.604†	275.0	-11.4	-0.6601	µg/L	-0.6601	ppb	07:19:28
1	P 214.914†	198.8	-8.7	-19.716	µg/L	-19.716	ppb	07:19:28
1	Pb 220.353†	50.7	-6.2	-1.6490	µg/L	-1.6490	ppb	07:19:28
1	S 181.975 Axial†	25.0	-14.3	-76.473	µg/L	-76.473	ppb	07:19:28
1	Sb 206.836†	17.5	-1.7	-1.8137	µg/L	-1.8137	ppb	07:19:28
1	Se 196.026†	19.7	8.5	12.808	µg/L	12.808	ppb	07:19:28
1	SiO2†	2036.4	-74.4	-15.119	µg/L	-15.119	ppb	07:19:07
1	Si 251.611†	465.2	142.5	11.580	µg/L	11.580	ppb	07:19:28
1	Sn 189.927†	24.9	0.1	0.0692	µg/L	0.0692	ppb	07:19:28
1	Ti 334.940†	938.8	126.0	0.2956	µg/L	0.2956	ppb	07:19:07
1	Tl 190.801†	-16.5	3.1	4.9809	µg/L	4.9809	ppb	07:19:28
1	U 409.014†	677.7	-159.5	-16.148	µg/L	-16.148	ppb	07:19:07
1	V 292.402†	-87.1	-9.0	-0.1308	µg/L	-0.1308	ppb	07:19:07
1	Zn 213.857†	505.4	-21.5	-0.6068	µg/L	-0.6068	ppb	07:19:28
2	Sc RADIAL	110647.3	110647.3	99.4	%			07:18:05
2	Al 396.153Radial†	189.2	26.9	14.017	µg/L	14.017	ppb	07:18:05
2	Ca 317.933Radial†	422.6	17.6	6.9455	µg/L	6.9455	ppb	07:18:26
2	Fe 238.204 Radial†	14.4	7.5	38.376	µg/L	38.376	ppb	07:18:26
2	K 766.490 Radial†	706.9	-128.9	-72.296	µg/L	-72.296	ppb	07:18:05
2	Mg 279.077 IEC†	15.6	0.2	1.2671	µg/L	1.2671	ppb	07:18:26
2	Na 589.592 Radial†	-679.5	-177.3	-49.443	µg/L	-49.443	ppb	07:18:05
2	Sr 421.552†	-34.2	48.2	0.2755	µg/L	0.2755	ppb	07:18:05
2	Sc 361.383	1966936.4	1966936.4	101.14	%			07:19:34
2	Y 371.029	1195154.6	1195154.6	101.18	%			07:19:34
2	Ag 328.068†	12.3	113.5	1.0827	µg/L	1.0827	ppb	07:19:40
2	As 188.979†	3.6	-1.6	-3.1776	µg/L	-3.1776	ppb	07:20:00
2	B 249.677†	156.6	3.6	0.1570	µg/L	0.1570	ppb	07:20:00
2	Ba 233.527†	-77.7	2.3	0.0619	µg/L	0.0619	ppb	07:20:00
2	Be 313.107†	3593.6	-112.6	-0.0750	µg/L	-0.0750	ppb	07:19:40
2	Cd 226.502†	-89.3	9.2	0.2472	µg/L	0.2472	ppb	07:20:00
2	Co 228.616†	-71.9	-3.7	-0.1884	µg/L	-0.1884	ppb	07:20:00
2	Cr 267.716†	-71.5	56.5	1.2570	µg/L	1.2570	ppb	07:19:40
2	Cu 324.752†	3216.0	-86.4	-0.6365	µg/L	-0.6365	ppb	07:19:40
2	Mn 257.610†	-162.1	70.9	0.2416	µg/L	0.2416	ppb	07:20:00
2	Mo 202.031†	-6.1	-1.2	-0.1403	µg/L	-0.1403	ppb	07:20:00
2	Ni 231.604†	279.3	-5.5	-0.3190	µg/L	-0.3190	ppb	07:20:00
2	P 214.914†	196.2	-10.2	-22.972	µg/L	-22.972	ppb	07:20:00
2	Pb 220.353†	58.1	1.5	0.4063	µg/L	0.4063	ppb	07:20:00

2	S 181.975 Axial†	28.0	-11.2	-59.783	µg/L	-59.783 ppb	07:20:00
2	Sb 206.836†	15.7	-3.4	-3.5620	µg/L	-3.5620 ppb	07:20:00
2	Se 196.026†	9.4	-1.5	-2.2574	µg/L	-2.2574 ppb	07:20:00
2	SiO2†	2059.0	-40.0	-8.1222	µg/L	-8.1222 ppb	07:19:40
2	Si 251.611†	445.1	125.4	10.213	µg/L	10.213 ppb	07:20:00
2	Sn 189.927†	24.5	-0.1	-0.0676	µg/L	-0.0676 ppb	07:20:00
2	Ti 334.940†	830.0	23.9	0.0558	µg/L	0.0558 ppb	07:19:40
2	Tl 190.801†	-17.6	1.9	3.1058	µg/L	3.1058 ppb	07:20:00
2	U 409.014†	724.6	-109.1	-11.048	µg/L	-11.048 ppb	07:19:40
2	V 292.402†	-81.4	-3.9	-0.0623	µg/L	-0.0623 ppb	07:19:40
2	Zn 213.857†	502.1	-21.8	-0.6178	µg/L	-0.6178 ppb	07:20:00
3	Sc RADIAL	110408.6	110408.6	99.2	%		07:18:31
3	Al 396.153Radial†	173.2	11.2	5.8175	µg/L	5.8175 ppb	07:18:31
3	Ca 317.933Radial†	417.8	13.7	5.3960	µg/L	5.3960 ppb	07:18:51
3	Fe 238.204 Radial†	12.1	5.2	26.962	µg/L	26.962 ppb	07:18:51
3	K 766.490 Radial†	746.7	-87.3	-48.976	µg/L	-48.976 ppb	07:18:31
3	Mg 279.077 IEC†	16.3	1.0	5.4760	µg/L	5.4760 ppb	07:18:51
3	Na 589.592 Radial†	-657.8	-156.9	-43.753	µg/L	-43.753 ppb	07:18:31
3	Sr 421.552†	-61.3	20.8	0.1190	µg/L	0.1190 ppb	07:18:31
3	Sc 361.383	1952505.1	1952505.1	100.40	%		07:20:06
3	Y 371.029	1187104.0	1187104.0	100.49	%		07:20:06
3	Ag 328.068†	-35.7	65.7	0.6280	µg/L	0.6280 ppb	07:20:12
3	As 188.979†	2.6	-2.5	-5.0029	µg/L	-5.0029 ppb	07:20:32
3	B 249.677†	144.8	-7.0	-0.3362	µg/L	-0.3362 ppb	07:20:32
3	Ba 233.527†	-68.3	11.2	0.2986	µg/L	0.2986 ppb	07:20:32
3	Be 313.107†	3576.4	-103.5	-0.0692	µg/L	-0.0692 ppb	07:20:12
3	Cd 226.502†	-88.5	9.3	0.2518	µg/L	0.2518 ppb	07:20:32
3	Co 228.616†	-67.7	-0.0	-0.0024	µg/L	-0.0024 ppb	07:20:32
3	Cr 267.716†	-139.7	-11.9	-0.2651	µg/L	-0.2651 ppb	07:20:12
3	Cu 324.752†	3182.7	-96.1	-0.7113	µg/L	-0.7113 ppb	07:20:12
3	Mn 257.610†	-147.5	84.3	0.2846	µg/L	0.2846 ppb	07:20:32
3	Mo 202.031†	-4.7	0.1	0.0158	µg/L	0.0158 ppb	07:20:32
3	Ni 231.604†	283.3	0.5	0.0277	µg/L	0.0277 ppb	07:20:32
3	P 214.914†	195.5	-9.4	-21.234	µg/L	-21.234 ppb	07:20:32
3	Pb 220.353†	63.3	7.0	1.8830	µg/L	1.8830 ppb	07:20:32
3	S 181.975 Axial†	30.5	-8.5	-45.395	µg/L	-45.395 ppb	07:20:32
3	Sb 206.836†	16.0	-3.0	-3.1856	µg/L	-3.1856 ppb	07:20:32
3	Se 196.026†	14.6	3.7	5.5843	µg/L	5.5843 ppb	07:20:32
3	SiO2†	2506.2	420.5	85.443	µg/L	85.443 ppb	07:20:12
3	Si 251.611†	407.4	91.1	7.4795	µg/L	7.4795 ppb	07:20:32
3	Sn 189.927†	19.7	-4.7	-2.4400	µg/L	-2.4400 ppb	07:20:32
3	Ti 334.940†	1170.5	369.2	0.8667	µg/L	0.8667 ppb	07:20:12
3	Tl 190.801†	-19.9	-0.5	-0.8049	µg/L	-0.8049 ppb	07:20:32
3	U 409.014†	728.5	-99.9	-10.116	µg/L	-10.116 ppb	07:20:12
3	V 292.402†	-76.0	0.9	-0.0035	µg/L	-0.0035 ppb	07:20:12
3	Zn 213.857†	508.6	-11.7	-0.3324	µg/L	-0.3324 ppb	07:20:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1966090.3	101.10	%	0.678				0.67%
Sc RADIAL	110695.2	99.5	%	0.28				0.28%
Y 371.029	1194775.5	101.14	%	0.634				0.63%
Ag 328.068†	63.5	0.6067	µg/L	0.48713	0.6067	ppb	0.48713	80.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.8	9.2446	µg/L	4.26242	9.2446	ppb	4.26242	46.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.0	-5.9671	µg/L	3.37641	-5.9671	ppb	3.37641	56.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-8.2	-0.3942	µg/L	0.58243	-0.3942	ppb	0.58243	147.74%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.9	0.1855	µg/L	0.11870	0.1855	ppb	0.11870	63.99%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-101.5	-0.0677	µg/L	0.00810	-0.0677	ppb	0.00810	11.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.3	5.2396	µg/L	1.78917	5.2396	ppb	1.78917	34.15%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.0	0.2688	µg/L	0.03350	0.2688	ppb	0.03350	12.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.1	0.0027	µg/L	0.19360	0.0027	ppb	0.19360	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.8      0.4176 µg/L       0.77304      0.4176 ppb        0.77304 185.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -91.9     -0.6794 µg/L       0.03857     -0.6794 ppb        0.03857   5.68%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        5.5      28.267 µg/L        9.5246      28.267 ppb         9.5246  33.70%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -116.9     -65.583 µg/L       14.4700     -65.583 ppb        14.4700  22.06%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.2      6.9063 µg/L       6.47400      6.9063 ppb        6.47400  93.74%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              78.1      0.2641 µg/L       0.02157      0.2641 ppb        0.02157   8.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.6      0.0756 µg/L       0.25121      0.0756 ppb        0.25121 332.30%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -165.4     -46.107 µg/L        2.9692     -46.107 ppb         2.9692   6.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.5     -0.3171 µg/L       0.34393     -0.3171 ppb        0.34393 108.45%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -9.4     -21.307 µg/L        1.6293     -21.307 ppb         1.6293   7.65%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               0.8      0.2134 µg/L       1.77389      0.2134 ppb        1.77389 831.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -11.3     -60.551 µg/L       15.5535     -60.551 ppb        15.5535  25.69%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.7     -2.8538 µg/L       0.92017     -2.8538 ppb        0.92017  32.24%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.6      5.3782 µg/L       7.53466      5.3782 ppb        7.53466 140.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   102.0      20.734 µg/L       56.1490      20.734 ppb        56.1490 270.80%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             119.7      9.7575 µg/L       2.08776      9.7575 ppb        2.08776  21.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.6     -0.8128 µg/L       1.41087     -0.8128 ppb        1.41087 173.58%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              26.6      0.1519 µg/L       0.11078      0.1519 ppb        0.11078  72.91%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             173.0      0.4061 µg/L       0.41657      0.4061 ppb        0.41657 102.59%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.5      2.4273 µg/L       2.95203      2.4273 ppb        2.95203 121.62%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -122.8     -12.437 µg/L        3.2470     -12.437 ppb         3.2470  26.11%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -4.0     -0.0655 µg/L       0.06372     -0.0655 ppb        0.06372  97.22%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -18.3     -0.5190 µg/L       0.16170     -0.5190 ppb        0.16170  31.16%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: 1201995284|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 316
Date Collected: 12/15/2009 07:20:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201995284|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110002.2	110002.2	98.8	%			07:21:19
1	Al 396.153Radial†	197.4	36.4	18.951	µg/L	18.951	ppb	07:21:19
1	Ca 317.933Radial†	458.7	56.7	22.314	µg/L	22.314	ppb	07:21:40
1	Fe 238.204 Radial†	19.5	12.8	65.561	µg/L	65.561	ppb	07:21:40
1	K 766.490 Radial†	759.6	-71.4	-40.067	µg/L	-40.067	ppb	07:21:19
1	Mg 279.077 IEC†	21.6	6.5	36.026	µg/L	36.026	ppb	07:21:40
1	Na 589.592 Radial†	-627.9	-129.2	-36.011	µg/L	-36.011	ppb	07:21:19
1	Sr 421.552†	-68.8	13.0	0.0741	µg/L	0.0741	ppb	07:21:19
1	Sc 361.383	1943190.5	1943190.5	99.923	%			07:22:41
1	Y 371.029	1176724.9	1176724.9	99.616	%			07:22:41
1	Ag 328.068†	-99.5	1.7	0.0203	µg/L	0.0203	ppb	07:22:47
1	As 188.979†	1.5	-3.6	-7.1343	µg/L	-7.1343	ppb	07:23:07
1	B 249.677†	162.6	11.5	0.5192	µg/L	0.5192	ppb	07:22:47
1	Ba 233.527†	-65.9	13.2	0.3540	µg/L	0.3540	ppb	07:23:07
1	Be 313.107†	3637.6	-25.2	-0.0168	µg/L	-0.0168	ppb	07:22:47
1	Cd 226.502†	-78.2	19.1	0.5346	µg/L	0.5346	ppb	07:23:07
1	Co 228.616†	-72.8	-5.5	-0.2807	µg/L	-0.2807	ppb	07:23:07
1	Cr 267.716†	-122.3	4.8	0.1062	µg/L	0.1062	ppb	07:22:47
1	Cu 324.752†	3176.0	-87.6	-0.6397	µg/L	-0.6397	ppb	07:22:47
1	Mn 257.610†	-33.1	198.1	0.6693	µg/L	0.6693	ppb	07:23:07
1	Mo 202.031†	-5.5	-0.6	-0.0708	µg/L	-0.0708	ppb	07:23:07
1	Ni 231.604†	274.7	-6.7	-0.3890	µg/L	-0.3890	ppb	07:23:07
1	P 214.914†	206.2	2.3	5.0916	µg/L	5.0916	ppb	07:23:07
1	Pb 220.353†	59.2	3.2	0.8614	µg/L	0.8614	ppb	07:23:07
1	S 181.975 Axial†	38.2	-0.6	-3.3722	µg/L	-3.3722	ppb	07:23:07
1	Sb 206.836†	16.5	-2.4	-2.5345	µg/L	-2.5345	ppb	07:23:07
1	Se 196.026†	7.0	-3.8	-5.6642	µg/L	-5.6642	ppb	07:23:07
1	SiO2†	2096.4	22.3	4.5370	µg/L	4.5370	ppb	07:22:47
1	Si 251.611†	459.6	145.3	11.851	µg/L	11.851	ppb	07:23:07
1	Sn 189.927†	22.1	-2.3	-1.1635	µg/L	-1.1635	ppb	07:23:07
1	Ti 334.940†	878.0	82.1	0.1915	µg/L	0.1915	ppb	07:22:47
1	Tl 190.801†	-18.4	0.9	1.4575	µg/L	1.4575	ppb	07:23:07
1	U 409.014†	850.8	26.0	2.6173	µg/L	2.6173	ppb	07:22:47
1	V 292.402†	-91.2	-14.7	-0.1679	µg/L	-0.1679	ppb	07:22:47
1	Zn 213.857†	568.2	50.4	1.4196	µg/L	1.4196	ppb	07:23:07
2	Sc RADIAL	109839.5	109839.5	98.7	%			07:21:45
2	Al 396.153Radial†	214.6	54.1	28.136	µg/L	28.136	ppb	07:21:45
2	Ca 317.933Radial†	448.6	47.1	18.555	µg/L	18.555	ppb	07:22:05
2	Fe 238.204 Radial†	19.0	12.3	63.303	µg/L	63.303	ppb	07:22:05
2	K 766.490 Radial†	725.2	-105.2	-59.007	µg/L	-59.007	ppb	07:21:45
2	Mg 279.077 IEC†	17.0	1.8	9.8015	µg/L	9.8015	ppb	07:22:05
2	Na 589.592 Radial†	-615.2	-117.3	-32.700	µg/L	-32.700	ppb	07:21:45
2	Sr 421.552†	-65.5	16.2	0.0926	µg/L	0.0926	ppb	07:21:45
2	Sc 361.383	1936967.3	1936967.3	99.603	%			07:23:13
2	Y 371.029	1173039.2	1173039.2	99.304	%			07:23:13
2	Ag 328.068†	-133.4	-32.7	-0.3046	µg/L	-0.3046	ppb	07:23:19
2	As 188.979†	0.8	-4.3	-8.6819	µg/L	-8.6819	ppb	07:23:39
2	B 249.677†	173.8	23.3	1.0710	µg/L	1.0710	ppb	07:23:19
2	Ba 233.527†	-71.7	7.2	0.1942	µg/L	0.1942	ppb	07:23:39
2	Be 313.107†	3537.4	-114.2	-0.0761	µg/L	-0.0761	ppb	07:23:19
2	Cd 226.502†	-87.5	9.6	0.2640	µg/L	0.2640	ppb	07:23:39
2	Co 228.616†	-67.1	0.0	0.0028	µg/L	0.0028	ppb	07:23:39
2	Cr 267.716†	-109.7	17.1	0.3803	µg/L	0.3803	ppb	07:23:19
2	Cu 324.752†	3214.0	-39.2	-0.2790	µg/L	-0.2790	ppb	07:23:19
2	Mn 257.610†	-18.9	212.3	0.7163	µg/L	0.7163	ppb	07:23:39
2	Mo 202.031†	-0.3	4.5	0.5456	µg/L	0.5456	ppb	07:23:39
2	Ni 231.604†	278.6	-2.0	-0.1159	µg/L	-0.1159	ppb	07:23:39
2	P 214.914†	199.5	-3.8	-8.6829	µg/L	-8.6829	ppb	07:23:39
2	Pb 220.353†	51.4	-4.4	-1.1611	µg/L	-1.1611	ppb	07:23:39

2	S 181.975 Axial†	34.3	-4.4	-23.575 µg/L	-23.575 ppb	07:23:39
2	Sb 206.836†	19.6	0.7	0.7495 µg/L	0.7495 ppb	07:23:39
2	Se 196.026†	18.6	7.9	11.858 µg/L	11.858 ppb	07:23:39
2	SiO2†	2093.6	26.2	5.3281 µg/L	5.3281 ppb	07:23:19
2	Si 251.611†	480.1	167.4	13.633 µg/L	13.633 ppb	07:23:39
2	Sn 189.927†	21.9	-2.4	-1.2126 µg/L	-1.2126 ppb	07:23:39
2	Ti 334.940†	939.4	146.5	0.3430 µg/L	0.3430 ppb	07:23:19
2	Tl 190.801†	-22.1	-2.8	-4.5402 µg/L	-4.5402 ppb	07:23:39
2	U 409.014†	804.2	-18.1	-1.8435 µg/L	-1.8435 ppb	07:23:19
2	V 292.402†	-55.6	20.7	0.2561 µg/L	0.2561 ppb	07:23:19
2	Zn 213.857†	567.6	51.7	1.4551 µg/L	1.4551 ppb	07:23:39
3	Sc RADIAL	110565.8	110565.8	99.3 %		07:22:11
3	Al 396.153Radial†	185.6	23.4	12.207 µg/L	12.207 ppb	07:22:11
3	Ca 317.933Radial†	448.9	44.5	17.515 µg/L	17.515 ppb	07:22:31
3	Fe 238.204 Radial†	18.2	11.3	58.133 µg/L	58.133 ppb	07:22:31
3	K 766.490 Radial†	721.8	-113.4	-63.614 µg/L	-63.614 ppb	07:22:11
3	Mg 279.077 IEC†	17.7	2.3	12.967 µg/L	12.967 ppb	07:22:31
3	Na 589.592 Radial†	-645.2	-143.4	-39.969 µg/L	-39.969 ppb	07:22:11
3	Sr 421.552†	-74.4	7.8	0.0444 µg/L	0.0444 ppb	07:22:11
3	Sc 361.383	1928392.8	1928392.8	99.162 %		07:23:45
3	Y 371.029	1168431.7	1168431.7	98.914 %		07:23:45
3	Ag 328.068†	-57.8	43.0	0.4170 µg/L	0.4170 ppb	07:23:50
3	As 188.979†	1.5	-3.6	-7.2283 µg/L	-7.2283 ppb	07:24:11
3	B 249.677†	141.1	-8.9	-0.4376 µg/L	-0.4376 ppb	07:23:50
3	Ba 233.527†	-69.6	8.9	0.2405 µg/L	0.2405 ppb	07:24:11
3	Be 313.107†	3627.3	-7.7	-0.0052 µg/L	-0.0052 ppb	07:23:50
3	Cd 226.502†	-95.7	1.0	0.0221 µg/L	0.0221 ppb	07:24:11
3	Co 228.616†	-60.7	6.1	0.3093 µg/L	0.3093 ppb	07:24:11
3	Cr 267.716†	-94.5	31.9	0.7117 µg/L	0.7117 ppb	07:23:50
3	Cu 324.752†	3202.3	-36.7	-0.2614 µg/L	-0.2614 ppb	07:23:50
3	Mn 257.610†	-34.9	196.0	0.6614 µg/L	0.6614 ppb	07:24:11
3	Mo 202.031†	-4.9	-0.1	-0.0097 µg/L	-0.0097 ppb	07:24:11
3	Ni 231.604†	272.8	-6.6	-0.3789 µg/L	-0.3789 ppb	07:24:11
3	P 214.914†	193.7	-8.8	-19.974 µg/L	-19.974 ppb	07:24:11
3	Pb 220.353†	57.0	1.5	0.3938 µg/L	0.3938 ppb	07:24:11
3	S 181.975 Axial†	37.8	-0.7	-3.9970 µg/L	-3.9970 ppb	07:24:11
3	Sb 206.836†	16.5	-2.3	-2.4491 µg/L	-2.4491 ppb	07:24:11
3	Se 196.026†	10.6	-0.1	-0.1595 µg/L	-0.1595 ppb	07:24:11
3	SiO2†	2113.9	56.0	11.388 µg/L	11.388 ppb	07:23:50
3	Si 251.611†	476.4	165.7	13.405 µg/L	13.405 ppb	07:24:11
3	Sn 189.927†	27.2	3.1	1.6233 µg/L	1.6233 ppb	07:24:11
3	Ti 334.940†	906.5	117.6	0.2751 µg/L	0.2751 ppb	07:23:50
3	Tl 190.801†	-20.6	-1.4	-2.2903 µg/L	-2.2903 ppb	07:24:11
3	U 409.014†	820.8	2.3	0.2193 µg/L	0.2193 ppb	07:23:50
3	V 292.402†	-34.6	41.7	0.5074 µg/L	0.5074 ppb	07:23:50
3	Zn 213.857†	565.3	51.8	1.4610 µg/L	1.4610 ppb	07:24:11

Mean Data: 1201995284|932724|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1936183.5	99.563	%	0.3821				0.38%
Sc RADIAL	110135.8	99.0	%	0.34				0.35%
Y 371.029	1172731.9	99.278	%	0.3518				0.35%
Ag 328.068†	4.0	0.0442	µg/L	0.36139	0.0442	ppb	0.36139	817.08%
Al 396.153Radial†	38.0	19.764	µg/L	7.9955	19.764	ppb	7.9955	40.45%
As 188.979†	-3.8	-7.6815	µg/L	0.86768	-7.6815	ppb	0.86768	11.30%
B 249.677†	8.6	0.3842	µg/L	0.76331	0.3842	ppb	0.76331	198.67%
Ba 233.527†	9.8	0.2629	µg/L	0.08219	0.2629	ppb	0.08219	31.26%
Be 313.107†	-49.0	-0.0327	µg/L	0.03801	-0.0327	ppb	0.03801	116.19%
Ca 317.933Radial†	49.4	19.461	µg/L	2.5246	19.461	ppb	2.5246	12.97%
Cd 226.502†	9.9	0.2736	µg/L	0.25635	0.2736	ppb	0.25635	93.70%
Co 228.616†	0.2	0.0105	µg/L	0.29511	0.0105	ppb	0.29511	>999.9%
Cr 267.716†	17.9	0.3994	µg/L	0.30322	0.3994	ppb	0.30322	75.92%
Cu 324.752†	-54.5	-0.3934	µg/L	0.21350	-0.3934	ppb	0.21350	54.27%
Fe 238.204 Radial†	12.1	62.332	µg/L	3.8079	62.332	ppb	3.8079	6.11%
K 766.490 Radial†	-96.7	-54.229	µg/L	12.4793	-54.229	ppb	12.4793	23.01%
Mg 279.077 IEC†	3.5	19.598	µg/L	14.3148	19.598	ppb	14.3148	73.04%
Mn 257.610†	202.1	0.6823	µg/L	0.02967	0.6823	ppb	0.02967	4.35%
Mo 202.031†	1.3	0.1550	µg/L	0.33960	0.1550	ppb	0.33960	219.05%
Na 589.592 Radial†	-129.9	-36.227	µg/L	3.6394	-36.227	ppb	3.6394	10.05%

Ni 231.604†	-5.1	-0.2946	µg/L	0.15485	-0.2946	ppb	0.15485 52.57%
P 214.914†	-3.5	-7.8552	µg/L	12.55350	-7.8552	ppb	12.55350 159.81%
Pb 220.353†	0.1	0.0313	µg/L	1.05886	0.0313	ppb	1.05886 >999.9%
S 181.975 Axial†	-1.9	-10.315	µg/L	11.4877	-10.315	ppb	11.4877 111.37%
Sb 206.836†	-1.3	-1.4114	µg/L	1.87183	-1.4114	ppb	1.87183 132.62%
Se 196.026†	1.3	2.0114	µg/L	8.96044	2.0114	ppb	8.96044 445.49%
SiO2†	34.9	7.0843	µg/L	3.74792	7.0843	ppb	3.74792 52.90%
Si 251.611†	159.5	12.963	µg/L	0.9699	12.963	ppb	0.9699 7.48%
Sn 189.927†	-0.5	-0.2509	µg/L	1.62332	-0.2509	ppb	1.62332 646.97%
Sr 421.552†	12.3	0.0704	µg/L	0.02433	0.0704	ppb	0.02433 34.58%
Ti 334.940†	115.4	0.2699	µg/L	0.07588	0.2699	ppb	0.07588 28.12%
Tl 190.801†	-1.1	-1.7910	µg/L	3.02991	-1.7910	ppb	3.02991 169.17%
U 409.014†	3.4	0.3310	µg/L	2.23249	0.3310	ppb	2.23249 674.38%
V 292.402†	15.9	0.1985	µg/L	0.34133	0.1985	ppb	0.34133 171.95%
Zn 213.857†	51.3	1.4452	µg/L	0.02239	1.4452	ppb	0.02239 1.55%

Sequence No.: 25
Sample ID: 1201995285|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 317
Date Collected: 12/15/2009 07:24:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201995285|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111824.9	111824.9	100	%			07:24:59
1	Al 396.153Radial†	181378.7	180350.3	93903	µg/L	93903	ppb	07:24:54
1	Ca 317.933Radial†	262293.4	260635.1	102650	µg/L	102650	ppb	07:24:54
1	Fe 238.204 Radial†	39757.0	39560.4	203350	µg/L	203350	ppb	07:24:59
1	K 766.490 Radial†	78845.8	77629.8	43552	µg/L	43552	ppb	07:24:54
1	Mg 279.077 IEC†	7460.7	7409.7	41063	µg/L	41063	ppb	07:24:59
1	Na 589.592 Radial†	37240.6	37569.1	10474	µg/L	10474	ppb	07:24:59
1	Sr 421.552†	432375.7	430396.4	2457.7	µg/L	2457.7	ppb	07:24:54
1	Sc 361.383	1954041.3	1954041.3	100.48	%			07:25:34
1	Y 371.029	1201436.5	1201436.5	101.71	%			07:25:34
1	Ag 328.068†	32357.1	32303.4	332.21	µg/L	332.21	ppb	07:25:40
1	As 188.979†	583.1	575.2	1118.4	µg/L	1118.4	ppb	07:26:00
1	B 249.677†	35672.7	35350.7	1593.7	µg/L	1593.7	ppb	07:25:40
1	Ba 233.527†	77815.4	77521.8	2077.2	µg/L	2077.2	ppb	07:25:40
1	Be 313.107†	1258700.6	1249005.4	828.77	µg/L	828.77	ppb	07:25:34
1	Cd 226.502†	22821.7	22809.9	626.89	µg/L	626.89	ppb	07:25:40
1	Co 228.616†	19671.5	19644.6	985.42	µg/L	985.42	ppb	07:25:40
1	Cr 267.716†	110802.5	110398.9	2458.8	µg/L	2458.8	ppb	07:25:40
1	Cu 324.752†	263336.2	258808.7	1974.9	µg/L	1974.9	ppb	07:25:40
1	Mn 257.610†	1687433.1	1679581.0	5630.5	µg/L	5630.5	ppb	07:25:34
1	Mo 202.031†	4490.0	4473.3	544.84	µg/L	544.84	ppb	07:26:00
1	Ni 231.604†	25282.0	24879.2	1434.6	µg/L	1434.6	ppb	07:25:40
1	P 214.914†	4013.3	3789.9	8150.9	µg/L	8150.9	ppb	07:26:00
1	Pb 220.353†	3264.2	3192.6	858.65	µg/L	858.65	ppb	07:26:00
1	S 181.975 Axial†	802.6	759.9	4027.0	µg/L	4027.0	ppb	07:26:00
1	Sb 206.836†	1835.8	1808.1	1909.4	µg/L	1909.4	ppb	07:26:00
1	Se 196.026†	1926.8	1906.7	2997.3	µg/L	2997.3	ppb	07:26:00
1	SiO2†	119582.9	116934.4	23763	µg/L	23763	ppb	07:25:40
1	Si 251.611†	137238.8	136266.7	10783	µg/L	10783	ppb	07:25:40
1	Sn 189.927†	2010.7	1976.7	1083.5	µg/L	1083.5	ppb	07:26:00
1	Ti 334.940†	2533747.8	2520813.8	5913.8	µg/L	5913.8	ppb	07:25:34
1	Tl 190.801†	781.3	796.9	1324.4	µg/L	1324.4	ppb	07:26:00
1	U 409.014†	390.0	-437.4	-79.801	µg/L	-79.801	ppb	07:25:40
1	V 292.402†	105592.1	105162.9	1287.8	µg/L	1287.8	ppb	07:25:40
1	Zn 213.857†	217685.3	216124.3	6075.8	µg/L	6075.8	ppb	07:25:40
2	Sc RADIAL	112400.2	112400.2	101	%			07:25:10
2	Al 396.153Radial†	182299.3	180337.9	93896	µg/L	93896	ppb	07:25:05
2	Ca 317.933Radial†	263796.3	260787.0	102710	µg/L	102710	ppb	07:25:05
2	Fe 238.204 Radial†	39768.1	39368.9	202360	µg/L	202360	ppb	07:25:10
2	K 766.490 Radial†	79314.6	77692.4	43587	µg/L	43587	ppb	07:25:05
2	Mg 279.077 IEC†	7511.0	7421.5	41131	µg/L	41131	ppb	07:25:10
2	Na 589.592 Radial†	37476.4	37612.8	10486	µg/L	10486	ppb	07:25:10
2	Sr 421.552†	434596.8	430392.9	2457.7	µg/L	2457.7	ppb	07:25:05
2	Sc 361.383	1951374.2	1951374.2	100.34	%			07:26:07
2	Y 371.029	1199928.5	1199928.5	101.58	%			07:26:07
2	Ag 328.068†	32248.6	32239.3	331.47	µg/L	331.47	ppb	07:26:13
2	As 188.979†	586.0	578.9	1125.8	µg/L	1125.8	ppb	07:26:34
2	B 249.677†	35443.5	35170.8	1585.5	µg/L	1585.5	ppb	07:26:13
2	Ba 233.527†	77341.0	77154.9	2067.4	µg/L	2067.4	ppb	07:26:13
2	Be 313.107†	1255862.9	1247889.6	828.03	µg/L	828.03	ppb	07:26:07
2	Cd 226.502†	22686.3	22705.9	624.02	µg/L	624.02	ppb	07:26:13
2	Co 228.616†	19525.9	19526.3	979.46	µg/L	979.46	ppb	07:26:13
2	Cr 267.716†	109908.3	109658.5	2442.3	µg/L	2442.3	ppb	07:26:13
2	Cu 324.752†	262001.8	257837.1	1967.4	µg/L	1967.4	ppb	07:26:13
2	Mn 257.610†	1684213.3	1678667.5	5627.3	µg/L	5627.3	ppb	07:26:07
2	Mo 202.031†	4526.4	4515.7	549.89	µg/L	549.89	ppb	07:26:34
2	Ni 231.604†	25053.4	24685.7	1423.4	µg/L	1423.4	ppb	07:26:13
2	P 214.914†	3993.7	3775.8	8121.3	µg/L	8121.3	ppb	07:26:34
2	Pb 220.353†	3258.3	3191.1	858.28	µg/L	858.28	ppb	07:26:34

2	S 181.975 Axial†	793.6	752.1	3985.4	µg/L	3985.4 ppb	07:26:34
2	Sb 206.836†	1845.2	1819.9	1921.9	µg/L	1921.9 ppb	07:26:34
2	Se 196.026†	1944.7	1927.2	3027.3	µg/L	3027.3 ppb	07:26:34
2	SiO2†	119064.4	116580.3	23691	µg/L	23691 ppb	07:26:13
2	Si 251.611†	136613.5	135830.2	10747	µg/L	10747 ppb	07:26:13
2	Sn 189.927†	2020.0	1988.7	1089.7	µg/L	1089.7 ppb	07:26:34
2	Ti 334.940†	2524205.2	2514750.3	5899.6	µg/L	5899.6 ppb	07:26:07
2	Tl 190.801†	777.9	794.5	1320.5	µg/L	1320.5 ppb	07:26:34
2	U 409.014†	327.1	-499.5	-85.905	µg/L	-85.905 ppb	07:26:13
2	V 292.402†	104847.9	104564.8	1280.6	µg/L	1280.6 ppb	07:26:13
2	Zn 213.857†	216211.3	214951.4	6042.8	µg/L	6042.8 ppb	07:26:13
3	Sc RADIAL	112664.3	112664.3	101	%		07:25:21
3	Al 396.153Radial†	181913.8	179534.0	93478	µg/L	93478 ppb	07:25:16
3	Ca 317.933Radial†	262350.6	258746.7	101910	µg/L	101910 ppb	07:25:16
3	Fe 238.204 Radial†	40118.9	39623.2	203670	µg/L	203670 ppb	07:25:21
3	K 766.490 Radial†	79149.5	77345.2	43393	µg/L	43393 ppb	07:25:16
3	Mg 279.077 IEC†	7580.4	7472.6	41414	µg/L	41414 ppb	07:25:21
3	Na 589.592 Radial†	37734.7	37781.0	10533	µg/L	10533 ppb	07:25:21
3	Sr 421.552†	433692.9	428491.4	2446.9	µg/L	2446.9 ppb	07:25:16
3	Sc 361.383	1956434.0	1956434.0	100.60	%		07:26:41
3	Y 371.029	1203748.5	1203748.5	101.90	%		07:26:41
3	Ag 328.068†	32358.2	32265.1	331.86	µg/L	331.86 ppb	07:26:47
3	As 188.979†	589.8	581.1	1130.3	µg/L	1130.3 ppb	07:27:08
3	B 249.677†	35633.2	35267.9	1589.7	µg/L	1589.7 ppb	07:26:47
3	Ba 233.527†	77929.1	77540.1	2077.7	µg/L	2077.7 ppb	07:26:47
3	Be 313.107†	1262161.6	1250913.6	830.04	µg/L	830.04 ppb	07:26:41
3	Cd 226.502†	22834.5	22794.8	626.43	µg/L	626.43 ppb	07:26:47
3	Co 228.616†	19653.1	19602.4	983.28	µg/L	983.28 ppb	07:26:47
3	Cr 267.716†	110812.3	110273.8	2456.0	µg/L	2456.0 ppb	07:26:47
3	Cu 324.752†	263308.0	258460.2	1972.3	µg/L	1972.3 ppb	07:26:47
3	Mn 257.610†	1692852.9	1682914.3	5641.6	µg/L	5641.6 ppb	07:26:41
3	Mo 202.031†	4510.4	4488.2	546.63	µg/L	546.63 ppb	07:27:08
3	Ni 231.604†	25268.4	24834.9	1432.0	µg/L	1432.0 ppb	07:26:47
3	P 214.914†	3995.3	3767.2	8099.2	µg/L	8099.2 ppb	07:27:08
3	Pb 220.353†	3260.7	3185.1	856.62	µg/L	856.62 ppb	07:27:08
3	S 181.975 Axial†	801.5	757.9	4016.2	µg/L	4016.2 ppb	07:27:08
3	Sb 206.836†	1852.3	1822.2	1924.4	µg/L	1924.4 ppb	07:27:08
3	Se 196.026†	1936.9	1914.5	3008.9	µg/L	3008.9 ppb	07:27:08
3	SiO2†	117992.5	115207.9	23412	µg/L	23412 ppb	07:26:47
3	Si 251.611†	135257.8	134130.6	10609	µg/L	10609 ppb	07:26:47
3	Sn 189.927†	2009.4	1973.0	1081.5	µg/L	1081.5 ppb	07:27:08
3	Ti 334.940†	2536631.3	2520595.9	5913.4	µg/L	5913.4 ppb	07:26:41
3	Tl 190.801†	787.4	802.0	1332.7	µg/L	1332.7 ppb	07:27:08
3	U 409.014†	263.2	-563.9	-92.683	µg/L	-92.683 ppb	07:26:47
3	V 292.402†	105551.5	104994.0	1285.8	µg/L	1285.8 ppb	07:26:47
3	Zn 213.857†	217704.7	215878.7	6068.8	µg/L	6068.8 ppb	07:26:47

Mean Data: 1201995285|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1953949.8	100.48	%	0.130				0.13%
Sc RADIAL	112296.5	101	%	0.4				0.38%
Y 371.029	1201704.5	101.73	%	0.163				0.16%
Ag 328.068†	32269.2	331.85	µg/L	0.369	331.85	ppb	0.369	0.11%
Al 396.153Radial†	180074.1	93759	µg/L	243.6	93759	ppb	243.6	0.26%
As 188.979†	578.4	1124.8	µg/L	6.01	1124.8	ppb	6.01	0.53%
B 249.677†	35263.1	1589.6	µg/L	4.06	1589.6	ppb	4.06	0.26%
Ba 233.527†	77405.6	2074.1	µg/L	5.82	2074.1	ppb	5.82	0.28%
Be 313.107†	1249269.5	828.95	µg/L	1.015	828.95	ppb	1.015	0.12%
Ca 317.933Radial†	260056.3	102420	µg/L	447.7	102420	ppb	447.7	0.44%
Cd 226.502†	22770.2	625.78	µg/L	1.537	625.78	ppb	1.537	0.25%
Co 228.616†	19591.1	982.72	µg/L	3.021	982.72	ppb	3.021	0.31%
Cr 267.716†	110110.4	2452.4	µg/L	8.82	2452.4	ppb	8.82	0.36%
Cu 324.752†	258368.7	1971.5	µg/L	3.79	1971.5	ppb	3.79	0.19%
Fe 238.204 Radial†	39517.5	203130	µg/L	680.8	203130	ppb	680.8	0.34%
K 766.490 Radial†	77555.8	43511	µg/L	103.8	43511	ppb	103.8	0.24%
Mg 279.077 IEC†	7434.6	41203	µg/L	186.1	41203	ppb	186.1	0.45%
Mn 257.610†	1680387.6	5633.1	µg/L	7.53	5633.1	ppb	7.53	0.13%
Mo 202.031†	4492.4	547.12	µg/L	2.560	547.12	ppb	2.560	0.47%
Na 589.592 Radial†	37654.3	10498	µg/L	31.2	10498	ppb	31.2	0.30%

Ni 231.604†	24800.0	1430.0	µg/L	5.84	1430.0	ppb	5.84	0.41%
P 214.914†	3777.6	8123.8	µg/L	25.92	8123.8	ppb	25.92	0.32%
Pb 220.353†	3189.6	857.85	µg/L	1.082	857.85	ppb	1.082	0.13%
S 181.975 Axial†	756.6	4009.5	µg/L	21.59	4009.5	ppb	21.59	0.54%
Sb 206.836†	1816.8	1918.6	µg/L	8.02	1918.6	ppb	8.02	0.42%
Se 196.026†	1916.1	3011.1	µg/L	15.13	3011.1	ppb	15.13	0.50%
SiO2†	116240.8	23622	µg/L	185.3	23622	ppb	185.3	0.78%
Si 251.611†	135409.2	10713	µg/L	91.6	10713	ppb	91.6	0.85%
Sn 189.927†	1979.4	1084.9	µg/L	4.26	1084.9	ppb	4.26	0.39%
Sr 421.552†	429760.2	2454.1	µg/L	6.27	2454.1	ppb	6.27	0.26%
Ti 334.940†	2518720.0	5908.9	µg/L	8.09	5908.9	ppb	8.09	0.14%
Tl 190.801†	797.8	1325.9	µg/L	6.23	1325.9	ppb	6.23	0.47%
U 409.014†	-500.3	-86.130	µg/L	6.4436	-86.130	ppb	6.4436	7.48%
V 292.402†	104907.2	1284.7	µg/L	3.75	1284.7	ppb	3.75	0.29%
Zn 213.857†	215651.5	6062.5	µg/L	17.38	6062.5	ppb	17.38	0.29%

Sequence No.: 26
Sample ID: 241613001|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 318
Date Collected: 12/15/2009 07:27:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613001|932724|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112860.2	112860.2	101	%			07:27:49
1	Al 396.153Radial†	110276.8	108580.8	56546	µg/L	56546	ppb	07:27:49
1	Ca 317.933Radial†	23609.9	22874.4	9009.1	µg/L	9009.1	ppb	07:28:10
1	Fe 238.204 Radial†	20208.3	19920.5	102380	µg/L	102380	ppb	07:28:10
1	K 766.490 Radial†	9729.6	8754.5	4911.5	µg/L	4911.5	ppb	07:27:49
1	Mg 279.077 IEC†	1865.0	1823.7	10027	µg/L	10027	ppb	07:28:10
1	Na 589.592 Radial†	6231.4	6650.9	1854.2	µg/L	1854.2	ppb	07:27:49
1	Sr 421.552†	23728.2	23481.1	134.09	µg/L	134.09	ppb	07:27:49
1	Sc 361.383	1990703.8	1990703.8	102.37	%			07:29:14
1	Y 371.029	1255938.4	1255938.4	106.32	%			07:29:14
1	Ag 328.068†	-993.6	-869.4	0.2923	µg/L	0.2923	ppb	07:29:20
1	As 188.979†	10.4	5.1	-0.9446	µg/L	-0.9446	ppb	07:29:40
1	B 249.677†	1508.1	1322.1	29.798	µg/L	29.798	ppb	07:29:20
1	Ba 233.527†	14351.6	14099.0	377.46	µg/L	377.46	ppb	07:29:20
1	Be 313.107†	14586.6	10583.7	6.3217	µg/L	6.3217	ppb	07:29:20
1	Cd 226.502†	195.3	288.3	0.1656	µg/L	0.1656	ppb	07:29:40
1	Co 228.616†	288.0	348.7	13.687	µg/L	13.687	ppb	07:29:40
1	Cr 267.716†	1385.9	1481.1	33.114	µg/L	33.114	ppb	07:29:40
1	Cu 324.752†	4305.3	939.7	29.003	µg/L	29.003	ppb	07:29:20
1	Mn 257.610†	783361.4	765482.2	2567.3	µg/L	2567.3	ppb	07:29:14
1	Mo 202.031†	204.8	204.9	28.610	µg/L	28.610	ppb	07:29:40
1	Ni 231.604†	892.2	589.9	34.014	µg/L	34.014	ppb	07:29:40
1	P 214.914†	468.3	253.3	471.71	µg/L	471.71	ppb	07:29:40
1	Pb 220.353†	482.4	415.3	114.85	µg/L	114.85	ppb	07:29:40
1	S 181.975 Axial†	83.2	42.4	210.18	µg/L	210.18	ppb	07:29:40
1	Sb 206.836†	18.1	-1.2	4.9354	µg/L	4.9354	ppb	07:29:40
1	Se 196.026†	-25.3	-35.5	15.585	µg/L	15.585	ppb	07:29:40
1	SiO2†	90161.1	86001.0	17477	µg/L	17477	ppb	07:29:20
1	Si 251.611†	102790.2	100099.1	8054.1	µg/L	8054.1	ppb	07:29:20
1	Sn 189.927†	-23.9	-47.7	-8.8045	µg/L	-8.8045	ppb	07:29:40
1	Ti 334.940†	848109.8	827705.8	1943.2	µg/L	1943.2	ppb	07:29:14
1	Tl 190.801†	-34.2	-14.1	1.0195	µg/L	1.0195	ppb	07:29:40
1	U 409.014†	264.3	-567.2	-76.319	µg/L	-76.319	ppb	07:29:14
1	V 292.402†	5993.8	5931.8	79.930	µg/L	79.930	ppb	07:29:20
1	Zn 213.857†	13992.5	13150.8	360.34	µg/L	360.34	ppb	07:29:20
2	Sc RADIAL	113805.1	113805.1	102	%			07:28:15
2	Al 396.153Radial†	111183.6	108564.6	56538	µg/L	56538	ppb	07:28:15
2	Ca 317.933Radial†	23495.7	22569.4	8889.0	µg/L	8889.0	ppb	07:28:36
2	Fe 238.204 Radial†	20108.1	19657.0	101030	µg/L	101030	ppb	07:28:36
2	K 766.490 Radial†	9802.8	8746.4	4906.9	µg/L	4906.9	ppb	07:28:15
2	Mg 279.077 IEC†	1868.7	1812.0	9963.6	µg/L	9963.6	ppb	07:28:36
2	Na 589.592 Radial†	6253.8	6621.7	1846.1	µg/L	1846.1	ppb	07:28:15
2	Sr 421.552†	23934.8	23488.8	134.13	µg/L	134.13	ppb	07:28:15
2	Sc 361.383	1994556.9	1994556.9	102.56	%			07:29:48
2	Y 371.029	1258667.3	1258667.3	106.55	%			07:29:48
2	Ag 328.068†	-1016.7	-890.0	-0.0126	µg/L	-0.0126	ppb	07:29:53
2	As 188.979†	14.1	8.6	6.3339	µg/L	6.3339	ppb	07:30:14
2	B 249.677†	1537.0	1347.4	31.413	µg/L	31.413	ppb	07:29:53
2	Ba 233.527†	14325.4	14046.4	376.05	µg/L	376.05	ppb	07:29:53
2	Be 313.107†	14629.2	10597.8	6.3282	µg/L	6.3282	ppb	07:29:53
2	Cd 226.502†	207.8	300.1	0.5999	µg/L	0.5999	ppb	07:30:14
2	Co 228.616†	290.0	350.1	13.740	µg/L	13.740	ppb	07:30:14
2	Cr 267.716†	1375.4	1468.2	32.827	µg/L	32.827	ppb	07:30:14
2	Cu 324.752†	4315.2	941.3	28.724	µg/L	28.724	ppb	07:29:53
2	Mn 257.610†	788277.5	768797.0	2578.2	µg/L	2578.2	ppb	07:29:48
2	Mo 202.031†	201.1	200.9	28.082	µg/L	28.082	ppb	07:30:14
2	Ni 231.604†	892.0	588.0	33.907	µg/L	33.907	ppb	07:30:14
2	P 214.914†	462.3	246.6	458.00	µg/L	458.00	ppb	07:30:14
2	Pb 220.353†	472.8	405.0	112.11	µg/L	112.11	ppb	07:30:14

2	S 181.975 Axial†	72.2	31.6	152.41 µg/L	152.41 ppb	07:30:14
2	Sb 206.836†	24.6	5.1	11.635 µg/L	11.635 ppb	07:30:14
2	Se 196.026†	-29.7	-39.8	8.2898 µg/L	8.2898 ppb	07:30:14
2	SiO2†	89322.5	85013.2	17276 µg/L	17276 ppb	07:29:53
2	Si 251.611†	101749.5	98890.5	7955.8 µg/L	7955.8 ppb	07:29:53
2	Sn 189.927†	-29.3	-52.9	-11.698 µg/L	-11.698 ppb	07:30:14
2	Ti 334.940†	853122.7	830992.8	1950.9 µg/L	1950.9 ppb	07:29:48
2	Tl 190.801†	-44.8	-24.3	-15.214 µg/L	-15.214 ppb	07:30:14
2	U 409.014†	245.0	-586.6	-78.027 µg/L	-78.027 ppb	07:29:48
2	V 292.402†	5983.9	5910.9	79.560 µg/L	79.560 ppb	07:29:53
2	Zn 213.857†	13988.1	13120.1	359.63 µg/L	359.63 ppb	07:29:53
3	Sc RADIAL	113636.7	113636.7	102 %		07:28:41
3	Al 396.153Radial†	110322.3	107882.2	56182 µg/L	56182 ppb	07:28:41
3	Ca 317.933Radial†	23559.4	22665.8	8927.0 µg/L	8927.0 ppb	07:29:02
3	Fe 238.204 Radial†	20129.7	19707.3	101280 µg/L	101280 ppb	07:29:02
3	K 766.490 Radial†	9681.6	8641.9	4848.3 µg/L	4848.3 ppb	07:28:41
3	Mg 279.077 IEC†	1870.7	1816.6	9988.9 µg/L	9988.9 ppb	07:29:02
3	Na 589.592 Radial†	6143.0	6522.3	1818.4 µg/L	1818.4 ppb	07:28:41
3	Sr 421.552†	23715.0	23308.2	133.10 µg/L	133.10 ppb	07:28:41
3	Sc 361.383	1970038.4	1970038.4	101.30 %		07:30:21
3	Y 371.029	1243801.6	1243801.6	105.29 %		07:30:21
3	Ag 328.068†	-1053.1	-938.3	-0.4500 µg/L	-0.4500 ppb	07:30:27
3	As 188.979†	14.5	9.2	7.5146 µg/L	7.5146 ppb	07:30:47
3	B 249.677†	1478.8	1308.6	29.510 µg/L	29.510 ppb	07:30:27
3	Ba 233.527†	14194.8	14091.3	377.25 µg/L	377.25 ppb	07:30:27
3	Be 313.107†	14561.6	10708.5	6.4026 µg/L	6.4026 ppb	07:30:27
3	Cd 226.502†	209.2	303.9	0.6915 µg/L	0.6915 ppb	07:30:47
3	Co 228.616†	289.9	353.5	13.918 µg/L	13.918 ppb	07:30:47
3	Cr 267.716†	1376.2	1485.7	33.217 µg/L	33.217 ppb	07:30:47
3	Cu 324.752†	4372.4	1050.1	29.592 µg/L	29.592 ppb	07:30:27
3	Mn 257.610†	776107.7	766349.2	2570.1 µg/L	2570.1 ppb	07:30:21
3	Mo 202.031†	204.8	207.0	28.820 µg/L	28.820 ppb	07:30:47
3	Ni 231.604†	883.7	590.6	34.056 µg/L	34.056 ppb	07:30:47
3	P 214.914†	459.8	249.8	464.74 µg/L	464.74 ppb	07:30:47
3	Pb 220.353†	477.7	415.6	114.90 µg/L	114.90 ppb	07:30:47
3	S 181.975 Axial†	76.4	36.6	179.30 µg/L	179.30 ppb	07:30:47
3	Sb 206.836†	16.9	-2.2	3.9072 µg/L	3.9072 ppb	07:30:47
3	Se 196.026†	-36.2	-46.6	-1.7314 µg/L	-1.7314 ppb	07:30:47
3	SiO2†	87712.5	84507.8	17173 µg/L	17173 ppb	07:30:27
3	Si 251.611†	100010.5	98408.6	7916.7 µg/L	7916.7 ppb	07:30:27
3	Sn 189.927†	-26.2	-50.2	-10.235 µg/L	-10.235 ppb	07:30:47
3	Ti 334.940†	841831.0	830198.7	1949.0 µg/L	1949.0 ppb	07:30:21
3	Tl 190.801†	-42.7	-22.8	-12.899 µg/L	-12.899 ppb	07:30:47
3	U 409.014†	274.1	-554.9	-74.865 µg/L	-74.865 ppb	07:30:21
3	V 292.402†	5928.3	5928.6	79.805 µg/L	79.805 ppb	07:30:27
3	Zn 213.857†	13805.3	13109.4	359.29 µg/L	359.29 ppb	07:30:27

Mean Data: 241613001|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1985099.7	102.08	%	0.678				0.66%
Sc RADIAL	113434.0	102	%	0.5				0.44%
Y 371.029	1252802.4	106.06	%	0.670				0.63%
Ag 328.068†	-899.2	-0.0568	µg/L	0.37311	-0.0568	ppb	0.37311	657.30%
Al 396.153Radial†	108342.5	56422	µg/L	207.7	56422	ppb	207.7	0.37%
As 188.979†	7.6	4.3013	µg/L	4.58129	4.3013	ppb	4.58129	106.51%
B 249.677†	1326.0	30.240	µg/L	1.0255	30.240	ppb	1.0255	3.39%
Ba 233.527†	14078.9	376.92	µg/L	0.761	376.92	ppb	0.761	0.20%
Be 313.107†	10630.0	6.3508	µg/L	0.04492	6.3508	ppb	0.04492	0.71%
Ca 317.933Radial†	22703.2	8941.7	µg/L	61.40	8941.7	ppb	61.40	0.69%
Cd 226.502†	297.4	0.4857	µg/L	0.28092	0.4857	ppb	0.28092	57.84%
Co 228.616†	350.8	13.781	µg/L	0.1210	13.781	ppb	0.1210	0.88%
Cr 267.716†	1478.3	33.053	µg/L	0.2024	33.053	ppb	0.2024	0.61%
Cu 324.752†	977.0	29.106	µg/L	0.4430	29.106	ppb	0.4430	1.52%
Fe 238.204 Radial†	19761.6	101560	µg/L	718.8	101560	ppb	718.8	0.71%
K 766.490 Radial†	8714.2	4888.9	µg/L	35.23	4888.9	ppb	35.23	0.72%
Mg 279.077 IEC†	1817.4	9993.0	µg/L	31.70	9993.0	ppb	31.70	0.32%
Mn 257.610†	766876.1	2571.9	µg/L	5.66	2571.9	ppb	5.66	0.22%
Mo 202.031†	204.3	28.504	µg/L	0.3801	28.504	ppb	0.3801	1.33%
Na 589.592 Radial†	6598.3	1839.6	µg/L	18.80	1839.6	ppb	18.80	1.02%

Ni 231.604†	589.5	33.993	µg/L	0.0770	33.993	ppb	0.0770	0.23%
P 214.914†	249.9	464.82	µg/L	6.857	464.82	ppb	6.857	1.48%
Pb 220.353†	411.9	113.95	µg/L	1.597	113.95	ppb	1.597	1.40%
S 181.975 Axial†	36.9	180.63	µg/L	28.908	180.63	ppb	28.908	16.00%
Sb 206.836†	0.6	6.8257	µg/L	4.19618	6.8257	ppb	4.19618	61.48%
Se 196.026†	-40.6	7.3812	µg/L	8.69397	7.3812	ppb	8.69397	117.79%
SiO2†	85174.0	17309	µg/L	154.3	17309	ppb	154.3	0.89%
Si 251.611†	99132.7	7975.6	µg/L	70.78	7975.6	ppb	70.78	0.89%
Sn 189.927†	-50.3	-10.246	µg/L	1.4470	-10.246	ppb	1.4470	14.12%
Sr 421.552†	23426.0	133.77	µg/L	0.583	133.77	ppb	0.583	0.44%
Ti 334.940†	829632.4	1947.7	µg/L	4.03	1947.7	ppb	4.03	0.21%
Tl 190.801†	-20.4	-9.0313	µg/L	8.78088	-9.0313	ppb	8.78088	97.23%
U 409.014†	-569.6	-76.404	µg/L	1.5824	-76.404	ppb	1.5824	2.07%
V 292.402†	5923.8	79.765	µg/L	0.1881	79.765	ppb	0.1881	0.24%
Zn 213.857†	13126.8	359.75	µg/L	0.538	359.75	ppb	0.538	0.15%

Sequence No.: 27
Sample ID: 1201978608|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 319
Date Collected: 12/15/2009 07:30:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978608|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112773.1	112773.1	101	%			07:31:29
1	Al 396.153Radial†	109875.8	108269.0	56384	µg/L	56384	ppb	07:31:29
1	Ca 317.933Radial†	23452.9	22737.4	8955.2	µg/L	8955.2	ppb	07:31:50
1	Fe 238.204 Radial†	20470.8	20194.9	103790	µg/L	103790	ppb	07:31:50
1	K 766.490 Radial†	9337.6	8375.1	4698.6	µg/L	4698.6	ppb	07:31:29
1	Mg 279.077 IEC†	1834.9	1795.4	9866.8	µg/L	9866.8	ppb	07:31:50
1	Na 589.592 Radial†	5988.2	6415.6	1788.6	µg/L	1788.6	ppb	07:31:29
1	Sr 421.552†	23917.9	23686.3	135.26	µg/L	135.26	ppb	07:31:29
1	Sc 361.383	1976271.7	1976271.7	101.62	%			07:32:54
1	Y 371.029	1245248.7	1245248.7	105.42	%			07:32:54
1	Ag 328.068†	-1074.1	-955.7	-0.4311	µg/L	-0.4311	ppb	07:33:00
1	As 188.979†	11.1	5.8	0.1334	µg/L	0.1334	ppb	07:33:20
1	B 249.677†	1440.0	1265.8	26.716	µg/L	26.716	ppb	07:33:00
1	Ba 233.527†	14347.0	14196.8	380.07	µg/L	380.07	ppb	07:33:00
1	Be 313.107†	14204.8	10312.1	6.1643	µg/L	6.1643	ppb	07:33:00
1	Cd 226.502†	214.6	308.7	0.6379	µg/L	0.6379	ppb	07:33:20
1	Co 228.616†	300.2	362.7	14.531	µg/L	14.531	ppb	07:33:20
1	Cr 267.716†	1365.3	1470.6	32.878	µg/L	32.878	ppb	07:33:20
1	Cu 324.752†	4192.7	859.7	28.709	µg/L	28.709	ppb	07:33:00
1	Mn 257.610†	887441.0	873486.4	2927.9	µg/L	2927.9	ppb	07:32:54
1	Mo 202.031†	207.1	208.6	29.112	µg/L	29.112	ppb	07:33:20
1	Ni 231.604†	927.8	631.3	36.402	µg/L	36.402	ppb	07:33:20
1	P 214.914†	462.3	250.8	464.40	µg/L	464.40	ppb	07:33:20
1	Pb 220.353†	505.8	441.7	121.87	µg/L	121.87	ppb	07:33:20
1	S 181.975 Axial†	77.4	37.3	182.47	µg/L	182.47	ppb	07:33:20
1	Sb 206.836†	18.4	-0.8	5.1534	µg/L	5.1534	ppb	07:33:20
1	Se 196.026†	-31.9	-42.2	6.6251	µg/L	6.6251	ppb	07:33:20
1	SiO2†	84284.1	80861.1	16432	µg/L	16432	ppb	07:33:00
1	Si 251.611†	96104.4	94253.5	7581.9	µg/L	7581.9	ppb	07:33:00
1	Sn 189.927†	-22.3	-46.3	-7.9650	µg/L	-7.9650	ppb	07:33:20
1	Ti 334.940†	814719.9	800899.9	1880.2	µg/L	1880.2	ppb	07:32:54
1	Tl 190.801†	-33.5	-13.7	2.6736	µg/L	2.6736	ppb	07:33:20
1	U 409.014†	349.5	-481.5	-67.906	µg/L	-67.906	ppb	07:32:54
1	V 292.402†	5787.0	5771.0	78.124	µg/L	78.124	ppb	07:33:00
1	Zn 213.857†	13905.4	13164.9	360.59	µg/L	360.59	ppb	07:33:00
2	Sc RADIAL	113501.8	113501.8	102	%			07:31:55
2	Al 396.153Radial†	110638.5	108320.7	56411	µg/L	56411	ppb	07:31:55
2	Ca 317.933Radial†	23487.3	22622.5	8909.9	µg/L	8909.9	ppb	07:32:16
2	Fe 238.204 Radial†	20494.1	20088.0	103240	µg/L	103240	ppb	07:32:16
2	K 766.490 Radial†	9517.5	8492.3	4764.4	µg/L	4764.4	ppb	07:31:55
2	Mg 279.077 IEC†	1834.6	1783.4	9800.8	µg/L	9800.8	ppb	07:32:16
2	Na 589.592 Radial†	6005.1	6394.2	1782.7	µg/L	1782.7	ppb	07:31:55
2	Sr 421.552†	23998.3	23613.6	134.84	µg/L	134.84	ppb	07:31:55
2	Sc 361.383	1981402.8	1981402.8	101.89	%			07:33:28
2	Y 371.029	1249086.6	1249086.6	105.74	%			07:33:28
2	Ag 328.068†	-1020.0	-899.9	0.0643	µg/L	0.0643	ppb	07:33:33
2	As 188.979†	13.8	8.4	5.4393	µg/L	5.4393	ppb	07:33:54
2	B 249.677†	1468.1	1289.7	28.009	µg/L	28.009	ppb	07:33:33
2	Ba 233.527†	14408.7	14220.8	380.71	µg/L	380.71	ppb	07:33:33
2	Be 313.107†	14245.8	10316.1	6.1648	µg/L	6.1648	ppb	07:33:33
2	Cd 226.502†	208.7	302.2	0.4956	µg/L	0.4956	ppb	07:33:54
2	Co 228.616†	315.0	376.5	15.218	µg/L	15.218	ppb	07:33:54
2	Cr 267.716†	1370.9	1472.7	32.926	µg/L	32.926	ppb	07:33:54
2	Cu 324.752†	4238.5	893.9	28.846	µg/L	28.846	ppb	07:33:33
2	Mn 257.610†	892535.1	876224.7	2937.0	µg/L	2937.0	ppb	07:33:28
2	Mo 202.031†	204.4	205.4	28.712	µg/L	28.712	ppb	07:33:54
2	Ni 231.604†	908.9	610.4	35.195	µg/L	35.195	ppb	07:33:54
2	P 214.914†	450.7	238.2	436.62	µg/L	436.62	ppb	07:33:54
2	Pb 220.353†	491.8	426.7	117.88	µg/L	117.88	ppb	07:33:54

2	S 181.975 Axial†	76.6	36.3	177.55 µg/L	177.55 ppb	07:33:54
2	Sb 206.836†	23.1	3.8	9.9968 µg/L	9.9968 ppb	07:33:54
2	Se 196.026†	-32.3	-42.6	5.7058 µg/L	5.7058 ppb	07:33:54
2	SiO2†	84945.9	81295.9	16521 µg/L	16521 ppb	07:33:33
2	Si 251.611†	96740.6	94633.0	7612.5 µg/L	7612.5 ppb	07:33:33
2	Sn 189.927†	-23.6	-47.5	-8.6717 µg/L	-8.6717 ppb	07:33:54
2	Ti 334.940†	819346.2	803364.3	1886.0 µg/L	1886.0 ppb	07:33:28
2	Tl 190.801†	-29.5	-9.7	9.2286 µg/L	9.2286 ppb	07:33:54
2	U 409.014†	305.1	-526.0	-72.309 µg/L	-72.309 ppb	07:33:28
2	V 292.402†	5894.6	5861.9	79.165 µg/L	79.165 ppb	07:33:33
2	Zn 213.857†	13948.2	13171.4	360.84 µg/L	360.84 ppb	07:33:33
3	Sc RADIAL	114062.3	114062.3	102 %		07:32:21
3	Al 396.153Radial†	111288.5	108421.7	56463 µg/L	56463 ppb	07:32:21
3	Ca 317.933Radial†	23463.2	22485.9	8856.1 µg/L	8856.1 ppb	07:32:42
3	Fe 238.204 Radial†	20508.1	20002.9	102800 µg/L	102800 ppb	07:32:42
3	K 766.490 Radial†	9507.5	8436.6	4733.2 µg/L	4733.2 ppb	07:32:21
3	Mg 279.077 IEC†	1830.0	1770.1	9727.2 µg/L	9727.2 ppb	07:32:42
3	Na 589.592 Radial†	6113.1	6470.7	1804.0 µg/L	1804.0 ppb	07:32:21
3	Sr 421.552†	24280.1	23773.0	135.75 µg/L	135.75 ppb	07:32:21
3	Sc 361.383	1976345.3	1976345.3	101.63 %		07:34:01
3	Y 371.029	1245520.2	1245520.2	105.44 %		07:34:01
3	Ag 328.068†	-1068.4	-950.0	-0.4530 µg/L	-0.4530 ppb	07:34:07
3	As 188.979†	14.6	9.2	7.1949 µg/L	7.1949 ppb	07:34:27
3	B 249.677†	1467.2	1292.6	28.281 µg/L	28.281 ppb	07:34:07
3	Ba 233.527†	14486.0	14333.0	383.72 µg/L	383.72 ppb	07:34:07
3	Be 313.107†	14218.2	10324.8	6.1730 µg/L	6.1730 ppb	07:34:07
3	Cd 226.502†	225.0	318.8	1.0011 µg/L	1.0011 ppb	07:34:27
3	Co 228.616†	303.5	366.0	14.701 µg/L	14.701 ppb	07:34:27
3	Cr 267.716†	1380.1	1485.2	33.202 µg/L	33.202 ppb	07:34:27
3	Cu 324.752†	4318.8	983.6	29.421 µg/L	29.421 ppb	07:34:07
3	Mn 257.610†	885712.5	871753.1	2922.0 µg/L	2922.0 ppb	07:34:01
3	Mo 202.031†	211.1	212.6	29.555 µg/L	29.555 ppb	07:34:27
3	Ni 231.604†	943.4	646.6	37.285 µg/L	37.285 ppb	07:34:27
3	P 214.914†	454.9	243.5	448.87 µg/L	448.87 ppb	07:34:27
3	Pb 220.353†	507.6	443.4	122.36 µg/L	122.36 ppb	07:34:27
3	S 181.975 Axial†	76.8	36.7	179.48 µg/L	179.48 ppb	07:34:27
3	Sb 206.836†	19.6	0.3	6.3332 µg/L	6.3332 ppb	07:34:27
3	Se 196.026†	-24.1	-34.6	17.393 µg/L	17.393 ppb	07:34:27
3	SiO2†	85025.0	81587.0	16580 µg/L	16580 ppb	07:34:07
3	Si 251.611†	96854.2	94987.8	7641.6 µg/L	7641.6 ppb	07:34:07
3	Sn 189.927†	-27.6	-51.6	-10.840 µg/L	-10.840 ppb	07:34:27
3	Ti 334.940†	814428.1	800582.9	1879.5 µg/L	1879.5 ppb	07:34:01
3	Tl 190.801†	-37.5	-17.6	-3.5424 µg/L	-3.5424 ppb	07:34:27
3	U 409.014†	349.2	-481.9	-67.762 µg/L	-67.762 ppb	07:34:01
3	V 292.402†	5816.5	5799.9	78.395 µg/L	78.395 ppb	07:34:07
3	Zn 213.857†	13988.6	13246.2	362.99 µg/L	362.99 ppb	07:34:07

Mean Data: 1201978608|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1978006.6	101.71	%	0.151				0.15%
Sc RADIAL	113445.7	102	%	0.6				0.57%
Y 371.029	1246618.5	105.53	%	0.181				0.17%
Ag 328.068†	-935.2	-0.2733	µg/L	0.29257	-0.2733	ppb	0.29257	107.06%
Al 396.153Radial†	108337.1	56419	µg/L	40.4	56419	ppb	40.4	0.07%
As 188.979†	7.8	4.2559	µg/L	3.67649	4.2559	ppb	3.67649	86.39%
B 249.677†	1282.7	27.669	µg/L	0.8365	27.669	ppb	0.8365	3.02%
Ba 233.527†	14250.2	381.50	µg/L	1.946	381.50	ppb	1.946	0.51%
Be 313.107†	10317.7	6.1674	µg/L	0.00487	6.1674	ppb	0.00487	0.08%
Ca 317.933Radial†	22615.3	8907.1	µg/L	49.60	8907.1	ppb	49.60	0.56%
Cd 226.502†	309.9	0.7115	µg/L	0.26068	0.7115	ppb	0.26068	36.64%
Co 228.616†	368.4	14.816	µg/L	0.3578	14.816	ppb	0.3578	2.42%
Cr 267.716†	1476.2	33.002	µg/L	0.1748	33.002	ppb	0.1748	0.53%
Cu 324.752†	912.4	28.992	µg/L	0.3782	28.992	ppb	0.3782	1.30%
Fe 238.204 Radial†	20095.3	103280	µg/L	494.4	103280	ppb	494.4	0.48%
K 766.490 Radial†	8434.7	4732.1	µg/L	32.90	4732.1	ppb	32.90	0.70%
Mg 279.077 IEC†	1783.0	9798.3	µg/L	69.81	9798.3	ppb	69.81	0.71%
Mn 257.610†	873821.4	2929.0	µg/L	7.54	2929.0	ppb	7.54	0.26%
Mo 202.031†	208.9	29.126	µg/L	0.4216	29.126	ppb	0.4216	1.45%
Na 589.592 Radial†	6426.8	1791.8	µg/L	11.00	1791.8	ppb	11.00	0.61%

Ni 231.604†	629.4	36.294	µg/L	1.0494	36.294	ppb	1.0494	2.89%
P 214.914†	244.2	449.96	µg/L	13.923	449.96	ppb	13.923	3.09%
Pb 220.353†	437.3	120.70	µg/L	2.459	120.70	ppb	2.459	2.04%
S 181.975 Axial†	36.8	179.83	µg/L	2.477	179.83	ppb	2.477	1.38%
Sb 206.836†	1.1	7.1611	µg/L	2.52562	7.1611	ppb	2.52562	35.27%
Se 196.026†	-39.8	9.9079	µg/L	6.49839	9.9079	ppb	6.49839	65.59%
SiO2†	81248.0	16511	µg/L	74.2	16511	ppb	74.2	0.45%
Si 251.611†	94624.8	7612.0	µg/L	29.86	7612.0	ppb	29.86	0.39%
Sn 189.927†	-48.5	-9.1587	µg/L	1.49793	-9.1587	ppb	1.49793	16.36%
Sr 421.552†	23691.0	135.29	µg/L	0.456	135.29	ppb	0.456	0.34%
Ti 334.940†	801615.7	1881.9	µg/L	3.58	1881.9	ppb	3.58	0.19%
Tl 190.801†	-13.6	2.7866	µg/L	6.38624	2.7866	ppb	6.38624	229.18%
U 409.014†	-496.5	-69.326	µg/L	2.5848	-69.326	ppb	2.5848	3.73%
V 292.402†	5811.0	78.561	µg/L	0.5400	78.561	ppb	0.5400	0.69%
Zn 213.857†	13194.2	361.47	µg/L	1.320	361.47	ppb	1.320	0.37%

Sequence No.: 28
Sample ID: 1201978610|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 320
Date Collected: 12/15/2009 07:34:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978610|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112298.9	112298.9	101	%			07:35:09
1	Al 396.153Radial†	181560.1	179768.1	93601	µg/L	93601	ppb	07:35:09
1	Ca 317.933Radial†	39122.8	38364.5	15110	µg/L	15110	ppb	07:35:14
1	Fe 238.204 Radial†	22523.6	22314.6	114700	µg/L	114700	ppb	07:35:14
1	K 766.490 Radial†	22898.3	21853.0	12260	µg/L	12260	ppb	07:35:14
1	Mg 279.077 IEC†	3374.8	3329.1	18422	µg/L	18422	ppb	07:35:14
1	Na 589.592 Radial†	24187.6	24476.7	6824.0	µg/L	6824.0	ppb	07:35:09
1	Sr 421.552†	113653.4	112716.5	643.66	µg/L	643.66	ppb	07:35:09
1	Sc 361.383	1971458.1	1971458.1	101.38	%			07:35:50
1	Y 371.029	1257690.1	1257690.1	106.47	%			07:35:50
1	Ag 328.068†	53571.0	52944.7	517.03	µg/L	517.03	ppb	07:35:55
1	As 188.979†	267.7	259.0	504.67	µg/L	504.67	ppb	07:36:16
1	B 249.677†	12415.7	12095.8	531.12	µg/L	531.12	ppb	07:35:55
1	Ba 233.527†	33952.2	33570.2	899.61	µg/L	899.61	ppb	07:35:55
1	Be 313.107†	796323.0	781841.3	519.13	µg/L	519.13	ppb	07:35:50
1	Cd 226.502†	18267.3	18116.6	501.22	µg/L	501.22	ppb	07:35:55
1	Co 228.616†	10173.8	10103.0	507.90	µg/L	507.90	ppb	07:35:55
1	Cr 267.716†	24589.8	24383.0	543.78	µg/L	543.78	ppb	07:35:55
1	Cu 324.752†	77604.8	73284.7	571.47	µg/L	571.47	ppb	07:35:55
1	Mn 257.610†	894102.3	882189.4	2958.4	µg/L	2958.4	ppb	07:35:50
1	Mo 202.031†	4310.0	4256.4	515.32	µg/L	515.32	ppb	07:36:16
1	Ni 231.604†	9728.4	9314.5	537.08	µg/L	537.08	ppb	07:35:55
1	P 214.914†	711.7	497.9	968.68	µg/L	968.68	ppb	07:36:16
1	Pb 220.353†	2374.3	2286.1	618.63	µg/L	618.63	ppb	07:36:16
1	S 181.975 Axial†	1034.4	981.5	5228.8	µg/L	5228.8	ppb	07:36:16
1	Sb 206.836†	467.5	442.3	472.92	µg/L	472.92	ppb	07:36:16
1	Se 196.026†	305.1	290.1	509.65	µg/L	509.65	ppb	07:36:16
1	SiO2†	125351.3	121573.0	24706	µg/L	24706	ppb	07:35:55
1	Si 251.611†	143840.3	141572.0	11360	µg/L	11360	ppb	07:35:55
1	Sn 189.927†	955.9	918.6	498.58	µg/L	498.58	ppb	07:36:16
1	Ti 334.940†	1199018.2	1181935.9	2774.7	µg/L	2774.7	ppb	07:35:50
1	Tl 190.801†	280.4	295.9	503.02	µg/L	503.02	ppb	07:36:16
1	U 409.014†	5424.8	4525.6	437.05	µg/L	437.05	ppb	07:35:50
1	V 292.402†	49241.3	48649.1	600.05	µg/L	600.05	ppb	07:35:55
1	Zn 213.857†	33023.9	32057.1	889.80	µg/L	889.80	ppb	07:35:55
2	Sc RADIAL	112452.6	112452.6	101	%			07:35:20
2	Al 396.153Radial†	182107.2	180063.7	93754	µg/L	93754	ppb	07:35:20
2	Ca 317.933Radial†	38828.9	38020.6	14975	µg/L	14975	ppb	07:35:25
2	Fe 238.204 Radial†	22430.8	22192.3	114070	µg/L	114070	ppb	07:35:25
2	K 766.490 Radial†	22836.1	21760.4	12208	µg/L	12208	ppb	07:35:25
2	Mg 279.077 IEC†	3354.4	3304.4	18285	µg/L	18285	ppb	07:35:25
2	Na 589.592 Radial†	24181.6	24438.0	6813.2	µg/L	6813.2	ppb	07:35:20
2	Sr 421.552†	113817.9	112725.4	643.71	µg/L	643.71	ppb	07:35:20
2	Sc 361.383	1953949.2	1953949.2	100.48	%			07:36:24
2	Y 371.029	1247310.1	1247310.1	105.59	%			07:36:24
2	Ag 328.068†	53760.1	53606.4	523.32	µg/L	523.32	ppb	07:36:29
2	As 188.979†	262.7	256.4	499.67	µg/L	499.67	ppb	07:36:50
2	B 249.677†	12478.9	12268.5	539.41	µg/L	539.41	ppb	07:36:29
2	Ba 233.527†	34110.3	34027.7	911.87	µg/L	911.87	ppb	07:36:29
2	Be 313.107†	794760.5	787325.0	522.77	µg/L	522.77	ppb	07:36:24
2	Cd 226.502†	18364.2	18374.6	508.54	µg/L	508.54	ppb	07:36:29
2	Co 228.616†	10206.2	10225.1	514.06	µg/L	514.06	ppb	07:36:29
2	Cr 267.716†	24731.1	24741.0	551.76	µg/L	551.76	ppb	07:36:29
2	Cu 324.752†	77984.9	74349.0	579.28	µg/L	579.28	ppb	07:36:29
2	Mn 257.610†	892849.8	888845.8	2980.5	µg/L	2980.5	ppb	07:36:24
2	Mo 202.031†	4319.5	4303.9	521.00	µg/L	521.00	ppb	07:36:50
2	Ni 231.604†	9770.0	9441.9	544.43	µg/L	544.43	ppb	07:36:29
2	P 214.914†	709.9	502.4	978.83	µg/L	978.83	ppb	07:36:50
2	Pb 220.353†	2369.2	2301.9	622.88	µg/L	622.88	ppb	07:36:50

2	S 181.975 Axial†	1035.6	991.8	5283.7 µg/L	5283.7 ppb	07:36:50
2	Sb 206.836†	475.2	454.0	485.44 µg/L	485.44 ppb	07:36:50
2	Se 196.026†	304.8	292.5	512.75 µg/L	512.75 ppb	07:36:50
2	SiO2†	125705.6	123033.7	25003 µg/L	25003 ppb	07:36:29
2	Si 251.611†	144328.4	143329.1	11502 µg/L	11502 ppb	07:36:29
2	Sn 189.927†	966.8	937.9	508.49 µg/L	508.49 ppb	07:36:50
2	Ti 334.940†	1198375.5	1191894.5	2798.1 µg/L	2798.1 ppb	07:36:24
2	Tl 190.801†	288.0	305.9	519.35 µg/L	519.35 ppb	07:36:50
2	U 409.014†	5548.3	4696.5	454.46 µg/L	454.46 ppb	07:36:24
2	V 292.402†	49331.4	49173.9	606.39 µg/L	606.39 ppb	07:36:29
2	Zn 213.857†	33054.6	32379.6	898.94 µg/L	898.94 ppb	07:36:29
3	Sc RADIAL	111714.8	111714.8	100 %		07:35:31
3	Al 396.153Radial†	181567.1	180715.9	94094 µg/L	94094 ppb	07:35:31
3	Ca 317.933Radial†	39183.9	38628.0	15214 µg/L	15214 ppb	07:35:36
3	Fe 238.204 Radial†	22565.0	22472.5	115510 µg/L	115510 ppb	07:35:36
3	K 766.490 Radial†	22992.9	22065.8	12380 µg/L	12380 ppb	07:35:36
3	Mg 279.077 IEC†	3375.9	3347.7	18524 µg/L	18524 ppb	07:35:36
3	Na 589.592 Radial†	24157.9	24572.5	6850.7 µg/L	6850.7 ppb	07:35:31
3	Sr 421.552†	113365.5	113018.7	645.38 µg/L	645.38 ppb	07:35:31
3	Sc 361.383	1970965.8	1970965.8	101.35 %		07:36:57
3	Y 371.029	1257903.6	1257903.6	106.49 %		07:36:57
3	Ag 328.068†	53773.3	53157.4	519.13 µg/L	519.13 ppb	07:37:03
3	As 188.979†	272.4	263.7	514.04 µg/L	514.04 ppb	07:37:23
3	B 249.677†	12516.3	12198.2	535.66 µg/L	535.66 ppb	07:37:03
3	Ba 233.527†	34254.0	33876.4	907.81 µg/L	907.81 ppb	07:37:03
3	Be 313.107†	798528.0	784213.2	520.70 µg/L	520.70 ppb	07:36:57
3	Cd 226.502†	18313.8	18167.0	502.60 µg/L	502.60 ppb	07:37:03
3	Co 228.616†	10251.1	10181.7	511.86 µg/L	511.86 ppb	07:37:03
3	Cr 267.716†	24742.7	24539.9	547.28 µg/L	547.28 ppb	07:37:03
3	Cu 324.752†	78167.1	73858.7	575.93 µg/L	575.93 ppb	07:37:03
3	Mn 257.610†	896715.4	884988.0	2967.8 µg/L	2967.8 ppb	07:36:57
3	Mo 202.031†	4309.7	4257.1	515.44 µg/L	515.44 ppb	07:37:23
3	Ni 231.604†	9809.6	9397.1	541.84 µg/L	541.84 ppb	07:37:03
3	P 214.914†	720.5	506.7	987.35 µg/L	987.35 ppb	07:37:23
3	Pb 220.353†	2368.5	2280.9	617.25 µg/L	617.25 ppb	07:37:23
3	S 181.975 Axial†	1036.7	984.0	5241.9 µg/L	5241.9 ppb	07:37:23
3	Sb 206.836†	475.7	450.4	481.57 µg/L	481.57 ppb	07:37:23
3	Se 196.026†	307.3	292.3	513.48 µg/L	513.48 ppb	07:37:23
3	SiO2†	125857.3	122103.2	24813 µg/L	24813 ppb	07:37:03
3	Si 251.611†	144408.0	142167.5	11408 µg/L	11408 ppb	07:37:03
3	Sn 189.927†	958.7	921.5	500.25 µg/L	500.25 ppb	07:37:23
3	Ti 334.940†	1204836.8	1187972.3	2788.8 µg/L	2788.8 ppb	07:36:57
3	Tl 190.801†	283.2	298.7	507.67 µg/L	507.67 ppb	07:37:23
3	U 409.014†	5656.0	4755.1	460.13 µg/L	460.13 ppb	07:36:57
3	V 292.402†	49460.0	48877.0	602.90 µg/L	602.90 ppb	07:37:03
3	Zn 213.857†	33179.1	32218.4	894.24 µg/L	894.24 ppb	07:37:03

Mean Data: 1201978610|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1965457.7	101.07	%	0.513				0.51%
Sc RADIAL	112155.4	101	%	0.3				0.35%
Y 371.029	1254301.3	106.18	%	0.513				0.48%
Ag 328.068†	53236.2	519.83	µg/L	3.203	519.83	ppb	3.203	0.62%
Al 396.153Radial†	180182.6	93816	µg/L	252.6	93816	ppb	252.6	0.27%
As 188.979†	259.7	506.13	µg/L	7.294	506.13	ppb	7.294	1.44%
B 249.677†	12187.5	535.40	µg/L	4.154	535.40	ppb	4.154	0.78%
Ba 233.527†	33824.8	906.43	µg/L	6.244	906.43	ppb	6.244	0.69%
Be 313.107†	784459.8	520.87	µg/L	1.825	520.87	ppb	1.825	0.35%
Ca 317.933Radial†	38337.7	15099	µg/L	120.0	15099	ppb	120.0	0.79%
Cd 226.502†	18219.4	504.12	µg/L	3.890	504.12	ppb	3.890	0.77%
Co 228.616†	10169.9	511.27	µg/L	3.122	511.27	ppb	3.122	0.61%
Cr 267.716†	24554.6	547.60	µg/L	3.999	547.60	ppb	3.999	0.73%
Cu 324.752†	73830.8	575.56	µg/L	3.916	575.56	ppb	3.916	0.68%
Fe 238.204 Radial†	22326.5	114760	µg/L	722.1	114760	ppb	722.1	0.63%
K 766.490 Radial†	21893.1	12283	µg/L	87.9	12283	ppb	87.9	0.72%
Mg 279.077 IEC†	3327.1	18410	µg/L	120.1	18410	ppb	120.1	0.65%
Mn 257.610†	885341.1	2968.9	µg/L	11.11	2968.9	ppb	11.11	0.37%
Mo 202.031†	4272.4	517.25	µg/L	3.245	517.25	ppb	3.245	0.63%
Na 589.592 Radial†	24495.7	6829.3	µg/L	19.30	6829.3	ppb	19.30	0.28%

Ni 231.604†	9384.5	541.12	µg/L	3.726	541.12	ppb	3.726	0.69%
P 214.914†	502.3	978.28	µg/L	9.345	978.28	ppb	9.345	0.96%
Pb 220.353†	2289.7	619.58	µg/L	2.936	619.58	ppb	2.936	0.47%
S 181.975 Axial†	985.8	5251.4	µg/L	28.68	5251.4	ppb	28.68	0.55%
Sb 206.836†	448.9	479.97	µg/L	6.406	479.97	ppb	6.406	1.33%
Se 196.026†	291.7	511.96	µg/L	2.036	511.96	ppb	2.036	0.40%
SiO2†	122236.6	24841	µg/L	150.3	24841	ppb	150.3	0.60%
Si 251.611†	142356.2	11423	µg/L	71.9	11423	ppb	71.9	0.63%
Sn 189.927†	926.0	502.44	µg/L	5.306	502.44	ppb	5.306	1.06%
Sr 421.552†	112820.2	644.25	µg/L	0.982	644.25	ppb	0.982	0.15%
Ti 334.940†	1187267.6	2787.2	µg/L	11.78	2787.2	ppb	11.78	0.42%
Tl 190.801†	300.2	510.02	µg/L	8.411	510.02	ppb	8.411	1.65%
U 409.014†	4659.1	450.55	µg/L	12.027	450.55	ppb	12.027	2.67%
V 292.402†	48900.0	603.11	µg/L	3.177	603.11	ppb	3.177	0.53%
Zn 213.857†	32218.4	894.33	µg/L	4.568	894.33	ppb	4.568	0.51%

Sequence No.: 29
Sample ID: 1201978611|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 321
Date Collected: 12/15/2009 07:37:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978611|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113859.4	113859.4	102	%			07:38:05
1	Al 396.153Radial†	188766.2	184345.7	95985	µg/L	95985	ppb	07:38:05
1	Ca 317.933Radial†	38668.6	37389.2	14726	µg/L	14726	ppb	07:38:10
1	Fe 238.204 Radial†	25075.4	24502.9	125950	µg/L	125950	ppb	07:38:10
1	K 766.490 Radial†	23295.3	21930.0	12303	µg/L	12303	ppb	07:38:10
1	Mg 279.077 IEC†	3468.1	3374.5	18658	µg/L	18658	ppb	07:38:10
1	Na 589.592 Radial†	24330.2	24287.6	6771.3	µg/L	6771.3	ppb	07:38:05
1	Sr 421.552†	115640.4	113115.1	645.93	µg/L	645.93	ppb	07:38:05
1	Sc 361.383	1980334.6	1980334.6	101.83	%			07:38:46
1	Y 371.029	1265887.8	1265887.8	107.16	%			07:38:46
1	Ag 328.068†	53082.5	52228.0	511.09	µg/L	511.09	ppb	07:38:51
1	As 188.979†	272.0	262.0	509.66	µg/L	509.66	ppb	07:39:12
1	B 249.677†	12410.4	12035.8	524.77	µg/L	524.77	ppb	07:38:51
1	Ba 233.527†	35921.6	35354.0	947.35	µg/L	947.35	ppb	07:38:51
1	Be 313.107†	797443.6	779420.9	517.45	µg/L	517.45	ppb	07:38:46
1	Cd 226.502†	18172.0	17942.3	495.45	µg/L	495.45	ppb	07:38:51
1	Co 228.616†	10120.4	10005.6	502.54	µg/L	502.54	ppb	07:38:51
1	Cr 267.716†	24503.4	24189.4	539.47	µg/L	539.47	ppb	07:38:51
1	Cu 324.752†	77079.0	72425.3	567.47	µg/L	567.47	ppb	07:38:51
1	Mn 257.610†	986038.5	968517.2	3247.8	µg/L	3247.8	ppb	07:38:46
1	Mo 202.031†	4317.4	4244.6	514.34	µg/L	514.34	ppb	07:39:12
1	Ni 231.604†	9702.2	9245.8	533.12	µg/L	533.12	ppb	07:38:51
1	P 214.914†	795.4	576.9	1135.7	µg/L	1135.7	ppb	07:39:12
1	Pb 220.353†	2397.1	2298.0	621.87	µg/L	621.87	ppb	07:39:12
1	S 181.975 Axial†	1030.8	973.4	5183.4	µg/L	5183.4	ppb	07:39:12
1	Sb 206.836†	471.8	444.3	475.93	µg/L	475.93	ppb	07:39:12
1	Se 196.026†	288.7	272.6	491.13	µg/L	491.13	ppb	07:39:12
1	SiO2†	121722.2	117455.1	23869	µg/L	23869	ppb	07:38:51
1	Si 251.611†	139862.7	137029.9	10984	µg/L	10984	ppb	07:38:51
1	Sn 189.927†	956.0	914.5	497.74	µg/L	497.74	ppb	07:39:12
1	Ti 334.940†	1290208.2	1266182.8	2972.5	µg/L	2972.5	ppb	07:38:46
1	Tl 190.801†	269.2	283.6	486.03	µg/L	486.03	ppb	07:39:12
1	U 409.014†	5540.7	4615.5	444.04	µg/L	444.04	ppb	07:38:46
1	V 292.402†	49466.5	48652.5	601.01	µg/L	601.01	ppb	07:38:51
1	Zn 213.857†	33820.2	32693.1	906.60	µg/L	906.60	ppb	07:38:51
2	Sc RADIAL	113576.5	113576.5	102	%			07:38:16
2	Al 396.153Radial†	188477.9	184522.8	96077	µg/L	96077	ppb	07:38:16
2	Ca 317.933Radial†	38471.9	37290.5	14687	µg/L	14687	ppb	07:38:21
2	Fe 238.204 Radial†	24963.8	24454.6	125700	µg/L	125700	ppb	07:38:21
2	K 766.490 Radial†	23142.4	21836.9	12251	µg/L	12251	ppb	07:38:21
2	Mg 279.077 IEC†	3457.6	3372.6	18648	µg/L	18648	ppb	07:38:21
2	Na 589.592 Radial†	24268.8	24286.7	6771.0	µg/L	6771.0	ppb	07:38:16
2	Sr 421.552†	115386.9	113148.3	646.12	µg/L	646.12	ppb	07:38:16
2	Sc 361.383	1978403.8	1978403.8	101.73	%			07:39:19
2	Y 371.029	1264201.3	1264201.3	107.02	%			07:39:19
2	Ag 328.068†	53172.6	52367.5	512.41	µg/L	512.41	ppb	07:39:25
2	As 188.979†	257.1	247.6	480.89	µg/L	480.89	ppb	07:39:46
2	B 249.677†	12441.3	12078.0	526.82	µg/L	526.82	ppb	07:39:25
2	Ba 233.527†	35951.7	35418.1	949.06	µg/L	949.06	ppb	07:39:25
2	Be 313.107†	794239.3	777035.4	515.87	µg/L	515.87	ppb	07:39:19
2	Cd 226.502†	18255.5	18041.8	498.26	µg/L	498.26	ppb	07:39:25
2	Co 228.616†	10144.5	10039.0	504.24	µg/L	504.24	ppb	07:39:25
2	Cr 267.716†	24552.3	24260.9	541.07	µg/L	541.07	ppb	07:39:25
2	Cu 324.752†	77133.2	72552.4	568.37	µg/L	568.37	ppb	07:39:25
2	Mn 257.610†	982271.5	965759.4	3238.6	µg/L	3238.6	ppb	07:39:19
2	Mo 202.031†	4225.5	4158.3	503.98	µg/L	503.98	ppb	07:39:46
2	Ni 231.604†	9701.0	9253.9	533.59	µg/L	533.59	ppb	07:39:25
2	P 214.914†	779.9	562.5	1102.9	µg/L	1102.9	ppb	07:39:46
2	Pb 220.353†	2340.6	2244.7	607.61	µg/L	607.61	ppb	07:39:46

2	S 181.975 Axial†	1002.5	946.6	5040.1 µg/L	5040.1 ppb	07:39:46
2	Sb 206.836†	466.4	439.5	470.79 µg/L	470.79 ppb	07:39:46
2	Se 196.026†	284.9	269.2	485.84 µg/L	485.84 ppb	07:39:46
2	SiO2†	122051.3	117895.2	23958 µg/L	23958 ppb	07:39:25
2	Si 251.611†	140139.5	137436.1	11019 µg/L	11019 ppb	07:39:25
2	Sn 189.927†	920.8	880.8	480.15 µg/L	480.15 ppb	07:39:46
2	Ti 334.940†	1283134.5	1260466.1	2959.1 µg/L	2959.1 ppb	07:39:19
2	Tl 190.801†	272.4	287.1	491.40 µg/L	491.40 ppb	07:39:46
2	U 409.014†	5432.9	4514.8	433.89 µg/L	433.89 ppb	07:39:19
2	V 292.402†	49543.4	48775.5	602.39 µg/L	602.39 ppb	07:39:25
2	Zn 213.857†	33800.4	32706.1	906.99 µg/L	906.99 ppb	07:39:25
3	Sc RADIAL	113057.4	113057.4	102 %		07:38:27
3	Al 396.153Radial†	188685.7	185575.4	96625 µg/L	96625 ppb	07:38:27
3	Ca 317.933Radial†	38855.1	37840.8	14904 µg/L	14904 ppb	07:38:32
3	Fe 238.204 Radial†	25177.6	24777.4	127360 µg/L	127360 ppb	07:38:32
3	K 766.490 Radial†	23398.3	22192.9	12451 µg/L	12451 ppb	07:38:32
3	Mg 279.077 IEC†	3510.0	3439.7	19020 µg/L	19020 ppb	07:38:32
3	Na 589.592 Radial†	24307.2	24433.7	6812.0 µg/L	6812.0 ppb	07:38:27
3	Sr 421.552†	115582.3	113859.8	650.19 µg/L	650.19 ppb	07:38:27
3	Sc 361.383	1982125.9	1982125.9	101.93 %		07:39:54
3	Y 371.029	1267149.2	1267149.2	107.27 %		07:39:54
3	Ag 328.068†	53121.1	52218.9	511.13 µg/L	511.13 ppb	07:39:59
3	As 188.979†	269.9	259.7	504.90 µg/L	504.90 ppb	07:40:20
3	B 249.677†	12404.2	12018.7	523.52 µg/L	523.52 ppb	07:39:59
3	Ba 233.527†	35982.3	35381.7	948.09 µg/L	948.09 ppb	07:39:59
3	Be 313.107†	798046.9	779305.1	517.37 µg/L	517.37 ppb	07:39:54
3	Cd 226.502†	18194.1	17947.9	495.49 µg/L	495.49 ppb	07:39:59
3	Co 228.616†	10072.1	9949.2	499.68 µg/L	499.68 ppb	07:39:59
3	Cr 267.716†	24600.6	24263.1	541.11 µg/L	541.11 ppb	07:39:59
3	Cu 324.752†	77119.4	72396.5	567.56 µg/L	567.56 ppb	07:39:59
3	Mn 257.610†	987193.1	968774.9	3248.9 µg/L	3248.9 ppb	07:39:54
3	Mo 202.031†	4317.6	4240.8	513.95 µg/L	513.95 ppb	07:40:20
3	Ni 231.604†	9696.6	9231.8	532.31 µg/L	532.31 ppb	07:39:59
3	P 214.914†	792.6	573.5	1126.5 µg/L	1126.5 ppb	07:40:20
3	Pb 220.353†	2399.7	2298.3	622.01 µg/L	622.01 ppb	07:40:20
3	S 181.975 Axial†	1023.5	965.3	5140.1 µg/L	5140.1 ppb	07:40:20
3	Sb 206.836†	477.0	449.0	480.84 µg/L	480.84 ppb	07:40:20
3	Se 196.026†	301.5	285.0	510.56 µg/L	510.56 ppb	07:40:20
3	SiO2†	122519.9	118129.6	24006 µg/L	24006 ppb	07:39:59
3	Si 251.611†	140768.8	137794.8	11047 µg/L	11047 ppb	07:39:59
3	Sn 189.927†	956.0	913.6	497.57 µg/L	497.57 ppb	07:40:20
3	Ti 334.940†	1291243.3	1266053.3	2972.2 µg/L	2972.2 ppb	07:39:54
3	Tl 190.801†	279.2	293.3	501.49 µg/L	501.49 ppb	07:40:20
3	U 409.014†	5401.1	4473.6	429.42 µg/L	429.42 ppb	07:39:54
3	V 292.402†	49643.6	48782.4	602.67 µg/L	602.67 ppb	07:39:59
3	Zn 213.857†	33829.5	32672.2	905.86 µg/L	905.86 ppb	07:39:59

Mean Data: 1201978611|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1980288.1	101.83	%	0.096				0.09%
Sc RADIAL	113497.7	102	%	0.4				0.36%
Y 371.029	1265746.1	107.15	%	0.125				0.12%
Ag 328.068†	52271.5	511.54	µg/L	0.751	511.54	ppb	0.751	0.15%
Al 396.153Radial†	184814.6	96229	µg/L	346.1	96229	ppb	346.1	0.36%
As 188.979†	256.4	498.49	µg/L	15.422	498.49	ppb	15.422	3.09%
B 249.677†	12044.2	525.04	µg/L	1.668	525.04	ppb	1.668	0.32%
Ba 233.527†	35384.6	948.17	µg/L	0.861	948.17	ppb	0.861	0.09%
Be 313.107†	778587.1	516.89	µg/L	0.892	516.89	ppb	0.892	0.17%
Ca 317.933Radial†	37506.8	14772	µg/L	115.6	14772	ppb	115.6	0.78%
Cd 226.502†	17977.3	496.40	µg/L	1.612	496.40	ppb	1.612	0.32%
Co 228.616†	9997.9	502.15	µg/L	2.305	502.15	ppb	2.305	0.46%
Cr 267.716†	24237.8	540.55	µg/L	0.934	540.55	ppb	0.934	0.17%
Cu 324.752†	72458.1	567.80	µg/L	0.494	567.80	ppb	0.494	0.09%
Fe 238.204 Radial†	24578.3	126330	µg/L	894.7	126330	ppb	894.7	0.71%
K 766.490 Radial†	21986.6	12335	µg/L	103.6	12335	ppb	103.6	0.84%
Mg 279.077 IEC†	3395.6	18776	µg/L	211.9	18776	ppb	211.9	1.13%
Mn 257.610†	967683.8	3245.1	µg/L	5.65	3245.1	ppb	5.65	0.17%
Mo 202.031†	4214.6	510.76	µg/L	5.873	510.76	ppb	5.873	1.15%
Na 589.592 Radial†	24336.0	6784.8	µg/L	23.58	6784.8	ppb	23.58	0.35%

Ni 231.604†	9243.8	533.01 µg/L	0.646	533.01 ppb	0.646	0.12%
P 214.914†	570.9	1121.7 µg/L	16.94	1121.7 ppb	16.94	1.51%
Pb 220.353†	2280.3	617.16 µg/L	8.273	617.16 ppb	8.273	1.34%
S 181.975 Axial†	961.8	5121.2 µg/L	73.52	5121.2 ppb	73.52	1.44%
Sb 206.836†	444.3	475.85 µg/L	5.024	475.85 ppb	5.024	1.06%
Se 196.026†	275.6	495.85 µg/L	13.017	495.85 ppb	13.017	2.63%
SiO2†	117826.6	23944 µg/L	69.6	23944 ppb	69.6	0.29%
Si 251.611†	137420.3	11017 µg/L	31.1	11017 ppb	31.1	0.28%
Sn 189.927†	903.0	491.82 µg/L	10.107	491.82 ppb	10.107	2.06%
Sr 421.552†	113374.4	647.41 µg/L	2.402	647.41 ppb	2.402	0.37%
Ti 334.940†	1264234.0	2968.0 µg/L	7.66	2968.0 ppb	7.66	0.26%
Tl 190.801†	288.0	492.98 µg/L	7.851	492.98 ppb	7.851	1.59%
U 409.014†	4534.6	435.78 µg/L	7.492	435.78 ppb	7.492	1.72%
V 292.402†	48736.8	602.02 µg/L	0.885	602.02 ppb	0.885	0.15%
Zn 213.857†	32690.5	906.49 µg/L	0.577	906.49 ppb	0.577	0.06%

Sequence No.: 30
Sample ID: 1201978609|932724|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 322
Date Collected: 12/15/2009 07:40:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978609|932724|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111066.3	111066.3	99.8	%			07:41:01
1	Al 396.153Radial†	21798.3	21679.2	11290	µg/L	11290	ppb	07:41:01
1	Ca 317.933Radial†	4951.3	4553.9	1793.6	µg/L	1793.6	ppb	07:41:21
1	Fe 238.204 Radial†	4006.6	4007.7	20597	µg/L	20597	ppb	07:41:21
1	K 766.490 Radial†	2502.1	1667.3	935.40	µg/L	935.40	ppb	07:41:01
1	Mg 279.077 IEC†	382.0	367.4	2019.9	µg/L	2019.9	ppb	07:41:21
1	Na 589.592 Radial†	693.2	1200.7	334.75	µg/L	334.75	ppb	07:41:01
1	Sr 421.552†	4591.3	4683.2	26.743	µg/L	26.743	ppb	07:41:01
1	Sc 361.383	1981665.7	1981665.7	101.90	%			07:42:24
1	Y 371.029	1211045.9	1211045.9	102.52	%			07:42:24
1	Ag 328.068†	-261.9	-155.8	0.2366	µg/L	0.2366	ppb	07:42:30
1	As 188.979†	8.6	3.4	4.4729	µg/L	4.4729	ppb	07:42:50
1	B 249.677†	429.4	270.2	6.1927	µg/L	6.1927	ppb	07:42:30
1	Ba 233.527†	2715.5	2744.0	73.462	µg/L	73.462	ppb	07:42:30
1	Be 313.107†	5641.6	1870.7	1.1014	µg/L	1.1014	ppb	07:42:30
1	Cd 226.502†	-38.0	60.2	0.0850	µg/L	0.0850	ppb	07:42:50
1	Co 228.616†	-10.1	57.5	2.1198	µg/L	2.1198	ppb	07:42:50
1	Cr 267.716†	187.7	311.4	6.9594	µg/L	6.9594	ppb	07:42:30
1	Cu 324.752†	3376.8	47.7	4.7805	µg/L	4.7805	ppb	07:42:30
1	Mn 257.610†	156661.5	153968.9	516.40	µg/L	516.40	ppb	07:42:24
1	Mo 202.031†	35.2	39.4	5.5378	µg/L	5.5378	ppb	07:42:50
1	Ni 231.604†	396.5	107.4	6.1901	µg/L	6.1901	ppb	07:42:50
1	P 214.914†	255.4	46.5	84.782	µg/L	84.782	ppb	07:42:50
1	Pb 220.353†	146.2	87.5	24.153	µg/L	24.153	ppb	07:42:50
1	S 181.975 Axial†	39.2	-0.4	-5.5401	µg/L	-5.5401	ppb	07:42:50
1	Sb 206.836†	21.5	2.1	3.4942	µg/L	3.4942	ppb	07:42:50
1	Se 196.026†	-1.2	-12.0	-4.1750	µg/L	-4.1750	ppb	07:42:50
1	SiO2†	19295.4	16859.6	3426.2	µg/L	3426.2	ppb	07:42:30
1	Si 251.611†	20538.9	19840.9	1596.5	µg/L	1596.5	ppb	07:42:30
1	Sn 189.927†	8.9	-15.6	-4.9182	µg/L	-4.9182	ppb	07:42:50
1	Ti 334.940†	168647.2	164703.0	386.67	µg/L	386.67	ppb	07:42:24
1	Tl 190.801†	-21.1	-1.4	2.5413	µg/L	2.5413	ppb	07:42:50
1	U 409.014†	603.9	-232.9	-27.376	µg/L	-27.376	ppb	07:42:30
1	V 292.402†	1085.5	1141.8	15.438	µg/L	15.438	ppb	07:42:30
1	Zn 213.857†	3084.4	2508.6	68.625	µg/L	68.625	ppb	07:42:30
2	Sc RADIAL	110595.9	110595.9	99.4	%			07:41:27
2	Al 396.153Radial†	21852.8	21826.9	11367	µg/L	11367	ppb	07:41:27
2	Ca 317.933Radial†	4945.8	4569.5	1799.7	µg/L	1799.7	ppb	07:41:47
2	Fe 238.204 Radial†	4000.2	4018.4	20652	µg/L	20652	ppb	07:41:47
2	K 766.490 Radial†	2521.2	1697.1	952.14	µg/L	952.14	ppb	07:41:27
2	Mg 279.077 IEC†	383.5	370.5	2037.2	µg/L	2037.2	ppb	07:41:47
2	Na 589.592 Radial†	703.3	1213.8	338.40	µg/L	338.40	ppb	07:41:27
2	Sr 421.552†	4558.9	4670.2	26.669	µg/L	26.669	ppb	07:41:27
2	Sc 361.383	1874522.9	1874522.9	96.392	%			07:42:57
2	Y 371.029	1146198.5	1146198.5	97.032	%			07:42:57
2	Ag 328.068†	-294.3	-204.0	-0.2142	µg/L	-0.2142	ppb	07:43:03
2	As 188.979†	2.7	-2.3	-6.8289	µg/L	-6.8289	ppb	07:43:23
2	B 249.677†	427.3	292.1	7.2035	µg/L	7.2035	ppb	07:43:03
2	Ba 233.527†	2742.3	2924.2	78.284	µg/L	78.284	ppb	07:43:03
2	Be 313.107†	5619.8	2164.5	1.2852	µg/L	1.2852	ppb	07:43:03
2	Cd 226.502†	-25.3	71.2	0.3904	µg/L	0.3904	ppb	07:43:23
2	Co 228.616†	-0.6	66.7	2.5253	µg/L	2.5253	ppb	07:43:23
2	Cr 267.716†	161.8	295.0	6.5967	µg/L	6.5967	ppb	07:43:03
2	Cu 324.752†	3362.5	222.3	6.0951	µg/L	6.0951	ppb	07:43:03
2	Mn 257.610†	159399.0	165596.0	555.20	µg/L	555.20	ppb	07:42:57
2	Mo 202.031†	45.7	52.3	7.0850	µg/L	7.0850	ppb	07:43:23
2	Ni 231.604†	392.9	125.9	7.2578	µg/L	7.2578	ppb	07:43:23
2	P 214.914†	248.6	53.7	101.11	µg/L	101.11	ppb	07:43:23
2	Pb 220.353†	132.0	80.9	22.419	µg/L	22.419	ppb	07:43:23

2	S 181.975 Axial†	36.6	-0.9	-8.0895 µg/L	-8.0895 ppb	07:43:23
2	Sb 206.836†	17.8	-0.4	0.9021 µg/L	0.9021 ppb	07:43:23
2	Se 196.026†	-1.0	-11.9	-3.9781 µg/L	-3.9781 ppb	07:43:23
2	SiO2†	19526.4	18181.5	3694.8 µg/L	3694.8 ppb	07:43:03
2	Si 251.611†	20665.3	21124.0	1699.4 µg/L	1699.4 ppb	07:43:03
2	Sn 189.927†	14.5	-9.3	-1.6306 µg/L	-1.6306 ppb	07:43:23
2	Ti 334.940†	172357.3	178011.5	417.92 µg/L	417.92 ppb	07:42:57
2	Tl 190.801†	-23.2	-4.8	-2.5861 µg/L	-2.5861 ppb	07:43:23
2	U 409.014†	561.5	-243.0	-28.406 µg/L	-28.406 ppb	07:43:03
2	V 292.402†	1072.6	1189.3	16.024 µg/L	16.024 ppb	07:43:03
2	Zn 213.857†	3105.4	2703.4	74.117 µg/L	74.117 ppb	07:43:03
3	Sc RADIAL	111347.4	111347.4	100 %		07:41:53
3	Al 396.153Radial†	21917.7	21743.4	11323 µg/L	11323 ppb	07:41:53
3	Ca 317.933Radial†	4951.2	4541.3	1788.6 µg/L	1788.6 ppb	07:42:13
3	Fe 238.204 Radial†	3996.7	3987.7	20495 µg/L	20495 ppb	07:42:13
3	K 766.490 Radial†	2487.5	1646.3	923.61 µg/L	923.61 ppb	07:41:53
3	Mg 279.077 IEC†	378.8	363.1	1996.4 µg/L	1996.4 ppb	07:42:13
3	Na 589.592 Radial†	675.5	1181.3	329.34 µg/L	329.34 ppb	07:41:53
3	Sr 421.552†	4620.3	4700.6	26.843 µg/L	26.843 ppb	07:41:53
3	Sc 361.383	1977432.6	1977432.6	101.68 %		07:43:30
3	Y 371.029	1208283.7	1208283.7	102.29 %		07:43:30
3	Ag 328.068†	-218.8	-113.9	0.6286 µg/L	0.6286 ppb	07:43:36
3	As 188.979†	3.2	-2.0	-6.1876 µg/L	-6.1876 ppb	07:43:56
3	B 249.677†	397.9	240.2	4.8162 µg/L	4.8162 ppb	07:43:36
3	Ba 233.527†	2711.9	2746.2	73.521 µg/L	73.521 ppb	07:43:36
3	Be 313.107†	5723.1	1962.7	1.1647 µg/L	1.1647 ppb	07:43:36
3	Cd 226.502†	-33.7	64.3	0.2105 µg/L	0.2105 ppb	07:43:56
3	Co 228.616†	6.8	74.0	2.9712 µg/L	2.9712 ppb	07:43:56
3	Cr 267.716†	192.5	316.6	7.0746 µg/L	7.0746 ppb	07:43:36
3	Cu 324.752†	3383.2	61.2	4.8586 µg/L	4.8586 ppb	07:43:36
3	Mn 257.610†	154694.1	152363.2	511.02 µg/L	511.02 ppb	07:43:30
3	Mo 202.031†	35.3	39.6	5.5531 µg/L	5.5531 ppb	07:43:56
3	Ni 231.604†	425.0	136.3	7.8573 µg/L	7.8573 ppb	07:43:56
3	P 214.914†	252.6	44.3	80.042 µg/L	80.042 ppb	07:43:56
3	Pb 220.353†	145.5	87.1	24.056 µg/L	24.056 ppb	07:43:56
3	S 181.975 Axial†	31.7	-7.7	-44.532 µg/L	-44.532 ppb	07:43:56
3	Sb 206.836†	14.4	-4.7	-3.7995 µg/L	-3.7995 ppb	07:43:56
3	Se 196.026†	4.0	-6.9	3.4522 µg/L	3.4522 ppb	07:43:56
3	SiO2†	19363.9	16967.5	3448.1 µg/L	3448.1 ppb	07:43:36
3	Si 251.611†	20501.5	19847.3	1597.2 µg/L	1597.2 ppb	07:43:36
3	Sn 189.927†	10.9	-13.6	-3.8992 µg/L	-3.8992 ppb	07:43:56
3	Ti 334.940†	165784.2	162241.7	380.89 µg/L	380.89 ppb	07:43:30
3	Tl 190.801†	-19.8	-0.2	4.4152 µg/L	4.4152 ppb	07:43:56
3	U 409.014†	589.3	-245.9	-28.675 µg/L	-28.675 ppb	07:43:36
3	V 292.402†	1100.6	1158.9	15.634 µg/L	15.634 ppb	07:43:36
3	Zn 213.857†	3078.3	2509.1	68.641 µg/L	68.641 ppb	07:43:36

Mean Data: 1201978609|932724|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944540.4	99.993	%	3.1200				3.12%
Sc RADIAL	111003.2	99.7	%	0.34				0.34%
Y 371.029	1188509.4	100.61	%	3.104				3.09%
Ag 328.068†	-157.9	0.2170	µg/L	0.42175	0.2170	ppb	0.42175	194.38%
Al 396.153Radial†	21749.8	11327	µg/L	38.5	11327	ppb	38.5	0.34%
As 188.979†	-0.3	-2.8479	µg/L	6.34809	-2.8479	ppb	6.34809	222.91%
B 249.677†	267.5	6.0708	µg/L	1.19832	6.0708	ppb	1.19832	19.74%
Ba 233.527†	2804.8	75.089	µg/L	2.7669	75.089	ppb	2.7669	3.68%
Be 313.107†	1999.3	1.1838	µg/L	0.09341	1.1838	ppb	0.09341	7.89%
Ca 317.933Radial†	4554.9	1794.0	µg/L	5.56	1794.0	ppb	5.56	0.31%
Cd 226.502†	65.2	0.2286	µg/L	0.15348	0.2286	ppb	0.15348	67.13%
Co 228.616†	66.1	2.5388	µg/L	0.42589	2.5388	ppb	0.42589	16.78%
Cr 267.716†	307.7	6.8769	µg/L	0.24936	6.8769	ppb	0.24936	3.63%
Cu 324.752†	110.4	5.2448	µg/L	0.73744	5.2448	ppb	0.73744	14.06%
Fe 238.204 Radial†	4004.6	20581	µg/L	79.9	20581	ppb	79.9	0.39%
K 766.490 Radial†	1670.2	937.05	µg/L	14.337	937.05	ppb	14.337	1.53%
Mg 279.077 IEC†	367.0	2017.9	µg/L	20.46	2017.9	ppb	20.46	1.01%
Mn 257.610†	157309.4	527.54	µg/L	24.106	527.54	ppb	24.106	4.57%
Mo 202.031†	43.7	6.0586	µg/L	0.88892	6.0586	ppb	0.88892	14.67%
Na 589.592 Radial†	1198.6	334.16	µg/L	4.558	334.16	ppb	4.558	1.36%

Ni 231.604†	123.2	7.1017	µg/L	0.84451	7.1017	ppb	0.84451	11.89%
P 214.914†	48.2	88.645	µg/L	11.0533	88.645	ppb	11.0533	12.47%
Pb 220.353†	85.2	23.543	µg/L	0.9743	23.543	ppb	0.9743	4.14%
S 181.975 Axial†	-3.0	-19.387	µg/L	21.8131	-19.387	ppb	21.8131	112.51%
Sb 206.836†	-1.0	0.1989	µg/L	3.69736	0.1989	ppb	3.69736	>999.9%
Se 196.026†	-10.3	-1.5670	µg/L	4.34785	-1.5670	ppb	4.34785	277.47%
SiO2†	17336.2	3523.0	µg/L	149.17	3523.0	ppb	149.17	4.23%
Si 251.611†	20270.7	1631.0	µg/L	59.19	1631.0	ppb	59.19	3.63%
Sn 189.927†	-12.9	-3.4826	µg/L	1.68293	-3.4826	ppb	1.68293	48.32%
Sr 421.552†	4684.7	26.751	µg/L	0.0873	26.751	ppb	0.0873	0.33%
Ti 334.940†	168318.7	395.16	µg/L	19.922	395.16	ppb	19.922	5.04%
Tl 190.801†	-2.1	1.4568	µg/L	3.62445	1.4568	ppb	3.62445	248.80%
U 409.014†	-240.6	-28.152	µg/L	0.6857	-28.152	ppb	0.6857	2.44%
V 292.402†	1163.4	15.699	µg/L	0.2982	15.699	ppb	0.2982	1.90%
Zn 213.857†	2573.7	70.461	µg/L	3.1662	70.461	ppb	3.1662	4.49%

Sequence No.: 31
Sample ID: 241613002|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 323
Date Collected: 12/15/2009 07:44:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613002|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109682.7	109682.7	98.6	%			07:44:38
1	Al 396.153Radial†	36115.2	36481.6	18998	µg/L	18998	ppb	07:44:38
1	Ca 317.933Radial†	25764.1	25734.6	10136	µg/L	10136	ppb	07:44:38
1	Fe 238.204 Radial†	14112.5	14312.5	73558	µg/L	73558	ppb	07:44:58
1	K 766.490 Radial†	6428.7	5683.1	3188.4	µg/L	3188.4	ppb	07:44:38
1	Mg 279.077 IEC†	1016.8	1016.2	5563.0	µg/L	5563.0	ppb	07:44:58
1	Na 589.592 Radial†	5662.1	6251.2	1742.8	µg/L	1742.8	ppb	07:44:38
1	Sr 421.552†	14760.5	15059.7	85.997	µg/L	85.997	ppb	07:44:38
1	Sc 361.383	1969976.7	1969976.7	101.30	%			07:46:02
1	Y 371.029	1261909.9	1261909.9	106.83	%			07:46:02
1	Ag 328.068†	-831.5	-719.5	-0.5972	µg/L	-0.5972	ppb	07:46:08
1	As 188.979†	6.5	1.3	-3.4642	µg/L	-3.4642	ppb	07:46:29
1	B 249.677†	1010.7	846.5	16.564	µg/L	16.564	ppb	07:46:08
1	Ba 233.527†	16883.0	16745.4	448.26	µg/L	448.26	ppb	07:46:08
1	Be 313.107†	11659.8	7844.5	4.3727	µg/L	4.3727	ppb	07:46:08
1	Cd 226.502†	113.9	209.9	0.1936	µg/L	0.1936	ppb	07:46:08
1	Co 228.616†	250.3	314.4	11.215	µg/L	11.215	ppb	07:46:29
1	Cr 267.716†	790.3	907.4	20.338	µg/L	20.338	ppb	07:46:08
1	Cu 324.752†	5374.0	2039.0	31.015	µg/L	31.015	ppb	07:46:08
1	Mn 257.610†	606237.6	598684.3	2007.1	µg/L	2007.1	ppb	07:46:02
1	Mo 202.031†	139.2	142.3	19.968	µg/L	19.968	ppb	07:46:29
1	Ni 231.604†	636.2	346.3	19.971	µg/L	19.971	ppb	07:46:29
1	P 214.914†	710.6	497.3	1042.7	µg/L	1042.7	ppb	07:46:29
1	Pb 220.353†	218.7	159.9	43.569	µg/L	43.569	ppb	07:46:29
1	S 181.975 Axial†	58.4	18.8	89.039	µg/L	89.039	ppb	07:46:29
1	Sb 206.836†	22.4	3.2	10.876	µg/L	10.876	ppb	07:46:29
1	Se 196.026†	-26.3	-36.8	-4.4923	µg/L	-4.4923	ppb	07:46:29
1	SiO2†	68620.8	65663.9	13344	µg/L	13344	ppb	07:46:08
1	Si 251.611†	77750.5	76437.4	6121.8	µg/L	6121.8	ppb	07:46:08
1	Sn 189.927†	-20.7	-44.8	-11.331	µg/L	-11.331	ppb	07:46:29
1	Ti 334.940†	986820.8	973352.7	2285.1	µg/L	2285.1	ppb	07:46:02
1	Tl 190.801†	-35.3	-15.6	-1.8307	µg/L	-1.8307	ppb	07:46:29
1	U 409.014†	441.7	-389.4	-52.914	µg/L	-52.914	ppb	07:46:02
1	V 292.402†	5417.1	5424.2	71.436	µg/L	71.436	ppb	07:46:08
1	Zn 213.857†	11236.9	10574.4	290.78	µg/L	290.78	ppb	07:46:08
2	Sc RADIAL	110139.4	110139.4	99.0	%			07:45:04
2	Al 396.153Radial†	36425.9	36643.6	19083	µg/L	19083	ppb	07:45:04
2	Ca 317.933Radial†	25889.2	25752.6	10143	µg/L	10143	ppb	07:45:04
2	Fe 238.204 Radial†	14090.2	14230.6	73137	µg/L	73137	ppb	07:45:24
2	K 766.490 Radial†	6505.9	5734.1	3217.0	µg/L	3217.0	ppb	07:45:04
2	Mg 279.077 IEC†	1021.6	1016.8	5567.0	µg/L	5567.0	ppb	07:45:24
2	Na 589.592 Radial†	5739.2	6305.3	1757.9	µg/L	1757.9	ppb	07:45:04
2	Sr 421.552†	14958.6	15197.7	86.785	µg/L	86.785	ppb	07:45:04
2	Sc 361.383	1964658.1	1964658.1	101.03	%			07:46:36
2	Y 371.029	1258485.1	1258485.1	106.54	%			07:46:36
2	Ag 328.068†	-715.3	-606.8	0.4404	µg/L	0.4404	ppb	07:46:42
2	As 188.979†	8.9	3.7	1.2788	µg/L	1.2788	ppb	07:47:02
2	B 249.677†	998.4	837.0	16.251	µg/L	16.251	ppb	07:46:42
2	Ba 233.527†	16637.4	16547.4	442.97	µg/L	442.97	ppb	07:46:42
2	Be 313.107†	11554.6	7771.5	4.3316	µg/L	4.3316	ppb	07:46:42
2	Cd 226.502†	111.0	207.3	0.1536	µg/L	0.1536	ppb	07:46:42
2	Co 228.616†	247.1	312.0	11.132	µg/L	11.132	ppb	07:47:02
2	Cr 267.716†	827.1	945.9	21.195	µg/L	21.195	ppb	07:46:42
2	Cu 324.752†	5251.1	1931.7	30.124	µg/L	30.124	ppb	07:46:42
2	Mn 257.610†	599141.0	593280.0	1989.0	µg/L	1989.0	ppb	07:46:36
2	Mo 202.031†	133.7	137.2	19.343	µg/L	19.343	ppb	07:47:02
2	Ni 231.604†	635.1	346.9	20.005	µg/L	20.005	ppb	07:47:02
2	P 214.914†	699.6	488.3	1022.9	µg/L	1022.9	ppb	07:47:02
2	Pb 220.353†	219.7	161.5	44.012	µg/L	44.012	ppb	07:47:02

2	S 181.975 Axial†	58.1	18.7	88.175 µg/L	88.175 ppb	07:47:02
2	Sb 206.836†	10.4	-8.6	-1.7410 µg/L	-1.7410 ppb	07:47:02
2	Se 196.026†	-17.6	-28.3	7.9789 µg/L	7.9789 ppb	07:47:02
2	SiO2†	67382.7	64621.8	13132 µg/L	13132 ppb	07:46:42
2	Si 251.611†	76348.5	75257.5	6026.8 µg/L	6026.8 ppb	07:46:42
2	Sn 189.927†	-24.6	-48.7	-13.400 µg/L	-13.400 ppb	07:47:02
2	Ti 334.940†	975522.1	964806.0	2265.1 µg/L	2265.1 ppb	07:46:36
2	Tl 190.801†	-32.3	-12.6	2.6462 µg/L	2.6462 ppb	07:47:02
2	U 409.014†	459.5	-370.7	-50.935 µg/L	-50.935 ppb	07:46:36
2	V 292.402†	5376.1	5398.0	71.086 µg/L	71.086 ppb	07:46:42
2	Zn 213.857†	11087.1	10456.1	287.48 µg/L	287.48 ppb	07:46:42
3	Sc RADIAL	110343.5	110343.5	99.1 %		07:45:29
3	Al 396.153Radial†	36325.6	36474.4	18995 µg/L	18995 ppb	07:45:29
3	Ca 317.933Radial†	25844.9	25659.6	10106 µg/L	10106 ppb	07:45:29
3	Fe 238.204 Radial†	14130.9	14245.3	73213 µg/L	73213 ppb	07:45:50
3	K 766.490 Radial†	6448.8	5664.3	3177.8 µg/L	3177.8 ppb	07:45:29
3	Mg 279.077 IEC†	1018.4	1011.7	5538.4 µg/L	5538.4 ppb	07:45:50
3	Na 589.592 Radial†	5634.2	6188.8	1725.4 µg/L	1725.4 ppb	07:45:29
3	Sr 421.552†	14861.0	15071.3	86.063 µg/L	86.063 ppb	07:45:29
3	Sc 361.383	1955810.8	1955810.8	100.57 %		07:47:10
3	Y 371.029	1252700.2	1252700.2	106.05 %		07:47:10
3	Ag 328.068†	-797.6	-691.8	-0.3633 µg/L	-0.3633 ppb	07:47:15
3	As 188.979†	10.5	5.4	4.6612 µg/L	4.6612 ppb	07:47:36
3	B 249.677†	1016.2	859.2	17.268 µg/L	17.268 ppb	07:47:15
3	Ba 233.527†	16689.6	16673.8	446.35 µg/L	446.35 ppb	07:47:15
3	Be 313.107†	11645.3	7913.4	4.4220 µg/L	4.4220 ppb	07:47:15
3	Cd 226.502†	131.9	228.6	0.7519 µg/L	0.7519 ppb	07:47:15
3	Co 228.616†	239.4	305.4	10.776 µg/L	10.776 ppb	07:47:36
3	Cr 267.716†	780.8	903.6	20.252 µg/L	20.252 ppb	07:47:15
3	Cu 324.752†	5385.6	2089.0	31.314 µg/L	31.314 ppb	07:47:15
3	Mn 257.610†	599218.9	596040.1	1998.2 µg/L	1998.2 ppb	07:47:10
3	Mo 202.031†	128.6	132.7	18.800 µg/L	18.800 ppb	07:47:36
3	Ni 231.604†	643.1	357.7	20.626 µg/L	20.626 ppb	07:47:36
3	P 214.914†	701.7	493.5	1034.5 µg/L	1034.5 ppb	07:47:36
3	Pb 220.353†	235.7	178.3	48.493 µg/L	48.493 ppb	07:47:36
3	S 181.975 Axial†	56.7	17.6	82.277 µg/L	82.277 ppb	07:47:36
3	Sb 206.836†	17.0	-2.0	5.3082 µg/L	5.3082 ppb	07:47:36
3	Se 196.026†	-23.1	-33.8	-0.2889 µg/L	-0.2889 ppb	07:47:36
3	SiO2†	67736.0	65274.8	13265 µg/L	13265 ppb	07:47:15
3	Si 251.611†	76741.6	75990.2	6085.8 µg/L	6085.8 ppb	07:47:15
3	Sn 189.927†	-19.7	-43.9	-10.907 µg/L	-10.907 ppb	07:47:36
3	Ti 334.940†	975745.7	969396.3	2275.9 µg/L	2275.9 ppb	07:47:10
3	Tl 190.801†	-32.1	-12.6	2.9099 µg/L	2.9099 ppb	07:47:36
3	U 409.014†	511.9	-316.5	-45.467 µg/L	-45.467 ppb	07:47:10
3	V 292.402†	5342.6	5388.7	70.985 µg/L	70.985 ppb	07:47:15
3	Zn 213.857†	11110.0	10528.6	289.51 µg/L	289.51 ppb	07:47:15

Mean Data: 241613002|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1963481.9	100.97	%	0.368				0.36%
Sc RADIAL	110055.2	98.9	%	0.30				0.31%
Y 371.029	1257698.4	106.47	%	0.394				0.37%
Ag 328.068†	-672.7	-0.1734	µg/L	0.54428	-0.1734	ppb	0.54428	313.92%
Al 396.153Radial†	36533.2	19025	µg/L	49.8	19025	ppb	49.8	0.26%
As 188.979†	3.5	0.8253	µg/L	4.08167	0.8253	ppb	4.08167	494.59%
B 249.677†	847.6	16.694	µg/L	0.5209	16.694	ppb	0.5209	3.12%
Ba 233.527†	16655.5	445.86	µg/L	2.682	445.86	ppb	2.682	0.60%
Be 313.107†	7843.1	4.3754	µg/L	0.04528	4.3754	ppb	0.04528	1.03%
Ca 317.933Radial†	25715.6	10128	µg/L	19.4	10128	ppb	19.4	0.19%
Cd 226.502†	215.3	0.3664	µg/L	0.33444	0.3664	ppb	0.33444	91.28%
Co 228.616†	310.6	11.041	µg/L	0.2335	11.041	ppb	0.2335	2.12%
Cr 267.716†	919.0	20.595	µg/L	0.5212	20.595	ppb	0.5212	2.53%
Cu 324.752†	2019.9	30.817	µg/L	0.6190	30.817	ppb	0.6190	2.01%
Fe 238.204 Radial†	14262.8	73302	µg/L	224.4	73302	ppb	224.4	0.31%
K 766.490 Radial†	5693.8	3194.4	µg/L	20.25	3194.4	ppb	20.25	0.63%
Mg 279.077 IEC†	1014.9	5556.2	µg/L	15.49	5556.2	ppb	15.49	0.28%
Mn 257.610†	596001.5	1998.1	µg/L	9.04	1998.1	ppb	9.04	0.45%
Mo 202.031†	137.4	19.370	µg/L	0.5847	19.370	ppb	0.5847	3.02%
Na 589.592 Radial†	6248.4	1742.0	µg/L	16.27	1742.0	ppb	16.27	0.93%

Ni 231.604†	350.3	20.201 µg/L	0.3689	20.201 ppb	0.3689	1.83%
P 214.914†	493.1	1033.4 µg/L	9.96	1033.4 ppb	9.96	0.96%
Pb 220.353†	166.6	45.358 µg/L	2.7237	45.358 ppb	2.7237	6.00%
S 181.975 Axial†	18.4	86.497 µg/L	3.6800	86.497 ppb	3.6800	4.25%
Sb 206.836†	-2.5	4.8144 µg/L	6.32299	4.8144 ppb	6.32299	131.34%
Se 196.026†	-32.9	1.0659 µg/L	6.34500	1.0659 ppb	6.34500	595.28%
SiO2†	65186.9	13247 µg/L	107.0	13247 ppb	107.0	0.81%
Si 251.611†	75895.0	6078.1 µg/L	47.95	6078.1 ppb	47.95	0.79%
Sn 189.927†	-45.8	-11.879 µg/L	1.3338	-11.879 ppb	1.3338	11.23%
Sr 421.552†	15109.6	86.282 µg/L	0.4373	86.282 ppb	0.4373	0.51%
Ti 334.940†	969185.0	2275.4 µg/L	10.04	2275.4 ppb	10.04	0.44%
Tl 190.801†	-13.6	1.2418 µg/L	2.66412	1.2418 ppb	2.66412	214.54%
U 409.014†	-358.9	-49.772 µg/L	3.8572	-49.772 ppb	3.8572	7.75%
V 292.402†	5403.6	71.169 µg/L	0.2369	71.169 ppb	0.2369	0.33%
Zn 213.857†	10519.7	289.26 µg/L	1.664	289.26 ppb	1.664	0.58%

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 07:47:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110944.1	110944.1	99.7	%			07:48:23
1	Al 396.153Radial†	10117.7	9986.0	5181.6	µg/L	5181.6	ppb	07:48:23
1	Ca 317.933Radial†	13209.1	12843.0	5058.3	µg/L	5058.3	ppb	07:48:44
1	Fe 238.204 Radial†	1029.4	1025.7	5287.9	µg/L	5287.9	ppb	07:48:44
1	K 766.490 Radial†	10000.6	9192.0	5156.9	µg/L	5156.9	ppb	07:48:23
1	Mg 279.077 IEC†	967.3	954.9	5333.6	µg/L	5333.6	ppb	07:48:44
1	Na 589.592 Radial†	36085.3	36704.4	10233	µg/L	10233	ppb	07:48:23
1	Sr 421.552†	88000.9	88359.1	504.57	µg/L	504.57	ppb	07:48:23
1	Sc 361.383	1971441.9	1971441.9	101.38	%			07:49:47
1	Y 371.029	1191366.8	1191366.8	100.86	%			07:49:47
1	Ag 328.068†	53946.5	53315.4	511.35	µg/L	511.35	ppb	07:49:53
1	As 188.979†	257.1	248.5	495.16	µg/L	495.16	ppb	07:50:13
1	B 249.677†	10939.4	10639.7	497.24	µg/L	497.24	ppb	07:49:53
1	Ba 233.527†	18968.5	18790.2	503.91	µg/L	503.91	ppb	07:49:53
1	Be 313.107†	769185.6	755078.8	502.17	µg/L	502.17	ppb	07:49:47
1	Cd 226.502†	17952.5	17806.2	500.97	µg/L	500.97	ppb	07:49:53
1	Co 228.616†	9925.6	9858.3	500.20	µg/L	500.20	ppb	07:49:53
1	Cr 267.716†	22675.1	22494.5	501.57	µg/L	501.57	ppb	07:49:53
1	Cu 324.752†	72414.8	68165.8	509.77	µg/L	509.77	ppb	07:49:53
1	Mn 257.610†	152782.8	150940.1	504.36	µg/L	504.36	ppb	07:49:47
1	Mo 202.031†	4203.2	4151.0	498.37	µg/L	498.37	ppb	07:50:13
1	Ni 231.604†	9084.6	8679.6	500.47	µg/L	500.47	ppb	07:49:53
1	P 214.914†	1312.2	1090.2	2409.3	µg/L	2409.3	ppb	07:50:13
1	Pb 220.353†	1937.3	1855.0	496.96	µg/L	496.96	ppb	07:50:13
1	S 181.975 Axial†	206.3	164.6	878.65	µg/L	878.65	ppb	07:50:13
1	Sb 206.836†	493.3	467.7	492.43	µg/L	492.43	ppb	07:50:13
1	Se 196.026†	351.0	335.5	504.93	µg/L	504.93	ppb	07:50:13
1	SiO2†	28742.9	26277.0	5339.9	µg/L	5339.9	ppb	07:49:53
1	Si 251.611†	31582.0	30838.6	2455.8	µg/L	2455.8	ppb	07:49:53
1	Sn 189.927†	981.0	943.3	493.76	µg/L	493.76	ppb	07:50:13
1	Ti 334.940†	218372.0	214611.1	503.68	µg/L	503.68	ppb	07:49:47
1	Tl 190.801†	297.3	312.6	503.72	µg/L	503.72	ppb	07:50:13
1	U 409.014†	5847.0	4942.2	499.40	µg/L	499.40	ppb	07:49:53
1	V 292.402†	42249.0	41752.1	507.97	µg/L	507.97	ppb	07:49:53
1	Zn 213.857†	18685.5	17913.6	502.29	µg/L	502.29	ppb	07:49:53
2	Sc RADIAL	111145.3	111145.3	99.9	%			07:48:49
2	Al 396.153Radial†	10143.8	9993.8	5185.7	µg/L	5185.7	ppb	07:48:49
2	Ca 317.933Radial†	13231.5	12841.5	5057.6	µg/L	5057.6	ppb	07:49:10
2	Fe 238.204 Radial†	1029.5	1023.9	5279.0	µg/L	5279.0	ppb	07:49:10
2	K 766.490 Radial†	9896.0	9069.1	5088.0	µg/L	5088.0	ppb	07:48:49
2	Mg 279.077 IEC†	970.8	956.6	5343.1	µg/L	5343.1	ppb	07:49:10
2	Na 589.592 Radial†	36104.3	36657.9	10220	µg/L	10220	ppb	07:48:49
2	Sr 421.552†	87863.1	88061.5	502.87	µg/L	502.87	ppb	07:48:49
2	Sc 361.383	1966192.9	1966192.9	101.11	%			07:50:20
2	Y 371.029	1188452.5	1188452.5	100.61	%			07:50:20
2	Ag 328.068†	54167.9	53676.5	514.82	µg/L	514.82	ppb	07:50:26
2	As 188.979†	256.5	248.6	495.25	µg/L	495.25	ppb	07:50:47
2	B 249.677†	10962.9	10691.7	499.69	µg/L	499.69	ppb	07:50:26
2	Ba 233.527†	19026.7	18897.7	506.79	µg/L	506.79	ppb	07:50:26
2	Be 313.107†	767551.5	755488.1	502.44	µg/L	502.44	ppb	07:50:20
2	Cd 226.502†	17950.5	17851.6	502.25	µg/L	502.25	ppb	07:50:26
2	Co 228.616†	9961.6	9920.0	503.33	µg/L	503.33	ppb	07:50:26
2	Cr 267.716†	22782.9	22660.9	505.28	µg/L	505.28	ppb	07:50:26
2	Cu 324.752†	72704.0	68642.5	513.33	µg/L	513.33	ppb	07:50:26
2	Mn 257.610†	152700.4	151260.9	505.43	µg/L	505.43	ppb	07:50:20
2	Mo 202.031†	4180.0	4139.1	496.95	µg/L	496.95	ppb	07:50:47
2	Ni 231.604†	9128.9	8747.3	504.38	µg/L	504.38	ppb	07:50:26
2	P 214.914†	1304.9	1086.5	2400.5	µg/L	2400.5	ppb	07:50:47
2	Pb 220.353†	1937.6	1860.4	498.39	µg/L	498.39	ppb	07:50:47

2	S 181.975 Axial†	213.4	172.2	919.35 µg/L	919.35 ppb	07:50:47
2	Sb 206.836†	495.8	471.4	496.41 µg/L	496.41 ppb	07:50:47
2	Se 196.026†	343.4	328.8	494.95 µg/L	494.95 ppb	07:50:47
2	SiO2†	28932.4	26540.1	5393.4 µg/L	5393.4 ppb	07:50:26
2	Si 251.611†	31756.3	31094.2	2476.4 µg/L	2476.4 ppb	07:50:26
2	Sn 189.927†	986.0	950.8	497.67 µg/L	497.67 ppb	07:50:47
2	Ti 334.940†	217885.2	214704.7	503.90 µg/L	503.90 ppb	07:50:20
2	Tl 190.801†	292.2	308.3	496.94 µg/L	496.94 ppb	07:50:47
2	U 409.014†	5882.5	4992.7	504.52 µg/L	504.52 ppb	07:50:26
2	V 292.402†	42474.6	42086.4	512.00 µg/L	512.00 ppb	07:50:26
2	Zn 213.857†	18691.4	17968.7	503.82 µg/L	503.82 ppb	07:50:26
3	Sc RADIAL	111061.2	111061.2	99.8 %		07:49:15
3	Al 396.153Radial†	10230.9	10088.8	5235.1 µg/L	5235.1 ppb	07:49:15
3	Ca 317.933Radial†	13216.1	12836.1	5055.5 µg/L	5055.5 ppb	07:49:35
3	Fe 238.204 Radial†	1025.6	1020.8	5262.9 µg/L	5262.9 ppb	07:49:35
3	K 766.490 Radial†	9971.3	9152.1	5134.5 µg/L	5134.5 ppb	07:49:15
3	Mg 279.077 IEC†	972.3	958.9	5355.7 µg/L	5355.7 ppb	07:49:35
3	Na 589.592 Radial†	36314.5	36895.9	10286 µg/L	10286 ppb	07:49:15
3	Sr 421.552†	88696.0	88962.6	508.01 µg/L	508.01 ppb	07:49:15
3	Sc 361.383	1967293.2	1967293.2	101.16 %		07:50:54
3	Y 371.029	1189103.4	1189103.4	100.66 %		07:50:54
3	Ag 328.068†	53916.7	53398.3	512.14 µg/L	512.14 ppb	07:50:59
3	As 188.979†	252.6	244.6	487.24 µg/L	487.24 ppb	07:51:20
3	B 249.677†	10906.0	10629.4	496.77 µg/L	496.77 ppb	07:50:59
3	Ba 233.527†	18939.6	18801.0	504.20 µg/L	504.20 ppb	07:50:59
3	Be 313.107†	766820.2	754340.6	501.68 µg/L	501.68 ppb	07:50:54
3	Cd 226.502†	17918.7	17810.2	501.08 µg/L	501.08 ppb	07:50:59
3	Co 228.616†	9945.6	9898.7	502.25 µg/L	502.25 ppb	07:50:59
3	Cr 267.716†	22689.3	22555.7	502.94 µg/L	502.94 ppb	07:50:59
3	Cu 324.752†	72254.5	68158.0	509.71 µg/L	509.71 ppb	07:50:59
3	Mn 257.610†	152417.1	150896.4	504.21 µg/L	504.21 ppb	07:50:54
3	Mo 202.031†	4192.2	4148.8	498.11 µg/L	498.11 ppb	07:51:20
3	Ni 231.604†	9088.6	8702.4	501.79 µg/L	501.79 ppb	07:50:59
3	P 214.914†	1311.1	1091.9	2413.2 µg/L	2413.2 ppb	07:51:20
3	Pb 220.353†	1933.7	1855.5	497.08 µg/L	497.08 ppb	07:51:20
3	S 181.975 Axial†	211.0	169.8	906.27 µg/L	906.27 ppb	07:51:20
3	Sb 206.836†	494.0	469.4	494.29 µg/L	494.29 ppb	07:51:20
3	Se 196.026†	346.9	332.1	499.94 µg/L	499.94 ppb	07:51:20
3	SiO2†	28723.0	26317.1	5348.1 µg/L	5348.1 ppb	07:50:59
3	Si 251.611†	31463.8	30787.5	2451.6 µg/L	2451.6 ppb	07:50:59
3	Sn 189.927†	980.1	944.5	494.37 µg/L	494.37 ppb	07:51:20
3	Ti 334.940†	217709.8	214410.8	503.21 µg/L	503.21 ppb	07:50:54
3	Tl 190.801†	298.2	314.1	506.20 µg/L	506.20 ppb	07:51:20
3	U 409.014†	5827.0	4934.5	498.64 µg/L	498.64 ppb	07:50:59
3	V 292.402†	42170.4	41762.3	508.09 µg/L	508.09 ppb	07:50:59
3	Zn 213.857†	18690.7	17957.6	503.53 µg/L	503.53 ppb	07:50:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1968309.3	101.22	%	0.142				0.14%
Sc RADIAL	111050.2	99.8	%	0.09				0.09%
Y 371.029	1189640.9	100.71	%	0.129				0.13%
Ag 328.068†	53463.4	512.77	µg/L	1.816	512.77	ppb	1.816	0.35%
QC value within limits for Ag 328.068 Recovery = 102.55%								
Al 396.153Radial†	10022.8	5200.8	µg/L	29.79	5200.8	ppb	29.79	0.57%
QC value within limits for Al 396.153Radial Recovery = 104.02%								
As 188.979†	247.2	492.55	µg/L	4.596	492.55	ppb	4.596	0.93%
QC value within limits for As 188.979 Recovery = 98.51%								
B 249.677†	10653.6	497.90	µg/L	1.565	497.90	ppb	1.565	0.31%
QC value within limits for B 249.677 Recovery = 99.58%								
Ba 233.527†	18829.6	504.96	µg/L	1.588	504.96	ppb	1.588	0.31%
QC value within limits for Ba 233.527 Recovery = 100.99%								
Be 313.107†	754969.1	502.09	µg/L	0.387	502.09	ppb	0.387	0.08%
QC value within limits for Be 313.107 Recovery = 100.42%								
Ca 317.933Radial†	12840.2	5057.2	µg/L	1.43	5057.2	ppb	1.43	0.03%
QC value within limits for Ca 317.933Radial Recovery = 101.14%								
Cd 226.502†	17822.7	501.43	µg/L	0.710	501.43	ppb	0.710	0.14%
QC value within limits for Cd 226.502 Recovery = 100.29%								
Co 228.616†	9892.3	501.93	µg/L	1.588	501.93	ppb	1.588	0.32%

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   QC value within limits for Co 228.616  Recovery = 100.39%
Cr 267.716†            22570.3      503.26 µg/L        1.877      503.26 ppb        1.877   0.37%
   QC value within limits for Cr 267.716  Recovery = 100.65%
Cu 324.752†            68322.1      510.94 µg/L        2.071      510.94 ppb        2.071   0.41%
   QC value within limits for Cu 324.752  Recovery = 102.19%
Fe 238.204 Radial†      1023.5      5276.6 µg/L       12.71      5276.6 ppb       12.71   0.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.53%
K 766.490 Radial†       9137.7      5126.5 µg/L       35.17      5126.5 ppb       35.17   0.69%
   QC value within limits for K 766.490 Radial  Recovery = 102.53%
Mg 279.077 IEC†          956.8      5344.2 µg/L       11.08      5344.2 ppb       11.08   0.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.88%
Mn 257.610†           151032.5      504.67 µg/L        0.665      504.67 ppb        0.665   0.13%
   QC value within limits for Mn 257.610  Recovery = 100.93%
Mo 202.031†             4146.3      497.81 µg/L        0.760      497.81 ppb        0.760   0.15%
   QC value within limits for Mo 202.031  Recovery = 99.56%
Na 589.592 Radial†     36752.8       10246 µg/L         35.2       10246 ppb         35.2   0.34%
   QC value within limits for Na 589.592 Radial  Recovery = 102.46%
Ni 231.604†             8709.8      502.21 µg/L        1.988      502.21 ppb        1.988   0.40%
   QC value within limits for Ni 231.604  Recovery = 100.44%
P 214.914†              1089.5      2407.7 µg/L        6.48      2407.7 ppb         6.48   0.27%
   QC value within limits for P 214.914  Recovery = 96.31%
Pb 220.353†             1857.0      497.48 µg/L        0.794      497.48 ppb        0.794   0.16%
   QC value within limits for Pb 220.353  Recovery = 99.50%
S 181.975 Axial†         168.9      901.42 µg/L       20.777      901.42 ppb       20.777   2.30%
   QC value within limits for S 181.975 Axial  Recovery = 90.14%
Sb 206.836†              469.5      494.37 µg/L        1.989      494.37 ppb        1.989   0.40%
   QC value within limits for Sb 206.836  Recovery = 98.87%
Se 196.026†              332.1      499.94 µg/L        4.992      499.94 ppb        4.992   1.00%
   QC value within limits for Se 196.026  Recovery = 99.99%
SiO2†                  26378.1      5360.5 µg/L       28.81      5360.5 ppb       28.81   0.54%
   QC value within limits for SiO2  Recovery = 100.24%
Si 251.611†            30906.8      2461.3 µg/L       13.27      2461.3 ppb       13.27   0.54%
   QC value within limits for Si 251.611  Recovery = 98.45%
Sn 189.927†              946.2      495.26 µg/L        2.104      495.26 ppb        2.104   0.42%
   QC value within limits for Sn 189.927  Recovery = 99.05%
Sr 421.552†            88461.1      505.15 µg/L        2.622      505.15 ppb        2.622   0.52%
   QC value within limits for Sr 421.552  Recovery = 101.03%
Ti 334.940†           214575.5      503.60 µg/L        0.352      503.60 ppb        0.352   0.07%
   QC value within limits for Ti 334.940  Recovery = 100.72%
Tl 190.801†              311.7      502.29 µg/L        4.792      502.29 ppb        4.792   0.95%
   QC value within limits for Tl 190.801  Recovery = 100.46%
U 409.014†              4956.5      500.85 µg/L        3.198      500.85 ppb        3.198   0.64%
   QC value within limits for U 409.014  Recovery = 100.17%
V 292.402†             41866.9      509.35 µg/L        2.292      509.35 ppb        2.292   0.45%
   QC value within limits for V 292.402  Recovery = 101.87%
Zn 213.857†            17946.7      503.21 µg/L        0.813      503.21 ppb        0.813   0.16%
   QC value within limits for Zn 213.857  Recovery = 100.64%
All analyte(s) passed QC.
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Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 07:51:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109514.6	109514.6	98.4	%			07:52:02
1	Al 396.153Radial†	174.4	13.8	7.2187	µg/L	7.2187	ppb	07:52:02
1	Ca 317.933Radial†	407.2	6.4	2.5150	µg/L	2.5150	ppb	07:52:23
1	Fe 238.204 Radial†	12.0	5.2	26.964	µg/L	26.964	ppb	07:52:23
1	K 766.490 Radial†	734.2	-93.8	-52.624	µg/L	-52.624	ppb	07:52:02
1	Mg 279.077 IEC†	25.3	10.3	57.386	µg/L	57.386	ppb	07:52:23
1	Na 589.592 Radial†	-667.8	-172.6	-48.116	µg/L	-48.116	ppb	07:52:02
1	Sr 421.552†	-69.5	12.0	0.0685	µg/L	0.0685	ppb	07:52:02
1	Sc 361.383	1972943.3	1972943.3	101.45	%			07:53:25
1	Y 371.029	1198027.3	1198027.3	101.42	%			07:53:25
1	Ag 328.068†	-55.7	46.3	0.4428	µg/L	0.4428	ppb	07:53:30
1	As 188.979†	2.6	-2.5	-5.0040	µg/L	-5.0040	ppb	07:53:51
1	B 249.677†	150.8	-2.6	-0.1289	µg/L	-0.1289	ppb	07:53:30
1	Ba 233.527†	-82.1	-1.7	-0.0457	µg/L	-0.0457	ppb	07:53:51
1	Be 313.107†	3603.7	-113.5	-0.0755	µg/L	-0.0755	ppb	07:53:30
1	Cd 226.502†	-90.9	7.8	0.2052	µg/L	0.2052	ppb	07:53:51
1	Co 228.616†	-62.0	6.2	0.3154	µg/L	0.3154	ppb	07:53:51
1	Cr 267.716†	-95.9	32.7	0.7274	µg/L	0.7274	ppb	07:53:30
1	Cu 324.752†	3202.7	-109.2	-0.8092	µg/L	-0.8092	ppb	07:53:30
1	Mn 257.610†	-181.6	52.2	0.1775	µg/L	0.1775	ppb	07:53:51
1	Mo 202.031†	-6.4	-1.5	-0.1784	µg/L	-0.1784	ppb	07:53:51
1	Ni 231.604†	285.3	-0.5	-0.0282	µg/L	-0.0282	ppb	07:53:51
1	P 214.914†	202.0	-5.0	-11.351	µg/L	-11.351	ppb	07:53:51
1	Pb 220.353†	58.9	2.0	0.5528	µg/L	0.5528	ppb	07:53:51
1	S 181.975 Axial†	25.6	-13.6	-72.693	µg/L	-72.693	ppb	07:53:51
1	Sb 206.836†	20.5	1.3	1.3404	µg/L	1.3404	ppb	07:53:51
1	Se 196.026†	16.0	4.9	7.3907	µg/L	7.3907	ppb	07:53:51
1	SiO2†	2043.2	-61.8	-12.552	µg/L	-12.552	ppb	07:53:30
1	Si 251.611†	389.9	69.7	5.7861	µg/L	5.7861	ppb	07:53:51
1	Sn 189.927†	19.3	-5.3	-2.7370	µg/L	-2.7370	ppb	07:53:51
1	Ti 334.940†	808.0	-0.2	-0.0006	µg/L	-0.0006	ppb	07:53:30
1	Tl 190.801†	-18.1	1.4	2.3207	µg/L	2.3207	ppb	07:53:51
1	U 409.014†	657.3	-177.6	-17.985	µg/L	-17.985	ppb	07:53:30
1	V 292.402†	-84.4	-6.7	-0.1084	µg/L	-0.1084	ppb	07:53:30
1	Zn 213.857†	517.8	-7.9	-0.2256	µg/L	-0.2256	ppb	07:53:51
2	Sc RADIAL	111570.1	111570.1	100	%			07:52:28
2	Al 396.153Radial†	213.2	49.3	25.662	µg/L	25.662	ppb	07:52:28
2	Ca 317.933Radial†	401.4	-7.0	-2.7628	µg/L	-2.7628	ppb	07:52:49
2	Fe 238.204 Radial†	8.6	1.6	8.3604	µg/L	8.3604	ppb	07:52:49
2	K 766.490 Radial†	701.2	-140.4	-78.787	µg/L	-78.787	ppb	07:52:28
2	Mg 279.077 IEC†	11.1	-4.4	-24.289	µg/L	-24.289	ppb	07:52:49
2	Na 589.592 Radial†	-657.0	-149.3	-41.620	µg/L	-41.620	ppb	07:52:28
2	Sr 421.552†	-52.4	30.3	0.1732	µg/L	0.1732	ppb	07:52:28
2	Sc 361.383	1987299.0	1987299.0	102.19	%			07:53:57
2	Y 371.029	1207383.5	1207383.5	102.21	%			07:53:57
2	Ag 328.068†	-48.6	53.8	0.5105	µg/L	0.5105	ppb	07:54:02
2	As 188.979†	0.7	-4.4	-8.7670	µg/L	-8.7670	ppb	07:54:23
2	B 249.677†	135.8	-18.3	-0.8593	µg/L	-0.8593	ppb	07:54:02
2	Ba 233.527†	-65.2	15.3	0.4099	µg/L	0.4099	ppb	07:54:23
2	Be 313.107†	3641.2	-102.5	-0.0682	µg/L	-0.0682	ppb	07:54:02
2	Cd 226.502†	-95.4	4.1	0.0986	µg/L	0.0986	ppb	07:54:23
2	Co 228.616†	-69.2	-0.3	-0.0158	µg/L	-0.0158	ppb	07:54:23
2	Cr 267.716†	-111.2	18.4	0.4084	µg/L	0.4084	ppb	07:54:02
2	Cu 324.752†	3198.4	-136.2	-1.0142	µg/L	-1.0142	ppb	07:54:02
2	Mn 257.610†	-185.6	49.6	0.1665	µg/L	0.1665	ppb	07:54:23
2	Mo 202.031†	-4.2	0.8	0.0944	µg/L	0.0944	ppb	07:54:23
2	Ni 231.604†	282.0	-5.8	-0.3340	µg/L	-0.3340	ppb	07:54:23
2	P 214.914†	197.7	-10.7	-24.072	µg/L	-24.072	ppb	07:54:23
2	Pb 220.353†	45.0	-12.0	-3.1789	µg/L	-3.1789	ppb	07:54:23

2	S 181.975 Axial†	24.7	-14.7	-78.592 µg/L	-78.592 ppb	07:54:23
2	Sb 206.836†	16.1	-3.1	-3.3224 µg/L	-3.3224 ppb	07:54:23
2	Se 196.026†	13.9	2.8	4.1732 µg/L	4.1732 ppb	07:54:23
2	SiO2†	2025.6	-93.6	-19.017 µg/L	-19.017 ppb	07:54:02
2	Si 251.611†	391.9	68.8	5.6792 µg/L	5.6792 ppb	07:54:23
2	Sn 189.927†	21.7	-3.1	-1.6188 µg/L	-1.6188 ppb	07:54:23
2	Ti 334.940†	775.8	-37.5	-0.0879 µg/L	-0.0879 ppb	07:54:02
2	Tl 190.801†	-21.2	-1.5	-2.3294 µg/L	-2.3294 ppb	07:54:23
2	U 409.014†	620.2	-218.6	-22.126 µg/L	-22.126 ppb	07:54:02
2	V 292.402†	-100.7	-22.0	-0.2995 µg/L	-0.2995 ppb	07:54:02
2	Zn 213.857†	505.6	-23.4	-0.6592 µg/L	-0.6592 ppb	07:54:23
3	Sc RADIAL	111467.4	111467.4	100 %		07:52:54
3	Al 396.153Radial†	181.5	17.8	9.2932 µg/L	9.2932 ppb	07:52:54
3	Ca 317.933Radial†	407.0	-1.0	-0.3968 µg/L	-0.3968 ppb	07:53:14
3	Fe 238.204 Radial†	9.8	2.9	14.735 µg/L	14.735 ppb	07:53:14
3	K 766.490 Radial†	764.6	-76.5	-42.934 µg/L	-42.934 ppb	07:52:54
3	Mg 279.077 IEC†	12.0	-3.4	-19.094 µg/L	-19.094 ppb	07:53:14
3	Na 589.592 Radial†	-683.2	-176.1	-49.085 µg/L	-49.085 ppb	07:52:54
3	Sr 421.552†	-86.0	-3.2	-0.0183 µg/L	-0.0183 ppb	07:52:54
3	Sc 361.383	1994397.1	1994397.1	102.56 %		07:54:29
3	Y 371.029	1211362.0	1211362.0	102.55 %		07:54:29
3	Ag 328.068†	-42.8	59.5	0.5680 µg/L	0.5680 ppb	07:54:35
3	As 188.979†	1.2	-4.0	-7.9677 µg/L	-7.9677 ppb	07:54:55
3	B 249.677†	144.6	-10.2	-0.4835 µg/L	-0.4835 ppb	07:54:35
3	Ba 233.527†	-74.8	6.3	0.1685 µg/L	0.1685 ppb	07:54:55
3	Be 313.107†	3664.0	-93.0	-0.0619 µg/L	-0.0619 ppb	07:54:35
3	Cd 226.502†	-106.6	-6.5	-0.1936 µg/L	-0.1936 ppb	07:54:55
3	Co 228.616†	-67.1	1.9	0.0967 µg/L	0.0967 ppb	07:54:55
3	Cr 267.716†	-145.2	-14.3	-0.3189 µg/L	-0.3189 ppb	07:54:35
3	Cu 324.752†	3187.8	-157.7	-1.1735 µg/L	-1.1735 ppb	07:54:35
3	Mn 257.610†	-166.6	68.7	0.2312 µg/L	0.2312 ppb	07:54:55
3	Mo 202.031†	-5.7	-0.7	-0.0798 µg/L	-0.0798 ppb	07:54:55
3	Ni 231.604†	276.3	-12.3	-0.7076 µg/L	-0.7076 ppb	07:54:55
3	P 214.914†	201.7	-7.4	-16.757 µg/L	-16.757 ppb	07:54:55
3	Pb 220.353†	59.7	2.2	0.5957 µg/L	0.5957 ppb	07:54:55
3	S 181.975 Axial†	25.0	-14.5	-77.625 µg/L	-77.625 ppb	07:54:55
3	Sb 206.836†	18.9	-0.5	-0.5129 µg/L	-0.5129 ppb	07:54:55
3	Se 196.026†	9.2	-1.9	-2.7977 µg/L	-2.7977 ppb	07:54:55
3	SiO2†	2123.8	-4.8	-0.9793 µg/L	-0.9793 ppb	07:54:35
3	Si 251.611†	428.5	103.1	8.5205 µg/L	8.5205 ppb	07:54:55
3	Sn 189.927†	18.1	-6.7	-3.4949 µg/L	-3.4949 ppb	07:54:55
3	Ti 334.940†	852.5	34.6	0.0813 µg/L	0.0813 ppb	07:54:35
3	Tl 190.801†	-18.0	1.7	2.7975 µg/L	2.7975 ppb	07:54:55
3	U 409.014†	702.1	-140.9	-14.261 µg/L	-14.261 ppb	07:54:35
3	V 292.402†	-74.8	3.6	0.0209 µg/L	0.0209 ppb	07:54:35
3	Zn 213.857†	510.0	-20.9	-0.5858 µg/L	-0.5858 ppb	07:54:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984879.8	102.07	%	0.562				0.55%
Sc RADIAL	110850.7	99.6	%	1.04				1.04%
Y 371.029	1205591.0	102.06	%	0.580				0.57%
Ag 328.068†	53.2	0.5071	µg/L	0.06267	0.5071	ppb	0.06267	12.36%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.0	14.058	µg/L	10.1029	14.058	ppb	10.1029	71.87%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.2462	µg/L	1.98251	-7.2462	ppb	1.98251	27.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-10.3	-0.4906	µg/L	0.36526	-0.4906	ppb	0.36526	74.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.1776	µg/L	0.22790	0.1776	ppb	0.22790	128.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-103.0	-0.0685	µg/L	0.00682	-0.0685	ppb	0.00682	9.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.5	-0.2149	µg/L	2.64359	-0.2149	ppb	2.64359	>999.9%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.8	0.0367	µg/L	0.20650	0.0367	ppb	0.20650	562.56%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.6	0.1321	µg/L	0.16841	0.1321	ppb	0.16841	127.50%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                12.3      0.2723 µg/L       0.53626      0.2723 ppb        0.53626 196.96%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -134.4     -0.9990 µg/L       0.18263     -0.9990 ppb        0.18263  18.28%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          3.2      16.686 µg/L        9.4540      16.686 ppb         9.4540  56.66%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -103.6     -58.115 µg/L       18.5465     -58.115 ppb        18.5465  31.91%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.8      4.6675 µg/L      45.72898      4.6675 ppb       45.72898 979.73%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                56.8      0.1917 µg/L       0.03464      0.1917 ppb        0.03464  18.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.5     -0.0546 µg/L       0.13814     -0.0546 ppb        0.13814 252.83%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -166.0     -46.274 µg/L        4.0590     -46.274 ppb         4.0590   8.77%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.2     -0.3566 µg/L       0.34027     -0.3566 ppb        0.34027  95.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.7     -17.393 µg/L        6.3847     -17.393 ppb         6.3847  36.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.6     -0.6768 µg/L       2.16703     -0.6768 ppb        2.16703 320.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -14.3     -76.303 µg/L        3.1639     -76.303 ppb         3.1639   4.15%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.8     -0.8317 µg/L       2.34769     -0.8317 ppb        2.34769 282.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.9      2.9221 µg/L       5.20816      2.9221 ppb        5.20816 178.24%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -53.4     -10.849 µg/L        9.1385     -10.849 ppb         9.1385  84.23%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                80.5      6.6619 µg/L       1.61049      6.6619 ppb        1.61049  24.17%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -5.0     -2.6169 µg/L       0.94381     -2.6169 ppb        0.94381  36.07%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                13.0      0.0745 µg/L       0.09589      0.0745 ppb        0.09589 128.79%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -1.0     -0.0024 µg/L       0.08461     -0.0024 ppb        0.08461 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.6      0.9296 µg/L       2.83246      0.9296 ppb        2.83246 304.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -179.0     -18.124 µg/L        3.9347     -18.124 ppb         3.9347  21.71%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -8.3     -0.1290 µg/L       0.16120     -0.1290 ppb        0.16120 124.99%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -17.4     -0.4902 µg/L       0.23209     -0.4902 ppb        0.23209  47.35%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: 241613003|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 324
Date Collected: 12/15/2009 07:55:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613003|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114396.0	114396.0	103	%			07:55:43
1	Al 396.153Radial†	172674.6	167825.3	87400	µg/L	87400	ppb	07:55:43
1	Ca 317.933Radial†	52172.8	50349.5	19830	µg/L	19830	ppb	07:55:49
1	Fe 238.204 Radial†	25655.3	24952.1	128240	µg/L	128240	ppb	07:55:49
1	K 766.490 Radial†	21113.4	19700.6	11053	µg/L	11053	ppb	07:55:49
1	Mg 279.077 IEC†	3765.4	3647.8	20168	µg/L	20168	ppb	07:55:49
1	Na 589.592 Radial†	5476.5	5834.0	1626.5	µg/L	1626.5	ppb	07:55:49
1	Sr 421.552†	47842.0	46626.3	266.26	µg/L	266.26	ppb	07:55:43
1	Sc 361.383	2010734.9	2010734.9	103.40	%			07:56:23
1	Y 371.029	1253280.1	1253280.1	106.10	%			07:56:23
1	Ag 328.068†	-1339.4	-1194.2	0.3283	µg/L	0.3283	ppb	07:56:28
1	As 188.979†	20.5	14.7	18.896	µg/L	18.896	ppb	07:56:49
1	B 249.677†	1808.2	1597.6	34.585	µg/L	34.585	ppb	07:56:28
1	Ba 233.527†	52911.0	51252.0	1372.0	µg/L	1372.0	ppb	07:56:28
1	Be 313.107†	18980.4	14691.3	8.2388	µg/L	8.2388	ppb	07:56:28
1	Cd 226.502†	302.1	389.6	1.0521	µg/L	1.0521	ppb	07:56:49
1	Co 228.616†	1063.1	1095.5	46.914	µg/L	46.914	ppb	07:56:49
1	Cr 267.716†	4249.8	4237.4	94.802	µg/L	94.802	ppb	07:56:28
1	Cu 324.752†	9672.2	6088.5	72.977	µg/L	72.977	ppb	07:56:28
1	Mn 257.610†	924313.0	894179.9	3000.1	µg/L	3000.1	ppb	07:56:23
1	Mo 202.031†	7.1	11.8	6.4502	µg/L	6.4502	ppb	07:56:49
1	Ni 231.604†	1490.8	1160.1	66.892	µg/L	66.892	ppb	07:56:49
1	P 214.914†	658.8	433.0	853.64	µg/L	853.64	ppb	07:56:49
1	Pb 220.353†	462.5	391.3	110.68	µg/L	110.68	ppb	07:56:49
1	S 181.975 Axial†	146.5	102.9	528.23	µg/L	528.23	ppb	07:56:49
1	Sb 206.836†	19.2	-0.4	12.797	µg/L	12.797	ppb	07:56:49
1	Se 196.026†	-32.4	-42.1	21.086	µg/L	21.086	ppb	07:56:49
1	SiO2†	88745.1	83754.0	17020	µg/L	17020	ppb	07:56:28
1	Si 251.611†	101177.5	97539.1	7766.2	µg/L	7766.2	ppb	07:56:28
1	Sn 189.927†	-90.9	-112.3	-34.925	µg/L	-34.925	ppb	07:56:49
1	Ti 334.940†	1826712.6	1765907.1	4145.7	µg/L	4145.7	ppb	07:56:23
1	Tl 190.801†	-42.0	-21.3	5.9524	µg/L	5.9524	ppb	07:56:49
1	U 409.014†	351.8	-485.2	-72.587	µg/L	-72.587	ppb	07:56:28
1	V 292.402†	19664.7	19095.3	240.56	µg/L	240.56	ppb	07:56:28
1	Zn 213.857†	10248.0	9393.1	250.88	µg/L	250.88	ppb	07:56:28
2	Sc RADIAL	116003.8	116003.8	104	%			07:55:55
2	Al 396.153Radial†	173624.4	166408.3	86662	µg/L	86662	ppb	07:55:55
2	Ca 317.933Radial†	52263.4	49733.0	19587	µg/L	19587	ppb	07:56:00
2	Fe 238.204 Radial†	25613.4	24566.0	126260	µg/L	126260	ppb	07:56:00
2	K 766.490 Radial†	21290.8	19586.0	10988	µg/L	10988	ppb	07:56:00
2	Mg 279.077 IEC†	3782.8	3613.7	19980	µg/L	19980	ppb	07:56:00
2	Na 589.592 Radial†	5431.6	5717.0	1593.9	µg/L	1593.9	ppb	07:56:00
2	Sr 421.552†	48117.0	46245.1	264.08	µg/L	264.08	ppb	07:55:55
2	Sc 361.383	1995761.9	1995761.9	102.63	%			07:56:56
2	Y 371.029	1244138.6	1244138.6	105.32	%			07:56:56
2	Ag 328.068†	-1334.9	-1199.5	0.1387	µg/L	0.1387	ppb	07:57:01
2	As 188.979†	22.3	16.6	23.095	µg/L	23.095	ppb	07:57:22
2	B 249.677†	1803.7	1606.4	35.621	µg/L	35.621	ppb	07:57:01
2	Ba 233.527†	53253.6	51969.8	1391.3	µg/L	1391.3	ppb	07:57:01
2	Be 313.107†	19073.2	14919.4	8.3890	µg/L	8.3890	ppb	07:57:01
2	Cd 226.502†	293.8	383.7	1.0336	µg/L	1.0336	ppb	07:57:22
2	Co 228.616†	1057.3	1097.6	47.011	µg/L	47.011	ppb	07:57:22
2	Cr 267.716†	4204.4	4224.0	94.510	µg/L	94.510	ppb	07:57:01
2	Cu 324.752†	9758.9	6243.1	73.704	µg/L	73.704	ppb	07:57:01
2	Mn 257.610†	917983.8	894719.4	3001.6	µg/L	3001.6	ppb	07:56:56
2	Mo 202.031†	6.7	11.4	6.3307	µg/L	6.3307	ppb	07:57:22
2	Ni 231.604†	1479.4	1159.8	66.878	µg/L	66.878	ppb	07:57:22
2	P 214.914†	668.4	447.1	887.43	µg/L	887.43	ppb	07:57:22
2	Pb 220.353†	465.2	397.3	112.24	µg/L	112.24	ppb	07:57:22

2	S 181.975 Axial†	151.3	108.6	558.91 µg/L	558.91 ppb	07:57:22
2	Sb 206.836†	21.4	2.0	15.281 µg/L	15.281 ppb	07:57:22
2	Se 196.026†	-38.2	-48.0	10.933 µg/L	10.933 ppb	07:57:22
2	SiO2†	89476.0	85110.2	17296 µg/L	17296 ppb	07:57:01
2	Si 251.611†	102146.5	99217.4	7902.4 µg/L	7902.4 ppb	07:57:01
2	Sn 189.927†	-91.4	-113.4	-35.838 µg/L	-35.838 ppb	07:57:22
2	Ti 334.940†	1814879.7	1767631.7	4149.8 µg/L	4149.8 ppb	07:56:56
2	Tl 190.801†	-41.8	-21.4	5.7709 µg/L	5.7709 ppb	07:57:22
2	U 409.014†	262.5	-569.7	-80.777 µg/L	-80.777 ppb	07:57:01
2	V 292.402†	19735.8	19307.3	242.94 µg/L	242.94 ppb	07:57:01
2	Zn 213.857†	10279.0	9497.7	254.05 µg/L	254.05 ppb	07:57:01
3	Sc RADIAL	114959.8	114959.8	103 %		07:56:06
3	Al 396.153Radial†	173490.4	167791.1	87383 µg/L	87383 ppb	07:56:06
3	Ca 317.933Radial†	53180.4	51076.1	20116 µg/L	20116 ppb	07:56:11
3	Fe 238.204 Radial†	26105.8	25265.8	129850 µg/L	129850 ppb	07:56:11
3	K 766.490 Radial†	21609.5	20080.1	11265 µg/L	11265 ppb	07:56:11
3	Mg 279.077 IEC†	3852.3	3713.9	20534 µg/L	20534 ppb	07:56:11
3	Na 589.592 Radial†	5556.4	5885.2	1640.8 µg/L	1640.8 ppb	07:56:11
3	Sr 421.552†	48018.4	46568.8	265.93 µg/L	265.93 ppb	07:56:06
3	Sc 361.383	2003860.9	2003860.9	103.04 %		07:57:29
3	Y 371.029	1249300.5	1249300.5	105.76 %		07:57:29
3	Ag 328.068†	-1329.6	-1189.0	0.5118 µg/L	0.5118 ppb	07:57:34
3	As 188.979†	33.7	27.6	44.346 µg/L	44.346 ppb	07:57:55
3	B 249.677†	1810.4	1605.7	34.461 µg/L	34.461 ppb	07:57:34
3	Ba 233.527†	53128.9	51639.0	1382.4 µg/L	1382.4 ppb	07:57:34
3	Be 313.107†	19191.4	14959.0	8.4278 µg/L	8.4278 ppb	07:57:34
3	Cd 226.502†	296.8	385.5	0.8062 µg/L	0.8062 ppb	07:57:55
3	Co 228.616†	1064.9	1100.8	47.244 µg/L	47.244 ppb	07:57:55
3	Cr 267.716†	4275.5	4276.5	95.673 µg/L	95.673 ppb	07:57:34
3	Cu 324.752†	9769.9	6215.3	74.269 µg/L	74.269 ppb	07:57:34
3	Mn 257.610†	914535.2	887757.4	2978.8 µg/L	2978.8 ppb	07:57:29
3	Mo 202.031†	11.4	15.9	7.0127 µg/L	7.0127 ppb	07:57:55
3	Ni 231.604†	1475.0	1149.8	66.296 µg/L	66.296 ppb	07:57:55
3	P 214.914†	663.8	440.0	867.50 µg/L	867.50 ppb	07:57:55
3	Pb 220.353†	474.4	404.4	114.15 µg/L	114.15 ppb	07:57:55
3	S 181.975 Axial†	149.7	106.4	546.93 µg/L	546.93 ppb	07:57:55
3	Sb 206.836†	18.0	-1.4	11.543 µg/L	11.543 ppb	07:57:55
3	Se 196.026†	-32.5	-42.4	21.789 µg/L	21.789 ppb	07:57:55
3	SiO2†	89163.9	84454.9	17163 µg/L	17163 ppb	07:57:34
3	Si 251.611†	101615.4	98299.8	7828.9 µg/L	7828.9 ppb	07:57:34
3	Sn 189.927†	-85.8	-107.7	-32.207 µg/L	-32.207 ppb	07:57:55
3	Ti 334.940†	1807502.8	1753325.1	4116.2 µg/L	4116.2 ppb	07:57:29
3	Tl 190.801†	-44.5	-23.8	1.5258 µg/L	1.5258 ppb	07:57:55
3	U 409.014†	295.2	-539.0	-78.324 µg/L	-78.324 ppb	07:57:34
3	V 292.402†	19689.7	19184.7	241.76 µg/L	241.76 ppb	07:57:34
3	Zn 213.857†	10262.0	9440.7	252.04 µg/L	252.04 ppb	07:57:34

Mean Data: 241613003|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2003452.5	103.02	%	0.385				0.37%
Sc RADIAL	115119.9	103	%	0.7				0.71%
Y 371.029	1248906.4	105.73	%	0.388				0.37%
Ag 328.068†	-1194.2	0.3263	µg/L	0.18655	0.3263	ppb	0.18655	57.17%
Al 396.153Radial†	167341.6	87148	µg/L	421.0	87148	ppb	421.0	0.48%
As 188.979†	19.6	28.779	µg/L	13.6436	28.779	ppb	13.6436	47.41%
B 249.677†	1603.2	34.889	µg/L	0.6370	34.889	ppb	0.6370	1.83%
Ba 233.527†	51620.3	1381.9	µg/L	9.62	1381.9	ppb	9.62	0.70%
Be 313.107†	14856.6	8.3519	µg/L	0.09986	8.3519	ppb	0.09986	1.20%
Ca 317.933Radial†	50386.2	19845	µg/L	264.8	19845	ppb	264.8	1.33%
Cd 226.502†	386.3	0.9640	µg/L	0.13698	0.9640	ppb	0.13698	14.21%
Co 228.616†	1098.0	47.056	µg/L	0.1694	47.056	ppb	0.1694	0.36%
Cr 267.716†	4246.0	94.995	µg/L	0.6051	94.995	ppb	0.6051	0.64%
Cu 324.752†	6182.3	73.650	µg/L	0.6482	73.650	ppb	0.6482	0.88%
Fe 238.204 Radial†	24928.0	128120	µg/L	1801.5	128120	ppb	1801.5	1.41%
K 766.490 Radial†	19788.9	11102	µg/L	145.1	11102	ppb	145.1	1.31%
Mg 279.077 IEC†	3658.5	20227	µg/L	281.8	20227	ppb	281.8	1.39%
Mn 257.610†	892218.9	2993.5	µg/L	12.73	2993.5	ppb	12.73	0.43%
Mo 202.031†	13.0	6.5979	µg/L	0.36418	6.5979	ppb	0.36418	5.52%
Na 589.592 Radial†	5812.0	1620.4	µg/L	24.03	1620.4	ppb	24.03	1.48%

Ni 231.604†	1156.6	66.689	µg/L	0.3401	66.689	ppb	0.3401	0.51%
P 214.914†	440.1	869.52	µg/L	16.988	869.52	ppb	16.988	1.95%
Pb 220.353†	397.7	112.36	µg/L	1.738	112.36	ppb	1.738	1.55%
S 181.975 Axial†	106.0	544.69	µg/L	15.460	544.69	ppb	15.460	2.84%
Sb 206.836†	0.1	13.207	µg/L	1.9020	13.207	ppb	1.9020	14.40%
Se 196.026†	-44.2	17.936	µg/L	6.0746	17.936	ppb	6.0746	33.87%
SiO2†	84439.7	17160	µg/L	137.8	17160	ppb	137.8	0.80%
Si 251.611†	98352.1	7832.5	µg/L	68.14	7832.5	ppb	68.14	0.87%
Sn 189.927†	-111.1	-34.324	µg/L	1.8889	-34.324	ppb	1.8889	5.50%
Sr 421.552†	46480.1	265.42	µg/L	1.174	265.42	ppb	1.174	0.44%
Ti 334.940†	1762288.0	4137.2	µg/L	18.35	4137.2	ppb	18.35	0.44%
Tl 190.801†	-22.2	4.4163	µg/L	2.50494	4.4163	ppb	2.50494	56.72%
U 409.014†	-531.3	-77.230	µg/L	4.2034	-77.230	ppb	4.2034	5.44%
V 292.402†	19195.8	241.75	µg/L	1.189	241.75	ppb	1.189	0.49%
Zn 213.857†	9443.8	252.32	µg/L	1.605	252.32	ppb	1.605	0.64%

Sequence No.: 35
Sample ID: 241613004|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 325
Date Collected: 12/15/2009 07:58:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613004|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111100.0	111100.0	99.8	%			07:58:37
1	Al 396.153Radial†	45855.3	45771.0	23836	µg/L	23836	ppb	07:58:37
1	Ca 317.933Radial†	18460.4	18084.9	7122.8	µg/L	7122.8	ppb	07:58:58
1	Fe 238.204 Radial†	14693.1	14711.4	75608	µg/L	75608	ppb	07:58:58
1	K 766.490 Radial†	7090.2	6262.5	3513.4	µg/L	3513.4	ppb	07:58:37
1	Mg 279.077 IEC†	1211.2	1197.8	6573.5	µg/L	6573.5	ppb	07:58:58
1	Na 589.592 Radial†	7698.1	8217.5	2291.0	µg/L	2291.0	ppb	07:58:37
1	Sr 421.552†	12294.5	12398.3	70.800	µg/L	70.800	ppb	07:58:58
1	Sc 361.383	1990108.2	1990108.2	102.34	%			08:00:02
1	Y 371.029	1297137.1	1297137.1	109.81	%			08:00:02
1	Ag 328.068†	-756.0	-637.5	0.1639	µg/L	0.1639	ppb	08:00:08
1	As 188.979†	16.4	10.9	13.123	µg/L	13.123	ppb	08:00:28
1	B 249.677†	1116.9	940.3	20.314	µg/L	20.314	ppb	08:00:08
1	Ba 233.527†	7941.5	7839.4	209.87	µg/L	209.87	ppb	08:00:08
1	Be 313.107†	13134.1	9168.6	5.6347	µg/L	5.6347	ppb	08:00:08
1	Cd 226.502†	140.9	235.2	0.7357	µg/L	0.7357	ppb	08:00:08
1	Co 228.616†	127.7	192.1	7.1742	µg/L	7.1742	ppb	08:00:28
1	Cr 267.716†	1444.8	1539.0	34.326	µg/L	34.326	ppb	08:00:08
1	Cu 324.752†	4447.0	1079.5	24.295	µg/L	24.295	ppb	08:00:08
1	Mn 257.610†	653253.6	638573.3	2140.5	µg/L	2140.5	ppb	08:00:02
1	Mo 202.031†	191.8	192.2	26.041	µg/L	26.041	ppb	08:00:28
1	Ni 231.604†	920.8	618.0	35.638	µg/L	35.638	ppb	08:00:28
1	P 214.914†	446.8	232.5	444.08	µg/L	444.08	ppb	08:00:28
1	Pb 220.353†	292.9	230.2	62.829	µg/L	62.829	ppb	08:00:28
1	S 181.975 Axial†	60.2	20.0	94.918	µg/L	94.918	ppb	08:00:28
1	Sb 206.836†	13.6	-5.6	-2.1258	µg/L	-2.1258	ppb	08:00:28
1	Se 196.026†	-17.6	-28.0	9.2098	µg/L	9.2098	ppb	08:00:28
1	SiO2†	91302.0	87142.2	17709	µg/L	17709	ppb	08:00:08
1	Si 251.611†	104222.7	101529.0	8195.2	µg/L	8195.2	ppb	08:00:08
1	Sn 189.927†	-6.3	-30.5	-4.0897	µg/L	-4.0897	ppb	08:00:28
1	Ti 334.940†	548396.3	535081.6	1256.1	µg/L	1256.1	ppb	08:00:02
1	Tl 190.801†	-33.7	-13.6	-5.0607	µg/L	-5.0607	ppb	08:00:28
1	U 409.014†	79.1	-748.2	-89.680	µg/L	-89.680	ppb	08:00:02
1	V 292.402†	3221.9	3224.9	45.078	µg/L	45.078	ppb	08:00:08
1	Zn 213.857†	13657.4	12827.4	354.14	µg/L	354.14	ppb	08:00:08
2	Sc RADIAL	113295.8	113295.8	102	%			07:59:03
2	Al 396.153Radial†	46720.9	45731.0	23815	µg/L	23815	ppb	07:59:03
2	Ca 317.933Radial†	18408.4	17675.4	6961.5	µg/L	6961.5	ppb	07:59:24
2	Fe 238.204 Radial†	14675.6	14409.0	74054	µg/L	74054	ppb	07:59:24
2	K 766.490 Radial†	7213.8	6246.3	3504.3	µg/L	3504.3	ppb	07:59:03
2	Mg 279.077 IEC†	1205.8	1169.0	6415.1	µg/L	6415.1	ppb	07:59:24
2	Na 589.592 Radial†	7762.6	8131.4	2267.0	µg/L	2267.0	ppb	07:59:03
2	Sr 421.552†	12317.9	12182.6	69.568	µg/L	69.568	ppb	07:59:24
2	Sc 361.383	1985727.6	1985727.6	102.11	%			08:00:36
2	Y 371.029	1294543.9	1294543.9	109.59	%			08:00:36
2	Ag 328.068†	-704.5	-588.7	0.5044	µg/L	0.5044	ppb	08:00:41
2	As 188.979†	13.5	8.1	7.7729	µg/L	7.7729	ppb	08:01:02
2	B 249.677†	1112.3	938.1	20.703	µg/L	20.703	ppb	08:00:41
2	Ba 233.527†	7925.6	7841.0	209.91	µg/L	209.91	ppb	08:00:41
2	Be 313.107†	13028.9	9094.0	5.5865	µg/L	5.5865	ppb	08:00:41
2	Cd 226.502†	111.9	207.0	0.0698	µg/L	0.0698	ppb	08:00:41
2	Co 228.616†	120.6	185.4	6.8430	µg/L	6.8430	ppb	08:01:02
2	Cr 267.716†	1440.4	1537.8	34.300	µg/L	34.300	ppb	08:00:41
2	Cu 324.752†	4399.2	1042.2	23.684	µg/L	23.684	ppb	08:00:41
2	Mn 257.610†	648146.1	634979.6	2128.3	µg/L	2128.3	ppb	08:00:36
2	Mo 202.031†	187.7	188.7	25.556	µg/L	25.556	ppb	08:01:02
2	Ni 231.604†	931.0	630.1	36.331	µg/L	36.331	ppb	08:01:02
2	P 214.914†	442.9	229.6	439.56	µg/L	439.56	ppb	08:01:02
2	Pb 220.353†	304.5	242.2	66.046	µg/L	66.046	ppb	08:01:02

2	S 181.975 Axial†	61.4	21.3	102.15	µg/L	102.15 ppb	08:01:02
2	Sb 206.836†	19.9	0.5	4.3730	µg/L	4.3730 ppb	08:01:02
2	Se 196.026†	-14.5	-25.0	12.646	µg/L	12.646 ppb	08:01:02
2	SiO2†	89402.6	85478.9	17371	µg/L	17371 ppb	08:00:41
2	Si 251.611†	102154.0	99727.8	8049.2	µg/L	8049.2 ppb	08:00:41
2	Sn 189.927†	-8.9	-33.0	-5.6652	µg/L	-5.6652 ppb	08:01:02
2	Ti 334.940†	545423.8	533352.8	1252.1	µg/L	1252.1 ppb	08:00:36
2	Tl 190.801†	-20.5	-0.8	15.486	µg/L	15.486 ppb	08:01:02
2	U 409.014†	127.5	-700.6	-84.582	µg/L	-84.582 ppb	08:00:36
2	V 292.402†	3195.4	3205.9	44.727	µg/L	44.727 ppb	08:00:41
2	Zn 213.857†	13578.1	12779.2	352.94	µg/L	352.94 ppb	08:00:41
3	Sc RADIAL	112642.9	112642.9	101	%		07:59:29
3	Al 396.153Radial†	46552.1	45830.2	23867	µg/L	23867 ppb	07:59:29
3	Ca 317.933Radial†	18354.3	17726.7	6981.7	µg/L	6981.7 ppb	07:59:50
3	Fe 238.204 Radial†	14629.7	14447.3	74250	µg/L	74250 ppb	07:59:50
3	K 766.490 Radial†	7260.2	6333.2	3553.1	µg/L	3553.1 ppb	07:59:29
3	Mg 279.077 IEC†	1203.2	1173.3	6438.9	µg/L	6438.9 ppb	07:59:50
3	Na 589.592 Radial†	7791.8	8204.4	2287.4	µg/L	2287.4 ppb	07:59:29
3	Sr 421.552†	12261.5	12197.0	69.650	µg/L	69.650 ppb	07:59:50
3	Sc 361.383	1978660.3	1978660.3	101.75	%		08:01:09
3	Y 371.029	1290204.5	1290204.5	109.22	%		08:01:09
3	Ag 328.068†	-742.6	-628.6	0.1422	µg/L	0.1422 ppb	08:01:15
3	As 188.979†	13.6	8.3	8.0590	µg/L	8.0590 ppb	08:01:35
3	B 249.677†	1116.1	945.7	20.996	µg/L	20.996 ppb	08:01:15
3	Ba 233.527†	7996.7	7938.6	212.53	µg/L	212.53 ppb	08:01:15
3	Be 313.107†	13120.0	9229.1	5.6739	µg/L	5.6739 ppb	08:01:15
3	Cd 226.502†	91.5	187.4	-0.4940	µg/L	-0.4940 ppb	08:01:15
3	Co 228.616†	126.2	191.4	7.1324	µg/L	7.1324 ppb	08:01:35
3	Cr 267.716†	1466.4	1568.4	34.981	µg/L	34.981 ppb	08:01:15
3	Cu 324.752†	4397.0	1055.5	23.825	µg/L	23.825 ppb	08:01:15
3	Mn 257.610†	649468.1	638546.1	2140.2	µg/L	2140.2 ppb	08:01:09
3	Mo 202.031†	195.1	196.6	26.512	µg/L	26.512 ppb	08:01:35
3	Ni 231.604†	929.0	631.4	36.406	µg/L	36.406 ppb	08:01:35
3	P 214.914†	440.0	228.3	436.18	µg/L	436.18 ppb	08:01:35
3	Pb 220.353†	307.3	246.0	67.069	µg/L	67.069 ppb	08:01:35
3	S 181.975 Axial†	58.7	18.9	89.014	µg/L	89.014 ppb	08:01:35
3	Sb 206.836†	16.0	-3.2	0.4454	µg/L	0.4454 ppb	08:01:35
3	Se 196.026†	-20.7	-31.2	3.5713	µg/L	3.5713 ppb	08:01:35
3	SiO2†	89279.8	85671.0	17410	µg/L	17410 ppb	08:01:15
3	Si 251.611†	101915.4	99850.6	8058.9	µg/L	8058.9 ppb	08:01:15
3	Sn 189.927†	-13.6	-37.8	-8.0951	µg/L	-8.0951 ppb	08:01:35
3	Ti 334.940†	546443.4	536262.7	1258.9	µg/L	1258.9 ppb	08:01:09
3	Tl 190.801†	-31.9	-12.1	-2.5491	µg/L	-2.5491 ppb	08:01:35
3	U 409.014†	191.0	-637.7	-78.252	µg/L	-78.252 ppb	08:01:09
3	V 292.402†	3217.0	3238.3	45.150	µg/L	45.150 ppb	08:01:15
3	Zn 213.857†	13677.1	12924.0	357.01	µg/L	357.01 ppb	08:01:15

Mean Data: 241613004|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984832.0	102.06	%	0.297				0.29%
Sc RADIAL	112346.2	101	%	1.0				1.00%
Y 371.029	1293961.8	109.54	%	0.297				0.27%
Ag 328.068†	-618.2	0.2702	µg/L	0.20317	0.2702	ppb	0.20317	75.20%
Al 396.153Radial†	45777.4	23839	µg/L	26.0	23839	ppb	26.0	0.11%
As 188.979†	9.1	9.6517	µg/L	3.00977	9.6517	ppb	3.00977	31.18%
B 249.677†	941.4	20.671	µg/L	0.3422	20.671	ppb	0.3422	1.66%
Ba 233.527†	7873.0	210.77	µg/L	1.520	210.77	ppb	1.520	0.72%
Be 313.107†	9163.9	5.6317	µg/L	0.04376	5.6317	ppb	0.04376	0.78%
Ca 317.933Radial†	17829.0	7022.0	µg/L	87.87	7022.0	ppb	87.87	1.25%
Cd 226.502†	209.8	0.1038	µg/L	0.61552	0.1038	ppb	0.61552	592.75%
Co 228.616†	189.6	7.0499	µg/L	0.18040	7.0499	ppb	0.18040	2.56%
Cr 267.716†	1548.4	34.536	µg/L	0.3856	34.536	ppb	0.3856	1.12%
Cu 324.752†	1059.1	23.935	µg/L	0.3203	23.935	ppb	0.3203	1.34%
Fe 238.204 Radial†	14522.6	74637	µg/L	846.3	74637	ppb	846.3	1.13%
K 766.490 Radial†	6280.6	3523.6	µg/L	25.92	3523.6	ppb	25.92	0.74%
Mg 279.077 IEC†	1180.1	6475.8	µg/L	85.44	6475.8	ppb	85.44	1.32%
Mn 257.610†	637366.3	2136.3	µg/L	6.96	2136.3	ppb	6.96	0.33%
Mo 202.031†	192.5	26.036	µg/L	0.4779	26.036	ppb	0.4779	1.84%
Na 589.592 Radial†	8184.4	2281.8	µg/L	12.93	2281.8	ppb	12.93	0.57%

Ni 231.604†	626.5	36.125	µg/L	0.4235	36.125	ppb	0.4235	1.17%
P 214.914†	230.1	439.94	µg/L	3.966	439.94	ppb	3.966	0.90%
Pb 220.353†	239.5	65.315	µg/L	2.2127	65.315	ppb	2.2127	3.39%
S 181.975 Axial†	20.1	95.361	µg/L	6.5793	95.361	ppb	6.5793	6.90%
Sb 206.836†	-2.8	0.8975	µg/L	3.27295	0.8975	ppb	3.27295	364.66%
Se 196.026†	-28.1	8.4757	µg/L	4.58159	8.4757	ppb	4.58159	54.06%
SiO2†	86097.3	17496	µg/L	184.9	17496	ppb	184.9	1.06%
Si 251.611†	100369.1	8101.1	µg/L	81.62	8101.1	ppb	81.62	1.01%
Sn 189.927†	-33.8	-5.9500	µg/L	2.01779	-5.9500	ppb	2.01779	33.91%
Sr 421.552†	12259.3	70.006	µg/L	0.6886	70.006	ppb	0.6886	0.98%
Ti 334.940†	534899.0	1255.7	µg/L	3.44	1255.7	ppb	3.44	0.27%
Tl 190.801†	-8.8	2.6255	µg/L	11.20824	2.6255	ppb	11.20824	426.90%
U 409.014†	-695.5	-84.172	µg/L	5.7252	-84.172	ppb	5.7252	6.80%
V 292.402†	3223.0	44.985	µg/L	0.2266	44.985	ppb	0.2266	0.50%
Zn 213.857†	12843.5	354.70	µg/L	2.092	354.70	ppb	2.092	0.59%

Sequence No.: 36
Sample ID: 241613005|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 326
Date Collected: 12/15/2009 08:01:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613005|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113872.3	113872.3	102	%			08:02:17
1	Al 396.153Radial†	100150.6	97717.6	50889	µg/L	50889	ppb	08:02:17
1	Ca 317.933Radial†	41809.9	40455.0	15933	µg/L	15933	ppb	08:02:17
1	Fe 238.204 Radial†	21347.7	20856.9	107190	µg/L	107190	ppb	08:02:37
1	K 766.490 Radial†	12751.5	11622.6	6520.6	µg/L	6520.6	ppb	08:02:17
1	Mg 279.077 IEC†	2375.4	2306.1	12712	µg/L	12712	ppb	08:02:37
1	Na 589.592 Radial†	2074.1	2533.2	706.25	µg/L	706.25	ppb	08:02:37
1	Sr 421.552†	30255.9	29652.8	169.33	µg/L	169.33	ppb	08:02:17
1	Sc 361.383	1975248.2	1975248.2	101.57	%			08:03:42
1	Y 371.029	1252382.2	1252382.2	106.02	%			08:03:42
1	Ag 328.068†	-1029.6	-912.4	0.7474	µg/L	0.7474	ppb	08:03:47
1	As 188.979†	19.1	13.7	18.575	µg/L	18.575	ppb	08:04:08
1	B 249.677†	1545.6	1370.5	30.554	µg/L	30.554	ppb	08:03:47
1	Ba 233.527†	57797.2	56981.9	1525.2	µg/L	1525.2	ppb	08:03:47
1	Be 313.107†	16255.5	12338.3	6.9433	µg/L	6.9433	ppb	08:03:47
1	Cd 226.502†	239.7	333.4	1.1142	µg/L	1.1142	ppb	08:04:08
1	Co 228.616†	1585.1	1628.0	75.484	µg/L	75.484	ppb	08:04:08
1	Cr 267.716†	2137.1	2231.2	49.968	µg/L	49.968	ppb	08:04:08
1	Cu 324.752†	7102.1	3726.2	50.829	µg/L	50.829	ppb	08:03:47
1	Mn 257.610†	2190885.5	2157212.3	7212.3	µg/L	7212.3	ppb	08:03:42
1	Mo 202.031†	139.6	142.3	21.287	µg/L	21.287	ppb	08:04:08
1	Ni 231.604†	1309.6	1007.6	58.098	µg/L	58.098	ppb	08:04:08
1	P 214.914†	720.6	505.3	1031.0	µg/L	1031.0	ppb	08:04:08
1	Pb 220.353†	471.9	408.6	112.42	µg/L	112.42	ppb	08:04:08
1	S 181.975 Axial†	93.8	53.5	268.30	µg/L	268.30	ppb	08:04:08
1	Sb 206.836†	18.0	-1.2	9.7508	µg/L	9.7508	ppb	08:04:08
1	Se 196.026†	-31.0	-41.4	10.056	µg/L	10.056	ppb	08:04:08
1	SiO2†	80811.2	77485.0	15746	µg/L	15746	ppb	08:03:47
1	Si 251.611†	92069.7	90330.2	7208.2	µg/L	7208.2	ppb	08:03:47
1	Sn 189.927†	-60.6	-84.0	-25.071	µg/L	-25.071	ppb	08:04:08
1	Ti 334.940†	1479160.3	1455473.3	3417.0	µg/L	3417.0	ppb	08:03:42
1	Tl 190.801†	-44.0	-24.0	12.683	µg/L	12.683	ppb	08:04:08
1	U 409.014†	644.1	-191.3	-39.002	µg/L	-39.002	ppb	08:03:42
1	V 292.402†	11906.5	11798.8	151.05	µg/L	151.05	ppb	08:03:47
1	Zn 213.857†	12047.3	11342.6	308.50	µg/L	308.50	ppb	08:03:47
2	Sc RADIAL	114232.9	114232.9	103	%			08:02:43
2	Al 396.153Radial†	100302.8	97556.8	50805	µg/L	50805	ppb	08:02:43
2	Ca 317.933Radial†	41748.8	40266.5	15859	µg/L	15859	ppb	08:02:43
2	Fe 238.204 Radial†	21357.0	20800.1	106900	µg/L	106900	ppb	08:03:03
2	K 766.490 Radial†	12798.7	11629.2	6524.3	µg/L	6524.3	ppb	08:02:43
2	Mg 279.077 IEC†	2388.0	2311.0	12740	µg/L	12740	ppb	08:03:03
2	Na 589.592 Radial†	2062.1	2515.1	701.21	µg/L	701.21	ppb	08:03:03
2	Sr 421.552†	30305.9	29608.2	169.08	µg/L	169.08	ppb	08:02:43
2	Sc 361.383	1982752.2	1982752.2	101.96	%			08:04:15
2	Y 371.029	1257562.3	1257562.3	106.46	%			08:04:15
2	Ag 328.068†	-1051.3	-929.9	0.5626	µg/L	0.5626	ppb	08:04:21
2	As 188.979†	15.5	10.1	11.455	µg/L	11.455	ppb	08:04:41
2	B 249.677†	1499.3	1319.3	28.247	µg/L	28.247	ppb	08:04:21
2	Ba 233.527†	58128.7	57091.7	1528.1	µg/L	1528.1	ppb	08:04:21
2	Be 313.107†	16379.3	12399.2	6.9856	µg/L	6.9856	ppb	08:04:21
2	Cd 226.502†	253.8	346.4	1.5034	µg/L	1.5034	ppb	08:04:41
2	Co 228.616†	1600.5	1637.1	75.963	µg/L	75.963	ppb	08:04:41
2	Cr 267.716†	2119.8	2206.3	49.414	µg/L	49.414	ppb	08:04:41
2	Cu 324.752†	7048.3	3647.0	50.175	µg/L	50.175	ppb	08:04:21
2	Mn 257.610†	2193781.2	2151889.1	7194.5	µg/L	7194.5	ppb	08:04:15
2	Mo 202.031†	156.1	158.0	23.161	µg/L	23.161	ppb	08:04:41
2	Ni 231.604†	1338.1	1030.7	59.428	µg/L	59.428	ppb	08:04:41
2	P 214.914†	715.2	497.3	1013.2	µg/L	1013.2	ppb	08:04:41
2	Pb 220.353†	481.6	416.3	114.49	µg/L	114.49	ppb	08:04:41

2	S 181.975 Axial†	98.4	57.7	290.86	µg/L	290.86 ppb	08:04:41
2	Sb 206.836†	12.1	-7.1	3.5510	µg/L	3.5510 ppb	08:04:41
2	Se 196.026†	-21.7	-32.1	23.665	µg/L	23.665 ppb	08:04:41
2	SiO2†	81211.3	77576.3	15765	µg/L	15765 ppb	08:04:21
2	Si 251.611†	92483.4	90392.9	7213.4	µg/L	7213.4 ppb	08:04:21
2	Sn 189.927†	-58.7	-81.9	-23.996	µg/L	-23.996 ppb	08:04:41
2	Ti 334.940†	1482579.9	1453315.8	3411.9	µg/L	3411.9 ppb	08:04:15
2	Tl 190.801†	-47.4	-27.2	7.5107	µg/L	7.5107 ppb	08:04:41
2	U 409.014†	638.4	-199.3	-39.757	µg/L	-39.757 ppb	08:04:15
2	V 292.402†	12011.3	11857.3	151.74	µg/L	151.74 ppb	08:04:21
2	Zn 213.857†	12153.8	11402.2	310.20	µg/L	310.20 ppb	08:04:21
3	Sc RADIAL	112936.7	112936.7	101	%		08:03:09
3	Al 396.153Radial†	100116.6	98494.9	51294	µg/L	51294 ppb	08:03:09
3	Ca 317.933Radial†	41517.0	40504.8	15953	µg/L	15953 ppb	08:03:09
3	Fe 238.204 Radial†	21352.3	21034.3	108110	µg/L	108110 ppb	08:03:29
3	K 766.490 Radial†	12724.5	11699.2	6563.6	µg/L	6563.6 ppb	08:03:09
3	Mg 279.077 IEC†	2400.2	2349.8	12954	µg/L	12954 ppb	08:03:29
3	Na 589.592 Radial†	2057.5	2533.6	706.36	µg/L	706.36 ppb	08:03:29
3	Sr 421.552†	30175.8	29818.8	170.28	µg/L	170.28 ppb	08:03:09
3	Sc 361.383	1975736.3	1975736.3	101.60	%		08:04:49
3	Y 371.029	1253103.3	1253103.3	106.08	%		08:04:49
3	Ag 328.068†	-1039.4	-921.8	0.7379	µg/L	0.7379 ppb	08:04:54
3	As 188.979†	19.1	13.7	18.488	µg/L	18.488 ppb	08:05:15
3	B 249.677†	1535.0	1359.7	29.764	µg/L	29.764 ppb	08:04:54
3	Ba 233.527†	58288.0	57451.0	1537.8	µg/L	1537.8 ppb	08:04:54
3	Be 313.107†	16435.1	12511.2	7.0560	µg/L	7.0560 ppb	08:04:54
3	Cd 226.502†	254.8	348.2	1.4524	µg/L	1.4524 ppb	08:05:15
3	Co 228.616†	1583.6	1626.1	75.376	µg/L	75.376 ppb	08:05:15
3	Cr 267.716†	2149.0	2242.5	50.220	µg/L	50.220 ppb	08:05:15
3	Cu 324.752†	7103.2	3725.5	51.020	µg/L	51.020 ppb	08:04:54
3	Mn 257.610†	2195366.1	2161089.6	7225.3	µg/L	7225.3 ppb	08:04:49
3	Mo 202.031†	144.0	146.6	21.844	µg/L	21.844 ppb	08:05:15
3	Ni 231.604†	1318.1	1015.7	58.562	µg/L	58.562 ppb	08:05:15
3	P 214.914†	703.1	487.9	990.71	µg/L	990.71 ppb	08:05:15
3	Pb 220.353†	468.3	404.9	111.48	µg/L	111.48 ppb	08:05:15
3	S 181.975 Axial†	93.3	53.0	265.46	µg/L	265.46 ppb	08:05:15
3	Sb 206.836†	23.6	4.3	15.616	µg/L	15.616 ppb	08:05:15
3	Se 196.026†	-21.8	-32.2	24.258	µg/L	24.258 ppb	08:05:15
3	SiO2†	81689.0	78329.3	15918	µg/L	15918 ppb	08:04:54
3	Si 251.611†	93150.9	91372.1	7292.5	µg/L	7292.5 ppb	08:04:54
3	Sn 189.927†	-59.3	-82.7	-24.225	µg/L	-24.225 ppb	08:05:15
3	Ti 334.940†	1482089.7	1457996.9	3422.9	µg/L	3422.9 ppb	08:04:49
3	Tl 190.801†	-49.6	-29.5	3.9691	µg/L	3.9691 ppb	08:05:15
3	U 409.014†	533.1	-300.8	-50.252	µg/L	-50.252 ppb	08:04:49
3	V 292.402†	12016.7	11904.4	152.38	µg/L	152.38 ppb	08:04:54
3	Zn 213.857†	12165.7	11456.3	311.60	µg/L	311.60 ppb	08:04:54

Mean Data: 241613005|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1977912.2	101.71	%	0.216				0.21%
Sc RADIAL	113680.6	102	%	0.6				0.59%
Y 371.029	1254349.2	106.19	%	0.238				0.22%
Ag 328.068†	-921.4	0.6826	µg/L	0.10407	0.6826	ppb	0.10407	15.24%
Al 396.153Radial†	97923.1	50996	µg/L	261.3	50996	ppb	261.3	0.51%
As 188.979†	12.5	16.173	µg/L	4.0861	16.173	ppb	4.0861	25.27%
B 249.677†	1349.8	29.521	µg/L	1.1727	29.521	ppb	1.1727	3.97%
Ba 233.527†	57174.9	1530.4	µg/L	6.57	1530.4	ppb	6.57	0.43%
Be 313.107†	12416.2	6.9950	µg/L	0.05698	6.9950	ppb	0.05698	0.81%
Ca 317.933Radial†	40408.8	15915	µg/L	49.5	15915	ppb	49.5	0.31%
Cd 226.502†	342.7	1.3567	µg/L	0.21150	1.3567	ppb	0.21150	15.59%
Co 228.616†	1630.4	75.608	µg/L	0.3126	75.608	ppb	0.3126	0.41%
Cr 267.716†	2226.6	49.867	µg/L	0.4125	49.867	ppb	0.4125	0.83%
Cu 324.752†	3699.6	50.675	µg/L	0.4429	50.675	ppb	0.4429	0.87%
Fe 238.204 Radial†	20897.1	107400	µg/L	628.0	107400	ppb	628.0	0.58%
K 766.490 Radial†	11650.4	6536.2	µg/L	23.82	6536.2	ppb	23.82	0.36%
Mg 279.077 IEC†	2322.3	12802	µg/L	132.6	12802	ppb	132.6	1.04%
Mn 257.610†	2156730.3	7210.7	µg/L	15.49	7210.7	ppb	15.49	0.21%
Mo 202.031†	149.0	22.097	µg/L	0.9621	22.097	ppb	0.9621	4.35%
Na 589.592 Radial†	2527.3	704.61	µg/L	2.943	704.61	ppb	2.943	0.42%

Ni 231.604†	1018.0	58.696 µg/L	0.6751	58.696 ppb	0.6751	1.15%
P 214.914†	496.9	1011.6 µg/L	20.18	1011.6 ppb	20.18	2.00%
Pb 220.353†	410.0	112.80 µg/L	1.539	112.80 ppb	1.539	1.36%
S 181.975 Axial†	54.7	274.87 µg/L	13.919	274.87 ppb	13.919	5.06%
Sb 206.836†	-1.3	9.6392 µg/L	6.03322	9.6392 ppb	6.03322	62.59%
Se 196.026†	-35.2	19.326 µg/L	8.0337	19.326 ppb	8.0337	41.57%
SiO2†	77796.8	15810 µg/L	94.2	15810 ppb	94.2	0.60%
Si 251.611†	90698.4	7238.0 µg/L	47.25	7238.0 ppb	47.25	0.65%
Sn 189.927†	-82.9	-24.431 µg/L	0.5661	-24.431 ppb	0.5661	2.32%
Sr 421.552†	29693.3	169.56 µg/L	0.634	169.56 ppb	0.634	0.37%
Ti 334.940†	1455595.4	3417.3 µg/L	5.50	3417.3 ppb	5.50	0.16%
Tl 190.801†	-26.9	8.0542 µg/L	4.38219	8.0542 ppb	4.38219	54.41%
U 409.014†	-230.5	-43.004 µg/L	6.2888	-43.004 ppb	6.2888	14.62%
V 292.402†	11853.5	151.72 µg/L	0.667	151.72 ppb	0.667	0.44%
Zn 213.857†	11400.4	310.10 µg/L	1.556	310.10 ppb	1.556	0.50%

Sequence No.: 37
Sample ID: 241613006|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 327
Date Collected: 12/15/2009 08:05:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613006|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114104.0	114104.0	103	%			08:05:56
1	Al 396.153Radial†	196543.8	191536.0	99749	µg/L	99749	ppb	08:05:56
1	Ca 317.933Radial†	50283.4	48636.6	19156	µg/L	19156	ppb	08:06:01
1	Fe 238.204 Radial†	27351.3	26670.2	137070	µg/L	137070	ppb	08:06:01
1	K 766.490 Radial†	29862.6	28286.6	15870	µg/L	15870	ppb	08:05:56
1	Mg 279.077 IEC†	3719.3	3612.2	19956	µg/L	19956	ppb	08:06:01
1	Na 589.592 Radial†	6448.4	6795.6	1894.6	µg/L	1894.6	ppb	08:06:01
1	Sr 421.552†	47522.7	46434.0	265.16	µg/L	265.16	ppb	08:05:56
1	Sc 361.383	1980417.5	1980417.5	101.84	%			08:06:36
1	Y 371.029	1233659.0	1233659.0	104.44	%			08:06:36
1	Ag 328.068†	-1386.9	-1260.6	0.5350	µg/L	0.5350	ppb	08:06:41
1	As 188.979†	27.0	21.4	33.678	µg/L	33.678	ppb	08:07:02
1	B 249.677†	1917.8	1732.0	38.112	µg/L	38.112	ppb	08:06:41
1	Ba 233.527†	67304.2	66168.8	1771.3	µg/L	1771.3	ppb	08:06:41
1	Be 313.107†	21544.9	17490.5	9.7611	µg/L	9.7611	ppb	08:06:41
1	Cd 226.502†	332.1	423.6	1.3601	µg/L	1.3601	ppb	08:07:02
1	Co 228.616†	1381.3	1423.7	61.647	µg/L	61.647	ppb	08:07:02
1	Cr 267.716†	4250.1	4300.6	96.257	µg/L	96.257	ppb	08:06:41
1	Cu 324.752†	8264.3	4849.2	65.626	µg/L	65.626	ppb	08:06:41
1	Mn 257.610†	1177735.9	1156714.8	3877.3	µg/L	3877.3	ppb	08:06:36
1	Mo 202.031†	14.2	18.7	7.6364	µg/L	7.6364	ppb	08:07:02
1	Ni 231.604†	1624.3	1313.3	75.726	µg/L	75.726	ppb	08:07:02
1	P 214.914†	658.9	442.8	871.16	µg/L	871.16	ppb	08:07:02
1	Pb 220.353†	525.9	460.4	130.10	µg/L	130.10	ppb	08:07:02
1	S 181.975 Axial†	159.5	117.7	606.40	µg/L	606.40	ppb	08:07:02
1	Sb 206.836†	20.0	0.7	17.405	µg/L	17.405	ppb	08:07:02
1	Se 196.026†	-32.6	-42.8	26.285	µg/L	26.285	ppb	08:07:02
1	SiO2†	90262.1	86557.7	17590	µg/L	17590	ppb	08:06:41
1	Si 251.611†	102909.0	100737.3	7990.9	µg/L	7990.9	ppb	08:06:41
1	Sn 189.927†	-88.7	-111.5	-33.660	µg/L	-33.660	ppb	08:07:02
1	Ti 334.940†	2197368.5	2156920.3	5064.0	µg/L	5064.0	ppb	08:06:36
1	Tl 190.801†	-44.2	-24.1	11.759	µg/L	11.759	ppb	08:07:02
1	U 409.014†	742.4	-96.4	-34.898	µg/L	-34.898	ppb	08:06:36
1	V 292.402†	21124.3	20819.7	262.13	µg/L	262.13	ppb	08:06:41
1	Zn 213.857†	11460.4	10735.4	287.85	µg/L	287.85	ppb	08:06:41
2	Sc RADIAL	114318.6	114318.6	103	%			08:06:07
2	Al 396.153Radial†	196577.9	191209.3	99578	µg/L	99578	ppb	08:06:07
2	Ca 317.933Radial†	50632.3	48884.2	19253	µg/L	19253	ppb	08:06:12
2	Fe 238.204 Radial†	27572.1	26835.1	137920	µg/L	137920	ppb	08:06:12
2	K 766.490 Radial†	29901.7	28270.0	15860	µg/L	15860	ppb	08:06:07
2	Mg 279.077 IEC†	3753.1	3638.3	20100	µg/L	20100	ppb	08:06:12
2	Na 589.592 Radial†	6525.0	6858.3	1912.1	µg/L	1912.1	ppb	08:06:12
2	Sr 421.552†	47578.9	46401.7	264.97	µg/L	264.97	ppb	08:06:07
2	Sc 361.383	1968091.2	1968091.2	101.20	%			08:07:09
2	Y 371.029	1225867.4	1225867.4	103.78	%			08:07:09
2	Ag 328.068†	-1472.5	-1353.8	-0.2485	µg/L	-0.2485	ppb	08:07:15
2	As 188.979†	23.9	18.5	27.611	µg/L	27.611	ppb	08:07:35
2	B 249.677†	1901.9	1728.1	37.663	µg/L	37.663	ppb	08:07:15
2	Ba 233.527†	68346.6	67612.8	1809.9	µg/L	1809.9	ppb	08:07:15
2	Be 313.107†	21837.7	17912.3	10.043	µg/L	10.043	ppb	08:07:15
2	Cd 226.502†	334.2	427.7	1.4124	µg/L	1.4124	ppb	08:07:35
2	Co 228.616†	1375.3	1426.4	61.790	µg/L	61.790	ppb	08:07:35
2	Cr 267.716†	4241.2	4318.0	96.655	µg/L	96.655	ppb	08:07:15
2	Cu 324.752†	8329.3	4964.2	66.666	µg/L	66.666	ppb	08:07:15
2	Mn 257.610†	1169288.9	1155611.4	3873.7	µg/L	3873.7	ppb	08:07:09
2	Mo 202.031†	21.1	25.7	8.5034	µg/L	8.5034	ppb	08:07:35
2	Ni 231.604†	1621.8	1320.8	76.157	µg/L	76.157	ppb	08:07:35
2	P 214.914†	647.8	435.9	854.25	µg/L	854.25	ppb	08:07:35
2	Pb 220.353†	529.7	467.4	131.94	µg/L	131.94	ppb	08:07:35

2	S 181.975 Axial†	162.6	121.8	627.94 µg/L	627.94 ppb	08:07:35
2	Sb 206.836†	20.1	0.9	17.626 µg/L	17.626 ppb	08:07:35
2	Se 196.026†	-40.7	-51.1	14.413 µg/L	14.413 ppb	08:07:35
2	SiO2†	91588.6	88423.4	17969 µg/L	17969 ppb	08:07:15
2	Si 251.611†	104556.9	102998.6	8174.8 µg/L	8174.8 ppb	08:07:15
2	Sn 189.927†	-98.8	-121.9	-38.966 µg/L	-38.966 ppb	08:07:35
2	Ti 334.940†	2182202.1	2155448.2	5060.5 µg/L	5060.5 ppb	08:07:09
2	Tl 190.801†	-53.9	-34.0	-4.0935 µg/L	-4.0935 ppb	08:07:35
2	U 409.014†	771.8	-62.9	-31.655 µg/L	-31.655 ppb	08:07:09
2	V 292.402†	21438.2	21259.8	267.52 µg/L	267.52 ppb	08:07:15
2	Zn 213.857†	11608.0	10951.8	293.87 µg/L	293.87 ppb	08:07:15
3	Sc RADIAL	114437.0	114437.0	103 %		08:06:18
3	Al 396.153Radial†	197878.3	192276.0	100130 µg/L	100130 ppb	08:06:18
3	Ca 317.933Radial†	50416.4	48623.2	19150 µg/L	19150 ppb	08:06:23
3	Fe 238.204 Radial†	27450.8	26689.3	137170 µg/L	137170 ppb	08:06:23
3	K 766.490 Radial†	30090.2	28423.3	15946 µg/L	15946 ppb	08:06:18
3	Mg 279.077 IEC†	3740.0	3621.8	20009 µg/L	20009 ppb	08:06:23
3	Na 589.592 Radial†	6454.5	6783.2	1891.1 µg/L	1891.1 ppb	08:06:23
3	Sr 421.552†	47848.0	46615.5	266.19 µg/L	266.19 ppb	08:06:18
3	Sc 361.383	1977093.3	1977093.3	101.67 %		08:07:43
3	Y 371.029	1231638.5	1231638.5	104.26 %		08:07:43
3	Ag 328.068†	-1389.3	-1265.2	0.5221 µg/L	0.5221 ppb	08:07:48
3	As 188.979†	19.1	13.7	18.208 µg/L	18.208 ppb	08:08:09
3	B 249.677†	1853.4	1671.8	35.259 µg/L	35.259 ppb	08:07:48
3	Ba 233.527†	68250.6	67210.8	1799.2 µg/L	1799.2 ppb	08:07:48
3	Be 313.107†	21779.1	17756.4	9.9314 µg/L	9.9314 ppb	08:07:48
3	Cd 226.502†	335.3	427.2	1.4491 µg/L	1.4491 ppb	08:08:09
3	Co 228.616†	1379.8	1424.5	61.654 µg/L	61.654 ppb	08:08:09
3	Cr 267.716†	4279.8	4336.9	97.071 µg/L	97.071 ppb	08:07:48
3	Cu 324.752†	8273.0	4871.3	65.812 µg/L	65.812 ppb	08:07:48
3	Mn 257.610†	1180138.7	1161022.8	3891.7 µg/L	3891.7 ppb	08:07:43
3	Mo 202.031†	24.4	28.8	8.8469 µg/L	8.8469 ppb	08:08:09
3	Ni 231.604†	1630.0	1321.6	76.202 µg/L	76.202 ppb	08:08:09
3	P 214.914†	651.6	436.8	857.47 µg/L	857.47 ppb	08:08:09
3	Pb 220.353†	514.0	449.5	127.24 µg/L	127.24 ppb	08:08:09
3	S 181.975 Axial†	153.5	112.1	576.44 µg/L	576.44 ppb	08:08:09
3	Sb 206.836†	16.6	-2.6	14.003 µg/L	14.003 ppb	08:08:09
3	Se 196.026†	-42.1	-52.3	12.128 µg/L	12.128 ppb	08:08:09
3	SiO2†	91496.3	87920.6	17867 µg/L	17867 ppb	08:07:48
3	Si 251.611†	104280.5	102256.3	8113.6 µg/L	8113.6 ppb	08:07:48
3	Sn 189.927†	-95.4	-118.2	-37.161 µg/L	-37.161 ppb	08:08:09
3	Ti 334.940†	2201411.4	2164524.8	5081.9 µg/L	5081.9 ppb	08:07:43
3	Tl 190.801†	-44.5	-24.5	11.357 µg/L	11.357 ppb	08:08:09
3	U 409.014†	651.0	-185.1	-43.891 µg/L	-43.891 ppb	08:07:43
3	V 292.402†	21378.1	21104.2	265.56 µg/L	265.56 ppb	08:07:48
3	Zn 213.857†	11601.9	10893.5	292.30 µg/L	292.30 ppb	08:07:48

Mean Data: 241613006|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1975200.7	101.57	%	0.328				0.32%
Sc RADIAL	114286.6	103	%	0.2				0.15%
Y 371.029	1230388.3	104.16	%	0.342				0.33%
Ag 328.068†	-1293.2	0.2695	µg/L	0.44867	0.2695	ppb	0.44867	166.47%
Al 396.153Radial†	191673.8	99820	µg/L	284.6	99820	ppb	284.6	0.29%
As 188.979†	17.9	26.499	µg/L	7.7947	26.499	ppb	7.7947	29.41%
B 249.677†	1710.6	37.011	µg/L	1.5345	37.011	ppb	1.5345	4.15%
Ba 233.527†	66997.5	1793.5	µg/L	19.95	1793.5	ppb	19.95	1.11%
Be 313.107†	17719.7	9.9118	µg/L	0.14197	9.9118	ppb	0.14197	1.43%
Ca 317.933Radial†	48714.7	19186	µg/L	57.9	19186	ppb	57.9	0.30%
Cd 226.502†	426.2	1.4072	µg/L	0.04474	1.4072	ppb	0.04474	3.18%
Co 228.616†	1424.9	61.697	µg/L	0.0808	61.697	ppb	0.0808	0.13%
Cr 267.716†	4318.5	96.661	µg/L	0.4071	96.661	ppb	0.4071	0.42%
Cu 324.752†	4894.9	66.035	µg/L	0.5548	66.035	ppb	0.5548	0.84%
Fe 238.204 Radial†	26731.5	137390	µg/L	463.5	137390	ppb	463.5	0.34%
K 766.490 Radial†	28326.6	15892	µg/L	47.2	15892	ppb	47.2	0.30%
Mg 279.077 IEC†	3624.1	20022	µg/L	73.0	20022	ppb	73.0	0.36%
Mn 257.610†	1157783.0	3880.9	µg/L	9.51	3880.9	ppb	9.51	0.25%
Mo 202.031†	24.4	8.3289	µg/L	0.62382	8.3289	ppb	0.62382	7.49%
Na 589.592 Radial†	6812.3	1899.2	µg/L	11.22	1899.2	ppb	11.22	0.59%

Ni 231.604†	1318.6	76.029	µg/L	0.2626	76.029	ppb	0.2626	0.35%
P 214.914†	438.5	860.96	µg/L	8.977	860.96	ppb	8.977	1.04%
Pb 220.353†	459.1	129.76	µg/L	2.370	129.76	ppb	2.370	1.83%
S 181.975 Axial†	117.2	603.59	µg/L	25.867	603.59	ppb	25.867	4.29%
Sb 206.836†	-0.3	16.345	µg/L	2.0308	16.345	ppb	2.0308	12.43%
Se 196.026†	-48.7	17.609	µg/L	7.6003	17.609	ppb	7.6003	43.16%
SiO2†	87633.9	17809	µg/L	196.2	17809	ppb	196.2	1.10%
Si 251.611†	101997.4	8093.1	µg/L	93.64	8093.1	ppb	93.64	1.16%
Sn 189.927†	-117.2	-36.596	µg/L	2.6978	-36.596	ppb	2.6978	7.37%
Sr 421.552†	46483.7	265.44	µg/L	0.658	265.44	ppb	0.658	0.25%
Ti 334.940†	2158964.4	5068.8	µg/L	11.44	5068.8	ppb	11.44	0.23%
Tl 190.801†	-27.5	6.3409	µg/L	9.03872	6.3409	ppb	9.03872	142.55%
U 409.014†	-114.8	-36.815	µg/L	6.3392	-36.815	ppb	6.3392	17.22%
V 292.402†	21061.2	265.07	µg/L	2.726	265.07	ppb	2.726	1.03%
Zn 213.857†	10860.2	291.34	µg/L	3.123	291.34	ppb	3.123	1.07%

Sequence No.: 38
Sample ID: 241613007|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 328
Date Collected: 12/15/2009 08:08:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613007|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112199.9	112199.9	101	%			08:08:50
1	Al 396.153Radial†	61523.2	60861.8	31695	µg/L	31695	ppb	08:08:50
1	Ca 317.933Radial†	27391.3	26762.1	10540	µg/L	10540	ppb	08:09:11
1	Fe 238.204 Radial†	18066.9	17913.7	92066	µg/L	92066	ppb	08:09:11
1	K 766.490 Radial†	9866.6	8946.8	5019.4	µg/L	5019.4	ppb	08:08:50
1	Mg 279.077 IEC†	1498.2	1470.7	8071.7	µg/L	8071.7	ppb	08:09:11
1	Na 589.592 Radial†	1111.7	1608.8	448.52	µg/L	448.52	ppb	08:09:11
1	Sr 421.552†	18516.4	18449.1	105.35	µg/L	105.35	ppb	08:08:50
1	Sc 361.383	1986125.3	1986125.3	102.13	%			08:10:15
1	Y 371.029	1273060.5	1273060.5	107.77	%			08:10:15
1	Ag 328.068†	-966.2	-844.8	-0.1751	µg/L	-0.1751	ppb	08:10:21
1	As 188.979†	16.3	10.8	13.713	µg/L	13.713	ppb	08:10:41
1	B 249.677†	1393.2	1213.0	27.925	µg/L	27.925	ppb	08:10:21
1	Ba 233.527†	25927.2	25465.3	681.67	µg/L	681.67	ppb	08:10:21
1	Be 313.107†	13644.8	9694.4	5.4706	µg/L	5.4706	ppb	08:10:21
1	Cd 226.502†	176.6	270.4	0.4647	µg/L	0.4647	ppb	08:10:41
1	Co 228.616†	502.9	559.8	22.918	µg/L	22.918	ppb	08:10:41
1	Cr 267.716†	1280.0	1380.5	30.915	µg/L	30.915	ppb	08:10:41
1	Cu 324.752†	5514.4	2133.3	35.694	µg/L	35.694	ppb	08:10:21
1	Mn 257.610†	784432.6	768295.1	2575.4	µg/L	2575.4	ppb	08:10:15
1	Mo 202.031†	164.3	165.7	23.500	µg/L	23.500	ppb	08:10:41
1	Ni 231.604†	855.8	556.2	32.074	µg/L	32.074	ppb	08:10:41
1	P 214.914†	755.6	535.7	1112.2	µg/L	1112.2	ppb	08:10:41
1	Pb 220.353†	308.3	245.9	67.464	µg/L	67.464	ppb	08:10:41
1	S 181.975 Axial†	77.8	37.4	184.90	µg/L	184.90	ppb	08:10:41
1	Sb 206.836†	24.4	5.0	13.988	µg/L	13.988	ppb	08:10:41
1	Se 196.026†	-25.6	-35.9	8.7450	µg/L	8.7450	ppb	08:10:41
1	SiO2†	73321.4	69715.7	14167	µg/L	14167	ppb	08:10:21
1	Si 251.611†	83241.7	81190.0	6494.0	µg/L	6494.0	ppb	08:10:21
1	Sn 189.927†	-27.3	-51.1	-11.827	µg/L	-11.827	ppb	08:10:41
1	Ti 334.940†	1150899.2	1126086.8	2643.8	µg/L	2643.8	ppb	08:10:15
1	Tl 190.801†	-39.3	-19.2	-2.7003	µg/L	-2.7003	ppb	08:10:41
1	U 409.014†	324.1	-508.2	-68.377	µg/L	-68.377	ppb	08:10:15
1	V 292.402†	7372.5	7295.2	95.499	µg/L	95.499	ppb	08:10:21
1	Zn 213.857†	10788.5	10045.2	273.71	µg/L	273.71	ppb	08:10:21
2	Sc RADIAL	111903.0	111903.0	101	%			08:09:16
2	Al 396.153Radial†	62015.1	61512.8	32034	µg/L	32034	ppb	08:09:16
2	Ca 317.933Radial†	27273.3	26716.8	10522	µg/L	10522	ppb	08:09:37
2	Fe 238.204 Radial†	18021.6	17916.2	92079	µg/L	92079	ppb	08:09:37
2	K 766.490 Radial†	10005.3	9110.7	5111.3	µg/L	5111.3	ppb	08:09:16
2	Mg 279.077 IEC†	1495.7	1472.1	8079.8	µg/L	8079.8	ppb	08:09:37
2	Na 589.592 Radial†	1087.8	1587.9	442.71	µg/L	442.71	ppb	08:09:37
2	Sr 421.552†	18640.5	18621.3	106.34	µg/L	106.34	ppb	08:09:16
2	Sc 361.383	1984144.5	1984144.5	102.03	%			08:10:49
2	Y 371.029	1271739.0	1271739.0	107.66	%			08:10:49
2	Ag 328.068†	-921.0	-801.5	0.2366	µg/L	0.2366	ppb	08:10:54
2	As 188.979†	10.9	5.6	3.2591	µg/L	3.2591	ppb	08:11:15
2	B 249.677†	1353.3	1175.2	26.150	µg/L	26.150	ppb	08:10:54
2	Ba 233.527†	25680.4	25248.8	675.87	µg/L	675.87	ppb	08:10:54
2	Be 313.107†	13567.3	9631.8	5.4366	µg/L	5.4366	ppb	08:10:54
2	Cd 226.502†	176.8	270.7	0.4753	µg/L	0.4753	ppb	08:11:15
2	Co 228.616†	513.1	570.3	23.493	µg/L	23.493	ppb	08:11:15
2	Cr 267.716†	1296.0	1397.4	31.292	µg/L	31.292	ppb	08:11:15
2	Cu 324.752†	5472.9	2098.0	35.434	µg/L	35.434	ppb	08:10:54
2	Mn 257.610†	778312.8	763063.7	2558.0	µg/L	2558.0	ppb	08:10:49
2	Mo 202.031†	155.8	157.6	22.532	µg/L	22.532	ppb	08:11:15
2	Ni 231.604†	874.3	575.2	33.167	µg/L	33.167	ppb	08:11:15
2	P 214.914†	753.6	534.4	1109.3	µg/L	1109.3	ppb	08:11:15
2	Pb 220.353†	303.8	241.7	66.377	µg/L	66.377	ppb	08:11:15

2	S 181.975 Axial†	78.0	37.6	186.24	µg/L	186.24 ppb	08:11:15
2	Sb 206.836†	17.5	-1.8	6.7406	µg/L	6.7406 ppb	08:11:15
2	Se 196.026†	-30.2	-40.4	2.0774	µg/L	2.0774 ppb	08:11:15
2	SiO2†	73267.1	69734.2	14171	µg/L	14171 ppb	08:10:54
2	Si 251.611†	83221.8	81251.9	6500.0	µg/L	6500.0 ppb	08:10:54
2	Sn 189.927†	-38.8	-62.4	-17.721	µg/L	-17.721 ppb	08:11:15
2	Ti 334.940†	1140855.5	1117367.8	2623.3	µg/L	2623.3 ppb	08:10:49
2	Tl 190.801†	-35.9	-15.9	2.4191	µg/L	2.4191 ppb	08:11:15
2	U 409.014†	360.1	-472.6	-64.776	µg/L	-64.776 ppb	08:10:49
2	V 292.402†	7340.1	7270.7	95.204	µg/L	95.204 ppb	08:10:54
2	Zn 213.857†	10692.0	9961.1	271.33	µg/L	271.33 ppb	08:10:54
3	Sc RADIAL	112196.9	112196.9	101	%		08:09:42
3	Al 396.153Radial†	61961.4	61298.1	31922	µg/L	31922 ppb	08:09:42
3	Ca 317.933Radial†	27184.7	26558.0	10460	µg/L	10460 ppb	08:10:03
3	Fe 238.204 Radial†	17959.3	17807.4	91520	µg/L	91520 ppb	08:10:03
3	K 766.490 Radial†	10055.3	9134.3	5124.6	µg/L	5124.6 ppb	08:09:42
3	Mg 279.077 IEC†	1498.4	1470.9	8073.9	µg/L	8073.9 ppb	08:10:03
3	Na 589.592 Radial†	1087.8	1585.2	441.93	µg/L	441.93 ppb	08:10:03
3	Sr 421.552†	18660.0	18592.1	106.17	µg/L	106.17 ppb	08:09:42
3	Sc 361.383	1988406.1	1988406.1	102.25	%		08:11:22
3	Y 371.029	1273844.4	1273844.4	107.84	%		08:11:22
3	Ag 328.068†	-959.7	-837.3	-0.1523	µg/L	-0.1523 ppb	08:11:28
3	As 188.979†	16.7	11.3	14.625	µg/L	14.625 ppb	08:11:48
3	B 249.677†	1362.1	1181.0	26.599	µg/L	26.599 ppb	08:11:28
3	Ba 233.527†	25798.2	25310.1	677.51	µg/L	677.51 ppb	08:11:28
3	Be 313.107†	13572.4	9608.3	5.4241	µg/L	5.4241 ppb	08:11:28
3	Cd 226.502†	189.5	282.8	0.8618	µg/L	0.8618 ppb	08:11:48
3	Co 228.616†	508.9	565.1	23.252	µg/L	23.252 ppb	08:11:48
3	Cr 267.716†	1280.3	1379.3	30.887	µg/L	30.887 ppb	08:11:48
3	Cu 324.752†	5456.4	2070.4	35.107	µg/L	35.107 ppb	08:11:28
3	Mn 257.610†	776402.1	759560.1	2546.2	µg/L	2546.2 ppb	08:11:22
3	Mo 202.031†	170.7	171.8	24.218	µg/L	24.218 ppb	08:11:48
3	Ni 231.604†	882.7	581.6	33.535	µg/L	33.535 ppb	08:11:48
3	P 214.914†	762.6	541.7	1126.5	µg/L	1126.5 ppb	08:11:48
3	Pb 220.353†	309.8	247.0	67.784	µg/L	67.784 ppb	08:11:48
3	S 181.975 Axial†	77.3	36.7	181.54	µg/L	181.54 ppb	08:11:48
3	Sb 206.836†	17.7	-1.6	6.8684	µg/L	6.8684 ppb	08:11:48
3	Se 196.026†	-20.4	-30.7	16.126	µg/L	16.126 ppb	08:11:48
3	SiO2†	72651.0	68977.7	14017	µg/L	14017 ppb	08:11:28
3	Si 251.611†	82387.2	80260.9	6419.6	µg/L	6419.6 ppb	08:11:28
3	Sn 189.927†	-29.0	-52.8	-12.775	µg/L	-12.775 ppb	08:11:48
3	Ti 334.940†	1139496.3	1113642.0	2614.6	µg/L	2614.6 ppb	08:11:22
3	Tl 190.801†	-33.3	-13.3	6.4412	µg/L	6.4412 ppb	08:11:48
3	U 409.014†	385.9	-448.0	-62.191	µg/L	-62.191 ppb	08:11:22
3	V 292.402†	7311.7	7227.5	94.653	µg/L	94.653 ppb	08:11:28
3	Zn 213.857†	10657.8	9905.3	269.81	µg/L	269.81 ppb	08:11:28

Mean Data: 241613007|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1986225.3	102.14	%	0.110				0.11%
Sc RADIAL	112100.0	101	%	0.2				0.15%
Y 371.029	1272881.3	107.76	%	0.090				0.08%
Ag 328.068†	-827.9	-0.0303	µg/L	0.23143	-0.0303	ppb	0.23143	764.67%
Al 396.153Radial†	61224.2	31884	µg/L	172.8	31884	ppb	172.8	0.54%
As 188.979†	9.2	10.532	µg/L	6.3154	10.532	ppb	6.3154	59.96%
B 249.677†	1189.7	26.891	µg/L	0.9229	26.891	ppb	0.9229	3.43%
Ba 233.527†	25341.4	678.35	µg/L	2.987	678.35	ppb	2.987	0.44%
Be 313.107†	9644.8	5.4438	µg/L	0.02407	5.4438	ppb	0.02407	0.44%
Ca 317.933Radial†	26679.0	10508	µg/L	42.2	10508	ppb	42.2	0.40%
Cd 226.502†	274.6	0.6006	µg/L	0.22627	0.6006	ppb	0.22627	37.68%
Co 228.616†	565.1	23.221	µg/L	0.2890	23.221	ppb	0.2890	1.24%
Cr 267.716†	1385.7	31.031	µg/L	0.2259	31.031	ppb	0.2259	0.73%
Cu 324.752†	2100.6	35.412	µg/L	0.2940	35.412	ppb	0.2940	0.83%
Fe 238.204 Radial†	17879.1	91888	µg/L	319.2	91888	ppb	319.2	0.35%
K 766.490 Radial†	9063.9	5085.1	µg/L	57.28	5085.1	ppb	57.28	1.13%
Mg 279.077 IEC†	1471.2	8075.1	µg/L	4.16	8075.1	ppb	4.16	0.05%
Mn 257.610†	763639.6	2559.9	µg/L	14.70	2559.9	ppb	14.70	0.57%
Mo 202.031†	165.0	23.417	µg/L	0.8462	23.417	ppb	0.8462	3.61%
Na 589.592 Radial†	1594.0	444.39	µg/L	3.598	444.39	ppb	3.598	0.81%

Ni 231.604†	571.0	32.925	µg/L	0.7602	32.925	ppb	0.7602	2.31%
P 214.914†	537.3	1116.0	µg/L	9.21	1116.0	ppb	9.21	0.83%
Pb 220.353†	244.9	67.208	µg/L	0.7373	67.208	ppb	0.7373	1.10%
S 181.975 Axial†	37.2	184.23	µg/L	2.423	184.23	ppb	2.423	1.32%
Sb 206.836†	0.5	9.1989	µg/L	4.14769	9.1989	ppb	4.14769	45.09%
Se 196.026†	-35.7	8.9829	µg/L	7.02742	8.9829	ppb	7.02742	78.23%
SiO2†	69475.9	14119	µg/L	87.7	14119	ppb	87.7	0.62%
Si 251.611†	80900.9	6471.2	µg/L	44.77	6471.2	ppb	44.77	0.69%
Sn 189.927†	-55.4	-14.107	µg/L	3.1649	-14.107	ppb	3.1649	22.43%
Sr 421.552†	18554.2	105.95	µg/L	0.526	105.95	ppb	0.526	0.50%
Ti 334.940†	1119032.2	2627.2	µg/L	15.00	2627.2	ppb	15.00	0.57%
Tl 190.801†	-16.1	2.0533	µg/L	4.58169	2.0533	ppb	4.58169	223.13%
U 409.014†	-476.3	-65.115	µg/L	3.1071	-65.115	ppb	3.1071	4.77%
V 292.402†	7264.5	95.119	µg/L	0.4294	95.119	ppb	0.4294	0.45%
Zn 213.857†	9970.5	271.62	µg/L	1.967	271.62	ppb	1.967	0.72%

Sequence No.: 39
Sample ID: 241613008|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 329
Date Collected: 12/15/2009 08:11:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613008|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114032.2	114032.2	102	%			08:12:31
1	Al 396.153Radial†	232855.4	227095.7	118270	µg/L	118270	ppb	08:12:31
1	Ca 317.933Radial†	110515.6	107452.1	42320	µg/L	42320	ppb	08:12:31
1	Fe 238.204 Radial†	24251.2	23661.4	121610	µg/L	121610	ppb	08:12:36
1	K 766.490 Radial†	28182.8	26665.5	14960	µg/L	14960	ppb	08:12:31
1	Mg 279.077 IEC†	3733.3	3628.2	20068	µg/L	20068	ppb	08:12:36
1	Na 589.592 Radial†	6046.5	6407.2	1786.3	µg/L	1786.3	ppb	08:12:36
1	Sr 421.552†	57338.0	56042.6	320.03	µg/L	320.03	ppb	08:12:31
1	Sc 361.383	1985020.5	1985020.5	102.07	%			08:13:10
1	Y 371.029	1229479.6	1229479.6	104.08	%			08:13:10
1	Ag 328.068†	-1209.3	-1083.5	0.7975	µg/L	0.7975	ppb	08:13:15
1	As 188.979†	30.7	25.0	38.329	µg/L	38.329	ppb	08:13:36
1	B 249.677†	1825.8	1637.6	38.546	µg/L	38.546	ppb	08:13:15
1	Ba 233.527†	68536.2	67222.6	1799.4	µg/L	1799.4	ppb	08:13:15
1	Be 313.107†	22281.6	18163.1	10.375	µg/L	10.375	ppb	08:13:15
1	Cd 226.502†	287.7	379.3	1.2818	µg/L	1.2818	ppb	08:13:36
1	Co 228.616†	1174.9	1218.4	52.161	µg/L	52.161	ppb	08:13:36
1	Cr 267.716†	3825.3	3874.8	86.714	µg/L	86.714	ppb	08:13:15
1	Cu 324.752†	8647.0	5205.3	64.961	µg/L	64.961	ppb	08:13:15
1	Mn 257.610†	986001.2	966194.8	3239.6	µg/L	3239.6	ppb	08:13:10
1	Mo 202.031†	-15.3	-10.1	3.5660	µg/L	3.5660	ppb	08:13:36
1	Ni 231.604†	1548.4	1235.2	71.223	µg/L	71.223	ppb	08:13:36
1	P 214.914†	568.4	352.7	691.57	µg/L	691.57	ppb	08:13:36
1	Pb 220.353†	471.8	406.3	117.44	µg/L	117.44	ppb	08:13:36
1	S 181.975 Axial†	130.2	88.8	453.65	µg/L	453.65	ppb	08:13:36
1	Sb 206.836†	26.5	7.0	20.261	µg/L	20.261	ppb	08:13:36
1	Se 196.026†	-38.9	-48.9	9.4547	µg/L	9.4547	ppb	08:13:36
1	SiO2†	87458.9	83605.8	16990	µg/L	16990	ppb	08:13:15
1	Si 251.611†	99683.5	97343.0	7732.9	µg/L	7732.9	ppb	08:13:15
1	Sn 189.927†	-136.4	-158.0	-54.556	µg/L	-54.556	ppb	08:13:36
1	Ti 334.940†	2007431.0	1965839.2	4614.0	µg/L	4614.0	ppb	08:13:10
1	Tl 190.801†	-44.3	-24.1	2.9002	µg/L	2.9002	ppb	08:13:36
1	U 409.014†	372.5	-460.5	-68.317	µg/L	-68.317	ppb	08:13:15
1	V 292.402†	18661.5	18358.9	231.13	µg/L	231.13	ppb	08:13:15
1	Zn 213.857†	8753.5	8057.4	213.82	µg/L	213.82	ppb	08:13:15
2	Sc RADIAL	114023.4	114023.4	102	%			08:12:42
2	Al 396.153Radial†	232601.1	226865.1	118150	µg/L	118150	ppb	08:12:42
2	Ca 317.933Radial†	109923.7	106882.7	42096	µg/L	42096	ppb	08:12:42
2	Fe 238.204 Radial†	24244.6	23656.8	121580	µg/L	121580	ppb	08:12:47
2	K 766.490 Radial†	28269.0	26751.8	15008	µg/L	15008	ppb	08:12:42
2	Mg 279.077 IEC†	3728.7	3623.9	20044	µg/L	20044	ppb	08:12:47
2	Na 589.592 Radial†	6027.3	6389.0	1781.2	µg/L	1781.2	ppb	08:12:47
2	Sr 421.552†	57109.9	55824.3	318.78	µg/L	318.78	ppb	08:12:42
2	Sc 361.383	1980561.9	1980561.9	101.85	%			08:13:43
2	Y 371.029	1227062.0	1227062.0	103.88	%			08:13:43
2	Ag 328.068†	-1278.5	-1154.0	0.1259	µg/L	0.1259	ppb	08:13:48
2	As 188.979†	32.4	26.7	41.696	µg/L	41.696	ppb	08:14:09
2	B 249.677†	1803.8	1619.9	37.728	µg/L	37.728	ppb	08:13:48
2	Ba 233.527†	68558.3	67395.4	1804.0	µg/L	1804.0	ppb	08:13:48
2	Be 313.107†	22271.8	18202.7	10.405	µg/L	10.405	ppb	08:13:48
2	Cd 226.502†	281.5	373.8	1.1320	µg/L	1.1320	ppb	08:14:09
2	Co 228.616†	1180.4	1226.4	52.592	µg/L	52.592	ppb	08:14:09
2	Cr 267.716†	3848.8	3906.3	87.415	µg/L	87.415	ppb	08:13:48
2	Cu 324.752†	8701.7	5278.1	65.500	µg/L	65.500	ppb	08:13:48
2	Mn 257.610†	979655.5	962138.6	3226.0	µg/L	3226.0	ppb	08:13:43
2	Mo 202.031†	-1.1	3.7	5.2271	µg/L	5.2271	ppb	08:14:09
2	Ni 231.604†	1551.5	1241.7	71.599	µg/L	71.599	ppb	08:14:09
2	P 214.914†	565.9	351.5	688.84	µg/L	688.84	ppb	08:14:09
2	Pb 220.353†	471.4	406.9	117.61	µg/L	117.61	ppb	08:14:09

2	S 181.975 Axial†	129.5	88.3	451.44 µg/L	451.44 ppb	08:14:09
2	Sb 206.836†	17.3	-1.9	10.811 µg/L	10.811 ppb	08:14:09
2	Se 196.026†	-41.5	-51.5	5.4873 µg/L	5.4873 ppb	08:14:09
2	SiO2†	87611.5	83948.6	17060 µg/L	17060 ppb	08:13:48
2	Si 251.611†	99974.9	97849.1	7774.3 µg/L	7774.3 ppb	08:13:48
2	Sn 189.927†	-133.3	-155.3	-53.208 µg/L	-53.208 ppb	08:14:09
2	Ti 334.940†	1997867.8	1960876.5	4602.3 µg/L	4602.3 ppb	08:13:43
2	Tl 190.801†	-36.1	-16.1	15.528 µg/L	15.528 ppb	08:14:09
2	U 409.014†	390.3	-442.2	-66.467 µg/L	-66.467 ppb	08:13:48
2	V 292.402†	18640.2	18379.1	231.38 µg/L	231.38 ppb	08:13:48
2	Zn 213.857†	8784.0	8106.7	215.21 µg/L	215.21 ppb	08:13:48
3	Sc RADIAL	113965.7	113965.7	102 %		08:12:53
3	Al 396.153Radial†	231984.4	226377.7	117890 µg/L	117890 ppb	08:12:53
3	Ca 317.933Radial†	109551.7	106573.8	41974 µg/L	41974 ppb	08:12:53
3	Fe 238.204 Radial†	24301.3	23724.1	121930 µg/L	121930 ppb	08:12:58
3	K 766.490 Radial†	28073.2	26574.6	14909 µg/L	14909 ppb	08:12:53
3	Mg 279.077 IEC†	3720.6	3617.9	20010 µg/L	20010 ppb	08:12:58
3	Na 589.592 Radial†	6085.0	6448.3	1797.8 µg/L	1797.8 ppb	08:12:58
3	Sr 421.552†	56951.5	55697.8	318.06 µg/L	318.06 ppb	08:12:53
3	Sc 361.383	1982382.1	1982382.1	101.94 %		08:14:16
3	Y 371.029	1228429.4	1228429.4	103.99 %		08:14:16
3	Ag 328.068†	-1351.4	-1224.4	-0.5149 µg/L	-0.5149 ppb	08:14:21
3	As 188.979†	21.7	16.2	20.736 µg/L	20.736 ppb	08:14:42
3	B 249.677†	1840.4	1654.3	39.228 µg/L	39.228 ppb	08:14:21
3	Ba 233.527†	68710.2	67482.7	1806.4 µg/L	1806.4 ppb	08:14:21
3	Be 313.107†	22267.7	18178.6	10.384 µg/L	10.384 ppb	08:14:21
3	Cd 226.502†	279.5	371.6	1.0392 µg/L	1.0392 ppb	08:14:42
3	Co 228.616†	1176.0	1221.0	52.286 µg/L	52.286 ppb	08:14:42
3	Cr 267.716†	3841.3	3895.4	87.174 µg/L	87.174 ppb	08:14:21
3	Cu 324.752†	8706.0	5274.4	65.547 µg/L	65.547 ppb	08:14:21
3	Mn 257.610†	984299.7	965811.4	3238.3 µg/L	3238.3 ppb	08:14:16
3	Mo 202.031†	-9.3	-4.2	4.2833 µg/L	4.2833 ppb	08:14:42
3	Ni 231.604†	1561.6	1250.2	72.090 µg/L	72.090 ppb	08:14:42
3	P 214.914†	569.8	354.8	695.82 µg/L	695.82 ppb	08:14:42
3	Pb 220.353†	475.1	410.1	118.43 µg/L	118.43 ppb	08:14:42
3	S 181.975 Axial†	134.5	93.1	476.96 µg/L	476.96 ppb	08:14:42
3	Sb 206.836†	28.0	8.6	21.985 µg/L	21.985 ppb	08:14:42
3	Se 196.026†	-40.6	-50.6	7.0844 µg/L	7.0844 ppb	08:14:42
3	SiO2†	87189.0	83455.2	16960 µg/L	16960 ppb	08:14:21
3	Si 251.611†	99363.1	97158.8	7717.6 µg/L	7717.6 ppb	08:14:21
3	Sn 189.927†	-123.6	-145.6	-48.169 µg/L	-48.169 ppb	08:14:42
3	Ti 334.940†	2006068.8	1967120.4	4617.0 µg/L	4617.0 ppb	08:14:16
3	Tl 190.801†	-36.1	-16.1	15.765 µg/L	15.765 ppb	08:14:42
3	U 409.014†	326.7	-505.0	-72.889 µg/L	-72.889 ppb	08:14:21
3	V 292.402†	18681.7	18403.0	231.68 µg/L	231.68 ppb	08:14:21
3	Zn 213.857†	8776.3	8091.2	214.74 µg/L	214.74 ppb	08:14:21

Mean Data: 241613008|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1982654.9	101.95	%	0.115				0.11%
Sc RADIAL	114007.1	102	%	0.0				0.03%
Y 371.029	1228323.6	103.98	%	0.103				0.10%
Ag 328.068†	-1154.0	0.1362	µg/L	0.65624	0.1362	ppb	0.65624	481.92%
Al 396.153Radial†	226779.5	118100	µg/L	190.9	118100	ppb	190.9	0.16%
As 188.979†	22.6	33.587	µg/L	11.2563	33.587	ppb	11.2563	33.51%
B 249.677†	1637.3	38.500	µg/L	0.7511	38.500	ppb	0.7511	1.95%
Ba 233.527†	67366.9	1803.3	µg/L	3.54	1803.3	ppb	3.54	0.20%
Be 313.107†	18181.5	10.388	µg/L	0.0157	10.388	ppb	0.0157	0.15%
Ca 317.933Radial†	106969.5	42130	µg/L	175.5	42130	ppb	175.5	0.42%
Cd 226.502†	374.9	1.1510	µg/L	0.12241	1.1510	ppb	0.12241	10.64%
Co 228.616†	1221.9	52.347	µg/L	0.2221	52.347	ppb	0.2221	0.42%
Cr 267.716†	3892.1	87.101	µg/L	0.3563	87.101	ppb	0.3563	0.41%
Cu 324.752†	5252.6	65.336	µg/L	0.3252	65.336	ppb	0.3252	0.50%
Fe 238.204 Radial†	23680.8	121710	µg/L	193.2	121710	ppb	193.2	0.16%
K 766.490 Radial†	26664.0	14959	µg/L	49.7	14959	ppb	49.7	0.33%
Mg 279.077 IEC†	3623.3	20040	µg/L	29.1	20040	ppb	29.1	0.15%
Mn 257.610†	964714.9	3234.6	µg/L	7.48	3234.6	ppb	7.48	0.23%
Mo 202.031†	-3.5	4.3588	µg/L	0.83312	4.3588	ppb	0.83312	19.11%
Na 589.592 Radial†	6414.9	1788.4	µg/L	8.47	1788.4	ppb	8.47	0.47%

Ni 231.604†	1242.4	71.638	µg/L	0.4346	71.638	ppb	0.4346	0.61%
P 214.914†	353.0	692.08	µg/L	3.517	692.08	ppb	3.517	0.51%
Pb 220.353†	407.7	117.83	µg/L	0.531	117.83	ppb	0.531	0.45%
S 181.975 Axial†	90.1	460.68	µg/L	14.142	460.68	ppb	14.142	3.07%
Sb 206.836†	4.6	17.686	µg/L	6.0160	17.686	ppb	6.0160	34.02%
Se 196.026†	-50.4	7.3421	µg/L	1.99624	7.3421	ppb	1.99624	27.19%
SiO2†	83669.9	17003	µg/L	51.4	17003	ppb	51.4	0.30%
Si 251.611†	97450.3	7741.6	µg/L	29.34	7741.6	ppb	29.34	0.38%
Sn 189.927†	-152.9	-51.978	µg/L	3.3667	-51.978	ppb	3.3667	6.48%
Sr 421.552†	55854.9	318.95	µg/L	0.996	318.95	ppb	0.996	0.31%
Ti 334.940†	1964612.0	4611.1	µg/L	7.74	4611.1	ppb	7.74	0.17%
Tl 190.801†	-18.8	11.398	µg/L	7.3602	11.398	ppb	7.3602	64.57%
U 409.014†	-469.3	-69.224	µg/L	3.3058	-69.224	ppb	3.3058	4.78%
V 292.402†	18380.3	231.40	µg/L	0.278	231.40	ppb	0.278	0.12%
Zn 213.857†	8085.1	214.59	µg/L	0.708	214.59	ppb	0.708	0.33%

Sequence No.: 40
Sample ID: 241613009|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 330
Date Collected: 12/15/2009 08:14:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613009|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112679.7	112679.7	101	%			08:15:24
1	Al 396.153Radial†	153069.8	151020.7	78649	µg/L	78649	ppb	08:15:24
1	Ca 317.933Radial†	131420.8	129394.3	50962	µg/L	50962	ppb	08:15:24
1	Fe 238.204 Radial†	25970.4	25643.5	131790	µg/L	131790	ppb	08:15:30
1	K 766.490 Radial†	30536.2	29320.1	16449	µg/L	16449	ppb	08:15:24
1	Mg 279.077 IEC†	4144.4	4077.9	22562	µg/L	22562	ppb	08:15:30
1	Na 589.592 Radial†	4143.9	4599.0	1282.2	µg/L	1282.2	ppb	08:15:30
1	Sr 421.552†	60376.9	59715.7	341.00	µg/L	341.00	ppb	08:15:24
1	Sc 361.383	1970381.9	1970381.9	101.32	%			08:16:03
1	Y 371.029	1203529.5	1203529.5	101.89	%			08:16:03
1	Ag 328.068†	-1384.2	-1264.9	-0.0391	µg/L	-0.0391	ppb	08:16:08
1	As 188.979†	38.1	32.5	45.138	µg/L	45.138	ppb	08:16:29
1	B 249.677†	1800.0	1625.3	34.768	µg/L	34.768	ppb	08:16:08
1	Ba 233.527†	49803.7	49233.2	1318.0	µg/L	1318.0	ppb	08:16:08
1	Be 313.107†	17560.4	13665.7	8.1206	µg/L	8.1206	ppb	08:16:08
1	Cd 226.502†	291.9	385.6	0.6716	µg/L	0.6716	ppb	08:16:29
1	Co 228.616†	1369.4	1418.9	66.508	µg/L	66.508	ppb	08:16:29
1	Cr 267.716†	4045.9	4120.4	92.207	µg/L	92.207	ppb	08:16:08
1	Cu 324.752†	9725.8	6333.0	75.564	µg/L	75.564	ppb	08:16:08
1	Mn 257.610†	1068634.8	1054927.1	3536.9	µg/L	3536.9	ppb	08:16:03
1	Mo 202.031†	22.0	26.6	8.3711	µg/L	8.3711	ppb	08:16:29
1	Ni 231.604†	1562.3	1260.2	72.665	µg/L	72.665	ppb	08:16:29
1	P 214.914†	630.5	418.2	811.94	µg/L	811.94	ppb	08:16:29
1	Pb 220.353†	444.0	382.2	107.43	µg/L	107.43	ppb	08:16:29
1	S 181.975 Axial†	144.6	103.9	532.61	µg/L	532.61	ppb	08:16:29
1	Sb 206.836†	27.8	8.5	13.516	µg/L	13.516	ppb	08:16:29
1	Se 196.026†	-42.0	-52.2	11.799	µg/L	11.799	ppb	08:16:29
1	SiO2†	97191.9	93848.4	19072	µg/L	19072	ppb	08:16:08
1	Si 251.611†	111069.4	109306.0	8775.2	µg/L	8775.2	ppb	08:16:08
1	Sn 189.927†	-132.4	-155.1	-49.455	µg/L	-49.455	ppb	08:16:29
1	Ti 334.940†	1132545.6	1116976.4	2620.1	µg/L	2620.1	ppb	08:16:03
1	Tl 190.801†	-26.7	-7.0	14.898	µg/L	14.898	ppb	08:16:29
1	U 409.014†	376.0	-454.4	-69.393	µg/L	-69.393	ppb	08:16:08
1	V 292.402†	19584.9	19406.1	244.61	µg/L	244.61	ppb	08:16:08
1	Zn 213.857†	11197.0	10532.7	282.61	µg/L	282.61	ppb	08:16:08
2	Sc RADIAL	113297.9	113297.9	102	%			08:15:35
2	Al 396.153Radial†	155044.5	152135.5	79229	µg/L	79229	ppb	08:15:35
2	Ca 317.933Radial†	132952.5	130190.8	51276	µg/L	51276	ppb	08:15:35
2	Fe 238.204 Radial†	25921.6	25455.7	130830	µg/L	130830	ppb	08:15:41
2	K 766.490 Radial†	30956.4	29568.3	16589	µg/L	16589	ppb	08:15:35
2	Mg 279.077 IEC†	4132.8	4044.2	22376	µg/L	22376	ppb	08:15:41
2	Na 589.592 Radial†	4086.8	4520.5	1260.3	µg/L	1260.3	ppb	08:15:41
2	Sr 421.552†	61138.5	60138.5	343.42	µg/L	343.42	ppb	08:15:35
2	Sc 361.383	1947674.9	1947674.9	100.15	%			08:16:35
2	Y 371.029	1190533.1	1190533.1	100.79	%			08:16:35
2	Ag 328.068†	-1376.5	-1273.1	-0.1644	µg/L	-0.1644	ppb	08:16:40
2	As 188.979†	37.9	32.7	45.554	µg/L	45.554	ppb	08:17:01
2	B 249.677†	1875.0	1720.9	39.556	µg/L	39.556	ppb	08:16:40
2	Ba 233.527†	50033.0	50035.3	1339.5	µg/L	1339.5	ppb	08:16:40
2	Be 313.107†	17753.4	14060.5	8.3835	µg/L	8.3835	ppb	08:16:40
2	Cd 226.502†	297.8	394.8	1.0046	µg/L	1.0046	ppb	08:17:01
2	Co 228.616†	1377.0	1442.2	67.692	µg/L	67.692	ppb	08:17:01
2	Cr 267.716†	4058.5	4179.4	93.531	µg/L	93.531	ppb	08:16:40
2	Cu 324.752†	9786.3	6505.2	76.642	µg/L	76.642	ppb	08:16:40
2	Mn 257.610†	1058498.6	1057102.6	3544.1	µg/L	3544.1	ppb	08:16:35
2	Mo 202.031†	24.0	28.8	8.5943	µg/L	8.5943	ppb	08:17:01
2	Ni 231.604†	1580.3	1296.2	74.738	µg/L	74.738	ppb	08:17:01
2	P 214.914†	608.9	403.9	780.76	µg/L	780.76	ppb	08:17:01
2	Pb 220.353†	456.3	399.6	112.14	µg/L	112.14	ppb	08:17:01

2	S 181.975 Axial†	138.4	99.4	508.62 µg/L	508.62 ppb	08:17:01
2	Sb 206.836†	24.2	5.3	10.080 µg/L	10.080 ppb	08:17:01
2	Se 196.026†	-46.0	-56.8	4.4476 µg/L	4.4476 ppb	08:17:01
2	SiO2†	97835.7	95609.6	19430 µg/L	19430 ppb	08:16:40
2	Si 251.611†	111756.3	111269.9	8934.6 µg/L	8934.6 ppb	08:16:40
2	Sn 189.927†	-130.7	-154.8	-49.414 µg/L	-49.414 ppb	08:17:01
2	Ti 334.940†	1119275.5	1116758.3	2619.6 µg/L	2619.6 ppb	08:16:35
2	Tl 190.801†	-27.2	-7.8	13.677 µg/L	13.677 ppb	08:17:01
2	U 409.014†	312.1	-513.9	-75.225 µg/L	-75.225 ppb	08:16:40
2	V 292.402†	19714.1	19760.4	248.79 µg/L	248.79 ppb	08:16:40
2	Zn 213.857†	11254.5	10719.0	287.97 µg/L	287.97 ppb	08:16:40
3	Sc RADIAL	113317.2	113317.2	102 %		08:15:46
3	Al 396.153Radial†	154359.0	151436.5	78865 µg/L	78865 ppb	08:15:46
3	Ca 317.933Radial†	132270.4	129498.6	51003 µg/L	51003 ppb	08:15:46
3	Fe 238.204 Radial†	25719.1	25252.4	129780 µg/L	129780 ppb	08:15:52
3	K 766.490 Radial†	30825.3	29434.4	16513 µg/L	16513 ppb	08:15:46
3	Mg 279.077 IEC†	4109.7	4020.8	22247 µg/L	22247 ppb	08:15:52
3	Na 589.592 Radial†	4120.6	4553.0	1269.4 µg/L	1269.4 ppb	08:15:52
3	Sr 421.552†	60839.7	59834.8	341.68 µg/L	341.68 ppb	08:15:46
3	Sc 361.383	1966750.4	1966750.4	101.13 %		08:17:07
3	Y 371.029	1201991.1	1201991.1	101.76 %		08:17:07
3	Ag 328.068†	-1358.1	-1241.5	0.0290 µg/L	0.0290 ppb	08:17:13
3	As 188.979†	32.7	27.2	34.825 µg/L	34.825 ppb	08:17:33
3	B 249.677†	1838.8	1666.9	37.353 µg/L	37.353 ppb	08:17:13
3	Ba 233.527†	49909.9	49429.0	1323.3 µg/L	1323.3 ppb	08:17:13
3	Be 313.107†	17596.1	13733.0	8.1683 µg/L	8.1683 ppb	08:17:13
3	Cd 226.502†	314.1	408.1	1.4584 µg/L	1.4584 ppb	08:17:33
3	Co 228.616†	1380.6	1432.4	67.209 µg/L	67.209 ppb	08:17:33
3	Cr 267.716†	4075.8	4157.2	93.028 µg/L	93.028 ppb	08:17:13
3	Cu 324.752†	9814.3	6438.2	75.917 µg/L	75.917 ppb	08:17:13
3	Mn 257.610†	1066170.3	1054437.6	3535.1 µg/L	3535.1 ppb	08:17:07
3	Mo 202.031†	21.4	26.0	8.2220 µg/L	8.2220 ppb	08:17:33
3	Ni 231.604†	1575.8	1276.5	73.601 µg/L	73.601 ppb	08:17:33
3	P 214.914†	625.9	414.8	806.55 µg/L	806.55 ppb	08:17:33
3	Pb 220.353†	462.7	401.5	112.64 µg/L	112.64 ppb	08:17:33
3	S 181.975 Axial†	136.0	95.6	488.98 µg/L	488.98 ppb	08:17:33
3	Sb 206.836†	33.3	14.0	19.366 µg/L	19.366 ppb	08:17:33
3	Se 196.026†	-55.4	-65.6	-9.5582 µg/L	-9.5582 ppb	08:17:33
3	SiO2†	98429.4	95249.2	19356 µg/L	19356 ppb	08:17:13
3	Si 251.611†	112572.6	110994.7	8912.5 µg/L	8912.5 ppb	08:17:13
3	Sn 189.927†	-132.8	-155.7	-50.060 µg/L	-50.060 ppb	08:17:33
3	Ti 334.940†	1127078.8	1113634.8	2612.3 µg/L	2612.3 ppb	08:17:07
3	Tl 190.801†	-21.2	-1.6	23.544 µg/L	23.544 ppb	08:17:33
3	U 409.014†	344.7	-484.6	-72.076 µg/L	-72.076 ppb	08:17:13
3	V 292.402†	19602.1	19458.7	245.08 µg/L	245.08 ppb	08:17:13
3	Zn 213.857†	11265.8	10621.1	285.33 µg/L	285.33 ppb	08:17:13

Mean Data: 241613009|932724|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1961602.4	100.87	%	0.627				0.62%
Sc RADIAL	113098.3	102	%	0.3				0.32%
Y 371.029	1198684.6	101.48	%	0.601				0.59%
Ag 328.068†	-1259.9	-0.0582	µg/L	0.09811	-0.0582	ppb	0.09811	168.69%
Al 396.153Radial†	151530.9	78915	µg/L	293.4	78915	ppb	293.4	0.37%
As 188.979†	30.8	41.839	µg/L	6.0781	41.839	ppb	6.0781	14.53%
B 249.677†	1671.1	37.225	µg/L	2.3963	37.225	ppb	2.3963	6.44%
Ba 233.527†	49565.8	1326.9	µg/L	11.20	1326.9	ppb	11.20	0.84%
Be 313.107†	13819.7	8.2241	µg/L	0.14003	8.2241	ppb	0.14003	1.70%
Ca 317.933Radial†	129694.6	51081	µg/L	170.5	51081	ppb	170.5	0.33%
Cd 226.502†	396.2	1.0449	µg/L	0.39498	1.0449	ppb	0.39498	37.80%
Co 228.616†	1431.2	67.136	µg/L	0.5954	67.136	ppb	0.5954	0.89%
Cr 267.716†	4152.3	92.922	µg/L	0.6686	92.922	ppb	0.6686	0.72%
Cu 324.752†	6425.4	76.041	µg/L	0.5495	76.041	ppb	0.5495	0.72%
Fe 238.204 Radial†	25450.5	130800	µg/L	1005.3	130800	ppb	1005.3	0.77%
K 766.490 Radial†	29440.9	16517	µg/L	69.7	16517	ppb	69.7	0.42%
Mg 279.077 IEC†	4047.6	22395	µg/L	158.6	22395	ppb	158.6	0.71%
Mn 257.610†	1055489.1	3538.7	µg/L	4.76	3538.7	ppb	4.76	0.13%
Mo 202.031†	27.1	8.3958	µg/L	0.18737	8.3958	ppb	0.18737	2.23%
Na 589.592 Radial†	4557.5	1270.6	µg/L	10.99	1270.6	ppb	10.99	0.86%

Ni 231.604†	1277.6	73.668 µg/L	1.0382	73.668 ppb	1.0382	1.41%
P 214.914†	412.3	799.75 µg/L	16.666	799.75 ppb	16.666	2.08%
Pb 220.353†	394.4	110.74 µg/L	2.875	110.74 ppb	2.875	2.60%
S 181.975 Axial†	99.6	510.07 µg/L	21.850	510.07 ppb	21.850	4.28%
Sb 206.836†	9.3	14.321 µg/L	4.6950	14.321 ppb	4.6950	32.78%
Se 196.026†	-58.2	2.2296 µg/L	10.85018	2.2296 ppb	10.85018	486.64%
SiO2†	94902.4	19286 µg/L	189.1	19286 ppb	189.1	0.98%
Si 251.611†	110523.5	8874.1 µg/L	86.36	8874.1 ppb	86.36	0.97%
Sn 189.927†	-155.2	-49.643 µg/L	0.3617	-49.643 ppb	0.3617	0.73%
Sr 421.552†	59896.4	342.03 µg/L	1.245	342.03 ppb	1.245	0.36%
Ti 334.940†	1115789.8	2617.3 µg/L	4.39	2617.3 ppb	4.39	0.17%
Tl 190.801†	-5.5	17.373 µg/L	5.3791	17.373 ppb	5.3791	30.96%
U 409.014†	-484.3	-72.231 µg/L	2.9189	-72.231 ppb	2.9189	4.04%
V 292.402†	19541.7	246.16 µg/L	2.293	246.16 ppb	2.293	0.93%
Zn 213.857†	10624.3	285.30 µg/L	2.681	285.30 ppb	2.681	0.94%

Sequence No.: 41
Sample ID: 241613010|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 331
Date Collected: 12/15/2009 08:17:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613010|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113787.8	113787.8	102	%			08:18:15
1	Al 396.153Radial†	111083.5	108483.2	56496	µg/L	56496	ppb	08:18:15
1	Ca 317.933Radial†	52568.5	51007.9	20090	µg/L	20090	ppb	08:18:15
1	Fe 238.204 Radial†	19832.3	19390.3	99655	µg/L	99655	ppb	08:18:36
1	K 766.490 Radial†	15263.6	14088.8	7904.2	µg/L	7904.2	ppb	08:18:15
1	Mg 279.077 IEC†	2472.6	2402.9	13263	µg/L	13263	ppb	08:18:36
1	Na 589.592 Radial†	2624.6	3073.1	856.76	µg/L	856.76	ppb	08:18:36
1	Sr 421.552†	34107.9	33442.3	190.97	µg/L	190.97	ppb	08:18:15
1	Sc 361.383	1980646.7	1980646.7	101.85	%			08:19:40
1	Y 371.029	1240941.4	1240941.4	105.05	%			08:19:40
1	Ag 328.068†	-1000.3	-880.9	0.5699	µg/L	0.5699	ppb	08:19:46
1	As 188.979†	21.4	15.9	23.436	µg/L	23.436	ppb	08:20:06
1	B 249.677†	1456.2	1278.6	28.618	µg/L	28.618	ppb	08:19:46
1	Ba 233.527†	44058.6	43337.8	1160.1	µg/L	1160.1	ppb	08:19:46
1	Be 313.107†	15029.4	11090.9	6.1038	µg/L	6.1038	ppb	08:19:46
1	Cd 226.502†	229.6	322.8	1.3816	µg/L	1.3816	ppb	08:20:06
1	Co 228.616†	789.5	842.6	35.566	µg/L	35.566	ppb	08:20:06
1	Cr 267.716†	2818.8	2894.8	64.769	µg/L	64.769	ppb	08:19:46
1	Cu 324.752†	7250.1	3852.4	50.151	µg/L	50.151	ppb	08:19:46
1	Mn 257.610†	926665.7	910069.9	3049.5	µg/L	3049.5	ppb	08:19:40
1	Mo 202.031†	61.1	64.8	11.692	µg/L	11.692	ppb	08:20:06
1	Ni 231.604†	1158.8	856.1	49.361	µg/L	49.361	ppb	08:20:06
1	P 214.914†	825.9	606.8	1271.1	µg/L	1271.1	ppb	08:20:06
1	Pb 220.353†	374.0	311.2	86.942	µg/L	86.942	ppb	08:20:06
1	S 181.975 Axial†	103.2	62.5	317.37	µg/L	317.37	ppb	08:20:06
1	Sb 206.836†	20.3	1.0	11.725	µg/L	11.725	ppb	08:20:06
1	Se 196.026†	-24.8	-35.2	14.362	µg/L	14.362	ppb	08:20:06
1	SiO2†	83275.6	79687.7	16194	µg/L	16194	ppb	08:19:46
1	Si 251.611†	94960.0	92921.0	7417.5	µg/L	7417.5	ppb	08:19:46
1	Sn 189.927†	-73.5	-96.5	-31.425	µg/L	-31.425	ppb	08:20:06
1	Ti 334.940†	1494399.3	1466466.4	3442.6	µg/L	3442.6	ppb	08:19:40
1	Tl 190.801†	-38.3	-18.3	5.3104	µg/L	5.3104	ppb	08:20:06
1	U 409.014†	499.4	-335.1	-52.054	µg/L	-52.054	ppb	08:19:40
1	V 292.402†	13388.6	13222.1	167.50	µg/L	167.50	ppb	08:19:46
1	Zn 213.857†	10305.9	9600.6	260.09	µg/L	260.09	ppb	08:19:46
2	Sc RADIAL	113604.6	113604.6	102	%			08:18:41
2	Al 396.153Radial†	111041.7	108617.5	56566	µg/L	56566	ppb	08:18:41
2	Ca 317.933Radial†	52351.6	50878.3	20039	µg/L	20039	ppb	08:18:41
2	Fe 238.204 Radial†	19922.2	19509.7	100270	µg/L	100270	ppb	08:19:02
2	K 766.490 Radial†	15296.3	14145.0	7935.7	µg/L	7935.7	ppb	08:18:41
2	Mg 279.077 IEC†	2487.7	2421.7	13366	µg/L	13366	ppb	08:19:02
2	Na 589.592 Radial†	2619.7	3072.4	856.57	µg/L	856.57	ppb	08:19:02
2	Sr 421.552†	34074.7	33463.5	191.09	µg/L	191.09	ppb	08:18:41
2	Sc 361.383	1969727.6	1969727.6	101.29	%			08:20:14
2	Y 371.029	1233486.8	1233486.8	104.42	%			08:20:14
2	Ag 328.068†	-1030.1	-915.8	0.2905	µg/L	0.2905	ppb	08:20:20
2	As 188.979†	12.7	7.4	6.5324	µg/L	6.5324	ppb	08:20:40
2	B 249.677†	1398.4	1229.4	26.118	µg/L	26.118	ppb	08:20:20
2	Ba 233.527†	43933.7	43454.2	1163.2	µg/L	1163.2	ppb	08:20:20
2	Be 313.107†	14984.0	11127.9	6.1266	µg/L	6.1266	ppb	08:20:20
2	Cd 226.502†	208.9	303.7	0.8055	µg/L	0.8055	ppb	08:20:40
2	Co 228.616†	785.8	843.2	35.587	µg/L	35.587	ppb	08:20:40
2	Cr 267.716†	2793.0	2884.7	64.545	µg/L	64.545	ppb	08:20:20
2	Cu 324.752†	7242.8	3884.7	50.524	µg/L	50.524	ppb	08:20:20
2	Mn 257.610†	921527.9	910041.1	3049.5	µg/L	3049.5	ppb	08:20:14
2	Mo 202.031†	64.2	68.2	12.130	µg/L	12.130	ppb	08:20:40
2	Ni 231.604†	1164.8	868.3	50.066	µg/L	50.066	ppb	08:20:40
2	P 214.914†	818.8	604.2	1264.6	µg/L	1264.6	ppb	08:20:40
2	Pb 220.353†	374.7	313.9	87.660	µg/L	87.660	ppb	08:20:40

2	S 181.975 Axial†	101.4	61.2	310.60 µg/L	310.60 ppb	08:20:40
2	Sb 206.836†	16.7	-2.4	8.1444 µg/L	8.1444 ppb	08:20:40
2	Se 196.026†	-31.3	-41.7	4.9777 µg/L	4.9777 ppb	08:20:40
2	SiO2†	83635.3	80496.1	16358 µg/L	16358 ppb	08:20:20
2	Si 251.611†	95259.3	93733.4	7483.1 µg/L	7483.1 ppb	08:20:20
2	Sn 189.927†	-69.6	-93.1	-29.578 µg/L	-29.578 ppb	08:20:40
2	Ti 334.940†	1488271.0	1468549.7	3447.5 µg/L	3447.5 ppb	08:20:14
2	Tl 190.801†	-38.1	-18.3	5.3219 µg/L	5.3219 ppb	08:20:40
2	U 409.014†	605.0	-228.2	-41.346 µg/L	-41.346 ppb	08:20:14
2	V 292.402†	13367.9	13274.5	168.20 µg/L	168.20 ppb	08:20:20
2	Zn 213.857†	10242.1	9593.7	259.82 µg/L	259.82 ppb	08:20:20
3	Sc RADIAL	113350.4	113350.4	102 %		08:19:07
3	Al 396.153Radial†	110339.5	108172.0	56334 µg/L	56334 ppb	08:19:07
3	Ca 317.933Radial†	52092.5	50738.9	19984 µg/L	19984 ppb	08:19:07
3	Fe 238.204 Radial†	19774.8	19408.7	99750 µg/L	99750 ppb	08:19:28
3	K 766.490 Radial†	15186.2	14070.4	7893.9 µg/L	7893.9 ppb	08:19:07
3	Mg 279.077 IEC†	2467.2	2407.0	13285 µg/L	13285 ppb	08:19:28
3	Na 589.592 Radial†	2636.6	3094.8	862.82 µg/L	862.82 ppb	08:19:28
3	Sr 421.552†	33847.5	33315.4	190.24 µg/L	190.24 ppb	08:19:07
3	Sc 361.383	1962080.2	1962080.2	100.89 %		08:20:48
3	Y 371.029	1228602.8	1228602.8	104.01 %		08:20:48
3	Ag 328.068†	-1063.4	-952.7	-0.0875 µg/L	-0.0875 ppb	08:20:53
3	As 188.979†	16.8	11.5	14.717 µg/L	14.717 ppb	08:21:14
3	B 249.677†	1436.2	1272.2	28.289 µg/L	28.289 ppb	08:20:53
3	Ba 233.527†	44268.4	43955.1	1176.6 µg/L	1176.6 ppb	08:20:53
3	Be 313.107†	15080.7	11281.4	6.2322 µg/L	6.2322 ppb	08:20:53
3	Cd 226.502†	215.8	311.4	1.0576 µg/L	1.0576 ppb	08:21:14
3	Co 228.616†	787.9	848.3	35.868 µg/L	35.868 ppb	08:21:14
3	Cr 267.716†	2821.2	2923.4	65.412 µg/L	65.412 ppb	08:20:53
3	Cu 324.752†	7262.8	3932.4	50.769 µg/L	50.769 ppb	08:20:53
3	Mn 257.610†	915351.1	907465.2	3040.8 µg/L	3040.8 ppb	08:20:48
3	Mo 202.031†	66.4	70.7	12.402 µg/L	12.402 ppb	08:21:14
3	Ni 231.604†	1150.7	858.8	49.516 µg/L	49.516 ppb	08:21:14
3	P 214.914†	829.8	618.3	1296.8 µg/L	1296.8 ppb	08:21:14
3	Pb 220.353†	381.3	321.9	89.774 µg/L	89.774 ppb	08:21:14
3	S 181.975 Axial†	107.8	68.0	347.04 µg/L	347.04 ppb	08:21:14
3	Sb 206.836†	17.9	-1.2	9.3713 µg/L	9.3713 ppb	08:21:14
3	Se 196.026†	-32.6	-43.2	2.4372 µg/L	2.4372 ppb	08:21:14
3	SiO2†	83860.0	81040.6	16469 µg/L	16469 ppb	08:20:53
3	Si 251.611†	95568.8	94406.7	7538.1 µg/L	7538.1 ppb	08:20:53
3	Sn 189.927†	-66.7	-90.5	-28.303 µg/L	-28.303 ppb	08:21:14
3	Ti 334.940†	1478392.2	1464485.4	3437.9 µg/L	3437.9 ppb	08:20:48
3	Tl 190.801†	-35.6	-16.0	8.9545 µg/L	8.9545 ppb	08:21:14
3	U 409.014†	573.7	-256.9	-44.151 µg/L	-44.151 ppb	08:20:48
3	V 292.402†	13494.8	13451.7	170.29 µg/L	170.29 ppb	08:20:53
3	Zn 213.857†	10342.3	9732.4	263.80 µg/L	263.80 ppb	08:20:53

Mean Data: 241613010|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1970818.2	101.34	%	0.480				0.47%
Sc RADIAL	113580.9	102	%	0.2				0.19%
Y 371.029	1234343.7	104.49	%	0.526				0.50%
Ag 328.068†	-916.5	0.2576	µg/L	0.32994	0.2576	ppb	0.32994	128.07%
Al 396.153Radial†	108424.3	56465	µg/L	119.0	56465	ppb	119.0	0.21%
As 188.979†	11.6	14.895	µg/L	8.4534	14.895	ppb	8.4534	56.75%
B 249.677†	1260.1	27.675	µg/L	1.3584	27.675	ppb	1.3584	4.91%
Ba 233.527†	43582.3	1166.7	µg/L	8.78	1166.7	ppb	8.78	0.75%
Be 313.107†	11166.7	6.1542	µg/L	0.06853	6.1542	ppb	0.06853	1.11%
Ca 317.933Radial†	50875.0	20037	µg/L	53.0	20037	ppb	53.0	0.26%
Cd 226.502†	312.6	1.0815	µg/L	0.28881	1.0815	ppb	0.28881	26.70%
Co 228.616†	844.7	35.674	µg/L	0.1682	35.674	ppb	0.1682	0.47%
Cr 267.716†	2901.0	64.909	µg/L	0.4502	64.909	ppb	0.4502	0.69%
Cu 324.752†	3889.8	50.481	µg/L	0.3109	50.481	ppb	0.3109	0.62%
Fe 238.204 Radial†	19436.2	99891	µg/L	330.3	99891	ppb	330.3	0.33%
K 766.490 Radial†	14101.4	7911.3	µg/L	21.80	7911.3	ppb	21.80	0.28%
Mg 279.077 IEC†	2410.5	13305	µg/L	54.4	13305	ppb	54.4	0.41%
Mn 257.610†	909192.0	3046.6	µg/L	5.01	3046.6	ppb	5.01	0.16%
Mo 202.031†	67.9	12.075	µg/L	0.3580	12.075	ppb	0.3580	2.97%
Na 589.592 Radial†	3080.1	858.72	µg/L	3.555	858.72	ppb	3.555	0.41%

Ni 231.604†	861.0	49.648 µg/L	0.3705	49.648 ppb	0.3705	0.75%
P 214.914†	609.8	1277.5 µg/L	17.05	1277.5 ppb	17.05	1.33%
Pb 220.353†	315.7	88.125 µg/L	1.4721	88.125 ppb	1.4721	1.67%
S 181.975 Axial†	63.9	325.00 µg/L	19.384	325.00 ppb	19.384	5.96%
Sb 206.836†	-0.9	9.7469 µg/L	1.81963	9.7469 ppb	1.81963	18.67%
Se 196.026†	-40.0	7.2589 µg/L	6.28097	7.2589 ppb	6.28097	86.53%
SiO2†	80408.1	16340 µg/L	138.3	16340 ppb	138.3	0.85%
Si 251.611†	93687.0	7479.6 µg/L	60.40	7479.6 ppb	60.40	0.81%
Sn 189.927†	-93.4	-29.769 µg/L	1.5693	-29.769 ppb	1.5693	5.27%
Sr 421.552†	33407.1	190.77 µg/L	0.458	190.77 ppb	0.458	0.24%
Ti 334.940†	1466500.5	3442.6 µg/L	4.77	3442.6 ppb	4.77	0.14%
Tl 190.801†	-17.5	6.5289 µg/L	2.10059	6.5289 ppb	2.10059	32.17%
U 409.014†	-273.4	-45.850 µg/L	5.5526	-45.850 ppb	5.5526	12.11%
V 292.402†	13316.1	168.67 µg/L	1.453	168.67 ppb	1.453	0.86%
Zn 213.857†	9642.2	261.24 µg/L	2.225	261.24 ppb	2.225	0.85%

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 08:21:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113238.2	113238.2	102	%			08:22:00
1	Al 396.153Radial†	10243.6	9904.2	5138.7	µg/L	5138.7	ppb	08:22:00
1	Ca 317.933Radial†	13231.8	12597.0	4961.3	µg/L	4961.3	ppb	08:22:21
1	Fe 238.204 Radial†	1035.3	1010.6	5210.5	µg/L	5210.5	ppb	08:22:21
1	K 766.490 Radial†	9906.2	8896.0	4990.9	µg/L	4990.9	ppb	08:22:00
1	Mg 279.077 IEC†	966.6	934.5	5220.1	µg/L	5220.1	ppb	08:22:21
1	Na 589.592 Radial†	36582.5	36459.8	10165	µg/L	10165	ppb	08:22:00
1	Sr 421.552†	89070.1	87621.6	500.36	µg/L	500.36	ppb	08:22:00
1	Sc 361.383	1955921.8	1955921.8	100.58	%			08:23:24
1	Y 371.029	1179540.3	1179540.3	99.854	%			08:23:24
1	Ag 328.068†	53945.2	53736.4	515.39	µg/L	515.39	ppb	08:23:29
1	As 188.979†	254.2	247.7	493.43	µg/L	493.43	ppb	08:23:50
1	B 249.677†	10939.9	10725.8	501.30	µg/L	501.30	ppb	08:23:29
1	Ba 233.527†	18973.8	18943.9	508.03	µg/L	508.03	ppb	08:23:29
1	Be 313.107†	760276.4	752241.3	500.28	µg/L	500.28	ppb	08:23:24
1	Cd 226.502†	17978.3	17972.4	505.65	µg/L	505.65	ppb	08:23:29
1	Co 228.616†	9958.9	9969.1	505.84	µg/L	505.84	ppb	08:23:29
1	Cr 267.716†	22709.4	22706.1	506.29	µg/L	506.29	ppb	08:23:29
1	Cu 324.752†	72464.0	68781.5	514.35	µg/L	514.35	ppb	08:23:29
1	Mn 257.610†	152043.6	151401.0	505.89	µg/L	505.89	ppb	08:23:24
1	Mo 202.031†	4225.5	4206.1	504.98	µg/L	504.98	ppb	08:23:50
1	Ni 231.604†	9108.8	8774.8	505.96	µg/L	505.96	ppb	08:23:29
1	P 214.914†	1324.3	1112.6	2459.7	µg/L	2459.7	ppb	08:23:50
1	Pb 220.353†	1958.5	1891.3	506.66	µg/L	506.66	ppb	08:23:50
1	S 181.975 Axial†	215.5	175.5	936.71	µg/L	936.71	ppb	08:23:50
1	Sb 206.836†	495.9	474.1	499.23	µg/L	499.23	ppb	08:23:50
1	Se 196.026†	347.8	335.0	504.23	µg/L	504.23	ppb	08:23:50
1	SiO2†	28749.2	26508.3	5386.9	µg/L	5386.9	ppb	08:23:29
1	Si 251.611†	31526.9	31031.1	2470.8	µg/L	2470.8	ppb	08:23:29
1	Sn 189.927†	1001.3	971.2	508.19	µg/L	508.19	ppb	08:23:50
1	Ti 334.940†	216412.3	214371.9	503.13	µg/L	503.13	ppb	08:23:24
1	Tl 190.801†	297.3	314.9	507.49	µg/L	507.49	ppb	08:23:50
1	U 409.014†	5797.3	4938.5	499.05	µg/L	499.05	ppb	08:23:29
1	V 292.402†	42357.9	42191.0	513.30	µg/L	513.30	ppb	08:23:29
1	Zn 213.857†	18657.6	18032.2	505.62	µg/L	505.62	ppb	08:23:29
2	Sc RADIAL	113664.7	113664.7	102	%			08:22:27
2	Al 396.153Radial†	10283.5	9905.5	5139.5	µg/L	5139.5	ppb	08:22:27
2	Ca 317.933Radial†	13174.1	12491.6	4919.9	µg/L	4919.9	ppb	08:22:47
2	Fe 238.204 Radial†	1031.0	1002.5	5168.8	µg/L	5168.8	ppb	08:22:47
2	K 766.490 Radial†	10039.4	8989.8	5043.5	µg/L	5043.5	ppb	08:22:27
2	Mg 279.077 IEC†	968.0	932.3	5207.8	µg/L	5207.8	ppb	08:22:47
2	Na 589.592 Radial†	36682.5	36422.7	10154	µg/L	10154	ppb	08:22:27
2	Sr 421.552†	89667.7	87878.2	501.82	µg/L	501.82	ppb	08:22:27
2	Sc 361.383	1968945.7	1968945.7	101.25	%			08:23:56
2	Y 371.029	1187051.0	1187051.0	100.49	%			08:23:56
2	Ag 328.068†	53989.6	53425.5	512.40	µg/L	512.40	ppb	08:24:02
2	As 188.979†	259.3	251.0	500.07	µg/L	500.07	ppb	08:24:22
2	B 249.677†	10953.8	10667.7	498.59	µg/L	498.59	ppb	08:24:02
2	Ba 233.527†	18968.2	18813.6	504.53	µg/L	504.53	ppb	08:24:02
2	Be 313.107†	767237.6	754116.7	501.53	µg/L	501.53	ppb	08:23:56
2	Cd 226.502†	18019.4	17894.8	503.47	µg/L	503.47	ppb	08:24:02
2	Co 228.616†	9992.1	9936.3	504.17	µg/L	504.17	ppb	08:24:02
2	Cr 267.716†	22638.7	22486.9	501.41	µg/L	501.41	ppb	08:24:02
2	Cu 324.752†	72293.1	68136.2	509.53	µg/L	509.53	ppb	08:24:02
2	Mn 257.610†	153269.1	151611.4	506.59	µg/L	506.59	ppb	08:23:56
2	Mo 202.031†	4234.7	4187.4	502.73	µg/L	502.73	ppb	08:24:22
2	Ni 231.604†	9094.8	8701.0	501.70	µg/L	501.70	ppb	08:24:02
2	P 214.914†	1316.4	1096.0	2422.8	µg/L	2422.8	ppb	08:24:22
2	Pb 220.353†	1947.4	1867.4	500.28	µg/L	500.28	ppb	08:24:22

2	S 181.975 Axial†	213.8	172.3	919.64 µg/L	919.64 ppb	08:24:22
2	Sb 206.836†	500.4	475.3	500.54 µg/L	500.54 ppb	08:24:22
2	Se 196.026†	346.7	331.6	499.12 µg/L	499.12 ppb	08:24:22
2	SiO2†	28708.1	26278.7	5340.3 µg/L	5340.3 ppb	08:24:02
2	Si 251.611†	31479.0	30776.4	2450.4 µg/L	2450.4 ppb	08:24:02
2	Sn 189.927†	996.5	959.9	502.32 µg/L	502.32 ppb	08:24:22
2	Ti 334.940†	218032.0	214548.4	503.55 µg/L	503.55 ppb	08:23:56
2	Tl 190.801†	297.9	313.6	505.31 µg/L	505.31 ppb	08:24:22
2	U 409.014†	5942.6	5043.9	509.72 µg/L	509.72 ppb	08:24:02
2	V 292.402†	42276.9	41832.4	508.98 µg/L	508.98 ppb	08:24:02
2	Zn 213.857†	18666.1	17917.8	502.42 µg/L	502.42 ppb	08:24:02
3	Sc RADIAL	112726.3	112726.3	101 %		08:22:52
3	Al 396.153Radial†	10242.6	9948.8	5162.0 µg/L	5162.0 ppb	08:22:52
3	Ca 317.933Radial†	13260.3	12684.2	4995.7 µg/L	4995.7 ppb	08:23:13
3	Fe 238.204 Radial†	1033.0	1012.9	5222.2 µg/L	5222.2 ppb	08:23:13
3	K 766.490 Radial†	9913.3	8947.2	5019.6 µg/L	5019.6 ppb	08:22:52
3	Mg 279.077 IEC†	966.4	938.7	5243.1 µg/L	5243.1 ppb	08:23:13
3	Na 589.592 Radial†	36532.8	36574.0	10197 µg/L	10197 ppb	08:22:52
3	Sr 421.552†	89043.1	87992.4	502.47 µg/L	502.47 ppb	08:22:52
3	Sc 361.383	1954458.9	1954458.9	100.50 %		08:24:28
3	Y 371.029	1178515.9	1178515.9	99.768 %		08:24:28
3	Ag 328.068†	53782.9	53615.0	514.23 µg/L	514.23 ppb	08:24:34
3	As 188.979†	261.2	254.8	507.64 µg/L	507.64 ppb	08:24:54
3	B 249.677†	10907.7	10701.9	500.18 µg/L	500.18 ppb	08:24:34
3	Ba 233.527†	18944.7	18929.1	507.63 µg/L	507.63 ppb	08:24:34
3	Be 313.107†	763817.0	756330.0	503.00 µg/L	503.00 ppb	08:24:28
3	Cd 226.502†	17940.6	17948.3	504.98 µg/L	504.98 ppb	08:24:34
3	Co 228.616†	9943.6	9961.2	505.43 µg/L	505.43 ppb	08:24:34
3	Cr 267.716†	22657.5	22671.3	505.52 µg/L	505.52 ppb	08:24:34
3	Cu 324.752†	72394.8	68766.6	514.24 µg/L	514.24 ppb	08:24:34
3	Mn 257.610†	152564.7	152032.6	508.00 µg/L	508.00 ppb	08:24:28
3	Mo 202.031†	4214.0	4197.8	503.98 µg/L	503.98 ppb	08:24:54
3	Ni 231.604†	9113.1	8785.8	506.59 µg/L	506.59 ppb	08:24:34
3	P 214.914†	1325.0	1114.2	2463.4 µg/L	2463.4 ppb	08:24:54
3	Pb 220.353†	1949.8	1884.0	504.71 µg/L	504.71 ppb	08:24:54
3	S 181.975 Axial†	215.2	175.3	935.90 µg/L	935.90 ppb	08:24:54
3	Sb 206.836†	498.1	476.7	501.97 µg/L	501.97 ppb	08:24:54
3	Se 196.026†	358.4	345.8	520.36 µg/L	520.36 ppb	08:24:54
3	SiO2†	28706.1	26486.8	5382.6 µg/L	5382.6 ppb	08:24:34
3	Si 251.611†	31558.8	31086.3	2475.3 µg/L	2475.3 ppb	08:24:34
3	Sn 189.927†	993.6	964.3	504.62 µg/L	504.62 ppb	08:24:54
3	Ti 334.940†	217491.7	215607.0	506.03 µg/L	506.03 ppb	08:24:28
3	Tl 190.801†	300.0	317.8	512.21 µg/L	512.21 ppb	08:24:54
3	U 409.014†	5887.8	5032.9	508.60 µg/L	508.60 ppb	08:24:34
3	V 292.402†	42228.4	42093.7	512.14 µg/L	512.14 ppb	08:24:34
3	Zn 213.857†	18658.4	18046.8	506.03 µg/L	506.03 ppb	08:24:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1959775.5	100.78	%	0.410				0.41%
Sc RADIAL	113209.7	102	%	0.4				0.42%
Y 371.029	1181702.4	100.04	%	0.395				0.39%
Ag 328.068†	53592.3	514.01	µg/L	1.508	514.01	ppb	1.508	0.29%
QC value within limits for Ag 328.068 Recovery = 102.80%								
Al 396.153Radial†	9919.5	5146.7	µg/L	13.24	5146.7	ppb	13.24	0.26%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	251.1	500.38	µg/L	7.113	500.38	ppb	7.113	1.42%
QC value within limits for As 188.979 Recovery = 100.08%								
B 249.677†	10698.5	500.03	µg/L	1.363	500.03	ppb	1.363	0.27%
QC value within limits for B 249.677 Recovery = 100.01%								
Ba 233.527†	18895.6	506.73	µg/L	1.913	506.73	ppb	1.913	0.38%
QC value within limits for Ba 233.527 Recovery = 101.35%								
Be 313.107†	754229.3	501.60	µg/L	1.361	501.60	ppb	1.361	0.27%
QC value within limits for Be 313.107 Recovery = 100.32%								
Ca 317.933Radial†	12590.9	4959.0	µg/L	37.98	4959.0	ppb	37.98	0.77%
QC value within limits for Ca 317.933Radial Recovery = 99.18%								
Cd 226.502†	17938.5	504.70	µg/L	1.113	504.70	ppb	1.113	0.22%
QC value within limits for Cd 226.502 Recovery = 100.94%								
Co 228.616†	9955.5	505.15	µg/L	0.870	505.15	ppb	0.870	0.17%

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   QC value within limits for Co 228.616  Recovery = 101.03%
Cr 267.716†            22621.5      504.41 µg/L        2.625      504.41 ppb          2.625   0.52%
   QC value within limits for Cr 267.716  Recovery = 100.88%
Cu 324.752†            68561.4      512.71 µg/L        2.754      512.71 ppb          2.754   0.54%
   QC value within limits for Cu 324.752  Recovery = 102.54%
Fe 238.204 Radial†      1008.6      5200.5 µg/L       28.08      5200.5 ppb         28.08   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.01%
K 766.490 Radial†       8944.3      5018.0 µg/L       26.37      5018.0 ppb         26.37   0.53%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†          935.2      5223.7 µg/L       17.88      5223.7 ppb         17.88   0.34%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.47%
Mn 257.610†           151681.7      506.83 µg/L        1.075      506.83 ppb          1.075   0.21%
   QC value within limits for Mn 257.610  Recovery = 101.37%
Mo 202.031†             4197.1      503.90 µg/L        1.127      503.90 ppb          1.127   0.22%
   QC value within limits for Mo 202.031  Recovery = 100.78%
Na 589.592 Radial†     36485.5       10172 µg/L       22.0       10172 ppb          22.0   0.22%
   QC value within limits for Na 589.592 Radial  Recovery = 101.72%
Ni 231.604†             8753.8      504.75 µg/L        2.659      504.75 ppb          2.659   0.53%
   QC value within limits for Ni 231.604  Recovery = 100.95%
P 214.914†              1107.6      2448.6 µg/L       22.47      2448.6 ppb         22.47   0.92%
   QC value within limits for P 214.914  Recovery = 97.94%
Pb 220.353†             1880.9      503.88 µg/L        3.269      503.88 ppb          3.269   0.65%
   QC value within limits for Pb 220.353  Recovery = 100.78%
S 181.975 Axial†         174.3      930.75 µg/L        9.627      930.75 ppb          9.627   1.03%
   QC value within limits for S 181.975 Axial  Recovery = 93.07%
Sb 206.836†              475.4      500.58 µg/L        1.369      500.58 ppb          1.369   0.27%
   QC value within limits for Sb 206.836  Recovery = 100.12%
Se 196.026†              337.5      507.91 µg/L       11.088      507.91 ppb         11.088   2.18%
   QC value within limits for Se 196.026  Recovery = 101.58%
SiO2†                  26424.6      5369.9 µg/L       25.77      5369.9 ppb         25.77   0.48%
   QC value within limits for SiO2  Recovery = 100.42%
Si 251.611†            30964.6      2465.5 µg/L       13.30      2465.5 ppb         13.30   0.54%
   QC value within limits for Si 251.611  Recovery = 98.62%
Sn 189.927†              965.1      505.04 µg/L        2.960      505.04 ppb          2.960   0.59%
   QC value within limits for Sn 189.927  Recovery = 101.01%
Sr 421.552†            87830.8      501.55 µg/L        1.085      501.55 ppb          1.085   0.22%
   QC value within limits for Sr 421.552  Recovery = 100.31%
Ti 334.940†           214842.4      504.23 µg/L        1.567      504.23 ppb          1.567   0.31%
   QC value within limits for Ti 334.940  Recovery = 100.85%
Tl 190.801†              315.4      508.34 µg/L        3.525      508.34 ppb          3.525   0.69%
   QC value within limits for Tl 190.801  Recovery = 101.67%
U 409.014†              5005.1      505.79 µg/L        5.866      505.79 ppb          5.866   1.16%
   QC value within limits for U 409.014  Recovery = 101.16%
V 292.402†             42039.0      511.47 µg/L        2.238      511.47 ppb          2.238   0.44%
   QC value within limits for V 292.402  Recovery = 102.29%
Zn 213.857†            17998.9      504.69 µg/L        1.975      504.69 ppb          1.975   0.39%
   QC value within limits for Zn 213.857  Recovery = 100.94%
All analyte(s) passed QC.
```

Sequence No.: 43
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 08:25:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112719.6	112719.6	101	%			08:25:36
1	Al 396.153Radial†	157.0	-8.4	-4.3844	µg/L	-4.3844	ppb	08:25:36
1	Ca 317.933Radial†	400.5	-12.0	-4.7315	µg/L	-4.7315	ppb	08:25:57
1	Fe 238.204 Radial†	11.0	3.9	19.840	µg/L	19.840	ppb	08:25:57
1	K 766.490 Radial†	715.2	-133.8	-75.047	µg/L	-75.047	ppb	08:25:36
1	Mg 279.077 IEC†	20.0	4.3	23.826	µg/L	23.826	ppb	08:25:57
1	Na 589.592 Radial†	-639.1	-124.9	-34.823	µg/L	-34.823	ppb	08:25:36
1	Sr 421.552†	-99.2	-15.3	-0.0875	µg/L	-0.0875	ppb	08:25:36
1	Sc 361.383	1981133.6	1981133.6	101.87	%			08:26:59
1	Y 371.029	1203176.0	1203176.0	101.86	%			08:26:59
1	Ag 328.068†	-63.3	39.1	0.3722	µg/L	0.3722	ppb	08:27:04
1	As 188.979†	0.3	-4.8	-9.6662	µg/L	-9.6662	ppb	08:27:25
1	B 249.677†	158.8	4.7	0.2148	µg/L	0.2148	ppb	08:27:04
1	Ba 233.527†	-79.2	1.5	0.0391	µg/L	0.0391	ppb	08:27:25
1	Be 313.107†	3609.7	-122.3	-0.0814	µg/L	-0.0814	ppb	08:27:04
1	Cd 226.502†	-98.4	0.8	0.0189	µg/L	0.0189	ppb	08:27:25
1	Co 228.616†	-66.7	1.9	0.0963	µg/L	0.0963	ppb	08:27:25
1	Cr 267.716†	-149.9	-20.0	-0.4446	µg/L	-0.4446	ppb	08:27:04
1	Cu 324.752†	3196.8	-128.1	-0.9512	µg/L	-0.9512	ppb	08:27:04
1	Mn 257.610†	-180.2	54.3	0.1838	µg/L	0.1838	ppb	08:27:25
1	Mo 202.031†	-2.8	2.1	0.2506	µg/L	0.2506	ppb	08:27:25
1	Ni 231.604†	265.3	-21.3	-1.2297	µg/L	-1.2297	ppb	08:27:25
1	P 214.914†	201.6	-6.2	-14.021	µg/L	-14.021	ppb	08:27:25
1	Pb 220.353†	65.0	7.8	2.0789	µg/L	2.0789	ppb	08:27:25
1	S 181.975 Axial†	28.3	-11.1	-59.436	µg/L	-59.436	ppb	08:27:25
1	Sb 206.836†	21.8	2.4	2.5810	µg/L	2.5810	ppb	08:27:25
1	Se 196.026†	10.6	-0.4	-0.6603	µg/L	-0.6603	ppb	08:27:25
1	SiO2†	2050.9	-62.5	-12.709	µg/L	-12.709	ppb	08:27:04
1	Si 251.611†	342.5	21.6	1.8279	µg/L	1.8279	ppb	08:27:25
1	Sn 189.927†	22.3	-2.5	-1.3035	µg/L	-1.3035	ppb	08:27:25
1	Ti 334.940†	787.4	-23.7	-0.0554	µg/L	-0.0554	ppb	08:27:04
1	Tl 190.801†	-19.2	0.5	0.8004	µg/L	0.8004	ppb	08:27:25
1	U 409.014†	813.0	-27.5	-2.7825	µg/L	-2.7825	ppb	08:27:04
1	V 292.402†	-98.9	-20.5	-0.2478	µg/L	-0.2478	ppb	08:27:04
1	Zn 213.857†	499.9	-27.5	-0.7716	µg/L	-0.7716	ppb	08:27:25
2	Sc RADIAL	111775.0	111775.0	100	%			08:26:02
2	Al 396.153Radial†	143.8	-20.2	-10.548	µg/L	-10.548	ppb	08:26:02
2	Ca 317.933Radial†	416.9	7.7	3.0394	µg/L	3.0394	ppb	08:26:23
2	Fe 238.204 Radial†	10.1	3.1	16.104	µg/L	16.104	ppb	08:26:23
2	K 766.490 Radial†	758.6	-84.6	-47.486	µg/L	-47.486	ppb	08:26:02
2	Mg 279.077 IEC†	15.8	0.3	1.5086	µg/L	1.5086	ppb	08:26:23
2	Na 589.592 Radial†	-700.8	-191.7	-53.449	µg/L	-53.449	ppb	08:26:02
2	Sr 421.552†	-64.7	18.2	0.1041	µg/L	0.1041	ppb	08:26:02
2	Sc 361.383	1972945.2	1972945.2	101.45	%			08:27:31
2	Y 371.029	1197978.0	1197978.0	101.42	%			08:27:31
2	Ag 328.068†	-79.5	22.9	0.2212	µg/L	0.2212	ppb	08:27:36
2	As 188.979†	-0.5	-5.6	-11.135	µg/L	-11.135	ppb	08:27:57
2	B 249.677†	148.8	-4.5	-0.2159	µg/L	-0.2159	ppb	08:27:36
2	Ba 233.527†	-79.2	1.1	0.0313	µg/L	0.0313	ppb	08:27:57
2	Be 313.107†	3665.9	-52.3	-0.0348	µg/L	-0.0348	ppb	08:27:36
2	Cd 226.502†	-95.0	3.8	0.0944	µg/L	0.0944	ppb	08:27:57
2	Co 228.616†	-68.2	0.2	0.0087	µg/L	0.0087	ppb	08:27:57
2	Cr 267.716†	-91.3	37.2	0.8287	µg/L	0.8287	ppb	08:27:36
2	Cu 324.752†	3223.0	-89.2	-0.6619	µg/L	-0.6619	ppb	08:27:36
2	Mn 257.610†	-181.9	51.9	0.1752	µg/L	0.1752	ppb	08:27:57
2	Mo 202.031†	-1.8	3.1	0.3744	µg/L	0.3744	ppb	08:27:57
2	Ni 231.604†	282.6	-3.2	-0.1822	µg/L	-0.1822	ppb	08:27:57
2	P 214.914†	196.8	-10.1	-22.877	µg/L	-22.877	ppb	08:27:57
2	Pb 220.353†	56.7	-0.1	-0.0201	µg/L	-0.0201	ppb	08:27:57

2	S 181.975 Axial†	23.6	-15.6	-83.330 µg/L	-83.330 ppb	08:27:57
2	Sb 206.836†	18.6	-0.6	-0.6190 µg/L	-0.6190 ppb	08:27:57
2	Se 196.026†	7.1	-3.8	-5.7227 µg/L	-5.7227 ppb	08:27:57
2	SiO2†	2030.4	-74.4	-15.123 µg/L	-15.123 ppb	08:27:36
2	Si 251.611†	354.1	34.4	2.8689 µg/L	2.8689 ppb	08:27:57
2	Sn 189.927†	21.4	-3.3	-1.6961 µg/L	-1.6961 ppb	08:27:57
2	Ti 334.940†	801.2	-6.9	-0.0163 µg/L	-0.0163 ppb	08:27:36
2	Tl 190.801†	-19.7	-0.1	-0.1033 µg/L	-0.1033 ppb	08:27:57
2	U 409.014†	682.3	-153.0	-15.486 µg/L	-15.486 ppb	08:27:36
2	V 292.402†	-55.7	21.7	0.2401 µg/L	0.2401 ppb	08:27:36
2	Zn 213.857†	510.1	-15.4	-0.4345 µg/L	-0.4345 ppb	08:27:57
3	Sc RADIAL	111217.9	111217.9	99.9 %		08:26:28
3	Al 396.153Radial†	172.0	8.7	4.5267 µg/L	4.5267 ppb	08:26:28
3	Ca 317.933Radial†	412.5	5.3	2.0950 µg/L	2.0950 ppb	08:26:48
3	Fe 238.204 Radial†	5.9	-1.0	-5.3867 µg/L	-5.3867 ppb	08:26:48
3	K 766.490 Radial†	736.5	-103.0	-57.762 µg/L	-57.762 ppb	08:26:28
3	Mg 279.077 IEC†	17.4	2.0	11.175 µg/L	11.175 ppb	08:26:48
3	Na 589.592 Radial†	-698.3	-192.7	-53.716 µg/L	-53.716 ppb	08:26:28
3	Sr 421.552†	-81.5	1.1	0.0061 µg/L	0.0061 ppb	08:26:28
3	Sc 361.383	1965649.9	1965649.9	101.08 %		08:28:03
3	Y 371.029	1193625.1	1193625.1	101.05 %		08:28:03
3	Ag 328.068†	-5.9	95.4	0.9107 µg/L	0.9107 ppb	08:28:08
3	As 188.979†	1.5	-3.6	-7.2498 µg/L	-7.2498 ppb	08:28:29
3	B 249.677†	145.2	-7.6	-0.3534 µg/L	-0.3534 ppb	08:28:08
3	Ba 233.527†	-78.9	1.1	0.0300 µg/L	0.0300 ppb	08:28:29
3	Be 313.107†	3657.2	-47.4	-0.0315 µg/L	-0.0315 ppb	08:28:08
3	Cd 226.502†	-101.5	-2.9	-0.0960 µg/L	-0.0960 ppb	08:28:29
3	Co 228.616†	-64.5	3.5	0.1790 µg/L	0.1790 ppb	08:28:29
3	Cr 267.716†	-118.1	10.3	0.2303 µg/L	0.2303 ppb	08:28:08
3	Cu 324.752†	3213.5	-86.8	-0.6488 µg/L	-0.6488 ppb	08:28:08
3	Mn 257.610†	-171.7	61.4	0.2042 µg/L	0.2042 ppb	08:28:29
3	Mo 202.031†	-3.4	1.5	0.1781 µg/L	0.1781 ppb	08:28:29
3	Ni 231.604†	285.9	1.2	0.0676 µg/L	0.0676 ppb	08:28:29
3	P 214.914†	200.2	-6.1	-13.639 µg/L	-13.639 ppb	08:28:29
3	Pb 220.353†	52.8	-3.7	-0.9806 µg/L	-0.9806 ppb	08:28:29
3	S 181.975 Axial†	25.7	-13.4	-71.677 µg/L	-71.677 ppb	08:28:29
3	Sb 206.836†	18.8	-0.4	-0.3934 µg/L	-0.3934 ppb	08:28:29
3	Se 196.026†	12.3	1.4	2.0242 µg/L	2.0242 ppb	08:28:29
3	SiO2†	2002.6	-94.4	-19.185 µg/L	-19.185 ppb	08:28:08
3	Si 251.611†	360.9	42.4	3.4283 µg/L	3.4283 ppb	08:28:29
3	Sn 189.927†	26.2	1.6	0.8151 µg/L	0.8151 ppb	08:28:29
3	Ti 334.940†	825.3	19.8	0.0465 µg/L	0.0465 ppb	08:28:08
3	Tl 190.801†	-20.4	-0.9	-1.4530 µg/L	-1.4530 ppb	08:28:29
3	U 409.014†	640.1	-192.2	-19.453 µg/L	-19.453 ppb	08:28:08
3	V 292.402†	-40.3	36.7	0.4112 µg/L	0.4112 ppb	08:28:08
3	Zn 213.857†	498.1	-25.4	-0.7170 µg/L	-0.7170 ppb	08:28:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1973242.9	101.47	%	0.398				0.39%
Sc RADIAL	111904.2	101	%	0.7				0.68%
Y 371.029	1198259.7	101.44	%	0.405				0.40%
Ag 328.068†	52.5	0.5014	µg/L	0.36248	0.5014	ppb	0.36248	72.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.6	-3.4686	µg/L	7.57894	-3.4686	ppb	7.57894	218.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.7	-9.3502	µg/L	1.96153	-9.3502	ppb	1.96153	20.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-2.5	-0.1182	µg/L	0.29647	-0.1182	ppb	0.29647	250.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.2	0.0335	µg/L	0.00492	0.0335	ppb	0.00492	14.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-74.0	-0.0492	µg/L	0.02788	-0.0492	ppb	0.02788	56.64%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.3	0.1343	µg/L	4.24026	0.1343	ppb	4.24026	>999.9%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	0.6	0.0058	µg/L	0.09584	0.0058	ppb	0.09584	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.9	0.0947	µg/L	0.08514	0.0947	ppb	0.08514	89.94%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 9.2      0.2048 µg/L       0.63703      0.2048 ppb        0.63703 311.01%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -101.3     -0.7540 µg/L       0.17095     -0.7540 ppb        0.17095  22.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.0      10.186 µg/L       13.6148      10.186 ppb        13.6148 133.67%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -107.1     -60.098 µg/L       13.9282     -60.098 ppb        13.9282  23.18%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.2      12.170 µg/L       11.1918      12.170 ppb        11.1918  91.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                55.9      0.1877 µg/L       0.01489      0.1877 ppb        0.01489   7.93%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.2      0.2677 µg/L       0.09928      0.2677 ppb        0.09928  37.09%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -169.8     -47.329 µg/L       10.8313     -47.329 ppb        10.8313  22.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.8     -0.4481 µg/L       0.68829     -0.4481 ppb        0.68829 153.60%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.5     -16.846 µg/L        5.2268     -16.846 ppb         5.2268  31.03%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.3      0.3594 µg/L       1.56463      0.3594 ppb        1.56463 435.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -13.4     -71.481 µg/L       11.9481     -71.481 ppb        11.9481  16.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.5      0.5229 µg/L       1.78594      0.5229 ppb        1.78594 341.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.0     -1.4530 µg/L       3.93381     -1.4530 ppb        3.93381 270.75%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -77.1     -15.673 µg/L        3.2726     -15.673 ppb         3.2726  20.88%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                32.8      2.7084 µg/L       0.81219      2.7084 ppb        0.81219  29.99%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.4     -0.7281 µg/L       1.35082     -0.7281 ppb        1.35082 185.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 1.3      0.0075 µg/L       0.09577      0.0075 ppb        0.09577 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -3.6     -0.0084 µg/L       0.05137     -0.0084 ppb        0.05137 610.13%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.2     -0.2520 µg/L       1.13405     -0.2520 ppb        1.13405 450.06%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -124.2     -12.574 µg/L        8.7083     -12.574 ppb         8.7083  69.26%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                12.6      0.1345 µg/L       0.34194      0.1345 ppb        0.34194 254.19%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -22.8     -0.6411 µg/L       0.18094     -0.6411 ppb        0.18094  28.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 44
Sample ID: 241613011|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 332
Date Collected: 12/15/2009 08:28:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613011|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113596.2	113596.2	102	%			08:29:17
1	Al 396.153Radial†	232200.4	227326.2	118390	µg/L	118390	ppb	08:29:17
1	Ca 317.933Radial†	52629.0	51153.8	20147	µg/L	20147	ppb	08:29:23
1	Fe 238.204 Radial†	24544.3	24039.4	123550	µg/L	123550	ppb	08:29:23
1	K 766.490 Radial†	28628.7	27208.0	15264	µg/L	15264	ppb	08:29:17
1	Mg 279.077 IEC†	3523.3	3436.4	18995	µg/L	18995	ppb	08:29:23
1	Na 589.592 Radial†	7026.6	7390.2	2060.3	µg/L	2060.3	ppb	08:29:23
1	Sr 421.552†	44572.8	43751.2	249.84	µg/L	249.84	ppb	08:29:17
1	Sc 361.383	1960485.2	1960485.2	100.81	%			08:29:56
1	Y 371.029	1218797.3	1218797.3	103.18	%			08:29:56
1	Ag 328.068†	-1260.5	-1149.1	0.4002	µg/L	0.4002	ppb	08:30:02
1	As 188.979†	4.2	-1.0	-9.6574	µg/L	-9.6574	ppb	08:30:23
1	B 249.677†	1787.7	1622.1	37.211	µg/L	37.211	ppb	08:30:02
1	Ba 233.527†	64686.1	64243.8	1719.7	µg/L	1719.7	ppb	08:30:02
1	Be 313.107†	22667.8	18819.5	10.701	µg/L	10.701	ppb	08:30:02
1	Cd 226.502†	282.6	377.8	1.0869	µg/L	1.0869	ppb	08:30:23
1	Co 228.616†	1188.6	1246.4	52.956	µg/L	52.956	ppb	08:30:23
1	Cr 267.716†	4191.9	4285.3	95.872	µg/L	95.872	ppb	08:30:02
1	Cu 324.752†	9324.7	5983.6	71.186	µg/L	71.186	ppb	08:30:02
1	Mn 257.610†	1034696.9	1026587.0	3441.3	µg/L	3441.3	ppb	08:29:56
1	Mo 202.031†	-9.2	-4.3	4.3447	µg/L	4.3447	ppb	08:30:23
1	Ni 231.604†	1606.9	1312.3	75.668	µg/L	75.668	ppb	08:30:23
1	P 214.914†	645.6	436.3	878.03	µg/L	878.03	ppb	08:30:23
1	Pb 220.353†	466.8	407.0	117.64	µg/L	117.64	ppb	08:30:23
1	S 181.975 Axial†	128.7	88.9	454.04	µg/L	454.04	ppb	08:30:23
1	Sb 206.836†	20.2	1.1	17.164	µg/L	17.164	ppb	08:30:23
1	Se 196.026†	-34.0	-44.6	14.712	µg/L	14.712	ppb	08:30:23
1	SiO2†	100552.9	97666.6	19848	µg/L	19848	ppb	08:30:02
1	Si 251.611†	114980.2	113738.7	9052.1	µg/L	9052.1	ppb	08:30:02
1	Sn 189.927†	-97.2	-120.8	-40.066	µg/L	-40.066	ppb	08:30:23
1	Ti 334.940†	2111029.8	2093215.2	4914.3	µg/L	4914.3	ppb	08:29:56
1	Tl 190.801†	-45.8	-26.1	6.0449	µg/L	6.0449	ppb	08:30:23
1	U 409.014†	253.5	-574.0	-80.696	µg/L	-80.696	ppb	08:30:02
1	V 292.402†	19335.1	19255.8	242.08	µg/L	242.08	ppb	08:30:02
1	Zn 213.857†	9539.0	8943.8	238.66	µg/L	238.66	ppb	08:30:02
2	Sc RADIAL	113980.2	113980.2	102	%			08:29:28
2	Al 396.153Radial†	232500.0	226852.4	118140	µg/L	118140	ppb	08:29:28
2	Ca 317.933Radial†	53237.3	51574.1	20313	µg/L	20313	ppb	08:29:34
2	Fe 238.204 Radial†	24860.1	24266.7	124720	µg/L	124720	ppb	08:29:34
2	K 766.490 Radial†	28737.1	27219.3	15271	µg/L	15271	ppb	08:29:28
2	Mg 279.077 IEC†	3573.7	3473.9	19202	µg/L	19202	ppb	08:29:34
2	Na 589.592 Radial†	7157.6	7494.9	2089.5	µg/L	2089.5	ppb	08:29:34
2	Sr 421.552†	44633.1	43662.9	249.33	µg/L	249.33	ppb	08:29:28
2	Sc 361.383	1968378.4	1968378.4	101.22	%			08:30:29
2	Y 371.029	1223717.7	1223717.7	103.59	%			08:30:29
2	Ag 328.068†	-1334.0	-1216.7	-0.1523	µg/L	-0.1523	ppb	08:30:35
2	As 188.979†	25.9	20.5	33.045	µg/L	33.045	ppb	08:30:56
2	B 249.677†	1814.7	1641.7	37.761	µg/L	37.761	ppb	08:30:35
2	Ba 233.527†	65222.7	64516.6	1727.0	µg/L	1727.0	ppb	08:30:35
2	Be 313.107†	22738.8	18799.5	10.686	µg/L	10.686	ppb	08:30:35
2	Cd 226.502†	289.7	383.7	1.1655	µg/L	1.1655	ppb	08:30:56
2	Co 228.616†	1187.8	1240.8	52.669	µg/L	52.669	ppb	08:30:56
2	Cr 267.716†	4195.6	4272.2	95.581	µg/L	95.581	ppb	08:30:35
2	Cu 324.752†	9383.9	6004.9	71.596	µg/L	71.596	ppb	08:30:35
2	Mn 257.610†	1039004.7	1026727.2	3441.9	µg/L	3441.9	ppb	08:30:29
2	Mo 202.031†	-16.0	-10.9	3.5912	µg/L	3.5912	ppb	08:30:56
2	Ni 231.604†	1604.0	1302.9	75.129	µg/L	75.129	ppb	08:30:56
2	P 214.914†	638.8	426.9	855.37	µg/L	855.37	ppb	08:30:56
2	Pb 220.353†	450.9	389.4	112.89	µg/L	112.89	ppb	08:30:56

2	S 181.975 Axial†	124.4	84.1	428.39 µg/L	428.39 ppb	08:30:56
2	Sb 206.836†	22.3	3.1	19.345 µg/L	19.345 ppb	08:30:56
2	Se 196.026†	-30.4	-40.8	21.075 µg/L	21.075 ppb	08:30:56
2	SiO2†	100978.8	97687.4	19852 µg/L	19852 ppb	08:30:35
2	Si 251.611†	115485.6	113780.6	9055.4 µg/L	9055.4 ppb	08:30:35
2	Sn 189.927†	-97.6	-120.8	-39.885 µg/L	-39.885 ppb	08:30:56
2	Ti 334.940†	2120629.8	2094302.7	4916.9 µg/L	4916.9 ppb	08:30:29
2	Tl 190.801†	-46.2	-26.3	5.7132 µg/L	5.7132 ppb	08:30:56
2	U 409.014†	323.1	-506.3	-74.050 µg/L	-74.050 ppb	08:30:35
2	V 292.402†	19397.9	19240.9	242.00 µg/L	242.00 ppb	08:30:35
2	Zn 213.857†	9644.2	9009.9	240.40 µg/L	240.40 ppb	08:30:35
3	Sc RADIAL	114226.5	114226.5	103 %		08:29:39
3	Al 396.153Radial†	235182.9	228976.9	119250 µg/L	119250 ppb	08:29:39
3	Ca 317.933Radial†	53230.6	51455.5	20266 µg/L	20266 ppb	08:29:45
3	Fe 238.204 Radial†	24847.0	24201.6	124380 µg/L	124380 ppb	08:29:45
3	K 766.490 Radial†	28972.9	27388.6	15366 µg/L	15366 ppb	08:29:39
3	Mg 279.077 IEC†	3569.4	3462.3	19138 µg/L	19138 ppb	08:29:45
3	Na 589.592 Radial†	7119.4	7442.5	2074.9 µg/L	2074.9 ppb	08:29:45
3	Sr 421.552†	45109.8	44033.4	251.45 µg/L	251.45 ppb	08:29:39
3	Sc 361.383	1957029.9	1957029.9	100.64 %		08:31:02
3	Y 371.029	1216900.1	1216900.1	103.02 %		08:31:02
3	Ag 328.068†	-1297.3	-1187.9	0.0996 µg/L	0.0996 ppb	08:31:08
3	As 188.979†	19.1	13.8	19.825 µg/L	19.825 ppb	08:31:28
3	B 249.677†	1765.6	1603.2	36.064 µg/L	36.064 ppb	08:31:08
3	Ba 233.527†	64868.7	64538.6	1727.6 µg/L	1727.6 ppb	08:31:08
3	Be 313.107†	22729.2	18920.1	10.764 µg/L	10.764 ppb	08:31:08
3	Cd 226.502†	287.9	383.5	1.1911 µg/L	1.1911 ppb	08:31:28
3	Co 228.616†	1195.7	1255.5	53.398 µg/L	53.398 ppb	08:31:28
3	Cr 267.716†	4250.1	4350.5	97.322 µg/L	97.322 ppb	08:31:08
3	Cu 324.752†	9258.7	5934.2	70.997 µg/L	70.997 ppb	08:31:08
3	Mn 257.610†	1034372.9	1028077.1	3446.4 µg/L	3446.4 ppb	08:31:02
3	Mo 202.031†	-12.9	-8.0	3.9322 µg/L	3.9322 ppb	08:31:28
3	Ni 231.604†	1611.6	1319.7	76.098 µg/L	76.098 ppb	08:31:28
3	P 214.914†	646.6	438.4	882.12 µg/L	882.12 ppb	08:31:28
3	Pb 220.353†	458.9	400.0	115.81 µg/L	115.81 ppb	08:31:28
3	S 181.975 Axial†	131.0	91.3	466.91 µg/L	466.91 ppb	08:31:28
3	Sb 206.836†	12.5	-6.5	9.2206 µg/L	9.2206 ppb	08:31:28
3	Se 196.026†	11.7	0.8	83.188 µg/L	83.188 ppb	08:31:28
3	SiO2†	100109.2	97401.8	19794 µg/L	19794 ppb	08:31:08
3	Si 251.611†	114509.9	113472.7	9030.2 µg/L	9030.2 ppb	08:31:08
3	Sn 189.927†	-99.4	-123.1	-41.157 µg/L	-41.157 ppb	08:31:28
3	Ti 334.940†	2111864.4	2097741.6	4925.0 µg/L	4925.0 ppb	08:31:02
3	Tl 190.801†	-39.3	-19.8	16.279 µg/L	16.279 ppb	08:31:28
3	U 409.014†	374.0	-453.9	-68.685 µg/L	-68.685 ppb	08:31:08
3	V 292.402†	19333.9	19288.5	242.56 µg/L	242.56 ppb	08:31:08
3	Zn 213.857†	9539.5	8961.1	239.06 µg/L	239.06 ppb	08:31:08

Mean Data: 241613011|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1961964.5	100.89	%	0.299				0.30%
Sc RADIAL	113934.3	102	%	0.3				0.28%
Y 371.029	1219805.0	103.26	%	0.298				0.29%
Ag 328.068†	-1184.6	0.1158	µg/L	0.27659	0.1158	ppb	0.27659	238.84%
Al 396.153Radial†	227718.5	118590	µg/L	580.8	118590	ppb	580.8	0.49%
As 188.979†	11.1	14.404	µg/L	21.8613	14.404	ppb	21.8613	151.77%
B 249.677†	1622.3	37.012	µg/L	0.8656	37.012	ppb	0.8656	2.34%
Ba 233.527†	64433.0	1724.8	µg/L	4.39	1724.8	ppb	4.39	0.25%
Be 313.107†	18846.4	10.717	µg/L	0.0411	10.717	ppb	0.0411	0.38%
Ca 317.933Radial†	51394.5	20242	µg/L	85.3	20242	ppb	85.3	0.42%
Cd 226.502†	381.7	1.1478	µg/L	0.05431	1.1478	ppb	0.05431	4.73%
Co 228.616†	1247.6	53.007	µg/L	0.3671	53.007	ppb	0.3671	0.69%
Cr 267.716†	4302.7	96.258	µg/L	0.9329	96.258	ppb	0.9329	0.97%
Cu 324.752†	5974.2	71.260	µg/L	0.3062	71.260	ppb	0.3062	0.43%
Fe 238.204 Radial†	24169.2	124220	µg/L	601.7	124220	ppb	601.7	0.48%
K 766.490 Radial†	27272.0	15300	µg/L	56.8	15300	ppb	56.8	0.37%
Mg 279.077 IEC†	3457.6	19112	µg/L	106.2	19112	ppb	106.2	0.56%
Mn 257.610†	1027130.4	3443.2	µg/L	2.77	3443.2	ppb	2.77	0.08%
Mo 202.031†	-7.7	3.9560	µg/L	0.37733	3.9560	ppb	0.37733	9.54%
Na 589.592 Radial†	7442.5	2074.9	µg/L	14.60	2074.9	ppb	14.60	0.70%

Ni 231.604†	1311.7	75.632 µg/L	0.4854	75.632 ppb	0.4854	0.64%
P 214.914†	433.9	871.84 µg/L	14.410	871.84 ppb	14.410	1.65%
Pb 220.353†	398.8	115.45 µg/L	2.398	115.45 ppb	2.398	2.08%
S 181.975 Axial†	88.1	449.78 µg/L	19.609	449.78 ppb	19.609	4.36%
Sb 206.836†	-0.8	15.243 µg/L	5.3284	15.243 ppb	5.3284	34.96%
Se 196.026†	-28.2	39.658 µg/L	37.8317	39.658 ppb	37.8317	95.39%
SiO2†	97585.2	19831 µg/L	32.4	19831 ppb	32.4	0.16%
Si 251.611†	113664.0	9045.9 µg/L	13.74	9045.9 ppb	13.74	0.15%
Sn 189.927†	-121.6	-40.370 µg/L	0.6883	-40.370 ppb	0.6883	1.71%
Sr 421.552†	43815.8	250.21 µg/L	1.105	250.21 ppb	1.105	0.44%
Ti 334.940†	2095086.5	4918.7 µg/L	5.55	4918.7 ppb	5.55	0.11%
Tl 190.801†	-24.0	9.3456 µg/L	6.00650	9.3456 ppb	6.00650	64.27%
U 409.014†	-511.4	-74.477 µg/L	6.0168	-74.477 ppb	6.0168	8.08%
V 292.402†	19261.7	242.21 µg/L	0.302	242.21 ppb	0.302	0.12%
Zn 213.857†	8971.6	239.37 µg/L	0.912	239.37 ppb	0.912	0.38%

Sequence No.: 45
Sample ID: 241613012|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 333
Date Collected: 12/15/2009 08:31:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613012|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109950.9	109950.9	98.8	%			08:32:10
1	Al 396.153Radial†	33984.8	34235.9	17828	µg/L	17828	ppb	08:32:10
1	Ca 317.933Radial†	15254.5	15033.1	5920.8	µg/L	5920.8	ppb	08:32:10
1	Fe 238.204 Radial†	15143.8	15321.5	78743	µg/L	78743	ppb	08:32:31
1	K 766.490 Radial†	5659.3	4888.4	2742.5	µg/L	2742.5	ppb	08:32:10
1	Mg 279.077 IEC†	790.0	784.3	4261.1	µg/L	4261.1	ppb	08:32:31
1	Na 589.592 Radial†	1443.1	1966.8	548.34	µg/L	548.34	ppb	08:32:10
1	Sr 421.552†	8877.3	9068.2	51.783	µg/L	51.783	ppb	08:32:10
1	Sc 361.383	1957155.7	1957155.7	100.64	%			08:33:35
1	Y 371.029	1269449.0	1269449.0	107.47	%			08:33:35
1	Ag 328.068†	-844.9	-738.3	-0.5327	µg/L	-0.5327	ppb	08:33:41
1	As 188.979†	7.7	2.5	-0.7836	µg/L	-0.7836	ppb	08:34:01
1	B 249.677†	1084.2	926.1	18.664	µg/L	18.664	ppb	08:33:41
1	Ba 233.527†	10186.5	10200.7	273.07	µg/L	273.07	ppb	08:33:41
1	Be 313.107†	12093.0	8350.3	4.6474	µg/L	4.6474	ppb	08:33:41
1	Cd 226.502†	170.6	267.0	1.3672	µg/L	1.3672	ppb	08:33:41
1	Co 228.616†	188.2	254.4	7.8485	µg/L	7.8485	ppb	08:34:01
1	Cr 267.716†	666.5	789.5	17.659	µg/L	17.659	ppb	08:33:41
1	Cu 324.752†	3653.5	364.2	19.631	µg/L	19.631	ppb	08:33:41
1	Mn 257.610†	647541.0	643644.8	2157.8	µg/L	2157.8	ppb	08:33:35
1	Mo 202.031†	235.8	239.1	31.793	µg/L	31.793	ppb	08:34:01
1	Ni 231.604†	613.5	327.9	18.906	µg/L	18.906	ppb	08:34:01
1	P 214.914†	489.2	281.9	550.75	µg/L	550.75	ppb	08:34:01
1	Pb 220.353†	256.4	198.8	53.888	µg/L	53.888	ppb	08:34:01
1	S 181.975 Axial†	51.9	12.7	55.760	µg/L	55.760	ppb	08:34:01
1	Sb 206.836†	13.9	-5.1	3.0569	µg/L	3.0569	ppb	08:34:01
1	Se 196.026†	-23.9	-34.6	2.3945	µg/L	2.3945	ppb	08:34:01
1	SiO2†	68733.3	66219.5	13457	µg/L	13457	ppb	08:33:41
1	Si 251.611†	78049.7	77237.5	6180.4	µg/L	6180.4	ppb	08:33:41
1	Sn 189.927†	-6.2	-30.5	-4.4829	µg/L	-4.4829	ppb	08:34:01
1	Ti 334.940†	1051918.0	1044416.4	2452.3	µg/L	2452.3	ppb	08:33:35
1	Tl 190.801†	-39.3	-19.7	-6.0392	µg/L	-6.0392	ppb	08:34:01
1	U 409.014†	43.5	-782.2	-93.740	µg/L	-93.740	ppb	08:33:35
1	V 292.402†	3357.6	3412.8	47.632	µg/L	47.632	ppb	08:33:41
1	Zn 213.857†	12064.1	11469.0	315.57	µg/L	315.57	ppb	08:33:41
2	Sc RADIAL	110955.7	110955.7	99.7	%			08:32:36
2	Al 396.153Radial†	34234.8	34175.1	17797	µg/L	17797	ppb	08:32:36
2	Ca 317.933Radial†	15365.0	15004.1	5909.4	µg/L	5909.4	ppb	08:32:36
2	Fe 238.204 Radial†	15111.0	15149.8	77861	µg/L	77861	ppb	08:32:57
2	K 766.490 Radial†	5767.3	4944.8	2774.2	µg/L	2774.2	ppb	08:32:36
2	Mg 279.077 IEC†	789.1	776.0	4216.5	µg/L	4216.5	ppb	08:32:57
2	Na 589.592 Radial†	1383.3	1893.6	527.91	µg/L	527.91	ppb	08:32:36
2	Sr 421.552†	8986.9	9096.8	51.946	µg/L	51.946	ppb	08:32:36
2	Sc 361.383	1959868.0	1959868.0	100.78	%			08:34:09
2	Y 371.029	1271336.0	1271336.0	107.63	%			08:34:09
2	Ag 328.068†	-805.5	-698.0	-0.2216	µg/L	-0.2216	ppb	08:34:14
2	As 188.979†	16.4	11.1	16.634	µg/L	16.634	ppb	08:34:35
2	B 249.677†	1058.1	898.7	17.658	µg/L	17.658	ppb	08:34:14
2	Ba 233.527†	10188.9	10189.2	272.76	µg/L	272.76	ppb	08:34:14
2	Be 313.107†	12090.0	8330.7	4.6290	µg/L	4.6290	ppb	08:34:14
2	Cd 226.502†	124.3	220.8	0.1411	µg/L	0.1411	ppb	08:34:14
2	Co 228.616†	191.7	257.6	7.9814	µg/L	7.9814	ppb	08:34:35
2	Cr 267.716†	618.0	740.4	16.565	µg/L	16.565	ppb	08:34:14
2	Cu 324.752†	3652.4	358.1	19.397	µg/L	19.397	ppb	08:34:14
2	Mn 257.610†	652650.5	647824.2	2171.6	µg/L	2171.6	ppb	08:34:09
2	Mo 202.031†	235.4	238.4	31.676	µg/L	31.676	ppb	08:34:35
2	Ni 231.604†	617.6	331.1	19.091	µg/L	19.091	ppb	08:34:35
2	P 214.914†	487.8	279.9	547.13	µg/L	547.13	ppb	08:34:35
2	Pb 220.353†	263.7	205.7	55.739	µg/L	55.739	ppb	08:34:35

2	S 181.975 Axial†	48.2	9.0	35.879	µg/L	35.879 ppb	08:34:35
2	Sb 206.836†	12.4	-6.6	1.5121	µg/L	1.5121 ppb	08:34:35
2	Se 196.026†	-19.8	-30.4	7.9928	µg/L	7.9928 ppb	08:34:35
2	SiO2†	69644.9	67029.5	13622	µg/L	13622 ppb	08:34:14
2	Si 251.611†	79042.7	78115.5	6251.1	µg/L	6251.1 ppb	08:34:14
2	Sn 189.927†	-5.3	-29.6	-4.0915	µg/L	-4.0915 ppb	08:34:35
2	Ti 334.940†	1059638.2	1050630.3	2466.9	µg/L	2466.9 ppb	08:34:09
2	Tl 190.801†	-39.0	-19.4	-5.3753	µg/L	-5.3753 ppb	08:34:35
2	U 409.014†	102.9	-723.3	-87.615	µg/L	-87.615 ppb	08:34:09
2	V 292.402†	3333.1	3383.9	47.220	µg/L	47.220 ppb	08:34:14
2	Zn 213.857†	12062.1	11450.4	315.14	µg/L	315.14 ppb	08:34:14
3	Sc RADIAL	111632.2	111632.2	100	%		08:33:02
3	Al 396.153Radial†	34789.4	34519.9	17976	µg/L	17976 ppb	08:33:02
3	Ca 317.933Radial†	15684.1	15228.8	5997.9	µg/L	5997.9 ppb	08:33:02
3	Fe 238.204 Radial†	15073.3	15020.3	77195	µg/L	77195 ppb	08:33:22
3	K 766.490 Radial†	5828.0	4970.2	2788.4	µg/L	2788.4 ppb	08:33:02
3	Mg 279.077 IEC†	787.8	770.0	4183.9	µg/L	4183.9 ppb	08:33:22
3	Na 589.592 Radial†	1453.6	1955.3	545.12	µg/L	545.12 ppb	08:33:02
3	Sr 421.552†	9120.8	9175.6	52.396	µg/L	52.396 ppb	08:33:02
3	Sc 361.383	1945796.4	1945796.4	100.06	%		08:34:42
3	Y 371.029	1262162.0	1262162.0	106.85	%		08:34:42
3	Ag 328.068†	-898.9	-797.1	-1.2169	µg/L	-1.2169 ppb	08:34:48
3	As 188.979†	10.5	5.3	5.0759	µg/L	5.0759 ppb	08:35:08
3	B 249.677†	1104.6	952.8	20.400	µg/L	20.400 ppb	08:34:48
3	Ba 233.527†	10230.4	10303.7	275.83	µg/L	275.83 ppb	08:34:48
3	Be 313.107†	12097.9	8425.3	4.7002	µg/L	4.7002 ppb	08:34:48
3	Cd 226.502†	168.3	265.6	1.4565	µg/L	1.4565 ppb	08:34:48
3	Co 228.616†	192.5	259.7	8.1362	µg/L	8.1362 ppb	08:35:08
3	Cr 267.716†	657.5	784.3	17.543	µg/L	17.543 ppb	08:34:48
3	Cu 324.752†	3709.9	441.7	19.877	µg/L	19.877 ppb	08:34:48
3	Mn 257.610†	642237.6	642100.6	2152.4	µg/L	2152.4 ppb	08:34:42
3	Mo 202.031†	240.5	245.2	32.465	µg/L	32.465 ppb	08:35:08
3	Ni 231.604†	626.9	344.8	19.883	µg/L	19.883 ppb	08:35:08
3	P 214.914†	498.4	294.0	579.79	µg/L	579.79 ppb	08:35:08
3	Pb 220.353†	243.7	187.5	50.912	µg/L	50.912 ppb	08:35:08
3	S 181.975 Axial†	50.2	11.3	48.343	µg/L	48.343 ppb	08:35:08
3	Sb 206.836†	13.9	-5.0	3.1343	µg/L	3.1343 ppb	08:35:08
3	Se 196.026†	-18.2	-29.0	9.7125	µg/L	9.7125 ppb	08:35:08
3	SiO2†	69379.6	67264.1	13669	µg/L	13669 ppb	08:34:48
3	Si 251.611†	78701.1	78341.3	6270.3	µg/L	6270.3 ppb	08:34:48
3	Sn 189.927†	-8.3	-32.7	-5.7758	µg/L	-5.7758 ppb	08:35:08
3	Ti 334.940†	1042522.9	1041128.5	2444.5	µg/L	2444.5 ppb	08:34:42
3	Tl 190.801†	-34.9	-15.5	0.5834	µg/L	0.5834 ppb	08:35:08
3	U 409.014†	139.5	-686.0	-83.711	µg/L	-83.711 ppb	08:34:42
3	V 292.402†	3310.7	3385.3	47.195	µg/L	47.195 ppb	08:34:48
3	Zn 213.857†	12050.4	11525.3	317.32	µg/L	317.32 ppb	08:34:48

Mean Data: 241613012|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1954273.4	100.49	%	0.384				0.38%
Sc RADIAL	110846.2	99.6	%	0.76				0.76%
Y 371.029	1267649.0	107.31	%	0.410				0.38%
Ag 328.068†	-744.5	-0.6571	µg/L	0.50916	-0.6571	ppb	0.50916	77.49%
Al 396.153Radial†	34310.3	17867	µg/L	95.8	17867	ppb	95.8	0.54%
As 188.979†	6.3	6.9753	µg/L	8.86262	6.9753	ppb	8.86262	127.06%
B 249.677†	925.9	18.907	µg/L	1.3873	18.907	ppb	1.3873	7.34%
Ba 233.527†	10231.2	273.88	µg/L	1.688	273.88	ppb	1.688	0.62%
Be 313.107†	8368.8	4.6588	µg/L	0.03694	4.6588	ppb	0.03694	0.79%
Ca 317.933Radial†	15088.7	5942.7	µg/L	48.14	5942.7	ppb	48.14	0.81%
Cd 226.502†	251.1	0.9883	µg/L	0.73505	0.9883	ppb	0.73505	74.38%
Co 228.616†	257.2	7.9887	µg/L	0.14399	7.9887	ppb	0.14399	1.80%
Cr 267.716†	771.4	17.256	µg/L	0.6006	17.256	ppb	0.6006	3.48%
Cu 324.752†	388.0	19.635	µg/L	0.2405	19.635	ppb	0.2405	1.22%
Fe 238.204 Radial†	15163.9	77933	µg/L	776.5	77933	ppb	776.5	1.00%
K 766.490 Radial†	4934.5	2768.4	µg/L	23.51	2768.4	ppb	23.51	0.85%
Mg 279.077 IEC†	776.8	4220.5	µg/L	38.76	4220.5	ppb	38.76	0.92%
Mn 257.610†	644523.2	2160.6	µg/L	9.90	2160.6	ppb	9.90	0.46%
Mo 202.031†	240.9	31.978	µg/L	0.4255	31.978	ppb	0.4255	1.33%
Na 589.592 Radial†	1938.5	540.46	µg/L	10.981	540.46	ppb	10.981	2.03%

Ni 231.604†	334.6	19.294 µg/L	0.5190	19.294 ppb	0.5190	2.69%
P 214.914†	285.3	559.22 µg/L	17.899	559.22 ppb	17.899	3.20%
Pb 220.353†	197.3	53.513 µg/L	2.4350	53.513 ppb	2.4350	4.55%
S 181.975 Axial†	11.0	46.661 µg/L	10.0465	46.661 ppb	10.0465	21.53%
Sb 206.836†	-5.6	2.5678 µg/L	0.91507	2.5678 ppb	0.91507	35.64%
Se 196.026†	-31.3	6.6999 µg/L	3.82647	6.6999 ppb	3.82647	57.11%
SiO2†	66837.7	13583 µg/L	111.4	13583 ppb	111.4	0.82%
Si 251.611†	77898.1	6233.9 µg/L	47.34	6233.9 ppb	47.34	0.76%
Sn 189.927†	-30.9	-4.7834 µg/L	0.88144	-4.7834 ppb	0.88144	18.43%
Sr 421.552†	9113.5	52.042 µg/L	0.3176	52.042 ppb	0.3176	0.61%
Ti 334.940†	1045391.7	2454.5 µg/L	11.33	2454.5 ppb	11.33	0.46%
Tl 190.801†	-18.2	-3.6103 µg/L	3.64704	-3.6103 ppb	3.64704	101.02%
U 409.014†	-730.5	-88.355 µg/L	5.0555	-88.355 ppb	5.0555	5.72%
V 292.402†	3394.0	47.349 µg/L	0.2453	47.349 ppb	0.2453	0.52%
Zn 213.857†	11481.6	316.01 µg/L	1.156	316.01 ppb	1.156	0.37%

Sequence No.: 46
Sample ID: 241613013|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 334
Date Collected: 12/15/2009 08:35:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613013|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111385.6	111385.6	100	%			08:35:50
1	Al 396.153Radial†	54359.3	54150.1	28200	µg/L	28200	ppb	08:35:50
1	Ca 317.933Radial†	81390.4	80914.3	31868	µg/L	31868	ppb	08:35:50
1	Fe 238.204 Radial†	15518.1	15498.0	79651	µg/L	79651	ppb	08:36:10
1	K 766.490 Radial†	11817.3	10967.4	6153.0	µg/L	6153.0	ppb	08:35:50
1	Mg 279.077 IEC†	2320.1	2302.7	12733	µg/L	12733	ppb	08:36:10
1	Na 589.592 Radial†	1416.5	1921.4	535.68	µg/L	535.68	ppb	08:36:10
1	Sr 421.552†	32600.4	32655.5	186.48	µg/L	186.48	ppb	08:35:50
1	Sc 361.383	1941627.7	1941627.7	99.843	%			08:37:15
1	Y 371.029	1233059.4	1233059.4	104.39	%			08:37:15
1	Ag 328.068†	-868.8	-768.9	-0.3052	µg/L	-0.3052	ppb	08:37:20
1	As 188.979†	24.0	18.9	27.713	µg/L	27.713	ppb	08:37:41
1	B 249.677†	1266.9	1117.7	27.363	µg/L	27.363	ppb	08:37:20
1	Ba 233.527†	28716.1	28840.4	772.03	µg/L	772.03	ppb	08:37:20
1	Be 313.107†	11244.7	7596.8	4.1690	µg/L	4.1690	ppb	08:37:20
1	Cd 226.502†	156.2	253.9	0.9796	µg/L	0.9796	ppb	08:37:41
1	Co 228.616†	426.8	494.9	20.137	µg/L	20.137	ppb	08:37:41
1	Cr 267.716†	1634.4	1764.2	39.494	µg/L	39.494	ppb	08:37:41
1	Cu 324.752†	7302.3	4047.8	47.313	µg/L	47.313	ppb	08:37:20
1	Mn 257.610†	717207.2	718566.2	2407.9	µg/L	2407.9	ppb	08:37:15
1	Mo 202.031†	96.4	101.4	15.298	µg/L	15.298	ppb	08:37:41
1	Ni 231.604†	953.0	672.8	38.793	µg/L	38.793	ppb	08:37:41
1	P 214.914†	943.7	741.1	1587.6	µg/L	1587.6	ppb	08:37:41
1	Pb 220.353†	258.5	202.9	55.765	µg/L	55.765	ppb	08:37:41
1	S 181.975 Axial†	101.0	62.3	319.54	µg/L	319.54	ppb	08:37:41
1	Sb 206.836†	17.8	-1.1	4.6042	µg/L	4.6042	ppb	08:37:41
1	Se 196.026†	-26.1	-36.9	-0.4028	µg/L	-0.4028	ppb	08:37:41
1	SiO2†	93477.5	91548.8	18604	µg/L	18604	ppb	08:37:20
1	Si 251.611†	106809.8	106663.1	8571.7	µg/L	8571.7	ppb	08:37:20
1	Sn 189.927†	-81.5	-106.0	-36.208	µg/L	-36.208	ppb	08:37:41
1	Ti 334.940†	1017222.1	1018025.0	2388.8	µg/L	2388.8	ppb	08:37:15
1	Tl 190.801†	-27.9	-8.7	8.4036	µg/L	8.4036	ppb	08:37:41
1	U 409.014†	463.8	-360.9	-50.648	µg/L	-50.648	ppb	08:37:15
1	V 292.402†	8737.4	8827.7	112.93	µg/L	112.93	ppb	08:37:20
1	Zn 213.857†	11291.5	10791.1	295.94	µg/L	295.94	ppb	08:37:20
2	Sc RADIAL	110888.2	110888.2	99.6	%			08:36:16
2	Al 396.153Radial†	54978.4	55015.1	28650	µg/L	28650	ppb	08:36:16
2	Ca 317.933Radial†	82239.0	82130.8	32347	µg/L	32347	ppb	08:36:16
2	Fe 238.204 Radial†	15483.0	15532.4	79827	µg/L	79827	ppb	08:36:36
2	K 766.490 Radial†	11892.4	11095.7	6225.0	µg/L	6225.0	ppb	08:36:16
2	Mg 279.077 IEC†	2311.0	2304.0	12740	µg/L	12740	ppb	08:36:36
2	Na 589.592 Radial†	1387.5	1898.7	529.34	µg/L	529.34	ppb	08:36:36
2	Sr 421.552†	32912.0	33114.4	189.10	µg/L	189.10	ppb	08:36:16
2	Sc 361.383	1956159.2	1956159.2	100.59	%			08:37:48
2	Y 371.029	1241528.2	1241528.2	105.10	%			08:37:48
2	Ag 328.068†	-838.6	-732.4	0.0620	µg/L	0.0620	ppb	08:37:54
2	As 188.979†	18.5	13.2	16.313	µg/L	16.313	ppb	08:38:14
2	B 249.677†	1263.0	1104.4	26.682	µg/L	26.682	ppb	08:37:54
2	Ba 233.527†	28801.6	28711.8	768.59	µg/L	768.59	ppb	08:37:54
2	Be 313.107†	11265.3	7533.6	4.1318	µg/L	4.1318	ppb	08:37:54
2	Cd 226.502†	163.7	260.2	1.1494	µg/L	1.1494	ppb	08:38:14
2	Co 228.616†	422.5	487.4	19.787	µg/L	19.787	ppb	08:38:14
2	Cr 267.716†	1650.8	1768.3	39.588	µg/L	39.588	ppb	08:38:14
2	Cu 324.752†	7362.9	4053.6	47.394	µg/L	47.394	ppb	08:37:54
2	Mn 257.610†	718544.2	714559.1	2394.6	µg/L	2394.6	ppb	08:37:48
2	Mo 202.031†	106.6	110.8	16.434	µg/L	16.434	ppb	08:38:14
2	Ni 231.604†	942.8	655.6	37.802	µg/L	37.802	ppb	08:38:14
2	P 214.914†	952.1	742.4	1590.4	µg/L	1590.4	ppb	08:38:14
2	Pb 220.353†	260.7	203.2	55.868	µg/L	55.868	ppb	08:38:14

2	S 181.975 Axial†	101.1	61.7	316.12	µg/L	316.12 ppb	08:38:14
2	Sb 206.836†	28.5	9.4	15.607	µg/L	15.607 ppb	08:38:14
2	Se 196.026†	-22.0	-32.7	6.1872	µg/L	6.1872 ppb	08:38:14
2	SiO2†	93441.2	90817.2	18456	µg/L	18456 ppb	08:37:54
2	Si 251.611†	106795.7	105854.4	8506.5	µg/L	8506.5 ppb	08:37:54
2	Sn 189.927†	-83.4	-107.3	-36.773	µg/L	-36.773 ppb	08:38:14
2	Ti 334.940†	1019262.9	1012485.4	2375.8	µg/L	2375.8 ppb	08:37:48
2	Tl 190.801†	-29.8	-10.4	5.4666	µg/L	5.4666 ppb	08:38:14
2	U 409.014†	546.8	-281.9	-42.672	µg/L	-42.672 ppb	08:37:48
2	V 292.402†	8872.8	8897.3	113.80	µg/L	113.80 ppb	08:37:54
2	Zn 213.857†	11317.5	10732.9	294.28	µg/L	294.28 ppb	08:37:54
3	Sc RADIAL	110509.1	110509.1	99.3	%		08:36:42
3	Al 396.153Radial†	54605.3	54828.6	28553	µg/L	28553 ppb	08:36:42
3	Ca 317.933Radial†	81517.3	81687.1	32173	µg/L	32173 ppb	08:36:42
3	Fe 238.204 Radial†	15515.9	15618.8	80272	µg/L	80272 ppb	08:37:02
3	K 766.490 Radial†	11848.5	11092.4	6223.2	µg/L	6223.2 ppb	08:36:42
3	Mg 279.077 IEC†	2309.1	2310.0	12773	µg/L	12773 ppb	08:37:02
3	Na 589.592 Radial†	1425.9	1942.1	541.45	µg/L	541.45 ppb	08:37:02
3	Sr 421.552†	32669.0	32982.9	188.35	µg/L	188.35 ppb	08:36:42
3	Sc 361.383	1942478.3	1942478.3	99.887	%		08:38:22
3	Y 371.029	1233517.0	1233517.0	104.42	%		08:38:22
3	Ag 328.068†	-828.3	-728.0	0.1397	µg/L	0.1397 ppb	08:38:28
3	As 188.979†	21.7	16.6	23.104	µg/L	23.104 ppb	08:38:48
3	B 249.677†	1254.0	1104.2	26.536	µg/L	26.536 ppb	08:38:28
3	Ba 233.527†	28719.0	28830.7	771.77	µg/L	771.77 ppb	08:38:28
3	Be 313.107†	11227.5	7574.6	4.1549	µg/L	4.1549 ppb	08:38:28
3	Cd 226.502†	153.1	250.7	0.8479	µg/L	0.8479 ppb	08:38:48
3	Co 228.616†	421.7	489.5	19.872	µg/L	19.872 ppb	08:38:48
3	Cr 267.716†	1636.3	1765.3	39.522	µg/L	39.522 ppb	08:38:48
3	Cu 324.752†	7332.0	4074.3	47.644	µg/L	47.644 ppb	08:38:28
3	Mn 257.610†	717260.3	718304.8	2407.1	µg/L	2407.1 ppb	08:38:22
3	Mo 202.031†	103.5	108.5	16.175	µg/L	16.175 ppb	08:38:48
3	Ni 231.604†	956.8	676.2	38.988	µg/L	38.988 ppb	08:38:48
3	P 214.914†	965.7	762.6	1635.7	µg/L	1635.7 ppb	08:38:48
3	Pb 220.353†	253.9	198.2	54.532	µg/L	54.532 ppb	08:38:48
3	S 181.975 Axial†	91.8	53.0	269.80	µg/L	269.80 ppb	08:38:48
3	Sb 206.836†	20.3	1.4	7.2260	µg/L	7.2260 ppb	08:38:48
3	Se 196.026†	-20.4	-31.3	8.5753	µg/L	8.5753 ppb	08:38:48
3	SiO2†	93223.2	91253.2	18544	µg/L	18544 ppb	08:38:28
3	Si 251.611†	106319.9	106125.8	8528.0	µg/L	8528.0 ppb	08:38:28
3	Sn 189.927†	-75.4	-99.9	-32.900	µg/L	-32.900 ppb	08:38:48
3	Ti 334.940†	1016987.0	1017343.5	2387.2	µg/L	2387.2 ppb	08:38:22
3	Tl 190.801†	-25.1	-5.8	12.968	µg/L	12.968 ppb	08:38:48
3	U 409.014†	526.2	-298.7	-44.461	µg/L	-44.461 ppb	08:38:22
3	V 292.402†	8823.4	8910.0	113.99	µg/L	113.99 ppb	08:38:28
3	Zn 213.857†	11291.3	10785.9	295.72	µg/L	295.72 ppb	08:38:28

Mean Data: 241613013|932724|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1946755.1	100.11	%	0.419				0.42%
Sc RADIAL	110927.6	99.7	%	0.39				0.40%
Y 371.029	1236034.8	104.64	%	0.403				0.39%
Ag 328.068†	-743.1	-0.0345	µg/L	0.23765	-0.0345	ppb	0.23765	688.92%
Al 396.153Radial†	54664.6	28468	µg/L	237.0	28468	ppb	237.0	0.83%
As 188.979†	16.2	22.377	µg/L	5.7346	22.377	ppb	5.7346	25.63%
B 249.677†	1108.8	26.861	µg/L	0.4413	26.861	ppb	0.4413	1.64%
Ba 233.527†	28794.3	770.79	µg/L	1.917	770.79	ppb	1.917	0.25%
Be 313.107†	7568.3	4.1519	µg/L	0.01879	4.1519	ppb	0.01879	0.45%
Ca 317.933Radial†	81577.4	32129	µg/L	242.5	32129	ppb	242.5	0.75%
Cd 226.502†	254.9	0.9923	µg/L	0.15117	0.9923	ppb	0.15117	15.23%
Co 228.616†	490.6	19.932	µg/L	0.1827	19.932	ppb	0.1827	0.92%
Cr 267.716†	1765.9	39.535	µg/L	0.0482	39.535	ppb	0.0482	0.12%
Cu 324.752†	4058.6	47.450	µg/L	0.1726	47.450	ppb	0.1726	0.36%
Fe 238.204 Radial†	15549.7	79917	µg/L	320.0	79917	ppb	320.0	0.40%
K 766.490 Radial†	11051.9	6200.4	µg/L	41.04	6200.4	ppb	41.04	0.66%
Mg 279.077 IEC†	2305.6	12749	µg/L	21.3	12749	ppb	21.3	0.17%
Mn 257.610†	717143.4	2403.2	µg/L	7.49	2403.2	ppb	7.49	0.31%
Mo 202.031†	106.9	15.969	µg/L	0.5953	15.969	ppb	0.5953	3.73%
Na 589.592 Radial†	1920.7	535.49	µg/L	6.058	535.49	ppb	6.058	1.13%

Ni 231.604†	668.2	38.528	µg/L	0.6364	38.528	ppb	0.6364	1.65%
P 214.914†	748.7	1604.6	µg/L	27.02	1604.6	ppb	27.02	1.68%
Pb 220.353†	201.4	55.388	µg/L	0.7432	55.388	ppb	0.7432	1.34%
S 181.975 Axial†	59.0	301.82	µg/L	27.787	301.82	ppb	27.787	9.21%
Sb 206.836†	3.3	9.1457	µg/L	5.74712	9.1457	ppb	5.74712	62.84%
Se 196.026†	-33.6	4.7866	µg/L	4.65005	4.7866	ppb	4.65005	97.15%
SiO2†	91206.4	18535	µg/L	74.8	18535	ppb	74.8	0.40%
Si 251.611†	106214.4	8535.4	µg/L	33.23	8535.4	ppb	33.23	0.39%
Sn 189.927†	-104.4	-35.294	µg/L	2.0923	-35.294	ppb	2.0923	5.93%
Sr 421.552†	32917.6	187.97	µg/L	1.349	187.97	ppb	1.349	0.72%
Ti 334.940†	1015951.3	2383.9	µg/L	7.11	2383.9	ppb	7.11	0.30%
Tl 190.801†	-8.3	8.9460	µg/L	3.77993	8.9460	ppb	3.77993	42.25%
U 409.014†	-313.8	-45.927	µg/L	4.1853	-45.927	ppb	4.1853	9.11%
V 292.402†	8878.4	113.57	µg/L	0.565	113.57	ppb	0.565	0.50%
Zn 213.857†	10770.0	295.31	µg/L	0.901	295.31	ppb	0.901	0.31%

Sequence No.: 47
Sample ID: 241613014|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 335
Date Collected: 12/15/2009 08:38:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613014|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113817.9	113817.9	102	%			08:39:30
1	Al 396.153Radial†	242843.0	237289.5	123580	µg/L	123580	ppb	08:39:30
1	Ca 317.933Radial†	58423.1	56719.0	22339	µg/L	22339	ppb	08:39:36
1	Fe 238.204 Radial†	28548.9	27908.3	143430	µg/L	143430	ppb	08:39:36
1	K 766.490 Radial†	32415.8	30856.4	17311	µg/L	17311	ppb	08:39:30
1	Mg 279.077 IEC†	4075.8	3969.9	21943	µg/L	21943	ppb	08:39:36
1	Na 589.592 Radial†	5657.8	6038.4	1683.5	µg/L	1683.5	ppb	08:39:36
1	Sr 421.552†	48748.4	47749.0	272.67	µg/L	272.67	ppb	08:39:30
1	Sc 361.383	1959060.7	1959060.7	100.74	%			08:40:10
1	Y 371.029	1221182.9	1221182.9	103.38	%			08:40:10
1	Ag 328.068†	-1471.7	-1359.6	0.1604	µg/L	0.1604	ppb	08:40:15
1	As 188.979†	22.5	17.2	23.511	µg/L	23.511	ppb	08:40:36
1	B 249.677†	2052.0	1885.8	43.322	µg/L	43.322	ppb	08:40:15
1	Ba 233.527†	64274.5	63881.9	1710.1	µg/L	1710.1	ppb	08:40:15
1	Be 313.107†	22567.9	18736.7	10.644	µg/L	10.644	ppb	08:40:15
1	Cd 226.502†	351.1	446.0	1.4731	µg/L	1.4731	ppb	08:40:36
1	Co 228.616†	1328.0	1385.6	60.018	µg/L	60.018	ppb	08:40:36
1	Cr 267.716†	4513.8	4607.8	103.11	µg/L	103.11	ppb	08:40:15
1	Cu 324.752†	9510.5	6174.7	76.883	µg/L	76.883	ppb	08:40:15
1	Mn 257.610†	1027555.5	1020244.3	3422.7	µg/L	3422.7	ppb	08:40:10
1	Mo 202.031†	7.8	12.6	7.1456	µg/L	7.1456	ppb	08:40:36
1	Ni 231.604†	1691.6	1397.4	80.578	µg/L	80.578	ppb	08:40:36
1	P 214.914†	649.0	440.1	864.75	µg/L	864.75	ppb	08:40:36
1	Pb 220.353†	518.1	458.3	131.55	µg/L	131.55	ppb	08:40:36
1	S 181.975 Axial†	133.9	94.1	478.47	µg/L	478.47	ppb	08:40:36
1	Sb 206.836†	16.6	-2.4	13.263	µg/L	13.263	ppb	08:40:36
1	Se 196.026†	-40.6	-51.2	17.829	µg/L	17.829	ppb	08:40:36
1	SiO2†	101144.7	98326.5	19982	µg/L	19982	ppb	08:40:15
1	Si 251.611†	115741.6	114577.4	9119.5	µg/L	9119.5	ppb	08:40:15
1	Sn 189.927†	-107.3	-130.8	-41.892	µg/L	-41.892	ppb	08:40:36
1	Ti 334.940†	2111192.5	2094899.4	4918.2	µg/L	4918.2	ppb	08:40:10
1	Tl 190.801†	-42.5	-22.9	10.887	µg/L	10.887	ppb	08:40:36
1	U 409.014†	320.2	-507.6	-77.635	µg/L	-77.635	ppb	08:40:15
1	V 292.402†	21696.2	21613.5	272.15	µg/L	272.15	ppb	08:40:15
1	Zn 213.857†	11581.1	10977.9	293.93	µg/L	293.93	ppb	08:40:15
2	Sc RADIAL	114662.0	114662.0	103	%			08:39:41
2	Al 396.153Radial†	244695.2	237339.2	123600	µg/L	123600	ppb	08:39:41
2	Ca 317.933Radial†	58728.1	56594.4	22290	µg/L	22290	ppb	08:39:47
2	Fe 238.204 Radial†	28661.9	27812.5	142940	µg/L	142940	ppb	08:39:47
2	K 766.490 Radial†	32721.2	30919.4	17347	µg/L	17347	ppb	08:39:41
2	Mg 279.077 IEC†	4096.5	3960.6	21891	µg/L	21891	ppb	08:39:47
2	Na 589.592 Radial†	5717.9	6055.9	1688.3	µg/L	1688.3	ppb	08:39:47
2	Sr 421.552†	49098.1	47737.5	272.60	µg/L	272.60	ppb	08:39:41
2	Sc 361.383	1965322.1	1965322.1	101.06	%			08:40:43
2	Y 371.029	1225188.8	1225188.8	103.72	%			08:40:43
2	Ag 328.068†	-1466.3	-1349.6	0.2136	µg/L	0.2136	ppb	08:40:49
2	As 188.979†	31.1	25.6	40.313	µg/L	40.313	ppb	08:41:09
2	B 249.677†	2035.7	1863.1	42.414	µg/L	42.414	ppb	08:40:49
2	Ba 233.527†	64758.7	64157.7	1717.5	µg/L	1717.5	ppb	08:40:49
2	Be 313.107†	22733.4	18829.0	10.703	µg/L	10.703	ppb	08:40:49
2	Cd 226.502†	344.5	438.3	1.2880	µg/L	1.2880	ppb	08:41:09
2	Co 228.616†	1315.1	1368.7	59.144	µg/L	59.144	ppb	08:41:09
2	Cr 267.716†	4548.4	4627.8	103.56	µg/L	103.56	ppb	08:40:49
2	Cu 324.752†	9618.3	6251.3	77.349	µg/L	77.349	ppb	08:40:49
2	Mn 257.610†	1033222.7	1022602.2	3430.5	µg/L	3430.5	ppb	08:40:43
2	Mo 202.031†	9.5	14.3	7.3314	µg/L	7.3314	ppb	08:41:09
2	Ni 231.604†	1691.1	1391.6	80.241	µg/L	80.241	ppb	08:41:09
2	P 214.914†	642.5	431.6	846.22	µg/L	846.22	ppb	08:41:09
2	Pb 220.353†	529.7	468.1	134.20	µg/L	134.20	ppb	08:41:09

2	S 181.975 Axial†	137.2	96.9	493.78 µg/L	493.78 ppb	08:41:09
2	Sb 206.836†	19.0	-0.1	15.706 µg/L	15.706 ppb	08:41:09
2	Se 196.026†	-36.8	-47.3	23.352 µg/L	23.352 ppb	08:41:09
2	SiO2†	101167.6	98029.4	19921 µg/L	19921 ppb	08:40:49
2	Si 251.611†	115770.7	114240.1	9091.7 µg/L	9091.7 ppb	08:40:49
2	Sn 189.927†	-99.1	-122.4	-37.590 µg/L	-37.590 ppb	08:41:09
2	Ti 334.940†	2120975.5	2097902.8	4925.2 µg/L	4925.2 ppb	08:40:43
2	Tl 190.801†	-45.9	-26.1	5.7232 µg/L	5.7232 ppb	08:41:09
2	U 409.014†	241.1	-586.9	-85.567 µg/L	-85.567 ppb	08:40:49
2	V 292.402†	21729.6	21578.0	271.67 µg/L	271.67 ppb	08:40:49
2	Zn 213.857†	11676.4	11035.6	295.62 µg/L	295.62 ppb	08:40:49
3	Sc RADIAL	114193.7	114193.7	103 %		08:39:53
3	Al 396.153Radial†	244757.8	238374.2	124140 µg/L	124140 ppb	08:39:53
3	Ca 317.933Radial†	58982.2	57075.9	22479 µg/L	22479 ppb	08:39:58
3	Fe 238.204 Radial†	28797.9	28059.1	144210 µg/L	144210 ppb	08:39:58
3	K 766.490 Radial†	32793.1	31119.8	17459 µg/L	17459 ppb	08:39:53
3	Mg 279.077 IEC†	4111.0	3991.1	22060 µg/L	22060 ppb	08:39:58
3	Na 589.592 Radial†	5792.6	6151.5	1715.0 µg/L	1715.0 ppb	08:39:58
3	Sr 421.552†	49154.9	47988.3	274.03 µg/L	274.03 ppb	08:39:53
3	Sc 361.383	1963050.4	1963050.4	100.94 %		08:41:16
3	Y 371.029	1224297.8	1224297.8	103.64 %		08:41:16
3	Ag 328.068†	-1439.7	-1324.9	0.5266 µg/L	0.5266 ppb	08:41:21
3	As 188.979†	24.4	19.1	27.091 µg/L	27.091 ppb	08:41:42
3	B 249.677†	2013.3	1843.3	41.085 µg/L	41.085 ppb	08:41:21
3	Ba 233.527†	63957.3	63438.0	1698.2 µg/L	1698.2 ppb	08:41:21
3	Be 313.107†	22589.6	18712.6	10.626 µg/L	10.626 ppb	08:41:21
3	Cd 226.502†	344.4	438.6	1.2034 µg/L	1.2034 ppb	08:41:42
3	Co 228.616†	1324.4	1379.4	59.688 µg/L	59.688 ppb	08:41:42
3	Cr 267.716†	4460.1	4545.5	101.72 µg/L	101.72 ppb	08:41:21
3	Cu 324.752†	9547.6	6192.2	77.181 µg/L	77.181 ppb	08:41:21
3	Mn 257.610†	1030242.1	1020832.7	3424.7 µg/L	3424.7 ppb	08:41:16
3	Mo 202.031†	8.4	13.2	7.2496 µg/L	7.2496 ppb	08:41:42
3	Ni 231.604†	1697.9	1400.4	80.746 µg/L	80.746 ppb	08:41:42
3	P 214.914†	649.2	439.0	861.71 µg/L	861.71 ppb	08:41:42
3	Pb 220.353†	525.8	464.9	133.36 µg/L	133.36 ppb	08:41:42
3	S 181.975 Axial†	128.5	88.5	448.54 µg/L	448.54 ppb	08:41:42
3	Sb 206.836†	15.1	-4.0	11.589 µg/L	11.589 ppb	08:41:42
3	Se 196.026†	-39.8	-50.2	19.769 µg/L	19.769 ppb	08:41:42
3	SiO2†	100939.0	97918.7	19899 µg/L	19899 ppb	08:41:21
3	Si 251.611†	115374.2	113979.9	9070.6 µg/L	9070.6 ppb	08:41:21
3	Sn 189.927†	-102.0	-125.4	-38.937 µg/L	-38.937 ppb	08:41:42
3	Ti 334.940†	2118195.8	2097577.8	4924.5 µg/L	4924.5 ppb	08:41:16
3	Tl 190.801†	-48.5	-28.8	1.4507 µg/L	1.4507 ppb	08:41:42
3	U 409.014†	298.9	-529.4	-79.981 µg/L	-79.981 ppb	08:41:21
3	V 292.402†	21436.6	21312.6	268.58 µg/L	268.58 ppb	08:41:21
3	Zn 213.857†	11485.0	10859.3	290.49 µg/L	290.49 ppb	08:41:21

Mean Data: 241613014|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1962477.7	100.92	%	0.163				0.16%
Sc RADIAL	114224.5	103	%	0.4				0.37%
Y 371.029	1223556.5	103.58	%	0.178				0.17%
Ag 328.068†	-1344.7	0.3002	µg/L	0.19785	0.3002	ppb	0.19785	65.90%
Al 396.153Radial†	237667.6	123770	µg/L	318.9	123770	ppb	318.9	0.26%
As 188.979†	20.7	30.305	µg/L	8.8501	30.305	ppb	8.8501	29.20%
B 249.677†	1864.1	42.274	µg/L	1.1252	42.274	ppb	1.1252	2.66%
Ba 233.527†	63825.9	1708.6	µg/L	9.72	1708.6	ppb	9.72	0.57%
Be 313.107†	18759.4	10.658	µg/L	0.0403	10.658	ppb	0.0403	0.38%
Ca 317.933Radial†	56796.4	22369	µg/L	98.4	22369	ppb	98.4	0.44%
Cd 226.502†	441.0	1.3215	µg/L	0.13794	1.3215	ppb	0.13794	10.44%
Co 228.616†	1377.9	59.616	µg/L	0.4414	59.616	ppb	0.4414	0.74%
Cr 267.716†	4593.7	102.80	µg/L	0.959	102.80	ppb	0.959	0.93%
Cu 324.752†	6206.1	77.138	µg/L	0.2359	77.138	ppb	0.2359	0.31%
Fe 238.204 Radial†	27926.6	143530	µg/L	639.0	143530	ppb	639.0	0.45%
K 766.490 Radial†	30965.2	17372	µg/L	77.2	17372	ppb	77.2	0.44%
Mg 279.077 IEC†	3973.9	21965	µg/L	86.2	21965	ppb	86.2	0.39%
Mn 257.610†	1021226.4	3426.0	µg/L	4.05	3426.0	ppb	4.05	0.12%
Mo 202.031†	13.3	7.2422	µg/L	0.09314	7.2422	ppb	0.09314	1.29%
Na 589.592 Radial†	6081.9	1695.6	µg/L	16.98	1695.6	ppb	16.98	1.00%

Ni 231.604†	1396.5	80.522	µg/L	0.2569	80.522	ppb	0.2569	0.32%
P 214.914†	436.9	857.56	µg/L	9.940	857.56	ppb	9.940	1.16%
Pb 220.353†	463.8	133.04	µg/L	1.356	133.04	ppb	1.356	1.02%
S 181.975 Axial†	93.1	473.60	µg/L	23.011	473.60	ppb	23.011	4.86%
Sb 206.836†	-2.2	13.519	µg/L	2.0706	13.519	ppb	2.0706	15.32%
Se 196.026†	-49.5	20.317	µg/L	2.8021	20.317	ppb	2.8021	13.79%
SiO2†	98091.6	19934	µg/L	42.9	19934	ppb	42.9	0.22%
Si 251.611†	114265.8	9093.9	µg/L	24.53	9093.9	ppb	24.53	0.27%
Sn 189.927†	-126.2	-39.473	µg/L	2.2008	-39.473	ppb	2.2008	5.58%
Sr 421.552†	47824.9	273.10	µg/L	0.809	273.10	ppb	0.809	0.30%
Ti 334.940†	2096793.3	4922.6	µg/L	3.87	4922.6	ppb	3.87	0.08%
Tl 190.801†	-25.9	6.0203	µg/L	4.72509	6.0203	ppb	4.72509	78.49%
U 409.014†	-541.3	-81.061	µg/L	4.0747	-81.061	ppb	4.0747	5.03%
V 292.402†	21501.3	270.80	µg/L	1.936	270.80	ppb	1.936	0.71%
Zn 213.857†	10957.6	293.35	µg/L	2.611	293.35	ppb	2.611	0.89%

Sequence No.: 48
Sample ID: 241613015|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 336
Date Collected: 12/15/2009 08:41:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613015|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113931.6	113931.6	102	%			08:42:25
1	Al 396.153Radial†	240925.4	235179.2	122480	µg/L	122480	ppb	08:42:25
1	Ca 317.933Radial†	76873.5	74684.8	29415	µg/L	29415	ppb	08:42:30
1	Fe 238.204 Radial†	23406.8	22857.4	117470	µg/L	117470	ppb	08:42:30
1	K 766.490 Radial†	30235.4	28694.8	16099	µg/L	16099	ppb	08:42:25
1	Mg 279.077 IEC†	3808.6	3704.9	20502	µg/L	20502	ppb	08:42:30
1	Na 589.592 Radial†	5746.4	6119.4	1706.0	µg/L	1706.0	ppb	08:42:30
1	Sr 421.552†	49384.4	48322.7	275.94	µg/L	275.94	ppb	08:42:25
1	Sc 361.383	1975735.7	1975735.7	101.60	%			08:43:04
1	Y 371.029	1224037.8	1224037.8	103.62	%			08:43:04
1	Ag 328.068†	-1245.5	-1124.6	0.0370	µg/L	0.0370	ppb	08:43:09
1	As 188.979†	27.2	21.7	34.488	µg/L	34.488	ppb	08:43:30
1	B 249.677†	1731.7	1553.3	35.897	µg/L	35.897	ppb	08:43:09
1	Ba 233.527†	64207.5	63277.5	1693.8	µg/L	1693.8	ppb	08:43:09
1	Be 313.107†	23747.2	19708.3	11.374	µg/L	11.374	ppb	08:43:09
1	Cd 226.502†	260.9	354.3	0.8905	µg/L	0.8905	ppb	08:43:30
1	Co 228.616†	988.8	1040.7	42.981	µg/L	42.981	ppb	08:43:30
1	Cr 267.716†	3752.5	3820.7	85.497	µg/L	85.497	ppb	08:43:09
1	Cu 324.752†	7768.9	4380.7	57.921	µg/L	57.921	ppb	08:43:09
1	Mn 257.610†	842317.0	829308.5	2782.2	µg/L	2782.2	ppb	08:43:04
1	Mo 202.031†	-9.4	-4.4	4.0913	µg/L	4.0913	ppb	08:43:30
1	Ni 231.604†	1488.1	1183.0	68.214	µg/L	68.214	ppb	08:43:30
1	P 214.914†	580.8	367.5	732.47	µg/L	732.47	ppb	08:43:30
1	Pb 220.353†	398.8	336.5	99.225	µg/L	99.225	ppb	08:43:30
1	S 181.975 Axial†	137.0	96.0	492.80	µg/L	492.80	ppb	08:43:30
1	Sb 206.836†	13.6	-5.6	8.4867	µg/L	8.4867	ppb	08:43:30
1	Se 196.026†	-41.2	-51.3	0.9821	µg/L	0.9821	ppb	08:43:30
1	SiO2†	81182.0	77830.3	15816	µg/L	15816	ppb	08:43:09
1	Si 251.611†	92336.9	90570.9	7179.3	µg/L	7179.3	ppb	08:43:09
1	Sn 189.927†	-108.0	-130.6	-43.571	µg/L	-43.571	ppb	08:43:30
1	Ti 334.940†	2032056.6	1999319.8	4693.3	µg/L	4693.3	ppb	08:43:04
1	Tl 190.801†	-41.2	-21.2	8.3163	µg/L	8.3163	ppb	08:43:30
1	U 409.014†	289.2	-540.8	-75.979	µg/L	-75.979	ppb	08:43:09
1	V 292.402†	18043.8	17836.8	224.49	µg/L	224.49	ppb	08:43:09
1	Zn 213.857†	8956.9	8297.9	221.07	µg/L	221.07	ppb	08:43:09
2	Sc RADIAL	113580.3	113580.3	102	%			08:42:36
2	Al 396.153Radial†	240401.1	235393.4	122590	µg/L	122590	ppb	08:42:36
2	Ca 317.933Radial†	77815.4	75839.9	29870	µg/L	29870	ppb	08:42:41
2	Fe 238.204 Radial†	23693.0	23208.6	119280	µg/L	119280	ppb	08:42:41
2	K 766.490 Radial†	30118.8	28672.0	16086	µg/L	16086	ppb	08:42:36
2	Mg 279.077 IEC†	3851.8	3758.8	20800	µg/L	20800	ppb	08:42:41
2	Na 589.592 Radial†	5837.2	6225.7	1735.7	µg/L	1735.7	ppb	08:42:41
2	Sr 421.552†	49234.9	48325.4	275.96	µg/L	275.96	ppb	08:42:36
2	Sc 361.383	1946852.6	1946852.6	100.11	%			08:43:37
2	Y 371.029	1208393.5	1208393.5	102.30	%			08:43:37
2	Ag 328.068†	-1189.9	-1087.3	0.5490	µg/L	0.5490	ppb	08:43:43
2	As 188.979†	22.4	17.3	25.615	µg/L	25.615	ppb	08:44:03
2	B 249.677†	1653.1	1500.1	32.831	µg/L	32.831	ppb	08:43:43
2	Ba 233.527†	63922.8	63930.7	1711.3	µg/L	1711.3	ppb	08:43:43
2	Be 313.107†	23487.3	19795.5	11.397	µg/L	11.397	ppb	08:43:43
2	Cd 226.502†	268.5	365.6	1.0732	µg/L	1.0732	ppb	08:44:03
2	Co 228.616†	1009.4	1075.7	44.563	µg/L	44.563	ppb	08:44:03
2	Cr 267.716†	3745.4	3868.4	86.563	µg/L	86.563	ppb	08:43:43
2	Cu 324.752†	7788.6	4513.9	59.302	µg/L	59.302	ppb	08:43:43
2	Mn 257.610†	845597.4	844885.3	2834.4	µg/L	2834.4	ppb	08:43:37
2	Mo 202.031†	-11.9	-7.1	3.8392	µg/L	3.8392	ppb	08:44:03
2	Ni 231.604†	1503.5	1220.1	70.352	µg/L	70.352	ppb	08:44:03
2	P 214.914†	581.6	376.8	751.37	µg/L	751.37	ppb	08:44:03
2	Pb 220.353†	402.7	346.3	101.82	µg/L	101.82	ppb	08:44:03

2	S 181.975 Axial†	141.4	102.4	527.06	µg/L	527.06 ppb	08:44:03
2	Sb 206.836†	15.6	-3.4	11.141	µg/L	11.141 ppb	08:44:03
2	Se 196.026†	-30.8	-41.6	16.763	µg/L	16.763 ppb	08:44:03
2	SiO2†	80095.4	77930.4	15837	µg/L	15837 ppb	08:43:43
2	Si 251.611†	91053.4	90637.2	7181.4	µg/L	7181.4 ppb	08:43:43
2	Sn 189.927†	-105.5	-129.8	-42.746	µg/L	-42.746 ppb	08:44:03
2	Ti 334.940†	2041900.6	2038826.1	4786.1	µg/L	4786.1 ppb	08:43:37
2	Tl 190.801†	-36.8	-17.4	15.274	µg/L	15.274 ppb	08:44:03
2	U 409.014†	308.7	-517.1	-73.907	µg/L	-73.907 ppb	08:43:43
2	V 292.402†	17955.6	18012.2	226.75	µg/L	226.75 ppb	08:43:43
2	Zn 213.857†	8866.7	8338.6	222.01	µg/L	222.01 ppb	08:43:43
3	Sc RADIAL	114087.1	114087.1	103	%		08:42:47
3	Al 396.153Radial†	242199.9	236101.9	122960	µg/L	122960 ppb	08:42:47
3	Ca 317.933Radial†	77541.0	75233.6	29631	µg/L	29631 ppb	08:42:52
3	Fe 238.204 Radial†	23632.7	23046.6	118450	µg/L	118450 ppb	08:42:52
3	K 766.490 Radial†	30354.0	28770.3	16141	µg/L	16141 ppb	08:42:47
3	Mg 279.077 IEC†	3859.3	3749.3	20748	µg/L	20748 ppb	08:42:52
3	Na 589.592 Radial†	5844.5	6207.4	1730.6	µg/L	1730.6 ppb	08:42:52
3	Sr 421.552†	49628.8	48495.4	276.93	µg/L	276.93 ppb	08:42:47
3	Sc 361.383	1943536.9	1943536.9	99.941	%		08:44:10
3	Y 371.029	1206316.7	1206316.7	102.12	%		08:44:10
3	Ag 328.068†	-1219.6	-1119.0	0.1773	µg/L	0.1773 ppb	08:44:16
3	As 188.979†	30.2	25.1	41.416	µg/L	41.416 ppb	08:44:36
3	B 249.677†	1723.7	1573.5	36.535	µg/L	36.535 ppb	08:44:16
3	Ba 233.527†	63836.9	63953.6	1711.9	µg/L	1711.9 ppb	08:44:16
3	Be 313.107†	23469.8	19818.0	11.412	µg/L	11.412 ppb	08:44:16
3	Cd 226.502†	270.8	368.4	1.2170	µg/L	1.2170 ppb	08:44:36
3	Co 228.616†	1016.9	1084.8	45.027	µg/L	45.027 ppb	08:44:36
3	Cr 267.716†	3726.4	3855.8	86.281	µg/L	86.281 ppb	08:44:16
3	Cu 324.752†	7758.2	4496.7	58.996	µg/L	58.996 ppb	08:44:16
3	Mn 257.610†	844324.0	845052.2	2834.9	µg/L	2834.9 ppb	08:44:10
3	Mo 202.031†	-10.2	-5.4	4.0104	µg/L	4.0104 ppb	08:44:36
3	Ni 231.604†	1513.8	1232.9	71.093	µg/L	71.093 ppb	08:44:36
3	P 214.914†	591.8	388.0	777.76	µg/L	777.76 ppb	08:44:36
3	Pb 220.353†	393.6	337.9	99.612	µg/L	99.612 ppb	08:44:36
3	S 181.975 Axial†	138.0	99.2	509.82	µg/L	509.82 ppb	08:44:36
3	Sb 206.836†	15.8	-3.1	11.435	µg/L	11.435 ppb	08:44:36
3	Se 196.026†	-41.1	-52.0	0.6386	µg/L	0.6386 ppb	08:44:36
3	SiO2†	80140.6	78112.0	15874	µg/L	15874 ppb	08:44:16
3	Si 251.611†	91128.1	90867.1	7200.2	µg/L	7200.2 ppb	08:44:16
3	Sn 189.927†	-115.4	-139.8	-48.127	µg/L	-48.127 ppb	08:44:36
3	Ti 334.940†	2038732.2	2039135.5	4786.8	µg/L	4786.8 ppb	08:44:10
3	Tl 190.801†	-46.4	-27.1	-0.1807	µg/L	-0.1807 ppb	08:44:36
3	U 409.014†	299.7	-525.5	-74.610	µg/L	-74.610 ppb	08:44:16
3	V 292.402†	17874.2	17961.3	226.07	µg/L	226.07 ppb	08:44:16
3	Zn 213.857†	8905.3	8392.3	223.61	µg/L	223.61 ppb	08:44:16

Mean Data: 241613015|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1955375.1	100.55	%	0.911				0.91%
Sc RADIAL	113866.3	102	%	0.2				0.23%
Y 371.029	1212916.0	102.68	%	0.820				0.80%
Ag 328.068†	-1110.3	0.2544	µg/L	0.26456	0.2544	ppb	0.26456	103.98%
Al 396.153Radial†	235558.2	122670	µg/L	251.5	122670	ppb	251.5	0.20%
As 188.979†	21.4	33.840	µg/L	7.9202	33.840	ppb	7.9202	23.41%
B 249.677†	1542.3	35.088	µg/L	1.9802	35.088	ppb	1.9802	5.64%
Ba 233.527†	63720.6	1705.7	µg/L	10.28	1705.7	ppb	10.28	0.60%
Be 313.107†	19773.9	11.394	µg/L	0.0194	11.394	ppb	0.0194	0.17%
Ca 317.933Radial†	75252.8	29639	µg/L	227.6	29639	ppb	227.6	0.77%
Cd 226.502†	362.8	1.0603	µg/L	0.16362	1.0603	ppb	0.16362	15.43%
Co 228.616†	1067.0	44.190	µg/L	1.0724	44.190	ppb	1.0724	2.43%
Cr 267.716†	3848.3	86.114	µg/L	0.5522	86.114	ppb	0.5522	0.64%
Cu 324.752†	4463.8	58.740	µg/L	0.7253	58.740	ppb	0.7253	1.23%
Fe 238.204 Radial†	23037.5	118400	µg/L	903.2	118400	ppb	903.2	0.76%
K 766.490 Radial†	28712.3	16108	µg/L	28.9	16108	ppb	28.9	0.18%
Mg 279.077 IEC†	3737.7	20683	µg/L	159.1	20683	ppb	159.1	0.77%
Mn 257.610†	839748.7	2817.2	µg/L	30.27	2817.2	ppb	30.27	1.07%
Mo 202.031†	-5.6	3.9803	µg/L	0.12872	3.9803	ppb	0.12872	3.23%
Na 589.592 Radial†	6184.1	1724.1	µg/L	15.85	1724.1	ppb	15.85	0.92%

Ni 231.604†	1212.0	69.886 µg/L	1.4951	69.886 ppb	1.4951	2.14%
P 214.914†	377.5	753.86 µg/L	22.749	753.86 ppb	22.749	3.02%
Pb 220.353†	340.2	100.22 µg/L	1.401	100.22 ppb	1.401	1.40%
S 181.975 Axial†	99.2	509.89 µg/L	17.128	509.89 ppb	17.128	3.36%
Sb 206.836†	-4.0	10.354 µg/L	1.6240	10.354 ppb	1.6240	15.68%
Se 196.026†	-48.3	6.1279 µg/L	9.21183	6.1279 ppb	9.21183	150.33%
SiO2†	77957.6	15842 µg/L	29.0	15842 ppb	29.0	0.18%
Si 251.611†	90691.7	7187.0 µg/L	11.49	7187.0 ppb	11.49	0.16%
Sn 189.927†	-133.4	-44.815 µg/L	2.8982	-44.815 ppb	2.8982	6.47%
Sr 421.552†	48381.2	276.28 µg/L	0.565	276.28 ppb	0.565	0.20%
Ti 334.940†	2025760.5	4755.4 µg/L	53.76	4755.4 ppb	53.76	1.13%
Tl 190.801†	-21.9	7.8033 µg/L	7.74029	7.8033 ppb	7.74029	99.19%
U 409.014†	-527.8	-74.832 µg/L	1.0539	-74.832 ppb	1.0539	1.41%
V 292.402†	17936.8	225.77 µg/L	1.161	225.77 ppb	1.161	0.51%
Zn 213.857†	8342.9	222.23 µg/L	1.286	222.23 ppb	1.286	0.58%

Sequence No.: 49
Sample ID: 241613016|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 337
Date Collected: 12/15/2009 08:44:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613016|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110253.3	110253.3	99.1	%			08:45:18
1	Al 396.153Radial†	14729.0	14704.4	7656.3	µg/L	7656.3	ppb	08:45:18
1	Ca 317.933Radial†	14312.0	14039.4	5529.5	µg/L	5529.5	ppb	08:45:18
1	Fe 238.204 Radial†	15094.2	15229.4	78270	µg/L	78270	ppb	08:45:38
1	K 766.490 Radial†	4362.5	3563.7	1999.3	µg/L	1999.3	ppb	08:45:18
1	Mg 279.077 IEC†	528.9	518.4	2778.5	µg/L	2778.5	ppb	08:45:38
1	Na 589.592 Radial†	3141.8	3677.4	1025.3	µg/L	1025.3	ppb	08:45:18
1	Sr 421.552†	7828.9	7985.3	45.599	µg/L	45.599	ppb	08:45:18
1	Sc 361.383	1959586.9	1959586.9	100.77	%			08:46:43
1	Y 371.029	1253825.4	1253825.4	106.14	%			08:46:43
1	Ag 328.068†	-750.1	-643.1	0.2238	µg/L	0.2238	ppb	08:46:48
1	As 188.979†	17.6	12.4	21.221	µg/L	21.221	ppb	08:47:09
1	B 249.677†	964.7	806.2	13.191	µg/L	13.191	ppb	08:46:48
1	Ba 233.527†	8948.2	8959.3	239.81	µg/L	239.81	ppb	08:46:48
1	Be 313.107†	11230.9	7479.9	3.7768	µg/L	3.7768	ppb	08:46:48
1	Cd 226.502†	134.7	231.1	0.4100	µg/L	0.4100	ppb	08:46:48
1	Co 228.616†	213.2	278.9	7.4688	µg/L	7.4688	ppb	08:47:09
1	Cr 267.716†	500.2	623.6	13.930	µg/L	13.930	ppb	08:46:48
1	Cu 324.752†	3217.3	-73.2	16.266	µg/L	16.266	ppb	08:46:48
1	Mn 257.610†	667398.7	662553.2	2220.8	µg/L	2220.8	ppb	08:46:43
1	Mo 202.031†	312.4	314.9	40.866	µg/L	40.866	ppb	08:47:09
1	Ni 231.604†	762.5	475.0	27.390	µg/L	27.390	ppb	08:47:09
1	P 214.914†	455.2	247.6	470.63	µg/L	470.63	ppb	08:47:09
1	Pb 220.353†	236.3	178.5	47.602	µg/L	47.602	ppb	08:47:09
1	S 181.975 Axial†	38.4	-0.7	-15.979	µg/L	-15.979	ppb	08:47:09
1	Sb 206.836†	16.4	-2.7	8.6389	µg/L	8.6389	ppb	08:47:09
1	Se 196.026†	-25.4	-36.1	0.3889	µg/L	0.3889	ppb	08:47:09
1	SiO2†	56134.5	53631.8	10899	µg/L	10899	ppb	08:46:48
1	Si 251.611†	63326.0	62529.7	4957.6	µg/L	4957.6	ppb	08:46:48
1	Sn 189.927†	23.6	-1.0	10.468	µg/L	10.468	ppb	08:47:09
1	Ti 334.940†	1391072.3	1379694.1	3239.6	µg/L	3239.6	ppb	08:46:43
1	Tl 190.801†	-40.3	-20.7	-1.7619	µg/L	-1.7619	ppb	08:47:09
1	U 409.014†	134.6	-691.9	-84.519	µg/L	-84.519	ppb	08:46:43
1	V 292.402†	1999.0	2060.4	31.370	µg/L	31.370	ppb	08:46:48
1	Zn 213.857†	12848.5	12232.5	337.20	µg/L	337.20	ppb	08:46:48
2	Sc RADIAL	110784.7	110784.7	99.5	%			08:45:44
2	Al 396.153Radial†	14743.0	14647.1	7626.5	µg/L	7626.5	ppb	08:45:44
2	Ca 317.933Radial†	14246.1	13903.9	5476.1	µg/L	5476.1	ppb	08:45:44
2	Fe 238.204 Radial†	15058.2	15120.1	77708	µg/L	77708	ppb	08:46:04
2	K 766.490 Radial†	4376.1	3556.2	1995.1	µg/L	1995.1	ppb	08:45:44
2	Mg 279.077 IEC†	526.7	513.7	2752.9	µg/L	2752.9	ppb	08:46:04
2	Na 589.592 Radial†	3185.9	3706.5	1033.4	µg/L	1033.4	ppb	08:45:44
2	Sr 421.552†	7753.4	7871.5	44.949	µg/L	44.949	ppb	08:45:44
2	Sc 361.383	1956971.5	1956971.5	100.63	%			08:47:16
2	Y 371.029	1251178.8	1251178.8	105.92	%			08:47:16
2	Ag 328.068†	-832.9	-726.4	-0.6049	µg/L	-0.6049	ppb	08:47:22
2	As 188.979†	9.1	3.9	4.3909	µg/L	4.3909	ppb	08:47:42
2	B 249.677†	980.7	823.3	14.171	µg/L	14.171	ppb	08:47:22
2	Ba 233.527†	9009.0	9031.6	241.75	µg/L	241.75	ppb	08:47:22
2	Be 313.107†	11298.1	7561.5	3.8303	µg/L	3.8303	ppb	08:47:22
2	Cd 226.502†	119.2	215.9	0.0320	µg/L	0.0320	ppb	08:47:22
2	Co 228.616†	218.9	284.9	7.7659	µg/L	7.7659	ppb	08:47:42
2	Cr 267.716†	499.5	623.6	13.933	µg/L	13.933	ppb	08:47:22
2	Cu 324.752†	3244.4	-42.0	16.378	µg/L	16.378	ppb	08:47:22
2	Mn 257.610†	666429.3	662475.0	2220.5	µg/L	2220.5	ppb	08:47:16
2	Mo 202.031†	308.3	311.3	40.408	µg/L	40.408	ppb	08:47:42
2	Ni 231.604†	766.7	480.2	27.687	µg/L	27.687	ppb	08:47:42
2	P 214.914†	459.4	252.4	481.89	µg/L	481.89	ppb	08:47:42
2	Pb 220.353†	240.5	183.0	48.800	µg/L	48.800	ppb	08:47:42

2	S 181.975 Axial†	38.3	-0.8	-16.273	µg/L	-16.273 ppb	08:47:42
2	Sb 206.836†	16.6	-2.5	8.8634	µg/L	8.8634 ppb	08:47:42
2	Se 196.026†	-21.3	-32.0	6.1156	µg/L	6.1156 ppb	08:47:42
2	SiO2†	56335.7	53906.2	10955	µg/L	10955 ppb	08:47:22
2	Si 251.611†	63579.5	62865.6	4985.0	µg/L	4985.0 ppb	08:47:22
2	Sn 189.927†	12.5	-12.0	4.6651	µg/L	4.6651 ppb	08:47:42
2	Ti 334.940†	1390133.6	1380606.3	3241.8	µg/L	3241.8 ppb	08:47:16
2	Tl 190.801†	-40.6	-21.0	-2.3568	µg/L	-2.3568 ppb	08:47:42
2	U 409.014†	185.7	-641.0	-79.260	µg/L	-79.260 ppb	08:47:16
2	V 292.402†	2095.8	2159.3	32.521	µg/L	32.521 ppb	08:47:22
2	Zn 213.857†	12920.3	12320.9	339.76	µg/L	339.76 ppb	08:47:22
3	Sc RADIAL	110774.8	110774.8	99.5	%		08:46:10
3	Al 396.153Radial†	14577.9	14482.5	7540.8	µg/L	7540.8 ppb	08:46:10
3	Ca 317.933Radial†	14078.4	13736.7	5410.2	µg/L	5410.2 ppb	08:46:10
3	Fe 238.204 Radial†	15043.1	15106.3	77637	µg/L	77637 ppb	08:46:30
3	K 766.490 Radial†	4392.8	3573.4	2004.8	µg/L	2004.8 ppb	08:46:10
3	Mg 279.077 IEC†	527.1	514.1	2755.5	µg/L	2755.5 ppb	08:46:30
3	Na 589.592 Radial†	3132.3	3653.0	1018.4	µg/L	1018.4 ppb	08:46:10
3	Sr 421.552†	7682.9	7801.4	44.549	µg/L	44.549 ppb	08:46:10
3	Sc 361.383	1950180.0	1950180.0	100.28	%		08:47:50
3	Y 371.029	1247080.9	1247080.9	105.57	%		08:47:50
3	Ag 328.068†	-772.2	-668.8	-0.0643	µg/L	-0.0643 ppb	08:47:55
3	As 188.979†	9.3	4.2	4.8974	µg/L	4.8974 ppb	08:48:16
3	B 249.677†	1014.8	860.8	15.950	µg/L	15.950 ppb	08:47:55
3	Ba 233.527†	8977.6	9031.5	241.75	µg/L	241.75 ppb	08:47:55
3	Be 313.107†	11216.1	7518.8	3.8080	µg/L	3.8080 ppb	08:47:55
3	Cd 226.502†	154.4	251.5	1.0337	µg/L	1.0337 ppb	08:47:55
3	Co 228.616†	214.6	281.4	7.6261	µg/L	7.6261 ppb	08:48:16
3	Cr 267.716†	529.5	655.2	14.636	µg/L	14.636 ppb	08:47:55
3	Cu 324.752†	3203.6	-71.4	16.143	µg/L	16.143 ppb	08:47:55
3	Mn 257.610†	660527.8	658896.4	2208.5	µg/L	2208.5 ppb	08:47:50
3	Mo 202.031†	315.3	319.2	41.364	µg/L	41.364 ppb	08:48:16
3	Ni 231.604†	763.0	479.1	27.628	µg/L	27.628 ppb	08:48:16
3	P 214.914†	458.4	253.0	483.41	µg/L	483.41 ppb	08:48:16
3	Pb 220.353†	226.3	169.6	45.231	µg/L	45.231 ppb	08:48:16
3	S 181.975 Axial†	37.5	-1.5	-19.777	µg/L	-19.777 ppb	08:48:16
3	Sb 206.836†	20.7	1.7	13.213	µg/L	13.213 ppb	08:48:16
3	Se 196.026†	-25.2	-36.0	0.0327	µg/L	0.0327 ppb	08:48:16
3	SiO2†	54957.8	52727.1	10715	µg/L	10715 ppb	08:47:55
3	Si 251.611†	61925.6	61436.3	4869.5	µg/L	4869.5 ppb	08:47:55
3	Sn 189.927†	15.0	-9.4	5.9896	µg/L	5.9896 ppb	08:48:16
3	Ti 334.940†	1378310.2	1373626.9	3225.4	µg/L	3225.4 ppb	08:47:50
3	Tl 190.801†	-41.4	-21.9	-3.9281	µg/L	-3.9281 ppb	08:48:16
3	U 409.014†	157.5	-668.4	-82.022	µg/L	-82.022 ppb	08:47:50
3	V 292.402†	2060.8	2131.5	32.184	µg/L	32.184 ppb	08:47:55
3	Zn 213.857†	12893.0	12338.4	340.26	µg/L	340.26 ppb	08:47:55

Mean Data: 241613016|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1955579.5	100.56	%	0.250				0.25%
Sc RADIAL	110604.3	99.4	%	0.27				0.27%
Y 371.029	1250695.1	105.88	%	0.288				0.27%
Ag 328.068†	-679.4	-0.1485	µg/L	0.42075	-0.1485	ppb	0.42075	283.42%
Al 396.153Radial†	14611.3	7607.9	µg/L	60.00	7607.9	ppb	60.00	0.79%
As 188.979†	6.8	10.170	µg/L	9.5739	10.170	ppb	9.5739	94.14%
B 249.677†	830.1	14.437	µg/L	1.3983	14.437	ppb	1.3983	9.69%
Ba 233.527†	9007.5	241.10	µg/L	1.118	241.10	ppb	1.118	0.46%
Be 313.107†	7520.1	3.8050	µg/L	0.02688	3.8050	ppb	0.02688	0.71%
Ca 317.933Radial†	13893.3	5471.9	µg/L	59.71	5471.9	ppb	59.71	1.09%
Cd 226.502†	232.8	0.4919	µg/L	0.50588	0.4919	ppb	0.50588	102.84%
Co 228.616†	281.7	7.6203	µg/L	0.14865	7.6203	ppb	0.14865	1.95%
Cr 267.716†	634.1	14.166	µg/L	0.4063	14.166	ppb	0.4063	2.87%
Cu 324.752†	-62.2	16.263	µg/L	0.1175	16.263	ppb	0.1175	0.72%
Fe 238.204 Radial†	15152.0	77872	µg/L	346.5	77872	ppb	346.5	0.44%
K 766.490 Radial†	3564.4	1999.7	µg/L	4.83	1999.7	ppb	4.83	0.24%
Mg 279.077 IEC†	515.4	2762.3	µg/L	14.09	2762.3	ppb	14.09	0.51%
Mn 257.610†	661308.2	2216.6	µg/L	7.00	2216.6	ppb	7.00	0.32%
Mo 202.031†	315.1	40.879	µg/L	0.4783	40.879	ppb	0.4783	1.17%
Na 589.592 Radial†	3679.0	1025.7	µg/L	7.47	1025.7	ppb	7.47	0.73%

Ni 231.604†	478.1	27.568	µg/L	0.1575	27.568	ppb	0.1575	0.57%
P 214.914†	251.0	478.64	µg/L	6.981	478.64	ppb	6.981	1.46%
Pb 220.353†	177.0	47.211	µg/L	1.8161	47.211	ppb	1.8161	3.85%
S 181.975 Axial†	-1.0	-17.343	µg/L	2.1133	-17.343	ppb	2.1133	12.19%
Sb 206.836†	-1.1	10.238	µg/L	2.5783	10.238	ppb	2.5783	25.18%
Se 196.026†	-34.7	2.1790	µg/L	3.41382	2.1790	ppb	3.41382	156.67%
SiO2†	53421.7	10856	µg/L	125.4	10856	ppb	125.4	1.15%
Si 251.611†	62277.2	4937.4	µg/L	60.35	4937.4	ppb	60.35	1.22%
Sn 189.927†	-7.4	7.0407	µg/L	3.04066	7.0407	ppb	3.04066	43.19%
Sr 421.552†	7886.0	45.033	µg/L	0.5300	45.033	ppb	0.5300	1.18%
Ti 334.940†	1377975.8	3235.6	µg/L	8.91	3235.6	ppb	8.91	0.28%
Tl 190.801†	-21.2	-2.6823	µg/L	1.11918	-2.6823	ppb	1.11918	41.73%
U 409.014†	-667.1	-81.934	µg/L	2.6304	-81.934	ppb	2.6304	3.21%
V 292.402†	2117.1	32.025	µg/L	0.5918	32.025	ppb	0.5918	1.85%
Zn 213.857†	12297.3	339.07	µg/L	1.641	339.07	ppb	1.641	0.48%

Sequence No.: 50
Sample ID: 241613017|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 338
Date Collected: 12/15/2009 08:48:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613017|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111590.8	111590.8	100	%			08:48:58
1	Al 396.153Radial†	40553.6	40281.5	20977	µg/L	20977	ppb	08:48:58
1	Ca 317.933Radial†	37935.0	37425.8	14740	µg/L	14740	ppb	08:48:58
1	Fe 238.204 Radial†	16655.7	16604.1	85335	µg/L	85335	ppb	08:49:19
1	K 766.490 Radial†	8045.0	7183.5	4030.1	µg/L	4030.1	ppb	08:48:58
1	Mg 279.077 IEC†	1330.3	1311.3	7192.5	µg/L	7192.5	ppb	08:49:19
1	Na 589.592 Radial†	5519.1	6010.4	1675.7	µg/L	1675.7	ppb	08:48:58
1	Sr 421.552†	18195.2	18229.0	104.10	µg/L	104.10	ppb	08:48:58
1	Sc 361.383	1962751.6	1962751.6	100.93	%			08:50:23
1	Y 371.029	1251656.6	1251656.6	105.96	%			08:50:23
1	Ag 328.068†	-759.3	-651.1	1.1784	µg/L	1.1784	ppb	08:50:29
1	As 188.979†	11.2	6.0	4.2524	µg/L	4.2524	ppb	08:50:50
1	B 249.677†	1185.5	1023.4	21.152	µg/L	21.152	ppb	08:50:29
1	Ba 233.527†	20434.4	20325.4	544.13	µg/L	544.13	ppb	08:50:29
1	Be 313.107†	10960.1	7193.6	3.8283	µg/L	3.8283	ppb	08:50:29
1	Cd 226.502†	173.5	269.4	0.9553	µg/L	0.9553	ppb	08:50:50
1	Co 228.616†	372.2	436.1	16.759	µg/L	16.759	ppb	08:50:50
1	Cr 267.716†	1165.0	1281.5	28.728	µg/L	28.728	ppb	08:50:50
1	Cu 324.752†	7048.4	3717.5	46.069	µg/L	46.069	ppb	08:50:29
1	Mn 257.610†	736283.0	729735.3	2445.9	µg/L	2445.9	ppb	08:50:23
1	Mo 202.031†	135.7	139.3	20.072	µg/L	20.072	ppb	08:50:50
1	Ni 231.604†	778.8	490.0	28.252	µg/L	28.252	ppb	08:50:50
1	P 214.914†	936.2	723.4	1539.1	µg/L	1539.1	ppb	08:50:50
1	Pb 220.353†	245.8	187.5	50.970	µg/L	50.970	ppb	08:50:50
1	S 181.975 Axial†	70.3	30.8	151.01	µg/L	151.01	ppb	08:50:50
1	Sb 206.836†	15.1	-3.9	3.9544	µg/L	3.9544	ppb	08:50:50
1	Se 196.026†	-19.4	-30.0	13.814	µg/L	13.814	ppb	08:50:50
1	SiO2†	69279.9	66566.3	13527	µg/L	13527	ppb	08:50:29
1	Si 251.611†	78409.5	77372.9	6187.0	µg/L	6187.0	ppb	08:50:29
1	Sn 189.927†	-43.1	-67.1	-20.206	µg/L	-20.206	ppb	08:50:50
1	Ti 334.940†	1112427.2	1101388.6	2585.6	µg/L	2585.6	ppb	08:50:23
1	Tl 190.801†	-32.0	-12.4	6.5338	µg/L	6.5338	ppb	08:50:50
1	U 409.014†	351.7	-477.0	-63.866	µg/L	-63.866	ppb	08:50:23
1	V 292.402†	7779.1	7784.1	100.83	µg/L	100.83	ppb	08:50:29
1	Zn 213.857†	12099.7	11470.1	314.73	µg/L	314.73	ppb	08:50:29
2	Sc RADIAL	110970.9	110970.9	99.7	%			08:49:24
2	Al 396.153Radial†	41055.9	41011.2	21357	µg/L	21357	ppb	08:49:24
2	Ca 317.933Radial†	38424.4	38128.0	15017	µg/L	15017	ppb	08:49:24
2	Fe 238.204 Radial†	16563.7	16604.6	85338	µg/L	85338	ppb	08:49:45
2	K 766.490 Radial†	8142.0	7325.7	4109.9	µg/L	4109.9	ppb	08:49:24
2	Mg 279.077 IEC†	1324.7	1313.1	7202.3	µg/L	7202.3	ppb	08:49:45
2	Na 589.592 Radial†	5539.9	6062.0	1690.1	µg/L	1690.1	ppb	08:49:24
2	Sr 421.552†	18396.5	18532.3	105.83	µg/L	105.83	ppb	08:49:24
2	Sc 361.383	1968331.4	1968331.4	101.22	%			08:50:57
2	Y 371.029	1254420.6	1254420.6	106.19	%			08:50:57
2	Ag 328.068†	-808.4	-697.4	0.7426	µg/L	0.7426	ppb	08:51:02
2	As 188.979†	6.9	1.7	-4.2556	µg/L	-4.2556	ppb	08:51:23
2	B 249.677†	1170.0	1004.7	20.278	µg/L	20.278	ppb	08:51:02
2	Ba 233.527†	20448.8	20282.3	542.98	µg/L	542.98	ppb	08:51:02
2	Be 313.107†	10982.6	7185.0	3.8266	µg/L	3.8266	ppb	08:51:02
2	Cd 226.502†	176.4	271.7	1.0230	µg/L	1.0230	ppb	08:51:23
2	Co 228.616†	368.7	431.7	16.554	µg/L	16.554	ppb	08:51:23
2	Cr 267.716†	1154.2	1267.5	28.417	µg/L	28.417	ppb	08:51:23
2	Cu 324.752†	7042.5	3691.8	45.878	µg/L	45.878	ppb	08:51:02
2	Mn 257.610†	733838.4	725252.2	2431.0	µg/L	2431.0	ppb	08:50:57
2	Mo 202.031†	128.7	132.0	19.195	µg/L	19.195	ppb	08:51:23
2	Ni 231.604†	764.6	473.7	27.314	µg/L	27.314	ppb	08:51:23
2	P 214.914†	931.7	716.3	1523.2	µg/L	1523.2	ppb	08:51:23
2	Pb 220.353†	252.4	193.4	52.578	µg/L	52.578	ppb	08:51:23

2	S 181.975 Axial†	72.0	32.3	159.03 µg/L	159.03 ppb	08:51:23
2	Sb 206.836†	24.6	5.4	13.757 µg/L	13.757 ppb	08:51:23
2	Se 196.026†	-26.9	-37.4	2.7631 µg/L	2.7631 ppb	08:51:23
2	SiO2†	68628.0	65727.7	13357 µg/L	13357 ppb	08:51:02
2	Si 251.611†	77738.6	76489.9	6115.6 µg/L	6115.6 ppb	08:51:02
2	Sn 189.927†	-38.3	-62.2	-17.571 µg/L	-17.571 ppb	08:51:23
2	Ti 334.940†	1110984.4	1096838.7	2574.9 µg/L	2574.9 ppb	08:50:57
2	Tl 190.801†	-29.5	-9.8	10.430 µg/L	10.430 ppb	08:51:23
2	U 409.014†	411.3	-419.1	-58.001 µg/L	-58.001 ppb	08:50:57
2	V 292.402†	7862.7	7844.8	101.56 µg/L	101.56 ppb	08:51:02
2	Zn 213.857†	12099.3	11435.7	313.77 µg/L	313.77 ppb	08:51:02
3	Sc RADIAL	111394.2	111394.2	100 %		08:49:50
3	Al 396.153Radial†	40768.9	40568.0	21127 µg/L	21127 ppb	08:49:50
3	Ca 317.933Radial†	38066.6	37624.1	14818 µg/L	14818 ppb	08:49:50
3	Fe 238.204 Radial†	16606.2	16583.9	85231 µg/L	85231 ppb	08:50:11
3	K 766.490 Radial†	8141.5	7294.0	4092.1 µg/L	4092.1 ppb	08:49:50
3	Mg 279.077 IEC†	1327.4	1310.8	7189.6 µg/L	7189.6 ppb	08:50:11
3	Na 589.592 Radial†	5436.4	5937.4	1655.3 µg/L	1655.3 ppb	08:49:50
3	Sr 421.552†	18245.5	18311.3	104.57 µg/L	104.57 ppb	08:49:50
3	Sc 361.383	1973551.9	1973551.9	101.48 %		08:51:30
3	Y 371.029	1257825.1	1257825.1	106.48 %		08:51:30
3	Ag 328.068†	-844.6	-731.0	0.4101 µg/L	0.4101 ppb	08:51:36
3	As 188.979†	13.0	7.7	7.6647 µg/L	7.6647 ppb	08:51:57
3	B 249.677†	1174.7	1006.3	20.385 µg/L	20.385 ppb	08:51:36
3	Ba 233.527†	20439.4	20219.6	541.30 µg/L	541.30 ppb	08:51:36
3	Be 313.107†	11006.4	7179.8	3.8257 µg/L	3.8257 ppb	08:51:36
3	Cd 226.502†	175.6	270.5	0.9968 µg/L	0.9968 ppb	08:51:57
3	Co 228.616†	362.9	425.0	16.229 µg/L	16.229 ppb	08:51:57
3	Cr 267.716†	1151.3	1261.6	28.285 µg/L	28.285 ppb	08:51:57
3	Cu 324.752†	6962.0	3594.1	45.126 µg/L	45.126 ppb	08:51:36
3	Mn 257.610†	735420.3	724893.0	2429.7 µg/L	2429.7 ppb	08:51:30
3	Mo 202.031†	130.0	132.9	19.300 µg/L	19.300 ppb	08:51:57
3	Ni 231.604†	785.4	492.2	28.382 µg/L	28.382 ppb	08:51:57
3	P 214.914†	934.3	716.5	1523.6 µg/L	1523.6 ppb	08:51:57
3	Pb 220.353†	249.7	190.1	51.664 µg/L	51.664 ppb	08:51:57
3	S 181.975 Axial†	75.0	35.1	174.02 µg/L	174.02 ppb	08:51:57
3	Sb 206.836†	18.8	-0.4	7.6023 µg/L	7.6023 ppb	08:51:57
3	Se 196.026†	-29.7	-40.1	-1.3363 µg/L	-1.3363 ppb	08:51:57
3	SiO2†	68628.0	65548.4	13321 µg/L	13321 ppb	08:51:36
3	Si 251.611†	77761.5	76309.2	6101.2 µg/L	6101.2 ppb	08:51:36
3	Sn 189.927†	-39.8	-63.6	-18.364 µg/L	-18.364 ppb	08:51:57
3	Ti 334.940†	1110869.7	1093822.2	2567.8 µg/L	2567.8 ppb	08:51:30
3	Tl 190.801†	-33.6	-13.8	4.0842 µg/L	4.0842 ppb	08:51:57
3	U 409.014†	390.8	-440.4	-60.138 µg/L	-60.138 ppb	08:51:30
3	V 292.402†	7828.1	7790.1	100.89 µg/L	100.89 ppb	08:51:36
3	Zn 213.857†	12134.0	11438.3	313.84 µg/L	313.84 ppb	08:51:36

Mean Data: 241613017|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1968211.6	101.21	%	0.278				0.27%
Sc RADIAL	111318.6	100	%	0.3				0.28%
Y 371.029	1254634.1	106.21	%	0.262				0.25%
Ag 328.068†	-693.2	0.7770	µg/L	0.38534	0.7770	ppb	0.38534	49.59%
Al 396.153Radial†	40620.2	21154	µg/L	191.5	21154	ppb	191.5	0.91%
As 188.979†	5.1	2.5538	µg/L	6.13897	2.5538	ppb	6.13897	240.38%
B 249.677†	1011.5	20.605	µg/L	0.4766	20.605	ppb	0.4766	2.31%
Ba 233.527†	20275.8	542.80	µg/L	1.424	542.80	ppb	1.424	0.26%
Be 313.107†	7186.1	3.8269	µg/L	0.00132	3.8269	ppb	0.00132	0.03%
Ca 317.933Radial†	37726.0	14858	µg/L	142.6	14858	ppb	142.6	0.96%
Cd 226.502†	270.5	0.9917	µg/L	0.03414	0.9917	ppb	0.03414	3.44%
Co 228.616†	430.9	16.514	µg/L	0.2671	16.514	ppb	0.2671	1.62%
Cr 267.716†	1270.2	28.477	µg/L	0.2270	28.477	ppb	0.2270	0.80%
Cu 324.752†	3667.8	45.691	µg/L	0.4986	45.691	ppb	0.4986	1.09%
Fe 238.204 Radial†	16597.5	85302	µg/L	60.7	85302	ppb	60.7	0.07%
K 766.490 Radial†	7267.7	4077.4	µg/L	41.89	4077.4	ppb	41.89	1.03%
Mg 279.077 IEC†	1311.8	7194.8	µg/L	6.70	7194.8	ppb	6.70	0.09%
Mn 257.610†	726626.9	2435.5	µg/L	9.01	2435.5	ppb	9.01	0.37%
Mo 202.031†	134.7	19.522	µg/L	0.4788	19.522	ppb	0.4788	2.45%
Na 589.592 Radial†	6003.3	1673.7	µg/L	17.45	1673.7	ppb	17.45	1.04%

Ni 231.604†	485.3	27.983	µg/L	0.5830	27.983	ppb	0.5830	2.08%
P 214.914†	718.7	1528.6	µg/L	9.04	1528.6	ppb	9.04	0.59%
Pb 220.353†	190.3	51.737	µg/L	0.8067	51.737	ppb	0.8067	1.56%
S 181.975 Axial†	32.7	161.35	µg/L	11.682	161.35	ppb	11.682	7.24%
Sb 206.836†	0.3	8.4378	µg/L	4.95423	8.4378	ppb	4.95423	58.71%
Se 196.026†	-35.9	5.0803	µg/L	7.83642	5.0803	ppb	7.83642	154.25%
SiO2†	65947.4	13402	µg/L	110.4	13402	ppb	110.4	0.82%
Si 251.611†	76724.0	6134.6	µg/L	45.94	6134.6	ppb	45.94	0.75%
Sn 189.927†	-64.3	-18.713	µg/L	1.3519	-18.713	ppb	1.3519	7.22%
Sr 421.552†	18357.5	104.83	µg/L	0.896	104.83	ppb	0.896	0.85%
Ti 334.940†	1097349.8	2576.1	µg/L	8.95	2576.1	ppb	8.95	0.35%
Tl 190.801†	-12.0	7.0161	µg/L	3.20048	7.0161	ppb	3.20048	45.62%
U 409.014†	-445.5	-60.668	µg/L	2.9685	-60.668	ppb	2.9685	4.89%
V 292.402†	7806.3	101.09	µg/L	0.407	101.09	ppb	0.407	0.40%
Zn 213.857†	11448.0	314.11	µg/L	0.537	314.11	ppb	0.537	0.17%

Sequence No.: 51
Sample ID: 241613018|932724|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 339
Date Collected: 12/15/2009 08:52:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613018|932724|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113557.2	113557.2	102	%			08:52:38
1	Al 396.153Radial†	136341.6	133458.0	69502	µg/L	69502	ppb	08:52:38
1	Ca 317.933Radial†	118808.6	116030.8	45699	µg/L	45699	ppb	08:52:38
1	Fe 238.204 Radial†	24129.2	23640.8	121500	µg/L	121500	ppb	08:52:43
1	K 766.490 Radial†	27491.7	26103.3	14645	µg/L	14645	ppb	08:52:38
1	Mg 279.077 IEC†	3630.8	3542.9	19592	µg/L	19592	ppb	08:52:43
1	Na 589.592 Radial†	3840.0	4269.5	1190.3	µg/L	1190.3	ppb	08:52:43
1	Sr 421.552†	54888.1	53875.7	307.65	µg/L	307.65	ppb	08:52:38
1	Sc 361.383	1960270.5	1960270.5	100.80	%			08:53:17
1	Y 371.029	1201830.6	1201830.6	101.74	%			08:53:17
1	Ag 328.068†	-1228.4	-1117.4	0.4724	µg/L	0.4724	ppb	08:53:23
1	As 188.979†	29.0	23.6	30.393	µg/L	30.393	ppb	08:53:43
1	B 249.677†	1676.8	1512.2	32.703	µg/L	32.703	ppb	08:53:23
1	Ba 233.527†	45392.3	45110.4	1207.7	µg/L	1207.7	ppb	08:53:23
1	Be 313.107†	16306.3	12511.0	7.2474	µg/L	7.2474	ppb	08:53:23
1	Cd 226.502†	279.0	374.2	1.1421	µg/L	1.1421	ppb	08:53:43
1	Co 228.616†	1312.3	1369.3	63.397	µg/L	63.397	ppb	08:53:43
1	Cr 267.716†	3558.8	3657.7	81.887	µg/L	81.887	ppb	08:53:23
1	Cu 324.752†	9130.4	5791.8	69.315	µg/L	69.315	ppb	08:53:23
1	Mn 257.610†	922034.5	914932.9	3068.5	µg/L	3068.5	ppb	08:53:17
1	Mo 202.031†	21.6	26.2	7.9229	µg/L	7.9229	ppb	08:53:43
1	Ni 231.604†	1414.9	1122.0	64.694	µg/L	64.694	ppb	08:53:43
1	P 214.914†	630.7	421.5	828.87	µg/L	828.87	ppb	08:53:43
1	Pb 220.353†	400.1	341.0	95.732	µg/L	95.732	ppb	08:53:43
1	S 181.975 Axial†	138.9	99.0	508.31	µg/L	508.31	ppb	08:53:43
1	Sb 206.836†	26.5	7.4	13.963	µg/L	13.963	ppb	08:53:43
1	Se 196.026†	-47.9	-58.3	-4.0404	µg/L	-4.0404	ppb	08:53:43
1	SiO2†	96234.9	93393.9	18979	µg/L	18979	ppb	08:53:23
1	Si 251.611†	109805.2	108617.2	8709.6	µg/L	8709.6	ppb	08:53:23
1	Sn 189.927†	-124.5	-147.8	-48.650	µg/L	-48.650	ppb	08:53:43
1	Ti 334.940†	1248442.9	1237717.6	2904.0	µg/L	2904.0	ppb	08:53:17
1	Tl 190.801†	-28.1	-8.6	13.264	µg/L	13.264	ppb	08:53:43
1	U 409.014†	377.5	-451.0	-67.249	µg/L	-67.249	ppb	08:53:23
1	V 292.402†	18497.5	18427.0	231.97	µg/L	231.97	ppb	08:53:23
1	Zn 213.857†	10495.2	9893.5	265.77	µg/L	265.77	ppb	08:53:23
2	Sc RADIAL	113615.7	113615.7	102	%			08:52:49
2	Al 396.153Radial†	136645.5	133687.0	69622	µg/L	69622	ppb	08:52:49
2	Ca 317.933Radial†	118869.6	116030.6	45699	µg/L	45699	ppb	08:52:49
2	Fe 238.204 Radial†	24124.2	23623.7	121410	µg/L	121410	ppb	08:52:54
2	K 766.490 Radial†	27557.8	26154.2	14673	µg/L	14673	ppb	08:52:49
2	Mg 279.077 IEC†	3615.6	3526.3	19499	µg/L	19499	ppb	08:52:54
2	Na 589.592 Radial†	3826.0	4253.8	1185.9	µg/L	1185.9	ppb	08:52:54
2	Sr 421.552†	54959.1	53917.5	307.89	µg/L	307.89	ppb	08:52:49
2	Sc 361.383	1954643.1	1954643.1	100.51	%			08:53:50
2	Y 371.029	1198662.3	1198662.3	101.47	%			08:53:50
2	Ag 328.068†	-1252.7	-1145.0	0.1905	µg/L	0.1905	ppb	08:53:56
2	As 188.979†	24.3	19.1	21.387	µg/L	21.387	ppb	08:54:16
2	B 249.677†	1669.1	1509.5	32.600	µg/L	32.600	ppb	08:53:56
2	Ba 233.527†	45115.2	44964.4	1203.8	µg/L	1203.8	ppb	08:53:56
2	Be 313.107†	16174.9	12426.8	7.1933	µg/L	7.1933	ppb	08:53:56
2	Cd 226.502†	294.5	390.4	1.5977	µg/L	1.5977	ppb	08:54:16
2	Co 228.616†	1320.8	1381.4	64.023	µg/L	64.023	ppb	08:54:16
2	Cr 267.716†	3506.6	3615.9	80.953	µg/L	80.953	ppb	08:53:56
2	Cu 324.752†	9116.7	5804.2	69.389	µg/L	69.389	ppb	08:53:56
2	Mn 257.610†	917478.0	913033.1	3062.1	µg/L	3062.1	ppb	08:53:50
2	Mo 202.031†	16.6	21.4	7.3405	µg/L	7.3405	ppb	08:54:16
2	Ni 231.604†	1421.7	1132.7	65.313	µg/L	65.313	ppb	08:54:16
2	P 214.914†	625.5	418.2	821.49	µg/L	821.49	ppb	08:54:16
2	Pb 220.353†	401.9	343.9	96.527	µg/L	96.527	ppb	08:54:16

2	S 181.975 Axial†	131.6	92.0	471.35 µg/L	471.35 ppb	08:54:16
2	Sb 206.836†	33.2	14.1	21.004 µg/L	21.004 ppb	08:54:16
2	Se 196.026†	-44.5	-55.1	0.7148 µg/L	0.7148 ppb	08:54:16
2	SiO2†	94541.8	91984.3	18693 µg/L	18693 ppb	08:53:56
2	Si 251.611†	108052.8	107187.4	8593.6 µg/L	8593.6 ppb	08:53:56
2	Sn 189.927†	-120.2	-143.9	-46.649 µg/L	-46.649 ppb	08:54:16
2	Ti 334.940†	1242782.9	1235652.1	2899.1 µg/L	2899.1 ppb	08:53:50
2	Tl 190.801†	-31.2	-11.7	8.2391 µg/L	8.2391 ppb	08:54:16
2	U 409.014†	290.4	-536.5	-75.894 µg/L	-75.894 ppb	08:53:56
2	V 292.402†	18301.4	18284.7	230.23 µg/L	230.23 ppb	08:53:56
2	Zn 213.857†	10437.7	9866.3	265.01 µg/L	265.01 ppb	08:53:56
3	Sc RADIAL	113377.5	113377.5	102 %		08:53:00
3	Al 396.153Radial†	137172.0	134485.0	70037 µg/L	70037 ppb	08:53:00
3	Ca 317.933Radial†	119228.0	116627.1	45934 µg/L	45934 ppb	08:53:00
3	Fe 238.204 Radial†	24310.3	23856.0	122610 µg/L	122610 ppb	08:53:05
3	K 766.490 Radial†	27703.5	26353.9	14785 µg/L	14785 ppb	08:53:00
3	Mg 279.077 IEC†	3663.3	3580.5	19800 µg/L	19800 ppb	08:53:05
3	Na 589.592 Radial†	3868.5	4303.5	1199.8 µg/L	1199.8 ppb	08:53:05
3	Sr 421.552†	55113.1	54181.8	309.40 µg/L	309.40 ppb	08:53:00
3	Sc 361.383	1963549.3	1963549.3	100.97 %		08:54:23
3	Y 371.029	1203769.2	1203769.2	101.91 %		08:54:23
3	Ag 328.068†	-1256.5	-1143.1	0.2995 µg/L	0.2995 ppb	08:54:28
3	As 188.979†	35.3	29.8	42.603 µg/L	42.603 ppb	08:54:49
3	B 249.677†	1681.8	1514.5	32.461 µg/L	32.461 ppb	08:54:28
3	Ba 233.527†	45430.4	45073.0	1206.7 µg/L	1206.7 ppb	08:54:28
3	Be 313.107†	16318.0	12495.6	7.2336 µg/L	7.2336 ppb	08:54:28
3	Cd 226.502†	274.8	369.6	0.9178 µg/L	0.9178 ppb	08:54:49
3	Co 228.616†	1331.9	1386.5	64.252 µg/L	64.252 ppb	08:54:49
3	Cr 267.716†	3531.4	3624.6	81.147 µg/L	81.147 ppb	08:54:28
3	Cu 324.752†	9156.6	5802.6	69.633 µg/L	69.633 ppb	08:54:28
3	Mn 257.610†	922922.8	914285.4	3066.5 µg/L	3066.5 ppb	08:54:23
3	Mo 202.031†	28.1	32.7	8.7457 µg/L	8.7457 ppb	08:54:49
3	Ni 231.604†	1426.4	1131.0	65.214 µg/L	65.214 ppb	08:54:49
3	P 214.914†	634.4	424.1	833.58 µg/L	833.58 ppb	08:54:49
3	Pb 220.353†	414.7	354.7	99.465 µg/L	99.465 ppb	08:54:49
3	S 181.975 Axial†	133.1	93.0	476.11 µg/L	476.11 ppb	08:54:49
3	Sb 206.836†	28.8	9.6	16.274 µg/L	16.274 ppb	08:54:49
3	Se 196.026†	-54.3	-64.6	-12.718 µg/L	-12.718 ppb	08:54:49
3	SiO2†	94926.9	91939.1	18684 µg/L	18684 ppb	08:54:28
3	Si 251.611†	108430.7	107074.1	8583.9 µg/L	8583.9 ppb	08:54:28
3	Sn 189.927†	-123.9	-147.0	-48.011 µg/L	-48.011 ppb	08:54:49
3	Ti 334.940†	1254723.4	1241869.7	2913.7 µg/L	2913.7 ppb	08:54:23
3	Tl 190.801†	-30.2	-10.6	10.137 µg/L	10.137 ppb	08:54:49
3	U 409.014†	253.9	-574.0	-79.908 µg/L	-79.908 ppb	08:54:28
3	V 292.402†	18347.6	18247.9	229.89 µg/L	229.89 ppb	08:54:28
3	Zn 213.857†	10521.5	9902.2	265.89 µg/L	265.89 ppb	08:54:28

Mean Data: 241613018|932724|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1959487.6	100.76	%	0.232				0.23%
Sc RADIAL	113516.8	102	%	0.1				0.11%
Y 371.029	1201420.7	101.71	%	0.218				0.21%
Ag 328.068†	-1135.2	0.3208	µg/L	0.14218	0.3208	ppb	0.14218	44.32%
Al 396.153Radial†	133876.7	69720	µg/L	280.7	69720	ppb	280.7	0.40%
As 188.979†	24.2	31.461	µg/L	10.6486	31.461	ppb	10.6486	33.85%
B 249.677†	1512.1	32.588	µg/L	0.1218	32.588	ppb	0.1218	0.37%
Ba 233.527†	45049.3	1206.0	µg/L	2.03	1206.0	ppb	2.03	0.17%
Be 313.107†	12477.8	7.2248	µg/L	0.02815	7.2248	ppb	0.02815	0.39%
Ca 317.933Radial†	116229.5	45777	µg/L	135.6	45777	ppb	135.6	0.30%
Cd 226.502†	378.1	1.2192	µg/L	0.34647	1.2192	ppb	0.34647	28.42%
Co 228.616†	1379.1	63.890	µg/L	0.4426	63.890	ppb	0.4426	0.69%
Cr 267.716†	3632.7	81.329	µg/L	0.4927	81.329	ppb	0.4927	0.61%
Cu 324.752†	5799.5	69.446	µg/L	0.1665	69.446	ppb	0.1665	0.24%
Fe 238.204 Radial†	23706.9	121840	µg/L	665.4	121840	ppb	665.4	0.55%
K 766.490 Radial†	26203.8	14701	µg/L	74.3	14701	ppb	74.3	0.51%
Mg 279.077 IEC†	3549.9	19630	µg/L	154.1	19630	ppb	154.1	0.79%
Mn 257.610†	914083.8	3065.7	µg/L	3.24	3065.7	ppb	3.24	0.11%
Mo 202.031†	26.8	8.0031	µg/L	0.70601	8.0031	ppb	0.70601	8.82%
Na 589.592 Radial†	4275.6	1192.0	µg/L	7.07	1192.0	ppb	7.07	0.59%

Ni 231.604†	1128.6	65.073	µg/L	0.3324	65.073	ppb	0.3324	0.51%
P 214.914†	421.3	827.98	µg/L	6.097	827.98	ppb	6.097	0.74%
Pb 220.353†	346.5	97.241	µg/L	1.9661	97.241	ppb	1.9661	2.02%
S 181.975 Axial†	94.7	485.25	µg/L	20.106	485.25	ppb	20.106	4.14%
Sb 206.836†	10.3	17.080	µg/L	3.5889	17.080	ppb	3.5889	21.01%
Se 196.026†	-59.4	-5.3479	µg/L	6.81114	-5.3479	ppb	6.81114	127.36%
SiO2†	92439.1	18785	µg/L	168.1	18785	ppb	168.1	0.89%
Si 251.611†	107626.2	8629.0	µg/L	69.93	8629.0	ppb	69.93	0.81%
Sn 189.927†	-146.3	-47.770	µg/L	1.0221	-47.770	ppb	1.0221	2.14%
Sr 421.552†	53991.7	308.31	µg/L	0.948	308.31	ppb	0.948	0.31%
Ti 334.940†	1238413.1	2905.6	µg/L	7.43	2905.6	ppb	7.43	0.26%
Tl 190.801†	-10.3	10.547	µg/L	2.5373	10.547	ppb	2.5373	24.06%
U 409.014†	-520.5	-74.350	µg/L	6.4691	-74.350	ppb	6.4691	8.70%
V 292.402†	18319.8	230.69	µg/L	1.117	230.69	ppb	1.117	0.48%
Zn 213.857†	9887.3	265.55	µg/L	0.477	265.55	ppb	0.477	0.18%

Sequence No.: 52
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 08:54:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110889.0	110889.0	99.6	%			08:55:35
1	Al 396.153Radial†	10190.3	10063.9	5222.0	µg/L	5222.0	ppb	08:55:35
1	Ca 317.933Radial†	13219.3	12859.9	5064.9	µg/L	5064.9	ppb	08:55:55
1	Fe 238.204 Radial†	1025.3	1022.0	5269.3	µg/L	5269.3	ppb	08:55:55
1	K 766.490 Radial†	9989.4	9185.8	5153.5	µg/L	5153.5	ppb	08:55:35
1	Mg 279.077 IEC†	964.9	952.9	5322.7	µg/L	5322.7	ppb	08:55:55
1	Na 589.592 Radial†	36198.9	36836.4	10270	µg/L	10270	ppb	08:55:35
1	Sr 421.552†	87905.0	88306.7	504.27	µg/L	504.27	ppb	08:55:35
1	Sc 361.383	1977158.9	1977158.9	101.67	%			08:56:58
1	Y 371.029	1195031.6	1195031.6	101.17	%			08:56:58
1	Ag 328.068†	54560.1	53765.1	515.66	µg/L	515.66	ppb	08:57:04
1	As 188.979†	263.8	254.4	506.83	µg/L	506.83	ppb	08:57:25
1	B 249.677†	11080.7	10747.4	502.30	µg/L	502.30	ppb	08:57:04
1	Ba 233.527†	19188.4	18952.4	508.25	µg/L	508.25	ppb	08:57:04
1	Be 313.107†	769928.3	753615.3	501.19	µg/L	501.19	ppb	08:56:58
1	Cd 226.502†	18158.2	17957.3	505.22	µg/L	505.22	ppb	08:57:04
1	Co 228.616†	10098.3	9999.8	507.39	µg/L	507.39	ppb	08:57:04
1	Cr 267.716†	22980.9	22730.6	506.84	µg/L	506.84	ppb	08:57:04
1	Cu 324.752†	73065.0	68598.8	513.00	µg/L	513.00	ppb	08:57:04
1	Mn 257.610†	152873.0	150593.0	503.20	µg/L	503.20	ppb	08:56:58
1	Mo 202.031†	4239.2	4174.4	501.19	µg/L	501.19	ppb	08:57:25
1	Ni 231.604†	9197.5	8764.7	505.38	µg/L	505.38	ppb	08:57:04
1	P 214.914†	1321.2	1095.3	2420.8	µg/L	2420.8	ppb	08:57:25
1	Pb 220.353†	1958.2	1870.1	500.98	µg/L	500.98	ppb	08:57:25
1	S 181.975 Axial†	211.7	169.4	904.35	µg/L	904.35	ppb	08:57:25
1	Sb 206.836†	509.6	482.3	507.87	µg/L	507.87	ppb	08:57:25
1	Se 196.026†	351.6	335.0	504.31	µg/L	504.31	ppb	08:57:25
1	SiO2†	28966.0	26414.5	5367.9	µg/L	5367.9	ppb	08:57:04
1	Si 251.611†	31886.9	31048.5	2472.3	µg/L	2472.3	ppb	08:57:04
1	Sn 189.927†	1005.8	965.0	505.01	µg/L	505.01	ppb	08:57:25
1	Ti 334.940†	218634.1	214246.0	502.83	µg/L	502.83	ppb	08:56:58
1	Tl 190.801†	301.2	315.6	508.48	µg/L	508.48	ppb	08:57:25
1	U 409.014†	5887.5	4965.3	501.75	µg/L	501.75	ppb	08:57:04
1	V 292.402†	42734.4	42109.0	512.29	µg/L	512.29	ppb	08:57:04
1	Zn 213.857†	18884.8	18056.4	506.30	µg/L	506.30	ppb	08:57:04
2	Sc RADIAL	111279.8	111279.8	100.0	%			08:56:01
2	Al 396.153Radial†	10173.0	10010.7	5194.4	µg/L	5194.4	ppb	08:56:01
2	Ca 317.933Radial†	13293.1	12887.1	5075.6	µg/L	5075.6	ppb	08:56:21
2	Fe 238.204 Radial†	1034.9	1028.0	5300.0	µg/L	5300.0	ppb	08:56:21
2	K 766.490 Radial†	9926.5	9087.7	5098.4	µg/L	5098.4	ppb	08:56:01
2	Mg 279.077 IEC†	972.3	956.9	5344.9	µg/L	5344.9	ppb	08:56:21
2	Na 589.592 Radial†	36407.4	36917.3	10292	µg/L	10292	ppb	08:56:01
2	Sr 421.552†	88131.7	88223.7	503.79	µg/L	503.79	ppb	08:56:01
2	Sc 361.383	1966234.2	1966234.2	101.11	%			08:57:32
2	Y 371.029	1189045.5	1189045.5	100.66	%			08:57:32
2	Ag 328.068†	53919.8	53430.0	512.44	µg/L	512.44	ppb	08:57:37
2	As 188.979†	257.5	249.6	497.29	µg/L	497.29	ppb	08:57:58
2	B 249.677†	10925.8	10654.8	497.95	µg/L	497.95	ppb	08:57:37
2	Ba 233.527†	18934.8	18806.5	504.34	µg/L	504.34	ppb	08:57:37
2	Be 313.107†	763980.4	751940.2	500.08	µg/L	500.08	ppb	08:57:32
2	Cd 226.502†	17917.3	17818.4	501.30	µg/L	501.30	ppb	08:57:37
2	Co 228.616†	9931.1	9889.6	501.80	µg/L	501.80	ppb	08:57:37
2	Cr 267.716†	22611.0	22490.3	501.48	µg/L	501.48	ppb	08:57:37
2	Cu 324.752†	72377.3	68317.9	510.91	µg/L	510.91	ppb	08:57:37
2	Mn 257.610†	151674.6	150243.2	502.04	µg/L	502.04	ppb	08:57:32
2	Mo 202.031†	4212.6	4171.3	500.81	µg/L	500.81	ppb	08:57:58
2	Ni 231.604†	9098.5	8717.1	502.63	µg/L	502.63	ppb	08:57:37
2	P 214.914†	1304.0	1085.6	2399.0	µg/L	2399.0	ppb	08:57:58
2	Pb 220.353†	1947.7	1870.3	501.06	µg/L	501.06	ppb	08:57:58

2	S 181.975 Axial†	220.4	179.1	956.33 µg/L	956.33 ppb	08:57:58
2	Sb 206.836†	507.3	482.8	508.38 µg/L	508.38 ppb	08:57:58
2	Se 196.026†	347.9	333.2	501.64 µg/L	501.64 ppb	08:57:58
2	SiO2†	28681.5	26291.4	5342.9 µg/L	5342.9 ppb	08:57:37
2	Si 251.611†	31463.7	30804.1	2452.6 µg/L	2452.6 ppb	08:57:37
2	Sn 189.927†	999.3	964.0	504.53 µg/L	504.53 ppb	08:57:58
2	Ti 334.940†	216966.3	213791.4	501.76 µg/L	501.76 ppb	08:57:32
2	Tl 190.801†	300.2	316.3	509.61 µg/L	509.61 ppb	08:57:58
2	U 409.014†	5722.0	4833.8	488.43 µg/L	488.43 ppb	08:57:37
2	V 292.402†	42096.9	41712.0	507.49 µg/L	507.49 ppb	08:57:37
2	Zn 213.857†	18579.2	17857.3	500.68 µg/L	500.68 ppb	08:57:37
3	Sc RADIAL	111487.0	111487.0	100 %		08:56:26
3	Al 396.153Radial†	10147.5	9966.4	5171.2 µg/L	5171.2 ppb	08:56:26
3	Ca 317.933Radial†	13283.6	12852.9	5062.2 µg/L	5062.2 ppb	08:56:47
3	Fe 238.204 Radial†	1032.2	1023.4	5276.4 µg/L	5276.4 ppb	08:56:47
3	K 766.490 Radial†	9926.8	9069.5	5088.2 µg/L	5088.2 ppb	08:56:26
3	Mg 279.077 IEC†	969.6	952.5	5320.0 µg/L	5320.0 ppb	08:56:47
3	Na 589.592 Radial†	36380.4	36822.8	10266 µg/L	10266 ppb	08:56:26
3	Sr 421.552†	88044.9	87973.3	502.36 µg/L	502.36 ppb	08:56:26
3	Sc 361.383	1974247.0	1974247.0	101.52 %		08:58:05
3	Y 371.029	1193689.9	1193689.9	101.05 %		08:58:05
3	Ag 328.068†	54083.2	53374.5	511.91 µg/L	511.91 ppb	08:58:11
3	As 188.979†	259.8	250.8	499.64 µg/L	499.64 ppb	08:58:31
3	B 249.677†	10947.1	10632.0	496.89 µg/L	496.89 ppb	08:58:11
3	Ba 233.527†	19032.9	18827.1	504.89 µg/L	504.89 ppb	08:58:11
3	Be 313.107†	772219.7	756989.3	503.44 µg/L	503.44 ppb	08:58:05
3	Cd 226.502†	17990.9	17818.9	501.33 µg/L	501.33 ppb	08:58:11
3	Co 228.616†	9995.9	9913.6	503.01 µg/L	503.01 ppb	08:58:11
3	Cr 267.716†	22762.3	22548.7	502.78 µg/L	502.78 ppb	08:58:11
3	Cu 324.752†	72451.8	68100.8	509.29 µg/L	509.29 ppb	08:58:11
3	Mn 257.610†	153360.3	151294.8	505.54 µg/L	505.54 ppb	08:58:05
3	Mo 202.031†	4236.9	4178.3	501.65 µg/L	501.65 ppb	08:58:31
3	Ni 231.604†	9111.1	8693.0	501.24 µg/L	501.24 ppb	08:58:11
3	P 214.914†	1325.2	1101.2	2434.3 µg/L	2434.3 ppb	08:58:31
3	Pb 220.353†	1941.3	1856.3	497.28 µg/L	497.28 ppb	08:58:31
3	S 181.975 Axial†	215.9	173.8	927.96 µg/L	927.96 ppb	08:58:31
3	Sb 206.836†	500.2	473.8	498.87 µg/L	498.87 ppb	08:58:31
3	Se 196.026†	358.3	342.1	514.89 µg/L	514.89 ppb	08:58:31
3	SiO2†	28740.8	26234.7	5331.3 µg/L	5331.3 ppb	08:58:11
3	Si 251.611†	31613.8	30825.7	2454.4 µg/L	2454.4 ppb	08:58:11
3	Sn 189.927†	993.2	954.0	499.30 µg/L	499.30 ppb	08:58:31
3	Ti 334.940†	219504.4	215420.5	505.59 µg/L	505.59 ppb	08:58:05
3	Tl 190.801†	293.9	308.8	497.64 µg/L	497.64 ppb	08:58:31
3	U 409.014†	5971.2	5056.3	510.96 µg/L	510.96 ppb	08:58:11
3	V 292.402†	42277.6	41721.1	507.64 µg/L	507.64 ppb	08:58:11
3	Zn 213.857†	18718.8	17920.3	502.48 µg/L	502.48 ppb	08:58:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1972546.7	101.43	%	0.291				0.29%
Sc RADIAL	111218.6	99.9	%	0.27				0.27%
Y 371.029	1192589.0	100.96	%	0.266				0.26%
Ag 328.068†	53523.2	513.34	µg/L	2.029	513.34	ppb	2.029	0.40%
QC value within limits for Ag 328.068 Recovery = 102.67%								
Al 396.153Radial†	10013.7	5195.9	µg/L	25.43	5195.9	ppb	25.43	0.49%
QC value within limits for Al 396.153Radial Recovery = 103.92%								
As 188.979†	251.6	501.26	µg/L	4.973	501.26	ppb	4.973	0.99%
QC value within limits for As 188.979 Recovery = 100.25%								
B 249.677†	10678.1	499.05	µg/L	2.869	499.05	ppb	2.869	0.57%
QC value within limits for B 249.677 Recovery = 99.81%								
Ba 233.527†	18862.0	505.83	µg/L	2.119	505.83	ppb	2.119	0.42%
QC value within limits for Ba 233.527 Recovery = 101.17%								
Be 313.107†	754181.6	501.57	µg/L	1.710	501.57	ppb	1.710	0.34%
QC value within limits for Be 313.107 Recovery = 100.31%								
Ca 317.933Radial†	12866.6	5067.6	µg/L	7.11	5067.6	ppb	7.11	0.14%
QC value within limits for Ca 317.933Radial Recovery = 101.35%								
Cd 226.502†	17864.9	502.62	µg/L	2.254	502.62	ppb	2.254	0.45%
QC value within limits for Cd 226.502 Recovery = 100.52%								
Co 228.616†	9934.3	504.06	µg/L	2.940	504.06	ppb	2.940	0.58%

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   QC value within limits for Co 228.616  Recovery = 100.81%
Cr 267.716†            22589.9      503.70 µg/L        2.794      503.70 ppb          2.794   0.55%
   QC value within limits for Cr 267.716  Recovery = 100.74%
Cu 324.752†            68339.1      511.07 µg/L        1.862      511.07 ppb          1.862   0.36%
   QC value within limits for Cu 324.752  Recovery = 102.21%
Fe 238.204 Radial†      1024.5      5281.9 µg/L       16.06      5281.9 ppb         16.06   0.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.64%
K 766.490 Radial†       9114.3      5113.4 µg/L       35.10      5113.4 ppb         35.10   0.69%
   QC value within limits for K 766.490 Radial  Recovery = 102.27%
Mg 279.077 IEC†          954.1      5329.2 µg/L       13.67      5329.2 ppb         13.67   0.26%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.58%
Mn 257.610†           150710.3      503.59 µg/L        1.786      503.59 ppb          1.786   0.35%
   QC value within limits for Mn 257.610  Recovery = 100.72%
Mo 202.031†             4174.7      501.21 µg/L        0.419      501.21 ppb          0.419   0.08%
   QC value within limits for Mo 202.031  Recovery = 100.24%
Na 589.592 Radial†     36858.8       10276 µg/L         14.2       10276 ppb           14.2   0.14%
   QC value within limits for Na 589.592 Radial  Recovery = 102.76%
Ni 231.604†             8724.9      503.08 µg/L        2.105      503.08 ppb          2.105   0.42%
   QC value within limits for Ni 231.604  Recovery = 100.62%
P 214.914†              1094.0      2418.0 µg/L       17.85      2418.0 ppb         17.85   0.74%
   QC value within limits for P 214.914  Recovery = 96.72%
Pb 220.353†             1865.5      499.78 µg/L        2.158      499.78 ppb          2.158   0.43%
   QC value within limits for Pb 220.353  Recovery = 99.96%
S 181.975 Axial†         174.1      929.55 µg/L       26.028      929.55 ppb         26.028   2.80%
   QC value within limits for S 181.975 Axial  Recovery = 92.95%
Sb 206.836†              479.6      505.04 µg/L        5.347      505.04 ppb          5.347   1.06%
   QC value within limits for Sb 206.836  Recovery = 101.01%
Se 196.026†              336.8      506.94 µg/L        7.009      506.94 ppb          7.009   1.38%
   QC value within limits for Se 196.026  Recovery = 101.39%
SiO2†                   26313.6      5347.4 µg/L       18.68      5347.4 ppb         18.68   0.35%
   QC value within limits for SiO2  Recovery = 100.00%
Si 251.611†             30892.8      2459.8 µg/L       10.92      2459.8 ppb         10.92   0.44%
   QC value within limits for Si 251.611  Recovery = 98.39%
Sn 189.927†              961.0      502.95 µg/L        3.170      502.95 ppb          3.170   0.63%
   QC value within limits for Sn 189.927  Recovery = 100.59%
Sr 421.552†             88167.9      503.48 µg/L        0.991      503.48 ppb          0.991   0.20%
   QC value within limits for Sr 421.552  Recovery = 100.70%
Ti 334.940†            214486.0      503.39 µg/L        1.974      503.39 ppb          1.974   0.39%
   QC value within limits for Ti 334.940  Recovery = 100.68%
Tl 190.801†              313.5      505.24 µg/L        6.610      505.24 ppb          6.610   1.31%
   QC value within limits for Tl 190.801  Recovery = 101.05%
U 409.014†              4951.8      500.38 µg/L       11.326      500.38 ppb         11.326   2.26%
   QC value within limits for U 409.014  Recovery = 100.08%
V 292.402†              41847.4      509.14 µg/L        2.733      509.14 ppb          2.733   0.54%
   QC value within limits for V 292.402  Recovery = 101.83%
Zn 213.857†             17944.7      503.15 µg/L        2.867      503.15 ppb          2.867   0.57%
   QC value within limits for Zn 213.857  Recovery = 100.63%
All analyte(s) passed QC.
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Sequence No.: 53
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 08:58:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111769.8	111769.8	100	%			08:59:13
1	Al 396.153Radial†	174.7	10.5	5.4962	µg/L	5.4962	ppb	08:59:13
1	Ca 317.933Radial†	425.1	15.9	6.2695	µg/L	6.2695	ppb	08:59:34
1	Fe 238.204 Radial†	10.1	3.0	15.656	µg/L	15.656	ppb	08:59:34
1	K 766.490 Radial†	738.2	-104.9	-58.854	µg/L	-58.854	ppb	08:59:13
1	Mg 279.077 IEC†	16.0	0.5	2.5276	µg/L	2.5276	ppb	08:59:34
1	Na 589.592 Radial†	-677.2	-168.2	-46.897	µg/L	-46.897	ppb	08:59:13
1	Sr 421.552†	-89.5	-6.4	-0.0368	µg/L	-0.0368	ppb	08:59:13
1	Sc 361.383	1981387.0	1981387.0	101.89	%			09:00:36
1	Y 371.029	1203736.5	1203736.5	101.90	%			09:00:36
1	Ag 328.068†	-17.7	83.8	0.7958	µg/L	0.7958	ppb	09:00:41
1	As 188.979†	4.1	-1.1	-2.1706	µg/L	-2.1706	ppb	09:01:02
1	B 249.677†	127.2	-26.4	-1.2412	µg/L	-1.2412	ppb	09:00:41
1	Ba 233.527†	-75.9	4.7	0.1246	µg/L	0.1246	ppb	09:01:02
1	Be 313.107†	3519.7	-211.1	-0.1405	µg/L	-0.1405	ppb	09:00:41
1	Cd 226.502†	-86.9	12.1	0.3223	µg/L	0.3223	ppb	09:01:02
1	Co 228.616†	-75.3	-6.5	-0.3304	µg/L	-0.3304	ppb	09:01:02
1	Cr 267.716†	-110.6	18.7	0.4146	µg/L	0.4146	ppb	09:00:41
1	Cu 324.752†	3207.9	-117.5	-0.8736	µg/L	-0.8736	ppb	09:00:41
1	Mn 257.610†	-179.4	55.1	0.1859	µg/L	0.1859	ppb	09:01:02
1	Mo 202.031†	-7.8	-2.8	-0.3388	µg/L	-0.3388	ppb	09:01:02
1	Ni 231.604†	277.6	-9.3	-0.5346	µg/L	-0.5346	ppb	09:01:02
1	P 214.914†	200.0	-7.9	-17.774	µg/L	-17.774	ppb	09:01:02
1	Pb 220.353†	55.4	-1.7	-0.4232	µg/L	-0.4232	ppb	09:01:02
1	S 181.975 Axial†	25.8	-13.6	-72.463	µg/L	-72.463	ppb	09:01:02
1	Sb 206.836†	18.8	-0.5	-0.5063	µg/L	-0.5063	ppb	09:01:02
1	Se 196.026†	5.7	-5.2	-7.8231	µg/L	-7.8231	ppb	09:01:02
1	SiO2†	2041.4	-72.1	-14.662	µg/L	-14.662	ppb	09:00:41
1	Si 251.611†	343.5	22.5	2.0230	µg/L	2.0230	ppb	09:01:02
1	Sn 189.927†	16.1	-8.6	-4.4470	µg/L	-4.4470	ppb	09:01:02
1	Ti 334.940†	863.2	50.6	0.1185	µg/L	0.1185	ppb	09:00:41
1	Tl 190.801†	-25.4	-5.6	-8.9569	µg/L	-8.9569	ppb	09:01:02
1	U 409.014†	606.8	-229.9	-23.274	µg/L	-23.274	ppb	09:00:41
1	V 292.402†	-121.7	-42.8	-0.5551	µg/L	-0.5551	ppb	09:00:41
1	Zn 213.857†	511.1	-16.5	-0.4653	µg/L	-0.4653	ppb	09:01:02
2	Sc RADIAL	111186.1	111186.1	99.9	%			08:59:39
2	Al 396.153Radial†	159.5	-3.8	-1.9594	µg/L	-1.9594	ppb	08:59:39
2	Ca 317.933Radial†	412.2	5.2	2.0354	µg/L	2.0354	ppb	09:00:00
2	Fe 238.204 Radial†	9.5	2.6	13.186	µg/L	13.186	ppb	09:00:00
2	K 766.490 Radial†	701.3	-137.9	-77.388	µg/L	-77.388	ppb	08:59:39
2	Mg 279.077 IEC†	16.5	1.1	6.2031	µg/L	6.2031	ppb	09:00:00
2	Na 589.592 Radial†	-703.8	-198.4	-55.308	µg/L	-55.308	ppb	08:59:39
2	Sr 421.552†	-72.4	10.1	0.0578	µg/L	0.0578	ppb	08:59:39
2	Sc 361.383	1984515.4	1984515.4	102.05	%			09:01:08
2	Y 371.029	1205918.7	1205918.7	102.09	%			09:01:08
2	Ag 328.068†	-14.3	87.2	0.8287	µg/L	0.8287	ppb	09:01:13
2	As 188.979†	1.1	-4.1	-8.1462	µg/L	-8.1462	ppb	09:01:34
2	B 249.677†	122.1	-31.5	-1.4825	µg/L	-1.4825	ppb	09:01:13
2	Ba 233.527†	-78.2	2.6	0.0688	µg/L	0.0688	ppb	09:01:34
2	Be 313.107†	3635.8	-102.8	-0.0684	µg/L	-0.0684	ppb	09:01:13
2	Cd 226.502†	-92.0	7.3	0.1947	µg/L	0.1947	ppb	09:01:34
2	Co 228.616†	-65.7	3.0	0.1527	µg/L	0.1527	ppb	09:01:34
2	Cr 267.716†	-152.8	-22.5	-0.5016	µg/L	-0.5016	ppb	09:01:13
2	Cu 324.752†	3227.4	-103.4	-0.7687	µg/L	-0.7687	ppb	09:01:13
2	Mn 257.610†	-189.7	45.3	0.1530	µg/L	0.1530	ppb	09:01:34
2	Mo 202.031†	-5.5	-0.5	-0.0594	µg/L	-0.0594	ppb	09:01:34
2	Ni 231.604†	279.2	-8.1	-0.4677	µg/L	-0.4677	ppb	09:01:34
2	P 214.914†	193.5	-14.6	-32.888	µg/L	-32.888	ppb	09:01:34
2	Pb 220.353†	56.7	-0.4	-0.1024	µg/L	-0.1024	ppb	09:01:34

2	S 181.975 Axial†	21.4	-17.9	-95.694 µg/L	-95.694 ppb	09:01:34
2	Sb 206.836†	19.0	-0.3	-0.2759 µg/L	-0.2759 ppb	09:01:34
2	Se 196.026†	5.2	-5.7	-8.6103 µg/L	-8.6103 ppb	09:01:34
2	SiO2†	2055.6	-61.4	-12.474 µg/L	-12.474 ppb	09:01:13
2	Si 251.611†	354.1	32.3	2.7225 µg/L	2.7225 ppb	09:01:34
2	Sn 189.927†	21.4	-3.4	-1.7681 µg/L	-1.7681 ppb	09:01:34
2	Ti 334.940†	832.1	18.7	0.0439 µg/L	0.0439 ppb	09:01:13
2	Tl 190.801†	-18.3	1.3	2.1444 µg/L	2.1444 ppb	09:01:34
2	U 409.014†	714.3	-125.5	-12.704 µg/L	-12.704 ppb	09:01:13
2	V 292.402†	-112.3	-33.5	-0.4233 µg/L	-0.4233 ppb	09:01:13
2	Zn 213.857†	513.4	-15.1	-0.4241 µg/L	-0.4241 ppb	09:01:34
3	Sc RADIAL	111209.3	111209.3	99.9 %		09:00:05
3	Al 396.153Radial†	158.5	-4.8	-2.4940 µg/L	-2.4940 ppb	09:00:05
3	Ca 317.933Radial†	415.5	8.4	3.3085 µg/L	3.3085 ppb	09:00:25
3	Fe 238.204 Radial†	9.3	2.3	11.875 µg/L	11.875 ppb	09:00:25
3	K 766.490 Radial†	733.4	-106.0	-59.463 µg/L	-59.463 ppb	09:00:05
3	Mg 279.077 IEC†	13.6	-1.9	-10.392 µg/L	-10.392 ppb	09:00:25
3	Na 589.592 Radial†	-688.4	-182.8	-50.957 µg/L	-50.957 ppb	09:00:05
3	Sr 421.552†	-62.9	19.7	0.1126 µg/L	0.1126 ppb	09:00:05
3	Sc 361.383	1973924.7	1973924.7	101.50 %		09:01:40
3	Y 371.029	1199326.0	1199326.0	101.53 %		09:01:40
3	Ag 328.068†	-15.2	86.3	0.8275 µg/L	0.8275 ppb	09:01:46
3	As 188.979†	-3.3	-8.4	-16.799 µg/L	-16.799 ppb	09:02:06
3	B 249.677†	137.8	-15.4	-0.7261 µg/L	-0.7261 ppb	09:01:46
3	Ba 233.527†	-75.8	4.6	0.1234 µg/L	0.1234 ppb	09:02:06
3	Be 313.107†	3568.9	-149.6	-0.0998 µg/L	-0.0998 ppb	09:01:46
3	Cd 226.502†	-99.1	-0.2	-0.0177 µg/L	-0.0177 ppb	09:02:06
3	Co 228.616†	-65.1	3.2	0.1642 µg/L	0.1642 ppb	09:02:06
3	Cr 267.716†	-157.0	-27.5	-0.6096 µg/L	-0.6096 ppb	09:01:46
3	Cu 324.752†	3197.0	-116.4	-0.8658 µg/L	-0.8658 ppb	09:01:46
3	Mn 257.610†	-156.0	77.5	0.2602 µg/L	0.2602 ppb	09:02:06
3	Mo 202.031†	-1.1	3.8	0.4553 µg/L	0.4553 ppb	09:02:06
3	Ni 231.604†	279.4	-6.5	-0.3735 µg/L	-0.3735 ppb	09:02:06
3	P 214.914†	199.0	-8.1	-18.204 µg/L	-18.204 ppb	09:02:06
3	Pb 220.353†	46.8	-9.9	-2.6334 µg/L	-2.6334 ppb	09:02:06
3	S 181.975 Axial†	28.2	-11.1	-59.389 µg/L	-59.389 ppb	09:02:06
3	Sb 206.836†	19.6	0.4	0.4399 µg/L	0.4399 ppb	09:02:06
3	Se 196.026†	7.6	-3.3	-4.9344 µg/L	-4.9344 ppb	09:02:06
3	SiO2†	1980.7	-124.3	-25.260 µg/L	-25.260 ppb	09:01:46
3	Si 251.611†	345.6	25.9	2.1603 µg/L	2.1603 ppb	09:02:06
3	Sn 189.927†	21.0	-3.6	-1.8853 µg/L	-1.8853 ppb	09:02:06
3	Ti 334.940†	1125.8	312.5	0.7337 µg/L	0.7337 ppb	09:01:46
3	Tl 190.801†	-20.0	-0.4	-0.6692 µg/L	-0.6692 ppb	09:02:06
3	U 409.014†	689.7	-146.0	-14.783 µg/L	-14.783 ppb	09:01:46
3	V 292.402†	-17.3	59.5	0.6973 µg/L	0.6973 ppb	09:01:46
3	Zn 213.857†	506.8	-18.9	-0.5314 µg/L	-0.5314 ppb	09:02:06

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1979942.4	101.81	%	0.280				0.27%
Sc RADIAL	111388.4	100	%	0.3				0.30%
Y 371.029	1202993.7	101.84	%	0.284				0.28%
Ag 328.068†	85.8	0.8173	µg/L	0.01865	0.8173	ppb	0.01865	2.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.7	0.3476	µg/L	4.46680	0.3476	ppb	4.46680	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.5	-9.0386	µg/L	7.35501	-9.0386	ppb	7.35501	81.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-24.4	-1.1499	µg/L	0.38641	-1.1499	ppb	0.38641	33.60%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.0	0.1056	µg/L	0.03188	0.1056	ppb	0.03188	30.19%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-154.5	-0.1029	µg/L	0.03615	-0.1029	ppb	0.03615	35.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.8	3.8711	µg/L	2.17243	3.8711	ppb	2.17243	56.12%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.4	0.1664	µg/L	0.17176	0.1664	ppb	0.17176	103.21%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.1	-0.0045	µg/L	0.28228	-0.0045	ppb	0.28228	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -10.4     -0.2322 µg/L       0.56271     -0.2322 ppb        0.56271 242.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -112.4     -0.8361 µg/L       0.05844     -0.8361 ppb        0.05844   6.99%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.6      13.572 µg/L        1.9196      13.572 ppb         1.9196  14.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -116.3     -65.235 µg/L       10.5293     -65.235 ppb        10.5293  16.14%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.1     -0.5537 µg/L       8.71598     -0.5537 ppb        8.71598 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               59.3      0.1997 µg/L       0.05494      0.1997 ppb        0.05494  27.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.2      0.0190 µg/L       0.40283      0.0190 ppb        0.40283 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -183.1     -51.054 µg/L        4.2062     -51.054 ppb         4.2062   8.24%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -8.0     -0.4586 µg/L       0.08092     -0.4586 ppb        0.08092  17.65%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -10.2     -22.956 µg/L        8.6044     -22.956 ppb         8.6044  37.48%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.0     -1.0530 µg/L       1.37805     -1.0530 ppb        1.37805 130.87%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -14.2     -75.849 µg/L       18.3881     -75.849 ppb        18.3881  24.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.1     -0.1141 µg/L       0.49345     -0.1141 ppb        0.49345 432.45%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.8     -7.1226 µg/L       1.93548     -7.1226 ppb        1.93548  27.17%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -85.9     -17.465 µg/L        6.8383     -17.465 ppb         6.8383  39.15%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               26.9      2.3019 µg/L       0.37068      2.3019 ppb        0.37068  16.10%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -5.2     -2.7001 µg/L       1.51395     -2.7001 ppb        1.51395  56.07%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                7.8      0.0445 µg/L       0.07558      0.0445 ppb        0.07558 169.74%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              127.3      0.2987 µg/L       0.37857      0.2987 ppb        0.37857 126.74%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.6     -2.4939 µg/L       5.77120     -2.4939 ppb        5.77120 231.42%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -167.1     -16.921 µg/L        5.5998     -16.921 ppb         5.5998  33.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.6     -0.0937 µg/L       0.68815     -0.0937 ppb        0.68815 734.40%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -16.8     -0.4736 µg/L       0.05414     -0.4736 ppb        0.05414  11.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 121609

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

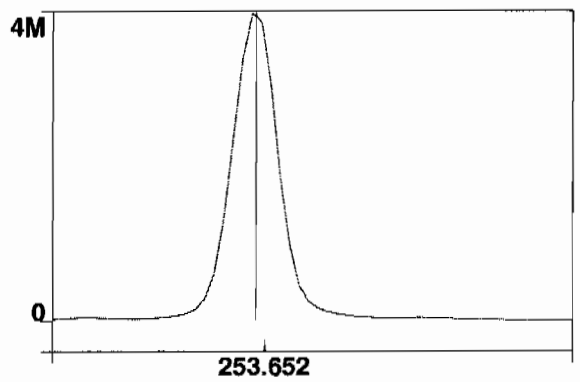

Intensity: 3600695.8 cps
Conc:

1

12/8/2009 07:27:56 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 2

Analysis Begun

Start Time: 12/8/2009 07:28:37 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/7/2009 08:20:00**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/8/2009 07:28:38**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5745.6	5745.6	98.3	%	07:30:31
1	Y RADIAL	6211.7	6211.7	98.79	%	07:30:31
1	Al 396.153Radial†	-19.0	-19.3	[0.00]	ug/L	07:30:31
1	Ca 317.933Radial†	15.5	15.8	[0.00]	ug/L	07:30:51
1	Fe 238.204 Radial†	5.3	5.4	[0.00]	ug/L	07:30:51
1	K 766.490 Radial†	2457.5	2499.5	[0.00]	ug/L	07:30:31
1	Mg 279.077 IEC†	0.5	0.5	[0.00]	ug/L	07:30:51
1	Na 589.592 Radial†	-1085.4	-1103.9	[0.00]	ug/L	07:30:31
1	Sr 421.552†	-7.0	-7.1	[0.00]	ug/L	07:30:31
1	Sc 361.383	900693.7	900693.7	99.937	%	07:31:48
1	Y 371.029	750994.5	750994.5	99.988	%	07:31:48
1	Ag 328.068†	258.4	258.6	[0.00]	ug/L	07:31:48
1	As 188.979†	-20.1	-20.1	[0.00]	ug/L	07:32:08
1	B 249.677†	-538.8	-539.2	[0.00]	ug/L	07:32:08
1	Ba 233.527†	-14.2	-14.2	[0.00]	ug/L	07:32:08
1	Be 313.107†	-5056.8	-5060.0	[0.00]	ug/L	07:31:48
1	Cd 226.502†	-193.9	-194.0	[0.00]	ug/L	07:32:08
1	Co 228.616†	-62.5	-62.5	[0.00]	ug/L	07:32:08
1	Cr 267.716†	74.9	74.9	[0.00]	ug/L	07:32:08
1	Cu 324.752†	6750.3	6754.6	[0.00]	ug/L	07:31:48
1	Mn 257.610†	418.2	418.5	[0.00]	ug/L	07:32:08
1	Mo 202.031†	24.3	24.3	[0.00]	ug/L	07:32:08
1	Ni 231.604†	82.5	82.6	[0.00]	ug/L	07:32:08
1	P 214.914†	227.9	228.1	[0.00]	ug/L	07:32:08
1	Pb 220.353†	-62.4	-62.5	[0.00]	ug/L	07:32:08
1	S 181.975 Axial†	41.2	41.3	[0.00]	ug/L	07:32:08
1	Sb 206.836†	33.6	33.6	[0.00]	ug/L	07:32:08
1	Se 196.026†	-24.2	-24.2	[0.00]	ug/L	07:32:08
1	Si 251.611†	437.2	437.5	[0.00]	ug/L	07:32:08
1	Sn 189.927†	-2.2	-2.2	[0.00]	ug/L	07:32:08
1	Ti 334.940†	-1030.7	-1031.3	[0.00]	ug/L	07:31:48
1	Tl 190.801†	-27.6	-27.6	[0.00]	ug/L	07:32:08
1	U 409.014†	-2346.9	-2348.4	[0.00]	ug/L	07:31:48
1	V 292.402†	-1372.8	-1373.7	[0.00]	ug/L	07:31:48
1	Zn 213.857†	625.8	626.2	[0.00]	ug/L	07:32:08
1	SiO2†	455.0	455.3	[0.00]	ug/L	07:33:04
2	Sc Radial	5922.7	5922.7	101	%	07:30:56
2	Y RADIAL	6350.2	6350.2	101.0	%	07:30:56
2	Al 396.153Radial†	-27.2	-26.9	[0.00]	ug/L	07:30:56
2	Ca 317.933Radial†	15.9	15.6	[0.00]	ug/L	07:31:16
2	Fe 238.204 Radial†	8.7	8.6	[0.00]	ug/L	07:31:16
2	K 766.490 Radial†	2256.7	2226.7	[0.00]	ug/L	07:30:56
2	Mg 279.077 IEC†	1.4	1.4	[0.00]	ug/L	07:31:16
2	Na 589.592 Radial†	-1070.6	-1056.4	[0.00]	ug/L	07:30:56
2	Sr 421.552†	-29.3	-28.9	[0.00]	ug/L	07:30:56
2	Sc 361.383	897080.5	897080.5	99.536	%	07:32:13
2	Y 371.029	746552.6	746552.6	99.397	%	07:32:13
2	Ag 328.068†	238.8	240.0	[0.00]	ug/L	07:32:13
2	As 188.979†	-23.4	-23.5	[0.00]	ug/L	07:32:33
2	B 249.677†	-533.8	-536.2	[0.00]	ug/L	07:32:33
2	Ba 233.527†	0.1	0.1	[0.00]	ug/L	07:32:33
2	Be 313.107†	-5169.1	-5193.2	[0.00]	ug/L	07:32:13
2	Cd 226.502†	-185.9	-186.8	[0.00]	ug/L	07:32:33
2	Co 228.616†	-67.4	-67.7	[0.00]	ug/L	07:32:33
2	Cr 267.716†	72.6	72.9	[0.00]	ug/L	07:32:33
2	Cu 324.752†	6796.2	6827.9	[0.00]	ug/L	07:32:13
2	Mn 257.610†	427.5	429.5	[0.00]	ug/L	07:32:33
2	Mo 202.031†	14.6	14.7	[0.00]	ug/L	07:32:33
2	Ni 231.604†	86.6	87.0	[0.00]	ug/L	07:32:33
2	P 214.914†	222.0	223.0	[0.00]	ug/L	07:32:33
2	Pb 220.353†	-69.2	-69.5	[0.00]	ug/L	07:32:33
2	S 181.975 Axial†	41.0	41.2	[0.00]	ug/L	07:32:33
2	Sb 206.836†	36.1	36.3	[0.00]	ug/L	07:32:33
2	Se 196.026†	-32.4	-32.6	[0.00]	ug/L	07:32:33
2	Si 251.611†	455.6	457.8	[0.00]	ug/L	07:32:33
2	Sn 189.927†	9.9	10.0	[0.00]	ug/L	07:32:33
2	Ti 334.940†	-1182.5	-1188.0	[0.00]	ug/L	07:32:13
2	Tl 190.801†	-32.3	-32.4	[0.00]	ug/L	07:32:33
2	U 409.014†	-2442.7	-2454.1	[0.00]	ug/L	07:32:13
2	V 292.402†	-1362.6	-1369.0	[0.00]	ug/L	07:32:13

2	Zn 213.857†	620.7	623.6	[0.00]	ug/L	07:32:33
2	SiO2†	500.9	503.3	[0.00]	ug/L	07:33:09
3	Sc Radial	5863.5	5863.5	100	%	07:31:21
3	Y RADIAL	6301.5	6301.5	100.2	%	07:31:21
3	Al 396.153Radial†	-15.1	-15.0	[0.00]	ug/L	07:31:21
3	Ca 317.933Radial†	15.4	15.3	[0.00]	ug/L	07:31:41
3	Fe 238.204 Radial†	6.4	6.4	[0.00]	ug/L	07:31:41
3	K 766.490 Radial†	2336.7	2328.9	[0.00]	ug/L	07:31:21
3	Mg 279.077 IEC†	1.6	1.6	[0.00]	ug/L	07:31:41
3	Na 589.592 Radial†	-1107.2	-1103.5	[0.00]	ug/L	07:31:21
3	Sr 421.552†	-46.2	-46.0	[0.00]	ug/L	07:31:21
3	Sc 361.383	906018.4	906018.4	100.53	%	07:32:38
3	Y 371.029	755705.3	755705.3	100.62	%	07:32:38
3	Ag 328.068†	381.7	379.7	[0.00]	ug/L	07:32:38
3	As 188.979†	-29.1	-29.0	[0.00]	ug/L	07:32:58
3	B 249.677†	-519.4	-516.6	[0.00]	ug/L	07:32:58
3	Ba 233.527†	-11.3	-11.2	[0.00]	ug/L	07:32:58
3	Be 313.107†	-5112.7	-5085.8	[0.00]	ug/L	07:32:38
3	Cd 226.502†	-205.6	-204.5	[0.00]	ug/L	07:32:58
3	Co 228.616†	-66.3	-66.0	[0.00]	ug/L	07:32:58
3	Cr 267.716†	88.6	88.1	[0.00]	ug/L	07:32:58
3	Cu 324.752†	6722.9	6687.6	[0.00]	ug/L	07:32:38
3	Mn 257.610†	421.2	419.0	[0.00]	ug/L	07:32:58
3	Mo 202.031†	16.1	16.0	[0.00]	ug/L	07:32:58
3	Ni 231.604†	90.6	90.1	[0.00]	ug/L	07:32:58
3	P 214.914†	220.6	219.4	[0.00]	ug/L	07:32:58
3	Pb 220.353†	-73.8	-73.4	[0.00]	ug/L	07:32:58
3	S 181.975 Axial†	42.5	42.2	[0.00]	ug/L	07:32:58
3	Sb 206.836†	33.0	32.8	[0.00]	ug/L	07:32:58
3	Se 196.026†	-29.8	-29.7	[0.00]	ug/L	07:32:58
3	Si 251.611†	456.1	453.7	[0.00]	ug/L	07:32:58
3	Sn 189.927†	7.3	7.2	[0.00]	ug/L	07:32:58
3	Ti 334.940†	-1131.4	-1125.5	[0.00]	ug/L	07:32:38
3	Tl 190.801†	-37.6	-37.4	[0.00]	ug/L	07:32:58
3	U 409.014†	-2415.7	-2403.0	[0.00]	ug/L	07:32:38
3	V 292.402†	-1339.4	-1332.4	[0.00]	ug/L	07:32:38
3	Zn 213.857†	618.9	615.7	[0.00]	ug/L	07:32:58
3	SiO2†	446.1	443.8	[0.00]	ug/L	07:33:14

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	901264.2	4496.20	0.50%	100.00	%
Sc Radial	5843.9	90.14	1.54%	100	%
Y 371.029	751084.2	4577.00	0.61%	100.00	%
Y RADIAL	6287.8	70.25	1.12%	100.0	%
Ag 328.068†	292.7	75.86	25.92%	[0.00]	ug/L
Al 396.153Radial†	-20.4	5.98	29.32%	[0.00]	ug/L
As 188.979†	-24.2	4.49	18.59%	[0.00]	ug/L
B 249.677†	-530.7	12.25	2.31%	[0.00]	ug/L
Ba 233.527†	-8.5	7.54	89.18%	[0.00]	ug/L
Be 313.107†	-5113.0	70.64	1.38%	[0.00]	ug/L
Ca 317.933Radial†	15.6	0.26	1.66%	[0.00]	ug/L
Cd 226.502†	-195.1	8.91	4.57%	[0.00]	ug/L
Co 228.616†	-65.4	2.64	4.04%	[0.00]	ug/L
Cr 267.716†	78.7	8.27	10.52%	[0.00]	ug/L
Cu 324.752†	6756.7	70.20	1.04%	[0.00]	ug/L
Fe 238.204 Radial†	6.8	1.66	24.44%	[0.00]	ug/L
K 766.490 Radial†	2351.7	137.81	5.86%	[0.00]	ug/L
Mg 279.077 IEC†	1.2	0.61	52.53%	[0.00]	ug/L
Mn 257.610†	422.3	6.23	1.47%	[0.00]	ug/L
Mo 202.031†	18.3	5.20	28.34%	[0.00]	ug/L
Na 589.592 Radial†	-1087.9	27.36	2.52%	[0.00]	ug/L
Ni 231.604†	86.6	3.79	4.38%	[0.00]	ug/L
P 214.914†	223.5	4.34	1.94%	[0.00]	ug/L
Pb 220.353†	-68.5	5.55	8.11%	[0.00]	ug/L
S 181.975 Axial†	41.6	0.57	1.37%	[0.00]	ug/L
Sb 206.836†	34.2	1.82	5.32%	[0.00]	ug/L
Se 196.026†	-28.8	4.23	14.66%	[0.00]	ug/L
Si 251.611†	449.7	10.73	2.39%	[0.00]	ug/L

Sn 189.927†	5.0	6.41	128.46%	[0.00]	ug/L
Sr 421.552†	-27.4	19.51	71.35%	[0.00]	ug/L
Ti 334.940†	-1114.9	78.85	7.07%	[0.00]	ug/L
Tl 190.801†	-32.5	4.90	15.07%	[0.00]	ug/L
U 409.014†	-2401.8	52.87	2.20%	[0.00]	ug/L
V 292.402†	-1358.4	22.59	1.66%	[0.00]	ug/L
Zn 213.857†	621.8	5.49	0.88%	[0.00]	ug/L
SiO2†	467.5	31.54	6.75%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/8/2009 07:35:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5765.8	5765.8	98.7	%	07:37:21
1	Y RADIAL	6189.1	6189.1	98.43	%	07:37:21
1	K 766.490 Radial†	8010.4	5767.1	[1000]	ug/L	07:37:16
1	Sr 421.552†	15682.7	15922.4	[100]	ug/L	07:37:21
1	Sc 361.383	914536.7	914536.7	101.47	%	07:37:48
1	Y 371.029	754661.2	754661.2	100.48	%	07:37:48
1	Ag 328.068†	21843.7	21234.0	[100]	ug/L	07:37:53
1	As 188.979†	227.9	248.8	[100]	ug/L	07:38:13
1	B 249.677†	3929.5	4403.2	[100]	ug/L	07:37:53
1	Ba 233.527†	13325.8	13140.9	[100]	ug/L	07:37:53
1	Be 313.107†	260898.9	262225.5	[100]	ug/L	07:37:48
1	Cd 226.502†	9200.0	9261.6	[100]	ug/L	07:37:53
1	Co 228.616†	5047.2	5039.4	[100]	ug/L	07:38:13
1	Cr 267.716†	9428.4	9212.9	[100]	ug/L	07:37:53
1	Cu 324.752†	40509.5	33164.9	[100]	ug/L	07:37:53
1	Mn 257.610†	93021.3	91249.0	[100]	ug/L	07:37:53
1	Mo 202.031†	1542.1	1501.4	[100]	ug/L	07:38:13
1	Ni 231.604†	4280.0	4131.4	[100]	ug/L	07:38:13
1	P 214.914†	1053.7	814.9	[500]	ug/L	07:38:13
1	Pb 220.353†	819.7	876.2	[100]	ug/L	07:38:13
1	S 181.975 Axial†	175.1	130.9	[200]	ug/L	07:38:13
1	Sb 206.836†	334.6	295.5	[100]	ug/L	07:38:13
1	Se 196.026†	142.3	169.1	[100]	ug/L	07:38:13
1	Si 251.611†	16559.7	15869.7	[500]	ug/L	07:37:53
1	Sn 189.927†	576.8	563.4	[100]	ug/L	07:38:13
1	Ti 334.940†	59872.4	60118.4	[100]	ug/L	07:37:53
1	Tl 190.801†	319.5	347.4	[100]	ug/L	07:38:13
1	U 409.014†	1213.1	3597.3	[100]	ug/L	07:37:48
1	V 292.402†	13311.9	14477.1	[100]	ug/L	07:37:53
1	Zn 213.857†	11943.1	11147.9	[100]	ug/L	07:37:53
1	SiO2†	16722.0	16011.9	[1069.5]	ug/L	07:39:19
2	Sc Radial	5769.0	5769.0	98.7	%	07:37:31
2	Y RADIAL	6129.7	6129.7	97.49	%	07:37:31
2	K 766.490 Radial†	7990.0	5742.1	[1000]	ug/L	07:37:26
2	Sr 421.552†	15612.4	15842.5	[100]	ug/L	07:37:31
2	Sc 361.383	915362.8	915362.8	101.56	%	07:38:18
2	Y 371.029	757053.4	757053.4	100.79	%	07:38:18
2	Ag 328.068†	22010.2	21378.4	[100]	ug/L	07:38:23
2	As 188.979†	219.9	240.7	[100]	ug/L	07:38:43
2	B 249.677†	3929.3	4399.5	[100]	ug/L	07:38:23
2	Ba 233.527†	13353.9	13156.7	[100]	ug/L	07:38:23
2	Be 313.107†	261281.3	262369.9	[100]	ug/L	07:38:18
2	Cd 226.502†	9245.9	9298.6	[100]	ug/L	07:38:23
2	Co 228.616†	5066.0	5053.3	[100]	ug/L	07:38:43
2	Cr 267.716†	9513.3	9288.1	[100]	ug/L	07:38:23
2	Cu 324.752†	40726.1	33342.1	[100]	ug/L	07:38:23
2	Mn 257.610†	93398.3	91537.5	[100]	ug/L	07:38:23
2	Mo 202.031†	1547.3	1505.1	[100]	ug/L	07:38:43
2	Ni 231.604†	4269.5	4117.2	[100]	ug/L	07:38:43
2	P 214.914†	1060.5	820.7	[500]	ug/L	07:38:43
2	Pb 220.353†	815.7	871.6	[100]	ug/L	07:38:43
2	S 181.975 Axial†	174.2	129.9	[200]	ug/L	07:38:43
2	Sb 206.836†	333.9	294.5	[100]	ug/L	07:38:43
2	Se 196.026†	147.7	174.2	[100]	ug/L	07:38:43
2	Si 251.611†	16619.4	15913.7	[500]	ug/L	07:38:23
2	Sn 189.927†	602.2	587.9	[100]	ug/L	07:38:43
2	Ti 334.940†	60122.7	60311.6	[100]	ug/L	07:38:23
2	Tl 190.801†	325.1	352.6	[100]	ug/L	07:38:43
2	U 409.014†	1005.2	3391.5	[100]	ug/L	07:38:18

2	V 292.402†	13412.6	14564.3	[100]	ug/L	07:38:23
2	Zn 213.857†	11968.2	11162.1	[100]	ug/L	07:38:23
2	SiO2†	16537.0	15814.9	[1069.5]	ug/L	07:39:24
3	Sc Radial	5875.5	5875.5	101	%	07:37:41
3	Y RADIAL	6269.8	6269.8	99.71	%	07:37:41
3	K 766.490 Radial†	7932.9	5538.6	[1000]	ug/L	07:37:36
3	Sr 421.552†	15938.0	15879.7	[100]	ug/L	07:37:41
3	Sc 361.383	919222.5	919222.5	101.99	%	07:38:49
3	Y 371.029	759136.1	759136.1	101.07	%	07:38:49
3	Ag 328.068†	22234.4	21507.3	[100]	ug/L	07:38:54
3	As 188.979†	225.1	244.9	[100]	ug/L	07:39:14
3	B 249.677†	4040.0	4491.7	[100]	ug/L	07:38:54
3	Ba 233.527†	13560.3	13303.8	[100]	ug/L	07:38:54
3	Be 313.107†	261887.7	261884.4	[100]	ug/L	07:38:49
3	Cd 226.502†	9334.1	9346.9	[100]	ug/L	07:38:54
3	Co 228.616†	5039.9	5006.8	[100]	ug/L	07:39:14
3	Cr 267.716†	9582.2	9316.3	[100]	ug/L	07:38:54
3	Cu 324.752†	40945.3	33388.7	[100]	ug/L	07:38:54
3	Mn 257.610†	94457.9	92190.2	[100]	ug/L	07:38:54
3	Mo 202.031†	1552.8	1504.1	[100]	ug/L	07:39:14
3	Ni 231.604†	4263.2	4093.4	[100]	ug/L	07:39:14
3	P 214.914†	1052.4	808.3	[500]	ug/L	07:39:14
3	Pb 220.353†	818.7	871.2	[100]	ug/L	07:39:14
3	S 181.975 Axial†	175.0	130.0	[200]	ug/L	07:39:14
3	Sb 206.836†	329.8	289.1	[100]	ug/L	07:39:14
3	Se 196.026†	150.6	176.5	[100]	ug/L	07:39:14
3	Si 251.611†	16850.5	16071.6	[500]	ug/L	07:38:54
3	Sn 189.927†	596.2	579.5	[100]	ug/L	07:39:14
3	Ti 334.940†	60935.8	60860.2	[100]	ug/L	07:38:54
3	Tl 190.801†	315.6	342.0	[100]	ug/L	07:39:14
3	U 409.014†	972.6	3355.4	[100]	ug/L	07:38:49
3	V 292.402†	13503.5	14598.0	[100]	ug/L	07:38:54
3	Zn 213.857†	12098.0	11239.8	[100]	ug/L	07:38:54
3	SiO2†	16521.2	15731.0	[1069.5]	ug/L	07:39:29

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	916374.0	2501.23	0.27%	101.68	%
Sc Radial	5803.4	62.41	1.08%	99.3	%
Y 371.029	756950.2	2239.21	0.30%	100.78	%
Y RADIAL	6196.2	70.31	1.13%	98.54	%
Ag 328.068†	21373.3	136.74	0.64%	[100]	ug/L
As 188.979†	244.8	4.02	1.64%	[100]	ug/L
B 249.677†	4431.5	52.22	1.18%	[100]	ug/L
Ba 233.527†	13200.4	89.86	0.68%	[100]	ug/L
Be 313.107†	262159.9	249.34	0.10%	[100]	ug/L
Cd 226.502†	9302.4	42.77	0.46%	[100]	ug/L
Co 228.616†	5033.2	23.87	0.47%	[100]	ug/L
Cr 267.716†	9272.4	53.46	0.58%	[100]	ug/L
Cu 324.752†	33298.6	118.07	0.35%	[100]	ug/L
K 766.490 Radial†	5682.6	125.36	2.21%	[1000]	ug/L
Mn 257.610†	91658.9	482.19	0.53%	[100]	ug/L
Mo 202.031†	1503.6	1.93	0.13%	[100]	ug/L
Ni 231.604†	4114.0	19.19	0.47%	[100]	ug/L
P 214.914†	814.6	6.21	0.76%	[500]	ug/L
Pb 220.353†	873.0	2.80	0.32%	[100]	ug/L
S 181.975 Axial†	130.3	0.57	0.43%	[200]	ug/L
Sb 206.836†	293.0	3.44	1.17%	[100]	ug/L
Se 196.026†	173.3	3.78	2.18%	[100]	ug/L
Si 251.611†	15951.7	106.20	0.67%	[500]	ug/L
Sn 189.927†	576.9	12.46	2.16%	[100]	ug/L
Sr 421.552†	15881.5	39.96	0.25%	[100]	ug/L
Ti 334.940†	60430.1	384.83	0.64%	[100]	ug/L
Tl 190.801†	347.3	5.29	1.52%	[100]	ug/L
U 409.014†	3448.1	130.52	3.79%	[100]	ug/L
V 292.402†	14546.5	62.44	0.43%	[100]	ug/L
Zn 213.857†	11183.3	49.46	0.44%	[100]	ug/L
SiO2†	15852.6	144.20	0.91%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/8/2009 07:41:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5755.3	5755.3	98.5	%	07:43:33
1	Y RADIAL	6135.8	6135.8	97.58	%	07:43:33
1	Al 396.153Radial†	6940.6	7067.9	[5000]	ug/L	07:43:33
1	Ca 317.933Radial†	3383.4	3419.9	[5000]	ug/L	07:43:53
1	K 766.490 Radial†	30250.2	28364.4	[5000]	ug/L	07:43:33
1	Mg 279.077 IEC†	149.6	150.7	[5000]	ug/L	07:43:53
1	Sr 421.552†	79566.2	80818.9	[500]	ug/L	07:43:33
1	Sc 361.383	902007.9	902007.9	100.08	%	07:44:50
1	Y 371.029	736818.6	736818.6	98.101	%	07:44:50
1	Ag 328.068†	110404.5	110020.7	[500]	ug/L	07:44:55
1	As 188.979†	1227.6	1250.8	[500]	ug/L	07:45:15
1	B 249.677†	22624.2	23136.2	[500]	ug/L	07:44:55
1	Ba 233.527†	66321.3	66275.0	[500]	ug/L	07:44:55
1	Be 313.107†	1344073.3	1348078.1	[500]	ug/L	07:44:50
1	Cd 226.502†	46481.0	46637.8	[500]	ug/L	07:44:55
1	Co 228.616†	25957.4	26001.4	[500]	ug/L	07:44:55
1	Cr 267.716†	46880.7	46763.4	[500]	ug/L	07:44:55
1	Cu 324.752†	176748.5	169846.1	[500]	ug/L	07:44:55
1	Mn 257.610†	463225.0	462420.8	[500]	ug/L	07:44:50
1	Mo 202.031†	7863.2	7838.4	[500]	ug/L	07:45:15
1	Ni 231.604†	21487.8	21383.5	[500]	ug/L	07:44:55
1	P 214.914†	4473.1	4245.9	[2500]	ug/L	07:45:15
1	Pb 220.353†	4294.6	4359.5	[500]	ug/L	07:45:15
1	S 181.975 Axial†	761.5	719.3	[1000]	ug/L	07:45:15
1	Sb 206.836†	1615.7	1580.1	[500]	ug/L	07:45:15
1	Se 196.026†	818.6	846.7	[500]	ug/L	07:45:15
1	Si 251.611†	82564.9	82047.1	[2500]	ug/L	07:44:55
1	Sn 189.927†	3040.6	3033.1	[500]	ug/L	07:45:15
1	Ti 334.940†	310662.0	311520.8	[500]	ug/L	07:44:55
1	Tl 190.801†	1746.7	1777.8	[500]	ug/L	07:45:15
1	U 409.014†	15499.0	17888.0	[500]	ug/L	07:44:55
1	V 292.402†	72745.3	74043.7	[500]	ug/L	07:44:55
1	Zn 213.857†	56861.0	56192.3	[500]	ug/L	07:44:55
1	SiO2†	83677.9	83141.4	[5347.5]	ug/L	07:46:23
2	Sc Radial	5753.2	5753.2	98.4	%	07:43:58
2	Y RADIAL	6098.6	6098.6	96.99	%	07:43:58
2	Al 396.153Radial†	7008.5	7139.3	[5000]	ug/L	07:43:58
2	Ca 317.933Radial†	3357.1	3394.4	[5000]	ug/L	07:44:18
2	K 766.490 Radial†	30376.3	28503.4	[5000]	ug/L	07:43:58
2	Mg 279.077 IEC†	145.0	146.2	[5000]	ug/L	07:44:18
2	Sr 421.552†	80143.3	81433.9	[500]	ug/L	07:43:58
2	Sc 361.383	897050.9	897050.9	99.533	%	07:45:21
2	Y 371.029	733930.5	733930.5	97.716	%	07:45:21
2	Ag 328.068†	111157.6	111387.0	[500]	ug/L	07:45:26
2	As 188.979†	1224.7	1254.7	[500]	ug/L	07:45:46
2	B 249.677†	22833.2	23471.2	[500]	ug/L	07:45:26
2	Ba 233.527†	66766.7	67088.7	[500]	ug/L	07:45:26
2	Be 313.107†	1337696.5	1349092.5	[500]	ug/L	07:45:21
2	Cd 226.502†	46562.9	46976.7	[500]	ug/L	07:45:26
2	Co 228.616†	26072.6	26260.5	[500]	ug/L	07:45:26
2	Cr 267.716†	47094.3	47236.9	[500]	ug/L	07:45:26
2	Cu 324.752†	179116.2	173200.8	[500]	ug/L	07:45:26
2	Mn 257.610†	460045.0	461783.5	[500]	ug/L	07:45:21
2	Mo 202.031†	7897.3	7916.1	[500]	ug/L	07:45:46
2	Ni 231.604†	21502.8	21517.2	[500]	ug/L	07:45:26
2	P 214.914†	4483.7	4281.3	[2500]	ug/L	07:45:46
2	Pb 220.353†	4299.8	4388.4	[500]	ug/L	07:45:46
2	S 181.975 Axial†	755.4	717.4	[1000]	ug/L	07:45:46
2	Sb 206.836†	1616.8	1590.2	[500]	ug/L	07:45:46

2	Se 196.026†	835.3	868.1	[500]	ug/L	07:45:46
2	Si 251.611†	83146.9	83087.8	[2500]	ug/L	07:45:26
2	Sn 189.927†	3056.2	3065.6	[500]	ug/L	07:45:46
2	Ti 334.940†	313337.6	315924.2	[500]	ug/L	07:45:26
2	Tl 190.801†	1732.8	1773.5	[500]	ug/L	07:45:46
2	U 409.014†	15713.5	18189.1	[500]	ug/L	07:45:26
2	V 292.402†	73060.5	74762.0	[500]	ug/L	07:45:26
2	Zn 213.857†	57384.3	57032.0	[500]	ug/L	07:45:26
2	SiO2†	82111.0	82029.2	[5347.5]	ug/L	07:46:28
3	Sc Radial	5658.5	5658.5	96.8	%	07:44:23
3	Y RADIAL	6000.3	6000.3	95.43	%	07:44:23
3	Al 396.153Radial†	7008.2	7258.2	[5000]	ug/L	07:44:23
3	Ca 317.933Radial†	3379.5	3474.7	[5000]	ug/L	07:44:43
3	K 766.490 Radial†	30355.1	28998.2	[5000]	ug/L	07:44:23
3	Mg 279.077 IEC†	146.2	149.8	[5000]	ug/L	07:44:43
3	Sr 421.552†	80169.9	82824.7	[500]	ug/L	07:44:23
3	Sc 361.383	903673.3	903673.3	100.27	%	07:45:52
3	Y 371.029	738349.2	738349.2	98.304	%	07:45:52
3	Ag 328.068†	111866.7	111275.7	[500]	ug/L	07:45:57
3	As 188.979†	1213.8	1234.8	[500]	ug/L	07:46:17
3	B 249.677†	23191.3	23660.2	[500]	ug/L	07:45:57
3	Ba 233.527†	67179.0	67008.4	[500]	ug/L	07:45:57
3	Be 313.107†	1348404.0	1349922.3	[500]	ug/L	07:45:52
3	Cd 226.502†	47083.0	47152.6	[500]	ug/L	07:45:57
3	Co 228.616†	26298.3	26293.6	[500]	ug/L	07:45:57
3	Cr 267.716†	47483.6	47278.4	[500]	ug/L	07:45:57
3	Cu 324.752†	179916.3	172680.0	[500]	ug/L	07:45:57
3	Mn 257.610†	464824.3	463162.8	[500]	ug/L	07:45:52
3	Mo 202.031†	7859.2	7820.0	[500]	ug/L	07:46:17
3	Ni 231.604†	21680.2	21535.9	[500]	ug/L	07:45:57
3	P 214.914†	4444.9	4209.6	[2500]	ug/L	07:46:17
3	Pb 220.353†	4302.0	4359.0	[500]	ug/L	07:46:17
3	S 181.975 Axial†	750.3	706.7	[1000]	ug/L	07:46:17
3	Sb 206.836†	1605.1	1566.6	[500]	ug/L	07:46:17
3	Se 196.026†	826.7	853.3	[500]	ug/L	07:46:17
3	Si 251.611†	83765.2	83092.2	[2500]	ug/L	07:45:57
3	Sn 189.927†	3059.4	3046.2	[500]	ug/L	07:46:17
3	Ti 334.940†	315390.3	315664.4	[500]	ug/L	07:45:57
3	Tl 190.801†	1716.4	1744.4	[500]	ug/L	07:46:17
3	U 409.014†	15674.1	18034.2	[500]	ug/L	07:45:57
3	V 292.402†	73603.1	74765.2	[500]	ug/L	07:45:57
3	Zn 213.857†	57834.5	57058.5	[500]	ug/L	07:45:57
3	SiO2†	81804.4	81118.8	[5347.5]	ug/L	07:46:33

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	900910.7	3444.89	0.38%	99.961	%
Sc Radial	5722.3	55.31	0.97%	97.9	%
Y 371.029	736366.1	2243.84	0.30%	98.040	%
Y RADIAL	6078.3	70.01	1.15%	96.67	%
Ag 328.068†	110894.5	758.70	0.68%	[500]	ug/L
Al 396.153Radial†	7155.2	96.14	1.34%	[5000]	ug/L
As 188.979†	1246.7	10.54	0.85%	[500]	ug/L
B 249.677†	23422.5	265.36	1.13%	[500]	ug/L
Ba 233.527†	66790.7	448.39	0.67%	[500]	ug/L
Be 313.107†	1349030.9	923.63	0.07%	[500]	ug/L
Ca 317.933Radial†	3429.7	41.02	1.20%	[5000]	ug/L
Cd 226.502†	46922.4	261.67	0.56%	[500]	ug/L
Co 228.616†	26185.2	159.97	0.61%	[500]	ug/L
Cr 267.716†	47092.9	286.09	0.61%	[500]	ug/L
Cu 324.752†	171909.0	1805.36	1.05%	[500]	ug/L
K 766.490 Radial†	28622.0	333.13	1.16%	[5000]	ug/L
Mg 279.077 IEC†	148.9	2.41	1.62%	[5000]	ug/L
Mn 257.610†	462455.7	690.31	0.15%	[500]	ug/L
Mo 202.031†	7858.1	51.01	0.65%	[500]	ug/L
Ni 231.604†	21478.9	83.11	0.39%	[500]	ug/L
P 214.914†	4245.6	35.86	0.84%	[2500]	ug/L
Pb 220.353†	4369.0	16.86	0.39%	[500]	ug/L
S 181.975 Axial†	714.5	6.78	0.95%	[1000]	ug/L

Sb 206.836†	1579.0	11.84	0.75%	[500]	ug/L
Se 196.026†	856.0	10.93	1.28%	[500]	ug/L
Si 251.611†	82742.4	602.11	0.73%	[2500]	ug/L
Sn 189.927†	3048.3	16.37	0.54%	[500]	ug/L
Sr 421.552†	81692.5	1027.61	1.26%	[500]	ug/L
Ti 334.940†	314369.8	2470.75	0.79%	[500]	ug/L
Tl 190.801†	1765.2	18.18	1.03%	[500]	ug/L
U 409.014†	18037.1	150.54	0.83%	[500]	ug/L
V 292.402†	74523.6	415.67	0.56%	[500]	ug/L
Zn 213.857†	56760.9	492.63	0.87%	[500]	ug/L
SiO2†	82096.5	1012.97	1.23%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/8/2009 07:48:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5727.6	5727.6	98.0	%	07:50:36
1	Y RADIAL	6092.4	6092.4	96.89	%	07:50:36
1	Al 396.153Radial†	13699.9	13998.6	[10000]	ug/L	07:50:36
1	Ca 317.933Radial†	6656.5	6776.1	[10000]	ug/L	07:50:36
1	Fe 238.204 Radial†	1055.7	1070.4	[10000]	ug/L	07:50:56
1	K 766.490 Radial†	57301.4	56113.4	[10000]	ug/L	07:50:36
1	Mg 279.077 IEC†	286.7	291.4	[10000]	ug/L	07:50:56
1	Na 589.592 Radial†	26952.5	28587.8	[10000]	ug/L	07:50:36
1	Sr 421.552†	156642.7	159851.3	[1000]	ug/L	07:50:36
1	Sc 361.383	866703.8	866703.8	96.165	%	07:51:59
1	Y 371.029	725126.9	725126.9	96.544	%	07:51:59
1	Ag 328.068†	212191.8	220360.3	[1000]	ug/L	07:51:59
1	As 188.979†	2413.4	2533.8	[1000]	ug/L	07:52:19
1	B 249.677†	45434.2	47776.6	[1000]	ug/L	07:51:59
1	Ba 233.527†	129842.7	135028.7	[1000]	ug/L	07:51:59
1	Be 313.107†	2636643.4	2746894.1	[1000]	ug/L	07:51:54
1	Cd 226.502†	90744.2	94557.8	[1000]	ug/L	07:51:59
1	Co 228.616†	50574.3	52656.4	[1000]	ug/L	07:51:59
1	Cr 267.716†	91836.0	95419.4	[1000]	ug/L	07:51:59
1	Cu 324.752†	343293.5	350225.9	[1000]	ug/L	07:51:59
1	Mn 257.610†	901280.3	936797.1	[1000]	ug/L	07:51:54
1	Mo 202.031†	15191.7	15779.1	[1000]	ug/L	07:52:19
1	Ni 231.604†	41580.1	43151.6	[1000]	ug/L	07:51:59
1	P 214.914†	8615.8	8735.8	[5000]	ug/L	07:52:19
1	Pb 220.353†	8464.2	8870.1	[1000]	ug/L	07:52:19
1	S 181.975 Axial†	1409.9	1424.5	[2000]	ug/L	07:52:19
1	Sb 206.836†	3070.7	3158.9	[1000]	ug/L	07:52:19
1	Se 196.026†	1640.1	1734.3	[1000]	ug/L	07:52:19
1	Si 251.611†	161079.4	167052.8	[5000]	ug/L	07:51:59
1	Sn 189.927†	5873.8	6103.0	[1000]	ug/L	07:52:19
1	Ti 334.940†	600269.7	625320.7	[1000]	ug/L	07:51:59
1	Tl 190.801†	3419.3	3588.1	[1000]	ug/L	07:52:19
1	U 409.014†	32652.6	36356.5	[1000]	ug/L	07:51:59
1	V 292.402†	144700.9	151829.2	[1000]	ug/L	07:51:59
1	Zn 213.857†	110773.1	114568.4	[1000]	ug/L	07:51:59
1	SiO2†	162097.8	168094.0	[10695]	ug/L	07:53:28
2	Sc Radial	5706.1	5706.1	97.6	%	07:51:01
2	Y RADIAL	6044.1	6044.1	96.12	%	07:51:01
2	Al 396.153Radial†	13658.2	14008.6	[10000]	ug/L	07:51:01
2	Ca 317.933Radial†	6641.4	6786.2	[10000]	ug/L	07:51:01
2	Fe 238.204 Radial†	1051.8	1070.4	[10000]	ug/L	07:51:21
2	K 766.490 Radial†	57341.9	56375.2	[10000]	ug/L	07:51:01
2	Mg 279.077 IEC†	284.9	290.6	[10000]	ug/L	07:51:21
2	Na 589.592 Radial†	26942.8	28681.5	[10000]	ug/L	07:51:01
2	Sr 421.552†	156508.0	160315.7	[1000]	ug/L	07:51:01
2	Sc 361.383	870985.3	870985.3	96.640	%	07:52:31
2	Y 371.029	731540.9	731540.9	97.398	%	07:52:31
2	Ag 328.068†	213845.0	220986.4	[1000]	ug/L	07:52:31
2	As 188.979†	2432.4	2541.1	[1000]	ug/L	07:52:51
2	B 249.677†	46010.4	48140.5	[1000]	ug/L	07:52:31
2	Ba 233.527†	130856.3	135413.9	[1000]	ug/L	07:52:31
2	Be 313.107†	2666787.9	2764609.1	[1000]	ug/L	07:52:25
2	Cd 226.502†	91618.2	94998.3	[1000]	ug/L	07:52:31
2	Co 228.616†	51055.4	52895.7	[1000]	ug/L	07:52:31
2	Cr 267.716†	92533.4	95671.6	[1000]	ug/L	07:52:31
2	Cu 324.752†	346989.1	352295.1	[1000]	ug/L	07:52:31
2	Mn 257.610†	910927.9	942173.1	[1000]	ug/L	07:52:25
2	Mo 202.031†	15202.7	15712.9	[1000]	ug/L	07:52:51
2	Ni 231.604†	42023.0	43397.4	[1000]	ug/L	07:52:31

2	P 214.914†	8619.1	8695.2	[5000]	ug/L	07:52:51
2	Pb 220.353†	8484.9	8848.3	[1000]	ug/L	07:52:51
2	S 181.975 Axial†	1414.8	1422.4	[2000]	ug/L	07:52:51
2	Sb 206.836†	3088.5	3161.7	[1000]	ug/L	07:52:51
2	Se 196.026†	1638.9	1724.7	[1000]	ug/L	07:52:51
2	Si 251.611†	162691.4	167897.5	[5000]	ug/L	07:52:31
2	Sn 189.927†	5905.9	6106.2	[1000]	ug/L	07:52:51
2	Ti 334.940†	605448.6	627611.3	[1000]	ug/L	07:52:31
2	Tl 190.801†	3427.2	3578.8	[1000]	ug/L	07:52:51
2	U 409.014†	32852.3	36396.2	[1000]	ug/L	07:52:31
2	V 292.402†	145972.5	152405.4	[1000]	ug/L	07:52:31
2	Zn 213.857†	111675.6	114936.0	[1000]	ug/L	07:52:31
2	SiO2†	162732.6	167922.3	[10695]	ug/L	07:53:33
3	Sc Radial	5835.4	5835.4	99.9	%	07:51:26
3	Y RADIAL	6153.0	6153.0	97.86	%	07:51:26
3	Al 396.153Radial†	13935.7	13976.5	[10000]	ug/L	07:51:26
3	Ca 317.933Radial†	6750.2	6744.5	[10000]	ug/L	07:51:26
3	Fe 238.204 Radial†	1062.5	1057.3	[10000]	ug/L	07:51:46
3	K 766.490 Radial†	58299.6	56033.1	[10000]	ug/L	07:51:26
3	Mg 279.077 IEC†	286.1	285.3	[10000]	ug/L	07:51:46
3	Na 589.592 Radial†	27504.4	28632.6	[10000]	ug/L	07:51:26
3	Sr 421.552†	159231.4	159491.6	[1000]	ug/L	07:51:26
3	Sc 361.383	870659.7	870659.7	96.604	%	07:53:02
3	Y 371.029	729400.6	729400.6	97.113	%	07:53:02
3	Ag 328.068†	213245.6	220448.6	[1000]	ug/L	07:53:02
3	As 188.979†	2437.9	2547.8	[1000]	ug/L	07:53:22
3	B 249.677†	45730.3	47868.4	[1000]	ug/L	07:53:02
3	Ba 233.527†	130842.6	135450.2	[1000]	ug/L	07:53:02
3	Be 313.107†	2658103.6	2756651.3	[1000]	ug/L	07:52:57
3	Cd 226.502†	91430.2	94839.1	[1000]	ug/L	07:53:02
3	Co 228.616†	50994.1	52852.0	[1000]	ug/L	07:53:02
3	Cr 267.716†	92409.5	95579.1	[1000]	ug/L	07:53:02
3	Cu 324.752†	345135.9	350511.0	[1000]	ug/L	07:53:02
3	Mn 257.610†	911726.2	943351.9	[1000]	ug/L	07:52:57
3	Mo 202.031†	15254.9	15772.8	[1000]	ug/L	07:53:22
3	Ni 231.604†	41851.4	43236.0	[1000]	ug/L	07:53:02
3	P 214.914†	8647.5	8728.0	[5000]	ug/L	07:53:22
3	Pb 220.353†	8535.4	8903.9	[1000]	ug/L	07:53:22
3	S 181.975 Axial†	1428.8	1437.4	[2000]	ug/L	07:53:22
3	Sb 206.836†	3094.4	3169.0	[1000]	ug/L	07:53:22
3	Se 196.026†	1655.8	1742.8	[1000]	ug/L	07:53:22
3	Si 251.611†	162249.9	167503.4	[5000]	ug/L	07:53:02
3	Sn 189.927†	5928.4	6131.8	[1000]	ug/L	07:53:22
3	Ti 334.940†	603756.8	626094.3	[1000]	ug/L	07:53:02
3	Tl 190.801†	3424.4	3577.2	[1000]	ug/L	07:53:22
3	U 409.014†	32820.6	36376.1	[1000]	ug/L	07:53:02
3	V 292.402†	145449.4	151920.4	[1000]	ug/L	07:53:02
3	Zn 213.857†	111377.9	114671.1	[1000]	ug/L	07:53:02
3	SiO2†	161107.2	166302.8	[10695]	ug/L	07:53:38

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	869449.6	2383.48	0.27%	96.470	%
Sc Radial	5756.4	69.28	1.20%	98.5	%
Y 371.029	728689.4	3265.57	0.45%	97.018	%
Y RADIAL	6096.5	54.59	0.90%	96.96	%
Ag 328.068†	220598.4	338.87	0.15%	[1000]	ug/L
Al 396.153Radial†	13994.5	16.43	0.12%	[10000]	ug/L
As 188.979†	2540.9	6.99	0.28%	[1000]	ug/L
B 249.677†	47928.5	189.28	0.39%	[1000]	ug/L
Ba 233.527†	135297.6	233.59	0.17%	[1000]	ug/L
Be 313.107†	2756051.5	8872.70	0.32%	[1000]	ug/L
Ca 317.933Radial†	6768.9	21.76	0.32%	[10000]	ug/L
Cd 226.502†	94798.4	223.05	0.24%	[1000]	ug/L
Co 228.616†	52801.4	127.43	0.24%	[1000]	ug/L
Cr 267.716†	95556.7	127.57	0.13%	[1000]	ug/L
Cu 324.752†	351010.6	1121.46	0.32%	[1000]	ug/L
Fe 238.204 Radial†	1066.0	7.56	0.71%	[10000]	ug/L
K 766.490 Radial†	56173.9	178.89	0.32%	[10000]	ug/L

Mg 279.077 IEC†	289.1	3.30	1.14%	[10000]	ug/L
Mn 257.610†	940774.0	3494.17	0.37%	[1000]	ug/L
Mo 202.031†	15754.9	36.54	0.23%	[1000]	ug/L
Na 589.592 Radial†	28634.0	46.86	0.16%	[10000]	ug/L
Ni 231.604†	43261.7	124.89	0.29%	[1000]	ug/L
P 214.914†	8719.7	21.52	0.25%	[5000]	ug/L
Pb 220.353†	8874.1	28.01	0.32%	[1000]	ug/L
S 181.975 Axial†	1428.1	8.14	0.57%	[2000]	ug/L
Sb 206.836†	3163.2	5.19	0.16%	[1000]	ug/L
Se 196.026†	1733.9	9.04	0.52%	[1000]	ug/L
Si 251.611†	167484.6	422.65	0.25%	[5000]	ug/L
Sn 189.927†	6113.7	15.78	0.26%	[1000]	ug/L
Sr 421.552†	159886.2	413.17	0.26%	[1000]	ug/L
Ti 334.940†	626342.1	1165.23	0.19%	[1000]	ug/L
Tl 190.801†	3581.4	5.88	0.16%	[1000]	ug/L
U 409.014†	36376.3	19.85	0.05%	[1000]	ug/L
V 292.402†	152051.7	309.69	0.20%	[1000]	ug/L
Zn 213.857†	114725.2	189.70	0.17%	[1000]	ug/L
SiO2†	167439.7	988.35	0.59%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/8/2009 07:55:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5634.4	5634.4	96.4	%	07:58:03
1	Y RADIAL	5976.9	5976.9	95.06	%	07:58:03
1	Al 396.153Radial†	70118.2	72745.8	[50000]	ug/L	07:57:43
1	Ca 317.933Radial†	33119.0	34334.9	[50000]	ug/L	07:57:43
1	Fe 238.204 Radial†	2068.2	2138.3	[20000]	ug/L	07:58:03
1	Mg 279.077 IEC†	1367.9	1417.6	[50000]	ug/L	07:58:03
1	Na 589.592 Radial†	57661.4	60893.3	[20000]	ug/L	07:57:43
1	Sc 361.383	873678.1	873678.1	96.939	%	07:59:00
1	Y 371.029	712440.2	712440.2	94.855	%	07:59:00
2	Sc Radial	5657.2	5657.2	96.8	%	07:58:28
2	Y RADIAL	5981.2	5981.2	95.12	%	07:58:28
2	Al 396.153Radial†	69017.3	71315.7	[50000]	ug/L	07:58:08
2	Ca 317.933Radial†	32519.9	33577.7	[50000]	ug/L	07:58:08
2	Fe 238.204 Radial†	2074.1	2135.7	[20000]	ug/L	07:58:28
2	Mg 279.077 IEC†	1366.8	1410.8	[50000]	ug/L	07:58:28
2	Na 589.592 Radial†	56539.3	59493.5	[20000]	ug/L	07:58:08
2	Sc 361.383	887334.1	887334.1	98.454	%	07:59:05
2	Y 371.029	723198.7	723198.7	96.287	%	07:59:05
3	Sc Radial	5603.7	5603.7	95.9	%	07:58:53
3	Y RADIAL	5935.7	5935.7	94.40	%	07:58:53
3	Al 396.153Radial†	69152.0	72137.0	[50000]	ug/L	07:58:33
3	Ca 317.933Radial†	32476.7	33853.5	[50000]	ug/L	07:58:33
3	Fe 238.204 Radial†	2056.8	2138.2	[20000]	ug/L	07:58:53
3	Mg 279.077 IEC†	1360.7	1417.9	[50000]	ug/L	07:58:53
3	Na 589.592 Radial†	56639.2	60155.3	[20000]	ug/L	07:58:33
3	Sc 361.383	876437.1	876437.1	97.245	%	07:59:11
3	Y 371.029	715214.6	715214.6	95.224	%	07:59:11

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	879149.8	7220.84	0.82%	97.546	%
Sc Radial	5631.8	26.85	0.48%	96.4	%
Y 371.029	716951.2	5585.53	0.78%	95.456	%
Y RADIAL	5964.6	25.13	0.42%	94.86	%
Al 396.153Radial†	72066.2	717.65	1.00%	[50000]	ug/L
Ca 317.933Radial†	33922.0	383.22	1.13%	[50000]	ug/L
Fe 238.204 Radial†	2137.4	1.46	0.07%	[20000]	ug/L
Mg 279.077 IEC†	1415.5	4.03	0.28%	[50000]	ug/L
Na 589.592 Radial†	60180.7	700.27	1.16%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	220.8	0.00000	0.999994	
Al 396.153Radial	3	Lin Thru 0	0.0	1.440	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	2.531	0.00000	0.999968	
B 249.677	3	Lin Thru 0	0.0	47.68	0.00000	0.999939	
Ba 233.527	3	Lin Thru 0	0.0	134.9	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	2743	0.00000	0.999957	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6785	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	94.60	0.00000	0.999991	
Co 228.616	3	Lin Thru 0	0.0	52.70	0.00000	0.999987	
Cr 267.716	3	Lin Thru 0	0.0	95.26	0.00000	0.999981	
Cu 324.752	3	Lin Thru 0	0.0	349.4	0.00000	0.999958	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1068	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.639	0.00000	0.999971	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0283	0.00000	0.999979
Mn 257.610	3	Lin Thru 0	0.0	937.4	0.00000	0.999975
Mo 202.031	3	Lin Thru 0	0.0	15.74	0.00000	0.999991
Na 589.592 Radia	2	Lin Thru 0	0.0	2.980	0.00000	0.999809
Ni 231.604	3	Lin Thru 0	0.0	43.18	0.00000	0.999987
P 214.914	3	Lin Thru 0	0.0	1.734	0.00000	0.999930
Pb 220.353	3	Lin Thru 0	0.0	8.846	0.00000	0.999981
S 181.975 Axial	3	Lin Thru 0	0.0	0.7136	0.00000	0.999970
Sb 206.836	3	Lin Thru 0	0.0	3.160	0.00000	0.999979
Se 196.026	3	Lin Thru 0	0.0	1.730	0.00000	0.999987
Si 251.611	3	Lin Thru 0	0.0	33.40	0.00000	0.999981
Sn 189.927	3	Lin Thru 0	0.0	6.108	0.00000	0.999987
Sr 421.552	3	Lin Thru 0	0.0	160.6	0.00000	0.999962
Ti 334.940	3	Lin Thru 0	0.0	626.6	0.00000	0.999994
Tl 190.801	3	Lin Thru 0	0.0	3.570	0.00000	0.999981
U 409.014	3	Lin Thru 0	0.0	36.30	0.00000	0.999984
V 292.402	3	Lin Thru 0	0.0	151.4	0.00000	0.999963
Zn 213.857	3	Lin Thru 0	0.0	114.5	0.00000	0.999989
SiO2	3	Lin Thru 0	0.0	15.59	0.00000	0.999960

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/8/2009 08:01:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6009.6	6009.6	103	%			08:03:14
1	Y RADIAL	6456.4	6456.4	102.7	%			08:03:14
1	Al 396.153Radial†	7067.2	6892.7	4765.0	ug/L	4765.0	ppb	08:03:14
1	Ca 317.933Radial†	3331.3	3223.9	4751.8	ug/L	4751.8	ppb	08:03:35
1	Fe 238.204 Radial†	542.1	520.4	4887.1	ug/L	4887.1	ppb	08:03:35
1	K 766.490 Radial†	16331.3	13529.3	2394.0	ug/L	2394.0	ppb	08:03:14
1	Mg 279.077 IEC†	148.3	143.1	5053.8	ug/L	5053.8	ppb	08:03:35
1	Na 589.592 Radial†	6072.0	6992.5	2346.6	ug/L	2346.6	ppb	08:03:14
1	Sr 421.552†	83886.5	81601.2	508.15	ug/L	508.15	ppb	08:03:14
1	Sc 361.383	912453.5	912453.5	101.24	%			08:04:32
1	Y 371.029	752091.5	752091.5	100.13	%			08:04:32
1	Ag 328.068†	57656.7	56656.9	259.65	ug/L	259.65	ppb	08:04:32
1	As 188.979†	1167.3	1177.2	469.45	ug/L	469.45	ppb	08:04:52
1	B 249.677†	23906.7	24144.2	504.43	ug/L	504.43	ppb	08:04:32
1	Ba 233.527†	68424.2	67593.6	502.25	ug/L	502.25	ppb	08:04:32
1	Be 313.107†	705987.4	702442.9	257.03	ug/L	257.03	ppb	08:04:32
1	Cd 226.502†	47081.6	46699.3	493.50	ug/L	493.50	ppb	08:04:32
1	Co 228.616†	26273.8	26017.0	494.03	ug/L	494.03	ppb	08:04:52
1	Cr 267.716†	46520.1	45871.0	482.33	ug/L	482.33	ppb	08:04:32
1	Cu 324.752†	183044.9	174043.5	498.31	ug/L	498.31	ppb	08:04:32
1	Mn 257.610†	477045.7	470773.4	502.59	ug/L	502.59	ppb	08:04:32
1	Mo 202.031†	8517.1	8394.4	533.61	ug/L	533.61	ppb	08:04:52
1	Ni 231.604†	21479.4	21129.4	488.97	ug/L	488.97	ppb	08:04:52
1	P 214.914†	4554.6	4275.2	2390.8	ug/L	2390.8	ppb	08:04:52
1	Pb 220.353†	4364.0	4378.9	496.61	ug/L	496.61	ppb	08:04:52
1	S 181.975 Axial†	1818.9	1755.0	2458.3	ug/L	2458.3	ppb	08:04:52
1	Sb 206.836†	1586.3	1532.6	494.01	ug/L	494.01	ppb	08:04:52
1	Se 196.026†	4375.9	4351.0	2533.6	ug/L	2533.6	ppb	08:04:52
1	Si 251.611†	160353.0	157937.0	4716.2	ug/L	4716.2	ppb	08:04:32
1	Sn 189.927†	3306.2	3260.6	534.43	ug/L	534.43	ppb	08:04:52
1	Ti 334.940†	317801.3	315019.0	502.58	ug/L	502.58	ppb	08:04:32
1	Tl 190.801†	1838.8	1848.8	521.06	ug/L	521.06	ppb	08:04:52
1	U 409.014†	14870.6	17090.1	469.24	ug/L	469.24	ppb	08:04:32
1	V 292.402†	74687.1	75129.5	503.39	ug/L	503.39	ppb	08:04:32
1	Zn 213.857†	58836.0	57492.6	497.92	ug/L	497.92	ppb	08:04:32
1	SiO2†	158439.0	156028.6	9983.3	ug/L	9983.3	ppb	08:05:50
2	Sc Radial	5793.2	5793.2	99.1	%			08:03:40
2	Y RADIAL	6177.7	6177.7	98.25	%			08:03:40
2	Al 396.153Radial†	7001.0	7082.7	4896.9	ug/L	4896.9	ppb	08:03:40
2	Ca 317.933Radial†	3313.6	3327.0	4903.8	ug/L	4903.8	ppb	08:04:00
2	Fe 238.204 Radial†	539.7	537.6	5048.4	ug/L	5048.4	ppb	08:04:00
2	K 766.490 Radial†	16265.1	14055.7	2487.4	ug/L	2487.4	ppb	08:03:40
2	Mg 279.077 IEC†	149.3	149.4	5277.4	ug/L	5277.4	ppb	08:04:00
2	Na 589.592 Radial†	5957.8	7097.9	2381.9	ug/L	2381.9	ppb	08:03:40
2	Sr 421.552†	83562.4	84321.3	525.09	ug/L	525.09	ppb	08:03:40
2	Sc 361.383	907490.4	907490.4	100.69	%			08:04:58
2	Y 371.029	745986.1	745986.1	99.321	%			08:04:58
2	Ag 328.068†	56982.2	56298.5	258.07	ug/L	258.07	ppb	08:04:58
2	As 188.979†	1163.4	1179.6	470.43	ug/L	470.43	ppb	08:05:18
2	B 249.677†	23675.8	24044.1	502.30	ug/L	502.30	ppb	08:04:58
2	Ba 233.527†	67850.0	67393.0	500.76	ug/L	500.76	ppb	08:04:58
2	Be 313.107†	697546.8	697874.0	255.36	ug/L	255.36	ppb	08:04:58
2	Cd 226.502†	46668.9	46543.8	491.84	ug/L	491.84	ppb	08:04:58
2	Co 228.616†	26211.1	26096.7	495.55	ug/L	495.55	ppb	08:05:18
2	Cr 267.716†	46057.8	45663.2	480.15	ug/L	480.15	ppb	08:04:58
2	Cu 324.752†	181224.7	173224.6	495.98	ug/L	495.98	ppb	08:04:58
2	Mn 257.610†	473022.1	469354.4	501.08	ug/L	501.08	ppb	08:04:58
2	Mo 202.031†	8509.7	8433.0	536.07	ug/L	536.07	ppb	08:05:18
2	Ni 231.604†	21412.6	21179.1	490.12	ug/L	490.12	ppb	08:05:18

2	P 214.914†	4536.6	4281.9	2394.9 ug/L	2394.9 ppb	08:05:18
2	Pb 220.353†	4334.8	4373.6	496.03 ug/L	496.03 ppb	08:05:18
2	S 181.975 Axial†	1822.1	1768.0	2476.4 ug/L	2476.4 ppb	08:05:18
2	Sb 206.836†	1605.6	1560.3	502.85 ug/L	502.85 ppb	08:05:18
2	Se 196.026†	4352.9	4351.8	2534.6 ug/L	2534.6 ppb	08:05:18
2	Si 251.611†	158990.5	157450.0	4701.6 ug/L	4701.6 ppb	08:04:58
2	Sn 189.927†	3284.1	3256.6	533.79 ug/L	533.79 ppb	08:05:18
2	Ti 334.940†	314891.7	313846.1	500.72 ug/L	500.72 ppb	08:04:58
2	Tl 190.801†	1828.3	1848.3	520.91 ug/L	520.91 ppb	08:05:18
2	U 409.014†	14835.2	17135.3	470.47 ug/L	470.47 ppb	08:04:58
2	V 292.402†	73950.2	74801.2	501.24 ug/L	501.24 ppb	08:04:58
2	Zn 213.857†	58273.9	57252.3	495.79 ug/L	495.79 ppb	08:04:58
2	SiO2†	160101.9	158536.0	10144 ug/L	10144 ppb	08:05:55
3	Sc Radial	5889.1	5889.1	101 %		08:04:05
3	Y RADIAL	6279.1	6279.1	99.86 %		08:04:05
3	Al 396.153Radial†	7083.1	7049.2	4873.9 ug/L	4873.9 ppb	08:04:05
3	Ca 317.933Radial†	3333.3	3292.1	4852.4 ug/L	4852.4 ppb	08:04:25
3	Fe 238.204 Radial†	542.0	531.1	4987.3 ug/L	4987.3 ppb	08:04:25
3	K 766.490 Radial†	16313.1	13836.3	2448.5 ug/L	2448.5 ppb	08:04:05
3	Mg 279.077 IEC†	149.3	147.0	5193.5 ug/L	5193.5 ppb	08:04:25
3	Na 589.592 Radial†	6061.0	7102.5	2383.5 ug/L	2383.5 ppb	08:04:05
3	Sr 421.552†	83836.6	83221.2	518.23 ug/L	518.23 ppb	08:04:05
3	Sc 361.383	911772.7	911772.7	101.17 %		08:05:24
3	Y 371.029	751267.0	751267.0	100.02 %		08:05:24
3	Ag 328.068†	57151.9	56200.5	257.60 ug/L	257.60 ppb	08:05:24
3	As 188.979†	1153.3	1164.1	464.30 ug/L	464.30 ppb	08:05:44
3	B 249.677†	23705.7	23963.1	500.63 ug/L	500.63 ppb	08:05:24
3	Ba 233.527†	68150.6	67373.6	500.61 ug/L	500.61 ppb	08:05:24
3	Be 313.107†	702427.5	699444.7	255.93 ug/L	255.93 ppb	08:05:24
3	Cd 226.502†	46920.7	46575.1	492.18 ug/L	492.18 ppb	08:05:24
3	Co 228.616†	25964.5	25730.7	488.58 ug/L	488.58 ppb	08:05:44
3	Cr 267.716†	46302.7	45690.4	480.44 ug/L	480.44 ppb	08:05:24
3	Cu 324.752†	181422.2	172574.6	494.11 ug/L	494.11 ppb	08:05:24
3	Mn 257.610†	475160.7	469262.0	500.98 ug/L	500.98 ppb	08:05:24
3	Mo 202.031†	8439.4	8323.8	529.13 ug/L	529.13 ppb	08:05:44
3	Ni 231.604†	21253.5	20922.0	484.17 ug/L	484.17 ppb	08:05:44
3	P 214.914†	4499.7	4224.3	2362.0 ug/L	2362.0 ppb	08:05:44
3	Pb 220.353†	4320.0	4338.7	492.07 ug/L	492.07 ppb	08:05:44
3	S 181.975 Axial†	1804.6	1742.3	2440.4 ug/L	2440.4 ppb	08:05:44
3	Sb 206.836†	1602.0	1549.3	499.13 ug/L	499.13 ppb	08:05:44
3	Se 196.026†	4323.5	4302.5	2505.8 ug/L	2505.8 ppb	08:05:44
3	Si 251.611†	159550.9	157262.3	4696.1 ug/L	4696.1 ppb	08:05:24
3	Sn 189.927†	3266.4	3223.7	528.40 ug/L	528.40 ppb	08:05:44
3	Ti 334.940†	315966.4	313439.7	500.07 ug/L	500.07 ppb	08:05:24
3	Tl 190.801†	1822.4	1833.9	516.90 ug/L	516.90 ppb	08:05:44
3	U 409.014†	14891.2	17121.4	470.10 ug/L	470.10 ppb	08:05:24
3	V 292.402†	74284.8	74787.0	501.05 ug/L	501.05 ppb	08:05:24
3	Zn 213.857†	58572.4	57275.5	496.05 ug/L	496.05 ppb	08:05:24
3	SiO2†	157929.4	155641.7	9958.7 ug/L	9958.7 ppb	08:06:00

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910572.2	101.03	%	0.299				0.30%
Sc Radial	5897.3	101	%	1.9				1.84%
Y 371.029	749781.5	99.827	%	0.4411				0.44%
Y RADIAL	6304.4	100.3	%	2.24				2.24%
Ag 328.068†	56385.3	258.44	ug/L	1.073	258.44	ppb	1.073	0.42%
QC value within limits for Ag 328.068 Recovery = 103.38%								
Al 396.153Radial†	7008.2	4845.3	ug/L	70.45	4845.3	ppb	70.45	1.45%
QC value within limits for Al 396.153Radial Recovery = 96.91%								
As 188.979†	1173.6	468.06	ug/L	3.291	468.06	ppb	3.291	0.70%
QC value within limits for As 188.979 Recovery = 93.61%								
B 249.677†	24050.5	502.45	ug/L	1.903	502.45	ppb	1.903	0.38%
QC value within limits for B 249.677 Recovery = 100.49%								
Ba 233.527†	67453.4	501.21	ug/L	0.903	501.21	ppb	0.903	0.18%
QC value within limits for Ba 233.527 Recovery = 100.24%								
Be 313.107†	699920.5	256.11	ug/L	0.848	256.11	ppb	0.848	0.33%
QC value within limits for Be 313.107 Recovery = 102.44%								
Ca 317.933Radial†	3281.0	4836.0	ug/L	77.30	4836.0	ppb	77.30	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.72%
Cd 226.502†            46606.1      492.51 ug/L         0.878      492.51 ppb          0.878   0.18%
   QC value within limits for Cd 226.502  Recovery = 98.50%
Co 228.616†            25948.1      492.72 ug/L         3.661      492.72 ppb          3.661   0.74%
   QC value within limits for Co 228.616  Recovery = 98.54%
Cr 267.716†            45741.5      480.97 ug/L         1.187      480.97 ppb          1.187   0.25%
   QC value within limits for Cr 267.716  Recovery = 96.19%
Cu 324.752†           173280.9      496.13 ug/L         2.104      496.13 ppb          2.104   0.42%
   QC value within limits for Cu 324.752  Recovery = 99.23%
Fe 238.204 Radial†       529.7      4974.3 ug/L        81.47      4974.3 ppb         81.47   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.49%
K 766.490 Radial†      13807.1      2443.3 ug/L        46.90      2443.3 ppb         46.90   1.92%
   QC value within limits for K 766.490 Radial  Recovery = 97.73%
Mg 279.077 IEC†          146.5      5174.9 ug/L       112.95      5174.9 ppb        112.95   2.18%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           469796.6      501.55 ug/L         0.898      501.55 ppb          0.898   0.18%
   QC value within limits for Mn 257.610  Recovery = 100.31%
Mo 202.031†             8383.7      532.94 ug/L         3.519      532.94 ppb          3.519   0.66%
   QC value within limits for Mo 202.031  Recovery = 106.59%
Na 589.592 Radial†      7064.3      2370.6 ug/L        20.88      2370.6 ppb         20.88   0.88%
   QC value within limits for Na 589.592 Radial  Recovery = 94.83%
Ni 231.604†            21076.9      487.75 ug/L         3.155      487.75 ppb          3.155   0.65%
   QC value within limits for Ni 231.604  Recovery = 97.55%
P 214.914†              4260.5      2382.6 ug/L        17.95      2382.6 ppb         17.95   0.75%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4363.7      494.90 ug/L         2.468      494.90 ppb          2.468   0.50%
   QC value within limits for Pb 220.353  Recovery = 98.98%
S 181.975 Axial†        1755.1      2458.4 ug/L        18.02      2458.4 ppb         18.02   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 98.33%
Sb 206.836†             1547.4      498.66 ug/L         4.442      498.66 ppb          4.442   0.89%
   QC value within limits for Sb 206.836  Recovery = 99.73%
Se 196.026†             4335.1      2524.7 ug/L        16.33      2524.7 ppb         16.33   0.65%
   QC value within limits for Se 196.026  Recovery = 100.99%
Si 251.611†           157549.8      4704.6 ug/L        10.40      4704.6 ppb         10.40   0.22%
   QC value within limits for Si 251.611  Recovery = 94.09%
Sn 189.927†             3247.0      532.21 ug/L         3.311      532.21 ppb          3.311   0.62%
   QC value within limits for Sn 189.927  Recovery = 106.44%
Sr 421.552†            83047.9      517.16 ug/L         8.521      517.16 ppb          8.521   1.65%
   QC value within limits for Sr 421.552  Recovery = 103.43%
Ti 334.940†           314101.6      501.12 ug/L         1.305      501.12 ppb          1.305   0.26%
   QC value within limits for Ti 334.940  Recovery = 100.22%
Tl 190.801†             1843.6      519.62 ug/L         2.361      519.62 ppb          2.361   0.45%
   QC value within limits for Tl 190.801  Recovery = 103.92%
U 409.014†             17115.6      469.94 ug/L         0.630      469.94 ppb          0.630   0.13%
   QC value within limits for U 409.014  Recovery = 93.99%
V 292.402†             74905.9      501.89 ug/L         1.297      501.89 ppb          1.297   0.26%
   QC value within limits for V 292.402  Recovery = 100.38%
Zn 213.857†            57340.1      496.59 ug/L         1.162      496.59 ppb          1.162   0.23%
   QC value within limits for Zn 213.857  Recovery = 99.32%
SiO2†                 156735.4       10029 ug/L         100.6       10029 ppb          100.6   1.00%
   QC value within limits for SiO2  Recovery = 93.77%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/8/2009 08:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5863.4	5863.4	100	%			08:10:04
1	Y RADIAL	6302.2	6302.2	100.2	%			08:10:04
1	Al 396.153Radial†	-13.8	6.7	4.5878	ug/L	4.5878	ppb	08:10:04
1	Ca 317.933Radial†	19.2	3.6	5.2688	ug/L	5.2688	ppb	08:10:24
1	Fe 238.204 Radial†	8.0	1.2	11.415	ug/L	11.415	ppb	08:10:24
1	K 766.490 Radial†	2488.1	128.1	22.724	ug/L	22.724	ppb	08:10:04
1	Mg 279.077 IEC†	2.3	1.1	38.489	ug/L	38.489	ppb	08:10:24
1	Na 589.592 Radial†	-1113.9	-22.2	-7.4610	ug/L	-7.4610	ppb	08:10:04
1	Sr 421.552†	-33.7	-6.3	-0.0391	ug/L	-0.0391	ppb	08:10:04
1	Sc 361.383	917080.9	917080.9	101.75	%			08:11:21
1	Y 371.029	764417.3	764417.3	101.78	%			08:11:21
1	Ag 328.068†	348.3	49.5	0.2333	ug/L	0.2333	ppb	08:11:26
1	As 188.979†	-22.9	1.6	0.6456	ug/L	0.6456	ppb	08:11:46
1	B 249.677†	-334.1	202.3	4.2414	ug/L	4.2414	ppb	08:11:46
1	Ba 233.527†	-12.6	-4.0	-0.0287	ug/L	-0.0287	ppb	08:11:46
1	Be 313.107†	-4947.4	250.9	0.0916	ug/L	0.0916	ppb	08:11:26
1	Cd 226.502†	-181.7	16.5	0.1736	ug/L	0.1736	ppb	08:11:46
1	Co 228.616†	-63.4	3.1	0.0612	ug/L	0.0612	ppb	08:11:46
1	Cr 267.716†	66.2	-13.6	-0.1409	ug/L	-0.1409	ppb	08:11:46
1	Cu 324.752†	6717.4	-155.2	-0.4435	ug/L	-0.4435	ppb	08:11:26
1	Mn 257.610†	419.5	-10.1	-0.0103	ug/L	-0.0103	ppb	08:11:46
1	Mo 202.031†	32.0	13.1	0.8345	ug/L	0.8345	ppb	08:11:46
1	Ni 231.604†	83.7	-4.3	-0.0992	ug/L	-0.0992	ppb	08:11:46
1	P 214.914†	209.3	-17.8	-10.216	ug/L	-10.216	ppb	08:11:46
1	Pb 220.353†	-65.1	4.5	0.5114	ug/L	0.5114	ppb	08:11:46
1	S 181.975 Axial†	40.0	-2.3	-3.1993	ug/L	-3.1993	ppb	08:11:46
1	Sb 206.836†	39.9	5.0	1.5899	ug/L	1.5899	ppb	08:11:46
1	Se 196.026†	-24.9	4.4	2.5561	ug/L	2.5561	ppb	08:11:46
1	Si 251.611†	479.1	21.1	0.6112	ug/L	0.6112	ppb	08:11:46
1	Sn 189.927†	4.3	-0.8	-0.1275	ug/L	-0.1275	ppb	08:11:46
1	Ti 334.940†	-1091.9	41.9	0.0697	ug/L	0.0697	ppb	08:11:26
1	Tl 190.801†	-35.8	-2.6	-0.7368	ug/L	-0.7368	ppb	08:11:46
1	U 409.014†	-2659.8	-212.1	-5.8431	ug/L	-5.8431	ppb	08:11:21
1	V 292.402†	-1367.8	14.2	0.0934	ug/L	0.0934	ppb	08:11:26
1	Zn 213.857†	672.2	38.8	0.3379	ug/L	0.3379	ppb	08:11:46
1	SiO2†	486.6	10.7	0.6409	ug/L	0.6409	ppb	08:12:52
2	Sc Radial	5788.1	5788.1	99.0	%			08:10:29
2	Y RADIAL	6221.9	6221.9	98.95	%			08:10:29
2	Al 396.153Radial†	-45.4	-25.4	-17.699	ug/L	-17.699	ppb	08:10:29
2	Ca 317.933Radial†	19.1	3.7	5.5102	ug/L	5.5102	ppb	08:10:49
2	Fe 238.204 Radial†	8.1	1.4	13.251	ug/L	13.251	ppb	08:10:49
2	K 766.490 Radial†	2366.7	37.8	6.7059	ug/L	6.7059	ppb	08:10:29
2	Mg 279.077 IEC†	0.6	-0.5	-18.604	ug/L	-18.604	ppb	08:10:49
2	Na 589.592 Radial†	-1117.3	-40.2	-13.477	ug/L	-13.477	ppb	08:10:29
2	Sr 421.552†	-26.1	1.0	0.0061	ug/L	0.0061	ppb	08:10:29
2	Sc 361.383	921030.5	921030.5	102.19	%			08:11:51
2	Y 371.029	765704.1	765704.1	101.95	%			08:11:51
2	Ag 328.068†	345.6	45.5	0.2119	ug/L	0.2119	ppb	08:11:56
2	As 188.979†	-20.9	3.7	1.4577	ug/L	1.4577	ppb	08:12:17
2	B 249.677†	-369.6	169.0	3.5417	ug/L	3.5417	ppb	08:12:17
2	Ba 233.527†	4.8	13.1	0.0982	ug/L	0.0982	ppb	08:12:17
2	Be 313.107†	-4999.5	220.8	0.0806	ug/L	0.0806	ppb	08:11:56
2	Cd 226.502†	-187.8	11.3	0.1186	ug/L	0.1186	ppb	08:12:17
2	Co 228.616†	-68.1	-1.2	-0.0205	ug/L	-0.0205	ppb	08:12:17
2	Cr 267.716†	69.1	-11.0	-0.1148	ug/L	-0.1148	ppb	08:12:17
2	Cu 324.752†	6713.4	-187.4	-0.5357	ug/L	-0.5357	ppb	08:11:56
2	Mn 257.610†	439.8	8.1	0.0103	ug/L	0.0103	ppb	08:12:17
2	Mo 202.031†	36.4	17.3	1.1000	ug/L	1.1000	ppb	08:12:17
2	Ni 231.604†	100.8	12.1	0.2799	ug/L	0.2799	ppb	08:12:17

2	P 214.914†	201.9	-26.0	-14.897	ug/L	-14.897 ppb	08:12:17
2	Pb 220.353†	-58.2	11.5	1.2990	ug/L	1.2990 ppb	08:12:17
2	S 181.975 Axial†	32.1	-10.2	-14.223	ug/L	-14.223 ppb	08:12:17
2	Sb 206.836†	32.9	-2.0	-0.6113	ug/L	-0.6113 ppb	08:12:17
2	Se 196.026†	-24.0	5.4	3.1479	ug/L	3.1479 ppb	08:12:17
2	Si 251.611†	484.7	24.6	0.7154	ug/L	0.7154 ppb	08:12:17
2	Sn 189.927†	5.4	0.3	0.0478	ug/L	0.0478 ppb	08:12:17
2	Ti 334.940†	-1097.3	41.2	0.0666	ug/L	0.0666 ppb	08:11:56
2	Tl 190.801†	-38.7	-5.4	-1.5059	ug/L	-1.5059 ppb	08:12:17
2	U 409.014†	-2499.4	-43.9	-1.2109	ug/L	-1.2109 ppb	08:11:51
2	V 292.402†	-1362.2	25.3	0.1783	ug/L	0.1783 ppb	08:11:56
2	Zn 213.857†	657.7	21.7	0.1879	ug/L	0.1879 ppb	08:12:17
2	SiO2†	477.7	-0.0	-0.0471	ug/L	-0.0471 ppb	08:12:57
3	Sc Radial	5801.4	5801.4	99.3	%		08:10:54
3	Y RADIAL	6256.3	6256.3	99.50	%		08:10:54
3	Al 396.153Radial†	-3.8	16.6	11.493	ug/L	11.493 ppb	08:10:54
3	Ca 317.933Radial†	21.4	6.0	8.8051	ug/L	8.8051 ppb	08:11:15
3	Fe 238.204 Radial†	7.9	1.2	11.147	ug/L	11.147 ppb	08:11:15
3	K 766.490 Radial†	2292.2	-42.7	-7.5763	ug/L	-7.5763 ppb	08:10:54
3	Mg 279.077 IEC†	1.9	0.8	26.566	ug/L	26.566 ppb	08:11:15
3	Na 589.592 Radial†	-1095.1	-15.2	-5.1014	ug/L	-5.1014 ppb	08:10:54
3	Sr 421.552†	-24.4	2.8	0.0174	ug/L	0.0174 ppb	08:10:54
3	Sc 361.383	917281.5	917281.5	101.78	%		08:12:22
3	Y 371.029	764497.1	764497.1	101.79	%		08:12:22
3	Ag 328.068†	371.5	72.2	0.3336	ug/L	0.3336 ppb	08:12:27
3	As 188.979†	-26.0	-1.4	-0.5580	ug/L	-0.5580 ppb	08:12:47
3	B 249.677†	-364.7	172.3	3.6127	ug/L	3.6127 ppb	08:12:47
3	Ba 233.527†	3.5	11.9	0.0885	ug/L	0.0885 ppb	08:12:47
3	Be 313.107†	-4952.6	246.9	0.0901	ug/L	0.0901 ppb	08:12:27
3	Cd 226.502†	-187.5	10.8	0.1139	ug/L	0.1139 ppb	08:12:47
3	Co 228.616†	-63.4	3.1	0.0586	ug/L	0.0586 ppb	08:12:47
3	Cr 267.716†	63.9	-15.9	-0.1653	ug/L	-0.1653 ppb	08:12:47
3	Cu 324.752†	6714.5	-159.4	-0.4557	ug/L	-0.4557 ppb	08:12:27
3	Mn 257.610†	459.3	28.9	0.0315	ug/L	0.0315 ppb	08:12:47
3	Mo 202.031†	20.1	1.4	0.0900	ug/L	0.0900 ppb	08:12:47
3	Ni 231.604†	116.1	27.5	0.6373	ug/L	0.6373 ppb	08:12:47
3	P 214.914†	209.1	-18.1	-10.383	ug/L	-10.383 ppb	08:12:47
3	Pb 220.353†	-61.8	7.7	0.8752	ug/L	0.8752 ppb	08:12:47
3	S 181.975 Axial†	37.7	-4.5	-6.3631	ug/L	-6.3631 ppb	08:12:47
3	Sb 206.836†	36.0	1.1	0.3524	ug/L	0.3524 ppb	08:12:47
3	Se 196.026†	-23.5	5.7	3.3461	ug/L	3.3461 ppb	08:12:47
3	Si 251.611†	486.9	28.7	0.8618	ug/L	0.8618 ppb	08:12:47
3	Sn 189.927†	0.7	-4.3	-0.7058	ug/L	-0.7058 ppb	08:12:47
3	Ti 334.940†	-1114.9	19.5	0.0330	ug/L	0.0330 ppb	08:12:27
3	Tl 190.801†	-24.6	8.3	2.3260	ug/L	2.3260 ppb	08:12:47
3	U 409.014†	-2560.9	-114.4	-3.1511	ug/L	-3.1511 ppb	08:12:22
3	V 292.402†	-1372.0	10.3	0.0621	ug/L	0.0621 ppb	08:12:27
3	Zn 213.857†	632.6	-0.3	-0.0081	ug/L	-0.0081 ppb	08:12:47
3	SiO2†	481.9	6.1	0.3958	ug/L	0.3958 ppb	08:13:02

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918464.3	101.91	%	0.247				0.24%
Sc Radial	5817.6	99.6	%	0.69				0.69%
Y 371.029	764872.8	101.84	%	0.096				0.09%
Y RADIAL	6260.2	99.56	%	0.641				0.64%
Ag 328.068†	55.8	0.2596	ug/L	0.06495	0.2596	ppb	0.06495	25.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.5396	ug/L	15.25647	-0.5396	ppb	15.25647	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5151	ug/L	1.01417	0.5151	ppb	1.01417	196.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	181.2	3.7986	ug/L	0.38512	3.7986	ppb	0.38512	10.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0527	ug/L	0.07066	0.0527	ppb	0.07066	134.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	239.5	0.0874	ug/L	0.00595	0.0874	ppb	0.00595	6.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.4	6.5280	ug/L	1.97572	6.5280	ppb	1.97572	30.27%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                12.9      0.1354 ug/L       0.03318      0.1354 ppb        0.03318  24.51%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.7      0.0331 ug/L       0.04646      0.0331 ppb        0.04646 140.40%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -13.5     -0.1403 ug/L       0.02526     -0.1403 ppb        0.02526  18.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -167.4     -0.4783 ug/L       0.05006     -0.4783 ppb        0.05006  10.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      11.938 ug/L        1.1452      11.938 ppb         1.1452   9.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          41.0      7.2846 ug/L      15.15852      7.2846 ppb       15.15852 208.09%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.4      15.484 ug/L       30.1170      15.484 ppb        30.1170 194.51%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 9.0      0.0105 ug/L       0.02090      0.0105 ppb        0.02090 199.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                10.6      0.6748 ug/L       0.52359      0.6748 ppb        0.52359  77.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -25.9     -8.6799 ug/L       4.31890     -8.6799 ppb        4.31890  49.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.8      0.2727 ug/L       0.36830      0.2727 ppb        0.36830 135.08%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -20.6     -11.832 ug/L        2.6556     -11.832 ppb         2.6556  22.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8952 ug/L       0.39415      0.8952 ppb        0.39415  44.03%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -5.7     -7.9284 ug/L       5.67605     -7.9284 ppb        5.67605  71.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.4      0.4437 ug/L       1.10344      0.4437 ppb        1.10344 248.71%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.1      3.0167 ug/L       0.41103      3.0167 ppb        0.41103  13.63%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                24.8      0.7294 ug/L       0.12588      0.7294 ppb        0.12588  17.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.6     -0.2618 ug/L       0.39435     -0.2618 ppb        0.39435 150.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.8     -0.0052 ug/L       0.02993     -0.0052 ppb        0.02993 575.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                34.2      0.0564 ug/L       0.02032      0.0564 ppb        0.02032  36.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.1      0.0278 ug/L       2.02711      0.0278 ppb        2.02711 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -123.4     -3.4017 ug/L       2.32626     -3.4017 ppb        2.32626  68.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                16.6      0.1113 ug/L       0.06011      0.1113 ppb        0.06011  54.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               20.1      0.1726 ug/L       0.17351      0.1726 ppb        0.17351 100.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      5.6      0.3299 ug/L       0.34869      0.3299 ppb        0.34869 105.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/8/2009 08:15:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5940.5	5940.5	102	%			08:17:06
1	Y RADIAL	6395.2	6395.2	101.7	%			08:17:06
1	Al 396.153Radial†	260.7	276.9	191.93	ug/L	191.93	ppb	08:17:06
1	Ca 317.933Radial†	153.9	135.9	200.25	ug/L	200.25	ppb	08:17:26
1	Fe 238.204 Radial†	20.4	13.3	124.24	ug/L	124.24	ppb	08:17:26
1	K 766.490 Radial†	3305.8	900.3	159.44	ug/L	159.44	ppb	08:17:06
1	Mg 279.077 IEC†	7.2	5.9	209.88	ug/L	209.88	ppb	08:17:26
1	Na 589.592 Radial†	-237.5	854.3	286.69	ug/L	286.69	ppb	08:17:06
1	Sr 421.552†	769.9	784.8	4.8854	ug/L	4.8854	ppb	08:17:06
1	Sc 361.383	901641.8	901641.8	100.04	%			08:18:23
1	Y 371.029	753823.3	753823.3	100.36	%			08:18:23
1	Ag 328.068†	1343.5	1050.2	4.7669	ug/L	4.7669	ppb	08:18:23
1	As 188.979†	48.4	72.6	28.705	ug/L	28.705	ppb	08:18:43
1	B 249.677†	1835.1	2365.0	49.569	ug/L	49.569	ppb	08:18:23
1	Ba 233.527†	676.8	684.9	5.0920	ug/L	5.0920	ppb	08:18:43
1	Be 313.107†	8490.6	13600.1	4.9675	ug/L	4.9675	ppb	08:18:23
1	Cd 226.502†	271.5	466.4	4.9219	ug/L	4.9219	ppb	08:18:43
1	Co 228.616†	190.1	255.4	4.8605	ug/L	4.8605	ppb	08:18:43
1	Cr 267.716†	535.1	456.2	4.7826	ug/L	4.7826	ppb	08:18:43
1	Cu 324.752†	10202.8	3441.8	9.8558	ug/L	9.8558	ppb	08:18:23
1	Mn 257.610†	10097.5	9670.9	10.325	ug/L	10.325	ppb	08:18:23
1	Mo 202.031†	173.7	155.3	9.8742	ug/L	9.8742	ppb	08:18:43
1	Ni 231.604†	315.7	229.0	5.2994	ug/L	5.2994	ppb	08:18:43
1	P 214.914†	456.1	232.4	132.55	ug/L	132.55	ppb	08:18:43
1	Pb 220.353†	25.9	94.4	10.717	ug/L	10.717	ppb	08:18:43
1	S 181.975 Axial†	110.1	68.5	95.956	ug/L	95.956	ppb	08:18:43
1	Sb 206.836†	69.5	35.3	11.434	ug/L	11.434	ppb	08:18:43
1	Se 196.026†	33.0	61.8	36.168	ug/L	36.168	ppb	08:18:43
1	Si 251.611†	3632.7	3181.5	94.983	ug/L	94.983	ppb	08:18:43
1	Sn 189.927†	68.9	63.9	10.481	ug/L	10.481	ppb	08:18:43
1	Ti 334.940†	2173.8	3287.9	5.2317	ug/L	5.2317	ppb	08:18:23
1	Tl 190.801†	39.9	72.4	20.346	ug/L	20.346	ppb	08:18:43
1	U 409.014†	-441.2	1960.8	53.991	ug/L	53.991	ppb	08:18:23
1	V 292.402†	-596.4	762.2	5.2581	ug/L	5.2581	ppb	08:18:23
1	Zn 213.857†	1785.0	1162.4	10.091	ug/L	10.091	ppb	08:18:43
1	SiO2†	3760.9	3291.8	210.60	ug/L	210.60	ppb	08:19:40
2	Sc Radial	5778.3	5778.3	98.9	%			08:17:31
2	Y RADIAL	6209.6	6209.6	98.76	%			08:17:31
2	Al 396.153Radial†	262.1	285.5	197.91	ug/L	197.91	ppb	08:17:31
2	Ca 317.933Radial†	154.9	141.0	207.90	ug/L	207.90	ppb	08:17:52
2	Fe 238.204 Radial†	20.3	13.7	128.46	ug/L	128.46	ppb	08:17:52
2	K 766.490 Radial†	3191.9	876.4	155.21	ug/L	155.21	ppb	08:17:31
2	Mg 279.077 IEC†	10.5	9.5	335.33	ug/L	335.33	ppb	08:17:52
2	Na 589.592 Radial†	-280.7	804.1	269.83	ug/L	269.83	ppb	08:17:31
2	Sr 421.552†	760.1	796.1	4.9557	ug/L	4.9557	ppb	08:17:31
2	Sc 361.383	901543.3	901543.3	100.03	%			08:18:49
2	Y 371.029	753311.9	753311.9	100.30	%			08:18:49
2	Ag 328.068†	1410.9	1117.8	5.0769	ug/L	5.0769	ppb	08:18:49
2	As 188.979†	51.1	75.3	29.767	ug/L	29.767	ppb	08:19:09
2	B 249.677†	1816.1	2346.2	49.173	ug/L	49.173	ppb	08:18:49
2	Ba 233.527†	673.4	681.6	5.0677	ug/L	5.0677	ppb	08:19:09
2	Be 313.107†	8482.4	13592.8	4.9644	ug/L	4.9644	ppb	08:18:49
2	Cd 226.502†	284.4	479.4	5.0588	ug/L	5.0588	ppb	08:19:09
2	Co 228.616†	174.4	239.8	4.5649	ug/L	4.5649	ppb	08:19:09
2	Cr 267.716†	547.3	468.5	4.9130	ug/L	4.9130	ppb	08:19:09
2	Cu 324.752†	10227.0	3467.1	9.9285	ug/L	9.9285	ppb	08:18:49
2	Mn 257.610†	10053.3	9627.9	10.277	ug/L	10.277	ppb	08:18:49
2	Mo 202.031†	176.8	158.4	10.073	ug/L	10.073	ppb	08:19:09
2	Ni 231.604†	319.1	232.5	5.3801	ug/L	5.3801	ppb	08:19:09

2	P 214.914†	470.3	246.6	140.77 ug/L	140.77 ppb	08:19:09
2	Pb 220.353†	11.6	80.1	9.1052 ug/L	9.1052 ppb	08:19:09
2	S 181.975 Axial†	109.3	67.7	94.849 ug/L	94.849 ppb	08:19:09
2	Sb 206.836†	66.3	32.0	10.412 ug/L	10.412 ppb	08:19:09
2	Se 196.026†	28.9	57.7	33.851 ug/L	33.851 ppb	08:19:09
2	Si 251.611†	3618.6	3167.8	94.570 ug/L	94.570 ppb	08:19:09
2	Sn 189.927†	71.4	66.3	10.886 ug/L	10.886 ppb	08:19:09
2	Ti 334.940†	2003.5	3117.8	4.9622 ug/L	4.9622 ppb	08:18:49
2	Tl 190.801†	32.8	65.3	18.347 ug/L	18.347 ppb	08:19:09
2	U 409.014†	-563.6	1838.4	50.616 ug/L	50.616 ppb	08:18:49
2	V 292.402†	-605.8	752.7	5.1946 ug/L	5.1946 ppb	08:18:49
2	Zn 213.857†	1781.3	1158.9	10.054 ug/L	10.054 ppb	08:19:09
2	SiO2†	3752.2	3283.5	210.06 ug/L	210.06 ppb	08:19:45
3	Sc Radial	5805.0	5805.0	99.3 %		08:17:57
3	Y RADIAL	6273.9	6273.9	99.78 %		08:17:57
3	Al 396.153Radial†	262.7	284.9	197.48 ug/L	197.48 ppb	08:17:57
3	Ca 317.933Radial†	153.3	138.7	204.49 ug/L	204.49 ppb	08:18:17
3	Fe 238.204 Radial†	21.8	15.2	142.16 ug/L	142.16 ppb	08:18:17
3	K 766.490 Radial†	3276.4	946.6	167.66 ug/L	167.66 ppb	08:17:57
3	Mg 279.077 IEC†	12.6	11.5	405.90 ug/L	405.90 ppb	08:18:17
3	Na 589.592 Radial†	-294.2	791.8	265.71 ug/L	265.71 ppb	08:17:57
3	Sr 421.552†	792.6	825.2	5.1374 ug/L	5.1374 ppb	08:17:57
3	Sc 361.383	905114.1	905114.1	100.43 %		08:19:14
3	Y 371.029	758310.9	758310.9	100.96 %		08:19:14
3	Ag 328.068†	1518.1	1218.9	5.5368 ug/L	5.5368 ppb	08:19:14
3	As 188.979†	45.6	69.5	27.505 ug/L	27.505 ppb	08:19:34
3	B 249.677†	1844.8	2367.6	49.620 ug/L	49.620 ppb	08:19:14
3	Ba 233.527†	684.6	690.2	5.1316 ug/L	5.1316 ppb	08:19:34
3	Be 313.107†	8549.0	13625.7	4.9766 ug/L	4.9766 ppb	08:19:14
3	Cd 226.502†	270.4	464.4	4.8984 ug/L	4.8984 ppb	08:19:34
3	Co 228.616†	191.0	255.6	4.8644 ug/L	4.8644 ppb	08:19:34
3	Cr 267.716†	535.3	454.3	4.7632 ug/L	4.7632 ppb	08:19:34
3	Cu 324.752†	10231.8	3431.6	9.8274 ug/L	9.8274 ppb	08:19:14
3	Mn 257.610†	10048.0	9582.9	10.229 ug/L	10.229 ppb	08:19:14
3	Mo 202.031†	175.0	155.9	9.9140 ug/L	9.9140 ppb	08:19:34
3	Ni 231.604†	317.8	229.9	5.3208 ug/L	5.3208 ppb	08:19:34
3	P 214.914†	462.6	237.2	135.29 ug/L	135.29 ppb	08:19:34
3	Pb 220.353†	18.1	86.5	9.8297 ug/L	9.8297 ppb	08:19:34
3	S 181.975 Axial†	109.9	67.8	95.025 ug/L	95.025 ppb	08:19:34
3	Sb 206.836†	58.7	24.2	7.9299 ug/L	7.9299 ppb	08:19:34
3	Se 196.026†	37.1	65.8	38.547 ug/L	38.547 ppb	08:19:34
3	Si 251.611†	3618.1	3153.0	94.127 ug/L	94.127 ppb	08:19:34
3	Sn 189.927†	69.7	64.5	10.576 ug/L	10.576 ppb	08:19:34
3	Ti 334.940†	2093.8	3199.8	5.0916 ug/L	5.0916 ppb	08:19:14
3	Tl 190.801†	40.4	72.7	20.436 ug/L	20.436 ppb	08:19:34
3	U 409.014†	-456.0	1947.7	53.628 ug/L	53.628 ppb	08:19:14
3	V 292.402†	-603.6	757.3	5.2280 ug/L	5.2280 ppb	08:19:14
3	Zn 213.857†	1787.2	1157.7	10.041 ug/L	10.041 ppb	08:19:34
3	SiO2†	3771.9	3288.4	210.37 ug/L	210.37 ppb	08:19:50

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902766.4	100.17	%	0.226				0.23%
Sc Radial	5841.3	100.0	%	1.49				1.49%
Y 371.029	755148.7	100.54	%	0.366				0.36%
Y RADIAL	6292.9	100.1	%	1.50				1.50%
Ag 328.068†	1128.9	5.1269	ug/L	0.38740	5.1269	ppb	0.38740	7.56%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	282.5	195.77	ug/L	3.334	195.77	ppb	3.334	1.70%
QC value within limits for Al 396.153Radial Recovery = 97.89%								
As 188.979†	72.5	28.659	ug/L	1.1313	28.659	ppb	1.1313	3.95%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2359.6	49.454	ug/L	0.2442	49.454	ppb	0.2442	0.49%
QC value within limits for B 249.677 Recovery = 98.91%								
Ba 233.527†	685.6	5.0971	ug/L	0.03226	5.0971	ppb	0.03226	0.63%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	13606.2	4.9695	ug/L	0.00635	4.9695	ppb	0.00635	0.13%
QC value within limits for Be 313.107 Recovery = 99.39%								
Ca 317.933Radial†	138.5	204.21	ug/L	3.830	204.21	ppb	3.830	1.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.11%
Cd 226.502†              470.1      4.9597 ug/L       0.08663      4.9597 ppb        0.08663   1.75%
   QC value within limits for Cd 226.502  Recovery = 99.19%
Co 228.616†              250.3      4.7633 ug/L       0.17179      4.7633 ppb        0.17179   3.61%
   QC value within limits for Co 228.616  Recovery = 95.27%
Cr 267.716†              459.7      4.8196 ug/L       0.08146      4.8196 ppb        0.08146   1.69%
   QC value within limits for Cr 267.716  Recovery = 96.39%
Cu 324.752†             3446.8      9.8706 ug/L       0.05214      9.8706 ppb        0.05214   0.53%
   QC value within limits for Cu 324.752  Recovery = 98.71%
Fe 238.204 Radial†       14.0      131.62 ug/L         9.372      131.62 ppb          9.372   7.12%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 131.62%
K 766.490 Radial†        907.8      160.77 ug/L         6.329      160.77 ppb          6.329   3.94%
   QC value within limits for K 766.490 Radial  Recovery = 107.18%
Mg 279.077 IEC†           9.0      317.04 ug/L        99.282      317.04 ppb         99.282  31.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.68%
Mn 257.610†             9627.3      10.277 ug/L        0.0479      10.277 ppb         0.0479   0.47%
   QC value within limits for Mn 257.610  Recovery = 102.77%
Mo 202.031†              156.5      9.9537 ug/L       0.10505      9.9537 ppb        0.10505   1.06%
   QC value within limits for Mo 202.031  Recovery = 99.54%
Na 589.592 Radial†       816.7      274.08 ug/L        11.114      274.08 ppb         11.114   4.05%
   QC value within limits for Na 589.592 Radial  Recovery = 91.36%
Ni 231.604†              230.5      5.3334 ug/L       0.04181      5.3334 ppb        0.04181   0.78%
   QC value within limits for Ni 231.604  Recovery = 106.67%
P 214.914†               238.7      136.20 ug/L         4.184      136.20 ppb          4.184   3.07%
   QC value within limits for P 214.914  Recovery = 90.80%
Pb 220.353†               87.0      9.8839 ug/L       0.80722      9.8839 ppb        0.80722   8.17%
   QC value within limits for Pb 220.353  Recovery = 98.84%
S 181.975 Axial†          68.0      95.277 ug/L        0.5949      95.277 ppb         0.5949   0.62%
   QC value within limits for S 181.975 Axial  Recovery = 95.28%
Sb 206.836†               30.5      9.9256 ug/L       1.80229      9.9256 ppb        1.80229  18.16%
   QC value within limits for Sb 206.836  Recovery = 99.26%
Se 196.026†               61.8      36.189 ug/L        2.3479      36.189 ppb         2.3479   6.49%
   QC value within limits for Se 196.026  Recovery = 120.63%
Si 251.611†             3167.4      94.560 ug/L        0.4282      94.560 ppb         0.4282   0.45%
   QC value within limits for Si 251.611  Recovery = 94.56%
Sn 189.927†               64.9      10.648 ug/L        0.2117      10.648 ppb         0.2117   1.99%
   QC value within limits for Sn 189.927  Recovery = 106.48%
Sr 421.552†              802.0      4.9928 ug/L       0.13002      4.9928 ppb        0.13002   2.60%
   QC value within limits for Sr 421.552  Recovery = 99.86%
Ti 334.940†             3201.8      5.0952 ug/L       0.13476      5.0952 ppb        0.13476   2.64%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†               70.1      19.710 ug/L        1.1813      19.710 ppb         1.1813   5.99%
   QC value within limits for Tl 190.801  Recovery = 98.55%
U 409.014†              1915.6      52.745 ug/L        1.8523      52.745 ppb         1.8523   3.51%
   QC value within limits for U 409.014  Recovery = 105.49%
V 292.402†               757.4      5.2269 ug/L       0.03179      5.2269 ppb        0.03179   0.61%
   QC value within limits for V 292.402  Recovery = 104.54%
Zn 213.857†             1159.7      10.062 ug/L        0.0256      10.062 ppb         0.0256   0.25%
   QC value within limits for Zn 213.857  Recovery = 100.62%
SiO2†                   3287.9      210.35 ug/L         0.271      210.35 ppb          0.271   0.13%
   QC value within limits for SiO2  Recovery = 98.75%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/8/2009 08:22:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5189.8	5189.8	88.8	%			08:23:59
1	Y RADIAL	5590.3	5590.3	88.91	%			08:23:59
1	Al 396.153Radial†	669734.8	754172.3	523870	ug/L	523870	ppb	08:23:54
1	Ca 317.933Radial†	291928.0	328708.7	484500	ug/L	484500	ppb	08:23:54
1	Fe 238.204 Radial†	17643.1	19860.1	185930	ug/L	185930	ppb	08:23:59
1	K 766.490 Radial†	2220.3	148.4	42.540	ug/L	42.540	ppb	08:23:59
1	Mg 279.077 IEC†	12418.2	13982.3	493110	ug/L	493110	ppb	08:23:59
1	Na 589.592 Radial†	-979.9	-15.4	-5.1754	ug/L	-5.1754	ppb	08:23:59
1	Sr 421.552†	535.4	630.3	-0.5657	ug/L	-0.5657	ppb	08:23:59
1	Sc 361.383	776307.7	776307.7	86.135	%			08:24:26
1	Y 371.029	629776.0	629776.0	83.849	%			08:24:26
1	Ag 328.068†	-9607.7	-11447.0	0.2578	ug/L	0.2578	ppb	08:24:26
1	As 188.979†	-78.4	-66.9	2.0669	ug/L	2.0669	ppb	08:24:46
1	B 249.677†	446.4	1048.9	-2.6705	ug/L	-2.6705	ppb	08:24:26
1	Ba 233.527†	-463.0	-529.1	3.0093	ug/L	3.0093	ppb	08:24:46
1	Be 313.107†	-5475.2	-1243.6	-0.5072	ug/L	-0.5072	ppb	08:24:26
1	Cd 226.502†	1417.2	1840.4	0.8697	ug/L	0.8697	ppb	08:24:46
1	Co 228.616†	-13.4	49.8	-1.6911	ug/L	-1.6911	ppb	08:24:46
1	Cr 267.716†	-127.7	-226.9	0.9593	ug/L	0.9593	ppb	08:24:46
1	Cu 324.752†	3902.7	-2225.8	3.1148	ug/L	3.1148	ppb	08:24:26
1	Mn 257.610†	-402.3	-889.3	8.4088	ug/L	8.4088	ppb	08:24:26
1	Mo 202.031†	-211.4	-263.7	-3.5634	ug/L	-3.5634	ppb	08:24:46
1	Ni 231.604†	221.2	170.3	3.9419	ug/L	3.9419	ppb	08:24:46
1	P 214.914†	179.5	-15.1	18.966	ug/L	18.966	ppb	08:24:46
1	Pb 220.353†	-791.2	-850.1	6.1602	ug/L	6.1602	ppb	08:24:46
1	S 181.975 Axial†	83.0	54.8	-26.290	ug/L	-26.290	ppb	08:24:46
1	Sb 206.836†	63.7	39.7	-0.1476	ug/L	-0.1476	ppb	08:24:46
1	Se 196.026†	-1063.9	-1206.3	-16.785	ug/L	-16.785	ppb	08:24:46
1	Si 251.611†	453.6	76.9	2.8018	ug/L	2.8018	ppb	08:24:46
1	Sn 189.927†	-361.1	-424.2	-16.384	ug/L	-16.384	ppb	08:24:46
1	Ti 334.940†	-15761.9	-17184.0	-2.1640	ug/L	-2.1640	ppb	08:24:26
1	Tl 190.801†	-85.3	-66.6	-4.5522	ug/L	-4.5522	ppb	08:24:46
1	U 409.014†	-1013.4	1225.3	10.365	ug/L	10.365	ppb	08:24:26
1	V 292.402†	867.1	2365.0	-1.6778	ug/L	-1.6778	ppb	08:24:46
1	Zn 213.857†	3296.5	3205.3	-6.6524	ug/L	-6.6524	ppb	08:24:46
1	SiO2†	440.3	43.7	3.8863	ug/L	3.8863	ppb	08:25:43
2	Sc Radial	5172.2	5172.2	88.5	%			08:24:09
2	Y RADIAL	5524.2	5524.2	87.86	%			08:24:09
2	Al 396.153Radial†	671985.1	759276.6	527410	ug/L	527410	ppb	08:24:04
2	Ca 317.933Radial†	292632.2	330620.9	487320	ug/L	487320	ppb	08:24:04
2	Fe 238.204 Radial†	17633.3	19916.5	186450	ug/L	186450	ppb	08:24:09
2	K 766.490 Radial†	2182.2	113.9	36.591	ug/L	36.591	ppb	08:24:09
2	Mg 279.077 IEC†	12395.4	14004.0	493880	ug/L	493880	ppb	08:24:09
2	Na 589.592 Radial†	-942.9	22.6	7.5962	ug/L	7.5962	ppb	08:24:09
2	Sr 421.552†	494.0	585.5	-0.8709	ug/L	-0.8709	ppb	08:24:09
2	Sc 361.383	703840.2	703840.2	78.095	%			08:24:52
2	Y 371.029	571920.7	571920.7	76.146	%			08:24:52
2	Ag 328.068†	-9831.3	-12881.6	-6.1038	ug/L	-6.1038	ppb	08:24:52
2	As 188.979†	-85.5	-85.3	-5.1682	ug/L	-5.1682	ppb	08:25:12
2	B 249.677†	361.2	993.2	-3.9085	ug/L	-3.9085	ppb	08:24:52
2	Ba 233.527†	-536.2	-678.2	1.9266	ug/L	1.9266	ppb	08:25:12
2	Be 313.107†	-5405.9	-1809.3	-0.7211	ug/L	-0.7211	ppb	08:24:52
2	Cd 226.502†	1474.1	2082.7	3.3788	ug/L	3.3788	ppb	08:25:12
2	Co 228.616†	-20.8	38.8	-1.9097	ug/L	-1.9097	ppb	08:25:12
2	Cr 267.716†	-87.7	-191.0	1.3502	ug/L	1.3502	ppb	08:25:12
2	Cu 324.752†	3771.0	-1927.9	3.9942	ug/L	3.9942	ppb	08:24:52
2	Mn 257.610†	-522.6	-1091.4	8.2316	ug/L	8.2316	ppb	08:24:52
2	Mo 202.031†	-238.1	-323.2	-7.3030	ug/L	-7.3030	ppb	08:25:12
2	Ni 231.604†	205.0	175.9	4.0727	ug/L	4.0727	ppb	08:25:12

2	P 214.914†	142.8	-40.6	4.8366 ug/L	4.8366 ppb	08:25:12
2	Pb 220.353†	-811.4	-970.5	-6.7096 ug/L	-6.7096 ppb	08:25:12
2	S 181.975 Axial†	82.5	64.0	-14.051 ug/L	-14.051 ppb	08:25:12
2	Sb 206.836†	80.0	68.2	8.6688 ug/L	8.6688 ppb	08:25:12
2	Se 196.026†	-1075.3	-1348.1	-96.472 ug/L	-96.472 ppb	08:25:12
2	Si 251.611†	393.7	54.5	2.2031 ug/L	2.2031 ppb	08:25:12
2	Sn 189.927†	-335.1	-434.1	-17.705 ug/L	-17.705 ppb	08:25:12
2	Ti 334.940†	-16209.8	-19641.7	-5.9362 ug/L	-5.9362 ppb	08:24:52
2	Tl 190.801†	-76.2	-65.1	-4.0711 ug/L	-4.0711 ppb	08:25:12
2	U 409.014†	-1109.0	981.8	3.5914 ug/L	3.5914 ppb	08:24:52
2	V 292.402†	911.5	2525.6	-0.7433 ug/L	-0.7433 ppb	08:25:12
2	Zn 213.857†	3324.6	3635.3	-2.9743 ug/L	-2.9743 ppb	08:25:12
2	SiO2†	494.5	165.8	11.879 ug/L	11.879 ppb	08:25:48
3	Sc Radial	5341.1	5341.1	91.4 %		08:24:20
3	Y RADIAL	5696.8	5696.8	90.60 %		08:24:20
3	Al 396.153Radial†	668773.5	731756.6	508300 ug/L	508300 ppb	08:24:14
3	Ca 317.933Radial†	291429.1	318850.6	469970 ug/L	469970 ppb	08:24:14
3	Fe 238.204 Radial†	17266.5	18885.3	176800 ug/L	176800 ppb	08:24:20
3	K 766.490 Radial†	2229.6	87.8	31.346 ug/L	31.346 ppb	08:24:20
3	Mg 279.077 IEC†	12175.8	13320.9	469790 ug/L	469790 ppb	08:24:20
3	Na 589.592 Radial†	-901.3	101.7	34.145 ug/L	34.145 ppb	08:24:20
3	Sr 421.552†	505.0	579.9	-0.7448 ug/L	-0.7448 ppb	08:24:20
3	Sc 361.383	766708.2	766708.2	85.070 %		08:25:17
3	Y 371.029	621737.7	621737.7	82.779 %		08:25:17
3	Ag 328.068†	-9560.5	-11531.1	-2.8107 ug/L	-2.8107 ppb	08:25:17
3	As 188.979†	-93.2	-85.4	-6.6566 ug/L	-6.6566 ppb	08:25:37
3	B 249.677†	425.5	1030.8	-1.8388 ug/L	-1.8388 ppb	08:25:17
3	Ba 233.527†	-496.6	-575.2	2.3293 ug/L	2.3293 ppb	08:25:37
3	Be 313.107†	-5346.4	-1171.7	-0.4819 ug/L	-0.4819 ppb	08:25:17
3	Cd 226.502†	1451.3	1901.1	2.4241 ug/L	2.4241 ppb	08:25:37
3	Co 228.616†	-9.2	54.7	-1.4754 ug/L	-1.4754 ppb	08:25:37
3	Cr 267.716†	-93.8	-188.9	1.1967 ug/L	1.1967 ppb	08:25:37
3	Cu 324.752†	3834.9	-2248.8	2.5836 ug/L	2.5836 ppb	08:25:17
3	Mn 257.610†	-380.3	-869.3	7.9544 ug/L	7.9544 ppb	08:25:17
3	Mo 202.031†	-241.1	-301.8	-6.6288 ug/L	-6.6288 ppb	08:25:37
3	Ni 231.604†	204.1	153.3	3.5498 ug/L	3.5498 ppb	08:25:37
3	P 214.914†	162.7	-32.3	11.143 ug/L	11.143 ppb	08:25:37
3	Pb 220.353†	-803.2	-875.7	0.5132 ug/L	0.5132 ppb	08:25:37
3	S 181.975 Axial†	75.6	47.3	-33.723 ug/L	-33.723 ppb	08:25:37
3	Sb 206.836†	59.7	36.0	-1.1159 ug/L	-1.1159 ppb	08:25:37
3	Se 196.026†	-1060.8	-1218.2	-55.253 ug/L	-55.253 ppb	08:25:37
3	Si 251.611†	410.8	33.3	1.5399 ug/L	1.5399 ppb	08:25:37
3	Sn 189.927†	-354.6	-421.8	-17.629 ug/L	-17.629 ppb	08:25:37
3	Ti 334.940†	-15808.1	-17467.5	-3.3724 ug/L	-3.3724 ppb	08:25:17
3	Tl 190.801†	-85.2	-67.6	-5.2665 ug/L	-5.2665 ppb	08:25:37
3	U 409.014†	-1140.9	1060.7	6.9789 ug/L	6.9789 ppb	08:25:17
3	V 292.402†	872.8	2384.3	-0.7314 ug/L	-0.7314 ppb	08:25:37
3	Zn 213.857†	3339.7	3304.0	-4.1173 ug/L	-4.1173 ppb	08:25:37
3	SiO2†	414.5	19.8	2.4542 ug/L	2.4542 ppb	08:25:53

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	748952.0	83.100	%	4.3674				5.26%
Sc Radial	5234.3	89.6	%	1.59				1.77%
Y 371.029	607811.5	80.925	%	4.1728				5.16%
Y RADIAL	5603.8	89.12	%	1.385				1.55%
Ag 328.068†	-11953.2	-2.8856	ug/L	3.18143	-2.8856	ppb	3.18143	110.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	748401.9	519860	ug/L	10168.8	519860	ppb	10168.8	1.96%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	-79.2	-3.2526	ug/L	4.66656	-3.2526	ppb	4.66656	143.47%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1024.3	-2.8059	ug/L	1.04145	-2.8059	ppb	1.04145	37.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-594.2	2.4218	ug/L	0.54724	2.4218	ppb	0.54724	22.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1408.2	-0.5701	ug/L	0.13141	-0.5701	ppb	0.13141	23.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	326060.1	480590	ug/L	9310.0	480590	ppb	9310.0	1.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.12%
Cd 226.502†            1941.4      2.2242 ug/L       1.26642      2.2242 ppb        1.26642  56.94%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              47.8     -1.6920 ug/L       0.21716     -1.6920 ppb        0.21716  12.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -202.3      1.1687 ug/L       0.19695      1.1687 ppb        0.19695  16.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2134.2      3.2308 ug/L       0.71244      3.2308 ppb        0.71244  22.05%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    19554.0      183060 ug/L        5428.0      183060 ppb         5428.0   2.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.53%
K 766.490 Radial†       116.7      36.826 ug/L        5.6005      36.826 ppb         5.6005  15.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       13769.1      485590 ug/L       13692.7      485590 ppb        13692.7   2.82%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.12%
Mn 257.610†            -950.0      8.1983 ug/L       0.22901      8.1983 ppb        0.22901   2.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -296.2     -5.8318 ug/L       1.99315     -5.8318 ppb        1.99315  34.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       36.3      12.189 ug/L       20.0583      12.189 ppb       20.0583 164.57%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             166.5      3.8548 ug/L       0.27213      3.8548 ppb        0.27213   7.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -29.3      11.648 ug/L        7.0781      11.648 ppb         7.0781  60.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -898.8     -0.0121 ug/L       6.45097     -0.0121 ppb       6.45097 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         55.4     -24.688 ug/L        9.9331     -24.688 ppb        9.9331  40.23%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              48.0      2.4684 ug/L       5.39148      2.4684 ppb       5.39148 218.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1257.5     -56.170 ug/L       39.8514     -56.170 ppb       39.8514  70.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              54.9      2.1816 ug/L       0.63120      2.1816 ppb        0.63120  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -426.7     -17.239 ug/L        0.7416     -17.239 ppb         0.7416   4.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             598.5     -0.7271 ug/L       0.15335     -0.7271 ppb        0.15335  21.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -18097.7     -3.8242 ug/L       1.92624     -3.8242 ppb        1.92624  50.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -66.4     -4.6299 ug/L       0.60148     -4.6299 ppb        0.60148  12.99%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1089.2      6.9786 ug/L       3.38696      6.9786 ppb        3.38696  48.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2425.0     -1.0508 ug/L       0.54301     -1.0508 ppb        0.54301  51.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            3381.5     -4.5813 ug/L       1.88241     -4.5813 ppb        1.88241  41.09%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    76.4      6.0733 ug/L       5.07889      6.0733 ppb        5.07889  83.63%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/8/2009 08:28:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5678.5	5678.5	97.2	%			08:30:02
1	Y RADIAL	6082.3	6082.3	96.73	%			08:30:02
1	Al 396.153Radial†	666388.7	685819.7	476370	ug/L	476370	ppb	08:29:57
1	Ca 317.933Radial†	290269.6	298709.0	440280	ug/L	440280	ppb	08:29:57
1	Fe 238.204 Radial†	17682.4	18190.6	170310	ug/L	170310	ppb	08:30:02
1	K 766.490 Radial†	30306.4	28837.4	5122.4	ug/L	5122.4	ppb	08:29:57
1	Mg 279.077 IEC†	12380.2	12739.7	449300	ug/L	449300	ppb	08:30:02
1	Na 589.592 Radial†	12920.7	14385.0	4827.3	ug/L	4827.3	ppb	08:30:02
1	Sr 421.552†	73414.3	75580.0	466.61	ug/L	466.61	ppb	08:29:57
1	Sc 361.383	798852.1	798852.1	88.637	%			08:30:29
1	Y 371.029	647271.7	647271.7	86.178	%			08:30:29
1	Ag 328.068†	42822.1	48019.2	266.81	ug/L	266.81	ppb	08:30:29
1	As 188.979†	1018.7	1173.4	493.46	ug/L	493.46	ppb	08:30:50
1	B 249.677†	21666.1	24974.3	500.05	ug/L	500.05	ppb	08:30:29
1	Ba 233.527†	57014.2	64331.8	484.23	ug/L	484.23	ppb	08:30:29
1	Be 313.107†	576364.8	655367.2	239.84	ug/L	239.84	ppb	08:30:29
1	Cd 226.502†	38769.0	43934.3	447.70	ug/L	447.70	ppb	08:30:50
1	Co 228.616†	20156.9	22806.4	430.59	ug/L	430.59	ppb	08:30:50
1	Cr 267.716†	39430.2	44406.4	469.93	ug/L	469.93	ppb	08:30:29
1	Cu 324.752†	171408.3	186626.0	542.76	ug/L	542.76	ppb	08:30:29
1	Mn 257.610†	389330.6	438820.1	476.72	ug/L	476.72	ppb	08:30:29
1	Mo 202.031†	6497.4	7312.0	476.58	ug/L	476.58	ppb	08:30:50
1	Ni 231.604†	16695.5	18749.2	433.89	ug/L	433.89	ppb	08:30:50
1	P 214.914†	3977.5	4263.9	2403.3	ug/L	2403.3	ppb	08:30:50
1	Pb 220.353†	2698.9	3113.3	445.59	ug/L	445.59	ppb	08:30:50
1	S 181.975 Axial†	1732.0	1912.5	2586.2	ug/L	2586.2	ppb	08:30:50
1	Sb 206.836†	1484.7	1640.8	514.93	ug/L	514.93	ppb	08:30:50
1	Se 196.026†	2736.6	3116.2	2426.1	ug/L	2426.1	ppb	08:30:50
1	Si 251.611†	152690.0	171815.1	5132.3	ug/L	5132.3	ppb	08:30:29
1	Sn 189.927†	2275.0	2561.6	467.67	ug/L	467.67	ppb	08:30:50
1	Ti 334.940†	268963.2	304558.9	508.60	ug/L	508.60	ppb	08:30:29
1	Tl 190.801†	1347.6	1552.8	451.07	ug/L	451.07	ppb	08:30:50
1	U 409.014†	13644.1	17795.1	467.88	ug/L	467.88	ppb	08:30:29
1	V 292.402†	66527.3	76414.4	495.81	ug/L	495.81	ppb	08:30:29
1	Zn 213.857†	52450.8	58553.1	476.49	ug/L	476.49	ppb	08:30:29
1	SiO2†	152506.2	171589.9	10983	ug/L	10983	ppb	08:31:47
2	Sc Radial	5253.3	5253.3	89.9	%			08:30:12
2	Y RADIAL	5660.3	5660.3	90.02	%			08:30:12
2	Al 396.153Radial†	669134.5	744386.3	517050	ug/L	517050	ppb	08:30:07
2	Ca 317.933Radial†	291040.4	323746.7	477180	ug/L	477180	ppb	08:30:07
2	Fe 238.204 Radial†	17943.6	19954.2	186820	ug/L	186820	ppb	08:30:12
2	K 766.490 Radial†	30260.5	31311.0	5562.1	ug/L	5562.1	ppb	08:30:07
2	Mg 279.077 IEC†	12561.2	13972.3	492770	ug/L	492770	ppb	08:30:12
2	Na 589.592 Radial†	13114.0	15676.3	5260.7	ug/L	5260.7	ppb	08:30:12
2	Sr 421.552†	73629.2	81934.7	505.84	ug/L	505.84	ppb	08:30:07
2	Sc 361.383	796712.5	796712.5	88.399	%			08:30:55
2	Y 371.029	643552.7	643552.7	85.683	%			08:30:55
2	Ag 328.068†	42735.7	48051.2	271.67	ug/L	271.67	ppb	08:30:55
2	As 188.979†	1015.2	1172.6	495.72	ug/L	495.72	ppb	08:31:16
2	B 249.677†	21486.0	24836.2	494.95	ug/L	494.95	ppb	08:30:55
2	Ba 233.527†	57186.8	64699.9	487.57	ug/L	487.57	ppb	08:30:55
2	Be 313.107†	575113.2	655697.7	239.96	ug/L	239.96	ppb	08:30:55
2	Cd 226.502†	38833.6	44124.8	448.06	ug/L	448.06	ppb	08:31:16
2	Co 228.616†	20227.1	22946.9	433.02	ug/L	433.02	ppb	08:31:16
2	Cr 267.716†	39521.6	44629.3	472.56	ug/L	472.56	ppb	08:30:55
2	Cu 324.752†	171480.3	187226.7	545.32	ug/L	545.32	ppb	08:30:55
2	Mn 257.610†	391057.2	441952.9	480.90	ug/L	480.90	ppb	08:30:55
2	Mo 202.031†	6536.7	7376.1	481.83	ug/L	481.83	ppb	08:31:16
2	Ni 231.604†	16709.6	18815.9	435.43	ug/L	435.43	ppb	08:31:16

2	P 214.914†	3949.7	4244.6	2392.4 ug/L	2392.4 ppb	08:31:16
2	Pb 220.353†	2735.7	3163.2	459.01 ug/L	459.01 ppb	08:31:16
2	S 181.975 Axial†	1746.4	1934.0	2608.4 ug/L	2608.4 ppb	08:31:16
2	Sb 206.836†	1494.1	1656.0	518.97 ug/L	518.97 ppb	08:31:16
2	Se 196.026†	2715.8	3101.0	2476.7 ug/L	2476.7 ppb	08:31:16
2	Si 251.611†	153211.3	172867.4	5163.6 ug/L	5163.6 ppb	08:30:55
2	Sn 189.927†	2278.8	2572.8	473.58 ug/L	473.58 ppb	08:31:16
2	Ti 334.940†	269939.9	306478.8	513.59 ug/L	513.59 ppb	08:30:55
2	Tl 190.801†	1329.2	1536.1	447.53 ug/L	447.53 ppb	08:31:16
2	U 409.014†	13777.1	17986.9	471.08 ug/L	471.08 ppb	08:30:55
2	V 292.402†	66665.8	76772.6	496.71 ug/L	496.71 ppb	08:30:55
2	Zn 213.857†	52594.9	58875.0	476.22 ug/L	476.22 ppb	08:30:55
2	SiO2†	151895.1	171360.7	10968 ug/L	10968 ppb	08:31:52
3	Sc Radial	5329.5	5329.5	91.2 %		08:30:22
3	Y RADIAL	5716.9	5716.9	90.92 %		08:30:22
3	Al 396.153Radial†	656419.4	719803.9	499970 ug/L	499970 ppb	08:30:17
3	Ca 317.933Radial†	287241.2	314952.9	464220 ug/L	464220 ppb	08:30:17
3	Fe 238.204 Radial†	17841.4	19556.9	183100 ug/L	183100 ppb	08:30:22
3	K 766.490 Radial†	29973.6	30515.2	5420.2 ug/L	5420.2 ppb	08:30:17
3	Mg 279.077 IEC†	12509.3	13715.6	483720 ug/L	483720 ppb	08:30:22
3	Na 589.592 Radial†	13157.8	15515.9	5206.8 ug/L	5206.8 ppb	08:30:22
3	Sr 421.552†	72231.6	79231.4	489.13 ug/L	489.13 ppb	08:30:17
3	Sc 361.383	790190.3	790190.3	87.676 %		08:31:21
3	Y 371.029	639607.1	639607.1	85.158 %		08:31:21
3	Ag 328.068†	42287.3	47938.8	270.17 ug/L	270.17 ppb	08:31:21
3	As 188.979†	1035.6	1205.4	508.07 ug/L	508.07 ppb	08:31:42
3	B 249.677†	21305.2	24830.6	495.33 ug/L	495.33 ppb	08:31:21
3	Ba 233.527†	56590.8	64554.0	486.35 ug/L	486.35 ppb	08:31:21
3	Be 313.107†	570088.1	655336.1	239.83 ug/L	239.83 ppb	08:31:21
3	Cd 226.502†	38615.9	44239.1	449.65 ug/L	449.65 ppb	08:31:42
3	Co 228.616†	20126.4	23020.9	434.49 ug/L	434.49 ppb	08:31:42
3	Cr 267.716†	39221.0	44655.5	472.77 ug/L	472.77 ppb	08:31:21
3	Cu 324.752†	169737.3	186839.9	544.02 ug/L	544.02 ppb	08:31:21
3	Mn 257.610†	386530.2	440441.0	479.09 ug/L	479.09 ppb	08:31:21
3	Mo 202.031†	6526.6	7425.7	484.71 ug/L	484.71 ppb	08:31:42
3	Ni 231.604†	16652.9	18907.1	437.54 ug/L	437.54 ppb	08:31:42
3	P 214.914†	3959.3	4292.4	2417.3 ug/L	2417.3 ppb	08:31:42
3	Pb 220.353†	2673.5	3117.8	450.36 ug/L	450.36 ppb	08:31:42
3	S 181.975 Axial†	1725.8	1926.8	2601.6 ug/L	2601.6 ppb	08:31:42
3	Sb 206.836†	1474.2	1647.1	516.57 ug/L	516.57 ppb	08:31:42
3	Se 196.026†	2692.7	3100.1	2461.3 ug/L	2461.3 ppb	08:31:42
3	Si 251.611†	151474.4	172316.8	5147.1 ug/L	5147.1 ppb	08:31:21
3	Sn 189.927†	2237.1	2546.5	467.87 ug/L	467.87 ppb	08:31:42
3	Ti 334.940†	267030.2	305680.5	511.64 ug/L	511.64 ppb	08:31:21
3	Tl 190.801†	1335.4	1555.6	452.50 ug/L	452.50 ppb	08:31:42
3	U 409.014†	13591.7	17904.1	469.27 ug/L	469.27 ppb	08:31:21
3	V 292.402†	65923.7	76548.7	495.64 ug/L	495.64 ppb	08:31:21
3	Zn 213.857†	51997.0	58684.2	475.21 ug/L	475.21 ppb	08:31:21
3	SiO2†	151961.7	172854.8	11064 ug/L	11064 ppb	08:31:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	795251.6	88.237	%	0.5006				0.57%
Sc Radial	5420.4	92.8	%	3.88				4.18%
Y 371.029	643477.2	85.673	%	0.5103				0.60%
Y RADIAL	5819.8	92.56	%	3.643				3.94%
Ag 328.068†	48003.0	269.55	ug/L	2.490	269.55	ppb	2.490	0.92%
QC value within limits for Ag 328.068 Recovery = 107.82%								
Al 396.153Radial†	716670.0	497800	ug/L	20427.9	497800	ppb	20427.9	4.10%
QC value within limits for Al 396.153Radial Recovery = 99.56%								
As 188.979†	1183.8	499.08	ug/L	7.867	499.08	ppb	7.867	1.58%
QC value within limits for As 188.979 Recovery = 99.82%								
B 249.677†	24880.4	496.78	ug/L	2.839	496.78	ppb	2.839	0.57%
QC value within limits for B 249.677 Recovery = 99.36%								
Ba 233.527†	64528.6	486.05	ug/L	1.693	486.05	ppb	1.693	0.35%
QC value within limits for Ba 233.527 Recovery = 97.21%								
Be 313.107†	655467.0	239.88	ug/L	0.075	239.88	ppb	0.075	0.03%
QC value within limits for Be 313.107 Recovery = 95.95%								
Ca 317.933Radial†	312469.5	460560	ug/L	18722.4	460560	ppb	18722.4	4.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 92.11%
Cd 226.502†            44099.4      448.47 ug/L         1.035      448.47 ppb          1.035   0.23%
   QC value within limits for Cd 226.502  Recovery = 89.69%
Co 228.616†            22924.7      432.70 ug/L         1.971      432.70 ppb          1.971   0.46%
   QC value within limits for Co 228.616  Recovery = 86.54%
Cr 267.716†            44563.7      471.75 ug/L         1.586      471.75 ppb          1.586   0.34%
   QC value within limits for Cr 267.716  Recovery = 94.35%
Cu 324.752†           186897.5      544.03 ug/L         1.281      544.03 ppb          1.281   0.24%
   QC value within limits for Cu 324.752  Recovery = 108.81%
Fe 238.204 Radial†     19233.9      180080 ug/L        8660.4      180080 ppb         8660.4   4.81%
   QC value within limits for Fe 238.204 Radial  Recovery = 90.04%
K 766.490 Radial†      30221.2      5368.2 ug/L        224.43      5368.2 ppb         224.43   4.18%
   QC value within limits for K 766.490 Radial  Recovery = 107.36%
Mg 279.077 IEC†        13475.9      475260 ug/L       22935.4      475260 ppb        22935.4   4.83%
   QC value within limits for Mg 279.077 IEC  Recovery = 95.05%
Mn 257.610†           440404.7      478.90 ug/L         2.095      478.90 ppb          2.095   0.44%
   QC value within limits for Mn 257.610  Recovery = 95.78%
Mo 202.031†             7371.3      481.04 ug/L         4.122      481.04 ppb          4.122   0.86%
   QC value within limits for Mo 202.031  Recovery = 96.21%
Na 589.592 Radial†     15192.4      5098.3 ug/L        236.19      5098.3 ppb         236.19   4.63%
   QC value within limits for Na 589.592 Radial  Recovery = 101.97%
Ni 231.604†            18824.1      435.62 ug/L         1.834      435.62 ppb          1.834   0.42%
   QC value within limits for Ni 231.604  Recovery = 87.12%
P 214.914†              4266.9      2404.3 ug/L         12.48      2404.3 ppb          12.48   0.52%
   QC value within limits for P 214.914  Recovery = 96.17%
Pb 220.353†             3131.4      451.66 ug/L         6.802      451.66 ppb          6.802   1.51%
   QC value within limits for Pb 220.353  Recovery = 90.33%
S 181.975 Axial†        1924.4      2598.7 ug/L         11.39      2598.7 ppb          11.39   0.44%
   QC value within limits for S 181.975 Axial  Recovery = 103.95%
Sb 206.836†             1648.0      516.82 ug/L         2.030      516.82 ppb          2.030   0.39%
   QC value within limits for Sb 206.836  Recovery = 103.36%
Se 196.026†             3105.8      2454.7 ug/L         25.95      2454.7 ppb          25.95   1.06%
   QC value within limits for Se 196.026  Recovery = 98.19%
Si 251.611†           172333.1      5147.7 ug/L         15.65      5147.7 ppb          15.65   0.30%
   QC value within limits for Si 251.611  Recovery = 102.95%
Sn 189.927†             2560.3      469.70 ug/L         3.357      469.70 ppb          3.357   0.71%
   QC value within limits for Sn 189.927  Recovery = 93.94%
Sr 421.552†            78915.4      487.20 ug/L        19.688      487.20 ppb         19.688   4.04%
   QC value within limits for Sr 421.552  Recovery = 97.44%
Ti 334.940†           305572.7      511.28 ug/L         2.512      511.28 ppb          2.512   0.49%
   QC value within limits for Ti 334.940  Recovery = 102.26%
Tl 190.801†             1548.2      450.37 ug/L         2.558      450.37 ppb          2.558   0.57%
   QC value within limits for Tl 190.801  Recovery = 90.07%
U 409.014†             17895.4      469.41 ug/L         1.606      469.41 ppb          1.606   0.34%
   QC value within limits for U 409.014  Recovery = 93.88%
V 292.402†             76578.6      496.05 ug/L         0.577      496.05 ppb          0.577   0.12%
   QC value within limits for V 292.402  Recovery = 99.21%
Zn 213.857†            58704.1      475.97 ug/L         0.675      475.97 ppb          0.675   0.14%
   QC value within limits for Zn 213.857  Recovery = 95.19%
SiO2†                 171935.1       11005 ug/L          51.5       11005 ppb           51.5   0.47%
   QC value within limits for SiO2  Recovery = 102.90%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/8/2009 08:34:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5000.9	5000.9	85.6	%			08:36:06
1	Y RADIAL	5375.7	5375.7	85.49	%			08:36:06
1	Al 396.153Radial†	649764.4	759313.3	527440	ug/L	527440	ppb	08:36:01
1	Ca 317.933Radial†	281096.4	328464.2	484140	ug/L	484140	ppb	08:36:01
1	Fe 238.204 Radial†	39476.3	46123.9	431800	ug/L	431800	ppb	08:36:06
1	K 766.490 Radial†	3503.5	1742.3	121.03	ug/L	121.03	ppb	08:36:06
1	Mg 279.077 IEC†	11841.5	13836.5	487760	ug/L	487760	ppb	08:36:06
1	Na 589.592 Radial†	1231875.6	1440616.5	483440	ug/L	483440	ppb	08:36:01
1	Sr 421.552†	695.9	840.5	0.7472	ug/L	0.7472	ppb	08:36:06
1	Sc 361.383	771300.7	771300.7	85.580	%			08:36:34
1	Y 371.029	626017.5	626017.5	83.349	%			08:36:34
1	Ag 328.068†	-22719.5	-26840.4	-3.2200	ug/L	-3.2200	ppb	08:36:34
1	As 188.979†	-207.8	-218.6	-19.790	ug/L	-19.790	ppb	08:36:54
1	B 249.677†	1415.1	2184.2	-11.491	ug/L	-11.491	ppb	08:36:34
1	Ba 233.527†	-1526.8	-1775.6	2.9110	ug/L	2.9110	ppb	08:36:54
1	Be 313.107†	-11993.9	-8901.9	-3.2741	ug/L	-3.2741	ppb	08:36:34
1	Cd 226.502†	3639.7	4448.1	3.8564	ug/L	3.8564	ppb	08:36:54
1	Co 228.616†	198.8	297.7	-0.5794	ug/L	-0.5794	ppb	08:36:54
1	Cr 267.716†	123.2	65.3	3.8985	ug/L	3.8985	ppb	08:36:54
1	Cu 324.752†	1091.9	-5480.9	6.3424	ug/L	6.3424	ppb	08:36:34
1	Mn 257.610†	-25668.8	-30416.2	1.5267	ug/L	1.5267	ppb	08:36:34
1	Mo 202.031†	-493.2	-594.6	-7.1425	ug/L	-7.1425	ppb	08:36:54
1	Ni 231.604†	283.8	245.0	5.6702	ug/L	5.6702	ppb	08:36:54
1	P 214.914†	594.9	471.6	103.98	ug/L	103.98	ppb	08:36:54
1	Pb 220.353†	-558.6	-584.3	16.782	ug/L	16.782	ppb	08:36:54
1	S 181.975 Axial†	112.6	90.0	22.368	ug/L	22.368	ppb	08:36:54
1	Sb 206.836†	65.0	41.7	3.7037	ug/L	3.7037	ppb	08:36:54
1	Se 196.026†	-2484.6	-2874.4	-206.03	ug/L	-206.03	ppb	08:36:54
1	Si 251.611†	-583.5	-1131.5	-33.075	ug/L	-33.075	ppb	08:36:54
1	Sn 189.927†	-400.0	-472.4	-21.025	ug/L	-21.025	ppb	08:36:54
1	Ti 334.940†	-8964.2	-9359.7	4.0726	ug/L	4.0726	ppb	08:36:34
1	Tl 190.801†	-104.9	-90.1	-11.168	ug/L	-11.168	ppb	08:36:54
1	U 409.014†	437392.5	513494.5	14091	ug/L	14091	ppb	08:36:34
1	V 292.402†	2035.5	3736.8	-3.0468	ug/L	-3.0468	ppb	08:36:54
1	Zn 213.857†	6171.5	6589.6	-0.3854	ug/L	-0.3854	ppb	08:36:54
1	SiO2†	-667.1	-1247.0	-78.271	ug/L	-78.271	ppb	08:37:51
2	Sc Radial	5047.1	5047.1	86.4	%			08:36:16
2	Y RADIAL	5379.7	5379.7	85.56	%			08:36:16
2	Al 396.153Radial†	648919.6	751395.2	521940	ug/L	521940	ppb	08:36:11
2	Ca 317.933Radial†	280281.3	324518.2	478320	ug/L	478320	ppb	08:36:11
2	Fe 238.204 Radial†	39267.0	45459.9	425590	ug/L	425590	ppb	08:36:16
2	K 766.490 Radial†	3384.7	1567.4	92.631	ug/L	92.631	ppb	08:36:16
2	Mg 279.077 IEC†	11734.0	13585.5	478910	ug/L	478910	ppb	08:36:16
2	Na 589.592 Radial†	1226896.0	1421693.4	477090	ug/L	477090	ppb	08:36:11
2	Sr 421.552†	705.7	844.5	0.8257	ug/L	0.8257	ppb	08:36:16
2	Sc 361.383	760812.5	760812.5	84.416	%			08:36:59
2	Y 371.029	617644.0	617644.0	82.234	%			08:36:59
2	Ag 328.068†	-22429.0	-26862.3	-5.1840	ug/L	-5.1840	ppb	08:36:59
2	As 188.979†	-197.3	-209.6	-17.174	ug/L	-17.174	ppb	08:37:19
2	B 249.677†	1451.0	2249.6	-9.2958	ug/L	-9.2958	ppb	08:36:59
2	Ba 233.527†	-1497.0	-1764.9	2.7630	ug/L	2.7630	ppb	08:37:19
2	Be 313.107†	-11778.7	-8840.1	-3.2506	ug/L	-3.2506	ppb	08:36:59
2	Cd 226.502†	3625.7	4490.2	4.9226	ug/L	4.9226	ppb	08:37:19
2	Co 228.616†	200.5	302.9	-0.4003	ug/L	-0.4003	ppb	08:37:19
2	Cr 267.716†	67.3	1.1	3.1242	ug/L	3.1242	ppb	08:37:19
2	Cu 324.752†	1131.9	-5415.9	6.2112	ug/L	6.2112	ppb	08:36:59
2	Mn 257.610†	-25098.4	-30154.0	1.3513	ug/L	1.3513	ppb	08:36:59
2	Mo 202.031†	-524.4	-639.6	-10.441	ug/L	-10.441	ppb	08:37:19
2	Ni 231.604†	280.4	245.7	5.6851	ug/L	5.6851	ppb	08:37:19

2	P 214.914†	587.8	472.7	107.76	ug/L	107.76 ppb	08:37:19
2	Pb 220.353†	-552.6	-586.2	15.843	ug/L	15.843 ppb	08:37:19
2	S 181.975 Axial†	102.3	79.6	8.8127	ug/L	8.8127 ppb	08:37:19
2	Sb 206.836†	51.5	26.8	-0.9806	ug/L	-0.9806 ppb	08:37:19
2	Se 196.026†	-2486.1	-2916.3	-250.79	ug/L	-250.79 ppb	08:37:19
2	Si 251.611†	-513.5	-1058.0	-30.818	ug/L	-30.818 ppb	08:37:19
2	Sn 189.927†	-389.4	-466.3	-20.709	ug/L	-20.709 ppb	08:37:19
2	Ti 334.940†	-8570.3	-9037.5	4.2951	ug/L	4.2951 ppb	08:36:59
2	Tl 190.801†	-106.2	-93.3	-12.214	ug/L	-12.214 ppb	08:37:19
2	U 409.014†	430645.6	512547.8	14066	ug/L	14066 ppb	08:36:59
2	V 292.402†	2197.4	3961.4	-0.9096	ug/L	-0.9096 ppb	08:37:19
2	Zn 213.857†	6159.1	6674.3	1.2507	ug/L	1.2507 ppb	08:37:19
2	SiO2†	-605.6	-1184.9	-74.162	ug/L	-74.162 ppb	08:37:56
3	Sc Radial	5165.7	5165.7	88.4	%		08:36:27
3	Y RADIAL	5522.4	5522.4	87.83	%		08:36:27
3	Al 396.153Radial†	642891.5	727321.1	505220	ug/L	505220 ppb	08:36:21
3	Ca 317.933Radial†	278315.4	314841.6	464060	ug/L	464060 ppb	08:36:21
3	Fe 238.204 Radial†	39710.3	44917.3	420510	ug/L	420510 ppb	08:36:27
3	K 766.490 Radial†	3439.3	1539.1	94.417	ug/L	94.417 ppb	08:36:27
3	Mg 279.077 IEC†	11899.8	13461.0	474520	ug/L	474520 ppb	08:36:27
3	Na 589.592 Radial†	1210113.3	1370084.6	459770	ug/L	459770 ppb	08:36:21
3	Sr 421.552†	717.5	839.1	0.9243	ug/L	0.9243 ppb	08:36:27
3	Sc 361.383	772776.7	772776.7	85.744	%		08:37:25
3	Y 371.029	625753.3	625753.3	83.313	%		08:37:25
3	Ag 328.068†	-22889.6	-26988.2	-7.1932	ug/L	-7.1932 ppb	08:37:25
3	As 188.979†	-196.3	-204.7	-16.043	ug/L	-16.043 ppb	08:37:45
3	B 249.677†	1532.1	2317.5	-7.1964	ug/L	-7.1964 ppb	08:37:25
3	Ba 233.527†	-1572.7	-1825.8	2.1229	ug/L	2.1229 ppb	08:37:45
3	Be 313.107†	-12043.2	-8932.6	-3.2847	ug/L	-3.2847 ppb	08:37:25
3	Cd 226.502†	3599.9	4393.5	4.4090	ug/L	4.4090 ppb	08:37:45
3	Co 228.616†	199.7	298.3	-0.4121	ug/L	-0.4121 ppb	08:37:45
3	Cr 267.716†	74.0	7.7	3.0910	ug/L	3.0910 ppb	08:37:45
3	Cu 324.752†	1115.2	-5456.1	5.8371	ug/L	5.8371 ppb	08:37:25
3	Mn 257.610†	-25593.9	-30271.7	0.8010	ug/L	0.8010 ppb	08:37:25
3	Mo 202.031†	-517.6	-622.0	-9.6842	ug/L	-9.6842 ppb	08:37:45
3	Ni 231.604†	292.4	254.5	5.8899	ug/L	5.8899 ppb	08:37:45
3	P 214.914†	577.1	449.5	92.795	ug/L	92.795 ppb	08:37:45
3	Pb 220.353†	-556.8	-581.0	13.099	ug/L	13.099 ppb	08:37:45
3	S 181.975 Axial†	91.4	65.0	-8.2624	ug/L	-8.2624 ppb	08:37:45
3	Sb 206.836†	35.6	7.3	-6.7597	ug/L	-6.7597 ppb	08:37:45
3	Se 196.026†	-2465.4	-2846.5	-229.50	ug/L	-229.50 ppb	08:37:45
3	Si 251.611†	-520.1	-1056.3	-30.784	ug/L	-30.784 ppb	08:37:45
3	Sn 189.927†	-398.3	-469.5	-22.789	ug/L	-22.789 ppb	08:37:45
3	Ti 334.940†	-8828.6	-9181.6	3.3055	ug/L	3.3055 ppb	08:37:25
3	Tl 190.801†	-95.8	-79.2	-8.7262	ug/L	-8.7262 ppb	08:37:45
3	U 409.014†	438523.0	513836.9	14102	ug/L	14102 ppb	08:37:25
3	V 292.402†	2204.3	3929.2	-0.3636	ug/L	-0.3636 ppb	08:37:45
3	Zn 213.857†	6143.8	6543.5	0.7426	ug/L	0.7426 ppb	08:37:45
3	SiO2†	-603.9	-1171.7	-73.351	ug/L	-73.351 ppb	08:38:01

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	768296.6	85.247	%	0.7238				0.85%
Sc Radial	5071.2	86.8	%	1.45				1.68%
Y 371.029	623138.3	82.965	%	0.6338				0.76%
Y RADIAL	5425.9	86.29	%	1.329				1.54%
Ag 328.068†	-26897.0	-5.1991	ug/L	1.98666	-5.1991	ppb	1.98666	38.21%
Al 396.153Radial†	746009.9	518200	ug/L	11573.9	518200	ppb	11573.9	2.23%
QC value within limits for Al 396.153Radial Recovery = 103.64%								
As 188.979†	-211.0	-17.669	ug/L	1.9221	-17.669	ppb	1.9221	10.88%
B 249.677†	2250.4	-9.3278	ug/L	2.14768	-9.3278	ppb	2.14768	23.02%
Ba 233.527†	-1788.7	2.5990	ug/L	0.41885	2.5990	ppb	0.41885	16.12%
Be 313.107†	-8891.5	-3.2698	ug/L	0.01747	-3.2698	ppb	0.01747	0.53%
Ca 317.933Radial†	322608.0	475510	ug/L	10331.3	475510	ppb	10331.3	2.17%
QC value within limits for Ca 317.933Radial Recovery = 95.10%								
Cd 226.502†	4443.9	4.3960	ug/L	0.53322	4.3960	ppb	0.53322	12.13%
Co 228.616†	299.6	-0.4640	ug/L	0.10017	-0.4640	ppb	0.10017	21.59%
Cr 267.716†	24.7	3.3712	ug/L	0.45693	3.3712	ppb	0.45693	13.55%
Cu 324.752†	-5450.9	6.1302	ug/L	0.26219	6.1302	ppb	0.26219	4.28%

Fe 238.204 Radial†	45500.4	425970 ug/L	5657.7	425970 ppb	5657.7	1.33%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 85.19%						
K 766.490 Radial†	1616.3	102.69 ug/L	15.907	102.69 ppb	15.907	15.49%
Mg 279.077 IEC†	13627.6	480400 ug/L	6742.2	480400 ppb	6742.2	1.40%
QC value within limits for Mg 279.077 IEC Recovery = 96.08%						
Mn 257.610†	-30280.6	1.2263 ug/L	0.37865	1.2263 ppb	0.37865	30.88%
Mo 202.031†	-618.7	-9.0891 ug/L	1.72772	-9.0891 ppb	1.72772	19.01%
Na 589.592 Radial†	1410798.2	473440 ug/L	12250.8	473440 ppb	12250.8	2.59%
QC value within limits for Na 589.592 Radial Recovery = 94.69%						
Ni 231.604†	248.4	5.7484 ug/L	0.12280	5.7484 ppb	0.12280	2.14%
P 214.914†	464.6	101.51 ug/L	7.782	101.51 ppb	7.782	7.67%
Pb 220.353†	-583.8	15.241 ug/L	1.9138	15.241 ppb	1.9138	12.56%
S 181.975 Axial†	78.2	7.6395 ug/L	15.34901	7.6395 ppb	15.34901	200.92%
Sb 206.836†	25.3	-1.3456 ug/L	5.24120	-1.3456 ppb	5.24120	389.52%
Se 196.026†	-2879.1	-228.77 ug/L	22.392	-228.77 ppb	22.392	9.79%
Si 251.611†	-1081.9	-31.559 ug/L	1.3131	-31.559 ppb	1.3131	4.16%
Sn 189.927†	-469.4	-21.508 ug/L	1.1209	-21.508 ppb	1.1209	5.21%
Sr 421.552†	841.4	0.8324 ug/L	0.08875	0.8324 ppb	0.08875	10.66%
Ti 334.940†	-9192.9	3.8911 ug/L	0.51918	3.8911 ppb	0.51918	13.34%
Tl 190.801†	-87.5	-10.703 ug/L	1.7899	-10.703 ppb	1.7899	16.72%
U 409.014†	513293.1	14086 ug/L	18.5	14086 ppb	18.5	0.13%
QC value within limits for U 409.014 Recovery = 93.91%						
V 292.402†	3875.8	-1.4400 ug/L	1.41804	-1.4400 ppb	1.41804	98.48%
Zn 213.857†	6602.5	0.5360 ug/L	0.83740	0.5360 ppb	0.83740	156.24%
SiO2†	-1201.2	-75.261 ug/L	2.6374	-75.261 ppb	2.6374	3.50%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/8/2009 08:40:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5467.0	5467.0	93.5	%			08:42:08
1	Y RADIAL	5820.4	5820.4	92.57	%			08:42:08
1	Al 396.153Radial†	648.2	713.3	73.153	ug/L	73.153	ppb	08:42:08
1	Ca 317.933Radial†	40.2	27.3	40.294	ug/L	40.294	ppb	08:42:28
1	Fe 238.204 Radial†	-20.2	-28.4	30.402	ug/L	30.402	ppb	08:42:28
1	K 766.490 Radial†	1630640.1	1740720.3	308600	ug/L	308600	ppb	08:42:03
1	Mg 279.077 IEC†	-4.9	-6.4	-27.533	ug/L	-27.533	ppb	08:42:28
1	Na 589.592 Radial†	-395.2	665.5	223.32	ug/L	223.32	ppb	08:42:08
1	Sr 421.552†	1474708.6	1576416.5	9817.5	ug/L	9817.5	ppb	08:42:03
1	Sc 361.383	867124.6	867124.6	96.212	%			08:43:46
1	Y 371.029	701273.1	701273.1	93.368	%			08:43:46
1	Ag 328.068†	-7380.9	-7964.3	3.0125	ug/L	3.0125	ppb	08:43:51
1	As 188.979†	24239.3	25217.9	10051	ug/L	10051	ppb	08:43:51
1	B 249.677†	225599.7	235012.5	4904.6	ug/L	4904.6	ppb	08:43:46
1	Ba 233.527†	1819903.5	1891563.5	14041	ug/L	14041	ppb	08:43:46
1	Be 313.107†	7677022.8	7984388.4	2930.5	ug/L	2930.5	ppb	08:43:39
1	Cd 226.502†	883298.9	918270.4	9713.7	ug/L	9713.7	ppb	08:43:46
1	Co 228.616†	476506.8	495332.8	9401.0	ug/L	9401.0	ppb	08:43:51
1	Cr 267.716†	2192143.9	2278372.3	23934	ug/L	23934	ppb	08:43:46
1	Cu 324.752†	6813641.4	7075145.1	20247	ug/L	20247	ppb	08:43:39
1	Mn 257.610†	8511935.4	8846637.1	9437.0	ug/L	9437.0	ppb	08:43:39
1	Mo 202.031†	149411.9	155276.0	9864.1	ug/L	9864.1	ppb	08:43:51
1	Ni 231.604†	406202.4	422108.5	9768.5	ug/L	9768.5	ppb	08:43:46
1	P 214.914†	30887.7	31880.2	15285	ug/L	15285	ppb	08:43:51
1	Pb 220.353†	205565.7	213727.5	24170	ug/L	24170	ppb	08:43:51
1	S 181.975 Axial†	36410.6	37802.5	52971	ug/L	52971	ppb	08:43:51
1	Sb 206.836†	32057.5	33285.4	10343	ug/L	10343	ppb	08:43:51
1	Se 196.026†	16842.4	17534.3	10169	ug/L	10169	ppb	08:43:51
1	Si 251.611†	1547757.8	1608245.0	47837	ug/L	47837	ppb	08:43:46
1	Sn 189.927†	62087.1	64526.6	10565	ug/L	10565	ppb	08:43:51
1	Ti 334.940†	6182963.9	6427508.7	10249	ug/L	10249	ppb	08:43:39
1	Tl 190.801†	33155.5	34493.4	9723.9	ug/L	9723.9	ppb	08:43:51
1	U 409.014†	-1235.9	1117.3	-15.386	ug/L	-15.386	ppb	08:43:51
1	V 292.402†	1452120.7	1510650.6	10098	ug/L	10098	ppb	08:43:46
1	Zn 213.857†	1555331.3	1615944.6	14031	ug/L	14031	ppb	08:43:46
1	SiO2†	1561537.4	1622549.4	103410	ug/L	103410	ppb	08:44:38
2	Sc Radial	5444.5	5444.5	93.2	%			08:42:39
2	Y RADIAL	5757.5	5757.5	91.57	%			08:42:39
2	Al 396.153Radial†	634.7	701.7	68.198	ug/L	68.198	ppb	08:42:39
2	Ca 317.933Radial†	40.9	28.3	41.687	ug/L	41.687	ppb	08:42:59
2	Fe 238.204 Radial†	-21.6	-30.0	14.286	ug/L	14.286	ppb	08:42:59
2	K 766.490 Radial†	1678331.1	1799114.9	318960	ug/L	318960	ppb	08:42:34
2	Mg 279.077 IEC†	-4.3	-5.8	-5.8103	ug/L	-5.8103	ppb	08:42:59
2	Na 589.592 Radial†	-444.2	611.2	205.10	ug/L	205.10	ppb	08:42:39
2	Sr 421.552†	1524852.5	1636755.0	10193	ug/L	10193	ppb	08:42:34
2	Sc 361.383	875997.1	875997.1	97.196	%			08:44:05
2	Y 371.029	706892.2	706892.2	94.116	%			08:44:05
2	Ag 328.068†	-7542.1	-8052.4	2.5047	ug/L	2.5047	ppb	08:44:11
2	As 188.979†	24445.9	25175.2	10032	ug/L	10032	ppb	08:44:11
2	B 249.677†	227893.7	234997.7	4904.4	ug/L	4904.4	ppb	08:44:05
2	Ba 233.527†	1836991.3	1889985.5	14029	ug/L	14029	ppb	08:44:05
2	Be 313.107†	7606544.6	7831059.2	2874.2	ug/L	2874.2	ppb	08:43:59
2	Cd 226.502†	890702.9	916589.3	9695.9	ug/L	9695.9	ppb	08:44:05
2	Co 228.616†	478916.3	492795.5	9353.1	ug/L	9353.1	ppb	08:44:11
2	Cr 267.716†	2207826.3	2271429.7	23862	ug/L	23862	ppb	08:44:05
2	Cu 324.752†	6728151.8	6915460.5	19790	ug/L	19790	ppb	08:43:59
2	Mn 257.610†	8436455.1	8679372.2	9258.6	ug/L	9258.6	ppb	08:43:59
2	Mo 202.031†	149840.4	154144.1	9792.2	ug/L	9792.2	ppb	08:44:11
2	Ni 231.604†	409458.3	421182.0	9747.1	ug/L	9747.1	ppb	08:44:05

2	P 214.914†	31072.0	31744.7	15279	ug/L	15279 ppb	08:44:11
2	Pb 220.353†	206625.4	212653.7	24048	ug/L	24048 ppb	08:44:11
2	S 181.975 Axial†	36505.0	37516.4	52570	ug/L	52570 ppb	08:44:11
2	Sb 206.836†	32226.2	33121.5	10291	ug/L	10291 ppb	08:44:11
2	Se 196.026†	16905.3	17421.7	10103	ug/L	10103 ppb	08:44:11
2	Si 251.611†	1563796.3	1608452.5	47841	ug/L	47841 ppb	08:44:05
2	Sn 189.927†	62338.6	64131.7	10500	ug/L	10500 ppb	08:44:11
2	Ti 334.940†	6117371.6	6294934.8	10037	ug/L	10037 ppb	08:43:59
2	Tl 190.801†	33295.1	34288.0	9664.0	ug/L	9664.0 ppb	08:44:11
2	U 409.014†	-1090.5	1279.9	-10.764	ug/L	-10.764 ppb	08:44:11
2	V 292.402†	1463232.8	1506796.3	10072	ug/L	10072 ppb	08:44:05
2	Zn 213.857†	1567638.7	1612233.5	13999	ug/L	13999 ppb	08:44:05
2	SiO2†	1556021.4	1600435.5	101990	ug/L	101990 ppb	08:44:45
3	Sc Radial	5627.2	5627.2	96.3	%		08:43:09
3	Y RADIAL	5959.5	5959.5	94.78	%		08:43:09
3	Al 396.153Radial†	620.4	664.7	38.156	ug/L	38.156 ppb	08:43:09
3	Ca 317.933Radial†	43.5	29.6	43.629	ug/L	43.629 ppb	08:43:29
3	Fe 238.204 Radial†	-20.6	-28.2	34.402	ug/L	34.402 ppb	08:43:29
3	K 766.490 Radial†	1663829.2	1725552.7	305910	ug/L	305910 ppb	08:43:04
3	Mg 279.077 IEC†	-2.4	-3.7	71.666	ug/L	71.666 ppb	08:43:29
3	Na 589.592 Radial†	-505.0	563.5	189.12	ug/L	189.12 ppb	08:43:09
3	Sr 421.552†	1503489.9	1561417.6	9724.1	ug/L	9724.1 ppb	08:43:04
3	Sc 361.383	860972.2	860972.2	95.529	%		08:44:25
3	Y 371.029	693995.6	693995.6	92.399	%		08:44:25
3	Ag 328.068†	-7391.7	-8030.3	2.6685	ug/L	2.6685 ppb	08:44:30
3	As 188.979†	24137.2	25291.0	10079	ug/L	10079 ppb	08:44:30
3	B 249.677†	224130.1	235149.6	4907.3	ug/L	4907.3 ppb	08:44:25
3	Ba 233.527†	1812109.2	1896921.1	14081	ug/L	14081 ppb	08:44:25
3	Be 313.107†	7558719.3	7917566.9	2906.0	ug/L	2906.0 ppb	08:44:19
3	Cd 226.502†	877962.6	919244.8	9724.0	ug/L	9724.0 ppb	08:44:25
3	Co 228.616†	475940.9	498279.5	9457.1	ug/L	9457.1 ppb	08:44:30
3	Cr 267.716†	2176726.4	2278514.6	23936	ug/L	23936 ppb	08:44:25
3	Cu 324.752†	6705646.3	7012701.8	20068	ug/L	20068 ppb	08:44:19
3	Mn 257.610†	8434113.9	8828393.0	9417.6	ug/L	9417.6 ppb	08:44:19
3	Mo 202.031†	148782.4	155726.8	9892.7	ug/L	9892.7 ppb	08:44:30
3	Ni 231.604†	403751.5	422559.8	9778.9	ug/L	9778.9 ppb	08:44:25
3	P 214.914†	30822.4	32041.3	15407	ug/L	15407 ppb	08:44:30
3	Pb 220.353†	205278.5	214953.7	24308	ug/L	24308 ppb	08:44:30
3	S 181.975 Axial†	36042.6	37687.8	52810	ug/L	52810 ppb	08:44:30
3	Sb 206.836†	31930.0	33390.0	10378	ug/L	10378 ppb	08:44:30
3	Se 196.026†	16715.5	17526.6	10164	ug/L	10164 ppb	08:44:30
3	Si 251.611†	1540381.3	1612018.7	47950	ug/L	47950 ppb	08:44:25
3	Sn 189.927†	61948.9	64843.0	10617	ug/L	10617 ppb	08:44:30
3	Ti 334.940†	6107035.0	6393948.3	10195	ug/L	10195 ppb	08:44:19
3	Tl 190.801†	33080.3	34660.9	9770.0	ug/L	9770.0 ppb	08:44:30
3	U 409.014†	-984.4	1371.4	-8.3904	ug/L	-8.3904 ppb	08:44:30
3	V 292.402†	1440370.5	1509135.6	10089	ug/L	10089 ppb	08:44:25
3	Zn 213.857†	1547039.7	1618816.6	14056	ug/L	14056 ppb	08:44:25
3	SiO2†	1561660.1	1634275.6	104160	ug/L	104160 ppb	08:44:52

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868031.3	96.313	%	0.8381				0.87%
Sc Radial	5512.9	94.3	%	1.71				1.81%
Y 371.029	700720.3	93.295	%	0.8609				0.92%
Y RADIAL	5845.8	92.97	%	1.643				1.77%
Ag 328.068†	-8015.7	2.7286	ug/L	0.25915	2.7286	ppb	0.25915	9.50%
Al 396.153Radial†	693.2	59.836	ug/L	18.9377	59.836	ppb	18.9377	31.65%
As 188.979†	25228.0	10054	ug/L	23.7	10054	ppb	23.7	0.24%
QC value within limits for As 188.979 Recovery = 100.54%								
B 249.677†	235053.3	4905.5	ug/L	1.63	4905.5	ppb	1.63	0.03%
QC value within limits for B 249.677 Recovery = 98.11%								
Ba 233.527†	1892823.4	14050	ug/L	27.0	14050	ppb	27.0	0.19%
QC value within limits for Ba 233.527 Recovery = 93.67%								
Be 313.107†	7911004.8	2903.6	ug/L	28.23	2903.6	ppb	28.23	0.97%
QC value within limits for Be 313.107 Recovery = 96.79%								
Ca 317.933Radial†	28.4	41.870	ug/L	1.6750	41.870	ppb	1.6750	4.00%
Cd 226.502†	918034.8	9711.2	ug/L	14.21	9711.2	ppb	14.21	0.15%
QC value within limits for Cd 226.502 Recovery = 97.11%								

Co 228.616†	495469.3	9403.8 ug/L	52.05	9403.8 ppb	52.05	0.55%
QC value within limits for Co 228.616 Recovery = 94.04%						
Cr 267.716†	2276105.6	23911 ug/L	42.5	23911 ppb	42.5	0.18%
QC value within limits for Cr 267.716 Recovery = 95.64%						
Cu 324.752†	7001102.5	20035 ug/L	230.3	20035 ppb	230.3	1.15%
QC value within limits for Cu 324.752 Recovery = 100.18%						
Fe 238.204 Radial†	-28.9	26.363 ug/L	10.6490	26.363 ppb	10.6490	40.39%
K 766.490 Radial†	1755129.3	311160 ug/L	6888.6	311160 ppb	6888.6	2.21%
QC value within limits for K 766.490 Radial Recovery = 103.72%						
Mg 279.077 IEC†	-5.3	12.774 ug/L	52.1454	12.774 ppb	52.1454	408.21%
Mn 257.610†	8784800.8	9371.1 ug/L	97.88	9371.1 ppb	97.88	1.04%
QC value within limits for Mn 257.610 Recovery = 93.71%						
Mo 202.031†	155049.0	9849.6 ug/L	51.80	9849.6 ppb	51.80	0.53%
QC value within limits for Mo 202.031 Recovery = 98.50%						
Na 589.592 Radial†	613.4	205.85 ug/L	17.116	205.85 ppb	17.116	8.32%
Ni 231.604†	421950.1	9764.9 ug/L	16.23	9764.9 ppb	16.23	0.17%
QC value within limits for Ni 231.604 Recovery = 97.65%						
P 214.914†	31888.7	15324 ug/L	72.3	15324 ppb	72.3	0.47%
QC value within limits for P 214.914 Recovery = 102.16%						
Pb 220.353†	213778.3	24175 ug/L	130.1	24175 ppb	130.1	0.54%
QC value within limits for Pb 220.353 Recovery = 96.70%						
S 181.975 Axial†	37668.9	52784 ug/L	201.8	52784 ppb	201.8	0.38%
QC value within limits for S 181.975 Axial Recovery = 105.57%						
Sb 206.836†	33265.6	10337 ug/L	43.8	10337 ppb	43.8	0.42%
QC value within limits for Sb 206.836 Recovery = 103.37%						
Se 196.026†	17494.2	10145 ug/L	36.5	10145 ppb	36.5	0.36%
QC value within limits for Se 196.026 Recovery = 101.45%						
Si 251.611†	1609572.1	47876 ug/L	64.2	47876 ppb	64.2	0.13%
QC value within limits for Si 251.611 Recovery = 95.75%						
Sn 189.927†	64500.4	10561 ug/L	58.4	10561 ppb	58.4	0.55%
QC value within limits for Sn 189.927 Recovery = 105.61%						
Sr 421.552†	1591529.7	9911.6 ug/L	248.35	9911.6 ppb	248.35	2.51%
QC value within limits for Sr 421.552 Recovery = 99.12%						
Ti 334.940†	6372130.6	10160 ug/L	110.0	10160 ppb	110.0	1.08%
QC value within limits for Ti 334.940 Recovery = 101.60%						
Tl 190.801†	34480.7	9719.3 ug/L	53.15	9719.3 ppb	53.15	0.55%
QC value within limits for Tl 190.801 Recovery = 97.19%						
U 409.014†	1256.2	-11.514 ug/L	3.5577	-11.514 ppb	3.5577	30.90%
V 292.402†	1508860.8	10086 ug/L	13.3	10086 ppb	13.3	0.13%
QC value within limits for V 292.402 Recovery = 100.86%						
Zn 213.857†	1615664.9	14029 ug/L	28.5	14029 ppb	28.5	0.20%
QC value within limits for Zn 213.857 Recovery = 93.53%						
SiO2†	1619086.8	103190 ug/L	1105.0	103190 ppb	1105.0	1.07%
QC value within limits for SiO2 Recovery = 96.44%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 08:47:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5782.1	5782.1	98.9	%			08:48:55
1	Y RADIAL	6146.7	6146.7	97.76	%			08:48:55
1	Al 396.153Radial†	7076.6	7172.7	4961.1	ug/L	4961.1	ppb	08:48:55
1	Ca 317.933Radial†	3407.2	3428.0	5052.7	ug/L	5052.7	ppb	08:49:15
1	Fe 238.204 Radial†	532.6	531.5	4991.6	ug/L	4991.6	ppb	08:49:15
1	K 766.490 Radial†	32409.0	30403.6	5383.4	ug/L	5383.4	ppb	08:48:55
1	Mg 279.077 IEC†	148.2	148.6	5249.8	ug/L	5249.8	ppb	08:49:15
1	Na 589.592 Radial†	25995.9	27361.6	9182.0	ug/L	9182.0	ppb	08:48:55
1	Sr 421.552†	78123.6	78985.8	491.86	ug/L	491.86	ppb	08:48:55
1	Sc 361.383	915700.9	915700.9	101.60	%			08:50:12
1	Y 371.029	748883.0	748883.0	99.707	%			08:50:12
1	Ag 328.068†	111463.9	109413.9	498.59	ug/L	498.59	ppb	08:50:17
1	As 188.979†	1317.5	1320.9	526.25	ug/L	526.25	ppb	08:50:37
1	B 249.677†	24216.2	24365.1	509.06	ug/L	509.06	ppb	08:50:17
1	Ba 233.527†	67026.7	65978.4	490.26	ug/L	490.26	ppb	08:50:17
1	Be 313.107†	1367141.0	1350700.0	493.30	ug/L	493.30	ppb	08:50:12
1	Cd 226.502†	47097.9	46550.5	491.92	ug/L	491.92	ppb	08:50:17
1	Co 228.616†	26192.0	25844.5	490.66	ug/L	490.66	ppb	08:50:17
1	Cr 267.716†	47478.6	46651.4	490.51	ug/L	490.51	ppb	08:50:17
1	Cu 324.752†	179450.2	169864.4	486.36	ug/L	486.36	ppb	08:50:17
1	Mn 257.610†	468544.1	460734.8	491.88	ug/L	491.88	ppb	08:50:12
1	Mo 202.031†	7937.6	7794.1	495.48	ug/L	495.48	ppb	08:50:37
1	Ni 231.604†	21717.3	21288.4	492.65	ug/L	492.65	ppb	08:50:17
1	P 214.914†	4496.1	4201.7	2349.8	ug/L	2349.8	ppb	08:50:37
1	Pb 220.353†	4339.1	4339.2	492.07	ug/L	492.07	ppb	08:50:37
1	S 181.975 Axial†	768.7	715.0	1001.0	ug/L	1001.0	ppb	08:50:37
1	Sb 206.836†	1660.7	1600.3	513.72	ug/L	513.72	ppb	08:50:37
1	Se 196.026†	829.5	845.2	506.85	ug/L	506.85	ppb	08:50:37
1	Si 251.611†	83963.3	82189.9	2448.4	ug/L	2448.4	ppb	08:50:17
1	Sn 189.927†	3091.0	3037.3	497.89	ug/L	497.89	ppb	08:50:37
1	Ti 334.940†	314148.2	310310.4	495.07	ug/L	495.07	ppb	08:50:17
1	Tl 190.801†	1753.9	1758.8	495.78	ug/L	495.78	ppb	08:50:37
1	U 409.014†	15497.7	17655.2	484.78	ug/L	484.78	ppb	08:50:17
1	V 292.402†	73683.2	73879.9	494.61	ug/L	494.61	ppb	08:50:17
1	Zn 213.857†	58008.6	56472.2	488.98	ug/L	488.98	ppb	08:50:17
1	SiO2†	84671.3	82869.0	5289.8	ug/L	5289.8	ppb	08:51:45
2	Sc Radial	5788.5	5788.5	99.1	%			08:49:20
2	Y RADIAL	6144.8	6144.8	97.73	%			08:49:20
2	Al 396.153Radial†	7103.7	7192.2	4974.5	ug/L	4974.5	ppb	08:49:20
2	Ca 317.933Radial†	3346.8	3363.2	4957.2	ug/L	4957.2	ppb	08:49:40
2	Fe 238.204 Radial†	527.8	526.1	4940.5	ug/L	4940.5	ppb	08:49:40
2	K 766.490 Radial†	32276.6	30234.0	5353.3	ug/L	5353.3	ppb	08:49:20
2	Mg 279.077 IEC†	146.4	146.7	5180.9	ug/L	5180.9	ppb	08:49:40
2	Na 589.592 Radial†	25876.0	27211.8	9131.8	ug/L	9131.8	ppb	08:49:20
2	Sr 421.552†	78170.1	78946.0	491.61	ug/L	491.61	ppb	08:49:20
2	Sc 361.383	916693.8	916693.8	101.71	%			08:50:43
2	Y 371.029	749698.1	749698.1	99.815	%			08:50:43
2	Ag 328.068†	111726.1	109552.8	499.21	ug/L	499.21	ppb	08:50:48
2	As 188.979†	1322.7	1324.7	527.73	ug/L	527.73	ppb	08:51:08
2	B 249.677†	24303.2	24424.8	510.31	ug/L	510.31	ppb	08:50:48
2	Ba 233.527†	67467.5	66340.4	492.94	ug/L	492.94	ppb	08:50:48
2	Be 313.107†	1368824.6	1350897.8	493.38	ug/L	493.38	ppb	08:50:43
2	Cd 226.502†	47404.8	46802.0	494.59	ug/L	494.59	ppb	08:50:48
2	Co 228.616†	26331.6	25953.8	492.74	ug/L	492.74	ppb	08:50:48
2	Cr 267.716†	47593.6	46713.8	491.16	ug/L	491.16	ppb	08:50:48
2	Cu 324.752†	179807.8	170024.6	486.81	ug/L	486.81	ppb	08:50:48
2	Mn 257.610†	469543.6	461218.1	492.39	ug/L	492.39	ppb	08:50:43
2	Mo 202.031†	8012.0	7858.8	499.59	ug/L	499.59	ppb	08:51:08
2	Ni 231.604†	21790.2	21336.9	493.77	ug/L	493.77	ppb	08:50:48

2	P 214.914†	4553.2	4253.0	2379.4 ug/L	2379.4 ppb	08:51:08
2	Pb 220.353†	4360.0	4355.1	493.88 ug/L	493.88 ppb	08:51:08
2	S 181.975 Axial†	776.7	722.1	1010.8 ug/L	1010.8 ppb	08:51:08
2	Sb 206.836†	1674.2	1611.8	517.49 ug/L	517.49 ppb	08:51:08
2	Se 196.026†	850.9	865.4	518.35 ug/L	518.35 ppb	08:51:08
2	Si 251.611†	84254.2	82386.4	2454.3 ug/L	2454.3 ppb	08:50:48
2	Sn 189.927†	3110.0	3052.7	500.40 ug/L	500.40 ppb	08:51:08
2	Ti 334.940†	315465.2	311270.3	496.60 ug/L	496.60 ppb	08:50:48
2	Tl 190.801†	1762.5	1765.4	497.62 ug/L	497.62 ppb	08:51:08
2	U 409.014†	15551.4	17691.4	485.78 ug/L	485.78 ppb	08:50:48
2	V 292.402†	73936.6	74050.4	495.80 ug/L	495.80 ppb	08:50:48
2	Zn 213.857†	58308.9	56705.6	491.02 ug/L	491.02 ppb	08:50:48
2	SiO2†	84289.9	82403.7	5259.8 ug/L	5259.8 ppb	08:51:50
3	Sc Radial	5847.4	5847.4	100 %		08:49:45
3	Y RADIAL	6208.4	6208.4	98.74 %		08:49:45
3	Al 396.153Radial†	7161.0	7177.2	4964.1 ug/L	4964.1 ppb	08:49:45
3	Ca 317.933Radial†	3361.4	3343.9	4928.7 ug/L	4928.7 ppb	08:50:05
3	Fe 238.204 Radial†	533.2	526.1	4940.8 ug/L	4940.8 ppb	08:50:05
3	K 766.490 Radial†	32465.1	30094.2	5328.5 ug/L	5328.5 ppb	08:49:45
3	Mg 279.077 IEC†	147.3	146.0	5157.2 ug/L	5157.2 ppb	08:50:05
3	Na 589.592 Radial†	26135.2	27207.7	9130.4 ug/L	9130.4 ppb	08:49:45
3	Sr 421.552†	79104.0	79084.6	492.47 ug/L	492.47 ppb	08:49:45
3	Sc 361.383	913157.2	913157.2	101.32 %		08:51:14
3	Y 371.029	746146.8	746146.8	99.343 %		08:51:14
3	Ag 328.068†	111949.4	110198.7	502.13 ug/L	502.13 ppb	08:51:19
3	As 188.979†	1322.9	1329.9	529.82 ug/L	529.82 ppb	08:51:39
3	B 249.677†	24230.2	24445.3	510.73 ug/L	510.73 ppb	08:51:19
3	Ba 233.527†	67345.5	66476.8	493.96 ug/L	493.96 ppb	08:51:19
3	Be 313.107†	1359749.2	1347152.8	492.02 ug/L	492.02 ppb	08:51:14
3	Cd 226.502†	47198.8	46779.2	494.35 ug/L	494.35 ppb	08:51:19
3	Co 228.616†	26403.8	26125.3	495.99 ug/L	495.99 ppb	08:51:19
3	Cr 267.716†	47416.6	46720.4	491.23 ug/L	491.23 ppb	08:51:19
3	Cu 324.752†	180362.3	171256.6	490.34 ug/L	490.34 ppb	08:51:19
3	Mn 257.610†	467972.0	461454.8	492.65 ug/L	492.65 ppb	08:51:14
3	Mo 202.031†	7964.6	7842.6	498.56 ug/L	498.56 ppb	08:51:39
3	Ni 231.604†	21690.8	21321.7	493.42 ug/L	493.42 ppb	08:51:19
3	P 214.914†	4511.2	4229.0	2365.0 ug/L	2365.0 ppb	08:51:39
3	Pb 220.353†	4333.2	4345.2	492.76 ug/L	492.76 ppb	08:51:39
3	S 181.975 Axial†	770.2	718.6	1005.9 ug/L	1005.9 ppb	08:51:39
3	Sb 206.836†	1648.3	1592.6	511.39 ug/L	511.39 ppb	08:51:39
3	Se 196.026†	837.6	855.5	512.64 ug/L	512.64 ppb	08:51:39
3	Si 251.611†	84314.0	82766.2	2465.7 ug/L	2465.7 ppb	08:51:19
3	Sn 189.927†	3099.7	3054.3	500.67 ug/L	500.67 ppb	08:51:39
3	Ti 334.940†	315905.7	312906.3	499.20 ug/L	499.20 ppb	08:51:19
3	Tl 190.801†	1760.2	1769.7	498.86 ug/L	498.86 ppb	08:51:39
3	U 409.014†	15741.3	17938.2	492.58 ug/L	492.58 ppb	08:51:19
3	V 292.402†	73739.7	74137.7	496.37 ug/L	496.37 ppb	08:51:19
3	Zn 213.857†	58213.2	56833.2	492.13 ug/L	492.13 ppb	08:51:19
3	SiO2†	84868.2	83295.4	5317.0 ug/L	5317.0 ppb	08:51:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915183.9	101.54	%	0.202				0.20%
Sc Radial	5806.0	99.4	%	0.62				0.62%
Y 371.029	748242.6	99.622	%	0.2477				0.25%
Y RADIAL	6166.6	98.07	%	0.575				0.59%
Ag 328.068†	109721.8	499.98	ug/L	1.891	499.98	ppb	1.891	0.38%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	7180.7	4966.6	ug/L	7.01	4966.6	ppb	7.01	0.14%
QC value within limits for Al 396.153Radial Recovery = 99.33%								
As 188.979†	1325.2	527.94	ug/L	1.794	527.94	ppb	1.794	0.34%
QC value within limits for As 188.979 Recovery = 105.59%								
B 249.677†	24411.7	510.03	ug/L	0.871	510.03	ppb	0.871	0.17%
QC value within limits for B 249.677 Recovery = 102.01%								
Ba 233.527†	66265.2	492.39	ug/L	1.910	492.39	ppb	1.910	0.39%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	1349583.6	492.90	ug/L	0.764	492.90	ppb	0.764	0.16%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	3378.4	4979.5	ug/L	64.94	4979.5	ppb	64.94	1.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.59%
Cd 226.502†            46710.6      493.62 ug/L        1.474      493.62 ppb          1.474   0.30%
   QC value within limits for Cd 226.502  Recovery = 98.72%
Co 228.616†            25974.5      493.13 ug/L        2.686      493.13 ppb          2.686   0.54%
   QC value within limits for Co 228.616  Recovery = 98.63%
Cr 267.716†            46695.2      490.97 ug/L        0.400      490.97 ppb          0.400   0.08%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†           170381.8      487.84 ug/L        2.179      487.84 ppb          2.179   0.45%
   QC value within limits for Cu 324.752  Recovery = 97.57%
Fe 238.204 Radial†       527.9      4957.6 ug/L       29.40      4957.6 ppb          29.40   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.15%
K 766.490 Radial†      30243.9      5355.1 ug/L       27.45      5355.1 ppb          27.45   0.51%
   QC value within limits for K 766.490 Radial  Recovery = 107.10%
Mg 279.077 IEC†          147.1      5195.9 ug/L       48.14      5195.9 ppb          48.14   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†           461135.9      492.31 ug/L        0.390      492.31 ppb          0.390   0.08%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             7831.8      497.88 ug/L        2.135      497.88 ppb          2.135   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     27260.4      9148.1 ug/L       29.43      9148.1 ppb          29.43   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 91.48%
Ni 231.604†            21315.7      493.28 ug/L        0.574      493.28 ppb          0.574   0.12%
   QC value within limits for Ni 231.604  Recovery = 98.66%
P 214.914†              4227.9      2364.7 ug/L       14.81      2364.7 ppb          14.81   0.63%
   QC value within limits for P 214.914  Recovery = 94.59%
Pb 220.353†             4346.5      492.90 ug/L        0.915      492.90 ppb          0.915   0.19%
   QC value within limits for Pb 220.353  Recovery = 98.58%
S 181.975 Axial†         718.6      1005.9 ug/L        4.92      1005.9 ppb           4.92   0.49%
   QC value within limits for S 181.975 Axial  Recovery = 100.59%
Sb 206.836†             1601.6      514.20 ug/L        3.082      514.20 ppb          3.082   0.60%
   QC value within limits for Sb 206.836  Recovery = 102.84%
Se 196.026†              855.4      512.61 ug/L        5.748      512.61 ppb          5.748   1.12%
   QC value within limits for Se 196.026  Recovery = 102.52%
Si 251.611†            82447.5      2456.1 ug/L        8.75      2456.1 ppb           8.75   0.36%
   QC value within limits for Si 251.611  Recovery = 98.24%
Sn 189.927†             3048.1      499.65 ug/L        1.532      499.65 ppb          1.532   0.31%
   QC value within limits for Sn 189.927  Recovery = 99.93%
Sr 421.552†            79005.5      491.98 ug/L        0.445      491.98 ppb          0.445   0.09%
   QC value within limits for Sr 421.552  Recovery = 98.40%
Ti 334.940†           311495.6      496.96 ug/L        2.090      496.96 ppb          2.090   0.42%
   QC value within limits for Ti 334.940  Recovery = 99.39%
Tl 190.801†             1764.6      497.42 ug/L        1.546      497.42 ppb          1.546   0.31%
   QC value within limits for Tl 190.801  Recovery = 99.48%
U 409.014†             17761.6      487.71 ug/L        4.243      487.71 ppb          4.243   0.87%
   QC value within limits for U 409.014  Recovery = 97.54%
V 292.402†             74022.7      495.60 ug/L        0.899      495.60 ppb          0.899   0.18%
   QC value within limits for V 292.402  Recovery = 99.12%
Zn 213.857†            56670.3      490.71 ug/L        1.599      490.71 ppb          1.599   0.33%
   QC value within limits for Zn 213.857  Recovery = 98.14%
SiO2†                  82856.0      5288.9 ug/L       28.64      5288.9 ppb          28.64   0.54%
   QC value within limits for SiO2  Recovery = 98.90%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 08:54:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.9	5848.9	100	%			08:55:57
1	Y RADIAL	6279.8	6279.8	99.87	%			08:55:57
1	Al 396.153Radial†	-26.0	-5.6	-3.9206	ug/L	-3.9206	ppb	08:55:57
1	Ca 317.933Radial†	21.0	5.4	7.9071	ug/L	7.9071	ppb	08:56:17
1	Fe 238.204 Radial†	5.7	-1.1	-10.330	ug/L	-10.330	ppb	08:56:17
1	K 766.490 Radial†	3182.5	828.1	146.83	ug/L	146.83	ppb	08:55:57
1	Mg 279.077 IEC†	2.1	1.0	34.534	ug/L	34.534	ppb	08:56:17
1	Na 589.592 Radial†	-941.9	146.9	49.290	ug/L	49.290	ppb	08:55:57
1	Sr 421.552†	15.9	43.3	0.2694	ug/L	0.2694	ppb	08:55:57
1	Sc 361.383	901425.1	901425.1	100.02	%			08:57:14
1	Y 371.029	753544.9	753544.9	100.33	%			08:57:14
1	Ag 328.068†	368.5	75.7	0.3398	ug/L	0.3398	ppb	08:57:14
1	As 188.979†	15.2	39.3	15.531	ug/L	15.531	ppb	08:57:34
1	B 249.677†	312.7	843.3	17.688	ug/L	17.688	ppb	08:57:34
1	Ba 233.527†	11.1	19.6	0.1457	ug/L	0.1457	ppb	08:57:34
1	Be 313.107†	-4890.2	223.7	0.0819	ug/L	0.0819	ppb	08:57:14
1	Cd 226.502†	-156.4	38.7	0.4107	ug/L	0.4107	ppb	08:57:34
1	Co 228.616†	-74.1	-8.7	-0.1627	ug/L	-0.1627	ppb	08:57:34
1	Cr 267.716†	79.8	1.2	0.0123	ug/L	0.0123	ppb	08:57:34
1	Cu 324.752†	6899.0	141.1	0.4032	ug/L	0.4032	ppb	08:57:14
1	Mn 257.610†	479.6	57.2	0.0593	ug/L	0.0593	ppb	08:57:34
1	Mo 202.031†	34.7	16.4	1.0403	ug/L	1.0403	ppb	08:57:34
1	Ni 231.604†	94.7	8.1	0.1884	ug/L	0.1884	ppb	08:57:34
1	P 214.914†	218.2	-5.3	-3.0892	ug/L	-3.0892	ppb	08:57:34
1	Pb 220.353†	-50.4	18.1	2.0453	ug/L	2.0453	ppb	08:57:34
1	S 181.975 Axial†	42.4	0.8	1.0843	ug/L	1.0843	ppb	08:57:34
1	Sb 206.836†	62.0	27.7	8.8422	ug/L	8.8422	ppb	08:57:34
1	Se 196.026†	-16.2	12.6	7.2774	ug/L	7.2774	ppb	08:57:34
1	Si 251.611†	602.0	152.3	4.4842	ug/L	4.4842	ppb	08:57:34
1	Sn 189.927†	18.6	13.6	2.2351	ug/L	2.2351	ppb	08:57:34
1	Ti 334.940†	-1003.7	111.4	0.1774	ug/L	0.1774	ppb	08:57:14
1	Tl 190.801†	-20.6	11.9	3.3333	ug/L	3.3333	ppb	08:57:34
1	U 409.014†	-2337.6	64.6	1.7809	ug/L	1.7809	ppb	08:57:14
1	V 292.402†	-1287.7	70.9	0.4890	ug/L	0.4890	ppb	08:57:14
1	Zn 213.857†	853.4	231.4	2.0199	ug/L	2.0199	ppb	08:57:34
1	SiO2†	567.6	100.0	6.2536	ug/L	6.2536	ppb	08:58:30
2	Sc Radial	5763.2	5763.2	98.6	%			08:56:22
2	Y RADIAL	6204.0	6204.0	98.67	%			08:56:22
2	Al 396.153Radial†	-35.2	-15.2	-10.645	ug/L	-10.645	ppb	08:56:22
2	Ca 317.933Radial†	18.1	2.8	4.1167	ug/L	4.1167	ppb	08:56:42
2	Fe 238.204 Radial†	8.3	1.6	14.665	ug/L	14.665	ppb	08:56:42
2	K 766.490 Radial†	3056.0	747.1	132.47	ug/L	132.47	ppb	08:56:22
2	Mg 279.077 IEC†	0.6	-0.6	-19.519	ug/L	-19.519	ppb	08:56:42
2	Na 589.592 Radial†	-945.8	128.9	43.263	ug/L	43.263	ppb	08:56:22
2	Sr 421.552†	-26.0	1.0	0.0062	ug/L	0.0062	ppb	08:56:22
2	Sc 361.383	904499.4	904499.4	100.36	%			08:57:39
2	Y 371.029	753447.4	753447.4	100.31	%			08:57:39
2	Ag 328.068†	351.8	57.8	0.2600	ug/L	0.2600	ppb	08:57:39
2	As 188.979†	11.6	35.7	14.109	ug/L	14.109	ppb	08:57:59
2	B 249.677†	271.6	801.3	16.804	ug/L	16.804	ppb	08:57:59
2	Ba 233.527†	-16.9	-8.4	-0.0622	ug/L	-0.0622	ppb	08:57:59
2	Be 313.107†	-5037.8	93.2	0.0338	ug/L	0.0338	ppb	08:57:39
2	Cd 226.502†	-148.0	47.6	0.5021	ug/L	0.5021	ppb	08:57:59
2	Co 228.616†	-75.2	-9.5	-0.1759	ug/L	-0.1759	ppb	08:57:59
2	Cr 267.716†	96.7	17.7	0.1836	ug/L	0.1836	ppb	08:57:59
2	Cu 324.752†	6834.9	53.7	0.1545	ug/L	0.1545	ppb	08:57:39
2	Mn 257.610†	476.0	52.0	0.0573	ug/L	0.0573	ppb	08:57:59
2	Mo 202.031†	41.2	22.7	1.4411	ug/L	1.4411	ppb	08:57:59
2	Ni 231.604†	102.3	15.4	0.3561	ug/L	0.3561	ppb	08:57:59

2	P 214.914†	217.8	-6.5	-3.7894	ug/L	-3.7894 ppb	08:57:59
2	Pb 220.353†	-42.2	26.4	2.9877	ug/L	2.9877 ppb	08:57:59
2	S 181.975 Axial†	42.4	0.7	0.9493	ug/L	0.9493 ppb	08:57:59
2	Sb 206.836†	61.2	26.7	8.5108	ug/L	8.5108 ppb	08:57:59
2	Se 196.026†	-30.8	-1.9	-1.0542	ug/L	-1.0542 ppb	08:57:59
2	Si 251.611†	599.3	147.4	4.3396	ug/L	4.3396 ppb	08:57:59
2	Sn 189.927†	15.2	10.1	1.6614	ug/L	1.6614 ppb	08:57:59
2	Ti 334.940†	-1183.0	-63.8	-0.1044	ug/L	-0.1044 ppb	08:57:39
2	Tl 190.801†	-30.7	1.9	0.5410	ug/L	0.5410 ppb	08:57:59
2	U 409.014†	-2192.6	217.1	5.9770	ug/L	5.9770 ppb	08:57:39
2	V 292.402†	-1417.6	-54.1	-0.3279	ug/L	-0.3279 ppb	08:57:39
2	Zn 213.857†	827.2	202.4	1.7647	ug/L	1.7647 ppb	08:57:59
2	SiO2†	578.3	108.8	6.8154	ug/L	6.8154 ppb	08:58:35
3	Sc Radial	5778.5	5778.5	98.9	%		08:56:47
3	Y RADIAL	6196.6	6196.6	98.55	%		08:56:47
3	Al 396.153Radial†	-13.1	7.2	4.9512	ug/L	4.9512 ppb	08:56:47
3	Ca 317.933Radial†	17.3	1.9	2.8636	ug/L	2.8636 ppb	08:57:07
3	Fe 238.204 Radial†	5.3	-1.4	-13.193	ug/L	-13.193 ppb	08:57:07
3	K 766.490 Radial†	3077.8	760.9	134.91	ug/L	134.91 ppb	08:56:47
3	Mg 279.077 IEC†	2.2	1.0	36.914	ug/L	36.914 ppb	08:57:07
3	Na 589.592 Radial†	-940.2	137.1	45.999	ug/L	45.999 ppb	08:56:47
3	Sr 421.552†	-14.7	12.4	0.0774	ug/L	0.0774 ppb	08:56:47
3	Sc 361.383	901678.2	901678.2	100.05	%		08:58:05
3	Y 371.029	751276.9	751276.9	100.03	%		08:58:05
3	Ag 328.068†	353.0	60.1	0.2640	ug/L	0.2640 ppb	08:58:05
3	As 188.979†	1.1	25.2	9.9656	ug/L	9.9656 ppb	08:58:25
3	B 249.677†	234.5	765.1	16.046	ug/L	16.046 ppb	08:58:25
3	Ba 233.527†	16.8	25.3	0.1861	ug/L	0.1861 ppb	08:58:25
3	Be 313.107†	-4967.7	147.6	0.0540	ug/L	0.0540 ppb	08:58:05
3	Cd 226.502†	-152.4	42.8	0.4533	ug/L	0.4533 ppb	08:58:25
3	Co 228.616†	-67.8	-2.4	-0.0438	ug/L	-0.0438 ppb	08:58:25
3	Cr 267.716†	87.7	9.0	0.0923	ug/L	0.0923 ppb	08:58:25
3	Cu 324.752†	6900.3	140.5	0.4013	ug/L	0.4013 ppb	08:58:05
3	Mn 257.610†	424.4	1.9	0.0000	ug/L	0.0000 ppb	08:58:25
3	Mo 202.031†	28.5	10.1	0.6413	ug/L	0.6413 ppb	08:58:25
3	Ni 231.604†	91.4	4.8	0.1114	ug/L	0.1114 ppb	08:58:25
3	P 214.914†	212.5	-11.1	-6.4313	ug/L	-6.4313 ppb	08:58:25
3	Pb 220.353†	-56.8	11.7	1.3264	ug/L	1.3264 ppb	08:58:25
3	S 181.975 Axial†	35.8	-5.8	-8.1206	ug/L	-8.1206 ppb	08:58:25
3	Sb 206.836†	49.5	15.2	4.8512	ug/L	4.8512 ppb	08:58:25
3	Se 196.026†	-26.0	2.9	1.6149	ug/L	1.6149 ppb	08:58:25
3	Si 251.611†	583.4	133.4	3.9342	ug/L	3.9342 ppb	08:58:25
3	Sn 189.927†	13.7	8.8	1.4330	ug/L	1.4330 ppb	08:58:25
3	Ti 334.940†	-1043.5	71.9	0.1135	ug/L	0.1135 ppb	08:58:05
3	Tl 190.801†	-33.7	-1.2	-0.3407	ug/L	-0.3407 ppb	08:58:25
3	U 409.014†	-2289.9	113.0	3.1135	ug/L	3.1135 ppb	08:58:05
3	V 292.402†	-1405.9	-46.9	-0.2917	ug/L	-0.2917 ppb	08:58:05
3	Zn 213.857†	837.0	214.7	1.8749	ug/L	1.8749 ppb	08:58:25
3	SiO2†	586.3	118.6	7.4719	ug/L	7.4719 ppb	08:58:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902534.2	100.14	%	0.189				0.19%
Sc Radial	5796.9	99.2	%	0.78				0.79%
Y 371.029	752756.4	100.22	%	0.171				0.17%
Y RADIAL	6226.8	99.03	%	0.732				0.74%
Ag 328.068†	64.5	0.2879	ug/L	0.04497	0.2879	ppb	0.04497	15.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.5	-3.2049	ug/L	7.82294	-3.2049	ppb	7.82294	244.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	33.4	13.202	ug/L	2.8916	13.202	ppb	2.8916	21.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	803.2	16.846	ug/L	0.8218	16.846	ppb	0.8218	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0899	ug/L	0.13323	0.0899	ppb	0.13323	148.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.8	0.0566	ug/L	0.02416	0.0566	ppb	0.02416	42.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9625	ug/L	2.62598	4.9625	ppb	2.62598	52.92%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              43.0      0.4554 ug/L       0.04576      0.4554 ppb        0.04576  10.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -6.9     -0.1275 ug/L       0.07277     -0.1275 ppb        0.07277  57.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               9.3      0.0961 ug/L       0.08574      0.0961 ppb        0.08574  89.25%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             111.8      0.3197 ug/L       0.14300      0.3197 ppb        0.14300  44.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.3     -2.9527 ug/L      15.32419     -2.9527 ppb       15.32419 518.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        778.7      138.07 ug/L         7.683      138.07 ppb          7.683   5.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.5      17.309 ug/L       31.9168      17.309 ppb        31.9168 184.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              37.0      0.0389 ug/L       0.03368      0.0389 ppb        0.03368  86.60%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              16.4      1.0409 ug/L       0.39988      1.0409 ppb        0.39988  38.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       137.6      46.184 ug/L        3.0177      46.184 ppb         3.0177   6.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               9.4      0.2186 ug/L       0.12512      0.2186 ppb        0.12512  57.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.6     -4.4366 ug/L       1.76250     -4.4366 ppb        1.76250  39.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              18.7      2.1198 ug/L       0.83315      2.1198 ppb        0.83315  39.30%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.4     -2.0290 ug/L       5.27591     -2.0290 ppb        5.27591 260.03%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              23.2      7.4014 ug/L       2.21472      7.4014 ppb        2.21472  29.92%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.5      2.6127 ug/L       4.25448      2.6127 ppb        4.25448 162.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             144.4      4.2527 ug/L       0.28511      4.2527 ppb        0.28511   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              10.8      1.7765 ug/L       0.41326      1.7765 ppb        0.41326  23.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.9      0.1177 ug/L       0.13614      0.1177 ppb        0.13614 115.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              39.8      0.0622 ug/L       0.14773      0.0622 ppb        0.14773 237.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.2      1.1779 ug/L       1.91799      1.1779 ppb        1.91799 162.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               131.5      3.6238 ug/L       2.14410      3.6238 ppb        2.14410  59.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -10.0     -0.0436 ug/L       0.46154     -0.0436 ppb        0.46154 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              216.2      1.8865 ug/L       0.12801      1.8865 ppb        0.12801   6.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    109.1      6.8470 ug/L       0.60978      6.8470 ppb        0.60978   8.91%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 09:04:46 **Plasma On Time:** 12/7/2009 05:17:52
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved:** 12/8/2009 07:33:15
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location:** 37
Sample ID: LR1 **Date Collected:** 12/8/2009 09:04:47
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5674.8	5674.8	97.1	%			09:06:40
1	Y RADIAL	6109.0	6109.0	97.16	%			09:06:40
1	Al 396.153Radial†	-44.6	-25.5	-16.605	ug/L	-16.605	ppb	09:06:40

1	Ca 317.933Radial†	48.4	34.2	50.475 ug/L	50.475 ppb	09:07:00
1	Fe 238.204 Radial†	39249.2	40411.8	378330 ug/L	378330 ppb	09:06:40
1	K 766.490 Radial†	2474.7	196.7	47.290 ug/L	47.290 ppb	09:06:40
1	Mg 279.077 IEC†	8.2	7.2	-68.508 ug/L	-68.508 ppb	09:07:00
1	Na 589.592 Radial†	-982.9	75.8	25.423 ug/L	25.423 ppb	09:06:40
1	Sr 421.552†	73.8	103.4	0.6433 ug/L	0.6433 ppb	09:06:40
1	Sc 361.383	897521.6	897521.6	99.585 %		09:07:58
1	Y 371.029	739294.0	739294.0	98.430 %		09:07:58
1	Ag 328.068†	-25481.6	-25880.6	3.3525 ug/L	3.3525 ppb	09:07:58
1	As 188.979†	-214.5	-191.2	-17.133 ug/L	-17.133 ppb	09:08:18
1	B 249.677†	2487.7	3028.7	13.314 ug/L	13.314 ppb	09:07:58
1	Ba 233.527†	-1770.5	-1769.5	1.0427 ug/L	1.0427 ppb	09:07:58
1	Be 313.107†	-4846.7	246.1	0.0894 ug/L	0.0894 ppb	09:07:58
1	Cd 226.502†	3574.9	3784.9	2.1903 ug/L	2.1903 ppb	09:07:58
1	Co 228.616†	211.8	278.1	-0.1855 ug/L	-0.1855 ppb	09:08:18
1	Cr 267.716†	-619.6	-700.8	-0.5095 ug/L	-0.5095 ppb	09:07:58
1	Cu 324.752†	21.2	-6735.4	0.0244 ug/L	0.0244 ppb	09:07:58
1	Mn 257.610†	-37238.4	-37815.9	-2.6165 ug/L	-2.6165 ppb	09:07:58
1	Mo 202.031†	-382.7	-402.6	1.2600 ug/L	1.2600 ppb	09:07:58
1	Ni 231.604†	208.3	122.6	2.8363 ug/L	2.8363 ppb	09:08:18
1	P 214.914†	753.0	532.6	5.1179 ug/L	5.1179 ppb	09:08:18
1	Pb 220.353†	220.4	289.7	1.6461 ug/L	1.6461 ppb	09:08:18
1	S 181.975 Axial†	53.1	11.7	16.442 ug/L	16.442 ppb	09:08:18
1	Sb 206.836†	31.2	-3.0	4.8987 ug/L	4.8987 ppb	09:08:18
1	Se 196.026†	-2121.3	-2101.3	-23.019 ug/L	-23.019 ppb	09:08:18
1	Si 251.611†	-704.3	-1156.9	-34.181 ug/L	-34.181 ppb	09:07:58
1	Sn 189.927†	-28.8	-33.9	-0.4826 ug/L	-0.4826 ppb	09:08:18
1	Ti 334.940†	-1214.7	-104.8	-0.1851 ug/L	-0.1851 ppb	09:07:58
1	Tl 190.801†	-43.3	-10.9	-3.4531 ug/L	-3.4531 ppb	09:08:18
1	U 409.014†	-505.7	1894.0	4.5915 ug/L	4.5915 ppb	09:07:58
1	V 292.402†	7050.4	8438.2	-2.0700 ug/L	-2.0700 ppb	09:07:58
1	Zn 213.857†	4885.8	4284.4	1.3044 ug/L	1.3044 ppb	09:08:18
1	SiO2†	-783.5	-1254.3	-79.480 ug/L	-79.480 ppb	09:09:15
2	Sc Radial	5859.6	5859.6	100 %		09:07:05
2	Y RADIAL	6268.0	6268.0	99.69 %		09:07:05
2	Al 396.153Radial†	-53.2	-32.6	-21.569 ug/L	-21.569 ppb	09:07:05
2	Ca 317.933Radial†	51.5	35.8	52.701 ug/L	52.701 ppb	09:07:25
2	Fe 238.204 Radial†	39706.4	39593.5	370670 ug/L	370670 ppb	09:07:05
2	K 766.490 Radial†	2416.7	58.5	22.531 ug/L	22.531 ppb	09:07:05
2	Mg 279.077 IEC†	7.2	6.0	-104.83 ug/L	-104.83 ppb	09:07:25
2	Na 589.592 Radial†	-981.9	108.7	36.480 ug/L	36.480 ppb	09:07:05
2	Sr 421.552†	69.0	96.2	0.5986 ug/L	0.5986 ppb	09:07:05
2	Sc 361.383	892276.6	892276.6	99.003 %		09:08:24
2	Y 371.029	734022.9	734022.9	97.728 %		09:08:24
2	Ag 328.068†	-25591.8	-26142.3	-0.2725 ug/L	-0.2725 ppb	09:08:24
2	As 188.979†	-212.9	-190.9	-18.162 ug/L	-18.162 ppb	09:08:44
2	B 249.677†	2371.1	2925.6	12.168 ug/L	12.168 ppb	09:08:24
2	Ba 233.527†	-1757.7	-1767.0	0.7774 ug/L	0.7774 ppb	09:08:24
2	Be 313.107†	-4974.3	88.6	0.0322 ug/L	0.0322 ppb	09:08:24
2	Cd 226.502†	3528.9	3759.6	2.6878 ug/L	2.6878 ppb	09:08:24
2	Co 228.616†	210.9	278.5	-0.0703 ug/L	-0.0703 ppb	09:08:44
2	Cr 267.716†	-604.4	-689.1	-0.5247 ug/L	-0.5247 ppb	09:08:24
2	Cu 324.752†	24.9	-6731.6	-0.3556 ug/L	-0.3556 ppb	09:08:24
2	Mn 257.610†	-37010.4	-37805.5	-3.3686 ug/L	-3.3686 ppb	09:08:24
2	Mo 202.031†	-385.1	-407.3	0.4165 ug/L	0.4165 ppb	09:08:24
2	Ni 231.604†	185.1	100.5	2.3228 ug/L	2.3228 ppb	09:08:44
2	P 214.914†	738.7	522.7	5.5558 ug/L	5.5558 ppb	09:08:44
2	Pb 220.353†	220.1	290.8	2.3945 ug/L	2.3945 ppb	09:08:44
2	S 181.975 Axial†	57.0	16.0	22.396 ug/L	22.396 ppb	09:08:44
2	Sb 206.836†	24.3	-9.7	2.6260 ug/L	2.6260 ppb	09:08:44
2	Se 196.026†	-2108.8	-2101.2	-47.131 ug/L	-47.131 ppb	09:08:44
2	Si 251.611†	-790.8	-1248.4	-36.906 ug/L	-36.906 ppb	09:08:24
2	Sn 189.927†	-30.1	-35.3	-0.8273 ug/L	-0.8273 ppb	09:08:44
2	Ti 334.940†	-1122.8	-19.2	-0.0494 ug/L	-0.0494 ppb	09:08:24
2	Tl 190.801†	-38.2	-6.0	-2.0739 ug/L	-2.0739 ppb	09:08:44
2	U 409.014†	-422.2	1975.4	7.7953 ug/L	7.7953 ppb	09:08:24
2	V 292.402†	7016.4	8445.5	-0.8577 ug/L	-0.8577 ppb	09:08:24
2	Zn 213.857†	4882.3	4309.7	2.2615 ug/L	2.2615 ppb	09:08:44
2	SiO2†	-749.4	-1224.4	-77.532 ug/L	-77.532 ppb	09:09:20
3	Sc Radial	5765.3	5765.3	98.7 %		09:07:30
3	Y RADIAL	6199.1	6199.1	98.59 %		09:07:30

3	Al 396.153Radial†	-80.6	-61.3	-41.455 ug/L	-41.455 ppb	09:07:30
3	Ca 317.933Radial†	48.2	33.3	49.051 ug/L	49.051 ppb	09:07:50
3	Fe 238.204 Radial†	39281.5	39810.2	372700 ug/L	372700 ppb	09:07:30
3	K 766.490 Radial†	2355.2	35.6	18.540 ug/L	18.540 ppb	09:07:30
3	Mg 279.077 IEC†	13.9	12.9	136.09 ug/L	136.09 ppb	09:07:50
3	Na 589.592 Radial†	-1033.0	40.9	13.709 ug/L	13.709 ppb	09:07:30
3	Sr 421.552†	60.1	88.3	0.5492 ug/L	0.5492 ppb	09:07:30
3	Sc 361.383	894183.3	894183.3	99.214 %		09:08:50
3	Y 371.029	735495.5	735495.5	97.925 %		09:08:50
3	Ag 328.068†	-25540.2	-26035.2	0.8586 ug/L	0.8586 ppb	09:08:50
3	As 188.979†	-218.4	-195.9	-19.849 ug/L	-19.849 ppb	09:09:10
3	B 249.677†	2406.5	2956.3	12.542 ug/L	12.542 ppb	09:08:50
3	Ba 233.527†	-1710.9	-1716.0	1.2281 ug/L	1.2281 ppb	09:08:50
3	Be 313.107†	-4932.6	141.3	0.0513 ug/L	0.0513 ppb	09:08:50
3	Cd 226.502†	3569.6	3793.0	2.8380 ug/L	2.8380 ppb	09:08:50
3	Co 228.616†	200.3	267.3	-0.3114 ug/L	-0.3114 ppb	09:09:10
3	Cr 267.716†	-627.3	-710.9	-0.7171 ug/L	-0.7171 ppb	09:08:50
3	Cu 324.752†	-29.6	-6786.5	-0.4093 ug/L	-0.4093 ppb	09:08:50
3	Mn 257.610†	-37288.3	-38005.9	-3.3844 ug/L	-3.3844 ppb	09:08:50
3	Mo 202.031†	-394.6	-416.1	0.0069 ug/L	0.0069 ppb	09:08:50
3	Ni 231.604†	174.2	89.0	2.0577 ug/L	2.0577 ppb	09:09:10
3	P 214.914†	751.9	534.3	10.658 ug/L	10.658 ppb	09:09:10
3	Pb 220.353†	253.9	324.4	6.0178 ug/L	6.0178 ppb	09:09:10
3	S 181.975 Axial†	58.5	17.4	24.396 ug/L	24.396 ppb	09:09:10
3	Sb 206.836†	22.0	-12.1	1.9004 ug/L	1.9004 ppb	09:09:10
3	Se 196.026†	-2099.6	-2087.5	-32.776 ug/L	-32.776 ppb	09:09:10
3	Si 251.611†	-792.9	-1248.9	-36.910 ug/L	-36.910 ppb	09:08:50
3	Sn 189.927†	-27.3	-32.5	-0.3349 ug/L	-0.3349 ppb	09:09:10
3	Ti 334.940†	-1172.2	-66.6	-0.1230 ug/L	-0.1230 ppb	09:08:50
3	Tl 190.801†	-37.5	-5.3	-1.8614 ug/L	-1.8614 ppb	09:09:10
3	U 409.014†	-595.4	1801.7	2.7559 ug/L	2.7559 ppb	09:08:50
3	V 292.402†	6887.9	8300.8	-2.1334 ug/L	-2.1334 ppb	09:08:50
3	Zn 213.857†	4888.1	4305.0	2.0203 ug/L	2.0203 ppb	09:09:10
3	SiO2†	-772.8	-1246.4	-78.924 ug/L	-78.924 ppb	09:09:25

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894660.5	99.267	%	0.2946				0.30%
Sc Radial	5766.6	98.7	%	1.58				1.60%
Y 371.029	736270.8	98.028	%	0.3621				0.37%
Y RADIAL	6192.0	98.48	%	1.269				1.29%
Ag 328.068†	-26019.4	1.3128	ug/L	1.85472	1.3128	ppb	1.85472	141.28%
Al 396.153Radial†	-39.8	-26.543	ug/L	13.1508	-26.543	ppb	13.1508	49.55%
As 188.979†	-192.7	-18.381	ug/L	1.3714	-18.381	ppb	1.3714	7.46%
B 249.677†	2970.2	12.675	ug/L	0.5842	12.675	ppb	0.5842	4.61%
Ba 233.527†	-1750.8	1.0161	ug/L	0.22652	1.0161	ppb	0.22652	22.29%
Be 313.107†	158.7	0.0576	ug/L	0.02910	0.0576	ppb	0.02910	50.48%
Ca 317.933Radial†	34.4	50.742	ug/L	1.8397	50.742	ppb	1.8397	3.63%
Cd 226.502†	3779.2	2.5720	ug/L	0.33898	2.5720	ppb	0.33898	13.18%
Co 228.616†	274.6	-0.1891	ug/L	0.12058	-0.1891	ppb	0.12058	63.77%
Cr 267.716†	-700.3	-0.5838	ug/L	0.11570	-0.5838	ppb	0.11570	19.82%
Cu 324.752†	-6751.2	-0.2468	ug/L	0.23640	-0.2468	ppb	0.23640	95.77%
Fe 238.204 Radial†	39938.5	373900	ug/L	3969.2	373900	ppb	3969.2	1.06%
K 766.490 Radial†	97.0	29.454	ug/L	15.5752	29.454	ppb	15.5752	52.88%
Mg 279.077 IEC†	8.7	-12.417	ug/L	129.8883	-12.417	ppb	129.8883	>999.9%
Mn 257.610†	-37875.8	-3.1232	ug/L	0.43887	-3.1232	ppb	0.43887	14.05%
Mo 202.031†	-408.7	0.5611	ug/L	0.63894	0.5611	ppb	0.63894	113.87%
Na 589.592 Radial†	75.1	25.204	ug/L	11.3872	25.204	ppb	11.3872	45.18%
Ni 231.604†	104.0	2.4056	ug/L	0.39584	2.4056	ppb	0.39584	16.45%
P 214.914†	529.9	7.1105	ug/L	3.07985	7.1105	ppb	3.07985	43.31%
Pb 220.353†	301.6	3.3528	ug/L	2.33809	3.3528	ppb	2.33809	69.74%
S 181.975 Axial†	15.0	21.078	ug/L	4.1374	21.078	ppb	4.1374	19.63%
Sb 206.836†	-8.2	3.1417	ug/L	1.56424	3.1417	ppb	1.56424	49.79%
Se 196.026†	-2096.7	-34.309	ug/L	12.1289	-34.309	ppb	12.1289	35.35%
Si 251.611†	-1218.1	-35.999	ug/L	1.5747	-35.999	ppb	1.5747	4.37%
Sn 189.927†	-33.9	-0.5483	ug/L	0.25266	-0.5483	ppb	0.25266	46.08%
Sr 421.552†	95.9	0.5970	ug/L	0.04707	0.5970	ppb	0.04707	7.88%
Ti 334.940†	-63.5	-0.1192	ug/L	0.06791	-0.1192	ppb	0.06791	56.99%
Tl 190.801†	-7.4	-2.4628	ug/L	0.86420	-2.4628	ppb	0.86420	35.09%

U 409.014†	1890.4	5.0475 ug/L	2.55046	5.0475 ppb	2.55046	50.53%
V 292.402†	8394.8	-1.6870 ug/L	0.71891	-1.6870 ppb	0.71891	42.61%
Zn 213.857†	4299.7	1.8621 ug/L	0.49779	1.8621 ppb	0.49779	26.73%
SiO2†	-1241.7	-78.646 ug/L	1.0035	-78.646 ppb	1.0035	1.28%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5760.8	5760.8	98.6	%			09:13:29
1	Y RADIAL	6116.4	6116.4	97.27	%			09:13:29
1	Al 396.153Radial†	7034.5	7156.4	4950.1	ug/L	4950.1	ppb	09:13:29
1	Ca 317.933Radial†	3364.6	3397.5	5007.8	ug/L	5007.8	ppb	09:13:49
1	Fe 238.204 Radial†	538.1	539.0	5061.5	ug/L	5061.5	ppb	09:13:49
1	K 766.490 Radial†	31007.5	29103.4	5152.6	ug/L	5152.6	ppb	09:13:29
1	Mg 279.077 IEC†	150.9	151.9	5364.4	ug/L	5364.4	ppb	09:13:49
1	Na 589.592 Radial†	26896.4	28372.6	9521.3	ug/L	9521.3	ppb	09:13:29
1	Sr 421.552†	79592.9	80769.1	502.96	ug/L	502.96	ppb	09:13:29
1	Sc 361.383	922734.0	922734.0	102.38	%			09:14:46
1	Y 371.029	754063.7	754063.7	100.40	%			09:14:46
1	Ag 328.068†	110965.4	108090.8	492.60	ug/L	492.60	ppb	09:14:51
1	As 188.979†	1231.3	1226.8	489.06	ug/L	489.06	ppb	09:15:12
1	B 249.677†	22929.7	22926.9	478.90	ug/L	478.90	ppb	09:14:51
1	Ba 233.527†	66920.1	65371.5	485.75	ug/L	485.75	ppb	09:14:51
1	Be 313.107†	1375184.7	1348300.4	492.42	ug/L	492.42	ppb	09:14:46
1	Cd 226.502†	46992.1	46093.8	487.09	ug/L	487.09	ppb	09:14:51
1	Co 228.616†	26129.9	25587.3	485.77	ug/L	485.77	ppb	09:14:51
1	Cr 267.716†	47317.9	46138.3	485.11	ug/L	485.11	ppb	09:14:51
1	Cu 324.752†	177843.4	166948.7	478.02	ug/L	478.02	ppb	09:14:51
1	Mn 257.610†	471345.6	459956.2	491.06	ug/L	491.06	ppb	09:14:46
1	Mo 202.031†	7882.8	7681.1	488.31	ug/L	488.31	ppb	09:15:12
1	Ni 231.604†	21715.5	21123.7	488.84	ug/L	488.84	ppb	09:14:51
1	P 214.914†	4481.1	4153.3	2323.1	ug/L	2323.1	ppb	09:15:12
1	Pb 220.353†	4313.2	4281.3	485.50	ug/L	485.50	ppb	09:15:12
1	S 181.975 Axial†	757.5	698.3	977.50	ug/L	977.50	ppb	09:15:12
1	Sb 206.836†	1596.8	1525.4	489.90	ug/L	489.90	ppb	09:15:12
1	Se 196.026†	838.3	847.6	508.44	ug/L	508.44	ppb	09:15:12
1	Si 251.611†	83061.3	80679.0	2403.4	ug/L	2403.4	ppb	09:14:51
1	Sn 189.927†	3071.2	2994.7	490.93	ug/L	490.93	ppb	09:15:12
1	Ti 334.940†	312506.5	306350.1	488.75	ug/L	488.75	ppb	09:14:51
1	Tl 190.801†	1729.6	1721.8	485.42	ug/L	485.42	ppb	09:15:12
1	U 409.014†	15419.3	17462.3	479.47	ug/L	479.47	ppb	09:14:51
1	V 292.402†	73201.8	72857.0	487.74	ug/L	487.74	ppb	09:14:51
1	Zn 213.857†	57549.1	55588.2	481.28	ug/L	481.28	ppb	09:14:51
1	SiO2†	83836.2	81418.0	5197.2	ug/L	5197.2	ppb	09:16:19
2	Sc Radial	5745.5	5745.5	98.3	%			09:13:54
2	Y RADIAL	6192.6	6192.6	98.49	%			09:13:54
2	Al 396.153Radial†	7003.1	7143.6	4941.1	ug/L	4941.1	ppb	09:13:54
2	Ca 317.933Radial†	3363.9	3406.0	5020.2	ug/L	5020.2	ppb	09:14:14
2	Fe 238.204 Radial†	533.2	535.5	5028.9	ug/L	5028.9	ppb	09:14:14
2	K 766.490 Radial†	30739.7	28914.8	5119.2	ug/L	5119.2	ppb	09:13:54
2	Mg 279.077 IEC†	147.9	149.3	5273.6	ug/L	5273.6	ppb	09:14:14
2	Na 589.592 Radial†	26537.9	28080.6	9423.3	ug/L	9423.3	ppb	09:13:54
2	Sr 421.552†	78795.9	80173.6	499.25	ug/L	499.25	ppb	09:13:54
2	Sc 361.383	918645.3	918645.3	101.93	%			09:15:17
2	Y 371.029	749404.0	749404.0	99.776	%			09:15:17
2	Ag 328.068†	111114.6	108719.5	495.44	ug/L	495.44	ppb	09:15:22
2	As 188.979†	1241.3	1241.9	495.05	ug/L	495.05	ppb	09:15:43
2	B 249.677†	22912.8	23009.9	480.64	ug/L	480.64	ppb	09:15:22
2	Ba 233.527†	66956.5	65698.1	488.17	ug/L	488.17	ppb	09:15:22
2	Be 313.107†	1358622.3	1338029.7	488.68	ug/L	488.68	ppb	09:15:17
2	Cd 226.502†	46897.3	46205.1	488.27	ug/L	488.27	ppb	09:15:22
2	Co 228.616†	26185.9	25755.9	488.97	ug/L	488.97	ppb	09:15:22
2	Cr 267.716†	47298.1	46324.5	487.07	ug/L	487.07	ppb	09:15:22
2	Cu 324.752†	178329.4	168198.6	481.59	ug/L	481.59	ppb	09:15:22
2	Mn 257.610†	468894.0	459600.0	490.68	ug/L	490.68	ppb	09:15:17
2	Mo 202.031†	7898.2	7730.5	491.44	ug/L	491.44	ppb	09:15:43
2	Ni 231.604†	21658.2	21161.9	489.72	ug/L	489.72	ppb	09:15:22

2	P 214.914†	4481.9	4173.6	2334.2 ug/L	2334.2 ppb	09:15:43
2	Pb 220.353†	4305.7	4292.7	486.80 ug/L	486.80 ppb	09:15:43
2	S 181.975 Axial†	742.6	687.0	961.68 ug/L	961.68 ppb	09:15:43
2	Sb 206.836†	1611.4	1546.7	496.65 ug/L	496.65 ppb	09:15:43
2	Se 196.026†	816.5	829.9	498.09 ug/L	498.09 ppb	09:15:43
2	Si 251.611†	83451.2	81422.6	2425.7 ug/L	2425.7 ppb	09:15:22
2	Sn 189.927†	3064.3	3001.3	492.00 ug/L	492.00 ppb	09:15:43
2	Ti 334.940†	313467.9	308651.9	492.42 ug/L	492.42 ppb	09:15:22
2	Tl 190.801†	1733.8	1733.5	488.68 ug/L	488.68 ppb	09:15:43
2	U 409.014†	15637.9	17743.9	487.22 ug/L	487.22 ppb	09:15:22
2	V 292.402†	73233.5	73206.2	490.11 ug/L	490.11 ppb	09:15:22
2	Zn 213.857†	57577.9	55866.6	483.71 ug/L	483.71 ppb	09:15:22
2	SiO2†	84539.8	82472.9	5264.8 ug/L	5264.8 ppb	09:16:24
3	Sc Radial	5870.9	5870.9	100 %		09:14:19
3	Y RADIAL	6265.4	6265.4	99.64 %		09:14:19
3	Al 396.153Radial†	7091.8	7079.6	4896.6 ug/L	4896.6 ppb	09:14:19
3	Ca 317.933Radial†	3390.8	3359.6	4951.9 ug/L	4951.9 ppb	09:14:39
3	Fe 238.204 Radial†	544.0	534.7	5021.2 ug/L	5021.2 ppb	09:14:39
3	K 766.490 Radial†	31070.1	28575.4	5059.1 ug/L	5059.1 ppb	09:14:19
3	Mg 279.077 IEC†	148.1	146.3	5165.6 ug/L	5165.6 ppb	09:14:39
3	Na 589.592 Radial†	26868.9	27833.2	9340.3 ug/L	9340.3 ppb	09:14:19
3	Sr 421.552†	79717.2	79377.6	494.30 ug/L	494.30 ppb	09:14:19
3	Sc 361.383	925667.8	925667.8	102.71 %		09:15:48
3	Y 371.029	756709.0	756709.0	100.75 %		09:15:48
3	Ag 328.068†	111245.2	108019.7	492.26 ug/L	492.26 ppb	09:15:53
3	As 188.979†	1236.1	1227.6	489.36 ug/L	489.36 ppb	09:16:14
3	B 249.677†	23103.8	23025.4	480.97 ug/L	480.97 ppb	09:15:53
3	Ba 233.527†	66683.4	64933.9	482.50 ug/L	482.50 ppb	09:15:53
3	Be 313.107†	1368635.9	1337667.3	488.54 ug/L	488.54 ppb	09:15:48
3	Cd 226.502†	46751.6	45714.1	483.07 ug/L	483.07 ppb	09:15:53
3	Co 228.616†	26093.7	25471.2	483.57 ug/L	483.57 ppb	09:15:53
3	Cr 267.716†	47245.6	45921.4	482.83 ug/L	482.83 ppb	09:15:53
3	Cu 324.752†	179081.9	167604.0	479.89 ug/L	479.89 ppb	09:15:53
3	Mn 257.610†	469661.4	456857.3	487.75 ug/L	487.75 ppb	09:15:48
3	Mo 202.031†	7946.8	7719.0	490.71 ug/L	490.71 ppb	09:16:14
3	Ni 231.604†	21620.0	20963.5	485.13 ug/L	485.13 ppb	09:15:53
3	P 214.914†	4497.4	4155.4	2324.0 ug/L	2324.0 ppb	09:16:14
3	Pb 220.353†	4343.4	4297.4	487.32 ug/L	487.32 ppb	09:16:14
3	S 181.975 Axial†	765.5	703.7	985.12 ug/L	985.12 ppb	09:16:14
3	Sb 206.836†	1633.4	1556.1	499.75 ug/L	499.75 ppb	09:16:14
3	Se 196.026†	833.8	840.6	504.26 ug/L	504.26 ppb	09:16:14
3	Si 251.611†	83304.0	80658.2	2402.8 ug/L	2402.8 ppb	09:15:53
3	Sn 189.927†	3097.9	3011.3	493.62 ug/L	493.62 ppb	09:16:14
3	Ti 334.940†	313165.7	306024.6	488.23 ug/L	488.23 ppb	09:15:53
3	Tl 190.801†	1748.1	1734.5	488.96 ug/L	488.96 ppb	09:16:14
3	U 409.014†	15443.1	17437.8	478.80 ug/L	478.80 ppb	09:15:53
3	V 292.402†	73192.0	72620.7	486.22 ug/L	486.22 ppb	09:15:53
3	Zn 213.857†	57567.6	55428.1	479.91 ug/L	479.91 ppb	09:15:53
3	SiO2†	83513.2	80844.1	5160.3 ug/L	5160.3 ppb	09:16:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922349.0	102.34	%	0.391				0.38%
Sc Radial	5792.4	99.1	%	1.17				1.18%
Y 371.029	753392.2	100.31	%	0.492				0.49%
Y RADIAL	6191.5	98.47	%	1.186				1.20%
Ag 328.068†	108276.7	493.43	ug/L	1.746	493.43	ppb	1.746	0.35%
QC value within limits for Ag 328.068 Recovery = 98.69%								
Al 396.153Radial†	7126.5	4929.3	ug/L	28.62	4929.3	ppb	28.62	0.58%
QC value within limits for Al 396.153Radial Recovery = 98.59%								
As 188.979†	1232.1	491.16	ug/L	3.377	491.16	ppb	3.377	0.69%
QC value within limits for As 188.979 Recovery = 98.23%								
B 249.677†	22987.4	480.17	ug/L	1.114	480.17	ppb	1.114	0.23%
QC value within limits for B 249.677 Recovery = 96.03%								
Ba 233.527†	65334.5	485.48	ug/L	2.846	485.48	ppb	2.846	0.59%
QC value within limits for Ba 233.527 Recovery = 97.10%								
Be 313.107†	1341332.5	489.88	ug/L	2.199	489.88	ppb	2.199	0.45%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	3387.7	4993.3	ug/L	36.39	4993.3	ppb	36.39	0.73%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.87%
Cd 226.502†            46004.4      486.14 ug/L         2.722      486.14 ppb          2.722   0.56%
   QC value within limits for Cd 226.502  Recovery = 97.23%
Co 228.616†            25604.8      486.10 ug/L         2.713      486.10 ppb          2.713   0.56%
   QC value within limits for Co 228.616  Recovery = 97.22%
Cr 267.716†            46128.1      485.01 ug/L         2.120      485.01 ppb          2.120   0.44%
   QC value within limits for Cr 267.716  Recovery = 97.00%
Cu 324.752†           167583.8      479.83 ug/L         1.788      479.83 ppb          1.788   0.37%
   QC value within limits for Cu 324.752  Recovery = 95.97%
Fe 238.204 Radial†       536.4      5037.2 ug/L        21.40      5037.2 ppb         21.40   0.42%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      28864.5      5110.3 ug/L        47.39      5110.3 ppb         47.39   0.93%
   QC value within limits for K 766.490 Radial  Recovery = 102.21%
Mg 279.077 IEC†          149.2      5267.9 ug/L        99.54      5267.9 ppb         99.54   1.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.36%
Mn 257.610†           458804.5      489.83 ug/L         1.809      489.83 ppb          1.809   0.37%
   QC value within limits for Mn 257.610  Recovery = 97.97%
Mo 202.031†             7710.2      490.15 ug/L         1.640      490.15 ppb          1.640   0.33%
   QC value within limits for Mo 202.031  Recovery = 98.03%
Na 589.592 Radial†     28095.5      9428.3 ug/L        90.60      9428.3 ppb         90.60   0.96%
   QC value within limits for Na 589.592 Radial  Recovery = 94.28%
Ni 231.604†            21083.0      487.90 ug/L         2.436      487.90 ppb          2.436   0.50%
   QC value within limits for Ni 231.604  Recovery = 97.58%
P 214.914†              4160.8      2327.1 ug/L         6.18      2327.1 ppb          6.18   0.27%
   QC value within limits for P 214.914  Recovery = 93.08%
Pb 220.353†             4290.5      486.54 ug/L         0.936      486.54 ppb          0.936   0.19%
   QC value within limits for Pb 220.353  Recovery = 97.31%
S 181.975 Axial†         696.3      974.77 ug/L        11.960      974.77 ppb         11.960   1.23%
   QC value within limits for S 181.975 Axial  Recovery = 97.48%
Sb 206.836†             1542.7      495.43 ug/L         5.037      495.43 ppb          5.037   1.02%
   QC value within limits for Sb 206.836  Recovery = 99.09%
Se 196.026†              839.4      503.59 ug/L         5.207      503.59 ppb          5.207   1.03%
   QC value within limits for Se 196.026  Recovery = 100.72%
Si 251.611†            80919.9      2410.6 ug/L        13.01      2410.6 ppb         13.01   0.54%
   QC value within limits for Si 251.611  Recovery = 96.43%
Sn 189.927†             3002.4      492.18 ug/L         1.357      492.18 ppb          1.357   0.28%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            80106.8      498.84 ug/L         4.348      498.84 ppb          4.348   0.87%
   QC value within limits for Sr 421.552  Recovery = 99.77%
Ti 334.940†           307008.9      489.80 ug/L         2.284      489.80 ppb          2.284   0.47%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†             1729.9      487.69 ug/L         1.971      487.69 ppb          1.971   0.40%
   QC value within limits for Tl 190.801  Recovery = 97.54%
U 409.014†             17548.0      481.83 ug/L         4.683      481.83 ppb          4.683   0.97%
   QC value within limits for U 409.014  Recovery = 96.37%
V 292.402†             72894.6      488.02 ug/L         1.960      488.02 ppb          1.960   0.40%
   QC value within limits for V 292.402  Recovery = 97.60%
Zn 213.857†            55627.6      481.63 ug/L         1.922      481.63 ppb          1.922   0.40%
   QC value within limits for Zn 213.857  Recovery = 96.33%
SiO2†                  81578.3      5207.4 ug/L        52.96      5207.4 ppb         52.96   1.02%
   QC value within limits for SiO2  Recovery = 97.38%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:18:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5673.3	5673.3	97.1	%			09:20:32
1	Y RADIAL	6094.3	6094.3	96.92	%			09:20:32
1	Al 396.153Radial†	-30.7	-11.2	-7.7882	ug/L	-7.7882	ppb	09:20:32
1	Ca 317.933Radial†	21.1	6.1	9.0265	ug/L	9.0265	ppb	09:20:52
1	Fe 238.204 Radial†	7.9	1.3	12.187	ug/L	12.187	ppb	09:20:52
1	K 766.490 Radial†	2609.3	336.1	59.601	ug/L	59.601	ppb	09:20:32
1	Mg 279.077 IEC†	2.8	1.7	61.423	ug/L	61.423	ppb	09:20:52
1	Na 589.592 Radial†	-1099.0	-44.1	-14.808	ug/L	-14.808	ppb	09:20:32
1	Sr 421.552†	0.7	28.1	0.1748	ug/L	0.1748	ppb	09:20:32
1	Sc 361.383	904057.2	904057.2	100.31	%			09:21:49
1	Y 371.029	754720.7	754720.7	100.48	%			09:21:49
1	Ag 328.068†	312.9	19.2	0.0919	ug/L	0.0919	ppb	09:21:49
1	As 188.979†	-23.0	1.2	0.4798	ug/L	0.4798	ppb	09:22:09
1	B 249.677†	-87.7	443.2	9.2934	ug/L	9.2934	ppb	09:22:09
1	Ba 233.527†	-11.7	-3.2	-0.0229	ug/L	-0.0229	ppb	09:22:09
1	Be 313.107†	-4874.0	254.1	0.0927	ug/L	0.0927	ppb	09:21:49
1	Cd 226.502†	-179.4	16.3	0.1714	ug/L	0.1714	ppb	09:22:09
1	Co 228.616†	-79.9	-14.3	-0.2709	ug/L	-0.2709	ppb	09:22:09
1	Cr 267.716†	68.7	-10.1	-0.1056	ug/L	-0.1056	ppb	09:22:09
1	Cu 324.752†	6725.9	-51.6	-0.1469	ug/L	-0.1469	ppb	09:21:49
1	Mn 257.610†	420.1	-3.5	-0.0036	ug/L	-0.0036	ppb	09:22:09
1	Mo 202.031†	18.8	0.4	0.0244	ug/L	0.0244	ppb	09:22:09
1	Ni 231.604†	113.9	27.0	0.6255	ug/L	0.6255	ppb	09:22:09
1	P 214.914†	226.0	1.7	1.0491	ug/L	1.0491	ppb	09:22:09
1	Pb 220.353†	-56.2	12.4	1.4025	ug/L	1.4025	ppb	09:22:09
1	S 181.975 Axial†	39.2	-2.5	-3.4623	ug/L	-3.4623	ppb	09:22:09
1	Sb 206.836†	40.8	6.4	2.0583	ug/L	2.0583	ppb	09:22:09
1	Se 196.026†	-27.6	1.3	0.7972	ug/L	0.7972	ppb	09:22:09
1	Si 251.611†	479.1	28.0	0.8114	ug/L	0.8114	ppb	09:22:09
1	Sn 189.927†	17.7	12.7	2.0783	ug/L	2.0783	ppb	09:22:09
1	Ti 334.940†	-1083.6	34.6	0.0561	ug/L	0.0561	ppb	09:21:49
1	Tl 190.801†	-28.5	4.1	1.1534	ug/L	1.1534	ppb	09:22:09
1	U 409.014†	-2434.0	-24.7	-0.6809	ug/L	-0.6809	ppb	09:21:49
1	V 292.402†	-1342.8	19.7	0.1285	ug/L	0.1285	ppb	09:21:49
1	Zn 213.857†	711.6	87.6	0.7583	ug/L	0.7583	ppb	09:22:09
1	SiO2†	526.8	57.7	3.6408	ug/L	3.6408	ppb	09:23:05
2	Sc Radial	5946.6	5946.6	102	%			09:20:57
2	Y RADIAL	6401.7	6401.7	101.8	%			09:20:57
2	Al 396.153Radial†	-7.9	12.7	8.7846	ug/L	8.7846	ppb	09:20:57
2	Ca 317.933Radial†	24.4	8.4	12.347	ug/L	12.347	ppb	09:21:17
2	Fe 238.204 Radial†	8.6	1.6	15.360	ug/L	15.360	ppb	09:21:17
2	K 766.490 Radial†	2552.1	156.3	27.714	ug/L	27.714	ppb	09:20:57
2	Mg 279.077 IEC†	0.8	-0.4	-14.689	ug/L	-14.689	ppb	09:21:17
2	Na 589.592 Radial†	-1075.1	31.4	10.531	ug/L	10.531	ppb	09:20:57
2	Sr 421.552†	-38.2	-10.2	-0.0635	ug/L	-0.0635	ppb	09:20:57
2	Sc 361.383	913109.6	913109.6	101.31	%			09:22:14
2	Y 371.029	762217.3	762217.3	101.48	%			09:22:14
2	Ag 328.068†	373.3	75.7	0.3473	ug/L	0.3473	ppb	09:22:14
2	As 188.979†	-22.0	2.5	0.9795	ug/L	0.9795	ppb	09:22:34
2	B 249.677†	-143.7	388.9	8.1531	ug/L	8.1531	ppb	09:22:34
2	Ba 233.527†	-8.4	0.2	0.0033	ug/L	0.0033	ppb	09:22:34
2	Be 313.107†	-4965.6	211.8	0.0770	ug/L	0.0770	ppb	09:22:14
2	Cd 226.502†	-173.3	24.0	0.2526	ug/L	0.2526	ppb	09:22:34
2	Co 228.616†	-67.4	-1.1	-0.0193	ug/L	-0.0193	ppb	09:22:34
2	Cr 267.716†	75.4	-4.2	-0.0439	ug/L	-0.0439	ppb	09:22:34
2	Cu 324.752†	6711.1	-132.7	-0.3789	ug/L	-0.3789	ppb	09:22:14
2	Mn 257.610†	437.1	9.1	0.0115	ug/L	0.0115	ppb	09:22:34
2	Mo 202.031†	27.1	8.4	0.5349	ug/L	0.5349	ppb	09:22:34
2	Ni 231.604†	93.1	5.4	0.1242	ug/L	0.1242	ppb	09:22:34

2	P 214.914†	209.0	-17.2	-9.8660 ug/L	-9.8660 ppb	09:22:34
2	Pb 220.353†	-64.7	4.6	0.5214 ug/L	0.5214 ppb	09:22:34
2	S 181.975 Axial†	41.5	-0.6	-0.8812 ug/L	-0.8812 ppb	09:22:34
2	Sb 206.836†	44.6	9.8	3.1149 ug/L	3.1149 ppb	09:22:34
2	Se 196.026†	-31.9	-2.7	-1.4810 ug/L	-1.4810 ppb	09:22:34
2	Si 251.611†	482.1	26.2	0.7650 ug/L	0.7650 ppb	09:22:34
2	Sn 189.927†	8.0	2.9	0.4693 ug/L	0.4693 ppb	09:22:34
2	Ti 334.940†	-1207.0	-76.4	-0.1226 ug/L	-0.1226 ppb	09:22:14
2	Tl 190.801†	-28.9	4.0	1.1274 ug/L	1.1274 ppb	09:22:34
2	U 409.014†	-2327.4	104.7	2.8810 ug/L	2.8810 ppb	09:22:14
2	V 292.402†	-1294.0	81.1	0.5465 ug/L	0.5465 ppb	09:22:14
2	Zn 213.857†	712.1	81.1	0.7069 ug/L	0.7069 ppb	09:22:34
2	SiO2†	494.8	20.9	1.2965 ug/L	1.2965 ppb	09:23:10
3	Sc Radial	5965.8	5965.8	102 %		09:21:22
3	Y RADIAL	6390.8	6390.8	101.6 %		09:21:22
3	Al 396.153Radial†	-18.0	2.8	1.8837 ug/L	1.8837 ppb	09:21:22
3	Ca 317.933Radial†	21.0	5.0	7.3675 ug/L	7.3675 ppb	09:21:42
3	Fe 238.204 Radial†	8.8	1.8	17.163 ug/L	17.163 ppb	09:21:42
3	K 766.490 Radial†	2654.1	248.2	44.012 ug/L	44.012 ppb	09:21:22
3	Mg 279.077 IEC†	2.7	1.5	51.921 ug/L	51.921 ppb	09:21:42
3	Na 589.592 Radial†	-1140.7	-29.5	-9.8839 ug/L	-9.8839 ppb	09:21:22
3	Sr 421.552†	-12.2	15.4	0.0956 ug/L	0.0956 ppb	09:21:22
3	Sc 361.383	916495.3	916495.3	101.69 %		09:22:39
3	Y 371.029	767046.2	767046.2	102.13 %		09:22:39
3	Ag 328.068†	305.8	8.0	0.0385 ug/L	0.0385 ppb	09:22:39
3	As 188.979†	-16.6	7.9	3.1139 ug/L	3.1139 ppb	09:22:59
3	B 249.677†	-153.3	379.9	7.9653 ug/L	7.9653 ppb	09:22:59
3	Ba 233.527†	-1.6	6.9	0.0519 ug/L	0.0519 ppb	09:22:59
3	Be 313.107†	-4926.0	268.9	0.0981 ug/L	0.0981 ppb	09:22:39
3	Cd 226.502†	-178.1	19.9	0.2092 ug/L	0.2092 ppb	09:22:59
3	Co 228.616†	-68.9	-2.4	-0.0426 ug/L	-0.0426 ppb	09:22:59
3	Cr 267.716†	77.8	-2.2	-0.0234 ug/L	-0.0234 ppb	09:22:59
3	Cu 324.752†	6814.0	-56.0	-0.1594 ug/L	-0.1594 ppb	09:22:39
3	Mn 257.610†	440.3	10.7	0.0122 ug/L	0.0122 ppb	09:22:59
3	Mo 202.031†	34.1	15.2	0.9654 ug/L	0.9654 ppb	09:22:59
3	Ni 231.604†	98.7	10.5	0.2430 ug/L	0.2430 ppb	09:22:59
3	P 214.914†	223.4	-3.8	-2.1956 ug/L	-2.1956 ppb	09:22:59
3	Pb 220.353†	-65.7	3.8	0.4307 ug/L	0.4307 ppb	09:22:59
3	S 181.975 Axial†	39.1	-3.1	-4.3810 ug/L	-4.3810 ppb	09:22:59
3	Sb 206.836†	43.6	8.7	2.7720 ug/L	2.7720 ppb	09:22:59
3	Se 196.026†	-25.3	3.9	2.3314 ug/L	2.3314 ppb	09:22:59
3	Si 251.611†	505.4	47.3	1.3841 ug/L	1.3841 ppb	09:22:59
3	Sn 189.927†	6.5	1.4	0.2312 ug/L	0.2312 ppb	09:22:59
3	Ti 334.940†	-1100.5	32.7	0.0506 ug/L	0.0506 ppb	09:22:39
3	Tl 190.801†	-31.0	2.0	0.5543 ug/L	0.5543 ppb	09:22:59
3	U 409.014†	-2281.5	158.3	4.3581 ug/L	4.3581 ppb	09:22:39
3	V 292.402†	-1351.2	29.6	0.2165 ug/L	0.2165 ppb	09:22:39
3	Zn 213.857†	707.0	73.4	0.6366 ug/L	0.6366 ppb	09:22:59
3	SiO2†	503.4	27.6	1.6973 ug/L	1.6973 ppb	09:23:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911220.7	101.10	%	0.714				0.71%
Sc Radial	5861.9	100	%	2.8				2.79%
Y 371.029	761328.0	101.36	%	0.827				0.82%
Y RADIAL	6295.6	100.1	%	2.77				2.77%
Ag 328.068†	34.3	0.1592	ug/L	0.16502	0.1592	ppb	0.16502	103.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.4	0.9600	ug/L	8.32490	0.9600	ppb	8.32490	867.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.9	1.5244	ug/L	1.39905	1.5244	ppb	1.39905	91.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	404.0	8.4706	ug/L	0.71870	8.4706	ppb	0.71870	8.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.3	0.0108	ug/L	0.03799	0.0108	ppb	0.03799	352.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	244.9	0.0893	ug/L	0.01098	0.0893	ppb	0.01098	12.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.5	9.5803	ug/L	2.53552	9.5803	ppb	2.53552	26.47%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              20.1      0.2111 ug/L       0.04065      0.2111 ppb        0.04065  19.26%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -5.9     -0.1109 ug/L       0.13905     -0.1109 ppb        0.13905 125.33%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -5.5     -0.0576 ug/L       0.04278     -0.0576 ppb        0.04278  74.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -80.1     -0.2284 ug/L       0.13050     -0.2284 ppb        0.13050  57.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.6      14.903 ug/L        2.5196      14.903 ppb         2.5196  16.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       246.8      43.776 ug/L       15.9447      43.776 ppb        15.9447  36.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.9      32.885 ug/L       41.4731      32.885 ppb        41.4731 126.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               5.5      0.0067 ug/L       0.00894      0.0067 ppb        0.00894 133.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.0      0.5082 ug/L       0.47108      0.5082 ppb        0.47108  92.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -14.1     -4.7202 ug/L      13.43550     -4.7202 ppb       13.43550 284.64%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              14.3      0.3309 ug/L       0.26193      0.3309 ppb        0.26193  79.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -6.4     -3.6708 ug/L       5.60512     -3.6708 ppb        5.60512 152.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.9      0.7849 ug/L       0.53682      0.7849 ppb        0.53682  68.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.1     -2.9082 ug/L       1.81452     -2.9082 ppb        1.81452  62.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.3      2.6484 ug/L       0.53904      2.6484 ppb        0.53904  20.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.9      0.5492 ug/L       1.91828      0.5492 ppb        1.91828 349.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              33.8      0.9868 ug/L       0.34483      0.9868 ppb        0.34483  34.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.6      0.9263 ug/L       1.00478      0.9263 ppb        1.00478 108.48%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              11.1      0.0690 ug/L       0.12137      0.0690 ppb        0.12137 175.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -3.0     -0.0053 ug/L       0.10161     -0.0053 ppb        0.10161 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.4      0.9450 ug/L       0.33865      0.9450 ppb        0.33865  35.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               79.4      2.1861 ug/L       2.59036      2.1861 ppb        2.59036 118.49%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               43.5      0.2972 ug/L       0.22039      0.2972 ppb        0.22039  74.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              80.7      0.7006 ug/L       0.06110      0.7006 ppb        0.06110   8.72%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    35.4      2.2115 ug/L       1.25386      2.2115 ppb        1.25386  56.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:52:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5798.3	5798.3	99.2	%			09:54:38
1	Y RADIAL	6170.9	6170.9	98.14	%			09:54:38
1	Al 396.153Radial†	7003.2	7078.7	4895.8	ug/L	4895.8	ppb	09:54:38
1	Ca 317.933Radial†	3348.4	3359.1	4951.2	ug/L	4951.2	ppb	09:54:58
1	Fe 238.204 Radial†	532.5	529.9	4976.0	ug/L	4976.0	ppb	09:54:58
1	K 766.490 Radial†	30386.2	28273.5	5005.6	ug/L	5005.6	ppb	09:54:38
1	Mg 279.077 IEC†	143.2	143.2	5056.6	ug/L	5056.6	ppb	09:54:58
1	Na 589.592 Radial†	26305.9	27600.8	9262.3	ug/L	9262.3	ppb	09:54:38
1	Sr 421.552†	78338.6	78982.3	491.84	ug/L	491.84	ppb	09:54:38
1	Sc 361.383	913291.3	913291.3	101.33	%			09:55:55
1	Y 371.029	746166.9	746166.9	99.345	%			09:55:55
1	Ag 328.068†	111619.8	109857.2	500.60	ug/L	500.60	ppb	09:56:00
1	As 188.979†	1235.9	1243.8	495.83	ug/L	495.83	ppb	09:56:20
1	B 249.677†	22935.9	23164.5	483.87	ug/L	483.87	ppb	09:56:00
1	Ba 233.527†	67190.5	66314.2	492.75	ug/L	492.75	ppb	09:56:00
1	Be 313.107†	1363119.3	1350281.4	493.16	ug/L	493.16	ppb	09:55:55
1	Cd 226.502†	47270.4	46843.0	495.02	ug/L	495.02	ppb	09:56:00
1	Co 228.616†	26329.1	26047.8	494.52	ug/L	494.52	ppb	09:56:00
1	Cr 267.716†	47557.2	46852.2	492.62	ug/L	492.62	ppb	09:56:00
1	Cu 324.752†	179106.7	169991.4	486.72	ug/L	486.72	ppb	09:56:00
1	Mn 257.610†	467768.4	461186.1	492.37	ug/L	492.37	ppb	09:55:55
1	Mo 202.031†	7951.8	7828.7	497.68	ug/L	497.68	ppb	09:56:20
1	Ni 231.604†	21776.8	21403.5	495.31	ug/L	495.31	ppb	09:56:00
1	P 214.914†	4496.3	4213.6	2356.6	ug/L	2356.6	ppb	09:56:20
1	Pb 220.353†	4324.7	4336.2	491.73	ug/L	491.73	ppb	09:56:20
1	S 181.975 Axial†	761.4	709.8	993.59	ug/L	993.59	ppb	09:56:20
1	Sb 206.836†	1610.3	1554.9	499.36	ug/L	499.36	ppb	09:56:20
1	Se 196.026†	830.1	847.9	508.36	ug/L	508.36	ppb	09:56:20
1	Si 251.611†	83663.7	82112.3	2446.2	ug/L	2446.2	ppb	09:56:00
1	Sn 189.927†	3087.2	3041.6	498.59	ug/L	498.59	ppb	09:56:20
1	Ti 334.940†	314687.5	311658.3	497.22	ug/L	497.22	ppb	09:56:00
1	Tl 190.801†	1737.0	1746.6	492.37	ug/L	492.37	ppb	09:56:20
1	U 409.014†	15597.8	17794.2	488.61	ug/L	488.61	ppb	09:56:00
1	V 292.402†	73648.2	74036.7	495.68	ug/L	495.68	ppb	09:56:00
1	Zn 213.857†	57897.4	56513.1	489.33	ug/L	489.33	ppb	09:56:00
1	SiO2†	82623.5	81068.0	5174.4	ug/L	5174.4	ppb	09:57:28
2	Sc Radial	5699.5	5699.5	97.5	%			09:55:03
2	Y RADIAL	6095.6	6095.6	96.94	%			09:55:03
2	Al 396.153Radial†	6983.8	7181.2	4967.1	ug/L	4967.1	ppb	09:55:03
2	Ca 317.933Radial†	3382.0	3452.1	5088.2	ug/L	5088.2	ppb	09:55:23
2	Fe 238.204 Radial†	536.3	543.1	5100.2	ug/L	5100.2	ppb	09:55:23
2	K 766.490 Radial†	30276.6	28692.1	5079.8	ug/L	5079.8	ppb	09:55:03
2	Mg 279.077 IEC†	148.2	150.8	5324.3	ug/L	5324.3	ppb	09:55:23
2	Na 589.592 Radial†	26033.4	27781.1	9322.8	ug/L	9322.8	ppb	09:55:03
2	Sr 421.552†	77942.2	79944.7	497.83	ug/L	497.83	ppb	09:55:03
2	Sc 361.383	917308.5	917308.5	101.78	%			09:56:26
2	Y 371.029	749645.7	749645.7	99.808	%			09:56:26
2	Ag 328.068†	112752.9	110488.1	503.50	ug/L	503.50	ppb	09:56:31
2	As 188.979†	1226.0	1228.7	489.90	ug/L	489.90	ppb	09:56:51
2	B 249.677†	23222.7	23347.2	487.68	ug/L	487.68	ppb	09:56:31
2	Ba 233.527†	68008.6	66827.5	496.57	ug/L	496.57	ppb	09:56:31
2	Be 313.107†	1371532.3	1352656.2	494.03	ug/L	494.03	ppb	09:56:26
2	Cd 226.502†	47576.1	46939.1	496.02	ug/L	496.02	ppb	09:56:31
2	Co 228.616†	26565.9	26166.7	496.75	ug/L	496.75	ppb	09:56:31
2	Cr 267.716†	48003.3	47085.1	495.07	ug/L	495.07	ppb	09:56:31
2	Cu 324.752†	181535.2	171603.3	491.34	ug/L	491.34	ppb	09:56:31
2	Mn 257.610†	470796.4	462139.6	493.39	ug/L	493.39	ppb	09:56:26
2	Mo 202.031†	7918.0	7761.2	493.40	ug/L	493.40	ppb	09:56:51
2	Ni 231.604†	21967.0	21496.2	497.46	ug/L	497.46	ppb	09:56:31

2	P 214.914†	4508.4	4206.0	2351.4 ug/L	2351.4 ppb	09:56:51
2	Pb 220.353†	4313.4	4306.4	488.35 ug/L	488.35 ppb	09:56:51
2	S 181.975 Axial†	750.8	696.1	974.45 ug/L	974.45 ppb	09:56:51
2	Sb 206.836†	1620.0	1557.5	499.99 ug/L	499.99 ppb	09:56:51
2	Se 196.026†	819.8	834.2	500.83 ug/L	500.83 ppb	09:56:51
2	Si 251.611†	84641.3	82711.1	2464.2 ug/L	2464.2 ppb	09:56:31
2	Sn 189.927†	3086.1	3027.1	496.23 ug/L	496.23 ppb	09:56:51
2	Ti 334.940†	318134.5	313685.0	500.46 ug/L	500.46 ppb	09:56:31
2	Tl 190.801†	1738.7	1740.8	490.77 ug/L	490.77 ppb	09:56:51
2	U 409.014†	15717.0	17843.9	489.96 ug/L	489.96 ppb	09:56:31
2	V 292.402†	74442.7	74499.0	498.66 ug/L	498.66 ppb	09:56:31
2	Zn 213.857†	58410.1	56766.6	491.50 ug/L	491.50 ppb	09:56:31
2	SiO2†	83428.0	81501.3	5202.4 ug/L	5202.4 ppb	09:57:33
3	Sc Radial	5781.7	5781.7	98.9 %		09:55:28
3	Y RADIAL	6134.2	6134.2	97.56 %		09:55:28
3	Al 396.153Radial†	7144.4	7241.7	5009.0 ug/L	5009.0 ppb	09:55:28
3	Ca 317.933Radial†	3390.8	3411.7	5028.7 ug/L	5028.7 ppb	09:55:48
3	Fe 238.204 Radial†	533.2	532.2	4997.9 ug/L	4997.9 ppb	09:55:48
3	K 766.490 Radial†	31003.1	28985.2	5131.8 ug/L	5131.8 ppb	09:55:28
3	Mg 279.077 IEC†	146.5	146.9	5189.7 ug/L	5189.7 ppb	09:55:48
3	Na 589.592 Radial†	26404.0	27776.3	9321.2 ug/L	9321.2 ppb	09:55:28
3	Sr 421.552†	79363.0	80245.0	499.70 ug/L	499.70 ppb	09:55:28
3	Sc 361.383	911611.3	911611.3	101.15 %		09:56:57
3	Y 371.029	745769.9	745769.9	99.292 %		09:56:57
3	Ag 328.068†	112067.6	110502.8	503.55 ug/L	503.55 ppb	09:57:02
3	As 188.979†	1237.5	1247.6	497.35 ug/L	497.35 ppb	09:57:22
3	B 249.677†	23101.5	23370.0	488.17 ug/L	488.17 ppb	09:57:02
3	Ba 233.527†	67671.0	66911.4	497.19 ug/L	497.19 ppb	09:57:02
3	Be 313.107†	1364038.9	1353669.5	494.40 ug/L	494.40 ppb	09:56:57
3	Cd 226.502†	47536.3	47191.8	498.71 ug/L	498.71 ppb	09:57:02
3	Co 228.616†	26480.7	26245.6	498.26 ug/L	498.26 ppb	09:57:02
3	Cr 267.716†	47913.3	47290.8	497.23 ug/L	497.23 ppb	09:57:02
3	Cu 324.752†	179727.3	170930.7	489.41 ug/L	489.41 ppb	09:57:02
3	Mn 257.610†	467403.8	461676.3	492.89 ug/L	492.89 ppb	09:56:57
3	Mo 202.031†	7909.1	7801.0	495.92 ug/L	495.92 ppb	09:57:22
3	Ni 231.604†	21876.1	21541.2	498.50 ug/L	498.50 ppb	09:57:02
3	P 214.914†	4487.9	4213.5	2356.1 ug/L	2356.1 ppb	09:57:22
3	Pb 220.353†	4324.6	4343.9	492.62 ug/L	492.62 ppb	09:57:22
3	S 181.975 Axial†	753.5	703.4	984.64 ug/L	984.64 ppb	09:57:22
3	Sb 206.836†	1616.8	1564.2	502.10 ug/L	502.10 ppb	09:57:22
3	Se 196.026†	830.8	850.1	509.72 ug/L	509.72 ppb	09:57:22
3	Si 251.611†	84048.4	82644.7	2462.1 ug/L	2462.1 ppb	09:57:02
3	Sn 189.927†	3062.7	3023.0	495.55 ug/L	495.55 ppb	09:57:22
3	Ti 334.940†	316195.2	313721.2	500.51 ug/L	500.51 ppb	09:57:02
3	Tl 190.801†	1738.8	1751.6	493.76 ug/L	493.76 ppb	09:57:22
3	U 409.014†	15569.6	17794.7	488.61 ug/L	488.61 ppb	09:57:02
3	V 292.402†	74329.4	74844.1	500.98 ug/L	500.98 ppb	09:57:02
3	Zn 213.857†	58136.8	56855.1	492.29 ug/L	492.29 ppb	09:57:02
3	SiO2†	82825.2	81417.6	5196.9 ug/L	5196.9 ppb	09:57:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914070.4	101.42	%	0.325				0.32%
Sc Radial	5759.8	98.6	%	0.91				0.92%
Y 371.029	747194.2	99.482	%	0.2839				0.29%
Y RADIAL	6133.6	97.55	%	0.599				0.61%
Ag 328.068†	110282.7	502.55	ug/L	1.691	502.55	ppb	1.691	0.34%
QC value within limits for Ag 328.068 Recovery = 100.51%								
Al 396.153Radial†	7167.2	4957.3	ug/L	57.27	4957.3	ppb	57.27	1.16%
QC value within limits for Al 396.153Radial Recovery = 99.15%								
As 188.979†	1240.1	494.36	ug/L	3.935	494.36	ppb	3.935	0.80%
QC value within limits for As 188.979 Recovery = 98.87%								
B 249.677†	23293.9	486.57	ug/L	2.353	486.57	ppb	2.353	0.48%
QC value within limits for B 249.677 Recovery = 97.31%								
Ba 233.527†	66684.4	495.50	ug/L	2.403	495.50	ppb	2.403	0.49%
QC value within limits for Ba 233.527 Recovery = 99.10%								
Be 313.107†	1352202.4	493.86	ug/L	0.637	493.86	ppb	0.637	0.13%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	3407.6	5022.7	ug/L	68.70	5022.7	ppb	68.70	1.37%

QC value within limits for Ca 317.933Radial Recovery = 100.45%

Cd 226.502†	46991.3	496.58 ug/L	1.906	496.58 ppb	1.906	0.38%

QC value within limits for Cd 226.502 Recovery = 99.32%

Co 228.616†	26153.3	496.51 ug/L	1.883	496.51 ppb	1.883	0.38%

QC value within limits for Co 228.616 Recovery = 99.30%

Cr 267.716†	47076.0	494.97 ug/L	2.308	494.97 ppb	2.308	0.47%

QC value within limits for Cr 267.716 Recovery = 98.99%

Cu 324.752†	170841.8	489.16 ug/L	2.320	489.16 ppb	2.320	0.47%

QC value within limits for Cu 324.752 Recovery = 97.83%

Fe 238.204 Radial†	535.0	5024.7 ug/L	66.27	5024.7 ppb	66.27	1.32%

QC value within limits for Fe 238.204 Radial Recovery = 100.49%

K 766.490 Radial†	28650.3	5072.4 ug/L	63.41	5072.4 ppb	63.41	1.25%

QC value within limits for K 766.490 Radial Recovery = 101.45%

Mg 279.077 IEC†	147.0	5190.2 ug/L	133.85	5190.2 ppb	133.85	2.58%

QC value within limits for Mg 279.077 IEC Recovery = 103.80%

Mn 257.610†	461667.3	492.88 ug/L	0.512	492.88 ppb	0.512	0.10%

QC value within limits for Mn 257.610 Recovery = 98.58%

Mo 202.031†	7797.0	495.67 ug/L	2.152	495.67 ppb	2.152	0.43%

QC value within limits for Mo 202.031 Recovery = 99.13%

Na 589.592 Radial†	27719.4	9302.1 ug/L	34.47	9302.1 ppb	34.47	0.37%

QC value within limits for Na 589.592 Radial Recovery = 93.02%

Ni 231.604†	21480.3	497.09 ug/L	1.625	497.09 ppb	1.625	0.33%

QC value within limits for Ni 231.604 Recovery = 99.42%

P 214.914†	4211.0	2354.7 ug/L	2.87	2354.7 ppb	2.87	0.12%

QC value within limits for P 214.914 Recovery = 94.19%

Pb 220.353†	4328.9	490.90 ug/L	2.250	490.90 ppb	2.250	0.46%

QC value within limits for Pb 220.353 Recovery = 98.18%

S 181.975 Axial†	703.1	984.23 ug/L	9.577	984.23 ppb	9.577	0.97%

QC value within limits for S 181.975 Axial Recovery = 98.42%

Sb 206.836†	1558.8	500.49 ug/L	1.436	500.49 ppb	1.436	0.29%

QC value within limits for Sb 206.836 Recovery = 100.10%

Se 196.026†	844.1	506.30 ug/L	4.789	506.30 ppb	4.789	0.95%

QC value within limits for Se 196.026 Recovery = 101.26%

Si 251.611†	82489.4	2457.5 ug/L	9.85	2457.5 ppb	9.85	0.40%

QC value within limits for Si 251.611 Recovery = 98.30%

Sn 189.927†	3030.5	496.79 ug/L	1.593	496.79 ppb	1.593	0.32%

QC value within limits for Sn 189.927 Recovery = 99.36%

Sr 421.552†	79724.0	496.45 ug/L	4.108	496.45 ppb	4.108	0.83%

QC value within limits for Sr 421.552 Recovery = 99.29%

Ti 334.940†	313021.5	499.39 ug/L	1.886	499.39 ppb	1.886	0.38%

QC value within limits for Ti 334.940 Recovery = 99.88%

Tl 190.801†	1746.4	492.30 ug/L	1.499	492.30 ppb	1.499	0.30%

QC value within limits for Tl 190.801 Recovery = 98.46%

U 409.014†	17810.9	489.06 ug/L	0.779	489.06 ppb	0.779	0.16%

QC value within limits for U 409.014 Recovery = 97.81%

V 292.402†	74459.9	498.44 ug/L	2.658	498.44 ppb	2.658	0.53%

QC value within limits for V 292.402 Recovery = 99.69%

Zn 213.857†	56711.6	491.04 ug/L	1.532	491.04 ppb	1.532	0.31%

QC value within limits for Zn 213.857 Recovery = 98.21%

SiO2†	81329.0	5191.2 ug/L	14.79	5191.2 ppb	14.79	0.28%

QC value within limits for SiO2 Recovery = 97.08%

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5856.6	5856.6	100	%			10:01:40
1	Y RADIAL	6302.7	6302.7	100.2	%			10:01:40
1	Al 396.153Radial†	-34.9	-14.4	-10.047	ug/L	-10.047	ppb	10:01:40
1	Ca 317.933Radial†	25.4	9.8	14.456	ug/L	14.456	ppb	10:02:00
1	Fe 238.204 Radial†	10.4	3.5	33.153	ug/L	33.153	ppb	10:02:00
1	K 766.490 Radial†	2417.2	60.2	10.691	ug/L	10.691	ppb	10:01:40
1	Mg 279.077 IEC†	1.7	0.5	17.521	ug/L	17.521	ppb	10:02:00
1	Na 589.592 Radial†	-1131.4	-41.1	-13.778	ug/L	-13.778	ppb	10:01:40
1	Sr 421.552†	-11.1	16.3	0.1012	ug/L	0.1012	ppb	10:01:40
1	Sc 361.383	910453.7	910453.7	101.02	%			10:02:57
1	Y 371.029	761123.5	761123.5	101.34	%			10:02:57
1	Ag 328.068†	424.3	127.3	0.5854	ug/L	0.5854	ppb	10:02:57
1	As 188.979†	-20.3	4.1	1.6169	ug/L	1.6169	ppb	10:03:17
1	B 249.677†	-282.4	251.1	5.2624	ug/L	5.2624	ppb	10:03:17
1	Ba 233.527†	-10.7	-2.2	-0.0145	ug/L	-0.0145	ppb	10:03:17
1	Be 313.107†	-4984.1	179.2	0.0655	ug/L	0.0655	ppb	10:02:57
1	Cd 226.502†	-199.5	-2.4	-0.0279	ug/L	-0.0279	ppb	10:03:17
1	Co 228.616†	-71.1	-4.9	-0.0924	ug/L	-0.0924	ppb	10:03:17
1	Cr 267.716†	90.6	11.0	0.1154	ug/L	0.1154	ppb	10:03:17
1	Cu 324.752†	6722.7	-101.8	-0.2898	ug/L	-0.2898	ppb	10:02:57
1	Mn 257.610†	429.7	3.1	0.0062	ug/L	0.0062	ppb	10:03:17
1	Mo 202.031†	29.8	11.2	0.7111	ug/L	0.7111	ppb	10:03:17
1	Ni 231.604†	110.3	22.6	0.5242	ug/L	0.5242	ppb	10:03:17
1	P 214.914†	216.2	-9.5	-5.4823	ug/L	-5.4823	ppb	10:03:17
1	Pb 220.353†	-58.5	10.5	1.1878	ug/L	1.1878	ppb	10:03:17
1	S 181.975 Axial†	42.2	0.2	0.2210	ug/L	0.2210	ppb	10:03:17
1	Sb 206.836†	42.3	7.6	2.4420	ug/L	2.4420	ppb	10:03:17
1	Se 196.026†	-34.3	-5.1	-2.8713	ug/L	-2.8713	ppb	10:03:17
1	Si 251.611†	498.1	43.4	1.2818	ug/L	1.2818	ppb	10:03:17
1	Sn 189.927†	7.9	2.9	0.4713	ug/L	0.4713	ppb	10:03:17
1	Ti 334.940†	-1069.0	56.8	0.0901	ug/L	0.0901	ppb	10:02:57
1	Tl 190.801†	-32.9	-0.0	-0.0121	ug/L	-0.0121	ppb	10:03:17
1	U 409.014†	-2331.2	94.1	2.5885	ug/L	2.5885	ppb	10:02:57
1	V 292.402†	-1353.0	19.0	0.1359	ug/L	0.1359	ppb	10:02:57
1	Zn 213.857†	694.0	65.1	0.5621	ug/L	0.5621	ppb	10:03:17
1	SiO2†	465.2	-7.0	-0.4864	ug/L	-0.4864	ppb	10:04:13
2	Sc Radial	5902.5	5902.5	101	%			10:02:05
2	Y RADIAL	6366.5	6366.5	101.3	%			10:02:05
2	Al 396.153Radial†	-13.1	7.4	5.1522	ug/L	5.1522	ppb	10:02:05
2	Ca 317.933Radial†	20.3	4.5	6.7005	ug/L	6.7005	ppb	10:02:25
2	Fe 238.204 Radial†	5.6	-1.3	-11.735	ug/L	-11.735	ppb	10:02:25
2	K 766.490 Radial†	2448.0	72.0	12.773	ug/L	12.773	ppb	10:02:05
2	Mg 279.077 IEC†	2.0	0.9	30.205	ug/L	30.205	ppb	10:02:25
2	Na 589.592 Radial†	-1120.1	-21.0	-7.0524	ug/L	-7.0524	ppb	10:02:05
2	Sr 421.552†	-4.8	22.6	0.1409	ug/L	0.1409	ppb	10:02:05
2	Sc 361.383	906696.3	906696.3	100.60	%			10:03:22
2	Y 371.029	757143.8	757143.8	100.81	%			10:03:22
2	Ag 328.068†	460.3	164.8	0.7406	ug/L	0.7406	ppb	10:03:22
2	As 188.979†	-18.5	5.8	2.2924	ug/L	2.2924	ppb	10:03:42
2	B 249.677†	-286.2	246.2	5.1636	ug/L	5.1636	ppb	10:03:42
2	Ba 233.527†	-12.4	-3.8	-0.0285	ug/L	-0.0285	ppb	10:03:42
2	Be 313.107†	-4940.5	202.1	0.0737	ug/L	0.0737	ppb	10:03:22
2	Cd 226.502†	-189.0	7.3	0.0778	ug/L	0.0778	ppb	10:03:42
2	Co 228.616†	-61.9	3.9	0.0757	ug/L	0.0757	ppb	10:03:42
2	Cr 267.716†	76.6	-2.5	-0.0269	ug/L	-0.0269	ppb	10:03:42
2	Cu 324.752†	6780.8	-16.6	-0.0480	ug/L	-0.0480	ppb	10:03:22
2	Mn 257.610†	438.7	13.7	0.0129	ug/L	0.0129	ppb	10:03:42
2	Mo 202.031†	24.4	6.0	0.3775	ug/L	0.3775	ppb	10:03:42
2	Ni 231.604†	74.4	-12.6	-0.2911	ug/L	-0.2911	ppb	10:03:42

2	P 214.914†	211.6	-13.2	-7.5926	ug/L	-7.5926	ppb	10:03:42
2	Pb 220.353†	-63.4	5.4	0.6161	ug/L	0.6161	ppb	10:03:42
2	S 181.975 Axial†	45.7	3.9	5.4030	ug/L	5.4030	ppb	10:03:42
2	Sb 206.836†	42.8	8.3	2.6247	ug/L	2.6247	ppb	10:03:42
2	Se 196.026†	-24.4	4.6	2.6330	ug/L	2.6330	ppb	10:03:42
2	Si 251.611†	494.0	41.4	1.2271	ug/L	1.2271	ppb	10:03:42
2	Sn 189.927†	5.3	0.3	0.0474	ug/L	0.0474	ppb	10:03:42
2	Ti 334.940†	-1108.9	12.6	0.0192	ug/L	0.0192	ppb	10:03:22
2	Tl 190.801†	-30.9	1.8	0.5082	ug/L	0.5082	ppb	10:03:42
2	U 409.014†	-2307.9	107.7	2.9690	ug/L	2.9690	ppb	10:03:22
2	V 292.402†	-1348.2	18.2	0.1339	ug/L	0.1339	ppb	10:03:22
2	Zn 213.857†	689.0	63.0	0.5524	ug/L	0.5524	ppb	10:03:42
2	SiO2†	513.6	43.1	2.7395	ug/L	2.7395	ppb	10:04:18
3	Sc Radial	5922.3	5922.3	101	%			10:02:30
3	Y RADIAL	6371.5	6371.5	101.3	%			10:02:30
3	Al 396.153Radial†	-29.0	-8.2	-5.7155	ug/L	-5.7155	ppb	10:02:30
3	Ca 317.933Radial†	20.3	4.5	6.5597	ug/L	6.5597	ppb	10:02:50
3	Fe 238.204 Radial†	8.3	1.4	13.121	ug/L	13.121	ppb	10:02:50
3	K 766.490 Radial†	2353.1	-29.8	-5.2822	ug/L	-5.2822	ppb	10:02:30
3	Mg 279.077 IEC†	0.6	-0.6	-20.672	ug/L	-20.672	ppb	10:02:50
3	Na 589.592 Radial†	-1094.9	7.5	2.5235	ug/L	2.5235	ppb	10:02:30
3	Sr 421.552†	3.7	31.0	0.1931	ug/L	0.1931	ppb	10:02:30
3	Sc 361.383	902829.2	902829.2	100.17	%			10:03:47
3	Y 371.029	755411.0	755411.0	100.58	%			10:03:47
3	Ag 328.068†	358.0	64.7	0.2988	ug/L	0.2988	ppb	10:03:47
3	As 188.979†	-15.0	9.2	3.6283	ug/L	3.6283	ppb	10:04:07
3	B 249.677†	-300.1	231.1	4.8434	ug/L	4.8434	ppb	10:04:07
3	Ba 233.527†	-0.7	7.7	0.0580	ug/L	0.0580	ppb	10:04:07
3	Be 313.107†	-4892.1	229.3	0.0837	ug/L	0.0837	ppb	10:03:47
3	Cd 226.502†	-180.1	15.3	0.1610	ug/L	0.1610	ppb	10:04:07
3	Co 228.616†	-60.9	4.6	0.0881	ug/L	0.0881	ppb	10:04:07
3	Cr 267.716†	79.3	0.5	0.0064	ug/L	0.0064	ppb	10:04:07
3	Cu 324.752†	6709.2	-59.1	-0.1685	ug/L	-0.1685	ppb	10:03:47
3	Mn 257.610†	438.1	15.0	0.0177	ug/L	0.0177	ppb	10:04:07
3	Mo 202.031†	21.5	3.2	0.2015	ug/L	0.2015	ppb	10:04:07
3	Ni 231.604†	99.5	12.8	0.2969	ug/L	0.2969	ppb	10:04:07
3	P 214.914†	215.8	-8.1	-4.6716	ug/L	-4.6716	ppb	10:04:07
3	Pb 220.353†	-65.9	2.6	0.2959	ug/L	0.2959	ppb	10:04:07
3	S 181.975 Axial†	39.7	-2.0	-2.7906	ug/L	-2.7906	ppb	10:04:07
3	Sb 206.836†	32.3	-2.0	-0.6310	ug/L	-0.6310	ppb	10:04:07
3	Se 196.026†	-16.8	12.0	6.9843	ug/L	6.9843	ppb	10:04:07
3	Si 251.611†	489.0	38.5	1.1488	ug/L	1.1488	ppb	10:04:07
3	Sn 189.927†	6.7	1.7	0.2867	ug/L	0.2867	ppb	10:04:07
3	Ti 334.940†	-1078.5	38.3	0.0622	ug/L	0.0622	ppb	10:03:47
3	Tl 190.801†	-33.1	-0.6	-0.1545	ug/L	-0.1545	ppb	10:04:07
3	U 409.014†	-2470.8	-64.7	-1.7847	ug/L	-1.7847	ppb	10:03:47
3	V 292.402†	-1354.7	6.0	0.0363	ug/L	0.0363	ppb	10:03:47
3	Zn 213.857†	672.6	49.6	0.4309	ug/L	0.4309	ppb	10:04:07
3	SiO2†	501.7	33.4	2.1374	ug/L	2.1374	ppb	10:04:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906659.7	100.60	%	0.423				0.42%
Sc Radial	5893.8	101	%	0.6				0.57%
Y 371.029	757892.8	100.91	%	0.390				0.39%
Y RADIAL	6346.9	100.9	%	0.61				0.60%
Ag 328.068†	118.9	0.5416	ug/L	0.22414	0.5416	ppb	0.22414	41.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.1	-3.5369	ug/L	7.83042	-3.5369	ppb	7.83042	221.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.4	2.5125	ug/L	1.02361	2.5125	ppb	1.02361	40.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	242.8	5.0898	ug/L	0.21902	5.0898	ppb	0.21902	4.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.6	0.0050	ug/L	0.04645	0.0050	ppb	0.04645	932.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.5	0.0743	ug/L	0.00913	0.0743	ppb	0.00913	12.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	9.2388	ug/L	4.51901	9.2388	ppb	4.51901	48.91%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                6.7      0.0703 ug/L       0.09465      0.0703 ppb        0.09465 134.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.2      0.0238 ug/L       0.10080      0.0238 ppb        0.10080 423.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                3.0      0.0316 ug/L       0.07442      0.0316 ppb        0.07442 235.34%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -59.2     -0.1688 ug/L       0.12088     -0.1688 ppb        0.12088  71.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.2      11.513 ug/L       22.4868      11.513 ppb        22.4868 195.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         34.2      6.0606 ug/L       9.87817      6.0606 ppb        9.87817 162.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.3      9.0182 ug/L      26.48267      9.0182 ppb       26.48267 293.66%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               10.6      0.0123 ug/L       0.00577      0.0123 ppb        0.00577  46.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.8      0.4300 ug/L       0.25880      0.4300 ppb        0.25880  60.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -18.2     -6.1022 ug/L       8.19208     -6.1022 ppb        8.19208 134.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                7.6      0.1767 ug/L       0.42074      0.1767 ppb        0.42074 238.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -10.3     -5.9155 ug/L       1.50790     -5.9155 ppb        1.50790  25.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                6.2      0.7000 ug/L       0.45182      0.7000 ppb        0.45182  64.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.7      0.9445 ug/L       4.14441      0.9445 ppb        4.14441 438.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                4.6      1.4786 ug/L       1.82922      1.4786 ppb        1.82922 123.72%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.8      2.2487 ug/L       4.93905      2.2487 ppb        4.93905 219.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               41.1      1.2192 ug/L       0.06684      1.2192 ppb        0.06684   5.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.6      0.2684 ug/L       0.21256      0.2684 ppb        0.21256  79.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               23.3      0.1451 ug/L       0.04613      0.1451 ppb        0.04613  31.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               35.9      0.0572 ug/L       0.03572      0.0572 ppb        0.03572  62.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.4      0.1139 ug/L       0.34885      0.1139 ppb        0.34885 306.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                45.7      1.2576 ug/L       2.64158      1.2576 ppb        2.64158 210.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                14.4      0.1020 ug/L       0.05695      0.1020 ppb        0.05695  55.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               59.2      0.5151 ug/L       0.07311      0.5151 ppb        0.07311  14.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     23.2      1.4635 ug/L       1.71530      1.4635 ppb        1.71530 117.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 10:55:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5836.7	5836.7	99.9	%			10:56:54
1	Y RADIAL	6210.2	6210.2	98.77	%			10:56:54
1	Al 396.153Radial†	7234.6	7264.0	5024.4	ug/L	5024.4	ppb	10:56:54
1	Ca 317.933Radial†	3402.4	3391.0	4998.2	ug/L	4998.2	ppb	10:57:14
1	Fe 238.204 Radial†	541.2	535.0	5024.5	ug/L	5024.5	ppb	10:57:14
1	K 766.490 Radial†	31171.5	28858.3	5109.2	ug/L	5109.2	ppb	10:56:54
1	Mg 279.077 IEC†	147.8	146.8	5185.7	ug/L	5185.7	ppb	10:57:14
1	Na 589.592 Radial†	26951.7	28073.0	9420.8	ug/L	9420.8	ppb	10:56:54
1	Sr 421.552†	80685.7	80812.9	503.24	ug/L	503.24	ppb	10:56:54
1	Sc 361.383	912942.5	912942.5	101.30	%			10:58:11
1	Y 371.029	746090.1	746090.1	99.335	%			10:58:11
1	Ag 328.068†	113045.6	111306.8	507.20	ug/L	507.20	ppb	10:58:16
1	As 188.979†	1243.0	1251.3	498.84	ug/L	498.84	ppb	10:58:36
1	B 249.677†	23351.6	23583.6	492.64	ug/L	492.64	ppb	10:58:16
1	Ba 233.527†	68082.7	67220.2	499.48	ug/L	499.48	ppb	10:58:16
1	Be 313.107†	1379726.6	1367190.1	499.33	ug/L	499.33	ppb	10:58:11
1	Cd 226.502†	47784.4	47368.2	500.57	ug/L	500.57	ppb	10:58:16
1	Co 228.616†	26603.3	26328.4	499.82	ug/L	499.82	ppb	10:58:16
1	Cr 267.716†	48114.7	47420.6	498.60	ug/L	498.60	ppb	10:58:16
1	Cu 324.752†	182183.4	173096.2	495.61	ug/L	495.61	ppb	10:58:16
1	Mn 257.610†	472775.1	466305.0	497.83	ug/L	497.83	ppb	10:58:11
1	Mo 202.031†	7944.6	7824.7	497.43	ug/L	497.43	ppb	10:58:36
1	Ni 231.604†	22018.7	21650.5	501.03	ug/L	501.03	ppb	10:58:16
1	P 214.914†	4530.0	4248.6	2375.4	ug/L	2375.4	ppb	10:58:36
1	Pb 220.353†	4336.0	4349.0	493.19	ug/L	493.19	ppb	10:58:36
1	S 181.975 Axial†	760.5	709.2	992.78	ug/L	992.78	ppb	10:58:36
1	Sb 206.836†	1628.6	1573.5	505.12	ug/L	505.12	ppb	10:58:36
1	Se 196.026†	832.9	851.0	510.32	ug/L	510.32	ppb	10:58:36
1	Si 251.611†	85003.3	83466.2	2486.7	ug/L	2486.7	ppb	10:58:16
1	Sn 189.927†	3093.2	3048.7	499.75	ug/L	499.75	ppb	10:58:36
1	Ti 334.940†	319189.1	316220.9	504.49	ug/L	504.49	ppb	10:58:16
1	Tl 190.801†	1748.6	1758.7	495.80	ug/L	495.80	ppb	10:58:36
1	U 409.014†	15769.5	17969.6	493.42	ug/L	493.42	ppb	10:58:16
1	V 292.402†	74759.8	75161.8	503.10	ug/L	503.10	ppb	10:58:16
1	Zn 213.857†	58554.3	57183.4	495.13	ug/L	495.13	ppb	10:58:16
1	SiO2†	84380.2	82833.4	5287.6	ug/L	5287.6	ppb	10:59:44
2	Sc Radial	5834.9	5834.9	99.8	%			10:57:19
2	Y RADIAL	6222.6	6222.6	98.96	%			10:57:19
2	Al 396.153Radial†	7203.7	7235.3	5004.3	ug/L	5004.3	ppb	10:57:19
2	Ca 317.933Radial†	3392.1	3381.8	4984.6	ug/L	4984.6	ppb	10:57:39
2	Fe 238.204 Radial†	535.4	529.4	4972.3	ug/L	4972.3	ppb	10:57:39
2	K 766.490 Radial†	31223.2	28919.9	5120.1	ug/L	5120.1	ppb	10:57:19
2	Mg 279.077 IEC†	147.2	146.2	5165.0	ug/L	5165.0	ppb	10:57:39
2	Na 589.592 Radial†	27037.9	28167.8	9452.6	ug/L	9452.6	ppb	10:57:19
2	Sr 421.552†	80750.8	80903.3	503.80	ug/L	503.80	ppb	10:57:19
2	Sc 361.383	909552.0	909552.0	100.92	%			10:58:42
2	Y 371.029	743255.5	743255.5	98.958	%			10:58:42
2	Ag 328.068†	112515.9	111198.0	506.69	ug/L	506.69	ppb	10:58:47
2	As 188.979†	1256.0	1268.7	505.70	ug/L	505.70	ppb	10:59:07
2	B 249.677†	23323.4	23641.6	493.86	ug/L	493.86	ppb	10:58:47
2	Ba 233.527†	67589.6	66982.2	497.72	ug/L	497.72	ppb	10:58:47
2	Be 313.107†	1376097.3	1368671.4	499.87	ug/L	499.87	ppb	10:58:42
2	Cd 226.502†	47400.4	47163.6	498.41	ug/L	498.41	ppb	10:58:47
2	Co 228.616†	26513.1	26336.9	500.00	ug/L	500.00	ppb	10:58:47
2	Cr 267.716†	47769.9	47256.0	496.86	ug/L	496.86	ppb	10:58:47
2	Cu 324.752†	181689.9	173277.6	496.12	ug/L	496.12	ppb	10:58:47
2	Mn 257.610†	471465.6	466747.3	498.30	ug/L	498.30	ppb	10:58:42
2	Mo 202.031†	7999.6	7908.4	502.74	ug/L	502.74	ppb	10:59:07
2	Ni 231.604†	21920.1	21633.9	500.64	ug/L	500.64	ppb	10:58:47

2	P 214.914†	4543.1	4278.2	2392.4 ug/L	2392.4 ppb	10:59:07
2	Pb 220.353†	4354.4	4383.1	497.06 ug/L	497.06 ppb	10:59:07
2	S 181.975 Axial†	764.8	716.3	1002.7 ug/L	1002.7 ppb	10:59:07
2	Sb 206.836†	1632.7	1583.6	508.54 ug/L	508.54 ppb	10:59:07
2	Se 196.026†	848.5	869.6	520.92 ug/L	520.92 ppb	10:59:07
2	Si 251.611†	84780.6	83558.4	2489.4 ug/L	2489.4 ppb	10:58:47
2	Sn 189.927†	3104.1	3070.8	503.38 ug/L	503.38 ppb	10:59:07
2	Ti 334.940†	317707.7	315927.7	504.03 ug/L	504.03 ppb	10:58:47
2	Tl 190.801†	1746.8	1763.4	497.13 ug/L	497.13 ppb	10:59:07
2	U 409.014†	15661.1	17920.2	492.07 ug/L	492.07 ppb	10:58:47
2	V 292.402†	74294.6	74976.0	501.96 ug/L	501.96 ppb	10:58:47
2	Zn 213.857†	58260.9	57108.1	494.48 ug/L	494.48 ppb	10:58:47
2	SiO2†	84649.4	83410.6	5324.4 ug/L	5324.4 ppb	10:59:49
3	Sc Radial	5661.5	5661.5	96.9 %		10:57:44
3	Y RADIAL	6036.7	6036.7	96.01 %		10:57:44
3	Al 396.153Radial†	7058.0	7305.9	5053.4 ug/L	5053.4 ppb	10:57:44
3	Ca 317.933Radial†	3401.0	3495.0	5151.4 ug/L	5151.4 ppb	10:58:04
3	Fe 238.204 Radial†	540.2	550.8	5172.0 ug/L	5172.0 ppb	10:58:04
3	K 766.490 Radial†	30464.0	29093.9	5150.9 ug/L	5150.9 ppb	10:57:44
3	Mg 279.077 IEC†	150.6	154.3	5450.5 ug/L	5450.5 ppb	10:58:04
3	Na 589.592 Radial†	26299.4	28234.8	9475.0 ug/L	9475.0 ppb	10:57:44
3	Sr 421.552†	78649.8	81211.4	505.72 ug/L	505.72 ppb	10:57:44
3	Sc 361.383	910135.6	910135.6	100.98 %		10:59:13
3	Y 371.029	743780.8	743780.8	99.028 %		10:59:13
3	Ag 328.068†	112947.9	111554.2	508.37 ug/L	508.37 ppb	10:59:18
3	As 188.979†	1238.3	1250.4	498.50 ug/L	498.50 ppb	10:59:38
3	B 249.677†	23406.9	23709.4	495.25 ug/L	495.25 ppb	10:59:18
3	Ba 233.527†	67980.8	67326.6	500.28 ug/L	500.28 ppb	10:59:18
3	Be 313.107†	1377213.7	1368902.5	499.96 ug/L	499.96 ppb	10:59:13
3	Cd 226.502†	47687.0	47417.3	501.07 ug/L	501.07 ppb	10:59:18
3	Co 228.616†	26599.4	26405.6	501.29 ug/L	501.29 ppb	10:59:18
3	Cr 267.716†	47962.8	47416.7	498.56 ug/L	498.56 ppb	10:59:18
3	Cu 324.752†	182088.2	173556.6	496.93 ug/L	496.93 ppb	10:59:18
3	Mn 257.610†	472502.0	467474.0	499.09 ug/L	499.09 ppb	10:59:13
3	Mo 202.031†	7966.0	7870.1	500.32 ug/L	500.32 ppb	10:59:38
3	Ni 231.604†	21954.6	21654.0	501.11 ug/L	501.11 ppb	10:59:18
3	P 214.914†	4524.4	4256.8	2379.8 ug/L	2379.8 ppb	10:59:38
3	Pb 220.353†	4326.4	4352.7	493.61 ug/L	493.61 ppb	10:59:38
3	S 181.975 Axial†	764.3	715.3	1001.3 ug/L	1001.3 ppb	10:59:38
3	Sb 206.836†	1612.5	1562.5	501.73 ug/L	501.73 ppb	10:59:38
3	Se 196.026†	836.6	857.2	514.39 ug/L	514.39 ppb	10:59:38
3	Si 251.611†	85020.0	83741.6	2494.9 ug/L	2494.9 ppb	10:59:18
3	Sn 189.927†	3089.6	3054.5	500.73 ug/L	500.73 ppb	10:59:38
3	Ti 334.940†	318560.4	316570.2	505.06 ug/L	505.06 ppb	10:59:18
3	Tl 190.801†	1744.8	1760.3	496.26 ug/L	496.26 ppb	10:59:38
3	U 409.014†	15645.4	17894.7	491.34 ug/L	491.34 ppb	10:59:18
3	V 292.402†	74546.6	75178.3	503.23 ug/L	503.23 ppb	10:59:18
3	Zn 213.857†	58671.4	57477.7	497.67 ug/L	497.67 ppb	10:59:18
3	SiO2†	83527.3	82245.7	5249.8 ug/L	5249.8 ppb	10:59:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910876.7	101.07	%	0.201				0.20%
Sc Radial	5777.7	98.9	%	1.72				1.74%
Y 371.029	744375.4	99.107	%	0.2008				0.20%
Y RADIAL	6156.5	97.91	%	1.653				1.69%
Ag 328.068†	111353.0	507.42	ug/L	0.861	507.42	ppb	0.861	0.17%
QC value within limits for Ag 328.068 Recovery = 101.48%								
Al 396.153Radial†	7268.4	5027.4	ug/L	24.71	5027.4	ppb	24.71	0.49%
QC value within limits for Al 396.153Radial Recovery = 100.55%								
As 188.979†	1256.8	501.01	ug/L	4.064	501.01	ppb	4.064	0.81%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	23644.8	493.92	ug/L	1.308	493.92	ppb	1.308	0.26%
QC value within limits for B 249.677 Recovery = 98.78%								
Ba 233.527†	67176.3	499.16	ug/L	1.312	499.16	ppb	1.312	0.26%
QC value within limits for Ba 233.527 Recovery = 99.83%								
Be 313.107†	1368254.7	499.72	ug/L	0.339	499.72	ppb	0.339	0.07%
QC value within limits for Be 313.107 Recovery = 99.94%								
Ca 317.933Radial†	3422.6	5044.7	ug/L	92.67	5044.7	ppb	92.67	1.84%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.89%
Cd 226.502†            47316.4      500.02 ug/L        1.414      500.02 ppb        1.414   0.28%
   QC value within limits for Cd 226.502  Recovery = 100.00%
Co 228.616†            26357.0      500.37 ug/L        0.802      500.37 ppb        0.802   0.16%
   QC value within limits for Co 228.616  Recovery = 100.07%
Cr 267.716†            47364.4      498.01 ug/L        0.988      498.01 ppb        0.988   0.20%
   QC value within limits for Cr 267.716  Recovery = 99.60%
Cu 324.752†           173310.1      496.22 ug/L        0.668      496.22 ppb        0.668   0.13%
   QC value within limits for Cu 324.752  Recovery = 99.24%
Fe 238.204 Radial†       538.4      5056.3 ug/L       103.60      5056.3 ppb       103.60   2.05%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.13%
K 766.490 Radial†      28957.4      5126.7 ug/L       21.65       5126.7 ppb        21.65   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 102.53%
Mg 279.077 IEC†          149.1      5267.1 ug/L       159.20      5267.1 ppb       159.20   3.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.34%
Mn 257.610†           466842.1      498.40 ug/L        0.635      498.40 ppb        0.635   0.13%
   QC value within limits for Mn 257.610  Recovery = 99.68%
Mo 202.031†             7867.7      500.16 ug/L        2.660      500.16 ppb        2.660   0.53%
   QC value within limits for Mo 202.031  Recovery = 100.03%
Na 589.592 Radial†     28158.5      9449.5 ug/L       27.27       9449.5 ppb        27.27   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 94.49%
Ni 231.604†            21646.1      500.93 ug/L        0.249      500.93 ppb        0.249   0.05%
   QC value within limits for Ni 231.604  Recovery = 100.19%
P 214.914†              4261.2      2382.5 ug/L        8.85       2382.5 ppb         8.85   0.37%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4361.6      494.62 ug/L        2.124      494.62 ppb        2.124   0.43%
   QC value within limits for Pb 220.353  Recovery = 98.92%
S 181.975 Axial†         713.6      998.91 ug/L        5.360      998.91 ppb        5.360   0.54%
   QC value within limits for S 181.975 Axial  Recovery = 99.89%
Sb 206.836†             1573.2      505.13 ug/L        3.408      505.13 ppb        3.408   0.67%
   QC value within limits for Sb 206.836  Recovery = 101.03%
Se 196.026†              859.3      515.21 ug/L        5.347      515.21 ppb        5.347   1.04%
   QC value within limits for Se 196.026  Recovery = 103.04%
Si 251.611†            83588.8      2490.3 ug/L        4.17       2490.3 ppb         4.17   0.17%
   QC value within limits for Si 251.611  Recovery = 99.61%
Sn 189.927†             3058.0      501.29 ug/L        1.878      501.29 ppb        1.878   0.37%
   QC value within limits for Sn 189.927  Recovery = 100.26%
Sr 421.552†            80975.9      504.25 ug/L        1.300      504.25 ppb        1.300   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†           316239.6      504.53 ug/L        0.518      504.53 ppb        0.518   0.10%
   QC value within limits for Ti 334.940  Recovery = 100.91%
Tl 190.801†             1760.8      496.40 ug/L        0.673      496.40 ppb        0.673   0.14%
   QC value within limits for Tl 190.801  Recovery = 99.28%
U 409.014†             17928.2      492.28 ug/L        1.056      492.28 ppb        1.056   0.21%
   QC value within limits for U 409.014  Recovery = 98.46%
V 292.402†             75105.4      502.76 ug/L        0.701      502.76 ppb        0.701   0.14%
   QC value within limits for V 292.402  Recovery = 100.55%
Zn 213.857†            57256.4      495.76 ug/L        1.689      495.76 ppb        1.689   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.15%
SiO2†                  82829.9      5287.3 ug/L       37.32       5287.3 ppb        37.32   0.71%
   QC value within limits for SiO2  Recovery = 98.87%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 11:02:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5907.4	5907.4	101	%			11:03:56
1	Y RADIAL	6373.2	6373.2	101.4	%			11:03:56
1	Al 396.153Radial†	-16.4	4.2	2.8934	ug/L	2.8934	ppb	11:03:56
1	Ca 317.933Radial†	26.3	10.4	15.372	ug/L	15.372	ppb	11:04:16
1	Fe 238.204 Radial†	8.9	2.0	18.992	ug/L	18.992	ppb	11:04:16
1	K 766.490 Radial†	2487.0	108.5	19.254	ug/L	19.254	ppb	11:03:56
1	Mg 279.077 IEC†	1.8	0.6	20.816	ug/L	20.816	ppb	11:04:16
1	Na 589.592 Radial†	-1139.5	-39.4	-13.208	ug/L	-13.208	ppb	11:03:56
1	Sr 421.552†	-17.9	9.7	0.0600	ug/L	0.0600	ppb	11:03:56
1	Sc 361.383	921090.1	921090.1	102.20	%			11:05:13
1	Y 371.029	765057.3	765057.3	101.86	%			11:05:13
1	Ag 328.068†	422.5	120.7	0.5537	ug/L	0.5537	ppb	11:05:18
1	As 188.979†	-29.5	-4.7	-1.8629	ug/L	-1.8629	ppb	11:05:38
1	B 249.677†	-196.7	338.2	7.0890	ug/L	7.0890	ppb	11:05:38
1	Ba 233.527†	-11.6	-2.9	-0.0190	ug/L	-0.0190	ppb	11:05:38
1	Be 313.107†	-5013.6	207.3	0.0759	ug/L	0.0759	ppb	11:05:18
1	Cd 226.502†	-193.1	6.1	0.0631	ug/L	0.0631	ppb	11:05:38
1	Co 228.616†	-63.1	3.7	0.0701	ug/L	0.0701	ppb	11:05:38
1	Cr 267.716†	78.2	-2.2	-0.0219	ug/L	-0.0219	ppb	11:05:38
1	Cu 324.752†	6827.8	-75.9	-0.2162	ug/L	-0.2162	ppb	11:05:18
1	Mn 257.610†	450.5	18.5	0.0213	ug/L	0.0213	ppb	11:05:38
1	Mo 202.031†	27.3	8.4	0.5323	ug/L	0.5323	ppb	11:05:38
1	Ni 231.604†	89.4	0.9	0.0214	ug/L	0.0214	ppb	11:05:38
1	P 214.914†	211.9	-16.2	-9.3236	ug/L	-9.3236	ppb	11:05:38
1	Pb 220.353†	-64.3	5.6	0.6285	ug/L	0.6285	ppb	11:05:38
1	S 181.975 Axial†	41.5	-1.0	-1.3774	ug/L	-1.3774	ppb	11:05:38
1	Sb 206.836†	36.6	1.5	0.4904	ug/L	0.4904	ppb	11:05:38
1	Se 196.026†	-26.5	2.9	1.7419	ug/L	1.7419	ppb	11:05:38
1	Si 251.611†	653.6	189.9	5.6697	ug/L	5.6697	ppb	11:05:38
1	Sn 189.927†	2.2	-2.9	-0.4695	ug/L	-0.4695	ppb	11:05:38
1	Ti 334.940†	-1019.1	117.8	0.1879	ug/L	0.1879	ppb	11:05:18
1	Tl 190.801†	-30.7	2.5	0.6973	ug/L	0.6973	ppb	11:05:38
1	U 409.014†	-2386.4	66.7	1.8362	ug/L	1.8362	ppb	11:05:13
1	V 292.402†	-1272.8	113.0	0.7547	ug/L	0.7547	ppb	11:05:18
1	Zn 213.857†	691.1	54.4	0.4729	ug/L	0.4729	ppb	11:05:38
1	SiO2†	679.7	197.6	12.642	ug/L	12.642	ppb	11:06:44
2	Sc Radial	5763.9	5763.9	98.6	%			11:04:21
2	Y RADIAL	6194.3	6194.3	98.51	%			11:04:21
2	Al 396.153Radial†	4.4	24.8	17.233	ug/L	17.233	ppb	11:04:21
2	Ca 317.933Radial†	28.7	13.5	19.943	ug/L	19.943	ppb	11:04:41
2	Fe 238.204 Radial†	6.9	0.2	1.8678	ug/L	1.8678	ppb	11:04:41
2	K 766.490 Radial†	2548.3	232.0	41.140	ug/L	41.140	ppb	11:04:21
2	Mg 279.077 IEC†	3.6	2.5	86.967	ug/L	86.967	ppb	11:04:41
2	Na 589.592 Radial†	-1094.3	-21.6	-7.2337	ug/L	-7.2337	ppb	11:04:21
2	Sr 421.552†	-18.4	8.7	0.0542	ug/L	0.0542	ppb	11:04:21
2	Sc 361.383	926942.0	926942.0	102.85	%			11:05:43
2	Y 371.029	770672.4	770672.4	102.61	%			11:05:43
2	Ag 328.068†	401.4	97.5	0.4398	ug/L	0.4398	ppb	11:05:48
2	As 188.979†	-22.5	2.3	0.9165	ug/L	0.9165	ppb	11:06:08
2	B 249.677†	-182.2	353.5	7.4138	ug/L	7.4138	ppb	11:06:08
2	Ba 233.527†	-3.0	5.6	0.0422	ug/L	0.0422	ppb	11:06:08
2	Be 313.107†	-5006.2	245.5	0.0896	ug/L	0.0896	ppb	11:05:48
2	Cd 226.502†	-191.4	9.0	0.0952	ug/L	0.0952	ppb	11:06:08
2	Co 228.616†	-69.6	-2.2	-0.0411	ug/L	-0.0411	ppb	11:06:08
2	Cr 267.716†	63.2	-17.2	-0.1810	ug/L	-0.1810	ppb	11:06:08
2	Cu 324.752†	6828.8	-117.1	-0.3350	ug/L	-0.3350	ppb	11:05:48
2	Mn 257.610†	438.6	4.1	0.0030	ug/L	0.0030	ppb	11:06:08
2	Mo 202.031†	23.8	4.8	0.3045	ug/L	0.3045	ppb	11:06:08
2	Ni 231.604†	81.8	-7.1	-0.1636	ug/L	-0.1636	ppb	11:06:08

2	P 214.914†	205.3	-23.9	-13.726 ug/L	-13.726 ppb	11:06:08
2	Pb 220.353†	-62.5	7.7	0.8775 ug/L	0.8775 ppb	11:06:08
2	S 181.975 Axial†	41.7	-1.0	-1.4676 ug/L	-1.4676 ppb	11:06:08
2	Sb 206.836†	29.2	-5.9	-1.8352 ug/L	-1.8352 ppb	11:06:08
2	Se 196.026†	-22.1	7.4	4.2662 ug/L	4.2662 ppb	11:06:08
2	Si 251.611†	667.8	199.7	5.9570 ug/L	5.9570 ppb	11:06:08
2	Sn 189.927†	8.0	2.8	0.4656 ug/L	0.4656 ppb	11:06:08
2	Ti 334.940†	-1103.5	42.0	0.0662 ug/L	0.0662 ppb	11:05:48
2	Tl 190.801†	-29.8	3.5	0.9826 ug/L	0.9826 ppb	11:06:08
2	U 409.014†	-2304.3	161.3	4.4447 ug/L	4.4447 ppb	11:05:43
2	V 292.402†	-1330.3	64.9	0.4431 ug/L	0.4431 ppb	11:05:48
2	Zn 213.857†	694.5	53.4	0.4652 ug/L	0.4652 ppb	11:06:08
2	SiO2†	634.7	149.7	9.5550 ug/L	9.5550 ppb	11:06:49
3	Sc Radial	5852.5	5852.5	100 %		11:04:46
3	Y RADIAL	6294.3	6294.3	100.1 %		11:04:46
3	Al 396.153Radial†	-20.8	-0.3	-0.2076 ug/L	-0.2076 ppb	11:04:46
3	Ca 317.933Radial†	26.3	10.6	15.688 ug/L	15.688 ppb	11:05:06
3	Fe 238.204 Radial†	7.6	0.7	6.9508 ug/L	6.9508 ppb	11:05:06
3	K 766.490 Radial†	2526.5	171.1	30.334 ug/L	30.334 ppb	11:04:46
3	Mg 279.077 IEC†	-0.1	-1.2	-43.215 ug/L	-43.215 ppb	11:05:06
3	Na 589.592 Radial†	-1082.0	7.5	2.5188 ug/L	2.5188 ppb	11:04:46
3	Sr 421.552†	-35.5	-8.1	-0.0508 ug/L	-0.0508 ppb	11:04:46
3	Sc 361.383	926310.6	926310.6	102.78 %		11:06:13
3	Y 371.029	767982.9	767982.9	102.25 %		11:06:13
3	Ag 328.068†	331.6	29.9	0.1375 ug/L	0.1375 ppb	11:06:18
3	As 188.979†	-35.3	-10.2	-4.0182 ug/L	-4.0182 ppb	11:06:38
3	B 249.677†	-161.8	373.2	7.8261 ug/L	7.8261 ppb	11:06:38
3	Ba 233.527†	-5.2	3.4	0.0266 ug/L	0.0266 ppb	11:06:38
3	Be 313.107†	-5081.7	168.7	0.0619 ug/L	0.0619 ppb	11:06:18
3	Cd 226.502†	-185.5	14.6	0.1543 ug/L	0.1543 ppb	11:06:38
3	Co 228.616†	-67.0	0.2	0.0024 ug/L	0.0024 ppb	11:06:38
3	Cr 267.716†	86.4	5.4	0.0568 ug/L	0.0568 ppb	11:06:38
3	Cu 324.752†	6866.4	-75.9	-0.2170 ug/L	-0.2170 ppb	11:06:18
3	Mn 257.610†	434.6	0.6	0.0021 ug/L	0.0021 ppb	11:06:38
3	Mo 202.031†	13.3	-5.4	-0.3443 ug/L	-0.3443 ppb	11:06:38
3	Ni 231.604†	103.4	14.1	0.3264 ug/L	0.3264 ppb	11:06:38
3	P 214.914†	224.7	-4.9	-2.7834 ug/L	-2.7834 ppb	11:06:38
3	Pb 220.353†	-59.6	10.5	1.1836 ug/L	1.1836 ppb	11:06:38
3	S 181.975 Axial†	39.4	-3.2	-4.5029 ug/L	-4.5029 ppb	11:06:38
3	Sb 206.836†	24.5	-10.4	-3.3172 ug/L	-3.3172 ppb	11:06:38
3	Se 196.026†	-23.1	6.4	3.7104 ug/L	3.7104 ppb	11:06:38
3	Si 251.611†	645.3	178.2	5.3332 ug/L	5.3332 ppb	11:06:38
3	Sn 189.927†	1.3	-3.7	-0.6028 ug/L	-0.6028 ppb	11:06:38
3	Ti 334.940†	-1024.2	118.4	0.1890 ug/L	0.1890 ppb	11:06:18
3	Tl 190.801†	-28.7	4.6	1.2797 ug/L	1.2797 ppb	11:06:38
3	U 409.014†	-2403.5	63.3	1.7426 ug/L	1.7426 ppb	11:06:13
3	V 292.402†	-1333.5	61.0	0.3988 ug/L	0.3988 ppb	11:06:18
3	Zn 213.857†	675.7	35.6	0.3103 ug/L	0.3103 ppb	11:06:38
3	SiO2†	640.4	155.6	9.9788 ug/L	9.9788 ppb	11:06:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	924780.9	102.61	%	0.356				0.35%
Sc Radial	5841.3	100.0	%	1.24				1.24%
Y 371.029	767904.2	102.24	%	0.374				0.37%
Y RADIAL	6287.3	99.99	%	1.426				1.43%
Ag 328.068†	82.7	0.3770	ug/L	0.21509	0.3770	ppb	0.21509	57.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.6	6.6396	ug/L	9.30430	6.6396	ppb	9.30430	140.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.2	-1.6548	ug/L	2.47392	-1.6548	ppb	2.47392	149.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	355.0	7.4429	ug/L	0.36945	7.4429	ppb	0.36945	4.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0166	ug/L	0.03179	0.0166	ppb	0.03179	191.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	207.1	0.0758	ug/L	0.01388	0.0758	ppb	0.01388	18.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.5	17.001	ug/L	2.5526	17.001	ppb	2.5526	15.01%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.9      0.1042 ug/L       0.04626      0.1042 ppb        0.04626  44.41%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0104 ug/L       0.05605      0.0104 ppb        0.05605 536.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.7     -0.0487 ug/L       0.12113     -0.0487 ppb        0.12113 248.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -89.6     -0.2560 ug/L       0.06838     -0.2560 ppb        0.06838  26.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2701 ug/L       8.79450      9.2701 ppb        8.79450  94.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         170.5      30.243 ug/L       10.9433      30.243 ppb        10.9433  36.18%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.522 ug/L       65.0937      21.522 ppb        65.0937 302.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.7      0.0088 ug/L       0.01083      0.0088 ppb        0.01083 123.29%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.6      0.1642 ug/L       0.45483      0.1642 ppb        0.45483 277.06%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -17.8     -5.9743 ug/L       7.93874     -5.9743 ppb        7.93874 132.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.7      0.0614 ug/L       0.24741      0.0614 ppb        0.24741 402.87%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.0     -8.6109 ug/L       5.50587     -8.6109 ppb        5.50587  63.94%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8965 ug/L       0.27803      0.8965 ppb        0.27803  31.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.7     -2.4493 ug/L       1.77904     -2.4493 ppb        1.77904  72.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.9     -1.5540 ug/L       1.91933     -1.5540 ppb        1.91933 123.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      3.2395 ug/L       1.32638      3.2395 ppb        1.32638  40.94%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               189.3      5.6533 ug/L       0.31226      5.6533 ppb        0.31226   5.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.2     -0.2022 ug/L       0.58216     -0.2022 ppb        0.58216 287.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 3.4      0.0211 ug/L       0.06241      0.0211 ppb        0.06241 295.14%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                92.7      0.1477 ug/L       0.07062      0.1477 ppb        0.07062  47.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.5      0.9865 ug/L       0.29122      0.9865 ppb        0.29122  29.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 97.1      2.6745 ug/L       1.53372      2.6745 ppb        1.53372  57.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 79.6      0.5322 ug/L       0.19394      0.5322 ppb        0.19394  36.44%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.4161 ug/L       0.09172      0.4161 ppb        0.09172  22.04%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     167.6      10.725 ug/L        1.6735      10.725 ppb         1.6735  15.60%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 11:57:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5830.5	5830.5	99.8	%			11:59:41
1	Y RADIAL	6202.8	6202.8	98.65	%			11:59:41
1	Al 396.153Radial†	7094.2	7130.9	4932.0	ug/L	4932.0	ppb	11:59:41
1	Ca 317.933Radial†	3394.3	3386.6	4991.6	ug/L	4991.6	ppb	12:00:01
1	Fe 238.204 Radial†	542.6	537.1	5043.6	ug/L	5043.6	ppb	12:00:01
1	K 766.490 Radial†	30903.2	28622.7	5067.4	ug/L	5067.4	ppb	11:59:41
1	Mg 279.077 IEC†	148.5	147.6	5214.1	ug/L	5214.1	ppb	12:00:01
1	Na 589.592 Radial†	27223.4	28374.1	9521.8	ug/L	9521.8	ppb	11:59:41
1	Sr 421.552†	80201.0	80413.2	500.75	ug/L	500.75	ppb	11:59:41
1	Sc 361.383	918521.4	918521.4	101.91	%			12:00:59
1	Y 371.029	750066.3	750066.3	99.864	%			12:00:59
1	Ag 328.068†	112350.8	109947.2	501.03	ug/L	501.03	ppb	12:01:04
1	As 188.979†	1247.6	1248.3	497.63	ug/L	497.63	ppb	12:01:24
1	B 249.677†	22959.7	23059.0	481.64	ug/L	481.64	ppb	12:01:04
1	Ba 233.527†	67958.6	66690.2	495.54	ug/L	495.54	ppb	12:01:04
1	Be 313.107†	1373495.7	1352803.5	494.08	ug/L	494.08	ppb	12:00:59
1	Cd 226.502†	47617.2	46917.7	495.80	ug/L	495.80	ppb	12:01:04
1	Co 228.616†	26557.5	26124.0	495.96	ug/L	495.96	ppb	12:01:04
1	Cr 267.716†	47889.0	46910.6	493.23	ug/L	493.23	ppb	12:01:04
1	Cu 324.752†	180614.2	170464.1	488.08	ug/L	488.08	ppb	12:01:04
1	Mn 257.610†	472034.3	462743.4	494.03	ug/L	494.03	ppb	12:00:59
1	Mo 202.031†	8022.2	7853.2	499.24	ug/L	499.24	ppb	12:01:24
1	Ni 231.604†	21931.5	21432.9	495.99	ug/L	495.99	ppb	12:01:04
1	P 214.914†	4554.7	4245.6	2374.8	ug/L	2374.8	ppb	12:01:24
1	Pb 220.353†	4352.0	4338.7	492.01	ug/L	492.01	ppb	12:01:24
1	S 181.975 Axial†	765.9	710.0	993.87	ug/L	993.87	ppb	12:01:24
1	Sb 206.836†	1635.2	1570.2	504.25	ug/L	504.25	ppb	12:01:24
1	Se 196.026†	844.2	857.1	513.90	ug/L	513.90	ppb	12:01:24
1	Si 251.611†	84702.9	82661.8	2462.6	ug/L	2462.6	ppb	12:01:04
1	Sn 189.927†	3110.9	3047.4	499.55	ug/L	499.55	ppb	12:01:24
1	Ti 334.940†	317360.8	312513.2	498.58	ug/L	498.58	ppb	12:01:04
1	Tl 190.801†	1776.2	1775.3	500.42	ug/L	500.42	ppb	12:01:24
1	U 409.014†	15668.6	17776.0	488.10	ug/L	488.10	ppb	12:01:04
1	V 292.402†	74306.5	74268.8	497.23	ug/L	497.23	ppb	12:01:04
1	Zn 213.857†	58266.2	56549.7	489.63	ug/L	489.63	ppb	12:01:04
1	SiO2†	83444.8	81409.6	5196.2	ug/L	5196.2	ppb	12:02:31
2	Sc Radial	5836.0	5836.0	99.9	%			12:00:06
2	Y RADIAL	6237.9	6237.9	99.21	%			12:00:06
2	Al 396.153Radial†	7113.8	7143.8	4941.2	ug/L	4941.2	ppb	12:00:06
2	Ca 317.933Radial†	3379.1	3368.1	4964.4	ug/L	4964.4	ppb	12:00:26
2	Fe 238.204 Radial†	541.4	535.4	5027.5	ug/L	5027.5	ppb	12:00:26
2	K 766.490 Radial†	30922.1	28612.4	5065.6	ug/L	5065.6	ppb	12:00:06
2	Mg 279.077 IEC†	145.0	144.1	5087.7	ug/L	5087.7	ppb	12:00:26
2	Na 589.592 Radial†	27104.4	28229.2	9473.2	ug/L	9473.2	ppb	12:00:06
2	Sr 421.552†	79988.6	80124.7	498.95	ug/L	498.95	ppb	12:00:06
2	Sc 361.383	915777.4	915777.4	101.61	%			12:01:29
2	Y 371.029	747914.5	747914.5	99.578	%			12:01:29
2	Ag 328.068†	112273.2	110201.2	502.17	ug/L	502.17	ppb	12:01:35
2	As 188.979†	1226.2	1230.9	490.75	ug/L	490.75	ppb	12:01:55
2	B 249.677†	22927.2	23094.5	482.39	ug/L	482.39	ppb	12:01:35
2	Ba 233.527†	67534.9	66473.1	493.93	ug/L	493.93	ppb	12:01:35
2	Be 313.107†	1367741.0	1351178.1	493.49	ug/L	493.49	ppb	12:01:29
2	Cd 226.502†	47330.6	46775.6	494.30	ug/L	494.30	ppb	12:01:35
2	Co 228.616†	26423.0	26069.6	494.91	ug/L	494.91	ppb	12:01:35
2	Cr 267.716†	47634.4	46800.8	492.08	ug/L	492.08	ppb	12:01:35
2	Cu 324.752†	181101.5	171474.7	490.97	ug/L	490.97	ppb	12:01:35
2	Mn 257.610†	470818.6	462934.8	494.24	ug/L	494.24	ppb	12:01:29
2	Mo 202.031†	7886.3	7742.9	492.23	ug/L	492.23	ppb	12:01:55
2	Ni 231.604†	21779.2	21347.5	494.02	ug/L	494.02	ppb	12:01:35

2	P 214.914†	4507.0	4212.1	2354.9 ug/L	2354.9 ppb	12:01:55
2	Pb 220.353†	4296.6	4297.0	487.28 ug/L	487.28 ppb	12:01:55
2	S 181.975 Axial†	749.8	696.4	974.83 ug/L	974.83 ppb	12:01:55
2	Sb 206.836†	1600.2	1540.6	494.60 ug/L	494.60 ppb	12:01:55
2	Se 196.026†	823.5	839.3	503.52 ug/L	503.52 ppb	12:01:55
2	Si 251.611†	84593.1	82802.8	2467.0 ug/L	2467.0 ppb	12:01:35
2	Sn 189.927†	3046.2	2993.0	490.63 ug/L	490.63 ppb	12:01:55
2	Ti 334.940†	316972.8	313064.4	499.46 ug/L	499.46 ppb	12:01:35
2	Tl 190.801†	1733.2	1738.2	490.05 ug/L	490.05 ppb	12:01:55
2	U 409.014†	15918.3	18067.9	496.14 ug/L	496.14 ppb	12:01:35
2	V 292.402†	74100.8	74284.8	497.25 ug/L	497.25 ppb	12:01:35
2	Zn 213.857†	58044.3	56502.6	489.23 ug/L	489.23 ppb	12:01:35
2	SiO2†	84324.6	82520.8	5267.8 ug/L	5267.8 ppb	12:02:36
3	Sc Radial	5884.4	5884.4	101 %		12:00:31
3	Y RADIAL	6270.2	6270.2	99.72 %		12:00:31
3	Al 396.153Radial†	7158.7	7129.8	4931.4 ug/L	4931.4 ppb	12:00:31
3	Ca 317.933Radial†	3409.0	3370.0	4967.2 ug/L	4967.2 ppb	12:00:51
3	Fe 238.204 Radial†	545.2	534.7	5021.0 ug/L	5021.0 ppb	12:00:51
3	K 766.490 Radial†	31146.7	28580.5	5059.9 ug/L	5059.9 ppb	12:00:31
3	Mg 279.077 IEC†	147.8	145.7	5144.4 ug/L	5144.4 ppb	12:00:51
3	Na 589.592 Radial†	27319.4	28219.2	9469.8 ug/L	9469.8 ppb	12:00:31
3	Sr 421.552†	80838.8	80309.4	500.10 ug/L	500.10 ppb	12:00:31
3	Sc 361.383	916763.4	916763.4	101.72 %		12:02:00
3	Y 371.029	750219.5	750219.5	99.885 %		12:02:00
3	Ag 328.068†	112532.6	110337.4	502.79 ug/L	502.79 ppb	12:02:06
3	As 188.979†	1232.9	1236.2	492.84 ug/L	492.84 ppb	12:02:26
3	B 249.677†	22961.7	23104.2	482.60 ug/L	482.60 ppb	12:02:06
3	Ba 233.527†	67633.9	66498.9	494.13 ug/L	494.13 ppb	12:02:06
3	Be 313.107†	1372957.1	1354858.4	494.83 ug/L	494.83 ppb	12:02:00
3	Cd 226.502†	47315.4	46710.6	493.61 ug/L	493.61 ppb	12:02:06
3	Co 228.616†	26421.4	26040.1	494.36 ug/L	494.36 ppb	12:02:06
3	Cr 267.716†	47764.7	46878.6	492.90 ug/L	492.90 ppb	12:02:06
3	Cu 324.752†	181442.5	171618.3	491.38 ug/L	491.38 ppb	12:02:06
3	Mn 257.610†	470737.9	462357.1	493.62 ug/L	493.62 ppb	12:02:00
3	Mo 202.031†	7937.8	7785.2	494.92 ug/L	494.92 ppb	12:02:26
3	Ni 231.604†	21824.4	21368.9	494.51 ug/L	494.51 ppb	12:02:06
3	P 214.914†	4510.5	4210.8	2354.1 ug/L	2354.1 ppb	12:02:26
3	Pb 220.353†	4325.6	4321.0	490.00 ug/L	490.00 ppb	12:02:26
3	S 181.975 Axial†	761.3	706.8	989.49 ug/L	989.49 ppb	12:02:26
3	Sb 206.836†	1624.9	1563.2	501.88 ug/L	501.88 ppb	12:02:26
3	Se 196.026†	832.2	846.9	507.93 ug/L	507.93 ppb	12:02:26
3	Si 251.611†	84649.0	82768.2	2465.9 ug/L	2465.9 ppb	12:02:06
3	Sn 189.927†	3082.7	3025.6	495.96 ug/L	495.96 ppb	12:02:26
3	Ti 334.940†	317453.6	313201.5	499.68 ug/L	499.68 ppb	12:02:06
3	Tl 190.801†	1745.8	1748.8	493.00 ug/L	493.00 ppb	12:02:26
3	U 409.014†	15926.1	18058.6	495.88 ug/L	495.88 ppb	12:02:06
3	V 292.402†	74332.9	74434.6	498.28 ug/L	498.28 ppb	12:02:06
3	Zn 213.857†	58061.6	56458.2	488.84 ug/L	488.84 ppb	12:02:06
3	SiO2†	84953.7	83050.0	5301.7 ug/L	5301.7 ppb	12:02:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917020.7	101.75	%	0.154				0.15%
Sc Radial	5850.3	100	%	0.5				0.51%
Y 371.029	749400.1	99.776	%	0.1716				0.17%
Y RADIAL	6237.0	99.19	%	0.536				0.54%
Ag 328.068†	110161.9	502.00	ug/L	0.892	502.00	ppb	0.892	0.18%
QC value within limits for Ag 328.068 Recovery = 100.40%								
Al 396.153Radial†	7134.9	4934.8	ug/L	5.53	4934.8	ppb	5.53	0.11%
QC value within limits for Al 396.153Radial Recovery = 98.70%								
As 188.979†	1238.5	493.74	ug/L	3.525	493.74	ppb	3.525	0.71%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	23085.9	482.21	ug/L	0.502	482.21	ppb	0.502	0.10%
QC value within limits for B 249.677 Recovery = 96.44%								
Ba 233.527†	66554.1	494.54	ug/L	0.879	494.54	ppb	0.879	0.18%
QC value within limits for Ba 233.527 Recovery = 98.91%								
Be 313.107†	1352946.7	494.13	ug/L	0.673	494.13	ppb	0.673	0.14%
QC value within limits for Be 313.107 Recovery = 98.83%								
Ca 317.933Radial†	3374.9	4974.4	ug/L	14.97	4974.4	ppb	14.97	0.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.49%
Cd 226.502†            46801.3      494.57 ug/L         1.119      494.57 ppb          1.119   0.23%
   QC value within limits for Cd 226.502  Recovery = 98.91%
Co 228.616†            26077.9      495.08 ug/L         0.815      495.08 ppb          0.815   0.16%
   QC value within limits for Co 228.616  Recovery = 99.02%
Cr 267.716†            46863.3      492.74 ug/L         0.594      492.74 ppb          0.594   0.12%
   QC value within limits for Cr 267.716  Recovery = 98.55%
Cu 324.752†           171185.7      490.14 ug/L         1.800      490.14 ppb          1.800   0.37%
   QC value within limits for Cu 324.752  Recovery = 98.03%
Fe 238.204 Radial†       535.7      5030.7 ug/L         11.65      5030.7 ppb          11.65   0.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.61%
K 766.490 Radial†      28605.2      5064.3 ug/L          3.89      5064.3 ppb           3.89   0.08%
   QC value within limits for K 766.490 Radial  Recovery = 101.29%
Mg 279.077 IEC†          145.8      5148.7 ug/L         63.35      5148.7 ppb          63.35   1.23%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.97%
Mn 257.610†           462678.4      493.96 ug/L         0.315      493.96 ppb          0.315   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.79%
Mo 202.031†             7793.8      495.46 ug/L         3.533      495.46 ppb          3.533   0.71%
   QC value within limits for Mo 202.031  Recovery = 99.09%
Na 589.592 Radial†     28274.2      9488.3 ug/L         29.09      9488.3 ppb          29.09   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 94.88%
Ni 231.604†            21383.1      494.84 ug/L         1.030      494.84 ppb          1.030   0.21%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4222.8      2361.3 ug/L         11.71      2361.3 ppb          11.71   0.50%
   QC value within limits for P 214.914  Recovery = 94.45%
Pb 220.353†             4318.9      489.76 ug/L         2.373      489.76 ppb          2.373   0.48%
   QC value within limits for Pb 220.353  Recovery = 97.95%
S 181.975 Axial†         704.4      986.06 ug/L         9.972      986.06 ppb          9.972   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 98.61%
Sb 206.836†             1558.0      500.24 ug/L         5.028      500.24 ppb          5.028   1.01%
   QC value within limits for Sb 206.836  Recovery = 100.05%
Se 196.026†              847.8      508.45 ug/L         5.213      508.45 ppb          5.213   1.03%
   QC value within limits for Se 196.026  Recovery = 101.69%
Si 251.611†            82744.3      2465.2 ug/L          2.27      2465.2 ppb           2.27   0.09%
   QC value within limits for Si 251.611  Recovery = 98.61%
Sn 189.927†             3022.0      495.38 ug/L         4.487      495.38 ppb          4.487   0.91%
   QC value within limits for Sn 189.927  Recovery = 99.08%
Sr 421.552†            80282.4      499.93 ug/L         0.910      499.93 ppb          0.910   0.18%
   QC value within limits for Sr 421.552  Recovery = 99.99%
Ti 334.940†           312926.3      499.24 ug/L         0.579      499.24 ppb          0.579   0.12%
   QC value within limits for Ti 334.940  Recovery = 99.85%
Tl 190.801†             1754.1      494.49 ug/L         5.347      494.49 ppb          5.347   1.08%
   QC value within limits for Tl 190.801  Recovery = 98.90%
U 409.014†             17967.5      493.37 ug/L         4.573      493.37 ppb          4.573   0.93%
   QC value within limits for U 409.014  Recovery = 98.67%
V 292.402†             74329.4      497.58 ug/L         0.600      497.58 ppb          0.600   0.12%
   QC value within limits for V 292.402  Recovery = 99.52%
Zn 213.857†            56503.5      489.23 ug/L         0.395      489.23 ppb          0.395   0.08%
   QC value within limits for Zn 213.857  Recovery = 97.85%
SiO2†                  82326.8      5255.2 ug/L         53.83      5255.2 ppb          53.83   1.02%
   QC value within limits for SiO2  Recovery = 98.27%
All analyte(s) passed QC.
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Sequence No.: 18
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 12:04:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5943.6	5943.6	102	%			12:06:44
1	Y RADIAL	6397.8	6397.8	101.7	%			12:06:44
1	Al 396.153Radial†	-36.7	-15.7	-10.945	ug/L	-10.945	ppb	12:06:44
1	Ca 317.933Radial†	31.9	15.8	23.253	ug/L	23.253	ppb	12:07:04
1	Fe 238.204 Radial†	6.4	-0.5	-5.0186	ug/L	-5.0186	ppb	12:07:04
1	K 766.490 Radial†	2423.9	31.5	5.5818	ug/L	5.5818	ppb	12:06:44
1	Mg 279.077 IEC†	1.9	0.7	26.364	ug/L	26.364	ppb	12:07:04
1	Na 589.592 Radial†	-1049.6	55.9	18.772	ug/L	18.772	ppb	12:06:44
1	Sr 421.552†	-27.7	0.1	0.0002	ug/L	0.0002	ppb	12:06:44
1	Sc 361.383	904747.1	904747.1	100.39	%			12:08:01
1	Y 371.029	752940.7	752940.7	100.25	%			12:08:01
1	Ag 328.068†	351.0	57.0	0.2560	ug/L	0.2560	ppb	12:08:01
1	As 188.979†	-22.3	2.0	0.7794	ug/L	0.7794	ppb	12:08:21
1	B 249.677†	-384.4	147.8	3.0992	ug/L	3.0992	ppb	12:08:21
1	Ba 233.527†	-10.1	-1.6	-0.0110	ug/L	-0.0110	ppb	12:08:21
1	Be 313.107†	-4990.4	141.8	0.0518	ug/L	0.0518	ppb	12:08:01
1	Cd 226.502†	-182.7	13.1	0.1395	ug/L	0.1395	ppb	12:08:21
1	Co 228.616†	-62.0	3.6	0.0702	ug/L	0.0702	ppb	12:08:21
1	Cr 267.716†	81.3	2.4	0.0248	ug/L	0.0248	ppb	12:08:21
1	Cu 324.752†	6819.0	36.1	0.1029	ug/L	0.1029	ppb	12:08:01
1	Mn 257.610†	447.6	23.6	0.0241	ug/L	0.0241	ppb	12:08:21
1	Mo 202.031†	28.1	9.7	0.6137	ug/L	0.6137	ppb	12:08:21
1	Ni 231.604†	95.1	8.2	0.1888	ug/L	0.1888	ppb	12:08:21
1	P 214.914†	211.1	-13.3	-7.6724	ug/L	-7.6724	ppb	12:08:21
1	Pb 220.353†	-64.7	4.0	0.4526	ug/L	0.4526	ppb	12:08:21
1	S 181.975 Axial†	39.4	-2.3	-3.2083	ug/L	-3.2083	ppb	12:08:21
1	Sb 206.836†	34.8	0.4	0.1241	ug/L	0.1241	ppb	12:08:21
1	Se 196.026†	-25.1	3.8	2.1663	ug/L	2.1663	ppb	12:08:21
1	Si 251.611†	725.9	273.4	8.1744	ug/L	8.1744	ppb	12:08:21
1	Sn 189.927†	0.5	-4.5	-0.7298	ug/L	-0.7298	ppb	12:08:21
1	Ti 334.940†	-1079.7	39.4	0.0632	ug/L	0.0632	ppb	12:08:01
1	Tl 190.801†	-37.9	-5.2	-1.4600	ug/L	-1.4600	ppb	12:08:21
1	U 409.014†	-2334.6	76.2	2.1001	ug/L	2.1001	ppb	12:08:01
1	V 292.402†	-1295.7	67.6	0.4609	ug/L	0.4609	ppb	12:08:01
1	Zn 213.857†	678.6	54.1	0.4711	ug/L	0.4711	ppb	12:08:21
1	SiO2†	563.1	93.5	5.9727	ug/L	5.9727	ppb	12:09:17
2	Sc Radial	5877.5	5877.5	101	%			12:07:09
2	Y RADIAL	6301.1	6301.1	100.2	%			12:07:09
2	Al 396.153Radial†	-30.4	-9.8	-6.7942	ug/L	-6.7942	ppb	12:07:09
2	Ca 317.933Radial†	29.5	13.7	20.250	ug/L	20.250	ppb	12:07:29
2	Fe 238.204 Radial†	8.5	1.6	15.144	ug/L	15.144	ppb	12:07:29
2	K 766.490 Radial†	2420.9	55.3	9.8013	ug/L	9.8013	ppb	12:07:09
2	Mg 279.077 IEC†	0.3	-0.9	-30.512	ug/L	-30.512	ppb	12:07:29
2	Na 589.592 Radial†	-1064.0	30.1	10.092	ug/L	10.092	ppb	12:07:09
2	Sr 421.552†	-6.2	21.2	0.1316	ug/L	0.1316	ppb	12:07:09
2	Sc 361.383	915787.5	915787.5	101.61	%			12:08:26
2	Y 371.029	763840.5	763840.5	101.70	%			12:08:26
2	Ag 328.068†	373.0	74.4	0.3355	ug/L	0.3355	ppb	12:08:26
2	As 188.979†	-22.8	1.8	0.7053	ug/L	0.7053	ppb	12:08:46
2	B 249.677†	-358.0	178.3	3.7375	ug/L	3.7375	ppb	12:08:46
2	Ba 233.527†	16.7	24.9	0.1859	ug/L	0.1859	ppb	12:08:46
2	Be 313.107†	-5092.2	101.6	0.0371	ug/L	0.0371	ppb	12:08:26
2	Cd 226.502†	-198.1	0.2	0.0002	ug/L	0.0002	ppb	12:08:46
2	Co 228.616†	-66.9	-0.4	-0.0071	ug/L	-0.0071	ppb	12:08:46
2	Cr 267.716†	95.7	15.5	0.1608	ug/L	0.1608	ppb	12:08:46
2	Cu 324.752†	6866.8	1.2	0.0042	ug/L	0.0042	ppb	12:08:26
2	Mn 257.610†	453.6	24.1	0.0278	ug/L	0.0278	ppb	12:08:46
2	Mo 202.031†	21.7	3.0	0.1917	ug/L	0.1917	ppb	12:08:46
2	Ni 231.604†	90.0	2.1	0.0479	ug/L	0.0479	ppb	12:08:46

2	P 214.914†	213.6	-13.3	-7.6526	ug/L	-7.6526 ppb	12:08:46
2	Pb 220.353†	-68.6	0.9	0.1004	ug/L	0.1004 ppb	12:08:46
2	S 181.975 Axial†	40.1	-2.1	-2.9631	ug/L	-2.9631 ppb	12:08:46
2	Sb 206.836†	38.8	3.9	1.2504	ug/L	1.2504 ppb	12:08:46
2	Se 196.026†	-16.0	13.1	7.5950	ug/L	7.5950 ppb	12:08:46
2	Si 251.611†	678.6	218.2	6.5230	ug/L	6.5230 ppb	12:08:46
2	Sn 189.927†	9.9	4.8	0.7858	ug/L	0.7858 ppb	12:08:46
2	Ti 334.940†	-1103.3	29.1	0.0434	ug/L	0.0434 ppb	12:08:26
2	Tl 190.801†	-37.2	-4.1	-1.1582	ug/L	-1.1582 ppb	12:08:46
2	U 409.014†	-2106.4	328.8	9.0562	ug/L	9.0562 ppb	12:08:26
2	V 292.402†	-1307.0	72.1	0.4934	ug/L	0.4934 ppb	12:08:26
2	Zn 213.857†	689.6	56.9	0.4960	ug/L	0.4960 ppb	12:08:46
2	SiO2†	577.4	100.8	6.4452	ug/L	6.4452 ppb	12:09:22
3	Sc Radial	5765.2	5765.2	98.7	%		12:07:34
3	Y RADIAL	6230.6	6230.6	99.09	%		12:07:34
3	Al 396.153Radial†	-30.3	-10.3	-7.1552	ug/L	-7.1552 ppb	12:07:34
3	Ca 317.933Radial†	31.8	16.7	24.546	ug/L	24.546 ppb	12:07:54
3	Fe 238.204 Radial†	6.9	0.1	1.3209	ug/L	1.3209 ppb	12:07:54
3	K 766.490 Radial†	2425.1	106.5	18.876	ug/L	18.876 ppb	12:07:34
3	Mg 279.077 IEC†	0.7	-0.5	-16.193	ug/L	-16.193 ppb	12:07:54
3	Na 589.592 Radial†	-1040.0	33.8	11.341	ug/L	11.341 ppb	12:07:34
3	Sr 421.552†	0.5	27.8	0.1730	ug/L	0.1730 ppb	12:07:34
3	Sc 361.383	904812.9	904812.9	100.39	%		12:08:51
3	Y 371.029	754674.2	754674.2	100.48	%		12:08:51
3	Ag 328.068†	311.7	17.7	0.0780	ug/L	0.0780 ppb	12:08:51
3	As 188.979†	-26.5	-2.2	-0.8622	ug/L	-0.8622 ppb	12:09:11
3	B 249.677†	-375.9	156.2	3.2768	ug/L	3.2768 ppb	12:09:11
3	Ba 233.527†	-9.4	-1.0	-0.0062	ug/L	-0.0062 ppb	12:09:11
3	Be 313.107†	-4986.8	145.8	0.0531	ug/L	0.0531 ppb	12:08:51
3	Cd 226.502†	-180.6	15.3	0.1612	ug/L	0.1612 ppb	12:09:11
3	Co 228.616†	-73.7	-8.0	-0.1515	ug/L	-0.1515 ppb	12:09:11
3	Cr 267.716†	75.4	-3.5	-0.0376	ug/L	-0.0376 ppb	12:09:11
3	Cu 324.752†	6811.0	27.6	0.0790	ug/L	0.0790 ppb	12:08:51
3	Mn 257.610†	443.6	19.6	0.0213	ug/L	0.0213 ppb	12:09:11
3	Mo 202.031†	20.5	2.1	0.1318	ug/L	0.1318 ppb	12:09:11
3	Ni 231.604†	90.4	3.4	0.0800	ug/L	0.0800 ppb	12:09:11
3	P 214.914†	205.7	-18.7	-10.767	ug/L	-10.767 ppb	12:09:11
3	Pb 220.353†	-57.3	11.3	1.2803	ug/L	1.2803 ppb	12:09:11
3	S 181.975 Axial†	42.1	0.4	0.5027	ug/L	0.5027 ppb	12:09:11
3	Sb 206.836†	31.3	-3.1	-0.9572	ug/L	-0.9572 ppb	12:09:11
3	Se 196.026†	-28.5	0.4	0.2427	ug/L	0.2427 ppb	12:09:11
3	Si 251.611†	587.0	135.0	4.0314	ug/L	4.0314 ppb	12:09:11
3	Sn 189.927†	7.7	2.6	0.4341	ug/L	0.4341 ppb	12:09:11
3	Ti 334.940†	-1138.7	-19.4	-0.0317	ug/L	-0.0317 ppb	12:08:51
3	Tl 190.801†	-40.8	-8.1	-2.2771	ug/L	-2.2771 ppb	12:09:11
3	U 409.014†	-2241.4	169.2	4.6600	ug/L	4.6600 ppb	12:08:51
3	V 292.402†	-1304.3	59.2	0.4013	ug/L	0.4013 ppb	12:08:51
3	Zn 213.857†	688.0	63.4	0.5539	ug/L	0.5539 ppb	12:09:11
3	SiO2†	579.7	110.0	7.0334	ug/L	7.0334 ppb	12:09:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908449.2	100.80	%	0.705				0.70%
Sc Radial	5862.1	100	%	1.5				1.54%
Y 371.029	757151.8	100.81	%	0.780				0.77%
Y RADIAL	6309.8	100.4	%	1.34				1.33%
Ag 328.068†	49.7	0.2232	ug/L	0.13185	0.2232	ppb	0.13185	59.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.9	-8.2981	ug/L	2.29928	-8.2981	ppb	2.29928	27.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.2075	ug/L	0.92711	0.2075	ppb	0.92711	446.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.8	3.3712	ug/L	0.32948	3.3712	ppb	0.32948	9.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.4	0.0562	ug/L	0.11232	0.0562	ppb	0.11232	199.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	129.7	0.0473	ug/L	0.00887	0.0473	ppb	0.00887	18.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.4	22.683	ug/L	2.2037	22.683	ppb	2.2037	9.72%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.5      0.1003 ug/L       0.08734      0.1003 ppb        0.08734  87.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.6     -0.0295 ug/L       0.11254     -0.0295 ppb        0.11254 381.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.8      0.0494 ug/L       0.10145      0.0494 ppb        0.10145 205.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                21.6      0.0621 ug/L       0.05151      0.0621 ppb        0.05151  83.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.4      3.8155 ug/L      10.31030      3.8155 ppb       10.31030 270.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          64.4      11.420 ug/L        6.7935      11.420 ppb         6.7935  59.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.2     -6.7803 ug/L      29.58356     -6.7803 ppb       29.58356 436.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.4      0.0244 ug/L       0.00323      0.0244 ppb        0.00323  13.22%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.9      0.3124 ug/L       0.26266      0.3124 ppb        0.26266  84.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         39.9      13.402 ug/L        4.6928      13.402 ppb         4.6928  35.02%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.6      0.1056 ug/L       0.07387      0.1056 ppb        0.07387  69.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.1     -8.6973 ug/L       1.79249     -8.6973 ppb        1.79249  20.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 5.4      0.6111 ug/L       0.60572      0.6111 ppb        0.60572  99.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.3     -1.8896 ug/L       2.07538     -1.8896 ppb        2.07538 109.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.4      0.1391 ug/L       1.10385      0.1391 ppb        1.10385 793.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.7      3.3347 ug/L       3.81286      3.3347 ppb        3.81286 114.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               208.9      6.2429 ug/L       2.08565      6.2429 ppb        2.08565  33.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.0      0.1634 ug/L       0.79323      0.1634 ppb        0.79323 485.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                16.3      0.1016 ug/L       0.09020      0.1016 ppb        0.09020  88.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                16.4      0.0250 ug/L       0.05004      0.0250 ppb        0.05004 200.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.8     -1.6318 ug/L       0.57888     -1.6318 ppb        0.57888  35.48%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                191.4      5.2721 ug/L       3.51825      5.2721 ppb        3.51825  66.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 66.3      0.4518 ug/L       0.04670      0.4518 ppb        0.04670  10.33%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                58.1      0.5070 ug/L       0.04248      0.5070 ppb        0.04248   8.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     101.4      6.4838 ug/L       0.53137      6.4838 ppb        0.53137   8.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 12:54:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.2	5848.2	100	%			12:56:17
1	Y RADIAL	6232.2	6232.2	99.12	%			12:56:17
1	Al 396.153Radial†	7194.6	7209.7	4986.7	ug/L	4986.7	ppb	12:56:17
1	Ca 317.933Radial†	3408.9	3390.8	4997.8	ug/L	4997.8	ppb	12:56:37
1	Fe 238.204 Radial†	540.1	532.9	5005.0	ug/L	5005.0	ppb	12:56:37
1	K 766.490 Radial†	31431.1	29056.3	5144.2	ug/L	5144.2	ppb	12:56:17
1	Mg 279.077 IEC†	146.4	145.1	5124.1	ug/L	5124.1	ppb	12:56:37
1	Na 589.592 Radial†	27231.8	28299.8	9496.9	ug/L	9496.9	ppb	12:56:17
1	Sr 421.552†	80956.2	80924.2	503.93	ug/L	503.93	ppb	12:56:17
1	Sc 361.383	912254.4	912254.4	101.22	%			12:57:34
1	Y 371.029	744537.5	744537.5	99.128	%			12:57:34
1	Ag 328.068†	112666.9	111016.8	505.86	ug/L	505.86	ppb	12:57:39
1	As 188.979†	1234.9	1244.2	496.11	ug/L	496.11	ppb	12:57:59
1	B 249.677†	22942.3	23196.5	484.53	ug/L	484.53	ppb	12:57:39
1	Ba 233.527†	67793.9	66985.6	497.74	ug/L	497.74	ppb	12:57:39
1	Be 313.107†	1375749.3	1364288.2	498.30	ug/L	498.30	ppb	12:57:34
1	Cd 226.502†	47434.1	47057.7	497.29	ug/L	497.29	ppb	12:57:39
1	Co 228.616†	26515.2	26261.2	498.53	ug/L	498.53	ppb	12:57:39
1	Cr 267.716†	47769.1	47114.9	495.38	ug/L	495.38	ppb	12:57:39
1	Cu 324.752†	181657.9	172712.7	494.51	ug/L	494.51	ppb	12:57:39
1	Mn 257.610†	473453.5	467327.3	498.92	ug/L	498.92	ppb	12:57:34
1	Mo 202.031†	7948.0	7833.9	498.01	ug/L	498.01	ppb	12:57:59
1	Ni 231.604†	21906.5	21556.1	498.84	ug/L	498.84	ppb	12:57:39
1	P 214.914†	4536.0	4257.8	2380.8	ug/L	2380.8	ppb	12:57:59
1	Pb 220.353†	4319.8	4336.2	491.73	ug/L	491.73	ppb	12:57:59
1	S 181.975 Axial†	756.8	706.1	988.42	ug/L	988.42	ppb	12:57:59
1	Sb 206.836†	1617.9	1564.2	502.19	ug/L	502.19	ppb	12:57:59
1	Se 196.026†	831.0	849.9	509.57	ug/L	509.57	ppb	12:57:59
1	Si 251.611†	84761.3	83290.5	2481.4	ug/L	2481.4	ppb	12:57:39
1	Sn 189.927†	3078.5	3036.4	497.75	ug/L	497.75	ppb	12:57:59
1	Ti 334.940†	325620.8	322812.9	515.01	ug/L	515.01	ppb	12:57:34
1	Tl 190.801†	1749.0	1760.5	496.40	ug/L	496.40	ppb	12:57:59
1	U 409.014†	15897.7	18108.0	497.24	ug/L	497.24	ppb	12:57:39
1	V 292.402†	74188.5	74653.1	499.75	ug/L	499.75	ppb	12:57:39
1	Zn 213.857†	58215.4	56892.3	492.60	ug/L	492.60	ppb	12:57:39
1	SiO2†	84461.0	82976.0	5296.7	ug/L	5296.7	ppb	12:59:07
2	Sc Radial	5803.5	5803.5	99.3	%			12:56:42
2	Y RADIAL	6206.0	6206.0	98.70	%			12:56:42
2	Al 396.153Radial†	7175.4	7245.8	5011.9	ug/L	5011.9	ppb	12:56:42
2	Ca 317.933Radial†	3438.4	3446.8	5080.3	ug/L	5080.3	ppb	12:57:02
2	Fe 238.204 Radial†	545.7	542.7	5096.7	ug/L	5096.7	ppb	12:57:02
2	K 766.490 Radial†	31189.8	29055.6	5144.1	ug/L	5144.1	ppb	12:56:42
2	Mg 279.077 IEC†	147.8	147.6	5214.0	ug/L	5214.0	ppb	12:57:02
2	Na 589.592 Radial†	26929.5	28205.2	9465.1	ug/L	9465.1	ppb	12:56:42
2	Sr 421.552†	80181.3	80767.7	502.95	ug/L	502.95	ppb	12:56:42
2	Sc 361.383	913415.6	913415.6	101.35	%			12:58:05
2	Y 371.029	745440.7	745440.7	99.249	%			12:58:05
2	Ag 328.068†	113535.7	111732.6	509.14	ug/L	509.14	ppb	12:58:11
2	As 188.979†	1239.3	1247.0	497.24	ug/L	497.24	ppb	12:58:31
2	B 249.677†	23165.3	23387.8	488.52	ug/L	488.52	ppb	12:58:11
2	Ba 233.527†	68388.5	67487.2	501.47	ug/L	501.47	ppb	12:58:11
2	Be 313.107†	1373939.6	1360774.7	497.01	ug/L	497.01	ppb	12:58:05
2	Cd 226.502†	47909.1	47466.9	501.61	ug/L	501.61	ppb	12:58:11
2	Co 228.616†	26781.7	26490.8	502.88	ug/L	502.88	ppb	12:58:11
2	Cr 267.716†	48292.3	47571.2	500.18	ug/L	500.18	ppb	12:58:11
2	Cu 324.752†	183289.2	174094.2	498.47	ug/L	498.47	ppb	12:58:11
2	Mn 257.610†	473255.3	466537.2	498.08	ug/L	498.08	ppb	12:58:05
2	Mo 202.031†	7917.2	7793.5	495.45	ug/L	495.45	ppb	12:58:31
2	Ni 231.604†	22089.9	21709.5	502.39	ug/L	502.39	ppb	12:58:11

2	P 214.914†	4515.2	4231.6	2365.1 ug/L	2365.1 ppb	12:58:31
2	Pb 220.353†	4309.4	4320.5	489.95 ug/L	489.95 ppb	12:58:31
2	S 181.975 Axial†	752.7	701.1	981.44 ug/L	981.44 ppb	12:58:31
2	Sb 206.836†	1612.0	1556.4	499.57 ug/L	499.57 ppb	12:58:31
2	Se 196.026†	835.8	853.5	511.94 ug/L	511.94 ppb	12:58:31
2	Si 251.611†	85473.2	83886.5	2499.3 ug/L	2499.3 ppb	12:58:11
2	Sn 189.927†	3086.7	3040.6	498.45 ug/L	498.45 ppb	12:58:31
2	Ti 334.940†	325546.6	322330.7	514.24 ug/L	514.24 ppb	12:58:05
2	Tl 190.801†	1735.6	1745.1	492.04 ug/L	492.04 ppb	12:58:31
2	U 409.014†	16225.5	18411.5	505.58 ug/L	505.58 ppb	12:58:11
2	V 292.402†	74965.0	75326.1	504.16 ug/L	504.16 ppb	12:58:11
2	Zn 213.857†	58717.4	57314.4	496.25 ug/L	496.25 ppb	12:58:11
2	SiO2†	85200.7	83599.8	5336.8 ug/L	5336.8 ppb	12:59:12
3	Sc Radial	5762.9	5762.9	98.6 %		12:57:07
3	Y RADIAL	6173.0	6173.0	98.17 %		12:57:07
3	Al 396.153Radial†	7133.9	7254.6	5017.9 ug/L	5017.9 ppb	12:57:07
3	Ca 317.933Radial†	3390.6	3422.7	5044.8 ug/L	5044.8 ppb	12:57:27
3	Fe 238.204 Radial†	542.7	543.5	5103.8 ug/L	5103.8 ppb	12:57:27
3	K 766.490 Radial†	30798.1	28879.2	5112.9 ug/L	5112.9 ppb	12:57:07
3	Mg 279.077 IEC†	149.9	150.9	5328.4 ug/L	5328.4 ppb	12:57:27
3	Na 589.592 Radial†	26765.7	28229.9	9473.4 ug/L	9473.4 ppb	12:57:07
3	Sr 421.552†	79557.2	80702.8	502.55 ug/L	502.55 ppb	12:57:07
3	Sc 361.383	913286.2	913286.2	101.33 %		12:58:37
3	Y 371.029	745920.9	745920.9	99.313 %		12:58:37
3	Ag 328.068†	113322.2	111537.7	508.26 ug/L	508.26 ppb	12:58:42
3	As 188.979†	1234.0	1242.0	495.25 ug/L	495.25 ppb	12:59:02
3	B 249.677†	23113.6	23340.1	487.52 ug/L	487.52 ppb	12:58:42
3	Ba 233.527†	68321.3	67430.4	501.05 ug/L	501.05 ppb	12:58:42
3	Be 313.107†	1375010.7	1362023.8	497.47 ug/L	497.47 ppb	12:58:37
3	Cd 226.502†	47830.2	47395.7	500.85 ug/L	500.85 ppb	12:58:42
3	Co 228.616†	26719.9	26433.6	501.80 ug/L	501.80 ppb	12:58:42
3	Cr 267.716†	48139.2	47426.9	498.66 ug/L	498.66 ppb	12:58:42
3	Cu 324.752†	182898.0	173733.7	497.44 ug/L	497.44 ppb	12:58:42
3	Mn 257.610†	473496.5	466841.3	498.41 ug/L	498.41 ppb	12:58:37
3	Mo 202.031†	7957.6	7834.5	498.06 ug/L	498.06 ppb	12:59:02
3	Ni 231.604†	21966.3	21590.6	499.64 ug/L	499.64 ppb	12:58:42
3	P 214.914†	4534.6	4251.4	2376.6 ug/L	2376.6 ppb	12:59:02
3	Pb 220.353†	4365.7	4376.6	496.30 ug/L	496.30 ppb	12:59:02
3	S 181.975 Axial†	771.7	720.0	1007.9 ug/L	1007.9 ppb	12:59:02
3	Sb 206.836†	1609.2	1553.8	498.84 ug/L	498.84 ppb	12:59:02
3	Se 196.026†	823.7	841.7	505.15 ug/L	505.15 ppb	12:59:02
3	Si 251.611†	85416.9	83842.8	2498.0 ug/L	2498.0 ppb	12:58:42
3	Sn 189.927†	3083.0	3037.5	497.92 ug/L	497.92 ppb	12:59:02
3	Ti 334.940†	325654.1	322482.3	514.48 ug/L	514.48 ppb	12:58:37
3	Tl 190.801†	1752.9	1762.4	496.90 ug/L	496.90 ppb	12:59:02
3	U 409.014†	16132.8	18322.3	503.13 ug/L	503.13 ppb	12:58:42
3	V 292.402†	74830.0	75203.4	503.39 ug/L	503.39 ppb	12:58:42
3	Zn 213.857†	58637.8	57244.1	495.65 ug/L	495.65 ppb	12:58:42
3	SiO2†	84734.0	83151.2	5308.0 ug/L	5308.0 ppb	12:59:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912985.4	101.30	%	0.071				0.07%
Sc Radial	5804.9	99.3	%	0.73				0.73%
Y 371.029	745299.7	99.230	%	0.0935				0.09%
Y RADIAL	6203.8	98.66	%	0.472				0.48%
Ag 328.068†	111429.0	507.76	ug/L	1.698	507.76	ppb	1.698	0.33%
QC value within limits for Ag 328.068 Recovery = 101.55%								
Al 396.153Radial†	7236.7	5005.5	ug/L	16.55	5005.5	ppb	16.55	0.33%
QC value within limits for Al 396.153Radial Recovery = 100.11%								
As 188.979†	1244.4	496.20	ug/L	0.999	496.20	ppb	0.999	0.20%
QC value within limits for As 188.979 Recovery = 99.24%								
B 249.677†	23308.1	486.85	ug/L	2.075	486.85	ppb	2.075	0.43%
QC value within limits for B 249.677 Recovery = 97.37%								
Ba 233.527†	67301.1	500.08	ug/L	2.043	500.08	ppb	2.043	0.41%
QC value within limits for Ba 233.527 Recovery = 100.02%								
Be 313.107†	1362362.2	497.59	ug/L	0.650	497.59	ppb	0.650	0.13%
QC value within limits for Be 313.107 Recovery = 99.52%								
Ca 317.933Radial†	3420.1	5041.0	ug/L	41.39	5041.0	ppb	41.39	0.82%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.82%
Cd 226.502†            47306.8      499.91 ug/L         2.306      499.91 ppb          2.306   0.46%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†            26395.2      501.07 ug/L         2.265      501.07 ppb          2.265   0.45%
   QC value within limits for Co 228.616  Recovery = 100.21%
Cr 267.716†            47371.0      498.07 ug/L         2.452      498.07 ppb          2.452   0.49%
   QC value within limits for Cr 267.716  Recovery = 99.61%
Cu 324.752†           173513.5      496.80 ug/L         2.053      496.80 ppb          2.053   0.41%
   QC value within limits for Cu 324.752  Recovery = 99.36%
Fe 238.204 Radial†       539.7      5068.5 ug/L        55.12      5068.5 ppb         55.12   1.09%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.37%
K 766.490 Radial†      28997.0      5133.7 ug/L        18.08      5133.7 ppb         18.08   0.35%
   QC value within limits for K 766.490 Radial  Recovery = 102.67%
Mg 279.077 IEC†          147.9      5222.2 ug/L       102.39      5222.2 ppb        102.39   1.96%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.44%
Mn 257.610†           466901.9      498.47 ug/L         0.421      498.47 ppb          0.421   0.08%
   QC value within limits for Mn 257.610  Recovery = 99.69%
Mo 202.031†             7820.7      497.17 ug/L         1.491      497.17 ppb          1.491   0.30%
   QC value within limits for Mo 202.031  Recovery = 99.43%
Na 589.592 Radial†     28245.0      9478.5 ug/L        16.47      9478.5 ppb         16.47   0.17%
   QC value within limits for Na 589.592 Radial  Recovery = 94.78%
Ni 231.604†            21618.7      500.29 ug/L         1.863      500.29 ppb          1.863   0.37%
   QC value within limits for Ni 231.604  Recovery = 100.06%
P 214.914†              4247.0      2374.2 ug/L         8.17      2374.2 ppb          8.17   0.34%
   QC value within limits for P 214.914  Recovery = 94.97%
Pb 220.353†             4344.4      492.66 ug/L         3.276      492.66 ppb          3.276   0.67%
   QC value within limits for Pb 220.353  Recovery = 98.53%
S 181.975 Axial†         709.1      992.58 ug/L        13.705      992.58 ppb         13.705   1.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.26%
Sb 206.836†             1558.1      500.20 ug/L         1.762      500.20 ppb          1.762   0.35%
   QC value within limits for Sb 206.836  Recovery = 100.04%
Se 196.026†              848.3      508.89 ug/L         3.448      508.89 ppb          3.448   0.68%
   QC value within limits for Se 196.026  Recovery = 101.78%
Si 251.611†            83673.3      2492.9 ug/L         9.96      2492.9 ppb          9.96   0.40%
   QC value within limits for Si 251.611  Recovery = 99.72%
Sn 189.927†             3038.2      498.04 ug/L         0.362      498.04 ppb          0.362   0.07%
   QC value within limits for Sn 189.927  Recovery = 99.61%
Sr 421.552†            80798.2      503.14 ug/L         0.709      503.14 ppb          0.709   0.14%
   QC value within limits for Sr 421.552  Recovery = 100.63%
Ti 334.940†           322542.0      514.58 ug/L         0.394      514.58 ppb          0.394   0.08%
   QC value within limits for Ti 334.940  Recovery = 102.92%
Tl 190.801†             1756.0      495.11 ug/L         2.674      495.11 ppb          2.674   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.02%
U 409.014†             18280.6      501.98 ug/L         4.285      501.98 ppb          4.285   0.85%
   QC value within limits for U 409.014  Recovery = 100.40%
V 292.402†             75060.8      502.43 ug/L         2.355      502.43 ppb          2.355   0.47%
   QC value within limits for V 292.402  Recovery = 100.49%
Zn 213.857†            57150.3      494.84 ug/L         1.957      494.84 ppb          1.957   0.40%
   QC value within limits for Zn 213.857  Recovery = 98.97%
SiO2†                  83242.3      5313.8 ug/L        20.69      5313.8 ppb         20.69   0.39%
   QC value within limits for SiO2  Recovery = 99.37%
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 13:01:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5868.7	5868.7	100	%			13:03:21
1	Y RADIAL	6266.3	6266.3	99.66	%			13:03:21
1	Al 396.153Radial†	-30.6	-10.0	-6.9732	ug/L	-6.9732	ppb	13:03:21
1	Ca 317.933Radial†	27.1	11.4	16.834	ug/L	16.834	ppb	13:03:41
1	Fe 238.204 Radial†	7.1	0.3	2.8617	ug/L	2.8617	ppb	13:03:41
1	K 766.490 Radial†	2529.2	166.8	29.557	ug/L	29.557	ppb	13:03:21
1	Mg 279.077 IEC†	2.6	1.4	48.947	ug/L	48.947	ppb	13:03:41
1	Na 589.592 Radial†	-997.4	94.8	31.813	ug/L	31.813	ppb	13:03:21
1	Sr 421.552†	-4.1	23.2	0.1444	ug/L	0.1444	ppb	13:03:21
1	Sc 361.383	909330.4	909330.4	100.89	%			13:04:37
1	Y 371.029	756247.7	756247.7	100.69	%			13:04:37
1	Ag 328.068†	309.1	13.6	0.0644	ug/L	0.0644	ppb	13:04:37
1	As 188.979†	-26.8	-2.4	-0.9536	ug/L	-0.9536	ppb	13:04:57
1	B 249.677†	-417.1	117.3	2.4588	ug/L	2.4588	ppb	13:04:57
1	Ba 233.527†	-20.7	-12.0	-0.0874	ug/L	-0.0874	ppb	13:04:57
1	Be 313.107†	-5096.0	62.2	0.0227	ug/L	0.0227	ppb	13:04:37
1	Cd 226.502†	-193.8	3.0	0.0311	ug/L	0.0311	ppb	13:04:57
1	Co 228.616†	-60.1	5.8	0.1104	ug/L	0.1104	ppb	13:04:57
1	Cr 267.716†	70.5	-8.8	-0.0914	ug/L	-0.0914	ppb	13:04:57
1	Cu 324.752†	6809.4	-7.7	-0.0218	ug/L	-0.0218	ppb	13:04:37
1	Mn 257.610†	455.0	28.6	0.0299	ug/L	0.0299	ppb	13:04:57
1	Mo 202.031†	16.2	-2.3	-0.1469	ug/L	-0.1469	ppb	13:04:57
1	Ni 231.604†	76.1	-11.2	-0.2588	ug/L	-0.2588	ppb	13:04:57
1	P 214.914†	204.8	-20.5	-11.821	ug/L	-11.821	ppb	13:04:57
1	Pb 220.353†	-56.1	12.9	1.4528	ug/L	1.4528	ppb	13:04:57
1	S 181.975 Axial†	41.0	-1.0	-1.3701	ug/L	-1.3701	ppb	13:04:57
1	Sb 206.836†	35.0	0.4	0.1492	ug/L	0.1492	ppb	13:04:57
1	Se 196.026†	-22.5	6.6	3.7976	ug/L	3.7976	ppb	13:04:57
1	Si 251.611†	555.9	101.3	3.0211	ug/L	3.0211	ppb	13:04:57
1	Sn 189.927†	11.9	6.8	1.1211	ug/L	1.1211	ppb	13:04:57
1	Ti 334.940†	-1127.8	-2.9	-0.0042	ug/L	-0.0042	ppb	13:04:37
1	Tl 190.801†	-37.4	-4.6	-1.2783	ug/L	-1.2783	ppb	13:04:57
1	U 409.014†	-2380.6	42.3	1.1648	ug/L	1.1648	ppb	13:04:37
1	V 292.402†	-1258.8	110.7	0.7320	ug/L	0.7320	ppb	13:04:37
1	Zn 213.857†	683.4	55.5	0.4848	ug/L	0.4848	ppb	13:04:57
1	SiO2†	542.9	70.6	4.5059	ug/L	4.5059	ppb	13:05:53
2	Sc Radial	5855.0	5855.0	100	%			13:03:46
2	Y RADIAL	6293.2	6293.2	100.1	%			13:03:46
2	Al 396.153Radial†	-28.1	-7.6	-5.3089	ug/L	-5.3089	ppb	13:03:46
2	Ca 317.933Radial†	28.7	13.1	19.271	ug/L	19.271	ppb	13:04:06
2	Fe 238.204 Radial†	6.7	-0.1	-0.8685	ug/L	-0.8685	ppb	13:04:06
2	K 766.490 Radial†	2589.7	233.1	41.320	ug/L	41.320	ppb	13:03:46
2	Mg 279.077 IEC†	2.6	1.4	50.157	ug/L	50.157	ppb	13:04:06
2	Na 589.592 Radial†	-1015.8	74.1	24.869	ug/L	24.869	ppb	13:03:46
2	Sr 421.552†	-45.3	-17.9	-0.1116	ug/L	-0.1116	ppb	13:03:46
2	Sc 361.383	901165.7	901165.7	99.989	%			13:05:03
2	Y 371.029	749854.7	749854.7	99.836	%			13:05:03
2	Ag 328.068†	310.6	17.9	0.0813	ug/L	0.0813	ppb	13:05:03
2	As 188.979†	-14.4	9.8	3.8646	ug/L	3.8646	ppb	13:05:23
2	B 249.677†	-420.0	110.6	2.3197	ug/L	2.3197	ppb	13:05:23
2	Ba 233.527†	1.0	9.5	0.0704	ug/L	0.0704	ppb	13:05:23
2	Be 313.107†	-5025.4	87.0	0.0318	ug/L	0.0318	ppb	13:05:03
2	Cd 226.502†	-196.4	-1.3	-0.0140	ug/L	-0.0140	ppb	13:05:23
2	Co 228.616†	-58.2	7.2	0.1379	ug/L	0.1379	ppb	13:05:23
2	Cr 267.716†	91.5	12.8	0.1348	ug/L	0.1348	ppb	13:05:23
2	Cu 324.752†	6670.0	-86.0	-0.2461	ug/L	-0.2461	ppb	13:05:03
2	Mn 257.610†	575.8	153.5	0.1628	ug/L	0.1628	ppb	13:05:23
2	Mo 202.031†	22.9	4.5	0.2874	ug/L	0.2874	ppb	13:05:23
2	Ni 231.604†	88.3	1.7	0.0399	ug/L	0.0399	ppb	13:05:23

2	P 214.914†	217.0	-6.5	-3.7298 ug/L	-3.7298 ppb	13:05:23
2	Pb 220.353†	-51.8	16.6	1.8791 ug/L	1.8791 ppb	13:05:23
2	S 181.975 Axial†	44.5	2.9	4.0947 ug/L	4.0947 ppb	13:05:23
2	Sb 206.836†	33.9	-0.3	-0.1071 ug/L	-0.1071 ppb	13:05:23
2	Se 196.026†	-13.0	15.9	9.1655 ug/L	9.1655 ppb	13:05:23
2	Si 251.611†	597.7	148.1	4.4168 ug/L	4.4168 ppb	13:05:23
2	Sn 189.927†	2.5	-2.5	-0.4044 ug/L	-0.4044 ppb	13:05:23
2	Ti 334.940†	-1080.2	34.6	0.0563 ug/L	0.0563 ppb	13:05:03
2	Tl 190.801†	-32.3	0.3	0.0723 ug/L	0.0723 ppb	13:05:23
2	U 409.014†	-2419.0	-17.5	-0.4815 ug/L	-0.4815 ppb	13:05:03
2	V 292.402†	-1344.5	13.7	0.0947 ug/L	0.0947 ppb	13:05:03
2	Zn 213.857†	675.2	53.4	0.4649 ug/L	0.4649 ppb	13:05:23
2	SiO2†	559.6	92.2	5.8782 ug/L	5.8782 ppb	13:05:58
3	Sc Radial	5767.9	5767.9	98.7 %		13:04:11
3	Y RADIAL	6173.0	6173.0	98.17 %		13:04:11
3	Al 396.153Radial†	-28.0	-8.0	-5.5661 ug/L	-5.5661 ppb	13:04:11
3	Ca 317.933Radial†	25.0	9.7	14.340 ug/L	14.340 ppb	13:04:31
3	Fe 238.204 Radial†	6.6	-0.2	-1.4562 ug/L	-1.4562 ppb	13:04:31
3	K 766.490 Radial†	2509.3	190.6	33.799 ug/L	33.799 ppb	13:04:11
3	Mg 279.077 IEC†	-1.3	-2.5	-87.543 ug/L	-87.543 ppb	13:04:31
3	Na 589.592 Radial†	-1023.7	50.7	17.013 ug/L	17.013 ppb	13:04:11
3	Sr 421.552†	-34.9	-8.0	-0.0497 ug/L	-0.0497 ppb	13:04:11
3	Sc 361.383	904623.9	904623.9	100.37 %		13:05:28
3	Y 371.029	754861.8	754861.8	100.50 %		13:05:28
3	Ag 328.068†	417.8	123.5	0.5554 ug/L	0.5554 ppb	13:05:28
3	As 188.979†	-16.9	7.3	2.8912 ug/L	2.8912 ppb	13:05:48
3	B 249.677†	-395.9	136.2	2.8560 ug/L	2.8560 ppb	13:05:48
3	Ba 233.527†	1.7	10.1	0.0762 ug/L	0.0762 ppb	13:05:48
3	Be 313.107†	-4983.4	148.1	0.0545 ug/L	0.0545 ppb	13:05:28
3	Cd 226.502†	-176.5	19.2	0.2035 ug/L	0.2035 ppb	13:05:48
3	Co 228.616†	-58.4	7.2	0.1366 ug/L	0.1366 ppb	13:05:48
3	Cr 267.716†	78.7	-0.3	-0.0042 ug/L	-0.0042 ppb	13:05:48
3	Cu 324.752†	6872.2	90.0	0.2573 ug/L	0.2573 ppb	13:05:28
3	Mn 257.610†	469.1	45.1	0.0496 ug/L	0.0496 ppb	13:05:48
3	Mo 202.031†	22.0	3.6	0.2268 ug/L	0.2268 ppb	13:05:48
3	Ni 231.604†	96.7	9.8	0.2258 ug/L	0.2258 ppb	13:05:48
3	P 214.914†	225.9	1.5	0.8286 ug/L	0.8286 ppb	13:05:48
3	Pb 220.353†	-48.5	20.1	2.2709 ug/L	2.2709 ppb	13:05:48
3	S 181.975 Axial†	40.5	-1.3	-1.7683 ug/L	-1.7683 ppb	13:05:48
3	Sb 206.836†	35.0	0.7	0.2079 ug/L	0.2079 ppb	13:05:48
3	Se 196.026†	-15.1	13.8	7.9618 ug/L	7.9618 ppb	13:05:48
3	Si 251.611†	545.0	93.3	2.7804 ug/L	2.7804 ppb	13:05:48
3	Sn 189.927†	2.6	-2.4	-0.3905 ug/L	-0.3905 ppb	13:05:48
3	Ti 334.940†	-944.1	174.4	0.2764 ug/L	0.2764 ppb	13:05:28
3	Tl 190.801†	-31.8	0.9	0.2397 ug/L	0.2397 ppb	13:05:48
3	U 409.014†	-2197.1	212.9	5.8648 ug/L	5.8648 ppb	13:05:28
3	V 292.402†	-1294.3	68.9	0.4674 ug/L	0.4674 ppb	13:05:28
3	Zn 213.857†	659.7	35.5	0.3111 ug/L	0.3111 ppb	13:05:48
3	SiO2†	559.8	90.3	5.7599 ug/L	5.7599 ppb	13:06:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905040.0	100.42	%	0.455				0.45%
Sc Radial	5830.5	99.8	%	0.94				0.94%
Y 371.029	753654.7	100.34	%	0.448				0.45%
Y RADIAL	6244.2	99.31	%	1.004				1.01%
Ag 328.068†	51.7	0.2337	ug/L	0.27875	0.2337	ppb	0.27875	119.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.6	-5.9494	ug/L	0.89589	-5.9494	ppb	0.89589	15.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.9	1.9341	ug/L	2.54769	1.9341	ppb	2.54769	131.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	121.4	2.5448	ug/L	0.27833	2.5448	ppb	0.27833	10.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.5	0.0197	ug/L	0.09280	0.0197	ppb	0.09280	470.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	99.1	0.0363	ug/L	0.01641	0.0363	ppb	0.01641	45.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.4	16.815	ug/L	2.4656	16.815	ppb	2.4656	14.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.0      0.0735 ug/L       0.11483      0.0735 ppb        0.11483 156.20%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                6.8      0.1283 ug/L       0.01552      0.1283 ppb        0.01552  12.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.2      0.0131 ug/L       0.11408      0.0131 ppb        0.11408 872.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -1.2     -0.0035 ug/L       0.25223     -0.0035 ppb        0.25223 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.0      0.1790 ug/L       2.34180      0.1790 ppb        2.34180 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        196.8     34.892 ug/L        5.9572     34.892 ppb         5.9572  17.07%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      3.8537 ug/L      79.15382      3.8537 ppb       79.15382 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               75.8      0.0808 ug/L       0.07169      0.0808 ppb        0.07169  88.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.9      0.1224 ug/L       0.23521      0.1224 ppb        0.23521 192.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        73.2     24.565 ug/L        7.4046     24.565 ppb         7.4046  30.14%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.1      0.0023 ug/L       0.24447      0.0023 ppb        0.24447 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -8.5     -4.9075 ug/L       6.40658     -4.9075 ppb        6.40658 130.55%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               16.5      1.8676 ug/L       0.40916      1.8676 ppb        0.40916  21.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.3188 ug/L       3.27610      0.3188 ppb        3.27610 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.2      0.0833 ug/L       0.16755      0.0833 ppb        0.16755 201.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               12.1      6.9750 ug/L       2.81675      6.9750 ppb        2.81675  40.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              114.2      3.4061 ug/L       0.88355      3.4061 ppb        0.88355  25.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.7      0.1087 ug/L       0.87675      0.1087 ppb        0.87675 806.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -0.9     -0.0056 ug/L       0.13359     -0.0056 ppb        0.13359 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               68.7      0.1095 ug/L       0.14767      0.1095 ppb        0.14767 134.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.1     -0.3221 ug/L       0.83232     -0.3221 ppb        0.83232 258.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                79.2      2.1827 ug/L       3.29335      2.1827 ppb        3.29335 150.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                64.4      0.4314 ug/L       0.32014      0.4314 ppb        0.32014  74.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               48.1      0.4203 ug/L       0.09507      0.4203 ppb        0.09507  22.62%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     84.4      5.3813 ug/L       0.76046      5.3813 ppb        0.76046  14.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 14:10:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5767.6	5767.6	98.7	%			14:12:27
1	Y RADIAL	6113.9	6113.9	97.23	%			14:12:27
1	Al 396.153Radial†	7037.9	7151.4	4946.2	ug/L	4946.2	ppb	14:12:27
1	Ca 317.933Radial†	3411.0	3440.5	5071.1	ug/L	5071.1	ppb	14:12:47
1	Fe 238.204 Radial†	551.7	552.2	5185.6	ug/L	5185.6	ppb	14:12:47
1	K 766.490 Radial†	30862.4	28918.9	5119.7	ug/L	5119.7	ppb	14:12:27
1	Mg 279.077 IEC†	148.5	149.4	5274.6	ug/L	5274.6	ppb	14:12:47
1	Na 589.592 Radial†	28095.3	29554.8	9918.0	ug/L	9918.0	ppb	14:12:27
1	Sr 421.552†	80684.1	81778.7	509.25	ug/L	509.25	ppb	14:12:27
1	Sc 361.383	914335.1	914335.1	101.45	%			14:13:44
1	Y 371.029	745873.4	745873.4	99.306	%			14:13:44
1	Ag 328.068†	112981.5	111073.6	506.18	ug/L	506.18	ppb	14:13:49
1	As 188.979†	1241.4	1247.8	497.49	ug/L	497.49	ppb	14:14:09
1	B 249.677†	23031.8	23233.2	485.27	ug/L	485.27	ppb	14:13:49
1	Ba 233.527†	67901.6	66939.4	497.40	ug/L	497.40	ppb	14:13:49
1	Be 313.107†	1359268.7	1344950.1	491.23	ug/L	491.23	ppb	14:13:44
1	Cd 226.502†	47511.2	47027.1	496.94	ug/L	496.94	ppb	14:13:49
1	Co 228.616†	26580.2	26265.6	498.63	ug/L	498.63	ppb	14:13:49
1	Cr 267.716†	47865.6	47102.7	495.25	ug/L	495.25	ppb	14:13:49
1	Cu 324.752†	182072.2	172712.6	494.52	ug/L	494.52	ppb	14:13:49
1	Mn 257.610†	469610.4	462474.8	493.76	ug/L	493.76	ppb	14:13:44
1	Mo 202.031†	7966.9	7834.7	498.07	ug/L	498.07	ppb	14:14:09
1	Ni 231.604†	21836.7	21438.0	496.11	ug/L	496.11	ppb	14:13:49
1	P 214.914†	4530.8	4242.6	2371.9	ug/L	2371.9	ppb	14:14:09
1	Pb 220.353†	4334.3	4340.8	492.23	ug/L	492.23	ppb	14:14:09
1	S 181.975 Axial†	752.5	700.2	980.20	ug/L	980.20	ppb	14:14:09
1	Sb 206.836†	1621.5	1564.0	502.20	ug/L	502.20	ppb	14:14:09
1	Se 196.026†	835.3	852.1	511.46	ug/L	511.46	ppb	14:14:09
1	Si 251.611†	84831.3	83168.9	2477.8	ug/L	2477.8	ppb	14:13:49
1	Sn 189.927†	3088.6	3039.5	498.26	ug/L	498.26	ppb	14:14:09
1	Ti 334.940†	319504.6	316052.1	504.23	ug/L	504.23	ppb	14:13:49
1	Tl 190.801†	1751.4	1758.9	495.84	ug/L	495.84	ppb	14:14:09
1	U 409.014†	16013.2	18186.1	499.37	ug/L	499.37	ppb	14:13:49
1	V 292.402†	74358.8	74654.1	499.75	ug/L	499.75	ppb	14:13:49
1	Zn 213.857†	58240.8	56786.4	491.67	ug/L	491.67	ppb	14:13:49
1	SiO2†	84590.2	82913.5	5292.7	ug/L	5292.7	ppb	14:15:17
2	Sc Radial	5844.2	5844.2	100	%			14:12:52
2	Y RADIAL	6183.7	6183.7	98.34	%			14:12:52
2	Al 396.153Radial†	7136.0	7156.1	4949.6	ug/L	4949.6	ppb	14:12:52
2	Ca 317.933Radial†	3429.6	3413.8	5031.8	ug/L	5031.8	ppb	14:13:12
2	Fe 238.204 Radial†	560.4	553.6	5198.5	ug/L	5198.5	ppb	14:13:12
2	K 766.490 Radial†	31201.2	28848.2	5107.2	ug/L	5107.2	ppb	14:12:52
2	Mg 279.077 IEC†	150.4	149.3	5271.3	ug/L	5271.3	ppb	14:13:12
2	Na 589.592 Radial†	28413.1	29499.8	9899.6	ug/L	9899.6	ppb	14:12:52
2	Sr 421.552†	81619.5	81643.5	508.41	ug/L	508.41	ppb	14:12:52
2	Sc 361.383	916326.9	916326.9	101.67	%			14:14:15
2	Y 371.029	747946.9	747946.9	99.582	%			14:14:15
2	Ag 328.068†	112044.5	109909.9	500.90	ug/L	500.90	ppb	14:14:20
2	As 188.979†	1222.6	1226.7	489.10	ug/L	489.10	ppb	14:14:40
2	B 249.677†	22946.8	23100.3	482.49	ug/L	482.49	ppb	14:14:20
2	Ba 233.527†	67507.5	66406.3	493.44	ug/L	493.44	ppb	14:14:20
2	Be 313.107†	1365317.7	1347987.5	492.33	ug/L	492.33	ppb	14:14:15
2	Cd 226.502†	47350.7	46767.4	494.19	ug/L	494.19	ppb	14:14:20
2	Co 228.616†	26500.9	26130.7	496.07	ug/L	496.07	ppb	14:14:20
2	Cr 267.716†	47619.4	46758.0	491.63	ug/L	491.63	ppb	14:14:20
2	Cu 324.752†	180608.4	170882.9	489.28	ug/L	489.28	ppb	14:14:20
2	Mn 257.610†	471448.2	463276.2	494.61	ug/L	494.61	ppb	14:14:15
2	Mo 202.031†	7948.2	7799.2	495.82	ug/L	495.82	ppb	14:14:40
2	Ni 231.604†	21746.7	21302.6	492.98	ug/L	492.98	ppb	14:14:20

2	P 214.914†	4549.4	4251.1	2377.6 ug/L	2377.6 ppb	14:14:40
2	Pb 220.353†	4320.6	4318.0	489.66 ug/L	489.66 ppb	14:14:40
2	S 181.975 Axial†	751.5	697.6	976.54 ug/L	976.54 ppb	14:14:40
2	Sb 206.836†	1620.3	1559.4	500.74 ug/L	500.74 ppb	14:14:40
2	Se 196.026†	837.8	852.8	511.89 ug/L	511.89 ppb	14:14:40
2	Si 251.611†	84132.7	82300.0	2451.8 ug/L	2451.8 ppb	14:14:20
2	Sn 189.927†	3084.6	3028.9	496.53 ug/L	496.53 ppb	14:14:40
2	Ti 334.940†	317654.2	313547.4	500.23 ug/L	500.23 ppb	14:14:20
2	Tl 190.801†	1736.1	1740.1	490.58 ug/L	490.58 ppb	14:14:40
2	U 409.014†	15862.4	18003.5	494.35 ug/L	494.35 ppb	14:14:20
2	V 292.402†	73950.4	74093.1	496.01 ug/L	496.01 ppb	14:14:20
2	Zn 213.857†	57929.0	56354.9	487.93 ug/L	487.93 ppb	14:14:20
2	SiO2†	84189.5	82338.1	5255.9 ug/L	5255.9 ppb	14:15:22
3	Sc Radial	5890.8	5890.8	101 %		14:13:17
3	Y RADIAL	6272.3	6272.3	99.75 %		14:13:17
3	Al 396.153Radial†	7123.1	7086.9	4901.4 ug/L	4901.4 ppb	14:13:17
3	Ca 317.933Radial†	3415.8	3373.1	4971.7 ug/L	4971.7 ppb	14:13:37
3	Fe 238.204 Radial†	550.4	539.2	5063.4 ug/L	5063.4 ppb	14:13:37
3	K 766.490 Radial†	31389.4	28788.0	5096.5 ug/L	5096.5 ppb	14:13:17
3	Mg 279.077 IEC†	148.3	146.0	5156.2 ug/L	5156.2 ppb	14:13:37
3	Na 589.592 Radial†	28750.2	29609.5	9936.4 ug/L	9936.4 ppb	14:13:17
3	Sr 421.552†	82414.1	81785.9	509.30 ug/L	509.30 ppb	14:13:17
3	Sc 361.383	917143.5	917143.5	101.76 %		14:14:46
3	Y 371.029	747714.9	747714.9	99.551 %		14:14:46
3	Ag 328.068†	111815.0	109586.3	499.39 ug/L	499.39 ppb	14:14:51
3	As 188.979†	1227.9	1230.8	490.72 ug/L	490.72 ppb	14:15:11
3	B 249.677†	22960.0	23093.1	482.36 ug/L	482.36 ppb	14:14:51
3	Ba 233.527†	67497.4	66337.2	492.92 ug/L	492.92 ppb	14:14:51
3	Be 313.107†	1368447.3	1349867.2	493.01 ug/L	493.01 ppb	14:14:46
3	Cd 226.502†	47312.9	46688.8	493.38 ug/L	493.38 ppb	14:14:51
3	Co 228.616†	26449.5	26057.0	494.69 ug/L	494.69 ppb	14:14:51
3	Cr 267.716†	47510.7	46609.4	490.07 ug/L	490.07 ppb	14:14:51
3	Cu 324.752†	180160.7	170284.7	487.56 ug/L	487.56 ppb	14:14:51
3	Mn 257.610†	473615.9	464993.5	496.44 ug/L	496.44 ppb	14:14:46
3	Mo 202.031†	7973.5	7817.1	496.95 ug/L	496.95 ppb	14:15:11
3	Ni 231.604†	21750.4	21287.3	492.62 ug/L	492.62 ppb	14:14:51
3	P 214.914†	4556.7	4254.3	2379.9 ug/L	2379.9 ppb	14:15:11
3	Pb 220.353†	4347.5	4340.6	492.22 ug/L	492.22 ppb	14:15:11
3	S 181.975 Axial†	765.3	710.5	994.61 ug/L	994.61 ppb	14:15:11
3	Sb 206.836†	1636.8	1574.2	505.57 ug/L	505.57 ppb	14:15:11
3	Se 196.026†	835.3	849.7	509.63 ug/L	509.63 ppb	14:15:11
3	Si 251.611†	84088.3	82182.7	2448.3 ug/L	2448.3 ppb	14:14:51
3	Sn 189.927†	3113.9	3055.0	500.79 ug/L	500.79 ppb	14:15:11
3	Ti 334.940†	316824.9	312454.3	498.49 ug/L	498.49 ppb	14:14:51
3	Tl 190.801†	1742.6	1745.0	491.94 ug/L	491.94 ppb	14:15:11
3	U 409.014†	15712.7	17842.5	489.93 ug/L	489.93 ppb	14:14:51
3	V 292.402†	73846.4	73926.1	494.93 ug/L	494.93 ppb	14:14:51
3	Zn 213.857†	57930.5	56305.7	487.52 ug/L	487.52 ppb	14:14:51
3	SiO2†	84838.9	82902.6	5292.1 ug/L	5292.1 ppb	14:15:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915935.2	101.63	%	0.160				0.16%
Sc Radial	5834.2	99.8	%	1.06				1.07%
Y 371.029	747178.4	99.480	%	0.1513				0.15%
Y RADIAL	6189.9	98.44	%	1.262				1.28%
Ag 328.068†	110190.0	502.16	ug/L	3.563	502.16	ppb	3.563	0.71%
QC value within limits for Ag 328.068 Recovery = 100.43%								
Al 396.153Radial†	7131.5	4932.4	ug/L	26.88	4932.4	ppb	26.88	0.55%
QC value within limits for Al 396.153Radial Recovery = 98.65%								
As 188.979†	1235.1	492.44	ug/L	4.451	492.44	ppb	4.451	0.90%
QC value within limits for As 188.979 Recovery = 98.49%								
B 249.677†	23142.2	483.37	ug/L	1.645	483.37	ppb	1.645	0.34%
QC value within limits for B 249.677 Recovery = 96.67%								
Ba 233.527†	66560.9	494.59	ug/L	2.449	494.59	ppb	2.449	0.50%
QC value within limits for Ba 233.527 Recovery = 98.92%								
Be 313.107†	1347601.6	492.19	ug/L	0.899	492.19	ppb	0.899	0.18%
QC value within limits for Be 313.107 Recovery = 98.44%								
Ca 317.933Radial†	3409.1	5024.9	ug/L	50.04	5024.9	ppb	50.04	1.00%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.50%
Cd 226.502†            46827.8      494.84 ug/L         1.868      494.84 ppb          1.868   0.38%
   QC value within limits for Cd 226.502  Recovery = 98.97%
Co 228.616†            26151.1      496.46 ug/L         2.003      496.46 ppb          2.003   0.40%
   QC value within limits for Co 228.616  Recovery = 99.29%
Cr 267.716†            46823.4      492.32 ug/L         2.660      492.32 ppb          2.660   0.54%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           171293.4      490.46 ug/L         3.622      490.46 ppb          3.622   0.74%
   QC value within limits for Cu 324.752  Recovery = 98.09%
Fe 238.204 Radial†       548.3      5149.1 ug/L        74.56      5149.1 ppb          74.56   1.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.98%
K 766.490 Radial†      28851.7      5107.8 ug/L        11.64      5107.8 ppb          11.64   0.23%
   QC value within limits for K 766.490 Radial  Recovery = 102.16%
Mg 279.077 IEC†          148.2      5234.1 ug/L        67.45      5234.1 ppb          67.45   1.29%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.68%
Mn 257.610†           463581.5      494.94 ug/L         1.367      494.94 ppb          1.367   0.28%
   QC value within limits for Mn 257.610  Recovery = 98.99%
Mo 202.031†             7817.0      496.95 ug/L         1.126      496.95 ppb          1.126   0.23%
   QC value within limits for Mo 202.031  Recovery = 99.39%
Na 589.592 Radial†     29554.7      9918.0 ug/L        18.39      9918.0 ppb          18.39   0.19%
   QC value within limits for Na 589.592 Radial  Recovery = 99.18%
Ni 231.604†            21342.6      493.90 ug/L         1.919      493.90 ppb          1.919   0.39%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†              4249.3      2376.5 ug/L         4.13      2376.5 ppb           4.13   0.17%
   QC value within limits for P 214.914  Recovery = 95.06%
Pb 220.353†             4333.1      491.37 ug/L         1.482      491.37 ppb          1.482   0.30%
   QC value within limits for Pb 220.353  Recovery = 98.27%
S 181.975 Axial†         702.8      983.78 ug/L         9.551      983.78 ppb          9.551   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 98.38%
Sb 206.836†             1565.9      502.84 ug/L         2.475      502.84 ppb          2.475   0.49%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†              851.5      510.99 ug/L         1.202      510.99 ppb          1.202   0.24%
   QC value within limits for Se 196.026  Recovery = 102.20%
Si 251.611†            82550.6      2459.3 ug/L        16.11      2459.3 ppb          16.11   0.66%
   QC value within limits for Si 251.611  Recovery = 98.37%
Sn 189.927†             3041.1      498.53 ug/L         2.145      498.53 ppb          2.145   0.43%
   QC value within limits for Sn 189.927  Recovery = 99.71%
Sr 421.552†            81736.0      508.98 ug/L         0.500      508.98 ppb          0.500   0.10%
   QC value within limits for Sr 421.552  Recovery = 101.80%
Ti 334.940†           314017.9      500.98 ug/L         2.943      500.98 ppb          2.943   0.59%
   QC value within limits for Ti 334.940  Recovery = 100.20%
Tl 190.801†             1748.0      492.79 ug/L         2.732      492.79 ppb          2.732   0.55%
   QC value within limits for Tl 190.801  Recovery = 98.56%
U 409.014†             18010.7      494.55 ug/L         4.724      494.55 ppb          4.724   0.96%
   QC value within limits for U 409.014  Recovery = 98.91%
V 292.402†             74224.5      496.90 ug/L         2.529      496.90 ppb          2.529   0.51%
   QC value within limits for V 292.402  Recovery = 99.38%
Zn 213.857†            56482.3      489.04 ug/L         2.289      489.04 ppb          2.289   0.47%
   QC value within limits for Zn 213.857  Recovery = 97.81%
SiO2†                  82718.1      5280.2 ug/L        21.06      5280.2 ppb          21.06   0.40%
   QC value within limits for SiO2  Recovery = 98.74%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 14:17:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5779.9	5779.9	98.9	%			14:19:30
1	Y RADIAL	6181.0	6181.0	98.30	%			14:19:30
1	Al 396.153Radial†	-29.7	-9.6	-6.7264	ug/L	-6.7264	ppb	14:19:30
1	Ca 317.933Radial†	26.3	11.0	16.241	ug/L	16.241	ppb	14:19:50
1	Fe 238.204 Radial†	8.6	1.9	18.113	ug/L	18.113	ppb	14:19:50
1	K 766.490 Radial†	2440.0	115.3	20.422	ug/L	20.422	ppb	14:19:30
1	Mg 279.077 IEC†	6.0	5.0	174.72	ug/L	174.72	ppb	14:19:50
1	Na 589.592 Radial†	-917.1	160.7	53.921	ug/L	53.921	ppb	14:19:30
1	Sr 421.552†	-12.7	14.5	0.0901	ug/L	0.0901	ppb	14:19:30
1	Sc 361.383	909647.7	909647.7	100.93	%			14:20:46
1	Y 371.029	757756.8	757756.8	100.89	%			14:20:46
1	Ag 328.068†	423.4	126.8	0.5784	ug/L	0.5784	ppb	14:20:46
1	As 188.979†	-34.0	-9.5	-3.7454	ug/L	-3.7454	ppb	14:21:06
1	B 249.677†	-308.9	224.6	4.7091	ug/L	4.7091	ppb	14:21:06
1	Ba 233.527†	-18.5	-9.9	-0.0707	ug/L	-0.0707	ppb	14:21:06
1	Be 313.107†	-5051.6	107.9	0.0395	ug/L	0.0395	ppb	14:20:46
1	Cd 226.502†	-187.7	9.2	0.0950	ug/L	0.0950	ppb	14:21:06
1	Co 228.616†	-73.9	-7.8	-0.1459	ug/L	-0.1459	ppb	14:21:06
1	Cr 267.716†	52.3	-26.9	-0.2821	ug/L	-0.2821	ppb	14:21:06
1	Cu 324.752†	6834.6	14.9	0.0437	ug/L	0.0437	ppb	14:20:46
1	Mn 257.610†	459.5	33.0	0.0337	ug/L	0.0337	ppb	14:21:06
1	Mo 202.031†	31.7	13.1	0.8318	ug/L	0.8318	ppb	14:21:06
1	Ni 231.604†	81.5	-5.8	-0.1348	ug/L	-0.1348	ppb	14:21:06
1	P 214.914†	215.4	-10.1	-5.8334	ug/L	-5.8334	ppb	14:21:06
1	Pb 220.353†	-79.5	-10.3	-1.1620	ug/L	-1.1620	ppb	14:21:06
1	S 181.975 Axial†	49.6	7.6	10.649	ug/L	10.649	ppb	14:21:06
1	Sb 206.836†	36.7	2.1	0.6884	ug/L	0.6884	ppb	14:21:06
1	Se 196.026†	-27.8	1.2	0.7741	ug/L	0.7741	ppb	14:21:06
1	Si 251.611†	506.0	51.6	1.5257	ug/L	1.5257	ppb	14:21:06
1	Sn 189.927†	2.4	-2.6	-0.4235	ug/L	-0.4235	ppb	14:21:06
1	Ti 334.940†	-1063.5	61.2	0.0960	ug/L	0.0960	ppb	14:20:46
1	Tl 190.801†	-32.4	0.4	0.1073	ug/L	0.1073	ppb	14:21:06
1	U 409.014†	-2204.8	217.4	5.9861	ug/L	5.9861	ppb	14:20:46
1	V 292.402†	-1225.7	143.9	0.9754	ug/L	0.9754	ppb	14:20:46
1	Zn 213.857†	664.9	37.0	0.3160	ug/L	0.3160	ppb	14:21:06
1	SiO2†	526.4	54.1	3.4289	ug/L	3.4289	ppb	14:22:02
2	Sc Radial	5959.4	5959.4	102	%			14:19:55
2	Y RADIAL	6404.8	6404.8	101.9	%			14:19:55
2	Al 396.153Radial†	-5.4	15.1	10.491	ug/L	10.491	ppb	14:19:55
2	Ca 317.933Radial†	25.8	9.7	14.314	ug/L	14.314	ppb	14:20:15
2	Fe 238.204 Radial†	7.3	0.3	2.9071	ug/L	2.9071	ppb	14:20:15
2	K 766.490 Radial†	2446.3	47.2	8.3442	ug/L	8.3442	ppb	14:19:55
2	Mg 279.077 IEC†	3.8	2.6	90.907	ug/L	90.907	ppb	14:20:15
2	Na 589.592 Radial†	-903.6	201.9	67.746	ug/L	67.746	ppb	14:19:55
2	Sr 421.552†	-25.1	2.8	0.0172	ug/L	0.0172	ppb	14:19:55
2	Sc 361.383	908783.6	908783.6	100.83	%			14:21:12
2	Y 371.029	756729.9	756729.9	100.75	%			14:21:12
2	Ag 328.068†	283.9	-11.2	-0.0528	ug/L	-0.0528	ppb	14:21:12
2	As 188.979†	-25.2	-0.8	-0.3109	ug/L	-0.3109	ppb	14:21:32
2	B 249.677†	-341.6	191.9	4.0240	ug/L	4.0240	ppb	14:21:32
2	Ba 233.527†	0.6	9.0	0.0675	ug/L	0.0675	ppb	14:21:32
2	Be 313.107†	-5046.8	107.9	0.0397	ug/L	0.0397	ppb	14:21:12
2	Cd 226.502†	-188.4	8.3	0.0874	ug/L	0.0874	ppb	14:21:32
2	Co 228.616†	-67.7	-1.7	-0.0324	ug/L	-0.0324	ppb	14:21:32
2	Cr 267.716†	72.1	-7.2	-0.0763	ug/L	-0.0763	ppb	14:21:32
2	Cu 324.752†	6841.1	27.7	0.0795	ug/L	0.0795	ppb	14:21:12
2	Mn 257.610†	445.1	19.1	0.0190	ug/L	0.0190	ppb	14:21:32
2	Mo 202.031†	22.8	4.3	0.2711	ug/L	0.2711	ppb	14:21:32
2	Ni 231.604†	93.9	6.6	0.1531	ug/L	0.1531	ppb	14:21:32

2	P 214.914†	214.6	-10.6	-6.1467 ug/L	-6.1467 ppb	14:21:32
2	Pb 220.353†	-60.6	8.3	0.9438 ug/L	0.9438 ppb	14:21:32
2	S 181.975 Axial†	36.6	-5.3	-7.4290 ug/L	-7.4290 ppb	14:21:32
2	Sb 206.836†	37.6	3.0	0.9719 ug/L	0.9719 ppb	14:21:32
2	Se 196.026†	-20.0	9.0	5.2124 ug/L	5.2124 ppb	14:21:32
2	Si 251.611†	519.1	65.1	1.9397 ug/L	1.9397 ppb	14:21:32
2	Sn 189.927†	7.8	2.7	0.4462 ug/L	0.4462 ppb	14:21:32
2	Ti 334.940†	-1004.7	118.5	0.1881 ug/L	0.1881 ppb	14:21:12
2	Tl 190.801†	-40.0	-7.2	-2.0118 ug/L	-2.0118 ppb	14:21:32
2	U 409.014†	-2272.1	148.5	4.0899 ug/L	4.0899 ppb	14:21:12
2	V 292.402†	-1336.7	32.7	0.2295 ug/L	0.2295 ppb	14:21:12
2	Zn 213.857†	682.4	54.9	0.4756 ug/L	0.4756 ppb	14:21:32
2	SiO2†	512.1	40.5	2.5755 ug/L	2.5755 ppb	14:22:07
3	Sc Radial	5788.7	5788.7	99.1 %		14:20:20
3	Y RADIAL	6193.0	6193.0	98.49 %		14:20:20
3	Al 396.153Radial†	-6.4	14.0	9.6925 ug/L	9.6925 ppb	14:20:20
3	Ca 317.933Radial†	22.9	7.6	11.132 ug/L	11.132 ppb	14:20:40
3	Fe 238.204 Radial†	7.5	0.7	6.8252 ug/L	6.8252 ppb	14:20:40
3	K 766.490 Radial†	2436.9	108.4	19.211 ug/L	19.211 ppb	14:20:20
3	Mg 279.077 IEC†	1.4	0.2	7.9298 ug/L	7.9298 ppb	14:20:40
3	Na 589.592 Radial†	-957.5	121.3	40.692 ug/L	40.692 ppb	14:20:20
3	Sr 421.552†	-28.7	-1.6	-0.0099 ug/L	-0.0099 ppb	14:20:20
3	Sc 361.383	905762.9	905762.9	100.50 %		14:21:37
3	Y 371.029	752952.0	752952.0	100.25 %		14:21:37
3	Ag 328.068†	361.0	66.5	0.2960 ug/L	0.2960 ppb	14:21:37
3	As 188.979†	-25.1	-0.8	-0.2998 ug/L	-0.2998 ppb	14:21:57
3	B 249.677†	-323.7	208.6	4.3734 ug/L	4.3734 ppb	14:21:57
3	Ba 233.527†	-0.1	8.4	0.0620 ug/L	0.0620 ppb	14:21:57
3	Be 313.107†	-5132.6	5.9	0.0023 ug/L	0.0023 ppb	14:21:37
3	Cd 226.502†	-190.0	6.0	0.0629 ug/L	0.0629 ppb	14:21:57
3	Co 228.616†	-72.6	-6.8	-0.1294 ug/L	-0.1294 ppb	14:21:57
3	Cr 267.716†	63.2	-15.8	-0.1685 ug/L	-0.1685 ppb	14:21:57
3	Cu 324.752†	6868.5	77.6	0.2225 ug/L	0.2225 ppb	14:21:37
3	Mn 257.610†	440.9	16.4	0.0181 ug/L	0.0181 ppb	14:21:57
3	Mo 202.031†	18.6	0.2	0.0118 ug/L	0.0118 ppb	14:21:57
3	Ni 231.604†	65.2	-21.6	-0.5012 ug/L	-0.5012 ppb	14:21:57
3	P 214.914†	236.2	11.5	6.6189 ug/L	6.6189 ppb	14:21:57
3	Pb 220.353†	-71.8	-2.9	-0.3313 ug/L	-0.3313 ppb	14:21:57
3	S 181.975 Axial†	40.8	-0.9	-1.3172 ug/L	-1.3172 ppb	14:21:57
3	Sb 206.836†	34.9	0.5	0.1676 ug/L	0.1676 ppb	14:21:57
3	Se 196.026†	-18.1	10.9	6.2998 ug/L	6.2998 ppb	14:21:57
3	Si 251.611†	487.7	35.6	1.0576 ug/L	1.0576 ppb	14:21:57
3	Sn 189.927†	11.0	5.9	0.9712 ug/L	0.9712 ppb	14:21:57
3	Ti 334.940†	-1073.9	46.4	0.0711 ug/L	0.0711 ppb	14:21:37
3	Tl 190.801†	-26.7	6.0	1.6702 ug/L	1.6702 ppb	14:21:57
3	U 409.014†	-2121.2	291.1	8.0187 ug/L	8.0187 ppb	14:21:37
3	V 292.402†	-1378.9	-13.7	-0.0759 ug/L	-0.0759 ppb	14:21:37
3	Zn 213.857†	670.1	44.9	0.3946 ug/L	0.3946 ppb	14:21:57
3	SiO2†	535.4	65.3	4.1658 ug/L	4.1658 ppb	14:22:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908064.7	100.75	%	0.226				0.22%
Sc Radial	5842.6	100.0	%	1.73				1.73%
Y 371.029	755812.9	100.63	%	0.337				0.33%
Y RADIAL	6259.6	99.55	%	2.002				2.01%
Ag 328.068†	60.7	0.2739	ug/L	0.31617	0.2739	ppb	0.31617	115.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.5	4.4856	ug/L	9.71812	4.4856	ppb	9.71812	216.65%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.7	-1.4520	ug/L	1.98609	-1.4520	ppb	1.98609	136.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	208.4	4.3688	ug/L	0.34256	4.3688	ppb	0.34256	7.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.5	0.0196	ug/L	0.07825	0.0196	ppb	0.07825	399.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	73.9	0.0272	ug/L	0.02155	0.0272	ppb	0.02155	79.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.4	13.896	ug/L	2.5799	13.896	ppb	2.5799	18.57%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.8      0.0818 ug/L       0.01677      0.0818 ppb        0.01677  20.51%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.4     -0.1026 ug/L       0.06129     -0.1026 ppb        0.06129  59.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -16.6     -0.1757 ug/L       0.10308     -0.1757 ppb        0.10308  58.68%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                40.1      0.1153 ug/L       0.09462      0.1153 ppb        0.09462  82.09%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2817 ug/L       7.89488      9.2817 ppb        7.89488  85.06%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          90.3      15.993 ug/L        6.6513      15.993 ppb         6.6513  41.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.6      91.186 ug/L       83.3967      91.186 ppb        83.3967  91.46%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.8      0.0236 ug/L       0.00878      0.0236 ppb        0.00878  37.21%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.8      0.3716 ug/L       0.41915      0.3716 ppb        0.41915 112.80%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        161.3      54.119 ug/L       13.5282      54.119 ppb        13.5282  25.00%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.0     -0.1609 ug/L       0.32793     -0.1609 ppb        0.32793 203.75%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.1     -1.7871 ug/L       7.28143     -1.7871 ppb        7.28143 407.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.6     -0.1832 ug/L       1.06072     -0.1832 ppb        1.06072 579.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.6343 ug/L       9.19569      0.6343 ppb        9.19569 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.9      0.6093 ug/L       0.40795      0.6093 ppb        0.40795  66.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 7.0      4.0954 ug/L       2.92732      4.0954 ppb        2.92732  71.48%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                50.8      1.5077 ug/L       0.44134      1.5077 ppb        0.44134  29.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.0      0.3313 ug/L       0.70441      0.3313 ppb        0.70441 212.60%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 5.2      0.0324 ug/L       0.05170      0.0324 ppb        0.05170 159.31%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                75.4      0.1184 ug/L       0.06165      0.1184 ppb        0.06165  52.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.3     -0.0781 ug/L       1.84797     -0.0781 ppb        1.84797 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                219.0      6.0315 ug/L       1.96482      6.0315 ppb        1.96482  32.58%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 54.3      0.3763 ug/L       0.54084      0.3763 ppb        0.54084 143.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                45.6      0.3954 ug/L       0.07979      0.3954 ppb        0.07979  20.18%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      53.3      3.3901 ug/L       0.79588      3.3901 ppb        0.79588  23.48%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 14:50:31 Plasma On Time: 12/7/2009 05:17:52
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/8/2009 14:50:32
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5822.2	5822.2	99.6	%			14:52:24
1	Y RADIAL	6192.0	6192.0	98.48	%			14:52:24
1	Al 396.153Radial†	7058.7	7105.5	4914.4	ug/L	4914.4	ppb	14:52:24
1	Ca 317.933Radial†	3404.7	3401.9	5014.2	ug/L	5014.2	ppb	14:52:44
1	Fe 238.204 Radial†	550.1	545.4	5121.3	ug/L	5121.3	ppb	14:52:44
1	K 766.490 Radial†	31002.7	28766.8	5092.8	ug/L	5092.8	ppb	14:52:24
1	Mg 279.077 IEC†	144.6	144.0	5084.9	ug/L	5084.9	ppb	14:52:44
1	Na 589.592 Radial†	27765.1	28956.8	9717.3	ug/L	9717.3	ppb	14:52:24
1	Sr 421.552†	80833.4	81162.8	505.41	ug/L	505.41	ppb	14:52:24
1	Sc 361.383	915510.8	915510.8	101.58	%			14:53:41
1	Y 371.029	747043.4	747043.4	99.462	%			14:53:41
1	Ag 328.068†	112542.6	110498.6	503.55	ug/L	503.55	ppb	14:53:47
1	As 188.979†	1230.0	1235.1	492.43	ug/L	492.43	ppb	14:54:07
1	B 249.677†	23010.6	23183.2	484.23	ug/L	484.23	ppb	14:53:47
1	Ba 233.527†	67960.1	66911.0	497.19	ug/L	497.19	ppb	14:53:47
1	Be 313.107†	1366061.7	1349916.9	493.03	ug/L	493.03	ppb	14:53:41
1	Cd 226.502†	47421.5	46878.7	495.38	ug/L	495.38	ppb	14:53:47
1	Co 228.616†	26607.5	26258.8	498.51	ug/L	498.51	ppb	14:53:47
1	Cr 267.716†	47728.8	46907.4	493.20	ug/L	493.20	ppb	14:53:47
1	Cu 324.752†	181924.0	172336.3	493.44	ug/L	493.44	ppb	14:53:47
1	Mn 257.610†	472404.0	464630.4	496.05	ug/L	496.05	ppb	14:53:41
1	Mo 202.031†	7952.7	7810.6	496.54	ug/L	496.54	ppb	14:54:07
1	Ni 231.604†	21858.5	21431.8	495.97	ug/L	495.97	ppb	14:53:47
1	P 214.914†	4557.0	4262.5	2383.6	ug/L	2383.6	ppb	14:54:07
1	Pb 220.353†	4349.2	4349.9	493.26	ug/L	493.26	ppb	14:54:07
1	S 181.975 Axial†	763.2	709.7	993.53	ug/L	993.53	ppb	14:54:07
1	Sb 206.836†	1642.4	1582.6	508.08	ug/L	508.08	ppb	14:54:07
1	Se 196.026†	841.8	857.5	514.37	ug/L	514.37	ppb	14:54:07
1	Si 251.611†	84801.0	83031.7	2473.7	ug/L	2473.7	ppb	14:53:47
1	Sn 189.927†	3092.8	3039.6	498.28	ug/L	498.28	ppb	14:54:07
1	Ti 334.940†	318949.2	315100.9	502.71	ug/L	502.71	ppb	14:53:47
1	Tl 190.801†	1739.0	1744.5	491.81	ug/L	491.81	ppb	14:54:07
1	U 409.014†	16013.8	18166.4	498.84	ug/L	498.84	ppb	14:53:47
1	V 292.402†	74225.3	74428.6	498.25	ug/L	498.25	ppb	14:53:47
1	Zn 213.857†	58235.3	56707.3	491.00	ug/L	491.00	ppb	14:53:47
1	SiO2†	84454.5	82672.9	5277.4	ug/L	5277.4	ppb	14:55:14
2	Sc Radial	5840.7	5840.7	99.9	%			14:52:49
2	Y RADIAL	6177.5	6177.5	98.25	%			14:52:49
2	Al 396.153Radial†	7114.7	7139.0	4937.6	ug/L	4937.6	ppb	14:52:49
2	Ca 317.933Radial†	3401.7	3388.0	4993.7	ug/L	4993.7	ppb	14:53:09
2	Fe 238.204 Radial†	549.0	542.5	5094.1	ug/L	5094.1	ppb	14:53:09
2	K 766.490 Radial†	31029.7	28694.9	5080.1	ug/L	5080.1	ppb	14:52:49
2	Mg 279.077 IEC†	144.1	143.0	5051.4	ug/L	5051.4	ppb	14:53:09
2	Na 589.592 Radial†	27808.3	28911.3	9702.1	ug/L	9702.1	ppb	14:52:49
2	Sr 421.552†	80809.8	80881.1	503.66	ug/L	503.66	ppb	14:52:49
2	Sc 361.383	911931.0	911931.0	101.18	%			14:54:12
2	Y 371.029	743477.2	743477.2	98.987	%			14:54:12

2	Ag 328.068†	112131.9	110527.6	503.67 ug/L	503.67 ppb	14:54:18
2	As 188.979†	1213.4	1223.4	487.81 ug/L	487.81 ppb	14:54:38
2	B 249.677†	22948.1	23210.4	484.81 ug/L	484.81 ppb	14:54:18
2	Ba 233.527†	67669.9	66886.8	497.00 ug/L	497.00 ppb	14:54:18
2	Be 313.107†	1361351.3	1350540.7	493.26 ug/L	493.26 ppb	14:54:12
2	Cd 226.502†	47361.4	47002.5	496.69 ug/L	496.69 ppb	14:54:18
2	Co 228.616†	26515.1	26270.3	498.73 ug/L	498.73 ppb	14:54:18
2	Cr 267.716†	47582.9	46947.6	493.62 ug/L	493.62 ppb	14:54:18
2	Cu 324.752†	180697.2	171826.9	491.98 ug/L	491.98 ppb	14:54:18
2	Mn 257.610†	471591.4	465653.0	497.14 ug/L	497.14 ppb	14:54:12
2	Mo 202.031†	7931.5	7820.4	497.16 ug/L	497.16 ppb	14:54:38
2	Ni 231.604†	21841.5	21499.5	497.53 ug/L	497.53 ppb	14:54:18
2	P 214.914†	4504.8	4228.6	2364.3 ug/L	2364.3 ppb	14:54:38
2	Pb 220.353†	4329.5	4347.3	492.97 ug/L	492.97 ppb	14:54:38
2	S 181.975 Axial†	755.4	705.0	986.92 ug/L	986.92 ppb	14:54:38
2	Sb 206.836†	1623.1	1569.8	504.04 ug/L	504.04 ppb	14:54:38
2	Se 196.026†	832.9	851.9	511.05 ug/L	511.05 ppb	14:54:38
2	Si 251.611†	84247.4	82812.3	2467.1 ug/L	2467.1 ppb	14:54:18
2	Sn 189.927†	3077.6	3036.6	497.78 ug/L	497.78 ppb	14:54:38
2	Ti 334.940†	317593.7	314993.8	502.54 ug/L	502.54 ppb	14:54:18
2	Tl 190.801†	1745.4	1757.5	495.45 ug/L	495.45 ppb	14:54:38
2	U 409.014†	15837.1	18053.7	495.74 ug/L	495.74 ppb	14:54:18
2	V 292.402†	73904.7	74398.6	498.05 ug/L	498.05 ppb	14:54:18
2	Zn 213.857†	57941.6	56642.0	490.42 ug/L	490.42 ppb	14:54:18
2	SiO2†	84207.9	82755.5	5282.7 ug/L	5282.7 ppb	14:55:19
3	Sc Radial	5817.3	5817.3	99.5 %		14:53:14
3	Y RADIAL	6180.6	6180.6	98.29 %		14:53:14
3	Al 396.153Radial†	7065.5	7118.2	4923.2 ug/L	4923.2 ppb	14:53:14
3	Ca 317.933Radial†	3380.1	3380.0	4981.9 ug/L	4981.9 ppb	14:53:34
3	Fe 238.204 Radial†	543.2	538.9	5060.4 ug/L	5060.4 ppb	14:53:34
3	K 766.490 Radial†	30832.3	28621.8	5067.1 ug/L	5067.1 ppb	14:53:14
3	Mg 279.077 IEC†	147.0	146.5	5175.5 ug/L	5175.5 ppb	14:53:34
3	Na 589.592 Radial†	27563.1	28777.3	9657.1 ug/L	9657.1 ppb	14:53:14
3	Sr 421.552†	80590.1	80986.6	504.32 ug/L	504.32 ppb	14:53:14
3	Sc 361.383	915362.0	915362.0	101.56 %		14:54:43
3	Y 371.029	746392.0	746392.0	99.375 %		14:54:43
3	Ag 328.068†	112967.2	110934.6	505.50 ug/L	505.50 ppb	14:54:49
3	As 188.979†	1242.1	1247.1	497.19 ug/L	497.19 ppb	14:55:09
3	B 249.677†	23119.9	23294.5	486.58 ug/L	486.58 ppb	14:54:49
3	Ba 233.527†	67702.8	66668.5	495.38 ug/L	495.38 ppb	14:54:49
3	Be 313.107†	1365727.3	1349806.3	492.99 ug/L	492.99 ppb	14:54:43
3	Cd 226.502†	47339.7	46805.8	494.61 ug/L	494.61 ppb	14:54:49
3	Co 228.616†	26567.5	26223.7	497.84 ug/L	497.84 ppb	14:54:49
3	Cr 267.716†	47693.6	46880.4	492.91 ug/L	492.91 ppb	14:54:49
3	Cu 324.752†	182283.0	172718.9	494.53 ug/L	494.53 ppb	14:54:49
3	Mn 257.610†	472909.7	465204.0	496.66 ug/L	496.66 ppb	14:54:43
3	Mo 202.031†	7974.5	7833.4	497.98 ug/L	497.98 ppb	14:55:09
3	Ni 231.604†	21778.0	21356.1	494.21 ug/L	494.21 ppb	14:54:49
3	P 214.914†	4553.2	4259.5	2381.8 ug/L	2381.8 ppb	14:55:09
3	Pb 220.353†	4345.3	4346.8	492.92 ug/L	492.92 ppb	14:55:09
3	S 181.975 Axial†	762.9	709.6	993.35 ug/L	993.35 ppb	14:55:09
3	Sb 206.836†	1635.2	1575.7	505.93 ug/L	505.93 ppb	14:55:09
3	Se 196.026†	835.2	851.1	510.48 ug/L	510.48 ppb	14:55:09
3	Si 251.611†	84744.7	82989.9	2472.5 ug/L	2472.5 ppb	14:54:49
3	Sn 189.927†	3087.9	3035.3	497.56 ug/L	497.56 ppb	14:55:09
3	Ti 334.940†	319146.8	315346.5	503.10 ug/L	503.10 ppb	14:54:49
3	Tl 190.801†	1744.9	1750.5	493.51 ug/L	493.51 ppb	14:55:09
3	U 409.014†	16177.8	18330.5	503.37 ug/L	503.37 ppb	14:54:49
3	V 292.402†	74115.1	74332.0	497.65 ug/L	497.65 ppb	14:54:49
3	Zn 213.857†	58078.5	56562.2	489.74 ug/L	489.74 ppb	14:54:49
3	SiO2†	83709.4	81952.7	5231.1 ug/L	5231.1 ppb	14:55:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914267.9	101.44	%	0.225				0.22%
Sc Radial	5826.7	99.7	%	0.21				0.21%
Y 371.029	745637.5	99.275	%	0.2528				0.25%
Y RADIAL	6183.4	98.34	%	0.122				0.12%
Ag 328.068†	110653.6	504.24	ug/L	1.091	504.24	ppb	1.091	0.22%

```
   QC value within limits for Ag 328.068  Recovery = 100.85%
Al 396.153Radial†       7120.9      4925.1 ug/L        11.72      4925.1 ppb        11.72   0.24%
   QC value within limits for Al 396.153Radial  Recovery = 98.50%
As 188.979†             1235.2      492.48 ug/L        4.693      492.48 ppb        4.693   0.95%
   QC value within limits for As 188.979  Recovery = 98.50%
B 249.677†             23229.4      485.20 ug/L        1.222      485.20 ppb        1.222   0.25%
   QC value within limits for B 249.677  Recovery = 97.04%
Ba 233.527†            66822.1      496.53 ug/L        0.992      496.53 ppb        0.992   0.20%
   QC value within limits for Ba 233.527  Recovery = 99.31%
Be 313.107†          1350087.9      493.10 ug/L        0.144      493.10 ppb        0.144   0.03%
   QC value within limits for Be 313.107  Recovery = 98.62%
Ca 317.933Radial†       3390.0      4996.6 ug/L        16.32      4996.6 ppb        16.32   0.33%
   QC value within limits for Ca 317.933Radial  Recovery = 99.93%
Cd 226.502†            46895.6      495.56 ug/L        1.051      495.56 ppb        1.051   0.21%
   QC value within limits for Cd 226.502  Recovery = 99.11%
Co 228.616†            26251.0      498.36 ug/L        0.460      498.36 ppb        0.460   0.09%
   QC value within limits for Co 228.616  Recovery = 99.67%
Cr 267.716†            46911.8      493.24 ug/L        0.357      493.24 ppb        0.357   0.07%
   QC value within limits for Cr 267.716  Recovery = 98.65%
Cu 324.752†           172294.0      493.32 ug/L        1.280      493.32 ppb        1.280   0.26%
   QC value within limits for Cu 324.752  Recovery = 98.66%
Fe 238.204 Radial†       542.2      5091.9 ug/L        30.51      5091.9 ppb        30.51   0.60%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.84%
K 766.490 Radial†      28694.5      5080.0 ug/L        12.84      5080.0 ppb        12.84   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 101.60%
Mg 279.077 IEC†          144.5      5103.9 ug/L        64.19      5103.9 ppb        64.19   1.26%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.08%
Mn 257.610†           465162.4      496.62 ug/L        0.545      496.62 ppb        0.545   0.11%
   QC value within limits for Mn 257.610  Recovery = 99.32%
Mo 202.031†             7821.5      497.23 ug/L        0.723      497.23 ppb        0.723   0.15%
   QC value within limits for Mo 202.031  Recovery = 99.45%
Na 589.592 Radial†     28881.8      9692.2 ug/L        31.31      9692.2 ppb        31.31   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 96.92%
Ni 231.604†            21429.1      495.90 ug/L        1.661      495.90 ppb        1.661   0.33%
   QC value within limits for Ni 231.604  Recovery = 99.18%
P 214.914†              4250.2      2376.6 ug/L        10.67      2376.6 ppb        10.67   0.45%
   QC value within limits for P 214.914  Recovery = 95.06%
Pb 220.353†             4348.0      493.05 ug/L        0.184      493.05 ppb        0.184   0.04%
   QC value within limits for Pb 220.353  Recovery = 98.61%
S 181.975 Axial†         708.1      991.26 ug/L        3.765      991.26 ppb        3.765   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.13%
Sb 206.836†             1576.1      506.02 ug/L        2.019      506.02 ppb        2.019   0.40%
   QC value within limits for Sb 206.836  Recovery = 101.20%
Se 196.026†              853.5      511.97 ug/L        2.100      511.97 ppb        2.100   0.41%
   QC value within limits for Se 196.026  Recovery = 102.39%
Si 251.611†            82944.7      2471.1 ug/L         3.49      2471.1 ppb         3.49   0.14%
   QC value within limits for Si 251.611  Recovery = 98.84%
Sn 189.927†             3037.2      497.87 ug/L        0.365      497.87 ppb        0.365   0.07%
   QC value within limits for Sn 189.927  Recovery = 99.57%
Sr 421.552†            81010.2      504.46 ug/L        0.886      504.46 ppb        0.886   0.18%
   QC value within limits for Sr 421.552  Recovery = 100.89%
Ti 334.940†           315147.0      502.78 ug/L        0.287      502.78 ppb        0.287   0.06%
   QC value within limits for Ti 334.940  Recovery = 100.56%
Tl 190.801†             1750.8      493.59 ug/L        1.822      493.59 ppb        1.822   0.37%
   QC value within limits for Tl 190.801  Recovery = 98.72%
U 409.014†             18183.5      499.32 ug/L        3.837      499.32 ppb        3.837   0.77%
   QC value within limits for U 409.014  Recovery = 99.86%
V 292.402†             74386.4      497.98 ug/L        0.305      497.98 ppb        0.305   0.06%
   QC value within limits for V 292.402  Recovery = 99.60%
Zn 213.857†            56637.1      490.39 ug/L        0.628      490.39 ppb        0.628   0.13%
   QC value within limits for Zn 213.857  Recovery = 98.08%
SiO2†                  82460.3      5263.7 ug/L        28.34      5263.7 ppb        28.34   0.54%
   QC value within limits for SiO2  Recovery = 98.43%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 14:57:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5708.5	5708.5	97.7	%			14:59:27
1	Y RADIAL	6146.7	6146.7	97.76	%			14:59:27
1	Al 396.153Radial†	-34.6	-15.0	-10.435	ug/L	-10.435	ppb	14:59:27
1	Ca 317.933Radial†	23.3	8.2	12.117	ug/L	12.117	ppb	14:59:47
1	Fe 238.204 Radial†	7.7	1.1	10.024	ug/L	10.024	ppb	14:59:47
1	K 766.490 Radial†	2297.5	0.3	0.0198	ug/L	0.0198	ppb	14:59:27
1	Mg 279.077 IEC†	3.7	2.6	92.377	ug/L	92.377	ppb	14:59:47
1	Na 589.592 Radial†	-905.5	161.0	54.029	ug/L	54.029	ppb	14:59:27
1	Sr 421.552†	-23.8	2.9	0.0182	ug/L	0.0182	ppb	14:59:27
1	Sc 361.383	930405.4	930405.4	103.23	%			15:00:44
1	Y 371.029	770314.6	770314.6	102.56	%			15:00:44
1	Ag 328.068†	345.4	41.8	0.1963	ug/L	0.1963	ppb	15:00:49
1	As 188.979†	-21.1	3.8	1.4839	ug/L	1.4839	ppb	15:01:09
1	B 249.677†	-321.6	219.2	4.5956	ug/L	4.5956	ppb	15:01:09
1	Ba 233.527†	3.0	11.4	0.0861	ug/L	0.0861	ppb	15:01:09
1	Be 313.107†	-5132.0	141.7	0.0518	ug/L	0.0518	ppb	15:00:49
1	Cd 226.502†	-185.8	15.1	0.1592	ug/L	0.1592	ppb	15:01:09
1	Co 228.616†	-79.4	-11.5	-0.2181	ug/L	-0.2181	ppb	15:01:09
1	Cr 267.716†	76.0	-5.1	-0.0516	ug/L	-0.0516	ppb	15:01:09
1	Cu 324.752†	6884.0	-88.4	-0.2523	ug/L	-0.2523	ppb	15:00:49
1	Mn 257.610†	448.0	11.7	0.0117	ug/L	0.0117	ppb	15:01:09
1	Mo 202.031†	25.4	6.3	0.4009	ug/L	0.4009	ppb	15:01:09
1	Ni 231.604†	94.5	4.9	0.1147	ug/L	0.1147	ppb	15:01:09
1	P 214.914†	210.7	-19.4	-11.154	ug/L	-11.154	ppb	15:01:09
1	Pb 220.353†	-57.1	13.2	1.4879	ug/L	1.4879	ppb	15:01:09
1	S 181.975 Axial†	40.9	-2.0	-2.7523	ug/L	-2.7523	ppb	15:01:09
1	Sb 206.836†	42.1	6.6	2.0734	ug/L	2.0734	ppb	15:01:09
1	Se 196.026†	-25.0	4.6	2.6994	ug/L	2.6994	ppb	15:01:09
1	Si 251.611†	472.3	7.8	0.2299	ug/L	0.2299	ppb	15:01:09
1	Sn 189.927†	0.7	-4.3	-0.7095	ug/L	-0.7095	ppb	15:01:09
1	Ti 334.940†	-1106.1	43.5	0.0708	ug/L	0.0708	ppb	15:00:49
1	Tl 190.801†	-36.8	-3.2	-0.8907	ug/L	-0.8907	ppb	15:01:09
1	U 409.014†	-2546.5	-64.9	-1.7890	ug/L	-1.7890	ppb	15:00:49
1	V 292.402†	-1311.2	88.2	0.5854	ug/L	0.5854	ppb	15:00:49
1	Zn 213.857†	674.5	31.5	0.2710	ug/L	0.2710	ppb	15:01:09
1	SiO2†	489.0	6.2	0.3875	ug/L	0.3875	ppb	15:02:30
2	Sc Radial	5775.2	5775.2	98.8	%			14:59:52
2	Y RADIAL	6224.9	6224.9	99.00	%			14:59:52
2	Al 396.153Radial†	-20.3	-0.2	-0.1197	ug/L	-0.1197	ppb	14:59:52
2	Ca 317.933Radial†	31.1	15.9	23.407	ug/L	23.407	ppb	15:00:12
2	Fe 238.204 Radial†	8.7	2.0	18.368	ug/L	18.368	ppb	15:00:12
2	K 766.490 Radial†	2352.1	28.4	5.0073	ug/L	5.0073	ppb	14:59:52
2	Mg 279.077 IEC†	4.4	3.3	115.49	ug/L	115.49	ppb	15:00:12
2	Na 589.592 Radial†	-913.4	163.7	54.946	ug/L	54.946	ppb	14:59:52
2	Sr 421.552†	0.4	27.8	0.1729	ug/L	0.1729	ppb	14:59:52
2	Sc 361.383	909855.2	909855.2	100.95	%			15:01:14
2	Y 371.029	753755.3	753755.3	100.36	%			15:01:14
2	Ag 328.068†	272.0	-23.3	-0.0966	ug/L	-0.0966	ppb	15:01:19
2	As 188.979†	-17.1	7.2	2.8471	ug/L	2.8471	ppb	15:01:39
2	B 249.677†	-375.6	158.6	3.3247	ug/L	3.3247	ppb	15:01:39
2	Ba 233.527†	-16.9	-8.3	-0.0604	ug/L	-0.0604	ppb	15:01:39
2	Be 313.107†	-5144.8	16.8	0.0064	ug/L	0.0064	ppb	15:01:19
2	Cd 226.502†	-181.0	15.9	0.1658	ug/L	0.1658	ppb	15:01:39
2	Co 228.616†	-81.2	-15.0	-0.2850	ug/L	-0.2850	ppb	15:01:39
2	Cr 267.716†	62.7	-16.5	-0.1717	ug/L	-0.1717	ppb	15:01:39
2	Cu 324.752†	6757.1	-63.5	-0.1807	ug/L	-0.1807	ppb	15:01:19
2	Mn 257.610†	455.0	28.4	0.0300	ug/L	0.0300	ppb	15:01:39
2	Mo 202.031†	21.8	3.2	0.2060	ug/L	0.2060	ppb	15:01:39
2	Ni 231.604†	86.1	-1.3	-0.0298	ug/L	-0.0298	ppb	15:01:39

2	P 214.914†	210.7	-14.8	-8.5016 ug/L	-8.5016 ppb	15:01:39
2	Pb 220.353†	-70.1	-0.9	-0.1080 ug/L	-0.1080 ppb	15:01:39
2	S 181.975 Axial†	43.6	1.7	2.3145 ug/L	2.3145 ppb	15:01:39
2	Sb 206.836†	27.3	-7.2	-2.2535 ug/L	-2.2535 ppb	15:01:39
2	Se 196.026†	-25.0	4.0	2.3953 ug/L	2.3953 ppb	15:01:39
2	Si 251.611†	497.2	42.9	1.2744 ug/L	1.2744 ppb	15:01:39
2	Sn 189.927†	12.2	7.0	1.1567 ug/L	1.1567 ppb	15:01:39
2	Ti 334.940†	-1045.9	78.9	0.1284 ug/L	0.1284 ppb	15:01:19
2	Tl 190.801†	-40.9	-8.0	-2.2272 ug/L	-2.2272 ppb	15:01:39
2	U 409.014†	-2531.4	-105.7	-2.9140 ug/L	-2.9140 ppb	15:01:19
2	V 292.402†	-1333.6	37.4	0.2440 ug/L	0.2440 ppb	15:01:19
2	Zn 213.857†	678.4	50.1	0.4325 ug/L	0.4325 ppb	15:01:39
2	SiO2†	516.3	44.0	2.8008 ug/L	2.8008 ppb	15:02:50
3	Sc Radial	5949.9	5949.9	102 %		15:00:17
3	Y RADIAL	6376.5	6376.5	101.4 %		15:00:17
3	Al 396.153Radial†	-37.8	-16.8	-11.650 ug/L	-11.650 ppb	15:00:17
3	Ca 317.933Radial†	24.5	8.5	12.469 ug/L	12.469 ppb	15:00:37
3	Fe 238.204 Radial†	8.0	1.1	9.9854 ug/L	9.9854 ppb	15:00:37
3	K 766.490 Radial†	2252.8	-139.0	-24.682 ug/L	-24.682 ppb	15:00:17
3	Mg 279.077 IEC†	2.2	1.0	34.866 ug/L	34.866 ppb	15:00:37
3	Na 589.592 Radial†	-937.8	166.8	55.991 ug/L	55.991 ppb	15:00:17
3	Sr 421.552†	-24.7	3.1	0.0189 ug/L	0.0189 ppb	15:00:17
3	Sc 361.383	921452.8	921452.8	102.24 %		15:01:44
3	Y 371.029	764859.6	764859.6	101.83 %		15:01:44
3	Ag 328.068†	285.4	-13.5	-0.0495 ug/L	-0.0495 ppb	15:01:50
3	As 188.979†	-21.1	3.6	1.4137 ug/L	1.4137 ppb	15:02:10
3	B 249.677†	-391.5	147.8	3.0975 ug/L	3.0975 ppb	15:02:10
3	Ba 233.527†	-5.1	3.5	0.0278 ug/L	0.0278 ppb	15:02:10
3	Be 313.107†	-5044.9	178.6	0.0653 ug/L	0.0653 ppb	15:01:50
3	Cd 226.502†	-179.4	19.6	0.2060 ug/L	0.2060 ppb	15:02:10
3	Co 228.616†	-69.6	-2.7	-0.0502 ug/L	-0.0502 ppb	15:02:10
3	Cr 267.716†	76.4	-3.9	-0.0372 ug/L	-0.0372 ppb	15:02:10
3	Cu 324.752†	6767.8	-137.2	-0.3921 ug/L	-0.3921 ppb	15:01:50
3	Mn 257.610†	420.6	-11.0	-0.0114 ug/L	-0.0114 ppb	15:02:10
3	Mo 202.031†	22.2	3.4	0.2169 ug/L	0.2169 ppb	15:02:10
3	Ni 231.604†	79.5	-8.8	-0.2037 ug/L	-0.2037 ppb	15:02:10
3	P 214.914†	231.2	2.6	1.5628 ug/L	1.5628 ppb	15:02:10
3	Pb 220.353†	-73.8	-3.7	-0.4191 ug/L	-0.4191 ppb	15:02:10
3	S 181.975 Axial†	37.9	-4.5	-6.2915 ug/L	-6.2915 ppb	15:02:10
3	Sb 206.836†	26.9	-7.9	-2.5117 ug/L	-2.5117 ppb	15:02:10
3	Se 196.026†	-19.1	10.1	5.8643 ug/L	5.8643 ppb	15:02:10
3	Si 251.611†	482.4	22.1	0.6683 ug/L	0.6683 ppb	15:02:10
3	Sn 189.927†	3.0	-2.1	-0.3391 ug/L	-0.3391 ppb	15:02:10
3	Ti 334.940†	-1093.9	44.9	0.0755 ug/L	0.0755 ppb	15:01:50
3	Tl 190.801†	-28.0	5.1	1.4355 ug/L	1.4355 ppb	15:02:10
3	U 409.014†	-2718.7	-257.3	-7.0900 ug/L	-7.0900 ppb	15:01:50
3	V 292.402†	-1279.4	107.0	0.6952 ug/L	0.6952 ppb	15:01:50
3	Zn 213.857†	666.2	29.8	0.2597 ug/L	0.2597 ppb	15:02:10
3	SiO2†	499.5	21.1	1.3636 ug/L	1.3636 ppb	15:03:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	920571.1	102.14	%	1.143				1.12%
Sc Radial	5811.2	99.4	%	2.13				2.14%
Y 371.029	762976.5	101.58	%	1.124				1.11%
Y RADIAL	6249.4	99.39	%	1.858				1.87%
Ag 328.068†	1.7	0.0167	ug/L	0.15729	0.0167	ppb	0.15729	939.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.6	-7.4018	ug/L	6.33562	-7.4018	ppb	6.33562	85.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.8	1.9149	ug/L	0.80807	1.9149	ppb	0.80807	42.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	175.2	3.6726	ug/L	0.80738	3.6726	ppb	0.80738	21.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.2	0.0178	ug/L	0.07377	0.0178	ppb	0.07377	414.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	112.4	0.0411	ug/L	0.03085	0.0411	ppb	0.03085	75.00%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.9	15.997	ug/L	6.4191	15.997	ppb	6.4191	40.13%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              16.9      0.1770 ug/L       0.02534      0.1770 ppb        0.02534  14.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -9.7     -0.1844 ug/L       0.12096     -0.1844 ppb        0.12096  65.59%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -8.5     -0.0868 ug/L       0.07386     -0.0868 ppb        0.07386  85.07%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -96.3     -0.2750 ug/L       0.10752     -0.2750 ppb        0.10752  39.10%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.4      12.793 ug/L        4.8288      12.793 ppb         4.8288  37.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -36.8     -6.5515 ug/L      15.89795     -6.5515 ppb       15.89795 242.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           2.3      80.913 ug/L       41.5191      80.913 ppb        41.5191  51.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               9.7      0.0101 ug/L       0.02072      0.0101 ppb        0.02072 204.57%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.3      0.2746 ug/L       0.10955      0.2746 ppb        0.10955  39.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      163.9      54.989 ug/L        0.9819      54.989 ppb         0.9819   1.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.7     -0.0396 ug/L       0.15940     -0.0396 ppb        0.15940 402.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -10.5     -6.0310 ug/L       6.70884     -6.0310 ppb        6.70884 111.24%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               2.8      0.3203 ug/L       1.02310      0.3203 ppb        1.02310 319.45%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.6     -2.2431 ug/L       4.32555     -2.2431 ppb        4.32555 192.84%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.9     -0.8973 ug/L       2.57591     -0.8973 ppb        2.57591 287.08%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.2      3.6530 ug/L       1.92103      3.6530 ppb        1.92103  52.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              24.3      0.7242 ug/L       0.52448      0.7242 ppb        0.52448  72.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.2      0.0360 ug/L       0.98807      0.0360 ppb        0.98807 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              11.3      0.0700 ug/L       0.08912      0.0700 ppb        0.08912 127.27%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              55.8      0.0916 ug/L       0.03198      0.0916 ppb        0.03198  34.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.0     -0.5608 ug/L       1.85351     -0.5608 ppb        1.85351 330.50%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -142.6     -3.9310 ug/L       2.79299     -3.9310 ppb        2.79299  71.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               77.5      0.5082 ug/L       0.23528      0.5082 ppb        0.23528  46.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              37.1      0.3211 ug/L       0.09669      0.3211 ppb        0.09669  30.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    23.7      1.5173 ug/L       1.21400      1.5173 ppb        1.21400  80.01%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 16:07:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5850.9	5850.9	100	%			16:09:41
1	Y RADIAL	6234.6	6234.6	99.15	%			16:09:41
1	Al 396.153Radial†	6877.4	6889.7	4765.0	ug/L	4765.0	ppb	16:09:41
1	Ca 317.933Radial†	3305.2	3285.7	4842.9	ug/L	4842.9	ppb	16:10:01
1	Fe 238.204 Radial†	535.3	527.8	4956.9	ug/L	4956.9	ppb	16:10:01
1	K 766.490 Radial†	30340.3	27952.4	4948.6	ug/L	4948.6	ppb	16:09:41
1	Mg 279.077 IEC†	144.6	143.3	5060.7	ug/L	5060.7	ppb	16:10:01
1	Na 589.592 Radial†	27420.7	28476.0	9556.0	ug/L	9556.0	ppb	16:09:41
1	Sr 421.552†	79295.3	79228.2	493.37	ug/L	493.37	ppb	16:09:41
1	Sc 361.383	918568.4	918568.4	101.92	%			16:10:58
1	Y 371.029	748533.4	748533.4	99.660	%			16:10:58
1	Ag 328.068†	112592.0	110178.2	502.02	ug/L	502.02	ppb	16:11:04
1	As 188.979†	1199.4	1201.0	478.92	ug/L	478.92	ppb	16:11:24
1	B 249.677†	22683.7	22787.0	475.97	ug/L	475.97	ppb	16:11:04
1	Ba 233.527†	66684.8	65437.0	486.24	ug/L	486.24	ppb	16:11:04
1	Be 313.107†	1332146.9	1312164.5	479.26	ug/L	479.26	ppb	16:10:58
1	Cd 226.502†	46897.1	46208.8	488.31	ug/L	488.31	ppb	16:11:04
1	Co 228.616†	26184.8	25757.0	488.96	ug/L	488.96	ppb	16:11:04
1	Cr 267.716†	46946.7	45983.6	483.49	ug/L	483.49	ppb	16:11:04
1	Cu 324.752†	179478.0	169340.2	484.86	ug/L	484.86	ppb	16:11:04
1	Mn 257.610†	462810.3	453669.5	484.35	ug/L	484.35	ppb	16:10:58
1	Mo 202.031†	7794.0	7628.8	484.98	ug/L	484.98	ppb	16:11:24
1	Ni 231.604†	21496.0	21004.5	486.08	ug/L	486.08	ppb	16:11:04
1	P 214.914†	4416.5	4109.8	2296.8	ug/L	2296.8	ppb	16:11:24
1	Pb 220.353†	4224.1	4213.0	477.74	ug/L	477.74	ppb	16:11:24
1	S 181.975 Axial†	741.8	686.3	960.71	ug/L	960.71	ppb	16:11:24
1	Sb 206.836†	1582.4	1518.4	487.52	ug/L	487.52	ppb	16:11:24
1	Se 196.026†	826.1	839.3	503.25	ug/L	503.25	ppb	16:11:24
1	Si 251.611†	84571.1	82528.2	2458.9	ug/L	2458.9	ppb	16:11:04
1	Sn 189.927†	3027.0	2965.0	486.04	ug/L	486.04	ppb	16:11:24
1	Ti 334.940†	316778.2	311925.6	497.64	ug/L	497.64	ppb	16:11:04
1	Tl 190.801†	1703.6	1704.0	480.43	ug/L	480.43	ppb	16:11:24
1	U 409.014†	15719.3	17825.0	489.48	ug/L	489.48	ppb	16:11:04
1	V 292.402†	73108.4	73089.5	489.25	ug/L	489.25	ppb	16:11:04
1	Zn 213.857†	57568.1	55861.8	483.70	ug/L	483.70	ppb	16:11:04
1	SiO2†	82916.7	80887.3	5163.5	ug/L	5163.5	ppb	16:12:31
2	Sc Radial	5901.5	5901.5	101	%			16:10:06
2	Y RADIAL	6268.4	6268.4	99.69	%			16:10:06
2	Al 396.153Radial†	6974.0	6926.3	4790.5	ug/L	4790.5	ppb	16:10:06
2	Ca 317.933Radial†	3332.2	3284.1	4840.6	ug/L	4840.6	ppb	16:10:26
2	Fe 238.204 Radial†	539.3	527.3	4951.3	ug/L	4951.3	ppb	16:10:26
2	K 766.490 Radial†	30635.4	27984.7	4954.3	ug/L	4954.3	ppb	16:10:06
2	Mg 279.077 IEC†	146.1	143.5	5067.7	ug/L	5067.7	ppb	16:10:26
2	Na 589.592 Radial†	27823.9	28640.3	9611.1	ug/L	9611.1	ppb	16:10:06
2	Sr 421.552†	80286.9	79530.7	495.25	ug/L	495.25	ppb	16:10:06
2	Sc 361.383	919638.9	919638.9	102.04	%			16:11:29
2	Y 371.029	751015.9	751015.9	99.991	%			16:11:29
2	Ag 328.068†	110240.2	107744.8	490.97	ug/L	490.97	ppb	16:11:35
2	As 188.979†	1197.5	1197.8	477.54	ug/L	477.54	ppb	16:11:55
2	B 249.677†	22199.6	22286.8	465.51	ug/L	465.51	ppb	16:11:35
2	Ba 233.527†	65453.8	64154.4	476.71	ug/L	476.71	ppb	16:11:35
2	Be 313.107†	1337732.1	1316116.8	480.68	ug/L	480.68	ppb	16:11:29
2	Cd 226.502†	45845.4	45124.5	476.84	ug/L	476.84	ppb	16:11:35
2	Co 228.616†	25662.6	25215.2	478.70	ug/L	478.70	ppb	16:11:35
2	Cr 267.716†	46095.5	45095.8	474.15	ug/L	474.15	ppb	16:11:35
2	Cu 324.752†	175119.1	164863.4	472.04	ug/L	472.04	ppb	16:11:35
2	Mn 257.610†	463010.9	453337.5	483.99	ug/L	483.99	ppb	16:11:29
2	Mo 202.031†	7780.5	7606.7	483.57	ug/L	483.57	ppb	16:11:55
2	Ni 231.604†	21027.6	20521.0	474.89	ug/L	474.89	ppb	16:11:35

2	P 214.914†	4404.0	4092.5	2288.9 ug/L	2288.9 ppb	16:11:55
2	Pb 220.353†	4194.6	4179.2	473.93 ug/L	473.93 ppb	16:11:55
2	S 181.975 Axial†	734.7	678.4	949.72 ug/L	949.72 ppb	16:11:55
2	Sb 206.836†	1574.0	1508.3	484.47 ug/L	484.47 ppb	16:11:55
2	Se 196.026†	822.7	835.1	500.79 ug/L	500.79 ppb	16:11:55
2	Si 251.611†	82493.3	80395.4	2395.1 ug/L	2395.1 ppb	16:11:35
2	Sn 189.927†	3006.7	2941.6	482.20 ug/L	482.20 ppb	16:11:55
2	Ti 334.940†	310141.3	305059.5	486.69 ug/L	486.69 ppb	16:11:35
2	Tl 190.801†	1702.3	1700.8	479.52 ug/L	479.52 ppb	16:11:55
2	U 409.014†	15331.4	17426.9	478.53 ug/L	478.53 ppb	16:11:35
2	V 292.402†	71683.9	71610.0	479.46 ug/L	479.46 ppb	16:11:35
2	Zn 213.857†	56396.1	54647.5	473.18 ug/L	473.18 ppb	16:11:35
2	SiO2†	82737.3	80616.8	5146.2 ug/L	5146.2 ppb	16:12:36
3	Sc Radial	5704.2	5704.2	97.6 %		16:10:31
3	Y RADIAL	6069.3	6069.3	96.52 %		16:10:31
3	Al 396.153Radial†	6754.1	6939.9	4799.5 ug/L	4799.5 ppb	16:10:31
3	Ca 317.933Radial†	3340.4	3406.6	5021.2 ug/L	5021.2 ppb	16:10:51
3	Fe 238.204 Radial†	535.6	541.9	5089.1 ug/L	5089.1 ppb	16:10:51
3	K 766.490 Radial†	30011.7	28395.0	5027.1 ug/L	5027.1 ppb	16:10:31
3	Mg 279.077 IEC†	144.6	147.0	5191.5 ug/L	5191.5 ppb	16:10:51
3	Na 589.592 Radial†	26842.5	28588.0	9593.6 ug/L	9593.6 ppb	16:10:31
3	Sr 421.552†	77467.2	79392.1	494.39 ug/L	494.39 ppb	16:10:31
3	Sc 361.383	906617.1	906617.1	100.59 %		16:12:00
3	Y 371.029	740468.1	740468.1	98.587 %		16:12:00
3	Ag 328.068†	111277.4	110327.7	502.74 ug/L	502.74 ppb	16:12:06
3	As 188.979†	1205.7	1222.8	487.55 ug/L	487.55 ppb	16:12:26
3	B 249.677†	22492.4	22890.3	478.11 ug/L	478.11 ppb	16:12:06
3	Ba 233.527†	66213.4	65830.9	489.16 ug/L	489.16 ppb	16:12:06
3	Be 313.107†	1321558.0	1318868.1	481.71 ug/L	481.71 ppb	16:12:00
3	Cd 226.502†	46483.9	46404.6	490.37 ug/L	490.37 ppb	16:12:06
3	Co 228.616†	25976.3	25888.4	491.48 ug/L	491.48 ppb	16:12:06
3	Cr 267.716†	46690.2	46335.9	487.19 ug/L	487.19 ppb	16:12:06
3	Cu 324.752†	177158.5	169355.8	484.91 ug/L	484.91 ppb	16:12:06
3	Mn 257.610†	457488.6	454365.1	485.10 ug/L	485.10 ppb	16:12:00
3	Mo 202.031†	7831.4	7766.9	493.76 ug/L	493.76 ppb	16:12:26
3	Ni 231.604†	21315.9	21103.5	488.37 ug/L	488.37 ppb	16:12:06
3	P 214.914†	4461.5	4211.7	2355.6 ug/L	2355.6 ppb	16:12:26
3	Pb 220.353†	4234.0	4277.4	485.04 ug/L	485.04 ppb	16:12:26
3	S 181.975 Axial†	755.6	709.5	993.31 ug/L	993.31 ppb	16:12:26
3	Sb 206.836†	1606.1	1562.4	501.70 ug/L	501.70 ppb	16:12:26
3	Se 196.026†	823.7	847.6	508.51 ug/L	508.51 ppb	16:12:26
3	Si 251.611†	83546.7	82603.8	2461.0 ug/L	2461.0 ppb	16:12:06
3	Sn 189.927†	3042.1	3019.1	494.92 ug/L	494.92 ppb	16:12:26
3	Ti 334.940†	313486.9	312750.9	498.96 ug/L	498.96 ppb	16:12:06
3	Tl 190.801†	1720.0	1742.3	491.16 ug/L	491.16 ppb	16:12:26
3	U 409.014†	15456.7	17767.2	487.86 ug/L	487.86 ppb	16:12:06
3	V 292.402†	72417.5	73348.2	491.06 ug/L	491.06 ppb	16:12:06
3	Zn 213.857†	56968.8	56010.6	484.97 ug/L	484.97 ppb	16:12:06
3	SiO2†	82132.3	81179.9	5181.8 ug/L	5181.8 ppb	16:12:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	914941.5	101.52	%	0.802				0.79%
Sc Radial	5818.9	99.6	%	1.75				1.76%
Y 371.029	746672.5	99.413	%	0.7342				0.74%
Y RADIAL	6190.8	98.46	%	1.694				1.72%
Ag 328.068†	109416.9	498.58	ug/L	6.600	498.58	ppb	6.600	1.32%
QC value within limits for Ag 328.068 Recovery = 99.72%								
Al 396.153Radial†	6918.6	4785.0	ug/L	17.92	4785.0	ppb	17.92	0.37%
QC value within limits for Al 396.153Radial Recovery = 95.70%								
As 188.979†	1207.2	481.34	ug/L	5.423	481.34	ppb	5.423	1.13%
QC value within limits for As 188.979 Recovery = 96.27%								
B 249.677†	22654.7	473.20	ug/L	6.745	473.20	ppb	6.745	1.43%
QC value within limits for B 249.677 Recovery = 94.64%								
Ba 233.527†	65140.8	484.04	ug/L	6.513	484.04	ppb	6.513	1.35%
QC value within limits for Ba 233.527 Recovery = 96.81%								
Be 313.107†	1315716.5	480.55	ug/L	1.228	480.55	ppb	1.228	0.26%
QC value within limits for Be 313.107 Recovery = 96.11%								
Ca 317.933Radial†	3325.5	4901.6	ug/L	103.61	4901.6	ppb	103.61	2.11%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.03%
Cd 226.502†            45912.6      485.17 ug/L         7.289      485.17 ppb          7.289   1.50%
   QC value within limits for Cd 226.502  Recovery = 97.03%
Co 228.616†            25620.2      486.38 ug/L         6.767      486.38 ppb          6.767   1.39%
   QC value within limits for Co 228.616  Recovery = 97.28%
Cr 267.716†            45805.1      481.61 ug/L         6.718      481.61 ppb          6.718   1.39%
   QC value within limits for Cr 267.716  Recovery = 96.32%
Cu 324.752†           167853.1      480.60 ug/L         7.412      480.60 ppb          7.412   1.54%
   QC value within limits for Cu 324.752  Recovery = 96.12%
Fe 238.204 Radial†       532.4      4999.1 ug/L        77.94      4999.1 ppb         77.94   1.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.98%
K 766.490 Radial†      28110.7      4976.6 ug/L        43.76      4976.6 ppb         43.76   0.88%
   QC value within limits for K 766.490 Radial  Recovery = 99.53%
Mg 279.077 IEC†          144.6      5106.6 ug/L        73.61      5106.6 ppb         73.61   1.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.13%
Mn 257.610†           453790.7      484.48 ug/L         0.566      484.48 ppb          0.566   0.12%
   QC value within limits for Mn 257.610  Recovery = 96.90%
Mo 202.031†             7667.5      487.44 ug/L         5.519      487.44 ppb          5.519   1.13%
   QC value within limits for Mo 202.031  Recovery = 97.49%
Na 589.592 Radial†     28568.1      9586.9 ug/L        28.16      9586.9 ppb         28.16   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 95.87%
Ni 231.604†            20876.3      483.11 ug/L         7.214      483.11 ppb          7.214   1.49%
   QC value within limits for Ni 231.604  Recovery = 96.62%
P 214.914†              4138.0      2313.8 ug/L        36.45      2313.8 ppb         36.45   1.58%
   QC value within limits for P 214.914  Recovery = 92.55%
Pb 220.353†             4223.2      478.90 ug/L         5.647      478.90 ppb          5.647   1.18%
   QC value within limits for Pb 220.353  Recovery = 95.78%
S 181.975 Axial†         691.4      967.91 ug/L        22.668      967.91 ppb         22.668   2.34%
   QC value within limits for S 181.975 Axial  Recovery = 96.79%
Sb 206.836†             1529.7      491.23 ug/L         9.195      491.23 ppb          9.195   1.87%
   QC value within limits for Sb 206.836  Recovery = 98.25%
Se 196.026†              840.7      504.18 ug/L         3.941      504.18 ppb          3.941   0.78%
   QC value within limits for Se 196.026  Recovery = 100.84%
Si 251.611†            81842.5      2438.3 ug/L        37.45      2438.3 ppb         37.45   1.54%
   QC value within limits for Si 251.611  Recovery = 97.53%
Sn 189.927†             2975.2      487.72 ug/L         6.524      487.72 ppb          6.524   1.34%
   QC value within limits for Sn 189.927  Recovery = 97.54%
Sr 421.552†            79383.6      494.34 ug/L         0.943      494.34 ppb          0.943   0.19%
   QC value within limits for Sr 421.552  Recovery = 98.87%
Ti 334.940†           309912.0      494.43 ug/L         6.737      494.43 ppb          6.737   1.36%
   QC value within limits for Ti 334.940  Recovery = 98.89%
Tl 190.801†             1715.7      483.70 ug/L         6.472      483.70 ppb          6.472   1.34%
   QC value within limits for Tl 190.801  Recovery = 96.74%
U 409.014†             17673.1      485.29 ug/L         5.910      485.29 ppb          5.910   1.22%
   QC value within limits for U 409.014  Recovery = 97.06%
V 292.402†             72682.6      486.59 ug/L         6.245      486.59 ppb          6.245   1.28%
   QC value within limits for V 292.402  Recovery = 97.32%
Zn 213.857†            55506.6      480.62 ug/L         6.472      480.62 ppb          6.472   1.35%
   QC value within limits for Zn 213.857  Recovery = 96.12%
SiO2†                  80894.7      5163.8 ug/L        17.80      5163.8 ppb         17.80   0.34%
   QC value within limits for SiO2  Recovery = 96.56%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 16:14:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5997.3	5997.3	103	%			16:16:44
1	Y RADIAL	6380.2	6380.2	101.5	%			16:16:44
1	Al 396.153Radial†	-11.9	8.8	6.1007	ug/L	6.1007	ppb	16:16:44
1	Ca 317.933Radial†	32.0	15.6	22.925	ug/L	22.925	ppb	16:17:04
1	Fe 238.204 Radial†	7.8	0.8	7.6576	ug/L	7.6576	ppb	16:17:04
1	K 766.490 Radial†	2266.6	-143.1	-25.393	ug/L	-25.393	ppb	16:16:44
1	Mg 279.077 IEC†	0.9	-0.3	-10.086	ug/L	-10.086	ppb	16:17:04
1	Na 589.592 Radial†	-974.3	138.5	46.492	ug/L	46.492	ppb	16:16:44
1	Sr 421.552†	-10.3	17.3	0.1078	ug/L	0.1078	ppb	16:16:44
1	Sc 361.383	902141.4	902141.4	100.10	%			16:18:01
1	Y 371.029	750918.2	750918.2	99.978	%			16:18:01
1	Ag 328.068†	359.0	65.9	0.2960	ug/L	0.2960	ppb	16:18:01
1	As 188.979†	-25.0	-0.8	-0.2985	ug/L	-0.2985	ppb	16:18:21
1	B 249.677†	-348.1	182.9	3.8358	ug/L	3.8358	ppb	16:18:21
1	Ba 233.527†	-16.1	-7.7	-0.0562	ug/L	-0.0562	ppb	16:18:21
1	Be 313.107†	-5089.1	28.8	0.0108	ug/L	0.0108	ppb	16:18:01
1	Cd 226.502†	-196.2	-0.9	-0.0104	ug/L	-0.0104	ppb	16:18:21
1	Co 228.616†	-73.6	-8.2	-0.1541	ug/L	-0.1541	ppb	16:18:21
1	Cr 267.716†	73.9	-4.8	-0.0521	ug/L	-0.0521	ppb	16:18:21
1	Cu 324.752†	6951.8	188.3	0.5394	ug/L	0.5394	ppb	16:18:01
1	Mn 257.610†	454.0	31.2	0.0342	ug/L	0.0342	ppb	16:18:21
1	Mo 202.031†	24.9	6.5	0.4161	ug/L	0.4161	ppb	16:18:21
1	Ni 231.604†	68.3	-18.3	-0.4244	ug/L	-0.4244	ppb	16:18:21
1	P 214.914†	234.5	10.8	6.1249	ug/L	6.1249	ppb	16:18:21
1	Pb 220.353†	-59.3	9.2	1.0407	ug/L	1.0407	ppb	16:18:21
1	S 181.975 Axial†	45.3	3.7	5.1474	ug/L	5.1474	ppb	16:18:21
1	Sb 206.836†	43.5	9.3	2.9348	ug/L	2.9348	ppb	16:18:21
1	Se 196.026†	-26.6	2.2	1.3150	ug/L	1.3150	ppb	16:18:21
1	Si 251.611†	542.2	92.0	2.7574	ug/L	2.7574	ppb	16:18:21
1	Sn 189.927†	3.0	-2.0	-0.3265	ug/L	-0.3265	ppb	16:18:21
1	Ti 334.940†	-1017.3	98.6	0.1559	ug/L	0.1559	ppb	16:18:01
1	Tl 190.801†	-26.6	5.9	1.6513	ug/L	1.6513	ppb	16:18:21
1	U 409.014†	-2189.4	214.6	5.9103	ug/L	5.9103	ppb	16:18:01
1	V 292.402†	-1339.5	20.2	0.1490	ug/L	0.1490	ppb	16:18:01
1	Zn 213.857†	694.2	71.7	0.6283	ug/L	0.6283	ppb	16:18:21
1	SiO2†	516.1	48.1	3.0941	ug/L	3.0941	ppb	16:19:17
2	Sc Radial	6012.1	6012.1	103	%			16:17:09
2	Y RADIAL	6408.9	6408.9	101.9	%			16:17:09
2	Al 396.153Radial†	-36.3	-14.9	-10.362	ug/L	-10.362	ppb	16:17:09
2	Ca 317.933Radial†	30.7	14.3	21.060	ug/L	21.060	ppb	16:17:29
2	Fe 238.204 Radial†	9.5	2.4	22.746	ug/L	22.746	ppb	16:17:29
2	K 766.490 Radial†	2357.0	-60.7	-10.790	ug/L	-10.790	ppb	16:17:09
2	Mg 279.077 IEC†	0.1	-1.0	-36.764	ug/L	-36.764	ppb	16:17:29
2	Na 589.592 Radial†	-977.1	138.2	46.378	ug/L	46.378	ppb	16:17:09
2	Sr 421.552†	-16.5	11.4	0.0706	ug/L	0.0706	ppb	16:17:09
2	Sc 361.383	903845.4	903845.4	100.29	%			16:18:26
2	Y 371.029	752600.8	752600.8	100.20	%			16:18:26
2	Ag 328.068†	358.1	64.3	0.2983	ug/L	0.2983	ppb	16:18:26
2	As 188.979†	-29.0	-4.8	-1.8783	ug/L	-1.8783	ppb	16:18:46
2	B 249.677†	-359.2	172.5	3.6144	ug/L	3.6144	ppb	16:18:46
2	Ba 233.527†	-11.6	-3.1	-0.0207	ug/L	-0.0207	ppb	16:18:46
2	Be 313.107†	-5050.4	77.1	0.0283	ug/L	0.0283	ppb	16:18:26
2	Cd 226.502†	-179.2	16.4	0.1712	ug/L	0.1712	ppb	16:18:46
2	Co 228.616†	-66.3	-0.7	-0.0139	ug/L	-0.0139	ppb	16:18:46
2	Cr 267.716†	82.9	4.1	0.0432	ug/L	0.0432	ppb	16:18:46
2	Cu 324.752†	6849.8	73.5	0.2116	ug/L	0.2116	ppb	16:18:26
2	Mn 257.610†	454.3	30.7	0.0357	ug/L	0.0357	ppb	16:18:46
2	Mo 202.031†	16.9	-1.5	-0.0918	ug/L	-0.0918	ppb	16:18:46
2	Ni 231.604†	83.6	-3.2	-0.0736	ug/L	-0.0736	ppb	16:18:46

2	P 214.914†	212.9	-11.2	-6.5142 ug/L	-6.5142 ppb	16:18:46
2	Pb 220.353†	-57.7	10.9	1.2306 ug/L	1.2306 ppb	16:18:46
2	S 181.975 Axial†	43.3	1.6	2.2762 ug/L	2.2762 ppb	16:18:46
2	Sb 206.836†	36.6	2.2	0.7144 ug/L	0.7144 ppb	16:18:46
2	Se 196.026†	-30.1	-1.2	-0.6243 ug/L	-0.6243 ppb	16:18:46
2	Si 251.611†	542.4	91.2	2.7314 ug/L	2.7314 ppb	16:18:46
2	Sn 189.927†	11.5	6.5	1.0600 ug/L	1.0600 ppb	16:18:46
2	Ti 334.940†	-1064.7	53.3	0.0846 ug/L	0.0846 ppb	16:18:26
2	Tl 190.801†	-26.4	6.2	1.7321 ug/L	1.7321 ppb	16:18:46
2	U 409.014†	-2287.8	120.6	3.3181 ug/L	3.3181 ppb	16:18:26
2	V 292.402†	-1251.6	110.3	0.7294 ug/L	0.7294 ppb	16:18:26
2	Zn 213.857†	688.9	65.1	0.5680 ug/L	0.5680 ppb	16:18:46
2	SiO2†	534.2	65.2	4.1883 ug/L	4.1883 ppb	16:19:22
3	Sc Radial	5984.6	5984.6	102 %		16:17:34
3	Y RADIAL	6405.1	6405.1	101.9 %		16:17:34
3	Al 396.153Radial†	-28.8	-7.7	-5.3395 ug/L	-5.3395 ppb	16:17:34
3	Ca 317.933Radial†	25.8	9.6	14.150 ug/L	14.150 ppb	16:17:54
3	Fe 238.204 Radial†	7.6	0.6	5.3339 ug/L	5.3339 ppb	16:17:54
3	K 766.490 Radial†	2358.4	-48.7	-8.6670 ug/L	-8.6670 ppb	16:17:34
3	Mg 279.077 IEC†	4.6	3.4	119.26 ug/L	119.26 ppb	16:17:54
3	Na 589.592 Radial†	-940.3	169.7	56.954 ug/L	56.954 ppb	16:17:34
3	Sr 421.552†	-2.0	25.4	0.1583 ug/L	0.1583 ppb	16:17:34
3	Sc 361.383	891886.2	891886.2	98.959 %		16:18:51
3	Y 371.029	741776.6	741776.6	98.761 %		16:18:51
3	Ag 328.068†	352.6	63.5	0.2859 ug/L	0.2859 ppb	16:18:51
3	As 188.979†	-26.7	-2.8	-1.1194 ug/L	-1.1194 ppb	16:19:12
3	B 249.677†	-361.9	164.9	3.4576 ug/L	3.4576 ppb	16:19:12
3	Ba 233.527†	-3.3	5.1	0.0388 ug/L	0.0388 ppb	16:19:12
3	Be 313.107†	-5098.4	-39.0	-0.0142 ug/L	-0.0142 ppb	16:18:51
3	Cd 226.502†	-168.8	24.6	0.2590 ug/L	0.2590 ppb	16:19:12
3	Co 228.616†	-53.5	11.4	0.2166 ug/L	0.2166 ppb	16:19:12
3	Cr 267.716†	59.9	-18.1	-0.1915 ug/L	-0.1915 ppb	16:19:12
3	Cu 324.752†	6742.8	57.0	0.1633 ug/L	0.1633 ppb	16:18:51
3	Mn 257.610†	457.3	39.8	0.0408 ug/L	0.0408 ppb	16:19:12
3	Mo 202.031†	21.3	3.2	0.2013 ug/L	0.2013 ppb	16:19:12
3	Ni 231.604†	87.1	1.5	0.0337 ug/L	0.0337 ppb	16:19:12
3	P 214.914†	223.2	2.0	1.1147 ug/L	1.1147 ppb	16:19:12
3	Pb 220.353†	-74.9	-7.3	-0.8213 ug/L	-0.8213 ppb	16:19:12
3	S 181.975 Axial†	41.4	0.2	0.3184 ug/L	0.3184 ppb	16:19:12
3	Sb 206.836†	28.0	-6.0	-1.8934 ug/L	-1.8934 ppb	16:19:12
3	Se 196.026†	-18.4	10.3	5.9484 ug/L	5.9484 ppb	16:19:12
3	Si 251.611†	522.5	78.3	2.3466 ug/L	2.3466 ppb	16:19:12
3	Sn 189.927†	-1.4	-6.4	-1.0542 ug/L	-1.0542 ppb	16:19:12
3	Ti 334.940†	-1101.5	1.9	0.0016 ug/L	0.0016 ppb	16:18:51
3	Tl 190.801†	-35.8	-3.7	-1.0409 ug/L	-1.0409 ppb	16:19:12
3	U 409.014†	-2199.4	179.2	4.9375 ug/L	4.9375 ppb	16:18:51
3	V 292.402†	-1313.3	31.3	0.2210 ug/L	0.2210 ppb	16:18:51
3	Zn 213.857†	716.8	102.5	0.8901 ug/L	0.8901 ppb	16:19:12
3	SiO2†	521.6	59.6	3.8314 ug/L	3.8314 ppb	16:19:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899291.0	99.781	%	0.7178				0.72%
Sc Radial	5998.0	103	%	0.2				0.23%
Y 371.029	748431.9	99.647	%	0.7755				0.78%
Y RADIAL	6398.0	101.8	%	0.25				0.24%
Ag 328.068†	64.6	0.2934	ug/L	0.00659	0.2934	ppb	0.00659	2.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.6	-3.2003	ug/L	8.43731	-3.2003	ppb	8.43731	263.64%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-1.0987	ug/L	0.79011	-1.0987	ppb	0.79011	71.91%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	173.5	3.6359	ug/L	0.19001	3.6359	ppb	0.19001	5.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0127	ug/L	0.04799	-0.0127	ppb	0.04799	377.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.3	0.0083	ug/L	0.02134	0.0083	ppb	0.02134	257.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.1	19.378	ug/L	4.6227	19.378	ppb	4.6227	23.86%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                13.4      0.1399 ug/L       0.13744      0.1399 ppb        0.13744  98.22%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.8      0.0162 ug/L       0.18717      0.0162 ppb        0.18717 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -6.3     -0.0668 ug/L       0.11801     -0.0668 ppb        0.11801 176.66%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               106.3      0.3047 ug/L       0.20461      0.3047 ppb        0.20461  67.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      11.913 ug/L        9.4538      11.913 ppb         9.4538  79.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -84.2     -14.950 ug/L        9.1059     -14.950 ppb         9.1059  60.91%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      24.137 ug/L       83.4519      24.137 ppb        83.4519 345.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                33.9      0.0369 ug/L       0.00341      0.0369 ppb        0.00341   9.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.7      0.1752 ug/L       0.25494      0.1752 ppb        0.25494 145.50%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        148.8      49.941 ug/L        6.0737      49.941 ppb         6.0737  12.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.7     -0.1548 ug/L       0.23961     -0.1548 ppb        0.23961 154.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  0.5      0.2418 ug/L       6.36463      0.2418 ppb        6.36463 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.3      0.4834 ug/L       1.13387      0.4834 ppb        1.13387 234.58%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.8      2.5807 ug/L       2.42887      2.5807 ppb        2.42887  94.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.8      0.5853 ug/L       2.41670      0.5853 ppb        2.41670 412.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.8      2.2131 ug/L       3.37712      2.2131 ppb        3.37712 152.60%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                87.2      2.6118 ug/L       0.23004      2.6118 ppb        0.23004   8.81%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.1069 ug/L       1.07406     -0.1069 ppb        1.07406 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.0      0.1122 ug/L       0.04403      0.1122 ppb        0.04403  39.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                51.2      0.0807 ug/L       0.07724      0.0807 ppb        0.07724  95.69%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.8      0.7808 ug/L       1.57821      0.7808 ppb        1.57821 202.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                171.5      4.7220 ug/L       1.30950      4.7220 ppb        1.30950  27.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 53.9      0.3665 ug/L       0.31636      0.3665 ppb        0.31636  86.33%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                79.8      0.6955 ug/L       0.17122      0.6955 ppb        0.17122  24.62%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      57.7      3.7046 ug/L       0.55801      3.7046 ppb        0.55801  15.06%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 17:18:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5781.8	5781.8	98.9	%			17:20:03
1	Y RADIAL	6171.4	6171.4	98.15	%			17:20:03
1	Al 396.153Radial†	6864.1	6958.2	4812.3	ug/L	4812.3	ppb	17:20:03
1	Ca 317.933Radial†	3323.3	3343.4	4928.0	ug/L	4928.0	ppb	17:20:23
1	Fe 238.204 Radial†	540.1	539.1	5062.1	ug/L	5062.1	ppb	17:20:23
1	K 766.490 Radial†	30485.6	28461.2	5038.7	ug/L	5038.7	ppb	17:20:03
1	Mg 279.077 IEC†	146.4	146.8	5185.6	ug/L	5185.6	ppb	17:20:23
1	Na 589.592 Radial†	27745.2	29131.1	9775.8	ug/L	9775.8	ppb	17:20:03
1	Sr 421.552†	79846.6	80731.3	502.73	ug/L	502.73	ppb	17:20:03
1	Sc 361.383	905894.9	905894.9	100.51	%			17:21:21
1	Y 371.029	738248.8	738248.8	98.291	%			17:21:21
1	Ag 328.068†	111798.2	110934.0	505.49	ug/L	505.49	ppb	17:21:26
1	As 188.979†	1192.9	1211.0	482.91	ug/L	482.91	ppb	17:21:46
1	B 249.677†	22472.9	22888.7	478.07	ug/L	478.07	ppb	17:21:26
1	Ba 233.527†	66453.6	66122.4	491.33	ug/L	491.33	ppb	17:21:26
1	Be 313.107†	1326019.3	1324354.0	483.72	ug/L	483.72	ppb	17:21:21
1	Cd 226.502†	46626.6	46583.4	492.26	ug/L	492.26	ppb	17:21:26
1	Co 228.616†	26107.4	26039.3	494.33	ug/L	494.33	ppb	17:21:26
1	Cr 267.716†	46747.8	46430.2	488.18	ug/L	488.18	ppb	17:21:26
1	Cu 324.752†	178355.4	170687.0	488.72	ug/L	488.72	ppb	17:21:26
1	Mn 257.610†	461681.8	458899.5	489.93	ug/L	489.93	ppb	17:21:21
1	Mo 202.031†	7805.7	7747.5	492.53	ug/L	492.53	ppb	17:21:46
1	Ni 231.604†	21340.1	21144.4	489.31	ug/L	489.31	ppb	17:21:26
1	P 214.914†	4455.3	4209.1	2353.5	ug/L	2353.5	ppb	17:21:46
1	Pb 220.353†	4221.8	4268.7	484.05	ug/L	484.05	ppb	17:21:46
1	S 181.975 Axial†	746.5	701.1	981.48	ug/L	981.48	ppb	17:21:46
1	Sb 206.836†	1603.1	1560.6	501.09	ug/L	501.09	ppb	17:21:46
1	Se 196.026†	809.7	834.4	500.75	ug/L	500.75	ppb	17:21:46
1	Si 251.611†	83972.4	83093.5	2475.7	ug/L	2475.7	ppb	17:21:26
1	Sn 189.927†	3034.4	3013.9	494.05	ug/L	494.05	ppb	17:21:46
1	Ti 334.940†	315786.0	315286.7	503.00	ug/L	503.00	ppb	17:21:26
1	Tl 190.801†	1707.6	1731.4	488.13	ug/L	488.13	ppb	17:21:46
1	U 409.014†	15657.6	17979.4	493.71	ug/L	493.71	ppb	17:21:26
1	V 292.402†	72858.4	73844.3	494.33	ug/L	494.33	ppb	17:21:26
1	Zn 213.857†	57202.8	56288.6	487.39	ug/L	487.39	ppb	17:21:26
1	SiO2†	82835.5	81944.6	5230.9	ug/L	5230.9	ppb	17:22:53
2	Sc Radial	5767.0	5767.0	98.7	%			17:20:28
2	Y RADIAL	6129.9	6129.9	97.49	%			17:20:28
2	Al 396.153Radial†	6894.5	7006.9	4846.1	ug/L	4846.1	ppb	17:20:28
2	Ca 317.933Radial†	3337.2	3366.2	4961.5	ug/L	4961.5	ppb	17:20:48
2	Fe 238.204 Radial†	542.6	543.0	5099.1	ug/L	5099.1	ppb	17:20:48
2	K 766.490 Radial†	30568.5	28624.6	5067.7	ug/L	5067.7	ppb	17:20:28
2	Mg 279.077 IEC†	147.1	147.9	5224.2	ug/L	5224.2	ppb	17:20:48
2	Na 589.592 Radial†	27639.2	29095.9	9764.0	ug/L	9764.0	ppb	17:20:28
2	Sr 421.552†	79437.0	80524.3	501.44	ug/L	501.44	ppb	17:20:28
2	Sc 361.383	910972.4	910972.4	101.08	%			17:21:52
2	Y 371.029	743666.0	743666.0	99.012	%			17:21:52
2	Ag 328.068†	112646.0	111152.8	506.49	ug/L	506.49	ppb	17:21:57
2	As 188.979†	1215.5	1226.7	489.13	ug/L	489.13	ppb	17:22:17
2	B 249.677†	22738.1	23026.4	480.96	ug/L	480.96	ppb	17:21:57
2	Ba 233.527†	67026.2	66320.4	492.80	ug/L	492.80	ppb	17:21:57
2	Be 313.107†	1335969.0	1326844.6	484.63	ug/L	484.63	ppb	17:21:52
2	Cd 226.502†	47012.3	46706.4	493.56	ug/L	493.56	ppb	17:21:57
2	Co 228.616†	26250.7	26036.3	494.27	ug/L	494.27	ppb	17:21:57
2	Cr 267.716†	47196.3	46614.7	490.12	ug/L	490.12	ppb	17:21:57
2	Cu 324.752†	180061.7	171386.1	490.72	ug/L	490.72	ppb	17:21:57
2	Mn 257.610†	463718.2	458354.1	489.35	ug/L	489.35	ppb	17:21:52
2	Mo 202.031†	7843.5	7741.6	492.16	ug/L	492.16	ppb	17:22:17
2	Ni 231.604†	21593.1	21276.4	492.37	ug/L	492.37	ppb	17:21:57

2	P 214.914†	4449.0	4178.1	2335.3 ug/L	2335.3 ppb	17:22:17
2	Pb 220.353†	4248.1	4271.3	484.34 ug/L	484.34 ppb	17:22:17
2	S 181.975 Axial†	755.6	706.0	988.27 ug/L	988.27 ppb	17:22:17
2	Sb 206.836†	1592.0	1540.8	494.76 ug/L	494.76 ppb	17:22:17
2	Se 196.026†	826.6	846.6	507.94 ug/L	507.94 ppb	17:22:17
2	Si 251.611†	84789.7	83436.4	2485.9 ug/L	2485.9 ppb	17:21:57
2	Sn 189.927†	3049.6	3012.2	493.77 ug/L	493.77 ppb	17:22:17
2	Ti 334.940†	318016.8	315742.6	503.73 ug/L	503.73 ppb	17:21:57
2	Tl 190.801†	1724.6	1738.7	490.19 ug/L	490.19 ppb	17:22:17
2	U 409.014†	15697.5	17932.1	492.39 ug/L	492.39 ppb	17:21:57
2	V 292.402†	73238.0	73815.9	494.13 ug/L	494.13 ppb	17:21:57
2	Zn 213.857†	57676.2	56439.7	488.68 ug/L	488.68 ppb	17:21:57
2	SiO2†	83388.7	82032.6	5236.5 ug/L	5236.5 ppb	17:22:59
3	Sc Radial	5793.8	5793.8	99.1 %		17:20:54
3	Y RADIAL	6135.3	6135.3	97.57 %		17:20:54
3	Al 396.153Radial†	6915.4	6995.6	4838.1 ug/L	4838.1 ppb	17:20:54
3	Ca 317.933Radial†	3304.2	3317.1	4889.3 ug/L	4889.3 ppb	17:21:14
3	Fe 238.204 Radial†	534.3	532.1	4997.4 ug/L	4997.4 ppb	17:21:14
3	K 766.490 Radial†	30785.1	28699.4	5080.9 ug/L	5080.9 ppb	17:20:54
3	Mg 279.077 IEC†	144.7	144.8	5115.4 ug/L	5115.4 ppb	17:21:14
3	Na 589.592 Radial†	27868.4	29197.2	9798.0 ug/L	9798.0 ppb	17:20:54
3	Sr 421.552†	80176.8	80897.2	503.76 ug/L	503.76 ppb	17:20:54
3	Sc 361.383	906362.7	906362.7	100.57 %		17:22:23
3	Y 371.029	738656.8	738656.8	98.345 %		17:22:23
3	Ag 328.068†	111616.4	110695.8	504.38 ug/L	504.38 ppb	17:22:28
3	As 188.979†	1202.1	1219.5	486.25 ug/L	486.25 ppb	17:22:48
3	B 249.677†	22477.8	22882.0	477.94 ug/L	477.94 ppb	17:22:28
3	Ba 233.527†	66511.9	66146.2	491.50 ug/L	491.50 ppb	17:22:28
3	Be 313.107†	1326542.3	1324193.3	483.66 ug/L	483.66 ppb	17:22:23
3	Cd 226.502†	46831.6	46763.3	494.17 ug/L	494.17 ppb	17:22:28
3	Co 228.616†	26135.8	26054.2	494.62 ug/L	494.62 ppb	17:22:28
3	Cr 267.716†	46775.4	46433.6	488.21 ug/L	488.21 ppb	17:22:28
3	Cu 324.752†	177477.1	169722.1	485.95 ug/L	485.95 ppb	17:22:28
3	Mn 257.610†	462310.8	459287.9	490.34 ug/L	490.34 ppb	17:22:23
3	Mo 202.031†	7864.1	7801.5	495.95 ug/L	495.95 ppb	17:22:48
3	Ni 231.604†	21448.6	21241.4	491.56 ug/L	491.56 ppb	17:22:28
3	P 214.914†	4476.1	4227.4	2364.6 ug/L	2364.6 ppb	17:22:48
3	Pb 220.353†	4273.2	4317.6	489.60 ug/L	489.60 ppb	17:22:48
3	S 181.975 Axial†	754.2	708.4	991.63 ug/L	991.63 ppb	17:22:48
3	Sb 206.836†	1619.6	1576.2	506.16 ug/L	506.16 ppb	17:22:48
3	Se 196.026†	841.8	865.9	518.80 ug/L	518.80 ppb	17:22:48
3	Si 251.611†	83988.5	83066.3	2474.8 ug/L	2474.8 ppb	17:22:28
3	Sn 189.927†	3056.7	3034.5	497.42 ug/L	497.42 ppb	17:22:48
3	Ti 334.940†	315122.1	314464.4	501.69 ug/L	501.69 ppb	17:22:28
3	Tl 190.801†	1721.9	1744.7	491.87 ug/L	491.87 ppb	17:22:48
3	U 409.014†	15787.3	18100.3	497.04 ug/L	497.04 ppb	17:22:28
3	V 292.402†	72549.5	73499.8	492.12 ug/L	492.12 ppb	17:22:28
3	Zn 213.857†	57163.0	56219.6	486.79 ug/L	486.79 ppb	17:22:28
3	SiO2†	83011.4	82077.0	5239.2 ug/L	5239.2 ppb	17:23:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907743.3	100.72	%	0.311				0.31%
Sc Radial	5780.9	98.9	%	0.23				0.23%
Y 371.029	740190.6	98.550	%	0.4017				0.41%
Y RADIAL	6145.5	97.74	%	0.359				0.37%
Ag 328.068†	110927.5	505.45	ug/L	1.057	505.45	ppb	1.057	0.21%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	6986.9	4832.1	ug/L	17.66	4832.1	ppb	17.66	0.37%
QC value within limits for Al 396.153Radial Recovery = 96.64%								
As 188.979†	1219.0	486.10	ug/L	3.115	486.10	ppb	3.115	0.64%
QC value within limits for As 188.979 Recovery = 97.22%								
B 249.677†	22932.4	478.99	ug/L	1.704	478.99	ppb	1.704	0.36%
QC value within limits for B 249.677 Recovery = 95.80%								
Ba 233.527†	66196.3	491.88	ug/L	0.803	491.88	ppb	0.803	0.16%
QC value within limits for Ba 233.527 Recovery = 98.38%								
Be 313.107†	1325130.6	484.00	ug/L	0.543	484.00	ppb	0.543	0.11%
QC value within limits for Be 313.107 Recovery = 96.80%								
Ca 317.933Radial†	3342.2	4926.3	ug/L	36.15	4926.3	ppb	36.15	0.73%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.53%
Cd 226.502†            46684.4      493.33 ug/L         0.975      493.33 ppb          0.975   0.20%
   QC value within limits for Cd 226.502  Recovery = 98.67%
Co 228.616†            26043.3      494.41 ug/L         0.190      494.41 ppb          0.190   0.04%
   QC value within limits for Co 228.616  Recovery = 98.88%
Cr 267.716†            46492.8      488.84 ug/L         1.110      488.84 ppb          1.110   0.23%
   QC value within limits for Cr 267.716  Recovery = 97.77%
Cu 324.752†           170598.4      488.46 ug/L         2.394      488.46 ppb          2.394   0.49%
   QC value within limits for Cu 324.752  Recovery = 97.69%
Fe 238.204 Radial†       538.1      5052.9 ug/L         51.46      5052.9 ppb          51.46   1.02%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.06%
K 766.490 Radial†      28595.1      5062.4 ug/L         21.61      5062.4 ppb          21.61   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 101.25%
Mg 279.077 IEC†          146.5      5175.1 ug/L         55.15      5175.1 ppb          55.15   1.07%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           458847.2      489.88 ug/L         0.496      489.88 ppb          0.496   0.10%
   QC value within limits for Mn 257.610  Recovery = 97.98%
Mo 202.031†             7763.5      493.55 ug/L         2.094      493.55 ppb          2.094   0.42%
   QC value within limits for Mo 202.031  Recovery = 98.71%
Na 589.592 Radial†     29141.4      9779.3 ug/L         17.25      9779.3 ppb          17.25   0.18%
   QC value within limits for Na 589.592 Radial  Recovery = 97.79%
Ni 231.604†            21220.8      491.08 ug/L         1.583      491.08 ppb          1.583   0.32%
   QC value within limits for Ni 231.604  Recovery = 98.22%
P 214.914†              4204.9      2351.1 ug/L         14.80      2351.1 ppb          14.80   0.63%
   QC value within limits for P 214.914  Recovery = 94.05%
Pb 220.353†             4285.8      486.00 ug/L         3.125      486.00 ppb          3.125   0.64%
   QC value within limits for Pb 220.353  Recovery = 97.20%
S 181.975 Axial†         705.1      987.13 ug/L         5.173      987.13 ppb          5.173   0.52%
   QC value within limits for S 181.975 Axial  Recovery = 98.71%
Sb 206.836†             1559.2      500.67 ug/L         5.712      500.67 ppb          5.712   1.14%
   QC value within limits for Sb 206.836  Recovery = 100.13%
Se 196.026†              849.0      509.16 ug/L         9.088      509.16 ppb          9.088   1.78%
   QC value within limits for Se 196.026  Recovery = 101.83%
Si 251.611†            83198.7      2478.8 ug/L          6.20      2478.8 ppb           6.20   0.25%
   QC value within limits for Si 251.611  Recovery = 99.15%
Sn 189.927†             3020.2      495.08 ug/L         2.029      495.08 ppb          2.029   0.41%
   QC value within limits for Sn 189.927  Recovery = 99.02%
Sr 421.552†            80717.6      502.64 ug/L         1.164      502.64 ppb          1.164   0.23%
   QC value within limits for Sr 421.552  Recovery = 100.53%
Ti 334.940†           315164.6      502.81 ug/L         1.036      502.81 ppb          1.036   0.21%
   QC value within limits for Ti 334.940  Recovery = 100.56%
Tl 190.801†             1738.3      490.06 ug/L         1.876      490.06 ppb          1.876   0.38%
   QC value within limits for Tl 190.801  Recovery = 98.01%
U 409.014†             18003.9      494.38 ug/L         2.398      494.38 ppb          2.398   0.49%
   QC value within limits for U 409.014  Recovery = 98.88%
V 292.402†             73720.0      493.53 ug/L         1.222      493.53 ppb          1.222   0.25%
   QC value within limits for V 292.402  Recovery = 98.71%
Zn 213.857†            56316.0      487.62 ug/L         0.970      487.62 ppb          0.970   0.20%
   QC value within limits for Zn 213.857  Recovery = 97.52%
SiO2†                  82018.1      5235.5 ug/L          4.24      5235.5 ppb           4.24   0.08%
   QC value within limits for SiO2  Recovery = 97.91%
All analyte(s) passed QC.
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Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 17:25:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5889.0	5889.0	101	%			17:27:06
1	Y RADIAL	6303.6	6303.6	100.3	%			17:27:06
1	Al 396.153Radial†	-13.8	6.7	4.6319	ug/L	4.6319	ppb	17:27:06
1	Ca 317.933Radial†	31.9	16.1	23.698	ug/L	23.698	ppb	17:27:26
1	Fe 238.204 Radial†	6.7	-0.1	-1.1536	ug/L	-1.1536	ppb	17:27:26
1	K 766.490 Radial†	2284.2	-85.0	-15.095	ug/L	-15.095	ppb	17:27:06
1	Mg 279.077 IEC†	3.5	2.3	81.146	ug/L	81.146	ppb	17:27:26
1	Na 589.592 Radial†	-932.1	163.0	54.694	ug/L	54.694	ppb	17:27:06
1	Sr 421.552†	-36.3	-8.7	-0.0542	ug/L	-0.0542	ppb	17:27:06
1	Sc 361.383	913423.2	913423.2	101.35	%			17:28:22
1	Y 371.029	756971.6	756971.6	100.78	%			17:28:22
1	Ag 328.068†	363.2	65.6	0.3007	ug/L	0.3007	ppb	17:28:28
1	As 188.979†	-26.7	-2.2	-0.8715	ug/L	-0.8715	ppb	17:28:48
1	B 249.677†	-412.2	123.9	2.5990	ug/L	2.5990	ppb	17:28:48
1	Ba 233.527†	-1.0	7.4	0.0563	ug/L	0.0563	ppb	17:28:48
1	Be 313.107†	-5260.3	-77.3	-0.0278	ug/L	-0.0278	ppb	17:28:28
1	Cd 226.502†	-170.5	26.8	0.2838	ug/L	0.2838	ppb	17:28:48
1	Co 228.616†	-66.8	-0.4	-0.0084	ug/L	-0.0084	ppb	17:28:48
1	Cr 267.716†	78.3	-1.4	-0.0124	ug/L	-0.0124	ppb	17:28:48
1	Cu 324.752†	6856.6	8.6	0.0245	ug/L	0.0245	ppb	17:28:28
1	Mn 257.610†	426.6	-1.4	-0.0031	ug/L	-0.0031	ppb	17:28:48
1	Mo 202.031†	21.3	2.7	0.1696	ug/L	0.1696	ppb	17:28:48
1	Ni 231.604†	89.8	2.1	0.0480	ug/L	0.0480	ppb	17:28:48
1	P 214.914†	221.7	-4.8	-2.7469	ug/L	-2.7469	ppb	17:28:48
1	Pb 220.353†	-53.5	15.6	1.7702	ug/L	1.7702	ppb	17:28:48
1	S 181.975 Axial†	46.6	4.4	6.1355	ug/L	6.1355	ppb	17:28:48
1	Sb 206.836†	41.5	6.7	2.1347	ug/L	2.1347	ppb	17:28:48
1	Se 196.026†	-18.0	11.1	6.3915	ug/L	6.3915	ppb	17:28:48
1	Si 251.611†	531.4	74.6	2.2355	ug/L	2.2355	ppb	17:28:48
1	Sn 189.927†	6.8	1.7	0.2815	ug/L	0.2815	ppb	17:28:48
1	Ti 334.940†	-1014.5	113.9	0.1841	ug/L	0.1841	ppb	17:28:28
1	Tl 190.801†	-34.9	-1.9	-0.5317	ug/L	-0.5317	ppb	17:28:48
1	U 409.014†	-2522.5	-87.1	-2.3987	ug/L	-2.3987	ppb	17:28:28
1	V 292.402†	-1289.6	85.9	0.5669	ug/L	0.5669	ppb	17:28:28
1	Zn 213.857†	689.3	58.3	0.5061	ug/L	0.5061	ppb	17:28:48
1	SiO2†	513.8	39.5	2.5345	ug/L	2.5345	ppb	17:29:53
2	Sc Radial	5797.9	5797.9	99.2	%			17:27:31
2	Y RADIAL	6245.1	6245.1	99.32	%			17:27:31
2	Al 396.153Radial†	-22.2	-1.9	-1.3379	ug/L	-1.3379	ppb	17:27:31
2	Ca 317.933Radial†	29.5	14.1	20.799	ug/L	20.799	ppb	17:27:51
2	Fe 238.204 Radial†	6.8	0.0	0.1501	ug/L	0.1501	ppb	17:27:51
2	K 766.490 Radial†	2373.4	40.5	7.1602	ug/L	7.1602	ppb	17:27:31
2	Mg 279.077 IEC†	0.5	-0.7	-24.392	ug/L	-24.392	ppb	17:27:51
2	Na 589.592 Radial†	-897.8	183.0	61.414	ug/L	61.414	ppb	17:27:31
2	Sr 421.552†	-7.4	19.9	0.1235	ug/L	0.1235	ppb	17:27:31
2	Sc 361.383	910340.8	910340.8	101.01	%			17:28:53
2	Y 371.029	754574.2	754574.2	100.46	%			17:28:53
2	Ag 328.068†	359.6	63.3	0.2903	ug/L	0.2903	ppb	17:28:58
2	As 188.979†	-25.6	-1.2	-0.4657	ug/L	-0.4657	ppb	17:29:18
2	B 249.677†	-420.0	114.9	2.4089	ug/L	2.4089	ppb	17:29:18
2	Ba 233.527†	-6.0	2.5	0.0205	ug/L	0.0205	ppb	17:29:18
2	Be 313.107†	-5246.5	-81.2	-0.0297	ug/L	-0.0297	ppb	17:28:58
2	Cd 226.502†	-183.7	13.2	0.1392	ug/L	0.1392	ppb	17:29:18
2	Co 228.616†	-74.0	-7.8	-0.1478	ug/L	-0.1478	ppb	17:29:18
2	Cr 267.716†	91.9	12.4	0.1316	ug/L	0.1316	ppb	17:29:18
2	Cu 324.752†	6940.9	115.0	0.3290	ug/L	0.3290	ppb	17:28:58
2	Mn 257.610†	452.6	25.8	0.0280	ug/L	0.0280	ppb	17:29:18
2	Mo 202.031†	18.9	0.4	0.0229	ug/L	0.0229	ppb	17:29:18
2	Ni 231.604†	77.3	-10.0	-0.2311	ug/L	-0.2311	ppb	17:29:18

2	P 214.914†	221.9	-3.8	-2.2334 ug/L	-2.2334 ppb	17:29:18
2	Pb 220.353†	-57.3	11.7	1.3258 ug/L	1.3258 ppb	17:29:18
2	S 181.975 Axial†	39.1	-2.8	-3.9872 ug/L	-3.9872 ppb	17:29:18
2	Sb 206.836†	41.5	6.9	2.2034 ug/L	2.2034 ppb	17:29:18
2	Se 196.026†	-35.4	-6.2	-3.5971 ug/L	-3.5971 ppb	17:29:18
2	Si 251.611†	503.6	48.9	1.4568 ug/L	1.4568 ppb	17:29:18
2	Sn 189.927†	15.3	10.2	1.6725 ug/L	1.6725 ppb	17:29:18
2	Ti 334.940†	-1157.4	-30.9	-0.0480 ug/L	-0.0480 ppb	17:28:58
2	Tl 190.801†	-34.4	-1.6	-0.4393 ug/L	-0.4393 ppb	17:29:18
2	U 409.014†	-2451.5	-25.3	-0.6965 ug/L	-0.6965 ppb	17:28:58
2	V 292.402†	-1237.4	133.3	0.8786 ug/L	0.8786 ppb	17:28:58
2	Zn 213.857†	698.6	69.8	0.6120 ug/L	0.6120 ppb	17:29:18
2	SiO2†	509.9	37.4	2.3819 ug/L	2.3819 ppb	17:29:58
3	Sc Radial	5740.4	5740.4	98.2 %		17:27:56
3	Y RADIAL	6157.5	6157.5	97.93 %		17:27:56
3	Al 396.153Radial†	-18.2	1.9	1.3303 ug/L	1.3303 ppb	17:27:56
3	Ca 317.933Radial†	36.2	21.3	31.400 ug/L	31.400 ppb	17:28:16
3	Fe 238.204 Radial†	7.1	0.4	3.7312 ug/L	3.7312 ppb	17:28:16
3	K 766.490 Radial†	2301.9	-8.4	-1.5076 ug/L	-1.5076 ppb	17:27:56
3	Mg 279.077 IEC†	0.0	-1.2	-40.709 ug/L	-40.709 ppb	17:28:16
3	Na 589.592 Radial†	-915.4	156.0	52.353 ug/L	52.353 ppb	17:27:56
3	Sr 421.552†	-17.2	9.9	0.0613 ug/L	0.0613 ppb	17:27:56
3	Sc 361.383	914588.7	914588.7	101.48 %		17:29:23
3	Y 371.029	756001.4	756001.4	100.65 %		17:29:23
3	Ag 328.068†	302.0	4.9	0.0259 ug/L	0.0259 ppb	17:29:28
3	As 188.979†	-22.7	1.8	0.7187 ug/L	0.7187 ppb	17:29:48
3	B 249.677†	-398.4	138.1	2.8964 ug/L	2.8964 ppb	17:29:48
3	Ba 233.527†	-10.1	-1.5	-0.0099 ug/L	-0.0099 ppb	17:29:48
3	Be 313.107†	-5217.3	-28.3	-0.0099 ug/L	-0.0099 ppb	17:29:28
3	Cd 226.502†	-183.4	14.4	0.1513 ug/L	0.1513 ppb	17:29:48
3	Co 228.616†	-84.5	-17.9	-0.3404 ug/L	-0.3404 ppb	17:29:48
3	Cr 267.716†	88.9	8.9	0.0947 ug/L	0.0947 ppb	17:29:48
3	Cu 324.752†	6886.2	29.2	0.0837 ug/L	0.0837 ppb	17:29:28
3	Mn 257.610†	446.1	17.3	0.0196 ug/L	0.0196 ppb	17:29:48
3	Mo 202.031†	15.6	-3.0	-0.1908 ug/L	-0.1908 ppb	17:29:48
3	Ni 231.604†	60.0	-27.4	-0.6354 ug/L	-0.6354 ppb	17:29:48
3	P 214.914†	230.3	3.4	1.9868 ug/L	1.9868 ppb	17:29:48
3	Pb 220.353†	-66.1	3.3	0.3723 ug/L	0.3723 ppb	17:29:48
3	S 181.975 Axial†	43.9	1.7	2.3158 ug/L	2.3158 ppb	17:29:48
3	Sb 206.836†	41.0	6.2	1.9689 ug/L	1.9689 ppb	17:29:48
3	Se 196.026†	-23.7	5.5	3.1954 ug/L	3.1954 ppb	17:29:48
3	Si 251.611†	516.2	59.0	1.7641 ug/L	1.7641 ppb	17:29:48
3	Sn 189.927†	15.0	9.7	1.5994 ug/L	1.5994 ppb	17:29:48
3	Ti 334.940†	-980.8	148.4	0.2392 ug/L	0.2392 ppb	17:29:28
3	Tl 190.801†	-20.4	12.4	3.4646 ug/L	3.4646 ppb	17:29:48
3	U 409.014†	-2500.1	-61.9	-1.7059 ug/L	-1.7059 ppb	17:29:28
3	V 292.402†	-1321.1	56.5	0.3654 ug/L	0.3654 ppb	17:29:28
3	Zn 213.857†	692.4	60.5	0.5337 ug/L	0.5337 ppb	17:29:48
3	SiO2†	533.7	58.5	3.7487 ug/L	3.7487 ppb	17:30:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912784.2	101.28	%	0.244				0.24%
Sc Radial	5809.1	99.4	%	1.28				1.29%
Y 371.029	755849.1	100.63	%	0.161				0.16%
Y RADIAL	6235.4	99.17	%	1.170				1.18%
Ag 328.068†	44.6	0.2056	ug/L	0.15574	0.2056	ppb	0.15574	75.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.2	1.5414	ug/L	2.99050	1.5414	ppb	2.99050	194.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.2062	ug/L	0.82626	-0.2062	ppb	0.82626	400.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	125.6	2.6348	ug/L	0.24573	2.6348	ppb	0.24573	9.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.8	0.0223	ug/L	0.03310	0.0223	ppb	0.03310	148.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-62.3	-0.0225	ug/L	0.01096	-0.0225	ppb	0.01096	48.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	17.2	25.299	ug/L	5.4788	25.299	ppb	5.4788	21.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                18.1      0.1914 ug/L       0.08020      0.1914 ppb        0.08020  41.89%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -8.7     -0.1656 ug/L       0.16671     -0.1656 ppb        0.16671 100.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 6.6      0.0713 ug/L       0.07480      0.0713 ppb        0.07480 104.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                50.9      0.1457 ug/L       0.16148      0.1457 ppb        0.16148 110.79%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.1      0.9092 ug/L       2.52935      0.9092 ppb        2.52935 278.18%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -17.6     -3.1475 ug/L      11.21792     -3.1475 ppb       11.21792 356.40%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      5.3483 ug/L      66.14817      5.3483 ppb       66.14817 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                13.9      0.0148 ug/L       0.01606      0.0148 ppb        0.01606 108.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.0      0.0006 ug/L       0.18123      0.0006 ppb        0.18123 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        167.3      56.154 ug/L        4.7038      56.154 ppb         4.7038   8.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -11.8     -0.2728 ug/L       0.34363     -0.2728 ppb        0.34363 125.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.9978 ug/L       2.59749     -0.9978 ppb        2.59749 260.31%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.2      1.1561 ug/L       0.71422      1.1561 ppb        0.71422  61.78%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.1      1.4880 ug/L       5.11184      1.4880 ppb        5.11184 343.53%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      2.1024 ug/L       0.12055      2.1024 ppb        0.12055   5.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.4      1.9966 ug/L       5.10107      1.9966 ppb        5.10107 255.49%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                60.8      1.8188 ug/L       0.39223      1.8188 ppb        0.39223  21.57%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.2      1.1845 ug/L       0.78287      1.1845 ppb        0.78287  66.09%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 7.0      0.0435 ug/L       0.09014      0.0435 ppb        0.09014 207.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                77.2      0.1251 ug/L       0.15241      0.1251 ppb        0.15241 121.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.0      0.8312 ug/L       2.28104      0.8312 ppb        2.28104 274.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -58.1     -1.6004 ug/L       0.85598     -1.6004 ppb        0.85598  53.49%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 91.9      0.6036 ug/L       0.25853      0.6036 ppb        0.25853  42.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                62.9      0.5506 ug/L       0.05497      0.5506 ppb        0.05497   9.98%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      45.1      2.8884 ug/L       0.74896      2.8884 ppb        0.74896  25.93%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 18:28:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5760.8	5760.8	98.6	%			18:30:38
1	Y RADIAL	6107.4	6107.4	97.13	%			18:30:38
1	Al 396.153Radial†	6833.2	6952.1	4808.4	ug/L	4808.4	ppb	18:30:38
1	Ca 317.933Radial†	3329.2	3361.7	4954.9	ug/L	4954.9	ppb	18:30:58
1	Fe 238.204 Radial†	548.6	549.7	5161.4	ug/L	5161.4	ppb	18:30:58
1	K 766.490 Radial†	30552.9	28641.8	5070.5	ug/L	5070.5	ppb	18:30:38
1	Mg 279.077 IEC†	146.7	147.6	5213.1	ug/L	5213.1	ppb	18:30:58
1	Na 589.592 Radial†	29127.4	30635.5	10281	ug/L	10281	ppb	18:30:38
1	Sr 421.552†	81156.2	82354.1	512.83	ug/L	512.83	ppb	18:30:38
1	Sc 361.383	931865.0	931865.0	103.40	%			18:31:55
1	Y 371.029	760429.7	760429.7	101.24	%			18:31:55
1	Ag 328.068†	112468.0	108482.0	494.37	ug/L	494.37	ppb	18:32:00
1	As 188.979†	1219.5	1203.6	479.94	ug/L	479.94	ppb	18:32:20
1	B 249.677†	22486.3	22278.6	465.29	ug/L	465.29	ppb	18:32:00
1	Ba 233.527†	66777.1	64592.7	479.97	ug/L	479.97	ppb	18:32:00
1	Be 313.107†	1345739.2	1306660.5	477.24	ug/L	477.24	ppb	18:31:55
1	Cd 226.502†	46955.7	45608.8	481.94	ug/L	481.94	ppb	18:32:00
1	Co 228.616†	26262.4	25465.4	483.44	ug/L	483.44	ppb	18:32:00
1	Cr 267.716†	46948.6	45328.3	476.60	ug/L	476.60	ppb	18:32:00
1	Cu 324.752†	178634.2	166011.4	475.34	ug/L	475.34	ppb	18:32:00
1	Mn 257.610†	469210.1	453379.7	484.05	ug/L	484.05	ppb	18:31:55
1	Mo 202.031†	7911.3	7633.2	485.27	ug/L	485.27	ppb	18:32:20
1	Ni 231.604†	21527.7	20734.2	479.82	ug/L	479.82	ppb	18:32:00
1	P 214.914†	4543.7	4171.0	2333.5	ug/L	2333.5	ppb	18:32:20
1	Pb 220.353†	4303.0	4230.2	479.68	ug/L	479.68	ppb	18:32:20
1	S 181.975 Axial†	769.6	702.8	983.85	ug/L	983.85	ppb	18:32:20
1	Sb 206.836†	1622.5	1535.0	492.98	ug/L	492.98	ppb	18:32:20
1	Se 196.026†	842.4	843.6	506.38	ug/L	506.38	ppb	18:32:20
1	Si 251.611†	84383.8	81163.1	2418.0	ug/L	2418.0	ppb	18:32:00
1	Sn 189.927†	3079.4	2973.3	487.41	ug/L	487.41	ppb	18:32:20
1	Ti 334.940†	317125.3	307826.4	491.10	ug/L	491.10	ppb	18:32:00
1	Tl 190.801†	1740.1	1715.5	483.63	ug/L	483.63	ppb	18:32:20
1	U 409.014†	16017.5	17893.3	491.34	ug/L	491.34	ppb	18:32:00
1	V 292.402†	73029.2	71989.4	481.98	ug/L	481.98	ppb	18:32:00
1	Zn 213.857†	57479.2	54969.9	475.94	ug/L	475.94	ppb	18:32:00
1	SiO2†	82997.9	79804.9	5093.9	ug/L	5093.9	ppb	18:33:28
2	Sc Radial	5744.2	5744.2	98.3	%			18:31:03
2	Y RADIAL	6103.4	6103.4	97.07	%			18:31:03
2	Al 396.153Radial†	6818.3	6957.0	4810.7	ug/L	4810.7	ppb	18:31:03
2	Ca 317.933Radial†	3381.0	3424.0	5046.8	ug/L	5046.8	ppb	18:31:23
2	Fe 238.204 Radial†	559.0	561.9	5276.2	ug/L	5276.2	ppb	18:31:23
2	K 766.490 Radial†	30656.7	28837.0	5105.0	ug/L	5105.0	ppb	18:31:03
2	Mg 279.077 IEC†	145.9	147.3	5200.7	ug/L	5200.7	ppb	18:31:23
2	Na 589.592 Radial†	29101.1	30694.1	10300	ug/L	10300	ppb	18:31:03
2	Sr 421.552†	81509.9	82951.9	516.56	ug/L	516.56	ppb	18:31:03
2	Sc 361.383	888199.6	888199.6	98.550	%			18:32:26
2	Y 371.029	723758.1	723758.1	96.362	%			18:32:26
2	Ag 328.068†	110933.3	112272.3	511.63	ug/L	511.63	ppb	18:32:31
2	As 188.979†	1220.6	1262.8	503.44	ug/L	503.44	ppb	18:32:51
2	B 249.677†	22233.5	23091.3	482.27	ug/L	482.27	ppb	18:32:31
2	Ba 233.527†	66165.6	67147.3	498.94	ug/L	498.94	ppb	18:32:31
2	Be 313.107†	1326528.2	1351153.2	493.50	ug/L	493.50	ppb	18:32:26
2	Cd 226.502†	46496.3	47375.3	500.62	ug/L	500.62	ppb	18:32:31
2	Co 228.616†	25990.9	26438.7	501.94	ug/L	501.94	ppb	18:32:31
2	Cr 267.716†	46634.2	47241.5	496.71	ug/L	496.71	ppb	18:32:31
2	Cu 324.752†	176114.3	171948.1	492.34	ug/L	492.34	ppb	18:32:31
2	Mn 257.610†	464207.7	470613.4	502.45	ug/L	502.45	ppb	18:32:26
2	Mo 202.031†	7920.1	8018.3	509.75	ug/L	509.75	ppb	18:32:51
2	Ni 231.604†	21294.6	21521.2	498.04	ug/L	498.04	ppb	18:32:31

2	P 214.914†	4496.8	4339.5	2428.2 ug/L	2428.2 ppb	18:32:51
2	Pb 220.353†	4270.7	4402.0	499.14 ug/L	499.14 ppb	18:32:51
2	S 181.975 Axial†	753.6	723.1	1012.4 ug/L	1012.4 ppb	18:32:51
2	Sb 206.836†	1613.4	1602.9	514.90 ug/L	514.90 ppb	18:32:51
2	Se 196.026†	846.7	888.0	532.49 ug/L	532.49 ppb	18:32:51
2	Si 251.611†	83330.0	84106.0	2505.6 ug/L	2505.6 ppb	18:32:31
2	Sn 189.927†	3071.9	3112.1	510.14 ug/L	510.14 ppb	18:32:51
2	Ti 334.940†	313584.0	319311.4	509.43 ug/L	509.43 ppb	18:32:31
2	Tl 190.801†	1729.2	1787.1	503.82 ug/L	503.82 ppb	18:32:51
2	U 409.014†	15513.7	18143.7	498.19 ug/L	498.19 ppb	18:32:31
2	V 292.402†	72142.9	74562.4	499.29 ug/L	499.29 ppb	18:32:31
2	Zn 213.857†	56861.9	57076.4	494.19 ug/L	494.19 ppb	18:32:31
2	SiO2†	84093.7	84863.2	5417.3 ug/L	5417.3 ppb	18:33:33
3	Sc Radial	5812.9	5812.9	99.5 %		18:31:28
3	Y RADIAL	6138.3	6138.3	97.62 %		18:31:28
3	Al 396.153Radial†	6881.6	6938.8	4798.5 ug/L	4798.5 ppb	18:31:28
3	Ca 317.933Radial†	3371.4	3373.9	4972.9 ug/L	4972.9 ppb	18:31:48
3	Fe 238.204 Radial†	553.4	549.6	5160.7 ug/L	5160.7 ppb	18:31:48
3	K 766.490 Radial†	30745.4	28557.9	5055.6 ug/L	5055.6 ppb	18:31:28
3	Mg 279.077 IEC†	145.9	145.5	5139.5 ug/L	5139.5 ppb	18:31:48
3	Na 589.592 Radial†	29249.0	30493.2	10233 ug/L	10233 ppb	18:31:28
3	Sr 421.552†	81853.5	82318.1	512.61 ug/L	512.61 ppb	18:31:28
3	Sc 361.383	902897.8	902897.8	100.18 %		18:32:57
3	Y 371.029	735966.5	735966.5	97.987 %		18:32:57
3	Ag 328.068†	111386.7	110892.4	505.32 ug/L	505.32 ppb	18:33:02
3	As 188.979†	1209.4	1231.4	490.99 ug/L	490.99 ppb	18:33:22
3	B 249.677†	22344.7	22834.9	476.94 ug/L	476.94 ppb	18:33:02
3	Ba 233.527†	66227.0	66115.6	491.28 ug/L	491.28 ppb	18:33:02
3	Be 313.107†	1320143.6	1322868.1	483.17 ug/L	483.17 ppb	18:32:57
3	Cd 226.502†	46497.5	46608.4	492.52 ug/L	492.52 ppb	18:33:02
3	Co 228.616†	25971.7	25990.1	493.41 ug/L	493.41 ppb	18:33:02
3	Cr 267.716†	46557.9	46395.0	487.81 ug/L	487.81 ppb	18:33:02
3	Cu 324.752†	176686.9	169610.5	485.64 ug/L	485.64 ppb	18:33:02
3	Mn 257.610†	460920.3	459664.1	490.76 ug/L	490.76 ppb	18:32:57
3	Mo 202.031†	7881.0	7848.4	498.94 ug/L	498.94 ppb	18:33:22
3	Ni 231.604†	21335.0	21209.8	490.83 ug/L	490.83 ppb	18:33:02
3	P 214.914†	4474.4	4242.8	2373.4 ug/L	2373.4 ppb	18:33:22
3	Pb 220.353†	4249.5	4310.3	488.76 ug/L	488.76 ppb	18:33:22
3	S 181.975 Axial†	757.2	714.2	999.90 ug/L	999.90 ppb	18:33:22
3	Sb 206.836†	1618.7	1581.5	507.90 ug/L	507.90 ppb	18:33:22
3	Se 196.026†	826.2	853.6	512.18 ug/L	512.18 ppb	18:33:22
3	Si 251.611†	83427.3	82826.7	2467.6 ug/L	2467.6 ppb	18:33:02
3	Sn 189.927†	3044.9	3034.4	497.42 ug/L	497.42 ppb	18:33:22
3	Ti 334.940†	314076.2	314622.9	501.95 ug/L	501.95 ppb	18:33:02
3	Tl 190.801†	1711.7	1741.1	490.86 ug/L	490.86 ppb	18:33:22
3	U 409.014†	15730.5	18103.8	497.12 ug/L	497.12 ppb	18:33:02
3	V 292.402†	72340.5	73568.0	492.59 ug/L	492.59 ppb	18:33:02
3	Zn 213.857†	56954.5	56229.6	486.86 ug/L	486.86 ppb	18:33:02
3	SiO2†	84008.2	83388.8	5323.2 ug/L	5323.2 ppb	18:33:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	907654.1	100.71	%	2.465				2.45%
Sc Radial	5772.6	98.8	%	0.61				0.62%
Y 371.029	740051.5	98.531	%	2.4863				2.52%
Y RADIAL	6116.4	97.27	%	0.303				0.31%
Ag 328.068†	110548.9	503.78	ug/L	8.735	503.78	ppb	8.735	1.73%
QC value within limits for Ag 328.068 Recovery = 100.76%								
Al 396.153Radial†	6949.3	4805.9	ug/L	6.47	4805.9	ppb	6.47	0.13%
QC value within limits for Al 396.153Radial Recovery = 96.12%								
As 188.979†	1232.6	491.46	ug/L	11.762	491.46	ppb	11.762	2.39%
QC value within limits for As 188.979 Recovery = 98.29%								
B 249.677†	22734.9	474.84	ug/L	8.683	474.84	ppb	8.683	1.83%
QC value within limits for B 249.677 Recovery = 94.97%								
Ba 233.527†	65951.9	490.06	ug/L	9.546	490.06	ppb	9.546	1.95%
QC value within limits for Ba 233.527 Recovery = 98.01%								
Be 313.107†	1326893.9	484.64	ug/L	8.225	484.64	ppb	8.225	1.70%
QC value within limits for Be 313.107 Recovery = 96.93%								
Ca 317.933Radial†	3386.5	4991.5	ug/L	48.73	4991.5	ppb	48.73	0.98%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.83%
Cd 226.502†            46530.9      491.69 ug/L         9.364      491.69 ppb          9.364   1.90%
   QC value within limits for Cd 226.502  Recovery = 98.34%
Co 228.616†            25964.7      492.93 ug/L         9.256      492.93 ppb          9.256   1.88%
   QC value within limits for Co 228.616  Recovery = 98.59%
Cr 267.716†            46321.6      487.04 ug/L        10.079      487.04 ppb         10.079   2.07%
   QC value within limits for Cr 267.716  Recovery = 97.41%
Cu 324.752†           169190.0      484.44 ug/L         8.561      484.44 ppb          8.561   1.77%
   QC value within limits for Cu 324.752  Recovery = 96.89%
Fe 238.204 Radial†       553.7      5199.4 ug/L        66.47      5199.4 ppb          66.47   1.28%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.99%
K 766.490 Radial†      28678.9      5077.0 ug/L        25.31      5077.0 ppb          25.31   0.50%
   QC value within limits for K 766.490 Radial  Recovery = 101.54%
Mg 279.077 IEC†          146.8      5184.5 ug/L        39.41      5184.5 ppb          39.41   0.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.69%
Mn 257.610†           461219.1      492.42 ug/L         9.310      492.42 ppb          9.310   1.89%
   QC value within limits for Mn 257.610  Recovery = 98.48%
Mo 202.031†             7833.3      497.99 ug/L        12.265      497.99 ppb         12.265   2.46%
   QC value within limits for Mo 202.031  Recovery = 99.60%
Na 589.592 Radial†     30607.6       10271 ug/L         34.7       10271 ppb           34.7   0.34%
   QC value within limits for Na 589.592 Radial  Recovery = 102.71%
Ni 231.604†            21155.1      489.56 ug/L         9.172      489.56 ppb          9.172   1.87%
   QC value within limits for Ni 231.604  Recovery = 97.91%
P 214.914†              4251.1      2378.4 ug/L        47.53      2378.4 ppb          47.53   2.00%
   QC value within limits for P 214.914  Recovery = 95.13%
Pb 220.353†             4314.1      489.19 ug/L         9.736      489.19 ppb          9.736   1.99%
   QC value within limits for Pb 220.353  Recovery = 97.84%
S 181.975 Axial†         713.4      998.70 ug/L        14.296      998.70 ppb         14.296   1.43%
   QC value within limits for S 181.975 Axial  Recovery = 99.87%
Sb 206.836†             1573.1      505.26 ug/L        11.194      505.26 ppb         11.194   2.22%
   QC value within limits for Sb 206.836  Recovery = 101.05%
Se 196.026†              861.7      517.02 ug/L        13.711      517.02 ppb         13.711   2.65%
   QC value within limits for Se 196.026  Recovery = 103.40%
Si 251.611†            82698.6      2463.7 ug/L        43.92      2463.7 ppb          43.92   1.78%
   QC value within limits for Si 251.611  Recovery = 98.55%
Sn 189.927†             3039.9      498.32 ug/L        11.391      498.32 ppb         11.391   2.29%
   QC value within limits for Sn 189.927  Recovery = 99.66%
Sr 421.552†            82541.4      514.00 ug/L         2.217      514.00 ppb          2.217   0.43%
   QC value within limits for Sr 421.552  Recovery = 102.80%
Ti 334.940†           313920.2      500.83 ug/L         9.212      500.83 ppb          9.212   1.84%
   QC value within limits for Ti 334.940  Recovery = 100.17%
Tl 190.801†             1747.9      492.77 ug/L        10.229      492.77 ppb         10.229   2.08%
   QC value within limits for Tl 190.801  Recovery = 98.55%
U 409.014†             18046.9      495.55 ug/L         3.683      495.55 ppb          3.683   0.74%
   QC value within limits for U 409.014  Recovery = 99.11%
V 292.402†             73373.2      491.28 ug/L         8.729      491.28 ppb          8.729   1.78%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†            56092.0      485.66 ug/L         9.187      485.66 ppb          9.187   1.89%
   QC value within limits for Zn 213.857  Recovery = 97.13%
SiO2†                  82685.6      5278.1 ug/L       166.33      5278.1 ppb         166.33   3.15%
   QC value within limits for SiO2  Recovery = 98.70%
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 18:35:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5754.5	5754.5	98.5	%			18:37:39
1	Y RADIAL	6166.9	6166.9	98.08	%			18:37:39
1	Al 396.153Radial†	-27.5	-7.5	-5.1991	ug/L	-5.1991	ppb	18:37:39
1	Ca 317.933Radial†	16.6	1.3	1.8648	ug/L	1.8648	ppb	18:37:59
1	Fe 238.204 Radial†	6.9	0.2	1.4284	ug/L	1.4284	ppb	18:37:59
1	K 766.490 Radial†	2299.0	-17.0	-3.0531	ug/L	-3.0531	ppb	18:37:39
1	Mg 279.077 IEC†	-0.2	-1.3	-47.197	ug/L	-47.197	ppb	18:37:59
1	Na 589.592 Radial†	-869.3	205.2	68.852	ug/L	68.852	ppb	18:37:39
1	Sr 421.552†	5.4	32.9	0.2047	ug/L	0.2047	ppb	18:37:39
1	Sc 361.383	910093.8	910093.8	100.98	%			18:38:56
1	Y 371.029	753361.3	753361.3	100.30	%			18:38:56
1	Ag 328.068†	271.7	-23.7	-0.1074	ug/L	-0.1074	ppb	18:39:01
1	As 188.979†	-17.8	6.5	2.5865	ug/L	2.5865	ppb	18:39:21
1	B 249.677†	-445.6	89.4	1.8756	ug/L	1.8756	ppb	18:39:21
1	Ba 233.527†	-1.9	6.5	0.0498	ug/L	0.0498	ppb	18:39:21
1	Be 313.107†	-5234.1	-70.3	-0.0257	ug/L	-0.0257	ppb	18:39:01
1	Cd 226.502†	-180.9	15.9	0.1680	ug/L	0.1680	ppb	18:39:21
1	Co 228.616†	-76.3	-10.2	-0.1931	ug/L	-0.1931	ppb	18:39:21
1	Cr 267.716†	87.6	8.1	0.0854	ug/L	0.0854	ppb	18:39:21
1	Cu 324.752†	6754.5	-67.7	-0.1937	ug/L	-0.1937	ppb	18:39:01
1	Mn 257.610†	442.3	15.7	0.0178	ug/L	0.0178	ppb	18:39:21
1	Mo 202.031†	17.4	-1.1	-0.0713	ug/L	-0.0713	ppb	18:39:21
1	Ni 231.604†	86.2	-1.2	-0.0277	ug/L	-0.0277	ppb	18:39:21
1	P 214.914†	230.5	4.7	2.7512	ug/L	2.7512	ppb	18:39:21
1	Pb 220.353†	-57.2	11.8	1.3348	ug/L	1.3348	ppb	18:39:21
1	S 181.975 Axial†	40.8	-1.2	-1.6205	ug/L	-1.6205	ppb	18:39:21
1	Sb 206.836†	35.0	0.4	0.1198	ug/L	0.1198	ppb	18:39:21
1	Se 196.026†	-33.2	-4.0	-2.3332	ug/L	-2.3332	ppb	18:39:21
1	Si 251.611†	470.7	16.4	0.4945	ug/L	0.4945	ppb	18:39:21
1	Sn 189.927†	3.2	-1.8	-0.2932	ug/L	-0.2932	ppb	18:39:21
1	Ti 334.940†	-1151.9	-25.8	-0.0427	ug/L	-0.0427	ppb	18:39:01
1	Tl 190.801†	-23.0	9.7	2.7127	ug/L	2.7127	ppb	18:39:21
1	U 409.014†	-2300.7	123.5	3.4008	ug/L	3.4008	ppb	18:38:56
1	V 292.402†	-1277.6	93.2	0.6196	ug/L	0.6196	ppb	18:39:01
1	Zn 213.857†	648.1	20.0	0.1768	ug/L	0.1768	ppb	18:39:21
1	SiO2†	486.7	14.6	0.9410	ug/L	0.9410	ppb	18:40:27
2	Sc Radial	5807.3	5807.3	99.4	%			18:38:04
2	Y RADIAL	6166.8	6166.8	98.08	%			18:38:04
2	Al 396.153Radial†	-29.5	-9.3	-6.4595	ug/L	-6.4595	ppb	18:38:04
2	Ca 317.933Radial†	17.7	2.2	3.2387	ug/L	3.2387	ppb	18:38:24
2	Fe 238.204 Radial†	8.1	1.3	12.559	ug/L	12.559	ppb	18:38:24
2	K 766.490 Radial†	2342.0	5.1	0.8704	ug/L	0.8704	ppb	18:38:04
2	Mg 279.077 IEC†	-1.6	-2.8	-98.785	ug/L	-98.785	ppb	18:38:24
2	Na 589.592 Radial†	-862.1	220.5	73.979	ug/L	73.979	ppb	18:38:04
2	Sr 421.552†	8.6	36.0	0.2242	ug/L	0.2242	ppb	18:38:04
2	Sc 361.383	920464.7	920464.7	102.13	%			18:39:26
2	Y 371.029	761317.0	761317.0	101.36	%			18:39:26
2	Ag 328.068†	338.4	38.6	0.1773	ug/L	0.1773	ppb	18:39:32
2	As 188.979†	-24.4	0.3	0.1304	ug/L	0.1304	ppb	18:39:52
2	B 249.677†	-420.5	118.9	2.4926	ug/L	2.4926	ppb	18:39:52
2	Ba 233.527†	-7.1	1.5	0.0123	ug/L	0.0123	ppb	18:39:52
2	Be 313.107†	-5306.5	-82.8	-0.0298	ug/L	-0.0298	ppb	18:39:32
2	Cd 226.502†	-203.9	-4.6	-0.0497	ug/L	-0.0497	ppb	18:39:52
2	Co 228.616†	-75.0	-8.0	-0.1523	ug/L	-0.1523	ppb	18:39:52
2	Cr 267.716†	86.5	6.1	0.0637	ug/L	0.0637	ppb	18:39:52
2	Cu 324.752†	6753.9	-143.7	-0.4104	ug/L	-0.4104	ppb	18:39:32
2	Mn 257.610†	410.0	-20.9	-0.0192	ug/L	-0.0192	ppb	18:39:52
2	Mo 202.031†	23.1	4.3	0.2740	ug/L	0.2740	ppb	18:39:52
2	Ni 231.604†	80.2	-8.0	-0.1852	ug/L	-0.1852	ppb	18:39:52

2	P 214.914†	225.0	-3.2	-1.7759	ug/L	-1.7759 ppb	18:39:52
2	Pb 220.353†	-62.2	7.5	0.8506	ug/L	0.8506 ppb	18:39:52
2	S 181.975 Axial†	36.8	-5.6	-7.8331	ug/L	-7.8331 ppb	18:39:52
2	Sb 206.836†	31.4	-3.5	-1.1030	ug/L	-1.1030 ppb	18:39:52
2	Se 196.026†	-30.1	-0.6	-0.3331	ug/L	-0.3331 ppb	18:39:52
2	Si 251.611†	470.4	10.9	0.3221	ug/L	0.3221 ppb	18:39:52
2	Sn 189.927†	4.8	-0.3	-0.0452	ug/L	-0.0452 ppb	18:39:52
2	Ti 334.940†	-1005.2	130.7	0.2071	ug/L	0.2071 ppb	18:39:32
2	Tl 190.801†	-34.5	-1.3	-0.3516	ug/L	-0.3516 ppb	18:39:52
2	U 409.014†	-2310.9	139.2	3.8318	ug/L	3.8318 ppb	18:39:26
2	V 292.402†	-1312.4	73.3	0.4913	ug/L	0.4913 ppb	18:39:32
2	Zn 213.857†	648.1	12.8	0.1153	ug/L	0.1153 ppb	18:39:52
2	SiO2†	462.9	-14.2	-0.9194	ug/L	-0.9194 ppb	18:40:32
3	Sc Radial	5849.0	5849.0	100	%		18:38:30
3	Y RADIAL	6245.2	6245.2	99.32	%		18:38:30
3	Al 396.153Radial†	-18.9	1.5	1.0270	ug/L	1.0270 ppb	18:38:30
3	Ca 317.933Radial†	21.6	6.0	8.7723	ug/L	8.7723 ppb	18:38:50
3	Fe 238.204 Radial†	10.9	4.0	37.798	ug/L	37.798 ppb	18:38:50
3	K 766.490 Radial†	2322.8	-31.0	-5.5159	ug/L	-5.5159 ppb	18:38:30
3	Mg 279.077 IEC†	-0.4	-1.6	-56.109	ug/L	-56.109 ppb	18:38:50
3	Na 589.592 Radial†	-902.4	186.3	62.531	ug/L	62.531 ppb	18:38:30
3	Sr 421.552†	1.6	29.0	0.1803	ug/L	0.1803 ppb	18:38:30
3	Sc 361.383	922723.4	922723.4	102.38	%		18:39:57
3	Y 371.029	764408.7	764408.7	101.77	%		18:39:57
3	Ag 328.068†	352.9	52.0	0.2470	ug/L	0.2470 ppb	18:40:02
3	As 188.979†	-23.7	1.0	0.4121	ug/L	0.4121 ppb	18:40:22
3	B 249.677†	-447.5	93.6	1.9570	ug/L	1.9570 ppb	18:40:22
3	Ba 233.527†	-15.4	-6.6	-0.0465	ug/L	-0.0465 ppb	18:40:22
3	Be 313.107†	-5233.5	1.2	0.0005	ug/L	0.0005 ppb	18:40:02
3	Cd 226.502†	-184.4	15.0	0.1550	ug/L	0.1550 ppb	18:40:22
3	Co 228.616†	-67.5	-0.5	-0.0091	ug/L	-0.0091 ppb	18:40:22
3	Cr 267.716†	76.7	-3.8	-0.0389	ug/L	-0.0389 ppb	18:40:22
3	Cu 324.752†	6761.6	-152.4	-0.4342	ug/L	-0.4342 ppb	18:40:02
3	Mn 257.610†	449.8	17.0	0.0229	ug/L	0.0229 ppb	18:40:22
3	Mo 202.031†	23.2	4.3	0.2773	ug/L	0.2773 ppb	18:40:22
3	Ni 231.604†	82.2	-6.3	-0.1450	ug/L	-0.1450 ppb	18:40:22
3	P 214.914†	226.0	-2.7	-1.5538	ug/L	-1.5538 ppb	18:40:22
3	Pb 220.353†	-57.6	12.2	1.3732	ug/L	1.3732 ppb	18:40:22
3	S 181.975 Axial†	40.4	-2.1	-3.0113	ug/L	-3.0113 ppb	18:40:22
3	Sb 206.836†	28.2	-6.7	-2.1259	ug/L	-2.1259 ppb	18:40:22
3	Se 196.026†	-29.0	0.5	0.3871	ug/L	0.3871 ppb	18:40:22
3	Si 251.611†	493.6	32.5	0.9725	ug/L	0.9725 ppb	18:40:22
3	Sn 189.927†	-0.4	-5.4	-0.8749	ug/L	-0.8749 ppb	18:40:22
3	Ti 334.940†	-1107.0	33.7	0.0533	ug/L	0.0533 ppb	18:40:02
3	Tl 190.801†	-32.6	0.7	0.1993	ug/L	0.1993 ppb	18:40:22
3	U 409.014†	-2381.2	76.0	2.0891	ug/L	2.0891 ppb	18:39:57
3	V 292.402†	-1334.0	55.4	0.3667	ug/L	0.3667 ppb	18:40:02
3	Zn 213.857†	647.4	10.5	0.0919	ug/L	0.0919 ppb	18:40:22
3	SiO2†	495.3	16.3	1.0443	ug/L	1.0443 ppb	18:40:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917760.7	101.83	%	0.747				0.73%
Sc Radial	5803.6	99.3	%	0.81				0.82%
Y 371.029	759695.7	101.15	%	0.759				0.75%
Y RADIAL	6193.0	98.49	%	0.719				0.73%
Ag 328.068†	22.3	0.1056	ug/L	0.18778	0.1056	ppb	0.18778	177.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.1	-3.5439	ug/L	4.00834	-3.5439	ppb	4.00834	113.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.6	1.0430	ug/L	1.34413	1.0430	ppb	1.34413	128.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	100.6	2.1084	ug/L	0.33520	2.1084	ppb	0.33520	15.90%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.5	0.0052	ug/L	0.04854	0.0052	ppb	0.04854	935.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-50.7	-0.0183	ug/L	0.01645	-0.0183	ppb	0.01645	89.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.1	4.6253	ug/L	3.65656	4.6253	ppb	3.65656	79.06%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.8      0.0911 ug/L       0.12212      0.0911 ppb        0.12212 134.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.2     -0.1182 ug/L       0.09660     -0.1182 ppb        0.09660  81.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.5      0.0367 ug/L       0.06635      0.0367 ppb        0.06635 180.64%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -121.2     -0.3461 ug/L       0.13254     -0.3461 ppb        0.13254  38.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      17.262 ug/L       18.6353      17.262 ppb        18.6353 107.96%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -14.3     -2.5662 ug/L       3.22086     -2.5662 ppb        3.22086 125.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.9     -67.364 ug/L       27.5737     -67.364 ppb        27.5737  40.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 3.9      0.0072 ug/L       0.02296      0.0072 ppb        0.02296 319.61%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.5      0.1600 ug/L       0.20031      0.1600 ppb        0.20031 125.20%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        204.0      68.454 ug/L        5.7341      68.454 ppb         5.7341   8.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.2     -0.1193 ug/L       0.08185     -0.1193 ppb        0.08185  68.60%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -0.4     -0.1928 ug/L       2.55204     -0.1928 ppb        2.55204 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.5      1.1862 ug/L       0.29130      1.1862 ppb        0.29130  24.56%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -4.1550 ug/L       3.26043     -4.1550 ppb        3.26043  78.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.3     -1.0363 ug/L       1.12433     -1.0363 ppb        1.12433 108.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.4     -0.7598 ug/L       1.40945     -0.7598 ppb        1.40945 185.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                19.9      0.5964 ug/L       0.33692      0.5964 ppb        0.33692  56.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.5     -0.4044 ug/L       0.42585     -0.4044 ppb        0.42585 105.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                32.6      0.2031 ug/L       0.02198      0.2031 ppb        0.02198  10.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                46.2      0.0726 ug/L       0.12596      0.0726 ppb        0.12596 173.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.0      0.8535 ug/L       1.63353      0.8535 ppb        1.63353 191.40%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                112.9      3.1072 ug/L       0.90769      3.1072 ppb        0.90769  29.21%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 74.0      0.4925 ug/L       0.12645      0.4925 ppb        0.12645  25.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                14.4      0.1280 ug/L       0.04387      0.1280 ppb        0.04387  34.27%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       5.6      0.3553 ug/L       1.10515      0.3553 ppb        1.10515 311.05%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 44
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 19:52:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5799.2	5799.2	99.2	%			19:54:42
1	Y RADIAL	6156.4	6156.4	97.91	%			19:54:42
1	Al 396.153Radial†	6735.2	6807.5	4707.3	ug/L	4707.3	ppb	19:54:42
1	Ca 317.933Radial†	3300.8	3310.6	4879.7	ug/L	4879.7	ppb	19:55:02
1	Fe 238.204 Radial†	530.1	527.4	4952.8	ug/L	4952.8	ppb	19:55:02
1	K 766.490 Radial†	30046.2	27926.1	4943.9	ug/L	4943.9	ppb	19:54:42
1	Mg 279.077 IEC†	139.9	139.8	4939.0	ug/L	4939.0	ppb	19:55:02
1	Na 589.592 Radial†	26060.7	27349.5	9178.0	ug/L	9178.0	ppb	19:54:42
1	Sr 421.552†	76692.8	77311.2	481.43	ug/L	481.43	ppb	19:54:42
1	Sc 361.383	897338.7	897338.7	99.564	%			19:56:00
1	Y 371.029	729940.1	729940.1	97.185	%			19:56:00
1	Ag 328.068†	111671.9	111867.6	509.69	ug/L	509.69	ppb	19:56:05
1	As 188.979†	1190.2	1219.6	486.35	ug/L	486.35	ppb	19:56:25
1	B 249.677†	22533.9	23163.1	483.83	ug/L	483.83	ppb	19:56:05
1	Ba 233.527†	66576.3	66876.0	496.92	ug/L	496.92	ppb	19:56:05
1	Be 313.107†	1330155.2	1341087.0	489.83	ug/L	489.83	ppb	19:56:00
1	Cd 226.502†	46736.3	47135.9	498.12	ug/L	498.12	ppb	19:56:05
1	Co 228.616†	26213.0	26393.1	501.05	ug/L	501.05	ppb	19:56:05
1	Cr 267.716†	46772.2	46898.1	493.10	ug/L	493.10	ppb	19:56:05
1	Cu 324.752†	178222.0	172244.9	493.17	ug/L	493.17	ppb	19:56:05
1	Mn 257.610†	466706.1	468325.4	499.98	ug/L	499.98	ppb	19:56:00
1	Mo 202.031†	7825.0	7840.9	498.45	ug/L	498.45	ppb	19:56:25
1	Ni 231.604†	21389.5	21396.5	495.15	ug/L	495.15	ppb	19:56:05
1	P 214.914†	4479.3	4275.4	2391.2	ug/L	2391.2	ppb	19:56:25
1	Pb 220.353†	4257.6	4344.7	492.64	ug/L	492.64	ppb	19:56:25
1	S 181.975 Axial†	743.0	704.7	986.54	ug/L	986.54	ppb	19:56:25
1	Sb 206.836†	1600.8	1573.6	505.36	ug/L	505.36	ppb	19:56:25
1	Se 196.026†	833.9	866.4	518.93	ug/L	518.93	ppb	19:56:25
1	Si 251.611†	84064.5	83982.6	2502.2	ug/L	2502.2	ppb	19:56:05
1	Sn 189.927†	3063.3	3071.7	503.51	ug/L	503.51	ppb	19:56:25
1	Ti 334.940†	316322.4	318821.1	508.63	ug/L	508.63	ppb	19:56:05
1	Tl 190.801†	1710.7	1750.7	493.60	ug/L	493.60	ppb	19:56:25
1	U 409.014†	15894.7	18366.1	504.36	ug/L	504.36	ppb	19:56:05
1	V 292.402†	72664.7	74340.9	497.72	ug/L	497.72	ppb	19:56:05
1	Zn 213.857†	57239.0	56867.6	492.42	ug/L	492.42	ppb	19:56:05
1	SiO2†	83671.5	83570.0	5334.9	ug/L	5334.9	ppb	19:57:32
2	Sc Radial	5787.5	5787.5	99.0	%			19:55:07
2	Y RADIAL	6123.8	6123.8	97.39	%			19:55:07
2	Al 396.153Radial†	6980.1	7068.5	4888.2	ug/L	4888.2	ppb	19:55:07
2	Ca 317.933Radial†	3328.4	3345.2	4930.7	ug/L	4930.7	ppb	19:55:27
2	Fe 238.204 Radial†	532.0	530.4	4981.5	ug/L	4981.5	ppb	19:55:27
2	K 766.490 Radial†	30906.9	28856.4	5108.8	ug/L	5108.8	ppb	19:55:07
2	Mg 279.077 IEC†	142.5	142.8	5042.7	ug/L	5042.7	ppb	19:55:27
2	Na 589.592 Radial†	26804.0	28153.2	9447.7	ug/L	9447.7	ppb	19:55:07
2	Sr 421.552†	79276.3	80076.2	498.65	ug/L	498.65	ppb	19:55:07
2	Sc 361.383	890798.0	890798.0	98.839	%			19:56:31
2	Y 371.029	725032.0	725032.0	96.531	%			19:56:31
2	Ag 328.068†	111424.5	112440.9	512.30	ug/L	512.30	ppb	19:56:36
2	As 188.979†	1211.6	1250.0	498.38	ug/L	498.38	ppb	19:56:56
2	B 249.677†	22404.0	23197.9	484.55	ug/L	484.55	ppb	19:56:36
2	Ba 233.527†	66291.4	67078.7	498.43	ug/L	498.43	ppb	19:56:36
2	Be 313.107†	1322457.2	1343108.1	490.57	ug/L	490.57	ppb	19:56:31
2	Cd 226.502†	46568.9	47311.1	499.97	ug/L	499.97	ppb	19:56:36
2	Co 228.616†	26120.9	26493.2	502.97	ug/L	502.97	ppb	19:56:36
2	Cr 267.716†	46662.6	47132.2	495.56	ug/L	495.56	ppb	19:56:36
2	Cu 324.752†	177411.9	172739.7	494.59	ug/L	494.59	ppb	19:56:36
2	Mn 257.610†	462765.1	467780.0	499.40	ug/L	499.40	ppb	19:56:31
2	Mo 202.031†	7940.1	8015.0	509.51	ug/L	509.51	ppb	19:56:56
2	Ni 231.604†	21371.5	21536.1	498.38	ug/L	498.38	ppb	19:56:36

2	P 214.914†	4504.8	4334.2	2425.0 ug/L	2425.0 ppb	19:56:56
2	Pb 220.353†	4283.1	4401.9	499.17 ug/L	499.17 ppb	19:56:56
2	S 181.975 Axial†	760.5	727.8	1018.9 ug/L	1018.9 ppb	19:56:56
2	Sb 206.836†	1618.5	1603.2	515.01 ug/L	515.01 ppb	19:56:56
2	Se 196.026†	839.0	877.7	525.61 ug/L	525.61 ppb	19:56:56
2	Si 251.611†	83703.0	84236.7	2509.5 ug/L	2509.5 ppb	19:56:36
2	Sn 189.927†	3073.5	3104.6	508.91 ug/L	508.91 ppb	19:56:56
2	Ti 334.940†	315464.4	320285.8	510.97 ug/L	510.97 ppb	19:56:36
2	Tl 190.801†	1723.2	1775.9	500.67 ug/L	500.67 ppb	19:56:56
2	U 409.014†	15828.4	18416.2	505.74 ug/L	505.74 ppb	19:56:36
2	V 292.402†	72458.2	74667.9	500.04 ug/L	500.04 ppb	19:56:36
2	Zn 213.857†	57027.9	57076.1	494.22 ug/L	494.22 ppb	19:56:36
2	SiO2†	83847.8	84365.5	5385.4 ug/L	5385.4 ppb	19:57:37
3	Sc Radial	5699.0	5699.0	97.5 %		19:55:33
3	Y RADIAL	6028.3	6028.3	95.87 %		19:55:33
3	Al 396.153Radial†	6974.7	7172.5	4960.5 ug/L	4960.5 ppb	19:55:33
3	Ca 317.933Radial†	3322.1	3391.0	4998.1 ug/L	4998.1 ppb	19:55:53
3	Fe 238.204 Radial†	531.6	538.3	5055.4 ug/L	5055.4 ppb	19:55:53
3	K 766.490 Radial†	30680.6	29109.1	5153.6 ug/L	5153.6 ppb	19:55:33
3	Mg 279.077 IEC†	141.0	143.4	5065.5 ug/L	5065.5 ppb	19:55:53
3	Na 589.592 Radial†	26483.4	28244.8	9478.4 ug/L	9478.4 ppb	19:55:33
3	Sr 421.552†	78473.4	80496.4	501.26 ug/L	501.26 ppb	19:55:33
3	Sc 361.383	890287.6	890287.6	98.782 %		19:57:02
3	Y 371.029	725813.3	725813.3	96.635 %		19:57:02
3	Ag 328.068†	111578.0	112660.9	513.33 ug/L	513.33 ppb	19:57:07
3	As 188.979†	1208.8	1247.8	497.54 ug/L	497.54 ppb	19:57:27
3	B 249.677†	22559.4	23368.3	488.11 ug/L	488.11 ppb	19:57:07
3	Ba 233.527†	66559.2	67388.3	500.73 ug/L	500.73 ppb	19:57:07
3	Be 313.107†	1325687.9	1347145.6	492.04 ug/L	492.04 ppb	19:57:02
3	Cd 226.502†	46843.3	47615.9	503.19 ug/L	503.19 ppb	19:57:07
3	Co 228.616†	26160.6	26548.6	504.01 ug/L	504.01 ppb	19:57:07
3	Cr 267.716†	46751.2	47248.9	496.79 ug/L	496.79 ppb	19:57:07
3	Cu 324.752†	177831.7	173267.6	496.10 ug/L	496.10 ppb	19:57:07
3	Mn 257.610†	463208.7	468497.5	500.17 ug/L	500.17 ppb	19:57:02
3	Mo 202.031†	7900.9	7980.0	507.30 ug/L	507.30 ppb	19:57:27
3	Ni 231.604†	21542.3	21721.4	502.67 ug/L	502.67 ppb	19:57:07
3	P 214.914†	4519.9	4352.1	2435.1 ug/L	2435.1 ppb	19:57:27
3	Pb 220.353†	4270.7	4391.8	498.03 ug/L	498.03 ppb	19:57:27
3	S 181.975 Axial†	756.9	724.7	1014.5 ug/L	1014.5 ppb	19:57:27
3	Sb 206.836†	1619.4	1605.1	515.56 ug/L	515.56 ppb	19:57:27
3	Se 196.026†	830.5	869.5	521.14 ug/L	521.14 ppb	19:57:27
3	Si 251.611†	83979.9	84565.6	2519.4 ug/L	2519.4 ppb	19:57:07
3	Sn 189.927†	3086.5	3119.5	511.35 ug/L	511.35 ppb	19:57:27
3	Ti 334.940†	315915.6	320925.6	512.00 ug/L	512.00 ppb	19:57:07
3	Tl 190.801†	1729.9	1783.7	502.85 ug/L	502.85 ppb	19:57:27
3	U 409.014†	15786.0	18382.5	504.79 ug/L	504.79 ppb	19:57:07
3	V 292.402†	72730.4	74985.4	502.09 ug/L	502.09 ppb	19:57:07
3	Zn 213.857†	57179.0	57262.1	495.81 ug/L	495.81 ppb	19:57:07
3	SiO2†	83050.8	83607.3	5336.8 ug/L	5336.8 ppb	19:57:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892808.1	99.062	%	0.4363				0.44%
Sc Radial	5761.9	98.6	%	0.94				0.95%
Y 371.029	726928.5	96.784	%	0.3511				0.36%
Y RADIAL	6102.8	97.06	%	1.059				1.09%
Ag 328.068†	112323.1	511.77	ug/L	1.877	511.77	ppb	1.877	0.37%
QC value within limits for Ag 328.068 Recovery = 102.35%								
Al 396.153Radial†	7016.2	4852.0	ug/L	130.39	4852.0	ppb	130.39	2.69%
QC value within limits for Al 396.153Radial Recovery = 97.04%								
As 188.979†	1239.2	494.09	ug/L	6.715	494.09	ppb	6.715	1.36%
QC value within limits for As 188.979 Recovery = 98.82%								
B 249.677†	23243.1	485.49	ug/L	2.292	485.49	ppb	2.292	0.47%
QC value within limits for B 249.677 Recovery = 97.10%								
Ba 233.527†	67114.3	498.69	ug/L	1.919	498.69	ppb	1.919	0.38%
QC value within limits for Ba 233.527 Recovery = 99.74%								
Be 313.107†	1343780.2	490.81	ug/L	1.127	490.81	ppb	1.127	0.23%
QC value within limits for Be 313.107 Recovery = 98.16%								
Ca 317.933Radial†	3348.9	4936.2	ug/L	59.43	4936.2	ppb	59.43	1.20%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.72%
Cd 226.502†            47354.3      500.42 ug/L         2.565      500.42 ppb          2.565   0.51%
   QC value within limits for Cd 226.502  Recovery = 100.08%
Co 228.616†            26478.3      502.68 ug/L         1.504      502.68 ppb          1.504   0.30%
   QC value within limits for Co 228.616  Recovery = 100.54%
Cr 267.716†            47093.1      495.15 ug/L         1.880      495.15 ppb          1.880   0.38%
   QC value within limits for Cr 267.716  Recovery = 99.03%
Cu 324.752†           172750.7      494.62 ug/L         1.466      494.62 ppb          1.466   0.30%
   QC value within limits for Cu 324.752  Recovery = 98.92%
Fe 238.204 Radial†       532.0      4996.6 ug/L        52.97      4996.6 ppb         52.97   1.06%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.93%
K 766.490 Radial†      28630.5      5068.8 ug/L       110.44      5068.8 ppb        110.44   2.18%
   QC value within limits for K 766.490 Radial  Recovery = 101.38%
Mg 279.077 IEC†          142.0      5015.8 ug/L        67.43      5015.8 ppb         67.43   1.34%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.32%
Mn 257.610†           468200.9      499.85 ug/L         0.402      499.85 ppb          0.402   0.08%
   QC value within limits for Mn 257.610  Recovery = 99.97%
Mo 202.031†             7945.3      505.09 ug/L         5.852      505.09 ppb          5.852   1.16%
   QC value within limits for Mo 202.031  Recovery = 101.02%
Na 589.592 Radial†     27915.8      9368.0 ug/L       165.30      9368.0 ppb        165.30   1.76%
   QC value within limits for Na 589.592 Radial  Recovery = 93.68%
Ni 231.604†            21551.3      498.73 ug/L         3.773      498.73 ppb          3.773   0.76%
   QC value within limits for Ni 231.604  Recovery = 99.75%
P 214.914†              4320.5      2417.1 ug/L        22.97      2417.1 ppb         22.97   0.95%
   QC value within limits for P 214.914  Recovery = 96.68%
Pb 220.353†             4379.4      496.61 ug/L         3.490      496.61 ppb          3.490   0.70%
   QC value within limits for Pb 220.353  Recovery = 99.32%
S 181.975 Axial†         719.1      1006.7 ug/L        17.56      1006.7 ppb         17.56   1.74%
   QC value within limits for S 181.975 Axial  Recovery = 100.67%
Sb 206.836†             1594.0      511.98 ug/L         5.739      511.98 ppb          5.739   1.12%
   QC value within limits for Sb 206.836  Recovery = 102.40%
Se 196.026†              871.2      521.89 ug/L         3.404      521.89 ppb          3.404   0.65%
   QC value within limits for Se 196.026  Recovery = 104.38%
Si 251.611†            84261.7      2510.4 ug/L         8.63      2510.4 ppb          8.63   0.34%
   QC value within limits for Si 251.611  Recovery = 100.41%
Sn 189.927†             3098.6      507.92 ug/L         4.013      507.92 ppb          4.013   0.79%
   QC value within limits for Sn 189.927  Recovery = 101.58%
Sr 421.552†            79294.6      493.78 ug/L        10.777      493.78 ppb         10.777   2.18%
   QC value within limits for Sr 421.552  Recovery = 98.76%
Ti 334.940†           320010.8      510.54 ug/L         1.724      510.54 ppb          1.724   0.34%
   QC value within limits for Ti 334.940  Recovery = 102.11%
Tl 190.801†             1770.1      499.04 ug/L         4.839      499.04 ppb          4.839   0.97%
   QC value within limits for Tl 190.801  Recovery = 99.81%
U 409.014†             18388.3      504.96 ug/L         0.702      504.96 ppb          0.702   0.14%
   QC value within limits for U 409.014  Recovery = 100.99%
V 292.402†             74664.8      499.95 ug/L         2.185      499.95 ppb          2.185   0.44%
   QC value within limits for V 292.402  Recovery = 99.99%
Zn 213.857†            57068.6      494.15 ug/L         1.692      494.15 ppb          1.692   0.34%
   QC value within limits for Zn 213.857  Recovery = 98.83%
SiO2†                  83847.6      5352.4 ug/L        28.61      5352.4 ppb         28.61   0.53%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
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Sequence No.: 45
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 19:59:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5352.3	5352.3	91.6	%			20:01:44
1	Y RADIAL	5731.8	5731.8	91.16	%			20:01:44
1	Al 396.153Radial†	-32.4	-14.9	-10.398	ug/L	-10.398	ppb	20:01:44
1	Ca 317.933Radial†	21.7	8.1	11.931	ug/L	11.931	ppb	20:02:04
1	Fe 238.204 Radial†	4.2	-2.2	-20.907	ug/L	-20.907	ppb	20:02:04
1	K 766.490 Radial†	2291.1	149.9	26.549	ug/L	26.549	ppb	20:01:44
1	Mg 279.077 IEC†	-0.2	-1.3	-47.256	ug/L	-47.256	ppb	20:02:04
1	Na 589.592 Radial†	-850.8	159.0	53.345	ug/L	53.345	ppb	20:01:44
1	Sr 421.552†	-18.9	6.7	0.0418	ug/L	0.0418	ppb	20:01:44
1	Sc 361.383	904973.1	904973.1	100.41	%			20:03:01
1	Y 371.029	748413.4	748413.4	99.644	%			20:03:01
1	Ag 328.068†	251.9	-41.9	-0.1946	ug/L	-0.1946	ppb	20:03:06
1	As 188.979†	-21.0	3.3	1.2821	ug/L	1.2821	ppb	20:03:26
1	B 249.677†	-349.9	182.2	3.8245	ug/L	3.8245	ppb	20:03:26
1	Ba 233.527†	-19.0	-10.5	-0.0775	ug/L	-0.0775	ppb	20:03:26
1	Be 313.107†	-5300.7	-166.0	-0.0603	ug/L	-0.0603	ppb	20:03:06
1	Cd 226.502†	-181.8	14.0	0.1504	ug/L	0.1504	ppb	20:03:26
1	Co 228.616†	-79.4	-13.7	-0.2581	ug/L	-0.2581	ppb	20:03:26
1	Cr 267.716†	95.6	16.5	0.1737	ug/L	0.1737	ppb	20:03:26
1	Cu 324.752†	6700.2	-84.0	-0.2415	ug/L	-0.2415	ppb	20:03:06
1	Mn 257.610†	451.7	27.5	0.0281	ug/L	0.0281	ppb	20:03:26
1	Mo 202.031†	26.3	7.8	0.4967	ug/L	0.4967	ppb	20:03:26
1	Ni 231.604†	83.8	-3.1	-0.0714	ug/L	-0.0714	ppb	20:03:26
1	P 214.914†	230.1	5.7	3.3319	ug/L	3.3319	ppb	20:03:26
1	Pb 220.353†	-49.1	19.6	2.2142	ug/L	2.2142	ppb	20:03:26
1	S 181.975 Axial†	42.2	0.4	0.5764	ug/L	0.5764	ppb	20:03:26
1	Sb 206.836†	40.0	5.6	1.7829	ug/L	1.7829	ppb	20:03:26
1	Se 196.026†	-21.8	7.1	4.0460	ug/L	4.0460	ppb	20:03:26
1	Si 251.611†	503.8	52.0	1.5371	ug/L	1.5371	ppb	20:03:26
1	Sn 189.927†	10.3	5.3	0.8636	ug/L	0.8636	ppb	20:03:26
1	Ti 334.940†	-1063.5	55.8	0.0896	ug/L	0.0896	ppb	20:03:06
1	Tl 190.801†	-35.4	-2.8	-0.7717	ug/L	-0.7717	ppb	20:03:26
1	U 409.014†	-2415.0	-3.3	-0.0894	ug/L	-0.0894	ppb	20:03:06
1	V 292.402†	-1298.2	65.5	0.4413	ug/L	0.4413	ppb	20:03:06
1	Zn 213.857†	662.1	37.6	0.3325	ug/L	0.3325	ppb	20:03:26
1	SiO2†	464.4	-4.9	-0.3609	ug/L	-0.3609	ppb	20:04:32
2	Sc Radial	5818.3	5818.3	99.6	%			20:02:09
2	Y RADIAL	6230.2	6230.2	99.08	%			20:02:09
2	Al 396.153Radial†	-35.6	-15.4	-10.685	ug/L	-10.685	ppb	20:02:09
2	Ca 317.933Radial†	21.8	6.3	9.3352	ug/L	9.3352	ppb	20:02:29
2	Fe 238.204 Radial†	4.7	-2.1	-19.832	ug/L	-19.832	ppb	20:02:29
2	K 766.490 Radial†	2086.4	-256.2	-45.465	ug/L	-45.465	ppb	20:02:09
2	Mg 279.077 IEC†	1.4	0.3	8.9641	ug/L	8.9641	ppb	20:02:29
2	Na 589.592 Radial†	-853.9	230.3	77.274	ug/L	77.274	ppb	20:02:09
2	Sr 421.552†	-20.8	6.5	0.0402	ug/L	0.0402	ppb	20:02:09
2	Sc 361.383	896955.1	896955.1	99.522	%			20:03:31
2	Y 371.029	742969.9	742969.9	98.920	%			20:03:31
2	Ag 328.068†	237.9	-53.6	-0.2461	ug/L	-0.2461	ppb	20:03:36
2	As 188.979†	-29.5	-5.5	-2.1594	ug/L	-2.1594	ppb	20:03:56
2	B 249.677†	-373.8	155.1	3.2549	ug/L	3.2549	ppb	20:03:56
2	Ba 233.527†	-28.8	-20.5	-0.1518	ug/L	-0.1518	ppb	20:03:56
2	Be 313.107†	-5348.1	-260.9	-0.0947	ug/L	-0.0947	ppb	20:03:36
2	Cd 226.502†	-174.2	20.1	0.2141	ug/L	0.2141	ppb	20:03:56
2	Co 228.616†	-78.5	-13.5	-0.2553	ug/L	-0.2553	ppb	20:03:56
2	Cr 267.716†	95.7	17.5	0.1845	ug/L	0.1845	ppb	20:03:56
2	Cu 324.752†	6737.3	13.0	0.0361	ug/L	0.0361	ppb	20:03:36
2	Mn 257.610†	447.0	26.8	0.0264	ug/L	0.0264	ppb	20:03:56
2	Mo 202.031†	19.9	1.6	0.1027	ug/L	0.1027	ppb	20:03:56
2	Ni 231.604†	62.8	-23.5	-0.5437	ug/L	-0.5437	ppb	20:03:56

2	P 214.914†	210.4	-12.1	-6.9814 ug/L	-6.9814 ppb	20:03:56
2	Pb 220.353†	-45.2	23.0	2.6039 ug/L	2.6039 ppb	20:03:56
2	S 181.975 Axial†	37.5	-3.9	-5.5154 ug/L	-5.5154 ppb	20:03:56
2	Sb 206.836†	32.3	-1.8	-0.5547 ug/L	-0.5547 ppb	20:03:56
2	Se 196.026†	-22.8	5.9	3.3273 ug/L	3.3273 ppb	20:03:56
2	Si 251.611†	499.9	52.7	1.5869 ug/L	1.5869 ppb	20:03:56
2	Sn 189.927†	9.9	5.0	0.8178 ug/L	0.8178 ppb	20:03:56
2	Ti 334.940†	-996.0	114.1	0.1836 ug/L	0.1836 ppb	20:03:36
2	Tl 190.801†	-33.7	-1.3	-0.3632 ug/L	-0.3632 ppb	20:03:56
2	U 409.014†	-2480.0	-90.1	-2.4797 ug/L	-2.4797 ppb	20:03:36
2	V 292.402†	-1305.2	46.9	0.3091 ug/L	0.3091 ppb	20:03:36
2	Zn 213.857†	652.8	34.1	0.3029 ug/L	0.3029 ppb	20:03:56
2	SiO2†	494.6	29.5	1.9174 ug/L	1.9174 ppb	20:04:37
3	Sc Radial	5795.5	5795.5	99.2 %		20:02:34
3	Y RADIAL	6200.0	6200.0	98.60 %		20:02:34
3	Al 396.153Radial†	-29.2	-9.0	-6.2896 ug/L	-6.2896 ppb	20:02:34
3	Ca 317.933Radial†	18.1	2.7	3.9095 ug/L	3.9095 ppb	20:02:54
3	Fe 238.204 Radial†	7.5	0.8	7.1414 ug/L	7.1414 ppb	20:02:54
3	K 766.490 Radial†	2188.4	-145.1	-25.765 ug/L	-25.765 ppb	20:02:34
3	Mg 279.077 IEC†	0.9	-0.3	-9.3734 ug/L	-9.3734 ppb	20:02:54
3	Na 589.592 Radial†	-817.4	263.8	88.511 ug/L	88.511 ppb	20:02:34
3	Sr 421.552†	-12.1	15.2	0.0946 ug/L	0.0946 ppb	20:02:34
3	Sc 361.383	902817.3	902817.3	100.17 %		20:04:01
3	Y 371.029	747183.3	747183.3	99.481 %		20:04:01
3	Ag 328.068†	293.9	0.7	0.0104 ug/L	0.0104 ppb	20:04:06
3	As 188.979†	-17.3	6.9	2.7345 ug/L	2.7345 ppb	20:04:26
3	B 249.677†	-384.6	146.7	3.0766 ug/L	3.0766 ppb	20:04:26
3	Ba 233.527†	-13.7	-5.2	-0.0384 ug/L	-0.0384 ppb	20:04:26
3	Be 313.107†	-5362.9	-240.7	-0.0877 ug/L	-0.0877 ppb	20:04:06
3	Cd 226.502†	-171.8	23.5	0.2479 ug/L	0.2479 ppb	20:04:26
3	Co 228.616†	-79.0	-13.4	-0.2548 ug/L	-0.2548 ppb	20:04:26
3	Cr 267.716†	88.0	9.2	0.0984 ug/L	0.0984 ppb	20:04:26
3	Cu 324.752†	6706.7	-61.6	-0.1758 ug/L	-0.1758 ppb	20:04:06
3	Mn 257.610†	439.6	16.5	0.0185 ug/L	0.0185 ppb	20:04:26
3	Mo 202.031†	21.1	2.8	0.1763 ug/L	0.1763 ppb	20:04:26
3	Ni 231.604†	65.0	-21.7	-0.5025 ug/L	-0.5025 ppb	20:04:26
3	P 214.914†	228.8	4.9	2.8196 ug/L	2.8196 ppb	20:04:26
3	Pb 220.353†	-52.3	16.2	1.8319 ug/L	1.8319 ppb	20:04:26
3	S 181.975 Axial†	40.6	-1.1	-1.5013 ug/L	-1.5013 ppb	20:04:26
3	Sb 206.836†	38.2	3.9	1.2280 ug/L	1.2280 ppb	20:04:26
3	Se 196.026†	-25.9	3.0	1.7599 ug/L	1.7599 ppb	20:04:26
3	Si 251.611†	480.2	29.7	0.8974 ug/L	0.8974 ppb	20:04:26
3	Sn 189.927†	2.1	-2.9	-0.4696 ug/L	-0.4696 ppb	20:04:26
3	Ti 334.940†	-1104.9	11.9	0.0219 ug/L	0.0219 ppb	20:04:06
3	Tl 190.801†	-32.1	0.5	0.1334 ug/L	0.1334 ppb	20:04:26
3	U 409.014†	-2639.2	-232.8	-6.4148 ug/L	-6.4148 ppb	20:04:06
3	V 292.402†	-1375.8	-15.1	-0.1107 ug/L	-0.1107 ppb	20:04:06
3	Zn 213.857†	663.9	41.0	0.3609 ug/L	0.3609 ppb	20:04:26
3	SiO2†	494.1	25.8	1.6709 ug/L	1.6709 ppb	20:04:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901581.8	100.04	%	0.460				0.46%
Sc Radial	5655.4	96.8	%	4.50				4.65%
Y 371.029	746188.9	99.348	%	0.3801				0.38%
Y RADIAL	6054.0	96.28	%	4.444				4.62%
Ag 328.068†	-31.6	-0.1434	ug/L	0.13568	-0.1434	ppb	0.13568	94.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-13.1	-9.1242	ug/L	2.45904	-9.1242	ppb	2.45904	26.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.6	0.6191	ug/L	2.51341	0.6191	ppb	2.51341	405.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	161.3	3.3853	ug/L	0.39063	3.3853	ppb	0.39063	11.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-12.0	-0.0892	ug/L	0.05763	-0.0892	ppb	0.05763	64.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-222.5	-0.0809	ug/L	0.01817	-0.0809	ppb	0.01817	22.45%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.7	8.3918	ug/L	4.09301	8.3918	ppb	4.09301	48.77%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                19.2      0.2041 ug/L       0.04951      0.2041 ppb        0.04951  24.26%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -13.5     -0.2560 ug/L       0.00177     -0.2560 ppb        0.00177   0.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                14.4      0.1522 ug/L       0.04687      0.1522 ppb        0.04687  30.80%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -44.2     -0.1270 ug/L       0.14508     -0.1270 ppb        0.14508 114.20%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.2    -11.199 ug/L       15.8926    -11.199 ppb        15.8926 141.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -83.8    -14.894 ug/L       37.2175    -14.894 ppb        37.2175 249.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5    -15.889 ug/L       28.6709    -15.889 ppb        28.6709 180.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                23.6      0.0244 ug/L       0.00514      0.0244 ppb        0.00514  21.10%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.1      0.2586 ug/L       0.20948      0.2586 ppb        0.20948  81.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        217.7     73.044 ug/L       17.9605     73.044 ppb        17.9605  24.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -16.1     -0.3725 ug/L       0.26159     -0.3725 ppb        0.26159  70.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -0.5     -0.2766 ug/L       5.81213     -0.2766 ppb        5.81213 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                19.6      2.2167 ug/L       0.38599      2.2167 ppb        0.38599  17.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.5     -2.1468 ug/L       3.09677     -2.1468 ppb        3.09677 144.25%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.6      0.8187 ug/L       1.22139      0.8187 ppb        1.22139 149.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.3      3.0444 ug/L       1.16903      3.0444 ppb        1.16903  38.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                44.8      1.3405 ug/L       0.38451      1.3405 ppb        0.38451  28.68%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.5      0.4039 ug/L       0.75683      0.4039 ppb        0.75683 187.37%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 9.5      0.0589 ug/L       0.03096      0.0589 ppb        0.03096  52.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                60.6      0.0984 ug/L       0.08120      0.0984 ppb        0.08120  82.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.2     -0.3338 ug/L       0.45324     -0.3338 ppb        0.45324 135.77%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -108.7     -2.9946 ug/L       3.19396     -2.9946 ppb        3.19396 106.66%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                32.4      0.2132 ug/L       0.28823      0.2132 ppb        0.28823 135.18%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                37.5      0.3321 ug/L       0.02905      0.3321 ppb        0.02905   8.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      16.8      1.0758 ug/L       1.25029      1.0758 ppb        1.25029 116.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 56
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 21:17:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6025.1	6025.1	103	%			21:19:27
1	Y RADIAL	6358.9	6358.9	101.1	%			21:19:27
1	Al 396.153Radial†	6827.1	6642.2	4592.3	ug/L	4592.3	ppb	21:19:27
1	Ca 317.933Radial†	3342.7	3226.6	4755.9	ug/L	4755.9	ppb	21:19:47
1	Fe 238.204 Radial†	549.6	526.3	4942.7	ug/L	4942.7	ppb	21:19:47
1	K 766.490 Radial†	30725.7	27450.3	4859.3	ug/L	4859.3	ppb	21:19:27
1	Mg 279.077 IEC†	146.1	140.5	4963.4	ug/L	4963.4	ppb	21:19:47
1	Na 589.592 Radial†	29210.4	29420.2	9872.9	ug/L	9872.9	ppb	21:19:27
1	Sr 421.552†	81204.5	78790.5	490.64	ug/L	490.64	ppb	21:19:27
1	Sc 361.383	893452.3	893452.3	99.133	%			21:20:44
1	Y 371.029	727503.4	727503.4	96.860	%			21:20:44
1	Ag 328.068†	111977.0	112663.3	513.30	ug/L	513.30	ppb	21:20:50
1	As 188.979†	1195.1	1229.7	490.35	ug/L	490.35	ppb	21:21:10
1	B 249.677†	22546.9	23274.7	486.16	ug/L	486.16	ppb	21:20:50
1	Ba 233.527†	66724.2	67316.0	500.19	ug/L	500.19	ppb	21:20:50
1	Be 313.107†	1324682.6	1341377.9	489.94	ug/L	489.94	ppb	21:20:44
1	Cd 226.502†	47018.5	47624.7	503.29	ug/L	503.29	ppb	21:20:50
1	Co 228.616†	26272.0	26567.1	504.36	ug/L	504.36	ppb	21:20:50
1	Cr 267.716†	46979.8	47311.9	497.45	ug/L	497.45	ppb	21:20:50
1	Cu 324.752†	178122.0	172922.7	495.11	ug/L	495.11	ppb	21:20:50
1	Mn 257.610†	463952.3	467586.6	499.19	ug/L	499.19	ppb	21:20:44
1	Mo 202.031†	7865.6	7916.0	503.22	ug/L	503.22	ppb	21:21:10
1	Ni 231.604†	21506.8	21608.3	500.05	ug/L	500.05	ppb	21:20:50
1	P 214.914†	4495.1	4310.9	2411.3	ug/L	2411.3	ppb	21:21:10
1	Pb 220.353†	4267.6	4373.3	495.86	ug/L	495.86	ppb	21:21:10
1	S 181.975 Axial†	751.1	716.1	1002.6	ug/L	1002.6	ppb	21:21:10
1	Sb 206.836†	1627.9	1607.9	516.19	ug/L	516.19	ppb	21:21:10
1	Se 196.026†	821.6	857.6	513.80	ug/L	513.80	ppb	21:21:10
1	Si 251.611†	84260.2	84547.2	2519.0	ug/L	2519.0	ppb	21:20:50
1	Sn 189.927†	3043.1	3064.7	502.35	ug/L	502.35	ppb	21:21:10
1	Ti 334.940†	316887.2	320772.8	511.74	ug/L	511.74	ppb	21:20:50
1	Tl 190.801†	1709.3	1756.7	495.28	ug/L	495.28	ppb	21:21:10
1	U 409.014†	16071.0	18613.4	511.17	ug/L	511.17	ppb	21:20:50
1	V 292.402†	72956.1	74952.3	501.84	ug/L	501.84	ppb	21:20:50
1	Zn 213.857†	57358.7	57238.4	495.63	ug/L	495.63	ppb	21:20:50
1	SiO2†	84066.6	84334.1	5383.8	ug/L	5383.8	ppb	21:22:17
2	Sc Radial	5843.3	5843.3	100.0	%			21:19:52
2	Y RADIAL	6191.7	6191.7	98.47	%			21:19:52
2	Al 396.153Radial†	6765.1	6786.2	4692.6	ug/L	4692.6	ppb	21:19:52
2	Ca 317.933Radial†	3316.8	3301.6	4866.3	ug/L	4866.3	ppb	21:20:12
2	Fe 238.204 Radial†	541.3	534.5	5019.4	ug/L	5019.4	ppb	21:20:12
2	K 766.490 Radial†	30557.9	28209.3	4993.9	ug/L	4993.9	ppb	21:19:52
2	Mg 279.077 IEC†	144.7	143.6	5070.9	ug/L	5070.9	ppb	21:20:12
2	Na 589.592 Radial†	28751.6	29842.6	10015	ug/L	10015	ppb	21:19:52
2	Sr 421.552†	80577.2	80613.0	501.99	ug/L	501.99	ppb	21:19:52
2	Sc 361.383	906075.0	906075.0	100.53	%			21:21:15
2	Y 371.029	737827.2	737827.2	98.235	%			21:21:15
2	Ag 328.068†	110774.6	109893.7	500.74	ug/L	500.74	ppb	21:21:21
2	As 188.979†	1201.7	1219.5	486.23	ug/L	486.23	ppb	21:21:41
2	B 249.677†	22265.1	22677.5	473.66	ug/L	473.66	ppb	21:21:21
2	Ba 233.527†	66026.3	65684.2	488.07	ug/L	488.07	ppb	21:21:21
2	Be 313.107†	1323804.5	1321888.8	482.81	ug/L	482.81	ppb	21:21:15
2	Cd 226.502†	46401.8	46350.5	489.80	ug/L	489.80	ppb	21:21:21
2	Co 228.616†	25990.7	25918.1	492.05	ug/L	492.05	ppb	21:21:21
2	Cr 267.716†	46376.5	46051.6	484.20	ug/L	484.20	ppb	21:21:21
2	Cu 324.752†	175961.7	168270.7	481.80	ug/L	481.80	ppb	21:21:21
2	Mn 257.610†	463940.0	461054.4	492.23	ug/L	492.23	ppb	21:21:15
2	Mo 202.031†	7852.0	7792.0	495.35	ug/L	495.35	ppb	21:21:41
2	Ni 231.604†	21224.7	21025.5	486.56	ug/L	486.56	ppb	21:21:21

2	P 214.914†	4501.0	4253.6	2380.3 ug/L	2380.3 ppb	21:21:41
2	Pb 220.353†	4266.7	4312.5	488.99 ug/L	488.99 ppb	21:21:41
2	S 181.975 Axial†	747.8	702.2	983.10 ug/L	983.10 ppb	21:21:41
2	Sb 206.836†	1614.9	1572.1	504.88 ug/L	504.88 ppb	21:21:41
2	Se 196.026†	827.8	852.2	510.91 ug/L	510.91 ppb	21:21:41
2	Si 251.611†	83236.5	82344.9	2453.2 ug/L	2453.2 ppb	21:21:21
2	Sn 189.927†	3041.9	3020.8	495.18 ug/L	495.18 ppb	21:21:41
2	Ti 334.940†	313233.5	312685.3	498.85 ug/L	498.85 ppb	21:21:21
2	Tl 190.801†	1711.0	1734.5	489.00 ug/L	489.00 ppb	21:21:41
2	U 409.014†	15906.8	18224.2	500.46 ug/L	500.46 ppb	21:21:21
2	V 292.402†	71983.3	72959.5	488.55 ug/L	488.55 ppb	21:21:21
2	Zn 213.857†	56773.2	55850.0	483.59 ug/L	483.59 ppb	21:21:21
2	SiO2†	84082.0	83168.1	5309.3 ug/L	5309.3 ppb	21:22:22
3	Sc Radial	6045.1	6045.1	103 %		21:20:17
3	Y RADIAL	6398.8	6398.8	101.8 %		21:20:17
3	Al 396.153Radial†	6859.6	6651.6	4599.1 ug/L	4599.1 ppb	21:20:17
3	Ca 317.933Radial†	3314.8	3188.9	4700.2 ug/L	4700.2 ppb	21:20:37
3	Fe 238.204 Radial†	544.2	519.3	4877.0 ug/L	4877.0 ppb	21:20:37
3	K 766.490 Radial†	30960.0	27577.7	4881.9 ug/L	4881.9 ppb	21:20:17
3	Mg 279.077 IEC†	141.5	135.6	4791.3 ug/L	4791.3 ppb	21:20:37
3	Na 589.592 Radial†	29130.5	29248.7	9815.3 ug/L	9815.3 ppb	21:20:17
3	Sr 421.552†	81661.9	78970.9	491.77 ug/L	491.77 ppb	21:20:17
3	Sc 361.383	903703.1	903703.1	100.27 %		21:21:46
3	Y 371.029	735491.4	735491.4	97.924 %		21:21:46
3	Ag 328.068†	112175.9	111580.4	508.36 ug/L	508.36 ppb	21:21:52
3	As 188.979†	1211.0	1231.9	491.17 ug/L	491.17 ppb	21:22:12
3	B 249.677†	22608.4	23078.1	482.06 ug/L	482.06 ppb	21:21:52
3	Ba 233.527†	66751.7	66580.0	494.72 ug/L	494.72 ppb	21:21:52
3	Be 313.107†	1327395.7	1328926.4	485.39 ug/L	485.39 ppb	21:21:46
3	Cd 226.502†	47051.5	47119.6	497.95 ug/L	497.95 ppb	21:21:52
3	Co 228.616†	26255.1	26249.6	498.33 ug/L	498.33 ppb	21:21:52
3	Cr 267.716†	46894.7	46689.5	490.90 ug/L	490.90 ppb	21:21:52
3	Cu 324.752†	178307.2	171069.3	489.80 ug/L	489.80 ppb	21:21:52
3	Mn 257.610†	465570.9	463892.1	495.25 ug/L	495.25 ppb	21:21:46
3	Mo 202.031†	7851.2	7811.7	496.59 ug/L	496.59 ppb	21:22:12
3	Ni 231.604†	21527.6	21383.0	494.84 ug/L	494.84 ppb	21:21:52
3	P 214.914†	4495.9	4260.2	2383.0 ug/L	2383.0 ppb	21:22:12
3	Pb 220.353†	4257.9	4314.9	489.25 ug/L	489.25 ppb	21:22:12
3	S 181.975 Axial†	759.5	715.9	1002.3 ug/L	1002.3 ppb	21:22:12
3	Sb 206.836†	1608.0	1569.4	503.97 ug/L	503.97 ppb	21:22:12
3	Se 196.026†	834.9	861.5	515.83 ug/L	515.83 ppb	21:22:12
3	Si 251.611†	84266.7	83589.7	2490.5 ug/L	2490.5 ppb	21:21:52
3	Sn 189.927†	3056.7	3043.5	498.87 ug/L	498.87 ppb	21:22:12
3	Ti 334.940†	317311.2	317569.8	506.63 ug/L	506.63 ppb	21:21:52
3	Tl 190.801†	1721.6	1749.4	493.22 ug/L	493.22 ppb	21:22:12
3	U 409.014†	16151.4	18509.6	508.33 ug/L	508.33 ppb	21:21:52
3	V 292.402†	72963.2	74124.6	496.28 ug/L	496.28 ppb	21:21:52
3	Zn 213.857†	57424.3	56647.5	490.52 ug/L	490.52 ppb	21:21:52
3	SiO2†	83800.3	83106.7	5305.3 ug/L	5305.3 ppb	21:22:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901076.8	99.979	%	0.7444				0.74%
Sc Radial	5971.2	102	%	1.9				1.86%
Y 371.029	733607.4	97.673	%	0.7208				0.74%
Y RADIAL	6316.5	100.5	%	1.75				1.74%
Ag 328.068†	111379.1	507.47	ug/L	6.329	507.47	ppb	6.329	1.25%
QC value within limits for Ag 328.068 Recovery = 101.49%								
Al 396.153Radial†	6693.3	4628.0	ug/L	56.06	4628.0	ppb	56.06	1.21%
QC value within limits for Al 396.153Radial Recovery = 92.56%								
As 188.979†	1227.0	489.25	ug/L	2.651	489.25	ppb	2.651	0.54%
QC value within limits for As 188.979 Recovery = 97.85%								
B 249.677†	23010.1	480.63	ug/L	6.374	480.63	ppb	6.374	1.33%
QC value within limits for B 249.677 Recovery = 96.13%								
Ba 233.527†	66526.7	494.32	ug/L	6.070	494.32	ppb	6.070	1.23%
QC value within limits for Ba 233.527 Recovery = 98.86%								
Be 313.107†	1330731.0	486.05	ug/L	3.610	486.05	ppb	3.610	0.74%
QC value within limits for Be 313.107 Recovery = 97.21%								
Ca 317.933Radial†	3239.0	4774.1	ug/L	84.56	4774.1	ppb	84.56	1.77%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.48%
Cd 226.502†            47031.6      497.01 ug/L        6.792      497.01 ppb        6.792   1.37%
   QC value within limits for Cd 226.502  Recovery = 99.40%
Co 228.616†            26244.9      498.24 ug/L        6.156      498.24 ppb        6.156   1.24%
   QC value within limits for Co 228.616  Recovery = 99.65%
Cr 267.716†            46684.3      490.85 ug/L        6.624      490.85 ppb        6.624   1.35%
   QC value within limits for Cr 267.716  Recovery = 98.17%
Cu 324.752†           170754.3      488.90 ug/L        6.700      488.90 ppb        6.700   1.37%
   QC value within limits for Cu 324.752  Recovery = 97.78%
Fe 238.204 Radial†       526.7      4946.4 ug/L       71.27      4946.4 ppb       71.27   1.44%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.93%
K 766.490 Radial†      27745.8      4911.7 ug/L       72.07      4911.7 ppb       72.07   1.47%
   QC value within limits for K 766.490 Radial  Recovery = 98.23%
Mg 279.077 IEC†          139.9      4941.9 ug/L      141.05      4941.9 ppb      141.05   2.85%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.84%
Mn 257.610†           464177.7      495.56 ug/L        3.491      495.56 ppb        3.491   0.70%
   QC value within limits for Mn 257.610  Recovery = 99.11%
Mo 202.031†             7839.9      498.39 ug/L        4.234      498.39 ppb        4.234   0.85%
   QC value within limits for Mo 202.031  Recovery = 99.68%
Na 589.592 Radial†     29503.8      9900.9 ug/L      102.56      9900.9 ppb      102.56   1.04%
   QC value within limits for Na 589.592 Radial  Recovery = 99.01%
Ni 231.604†            21338.9      493.82 ug/L        6.802      493.82 ppb        6.802   1.38%
   QC value within limits for Ni 231.604  Recovery = 98.76%
P 214.914†              4274.9      2391.5 ug/L       17.19      2391.5 ppb       17.19   0.72%
   QC value within limits for P 214.914  Recovery = 95.66%
Pb 220.353†             4333.6      491.37 ug/L        3.894      491.37 ppb        3.894   0.79%
   QC value within limits for Pb 220.353  Recovery = 98.27%
S 181.975 Axial†         711.4      995.98 ug/L       11.157      995.98 ppb       11.157   1.12%
   QC value within limits for S 181.975 Axial  Recovery = 99.60%
Sb 206.836†             1583.1      508.35 ug/L        6.807      508.35 ppb        6.807   1.34%
   QC value within limits for Sb 206.836  Recovery = 101.67%
Se 196.026†              857.1      513.51 ug/L        2.474      513.51 ppb        2.474   0.48%
   QC value within limits for Se 196.026  Recovery = 102.70%
Si 251.611†            83493.9      2487.6 ug/L       33.00      2487.6 ppb       33.00   1.33%
   QC value within limits for Si 251.611  Recovery = 99.50%
Sn 189.927†             3043.0      498.80 ug/L        3.589      498.80 ppb        3.589   0.72%
   QC value within limits for Sn 189.927  Recovery = 99.76%
Sr 421.552†            79458.1      494.80 ug/L        6.253      494.80 ppb        6.253   1.26%
   QC value within limits for Sr 421.552  Recovery = 98.96%
Ti 334.940†           317009.3      505.74 ug/L        6.491      505.74 ppb        6.491   1.28%
   QC value within limits for Ti 334.940  Recovery = 101.15%
Tl 190.801†             1746.9      492.50 ug/L        3.201      492.50 ppb        3.201   0.65%
   QC value within limits for Tl 190.801  Recovery = 98.50%
U 409.014†             18449.1      506.65 ug/L        5.546      506.65 ppb        5.546   1.09%
   QC value within limits for U 409.014  Recovery = 101.33%
V 292.402†             74012.1      495.56 ug/L        6.673      495.56 ppb        6.673   1.35%
   QC value within limits for V 292.402  Recovery = 99.11%
Zn 213.857†            56578.6      489.91 ug/L        6.042      489.91 ppb        6.042   1.23%
   QC value within limits for Zn 213.857  Recovery = 97.98%
SiO2†                  83536.3      5332.8 ug/L       44.22      5332.8 ppb       44.22   0.83%
   QC value within limits for SiO2  Recovery = 99.73%
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 21:24:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5863.1	5863.1	100	%			21:26:29
1	Y RADIAL	6208.0	6208.0	98.73	%			21:26:29
1	Al 396.153Radial†	-49.0	-28.4	-19.786	ug/L	-19.786	ppb	21:26:29
1	Ca 317.933Radial†	16.4	0.8	1.1186	ug/L	1.1186	ppb	21:26:49
1	Fe 238.204 Radial†	7.0	0.1	1.1840	ug/L	1.1840	ppb	21:26:49
1	K 766.490 Radial†	2290.0	-69.2	-12.316	ug/L	-12.316	ppb	21:26:29
1	Mg 279.077 IEC†	3.5	2.4	83.176	ug/L	83.176	ppb	21:26:49
1	Na 589.592 Radial†	-802.4	288.1	96.696	ug/L	96.696	ppb	21:26:29
1	Sr 421.552†	23.0	50.3	0.3133	ug/L	0.3133	ppb	21:26:29
1	Sc 361.383	910256.5	910256.5	101.00	%			21:27:46
1	Y 371.029	753610.4	753610.4	100.34	%			21:27:46
1	Ag 328.068†	217.0	-77.9	-0.3521	ug/L	-0.3521	ppb	21:27:51
1	As 188.979†	-25.2	-0.7	-0.2944	ug/L	-0.2944	ppb	21:28:11
1	B 249.677†	-410.0	124.7	2.6162	ug/L	2.6162	ppb	21:28:11
1	Ba 233.527†	-21.4	-12.7	-0.0935	ug/L	-0.0935	ppb	21:28:11
1	Be 313.107†	-5317.5	-152.0	-0.0555	ug/L	-0.0555	ppb	21:27:51
1	Cd 226.502†	-179.0	17.8	0.1884	ug/L	0.1884	ppb	21:28:11
1	Co 228.616†	-81.2	-15.0	-0.2826	ug/L	-0.2826	ppb	21:28:11
1	Cr 267.716†	90.3	10.8	0.1135	ug/L	0.1135	ppb	21:28:11
1	Cu 324.752†	6768.0	-55.6	-0.1589	ug/L	-0.1589	ppb	21:27:51
1	Mn 257.610†	428.9	2.3	0.0010	ug/L	0.0010	ppb	21:28:11
1	Mo 202.031†	28.0	9.4	0.5963	ug/L	0.5963	ppb	21:28:11
1	Ni 231.604†	88.2	0.8	0.0193	ug/L	0.0193	ppb	21:28:11
1	P 214.914†	222.5	-3.2	-1.8366	ug/L	-1.8366	ppb	21:28:11
1	Pb 220.353†	-53.2	15.7	1.7765	ug/L	1.7765	ppb	21:28:11
1	S 181.975 Axial†	41.8	-0.2	-0.2898	ug/L	-0.2898	ppb	21:28:11
1	Sb 206.836†	41.8	7.1	2.2628	ug/L	2.2628	ppb	21:28:11
1	Se 196.026†	-28.9	0.2	0.1226	ug/L	0.1226	ppb	21:28:11
1	Si 251.611†	494.6	40.1	1.1944	ug/L	1.1944	ppb	21:28:11
1	Sn 189.927†	2.3	-2.7	-0.4368	ug/L	-0.4368	ppb	21:28:11
1	Ti 334.940†	-1153.6	-27.2	-0.0441	ug/L	-0.0441	ppb	21:27:51
1	Tl 190.801†	-29.9	2.9	0.8024	ug/L	0.8024	ppb	21:28:11
1	U 409.014†	-2373.2	52.1	1.4342	ug/L	1.4342	ppb	21:27:46
1	V 292.402†	-1316.3	55.1	0.3768	ug/L	0.3768	ppb	21:27:51
1	Zn 213.857†	657.2	28.8	0.2490	ug/L	0.2490	ppb	21:28:11
1	SiO2†	513.4	40.9	2.6139	ug/L	2.6139	ppb	21:29:17
2	Sc Radial	5879.6	5879.6	101	%			21:26:54
2	Y RADIAL	6293.5	6293.5	100.1	%			21:26:54
2	Al 396.153Radial†	0.7	21.1	14.619	ug/L	14.619	ppb	21:26:54
2	Ca 317.933Radial†	23.0	7.3	10.779	ug/L	10.779	ppb	21:27:14
2	Fe 238.204 Radial†	7.5	0.7	6.5227	ug/L	6.5227	ppb	21:27:14
2	K 766.490 Radial†	2300.4	-65.3	-11.606	ug/L	-11.606	ppb	21:26:54
2	Mg 279.077 IEC†	-1.2	-2.3	-81.843	ug/L	-81.843	ppb	21:27:14
2	Na 589.592 Radial†	-826.0	267.0	89.593	ug/L	89.593	ppb	21:26:54
2	Sr 421.552†	-15.0	12.5	0.0776	ug/L	0.0776	ppb	21:26:54
2	Sc 361.383	907753.0	907753.0	100.72	%			21:28:16
2	Y 371.029	751536.6	751536.6	100.06	%			21:28:16
2	Ag 328.068†	379.5	84.0	0.3836	ug/L	0.3836	ppb	21:28:21
2	As 188.979†	-23.6	0.8	0.3041	ug/L	0.3041	ppb	21:28:41
2	B 249.677†	-395.6	137.9	2.8926	ug/L	2.8926	ppb	21:28:41
2	Ba 233.527†	-20.5	-11.9	-0.0860	ug/L	-0.0860	ppb	21:28:41
2	Be 313.107†	-5315.6	-164.6	-0.0597	ug/L	-0.0597	ppb	21:28:21
2	Cd 226.502†	-167.4	28.9	0.3049	ug/L	0.3049	ppb	21:28:41
2	Co 228.616†	-83.5	-17.5	-0.3302	ug/L	-0.3302	ppb	21:28:41
2	Cr 267.716†	94.6	15.2	0.1607	ug/L	0.1607	ppb	21:28:41
2	Cu 324.752†	6711.8	-92.8	-0.2654	ug/L	-0.2654	ppb	21:28:21
2	Mn 257.610†	437.0	11.6	0.0145	ug/L	0.0145	ppb	21:28:41
2	Mo 202.031†	27.7	9.2	0.5846	ug/L	0.5846	ppb	21:28:41
2	Ni 231.604†	82.4	-4.8	-0.1105	ug/L	-0.1105	ppb	21:28:41

2	P 214.914†	214.1	-11.0	-6.3066	ug/L	-6.3066 ppb	21:28:41
2	Pb 220.353†	-61.7	7.2	0.8183	ug/L	0.8183 ppb	21:28:41
2	S 181.975 Axial†	56.1	14.1	19.767	ug/L	19.767 ppb	21:28:41
2	Sb 206.836†	34.1	-0.4	-0.1339	ug/L	-0.1339 ppb	21:28:41
2	Se 196.026†	-26.0	3.0	1.7750	ug/L	1.7750 ppb	21:28:41
2	Si 251.611†	471.9	18.9	0.5620	ug/L	0.5620 ppb	21:28:41
2	Sn 189.927†	-1.9	-6.9	-1.1224	ug/L	-1.1224 ppb	21:28:41
2	Ti 334.940†	-1028.8	93.4	0.1487	ug/L	0.1487 ppb	21:28:21
2	Tl 190.801†	-40.0	-7.2	-2.0093	ug/L	-2.0093 ppb	21:28:41
2	U 409.014†	-2340.2	78.3	2.1571	ug/L	2.1571 ppb	21:28:16
2	V 292.402†	-1257.2	110.1	0.7370	ug/L	0.7370 ppb	21:28:21
2	Zn 213.857†	645.2	18.7	0.1669	ug/L	0.1669 ppb	21:28:41
2	SiO2†	486.3	15.4	0.9795	ug/L	0.9795 ppb	21:29:22
3	Sc Radial	5801.1	5801.1	99.3	%		21:27:19
3	Y RADIAL	6194.6	6194.6	98.52	%		21:27:19
3	Al 396.153Radial†	-20.8	-0.6	-0.3992	ug/L	-0.3992 ppb	21:27:19
3	Ca 317.933Radial†	19.6	4.1	6.0922	ug/L	6.0922 ppb	21:27:39
3	Fe 238.204 Radial†	8.3	1.6	14.644	ug/L	14.644 ppb	21:27:39
3	K 766.490 Radial†	2358.3	24.0	4.2165	ug/L	4.2165 ppb	21:27:19
3	Mg 279.077 IEC†	2.5	1.3	46.801	ug/L	46.801 ppb	21:27:39
3	Na 589.592 Radial†	-795.3	286.8	96.249	ug/L	96.249 ppb	21:27:19
3	Sr 421.552†	-18.3	8.9	0.0552	ug/L	0.0552 ppb	21:27:19
3	Sc 361.383	914436.2	914436.2	101.46	%		21:28:47
3	Y 371.029	756886.4	756886.4	100.77	%		21:28:47
3	Ag 328.068†	289.1	-7.8	-0.0360	ug/L	-0.0360 ppb	21:28:52
3	As 188.979†	-23.2	1.4	0.5364	ug/L	0.5364 ppb	21:29:12
3	B 249.677†	-424.1	112.7	2.3608	ug/L	2.3608 ppb	21:29:12
3	Ba 233.527†	-17.9	-9.2	-0.0672	ug/L	-0.0672 ppb	21:29:12
3	Be 313.107†	-5264.0	-75.2	-0.0273	ug/L	-0.0273 ppb	21:28:52
3	Cd 226.502†	-189.6	8.3	0.0862	ug/L	0.0862 ppb	21:29:12
3	Co 228.616†	-72.4	-6.0	-0.1134	ug/L	-0.1134 ppb	21:29:12
3	Cr 267.716†	74.6	-5.1	-0.0557	ug/L	-0.0557 ppb	21:29:12
3	Cu 324.752†	6650.3	-202.2	-0.5780	ug/L	-0.5780 ppb	21:28:52
3	Mn 257.610†	444.6	15.9	0.0176	ug/L	0.0176 ppb	21:29:12
3	Mo 202.031†	21.4	2.8	0.1770	ug/L	0.1770 ppb	21:29:12
3	Ni 231.604†	96.5	8.6	0.1990	ug/L	0.1990 ppb	21:29:12
3	P 214.914†	221.5	-5.2	-2.9225	ug/L	-2.9225 ppb	21:29:12
3	Pb 220.353†	-40.7	28.3	3.1998	ug/L	3.1998 ppb	21:29:12
3	S 181.975 Axial†	44.7	2.5	3.4448	ug/L	3.4448 ppb	21:29:12
3	Sb 206.836†	27.6	-7.1	-2.2518	ug/L	-2.2518 ppb	21:29:12
3	Se 196.026†	-24.5	4.7	2.7574	ug/L	2.7574 ppb	21:29:12
3	Si 251.611†	462.2	5.8	0.1727	ug/L	0.1727 ppb	21:29:12
3	Sn 189.927†	-0.7	-5.7	-0.9310	ug/L	-0.9310 ppb	21:29:12
3	Ti 334.940†	-1103.4	27.4	0.0410	ug/L	0.0410 ppb	21:28:52
3	Tl 190.801†	-31.8	1.1	0.3209	ug/L	0.3209 ppb	21:29:12
3	U 409.014†	-2180.4	252.9	6.9637	ug/L	6.9637 ppb	21:28:47
3	V 292.402†	-1356.1	21.8	0.1589	ug/L	0.1589 ppb	21:28:52
3	Zn 213.857†	653.0	21.7	0.1864	ug/L	0.1864 ppb	21:29:12
3	SiO2†	422.9	-50.7	-3.2542	ug/L	-3.2542 ppb	21:29:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910815.2	101.06	%	0.375				0.37%
Sc Radial	5847.9	100	%	0.7				0.71%
Y 371.029	754011.1	100.39	%	0.359				0.36%
Y RADIAL	6232.1	99.11	%	0.853				0.86%
Ag 328.068†	-0.5	-0.0015	ug/L	0.36908	-0.0015	ppb	0.36908	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.6	-1.8555	ug/L	17.24883	-1.8555	ppb	17.24883	929.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.1820	ug/L	0.42863	0.1820	ppb	0.42863	235.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	125.1	2.6232	ug/L	0.26598	2.6232	ppb	0.26598	10.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.3	-0.0822	ug/L	0.01358	-0.0822	ppb	0.01358	16.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-130.6	-0.0475	ug/L	0.01761	-0.0475	ppb	0.01761	37.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.1	5.9966	ug/L	4.83090	5.9966	ppb	4.83090	80.56%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.3      0.1931 ug/L       0.10945      0.1931 ppb        0.10945  56.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -12.8     -0.2421 ug/L       0.11393     -0.2421 ppb        0.11393  47.06%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               7.0      0.0728 ug/L       0.11377      0.0728 ppb        0.11377 156.22%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -116.9     -0.3341 ug/L       0.21781     -0.3341 ppb        0.21781  65.20%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.8      7.4502 ug/L       6.77779      7.4502 ppb        6.77779  90.97%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -36.8     -6.5685 ug/L       9.34683     -6.5685 ppb        9.34683 142.30%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.5     16.045 ug/L       86.7026      16.045 ppb        86.7026 540.38%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               9.9      0.0110 ug/L       0.00879      0.0110 ppb        0.00879  79.62%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               7.1      0.4526 ug/L       0.23878      0.4526 ppb        0.23878  52.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      280.6     94.179 ug/L        3.9780     94.179 ppb         3.9780   4.22%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               1.5      0.0359 ug/L       0.15546      0.0359 ppb        0.15546 432.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -6.5     -3.6886 ug/L       2.33140     -3.6886 ppb        2.33140  63.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              17.1      1.9315 ug/L       1.19831      1.9315 ppb        1.19831  62.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          5.5      7.6407 ug/L      10.66648      7.6407 ppb       10.66648 139.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -0.1     -0.0410 ug/L       2.25877     -0.0410 ppb        2.25877 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               2.6      1.5516 ug/L       1.33152      1.5516 ppb        1.33152  85.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              21.6      0.6430 ug/L       0.51564      0.6430 ppb        0.51564  80.19%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -5.1     -0.8300 ug/L       0.35378     -0.8300 ppb        0.35378  42.62%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              23.9      0.1487 ug/L       0.14301      0.1487 ppb        0.14301  96.18%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              31.2      0.0485 ug/L       0.09661      0.0485 ppb        0.09661 199.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.1     -0.2953 ug/L       1.50373     -0.2953 ppb        1.50373 509.18%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              127.8      3.5183 ug/L       3.00563      3.5183 ppb        3.00563  85.43%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              62.3      0.4242 ug/L       0.29195      0.4242 ppb        0.29195  68.82%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              23.1      0.2008 ug/L       0.04289      0.2008 ppb        0.04289  21.36%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     1.9      0.1131 ug/L       3.02846      0.1131 ppb        3.02846 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 68
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 22:41:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5710.6	5710.6	97.7	%			22:43:43
1	Y RADIAL	6052.0	6052.0	96.25	%			22:43:43
1	Al 396.153Radial†	6867.4	7048.2	4874.3	ug/L	4874.3	ppb	22:43:43
1	Ca 317.933Radial†	3328.5	3390.7	4997.7	ug/L	4997.7	ppb	22:44:03
1	Fe 238.204 Radial†	538.6	544.4	5112.4	ug/L	5112.4	ppb	22:44:03
1	K 766.490 Radial†	30952.8	29324.0	5191.5	ug/L	5191.5	ppb	22:43:43
1	Mg 279.077 IEC†	144.6	146.8	5184.3	ug/L	5184.3	ppb	22:44:03
1	Na 589.592 Radial†	27947.0	29687.6	9962.6	ug/L	9962.6	ppb	22:43:43
1	Sr 421.552†	80331.1	82234.5	512.09	ug/L	512.09	ppb	22:43:43
1	Sc 361.383	892658.9	892658.9	99.045	%			22:45:01
1	Y 371.029	725002.8	725002.8	96.528	%			22:45:01
1	Ag 328.068†	112307.2	113097.1	515.32	ug/L	515.32	ppb	22:45:06
1	As 188.979†	1195.9	1231.6	491.15	ug/L	491.15	ppb	22:45:26
1	B 249.677†	22496.0	23243.5	485.48	ug/L	485.48	ppb	22:45:06
1	Ba 233.527†	66897.1	67550.4	501.93	ug/L	501.93	ppb	22:45:06
1	Be 313.107†	1311424.7	1329179.9	485.50	ug/L	485.50	ppb	22:45:01
1	Cd 226.502†	46935.2	47582.8	502.83	ug/L	502.83	ppb	22:45:06
1	Co 228.616†	26388.6	26708.4	507.03	ug/L	507.03	ppb	22:45:06
1	Cr 267.716†	46761.1	47133.2	495.57	ug/L	495.57	ppb	22:45:06
1	Cu 324.752†	179119.8	174089.8	498.46	ug/L	498.46	ppb	22:45:06
1	Mn 257.610†	463910.7	467960.5	499.60	ug/L	499.60	ppb	22:45:01
1	Mo 202.031†	7857.7	7915.2	503.18	ug/L	503.18	ppb	22:45:26
1	Ni 231.604†	21495.1	21615.7	500.22	ug/L	500.22	ppb	22:45:06
1	P 214.914†	4503.5	4323.4	2418.0	ug/L	2418.0	ppb	22:45:26
1	Pb 220.353†	4244.0	4353.3	493.65	ug/L	493.65	ppb	22:45:26
1	S 181.975 Axial†	752.5	718.2	1005.4	ug/L	1005.4	ppb	22:45:26
1	Sb 206.836†	1627.8	1609.2	516.66	ug/L	516.66	ppb	22:45:26
1	Se 196.026†	828.3	865.1	518.75	ug/L	518.75	ppb	22:45:26
1	Si 251.611†	84643.1	85009.4	2532.8	ug/L	2532.8	ppb	22:45:06
1	Sn 189.927†	3045.1	3069.5	503.17	ug/L	503.17	ppb	22:45:26
1	Ti 334.940†	318697.7	322884.9	515.12	ug/L	515.12	ppb	22:45:06
1	Tl 190.801†	1708.0	1756.9	495.36	ug/L	495.36	ppb	22:45:26
1	U 409.014†	16097.6	18654.6	512.29	ug/L	512.29	ppb	22:45:06
1	V 292.402†	72868.3	74929.1	501.66	ug/L	501.66	ppb	22:45:06
1	Zn 213.857†	57337.7	57268.6	495.87	ug/L	495.87	ppb	22:45:06
1	SiO2†	83476.3	83813.5	5350.2	ug/L	5350.2	ppb	22:46:33
2	Sc Radial	5710.5	5710.5	97.7	%			22:44:08
2	Y RADIAL	6055.0	6055.0	96.30	%			22:44:08
2	Al 396.153Radial†	6825.0	7004.9	4844.4	ug/L	4844.4	ppb	22:44:08
2	Ca 317.933Radial†	3330.6	3392.9	5000.9	ug/L	5000.9	ppb	22:44:28
2	Fe 238.204 Radial†	539.9	545.8	5125.0	ug/L	5125.0	ppb	22:44:28
2	K 766.490 Radial†	30734.9	29101.3	5152.0	ug/L	5152.0	ppb	22:44:08
2	Mg 279.077 IEC†	145.6	147.8	5221.4	ug/L	5221.4	ppb	22:44:28
2	Na 589.592 Radial†	27740.3	29476.4	9891.7	ug/L	9891.7	ppb	22:44:08
2	Sr 421.552†	79614.2	81501.7	507.53	ug/L	507.53	ppb	22:44:08
2	Sc 361.383	894196.8	894196.8	99.216	%			22:45:32
2	Y 371.029	727762.9	727762.9	96.895	%			22:45:32
2	Ag 328.068†	110549.7	111130.7	506.39	ug/L	506.39	ppb	22:45:37
2	As 188.979†	1184.1	1217.7	485.59	ug/L	485.59	ppb	22:45:57
2	B 249.677†	22170.8	22876.7	477.80	ug/L	477.80	ppb	22:45:37
2	Ba 233.527†	65848.0	66376.9	493.22	ug/L	493.22	ppb	22:45:37
2	Be 313.107†	1314278.5	1329779.0	485.70	ug/L	485.70	ppb	22:45:32
2	Cd 226.502†	46180.3	46740.4	493.91	ug/L	493.91	ppb	22:45:37
2	Co 228.616†	25977.3	26248.0	498.30	ug/L	498.30	ppb	22:45:37
2	Cr 267.716†	46179.4	46465.7	488.55	ug/L	488.55	ppb	22:45:37
2	Cu 324.752†	176332.7	170969.6	489.53	ug/L	489.53	ppb	22:45:37
2	Mn 257.610†	463698.5	466941.0	498.52	ug/L	498.52	ppb	22:45:32
2	Mo 202.031†	7829.7	7873.3	500.52	ug/L	500.52	ppb	22:45:57
2	Ni 231.604†	21144.6	21225.1	491.18	ug/L	491.18	ppb	22:45:37

2	P 214.914†	4470.0	4281.8	2395.4 ug/L	2395.4 ppb	22:45:57
2	Pb 220.353†	4210.4	4312.1	488.98 ug/L	488.98 ppb	22:45:57
2	S 181.975 Axial†	750.9	715.2	1001.3 ug/L	1001.3 ppb	22:45:57
2	Sb 206.836†	1608.2	1586.7	509.59 ug/L	509.59 ppb	22:45:57
2	Se 196.026†	822.5	857.8	514.52 ug/L	514.52 ppb	22:45:57
2	Si 251.611†	83136.0	83343.3	2483.0 ug/L	2483.0 ppb	22:45:37
2	Sn 189.927†	3033.5	3052.5	500.38 ug/L	500.38 ppb	22:45:57
2	Ti 334.940†	314007.0	317603.7	506.70 ug/L	506.70 ppb	22:45:37
2	Tl 190.801†	1709.7	1755.8	495.02 ug/L	495.02 ppb	22:45:57
2	U 409.014†	15855.1	18382.2	504.79 ug/L	504.79 ppb	22:45:37
2	V 292.402†	71830.1	73756.2	493.87 ug/L	493.87 ppb	22:45:37
2	Zn 213.857†	56505.8	56330.5	487.74 ug/L	487.74 ppb	22:45:37
2	SiO2†	83819.4	84014.4	5363.2 ug/L	5363.2 ppb	22:46:38
3	Sc Radial	5747.7	5747.7	98.4 %		22:44:33
3	Y RADIAL	6103.3	6103.3	97.06 %		22:44:33
3	Al 396.153Radial†	6819.6	6954.2	4809.3 ug/L	4809.3 ppb	22:44:33
3	Ca 317.933Radial†	3310.9	3350.7	4938.7 ug/L	4938.7 ppb	22:44:53
3	Fe 238.204 Radial†	537.3	539.5	5066.6 ug/L	5066.6 ppb	22:44:53
3	K 766.490 Radial†	30840.2	29004.7	5134.9 ug/L	5134.9 ppb	22:44:33
3	Mg 279.077 IEC†	143.3	144.5	5103.7 ug/L	5103.7 ppb	22:44:53
3	Na 589.592 Radial†	27877.9	29432.6	9877.0 ug/L	9877.0 ppb	22:44:33
3	Sr 421.552†	80025.9	81393.0	506.85 ug/L	506.85 ppb	22:44:33
3	Sc 361.383	900527.6	900527.6	99.918 %		22:46:03
3	Y 371.029	732709.2	732709.2	97.554 %		22:46:03
3	Ag 328.068†	111387.6	111186.0	506.62 ug/L	506.62 ppb	22:46:08
3	As 188.979†	1187.0	1212.2	483.40 ug/L	483.40 ppb	22:46:28
3	B 249.677†	22461.9	23010.9	480.63 ug/L	480.63 ppb	22:46:08
3	Ba 233.527†	66190.9	66253.5	492.30 ug/L	492.30 ppb	22:46:08
3	Be 313.107†	1322607.9	1328802.7	485.34 ug/L	485.34 ppb	22:46:03
3	Cd 226.502†	46380.8	46613.9	492.58 ug/L	492.58 ppb	22:46:08
3	Co 228.616†	26090.6	26177.3	496.95 ug/L	496.95 ppb	22:46:08
3	Cr 267.716†	46376.7	46335.9	487.19 ug/L	487.19 ppb	22:46:08
3	Cu 324.752†	177673.9	171062.5	489.79 ug/L	489.79 ppb	22:46:08
3	Mn 257.610†	466053.1	466012.0	497.52 ug/L	497.52 ppb	22:46:03
3	Mo 202.031†	7825.3	7813.4	496.71 ug/L	496.71 ppb	22:46:28
3	Ni 231.604†	21225.7	21156.5	489.59 ug/L	489.59 ppb	22:46:08
3	P 214.914†	4467.3	4247.4	2375.4 ug/L	2375.4 ppb	22:46:28
3	Pb 220.353†	4238.7	4310.6	488.80 ug/L	488.80 ppb	22:46:28
3	S 181.975 Axial†	749.0	708.1	991.24 ug/L	991.24 ppb	22:46:28
3	Sb 206.836†	1616.4	1583.5	508.45 ug/L	508.45 ppb	22:46:28
3	Se 196.026†	820.3	849.8	509.71 ug/L	509.71 ppb	22:46:28
3	Si 251.611†	83798.1	83417.0	2485.2 ug/L	2485.2 ppb	22:46:08
3	Sn 189.927†	3023.2	3020.7	495.17 ug/L	495.17 ppb	22:46:28
3	Ti 334.940†	315474.5	316847.4	505.49 ug/L	505.49 ppb	22:46:08
3	Tl 190.801†	1705.6	1739.5	490.46 ug/L	490.46 ppb	22:46:28
3	U 409.014†	16005.3	18420.2	505.85 ug/L	505.85 ppb	22:46:08
3	V 292.402†	72144.4	73561.8	492.54 ug/L	492.54 ppb	22:46:08
3	Zn 213.857†	56730.9	56155.5	486.23 ug/L	486.23 ppb	22:46:08
3	SiO2†	83268.9	82869.6	5290.0 ug/L	5290.0 ppb	22:46:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895794.4	99.393	%	0.4627				0.47%
Sc Radial	5722.9	97.9	%	0.37				0.38%
Y 371.029	728491.6	96.992	%	0.5199				0.54%
Y RADIAL	6070.1	96.54	%	0.457				0.47%
Ag 328.068†	111804.6	509.44	ug/L	5.090	509.44	ppb	5.090	1.00%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7002.4	4842.6	ug/L	32.56	4842.6	ppb	32.56	0.67%
QC value within limits for Al 396.153Radial Recovery = 96.85%								
As 188.979†	1220.5	486.71	ug/L	3.992	486.71	ppb	3.992	0.82%
QC value within limits for As 188.979 Recovery = 97.34%								
B 249.677†	23043.7	481.30	ug/L	3.880	481.30	ppb	3.880	0.81%
QC value within limits for B 249.677 Recovery = 96.26%								
Ba 233.527†	66727.0	495.82	ug/L	5.316	495.82	ppb	5.316	1.07%
QC value within limits for Ba 233.527 Recovery = 99.16%								
Be 313.107†	1329253.9	485.51	ug/L	0.180	485.51	ppb	0.180	0.04%
QC value within limits for Be 313.107 Recovery = 97.10%								
Ca 317.933Radial†	3378.1	4979.1	ug/L	34.99	4979.1	ppb	34.99	0.70%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.58%
Cd 226.502†            46979.0      496.44 ug/L         5.570      496.44 ppb          5.570   1.12%
   QC value within limits for Cd 226.502  Recovery = 99.29%
Co 228.616†            26377.9      500.76 ug/L         5.469      500.76 ppb          5.469   1.09%
   QC value within limits for Co 228.616  Recovery = 100.15%
Cr 267.716†            46644.9      490.44 ug/L         4.498      490.44 ppb          4.498   0.92%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†           172040.7      492.59 ug/L         5.081      492.59 ppb          5.081   1.03%
   QC value within limits for Cu 324.752  Recovery = 98.52%
Fe 238.204 Radial†       543.2      5101.3 ug/L         30.72      5101.3 ppb          30.72   0.60%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.03%
K 766.490 Radial†      29143.3      5159.5 ug/L         29.01      5159.5 ppb          29.01   0.56%
   QC value within limits for K 766.490 Radial  Recovery = 103.19%
Mg 279.077 IEC†          146.4      5169.8 ug/L         60.16      5169.8 ppb          60.16   1.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.40%
Mn 257.610†           466971.2      498.55 ug/L         1.041      498.55 ppb          1.041   0.21%
   QC value within limits for Mn 257.610  Recovery = 99.71%
Mo 202.031†             7867.3      500.14 ug/L         3.250      500.14 ppb          3.250   0.65%
   QC value within limits for Mo 202.031  Recovery = 100.03%
Na 589.592 Radial†     29532.2      9910.4 ug/L         45.77      9910.4 ppb          45.77   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 99.10%
Ni 231.604†            21332.5      493.66 ug/L         5.732      493.66 ppb          5.732   1.16%
   QC value within limits for Ni 231.604  Recovery = 98.73%
P 214.914†              4284.2      2396.3 ug/L         21.30      2396.3 ppb          21.30   0.89%
   QC value within limits for P 214.914  Recovery = 95.85%
Pb 220.353†             4325.4      490.48 ug/L         2.748      490.48 ppb          2.748   0.56%
   QC value within limits for Pb 220.353  Recovery = 98.10%
S 181.975 Axial†         713.8      999.31 ug/L         7.301      999.31 ppb          7.301   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 99.93%
Sb 206.836†             1593.1      511.57 ug/L         4.449      511.57 ppb          4.449   0.87%
   QC value within limits for Sb 206.836  Recovery = 102.31%
Se 196.026†              857.6      514.33 ug/L         4.524      514.33 ppb          4.524   0.88%
   QC value within limits for Se 196.026  Recovery = 102.87%
Si 251.611†            83923.3      2500.3 ug/L         28.12      2500.3 ppb          28.12   1.12%
   QC value within limits for Si 251.611  Recovery = 100.01%
Sn 189.927†             3047.6      499.57 ug/L         4.060      499.57 ppb          4.060   0.81%
   QC value within limits for Sn 189.927  Recovery = 99.91%
Sr 421.552†            81709.8      508.82 ug/L         2.850      508.82 ppb          2.850   0.56%
   QC value within limits for Sr 421.552  Recovery = 101.76%
Ti 334.940†           319112.0      509.10 ug/L         5.247      509.10 ppb          5.247   1.03%
   QC value within limits for Ti 334.940  Recovery = 101.82%
Tl 190.801†             1750.7      493.61 ug/L         2.735      493.61 ppb          2.735   0.55%
   QC value within limits for Tl 190.801  Recovery = 98.72%
U 409.014†             18485.7      507.64 ug/L         4.055      507.64 ppb          4.055   0.80%
   QC value within limits for U 409.014  Recovery = 101.53%
V 292.402†             74082.3      496.03 ug/L         4.925      496.03 ppb          4.925   0.99%
   QC value within limits for V 292.402  Recovery = 99.21%
Zn 213.857†            56584.9      489.94 ug/L         5.185      489.94 ppb          5.185   1.06%
   QC value within limits for Zn 213.857  Recovery = 97.99%
SiO2†                  83565.9      5334.5 ug/L         39.07      5334.5 ppb          39.07   0.73%
   QC value within limits for SiO2  Recovery = 99.76%
All analyte(s) passed QC.
```

Sequence No.: 69
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 22:48:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5833.8	5833.8	99.8	%			22:50:45
1	Y RADIAL	6248.7	6248.7	99.38	%			22:50:45
1	Al 396.153Radial†	-21.7	-1.3	-0.8959	ug/L	-0.8959	ppb	22:50:45
1	Ca 317.933Radial†	13.4	-2.2	-3.2077	ug/L	-3.2077	ppb	22:51:05
1	Fe 238.204 Radial†	8.7	2.0	18.244	ug/L	18.244	ppb	22:51:05
1	K 766.490 Radial†	2192.0	-155.9	-27.689	ug/L	-27.689	ppb	22:50:45
1	Mg 279.077 IEC†	1.9	0.8	27.288	ug/L	27.288	ppb	22:51:05
1	Na 589.592 Radial†	-758.0	328.7	110.29	ug/L	110.29	ppb	22:50:45
1	Sr 421.552†	-9.6	17.8	0.1106	ug/L	0.1106	ppb	22:50:45
1	Sc 361.383	907581.3	907581.3	100.70	%			22:52:02
1	Y 371.029	750170.6	750170.6	99.878	%			22:52:02
1	Ag 328.068†	301.0	6.2	0.0391	ug/L	0.0391	ppb	22:52:07
1	As 188.979†	-26.5	-2.1	-0.8426	ug/L	-0.8426	ppb	22:52:27
1	B 249.677†	-371.6	161.7	3.3893	ug/L	3.3893	ppb	22:52:27
1	Ba 233.527†	-23.0	-14.4	-0.1039	ug/L	-0.1039	ppb	22:52:27
1	Be 313.107†	-5437.9	-287.0	-0.1046	ug/L	-0.1046	ppb	22:52:07
1	Cd 226.502†	-183.4	13.0	0.1350	ug/L	0.1350	ppb	22:52:27
1	Co 228.616†	-89.3	-23.2	-0.4409	ug/L	-0.4409	ppb	22:52:27
1	Cr 267.716†	82.6	3.4	0.0383	ug/L	0.0383	ppb	22:52:27
1	Cu 324.752†	6642.2	-160.7	-0.4591	ug/L	-0.4591	ppb	22:52:07
1	Mn 257.610†	434.8	9.5	0.0114	ug/L	0.0114	ppb	22:52:27
1	Mo 202.031†	19.8	1.3	0.0865	ug/L	0.0865	ppb	22:52:27
1	Ni 231.604†	64.3	-22.7	-0.5261	ug/L	-0.5261	ppb	22:52:27
1	P 214.914†	226.4	1.3	0.8334	ug/L	0.8334	ppb	22:52:27
1	Pb 220.353†	-65.0	3.9	0.4426	ug/L	0.4426	ppb	22:52:27
1	S 181.975 Axial†	40.4	-1.4	-1.9809	ug/L	-1.9809	ppb	22:52:27
1	Sb 206.836†	41.5	7.0	2.2294	ug/L	2.2294	ppb	22:52:27
1	Se 196.026†	-27.5	1.5	0.9451	ug/L	0.9451	ppb	22:52:27
1	Si 251.611†	476.7	23.7	0.7165	ug/L	0.7165	ppb	22:52:27
1	Sn 189.927†	9.0	3.9	0.6459	ug/L	0.6459	ppb	22:52:27
1	Ti 334.940†	-1109.6	13.1	0.0218	ug/L	0.0218	ppb	22:52:07
1	Tl 190.801†	-34.4	-1.7	-0.4669	ug/L	-0.4669	ppb	22:52:27
1	U 409.014†	-2509.6	-90.3	-2.4892	ug/L	-2.4892	ppb	22:52:07
1	V 292.402†	-1242.7	124.3	0.8150	ug/L	0.8150	ppb	22:52:07
1	Zn 213.857†	641.3	15.0	0.1324	ug/L	0.1324	ppb	22:52:27
1	SiO2†	492.3	21.4	1.3882	ug/L	1.3882	ppb	22:53:33
2	Sc Radial	5845.5	5845.5	100	%			22:51:10
2	Y RADIAL	6240.3	6240.3	99.24	%			22:51:10
2	Al 396.153Radial†	-30.3	-9.9	-6.9308	ug/L	-6.9308	ppb	22:51:10
2	Ca 317.933Radial†	13.2	-2.4	-3.5705	ug/L	-3.5705	ppb	22:51:30
2	Fe 238.204 Radial†	7.1	0.3	2.3558	ug/L	2.3558	ppb	22:51:30
2	K 766.490 Radial†	2186.7	-165.7	-29.431	ug/L	-29.431	ppb	22:51:10
2	Mg 279.077 IEC†	3.0	1.8	65.024	ug/L	65.024	ppb	22:51:30
2	Na 589.592 Radial†	-718.6	369.5	124.01	ug/L	124.01	ppb	22:51:10
2	Sr 421.552†	-22.0	5.4	0.0334	ug/L	0.0334	ppb	22:51:10
2	Sc 361.383	912418.1	912418.1	101.24	%			22:52:32
2	Y 371.029	755004.5	755004.5	100.52	%			22:52:32
2	Ag 328.068†	277.4	-18.7	-0.0800	ug/L	-0.0800	ppb	22:52:37
2	As 188.979†	-26.8	-2.3	-0.9058	ug/L	-0.9058	ppb	22:52:57
2	B 249.677†	-388.7	146.7	3.0766	ug/L	3.0766	ppb	22:52:57
2	Ba 233.527†	-30.0	-21.2	-0.1549	ug/L	-0.1549	ppb	22:52:57
2	Be 313.107†	-5421.9	-242.6	-0.0885	ug/L	-0.0885	ppb	22:52:37
2	Cd 226.502†	-186.5	10.9	0.1150	ug/L	0.1150	ppb	22:52:57
2	Co 228.616†	-77.8	-11.5	-0.2154	ug/L	-0.2154	ppb	22:52:57
2	Cr 267.716†	89.1	9.3	0.0999	ug/L	0.0999	ppb	22:52:57
2	Cu 324.752†	6700.6	-138.1	-0.3950	ug/L	-0.3950	ppb	22:52:37
2	Mn 257.610†	427.9	0.4	-0.0005	ug/L	-0.0005	ppb	22:52:57
2	Mo 202.031†	32.9	14.2	0.9026	ug/L	0.9026	ppb	22:52:57
2	Ni 231.604†	87.8	0.2	0.0051	ug/L	0.0051	ppb	22:52:57

2	P 214.914†	226.4	0.1	0.1013 ug/L	0.1013 ppb	22:52:57
2	Pb 220.353†	-55.1	14.0	1.5836 ug/L	1.5836 ppb	22:52:57
2	S 181.975 Axial†	46.1	4.0	5.5634 ug/L	5.5634 ppb	22:52:57
2	Sb 206.836†	37.1	2.4	0.7694 ug/L	0.7694 ppb	22:52:57
2	Se 196.026†	-32.9	-3.7	-2.1114 ug/L	-2.1114 ppb	22:52:57
2	Si 251.611†	481.8	26.2	0.7793 ug/L	0.7793 ppb	22:52:57
2	Sn 189.927†	3.0	-2.1	-0.3375 ug/L	-0.3375 ppb	22:52:57
2	Ti 334.940†	-1142.7	-13.8	-0.0219 ug/L	-0.0219 ppb	22:52:37
2	Tl 190.801†	-30.6	2.3	0.6376 ug/L	0.6376 ppb	22:52:57
2	U 409.014†	-2460.6	-28.7	-0.7907 ug/L	-0.7907 ppb	22:52:37
2	V 292.402†	-1241.4	132.1	0.8849 ug/L	0.8849 ppb	22:52:37
2	Zn 213.857†	648.3	18.5	0.1600 ug/L	0.1600 ppb	22:52:57
2	SiO2†	457.8	-15.2	-0.9877 ug/L	-0.9877 ppb	22:53:38
3	Sc Radial	5847.3	5847.3	100 %		22:51:35
3	Y RADIAL	6255.9	6255.9	99.49 %		22:51:35
3	Al 396.153Radial†	-16.5	3.9	2.6838 ug/L	2.6838 ppb	22:51:35
3	Ca 317.933Radial†	14.9	-0.7	-1.0402 ug/L	-1.0402 ppb	22:51:55
3	Fe 238.204 Radial†	7.3	0.5	4.3509 ug/L	4.3509 ppb	22:51:55
3	K 766.490 Radial†	2088.9	-264.0	-46.869 ug/L	-46.869 ppb	22:51:35
3	Mg 279.077 IEC†	2.1	0.9	32.667 ug/L	32.667 ppb	22:51:55
3	Na 589.592 Radial†	-709.4	379.0	127.18 ug/L	127.18 ppb	22:51:35
3	Sr 421.552†	-2.3	25.1	0.1561 ug/L	0.1561 ppb	22:51:35
3	Sc 361.383	916090.5	916090.5	101.65 %		22:53:02
3	Y 371.029	757828.5	757828.5	100.90 %		22:53:02
3	Ag 328.068†	280.1	-17.1	-0.0770 ug/L	-0.0770 ppb	22:53:07
3	As 188.979†	-26.2	-1.6	-0.6295 ug/L	-0.6295 ppb	22:53:27
3	B 249.677†	-432.6	105.1	2.2038 ug/L	2.2038 ppb	22:53:27
3	Ba 233.527†	-25.9	-17.0	-0.1252 ug/L	-0.1252 ppb	22:53:27
3	Be 313.107†	-5330.0	-130.7	-0.0472 ug/L	-0.0472 ppb	22:53:07
3	Cd 226.502†	-182.5	15.6	0.1637 ug/L	0.1637 ppb	22:53:27
3	Co 228.616†	-71.8	-5.2	-0.0978 ug/L	-0.0978 ppb	22:53:27
3	Cr 267.716†	90.4	10.3	0.1083 ug/L	0.1083 ppb	22:53:27
3	Cu 324.752†	6683.4	-181.5	-0.5192 ug/L	-0.5192 ppb	22:53:07
3	Mn 257.610†	425.1	-4.1	-0.0045 ug/L	-0.0045 ppb	22:53:27
3	Mo 202.031†	27.9	9.2	0.5817 ug/L	0.5817 ppb	22:53:27
3	Ni 231.604†	67.1	-20.5	-0.4750 ug/L	-0.4750 ppb	22:53:27
3	P 214.914†	231.9	4.6	2.7672 ug/L	2.7672 ppb	22:53:27
3	Pb 220.353†	-56.6	12.7	1.4425 ug/L	1.4425 ppb	22:53:27
3	S 181.975 Axial†	43.8	1.6	2.1775 ug/L	2.1775 ppb	22:53:27
3	Sb 206.836†	33.3	-1.5	-0.4518 ug/L	-0.4518 ppb	22:53:27
3	Se 196.026†	-23.9	5.3	3.0652 ug/L	3.0652 ppb	22:53:27
3	Si 251.611†	468.4	11.2	0.3366 ug/L	0.3366 ppb	22:53:27
3	Sn 189.927†	10.9	5.8	0.9437 ug/L	0.9437 ppb	22:53:27
3	Ti 334.940†	-995.0	136.1	0.2159 ug/L	0.2159 ppb	22:53:07
3	Tl 190.801†	-35.9	-2.8	-0.7896 ug/L	-0.7896 ppb	22:53:27
3	U 409.014†	-2341.7	98.0	2.6981 ug/L	2.6981 ppb	22:53:07
3	V 292.402†	-1319.4	60.4	0.4120 ug/L	0.4120 ppb	22:53:07
3	Zn 213.857†	640.5	8.3	0.0745 ug/L	0.0745 ppb	22:53:27
3	SiO2†	453.5	-21.3	-1.3577 ug/L	-1.3577 ppb	22:53:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912030.0	101.19	%	0.474				0.47%
Sc Radial	5842.2	100.0	%	0.13				0.13%
Y 371.029	754334.5	100.43	%	0.516				0.51%
Y RADIAL	6248.3	99.37	%	0.124				0.12%
Ag 328.068†	-9.9	-0.0393	ug/L	0.06790	-0.0393	ppb	0.06790	172.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.4	-1.7143	ug/L	4.85926	-1.7143	ppb	4.85926	283.45%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-0.7926	ug/L	0.14477	-0.7926	ppb	0.14477	18.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	137.8	2.8899	ug/L	0.61440	2.8899	ppb	0.61440	21.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-17.5	-0.1280	ug/L	0.02564	-0.1280	ppb	0.02564	20.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-220.1	-0.0801	ug/L	0.02959	-0.0801	ppb	0.02959	36.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.8	-2.6061	ug/L	1.36826	-2.6061	ppb	1.36826	52.50%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.1      0.1379 ug/L       0.02446      0.1379 ppb        0.02446  17.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -13.3     -0.2513 ug/L       0.17436     -0.2513 ppb        0.17436  69.37%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               7.7      0.0822 ug/L       0.03825      0.0822 ppb        0.03825  46.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -160.1     -0.4578 ug/L       0.06212     -0.4578 ppb        0.06212  13.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.9      8.3170 ug/L       8.65505      8.3170 ppb        8.65505 104.06%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -195.2     -34.663 ug/L       10.6068     -34.663 ppb        10.6068  30.60%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.2      41.660 ug/L       20.4122      41.660 ppb        20.4122  49.00%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               1.9      0.0021 ug/L       0.00831      0.0021 ppb        0.00831 392.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.2      0.5236 ug/L       0.41114      0.5236 ppb        0.41114  78.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      359.1      120.49 ug/L         8.973      120.49 ppb          8.973   7.45%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -14.3     -0.3320 ug/L       0.29304     -0.3320 ppb        0.29304  88.26%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                2.0      1.2340 ug/L       1.37737      1.2340 ppb        1.37737 111.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.2      1.1562 ug/L       0.62205      1.1562 ppb        0.62205  53.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.4      1.9200 ug/L       3.77870      1.9200 ppb        3.77870 196.81%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.6      0.8490 ug/L       1.34235      0.8490 ppb        1.34235 158.11%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.0      0.6330 ug/L       2.60241      0.6330 ppb        2.60241 411.15%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              20.4      0.6108 ug/L       0.23955      0.6108 ppb        0.23955  39.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.5      0.4173 ug/L       0.67048      0.4173 ppb        0.67048 160.66%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              16.1      0.1000 ug/L       0.06204      0.1000 ppb        0.06204  62.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              45.1      0.0719 ug/L       0.12657      0.0719 ppb        0.12657 176.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.7     -0.2063 ug/L       0.74842     -0.2063 ppb        0.74842 362.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -7.0     -0.1939 ug/L       2.64461     -0.1939 ppb        2.64461 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              105.6      0.7040 ug/L       0.25525      0.7040 ppb        0.25525  36.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              13.9      0.1223 ug/L       0.04360      0.1223 ppb        0.04360  35.65%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -5.0     -0.3191 ug/L       1.49006     -0.3191 ppb        1.49006 467.01%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 80
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 00:06:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5785.8	5785.8	99.0	%			00:08:12
1	Y RADIAL	6109.8	6109.8	97.17	%			00:08:12
1	Al 396.153Radial†	6854.7	6944.0	4802.2	ug/L	4802.2	ppb	00:08:12
1	Ca 317.933Radial†	3297.1	3314.6	4885.6	ug/L	4885.6	ppb	00:08:32
1	Fe 238.204 Radial†	540.7	539.3	5065.0	ug/L	5065.0	ppb	00:08:32
1	K 766.490 Radial†	30984.2	28943.7	5124.0	ug/L	5124.0	ppb	00:08:12
1	Mg 279.077 IEC†	142.3	142.6	5035.7	ug/L	5035.7	ppb	00:08:32
1	Na 589.592 Radial†	28715.7	30092.1	10098	ug/L	10098	ppb	00:08:12
1	Sr 421.552†	81335.0	82179.3	511.75	ug/L	511.75	ppb	00:08:12
1	Sc 361.383	899083.5	899083.5	99.758	%			00:09:29
1	Y 371.029	730689.1	730689.1	97.285	%			00:09:29
1	Ag 328.068†	111290.6	111267.8	506.98	ug/L	506.98	ppb	00:09:34
1	As 188.979†	1186.8	1213.9	484.08	ug/L	484.08	ppb	00:09:54
1	B 249.677†	22438.7	23023.8	480.90	ug/L	480.90	ppb	00:09:34
1	Ba 233.527†	66160.6	66329.5	492.86	ug/L	492.86	ppb	00:09:34
1	Be 313.107†	1317378.7	1325687.0	484.21	ug/L	484.21	ppb	00:09:29
1	Cd 226.502†	46514.8	46822.7	494.79	ug/L	494.79	ppb	00:09:34
1	Co 228.616†	26076.2	26204.9	497.47	ug/L	497.47	ppb	00:09:34
1	Cr 267.716†	46338.5	46372.2	487.57	ug/L	487.57	ppb	00:09:34
1	Cu 324.752†	177400.5	171074.1	489.82	ug/L	489.82	ppb	00:09:34
1	Mn 257.610†	466008.1	466716.1	498.28	ug/L	498.28	ppb	00:09:29
1	Mo 202.031†	7798.2	7798.8	495.79	ug/L	495.79	ppb	00:09:54
1	Ni 231.604†	21249.2	21214.2	490.93	ug/L	490.93	ppb	00:09:34
1	P 214.914†	4480.3	4267.6	2387.1	ug/L	2387.1	ppb	00:09:54
1	Pb 220.353†	4241.8	4320.5	489.92	ug/L	489.92	ppb	00:09:54
1	S 181.975 Axial†	753.2	713.5	998.83	ug/L	998.83	ppb	00:09:54
1	Sb 206.836†	1619.3	1589.0	510.20	ug/L	510.20	ppb	00:09:54
1	Se 196.026†	829.1	859.9	515.53	ug/L	515.53	ppb	00:09:54
1	Si 251.611†	83864.4	83618.1	2491.3	ug/L	2491.3	ppb	00:09:34
1	Sn 189.927†	3032.5	3034.9	497.49	ug/L	497.49	ppb	00:09:54
1	Ti 334.940†	315679.6	317560.2	506.62	ug/L	506.62	ppb	00:09:34
1	Tl 190.801†	1697.8	1734.5	489.06	ug/L	489.06	ppb	00:09:54
1	U 409.014†	16144.3	18585.3	510.40	ug/L	510.40	ppb	00:09:34
1	V 292.402†	72080.1	73613.3	492.88	ug/L	492.88	ppb	00:09:34
1	Zn 213.857†	56763.8	56279.7	487.31	ug/L	487.31	ppb	00:09:34
1	SiO2†	84168.9	83905.6	5356.5	ug/L	5356.5	ppb	00:11:02
2	Sc Radial	5606.2	5606.2	95.9	%			00:08:37
2	Y RADIAL	5902.2	5902.2	93.87	%			00:08:37
2	Al 396.153Radial†	6664.5	6967.5	4818.2	ug/L	4818.2	ppb	00:08:37
2	Ca 317.933Radial†	3291.3	3415.3	5033.9	ug/L	5033.9	ppb	00:08:57
2	Fe 238.204 Radial†	538.3	554.4	5205.6	ug/L	5205.6	ppb	00:08:57
2	K 766.490 Radial†	30293.4	29226.4	5174.2	ug/L	5174.2	ppb	00:08:37
2	Mg 279.077 IEC†	146.0	151.0	5333.0	ug/L	5333.0	ppb	00:08:57
2	Na 589.592 Radial†	27742.4	30006.8	10070	ug/L	10070	ppb	00:08:37
2	Sr 421.552†	78766.2	82133.7	511.46	ug/L	511.46	ppb	00:08:37
2	Sc 361.383	883320.6	883320.6	98.009	%			00:10:00
2	Y 371.029	720503.6	720503.6	95.928	%			00:10:00
2	Ag 328.068†	111272.5	113240.2	515.99	ug/L	515.99	ppb	00:10:05
2	As 188.979†	1186.1	1234.3	492.25	ug/L	492.25	ppb	00:10:25
2	B 249.677†	22402.8	23388.6	488.51	ug/L	488.51	ppb	00:10:05
2	Ba 233.527†	66035.8	67385.7	500.71	ug/L	500.71	ppb	00:10:05
2	Be 313.107†	1292541.2	1323910.5	483.58	ug/L	483.58	ppb	00:10:00
2	Cd 226.502†	46267.6	47402.6	500.91	ug/L	500.91	ppb	00:10:05
2	Co 228.616†	26007.4	26601.2	505.00	ug/L	505.00	ppb	00:10:05
2	Cr 267.716†	46188.7	47048.3	494.68	ug/L	494.68	ppb	00:10:05
2	Cu 324.752†	177142.0	173983.8	498.16	ug/L	498.16	ppb	00:10:05
2	Mn 257.610†	455492.0	464322.5	495.73	ug/L	495.73	ppb	00:10:00
2	Mo 202.031†	7791.1	7931.0	504.20	ug/L	504.20	ppb	00:10:25
2	Ni 231.604†	21194.4	21538.4	498.43	ug/L	498.43	ppb	00:10:05

2	P 214.914†	4456.9	4324.0	2418.3 ug/L	2418.3 ppb	00:10:25
2	Pb 220.353†	4197.7	4351.5	493.42 ug/L	493.42 ppb	00:10:25
2	S 181.975 Axial†	734.3	707.6	990.64 ug/L	990.64 ppb	00:10:25
2	Sb 206.836†	1604.3	1602.6	514.63 ug/L	514.63 ppb	00:10:25
2	Se 196.026†	819.3	864.8	518.81 ug/L	518.81 ppb	00:10:25
2	Si 251.611†	83569.8	84817.7	2527.0 ug/L	2527.0 ppb	00:10:05
2	Sn 189.927†	3016.6	3072.8	503.72 ug/L	503.72 ppb	00:10:25
2	Ti 334.940†	315068.2	322583.3	514.64 ug/L	514.64 ppb	00:10:05
2	Tl 190.801†	1702.9	1770.0	498.99 ug/L	498.99 ppb	00:10:25
2	U 409.014†	16030.6	18758.0	515.12 ug/L	515.12 ppb	00:10:05
2	V 292.402†	72174.8	74999.3	502.13 ug/L	502.13 ppb	00:10:05
2	Zn 213.857†	56569.1	57096.3	494.36 ug/L	494.36 ppb	00:10:05
2	SiO2†	84092.9	85333.7	5447.7 ug/L	5447.7 ppb	00:11:07
3	Sc Radial	5688.4	5688.4	97.3 %		00:09:02
3	Y RADIAL	6014.9	6014.9	95.66 %		00:09:02
3	Al 396.153Radial†	6782.9	6988.7	4833.2 ug/L	4833.2 ppb	00:09:02
3	Ca 317.933Radial†	3330.2	3405.7	5019.7 ug/L	5019.7 ppb	00:09:22
3	Fe 238.204 Radial†	543.6	551.7	5180.3 ug/L	5180.3 ppb	00:09:22
3	K 766.490 Radial†	30627.1	29112.7	5154.0 ug/L	5154.0 ppb	00:09:02
3	Mg 279.077 IEC†	144.9	147.7	5216.7 ug/L	5216.7 ppb	00:09:22
3	Na 589.592 Radial†	28282.2	30143.4	10116 ug/L	10116 ppb	00:09:02
3	Sr 421.552†	80158.8	82377.7	512.98 ug/L	512.98 ppb	00:09:02
3	Sc 361.383	897243.1	897243.1	99.554 %		00:10:31
3	Y 371.029	730515.1	730515.1	97.261 %		00:10:31
3	Ag 328.068†	109699.7	109898.6	500.81 ug/L	500.81 ppb	00:10:36
3	As 188.979†	1194.1	1223.7	487.92 ug/L	487.92 ppb	00:10:56
3	B 249.677†	22152.5	22782.5	475.83 ug/L	475.83 ppb	00:10:36
3	Ba 233.527†	65442.6	65744.3	488.52 ug/L	488.52 ppb	00:10:36
3	Be 313.107†	1307618.6	1318591.9	481.61 ug/L	481.61 ppb	00:10:31
3	Cd 226.502†	45899.2	46300.0	489.25 ug/L	489.25 ppb	00:10:36
3	Co 228.616†	25784.7	25965.7	492.95 ug/L	492.95 ppb	00:10:36
3	Cr 267.716†	45784.9	45911.4	482.73 ug/L	482.73 ppb	00:10:36
3	Cu 324.752†	174566.3	168591.9	482.73 ug/L	482.73 ppb	00:10:36
3	Mn 257.610†	462245.3	463894.6	495.27 ug/L	495.27 ppb	00:10:31
3	Mo 202.031†	7813.2	7829.9	497.77 ug/L	497.77 ppb	00:10:56
3	Ni 231.604†	21005.8	21013.4	486.28 ug/L	486.28 ppb	00:10:36
3	P 214.914†	4494.3	4290.9	2401.7 ug/L	2401.7 ppb	00:10:56
3	Pb 220.353†	4237.4	4324.9	490.42 ug/L	490.42 ppb	00:10:56
3	S 181.975 Axial†	749.7	711.5	996.05 ug/L	996.05 ppb	00:10:56
3	Sb 206.836†	1608.7	1581.7	508.10 ug/L	508.10 ppb	00:10:56
3	Se 196.026†	829.8	862.3	517.31 ug/L	517.31 ppb	00:10:56
3	Si 251.611†	82688.7	82609.6	2461.0 ug/L	2461.0 ppb	00:10:36
3	Sn 189.927†	3043.4	3052.0	500.31 ug/L	500.31 ppb	00:10:56
3	Ti 334.940†	311575.5	314086.8	501.09 ug/L	501.09 ppb	00:10:36
3	Tl 190.801†	1707.1	1747.3	492.62 ug/L	492.62 ppb	00:10:56
3	U 409.014†	15750.2	18222.6	500.40 ug/L	500.40 ppb	00:10:36
3	V 292.402†	71202.1	72879.5	488.03 ug/L	488.03 ppb	00:10:36
3	Zn 213.857†	56157.6	55787.4	483.03 ug/L	483.03 ppb	00:10:36
3	SiO2†	83783.7	83691.7	5342.6 ug/L	5342.6 ppb	00:11:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	893215.7	99.107	%	0.9563				0.96%
Sc Radial	5693.5	97.4	%	1.54				1.58%
Y 371.029	727235.9	96.825	%	0.7763				0.80%
Y RADIAL	6009.0	95.57	%	1.654				1.73%
Ag 328.068†	111468.9	507.93	ug/L	7.636	507.93	ppb	7.636	1.50%
QC value within limits for Ag 328.068 Recovery = 101.59%								
Al 396.153Radial†	6966.7	4817.9	ug/L	15.51	4817.9	ppb	15.51	0.32%
QC value within limits for Al 396.153Radial Recovery = 96.36%								
As 188.979†	1224.0	488.08	ug/L	4.088	488.08	ppb	4.088	0.84%
QC value within limits for As 188.979 Recovery = 97.62%								
B 249.677†	23064.9	481.75	ug/L	6.381	481.75	ppb	6.381	1.32%
QC value within limits for B 249.677 Recovery = 96.35%								
Ba 233.527†	66486.5	494.03	ug/L	6.182	494.03	ppb	6.182	1.25%
QC value within limits for Ba 233.527 Recovery = 98.81%								
Be 313.107†	1322729.8	483.13	ug/L	1.354	483.13	ppb	1.354	0.28%
QC value within limits for Be 313.107 Recovery = 96.63%								
Ca 317.933Radial†	3378.5	4979.7	ug/L	81.86	4979.7	ppb	81.86	1.64%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.59%
Cd 226.502†            46841.8      494.98 ug/L         5.833      494.98 ppb          5.833   1.18%
   QC value within limits for Cd 226.502  Recovery = 99.00%
Co 228.616†            26257.3      498.47 ug/L         6.086      498.47 ppb          6.086   1.22%
   QC value within limits for Co 228.616  Recovery = 99.69%
Cr 267.716†            46444.0      488.33 ug/L         6.014      488.33 ppb          6.014   1.23%
   QC value within limits for Cr 267.716  Recovery = 97.67%
Cu 324.752†           171216.6      490.24 ug/L         7.724      490.24 ppb          7.724   1.58%
   QC value within limits for Cu 324.752  Recovery = 98.05%
Fe 238.204 Radial†       548.5      5150.3 ug/L        74.97      5150.3 ppb         74.97   1.46%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.01%
K 766.490 Radial†      29094.2      5150.7 ug/L        25.25      5150.7 ppb         25.25   0.49%
   QC value within limits for K 766.490 Radial  Recovery = 103.01%
Mg 279.077 IEC†          147.1      5195.2 ug/L       149.82      5195.2 ppb        149.82   2.88%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.90%
Mn 257.610†           464977.8      496.43 ug/L         1.617      496.43 ppb          1.617   0.33%
   QC value within limits for Mn 257.610  Recovery = 99.29%
Mo 202.031†            7853.2      499.25 ug/L         4.397      499.25 ppb          4.397   0.88%
   QC value within limits for Mo 202.031  Recovery = 99.85%
Na 589.592 Radial†     30080.7       10095 ug/L          23.2       10095 ppb           23.2   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 100.95%
Ni 231.604†            21255.3      491.88 ug/L         6.130      491.88 ppb          6.130   1.25%
   QC value within limits for Ni 231.604  Recovery = 98.38%
P 214.914†              4294.2      2402.4 ug/L        15.57      2402.4 ppb         15.57   0.65%
   QC value within limits for P 214.914  Recovery = 96.09%
Pb 220.353†             4332.3      491.25 ug/L         1.894      491.25 ppb          1.894   0.39%
   QC value within limits for Pb 220.353  Recovery = 98.25%
S 181.975 Axial†         710.9      995.17 ug/L         4.163      995.17 ppb          4.163   0.42%
   QC value within limits for S 181.975 Axial  Recovery = 99.52%
Sb 206.836†             1591.1      510.98 ug/L         3.333      510.98 ppb          3.333   0.65%
   QC value within limits for Sb 206.836  Recovery = 102.20%
Se 196.026†              862.3      517.22 ug/L         1.643      517.22 ppb          1.643   0.32%
   QC value within limits for Se 196.026  Recovery = 103.44%
Si 251.611†            83681.8      2493.1 ug/L        33.02      2493.1 ppb         33.02   1.32%
   QC value within limits for Si 251.611  Recovery = 99.72%
Sn 189.927†             3053.3      500.50 ug/L         3.120      500.50 ppb          3.120   0.62%
   QC value within limits for Sn 189.927  Recovery = 100.10%
Sr 421.552†            82230.2      512.06 ug/L         0.808      512.06 ppb          0.808   0.16%
   QC value within limits for Sr 421.552  Recovery = 102.41%
Ti 334.940†           318076.8      507.45 ug/L         6.812      507.45 ppb          6.812   1.34%
   QC value within limits for Ti 334.940  Recovery = 101.49%
Tl 190.801†             1750.6      493.55 ug/L         5.031      493.55 ppb          5.031   1.02%
   QC value within limits for Tl 190.801  Recovery = 98.71%
U 409.014†             18522.0      508.64 ug/L         7.517      508.64 ppb          7.517   1.48%
   QC value within limits for U 409.014  Recovery = 101.73%
V 292.402†             73830.7      494.35 ug/L         7.164      494.35 ppb          7.164   1.45%
   QC value within limits for V 292.402  Recovery = 98.87%
Zn 213.857†            56387.8      488.23 ug/L         5.723      488.23 ppb          5.723   1.17%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                  84310.3      5382.2 ug/L        57.08      5382.2 ppb         57.08   1.06%
   QC value within limits for SiO2  Recovery = 100.65%
All analyte(s) passed QC.
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Sequence No.: 81
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 00:13:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5961.8	5961.8	102	%			00:15:13
1	Y RADIAL	6382.9	6382.9	101.5	%			00:15:13
1	Al 396.153Radial†	-34.1	-13.1	-9.1070	ug/L	-9.1070	ppb	00:15:13
1	Ca 317.933Radial†	18.3	2.4	3.4821	ug/L	3.4821	ppb	00:15:33
1	Fe 238.204 Radial†	10.2	3.2	30.223	ug/L	30.223	ppb	00:15:33
1	K 766.490 Radial†	2337.9	-60.0	-10.697	ug/L	-10.697	ppb	00:15:13
1	Mg 279.077 IEC†	4.3	3.1	108.13	ug/L	108.13	ppb	00:15:33
1	Na 589.592 Radial†	-753.9	349.0	117.11	ug/L	117.11	ppb	00:15:13
1	Sr 421.552†	41.2	67.8	0.4220	ug/L	0.4220	ppb	00:15:13
1	Sc 361.383	893463.0	893463.0	99.134	%			00:16:30
1	Y 371.029	739012.8	739012.8	98.393	%			00:16:30
1	Ag 328.068†	281.0	-9.3	-0.0279	ug/L	-0.0279	ppb	00:16:35
1	As 188.979†	-23.7	0.3	0.1276	ug/L	0.1276	ppb	00:16:55
1	B 249.677†	-347.7	179.9	3.7707	ug/L	3.7707	ppb	00:16:55
1	Ba 233.527†	-22.9	-14.6	-0.1060	ug/L	-0.1060	ppb	00:16:55
1	Be 313.107†	-5398.7	-332.9	-0.1210	ug/L	-0.1210	ppb	00:16:35
1	Cd 226.502†	-179.6	13.9	0.1436	ug/L	0.1436	ppb	00:16:55
1	Co 228.616†	-87.4	-22.7	-0.4292	ug/L	-0.4292	ppb	00:16:55
1	Cr 267.716†	91.2	13.3	0.1419	ug/L	0.1419	ppb	00:16:55
1	Cu 324.752†	6716.5	18.4	0.0543	ug/L	0.0543	ppb	00:16:35
1	Mn 257.610†	449.4	31.0	0.0341	ug/L	0.0341	ppb	00:16:55
1	Mo 202.031†	32.9	14.9	0.9479	ug/L	0.9479	ppb	00:16:55
1	Ni 231.604†	60.1	-25.9	-0.5993	ug/L	-0.5993	ppb	00:16:55
1	P 214.914†	238.3	16.9	9.6898	ug/L	9.6898	ppb	00:16:55
1	Pb 220.353†	-42.8	25.2	2.8506	ug/L	2.8506	ppb	00:16:55
1	S 181.975 Axial†	42.2	1.0	1.4491	ug/L	1.4491	ppb	00:16:55
1	Sb 206.836†	41.3	7.4	2.3611	ug/L	2.3611	ppb	00:16:55
1	Se 196.026†	-28.4	0.1	0.1794	ug/L	0.1794	ppb	00:16:55
1	Si 251.611†	526.0	80.9	2.4097	ug/L	2.4097	ppb	00:16:55
1	Sn 189.927†	4.6	-0.4	-0.0620	ug/L	-0.0620	ppb	00:16:55
1	Ti 334.940†	-982.9	123.5	0.1984	ug/L	0.1984	ppb	00:16:35
1	Tl 190.801†	-31.6	0.7	0.1931	ug/L	0.1931	ppb	00:16:55
1	U 409.014†	-2482.6	-102.4	-2.8262	ug/L	-2.8262	ppb	00:16:35
1	V 292.402†	-1264.9	82.4	0.5500	ug/L	0.5500	ppb	00:16:35
1	Zn 213.857†	642.2	25.9	0.2239	ug/L	0.2239	ppb	00:16:55
1	SiO2†	524.8	61.9	3.9457	ug/L	3.9457	ppb	00:18:01
2	Sc Radial	5883.1	5883.1	101	%			00:15:38
2	Y RADIAL	6312.3	6312.3	100.4	%			00:15:38
2	Al 396.153Radial†	-19.5	1.0	0.6747	ug/L	0.6747	ppb	00:15:38
2	Ca 317.933Radial†	20.8	5.1	7.4637	ug/L	7.4637	ppb	00:15:58
2	Fe 238.204 Radial†	6.2	-0.6	-5.9880	ug/L	-5.9880	ppb	00:15:58
2	K 766.490 Radial†	2194.1	-172.2	-30.598	ug/L	-30.598	ppb	00:15:38
2	Mg 279.077 IEC†	1.5	0.4	13.370	ug/L	13.370	ppb	00:15:58
2	Na 589.592 Radial†	-731.4	361.4	121.28	ug/L	121.28	ppb	00:15:38
2	Sr 421.552†	-10.4	17.0	0.1059	ug/L	0.1059	ppb	00:15:38
2	Sc 361.383	912220.2	912220.2	101.22	%			00:17:00
2	Y 371.029	754541.7	754541.7	100.46	%			00:17:00
2	Ag 328.068†	358.5	61.5	0.2835	ug/L	0.2835	ppb	00:17:05
2	As 188.979†	-28.1	-3.6	-1.4123	ug/L	-1.4123	ppb	00:17:25
2	B 249.677†	-372.3	162.8	3.4161	ug/L	3.4161	ppb	00:17:25
2	Ba 233.527†	-24.7	-15.9	-0.1162	ug/L	-0.1162	ppb	00:17:25
2	Be 313.107†	-5371.7	-194.2	-0.0705	ug/L	-0.0705	ppb	00:17:05
2	Cd 226.502†	-177.5	19.7	0.2088	ug/L	0.2088	ppb	00:17:25
2	Co 228.616†	-74.2	-7.9	-0.1493	ug/L	-0.1493	ppb	00:17:25
2	Cr 267.716†	101.9	22.1	0.2344	ug/L	0.2344	ppb	00:17:25
2	Cu 324.752†	6729.4	-108.2	-0.3098	ug/L	-0.3098	ppb	00:17:05
2	Mn 257.610†	445.8	18.2	0.0185	ug/L	0.0185	ppb	00:17:25
2	Mo 202.031†	27.1	8.4	0.5347	ug/L	0.5347	ppb	00:17:25
2	Ni 231.604†	69.4	-18.0	-0.4165	ug/L	-0.4165	ppb	00:17:25

2	P 214.914†	220.1	-6.0	-3.4054	ug/L	-3.4054	ppb	00:17:25
2	Pb 220.353†	-49.8	19.2	2.1781	ug/L	2.1781	ppb	00:17:25
2	S 181.975 Axial†	42.6	0.5	0.6641	ug/L	0.6641	ppb	00:17:25
2	Sb 206.836†	43.9	9.1	2.9056	ug/L	2.9056	ppb	00:17:25
2	Se 196.026†	-26.8	2.3	1.3234	ug/L	1.3234	ppb	00:17:25
2	Si 251.611†	536.6	80.5	2.4084	ug/L	2.4084	ppb	00:17:25
2	Sn 189.927†	8.6	3.5	0.5671	ug/L	0.5671	ppb	00:17:25
2	Ti 334.940†	-1034.2	93.1	0.1506	ug/L	0.1506	ppb	00:17:05
2	Tl 190.801†	-41.9	-8.9	-2.5004	ug/L	-2.5004	ppb	00:17:25
2	U 409.014†	-2574.1	-141.4	-3.8949	ug/L	-3.8949	ppb	00:17:05
2	V 292.402†	-1235.0	138.2	0.9137	ug/L	0.9137	ppb	00:17:05
2	Zn 213.857†	652.3	22.6	0.2009	ug/L	0.2009	ppb	00:17:25
2	SiO2†	544.6	70.6	4.5256	ug/L	4.5256	ppb	00:18:06
3	Sc Radial	5790.8	5790.8	99.1	%			00:16:03
3	Y RADIAL	6164.3	6164.3	98.04	%			00:16:03
3	Al 396.153Radial†	-25.9	-5.8	-4.0277	ug/L	-4.0277	ppb	00:16:03
3	Ca 317.933Radial†	17.4	2.0	2.8895	ug/L	2.8895	ppb	00:16:23
3	Fe 238.204 Radial†	7.1	0.3	3.1665	ug/L	3.1665	ppb	00:16:23
3	K 766.490 Radial†	2207.3	-124.1	-22.065	ug/L	-22.065	ppb	00:16:03
3	Mg 279.077 IEC†	1.2	0.1	2.6302	ug/L	2.6302	ppb	00:16:23
3	Na 589.592 Radial†	-733.9	347.3	116.55	ug/L	116.55	ppb	00:16:03
3	Sr 421.552†	-10.2	17.1	0.1064	ug/L	0.1064	ppb	00:16:03
3	Sc 361.383	898819.2	898819.2	99.729	%			00:17:30
3	Y 371.029	743666.7	743666.7	99.012	%			00:17:30
3	Ag 328.068†	301.1	9.2	0.0439	ug/L	0.0439	ppb	00:17:36
3	As 188.979†	-25.5	-1.4	-0.5619	ug/L	-0.5619	ppb	00:17:56
3	B 249.677†	-390.7	139.0	2.9140	ug/L	2.9140	ppb	00:17:56
3	Ba 233.527†	-10.3	-1.8	-0.0122	ug/L	-0.0122	ppb	00:17:56
3	Be 313.107†	-5373.6	-275.2	-0.1002	ug/L	-0.1002	ppb	00:17:36
3	Cd 226.502†	-165.2	29.4	0.3101	ug/L	0.3101	ppb	00:17:56
3	Co 228.616†	-70.5	-5.3	-0.0992	ug/L	-0.0992	ppb	00:17:56
3	Cr 267.716†	84.5	6.1	0.0647	ug/L	0.0647	ppb	00:17:56
3	Cu 324.752†	6773.8	35.5	0.1019	ug/L	0.1019	ppb	00:17:36
3	Mn 257.610†	444.6	23.5	0.0253	ug/L	0.0253	ppb	00:17:56
3	Mo 202.031†	23.8	5.5	0.3524	ug/L	0.3524	ppb	00:17:56
3	Ni 231.604†	54.4	-32.0	-0.7402	ug/L	-0.7402	ppb	00:17:56
3	P 214.914†	231.1	8.2	4.7125	ug/L	4.7125	ppb	00:17:56
3	Pb 220.353†	-56.0	12.3	1.3868	ug/L	1.3868	ppb	00:17:56
3	S 181.975 Axial†	39.2	-2.3	-3.2360	ug/L	-3.2360	ppb	00:17:56
3	Sb 206.836†	54.1	20.0	6.3520	ug/L	6.3520	ppb	00:17:56
3	Se 196.026†	-20.9	7.9	4.5799	ug/L	4.5799	ppb	00:17:56
3	Si 251.611†	547.7	99.5	2.9779	ug/L	2.9779	ppb	00:17:56
3	Sn 189.927†	7.7	2.7	0.4479	ug/L	0.4479	ppb	00:17:56
3	Ti 334.940†	-1076.9	35.1	0.0556	ug/L	0.0556	ppb	00:17:36
3	Tl 190.801†	-43.9	-11.5	-3.2272	ug/L	-3.2272	ppb	00:17:56
3	U 409.014†	-2348.3	47.1	1.2972	ug/L	1.2972	ppb	00:17:36
3	V 292.402†	-1270.8	84.1	0.5624	ug/L	0.5624	ppb	00:17:36
3	Zn 213.857†	645.7	25.6	0.2278	ug/L	0.2278	ppb	00:17:56
3	SiO2†	509.5	43.4	2.7871	ug/L	2.7871	ppb	00:18:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901500.8	100.03	%	1.072				1.07%
Sc Radial	5878.6	101	%	1.5				1.46%
Y 371.029	745740.4	99.289	%	1.0611				1.07%
Y RADIAL	6286.5	99.98	%	1.774				1.77%
Ag 328.068†	20.5	0.0998	ug/L	0.16306	0.0998	ppb	0.16306	163.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.9	-4.1533	ug/L	4.89204	-4.1533	ppb	4.89204	117.79%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.6	-0.6155	ug/L	0.77139	-0.6155	ppb	0.77139	125.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.6	3.3669	ug/L	0.43045	3.3669	ppb	0.43045	12.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-10.8	-0.0781	ug/L	0.05731	-0.0781	ppb	0.05731	73.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-267.4	-0.0972	ug/L	0.02537	-0.0972	ppb	0.02537	26.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.1	4.6118	ug/L	2.48753	4.6118	ppb	2.48753	53.94%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              21.0      0.2208 ug/L       0.08392      0.2208 ppb        0.08392  38.00%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -12.0     -0.2259 ug/L       0.17785     -0.2259 ppb        0.17785  78.72%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              13.8      0.1470 ug/L       0.08495      0.1470 ppb        0.08495  57.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -18.1     -0.0512 ug/L       0.22521     -0.0512 ppb        0.22521 439.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       1.0      9.1337 ug/L      18.82837      9.1337 ppb       18.82837 206.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -118.8     -21.120 ug/L        9.9841     -21.120 ppb        9.9841  47.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          1.2      41.375 ug/L       58.0570      41.375 ppb        58.0570 140.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             24.2      0.0260 ug/L       0.00780      0.0260 ppb        0.00780  30.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              9.6      0.6117 ug/L       0.30512      0.6117 ppb        0.30512  49.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     352.6      118.31 ug/L         2.589      118.31 ppb          2.589   2.19%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -25.3     -0.5853 ug/L       0.16226     -0.5853 ppb        0.16226  27.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               6.3      3.6657 ug/L       6.61006      3.6657 ppb        6.61006 180.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             18.9      2.1385 ug/L       0.73271      2.1385 ppb        0.73271  34.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -0.3     -0.3743 ug/L       2.50921     -0.3743 ppb        2.50921 670.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             12.2      3.8729 ug/L       2.16416      3.8729 ppb        2.16416  55.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              3.5      2.0276 ug/L       2.28318      2.0276 ppb        2.28318 112.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             87.0      2.5987 ug/L       0.32843      2.5987 ppb        0.32843  12.64%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              1.9      0.3177 ug/L       0.33416      0.3177 ppb        0.33416 105.19%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             34.0      0.2114 ug/L       0.18235      0.2114 ppb        0.18235  86.26%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             83.9      0.1349 ug/L       0.07271      0.1349 ppb        0.07271  53.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -6.6     -1.8448 ug/L       1.80192     -1.8448 ppb        1.80192  97.67%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -65.6     -1.8080 ug/L       2.74174     -1.8080 ppb        2.74174 151.65%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             101.6      0.6754 ug/L       0.20653      0.6754 ppb        0.20653  30.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             24.7      0.2175 ug/L       0.01452      0.2175 ppb        0.01452   6.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   58.7      3.7528 ug/L       0.88516      3.7528 ppb        0.88516  23.59%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 90
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 01:16:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5658.9	5658.9	96.8	%			01:18:06
1	Y RADIAL	6014.3	6014.3	95.65	%			01:18:06
1	Al 396.153Radial†	6688.3	6927.3	4790.7	ug/L	4790.7	ppb	01:18:06
1	Ca 317.933Radial†	3281.5	3373.3	4972.0	ug/L	4972.0	ppb	01:18:26
1	Fe 238.204 Radial†	534.7	545.4	5121.4	ug/L	5121.4	ppb	01:18:26
1	K 766.490 Radial†	30542.8	29189.8	5167.7	ug/L	5167.7	ppb	01:18:06
1	Mg 279.077 IEC†	142.5	146.0	5156.3	ug/L	5156.3	ppb	01:18:26
1	Na 589.592 Radial†	27527.6	29515.6	9904.9	ug/L	9904.9	ppb	01:18:06
1	Sr 421.552†	78625.3	81223.4	505.79	ug/L	505.79	ppb	01:18:06
1	Sc 361.383	893164.6	893164.6	99.101	%			01:19:23
1	Y 371.029	726802.2	726802.2	96.767	%			01:19:23
1	Ag 328.068†	110434.2	111142.9	506.43	ug/L	506.43	ppb	01:19:28
1	As 188.979†	1163.4	1198.1	477.86	ug/L	477.86	ppb	01:19:48
1	B 249.677†	22162.2	22893.8	478.16	ug/L	478.16	ppb	01:19:28
1	Ba 233.527†	65678.4	66282.4	492.51	ug/L	492.51	ppb	01:19:28
1	Be 313.107†	1304973.9	1321920.9	482.84	ug/L	482.84	ppb	01:19:23
1	Cd 226.502†	46067.9	46680.7	493.28	ug/L	493.28	ppb	01:19:28
1	Co 228.616†	25937.2	26237.8	498.09	ug/L	498.09	ppb	01:19:28
1	Cr 267.716†	46005.3	46343.9	487.27	ug/L	487.27	ppb	01:19:28
1	Cu 324.752†	175544.2	170379.4	487.84	ug/L	487.84	ppb	01:19:28
1	Mn 257.610†	462385.9	466156.7	497.68	ug/L	497.68	ppb	01:19:23
1	Mo 202.031†	7728.4	7780.1	494.60	ug/L	494.60	ppb	01:19:48
1	Ni 231.604†	21106.7	21211.5	490.87	ug/L	490.87	ppb	01:19:28
1	P 214.914†	4436.8	4253.5	2379.2	ug/L	2379.2	ppb	01:19:48
1	Pb 220.353†	4194.8	4301.3	487.73	ug/L	487.73	ppb	01:19:48
1	S 181.975 Axial†	729.4	694.5	972.20	ug/L	972.20	ppb	01:19:48
1	Sb 206.836†	1586.1	1566.2	502.94	ug/L	502.94	ppb	01:19:48
1	Se 196.026†	826.6	863.0	517.47	ug/L	517.47	ppb	01:19:48
1	Si 251.611†	83062.0	83365.6	2483.7	ug/L	2483.7	ppb	01:19:28
1	Sn 189.927†	2999.5	3021.7	495.34	ug/L	495.34	ppb	01:19:48
1	Ti 334.940†	313387.7	317344.5	506.28	ug/L	506.28	ppb	01:19:28
1	Tl 190.801†	1690.6	1738.4	490.17	ug/L	490.17	ppb	01:19:48
1	U 409.014†	16036.2	18583.4	510.34	ug/L	510.34	ppb	01:19:28
1	V 292.402†	71584.1	73591.6	492.71	ug/L	492.71	ppb	01:19:28
1	Zn 213.857†	56340.2	56229.3	486.86	ug/L	486.86	ppb	01:19:28
1	SiO2†	82885.0	83169.1	5309.2	ug/L	5309.2	ppb	01:20:56
2	Sc Radial	5701.8	5701.8	97.6	%			01:18:31
2	Y RADIAL	6108.5	6108.5	97.15	%			01:18:31
2	Al 396.153Radial†	6798.7	6988.6	4833.0	ug/L	4833.0	ppb	01:18:31
2	Ca 317.933Radial†	3307.4	3374.3	4973.4	ug/L	4973.4	ppb	01:18:51
2	Fe 238.204 Radial†	535.3	541.8	5088.3	ug/L	5088.3	ppb	01:18:51
2	K 766.490 Radial†	30894.3	29312.7	5189.5	ug/L	5189.5	ppb	01:18:31
2	Mg 279.077 IEC†	144.2	146.6	5177.7	ug/L	5177.7	ppb	01:18:51
2	Na 589.592 Radial†	27956.6	29741.5	9980.7	ug/L	9980.7	ppb	01:18:31
2	Sr 421.552†	79769.3	81785.2	509.29	ug/L	509.29	ppb	01:18:31
2	Sc 361.383	887703.7	887703.7	98.495	%			01:19:54
2	Y 371.029	722125.2	722125.2	96.144	%			01:19:54
2	Ag 328.068†	110344.4	111737.3	509.13	ug/L	509.13	ppb	01:19:59
2	As 188.979†	1190.4	1232.8	491.59	ug/L	491.59	ppb	01:20:19
2	B 249.677†	22291.4	23162.6	483.80	ug/L	483.80	ppb	01:19:59
2	Ba 233.527†	65942.4	66958.2	497.53	ug/L	497.53	ppb	01:19:59
2	Be 313.107†	1295872.7	1320781.4	482.43	ug/L	482.43	ppb	01:19:54
2	Cd 226.502†	46156.5	47056.7	497.26	ug/L	497.26	ppb	01:19:59
2	Co 228.616†	25951.1	26413.0	501.43	ug/L	501.43	ppb	01:19:59
2	Cr 267.716†	45870.8	46492.9	488.84	ug/L	488.84	ppb	01:19:59
2	Cu 324.752†	175818.7	171747.8	491.75	ug/L	491.75	ppb	01:19:59
2	Mn 257.610†	459763.6	466364.6	497.90	ug/L	497.90	ppb	01:19:54
2	Mo 202.031†	7805.3	7906.2	502.61	ug/L	502.61	ppb	01:20:19
2	Ni 231.604†	21113.0	21348.9	494.05	ug/L	494.05	ppb	01:19:59

2	P 214.914†	4471.3	4316.1	2414.8 ug/L	2414.8 ppb	01:20:19
2	Pb 220.353†	4235.6	4368.8	495.39 ug/L	495.39 ppb	01:20:19
2	S 181.975 Axial†	744.3	714.1	999.68 ug/L	999.68 ppb	01:20:19
2	Sb 206.836†	1618.0	1608.5	516.58 ug/L	516.58 ppb	01:20:19
2	Se 196.026†	831.8	873.3	523.37 ug/L	523.37 ppb	01:20:19
2	Si 251.611†	83290.2	84112.8	2505.9 ug/L	2505.9 ppb	01:19:59
2	Sn 189.927†	3025.6	3066.9	502.73 ug/L	502.73 ppb	01:20:19
2	Ti 334.940†	313888.2	319798.0	510.20 ug/L	510.20 ppb	01:19:59
2	Tl 190.801†	1694.9	1753.3	494.34 ug/L	494.34 ppb	01:20:19
2	U 409.014†	16015.5	18662.0	512.51 ug/L	512.51 ppb	01:19:59
2	V 292.402†	71616.7	74069.1	495.99 ug/L	495.99 ppb	01:19:59
2	Zn 213.857†	56409.5	56649.4	490.51 ug/L	490.51 ppb	01:19:59
2	SiO2†	83272.2	84076.8	5367.1 ug/L	5367.1 ppb	01:21:01
3	Sc Radial	5735.3	5735.3	98.1 %		01:18:56
3	Y RADIAL	6115.2	6115.2	97.26 %		01:18:56
3	Al 396.153Radial†	6737.6	6885.5	4761.6 ug/L	4761.6 ppb	01:18:56
3	Ca 317.933Radial†	3304.7	3351.6	4940.1 ug/L	4940.1 ppb	01:19:16
3	Fe 238.204 Radial†	535.1	538.5	5056.5 ug/L	5056.5 ppb	01:19:16
3	K 766.490 Radial†	30896.4	29129.6	5157.0 ug/L	5157.0 ppb	01:18:56
3	Mg 279.077 IEC†	142.8	144.3	5097.6 ug/L	5097.6 ppb	01:19:16
3	Na 589.592 Radial†	27879.5	29495.2	9898.0 ug/L	9898.0 ppb	01:18:56
3	Sr 421.552†	79710.8	81247.2	505.94 ug/L	505.94 ppb	01:18:56
3	Sc 361.383	894812.5	894812.5	99.284 %		01:20:25
3	Y 371.029	726134.7	726134.7	96.678 %		01:20:25
3	Ag 328.068†	109891.4	110391.0	503.00 ug/L	503.00 ppb	01:20:30
3	As 188.979†	1190.8	1223.5	487.87 ug/L	487.87 ppb	01:20:50
3	B 249.677†	22116.3	22806.5	476.35 ug/L	476.35 ppb	01:20:30
3	Ba 233.527†	65490.2	65970.9	490.20 ug/L	490.20 ppb	01:20:30
3	Be 313.107†	1304073.1	1318588.6	481.62 ug/L	481.62 ppb	01:20:25
3	Cd 226.502†	45885.4	46411.3	490.44 ug/L	490.44 ppb	01:20:30
3	Co 228.616†	25790.9	26042.3	494.40 ug/L	494.40 ppb	01:20:30
3	Cr 267.716†	45700.9	45951.8	483.15 ug/L	483.15 ppb	01:20:30
3	Cu 324.752†	174952.9	169457.6	485.20 ug/L	485.20 ppb	01:20:30
3	Mn 257.610†	463570.6	466490.7	498.03 ug/L	498.03 ppb	01:20:25
3	Mo 202.031†	7771.2	7808.9	496.43 ug/L	496.43 ppb	01:20:50
3	Ni 231.604†	21001.0	21065.8	487.49 ug/L	487.49 ppb	01:20:30
3	P 214.914†	4453.7	4262.3	2384.8 ug/L	2384.8 ppb	01:20:50
3	Pb 220.353†	4218.2	4317.1	489.53 ug/L	489.53 ppb	01:20:50
3	S 181.975 Axial†	751.2	715.1	1001.1 ug/L	1001.1 ppb	01:20:50
3	Sb 206.836†	1615.5	1592.9	511.55 ug/L	511.55 ppb	01:20:50
3	Se 196.026†	816.6	851.3	510.55 ug/L	510.55 ppb	01:20:50
3	Si 251.611†	82756.3	82903.3	2469.9 ug/L	2469.9 ppb	01:20:30
3	Sn 189.927†	3019.7	3036.5	497.76 ug/L	497.76 ppb	01:20:50
3	Ti 334.940†	311997.2	315361.7	503.12 ug/L	503.12 ppb	01:20:30
3	Tl 190.801†	1699.6	1744.3	491.82 ug/L	491.82 ppb	01:20:50
3	U 409.014†	15972.5	18489.5	507.77 ug/L	507.77 ppb	01:20:30
3	V 292.402†	71230.4	73102.4	489.52 ug/L	489.52 ppb	01:20:30
3	Zn 213.857†	56011.8	55793.8	483.09 ug/L	483.09 ppb	01:20:30
3	SiO2†	84324.6	84465.1	5392.3 ug/L	5392.3 ppb	01:21:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891893.6	98.960	%	0.4129				0.42%
Sc Radial	5698.7	97.5	%	0.66				0.67%
Y 371.029	725020.7	96.530	%	0.3368				0.35%
Y RADIAL	6079.3	96.68	%	0.898				0.93%
Ag 328.068†	111090.4	506.19	ug/L	3.072	506.19	ppb	3.072	0.61%
QC value within limits for Ag 328.068 Recovery = 101.24%								
Al 396.153Radial†	6933.8	4795.1	ug/L	35.88	4795.1	ppb	35.88	0.75%
QC value within limits for Al 396.153Radial Recovery = 95.90%								
As 188.979†	1218.2	485.77	ug/L	7.099	485.77	ppb	7.099	1.46%
QC value within limits for As 188.979 Recovery = 97.15%								
B 249.677†	22954.3	479.44	ug/L	3.883	479.44	ppb	3.883	0.81%
QC value within limits for B 249.677 Recovery = 95.89%								
Ba 233.527†	66403.8	493.41	ug/L	3.748	493.41	ppb	3.748	0.76%
QC value within limits for Ba 233.527 Recovery = 98.68%								
Be 313.107†	1320430.3	482.29	ug/L	0.622	482.29	ppb	0.622	0.13%
QC value within limits for Be 313.107 Recovery = 96.46%								
Ca 317.933Radial†	3366.4	4961.8	ug/L	18.84	4961.8	ppb	18.84	0.38%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.24%
Cd 226.502†            46716.2      493.66 ug/L         3.427      493.66 ppb          3.427   0.69%
   QC value within limits for Cd 226.502  Recovery = 98.73%
Co 228.616†            26231.0      497.97 ug/L         3.520      497.97 ppb          3.520   0.71%
   QC value within limits for Co 228.616  Recovery = 99.59%
Cr 267.716†            46262.9      486.42 ug/L         2.939      486.42 ppb          2.939   0.60%
   QC value within limits for Cr 267.716  Recovery = 97.28%
Cu 324.752†           170528.3      488.26 ug/L         3.298      488.26 ppb          3.298   0.68%
   QC value within limits for Cu 324.752  Recovery = 97.65%
Fe 238.204 Radial†       541.9      5088.7 ug/L        32.48      5088.7 ppb         32.48   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.77%
K 766.490 Radial†      29210.7      5171.4 ug/L        16.55      5171.4 ppb         16.55   0.32%
   QC value within limits for K 766.490 Radial  Recovery = 103.43%
Mg 279.077 IEC†          145.6      5143.9 ug/L        41.48      5143.9 ppb         41.48   0.81%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.88%
Mn 257.610†           466337.3      497.87 ug/L         0.177      497.87 ppb          0.177   0.04%
   QC value within limits for Mn 257.610  Recovery = 99.57%
Mo 202.031†            7831.7      497.88 ug/L         4.194      497.88 ppb          4.194   0.84%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     29584.1      9927.9 ug/L        45.87      9927.9 ppb         45.87   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 99.28%
Ni 231.604†            21208.8      490.80 ug/L         3.276      490.80 ppb          3.276   0.67%
   QC value within limits for Ni 231.604  Recovery = 98.16%
P 214.914†              4277.3      2393.0 ug/L        19.15      2393.0 ppb         19.15   0.80%
   QC value within limits for P 214.914  Recovery = 95.72%
Pb 220.353†             4329.0      490.88 ug/L         4.007      490.88 ppb          4.007   0.82%
   QC value within limits for Pb 220.353  Recovery = 98.18%
S 181.975 Axial†         707.9      990.98 ug/L        16.281      990.98 ppb         16.281   1.64%
   QC value within limits for S 181.975 Axial  Recovery = 99.10%
Sb 206.836†            1589.2      510.36 ug/L         6.901      510.36 ppb          6.901   1.35%
   QC value within limits for Sb 206.836  Recovery = 102.07%
Se 196.026†             862.5      517.13 ug/L         6.420      517.13 ppb          6.420   1.24%
   QC value within limits for Se 196.026  Recovery = 103.43%
Si 251.611†            83460.6      2486.5 ug/L        18.20      2486.5 ppb         18.20   0.73%
   QC value within limits for Si 251.611  Recovery = 99.46%
Sn 189.927†            3041.7      498.61 ug/L         3.768      498.61 ppb          3.768   0.76%
   QC value within limits for Sn 189.927  Recovery = 99.72%
Sr 421.552†            81418.6      507.01 ug/L         1.979      507.01 ppb          1.979   0.39%
   QC value within limits for Sr 421.552  Recovery = 101.40%
Ti 334.940†           317501.4      506.53 ug/L         3.545      506.53 ppb          3.545   0.70%
   QC value within limits for Ti 334.940  Recovery = 101.31%
Tl 190.801†            1745.4      492.11 ug/L         2.101      492.11 ppb          2.101   0.43%
   QC value within limits for Tl 190.801  Recovery = 98.42%
U 409.014†             18578.3      510.20 ug/L         2.371      510.20 ppb          2.371   0.46%
   QC value within limits for U 409.014  Recovery = 102.04%
V 292.402†             73587.7      492.74 ug/L         3.235      492.74 ppb          3.235   0.66%
   QC value within limits for V 292.402  Recovery = 98.55%
Zn 213.857†            56224.2      486.82 ug/L         3.710      486.82 ppb          3.710   0.76%
   QC value within limits for Zn 213.857  Recovery = 97.36%
SiO2†                  83903.7      5356.2 ug/L        42.59      5356.2 ppb         42.59   0.80%
   QC value within limits for SiO2  Recovery = 100.16%
All analyte(s) passed QC.
```

Sequence No.: 91
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 01:23:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5898.6	5898.6	101	%			01:25:07
1	Y RADIAL	6317.9	6317.9	100.5	%			01:25:07
1	Al 396.153Radial†	-35.4	-14.6	-10.188	ug/L	-10.188	ppb	01:25:07
1	Ca 317.933Radial†	15.7	0.0	0.0021	ug/L	0.0021	ppb	01:25:27
1	Fe 238.204 Radial†	8.6	1.7	16.349	ug/L	16.349	ppb	01:25:27
1	K 766.490 Radial†	2422.9	48.7	8.5629	ug/L	8.5629	ppb	01:25:07
1	Mg 279.077 IEC†	3.2	2.0	72.073	ug/L	72.073	ppb	01:25:27
1	Na 589.592 Radial†	-603.4	490.1	164.47	ug/L	164.47	ppb	01:25:07
1	Sr 421.552†	-2.3	25.0	0.1559	ug/L	0.1559	ppb	01:25:07
1	Sc 361.383	900763.7	900763.7	99.944	%			01:26:24
1	Y 371.029	746155.6	746155.6	99.344	%			01:26:24
1	Ag 328.068†	355.0	62.5	0.2862	ug/L	0.2862	ppb	01:26:29
1	As 188.979†	-19.5	4.6	1.8298	ug/L	1.8298	ppb	01:26:49
1	B 249.677†	-294.0	236.5	4.9594	ug/L	4.9594	ppb	01:26:49
1	Ba 233.527†	-15.0	-6.6	-0.0464	ug/L	-0.0464	ppb	01:26:49
1	Be 313.107†	-5499.0	-389.0	-0.1415	ug/L	-0.1415	ppb	01:26:29
1	Cd 226.502†	-170.1	24.9	0.2606	ug/L	0.2606	ppb	01:26:49
1	Co 228.616†	-87.8	-22.5	-0.4260	ug/L	-0.4260	ppb	01:26:49
1	Cr 267.716†	89.3	10.7	0.1124	ug/L	0.1124	ppb	01:26:49
1	Cu 324.752†	6838.7	85.8	0.2463	ug/L	0.2463	ppb	01:26:29
1	Mn 257.610†	430.5	8.4	0.0092	ug/L	0.0092	ppb	01:26:49
1	Mo 202.031†	25.3	7.0	0.4457	ug/L	0.4457	ppb	01:26:49
1	Ni 231.604†	49.7	-36.8	-0.8522	ug/L	-0.8522	ppb	01:26:49
1	P 214.914†	233.9	10.5	5.9959	ug/L	5.9959	ppb	01:26:49
1	Pb 220.353†	-46.4	22.0	2.4860	ug/L	2.4860	ppb	01:26:49
1	S 181.975 Axial†	44.3	2.7	3.7888	ug/L	3.7888	ppb	01:26:49
1	Sb 206.836†	37.7	3.5	1.1096	ug/L	1.1096	ppb	01:26:49
1	Se 196.026†	-22.8	6.0	3.5320	ug/L	3.5320	ppb	01:26:49
1	Si 251.611†	499.7	50.3	1.4954	ug/L	1.4954	ppb	01:26:49
1	Sn 189.927†	6.2	1.2	0.1915	ug/L	0.1915	ppb	01:26:49
1	Ti 334.940†	-1003.7	110.6	0.1740	ug/L	0.1740	ppb	01:26:29
1	Tl 190.801†	-46.2	-13.8	-3.8499	ug/L	-3.8499	ppb	01:26:49
1	U 409.014†	-2194.6	206.0	5.6714	ug/L	5.6714	ppb	01:26:24
1	V 292.402†	-1244.3	113.4	0.7653	ug/L	0.7653	ppb	01:26:29
1	Zn 213.857†	644.3	22.8	0.2004	ug/L	0.2004	ppb	01:26:49
1	SiO2†	505.9	38.7	2.4593	ug/L	2.4593	ppb	01:27:55
2	Sc Radial	5642.3	5642.3	96.6	%			01:25:32
2	Y RADIAL	5996.7	5996.7	95.37	%			01:25:32
2	Al 396.153Radial†	-30.1	-10.7	-7.4713	ug/L	-7.4713	ppb	01:25:32
2	Ca 317.933Radial†	19.1	4.2	6.1650	ug/L	6.1650	ppb	01:25:52
2	Fe 238.204 Radial†	5.2	-1.4	-13.131	ug/L	-13.131	ppb	01:25:52
2	K 766.490 Radial†	2437.9	173.3	30.670	ug/L	30.670	ppb	01:25:32
2	Mg 279.077 IEC†	1.1	0.0	0.2827	ug/L	0.2827	ppb	01:25:52
2	Na 589.592 Radial†	-609.6	456.5	153.20	ug/L	153.20	ppb	01:25:32
2	Sr 421.552†	-5.0	22.2	0.1382	ug/L	0.1382	ppb	01:25:32
2	Sc 361.383	897445.2	897445.2	99.576	%			01:26:54
2	Y 371.029	742249.6	742249.6	98.824	%			01:26:54
2	Ag 328.068†	357.9	66.7	0.2960	ug/L	0.2960	ppb	01:26:59
2	As 188.979†	-16.8	7.3	2.8649	ug/L	2.8649	ppb	01:27:19
2	B 249.677†	-323.9	205.4	4.3098	ug/L	4.3098	ppb	01:27:19
2	Ba 233.527†	-16.9	-8.5	-0.0614	ug/L	-0.0614	ppb	01:27:19
2	Be 313.107†	-5480.6	-390.9	-0.1423	ug/L	-0.1423	ppb	01:26:59
2	Cd 226.502†	-191.6	2.7	0.0295	ug/L	0.0295	ppb	01:27:19
2	Co 228.616†	-83.6	-18.5	-0.3504	ug/L	-0.3504	ppb	01:27:19
2	Cr 267.716†	78.0	-0.3	-0.0043	ug/L	-0.0043	ppb	01:27:19
2	Cu 324.752†	6643.1	-85.3	-0.2449	ug/L	-0.2449	ppb	01:26:59
2	Mn 257.610†	436.2	15.7	0.0154	ug/L	0.0154	ppb	01:27:19
2	Mo 202.031†	27.5	9.3	0.5913	ug/L	0.5913	ppb	01:27:19
2	Ni 231.604†	57.0	-29.4	-0.6796	ug/L	-0.6796	ppb	01:27:19

2	P 214.914†	244.0	21.5	12.472	ug/L	12.472 ppb	01:27:19
2	Pb 220.353†	-63.1	5.1	0.5773	ug/L	0.5773 ppb	01:27:19
2	S 181.975 Axial†	40.8	-0.6	-0.8367	ug/L	-0.8367 ppb	01:27:19
2	Sb 206.836†	40.6	6.5	2.0916	ug/L	2.0916 ppb	01:27:19
2	Se 196.026†	-22.7	6.0	3.4469	ug/L	3.4469 ppb	01:27:19
2	Si 251.611†	493.2	45.6	1.3437	ug/L	1.3437 ppb	01:27:19
2	Sn 189.927†	6.8	1.8	0.2938	ug/L	0.2938 ppb	01:27:19
2	Ti 334.940†	-1048.6	61.8	0.0962	ug/L	0.0962 ppb	01:26:59
2	Tl 190.801†	-39.2	-6.8	-1.9099	ug/L	-1.9099 ppb	01:27:19
2	U 409.014†	-2163.7	228.9	6.3072	ug/L	6.3072 ppb	01:26:54
2	V 292.402†	-1219.6	133.5	0.9045	ug/L	0.9045 ppb	01:26:59
2	Zn 213.857†	631.1	12.0	0.1104	ug/L	0.1104 ppb	01:27:19
2	SiO2†	504.9	39.6	2.4910	ug/L	2.4910 ppb	01:28:00
3	Sc Radial	5705.0	5705.0	97.6	%		01:25:57
3	Y RADIAL	6101.7	6101.7	97.04	%		01:25:57
3	Al 396.153Radial†	-45.1	-25.8	-17.921	ug/L	-17.921 ppb	01:25:57
3	Ca 317.933Radial†	21.2	6.2	9.0983	ug/L	9.0983 ppb	01:26:17
3	Fe 238.204 Radial†	8.0	1.4	13.060	ug/L	13.060 ppb	01:26:17
3	K 766.490 Radial†	2428.3	135.7	24.001	ug/L	24.001 ppb	01:25:57
3	Mg 279.077 IEC†	1.6	0.4	15.408	ug/L	15.408 ppb	01:26:17
3	Na 589.592 Radial†	-641.1	431.2	144.70	ug/L	144.70 ppb	01:25:57
3	Sr 421.552†	14.4	42.1	0.2623	ug/L	0.2623 ppb	01:25:57
3	Sc 361.383	896279.3	896279.3	99.447	%		01:27:25
3	Y 371.029	740343.4	740343.4	98.570	%		01:27:25
3	Ag 328.068†	294.0	2.9	0.0162	ug/L	0.0162 ppb	01:27:30
3	As 188.979†	-21.6	2.4	0.9565	ug/L	0.9565 ppb	01:27:50
3	B 249.677†	-299.6	229.4	4.8090	ug/L	4.8090 ppb	01:27:50
3	Ba 233.527†	-18.1	-9.7	-0.0709	ug/L	-0.0709 ppb	01:27:50
3	Be 313.107†	-5514.5	-432.1	-0.1569	ug/L	-0.1569 ppb	01:27:30
3	Cd 226.502†	-165.4	28.8	0.3032	ug/L	0.3032 ppb	01:27:50
3	Co 228.616†	-81.8	-16.9	-0.3210	ug/L	-0.3210 ppb	01:27:50
3	Cr 267.716†	76.3	-1.9	-0.0204	ug/L	-0.0204 ppb	01:27:50
3	Cu 324.752†	6725.9	6.6	0.0196	ug/L	0.0196 ppb	01:27:30
3	Mn 257.610†	443.6	23.8	0.0264	ug/L	0.0264 ppb	01:27:50
3	Mo 202.031†	17.4	-0.8	-0.0498	ug/L	-0.0498 ppb	01:27:50
3	Ni 231.604†	75.6	-10.5	-0.2430	ug/L	-0.2430 ppb	01:27:50
3	P 214.914†	244.9	22.7	13.109	ug/L	13.109 ppb	01:27:50
3	Pb 220.353†	-52.7	15.5	1.7418	ug/L	1.7418 ppb	01:27:50
3	S 181.975 Axial†	48.2	6.9	9.6243	ug/L	9.6243 ppb	01:27:50
3	Sb 206.836†	38.8	4.8	1.5414	ug/L	1.5414 ppb	01:27:50
3	Se 196.026†	-26.9	1.8	1.0581	ug/L	1.0581 ppb	01:27:50
3	Si 251.611†	502.1	55.2	1.6406	ug/L	1.6406 ppb	01:27:50
3	Sn 189.927†	12.8	7.9	1.2928	ug/L	1.2928 ppb	01:27:50
3	Ti 334.940†	-906.2	203.6	0.3245	ug/L	0.3245 ppb	01:27:30
3	Tl 190.801†	-38.6	-6.3	-1.7579	ug/L	-1.7579 ppb	01:27:50
3	U 409.014†	-2308.4	80.5	2.2172	ug/L	2.2172 ppb	01:27:25
3	V 292.402†	-1308.0	43.1	0.2865	ug/L	0.2865 ppb	01:27:30
3	Zn 213.857†	641.1	22.8	0.1989	ug/L	0.1989 ppb	01:27:50
3	SiO2†	563.6	99.3	6.3422	ug/L	6.3422 ppb	01:28:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898162.7	99.656	%	0.2582				0.26%
Sc Radial	5748.6	98.4	%	2.29				2.32%
Y 371.029	742916.2	98.913	%	0.3945				0.40%
Y RADIAL	6138.8	97.63	%	2.605				2.67%
Ag 328.068†	44.0	0.1994	ug/L	0.15878	0.1994	ppb	0.15878	79.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-17.1	-11.860	ug/L	5.4216	-11.860	ppb	5.4216	45.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.8	1.8837	ug/L	0.95530	1.8837	ppb	0.95530	50.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	223.8	4.6927	ug/L	0.34006	4.6927	ppb	0.34006	7.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.3	-0.0595	ug/L	0.01231	-0.0595	ppb	0.01231	20.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-404.0	-0.1469	ug/L	0.00867	-0.1469	ppb	0.00867	5.90%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.0885	ug/L	4.64266	5.0885	ppb	4.64266	91.24%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.8      0.1978 ug/L       0.14729      0.1978 ppb       0.14729  74.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -19.3     -0.3658 ug/L       0.05419     -0.3658 ppb       0.05419  14.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               2.8      0.0292 ug/L       0.07245      0.0292 ppb       0.07245 247.97%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               2.4      0.0070 ug/L       0.24586      0.0070 ppb       0.24586 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.6      5.4263 ug/L      16.15488      5.4263 ppb      16.15488 297.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       119.3      21.078 ug/L       11.3397      21.078 ppb       11.3397  53.80%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.8      29.255 ug/L       37.8455      29.255 ppb       37.8455 129.37%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              16.0      0.0170 ug/L       0.00866      0.0170 ppb       0.00866  50.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.2      0.3291 ug/L       0.33610      0.3291 ppb       0.33610 102.14%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      459.3      154.13 ug/L         9.920      154.13 ppb         9.920   6.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -25.6     -0.5916 ug/L       0.31401     -0.5916 ppb       0.31401  53.08%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               18.3      10.526 ug/L        3.9357      10.526 ppb        3.9357  37.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              14.2      1.6017 ug/L       0.96200      1.6017 ppb       0.96200  60.06%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.0      4.1921 ug/L       5.24211      4.1921 ppb       5.24211 125.05%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.9      1.5808 ug/L       0.49219      1.5808 ppb       0.49219  31.13%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.6      2.6790 ug/L       1.40440      2.6790 ppb       1.40440  52.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              50.4      1.4932 ug/L       0.14848      1.4932 ppb       0.14848   9.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.6      0.5927 ug/L       0.60842      0.5927 ppb       0.60842 102.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              29.8      0.1855 ug/L       0.06712      0.1855 ppb       0.06712  36.19%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             125.4      0.1982 ug/L       0.11606      0.1982 ppb       0.11606  58.55%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -9.0     -2.5059 ug/L       1.16640     -2.5059 ppb       1.16640  46.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               171.8      4.7319 ug/L       2.20093      4.7319 ppb       2.20093  46.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               96.7      0.6521 ug/L       0.32420      0.6521 ppb       0.32420  49.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              19.2      0.1699 ug/L       0.05153      0.1699 ppb       0.05153  30.33%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    59.2      3.7642 ug/L       2.23271      3.7642 ppb       2.23271  59.32%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 99
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 02:20:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5762.1	5762.1	98.6	%			02:22:03
1	Y RADIAL	6110.2	6110.2	97.18	%			02:22:03
1	Al 396.153Radial†	6774.8	6891.4	4765.9	ug/L	4765.9	ppb	02:22:03
1	Ca 317.933Radial†	3286.4	3317.5	4889.8	ug/L	4889.8	ppb	02:22:23
1	Fe 238.204 Radial†	534.1	534.9	5023.1	ug/L	5023.1	ppb	02:22:23
1	K 766.490 Radial†	30956.4	29044.3	5142.0	ug/L	5142.0	ppb	02:22:03
1	Mg 279.077 IEC†	141.1	142.0	5013.5	ug/L	5013.5	ppb	02:22:23
1	Na 589.592 Radial†	27628.8	29109.1	9768.5	ug/L	9768.5	ppb	02:22:03
1	Sr 421.552†	79698.2	80857.3	503.51	ug/L	503.51	ppb	02:22:03
1	Sc 361.383	904059.2	904059.2	100.31	%			02:23:20
1	Y 371.029	736076.6	736076.6	98.002	%			02:23:20
1	Ag 328.068†	111559.8	110922.1	505.40	ug/L	505.40	ppb	02:23:25
1	As 188.979†	1178.6	1199.1	478.24	ug/L	478.24	ppb	02:23:45
1	B 249.677†	22353.4	22815.0	476.53	ug/L	476.53	ppb	02:23:25
1	Ba 233.527†	66397.6	66200.8	491.90	ug/L	491.90	ppb	02:23:25
1	Be 313.107†	1317563.6	1318603.3	481.63	ug/L	481.63	ppb	02:23:20
1	Cd 226.502†	46519.4	46570.7	492.13	ug/L	492.13	ppb	02:23:25
1	Co 228.616†	26191.3	26175.8	496.91	ug/L	496.91	ppb	02:23:25
1	Cr 267.716†	46353.3	46131.3	485.04	ug/L	485.04	ppb	02:23:25
1	Cu 324.752†	178097.4	170790.0	489.01	ug/L	489.01	ppb	02:23:25
1	Mn 257.610†	466489.5	464625.0	496.04	ug/L	496.04	ppb	02:23:20
1	Mo 202.031†	7784.6	7742.2	492.19	ug/L	492.19	ppb	02:23:45
1	Ni 231.604†	21291.1	21138.8	489.18	ug/L	489.18	ppb	02:23:25
1	P 214.914†	4467.3	4230.0	2365.5	ug/L	2365.5	ppb	02:23:45
1	Pb 220.353†	4224.0	4279.3	485.25	ug/L	485.25	ppb	02:23:45
1	S 181.975 Axial†	729.9	686.0	960.39	ug/L	960.39	ppb	02:23:45
1	Sb 206.836†	1601.6	1562.4	501.66	ug/L	501.66	ppb	02:23:45
1	Se 196.026†	827.5	853.8	511.84	ug/L	511.84	ppb	02:23:45
1	Si 251.611†	84059.8	83350.2	2483.3	ug/L	2483.3	ppb	02:23:25
1	Sn 189.927†	3016.5	3002.2	492.14	ug/L	492.14	ppb	02:23:45
1	Ti 334.940†	317082.1	317216.7	506.08	ug/L	506.08	ppb	02:23:25
1	Tl 190.801†	1709.0	1736.2	489.54	ug/L	489.54	ppb	02:23:45
1	U 409.014†	16099.2	18451.2	506.71	ug/L	506.71	ppb	02:23:25
1	V 292.402†	72227.1	73362.2	491.17	ug/L	491.17	ppb	02:23:25
1	Zn 213.857†	56873.6	56075.9	485.54	ug/L	485.54	ppb	02:23:25
1	SiO2†	83217.4	82492.7	5266.0	ug/L	5266.0	ppb	02:24:53
2	Sc Radial	5668.4	5668.4	97.0	%			02:22:28
2	Y RADIAL	6010.3	6010.3	95.59	%			02:22:28
2	Al 396.153Radial†	6676.7	6903.8	4774.2	ug/L	4774.2	ppb	02:22:28
2	Ca 317.933Radial†	3281.0	3367.0	4962.8	ug/L	4962.8	ppb	02:22:48
2	Fe 238.204 Radial†	531.1	540.7	5077.9	ug/L	5077.9	ppb	02:22:48
2	K 766.490 Radial†	30462.3	29053.6	5143.6	ug/L	5143.6	ppb	02:22:28
2	Mg 279.077 IEC†	143.6	146.9	5187.4	ug/L	5187.4	ppb	02:22:48
2	Na 589.592 Radial†	27162.6	29091.4	9762.5	ug/L	9762.5	ppb	02:22:28
2	Sr 421.552†	78056.5	80500.3	501.29	ug/L	501.29	ppb	02:22:28
2	Sc 361.383	890627.2	890627.2	98.820	%			02:23:51
2	Y 371.029	724348.2	724348.2	96.440	%			02:23:51
2	Ag 328.068†	111034.9	112068.3	510.63	ug/L	510.63	ppb	02:23:56
2	As 188.979†	1177.7	1215.9	484.93	ug/L	484.93	ppb	02:24:16
2	B 249.677†	22385.9	23183.9	484.24	ug/L	484.24	ppb	02:23:56
2	Ba 233.527†	66269.1	67069.0	498.35	ug/L	498.35	ppb	02:23:56
2	Be 313.107†	1298712.3	1319336.2	481.90	ug/L	481.90	ppb	02:23:51
2	Cd 226.502†	46435.4	47185.1	498.62	ug/L	498.62	ppb	02:23:56
2	Co 228.616†	26161.7	26539.5	503.82	ug/L	503.82	ppb	02:23:56
2	Cr 267.716†	46279.0	46753.1	491.57	ug/L	491.57	ppb	02:23:56
2	Cu 324.752†	177017.2	172374.6	493.55	ug/L	493.55	ppb	02:23:56
2	Mn 257.610†	461178.4	466264.1	497.79	ug/L	497.79	ppb	02:23:51
2	Mo 202.031†	7780.7	7855.3	499.38	ug/L	499.38	ppb	02:24:16
2	Ni 231.604†	21300.0	21467.8	496.80	ug/L	496.80	ppb	02:23:56

2	P 214.914†	4481.6	4311.7	2412.0 ug/L	2412.0 ppb	02:24:16
2	Pb 220.353†	4206.6	4325.3	490.45 ug/L	490.45 ppb	02:24:16
2	S 181.975 Axial†	733.7	700.9	981.23 ug/L	981.23 ppb	02:24:16
2	Sb 206.836†	1612.5	1597.6	512.96 ug/L	512.96 ppb	02:24:16
2	Se 196.026†	828.4	867.1	519.74 ug/L	519.74 ppb	02:24:16
2	Si 251.611†	83798.9	84350.1	2513.1 ug/L	2513.1 ppb	02:23:56
2	Sn 189.927†	3032.0	3063.3	502.14 ug/L	502.14 ppb	02:24:16
2	Ti 334.940†	315803.5	320690.2	511.62 ug/L	511.62 ppb	02:23:56
2	Tl 190.801†	1707.3	1760.2	496.26 ug/L	496.26 ppb	02:24:16
2	U 409.014†	16064.8	18658.5	512.40 ug/L	512.40 ppb	02:23:56
2	V 292.402†	72093.7	74313.1	497.55 ug/L	497.55 ppb	02:23:56
2	Zn 213.857†	56836.4	56893.4	492.62 ug/L	492.62 ppb	02:23:56
2	SiO2†	84288.4	84827.6	5415.4 ug/L	5415.4 ppb	02:24:58
3	Sc Radial	5738.9	5738.9	98.2 %		02:22:53
3	Y RADIAL	6092.6	6092.6	96.90 %		02:22:53
3	Al 396.153Radial†	6782.2	6926.6	4790.1 ug/L	4790.1 ppb	02:22:53
3	Ca 317.933Radial†	3298.3	3343.0	4927.4 ug/L	4927.4 ppb	02:23:13
3	Fe 238.204 Radial†	534.7	537.7	5049.9 ug/L	5049.9 ppb	02:23:13
3	K 766.490 Radial†	30744.1	28954.7	5126.1 ug/L	5126.1 ppb	02:22:53
3	Mg 279.077 IEC†	141.3	142.8	5042.4 ug/L	5042.4 ppb	02:23:13
3	Na 589.592 Radial†	27523.5	29114.9	9770.4 ug/L	9770.4 ppb	02:22:53
3	Sr 421.552†	79196.7	80672.7	502.36 ug/L	502.36 ppb	02:22:53
3	Sc 361.383	891259.4	891259.4	98.890 %		02:24:22
3	Y 371.029	724850.0	724850.0	96.507 %		02:24:22
3	Ag 328.068†	111403.3	112361.1	511.95 ug/L	511.95 ppb	02:24:27
3	As 188.979†	1175.8	1213.2	483.84 ug/L	483.84 ppb	02:24:47
3	B 249.677†	22466.9	23249.8	485.63 ug/L	485.63 ppb	02:24:27
3	Ba 233.527†	66409.6	67163.5	499.06 ug/L	499.06 ppb	02:24:27
3	Be 313.107†	1296238.1	1315902.0	480.66 ug/L	480.66 ppb	02:24:22
3	Cd 226.502†	46491.5	47208.5	498.88 ug/L	498.88 ppb	02:24:27
3	Co 228.616†	26169.4	26528.6	503.61 ug/L	503.61 ppb	02:24:27
3	Cr 267.716†	46379.0	46821.0	492.29 ug/L	492.29 ppb	02:24:27
3	Cu 324.752†	177904.8	173145.2	495.75 ug/L	495.75 ppb	02:24:27
3	Mn 257.610†	460865.8	465617.0	497.10 ug/L	497.10 ppb	02:24:22
3	Mo 202.031†	7755.0	7823.7	497.36 ug/L	497.36 ppb	02:24:47
3	Ni 231.604†	21341.3	21494.3	497.41 ug/L	497.41 ppb	02:24:27
3	P 214.914†	4442.9	4269.3	2387.2 ug/L	2387.2 ppb	02:24:47
3	Pb 220.353†	4218.8	4334.6	491.51 ug/L	491.51 ppb	02:24:47
3	S 181.975 Axial†	736.5	703.2	984.45 ug/L	984.45 ppb	02:24:47
3	Sb 206.836†	1606.1	1589.9	510.39 ug/L	510.39 ppb	02:24:47
3	Se 196.026†	829.8	867.9	520.13 ug/L	520.13 ppb	02:24:47
3	Si 251.611†	84201.7	84697.2	2523.6 ug/L	2523.6 ppb	02:24:27
3	Sn 189.927†	3009.3	3038.1	498.01 ug/L	498.01 ppb	02:24:47
3	Ti 334.940†	316645.6	321315.0	512.61 ug/L	512.61 ppb	02:24:27
3	Tl 190.801†	1679.0	1730.3	487.90 ug/L	487.90 ppb	02:24:47
3	U 409.014†	16095.4	18677.9	512.94 ug/L	512.94 ppb	02:24:27
3	V 292.402†	72355.1	74525.7	498.93 ug/L	498.93 ppb	02:24:27
3	Zn 213.857†	56876.9	56893.5	492.62 ug/L	492.62 ppb	02:24:27
3	SiO2†	83717.0	84189.3	5374.6 ug/L	5374.6 ppb	02:25:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895315.2	99.340	%	0.8409				0.85%
Sc Radial	5723.2	97.9	%	0.83				0.85%
Y 371.029	728424.9	96.983	%	0.8829				0.91%
Y RADIAL	6071.1	96.55	%	0.848				0.88%
Ag 328.068†	111783.8	509.33	ug/L	3.464	509.33	ppb	3.464	0.68%
QC value within limits for Ag 328.068 Recovery = 101.87%								
Al 396.153Radial†	6907.3	4776.7	ug/L	12.32	4776.7	ppb	12.32	0.26%
QC value within limits for Al 396.153Radial Recovery = 95.53%								
As 188.979†	1209.4	482.34	ug/L	3.587	482.34	ppb	3.587	0.74%
QC value within limits for As 188.979 Recovery = 96.47%								
B 249.677†	23082.9	482.13	ug/L	4.902	482.13	ppb	4.902	1.02%
QC value within limits for B 249.677 Recovery = 96.43%								
Ba 233.527†	66811.1	496.44	ug/L	3.943	496.44	ppb	3.943	0.79%
QC value within limits for Ba 233.527 Recovery = 99.29%								
Be 313.107†	1317947.1	481.40	ug/L	0.656	481.40	ppb	0.656	0.14%
QC value within limits for Be 313.107 Recovery = 96.28%								
Ca 317.933Radial†	3342.5	4926.6	ug/L	36.50	4926.6	ppb	36.50	0.74%

QC value within limits for Ca 317.933Radial Recovery = 98.53%

Cd 226.502†	46988.1	496.54 ug/L	3.824	496.54 ppb	3.824	0.77%
QC value within limits for Cd 226.502 Recovery = 99.31%						
Co 228.616†	26414.6	501.45 ug/L	3.929	501.45 ppb	3.929	0.78%
QC value within limits for Co 228.616 Recovery = 100.29%						
Cr 267.716†	46568.5	489.63 ug/L	3.997	489.63 ppb	3.997	0.82%
QC value within limits for Cr 267.716 Recovery = 97.93%						
Cu 324.752†	172103.3	492.77 ug/L	3.437	492.77 ppb	3.437	0.70%
QC value within limits for Cu 324.752 Recovery = 98.55%						
Fe 238.204 Radial†	537.8	5050.3 ug/L	27.41	5050.3 ppb	27.41	0.54%
QC value within limits for Fe 238.204 Radial Recovery = 101.01%						
K 766.490 Radial†	29017.6	5137.2 ug/L	9.69	5137.2 ppb	9.69	0.19%
QC value within limits for K 766.490 Radial Recovery = 102.74%						
Mg 279.077 IEC†	143.9	5081.1 ug/L	93.18	5081.1 ppb	93.18	1.83%
QC value within limits for Mg 279.077 IEC Recovery = 101.62%						
Mn 257.610†	465502.0	496.98 ug/L	0.882	496.98 ppb	0.882	0.18%
QC value within limits for Mn 257.610 Recovery = 99.40%						
Mo 202.031†	7807.1	496.31 ug/L	3.708	496.31 ppb	3.708	0.75%
QC value within limits for Mo 202.031 Recovery = 99.26%						
Na 589.592 Radial†	29105.1	9767.1 ug/L	4.10	9767.1 ppb	4.10	0.04%
QC value within limits for Na 589.592 Radial Recovery = 97.67%						
Ni 231.604†	21367.0	494.46 ug/L	4.585	494.46 ppb	4.585	0.93%
QC value within limits for Ni 231.604 Recovery = 98.89%						
P 214.914†	4270.3	2388.2 ug/L	23.25	2388.2 ppb	23.25	0.97%
QC value within limits for P 214.914 Recovery = 95.53%						
Pb 220.353†	4313.1	489.07 ug/L	3.351	489.07 ppb	3.351	0.69%
QC value within limits for Pb 220.353 Recovery = 97.81%						
S 181.975 Axial†	696.7	975.36 ug/L	13.060	975.36 ppb	13.060	1.34%
QC value within limits for S 181.975 Axial Recovery = 97.54%						
Sb 206.836†	1583.3	508.34 ug/L	5.926	508.34 ppb	5.926	1.17%
QC value within limits for Sb 206.836 Recovery = 101.67%						
Se 196.026†	862.9	517.24 ug/L	4.683	517.24 ppb	4.683	0.91%
QC value within limits for Se 196.026 Recovery = 103.45%						
Si 251.611†	84132.5	2506.7 ug/L	20.87	2506.7 ppb	20.87	0.83%
QC value within limits for Si 251.611 Recovery = 100.27%						
Sn 189.927†	3034.5	497.43 ug/L	5.027	497.43 ppb	5.027	1.01%
QC value within limits for Sn 189.927 Recovery = 99.49%						
Sr 421.552†	80676.8	502.39 ug/L	1.112	502.39 ppb	1.112	0.22%
QC value within limits for Sr 421.552 Recovery = 100.48%						
Ti 334.940†	319740.6	510.10 ug/L	3.522	510.10 ppb	3.522	0.69%
QC value within limits for Ti 334.940 Recovery = 102.02%						
Tl 190.801†	1742.3	491.23 ug/L	4.431	491.23 ppb	4.431	0.90%
QC value within limits for Tl 190.801 Recovery = 98.25%						
U 409.014†	18595.9	510.69 ug/L	3.451	510.69 ppb	3.451	0.68%
QC value within limits for U 409.014 Recovery = 102.14%						
V 292.402†	74067.0	495.88 ug/L	4.139	495.88 ppb	4.139	0.83%
QC value within limits for V 292.402 Recovery = 99.18%						
Zn 213.857†	56621.0	490.26 ug/L	4.086	490.26 ppb	4.086	0.83%
QC value within limits for Zn 213.857 Recovery = 98.05%						
SiO2†	83836.6	5352.0 ug/L	77.24	5352.0 ppb	77.24	1.44%
QC value within limits for SiO2 Recovery = 100.08%						

All analyte(s) passed QC.

Sequence No.: 100
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 02:27:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5629.6	5629.6	96.3	%			02:29:04
1	Y RADIAL	5994.6	5994.6	95.34	%			02:29:04
1	Al 396.153Radial†	-4.6	15.6	10.824	ug/L	10.824	ppb	02:29:04
1	Ca 317.933Radial†	16.1	1.1	1.6278	ug/L	1.6278	ppb	02:29:24
1	Fe 238.204 Radial†	6.9	0.3	3.1044	ug/L	3.1044	ppb	02:29:24
1	K 766.490 Radial†	2248.4	-17.8	-3.2136	ug/L	-3.2136	ppb	02:29:04
1	Mg 279.077 IEC†	2.8	1.7	61.330	ug/L	61.330	ppb	02:29:24
1	Na 589.592 Radial†	-610.7	454.0	152.36	ug/L	152.36	ppb	02:29:04
1	Sr 421.552†	-38.5	-12.6	-0.0787	ug/L	-0.0787	ppb	02:29:04
1	Sc 361.383	893949.9	893949.9	99.188	%			02:30:21
1	Y 371.029	741434.5	741434.5	98.715	%			02:30:21
1	Ag 328.068†	284.6	-5.8	-0.0263	ug/L	-0.0263	ppb	02:30:26
1	As 188.979†	-25.0	-1.0	-0.4038	ug/L	-0.4038	ppb	02:30:46
1	B 249.677†	-373.3	154.3	3.2360	ug/L	3.2360	ppb	02:30:46
1	Ba 233.527†	-27.3	-19.1	-0.1407	ug/L	-0.1407	ppb	02:30:46
1	Be 313.107†	-5553.0	-485.5	-0.1765	ug/L	-0.1765	ppb	02:30:26
1	Cd 226.502†	-178.2	15.5	0.1630	ug/L	0.1630	ppb	02:30:46
1	Co 228.616†	-73.8	-9.0	-0.1691	ug/L	-0.1691	ppb	02:30:46
1	Cr 267.716†	74.0	-4.0	-0.0426	ug/L	-0.0426	ppb	02:30:46
1	Cu 324.752†	6795.9	94.8	0.2714	ug/L	0.2714	ppb	02:30:26
1	Mn 257.610†	441.8	23.1	0.0239	ug/L	0.0239	ppb	02:30:46
1	Mo 202.031†	31.6	13.6	0.8623	ug/L	0.8623	ppb	02:30:46
1	Ni 231.604†	60.8	-25.2	-0.5835	ug/L	-0.5835	ppb	02:30:46
1	P 214.914†	231.3	9.6	5.5487	ug/L	5.5487	ppb	02:30:46
1	Pb 220.353†	-55.4	12.6	1.4321	ug/L	1.4321	ppb	02:30:46
1	S 181.975 Axial†	40.5	-0.7	-0.9812	ug/L	-0.9812	ppb	02:30:46
1	Sb 206.836†	39.7	5.8	1.8771	ug/L	1.8771	ppb	02:30:46
1	Se 196.026†	-18.1	10.5	6.1000	ug/L	6.1000	ppb	02:30:46
1	Si 251.611†	496.9	51.3	1.5139	ug/L	1.5139	ppb	02:30:46
1	Sn 189.927†	17.9	13.0	2.1348	ug/L	2.1348	ppb	02:30:46
1	Ti 334.940†	-952.5	154.6	0.2459	ug/L	0.2459	ppb	02:30:26
1	Tl 190.801†	-36.0	-3.8	-1.0610	ug/L	-1.0610	ppb	02:30:46
1	U 409.014†	-2303.9	79.0	2.1766	ug/L	2.1766	ppb	02:30:26
1	V 292.402†	-1318.1	29.5	0.2120	ug/L	0.2120	ppb	02:30:26
1	Zn 213.857†	639.8	23.2	0.2041	ug/L	0.2041	ppb	02:30:46
1	SiO2†	500.8	37.5	2.3587	ug/L	2.3587	ppb	02:31:52
2	Sc Radial	5811.6	5811.6	99.4	%			02:29:29
2	Y RADIAL	6239.4	6239.4	99.23	%			02:29:29
2	Al 396.153Radial†	-3.3	17.0	11.799	ug/L	11.799	ppb	02:29:29
2	Ca 317.933Radial†	18.8	3.3	4.9035	ug/L	4.9035	ppb	02:29:49
2	Fe 238.204 Radial†	8.3	1.6	14.576	ug/L	14.576	ppb	02:29:49
2	K 766.490 Radial†	2030.6	-309.8	-54.994	ug/L	-54.994	ppb	02:29:29
2	Mg 279.077 IEC†	0.3	-0.9	-30.164	ug/L	-30.164	ppb	02:29:49
2	Na 589.592 Radial†	-652.8	431.5	144.82	ug/L	144.82	ppb	02:29:29
2	Sr 421.552†	18.5	45.9	0.2859	ug/L	0.2859	ppb	02:29:29
2	Sc 361.383	900014.5	900014.5	99.861	%			02:30:51
2	Y 371.029	744221.5	744221.5	99.086	%			02:30:51
2	Ag 328.068†	244.7	-47.7	-0.2090	ug/L	-0.2090	ppb	02:30:56
2	As 188.979†	-30.5	-6.4	-2.5178	ug/L	-2.5178	ppb	02:31:16
2	B 249.677†	-362.6	167.5	3.5123	ug/L	3.5123	ppb	02:31:16
2	Ba 233.527†	-22.3	-13.9	-0.1007	ug/L	-0.1007	ppb	02:31:16
2	Be 313.107†	-5590.4	-485.1	-0.1762	ug/L	-0.1762	ppb	02:30:56
2	Cd 226.502†	-189.8	5.0	0.0513	ug/L	0.0513	ppb	02:31:16
2	Co 228.616†	-79.2	-13.9	-0.2622	ug/L	-0.2622	ppb	02:31:16
2	Cr 267.716†	98.7	20.2	0.2130	ug/L	0.2130	ppb	02:31:16
2	Cu 324.752†	6704.9	-42.5	-0.1209	ug/L	-0.1209	ppb	02:30:56
2	Mn 257.610†	446.8	25.1	0.0288	ug/L	0.0288	ppb	02:31:16
2	Mo 202.031†	33.3	15.0	0.9546	ug/L	0.9546	ppb	02:31:16
2	Ni 231.604†	55.0	-31.5	-0.7284	ug/L	-0.7284	ppb	02:31:16

2	P 214.914†	231.2	8.0	4.6399	ug/L	4.6399 ppb	02:31:16
2	Pb 220.353†	-52.7	15.7	1.7749	ug/L	1.7749 ppb	02:31:16
2	S 181.975 Axial†	44.2	2.7	3.7228	ug/L	3.7228 ppb	02:31:16
2	Sb 206.836†	36.0	1.8	0.6136	ug/L	0.6136 ppb	02:31:16
2	Se 196.026†	-23.0	5.8	3.4085	ug/L	3.4085 ppb	02:31:16
2	Si 251.611†	478.9	29.9	0.8923	ug/L	0.8923 ppb	02:31:16
2	Sn 189.927†	12.2	7.2	1.1772	ug/L	1.1772 ppb	02:31:16
2	Ti 334.940†	-915.9	197.7	0.3155	ug/L	0.3155 ppb	02:30:56
2	Tl 190.801†	-43.3	-10.9	-3.0495	ug/L	-3.0495 ppb	02:31:16
2	U 409.014†	-2379.9	18.6	0.5107	ug/L	0.5107 ppb	02:30:56
2	V 292.402†	-1240.0	116.6	0.7815	ug/L	0.7815 ppb	02:30:56
2	Zn 213.857†	636.2	15.3	0.1378	ug/L	0.1378 ppb	02:31:16
2	SiO2†	494.8	28.1	1.7977	ug/L	1.7977 ppb	02:31:57
3	Sc Radial	5720.4	5720.4	97.9	%		02:29:54
3	Y RADIAL	6104.0	6104.0	97.08	%		02:29:54
3	Al 396.153Radial†	-21.9	-1.9	-1.3487	ug/L	-1.3487 ppb	02:29:54
3	Ca 317.933Radial†	14.8	-0.5	-0.6676	ug/L	-0.6676 ppb	02:30:14
3	Fe 238.204 Radial†	6.9	0.3	2.5032	ug/L	2.5032 ppb	02:30:14
3	K 766.490 Radial†	2329.8	28.4	4.9770	ug/L	4.9770 ppb	02:29:54
3	Mg 279.077 IEC†	2.4	1.3	47.280	ug/L	47.280 ppb	02:30:14
3	Na 589.592 Radial†	-627.1	447.3	150.10	ug/L	150.10 ppb	02:29:54
3	Sr 421.552†	35.1	63.2	0.3933	ug/L	0.3933 ppb	02:29:54
3	Sc 361.383	905297.6	905297.6	100.45	%		02:31:21
3	Y 371.029	747984.4	747984.4	99.587	%		02:31:21
3	Ag 328.068†	315.5	21.4	0.1000	ug/L	0.1000 ppb	02:31:26
3	As 188.979†	-17.7	6.5	2.5792	ug/L	2.5792 ppb	02:31:46
3	B 249.677†	-388.2	144.2	3.0233	ug/L	3.0233 ppb	02:31:46
3	Ba 233.527†	-33.1	-24.5	-0.1799	ug/L	-0.1799 ppb	02:31:46
3	Be 313.107†	-5536.3	-398.6	-0.1451	ug/L	-0.1451 ppb	02:31:26
3	Cd 226.502†	-176.9	19.0	0.2003	ug/L	0.2003 ppb	02:31:46
3	Co 228.616†	-72.6	-6.9	-0.1307	ug/L	-0.1307 ppb	02:31:46
3	Cr 267.716†	78.4	-0.6	-0.0054	ug/L	-0.0054 ppb	02:31:46
3	Cu 324.752†	6672.0	-114.5	-0.3275	ug/L	-0.3275 ppb	02:31:26
3	Mn 257.610†	443.8	19.5	0.0202	ug/L	0.0202 ppb	02:31:46
3	Mo 202.031†	18.8	0.4	0.0270	ug/L	0.0270 ppb	02:31:46
3	Ni 231.604†	51.0	-35.8	-0.8289	ug/L	-0.8289 ppb	02:31:46
3	P 214.914†	234.2	9.7	5.6604	ug/L	5.6604 ppb	02:31:46
3	Pb 220.353†	-62.5	6.3	0.7088	ug/L	0.7088 ppb	02:31:46
3	S 181.975 Axial†	42.1	0.3	0.4355	ug/L	0.4355 ppb	02:31:46
3	Sb 206.836†	34.8	0.4	0.1674	ug/L	0.1674 ppb	02:31:46
3	Se 196.026†	-25.2	3.7	2.1735	ug/L	2.1735 ppb	02:31:46
3	Si 251.611†	495.4	43.6	1.2958	ug/L	1.2958 ppb	02:31:46
3	Sn 189.927†	16.6	11.5	1.8902	ug/L	1.8902 ppb	02:31:46
3	Ti 334.940†	-1064.3	55.3	0.0883	ug/L	0.0883 ppb	02:31:26
3	Tl 190.801†	-33.1	-0.5	-0.1308	ug/L	-0.1308 ppb	02:31:46
3	U 409.014†	-2412.9	-0.3	-0.0096	ug/L	-0.0096 ppb	02:31:26
3	V 292.402†	-1276.0	88.1	0.5828	ug/L	0.5828 ppb	02:31:26
3	Zn 213.857†	627.9	3.3	0.0327	ug/L	0.0327 ppb	02:31:46
3	SiO2†	485.3	15.7	0.9890	ug/L	0.9890 ppb	02:32:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899754.0	99.832	%	0.6300				0.63%
Sc Radial	5720.5	97.9	%	1.56				1.59%
Y 371.029	744546.8	99.130	%	0.4376				0.44%
Y RADIAL	6112.7	97.21	%	1.950				2.01%
Ag 328.068†	-10.7	-0.0451	ug/L	0.15533	-0.0451	ppb	0.15533	344.58%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.2	7.0914	ug/L	7.32553	7.0914	ppb	7.32553	103.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.1141	ug/L	2.56080	-0.1141	ppb	2.56080	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	155.3	3.2572	ug/L	0.24523	3.2572	ppb	0.24523	7.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-19.1	-0.1404	ug/L	0.03961	-0.1404	ppb	0.03961	28.20%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-456.4	-0.1659	ug/L	0.01802	-0.1659	ppb	0.01802	10.86%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.3	1.9546	ug/L	2.79989	1.9546	ppb	2.79989	143.25%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.2      0.1382 ug/L       0.07755      0.1382 ppb        0.07755  56.12%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -9.9     -0.1873 ug/L       0.06764     -0.1873 ppb        0.06764  36.11%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               5.2      0.0550 ug/L       0.13807      0.0550 ppb        0.13807 250.97%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -20.7     -0.0590 ug/L       0.30421     -0.0590 ppb        0.30421 515.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.7      6.7280 ug/L       6.80349      6.7280 ppb        6.80349 101.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -99.7     -17.744 ug/L       32.5190     -17.744 ppb        32.5190 183.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.7      26.148 ug/L       49.2716      26.148 ppb        49.2716 188.43%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              22.6      0.0243 ug/L       0.00431      0.0243 ppb        0.00431  17.75%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               9.7      0.6147 ug/L       0.51100      0.6147 ppb        0.51100  83.13%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      444.3      149.09 ug/L         3.873      149.09 ppb          3.873   2.60%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -30.8     -0.7136 ug/L       0.12334     -0.7136 ppb        0.12334  17.28%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                9.1      5.2830 ug/L       0.55975      5.2830 ppb        0.55975  10.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              11.5      1.3052 ug/L       0.54424      1.3052 ppb        0.54424  41.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.8      1.0591 ug/L       2.41319      1.0591 ppb        2.41319 227.86%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.7      0.8860 ug/L       0.88680      0.8860 ppb        0.88680 100.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.7      3.8940 ug/L       2.00780      3.8940 ppb        2.00780  51.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              41.6      1.2340 ug/L       0.31537      1.2340 ppb        0.31537  25.56%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              10.6      1.7340 ug/L       0.49754      1.7340 ppb        0.49754  28.69%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              32.1      0.2002 ug/L       0.24741      0.2002 ppb        0.24741 123.60%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             135.9      0.2165 ug/L       0.11641      0.2165 ppb        0.11641  53.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -5.1     -1.4138 ug/L       1.49098     -1.4138 ppb        1.49098 105.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               32.4      0.8926 ug/L       1.14207      0.8926 ppb        1.14207 127.95%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               78.1      0.5254 ug/L       0.28901      0.5254 ppb        0.28901  55.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              13.9      0.1249 ug/L       0.08642      0.1249 ppb        0.08642  69.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    27.1      1.7151 ug/L       0.68858      1.7151 ppb        0.68858  40.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 108
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 03:24:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5733.5	5733.5	98.1	%			03:26:12
1	Y RADIAL	6093.1	6093.1	96.90	%			03:26:12
1	Al 396.153Radial†	6755.1	6905.6	4775.7	ug/L	4775.7	ppb	03:26:12
1	Ca 317.933Radial†	3323.7	3372.1	4970.2	ug/L	4970.2	ppb	03:26:32
1	Fe 238.204 Radial†	547.1	550.9	5172.8	ug/L	5172.8	ppb	03:26:32
1	K 766.490 Radial†	30792.9	29034.0	5139.9	ug/L	5139.9	ppb	03:26:12
1	Mg 279.077 IEC†	145.3	146.9	5189.5	ug/L	5189.5	ppb	03:26:32
1	Na 589.592 Radial†	29302.1	30954.2	10388	ug/L	10388	ppb	03:26:12
1	Sr 421.552†	81573.9	83171.8	517.93	ug/L	517.93	ppb	03:26:12
1	Sc 361.383	899362.5	899362.5	99.789	%			03:27:29
1	Y 371.029	731599.3	731599.3	97.406	%			03:27:29
1	Ag 328.068†	111056.9	110999.0	505.80	ug/L	505.80	ppb	03:27:34
1	As 188.979†	1181.9	1208.6	482.01	ug/L	482.01	ppb	03:27:54
1	B 249.677†	22186.0	22763.5	475.43	ug/L	475.43	ppb	03:27:34
1	Ba 233.527†	65968.9	66116.8	491.29	ug/L	491.29	ppb	03:27:34
1	Be 313.107†	1314073.6	1321965.2	482.85	ug/L	482.85	ppb	03:27:29
1	Cd 226.502†	46359.2	46652.3	492.98	ug/L	492.98	ppb	03:27:34
1	Co 228.616†	26036.6	26157.1	496.56	ug/L	496.56	ppb	03:27:34
1	Cr 267.716†	46194.4	46213.4	485.90	ug/L	485.90	ppb	03:27:34
1	Cu 324.752†	176306.6	169922.7	486.53	ug/L	486.53	ppb	03:27:34
1	Mn 257.610†	466000.2	466563.3	498.12	ug/L	498.12	ppb	03:27:29
1	Mo 202.031†	7767.1	7765.2	493.66	ug/L	493.66	ppb	03:27:54
1	Ni 231.604†	21202.5	21160.8	489.69	ug/L	489.69	ppb	03:27:34
1	P 214.914†	4473.9	4259.8	2383.0	ug/L	2383.0	ppb	03:27:54
1	Pb 220.353†	4230.3	4307.7	488.45	ug/L	488.45	ppb	03:27:54
1	S 181.975 Axial†	744.8	704.8	986.71	ug/L	986.71	ppb	03:27:54
1	Sb 206.836†	1606.8	1575.9	505.99	ug/L	505.99	ppb	03:27:54
1	Se 196.026†	832.0	862.5	517.39	ug/L	517.39	ppb	03:27:54
1	Si 251.611†	83545.0	83272.0	2481.0	ug/L	2481.0	ppb	03:27:34
1	Sn 189.927†	3007.8	3009.2	493.29	ug/L	493.29	ppb	03:27:54
1	Ti 334.940†	314922.6	316703.4	505.26	ug/L	505.26	ppb	03:27:34
1	Tl 190.801†	1687.3	1723.4	485.96	ug/L	485.96	ppb	03:27:54
1	U 409.014†	16047.2	18482.9	507.57	ug/L	507.57	ppb	03:27:34
1	V 292.402†	71892.3	73402.7	491.44	ug/L	491.44	ppb	03:27:34
1	Zn 213.857†	56511.7	56009.4	484.94	ug/L	484.94	ppb	03:27:34
1	SiO2†	84559.7	84271.0	5380.0	ug/L	5380.0	ppb	03:29:02
2	Sc Radial	5806.6	5806.6	99.4	%			03:26:37
2	Y RADIAL	6163.8	6163.8	98.03	%			03:26:37
2	Al 396.153Radial†	6791.9	6856.1	4741.0	ug/L	4741.0	ppb	03:26:37
2	Ca 317.933Radial†	3325.8	3331.7	4910.7	ug/L	4910.7	ppb	03:26:57
2	Fe 238.204 Radial†	549.0	545.8	5125.0	ug/L	5125.0	ppb	03:26:57
2	K 766.490 Radial†	31002.7	28850.5	5107.4	ug/L	5107.4	ppb	03:26:37
2	Mg 279.077 IEC†	137.7	137.4	4853.6	ug/L	4853.6	ppb	03:26:57
2	Na 589.592 Radial†	29452.2	30729.6	10312	ug/L	10312	ppb	03:26:37
2	Sr 421.552†	82168.5	82724.6	515.14	ug/L	515.14	ppb	03:26:37
2	Sc 361.383	894850.3	894850.3	99.288	%			03:28:00
2	Y 371.029	727243.3	727243.3	96.826	%			03:28:00
2	Ag 328.068†	111374.8	111880.3	509.79	ug/L	509.79	ppb	03:28:05
2	As 188.979†	1189.0	1221.7	487.20	ug/L	487.20	ppb	03:28:25
2	B 249.677†	22161.2	22850.7	477.26	ug/L	477.26	ppb	03:28:05
2	Ba 233.527†	66147.6	66630.2	495.10	ug/L	495.10	ppb	03:28:05
2	Be 313.107†	1300816.1	1315252.8	480.41	ug/L	480.41	ppb	03:28:00
2	Cd 226.502†	46365.8	46893.2	495.53	ug/L	495.53	ppb	03:28:05
2	Co 228.616†	26080.5	26332.9	499.91	ug/L	499.91	ppb	03:28:05
2	Cr 267.716†	46296.7	46549.9	489.44	ug/L	489.44	ppb	03:28:05
2	Cu 324.752†	176483.6	170991.9	489.59	ug/L	489.59	ppb	03:28:05
2	Mn 257.610†	463640.0	466540.9	498.10	ug/L	498.10	ppb	03:28:00
2	Mo 202.031†	7836.8	7874.7	500.61	ug/L	500.61	ppb	03:28:25
2	Ni 231.604†	21234.5	21300.2	492.92	ug/L	492.92	ppb	03:28:05

2	P 214.914†	4474.3	4282.9	2395.9 ug/L	2395.9 ppb	03:28:25
2	Pb 220.353†	4236.1	4334.9	491.53 ug/L	491.53 ppb	03:28:25
2	S 181.975 Axial†	742.1	705.8	988.06 ug/L	988.06 ppb	03:28:25
2	Sb 206.836†	1619.9	1597.3	512.90 ug/L	512.90 ppb	03:28:25
2	Se 196.026†	831.7	866.5	519.54 ug/L	519.54 ppb	03:28:25
2	Si 251.611†	83743.0	83893.6	2499.4 ug/L	2499.4 ppb	03:28:05
2	Sn 189.927†	3025.2	3041.9	498.64 ug/L	498.64 ppb	03:28:25
2	Ti 334.940†	315413.6	318789.3	508.59 ug/L	508.59 ppb	03:28:05
2	Tl 190.801†	1710.8	1755.6	494.96 ug/L	494.96 ppb	03:28:25
2	U 409.014†	15975.2	18491.5	507.80 ug/L	507.80 ppb	03:28:05
2	V 292.402†	72024.0	73898.6	494.81 ug/L	494.81 ppb	03:28:05
2	Zn 213.857†	56635.5	56419.6	488.52 ug/L	488.52 ppb	03:28:05
2	SiO2†	83421.2	83551.7	5333.6 ug/L	5333.6 ppb	03:29:07
3	Sc Radial	5777.6	5777.6	98.9 %		03:27:02
3	Y RADIAL	6115.3	6115.3	97.26 %		03:27:02
3	Al 396.153Radial†	6761.1	6859.1	4743.5 ug/L	4743.5 ppb	03:27:02
3	Ca 317.933Radial†	3341.9	3364.7	4959.4 ug/L	4959.4 ppb	03:27:22
3	Fe 238.204 Radial†	550.4	549.9	5163.8 ug/L	5163.8 ppb	03:27:22
3	K 766.490 Radial†	30988.2	28992.1	5132.5 ug/L	5132.5 ppb	03:27:02
3	Mg 279.077 IEC†	143.2	143.6	5073.2 ug/L	5073.2 ppb	03:27:22
3	Na 589.592 Radial†	29241.9	30665.5	10291 ug/L	10291 ppb	03:27:02
3	Sr 421.552†	81705.7	82670.8	514.81 ug/L	514.81 ppb	03:27:02
3	Sc 361.383	907246.0	907246.0	100.66 %		03:28:31
3	Y 371.029	738937.6	738937.6	98.383 %		03:28:31
3	Ag 328.068†	111681.9	110652.8	504.23 ug/L	504.23 ppb	03:28:36
3	As 188.979†	1192.0	1208.4	481.91 ug/L	481.91 ppb	03:28:56
3	B 249.677†	22432.1	22814.9	476.51 ug/L	476.51 ppb	03:28:36
3	Ba 233.527†	66436.8	66007.2	490.47 ug/L	490.47 ppb	03:28:36
3	Be 313.107†	1322373.3	1318767.3	481.68 ug/L	481.68 ppb	03:28:31
3	Cd 226.502†	46594.6	46482.5	491.18 ug/L	491.18 ppb	03:28:36
3	Co 228.616†	26224.7	26117.2	495.80 ug/L	495.80 ppb	03:28:36
3	Cr 267.716†	46492.2	46107.0	484.78 ug/L	484.78 ppb	03:28:36
3	Cu 324.752†	177897.8	169968.2	486.66 ug/L	486.66 ppb	03:28:36
3	Mn 257.610†	468528.4	465016.9	496.47 ug/L	496.47 ppb	03:28:31
3	Mo 202.031†	7807.0	7737.2	491.88 ug/L	491.88 ppb	03:28:56
3	Ni 231.604†	21372.7	21145.2	489.33 ug/L	489.33 ppb	03:28:36
3	P 214.914†	4473.2	4220.2	2360.1 ug/L	2360.1 ppb	03:28:56
3	Pb 220.353†	4227.4	4268.0	483.95 ug/L	483.95 ppb	03:28:56
3	S 181.975 Axial†	740.9	694.5	972.18 ug/L	972.18 ppb	03:28:56
3	Sb 206.836†	1623.8	1578.9	506.91 ug/L	506.91 ppb	03:28:56
3	Se 196.026†	831.9	855.2	513.09 ug/L	513.09 ppb	03:28:56
3	Si 251.611†	83979.0	82975.6	2472.1 ug/L	2472.1 ppb	03:28:36
3	Sn 189.927†	3032.7	3007.7	493.04 ug/L	493.04 ppb	03:28:56
3	Ti 334.940†	317337.6	316360.2	504.72 ug/L	504.72 ppb	03:28:36
3	Tl 190.801†	1709.8	1731.0	488.07 ug/L	488.07 ppb	03:28:56
3	U 409.014†	16031.0	18327.1	503.28 ug/L	503.28 ppb	03:28:36
3	V 292.402†	72443.7	73324.4	490.89 ug/L	490.89 ppb	03:28:36
3	Zn 213.857†	56958.2	55960.8	484.52 ug/L	484.52 ppb	03:28:36
3	SiO2†	83149.1	82133.4	5242.9 ug/L	5242.9 ppb	03:29:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900486.3	99.914	%	0.6961				0.70%
Sc Radial	5772.6	98.8	%	0.63				0.64%
Y 371.029	732593.4	97.538	%	0.7869				0.81%
Y RADIAL	6124.1	97.40	%	0.574				0.59%
Ag 328.068†	111177.4	506.60	ug/L	2.866	506.60	ppb	2.866	0.57%
QC value within limits for Ag 328.068 Recovery = 101.32%								
Al 396.153Radial†	6873.6	4753.4	ug/L	19.36	4753.4	ppb	19.36	0.41%
QC value within limits for Al 396.153Radial Recovery = 95.07%								
As 188.979†	1212.9	483.71	ug/L	3.027	483.71	ppb	3.027	0.63%
QC value within limits for As 188.979 Recovery = 96.74%								
B 249.677†	22809.7	476.40	ug/L	0.918	476.40	ppb	0.918	0.19%
QC value within limits for B 249.677 Recovery = 95.28%								
Ba 233.527†	66251.4	492.29	ug/L	2.468	492.29	ppb	2.468	0.50%
QC value within limits for Ba 233.527 Recovery = 98.46%								
Be 313.107†	1318661.8	481.65	ug/L	1.220	481.65	ppb	1.220	0.25%
QC value within limits for Be 313.107 Recovery = 96.33%								
Ca 317.933Radial†	3356.1	4946.8	ug/L	31.72	4946.8	ppb	31.72	0.64%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.94%
Cd 226.502†            46676.0      493.23 ug/L        2.185      493.23 ppb        2.185   0.44%
   QC value within limits for Cd 226.502  Recovery = 98.65%
Co 228.616†            26202.4      497.42 ug/L        2.186      497.42 ppb        2.186   0.44%
   QC value within limits for Co 228.616  Recovery = 99.48%
Cr 267.716†            46290.1      486.71 ug/L        2.429      486.71 ppb        2.429   0.50%
   QC value within limits for Cr 267.716  Recovery = 97.34%
Cu 324.752†           170294.3      487.60 ug/L        1.729      487.60 ppb        1.729   0.35%
   QC value within limits for Cu 324.752  Recovery = 97.52%
Fe 238.204 Radial†       548.8      5153.9 ug/L       25.40      5153.9 ppb        25.40   0.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.08%
K 766.490 Radial†      28958.9      5126.6 ug/L       17.02      5126.6 ppb        17.02   0.33%
   QC value within limits for K 766.490 Radial  Recovery = 102.53%
Mg 279.077 IEC†          142.7      5038.7 ug/L      170.57      5038.7 ppb       170.57   3.39%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.77%
Mn 257.610†           466040.4      497.56 ug/L        0.945      497.56 ppb        0.945   0.19%
   QC value within limits for Mn 257.610  Recovery = 99.51%
Mo 202.031†             7792.4      495.38 ug/L        4.613      495.38 ppb        4.613   0.93%
   QC value within limits for Mo 202.031  Recovery = 99.08%
Na 589.592 Radial†     30783.1       10330 ug/L         50.9       10330 ppb         50.9   0.49%
   QC value within limits for Na 589.592 Radial  Recovery = 103.30%
Ni 231.604†            21202.0      490.65 ug/L        1.974      490.65 ppb        1.974   0.40%
   QC value within limits for Ni 231.604  Recovery = 98.13%
P 214.914†              4254.3      2379.7 ug/L       18.13      2379.7 ppb        18.13   0.76%
   QC value within limits for P 214.914  Recovery = 95.19%
Pb 220.353†             4303.5      487.98 ug/L        3.816      487.98 ppb        3.816   0.78%
   QC value within limits for Pb 220.353  Recovery = 97.60%
S 181.975 Axial†         701.7      982.32 ug/L        8.805      982.32 ppb        8.805   0.90%
   QC value within limits for S 181.975 Axial  Recovery = 98.23%
Sb 206.836†             1584.0      508.60 ug/L        3.752      508.60 ppb        3.752   0.74%
   QC value within limits for Sb 206.836  Recovery = 101.72%
Se 196.026†              861.4      516.68 ug/L        3.283      516.68 ppb        3.283   0.64%
   QC value within limits for Se 196.026  Recovery = 103.34%
Si 251.611†            83380.4      2484.2 ug/L       13.94      2484.2 ppb        13.94   0.56%
   QC value within limits for Si 251.611  Recovery = 99.37%
Sn 189.927†             3019.6      494.99 ug/L        3.163      494.99 ppb        3.163   0.64%
   QC value within limits for Sn 189.927  Recovery = 99.00%
Sr 421.552†            82855.7      515.96 ug/L        1.713      515.96 ppb        1.713   0.33%
   QC value within limits for Sr 421.552  Recovery = 103.19%
Ti 334.940†           317284.3      506.19 ug/L        2.095      506.19 ppb        2.095   0.41%
   QC value within limits for Ti 334.940  Recovery = 101.24%
Tl 190.801†             1736.6      489.66 ug/L        4.709      489.66 ppb        4.709   0.96%
   QC value within limits for Tl 190.801  Recovery = 97.93%
U 409.014†             18433.8      506.22 ug/L        2.547      506.22 ppb        2.547   0.50%
   QC value within limits for U 409.014  Recovery = 101.24%
V 292.402†             73541.9      492.38 ug/L        2.123      492.38 ppb        2.123   0.43%
   QC value within limits for V 292.402  Recovery = 98.48%
Zn 213.857†            56129.9      485.99 ug/L        2.195      485.99 ppb        2.195   0.45%
   QC value within limits for Zn 213.857  Recovery = 97.20%
SiO2†                  83318.7      5318.8 ug/L       69.70      5318.8 ppb        69.70   1.31%
   QC value within limits for SiO2  Recovery = 99.46%
All analyte(s) passed QC.
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Sequence No.: 109
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 03:31:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5784.5	5784.5	99.0	%			03:33:14
1	Y RADIAL	6168.9	6168.9	98.11	%			03:33:14
1	Al 396.153Radial†	-19.1	1.2	0.7721	ug/L	0.7721	ppb	03:33:34
1	Ca 317.933Radial†	26.0	10.7	15.810	ug/L	15.810	ppb	03:33:34
1	Fe 238.204 Radial†	8.6	1.9	17.491	ug/L	17.491	ppb	03:33:34
1	K 766.490 Radial†	2341.9	14.2	2.4509	ug/L	2.4509	ppb	03:33:14
1	Mg 279.077 IEC†	1.8	0.6	22.634	ug/L	22.634	ppb	03:33:34
1	Na 589.592 Radial†	-592.5	489.4	164.23	ug/L	164.23	ppb	03:33:14
1	Sr 421.552†	-14.4	12.8	0.0794	ug/L	0.0794	ppb	03:33:14
1	Sc 361.383	902765.2	902765.2	100.17	%			03:34:31
1	Y 371.029	746174.9	746174.9	99.346	%			03:34:31
1	Ag 328.068†	247.6	-45.5	-0.2026	ug/L	-0.2026	ppb	03:34:36
1	As 188.979†	-24.3	-0.1	-0.0184	ug/L	-0.0184	ppb	03:34:56
1	B 249.677†	-404.8	126.5	2.6523	ug/L	2.6523	ppb	03:34:56
1	Ba 233.527†	-23.3	-14.8	-0.1069	ug/L	-0.1069	ppb	03:34:56
1	Be 313.107†	-5577.3	-455.0	-0.1652	ug/L	-0.1652	ppb	03:34:36
1	Cd 226.502†	-172.5	22.9	0.2399	ug/L	0.2399	ppb	03:34:56
1	Co 228.616†	-82.3	-16.8	-0.3180	ug/L	-0.3180	ppb	03:34:56
1	Cr 267.716†	95.3	16.5	0.1727	ug/L	0.1727	ppb	03:34:56
1	Cu 324.752†	6813.9	45.9	0.1322	ug/L	0.1322	ppb	03:34:36
1	Mn 257.610†	495.7	72.6	0.0788	ug/L	0.0788	ppb	03:34:56
1	Mo 202.031†	28.5	10.2	0.6469	ug/L	0.6469	ppb	03:34:56
1	Ni 231.604†	64.4	-22.3	-0.5158	ug/L	-0.5158	ppb	03:34:56
1	P 214.914†	223.2	-0.6	-0.3979	ug/L	-0.3979	ppb	03:34:56
1	Pb 220.353†	-60.3	8.3	0.9352	ug/L	0.9352	ppb	03:34:56
1	S 181.975 Axial†	46.1	4.4	6.1664	ug/L	6.1664	ppb	03:34:56
1	Sb 206.836†	41.0	6.7	2.1390	ug/L	2.1390	ppb	03:34:56
1	Se 196.026†	-25.3	3.6	2.1266	ug/L	2.1266	ppb	03:34:56
1	Si 251.611†	489.3	38.8	1.1473	ug/L	1.1473	ppb	03:34:56
1	Sn 189.927†	9.0	4.0	0.6524	ug/L	0.6524	ppb	03:34:56
1	Ti 334.940†	-913.5	203.0	0.3219	ug/L	0.3219	ppb	03:34:36
1	Tl 190.801†	-30.8	1.7	0.4888	ug/L	0.4888	ppb	03:34:56
1	U 409.014†	-2180.9	224.6	6.1835	ug/L	6.1835	ppb	03:34:31
1	V 292.402†	-1223.0	137.4	0.9260	ug/L	0.9260	ppb	03:34:36
1	Zn 213.857†	674.0	51.0	0.4465	ug/L	0.4465	ppb	03:34:56
1	SiO2†	505.0	36.7	2.3231	ug/L	2.3231	ppb	03:36:02
2	Sc Radial	5781.6	5781.6	98.9	%			03:33:39
2	Y RADIAL	6198.0	6198.0	98.57	%			03:33:39
2	Al 396.153Radial†	-14.5	5.8	3.9968	ug/L	3.9968	ppb	03:33:59
2	Ca 317.933Radial†	28.9	13.7	20.132	ug/L	20.132	ppb	03:33:59
2	Fe 238.204 Radial†	8.2	1.5	14.195	ug/L	14.195	ppb	03:33:59
2	K 766.490 Radial†	2388.8	62.8	11.071	ug/L	11.071	ppb	03:33:39
2	Mg 279.077 IEC†	0.8	-0.3	-11.102	ug/L	-11.102	ppb	03:33:59
2	Na 589.592 Radial†	-653.8	427.1	143.31	ug/L	143.31	ppb	03:33:39
2	Sr 421.552†	1.9	29.3	0.1820	ug/L	0.1820	ppb	03:33:39
2	Sc 361.383	898696.4	898696.4	99.715	%			03:35:01
2	Y 371.029	742373.1	742373.1	98.840	%			03:35:01
2	Ag 328.068†	278.6	-13.3	-0.0612	ug/L	-0.0612	ppb	03:35:06
2	As 188.979†	-22.0	2.1	0.8357	ug/L	0.8357	ppb	03:35:26
2	B 249.677†	-420.0	109.5	2.2948	ug/L	2.2948	ppb	03:35:26
2	Ba 233.527†	-28.5	-20.1	-0.1465	ug/L	-0.1465	ppb	03:35:26
2	Be 313.107†	-5550.8	-453.7	-0.1652	ug/L	-0.1652	ppb	03:35:06
2	Cd 226.502†	-190.3	4.3	0.0433	ug/L	0.0433	ppb	03:35:26
2	Co 228.616†	-80.9	-15.8	-0.2994	ug/L	-0.2994	ppb	03:35:26
2	Cr 267.716†	61.7	-16.8	-0.1774	ug/L	-0.1774	ppb	03:35:26
2	Cu 324.752†	6756.7	19.3	0.0560	ug/L	0.0560	ppb	03:35:06
2	Mn 257.610†	473.8	52.8	0.0580	ug/L	0.0580	ppb	03:35:26
2	Mo 202.031†	18.0	-0.3	-0.0181	ug/L	-0.0181	ppb	03:35:26
2	Ni 231.604†	51.5	-34.9	-0.8090	ug/L	-0.8090	ppb	03:35:26

2	P 214.914†	232.9	10.1	5.7895	ug/L	5.7895 ppb	03:35:26
2	Pb 220.353†	-59.9	8.4	0.9517	ug/L	0.9517 ppb	03:35:26
2	S 181.975 Axial†	43.7	2.3	3.1667	ug/L	3.1667 ppb	03:35:26
2	Sb 206.836†	41.4	7.2	2.3067	ug/L	2.3067 ppb	03:35:26
2	Se 196.026†	-31.9	-3.2	-1.7935	ug/L	-1.7935 ppb	03:35:26
2	Si 251.611†	494.5	46.2	1.3784	ug/L	1.3784 ppb	03:35:26
2	Sn 189.927†	8.7	3.7	0.6113	ug/L	0.6113 ppb	03:35:26
2	Ti 334.940†	-1058.0	53.9	0.0826	ug/L	0.0826 ppb	03:35:06
2	Tl 190.801†	-36.5	-4.1	-1.1386	ug/L	-1.1386 ppb	03:35:26
2	U 409.014†	-2021.4	374.6	10.318	ug/L	10.318 ppb	03:35:01
2	V 292.402†	-1208.0	146.9	0.9873	ug/L	0.9873 ppb	03:35:06
2	Zn 213.857†	664.5	44.6	0.3935	ug/L	0.3935 ppb	03:35:26
2	SiO2†	501.3	35.2	2.2488	ug/L	2.2488 ppb	03:36:07
3	Sc Radial	5808.8	5808.8	99.4	%		03:34:04
3	Y RADIAL	6223.1	6223.1	98.97	%		03:34:04
3	Al 396.153Radial†	-12.9	7.4	5.1235	ug/L	5.1235 ppb	03:34:24
3	Ca 317.933Radial†	24.2	8.7	12.871	ug/L	12.871 ppb	03:34:24
3	Fe 238.204 Radial†	9.3	2.5	23.686	ug/L	23.686 ppb	03:34:24
3	K 766.490 Radial†	2367.0	29.6	5.1859	ug/L	5.1859 ppb	03:34:04
3	Mg 279.077 IEC†	0.6	-0.5	-18.117	ug/L	-18.117 ppb	03:34:24
3	Na 589.592 Radial†	-613.3	470.9	158.04	ug/L	158.04 ppb	03:34:04
3	Sr 421.552†	8.9	36.3	0.2260	ug/L	0.2260 ppb	03:34:04
3	Sc 361.383	893484.8	893484.8	99.137	%		03:35:32
3	Y 371.029	740417.5	740417.5	98.580	%		03:35:32
3	Ag 328.068†	312.0	22.0	0.1067	ug/L	0.1067 ppb	03:35:37
3	As 188.979†	-25.6	-1.7	-0.6564	ug/L	-0.6564 ppb	03:35:57
3	B 249.677†	-412.5	114.6	2.4002	ug/L	2.4002 ppb	03:35:57
3	Ba 233.527†	-16.9	-8.6	-0.0623	ug/L	-0.0623 ppb	03:35:57
3	Be 313.107†	-5533.9	-469.1	-0.1709	ug/L	-0.1709 ppb	03:35:37
3	Cd 226.502†	-176.2	17.3	0.1807	ug/L	0.1807 ppb	03:35:57
3	Co 228.616†	-75.9	-11.1	-0.2108	ug/L	-0.2108 ppb	03:35:57
3	Cr 267.716†	86.0	8.1	0.0851	ug/L	0.0851 ppb	03:35:57
3	Cu 324.752†	6753.5	55.6	0.1603	ug/L	0.1603 ppb	03:35:37
3	Mn 257.610†	452.5	34.1	0.0391	ug/L	0.0391 ppb	03:35:57
3	Mo 202.031†	25.2	7.1	0.4522	ug/L	0.4522 ppb	03:35:57
3	Ni 231.604†	64.1	-21.9	-0.5058	ug/L	-0.5058 ppb	03:35:57
3	P 214.914†	225.4	3.8	2.1693	ug/L	2.1693 ppb	03:35:57
3	Pb 220.353†	-64.2	3.7	0.4188	ug/L	0.4188 ppb	03:35:57
3	S 181.975 Axial†	41.1	-0.1	-0.1334	ug/L	-0.1334 ppb	03:35:57
3	Sb 206.836†	34.9	1.0	0.3138	ug/L	0.3138 ppb	03:35:57
3	Se 196.026†	-20.1	8.6	5.0372	ug/L	5.0372 ppb	03:35:57
3	Si 251.611†	481.0	35.6	1.0558	ug/L	1.0558 ppb	03:35:57
3	Sn 189.927†	3.1	-1.9	-0.3048	ug/L	-0.3048 ppb	03:35:57
3	Ti 334.940†	-1087.3	18.1	0.0287	ug/L	0.0287 ppb	03:35:37
3	Tl 190.801†	-28.6	3.7	1.0344	ug/L	1.0344 ppb	03:35:57
3	U 409.014†	-2309.2	72.5	1.9945	ug/L	1.9945 ppb	03:35:32
3	V 292.402†	-1296.4	50.7	0.3410	ug/L	0.3410 ppb	03:35:37
3	Zn 213.857†	656.0	39.9	0.3497	ug/L	0.3497 ppb	03:35:57
3	SiO2†	510.6	47.6	3.0365	ug/L	3.0365 ppb	03:36:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898315.5	99.673	%	0.5162				0.52%
Sc Radial	5791.6	99.1	%	0.25				0.26%
Y 371.029	742988.5	98.922	%	0.3898				0.39%
Y RADIAL	6196.7	98.55	%	0.431				0.44%
Ag 328.068†	-12.3	-0.0524	ug/L	0.15485	-0.0524	ppb	0.15485	295.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.8	3.2975	ug/L	2.25838	3.2975	ppb	2.25838	68.49%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.1	0.0536	ug/L	0.74864	0.0536	ppb	0.74864	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	116.9	2.4491	ug/L	0.18367	2.4491	ppb	0.18367	7.50%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-14.5	-0.1052	ug/L	0.04214	-0.1052	ppb	0.04214	40.05%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-459.3	-0.1671	ug/L	0.00330	-0.1671	ppb	0.00330	1.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.0	16.271	ug/L	3.6527	16.271	ppb	3.6527	22.45%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              14.8      0.1546 ug/L       0.10082      0.1546 ppb        0.10082  65.20%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -14.6     -0.2761 ug/L       0.05729     -0.2761 ppb        0.05729  20.75%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               2.6      0.0268 ug/L       0.18219      0.0268 ppb        0.18219 680.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              40.3      0.1162 ug/L       0.05397      0.1162 ppb        0.05397  46.45%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.0      18.458 ug/L        4.8187      18.458 ppb         4.8187  26.11%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        35.6      6.2361 ug/L       4.40509      6.2361 ppb        4.40509  70.64%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.1     -2.1951 ug/L      21.78650     -2.1951 ppb       21.78650 992.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              53.2      0.0586 ug/L       0.01986      0.0586 ppb        0.01986  33.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.7      0.3603 ug/L       0.34187      0.3603 ppb        0.34187  94.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       462.5      155.19 ug/L        10.746      155.19 ppb         10.746   6.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -26.4     -0.6102 ug/L       0.17222     -0.6102 ppb        0.17222  28.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.4      2.5203 ug/L       3.10858      2.5203 ppb        3.10858 123.34%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.8      0.7686 ug/L       0.30298      0.7686 ppb        0.30298  39.42%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.2      3.0666 ug/L       3.15105      3.0666 ppb        3.15105 102.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.0      1.5865 ug/L       1.10539      1.5865 ppb        1.10539  69.67%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.0      1.7901 ug/L       3.42776      1.7901 ppb        3.42776 191.49%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              40.2      1.1938 ug/L       0.16628      1.1938 ppb        0.16628  13.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.9      0.3196 ug/L       0.54116      0.3196 ppb        0.54116 169.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              26.1      0.1625 ug/L       0.07522      0.1625 ppb        0.07522  46.30%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              91.7      0.1444 ug/L       0.15609      0.1444 ppb        0.15609 108.09%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.5      0.1282 ug/L       1.13049      0.1282 ppb        1.13049 881.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              223.9      6.1653 ug/L       4.16170      6.1653 ppb        4.16170  67.50%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              111.6      0.7515 ug/L       0.35674      0.7515 ppb        0.35674  47.47%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              45.2      0.3966 ug/L       0.04846      0.3966 ppb        0.04846  12.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    39.9      2.5361 ug/L       0.43493      2.5361 ppb        0.43493  17.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 110
Sample ID: 1201978607|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 12/9/2009 03:38:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978607|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5715.3	5715.3	97.8	%			03:40:17
1	Y RADIAL	6136.8	6136.8	97.60	%			03:40:17
1	Al 396.153Radial†	-31.1	-11.4	-7.9359	ug/L	-7.9359	ppb	03:40:17
1	Ca 317.933Radial†	25.5	10.5	15.534	ug/L	15.534	ppb	03:40:37
1	Fe 238.204 Radial†	9.8	3.2	29.919	ug/L	29.919	ppb	03:40:37
1	K 766.490 Radial†	2364.6	66.0	11.633	ug/L	11.633	ppb	03:40:17
1	Mg 279.077 IEC†	1.1	-0.1	-1.9130	ug/L	-1.9130	ppb	03:40:37
1	Na 589.592 Radial†	-571.9	503.2	168.87	ug/L	168.87	ppb	03:40:17
1	Sr 421.552†	19.2	47.0	0.2927	ug/L	0.2927	ppb	03:40:17
1	Sc 361.383	893797.9	893797.9	99.172	%			03:41:33
1	Y 371.029	738176.5	738176.5	98.281	%			03:41:33
1	Ag 328.068†	268.9	-21.6	-0.0848	ug/L	-0.0848	ppb	03:41:38
1	As 188.979†	-24.7	-0.7	-0.2673	ug/L	-0.2673	ppb	03:41:58
1	B 249.677†	-433.8	93.2	1.9524	ug/L	1.9524	ppb	03:41:58
1	Ba 233.527†	-14.6	-6.3	-0.0436	ug/L	-0.0436	ppb	03:41:58
1	Be 313.107†	-5481.0	-413.8	-0.1501	ug/L	-0.1501	ppb	03:41:38
1	Cd 226.502†	-168.4	25.3	0.2640	ug/L	0.2640	ppb	03:41:58
1	Co 228.616†	-85.9	-21.2	-0.4038	ug/L	-0.4038	ppb	03:41:58
1	Cr 267.716†	97.2	19.4	0.2058	ug/L	0.2058	ppb	03:41:58
1	Cu 324.752†	6612.5	-89.0	-0.2530	ug/L	-0.2530	ppb	03:41:38
1	Mn 257.610†	732.3	316.1	0.3402	ug/L	0.3402	ppb	03:41:58
1	Mo 202.031†	19.6	1.4	0.0902	ug/L	0.0902	ppb	03:41:58
1	Ni 231.604†	67.7	-18.3	-0.4237	ug/L	-0.4237	ppb	03:41:58
1	P 214.914†	243.2	21.7	12.551	ug/L	12.551	ppb	03:41:58
1	Pb 220.353†	-50.6	17.4	1.9615	ug/L	1.9615	ppb	03:41:58
1	S 181.975 Axial†	47.4	6.3	8.7747	ug/L	8.7747	ppb	03:41:58
1	Sb 206.836†	39.2	5.2	1.6608	ug/L	1.6608	ppb	03:41:58
1	Se 196.026†	-30.8	-2.2	-1.1740	ug/L	-1.1740	ppb	03:41:58
1	Si 251.611†	680.1	236.1	7.0628	ug/L	7.0628	ppb	03:41:58
1	Sn 189.927†	6.6	1.7	0.2799	ug/L	0.2799	ppb	03:41:58
1	Ti 334.940†	-866.0	241.7	0.3867	ug/L	0.3867	ppb	03:41:38
1	Tl 190.801†	-39.3	-7.1	-1.9785	ug/L	-1.9785	ppb	03:41:58
1	U 409.014†	-2405.5	-23.8	-0.6599	ug/L	-0.6599	ppb	03:41:38
1	V 292.402†	-1222.9	125.2	0.8221	ug/L	0.8221	ppb	03:41:38
1	Zn 213.857†	939.1	325.1	2.8408	ug/L	2.8408	ppb	03:41:58
1	SiO2†	700.0	238.4	15.279	ug/L	15.279	ppb	03:43:04
2	Sc Radial	5660.3	5660.3	96.9	%			03:40:42
2	Y RADIAL	6067.8	6067.8	96.50	%			03:40:42
2	Al 396.153Radial†	-13.1	6.9	4.7569	ug/L	4.7569	ppb	03:40:42
2	Ca 317.933Radial†	29.8	15.2	22.383	ug/L	22.383	ppb	03:41:02
2	Fe 238.204 Radial†	8.5	2.0	18.605	ug/L	18.605	ppb	03:41:02
2	K 766.490 Radial†	2306.4	29.6	5.1621	ug/L	5.1621	ppb	03:40:42
2	Mg 279.077 IEC†	0.9	-0.2	-8.3014	ug/L	-8.3014	ppb	03:41:02
2	Na 589.592 Radial†	-557.0	512.9	172.12	ug/L	172.12	ppb	03:40:42
2	Sr 421.552†	0.1	27.4	0.1705	ug/L	0.1705	ppb	03:40:42
2	Sc 361.383	905990.9	905990.9	100.52	%			03:42:04
2	Y 371.029	747742.4	747742.4	99.555	%			03:42:04
2	Ag 328.068†	205.5	-88.3	-0.3935	ug/L	-0.3935	ppb	03:42:09
2	As 188.979†	-22.6	1.7	0.6740	ug/L	0.6740	ppb	03:42:29
2	B 249.677†	-452.9	80.1	1.6782	ug/L	1.6782	ppb	03:42:29
2	Ba 233.527†	-8.1	0.4	0.0062	ug/L	0.0062	ppb	03:42:29
2	Be 313.107†	-5530.5	-388.7	-0.1407	ug/L	-0.1407	ppb	03:42:09
2	Cd 226.502†	-183.4	12.7	0.1315	ug/L	0.1315	ppb	03:42:29
2	Co 228.616†	-76.9	-11.1	-0.2109	ug/L	-0.2109	ppb	03:42:29
2	Cr 267.716†	117.6	38.3	0.4030	ug/L	0.4030	ppb	03:42:29
2	Cu 324.752†	6674.4	-117.2	-0.3343	ug/L	-0.3343	ppb	03:42:09
2	Mn 257.610†	738.2	312.1	0.3349	ug/L	0.3349	ppb	03:42:29
2	Mo 202.031†	25.4	7.0	0.4431	ug/L	0.4431	ppb	03:42:29
2	Ni 231.604†	47.9	-38.9	-0.9018	ug/L	-0.9018	ppb	03:42:29

2	P 214.914†	236.9	12.1	7.0494 ug/L	7.0494 ppb	03:42:29
2	Pb 220.353†	-58.0	10.7	1.2127 ug/L	1.2127 ppb	03:42:29
2	S 181.975 Axial†	42.1	0.3	0.3671 ug/L	0.3671 ppb	03:42:29
2	Sb 206.836†	44.5	10.0	3.1834 ug/L	3.1834 ppb	03:42:29
2	Se 196.026†	-27.7	1.3	0.8057 ug/L	0.8057 ppb	03:42:29
2	Si 251.611†	685.7	232.4	6.9454 ug/L	6.9454 ppb	03:42:29
2	Sn 189.927†	11.1	6.0	0.9875 ug/L	0.9875 ppb	03:42:29
2	Ti 334.940†	-821.0	298.2	0.4754 ug/L	0.4754 ppb	03:42:09
2	Tl 190.801†	-33.5	-0.8	-0.2280 ug/L	-0.2280 ppb	03:42:29
2	U 409.014†	-2291.9	121.9	3.3540 ug/L	3.3540 ppb	03:42:09
2	V 292.402†	-1213.2	151.5	1.0096 ug/L	1.0096 ppb	03:42:09
2	Zn 213.857†	939.0	312.2	2.7325 ug/L	2.7325 ppb	03:42:29
2	SiO2†	695.3	224.2	14.355 ug/L	14.355 ppb	03:43:09
3	Sc Radial	5685.0	5685.0	97.3 %		03:41:07
3	Y RADIAL	6103.8	6103.8	97.07 %		03:41:07
3	Al 396.153Radial†	-20.2	-0.3	-0.2279 ug/L	-0.2279 ppb	03:41:07
3	Ca 317.933Radial†	28.7	13.9	20.533 ug/L	20.533 ppb	03:41:27
3	Fe 238.204 Radial†	8.3	1.8	16.468 ug/L	16.468 ppb	03:41:27
3	K 766.490 Radial†	2270.8	-17.5	-3.1882 ug/L	-3.1882 ppb	03:41:07
3	Mg 279.077 IEC†	0.9	-0.3	-9.4114 ug/L	-9.4114 ppb	03:41:27
3	Na 589.592 Radial†	-530.7	542.4	182.02 ug/L	182.02 ppb	03:41:07
3	Sr 421.552†	-1.4	25.9	0.1612 ug/L	0.1612 ppb	03:41:07
3	Sc 361.383	907164.8	907164.8	100.65 %		03:42:34
3	Y 371.029	749334.7	749334.7	99.767 %		03:42:34
3	Ag 328.068†	231.6	-62.7	-0.2825 ug/L	-0.2825 ppb	03:42:39
3	As 188.979†	-21.1	3.2	1.2735 ug/L	1.2735 ppb	03:42:59
3	B 249.677†	-454.5	79.1	1.6571 ug/L	1.6571 ppb	03:42:59
3	Ba 233.527†	-4.6	3.9	0.0304 ug/L	0.0304 ppb	03:42:59
3	Be 313.107†	-5466.9	-318.4	-0.1148 ug/L	-0.1148 ppb	03:42:39
3	Cd 226.502†	-181.8	14.5	0.1513 ug/L	0.1513 ppb	03:42:59
3	Co 228.616†	-73.8	-7.9	-0.1513 ug/L	-0.1513 ppb	03:42:59
3	Cr 267.716†	111.5	32.1	0.3360 ug/L	0.3360 ppb	03:42:59
3	Cu 324.752†	6703.0	-97.3	-0.2777 ug/L	-0.2777 ppb	03:42:39
3	Mn 257.610†	749.5	322.3	0.3457 ug/L	0.3457 ppb	03:42:59
3	Mo 202.031†	22.1	3.7	0.2336 ug/L	0.2336 ppb	03:42:59
3	Ni 231.604†	48.9	-38.0	-0.8789 ug/L	-0.8789 ppb	03:42:59
3	P 214.914†	234.4	9.3	5.4151 ug/L	5.4151 ppb	03:42:59
3	Pb 220.353†	-70.5	-1.6	-0.1820 ug/L	-0.1820 ppb	03:42:59
3	S 181.975 Axial†	47.1	5.2	7.2895 ug/L	7.2895 ppb	03:42:59
3	Sb 206.836†	34.6	0.1	0.0374 ug/L	0.0374 ppb	03:42:59
3	Se 196.026†	-32.2	-3.2	-1.7703 ug/L	-1.7703 ppb	03:42:59
3	Si 251.611†	668.2	214.2	6.4068 ug/L	6.4068 ppb	03:42:59
3	Sn 189.927†	9.1	4.1	0.6736 ug/L	0.6736 ppb	03:42:59
3	Ti 334.940†	-719.9	399.7	0.6361 ug/L	0.6361 ppb	03:42:39
3	Tl 190.801†	-28.9	3.8	1.0797 ug/L	1.0797 ppb	03:42:59
3	U 409.014†	-2187.6	228.4	6.2898 ug/L	6.2898 ppb	03:42:39
3	V 292.402†	-1299.4	67.4	0.4573 ug/L	0.4573 ppb	03:42:39
3	Zn 213.857†	942.5	314.6	2.7528 ug/L	2.7528 ppb	03:42:59
3	SiO2†	700.1	228.1	14.622 ug/L	14.622 ppb	03:43:14

Mean Data: 1201978607|925482|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	902317.9	100.12	%	0.821				0.82%
Sc Radial	5686.9	97.3	%	0.47				0.48%
Y 371.029	745084.6	99.201	%	0.8035				0.81%
Y RADIAL	6102.8	97.06	%	0.549				0.57%
Ag 328.068†	-57.5	-0.2536	ug/L	0.15633	-0.2536	ppb	0.15633	61.65%
Al 396.153Radial†	-1.6	-1.1356	ug/L	6.39489	-1.1356	ppb	6.39489	563.12%
As 188.979†	1.4	0.5600	ug/L	0.77670	0.5600	ppb	0.77670	138.69%
B 249.677†	84.2	1.7626	ug/L	0.16477	1.7626	ppb	0.16477	9.35%
Ba 233.527†	-0.7	-0.0023	ug/L	0.03774	-0.0023	ppb	0.03774	>999.9%
Be 313.107†	-373.6	-0.1352	ug/L	0.01828	-0.1352	ppb	0.01828	13.52%
Ca 317.933Radial†	13.2	19.483	ug/L	3.5431	19.483	ppb	3.5431	18.19%
Cd 226.502†	17.5	0.1823	ug/L	0.07146	0.1823	ppb	0.07146	39.20%
Co 228.616†	-13.4	-0.2554	ug/L	0.13199	-0.2554	ppb	0.13199	51.69%
Cr 267.716†	29.9	0.3149	ug/L	0.10026	0.3149	ppb	0.10026	31.84%
Cu 324.752†	-101.1	-0.2884	ug/L	0.04169	-0.2884	ppb	0.04169	14.46%
Fe 238.204 Radial†	2.3	21.664	ug/L	7.2285	21.664	ppb	7.2285	33.37%
K 766.490 Radial†	26.0	4.5355	ug/L	7.43029	4.5355	ppb	7.43029	163.82%

Mg 279.077 IEC†	-0.2	-6.5419 ug/L	4.04698	-6.5419 ppb	4.04698	61.86%
Mn 257.610†	316.8	0.3403 ug/L	0.00539	0.3403 ppb	0.00539	1.58%
Mo 202.031†	4.0	0.2556 ug/L	0.17749	0.2556 ppb	0.17749	69.43%
Na 589.592 Radial†	519.5	174.34 ug/L	6.847	174.34 ppb	6.847	3.93%
Ni 231.604†	-31.7	-0.7348 ug/L	0.26968	-0.7348 ppb	0.26968	36.70%
P 214.914†	14.4	8.3385 ug/L	3.73852	8.3385 ppb	3.73852	44.83%
Pb 220.353†	8.8	0.9974 ug/L	1.08785	0.9974 ppb	1.08785	109.07%
S 181.975 Axial†	3.9	5.4771 ug/L	4.48726	5.4771 ppb	4.48726	81.93%
Sb 206.836†	5.1	1.6272 ug/L	1.57322	1.6272 ppb	1.57322	96.68%
Se 196.026†	-1.4	-0.7129 ug/L	1.34850	-0.7129 ppb	1.34850	189.17%
Si 251.611†	227.6	6.8050 ug/L	0.34982	6.8050 ppb	0.34982	5.14%
Sn 189.927†	3.9	0.6470 ug/L	0.35459	0.6470 ppb	0.35459	54.81%
Sr 421.552†	33.5	0.2081 ug/L	0.07340	0.2081 ppb	0.07340	35.27%
Ti 334.940†	313.2	0.4994 ug/L	0.12641	0.4994 ppb	0.12641	25.31%
Tl 190.801†	-1.4	-0.3756 ug/L	1.53444	-0.3756 ppb	1.53444	408.52%
U 409.014†	108.8	2.9946 ug/L	3.48879	2.9946 ppb	3.48879	116.50%
V 292.402†	114.7	0.7630 ug/L	0.28084	0.7630 ppb	0.28084	36.81%
Zn 213.857†	317.3	2.7754 ug/L	0.05756	2.7754 ppb	0.05756	2.07%
SiO2†	230.2	14.752 ug/L	0.4754	14.752 ppb	0.4754	3.22%

Sequence No.: 111
Sample ID: 1201978612|925482|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 12/9/2009 03:45:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978612|925482|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5654.2	5654.2	96.8	%			03:47:40
1	Y RADIAL	6399.5	6399.5	101.8	%			03:47:40
1	Al 396.153Radial†	46226.4	47798.1	33185	ug/L	33185	ppb	03:47:20
1	Ca 317.933Radial†	11437.4	11805.7	17401	ug/L	17401	ppb	03:47:20
1	Fe 238.204 Radial†	9408.9	9717.8	90989	ug/L	90989	ppb	03:47:20
1	K 766.490 Radial†	65272.9	65111.6	11530	ug/L	11530	ppb	03:47:20
1	Mg 279.077 IEC†	402.0	414.3	14546	ug/L	14546	ppb	03:47:40
1	Na 589.592 Radial†	7780.1	9129.2	3063.6	ug/L	3063.6	ppb	03:47:20
1	Sr 421.552†	132034.3	136492.4	849.88	ug/L	849.88	ppb	03:47:20
1	Sc 361.383	896990.8	896990.8	99.526	%			03:48:39
1	Y 371.029	777814.0	777814.0	103.56	%			03:48:39
1	Ag 328.068†	135162.8	135514.0	645.38	ug/L	645.38	ppb	03:48:39
1	As 188.979†	2943.2	2981.4	1205.4	ug/L	1205.4	ppb	03:48:59
1	B 249.677†	30163.5	30837.8	633.62	ug/L	633.62	ppb	03:48:39
1	Ba 233.527†	304268.4	305726.4	2270.8	ug/L	2270.8	ppb	03:48:39
1	Be 313.107†	1135952.0	1146476.8	421.14	ug/L	421.14	ppb	03:48:39
1	Cd 226.502†	53025.4	53473.1	556.50	ug/L	556.50	ppb	03:48:39
1	Co 228.616†	20810.4	20974.9	395.13	ug/L	395.13	ppb	03:48:59
1	Cr 267.716†	34065.6	34149.3	361.39	ug/L	361.39	ppb	03:48:39
1	Cu 324.752†	176786.1	170871.6	493.63	ug/L	493.63	ppb	03:48:39
1	Mn 257.610†	1652434.6	1659884.7	1779.5	ug/L	1779.5	ppb	03:48:39
1	Mo 202.031†	6147.9	6158.8	397.70	ug/L	397.70	ppb	03:48:59
1	Ni 231.604†	20739.6	20751.8	480.28	ug/L	480.28	ppb	03:48:59
1	P 214.914†	6013.9	5819.1	3222.5	ug/L	3222.5	ppb	03:48:59
1	Pb 220.353†	6916.4	7017.8	793.90	ug/L	793.90	ppb	03:48:59
1	S 181.975 Axial†	765.4	727.5	1012.8	ug/L	1012.8	ppb	03:48:59
1	Sb 206.836†	1295.7	1267.6	407.66	ug/L	407.66	ppb	03:48:59
1	Se 196.026†	1129.6	1163.8	966.79	ug/L	966.79	ppb	03:48:59
1	Si 251.611†	544372.9	546516.7	16348	ug/L	16348	ppb	03:48:39
1	Sn 189.927†	3124.6	3134.5	516.26	ug/L	516.26	ppb	03:48:59
1	Ti 334.940†	1030118.5	1036141.0	1654.3	ug/L	1654.3	ppb	03:48:39
1	Tl 190.801†	3213.4	3261.2	933.73	ug/L	933.73	ppb	03:48:59
1	U 409.014†	-5676.4	-3301.6	-103.09	ug/L	-103.09	ppb	03:48:39
1	V 292.402†	106461.7	108327.3	705.43	ug/L	705.43	ppb	03:48:39
1	Zn 213.857†	109194.7	109093.1	940.24	ug/L	940.24	ppb	03:48:39
1	SiO2†	542966.8	545086.1	34939	ug/L	34939	ppb	03:49:59
2	Sc Radial	5783.6	5783.6	99.0	%			03:48:05
2	Y RADIAL	6521.3	6521.3	103.7	%			03:48:05
2	Al 396.153Radial†	45610.3	46106.0	32010	ug/L	32010	ppb	03:47:45
2	Ca 317.933Radial†	11308.2	11410.5	16818	ug/L	16818	ppb	03:47:45
2	Fe 238.204 Radial†	9251.8	9341.4	87465	ug/L	87465	ppb	03:47:45
2	K 766.490 Radial†	64500.6	62821.1	11123	ug/L	11123	ppb	03:47:45
2	Mg 279.077 IEC†	399.5	402.5	14131	ug/L	14131	ppb	03:48:05
2	Na 589.592 Radial†	7718.4	8886.8	2982.2	ug/L	2982.2	ppb	03:47:45
2	Sr 421.552†	130108.7	131492.0	818.74	ug/L	818.74	ppb	03:47:45
2	Sc 361.383	903061.5	903061.5	100.20	%			03:49:06
2	Y 371.029	784236.0	784236.0	104.41	%			03:49:06
2	Ag 328.068†	135682.0	135119.2	642.47	ug/L	642.47	ppb	03:49:06
2	As 188.979†	2972.9	2991.1	1208.6	ug/L	1208.6	ppb	03:49:26
2	B 249.677†	30186.8	30657.4	630.30	ug/L	630.30	ppb	03:49:06
2	Ba 233.527†	304502.1	303904.5	2257.1	ug/L	2257.1	ppb	03:49:06
2	Be 313.107†	1139618.6	1142463.4	419.67	ug/L	419.67	ppb	03:49:06
2	Cd 226.502†	53201.9	53291.2	554.93	ug/L	554.93	ppb	03:49:06
2	Co 228.616†	20980.4	21004.1	395.74	ug/L	395.74	ppb	03:49:26
2	Cr 267.716†	34171.0	34024.4	360.02	ug/L	360.02	ppb	03:49:06
2	Cu 324.752†	177401.9	170292.1	491.79	ug/L	491.79	ppb	03:49:06
2	Mn 257.610†	1654446.6	1650731.5	1769.4	ug/L	1769.4	ppb	03:49:06
2	Mo 202.031†	6184.3	6153.6	397.12	ug/L	397.12	ppb	03:49:26
2	Ni 231.604†	20940.0	20811.8	481.67	ug/L	481.67	ppb	03:49:26

2	P 214.914†	6063.5	5827.9	3230.3	ug/L	3230.3	ppb	03:49:26
2	Pb 220.353†	6957.7	7012.3	793.29	ug/L	793.29	ppb	03:49:26
2	S 181.975 Axial†	758.6	715.5	996.28	ug/L	996.28	ppb	03:49:26
2	Sb 206.836†	1313.5	1276.6	410.45	ug/L	410.45	ppb	03:49:26
2	Se 196.026†	1142.6	1169.2	958.56	ug/L	958.56	ppb	03:49:26
2	Si 251.611†	545222.3	543687.5	16264	ug/L	16264	ppb	03:49:06
2	Sn 189.927†	3122.5	3111.3	512.35	ug/L	512.35	ppb	03:49:26
2	Ti 334.940†	1033480.7	1032538.7	1648.5	ug/L	1648.5	ppb	03:49:06
2	Tl 190.801†	3262.3	3288.4	941.19	ug/L	941.19	ppb	03:49:26
2	U 409.014†	-5781.5	-3368.1	-104.48	ug/L	-104.48	ppb	03:49:06
2	V 292.402†	106867.3	108013.0	703.88	ug/L	703.88	ppb	03:49:06
2	Zn 213.857†	109307.4	108468.0	935.12	ug/L	935.12	ppb	03:49:06
2	SiO2†	544578.7	543027.4	34807	ug/L	34807	ppb	03:50:05
3	Sc Radial	5775.4	5775.4	98.8	%			03:48:30
3	Y RADIAL	6529.1	6529.1	103.8	%			03:48:30
3	Al 396.153Radial†	45061.6	45616.3	31669	ug/L	31669	ppb	03:48:10
3	Ca 317.933Radial†	11192.4	11309.5	16670	ug/L	16670	ppb	03:48:10
3	Fe 238.204 Radial†	9178.0	9280.0	86890	ug/L	86890	ppb	03:48:10
3	K 766.490 Radial†	64061.4	62469.2	11061	ug/L	11061	ppb	03:48:10
3	Mg 279.077 IEC†	400.7	404.3	14198	ug/L	14198	ppb	03:48:30
3	Na 589.592 Radial†	7620.6	8798.9	2952.7	ug/L	2952.7	ppb	03:48:10
3	Sr 421.552†	128231.6	129779.3	808.08	ug/L	808.08	ppb	03:48:10
3	Sc 361.383	904330.1	904330.1	100.34	%			03:49:34
3	Y 371.029	785023.7	785023.7	104.52	%			03:49:34
3	Ag 328.068†	135781.8	135028.7	641.89	ug/L	641.89	ppb	03:49:34
3	As 188.979†	2947.7	2961.9	1196.9	ug/L	1196.9	ppb	03:49:54
3	B 249.677†	30250.6	30678.7	630.83	ug/L	630.83	ppb	03:49:34
3	Ba 233.527†	304973.8	303948.3	2257.4	ug/L	2257.4	ppb	03:49:34
3	Be 313.107†	1142715.5	1143954.4	420.21	ug/L	420.21	ppb	03:49:34
3	Cd 226.502†	53278.5	53293.0	555.00	ug/L	555.00	ppb	03:49:34
3	Co 228.616†	20826.2	20821.0	392.27	ug/L	392.27	ppb	03:49:54
3	Cr 267.716†	34257.5	34062.7	360.41	ug/L	360.41	ppb	03:49:34
3	Cu 324.752†	177538.3	170179.7	491.44	ug/L	491.44	ppb	03:49:34
3	Mn 257.610†	1657601.7	1651559.6	1770.2	ug/L	1770.2	ppb	03:49:34
3	Mo 202.031†	6150.8	6111.6	394.41	ug/L	394.41	ppb	03:49:54
3	Ni 231.604†	20790.2	20633.2	477.54	ug/L	477.54	ppb	03:49:54
3	P 214.914†	6020.1	5776.2	3200.8	ug/L	3200.8	ppb	03:49:54
3	Pb 220.353†	6930.6	6975.6	789.11	ug/L	789.11	ppb	03:49:54
3	S 181.975 Axial†	760.7	716.5	997.82	ug/L	997.82	ppb	03:49:54
3	Sb 206.836†	1290.8	1252.2	402.63	ug/L	402.63	ppb	03:49:54
3	Se 196.026†	1131.8	1156.8	949.54	ug/L	949.54	ppb	03:49:54
3	Si 251.611†	546458.9	544156.5	16278	ug/L	16278	ppb	03:49:34
3	Sn 189.927†	3116.2	3100.7	510.59	ug/L	510.59	ppb	03:49:54
3	Ti 334.940†	1034517.4	1032125.0	1647.9	ug/L	1647.9	ppb	03:49:34
3	Tl 190.801†	3235.6	3257.1	932.46	ug/L	932.46	ppb	03:49:54
3	U 409.014†	-5891.8	-3470.0	-107.21	ug/L	-107.21	ppb	03:49:34
3	V 292.402†	107086.7	108082.0	704.38	ug/L	704.38	ppb	03:49:34
3	Zn 213.857†	109459.2	108466.3	935.19	ug/L	935.19	ppb	03:49:34
3	SiO2†	540703.3	538402.7	34511	ug/L	34511	ppb	03:50:10

Mean Data: 1201978612|925482|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901460.8	100.02	%	0.435				0.44%
Sc Radial	5737.8	98.2	%	1.24				1.26%
Y 371.029	782357.9	104.16	%	0.527				0.51%
Y RADIAL	6483.3	103.1	%	1.16				1.12%
Ag 328.068†	135220.6	643.25	ug/L	1.871	643.25	ppb	1.871	0.29%
Al 396.153Radial†	46506.8	32288	ug/L	795.1	32288	ppb	795.1	2.46%
As 188.979†	2978.1	1203.6	ug/L	6.02	1203.6	ppb	6.02	0.50%
B 249.677†	30724.7	631.59	ug/L	1.782	631.59	ppb	1.782	0.28%
Ba 233.527†	304526.4	2261.8	ug/L	7.79	2261.8	ppb	7.79	0.34%
Be 313.107†	1144298.2	420.34	ug/L	0.746	420.34	ppb	0.746	0.18%
Ca 317.933Radial†	11508.6	16963	ug/L	386.5	16963	ppb	386.5	2.28%
Cd 226.502†	53352.4	555.48	ug/L	0.886	555.48	ppb	0.886	0.16%
Co 228.616†	20933.3	394.38	ug/L	1.854	394.38	ppb	1.854	0.47%
Cr 267.716†	34078.8	360.61	ug/L	0.709	360.61	ppb	0.709	0.20%
Cu 324.752†	170447.8	492.28	ug/L	1.176	492.28	ppb	1.176	0.24%
Fe 238.204 Radial†	9446.4	88448	ug/L	2219.4	88448	ppb	2219.4	2.51%
K 766.490 Radial†	63467.3	11238	ug/L	254.5	11238	ppb	254.5	2.26%

Mg 279.077 IEC†	407.0	14292	ug/L	223.0	14292	ppb	223.0	1.56%
Mn 257.610†	1654058.6	1773.0	ug/L	5.61	1773.0	ppb	5.61	0.32%
Mo 202.031†	6141.4	396.41	ug/L	1.756	396.41	ppb	1.756	0.44%
Na 589.592 Radial†	8938.3	2999.5	ug/L	57.40	2999.5	ppb	57.40	1.91%
Ni 231.604†	20732.3	479.83	ug/L	2.104	479.83	ppb	2.104	0.44%
P 214.914†	5807.7	3217.9	ug/L	15.26	3217.9	ppb	15.26	0.47%
Pb 220.353†	7001.9	792.10	ug/L	2.606	792.10	ppb	2.606	0.33%
S 181.975 Axial†	719.8	1002.3	ug/L	9.15	1002.3	ppb	9.15	0.91%
Sb 206.836†	1265.5	406.91	ug/L	3.966	406.91	ppb	3.966	0.97%
Se 196.026†	1163.3	958.29	ug/L	8.632	958.29	ppb	8.632	0.90%
Si 251.611†	544786.9	16296	ug/L	45.3	16296	ppb	45.3	0.28%
Sn 189.927†	3115.5	513.07	ug/L	2.902	513.07	ppb	2.902	0.57%
Sr 421.552†	132587.9	825.57	ug/L	21.720	825.57	ppb	21.720	2.63%
Ti 334.940†	1033601.6	1650.2	ug/L	3.54	1650.2	ppb	3.54	0.21%
Tl 190.801†	3268.9	935.79	ug/L	4.719	935.79	ppb	4.719	0.50%
U 409.014†	-3379.9	-104.93	ug/L	2.097	-104.93	ppb	2.097	2.00%
V 292.402†	108140.8	704.57	ug/L	0.791	704.57	ppb	0.791	0.11%
Zn 213.857†	108675.8	936.85	ug/L	2.936	936.85	ppb	2.936	0.31%
SiO2†	542172.1	34753	ug/L	219.3	34753	ppb	219.3	0.63%

Sequence No.: 112
Sample ID: 241613001|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 12/9/2009 03:52:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613001|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5768.6	5768.6	98.7	%			03:54:16
1	Y RADIAL	7055.0	7055.0	112.2	%			03:54:16
1	Al 396.153Radial†	67427.4	68328.7	47462	ug/L	47462	ppb	03:54:16
1	Ca 317.933Radial†	5745.8	5805.3	8556.7	ug/L	8556.7	ppb	03:54:16
1	Fe 238.204 Radial†	9147.4	9260.1	86692	ug/L	86692	ppb	03:54:16
1	K 766.490 Radial†	28502.2	26522.8	4680.2	ug/L	4680.2	ppb	03:54:16
1	Mg 279.077 IEC†	242.8	244.8	8561.2	ug/L	8561.2	ppb	03:54:36
1	Na 589.592 Radial†	4280.8	5424.7	1820.4	ug/L	1820.4	ppb	03:54:16
1	Sr 421.552†	19278.2	19557.4	121.72	ug/L	121.72	ppb	03:54:16
1	Sc 361.383	900406.9	900406.9	99.905	%			03:55:33
1	Y 371.029	840609.0	840609.0	111.92	%			03:55:33
1	Ag 328.068†	-5275.7	-5573.5	2.7248	ug/L	2.7248	ppb	03:55:38
1	As 188.979†	-61.1	-36.9	14.688	ug/L	14.688	ppb	03:55:58
1	B 249.677†	861.2	1392.7	17.660	ug/L	17.660	ppb	03:55:38
1	Ba 233.527†	60658.7	60724.9	453.45	ug/L	453.45	ppb	03:55:38
1	Be 313.107†	-2851.2	2259.0	4.5539	ug/L	4.5539	ppb	03:55:38
1	Cd 226.502†	676.9	872.7	0.5800	ug/L	0.5800	ppb	03:55:58
1	Co 228.616†	873.5	939.7	12.792	ug/L	12.792	ppb	03:55:58
1	Cr 267.716†	3155.4	3079.7	34.094	ug/L	34.094	ppb	03:55:58
1	Cu 324.752†	13951.6	7208.1	25.050	ug/L	25.050	ppb	03:55:38
1	Mn 257.610†	2300642.4	2302410.6	2464.6	ug/L	2464.6	ppb	03:55:33
1	Mo 202.031†	262.6	244.5	21.682	ug/L	21.682	ppb	03:55:58
1	Ni 231.604†	1542.6	1457.6	33.740	ug/L	33.740	ppb	03:55:58
1	P 214.914†	974.6	752.0	376.53	ug/L	376.53	ppb	03:55:58
1	Pb 220.353†	824.0	893.2	104.53	ug/L	104.53	ppb	03:55:58
1	S 181.975 Axial†	213.1	171.7	231.31	ug/L	231.31	ppb	03:55:58
1	Sb 206.836†	48.1	13.9	-0.9810	ug/L	-0.9810	ppb	03:55:58
1	Se 196.026†	-362.2	-333.8	88.814	ug/L	88.814	ppb	03:55:58
1	Si 251.611†	991387.1	991881.3	29691	ug/L	29691	ppb	03:55:33
1	Sn 189.927†	-16.5	-21.5	-1.4426	ug/L	-1.4426	ppb	03:55:58
1	Ti 334.940†	1187080.1	1189325.3	1898.5	ug/L	1898.5	ppb	03:55:33
1	Tl 190.801†	-139.0	-106.6	0.1175	ug/L	0.1175	ppb	03:55:58
1	U 409.014†	-9717.5	-7324.9	-212.75	ug/L	-212.75	ppb	03:55:33
1	V 292.402†	11459.1	12828.3	69.465	ug/L	69.465	ppb	03:55:38
1	Zn 213.857†	36657.2	36070.3	306.31	ug/L	306.31	ppb	03:55:38
1	SiO2†	1003135.9	1003623.5	64376	ug/L	64376	ppb	03:57:07
2	Sc Radial	5852.2	5852.2	100	%			03:54:41
2	Y RADIAL	7181.0	7181.0	114.2	%			03:54:41
2	Al 396.153Radial†	67983.5	67907.6	47170	ug/L	47170	ppb	03:54:41
2	Ca 317.933Radial†	5786.1	5762.4	8493.4	ug/L	8493.4	ppb	03:54:41
2	Fe 238.204 Radial†	9209.0	9189.2	86028	ug/L	86028	ppb	03:54:41
2	K 766.490 Radial†	28730.3	26337.8	4647.4	ug/L	4647.4	ppb	03:54:41
2	Mg 279.077 IEC†	239.3	237.8	8315.1	ug/L	8315.1	ppb	03:55:01
2	Na 589.592 Radial†	4246.0	5327.9	1787.9	ug/L	1787.9	ppb	03:54:41
2	Sr 421.552†	19399.5	19399.4	120.74	ug/L	120.74	ppb	03:54:41
2	Sc 361.383	913955.9	913955.9	101.41	%			03:56:04
2	Y 371.029	852194.3	852194.3	113.46	%			03:56:04
2	Ag 328.068†	-5369.0	-5587.2	2.4487	ug/L	2.4487	ppb	03:56:09
2	As 188.979†	-66.1	-41.0	13.007	ug/L	13.007	ppb	03:56:29
2	B 249.677†	963.1	1480.4	19.589	ug/L	19.589	ppb	03:56:09
2	Ba 233.527†	60781.0	59945.4	447.65	ug/L	447.65	ppb	03:56:09
2	Be 313.107†	-2768.3	2383.1	4.6024	ug/L	4.6024	ppb	03:56:09
2	Cd 226.502†	684.0	869.6	0.6136	ug/L	0.6136	ppb	03:56:29
2	Co 228.616†	875.2	928.5	12.582	ug/L	12.582	ppb	03:56:29
2	Cr 267.716†	3136.9	3014.7	33.398	ug/L	33.398	ppb	03:56:29
2	Cu 324.752†	14092.0	7139.6	24.820	ug/L	24.820	ppb	03:56:09
2	Mn 257.610†	2332848.5	2300030.9	2462.0	ug/L	2462.0	ppb	03:56:04
2	Mo 202.031†	261.7	239.7	21.331	ug/L	21.331	ppb	03:56:29
2	Ni 231.604†	1562.7	1454.5	33.669	ug/L	33.669	ppb	03:56:29

2	P 214.914†	1000.3	762.9	383.28	ug/L	383.28 ppb	03:56:29
2	Pb 220.353†	808.9	866.2	101.46	ug/L	101.46 ppb	03:56:29
2	S 181.975 Axial†	204.2	159.8	214.57	ug/L	214.57 ppb	03:56:29
2	Sb 206.836†	39.7	4.9	-3.8405	ug/L	-3.8405 ppb	03:56:29
2	Se 196.026†	-376.8	-342.8	81.463	ug/L	81.463 ppb	03:56:29
2	Si 251.611†	1006182.1	991760.0	29687	ug/L	29687 ppb	03:56:04
2	Sn 189.927†	-18.7	-23.4	-1.7732	ug/L	-1.7732 ppb	03:56:29
2	Ti 334.940†	1206009.7	1190377.2	1900.1	ug/L	1900.1 ppb	03:56:04
2	Tl 190.801†	-149.1	-114.5	-2.1122	ug/L	-2.1122 ppb	03:56:29
2	U 409.014†	-9820.3	-7282.1	-211.49	ug/L	-211.49 ppb	03:56:04
2	V 292.402†	11538.3	12736.4	68.949	ug/L	68.949 ppb	03:56:09
2	Zn 213.857†	36851.1	35717.5	303.30	ug/L	303.30 ppb	03:56:09
2	SiO2†	991439.1	977204.0	62681	ug/L	62681 ppb	03:57:13
3	Sc Radial	5943.4	5943.4	102	%		03:55:06
3	Y RADIAL	7227.1	7227.1	114.9	%		03:55:06
3	Al 396.153Radial†	69200.3	68062.9	47277	ug/L	47277 ppb	03:55:06
3	Ca 317.933Radial†	5863.4	5749.8	8474.8	ug/L	8474.8 ppb	03:55:06
3	Fe 238.204 Radial†	9340.8	9177.7	85920	ug/L	85920 ppb	03:55:06
3	K 766.490 Radial†	29156.3	26316.7	4643.7	ug/L	4643.7 ppb	03:55:06
3	Mg 279.077 IEC†	241.0	235.8	8246.2	ug/L	8246.2 ppb	03:55:26
3	Na 589.592 Radial†	4365.3	5380.2	1805.5	ug/L	1805.5 ppb	03:55:06
3	Sr 421.552†	19806.9	19502.9	121.38	ug/L	121.38 ppb	03:55:06
3	Sc 361.383	907206.6	907206.6	100.66	%		03:56:35
3	Y 371.029	847453.4	847453.4	112.83	%		03:56:35
3	Ag 328.068†	-5341.6	-5599.3	2.3584	ug/L	2.3584 ppb	03:56:40
3	As 188.979†	-71.9	-47.2	10.500	ug/L	10.500 ppb	03:57:00
3	B 249.677†	979.1	1503.4	20.085	ug/L	20.085 ppb	03:56:40
3	Ba 233.527†	60375.5	59988.5	447.96	ug/L	447.96 ppb	03:56:40
3	Be 313.107†	-2977.8	2154.7	4.5122	ug/L	4.5122 ppb	03:56:40
3	Cd 226.502†	675.3	866.0	0.5862	ug/L	0.5862 ppb	03:57:00
3	Co 228.616†	861.5	921.2	12.453	ug/L	12.453 ppb	03:57:00
3	Cr 267.716†	3144.2	3045.0	33.713	ug/L	33.713 ppb	03:57:00
3	Cu 324.752†	13982.7	7134.4	24.799	ug/L	24.799 ppb	03:56:40
3	Mn 257.610†	2313766.4	2298188.5	2460.0	ug/L	2460.0 ppb	03:56:35
3	Mo 202.031†	256.4	236.4	21.109	ug/L	21.109 ppb	03:57:00
3	Ni 231.604†	1546.4	1449.7	33.558	ug/L	33.558 ppb	03:57:00
3	P 214.914†	989.1	759.1	381.16	ug/L	381.16 ppb	03:57:00
3	Pb 220.353†	815.8	878.9	102.94	ug/L	102.94 ppb	03:57:00
3	S 181.975 Axial†	212.4	169.5	228.17	ug/L	228.17 ppb	03:57:00
3	Sb 206.836†	51.5	16.9	-0.0421	ug/L	-0.0421 ppb	03:57:00
3	Se 196.026†	-371.1	-339.8	82.834	ug/L	82.834 ppb	03:57:00
3	Si 251.611†	998107.8	991120.3	29668	ug/L	29668 ppb	03:56:35
3	Sn 189.927†	-22.5	-27.3	-2.4227	ug/L	-2.4227 ppb	03:57:00
3	Ti 334.940†	1194880.3	1188168.5	1896.6	ug/L	1896.6 ppb	03:56:35
3	Tl 190.801†	-154.8	-121.3	-4.0388	ug/L	-4.0388 ppb	03:57:00
3	U 409.014†	-9682.7	-7217.5	-209.69	ug/L	-209.69 ppb	03:56:35
3	V 292.402†	11455.3	12738.7	68.983	ug/L	68.983 ppb	03:56:40
3	Zn 213.857†	36563.5	35702.2	303.18	ug/L	303.18 ppb	03:56:40
3	SiO2†	999590.8	992575.9	63667	ug/L	63667 ppb	03:57:18

Mean Data: 241613001|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907189.8	100.66	%	0.752				0.75%
Sc Radial	5854.7	100	%	1.5				1.49%
Y 371.029	846752.2	112.74	%	0.775				0.69%
Y RADIAL	7154.4	113.8	%	1.42				1.25%
Ag 328.068†	-5586.7	2.5106	ug/L	0.19091	2.5106	ppb	0.19091	7.60%
Al 396.153Radial†	68099.7	47303	ug/L	147.9	47303	ppb	147.9	0.31%
As 188.979†	-41.7	12.732	ug/L	2.1079	12.732	ppb	2.1079	16.56%
B 249.677†	1458.8	19.111	ug/L	1.2809	19.111	ppb	1.2809	6.70%
Ba 233.527†	60219.6	449.69	ug/L	3.263	449.69	ppb	3.263	0.73%
Be 313.107†	2265.6	4.5562	ug/L	0.04514	4.5562	ppb	0.04514	0.99%
Ca 317.933Radial†	5772.5	8508.3	ug/L	42.92	8508.3	ppb	42.92	0.50%
Cd 226.502†	869.4	0.5933	ug/L	0.01790	0.5933	ppb	0.01790	3.02%
Co 228.616†	929.8	12.609	ug/L	0.1712	12.609	ppb	0.1712	1.36%
Cr 267.716†	3046.5	33.735	ug/L	0.3485	33.735	ppb	0.3485	1.03%
Cu 324.752†	7160.7	24.890	ug/L	0.1391	24.890	ppb	0.1391	0.56%
Fe 238.204 Radial†	9209.0	86213	ug/L	418.0	86213	ppb	418.0	0.48%
K 766.490 Radial†	26392.5	4657.1	ug/L	20.10	4657.1	ppb	20.10	0.43%

Mg 279.077 IEC†	239.5	8374.1	ug/L	165.61	8374.1	ppb	165.61	1.98%
Mn 257.610†	2300210.0	2462.2	ug/L	2.29	2462.2	ppb	2.29	0.09%
Mo 202.031†	240.2	21.374	ug/L	0.2889	21.374	ppb	0.2889	1.35%
Na 589.592 Radial†	5377.6	1804.6	ug/L	16.25	1804.6	ppb	16.25	0.90%
Ni 231.604†	1453.9	33.656	ug/L	0.0918	33.656	ppb	0.0918	0.27%
P 214.914†	758.0	380.33	ug/L	3.453	380.33	ppb	3.453	0.91%
Pb 220.353†	879.4	102.98	ug/L	1.535	102.98	ppb	1.535	1.49%
S 181.975 Axial†	167.0	224.69	ug/L	8.897	224.69	ppb	8.897	3.96%
Sb 206.836†	11.9	-1.6212	ug/L	1.97850	-1.6212	ppb	1.97850	122.04%
Se 196.026†	-338.8	84.370	ug/L	3.9088	84.370	ppb	3.9088	4.63%
Si 251.611†	991587.2	29682	ug/L	12.2	29682	ppb	12.2	0.04%
Sn 189.927†	-24.1	-1.8795	ug/L	0.49862	-1.8795	ppb	0.49862	26.53%
Sr 421.552†	19486.6	121.28	ug/L	0.500	121.28	ppb	0.500	0.41%
Ti 334.940†	1189290.3	1898.4	ug/L	1.76	1898.4	ppb	1.76	0.09%
Tl 190.801†	-114.2	-2.0112	ug/L	2.07996	-2.0112	ppb	2.07996	103.42%
U 409.014†	-7274.9	-211.31	ug/L	1.537	-211.31	ppb	1.537	0.73%
V 292.402†	12767.8	69.132	ug/L	0.2882	69.132	ppb	0.2882	0.42%
Zn 213.857†	35830.0	304.27	ug/L	1.773	304.27	ppb	1.773	0.58%
SiO2†	991134.4	63575	ug/L	851.1	63575	ppb	851.1	1.34%

Sequence No.: 113
Sample ID: 1201978608|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 114
Date Collected: 12/9/2009 03:59:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978608|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5901.3	5901.3	101	%			04:01:24
1	Y RADIAL	7185.1	7185.1	114.3	%			04:01:24
1	Al 396.153Radial†	70282.5	69619.3	48358	ug/L	48358	ppb	04:01:24
1	Ca 317.933Radial†	5783.2	5711.3	8418.2	ug/L	8418.2	ppb	04:01:24
1	Fe 238.204 Radial†	9298.9	9201.6	86144	ug/L	86144	ppb	04:01:24
1	K 766.490 Radial†	29393.2	26755.5	4726.5	ug/L	4726.5	ppb	04:01:24
1	Mg 279.077 IEC†	252.3	248.6	8698.3	ug/L	8698.3	ppb	04:01:44
1	Na 589.592 Radial†	4542.7	5586.4	1874.7	ug/L	1874.7	ppb	04:01:24
1	Sr 421.552†	20351.2	20180.6	125.60	ug/L	125.60	ppb	04:01:24
1	Sc 361.383	905543.7	905543.7	100.47	%			04:02:42
1	Y 371.029	845678.7	845678.7	112.59	%			04:02:42
1	Ag 328.068†	-5305.0	-5572.7	2.5551	ug/L	2.5551	ppb	04:02:47
1	As 188.979†	-72.5	-48.0	9.2961	ug/L	9.2961	ppb	04:03:07
1	B 249.677†	934.1	1460.4	19.157	ug/L	19.157	ppb	04:02:47
1	Ba 233.527†	59021.9	58751.5	438.80	ug/L	438.80	ppb	04:02:47
1	Be 313.107†	-1376.9	3742.6	4.8726	ug/L	4.8726	ppb	04:02:47
1	Cd 226.502†	683.1	875.0	0.6582	ug/L	0.6582	ppb	04:03:07
1	Co 228.616†	795.0	856.6	11.456	ug/L	11.456	ppb	04:03:07
1	Cr 267.716†	3238.8	3144.9	34.767	ug/L	34.767	ppb	04:03:07
1	Cu 324.752†	13930.0	7107.5	24.734	ug/L	24.734	ppb	04:02:47
1	Mn 257.610†	1940718.8	1931124.9	2068.4	ug/L	2068.4	ppb	04:02:42
1	Mo 202.031†	259.8	240.2	21.369	ug/L	21.369	ppb	04:03:07
1	Ni 231.604†	1494.4	1400.8	32.427	ug/L	32.427	ppb	04:03:07
1	P 214.914†	1014.7	786.4	397.12	ug/L	397.12	ppb	04:03:07
1	Pb 220.353†	707.3	772.4	91.122	ug/L	91.122	ppb	04:03:07
1	S 181.975 Axial†	201.4	158.9	213.12	ug/L	213.12	ppb	04:03:07
1	Sb 206.836†	47.0	12.5	-1.1973	ug/L	-1.1973	ppb	04:03:07
1	Se 196.026†	-372.1	-341.5	82.751	ug/L	82.751	ppb	04:03:07
1	Si 251.611†	1079922.7	1074369.5	32160	ug/L	32160	ppb	04:02:42
1	Sn 189.927†	-27.8	-32.7	-3.2930	ug/L	-3.2930	ppb	04:03:07
1	Ti 334.940†	1122734.2	1118543.2	1785.5	ug/L	1785.5	ppb	04:02:42
1	Tl 190.801†	-135.3	-102.1	-1.7744	ug/L	-1.7744	ppb	04:03:07
1	U 409.014†	-9887.6	-7439.1	-215.83	ug/L	-215.83	ppb	04:02:42
1	V 292.402†	11386.5	12691.1	68.759	ug/L	68.759	ppb	04:02:47
1	Zn 213.857†	36203.0	35410.0	300.60	ug/L	300.60	ppb	04:02:47
1	SiO2†	1078538.0	1072973.5	68825	ug/L	68825	ppb	04:04:15
2	Sc Radial	5731.8	5731.8	98.1	%			04:01:49
2	Y RADIAL	7035.2	7035.2	111.9	%			04:01:49
2	Al 396.153Radial†	68725.6	70090.7	48686	ug/L	48686	ppb	04:01:49
2	Ca 317.933Radial†	5661.5	5756.7	8485.0	ug/L	8485.0	ppb	04:01:49
2	Fe 238.204 Radial†	9069.8	9240.4	86508	ug/L	86508	ppb	04:01:49
2	K 766.490 Radial†	28828.3	27040.6	4777.2	ug/L	4777.2	ppb	04:01:49
2	Mg 279.077 IEC†	254.9	258.8	9055.1	ug/L	9055.1	ppb	04:02:09
2	Na 589.592 Radial†	4445.3	5620.2	1886.0	ug/L	1886.0	ppb	04:01:49
2	Sr 421.552†	19849.4	20265.1	126.13	ug/L	126.13	ppb	04:01:49
2	Sc 361.383	907486.6	907486.6	100.69	%			04:03:13
2	Y 371.029	848556.9	848556.9	112.98	%			04:03:13
2	Ag 328.068†	-5344.1	-5600.2	2.5459	ug/L	2.5459	ppb	04:03:18
2	As 188.979†	-69.9	-45.3	10.406	ug/L	10.406	ppb	04:03:38
2	B 249.677†	834.1	1359.0	16.983	ug/L	16.983	ppb	04:03:18
2	Ba 233.527†	58913.2	58517.7	437.08	ug/L	437.08	ppb	04:03:18
2	Be 313.107†	-1594.6	3529.3	4.7888	ug/L	4.7888	ppb	04:03:18
2	Cd 226.502†	669.7	860.2	0.4654	ug/L	0.4654	ppb	04:03:38
2	Co 228.616†	799.6	859.5	11.510	ug/L	11.510	ppb	04:03:38
2	Cr 267.716†	3222.0	3121.2	34.526	ug/L	34.526	ppb	04:03:38
2	Cu 324.752†	13937.9	7085.7	24.690	ug/L	24.690	ppb	04:03:18
2	Mn 257.610†	1937510.6	1923803.4	2060.7	ug/L	2060.7	ppb	04:03:13
2	Mo 202.031†	253.0	232.9	20.931	ug/L	20.931	ppb	04:03:38
2	Ni 231.604†	1477.4	1380.7	31.961	ug/L	31.961	ppb	04:03:38

2	P 214.914†	1013.4	782.9	394.92	ug/L	394.92 ppb	04:03:38
2	Pb 220.353†	698.6	762.2	90.012	ug/L	90.012 ppb	04:03:38
2	S 181.975 Axial†	195.7	152.8	204.47	ug/L	204.47 ppb	04:03:38
2	Sb 206.836†	38.0	3.5	-4.0732	ug/L	-4.0732 ppb	04:03:38
2	Se 196.026†	-361.2	-329.9	90.701	ug/L	90.701 ppb	04:03:38
2	Si 251.611†	1079285.5	1071435.5	32072	ug/L	32072 ppb	04:03:13
2	Sn 189.927†	-32.1	-36.9	-3.9762	ug/L	-3.9762 ppb	04:03:38
2	Ti 334.940†	1123182.1	1116595.7	1782.4	ug/L	1782.4 ppb	04:03:13
2	Tl 190.801†	-146.0	-112.5	-4.7442	ug/L	-4.7442 ppb	04:03:38
2	U 409.014†	-9983.8	-7513.5	-217.92	ug/L	-217.92 ppb	04:03:13
2	V 292.402†	11374.9	12655.3	68.468	ug/L	68.468 ppb	04:03:18
2	Zn 213.857†	36054.3	35185.3	298.59	ug/L	298.59 ppb	04:03:18
2	SiO2†	1078275.1	1070414.3	68660	ug/L	68660 ppb	04:04:21
3	Sc Radial	5975.7	5975.7	102	%		04:02:14
3	Y RADIAL	7305.6	7305.6	116.2	%		04:02:14
3	Al 396.153Radial†	71472.6	69917.1	48565	ug/L	48565 ppb	04:02:14
3	Ca 317.933Radial†	5881.3	5736.1	8454.6	ug/L	8454.6 ppb	04:02:14
3	Fe 238.204 Radial†	9400.6	9186.5	86002	ug/L	86002 ppb	04:02:14
3	K 766.490 Radial†	29811.7	26802.7	4735.0	ug/L	4735.0 ppb	04:02:14
3	Mg 279.077 IEC†	256.7	249.9	8741.4	ug/L	8741.4 ppb	04:02:34
3	Na 589.592 Radial†	4653.4	5638.7	1892.3	ug/L	1892.3 ppb	04:02:14
3	Sr 421.552†	20714.8	20285.4	126.25	ug/L	126.25 ppb	04:02:14
3	Sc 361.383	909903.7	909903.7	100.96	%		04:03:44
3	Y 371.029	850099.2	850099.2	113.18	%		04:03:44
3	Ag 328.068†	-5333.8	-5575.9	2.4927	ug/L	2.4927 ppb	04:03:49
3	As 188.979†	-73.1	-48.2	9.1796	ug/L	9.1796 ppb	04:04:09
3	B 249.677†	884.9	1407.2	18.061	ug/L	18.061 ppb	04:03:49
3	Ba 233.527†	59408.8	58853.2	439.55	ug/L	439.55 ppb	04:03:49
3	Be 313.107†	-1530.3	3597.2	4.8156	ug/L	4.8156 ppb	04:03:49
3	Cd 226.502†	640.9	829.9	0.1955	ug/L	0.1955 ppb	04:04:09
3	Co 228.616†	784.7	842.6	11.195	ug/L	11.195 ppb	04:04:09
3	Cr 267.716†	3214.4	3105.2	34.347	ug/L	34.347 ppb	04:04:09
3	Cu 324.752†	14199.8	7308.2	25.301	ug/L	25.301 ppb	04:03:49
3	Mn 257.610†	1943884.3	1925004.9	2061.9	ug/L	2061.9 ppb	04:03:44
3	Mo 202.031†	248.0	227.3	20.543	ug/L	20.543 ppb	04:04:09
3	Ni 231.604†	1482.2	1381.6	31.982	ug/L	31.982 ppb	04:04:09
3	P 214.914†	1015.7	782.5	394.97	ug/L	394.97 ppb	04:04:09
3	Pb 220.353†	676.3	738.3	87.319	ug/L	87.319 ppb	04:04:09
3	S 181.975 Axial†	201.2	157.7	211.39	ug/L	211.39 ppb	04:04:09
3	Sb 206.836†	38.5	3.9	-3.9556	ug/L	-3.9556 ppb	04:04:09
3	Se 196.026†	-376.7	-344.3	80.713	ug/L	80.713 ppb	04:04:09
3	Si 251.611†	1083172.3	1072438.0	32102	ug/L	32102 ppb	04:03:44
3	Sn 189.927†	-32.8	-37.5	-4.0875	ug/L	-4.0875 ppb	04:04:09
3	Ti 334.940†	1126840.3	1117255.9	1783.4	ug/L	1783.4 ppb	04:03:44
3	Tl 190.801†	-138.5	-104.7	-2.5331	ug/L	-2.5331 ppb	04:04:09
3	U 409.014†	-9946.0	-7449.7	-216.10	ug/L	-216.10 ppb	04:03:44
3	V 292.402†	11343.8	12594.5	68.133	ug/L	68.133 ppb	04:03:49
3	Zn 213.857†	36430.0	35462.3	301.07	ug/L	301.07 ppb	04:03:49
3	SiO2†	1080126.7	1069403.5	68596	ug/L	68596 ppb	04:04:27

Mean Data: 1201978608|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907644.7	100.71	%	0.242				0.24%
Sc Radial	5869.6	100	%	2.1				2.13%
Y 371.029	848111.6	112.92	%	0.299				0.26%
Y RADIAL	7175.3	114.1	%	2.15				1.89%
Ag 328.068†	-5582.9	2.5312	ug/L	0.03365	2.5312	ppb	0.03365	1.33%
Al 396.153Radial†	69875.7	48537	ug/L	165.6	48537	ppb	165.6	0.34%
As 188.979†	-47.1	9.6273	ug/L	0.67699	9.6273	ppb	0.67699	7.03%
B 249.677†	1408.9	18.067	ug/L	1.0871	18.067	ppb	1.0871	6.02%
Ba 233.527†	58707.4	438.48	ug/L	1.265	438.48	ppb	1.265	0.29%
Be 313.107†	3623.0	4.8257	ug/L	0.04281	4.8257	ppb	0.04281	0.89%
Ca 317.933Radial†	5734.7	8452.6	ug/L	33.48	8452.6	ppb	33.48	0.40%
Cd 226.502†	855.0	0.4397	ug/L	0.23246	0.4397	ppb	0.23246	52.87%
Co 228.616†	852.9	11.387	ug/L	0.1684	11.387	ppb	0.1684	1.48%
Cr 267.716†	3123.8	34.547	ug/L	0.2107	34.547	ppb	0.2107	0.61%
Cu 324.752†	7167.1	24.908	ug/L	0.3409	24.908	ppb	0.3409	1.37%
Fe 238.204 Radial†	9209.5	86218	ug/L	260.5	86218	ppb	260.5	0.30%
K 766.490 Radial†	26866.3	4746.2	ug/L	27.16	4746.2	ppb	27.16	0.57%

Mg 279.077 IEC†	252.4	8831.6	ug/L	194.77	8831.6	ppb	194.77	2.21%
Mn 257.610†	1926644.4	2063.7	ug/L	4.18	2063.7	ppb	4.18	0.20%
Mo 202.031†	233.5	20.948	ug/L	0.4136	20.948	ppb	0.4136	1.97%
Na 589.592 Radial†	5615.1	1884.3	ug/L	8.90	1884.3	ppb	8.90	0.47%
Ni 231.604†	1387.7	32.123	ug/L	0.2630	32.123	ppb	0.2630	0.82%
P 214.914†	783.9	395.67	ug/L	1.253	395.67	ppb	1.253	0.32%
Pb 220.353†	757.6	89.484	ug/L	1.9558	89.484	ppb	1.9558	2.19%
S 181.975 Axial†	156.4	209.66	ug/L	4.579	209.66	ppb	4.579	2.18%
Sb 206.836†	6.6	-3.0754	ug/L	1.62753	-3.0754	ppb	1.62753	52.92%
Se 196.026†	-338.6	84.722	ug/L	5.2774	84.722	ppb	5.2774	6.23%
Si 251.611†	1072747.6	32112	ug/L	44.6	32112	ppb	44.6	0.14%
Sn 189.927†	-35.7	-3.7856	ug/L	0.43024	-3.7856	ppb	0.43024	11.37%
Sr 421.552†	20243.7	125.99	ug/L	0.346	125.99	ppb	0.346	0.27%
Ti 334.940†	1117464.9	1783.8	ug/L	1.58	1783.8	ppb	1.58	0.09%
Tl 190.801†	-106.4	-3.0172	ug/L	1.54295	-3.0172	ppb	1.54295	51.14%
U 409.014†	-7467.4	-216.62	ug/L	1.138	-216.62	ppb	1.138	0.53%
V 292.402†	12647.0	68.453	ug/L	0.3129	68.453	ppb	0.3129	0.46%
Zn 213.857†	35352.5	300.09	ug/L	1.316	300.09	ppb	1.316	0.44%
SiO2†	1070930.4	68694	ug/L	118.0	68694	ppb	118.0	0.17%

Sequence No.: 114
Sample ID: 1201978610|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 115
Date Collected: 12/9/2009 04:06:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978610|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5763.4	5763.4	98.6	%			04:08:52
1	Y RADIAL	7403.1	7403.1	117.7	%			04:08:52
1	Al 396.153Radial†	133073.8	134952.2	93721	ug/L	93721	ppb	04:08:32
1	Ca 317.933Radial†	9566.4	9684.4	14274	ug/L	14274	ppb	04:08:32
1	Fe 238.204 Radial†	11630.0	11785.6	110350	ug/L	110350	ppb	04:08:32
1	K 766.490 Radial†	77187.1	75913.1	13433	ug/L	13433	ppb	04:08:32
1	Mg 279.077 IEC†	520.5	526.6	18492	ug/L	18492	ppb	04:08:52
1	Na 589.592 Radial†	18807.0	20157.5	6764.5	ug/L	6764.5	ppb	04:08:32
1	Sr 421.552†	100381.0	101809.9	633.91	ug/L	633.91	ppb	04:08:32
1	Sc 361.383	902720.4	902720.4	100.16	%			04:09:51
1	Y 371.029	888439.3	888439.3	118.29	%			04:09:51
1	Ag 328.068†	101612.1	101155.5	495.17	ug/L	495.17	ppb	04:09:51
1	As 188.979†	1051.3	1073.7	466.54	ug/L	466.54	ppb	04:10:11
1	B 249.677†	23570.2	24062.8	488.75	ug/L	488.75	ppb	04:09:51
1	Ba 233.527†	124328.5	124136.4	925.40	ug/L	925.40	ppb	04:09:51
1	Be 313.107†	1299951.9	1302967.9	480.98	ug/L	480.98	ppb	04:09:51
1	Cd 226.502†	45305.5	45427.6	469.52	ug/L	469.52	ppb	04:09:51
1	Co 228.616†	25692.3	25716.3	481.37	ug/L	481.37	ppb	04:10:11
1	Cr 267.716†	48842.9	48685.4	513.99	ug/L	513.99	ppb	04:09:51
1	Cu 324.752†	192322.4	185255.5	535.78	ug/L	535.78	ppb	04:09:51
1	Mn 257.610†	3166806.9	3161276.1	3382.9	ug/L	3382.9	ppb	04:09:51
1	Mo 202.031†	7506.8	7476.3	482.77	ug/L	482.77	ppb	04:10:11
1	Ni 231.604†	21853.1	21731.3	502.91	ug/L	502.91	ppb	04:10:11
1	P 214.914†	2227.6	2000.5	1018.1	ug/L	1018.1	ppb	04:10:11
1	Pb 220.353†	4974.0	5034.4	581.85	ug/L	581.85	ppb	04:10:11
1	S 181.975 Axial†	3653.5	3606.1	5034.6	ug/L	5034.6	ppb	04:10:11
1	Sb 206.836†	1346.6	1310.1	413.04	ug/L	413.04	ppb	04:10:11
1	Se 196.026†	354.9	383.1	587.64	ug/L	587.64	ppb	04:10:11
1	Si 251.611†	1155667.1	1153353.2	34512	ug/L	34512	ppb	04:09:51
1	Sn 189.927†	2914.9	2905.2	478.69	ug/L	478.69	ppb	04:10:11
1	Ti 334.940†	1929117.2	1927120.2	3075.8	ug/L	3075.8	ppb	04:09:51
1	Tl 190.801†	1502.5	1532.6	471.34	ug/L	471.34	ppb	04:10:11
1	U 409.014†	6267.4	8659.1	223.67	ug/L	223.67	ppb	04:09:51
1	V 292.402†	87149.4	88367.2	570.95	ug/L	570.95	ppb	04:09:51
1	Zn 213.857†	98748.2	97967.1	840.86	ug/L	840.86	ppb	04:09:51
1	SiO2†	1152302.9	1149976.6	73737	ug/L	73737	ppb	04:11:12
2	Sc Radial	5735.9	5735.9	98.2	%			04:09:17
2	Y RADIAL	7354.7	7354.7	117.0	%			04:09:17
2	Al 396.153Radial†	137167.7	139770.8	97068	ug/L	97068	ppb	04:08:57
2	Ca 317.933Radial†	9837.2	10006.9	14750	ug/L	14750	ppb	04:08:57
2	Fe 238.204 Radial†	12010.6	12229.9	114510	ug/L	114510	ppb	04:08:57
2	K 766.490 Radial†	79712.9	78862.1	13956	ug/L	13956	ppb	04:08:57
2	Mg 279.077 IEC†	519.4	528.0	18538	ug/L	18538	ppb	04:09:17
2	Na 589.592 Radial†	19511.4	20966.7	7036.0	ug/L	7036.0	ppb	04:08:57
2	Sr 421.552†	103574.5	105552.0	657.21	ug/L	657.21	ppb	04:08:57
2	Sc 361.383	915588.1	915588.1	101.59	%			04:10:18
2	Y 371.029	902748.8	902748.8	120.19	%			04:10:18
2	Ag 328.068†	102934.4	101031.3	495.91	ug/L	495.91	ppb	04:10:18
2	As 188.979†	1052.4	1060.1	461.79	ug/L	461.79	ppb	04:10:38
2	B 249.677†	23865.6	24022.9	487.37	ug/L	487.37	ppb	04:10:18
2	Ba 233.527†	125872.3	123911.5	923.89	ug/L	923.89	ppb	04:10:18
2	Be 313.107†	1322594.7	1307016.3	482.45	ug/L	482.45	ppb	04:10:18
2	Cd 226.502†	45956.8	45432.9	469.16	ug/L	469.16	ppb	04:10:18
2	Co 228.616†	25697.3	25360.7	474.55	ug/L	474.55	ppb	04:10:38
2	Cr 267.716†	49491.7	48638.7	513.57	ug/L	513.57	ppb	04:10:18
2	Cu 324.752†	195398.4	185584.8	536.93	ug/L	536.93	ppb	04:10:18
2	Mn 257.610†	3207242.3	3156644.3	3378.4	ug/L	3378.4	ppb	04:10:18
2	Mo 202.031†	7506.3	7370.5	476.34	ug/L	476.34	ppb	04:10:38
2	Ni 231.604†	21821.0	21393.1	495.08	ug/L	495.08	ppb	04:10:38

2	P 214.914†	2237.9	1979.4	1003.4	ug/L	1003.4 ppb	04:10:38
2	Pb 220.353†	4998.0	4988.3	577.03	ug/L	577.03 ppb	04:10:38
2	S 181.975 Axial†	3658.0	3559.2	4968.3	ug/L	4968.3 ppb	04:10:38
2	Sb 206.836†	1341.2	1286.0	405.13	ug/L	405.13 ppb	04:10:38
2	Se 196.026†	382.0	404.9	613.91	ug/L	613.91 ppb	04:10:38
2	Si 251.611†	1170337.1	1151578.1	34459	ug/L	34459 ppb	04:10:18
2	Sn 189.927†	2918.0	2867.3	472.59	ug/L	472.59 ppb	04:10:38
2	Ti 334.940†	1955544.1	1926065.6	3074.1	ug/L	3074.1 ppb	04:10:18
2	Tl 190.801†	1499.2	1508.2	464.61	ug/L	464.61 ppb	04:10:38
2	U 409.014†	6534.2	8833.8	227.96	ug/L	227.96 ppb	04:10:18
2	V 292.402†	88287.3	88264.4	569.56	ug/L	569.56 ppb	04:10:18
2	Zn 213.857†	99813.9	97630.5	837.57	ug/L	837.57 ppb	04:10:18
2	SiO2†	1157878.4	1139296.5	73052	ug/L	73052 ppb	04:11:18
3	Sc Radial	5692.7	5692.7	97.4	%		04:09:42
3	Y RADIAL	7312.5	7312.5	116.3	%		04:09:42
3	Al 396.153Radial†	135573.5	139194.4	96667	ug/L	96667 ppb	04:09:22
3	Ca 317.933Radial†	9750.2	9993.6	14730	ug/L	14730 ppb	04:09:22
3	Fe 238.204 Radial†	11868.1	12176.5	114010	ug/L	114010 ppb	04:09:22
3	K 766.490 Radial†	78725.2	78464.2	13886	ug/L	13886 ppb	04:09:22
3	Mg 279.077 IEC†	510.9	523.3	18374	ug/L	18374 ppb	04:09:42
3	Na 589.592 Radial†	19265.6	20865.2	7002.0	ug/L	7002.0 ppb	04:09:22
3	Sr 421.552†	102350.0	105095.5	654.37	ug/L	654.37 ppb	04:09:22
3	Sc 361.383	909733.1	909733.1	100.94	%		04:10:46
3	Y 371.029	895563.7	895563.7	119.24	%		04:10:46
3	Ag 328.068†	102342.8	101097.3	496.06	ug/L	496.06 ppb	04:10:46
3	As 188.979†	1057.2	1071.5	466.23	ug/L	466.23 ppb	04:11:06
3	B 249.677†	23781.8	24091.1	488.86	ug/L	488.86 ppb	04:10:46
3	Ba 233.527†	125342.0	124183.6	925.89	ug/L	925.89 ppb	04:10:46
3	Be 313.107†	1313504.4	1306389.7	482.22	ug/L	482.22 ppb	04:10:46
3	Cd 226.502†	45799.4	45568.2	470.64	ug/L	470.64 ppb	04:10:46
3	Co 228.616†	25724.7	25550.7	478.17	ug/L	478.17 ppb	04:11:06
3	Cr 267.716†	49284.8	48747.3	514.71	ug/L	514.71 ppb	04:10:46
3	Cu 324.752†	193809.9	185248.9	535.95	ug/L	535.95 ppb	04:10:46
3	Mn 257.610†	3192965.0	3162818.6	3384.9	ug/L	3384.9 ppb	04:10:46
3	Mo 202.031†	7534.6	7446.2	481.11	ug/L	481.11 ppb	04:11:06
3	Ni 231.604†	21861.8	21571.7	499.21	ug/L	499.21 ppb	04:11:06
3	P 214.914†	2239.6	1995.2	1013.0	ug/L	1013.0 ppb	04:11:06
3	Pb 220.353†	5034.6	5056.2	584.67	ug/L	584.67 ppb	04:11:06
3	S 181.975 Axial†	3668.5	3592.8	5015.4	ug/L	5015.4 ppb	04:11:06
3	Sb 206.836†	1348.8	1302.0	410.31	ug/L	410.31 ppb	04:11:06
3	Se 196.026†	369.2	394.6	606.34	ug/L	606.34 ppb	04:11:06
3	Si 251.611†	1165053.3	1153757.9	34524	ug/L	34524 ppb	04:10:46
3	Sn 189.927†	2918.0	2885.9	475.61	ug/L	475.61 ppb	04:11:06
3	Ti 334.940†	1943840.3	1926859.5	3075.4	ug/L	3075.4 ppb	04:10:46
3	Tl 190.801†	1510.2	1528.7	470.35	ug/L	470.35 ppb	04:11:06
3	U 409.014†	6341.4	8684.1	223.89	ug/L	223.89 ppb	04:10:46
3	V 292.402†	87664.2	88206.5	569.31	ug/L	569.31 ppb	04:10:46
3	Zn 213.857†	99632.7	98083.4	841.56	ug/L	841.56 ppb	04:10:46
3	SiO2†	1160431.3	1149161.1	73685	ug/L	73685 ppb	04:11:24

Mean Data: 1201978610|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	909347.2	100.90	%	0.715				0.71%
Sc Radial	5730.7	98.1	%	0.61				0.62%
Y 371.029	895583.9	119.24	%	0.953				0.80%
Y RADIAL	7356.7	117.0	%	0.72				0.62%
Ag 328.068†	101094.7	495.71	ug/L	0.478	495.71	ppb	0.478	0.10%
Al 396.153Radial†	137972.5	95819	ug/L	1828.0	95819	ppb	1828.0	1.91%
As 188.979†	1068.5	464.86	ug/L	2.656	464.86	ppb	2.656	0.57%
B 249.677†	24058.9	488.33	ug/L	0.828	488.33	ppb	0.828	0.17%
Ba 233.527†	124077.2	925.06	ug/L	1.042	925.06	ppb	1.042	0.11%
Be 313.107†	1305458.0	481.88	ug/L	0.793	481.88	ppb	0.793	0.16%
Ca 317.933Radial†	9895.0	14585	ug/L	268.9	14585	ppb	268.9	1.84%
Cd 226.502†	45476.2	469.78	ug/L	0.772	469.78	ppb	0.772	0.16%
Co 228.616†	25542.5	478.03	ug/L	3.413	478.03	ppb	3.413	0.71%
Cr 267.716†	48690.5	514.09	ug/L	0.572	514.09	ppb	0.572	0.11%
Cu 324.752†	185363.1	536.22	ug/L	0.624	536.22	ppb	0.624	0.12%
Fe 238.204 Radial†	12064.0	112960	ug/L	2271.0	112960	ppb	2271.0	2.01%
K 766.490 Radial†	77746.5	13758	ug/L	284.0	13758	ppb	284.0	2.06%

Mg 279.077 IEC†	526.0	18468	ug/L	84.4	18468	ppb	84.4	0.46%
Mn 257.610†	3160246.3	3382.1	ug/L	3.35	3382.1	ppb	3.35	0.10%
Mo 202.031†	7431.0	480.07	ug/L	3.337	480.07	ppb	3.337	0.70%
Na 589.592 Radial†	20663.1	6934.2	ug/L	147.93	6934.2	ppb	147.93	2.13%
Ni 231.604†	21565.4	499.07	ug/L	3.915	499.07	ppb	3.915	0.78%
P 214.914†	1991.7	1011.5	ug/L	7.43	1011.5	ppb	7.43	0.73%
Pb 220.353†	5026.3	581.18	ug/L	3.864	581.18	ppb	3.864	0.66%
S 181.975 Axial†	3586.0	5006.1	ug/L	34.15	5006.1	ppb	34.15	0.68%
Sb 206.836†	1299.4	409.49	ug/L	4.015	409.49	ppb	4.015	0.98%
Se 196.026†	394.2	602.63	ug/L	13.519	602.63	ppb	13.519	2.24%
Si 251.611†	1152896.4	34499	ug/L	34.7	34499	ppb	34.7	0.10%
Sn 189.927†	2886.1	475.63	ug/L	3.051	475.63	ppb	3.051	0.64%
Sr 421.552†	104152.5	648.50	ug/L	12.711	648.50	ppb	12.711	1.96%
Ti 334.940†	1926681.8	3075.1	ug/L	0.87	3075.1	ppb	0.87	0.03%
Tl 190.801†	1523.1	468.76	ug/L	3.631	468.76	ppb	3.631	0.77%
U 409.014†	8725.7	225.17	ug/L	2.414	225.17	ppb	2.414	1.07%
V 292.402†	88279.4	569.94	ug/L	0.887	569.94	ppb	0.887	0.16%
Zn 213.857†	97893.7	840.00	ug/L	2.128	840.00	ppb	2.128	0.25%
SiO2†	1146144.7	73491	ug/L	381.3	73491	ppb	381.3	0.52%

Sequence No.: 115
Sample ID: 1201978611|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 116
Date Collected: 12/9/2009 04:13:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978611|925482|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5612.7	5612.7	96.0	%			04:15:49
1	Y RADIAL	7054.7	7054.7	112.2	%			04:15:49
1	Al 396.153Radial†	116020.3	120819.6	83904	ug/L	83904	ppb	04:15:29
1	Ca 317.933Radial†	8875.9	9226.0	13599	ug/L	13599	ppb	04:15:29
1	Fe 238.204 Radial†	10362.6	10782.6	100960	ug/L	100960	ppb	04:15:29
1	K 766.490 Radial†	71364.9	71952.7	12733	ug/L	12733	ppb	04:15:29
1	Mg 279.077 IEC†	454.9	472.5	16593	ug/L	16593	ppb	04:15:49
1	Na 589.592 Radial†	18978.8	20848.4	6996.3	ug/L	6996.3	ppb	04:15:29
1	Sr 421.552†	99999.2	104145.5	648.46	ug/L	648.46	ppb	04:15:29
1	Sc 361.383	901115.6	901115.6	99.984	%			04:16:48
1	Y 371.029	864177.8	864177.8	115.06	%			04:16:48
1	Ag 328.068†	102107.8	101831.9	495.15	ug/L	495.15	ppb	04:16:48
1	As 188.979†	1055.0	1079.3	463.91	ug/L	463.91	ppb	04:17:08
1	B 249.677†	23155.8	23690.3	482.19	ug/L	482.19	ppb	04:16:48
1	Ba 233.527†	126064.4	126093.6	939.52	ug/L	939.52	ppb	04:16:48
1	Be 313.107†	1292830.9	1298157.1	478.43	ug/L	478.43	ppb	04:16:48
1	Cd 226.502†	45203.4	45406.0	470.23	ug/L	470.23	ppb	04:16:48
1	Co 228.616†	25528.9	25598.5	480.14	ug/L	480.14	ppb	04:17:08
1	Cr 267.716†	47951.0	47880.3	505.33	ug/L	505.33	ppb	04:16:48
1	Cu 324.752†	189698.3	182972.8	528.77	ug/L	528.77	ppb	04:16:48
1	Mn 257.610†	2906384.3	2906441.3	3110.2	ug/L	3110.2	ppb	04:16:48
1	Mo 202.031†	7516.7	7499.6	483.58	ug/L	483.58	ppb	04:17:08
1	Ni 231.604†	21687.8	21604.8	499.98	ug/L	499.98	ppb	04:17:08
1	P 214.914†	2028.7	1805.6	910.98	ug/L	910.98	ppb	04:17:08
1	Pb 220.353†	4932.6	5001.9	576.74	ug/L	576.74	ppb	04:17:08
1	S 181.975 Axial†	3622.0	3581.0	5001.4	ug/L	5001.4	ppb	04:17:08
1	Sb 206.836†	1384.1	1350.1	427.13	ug/L	427.13	ppb	04:17:08
1	Se 196.026†	412.4	441.3	589.91	ug/L	589.91	ppb	04:17:08
1	Si 251.611†	1086929.4	1086659.0	32516	ug/L	32516	ppb	04:16:48
1	Sn 189.927†	2926.3	2921.8	481.21	ug/L	481.21	ppb	04:17:08
1	Ti 334.940†	1673375.1	1674766.0	2673.0	ug/L	2673.0	ppb	04:16:48
1	Tl 190.801†	1514.2	1546.9	470.47	ug/L	470.47	ppb	04:17:08
1	U 409.014†	7239.4	9642.4	251.95	ug/L	251.95	ppb	04:16:48
1	V 292.402†	83940.0	85312.2	552.68	ug/L	552.68	ppb	04:16:48
1	Zn 213.857†	91841.1	91234.5	783.03	ug/L	783.03	ppb	04:16:48
1	SiO2†	1107095.4	1106810.5	70969	ug/L	70969	ppb	04:18:09
2	Sc Radial	5686.6	5686.6	97.3	%			04:16:14
2	Y RADIAL	7111.9	7111.9	113.1	%			04:16:14
2	Al 396.153Radial†	110645.6	113726.2	78976	ug/L	78976	ppb	04:15:54
2	Ca 317.933Radial†	8541.2	8761.9	12914	ug/L	12914	ppb	04:15:54
2	Fe 238.204 Radial†	9902.0	10169.0	95216	ug/L	95216	ppb	04:15:54
2	K 766.490 Radial†	68830.0	68382.0	12099	ug/L	12099	ppb	04:15:54
2	Mg 279.077 IEC†	455.2	466.7	16391	ug/L	16391	ppb	04:16:14
2	Na 589.592 Radial†	18160.3	19750.5	6627.9	ug/L	6627.9	ppb	04:15:54
2	Sr 421.552†	95283.0	97945.7	609.86	ug/L	609.86	ppb	04:15:54
2	Sc 361.383	898184.2	898184.2	99.658	%			04:17:16
2	Y 371.029	862451.3	862451.3	114.83	%			04:17:16
2	Ag 328.068†	101714.3	101770.3	493.06	ug/L	493.06	ppb	04:17:16
2	As 188.979†	1063.6	1091.5	467.84	ug/L	467.84	ppb	04:17:36
2	B 249.677†	23053.7	23663.5	482.38	ug/L	482.38	ppb	04:17:16
2	Ba 233.527†	126047.7	126488.4	942.23	ug/L	942.23	ppb	04:17:16
2	Be 313.107†	1293629.3	1303178.3	480.27	ug/L	480.27	ppb	04:17:16
2	Cd 226.502†	45082.1	45431.8	471.08	ug/L	471.08	ppb	04:17:16
2	Co 228.616†	25473.7	25626.4	480.75	ug/L	480.75	ppb	04:17:36
2	Cr 267.716†	47948.6	48034.4	506.85	ug/L	506.85	ppb	04:17:16
2	Cu 324.752†	188993.3	182884.6	528.22	ug/L	528.22	ppb	04:17:16
2	Mn 257.610†	2900729.0	2910253.6	3113.7	ug/L	3113.7	ppb	04:17:16
2	Mo 202.031†	7501.4	7508.8	483.76	ug/L	483.76	ppb	04:17:36
2	Ni 231.604†	21677.1	21664.9	501.37	ug/L	501.37	ppb	04:17:36

2	P 214.914†	2042.3	1825.8	925.72 ug/L	925.72 ppb	04:17:36
2	Pb 220.353†	4918.6	5003.9	576.34 ug/L	576.34 ppb	04:17:36
2	S 181.975 Axial†	3619.0	3589.8	5014.7 ug/L	5014.7 ppb	04:17:36
2	Sb 206.836†	1377.9	1348.3	426.63 ug/L	426.63 ppb	04:17:36
2	Se 196.026†	399.2	429.4	564.06 ug/L	564.06 ppb	04:17:36
2	Si 251.611†	1084812.8	1088083.1	32559 ug/L	32559 ppb	04:17:16
2	Sn 189.927†	2932.2	2937.2	483.58 ug/L	483.58 ppb	04:17:36
2	Ti 334.940†	1668828.0	1675665.5	2674.4 ug/L	2674.4 ppb	04:17:16
2	Tl 190.801†	1511.0	1548.7	470.85 ug/L	470.85 ppb	04:17:36
2	U 409.014†	7025.0	9450.9	247.40 ug/L	247.40 ppb	04:17:16
2	V 292.402†	83693.3	85338.7	553.72 ug/L	553.72 ppb	04:17:16
2	Zn 213.857†	91576.8	91269.0	783.88 ug/L	783.88 ppb	04:17:16
2	SiO2†	1103882.3	1107200.2	70994 ug/L	70994 ppb	04:18:15
3	Sc Radial	5703.2	5703.2	97.6 %		04:16:39
3	Y RADIAL	7115.3	7115.3	113.2 %		04:16:39
3	Al 396.153Radial†	114155.2	116992.5	81245 ug/L	81245 ppb	04:16:19
3	Ca 317.933Radial†	8784.3	8985.5	13244 ug/L	13244 ppb	04:16:19
3	Fe 238.204 Radial†	10229.1	10474.7	98077 ug/L	98077 ppb	04:16:19
3	K 766.490 Radial†	70898.9	70296.8	12438 ug/L	12438 ppb	04:16:19
3	Mg 279.077 IEC†	451.7	461.7	16215 ug/L	16215 ppb	04:16:39
3	Na 589.592 Radial†	18771.4	20322.6	6819.9 ug/L	6819.9 ppb	04:16:19
3	Sr 421.552†	98721.6	101185.1	630.03 ug/L	630.03 ppb	04:16:19
3	Sc 361.383	905724.7	905724.7	100.49 %		04:17:43
3	Y 371.029	869062.8	869062.8	115.71 %		04:17:43
3	Ag 328.068†	102811.2	102012.2	495.05 ug/L	495.05 ppb	04:17:43
3	As 188.979†	1046.7	1065.8	458.15 ug/L	458.15 ppb	04:18:03
3	B 249.677†	23356.3	23771.9	484.29 ug/L	484.29 ppb	04:17:43
3	Ba 233.527†	127014.6	126397.6	941.66 ug/L	941.66 ppb	04:17:43
3	Be 313.107†	1303601.0	1302294.1	479.95 ug/L	479.95 ppb	04:17:43
3	Cd 226.502†	45520.7	45491.6	471.42 ug/L	471.42 ppb	04:17:43
3	Co 228.616†	25371.6	25312.1	474.72 ug/L	474.72 ppb	04:18:03
3	Cr 267.716†	48234.8	47918.6	505.68 ug/L	505.68 ppb	04:17:43
3	Cu 324.752†	190895.1	183198.3	529.26 ug/L	529.26 ppb	04:17:43
3	Mn 257.610†	2927381.0	2912542.1	3116.4 ug/L	3116.4 ppb	04:17:43
3	Mo 202.031†	7491.9	7436.7	479.38 ug/L	479.38 ppb	04:18:03
3	Ni 231.604†	21567.5	21374.7	494.66 ug/L	494.66 ppb	04:18:03
3	P 214.914†	2037.4	1803.8	911.25 ug/L	911.25 ppb	04:18:03
3	Pb 220.353†	4927.0	4971.2	572.91 ug/L	572.91 ppb	04:18:03
3	S 181.975 Axial†	3583.6	3524.3	4922.5 ug/L	4922.5 ppb	04:18:03
3	Sb 206.836†	1368.3	1327.3	419.79 ug/L	419.79 ppb	04:18:03
3	Se 196.026†	416.5	443.3	581.48 ug/L	581.48 ppb	04:18:03
3	Si 251.611†	1095000.8	1089158.5	32591 ug/L	32591 ppb	04:17:43
3	Sn 189.927†	2918.7	2899.4	477.45 ug/L	477.45 ppb	04:18:03
3	Ti 334.940†	1684754.8	1677572.7	2677.5 ug/L	2677.5 ppb	04:17:43
3	Tl 190.801†	1498.3	1523.4	463.90 ug/L	463.90 ppb	04:18:03
3	U 409.014†	7346.2	9711.9	254.23 ug/L	254.23 ppb	04:17:43
3	V 292.402†	84444.9	85387.4	553.55 ug/L	553.55 ppb	04:17:43
3	Zn 213.857†	92437.6	91360.5	784.45 ug/L	784.45 ppb	04:17:43
3	SiO2†	1101234.9	1095344.2	70233 ug/L	70233 ppb	04:18:21

Mean Data: 1201978611|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901674.8	100.05	%	0.422				0.42%
Sc Radial	5667.5	97.0	%	0.82				0.85%
Y 371.029	865230.6	115.20	%	0.457				0.40%
Y RADIAL	7094.0	112.8	%	0.54				0.48%
Ag 328.068†	101871.5	494.42	ug/L	1.181	494.42	ppb	1.181	0.24%
Al 396.153Radial†	117179.4	81375	ug/L	2466.2	81375	ppb	2466.2	3.03%
As 188.979†	1078.9	463.30	ug/L	4.871	463.30	ppb	4.871	1.05%
B 249.677†	23708.6	482.95	ug/L	1.164	482.95	ppb	1.164	0.24%
Ba 233.527†	126326.5	941.14	ug/L	1.431	941.14	ppb	1.431	0.15%
Be 313.107†	1301209.8	479.55	ug/L	0.980	479.55	ppb	0.980	0.20%
Ca 317.933Radial†	8991.1	13252	ug/L	342.1	13252	ppb	342.1	2.58%
Cd 226.502†	45443.1	470.91	ug/L	0.613	470.91	ppb	0.613	0.13%
Co 228.616†	25512.3	478.54	ug/L	3.316	478.54	ppb	3.316	0.69%
Cr 267.716†	47944.4	505.95	ug/L	0.794	505.95	ppb	0.794	0.16%
Cu 324.752†	183018.6	528.75	ug/L	0.522	528.75	ppb	0.522	0.10%
Fe 238.204 Radial†	10475.4	98084	ug/L	2872.2	98084	ppb	2872.2	2.93%
K 766.490 Radial†	70210.5	12423	ug/L	317.2	12423	ppb	317.2	2.55%

Mg 279.077 IEC†	467.0	16400	ug/L	188.9	16400	ppb	188.9	1.15%
Mn 257.610†	2909745.7	3113.4	ug/L	3.12	3113.4	ppb	3.12	0.10%
Mo 202.031†	7481.7	482.24	ug/L	2.477	482.24	ppb	2.477	0.51%
Na 589.592 Radial†	20307.2	6814.7	ug/L	184.28	6814.7	ppb	184.28	2.70%
Ni 231.604†	21548.1	498.67	ug/L	3.544	498.67	ppb	3.544	0.71%
P 214.914†	1811.7	915.98	ug/L	8.430	915.98	ppb	8.430	0.92%
Pb 220.353†	4992.3	575.33	ug/L	2.107	575.33	ppb	2.107	0.37%
S 181.975 Axial†	3565.0	4979.6	ug/L	49.82	4979.6	ppb	49.82	1.00%
Sb 206.836†	1341.9	424.52	ug/L	4.104	424.52	ppb	4.104	0.97%
Se 196.026†	438.0	578.48	ug/L	13.182	578.48	ppb	13.182	2.28%
Si 251.611†	1087966.9	32555	ug/L	37.6	32555	ppb	37.6	0.12%
Sn 189.927†	2919.5	480.75	ug/L	3.087	480.75	ppb	3.087	0.64%
Sr 421.552†	101092.1	629.45	ug/L	19.309	629.45	ppb	19.309	3.07%
Ti 334.940†	1676001.4	2675.0	ug/L	2.28	2675.0	ppb	2.28	0.09%
Tl 190.801†	1539.7	468.41	ug/L	3.909	468.41	ppb	3.909	0.83%
U 409.014†	9601.8	251.19	ug/L	3.478	251.19	ppb	3.478	1.38%
V 292.402†	85346.1	553.32	ug/L	0.557	553.32	ppb	0.557	0.10%
Zn 213.857†	91288.0	783.79	ug/L	0.716	783.79	ppb	0.716	0.09%
SiO2†	1103118.3	70732	ug/L	432.0	70732	ppb	432.0	0.61%

Sequence No.: 116
Sample ID: 1201978609|925482|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 117
Date Collected: 12/9/2009 04:20:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978609|925482|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5793.2	5793.2	99.1	%			04:22:26
1	Y RADIAL	6390.9	6390.9	101.6	%			04:22:26
1	Al 396.153Radial†	13271.4	13408.1	9313.4	ug/L	9313.4	ppb	04:22:26
1	Ca 317.933Radial†	1166.5	1161.1	1711.4	ug/L	1711.4	ppb	04:22:46
1	Fe 238.204 Radial†	1877.9	1887.6	17671	ug/L	17671	ppb	04:22:46
1	K 766.490 Radial†	7477.6	5191.4	915.71	ug/L	915.71	ppb	04:22:26
1	Mg 279.077 IEC†	49.2	48.5	1695.0	ug/L	1695.0	ppb	04:22:46
1	Na 589.592 Radial†	344.8	1435.8	481.83	ug/L	481.83	ppb	04:22:26
1	Sr 421.552†	3863.3	3924.5	24.425	ug/L	24.425	ppb	04:22:26
1	Sc 361.383	907143.5	907143.5	100.65	%			04:23:43
1	Y 371.029	764429.6	764429.6	101.78	%			04:23:43
1	Ag 328.068†	-852.9	-1140.1	0.5332	ug/L	0.5332	ppb	04:23:48
1	As 188.979†	-36.3	-11.9	1.2304	ug/L	1.2304	ppb	04:24:08
1	B 249.677†	-82.3	448.9	7.0602	ug/L	7.0602	ppb	04:23:48
1	Ba 233.527†	12299.9	12228.7	91.324	ug/L	91.324	ppb	04:23:48
1	Be 313.107†	-5110.5	35.6	0.7611	ug/L	0.7611	ppb	04:23:48
1	Cd 226.502†	0.4	195.5	0.3042	ug/L	0.3042	ppb	04:24:08
1	Co 228.616†	119.9	184.6	2.4872	ug/L	2.4872	ppb	04:24:08
1	Cr 267.716†	689.6	606.4	6.7241	ug/L	6.7241	ppb	04:24:08
1	Cu 324.752†	8286.1	1475.7	5.1244	ug/L	5.1244	ppb	04:23:48
1	Mn 257.610†	479221.2	475693.0	509.17	ug/L	509.17	ppb	04:23:43
1	Mo 202.031†	66.0	47.2	4.2542	ug/L	4.2542	ppb	04:24:08
1	Ni 231.604†	353.7	264.8	6.1303	ug/L	6.1303	ppb	04:24:08
1	P 214.914†	387.9	161.9	81.556	ug/L	81.556	ppb	04:24:08
1	Pb 220.353†	110.7	178.5	20.820	ug/L	20.820	ppb	04:24:08
1	S 181.975 Axial†	80.8	38.7	52.339	ug/L	52.339	ppb	04:24:08
1	Sb 206.836†	29.3	-5.1	-2.7197	ug/L	-2.7197	ppb	04:24:08
1	Se 196.026†	-95.0	-65.6	19.470	ug/L	19.470	ppb	04:24:08
1	Si 251.611†	202615.5	200852.6	6012.3	ug/L	6012.3	ppb	04:23:43
1	Sn 189.927†	-8.2	-13.1	-1.7314	ug/L	-1.7314	ppb	04:24:08
1	Ti 334.940†	238964.5	238530.7	380.75	ug/L	380.75	ppb	04:23:43
1	Tl 190.801†	-61.6	-28.7	-1.9361	ug/L	-1.9361	ppb	04:24:08
1	U 409.014†	-3696.5	-1270.8	-37.242	ug/L	-37.242	ppb	04:23:43
1	V 292.402†	1301.6	2651.5	14.417	ug/L	14.417	ppb	04:23:48
1	Zn 213.857†	7773.2	7101.0	60.247	ug/L	60.247	ppb	04:23:48
1	SiO2†	205376.6	203578.1	13058	ug/L	13058	ppb	04:25:15
2	Sc Radial	5848.7	5848.7	100	%			04:22:51
2	Y RADIAL	6379.4	6379.4	101.5	%			04:22:51
2	Al 396.153Radial†	13406.1	13415.6	9318.6	ug/L	9318.6	ppb	04:22:51
2	Ca 317.933Radial†	1184.9	1168.4	1722.1	ug/L	1722.1	ppb	04:23:11
2	Fe 238.204 Radial†	1890.6	1882.2	17621	ug/L	17621	ppb	04:23:11
2	K 766.490 Radial†	7449.3	5091.5	897.99	ug/L	897.99	ppb	04:22:51
2	Mg 279.077 IEC†	48.6	47.4	1657.7	ug/L	1657.7	ppb	04:23:11
2	Na 589.592 Radial†	370.1	1457.7	489.19	ug/L	489.19	ppb	04:22:51
2	Sr 421.552†	3877.8	3902.0	24.284	ug/L	24.284	ppb	04:22:51
2	Sc 361.383	902222.8	902222.8	100.11	%			04:24:14
2	Y 371.029	762054.3	762054.3	101.46	%			04:24:14
2	Ag 328.068†	-822.6	-1114.5	0.6320	ug/L	0.6320	ppb	04:24:19
2	As 188.979†	-35.5	-11.3	1.4342	ug/L	1.4342	ppb	04:24:39
2	B 249.677†	-78.1	452.7	7.1469	ug/L	7.1469	ppb	04:24:19
2	Ba 233.527†	12318.1	12313.5	91.952	ug/L	91.952	ppb	04:24:19
2	Be 313.107†	-4992.2	126.1	0.7935	ug/L	0.7935	ppb	04:24:19
2	Cd 226.502†	-8.3	186.8	0.2170	ug/L	0.2170	ppb	04:24:39
2	Co 228.616†	113.8	179.1	2.3847	ug/L	2.3847	ppb	04:24:39
2	Cr 267.716†	702.3	622.9	6.8953	ug/L	6.8953	ppb	04:24:39
2	Cu 324.752†	8246.5	1481.0	5.1372	ug/L	5.1372	ppb	04:24:19
2	Mn 257.610†	477161.0	476231.7	509.74	ug/L	509.74	ppb	04:24:14
2	Mo 202.031†	66.8	48.4	4.3253	ug/L	4.3253	ppb	04:24:39
2	Ni 231.604†	374.4	287.4	6.6536	ug/L	6.6536	ppb	04:24:39

2	P 214.914†	378.3	154.4	77.300 ug/L	77.300 ppb	04:24:39
2	Pb 220.353†	94.5	162.8	19.055 ug/L	19.055 ppb	04:24:39
2	S 181.975 Axial†	79.2	37.5	50.776 ug/L	50.776 ppb	04:24:39
2	Sb 206.836†	38.6	4.3	0.2736 ug/L	0.2736 ppb	04:24:39
2	Se 196.026†	-87.9	-59.0	23.090 ug/L	23.090 ppb	04:24:39
2	Si 251.611†	201361.3	200697.7	6007.7 ug/L	6007.7 ppb	04:24:14
2	Sn 189.927†	-9.7	-14.7	-1.9827 ug/L	-1.9827 ppb	04:24:39
2	Ti 334.940†	237470.7	238333.3	380.44 ug/L	380.44 ppb	04:24:14
2	Tl 190.801†	-56.4	-23.8	-0.5751 ug/L	-0.5751 ppb	04:24:39
2	U 409.014†	-3554.2	-1148.6	-33.871 ug/L	-33.871 ppb	04:24:14
2	V 292.402†	1349.1	2706.0	14.791 ug/L	14.791 ppb	04:24:19
2	Zn 213.857†	7768.5	7138.5	60.577 ug/L	60.577 ppb	04:24:19
2	SiO2†	201370.5	200689.1	12873 ug/L	12873 ppb	04:25:20
3	Sc Radial	5781.3	5781.3	98.9 %		04:23:16
3	Y RADIAL	6333.4	6333.4	100.7 %		04:23:16
3	Al 396.153Radial†	13222.9	13386.6	9298.5 ug/L	9298.5 ppb	04:23:16
3	Ca 317.933Radial†	1161.5	1158.5	1707.6 ug/L	1707.6 ppb	04:23:36
3	Fe 238.204 Radial†	1880.8	1894.4	17735 ug/L	17735 ppb	04:23:36
3	K 766.490 Radial†	7490.9	5220.4	920.82 ug/L	920.82 ppb	04:23:16
3	Mg 279.077 IEC†	51.6	51.0	1783.2 ug/L	1783.2 ppb	04:23:36
3	Na 589.592 Radial†	370.1	1462.0	490.63 ug/L	490.63 ppb	04:23:16
3	Sr 421.552†	3831.1	3900.0	24.272 ug/L	24.272 ppb	04:23:16
3	Sc 361.383	898036.5	898036.5	99.642 %		04:24:44
3	Y 371.029	757909.3	757909.3	100.91 %		04:24:44
3	Ag 328.068†	-900.3	-1196.2	0.2968 ug/L	0.2968 ppb	04:24:49
3	As 188.979†	-34.6	-10.5	1.7666 ug/L	1.7666 ppb	04:25:09
3	B 249.677†	-123.6	406.6	6.1652 ug/L	6.1652 ppb	04:24:49
3	Ba 233.527†	12317.5	12370.3	92.375 ug/L	92.375 ppb	04:24:49
3	Be 313.107†	-5005.3	89.7	0.7819 ug/L	0.7819 ppb	04:24:49
3	Cd 226.502†	-1.8	193.3	0.2740 ug/L	0.2740 ppb	04:25:09
3	Co 228.616†	123.7	189.6	2.5813 ug/L	2.5813 ppb	04:25:09
3	Cr 267.716†	681.6	605.4	6.7136 ug/L	6.7136 ppb	04:25:09
3	Cu 324.752†	8305.4	1578.5	5.4220 ug/L	5.4220 ppb	04:24:49
3	Mn 257.610†	476182.3	477471.4	511.07 ug/L	511.07 ppb	04:24:44
3	Mo 202.031†	69.4	51.3	4.5165 ug/L	4.5165 ppb	04:25:09
3	Ni 231.604†	350.8	265.6	6.1471 ug/L	6.1471 ppb	04:25:09
3	P 214.914†	392.1	170.0	86.127 ug/L	86.127 ppb	04:25:09
3	Pb 220.353†	101.5	170.3	19.890 ug/L	19.890 ppb	04:25:09
3	S 181.975 Axial†	80.9	39.6	53.655 ug/L	53.655 ppb	04:25:09
3	Sb 206.836†	20.2	-14.0	-5.5099 ug/L	-5.5099 ppb	04:25:09
3	Se 196.026†	-86.4	-57.9	24.085 ug/L	24.085 ppb	04:25:09
3	Si 251.611†	201143.7	201417.0	6029.2 ug/L	6029.2 ppb	04:24:44
3	Sn 189.927†	-4.0	-9.0	-1.0597 ug/L	-1.0597 ppb	04:25:09
3	Ti 334.940†	236888.9	238855.3	381.27 ug/L	381.27 ppb	04:24:44
3	Tl 190.801†	-55.0	-22.7	-0.2453 ug/L	-0.2453 ppb	04:25:09
3	U 409.014†	-3608.8	-1219.9	-35.849 ug/L	-35.849 ppb	04:24:44
3	V 292.402†	1221.5	2584.3	13.971 ug/L	13.971 ppb	04:24:49
3	Zn 213.857†	7800.7	7206.9	61.163 ug/L	61.163 ppb	04:24:49
3	SiO2†	202023.5	202282.1	12975 ug/L	12975 ppb	04:25:25

Mean Data: 1201978609|925482|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902467.6	100.13	%	0.506				0.51%
Sc Radial	5807.7	99.4	%	0.62				0.62%
Y 371.029	761464.4	101.38	%	0.439				0.43%
Y RADIAL	6367.9	101.3	%	0.48				0.48%
Ag 328.068†	-1150.3	0.4873	ug/L	0.17225	0.4873	ppb	0.17225	35.35%
Al 396.153Radial†	13403.4	9310.2	ug/L	10.44	9310.2	ppb	10.44	0.11%
As 188.979†	-11.2	1.4771	ug/L	0.27064	1.4771	ppb	0.27064	18.32%
B 249.677†	436.1	6.7908	ug/L	0.54349	6.7908	ppb	0.54349	8.00%
Ba 233.527†	12304.1	91.883	ug/L	0.5286	91.883	ppb	0.5286	0.58%
Be 313.107†	83.8	0.7789	ug/L	0.01641	0.7789	ppb	0.01641	2.11%
Ca 317.933Radial†	1162.7	1713.7	ug/L	7.50	1713.7	ppb	7.50	0.44%
Cd 226.502†	191.9	0.2651	ug/L	0.04425	0.2651	ppb	0.04425	16.69%
Co 228.616†	184.4	2.4844	ug/L	0.09835	2.4844	ppb	0.09835	3.96%
Cr 267.716†	611.6	6.7777	ug/L	0.10200	6.7777	ppb	0.10200	1.51%
Cu 324.752†	1511.7	5.2279	ug/L	0.16824	5.2279	ppb	0.16824	3.22%
Fe 238.204 Radial†	1888.1	17676	ug/L	57.2	17676	ppb	57.2	0.32%
K 766.490 Radial†	5167.8	911.51	ug/L	11.983	911.51	ppb	11.983	1.31%

Mg 279.077 IEC†	49.0	1712.0	ug/L	64.42	1712.0	ppb	64.42	3.76%
Mn 257.610†	476465.4	510.00	ug/L	0.976	510.00	ppb	0.976	0.19%
Mo 202.031†	49.0	4.3654	ug/L	0.13564	4.3654	ppb	0.13564	3.11%
Na 589.592 Radial†	1451.9	487.22	ug/L	4.723	487.22	ppb	4.723	0.97%
Ni 231.604†	272.6	6.3103	ug/L	0.29738	6.3103	ppb	0.29738	4.71%
P 214.914†	162.1	81.661	ug/L	4.4145	81.661	ppb	4.4145	5.41%
Pb 220.353†	170.5	19.922	ug/L	0.8831	19.922	ppb	0.8831	4.43%
S 181.975 Axial†	38.6	52.257	ug/L	1.4413	52.257	ppb	1.4413	2.76%
Sb 206.836†	-4.9	-2.6520	ug/L	2.89236	-2.6520	ppb	2.89236	109.06%
Se 196.026†	-60.8	22.215	ug/L	2.4291	22.215	ppb	2.4291	10.93%
Si 251.611†	200989.1	6016.4	ug/L	11.33	6016.4	ppb	11.33	0.19%
Sn 189.927†	-12.3	-1.5913	ug/L	0.47718	-1.5913	ppb	0.47718	29.99%
Sr 421.552†	3908.8	24.327	ug/L	0.0847	24.327	ppb	0.0847	0.35%
Ti 334.940†	238573.1	380.82	ug/L	0.421	380.82	ppb	0.421	0.11%
Tl 190.801†	-25.1	-0.9188	ug/L	0.89624	-0.9188	ppb	0.89624	97.54%
U 409.014†	-1213.1	-35.654	ug/L	1.6939	-35.654	ppb	1.6939	4.75%
V 292.402†	2647.3	14.393	ug/L	0.4107	14.393	ppb	0.4107	2.85%
Zn 213.857†	7148.8	60.663	ug/L	0.4638	60.663	ppb	0.4638	0.76%
SiO2†	202183.1	12969	ug/L	92.8	12969	ppb	92.8	0.72%

Sequence No.: 117
Sample ID: 241613002|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 118
Date Collected: 12/9/2009 04:27:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613002|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5761.2	5761.2	98.6	%			04:29:31
1	Y RADIAL	7349.7	7349.7	116.9	%			04:29:31
1	Al 396.153Radial†	29597.2	30042.3	20868	ug/L	20868	ppb	04:29:31
1	Ca 317.933Radial†	7904.8	8002.6	11795	ug/L	11795	ppb	04:29:31
1	Fe 238.204 Radial†	7160.6	7256.6	67935	ug/L	67935	ppb	04:29:31
1	K 766.490 Radial†	22893.9	20870.7	3679.0	ug/L	3679.0	ppb	04:29:31
1	Mg 279.077 IEC†	194.9	196.5	6874.1	ug/L	6874.1	ppb	04:29:51
1	Na 589.592 Radial†	5709.5	6879.4	2308.6	ug/L	2308.6	ppb	04:29:31
1	Sr 421.552†	16608.9	16874.5	104.98	ug/L	104.98	ppb	04:29:31
1	Sc 361.383	901453.0	901453.0	100.02	%			04:30:49
1	Y 371.029	884691.3	884691.3	117.79	%			04:30:49
1	Ag 328.068†	-4162.2	-4454.0	1.7907	ug/L	1.7907	ppb	04:30:54
1	As 188.979†	-82.5	-58.3	6.3105	ug/L	6.3105	ppb	04:31:14
1	B 249.677†	506.3	1036.9	12.689	ug/L	12.689	ppb	04:30:54
1	Ba 233.527†	64164.5	64159.5	478.23	ug/L	478.23	ppb	04:30:54
1	Be 313.107†	-8256.7	-3142.0	3.2802	ug/L	3.2802	ppb	04:30:54
1	Cd 226.502†	506.7	701.7	0.6429	ug/L	0.6429	ppb	04:31:14
1	Co 228.616†	836.3	901.5	11.581	ug/L	11.581	ppb	04:31:14
1	Cr 267.716†	2299.3	2220.1	24.742	ug/L	24.742	ppb	04:31:14
1	Cu 324.752†	17170.6	10410.3	33.257	ug/L	33.257	ppb	04:30:54
1	Mn 257.610†	1858722.7	1857911.0	1988.6	ug/L	1988.6	ppb	04:30:49
1	Mo 202.031†	161.0	142.6	13.877	ug/L	13.877	ppb	04:31:14
1	Ni 231.604†	1191.3	1104.5	25.566	ug/L	25.566	ppb	04:31:14
1	P 214.914†	2993.7	2769.6	1544.6	ug/L	1544.6	ppb	04:31:14
1	Pb 220.353†	295.7	364.1	40.261	ug/L	40.261	ppb	04:31:14
1	S 181.975 Axial†	126.7	85.1	115.12	ug/L	115.12	ppb	04:31:14
1	Sb 206.836†	43.8	9.5	-2.9631	ug/L	-2.9631	ppb	04:31:14
1	Se 196.026†	-283.1	-254.2	70.859	ug/L	70.859	ppb	04:31:14
1	Si 251.611†	861596.2	860966.1	25772	ug/L	25772	ppb	04:30:49
1	Sn 189.927†	-73.1	-78.1	-10.645	ug/L	-10.645	ppb	04:31:14
1	Ti 334.940†	1410086.9	1410906.5	2252.2	ug/L	2252.2	ppb	04:30:49
1	Tl 190.801†	-146.3	-113.7	-2.6843	ug/L	-2.6843	ppb	04:31:14
1	U 409.014†	-8515.0	-6111.4	-176.94	ug/L	-176.94	ppb	04:30:49
1	V 292.402†	13052.2	14407.8	82.298	ug/L	82.298	ppb	04:30:54
1	Zn 213.857†	30858.7	30230.4	257.18	ug/L	257.18	ppb	04:30:54
1	SiO2†	867115.3	866466.2	55579	ug/L	55579	ppb	04:32:23
2	Sc Radial	5825.9	5825.9	99.7	%			04:29:56
2	Y RADIAL	7477.2	7477.2	118.9	%			04:29:56
2	Al 396.153Radial†	29994.6	30107.7	20913	ug/L	20913	ppb	04:29:56
2	Ca 317.933Radial†	8012.5	8021.7	11824	ug/L	11824	ppb	04:29:56
2	Fe 238.204 Radial†	7242.1	7257.7	67946	ug/L	67946	ppb	04:29:56
2	K 766.490 Radial†	23198.9	20918.9	3687.6	ug/L	3687.6	ppb	04:29:56
2	Mg 279.077 IEC†	191.7	191.1	6684.7	ug/L	6684.7	ppb	04:30:16
2	Na 589.592 Radial†	5803.8	6909.7	2318.8	ug/L	2318.8	ppb	04:29:56
2	Sr 421.552†	16864.6	16944.0	105.41	ug/L	105.41	ppb	04:29:56
2	Sc 361.383	910379.1	910379.1	101.01	%			04:31:20
2	Y 371.029	893320.9	893320.9	118.94	%			04:31:20
2	Ag 328.068†	-4205.7	-4456.3	1.7831	ug/L	1.7831	ppb	04:31:25
2	As 188.979†	-78.9	-53.9	8.0888	ug/L	8.0888	ppb	04:31:45
2	B 249.677†	490.9	1016.6	12.263	ug/L	12.263	ppb	04:31:25
2	Ba 233.527†	64753.8	64113.9	477.90	ug/L	477.90	ppb	04:31:25
2	Be 313.107†	-8105.7	-2911.5	3.3691	ug/L	3.3691	ppb	04:31:25
2	Cd 226.502†	502.0	692.1	0.5397	ug/L	0.5397	ppb	04:31:45
2	Co 228.616†	838.4	895.4	11.461	ug/L	11.461	ppb	04:31:45
2	Cr 267.716†	2290.7	2189.1	24.417	ug/L	24.417	ppb	04:31:45
2	Cu 324.752†	17180.0	10251.3	32.802	ug/L	32.802	ppb	04:31:25
2	Mn 257.610†	1878999.4	1859764.1	1990.5	ug/L	1990.5	ppb	04:31:20
2	Mo 202.031†	167.9	147.9	14.217	ug/L	14.217	ppb	04:31:45
2	Ni 231.604†	1208.5	1109.9	25.690	ug/L	25.690	ppb	04:31:45

2	P 214.914†	2985.0	2731.6	1522.8	ug/L	1522.8 ppb	04:31:45
2	Pb 220.353†	308.6	374.0	41.394	ug/L	41.394 ppb	04:31:45
2	S 181.975 Axial†	131.8	88.9	120.50	ug/L	120.50 ppb	04:31:45
2	Sb 206.836†	50.6	15.9	-0.9437	ug/L	-0.9437 ppb	04:31:45
2	Se 196.026†	-288.3	-256.6	69.544	ug/L	69.544 ppb	04:31:45
2	Si 251.611†	871172.3	862000.2	25803	ug/L	25803 ppb	04:31:20
2	Sn 189.927†	-72.7	-77.0	-10.458	ug/L	-10.458 ppb	04:31:45
2	Ti 334.940†	1425607.3	1412448.7	2254.7	ug/L	2254.7 ppb	04:31:20
2	Tl 190.801†	-148.8	-114.8	-2.9622	ug/L	-2.9622 ppb	04:31:45
2	U 409.014†	-8581.3	-6093.6	-176.45	ug/L	-176.45 ppb	04:31:20
2	V 292.402†	13182.5	14408.9	82.302	ug/L	82.302 ppb	04:31:25
2	Zn 213.857†	31131.0	30197.4	256.90	ug/L	256.90 ppb	04:31:25
2	SiO2†	859432.4	850360.1	54546	ug/L	54546 ppb	04:32:28
3	Sc Radial	5860.0	5860.0	100	%		04:30:21
3	Y RADIAL	7504.5	7504.5	119.3	%		04:30:21
3	Al 396.153Radial†	30156.9	30094.6	20904	ug/L	20904 ppb	04:30:21
3	Ca 317.933Radial†	8049.3	8011.7	11809	ug/L	11809 ppb	04:30:21
3	Fe 238.204 Radial†	7248.6	7221.9	67610	ug/L	67610 ppb	04:30:21
3	K 766.490 Radial†	23295.5	20879.9	3680.6	ug/L	3680.6 ppb	04:30:21
3	Mg 279.077 IEC†	195.4	193.7	6777.1	ug/L	6777.1 ppb	04:30:42
3	Na 589.592 Radial†	5864.4	6936.3	2327.7	ug/L	2327.7 ppb	04:30:21
3	Sr 421.552†	16917.0	16898.0	105.13	ug/L	105.13 ppb	04:30:21
3	Sc 361.383	905773.5	905773.5	100.50	%		04:31:51
3	Y 371.029	887001.6	887001.6	118.10	%		04:31:51
3	Ag 328.068†	-4081.6	-4354.0	2.1385	ug/L	2.1385 ppb	04:31:56
3	As 188.979†	-88.8	-64.2	3.9481	ug/L	3.9481 ppb	04:32:16
3	B 249.677†	468.7	997.0	11.897	ug/L	11.897 ppb	04:31:56
3	Ba 233.527†	63894.2	63584.5	473.96	ug/L	473.96 ppb	04:31:56
3	Be 313.107†	-8205.6	-3051.8	3.3172	ug/L	3.3172 ppb	04:31:56
3	Cd 226.502†	504.4	696.9	0.6244	ug/L	0.6244 ppb	04:32:16
3	Co 228.616†	823.8	885.1	11.272	ug/L	11.272 ppb	04:32:16
3	Cr 267.716†	2261.9	2172.0	24.230	ug/L	24.230 ppb	04:32:16
3	Cu 324.752†	16984.7	10143.4	32.476	ug/L	32.476 ppb	04:31:56
3	Mn 257.610†	1870826.4	1861090.3	1991.9	ug/L	1991.9 ppb	04:31:51
3	Mo 202.031†	186.7	167.4	15.430	ug/L	15.430 ppb	04:32:16
3	Ni 231.604†	1175.5	1083.1	25.069	ug/L	25.069 ppb	04:32:16
3	P 214.914†	2994.4	2756.0	1537.2	ug/L	1537.2 ppb	04:32:16
3	Pb 220.353†	306.2	373.1	41.323	ug/L	41.323 ppb	04:32:16
3	S 181.975 Axial†	126.6	84.4	114.09	ug/L	114.09 ppb	04:32:16
3	Sb 206.836†	37.8	3.4	-4.8502	ug/L	-4.8502 ppb	04:32:16
3	Se 196.026†	-277.5	-247.3	73.828	ug/L	73.828 ppb	04:32:16
3	Si 251.611†	866298.1	861535.6	25789	ug/L	25789 ppb	04:31:51
3	Sn 189.927†	-64.9	-69.6	-9.2489	ug/L	-9.2489 ppb	04:32:16
3	Ti 334.940†	1418149.4	1412204.1	2254.3	ug/L	2254.3 ppb	04:31:51
3	Tl 190.801†	-159.1	-125.8	-6.0261	ug/L	-6.0261 ppb	04:32:16
3	U 409.014†	-8664.8	-6219.8	-179.89	ug/L	-179.89 ppb	04:31:51
3	V 292.402†	12951.6	14245.5	81.288	ug/L	81.288 ppb	04:31:56
3	Zn 213.857†	30764.1	29989.1	255.11	ug/L	255.11 ppb	04:31:56
3	SiO2†	865894.0	861115.7	55235	ug/L	55235 ppb	04:32:34

Mean Data: 241613002|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905868.6	100.51	%	0.495				0.49%
Sc Radial	5815.7	99.5	%	0.86				0.86%
Y 371.029	888337.9	118.27	%	0.595				0.50%
Y RADIAL	7443.8	118.4	%	1.31				1.11%
Ag 328.068†	-4421.5	1.9041	ug/L	0.20303	1.9041	ppb	0.20303	10.66%
Al 396.153Radial†	30081.6	20895	ug/L	24.0	20895	ppb	24.0	0.11%
As 188.979†	-58.8	6.1158	ug/L	2.07723	6.1158	ppb	2.07723	33.96%
B 249.677†	1016.8	12.283	ug/L	0.3962	12.283	ppb	0.3962	3.23%
Ba 233.527†	63952.7	476.69	ug/L	2.377	476.69	ppb	2.377	0.50%
Be 313.107†	-3035.1	3.3222	ug/L	0.04464	3.3222	ppb	0.04464	1.34%
Ca 317.933Radial†	8012.0	11809	ug/L	14.1	11809	ppb	14.1	0.12%
Cd 226.502†	696.9	0.6024	ug/L	0.05502	0.6024	ppb	0.05502	9.13%
Co 228.616†	894.0	11.438	ug/L	0.1559	11.438	ppb	0.1559	1.36%
Cr 267.716†	2193.7	24.463	ug/L	0.2594	24.463	ppb	0.2594	1.06%
Cu 324.752†	10268.3	32.845	ug/L	0.3919	32.845	ppb	0.3919	1.19%
Fe 238.204 Radial†	7245.4	67830	ug/L	190.6	67830	ppb	190.6	0.28%
K 766.490 Radial†	20889.8	3682.4	ug/L	4.54	3682.4	ppb	4.54	0.12%

Mg 279.077 IEC†	193.8	6778.6	ug/L	94.72	6778.6	ppb	94.72	1.40%
Mn 257.610†	1859588.5	1990.3	ug/L	1.69	1990.3	ppb	1.69	0.08%
Mo 202.031†	152.6	14.508	ug/L	0.8162	14.508	ppb	0.8162	5.63%
Na 589.592 Radial†	6908.4	2318.3	ug/L	9.56	2318.3	ppb	9.56	0.41%
Ni 231.604†	1099.2	25.442	ug/L	0.3286	25.442	ppb	0.3286	1.29%
P 214.914†	2752.4	1534.9	ug/L	11.09	1534.9	ppb	11.09	0.72%
Pb 220.353†	370.4	40.993	ug/L	0.6346	40.993	ppb	0.6346	1.55%
S 181.975 Axial†	86.1	116.57	ug/L	3.443	116.57	ppb	3.443	2.95%
Sb 206.836†	9.6	-2.9190	ug/L	1.95362	-2.9190	ppb	1.95362	66.93%
Se 196.026†	-252.7	71.410	ug/L	2.1946	71.410	ppb	2.1946	3.07%
Si 251.611†	861500.6	25788	ug/L	15.5	25788	ppb	15.5	0.06%
Sn 189.927†	-74.9	-10.117	ug/L	0.7580	-10.117	ppb	0.7580	7.49%
Sr 421.552†	16905.5	105.17	ug/L	0.220	105.17	ppb	0.220	0.21%
Ti 334.940†	1411853.1	2253.7	ug/L	1.32	2253.7	ppb	1.32	0.06%
Tl 190.801†	-118.1	-3.8909	ug/L	1.85439	-3.8909	ppb	1.85439	47.66%
U 409.014†	-6141.6	-177.76	ug/L	1.858	-177.76	ppb	1.858	1.05%
V 292.402†	14354.1	81.963	ug/L	0.5844	81.963	ppb	0.5844	0.71%
Zn 213.857†	30139.0	256.40	ug/L	1.122	256.40	ppb	1.122	0.44%
SiO2†	859314.0	55120	ug/L	526.2	55120	ppb	526.2	0.95%

Sequence No.: 118
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 04:34:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5785.2	5785.2	99.0	%			04:36:38
1	Y RADIAL	6128.3	6128.3	97.46	%			04:36:38
1	Al 396.153Radial†	6737.0	6825.8	4720.1	ug/L	4720.1	ppb	04:36:38
1	Ca 317.933Radial†	3287.5	3305.3	4871.8	ug/L	4871.8	ppb	04:36:58
1	Fe 238.204 Radial†	528.6	527.2	4951.0	ug/L	4951.0	ppb	04:36:58
1	K 766.490 Radial†	30794.8	28755.8	5090.9	ug/L	5090.9	ppb	04:36:38
1	Mg 279.077 IEC†	137.4	137.6	4861.2	ug/L	4861.2	ppb	04:36:58
1	Na 589.592 Radial†	27642.4	29011.0	9735.6	ug/L	9735.6	ppb	04:36:38
1	Sr 421.552†	79308.2	80140.8	499.05	ug/L	499.05	ppb	04:36:38
1	Sc 361.383	898895.8	898895.8	99.737	%			04:37:56
1	Y 371.029	731769.0	731769.0	97.428	%			04:37:56
1	Ag 328.068†	111126.2	111126.2	506.30	ug/L	506.30	ppb	04:38:01
1	As 188.979†	1193.1	1220.4	486.76	ug/L	486.76	ppb	04:38:21
1	B 249.677†	22305.0	22894.5	478.21	ug/L	478.21	ppb	04:38:01
1	Ba 233.527†	65994.2	66176.5	491.72	ug/L	491.72	ppb	04:38:01
1	Be 313.107†	1307940.7	1316499.9	480.89	ug/L	480.89	ppb	04:37:56
1	Cd 226.502†	46355.3	46672.6	493.21	ug/L	493.21	ppb	04:38:01
1	Co 228.616†	26003.7	26137.7	496.18	ug/L	496.18	ppb	04:38:01
1	Cr 267.716†	46166.5	46209.5	485.86	ug/L	485.86	ppb	04:38:01
1	Cu 324.752†	176740.2	170449.1	488.03	ug/L	488.03	ppb	04:38:01
1	Mn 257.610†	463932.0	464732.0	496.15	ug/L	496.15	ppb	04:37:56
1	Mo 202.031†	7822.0	7824.3	497.40	ug/L	497.40	ppb	04:38:21
1	Ni 231.604†	21201.0	21170.3	489.91	ug/L	489.91	ppb	04:38:01
1	P 214.914†	4479.6	4267.9	2387.6	ug/L	2387.6	ppb	04:38:21
1	Pb 220.353†	4233.3	4312.9	489.05	ug/L	489.05	ppb	04:38:21
1	S 181.975 Axial†	752.3	712.7	997.74	ug/L	997.74	ppb	04:38:21
1	Sb 206.836†	1613.3	1583.3	508.44	ug/L	508.44	ppb	04:38:21
1	Se 196.026†	828.1	859.1	514.72	ug/L	514.72	ppb	04:38:21
1	Si 251.611†	83654.7	83425.4	2485.5	ug/L	2485.5	ppb	04:38:01
1	Sn 189.927†	3028.6	3031.6	496.94	ug/L	496.94	ppb	04:38:21
1	Ti 334.940†	323245.8	325212.4	518.83	ug/L	518.83	ppb	04:37:56
1	Tl 190.801†	1707.7	1744.8	492.03	ug/L	492.03	ppb	04:38:21
1	U 409.014†	16140.9	18585.2	510.41	ug/L	510.41	ppb	04:38:01
1	V 292.402†	71977.9	73525.9	492.32	ug/L	492.32	ppb	04:38:01
1	Zn 213.857†	56518.4	56045.5	485.28	ug/L	485.28	ppb	04:38:01
1	SiO2†	82884.4	82635.3	5274.9	ug/L	5274.9	ppb	04:39:29
2	Sc Radial	5546.0	5546.0	94.9	%			04:37:03
2	Y RADIAL	5911.7	5911.7	94.02	%			04:37:03
2	Al 396.153Radial†	6490.1	6859.1	4743.4	ug/L	4743.4	ppb	04:37:03
2	Ca 317.933Radial†	3292.2	3453.5	5090.2	ug/L	5090.2	ppb	04:37:23
2	Fe 238.204 Radial†	527.6	549.1	5156.3	ug/L	5156.3	ppb	04:37:23
2	K 766.490 Radial†	29835.6	29086.4	5149.5	ug/L	5149.5	ppb	04:37:03
2	Mg 279.077 IEC†	141.6	148.0	5227.2	ug/L	5227.2	ppb	04:37:23
2	Na 589.592 Radial†	26512.1	29024.1	9739.9	ug/L	9739.9	ppb	04:37:03
2	Sr 421.552†	76215.7	80336.6	500.27	ug/L	500.27	ppb	04:37:03
2	Sc 361.383	899530.7	899530.7	99.808	%			04:38:27
2	Y 371.029	731624.2	731624.2	97.409	%			04:38:27
2	Ag 328.068†	110308.3	110228.2	502.28	ug/L	502.28	ppb	04:38:32
2	As 188.979†	1179.2	1205.7	480.92	ug/L	480.92	ppb	04:38:52
2	B 249.677†	22165.4	22738.8	474.92	ug/L	474.92	ppb	04:38:32
2	Ba 233.527†	65654.4	65789.4	488.85	ug/L	488.85	ppb	04:38:32
2	Be 313.107†	1293668.3	1301274.3	475.33	ug/L	475.33	ppb	04:38:27
2	Cd 226.502†	46044.0	46327.9	489.55	ug/L	489.55	ppb	04:38:32
2	Co 228.616†	25953.6	26069.0	494.87	ug/L	494.87	ppb	04:38:32
2	Cr 267.716†	45828.5	45838.2	481.96	ug/L	481.96	ppb	04:38:32
2	Cu 324.752†	175311.9	168893.0	483.59	ug/L	483.59	ppb	04:38:32
2	Mn 257.610†	460195.9	460660.4	491.82	ug/L	491.82	ppb	04:38:27
2	Mo 202.031†	7752.4	7749.0	492.63	ug/L	492.63	ppb	04:38:52
2	Ni 231.604†	21093.4	21047.5	487.07	ug/L	487.07	ppb	04:38:32

2	P 214.914†	4443.2	4228.3	2365.3 ug/L	2365.3 ppb	04:38:52
2	Pb 220.353†	4188.0	4264.6	483.57 ug/L	483.57 ppb	04:38:52
2	S 181.975 Axial†	741.4	701.2	981.67 ug/L	981.67 ppb	04:38:52
2	Sb 206.836†	1611.1	1580.0	507.32 ug/L	507.32 ppb	04:38:52
2	Se 196.026†	823.0	853.4	512.03 ug/L	512.03 ppb	04:38:52
2	Si 251.611†	83202.1	82912.7	2470.2 ug/L	2470.2 ppb	04:38:32
2	Sn 189.927†	3009.0	3009.8	493.40 ug/L	493.40 ppb	04:38:52
2	Ti 334.940†	320431.1	322163.5	513.98 ug/L	513.98 ppb	04:38:27
2	Tl 190.801†	1686.8	1722.6	485.78 ug/L	485.78 ppb	04:38:52
2	U 409.014†	15981.1	18413.7	505.67 ug/L	505.67 ppb	04:38:32
2	V 292.402†	71302.0	72797.8	487.42 ug/L	487.42 ppb	04:38:32
2	Zn 213.857†	56196.4	55682.9	482.11 ug/L	482.11 ppb	04:38:32
2	SiO2†	84392.0	84087.2	5368.2 ug/L	5368.2 ppb	04:39:34
3	Sc Radial	5609.4	5609.4	96.0 %		04:37:28
3	Y RADIAL	5928.1	5928.1	94.28 %		04:37:28
3	Al 396.153Radial†	6612.3	6909.2	4777.9 ug/L	4777.9 ppb	04:37:28
3	Ca 317.933Radial†	3272.3	3393.5	5001.8 ug/L	5001.8 ppb	04:37:48
3	Fe 238.204 Radial†	530.5	545.8	5125.9 ug/L	5125.9 ppb	04:37:48
3	K 766.490 Radial†	30451.5	29372.9	5200.3 ug/L	5200.3 ppb	04:37:28
3	Mg 279.077 IEC†	142.1	146.9	5187.1 ug/L	5187.1 ppb	04:37:48
3	Na 589.592 Radial†	26921.7	29135.3	9777.2 ug/L	9777.2 ppb	04:37:28
3	Sr 421.552†	77620.0	80892.6	503.73 ug/L	503.73 ppb	04:37:28
3	Sc 361.383	893255.2	893255.2	99.111 %		04:38:58
3	Y 371.029	727026.0	727026.0	96.797 %		04:38:58
3	Ag 328.068†	111183.8	111887.9	509.82 ug/L	509.82 ppb	04:39:03
3	As 188.979†	1180.4	1215.2	484.69 ug/L	484.69 ppb	04:39:23
3	B 249.677†	22379.9	23111.3	482.72 ug/L	482.72 ppb	04:39:03
3	Ba 233.527†	66089.3	66690.4	495.55 ug/L	495.55 ppb	04:39:03
3	Be 313.107†	1289273.6	1305946.3	477.03 ug/L	477.03 ppb	04:38:58
3	Cd 226.502†	46407.7	47018.9	496.86 ug/L	496.86 ppb	04:39:03
3	Co 228.616†	26092.6	26392.0	501.01 ug/L	501.01 ppb	04:39:03
3	Cr 267.716†	46168.4	46503.7	488.95 ug/L	488.95 ppb	04:39:03
3	Cu 324.752†	176675.8	171503.2	491.05 ug/L	491.05 ppb	04:39:03
3	Mn 257.610†	458956.1	462648.9	493.94 ug/L	493.94 ppb	04:38:58
3	Mo 202.031†	7801.4	7853.0	499.24 ug/L	499.24 ppb	04:39:23
3	Ni 231.604†	21240.1	21343.9	493.93 ug/L	493.93 ppb	04:39:03
3	P 214.914†	4451.7	4268.1	2387.2 ug/L	2387.2 ppb	04:39:23
3	Pb 220.353†	4214.3	4320.5	489.92 ug/L	489.92 ppb	04:39:23
3	S 181.975 Axial†	743.6	708.7	992.10 ug/L	992.10 ppb	04:39:23
3	Sb 206.836†	1604.7	1584.8	508.92 ug/L	508.92 ppb	04:39:23
3	Se 196.026†	824.9	861.1	516.44 ug/L	516.44 ppb	04:39:23
3	Si 251.611†	83595.0	83894.9	2499.5 ug/L	2499.5 ppb	04:39:03
3	Sn 189.927†	3019.5	3041.6	498.59 ug/L	498.59 ppb	04:39:23
3	Ti 334.940†	319473.4	323452.7	516.03 ug/L	516.03 ppb	04:38:58
3	Tl 190.801†	1695.1	1742.8	491.42 ug/L	491.42 ppb	04:39:23
3	U 409.014†	16305.2	18853.2	517.77 ug/L	517.77 ppb	04:39:03
3	V 292.402†	72118.4	74123.3	496.29 ug/L	496.29 ppb	04:39:03
3	Zn 213.857†	56574.0	56459.4	488.84 ug/L	488.84 ppb	04:39:03
3	SiO2†	84011.0	84296.8	5381.4 ug/L	5381.4 ppb	04:39:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897227.2	99.552	%	0.3833				0.39%
Sc Radial	5646.9	96.6	%	2.12				2.19%
Y 371.029	730139.7	97.211	%	0.3592				0.37%
Y RADIAL	5989.4	95.25	%	1.918				2.01%
Ag 328.068†	111080.8	506.14	ug/L	3.770	506.14	ppb	3.770	0.74%
QC value within limits for Ag 328.068 Recovery = 101.23%								
Al 396.153Radial†	6864.7	4747.1	ug/L	29.09	4747.1	ppb	29.09	0.61%
QC value within limits for Al 396.153Radial Recovery = 94.94%								
As 188.979†	1213.8	484.12	ug/L	2.959	484.12	ppb	2.959	0.61%
QC value within limits for As 188.979 Recovery = 96.82%								
B 249.677†	22914.9	478.61	ug/L	3.915	478.61	ppb	3.915	0.82%
QC value within limits for B 249.677 Recovery = 95.72%								
Ba 233.527†	66218.8	492.04	ug/L	3.359	492.04	ppb	3.359	0.68%
QC value within limits for Ba 233.527 Recovery = 98.41%								
Be 313.107†	1307906.8	477.75	ug/L	2.848	477.75	ppb	2.848	0.60%
QC value within limits for Be 313.107 Recovery = 95.55%								
Ca 317.933Radial†	3384.1	4987.9	ug/L	109.84	4987.9	ppb	109.84	2.20%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.76%
Cd 226.502†            46673.1      493.21 ug/L        3.656      493.21 ppb        3.656   0.74%
   QC value within limits for Cd 226.502  Recovery = 98.64%
Co 228.616†            26199.5      497.35 ug/L        3.236      497.35 ppb        3.236   0.65%
   QC value within limits for Co 228.616  Recovery = 99.47%
Cr 267.716†            46183.8      485.59 ug/L        3.506      485.59 ppb        3.506   0.72%
   QC value within limits for Cr 267.716  Recovery = 97.12%
Cu 324.752†           170281.8      487.56 ug/L        3.756      487.56 ppb        3.756   0.77%
   QC value within limits for Cu 324.752  Recovery = 97.51%
Fe 238.204 Radial†       540.7      5077.7 ug/L       110.80      5077.7 ppb       110.80   2.18%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.55%
K 766.490 Radial†      29071.7      5146.9 ug/L        54.77      5146.9 ppb        54.77   1.06%
   QC value within limits for K 766.490 Radial  Recovery = 102.94%
Mg 279.077 IEC†          144.2      5091.8 ug/L       200.71      5091.8 ppb       200.71   3.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.84%
Mn 257.610†           462680.4      493.97 ug/L        2.165      493.97 ppb        2.165   0.44%
   QC value within limits for Mn 257.610  Recovery = 98.79%
Mo 202.031†             7808.8      496.42 ug/L        3.411      496.42 ppb        3.411   0.69%
   QC value within limits for Mo 202.031  Recovery = 99.28%
Na 589.592 Radial†     29056.8      9750.9 ug/L        22.91      9750.9 ppb        22.91   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 97.51%
Ni 231.604†            21187.2      490.30 ug/L        3.447      490.30 ppb        3.447   0.70%
   QC value within limits for Ni 231.604  Recovery = 98.06%
P 214.914†              4254.7      2380.0 ug/L        12.76      2380.0 ppb        12.76   0.54%
   QC value within limits for P 214.914  Recovery = 95.20%
Pb 220.353†             4299.3      487.51 ug/L        3.444      487.51 ppb        3.444   0.71%
   QC value within limits for Pb 220.353  Recovery = 97.50%
S 181.975 Axial†         707.5      990.50 ug/L        8.153      990.50 ppb        8.153   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 99.05%
Sb 206.836†             1582.7      508.23 ug/L        0.821      508.23 ppb        0.821   0.16%
   QC value within limits for Sb 206.836  Recovery = 101.65%
Se 196.026†              857.9      514.39 ug/L        2.221      514.39 ppb        2.221   0.43%
   QC value within limits for Se 196.026  Recovery = 102.88%
Si 251.611†            83411.0      2485.1 ug/L        14.63      2485.1 ppb        14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 99.40%
Sn 189.927†             3027.7      496.31 ug/L        2.650      496.31 ppb        2.650   0.53%
   QC value within limits for Sn 189.927  Recovery = 99.26%
Sr 421.552†            80456.7      501.02 ug/L        2.429      501.02 ppb        2.429   0.48%
   QC value within limits for Sr 421.552  Recovery = 100.20%
Ti 334.940†           323609.6      516.28 ug/L        2.435      516.28 ppb        2.435   0.47%
   QC value within limits for Ti 334.940  Recovery = 103.26%
Tl 190.801†             1736.7      489.74 ug/L        3.446      489.74 ppb        3.446   0.70%
   QC value within limits for Tl 190.801  Recovery = 97.95%
U 409.014†             18617.4      511.28 ug/L        6.095      511.28 ppb        6.095   1.19%
   QC value within limits for U 409.014  Recovery = 102.26%
V 292.402†             73482.3      492.01 ug/L        4.444      492.01 ppb        4.444   0.90%
   QC value within limits for V 292.402  Recovery = 98.40%
Zn 213.857†            56062.6      485.41 ug/L        3.370      485.41 ppb        3.370   0.69%
   QC value within limits for Zn 213.857  Recovery = 97.08%
SiO2†                  83673.1      5341.5 ug/L        58.02      5341.5 ppb        58.02   1.09%
   QC value within limits for SiO2  Recovery = 99.89%
All analyte(s) passed QC.
```

Sequence No.: 119
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 04:41:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5776.4	5776.4	98.8	%			04:43:42
1	Y RADIAL	6168.9	6168.9	98.11	%			04:43:42
1	Al 396.153Radial†	-7.6	12.7	8.8269	ug/L	8.8269	ppb	04:43:42
1	Ca 317.933Radial†	30.7	15.5	22.857	ug/L	22.857	ppb	04:44:02
1	Fe 238.204 Radial†	6.0	-0.8	-7.0924	ug/L	-7.0924	ppb	04:44:02
1	K 766.490 Radial†	2197.8	-128.2	-22.809	ug/L	-22.809	ppb	04:43:42
1	Mg 279.077 IEC†	0.7	-0.5	-17.678	ug/L	-17.678	ppb	04:44:02
1	Na 589.592 Radial†	-557.6	523.8	175.77	ug/L	175.77	ppb	04:43:42
1	Sr 421.552†	8.9	36.4	0.2264	ug/L	0.2264	ppb	04:43:42
1	Sc 361.383	902966.0	902966.0	100.19	%			04:44:58
1	Y 371.029	747399.6	747399.6	99.509	%			04:44:58
1	Ag 328.068†	183.4	-109.7	-0.5016	ug/L	-0.5016	ppb	04:45:03
1	As 188.979†	-32.7	-8.4	-3.3338	ug/L	-3.3338	ppb	04:45:23
1	B 249.677†	-337.5	193.8	4.0653	ug/L	4.0653	ppb	04:45:23
1	Ba 233.527†	-35.1	-26.6	-0.1959	ug/L	-0.1959	ppb	04:45:23
1	Be 313.107†	-5510.0	-386.6	-0.1405	ug/L	-0.1405	ppb	04:45:03
1	Cd 226.502†	-182.1	13.4	0.1417	ug/L	0.1417	ppb	04:45:23
1	Co 228.616†	-77.7	-12.1	-0.2285	ug/L	-0.2285	ppb	04:45:23
1	Cr 267.716†	69.5	-9.3	-0.0986	ug/L	-0.0986	ppb	04:45:23
1	Cu 324.752†	6745.7	-23.7	-0.0682	ug/L	-0.0682	ppb	04:45:03
1	Mn 257.610†	441.2	18.0	0.0189	ug/L	0.0189	ppb	04:45:23
1	Mo 202.031†	28.9	10.5	0.6641	ug/L	0.6641	ppb	04:45:23
1	Ni 231.604†	56.6	-30.0	-0.6950	ug/L	-0.6950	ppb	04:45:23
1	P 214.914†	235.7	11.8	6.8080	ug/L	6.8080	ppb	04:45:23
1	Pb 220.353†	-63.7	4.9	0.5562	ug/L	0.5562	ppb	04:45:23
1	S 181.975 Axial†	50.5	8.8	12.342	ug/L	12.342	ppb	04:45:23
1	Sb 206.836†	33.3	-1.0	-0.2960	ug/L	-0.2960	ppb	04:45:23
1	Se 196.026†	-23.5	5.4	3.0919	ug/L	3.0919	ppb	04:45:23
1	Si 251.611†	551.4	100.6	3.0087	ug/L	3.0087	ppb	04:45:23
1	Sn 189.927†	5.1	0.1	0.0184	ug/L	0.0184	ppb	04:45:23
1	Ti 334.940†	-995.1	121.7	0.1931	ug/L	0.1931	ppb	04:45:03
1	Tl 190.801†	-30.0	2.6	0.7276	ug/L	0.7276	ppb	04:45:23
1	U 409.014†	-2213.3	192.6	5.3078	ug/L	5.3078	ppb	04:44:58
1	V 292.402†	-1265.5	95.3	0.6494	ug/L	0.6494	ppb	04:45:03
1	Zn 213.857†	669.0	45.9	0.4066	ug/L	0.4066	ppb	04:45:23
1	SiO2†	542.5	74.1	4.7422	ug/L	4.7422	ppb	04:46:44
2	Sc Radial	5884.8	5884.8	101	%			04:44:07
2	Y RADIAL	6253.1	6253.1	99.45	%			04:44:07
2	Al 396.153Radial†	-17.3	3.2	2.1957	ug/L	2.1957	ppb	04:44:07
2	Ca 317.933Radial†	26.8	11.0	16.257	ug/L	16.257	ppb	04:44:27
2	Fe 238.204 Radial†	8.1	1.2	11.160	ug/L	11.160	ppb	04:44:27
2	K 766.490 Radial†	2279.0	-88.5	-15.765	ug/L	-15.765	ppb	04:44:07
2	Mg 279.077 IEC†	2.6	1.4	49.706	ug/L	49.706	ppb	04:44:27
2	Na 589.592 Radial†	-602.3	489.8	164.38	ug/L	164.38	ppb	04:44:07
2	Sr 421.552†	25.4	52.5	0.3270	ug/L	0.3270	ppb	04:44:07
2	Sc 361.383	895577.7	895577.7	99.369	%			04:45:29
2	Y 371.029	740788.9	740788.9	98.629	%			04:45:29
2	Ag 328.068†	282.5	-8.4	-0.0354	ug/L	-0.0354	ppb	04:45:34
2	As 188.979†	-17.3	6.7	2.6654	ug/L	2.6654	ppb	04:45:54
2	B 249.677†	-324.3	204.3	4.2827	ug/L	4.2827	ppb	04:45:54
2	Ba 233.527†	-36.5	-28.3	-0.2087	ug/L	-0.2087	ppb	04:45:54
2	Be 313.107†	-5471.2	-393.0	-0.1430	ug/L	-0.1430	ppb	04:45:34
2	Cd 226.502†	-172.8	21.2	0.2220	ug/L	0.2220	ppb	04:45:54
2	Co 228.616†	-70.9	-5.9	-0.1109	ug/L	-0.1109	ppb	04:45:54
2	Cr 267.716†	65.7	-12.5	-0.1311	ug/L	-0.1311	ppb	04:45:54
2	Cu 324.752†	6764.6	50.9	0.1461	ug/L	0.1461	ppb	04:45:34
2	Mn 257.610†	436.3	16.8	0.0181	ug/L	0.0181	ppb	04:45:54
2	Mo 202.031†	31.6	13.5	0.8576	ug/L	0.8576	ppb	04:45:54
2	Ni 231.604†	45.5	-40.8	-0.9436	ug/L	-0.9436	ppb	04:45:54

2	P 214.914†	244.8	22.8	13.142 ug/L	13.142 ppb	04:45:54
2	Pb 220.353†	-53.8	14.3	1.6233 ug/L	1.6233 ppb	04:45:54
2	S 181.975 Axial†	49.0	7.7	10.785 ug/L	10.785 ppb	04:45:54
2	Sb 206.836†	46.2	12.3	3.9136 ug/L	3.9136 ppb	04:45:54
2	Se 196.026†	-22.7	6.0	3.4961 ug/L	3.4961 ppb	04:45:54
2	Si 251.611†	512.5	66.1	1.9664 ug/L	1.9664 ppb	04:45:54
2	Sn 189.927†	7.4	2.5	0.4070 ug/L	0.4070 ppb	04:45:54
2	Ti 334.940†	-1019.3	89.2	0.1422 ug/L	0.1422 ppb	04:45:34
2	Tl 190.801†	-28.3	4.1	1.1401 ug/L	1.1401 ppb	04:45:54
2	U 409.014†	-2304.1	83.0	2.2864 ug/L	2.2864 ppb	04:45:29
2	V 292.402†	-1294.5	55.7	0.3838 ug/L	0.3838 ppb	04:45:34
2	Zn 213.857†	658.3	40.7	0.3582 ug/L	0.3582 ppb	04:45:54
2	SiO2†	532.9	68.8	4.3923 ug/L	4.3923 ppb	04:47:04
3	Sc Radial	5804.3	5804.3	99.3 %		04:44:32
3	Y RADIAL	6211.4	6211.4	98.79 %		04:44:32
3	Al 396.153Radial†	-23.3	-3.1	-2.1218 ug/L	-2.1218 ppb	04:44:32
3	Ca 317.933Radial†	26.4	11.0	16.221 ug/L	16.221 ppb	04:44:52
3	Fe 238.204 Radial†	6.9	0.2	1.3991 ug/L	1.3991 ppb	04:44:52
3	K 766.490 Radial†	2210.3	-126.3	-22.475 ug/L	-22.475 ppb	04:44:32
3	Mg 279.077 IEC†	2.6	1.5	52.250 ug/L	52.250 ppb	04:44:52
3	Na 589.592 Radial†	-609.4	474.4	159.21 ug/L	159.21 ppb	04:44:32
3	Sr 421.552†	22.7	50.2	0.3127 ug/L	0.3127 ppb	04:44:32
3	Sc 361.383	907280.9	907280.9	100.67 %		04:45:59
3	Y 371.029	750232.4	750232.4	99.887 %		04:45:59
3	Ag 328.068†	245.0	-49.4	-0.2237 ug/L	-0.2237 ppb	04:46:04
3	As 188.979†	-28.1	-3.7	-1.4735 ug/L	-1.4735 ppb	04:46:24
3	B 249.677†	-306.8	225.9	4.7385 ug/L	4.7385 ppb	04:46:24
3	Ba 233.527†	-32.7	-24.1	-0.1763 ug/L	-0.1763 ppb	04:46:24
3	Be 313.107†	-5608.6	-458.5	-0.1668 ug/L	-0.1668 ppb	04:46:04
3	Cd 226.502†	-174.4	21.9	0.2303 ug/L	0.2303 ppb	04:46:24
3	Co 228.616†	-82.4	-16.4	-0.3119 ug/L	-0.3119 ppb	04:46:24
3	Cr 267.716†	90.2	10.9	0.1151 ug/L	0.1151 ppb	04:46:24
3	Cu 324.752†	6824.2	22.3	0.0638 ug/L	0.0638 ppb	04:46:04
3	Mn 257.610†	443.9	18.7	0.0191 ug/L	0.0191 ppb	04:46:24
3	Mo 202.031†	16.9	-1.5	-0.0956 ug/L	-0.0956 ppb	04:46:24
3	Ni 231.604†	40.4	-46.4	-1.0742 ug/L	-1.0742 ppb	04:46:24
3	P 214.914†	233.5	8.4	4.8266 ug/L	4.8266 ppb	04:46:24
3	Pb 220.353†	-56.1	12.7	1.4324 ug/L	1.4324 ppb	04:46:24
3	S 181.975 Axial†	33.3	-8.5	-11.880 ug/L	-11.880 ppb	04:46:24
3	Sb 206.836†	33.8	-0.7	-0.2428 ug/L	-0.2428 ppb	04:46:24
3	Se 196.026†	-19.3	9.7	5.6106 ug/L	5.6106 ppb	04:46:24
3	Si 251.611†	532.7	79.5	2.3934 ug/L	2.3934 ppb	04:46:24
3	Sn 189.927†	-1.9	-6.9	-1.1293 ug/L	-1.1293 ppb	04:46:24
3	Ti 334.940†	-1010.3	111.3	0.1764 ug/L	0.1764 ppb	04:46:04
3	Tl 190.801†	-25.2	7.5	2.1025 ug/L	2.1025 ppb	04:46:24
3	U 409.014†	-2257.6	159.2	4.3843 ug/L	4.3843 ppb	04:45:59
3	V 292.402†	-1230.1	136.4	0.9089 ug/L	0.9089 ppb	04:46:04
3	Zn 213.857†	655.8	29.6	0.2638 ug/L	0.2638 ppb	04:46:24
3	SiO2†	538.7	67.7	4.3716 ug/L	4.3716 ppb	04:47:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901941.5	100.08	%	0.657				0.66%
Sc Radial	5821.8	99.6	%	0.96				0.97%
Y 371.029	746140.3	99.342	%	0.6452				0.65%
Y RADIAL	6211.1	98.78	%	0.669				0.68%
Ag 328.068†	-55.8	-0.2536	ug/L	0.23451	-0.2536	ppb	0.23451	92.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.3	2.9669	ug/L	5.51496	2.9669	ppb	5.51496	185.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.8	-0.7140	ug/L	3.07090	-0.7140	ppb	3.07090	430.11%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	208.0	4.3622	ug/L	0.34355	4.3622	ppb	0.34355	7.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-26.3	-0.1937	ug/L	0.01632	-0.1937	ppb	0.01632	8.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-412.7	-0.1501	ug/L	0.01449	-0.1501	ppb	0.01449	9.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.5	18.445	ug/L	3.8209	18.445	ppb	3.8209	20.71%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.8      0.1980 ug/L       0.04896      0.1980 ppb        0.04896  24.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -11.5     -0.2171 ug/L       0.10097     -0.2171 ppb        0.10097  46.51%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.6     -0.0382 ug/L       0.13371     -0.0382 ppb        0.13371 350.15%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              16.5      0.0472 ug/L       0.10809      0.0472 ppb        0.10809 228.77%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.2      1.8223 ug/L       9.13371      1.8223 ppb        9.13371 501.21%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -114.3     -20.350 ug/L        3.9740     -20.350 ppb         3.9740  19.53%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.8      28.093 ug/L       39.6590      28.093 ppb        39.6590 141.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              17.8      0.0187 ug/L       0.00053      0.0187 ppb        0.00053   2.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               7.5      0.4754 ug/L       0.50384      0.4754 ppb        0.50384 105.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       496.0      166.45 ug/L         8.475      166.45 ppb          8.475   5.09%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -39.1     -0.9042 ug/L       0.19263     -0.9042 ppb        0.19263  21.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               14.3      8.2589 ug/L       4.34347      8.2589 ppb        4.34347  52.59%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.6      1.2040 ug/L       0.56907      1.2040 ppb        0.56907  47.27%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.7      3.7490 ug/L      13.55777      3.7490 ppb       13.55777 361.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.5      1.1249 ug/L       2.41516      1.1249 ppb        2.41516 214.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               7.0      4.0662 ug/L       1.35272      4.0662 ppb        1.35272  33.27%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              82.1      2.4562 ug/L       0.52394      2.4562 ppb        0.52394  21.33%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.4     -0.2347 ug/L       0.79879     -0.2347 ppb        0.79879 340.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              46.4      0.2887 ug/L       0.05444      0.2887 ppb        0.05444  18.86%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             107.4      0.1706 ug/L       0.02596      0.1706 ppb        0.02596  15.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.7      1.3234 ug/L       0.70555      1.3234 ppb        0.70555  53.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               145.0      3.9928 ug/L       1.54832      3.9928 ppb        1.54832  38.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               95.8      0.6474 ug/L       0.26259      0.6474 ppb        0.26259  40.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              38.7      0.3429 ug/L       0.07264      0.3429 ppb        0.07264  21.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    70.2      4.5020 ug/L       0.20827      4.5020 ppb        0.20827   4.63%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 120
Sample ID: 241613003|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 119
Date Collected: 12/9/2009 04:49:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613003|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5776.6	5776.6	98.8	%			04:51:49
1	Y RADIAL	6781.5	6781.5	107.9	%			04:51:49
1	Al 396.153Radial†	117810.9	119205.2	82803	ug/L	82803	ppb	04:51:29
1	Ca 317.933Radial†	12814.6	12948.5	19085	ug/L	19085	ppb	04:51:29
1	Fe 238.204 Radial†	12990.1	13134.8	122970	ug/L	122970	ppb	04:51:29
1	K 766.490 Radial†	75960.9	74495.1	13180	ug/L	13180	ppb	04:51:29
1	Mg 279.077 IEC†	546.5	551.7	19357	ug/L	19357	ppb	04:51:49
1	Na 589.592 Radial†	4060.8	5196.1	1743.7	ug/L	1743.7	ppb	04:51:29
1	Sr 421.552†	44539.2	45086.0	280.61	ug/L	280.61	ppb	04:51:29
1	Sc 361.383	909332.3	909332.3	100.90	%			04:52:46
1	Y 371.029	818417.9	818417.9	108.96	%			04:52:46
1	Ag 328.068†	-7858.4	-8081.4	3.3692	ug/L	3.3692	ppb	04:52:51
1	As 188.979†	-100.6	-75.6	21.530	ug/L	21.530	ppb	04:53:11
1	B 249.677†	1533.4	2050.5	26.530	ug/L	26.530	ppb	04:52:51
1	Ba 233.527†	200665.3	198893.3	1479.2	ug/L	1479.2	ppb	04:52:51
1	Be 313.107†	-5109.6	48.7	7.6032	ug/L	7.6032	ppb	04:52:51
1	Cd 226.502†	1079.8	1265.4	1.1261	ug/L	1.1261	ppb	04:53:11
1	Co 228.616†	3241.6	3278.2	52.872	ug/L	52.872	ppb	04:53:11
1	Cr 267.716†	8316.1	8163.7	88.389	ug/L	88.389	ppb	04:52:51
1	Cu 324.752†	28002.3	20997.1	66.360	ug/L	66.360	ppb	04:52:51
1	Mn 257.610†	3258573.5	3229239.2	3456.7	ug/L	3456.7	ppb	04:52:46
1	Mo 202.031†	-36.6	-54.6	5.2544	ug/L	5.2544	ppb	04:53:11
1	Ni 231.604†	3013.9	2900.6	67.128	ug/L	67.128	ppb	04:53:11
1	P 214.914†	1988.9	1747.7	926.93	ug/L	926.93	ppb	04:53:11
1	Pb 220.353†	863.2	924.0	112.88	ug/L	112.88	ppb	04:53:11
1	S 181.975 Axial†	546.9	500.5	684.98	ug/L	684.98	ppb	04:53:11
1	Sb 206.836†	60.0	25.3	-4.7400	ug/L	-4.7400	ppb	04:53:11
1	Se 196.026†	-526.8	-493.3	117.19	ug/L	117.19	ppb	04:53:11
1	Si 251.611†	1234080.6	1222681.5	36598	ug/L	36598	ppb	04:52:46
1	Sn 189.927†	-115.2	-119.2	-15.837	ug/L	-15.837	ppb	04:53:11
1	Ti 334.940†	2438847.7	2418323.8	3860.2	ug/L	3860.2	ppb	04:52:46
1	Tl 190.801†	-210.3	-176.0	1.9075	ug/L	1.9075	ppb	04:53:11
1	U 409.014†	-7636.3	-5166.8	-157.97	ug/L	-157.97	ppb	04:52:46
1	V 292.402†	37423.0	38449.4	231.08	ug/L	231.08	ppb	04:52:51
1	Zn 213.857†	31672.5	30769.7	255.91	ug/L	255.91	ppb	04:52:51
1	SiO2†	1218226.6	1206950.3	77413	ug/L	77413	ppb	04:54:20
2	Sc Radial	5768.2	5768.2	98.7	%			04:52:14
2	Y RADIAL	6782.6	6782.6	107.9	%			04:52:14
2	Al 396.153Radial†	118669.3	120247.0	83526	ug/L	83526	ppb	04:51:54
2	Ca 317.933Radial†	12904.4	13058.2	19247	ug/L	19247	ppb	04:51:54
2	Fe 238.204 Radial†	13030.0	13194.2	123520	ug/L	123520	ppb	04:51:54
2	K 766.490 Radial†	76195.4	74843.6	13242	ug/L	13242	ppb	04:51:54
2	Mg 279.077 IEC†	541.4	547.3	19203	ug/L	19203	ppb	04:52:14
2	Na 589.592 Radial†	4048.5	5189.5	1741.5	ug/L	1741.5	ppb	04:51:54
2	Sr 421.552†	44621.5	45234.4	281.53	ug/L	281.53	ppb	04:51:54
2	Sc 361.383	905715.0	905715.0	100.49	%			04:53:17
2	Y 371.029	816177.6	816177.6	108.67	%			04:53:17
2	Ag 328.068†	-7926.0	-8179.8	3.1064	ug/L	3.1064	ppb	04:53:22
2	As 188.979†	-105.0	-80.3	19.671	ug/L	19.671	ppb	04:53:42
2	B 249.677†	1628.8	2151.5	28.573	ug/L	28.573	ppb	04:53:22
2	Ba 233.527†	201517.0	200535.2	1491.4	ug/L	1491.4	ppb	04:53:22
2	Be 313.107†	-5345.5	-206.2	7.4972	ug/L	7.4972	ppb	04:53:22
2	Cd 226.502†	1089.6	1279.3	1.2187	ug/L	1.2187	ppb	04:53:42
2	Co 228.616†	3250.4	3299.9	53.292	ug/L	53.292	ppb	04:53:42
2	Cr 267.716†	8408.6	8288.7	89.715	ug/L	89.715	ppb	04:53:22
2	Cu 324.752†	28222.9	21327.5	67.334	ug/L	67.334	ppb	04:53:22
2	Mn 257.610†	3236248.1	3219922.6	3446.8	ug/L	3446.8	ppb	04:53:17
2	Mo 202.031†	-43.6	-61.7	4.8405	ug/L	4.8405	ppb	04:53:42
2	Ni 231.604†	3018.9	2917.5	67.520	ug/L	67.520	ppb	04:53:42

2	P 214.914†	1981.7	1748.4	926.97	ug/L	926.97 ppb	04:53:42
2	Pb 220.353†	844.5	908.8	111.28	ug/L	111.28 ppb	04:53:42
2	S 181.975 Axial†	549.1	504.8	690.95	ug/L	690.95 ppb	04:53:42
2	Sb 206.836†	73.2	38.6	-0.5575	ug/L	-0.5575 ppb	04:53:42
2	Se 196.026†	-529.6	-498.2	116.26	ug/L	116.26 ppb	04:53:42
2	Si 251.611†	1226780.4	1220302.3	36526	ug/L	36526 ppb	04:53:17
2	Sn 189.927†	-118.4	-122.8	-16.406	ug/L	-16.406 ppb	04:53:42
2	Ti 334.940†	2424964.2	2414162.6	3853.6	ug/L	3853.6 ppb	04:53:17
2	Tl 190.801†	-229.6	-195.9	-3.7890	ug/L	-3.7890 ppb	04:53:42
2	U 409.014†	-7648.7	-5209.3	-159.21	ug/L	-159.21 ppb	04:53:17
2	V 292.402†	37549.7	38723.6	232.80	ug/L	232.80 ppb	04:53:22
2	Zn 213.857†	31819.0	31040.8	258.23	ug/L	258.23 ppb	04:53:22
2	SiO2†	1237281.6	1230734.0	78939	ug/L	78939 ppb	04:54:26
3	Sc Radial	5791.1	5791.1	99.1	%		04:52:39
3	Y RADIAL	6802.1	6802.1	108.2	%		04:52:39
3	Al 396.153Radial†	120952.9	122077.4	84798	ug/L	84798 ppb	04:52:19
3	Ca 317.933Radial†	13153.4	13257.9	19541	ug/L	19541 ppb	04:52:19
3	Fe 238.204 Radial†	13262.9	13377.2	125240	ug/L	125240 ppb	04:52:19
3	K 766.490 Radial†	77472.6	75828.1	13416	ug/L	13416 ppb	04:52:19
3	Mg 279.077 IEC†	549.0	552.9	19398	ug/L	19398 ppb	04:52:39
3	Na 589.592 Radial†	4205.4	5331.7	1789.2	ug/L	1789.2 ppb	04:52:19
3	Sr 421.552†	45574.2	46017.6	286.40	ug/L	286.40 ppb	04:52:19
3	Sc 361.383	904529.4	904529.4	100.36	%		04:53:48
3	Y 371.029	815151.7	815151.7	108.53	%		04:53:48
3	Ag 328.068†	-7877.9	-8142.2	3.8066	ug/L	3.8066 ppb	04:53:54
3	As 188.979†	-96.0	-71.5	23.483	ug/L	23.483 ppb	04:54:14
3	B 249.677†	1566.4	2091.5	27.087	ug/L	27.087 ppb	04:53:54
3	Ba 233.527†	199543.0	198831.2	1478.8	ug/L	1478.8 ppb	04:53:54
3	Be 313.107†	-5180.3	-48.7	7.5652	ug/L	7.5652 ppb	04:53:54
3	Cd 226.502†	1088.4	1279.6	1.0503	ug/L	1.0503 ppb	04:54:14
3	Co 228.616†	3259.6	3313.2	53.508	ug/L	53.508 ppb	04:54:14
3	Cr 267.716†	8283.4	8174.8	88.546	ug/L	88.546 ppb	04:53:54
3	Cu 324.752†	27945.4	21087.9	66.736	ug/L	66.736 ppb	04:53:54
3	Mn 257.610†	3240420.6	3228300.9	3455.9	ug/L	3455.9 ppb	04:53:48
3	Mo 202.031†	-24.9	-43.2	6.1416	ug/L	6.1416 ppb	04:54:14
3	Ni 231.604†	3026.9	2929.4	67.794	ug/L	67.794 ppb	04:54:14
3	P 214.914†	1992.6	1761.9	933.87	ug/L	933.87 ppb	04:54:14
3	Pb 220.353†	855.1	920.5	112.75	ug/L	112.75 ppb	04:54:14
3	S 181.975 Axial†	561.7	518.1	709.32	ug/L	709.32 ppb	04:54:14
3	Sb 206.836†	64.6	30.2	-3.2268	ug/L	-3.2268 ppb	04:54:14
3	Se 196.026†	-526.7	-495.9	123.19	ug/L	123.19 ppb	04:54:14
3	Si 251.611†	1226871.7	1221993.2	36577	ug/L	36577 ppb	04:53:48
3	Sn 189.927†	-129.5	-134.1	-18.201	ug/L	-18.201 ppb	04:54:14
3	Ti 334.940†	2425175.9	2417536.4	3859.0	ug/L	3859.0 ppb	04:53:48
3	Tl 190.801†	-214.0	-180.7	0.6099	ug/L	0.6099 ppb	04:54:14
3	U 409.014†	-7486.6	-5057.7	-155.25	ug/L	-155.25 ppb	04:53:48
3	V 292.402†	37221.5	38445.4	230.73	ug/L	230.73 ppb	04:53:54
3	Zn 213.857†	31533.3	30797.7	255.93	ug/L	255.93 ppb	04:53:54
3	SiO2†	1219602.4	1214732.3	77912	ug/L	77912 ppb	04:54:32

Mean Data: 241613003|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906525.6	100.58	%	0.278				0.28%
Sc Radial	5778.6	98.9	%	0.20				0.20%
Y 371.029	816582.4	108.72	%	0.222				0.20%
Y RADIAL	6788.7	108.0	%	0.18				0.17%
Ag 328.068†	-8134.5	3.4274	ug/L	0.35375	3.4274	ppb	0.35375	10.32%
Al 396.153Radial†	120509.9	83709	ug/L	1010.0	83709	ppb	1010.0	1.21%
As 188.979†	-75.8	21.562	ug/L	1.9063	21.562	ppb	1.9063	8.84%
B 249.677†	2097.8	27.397	ug/L	1.0561	27.397	ppb	1.0561	3.85%
Ba 233.527†	199419.9	1483.1	ug/L	7.15	1483.1	ppb	7.15	0.48%
Be 313.107†	-68.7	7.5552	ug/L	0.05369	7.5552	ppb	0.05369	0.71%
Ca 317.933Radial†	13088.2	19291	ug/L	231.2	19291	ppb	231.2	1.20%
Cd 226.502†	1274.8	1.1317	ug/L	0.08434	1.1317	ppb	0.08434	7.45%
Co 228.616†	3297.1	53.224	ug/L	0.3233	53.224	ppb	0.3233	0.61%
Cr 267.716†	8209.1	88.883	ug/L	0.7243	88.883	ppb	0.7243	0.81%
Cu 324.752†	21137.5	66.810	ug/L	0.4911	66.810	ppb	0.4911	0.74%
Fe 238.204 Radial†	13235.4	123910	ug/L	1182.8	123910	ppb	1182.8	0.95%
K 766.490 Radial†	75055.6	13279	ug/L	122.7	13279	ppb	122.7	0.92%

Mg 279.077 IEC†	550.6	19319	ug/L	102.7	19319	ppb	102.7	0.53%
Mn 257.610†	3225820.9	3453.1	ug/L	5.49	3453.1	ppb	5.49	0.16%
Mo 202.031†	-53.2	5.4122	ug/L	0.66477	5.4122	ppb	0.66477	12.28%
Na 589.592 Radial†	5239.1	1758.2	ug/L	26.93	1758.2	ppb	26.93	1.53%
Ni 231.604†	2915.8	67.481	ug/L	0.3349	67.481	ppb	0.3349	0.50%
P 214.914†	1752.7	929.26	ug/L	3.998	929.26	ppb	3.998	0.43%
Pb 220.353†	917.7	112.30	ug/L	0.891	112.30	ppb	0.891	0.79%
S 181.975 Axial†	507.8	695.08	ug/L	12.684	695.08	ppb	12.684	1.82%
Sb 206.836†	31.3	-2.8415	ug/L	2.11771	-2.8415	ppb	2.11771	74.53%
Se 196.026†	-495.8	118.88	ug/L	3.760	118.88	ppb	3.760	3.16%
Si 251.611†	1221659.0	36567	ug/L	36.6	36567	ppb	36.6	0.10%
Sn 189.927†	-125.3	-16.814	ug/L	1.2338	-16.814	ppb	1.2338	7.34%
Sr 421.552†	45446.0	282.85	ug/L	3.115	282.85	ppb	3.115	1.10%
Ti 334.940†	2416674.3	3857.6	ug/L	3.53	3857.6	ppb	3.53	0.09%
Tl 190.801†	-184.2	-0.4239	ug/L	2.98563	-0.4239	ppb	2.98563	704.35%
U 409.014†	-5144.6	-157.47	ug/L	2.026	-157.47	ppb	2.026	1.29%
V 292.402†	38539.5	231.53	ug/L	1.109	231.53	ppb	1.109	0.48%
Zn 213.857†	30869.4	256.69	ug/L	1.331	256.69	ppb	1.331	0.52%
SiO2†	1217472.2	78088	ug/L	777.9	78088	ppb	777.9	1.00%

Sequence No.: 121
Sample ID: 241613004|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 120
Date Collected: 12/9/2009 04:56:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613004|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5793.2	5793.2	99.1	%			04:58:37
1	Y RADIAL	7933.6	7933.6	126.2	%			04:58:37
1	Al 396.153Radial†	26521.9	26774.5	18597	ug/L	18597	ppb	04:58:37
1	Ca 317.933Radial†	3217.1	3229.6	4760.3	ug/L	4760.3	ppb	04:58:57
1	Fe 238.204 Radial†	7107.8	7163.2	67061	ug/L	67061	ppb	04:58:37
1	K 766.490 Radial†	20080.7	17904.8	3149.9	ug/L	3149.9	ppb	04:58:37
1	Mg 279.077 IEC†	147.8	148.0	5162.9	ug/L	5162.9	ppb	04:58:57
1	Na 589.592 Radial†	4881.2	6011.9	2017.5	ug/L	2017.5	ppb	04:58:37
1	Sr 421.552†	7865.2	7961.4	49.538	ug/L	49.538	ppb	04:58:37
1	Sc 361.383	919285.2	919285.2	102.00	%			04:59:54
1	Y 371.029	963163.1	963163.1	128.24	%			04:59:54
1	Ag 328.068†	-4070.0	-4282.9	2.2487	ug/L	2.2487	ppb	04:59:59
1	As 188.979†	-36.7	-11.8	16.237	ug/L	16.237	ppb	05:00:19
1	B 249.677†	525.1	1045.5	13.009	ug/L	13.009	ppb	04:59:59
1	Ba 233.527†	23280.8	22832.8	171.80	ug/L	171.80	ppb	04:59:59
1	Be 313.107†	-1969.7	3181.9	3.6326	ug/L	3.6326	ppb	04:59:59
1	Cd 226.502†	493.5	679.0	0.4972	ug/L	0.4972	ppb	05:00:19
1	Co 228.616†	349.8	408.4	4.2317	ug/L	4.2317	ppb	05:00:19
1	Cr 267.716†	3634.8	3484.9	37.935	ug/L	37.935	ppb	05:00:19
1	Cu 324.752†	12582.6	5579.3	19.387	ug/L	19.387	ppb	04:59:59
1	Mn 257.610†	2186650.3	2143362.5	2293.0	ug/L	2293.0	ppb	04:59:54
1	Mo 202.031†	327.6	302.9	23.997	ug/L	23.997	ppb	05:00:19
1	Ni 231.604†	1734.3	1613.8	37.365	ug/L	37.365	ppb	05:00:19
1	P 214.914†	844.4	604.4	298.22	ug/L	298.22	ppb	05:00:19
1	Pb 220.353†	486.4	545.3	60.348	ug/L	60.348	ppb	05:00:19
1	S 181.975 Axial†	118.7	74.8	101.10	ug/L	101.10	ppb	05:00:19
1	Sb 206.836†	25.8	-9.0	-6.0560	ug/L	-6.0560	ppb	05:00:19
1	Se 196.026†	-279.0	-244.7	73.243	ug/L	73.243	ppb	05:00:19
1	Si 251.611†	864136.3	846746.8	25347	ug/L	25347	ppb	04:59:54
1	Sn 189.927†	7.9	2.7	1.8511	ug/L	1.8511	ppb	05:00:19
1	Ti 334.940†	802984.2	788358.0	1258.4	ug/L	1258.4	ppb	04:59:54
1	Tl 190.801†	-138.3	-103.1	-5.4525	ug/L	-5.4525	ppb	05:00:19
1	U 409.014†	-11412.1	-8786.6	-250.55	ug/L	-250.55	ppb	04:59:54
1	V 292.402†	5253.4	6508.7	31.311	ug/L	31.311	ppb	05:00:19
1	Zn 213.857†	41136.9	39708.6	340.07	ug/L	340.07	ppb	04:59:59
1	SiO2†	850814.1	833667.9	53475	ug/L	53475	ppb	05:01:28
2	Sc Radial	5819.1	5819.1	99.6	%			04:59:02
2	Y RADIAL	8008.1	8008.1	127.4	%			04:59:02
2	Al 396.153Radial†	26582.7	26716.5	18557	ug/L	18557	ppb	04:59:02
2	Ca 317.933Radial†	3224.1	3222.3	4749.5	ug/L	4749.5	ppb	04:59:22
2	Fe 238.204 Radial†	7129.4	7153.0	66966	ug/L	66966	ppb	04:59:02
2	K 766.490 Radial†	20120.0	17854.2	3140.9	ug/L	3140.9	ppb	04:59:02
2	Mg 279.077 IEC†	146.8	146.2	5101.5	ug/L	5101.5	ppb	04:59:22
2	Na 589.592 Radial†	4839.9	5948.5	1996.2	ug/L	1996.2	ppb	04:59:02
2	Sr 421.552†	7889.9	7950.9	49.472	ug/L	49.472	ppb	04:59:02
2	Sc 361.383	909750.5	909750.5	100.94	%			05:00:25
2	Y 371.029	953724.4	953724.4	126.98	%			05:00:25
2	Ag 328.068†	-4170.2	-4424.0	1.5849	ug/L	1.5849	ppb	05:00:30
2	As 188.979†	-38.9	-14.4	15.185	ug/L	15.185	ppb	05:00:51
2	B 249.677†	481.4	1007.6	12.226	ug/L	12.226	ppb	05:00:30
2	Ba 233.527†	23202.7	22994.7	173.00	ug/L	173.00	ppb	05:00:30
2	Be 313.107†	-1972.3	3159.1	3.6239	ug/L	3.6239	ppb	05:00:30
2	Cd 226.502†	490.8	681.4	0.5317	ug/L	0.5317	ppb	05:00:51
2	Co 228.616†	359.8	421.9	4.4892	ug/L	4.4892	ppb	05:00:51
2	Cr 267.716†	3581.7	3469.6	37.775	ug/L	37.775	ppb	05:00:51
2	Cu 324.752†	12618.1	5743.7	19.853	ug/L	19.853	ppb	05:00:30
2	Mn 257.610†	2165000.1	2144382.3	2294.1	ug/L	2294.1	ppb	05:00:25
2	Mo 202.031†	319.8	298.5	23.710	ug/L	23.710	ppb	05:00:51
2	Ni 231.604†	1697.7	1595.3	36.936	ug/L	36.936	ppb	05:00:51

2	P 214.914†	870.6	639.0	318.19 ug/L	318.19 ppb	05:00:51
2	Pb 220.353†	502.8	566.5	62.746 ug/L	62.746 ppb	05:00:51
2	S 181.975 Axial†	119.0	76.3	103.27 ug/L	103.27 ppb	05:00:51
2	Sb 206.836†	34.7	0.2	-3.1487 ug/L	-3.1487 ppb	05:00:51
2	Se 196.026†	-284.4	-252.9	68.158 ug/L	68.158 ppb	05:00:51
2	Si 251.611†	855262.6	846834.9	25349 ug/L	25349 ppb	05:00:25
2	Sn 189.927†	11.5	6.4	2.4507 ug/L	2.4507 ppb	05:00:51
2	Ti 334.940†	794528.9	788232.3	1258.2 ug/L	1258.2 ppb	05:00:25
2	Tl 190.801†	-124.2	-90.6	-1.9385 ug/L	-1.9385 ppb	05:00:51
2	U 409.014†	-11509.0	-8999.9	-256.42 ug/L	-256.42 ppb	05:00:25
2	V 292.402†	5216.5	6526.2	31.425 ug/L	31.425 ppb	05:00:51
2	Zn 213.857†	41222.1	40215.7	344.52 ug/L	344.52 ppb	05:00:30
2	SiO2†	849826.5	841431.7	53973 ug/L	53973 ppb	05:01:34
3	Sc Radial	5806.1	5806.1	99.4 %		04:59:27
3	Y RADIAL	7959.5	7959.5	126.6 %		04:59:27
3	Al 396.153Radial†	26531.2	26724.4	18563 ug/L	18563 ppb	04:59:27
3	Ca 317.933Radial†	3203.8	3209.1	4730.0 ug/L	4730.0 ppb	04:59:47
3	Fe 238.204 Radial†	7091.5	7130.9	66758 ug/L	66758 ppb	04:59:27
3	K 766.490 Radial†	19959.2	17737.4	3120.2 ug/L	3120.2 ppb	04:59:27
3	Mg 279.077 IEC†	146.0	145.8	5087.9 ug/L	5087.9 ppb	04:59:47
3	Na 589.592 Radial†	4853.0	5972.5	2004.3 ug/L	2004.3 ppb	04:59:27
3	Sr 421.552†	7843.7	7922.1	49.293 ug/L	49.293 ppb	04:59:27
3	Sc 361.383	912176.6	912176.6	101.21 %		05:00:56
3	Y 371.029	956491.1	956491.1	127.35 %		05:00:56
3	Ag 328.068†	-4076.6	-4320.6	1.9848 ug/L	1.9848 ppb	05:01:02
3	As 188.979†	-47.0	-22.2	12.078 ug/L	12.078 ppb	05:01:22
3	B 249.677†	476.3	1001.3	12.121 ug/L	12.121 ppb	05:01:02
3	Ba 233.527†	23154.9	22886.3	172.19 ug/L	172.19 ppb	05:01:02
3	Be 313.107†	-1996.5	3140.4	3.6192 ug/L	3.6192 ppb	05:01:02
3	Cd 226.502†	482.8	672.1	0.4548 ug/L	0.4548 ppb	05:01:22
3	Co 228.616†	366.8	427.8	4.6017 ug/L	4.6017 ppb	05:01:22
3	Cr 267.716†	3590.2	3468.6	37.760 ug/L	37.760 ppb	05:01:22
3	Cu 324.752†	12454.3	5548.6	19.284 ug/L	19.284 ppb	05:01:02
3	Mn 257.610†	2174662.1	2148224.3	2298.2 ug/L	2298.2 ppb	05:00:56
3	Mo 202.031†	316.3	294.2	23.423 ug/L	23.423 ppb	05:01:22
3	Ni 231.604†	1722.0	1614.8	37.388 ug/L	37.388 ppb	05:01:22
3	P 214.914†	861.7	627.9	312.04 ug/L	312.04 ppb	05:01:22
3	Pb 220.353†	510.5	572.8	63.476 ug/L	63.476 ppb	05:01:22
3	S 181.975 Axial†	115.6	72.7	98.202 ug/L	98.202 ppb	05:01:22
3	Sb 206.836†	37.2	2.5	-2.4174 ug/L	-2.4174 ppb	05:01:22
3	Se 196.026†	-292.2	-259.8	63.522 ug/L	63.522 ppb	05:01:22
3	Si 251.611†	858404.0	847685.2	25375 ug/L	25375 ppb	05:00:56
3	Sn 189.927†	14.3	9.1	2.8899 ug/L	2.8899 ppb	05:01:22
3	Ti 334.940†	797350.1	788926.3	1259.3 ug/L	1259.3 ppb	05:00:56
3	Tl 190.801†	-121.3	-87.4	-1.0139 ug/L	-1.0139 ppb	05:01:22
3	U 409.014†	-11413.2	-8874.9	-252.95 ug/L	-252.95 ppb	05:00:56
3	V 292.402†	5231.8	6527.5	31.466 ug/L	31.466 ppb	05:01:22
3	Zn 213.857†	40906.5	39795.4	340.86 ug/L	340.86 ppb	05:01:02
3	SiO2†	850335.0	839695.0	53861 ug/L	53861 ppb	05:01:40

Mean Data: 241613004|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	913737.4	101.38	%	0.550				0.54%
Sc Radial	5806.1	99.4	%	0.22				0.22%
Y 371.029	957792.9	127.52	%	0.646				0.51%
Y RADIAL	7967.1	126.7	%	0.60				0.48%
Ag 328.068†	-4342.5	1.9395	ug/L	0.33419	1.9395	ppb	0.33419	17.23%
Al 396.153Radial†	26738.5	18572	ug/L	21.8	18572	ppb	21.8	0.12%
As 188.979†	-16.1	14.500	ug/L	2.1624	14.500	ppb	2.1624	14.91%
B 249.677†	1018.1	12.452	ug/L	0.4850	12.452	ppb	0.4850	3.89%
Ba 233.527†	22904.6	172.33	ug/L	0.611	172.33	ppb	0.611	0.35%
Be 313.107†	3160.4	3.6252	ug/L	0.00677	3.6252	ppb	0.00677	0.19%
Ca 317.933Radial†	3220.3	4746.6	ug/L	15.35	4746.6	ppb	15.35	0.32%
Cd 226.502†	677.5	0.4946	ug/L	0.03853	0.4946	ppb	0.03853	7.79%
Co 228.616†	419.4	4.4409	ug/L	0.18966	4.4409	ppb	0.18966	4.27%
Cr 267.716†	3474.4	37.823	ug/L	0.0970	37.823	ppb	0.0970	0.26%
Cu 324.752†	5623.8	19.508	ug/L	0.3030	19.508	ppb	0.3030	1.55%
Fe 238.204 Radial†	7149.1	66928	ug/L	154.7	66928	ppb	154.7	0.23%
K 766.490 Radial†	17832.1	3137.0	ug/L	15.26	3137.0	ppb	15.26	0.49%

Mg 279.077 IEC†	146.7	5117.4	ug/L	39.94	5117.4	ppb	39.94	0.78%
Mn 257.610†	2145323.0	2295.1	ug/L	2.72	2295.1	ppb	2.72	0.12%
Mo 202.031†	298.5	23.710	ug/L	0.2871	23.710	ppb	0.2871	1.21%
Na 589.592 Radial†	5977.6	2006.0	ug/L	10.74	2006.0	ppb	10.74	0.54%
Ni 231.604†	1608.0	37.230	ug/L	0.2547	37.230	ppb	0.2547	0.68%
P 214.914†	623.7	309.48	ug/L	10.227	309.48	ppb	10.227	3.30%
Pb 220.353†	561.6	62.190	ug/L	1.6365	62.190	ppb	1.6365	2.63%
S 181.975 Axial†	74.6	100.85	ug/L	2.540	100.85	ppb	2.540	2.52%
Sb 206.836†	-2.1	-3.8741	ug/L	1.92466	-3.8741	ppb	1.92466	49.68%
Se 196.026†	-252.5	68.307	ug/L	4.8621	68.307	ppb	4.8621	7.12%
Si 251.611†	847089.0	25357	ug/L	15.5	25357	ppb	15.5	0.06%
Sn 189.927†	6.1	2.3972	ug/L	0.52147	2.3972	ppb	0.52147	21.75%
Sr 421.552†	7944.8	49.434	ug/L	0.1265	49.434	ppb	0.1265	0.26%
Ti 334.940†	788505.6	1258.6	ug/L	0.59	1258.6	ppb	0.59	0.05%
Tl 190.801†	-93.7	-2.8017	ug/L	2.34181	-2.8017	ppb	2.34181	83.59%
U 409.014†	-8887.1	-253.31	ug/L	2.948	-253.31	ppb	2.948	1.16%
V 292.402†	6520.8	31.401	ug/L	0.0801	31.401	ppb	0.0801	0.26%
Zn 213.857†	39906.6	341.82	ug/L	2.371	341.82	ppb	2.371	0.69%
SiO2†	838264.9	53770	ug/L	261.4	53770	ppb	261.4	0.49%

Sequence No.: 122
Sample ID: 241613005|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 121
Date Collected: 12/9/2009 05:03:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613005|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6026.9	6026.9	103	%			05:05:45
1	Y RADIAL	7611.4	7611.4	121.1	%			05:05:45
1	Al 396.153Radial†	43200.6	41909.5	29111	ug/L	29111	ppb	05:05:45
1	Ca 317.933Radial†	7222.5	6987.7	10299	ug/L	10299	ppb	05:05:45
1	Fe 238.204 Radial†	8303.6	8044.7	75314	ug/L	75314	ppb	05:05:45
1	K 766.490 Radial†	30306.5	27034.7	4769.0	ug/L	4769.0	ppb	05:05:45
1	Mg 279.077 IEC†	220.7	212.8	7443.3	ug/L	7443.3	ppb	05:06:05
1	Na 589.592 Radial†	2016.3	3043.1	1021.2	ug/L	1021.2	ppb	05:05:45
1	Sr 421.552†	18004.4	17485.2	108.80	ug/L	108.80	ppb	05:05:45
1	Sc 361.383	903506.8	903506.8	100.25	%			05:07:03
1	Y 371.029	876922.0	876922.0	116.75	%			05:07:03
1	Ag 328.068†	-4805.6	-5086.4	1.3276	ug/L	1.3276	ppb	05:07:08
1	As 188.979†	-80.4	-56.1	11.914	ug/L	11.914	ppb	05:07:28
1	B 249.677†	729.4	1258.3	16.346	ug/L	16.346	ppb	05:07:08
1	Ba 233.527†	121733.8	121440.1	903.04	ug/L	903.04	ppb	05:07:08
1	Be 313.107†	-8130.5	-2997.3	4.1698	ug/L	4.1698	ppb	05:07:08
1	Cd 226.502†	635.9	829.4	1.2583	ug/L	1.2583	ppb	05:07:28
1	Co 228.616†	998.3	1061.2	13.803	ug/L	13.803	ppb	05:07:28
1	Cr 267.716†	2790.5	2704.9	29.976	ug/L	29.976	ppb	05:07:28
1	Cu 324.752†	17210.3	10410.8	33.635	ug/L	33.635	ppb	05:07:08
1	Mn 257.610†	2260274.8	2254242.3	2412.1	ug/L	2412.1	ppb	05:07:03
1	Mo 202.031†	245.8	226.8	19.751	ug/L	19.751	ppb	05:07:28
1	Ni 231.604†	1415.9	1325.8	30.688	ug/L	30.688	ppb	05:07:28
1	P 214.914†	1909.0	1680.7	913.56	ug/L	913.56	ppb	05:07:28
1	Pb 220.353†	479.7	547.0	62.200	ug/L	62.200	ppb	05:07:28
1	S 181.975 Axial†	258.9	216.7	297.90	ug/L	297.90	ppb	05:07:28
1	Sb 206.836†	52.4	18.0	-1.4357	ug/L	-1.4357	ppb	05:07:28
1	Se 196.026†	-332.1	-302.5	67.725	ug/L	67.725	ppb	05:07:28
1	Si 251.611†	960263.0	957429.8	28660	ug/L	28660	ppb	05:07:03
1	Sn 189.927†	-35.8	-40.7	-4.5716	ug/L	-4.5716	ppb	05:07:28
1	Ti 334.940†	1680758.9	1677702.1	2677.9	ug/L	2677.9	ppb	05:07:03
1	Tl 190.801†	-169.1	-136.2	-3.0425	ug/L	-3.0425	ppb	05:07:28
1	U 409.014†	-8837.8	-6414.0	-186.22	ug/L	-186.22	ppb	05:07:03
1	V 292.402†	13996.6	15320.2	86.804	ug/L	86.804	ppb	05:07:08
1	Zn 213.857†	31851.2	31150.3	264.46	ug/L	264.46	ppb	05:07:08
1	SiO2†	959362.1	956513.5	61354	ug/L	61354	ppb	05:08:36
2	Sc Radial	5948.3	5948.3	102	%			05:06:10
2	Y RADIAL	7544.8	7544.8	120.0	%			05:06:10
2	Al 396.153Radial†	43315.0	42574.9	29573	ug/L	29573	ppb	05:06:10
2	Ca 317.933Radial†	7244.8	7102.0	10468	ug/L	10468	ppb	05:06:10
2	Fe 238.204 Radial†	8317.1	8164.3	76433	ug/L	76433	ppb	05:06:10
2	K 766.490 Radial†	30308.9	27425.1	4838.2	ug/L	4838.2	ppb	05:06:10
2	Mg 279.077 IEC†	220.1	215.1	7523.0	ug/L	7523.0	ppb	05:06:30
2	Na 589.592 Radial†	2018.0	3070.6	1030.4	ug/L	1030.4	ppb	05:06:10
2	Sr 421.552†	18068.2	17778.3	110.62	ug/L	110.62	ppb	05:06:10
2	Sc 361.383	901505.9	901505.9	100.03	%			05:07:34
2	Y 371.029	876620.8	876620.8	116.71	%			05:07:34
2	Ag 328.068†	-4762.5	-5053.9	1.8220	ug/L	1.8220	ppb	05:07:39
2	As 188.979†	-90.4	-66.2	8.0696	ug/L	8.0696	ppb	05:07:59
2	B 249.677†	841.6	1372.0	18.582	ug/L	18.582	ppb	05:07:39
2	Ba 233.527†	121311.8	121287.8	901.95	ug/L	901.95	ppb	05:07:39
2	Be 313.107†	-7968.0	-2852.8	4.2241	ug/L	4.2241	ppb	05:07:39
2	Cd 226.502†	642.1	837.1	1.2276	ug/L	1.2276	ppb	05:07:59
2	Co 228.616†	987.2	1052.3	13.618	ug/L	13.618	ppb	05:07:59
2	Cr 267.716†	2798.4	2719.0	30.142	ug/L	30.142	ppb	05:07:59
2	Cu 324.752†	17052.7	10291.5	33.350	ug/L	33.350	ppb	05:07:39
2	Mn 257.610†	2258171.5	2257143.7	2415.3	ug/L	2415.3	ppb	05:07:34
2	Mo 202.031†	251.1	232.7	20.206	ug/L	20.206	ppb	05:07:59
2	Ni 231.604†	1426.6	1339.7	31.010	ug/L	31.010	ppb	05:07:59

2	P 214.914†	1913.2	1689.1	917.75	ug/L	917.75 ppb	05:07:59
2	Pb 220.353†	455.6	524.0	59.607	ug/L	59.607 ppb	05:07:59
2	S 181.975 Axial†	254.5	212.9	292.49	ug/L	292.49 ppb	05:07:59
2	Sb 206.836†	44.0	9.8	-4.0172	ug/L	-4.0172 ppb	05:07:59
2	Se 196.026†	-317.0	-288.1	79.670	ug/L	79.670 ppb	05:07:59
2	Si 251.611†	958755.1	958048.3	28678	ug/L	28678 ppb	05:07:34
2	Sn 189.927†	-26.8	-31.8	-3.0807	ug/L	-3.0807 ppb	05:07:59
2	Ti 334.940†	1677541.3	1678206.4	2678.7	ug/L	2678.7 ppb	05:07:34
2	Tl 190.801†	-173.6	-141.0	-4.3467	ug/L	-4.3467 ppb	05:07:59
2	U 409.014†	-8673.1	-6268.9	-182.36	ug/L	-182.36 ppb	05:07:34
2	V 292.402†	13855.2	15209.8	85.919	ug/L	85.919 ppb	05:07:39
2	Zn 213.857†	31742.9	31112.5	264.02	ug/L	264.02 ppb	05:07:39
2	SiO2†	970325.3	969597.6	62193	ug/L	62193 ppb	05:08:42
3	Sc Radial	5882.0	5882.0	101	%		05:06:35
3	Y RADIAL	7446.5	7446.5	118.4	%		05:06:35
3	Al 396.153Radial†	43520.4	43258.7	30048	ug/L	30048 ppb	05:06:35
3	Ca 317.933Radial†	7258.8	7196.1	10607	ug/L	10607 ppb	05:06:35
3	Fe 238.204 Radial†	8403.7	8342.4	78100	ug/L	78100 ppb	05:06:35
3	K 766.490 Radial†	30499.7	27950.3	4931.5	ug/L	4931.5 ppb	05:06:35
3	Mg 279.077 IEC†	224.1	221.5	7748.4	ug/L	7748.4 ppb	05:06:55
3	Na 589.592 Radial†	2029.8	3104.6	1041.8	ug/L	1041.8 ppb	05:06:35
3	Sr 421.552†	18128.7	18038.6	112.24	ug/L	112.24 ppb	05:06:35
3	Sc 361.383	901884.3	901884.3	100.07	%		05:08:05
3	Y 371.029	876593.0	876593.0	116.71	%		05:08:05
3	Ag 328.068†	-4825.3	-5114.7	2.0791	ug/L	2.0791 ppb	05:08:10
3	As 188.979†	-84.5	-60.2	10.696	ug/L	10.696 ppb	05:08:30
3	B 249.677†	750.2	1280.3	16.438	ug/L	16.438 ppb	05:08:10
3	Ba 233.527†	122068.0	121992.5	907.24	ug/L	907.24 ppb	05:08:10
3	Be 313.107†	-8113.6	-2995.0	4.1696	ug/L	4.1696 ppb	05:08:10
3	Cd 226.502†	637.2	831.8	1.0051	ug/L	1.0051 ppb	05:08:30
3	Co 228.616†	1007.1	1071.8	13.969	ug/L	13.969 ppb	05:08:30
3	Cr 267.716†	2786.0	2705.4	30.030	ug/L	30.030 ppb	05:08:30
3	Cu 324.752†	17354.0	10585.4	34.276	ug/L	34.276 ppb	05:08:10
3	Mn 257.610†	2256600.2	2254626.3	2412.7	ug/L	2412.7 ppb	05:08:05
3	Mo 202.031†	251.5	233.0	20.339	ug/L	20.339 ppb	05:08:30
3	Ni 231.604†	1413.9	1326.4	30.701	ug/L	30.701 ppb	05:08:30
3	P 214.914†	1903.6	1678.8	910.45	ug/L	910.45 ppb	05:08:30
3	Pb 220.353†	481.3	549.4	62.455	ug/L	62.455 ppb	05:08:30
3	S 181.975 Axial†	259.0	217.2	298.49	ug/L	298.49 ppb	05:08:30
3	Sb 206.836†	49.9	15.6	-2.1660	ug/L	-2.1660 ppb	05:08:30
3	Se 196.026†	-320.1	-291.1	83.274	ug/L	83.274 ppb	05:08:30
3	Si 251.611†	958511.4	957402.6	28659	ug/L	28659 ppb	05:08:05
3	Sn 189.927†	-36.5	-41.5	-4.6296	ug/L	-4.6296 ppb	05:08:30
3	Ti 334.940†	1677398.7	1677360.3	2677.4	ug/L	2677.4 ppb	05:08:05
3	Tl 190.801†	-158.9	-126.2	-0.2287	ug/L	-0.2287 ppb	05:08:30
3	U 409.014†	-8639.8	-6232.0	-181.56	ug/L	-181.56 ppb	05:08:05
3	V 292.402†	14036.1	15384.8	86.830	ug/L	86.830 ppb	05:08:10
3	Zn 213.857†	31967.2	31323.4	265.70	ug/L	265.70 ppb	05:08:10
3	SiO2†	951588.9	950467.2	60966	ug/L	60966 ppb	05:08:48

Mean Data: 241613005|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902299.0	100.11	%	0.118				0.12%
Sc Radial	5952.4	102	%	1.2				1.22%
Y 371.029	876712.0	116.73	%	0.024				0.02%
Y RADIAL	7534.2	119.8	%	1.32				1.10%
Ag 328.068†	-5085.0	1.7429	ug/L	0.38189	1.7429	ppb	0.38189	21.91%
Al 396.153Radial†	42581.0	29577	ug/L	468.6	29577	ppb	468.6	1.58%
As 188.979†	-60.8	10.227	ug/L	1.9649	10.227	ppb	1.9649	19.21%
B 249.677†	1303.5	17.122	ug/L	1.2655	17.122	ppb	1.2655	7.39%
Ba 233.527†	121573.5	904.07	ug/L	2.792	904.07	ppb	2.792	0.31%
Be 313.107†	-2948.4	4.1878	ug/L	0.03139	4.1878	ppb	0.03139	0.75%
Ca 317.933Radial†	7095.3	10458	ug/L	153.9	10458	ppb	153.9	1.47%
Cd 226.502†	832.8	1.1637	ug/L	0.13814	1.1637	ppb	0.13814	11.87%
Co 228.616†	1061.8	13.797	ug/L	0.1756	13.797	ppb	0.1756	1.27%
Cr 267.716†	2709.8	30.049	ug/L	0.0842	30.049	ppb	0.0842	0.28%
Cu 324.752†	10429.2	33.754	ug/L	0.4744	33.754	ppb	0.4744	1.41%
Fe 238.204 Radial†	8183.8	76616	ug/L	1402.3	76616	ppb	1402.3	1.83%
K 766.490 Radial†	27470.0	4846.2	ug/L	81.56	4846.2	ppb	81.56	1.68%

Mg 279.077 IEC†	216.5	7571.6	ug/L	158.20	7571.6	ppb	158.20	2.09%
Mn 257.610†	2255337.4	2413.4	ug/L	1.69	2413.4	ppb	1.69	0.07%
Mo 202.031†	230.8	20.099	ug/L	0.3081	20.099	ppb	0.3081	1.53%
Na 589.592 Radial†	3072.7	1031.1	ug/L	10.34	1031.1	ppb	10.34	1.00%
Ni 231.604†	1330.6	30.800	ug/L	0.1821	30.800	ppb	0.1821	0.59%
P 214.914†	1682.9	913.92	ug/L	3.662	913.92	ppb	3.662	0.40%
Pb 220.353†	540.1	61.421	ug/L	1.5756	61.421	ppb	1.5756	2.57%
S 181.975 Axial†	215.6	296.30	ug/L	3.308	296.30	ppb	3.308	1.12%
Sb 206.836†	14.5	-2.5396	ug/L	1.33067	-2.5396	ppb	1.33067	52.40%
Se 196.026†	-293.9	76.890	ug/L	8.1389	76.890	ppb	8.1389	10.59%
Si 251.611†	957626.9	28665	ug/L	10.9	28665	ppb	10.9	0.04%
Sn 189.927†	-38.0	-4.0940	ug/L	0.87799	-4.0940	ppb	0.87799	21.45%
Sr 421.552†	17767.4	110.55	ug/L	1.723	110.55	ppb	1.723	1.56%
Ti 334.940†	1677756.3	2678.0	ug/L	0.68	2678.0	ppb	0.68	0.03%
Tl 190.801†	-134.5	-2.5393	ug/L	2.10457	-2.5393	ppb	2.10457	82.88%
U 409.014†	-6305.0	-183.38	ug/L	2.492	-183.38	ppb	2.492	1.36%
V 292.402†	15304.9	86.518	ug/L	0.5186	86.518	ppb	0.5186	0.60%
Zn 213.857†	31195.4	264.73	ug/L	0.869	264.73	ppb	0.869	0.33%
SiO2†	958859.4	61504	ug/L	627.3	61504	ppb	627.3	1.02%

Sequence No.: 123
Sample ID: 241613006|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 122
Date Collected: 12/9/2009 05:11:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613006|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5750.3	5750.3	98.4	%			05:13:14
1	Y RADIAL	7088.6	7088.6	112.7	%			05:13:14
1	Al 396.153Radial†	92616.2	94144.8	65395	ug/L	65395	ppb	05:12:54
1	Ca 317.933Radial†	9592.7	9733.3	14346	ug/L	14346	ppb	05:12:54
1	Fe 238.204 Radial†	11166.4	11341.4	106180	ug/L	106180	ppb	05:12:54
1	K 766.490 Radial†	67245.3	65988.6	11668	ug/L	11668	ppb	05:12:54
1	Mg 279.077 IEC†	369.1	374.0	13103	ug/L	13103	ppb	05:13:14
1	Na 589.592 Radial†	3814.3	4964.3	1665.9	ug/L	1665.9	ppb	05:12:54
1	Sr 421.552†	28385.0	28874.5	179.69	ug/L	179.69	ppb	05:12:54
1	Sc 361.383	903415.7	903415.7	100.24	%			05:14:11
1	Y 371.029	855203.0	855203.0	113.86	%			05:14:11
1	Ag 328.068†	-6699.6	-6976.4	2.8411	ug/L	2.8411	ppb	05:14:17
1	As 188.979†	-108.9	-84.4	15.260	ug/L	15.260	ppb	05:14:37
1	B 249.677†	1113.9	1642.0	20.224	ug/L	20.224	ppb	05:14:17
1	Ba 233.527†	142219.2	141889.0	1055.9	ug/L	1055.9	ppb	05:14:17
1	Be 313.107†	-6917.8	-1788.3	6.8965	ug/L	6.8965	ppb	05:14:17
1	Cd 226.502†	897.3	1090.2	0.9461	ug/L	0.9461	ppb	05:14:37
1	Co 228.616†	2524.5	2583.9	39.816	ug/L	39.816	ppb	05:14:37
1	Cr 267.716†	6103.3	6010.1	65.364	ug/L	65.364	ppb	05:14:17
1	Cu 324.752†	20445.3	13639.9	44.450	ug/L	44.450	ppb	05:14:17
1	Mn 257.610†	3275142.0	3266919.9	3495.3	ug/L	3495.3	ppb	05:14:11
1	Mo 202.031†	96.1	77.6	12.459	ug/L	12.459	ppb	05:14:37
1	Ni 231.604†	2500.5	2407.9	55.728	ug/L	55.728	ppb	05:14:37
1	P 214.914†	1659.6	1432.1	756.03	ug/L	756.03	ppb	05:14:37
1	Pb 220.353†	712.6	779.4	94.046	ug/L	94.046	ppb	05:14:37
1	S 181.975 Axial†	372.1	329.7	449.10	ug/L	449.10	ppb	05:14:37
1	Sb 206.836†	65.1	30.7	-2.0930	ug/L	-2.0930	ppb	05:14:37
1	Se 196.026†	-426.1	-396.3	117.26	ug/L	117.26	ppb	05:14:37
1	Si 251.611†	1084813.0	1081779.9	32380	ug/L	32380	ppb	05:14:11
1	Sn 189.927†	-78.7	-83.5	-10.723	ug/L	-10.723	ppb	05:14:37
1	Ti 334.940†	2411139.3	2406512.1	3841.1	ug/L	3841.1	ppb	05:14:11
1	Tl 190.801†	-230.6	-197.5	-4.2849	ug/L	-4.2849	ppb	05:14:37
1	U 409.014†	-8637.6	-6215.2	-184.69	ug/L	-184.69	ppb	05:14:11
1	V 292.402†	26210.5	27506.5	161.31	ug/L	161.31	ppb	05:14:17
1	Zn 213.857†	33417.4	32716.0	274.83	ug/L	274.83	ppb	05:14:17
1	SiO2†	1089045.5	1085984.5	69655	ug/L	69655	ppb	05:15:45
2	Sc Radial	5756.0	5756.0	98.5	%			05:13:39
2	Y RADIAL	7090.4	7090.4	112.8	%			05:13:39
2	Al 396.153Radial†	92067.4	93493.5	64943	ug/L	64943	ppb	05:13:19
2	Ca 317.933Radial†	9564.8	9695.3	14290	ug/L	14290	ppb	05:13:19
2	Fe 238.204 Radial†	11119.5	11282.5	105630	ug/L	105630	ppb	05:13:19
2	K 766.490 Radial†	66950.9	65621.4	11603	ug/L	11603	ppb	05:13:19
2	Mg 279.077 IEC†	372.1	376.6	13197	ug/L	13197	ppb	05:13:39
2	Na 589.592 Radial†	3845.2	4991.9	1675.2	ug/L	1675.2	ppb	05:13:19
2	Sr 421.552†	28077.0	28533.0	177.56	ug/L	177.56	ppb	05:13:19
2	Sc 361.383	912885.4	912885.4	101.29	%			05:14:43
2	Y 371.029	864028.9	864028.9	115.04	%			05:14:43
2	Ag 328.068†	-6699.6	-6907.0	2.9783	ug/L	2.9783	ppb	05:14:48
2	As 188.979†	-111.6	-86.0	14.571	ug/L	14.571	ppb	05:15:08
2	B 249.677†	1200.9	1716.2	21.856	ug/L	21.856	ppb	05:14:48
2	Ba 233.527†	143851.6	142028.8	1056.9	ug/L	1056.9	ppb	05:14:48
2	Be 313.107†	-6705.1	-1506.8	7.0010	ug/L	7.0010	ppb	05:14:48
2	Cd 226.502†	904.0	1087.6	0.9735	ug/L	0.9735	ppb	05:15:08
2	Co 228.616†	2535.9	2569.1	39.541	ug/L	39.541	ppb	05:15:08
2	Cr 267.716†	6229.0	6071.0	65.993	ug/L	65.993	ppb	05:14:48
2	Cu 324.752†	20416.4	13399.8	43.735	ug/L	43.735	ppb	05:14:48
2	Mn 257.610†	3314189.0	3271576.4	3500.2	ug/L	3500.2	ppb	05:14:43
2	Mo 202.031†	99.4	79.8	12.565	ug/L	12.565	ppb	05:15:08
2	Ni 231.604†	2512.2	2393.7	55.398	ug/L	55.398	ppb	05:15:08

2	P 214.914†	1685.2	1440.2	761.09 ug/L	761.09 ppb	05:15:08
2	Pb 220.353†	727.8	787.0	94.850 ug/L	94.850 ppb	05:15:08
2	S 181.975 Axial†	373.5	327.2	445.65 ug/L	445.65 ppb	05:15:08
2	Sb 206.836†	68.5	33.4	-1.2617 ug/L	-1.2617 ppb	05:15:08
2	Se 196.026†	-448.4	-413.9	105.25 ug/L	105.25 ppb	05:15:08
2	Si 251.611†	1097813.2	1083388.2	32428 ug/L	32428 ppb	05:14:43
2	Sn 189.927†	-81.0	-85.0	-10.985 ug/L	-10.985 ppb	05:15:08
2	Ti 334.940†	2437022.2	2407113.4	3842.1 ug/L	3842.1 ppb	05:14:43
2	Tl 190.801†	-211.5	-176.3	1.6787 ug/L	1.6787 ppb	05:15:08
2	U 409.014†	-8687.8	-6175.4	-183.53 ug/L	-183.53 ppb	05:14:43
2	V 292.402†	26427.8	27449.7	161.02 ug/L	161.02 ppb	05:14:48
2	Zn 213.857†	33765.4	32713.7	274.86 ug/L	274.86 ppb	05:14:48
2	SiO2†	1092408.9	1078034.9	69145 ug/L	69145 ppb	05:15:51
3	Sc Radial	5774.7	5774.7	98.8 %		05:14:04
3	Y RADIAL	7106.0	7106.0	113.0 %		05:14:04
3	Al 396.153Radial†	91003.4	92115.1	63985 ug/L	63985 ppb	05:13:44
3	Ca 317.933Radial†	9479.4	9577.5	14117 ug/L	14117 ppb	05:13:44
3	Fe 238.204 Radial†	11027.2	11152.6	104410 ug/L	104410 ppb	05:13:44
3	K 766.490 Radial†	66262.1	64705.0	11440 ug/L	11440 ppb	05:13:44
3	Mg 279.077 IEC†	363.6	366.8	12850 ug/L	12850 ppb	05:14:04
3	Na 589.592 Radial†	3758.5	4891.5	1641.5 ug/L	1641.5 ppb	05:13:44
3	Sr 421.552†	27902.5	28264.4	175.89 ug/L	175.89 ppb	05:13:44
3	Sc 361.383	908575.3	908575.3	100.81 %		05:15:14
3	Y 371.029	857522.0	857522.0	114.17 %		05:15:14
3	Ag 328.068†	-6790.9	-7029.0	2.0381 ug/L	2.0381 ppb	05:15:19
3	As 188.979†	-121.8	-96.7	10.185 ug/L	10.185 ppb	05:15:39
3	B 249.677†	1142.0	1663.4	20.910 ug/L	20.910 ppb	05:15:19
3	Ba 233.527†	142645.3	141506.0	1053.0 ug/L	1053.0 ppb	05:15:19
3	Be 313.107†	-6447.2	-1282.4	7.0903 ug/L	7.0903 ppb	05:15:19
3	Cd 226.502†	892.3	1080.2	1.0163 ug/L	1.0163 ppb	05:15:39
3	Co 228.616†	2517.0	2562.1	39.414 ug/L	39.414 ppb	05:15:39
3	Cr 267.716†	6168.2	6039.9	65.643 ug/L	65.643 ppb	05:15:19
3	Cu 324.752†	20244.0	13324.4	43.457 ug/L	43.457 ppb	05:15:19
3	Mn 257.610†	3297026.5	3270073.9	3498.5 ug/L	3498.5 ppb	05:15:14
3	Mo 202.031†	81.9	62.9	11.401 ug/L	11.401 ppb	05:15:39
3	Ni 231.604†	2481.7	2375.2	54.970 ug/L	54.970 ppb	05:15:39
3	P 214.914†	1670.0	1433.1	757.63 ug/L	757.63 ppb	05:15:39
3	Pb 220.353†	702.4	765.2	92.276 ug/L	92.276 ppb	05:15:39
3	S 181.975 Axial†	369.8	325.2	443.16 ug/L	443.16 ppb	05:15:39
3	Sb 206.836†	63.2	28.4	-2.8859 ug/L	-2.8859 ppb	05:15:39
3	Se 196.026†	-440.5	-408.2	104.57 ug/L	104.57 ppb	05:15:39
3	Si 251.611†	1094775.4	1085516.3	32492 ug/L	32492 ppb	05:15:14
3	Sn 189.927†	-92.4	-96.6	-12.919 ug/L	-12.919 ppb	05:15:39
3	Ti 334.940†	2427925.4	2409503.5	3845.9 ug/L	3845.9 ppb	05:15:14
3	Tl 190.801†	-220.9	-186.6	-1.2232 ug/L	-1.2232 ppb	05:15:39
3	U 409.014†	-8617.9	-6146.7	-182.58 ug/L	-182.58 ppb	05:15:14
3	V 292.402†	26202.3	27349.8	160.52 ug/L	160.52 ppb	05:15:19
3	Zn 213.857†	33454.3	32563.3	273.68 ug/L	273.68 ppb	05:15:19
3	SiO2†	1085382.1	1076180.9	69026 ug/L	69026 ppb	05:15:57

Mean Data: 241613006|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908292.1	100.78	%	0.526				0.52%
Sc Radial	5760.3	98.6	%	0.22				0.22%
Y 371.029	858917.9	114.36	%	0.609				0.53%
Y RADIAL	7095.0	112.8	%	0.15				0.14%
Ag 328.068†	-6970.8	2.6192	ug/L	0.50786	2.6192	ppb	0.50786	19.39%
Al 396.153Radial†	93251.2	64774	ug/L	719.8	64774	ppb	719.8	1.11%
As 188.979†	-89.0	13.339	ug/L	2.7528	13.339	ppb	2.7528	20.64%
B 249.677†	1673.9	20.997	ug/L	0.8191	20.997	ppb	0.8191	3.90%
Ba 233.527†	141807.9	1055.3	ug/L	2.04	1055.3	ppb	2.04	0.19%
Be 313.107†	-1525.8	6.9959	ug/L	0.09700	6.9959	ppb	0.09700	1.39%
Ca 317.933Radial†	9668.7	14251	ug/L	119.8	14251	ppb	119.8	0.84%
Cd 226.502†	1086.0	0.9786	ug/L	0.03536	0.9786	ppb	0.03536	3.61%
Co 228.616†	2571.7	39.590	ug/L	0.2053	39.590	ppb	0.2053	0.52%
Cr 267.716†	6040.4	65.667	ug/L	0.3151	65.667	ppb	0.3151	0.48%
Cu 324.752†	13454.7	43.880	ug/L	0.5122	43.880	ppb	0.5122	1.17%
Fe 238.204 Radial†	11258.8	105400	ug/L	904.3	105400	ppb	904.3	0.86%
K 766.490 Radial†	65438.3	11571	ug/L	117.4	11571	ppb	117.4	1.01%

Mg 279.077 IEC†	372.5	13050	ug/L	179.4	13050	ppb	179.4	1.37%
Mn 257.610†	3269523.4	3498.0	ug/L	2.49	3498.0	ppb	2.49	0.07%
Mo 202.031†	73.4	12.141	ug/L	0.6437	12.141	ppb	0.6437	5.30%
Na 589.592 Radial†	4949.2	1660.9	ug/L	17.39	1660.9	ppb	17.39	1.05%
Ni 231.604†	2392.3	55.365	ug/L	0.3800	55.365	ppb	0.3800	0.69%
P 214.914†	1435.1	758.25	ug/L	2.587	758.25	ppb	2.587	0.34%
Pb 220.353†	777.2	93.724	ug/L	1.3169	93.724	ppb	1.3169	1.41%
S 181.975 Axial†	327.4	445.97	ug/L	2.983	445.97	ppb	2.983	0.67%
Sb 206.836†	30.8	-2.0802	ug/L	0.81215	-2.0802	ppb	0.81215	39.04%
Se 196.026†	-406.1	109.03	ug/L	7.136	109.03	ppb	7.136	6.55%
Si 251.611†	1083561.5	32433	ug/L	56.2	32433	ppb	56.2	0.17%
Sn 189.927†	-88.4	-11.542	ug/L	1.1991	-11.542	ppb	1.1991	10.39%
Sr 421.552†	28557.3	177.72	ug/L	1.903	177.72	ppb	1.903	1.07%
Ti 334.940†	2407709.6	3843.0	ug/L	2.52	3843.0	ppb	2.52	0.07%
Tl 190.801†	-186.8	-1.2765	ug/L	2.98213	-1.2765	ppb	2.98213	233.63%
U 409.014†	-6179.1	-183.60	ug/L	1.056	-183.60	ppb	1.056	0.58%
V 292.402†	27435.3	160.95	ug/L	0.398	160.95	ppb	0.398	0.25%
Zn 213.857†	32664.3	274.46	ug/L	0.674	274.46	ppb	0.674	0.25%
SiO2†	1080066.7	69275	ug/L	334.0	69275	ppb	334.0	0.48%

Sequence No.: 124
Sample ID: 241613007|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 123
Date Collected: 12/9/2009 05:18:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613007|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5948.1	5948.1	102	%			05:20:02
1	Y RADIAL	7591.0	7591.0	120.7	%			05:20:02
1	Al 396.153Radial†	44219.3	43465.3	30191	ug/L	30191	ppb	05:20:02
1	Ca 317.933Radial†	6735.2	6601.7	9730.5	ug/L	9730.5	ppb	05:20:02
1	Fe 238.204 Radial†	8416.1	8261.9	77348	ug/L	77348	ppb	05:20:02
1	K 766.490 Radial†	31861.5	28951.8	5080.1	ug/L	5080.1	ppb	05:20:02
1	Mg 279.077 IEC†	216.0	211.1	7381.3	ug/L	7381.3	ppb	05:20:22
1	Na 589.592 Radial†	1435.2	2498.0	838.29	ug/L	838.29	ppb	05:20:02
1	Sr 421.552†	17323.2	17047.1	106.07	ug/L	106.07	ppb	05:20:02
1	Sc 361.383	904849.2	904849.2	100.40	%			05:21:20
1	Y 371.029	884848.4	884848.4	117.81	%			05:21:20
1	Ag 328.068†	-4607.8	-4882.3	2.9093	ug/L	2.9093	ppb	05:21:26
1	As 188.979†	-80.4	-56.0	11.207	ug/L	11.207	ppb	05:21:46
1	B 249.677†	1338.7	1864.1	28.773	ug/L	28.773	ppb	05:21:26
1	Ba 233.527†	88159.2	87818.4	653.93	ug/L	653.93	ppb	05:21:26
1	Be 313.107†	-7587.0	-2443.9	4.1231	ug/L	4.1231	ppb	05:21:26
1	Cd 226.502†	607.7	800.4	0.7487	ug/L	0.7487	ppb	05:21:46
1	Co 228.616†	1156.5	1217.3	16.890	ug/L	16.890	ppb	05:21:46
1	Cr 267.716†	2906.3	2816.2	31.181	ug/L	31.181	ppb	05:21:46
1	Cu 324.752†	17451.4	10625.5	34.353	ug/L	34.353	ppb	05:21:26
1	Mn 257.610†	4468816.5	4450688.6	4755.3	ug/L	4755.3	ppb	05:21:20
1	Mo 202.031†	222.6	203.4	18.406	ug/L	18.406	ppb	05:21:46
1	Ni 231.604†	1423.5	1331.3	30.813	ug/L	30.813	ppb	05:21:46
1	P 214.914†	2064.4	1832.7	999.82	ug/L	999.82	ppb	05:21:46
1	Pb 220.353†	839.0	904.2	102.65	ug/L	102.65	ppb	05:21:46
1	S 181.975 Axial†	216.5	174.1	237.96	ug/L	237.96	ppb	05:21:46
1	Sb 206.836†	38.3	3.9	-5.6384	ug/L	-5.6384	ppb	05:21:46
1	Se 196.026†	-322.4	-292.3	80.211	ug/L	80.211	ppb	05:21:46
1	Si 251.611†	894002.5	890010.7	26641	ug/L	26641	ppb	05:21:20
1	Sn 189.927†	-47.3	-52.1	-6.4720	ug/L	-6.4720	ppb	05:21:46
1	Ti 334.940†	1603729.9	1598490.8	2551.5	ug/L	2551.5	ppb	05:21:20
1	Tl 190.801†	-180.7	-147.5	6.5660	ug/L	6.5660	ppb	05:21:46
1	U 409.014†	-9075.0	-6637.2	-192.63	ug/L	-192.63	ppb	05:21:20
1	V 292.402†	13878.1	15181.4	85.683	ug/L	85.683	ppb	05:21:26
1	Zn 213.857†	32412.2	31662.0	268.74	ug/L	268.74	ppb	05:21:26
1	SiO2†	902030.7	897989.4	57600	ug/L	57600	ppb	05:22:56
2	Sc Radial	5979.2	5979.2	102	%			05:20:27
2	Y RADIAL	7595.2	7595.2	120.8	%			05:20:27
2	Al 396.153Radial†	44355.7	43372.6	30127	ug/L	30127	ppb	05:20:27
2	Ca 317.933Radial†	6768.4	6599.7	9727.5	ug/L	9727.5	ppb	05:20:27
2	Fe 238.204 Radial†	8412.0	8214.9	76907	ug/L	76907	ppb	05:20:27
2	K 766.490 Radial†	32189.0	29109.0	5108.0	ug/L	5108.0	ppb	05:20:27
2	Mg 279.077 IEC†	215.4	209.4	7321.1	ug/L	7321.1	ppb	05:20:47
2	Na 589.592 Radial†	1512.1	2565.8	861.03	ug/L	861.03	ppb	05:20:27
2	Sr 421.552†	17459.9	17092.2	106.36	ug/L	106.36	ppb	05:20:27
2	Sc 361.383	924340.4	924340.4	102.56	%			05:21:52
2	Y 371.029	901513.2	901513.2	120.03	%			05:21:52
2	Ag 328.068†	-4763.6	-4937.4	2.5094	ug/L	2.5094	ppb	05:21:58
2	As 188.979†	-81.9	-55.7	11.276	ug/L	11.276	ppb	05:22:18
2	B 249.677†	1238.1	1737.9	26.186	ug/L	26.186	ppb	05:21:58
2	Ba 233.527†	88196.5	86003.1	640.46	ug/L	640.46	ppb	05:21:58
2	Be 313.107†	-7485.2	-2185.3	4.2268	ug/L	4.2268	ppb	05:21:58
2	Cd 226.502†	602.4	782.5	0.6024	ug/L	0.6024	ppb	05:22:18
2	Co 228.616†	1156.8	1193.4	16.425	ug/L	16.425	ppb	05:22:18
2	Cr 267.716†	2927.0	2775.3	30.740	ug/L	30.740	ppb	05:22:18
2	Cu 324.752†	17507.3	10313.5	33.437	ug/L	33.437	ppb	05:21:58
2	Mn 257.610†	4561839.1	4447530.2	4751.9	ug/L	4751.9	ppb	05:21:52
2	Mo 202.031†	227.1	203.1	18.355	ug/L	18.355	ppb	05:22:18
2	Ni 231.604†	1426.3	1304.1	30.184	ug/L	30.184	ppb	05:22:18

2	P 214.914†	2079.3	1803.8	983.69	ug/L	983.69 ppb	05:22:18
2	Pb 220.353†	840.0	887.5	100.78	ug/L	100.78 ppb	05:22:18
2	S 181.975 Axial†	225.9	178.7	244.43	ug/L	244.43 ppb	05:22:18
2	Sb 206.836†	36.3	1.2	-6.4887	ug/L	-6.4887 ppb	05:22:18
2	Se 196.026†	-326.3	-289.3	80.534	ug/L	80.534 ppb	05:22:18
2	Si 251.611†	915184.1	891886.8	26697	ug/L	26697 ppb	05:21:52
2	Sn 189.927†	-33.2	-37.4	-4.0666	ug/L	-4.0666 ppb	05:22:18
2	Ti 334.940†	1641385.2	1601522.8	2556.3	ug/L	2556.3 ppb	05:21:52
2	Tl 190.801†	-171.2	-134.4	10.259	ug/L	10.259 ppb	05:22:18
2	U 409.014†	-9162.2	-6531.6	-189.66	ug/L	-189.66 ppb	05:21:52
2	V 292.402†	13885.2	14896.9	83.869	ug/L	83.869 ppb	05:21:58
2	Zn 213.857†	32339.3	30910.2	262.22	ug/L	262.22 ppb	05:21:58
2	SiO2†	903624.5	880598.0	56484	ug/L	56484 ppb	05:23:02
3	Sc Radial	5949.6	5949.6	102	%		05:20:52
3	Y RADIAL	7592.1	7592.1	120.7	%		05:20:52
3	Al 396.153Radial†	44192.7	43427.9	30166	ug/L	30166 ppb	05:20:52
3	Ca 317.933Radial†	6717.1	6582.2	9701.8	ug/L	9701.8 ppb	05:20:52
3	Fe 238.204 Radial†	8358.7	8203.4	76799	ug/L	76799 ppb	05:20:52
3	K 766.490 Radial†	31876.0	28958.0	5081.1	ug/L	5081.1 ppb	05:20:52
3	Mg 279.077 IEC†	213.6	208.6	7295.2	ug/L	7295.2 ppb	05:21:12
3	Na 589.592 Radial†	1437.0	2499.4	838.75	ug/L	838.75 ppb	05:20:52
3	Sr 421.552†	17362.0	17080.9	106.29	ug/L	106.29 ppb	05:20:52
3	Sc 361.383	916829.0	916829.0	101.73	%		05:22:24
3	Y 371.029	892874.5	892874.5	118.88	%		05:22:24
3	Ag 328.068†	-4726.1	-4938.6	2.4707	ug/L	2.4707 ppb	05:22:30
3	As 188.979†	-83.9	-58.3	10.218	ug/L	10.218 ppb	05:22:50
3	B 249.677†	1337.6	1845.6	28.459	ug/L	28.459 ppb	05:22:30
3	Ba 233.527†	88001.4	86515.9	644.26	ug/L	644.26 ppb	05:22:30
3	Be 313.107†	-7478.4	-2238.4	4.2058	ug/L	4.2058 ppb	05:22:30
3	Cd 226.502†	607.1	791.9	0.7129	ug/L	0.7129 ppb	05:22:50
3	Co 228.616†	1146.8	1192.7	16.416	ug/L	16.416 ppb	05:22:50
3	Cr 267.716†	2935.3	2806.8	31.069	ug/L	31.069 ppb	05:22:50
3	Cu 324.752†	17491.8	10438.2	33.789	ug/L	33.789 ppb	05:22:30
3	Mn 257.610†	4534854.5	4457445.1	4762.5	ug/L	4762.5 ppb	05:22:24
3	Mo 202.031†	213.5	191.6	17.618	ug/L	17.618 ppb	05:22:50
3	Ni 231.604†	1422.1	1311.4	30.354	ug/L	30.354 ppb	05:22:50
3	P 214.914†	2065.1	1806.5	985.22	ug/L	985.22 ppb	05:22:50
3	Pb 220.353†	831.9	886.2	100.65	ug/L	100.65 ppb	05:22:50
3	S 181.975 Axial†	222.6	177.3	242.49	ug/L	242.49 ppb	05:22:50
3	Sb 206.836†	42.4	7.4	-4.5736	ug/L	-4.5736 ppb	05:22:50
3	Se 196.026†	-327.0	-292.6	78.275	ug/L	78.275 ppb	05:22:50
3	Si 251.611†	908539.6	892665.9	26721	ug/L	26721 ppb	05:22:24
3	Sn 189.927†	-49.4	-53.6	-6.7191	ug/L	-6.7191 ppb	05:22:50
3	Ti 334.940†	1627514.2	1600999.2	2555.5	ug/L	2555.5 ppb	05:22:24
3	Tl 190.801†	-175.9	-140.4	8.6270	ug/L	8.6270 ppb	05:22:50
3	U 409.014†	-9031.3	-6476.2	-188.12	ug/L	-188.12 ppb	05:22:24
3	V 292.402†	13841.0	14964.4	84.324	ug/L	84.324 ppb	05:22:30
3	Zn 213.857†	32253.3	31083.9	263.75	ug/L	263.75 ppb	05:22:30
3	SiO2†	903544.1	887737.4	56942	ug/L	56942 ppb	05:23:08

Mean Data: 241613007|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915339.5	101.56	%	1.091				1.07%
Sc Radial	5959.0	102	%	0.3				0.29%
Y 371.029	893078.7	118.91	%	1.110				0.93%
Y RADIAL	7592.8	120.8	%	0.03				0.03%
Ag 328.068†	-4919.4	2.6298	ug/L	0.24284	2.6298	ppb	0.24284	9.23%
Al 396.153Radial†	43421.9	30161	ug/L	32.4	30161	ppb	32.4	0.11%
As 188.979†	-56.7	10.900	ug/L	0.5921	10.900	ppb	0.5921	5.43%
B 249.677†	1815.9	27.806	ug/L	1.4118	27.806	ppb	1.4118	5.08%
Ba 233.527†	86779.1	646.22	ug/L	6.947	646.22	ppb	6.947	1.08%
Be 313.107†	-2289.2	4.1852	ug/L	0.05487	4.1852	ppb	0.05487	1.31%
Ca 317.933Radial†	6594.5	9719.9	ug/L	15.76	9719.9	ppb	15.76	0.16%
Cd 226.502†	791.6	0.6880	ug/L	0.07629	0.6880	ppb	0.07629	11.09%
Co 228.616†	1201.2	16.577	ug/L	0.2710	16.577	ppb	0.2710	1.64%
Cr 267.716†	2799.4	30.997	ug/L	0.2293	30.997	ppb	0.2293	0.74%
Cu 324.752†	10459.1	33.860	ug/L	0.4619	33.860	ppb	0.4619	1.36%
Fe 238.204 Radial†	8226.7	77018	ug/L	290.5	77018	ppb	290.5	0.38%
K 766.490 Radial†	29006.3	5089.8	ug/L	15.82	5089.8	ppb	15.82	0.31%

Mg 279.077 IEC†	209.7	7332.5	ug/L	44.14	7332.5	ppb	44.14	0.60%
Mn 257.610†	4451888.0	4756.6	ug/L	5.39	4756.6	ppb	5.39	0.11%
Mo 202.031†	199.3	18.126	ug/L	0.4413	18.126	ppb	0.4413	2.43%
Na 589.592 Radial†	2521.1	846.03	ug/L	12.996	846.03	ppb	12.996	1.54%
Ni 231.604†	1315.6	30.450	ug/L	0.3257	30.450	ppb	0.3257	1.07%
P 214.914†	1814.4	989.58	ug/L	8.905	989.58	ppb	8.905	0.90%
Pb 220.353†	892.6	101.36	ug/L	1.116	101.36	ppb	1.116	1.10%
S 181.975 Axial†	176.7	241.63	ug/L	3.324	241.63	ppb	3.324	1.38%
Sb 206.836†	4.2	-5.5669	ug/L	0.95952	-5.5669	ppb	0.95952	17.24%
Se 196.026†	-291.4	79.673	ug/L	1.2214	79.673	ppb	1.2214	1.53%
Si 251.611†	891521.1	26686	ug/L	40.9	26686	ppb	40.9	0.15%
Sn 189.927†	-47.7	-5.7525	ug/L	1.46533	-5.7525	ppb	1.46533	25.47%
Sr 421.552†	17073.4	106.24	ug/L	0.146	106.24	ppb	0.146	0.14%
Ti 334.940†	1600337.6	2554.4	ug/L	2.59	2554.4	ppb	2.59	0.10%
Tl 190.801†	-140.8	8.4839	ug/L	1.85046	8.4839	ppb	1.85046	21.81%
U 409.014†	-6548.3	-190.14	ug/L	2.290	-190.14	ppb	2.290	1.20%
V 292.402†	15014.2	84.625	ug/L	0.9436	84.625	ppb	0.9436	1.12%
Zn 213.857†	31218.7	264.90	ug/L	3.410	264.90	ppb	3.410	1.29%
SiO2†	888774.9	57009	ug/L	560.8	57009	ppb	560.8	0.98%

Sequence No.: 125
Sample ID: 241613008|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 124
Date Collected: 12/9/2009 05:25:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613008|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5690.0	5690.0	97.4	%			05:27:34
1	Y RADIAL	6751.4	6751.4	107.4	%			05:27:34
1	Al 396.153Radial†	160395.2	164754.2	114440	ug/L	114440	ppb	05:27:14
1	Ca 317.933Radial†	29366.0	30144.8	44432	ug/L	44432	ppb	05:27:14
1	Fe 238.204 Radial†	12478.7	12809.5	119920	ug/L	119920	ppb	05:27:14
1	K 766.490 Radial†	90354.9	90447.3	16020	ug/L	16020	ppb	05:27:14
1	Mg 279.077 IEC†	548.0	561.6	19710	ug/L	19710	ppb	05:27:34
1	Na 589.592 Radial†	5046.9	6271.4	2104.6	ug/L	2104.6	ppb	05:27:14
1	Sr 421.552†	52155.4	53593.6	333.35	ug/L	333.35	ppb	05:27:14
1	Sc 361.383	895312.2	895312.2	99.340	%			05:28:32
1	Y 371.029	813039.4	813039.4	108.25	%			05:28:32
1	Ag 328.068†	-7274.4	-7615.5	4.0966	ug/L	4.0966	ppb	05:28:52
1	As 188.979†	-122.7	-99.3	18.375	ug/L	18.375	ppb	05:28:52
1	B 249.677†	1494.2	2034.8	26.626	ug/L	26.626	ppb	05:28:32
1	Ba 233.527†	231016.2	232560.4	1728.5	ug/L	1728.5	ppb	05:28:32
1	Be 313.107†	-3931.4	1155.5	9.5746	ug/L	9.5746	ppb	05:28:32
1	Cd 226.502†	1030.1	1232.0	1.0778	ug/L	1.0778	ppb	05:28:52
1	Co 228.616†	2761.6	2845.3	43.111	ug/L	43.111	ppb	05:28:52
1	Cr 267.716†	8061.4	8036.3	86.979	ug/L	86.979	ppb	05:28:52
1	Cu 324.752†	25949.4	19365.2	61.535	ug/L	61.535	ppb	05:28:32
1	Mn 257.610†	2410078.8	2425678.7	2599.2	ug/L	2599.2	ppb	05:28:32
1	Mo 202.031†	-68.0	-86.8	2.9903	ug/L	2.9903	ppb	05:28:52
1	Ni 231.604†	2951.1	2884.1	66.752	ug/L	66.752	ppb	05:28:52
1	P 214.914†	1564.5	1351.4	712.08	ug/L	712.08	ppb	05:28:52
1	Pb 220.353†	736.4	809.7	107.32	ug/L	107.32	ppb	05:28:52
1	S 181.975 Axial†	403.0	364.1	487.71	ug/L	487.71	ppb	05:28:52
1	Sb 206.836†	59.4	25.6	-8.0147	ug/L	-8.0147	ppb	05:28:52
1	Se 196.026†	-495.2	-469.7	126.99	ug/L	126.99	ppb	05:28:52
1	Si 251.611†	1277746.4	1285791.2	38486	ug/L	38486	ppb	05:28:32
1	Sn 189.927†	-199.5	-205.8	-27.417	ug/L	-27.417	ppb	05:28:52
1	Ti 334.940†	2897873.8	2918253.7	4659.3	ug/L	4659.3	ppb	05:28:32
1	Tl 190.801†	-229.0	-198.0	-2.2372	ug/L	-2.2372	ppb	05:28:52
1	U 409.014†	-7600.0	-5248.7	-159.84	ug/L	-159.84	ppb	05:28:32
1	V 292.402†	35146.6	36738.6	219.34	ug/L	219.34	ppb	05:28:32
1	Zn 213.857†	25830.4	25380.3	209.11	ug/L	209.11	ppb	05:28:52
1	SiO2†	1280641.8	1288688.0	82655	ug/L	82655	ppb	05:29:52
2	Sc Radial	5749.1	5749.1	98.4	%			05:27:59
2	Y RADIAL	6804.1	6804.1	108.2	%			05:27:59
2	Al 396.153Radial†	161536.9	164221.3	114070	ug/L	114070	ppb	05:27:39
2	Ca 317.933Radial†	29471.1	29941.5	44132	ug/L	44132	ppb	05:27:39
2	Fe 238.204 Radial†	12492.0	12691.2	118810	ug/L	118810	ppb	05:27:39
2	K 766.490 Radial†	90834.4	89980.7	15937	ug/L	15937	ppb	05:27:39
2	Mg 279.077 IEC†	547.3	555.1	19482	ug/L	19482	ppb	05:27:59
2	Na 589.592 Radial†	5050.6	6221.8	2087.9	ug/L	2087.9	ppb	05:27:39
2	Sr 421.552†	52403.0	53294.6	331.50	ug/L	331.50	ppb	05:27:39
2	Sc 361.383	894622.5	894622.5	99.263	%			05:28:59
2	Y 371.029	811459.3	811459.3	108.04	%			05:28:59
2	Ag 328.068†	-7227.7	-7574.1	3.9318	ug/L	3.9318	ppb	05:29:19
2	As 188.979†	-142.8	-119.7	10.209	ug/L	10.209	ppb	05:29:19
2	B 249.677†	1531.9	2073.9	27.595	ug/L	27.595	ppb	05:28:59
2	Ba 233.527†	231242.5	232967.7	1731.5	ug/L	1731.5	ppb	05:28:59
2	Be 313.107†	-3724.6	1360.7	9.6662	ug/L	9.6662	ppb	05:28:59
2	Cd 226.502†	1023.0	1225.7	1.1213	ug/L	1.1213	ppb	05:29:19
2	Co 228.616†	2738.9	2824.7	42.719	ug/L	42.719	ppb	05:29:19
2	Cr 267.716†	7997.3	7978.0	86.345	ug/L	86.345	ppb	05:29:19
2	Cu 324.752†	26002.3	19438.6	61.689	ug/L	61.689	ppb	05:28:59
2	Mn 257.610†	2416252.7	2433768.7	2607.7	ug/L	2607.7	ppb	05:28:59
2	Mo 202.031†	-59.1	-77.9	3.4781	ug/L	3.4781	ppb	05:29:19
2	Ni 231.604†	2939.2	2874.5	66.529	ug/L	66.529	ppb	05:29:19

2	P 214.914†	1575.0	1363.2	719.62	ug/L	719.62 ppb	05:29:19
2	Pb 220.353†	728.1	802.0	106.45	ug/L	106.45 ppb	05:29:19
2	S 181.975 Axial†	388.6	349.9	467.91	ug/L	467.91 ppb	05:29:19
2	Sb 206.836†	57.9	24.0	-8.5426	ug/L	-8.5426 ppb	05:29:19
2	Se 196.026†	-481.1	-455.9	131.42	ug/L	131.42 ppb	05:29:19
2	Si 251.611†	1278884.9	1287929.7	38550	ug/L	38550 ppb	05:28:59
2	Sn 189.927†	-212.8	-219.4	-29.681	ug/L	-29.681 ppb	05:29:19
2	Ti 334.940†	2900947.0	2923598.6	4667.8	ug/L	4667.8 ppb	05:28:59
2	Tl 190.801†	-229.8	-199.0	-2.4122	ug/L	-2.4122 ppb	05:29:19
2	U 409.014†	-7270.5	-4922.7	-150.72	ug/L	-150.72 ppb	05:28:59
2	V 292.402†	35250.3	36870.3	220.39	ug/L	220.39 ppb	05:28:59
2	Zn 213.857†	25643.0	25211.6	207.75	ug/L	207.75 ppb	05:29:19
2	SiO2†	1279148.8	1288177.7	82622	ug/L	82622 ppb	05:29:58
3	Sc Radial	5738.0	5738.0	98.2	%		05:28:24
3	Y RADIAL	6800.3	6800.3	108.1	%		05:28:24
3	Al 396.153Radial†	158968.8	161923.5	112480	ug/L	112480 ppb	05:28:04
3	Ca 317.933Radial†	29066.3	29587.2	43610	ug/L	43610 ppb	05:28:04
3	Fe 238.204 Radial†	12324.7	12545.4	117450	ug/L	117450 ppb	05:28:04
3	K 766.490 Radial†	89522.2	88822.9	15732	ug/L	15732 ppb	05:28:04
3	Mg 279.077 IEC†	550.0	559.0	19618	ug/L	19618 ppb	05:28:24
3	Na 589.592 Radial†	4973.6	6153.3	2064.9	ug/L	2064.9 ppb	05:28:04
3	Sr 421.552†	51534.4	52513.0	326.63	ug/L	326.63 ppb	05:28:04
3	Sc 361.383	888274.4	888274.4	98.559	%		05:29:26
3	Y 371.029	806562.6	806562.6	107.39	%		05:29:26
3	Ag 328.068†	-7201.2	-7599.2	3.3945	ug/L	3.3945 ppb	05:29:46
3	As 188.979†	-134.2	-112.0	13.065	ug/L	13.065 ppb	05:29:46
3	B 249.677†	1482.9	2035.3	26.964	ug/L	26.964 ppb	05:29:26
3	Ba 233.527†	229647.7	233014.4	1731.8	ug/L	1731.8 ppb	05:29:26
3	Be 313.107†	-3830.6	1226.4	9.6231	ug/L	9.6231 ppb	05:29:26
3	Cd 226.502†	1025.8	1235.9	1.3663	ug/L	1.3663 ppb	05:29:46
3	Co 228.616†	2761.1	2866.9	43.531	ug/L	43.531 ppb	05:29:46
3	Cr 267.716†	8026.4	8065.2	87.237	ug/L	87.237 ppb	05:29:46
3	Cu 324.752†	25949.3	19572.1	62.001	ug/L	62.001 ppb	05:29:26
3	Mn 257.610†	2398227.5	2432876.0	2606.6	ug/L	2606.6 ppb	05:29:26
3	Mo 202.031†	-73.6	-93.0	2.4257	ug/L	2.4257 ppb	05:29:46
3	Ni 231.604†	2907.3	2863.3	66.269	ug/L	66.269 ppb	05:29:46
3	P 214.914†	1546.3	1345.4	709.90	ug/L	709.90 ppb	05:29:46
3	Pb 220.353†	753.7	833.2	109.73	ug/L	109.73 ppb	05:29:46
3	S 181.975 Axial†	400.0	364.3	488.38	ug/L	488.38 ppb	05:29:46
3	Sb 206.836†	68.2	34.9	-5.0864	ug/L	-5.0864 ppb	05:29:46
3	Se 196.026†	-490.3	-468.6	119.45	ug/L	119.45 ppb	05:29:46
3	Si 251.611†	1271287.9	1289429.1	38595	ug/L	38595 ppb	05:29:26
3	Sn 189.927†	-193.9	-201.7	-26.869	ug/L	-26.869 ppb	05:29:46
3	Ti 334.940†	2882186.5	2925449.4	4670.8	ug/L	4670.8 ppb	05:29:26
3	Tl 190.801†	-224.8	-195.5	-1.4701	ug/L	-1.4701 ppb	05:29:46
3	U 409.014†	-7400.0	-5106.4	-155.61	ug/L	-155.61 ppb	05:29:26
3	V 292.402†	34966.3	36835.9	220.34	ug/L	220.34 ppb	05:29:26
3	Zn 213.857†	25746.6	25501.3	210.41	ug/L	210.41 ppb	05:29:46
3	SiO2†	1294936.9	1313406.1	84241	ug/L	84241 ppb	05:30:04

Mean Data: 241613008|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892736.4	99.054	%	0.4305				0.43%
Sc Radial	5725.7	98.0	%	0.54				0.55%
Y 371.029	810353.8	107.89	%	0.450				0.42%
Y RADIAL	6785.3	107.9	%	0.47				0.43%
Ag 328.068†	-7596.3	3.8076	ug/L	0.36713	3.8076	ppb	0.36713	9.64%
Al 396.153Radial†	163633.0	113660	ug/L	1044.9	113660	ppb	1044.9	0.92%
As 188.979†	-110.3	13.883	ug/L	4.1438	13.883	ppb	4.1438	29.85%
B 249.677†	2048.0	27.062	ug/L	0.4916	27.062	ppb	0.4916	1.82%
Ba 233.527†	232847.5	1730.6	ug/L	1.81	1730.6	ppb	1.81	0.10%
Be 313.107†	1247.5	9.6213	ug/L	0.04582	9.6213	ppb	0.04582	0.48%
Ca 317.933Radial†	29891.2	44058	ug/L	415.9	44058	ppb	415.9	0.94%
Cd 226.502†	1231.2	1.1885	ug/L	0.15554	1.1885	ppb	0.15554	13.09%
Co 228.616†	2845.6	43.121	ug/L	0.4061	43.121	ppb	0.4061	0.94%
Cr 267.716†	8026.5	86.854	ug/L	0.4588	86.854	ppb	0.4588	0.53%
Cu 324.752†	19458.7	61.742	ug/L	0.2374	61.742	ppb	0.2374	0.38%
Fe 238.204 Radial†	12682.0	118730	ug/L	1238.5	118730	ppb	1238.5	1.04%
K 766.490 Radial†	89750.3	15897	ug/L	148.5	15897	ppb	148.5	0.93%

Mg 279.077 IEC†	558.6	19604	ug/L	114.8	19604	ppb	114.8	0.59%
Mn 257.610†	2430774.5	2604.5	ug/L	4.64	2604.5	ppb	4.64	0.18%
Mo 202.031†	-85.9	2.9647	ug/L	0.52664	2.9647	ppb	0.52664	17.76%
Na 589.592 Radial†	6215.5	2085.8	ug/L	19.89	2085.8	ppb	19.89	0.95%
Ni 231.604†	2874.0	66.517	ug/L	0.2415	66.517	ppb	0.2415	0.36%
P 214.914†	1353.3	713.87	ug/L	5.101	713.87	ppb	5.101	0.71%
Pb 220.353†	815.0	107.83	ug/L	1.700	107.83	ppb	1.700	1.58%
S 181.975 Axial†	359.5	481.33	ug/L	11.628	481.33	ppb	11.628	2.42%
Sb 206.836†	28.2	-7.2146	ug/L	1.86182	-7.2146	ppb	1.86182	25.81%
Se 196.026†	-464.7	125.95	ug/L	6.052	125.95	ppb	6.052	4.80%
Si 251.611†	1287716.6	38544	ug/L	54.8	38544	ppb	54.8	0.14%
Sn 189.927†	-209.0	-27.989	ug/L	1.4906	-27.989	ppb	1.4906	5.33%
Sr 421.552†	53133.7	330.49	ug/L	3.471	330.49	ppb	3.471	1.05%
Ti 334.940†	2922433.9	4666.0	ug/L	5.94	4666.0	ppb	5.94	0.13%
Tl 190.801†	-197.5	-2.0398	ug/L	0.50111	-2.0398	ppb	0.50111	24.57%
U 409.014†	-5092.6	-155.39	ug/L	4.565	-155.39	ppb	4.565	2.94%
V 292.402†	36815.0	220.02	ug/L	0.594	220.02	ppb	0.594	0.27%
Zn 213.857†	25364.4	209.09	ug/L	1.329	209.09	ppb	1.329	0.64%
SiO2†	1296757.3	83173	ug/L	925.2	83173	ppb	925.2	1.11%

Sequence No.: 126
Sample ID: 241613009|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 125
Date Collected: 12/9/2009 05:32:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613009|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5694.9	5694.9	97.5	%			05:34:30
1	Y RADIAL	6465.2	6465.2	102.8	%			05:34:30
1	Al 396.153Radial†	93792.5	96266.7	66869	ug/L	66869	ppb	05:34:10
1	Ca 317.933Radial†	43567.8	44692.0	65873	ug/L	65873	ppb	05:34:10
1	Fe 238.204 Radial†	11974.9	12281.4	114980	ug/L	114980	ppb	05:34:10
1	K 766.490 Radial†	85602.5	85490.3	15118	ug/L	15118	ppb	05:34:10
1	Mg 279.077 IEC†	512.3	524.5	18405	ug/L	18405	ppb	05:34:30
1	Na 589.592 Radial†	3219.8	4392.0	1473.9	ug/L	1473.9	ppb	05:34:10
1	Sr 421.552†	55730.1	57215.4	355.71	ug/L	355.71	ppb	05:34:10
1	Sc 361.383	894331.6	894331.6	99.231	%			05:35:29
1	Y 371.029	779395.7	779395.7	103.77	%			05:35:29
1	Ag 328.068†	-7191.2	-7539.6	2.5026	ug/L	2.5026	ppb	05:35:34
1	As 188.979†	-80.1	-56.6	19.234	ug/L	19.234	ppb	05:35:54
1	B 249.677†	1275.6	1816.1	22.609	ug/L	22.609	ppb	05:35:34
1	Ba 233.527†	194551.1	196067.7	1457.9	ug/L	1457.9	ppb	05:35:34
1	Be 313.107†	-1880.0	3218.4	6.7515	ug/L	6.7515	ppb	05:35:34
1	Cd 226.502†	971.9	1174.5	0.9657	ug/L	0.9657	ppb	05:35:54
1	Co 228.616†	4557.8	4658.6	81.347	ug/L	81.347	ppb	05:35:54
1	Cr 267.716†	7332.3	7310.5	79.249	ug/L	79.249	ppb	05:35:34
1	Cu 324.752†	27188.6	20642.6	64.939	ug/L	64.939	ppb	05:35:34
1	Mn 257.610†	3539054.8	3566066.2	3815.2	ug/L	3815.2	ppb	05:35:29
1	Mo 202.031†	-22.4	-40.9	5.5602	ug/L	5.5602	ppb	05:35:54
1	Ni 231.604†	3032.7	2969.7	68.710	ug/L	68.710	ppb	05:35:54
1	P 214.914†	1938.8	1730.3	917.80	ug/L	917.80	ppb	05:35:54
1	Pb 220.353†	793.5	868.1	103.65	ug/L	103.65	ppb	05:35:54
1	S 181.975 Axial†	476.1	438.2	600.90	ug/L	600.90	ppb	05:35:54
1	Sb 206.836†	53.3	19.5	-3.6247	ug/L	-3.6247	ppb	05:35:54
1	Se 196.026†	-466.2	-441.0	119.38	ug/L	119.38	ppb	05:35:54
1	Si 251.611†	1130568.4	1138882.6	34088	ug/L	34088	ppb	05:35:29
1	Sn 189.927†	-235.2	-242.0	-31.218	ug/L	-31.218	ppb	05:35:54
1	Ti 334.940†	1763665.7	1778452.0	2841.5	ug/L	2841.5	ppb	05:35:29
1	Tl 190.801†	-181.6	-150.5	2.7760	ug/L	2.7760	ppb	05:35:54
1	U 409.014†	-7507.6	-5164.0	-156.87	ug/L	-156.87	ppb	05:35:29
1	V 292.402†	33272.7	34889.0	209.90	ug/L	209.90	ppb	05:35:34
1	Zn 213.857†	30384.5	29998.2	249.96	ug/L	249.96	ppb	05:35:34
1	SiO2†	1114179.5	1122348.9	71985	ug/L	71985	ppb	05:37:04
2	Sc Radial	5630.8	5630.8	96.4	%			05:34:55
2	Y RADIAL	6445.6	6445.6	102.5	%			05:34:55
2	Al 396.153Radial†	93948.0	97523.4	67742	ug/L	67742	ppb	05:34:35
2	Ca 317.933Radial†	43607.5	45242.0	66684	ug/L	66684	ppb	05:34:35
2	Fe 238.204 Radial†	11936.3	12381.2	115910	ug/L	115910	ppb	05:34:35
2	K 766.490 Radial†	85405.8	86285.8	15259	ug/L	15259	ppb	05:34:35
2	Mg 279.077 IEC†	511.0	529.2	18571	ug/L	18571	ppb	05:34:55
2	Na 589.592 Radial†	3281.2	4493.3	1507.9	ug/L	1507.9	ppb	05:34:35
2	Sr 421.552†	55702.3	57837.4	359.58	ug/L	359.58	ppb	05:34:35
2	Sc 361.383	892791.6	892791.6	99.060	%			05:36:01
2	Y 371.029	777686.8	777686.8	103.54	%			05:36:01
2	Ag 328.068†	-7295.7	-7657.7	2.2602	ug/L	2.2602	ppb	05:36:06
2	As 188.979†	-70.9	-47.4	22.936	ug/L	22.936	ppb	05:36:26
2	B 249.677†	1222.1	1764.4	21.401	ug/L	21.401	ppb	05:36:06
2	Ba 233.527†	195643.4	197508.5	1468.6	ug/L	1468.6	ppb	05:36:06
2	Be 313.107†	-1889.1	3205.9	6.7329	ug/L	6.7329	ppb	05:36:06
2	Cd 226.502†	955.4	1159.6	0.7140	ug/L	0.7140	ppb	05:36:26
2	Co 228.616†	4525.3	4633.7	80.881	ug/L	80.881	ppb	05:36:26
2	Cr 267.716†	7417.2	7409.0	80.302	ug/L	80.302	ppb	05:36:06
2	Cu 324.752†	27305.9	20808.4	65.460	ug/L	65.460	ppb	05:36:06
2	Mn 257.610†	3523942.0	3556962.0	3805.6	ug/L	3805.6	ppb	05:36:01
2	Mo 202.031†	-24.2	-42.7	5.5066	ug/L	5.5066	ppb	05:36:26
2	Ni 231.604†	3006.0	2948.0	68.208	ug/L	68.208	ppb	05:36:26

2	P 214.914†	1918.3	1713.0	907.29	ug/L	907.29 ppb	05:36:26
2	Pb 220.353†	805.8	881.9	105.33	ug/L	105.33 ppb	05:36:26
2	S 181.975 Axial†	478.1	441.1	604.73	ug/L	604.73 ppb	05:36:26
2	Sb 206.836†	53.7	20.0	-3.5275	ug/L	-3.5275 ppb	05:36:26
2	Se 196.026†	-447.0	-422.4	133.23	ug/L	133.23 ppb	05:36:26
2	Si 251.611†	1125423.8	1135654.5	33992	ug/L	33992 ppb	05:36:01
2	Sn 189.927†	-249.5	-256.8	-33.544	ug/L	-33.544 ppb	05:36:26
2	Ti 334.940†	1756210.6	1773992.1	2834.5	ug/L	2834.5 ppb	05:36:01
2	Tl 190.801†	-178.8	-148.0	3.3974	ug/L	3.3974 ppb	05:36:26
2	U 409.014†	-7567.8	-5237.8	-159.02	ug/L	-159.02 ppb	05:36:01
2	V 292.402†	33410.9	35086.4	211.06	ug/L	211.06 ppb	05:36:06
2	Zn 213.857†	30490.1	30157.6	251.26	ug/L	251.26 ppb	05:36:06
2	SiO2†	1128964.6	1139211.0	73067	ug/L	73067 ppb	05:37:10
3	Sc Radial	5697.9	5697.9	97.5	%		05:35:20
3	Y RADIAL	6491.5	6491.5	103.2	%		05:35:20
3	Al 396.153Radial†	93929.7	96356.6	66932	ug/L	66932 ppb	05:35:00
3	Ca 317.933Radial†	43612.4	44714.2	65906	ug/L	65906 ppb	05:35:00
3	Fe 238.204 Radial†	11939.6	12238.7	114580	ug/L	114580 ppb	05:35:00
3	K 766.490 Radial†	85480.1	85318.4	15087	ug/L	15087 ppb	05:35:00
3	Mg 279.077 IEC†	515.0	527.0	18494	ug/L	18494 ppb	05:35:20
3	Na 589.592 Radial†	3262.2	4433.8	1487.9	ug/L	1487.9 ppb	05:35:00
3	Sr 421.552†	55680.3	57134.1	355.21	ug/L	355.21 ppb	05:35:00
3	Sc 361.383	894584.8	894584.8	99.259	%		05:36:33
3	Y 371.029	779027.7	779027.7	103.72	%		05:36:33
3	Ag 328.068†	-7157.2	-7503.4	2.5366	ug/L	2.5366 ppb	05:36:38
3	As 188.979†	-65.3	-41.6	24.925	ug/L	24.925 ppb	05:36:58
3	B 249.677†	1265.6	1805.7	22.446	ug/L	22.446 ppb	05:36:38
3	Ba 233.527†	194237.8	195696.5	1455.1	ug/L	1455.1 ppb	05:36:38
3	Be 313.107†	-2114.9	2982.3	6.6306	ug/L	6.6306 ppb	05:36:38
3	Cd 226.502†	958.2	1160.5	0.8570	ug/L	0.8570 ppb	05:36:58
3	Co 228.616†	4511.4	4610.5	80.475	ug/L	80.475 ppb	05:36:58
3	Cr 267.716†	7437.5	7414.3	80.331	ug/L	80.331 ppb	05:36:38
3	Cu 324.752†	27104.7	20550.3	64.654	ug/L	64.654 ppb	05:36:38
3	Mn 257.610†	3516755.5	3542591.0	3790.1	ug/L	3790.1 ppb	05:36:33
3	Mo 202.031†	-27.4	-45.9	5.2089	ug/L	5.2089 ppb	05:36:58
3	Ni 231.604†	3013.0	2949.0	68.232	ug/L	68.232 ppb	05:36:58
3	P 214.914†	1909.9	1700.6	901.10	ug/L	901.10 ppb	05:36:58
3	Pb 220.353†	812.6	887.1	105.85	ug/L	105.85 ppb	05:36:58
3	S 181.975 Axial†	475.3	437.3	599.59	ug/L	599.59 ppb	05:36:58
3	Sb 206.836†	63.8	30.0	-0.2814	ug/L	-0.2814 ppb	05:36:58
3	Se 196.026†	-468.4	-443.0	116.95	ug/L	116.95 ppb	05:36:58
3	Si 251.611†	1123718.5	1131659.0	33872	ug/L	33872 ppb	05:36:33
3	Sn 189.927†	-232.8	-239.5	-30.802	ug/L	-30.802 ppb	05:36:58
3	Ti 334.940†	1753149.7	1767354.5	2823.8	ug/L	2823.8 ppb	05:36:33
3	Tl 190.801†	-171.0	-139.7	5.5233	ug/L	5.5233 ppb	05:36:58
3	U 409.014†	-7402.2	-5055.7	-153.84	ug/L	-153.84 ppb	05:36:33
3	V 292.402†	33280.1	34887.0	209.97	ug/L	209.97 ppb	05:36:38
3	Zn 213.857†	30318.4	29922.9	249.34	ug/L	249.34 ppb	05:36:38
3	SiO2†	1136818.7	1144839.3	73428	ug/L	73428 ppb	05:37:16

Mean Data: 241613009|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	893902.6	99.183	%	0.1077				0.11%
Sc Radial	5674.6	97.1	%	0.65				0.67%
Y 371.029	778703.4	103.68	%	0.120				0.12%
Y RADIAL	6467.4	102.9	%	0.37				0.36%
Ag 328.068†	-7566.9	2.4332	ug/L	0.15070	2.4332	ppb	0.15070	6.19%
Al 396.153Radial†	96715.5	67181	ug/L	487.0	67181	ppb	487.0	0.72%
As 188.979†	-48.5	22.365	ug/L	2.8880	22.365	ppb	2.8880	12.91%
B 249.677†	1795.4	22.152	ug/L	0.6553	22.152	ppb	0.6553	2.96%
Ba 233.527†	196424.2	1460.5	ug/L	7.12	1460.5	ppb	7.12	0.49%
Be 313.107†	3135.5	6.7050	ug/L	0.06511	6.7050	ppb	0.06511	0.97%
Ca 317.933Radial†	44882.7	66155	ug/L	458.9	66155	ppb	458.9	0.69%
Cd 226.502†	1164.9	0.8455	ug/L	0.12626	0.8455	ppb	0.12626	14.93%
Co 228.616†	4634.2	80.901	ug/L	0.4363	80.901	ppb	0.4363	0.54%
Cr 267.716†	7377.9	79.961	ug/L	0.6165	79.961	ppb	0.6165	0.77%
Cu 324.752†	20667.1	65.018	ug/L	0.4090	65.018	ppb	0.4090	0.63%
Fe 238.204 Radial†	12300.4	115160	ug/L	684.6	115160	ppb	684.6	0.59%
K 766.490 Radial†	85698.2	15155	ug/L	91.5	15155	ppb	91.5	0.60%

Mg 279.077 IEC†	526.9	18490	ug/L	82.9	18490	ppb	82.9	0.45%
Mn 257.610†	3555206.4	3803.6	ug/L	12.65	3803.6	ppb	12.65	0.33%
Mo 202.031†	-43.2	5.4252	ug/L	0.18924	5.4252	ppb	0.18924	3.49%
Na 589.592 Radial†	4439.7	1489.9	ug/L	17.08	1489.9	ppb	17.08	1.15%
Ni 231.604†	2955.5	68.384	ug/L	0.2833	68.384	ppb	0.2833	0.41%
P 214.914†	1714.6	908.73	ug/L	8.442	908.73	ppb	8.442	0.93%
Pb 220.353†	879.0	104.94	ug/L	1.146	104.94	ppb	1.146	1.09%
S 181.975 Axial†	438.9	601.74	ug/L	2.671	601.74	ppb	2.671	0.44%
Sb 206.836†	23.2	-2.4779	ug/L	1.90279	-2.4779	ppb	1.90279	76.79%
Se 196.026†	-435.5	123.19	ug/L	8.781	123.19	ppb	8.781	7.13%
Si 251.611†	1135398.7	33984	ug/L	108.3	33984	ppb	108.3	0.32%
Sn 189.927†	-246.1	-31.854	ug/L	1.4776	-31.854	ppb	1.4776	4.64%
Sr 421.552†	57395.6	356.83	ug/L	2.392	356.83	ppb	2.392	0.67%
Ti 334.940†	1773266.2	2833.3	ug/L	8.91	2833.3	ppb	8.91	0.31%
Tl 190.801†	-146.1	3.8989	ug/L	1.44065	3.8989	ppb	1.44065	36.95%
U 409.014†	-5152.5	-156.57	ug/L	2.605	-156.57	ppb	2.605	1.66%
V 292.402†	34954.1	210.31	ug/L	0.655	210.31	ppb	0.655	0.31%
Zn 213.857†	30026.2	250.18	ug/L	0.980	250.18	ppb	0.980	0.39%
SiO2†	1135466.4	72827	ug/L	750.8	72827	ppb	750.8	1.03%

Sequence No.: 127
Sample ID: 241613010|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 126
Date Collected: 12/9/2009 05:39:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613010|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5865.3	5865.3	100	%			05:41:21
1	Y RADIAL	7148.2	7148.2	113.7	%			05:41:21
1	Al 396.153Radial†	75214.1	74960.0	52069	ug/L	52069	ppb	05:41:21
1	Ca 317.933Radial†	12455.7	12394.7	18269	ug/L	18269	ppb	05:41:21
1	Fe 238.204 Radial†	9377.2	9336.2	87405	ug/L	87405	ppb	05:41:21
1	K 766.490 Radial†	43602.9	41092.0	7264.6	ug/L	7264.6	ppb	05:41:21
1	Mg 279.077 IEC†	346.9	344.5	12078	ug/L	12078	ppb	05:41:41
1	Na 589.592 Radial†	2740.0	3818.0	1281.2	ug/L	1281.2	ppb	05:41:21
1	Sr 421.552†	29265.8	29186.4	181.60	ug/L	181.60	ppb	05:41:21
1	Sc 361.383	914167.4	914167.4	101.43	%			05:42:39
1	Y 371.029	850372.6	850372.6	113.22	%			05:42:39
1	Ag 328.068†	-5412.0	-5628.4	2.7953	ug/L	2.7953	ppb	05:42:44
1	As 188.979†	-95.8	-70.3	11.932	ug/L	11.932	ppb	05:43:04
1	B 249.677†	856.6	1375.2	17.161	ug/L	17.161	ppb	05:42:44
1	Ba 233.527†	136378.8	134462.3	1000.1	ug/L	1000.1	ppb	05:42:44
1	Be 313.107†	-7397.2	-2179.8	5.3433	ug/L	5.3433	ppb	05:42:44
1	Cd 226.502†	727.7	912.6	0.9386	ug/L	0.9386	ppb	05:43:04
1	Co 228.616†	1681.3	1723.0	25.251	ug/L	25.251	ppb	05:43:04
1	Cr 267.716†	4769.1	4623.2	50.417	ug/L	50.417	ppb	05:43:04
1	Cu 324.752†	21090.2	14035.8	44.625	ug/L	44.625	ppb	05:42:44
1	Mn 257.610†	2254727.3	2222480.1	2379.3	ug/L	2379.3	ppb	05:42:39
1	Mo 202.031†	81.9	62.4	10.167	ug/L	10.167	ppb	05:43:04
1	Ni 231.604†	2114.2	1997.8	46.240	ug/L	46.240	ppb	05:43:04
1	P 214.914†	2762.4	2499.9	1382.2	ug/L	1382.2	ppb	05:43:04
1	Pb 220.353†	540.0	600.8	72.406	ug/L	72.406	ppb	05:43:04
1	S 181.975 Axial†	276.5	231.1	313.53	ug/L	313.53	ppb	05:43:04
1	Sb 206.836†	62.4	27.3	-0.9719	ug/L	-0.9719	ppb	05:43:04
1	Se 196.026†	-365.9	-331.9	92.923	ug/L	92.923	ppb	05:43:04
1	Si 251.611†	1134087.4	1117630.4	33455	ug/L	33455	ppb	05:42:39
1	Sn 189.927†	-114.4	-117.8	-16.185	ug/L	-16.185	ppb	05:43:04
1	Ti 334.940†	1983722.2	1956837.5	3123.7	ug/L	3123.7	ppb	05:42:39
1	Tl 190.801†	-179.9	-144.9	-1.8043	ug/L	-1.8043	ppb	05:43:04
1	U 409.014†	-7920.6	-5406.9	-160.04	ug/L	-160.04	ppb	05:42:39
1	V 292.402†	22579.0	23618.7	139.29	ug/L	139.29	ppb	05:42:44
1	Zn 213.857†	28315.7	27294.2	229.35	ug/L	229.35	ppb	05:42:44
1	SiO2†	1135801.1	1119302.1	71795	ug/L	71795	ppb	05:44:13
2	Sc Radial	5885.9	5885.9	101	%			05:41:47
2	Y RADIAL	7177.3	7177.3	114.1	%			05:41:47
2	Al 396.153Radial†	75462.4	74944.9	52058	ug/L	52058	ppb	05:41:47
2	Ca 317.933Radial†	12451.2	12346.9	18199	ug/L	18199	ppb	05:41:47
2	Fe 238.204 Radial†	9373.9	9300.2	87068	ug/L	87068	ppb	05:41:47
2	K 766.490 Radial†	43701.5	41038.2	7255.1	ug/L	7255.1	ppb	05:41:47
2	Mg 279.077 IEC†	342.4	338.8	11876	ug/L	11876	ppb	05:42:07
2	Na 589.592 Radial†	2742.5	3810.9	1278.9	ug/L	1278.9	ppb	05:41:47
2	Sr 421.552†	29371.3	29189.3	181.61	ug/L	181.61	ppb	05:41:47
2	Sc 361.383	907227.5	907227.5	100.66	%			05:43:10
2	Y 371.029	845125.1	845125.1	112.52	%			05:43:10
2	Ag 328.068†	-5473.0	-5729.8	2.2444	ug/L	2.2444	ppb	05:43:15
2	As 188.979†	-117.4	-92.4	3.1094	ug/L	3.1094	ppb	05:43:35
2	B 249.677†	956.2	1480.6	19.416	ug/L	19.416	ppb	05:43:15
2	Ba 233.527†	137562.3	136666.5	1016.4	ug/L	1016.4	ppb	05:43:15
2	Be 313.107†	-7471.4	-2309.3	5.2932	ug/L	5.2932	ppb	05:43:15
2	Cd 226.502†	731.2	921.5	1.0666	ug/L	1.0666	ppb	05:43:35
2	Co 228.616†	1675.4	1729.8	25.392	ug/L	25.392	ppb	05:43:35
2	Cr 267.716†	4764.9	4654.9	50.750	ug/L	50.750	ppb	05:43:35
2	Cu 324.752†	21210.6	14314.4	45.405	ug/L	45.405	ppb	05:43:15
2	Mn 257.610†	2235802.6	2220684.2	2377.4	ug/L	2377.4	ppb	05:43:10
2	Mo 202.031†	65.1	46.3	9.1199	ug/L	9.1199	ppb	05:43:35
2	Ni 231.604†	2099.9	1999.5	46.281	ug/L	46.281	ppb	05:43:35

2	P 214.914†	2751.7	2510.1	1388.2	ug/L	1388.2 ppb	05:43:35
2	Pb 220.353†	541.2	606.1	73.030	ug/L	73.030 ppb	05:43:35
2	S 181.975 Axial†	275.6	232.2	315.12	ug/L	315.12 ppb	05:43:35
2	Sb 206.836†	48.9	14.3	-5.0959	ug/L	-5.0959 ppb	05:43:35
2	Se 196.026†	-355.2	-324.0	96.425	ug/L	96.425 ppb	05:43:35
2	Si 251.611†	1124520.4	1116679.1	33426	ug/L	33426 ppb	05:43:10
2	Sn 189.927†	-110.3	-114.6	-15.681	ug/L	-15.681 ppb	05:43:35
2	Ti 334.940†	1967729.4	1955910.3	3122.3	ug/L	3122.3 ppb	05:43:10
2	Tl 190.801†	-188.6	-154.8	-4.6192	ug/L	-4.6192 ppb	05:43:35
2	U 409.014†	-8015.9	-5561.4	-164.25	ug/L	-164.25 ppb	05:43:10
2	V 292.402†	22834.2	24042.5	142.11	ug/L	142.11 ppb	05:43:15
2	Zn 213.857†	28537.4	27728.0	233.18	ug/L	233.18 ppb	05:43:15
2	SiO2†	1121837.3	1113995.9	71455	ug/L	71455 ppb	05:44:18
3	Sc Radial	5828.9	5828.9	99.7	%		05:42:12
3	Y RADIAL	7112.9	7112.9	113.1	%		05:42:12
3	Al 396.153Radial†	75005.0	75219.0	52249	ug/L	52249 ppb	05:42:12
3	Ca 317.933Radial†	12380.0	12396.4	18272	ug/L	18272 ppb	05:42:12
3	Fe 238.204 Radial†	9272.8	9290.0	86972	ug/L	86972 ppb	05:42:12
3	K 766.490 Radial†	43475.9	41236.3	7290.2	ug/L	7290.2 ppb	05:42:12
3	Mg 279.077 IEC†	343.7	343.4	12041	ug/L	12041 ppb	05:42:32
3	Na 589.592 Radial†	2704.1	3799.0	1274.9	ug/L	1274.9 ppb	05:42:12
3	Sr 421.552†	29053.5	29155.8	181.41	ug/L	181.41 ppb	05:42:12
3	Sc 361.383	904794.1	904794.1	100.39	%		05:43:41
3	Y 371.029	843777.5	843777.5	112.34	%		05:43:41
3	Ag 328.068†	-5440.6	-5712.1	2.2799	ug/L	2.2799 ppb	05:43:46
3	As 188.979†	-109.4	-84.8	6.1502	ug/L	6.1502 ppb	05:44:06
3	B 249.677†	853.3	1380.6	17.331	ug/L	17.331 ppb	05:43:46
3	Ba 233.527†	136048.2	135525.9	1008.0	ug/L	1008.0 ppb	05:43:46
3	Be 313.107†	-7617.7	-2475.0	5.2399	ug/L	5.2399 ppb	05:43:46
3	Cd 226.502†	716.1	908.4	0.9378	ug/L	0.9378 ppb	05:44:06
3	Co 228.616†	1685.9	1744.8	25.671	ug/L	25.671 ppb	05:44:06
3	Cr 267.716†	4792.1	4694.8	51.162	ug/L	51.162 ppb	05:44:06
3	Cu 324.752†	20810.6	13972.7	44.422	ug/L	44.422 ppb	05:43:46
3	Mn 257.610†	2231080.7	2221954.2	2378.7	ug/L	2378.7 ppb	05:43:41
3	Mo 202.031†	94.8	76.1	11.006	ug/L	11.006 ppb	05:44:06
3	Ni 231.604†	2098.7	2004.0	46.384	ug/L	46.384 ppb	05:44:06
3	P 214.914†	2743.5	2509.2	1388.0	ug/L	1388.0 ppb	05:44:06
3	Pb 220.353†	553.0	619.3	74.571	ug/L	74.571 ppb	05:44:06
3	S 181.975 Axial†	273.2	230.6	312.85	ug/L	312.85 ppb	05:44:06
3	Sb 206.836†	54.4	20.0	-3.2936	ug/L	-3.2936 ppb	05:44:06
3	Se 196.026†	-355.1	-324.9	95.672	ug/L	95.672 ppb	05:44:06
3	Si 251.611†	1122607.9	1117778.5	33459	ug/L	33459 ppb	05:43:41
3	Sn 189.927†	-113.4	-117.9	-16.221	ug/L	-16.221 ppb	05:44:06
3	Ti 334.940†	1964707.9	1958157.8	3125.8	ug/L	3125.8 ppb	05:43:41
3	Tl 190.801†	-185.5	-152.3	-3.8587	ug/L	-3.8587 ppb	05:44:06
3	U 409.014†	-7779.8	-5347.6	-158.35	ug/L	-158.35 ppb	05:43:41
3	V 292.402†	22471.9	23742.6	140.18	ug/L	140.18 ppb	05:43:46
3	Zn 213.857†	28151.2	27419.6	230.49	ug/L	230.49 ppb	05:43:46
3	SiO2†	1137076.1	1132172.5	72621	ug/L	72621 ppb	05:44:24

Mean Data: 241613010|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908729.7	100.83	%	0.540				0.54%
Sc Radial	5860.0	100	%	0.5				0.49%
Y 371.029	846425.1	112.69	%	0.464				0.41%
Y RADIAL	7146.2	113.7	%	0.51				0.45%
Ag 328.068†	-5690.1	2.4399	ug/L	0.30830	2.4399	ppb	0.30830	12.64%
Al 396.153Radial†	75041.3	52125	ug/L	107.0	52125	ppb	107.0	0.21%
As 188.979†	-82.5	7.0637	ug/L	4.48143	7.0637	ppb	4.48143	63.44%
B 249.677†	1412.1	17.969	ug/L	1.2557	17.969	ppb	1.2557	6.99%
Ba 233.527†	135551.6	1008.2	ug/L	8.17	1008.2	ppb	8.17	0.81%
Be 313.107†	-2321.4	5.2921	ug/L	0.05174	5.2921	ppb	0.05174	0.98%
Ca 317.933Radial†	12379.3	18246	ug/L	41.4	18246	ppb	41.4	0.23%
Cd 226.502†	914.1	0.9810	ug/L	0.07417	0.9810	ppb	0.07417	7.56%
Co 228.616†	1732.5	25.438	ug/L	0.2140	25.438	ppb	0.2140	0.84%
Cr 267.716†	4657.6	50.776	ug/L	0.3732	50.776	ppb	0.3732	0.74%
Cu 324.752†	14107.6	44.818	ug/L	0.5190	44.818	ppb	0.5190	1.16%
Fe 238.204 Radial†	9308.8	87148	ug/L	227.3	87148	ppb	227.3	0.26%
K 766.490 Radial†	41122.2	7270.0	ug/L	18.17	7270.0	ppb	18.17	0.25%

Mg 279.077 IEC†	342.2	11999	ug/L	107.3	11999	ppb	107.3	0.89%
Mn 257.610†	2221706.2	2378.5	ug/L	1.00	2378.5	ppb	1.00	0.04%
Mo 202.031†	61.6	10.098	ug/L	0.9450	10.098	ppb	0.9450	9.36%
Na 589.592 Radial†	3809.3	1278.3	ug/L	3.21	1278.3	ppb	3.21	0.25%
Ni 231.604†	2000.4	46.302	ug/L	0.0741	46.302	ppb	0.0741	0.16%
P 214.914†	2506.4	1386.1	ug/L	3.43	1386.1	ppb	3.43	0.25%
Pb 220.353†	608.7	73.336	ug/L	1.1145	73.336	ppb	1.1145	1.52%
S 181.975 Axial†	231.3	313.83	ug/L	1.162	313.83	ppb	1.162	0.37%
Sb 206.836†	20.5	-3.1204	ug/L	2.06742	-3.1204	ppb	2.06742	66.25%
Se 196.026†	-326.9	95.007	ug/L	1.8429	95.007	ppb	1.8429	1.94%
Si 251.611†	1117362.7	33447	ug/L	17.8	33447	ppb	17.8	0.05%
Sn 189.927†	-116.8	-16.029	ug/L	0.3021	-16.029	ppb	0.3021	1.88%
Sr 421.552†	29177.2	181.54	ug/L	0.116	181.54	ppb	0.116	0.06%
Ti 334.940†	1956968.5	3123.9	ug/L	1.80	3123.9	ppb	1.80	0.06%
Tl 190.801†	-150.6	-3.4274	ug/L	1.45620	-3.4274	ppb	1.45620	42.49%
U 409.014†	-5438.7	-160.88	ug/L	3.039	-160.88	ppb	3.039	1.89%
V 292.402†	23801.2	140.53	ug/L	1.443	140.53	ppb	1.443	1.03%
Zn 213.857†	27480.6	231.00	ug/L	1.966	231.00	ppb	1.966	0.85%
SiO2†	1121823.5	71957	ug/L	599.5	71957	ppb	599.5	0.83%

Sequence No.: 128
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 05:46:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5738.9	5738.9	98.2	%			05:48:29
1	Y RADIAL	6089.1	6089.1	96.84	%			05:48:29
1	Al 396.153Radial†	6735.8	6879.4	4757.6	ug/L	4757.6	ppb	05:48:29
1	Ca 317.933Radial†	3271.7	3316.0	4887.6	ug/L	4887.6	ppb	05:48:49
1	Fe 238.204 Radial†	531.1	534.0	5014.5	ug/L	5014.5	ppb	05:48:49
1	K 766.490 Radial†	30641.6	28850.7	5107.6	ug/L	5107.6	ppb	05:48:29
1	Mg 279.077 IEC†	137.8	139.1	4913.6	ug/L	4913.6	ppb	05:48:49
1	Na 589.592 Radial†	27874.8	29472.9	9890.5	ug/L	9890.5	ppb	05:48:29
1	Sr 421.552†	79586.9	81070.8	504.84	ug/L	504.84	ppb	05:48:29
1	Sc 361.383	903515.1	903515.1	100.25	%			05:49:46
1	Y 371.029	734022.4	734022.4	97.728	%			05:49:46
1	Ag 328.068†	110015.1	109448.2	498.70	ug/L	498.70	ppb	05:49:51
1	As 188.979†	1176.6	1197.9	477.69	ug/L	477.69	ppb	05:50:11
1	B 249.677†	21970.3	22446.2	468.81	ug/L	468.81	ppb	05:49:51
1	Ba 233.527†	65345.9	65191.6	484.41	ug/L	484.41	ppb	05:49:51
1	Be 313.107†	1314571.3	1316409.4	480.81	ug/L	480.81	ppb	05:49:46
1	Cd 226.502†	45854.2	45935.1	485.41	ug/L	485.41	ppb	05:49:51
1	Co 228.616†	25872.3	25873.3	491.19	ug/L	491.19	ppb	05:49:51
1	Cr 267.716†	45635.7	45443.3	477.80	ug/L	477.80	ppb	05:49:51
1	Cu 324.752†	174786.5	167594.3	479.86	ug/L	479.86	ppb	05:49:51
1	Mn 257.610†	468538.3	466948.7	498.52	ug/L	498.52	ppb	05:49:46
1	Mo 202.031†	7778.6	7740.9	492.10	ug/L	492.10	ppb	05:50:11
1	Ni 231.604†	20954.4	20815.7	481.70	ug/L	481.70	ppb	05:49:51
1	P 214.914†	4469.7	4235.0	2369.9	ug/L	2369.9	ppb	05:50:11
1	Pb 220.353†	4224.9	4282.8	485.65	ug/L	485.65	ppb	05:50:11
1	S 181.975 Axial†	743.4	700.0	979.90	ug/L	979.90	ppb	05:50:11
1	Sb 206.836†	1618.6	1580.4	507.53	ug/L	507.53	ppb	05:50:11
1	Se 196.026†	840.3	867.0	519.46	ug/L	519.46	ppb	05:50:11
1	Si 251.611†	82791.2	82135.2	2447.0	ug/L	2447.0	ppb	05:49:51
1	Sn 189.927†	3014.3	3001.8	492.07	ug/L	492.07	ppb	05:50:11
1	Ti 334.940†	312065.7	312403.2	498.40	ug/L	498.40	ppb	05:49:51
1	Tl 190.801†	1698.8	1727.0	486.97	ug/L	486.97	ppb	05:50:11
1	U 409.014†	15822.6	18185.0	499.40	ug/L	499.40	ppb	05:49:51
1	V 292.402†	71106.0	72287.3	484.06	ug/L	484.06	ppb	05:49:51
1	Zn 213.857†	56033.4	55271.9	478.58	ug/L	478.58	ppb	05:49:51
1	SiO2†	83345.5	82670.4	5277.4	ug/L	5277.4	ppb	05:51:19
2	Sc Radial	5790.0	5790.0	99.1	%			05:48:54
2	Y RADIAL	6135.5	6135.5	97.58	%			05:48:54
2	Al 396.153Radial†	6744.6	6827.8	4721.4	ug/L	4721.4	ppb	05:48:54
2	Ca 317.933Radial†	3302.4	3317.6	4889.9	ug/L	4889.9	ppb	05:49:14
2	Fe 238.204 Radial†	533.8	531.9	4995.7	ug/L	4995.7	ppb	05:49:14
2	K 766.490 Radial†	30798.6	28733.8	5086.9	ug/L	5086.9	ppb	05:48:54
2	Mg 279.077 IEC†	139.2	139.4	4922.9	ug/L	4922.9	ppb	05:49:14
2	Na 589.592 Radial†	27933.8	29282.0	9826.5	ug/L	9826.5	ppb	05:48:54
2	Sr 421.552†	79655.4	80424.8	500.82	ug/L	500.82	ppb	05:48:54
2	Sc 361.383	890659.5	890659.5	98.823	%			05:50:17
2	Y 371.029	724691.8	724691.8	96.486	%			05:50:17
2	Ag 328.068†	111036.2	112065.6	510.58	ug/L	510.58	ppb	05:50:22
2	As 188.979†	1171.3	1209.5	482.36	ug/L	482.36	ppb	05:50:42
2	B 249.677†	22286.9	23082.9	482.14	ug/L	482.14	ppb	05:50:22
2	Ba 233.527†	65960.9	66754.7	496.02	ug/L	496.02	ppb	05:50:22
2	Be 313.107†	1290984.9	1311469.1	479.04	ug/L	479.04	ppb	05:50:17
2	Cd 226.502†	46150.0	46894.5	495.56	ug/L	495.56	ppb	05:50:22
2	Co 228.616†	25971.5	26346.1	500.15	ug/L	500.15	ppb	05:50:22
2	Cr 267.716†	45962.6	46431.2	488.19	ug/L	488.19	ppb	05:50:22
2	Cu 324.752†	177303.6	172657.9	494.35	ug/L	494.35	ppb	05:50:22
2	Mn 257.610†	459207.0	464252.2	495.64	ug/L	495.64	ppb	05:50:17
2	Mo 202.031†	7774.6	7848.9	498.96	ug/L	498.96	ppb	05:50:42
2	Ni 231.604†	21136.6	21301.7	492.95	ug/L	492.95	ppb	05:50:22

2	P 214.914†	4454.3	4283.8	2395.8 ug/L	2395.8 ppb	05:50:42
2	Pb 220.353†	4214.1	4332.7	491.29 ug/L	491.29 ppb	05:50:42
2	S 181.975 Axial†	740.4	707.7	990.68 ug/L	990.68 ppb	05:50:42
2	Sb 206.836†	1612.1	1597.0	512.81 ug/L	512.81 ppb	05:50:42
2	Se 196.026†	834.9	873.7	523.28 ug/L	523.28 ppb	05:50:42
2	Si 251.611†	83696.4	84243.3	2509.9 ug/L	2509.9 ppb	05:50:22
2	Sn 189.927†	3013.2	3044.1	499.00 ug/L	499.00 ppb	05:50:42
2	Ti 334.940†	315554.8	320426.9	511.19 ug/L	511.19 ppb	05:50:22
2	Tl 190.801†	1694.7	1747.4	492.67 ug/L	492.67 ppb	05:50:42
2	U 409.014†	16301.9	18897.9	519.02 ug/L	519.02 ppb	05:50:22
2	V 292.402†	71765.8	73978.7	495.36 ug/L	495.36 ppb	05:50:22
2	Zn 213.857†	56379.7	56429.2	488.60 ug/L	488.60 ppb	05:50:22
2	SiO2†	83536.9	84064.0	5366.5 ug/L	5366.5 ppb	05:51:24
3	Sc Radial	5725.7	5725.7	98.0 %		05:49:19
3	Y RADIAL	6110.0	6110.0	97.17 %		05:49:19
3	Al 396.153Radial†	6689.7	6848.2	4735.6 ug/L	4735.6 ppb	05:49:19
3	Ca 317.933Radial†	3297.4	3349.9	4937.5 ug/L	4937.5 ppb	05:49:39
3	Fe 238.204 Radial†	536.1	540.3	5074.2 ug/L	5074.2 ppb	05:49:39
3	K 766.490 Radial†	30631.3	28911.9	5118.5 ug/L	5118.5 ppb	05:49:19
3	Mg 279.077 IEC†	137.8	139.5	4927.2 ug/L	4927.2 ppb	05:49:39
3	Na 589.592 Radial†	27846.2	29509.0	9902.7 ug/L	9902.7 ppb	05:49:19
3	Sr 421.552†	79426.5	81093.4	504.98 ug/L	504.98 ppb	05:49:19
3	Sc 361.383	896986.5	896986.5	99.525 %		05:50:48
3	Y 371.029	730586.2	730586.2	97.271 %		05:50:48
3	Ag 328.068†	110465.2	110699.3	504.41 ug/L	504.41 ppb	05:50:53
3	As 188.979†	1192.1	1222.0	487.27 ug/L	487.27 ppb	05:51:13
3	B 249.677†	22086.0	22722.0	474.57 ug/L	474.57 ppb	05:50:53
3	Ba 233.527†	65876.8	66199.4	491.89 ug/L	491.89 ppb	05:50:53
3	Be 313.107†	1302571.2	1313896.2	479.91 ug/L	479.91 ppb	05:50:48
3	Cd 226.502†	46131.8	46546.9	491.87 ug/L	491.87 ppb	05:50:53
3	Co 228.616†	25985.5	26174.8	496.91 ug/L	496.91 ppb	05:50:53
3	Cr 267.716†	45935.2	46075.6	484.45 ug/L	484.45 ppb	05:50:53
3	Cu 324.752†	175753.4	169834.9	486.28 ug/L	486.28 ppb	05:50:53
3	Mn 257.610†	462666.3	464450.4	495.86 ug/L	495.86 ppb	05:50:48
3	Mo 202.031†	7806.5	7825.4	497.48 ug/L	497.48 ppb	05:51:13
3	Ni 231.604†	21086.4	21100.4	488.29 ug/L	488.29 ppb	05:50:53
3	P 214.914†	4504.8	4302.8	2408.0 ug/L	2408.0 ppb	05:51:13
3	Pb 220.353†	4232.1	4320.8	489.94 ug/L	489.94 ppb	05:51:13
3	S 181.975 Axial†	740.0	701.9	982.65 ug/L	982.65 ppb	05:51:13
3	Sb 206.836†	1624.7	1598.2	513.25 ug/L	513.25 ppb	05:51:13
3	Se 196.026†	831.6	864.4	518.15 ug/L	518.15 ppb	05:51:13
3	Si 251.611†	83222.3	83169.6	2477.8 ug/L	2477.8 ppb	05:50:53
3	Sn 189.927†	3029.3	3038.8	498.13 ug/L	498.13 ppb	05:51:13
3	Ti 334.940†	314049.3	316661.9	505.20 ug/L	505.20 ppb	05:50:53
3	Tl 190.801†	1712.2	1752.9	494.20 ug/L	494.20 ppb	05:51:13
3	U 409.014†	15854.7	18332.2	503.43 ug/L	503.43 ppb	05:50:53
3	V 292.402†	71519.7	73219.2	490.28 ug/L	490.28 ppb	05:50:53
3	Zn 213.857†	56381.4	56028.4	485.13 ug/L	485.13 ppb	05:50:53
3	SiO2†	83523.4	83454.2	5327.4 ug/L	5327.4 ppb	05:51:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897053.7	99.533	%	0.7132				0.72%
Sc Radial	5751.5	98.4	%	0.58				0.59%
Y 371.029	729766.8	97.162	%	0.6283				0.65%
Y RADIAL	6111.5	97.20	%	0.369				0.38%
Ag 328.068†	110737.7	504.56	ug/L	5.939	504.56	ppb	5.939	1.18%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	6851.8	4738.2	ug/L	18.20	4738.2	ppb	18.20	0.38%
QC value within limits for Al 396.153Radial Recovery = 94.76%								
As 188.979†	1209.8	482.44	ug/L	4.788	482.44	ppb	4.788	0.99%
QC value within limits for As 188.979 Recovery = 96.49%								
B 249.677†	22750.4	475.17	ug/L	6.686	475.17	ppb	6.686	1.41%
QC value within limits for B 249.677 Recovery = 95.03%								
Ba 233.527†	66048.6	490.77	ug/L	5.885	490.77	ppb	5.885	1.20%
QC value within limits for Ba 233.527 Recovery = 98.15%								
Be 313.107†	1313924.9	479.92	ug/L	0.888	479.92	ppb	0.888	0.18%
QC value within limits for Be 313.107 Recovery = 95.98%								
Ca 317.933Radial†	3327.8	4905.0	ug/L	28.17	4905.0	ppb	28.17	0.57%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.10%
Cd 226.502†            46458.9      490.95 ug/L         5.139      490.95 ppb          5.139   1.05%
   QC value within limits for Cd 226.502  Recovery = 98.19%
Co 228.616†            26131.4      496.08 ug/L         4.540      496.08 ppb          4.540   0.92%
   QC value within limits for Co 228.616  Recovery = 99.22%
Cr 267.716†            45983.4      483.48 ug/L         5.259      483.48 ppb          5.259   1.09%
   QC value within limits for Cr 267.716  Recovery = 96.70%
Cu 324.752†           170029.0      486.83 ug/L         7.261      486.83 ppb          7.261   1.49%
   QC value within limits for Cu 324.752  Recovery = 97.37%
Fe 238.204 Radial†       535.4      5028.2 ug/L        41.00      5028.2 ppb         41.00   0.82%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.56%
K 766.490 Radial†      28832.1      5104.3 ug/L        16.02      5104.3 ppb         16.02   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 102.09%
Mg 279.077 IEC†          139.3      4921.2 ug/L         6.96      4921.2 ppb          6.96   0.14%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†           465217.1      496.67 ug/L         1.602      496.67 ppb         1.602   0.32%
   QC value within limits for Mn 257.610  Recovery = 99.33%
Mo 202.031†             7805.0      496.18 ug/L         3.608      496.18 ppb         3.608   0.73%
   QC value within limits for Mo 202.031  Recovery = 99.24%
Na 589.592 Radial†     29421.3      9873.2 ug/L        40.94      9873.2 ppb         40.94   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 98.73%
Ni 231.604†            21072.6      487.65 ug/L         5.652      487.65 ppb         5.652   1.16%
   QC value within limits for Ni 231.604  Recovery = 97.53%
P 214.914†              4273.9      2391.2 ug/L        19.44      2391.2 ppb         19.44   0.81%
   QC value within limits for P 214.914  Recovery = 95.65%
Pb 220.353†             4312.1      488.96 ug/L         2.943      488.96 ppb         2.943   0.60%
   QC value within limits for Pb 220.353  Recovery = 97.79%
S 181.975 Axial†         703.2      984.41 ug/L         5.601      984.41 ppb         5.601   0.57%
   QC value within limits for S 181.975 Axial  Recovery = 98.44%
Sb 206.836†             1591.9      511.19 ug/L         3.182      511.19 ppb         3.182   0.62%
   QC value within limits for Sb 206.836  Recovery = 102.24%
Se 196.026†              868.4      520.30 ug/L         2.668      520.30 ppb         2.668   0.51%
   QC value within limits for Se 196.026  Recovery = 104.06%
Si 251.611†            83182.7      2478.2 ug/L        31.49      2478.2 ppb         31.49   1.27%
   QC value within limits for Si 251.611  Recovery = 99.13%
Sn 189.927†             3028.2      496.40 ug/L         3.774      496.40 ppb         3.774   0.76%
   QC value within limits for Sn 189.927  Recovery = 99.28%
Sr 421.552†            80863.0      503.55 ug/L         2.364      503.55 ppb         2.364   0.47%
   QC value within limits for Sr 421.552  Recovery = 100.71%
Ti 334.940†           316497.3      504.93 ug/L         6.400      504.93 ppb         6.400   1.27%
   QC value within limits for Ti 334.940  Recovery = 100.99%
Tl 190.801†             1742.4      491.28 ug/L         3.812      491.28 ppb         3.812   0.78%
   QC value within limits for Tl 190.801  Recovery = 98.26%
U 409.014†             18471.7      507.28 ug/L        10.362      507.28 ppb        10.362   2.04%
   QC value within limits for U 409.014  Recovery = 101.46%
V 292.402†             73161.7      489.90 ug/L         5.656      489.90 ppb         5.656   1.15%
   QC value within limits for V 292.402  Recovery = 97.98%
Zn 213.857†            55909.8      484.11 ug/L         5.090      484.11 ppb         5.090   1.05%
   QC value within limits for Zn 213.857  Recovery = 96.82%
SiO2†                  83396.2      5323.8 ug/L        44.66      5323.8 ppb         44.66   0.84%
   QC value within limits for SiO2  Recovery = 99.56%
All analyte(s) passed QC.
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Sequence No.: 129
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 05:53:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5696.7	5696.7	97.5	%			05:55:32
1	Y RADIAL	6067.2	6067.2	96.49	%			05:55:32
1	Al 396.153Radial†	-20.7	-0.8	-0.6112	ug/L	-0.6112	ppb	05:55:32
1	Ca 317.933Radial†	29.2	14.4	21.168	ug/L	21.168	ppb	05:55:52
1	Fe 238.204 Radial†	7.2	0.6	5.2303	ug/L	5.2303	ppb	05:55:52
1	K 766.490 Radial†	2347.4	56.4	9.9279	ug/L	9.9279	ppb	05:55:32
1	Mg 279.077 IEC†	2.5	1.4	51.137	ug/L	51.137	ppb	05:55:52
1	Na 589.592 Radial†	-624.8	447.0	150.00	ug/L	150.00	ppb	05:55:32
1	Sr 421.552†	-42.2	-15.9	-0.0993	ug/L	-0.0993	ppb	05:55:32
1	Sc 361.383	899108.2	899108.2	99.761	%			05:56:49
1	Y 371.029	742638.2	742638.2	98.876	%			05:56:49
1	Ag 328.068†	264.7	-27.4	-0.1204	ug/L	-0.1204	ppb	05:56:54
1	As 188.979†	-22.2	1.9	0.7573	ug/L	0.7573	ppb	05:57:14
1	B 249.677†	-398.6	131.1	2.7492	ug/L	2.7492	ppb	05:57:14
1	Ba 233.527†	-32.4	-24.1	-0.1763	ug/L	-0.1763	ppb	05:57:14
1	Be 313.107†	-5612.8	-513.3	-0.1868	ug/L	-0.1868	ppb	05:56:54
1	Cd 226.502†	-166.3	28.4	0.2991	ug/L	0.2991	ppb	05:57:14
1	Co 228.616†	-71.5	-6.2	-0.1167	ug/L	-0.1167	ppb	05:57:14
1	Cr 267.716†	93.3	14.9	0.1576	ug/L	0.1576	ppb	05:57:14
1	Cu 324.752†	6784.9	44.4	0.1274	ug/L	0.1274	ppb	05:56:54
1	Mn 257.610†	438.8	17.6	0.0183	ug/L	0.0183	ppb	05:57:14
1	Mo 202.031†	31.0	12.7	0.8087	ug/L	0.8087	ppb	05:57:14
1	Ni 231.604†	51.3	-35.1	-0.8122	ug/L	-0.8122	ppb	05:57:14
1	P 214.914†	240.3	17.3	9.9752	ug/L	9.9752	ppb	05:57:14
1	Pb 220.353†	-45.1	23.3	2.6320	ug/L	2.6320	ppb	05:57:14
1	S 181.975 Axial†	41.0	-0.5	-0.6336	ug/L	-0.6336	ppb	05:57:14
1	Sb 206.836†	35.7	1.6	0.5305	ug/L	0.5305	ppb	05:57:14
1	Se 196.026†	-16.3	12.4	7.2161	ug/L	7.2161	ppb	05:57:14
1	Si 251.611†	480.0	31.4	0.9208	ug/L	0.9208	ppb	05:57:14
1	Sn 189.927†	10.1	5.1	0.8410	ug/L	0.8410	ppb	05:57:14
1	Ti 334.940†	-1018.5	94.0	0.1505	ug/L	0.1505	ppb	05:56:54
1	Tl 190.801†	-33.1	-0.6	-0.1794	ug/L	-0.1794	ppb	05:57:14
1	U 409.014†	-2355.7	40.4	1.1132	ug/L	1.1132	ppb	05:56:54
1	V 292.402†	-1231.2	124.2	0.8340	ug/L	0.8340	ppb	05:56:54
1	Zn 213.857†	675.0	54.8	0.4815	ug/L	0.4815	ppb	05:57:14
1	SiO2†	522.6	56.4	3.5739	ug/L	3.5739	ppb	05:58:20
2	Sc Radial	5727.8	5727.8	98.0	%			05:55:57
2	Y RADIAL	6130.6	6130.6	97.50	%			05:55:57
2	Al 396.153Radial†	-20.0	0.0	-0.0050	ug/L	-0.0050	ppb	05:55:57
2	Ca 317.933Radial†	26.4	11.3	16.720	ug/L	16.720	ppb	05:56:17
2	Fe 238.204 Radial†	8.0	1.3	12.364	ug/L	12.364	ppb	05:56:17
2	K 766.490 Radial†	2302.2	-2.9	-0.5752	ug/L	-0.5752	ppb	05:55:57
2	Mg 279.077 IEC†	-0.1	-1.3	-45.340	ug/L	-45.340	ppb	05:56:17
2	Na 589.592 Radial†	-629.5	445.7	149.56	ug/L	149.56	ppb	05:55:57
2	Sr 421.552†	-29.2	-2.4	-0.0150	ug/L	-0.0150	ppb	05:55:57
2	Sc 361.383	888138.8	888138.8	98.544	%			05:57:19
2	Y 371.029	734855.2	734855.2	97.839	%			05:57:19
2	Ag 328.068†	188.8	-101.1	-0.4509	ug/L	-0.4509	ppb	05:57:24
2	As 188.979†	-25.2	-1.4	-0.5514	ug/L	-0.5514	ppb	05:57:44
2	B 249.677†	-378.8	146.3	3.0670	ug/L	3.0670	ppb	05:57:44
2	Ba 233.527†	-27.8	-19.8	-0.1444	ug/L	-0.1444	ppb	05:57:44
2	Be 313.107†	-5491.1	-459.3	-0.1670	ug/L	-0.1670	ppb	05:57:24
2	Cd 226.502†	-174.5	18.1	0.1889	ug/L	0.1889	ppb	05:57:44
2	Co 228.616†	-79.1	-14.9	-0.2826	ug/L	-0.2826	ppb	05:57:44
2	Cr 267.716†	90.3	13.0	0.1377	ug/L	0.1377	ppb	05:57:44
2	Cu 324.752†	6760.7	103.9	0.2980	ug/L	0.2980	ppb	05:57:24
2	Mn 257.610†	477.7	62.5	0.0687	ug/L	0.0687	ppb	05:57:44
2	Mo 202.031†	22.3	4.3	0.2766	ug/L	0.2766	ppb	05:57:44
2	Ni 231.604†	27.0	-59.2	-1.3698	ug/L	-1.3698	ppb	05:57:44

2	P 214.914†	233.9	13.9	7.9302 ug/L	7.9302 ppb	05:57:44
2	Pb 220.353†	-71.0	-3.6	-0.4043 ug/L	-0.4043 ppb	05:57:44
2	S 181.975 Axial†	43.3	2.4	3.3291 ug/L	3.3291 ppb	05:57:44
2	Sb 206.836†	37.1	3.4	1.0773 ug/L	1.0773 ppb	05:57:44
2	Se 196.026†	-26.0	2.4	1.4533 ug/L	1.4533 ppb	05:57:44
2	Si 251.611†	500.2	57.9	1.7303 ug/L	1.7303 ppb	05:57:44
2	Sn 189.927†	2.7	-2.2	-0.3598 ug/L	-0.3598 ppb	05:57:44
2	Ti 334.940†	-956.6	144.2	0.2310 ug/L	0.2310 ppb	05:57:24
2	Tl 190.801†	-42.5	-10.6	-2.9665 ug/L	-2.9665 ppb	05:57:44
2	U 409.014†	-2367.4	-0.5	-0.0169 ug/L	-0.0169 ppb	05:57:24
2	V 292.402†	-1214.5	125.9	0.8325 ug/L	0.8325 ppb	05:57:24
2	Zn 213.857†	662.2	50.2	0.4471 ug/L	0.4471 ppb	05:57:44
2	SiO2†	482.5	22.2	1.4143 ug/L	1.4143 ppb	05:58:25
3	Sc Radial	5731.2	5731.2	98.1 %		05:56:22
3	Y RADIAL	6140.0	6140.0	97.65 %		05:56:22
3	Al 396.153Radial†	-38.1	-18.5	-12.858 ug/L	-12.858 ppb	05:56:22
3	Ca 317.933Radial†	26.9	11.8	17.410 ug/L	17.410 ppb	05:56:42
3	Fe 238.204 Radial†	9.4	2.8	25.819 ug/L	25.819 ppb	05:56:42
3	K 766.490 Radial†	2326.9	20.9	3.6368 ug/L	3.6368 ppb	05:56:22
3	Mg 279.077 IEC†	1.5	0.3	11.534 ug/L	11.534 ppb	05:56:42
3	Na 589.592 Radial†	-552.4	524.7	176.09 ug/L	176.09 ppb	05:56:22
3	Sr 421.552†	-16.2	10.8	0.0671 ug/L	0.0671 ppb	05:56:22
3	Sc 361.383	896357.1	896357.1	99.456 %		05:57:49
3	Y 371.029	741699.8	741699.8	98.751 %		05:57:49
3	Ag 328.068†	245.9	-45.4	-0.1980 ug/L	-0.1980 ppb	05:57:54
3	As 188.979†	-28.6	-4.6	-1.8105 ug/L	-1.8105 ppb	05:58:14
3	B 249.677†	-399.5	129.0	2.7022 ug/L	2.7022 ppb	05:58:14
3	Ba 233.527†	-27.9	-19.6	-0.1440 ug/L	-0.1440 ppb	05:58:14
3	Be 313.107†	-5545.3	-462.7	-0.1684 ug/L	-0.1684 ppb	05:57:54
3	Cd 226.502†	-168.3	25.9	0.2706 ug/L	0.2706 ppb	05:58:14
3	Co 228.616†	-62.6	2.5	0.0491 ug/L	0.0491 ppb	05:58:14
3	Cr 267.716†	101.7	23.6	0.2486 ug/L	0.2486 ppb	05:58:14
3	Cu 324.752†	6764.3	44.6	0.1291 ug/L	0.1291 ppb	05:57:54
3	Mn 257.610†	430.1	10.1	0.0131 ug/L	0.0131 ppb	05:58:14
3	Mo 202.031†	30.7	12.5	0.7981 ug/L	0.7981 ppb	05:58:14
3	Ni 231.604†	59.0	-27.2	-0.6303 ug/L	-0.6303 ppb	05:58:14
3	P 214.914†	237.2	15.0	8.6084 ug/L	8.6084 ppb	05:58:14
3	Pb 220.353†	-46.2	22.0	2.4796 ug/L	2.4796 ppb	05:58:14
3	S 181.975 Axial†	43.4	2.1	2.9189 ug/L	2.9189 ppb	05:58:14
3	Sb 206.836†	42.1	8.1	2.5673 ug/L	2.5673 ppb	05:58:14
3	Se 196.026†	-23.4	5.3	3.1288 ug/L	3.1288 ppb	05:58:14
3	Si 251.611†	491.4	44.4	1.3139 ug/L	1.3139 ppb	05:58:14
3	Sn 189.927†	6.1	1.2	0.1911 ug/L	0.1911 ppb	05:58:14
3	Ti 334.940†	-1040.0	69.2	0.1108 ug/L	0.1108 ppb	05:57:54
3	Tl 190.801†	-33.5	-1.1	-0.3212 ug/L	-0.3212 ppb	05:58:14
3	U 409.014†	-2345.4	43.5	1.1957 ug/L	1.1957 ppb	05:57:54
3	V 292.402†	-1317.9	33.3	0.2296 ug/L	0.2296 ppb	05:57:54
3	Zn 213.857†	667.8	49.6	0.4347 ug/L	0.4347 ppb	05:58:14
3	SiO2†	479.2	14.3	0.8849 ug/L	0.8849 ppb	05:58:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894534.7	99.253	%	0.6332				0.64%
Sc Radial	5718.6	97.9	%	0.32				0.33%
Y 371.029	739731.1	98.488	%	0.5657				0.57%
Y RADIAL	6112.6	97.21	%	0.630				0.65%
Ag 328.068†	-58.0	-0.2564	ug/L	0.17284	-0.2564	ppb	0.17284	67.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.4	-4.4914	ug/L	7.25210	-4.4914	ppb	7.25210	161.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.4	-0.5349	ug/L	1.28396	-0.5349	ppb	1.28396	240.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	135.5	2.8395	ug/L	0.19847	2.8395	ppb	0.19847	6.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-21.2	-0.1549	ug/L	0.01851	-0.1549	ppb	0.01851	11.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-478.4	-0.1741	ug/L	0.01105	-0.1741	ppb	0.01105	6.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.5	18.433	ug/L	2.3937	18.433	ppb	2.3937	12.99%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              24.1      0.2529 ug/L       0.05721      0.2529 ppb        0.05721  22.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -6.2     -0.1167 ug/L       0.16587     -0.1167 ppb        0.16587 142.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              17.2      0.1813 ug/L       0.05911      0.1813 ppb        0.05911  32.60%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              64.3      0.1848 ug/L       0.09802      0.1848 ppb        0.09802  53.03%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.5      14.471 ug/L       10.4550      14.471 ppb        10.4550  72.25%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        24.8      4.3298 ug/L       5.28572      4.3298 ppb        5.28572 122.08%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.2      5.7772 ug/L      48.49561      5.7772 ppb       48.49561 839.43%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              30.1      0.0334 ug/L       0.03069      0.0334 ppb        0.03069  91.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               9.9      0.6278 ug/L       0.30420      0.6278 ppb        0.30420  48.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       472.5      158.55 ug/L        15.191      158.55 ppb         15.191   9.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -40.5     -0.9374 ug/L       0.38534     -0.9374 ppb        0.38534  41.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               15.4      8.8379 ug/L       1.04166      8.8379 ppb        1.04166  11.79%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              13.9      1.5691 ug/L       1.71069      1.5691 ppb        1.71069 109.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.3      1.8715 ug/L       2.17911      1.8715 ppb        2.17911 116.44%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.4      1.3917 ug/L       1.05415      1.3917 ppb        1.05415  75.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.7      3.9327 ug/L       2.96434      3.9327 ppb        2.96434  75.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              44.6      1.3217 ug/L       0.40480      1.3217 ppb        0.40480  30.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.4      0.2241 ug/L       0.60108      0.2241 ppb        0.60108 268.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -2.5     -0.0158 ug/L       0.08317     -0.0158 ppb        0.08317 527.74%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             102.5      0.1641 ug/L       0.06123      0.1641 ppb        0.06123  37.31%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -4.1     -1.1557 ug/L       1.56976     -1.1557 ppb        1.56976 135.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               27.8      0.7640 ug/L       0.67754      0.7640 ppb        0.67754  88.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               94.5      0.6320 ug/L       0.34853      0.6320 ppb        0.34853  55.15%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              51.5      0.4544 ug/L       0.02424      0.4544 ppb        0.02424   5.33%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    31.0      1.9577 ug/L       1.42451      1.9577 ppb        1.42451  72.76%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 130
Sample ID: 241613011|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 127
Date Collected: 12/9/2009 06:00:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613011|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5680.9	5680.9	97.2	%			06:02:54
1	Y RADIAL	6723.9	6723.9	106.9	%			06:02:54
1	Al 396.153Radial†	162183.1	166858.0	115900	ug/L	115900	ppb	06:02:34
1	Ca 317.933Radial†	12830.8	13183.4	19432	ug/L	19432	ppb	06:02:34
1	Fe 238.204 Radial†	11389.6	11709.7	109630	ug/L	109630	ppb	06:02:34
1	K 766.490 Radial†	89324.6	89536.4	15860	ug/L	15860	ppb	06:02:34
1	Mg 279.077 IEC†	492.7	505.7	17745	ug/L	17745	ppb	06:02:54
1	Na 589.592 Radial†	6258.7	7526.3	2525.7	ug/L	2525.7	ppb	06:02:34
1	Sr 421.552†	41122.9	42330.5	263.44	ug/L	263.44	ppb	06:02:34
1	Sc 361.383	889568.1	889568.1	98.702	%			06:03:51
1	Y 371.029	805255.5	805255.5	107.21	%			06:03:51
1	Ag 328.068†	-7046.4	-7431.7	1.9163	ug/L	1.9163	ppb	06:03:56
1	As 188.979†	-154.5	-132.4	4.4992	ug/L	4.4992	ppb	06:04:17
1	B 249.677†	1311.0	1858.9	24.309	ug/L	24.309	ppb	06:03:56
1	Ba 233.527†	238537.5	241682.3	1795.7	ug/L	1795.7	ppb	06:03:56
1	Be 313.107†	-4169.8	888.4	9.6609	ug/L	9.6609	ppb	06:03:56
1	Cd 226.502†	940.3	1147.8	1.2163	ug/L	1.2163	ppb	06:04:17
1	Co 228.616†	2615.7	2715.5	40.629	ug/L	40.629	ppb	06:04:17
1	Cr 267.716†	7783.3	7807.0	84.342	ug/L	84.342	ppb	06:03:56
1	Cu 324.752†	24122.1	17682.6	56.195	ug/L	56.195	ppb	06:03:56
1	Mn 257.610†	2521557.1	2554288.5	2735.4	ug/L	2735.4	ppb	06:03:51
1	Mo 202.031†	-60.0	-79.1	2.7487	ug/L	2.7487	ppb	06:04:17
1	Ni 231.604†	2898.7	2850.3	65.970	ug/L	65.970	ppb	06:04:17
1	P 214.914†	1640.7	1438.8	772.25	ug/L	772.25	ppb	06:04:17
1	Pb 220.353†	642.0	718.9	98.229	ug/L	98.229	ppb	06:04:17
1	S 181.975 Axial†	330.3	293.1	387.90	ug/L	387.90	ppb	06:04:17
1	Sb 206.836†	62.0	28.6	-7.3042	ug/L	-7.3042	ppb	06:04:17
1	Se 196.026†	-454.1	-431.3	117.03	ug/L	117.03	ppb	06:04:17
1	Si 251.611†	1142947.8	1157525.7	34646	ug/L	34646	ppb	06:03:51
1	Sn 189.927†	-122.3	-128.9	-17.561	ug/L	-17.561	ppb	06:04:17
1	Ti 334.940†	2937045.5	2976777.0	4751.4	ug/L	4751.4	ppb	06:03:51
1	Tl 190.801†	-226.9	-197.4	-0.4349	ug/L	-0.4349	ppb	06:04:17
1	U 409.014†	-7089.7	-4781.1	-145.66	ug/L	-145.66	ppb	06:03:51
1	V 292.402†	31458.2	33230.2	197.62	ug/L	197.62	ppb	06:03:56
1	Zn 213.857†	26874.7	26606.2	220.88	ug/L	220.88	ppb	06:03:56
1	SiO2†	1160167.5	1174954.0	75359	ug/L	75359	ppb	06:05:25
2	Sc Radial	5691.5	5691.5	97.4	%			06:03:19
2	Y RADIAL	6740.0	6740.0	107.2	%			06:03:19
2	Al 396.153Radial†	162018.1	166377.3	115570	ug/L	115570	ppb	06:02:59
2	Ca 317.933Radial†	12796.3	13123.4	19343	ug/L	19343	ppb	06:02:59
2	Fe 238.204 Radial†	11430.0	11729.3	109810	ug/L	109810	ppb	06:02:59
2	K 766.490 Radial†	89291.4	89330.8	15823	ug/L	15823	ppb	06:02:59
2	Mg 279.077 IEC†	495.3	507.5	17808	ug/L	17808	ppb	06:03:19
2	Na 589.592 Radial†	6184.3	7437.8	2496.0	ug/L	2496.0	ppb	06:02:59
2	Sr 421.552†	41044.2	42170.7	262.45	ug/L	262.45	ppb	06:02:59
2	Sc 361.383	903952.3	903952.3	100.30	%			06:04:22
2	Y 371.029	818504.0	818504.0	108.98	%			06:04:22
2	Ag 328.068†	-7076.3	-7348.0	2.3469	ug/L	2.3469	ppb	06:04:28
2	As 188.979†	-150.3	-125.7	7.1323	ug/L	7.1323	ppb	06:04:48
2	B 249.677†	1385.4	1912.0	25.400	ug/L	25.400	ppb	06:04:28
2	Ba 233.527†	239770.1	239065.5	1776.3	ug/L	1776.3	ppb	06:04:28
2	Be 313.107†	-4569.9	556.7	9.5318	ug/L	9.5318	ppb	06:04:28
2	Cd 226.502†	950.4	1142.7	1.1428	ug/L	1.1428	ppb	06:04:48
2	Co 228.616†	2612.8	2670.4	39.770	ug/L	39.770	ppb	06:04:48
2	Cr 267.716†	7871.4	7769.4	83.947	ug/L	83.947	ppb	06:04:28
2	Cu 324.752†	24263.8	17434.9	55.495	ug/L	55.495	ppb	06:04:28
2	Mn 257.610†	2550379.9	2542373.4	2722.7	ug/L	2722.7	ppb	06:04:22
2	Mo 202.031†	-60.5	-78.6	2.7945	ug/L	2.7945	ppb	06:04:48
2	Ni 231.604†	2858.1	2763.1	63.950	ug/L	63.950	ppb	06:04:48

2	P 214.914†	1643.9	1415.5	758.67	ug/L	758.67 ppb	06:04:48
2	Pb 220.353†	633.8	700.4	96.049	ug/L	96.049 ppb	06:04:48
2	S 181.975 Axial†	340.1	297.5	394.14	ug/L	394.14 ppb	06:04:48
2	Sb 206.836†	82.5	48.1	-1.1021	ug/L	-1.1021 ppb	06:04:48
2	Se 196.026†	-460.1	-429.9	118.35	ug/L	118.35 ppb	06:04:48
2	Si 251.611†	1160074.4	1156174.9	34606	ug/L	34606 ppb	06:04:22
2	Sn 189.927†	-124.0	-128.6	-17.520	ug/L	-17.520 ppb	06:04:48
2	Ti 334.940†	2981935.4	2974182.8	4747.3	ug/L	4747.3 ppb	06:04:22
2	Tl 190.801†	-221.6	-188.4	1.9759	ug/L	1.9759 ppb	06:04:48
2	U 409.014†	-7117.2	-4694.2	-143.29	ug/L	-143.29 ppb	06:04:22
2	V 292.402†	31714.2	32978.2	195.94	ug/L	195.94 ppb	06:04:28
2	Zn 213.857†	26994.3	26292.2	218.13	ug/L	218.13 ppb	06:04:28
2	SiO2†	1154046.6	1150147.3	73768	ug/L	73768 ppb	06:05:31
3	Sc Radial	5739.8	5739.8	98.2	%		06:03:44
3	Y RADIAL	6781.3	6781.3	107.8	%		06:03:44
3	Al 396.153Radial†	161720.3	164675.0	114390	ug/L	114390 ppb	06:03:24
3	Ca 317.933Radial†	12808.3	13025.1	19198	ug/L	19198 ppb	06:03:24
3	Fe 238.204 Radial†	11441.8	11642.6	109000	ug/L	109000 ppb	06:03:24
3	K 766.490 Radial†	89155.6	88421.6	15662	ug/L	15662 ppb	06:03:24
3	Mg 279.077 IEC†	503.2	511.2	17940	ug/L	17940 ppb	06:03:44
3	Na 589.592 Radial†	6202.9	7403.4	2484.4	ug/L	2484.4 ppb	06:03:24
3	Sr 421.552†	40893.2	41662.5	259.29	ug/L	259.29 ppb	06:03:24
3	Sc 361.383	891357.9	891357.9	98.901	%		06:04:53
3	Y 371.029	808106.3	808106.3	107.59	%		06:04:53
3	Ag 328.068†	-6903.7	-7273.2	2.4305	ug/L	2.4305 ppb	06:04:59
3	As 188.979†	-140.2	-117.6	10.201	ug/L	10.201 ppb	06:05:19
3	B 249.677†	1366.0	1911.8	25.504	ug/L	25.504 ppb	06:04:59
3	Ba 233.527†	235934.8	238565.4	1772.6	ug/L	1772.6 ppb	06:04:59
3	Be 313.107†	-4408.4	655.6	9.5700	ug/L	9.5700 ppb	06:04:59
3	Cd 226.502†	930.3	1135.7	1.1517	ug/L	1.1517 ppb	06:05:19
3	Co 228.616†	2618.5	2713.0	40.589	ug/L	40.589 ppb	06:05:19
3	Cr 267.716†	7658.1	7664.6	82.832	ug/L	82.832 ppb	06:04:59
3	Cu 324.752†	23761.0	17268.4	54.977	ug/L	54.977 ppb	06:04:59
3	Mn 257.610†	2524560.4	2552195.4	2733.1	ug/L	2733.1 ppb	06:04:53
3	Mo 202.031†	-45.9	-64.8	3.6169	ug/L	3.6169 ppb	06:05:19
3	Ni 231.604†	2891.8	2837.4	65.671	ug/L	65.671 ppb	06:05:19
3	P 214.914†	1659.6	1454.6	781.50	ug/L	781.50 ppb	06:05:19
3	Pb 220.353†	647.9	723.5	98.465	ug/L	98.465 ppb	06:05:19
3	S 181.975 Axial†	338.9	301.1	399.44	ug/L	399.44 ppb	06:05:19
3	Sb 206.836†	76.0	42.6	-2.8062	ug/L	-2.8062 ppb	06:05:19
3	Se 196.026†	-459.3	-435.6	112.29	ug/L	112.29 ppb	06:05:19
3	Si 251.611†	1143733.8	1155995.3	34600	ug/L	34600 ppb	06:04:53
3	Sn 189.927†	-131.3	-137.7	-19.031	ug/L	-19.031 ppb	06:05:19
3	Ti 334.940†	2941062.1	2974863.3	4748.3	ug/L	4748.3 ppb	06:04:53
3	Tl 190.801†	-230.6	-200.6	-1.4144	ug/L	-1.4144 ppb	06:05:19
3	U 409.014†	-7191.8	-4869.9	-148.02	ug/L	-148.02 ppb	06:04:53
3	V 292.402†	31150.6	32855.2	195.25	ug/L	195.25 ppb	06:04:59
3	Zn 213.857†	26612.5	26286.5	218.15	ug/L	218.15 ppb	06:04:59
3	SiO2†	1151011.3	1163335.9	74614	ug/L	74614 ppb	06:05:37

Mean Data: 241613011|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894959.4	99.300	%	0.8698				0.88%
Sc Radial	5704.1	97.6	%	0.54				0.55%
Y 371.029	810621.9	107.93	%	0.928				0.86%
Y RADIAL	6748.4	107.3	%	0.47				0.44%
Ag 328.068†	-7351.0	2.2312	ug/L	0.27594	2.2312	ppb	0.27594	12.37%
Al 396.153Radial†	165970.1	115290	ug/L	796.8	115290	ppb	796.8	0.69%
As 188.979†	-125.2	7.2777	ug/L	2.85394	7.2777	ppb	2.85394	39.22%
B 249.677†	1894.2	25.071	ug/L	0.6618	25.071	ppb	0.6618	2.64%
Ba 233.527†	239771.1	1781.5	ug/L	12.42	1781.5	ppb	12.42	0.70%
Be 313.107†	700.2	9.5876	ug/L	0.06629	9.5876	ppb	0.06629	0.69%
Ca 317.933Radial†	13110.6	19324	ug/L	117.8	19324	ppb	117.8	0.61%
Cd 226.502†	1142.1	1.1703	ug/L	0.04009	1.1703	ppb	0.04009	3.43%
Co 228.616†	2699.6	40.329	ug/L	0.4846	40.329	ppb	0.4846	1.20%
Cr 267.716†	7747.0	83.707	ug/L	0.7831	83.707	ppb	0.7831	0.94%
Cu 324.752†	17462.0	55.556	ug/L	0.6109	55.556	ppb	0.6109	1.10%
Fe 238.204 Radial†	11693.9	109480	ug/L	425.5	109480	ppb	425.5	0.39%
K 766.490 Radial†	89096.3	15781	ug/L	105.3	15781	ppb	105.3	0.67%

Mg 279.077 IEC†	508.1	17831	ug/L	99.7	17831	ppb	99.7	0.56%
Mn 257.610†	2549619.1	2730.4	ug/L	6.76	2730.4	ppb	6.76	0.25%
Mo 202.031†	-74.2	3.0534	ug/L	0.48859	3.0534	ppb	0.48859	16.00%
Na 589.592 Radial†	7455.8	2502.0	ug/L	21.27	2502.0	ppb	21.27	0.85%
Ni 231.604†	2816.9	65.197	ug/L	1.0900	65.197	ppb	1.0900	1.67%
P 214.914†	1436.3	770.81	ug/L	11.485	770.81	ppb	11.485	1.49%
Pb 220.353†	714.3	97.581	ug/L	1.3317	97.581	ppb	1.3317	1.36%
S 181.975 Axial†	297.2	393.83	ug/L	5.774	393.83	ppb	5.774	1.47%
Sb 206.836†	39.7	-3.7375	ug/L	3.20422	-3.7375	ppb	3.20422	85.73%
Se 196.026†	-432.2	115.89	ug/L	3.188	115.89	ppb	3.188	2.75%
Si 251.611†	1156565.3	34618	ug/L	25.0	34618	ppb	25.0	0.07%
Sn 189.927†	-131.8	-18.038	ug/L	0.8610	-18.038	ppb	0.8610	4.77%
Sr 421.552†	42054.6	261.73	ug/L	2.171	261.73	ppb	2.171	0.83%
Ti 334.940†	2975274.4	4749.0	ug/L	2.15	4749.0	ppb	2.15	0.05%
Tl 190.801†	-195.5	0.0422	ug/L	1.74480	0.0422	ppb	1.74480	>999.9%
U 409.014†	-4781.8	-145.65	ug/L	2.367	-145.65	ppb	2.367	1.63%
V 292.402†	33021.2	196.27	ug/L	1.217	196.27	ppb	1.217	0.62%
Zn 213.857†	26395.0	219.05	ug/L	1.584	219.05	ppb	1.584	0.72%
SiO2†	1162812.4	74580	ug/L	796.2	74580	ppb	796.2	1.07%

Sequence No.: 131
Sample ID: 241613012|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 128
Date Collected: 12/9/2009 06:07:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613012|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5803.1	5803.1	99.3	%			06:09:42
1	Y RADIAL	7760.6	7760.6	123.4	%			06:09:42
1	Al 396.153Radial†	30834.7	31071.9	21582	ug/L	21582	ppb	06:09:42
1	Ca 317.933Radial†	4560.2	4576.7	6745.8	ug/L	6745.8	ppb	06:09:42
1	Fe 238.204 Radial†	7486.0	7531.8	70512	ug/L	70512	ppb	06:09:42
1	K 766.490 Radial†	23011.0	20821.1	3671.4	ug/L	3671.4	ppb	06:09:42
1	Mg 279.077 IEC†	146.9	146.8	5118.4	ug/L	5118.4	ppb	06:10:02
1	Na 589.592 Radial†	1524.8	2623.5	880.38	ug/L	880.38	ppb	06:09:42
1	Sr 421.552†	9493.6	9587.7	59.647	ug/L	59.647	ppb	06:09:42
1	Sc 361.383	907348.2	907348.2	100.68	%			06:11:00
1	Y 371.029	929053.2	929053.2	123.69	%			06:11:00
1	Ag 328.068†	-4403.0	-4666.2	1.6483	ug/L	1.6483	ppb	06:11:05
1	As 188.979†	-72.0	-47.3	11.548	ug/L	11.548	ppb	06:11:25
1	B 249.677†	540.5	1067.6	13.001	ug/L	13.001	ppb	06:11:05
1	Ba 233.527†	39863.3	39604.4	296.27	ug/L	296.27	ppb	06:11:05
1	Be 313.107†	-6907.3	-1748.0	3.9075	ug/L	3.9075	ppb	06:11:05
1	Cd 226.502†	517.2	708.9	0.4590	ug/L	0.4590	ppb	06:11:25
1	Co 228.616†	634.3	695.5	7.4560	ug/L	7.4560	ppb	06:11:25
1	Cr 267.716†	2100.3	2007.5	22.518	ug/L	22.518	ppb	06:11:25
1	Cu 324.752†	13167.1	6322.1	21.689	ug/L	21.689	ppb	06:11:05
1	Mn 257.610†	1892998.1	1879882.7	2012.3	ug/L	2012.3	ppb	06:11:00
1	Mo 202.031†	349.5	328.8	25.890	ug/L	25.890	ppb	06:11:25
1	Ni 231.604†	1076.5	982.7	22.748	ug/L	22.748	ppb	06:11:25
1	P 214.914†	1180.5	949.1	494.91	ug/L	494.91	ppb	06:11:25
1	Pb 220.353†	487.2	552.4	61.538	ug/L	61.538	ppb	06:11:25
1	S 181.975 Axial†	130.5	88.0	119.11	ug/L	119.11	ppb	06:11:25
1	Sb 206.836†	50.4	15.8	-0.6265	ug/L	-0.6265	ppb	06:11:25
1	Se 196.026†	-296.4	-265.6	72.596	ug/L	72.596	ppb	06:11:25
1	Si 251.611†	783532.7	777829.2	23283	ug/L	23283	ppb	06:11:00
1	Sn 189.927†	14.7	9.6	3.2249	ug/L	3.2249	ppb	06:11:25
1	Ti 334.940†	1457548.9	1448890.6	2312.6	ug/L	2312.6	ppb	06:11:00
1	Tl 190.801†	-160.7	-127.1	-5.7019	ug/L	-5.7019	ppb	06:11:25
1	U 409.014†	-11290.4	-8812.8	-251.68	ug/L	-251.68	ppb	06:11:00
1	V 292.402†	7743.3	9049.7	46.436	ug/L	46.436	ppb	06:11:05
1	Zn 213.857†	34737.5	33882.7	288.94	ug/L	288.94	ppb	06:11:05
1	SiO2†	794174.7	788382.1	50569	ug/L	50569	ppb	06:12:33
2	Sc Radial	5809.8	5809.8	99.4	%			06:10:07
2	Y RADIAL	7828.6	7828.6	124.5	%			06:10:07
2	Al 396.153Radial†	30591.8	30791.8	21388	ug/L	21388	ppb	06:10:07
2	Ca 317.933Radial†	4510.3	4521.2	6664.0	ug/L	6664.0	ppb	06:10:07
2	Fe 238.204 Radial†	7459.9	7496.9	70185	ug/L	70185	ppb	06:10:07
2	K 766.490 Radial†	22810.0	20592.2	3630.8	ug/L	3630.8	ppb	06:10:07
2	Mg 279.077 IEC†	143.8	143.5	5001.7	ug/L	5001.7	ppb	06:10:27
2	Na 589.592 Radial†	1474.6	2571.2	862.83	ug/L	862.83	ppb	06:10:07
2	Sr 421.552†	9357.2	9439.5	58.725	ug/L	58.725	ppb	06:10:07
2	Sc 361.383	925281.9	925281.9	102.66	%			06:11:31
2	Y 371.029	947347.6	947347.6	126.13	%			06:11:31
2	Ag 328.068†	-4369.2	-4548.5	2.0655	ug/L	2.0655	ppb	06:11:36
2	As 188.979†	-75.3	-49.2	10.719	ug/L	10.719	ppb	06:11:56
2	B 249.677†	639.5	1153.6	14.848	ug/L	14.848	ppb	06:11:36
2	Ba 233.527†	39763.3	38739.7	289.84	ug/L	289.84	ppb	06:11:36
2	Be 313.107†	-7036.2	-1740.6	3.9014	ug/L	3.9014	ppb	06:11:36
2	Cd 226.502†	517.3	699.0	0.3876	ug/L	0.3876	ppb	06:11:56
2	Co 228.616†	637.0	685.9	7.2853	ug/L	7.2853	ppb	06:11:56
2	Cr 267.716†	2092.0	1959.0	21.998	ug/L	21.998	ppb	06:11:56
2	Cu 324.752†	13227.5	6127.4	21.115	ug/L	21.115	ppb	06:11:36
2	Mn 257.610†	1925980.9	1875565.5	2007.6	ug/L	2007.6	ppb	06:11:31
2	Mo 202.031†	356.1	328.5	25.846	ug/L	25.846	ppb	06:11:56
2	Ni 231.604†	1113.8	998.3	23.109	ug/L	23.109	ppb	06:11:56

2	P 214.914†	1187.0	932.7	485.75	ug/L	485.75 ppb	06:11:56
2	Pb 220.353†	499.1	554.6	61.770	ug/L	61.770 ppb	06:11:56
2	S 181.975 Axial†	127.7	82.8	111.76	ug/L	111.76 ppb	06:11:56
2	Sb 206.836†	36.1	0.9	-5.3572	ug/L	-5.3572 ppb	06:11:56
2	Se 196.026†	-302.4	-265.7	71.428	ug/L	71.428 ppb	06:11:56
2	Si 251.611†	796676.9	775547.8	23215	ug/L	23215 ppb	06:11:31
2	Sn 189.927†	9.8	4.5	2.3842	ug/L	2.3842 ppb	06:11:56
2	Ti 334.940†	1483481.5	1446089.4	2308.1	ug/L	2308.1 ppb	06:11:31
2	Tl 190.801†	-159.5	-122.9	-4.5876	ug/L	-4.5876 ppb	06:11:56
2	U 409.014†	-11235.4	-8542.0	-244.18	ug/L	-244.18 ppb	06:11:31
2	V 292.402†	7632.0	8792.3	44.802	ug/L	44.802 ppb	06:11:36
2	Zn 213.857†	34626.9	33106.2	282.19	ug/L	282.19 ppb	06:11:36
2	SiO2†	791237.2	770231.5	49405	ug/L	49405 ppb	06:12:39
3	Sc Radial	5823.6	5823.6	99.7	%		06:10:32
3	Y RADIAL	7775.1	7775.1	123.7	%		06:10:32
3	Al 396.153Radial†	30654.1	30781.4	21381	ug/L	21381 ppb	06:10:32
3	Ca 317.933Radial†	4524.8	4524.9	6669.5	ug/L	6669.5 ppb	06:10:32
3	Fe 238.204 Radial†	7441.1	7460.2	69841	ug/L	69841 ppb	06:10:32
3	K 766.490 Radial†	22879.1	20607.1	3633.3	ug/L	3633.3 ppb	06:10:32
3	Mg 279.077 IEC†	147.5	146.8	5120.3	ug/L	5120.3 ppb	06:10:52
3	Na 589.592 Radial†	1535.3	2628.6	882.10	ug/L	882.10 ppb	06:10:32
3	Sr 421.552†	9378.3	9438.4	58.718	ug/L	58.718 ppb	06:10:32
3	Sc 361.383	921780.7	921780.7	102.28	%		06:12:02
3	Y 371.029	943912.3	943912.3	125.67	%		06:12:02
3	Ag 328.068†	-4434.2	-4628.2	1.6001	ug/L	1.6001 ppb	06:12:07
3	As 188.979†	-77.0	-51.1	10.062	ug/L	10.062 ppb	06:12:27
3	B 249.677†	581.5	1099.2	13.755	ug/L	13.755 ppb	06:12:07
3	Ba 233.527†	40108.4	39224.2	293.42	ug/L	293.42 ppb	06:12:07
3	Be 313.107†	-6800.7	-1536.4	4.0086	ug/L	4.0086 ppb	06:12:07
3	Cd 226.502†	519.6	703.1	0.4658	ug/L	0.4658 ppb	06:12:27
3	Co 228.616†	617.6	669.3	6.9430	ug/L	6.9430 ppb	06:12:27
3	Cr 267.716†	2086.3	1961.2	22.017	ug/L	22.017 ppb	06:12:27
3	Cu 324.752†	13205.9	6155.2	21.177	ug/L	21.177 ppb	06:12:07
3	Mn 257.610†	1932783.8	1889342.7	2022.3	ug/L	2022.3 ppb	06:12:02
3	Mo 202.031†	363.3	336.9	26.356	ug/L	26.356 ppb	06:12:27
3	Ni 231.604†	1123.4	1011.9	23.423	ug/L	23.423 ppb	06:12:27
3	P 214.914†	1168.1	918.6	477.87	ug/L	477.87 ppb	06:12:27
3	Pb 220.353†	489.4	546.9	60.932	ug/L	60.932 ppb	06:12:27
3	S 181.975 Axial†	121.4	77.1	103.83	ug/L	103.83 ppb	06:12:27
3	Sb 206.836†	48.7	13.4	-1.4775	ug/L	-1.4775 ppb	06:12:27
3	Se 196.026†	-308.4	-272.7	66.331	ug/L	66.331 ppb	06:12:27
3	Si 251.611†	800526.5	782259.2	23416	ug/L	23416 ppb	06:12:02
3	Sn 189.927†	-2.9	-7.8	0.3627	ug/L	0.3627 ppb	06:12:27
3	Ti 334.940†	1488548.6	1456532.3	2324.8	ug/L	2324.8 ppb	06:12:02
3	Tl 190.801†	-153.0	-117.1	-2.7694	ug/L	-2.7694 ppb	06:12:27
3	U 409.014†	-11243.5	-8591.4	-245.50	ug/L	-245.50 ppb	06:12:02
3	V 292.402†	7754.3	8940.1	45.819	ug/L	45.819 ppb	06:12:07
3	Zn 213.857†	35009.6	33608.6	286.60	ug/L	286.60 ppb	06:12:07
3	SiO2†	785443.6	767494.2	49229	ug/L	49229 ppb	06:12:45

Mean Data: 241613012|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918136.9	101.87	%	1.055				1.04%
Sc Radial	5812.2	99.5	%	0.18				0.18%
Y 371.029	940104.4	125.17	%	1.295				1.03%
Y RADIAL	7788.1	123.9	%	0.57				0.46%
Ag 328.068†	-4614.3	1.7713	ug/L	0.25594	1.7713	ppb	0.25594	14.45%
Al 396.153Radial†	30881.7	21450	ug/L	114.5	21450	ppb	114.5	0.53%
As 188.979†	-49.2	10.776	ug/L	0.7449	10.776	ppb	0.7449	6.91%
B 249.677†	1106.8	13.868	ug/L	0.9289	13.868	ppb	0.9289	6.70%
Ba 233.527†	39189.4	293.18	ug/L	3.219	293.18	ppb	3.219	1.10%
Be 313.107†	-1675.0	3.9392	ug/L	0.06020	3.9392	ppb	0.06020	1.53%
Ca 317.933Radial†	4540.9	6693.1	ug/L	45.72	6693.1	ppb	45.72	0.68%
Cd 226.502†	703.7	0.4374	ug/L	0.04331	0.4374	ppb	0.04331	9.90%
Co 228.616†	683.6	7.2281	ug/L	0.26124	7.2281	ppb	0.26124	3.61%
Cr 267.716†	1975.9	22.178	ug/L	0.2952	22.178	ppb	0.2952	1.33%
Cu 324.752†	6201.6	21.327	ug/L	0.3149	21.327	ppb	0.3149	1.48%
Fe 238.204 Radial†	7496.3	70179	ug/L	335.3	70179	ppb	335.3	0.48%
K 766.490 Radial†	20673.5	3645.2	ug/L	22.74	3645.2	ppb	22.74	0.62%

Mg 279.077 IEC†	145.7	5080.1	ug/L	67.92	5080.1	ppb	67.92	1.34%
Mn 257.610†	1881597.0	2014.1	ug/L	7.49	2014.1	ppb	7.49	0.37%
Mo 202.031†	331.4	26.031	ug/L	0.2828	26.031	ppb	0.2828	1.09%
Na 589.592 Radial†	2607.7	875.10	ug/L	10.662	875.10	ppb	10.662	1.22%
Ni 231.604†	997.6	23.094	ug/L	0.3378	23.094	ppb	0.3378	1.46%
P 214.914†	933.5	486.18	ug/L	8.530	486.18	ppb	8.530	1.75%
Pb 220.353†	551.3	61.413	ug/L	0.4327	61.413	ppb	0.4327	0.70%
S 181.975 Axial†	82.6	111.57	ug/L	7.643	111.57	ppb	7.643	6.85%
Sb 206.836†	10.0	-2.4870	ug/L	2.52176	-2.4870	ppb	2.52176	101.40%
Se 196.026†	-268.0	70.118	ug/L	3.3316	70.118	ppb	3.3316	4.75%
Si 251.611†	778545.4	23305	ug/L	102.2	23305	ppb	102.2	0.44%
Sn 189.927†	2.1	1.9906	ug/L	1.47116	1.9906	ppb	1.47116	73.91%
Sr 421.552†	9488.5	59.030	ug/L	0.5346	59.030	ppb	0.5346	0.91%
Ti 334.940†	1450504.1	2315.2	ug/L	8.63	2315.2	ppb	8.63	0.37%
Tl 190.801†	-122.4	-4.3530	ug/L	1.48027	-4.3530	ppb	1.48027	34.01%
U 409.014†	-8648.7	-247.12	ug/L	4.006	-247.12	ppb	4.006	1.62%
V 292.402†	8927.3	45.686	ug/L	0.8252	45.686	ppb	0.8252	1.81%
Zn 213.857†	33532.5	285.91	ug/L	3.428	285.91	ppb	3.428	1.20%
SiO2†	775369.3	49735	ug/L	728.2	49735	ppb	728.2	1.46%

Sequence No.: 132
Sample ID: 241613013|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 129
Date Collected: 12/9/2009 06:14:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613013|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5785.5	5785.5	99.0	%			06:17:10
1	Y RADIAL	7165.6	7165.6	114.0	%			06:17:10
1	Al 396.153Radial†	48120.2	48626.8	33777	ug/L	33777	ppb	06:16:50
1	Ca 317.933Radial†	25209.7	25448.9	37510	ug/L	37510	ppb	06:16:50
1	Fe 238.204 Radial†	8352.6	8430.2	78923	ug/L	78923	ppb	06:16:50
1	K 766.490 Radial†	45422.2	43529.4	7691.6	ug/L	7691.6	ppb	06:16:50
1	Mg 279.077 IEC†	424.1	427.3	15006	ug/L	15006	ppb	06:17:10
1	Na 589.592 Radial†	1794.9	2901.0	973.50	ug/L	973.50	ppb	06:16:50
1	Sr 421.552†	35342.1	35726.5	222.15	ug/L	222.15	ppb	06:16:50
1	Sc 361.383	906328.0	906328.0	100.56	%			06:18:08
1	Y 371.029	864515.1	864515.1	115.10	%			06:18:08
1	Ag 328.068†	-4901.4	-5166.7	1.7816	ug/L	1.7816	ppb	06:18:13
1	As 188.979†	-84.5	-59.9	7.8995	ug/L	7.8995	ppb	06:18:33
1	B 249.677†	854.4	1380.3	18.413	ug/L	18.413	ppb	06:18:13
1	Ba 233.527†	110532.7	109923.6	817.88	ug/L	817.88	ppb	06:18:13
1	Be 313.107†	-8073.9	-2915.8	3.4748	ug/L	3.4748	ppb	06:18:13
1	Cd 226.502†	611.7	803.4	0.6281	ug/L	0.6281	ppb	06:18:33
1	Co 228.616†	1252.1	1310.5	19.193	ug/L	19.193	ppb	06:18:33
1	Cr 267.716†	4158.3	4056.4	44.261	ug/L	44.261	ppb	06:18:33
1	Cu 324.752†	23175.1	16288.9	50.640	ug/L	50.640	ppb	06:18:13
1	Mn 257.610†	2267414.5	2254323.7	2412.4	ug/L	2412.4	ppb	06:18:08
1	Mo 202.031†	63.6	44.9	8.4498	ug/L	8.4498	ppb	06:18:33
1	Ni 231.604†	1832.1	1735.4	40.169	ug/L	40.169	ppb	06:18:33
1	P 214.914†	3250.8	3009.1	1675.3	ug/L	1675.3	ppb	06:18:33
1	Pb 220.353†	393.0	459.2	52.985	ug/L	52.985	ppb	06:18:33
1	S 181.975 Axial†	274.1	231.0	317.03	ug/L	317.03	ppb	06:18:33
1	Sb 206.836†	62.2	27.6	1.5459	ug/L	1.5459	ppb	06:18:33
1	Se 196.026†	-324.2	-293.6	85.044	ug/L	85.044	ppb	06:18:33
1	Si 251.611†	981197.5	975265.7	29193	ug/L	29193	ppb	06:18:08
1	Sn 189.927†	-188.5	-192.5	-26.547	ug/L	-26.547	ppb	06:18:33
1	Ti 334.940†	1453653.6	1446646.7	2310.6	ug/L	2310.6	ppb	06:18:08
1	Tl 190.801†	-149.3	-115.9	-0.1445	ug/L	-0.1445	ppb	06:18:33
1	U 409.014†	-7385.2	-4942.2	-146.15	ug/L	-146.15	ppb	06:18:08
1	V 292.402†	18023.1	19280.7	112.90	ug/L	112.90	ppb	06:18:13
1	Zn 213.857†	35019.4	34201.9	290.44	ug/L	290.44	ppb	06:18:13
1	SiO2†	973020.5	967116.6	62033	ug/L	62033	ppb	06:19:42
2	Sc Radial	5805.8	5805.8	99.3	%			06:17:36
2	Y RADIAL	7178.2	7178.2	114.2	%			06:17:36
2	Al 396.153Radial†	46781.0	47108.3	32722	ug/L	32722	ppb	06:17:15
2	Ca 317.933Radial†	24553.0	24698.4	36404	ug/L	36404	ppb	06:17:15
2	Fe 238.204 Radial†	8163.8	8210.5	76866	ug/L	76866	ppb	06:17:15
2	K 766.490 Radial†	44298.0	42236.8	7462.3	ug/L	7462.3	ppb	06:17:15
2	Mg 279.077 IEC†	426.7	428.4	15047	ug/L	15047	ppb	06:17:36
2	Na 589.592 Radial†	1766.3	2865.8	961.72	ug/L	961.72	ppb	06:17:15
2	Sr 421.552†	34257.9	34509.9	214.58	ug/L	214.58	ppb	06:17:15
2	Sc 361.383	907136.2	907136.2	100.65	%			06:18:39
2	Y 371.029	864637.5	864637.5	115.12	%			06:18:39
2	Ag 328.068†	-4864.9	-5126.1	1.3252	ug/L	1.3252	ppb	06:18:44
2	As 188.979†	-82.9	-58.2	8.2472	ug/L	8.2472	ppb	06:19:04
2	B 249.677†	898.4	1423.3	19.588	ug/L	19.588	ppb	06:18:44
2	Ba 233.527†	110378.8	109672.7	815.94	ug/L	815.94	ppb	06:18:44
2	Be 313.107†	-8022.1	-2857.2	3.5002	ug/L	3.5002	ppb	06:18:44
2	Cd 226.502†	629.7	820.8	1.0179	ug/L	1.0179	ppb	06:19:04
2	Co 228.616†	1248.6	1305.9	19.131	ug/L	19.131	ppb	06:19:04
2	Cr 267.716†	4138.2	4032.8	43.976	ug/L	43.976	ppb	06:19:04
2	Cu 324.752†	23161.6	16254.9	50.438	ug/L	50.438	ppb	06:18:44
2	Mn 257.610†	2272974.6	2257838.9	2415.9	ug/L	2415.9	ppb	06:18:39
2	Mo 202.031†	70.8	52.0	8.7563	ug/L	8.7563	ppb	06:19:04
2	Ni 231.604†	1837.7	1739.3	40.260	ug/L	40.260	ppb	06:19:04

2	P 214.914†	3277.8	3033.1	1690.4 ug/L	1690.4 ppb	06:19:04
2	Pb 220.353†	402.2	468.0	53.914 ug/L	53.914 ppb	06:19:04
2	S 181.975 Axial†	277.6	234.2	321.75 ug/L	321.75 ppb	06:19:04
2	Sb 206.836†	49.9	15.3	-2.3411 ug/L	-2.3411 ppb	06:19:04
2	Se 196.026†	-328.4	-297.4	76.136 ug/L	76.136 ppb	06:19:04
2	Si 251.611†	982801.5	975990.0	29215 ug/L	29215 ppb	06:18:39
2	Sn 189.927†	-191.4	-195.2	-27.131 ug/L	-27.131 ppb	06:19:04
2	Ti 334.940†	1456263.3	1447951.6	2312.6 ug/L	2312.6 ppb	06:18:39
2	Tl 190.801†	-155.8	-122.3	-1.9147 ug/L	-1.9147 ppb	06:19:04
2	U 409.014†	-7417.3	-4967.4	-146.59 ug/L	-146.59 ppb	06:18:39
2	V 292.402†	17941.1	19183.3	112.57 ug/L	112.57 ppb	06:18:44
2	Zn 213.857†	34904.4	34056.7	289.36 ug/L	289.36 ppb	06:18:44
2	SiO2†	984905.5	978062.6	62735 ug/L	62735 ppb	06:19:47
3	Sc Radial	5803.5	5803.5	99.3 %		06:18:01
3	Y RADIAL	7193.2	7193.2	114.4 %		06:18:01
3	Al 396.153Radial†	47511.5	47862.5	33246 ug/L	33246 ppb	06:17:41
3	Ca 317.933Radial†	24935.1	25093.0	36986 ug/L	36986 ppb	06:17:41
3	Fe 238.204 Radial†	8243.5	8294.1	77648 ug/L	77648 ppb	06:17:41
3	K 766.490 Radial†	45028.6	42990.2	7596.0 ug/L	7596.0 ppb	06:17:41
3	Mg 279.077 IEC†	425.6	427.4	15010 ug/L	15010 ppb	06:18:01
3	Na 589.592 Radial†	1779.0	2879.3	966.25 ug/L	966.25 ppb	06:17:41
3	Sr 421.552†	34902.0	35172.2	218.70 ug/L	218.70 ppb	06:17:41
3	Sc 361.383	906138.6	906138.6	100.54 %		06:19:10
3	Y 371.029	862653.8	862653.8	114.85 %		06:19:10
3	Ag 328.068†	-4924.1	-5190.3	1.2712 ug/L	1.2712 ppb	06:19:15
3	As 188.979†	-100.0	-75.3	1.5992 ug/L	1.5992 ppb	06:19:35
3	B 249.677†	798.5	1324.9	17.422 ug/L	17.422 ppb	06:19:15
3	Ba 233.527†	109718.2	109136.4	812.00 ug/L	812.00 ppb	06:19:15
3	Be 313.107†	-7928.5	-2772.8	3.5254 ug/L	3.5254 ppb	06:19:15
3	Cd 226.502†	621.4	813.2	0.8592 ug/L	0.8592 ppb	06:19:35
3	Co 228.616†	1235.6	1294.4	18.904 ug/L	18.904 ppb	06:19:35
3	Cr 267.716†	4124.4	4023.6	43.891 ug/L	43.891 ppb	06:19:35
3	Cu 324.752†	22901.5	16021.6	49.810 ug/L	49.810 ppb	06:19:15
3	Mn 257.610†	2268763.3	2256136.6	2414.2 ug/L	2414.2 ppb	06:19:10
3	Mo 202.031†	66.9	48.2	8.5706 ug/L	8.5706 ppb	06:19:35
3	Ni 231.604†	1809.8	1713.6	39.664 ug/L	39.664 ppb	06:19:35
3	P 214.914†	3248.3	3007.3	1675.2 ug/L	1675.2 ppb	06:19:35
3	Pb 220.353†	396.1	462.4	53.335 ug/L	53.335 ppb	06:19:35
3	S 181.975 Axial†	275.5	232.4	319.16 ug/L	319.16 ppb	06:19:35
3	Sb 206.836†	55.1	20.6	-0.6324 ug/L	-0.6324 ppb	06:19:35
3	Se 196.026†	-325.6	-295.1	80.082 ug/L	80.082 ppb	06:19:35
3	Si 251.611†	981662.4	975932.1	29213 ug/L	29213 ppb	06:19:10
3	Sn 189.927†	-177.2	-181.3	-24.781 ug/L	-24.781 ppb	06:19:35
3	Ti 334.940†	1452860.0	1446159.5	2309.8 ug/L	2309.8 ppb	06:19:10
3	Tl 190.801†	-158.2	-124.8	-2.6408 ug/L	-2.6408 ppb	06:19:35
3	U 409.014†	-7328.7	-4887.5	-144.49 ug/L	-144.49 ppb	06:19:10
3	V 292.402†	17846.5	19108.9	111.96 ug/L	111.96 ppb	06:19:15
3	Zn 213.857†	34739.4	33930.7	288.19 ug/L	288.19 ppb	06:19:15
3	SiO2†	980432.5	974690.9	62519 ug/L	62519 ppb	06:19:53

Mean Data: 241613013|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906534.3	100.58	%	0.059				0.06%
Sc Radial	5798.3	99.2	%	0.19				0.19%
Y 371.029	863935.5	115.03	%	0.148				0.13%
Y RADIAL	7179.0	114.2	%	0.22				0.19%
Ag 328.068†	-5161.1	1.4593	ug/L	0.28042	1.4593	ppb	0.28042	19.22%
Al 396.153Radial†	47865.9	33249	ug/L	527.4	33249	ppb	527.4	1.59%
As 188.979†	-64.5	5.9153	ug/L	3.74189	5.9153	ppb	3.74189	63.26%
B 249.677†	1376.2	18.474	ug/L	1.0844	18.474	ppb	1.0844	5.87%
Ba 233.527†	109577.6	815.27	ug/L	2.998	815.27	ppb	2.998	0.37%
Be 313.107†	-2848.6	3.5001	ug/L	0.02528	3.5001	ppb	0.02528	0.72%
Ca 317.933Radial†	25080.1	36967	ug/L	553.3	36967	ppb	553.3	1.50%
Cd 226.502†	812.4	0.8351	ug/L	0.19603	0.8351	ppb	0.19603	23.47%
Co 228.616†	1303.6	19.076	ug/L	0.1518	19.076	ppb	0.1518	0.80%
Cr 267.716†	4037.6	44.043	ug/L	0.1939	44.043	ppb	0.1939	0.44%
Cu 324.752†	16188.5	50.296	ug/L	0.4328	50.296	ppb	0.4328	0.86%
Fe 238.204 Radial†	8311.6	77812	ug/L	1038.0	77812	ppb	1038.0	1.33%
K 766.490 Radial†	42918.8	7583.3	ug/L	115.19	7583.3	ppb	115.19	1.52%

Mg 279.077 IEC†	427.7	15021	ug/L	22.5	15021	ppb	22.5	0.15%
Mn 257.610†	2256099.7	2414.2	ug/L	1.77	2414.2	ppb	1.77	0.07%
Mo 202.031†	48.4	8.5922	ug/L	0.15442	8.5922	ppb	0.15442	1.80%
Na 589.592 Radial†	2882.0	967.16	ug/L	5.945	967.16	ppb	5.945	0.61%
Ni 231.604†	1729.4	40.031	ug/L	0.3210	40.031	ppb	0.3210	0.80%
P 214.914†	3016.5	1680.3	ug/L	8.77	1680.3	ppb	8.77	0.52%
Pb 220.353†	463.2	53.411	ug/L	0.4691	53.411	ppb	0.4691	0.88%
S 181.975 Axial†	232.5	319.32	ug/L	2.360	319.32	ppb	2.360	0.74%
Sb 206.836†	21.1	-0.4759	ug/L	1.94821	-0.4759	ppb	1.94821	409.40%
Se 196.026†	-295.4	80.420	ug/L	4.4634	80.420	ppb	4.4634	5.55%
Si 251.611†	975729.3	29207	ug/L	12.1	29207	ppb	12.1	0.04%
Sn 189.927†	-189.6	-26.153	ug/L	1.2237	-26.153	ppb	1.2237	4.68%
Sr 421.552†	35136.2	218.48	ug/L	3.788	218.48	ppb	3.788	1.73%
Ti 334.940†	1446919.2	2311.0	ug/L	1.46	2311.0	ppb	1.46	0.06%
Tl 190.801†	-121.0	-1.5666	ug/L	1.28406	-1.5666	ppb	1.28406	81.96%
U 409.014†	-4932.4	-145.74	ug/L	1.110	-145.74	ppb	1.110	0.76%
V 292.402†	19191.0	112.48	ug/L	0.474	112.48	ppb	0.474	0.42%
Zn 213.857†	34063.1	289.33	ug/L	1.122	289.33	ppb	1.122	0.39%
SiO2†	973290.0	62429	ug/L	359.7	62429	ppb	359.7	0.58%

Sequence No.: 133
Sample ID: 241613014|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 130
Date Collected: 12/9/2009 06:22:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613014|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5792.0	5792.0	99.1	%			06:24:19
1	Y RADIAL	6956.6	6956.6	110.6	%			06:24:19
1	Al 396.153Radial†	149845.4	151208.2	105030	ug/L	105030	ppb	06:23:59
1	Ca 317.933Radial†	13632.4	13738.9	20250	ug/L	20250	ppb	06:23:59
1	Fe 238.204 Radial†	13622.9	13738.2	128620	ug/L	128620	ppb	06:23:59
1	K 766.490 Radial†	96422.9	94934.9	16819	ug/L	16819	ppb	06:23:59
1	Mg 279.077 IEC†	522.7	526.3	18456	ug/L	18456	ppb	06:24:19
1	Na 589.592 Radial†	4033.4	5157.5	1730.8	ug/L	1730.8	ppb	06:23:59
1	Sr 421.552†	39681.2	40064.0	249.32	ug/L	249.32	ppb	06:23:59
1	Sc 361.383	914320.0	914320.0	101.45	%			06:25:17
1	Y 371.029	844094.0	844094.0	112.38	%			06:25:17
1	Ag 328.068†	-8349.2	-8522.7	3.1662	ug/L	3.1662	ppb	06:25:22
1	As 188.979†	-141.4	-115.2	12.981	ug/L	12.981	ppb	06:25:42
1	B 249.677†	1688.5	2195.1	28.828	ug/L	28.828	ppb	06:25:22
1	Ba 233.527†	194451.5	191683.4	1425.9	ug/L	1425.9	ppb	06:25:22
1	Be 313.107†	-5865.0	-668.3	8.8052	ug/L	8.8052	ppb	06:25:22
1	Cd 226.502†	1114.1	1293.3	0.8576	ug/L	0.8576	ppb	06:25:42
1	Co 228.616†	2952.4	2975.6	45.438	ug/L	45.438	ppb	06:25:42
1	Cr 267.716†	8956.6	8750.0	94.652	ug/L	94.652	ppb	06:25:22
1	Cu 324.752†	27229.2	20083.7	64.035	ug/L	64.035	ppb	06:25:22
1	Mn 257.610†	2348638.6	2314679.6	2481.6	ug/L	2481.6	ppb	06:25:17
1	Mo 202.031†	-45.6	-63.3	5.1034	ug/L	5.1034	ppb	06:25:42
1	Ni 231.604†	3094.4	2963.7	68.592	ug/L	68.592	ppb	06:25:42
1	P 214.914†	1838.7	1588.9	838.75	ug/L	838.75	ppb	06:25:42
1	Pb 220.353†	808.7	865.6	110.81	ug/L	110.81	ppb	06:25:42
1	S 181.975 Axial†	422.3	374.7	504.41	ug/L	504.41	ppb	06:25:42
1	Sb 206.836†	77.0	41.7	-2.2464	ug/L	-2.2464	ppb	06:25:42
1	Se 196.026†	-538.2	-501.7	134.19	ug/L	134.19	ppb	06:25:42
1	Si 251.611†	1189944.1	1172502.9	35094	ug/L	35094	ppb	06:25:17
1	Sn 189.927†	-116.9	-120.2	-15.802	ug/L	-15.802	ppb	06:25:42
1	Ti 334.940†	2925529.3	2884870.0	4604.8	ug/L	4604.8	ppb	06:25:17
1	Tl 190.801†	-224.3	-188.5	-0.9867	ug/L	-0.9867	ppb	06:25:42
1	U 409.014†	-8041.4	-5524.8	-168.55	ug/L	-168.55	ppb	06:25:17
1	V 292.402†	37889.9	38707.2	231.05	ug/L	231.05	ppb	06:25:22
1	Zn 213.857†	32393.8	31309.4	260.11	ug/L	260.11	ppb	06:25:22
1	SiO2†	1184945.4	1167557.8	74884	ug/L	74884	ppb	06:26:50
2	Sc Radial	5845.6	5845.6	100	%			06:24:44
2	Y RADIAL	7039.9	7039.9	112.0	%			06:24:44
2	Al 396.153Radial†	149053.4	149031.2	103520	ug/L	103520	ppb	06:24:24
2	Ca 317.933Radial†	13523.8	13504.3	19905	ug/L	19905	ppb	06:24:24
2	Fe 238.204 Radial†	13488.5	13477.8	126180	ug/L	126180	ppb	06:24:24
2	K 766.490 Radial†	95730.4	93351.3	16538	ug/L	16538	ppb	06:24:24
2	Mg 279.077 IEC†	533.7	532.4	18674	ug/L	18674	ppb	06:24:44
2	Na 589.592 Radial†	4037.5	5124.2	1719.6	ug/L	1719.6	ppb	06:24:24
2	Sr 421.552†	39488.5	39504.5	245.84	ug/L	245.84	ppb	06:24:24
2	Sc 361.383	920503.9	920503.9	102.13	%			06:25:48
2	Y 371.029	849657.4	849657.4	113.12	%			06:25:48
2	Ag 328.068†	-8108.1	-8231.3	3.7012	ug/L	3.7012	ppb	06:25:53
2	As 188.979†	-141.3	-114.2	13.008	ug/L	13.008	ppb	06:26:13
2	B 249.677†	1615.3	2112.2	27.415	ug/L	27.415	ppb	06:25:53
2	Ba 233.527†	193013.8	188988.0	1405.9	ug/L	1405.9	ppb	06:25:53
2	Be 313.107†	-6012.0	-773.4	8.7689	ug/L	8.7689	ppb	06:25:53
2	Cd 226.502†	1092.2	1264.4	0.7959	ug/L	0.7959	ppb	06:26:13
2	Co 228.616†	2926.2	2930.5	44.605	ug/L	44.605	ppb	06:26:13
2	Cr 267.716†	8938.4	8672.9	93.792	ug/L	93.792	ppb	06:25:53
2	Cu 324.752†	27106.6	19783.4	63.051	ug/L	63.051	ppb	06:25:53
2	Mn 257.610†	2365616.3	2315749.7	2482.5	ug/L	2482.5	ppb	06:25:48
2	Mo 202.031†	-44.8	-62.2	5.0019	ug/L	5.0019	ppb	06:26:13
2	Ni 231.604†	3073.8	2923.0	67.650	ug/L	67.650	ppb	06:26:13

2	P 214.914†	1836.7	1574.8	832.22 ug/L	832.22 ppb	06:26:13
2	Pb 220.353†	821.5	872.8	111.49 ug/L	111.49 ppb	06:26:13
2	S 181.975 Axial†	411.9	361.7	486.49 ug/L	486.49 ppb	06:26:13
2	Sb 206.836†	79.4	43.5	-1.6724 ug/L	-1.6724 ppb	06:26:13
2	Se 196.026†	-530.4	-490.4	132.72 ug/L	132.72 ppb	06:26:13
2	Si 251.611†	1200234.6	1174698.6	35160 ug/L	35160 ppb	06:25:48
2	Sn 189.927†	-114.9	-117.5	-15.432 ug/L	-15.432 ppb	06:26:13
2	Ti 334.940†	2945977.9	2885518.2	4605.8 ug/L	4605.8 ppb	06:25:48
2	Tl 190.801†	-224.1	-186.9	-0.5531 ug/L	-0.5531 ppb	06:26:13
2	U 409.014†	-8198.6	-5625.4	-171.02 ug/L	-171.02 ppb	06:25:48
2	V 292.402†	37498.3	38072.9	227.23 ug/L	227.23 ppb	06:25:53
2	Zn 213.857†	32175.4	30881.1	256.60 ug/L	256.60 ppb	06:25:53
2	SiO2†	1203406.9	1177786.7	75540 ug/L	75540 ppb	06:26:56
3	Sc Radial	5820.1	5820.1	99.6 %		06:25:09
3	Y RADIAL	7014.7	7014.7	111.6 %		06:25:09
3	Al 396.153Radial†	150766.3	151402.8	105170 ug/L	105170 ppb	06:24:49
3	Ca 317.933Radial†	13679.5	13719.8	20222 ug/L	20222 ppb	06:24:49
3	Fe 238.204 Radial†	13612.3	13661.1	127890 ug/L	127890 ppb	06:24:49
3	K 766.490 Radial†	96772.2	94816.0	16798 ug/L	16798 ppb	06:24:49
3	Mg 279.077 IEC†	523.3	524.3	18386 ug/L	18386 ppb	06:25:09
3	Na 589.592 Radial†	4089.5	5194.2	1743.1 ug/L	1743.1 ppb	06:24:49
3	Sr 421.552†	39978.3	40169.0	249.97 ug/L	249.97 ppb	06:24:49
3	Sc 361.383	915518.4	915518.4	101.58 %		06:26:19
3	Y 371.029	843607.3	843607.3	112.32 %		06:26:19
3	Ag 328.068†	-8197.3	-8362.4	3.6481 ug/L	3.6481 ppb	06:26:24
3	As 188.979†	-141.3	-114.9	12.999 ug/L	12.999 ppb	06:26:44
3	B 249.677†	1638.0	2143.2	27.836 ug/L	27.836 ppb	06:26:24
3	Ba 233.527†	191605.8	188631.1	1403.3 ug/L	1403.3 ppb	06:26:24
3	Be 313.107†	-5777.3	-574.3	8.8446 ug/L	8.8446 ppb	06:26:24
3	Cd 226.502†	1129.8	1307.3	1.0780 ug/L	1.0780 ppb	06:26:44
3	Co 228.616†	2939.5	2959.2	45.120 ug/L	45.120 ppb	06:26:44
3	Cr 267.716†	8891.5	8674.4	93.838 ug/L	93.838 ppb	06:26:24
3	Cu 324.752†	27024.6	19847.1	63.321 ug/L	63.321 ppb	06:26:24
3	Mn 257.610†	2351463.9	2314430.4	2481.3 ug/L	2481.3 ppb	06:26:19
3	Mo 202.031†	-50.2	-67.8	4.7674 ug/L	4.7674 ppb	06:26:44
3	Ni 231.604†	3085.0	2950.5	68.286 ug/L	68.286 ppb	06:26:44
3	P 214.914†	1842.7	1590.5	840.37 ug/L	840.37 ppb	06:26:44
3	Pb 220.353†	817.2	872.9	111.73 ug/L	111.73 ppb	06:26:44
3	S 181.975 Axial†	401.6	353.8	475.03 ug/L	475.03 ppb	06:26:44
3	Sb 206.836†	75.1	39.7	-2.9132 ug/L	-2.9132 ppb	06:26:44
3	Se 196.026†	-528.5	-491.4	137.86 ug/L	137.86 ppb	06:26:44
3	Si 251.611†	1192800.2	1173779.3	35132 ug/L	35132 ppb	06:26:19
3	Sn 189.927†	-124.4	-127.5	-17.003 ug/L	-17.003 ppb	06:26:44
3	Ti 334.940†	2931043.4	2886523.4	4607.4 ug/L	4607.4 ppb	06:26:19
3	Tl 190.801†	-217.5	-181.6	1.0005 ug/L	1.0005 ppb	06:26:44
3	U 409.014†	-8097.2	-5569.3	-169.68 ug/L	-169.68 ppb	06:26:19
3	V 292.402†	37301.7	38079.3	227.00 ug/L	227.00 ppb	06:26:24
3	Zn 213.857†	31976.0	30856.3	256.23 ug/L	256.23 ppb	06:26:24
3	SiO2†	1185939.8	1167007.9	74849 ug/L	74849 ppb	06:27:02

Mean Data: 241613014|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916780.7	101.72	%	0.364				0.36%
Sc Radial	5819.3	99.6	%	0.46				0.46%
Y 371.029	845786.2	112.61	%	0.448				0.40%
Y RADIAL	7003.7	111.4	%	0.68				0.61%
Ag 328.068†	-8372.1	3.5052	ug/L	0.29472	3.5052	ppb	0.29472	8.41%
Al 396.153Radial†	150547.4	104570	ug/L	914.6	104570	ppb	914.6	0.87%
As 188.979†	-114.8	12.996	ug/L	0.0135	12.996	ppb	0.0135	0.10%
B 249.677†	2150.2	28.027	ug/L	0.7252	28.027	ppb	0.7252	2.59%
Ba 233.527†	189767.5	1411.7	ug/L	12.40	1411.7	ppb	12.40	0.88%
Be 313.107†	-672.0	8.8062	ug/L	0.03786	8.8062	ppb	0.03786	0.43%
Ca 317.933Radial†	13654.3	20126	ug/L	192.0	20126	ppb	192.0	0.95%
Cd 226.502†	1288.4	0.9105	ug/L	0.14833	0.9105	ppb	0.14833	16.29%
Co 228.616†	2955.1	45.054	ug/L	0.4205	45.054	ppb	0.4205	0.93%
Cr 267.716†	8699.1	94.094	ug/L	0.4836	94.094	ppb	0.4836	0.51%
Cu 324.752†	19904.7	63.469	ug/L	0.5083	63.469	ppb	0.5083	0.80%
Fe 238.204 Radial†	13625.7	127560	ug/L	1252.1	127560	ppb	1252.1	0.98%
K 766.490 Radial†	94367.4	16719	ug/L	156.6	16719	ppb	156.6	0.94%

Mg 279.077 IEC†	527.6	18505	ug/L	150.1	18505	ppb	150.1	0.81%
Mn 257.610†	2314953.2	2481.8	ug/L	0.64	2481.8	ppb	0.64	0.03%
Mo 202.031†	-64.4	4.9576	ug/L	0.17234	4.9576	ppb	0.17234	3.48%
Na 589.592 Radial†	5158.6	1731.1	ug/L	11.74	1731.1	ppb	11.74	0.68%
Ni 231.604†	2945.7	68.176	ug/L	0.4803	68.176	ppb	0.4803	0.70%
P 214.914†	1584.7	837.11	ug/L	4.317	837.11	ppb	4.317	0.52%
Pb 220.353†	870.4	111.34	ug/L	0.474	111.34	ppb	0.474	0.43%
S 181.975 Axial†	363.4	488.65	ug/L	14.808	488.65	ppb	14.808	3.03%
Sb 206.836†	41.6	-2.2773	ug/L	0.62096	-2.2773	ppb	0.62096	27.27%
Se 196.026†	-494.5	134.92	ug/L	2.649	134.92	ppb	2.649	1.96%
Si 251.611†	1173660.3	35129	ug/L	33.1	35129	ppb	33.1	0.09%
Sn 189.927†	-121.7	-16.079	ug/L	0.8215	-16.079	ppb	0.8215	5.11%
Sr 421.552†	39912.5	248.38	ug/L	2.223	248.38	ppb	2.223	0.89%
Ti 334.940†	2885637.2	4606.0	ug/L	1.33	4606.0	ppb	1.33	0.03%
Tl 190.801†	-185.7	-0.1798	ug/L	1.04490	-0.1798	ppb	1.04490	581.25%
U 409.014†	-5573.2	-169.75	ug/L	1.234	-169.75	ppb	1.234	0.73%
V 292.402†	38286.5	228.43	ug/L	2.274	228.43	ppb	2.274	1.00%
Zn 213.857†	31015.6	257.64	ug/L	2.143	257.64	ppb	2.143	0.83%
SiO2†	1170784.1	75091	ug/L	389.5	75091	ppb	389.5	0.52%

Sequence No.: 134
Sample ID: 241613015|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 131
Date Collected: 12/9/2009 06:29:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613015|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5754.3	5754.3	98.5	%			06:31:28
1	Y RADIAL	6763.5	6763.5	107.6	%			06:31:28
1	Al 396.153Radial†	167752.2	170386.4	118350	ug/L	118350	ppb	06:31:08
1	Ca 317.933Radial†	18649.5	18924.5	27894	ug/L	27894	ppb	06:31:08
1	Fe 238.204 Radial†	11100.2	11266.3	105470	ug/L	105470	ppb	06:31:08
1	K 766.490 Radial†	87561.5	86574.2	15339	ug/L	15339	ppb	06:31:08
1	Mg 279.077 IEC†	499.0	505.7	17749	ug/L	17749	ppb	06:31:28
1	Na 589.592 Radial†	4908.3	6072.8	2037.9	ug/L	2037.9	ppb	06:31:08
1	Sr 421.552†	42821.7	43516.3	270.75	ug/L	270.75	ppb	06:31:08
1	Sc 361.383	902143.9	902143.9	100.10	%			06:32:26
1	Y 371.029	811852.1	811852.1	108.09	%			06:32:26
1	Ag 328.068†	-6710.5	-6996.7	2.3976	ug/L	2.3976	ppb	06:32:31
1	As 188.979†	-123.1	-98.8	13.504	ug/L	13.504	ppb	06:32:51
1	B 249.677†	1292.9	1822.3	24.111	ug/L	24.111	ppb	06:32:31
1	Ba 233.527†	203749.6	203559.4	1513.0	ug/L	1513.0	ppb	06:32:31
1	Be 313.107†	-2640.7	2474.8	9.3930	ug/L	9.3930	ppb	06:32:31
1	Cd 226.502†	874.4	1068.7	0.7944	ug/L	0.7944	ppb	06:32:51
1	Co 228.616†	2298.9	2362.1	34.770	ug/L	34.770	ppb	06:32:51
1	Cr 267.716†	8248.6	8161.9	87.974	ug/L	87.974	ppb	06:32:31
1	Cu 324.752†	22763.3	15984.4	51.123	ug/L	51.123	ppb	06:32:31
1	Mn 257.610†	2181881.5	2179331.5	2335.0	ug/L	2335.0	ppb	06:32:26
1	Mo 202.031†	-41.8	-60.1	3.6657	ug/L	3.6657	ppb	06:32:51
1	Ni 231.604†	2883.5	2794.1	64.673	ug/L	64.673	ppb	06:32:51
1	P 214.914†	1712.7	1487.5	805.25	ug/L	805.25	ppb	06:32:51
1	Pb 220.353†	498.5	566.4	81.889	ug/L	81.889	ppb	06:32:51
1	S 181.975 Axial†	389.8	347.8	464.12	ug/L	464.12	ppb	06:32:51
1	Sb 206.836†	75.8	41.5	-2.3476	ug/L	-2.3476	ppb	06:32:51
1	Se 196.026†	-448.5	-419.2	111.34	ug/L	111.34	ppb	06:32:51
1	Si 251.611†	1218141.9	1216504.3	36412	ug/L	36412	ppb	06:32:26
1	Sn 189.927†	-156.9	-161.7	-22.109	ug/L	-22.109	ppb	06:32:51
1	Ti 334.940†	2708554.4	2707028.1	4321.4	ug/L	4321.4	ppb	06:32:26
1	Tl 190.801†	-205.5	-172.8	0.9323	ug/L	0.9323	ppb	06:32:51
1	U 409.014†	-7185.3	-4776.5	-145.01	ug/L	-145.01	ppb	06:32:26
1	V 292.402†	30199.9	31528.8	187.50	ug/L	187.50	ppb	06:32:31
1	Zn 213.857†	24290.8	23645.2	195.43	ug/L	195.43	ppb	06:32:31
1	SiO2†	1225313.5	1223651.1	78483	ug/L	78483	ppb	06:33:59
2	Sc Radial	5809.9	5809.9	99.4	%			06:31:53
2	Y RADIAL	6842.7	6842.7	108.8	%			06:31:53
2	Al 396.153Radial†	166989.4	167987.6	116690	ug/L	116690	ppb	06:31:33
2	Ca 317.933Radial†	18613.9	18707.3	27574	ug/L	27574	ppb	06:31:33
2	Fe 238.204 Radial†	11048.0	11105.9	103970	ug/L	103970	ppb	06:31:33
2	K 766.490 Radial†	87129.4	85287.9	15110	ug/L	15110	ppb	06:31:33
2	Mg 279.077 IEC†	504.9	506.7	17787	ug/L	17787	ppb	06:31:53
2	Na 589.592 Radial†	4828.5	5944.7	1994.9	ug/L	1994.9	ppb	06:31:33
2	Sr 421.552†	42537.8	42814.2	266.38	ug/L	266.38	ppb	06:31:33
2	Sc 361.383	908305.7	908305.7	100.78	%			06:32:57
2	Y 371.029	816722.4	816722.4	108.74	%			06:32:57
2	Ag 328.068†	-6659.8	-6900.9	2.3631	ug/L	2.3631	ppb	06:33:02
2	As 188.979†	-120.6	-95.4	14.592	ug/L	14.592	ppb	06:33:22
2	B 249.677†	1267.8	1788.7	23.605	ug/L	23.605	ppb	06:33:02
2	Ba 233.527†	205184.6	203602.3	1513.3	ug/L	1513.3	ppb	06:33:02
2	Be 313.107†	-2438.2	2693.7	9.4689	ug/L	9.4689	ppb	06:33:02
2	Cd 226.502†	881.0	1069.2	0.9498	ug/L	0.9498	ppb	06:33:22
2	Co 228.616†	2305.6	2353.2	34.623	ug/L	34.623	ppb	06:33:22
2	Cr 267.716†	8203.5	8061.2	86.892	ug/L	86.892	ppb	06:33:02
2	Cu 324.752†	22970.8	16036.0	51.194	ug/L	51.194	ppb	06:33:02
2	Mn 257.610†	2196781.4	2179328.8	2334.8	ug/L	2334.8	ppb	06:32:57
2	Mo 202.031†	-65.5	-83.4	2.0803	ug/L	2.0803	ppb	06:33:22
2	Ni 231.604†	2867.9	2759.1	63.863	ug/L	63.863	ppb	06:33:22

2	P 214.914†	1710.3	1473.5	797.75	ug/L	797.75 ppb	06:33:22
2	Pb 220.353†	537.2	601.5	85.604	ug/L	85.604 ppb	06:33:22
2	S 181.975 Axial†	400.7	356.0	475.93	ug/L	475.93 ppb	06:33:22
2	Sb 206.836†	78.5	43.7	-1.6466	ug/L	-1.6466 ppb	06:33:22
2	Se 196.026†	-443.5	-411.2	110.96	ug/L	110.96 ppb	06:33:22
2	Si 251.611†	1225971.8	1216017.9	36398	ug/L	36398 ppb	06:32:57
2	Sn 189.927†	-161.6	-165.4	-22.756	ug/L	-22.756 ppb	06:33:22
2	Ti 334.940†	2725795.2	2705778.7	4319.4	ug/L	4319.4 ppb	06:32:57
2	Tl 190.801†	-226.5	-192.2	-4.5793	ug/L	-4.5793 ppb	06:33:22
2	U 409.014†	-7292.7	-4834.3	-146.42	ug/L	-146.42 ppb	06:32:57
2	V 292.402†	30543.8	31665.3	188.61	ug/L	188.61 ppb	06:33:02
2	Zn 213.857†	24437.7	23626.4	195.41	ug/L	195.41 ppb	06:33:02
2	SiO2†	1231216.6	1221204.3	78327	ug/L	78327 ppb	06:34:05
3	Sc Radial	5764.3	5764.3	98.6	%		06:32:18
3	Y RADIAL	6799.9	6799.9	108.1	%		06:32:18
3	Al 396.153Radial†	167288.0	169620.4	117820	ug/L	117820 ppb	06:31:58
3	Ca 317.933Radial†	18612.4	18854.1	27790	ug/L	27790 ppb	06:31:58
3	Fe 238.204 Radial†	11046.6	11192.5	104780	ug/L	104780 ppb	06:31:58
3	K 766.490 Radial†	87370.7	86226.5	15277	ug/L	15277 ppb	06:31:58
3	Mg 279.077 IEC†	502.8	508.6	17854	ug/L	17854 ppb	06:32:18
3	Na 589.592 Radial†	4842.5	5997.4	2012.6	ug/L	2012.6 ppb	06:31:58
3	Sr 421.552†	42509.4	43124.3	268.31	ug/L	268.31 ppb	06:31:58
3	Sc 361.383	898486.0	898486.0	99.692	%		06:33:28
3	Y 371.029	809675.1	809675.1	107.80	%		06:33:28
3	Ag 328.068†	-6687.7	-7001.1	2.1688	ug/L	2.1688 ppb	06:33:33
3	As 188.979†	-138.6	-114.9	7.1809	ug/L	7.1809 ppb	06:33:53
3	B 249.677†	1342.4	1877.2	25.352	ug/L	25.352 ppb	06:33:33
3	Ba 233.527†	204716.2	205357.7	1526.3	ug/L	1526.3 ppb	06:33:33
3	Be 313.107†	-2550.3	2554.8	9.4517	ug/L	9.4517 ppb	06:33:33
3	Cd 226.502†	904.3	1102.2	1.2185	ug/L	1.2185 ppb	06:33:53
3	Co 228.616†	2308.8	2381.4	35.115	ug/L	35.115 ppb	06:33:53
3	Cr 267.716†	8197.4	8144.1	87.779	ug/L	87.779 ppb	06:33:33
3	Cu 324.752†	22955.2	16269.4	51.904	ug/L	51.904 ppb	06:33:33
3	Mn 257.610†	2178710.5	2185025.0	2341.0	ug/L	2341.0 ppb	06:33:28
3	Mo 202.031†	-71.2	-89.8	1.7297	ug/L	1.7297 ppb	06:33:53
3	Ni 231.604†	2898.9	2821.3	65.303	ug/L	65.303 ppb	06:33:53
3	P 214.914†	1715.2	1497.0	810.96	ug/L	810.96 ppb	06:33:53
3	Pb 220.353†	520.5	590.5	84.548	ug/L	84.548 ppb	06:33:53
3	S 181.975 Axial†	390.3	349.9	467.17	ug/L	467.17 ppb	06:33:53
3	Sb 206.836†	69.7	35.6	-4.2745	ug/L	-4.2745 ppb	06:33:53
3	Se 196.026†	-445.5	-418.1	109.73	ug/L	109.73 ppb	06:33:53
3	Si 251.611†	1216663.3	1219975.7	36516	ug/L	36516 ppb	06:33:28
3	Sn 189.927†	-157.2	-162.7	-22.280	ug/L	-22.280 ppb	06:33:53
3	Ti 334.940†	2706950.6	2716435.7	4336.4	ug/L	4336.4 ppb	06:33:28
3	Tl 190.801†	-227.4	-195.6	-5.3364	ug/L	-5.3364 ppb	06:33:53
3	U 409.014†	-7168.2	-4788.6	-145.26	ug/L	-145.26 ppb	06:33:28
3	V 292.402†	30440.4	31892.9	189.97	ug/L	189.97 ppb	06:33:33
3	Zn 213.857†	24335.3	23788.7	196.74	ug/L	196.74 ppb	06:33:33
3	SiO2†	1221170.6	1224479.1	78536	ug/L	78536 ppb	06:34:11

Mean Data: 241613015|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902978.6	100.19	%	0.551				0.55%
Sc Radial	5776.1	98.8	%	0.51				0.51%
Y 371.029	812749.9	108.21	%	0.480				0.44%
Y RADIAL	6802.0	108.2	%	0.63				0.58%
Ag 328.068†	-6966.3	2.3098	ug/L	0.12333	2.3098	ppb	0.12333	5.34%
Al 396.153Radial†	169331.5	117620	ug/L	851.0	117620	ppb	851.0	0.72%
As 188.979†	-103.1	11.759	ug/L	4.0017	11.759	ppb	4.0017	34.03%
B 249.677†	1829.4	24.356	ug/L	0.8989	24.356	ppb	0.8989	3.69%
Ba 233.527†	204173.1	1517.5	ug/L	7.61	1517.5	ppb	7.61	0.50%
Be 313.107†	2574.4	9.4379	ug/L	0.03977	9.4379	ppb	0.03977	0.42%
Ca 317.933Radial†	18828.6	27752	ug/L	163.3	27752	ppb	163.3	0.59%
Cd 226.502†	1080.1	0.9875	ug/L	0.21460	0.9875	ppb	0.21460	21.73%
Co 228.616†	2365.5	34.836	ug/L	0.2526	34.836	ppb	0.2526	0.73%
Cr 267.716†	8122.4	87.548	ug/L	0.5765	87.548	ppb	0.5765	0.66%
Cu 324.752†	16096.6	51.407	ug/L	0.4315	51.407	ppb	0.4315	0.84%
Fe 238.204 Radial†	11188.2	104740	ug/L	751.8	104740	ppb	751.8	0.72%
K 766.490 Radial†	86029.5	15242	ug/L	118.1	15242	ppb	118.1	0.77%

Mg 279.077 IEC†	507.0	17797	ug/L	53.4	17797	ppb	53.4	0.30%
Mn 257.610†	2181228.4	2336.9	ug/L	3.51	2336.9	ppb	3.51	0.15%
Mo 202.031†	-77.7	2.4919	ug/L	1.03156	2.4919	ppb	1.03156	41.40%
Na 589.592 Radial†	6004.9	2015.1	ug/L	21.60	2015.1	ppb	21.60	1.07%
Ni 231.604†	2791.5	64.613	ug/L	0.7218	64.613	ppb	0.7218	1.12%
P 214.914†	1486.0	804.65	ug/L	6.624	804.65	ppb	6.624	0.82%
Pb 220.353†	586.2	84.013	ug/L	1.9140	84.013	ppb	1.9140	2.28%
S 181.975 Axial†	351.3	469.07	ug/L	6.128	469.07	ppb	6.128	1.31%
Sb 206.836†	40.3	-2.7562	ug/L	1.36074	-2.7562	ppb	1.36074	49.37%
Se 196.026†	-416.2	110.68	ug/L	0.844	110.68	ppb	0.844	0.76%
Si 251.611†	1217499.3	36442	ug/L	64.6	36442	ppb	64.6	0.18%
Sn 189.927†	-163.3	-22.382	ug/L	0.3353	-22.382	ppb	0.3353	1.50%
Sr 421.552†	43151.6	268.48	ug/L	2.190	268.48	ppb	2.190	0.82%
Ti 334.940†	2709747.5	4325.7	ug/L	9.30	4325.7	ppb	9.30	0.21%
Tl 190.801†	-186.9	-2.9945	ug/L	3.42171	-2.9945	ppb	3.42171	114.27%
U 409.014†	-4799.8	-145.56	ug/L	0.749	-145.56	ppb	0.749	0.51%
V 292.402†	31695.7	188.69	ug/L	1.236	188.69	ppb	1.236	0.66%
Zn 213.857†	23686.8	195.86	ug/L	0.762	195.86	ppb	0.762	0.39%
SiO2†	1223111.5	78449	ug/L	109.1	78449	ppb	109.1	0.14%

Sequence No.: 135
Sample ID: 241613016|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 132
Date Collected: 12/9/2009 06:36:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613016|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6047.2	6047.2	103	%			06:38:16
1	Y RADIAL	7590.2	7590.2	120.7	%			06:38:16
1	Al 396.153Radial†	17697.0	17122.6	11893	ug/L	11893	ppb	06:38:16
1	Ca 317.933Radial†	4925.1	4743.9	6992.3	ug/L	6992.3	ppb	06:38:16
1	Fe 238.204 Radial†	7028.0	6785.0	63520	ug/L	63520	ppb	06:38:16
1	K 766.490 Radial†	20096.1	17068.8	3006.0	ug/L	3006.0	ppb	06:38:16
1	Mg 279.077 IEC†	111.6	106.7	3711.0	ug/L	3711.0	ppb	06:38:36
1	Na 589.592 Radial†	3872.4	4830.1	1620.9	ug/L	1620.9	ppb	06:38:16
1	Sr 421.552†	9300.1	9014.8	56.077	ug/L	56.077	ppb	06:38:16
1	Sc 361.383	920397.5	920397.5	102.12	%			06:39:34
1	Y 371.029	896069.0	896069.0	119.30	%			06:39:34
1	Ag 328.068†	-4099.5	-4307.0	0.9858	ug/L	0.9858	ppb	06:39:39
1	As 188.979†	-85.1	-59.1	10.020	ug/L	10.020	ppb	06:39:59
1	B 249.677†	295.5	820.0	8.7401	ug/L	8.7401	ppb	06:39:39
1	Ba 233.527†	38641.7	37846.9	282.96	ug/L	282.96	ppb	06:39:39
1	Be 313.107†	-13722.1	-8323.9	2.4975	ug/L	2.4975	ppb	06:39:39
1	Cd 226.502†	491.7	676.6	0.8179	ug/L	0.8179	ppb	06:39:59
1	Co 228.616†	573.7	627.2	5.1984	ug/L	5.1984	ppb	06:39:59
1	Cr 267.716†	1828.0	1711.4	19.258	ug/L	19.258	ppb	06:39:39
1	Cu 324.752†	11669.3	4670.0	16.605	ug/L	16.605	ppb	06:39:39
1	Mn 257.610†	1774276.1	1736970.0	1859.2	ug/L	1859.2	ppb	06:39:34
1	Mo 202.031†	426.4	399.2	29.864	ug/L	29.864	ppb	06:39:59
1	Ni 231.604†	1185.9	1074.7	24.878	ug/L	24.878	ppb	06:39:59
1	P 214.914†	1177.9	929.9	487.05	ug/L	487.05	ppb	06:39:59
1	Pb 220.353†	250.5	313.8	32.976	ug/L	32.976	ppb	06:39:59
1	S 181.975 Axial†	96.3	52.7	71.577	ug/L	71.577	ppb	06:39:59
1	Sb 206.836†	43.7	8.5	-3.9489	ug/L	-3.9489	ppb	06:39:59
1	Se 196.026†	-289.3	-254.5	55.242	ug/L	55.242	ppb	06:39:59
1	Si 251.611†	665089.2	650813.6	19481	ug/L	19481	ppb	06:39:34
1	Sn 189.927†	35.8	30.1	6.5021	ug/L	6.5021	ppb	06:39:59
1	Ti 334.940†	1799842.0	1763541.7	2814.7	ug/L	2814.7	ppb	06:39:34
1	Tl 190.801†	-166.6	-130.7	-3.9847	ug/L	-3.9847	ppb	06:39:59
1	U 409.014†	-10736.5	-8111.5	-231.47	ug/L	-231.47	ppb	06:39:34
1	V 292.402†	6107.6	7339.0	35.718	ug/L	35.718	ppb	06:39:39
1	Zn 213.857†	34304.0	32969.1	281.66	ug/L	281.66	ppb	06:39:39
1	SiO2†	662633.0	648390.6	41589	ug/L	41589	ppb	06:41:07
2	Sc Radial	5786.0	5786.0	99.0	%			06:38:41
2	Y RADIAL	7321.0	7321.0	116.4	%			06:38:41
2	Al 396.153Radial†	17616.4	17813.1	12372	ug/L	12372	ppb	06:38:41
2	Ca 317.933Radial†	4921.8	4955.4	7304.0	ug/L	7304.0	ppb	06:38:41
2	Fe 238.204 Radial†	7007.5	7070.8	66196	ug/L	66196	ppb	06:38:41
2	K 766.490 Radial†	19859.2	17706.1	3119.2	ug/L	3119.2	ppb	06:38:41
2	Mg 279.077 IEC†	108.1	108.1	3755.8	ug/L	3755.8	ppb	06:39:02
2	Na 589.592 Radial†	3754.0	4879.5	1637.5	ug/L	1637.5	ppb	06:38:41
2	Sr 421.552†	9218.9	9338.5	58.090	ug/L	58.090	ppb	06:38:41
2	Sc 361.383	918939.9	918939.9	101.96	%			06:40:05
2	Y 371.029	893408.0	893408.0	118.95	%			06:40:05
2	Ag 328.068†	-4081.0	-4295.2	1.8822	ug/L	1.8822	ppb	06:40:10
2	As 188.979†	-98.4	-72.3	5.1980	ug/L	5.1980	ppb	06:40:30
2	B 249.677†	428.9	951.3	11.139	ug/L	11.139	ppb	06:40:10
2	Ba 233.527†	38872.5	38133.3	285.18	ug/L	285.18	ppb	06:40:10
2	Be 313.107†	-13879.0	-8499.0	2.4283	ug/L	2.4283	ppb	06:40:10
2	Cd 226.502†	473.2	659.2	0.3662	ug/L	0.3662	ppb	06:40:30
2	Co 228.616†	583.2	637.4	5.3605	ug/L	5.3605	ppb	06:40:30
2	Cr 267.716†	1790.0	1676.9	18.942	ug/L	18.942	ppb	06:40:10
2	Cu 324.752†	11735.1	4752.7	16.978	ug/L	16.978	ppb	06:40:10
2	Mn 257.610†	1769389.7	1734933.4	1857.3	ug/L	1857.3	ppb	06:40:05
2	Mo 202.031†	423.0	396.5	29.887	ug/L	29.887	ppb	06:40:30
2	Ni 231.604†	1160.3	1051.4	24.340	ug/L	24.340	ppb	06:40:30

2	P 214.914†	1144.8	899.2	467.31 ug/L	467.31 ppb	06:40:30
2	Pb 220.353†	257.2	320.7	33.648 ug/L	33.648 ppb	06:40:30
2	S 181.975 Axial†	91.6	48.2	65.138 ug/L	65.138 ppb	06:40:30
2	Sb 206.836†	40.6	5.6	-4.8426 ug/L	-4.8426 ppb	06:40:30
2	Se 196.026†	-286.3	-252.0	65.196 ug/L	65.196 ppb	06:40:30
2	Si 251.611†	663853.4	650634.6	19476 ug/L	19476 ppb	06:40:05
2	Sn 189.927†	39.4	33.7	7.1600 ug/L	7.1600 ppb	06:40:30
2	Ti 334.940†	1795235.1	1761818.9	2812.0 ug/L	2812.0 ppb	06:40:05
2	Tl 190.801†	-165.9	-130.2	-3.8651 ug/L	-3.8651 ppb	06:40:30
2	U 409.014†	-10597.7	-7992.0	-228.52 ug/L	-228.52 ppb	06:40:05
2	V 292.402†	6050.0	7292.0	35.008 ug/L	35.008 ppb	06:40:10
2	Zn 213.857†	34657.2	33368.8	284.90 ug/L	284.90 ppb	06:40:10
2	SiO2†	662721.2	649506.4	41661 ug/L	41661 ppb	06:41:12
3	Sc Radial	5880.4	5880.4	101 %		06:39:07
3	Y RADIAL	7489.4	7489.4	119.1 %		06:39:07
3	Al 396.153Radial†	17877.0	17786.7	12354 ug/L	12354 ppb	06:39:07
3	Ca 317.933Radial†	4969.9	4923.5	7257.0 ug/L	7257.0 ppb	06:39:07
3	Fe 238.204 Radial†	7088.8	7038.1	65889 ug/L	65889 ppb	06:39:07
3	K 766.490 Radial†	20246.7	17769.5	3130.5 ug/L	3130.5 ppb	06:39:07
3	Mg 279.077 IEC†	111.1	109.3	3798.8 ug/L	3798.8 ppb	06:39:27
3	Na 589.592 Radial†	3849.2	4913.3	1648.8 ug/L	1648.8 ppb	06:39:07
3	Sr 421.552†	9391.7	9360.9	58.230 ug/L	58.230 ppb	06:39:07
3	Sc 361.383	913256.3	913256.3	101.33 %		06:40:36
3	Y 371.029	890231.8	890231.8	118.53 %		06:40:36
3	Ag 328.068†	-4119.1	-4357.7	1.5053 ug/L	1.5053 ppb	06:40:41
3	As 188.979†	-77.6	-52.4	12.960 ug/L	12.960 ppb	06:41:01
3	B 249.677†	411.4	936.7	10.872 ug/L	10.872 ppb	06:40:41
3	Ba 233.527†	38470.7	37974.0	283.98 ug/L	283.98 ppb	06:40:41
3	Be 313.107†	-13906.4	-8610.8	2.3776 ug/L	2.3776 ppb	06:40:41
3	Cd 226.502†	500.3	688.8	0.7107 ug/L	0.7107 ppb	06:41:01
3	Co 228.616†	582.0	639.7	5.4244 ug/L	5.4244 ppb	06:41:01
3	Cr 267.716†	1800.6	1698.3	19.163 ug/L	19.163 ppb	06:40:41
3	Cu 324.752†	11612.6	4703.4	16.821 ug/L	16.821 ppb	06:40:41
3	Mn 257.610†	1753693.5	1730243.3	1852.2 ug/L	1852.2 ppb	06:40:36
3	Mo 202.031†	447.1	422.9	31.537 ug/L	31.537 ppb	06:41:01
3	Ni 231.604†	1196.6	1094.4	25.334 ug/L	25.334 ppb	06:41:01
3	P 214.914†	1159.0	920.3	479.73 ug/L	479.73 ppb	06:41:01
3	Pb 220.353†	259.8	324.8	34.140 ug/L	34.140 ppb	06:41:01
3	S 181.975 Axial†	97.9	55.0	74.682 ug/L	74.682 ppb	06:41:01
3	Sb 206.836†	50.0	15.1	-1.7915 ug/L	-1.7915 ppb	06:41:01
3	Se 196.026†	-288.9	-256.3	61.742 ug/L	61.742 ppb	06:41:01
3	Si 251.611†	658498.4	649401.9	19439 ug/L	19439 ppb	06:40:36
3	Sn 189.927†	37.4	31.9	6.8608 ug/L	6.8608 ppb	06:41:01
3	Ti 334.940†	1780916.4	1758645.9	2806.9 ug/L	2806.9 ppb	06:40:36
3	Tl 190.801†	-167.1	-132.4	-4.5480 ug/L	-4.5480 ppb	06:41:01
3	U 409.014†	-10654.9	-8113.2	-231.82 ug/L	-231.82 ppb	06:40:36
3	V 292.402†	6026.4	7305.6	35.169 ug/L	35.169 ppb	06:40:41
3	Zn 213.857†	34321.7	33249.2	283.88 ug/L	283.88 ppb	06:40:41
3	SiO2†	657804.9	648699.7	41609 ug/L	41609 ppb	06:41:18

Mean Data: 241613016|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917531.2	101.80	%	0.419				0.41%
Sc Radial	5904.5	101	%	2.3				2.24%
Y 371.029	893236.3	118.93	%	0.389				0.33%
Y RADIAL	7466.9	118.8	%	2.16				1.82%
Ag 328.068†	-4320.0	1.4578	ug/L	0.45007	1.4578	ppb	0.45007	30.87%
Al 396.153Radial†	17574.1	12206	ug/L	271.8	12206	ppb	271.8	2.23%
As 188.979†	-61.3	9.3927	ug/L	3.91900	9.3927	ppb	3.91900	41.72%
B 249.677†	902.7	10.250	ug/L	1.3147	10.250	ppb	1.3147	12.83%
Ba 233.527†	37984.7	284.04	ug/L	1.112	284.04	ppb	1.112	0.39%
Be 313.107†	-8477.9	2.4345	ug/L	0.06021	2.4345	ppb	0.06021	2.47%
Ca 317.933Radial†	4874.3	7184.4	ug/L	168.06	7184.4	ppb	168.06	2.34%
Cd 226.502†	674.9	0.6316	ug/L	0.23597	0.6316	ppb	0.23597	37.36%
Co 228.616†	634.8	5.3278	ug/L	0.11651	5.3278	ppb	0.11651	2.19%
Cr 267.716†	1695.5	19.121	ug/L	0.1619	19.121	ppb	0.1619	0.85%
Cu 324.752†	4708.7	16.801	ug/L	0.1873	16.801	ppb	0.1873	1.12%
Fe 238.204 Radial†	6964.6	65202	ug/L	1464.5	65202	ppb	1464.5	2.25%
K 766.490 Radial†	17514.8	3085.2	ug/L	68.82	3085.2	ppb	68.82	2.23%

Mg 279.077 IEC†	108.0	3755.2	ug/L	43.91	3755.2	ppb	43.91	1.17%
Mn 257.610†	1734048.9	1856.2	ug/L	3.59	1856.2	ppb	3.59	0.19%
Mo 202.031†	406.2	30.429	ug/L	0.9595	30.429	ppb	0.9595	3.15%
Na 589.592 Radial†	4874.3	1635.7	ug/L	14.04	1635.7	ppb	14.04	0.86%
Ni 231.604†	1073.5	24.851	ug/L	0.4978	24.851	ppb	0.4978	2.00%
P 214.914†	916.5	478.03	ug/L	9.976	478.03	ppb	9.976	2.09%
Pb 220.353†	319.8	33.588	ug/L	0.5843	33.588	ppb	0.5843	1.74%
S 181.975 Axial†	52.0	70.466	ug/L	4.8680	70.466	ppb	4.8680	6.91%
Sb 206.836†	9.7	-3.5277	ug/L	1.56858	-3.5277	ppb	1.56858	44.46%
Se 196.026†	-254.2	60.727	ug/L	5.0539	60.727	ppb	5.0539	8.32%
Si 251.611†	650283.4	19465	ug/L	23.0	19465	ppb	23.0	0.12%
Sn 189.927†	31.9	6.8409	ug/L	0.32940	6.8409	ppb	0.32940	4.82%
Sr 421.552†	9238.1	57.466	ug/L	1.2046	57.466	ppb	1.2046	2.10%
Ti 334.940†	1761335.5	2811.2	ug/L	3.96	2811.2	ppb	3.96	0.14%
Tl 190.801†	-131.1	-4.1326	ug/L	0.36471	-4.1326	ppb	0.36471	8.83%
U 409.014†	-8072.2	-230.60	ug/L	1.813	-230.60	ppb	1.813	0.79%
V 292.402†	7312.2	35.298	ug/L	0.3718	35.298	ppb	0.3718	1.05%
Zn 213.857†	33195.7	283.48	ug/L	1.655	283.48	ppb	1.655	0.58%
SiO2†	648865.6	41620	ug/L	36.9	41620	ppb	36.9	0.09%

Sequence No.: 136
Sample ID: 241613017|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 133
Date Collected: 12/9/2009 06:43:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613017|925482|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5878.9	5878.9	101	%			06:45:24
1	Y RADIAL	7296.1	7296.1	116.0	%			06:45:24
1	Al 396.153Radial†	39682.6	39466.8	27414	ug/L	27414	ppb	06:45:24
1	Ca 317.933Radial†	15243.6	15137.3	22311	ug/L	22311	ppb	06:45:24
1	Fe 238.204 Radial†	8543.7	8486.1	79446	ug/L	79446	ppb	06:45:24
1	K 766.490 Radial†	34185.0	31629.7	5585.8	ug/L	5585.8	ppb	06:45:24
1	Mg 279.077 IEC†	269.2	266.5	9332.5	ug/L	9332.5	ppb	06:45:44
1	Na 589.592 Radial†	6574.5	7623.3	2558.2	ug/L	2558.2	ppb	06:45:24
1	Sr 421.552†	25787.4	25661.3	159.60	ug/L	159.60	ppb	06:45:24
1	Sc 361.383	900668.3	900668.3	99.934	%			06:46:41
1	Y 371.029	861322.0	861322.0	114.68	%			06:46:41
1	Ag 328.068†	-5059.4	-5355.5	1.3877	ug/L	1.3877	ppb	06:46:46
1	As 188.979†	-114.8	-90.7	-0.3981	ug/L	-0.3981	ppb	06:47:06
1	B 249.677†	585.1	1116.1	12.805	ug/L	12.805	ppb	06:46:46
1	Ba 233.527†	95474.5	95546.1	711.38	ug/L	711.38	ppb	06:46:46
1	Be 313.107†	-10982.6	-5876.9	3.2889	ug/L	3.2889	ppb	06:46:46
1	Cd 226.502†	650.8	846.4	1.0268	ug/L	1.0268	ppb	06:47:06
1	Co 228.616†	1223.8	1290.1	17.789	ug/L	17.789	ppb	06:47:06
1	Cr 267.716†	3599.2	3522.9	38.701	ug/L	38.701	ppb	06:47:06
1	Cu 324.752†	24042.0	17301.2	53.564	ug/L	53.564	ppb	06:46:46
1	Mn 257.610†	1943580.4	1944444.0	2082.0	ug/L	2082.0	ppb	06:46:41
1	Mo 202.031†	87.8	69.6	10.055	ug/L	10.055	ppb	06:47:06
1	Ni 231.604†	1566.1	1480.6	34.270	ug/L	34.270	ppb	06:47:06
1	P 214.914†	3682.5	3461.4	1933.2	ug/L	1933.2	ppb	06:47:06
1	Pb 220.353†	417.1	485.8	54.521	ug/L	54.521	ppb	06:47:06
1	S 181.975 Axial†	285.9	244.6	337.29	ug/L	337.29	ppb	06:47:06
1	Sb 206.836†	47.7	13.5	-3.6136	ug/L	-3.6136	ppb	06:47:06
1	Se 196.026†	-341.5	-312.9	74.381	ug/L	74.381	ppb	06:47:06
1	Si 251.611†	827672.1	827770.1	24778	ug/L	24778	ppb	06:46:41
1	Sn 189.927†	-138.7	-143.8	-20.156	ug/L	-20.156	ppb	06:47:06
1	Ti 334.940†	1729206.8	1731465.8	2764.3	ug/L	2764.3	ppb	06:46:41
1	Tl 190.801†	-166.2	-133.8	-3.8018	ug/L	-3.8018	ppb	06:47:06
1	U 409.014†	-8026.8	-5630.3	-165.16	ug/L	-165.16	ppb	06:46:41
1	V 292.402†	20058.0	21429.6	126.37	ug/L	126.37	ppb	06:46:46
1	Zn 213.857†	32264.7	31664.2	268.45	ug/L	268.45	ppb	06:46:46
1	SiO2†	828008.6	828089.0	53116	ug/L	53116	ppb	06:48:15
2	Sc Radial	5800.0	5800.0	99.2	%			06:45:49
2	Y RADIAL	7254.4	7254.4	115.4	%			06:45:49
2	Al 396.153Radial†	39576.0	39896.4	27713	ug/L	27713	ppb	06:45:49
2	Ca 317.933Radial†	15215.3	15315.0	22573	ug/L	22573	ppb	06:45:49
2	Fe 238.204 Radial†	8464.0	8521.4	79776	ug/L	79776	ppb	06:45:49
2	K 766.490 Radial†	34077.5	31984.0	5648.6	ug/L	5648.6	ppb	06:45:49
2	Mg 279.077 IEC†	270.9	271.8	9520.3	ug/L	9520.3	ppb	06:46:09
2	Na 589.592 Radial†	6494.4	7631.6	2561.0	ug/L	2561.0	ppb	06:45:49
2	Sr 421.552†	25602.1	25823.5	160.61	ug/L	160.61	ppb	06:45:49
2	Sc 361.383	899838.3	899838.3	99.842	%			06:47:12
2	Y 371.029	860026.6	860026.6	114.50	%			06:47:12
2	Ag 328.068†	-5101.4	-5402.2	1.2795	ug/L	1.2795	ppb	06:47:17
2	As 188.979†	-105.7	-81.7	3.2109	ug/L	3.2109	ppb	06:47:37
2	B 249.677†	683.1	1214.9	14.833	ug/L	14.833	ppb	06:47:17
2	Ba 233.527†	96142.3	96303.1	717.00	ug/L	717.00	ppb	06:47:17
2	Be 313.107†	-11141.5	-6046.2	3.2305	ug/L	3.2305	ppb	06:47:17
2	Cd 226.502†	652.5	848.7	1.0183	ug/L	1.0183	ppb	06:47:37
2	Co 228.616†	1212.6	1279.9	17.594	ug/L	17.594	ppb	06:47:37
2	Cr 267.716†	3555.9	3482.9	38.288	ug/L	38.288	ppb	06:47:37
2	Cu 324.752†	24398.1	17680.0	54.665	ug/L	54.665	ppb	06:47:17
2	Mn 257.610†	1941482.7	1944136.9	2081.7	ug/L	2081.7	ppb	06:47:12
2	Mo 202.031†	105.2	87.0	11.189	ug/L	11.189	ppb	06:47:37
2	Ni 231.604†	1573.7	1489.6	34.478	ug/L	34.478	ppb	06:47:37

2	P 214.914†	3667.5	3449.8	1926.2	ug/L	1926.2 ppb	06:47:37
2	Pb 220.353†	437.0	506.1	56.860	ug/L	56.860 ppb	06:47:37
2	S 181.975 Axial†	280.0	238.9	329.33	ug/L	329.33 ppb	06:47:37
2	Sb 206.836†	58.3	24.1	-0.2260	ug/L	-0.2260 ppb	06:47:37
2	Se 196.026†	-342.3	-314.0	74.821	ug/L	74.821 ppb	06:47:37
2	Si 251.611†	827362.7	828224.1	24792	ug/L	24792 ppb	06:47:12
2	Sn 189.927†	-137.1	-142.3	-19.867	ug/L	-19.867 ppb	06:47:37
2	Ti 334.940†	1728681.9	1732536.1	2766.0	ug/L	2766.0 ppb	06:47:12
2	Tl 190.801†	-168.3	-136.0	-4.4074	ug/L	-4.4074 ppb	06:47:37
2	U 409.014†	-7896.7	-5507.4	-161.82	ug/L	-161.82 ppb	06:47:12
2	V 292.402†	20222.5	21612.9	127.56	ug/L	127.56 ppb	06:47:17
2	Zn 213.857†	32526.0	31955.7	270.95	ug/L	270.95 ppb	06:47:17
2	SiO2†	832884.9	833737.3	53478	ug/L	53478 ppb	06:48:21
3	Sc Radial	5790.8	5790.8	99.1	%		06:46:14
3	Y RADIAL	7291.9	7291.9	116.0	%		06:46:14
3	Al 396.153Radial†	39771.8	40157.0	27894	ug/L	27894 ppb	06:46:14
3	Ca 317.933Radial†	15272.9	15397.4	22695	ug/L	22695 ppb	06:46:14
3	Fe 238.204 Radial†	8527.0	8598.4	80497	ug/L	80497 ppb	06:46:14
3	K 766.490 Radial†	34244.1	32206.5	5688.2	ug/L	5688.2 ppb	06:46:14
3	Mg 279.077 IEC†	271.1	272.4	9542.5	ug/L	9542.5 ppb	06:46:34
3	Na 589.592 Radial†	6579.2	7727.5	2593.2	ug/L	2593.2 ppb	06:46:14
3	Sr 421.552†	25701.0	25964.1	161.49	ug/L	161.49 ppb	06:46:14
3	Sc 361.383	898754.5	898754.5	99.722	%		06:47:43
3	Y 371.029	859964.6	859964.6	114.50	%		06:47:43
3	Ag 328.068†	-5124.3	-5431.4	1.3834	ug/L	1.3834 ppb	06:47:49
3	As 188.979†	-104.8	-80.9	3.5829	ug/L	3.5829 ppb	06:48:09
3	B 249.677†	628.7	1161.2	13.610	ug/L	13.610 ppb	06:47:49
3	Ba 233.527†	96509.3	96787.2	720.62	ug/L	720.62 ppb	06:47:49
3	Be 313.107†	-11227.0	-6145.4	3.1774	ug/L	3.1774 ppb	06:47:49
3	Cd 226.502†	657.6	854.6	1.0085	ug/L	1.0085 ppb	06:48:09
3	Co 228.616†	1224.5	1293.3	17.857	ug/L	17.857 ppb	06:48:09
3	Cr 267.716†	3612.4	3543.8	38.944	ug/L	38.944 ppb	06:48:09
3	Cu 324.752†	24370.0	17681.4	54.705	ug/L	54.705 ppb	06:47:49
3	Mn 257.610†	1933631.6	1938608.8	2075.8	ug/L	2075.8 ppb	06:47:43
3	Mo 202.031†	102.9	84.8	11.100	ug/L	11.100 ppb	06:48:09
3	Ni 231.604†	1569.6	1487.4	34.428	ug/L	34.428 ppb	06:48:09
3	P 214.914†	3713.1	3500.0	1954.6	ug/L	1954.6 ppb	06:48:09
3	Pb 220.353†	439.6	509.3	57.199	ug/L	57.199 ppb	06:48:09
3	S 181.975 Axial†	287.8	247.0	340.66	ug/L	340.66 ppb	06:48:09
3	Sb 206.836†	54.3	20.2	-1.4244	ug/L	-1.4244 ppb	06:48:09
3	Se 196.026†	-346.0	-318.2	74.737	ug/L	74.737 ppb	06:48:09
3	Si 251.611†	823266.7	825115.9	24699	ug/L	24699 ppb	06:47:43
3	Sn 189.927†	-133.1	-138.4	-19.219	ug/L	-19.219 ppb	06:48:09
3	Ti 334.940†	1721216.2	1727137.5	2757.4	ug/L	2757.4 ppb	06:47:43
3	Tl 190.801†	-167.8	-135.7	-4.4219	ug/L	-4.4219 ppb	06:48:09
3	U 409.014†	-8133.4	-5754.2	-168.71	ug/L	-168.71 ppb	06:47:43
3	V 292.402†	20304.0	21719.1	128.14	ug/L	128.14 ppb	06:47:49
3	Zn 213.857†	32646.2	32115.5	272.28	ug/L	272.28 ppb	06:47:49
3	SiO2†	817923.3	819739.8	52580	ug/L	52580 ppb	06:48:27

Mean Data: 241613017|925482|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899753.7	99.832	%	0.1065				0.11%
Sc Radial	5823.2	99.6	%	0.83				0.83%
Y 371.029	860437.8	114.56	%	0.102				0.09%
Y RADIAL	7280.8	115.8	%	0.37				0.32%
Ag 328.068†	-5396.3	1.3502	ug/L	0.06126	1.3502	ppb	0.06126	4.54%
Al 396.153Radial†	39840.1	27674	ug/L	242.1	27674	ppb	242.1	0.87%
As 188.979†	-84.4	2.1319	ug/L	2.19889	2.1319	ppb	2.19889	103.14%
B 249.677†	1164.1	13.749	ug/L	1.0208	13.749	ppb	1.0208	7.42%
Ba 233.527†	96212.1	716.33	ug/L	4.657	716.33	ppb	4.657	0.65%
Be 313.107†	-6022.8	3.2322	ug/L	0.05575	3.2322	ppb	0.05575	1.72%
Ca 317.933Radial†	15283.2	22527	ug/L	195.9	22527	ppb	195.9	0.87%
Cd 226.502†	849.9	1.0179	ug/L	0.00913	1.0179	ppb	0.00913	0.90%
Co 228.616†	1287.8	17.747	ug/L	0.1363	17.747	ppb	0.1363	0.77%
Cr 267.716†	3516.5	38.644	ug/L	0.3317	38.644	ppb	0.3317	0.86%
Cu 324.752†	17554.2	54.311	ug/L	0.6477	54.311	ppb	0.6477	1.19%
Fe 238.204 Radial†	8535.3	79906	ug/L	537.7	79906	ppb	537.7	0.67%
K 766.490 Radial†	31940.1	5640.8	ug/L	51.64	5640.8	ppb	51.64	0.92%

Mg 279.077 IEC†	270.2	9465.1	ug/L	115.34	9465.1	ppb	115.34	1.22%
Mn 257.610†	1942396.6	2079.8	ug/L	3.45	2079.8	ppb	3.45	0.17%
Mo 202.031†	80.5	10.781	ug/L	0.6306	10.781	ppb	0.6306	5.85%
Na 589.592 Radial†	7660.8	2570.8	ug/L	19.43	2570.8	ppb	19.43	0.76%
Ni 231.604†	1485.9	34.392	ug/L	0.1087	34.392	ppb	0.1087	0.32%
P 214.914†	3470.4	1938.0	ug/L	14.82	1938.0	ppb	14.82	0.76%
Pb 220.353†	500.4	56.193	ug/L	1.4582	56.193	ppb	1.4582	2.59%
S 181.975 Axial†	243.5	335.76	ug/L	5.817	335.76	ppb	5.817	1.73%
Sb 206.836†	19.3	-1.7546	ug/L	1.71781	-1.7546	ppb	1.71781	97.90%
Se 196.026†	-315.0	74.646	ug/L	0.2335	74.646	ppb	0.2335	0.31%
Si 251.611†	827036.7	24756	ug/L	50.3	24756	ppb	50.3	0.20%
Sn 189.927†	-141.5	-19.747	ug/L	0.4797	-19.747	ppb	0.4797	2.43%
Sr 421.552†	25816.3	160.57	ug/L	0.942	160.57	ppb	0.942	0.59%
Ti 334.940†	1730379.8	2762.6	ug/L	4.55	2762.6	ppb	4.55	0.16%
Tl 190.801†	-135.2	-4.2104	ug/L	0.35387	-4.2104	ppb	0.35387	8.40%
U 409.014†	-5630.6	-165.23	ug/L	3.447	-165.23	ppb	3.447	2.09%
V 292.402†	21587.2	127.36	ug/L	0.902	127.36	ppb	0.902	0.71%
Zn 213.857†	31911.8	270.56	ug/L	1.946	270.56	ppb	1.946	0.72%
SiO2†	827188.7	53058	ug/L	451.8	53058	ppb	451.8	0.85%

Sequence No.: 137
Sample ID: 241613018|925482|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 134
Date Collected: 12/9/2009 06:50:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241613018|925482|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5730.1	5730.1	98.1	%			06:52:53
1	Y RADIAL	6507.0	6507.0	103.5	%			06:52:53
1	Al 396.153Radial†	92877.0	94742.3	65810	ug/L	65810	ppb	06:52:33
1	Ca 317.933Radial†	37728.5	38462.4	56691	ug/L	56691	ppb	06:52:33
1	Fe 238.204 Radial†	11836.6	12064.9	112950	ug/L	112950	ppb	06:52:33
1	K 766.490 Radial†	84554.2	83882.1	14850	ug/L	14850	ppb	06:52:33
1	Mg 279.077 IEC†	518.9	528.1	18533	ug/L	18533	ppb	06:52:53
1	Na 589.592 Radial†	3134.1	4284.3	1437.7	ug/L	1437.7	ppb	06:52:33
1	Sr 421.552†	50968.5	52008.2	323.37	ug/L	323.37	ppb	06:52:33
1	Sc 361.383	908239.7	908239.7	100.77	%			06:53:51
1	Y 371.029	788405.4	788405.4	104.97	%			06:53:51
1	Ag 328.068†	-7146.1	-7384.0	2.6473	ug/L	2.6473	ppb	06:53:56
1	As 188.979†	-69.7	-45.0	22.293	ug/L	22.293	ppb	06:54:16
1	B 249.677†	1234.2	1755.4	21.696	ug/L	21.696	ppb	06:53:56
1	Ba 233.527†	146651.3	145533.5	1083.3	ug/L	1083.3	ppb	06:53:56
1	Be 313.107†	-1959.3	3168.8	6.4529	ug/L	6.4529	ppb	06:53:56
1	Cd 226.502†	939.8	1127.7	0.6654	ug/L	0.6654	ppb	06:54:16
1	Co 228.616†	2701.6	2746.2	45.223	ug/L	45.223	ppb	06:54:16
1	Cr 267.716†	7210.9	7076.9	76.739	ug/L	76.739	ppb	06:53:56
1	Cu 324.752†	26595.5	19634.6	61.950	ug/L	61.950	ppb	06:53:56
1	Mn 257.610†	2347613.1	2329160.5	2495.5	ug/L	2495.5	ppb	06:53:51
1	Mo 202.031†	-20.2	-38.4	5.5726	ug/L	5.5726	ppb	06:54:16
1	Ni 231.604†	2556.3	2450.1	56.702	ug/L	56.702	ppb	06:54:16
1	P 214.914†	1728.4	1491.6	781.94	ug/L	781.94	ppb	06:54:16
1	Pb 220.353†	632.7	696.3	84.160	ug/L	84.160	ppb	06:54:16
1	S 181.975 Axial†	414.5	369.7	505.12	ug/L	505.12	ppb	06:54:16
1	Sb 206.836†	61.3	26.6	-0.9306	ug/L	-0.9306	ppb	06:54:16
1	Se 196.026†	-463.1	-430.8	118.72	ug/L	118.72	ppb	06:54:16
1	Si 251.611†	1118254.3	1109216.1	33200	ug/L	33200	ppb	06:53:51
1	Sn 189.927†	-228.9	-232.1	-30.574	ug/L	-30.574	ppb	06:54:16
1	Ti 334.940†	1700973.5	1689024.5	2698.3	ug/L	2698.3	ppb	06:53:51
1	Tl 190.801†	-168.9	-135.1	-1.5564	ug/L	-1.5564	ppb	06:54:16
1	U 409.014†	-7055.4	-4599.4	-141.05	ug/L	-141.05	ppb	06:53:51
1	V 292.402†	32361.7	33471.5	201.04	ug/L	201.04	ppb	06:53:56
1	Zn 213.857†	29593.4	28744.3	239.27	ug/L	239.27	ppb	06:53:56
1	SiO2†	1117078.9	1108032.0	71067	ug/L	71067	ppb	06:55:24
2	Sc Radial	5780.7	5780.7	98.9	%			06:53:18
2	Y RADIAL	6559.4	6559.4	104.3	%			06:53:18
2	Al 396.153Radial†	93146.8	94185.3	65423	ug/L	65423	ppb	06:52:58
2	Ca 317.933Radial†	37882.6	38281.1	56424	ug/L	56424	ppb	06:52:58
2	Fe 238.204 Radial†	11861.7	11984.6	112200	ug/L	112200	ppb	06:52:58
2	K 766.490 Radial†	84952.5	83529.3	14787	ug/L	14787	ppb	06:52:58
2	Mg 279.077 IEC†	525.4	530.0	18602	ug/L	18602	ppb	06:53:18
2	Na 589.592 Radial†	3153.9	4276.3	1435.0	ug/L	1435.0	ppb	06:52:58
2	Sr 421.552†	51115.1	51701.1	321.46	ug/L	321.46	ppb	06:52:58
2	Sc 361.383	903448.2	903448.2	100.24	%			06:54:22
2	Y 371.029	784772.1	784772.1	104.49	%			06:54:22
2	Ag 328.068†	-7073.9	-7349.6	2.5729	ug/L	2.5729	ppb	06:54:27
2	As 188.979†	-73.6	-49.2	20.519	ug/L	20.519	ppb	06:54:47
2	B 249.677†	1189.7	1717.5	21.000	ug/L	21.000	ppb	06:54:27
2	Ba 233.527†	146913.3	146566.6	1090.9	ug/L	1090.9	ppb	06:54:27
2	Be 313.107†	-1934.9	3182.8	6.4590	ug/L	6.4590	ppb	06:54:27
2	Cd 226.502†	926.6	1119.5	0.6543	ug/L	0.6543	ppb	06:54:47
2	Co 228.616†	2703.9	2762.8	45.551	ug/L	45.551	ppb	06:54:47
2	Cr 267.716†	7226.5	7130.4	77.290	ug/L	77.290	ppb	06:54:27
2	Cu 324.752†	26549.8	19728.9	62.182	ug/L	62.182	ppb	06:54:27
2	Mn 257.610†	2331013.4	2324956.1	2491.0	ug/L	2491.0	ppb	06:54:22
2	Mo 202.031†	-18.7	-36.9	5.6121	ug/L	5.6121	ppb	06:54:47
2	Ni 231.604†	2566.4	2473.6	57.247	ug/L	57.247	ppb	06:54:47

2	P 214.914†	1747.6	1519.9	798.64	ug/L	798.64 ppb	06:54:47
2	Pb 220.353†	638.5	705.4	85.161	ug/L	85.161 ppb	06:54:47
2	S 181.975 Axial†	407.6	365.0	498.59	ug/L	498.59 ppb	06:54:47
2	Sb 206.836†	54.6	20.2	-2.9766	ug/L	-2.9766 ppb	06:54:47
2	Se 196.026†	-466.1	-436.1	113.20	ug/L	113.20 ppb	06:54:47
2	Si 251.611†	1112224.1	1109085.8	33197	ug/L	33197 ppb	06:54:22
2	Sn 189.927†	-232.6	-237.0	-31.410	ug/L	-31.410 ppb	06:54:47
2	Ti 334.940†	1692333.2	1689357.1	2698.9	ug/L	2698.9 ppb	06:54:22
2	Tl 190.801†	-173.5	-140.5	-3.1064	ug/L	-3.1064 ppb	06:54:47
2	U 409.014†	-6977.1	-4558.4	-139.83	ug/L	-139.83 ppb	06:54:22
2	V 292.402†	32426.7	33706.6	202.71	ug/L	202.71 ppb	06:54:27
2	Zn 213.857†	29655.3	28961.8	241.24	ug/L	241.24 ppb	06:54:27
2	SiO2†	1110284.8	1107133.4	71009	ug/L	71009 ppb	06:55:30
3	Sc Radial	5826.6	5826.6	99.7	%		06:53:43
3	Y RADIAL	6605.1	6605.1	105.0	%		06:53:43
3	Al 396.153Radial†	93110.2	93408.1	64883	ug/L	64883 ppb	06:53:23
3	Ca 317.933Radial†	37926.7	38024.1	56045	ug/L	56045 ppb	06:53:23
3	Fe 238.204 Radial†	11869.5	11898.1	111390	ug/L	111390 ppb	06:53:23
3	K 766.490 Radial†	85045.4	82947.1	14684	ug/L	14684 ppb	06:53:23
3	Mg 279.077 IEC†	526.2	526.7	18484	ug/L	18484 ppb	06:53:43
3	Na 589.592 Radial†	3145.7	4243.0	1423.9	ug/L	1423.9 ppb	06:53:23
3	Sr 421.552†	51094.5	51274.1	318.80	ug/L	318.80 ppb	06:53:23
3	Sc 361.383	900162.2	900162.2	99.878	%		06:54:53
3	Y 371.029	783498.3	783498.3	104.32	%		06:54:53
3	Ag 328.068†	-7047.5	-7348.9	2.3290	ug/L	2.3290 ppb	06:54:58
3	As 188.979†	-56.0	-31.9	27.226	ug/L	27.226 ppb	06:55:18
3	B 249.677†	1219.6	1751.8	21.826	ug/L	21.826 ppb	06:54:58
3	Ba 233.527†	147228.0	147416.7	1097.2	ug/L	1097.2 ppb	06:54:58
3	Be 313.107†	-1993.7	3116.9	6.4298	ug/L	6.4298 ppb	06:54:58
3	Cd 226.502†	927.3	1123.5	0.7781	ug/L	0.7781 ppb	06:55:18
3	Co 228.616†	2727.3	2796.0	46.199	ug/L	46.199 ppb	06:55:18
3	Cr 267.716†	7269.2	7199.4	78.002	ug/L	78.002 ppb	06:54:58
3	Cu 324.752†	26587.9	19863.7	62.527	ug/L	62.527 ppb	06:54:58
3	Mn 257.610†	2322608.9	2325029.9	2491.0	ug/L	2491.0 ppb	06:54:53
3	Mo 202.031†	-25.4	-43.8	5.1183	ug/L	5.1183 ppb	06:55:18
3	Ni 231.604†	2569.2	2485.8	57.528	ug/L	57.528 ppb	06:55:18
3	P 214.914†	1757.1	1535.7	808.21	ug/L	808.21 ppb	06:55:18
3	Pb 220.353†	639.0	708.2	85.429	ug/L	85.429 ppb	06:55:18
3	S 181.975 Axial†	416.8	375.7	513.69	ug/L	513.69 ppb	06:55:18
3	Sb 206.836†	67.5	33.3	1.1618	ug/L	1.1618 ppb	06:55:18
3	Se 196.026†	-466.3	-438.0	109.44	ug/L	109.44 ppb	06:55:18
3	Si 251.611†	1106854.3	1107759.7	33157	ug/L	33157 ppb	06:54:53
3	Sn 189.927†	-229.5	-234.8	-31.095	ug/L	-31.095 ppb	06:55:18
3	Ti 334.940†	1684519.5	1687696.6	2696.2	ug/L	2696.2 ppb	06:54:53
3	Tl 190.801†	-176.2	-143.9	-4.1039	ug/L	-4.1039 ppb	06:55:18
3	U 409.014†	-7015.9	-4622.6	-141.50	ug/L	-141.50 ppb	06:54:53
3	V 292.402†	32457.9	33856.0	203.81	ug/L	203.81 ppb	06:54:58
3	Zn 213.857†	29733.2	29147.7	242.94	ug/L	242.94 ppb	06:54:58
3	SiO2†	1120428.1	1121332.3	71920	ug/L	71920 ppb	06:55:36

Mean Data: 241613018|925482|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903950.0	100.30	%	0.451				0.45%
Sc Radial	5779.1	98.9	%	0.83				0.83%
Y 371.029	785558.6	104.59	%	0.339				0.32%
Y RADIAL	6557.2	104.3	%	0.78				0.75%
Ag 328.068†	-7360.8	2.5164	ug/L	0.16648	2.5164	ppb	0.16648	6.62%
Al 396.153Radial†	94111.9	65372	ug/L	465.5	65372	ppb	465.5	0.71%
As 188.979†	-42.0	23.346	ug/L	3.4748	23.346	ppb	3.4748	14.88%
B 249.677†	1741.5	21.507	ug/L	0.4442	21.507	ppb	0.4442	2.07%
Ba 233.527†	146505.6	1090.4	ug/L	6.96	1090.4	ppb	6.96	0.64%
Be 313.107†	3156.1	6.4472	ug/L	0.01541	6.4472	ppb	0.01541	0.24%
Ca 317.933Radial†	38255.9	56387	ug/L	324.6	56387	ppb	324.6	0.58%
Cd 226.502†	1123.6	0.6993	ug/L	0.06853	0.6993	ppb	0.06853	9.80%
Co 228.616†	2768.4	45.658	ug/L	0.4971	45.658	ppb	0.4971	1.09%
Cr 267.716†	7135.6	77.343	ug/L	0.6332	77.343	ppb	0.6332	0.82%
Cu 324.752†	19742.4	62.220	ug/L	0.2899	62.220	ppb	0.2899	0.47%
Fe 238.204 Radial†	11982.5	112180	ug/L	781.2	112180	ppb	781.2	0.70%
K 766.490 Radial†	83452.8	14773	ug/L	83.8	14773	ppb	83.8	0.57%

Mg 279.077 IEC†	528.2	18540	ug/L	58.9	18540	ppb	58.9	0.32%
Mn 257.610†	2326382.2	2492.5	ug/L	2.63	2492.5	ppb	2.63	0.11%
Mo 202.031†	-39.7	5.4343	ug/L	0.27441	5.4343	ppb	0.27441	5.05%
Na 589.592 Radial†	4267.9	1432.2	ug/L	7.35	1432.2	ppb	7.35	0.51%
Ni 231.604†	2469.8	57.159	ug/L	0.4202	57.159	ppb	0.4202	0.74%
P 214.914†	1515.8	796.26	ug/L	13.294	796.26	ppb	13.294	1.67%
Pb 220.353†	703.3	84.917	ug/L	0.6686	84.917	ppb	0.6686	0.79%
S 181.975 Axial†	370.1	505.80	ug/L	7.571	505.80	ppb	7.571	1.50%
Sb 206.836†	26.7	-0.9152	ug/L	2.06925	-0.9152	ppb	2.06925	226.11%
Se 196.026†	-435.0	113.79	ug/L	4.668	113.79	ppb	4.668	4.10%
Si 251.611†	1108687.2	33185	ug/L	24.1	33185	ppb	24.1	0.07%
Sn 189.927†	-234.6	-31.026	ug/L	0.4221	-31.026	ppb	0.4221	1.36%
Sr 421.552†	51661.2	321.21	ug/L	2.293	321.21	ppb	2.293	0.71%
Ti 334.940†	1688692.7	2697.8	ug/L	1.42	2697.8	ppb	1.42	0.05%
Tl 190.801†	-139.9	-2.9222	ug/L	1.28369	-2.9222	ppb	1.28369	43.93%
U 409.014†	-4593.5	-140.80	ug/L	0.863	-140.80	ppb	0.863	0.61%
V 292.402†	33678.1	202.52	ug/L	1.396	202.52	ppb	1.396	0.69%
Zn 213.857†	28951.3	241.15	ug/L	1.836	241.15	ppb	1.836	0.76%
SiO2†	1112165.9	71332	ug/L	510.1	71332	ppb	510.1	0.72%

Sequence No.: 138
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 06:57:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5871.0	5871.0	100	%			06:59:40
1	Y RADIAL	6244.2	6244.2	99.31	%			06:59:40
1	Al 396.153Radial†	6802.2	6791.3	4695.6	ug/L	4695.6	ppb	06:59:40
1	Ca 317.933Radial†	3300.7	3269.9	4819.6	ug/L	4819.6	ppb	07:00:00
1	Fe 238.204 Radial†	533.3	524.0	4922.1	ug/L	4922.1	ppb	07:00:00
1	K 766.490 Radial†	31101.8	28606.5	5064.3	ug/L	5064.3	ppb	06:59:40
1	Mg 279.077 IEC†	141.5	139.7	4934.7	ug/L	4934.7	ppb	07:00:00
1	Na 589.592 Radial†	27698.5	28658.5	9617.3	ug/L	9617.3	ppb	06:59:40
1	Sr 421.552†	79738.5	79397.8	494.42	ug/L	494.42	ppb	06:59:40
1	Sc 361.383	875802.7	875802.7	97.175	%			07:00:57
1	Y 371.029	711763.0	711763.0	94.765	%			07:00:57
1	Ag 328.068†	110981.1	113914.8	518.96	ug/L	518.96	ppb	07:01:02
1	As 188.979†	1175.7	1234.0	492.11	ug/L	492.11	ppb	07:01:22
1	B 249.677†	22087.9	23260.7	485.85	ug/L	485.85	ppb	07:01:02
1	Ba 233.527†	66078.8	68008.3	505.32	ug/L	505.32	ppb	07:01:02
1	Be 313.107†	1305360.3	1348423.0	492.52	ug/L	492.52	ppb	07:00:57
1	Cd 226.502†	46241.6	47781.1	504.94	ug/L	504.94	ppb	07:01:02
1	Co 228.616†	26075.3	26898.8	510.65	ug/L	510.65	ppb	07:01:02
1	Cr 267.716†	46186.1	47450.1	498.90	ug/L	498.90	ppb	07:01:02
1	Cu 324.752†	177089.6	175481.2	502.43	ug/L	502.43	ppb	07:01:02
1	Mn 257.610†	464741.4	477830.2	510.12	ug/L	510.12	ppb	07:00:57
1	Mo 202.031†	7795.7	8004.0	508.81	ug/L	508.81	ppb	07:01:22
1	Ni 231.604†	21140.3	21668.4	501.44	ug/L	501.44	ppb	07:01:02
1	P 214.914†	4483.9	4390.8	2456.4	ug/L	2456.4	ppb	07:01:22
1	Pb 220.353†	4224.4	4415.6	500.68	ug/L	500.68	ppb	07:01:22
1	S 181.975 Axial†	736.2	716.0	1002.4	ug/L	1002.4	ppb	07:01:22
1	Sb 206.836†	1618.0	1630.8	523.65	ug/L	523.65	ppb	07:01:22
1	Se 196.026†	829.4	882.3	528.06	ug/L	528.06	ppb	07:01:22
1	Si 251.611†	83606.7	85587.7	2550.0	ug/L	2550.0	ppb	07:01:02
1	Sn 189.927†	3025.4	3108.4	509.51	ug/L	509.51	ppb	07:01:22
1	Ti 334.940†	315061.6	325336.1	519.02	ug/L	519.02	ppb	07:01:02
1	Tl 190.801†	1693.0	1774.7	500.40	ug/L	500.40	ppb	07:01:22
1	U 409.014†	16167.8	19039.7	522.91	ug/L	522.91	ppb	07:01:02
1	V 292.402†	71875.5	75323.4	504.38	ug/L	504.38	ppb	07:01:02
1	Zn 213.857†	56578.5	57601.6	498.79	ug/L	498.79	ppb	07:01:02
1	SiO2†	83872.4	85843.3	5480.2	ug/L	5480.2	ppb	07:02:30
2	Sc Radial	5640.7	5640.7	96.5	%			07:00:05
2	Y RADIAL	5987.9	5987.9	95.23	%			07:00:05
2	Al 396.153Radial†	6773.0	7037.4	4867.6	ug/L	4867.6	ppb	07:00:05
2	Ca 317.933Radial†	3299.2	3402.4	5015.0	ug/L	5015.0	ppb	07:00:25
2	Fe 238.204 Radial†	530.6	543.0	5098.4	ug/L	5098.4	ppb	07:00:25
2	K 766.490 Radial†	30850.0	29609.5	5242.2	ug/L	5242.2	ppb	07:00:05
2	Mg 279.077 IEC†	142.0	145.9	5154.2	ug/L	5154.2	ppb	07:00:25
2	Na 589.592 Radial†	27343.1	29416.0	9871.4	ug/L	9871.4	ppb	07:00:05
2	Sr 421.552†	79402.4	82289.9	512.43	ug/L	512.43	ppb	07:00:05
2	Sc 361.383	914311.9	914311.9	101.45	%			07:01:28
2	Y 371.029	744121.3	744121.3	99.073	%			07:01:28
2	Ag 328.068†	110654.7	108782.9	495.70	ug/L	495.70	ppb	07:01:33
2	As 188.979†	1177.7	1185.1	472.63	ug/L	472.63	ppb	07:01:53
2	B 249.677†	22150.3	22364.9	467.10	ug/L	467.10	ppb	07:01:33
2	Ba 233.527†	65891.0	64959.2	482.68	ug/L	482.68	ppb	07:01:33
2	Be 313.107†	1308685.6	1295122.9	473.05	ug/L	473.05	ppb	07:01:28
2	Cd 226.502†	46249.7	45784.8	483.81	ug/L	483.81	ppb	07:01:33
2	Co 228.616†	26049.9	25743.5	488.71	ug/L	488.71	ppb	07:01:33
2	Cr 267.716†	45970.5	45235.8	475.62	ug/L	475.62	ppb	07:01:33
2	Cu 324.752†	176024.5	166755.9	477.47	ug/L	477.47	ppb	07:01:33
2	Mn 257.610†	465035.3	457976.7	488.95	ug/L	488.95	ppb	07:01:28
2	Mo 202.031†	7732.4	7603.8	483.40	ug/L	483.40	ppb	07:01:53
2	Ni 231.604†	21145.4	20757.1	480.35	ug/L	480.35	ppb	07:01:33

2	P 214.914†	4452.0	4165.0	2329.7 ug/L	2329.7 ppb	07:01:53
2	Pb 220.353†	4200.9	4209.4	477.34 ug/L	477.34 ppb	07:01:53
2	S 181.975 Axial†	741.1	688.9	964.39 ug/L	964.39 ppb	07:01:53
2	Sb 206.836†	1600.3	1543.2	495.48 ug/L	495.48 ppb	07:01:53
2	Se 196.026†	824.7	841.8	505.14 ug/L	505.14 ppb	07:01:53
2	Si 251.611†	83463.0	81822.3	2437.7 ug/L	2437.7 ppb	07:01:33
2	Sn 189.927†	2998.5	2950.7	483.71 ug/L	483.71 ppb	07:01:53
2	Ti 334.940†	314427.1	311055.0	496.26 ug/L	496.26 ppb	07:01:33
2	Tl 190.801†	1698.3	1706.6	481.18 ug/L	481.18 ppb	07:01:53
2	U 409.014†	16065.7	18238.2	500.86 ug/L	500.86 ppb	07:01:33
2	V 292.402†	71698.5	72033.7	482.26 ug/L	482.26 ppb	07:01:33
2	Zn 213.857†	56502.7	55074.5	476.85 ug/L	476.85 ppb	07:01:33
2	SiO2†	83335.8	81679.1	5214.1 ug/L	5214.1 ppb	07:02:35
3	Sc Radial	5610.8	5610.8	96.0 %		07:00:30
3	Y RADIAL	5950.7	5950.7	94.64 %		07:00:30
3	Al 396.153Radial†	6646.8	6943.4	4802.0 ug/L	4802.0 ppb	07:00:30
3	Ca 317.933Radial†	3303.0	3424.6	5047.7 ug/L	5047.7 ppb	07:00:50
3	Fe 238.204 Radial†	533.4	548.8	5153.4 ug/L	5153.4 ppb	07:00:50
3	K 766.490 Radial†	30343.4	29252.4	5178.9 ug/L	5178.9 ppb	07:00:30
3	Mg 279.077 IEC†	144.0	148.8	5255.1 ug/L	5255.1 ppb	07:00:50
3	Na 589.592 Radial†	26984.7	29193.8	9796.9 ug/L	9796.9 ppb	07:00:30
3	Sr 421.552†	77838.1	81099.3	505.02 ug/L	505.02 ppb	07:00:30
3	Sc 361.383	903776.7	903776.7	100.28 %		07:01:59
3	Y 371.029	735415.0	735415.0	97.914 %		07:01:59
3	Ag 328.068†	111287.8	110685.7	504.37 ug/L	504.37 ppb	07:02:04
3	As 188.979†	1177.7	1198.6	478.05 ug/L	478.05 ppb	07:02:24
3	B 249.677†	22376.9	22845.4	477.15 ug/L	477.15 ppb	07:02:04
3	Ba 233.527†	66287.0	66111.2	491.24 ug/L	491.24 ppb	07:02:04
3	Be 313.107†	1295453.9	1296965.5	473.74 ug/L	473.74 ppb	07:01:59
3	Cd 226.502†	46455.3	46521.2	491.59 ug/L	491.59 ppb	07:02:04
3	Co 228.616†	26112.7	26105.5	495.58 ug/L	495.58 ppb	07:02:04
3	Cr 267.716†	46178.5	45971.5	483.36 ug/L	483.36 ppb	07:02:04
3	Cu 324.752†	177485.2	170235.1	487.43 ug/L	487.43 ppb	07:02:04
3	Mn 257.610†	460397.6	458695.3	489.72 ug/L	489.72 ppb	07:01:59
3	Mo 202.031†	7772.0	7732.1	491.55 ug/L	491.55 ppb	07:02:24
3	Ni 231.604†	21247.7	21102.1	488.33 ug/L	488.33 ppb	07:02:04
3	P 214.914†	4465.0	4229.1	2365.1 ug/L	2365.1 ppb	07:02:24
3	Pb 220.353†	4222.9	4279.6	485.28 ug/L	485.28 ppb	07:02:24
3	S 181.975 Axial†	740.5	696.8	975.52 ug/L	975.52 ppb	07:02:24
3	Sb 206.836†	1615.4	1576.7	506.22 ug/L	506.22 ppb	07:02:24
3	Se 196.026†	833.1	859.6	515.61 ug/L	515.61 ppb	07:02:24
3	Si 251.611†	83954.9	83271.8	2481.0 ug/L	2481.0 ppb	07:02:04
3	Sn 189.927†	3019.3	3006.0	492.77 ug/L	492.77 ppb	07:02:24
3	Ti 334.940†	316203.8	316439.7	504.85 ug/L	504.85 ppb	07:02:04
3	Tl 190.801†	1697.1	1724.9	486.34 ug/L	486.34 ppb	07:02:24
3	U 409.014†	16010.2	18367.5	504.40 ug/L	504.40 ppb	07:02:04
3	V 292.402†	72032.3	73190.4	490.01 ug/L	490.01 ppb	07:02:04
3	Zn 213.857†	56753.5	55973.9	484.64 ug/L	484.64 ppb	07:02:04
3	SiO2†	84041.9	83340.8	5320.4 ug/L	5320.4 ppb	07:02:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897963.8	99.634	%	2.2082				2.22%
Sc Radial	5707.5	97.7	%	2.44				2.49%
Y 371.029	730433.1	97.251	%	2.2294				2.29%
Y RADIAL	6060.9	96.39	%	2.542				2.64%
Ag 328.068†	111127.8	506.34	ug/L	11.754	506.34	ppb	11.754	2.32%
QC value within limits for Ag 328.068 Recovery = 101.27%								
Al 396.153Radial†	6924.0	4788.4	ug/L	86.83	4788.4	ppb	86.83	1.81%
QC value within limits for Al 396.153Radial Recovery = 95.77%								
As 188.979†	1205.9	480.93	ug/L	10.053	480.93	ppb	10.053	2.09%
QC value within limits for As 188.979 Recovery = 96.19%								
B 249.677†	22823.6	476.70	ug/L	9.385	476.70	ppb	9.385	1.97%
QC value within limits for B 249.677 Recovery = 95.34%								
Ba 233.527†	66359.6	493.08	ug/L	11.432	493.08	ppb	11.432	2.32%
QC value within limits for Ba 233.527 Recovery = 98.62%								
Be 313.107†	1313503.8	479.77	ug/L	11.049	479.77	ppb	11.049	2.30%
QC value within limits for Be 313.107 Recovery = 95.95%								
Ca 317.933Radial†	3365.6	4960.8	ug/L	123.31	4960.8	ppb	123.31	2.49%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.22%
Cd 226.502†            46695.7      493.45 ug/L        10.689      493.45 ppb        10.689   2.17%
   QC value within limits for Cd 226.502  Recovery = 98.69%
Co 228.616†            26249.3      498.31 ug/L        11.225      498.31 ppb        11.225   2.25%
   QC value within limits for Co 228.616  Recovery = 99.66%
Cr 267.716†            46219.1      485.96 ug/L        11.852      485.96 ppb        11.852   2.44%
   QC value within limits for Cr 267.716  Recovery = 97.19%
Cu 324.752†           170824.1      489.11 ug/L        12.565      489.11 ppb        12.565   2.57%
   QC value within limits for Cu 324.752  Recovery = 97.82%
Fe 238.204 Radial†       538.6      5058.0 ug/L        120.84      5058.0 ppb        120.84   2.39%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.16%
K 766.490 Radial†      29156.1      5161.8 ug/L         90.19      5161.8 ppb         90.19   1.75%
   QC value within limits for K 766.490 Radial  Recovery = 103.24%
Mg 279.077 IEC†          144.8      5114.7 ug/L        163.81      5114.7 ppb        163.81   3.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.29%
Mn 257.610†           464834.0      496.27 ug/L        12.003      496.27 ppb        12.003   2.42%
   QC value within limits for Mn 257.610  Recovery = 99.25%
Mo 202.031†             7780.0      494.59 ug/L        12.976      494.59 ppb        12.976   2.62%
   QC value within limits for Mo 202.031  Recovery = 98.92%
Na 589.592 Radial†     29089.4      9761.9 ug/L        130.66      9761.9 ppb        130.66   1.34%
   QC value within limits for Na 589.592 Radial  Recovery = 97.62%
Ni 231.604†            21175.9      490.04 ug/L        10.648      490.04 ppb        10.648   2.17%
   QC value within limits for Ni 231.604  Recovery = 98.01%
P 214.914†              4261.6      2383.8 ug/L         65.34      2383.8 ppb         65.34   2.74%
   QC value within limits for P 214.914  Recovery = 95.35%
Pb 220.353†             4301.5      487.77 ug/L        11.864      487.77 ppb        11.864   2.43%
   QC value within limits for Pb 220.353  Recovery = 97.55%
S 181.975 Axial†         700.6      980.78 ug/L        19.558      980.78 ppb        19.558   1.99%
   QC value within limits for S 181.975 Axial  Recovery = 98.08%
Sb 206.836†             1583.6      508.45 ug/L        14.215      508.45 ppb        14.215   2.80%
   QC value within limits for Sb 206.836  Recovery = 101.69%
Se 196.026†              861.2      516.27 ug/L        11.473      516.27 ppb        11.473   2.22%
   QC value within limits for Se 196.026  Recovery = 103.25%
Si 251.611†            83560.6      2489.6 ug/L         56.62      2489.6 ppb         56.62   2.27%
   QC value within limits for Si 251.611  Recovery = 99.58%
Sn 189.927†             3021.7      495.33 ug/L        13.089      495.33 ppb        13.089   2.64%
   QC value within limits for Sn 189.927  Recovery = 99.07%
Sr 421.552†            80929.0      503.96 ug/L         9.051      503.96 ppb         9.051   1.80%
   QC value within limits for Sr 421.552  Recovery = 100.79%
Ti 334.940†           317610.2      506.71 ug/L        11.494      506.71 ppb        11.494   2.27%
   QC value within limits for Ti 334.940  Recovery = 101.34%
Tl 190.801†             1735.4      489.31 ug/L         9.948      489.31 ppb         9.948   2.03%
   QC value within limits for Tl 190.801  Recovery = 97.86%
U 409.014†             18548.5      509.39 ug/L        11.845      509.39 ppb        11.845   2.33%
   QC value within limits for U 409.014  Recovery = 101.88%
V 292.402†             73515.8      492.22 ug/L        11.226      492.22 ppb        11.226   2.28%
   QC value within limits for V 292.402  Recovery = 98.44%
Zn 213.857†            56216.7      486.76 ug/L        11.121      486.76 ppb        11.121   2.28%
   QC value within limits for Zn 213.857  Recovery = 97.35%
SiO2†                  83621.1      5338.2 ug/L        133.96      5338.2 ppb        133.96   2.51%
   QC value within limits for SiO2  Recovery = 99.83%
All analyte(s) passed QC.
```

Sequence No.: 139
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 07:04:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6240.7	6240.7	107	%			07:06:42
1	Y RADIAL	6654.4	6654.4	105.8	%			07:06:42
1	Al 396.153Radial†	-31.4	-9.0	-6.2720	ug/L	-6.2720	ppb	07:07:02
1	Ca 317.933Radial†	31.2	13.6	20.026	ug/L	20.026	ppb	07:07:02
1	Fe 238.204 Radial†	7.0	-0.2	-2.2178	ug/L	-2.2178	ppb	07:07:02
1	K 766.490 Radial†	2303.6	-194.6	-34.586	ug/L	-34.586	ppb	07:06:42
1	Mg 279.077 IEC†	3.2	1.8	64.539	ug/L	64.539	ppb	07:07:02
1	Na 589.592 Radial†	-645.9	483.1	162.12	ug/L	162.12	ppb	07:06:42
1	Sr 421.552†	1.9	29.1	0.1810	ug/L	0.1810	ppb	07:06:42
1	Sc 361.383	885275.4	885275.4	98.226	%			07:07:59
1	Y 371.029	732340.1	732340.1	97.504	%			07:07:59
1	Ag 328.068†	268.5	-19.4	-0.0860	ug/L	-0.0860	ppb	07:08:04
1	As 188.979†	-19.9	3.9	1.5417	ug/L	1.5417	ppb	07:08:24
1	B 249.677†	-386.2	137.5	2.8849	ug/L	2.8849	ppb	07:08:24
1	Ba 233.527†	-29.4	-21.5	-0.1583	ug/L	-0.1583	ppb	07:08:24
1	Be 313.107†	-5508.1	-494.6	-0.1801	ug/L	-0.1801	ppb	07:08:04
1	Cd 226.502†	-180.9	11.0	0.1159	ug/L	0.1159	ppb	07:08:24
1	Co 228.616†	-83.2	-19.2	-0.3635	ug/L	-0.3635	ppb	07:08:24
1	Cr 267.716†	74.9	-2.4	-0.0243	ug/L	-0.0243	ppb	07:08:24
1	Cu 324.752†	6782.9	148.7	0.4255	ug/L	0.4255	ppb	07:08:04
1	Mn 257.610†	466.0	52.1	0.0541	ug/L	0.0541	ppb	07:08:24
1	Mo 202.031†	28.4	10.6	0.6748	ug/L	0.6748	ppb	07:08:24
1	Ni 231.604†	58.2	-27.3	-0.6310	ug/L	-0.6310	ppb	07:08:24
1	P 214.914†	223.1	3.6	2.0388	ug/L	2.0388	ppb	07:08:24
1	Pb 220.353†	-55.6	11.9	1.3411	ug/L	1.3411	ppb	07:08:24
1	S 181.975 Axial†	41.5	0.7	0.9456	ug/L	0.9456	ppb	07:08:24
1	Sb 206.836†	30.5	-3.2	-0.9851	ug/L	-0.9851	ppb	07:08:24
1	Se 196.026†	-27.1	1.2	0.7000	ug/L	0.7000	ppb	07:08:24
1	Si 251.611†	493.6	52.9	1.5789	ug/L	1.5789	ppb	07:08:24
1	Sn 189.927†	11.2	6.4	1.0531	ug/L	1.0531	ppb	07:08:24
1	Ti 334.940†	-1048.2	47.8	0.0778	ug/L	0.0778	ppb	07:08:04
1	Tl 190.801†	-28.7	3.3	0.9317	ug/L	0.9317	ppb	07:08:24
1	U 409.014†	-2396.2	-37.7	-1.0383	ug/L	-1.0383	ppb	07:08:04
1	V 292.402†	-1257.7	77.9	0.5240	ug/L	0.5240	ppb	07:08:04
1	Zn 213.857†	665.2	55.4	0.4852	ug/L	0.4852	ppb	07:08:24
1	SiO2†	554.8	97.3	6.2373	ug/L	6.2373	ppb	07:09:30
2	Sc Radial	5865.9	5865.9	100	%			07:07:07
2	Y RADIAL	6278.6	6278.6	99.85	%			07:07:07
2	Al 396.153Radial†	-20.6	-0.1	-0.1100	ug/L	-0.1100	ppb	07:07:27
2	Ca 317.933Radial†	30.5	14.8	21.767	ug/L	21.767	ppb	07:07:27
2	Fe 238.204 Radial†	7.2	0.3	3.1857	ug/L	3.1857	ppb	07:07:27
2	K 766.490 Radial†	2306.9	-53.5	-9.5580	ug/L	-9.5580	ppb	07:07:07
2	Mg 279.077 IEC†	2.4	1.3	44.306	ug/L	44.306	ppb	07:07:27
2	Na 589.592 Radial†	-631.2	459.1	154.07	ug/L	154.07	ppb	07:07:07
2	Sr 421.552†	-9.2	18.2	0.1132	ug/L	0.1132	ppb	07:07:07
2	Sc 361.383	901702.0	901702.0	100.05	%			07:08:29
2	Y 371.029	746032.3	746032.3	99.327	%			07:08:29
2	Ag 328.068†	147.0	-145.8	-0.6587	ug/L	-0.6587	ppb	07:08:34
2	As 188.979†	-25.2	-1.0	-0.3997	ug/L	-0.3997	ppb	07:08:54
2	B 249.677†	-430.1	100.8	2.1137	ug/L	2.1137	ppb	07:08:54
2	Ba 233.527†	-19.2	-10.7	-0.0778	ug/L	-0.0778	ppb	07:08:54
2	Be 313.107†	-5563.0	-447.3	-0.1628	ug/L	-0.1628	ppb	07:08:34
2	Cd 226.502†	-181.3	13.9	0.1459	ug/L	0.1459	ppb	07:08:54
2	Co 228.616†	-82.8	-17.4	-0.3280	ug/L	-0.3280	ppb	07:08:54
2	Cr 267.716†	56.2	-22.5	-0.2355	ug/L	-0.2355	ppb	07:08:54
2	Cu 324.752†	6848.9	88.9	0.2545	ug/L	0.2545	ppb	07:08:34
2	Mn 257.610†	454.3	31.8	0.0334	ug/L	0.0334	ppb	07:08:54
2	Mo 202.031†	28.5	10.2	0.6471	ug/L	0.6471	ppb	07:08:54
2	Ni 231.604†	51.8	-34.8	-0.8057	ug/L	-0.8057	ppb	07:08:54

2	P 214.914†	227.0	3.3	1.8838	ug/L	1.8838 ppb	07:08:54
2	Pb 220.353†	-65.0	3.5	0.3957	ug/L	0.3957 ppb	07:08:54
2	S 181.975 Axial†	41.2	-0.4	-0.5928	ug/L	-0.5928 ppb	07:08:54
2	Sb 206.836†	37.7	3.5	1.1231	ug/L	1.1231 ppb	07:08:54
2	Se 196.026†	-18.0	10.8	6.2705	ug/L	6.2705 ppb	07:08:54
2	Si 251.611†	522.6	72.7	2.1680	ug/L	2.1680 ppb	07:08:54
2	Sn 189.927†	5.9	0.9	0.1476	ug/L	0.1476 ppb	07:08:54
2	Ti 334.940†	-1048.8	66.7	0.1067	ug/L	0.1067 ppb	07:08:34
2	Tl 190.801†	-37.3	-4.8	-1.3327	ug/L	-1.3327 ppb	07:08:54
2	U 409.014†	-2326.6	76.4	2.1042	ug/L	2.1042 ppb	07:08:34
2	V 292.402†	-1256.2	102.7	0.6924	ug/L	0.6924 ppb	07:08:34
2	Zn 213.857†	679.1	56.9	0.5002	ug/L	0.5002 ppb	07:08:54
2	SiO2†	474.4	6.8	0.4152	ug/L	0.4152 ppb	07:09:35
3	Sc Radial	5797.7	5797.7	99.2	%		07:07:32
3	Y RADIAL	6147.2	6147.2	97.76	%		07:07:32
3	Al 396.153Radial†	-18.7	1.6	1.0829	ug/L	1.0829 ppb	07:07:52
3	Ca 317.933Radial†	33.5	18.2	26.781	ug/L	26.781 ppb	07:07:52
3	Fe 238.204 Radial†	7.5	0.7	6.9050	ug/L	6.9050 ppb	07:07:52
3	K 766.490 Radial†	2278.0	-55.6	-9.9375	ug/L	-9.9375 ppb	07:07:32
3	Mg 279.077 IEC†	2.6	1.4	50.874	ug/L	50.874 ppb	07:07:52
3	Na 589.592 Radial†	-587.3	495.9	166.42	ug/L	166.42 ppb	07:07:32
3	Sr 421.552†	2.2	29.6	0.1839	ug/L	0.1839 ppb	07:07:32
3	Sc 361.383	905703.5	905703.5	100.49	%		07:08:59
3	Y 371.029	747067.5	747067.5	99.465	%		07:08:59
3	Ag 328.068†	218.9	-75.0	-0.3368	ug/L	-0.3368 ppb	07:09:04
3	As 188.979†	-29.6	-5.2	-2.0646	ug/L	-2.0646 ppb	07:09:24
3	B 249.677†	-399.1	133.5	2.7986	ug/L	2.7986 ppb	07:09:24
3	Ba 233.527†	-19.6	-11.0	-0.0795	ug/L	-0.0795 ppb	07:09:24
3	Be 313.107†	-5544.6	-404.4	-0.1467	ug/L	-0.1467 ppb	07:09:04
3	Cd 226.502†	-186.8	9.2	0.0964	ug/L	0.0964 ppb	07:09:24
3	Co 228.616†	-66.9	-1.2	-0.0225	ug/L	-0.0225 ppb	07:09:24
3	Cr 267.716†	63.3	-15.6	-0.1633	ug/L	-0.1633 ppb	07:09:24
3	Cu 324.752†	6746.7	-43.0	-0.1228	ug/L	-0.1228 ppb	07:09:04
3	Mn 257.610†	634.4	208.9	0.2226	ug/L	0.2226 ppb	07:09:24
3	Mo 202.031†	25.2	6.7	0.4279	ug/L	0.4279 ppb	07:09:24
3	Ni 231.604†	72.4	-14.5	-0.3357	ug/L	-0.3357 ppb	07:09:24
3	P 214.914†	233.6	8.9	5.1441	ug/L	5.1441 ppb	07:09:24
3	Pb 220.353†	-63.7	5.1	0.5775	ug/L	0.5775 ppb	07:09:24
3	S 181.975 Axial†	42.7	0.9	1.2741	ug/L	1.2741 ppb	07:09:24
3	Sb 206.836†	29.7	-4.6	-1.4605	ug/L	-1.4605 ppb	07:09:24
3	Se 196.026†	-28.6	0.4	0.2413	ug/L	0.2413 ppb	07:09:24
3	Si 251.611†	538.0	85.7	2.5616	ug/L	2.5616 ppb	07:09:24
3	Sn 189.927†	3.3	-1.7	-0.2739	ug/L	-0.2739 ppb	07:09:24
3	Ti 334.940†	-892.0	227.3	0.3629	ug/L	0.3629 ppb	07:09:04
3	Tl 190.801†	-40.3	-7.6	-2.1262	ug/L	-2.1262 ppb	07:09:24
3	U 409.014†	-2310.3	102.9	2.8331	ug/L	2.8331 ppb	07:09:04
3	V 292.402†	-1236.1	128.3	0.8588	ug/L	0.8588 ppb	07:09:04
3	Zn 213.857†	681.1	56.0	0.4888	ug/L	0.4888 ppb	07:09:24
3	SiO2†	469.2	-0.6	-0.0429	ug/L	-0.0429 ppb	07:09:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897560.3	99.589	%	1.2011				1.21%
Sc Radial	5968.1	102	%	4.1				4.00%
Y 371.029	741813.3	98.766	%	1.0945				1.11%
Y RADIAL	6360.1	101.1	%	4.19				4.14%
Ag 328.068†	-80.0	-0.3605	ug/L	0.28708	-0.3605	ppb	0.28708	79.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.5	-1.7664	ug/L	3.94734	-1.7664	ppb	3.94734	223.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-0.3075	ug/L	1.80489	-0.3075	ppb	1.80489	586.93%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	123.9	2.5991	ug/L	0.42252	2.5991	ppb	0.42252	16.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-14.4	-0.1052	ug/L	0.04597	-0.1052	ppb	0.04597	43.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-448.8	-0.1632	ug/L	0.01673	-0.1632	ppb	0.01673	10.25%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.5	22.858	ug/L	3.5071	22.858	ppb	3.5071	15.34%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              11.4      0.1194 ug/L       0.02495      0.1194 ppb        0.02495  20.90%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -12.6     -0.2380 ug/L       0.18745     -0.2380 ppb        0.18745  78.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -13.5     -0.1411 ug/L       0.10731     -0.1411 ppb        0.10731  76.08%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              64.9      0.1857 ug/L       0.28056      0.1857 ppb        0.28056 151.04%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.3      2.6243 ug/L       4.58720      2.6243 ppb        4.58720 174.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -101.2     -18.027 ug/L       14.3415     -18.027 ppb        14.3415  79.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.5      53.240 ug/L       10.3221      53.240 ppb        10.3221  19.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              97.6      0.1034 ug/L       0.10380      0.1034 ppb        0.10380 100.41%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               9.2      0.5833 ug/L       0.13527      0.5833 ppb        0.13527  23.19%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       479.4      160.87 ug/L         6.269      160.87 ppb          6.269   3.90%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -25.5     -0.5908 ug/L       0.23755     -0.5908 ppb        0.23755  40.21%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                5.3      3.0222 ug/L       1.83927      3.0222 ppb        1.83927  60.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.8      0.7714 ug/L       0.50165      0.7714 ppb        0.50165  65.03%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.4      0.5423 ug/L       0.99663      0.5423 ppb        0.99663 183.77%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -1.5     -0.4408 ug/L       1.37511     -0.4408 ppb        1.37511 311.94%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.1      2.4039 ug/L       3.35638      2.4039 ppb        3.35638 139.62%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              70.4      2.1029 ug/L       0.49456      2.1029 ppb        0.49456  23.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.9      0.3089 ug/L       0.67802      0.3089 ppb        0.67802 219.47%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              25.6      0.1593 ug/L       0.04001      0.1593 ppb        0.04001  25.11%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             113.9      0.1825 ug/L       0.15695      0.1825 ppb        0.15695  86.01%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.0     -0.8424 ug/L       1.58683     -0.8424 ppb        1.58683 188.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               47.2      1.2997 ug/L       2.05729      1.2997 ppb        2.05729 158.29%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              103.0      0.6917 ug/L       0.16741      0.6917 ppb        0.16741  24.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              56.1      0.4914 ug/L       0.00781      0.4914 ppb        0.00781   1.59%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    34.5      2.2032 ug/L       3.50112      2.2032 ppb        3.50112 158.91%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, December 10, 2009 10:37:19
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.5154
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	281.4	281.403	10.310	3.7
	Mg	24.0	2908.5	2908.496	64.710	2.2
	Co	58.9	15504.2	15504.210	171.442	1.1
	Rh	102.9	40393.0	40393.031	439.240	1.1
	In	114.9	60156.4	60156.402	609.083	1.0
	Pb	208.0	40357.7	40357.733	515.203	1.3
⌈>	Ba	137.9	50866.8	50866.775	468.982	0.9
⌊	Ba++	69.0	824.3	0.016	0.000	2.5
⌈>	Ce	139.9	62955.6	62955.620	430.549	0.7
⌊	CeO	155.9	1000.9	0.016	0.000	3.0
	Bkgd	220.0	4.9	4.900	1.782	36.4

Current Optimization File Data

Current Value	Description
0.96	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1812.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.5	390.3
Co	59	17	8.3	17935.6
In	115	17	9.3	78633.5

ICPMS#3 Instrument Tuning Report

File Name: 091210.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	584	2030	0.692
Be	9.0	9.0	2073	2010	0.733
Mg	24.0	23.9	5706	2090	0.686
Mg	25.0	25.0	5899	2010	0.659
Mg	26.0	25.9	6224	2110	0.737
Co	58.9	58.9	14202	2100	0.682
Rh	102.9	102.9	24911	2150	0.691
In	114.9	114.9	27831	2160	0.706
Ce	139.9	139.9	33912	2200	0.671
Pb	206.0	206.0	49992	2270	0.672
Pb	207.0	207.0	50282	2310	0.678
Pb	208.0	208.0	50486	2290	0.667
U	238.1	238.1	57851	2330	0.702

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, December 10, 2009 22:55:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\Blank.531

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		5	
	Be	9		ug/L		6	
	B	11		ug/L		54	
	Na	23		ug/L		7002	
	Mg	24		ug/L		0	
	Al	27		ug/L		1000	
	P	31		ug/L		724	
	K	39		ug/L		142712	
	Ca	43		ug/L		81	
>	Sc	45		ug/L		236493	
	Ti	47		ug/L		155	
	V	51		ug/L		811	
	Cr	52		ug/L		500	
	Cr	53		ug/L		30531	
	Mn	55		ug/L		236	
	Fe	57		ug/L		2254	
	Co	59		ug/L		92	
	Ni	60		ug/L		68	
	Cu	63		ug/L		165	
	Cu	65		ug/L		41	
	Zn	66		ug/L		236	
	Zn	67		ug/L		1423	
	Zn	68		ug/L		380	
>	Ge	74		ug/L		79330	
	As	75		ug/L		447	
	Se	77		ug/L		1213	
	Se	82		ug/L		-2	
	Kr	83		ug/L		31	
	Sr	88		ug/L		76	
	Y	89		ug/L		10	
	Zr	90		ug/L		109	
	Mo	98		ug/L		27	
	Ag	107		ug/L		19	
	Cd	111		ug/L		0	
	Cd	114		ug/L		15	
>	In	115		ug/L		63688	
	Sn	120		ug/L		70	
	Sb	121		ug/L		195	
	Sb	123		ug/L		160	
	Ba	135		ug/L		12	
	Ba	137		ug/L		20	
	Ho	165		ug/L		13	
>	Lu	175		ug/L		124223	
	Tl	205		ug/L		461	
	Pb	208		ug/L		195	
	Th	232		ug/L		155	
	U	238		ug/L		128	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, December 10, 2009 23:00:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\Standard 1.532

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	4.749	485	0.002
	Be	9	10.000	ug/L	6.475	341	0.001
	B	11	20.000	ug/L	4.804	742	0.003
	Na	23	1000.000	ug/L	8.875	308996	1.242
	Mg	24	1000.000	ug/L	5.174	218662	0.902
	Al	27	1000.000	ug/L	10.883	421506	1.733
	P	31	1000.000	ug/L	3.426	31439	0.127
	K	39	1000.000	ug/L	3.148	768110	2.563
	Ca	43	1000.000	ug/L	2.961	1519	0.006
>	Sc	45		ug/L		242712	242712.480
	Ti	47	10.000	ug/L	6.776	886	0.003
	V	51	10.000	ug/L	4.849	8096	0.030
	Cr	52	10.000	ug/L	3.787	10348	0.041
	Cr	53		ug/L		37391	0.025
	Mn	55	10.000	ug/L	2.602	16549	0.067
	Fe	57	1000.000	ug/L	4.496	34594	0.133
	Co	59	10.000	ug/L	3.430	11525	0.047
	Ni	60	10.000	ug/L	0.943	2405	0.010
	Cu	63		ug/L		5242	0.021
	Cu	65	10.000	ug/L	2.355	2388	0.010
	Zn	66	10.000	ug/L	2.175	2056	0.022
	Zn	67		ug/L		2110	0.008
	Zn	68		ug/L		1906	0.019
>	Ge	74		ug/L		81035	81035.335
	As	75	10.000	ug/L	0.763	2820	0.029
	Se	77		ug/L		1847	0.008
	Se	82	10.000	ug/L	3.430	196	0.002
	Kr	83		ug/L		24	-0.000
	Sr	88	10.000	ug/L	1.640	26815	0.413
	Y	89		ug/L		15	0.000
	Zr	90	10.000	ug/L	0.562	16946	0.260
	Mo	98	10.000	ug/L	1.708	7444	0.115
	Ag	107	10.000	ug/L	1.318	13406	0.207
	Cd	111	10.000	ug/L	0.516	3228	0.050
	Cd	114		ug/L		7991	0.123
>	In	115		ug/L		64714	64714.101
	Sn	120	10.000	ug/L	1.977	14542	0.224
	Sb	121	10.000	ug/L	2.605	13989	0.213
	Sb	123		ug/L		10735	0.163
	Ba	135		ug/L		3499	0.028
	Ba	137	10.000	ug/L	2.210	5929	0.047
	Ho	165		ug/L		14	0.000
>	Lu	175		ug/L		126572	126571.882
	Tl	205	10.000	ug/L	1.227	59138	0.464
	Pb	208	10.000	ug/L	2.044	68774	0.542
	Th	232	10.000	ug/L	2.163	80297	0.633
	U	238	10.000	ug/L	1.712	81941	0.646

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, December 10, 2009 23:06:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\Standard 2.533

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.987**	**ug/L**	2.279	4617	0.020
	Be	9	**100.072**	**ug/L**	3.913	3520	0.015
	B	11	**200.152**	**ug/L**	3.257	7290	0.031
	Na	23	**10013.895**	**ug/L**	4.334	3421030	14.449
	Mg	24	**10001.823**	**ug/L**	11.363	2171836	9.185
	Al	27	**10001.373**	**ug/L**	7.060	4152416	17.576
	P	31	**10001.826**	**ug/L**	1.401	305323	1.289
	K	39	**10009.201**	**ug/L**	3.254	6818894	28.248
	Ca	43	**10002.580**	**ug/L**	0.337	14437	0.061
>	Sc	45		**ug/L**		236282	236281.955
	Ti	47	**100.045**	**ug/L**	2.101	7569	0.031
	V	51	**100.156**	**ug/L**	2.329	84777	0.355
	Cr	52	**99.994**	**ug/L**	0.781	95688	0.403
	Cr	53		**ug/L**		50173	0.083
	Mn	55	**100.037**	**ug/L**	3.256	165209	0.698
	Fe	57	**10002.870**	**ug/L**	3.002	326045	1.371
	Co	59	**100.015**	**ug/L**	1.805	113171	0.479
	Ni	60	**100.018**	**ug/L**	2.935	23216	0.098
	Cu	63		**ug/L**		51338	0.217
	Cu	65	**100.039**	**ug/L**	1.801	23817	0.101
	Zn	66	**99.899**	**ug/L**	1.872	16695	0.203
	Zn	67		**ug/L**		4693	0.040
	Zn	68		**ug/L**		13219	0.158
>	Ge	74		**ug/L**		80957	80956.906
	As	75	**100.081**	**ug/L**	2.895	26158	0.318
	Se	77		**ug/L**		3463	0.028
	Se	82	**100.024**	**ug/L**	3.298	2030	0.025
	Kr	83		**ug/L**		30	-0.000
	Sr	88	**100.004**	**ug/L**	0.314	268645	4.148
	Y	89		**ug/L**		38	0.000
	Zr	90	**99.912**	**ug/L**	3.764	154790	2.390
	Mo	98	**100.003**	**ug/L**	3.098	74416	1.149
	Ag	107	**99.982**	**ug/L**	0.592	131563	2.032
	Cd	111	**100.009**	**ug/L**	1.775	32572	0.503
	Cd	114		**ug/L**		79681	1.230
>	In	115		**ug/L**		64746	64746.242
	Sn	120	**100.018**	**ug/L**	2.598	147445	2.277
	Sb	121	**100.023**	**ug/L**	2.476	141364	2.181
	Sb	123		**ug/L**		109982	1.696
	Ba	135		**ug/L**		34354	0.272
	Ba	137	**100.024**	**ug/L**	2.576	60475	0.478
	Ho	165		**ug/L**		21	0.000
>	Lu	175		**ug/L**		126430	126429.695
	Tl	205	**99.983**	**ug/L**	0.794	576838	4.558
	Pb	208	**99.986**	**ug/L**	1.884	675483	5.342
	Th	232	**99.987**	**ug/L**	0.974	790349	6.249
	U	238	**99.981**	**ug/L**	0.666	802162	6.343

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, December 10, 2009 23:12:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 1.534

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.847**	ug/L	2.234	2285	0.010
	Be	9	**49.605**	ug/L	2.609	1769	0.007
	B	11	**99.768**	ug/L	1.027	3705	0.015
	Na	23	**4376.202**	ug/L	4.007	1516095	6.315
	Mg	24	**4772.807**	ug/L	5.663	1048199	4.383
	Al	27	**4500.590**	ug/L	3.773	1891106	7.909
	P	31	**4866.300**	ug/L	1.175	150660	0.627
	K	39	**5275.735**	ug/L	8.910	3705771	14.889
	Ca	43	**4871.917**	ug/L	2.486	7156	0.030
>	Sc	45		ug/L		239059	239058.913
	Ti	47	**49.641**	ug/L	0.493	3880	0.016
	V	51	**48.930**	ug/L	2.252	42319	0.174
	Cr	52	**50.770**	ug/L	2.261	49395	0.205
	Cr	53		ug/L		45545	0.061
	Mn	55	**50.674**	ug/L	2.221	84806	0.354
	Fe	57	**4910.693**	ug/L	2.878	163112	0.673
	Co	59	**49.108**	ug/L	1.934	56264	0.235
	Ni	60	**49.116**	ug/L	1.275	11573	0.048
	Cu	63		ug/L		26460	0.110
	Cu	65	**50.524**	ug/L	2.775	12190	0.051
	Zn	66	**49.925**	ug/L	3.043	8464	0.102
	Zn	67		ug/L		3446	0.025
	Zn	68		ug/L		6939	0.081
>	Ge	74		ug/L		80988	80987.827
	As	75	**49.364**	ug/L	1.924	13136	0.157
	Se	77		ug/L		2701	0.018
	Se	82	**49.125**	ug/L	3.133	995	0.012
	Kr	83		ug/L		35	0.000
	Sr	88	**48.730**	ug/L	1.152	132190	2.021
	Y	89		ug/L		24	0.000
	Zr	90	**44.531**	ug/L	5.011	69705	1.065
	Mo	98	**49.023**	ug/L	1.652	36849	0.563
	Ag	107	**49.344**	ug/L	2.942	65551	1.003
	Cd	111	**49.734**	ug/L	3.073	16352	0.250
	Cd	114		ug/L		39687	0.607
>	In	115		ug/L		65365	65365.339
	Sn	120	**49.521**	ug/L	1.423	73745	1.127
	Sb	121	**50.825**	ug/L	2.458	72623	1.108
	Sb	123		ug/L		55579	0.848
	Ba	135		ug/L		17391	0.138
	Ba	137	**49.711**	ug/L	2.725	29885	0.238
	Ho	165		ug/L		24	0.000
>	Lu	175		ug/L		125670	125669.684
	Tl	205	**47.858**	ug/L	1.857	274616	2.182
	Pb	208	**50.689**	ug/L	2.793	340453	2.708
	Th	232	**50.690**	ug/L	1.539	398258	3.168
	U	238	**53.314**	ug/L	3.262	425073	3.383

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	97.694				
	Be	9	99.211				
	B	11	99.768				
	Na	23	87.524				
	Mg	24	95.456				
	Al	27	89.121				
	P	31	97.326				
	K	39	105.515				
	Ca	43	97.438				
>	Sc	45		101.1			
	Ti	47	99.283				
	V	51	97.860				
	Cr	52	101.541				
	Cr	53					
	Mn	55	101.349				
	Fe	57	98.214				
	Co	59	98.215				
	Ni	60	98.232				
	Cu	63					
	Cu	65	101.048				
	Zn	66	99.850				
	Zn	67					
	Zn	68					
>	Ge	74		102.1			
	As	75	98.729				
	Se	77					
	Se	82	98.250				
	Kr	83					
	Sr	88	97.459				
	Y	89					
	Zr	90	89.061				
	Mo	98	98.047				
	Ag	107	98.689				
	Cd	111	99.468				
	Cd	114					
>	In	115		102.6			
	Sn	120	99.041				
	Sb	121	101.649				
	Sb	123					
	Ba	135					
	Ba	137	99.421				
	Ho	165					
>	Lu	175		101.2			
	Tl	205	95.717				
	Pb	208	101.378				
	Th	232	101.381				
	U	238	106.628				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 1	Na	23ICV is out of limits (+/- 10%)
QC Std 1	Al	27ICV is out of limits (+/- 10%)
QC Std 1	Zr	90ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, December 10, 2009 23:18:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 2.535

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.072	ug/L	91.215	8	0.000
	Be	9	0.105	ug/L	136.717	10	0.000
	B	11	2.870	ug/L	36.387	158	0.000
	Na	23	14.700	ug/L	86.912	12005	0.021
	Mg	24	1.541	ug/L	173.205	333	0.001
	Al	27	3.217	ug/L	43.690	2334	0.006
	P	31	1.081	ug/L	99.168	756	0.000
	K	39	13.878	ug/L	72.072	151803	0.039
	Ca	43	9.811	ug/L	90.010	95	0.000
>	Sc	45		ug/L		236212	236211.526
	Ti	47	-0.573	ug/L	23.554	112	-0.000
	V	51	-1.185	ug/L	50.175	-183	-0.004
	Cr	52	0.036	ug/L	13.918	534	0.000
	Cr	53		ug/L		31084	0.002
	Mn	55	0.028	ug/L	7.357	281	0.000
	Fe	57	2.949	ug/L	78.374	2346	0.000
	Co	59	0.016	ug/L	32.788	109	0.000
	Ni	60	0.015	ug/L	61.423	71	0.000
	Cu	63		ug/L		129	-0.000
	Cu	65	0.055	ug/L	124.201	54	0.000
	Zn	66	-0.024	ug/L	438.531	234	-0.000
	Zn	67		ug/L		1449	0.000
	Zn	68		ug/L		377	-0.000
>	Ge	74		ug/L		80206	80206.002
	As	75	-0.172	ug/L	249.343	408	-0.001
	Se	77		ug/L		1265	0.000
	Se	82	0.419	ug/L	167.594	6	0.000
	Kr	83		ug/L		31	-0.000
	Sr	88	0.012	ug/L	60.556	107	0.000
	Y	89		ug/L		11	0.000
	Zr	90	0.138	ug/L	68.124	316	0.003
	Mo	98	0.055	ug/L	4.071	67	0.001
	Ag	107	0.010	ug/L	57.817	32	0.000
	Cd	111	0.036	ug/L	11.310	12	0.000
	Cd	114		ug/L		25	0.000
>	In	115		ug/L		63342	63342.089
	Sn	120	0.046	ug/L	17.613	136	0.001
	Sb	121	0.264	ug/L	9.896	558	0.006
	Sb	123		ug/L		432	0.004
	Ba	135		ug/L		18	0.000
	Ba	137	0.002	ug/L	359.413	21	0.000
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		123116	123115.867
	Tl	205	0.321	ug/L	15.152	2260	0.015
	Pb	208	0.010	ug/L	49.311	258	0.001
	Th	232	0.064	ug/L	9.893	648	0.004
	U	238	0.014	ug/L	13.934	240	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.1			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, December 10, 2009 23:23:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 3.536

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.288**	ug/L	7.422	478	0.002
	Be	9	**0.554**	ug/L	30.733	25	0.000
	B	11	**15.675**	ug/L	7.980	619	0.002
	Na	23	**248.136**	ug/L	8.514	91291	0.358
	Mg	24	**9.194**	ug/L	49.090	2000	0.008
	Al	27	**29.741**	ug/L	15.149	13340	0.052
	P	31	**59.925**	ug/L	5.369	2542	0.008
	K	39	**315.238**	ug/L	14.924	351622	0.890
	Ca	43	**229.164**	ug/L	13.200	408	0.001
>	Sc	45		ug/L		235740	235739.634
	Ti	47	**8.830**	ug/L	6.983	807	0.003
	V	51	**10.333**	ug/L	14.943	9437	0.037
	Cr	52	**10.970**	ug/L	4.902	10912	0.044
	Cr	53		ug/L		38560	0.035
	Mn	55	**5.478**	ug/L	1.641	9249	0.038
	Fe	57	**109.392**	ug/L	8.088	5777	0.015
	Co	59	**1.068**	ug/L	4.613	1297	0.005
	Ni	60	**2.175**	ug/L	2.990	570	0.002
	Cu	63		ug/L		703	0.002
	Cu	65	**1.154**	ug/L	4.893	315	0.001
	Zn	66	**13.006**	ug/L	0.814	2340	0.026
	Zn	67		ug/L		2200	0.010
	Zn	68		ug/L		2032	0.021
>	Ge	74		ug/L		79482	79481.626
	As	75	**5.187**	ug/L	21.230	1755	0.016
	Se	77		ug/L		1845	0.008
	Se	82	**4.795**	ug/L	12.411	94	0.001
	Kr	83		ug/L		35	0.000
	Sr	88	**11.053**	ug/L	1.946	29287	0.458
	Y	89		ug/L		12	0.000
	Zr	90	**2.166**	ug/L	3.089	3409	0.052
	Mo	98	**0.540**	ug/L	11.626	422	0.006
	Ag	107	**1.056**	ug/L	2.663	1386	0.021
	Cd	111	**1.135**	ug/L	4.020	364	0.006
	Cd	114		ug/L		816	0.013
>	In	115		ug/L		63730	63729.559
	Sn	120	**5.320**	ug/L	3.958	7782	0.121
	Sb	121	**3.237**	ug/L	6.714	4689	0.071
	Sb	123		ug/L		3689	0.055
	Ba	135		ug/L		710	0.006
	Ba	137	**2.050**	ug/L	3.356	1220	0.010
	Ho	165		ug/L		14	0.000
>	Lu	175		ug/L		122536	122535.582
	Tl	205	**1.145**	ug/L	3.101	6850	0.052
	Pb	208	**2.170**	ug/L	2.735	14398	0.116
	Th	232	**1.123**	ug/L	2.670	8749	0.070
	U	238	**0.228**	ug/L	2.337	1901	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.882				
	Be	9	110.829				
	B	11	104.497				
	Na	23	99.254				
	Mg	24	61.295				
	Al	27	99.135				
	P	31	119.849				
	K	39	105.079				
	Ca	43	114.582				
>	Sc	45		99.7			
	Ti	47	88.303				
	V	51	103.335				
	Cr	52	109.702				
	Cr	53					
	Mn	55	109.558				
	Fe	57	109.392				
	Co	59	106.812				
	Ni	60	108.767				
	Cu	63					
	Cu	65	115.431				
	Zn	66	130.056				
	Zn	67					
	Zn	68					
>	Ge	74		100.2			
	As	75	103.742				
	Se	77					
	Se	82	95.908				
	Kr	83					
	Sr	88	110.529				
	Y	89					
	Zr	90	108.287				
	Mo	98	108.100				
	Ag	107	105.621				
	Cd	111	113.523				
	Cd	114					
>	In	115		100.1			
	Sn	120	106.399				
	Sb	121	107.912				
	Sb	123					
	Ba	135					
	Ba	137	102.515				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	114.492				
	Pb	208	108.516				
	Th	232	112.261				
	U	238	114.126				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Mg	24CRDL is out of limits
QC Std 3	Zn	66CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, December 10, 2009 23:29:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 4.537

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.142**	ug/L	57.641	11	0.000
	Be	9	**0.029**	ug/L	362.623	7	0.000
	B	11	**1.114**	ug/L	20.365	90	0.000
	Na	23	**88158.446**	ug/L	2.995	28591206	127.207
	Mg	24	**99292.491**	ug/L	6.212	20495010	91.184
	Al	27	**90373.314**	ug/L	6.169	35696792	158.819
	P	31	**96747.476**	ug/L	2.280	2801836	12.470
	K	39	**100301.860**	ug/L	1.231	63730297	283.075
	Ca	43	**96476.345**	ug/L	1.002	131730	0.586
>	Sc	45		ug/L		224665	224664.864
	Ti	47	**1542.597**	ug/L	0.894	108864	0.484
	V	51	**-3.372**	ug/L	23.552	-1917	-0.012
	Cr	52	**2.978**	ug/L	1.599	3171	0.012
	Cr	53		ug/L		32840	0.017
	Mn	55	**5.843**	ug/L	1.684	9389	0.041
	Fe	57	**99408.884**	ug/L	1.422	3062460	13.623
	Co	59	**0.230**	ug/L	8.600	334	0.001
	Ni	60	**2.504**	ug/L	4.237	616	0.002
	Cu	63		ug/L		1965	0.008
	Cu	65	**4.434**	ug/L	4.154	1041	0.004
	Zn	66	**4.178**	ug/L	8.680	894	0.009
	Zn	67		ug/L		1783	0.005
	Zn	68		ug/L		642	0.003
>	Ge	74		ug/L		78012	78011.616
	As	75	**0.140**	ug/L	321.335	472	0.000
	Se	77		ug/L		2139	0.012
	Se	82	**-0.654**	ug/L	71.013	-15	-0.000
	Kr	83		ug/L		55	0.000
	Sr	88	**1.157**	ug/L	0.981	3006	0.048
	Y	89		ug/L		81	0.001
	Zr	90	**4.918**	ug/L	52.702	7274	0.118
	Mo	98	**1950.263**	ug/L	1.022	1369467	22.412
	Ag	107	**0.050**	ug/L	24.820	80	0.001
	Cd	111	**0.462**	ug/L	25.051	142	0.002
	Cd	114		ug/L		1390	0.023
>	In	115		ug/L		61107	61107.129
	Sn	120	**0.121**	ug/L	6.239	235	0.003
	Sb	121	**0.106**	ug/L	16.661	328	0.002
	Sb	123		ug/L		259	0.002
	Ba	135		ug/L		235	0.002
	Ba	137	**0.664**	ug/L	13.026	402	0.003
	Ho	165		ug/L		290	0.002
>	Lu	175		ug/L		120709	120708.723
	Tl	205	**0.054**	ug/L	17.657	747	0.002
	Pb	208	**0.177**	ug/L	3.061	1332	0.009
	Th	232	**0.071**	ug/L	17.352	689	0.004
	U	238	**-0.005**	ug/L	7.948	85	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	88.158				
	Mg	24	99.292				
	Al	27	90.373				
	P	31	96.747				
	K	39	100.302				
	Ca	43	96.476				
>	Sc	45			95.0		
	Ti	47	77.130				
	V	51					
	Cr	52	80.475				
	Cr	53					
	Mn	55	100.740				
	Fe	57	99.409				
	Co	59	91.892				
	Ni	60	92.723				
	Cu	63					
	Cu	65	152.910				
	Zn	66	116.049				
	Zn	67					
	Zn	68					
>	Ge	74			98.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	96.442				
	Y	89					
	Zr	90					
	Mo	98	97.513				
	Ag	107					
	Cd	111	115.525				
	Cd	114					
>	In	115			95.9		
	Sn	120					
	Sb	121	106.337				
	Sb	123					
	Ba	135					
	Ba	137	99.077				
	Ho	165					
>	Lu	175			97.2		
	Tl	205					
	Pb	208	88.589				
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits
QC Std 4	Zr	90ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, December 10, 2009 23:35:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 5.538

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.759**	ug/L	5.200	880	0.004
	Be	9	**18.252**	ug/L	2.034	621	0.003
	B	11	**19.791**	ug/L	3.029	739	0.003
	Na	23	**78889.759**	ug/L	1.269	25836572	113.833
	Mg	24	**99814.508**	ug/L	3.823	20799391	91.664
	Al	27	**92473.078**	ug/L	4.464	36868925	162.509
	P	31	**96181.982**	ug/L	0.923	2813783	12.397
	K	39	**97764.343**	ug/L	4.158	62737957	275.914
	Ca	43	**95002.702**	ug/L	0.972	131034	0.577
>	Sc	45		ug/L		226925	226924.797
	Ti	47	**1536.612**	ug/L	1.102	109535	0.482
	V	51	**18.794**	ug/L	1.522	15910	0.067
	Cr	52	**23.580**	ug/L	1.608	22037	0.095
	Cr	53		ug/L		36968	0.034
	Mn	55	**26.514**	ug/L	0.967	42232	0.185
	Fe	57	**100043.407**	ug/L	1.573	3112945	13.710
	Co	59	**21.119**	ug/L	1.332	23020	0.101
	Ni	60	**22.945**	ug/L	2.427	5166	0.022
	Cu	63		ug/L		11901	0.052
	Cu	65	**24.728**	ug/L	1.378	5685	0.025
	Zn	66	**23.655**	ug/L	2.410	4000	0.048
	Zn	67		ug/L		2403	0.013
	Zn	68		ug/L		2946	0.033
>	Ge	74		ug/L		78284	78284.368
	As	75	**21.410**	ug/L	5.846	5760	0.068
	Se	77		ug/L		2602	0.018
	Se	82	**20.392**	ug/L	6.877	398	0.005
	Kr	83		ug/L		59	0.000
	Sr	88	**22.830**	ug/L	0.139	57694	0.947
	Y	89		ug/L		78	0.001
	Zr	90	**22.014**	ug/L	1.677	32140	0.526
	Mo	98	**1964.260**	ug/L	1.031	1373521	22.572
	Ag	107	**20.138**	ug/L	1.401	24919	0.409
	Cd	111	**21.408**	ug/L	0.299	6554	0.108
	Cd	114		ug/L		17335	0.285
>	In	115		ug/L		60850	60850.053
	Sn	120	**20.584**	ug/L	1.260	28577	0.469
	Sb	121	**21.619**	ug/L	0.488	28867	0.471
	Sb	123		ug/L		22288	0.364
	Ba	135		ug/L		7077	0.058
	Ba	137	**21.186**	ug/L	1.459	12271	0.101
	Ho	165		ug/L		292	0.002
>	Lu	175		ug/L		120933	120932.597
	Tl	205	**19.479**	ug/L	1.776	107853	0.888
	Pb	208	**20.509**	ug/L	1.406	132702	1.096
	Th	232	**21.603**	ug/L	0.987	163449	1.350
	U	238	**22.383**	ug/L	0.140	171866	1.420

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	98.793				
	Be	9	91.259				
	B	11	98.953				
	Na	23	78.890				
	Mg	24	99.815				
	Al	27	92.473				
	P	31	96.182				
	K	39	97.764				
	Ca	43	95.003				
>	Sc	45		96.0			
	Ti	47	76.831				
	V	51	93.968				
	Cr	52	99.493				
	Cr	53					
	Mn	55	102.766				
	Fe	57	100.043				
	Co	59	104.290				
	Ni	60	101.077				
	Cu	63					
	Cu	65	107.984				
	Zn	66	100.233				
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75	107.051				
	Se	77					
	Se	82	101.959				
	Kr	83					
	Sr	88	107.690				
	Y	89					
	Zr	90	110.071				
	Mo	98	98.213				
	Ag	107	100.690				
	Cd	111	104.943				
	Cd	114					
>	In	115		95.5			
	Sn	120	102.922				
	Sb	121	107.556				
	Sb	123					
	Ba	135					
	Ba	137	102.497				
	Ho	165					
>	Lu	175		97.4			
	Tl	205	97.395				
	Pb	208	101.532				
	Th	232	108.017				
	U	238	111.915				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Na	23ICSAB is out of limits
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 23:40:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 6.539

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.414**	**ug/L**	1.917	2327	0.010
	Be	9	**50.239**	**ug/L**	0.826	1803	0.007
	B	11	**95.614**	**ug/L**	1.950	3576	0.015
	Na	23	**3958.339**	**ug/L**	4.667	1381477	5.712
	Mg	24	**4976.853**	**ug/L**	7.907	1099566	4.570
	Al	27	**4647.719**	**ug/L**	12.823	1966703	8.168
	P	31	**4891.976**	**ug/L**	0.718	152443	0.631
	K	39	**4990.393**	**ug/L**	4.033	3533489	14.084
	Ca	43	**4859.863**	**ug/L**	0.402	7185	0.030
>	Sc	45		**ug/L**		240606	240606.065
	Ti	47	**49.063**	**ug/L**	0.688	3861	0.015
	V	51	**50.198**	**ug/L**	4.182	43683	0.178
	Cr	52	**51.663**	**ug/L**	0.912	50589	0.208
	Cr	53		**ug/L**		46078	0.062
	Mn	55	**50.059**	**ug/L**	2.386	84325	0.349
	Fe	57	**4922.877**	**ug/L**	0.385	164609	0.675
	Co	59	**50.548**	**ug/L**	1.168	58292	0.242
	Ni	60	**50.411**	**ug/L**	2.114	11952	0.049
	Cu	63		**ug/L**		27180	0.112
	Cu	65	**51.654**	**ug/L**	2.311	12544	0.052
	Zn	66	**50.859**	**ug/L**	1.378	8816	0.103
	Zn	67		**ug/L**		3435	0.024
	Zn	68		**ug/L**		7077	0.081
>	Ge	74		**ug/L**		82825	82824.942
	As	75	**48.179**	**ug/L**	2.063	13128	0.153
	Se	77		**ug/L**		2712	0.017
	Se	82	**49.887**	**ug/L**	2.828	1034	0.013
	Kr	83		**ug/L**		34	0.000
	Sr	88	**49.664**	**ug/L**	1.061	134299	2.060
	Y	89		**ug/L**		19	0.000
	Zr	90	**43.297**	**ug/L**	9.047	67562	1.036
	Mo	98	**50.865**	**ug/L**	1.827	38108	0.585
	Ag	107	**51.032**	**ug/L**	0.718	67589	1.037
	Cd	111	**50.280**	**ug/L**	1.595	16480	0.253
	Cd	114		**ug/L**		40897	0.627
>	In	115		**ug/L**		65155	65155.381
	Sn	120	**50.110**	**ug/L**	1.771	74382	1.141
	Sb	121	**49.963**	**ug/L**	2.111	71168	1.089
	Sb	123		**ug/L**		54793	0.838
	Ba	135		**ug/L**		17596	0.139
	Ba	137	**49.567**	**ug/L**	3.538	29960	0.237
	Ho	165		**ug/L**		26	0.000
>	Lu	175		**ug/L**		126342	126341.596
	Tl	205	**47.886**	**ug/L**	1.333	276257	2.183
	Pb	208	**51.055**	**ug/L**	2.314	344739	2.728
	Th	232	**51.688**	**ug/L**	1.151	408292	3.231
	U	238	**53.532**	**ug/L**	2.095	429135	3.396

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	98.828				
	Be	9	100.478				
	B	11	95.614				
	Na	23	79.167				
	Mg	24	99.537				
	Al	27	92.034				
	P	31	97.840				
	K	39	99.808				
	Ca	43	97.197				
>	Sc	45		101.7			
	Ti	47	98.126				
	V	51	100.397				
	Cr	52	103.326				
	Cr	53					
	Mn	55	100.118				
	Fe	57	98.458				
	Co	59	101.095				
	Ni	60	100.821				
	Cu	63					
	Cu	65	103.309				
	Zn	66	101.718				
	Zn	67					
	Zn	68					
>	Ge	74		104.4			
	As	75	96.358				
	Se	77					
	Se	82	99.774				
	Kr	83					
	Sr	88	99.327				
	Y	89					
	Zr	90	86.594				
	Mo	98	101.729				
	Ag	107	102.064				
	Cd	111	100.560				
	Cd	114					
>	In	115		102.3			
	Sn	120	100.220				
	Sb	121	99.926				
	Sb	123					
	Ba	135					
	Ba	137	99.134				
	Ho	165					
>	Lu	175		101.7			
	Tl	205	95.772				
	Pb	208	102.110				
	Th	232	103.376				
	U	238	107.064				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 23:46:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 7.540

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.105**	**ug/L**	71.925	10	0.000
	Be	9	**0.036**	**ug/L**	243.394	7	0.000
	B	11	**1.848**	**ug/L**	22.076	122	0.000
	Na	23	**15.337**	**ug/L**	134.914	12340	0.022
	Mg	24	**3.044**	**ug/L**	86.611	667	0.003
	Al	27	**7.111**	**ug/L**	66.639	4001	0.012
	P	31	**7.930**	**ug/L**	74.329	977	0.001
	K	39	**14.025**	**ug/L**	90.319	153825	0.040
	Ca	43	**25.038**	**ug/L**	30.311	118	0.000
>	Sc	45		**ug/L**		239263	239262.820
	Ti	47	**-1.076**	**ug/L**	4.189	76	-0.000
	V	51	**-0.226**	**ug/L**	214.947	629	-0.001
	Cr	52	**0.024**	**ug/L**	255.430	529	0.000
	Cr	53		**ug/L**		31037	0.001
	Mn	55	**0.021**	**ug/L**	38.967	273	0.000
	Fe	57	**9.900**	**ug/L**	55.302	2604	0.001
	Co	59	**0.017**	**ug/L**	101.348	113	0.000
	Ni	60	**-0.030**	**ug/L**	218.758	62	-0.000
	Cu	63		**ug/L**		94	-0.000
	Cu	65	**0.063**	**ug/L**	81.014	57	0.000
	Zn	66	**0.001**	**ug/L**	4432.388	241	0.000
	Zn	67		**ug/L**		1455	-0.000
	Zn	68		**ug/L**		378	-0.000
>	Ge	74		**ug/L**		81185	81184.852
	As	75	**-0.371**	**ug/L**	75.323	361	-0.001
	Se	77		**ug/L**		1269	0.000
	Se	82	**0.311**	**ug/L**	55.817	4	0.000
	Kr	83		**ug/L**		37	0.000
	Sr	88	**0.023**	**ug/L**	76.174	140	0.001
	Y	89		**ug/L**		13	0.000
	Zr	90	**0.112**	**ug/L**	32.663	284	0.003
	Mo	98	**0.274**	**ug/L**	46.693	231	0.003
	Ag	107	**0.026**	**ug/L**	63.357	54	0.001
	Cd	111	**0.018**	**ug/L**	102.501	6	0.000
	Cd	114		**ug/L**		37	0.000
>	In	115		**ug/L**		64538	64537.651
	Sn	120	**0.046**	**ug/L**	30.691	139	0.001
	Sb	121	**0.242**	**ug/L**	11.949	539	0.005
	Sb	123		**ug/L**		436	0.004
	Ba	135		**ug/L**		20	0.000
	Ba	137	**0.019**	**ug/L**	69.672	31	0.000
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		124699	124698.806
	Tl	205	**0.231**	**ug/L**	13.020	1780	0.011
	Pb	208	**0.023**	**ug/L**	70.400	350	0.001
	Th	232	**0.071**	**ug/L**	19.337	709	0.004
	U	238	**0.024**	**ug/L**	73.651	315	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, December 10, 2009 23:52:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 10.541

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**956.710**	ug/L	0.941	43309	0.187
	Be	9	**934.283**	ug/L	2.641	32196	0.139
	B	11	**0.960**	ug/L	6.224	87	0.000
	Na	23	**42297.657**	ug/L	3.694	14153122	61.033
	Mg	24	**47612.196**	ug/L	1.165	10136533	43.724
	Al	27	**47079.191**	ug/L	3.246	19180366	82.735
	P	31	**24111.915**	ug/L	0.451	721145	3.108
	K	39	**51017.754**	ug/L	6.459	33519049	143.984
	Ca	43	**48458.558**	ug/L	1.527	68321	0.294
>	Sc	45		ug/L		231816	231816.412
	Ti	47	**32.538**	ug/L	2.419	2518	0.010
	V	51	**963.912**	ug/L	2.048	793640	3.420
	Cr	52	**956.317**	ug/L	0.738	893666	3.853
	Cr	53		ug/L		144254	0.493
	Mn	55	**942.240**	ug/L	0.998	1525171	6.578
	Fe	57	**47303.017**	ug/L	0.752	1504905	6.482
	Co	59	**939.677**	ug/L	0.613	1042519	4.497
	Ni	60	**978.153**	ug/L	1.030	222246	0.958
	Cu	63		ug/L		475430	2.050
	Cu	65	**959.397**	ug/L	1.614	223767	0.965
	Zn	66	**2401.422**	ug/L	0.453	396663	4.887
	Zn	67		ug/L		65329	0.787
	Zn	68		ug/L		301291	3.709
>	Ge	74		ug/L		81127	81126.513
	As	75	**918.126**	ug/L	0.705	236776	2.913
	Se	77		ug/L		9755	0.105
	Se	82	**506.069**	ug/L	2.788	10295	0.127
	Kr	83		ug/L		37	0.000
	Sr	88	**1002.140**	ug/L	0.600	2647541	41.566
	Y	89		ug/L		90	0.001
	Zr	90	**498.538**	ug/L	1.327	759531	11.923
	Mo	98	**1001.299**	ug/L	2.344	732894	11.506
	Ag	107	**257.780**	ug/L	1.736	333687	5.239
	Cd	111	**998.621**	ug/L	1.052	320000	5.024
	Cd	114		ug/L		766759	12.038
>	In	115		ug/L		63694	63694.218
	Sn	120	**974.906**	ug/L	1.269	1413488	22.191
	Sb	121	**252.398**	ug/L	3.224	350683	5.503
	Sb	123		ug/L		271001	4.252
	Ba	135		ug/L		340395	2.675
	Ba	137	**967.043**	ug/L	2.743	588492	4.624
	Ho	165		ug/L		96	0.001
>	Lu	175		ug/L		127286	127285.549
	Tl	205	**472.149**	ug/L	2.702	2739797	21.526
	Pb	208	**4786.990**	ug/L	3.472	32544815	255.763
	Th	232	**2430.112**	ug/L	2.383	19329282	151.886
	U	238	**5195.440**	ug/L	1.533	41952355	329.634

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	95.671				
	Be	9	93.428				
	B	11					
	Na	23	84.595				
	Mg	24	95.224				
	Al	27	94.158				
	P	31	96.448				
	K	39	102.036				
	Ca	43	96.917				
>	Sc	45		98.0			
	Ti	47					
	V	51	96.391				
	Cr	52	95.632				
	Cr	53					
	Mn	55	94.224				
	Fe	57	94.606				
	Co	59	93.968				
	Ni	60	97.815				
	Cu	63					
	Cu	65	95.940				
	Zn	66	96.057				
	Zn	67					
	Zn	68					
>	Ge	74		102.3			
	As	75	91.813				
	Se	77					
	Se	82	101.214				
	Kr	83					
	Sr	88	100.214				
	Y	89					
	Zr	90	99.708				
	Mo	98	100.130				
	Ag	107	103.112				
	Cd	111	99.862				
	Cd	114					
>	In	115		100.0			
	Sn	120	97.491				
	Sb	121	100.959				
	Sb	123					
	Ba	135					
	Ba	137	96.704				
	Ho	165					
>	Lu	175		102.5			
	Tl	205	94.430				
	Pb	208	95.740				
	Th	232	97.204				
	U	238	103.909				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 10	Na	23LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, December 10, 2009 23:58:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 11.542

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.421**	**ug/L**	1.224	2409	0.010
	Be	9	**49.764**	**ug/L**	2.330	1811	0.007
	B	11	**97.783**	**ug/L**	1.769	3708	0.015
	Na	23	**4190.852**	**ug/L**	5.052	1482511	6.047
	Mg	24	**5339.952**	**ug/L**	0.065	1197160	4.904
	Al	27	**4717.247**	**ug/L**	10.352	2022376	8.290
	P	31	**4914.155**	**ug/L**	2.880	155307	0.633
	K	39	**4923.693**	**ug/L**	9.051	3535212	13.896
	Ca	43	**4879.541**	**ug/L**	4.650	7315	0.030
>	Sc	45		**ug/L**		244122	244121.924
	Ti	47	**48.478**	**ug/L**	1.967	3873	0.015
	V	51	**46.714**	**ug/L**	3.715	41285	0.166
	Cr	52	**50.813**	**ug/L**	2.977	50472	0.205
	Cr	53		**ug/L**		45691	0.058
	Mn	55	**50.191**	**ug/L**	1.869	85768	0.350
	Fe	57	**4932.010**	**ug/L**	3.311	167250	0.676
	Co	59	**49.643**	**ug/L**	2.664	58068	0.238
	Ni	60	**50.617**	**ug/L**	2.782	12173	0.050
	Cu	63		**ug/L**		27213	0.111
	Cu	65	**50.785**	**ug/L**	1.481	12512	0.051
	Zn	66	**51.437**	**ug/L**	0.873	8871	0.105
	Zn	67		**ug/L**		3407	0.023
	Zn	68		**ug/L**		7039	0.081
>	Ge	74		**ug/L**		82425	82425.343
	As	75	**51.969**	**ug/L**	3.283	14048	0.165
	Se	77		**ug/L**		2671	0.017
	Se	82	**48.780**	**ug/L**	3.780	1006	0.012
	Kr	83		**ug/L**		35	0.000
	Sr	88	**49.457**	**ug/L**	1.171	135580	2.051
	Y	89		**ug/L**		19	0.000
	Zr	90	**53.128**	**ug/L**	5.266	84019	1.271
	Mo	98	**49.915**	**ug/L**	3.949	37912	0.574
	Ag	107	**49.837**	**ug/L**	1.126	66931	1.013
	Cd	111	**50.195**	**ug/L**	2.808	16680	0.253
	Cd	114		**ug/L**		40708	0.616
>	In	115		**ug/L**		66063	66062.528
	Sn	120	**52.184**	**ug/L**	3.653	78523	1.188
	Sb	121	**53.258**	**ug/L**	2.094	76898	1.161
	Sb	123		**ug/L**		59270	0.895
	Ba	135		**ug/L**		17665	0.138
	Ba	137	**49.884**	**ug/L**	1.469	30590	0.239
	Ho	165		**ug/L**		28	0.000
>	Lu	175		**ug/L**		128162	128162.306
	Tl	205	**47.867**	**ug/L**	2.708	280125	2.182
	Pb	208	**50.188**	**ug/L**	1.563	343835	2.681
	Th	232	**51.006**	**ug/L**	0.527	408734	3.188
	U	238	**52.961**	**ug/L**	1.576	430739	3.360

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	100.842				
	Be	9	99.528				
	B	11	97.783				
	Na	23	83.817				
	Mg	24	106.799				
	Al	27	93.411				
	P	31	98.283				
	K	39	98.474				
	Ca	43	97.591				
>	Sc	45		103.2			
	Ti	47	96.957				
	V	51	93.429				
	Cr	52	101.625				
	Cr	53					
	Mn	55	100.383				
	Fe	57	98.640				
	Co	59	99.285				
	Ni	60	101.234				
	Cu	63					
	Cu	65	101.570				
	Zn	66	102.873				
	Zn	67					
	Zn	68					
>	Ge	74		103.9			
	As	75	103.938				
	Se	77					
	Se	82	97.561				
	Kr	83					
	Sr	88	98.913				
	Y	89					
	Zr	90	106.257				
	Mo	98	99.831				
	Ag	107	99.673				
	Cd	111	100.391				
	Cd	114					
>	In	115		103.7			
	Sn	120	104.368				
	Sb	121	106.517				
	Sb	123					
	Ba	135					
	Ba	137	99.768				
	Ho	165					
>	Lu	175		103.2			
	Tl	205	95.734				
	Pb	208	100.376				
	Th	232	102.013				
	U	238	105.921				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Friday, December 11, 2009 00:03:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 12.543

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.224**	**ug/L**	25.145	16	0.000
	Be	9	**0.089**	**ug/L**	66.492	9	0.000
	B	11	**1.505**	**ug/L**	22.338	111	0.000
	Na	23	**23.368**	**ug/L**	59.781	15342	0.034
	Mg	24	**9.129**	**ug/L**	133.502	2000	0.008
	Al	27	**3.107**	**ug/L**	47.091	2334	0.005
	P	31	**4.735**	**ug/L**	52.951	887	0.001
	K	39	**-0.361**	**ug/L**	6134.275	145407	-0.001
	Ca	43	**26.987**	**ug/L**	25.850	122	0.000
>	Sc	45		**ug/L**		241565	241565.155
	Ti	47	**-1.067**	**ug/L**	10.861	77	-0.000
	V	51	**-0.792**	**ug/L**	143.592	154	-0.003
	Cr	52	**0.124**	**ug/L**	34.921	631	0.000
	Cr	53		**ug/L**		31249	0.000
	Mn	55	**0.101**	**ug/L**	77.458	410	0.001
	Fe	57	**6.620**	**ug/L**	91.853	2519	0.001
	Co	59	**0.104**	**ug/L**	58.403	214	0.000
	Ni	60	**0.100**	**ug/L**	70.689	93	0.000
	Cu	63		**ug/L**		129	-0.000
	Cu	65	**0.113**	**ug/L**	37.218	70	0.000
	Zn	66	**0.152**	**ug/L**	70.140	266	0.000
	Zn	67		**ug/L**		1458	0.000
	Zn	68		**ug/L**		396	0.000
>	Ge	74		**ug/L**		81124	81123.832
	As	75	**0.204**	**ug/L**	127.121	510	0.001
	Se	77		**ug/L**		1253	0.000
	Se	82	**0.068**	**ug/L**	900.555	-1	0.000
	Kr	83		**ug/L**		35	0.000
	Sr	88	**0.075**	**ug/L**	83.236	281	0.003
	Y	89		**ug/L**		14	0.000
	Zr	90	**0.118**	**ug/L**	8.647	294	0.003
	Mo	98	**0.266**	**ug/L**	33.235	225	0.003
	Ag	107	**0.042**	**ug/L**	71.692	74	0.001
	Cd	111	**0.091**	**ug/L**	80.222	30	0.000
	Cd	114		**ug/L**		74	0.001
>	In	115		**ug/L**		64943	64942.598
	Sn	120	**0.255**	**ug/L**	18.640	448	0.006
	Sb	121	**0.623**	**ug/L**	10.326	1080	0.014
	Sb	123		**ug/L**		849	0.011
	Ba	135		**ug/L**		49	0.000
	Ba	137	**0.090**	**ug/L**	76.103	74	0.000
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		124919	124918.519
	Tl	205	**0.502**	**ug/L**	9.278	3323	0.023
	Pb	208	**0.336**	**ug/L**	71.991	2443	0.018
	Th	232	**0.202**	**ug/L**	34.393	1736	0.013
	U	238	**0.314**	**ug/L**	66.663	2622	0.020

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.6			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 12	U	238CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 00:44:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 6.550

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.852**	**ug/L**	0.649	2274	0.010
	Be	9	**50.595**	**ug/L**	2.604	1795	0.008
	B	11	**93.003**	**ug/L**	2.125	3440	0.014
	Na	23	**4146.978**	**ug/L**	10.227	1429046	5.984
	Mg	24	**4998.683**	**ug/L**	4.501	1092291	4.590
	Al	27	**4429.424**	**ug/L**	3.020	1853369	7.784
	P	31	**4828.741**	**ug/L**	3.779	148738	0.622
	K	39	**5178.225**	**ug/L**	11.826	3616184	14.614
	Ca	43	**4770.409**	**ug/L**	2.887	6973	0.029
>	Sc	45		**ug/L**		237901	237900.551
	Ti	47	**50.996**	**ug/L**	2.039	3962	0.016
	V	51	**50.931**	**ug/L**	5.193	43786	0.181
	Cr	52	**51.286**	**ug/L**	1.413	49655	0.207
	Cr	53		**ug/L**		46698	0.067
	Mn	55	**50.581**	**ug/L**	1.704	84235	0.353
	Fe	57	**4896.866**	**ug/L**	3.312	161861	0.671
	Co	59	**49.781**	**ug/L**	1.368	56761	0.238
	Ni	60	**50.543**	**ug/L**	3.070	11847	0.050
	Cu	63		**ug/L**		26325	0.110
	Cu	65	**51.609**	**ug/L**	1.579	12391	0.052
	Zn	66	**51.363**	**ug/L**	1.359	8702	0.105
	Zn	67		**ug/L**		3502	0.025
	Zn	68		**ug/L**		6880	0.080
>	Ge	74		**ug/L**		80966	80965.615
	As	75	**49.585**	**ug/L**	3.795	13190	0.157
	Se	77		**ug/L**		2778	0.019
	Se	82	**51.801**	**ug/L**	4.484	1050	0.013
	Kr	83		**ug/L**		27	-0.000
	Sr	88	**49.326**	**ug/L**	0.988	133098	2.046
	Y	89		**ug/L**		22	0.000
	Zr	90	**44.570**	**ug/L**	4.336	69452	1.066
	Mo	98	**49.409**	**ug/L**	0.609	36947	0.568
	Ag	107	**49.470**	**ug/L**	1.825	65384	1.005
	Cd	111	**50.064**	**ug/L**	1.672	16379	0.252
	Cd	114		**ug/L**		40153	0.617
>	In	115		**ug/L**		65024	65023.975
	Sn	120	**49.637**	**ug/L**	2.048	73539	1.130
	Sb	121	**51.057**	**ug/L**	2.181	72591	1.113
	Sb	123		**ug/L**		56175	0.861
	Ba	135		**ug/L**		17212	0.137
	Ba	137	**49.424**	**ug/L**	1.470	29771	0.236
	Ho	165		**ug/L**		26	0.000
>	Lu	175		**ug/L**		125880	125880.427
	Tl	205	**47.510**	**ug/L**	2.623	273130	2.166
	Pb	208	**50.929**	**ug/L**	0.842	342726	2.721
	Th	232	**51.365**	**ug/L**	0.914	404284	3.210
	U	238	**53.236**	**ug/L**	1.981	425306	3.378

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	97.703				
	Be	9	101.191				
	B	11	93.003				
	Na	23	82.940				
	Mg	24	99.974				
	Al	27	87.711				
	P	31	96.575				
	K	39	103.564				
	Ca	43	95.408				
>	Sc	45		100.6			
	Ti	47	101.991				
	V	51	101.862				
	Cr	52	102.571				
	Cr	53					
	Mn	55	101.162				
	Fe	57	97.937				
	Co	59	99.563				
	Ni	60	101.085				
	Cu	63					
	Cu	65	103.218				
	Zn	66	102.726				
	Zn	67					
	Zn	68					
>	Ge	74		102.1			
	As	75	99.171				
	Se	77					
	Se	82	103.602				
	Kr	83					
	Sr	88	98.652				
	Y	89					
	Zr	90	89.139				
	Mo	98	98.818				
	Ag	107	98.940				
	Cd	111	100.128				
	Cd	114					
>	In	115		102.1			
	Sn	120	99.274				
	Sb	121	102.113				
	Sb	123					
	Ba	135					
	Ba	137	98.848				
	Ho	165					
>	Lu	175		101.3			
	Tl	205	95.019				
	Pb	208	101.858				
	Th	232	102.730				
	U	238	106.472				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 00:49:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 7.551

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.060**	ug/L	73.024	8	0.000
	Be	9	**0.061**	ug/L	49.814	8	0.000
	B	11	**1.492**	ug/L	11.022	106	0.000
	Na	23	**6.274**	ug/L	44.826	9003	0.009
	Mg	24	**3.103**	ug/L	86.607	667	0.003
	Al	27	**0.854**	ug/L	165.695	1333	0.002
	P	31	**1.758**	ug/L	114.456	765	0.000
	K	39	**-3.362**	ug/L	633.644	138339	-0.009
	Ca	43	**9.864**	ug/L	24.721	93	0.000
>	Sc	45		ug/L		232773	232772.529
	Ti	47	**-0.696**	ug/L	17.977	102	-0.000
	V	51	**-0.525**	ug/L	147.360	364	-0.002
	Cr	52	**0.110**	ug/L	79.275	595	0.000
	Cr	53		ug/L		31693	0.007
	Mn	55	**0.024**	ug/L	50.311	272	0.000
	Fe	57	**8.509**	ug/L	18.385	2490	0.001
	Co	59	**0.038**	ug/L	87.952	133	0.000
	Ni	60	**0.063**	ug/L	54.968	81	0.000
	Cu	63		ug/L		123	-0.000
	Cu	65	**0.050**	ug/L	62.722	52	0.000
	Zn	66	**0.061**	ug/L	241.487	248	0.000
	Zn	67		ug/L		1564	0.002
	Zn	68		ug/L		366	-0.000
>	Ge	74		ug/L		80093	80092.703
	As	75	**0.226**	ug/L	426.923	510	0.001
	Se	77		ug/L		1282	0.001
	Se	82	**-0.134**	ug/L	171.599	-5	-0.000
	Kr	83		ug/L		32	0.000
	Sr	88	**0.017**	ug/L	93.448	121	0.001
	Y	89		ug/L		16	0.000
	Zr	90	**0.082**	ug/L	9.269	235	0.002
	Mo	98	**0.091**	ug/L	33.651	93	0.001
	Ag	107	**0.022**	ug/L	73.098	47	0.000
	Cd	111	**0.020**	ug/L	131.954	6	0.000
	Cd	114		ug/L		27	0.000
>	In	115		ug/L		63612	63611.659
	Sn	120	**0.054**	ug/L	50.529	149	0.001
	Sb	121	**0.632**	ug/L	4.186	1070	0.014
	Sb	123		ug/L		838	0.011
	Ba	135		ug/L		16	0.000
	Ba	137	**0.014**	ug/L	96.308	28	0.000
	Ho	165		ug/L		13	0.000
>	Lu	175		ug/L		124101	124100.773
	Tl	205	**0.287**	ug/L	9.834	2089	0.013
	Pb	208	**0.029**	ug/L	84.934	389	0.002
	Th	232	**0.084**	ug/L	12.230	808	0.005
	U	238	**0.033**	ug/L	76.049	390	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.9			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 01:41:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 6.560

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.314**	**ug/L**	1.913	2336	0.010
	Be	9	**50.994**	**ug/L**	5.593	1804	0.008
	B	11	**95.393**	**ug/L**	3.134	3518	0.015
	Na	23	**4270.175**	**ug/L**	6.884	1468248	6.162
	Mg	24	**5148.018**	**ug/L**	13.791	1119972	4.728
	Al	27	**4962.357**	**ug/L**	12.528	2068307	8.721
	P	31	**5025.045**	**ug/L**	2.126	154387	0.648
	K	39	**5109.626**	**ug/L**	4.885	3566223	14.421
	Ca	43	**4880.741**	**ug/L**	1.207	7116	0.030
>	Sc	45		**ug/L**		237272	237272.316
	Ti	47	**50.260**	**ug/L**	3.500	3895	0.016
	V	51	**49.662**	**ug/L**	1.241	42627	0.176
	Cr	52	**51.835**	**ug/L**	2.283	50045	0.209
	Cr	53		**ug/L**		40426	0.041
	Mn	55	**50.826**	**ug/L**	2.862	84413	0.355
	Fe	57	**4863.024**	**ug/L**	1.715	160349	0.666
	Co	59	**49.702**	**ug/L**	2.763	56508	0.238
	Ni	60	**49.844**	**ug/L**	0.824	11655	0.049
	Cu	63		**ug/L**		27181	0.114
	Cu	65	**53.384**	**ug/L**	2.092	12783	0.054
	Zn	66	**50.820**	**ug/L**	2.715	8678	0.103
	Zn	67		**ug/L**		3270	0.022
	Zn	68		**ug/L**		7152	0.083
>	Ge	74		**ug/L**		81591	81590.835
	As	75	**48.599**	**ug/L**	2.101	13042	0.154
	Se	77		**ug/L**		2348	0.013
	Se	82	**48.807**	**ug/L**	3.444	997	0.012
	Kr	83		**ug/L**		32	0.000
	Sr	88	**50.104**	**ug/L**	0.563	133266	2.078
	Y	89		**ug/L**		27	0.000
	Zr	90	**42.340**	**ug/L**	9.635	65033	1.013
	Mo	98	**50.492**	**ug/L**	3.542	37206	0.580
	Ag	107	**49.980**	**ug/L**	3.748	65067	1.016
	Cd	111	**51.091**	**ug/L**	2.743	16465	0.257
	Cd	114		**ug/L**		39592	0.618
>	In	115		**ug/L**		64093	64092.949
	Sn	120	**52.339**	**ug/L**	3.032	76383	1.191
	Sb	121	**50.576**	**ug/L**	2.195	70839	1.103
	Sb	123		**ug/L**		54589	0.849
	Ba	135		**ug/L**		17304	0.138
	Ba	137	**50.284**	**ug/L**	1.707	30064	0.240
	Ho	165		**ug/L**		28	0.000
>	Lu	175		**ug/L**		124961	124960.787
	Tl	205	**40.721**	**ug/L**	5.554	232565	1.857
	Pb	208	**51.767**	**ug/L**	0.952	345792	2.766
	Th	232	**51.843**	**ug/L**	1.400	405051	3.240
	U	238	**53.825**	**ug/L**	1.800	426855	3.415

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	100.629				
	Be	9	101.988				
	B	11	95.393				
	Na	23	85.403				
	Mg	24	102.960				
	Al	27	98.264				
	P	31	100.501				
	K	39	102.193				
	Ca	43	97.615				
>	Sc	45		100.3			
	Ti	47	100.519				
	V	51	99.325				
	Cr	52	103.671				
	Cr	53					
	Mn	55	101.653				
	Fe	57	97.260				
	Co	59	99.404				
	Ni	60	99.689				
	Cu	63					
	Cu	65	106.768				
	Zn	66	101.639				
	Zn	67					
	Zn	68					
>	Ge	74		102.8			
	As	75	97.198				
	Se	77					
	Se	82	97.613				
	Kr	83					
	Sr	88	100.208				
	Y	89					
	Zr	90	84.680				
	Mo	98	100.984				
	Ag	107	99.960				
	Cd	111	102.182				
	Cd	114					
>	In	115		100.6			
	Sn	120	104.679				
	Sb	121	101.152				
	Sb	123					
	Ba	135					
	Ba	137	100.567				
	Ho	165					
>	Lu	175		100.6			
	Tl	205	81.442				
	Pb	208	103.534				
	Th	232	103.686				
	U	238	107.650				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)
QC Std 6	Tl	205CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 01:47:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 7.561

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.116**	**ug/L**	53.741	10	0.000
	Be	9	**-0.037**	**ug/L**	196.539	5	-0.000
	B	11	**1.171**	**ug/L**	16.992	96	0.000
	Na	23	**16.707**	**ug/L**	51.287	12673	0.024
	Mg	24	**3.079**	**ug/L**	86.625	667	0.003
	Al	27	**-2.406**	**ug/L**	0.000	0	-0.004
	P	31	**4.533**	**ug/L**	15.501	859	0.001
	K	39	**17.544**	**ug/L**	42.524	153824	0.050
	Ca	43	**9.505**	**ug/L**	44.889	94	0.000
>	Sc	45		**ug/L**		235570	235569.596
	Ti	47	**-1.178**	**ug/L**	5.507	67	-0.000
	V	51	**0.223**	**ug/L**	244.157	997	0.001
	Cr	52	**0.076**	**ug/L**	88.866	570	0.000
	Cr	53		**ug/L**		28806	-0.007
	Mn	55	**0.275**	**ug/L**	45.801	687	0.002
	Fe	57	**14.376**	**ug/L**	35.194	2708	0.002
	Co	59	**0.038**	**ug/L**	34.131	134	0.000
	Ni	60	**0.081**	**ug/L**	67.038	86	0.000
	Cu	63		**ug/L**		352	0.001
	Cu	65	**0.573**	**ug/L**	40.475	177	0.001
	Zn	66	**0.281**	**ug/L**	60.181	287	0.001
	Zn	67		**ug/L**		1399	-0.001
	Zn	68		**ug/L**		415	0.000
>	Ge	74		**ug/L**		80874	80874.098
	As	75	**-0.252**	**ug/L**	71.511	391	-0.001
	Se	77		**ug/L**		1025	-0.003
	Se	82	**0.699**	**ug/L**	85.030	12	0.000
	Kr	83		**ug/L**		23	-0.000
	Sr	88	**0.025**	**ug/L**	66.268	143	0.001
	Y	89		**ug/L**		11	0.000
	Zr	90	**0.092**	**ug/L**	34.676	250	0.002
	Mo	98	**0.069**	**ug/L**	20.435	77	0.001
	Ag	107	**0.024**	**ug/L**	55.796	49	0.000
	Cd	111	**0.059**	**ug/L**	23.754	19	0.000
	Cd	114		**ug/L**		32	0.000
>	In	115		**ug/L**		63780	63779.920
	Sn	120	**0.283**	**ug/L**	17.828	481	0.006
	Sb	121	**0.291**	**ug/L**	9.068	600	0.006
	Sb	123		**ug/L**		454	0.005
	Ba	135		**ug/L**		23	0.000
	Ba	137	**0.031**	**ug/L**	95.037	37	0.000
	Ho	165		**ug/L**		13	-0.000
>	Lu	175		**ug/L**		121922	121922.333
	Tl	205	**1.046**	**ug/L**	10.084	6267	0.048
	Pb	208	**0.161**	**ug/L**	70.925	1236	0.009
	Th	232	**0.078**	**ug/L**	13.770	750	0.005
	U	238	**0.030**	**ug/L**	45.472	360	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 7	Tl	205CCB is out of limts (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1201978613
Sample Date/Time: Friday, December 11, 2009 01:53:25
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\1201978613.562

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.100**	**ug/L**	87.035	10	0.000
	Be	9	**0.027**	**ug/L**	214.010	7	0.000
	B	11	**0.284**	**ug/L**	54.739	65	0.000
	Na	23	**4.837**	**ug/L**	287.337	8670	0.007
	Mg	24	**1.519**	**ug/L**	173.205	333	0.001
	Al	27	**5.508**	**ug/L**	107.290	3334	0.010
	P	31	**23.522**	**ug/L**	5.706	1451	0.003
	K	39	**-5.647**	**ug/L**	367.314	140022	-0.016
	Ca	43	**0.496**	**ug/L**	1915.185	82	0.000
>	Sc	45		**ug/L**		238124	238123.815
	Ti	47	**-0.547**	**ug/L**	38.561	115	-0.000
	V	51	**-0.395**	**ug/L**	206.648	480	-0.001
	Cr	52	**0.502**	**ug/L**	10.476	985	0.002
	Cr	53		**ug/L**		25467	-0.022
	Mn	55	**0.315**	**ug/L**	7.333	762	0.002
	Fe	57	**19.693**	**ug/L**	2.233	2912	0.003
	Co	59	**0.008**	**ug/L**	167.682	101	0.000
	Ni	60	**0.146**	**ug/L**	46.910	102	0.000
	Cu	63		**ug/L**		199	0.000
	Cu	65	**0.260**	**ug/L**	17.854	104	0.000
	Zn	66	**0.947**	**ug/L**	3.694	390	0.002
	Zn	67		**ug/L**		1282	-0.002
	Zn	68		**ug/L**		484	0.001
>	Ge	74		**ug/L**		79721	79720.679
	As	75	**-0.401**	**ug/L**	54.482	348	-0.001
	Se	77		**ug/L**		842	-0.005
	Se	82	**0.185**	**ug/L**	55.555	2	0.000
	Kr	83		**ug/L**		29	-0.000
	Sr	88	**0.023**	**ug/L**	27.888	137	0.001
	Y	89		**ug/L**		16	0.000
	Zr	90	**2.915**	**ug/L**	19.071	4557	0.070
	Mo	98	**0.069**	**ug/L**	19.857	77	0.001
	Ag	107	**0.006**	**ug/L**	75.968	27	0.000
	Cd	111	**0.039**	**ug/L**	83.917	13	0.000
	Cd	114		**ug/L**		13	-0.000
>	In	115		**ug/L**		63916	63916.194
	Sn	120	**0.436**	**ug/L**	7.916	704	0.010
	Sb	121	**0.020**	**ug/L**	42.244	224	0.000
	Sb	123		**ug/L**		193	0.001
	Ba	135		**ug/L**		100	0.001
	Ba	137	**0.302**	**ug/L**	3.425	197	0.001
	Ho	165		**ug/L**		13	-0.000
>	Lu	175		**ug/L**		123043	123043.264
	Tl	205	**0.729**	**ug/L**	16.183	4541	0.033
	Pb	208	**0.013**	**ug/L**	5.372	278	0.001
	Th	232	**0.111**	**ug/L**	26.842	1004	0.007
	U	238	**-0.011**	**ug/L**	5.657	38	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.1			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978618
Sample Date/Time: Friday, December 11, 2009 01:59:11
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925484|20|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\1201978618.563

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.235**	**ug/L**	10.245	201	0.001
	Be	9	**45.118**	**ug/L**	5.543	1597	0.007
	B	11	**67.360**	**ug/L**	4.779	2500	0.010
	Na	23	**292.093**	**ug/L**	18.111	107074	0.421
	Mg	24	**1772.263**	**ug/L**	9.199	386877	1.628
	Al	27	**3829.521**	**ug/L**	0.546	1598746	6.730
	P	31	**345.813**	**ug/L**	2.403	11306	0.045
	K	39	**1301.162**	**ug/L**	11.587	1013899	3.672
	Ca	43	**1807.771**	**ug/L**	1.629	2689	0.011
>	Sc	45		**ug/L**		237427	237427.355
	Ti	47	**153.894**	**ug/L**	2.288	11614	0.048
	V	51	**74.878**	**ug/L**	1.680	63881	0.266
	Cr	52	**34.730**	**ug/L**	4.462	33701	0.140
	Cr	53		**ug/L**		32429	0.008
	Mn	55	**182.202**	**ug/L**	2.846	302109	1.272
	Fe	57	**5246.944**	**ug/L**	3.454	172896	0.719
	Co	59	**42.754**	**ug/L**	3.700	48638	0.205
	Ni	60	**52.521**	**ug/L**	2.725	12280	0.051
	Cu	63		**ug/L**		26195	0.110
	Cu	65	**50.568**	**ug/L**	3.206	12113	0.051
	Zn	66	**105.596**	**ug/L**	1.871	17602	0.215
	Zn	67		**ug/L**		4312	0.035
	Zn	68		**ug/L**		14356	0.173
>	Ge	74		**ug/L**		80800	80800.363
	As	75	**128.402**	**ug/L**	1.956	33367	0.407
	Se	77		**ug/L**		2584	0.017
	Se	82	**91.572**	**ug/L**	0.675	1854	0.023
	Kr	83		**ug/L**		31	-0.000
	Sr	88	**83.176**	**ug/L**	0.619	223442	3.450
	Y	89		**ug/L**		17598	0.272
	Zr	90	**2.802**	**ug/L**	0.184	4450	0.067
	Mo	98	**42.728**	**ug/L**	0.896	31816	0.491
	Ag	107	**8.337**	**ug/L**	1.615	10989	0.169
	Cd	111	**61.078**	**ug/L**	1.160	19895	0.307
	Cd	114		**ug/L**		48906	0.755
>	In	115		**ug/L**		64744	64744.391
	Sn	120	**16.219**	**ug/L**	1.356	23972	0.369
	Sb	121	**22.286**	**ug/L**	2.199	31655	0.486
	Sb	123		**ug/L**		24366	0.374
	Ba	135		**ug/L**		82764	0.655
	Ba	137	**237.467**	**ug/L**	0.377	143538	1.136
	Ho	165		**ug/L**		1778	0.014
>	Lu	175		**ug/L**		126387	126386.555
	Tl	205	**97.138**	**ug/L**	1.865	560216	4.429
	Pb	208	**85.520**	**ug/L**	0.487	577702	4.569
	Th	232	**6.584**	**ug/L**	5.071	52175	0.411
	U	238	**0.906**	**ug/L**	2.799	7395	0.057

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			100.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			101.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			101.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978618
Sample Date/Time: Friday, December 11, 2009 02:04:57
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925484|40|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\1201978618.564

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1.861**	ug/L	3.490	92	0.000
	Be	9	**22.670**	ug/L	1.020	809	0.003
	B	11	**35.128**	ug/L	1.771	1336	0.005
	Na	23	**120.238**	ug/L	21.995	48417	0.173
	Mg	24	**900.087**	ug/L	10.293	197025	0.827
	Al	27	**2277.061**	ug/L	8.374	955031	4.002
	P	31	**175.420**	ug/L	0.789	6120	0.023
	K	39	**718.382**	ug/L	4.134	627145	2.027
	Ca	43	**924.095**	ug/L	3.561	1419	0.006
>	Sc	45		ug/L		238386	238385.548
	Ti	47	**78.425**	ug/L	1.768	6021	0.025
	V	51	**38.190**	ug/L	2.231	33123	0.136
	Cr	52	**17.530**	ug/L	2.085	17342	0.071
	Cr	53		ug/L		31467	0.003
	Mn	55	**92.759**	ug/L	1.106	154618	0.648
	Fe	57	**2732.264**	ug/L	1.597	91526	0.374
	Co	59	**21.591**	ug/L	1.217	24723	0.103
	Ni	60	**26.556**	ug/L	0.637	6271	0.026
	Cu	63		ug/L		13329	0.055
	Cu	65	**25.271**	ug/L	0.696	6102	0.025
	Zn	66	**54.060**	ug/L	0.241	9128	0.110
	Zn	67		ug/L		2845	0.017
	Zn	68		ug/L		7477	0.088
>	Ge	74		ug/L		80795	80795.327
	As	75	**64.591**	ug/L	0.560	17012	0.205
	Se	77		ug/L		1899	0.008
	Se	82	**45.565**	ug/L	5.064	922	0.011
	Kr	83		ug/L		35	0.000
	Sr	88	**42.735**	ug/L	1.376	113685	1.773
	Y	89		ug/L		8952	0.140
	Zr	90	**1.394**	ug/L	3.838	2247	0.033
	Mo	98	**21.629**	ug/L	2.256	15956	0.249
	Ag	107	**4.293**	ug/L	2.061	5611	0.087
	Cd	111	**31.417**	ug/L	2.767	10128	0.158
	Cd	114		ug/L		24979	0.390
>	In	115		ug/L		64101	64100.512
	Sn	120	**8.380**	ug/L	4.119	12292	0.191
	Sb	121	**11.485**	ug/L	4.267	16239	0.250
	Sb	123		ug/L		12514	0.193
	Ba	135		ug/L		42298	0.341
	Ba	137	**123.090**	ug/L	0.421	73028	0.589
	Ho	165		ug/L		900	0.007
>	Lu	175		ug/L		124035	124034.706
	Tl	205	**50.590**	ug/L	0.544	286548	2.306
	Pb	208	**44.154**	ug/L	1.341	292793	2.359
	Th	232	**3.345**	ug/L	5.066	26082	0.209
	U	238	**0.453**	ug/L	0.413	3693	0.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.8			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613001
Sample Date/Time: Friday, December 11, 2009 02:10:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613001.565

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**33.816**	ug/L	3.586	1630	0.007
	Be	9	**2.053**	ug/L	6.186	81	0.000
	B	11	**9.921**	ug/L	1.055	430	0.002
	Na	23	**1081.385**	ug/L	7.378	391302	1.560
	Mg	24	**5885.859**	ug/L	0.985	1330538	5.405
	Al	27	**37203.496**	ug/L	6.801	16090196	65.380
	P	31	**293.419**	ug/L	1.773	10063	0.038
	K	39	**4018.142**	ug/L	12.681	2939119	11.340
	Ca	43	**4326.296**	ug/L	3.829	6552	0.026
>	Sc	45		ug/L		246170	246169.722
	Ti	47	**601.401**	ug/L	0.952	46604	0.189
	V	51	**39.451**	ug/L	0.973	35307	0.140
	Cr	52	**19.014**	ug/L	3.017	19376	0.077
	Cr	53		ug/L		26918	-0.020
	Mn	55	**832.719**	ug/L	1.059	1431439	5.814
	Fe	57	**23064.254**	ug/L	1.507	780457	3.161
	Co	59	**7.400**	ug/L	1.333	8813	0.035
	Ni	60	**18.305**	ug/L	2.138	4485	0.018
	Cu	63		ug/L		6774	0.027
	Cu	65	**12.563**	ug/L	0.763	3154	0.013
	Zn	66	**129.427**	ug/L	1.538	21207	0.263
	Zn	67		ug/L		4726	0.041
	Zn	68		ug/L		16919	0.208
>	Ge	74		ug/L		79639	79638.865
	As	75	**3.122**	ug/L	8.381	1237	0.010
	Se	77		ug/L		931	-0.004
	Se	82	**0.598**	ug/L	26.879	10	0.000
	Kr	83		ug/L		41	0.000
	Sr	88	**64.435**	ug/L	1.213	170790	2.673
	Y	89		ug/L		159300	2.494
	Zr	90	**55.693**	ug/L	10.368	85142	1.332
	Mo	98	**4.053**	ug/L	4.341	3001	0.047
	Ag	107	**0.220**	ug/L	10.872	305	0.004
	Cd	111	**0.439**	ug/L	12.338	141	0.002
	Cd	114		ug/L		96	0.001
>	In	115		ug/L		63881	63880.515
	Sn	120	**0.791**	ug/L	0.622	1220	0.018
	Sb	121	**0.212**	ug/L	10.635	491	0.005
	Sb	123		ug/L		375	0.003
	Ba	135		ug/L		82214	0.624
	Ba	137	**224.893**	ug/L	1.561	141736	1.075
	Ho	165		ug/L		15791	0.120
>	Lu	175		ug/L		131783	131782.706
	Tl	205	**1.582**	ug/L	15.774	9992	0.072
	Pb	208	**40.423**	ug/L	0.356	284826	2.160
	Th	232	**22.235**	ug/L	0.115	183311	1.390
	U	238	**2.760**	ug/L	1.593	23213	0.175

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.1			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978614
Sample Date/Time: Friday, December 11, 2009 02:16:30
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\1201978614.566

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**35.162**	**ug/L**	0.708	1656	0.007
	Be	9	**2.268**	**ug/L**	15.179	87	0.000
	B	11	**10.426**	**ug/L**	7.228	438	0.002
	Na	23	**1028.372**	**ug/L**	17.048	364350	1.484
	Mg	24	**5600.374**	**ug/L**	1.722	1236642	5.143
	Al	27	**38561.818**	**ug/L**	3.834	16303311	67.767
	P	31	**236.201**	**ug/L**	0.952	8057	0.030
	K	39	**3823.963**	**ug/L**	4.162	2739273	10.792
	Ca	43	**4197.283**	**ug/L**	5.553	6210	0.025
>	Sc	45		**ug/L**		240494	240493.641
	Ti	47	**616.987**	**ug/L**	1.226	46699	0.194
	V	51	**41.470**	**ug/L**	3.345	36199	0.147
	Cr	52	**19.179**	**ug/L**	2.351	19087	0.077
	Cr	53		**ug/L**		25307	-0.024
	Mn	55	**756.073**	**ug/L**	1.660	1269456	5.279
	Fe	57	**23395.858**	**ug/L**	3.724	772965	3.206
	Co	59	**7.027**	**ug/L**	4.786	8176	0.034
	Ni	60	**16.955**	**ug/L**	4.281	4062	0.017
	Cu	63		**ug/L**		6342	0.026
	Cu	65	**12.348**	**ug/L**	0.999	3030	0.012
	Zn	66	**125.332**	**ug/L**	2.002	20275	0.255
	Zn	67		**ug/L**		4506	0.039
	Zn	68		**ug/L**		16505	0.205
>	Ge	74		**ug/L**		78593	78593.396
	As	75	**2.591**	**ug/L**	15.416	1089	0.008
	Se	77		**ug/L**		867	-0.004
	Se	82	**0.757**	**ug/L**	17.455	13	0.000
	Kr	83		**ug/L**		39	0.000
	Sr	88	**63.666**	**ug/L**	0.909	168344	2.641
	Y	89		**ug/L**		146814	2.304
	Zr	90	**60.916**	**ug/L**	2.520	92941	1.457
	Mo	98	**3.517**	**ug/L**	3.427	2601	0.040
	Ag	107	**0.206**	**ug/L**	5.355	285	0.004
	Cd	111	**0.470**	**ug/L**	13.732	151	0.002
	Cd	114		**ug/L**		79	0.001
>	In	115		**ug/L**		63720	63719.634
	Sn	120	**0.680**	**ug/L**	7.934	1056	0.015
	Sb	121	**0.147**	**ug/L**	2.254	398	0.003
	Sb	123		**ug/L**		304	0.002
	Ba	135		**ug/L**		78396	0.611
	Ba	137	**221.051**	**ug/L**	1.698	135560	1.057
	Ho	165		**ug/L**		14726	0.115
>	Lu	175		**ug/L**		128233	128232.927
	Tl	205	**0.868**	**ug/L**	0.663	5550	0.040
	Pb	208	**41.373**	**ug/L**	0.635	283652	2.211
	Th	232	**22.702**	**ug/L**	1.373	182100	1.419
	U	238	**2.710**	**ug/L**	0.820	22183	0.172

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	MassOut of Limits Message
Ti 47 Upper, S, EEETi	47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978616
Sample Date/Time: Friday, December 11, 2009 02:22:18
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\1201978616.567

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**59.956**	**ug/L**	2.184	2892	0.012
	Be	9	**26.279**	**ug/L**	5.365	969	0.004
	B	11	**54.625**	**ug/L**	6.105	2117	0.008
	Na	23	**1993.979**	**ug/L**	4.993	716556	2.877
	Mg	24	**7125.181**	**ug/L**	6.950	1612710	6.543
	Al	27	**39840.917**	**ug/L**	1.515	17262329	70.015
	P	31	**1121.912**	**ug/L**	1.715	36402	0.145
	K	39	**4666.613**	**ug/L**	1.036	3395664	13.170
	Ca	43	**4783.220**	**ug/L**	1.394	7247	0.029
>	Sc	45		**ug/L**		246531	246530.837
	Ti	47	**624.159**	**ug/L**	1.818	48432	0.196
	V	51	**69.150**	**ug/L**	2.992	61331	0.245
	Cr	52	**41.678**	**ug/L**	2.325	41915	0.168
	Cr	53		**ug/L**		28488	-0.014
	Mn	55	**1711.331**	**ug/L**	2.003	2945704	11.948
	Fe	57	**23146.487**	**ug/L**	2.477	784251	3.172
	Co	59	**48.715**	**ug/L**	1.699	57564	0.233
	Ni	60	**43.197**	**ug/L**	2.676	10505	0.042
	Cu	63		**ug/L**		18640	0.075
	Cu	65	**35.556**	**ug/L**	2.883	8861	0.036
	Zn	66	**149.811**	**ug/L**	0.533	25068	0.305
	Zn	67		**ug/L**		5239	0.046
	Zn	68		**ug/L**		20396	0.246
>	Ge	74		**ug/L**		81445	81444.694
	As	75	**37.117**	**ug/L**	0.783	10049	0.118
	Se	77		**ug/L**		1005	-0.003
	Se	82	**7.371**	**ug/L**	2.460	149	0.002
	Kr	83		**ug/L**		43	0.000
	Sr	88	**89.141**	**ug/L**	2.602	235783	3.697
	Y	89		**ug/L**		163946	2.571
	Zr	90	**117.222**	**ug/L**	2.268	178872	2.803
	Mo	98	**25.458**	**ug/L**	0.643	18681	0.293
	Ag	107	**22.418**	**ug/L**	1.324	29069	0.456
	Cd	111	**5.415**	**ug/L**	3.169	1738	0.027
	Cd	114		**ug/L**		3868	0.060
>	In	115		**ug/L**		63766	63765.523
	Sn	120	**12.671**	**ug/L**	0.528	18460	0.288
	Sb	121	**45.350**	**ug/L**	1.693	63234	0.989
	Sb	123		**ug/L**		48061	0.751
	Ba	135		**ug/L**		105216	0.787
	Ba	137	**282.410**	**ug/L**	1.913	180469	1.350
	Ho	165		**ug/L**		16734	0.125
>	Lu	175		**ug/L**		133650	133649.754
	Tl	205	**44.343**	**ug/L**	2.860	270612	2.022
	Pb	208	**163.702**	**ug/L**	2.750	1168747	8.746
	Th	232	**46.020**	**ug/L**	1.394	384553	2.876
	U	238	**27.396**	**ug/L**	3.296	232394	1.738

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.6			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1201978617
Sample Date/Time: Friday, December 11, 2009 02:28:06
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\1201978617.568

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**58.608**	**ug/L**	3.628	2812	0.011
	Be	9	**26.543**	**ug/L**	4.806	974	0.004
	B	11	**55.073**	**ug/L**	1.967	2123	0.008
	Na	23	**1980.804**	**ug/L**	1.910	708130	2.858
	Mg	24	**7238.788**	**ug/L**	4.070	1630059	6.648
	Al	27	**44506.531**	**ug/L**	5.030	19180366	78.214
	P	31	**1184.206**	**ug/L**	1.851	38181	0.153
	K	39	**5195.485**	**ug/L**	3.795	3743673	14.663
	Ca	43	**5677.305**	**ug/L**	1.546	8541	0.034
>	Sc	45		**ug/L**		245218	245218.145
	Ti	47	**668.693**	**ug/L**	1.138	51602	0.210
	V	51	**68.612**	**ug/L**	2.158	60542	0.243
	Cr	52	**43.880**	**ug/L**	1.394	43871	0.177
	Cr	53		**ug/L**		28855	-0.011
	Mn	55	**857.444**	**ug/L**	2.331	1468195	5.986
	Fe	57	**24163.551**	**ug/L**	1.311	814316	3.311
	Co	59	**32.715**	**ug/L**	2.365	38485	0.157
	Ni	60	**40.176**	**ug/L**	2.976	9724	0.039
	Cu	63		**ug/L**		18754	0.076
	Cu	65	**35.537**	**ug/L**	1.444	8809	0.036
	Zn	66	**147.506**	**ug/L**	0.865	24463	0.300
	Zn	67		**ug/L**		5210	0.047
	Zn	68		**ug/L**		20279	0.247
>	Ge	74		**ug/L**		80705	80705.139
	As	75	**38.669**	**ug/L**	4.395	10358	0.123
	Se	77		**ug/L**		1032	-0.002
	Se	82	**8.647**	**ug/L**	8.347	173	0.002
	Kr	83		**ug/L**		39	0.000
	Sr	88	**89.957**	**ug/L**	0.632	242123	3.731
	Y	89		**ug/L**		166307	2.563
	Zr	90	**110.174**	**ug/L**	1.491	171043	2.635
	Mo	98	**25.105**	**ug/L**	2.339	18741	0.288
	Ag	107	**22.618**	**ug/L**	0.284	29838	0.460
	Cd	111	**5.245**	**ug/L**	3.355	1712	0.026
	Cd	114		**ug/L**		3865	0.059
>	In	115		**ug/L**		64873	64873.471
	Sn	120	**11.982**	**ug/L**	1.161	17764	0.273
	Sb	121	**42.718**	**ug/L**	1.430	60616	0.931
	Sb	123		**ug/L**		47158	0.724
	Ba	135		**ug/L**		100644	0.760
	Ba	137	**273.787**	**ug/L**	2.410	173310	1.309
	Ho	165		**ug/L**		16930	0.128
>	Lu	175		**ug/L**		132397	132397.231
	Tl	205	**44.681**	**ug/L**	4.296	270019	2.037
	Pb	208	**135.067**	**ug/L**	3.153	955174	7.216
	Th	232	**46.819**	**ug/L**	2.089	387469	2.926
	U	238	**27.964**	**ug/L**	4.121	234888	1.774

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.6			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978615
Sample Date/Time: Friday, December 11, 2009 02:33:53
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925484|10|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\1201978615.569

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**7.155**	**ug/L**	2.535	333	0.001
	Be	9	**0.451**	**ug/L**	20.681	22	0.000
	B	11	**2.624**	**ug/L**	10.431	148	0.000
	Na	23	**251.890**	**ug/L**	5.398	92298	0.363
	Mg	24	**1431.848**	**ug/L**	5.376	308635	1.315
	Al	27	**7834.450**	**ug/L**	2.462	3233357	13.768
	P	31	**66.233**	**ug/L**	7.561	2723	0.009
	K	39	**780.431**	**ug/L**	8.814	658534	2.203
	Ca	43	**960.862**	**ug/L**	0.585	1451	0.006
>	Sc	45		**ug/L**		234821	234820.720
	Ti	47	**124.361**	**ug/L**	1.488	9314	0.039
	V	51	**10.045**	**ug/L**	7.192	9178	0.036
	Cr	52	**4.260**	**ug/L**	1.917	4526	0.017
	Cr	53		**ug/L**		27651	-0.011
	Mn	55	**184.413**	**ug/L**	2.210	302525	1.288
	Fe	57	**4921.911**	**ug/L**	1.062	160606	0.674
	Co	59	**1.552**	**ug/L**	4.447	1834	0.007
	Ni	60	**3.872**	**ug/L**	2.728	958	0.004
	Cu	63		**ug/L**		1478	0.006
	Cu	65	**2.812**	**ug/L**	5.133	706	0.003
	Zn	66	**26.561**	**ug/L**	2.599	4523	0.054
	Zn	67		**ug/L**		2012	0.007
	Zn	68		**ug/L**		3855	0.044
>	Ge	74		**ug/L**		79329	79328.772
	As	75	**0.447**	**ug/L**	96.717	559	0.001
	Se	77		**ug/L**		1212	-0.000
	Se	82	**0.520**	**ug/L**	14.947	8	0.000
	Kr	83		**ug/L**		28	-0.000
	Sr	88	**12.933**	**ug/L**	0.601	33887	0.536
	Y	89		**ug/L**		31445	0.499
	Zr	90	**9.832**	**ug/L**	5.621	14930	0.235
	Mo	98	**0.815**	**ug/L**	3.543	617	0.009
	Ag	107	**0.036**	**ug/L**	14.248	64	0.001
	Cd	111	**0.122**	**ug/L**	9.134	39	0.001
	Cd	114		**ug/L**		21	0.000
>	In	115		**ug/L**		63030	63029.748
	Sn	120	**0.248**	**ug/L**	4.342	424	0.006
	Sb	121	**0.183**	**ug/L**	10.503	444	0.004
	Sb	123		**ug/L**		340	0.003
	Ba	135		**ug/L**		16116	0.128
	Ba	137	**46.748**	**ug/L**	0.689	28065	0.224
	Ho	165		**ug/L**		3174	0.025
>	Lu	175		**ug/L**		125459	125459.448
	Tl	205	**0.545**	**ug/L**	6.496	3583	0.025
	Pb	208	**8.689**	**ug/L**	1.208	58443	0.464
	Th	232	**4.678**	**ug/L**	2.281	36841	0.292
	U	238	**0.574**	**ug/L**	0.891	4697	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			100.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.0		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 02:39:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 6.570

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.571**	ug/L	1.483	2311	0.010
	Be	9	**53.993**	ug/L	3.289	1918	0.008
	B	11	**95.091**	ug/L	3.427	3522	0.015
	Na	23	**4356.987**	ug/L	5.799	1504776	6.287
	Mg	24	**4992.672**	ug/L	4.051	1092260	4.585
	Al	27	**4442.518**	ug/L	5.259	1861007	7.807
	P	31	**4933.827**	ug/L	1.483	152226	0.636
	K	39	**5152.264**	ug/L	1.929	3607570	14.541
	Ca	43	**4873.595**	ug/L	3.537	7134	0.030
>	Sc	45		ug/L		238226	238225.945
	Ti	47	**48.610**	ug/L	2.285	3789	0.015
	V	51	**51.005**	ug/L	3.315	43931	0.181
	Cr	52	**51.698**	ug/L	1.157	50125	0.208
	Cr	53		ug/L		42450	0.049
	Mn	55	**50.994**	ug/L	1.633	85054	0.356
	Fe	57	**4919.292**	ug/L	1.060	162868	0.674
	Co	59	**48.977**	ug/L	1.714	55930	0.234
	Ni	60	**48.553**	ug/L	1.793	11401	0.048
	Cu	63		ug/L		26488	0.110
	Cu	65	**51.403**	ug/L	1.885	12360	0.052
	Zn	66	**50.442**	ug/L	2.135	8525	0.103
	Zn	67		ug/L		3233	0.022
	Zn	68		ug/L		7028	0.082
>	Ge	74		ug/L		80720	80720.226
	As	75	**48.384**	ug/L	1.231	12847	0.154
	Se	77		ug/L		2575	0.017
	Se	82	**47.974**	ug/L	3.469	969	0.012
	Kr	83		ug/L		28	-0.000
	Sr	88	**48.709**	ug/L	1.235	128837	2.020
	Y	89		ug/L		18	0.000
	Zr	90	**51.903**	ug/L	2.642	79215	1.241
	Mo	98	**49.959**	ug/L	0.639	36614	0.574
	Ag	107	**49.764**	ug/L	1.178	64472	1.011
	Cd	111	**49.819**	ug/L	2.212	15972	0.251
	Cd	114		ug/L		39674	0.622
>	In	115		ug/L		63732	63732.052
	Sn	120	**50.620**	ug/L	0.766	73503	1.152
	Sb	121	**51.476**	ug/L	0.989	71720	1.122
	Sb	123		ug/L		54719	0.856
	Ba	135		ug/L		17044	0.135
	Ba	137	**49.261**	ug/L	0.937	29675	0.236
	Ho	165		ug/L		28	0.000
>	Lu	175		ug/L		125905	125904.751
	Tl	205	**45.814**	ug/L	2.485	263453	2.089
	Pb	208	**51.507**	ug/L	2.428	346604	2.752
	Th	232	**51.436**	ug/L	2.132	404891	3.215
	U	238	**54.094**	ug/L	1.874	432157	3.432

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	99.143				
	Be	9	107.985				
	B	11	95.091				
	Na	23	87.140				
	Mg	24	99.853				
	Al	27	87.971				
	P	31	98.677				
	K	39	103.045				
	Ca	43	97.472				
>	Sc	45		100.7			
	Ti	47	97.219				
	V	51	102.010				
	Cr	52	103.397				
	Cr	53					
	Mn	55	101.989				
	Fe	57	98.386				
	Co	59	97.954				
	Ni	60	97.105				
	Cu	63					
	Cu	65	102.805				
	Zn	66	100.884				
	Zn	67					
	Zn	68					
>	Ge	74		101.8			
	As	75	96.768				
	Se	77					
	Se	82	95.948				
	Kr	83					
	Sr	88	97.418				
	Y	89					
	Zr	90	103.806				
	Mo	98	99.917				
	Ag	107	99.528				
	Cd	111	99.639				
	Cd	114					
>	In	115		100.1			
	Sn	120	101.240				
	Sb	121	102.952				
	Sb	123					
	Ba	135					
	Ba	137	98.521				
	Ho	165					
>	Lu	175		101.4			
	Tl	205	91.628				
	Pb	208	103.014				
	Th	232	102.872				
	U	238	108.188				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 02:45:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 7.571

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.180**	ug/L	10.930	13	0.000
	Be	9	**0.014**	ug/L	245.217	6	0.000
	B	11	**1.545**	ug/L	38.465	107	0.000
	Na	23	**14.540**	ug/L	92.805	11672	0.021
	Mg	24	**0.000**	ug/L		0	0.000
	Al	27	**3.329**	ug/L	111.961	2334	0.006
	P	31	**4.027**	ug/L	27.962	827	0.001
	K	39	**-2.294**	ug/L	921.814	137664	-0.006
	Ca	43	**18.554**	ug/L	39.315	105	0.000
>	Sc	45		ug/L		230759	230759.229
	Ti	47	**-1.241**	ug/L	6.781	61	-0.000
	V	51	**0.688**	ug/L	21.193	1356	0.002
	Cr	52	**0.173**	ug/L	18.327	650	0.001
	Cr	53		ug/L		29407	-0.002
	Mn	55	**0.195**	ug/L	29.069	543	0.001
	Fe	57	**11.085**	ug/L	27.166	2549	0.002
	Co	59	**0.026**	ug/L	29.807	118	0.000
	Ni	60	**0.031**	ug/L	193.400	73	0.000
	Cu	63		ug/L		118	-0.000
	Cu	65	**0.091**	ug/L	32.474	61	0.000
	Zn	66	**0.044**	ug/L	116.373	244	0.000
	Zn	67		ug/L		1389	-0.000
	Zn	68		ug/L		376	-0.000
>	Ge	74		ug/L		79608	79607.665
	As	75	**0.179**	ug/L	197.276	493	0.001
	Se	77		ug/L		1199	-0.000
	Se	82	**0.299**	ug/L	185.576	4	0.000
	Kr	83		ug/L		27	-0.000
	Sr	88	**0.024**	ug/L	45.066	137	0.001
	Y	89		ug/L		18	0.000
	Zr	90	**0.127**	ug/L	26.304	296	0.003
	Mo	98	**0.061**	ug/L	23.822	70	0.001
	Ag	107	**0.017**	ug/L	15.613	40	0.000
	Cd	111	**0.033**	ug/L	19.143	11	0.000
	Cd	114		ug/L		27	0.000
>	In	115		ug/L		62453	62452.539
	Sn	120	**0.071**	ug/L	23.080	170	0.002
	Sb	121	**0.225**	ug/L	6.819	497	0.005
	Sb	123		ug/L		372	0.003
	Ba	135		ug/L		25	0.000
	Ba	137	**0.031**	ug/L	52.673	37	0.000
	Ho	165		ug/L		15	0.000
>	Lu	175		ug/L		122119	122119.221
	Tl	205	**0.699**	ug/L	11.554	4345	0.032
	Pb	208	**0.048**	ug/L	42.409	507	0.003
	Th	232	**0.070**	ug/L	10.822	686	0.004
	U	238	**0.025**	ug/L	29.766	319	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.3			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613002
Sample Date/Time: Friday, December 11, 2009 02:51:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613002.572

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**36.688**	ug/L	2.938	1696	0.007
	Be	9	**1.769**	ug/L	13.486	68	0.000
	B	11	**4.939**	ug/L	5.503	232	0.001
	Na	23	**913.655**	ug/L	4.560	318177	1.318
	Mg	24	**3649.248**	ug/L	5.364	790654	3.351
	Al	27	**12935.024**	ug/L	2.858	5366173	22.732
	P	31	**562.263**	ug/L	1.539	17824	0.072
	K	39	**2165.154**	ug/L	3.791	1584698	6.111
	Ca	43	**4408.953**	ug/L	0.726	6401	0.027
>	Sc	45		ug/L		235986	235985.937
	Ti	47	**519.915**	ug/L	1.675	38642	0.163
	V	51	**25.520**	ug/L	4.206	22177	0.091
	Cr	52	**8.746**	ug/L	1.387	8814	0.035
	Cr	53		ug/L		25853	-0.019
	Mn	55	**768.708**	ug/L	1.182	1266679	5.367
	Fe	57	**14703.310**	ug/L	1.383	477754	2.015
	Co	59	**4.367**	ug/L	0.602	5023	0.021
	Ni	60	**9.883**	ug/L	1.840	2353	0.010
	Cu	63		ug/L		7538	0.031
	Cu	65	**14.850**	ug/L	3.387	3566	0.015
	Zn	66	**89.623**	ug/L	3.607	14684	0.182
	Zn	67		ug/L		3606	0.028
	Zn	68		ug/L		12485	0.153
>	Ge	74		ug/L		79273	79273.209
	As	75	**1.091**	ug/L	14.064	721	0.003
	Se	77		ug/L		963	-0.003
	Se	82	**0.885**	ug/L	29.830	16	0.000
	Kr	83		ug/L		39	0.000
	Sr	88	**39.115**	ug/L	0.805	103469	1.622
	Y	89		ug/L		202102	3.171
	Zr	90	**27.739**	ug/L	3.383	42401	0.663
	Mo	98	**2.417**	ug/L	1.404	1796	0.028
	Ag	107	**0.093**	ug/L	5.752	139	0.002
	Cd	111	**0.370**	ug/L	16.278	119	0.002
	Cd	114		ug/L		80	0.001
>	In	115		ug/L		63728	63728.173
	Sn	120	**0.751**	ug/L	1.820	1159	0.017
	Sb	121	**0.134**	ug/L	17.585	381	0.003
	Sb	123		ug/L		283	0.002
	Ba	135		ug/L		67940	0.520
	Ba	137	**189.041**	ug/L	1.029	118193	0.904
	Ho	165		ug/L		18746	0.143
>	Lu	175		ug/L		130733	130732.817
	Tl	205	**0.587**	ug/L	3.558	3986	0.027
	Pb	208	**16.992**	ug/L	1.213	118885	0.908
	Th	232	**16.063**	ug/L	3.089	131385	1.004
	U	238	**1.705**	ug/L	3.522	14278	0.108

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			105.2		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613003
Sample Date/Time: Friday, December 11, 2009 02:56:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613003.573

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**57.648**	ug/L	2.418	2803	0.011
	Be	9	**4.241**	ug/L	4.514	163	0.001
	B	11	**16.437**	ug/L	2.700	682	0.003
	Na	23	**854.144**	ug/L	4.425	313748	1.232
	Mg	24	**13356.702**	ug/L	7.820	3050155	12.266
	Al	27	**68311.588**	ug/L	0.986	29836124	120.048
	P	31	**547.262**	ug/L	1.513	18288	0.071
	K	39	**9157.886**	ug/L	7.344	6569086	25.846
	Ca	43	**10372.512**	ug/L	2.838	15746	0.063
>	Sc	45		ug/L		248505	248505.470
	Ti	47	**1568.713**	ug/L	2.817	122430	0.492
	V	51	**114.931**	ug/L	2.395	102184	0.408
	Cr	52	**47.176**	ug/L	1.183	47757	0.190
	Cr	53		ug/L		29188	-0.012
	Mn	55	**1438.126**	ug/L	2.154	2494942	10.041
	Fe	57	**50276.446**	ug/L	2.290	1714361	6.890
	Co	59	**23.317**	ug/L	2.888	27823	0.112
	Ni	60	**36.862**	ug/L	1.962	9046	0.036
	Cu	63		ug/L		17181	0.068
	Cu	65	**32.473**	ug/L	2.381	8160	0.033
	Zn	66	**147.270**	ug/L	2.806	24426	0.300
	Zn	67		ug/L		5704	0.053
	Zn	68		ug/L		21503	0.262
>	Ge	74		ug/L		80738	80737.704
	As	75	**7.599**	ug/L	5.578	2403	0.024
	Se	77		ug/L		964	-0.003
	Se	82	**-0.011**	ug/L	3361.764	-2	-0.000
	Kr	83		ug/L		52	0.000
	Sr	88	**145.615**	ug/L	1.157	384649	6.040
	Y	89		ug/L		162934	2.559
	Zr	90	**57.549**	ug/L	4.444	87739	1.376
	Mo	98	**1.420**	ug/L	1.199	1066	0.016
	Ag	107	**0.265**	ug/L	5.854	361	0.005
	Cd	111	**0.550**	ug/L	12.844	176	0.003
	Cd	114		ug/L		191	0.003
>	In	115		ug/L		63682	63681.778
	Sn	120	**0.503**	ug/L	4.231	798	0.011
	Sb	121	**0.141**	ug/L	6.877	391	0.003
	Sb	123		ug/L		303	0.002
	Ba	135		ug/L		315230	2.403
	Ba	137	**863.008**	ug/L	1.335	541432	4.127
	Ho	165		ug/L		15835	0.121
>	Lu	175		ug/L		131188	131187.612
	Tl	205	**1.021**	ug/L	1.311	6595	0.047
	Pb	208	**51.432**	ug/L	1.034	360717	2.748
	Th	232	**33.791**	ug/L	1.015	277215	2.112
	U	238	**3.665**	ug/L	2.223	30639	0.233

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.6			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613004
Sample Date/Time: Friday, December 11, 2009 03:02:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613004.574

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**24.763**	**ug/L**	0.907	1193	0.005
	Be	9	**1.947**	**ug/L**	2.506	77	0.000
	B	11	**6.636**	**ug/L**	5.226	306	0.001
	Na	23	**1178.502**	**ug/L**	19.350	424686	1.701
	Mg	24	**3617.487**	**ug/L**	3.538	816365	3.322
	Al	27	**16627.613**	**ug/L**	7.406	7180982	29.221
	P	31	**194.189**	**ug/L**	2.161	6902	0.025
	K	39	**2518.063**	**ug/L**	13.845	1894389	7.107
	Ca	43	**2516.966**	**ug/L**	4.547	3840	0.015
>	Sc	45		**ug/L**		245732	245731.972
	Ti	47	**294.024**	**ug/L**	1.144	22826	0.092
	V	51	**16.618**	**ug/L**	3.623	15330	0.059
	Cr	52	**12.200**	**ug/L**	1.509	12598	0.049
	Cr	53		**ug/L**		25500	-0.025
	Mn	55	**559.130**	**ug/L**	1.081	959545	3.904
	Fe	57	**12558.469**	**ug/L**	2.174	425272	1.721
	Co	59	**2.395**	**ug/L**	1.470	2911	0.011
	Ni	60	**13.606**	**ug/L**	0.897	3347	0.013
	Cu	63		**ug/L**		4527	0.018
	Cu	65	**8.578**	**ug/L**	2.349	2164	0.009
	Zn	66	**127.736**	**ug/L**	1.832	20971	0.260
	Zn	67		**ug/L**		4561	0.039
	Zn	68		**ug/L**		16933	0.207
>	Ge	74		**ug/L**		79779	79779.293
	As	75	**0.868**	**ug/L**	41.030	670	0.003
	Se	77		**ug/L**		921	-0.004
	Se	82	**0.860**	**ug/L**	13.748	15	0.000
	Kr	83		**ug/L**		45	0.000
	Sr	88	**25.960**	**ug/L**	1.767	68787	1.077
	Y	89		**ug/L**		243250	3.812
	Zr	90	**72.898**	**ug/L**	3.452	111352	1.743
	Mo	98	**6.325**	**ug/L**	4.729	4664	0.073
	Ag	107	**0.223**	**ug/L**	2.602	308	0.005
	Cd	111	**0.456**	**ug/L**	20.373	147	0.002
	Cd	114		**ug/L**		55	0.001
>	In	115		**ug/L**		63820	63819.500
	Sn	120	**0.853**	**ug/L**	1.532	1309	0.019
	Sb	121	**0.105**	**ug/L**	5.449	342	0.002
	Sb	123		**ug/L**		272	0.002
	Ba	135		**ug/L**		25744	0.191
	Ba	137	**70.129**	**ug/L**	2.920	45118	0.335
	Ho	165		**ug/L**		23427	0.174
>	Lu	175		**ug/L**		134522	134521.544
	Tl	205	**0.438**	**ug/L**	3.768	3183	0.020
	Pb	208	**20.598**	**ug/L**	2.286	148216	1.101
	Th	232	**20.804**	**ug/L**	1.126	175063	1.300
	U	238	**2.315**	**ug/L**	3.529	19891	0.147

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.3			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEETi		47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613005
Sample Date/Time: Friday, December 11, 2009 03:08:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613005.575

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.561**	ug/L	2.334	2127	0.009
	Be	9	**2.247**	ug/L	7.736	88	0.000
	B	11	**9.239**	ug/L	4.075	401	0.001
	Na	23	**583.762**	ug/L	15.225	212935	0.842
	Mg	24	**5650.244**	ug/L	2.544	1265347	5.189
	Al	27	**24275.646**	ug/L	2.898	10402684	42.661
	P	31	**654.132**	ug/L	3.826	21303	0.084
	K	39	**4027.191**	ug/L	2.427	2918445	11.366
	Ca	43	**5677.416**	ug/L	1.909	8493	0.034
>	Sc	45		ug/L		243882	243881.804
	Ti	47	**849.901**	ug/L	3.457	65164	0.267
	V	51	**47.251**	ug/L	0.300	41727	0.168
	Cr	52	**17.936**	ug/L	2.617	18138	0.072
	Cr	53		ug/L		25660	-0.024
	Mn	55	**911.201**	ug/L	2.660	1551367	6.362
	Fe	57	**22771.199**	ug/L	2.103	763207	3.120
	Co	59	**8.222**	ug/L	3.066	9688	0.039
	Ni	60	**17.450**	ug/L	2.017	4239	0.017
	Cu	63		ug/L		9375	0.038
	Cu	65	**18.176**	ug/L	4.460	4500	0.018
	Zn	66	**112.500**	ug/L	3.463	18424	0.229
	Zn	67		ug/L		4510	0.039
	Zn	68		ug/L		16122	0.198
>	Ge	74		ug/L		79474	79474.271
	As	75	**3.254**	ug/L	7.974	1268	0.010
	Se	77		ug/L		920	-0.004
	Se	82	**0.580**	ug/L	30.722	10	0.000
	Kr	83		ug/L		42	0.000
	Sr	88	**59.978**	ug/L	0.729	160046	2.488
	Y	89		ug/L		176050	2.738
	Zr	90	**48.191**	ug/L	4.063	74201	1.153
	Mo	98	**2.176**	ug/L	2.784	1635	0.025
	Ag	107	**0.159**	ug/L	12.025	227	0.003
	Cd	111	**0.650**	ug/L	3.004	210	0.003
	Cd	114		ug/L		240	0.004
>	In	115		ug/L		64305	64305.402
	Sn	120	**0.894**	ug/L	2.002	1380	0.020
	Sb	121	**0.109**	ug/L	9.290	349	0.002
	Sb	123		ug/L		282	0.002
	Ba	135		ug/L		187485	1.420
	Ba	137	**510.577**	ug/L	2.740	322324	2.442
	Ho	165		ug/L		16561	0.125
>	Lu	175		ug/L		132040	132040.285
	Tl	205	**0.478**	ug/L	1.051	3367	0.022
	Pb	208	**26.589**	ug/L	2.619	187707	1.421
	Th	232	**17.971**	ug/L	1.364	148465	1.123
	U	238	**1.969**	ug/L	1.392	16629	0.125

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.3			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613006
Sample Date/Time: Friday, December 11, 2009 03:14:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613006.576

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.399**	ug/L	3.316	2446	0.010
	Be	9	**2.968**	ug/L	12.012	116	0.000
	B	11	**11.336**	ug/L	13.218	487	0.002
	Na	23	**774.292**	ug/L	6.001	284476	1.117
	Mg	24	**7187.002**	ug/L	1.320	1637831	6.600
	Al	27	**48143.475**	ug/L	3.370	20991845	84.605
	P	31	**458.186**	ug/L	2.765	15409	0.059
	K	39	**6621.100**	ug/L	6.282	4787697	18.686
	Ca	43	**5910.673**	ug/L	1.790	8992	0.036
>	Sc	45		ug/L		248144	248143.554
	Ti	47	**1276.158**	ug/L	1.871	99491	0.400
	V	51	**66.928**	ug/L	1.909	59769	0.237
	Cr	52	**27.955**	ug/L	2.127	28466	0.113
	Cr	53		ug/L		26547	-0.022
	Mn	55	**1402.573**	ug/L	3.023	2429788	9.792
	Fe	57	**32679.222**	ug/L	1.270	1113497	4.478
	Co	59	**14.528**	ug/L	2.223	17343	0.070
	Ni	60	**24.881**	ug/L	4.713	6117	0.024
	Cu	63		ug/L		10173	0.040
	Cu	65	**19.374**	ug/L	3.047	4878	0.019
	Zn	66	**129.296**	ug/L	2.711	21481	0.263
	Zn	67		ug/L		4943	0.043
	Zn	68		ug/L		18415	0.223
>	Ge	74		ug/L		80746	80745.713
	As	75	**5.079**	ug/L	9.370	1756	0.016
	Se	77		ug/L		914	-0.004
	Se	82	**0.864**	ug/L	67.730	16	0.000
	Kr	83		ug/L		50	0.000
	Sr	88	**77.954**	ug/L	1.516	208231	3.233
	Y	89		ug/L		195480	3.036
	Zr	90	**51.761**	ug/L	4.655	79810	1.238
	Mo	98	**1.813**	ug/L	3.872	1368	0.021
	Ag	107	**0.211**	ug/L	3.117	295	0.004
	Cd	111	**0.600**	ug/L	20.662	195	0.003
	Cd	114		ug/L		153	0.002
>	In	115		ug/L		64388	64387.958
	Sn	120	**0.893**	ug/L	5.554	1379	0.020
	Sb	121	**0.082**	ug/L	9.435	311	0.002
	Sb	123		ug/L		262	0.002
	Ba	135		ug/L		180057	1.344
	Ba	137	**489.098**	ug/L	2.839	313311	2.339
	Ho	165		ug/L		18612	0.139
>	Lu	175		ug/L		133993	133993.261
	Tl	205	**0.705**	ug/L	3.397	4807	0.032
	Pb	208	**35.823**	ug/L	2.386	256599	1.914
	Th	232	**28.267**	ug/L	0.319	236889	1.767
	U	238	**3.354**	ug/L	1.451	28649	0.213

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.9			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613007
Sample Date/Time: Friday, December 11, 2009 03:20:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613007.577

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**39.022**	ug/L	1.429	1874	0.008
	Be	9	**2.196**	ug/L	8.488	86	0.000
	B	11	**7.990**	ug/L	1.678	356	0.001
	Na	23	**446.379**	ug/L	5.575	165286	0.644
	Mg	24	**5048.493**	ug/L	9.300	1137447	4.636
	Al	27	**23373.944**	ug/L	2.370	10079682	41.076
	P	31	**583.692**	ug/L	3.477	19208	0.075
	K	39	**3784.048**	ug/L	3.160	2768560	10.679
	Ca	43	**4877.378**	ug/L	1.947	7352	0.030
>	Sc	45		ug/L		245340	245339.955
	Ti	47	**782.732**	ug/L	1.746	60401	0.246
	V	51	**41.928**	ug/L	2.479	37338	0.149
	Cr	52	**16.356**	ug/L	2.486	16686	0.066
	Cr	53		ug/L		25358	-0.026
	Mn	55	**737.714**	ug/L	1.994	1263763	5.150
	Fe	57	**21114.193**	ug/L	0.579	712186	2.893
	Co	59	**7.077**	ug/L	1.951	8403	0.034
	Ni	60	**15.070**	ug/L	3.086	3693	0.015
	Cu	63		ug/L		8422	0.034
	Cu	65	**16.201**	ug/L	4.460	4041	0.016
	Zn	66	**104.798**	ug/L	0.403	17385	0.213
	Zn	67		ug/L		4102	0.033
	Zn	68		ug/L		14812	0.179
>	Ge	74		ug/L		80404	80403.787
	As	75	**3.663**	ug/L	3.472	1387	0.012
	Se	77		ug/L		965	-0.003
	Se	82	**0.510**	ug/L	94.612	8	0.000
	Kr	83		ug/L		44	0.000
	Sr	88	**52.519**	ug/L	0.454	139523	2.178
	Y	89		ug/L		195994	3.061
	Zr	90	**45.769**	ug/L	2.301	70172	1.095
	Mo	98	**2.335**	ug/L	0.686	1744	0.027
	Ag	107	**0.155**	ug/L	14.436	220	0.003
	Cd	111	**0.378**	ug/L	22.598	122	0.002
	Cd	114		ug/L		121	0.002
>	In	115		ug/L		64017	64017.231
	Sn	120	**0.871**	ug/L	5.610	1338	0.020
	Sb	121	**0.082**	ug/L	28.686	310	0.002
	Sb	123		ug/L		255	0.001
	Ba	135		ug/L		105217	0.796
	Ba	137	**284.671**	ug/L	1.692	179828	1.361
	Ho	165		ug/L		18083	0.137
>	Lu	175		ug/L		132087	132087.158
	Tl	205	**0.408**	ug/L	1.597	2947	0.019
	Pb	208	**23.240**	ug/L	1.605	164211	1.242
	Th	232	**18.270**	ug/L	0.906	150996	1.142
	U	238	**2.103**	ug/L	1.684	17763	0.133

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			101.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			106.3		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613008
Sample Date/Time: Friday, December 11, 2009 03:25:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613008.578

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**74.828**	**ug/L**	2.965	3668	0.015
	Be	9	**5.259**	**ug/L**	2.907	202	0.001
	B	11	**19.387**	**ug/L**	6.361	801	0.003
	Na	23	**1126.426**	**ug/L**	7.861	414610	1.625
	Mg	24	**12804.339**	**ug/L**	12.518	2943938	11.759
	Al	27	**84876.347**	**ug/L**	1.991	37401713	149.158
	P	31	**447.905**	**ug/L**	1.986	15242	0.058
	K	39	**10781.020**	**ug/L**	2.869	7783669	30.427
	Ca	43	**21106.343**	**ug/L**	1.594	32231	0.128
>	Sc	45		**ug/L**		250767	250767.156
	Ti	47	**1893.563**	**ug/L**	0.711	149136	0.594
	V	51	**99.634**	**ug/L**	1.754	89496	0.354
	Cr	52	**41.973**	**ug/L**	2.208	42925	0.169
	Cr	53		**ug/L**		27843	-0.018
	Mn	55	**1282.385**	**ug/L**	1.217	2245077	8.953
	Fe	57	**48761.066**	**ug/L**	0.948	1677827	6.682
	Co	59	**23.154**	**ug/L**	2.928	27874	0.111
	Ni	60	**37.249**	**ug/L**	0.684	9224	0.036
	Cu	63		**ug/L**		15954	0.063
	Cu	65	**30.190**	**ug/L**	0.899	7659	0.030
	Zn	66	**118.703**	**ug/L**	0.725	19765	0.242
	Zn	67		**ug/L**		4918	0.043
	Zn	68		**ug/L**		17995	0.218
>	Ge	74		**ug/L**		80839	80838.922
	As	75	**8.195**	**ug/L**	12.227	2559	0.026
	Se	77		**ug/L**		973	-0.003
	Se	82	**-0.128**	**ug/L**	275.487	-5	-0.000
	Kr	83		**ug/L**		60	0.000
	Sr	88	**168.765**	**ug/L**	1.070	449163	7.000
	Y	89		**ug/L**		151538	2.362
	Zr	90	**73.152**	**ug/L**	3.507	112329	1.750
	Mo	98	**1.091**	**ug/L**	5.851	832	0.013
	Ag	107	**0.314**	**ug/L**	8.382	428	0.006
	Cd	111	**0.535**	**ug/L**	20.493	173	0.003
	Cd	114		**ug/L**		164	0.002
>	In	115		**ug/L**		64155	64154.731
	Sn	120	**0.442**	**ug/L**	2.653	716	0.010
	Sb	121	**0.086**	**ug/L**	11.046	316	0.002
	Sb	123		**ug/L**		265	0.002
	Ba	135		**ug/L**		308880	2.318
	Ba	137	**840.847**	**ug/L**	2.714	535616	4.021
	Ho	165		**ug/L**		14101	0.106
>	Lu	175		**ug/L**		133228	133228.476
	Tl	205	**0.929**	**ug/L**	2.040	6137	0.042
	Pb	208	**52.189**	**ug/L**	1.189	371684	2.788
	Th	232	**35.990**	**ug/L**	1.362	299889	2.249
	U	238	**2.874**	**ug/L**	2.467	24423	0.182

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613009
Sample Date/Time: Friday, December 11, 2009 03:31:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613009.579

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**40.292**	**ug/L**	1.299	2033	0.008
	Be	9	**3.623**	**ug/L**	10.992	145	0.001
	B	11	**13.987**	**ug/L**	11.809	611	0.002
	Na	23	**707.620**	**ug/L**	7.445	270887	1.021
	Mg	24	**12049.339**	**ug/L**	3.186	2851990	11.065
	Al	27	**52921.757**	**ug/L**	2.240	23975457	93.003
	P	31	**452.023**	**ug/L**	3.887	15809	0.058
	K	39	**9539.823**	**ug/L**	4.716	7096267	26.924
	Ca	43	**26972.245**	**ug/L**	0.732	42321	0.164
>	Sc	45		**ug/L**		257766	257765.640
	Ti	47	**1116.508**	**ug/L**	2.352	90449	0.350
	V	51	**97.484**	**ug/L**	1.358	90046	0.346
	Cr	52	**38.538**	**ug/L**	2.006	40568	0.155
	Cr	53		**ug/L**		27701	-0.022
	Mn	55	**1552.486**	**ug/L**	2.083	2794053	10.839
	Fe	57	**41495.824**	**ug/L**	2.248	1468143	5.686
	Co	59	**29.909**	**ug/L**	1.462	36993	0.143
	Ni	60	**31.565**	**ug/L**	2.058	8047	0.031
	Cu	63		**ug/L**		15169	0.058
	Cu	65	**27.599**	**ug/L**	2.954	7202	0.028
	Zn	66	**121.287**	**ug/L**	2.268	20784	0.247
	Zn	67		**ug/L**		4912	0.041
	Zn	68		**ug/L**		18188	0.214
>	Ge	74		**ug/L**		83233	83232.656
	As	75	**7.665**	**ug/L**	10.989	2493	0.024
	Se	77		**ug/L**		1033	-0.003
	Se	82	**0.395**	**ug/L**	119.104	6	0.000
	Kr	83		**ug/L**		44	0.000
	Sr	88	**161.590**	**ug/L**	1.076	438801	6.702
	Y	89		**ug/L**		101512	1.551
	Zr	90	**49.544**	**ug/L**	2.175	77691	1.185
	Mo	98	**1.200**	**ug/L**	2.778	930	0.014
	Ag	107	**0.187**	**ug/L**	7.038	268	0.004
	Cd	111	**0.467**	**ug/L**	14.473	154	0.002
	Cd	114		**ug/L**		147	0.002
>	In	115		**ug/L**		65460	65460.048
	Sn	120	**0.336**	**ug/L**	6.620	572	0.008
	Sb	121	**0.132**	**ug/L**	16.524	388	0.003
	Sb	123		**ug/L**		308	0.002
	Ba	135		**ug/L**		221985	1.672
	Ba	137	**609.509**	**ug/L**	1.481	386947	2.915
	Ho	165		**ug/L**		9739	0.073
>	Lu	175		**ug/L**		132760	132759.741
	Tl	205	**0.971**	**ug/L**	2.893	6370	0.044
	Pb	208	**45.312**	**ug/L**	0.979	321593	2.421
	Th	232	**27.729**	**ug/L**	0.113	230250	1.733
	U	238	**2.821**	**ug/L**	1.234	23896	0.179

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			109.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			104.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			102.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			106.9		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	MassOut of Limits Message
Al 27 Upper, S, EEEAl	27Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47Sample is out of limits (over linear range)_
Mn 55 Upper, S, EEIMn	55Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613010
Sample Date/Time: Friday, December 11, 2009 03:37:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613010.580

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.590**	**ug/L**	1.356	2339	0.009
	Be	9	**2.286**	**ug/L**	1.534	92	0.000
	B	11	**10.122**	**ug/L**	4.081	446	0.002
	Na	23	**587.783**	**ug/L**	7.934	220359	0.848
	Mg	24	**6973.309**	**ug/L**	6.146	1607844	6.404
	Al	27	**35018.832**	**ug/L**	4.862	15450850	61.541
	P	31	**1022.103**	**ug/L**	0.677	33849	0.132
	K	39	**4582.164**	**ug/L**	2.697	3399110	12.932
	Ca	43	**8777.409**	**ug/L**	1.175	13474	0.053
>	Sc	45		**ug/L**		251099	251098.824
	Ti	47	**1030.634**	**ug/L**	1.303	81345	0.323
	V	51	**59.436**	**ug/L**	0.930	53816	0.211
	Cr	52	**21.385**	**ug/L**	1.002	22167	0.086
	Cr	53		**ug/L**		25733	-0.027
	Mn	55	**861.333**	**ug/L**	2.692	1510013	6.014
	Fe	57	**26755.082**	**ug/L**	2.810	922873	3.666
	Co	59	**10.840**	**ug/L**	3.595	13121	0.052
	Ni	60	**21.046**	**ug/L**	1.410	5250	0.021
	Cu	63		**ug/L**		11704	0.046
	Cu	65	**21.650**	**ug/L**	3.253	5512	0.022
	Zn	66	**114.672**	**ug/L**	2.121	19509	0.233
	Zn	67		**ug/L**		4428	0.036
	Zn	68		**ug/L**		16539	0.196
>	Ge	74		**ug/L**		82560	82560.036
	As	75	**3.616**	**ug/L**	3.117	1412	0.011
	Se	77		**ug/L**		918	-0.004
	Se	82	**0.252**	**ug/L**	160.694	3	0.000
	Kr	83		**ug/L**		52	0.000
	Sr	88	**79.784**	**ug/L**	1.244	216922	3.309
	Y	89		**ug/L**		187218	2.857
	Zr	90	**58.125**	**ug/L**	1.017	91208	1.390
	Mo	98	**1.750**	**ug/L**	3.727	1345	0.020
	Ag	107	**0.198**	**ug/L**	4.904	283	0.004
	Cd	111	**0.452**	**ug/L**	14.620	149	0.002
	Cd	114		**ug/L**		131	0.002
>	In	115		**ug/L**		65533	65532.973
	Sn	120	**0.787**	**ug/L**	4.031	1245	0.018
	Sb	121	**0.104**	**ug/L**	7.813	349	0.002
	Sb	123		**ug/L**		270	0.002
	Ba	135		**ug/L**		151889	1.132
	Ba	137	**406.902**	**ug/L**	3.145	261215	1.946
	Ho	165		**ug/L**		16833	0.125
>	Lu	175		**ug/L**		134314	134313.824
	Tl	205	**0.464**	**ug/L**	1.512	3338	0.021
	Pb	208	**28.631**	**ug/L**	2.498	205572	1.530
	Th	232	**20.570**	**ug/L**	1.249	172812	1.286
	U	238	**2.467**	**ug/L**	3.777	21151	0.157

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.1			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 03:43:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 6.581

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.710**	**ug/L**	3.500	2451	0.010
	Be	9	**56.851**	**ug/L**	4.597	2053	0.008
	B	11	**97.384**	**ug/L**	3.286	3664	0.015
	Na	23	**4302.213**	**ug/L**	9.610	1509812	6.208
	Mg	24	**5493.867**	**ug/L**	9.115	1221285	5.045
	Al	27	**4541.560**	**ug/L**	10.949	1934629	7.981
	P	31	**5076.045**	**ug/L**	2.345	159154	0.654
	K	39	**5252.037**	**ug/L**	8.608	3735058	14.822
	Ca	43	**4799.290**	**ug/L**	0.702	7142	0.029
>	Sc	45		**ug/L**		242157	242156.642
	Ti	47	**49.762**	**ug/L**	0.456	3939	0.016
	V	51	**51.063**	**ug/L**	3.326	44699	0.181
	Cr	52	**52.145**	**ug/L**	3.012	51381	0.210
	Cr	53		**ug/L**		41604	0.043
	Mn	55	**50.088**	**ug/L**	0.764	84920	0.350
	Fe	57	**4842.390**	**ug/L**	1.976	162983	0.664
	Co	59	**50.120**	**ug/L**	1.459	58172	0.240
	Ni	60	**50.239**	**ug/L**	1.681	11988	0.049
	Cu	63		**ug/L**		27164	0.111
	Cu	65	**51.708**	**ug/L**	1.695	12638	0.052
	Zn	66	**51.596**	**ug/L**	2.383	8902	0.105
	Zn	67		**ug/L**		3257	0.022
	Zn	68		**ug/L**		7286	0.084
>	Ge	74		**ug/L**		82482	82481.994
	As	75	**48.495**	**ug/L**	2.836	13151	0.154
	Se	77		**ug/L**		2685	0.017
	Se	82	**50.906**	**ug/L**	0.969	1051	0.013
	Kr	83		**ug/L**		32	0.000
	Sr	88	**49.641**	**ug/L**	1.014	131490	2.059
	Y	89		**ug/L**		26	0.000
	Zr	90	**53.761**	**ug/L**	1.087	82178	1.286
	Mo	98	**50.710**	**ug/L**	1.785	37218	0.583
	Ag	107	**50.798**	**ug/L**	1.796	65903	1.032
	Cd	111	**51.565**	**ug/L**	1.896	16557	0.259
	Cd	114		**ug/L**		39787	0.623
>	In	115		**ug/L**		63828	63828.099
	Sn	120	**50.778**	**ug/L**	1.782	73838	1.156
	Sb	121	**51.731**	**ug/L**	3.309	72172	1.128
	Sb	123		**ug/L**		55650	0.869
	Ba	135		**ug/L**		17315	0.139
	Ba	137	**50.180**	**ug/L**	2.119	29964	0.240
	Ho	165		**ug/L**		24	0.000
>	Lu	175		**ug/L**		124796	124795.723
	Tl	205	**47.079**	**ug/L**	1.088	268297	2.146
	Pb	208	**52.458**	**ug/L**	1.347	349928	2.803
	Th	232	**52.323**	**ug/L**	1.713	408204	3.270
	U	238	**54.377**	**ug/L**	2.727	430553	3.450

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.420				
	Be	9	113.701				
	B	11	97.384				
	Na	23	86.044				
	Mg	24	109.877				
	Al	27	89.932				
	P	31	101.521				
	K	39	105.041				
	Ca	43	95.986				
>	Sc	45		102.4			
	Ti	47	99.523				
	V	51	102.126				
	Cr	52	104.291				
	Cr	53					
	Mn	55	100.175				
	Fe	57	96.848				
	Co	59	100.241				
	Ni	60	100.477				
	Cu	63					
	Cu	65	103.415				
	Zn	66	103.192				
	Zn	67					
	Zn	68					
>	Ge	74		104.0			
	As	75	96.990				
	Se	77					
	Se	82	101.812				
	Kr	83					
	Sr	88	99.282				
	Y	89					
	Zr	90	107.521				
	Mo	98	101.420				
	Ag	107	101.597				
	Cd	111	103.130				
	Cd	114					
>	In	115		100.2			
	Sn	120	101.556				
	Sb	121	103.462				
	Sb	123					
	Ba	135					
	Ba	137	100.361				
	Ho	165					
>	Lu	175		100.5			
	Tl	205	94.157				
	Pb	208	104.916				
	Th	232	104.647				
	U	238	108.753				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 03:49:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 7.582

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.093	ug/L	71.913	9	0.000
	Be	9	-0.038	ug/L	157.809	5	-0.000
	B	11	1.253	ug/L	42.319	99	0.000
	Na	23	8.780	ug/L	58.754	10004	0.013
	Mg	24	1.515	ug/L	173.205	333	0.001
	Al	27	1.616	ug/L	174.641	1667	0.003
	P	31	3.979	ug/L	11.515	846	0.001
	K	39	9.440	ug/L	158.923	149109	0.027
	Ca	43	16.248	ug/L	58.112	104	0.000
>	Sc	45		ug/L		236700	236700.337
	Ti	47	-0.939	ug/L	19.924	85	-0.000
	V	51	0.979	ug/L	159.106	1634	0.003
	Cr	52	0.249	ug/L	25.482	739	0.001
	Cr	53		ug/L		28699	-0.008
	Mn	55	0.229	ug/L	12.179	615	0.002
	Fe	57	10.382	ug/L	38.019	2592	0.001
	Co	59	0.018	ug/L	11.592	112	0.000
	Ni	60	-0.032	ug/L	100.605	61	-0.000
	Cu	63		ug/L		114	-0.000
	Cu	65	0.047	ug/L	14.451	53	0.000
	Zn	66	0.021	ug/L	585.748	241	0.000
	Zn	67		ug/L		1366	-0.001
	Zn	68		ug/L		367	-0.000
>	Ge	74		ug/L		80124	80123.543
	As	75	-0.065	ug/L	283.442	435	-0.000
	Se	77		ug/L		1231	0.000
	Se	82	0.344	ug/L	212.733	5	0.000
	Kr	83		ug/L		32	0.000
	Sr	88	0.012	ug/L	43.108	106	0.000
	Y	89		ug/L		20	0.000
	Zr	90	0.119	ug/L	3.915	287	0.003
	Mo	98	0.038	ug/L	45.195	54	0.000
	Ag	107	0.008	ug/L	19.193	29	0.000
	Cd	111	0.023	ug/L	45.052	7	0.000
	Cd	114		ug/L		24	0.000
>	In	115		ug/L		62776	62775.518
	Sn	120	0.046	ug/L	2.210	135	0.001
	Sb	121	0.177	ug/L	11.781	435	0.004
	Sb	123		ug/L		335	0.003
	Ba	135		ug/L		21	0.000
	Ba	137	0.034	ug/L	38.111	39	0.000
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		120909	120909.053
	Tl	205	0.471	ug/L	14.892	3046	0.021
	Pb	208	0.024	ug/L	31.980	347	0.001
	Th	232	0.068	ug/L	10.576	663	0.004
	U	238	0.016	ug/L	24.558	251	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.3			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613012
Sample Date/Time: Friday, December 11, 2009 03:54:49
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613012.583

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**37.361**	**ug/L**	1.988	1784	0.007
	Be	9	**2.185**	**ug/L**	6.344	85	0.000
	B	11	**7.954**	**ug/L**	3.903	352	0.001
	Na	23	**382.148**	**ug/L**	5.351	141701	0.551
	Mg	24	**3872.634**	**ug/L**	6.924	866564	3.556
	Al	27	**23886.929**	**ug/L**	6.914	10231193	41.978
	P	31	**322.897**	**ug/L**	0.676	10893	0.042
	K	39	**3329.905**	**ug/L**	11.450	2436058	9.398
	Ca	43	**3732.697**	**ug/L**	4.038	5611	0.023
>	Sc	45		**ug/L**		243792	243792.239
	Ti	47	**652.747**	**ug/L**	0.303	50081	0.205
	V	51	**32.314**	**ug/L**	1.992	28786	0.115
	Cr	52	**14.138**	**ug/L**	3.070	14399	0.057
	Cr	53		**ug/L**		26003	-0.022
	Mn	55	**736.481**	**ug/L**	2.869	1253497	5.142
	Fe	57	**18338.400**	**ug/L**	2.642	614849	2.513
	Co	59	**6.242**	**ug/L**	2.344	7375	0.030
	Ni	60	**13.633**	**ug/L**	3.880	3325	0.013
	Cu	63		**ug/L**		6005	0.024
	Cu	65	**11.466**	**ug/L**	1.513	2854	0.012
	Zn	66	**100.890**	**ug/L**	2.484	16485	0.205
	Zn	67		**ug/L**		3835	0.031
	Zn	68		**ug/L**		13611	0.167
>	Ge	74		**ug/L**		79164	79163.535
	As	75	**2.739**	**ug/L**	4.886	1134	0.009
	Se	77		**ug/L**		930	-0.004
	Se	82	**0.682**	**ug/L**	19.121	12	0.000
	Kr	83		**ug/L**		42	0.000
	Sr	88	**40.232**	**ug/L**	1.979	105459	1.669
	Y	89		**ug/L**		209161	3.312
	Zr	90	**32.402**	**ug/L**	4.740	49040	0.775
	Mo	98	**2.200**	**ug/L**	2.074	1623	0.025
	Ag	107	**0.129**	**ug/L**	3.636	184	0.003
	Cd	111	**0.394**	**ug/L**	12.519	125	0.002
	Cd	114		**ug/L**		85	0.001
>	In	115		**ug/L**		63161	63160.891
	Sn	120	**1.028**	**ug/L**	3.859	1547	0.023
	Sb	121	**0.128**	**ug/L**	13.252	369	0.003
	Sb	123		**ug/L**		282	0.002
	Ba	135		**ug/L**		69290	0.533
	Ba	137	**193.563**	**ug/L**	2.350	120277	0.926
	Ho	165		**ug/L**		19337	0.149
>	Lu	175		**ug/L**		129970	129969.767
	Tl	205	**0.571**	**ug/L**	5.021	3865	0.026
	Pb	208	**23.722**	**ug/L**	2.317	164869	1.267
	Th	232	**19.417**	**ug/L**	1.417	157858	1.214
	U	238	**2.162**	**ug/L**	4.119	17953	0.137

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.6			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613013
Sample Date/Time: Friday, December 11, 2009 04:00:37
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613013.584

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.724**	ug/L	4.150	2051	0.008
	Be	9	**1.780**	ug/L	18.209	71	0.000
	B	11	**11.704**	ug/L	5.903	495	0.002
	Na	23	**647.666**	ug/L	13.359	236291	0.935
	Mg	24	**7988.441**	ug/L	3.100	1798987	7.336
	Al	27	**22317.612**	ug/L	1.576	9618487	39.220
	P	31	**813.016**	ug/L	0.682	26445	0.105
	K	39	**4344.698**	ug/L	6.110	3154471	12.262
	Ca	43	**14878.243**	ug/L	2.908	22247	0.090
>	Sc	45		ug/L		245193	245192.852
	Ti	47	**660.280**	ug/L	1.678	50952	0.207
	V	51	**42.578**	ug/L	2.288	37889	0.151
	Cr	52	**17.034**	ug/L	1.073	17345	0.069
	Cr	53		ug/L		26280	-0.022
	Mn	55	**983.158**	ug/L	1.845	1683253	6.864
	Fe	57	**20285.942**	ug/L	0.955	683980	2.780
	Co	59	**10.004**	ug/L	1.964	11833	0.048
	Ni	60	**17.398**	ug/L	0.814	4250	0.017
	Cu	63		ug/L		12434	0.050
	Cu	65	**23.512**	ug/L	0.844	5843	0.024
	Zn	66	**112.066**	ug/L	1.535	18366	0.228
	Zn	67		ug/L		4277	0.036
	Zn	68		ug/L		15628	0.192
>	Ge	74		ug/L		79502	79502.091
	As	75	**2.590**	ug/L	25.627	1100	0.008
	Se	77		ug/L		1003	-0.003
	Se	82	**0.668**	ug/L	74.930	11	0.000
	Kr	83		ug/L		39	0.000
	Sr	88	**96.941**	ug/L	1.747	255020	4.021
	Y	89		ug/L		169938	2.680
	Zr	90	**41.750**	ug/L	3.122	63413	0.998
	Mo	98	**1.738**	ug/L	5.396	1293	0.020
	Ag	107	**0.131**	ug/L	9.168	187	0.003
	Cd	111	**0.474**	ug/L	3.001	151	0.002
	Cd	114		ug/L		154	0.002
>	In	115		ug/L		63407	63407.023
	Sn	120	**0.727**	ug/L	2.776	1119	0.017
	Sb	121	**0.110**	ug/L	10.895	345	0.002
	Sb	123		ug/L		266	0.002
	Ba	135		ug/L		118218	0.902
	Ba	137	**326.376**	ug/L	1.809	204597	1.561
	Ho	165		ug/L		15427	0.118
>	Lu	175		ug/L		131105	131105.317
	Tl	205	**0.371**	ug/L	3.064	2704	0.017
	Pb	208	**22.949**	ug/L	1.922	160915	1.226
	Th	232	**15.439**	ug/L	1.388	126698	0.965
	U	238	**2.212**	ug/L	0.883	18537	0.140

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.5			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613014
Sample Date/Time: Friday, December 11, 2009 04:06:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613014.585

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**71.748**	**ug/L**	2.405	3559	0.014
	Be	9	**4.986**	**ug/L**	7.521	194	0.001
	B	11	**17.742**	**ug/L**	2.742	747	0.003
	Na	23	**828.567**	**ug/L**	6.947	311031	1.196
	Mg	24	**12567.141**	**ug/L**	3.008	2928085	11.541
	Al	27	**77894.577**	**ug/L**	6.786	34737773	136.889
	P	31	**511.873**	**ug/L**	3.143	17510	0.066
	K	39	**10017.399**	**ug/L**	3.268	7323678	28.271
	Ca	43	**10017.134**	**ug/L**	1.503	15522	0.061
>	Sc	45		**ug/L**		253705	253704.555
	Ti	47	**1668.954**	**ug/L**	1.054	132983	0.524
	V	51	**102.388**	**ug/L**	2.721	93018	0.363
	Cr	52	**42.307**	**ug/L**	2.579	43770	0.170
	Cr	53		**ug/L**		28840	-0.015
	Mn	55	**1393.359**	**ug/L**	2.679	2467610	9.728
	Fe	57	**46842.313**	**ug/L**	1.206	1630758	6.419
	Co	59	**25.848**	**ug/L**	2.872	31472	0.124
	Ni	60	**36.386**	**ug/L**	1.639	9116	0.036
	Cu	63		**ug/L**		16387	0.064
	Cu	65	**29.944**	**ug/L**	1.185	7686	0.030
	Zn	66	**136.055**	**ug/L**	2.139	22642	0.277
	Zn	67		**ug/L**		5250	0.047
	Zn	68		**ug/L**		19546	0.237
>	Ge	74		**ug/L**		80944	80943.566
	As	75	**7.331**	**ug/L**	6.516	2337	0.023
	Se	77		**ug/L**		1014	-0.003
	Se	82	**-0.078**	**ug/L**	320.119	-3	-0.000
	Kr	83		**ug/L**		57	0.000
	Sr	88	**123.801**	**ug/L**	0.452	322987	5.135
	Y	89		**ug/L**		163168	2.595
	Zr	90	**74.239**	**ug/L**	4.840	111761	1.776
	Mo	98	**1.327**	**ug/L**	3.792	986	0.015
	Ag	107	**0.309**	**ug/L**	5.961	413	0.006
	Cd	111	**0.699**	**ug/L**	15.764	221	0.004
	Cd	114		**ug/L**		215	0.003
>	In	115		**ug/L**		62887	62886.833
	Sn	120	**0.464**	**ug/L**	3.129	733	0.011
	Sb	121	**0.116**	**ug/L**	9.967	351	0.003
	Sb	123		**ug/L**		277	0.002
	Ba	135		**ug/L**		254544	1.952
	Ba	137	**707.947**	**ug/L**	1.759	441553	3.385
	Ho	165		**ug/L**		15448	0.118
>	Lu	175		**ug/L**		130429	130429.365
	Tl	205	**0.914**	**ug/L**	4.926	5918	0.042
	Pb	208	**51.143**	**ug/L**	1.336	356620	2.732
	Th	232	**40.481**	**ug/L**	0.474	330165	2.530
	U	238	**3.874**	**ug/L**	1.068	32193	0.246

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.0			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613015
Sample Date/Time: Friday, December 11, 2009 04:12:16
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613015.586

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**68.681**	ug/L	1.177	3425	0.013
	Be	9	**5.599**	ug/L	1.674	219	0.001
	B	11	**16.697**	ug/L	5.627	710	0.003
	Na	23	**1228.914**	ug/L	10.565	459308	1.773
	Mg	24	**16399.073**	ug/L	4.886	3841229	15.060
	Al	27	**82342.535**	ug/L	7.130	36868925	144.706
	P	31	**1355.696**	ug/L	1.213	45327	0.175
	K	39	**8944.850**	ug/L	2.538	6589760	25.244
	Ca	43	**14927.702**	ug/L	1.833	23201	0.091
>	Sc	45		ug/L		254957	254957.215
	Ti	47	**2572.482**	ug/L	1.640	205886	0.807
	V	51	**124.291**	ug/L	2.951	113287	0.441
	Cr	52	**49.641**	ug/L	2.580	51530	0.200
	Cr	53		ug/L		30036	-0.011
	Mn	55	**2180.954**	ug/L	1.881	3881686	15.227
	Fe	57	**55152.541**	ug/L	2.385	1928921	7.558
	Co	59	**30.764**	ug/L	2.398	37627	0.147
	Ni	60	**48.415**	ug/L	0.078	12168	0.047
	Cu	63		ug/L		18364	0.071
	Cu	65	**33.342**	ug/L	1.806	8596	0.034
	Zn	66	**126.316**	ug/L	2.257	21233	0.257
	Zn	67		ug/L		5166	0.045
	Zn	68		ug/L		18726	0.224
>	Ge	74		ug/L		81694	81693.820
	As	75	**9.195**	ug/L	6.541	2842	0.029
	Se	77		ug/L		1001	-0.003
	Se	82	**-0.338**	ug/L	259.125	-9	-0.000
	Kr	83		ug/L		61	0.000
	Sr	88	**151.487**	ug/L	2.173	399663	6.283
	Y	89		ug/L		148435	2.334
	Zr	90	**94.500**	ug/L	3.669	143863	2.260
	Mo	98	**1.268**	ug/L	3.087	953	0.015
	Ag	107	**0.313**	ug/L	7.257	423	0.006
	Cd	111	**0.592**	ug/L	3.759	190	0.003
	Cd	114		ug/L		182	0.003
>	In	115		ug/L		63609	63609.390
	Sn	120	**0.624**	ug/L	0.624	973	0.014
	Sb	121	**0.067**	ug/L	22.954	287	0.001
	Sb	123		ug/L		250	0.001
	Ba	135		ug/L		315418	2.407
	Ba	137	**862.186**	ug/L	1.030	540177	4.123
	Ho	165		ug/L		13932	0.106
>	Lu	175		ug/L		131018	131017.760
	Tl	205	**0.968**	ug/L	0.610	6270	0.044
	Pb	208	**51.739**	ug/L	0.363	362391	2.764
	Th	232	**33.389**	ug/L	0.935	273567	2.087
	U	238	**2.587**	ug/L	2.311	21639	0.164

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		103.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.5			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEtFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613016
Sample Date/Time: Friday, December 11, 2009 04:18:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613016.587

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.568**	**ug/L**	1.513	2573	0.010
	Be	9	**1.212**	**ug/L**	29.544	51	0.000
	B	11	**2.138**	**ug/L**	5.368	139	0.000
	Na	23	**1281.667**	**ug/L**	3.804	469944	1.849
	Mg	24	**2152.598**	**ug/L**	5.597	494427	1.977
	Al	27	**8303.712**	**ug/L**	0.808	3651262	14.593
	P	31	**306.870**	**ug/L**	0.868	10659	0.040
	K	39	**2566.974**	**ug/L**	12.385	1962318	7.245
	Ca	43	**3690.128**	**ug/L**	2.028	5692	0.022
>	Sc	45		**ug/L**		250131	250131.039
	Ti	47	**779.650**	**ug/L**	0.982	61339	0.245
	V	51	**12.041**	**ug/L**	9.073	11550	0.043
	Cr	52	**5.264**	**ug/L**	2.380	5834	0.021
	Cr	53		**ug/L**		24727	-0.030
	Mn	55	**689.192**	**ug/L**	2.026	1203675	4.812
	Fe	57	**16504.518**	**ug/L**	1.205	568071	2.262
	Co	59	**3.291**	**ug/L**	2.148	4036	0.016
	Ni	60	**12.084**	**ug/L**	1.635	3034	0.012
	Cu	63		**ug/L**		3835	0.015
	Cu	65	**7.054**	**ug/L**	0.359	1819	0.007
	Zn	66	**128.017**	**ug/L**	0.431	21503	0.260
	Zn	67		**ug/L**		4702	0.040
	Zn	68		**ug/L**		17454	0.209
>	Ge	74		**ug/L**		81619	81618.980
	As	75	**1.417**	**ug/L**	60.005	826	0.004
	Se	77		**ug/L**		973	-0.003
	Se	82	**1.057**	**ug/L**	35.314	20	0.000
	Kr	83		**ug/L**		43	0.000
	Sr	88	**31.439**	**ug/L**	0.760	84324	1.304
	Y	89		**ug/L**		222772	3.448
	Zr	90	**52.489**	**ug/L**	5.001	81193	1.255
	Mo	98	**1.992**	**ug/L**	4.218	1505	0.023
	Ag	107	**0.173**	**ug/L**	5.264	246	0.004
	Cd	111	**0.462**	**ug/L**	5.924	150	0.002
	Cd	114		**ug/L**		42	0.000
>	In	115		**ug/L**		64613	64612.846
	Sn	120	**3.529**	**ug/L**	3.358	5260	0.080
	Sb	121	**0.223**	**ug/L**	4.872	512	0.005
	Sb	123		**ug/L**		406	0.004
	Ba	135		**ug/L**		57675	0.432
	Ba	137	**158.098**	**ug/L**	1.421	100959	0.756
	Ho	165		**ug/L**		22614	0.169
>	Lu	175		**ug/L**		133518	133518.083
	Tl	205	**0.274**	**ug/L**	3.812	2166	0.013
	Pb	208	**11.492**	**ug/L**	2.043	82177	0.614
	Th	232	**19.514**	**ug/L**	0.779	163020	1.220
	U	238	**2.916**	**ug/L**	0.075	24839	0.185

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.5			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613017
Sample Date/Time: Friday, December 11, 2009 04:23:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613017.588

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**39.611**	ug/L	3.522	1948	0.008
	Be	9	**2.089**	ug/L	10.028	84	0.000
	B	11	**7.137**	ug/L	2.908	332	0.001
	Na	23	**1391.864**	ug/L	10.813	511730	2.008
	Mg	24	**6737.708**	ug/L	9.191	1554274	6.188
	Al	27	**21996.400**	ug/L	5.030	9708395	38.656
	P	31	**1211.614**	ug/L	1.012	39995	0.156
	K	39	**3680.740**	ug/L	8.176	2761669	10.388
	Ca	43	**10450.436**	ug/L	1.621	16031	0.063
>	Sc	45		ug/L		251185	251184.959
	Ti	47	**942.701**	ug/L	0.671	74452	0.296
	V	51	**61.718**	ug/L	0.812	55870	0.219
	Cr	52	**20.929**	ug/L	0.523	21712	0.084
	Cr	53		ug/L		26546	-0.023
	Mn	55	**906.792**	ug/L	1.622	1590574	6.331
	Fe	57	**25401.356**	ug/L	1.345	876690	3.481
	Co	59	**9.398**	ug/L	0.524	11394	0.045
	Ni	60	**19.640**	ug/L	1.889	4906	0.019
	Cu	63		ug/L		16122	0.063
	Cu	65	**30.048**	ug/L	1.963	7637	0.030
	Zn	66	**116.023**	ug/L	1.002	19789	0.236
	Zn	67		ug/L		4539	0.037
	Zn	68		ug/L		16559	0.195
>	Ge	74		ug/L		82784	82783.671
	As	75	**2.400**	ug/L	15.196	1096	0.008
	Se	77		ug/L		991	-0.003
	Se	82	**0.071**	ug/L	1061.886	-0	0.000
	Kr	83		ug/L		55	0.000
	Sr	88	**87.695**	ug/L	1.188	234963	3.637
	Y	89		ug/L		180775	2.800
	Zr	90	**51.419**	ug/L	1.168	79523	1.230
	Mo	98	**2.180**	ug/L	3.581	1645	0.025
	Ag	107	**0.177**	ug/L	7.446	251	0.004
	Cd	111	**0.539**	ug/L	7.515	175	0.003
	Cd	114		ug/L		161	0.002
>	In	115		ug/L		64580	64580.350
	Sn	120	**0.935**	ug/L	5.375	1445	0.021
	Sb	121	**0.176**	ug/L	9.088	445	0.004
	Sb	123		ug/L		367	0.003
	Ba	135		ug/L		132938	1.009
	Ba	137	**363.537**	ug/L	1.763	229120	1.738
	Ho	165		ug/L		16420	0.125
>	Lu	175		ug/L		131817	131817.229
	Tl	205	**0.343**	ug/L	2.449	2549	0.016
	Pb	208	**24.422**	ug/L	1.848	172159	1.305
	Th	232	**17.287**	ug/L	1.460	142585	1.080
	U	238	**2.354**	ug/L	1.368	19816	0.149

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			106.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			104.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			101.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			106.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613018
Sample Date/Time: Friday, December 11, 2009 04:29:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\241613018.589

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**45.369**	ug/L	1.500	2305	0.009
	Be	9	**3.715**	ug/L	7.923	150	0.001
	B	11	**15.829**	ug/L	2.409	688	0.002
	Na	23	**704.007**	ug/L	14.671	271596	1.016
	Mg	24	**12878.394**	ug/L	5.062	3069178	11.827
	Al	27	**54925.075**	ug/L	6.881	25041033	96.523
	P	31	**516.994**	ug/L	2.617	18089	0.067
	K	39	**10467.624**	ug/L	7.049	7821571	29.542
	Ca	43	**26689.409**	ug/L	1.807	42171	0.162
>	Sc	45		ug/L		259609	259608.670
	Ti	47	**1196.470**	ug/L	0.908	97623	0.375
	V	51	**102.816**	ug/L	0.915	95599	0.365
	Cr	52	**42.104**	ug/L	2.107	44583	0.170
	Cr	53		ug/L		29290	-0.016
	Mn	55	**1040.267**	ug/L	1.199	1885491	7.263
	Fe	57	**44301.488**	ug/L	1.019	1578370	6.071
	Co	59	**23.982**	ug/L	1.870	29894	0.115
	Ni	60	**32.281**	ug/L	2.003	8284	0.032
	Cu	63		ug/L		16765	0.064
	Cu	65	**29.522**	ug/L	2.584	7758	0.030
	Zn	66	**140.769**	ug/L	1.055	24055	0.286
	Zn	67		ug/L		5492	0.048
	Zn	68		ug/L		20492	0.242
>	Ge	74		ug/L		83123	83122.981
	As	75	**8.371**	ug/L	5.829	2677	0.027
	Se	77		ug/L		1092	-0.002
	Se	82	**0.272**	ug/L	170.887	4	0.000
	Kr	83		ug/L		48	0.000
	Sr	88	**166.378**	ug/L	2.210	444350	6.901
	Y	89		ug/L		110909	1.723
	Zr	90	**47.640**	ug/L	4.684	73462	1.139
	Mo	98	**1.273**	ug/L	2.288	968	0.015
	Ag	107	**0.198**	ug/L	1.288	277	0.004
	Cd	111	**0.443**	ug/L	10.911	144	0.002
	Cd	114		ug/L		152	0.002
>	In	115		ug/L		64379	64379.351
	Sn	120	**0.362**	ug/L	2.271	601	0.008
	Sb	121	**0.128**	ug/L	11.513	377	0.003
	Sb	123		ug/L		294	0.002
	Ba	135		ug/L		220096	1.682
	Ba	137	**603.046**	ug/L	1.794	377390	2.884
	Ho	165		ug/L		10570	0.081
>	Lu	175		ug/L		130887	130887.317
	Tl	205	**0.874**	ug/L	2.133	5700	0.040
	Pb	208	**42.606**	ug/L	2.422	298068	2.276
	Th	232	**28.655**	ug/L	1.562	234595	1.791
	U	238	**2.902**	ug/L	4.317	24220	0.184

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		109.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.4			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)_
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 04:35:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 6.590

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.295**	**ug/L**	2.682	2515	0.010
	Be	9	**57.729**	**ug/L**	2.587	2156	0.009
	B	11	**98.860**	**ug/L**	1.776	3849	0.015
	Na	23	**4313.777**	**ug/L**	6.772	1568701	6.225
	Mg	24	**5188.900**	**ug/L**	9.214	1194962	4.765
	Al	27	**4306.139**	**ug/L**	3.204	1897662	7.567
	P	31	**5059.120**	**ug/L**	2.230	164117	0.652
	K	39	**5286.333**	**ug/L**	6.606	3886666	14.919
	Ca	43	**4888.306**	**ug/L**	2.592	7528	0.030
>	Sc	45		**ug/L**		250582	250581.754
	Ti	47	**49.532**	**ug/L**	1.831	4057	0.016
	V	51	**51.940**	**ug/L**	2.059	47038	0.184
	Cr	52	**52.155**	**ug/L**	1.477	53179	0.210
	Cr	53		**ug/L**		42934	0.042
	Mn	55	**50.730**	**ug/L**	1.808	88979	0.354
	Fe	57	**4903.832**	**ug/L**	2.713	170720	0.672
	Co	59	**49.769**	**ug/L**	1.651	59770	0.238
	Ni	60	**49.774**	**ug/L**	1.729	12290	0.049
	Cu	63		**ug/L**		28459	0.113
	Cu	65	**51.738**	**ug/L**	3.017	13082	0.052
	Zn	66	**52.021**	**ug/L**	1.581	9252	0.106
	Zn	67		**ug/L**		3194	0.020
	Zn	68		**ug/L**		7578	0.084
>	Ge	74		**ug/L**		85020	85020.435
	As	75	**48.756**	**ug/L**	2.944	13631	0.155
	Se	77		**ug/L**		2813	0.018
	Se	82	**49.059**	**ug/L**	0.646	1044	0.012
	Kr	83		**ug/L**		28	-0.000
	Sr	88	**49.875**	**ug/L**	0.676	135317	2.069
	Y	89		**ug/L**		41	0.000
	Zr	90	**54.292**	**ug/L**	3.816	84965	1.298
	Mo	98	**50.778**	**ug/L**	1.717	38166	0.584
	Ag	107	**50.804**	**ug/L**	1.718	67501	1.032
	Cd	111	**51.660**	**ug/L**	2.333	16987	0.260
	Cd	114		**ug/L**		41155	0.629
>	In	115		**ug/L**		65371	65370.914
	Sn	120	**49.999**	**ug/L**	1.274	74463	1.138
	Sb	121	**51.953**	**ug/L**	0.879	74241	1.133
	Sb	123		**ug/L**		56905	0.868
	Ba	135		**ug/L**		17709	0.141
	Ba	137	**50.618**	**ug/L**	2.288	30496	0.242
	Ho	165		**ug/L**		26	0.000
>	Lu	175		**ug/L**		125934	125934.312
	Tl	205	**47.379**	**ug/L**	1.949	272501	2.160
	Pb	208	**52.042**	**ug/L**	1.300	350336	2.781
	Th	232	**51.979**	**ug/L**	0.555	409295	3.249
	U	238	**53.885**	**ug/L**	1.480	430621	3.419

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.590				
	Be	9	115.457				
	B	11	98.860				
	Na	23	86.276				
	Mg	24	103.778				
	Al	27	85.270				
	P	31	101.182				
	K	39	105.727				
	Ca	43	97.766				
>	Sc	45		106.0			
	Ti	47	99.065				
	V	51	103.880				
	Cr	52	104.310				
	Cr	53					
	Mn	55	101.460				
	Fe	57	98.077				
	Co	59	99.539				
	Ni	60	99.547				
	Cu	63					
	Cu	65	103.476				
	Zn	66	104.042				
	Zn	67					
	Zn	68					
>	Ge	74		107.2			
	As	75	97.511				
	Se	77					
	Se	82	98.119				
	Kr	83					
	Sr	88	99.750				
	Y	89					
	Zr	90	108.584				
	Mo	98	101.557				
	Ag	107	101.608				
	Cd	111	103.320				
	Cd	114					
>	In	115		102.6			
	Sn	120	99.998				
	Sb	121	103.906				
	Sb	123					
	Ba	135					
	Ba	137	101.236				
	Ho	165					
>	Lu	175		101.4			
	Tl	205	94.758				
	Pb	208	104.083				
	Th	232	103.958				
	U	238	107.770				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 04:41:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091208\QC Std 7.591

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.114**	**ug/L**	67.152	11	0.000
	Be	9	**-0.052**	**ug/L**	30.003	4	-0.000
	B	11	**1.061**	**ug/L**	34.784	96	0.000
	Na	23	**13.229**	**ug/L**	111.816	12006	0.019
	Mg	24	**2.952**	**ug/L**	86.642	667	0.003
	Al	27	**1.421**	**ug/L**	182.435	1667	0.002
	P	31	**0.955**	**ug/L**	33.809	784	0.000
	K	39	**3.726**	**ug/L**	472.192	151132	0.011
	Ca	43	**-0.848**	**ug/L**	356.624	83	-0.000
>	Sc	45		**ug/L**		246228	246228.397
	Ti	47	**-1.162**	**ug/L**	5.250	72	-0.000
	V	51	**1.027**	**ug/L**	82.164	1750	0.004
	Cr	52	**0.268**	**ug/L**	21.598	787	0.001
	Cr	53		**ug/L**		28846	-0.012
	Mn	55	**0.211**	**ug/L**	3.996	609	0.001
	Fe	57	**5.533**	**ug/L**	45.484	2533	0.001
	Co	59	**0.008**	**ug/L**	41.156	105	0.000
	Ni	60	**-0.025**	**ug/L**	219.940	65	-0.000
	Cu	63		**ug/L**		111	-0.000
	Cu	65	**0.054**	**ug/L**	59.750	56	0.000
	Zn	66	**0.053**	**ug/L**	98.140	254	0.000
	Zn	67		**ug/L**		1306	-0.002
	Zn	68		**ug/L**		365	-0.000
>	Ge	74		**ug/L**		82486	82485.950
	As	75	**0.074**	**ug/L**	93.558	484	0.000
	Se	77		**ug/L**		1224	-0.000
	Se	82	**0.116**	**ug/L**	428.234	0	0.000
	Kr	83		**ug/L**		34	0.000
	Sr	88	**0.008**	**ug/L**	15.345	97	0.000
	Y	89		**ug/L**		20	0.000
	Zr	90	**0.113**	**ug/L**	12.480	282	0.003
	Mo	98	**0.043**	**ug/L**	25.231	58	0.000
	Ag	107	**0.004**	**ug/L**	116.796	24	0.000
	Cd	111	**0.025**	**ug/L**	43.367	8	0.000
	Cd	114		**ug/L**		19	0.000
>	In	115		**ug/L**		63824	63824.343
	Sn	120	**0.042**	**ug/L**	7.331	131	0.001
	Sb	121	**0.164**	**ug/L**	19.882	423	0.004
	Sb	123		**ug/L**		339	0.003
	Ba	135		**ug/L**		18	0.000
	Ba	137	**0.021**	**ug/L**	10.217	32	0.000
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		124062	124062.392
	Tl	205	**0.381**	**ug/L**	18.688	2614	0.017
	Pb	208	**0.018**	**ug/L**	13.859	314	0.001
	Th	232	**0.061**	**ug/L**	9.789	626	0.004
	U	238	**0.014**	**ug/L**	22.298	240	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.9			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, December 11, 2009 10:44:32
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.5163
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	558.0	558.011	22.946	4.1
	Mg	24.0	4822.6	4822.614	77.780	1.6
	Co	58.9	19657.1	19657.116	235.188	1.2
	Rh	102.9	52984.5	52984.482	490.260	0.9
	In	114.9	71574.7	71574.662	517.168	0.7
	Pb	208.0	48244.3	48244.332	463.197	1.0
⌈>	Ba	137.9	67450.4	67450.390	419.762	0.6
⌊	Ba++	69.0	921.7	0.014	0.000	2.1
⌈>	Ce	139.9	84454.5	84454.528	923.835	1.1
⌊	CeO	155.9	1081.0	0.013	0.000	0.6
	Bkgd	220.0	6.2	6.200	2.080	33.5

Current Optimization File Data

Current Value	Description
0.96	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1812.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.0	456.7
Co	59	17	7.8	19116.1
In	115	17	9.0	87368.7

ICPMS#3 Instrument Tuning Report

File Name: 091211.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	577	2030	0.699
Be	9.0	9.0	2071	2010	0.675
Mg	24.0	24.0	5712	2090	0.650
Mg	25.0	25.0	5917	2010	0.660
Mg	26.0	26.0	6219	2110	0.713
Co	58.9	58.9	14196	2100	0.676
Rh	102.9	102.9	24914	2150	0.690
In	114.9	114.9	27822	2160	0.692
Ce	139.9	140.0	33927	2200	0.659
Pb	206.0	206.0	49992	2270	0.669
Pb	207.0	207.0	50270	2310	0.641
Pb	208.0	208.0	50486	2290	0.641
U	238.1	238.0	57845	2330	0.685

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Friday, December 11, 2009 15:37:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\Blank.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11		ug/L		59	
	Na	23		ug/L		2000	
	Mg	24		ug/L		0	
	Al	27		ug/L		0	
>	Sc	45		ug/L		289394	
	Mn	55		ug/L		978	
>	Ge	74		ug/L		97778	
	As	75		ug/L		394	
	Se	77		ug/L		1988	
	Se	82		ug/L		6	
	Kr	83		ug/L		30	
>	Lu	175		ug/L		132089	
	Tl	205		ug/L		197	
	Pb	208		ug/L		137	
	U	238		ug/L		89	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
Sc	45	Linear Thru Zero	
Mn	55	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45					
	Mn	55					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Friday, December 11, 2009 15:40:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\Standard 1.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**20.000**	**ug/L**	4.336	549	0.002
	Na	23	**1000.000**	**ug/L**	13.484	330151	1.136
	Mg	24	**1000.000**	**ug/L**	4.684	245428	0.850
	Al	27	**1000.000**	**ug/L**	2.469	473387	1.640
>	Sc	45		**ug/L**		288685	288685.185
	Mn	55	**10.000**	**ug/L**	0.597	18292	0.060
>	Ge	74		**ug/L**		98608	98607.519
	As	75	**10.000**	**ug/L**	3.891	3382	0.030
	Se	77		**ug/L**		2069	0.001
	Se	82	**10.000**	**ug/L**	5.096	260	0.003
	Kr	83		**ug/L**		32	0.000
>	Lu	175		**ug/L**		132557	132556.875
	Tl	205	**10.000**	**ug/L**	1.055	61443	0.462
	Pb	208	**10.000**	**ug/L**	0.668	72390	0.545
	U	238	**10.000**	**ug/L**	1.027	90163	0.680

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45					
	Mn	55					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Friday, December 11, 2009 15:42:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\Standard 2.085

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**199.978**	**ug/L**	7.455	4845	0.017
	Na	23	**9996.771**	**ug/L**	12.279	3137767	11.005
	Mg	24	**9998.380**	**ug/L**	23.438	2381709	8.362
	Al	27	**9996.833**	**ug/L**	10.799	4522108	15.888
>	Sc	45		**ug/L**		284760	284759.701
	Mn	55	**99.983**	**ug/L**	1.398	168854	0.590
>	Ge	74		**ug/L**		98971	98971.332
	As	75	**99.974**	**ug/L**	0.822	29597	0.295
	Se	77		**ug/L**		3360	0.014
	Se	82	**99.921**	**ug/L**	2.585	2360	0.024
	Kr	83		**ug/L**		29	-0.000
>	Lu	175		**ug/L**		133966	133965.921
	Tl	205	**99.949**	**ug/L**	0.317	588662	4.393
	Pb	208	**99.947**	**ug/L**	0.694	693437	5.175
	U	238	**99.924**	**ug/L**	0.349	845874	6.314

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45					
	Mn	55					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Friday, December 11, 2009 15:45:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 1.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**102.504**	**ug/L**	4.634	2544	0.009
	Na	23	**4287.529**	**ug/L**	11.156	1364404	4.720
	Mg	24	**4799.495**	**ug/L**	3.795	1158187	4.014
	Al	27	**4385.572**	**ug/L**	12.632	2012341	6.970
>	Sc	45		**ug/L**		288441	288440.967
	Mn	55	**52.574**	**ug/L**	1.010	90402	0.310
>	Ge	74		**ug/L**		100295	100295.215
	As	75	**46.955**	**ug/L**	2.445	14300	0.139
	Se	77		**ug/L**		2599	0.006
	Se	82	**49.464**	**ug/L**	1.827	1187	0.012
	Kr	83		**ug/L**		35	0.000
>	Lu	175		**ug/L**		133382	133382.449
	Tl	205	**49.722**	**ug/L**	0.943	291679	2.185
	Pb	208	**51.941**	**ug/L**	0.729	358883	2.690
	U	238	**53.922**	**ug/L**	0.492	454520	3.407

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	102.504				
	Na	23	85.751				
	Mg	24	95.990				
	Al	27	86.843				
>	Sc	45		99.7			
	Mn	55	105.148				
>	Ge	74		102.6			
	As	75	93.911				
	Se	77					
	Se	82	98.928				
	Kr	83					
>	Lu	175		101.0			
	Tl	205	99.445				
	Pb	208	103.882				
	U	238	107.844				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 1	Na	23ICV is out of limits (+/- 10%)
QC Std 1	Al	27ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Friday, December 11, 2009 15:48:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 2.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**3.184**	**ug/L**	24.767	135	0.000
	Na	23	**1.097**	**ug/L**	147.719	2334	0.001
	Mg	24	**2.826**	**ug/L**	86.611	667	0.002
	Al	27	**0.000**	**ug/L**		0	0.000
>	Sc	45		**ug/L**		286337	286337.285
	Mn	55	**-0.200**	**ug/L**	1.452	630	-0.001
>	Ge	74		**ug/L**		98101	98101.128
	As	75	**0.016**	**ug/L**	1142.941	400	0.000
	Se	77		**ug/L**		1723	-0.003
	Se	82	**0.080**	**ug/L**	690.803	8	0.000
	Kr	83		**ug/L**		33	0.000
>	Lu	175		**ug/L**		131553	131552.585
	Tl	205	**0.151**	**ug/L**	7.585	1069	0.007
	Pb	208	**0.003**	**ug/L**	73.459	157	0.000
	U	238	**0.012**	**ug/L**	25.470	191	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		98.9			
	Mn	55					
>	Ge	74		100.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.6			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Friday, December 11, 2009 15:51:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 3.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**16.217**	**ug/L**	4.337	449	0.001
	Na	23	**288.065**	**ug/L**	15.029	92636	0.317
	Mg	24	**22.004**	**ug/L**	57.228	5335	0.018
	Al	27	**25.636**	**ug/L**	13.828	11671	0.041
>	Sc	45		**ug/L**		286672	286671.855
	Mn	55	**5.387**	**ug/L**	3.152	10071	0.032
>	Ge	74		**ug/L**		99209	99208.623
	As	75	**5.669**	**ug/L**	3.868	2059	0.017
	Se	77		**ug/L**		2021	0.000
	Se	82	**5.319**	**ug/L**	6.916	132	0.001
	Kr	83		**ug/L**		27	-0.000
>	Lu	175		**ug/L**		133390	133389.890
	Tl	205	**1.091**	**ug/L**	0.456	6596	0.048
	Pb	208	**2.153**	**ug/L**	1.003	15009	0.111
	U	238	**0.231**	**ug/L**	0.659	2037	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	108.112				
	Na	23	115.226				
	Mg	24	146.695				
	Al	27	85.454				
>	Sc	45		99.1			
	Mn	55	107.741				
>	Ge	74		101.5			
	As	75	113.388				
	Se	77					
	Se	82	106.383				
	Kr	83					
>	Lu	175		101.0			
	Tl	205	109.126				
	Pb	208	107.653				
	U	238	115.529				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Mg	24CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Friday, December 11, 2009 15:54:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 4.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**1.140**	**ug/L**	63.117	80	0.000
	Na	23	**94947.205**	**ug/L**	2.174	27861803	104.522
	Mg	24	**95421.731**	**ug/L**	4.263	21268950	79.809
	Al	27	**96276.931**	**ug/L**	4.425	40795753	153.018
>	Sc	45		**ug/L**		266491	266491.321
	Mn	55	**5.693**	**ug/L**	0.907	9847	0.034
>	Ge	74		**ug/L**		92233	92233.045
	As	75	**0.266**	**ug/L**	193.169	445	0.001
	Se	77		**ug/L**		1839	-0.000
	Se	82	**-0.264**	**ug/L**	64.723	0	-0.000
	Kr	83		**ug/L**		47	0.000
>	Lu	175		**ug/L**		127979	127979.379
	Tl	205	**0.046**	**ug/L**	8.003	448	0.002
	Pb	208	**0.180**	**ug/L**	4.161	1324	0.009
	U	238	**0.002**	**ug/L**	64.871	103	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23	94.947				
	Mg	24	95.422				
	Al	27	96.277				
>	Sc	45			92.1		
	Mn	55	98.148				
>	Ge	74			94.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			96.9		
	Tl	205					
	Pb	208	89.942				
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, December 11, 2009 15:57:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 5.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**18.546**	**ug/L**	12.776	474	0.002
	Na	23	**97555.196**	**ug/L**	8.204	28922287	107.393
	Mg	24	**98930.956**	**ug/L**	4.849	22286603	82.744
	Al	27	**97056.640**	**ug/L**	3.851	41543319	154.257
>	Sc	45		**ug/L**		269338	269338.323
	Mn	55	**26.536**	**ug/L**	0.849	43060	0.156
>	Ge	74		**ug/L**		92566	92565.547
	As	75	**21.727**	**ug/L**	3.346	6307	0.064
	Se	77		**ug/L**		2320	0.005
	Se	82	**21.486**	**ug/L**	1.769	480	0.005
	Kr	83		**ug/L**		51	0.000
>	Lu	175		**ug/L**		127268	127267.705
	Tl	205	**19.531**	**ug/L**	2.783	109428	0.858
	Pb	208	**20.218**	**ug/L**	1.881	133352	1.047
	U	238	**22.167**	**ug/L**	1.807	178314	1.401

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	92.731				
	Na	23	97.555				
	Mg	24	98.931				
	Al	27	97.057				
>	Sc	45		93.1			
	Mn	55	102.854				
>	Ge	74		94.7			
	As	75	108.633				
	Se	77					
	Se	82	107.432				
	Kr	83					
>	Lu	175		96.3			
	Tl	205	97.656				
	Pb	208	100.090				
	U	238	110.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 16:00:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 6.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**95.100**	**ug/L**	6.082	2278	0.008
	Na	23	**4430.919**	**ug/L**	6.130	1357806	4.878
	Mg	24	**4575.874**	**ug/L**	4.733	1063579	3.827
	Al	27	**4416.270**	**ug/L**	1.900	1949929	7.019
>	Sc	45		**ug/L**		277836	277836.214
	Mn	55	**52.966**	**ug/L**	2.181	87704	0.312
>	Ge	74		**ug/L**		99242	99241.850
	As	75	**50.885**	**ug/L**	5.310	15298	0.150
	Se	77		**ug/L**		2441	0.004
	Se	82	**50.815**	**ug/L**	6.377	1207	0.012
	Kr	83		**ug/L**		29	-0.000
>	Lu	175		**ug/L**		131666	131666.309
	Tl	205	**51.057**	**ug/L**	0.340	295645	2.244
	Pb	208	**50.631**	**ug/L**	0.985	345321	2.622
	U	238	**51.631**	**ug/L**	0.504	429607	3.262

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	95.100				
	Na	23	88.618				
	Mg	24	91.517				
	Al	27	87.451				
>	Sc	45		96.0			
	Mn	55	105.932				
>	Ge	74		101.5			
	As	75	101.770				
	Se	77					
	Se	82	101.630				
	Kr	83					
>	Lu	175		99.7			
	Tl	205	102.115				
	Pb	208	101.263				
	U	238	103.263				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 16:03:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 7.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**1.700**	**ug/L**	30.054	97	0.000
	Na	23	**9.992**	**ug/L**	59.277	5001	0.011
	Mg	24	**0.000**	**ug/L**		0	0.000
	Al	27	**1.512**	**ug/L**	86.611	667	0.002
>	Sc	45		**ug/L**		280278	280277.831
	Mn	55	**-0.336**	**ug/L**	4.054	392	-0.002
>	Ge	74		**ug/L**		99535	99534.538
	As	75	**0.430**	**ug/L**	29.549	527	0.001
	Se	77		**ug/L**		1574	-0.005
	Se	82	**0.177**	**ug/L**	63.558	11	0.000
	Kr	83		**ug/L**		31	0.000
>	Lu	175		**ug/L**		129249	129249.361
	Tl	205	**0.175**	**ug/L**	3.534	1190	0.008
	Pb	208	**0.006**	**ug/L**	17.299	176	0.000
	U	238	**0.010**	**ug/L**	14.599	169	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		96.8			
	Mn	55					
>	Ge	74		101.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		97.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Friday, December 11, 2009 16:06:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 10.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**0.992**	**ug/L**	18.197	76	0.000
	Na	23	**46606.684**	**ug/L**	2.177	13689882	51.307
	Mg	24	**45593.581**	**ug/L**	2.699	10173351	38.133
	Al	27	**46860.266**	**ug/L**	10.271	19863901	74.477
>	Sc	45		**ug/L**		266749	266748.873
	Mn	55	**973.185**	**ug/L**	0.374	1531800	5.739
>	Ge	74		**ug/L**		93614	93614.013
	As	75	**952.148**	**ug/L**	0.139	263401	2.810
	Se	77		**ug/L**		10465	0.091
	Se	82	**508.106**	**ug/L**	0.122	11330	0.121
	Kr	83		**ug/L**		36	0.000
>	Lu	175		**ug/L**		130601	130600.594
	Tl	205	**471.790**	**ug/L**	1.152	2708287	20.735
	Pb	208	**4795.684**	**ug/L**	0.676	32430535	248.327
	U	238	**5226.444**	**ug/L**	1.282	43124991	330.224

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23	93.213				
	Mg	24	91.187				
	Al	27	93.721				
>	Sc	45			92.2		
	Mn	55	97.319				
>	Ge	74			95.7		
	As	75	95.215				
	Se	77					
	Se	82	101.621				
	Kr	83					
>	Lu	175			98.9		
	Tl	205	94.358				
	Pb	208	95.914				
	U	238	104.529				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Friday, December 11, 2009 16:08:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 11.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**94.985**	**ug/L**	4.854	2296	0.008
	Na	23	**4330.358**	**ug/L**	11.404	1339541	4.767
	Mg	24	**4252.618**	**ug/L**	4.682	997354	3.557
	Al	27	**4143.751**	**ug/L**	8.644	1847006	6.586
>	Sc	45		**ug/L**		280409	280409.200
	Mn	55	**51.112**	**ug/L**	0.908	85474	0.301
>	Ge	74		**ug/L**		96797	96796.797
	As	75	**51.717**	**ug/L**	1.054	15162	0.153
	Se	77		**ug/L**		2355	0.004
	Se	82	**50.389**	**ug/L**	0.965	1167	0.012
	Kr	83		**ug/L**		29	-0.000
>	Lu	175		**ug/L**		130165	130165.297
	Tl	205	**51.880**	**ug/L**	1.587	296973	2.280
	Pb	208	**50.894**	**ug/L**	0.679	343159	2.635
	U	238	**52.249**	**ug/L**	0.843	429787	3.301

Calibration

Analyte	MassCurve Type	Correlation Coefficient
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	94.985				
	Na	23	86.607				
	Mg	24	85.052				
	Al	27	82.054				
>	Sc	45		96.9			
	Mn	55	102.224				
>	Ge	74		99.0			
	As	75	103.434				
	Se	77					
	Se	82	100.778				
	Kr	83					
>	Lu	175		98.5			
	Tl	205	103.760				
	Pb	208	101.787				
	U	238	104.497				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 11	Na	23CCV is out of limits (+/- 10%)
QC Std 11	Mg	24CCV is out of limits (+/- 10%)
QC Std 11	Al	27CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Friday, December 11, 2009 16:11:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 12.095

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**1.786**	**ug/L**	4.293	97	0.000
	Na	23	**-3.072**	**ug/L**	180.821	1000	-0.003
	Mg	24	**1.468**	**ug/L**	173.205	333	0.001
	Al	27	**3.729**	**ug/L**	123.641	1667	0.006
>	Sc	45		**ug/L**		275986	275986.048
	Mn	55	**-0.304**	**ug/L**	3.807	437	-0.002
>	Ge	74		**ug/L**		96953	96952.927
	As	75	**0.023**	**ug/L**	1903.739	397	0.000
	Se	77		**ug/L**		1566	-0.004
	Se	82	**0.001**	**ug/L**	41559.524	6	0.000
	Kr	83		**ug/L**		28	-0.000
>	Lu	175		**ug/L**		128895	128894.528
	Tl	205	**0.283**	**ug/L**	3.107	1794	0.012
	Pb	208	**0.037**	**ug/L**	9.259	377	0.002
	U	238	**0.098**	**ug/L**	12.135	883	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		95.4			
	Mn	55					
>	Ge	74		99.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		97.6			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978613
Sample Date/Time: Friday, December 11, 2009 16:31:51
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\1201978613.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**0.917**	**ug/L**	44.604	80	0.000
	Na	23	**24.345**	**ug/L**	57.040	9670	0.027
	Mg	24	**2.811**	**ug/L**	173.205	667	0.002
	Al	27	**12.488**	**ug/L**	44.852	5668	0.020
>	Sc	45		**ug/L**		285640	285639.681
	Mn	55	**-0.084**	**ug/L**	19.047	823	-0.000
>	Ge	74		**ug/L**		97244	97244.182
	As	75	**0.089**	**ug/L**	464.098	418	0.000
	Se	77		**ug/L**		1378	-0.006
	Se	82	**0.190**	**ug/L**	108.010	11	0.000
	Kr	83		**ug/L**		30	0.000
>	Lu	175		**ug/L**		133374	133373.733
	Tl	205	**0.161**	**ug/L**	3.752	1140	0.007
	Pb	208	**0.036**	**ug/L**	8.692	386	0.002
	U	238	**0.018**	**ug/L**	12.253	239	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		98.7			
	Mn	55					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		101.0			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978618
Sample Date/Time: Friday, December 11, 2009 16:40:29
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925484|40|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\1201978618.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**36.583**	ug/L	4.241	914	0.003
	Na	23	**160.074**	ug/L	11.383	51092	0.176
	Mg	24	**787.654**	ug/L	8.487	183848	0.659
	Al	27	**2104.366**	ug/L	7.727	932929	3.345
>	Sc	45		ug/L		279009	279009.072
	Mn	55	**101.972**	ug/L	1.786	168734	0.601
>	Ge	74		ug/L		99011	99010.680
	As	75	**68.052**	ug/L	1.034	20281	0.201
	Se	77		ug/L		2575	0.006
	Se	82	**48.637**	ug/L	1.993	1153	0.012
	Kr	83		ug/L		25	-0.000
>	Lu	175		ug/L		128555	128554.538
	Tl	205	**54.481**	ug/L	1.655	307961	2.394
	Pb	208	**47.046**	ug/L	0.855	313280	2.436
	U	238	**0.500**	ug/L	2.102	4150	0.032

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			96.4		
	Mn	55					
>	Ge	74			101.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			97.3		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 16:43:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 6.105

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**95.412**	**ug/L**	3.234	2306	0.008
	Na	23	**4469.390**	**ug/L**	6.628	1381983	4.920
	Mg	24	**4421.524**	**ug/L**	5.497	1036691	3.698
	Al	27	**4645.111**	**ug/L**	12.592	2071249	7.383
>	Sc	45		**ug/L**		280384	280383.923
	Mn	55	**51.383**	**ug/L**	1.367	85920	0.303
>	Ge	74		**ug/L**		97367	97367.011
	As	75	**51.296**	**ug/L**	1.739	15130	0.151
	Se	77		**ug/L**		2472	0.005
	Se	82	**49.785**	**ug/L**	2.834	1160	0.012
	Kr	83		**ug/L**		30	0.000
>	Lu	175		**ug/L**		127603	127602.645
	Tl	205	**51.813**	**ug/L**	0.860	290760	2.277
	Pb	208	**51.042**	**ug/L**	0.329	337387	2.643
	U	238	**51.825**	**ug/L**	0.474	417914	3.274

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	95.412				
	Na	23	89.388				
	Mg	24	88.430				
	Al	27	91.982				
>	Sc	45		96.9			
	Mn	55	102.765				
>	Ge	74		99.6			
	As	75	102.592				
	Se	77					
	Se	82	99.569				
	Kr	83					
>	Lu	175		96.6			
	Tl	205	103.626				
	Pb	208	102.085				
	U	238	103.650				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 16:46:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 7.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**2.580**	**ug/L**	28.608	115	0.000
	Na	23	**2.564**	**ug/L**	73.045	2667	0.003
	Mg	24	**1.469**	**ug/L**	173.205	333	0.001
	Al	27	**1.492**	**ug/L**	173.205	667	0.002
>	Sc	45		**ug/L**		273793	273793.462
	Mn	55	**-0.316**	**ug/L**	0.415	415	-0.002
>	Ge	74		**ug/L**		96077	96076.623
	As	75	**0.446**	**ug/L**	62.258	513	0.001
	Se	77		**ug/L**		1689	-0.003
	Se	82	**0.236**	**ug/L**	116.178	12	0.000
	Kr	83		**ug/L**		34	0.000
>	Lu	175		**ug/L**		127913	127912.726
	Tl	205	**0.369**	**ug/L**	3.868	2267	0.016
	Pb	208	**0.009**	**ug/L**	15.252	194	0.000
	U	238	**0.013**	**ug/L**	11.215	194	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			94.6		
	Mn	55					
>	Ge	74			98.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			96.8		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613001
Sample Date/Time: Friday, December 11, 2009 16:51:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613001.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**9.651**	**ug/L**	4.490	295	0.001
	Na	23	**1188.097**	**ug/L**	17.528	382835	1.308
	Mg	24	**5455.138**	**ug/L**	9.853	1328042	4.563
	Al	27	**36488.573**	**ug/L**	3.109	16873636	57.993
>	Sc	45		**ug/L**		290974	290974.386
	Mn	55	**896.055**	**ug/L**	1.411	1538599	5.284
>	Ge	74		**ug/L**		97203	97203.238
	As	75	**3.301**	**ug/L**	33.611	1336	0.010
	Se	77		**ug/L**		1344	-0.007
	Se	82	**-0.066**	**ug/L**	898.127	5	-0.000
	Kr	83		**ug/L**		54	0.000
>	Lu	175		**ug/L**		140642	140642.062
	Tl	205	**0.613**	**ug/L**	2.337	3998	0.027
	Pb	208	**41.098**	**ug/L**	0.800	299437	2.128
	U	238	**2.833**	**ug/L**	0.316	25274	0.179

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		100.5			
	Mn	55					
>	Ge	74		99.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		106.5			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978614
Sample Date/Time: Friday, December 11, 2009 16:54:44
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\1201978614.108

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**9.525**	**ug/L**	14.044	289	0.001
	Na	23	**1166.211**	**ug/L**	14.337	371500	1.284
	Mg	24	**5595.076**	**ug/L**	5.794	1346763	4.680
	Al	27	**38066.874**	**ug/L**	8.529	17407612	60.502
>	Sc	45		**ug/L**		287757	287757.460
	Mn	55	**805.284**	**ug/L**	0.769	1367551	4.749
>	Ge	74		**ug/L**		96491	96490.735
	As	75	**3.495**	**ug/L**	12.565	1384	0.010
	Se	77		**ug/L**		1307	-0.007
	Se	82	**0.171**	**ug/L**	236.749	10	0.000
	Kr	83		**ug/L**		47	0.000
>	Lu	175		**ug/L**		138612	138612.323
	Tl	205	**0.540**	**ug/L**	2.975	3497	0.024
	Pb	208	**41.481**	**ug/L**	1.577	297844	2.148
	U	238	**2.687**	**ug/L**	1.440	23624	0.170

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		99.4			
	Mn	55					
>	Ge	74		98.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		104.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978616
Sample Date/Time: Friday, December 11, 2009 16:57:40
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\1201978616.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**53.862**	ug/L	7.627	1372	0.005
	Na	23	**2044.683**	ug/L	7.518	654709	2.251
	Mg	24	**5935.957**	ug/L	4.502	1440196	4.965
	Al	27	**40272.988**	ug/L	11.418	18582359	64.008
>	Sc	45		ug/L		290098	290097.597
	Mn	55	**1819.182**	ug/L	1.831	3113622	10.728
>	Ge	74		ug/L		93559	93558.998
	As	75	**40.668**	ug/L	3.083	11601	0.120
	Se	77		ug/L		1289	-0.007
	Se	82	**7.785**	ug/L	3.032	180	0.002
	Kr	83		ug/L		52	0.000
>	Lu	175		ug/L		136431	136431.081
	Tl	205	**46.153**	ug/L	1.636	276928	2.028
	Pb	208	**165.702**	ug/L	0.734	1170724	8.580
	U	238	**28.085**	ug/L	1.691	242178	1.774

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		100.2			
	Mn	55					
>	Ge	74		95.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.3			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1201978617
Sample Date/Time: Friday, December 11, 2009 17:00:37
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\1201978617.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**55.874**	**ug/L**	3.630	1425	0.005
	Na	23	**2147.982**	**ug/L**	9.408	689677	2.365
	Mg	24	**6383.208**	**ug/L**	5.969	1552900	5.339
	Al	27	**39511.855**	**ug/L**	4.096	18261973	62.798
>	Sc	45		**ug/L**		290851	290851.250
	Mn	55	**906.981**	**ug/L**	1.006	1556712	5.349
>	Ge	74		**ug/L**		96873	96873.335
	As	75	**39.202**	**ug/L**	1.305	11597	0.116
	Se	77		**ug/L**		1344	-0.006
	Se	82	**8.105**	**ug/L**	2.525	193	0.002
	Kr	83		**ug/L**		46	0.000
>	Lu	175		**ug/L**		137579	137579.362
	Tl	205	**45.661**	**ug/L**	2.673	276267	2.007
	Pb	208	**138.389**	**ug/L**	1.491	985970	7.166
	U	238	**28.285**	**ug/L**	0.824	245961	1.787

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			100.5		
	Mn	55					
>	Ge	74			99.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			104.2		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978615
Sample Date/Time: Friday, December 11, 2009 17:03:33
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925484|10|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\1201978615.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**2.945**	**ug/L**	20.496	126	0.000
	Na	23	**249.439**	**ug/L**	23.437	78556	0.275
	Mg	24	**1084.935**	**ug/L**	7.399	253234	0.907
	Al	27	**7847.794**	**ug/L**	5.309	3479186	12.473
>	Sc	45		**ug/L**		279012	279011.842
	Mn	55	**198.450**	**ug/L**	1.024	327495	1.170
>	Ge	74		**ug/L**		95567	95567.271
	As	75	**1.292**	**ug/L**	31.757	749	0.004
	Se	77		**ug/L**		1483	-0.005
	Se	82	**0.154**	**ug/L**	179.721	10	0.000
	Kr	83		**ug/L**		29	-0.000
>	Lu	175		**ug/L**		130372	130372.491
	Tl	205	**0.385**	**ug/L**	4.637	2403	0.017
	Pb	208	**8.921**	**ug/L**	0.714	60360	0.462
	U	238	**0.604**	**ug/L**	2.138	5066	0.038

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			96.4		
	Mn	55					
>	Ge	74			97.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			98.7		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 17:06:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 6.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**97.195**	**ug/L**	7.320	2297	0.008
	Na	23	**4512.909**	**ug/L**	6.122	1365458	4.968
	Mg	24	**4578.096**	**ug/L**	5.953	1050300	3.829
	Al	27	**4388.388**	**ug/L**	1.173	1913835	6.975
>	Sc	45		**ug/L**		274393	274393.362
	Mn	55	**52.746**	**ug/L**	0.649	86282	0.311
>	Ge	74		**ug/L**		96284	96284.028
	As	75	**49.892**	**ug/L**	1.268	14562	0.147
	Se	77		**ug/L**		2279	0.003
	Se	82	**49.104**	**ug/L**	1.198	1132	0.012
	Kr	83		**ug/L**		31	0.000
>	Lu	175		**ug/L**		126561	126561.154
	Tl	205	**51.467**	**ug/L**	2.037	286413	2.262
	Pb	208	**51.553**	**ug/L**	1.121	337949	2.669
	U	238	**51.668**	**ug/L**	1.894	413174	3.265

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	97.195				
	Na	23	90.258				
	Mg	24	91.562				
	Al	27	86.899				
>	Sc	45		94.8			
	Mn	55	105.492				
>	Ge	74		98.5			
	As	75	99.785				
	Se	77					
	Se	82	98.209				
	Kr	83					
>	Lu	175		95.8			
	Tl	205	102.934				
	Pb	208	103.106				
	U	238	103.336				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Al	27CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 17:09:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 7.113

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**2.110**	**ug/L**	35.723	105	0.000
	Na	23	**0.282**	**ug/L**	90.230	2000	0.000
	Mg	24	**1.463**	**ug/L**	173.205	333	0.001
	Al	27	**2.281**	**ug/L**	102.484	1000	0.004
>	Sc	45		**ug/L**		277215	277215.169
	Mn	55	**-0.293**	**ug/L**	4.095	457	-0.002
>	Ge	74		**ug/L**		93393	93393.242
	As	75	**-0.477**	**ug/L**	127.696	246	-0.001
	Se	77		**ug/L**		1501	-0.004
	Se	82	**-0.392**	**ug/L**	42.973	-3	-0.000
	Kr	83		**ug/L**		31	0.000
>	Lu	175		**ug/L**		123995	123995.033
	Tl	205	**0.197**	**ug/L**	3.097	1258	0.009
	Pb	208	**0.012**	**ug/L**	22.820	208	0.001
	U	238	**0.013**	**ug/L**	18.619	185	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			95.8		
	Mn	55					
>	Ge	74			95.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			93.9		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613002
Sample Date/Time: Friday, December 11, 2009 17:12:17
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613002.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**4.790**	**ug/L**	16.698	173	0.000
	Na	23	**1044.672**	**ug/L**	16.230	329820	1.150
	Mg	24	**3199.435**	**ug/L**	8.584	763642	2.676
	Al	27	**13176.452**	**ug/L**	7.097	5978861	20.942
>	Sc	45		**ug/L**		285364	285364.299
	Mn	55	**806.170**	**ug/L**	0.898	1357600	4.754
>	Ge	74		**ug/L**		95013	95012.879
	As	75	**2.036**	**ug/L**	15.248	954	0.006
	Se	77		**ug/L**		1248	-0.007
	Se	82	**0.210**	**ug/L**	334.481	11	0.000
	Kr	83		**ug/L**		52	0.000
>	Lu	175		**ug/L**		138778	138777.885
	Tl	205	**0.321**	**ug/L**	2.937	2166	0.014
	Pb	208	**17.020**	**ug/L**	0.974	122447	0.881
	U	238	**1.771**	**ug/L**	0.609	15625	0.112

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			98.6		
	Mn	55					
>	Ge	74			97.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			105.1		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613003
Sample Date/Time: Friday, December 11, 2009 17:15:12
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613003.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**16.321**	**ug/L**	4.682	467	0.001
	Na	23	**991.023**	**ug/L**	8.132	326028	1.091
	Mg	24	**12590.163**	**ug/L**	6.555	3127693	10.530
	Al	27	**71482.213**	**ug/L**	9.052	33747272	113.610
>	Sc	45		**ug/L**		296934	296934.273
	Mn	55	**1536.910**	**ug/L**	0.608	2692355	9.064
>	Ge	74		**ug/L**		95133	95132.707
	As	75	**8.276**	**ug/L**	1.281	2706	0.024
	Se	77		**ug/L**		1259	-0.007
	Se	82	**0.132**	**ug/L**	314.194	9	0.000
	Kr	83		**ug/L**		62	0.000
>	Lu	175		**ug/L**		134918	134918.460
	Tl	205	**0.883**	**ug/L**	3.456	5440	0.039
	Pb	208	**52.160**	**ug/L**	0.955	364549	2.701
	U	238	**3.699**	**ug/L**	0.920	31628	0.234

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		102.6			
	Mn	55					
>	Ge	74		97.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.1			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613004
Sample Date/Time: Friday, December 11, 2009 17:18:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613004.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**6.688**	**ug/L**	17.555	218	0.001
	Na	23	**1330.583**	**ug/L**	10.218	419094	1.465
	Mg	24	**3177.431**	**ug/L**	2.454	757229	2.658
	Al	27	**16272.113**	**ug/L**	3.450	7367198	25.862
>	Sc	45		**ug/L**		284907	284907.217
	Mn	55	**610.999**	**ug/L**	0.363	1027559	3.603
>	Ge	74		**ug/L**		96102	96102.134
	As	75	**1.984**	**ug/L**	16.239	950	0.006
	Se	77		**ug/L**		1180	-0.008
	Se	82	**0.551**	**ug/L**	32.760	19	0.000
	Kr	83		**ug/L**		50	0.000
>	Lu	175		**ug/L**		140537	140536.977
	Tl	205	**0.303**	**ug/L**	1.989	2083	0.013
	Pb	208	**20.907**	**ug/L**	0.794	152285	1.083
	U	238	**2.400**	**ug/L**	2.067	21407	0.152

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		98.4			
	Mn	55					
>	Ge	74		98.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		106.4			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613005
Sample Date/Time: Friday, December 11, 2009 17:21:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613005.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**9.082**	**ug/L**	2.026	281	0.001
	Na	23	**608.918**	**ug/L**	13.429	197032	0.670
	Mg	24	**4863.823**	**ug/L**	8.954	1184054	4.068
	Al	27	**24641.823**	**ug/L**	4.538	11397046	39.164
>	Sc	45		**ug/L**		290945	290945.181
	Mn	55	**976.868**	**ug/L**	0.861	1677173	5.761
>	Ge	74		**ug/L**		95898	95898.435
	As	75	**3.993**	**ug/L**	2.018	1516	0.012
	Se	77		**ug/L**		1239	-0.007
	Se	82	**0.847**	**ug/L**	34.567	26	0.000
	Kr	83		**ug/L**		46	0.000
>	Lu	175		**ug/L**		138556	138556.106
	Tl	205	**0.434**	**ug/L**	1.752	2849	0.019
	Pb	208	**27.188**	**ug/L**	1.877	195187	1.408
	U	238	**2.053**	**ug/L**	2.197	18061	0.130

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		100.5			
	Mn	55					
>	Ge	74		98.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		104.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613006
Sample Date/Time: Friday, December 11, 2009 17:24:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613006.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**10.891**	**ug/L**	9.289	326	0.001
	Na	23	**793.380**	**ug/L**	11.608	256979	0.873
	Mg	24	**6325.173**	**ug/L**	8.003	1543769	5.290
	Al	27	**46048.625**	**ug/L**	1.212	21359033	73.187
>	Sc	45		**ug/L**		291830	291829.934
	Mn	55	**1487.466**	**ug/L**	0.768	2560907	8.772
>	Ge	74		**ug/L**		97222	97222.021
	As	75	**5.615**	**ug/L**	5.554	2002	0.017
	Se	77		**ug/L**		1162	-0.008
	Se	82	**-0.109**	**ug/L**	241.151	4	-0.000
	Kr	83		**ug/L**		60	0.000
>	Lu	175		**ug/L**		138264	138264.304
	Tl	205	**0.664**	**ug/L**	2.326	4238	0.029
	Pb	208	**36.525**	**ug/L**	1.287	261626	1.891
	U	238	**3.365**	**ug/L**	2.264	29492	0.213

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		100.8			
	Mn	55					
>	Ge	74		99.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		104.7			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEIMn		55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613007
Sample Date/Time: Friday, December 11, 2009 17:26:58
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613007.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**7.452**	**ug/L**	19.432	242	0.001
	Na	23	**482.395**	**ug/L**	3.549	156857	0.531
	Mg	24	**4278.604**	**ug/L**	9.657	1043692	3.579
	Al	27	**23182.691**	**ug/L**	9.928	10741257	36.845
>	Sc	45		**ug/L**		291533	291532.978
	Mn	55	**786.666**	**ug/L**	0.870	1353518	4.639
>	Ge	74		**ug/L**		98535	98534.657
	As	75	**4.041**	**ug/L**	3.742	1572	0.012
	Se	77		**ug/L**		1173	-0.008
	Se	82	**0.410**	**ug/L**	195.407	16	0.000
	Kr	83		**ug/L**		54	0.000
>	Lu	175		**ug/L**		139853	139852.980
	Tl	205	**0.367**	**ug/L**	3.898	2462	0.016
	Pb	208	**23.167**	**ug/L**	0.853	167910	1.200
	U	238	**2.146**	**ug/L**	0.614	19058	0.136

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		100.7			
	Mn	55					
>	Ge	74		100.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		105.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613008
Sample Date/Time: Friday, December 11, 2009 17:29:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613008.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**19.261**	**ug/L**	4.933	533	0.002
	Na	23	**1115.781**	**ug/L**	7.093	361536	1.228
	Mg	24	**11609.406**	**ug/L**	3.567	2841478	9.710
	Al	27	**85868.668**	**ug/L**	4.563	39941391	136.475
>	Sc	45		**ug/L**		292569	292568.964
	Mn	55	**1327.291**	**ug/L**	0.552	2290995	7.827
>	Ge	74		**ug/L**		95279	95278.625
	As	75	**8.469**	**ug/L**	7.261	2765	0.025
	Se	77		**ug/L**		1186	-0.008
	Se	82	**-0.269**	**ug/L**	180.786	0	-0.000
	Kr	83		**ug/L**		60	0.000
>	Lu	175		**ug/L**		137105	137105.168
	Tl	205	**0.953**	**ug/L**	2.493	5947	0.042
	Pb	208	**52.500**	**ug/L**	0.966	372845	2.719
	U	238	**2.943**	**ug/L**	2.188	25585	0.186

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		101.1			
	Mn	55					
>	Ge	74		97.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.8			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613009
Sample Date/Time: Friday, December 11, 2009 17:32:50
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613009.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**13.433**	**ug/L**	5.567	401	0.001
	Na	23	**686.495**	**ug/L**	14.833	230206	0.756
	Mg	24	**10800.692**	**ug/L**	9.454	2725402	9.033
	Al	27	**55303.336**	**ug/L**	4.205	26485201	87.896
>	Sc	45		**ug/L**		301405	301404.901
	Mn	55	**1619.502**	**ug/L**	0.830	2879698	9.551
>	Ge	74		**ug/L**		97818	97818.072
	As	75	**8.568**	**ug/L**	2.706	2867	0.025
	Se	77		**ug/L**		1278	-0.007
	Se	82	**0.250**	**ug/L**	190.678	12	0.000
	Kr	83		**ug/L**		44	0.000
>	Lu	175		**ug/L**		134212	134211.887
	Tl	205	**1.027**	**ug/L**	2.569	6258	0.045
	Pb	208	**46.487**	**ug/L**	1.813	323165	2.407
	U	238	**2.926**	**ug/L**	1.876	24897	0.185

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		104.2			
	Mn	55					
>	Ge	74		100.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		101.6			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613010
Sample Date/Time: Friday, December 11, 2009 17:35:46
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613010.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**9.965**	**ug/L**	7.610	311	0.001
	Na	23	**712.414**	**ug/L**	10.436	236622	0.784
	Mg	24	**6061.396**	**ug/L**	10.276	1517808	5.070
	Al	27	**35942.624**	**ug/L**	5.533	17087226	57.125
>	Sc	45		**ug/L**		299217	299217.006
	Mn	55	**902.452**	**ug/L**	0.349	1593483	5.322
>	Ge	74		**ug/L**		98928	98927.739
	As	75	**4.067**	**ug/L**	2.032	1586	0.012
	Se	77		**ug/L**		1167	-0.009
	Se	82	**0.684**	**ug/L**	33.127	23	0.000
	Kr	83		**ug/L**		49	0.000
>	Lu	175		**ug/L**		137065	137064.801
	Tl	205	**0.457**	**ug/L**	2.926	2954	0.020
	Pb	208	**29.431**	**ug/L**	1.641	209005	1.524
	U	238	**2.562**	**ug/L**	2.051	22276	0.162

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		103.4			
	Mn	55					
>	Ge	74		101.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.8			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 17:38:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 6.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**92.073**	**ug/L**	9.838	2259	0.008
	Na	23	**4384.537**	**ug/L**	9.493	1374312	4.827
	Mg	24	**4407.672**	**ug/L**	11.093	1048334	3.686
	Al	27	**4530.575**	**ug/L**	16.172	2047214	7.201
>	Sc	45		**ug/L**		284649	284649.028
	Mn	55	**50.945**	**ug/L**	1.581	86462	0.300
>	Ge	74		**ug/L**		97956	97955.689
	As	75	**50.049**	**ug/L**	0.989	14862	0.148
	Se	77		**ug/L**		2369	0.004
	Se	82	**49.349**	**ug/L**	3.321	1157	0.012
	Kr	83		**ug/L**		33	0.000
>	Lu	175		**ug/L**		125661	125660.529
	Tl	205	**51.740**	**ug/L**	0.561	285930	2.274
	Pb	208	**51.835**	**ug/L**	0.772	337400	2.684
	U	238	**52.236**	**ug/L**	0.960	414805	3.300

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	92.073				
	Na	23	87.691				
	Mg	24	88.153				
	Al	27	89.714				
>	Sc	45			98.4		
	Mn	55	101.891				
>	Ge	74			100.2		
	As	75	100.097				
	Se	77					
	Se	82	98.697				
	Kr	83					
>	Lu	175			95.1		
	Tl	205	103.480				
	Pb	208	103.670				
	U	238	104.471				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 17:41:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 7.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**1.494**	**ug/L**	43.199	91	0.000
	Na	23	**-3.006**	**ug/L**	107.090	1000	-0.003
	Mg	24	**2.843**	**ug/L**	86.609	667	0.002
	Al	27	**1.496**	**ug/L**	86.609	667	0.002
>	Sc	45		**ug/L**		276378	276377.760
	Mn	55	**-0.290**	**ug/L**	3.259	461	-0.002
>	Ge	74		**ug/L**		96007	96007.226
	As	75	**0.566**	**ug/L**	51.642	547	0.002
	Se	77		**ug/L**		1523	-0.004
	Se	82	**-0.239**	**ug/L**	169.579	1	-0.000
	Kr	83		**ug/L**		33	0.000
>	Lu	175		**ug/L**		125588	125587.887
	Tl	205	**0.142**	**ug/L**	6.141	972	0.006
	Pb	208	**0.009**	**ug/L**	34.724	191	0.000
	U	238	**0.008**	**ug/L**	26.048	152	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			95.5		
	Mn	55					
>	Ge	74			98.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			95.1		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613012
Sample Date/Time: Friday, December 11, 2009 17:44:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613012.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**7.890**	**ug/L**	9.199	249	0.001
	Na	23	**548.587**	**ug/L**	10.884	175072	0.604
	Mg	24	**3729.160**	**ug/L**	1.339	895203	3.119
	Al	27	**21897.889**	**ug/L**	3.917	9985348	34.803
>	Sc	45		**ug/L**		287041	287041.411
	Mn	55	**780.930**	**ug/L**	1.202	1322691	4.605
>	Ge	74		**ug/L**		95721	95720.619
	As	75	**3.497**	**ug/L**	8.221	1373	0.010
	Se	77		**ug/L**		1215	-0.008
	Se	82	**0.630**	**ug/L**	40.965	21	0.000
	Kr	83		**ug/L**		50	0.000
>	Lu	175		**ug/L**		136474	136473.518
	Tl	205	**0.396**	**ug/L**	2.477	2581	0.017
	Pb	208	**23.923**	**ug/L**	1.500	169187	1.239
	U	238	**2.249**	**ug/L**	1.411	19484	0.142

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45			99.2		
	Mn	55					
>	Ge	74			97.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			103.3		
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613013
Sample Date/Time: Friday, December 11, 2009 17:47:28
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613013.126

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**10.911**	**ug/L**	7.306	327	0.001
	Na	23	**679.782**	**ug/L**	11.499	220368	0.748
	Mg	24	**7064.443**	**ug/L**	4.467	1724271	5.909
	Al	27	**20614.432**	**ug/L**	6.208	9561505	32.764
>	Sc	45		**ug/L**		291798	291797.557
	Mn	55	**1057.084**	**ug/L**	0.848	1820022	6.234
>	Ge	74		**ug/L**		97046	97046.181
	As	75	**3.661**	**ug/L**	11.995	1438	0.011
	Se	77		**ug/L**		1288	-0.007
	Se	82	**0.714**	**ug/L**	59.330	23	0.000
	Kr	83		**ug/L**		45	0.000
>	Lu	175		**ug/L**		134719	134718.926
	Tl	205	**0.308**	**ug/L**	1.832	2027	0.014
	Pb	208	**23.755**	**ug/L**	1.270	165847	1.230
	U	238	**2.341**	**ug/L**	0.675	20014	0.148

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		100.8			
	Mn	55					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.0			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613014
Sample Date/Time: Friday, December 11, 2009 17:50:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613014.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**17.058**	**ug/L**	8.611	487	0.001
	Na	23	**967.216**	**ug/L**	15.295	318916	1.065
	Mg	24	**12024.650**	**ug/L**	3.804	2989356	10.057
	Al	27	**78224.612**	**ug/L**	6.667	36951127	124.326
>	Sc	45		**ug/L**		297240	297240.062
	Mn	55	**1462.914**	**ug/L**	0.298	2565358	8.627
>	Ge	74		**ug/L**		96236	96236.078
	As	75	**7.425**	**ug/L**	7.765	2495	0.022
	Se	77		**ug/L**		1238	-0.007
	Se	82	**-0.606**	**ug/L**	37.852	-8	-0.000
	Kr	83		**ug/L**		68	0.000
>	Lu	175		**ug/L**		135241	135240.500
	Tl	205	**0.849**	**ug/L**	2.079	5245	0.037
	Pb	208	**50.766**	**ug/L**	1.611	355631	2.629
	U	238	**3.899**	**ug/L**	1.224	33408	0.246

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		102.7			
	Mn	55					
>	Ge	74		98.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.4			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613015
Sample Date/Time: Friday, December 11, 2009 17:53:24
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613015.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**15.448**	ug/L	13.157	445	0.001
	Na	23	**1134.574**	ug/L	6.729	372817	1.249
	Mg	24	**13354.258**	ug/L	8.518	3315323	11.169
	Al	27	**73098.584**	ug/L	7.290	34494838	116.179
>	Sc	45		ug/L		296819	296818.878
	Mn	55	**2323.260**	ug/L	1.945	4067894	13.701
>	Ge	74		ug/L		96158	96157.919
	As	75	**9.818**	ug/L	6.288	3173	0.029
	Se	77		ug/L		1265	-0.007
	Se	82	**-0.411**	ug/L	158.332	-3	-0.000
	Kr	83		ug/L		62	0.000
>	Lu	175		ug/L		132087	132086.581
	Tl	205	**0.964**	ug/L	3.069	5789	0.042
	Pb	208	**52.415**	ug/L	1.469	358584	2.714
	U	238	**2.657**	ug/L	2.793	22263	0.168

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		102.6			
	Mn	55					
>	Ge	74		98.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.0			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Mn 55 Upper, S, EElMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 241613016
Sample Date/Time: Friday, December 11, 2009 17:56:21
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613016.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**2.486**	**ug/L**	13.012	120	0.000
	Na	23	**1338.972**	**ug/L**	3.506	432795	1.474
	Mg	24	**1983.763**	**ug/L**	6.862	484773	1.659
	Al	27	**7406.119**	**ug/L**	2.983	3440807	11.771
>	Sc	45		**ug/L**		292299	292298.798
	Mn	55	**733.885**	**ug/L**	0.715	1266101	4.328
>	Ge	74		**ug/L**		97816	97816.103
	As	75	**2.161**	**ug/L**	10.964	1019	0.006
	Se	77		**ug/L**		1202	-0.008
	Se	82	**1.098**	**ug/L**	44.980	32	0.000
	Kr	83		**ug/L**		50	0.000
>	Lu	175		**ug/L**		136494	136493.812
	Tl	205	**0.254**	**ug/L**	4.272	1727	0.011
	Pb	208	**11.759**	**ug/L**	1.521	83237	0.609
	U	238	**3.018**	**ug/L**	1.310	26119	0.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		101.0			
	Mn	55					
>	Ge	74		100.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.3			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613017
Sample Date/Time: Friday, December 11, 2009 17:59:17
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613017.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**6.788**	**ug/L**	14.952	227	0.001
	Na	23	**1305.629**	**ug/L**	3.398	424554	1.437
	Mg	24	**5891.345**	**ug/L**	3.975	1448241	4.927
	Al	27	**22171.533**	**ug/L**	1.534	10359131	35.238
>	Sc	45		**ug/L**		293987	293986.612
	Mn	55	**977.404**	**ug/L**	0.346	1695520	5.764
>	Ge	74		**ug/L**		98875	98874.646
	As	75	**2.635**	**ug/L**	16.958	1168	0.008
	Se	77		**ug/L**		1217	-0.008
	Se	82	**0.145**	**ug/L**	123.587	10	0.000
	Kr	83		**ug/L**		52	0.000
>	Lu	175		**ug/L**		137140	137140.484
	Tl	205	**0.331**	**ug/L**	2.352	2199	0.015
	Pb	208	**24.781**	**ug/L**	0.542	176122	1.283
	U	238	**2.434**	**ug/L**	1.550	21188	0.154

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		101.6			
	Mn	55					
>	Ge	74		101.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.8			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241613018
Sample Date/Time: Friday, December 11, 2009 18:02:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|prb
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\241613018.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**14.717**	**ug/L**	2.936	436	0.001
	Na	23	**712.733**	**ug/L**	12.087	240019	0.785
	Mg	24	**11979.636**	**ug/L**	2.118	3037058	10.019
	Al	27	**53023.062**	**ug/L**	6.291	25524044	84.272
>	Sc	45		**ug/L**		303175	303175.425
	Mn	55	**1090.448**	**ug/L**	1.665	1950307	6.431
>	Ge	74		**ug/L**		98284	98283.599
	As	75	**8.697**	**ug/L**	6.105	2918	0.026
	Se	77		**ug/L**		1275	-0.007
	Se	82	**0.633**	**ug/L**	61.094	21	0.000
	Kr	83		**ug/L**		45	0.000
>	Lu	175		**ug/L**		135380	135380.236
	Tl	205	**0.920**	**ug/L**	2.718	5675	0.040
	Pb	208	**42.772**	**ug/L**	2.248	299908	2.215
	U	238	**2.967**	**ug/L**	1.085	25465	0.187

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		104.8			
	Mn	55					
>	Ge	74		100.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.5			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEIMn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 11, 2009 18:05:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 6.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**92.736**	**ug/L**	3.650	2283	0.008
	Na	23	**4182.688**	**ug/L**	5.995	1316462	4.604
	Mg	24	**4445.079**	**ug/L**	3.410	1061006	3.718
	Al	27	**4786.378**	**ug/L**	11.593	2171731	7.607
>	Sc	45		**ug/L**		285443	285442.810
	Mn	55	**51.478**	**ug/L**	0.779	87616	0.304
>	Ge	74		**ug/L**		100441	100441.251
	As	75	**50.730**	**ug/L**	1.642	15441	0.150
	Se	77		**ug/L**		2417	0.004
	Se	82	**50.729**	**ug/L**	1.245	1219	0.012
	Kr	83		**ug/L**		31	0.000
>	Lu	175		**ug/L**		126899	126898.720
	Tl	205	**50.664**	**ug/L**	0.727	282751	2.227
	Pb	208	**50.988**	**ug/L**	0.069	335176	2.640
	U	238	**51.622**	**ug/L**	1.040	413990	3.262

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11	92.736				
	Na	23	83.654				
	Mg	24	88.902				
	Al	27	94.780				
>	Sc	45		98.6			
	Mn	55	102.955				
>	Ge	74		102.7			
	As	75	101.461				
	Se	77					
	Se	82	101.458				
	Kr	83					
>	Lu	175		96.1			
	Tl	205	101.327				
	Pb	208	101.977				
	U	238	103.245				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 11, 2009 18:08:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\091211\QC Std 7.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	B	11	**1.453**	**ug/L**	24.764	92	0.000
	Na	23	**3.375**	**ug/L**	98.688	3000	0.004
	Mg	24	**2.828**	**ug/L**	86.618	667	0.002
	Al	27	**0.752**	**ug/L**	173.205	333	0.001
>	Sc	45		**ug/L**		283061	283060.923
	Mn	55	**-0.262**	**ug/L**	4.811	519	-0.002
>	Ge	74		**ug/L**		97831	97830.937
	As	75	**0.042**	**ug/L**	1673.606	409	0.000
	Se	77		**ug/L**		1625	-0.004
	Se	82	**-0.112**	**ug/L**	321.372	4	-0.000
	Kr	83		**ug/L**		37	0.000
>	Lu	175		**ug/L**		123108	123107.729
	Tl	205	**0.142**	**ug/L**	8.324	950	0.006
	Pb	208	**0.009**	**ug/L**	26.487	187	0.000
	U	238	**0.012**	**ug/L**	31.839	174	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	B	11					
	Na	23					
	Mg	24					
	Al	27					
>	Sc	45		97.8			
	Mn	55					
>	Ge	74		100.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		93.2			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 14:45:06
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.293
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1083.0	1083.041	31.331	2.9
	Mg	24.0	17160.1	17160.100	83.179	0.5
	Co	58.9	41851.8	41851.817	233.658	0.6
	Rh	102.9	69668.7	69668.682	726.654	1.0
	In	114.9	88317.6	88317.573	728.115	0.8
	Pb	208.0	54128.4	54128.357	444.880	0.8
⌈>	Ba	137.9	76857.7	76857.668	361.085	0.5
⌊	Ba++	69.0	1192.0	0.016	0.000	2.2
⌈>	Ce	139.9	92145.2	92145.232	645.220	0.7
⌊	CeO	155.9	1941.5	0.021	0.000	1.3
	Bkgd	220.0	4.6	4.600	1.710	37.2

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.0	649.7
Co	59	15	7.0	23678.9
In	115	15	8.3	56319.1

ICPMS #4 TUNING REPORT

File Name: 091205.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	604	2060	0.678
Be	9.0	9.0	2044	2055	0.677
Mg	24.0	24.0	5675	2085	0.609
Mg	25.0	25.0	5949	2080	0.649
Mg	26.0	26.0	6152	2095	0.653
Co	58.9	58.9	14166	2120	0.711
Rh	102.9	102.9	24871	2220	0.689
In	114.9	114.9	27780	2255	0.676
Ce	139.9	139.9	33857	2300	0.664
Pb	206.0	206.0	49925	2460	0.687
Pb	207.0	207.0	50113	2380	0.647
Pb	208.0	208.0	50436	2490	0.665
U	238.1	238.0	57686	2480	0.669

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 22:57:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\Blank.563

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		133648	
	U	238		ug/L		209	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 22:58:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\Standard 1.564

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		96068	96068.014
⌊	U	238	10.000	ug/L	11.177	123748	1.295

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 23:00:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\Standard 2.565

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		134027	134027.338
⌊	U	238	99.441	ug/L	0.288	1107327	8.260

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 23:02:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 1.566

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		136909	136908.660
	U	238	51.829	ug/L	1.754	589713	4.305

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		102.4			
	U	238	103.657				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 23:03:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 2.567

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		133437	133437.322
	U	238	0.014	ug/L	4.238	363	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		99.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 23:05:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 3.568

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		134161	134161.095
⌊	U	238	0.227	ug/L	1.353	2735	0.019

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.4			
⌊	U	238	113.303				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 23:07:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 4.569

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		131167	131167.061
⌊	U	238	-0.002	ug/L	78.194	184	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		98.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 23:09:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 5.570

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		133298	133297.715
⌊	U	238	21.354	ug/L	0.410	236662	1.774

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		99.7			
⌊	U	238	106.771				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 23:10:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.571

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		137398	137398.015
⌊	U	238	52.115	ug/L	0.975	595046	4.329

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		102.8			
⌊	U	238	104.231				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 23:12:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.572

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		136160	136159.863
⌊	U	238	0.012	ug/L	16.040	353	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978625
Sample Date/Time: Saturday, December 05, 2009 23:14:11
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\1201978625.573

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		134892	134891.570
	U	238	0.004	ug/L	29.115	259	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		100.9			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978630
Sample Date/Time: Saturday, December 05, 2009 23:15:51
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925488|40|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\1201978630.574

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		138195	138195.284
	U	238	0.458	ug/L	0.812	5472	0.038

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		103.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978626
Sample Date/Time: Saturday, December 05, 2009 23:19:14
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\1201978626.576

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		139864	139864.483
⌊	U	238	2.624	ug/L	0.495	30700	0.218

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		104.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978628
Sample Date/Time: Saturday, December 05, 2009 23:20:56
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\1201978628.577

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		138746	138745.915
	U	238	28.526	ug/L	1.913	328970	2.370

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		103.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978629
Sample Date/Time: Saturday, December 05, 2009 23:22:39
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\1201978629.578

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		135457	135456.516
⌊	U	238	28.091	ug/L	0.617	316286	2.333

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978627
Sample Date/Time: Saturday, December 05, 2009 23:24:20
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925488|10|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\1201978627.579

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		129084	129083.537
	U	238	0.445	ug/L	0.126	4971	0.037

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		96.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 23:27:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.581

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		129882	129882.401
	U	238	51.592	ug/L	1.190	556841	4.286

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		97.2			
	U	238	103.184				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 23:29:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.582

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		128664	128664.433
	U	238	0.012	ug/L	10.485	331	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		96.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241613011
Sample Date/Time: Saturday, December 05, 2009 23:43:02
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\241613011.590

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		134097	134097.467
	U	238	2.729	ug/L	1.087	30607	0.227

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		100.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 23:44:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 6.591

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		134539	134539.006
[	U	238	51.588	ug/L	0.907	576701	4.285

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		100.7			
[	U	238	103.176				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 23:46:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\Dataset\091202\QC Std 7.592

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		131236	131236.031
⌊	U	238	0.014	ug/L	27.474	353	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9984

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		98.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, December 04, 2009 17:10:05
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1393
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3656.5	3656.468	46.959	1.3
	Mg	24.0	33148.4	33148.415	197.622	0.6
	Co	58.9	77411.2	77411.206	1133.042	1.5
	Rh	102.9	141123.3	141123.253	984.846	0.7
	In	114.9	192067.3	192067.328	2730.625	1.4
	Pb	208.0	142811.1	142811.081	483.021	0.3
⌈>	Ba	137.9	191898.6	191898.598	1606.226	0.8
⌊	Ba++	69.0	3033.7	0.016	0.000	1.1
⌈>	Ce	139.9	239168.6	239168.575	2249.215	0.9
⌊	CeO	155.9	4645.9	0.019	0.000	1.3
	Bkgd	220.0	17.2	17.200	2.280	13.3

Current Optimization File Data

Current Value	Description
0.82	Nebulizer Gas Flow
6.25	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	5.8	3946.9
Co	59	9	6.0	76591.8
In	115	9	6.5	198967.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2060	0.592
Be	9.0	9.0	2066	2070	0.631
Mg	24.0	24.0	5699	2070	0.696
Mg	25.0	25.0	5915	2075	0.626
Mg	26.0	26.0	6201	2070	0.658
Co	58.9	59.0	14190	2095	0.653
Rh	102.9	102.9	24874	2160	0.628
In	114.9	114.9	27788	2180	0.627
Ce	139.9	139.9	33872	2195	0.644
Pb	206.0	206.0	49948	2290	0.613
Pb	207.0	207.0	50159	2260	0.606
Pb	208.0	208.0	50451	2280	0.640
U	238.1	238.1	57732	2295	0.653

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Friday, December 04, 2009 20:40:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Blank.597

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		84	
	Be	9		ug/L		17	
	B	11		ug/L		632	
	Na	23		ug/L		9336	
	Mg	24		ug/L		2667	
	Al	27		ug/L		3000	
	P	31		ug/L		4027	
	K	39		ug/L		494797	
	Ca	43		ug/L		254	
>	Sc	45		ug/L		328031	
	Ti	47		ug/L		413	
	V	51		ug/L		6222	
	Cr	52		ug/L		-2348	
	Cr	53		ug/L		65336	
	Mn	55		ug/L		1279	
	Fe	57		ug/L		6083	
	Co	59		ug/L		108	
	Ni	60		ug/L		78	
	Cu	63		ug/L		156	
	Cu	65		ug/L		107	
	Zn	66		ug/L		295	
	Zn	67		ug/L		6154	
	Zn	68		ug/L		778	
>	Ge	74		ug/L		376481	
	As	75		ug/L		284	
	Se	77		ug/L		3011	
	Se	82		ug/L		-13	
	Kr	83		ug/L		110	
	Sr	88		ug/L		158	
	Y	89		ug/L		72	
	Mo	98		ug/L		129	
	Ag	107		ug/L		48	
	Cd	111		ug/L		28	
	Cd	114		ug/L		50	
>	In	115		ug/L		232421	
	Sn	120		ug/L		623	
	Sb	121		ug/L		1015	
	Sb	123		ug/L		827	
	Ba	135		ug/L		40	
	Ba	137		ug/L		46	
	Ho	165		ug/L		55	
>	Lu	175		ug/L		383229	
	Tl	205		ug/L		892	
	Pb	208		ug/L		986	
	Bi	209		ug/L		470	
	Th	232		ug/L		3149	
	U	238		ug/L		307	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Linear Thru Zero	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Friday, December 04, 2009 20:47:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 1.598

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.552	15805	0.047
	Be	9	10.000	ug/L	3.079	3390	0.010
	B	11	20.000	ug/L	3.200	6337	0.017
	Na	23	1000.000	ug/L	15.648	3035554	9.141
	Mg	24	1000.000	ug/L	10.175	2085180	6.283
	Al	27	1000.000	ug/L	15.154	2938272	8.852
	P	31	1000.000	ug/L	2.582	190559	0.563
	K	39	1000.000	ug/L	3.569	4635735	12.492
	Ca	43	1000.000	ug/L	2.965	10222	0.030
>	Sc	45		ug/L		331184	331183.655
	Ti	47	10.000	ug/L	1.941	5311	0.015
	V	51	10.000	ug/L	6.187	66617	0.182
	Cr	52	10.000	ug/L	1.957	44240	0.141
	Cr	53		ug/L		81323	0.046
	Mn	55	10.000	ug/L	2.549	80610	0.240
	Fe	57	1000.000	ug/L	1.855	168462	0.490
	Co	59	10.000	ug/L	1.677	59450	0.179
	Ni	60	10.000	ug/L	3.088	12943	0.039
	Cu	63		ug/L		31468	0.095
	Cu	65	10.000	ug/L	2.528	15197	0.046
	Zn	66	10.000	ug/L	2.866	10944	0.028
	Zn	67		ug/L		8539	0.006
	Zn	68		ug/L		8694	0.021
>	Ge	74		ug/L		379680	379680.024
	As	75	10.000	ug/L	4.021	11240	0.029
	Se	77		ug/L		4689	0.004
	Se	82	10.000	ug/L	8.205	1099	0.003
	Kr	83		ug/L		102	-0.000
	Sr	88	10.000	ug/L	1.364	128100	0.546
	Y	89		ug/L		79	0.000
	Mo	98	10.000	ug/L	1.388	29750	0.126
	Ag	107	10.000	ug/L	1.631	50916	0.217
	Cd	111	10.000	ug/L	2.158	12735	0.054
	Cd	114		ug/L		29813	0.127
>	In	115		ug/L		234180	234179.505
	Sn	120	10.000	ug/L	3.612	51265	0.216
	Sb	121	10.000	ug/L	11.653	36622	0.152
	Sb	123		ug/L		29037	0.120
	Ba	135		ug/L		14091	0.037
	Ba	137	10.000	ug/L	2.327	24658	0.064
	Ho	165		ug/L		47	-0.000
>	Lu	175		ug/L		381752	381751.571
	Tl	205	10.000	ug/L	1.925	154985	0.404
	Pb	208	10.000	ug/L	1.821	240116	0.626
	Bi	209		ug/L		368	-0.000
	Th	232	10.000	ug/L	2.357	285438	0.739
	U	238	10.000	ug/L	0.789	309774	0.811

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Friday, December 04, 2009 20:53:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\Standard 2.599

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.964**	ug/L	0.833	158868	0.458
	Be	9	**99.952**	ug/L	0.762	33707	0.097
	B	11	**199.998**	ug/L	4.537	60271	0.172
	Na	23	**10006.741**	ug/L	3.689	34019046	98.084
	Mg	24	**10008.912**	ug/L	8.950	23936790	69.034
	Al	27	**10001.450**	ug/L	7.822	31152763	89.837
	P	31	**9988.942**	ug/L	0.986	1760705	5.066
	K	39	**10005.811**	ug/L	2.607	46531841	132.701
	Ca	43	**9996.926**	ug/L	2.438	101474	0.292
>	Sc	45		ug/L		346717	346717.105
	Ti	47	**99.982**	ug/L	1.194	50759	0.145
	V	51	**99.973**	ug/L	3.266	621648	1.774
	Cr	52	**99.992**	ug/L	1.917	481503	1.396
	Cr	53		ug/L		155531	0.249
	Mn	55	**99.958**	ug/L	0.851	798453	2.299
	Fe	57	**9988.452**	ug/L	1.286	1528221	4.389
	Co	59	**99.980**	ug/L	2.378	609061	1.756
	Ni	60	**99.979**	ug/L	2.284	132011	0.381
	Cu	63		ug/L		313685	0.904
	Cu	65	**99.992**	ug/L	1.616	156801	0.452
	Zn	66	**99.994**	ug/L	1.288	110784	0.279
	Zn	67		ug/L		27012	0.052
	Zn	68		ug/L		81327	0.203
>	Ge	74		ug/L		396450	396450.454
	As	75	**100.008**	ug/L	2.677	115598	0.291
	Se	77		ug/L		14434	0.028
	Se	82	**99.979**	ug/L	2.351	11371	0.029
	Kr	83		ug/L		126	0.000
	Sr	88	**99.960**	ug/L	1.516	1240218	5.252
	Y	89		ug/L		171	0.000
	Mo	98	**100.026**	ug/L	2.082	306950	1.299
	Ag	107	**99.989**	ug/L	0.649	507409	2.149
	Cd	111	**99.995**	ug/L	2.267	127465	0.540
	Cd	114		ug/L		299728	1.269
>	In	115		ug/L		236157	236156.752
	Sn	120	**100.024**	ug/L	2.621	524154	2.217
	Sb	121	**100.131**	ug/L	10.712	414577	1.753
	Sb	123		ug/L		327944	1.387
	Ba	135		ug/L		142430	0.381
	Ba	137	**100.030**	ug/L	2.384	248270	0.665
	Ho	165		ug/L		48	-0.000
>	Lu	175		ug/L		373302	373302.029
	Tl	205	**99.895**	ug/L	2.352	1363033	3.649
	Pb	208	**99.930**	ug/L	1.040	2183843	5.848
	Bi	209		ug/L		525	0.000
	Th	232	**99.880**	ug/L	1.862	2463531	6.592
	U	238	**99.805**	ug/L	2.167	2527067	6.770

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Friday, December 04, 2009 20:59:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 1.600

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.078**	**ug/L**	2.729	81701	0.225
	Be	9	**50.811**	**ug/L**	5.563	17930	0.049
	B	11	**105.169**	**ug/L**	6.135	33471	0.090
	Na	23	**4543.123**	**ug/L**	3.025	16173117	44.531
	Mg	24	**4688.337**	**ug/L**	7.304	11722155	32.337
	Al	27	**4993.987**	**ug/L**	4.918	16272599	44.858
	P	31	**5109.137**	**ug/L**	7.201	943595	2.591
	K	39	**4662.446**	**ug/L**	4.931	23009996	61.835
	Ca	43	**4874.238**	**ug/L**	6.025	51881	0.142
>	Sc	45		**ug/L**		363304	363304.397
	Ti	47	**49.400**	**ug/L**	5.232	26465	0.072
	V	51	**50.240**	**ug/L**	6.621	330055	0.891
	Cr	52	**50.927**	**ug/L**	6.399	255124	0.711
	Cr	53		**ug/L**		122448	0.138
	Mn	55	**51.673**	**ug/L**	5.880	432342	1.188
	Fe	57	**5146.728**	**ug/L**	5.408	826870	2.262
	Co	59	**49.188**	**ug/L**	5.490	313438	0.864
	Ni	60	**49.021**	**ug/L**	7.085	67704	0.187
	Cu	63		**ug/L**		168221	0.463
	Cu	65	**50.435**	**ug/L**	5.314	82781	0.228
	Zn	66	**50.865**	**ug/L**	2.225	58270	0.142
	Zn	67		**ug/L**		17777	0.027
	Zn	68		**ug/L**		43114	0.103
>	Ge	74		**ug/L**		408921	408921.446
	As	75	**47.928**	**ug/L**	1.676	57299	0.139
	Se	77		**ug/L**		9824	0.016
	Se	82	**51.146**	**ug/L**	2.175	5991	0.015
	Kr	83		**ug/L**		128	0.000
	Sr	88	**50.310**	**ug/L**	1.464	645711	2.643
	Y	89		**ug/L**		128	0.000
	Mo	98	**48.885**	**ug/L**	2.697	155229	0.635
	Ag	107	**50.015**	**ug/L**	0.941	262544	1.075
	Cd	111	**49.387**	**ug/L**	3.405	65135	0.267
	Cd	114		**ug/L**		153259	0.627
>	In	115		**ug/L**		244263	244262.928
	Sn	120	**50.041**	**ug/L**	2.267	271576	1.109
	Sb	121	**47.745**	**ug/L**	10.869	205086	0.836
	Sb	123		**ug/L**		161893	0.660
	Ba	135		**ug/L**		72046	0.192
	Ba	137	**50.922**	**ug/L**	1.067	126893	0.339
	Ho	165		**ug/L**		82	0.000
>	Lu	175		**ug/L**		374705	374705.015
	Tl	205	**51.483**	**ug/L**	1.490	705586	1.881
	Pb	208	**53.432**	**ug/L**	1.007	1172565	3.127
	Bi	209		**ug/L**		418	-0.000
	Th	232	**53.263**	**ug/L**	1.368	1320239	3.515
	U	238	**55.086**	**ug/L**	1.449	1400329	3.737

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.157				
	Be	9	101.623				
	B	11	105.169				
	Na	23	90.862				
	Mg	24	93.767				
	Al	27	98.891				
	P	31	102.183				
	K	39	93.249				
	Ca	43	97.485				
>	Sc	45		110.8			
	Ti	47	98.800				
	V	51	100.480				
	Cr	52	101.854				
	Cr	53					
	Mn	55	103.347				
	Fe	57	102.935				
	Co	59	98.376				
	Ni	60	98.041				
	Cu	63					
	Cu	65	100.871				
	Zn	66	101.731				
	Zn	67					
	Zn	68					
>	Ge	74		108.6			
	As	75	95.855				
	Se	77					
	Se	82	102.292				
	Kr	83					
	Sr	88	100.619				
	Y	89					
	Mo	98	97.771				
	Ag	107	100.031				
	Cd	111	98.775				
	Cd	114					
>	In	115		105.1			
	Sn	120	100.081				
	Sb	121	95.490				
	Sb	123					
	Ba	135					
	Ba	137	101.844				
	Ho	165					
>	Lu	175		97.8			
	Tl	205	102.967				
	Pb	208	106.864				
	Bi	209					
	Th	232	106.527				
	U	238	110.172				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	U	238	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Friday, December 04, 2009 21:05:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 2.601

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.018**	**ug/L**	68.742	117	0.000
	Be	9	**0.004**	**ug/L**	419.007	20	0.000
	B	11	**4.859**	**ug/L**	12.853	2113	0.004
	Na	23	**1.408**	**ug/L**	110.465	14675	0.014
	Mg	24	**1.059**	**ug/L**	62.418	5334	0.007
	Al	27	**1.454**	**ug/L**	57.151	7669	0.013
	P	31	**0.649**	**ug/L**	104.435	4364	0.000
	K	39	**14.203**	**ug/L**	224.658	586936	0.188
	Ca	43	**1.947**	**ug/L**	194.563	288	0.000
>	Sc	45		**ug/L**		346149	346149.114
	Ti	47	**-0.152**	**ug/L**	5.740	359	-0.000
	V	51	**0.172**	**ug/L**	245.286	7614	0.003
	Cr	52	**0.173**	**ug/L**	32.673	-1642	0.002
	Cr	53		**ug/L**		73933	0.014
	Mn	55	**-0.037**	**ug/L**	11.014	1053	-0.001
	Fe	57	**6.447**	**ug/L**	17.397	7399	0.003
	Co	59	**0.009**	**ug/L**	85.720	170	0.000
	Ni	60	**0.012**	**ug/L**	83.312	99	0.000
	Cu	63		**ug/L**		187	0.000
	Cu	65	**0.008**	**ug/L**	91.735	125	0.000
	Zn	66	**0.049**	**ug/L**	37.617	371	0.000
	Zn	67		**ug/L**		6541	-0.000
	Zn	68		**ug/L**		870	0.000
>	Ge	74		**ug/L**		403116	403116.157
	As	75	**-0.292**	**ug/L**	64.272	-38	-0.001
	Se	77		**ug/L**		3911	0.002
	Se	82	**-0.118**	**ug/L**	91.974	-28	-0.000
	Kr	83		**ug/L**		131	0.000
	Sr	88	**0.007**	**ug/L**	68.892	253	0.000
	Y	89		**ug/L**		47	-0.000
	Mo	98	**0.106**	**ug/L**	23.547	479	0.001
	Ag	107	**0.012**	**ug/L**	10.401	112	0.000
	Cd	111	**0.009**	**ug/L**	27.423	42	0.000
	Cd	114		**ug/L**		72	0.000
>	In	115		**ug/L**		248398	248398.416
	Sn	120	**0.458**	**ug/L**	13.425	3186	0.010
	Sb	121	**1.629**	**ug/L**	19.693	8171	0.029
	Sb	123		**ug/L**		6383	0.022
	Ba	135		**ug/L**		49	0.000
	Ba	137	**0.008**	**ug/L**	33.732	66	0.000
	Ho	165		**ug/L**		42	-0.000
>	Lu	175		**ug/L**		384218	384218.280
	Tl	205	**0.144**	**ug/L**	20.483	2912	0.005
	Pb	208	**0.011**	**ug/L**	37.886	1230	0.001
	Bi	209		**ug/L**		329	-0.000
	Th	232	**0.275**	**ug/L**	19.879	10128	0.018
	U	238	**0.023**	**ug/L**	9.582	916	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		106.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Friday, December 04, 2009 21:11:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 3.602

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.008**	ug/L	0.577	17760	0.050
	Be	9	**0.534**	ug/L	7.013	200	0.001
	B	11	**17.962**	ug/L	4.678	6082	0.015
	Na	23	**224.517**	ug/L	0.925	781128	2.201
	Mg	24	**16.801**	ug/L	12.797	43400	0.116
	Al	27	**33.004**	ug/L	2.718	107067	0.296
	P	31	**62.779**	ug/L	2.661	15455	0.032
	K	39	**292.711**	ug/L	4.487	1888910	3.882
	Ca	43	**224.355**	ug/L	3.028	2567	0.007
>	Sc	45		ug/L		350388	350388.404
	Ti	47	**8.938**	ug/L	1.485	4988	0.013
	V	51	**11.194**	ug/L	6.923	76196	0.199
	Cr	52	**10.636**	ug/L	1.075	49512	0.148
	Cr	53		ug/L		98129	0.081
	Mn	55	**5.693**	ug/L	1.267	47241	0.131
	Fe	57	**118.813**	ug/L	5.054	24783	0.052
	Co	59	**1.079**	ug/L	4.102	6756	0.019
	Ni	60	**2.141**	ug/L	1.502	2939	0.008
	Cu	63		ug/L		3764	0.010
	Cu	65	**1.101**	ug/L	4.048	1858	0.005
	Zn	66	**10.675**	ug/L	2.192	12327	0.030
	Zn	67		ug/L		10155	0.009
	Zn	68		ug/L		9684	0.022
>	Ge	74		ug/L		403778	403778.393
	As	75	**5.021**	ug/L	12.071	6202	0.015
	Se	77		ug/L		5987	0.007
	Se	82	**5.371**	ug/L	6.996	608	0.002
	Kr	83		ug/L		110	-0.000
	Sr	88	**11.480**	ug/L	1.143	145252	0.603
	Y	89		ug/L		57	-0.000
	Mo	98	**0.529**	ug/L	2.888	1788	0.007
	Ag	107	**1.047**	ug/L	2.657	5461	0.023
	Cd	111	**1.082**	ug/L	5.255	1433	0.006
	Cd	114		ug/L		3226	0.013
>	In	115		ug/L		240594	240593.990
	Sn	120	**5.554**	ug/L	3.186	30260	0.123
	Sb	121	**3.617**	ug/L	3.254	16285	0.063
	Sb	123		ug/L		12606	0.049
	Ba	135		ug/L		3074	0.008
	Ba	137	**2.130**	ug/L	1.766	5393	0.014
	Ho	165		ug/L		44	-0.000
>	Lu	175		ug/L		377687	377687.123
	Tl	205	**1.166**	ug/L	2.892	16967	0.043
	Pb	208	**2.284**	ug/L	1.338	51444	0.134
	Bi	209		ug/L		298	-0.000
	Th	232	**1.405**	ug/L	2.153	38123	0.093
	U	238	**0.268**	ug/L	2.241	7159	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.081				
	Be	9	106.812				
	B	11	119.746				
	Na	23	89.807				
	Mg	24	112.006				
	Al	27	110.014				
	P	31	125.559				
	K	39	97.570				
	Ca	43	112.178				
>	Sc	45		106.8			
	Ti	47	89.383				
	V	51	111.938				
	Cr	52	106.357				
	Cr	53					
	Mn	55	113.860				
	Fe	57	118.813				
	Co	59	107.939				
	Ni	60	107.061				
	Cu	63					
	Cu	65	110.103				
	Zn	66	106.747				
	Zn	67					
	Zn	68					
>	Ge	74		107.3			
	As	75	100.412				
	Se	77					
	Se	82	107.416				
	Kr	83					
	Sr	88	114.799				
	Y	89					
	Mo	98	105.893				
	Ag	107	104.717				
	Cd	111	108.171				
	Cd	114					
>	In	115		103.5			
	Sn	120	111.077				
	Sb	121	120.572				
	Sb	123					
	Ba	135					
	Ba	137	106.493				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	116.611				
	Pb	208	114.186				
	Bi	209					
	Th	232	140.501				
	U	238	133.792				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Th	232	CRDL is out of limits
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Friday, December 04, 2009 21:17:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 4.603

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.143**	ug/L	12.774	313	0.001
	Be	9	**0.057**	ug/L	48.755	37	0.000
	B	11	**1.664**	ug/L	7.116	1153	0.001
	Na	23	**86891.132**	ug/L	10.904	292163574	851.690
	Mg	24	**92106.064**	ug/L	3.549	218065300	635.282
	Al	27	**93280.158**	ug/L	0.660	287738251	837.880
	P	31	**92825.326**	ug/L	1.993	16167517	47.077
	K	39	**89596.298**	ug/L	12.120	407618930	1188.258
	Ca	43	**94951.996**	ug/L	4.040	951671	2.773
>	Sc	45		ug/L		343460	343459.705
	Ti	47	**1484.085**	ug/L	3.200	739848	2.154
	V	51	**0.183**	ug/L	187.606	7678	0.003
	Cr	52	**3.066**	ug/L	1.432	12238	0.043
	Cr	53		ug/L		76891	0.025
	Mn	55	**6.271**	ug/L	2.675	50845	0.144
	Fe	57	**99420.470**	ug/L	4.796	14995082	43.688
	Co	59	**0.288**	ug/L	4.426	1852	0.005
	Ni	60	**2.849**	ug/L	1.388	3805	0.011
	Cu	63		ug/L		11982	0.034
	Cu	65	**4.447**	ug/L	2.648	7010	0.020
	Zn	66	**3.249**	ug/L	1.367	3876	0.009
	Zn	67		ug/L		8256	0.005
	Zn	68		ug/L		1847	0.003
>	Ge	74		ug/L		393992	393992.184
	As	75	**0.372**	ug/L	95.001	721	0.001
	Se	77		ug/L		6197	0.008
	Se	82	**-0.804**	ug/L	26.117	-105	-0.000
	Kr	83		ug/L		295	0.000
	Sr	88	**1.286**	ug/L	1.829	15908	0.068
	Y	89		ug/L		414	0.001
	Mo	98	**2012.667**	ug/L	1.740	6097451	26.147
	Ag	107	**0.086**	ug/L	13.036	478	0.002
	Cd	111	**0.421**	ug/L	23.144	557	0.002
	Cd	114		ug/L		7536	0.032
>	In	115		ug/L		233216	233216.443
	Sn	120	**0.424**	ug/L	7.153	2817	0.009
	Sb	121	**0.459**	ug/L	25.569	2888	0.008
	Sb	123		ug/L		2229	0.006
	Ba	135		ug/L		1060	0.003
	Ba	137	**0.721**	ug/L	1.735	1748	0.005
	Ho	165		ug/L		966	0.003
>	Lu	175		ug/L		355895	355894.935
	Tl	205	**0.036**	ug/L	28.437	1296	0.001
	Pb	208	**0.294**	ug/L	3.358	7026	0.017
	Bi	209		ug/L		1012	0.002
	Th	232	**0.822**	ug/L	34.394	22197	0.054
	U	238	**0.123**	ug/L	4.949	3258	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	86.891				
	Mg	24	92.106				
	Al	27	93.280				
	P	31	92.825				
	K	39	89.596				
	Ca	43	94.952				
>	Sc	45		104.7			
	Ti	47	74.204				
	V	51					
	Cr	52	82.854				
	Cr	53					
	Mn	55	108.119				
	Fe	57	99.420				
	Co	59	115.347				
	Ni	60	105.527				
	Cu	63					
	Cu	65	153.341				
	Zn	66	90.239				
	Zn	67					
	Zn	68					
>	Ge	74		104.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	107.129				
	Y	89					
	Mo	98	100.633				
	Ag	107					
	Cd	111	105.182				
	Cd	114					
>	In	115		100.3			
	Sn	120					
	Sb	121	458.543				
	Sb	123					
	Ba	135					
	Ba	137	107.574				
	Ho	165					
>	Lu	175		92.9			
	Tl	205					
	Pb	208	146.750				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, December 04, 2009 21:23:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 5.604

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.314**	ug/L	2.457	30635	0.093
	Be	9	**19.399**	ug/L	4.145	6207	0.019
	B	11	**19.816**	ug/L	0.196	6226	0.017
	Na	23	**89705.202**	ug/L	10.480	288661613	879.273
	Mg	24	**88670.386**	ug/L	8.185	200656725	611.586
	Al	27	**96966.652**	ug/L	4.907	285850205	870.994
	P	31	**95323.024**	ug/L	3.619	15875704	48.344
	K	39	**102454.165**	ug/L	4.497	446519550	1358.784
	Ca	43	**95752.846**	ug/L	3.103	918069	2.796
>	Sc	45		ug/L		328426	328425.990
	Ti	47	**1500.065**	ug/L	2.822	715274	2.178
	V	51	**21.827**	ug/L	7.782	133277	0.387
	Cr	52	**24.415**	ug/L	3.606	109535	0.341
	Cr	53		ug/L		84662	0.059
	Mn	55	**28.341**	ug/L	2.575	215271	0.652
	Fe	57	**102357.952**	ug/L	2.641	14772258	44.978
	Co	59	**20.869**	ug/L	2.019	120466	0.367
	Ni	60	**22.609**	ug/L	3.402	28325	0.086
	Cu	63		ug/L		70895	0.215
	Cu	65	**24.341**	ug/L	1.670	36228	0.110
	Zn	66	**22.295**	ug/L	3.039	23945	0.062
	Zn	67		ug/L		11220	0.013
	Zn	68		ug/L		16618	0.042
>	Ge	74		ug/L		380757	380756.800
	As	75	**20.965**	ug/L	2.079	23496	0.061
	Se	77		ug/L		7375	0.011
	Se	82	**20.045**	ug/L	4.989	2177	0.006
	Kr	83		ug/L		284	0.000
	Sr	88	**24.369**	ug/L	2.993	290711	1.280
	Y	89		ug/L		422	0.002
	Mo	98	**2058.460**	ug/L	3.116	6068611	26.742
	Ag	107	**19.604**	ug/L	3.038	95642	0.421
	Cd	111	**20.494**	ug/L	4.616	25125	0.111
	Cd	114		ug/L		64875	0.286
>	In	115		ug/L		227051	227051.041
	Sn	120	**20.920**	ug/L	4.007	105835	0.464
	Sb	121	**23.500**	ug/L	7.148	94287	0.411
	Sb	123		ug/L		74703	0.326
	Ba	135		ug/L		29134	0.082
	Ba	137	**21.969**	ug/L	1.453	51822	0.146
	Ho	165		ug/L		948	0.003
>	Lu	175		ug/L		354557	354556.752
	Tl	205	**21.673**	ug/L	1.560	281519	0.792
	Pb	208	**21.956**	ug/L	1.555	456421	1.285
	Bi	209		ug/L		1316	0.002
	Th	232	**23.877**	ug/L	1.706	561576	1.576
	U	238	**24.992**	ug/L	1.667	601296	1.695

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.568				
	Be	9	96.993				
	B	11	99.080				
	Na	23	89.705				
	Mg	24	88.670				
	Al	27	96.967				
	P	31	95.323				
	K	39	102.454				
	Ca	43	95.753				
>	Sc	45		100.1			
	Ti	47	75.003				
	V	51	109.136				
	Cr	52	103.019				
	Cr	53					
	Mn	55	109.847				
	Fe	57	102.358				
	Co	59	103.055				
	Ni	60	99.597				
	Cu	63					
	Cu	65	106.291				
	Zn	66	94.471				
	Zn	67					
	Zn	68					
>	Ge	74		101.1			
	As	75	104.827				
	Se	77					
	Se	82	100.227				
	Kr	83					
	Sr	88	114.950				
	Y	89					
	Mo	98	102.923				
	Ag	107	98.019				
	Cd	111	100.461				
	Cd	114					
>	In	115		97.7			
	Sn	120	104.601				
	Sb	121	116.916				
	Sb	123					
	Ba	135					
	Ba	137	106.284				
	Ho	165					
>	Lu	175		92.5			
	Tl	205	108.363				
	Pb	208	108.691				
	Bi	209					
	Th	232	119.383				
	U	238	124.961				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	U	238	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, December 04, 2009 21:29:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 6.605

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.681**	ug/L	2.259	77156	0.237
	Be	9	**53.158**	ug/L	3.059	16837	0.052
	B	11	**103.973**	ug/L	1.202	29720	0.089
	Na	23	**4564.646**	ug/L	2.139	14575869	44.742
	Mg	24	**4677.784**	ug/L	5.020	10502410	32.264
	Al	27	**4825.593**	ug/L	4.411	14113146	43.345
	P	31	**5312.453**	ug/L	2.098	881125	2.694
	K	39	**4841.814**	ug/L	5.807	21407555	64.214
	Ca	43	**5173.475**	ug/L	1.858	49427	0.151
>	Sc	45		ug/L		325571	325571.032
	Ti	47	**55.891**	ug/L	3.670	26818	0.081
	V	51	**51.733**	ug/L	3.067	304971	0.918
	Cr	52	**51.541**	ug/L	0.858	231915	0.720
	Cr	53		ug/L		115311	0.155
	Mn	55	**53.971**	ug/L	3.531	405284	1.241
	Fe	57	**5437.332**	ug/L	3.801	783666	2.389
	Co	59	**51.275**	ug/L	1.591	293318	0.901
	Ni	60	**51.202**	ug/L	0.939	63517	0.195
	Cu	63		ug/L		157601	0.484
	Cu	65	**52.620**	ug/L	3.039	77515	0.238
	Zn	66	**50.054**	ug/L	1.823	54941	0.139
	Zn	67		ug/L		16649	0.026
	Zn	68		ug/L		41123	0.103
>	Ge	74		ug/L		391692	391692.482
	As	75	**47.172**	ug/L	1.174	54030	0.137
	Se	77		ug/L		9565	0.016
	Se	82	**50.402**	ug/L	1.441	5656	0.014
	Kr	83		ug/L		107	-0.000
	Sr	88	**49.435**	ug/L	1.491	619544	2.597
	Y	89		ug/L		80	0.000
	Mo	98	**48.971**	ug/L	1.777	151862	0.636
	Ag	107	**49.824**	ug/L	2.297	255360	1.071
	Cd	111	**49.829**	ug/L	1.831	64178	0.269
	Cd	114		ug/L		150944	0.633
>	In	115		ug/L		238487	238486.673
	Sn	120	**48.915**	ug/L	0.553	259244	1.084
	Sb	121	**46.217**	ug/L	11.370	193923	0.809
	Sb	123		ug/L		154003	0.643
	Ba	135		ug/L		70736	0.185
	Ba	137	**49.237**	ug/L	0.983	125186	0.327
	Ho	165		ug/L		83	0.000
>	Lu	175		ug/L		382303	382302.949
	Tl	205	**50.648**	ug/L	2.001	708140	1.850
	Pb	208	**52.481**	ug/L	1.264	1174990	3.071
	Bi	209		ug/L		406	-0.000
	Th	232	**52.806**	ug/L	3.233	1335183	3.485
	U	238	**54.972**	ug/L	2.021	1425610	3.729

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	103.363				
	Be	9	106.317				
	B	11	103.973				
	Na	23	91.293				
	Mg	24	93.556				
	Al	27	95.556				
	P	31	106.249				
	K	39	96.836				
	Ca	43	103.470				
>	Sc	45		99.3			
	Ti	47	111.782				
	V	51	103.466				
	Cr	52	103.082				
	Cr	53					
	Mn	55	107.941				
	Fe	57	108.747				
	Co	59	102.550				
	Ni	60	102.403				
	Cu	63					
	Cu	65	105.240				
	Zn	66	100.109				
	Zn	67					
	Zn	68					
>	Ge	74		104.0			
	As	75	94.344				
	Se	77					
	Se	82	100.805				
	Kr	83					
	Sr	88	98.870				
	Y	89					
	Mo	98	97.942				
	Ag	107	99.647				
	Cd	111	99.658				
	Cd	114					
>	In	115		102.6			
	Sn	120	97.830				
	Sb	121	92.435				
	Sb	123					
	Ba	135					
	Ba	137	98.473				
	Ho	165					
>	Lu	175		99.8			
	Tl	205	101.296				
	Pb	208	104.963				
	Bi	209					
	Th	232	105.611				
	U	238	109.944				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ti	47	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, December 04, 2009 21:35:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 7.606

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.007**	ug/L	15.956	93	0.000
	Be	9	**0.011**	ug/L	47.710	20	0.000
	B	11	**3.008**	ug/L	19.794	1443	0.003
	Na	23	**1.660**	ug/L	101.623	14341	0.016
	Mg	24	**1.396**	ug/L	68.883	5668	0.010
	Al	27	**1.203**	ug/L	118.927	6335	0.011
	P	31	**3.014**	ug/L	58.920	4410	0.002
	K	39	**-0.542**	ug/L	701.859	479590	-0.007
	Ca	43	**6.681**	ug/L	63.207	309	0.000
>	Sc	45		ug/L		319491	319491.179
	Ti	47	**0.922**	ug/L	9.782	830	0.001
	V	51	**0.357**	ug/L	61.669	8075	0.006
	Cr	52	**0.021**	ug/L	552.037	-2200	0.000
	Cr	53		ug/L		71173	0.024
	Mn	55	**-0.048**	ug/L	20.012	889	-0.001
	Fe	57	**10.264**	ug/L	11.864	7365	0.005
	Co	59	**0.007**	ug/L	43.951	142	0.000
	Ni	60	**0.008**	ug/L	99.886	86	0.000
	Cu	63		ug/L		171	0.000
	Cu	65	**0.001**	ug/L	545.412	105	0.000
	Zn	66	**0.053**	ug/L	44.245	356	0.000
	Zn	67		ug/L		6025	-0.001
	Zn	68		ug/L		792	0.000
>	Ge	74		ug/L		382763	382762.840
	As	75	**0.138**	ug/L	168.493	446	0.000
	Se	77		ug/L		4049	0.003
	Se	82	**-0.105**	ug/L	25.213	-25	-0.000
	Kr	83		ug/L		118	0.000
	Sr	88	**0.006**	ug/L	44.792	238	0.000
	Y	89		ug/L		43	-0.000
	Mo	98	**0.226**	ug/L	14.530	825	0.003
	Ag	107	**0.012**	ug/L	36.240	107	0.000
	Cd	111	**0.006**	ug/L	178.487	36	0.000
	Cd	114		ug/L		81	0.000
>	In	115		ug/L		235929	235929.077
	Sn	120	**0.387**	ug/L	14.649	2659	0.009
	Sb	121	**1.303**	ug/L	23.909	6417	0.023
	Sb	123		ug/L		4939	0.017
	Ba	135		ug/L		48	0.000
	Ba	137	**0.013**	ug/L	40.546	79	0.000
	Ho	165		ug/L		46	-0.000
>	Lu	175		ug/L		384871	384870.591
	Tl	205	**0.132**	ug/L	25.721	2744	0.005
	Pb	208	**0.014**	ug/L	19.336	1311	0.001
	Bi	209		ug/L		306	-0.000
	Th	232	**0.188**	ug/L	23.550	7941	0.012
	U	238	**0.019**	ug/L	22.141	801	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Friday, December 04, 2009 21:42:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 10.607

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**925.546**	ug/L	0.889	1329525	4.240
	Be	9	**944.088**	ug/L	2.637	287709	0.918
	B	11	**1.063**	ug/L	14.559	890	0.001
	Na	23	**45134.721**	ug/L	3.205	138744346	442.402
	Mg	24	**45228.963**	ug/L	6.811	97854513	311.957
	Al	27	**52610.464**	ug/L	8.064	148211632	472.569
	P	31	**24160.207**	ug/L	1.438	3845768	12.253
	K	39	**45037.332**	ug/L	7.476	187802512	597.301
	Ca	43	**48613.387**	ug/L	0.669	445308	1.419
>	Sc	45		ug/L		313526	313526.456
	Ti	47	**39.915**	ug/L	2.754	18560	0.058
	V	51	**971.422**	ug/L	1.251	5410728	17.238
	Cr	52	**970.134**	ug/L	1.307	4244342	13.543
	Cr	53		ug/L		569280	1.617
	Mn	55	**959.850**	ug/L	1.248	6922600	22.076
	Fe	57	**51686.658**	ug/L	1.522	7127341	22.712
	Co	59	**931.698**	ug/L	1.698	5132035	16.367
	Ni	60	**884.084**	ug/L	0.998	1055042	3.365
	Cu	63		ug/L		2669699	8.514
	Cu	65	**851.443**	ug/L	1.266	1206553	3.848
	Zn	66	**2400.858**	ug/L	1.036	2469956	6.691
	Zn	67		ug/L		372037	0.992
	Zn	68		ug/L		1526724	4.135
>	Ge	74		ug/L		369108	369108.287
	As	75	**874.063**	ug/L	1.127	938471	2.542
	Se	77		ug/L		43009	0.109
	Se	82	**482.201**	ug/L	0.994	51105	0.138
	Kr	83		ug/L		171	0.000
	Sr	88	**1008.914**	ug/L	0.576	11499479	53.005
	Y	89		ug/L		385	0.001
	Mo	98	**1066.252**	ug/L	2.613	3005508	13.852
	Ag	107	**226.633**	ug/L	4.596	1055983	4.870
	Cd	111	**900.504**	ug/L	1.772	1054398	4.861
	Cd	114		ug/L		2695431	12.422
>	In	115		ug/L		216939	216939.106
	Sn	120	**1010.397**	ug/L	1.957	4860123	22.399
	Sb	121	**225.541**	ug/L	14.563	859069	3.948
	Sb	123		ug/L		690766	3.175
	Ba	135		ug/L		1208893	3.288
	Ba	137	**869.607**	ug/L	14.392	2125011	5.781
	Ho	165		ug/L		311	0.001
>	Lu	175		ug/L		367709	367709.273
	Tl	205	**464.486**	ug/L	2.620	6239972	16.969
	Pb	208	**4743.162**	ug/L	1.162	102062062	277.570
	Bi	209		ug/L		2871	0.007
	Th	232	**2529.475**	ug/L	1.544	61390803	166.944
	U	238	**5300.239**	ug/L	1.118	132196187	359.520

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	92.555				
	Be	9	94.409				
	B	11					
	Na	23	90.269				
	Mg	24	90.458				
	Al	27	105.221				
	P	31	96.641				
	K	39	90.075				
	Ca	43	97.227				
>	Sc	45		95.6			
	Ti	47					
	V	51	97.142				
	Cr	52	97.013				
	Cr	53					
	Mn	55	95.985				
	Fe	57	103.373				
	Co	59	93.170				
	Ni	60	88.408				
	Cu	63					
	Cu	65	85.144				
	Zn	66	96.034				
	Zn	67					
	Zn	68					
>	Ge	74		98.0			
	As	75	87.406				
	Se	77					
	Se	82	96.440				
	Kr	83					
	Sr	88	100.891				
	Y	89					
	Mo	98	106.625				
	Ag	107	90.653				
	Cd	111	90.050				
	Cd	114					
>	In	115		93.3			
	Sn	120	101.040				
	Sb	121	90.216				
	Sb	123					
	Ba	135					
	Ba	137	86.961				
	Ho	165					
>	Lu	175		96.0			
	Tl	205	92.897				
	Pb	208	94.863				
	Bi	209					
	Th	232	101.179				
	U	238	106.005				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Friday, December 04, 2009 21:48:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 11.608

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.453**	ug/L	0.689	78867	0.236
	Be	9	**51.910**	ug/L	2.242	16877	0.050
	B	11	**102.867**	ug/L	2.657	30183	0.088
	Na	23	**4641.064**	ug/L	1.136	15214247	45.491
	Mg	24	**5029.392**	ug/L	4.785	11599035	34.689
	Al	27	**5092.039**	ug/L	2.811	15284325	45.739
	P	31	**5317.165**	ug/L	4.339	904935	2.697
	K	39	**4868.830**	ug/L	7.214	22073542	64.572
	Ca	43	**5031.094**	ug/L	2.765	49339	0.147
>	Sc	45		ug/L		334218	334218.385
	Ti	47	**52.098**	ug/L	2.003	25694	0.076
	V	51	**51.398**	ug/L	3.059	311025	0.912
	Cr	52	**52.000**	ug/L	2.179	240156	0.726
	Cr	53		ug/L		114085	0.142
	Mn	55	**54.132**	ug/L	2.592	417247	1.245
	Fe	57	**5366.232**	ug/L	4.457	793886	2.358
	Co	59	**50.680**	ug/L	1.773	297571	0.890
	Ni	60	**50.918**	ug/L	3.417	64815	0.194
	Cu	63		ug/L		160623	0.480
	Cu	65	**52.828**	ug/L	2.072	79882	0.239
	Zn	66	**50.508**	ug/L	2.760	55810	0.141
	Zn	67		ug/L		17315	0.028
	Zn	68		ug/L		41543	0.103
>	Ge	74		ug/L		394463	394462.718
	As	75	**48.516**	ug/L	3.405	55930	0.141
	Se	77		ug/L		9089	0.015
	Se	82	**50.539**	ug/L	3.360	5709	0.015
	Kr	83		ug/L		113	-0.000
	Sr	88	**49.869**	ug/L	1.283	632598	2.620
	Y	89		ug/L		112	0.000
	Mo	98	**49.053**	ug/L	2.286	153940	0.637
	Ag	107	**49.766**	ug/L	1.950	258158	1.069
	Cd	111	**49.043**	ug/L	3.088	63919	0.265
	Cd	114		ug/L		150129	0.622
>	In	115		ug/L		241428	241427.918
	Sn	120	**58.062**	ug/L	1.413	311366	1.287
	Sb	121	**53.598**	ug/L	8.366	227351	0.938
	Sb	123		ug/L		178321	0.736
	Ba	135		ug/L		70745	0.187
	Ba	137	**50.197**	ug/L	2.410	126183	0.334
	Ho	165		ug/L		85	0.000
>	Lu	175		ug/L		378054	378053.734
	Tl	205	**50.875**	ug/L	1.480	703438	1.859
	Pb	208	**53.310**	ug/L	1.497	1180217	3.120
	Bi	209		ug/L		348	-0.000
	Th	232	**57.768**	ug/L	1.492	1444605	3.813
	U	238	**55.545**	ug/L	2.013	1424437	3.768

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.906				
	Be	9	103.820				
	B	11	102.867				
	Na	23	92.821				
	Mg	24	100.588				
	Al	27	100.832				
	P	31	106.343				
	K	39	97.377				
	Ca	43	100.622				
>	Sc	45		101.9			
	Ti	47	104.195				
	V	51	102.797				
	Cr	52	104.000				
	Cr	53					
	Mn	55	108.263				
	Fe	57	107.325				
	Co	59	101.359				
	Ni	60	101.837				
	Cu	63					
	Cu	65	105.656				
	Zn	66	101.017				
	Zn	67					
	Zn	68					
>	Ge	74		104.8			
	As	75	97.032				
	Se	77					
	Se	82	101.079				
	Kr	83					
	Sr	88	99.738				
	Y	89					
	Mo	98	98.106				
	Ag	107	99.532				
	Cd	111	98.086				
	Cd	114					
>	In	115		103.9			
	Sn	120	116.124				
	Sb	121	107.197				
	Sb	123					
	Ba	135					
	Ba	137	100.394				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	101.750				
	Pb	208	106.619				
	Bi	209					
	Th	232	115.536				
	U	238	111.091				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Th	232	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Friday, December 04, 2009 21:54:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 12.609

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.122**	ug/L	10.031	274	0.001
	Be	9	**0.034**	ug/L	25.065	29	0.000
	B	11	**2.907**	ug/L	20.478	1486	0.002
	Na	23	**2.167**	ug/L	78.832	16677	0.021
	Mg	24	**1.409**	ug/L	52.214	6001	0.010
	Al	27	**2.188**	ug/L	23.909	9670	0.020
	P	31	**1.534**	ug/L	108.495	4385	0.001
	K	39	**4.125**	ug/L	57.737	525149	0.055
	Ca	43	**3.047**	ug/L	7.296	290	0.000
>	Sc	45		ug/L		335934	335934.039
	Ti	47	**-0.009**	ug/L	473.794	419	-0.000
	V	51	**-0.165**	ug/L	228.990	5396	-0.003
	Cr	52	**0.141**	ug/L	57.700	-1742	0.002
	Cr	53		ug/L		71914	0.015
	Mn	55	**-0.032**	ug/L	45.220	1066	-0.001
	Fe	57	**6.576**	ug/L	19.579	7200	0.003
	Co	59	**0.034**	ug/L	20.436	313	0.001
	Ni	60	**0.034**	ug/L	37.985	123	0.000
	Cu	63		ug/L		318	0.000
	Cu	65	**0.047**	ug/L	26.614	181	0.000
	Zn	66	**0.132**	ug/L	18.805	449	0.000
	Zn	67		ug/L		6738	0.001
	Zn	68		ug/L		983	0.000
>	Ge	74		ug/L		389600	389600.160
	As	75	**0.141**	ug/L	93.783	455	0.000
	Se	77		ug/L		3800	0.002
	Se	82	**-0.103**	ug/L	84.508	-25	-0.000
	Kr	83		ug/L		113	-0.000
	Sr	88	**0.027**	ug/L	40.280	507	0.001
	Y	89		ug/L		46	-0.000
	Mo	98	**0.292**	ug/L	12.049	1044	0.004
	Ag	107	**0.052**	ug/L	16.256	320	0.001
	Cd	111	**0.039**	ug/L	9.618	80	0.000
	Cd	114		ug/L		125	0.000
>	In	115		ug/L		240107	240106.845
	Sn	120	**2.580**	ug/L	6.048	14377	0.057
	Sb	121	**2.462**	ug/L	15.997	11405	0.043
	Sb	123		ug/L		8974	0.034
	Ba	135		ug/L		82	0.000
	Ba	137	**0.031**	ug/L	2.274	125	0.000
	Ho	165		ug/L		51	-0.000
>	Lu	175		ug/L		383138	383138.301
	Tl	205	**0.217**	ug/L	16.017	3933	0.008
	Pb	208	**0.109**	ug/L	24.116	3433	0.006
	Bi	209		ug/L		274	-0.001
	Th	232	**0.814**	ug/L	6.841	23722	0.054
	U	238	**0.195**	ug/L	17.873	5371	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		103.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978625
Sample Date/Time: Friday, December 04, 2009 22:00:19
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925488|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978625.610

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.048**	ug/L	9.389	156	0.000
	Be	9	**-0.009**	ug/L	147.941	14	-0.000
	B	11	**1.288**	ug/L	13.907	990	0.001
	Na	23	**7.739**	ug/L	13.189	34041	0.076
	Mg	24	**0.137**	ug/L	823.968	3000	0.001
	Al	27	**1.501**	ug/L	72.528	7335	0.013
	P	31	**38.331**	ug/L	6.650	10342	0.019
	K	39	**6.294**	ug/L	49.263	519274	0.083
	Ca	43	**10.220**	ug/L	34.639	350	0.000
>	Sc	45		ug/L		326238	326237.510
	Ti	47	**2.123**	ug/L	52.042	1423	0.003
	V	51	**0.167**	ug/L	136.082	7170	0.003
	Cr	52	**0.625**	ug/L	14.934	507	0.009
	Cr	53		ug/L		65821	0.002
	Mn	55	**0.157**	ug/L	4.377	2451	0.004
	Fe	57	**19.623**	ug/L	4.291	8861	0.009
	Co	59	**0.019**	ug/L	6.573	216	0.000
	Ni	60	**0.089**	ug/L	9.629	188	0.000
	Cu	63		ug/L		437	0.001
	Cu	65	**0.098**	ug/L	12.595	250	0.000
	Zn	66	**0.986**	ug/L	8.363	1318	0.003
	Zn	67		ug/L		6361	0.001
	Zn	68		ug/L		1576	0.002
>	Ge	74		ug/L		373365	373365.296
	As	75	**-0.079**	ug/L	193.104	197	-0.000
	Se	77		ug/L		3375	0.001
	Se	82	**0.292**	ug/L	10.511	18	0.000
	Kr	83		ug/L		93	-0.000
	Sr	88	**0.023**	ug/L	8.820	437	0.001
	Y	89		ug/L		52	-0.000
	Mo	98	**0.390**	ug/L	41.205	1298	0.005
	Ag	107	**0.040**	ug/L	11.624	243	0.001
	Cd	111	**0.049**	ug/L	25.724	88	0.000
	Cd	114		ug/L		42	-0.000
>	In	115		ug/L		230420	230419.755
	Sn	120	**1.896**	ug/L	8.177	10305	0.042
	Sb	121	**1.190**	ug/L	20.436	5813	0.021
	Sb	123		ug/L		4553	0.016
	Ba	135		ug/L		84	0.000
	Ba	137	**0.033**	ug/L	25.499	128	0.000
	Ho	165		ug/L		48	-0.000
>	Lu	175		ug/L		375058	375058.250
	Tl	205	**0.099**	ug/L	7.614	2224	0.004
	Pb	208	**0.016**	ug/L	10.598	1320	0.001
	Bi	209		ug/L		337	-0.000
	Th	232	**1.736**	ug/L	26.492	45947	0.115
	U	238	**0.085**	ug/L	25.101	2454	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978630
Sample Date/Time: Friday, December 04, 2009 22:06:24
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925488|20|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978630.611

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.173**	ug/L	1.767	6364	0.019
	Be	9	**50.029**	ug/L	1.431	15991	0.049
	B	11	**77.503**	ug/L	4.381	22498	0.067
	Na	23	**266.327**	ug/L	11.234	865586	2.610
	Mg	24	**1754.073**	ug/L	13.371	3974194	12.098
	Al	27	**4876.271**	ug/L	3.800	14390453	43.801
	P	31	**459.037**	ug/L	2.997	80473	0.233
	K	39	**1369.161**	ug/L	6.715	6470834	18.158
	Ca	43	**1981.639**	ug/L	1.615	19270	0.058
>	Sc	45		ug/L		328566	328566.378
	Ti	47	**142.680**	ug/L	2.664	68429	0.207
	V	51	**65.465**	ug/L	3.007	387652	1.162
	Cr	52	**36.490**	ug/L	4.848	164839	0.509
	Cr	53		ug/L		84889	0.059
	Mn	55	**181.480**	ug/L	3.085	1371742	4.174
	Fe	57	**5443.349**	ug/L	2.836	791481	2.392
	Co	59	**44.530**	ug/L	4.746	256853	0.782
	Ni	60	**53.915**	ug/L	3.459	67454	0.205
	Cu	63		ug/L		159003	0.484
	Cu	65	**52.416**	ug/L	1.985	77914	0.237
	Zn	66	**107.171**	ug/L	1.191	111484	0.299
	Zn	67		ug/L		24490	0.049
	Zn	68		ug/L		84796	0.226
>	Ge	74		ug/L		372299	372299.152
	As	75	**130.323**	ug/L	2.079	141388	0.379
	Se	77		ug/L		10971	0.021
	Se	82	**93.640**	ug/L	1.662	9998	0.027
	Kr	83		ug/L		109	0.000
	Sr	88	**85.024**	ug/L	2.058	1037042	4.467
	Y	89		ug/L		97222	0.418
	Mo	98	**42.572**	ug/L	2.546	128499	0.553
	Ag	107	**8.538**	ug/L	1.888	42644	0.183
	Cd	111	**62.670**	ug/L	1.731	78554	0.338
	Cd	114		ug/L		189027	0.814
>	In	115		ug/L		232186	232186.398
	Sn	120	**18.324**	ug/L	3.586	94901	0.406
	Sb	121	**25.277**	ug/L	4.248	103704	0.443
	Sb	123		ug/L		82014	0.350
	Ba	135		ug/L		342544	0.894
	Ba	137	**235.596**	ug/L	3.311	600083	1.566
	Ho	165		ug/L		6773	0.018
>	Lu	175		ug/L		383313	383312.806
	Tl	205	**102.619**	ug/L	2.548	1437265	3.749
	Pb	208	**93.549**	ug/L	1.382	2098896	5.475
	Bi	209		ug/L		3833	0.009
	Th	232	**7.252**	ug/L	7.428	186350	0.479
	U	238	**1.142**	ug/L	2.197	29980	0.077

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978630
Sample Date/Time: Friday, December 04, 2009 22:12:30
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925488|40|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978630.612

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.174**	ug/L	0.357	3236	0.010
	Be	9	**25.662**	ug/L	2.280	7917	0.025
	B	11	**41.287**	ug/L	1.186	11850	0.035
	Na	23	**160.686**	ug/L	8.187	507553	1.575
	Mg	24	**734.828**	ug/L	5.272	1608204	5.068
	Al	27	**2564.936**	ug/L	4.972	7298479	23.039
	P	31	**234.247**	ug/L	6.438	41492	0.119
	K	39	**657.447**	ug/L	4.336	3239779	8.719
	Ca	43	**991.152**	ug/L	3.333	9409	0.029
>	Sc	45		ug/L		316779	316778.850
	Ti	47	**72.382**	ug/L	1.686	33679	0.105
	V	51	**34.153**	ug/L	4.852	197900	0.606
	Cr	52	**18.444**	ug/L	2.257	79275	0.257
	Cr	53		ug/L		76470	0.042
	Mn	55	**97.650**	ug/L	2.024	712564	2.246
	Fe	57	**2864.790**	ug/L	4.548	404535	1.259
	Co	59	**22.916**	ug/L	2.007	127590	0.403
	Ni	60	**27.534**	ug/L	2.819	33259	0.105
	Cu	63		ug/L		77993	0.246
	Cu	65	**26.872**	ug/L	1.118	38581	0.121
	Zn	66	**54.765**	ug/L	2.068	56542	0.153
	Zn	67		ug/L		15217	0.025
	Zn	68		ug/L		42906	0.114
>	Ge	74		ug/L		368604	368603.687
	As	75	**65.901**	ug/L	1.648	70908	0.192
	Se	77		ug/L		7381	0.012
	Se	82	**48.256**	ug/L	3.352	5094	0.014
	Kr	83		ug/L		103	-0.000
	Sr	88	**43.732**	ug/L	3.921	531683	2.298
	Y	89		ug/L		47993	0.207
	Mo	98	**21.391**	ug/L	0.984	64432	0.278
	Ag	107	**4.154**	ug/L	1.422	20702	0.089
	Cd	111	**31.468**	ug/L	1.859	39331	0.170
	Cd	114		ug/L		94318	0.407
>	In	115		ug/L		231407	231406.687
	Sn	120	**9.375**	ug/L	2.548	48704	0.208
	Sb	121	**12.742**	ug/L	1.999	52626	0.223
	Sb	123		ug/L		41898	0.178
	Ba	135		ug/L		172349	0.457
	Ba	137	**121.025**	ug/L	0.415	303700	0.805
	Ho	165		ug/L		3400	0.009
>	Lu	175		ug/L		377400	377400.109
	Tl	205	**56.455**	ug/L	0.809	779214	2.062
	Pb	208	**49.209**	ug/L	0.503	1087764	2.880
	Bi	209		ug/L		2088	0.004
	Th	232	**3.697**	ug/L	3.956	95151	0.244
	U	238	**0.569**	ug/L	1.046	14861	0.039

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.5		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978626
Sample Date/Time: Friday, December 04, 2009 22:24:44
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978626.614

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**17.621**	**ug/L**	2.798	25421	0.081
	Be	9	**2.016**	**ug/L**	11.252	631	0.002
	B	11	**2.209**	**ug/L**	2.931	1202	0.002
	Na	23	**2728.456**	**ug/L**	3.241	8403142	26.744
	Mg	24	**617.497**	**ug/L**	5.893	1340208	4.259
	Al	27	**5747.937**	**ug/L**	1.952	16219497	51.630
	P	31	**220.066**	**ug/L**	4.577	38879	0.112
	K	39	**1846.407**	**ug/L**	0.647	8166338	24.488
	Ca	43	**1401.994**	**ug/L**	2.125	13096	0.041
>	Sc	45		**ug/L**		314114	314113.676
	Ti	47	**331.682**	**ug/L**	2.091	151576	0.481
	V	51	**6.403**	**ug/L**	2.274	41669	0.114
	Cr	52	**3.727**	**ug/L**	3.956	14083	0.052
	Cr	53		**ug/L**		51467	-0.036
	Mn	55	**529.075**	**ug/L**	3.914	3820359	12.169
	Fe	57	**8948.113**	**ug/L**	3.683	1239878	3.932
	Co	59	**1.118**	**ug/L**	2.623	6269	0.020
	Ni	60	**2.730**	**ug/L**	3.129	3336	0.010
	Cu	63		**ug/L**		13911	0.044
	Cu	65	**4.809**	**ug/L**	2.732	6927	0.022
	Zn	66	**77.925**	**ug/L**	1.424	70931	0.217
	Zn	67		**ug/L**		15451	0.031
	Zn	68		**ug/L**		51892	0.157
>	Ge	74		**ug/L**		325395	325394.920
	As	75	**1.553**	**ug/L**	20.020	1717	0.005
	Se	77		**ug/L**		2612	0.000
	Se	82	**0.721**	**ug/L**	18.199	56	0.000
	Kr	83		**ug/L**		149	0.000
	Sr	88	**6.646**	**ug/L**	1.960	75337	0.349
	Y	89		**ug/L**		972488	4.516
	Mo	98	**1.688**	**ug/L**	4.272	4841	0.022
	Ag	107	**0.106**	**ug/L**	9.696	533	0.002
	Cd	111	**0.649**	**ug/L**	7.877	780	0.004
	Cd	114		**ug/L**		292	0.001
>	In	115		**ug/L**		215374	215374.462
	Sn	120	**2.159**	**ug/L**	2.698	10879	0.048
	Sb	121	**0.596**	**ug/L**	8.283	3185	0.010
	Sb	123		**ug/L**		2569	0.008
	Ba	135		**ug/L**		60006	0.153
	Ba	137	**41.034**	**ug/L**	1.361	106862	0.273
	Ho	165		**ug/L**		70853	0.181
>	Lu	175		**ug/L**		391605	391605.225
	Tl	205	**0.317**	**ug/L**	1.962	5445	0.012
	Pb	208	**14.579**	**ug/L**	1.783	335051	0.853
	Bi	209		**ug/L**		3631	0.008
	Th	232	**22.569**	**ug/L**	4.665	586207	1.490
	U	238	**3.270**	**ug/L**	2.458	87158	0.222

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978628
Sample Date/Time: Friday, December 04, 2009 22:30:51
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978628.615

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.973**	ug/L	3.489	66968	0.215
	Be	9	**28.111**	ug/L	4.418	8509	0.027
	B	11	**52.796**	ug/L	4.737	14700	0.045
	Na	23	**3544.563**	ug/L	6.867	10831585	34.743
	Mg	24	**1675.075**	ug/L	6.059	3596245	11.553
	Al	27	**7067.729**	ug/L	1.753	19744834	63.485
	P	31	**1130.687**	ug/L	5.984	182007	0.573
	K	39	**2730.631**	ug/L	15.918	11723116	36.215
	Ca	43	**2135.652**	ug/L	1.182	19635	0.062
>	Sc	45		ug/L		311084	311083.706
	Ti	47	**355.620**	ug/L	2.581	160895	0.516
	V	51	**29.863**	ug/L	4.443	170575	0.530
	Cr	52	**26.823**	ug/L	4.480	114146	0.374
	Cr	53		ug/L		61833	-0.000
	Mn	55	**532.551**	ug/L	5.896	3806446	12.249
	Fe	57	**9514.104**	ug/L	3.633	1305234	4.181
	Co	59	**24.630**	ug/L	3.918	134574	0.433
	Ni	60	**25.551**	ug/L	3.718	30301	0.097
	Cu	63		ug/L		79354	0.255
	Cu	65	**27.691**	ug/L	3.492	39002	0.125
	Zn	66	**99.142**	ug/L	2.103	90859	0.276
	Zn	67		ug/L		18840	0.041
	Zn	68		ug/L		67010	0.202
>	Ge	74		ug/L		327977	327976.872
	As	75	**39.142**	ug/L	1.076	37579	0.114
	Se	77		ug/L		3082	0.001
	Se	82	**9.471**	ug/L	7.248	880	0.003
	Kr	83		ug/L		157	0.000
	Sr	88	**31.989**	ug/L	1.582	354033	1.681
	Y	89		ug/L		1007130	4.783
	Mo	98	**26.144**	ug/L	2.763	71626	0.340
	Ag	107	**24.668**	ug/L	1.669	111657	0.530
	Cd	111	**5.824**	ug/L	3.632	6644	0.031
	Cd	114		ug/L		13471	0.064
>	In	115		ug/L		210604	210604.376
	Sn	120	**27.450**	ug/L	2.587	128686	0.609
	Sb	121	**105.574**	ug/L	3.499	390031	1.848
	Sb	123		ug/L		313891	1.487
	Ba	135		ug/L		83973	0.212
	Ba	137	**57.579**	ug/L	1.540	151454	0.383
	Ho	165		ug/L		76252	0.193
>	Lu	175		ug/L		395565	395565.497
	Tl	205	**49.067**	ug/L	1.452	709898	1.793
	Pb	208	**108.844**	ug/L	1.242	2520371	6.370
	Bi	209		ug/L		3992	0.009
	Th	232	**48.994**	ug/L	2.371	1282026	3.234
	U	238	**32.893**	ug/L	2.257	882678	2.231

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978629
Sample Date/Time: Friday, December 04, 2009 22:36:58
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925488|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978629.616

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**45.383**	**ug/L**	0.579	62996	0.208
	Be	9	**27.937**	**ug/L**	4.238	8235	0.027
	B	11	**54.810**	**ug/L**	1.505	14840	0.047
	Na	23	**3487.808**	**ug/L**	6.247	10354756	34.187
	Mg	24	**1784.814**	**ug/L**	4.692	3727955	12.310
	Al	27	**6363.048**	**ug/L**	11.824	17299224	57.155
	P	31	**1111.859**	**ug/L**	0.983	174367	0.564
	K	39	**2320.659**	**ug/L**	11.550	9771687	30.777
	Ca	43	**1989.412**	**ug/L**	2.210	17814	0.058
>	Sc	45		**ug/L**		302629	302628.852
	Ti	47	**344.137**	**ug/L**	1.843	151564	0.500
	V	51	**29.819**	**ug/L**	2.210	165867	0.529
	Cr	52	**26.802**	**ug/L**	1.039	111069	0.374
	Cr	53		**ug/L**		60995	0.002
	Mn	55	**538.981**	**ug/L**	0.149	3752692	12.396
	Fe	57	**9811.012**	**ug/L**	1.576	1310281	4.311
	Co	59	**24.929**	**ug/L**	2.155	132625	0.438
	Ni	60	**26.115**	**ug/L**	2.309	30151	0.099
	Cu	63		**ug/L**		76985	0.254
	Cu	65	**27.932**	**ug/L**	1.788	38303	0.126
	Zn	66	**99.381**	**ug/L**	2.076	89640	0.277
	Zn	67		**ug/L**		18305	0.040
	Zn	68		**ug/L**		66256	0.203
>	Ge	74		**ug/L**		322790	322790.388
	As	75	**39.012**	**ug/L**	2.045	36864	0.113
	Se	77		**ug/L**		3017	0.001
	Se	82	**9.655**	**ug/L**	4.017	884	0.003
	Kr	83		**ug/L**		168	0.000
	Sr	88	**31.120**	**ug/L**	0.400	342170	1.635
	Y	89		**ug/L**		959835	4.589
	Mo	98	**25.537**	**ug/L**	0.549	69513	0.332
	Ag	107	**24.331**	**ug/L**	0.868	109404	0.523
	Cd	111	**5.575**	**ug/L**	0.208	6321	0.030
	Cd	114		**ug/L**		13255	0.063
>	In	115		**ug/L**		209190	209189.616
	Sn	120	**27.081**	**ug/L**	2.919	126121	0.600
	Sb	121	**104.409**	**ug/L**	0.510	383262	1.828
	Sb	123		**ug/L**		307574	1.467
	Ba	135		**ug/L**		91097	0.232
	Ba	137	**61.471**	**ug/L**	1.693	160758	0.409
	Ho	165		**ug/L**		71959	0.183
>	Lu	175		**ug/L**		393271	393271.187
	Tl	205	**48.081**	**ug/L**	0.434	691719	1.757
	Pb	208	**107.324**	**ug/L**	0.907	2470861	6.281
	Bi	209		**ug/L**		4019	0.009
	Th	232	**47.764**	**ug/L**	0.686	1242917	3.152
	U	238	**32.304**	**ug/L**	2.351	861944	2.191

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978627
Sample Date/Time: Friday, December 04, 2009 22:43:03
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925488|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\1201978627.617

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.210**	ug/L	2.721	4215	0.015
	Be	9	**0.400**	ug/L	6.247	124	0.000
	B	11	**2.278**	ug/L	13.035	1095	0.002
	Na	23	**588.733**	ug/L	11.777	1634168	5.771
	Mg	24	**148.698**	ug/L	5.401	291279	1.026
	Al	27	**1463.055**	ug/L	4.426	3705291	13.142
	P	31	**37.960**	ug/L	3.863	8882	0.019
	K	39	**378.240**	ug/L	9.747	1837695	5.016
	Ca	43	**230.537**	ug/L	4.146	2115	0.007
>	Sc	45		ug/L		281749	281748.855
	Ti	47	**63.908**	ug/L	1.969	26493	0.093
	V	51	**1.424**	ug/L	35.977	12459	0.025
	Cr	52	**0.957**	ug/L	9.451	1745	0.013
	Cr	53		ug/L		54072	-0.007
	Mn	55	**104.880**	ug/L	0.459	680740	2.412
	Fe	57	**1749.620**	ug/L	0.447	221836	0.769
	Co	59	**0.237**	ug/L	4.444	1264	0.004
	Ni	60	**0.635**	ug/L	6.505	748	0.002
	Cu	63		ug/L		2796	0.009
	Cu	65	**1.030**	ug/L	0.173	1404	0.005
	Zn	66	**13.541**	ug/L	0.644	12738	0.038
	Zn	67		ug/L		6432	0.003
	Zn	68		ug/L		9739	0.027
>	Ge	74		ug/L		330700	330700.170
	As	75	**0.344**	ug/L	50.021	580	0.001
	Se	77		ug/L		2916	0.001
	Se	82	**0.290**	ug/L	56.431	16	0.000
	Kr	83		ug/L		86	-0.000
	Sr	88	**1.337**	ug/L	3.700	14934	0.070
	Y	89		ug/L		165477	0.786
	Mo	98	**0.350**	ug/L	4.823	1073	0.005
	Ag	107	**0.015**	ug/L	3.983	110	0.000
	Cd	111	**0.086**	ug/L	13.434	123	0.000
	Cd	114		ug/L		78	0.000
>	In	115		ug/L		210539	210539.464
	Sn	120	**0.550**	ug/L	1.383	3131	0.012
	Sb	121	**0.640**	ug/L	15.332	3279	0.011
	Sb	123		ug/L		2503	0.008
	Ba	135		ug/L		11951	0.032
	Ba	137	**8.428**	ug/L	2.575	20990	0.056
	Ho	165		ug/L		11201	0.030
>	Lu	175		ug/L		373848	373848.319
	Tl	205	**0.696**	ug/L	12.578	10376	0.025
	Pb	208	**2.945**	ug/L	0.940	65382	0.172
	Bi	209		ug/L		984	0.001
	Th	232	**3.778**	ug/L	2.220	96294	0.249
	U	238	**0.551**	ug/L	2.674	14264	0.037

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			85.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			87.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Friday, December 04, 2009 22:49:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.618

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.332**	**ug/L**	2.476	71485	0.244
	Be	9	**57.164**	**ug/L**	1.112	16262	0.056
	B	11	**106.513**	**ug/L**	3.606	27319	0.092
	Na	23	**4293.958**	**ug/L**	5.878	12316792	42.089
	Mg	24	**4363.418**	**ug/L**	8.015	8793048	30.096
	Al	27	**4988.111**	**ug/L**	5.276	13101271	44.805
	P	31	**5175.361**	**ug/L**	1.710	770856	2.625
	K	39	**4769.881**	**ug/L**	7.794	18938459	63.260
	Ca	43	**4966.924**	**ug/L**	2.560	42615	0.145
>	Sc	45		**ug/L**		292358	292357.718
	Ti	47	**49.259**	**ug/L**	0.959	21276	0.072
	V	51	**51.160**	**ug/L**	3.188	270895	0.908
	Cr	52	**50.860**	**ug/L**	3.079	205418	0.710
	Cr	53		**ug/L**		99027	0.140
	Mn	55	**52.682**	**ug/L**	0.838	355382	1.212
	Fe	57	**5296.961**	**ug/L**	2.730	685761	2.328
	Co	59	**50.340**	**ug/L**	3.062	258590	0.884
	Ni	60	**50.270**	**ug/L**	2.724	55987	0.191
	Cu	63		**ug/L**		137832	0.471
	Cu	65	**51.290**	**ug/L**	1.155	67859	0.232
	Zn	66	**49.600**	**ug/L**	0.798	47998	0.138
	Zn	67		**ug/L**		13916	0.024
	Zn	68		**ug/L**		35459	0.101
>	Ge	74		**ug/L**		345290	345289.798
	As	75	**47.426**	**ug/L**	2.804	47887	0.138
	Se	77		**ug/L**		8427	0.016
	Se	82	**50.061**	**ug/L**	4.348	4952	0.014
	Kr	83		**ug/L**		98	-0.000
	Sr	88	**49.119**	**ug/L**	1.973	557130	2.581
	Y	89		**ug/L**		96	0.000
	Mo	98	**47.338**	**ug/L**	1.823	132868	0.615
	Ag	107	**48.769**	**ug/L**	0.478	226263	1.048
	Cd	111	**48.342**	**ug/L**	2.008	56348	0.261
	Cd	114		**ug/L**		134782	0.624
>	In	115		**ug/L**		215872	215872.125
	Sn	120	**49.073**	**ug/L**	2.551	235409	1.088
	Sb	121	**47.461**	**ug/L**	13.023	180240	0.831
	Sb	123		**ug/L**		142077	0.655
	Ba	135		**ug/L**		65244	0.178
	Ba	137	**46.690**	**ug/L**	4.208	113545	0.310
	Ho	165		**ug/L**		85	0.000
>	Lu	175		**ug/L**		365745	365745.052
	Tl	205	**51.435**	**ug/L**	0.438	688086	1.879
	Pb	208	**53.012**	**ug/L**	0.693	1135539	3.102
	Bi	209		**ug/L**		503	0.000
	Th	232	**53.697**	**ug/L**	0.854	1299127	3.544
	U	238	**56.677**	**ug/L**	2.657	1406105	3.844

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	106.665				
	Be	9	114.328				
	B	11	106.513				
	Na	23	85.879				
	Mg	24	87.268				
	Al	27	98.774				
	P	31	103.507				
	K	39	95.398				
	Ca	43	99.338				
>	Sc	45		89.1			
	Ti	47	98.518				
	V	51	102.321				
	Cr	52	101.721				
	Cr	53					
	Mn	55	105.365				
	Fe	57	105.939				
	Co	59	100.680				
	Ni	60	100.539				
	Cu	63					
	Cu	65	102.579				
	Zn	66	99.201				
	Zn	67					
	Zn	68					
>	Ge	74		91.7			
	As	75	94.852				
	Se	77					
	Se	82	100.122				
	Kr	83					
	Sr	88	98.238				
	Y	89					
	Mo	98	94.677				
	Ag	107	97.538				
	Cd	111	96.684				
	Cd	114					
>	In	115		92.9			
	Sn	120	98.146				
	Sb	121	94.923				
	Sb	123					
	Ba	135					
	Ba	137	93.380				
	Ho	165					
>	Lu	175		95.4			
	Tl	205	102.870				
	Pb	208	106.025				
	Bi	209					
	Th	232	107.395				
	U	238	113.353				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Friday, December 04, 2009 22:55:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.619

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.042**	**ug/L**	21.575	129	0.000
	Be	9	**0.016**	**ug/L**	74.625	20	0.000
	B	11	**3.311**	**ug/L**	19.143	1371	0.003
	Na	23	**1.228**	**ug/L**	113.790	11672	0.012
	Mg	24	**0.318**	**ug/L**	466.921	3001	0.002
	Al	27	**2.340**	**ug/L**	25.781	8669	0.021
	P	31	**1.334**	**ug/L**	53.520	3723	0.001
	K	39	**0.151**	**ug/L**	979.334	434166	0.002
	Ca	43	**3.739**	**ug/L**	22.495	254	0.000
>	Sc	45		**ug/L**		287487	287487.318
	Ti	47	**-0.226**	**ug/L**	11.408	268	-0.000
	V	51	**0.270**	**ug/L**	161.418	6810	0.005
	Cr	52	**0.318**	**ug/L**	36.666	-778	0.004
	Cr	53		**ug/L**		62727	0.019
	Mn	55	**-0.036**	**ug/L**	6.387	883	-0.001
	Fe	57	**7.459**	**ug/L**	5.697	6273	0.003
	Co	59	**0.013**	**ug/L**	25.399	162	0.000
	Ni	60	**0.020**	**ug/L**	93.874	90	0.000
	Cu	63		**ug/L**		160	0.000
	Cu	65	**0.001**	**ug/L**	1204.567	95	0.000
	Zn	66	**-0.022**	**ug/L**	44.895	251	-0.000
	Zn	67		**ug/L**		5188	-0.001
	Zn	68		**ug/L**		678	-0.000
>	Ge	74		**ug/L**		346523	346522.757
	As	75	**-0.090**	**ug/L**	352.170	172	-0.000
	Se	77		**ug/L**		3643	0.003
	Se	82	**0.135**	**ug/L**	19.832	1	0.000
	Kr	83		**ug/L**		88	-0.000
	Sr	88	**0.008**	**ug/L**	35.379	237	0.000
	Y	89		**ug/L**		48	-0.000
	Mo	98	**0.087**	**ug/L**	11.514	365	0.001
	Ag	107	**0.011**	**ug/L**	37.111	96	0.000
	Cd	111	**0.012**	**ug/L**	74.545	40	0.000
	Cd	114		**ug/L**		69	0.000
>	In	115		**ug/L**		215803	215803.076
	Sn	120	**0.489**	**ug/L**	12.830	2916	0.011
	Sb	121	**1.336**	**ug/L**	23.725	5989	0.023
	Sb	123		**ug/L**		4724	0.018
	Ba	135		**ug/L**		49	0.000
	Ba	137	**0.010**	**ug/L**	34.930	69	0.000
	Ho	165		**ug/L**		46	-0.000
>	Lu	175		**ug/L**		370295	370295.223
	Tl	205	**0.527**	**ug/L**	8.814	7994	0.019
	Pb	208	**0.012**	**ug/L**	29.673	1218	0.001
	Bi	209		**ug/L**		395	-0.000
	Th	232	**0.399**	**ug/L**	13.934	12803	0.026
	U	238	**0.028**	**ug/L**	4.782	998	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		87.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613011
Sample Date/Time: Friday, December 04, 2009 23:50:23
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\241613011.628

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**68.500**	ug/L	0.611	108459	0.314
	Be	9	**4.595**	ug/L	2.022	1561	0.004
	B	11	**15.677**	ug/L	5.251	5318	0.013
	Na	23	**1198.072**	ug/L	15.421	4059565	11.743
	Mg	24	**9619.742**	ug/L	12.141	22894566	66.350
	Al	27	**79604.169**	ug/L	8.315	247145256	715.037
	P	31	**383.696**	ug/L	1.861	71434	0.195
	K	39	**8095.884**	ug/L	6.367	37597728	107.370
	Ca	43	**8142.786**	ug/L	2.426	82379	0.238
>	Sc	45		ug/L		345357	345357.081
	Ti	47	**1491.416**	ug/L	3.180	748034	2.165
	V	51	**66.272**	ug/L	1.312	412672	1.176
	Cr	52	**34.773**	ug/L	0.854	165173	0.485
	Cr	53		ug/L		60617	-0.024
	Mn	55	**1076.097**	ug/L	3.924	8547730	24.750
	Fe	57	**43106.217**	ug/L	4.229	6546804	18.942
	Co	59	**18.088**	ug/L	1.366	109833	0.318
	Ni	60	**29.881**	ug/L	2.158	39351	0.114
	Cu	63		ug/L		75356	0.218
	Cu	65	**24.565**	ug/L	2.218	38452	0.111
	Zn	66	**114.909**	ug/L	3.226	98467	0.320
	Zn	67		ug/L		22543	0.057
	Zn	68		ug/L		81656	0.264
>	Ge	74		ug/L		306855	306854.957
	As	75	**6.338**	ug/L	3.134	5886	0.018
	Se	77		ug/L		1877	-0.002
	Se	82	**-1.551**	ug/L	15.550	-147	-0.000
	Kr	83		ug/L		317	0.001
	Sr	88	**118.199**	ug/L	1.266	1232924	6.210
	Y	89		ug/L		559399	2.818
	Mo	98	**1.103**	ug/L	1.338	2954	0.014
	Ag	107	**0.312**	ug/L	4.185	1373	0.007
	Cd	111	**0.979**	ug/L	9.050	1072	0.005
	Cd	114		ug/L		555	0.003
>	In	115		ug/L		198552	198552.329
	Sn	120	**0.553**	ug/L	2.389	2965	0.012
	Sb	121	**0.009**	ug/L	129.389	896	0.000
	Sb	123		ug/L		693	-0.000
	Ba	135		ug/L		943543	2.576
	Ba	137	**643.599**	ug/L	2.589	1567499	4.279
	Ho	165		ug/L		42100	0.115
>	Lu	175		ug/L		366491	366491.118
	Tl	205	**1.133**	ug/L	1.963	16015	0.041
	Pb	208	**51.215**	ug/L	1.933	1099010	2.997
	Bi	209		ug/L		20832	0.056
	Th	232	**40.769**	ug/L	3.803	988591	2.691
	U	238	**3.491**	ug/L	2.203	87065	0.237

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		81.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Friday, December 04, 2009 23:56:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 8.629

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.240**	**ug/L**	1.290	74131	0.253
	Be	9	**56.927**	**ug/L**	2.814	16208	0.055
	B	11	**108.628**	**ug/L**	2.427	27884	0.093
	Na	23	**4643.338**	**ug/L**	4.881	13322563	45.513
	Mg	24	**5013.321**	**ug/L**	7.109	10115871	34.578
	Al	27	**5205.989**	**ug/L**	4.749	13682435	46.762
	P	31	**5246.371**	**ug/L**	2.021	782191	2.661
	K	39	**4651.205**	**ug/L**	5.604	18487682	61.686
	Ca	43	**4923.283**	**ug/L**	1.974	42298	0.144
>	Sc	45		**ug/L**		292668	292667.502
	Ti	47	**50.650**	**ug/L**	2.255	21883	0.074
	V	51	**51.253**	**ug/L**	1.619	271690	0.909
	Cr	52	**51.137**	**ug/L**	1.653	206819	0.714
	Cr	53		**ug/L**		89772	0.108
	Mn	55	**52.043**	**ug/L**	2.733	351365	1.197
	Fe	57	**5191.141**	**ug/L**	1.267	672947	2.281
	Co	59	**49.448**	**ug/L**	1.061	254291	0.869
	Ni	60	**49.850**	**ug/L**	1.688	55595	0.190
	Cu	63		**ug/L**		137284	0.469
	Cu	65	**50.837**	**ug/L**	3.808	67317	0.230
	Zn	66	**50.542**	**ug/L**	2.340	47729	0.141
	Zn	67		**ug/L**		13274	0.023
	Zn	68		**ug/L**		34971	0.102
>	Ge	74		**ug/L**		337040	337040.100
	As	75	**47.742**	**ug/L**	2.446	47039	0.139
	Se	77		**ug/L**		7191	0.013
	Se	82	**49.137**	**ug/L**	2.441	4744	0.014
	Kr	83		**ug/L**		114	0.000
	Sr	88	**48.885**	**ug/L**	2.044	536006	2.568
	Y	89		**ug/L**		156	0.000
	Mo	98	**47.817**	**ug/L**	1.937	129711	0.621
	Ag	107	**49.210**	**ug/L**	0.676	220669	1.057
	Cd	111	**49.300**	**ug/L**	2.017	55544	0.266
	Cd	114		**ug/L**		132972	0.637
>	In	115		**ug/L**		208655	208654.889
	Sn	120	**49.933**	**ug/L**	1.342	231513	1.107
	Sb	121	**48.131**	**ug/L**	12.850	176654	0.843
	Sb	123		**ug/L**		139880	0.667
	Ba	135		**ug/L**		62296	0.172
	Ba	137	**46.339**	**ug/L**	1.759	111290	0.308
	Ho	165		**ug/L**		73	0.000
>	Lu	175		**ug/L**		361153	361152.962
	Tl	205	**51.510**	**ug/L**	1.988	680347	1.882
	Pb	208	**53.520**	**ug/L**	0.308	1132030	3.132
	Bi	209		**ug/L**		440	-0.000
	Th	232	**54.784**	**ug/L**	3.607	1308372	3.616
	U	238	**57.976**	**ug/L**	1.374	1420436	3.933

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.481				
	Be	9	113.855				
	B	11	108.628				
	Na	23	92.867				
	Mg	24	100.266				
	Al	27	103.089				
	P	31	104.927				
	K	39	93.024				
	Ca	43	98.466				
>	Sc	45		89.2			
	Ti	47	101.299				
	V	51	102.506				
	Cr	52	102.274				
	Cr	53					
	Mn	55	104.085				
	Fe	57	103.823				
	Co	59	98.896				
	Ni	60	99.699				
	Cu	63					
	Cu	65	101.674				
	Zn	66	101.084				
	Zn	67					
	Zn	68					
>	Ge	74		89.5			
	As	75	95.483				
	Se	77					
	Se	82	98.275				
	Kr	83					
	Sr	88	97.769				
	Y	89					
	Mo	98	95.633				
	Ag	107	98.421				
	Cd	111	98.601				
	Cd	114					
>	In	115		89.8			
	Sn	120	99.866				
	Sb	121	96.263				
	Sb	123					
	Ba	135					
	Ba	137	92.678				
	Ho	165					
>	Lu	175		94.2			
	Tl	205	103.019				
	Pb	208	107.039				
	Bi	209					
	Th	232	109.568				
	U	238	115.952				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	CCV is out of limits (+/- 10%)
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 00:02:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091203\QC Std 9.630

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.058**	**ug/L**	11.811	146	0.000
	Be	9	**0.007**	**ug/L**	294.153	17	0.000
	B	11	**2.999**	**ug/L**	15.168	1262	0.003
	Na	23	**2.081**	**ug/L**	12.335	13673	0.020
	Mg	24	**2.134**	**ug/L**	78.220	6335	0.015
	Al	27	**2.990**	**ug/L**	75.500	10004	0.027
	P	31	**1.403**	**ug/L**	85.758	3640	0.001
	K	39	**-1.492**	**ug/L**	474.203	416317	-0.020
	Ca	43	**0.598**	**ug/L**	488.389	221	0.000
>	Sc	45		**ug/L**		280019	280019.423
	Ti	47	**0.182**	**ug/L**	37.843	426	0.000
	V	51	**-0.070**	**ug/L**	483.744	4930	-0.001
	Cr	52	**0.183**	**ug/L**	30.816	-1294	0.003
	Cr	53		**ug/L**		55764	-0.000
	Mn	55	**0.045**	**ug/L**	35.226	1380	0.001
	Fe	57	**5.483**	**ug/L**	35.871	5863	0.002
	Co	59	**0.019**	**ug/L**	14.421	184	0.000
	Ni	60	**0.014**	**ug/L**	36.683	81	0.000
	Cu	63		**ug/L**		230	0.000
	Cu	65	**0.013**	**ug/L**	75.673	108	0.000
	Zn	66	**-0.021**	**ug/L**	133.530	239	-0.000
	Zn	67		**ug/L**		4829	-0.002
	Zn	68		**ug/L**		618	-0.000
>	Ge	74		**ug/L**		329405	329404.887
	As	75	**-0.142**	**ug/L**	255.218	111	-0.000
	Se	77		**ug/L**		2719	0.000
	Se	82	**-0.165**	**ug/L**	65.972	-27	-0.000
	Kr	83		**ug/L**		108	0.000
	Sr	88	**0.016**	**ug/L**	24.001	308	0.001
	Y	89		**ug/L**		78	0.000
	Mo	98	**0.083**	**ug/L**	33.862	335	0.001
	Ag	107	**0.014**	**ug/L**	46.308	105	0.000
	Cd	111	**0.002**	**ug/L**	384.360	26	0.000
	Cd	114		**ug/L**		82	0.000
>	In	115		**ug/L**		204986	204985.855
	Sn	120	**0.377**	**ug/L**	15.533	2264	0.008
	Sb	121	**1.198**	**ug/L**	26.391	5204	0.021
	Sb	123		**ug/L**		4075	0.016
	Ba	135		**ug/L**		67	0.000
	Ba	137	**0.025**	**ug/L**	22.942	102	0.000
	Ho	165		**ug/L**		38	-0.000
>	Lu	175		**ug/L**		357932	357932.489
	Tl	205	**0.285**	**ug/L**	15.765	4560	0.010
	Pb	208	**0.019**	**ug/L**	22.543	1318	0.001
	Bi	209		**ug/L**		359	-0.000
	Th	232	**0.234**	**ug/L**	21.707	8456	0.015
	U	238	**0.029**	**ug/L**	15.545	994	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		85.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 05, 2009 11:20:22
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1404
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6084.1	6084.096	126.122	2.1
	Mg	24.0	37933.7	37933.699	246.062	0.6
	Co	58.9	131465.5	131465.545	391.169	0.3
	Rh	102.9	287728.9	287728.860	2520.918	0.9
	In	114.9	384046.5	384046.542	2719.920	0.7
	Pb	208.0	227115.9	227115.942	904.488	0.4
⌈>	Ba	137.9	372943.0	372943.011	2197.849	0.6
⌊	Ba++	69.0	6670.6	0.018	0.000	0.7
⌈>	Ce	139.9	452582.0	452582.036	2432.404	0.5
⌊	CeO	155.9	10781.5	0.024	0.001	2.4
	Bkgd	220.0	29.1	29.100	2.485	8.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	7.0	5548.1
Co	59	9	7.0	144363.8
In	115	9	7.3	374732.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	604	2060	0.615
Be	9.0	9.1	2061	2070	0.655
Mg	24.0	24.0	5671	2080	0.651
Mg	25.0	25.0	5923	2075	0.623
Mg	26.0	26.0	6187	2070	0.695
Co	58.9	58.9	14186	2110	0.657
Rh	102.9	102.9	24872	2160	0.653
In	114.9	114.9	27786	2180	0.652
Ce	139.9	139.9	33870	2195	0.677
Pb	206.0	206.0	49948	2290	0.663
Pb	207.0	207.0	50159	2260	0.626
Pb	208.0	208.0	50451	2280	0.672
U	238.1	238.0	57718	2285	0.714

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 05, 2009 15:20:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\Blank.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		35	
>	Sc	45		ug/L		598453	
	Ni	60		ug/L		208	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ni	60	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 05, 2009 15:22:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\Standard 1.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	4.722	5071	0.008
|>	Sc	45		ug/L		603492	603492.421
[	Ni	60	10.000	ug/L	3.462	22845	0.038

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 05, 2009 15:24:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\Standard 2.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	100.049	ug/L	2.881	49730	0.088
|>	Sc	45		ug/L		565825	565825.241
⌊	Ni	60	100.012	ug/L	3.044	215114	0.380

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 05, 2009 15:26:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 1.085

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**54.154**	**ug/L**	3.975	26611	0.048
|>	Sc	45		**ug/L**		559299	559298.939
⌊	Ni	60	**52.343**	**ug/L**	2.447	111354	0.199

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	108.308				
|>	Sc	45		93.5			
⌊	Ni	60	104.685				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 05, 2009 15:27:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 2.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.003	ug/L	246.104	34	-0.000
>	Sc	45		ug/L		611830	611829.861
	Ni	60	0.013	ug/L	70.119	244	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		102.2			
[	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 05, 2009 15:29:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 3.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.498**	**ug/L**	5.437	293	0.000
>	Sc	45		**ug/L**		590387	590387.032
	Ni	60	**2.215**	**ug/L**	1.436	5172	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9	99.620				
>	Sc	45		98.7			
	Ni	60	110.744				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 05, 2009 15:31:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 4.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.069**	**ug/L**	8.844	62	0.000
|>	Sc	45		**ug/L**		516903	516903.151
⌊	Ni	60	**3.099**	**ug/L**	1.659	6263	0.012

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45			86.4		
⌊	Ni	60	114.770				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 05, 2009 15:32:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 5.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**21.110**	**ug/L**	2.704	9086	0.019
>	Sc	45		**ug/L**		488689	488688.903
	Ni	60	**23.655**	**ug/L**	3.109	44066	0.090

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	105.549				
>	Sc	45		81.7			
	Ni	60	104.207				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 15:34:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	54.183	ug/L	1.848	24873	0.048
>	Sc	45		ug/L		522218	522217.634
	Ni	60	52.040	ug/L	1.700	103379	0.198

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	108.366				
|>	Sc	45		87.3			
⌊	Ni	60	104.080				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 15:36:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.004	ug/L	722.467	35	0.000
>	Sc	45		ug/L		568923	568923.496
	Ni	60	0.007	ug/L	161.410	213	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		95.1			
	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978625
Sample Date/Time: Saturday, December 05, 2009 15:38:00
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201978625.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.005	ug/L	185.139	31	-0.000
|>	Sc	45		ug/L		559098	559097.690
⌊	Ni	60	0.058	ug/L	3.332	318	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		93.4			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978630
Sample Date/Time: Saturday, December 05, 2009 15:41:23
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925488|40|baj
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201978630.094

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**26.385**	**ug/L**	5.125	12256	0.023
|>	Sc	45		**ug/L**		528411	528411.459
⌊	Ni	60	**28.939**	**ug/L**	4.015	58193	0.110

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		88.3			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978626
Sample Date/Time: Saturday, December 05, 2009 15:44:48
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201978626.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	1.875	ug/L	2.213	981	0.002
|>	Sc	45		ug/L		575495	575495.428
⌊	Ni	60	2.753	ug/L	1.563	6216	0.010

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		96.2			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978628
Sample Date/Time: Saturday, December 05, 2009 15:46:32
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201978628.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**26.023**	**ug/L**	2.686	13195	0.023
|>	Sc	45		**ug/L**		575890	575889.871
⌊	Ni	60	**25.746**	**ug/L**	1.439	56509	0.098

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		96.2			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978629
Sample Date/Time: Saturday, December 05, 2009 15:48:14
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201978629.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**26.196**	**ug/L**	5.993	13067	0.023
>	Sc	45		**ug/L**		567552	567551.610
	Ni	60	**25.846**	**ug/L**	1.895	55879	0.098

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		94.8			
[	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978627
Sample Date/Time: Saturday, December 05, 2009 15:49:55
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925488|10|baj
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\1201978627.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.346**	**ug/L**	7.488	188	0.000
|>	Sc	45		**ug/L**		517869	517868.648
⌊	Ni	60	**0.592**	**ug/L**	3.729	1346	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		86.5			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, December 05, 2009 15:51:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 8.100

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	50.378	ug/L	3.000	24379	0.044
>	Sc	45		ug/L		550435	550435.233
	Ni	60	48.418	ug/L	2.814	101387	0.184

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	100.755				
>	Sc	45		92.0			
	Ni	60	96.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, December 05, 2009 15:53:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 9.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.009**	**ug/L**	96.065	37	0.000
|>	Sc	45		**ug/L**		562636	562636.119
⌊	Ni	60	**0.014**	**ug/L**	62.275	225	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		94.0			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613011
Sample Date/Time: Saturday, December 05, 2009 16:08:49
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925488|2|baj
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\241613011.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	4.415	ug/L	0.564	2406	0.004
|>	Sc	45		ug/L		611097	611097.326
⌊	Ni	60	31.653	ug/L	2.419	73667	0.120

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		102.1			
[	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 05, 2009 16:10:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 6.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	**54.066**	**ug/L**	0.381	24237	0.047
|>	Sc	45		**ug/L**		509857	509857.355
[	Ni	60	**49.765**	**ug/L**	0.960	96540	0.189

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	108.131				
|>	Sc	45		85.2			
[	Ni	60	99.531				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 05, 2009 16:12:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni.mth
Dataset File: C:\elandata\Dataset\091205\QC Std 7.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.013**	**ug/L**	50.072	37	0.000
|>	Sc	45		**ug/L**		533585	533584.639
⌊	Ni	60	**0.010**	**ug/L**	102.333	206	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		89.2			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, December 12, 2009 10:39:01
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1462
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	4936.9	4936.853	78.257	1.6
	Mg	24.0	46777.5	46777.467	535.183	1.1
	Co	58.9	96364.1	96364.133	711.460	0.7
	Rh	102.9	201890.8	201890.783	2678.775	1.3
	In	114.9	268151.6	268151.643	2408.490	0.9
	Pb	208.0	182932.8	182932.819	752.269	0.4
⌈>	Ba	137.9	247702.6	247702.628	919.279	0.4
⌊	Ba++	69.0	5029.6	0.020	0.000	1.2
⌈>	Ce	139.9	304603.9	304603.932	3663.229	1.2
⌊	CeO	155.9	6582.9	0.022	0.000	1.8
	Bkgd	220.0	22.9	22.900	2.903	12.7

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.5	5219.0
Co	59	13	7.0	99229.8
In	115	13	7.8	248055.7

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	600	2060	0.603
Be	9.0	9.0	2051	2070	0.639
Mg	24.0	24.0	5687	2080	0.608
Mg	25.0	25.0	5939	2075	0.667
Mg	26.0	26.1	6169	2070	0.667
Co	58.9	58.9	14166	2110	0.631
Rh	102.9	102.9	24880	2160	0.639
In	114.9	114.9	27794	2180	0.637
Ce	139.9	139.9	33866	2195	0.656
Pb	206.0	206.0	49948	2290	0.643
Pb	207.0	207.0	50159	2260	0.601
Pb	208.0	208.0	50451	2280	0.649
U	238.1	238.1	57728	2285	0.696

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, December 12, 2009 11:08:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\Blank.012

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		17	
Sc	45		ug/L		1654917	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, December 12, 2009 11:09:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\Standard 1.013

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	10.000	ug/L	1.866	5405	0.003
⌊>	Sc	45		ug/L		1630202	1630202.099

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, December 12, 2009 11:11:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\Standard 2.014

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	99.998	ug/L	1.107	51417	0.033
⌊>	Sc	45		ug/L		1557928	1557927.915

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, December 12, 2009 11:13:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 1.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.489	ug/L	1.880	27993	0.017
Sc	45		ug/L		1615986	1615985.971

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	104.978				
Sc	45		97.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, December 12, 2009 11:14:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 2.016

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.005	ug/L	128.784	19	0.000
Sc	45		ug/L		1629762	1629761.845

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		98.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, December 12, 2009 11:16:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 3.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.528**	**ug/L**	4.471	305	0.000
⌊>	Sc	45		**ug/L**		1652290	1652289.902

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	105.669				
⌊>	Sc	45		99.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, December 12, 2009 11:18:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 4.018

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.068	ug/L	24.342	46	0.000
Sc	45		ug/L		1410654	1410653.929

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		85.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, December 12, 2009 11:19:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 5.019

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**20.405**	**ug/L**	0.833	9396	0.007
⌊>	Sc	45		**ug/L**		1393393	1393392.814

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	102.027				
⌊>	Sc	45		84.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 11:21:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.020

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.597	ug/L	1.627	25948	0.017
Sc	45		ug/L		1523573	1523573.352

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	103.194				
Sc	45		92.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 11:23:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.021

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.008	ug/L	81.309	20	0.000
Sc	45		ug/L		1563558	1563557.663

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		94.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 11:33:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.027

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.251	ug/L	2.409	26257	0.017
Sc	45		ug/L		1551969	1551969.447

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	102.502				
Sc	45		93.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 11:34:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.028

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.011	ug/L	14.834	22	0.000
⌊>	Sc	45		ug/L		1589485	1589485.381

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		96.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 11:49:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.036

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.623	ug/L	0.885	25536	0.016
Sc	45		ug/L		1558698	1558698.447

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	99.246				
Sc	45		94.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 11:51:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.037

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.017	ug/L	70.044	24	0.000
⌊>	Sc	45		ug/L		1537194	1537194.187

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		92.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 12:04:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.045

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.219	ug/L	0.837	25221	0.016
Sc	45		ug/L		1552117	1552117.445

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	98.438				
Sc	45		93.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 12:06:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.046

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.010	ug/L	54.805	21	0.000
⌊>	Sc	45		ug/L		1543006	1543006.066

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		93.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 12:11:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.048

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	48.716	ug/L	0.600	25105	0.016
Sc	45		ug/L		1560975	1560974.965

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	97.431				
Sc	45		94.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 12:13:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.049

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.017	ug/L	55.242	25	0.000
Sc	45		ug/L		1579980	1579980.337

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		95.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 12:30:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.059

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.199	ug/L	1.082	25193	0.017
Sc	45		ug/L		1490501	1490501.173

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	102.397				
Sc	45		90.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 12:32:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.060

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.016**	**ug/L**	40.642	23	0.000
⌊>	Sc	45		**ug/L**		1485083	1485082.746

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		89.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 12:49:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.070

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.786**	**ug/L**	0.662	26560	0.017
⌊>	Sc	45		**ug/L**		1553579	1553579.374

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	103.572				
⌊>	Sc	45		93.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 12:51:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.071

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.012	ug/L	79.369	22	0.000
⌊>	Sc	45		ug/L		1578488	1578488.303

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 13:03:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.078

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	49.277	ug/L	2.293	26512	0.016
⌊>	Sc	45		ug/L		1629777	1629777.380

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	98.553				
⌊>	Sc	45		98.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 13:04:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.079

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.015	ug/L	36.082	25	0.000
Sc	45		ug/L		1678468	1678468.237

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		101.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 13:18:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.086

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.344	ug/L	2.010	26872	0.016
Sc	45		ug/L		1649951	1649951.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	98.687				
Sc	45		99.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 13:19:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.011	ug/L	62.272	23	0.000
⌊>	Sc	45		ug/L		1698016	1698016.333

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978613
Sample Date/Time: Saturday, December 12, 2009 13:21:26
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\1201978613.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.003	ug/L	112.798	19	0.000
>	Sc	45		ug/L		1711394	1711393.648

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		103.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978618
Sample Date/Time: Saturday, December 12, 2009 13:23:09
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925484|40|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\1201978618.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	23.469	ug/L	1.657	12575	0.008
⌊>	Sc	45		ug/L		1622003	1622003.376

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		98.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613001
Sample Date/Time: Saturday, December 12, 2009 13:24:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613001.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	2.202	ug/L	5.990	1274	0.001
⌊>	Sc	45		ug/L		1729790	1729790.400

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		104.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978614
Sample Date/Time: Saturday, December 12, 2009 13:26:37
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\1201978614.091

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.223	ug/L	2.263	1275	0.001
Sc	45		ug/L		1715456	1715456.451

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		103.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978616
Sample Date/Time: Saturday, December 12, 2009 13:28:21
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\1201978616.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	25.005	ug/L	0.745	13824	0.008
⌊>	Sc	45		ug/L		1673715	1673715.195

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978617
Sample Date/Time: Saturday, December 12, 2009 13:30:07
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925484|2|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\1201978617.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	26.039	ug/L	0.473	14291	0.009
⌊>	Sc	45		ug/L		1661459	1661459.215

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		100.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978615
Sample Date/Time: Saturday, December 12, 2009 13:31:53
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925484|10|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\1201978615.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.525	ug/L	9.312	289	0.000
⌊>	Sc	45		ug/L		1576284	1576283.813

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613002
Sample Date/Time: Saturday, December 12, 2009 13:33:38
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613002.095

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	1.664	ug/L	1.527	905	0.001
>	Sc	45		ug/L		1618934	1618934.074

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		97.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613003
Sample Date/Time: Saturday, December 12, 2009 13:35:21
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613003.096

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.183	ug/L	2.981	2329	0.001
Sc	45		ug/L		1675166	1675166.126

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		101.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 13:37:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.097

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.506	ug/L	0.883	26489	0.017
Sc	45		ug/L		1528157	1528157.239

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	105.012				
Sc	45		92.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 13:38:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.098

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.020	ug/L	62.937	26	0.000
Sc	45		ug/L		1550910	1550909.968

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		93.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613004
Sample Date/Time: Saturday, December 12, 2009 13:40:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613004.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	1.915	ug/L	3.579	1037	0.001
⌊>	Sc	45		ug/L		1616021	1616021.338

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		97.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613005
Sample Date/Time: Saturday, December 12, 2009 13:42:12
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613005.100

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.106	ug/L	3.175	1126	0.001
Sc	45		ug/L		1597683	1597682.650

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		96.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613006
Sample Date/Time: Saturday, December 12, 2009 13:43:58
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613006.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	3.100	ug/L	1.923	1656	0.001
>	Sc	45		ug/L		1602937	1602936.850

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613007
Sample Date/Time: Saturday, December 12, 2009 13:45:44
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613007.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	2.109	ug/L	5.536	1127	0.001
>	Sc	45		ug/L		1596134	1596134.091

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613008
Sample Date/Time: Saturday, December 12, 2009 13:47:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613008.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	5.100	ug/L	0.344	2749	0.002
>	Sc	45		ug/L		1623863	1623863.359

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		98.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613009
Sample Date/Time: Saturday, December 12, 2009 13:49:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613009.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	3.220	ug/L	2.215	1749	0.001
⌊>	Sc	45		ug/L		1631062	1631061.818

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		98.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613010
Sample Date/Time: Saturday, December 12, 2009 13:50:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613010.105

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	2.346	ug/L	0.836	1262	0.001
⌊>	Sc	45		ug/L		1608997	1608996.797

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		97.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 13:52:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.106

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.413	ug/L	2.421	26171	0.018
Sc	45		ug/L		1484618	1484618.126

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	106.825				
Sc	45		89.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 13:54:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.107

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.027	ug/L	25.628	29	0.000
Sc	45		ug/L		1522748	1522747.713

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		92.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613012
Sample Date/Time: Saturday, December 12, 2009 13:57:47
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613012.108

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.069	ug/L	2.638	1088	0.001
Sc	45		ug/L		1570722	1570721.572

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		94.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613013
Sample Date/Time: Saturday, December 12, 2009 13:59:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613013.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	1.710	ug/L	0.300	902	0.001
⌊>	Sc	45		ug/L		1571166	1571165.974

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		94.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613014
Sample Date/Time: Saturday, December 12, 2009 14:01:07
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613014.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	4.442	ug/L	5.305	2351	0.001
>	Sc	45		ug/L		1593848	1593848.405

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613015
Sample Date/Time: Saturday, December 12, 2009 14:02:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613015.111

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.015	ug/L	2.262	2631	0.002
Sc	45		ug/L		1581007	1581006.851

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		95.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613016
Sample Date/Time: Saturday, December 12, 2009 14:04:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613016.112

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.264	ug/L	7.039	651	0.000
Sc	45		ug/L		1524605	1524605.493

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		92.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613017
Sample Date/Time: Saturday, December 12, 2009 14:06:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613017.113

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.720	ug/L	0.953	898	0.001
Sc	45		ug/L		1554539	1554538.952

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		93.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241613018
Sample Date/Time: Saturday, December 12, 2009 14:07:50
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925484|2|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\241613018.114

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	3.555	ug/L	0.658	1886	0.001
Sc	45		ug/L		1594132	1594131.990

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		96.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, December 12, 2009 14:09:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 6.115

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.685	ug/L	1.615	25826	0.017
Sc	45		ug/L		1484922	1484921.576

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	105.369				
Sc	45		89.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, December 12, 2009 14:11:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\091212\QC Std 7.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.011	ug/L	29.217	21	0.000
⌊>	Sc	45		ug/L		1504624	1504623.829

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		90.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

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Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120709S1.SIF
Batch ID:
Results Data Set: 120709S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: SOIL **Method Last Saved: 12/2/2009 15:13:39**
Method Description: 7471A, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/7/2009 09:27:23**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0018	0.0004	09:28:16	Yes
2		[0.00]	0.0004	0.0025	0.0004	09:28:46	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0000				
%RSD:		0.00	4.44				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/7/2009 09:29:05**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0024	0.0113	0.0028	09:29:55	Yes
2		[0.2]	0.0025	0.0118	0.0029	09:30:25	Yes
Mean:		[0.2]	0.0024				
SD:		0.0	0.0000				
%RSD:		0.0	1.90				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01215 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/7/2009 09:30:44**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0061	0.0272	0.0066	09:31:35	Yes
2		[0.5]	0.0062	0.0278	0.0066	09:32:05	Yes
Mean:		[0.5]	0.0062				
SD:		0.0	0.0000				
%RSD:		0.0	0.28				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999981 Slope: 0.01233 Intercept: -0.00001

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/7/2009 09:32:24**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0249	0.1063	0.0253	09:33:16	Yes
2		[2.0]	0.0247	0.1049	0.0251	09:33:46	Yes
Mean:		[2.0]	0.0248				
SD:		0.0	0.0002				
%RSD:		0.0	0.64				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999998 Slope: 0.01240 Intercept: -0.00003

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/7/2009 09:34:06**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0609	0.2585	0.0613	09:34:58	Yes
2		[5.0]	0.0606	0.2573	0.0610	09:35:28	Yes
Mean:		[5.0]	0.0607				
SD:		0.0	0.0002				
%RSD:		0.0	0.39				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999964 Slope: 0.01215 Intercept: 0.00011

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/7/2009 09:35:48**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1191	0.5075	0.1195	09:36:38	Yes
2		[10.0]	0.1181	0.5021	0.1185	09:37:08	Yes
Mean:		[10.0]	0.1186				
SD:		0.0	0.0007				
%RSD:		0.0	0.60				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999912 Slope: 0.01187 Intercept: 0.00042

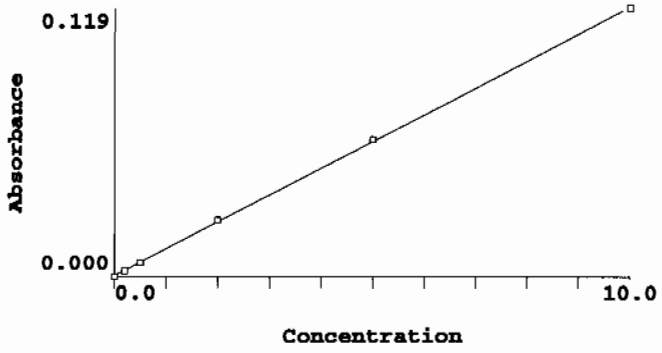

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.035	0.00	4.4
S0.2	0.0024	0.2	0.170	0.00	1.9
S0.5	0.0062	0.5	0.484	0.00	0.3
S2.0	0.0248	2.0	2.052	0.00	0.6

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120709S1.SIF
Batch ID:
Results Data Set: 120709S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: SOIL **Method Last Saved: 12/2/2009 15:13:39**
Method Description: 7471A, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/7/2009 09:44:10**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.145	5.145	0.0615	0.2634	0.0619	09:45:01	Yes
2	5.130	5.130	0.0613	0.2609	0.0618	09:45:31	Yes
Mean:	5.138	5.138	0.0614				
SD:	0.010	0.010	0.0001				
%RSD:	0.201	0.201	0.20				

QC value within limits for Hg 253.7 Recovery = 102.75%
All analyte(s) passed QC.

==========

Sequence No.: 2 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/7/2009 09:45:51**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	0.0000	0.0012	0.0004	09:46:42	Yes
2	-0.036	-0.036	-0.0000	0.0013	0.0004	09:47:12	Yes
Mean:	-0.034	-0.034	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	6.304	6.304	285.09				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 3 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/7/2009 09:47:32**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.189	0.189	0.0027	0.0127	0.0031	09:48:23	Yes
2	0.181	0.181	0.0026	0.0123	0.0030	09:48:53	Yes
Mean:	0.185	0.185	0.0026				
SD:	0.006	0.006	0.0001				
%RSD:	3.069	3.069	2.58				

QC value within limits for Hg 253.7 Recovery = 92.37%
All analyte(s) passed QC.

==========

Sequence No.: 4 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 09:49:13**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.099	5.099	0.0610	0.2612	0.0614	09:50:04	Yes
2	5.104	5.104	0.0610	0.2609	0.0614	09:50:33	Yes
Mean:	5.102	5.102	0.0610				
SD:	0.004	0.004	0.0000				
%RSD:	0.070	0.070	0.07				

QC value within limits for Hg 253.7 Recovery = 102.04%
All analyte(s) passed QC.

Sequence No.: 5 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/7/2009 09:50:52
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.035	-0.035	0.0000	0.0014	0.0004	09:51:43	Yes
2	-0.032	-0.032	0.0000	0.0020	0.0004	09:52:13	Yes
Mean:	-0.034	-0.034	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.955	5.955	128.26				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 6 Autosampler Location: 12
Sample ID: 1201981586|926813|1 Date Collected: 12/7/2009 09:52:33
Analyst: JXL1 Data Type: Original

Replicate Data: 1201981586|926813|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	0.0000	0.0015	0.0004	09:53:24	Yes
2	-0.036	-0.036	-0.0000	0.0017	0.0004	09:53:54	Yes
Mean:	-0.035	-0.035	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.233	3.233	294.92				

Sequence No.: 7 Autosampler Location: 13
Sample ID: 1201981587|926813|1 Date Collected: 12/7/2009 09:54:14
Analyst: JXL1 Data Type: Original

Replicate Data: 1201981587|926813|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.057	2.057	0.0248	0.1072	0.0253	09:55:06	Yes
2	2.050	2.050	0.0248	0.1064	0.0252	09:55:36	Yes
Mean:	2.053	2.053	0.0248				
SD:	0.005	0.005	0.0001				
%RSD:	0.233	0.233	0.23				

Sequence No.: 8 Autosampler Location: 14
Sample ID: 241451001|926813|1 Date Collected: 12/7/2009 09:55:56
Analyst: JXL1 Data Type: Original

Replicate Data: 241451001|926813|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.240	0.240	0.0033	0.0154	0.0037	09:56:47	Yes

Replicate Data: 241591002|926813|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.128	0.128	0.0019	0.0097	0.0023	10:05:03	Yes
2	0.125	0.125	0.0019	0.0099	0.0023	10:05:33	Yes
Mean:	0.126	0.126	0.0019				
SD:	0.002	0.002	0.0000				
%RSD:	1.518	1.518	1.19				

Sequence No.: 14 Autosampler Location: 20
Sample ID: 241591003|926813|1 Date Collected: 12/7/2009 10:05:53
Analyst: JXL1 Data Type: Original

Replicate Data: 241591003|926813|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.691	0.691	0.0086	0.0387	0.0090	10:06:43	Yes
2	0.686	0.686	0.0086	0.0383	0.0090	10:07:13	Yes
Mean:	0.688	0.688	0.0086				
SD:	0.004	0.004	0.0000				
%RSD:	0.580	0.580	0.55				

Sequence No.: 15 Autosampler Location: 21
Sample ID: 241591004|926813|1 Date Collected: 12/7/2009 10:07:32
Analyst: JXL1 Data Type: Original

Replicate Data: 241591004|926813|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.816	0.816	0.0101	0.0449	0.0105	10:08:23	Yes
2	0.813	0.813	0.0101	0.0450	0.0105	10:08:53	Yes
Mean:	0.815	0.815	0.0101				
SD:	0.002	0.002	0.0000				
%RSD:	0.249	0.249	0.24				

Sequence No.: 16 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/7/2009 10:09:13
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.097	5.097	0.0609	0.2619	0.0614	10:10:03	Yes
2	5.100	5.100	0.0610	0.2615	0.0614	10:10:33	Yes
Mean:	5.099	5.099	0.0610				
SD:	0.002	0.002	0.0000				
%RSD:	0.038	0.038	0.04				

QC value within limits for Hg 253.7 Recovery = 101.97%
All analyte(s) passed QC.

Sequence No.: 17 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/7/2009 10:10:52
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	0.0001	0.0038	0.0005	10:11:42	Yes
2	-0.029	-0.029	0.0001	0.0027	0.0005	10:12:12	Yes
Mean:	-0.027	-0.027	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	10.22	10.22	35.35				

QC value within limits for Hg 253.7 Recovery = Not calculated

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Replicate Data: 1201981590|926813|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.153	0.153	0.0022	0.0121	0.0026	10:28:27	Yes
2	0.159	0.159	0.0023	0.0133	0.0027	10:28:57	Yes
Mean:	0.156	0.156	0.0023				
SD:	0.005	0.005	0.0001				
%RSD:	2.913	2.913	2.38				

Sequence No.: 28 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 10:29:16**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.203	5.203	0.0622	0.2688	0.0626	10:30:06	Yes
2	5.175	5.175	0.0619	0.2651	0.0623	10:30:36	Yes
Mean:	5.189	5.189	0.0620				
SD:	0.019	0.019	0.0002				
%RSD:	0.375	0.375	0.37				

QC value within limits for Hg 253.7 Recovery = 103.78%
All analyte(s) passed QC.

Sequence No.: 29 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/7/2009 10:30:55**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	0.0000	0.0031	0.0005	10:31:46	Yes
2	-0.031	-0.031	0.0001	0.0025	0.0005	10:32:16	Yes
Mean:	-0.031	-0.031	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.723	1.723	12.76				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 30 **Autosampler Location: 32**
Sample ID: 241649002|926813|1 **Date Collected: 12/7/2009 10:32:36**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241649002|926813|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.108	0.108	0.0017	0.0091	0.0021	10:33:27	Yes
2	0.116	0.116	0.0018	0.0095	0.0022	10:33:56	Yes
Mean:	0.112	0.112	0.0017				
SD:	0.005	0.005	0.0001				
%RSD:	4.896	4.896	3.73				

Sequence No.: 31 **Autosampler Location: 33**
Sample ID: 1201981622|926829|1 **Date Collected: 12/7/2009 10:34:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981622|926829|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0001	0.0017	0.0003	10:35:07	Yes
2	-0.041	-0.041	-0.0001	0.0014	0.0003	10:35:37	Yes
Mean:	-0.041	-0.041	-0.0001				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.502	2.502	0.0301	0.1299	0.0305	10:43:33	Yes
2	2.487	2.487	0.0300	0.1287	0.0304	10:44:03	Yes
Mean:	2.495	2.495	0.0300				
SD:	0.010	0.010	0.0001				
%RSD:	0.418	0.418	0.41				

==========

Sequence No.: 37 **Autosampler Location: 39**
Sample ID: 1201981626|926829|5 **Date Collected: 12/7/2009 10:44:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981626|926829|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.102	0.102	0.0016	0.0086	0.0020	10:45:13	Yes
2	0.100	0.100	0.0016	0.0085	0.0020	10:45:43	Yes
Mean:	0.101	0.101	0.0016				
SD:	0.002	0.002	0.0000				
%RSD:	1.714	1.714	1.27				

==========

Sequence No.: 38 **Autosampler Location: 40**
Sample ID: 241765002|926829|1 **Date Collected: 12/7/2009 10:46:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241765002|926829|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.121	0.121	0.0019	0.0098	0.0023	10:46:53	Yes
2	0.125	0.125	0.0019	0.0102	0.0023	10:47:23	Yes
Mean:	0.123	0.123	0.0019				
SD:	0.003	0.003	0.0000				
%RSD:	2.133	2.133	1.66				

==========

Sequence No.: 39 **Autosampler Location: 41**
Sample ID: 241765003|926829|1 **Date Collected: 12/7/2009 10:47:43**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241765003|926829|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.164	1.164	0.0142	0.0627	0.0146	10:48:34	Yes
2	1.163	1.163	0.0142	0.0633	0.0146	10:49:04	Yes
Mean:	1.163	1.163	0.0142				
SD:	0.001	0.001	0.0000				
%RSD:	0.062	0.062	0.06				

==========

Sequence No.: 40 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 10:49:23**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.169	5.169	0.0618	0.2674	0.0622	10:50:13	Yes
2	5.138	5.138	0.0614	0.2666	0.0618	10:50:43	Yes
Mean:	5.153	5.153	0.0616				
SD:	0.022	0.022	0.0003				
%RSD:	0.427	0.427	0.42				

QC value within limits for Hg 253.7 Recovery = 103.06%
All analyte(s) passed QC.

==========

Sequence No.: 41 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 12/7/2009 10:51:02
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0001	0.0014	0.0004	10:51:53	Yes
2	-0.038	-0.038	-0.0000	0.0018	0.0004	10:52:23	Yes
Mean:	-0.039	-0.039	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.360	3.360	36.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 42
Sample ID: 241765004|926829|1
Analyst: JXL1
Autosampler Location: 42
Date Collected: 12/7/2009 10:52:43
Data Type: Original

Replicate Data: 241765004|926829|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.079	0.079	0.0014	0.0074	0.0018	10:53:34	Yes
2	0.082	0.082	0.0014	0.0080	0.0018	10:54:04	Yes
Mean:	0.080	0.080	0.0014				
SD:	0.002	0.002	0.0000				
%RSD:	2.447	2.447	1.70				

Sequence No.: 43
Sample ID: 241765005|926829|1
Analyst: JXL1
Autosampler Location: 43
Date Collected: 12/7/2009 10:54:23
Data Type: Original

Replicate Data: 241765005|926829|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.912	0.912	0.0112	0.0501	0.0117	10:55:14	Yes
2	0.912	0.912	0.0112	0.0500	0.0117	10:55:44	Yes
Mean:	0.912	0.912	0.0112				
SD:	0.000	0.000	0.0000				
%RSD:	0.009	0.009	0.01				

Sequence No.: 44
Sample ID: 241765006|926829|1
Analyst: JXL1
Autosampler Location: 44
Date Collected: 12/7/2009 10:56:04
Data Type: Original

Replicate Data: 241765006|926829|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.130	0.130	0.0020	0.0103	0.0024	10:56:55	Yes
2	0.140	0.140	0.0021	0.0113	0.0025	10:57:25	Yes
Mean:	0.135	0.135	0.0020				
SD:	0.007	0.007	0.0001				
%RSD:	5.193	5.193	4.12				

Sequence No.: 45
Sample ID: 241765007|926829|1
Analyst: JXL1
Autosampler Location: 45
Date Collected: 12/7/2009 10:57:44
Data Type: Original

Replicate Data: 241765007|926829|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.618	0.618	0.0078	0.0351	0.0082	10:58:35	Yes
2	0.621	0.621	0.0078	0.0353	0.0082	10:59:05	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.124	2.124	0.0256	0.1119	0.0261	11:07:02	Yes
2	2.105	2.105	0.0254	0.1103	0.0258	11:07:32	Yes
Mean:	2.114	2.114	0.0255				
SD:	0.013	0.013	0.0002				
%RSD:	0.627	0.627	0.62				

==========

Sequence No.: 51 **Autosampler Location: 51**
Sample ID: 241853001|928050|1 **Date Collected: 12/7/2009 11:07:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241853001|928050|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.412	0.412	0.0053	0.0220	0.0057	11:08:43	Yes
2	0.427	0.427	0.0055	0.0249	0.0059	11:09:13	Yes
Mean:	0.420	0.420	0.0054				
SD:	0.010	0.010	0.0001				
%RSD:	2.389	2.389	2.20				

==========

Sequence No.: 52 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 11:09:32**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.153	5.153	0.0616	0.2678	0.0620	11:10:22	Yes
2	5.164	5.164	0.0617	0.2672	0.0621	11:10:52	Yes
Mean:	5.158	5.158	0.0617				
SD:	0.007	0.007	0.0001				
%RSD:	0.143	0.143	0.14				

QC value within limits for Hg 253.7 Recovery = 103.17%
All analyte(s) passed QC.

==========

Sequence No.: 53 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/7/2009 11:11:11**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0001	0.0007	0.0003	11:12:02	Yes
2	-0.048	-0.048	-0.0001	0.0009	0.0003	11:12:31	Yes
Mean:	-0.047	-0.047	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.367	1.367	5.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 54 **Autosampler Location: 52**
Sample ID: 241853002|928050|1 **Date Collected: 12/7/2009 11:12:51**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241853002|928050|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.576	0.576	0.0073	0.0329	0.0077	11:13:42	Yes
2	1.803	1.803	0.0218	0.0998	0.0222	11:14:12	Yes
Mean:	1.190	1.190	0.0145				
SD:	0.868	0.868	0.0103				
%RSD:	72.92	72.92	70.83				

2	2.656	2.656	0.0320	0.1395	0.0324	11:22:35	Yes
Mean:	2.647	2.647	0.0319				
SD:	0.012	0.012	0.0001				
%RSD:	0.456	0.456	0.45				

==========

Sequence No.: 60 **Autosampler Location: 58**
Sample ID: 1201984351|928050|5 **Date Collected: 12/7/2009 11:22:55**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984351|928050|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.058	0.058	0.0011	0.0065	0.0015	11:23:47	Yes
2	0.057	0.057	0.0011	0.0063	0.0015	11:24:16	Yes
Mean:	0.058	0.058	0.0011				
SD:	0.000	0.000	0.0000				
%RSD:	0.537	0.537	0.33				

==========

Sequence No.: 61 **Autosampler Location: 59**
Sample ID: 241886002|928050|1 **Date Collected: 12/7/2009 11:24:36**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241886002|928050|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.106	0.106	0.0017	0.0095	0.0021	11:25:28	Yes
2	0.110	0.110	0.0017	0.0094	0.0021	11:25:58	Yes
Mean:	0.108	0.108	0.0017				
SD:	0.003	0.003	0.0000				
%RSD:	2.435	2.435	1.84				

==========

Sequence No.: 62 **Autosampler Location: 60**
Sample ID: 241886003|928050|1 **Date Collected: 12/7/2009 11:26:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241886003|928050|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.246	0.246	0.0033	0.0162	0.0038	11:27:10	Yes
2	0.248	0.248	0.0034	0.0164	0.0038	11:27:40	Yes
Mean:	0.247	0.247	0.0034				
SD:	0.001	0.001	0.0000				
%RSD:	0.562	0.562	0.49				

==========

Sequence No.: 63 **Autosampler Location: 61**
Sample ID: 241886004|928050|1 **Date Collected: 12/7/2009 11:28:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241886004|928050|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.072	0.072	0.0013	0.0075	0.0017	11:28:51	Yes
2	0.073	0.073	0.0013	0.0074	0.0017	11:29:21	Yes
Mean:	0.072	0.072	0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	1.280	1.280	0.86				

==========

Sequence No.: 64 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 11:29:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.213	5.213	0.0623	0.2703	0.0627	11:30:31	Yes
2	5.204	5.204	0.0622	0.2701	0.0626	11:31:01	Yes
Mean:	5.209	5.209	0.0623				
SD:	0.006	0.006	0.0001				
%RSD:	0.118	0.118	0.12				

QC value within limits for Hg 253.7 Recovery = 104.17%
All analyte(s) passed QC.

Sequence No.: 65 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/7/2009 11:31:20**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0001	0.0014	0.0004	11:32:12	Yes
2	-0.042	-0.042	-0.0001	0.0012	0.0003	11:32:41	Yes
Mean:	-0.041	-0.041	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.637	3.637	26.20				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 66 **Autosampler Location: 62**
Sample ID: 1201986966|929119|1 **Date Collected: 12/7/2009 11:33:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986966|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0001	0.0013	0.0003	11:33:52	Yes
2	-0.043	-0.043	-0.0001	0.0016	0.0003	11:34:22	Yes
Mean:	-0.043	-0.043	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.007	0.007	0.04				

Sequence No.: 67 **Autosampler Location: 63**
Sample ID: 1201986967|929119|1 **Date Collected: 12/7/2009 11:34:42**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986967|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.120	2.120	0.0256	0.1122	0.0260	11:35:33	Yes
2	2.116	2.116	0.0255	0.1122	0.0260	11:36:03	Yes
Mean:	2.118	2.118	0.0256				
SD:	0.003	0.003	0.0000				
%RSD:	0.129	0.129	0.13				

Sequence No.: 68 **Autosampler Location: 64**
Sample ID: 242086001|929119|1 **Date Collected: 12/7/2009 11:36:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242086001|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.135	0.135	0.0020	0.0105	0.0024	11:37:14	Yes
2	0.137	0.137	0.0020	0.0103	0.0025	11:37:44	Yes
Mean:	0.136	0.136	0.0020				
SD:	0.001	0.001	0.0000				

1	2.660	2.660	0.0320	0.1398	0.0324	11:45:41	Yes
2	2.635	2.635	0.0317	0.1394	0.0321	11:46:11	Yes
Mean:	2.647	2.647	0.0319				
SD:	0.018	0.018	0.0002				
%RSD:	0.674	0.674	0.66				

==========

Sequence No.: 74 **Autosampler Location: 70**
Sample ID: 1201986970|929119|5 **Date Collected: 12/7/2009 11:46:30**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986970|929119|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.111	0.111	0.0017	0.0092	0.0021	11:47:22	Yes
2	0.109	0.109	0.0017	0.0090	0.0021	11:47:52	Yes
Mean:	0.110	0.110	0.0017				
SD:	0.001	0.001	0.0000				
%RSD:	1.154	1.154	0.87				

==========

Sequence No.: 75 **Autosampler Location: 71**
Sample ID: 242197002|929119|1 **Date Collected: 12/7/2009 11:48:12**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242197002|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.040	0.040	0.0009	0.0056	0.0013	11:49:03	Yes
2	0.042	0.042	0.0009	0.0059	0.0013	11:49:33	Yes
Mean:	0.041	0.041	0.0009				
SD:	0.001	0.001	0.0000				
%RSD:	2.726	2.726	1.47				

==========

Sequence No.: 76 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 11:49:53**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0621	0.2729	0.0625	11:50:44	Yes
2	5.230	5.230	0.0625	0.2728	0.0629	11:51:14	Yes
Mean:	5.212	5.212	0.0623				
SD:	0.025	0.025	0.0003				
%RSD:	0.471	0.471	0.47				

QC value within limits for Hg 253.7 Recovery = 104.25%
All analyte(s) passed QC.

==========

Sequence No.: 77 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/7/2009 11:51:33**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0001	0.0009	0.0003	11:52:23	Yes
2	-0.043	-0.043	-0.0001	0.0015	0.0003	11:52:53	Yes
Mean:	-0.045	-0.045	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.321	5.321	24.56				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 78
Sample ID: 242197003|929119|1
Analyst: JXL1

Autosampler Location: 72
Date Collected: 12/7/2009 11:53:12
Data Type: Original

Replicate Data: 242197003|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.138	0.138	0.0021	0.0107	0.0025	11:54:04	Yes
2	0.141	0.141	0.0021	0.0110	0.0025	11:54:34	Yes
Mean:	0.139	0.139	0.0021				
SD:	0.002	0.002	0.0000				
%RSD:	1.377	1.377	1.10				

Sequence No.: 79
Sample ID: 242197004|929119|1
Analyst: JXL1

Autosampler Location: 73
Date Collected: 12/7/2009 11:54:55
Data Type: Original

Replicate Data: 242197004|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0006	0.0047	0.0010	11:55:46	Yes
2	0.016	0.016	0.0006	0.0048	0.0010	11:56:16	Yes
Mean:	0.017	0.017	0.0006				
SD:	0.002	0.002	0.0000				
%RSD:	9.906	9.906	3.24				

Sequence No.: 80
Sample ID: 242197005|929119|1
Analyst: JXL1

Autosampler Location: 74
Date Collected: 12/7/2009 11:56:36
Data Type: Original

Replicate Data: 242197005|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.424	0.424	0.0055	0.0255	0.0059	11:57:28	Yes
2	0.430	0.430	0.0055	0.0258	0.0059	11:57:58	Yes
Mean:	0.427	0.427	0.0055				
SD:	0.004	0.004	0.0000				
%RSD:	0.925	0.925	0.85				

Sequence No.: 81
Sample ID: 242197006|929119|1
Analyst: JXL1

Autosampler Location: 75
Date Collected: 12/7/2009 11:58:18
Data Type: Original

Replicate Data: 242197006|929119|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.049	0.049	0.0010	0.0061	0.0014	11:59:09	Yes
2	0.051	0.051	0.0010	0.0062	0.0014	11:59:39	Yes
Mean:	0.050	0.050	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	2.266	2.266	1.33				

Sequence No.: 82
Sample ID: 1201978991|925646|1
Analyst: JXL1

Autosampler Location: 76
Date Collected: 12/7/2009 11:59:59
Data Type: Original

Replicate Data: 1201978991|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0002	0.0010	0.0002	12:00:50	Yes
2	-0.046	-0.046	-0.0001	0.0017	0.0003	12:01:20	Yes
Mean:	-0.047	-0.047	-0.0001				

SD:	0.002	0.002	0.0000
%RSD:	4.917	4.917	19.07

==========

Sequence No.: 83 **Autosampler Location: 77**
Sample ID: 1201978992|925646|10 **Date Collected: 12/7/2009 12:01:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978992|925646|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.355	3.355	0.0403	0.1749	0.0407	12:02:31	Yes
2	3.344	3.344	0.0401	0.1736	0.0405	12:03:01	Yes
Mean:	3.350	3.350	0.0402				
SD:	0.008	0.008	0.0001				
%RSD:	0.239	0.239	0.24				

==========

Sequence No.: 84 **Autosampler Location: 78**
Sample ID: 241613001|925646|1 **Date Collected: 12/7/2009 12:03:21**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613001|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0018	0.0096	0.0022	12:04:12	Yes
2	0.115	0.115	0.0018	0.0097	0.0022	12:04:42	Yes
Mean:	0.114	0.114	0.0018				
SD:	0.002	0.002	0.0000				
%RSD:	1.891	1.891	1.44				

==========

Sequence No.: 85 **Autosampler Location: 79**
Sample ID: 1201978993|925646|1 **Date Collected: 12/7/2009 12:05:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978993|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.136	0.136	0.0020	0.0103	0.0024	12:05:54	Yes
2	0.139	0.139	0.0021	0.0107	0.0025	12:06:24	Yes
Mean:	0.137	0.137	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.226	1.226	0.98				

==========

Sequence No.: 86 **Autosampler Location: 80**
Sample ID: 1201978994|925646|1 **Date Collected: 12/7/2009 12:06:43**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978994|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.266	2.266	0.0273	0.1197	0.0277	12:07:35	Yes
2	2.249	2.249	0.0271	0.1179	0.0275	12:08:05	Yes
Mean:	2.258	2.258	0.0272				
SD:	0.012	0.012	0.0001				
%RSD:	0.514	0.514	0.51				

==========

Sequence No.: 87 **Autosampler Location: 81**
Sample ID: 1201978996|925646|1 **Date Collected: 12/7/2009 12:08:25**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978996|925646|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.271	2.271	0.0274	0.1200	0.0278	12:09:16	Yes
2	2.268	2.268	0.0273	0.1193	0.0278	12:09:46	Yes
Mean:	2.269	2.269	0.0274				
SD:	0.003	0.003	0.0000				
%RSD:	0.113	0.113	0.11				

==========

Sequence No.: 88 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 12:10:06**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.168	5.168	0.0618	0.2697	0.0622	12:10:56	Yes
2	5.198	5.198	0.0621	0.2688	0.0626	12:11:26	Yes
Mean:	5.183	5.183	0.0620				
SD:	0.021	0.021	0.0003				
%RSD:	0.407	0.407	0.40				

QC value within limits for Hg 253.7 Recovery = 103.66%
All analyte(s) passed QC.

==========

Sequence No.: 89 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/7/2009 12:11:45**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.023	-0.023	0.0001	0.0044	0.0006	12:12:35	Yes
2	-0.046	-0.046	-0.0001	0.0010	0.0003	12:13:05	Yes
Mean:	-0.034	-0.034	0.0000				
SD:	0.016	0.016	0.0002				
%RSD:	46.56	46.56	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 90 **Autosampler Location: 82**
Sample ID: 1201978995|925646|5 **Date Collected: 12/7/2009 12:13:25**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978995|925646|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	0.0003	0.0041	0.0007	12:14:16	Yes
2	-0.013	-0.013	0.0003	0.0032	0.0007	12:14:46	Yes
Mean:	-0.011	-0.011	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	30.75	30.75	13.48				

==========

Sequence No.: 91 **Autosampler Location: 83**
Sample ID: 241613002|925646|1 **Date Collected: 12/7/2009 12:15:06**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613002|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.077	0.077	0.0013	0.0075	0.0017	12:15:57	Yes
2	0.075	0.075	0.0013	0.0076	0.0017	12:16:27	Yes
Mean:	0.076	0.076	0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	1.821	1.821	1.24				

Sequence No.: 92
Sample ID: 241613003|925646|1
Analyst: JXL1
Autosampler Location: 84
Date Collected: 12/7/2009 12:16:47
Data Type: Original

Replicate Data: 241613003|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.223	0.223	0.0031	0.0152	0.0035	12:17:39	Yes
2	0.222	0.222	0.0031	0.0150	0.0035	12:18:08	Yes
Mean:	0.223	0.223	0.0031				
SD:	0.001	0.001	0.0000				
%RSD:	0.522	0.522	0.45				

Sequence No.: 93
Sample ID: 241613004|925646|1
Analyst: JXL1
Autosampler Location: 85
Date Collected: 12/7/2009 12:18:29
Data Type: Original

Replicate Data: 241613004|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.070	0.070	0.0012	0.0068	0.0017	12:19:20	Yes
2	0.075	0.075	0.0013	0.0076	0.0017	12:19:50	Yes
Mean:	0.073	0.073	0.0013				
SD:	0.004	0.004	0.0000				
%RSD:	5.640	5.640	3.80				

Sequence No.: 94
Sample ID: 241613005|925646|1
Analyst: JXL1
Autosampler Location: 86
Date Collected: 12/7/2009 12:20:10
Data Type: Original

Replicate Data: 241613005|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.133	0.133	0.0020	0.0104	0.0024	12:21:02	Yes
2	0.131	0.131	0.0020	0.0100	0.0024	12:21:32	Yes
Mean:	0.132	0.132	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.407	1.407	1.11				

Sequence No.: 95
Sample ID: 241613006|925646|1
Analyst: JXL1
Autosampler Location: 87
Date Collected: 12/7/2009 12:21:52
Data Type: Original

Replicate Data: 241613006|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.158	0.158	0.0023	0.0118	0.0027	12:22:43	Yes
2	0.160	0.160	0.0023	0.0119	0.0027	12:23:13	Yes
Mean:	0.159	0.159	0.0023				
SD:	0.001	0.001	0.0000				
%RSD:	0.788	0.788	0.65				

Sequence No.: 96
Sample ID: 241613007|925646|1
Analyst: JXL1
Autosampler Location: 88
Date Collected: 12/7/2009 12:23:34
Data Type: Original

Replicate Data: 241613007|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.111	0.111	0.0017	0.0093	0.0021	12:24:25	Yes
2	0.108	0.108	0.0017	0.0090	0.0021	12:24:55	Yes

Mean:	0.110	0.110	0.0017
SD:	0.002	0.002	0.0000
%RSD:	1.750	1.750	1.33

==========

Sequence No.: 97 **Autosampler Location: 89**
Sample ID: 241613008|925646|1 **Date Collected: 12/7/2009 12:25:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613008|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.322	0.322	0.0042	0.0207	0.0046	12:26:07	Yes
2	0.316	0.316	0.0042	0.0203	0.0046	12:26:37	Yes
Mean:	0.319	0.319	0.0042				
SD:	0.004	0.004	0.0000				
%RSD:	1.226	1.226	1.10				

==========

Sequence No.: 98 **Autosampler Location: 90**
Sample ID: 241613009|925646|1 **Date Collected: 12/7/2009 12:26:57**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613009|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.166	0.166	0.0024	0.0121	0.0028	12:27:49	Yes
2	0.166	0.166	0.0024	0.0120	0.0028	12:28:19	Yes
Mean:	0.166	0.166	0.0024				
SD:	0.000	0.000	0.0000				
%RSD:	0.161	0.161	0.13				

==========

Sequence No.: 99 **Autosampler Location: 91**
Sample ID: 241613010|925646|1 **Date Collected: 12/7/2009 12:28:39**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613010|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.154	0.154	0.0022	0.0117	0.0027	12:29:31	Yes
2	0.155	0.155	0.0023	0.0116	0.0027	12:30:00	Yes
Mean:	0.154	0.154	0.0023				
SD:	0.000	0.000	0.0000				
%RSD:	0.303	0.303	0.25				

==========

Sequence No.: 100 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 12:30:21**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.170	5.170	0.0618	0.2675	0.0622	12:31:11	Yes
2	5.146	5.146	0.0615	0.2667	0.0619	12:31:41	Yes
Mean:	5.158	5.158	0.0617				
SD:	0.016	0.016	0.0002				
%RSD:	0.316	0.316	0.31				

QC value within limits for Hg 253.7 Recovery = 103.16%
All analyte(s) passed QC.

==========

Sequence No.: 101 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/7/2009 12:32:00**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	0.0001	0.0031	0.0005	12:32:50	Yes
2	-0.046	-0.046	-0.0001	0.0010	0.0003	12:33:20	Yes
Mean:	-0.039	-0.039	-0.0000				
SD:	0.011	0.011	0.0001				
%RSD:	28.12	28.12	321.07				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 102 **Autosampler Location: 92**
Sample ID: 241613011|925646|1 **Date Collected: 12/7/2009 12:33:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613011|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.263	0.263	0.0035	0.0171	0.0040	12:34:32	Yes
2	0.260	0.260	0.0035	0.0170	0.0039	12:35:01	Yes
Mean:	0.262	0.262	0.0035				
SD:	0.002	0.002	0.0000				
%RSD:	0.887	0.887	0.78				

Sequence No.: 103 **Autosampler Location: 93**
Sample ID: 241613012|925646|1 **Date Collected: 12/7/2009 12:35:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613012|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0016	0.0089	0.0020	12:36:13	Yes
2	0.085	0.085	0.0014	0.0079	0.0018	12:36:43	Yes
Mean:	0.090	0.090	0.0015				
SD:	0.007	0.007	0.0001				
%RSD:	8.047	8.047	5.79				

Sequence No.: 104 **Autosampler Location: 94**
Sample ID: 241613013|925646|1 **Date Collected: 12/7/2009 12:37:03**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613013|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0009	0.0059	0.0013	12:37:55	Yes
2	0.040	0.040	0.0009	0.0058	0.0013	12:38:25	Yes
Mean:	0.039	0.039	0.0009				
SD:	0.000	0.000	0.0000				
%RSD:	0.670	0.670	0.35				

Sequence No.: 105 **Autosampler Location: 95**
Sample ID: 241613014|925646|1 **Date Collected: 12/7/2009 12:38:45**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241613014|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0035	0.0155	0.0039	12:39:36	Yes
2	0.260	0.260	0.0035	0.0174	0.0039	12:40:06	Yes
Mean:	0.259	0.259	0.0035				
SD:	0.001	0.001	0.0000				
%RSD:	0.477	0.477	0.42				

Sequence No.: 106
Sample ID: 241613015|925646|1
Analyst: JXL1
Autosampler Location: 96
Date Collected: 12/7/2009 12:40:26
Data Type: Original

Replicate Data: 241613015|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.254	0.254	0.0034	0.0167	0.0039	12:41:17	Yes
2	0.246	0.246	0.0033	0.0161	0.0038	12:41:47	Yes
Mean:	0.250	0.250	0.0034				
SD:	0.006	0.006	0.0001				
%RSD:	2.258	2.258	1.98				

Sequence No.: 107
Sample ID: 241613016|925646|1
Analyst: JXL1
Autosampler Location: 97
Date Collected: 12/7/2009 12:42:07
Data Type: Original

Replicate Data: 241613016|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0009	0.0056	0.0013	12:42:59	Yes
2	0.041	0.041	0.0009	0.0054	0.0013	12:43:29	Yes
Mean:	0.041	0.041	0.0009				
SD:	0.000	0.000	0.0000				
%RSD:	0.085	0.085	0.05				

Sequence No.: 108
Sample ID: 241613017|925646|1
Analyst: JXL1
Autosampler Location: 98
Date Collected: 12/7/2009 12:43:49
Data Type: Original

Replicate Data: 241613017|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0009	0.0060	0.0013	12:44:41	Yes
2	0.041	0.041	0.0009	0.0060	0.0013	12:45:11	Yes
Mean:	0.041	0.041	0.0009				
SD:	0.000	0.000	0.0000				
%RSD:	0.835	0.835	0.45				

Sequence No.: 109
Sample ID: 241613018|925646|1
Analyst: JXL1
Autosampler Location: 99
Date Collected: 12/7/2009 12:45:31
Data Type: Original

Replicate Data: 241613018|925646|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.204	0.204	0.0028	0.0140	0.0032	12:46:23	Yes
2	0.203	0.203	0.0028	0.0139	0.0032	12:46:53	Yes
Mean:	0.203	0.203	0.0028				
SD:	0.001	0.001	0.0000				
%RSD:	0.269	0.269	0.23				

Sequence No.: 110
Sample ID: 1201986009|928778|1
Analyst: JXL1
Autosampler Location: 100
Date Collected: 12/7/2009 12:47:14
Data Type: Original

Replicate Data: 1201986009|928778|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	-0.0001	0.0013	0.0003	12:48:05	Yes

2	-0.048	-0.048	-0.0002	0.0010	0.0003	12:48:35	Yes
Mean:	-0.047	-0.047	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.449	4.449	17.74				

==========

Sequence No.: 111 **Autosampler Location: 101**
Sample ID: 1201986010|928778|1 **Date Collected: 12/7/2009 12:48:56**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986010|928778|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.076	2.076	0.0251	0.1095	0.0255	12:49:47	Yes
2	2.080	2.080	0.0251	0.1095	0.0255	12:50:17	Yes
Mean:	2.078	2.078	0.0251				
SD:	0.003	0.003	0.0000				
%RSD:	0.149	0.149	0.15				

==========

Sequence No.: 112 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/7/2009 12:50:37**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.130	5.130	0.0613	0.2653	0.0618	12:51:28	Yes
2	5.123	5.123	0.0613	0.2661	0.0617	12:51:57	Yes
Mean:	5.127	5.127	0.0613				
SD:	0.005	0.005	0.0001				
%RSD:	0.096	0.096	0.10				

QC value within limits for Hg 253.7 Recovery = 102.54%
All analyte(s) passed QC.

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Sequence No.: 113 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/7/2009 12:52:16**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0004	0.0042	0.0008	12:53:07	Yes
2	-0.004	-0.004	0.0004	0.0033	0.0008	12:53:37	Yes
Mean:	-0.002	-0.002	0.0004				
SD:	0.004	0.004	0.0000				
%RSD:	251.5	251.5	12.10				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 114 **Autosampler Location: 102**
Sample ID: 242093001|928778|1 **Date Collected: 12/7/2009 12:53:57**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242093001|928778|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.841	0.841	0.0104	0.0466	0.0108	12:54:48	Yes
2	0.844	0.844	0.0104	0.0469	0.0108	12:55:18	Yes
Mean:	0.842	0.842	0.0104				
SD:	0.002	0.002	0.0000				
%RSD:	0.203	0.203	0.19				

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Sequence No.: 115 **Autosampler Location: 103**

Miscellaneous

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 925481

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978612	UI652380	.503	g
MS	1201978610	UI091119-01	.25	mL
MS	1201978610	UI091119-06	.25	mL
MSD	1201978611	UI091119-01	.25	mL
MSD	1201978611	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978607		SW846 3050B	23-NOV-2009 14:00	0.516 g	50 mL	96.89922	SOIL
LCS	1201978612		SW846 3050B	23-NOV-2009 14:00	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241613001		SW846 3050B	23-NOV-2009 14:00	0.501 g	50 mL	99.8004	SOIL
DUP	1201978608	241613001	SW846 3050B	23-NOV-2009 14:00	0.52 g	50 mL	96.15385	SOIL
SDILT	1201978609	241613001	SW846 3050B	23-NOV-2009 14:00	0.501 g	50 mL	99.8004	SOIL
MS	1201978610	241613001	SW846 3050B	23-NOV-2009 14:00	0.512 g	50 mL	97.65625	SOIL
MSD	1201978611	241613001	SW846 3050B	23-NOV-2009 14:00	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241613002		SW846 3050B	23-NOV-2009 14:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241613003		SW846 3050B	23-NOV-2009 14:00	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241613004		SW846 3050B	23-NOV-2009 14:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241613005		SW846 3050B	23-NOV-2009 14:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241613006		SW846 3050B	23-NOV-2009 14:00	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241613007		SW846 3050B	23-NOV-2009 14:00	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241613008		SW846 3050B	23-NOV-2009 14:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241613009		SW846 3050B	23-NOV-2009 14:00	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241613010		SW846 3050B	23-NOV-2009 14:00	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241613011		SW846 3050B	23-NOV-2009 14:00	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241613012		SW846 3050B	23-NOV-2009 14:00	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241613013		SW846 3050B	23-NOV-2009 14:00	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241613014		SW846 3050B	23-NOV-2009 14:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241613015		SW846 3050B	23-NOV-2009 14:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241613016		SW846 3050B	23-NOV-2009 14:00	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241613017		SW846 3050B	23-NOV-2009 14:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241613018		SW846 3050B	23-NOV-2009 14:00	0.507 g	50 mL	98.61933	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments: Gray soil w/rocks

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 925483

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978618	UI647733-01	.523	g
MS	1201978616	UI090611-A	.5	mL
MS	1201978616	UI090611-B	.5	mL
MSD	1201978617	UI090611-A	.5	mL
MSD	1201978617	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978613		SW846 3050B	23-NOV-2009 14:00	0.504 g	50 mL	99.20635	SOIL
LCS	1201978618		SW846 3050B	23-NOV-2009 14:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241613001		SW846 3050B	23-NOV-2009 14:00	0.507 g	50 mL	98.61933	SOIL
DUP	1201978614	241613001	SW846 3050B	23-NOV-2009 14:00	0.505 g	50 mL	99.0099	SOIL
SDILT	1201978615	241613001	SW846 3050B	23-NOV-2009 14:00	0.507 g	50 mL	98.61933	SOIL
MS	1201978616	241613001	SW846 3050B	23-NOV-2009 14:00	0.504 g	50 mL	99.20635	SOIL
MSD	1201978617	241613001	SW846 3050B	23-NOV-2009 14:00	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241613002		SW846 3050B	23-NOV-2009 14:00	0.5 g	50 mL	100	SOIL
SAMPLE	241613003		SW846 3050B	23-NOV-2009 14:00	0.524 g	50 mL	95.41985	SOIL
SAMPLE	241613004		SW846 3050B	23-NOV-2009 14:00	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241613005		SW846 3050B	23-NOV-2009 14:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241613006		SW846 3050B	23-NOV-2009 14:00	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241613007		SW846 3050B	23-NOV-2009 14:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241613008		SW846 3050B	23-NOV-2009 14:00	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241613009		SW846 3050B	23-NOV-2009 14:00	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241613010		SW846 3050B	23-NOV-2009 14:00	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241613012		SW846 3050B	23-NOV-2009 14:00	0.5 g	50 mL	100	SOIL
SAMPLE	241613013		SW846 3050B	23-NOV-2009 14:00	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241613014		SW846 3050B	23-NOV-2009 14:00	0.5 g	50 mL	100	SOIL
SAMPLE	241613015		SW846 3050B	23-NOV-2009 14:00	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241613016		SW846 3050B	23-NOV-2009 14:00	0.5 g	50 mL	100	SOIL
SAMPLE	241613017		SW846 3050B	23-NOV-2009 14:00	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241613018		SW846 3050B	23-NOV-2009 14:00	0.512 g	50 mL	97.65625	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments Gray soil w/rocks.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 925487

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978630	UI647733-01	.52	g
MS	1201978628	UI090611-A	.5	mL
MS	1201978628	UI090611-B	.5	mL
MSD	1201978629	UI090611-A	.5	mL
MSD	1201978629	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978625		SW846 3050B	23-NOV-2009 14:00	0.502 g	50 mL	99.60159	SOIL
LCS	1201978630		SW846 3050B	23-NOV-2009 14:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241611001		SW846 3050B	23-NOV-2009 14:00	0.506 g	50 mL	98.81423	SOIL
DUP	1201978626	241611001	SW846 3050B	23-NOV-2009 14:00	0.514 g	50 mL	97.27626	SOIL
SDILT	1201978627	241611001	SW846 3050B	23-NOV-2009 14:00	0.506 g	50 mL	98.81423	SOIL
MS	1201978628	241611001	SW846 3050B	23-NOV-2009 14:00	0.519 g	50 mL	96.33911	SOIL
MSD	1201978629	241611001	SW846 3050B	23-NOV-2009 14:00	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241611002		SW846 3050B	23-NOV-2009 14:00	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241611003		SW846 3050B	23-NOV-2009 14:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241611004		SW846 3050B	23-NOV-2009 14:00	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241611005		SW846 3050B	23-NOV-2009 14:00	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241611006		SW846 3050B	23-NOV-2009 14:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241611007		SW846 3050B	23-NOV-2009 14:00	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241611008		SW846 3050B	23-NOV-2009 14:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241611009		SW846 3050B	23-NOV-2009 14:00	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241613011		SW846 3050B	23-NOV-2009 14:00	0.505 g	50 mL	99.0099	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: Gray soil.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 932723

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201995285	UI062540-I	.517	g
MS	1201978610	UI091124-01	.25	mL
MS	1201978610	UI091124-06	.25	mL
MSD	1201978611	UI091124-01	.25	mL
MSD	1201978611	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201995284		SW846 3050B	14-DEC-2009 22:00	0.516 g	50 mL	96.89922	SOIL
LCS	1201995285		SW846 3050B	14-DEC-2009 22:00	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241613001		SW846 3050B	14-DEC-2009 22:00	0.526 g	50 mL	95.05703	SOIL
DUP	1201978608	241613001	SW846 3050B	14-DEC-2009 22:00	0.526 g	50 mL	95.05703	SOIL
SDILT	1201978609	241613001	SW846 3050B	14-DEC-2009 22:00	0.526 g	50 mL	95.05703	SOIL
MS	1201978610	241613001	SW846 3050B	14-DEC-2009 22:00	0.512 g	50 mL	97.65625	SOIL
MSD	1201978611	241613001	SW846 3050B	14-DEC-2009 22:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241613002		SW846 3050B	14-DEC-2009 22:00	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241613003		SW846 3050B	14-DEC-2009 22:00	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241613004		SW846 3050B	14-DEC-2009 22:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241613005		SW846 3050B	14-DEC-2009 22:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241613006		SW846 3050B	14-DEC-2009 22:00	0.528 g	50 mL	94.69697	SOIL
SAMPLE	241613007		SW846 3050B	14-DEC-2009 22:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241613008		SW846 3050B	14-DEC-2009 22:00	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241613009		SW846 3050B	14-DEC-2009 22:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241613010		SW846 3050B	14-DEC-2009 22:00	0.531 g	50 mL	94.16196	SOIL
SAMPLE	241613011		SW846 3050B	14-DEC-2009 22:00	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241613012		SW846 3050B	14-DEC-2009 22:00	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241613013		SW846 3050B	14-DEC-2009 22:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241613014		SW846 3050B	14-DEC-2009 22:00	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241613015		SW846 3050B	14-DEC-2009 22:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241613016		SW846 3050B	14-DEC-2009 22:00	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241613017		SW846 3050B	14-DEC-2009 22:00	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241613018		SW846 3050B	14-DEC-2009 22:00	0.505 g	50 mL	99.0099	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238341	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: Brown,clumpy soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925644

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978992	UI031809A	.2	g
MS	1201978994	WHG091204-14	.3	mL
MSD	1201978996	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978991		SW846 7471A Prep	04-DEC-2009 15:40	0.539 g	30 mL	55.65863	SOIL
LCS	1201978992		SW846 7471A Prep	04-DEC-2009 15:40	0.2 g	30 mL	150	SOIL
SAMPLE	241613001		SW846 7471A Prep	04-DEC-2009 15:40	0.51 g	30 mL	58.82353	SOIL
DUP	1201978993	241613001	SW846 7471A Prep	04-DEC-2009 15:40	0.51 g	30 mL	58.82353	SOIL
MS	1201978994	241613001	SW846 7471A Prep	04-DEC-2009 15:40	0.538 g	30 mL	55.76208	SOIL
MSD	1201978996	241613001	SW846 7471A Prep	04-DEC-2009 15:40	0.516 g	30 mL	58.13953	SOIL
SDILT	1201978995	241613001	SW846 7471A Prep	04-DEC-2009 15:40	0.51 g	30 mL	58.82353	SOIL
SAMPLE	241613002		SW846 7471A Prep	04-DEC-2009 15:40	0.591 g	30 mL	50.76142	SOIL
SAMPLE	241613003		SW846 7471A Prep	04-DEC-2009 15:40	0.567 g	30 mL	52.91005	SOIL
SAMPLE	241613004		SW846 7471A Prep	04-DEC-2009 15:40	0.513 g	30 mL	58.47953	SOIL
SAMPLE	241613005		SW846 7471A Prep	04-DEC-2009 15:40	0.54 g	30 mL	55.55556	SOIL
SAMPLE	241613006		SW846 7471A Prep	04-DEC-2009 15:40	0.539 g	30 mL	55.65863	SOIL
SAMPLE	241613007		SW846 7471A Prep	04-DEC-2009 15:40	0.56 g	30 mL	53.57143	SOIL
SAMPLE	241613008		SW846 7471A Prep	04-DEC-2009 15:40	0.521 g	30 mL	57.58157	SOIL
SAMPLE	241613009		SW846 7471A Prep	04-DEC-2009 15:40	0.503 g	30 mL	59.64215	SOIL
SAMPLE	241613010		SW846 7471A Prep	04-DEC-2009 15:40	0.54 g	30 mL	55.55556	SOIL
SAMPLE	241613011		SW846 7471A Prep	04-DEC-2009 15:40	0.534 g	30 mL	56.17978	SOIL
SAMPLE	241613012		SW846 7471A Prep	04-DEC-2009 15:40	0.521 g	30 mL	57.58157	SOIL
SAMPLE	241613013		SW846 7471A Prep	04-DEC-2009 15:40	0.512 g	30 mL	58.59375	SOIL
SAMPLE	241613014		SW846 7471A Prep	04-DEC-2009 15:40	0.554 g	30 mL	54.15162	SOIL
SAMPLE	241613015		SW846 7471A Prep	04-DEC-2009 15:40	0.536 g	30 mL	55.97015	SOIL
SAMPLE	241613016		SW846 7471A Prep	04-DEC-2009 15:40	0.566 g	30 mL	53.00353	SOIL
SAMPLE	241613017		SW846 7471A Prep	04-DEC-2009 15:40	0.562 g	30 mL	53.38078	SOIL
SAMPLE	241613018		SW846 7471A Prep	04-DEC-2009 15:40	0.513 g	30 mL	58.47953	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5

Comments Sample 241613001 is a rocky brown soil.
Digestion Start Date: 04-DEC-09 15:40
Digestion End Date: 04-DEC-09 16:10

Prep LogBook

WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

NCR Report No.: 769427
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
12-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925482	See Below		

Potentially affected work order(s)(SDG): 241613(10-643)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978610MS 2. Failed RPD for DUP: QC 1201978608DUP 3. Failed Recovery for MSD/PSD: QC 1201978611MSD	1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for magnesium,potassium and titanium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for manganese due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 15-DEC-09

Data Validator/Group Leader:
Louise Smith 15-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
12-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925484	See Below		

Potentially affected work order(s)(SDG): 241613(10-643)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978616MS	The matrix spike recovery failed outside of the control limits for Se due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Paul Boyd 13-DEC-09

Data Validator/Group Leader:

Elizabeth Janssen 14-DEC-09

NCR Report No.: 770358
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
932724	See Below		

Potentially affected work order(s)(SDG): 241613(10-643)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978610MS 2. Failed Recovery for MSD/PSD: QC 1201978611MSD	1./2. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 15-DEC-09

Data Validator/Group Leader:

Louise Smith 16-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID:	UI090828-42	**Opened:**	16-SEP-09	**Amount :**	500 mL
Name:	TRACE ICP Na-1000SOUR	**Received:**	27-AUG-09	**Catalog Number :**	060011-02-03
Type:	Source Material	**Expires:**	16-SEP-10	**Lot Number :**	1017098
Employee:	Helen Camello			**Solvent :**	1%HNO3
Supplier:	02SI				
Description:	Sodium 1000 +/- 3 ug/mL in 1% HNO3				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID:	UI090925-40	**Opened:**	23-OCT-09	**Amount :**	500 mL
Name:	SECOND SOURCE STD -1	**Received:**	25-SEP-09	**Catalog Number :**	SGELMX38-500N
Type:	Source Material	**Expires:**	30-SEP-10	**Lot Number :**	4909129
Employee:	Helen Camello			**Solvent :**	5%HNO3
Supplier:	SPECTRO PURE				
Description:	SECOND SOURCE STD #1A 5%HNO3				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID:	UI090925-41	**Opened:**	23-OCT-09	**Amount :**	500 mL
Name:	SECOND SOURCE STD -1	**Received:**	25-SEP-09	**Catalog Number :**	SGELMX39-500B
Type:	Source Material	**Expires:**	30-SEP-10	**Lot Number :**	4909130
Employee:	Helen Camello			**Solvent :**	5%HNO3,TR.HF
Supplier:	SPECTRO PURE				
Description:	SECOND SOURCE STD #1B				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Standard Logbook

Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI

Standard Logbook

Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL

Standard Logbook

Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091208-42 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091208-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091208-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091208-43 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091208-44 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091208-45 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091208-46 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091208-47 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091215-43 **Opened:** 15-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 16-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WMS091204-04 **Opened:** 04-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 04-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091204-04A **Opened:** 04-DEC-09 **Balance Id :** 4025216

Name: ICPMS Cal Standard 10 **Received:** 04-DEC-09 **Pipet Id :** 3541598

Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091204-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091204-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091204-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091204-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091204-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091204-05 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 04-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091204-06 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 04-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091204-07 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 04-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 05-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091204-08 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091204-70 **Opened:** 04-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 04-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 05-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091205-04 **Opened:** 05-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 05-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1235248
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091205-04A **Opened:** 05-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091205-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091205-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091205-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091205-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091205-05 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 05-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091205-06 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 05-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091205-07 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 05-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 06-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1235248
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091205-08 **Opened:** 05-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 05-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091210-04 **Opened:** 10-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 10-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 11-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS091210-04A **Opened:** 10-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 10-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 11-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091210-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091210-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091210-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091210-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091210-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091210-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091210-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091210-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091210-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091210-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091210-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS091210-05 **Opened:** 10-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 10-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 11-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091210-06 **Opened:** 10-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 10-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 11-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS091210-07 **Opened:** 10-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 10-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 11-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091210-08 **Opened:** 10-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 10-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 11-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091210-70 **Opened:** 10-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 10-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 11-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091211-04 **Opened:** 11-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 11-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 12-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091211-04A **Opened:** 11-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 11-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 12-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091211-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091211-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091211-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091211-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091211-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091211-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091211-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091211-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091211-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091211-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091211-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091211-05 **Opened:** 11-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 11-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 12-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091211-06 **Opened:** 11-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 11-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 12-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091211-07 **Opened:** 11-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 11-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 12-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091211-08 **Opened:** 11-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 11-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 12-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091211-70 **Opened:** 11-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 11-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 12-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091212-04 **Opened:** 12-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 13-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091212-04A **Opened:** 12-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 12-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091212-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091212-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091212-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091212-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091212-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091212-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091212-05 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 12-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091212-06 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 12-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091212-07 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 12-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 13-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091212-08 **Opened:** 12-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 12-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 13-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1235248 **Opened:** 30-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 30-NOV-09
Type: Reagent/Solvent **Expires:** 06-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Standard Logbook

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238341 **Opened:** 04-DEC-09 **Lot Number :** H44032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Standard Logbook

Serial ID:	1239193	**Opened:**	07-DEC-09	**Amount :**	20 L
Name:	B-ICP-RINSE SOLN	**Received:**	07-DEC-09	**Lot Number :**	H04040+G34050
Type:	Reagent/Solvent	**Expires:**	13-DEC-09	**Solvent :**	3%HCL+1%HNO3
Employee:	Helen Camello				
Supplier:	GEL				
Description:	3%HCL+1%HNO3 RINSE SOLN.				
Comments:	None				

Serial ID:	1242318	**Opened:**	14-DEC-09	**Amount :**	20 L
Name:	B-ICP-RINSE SOLN	**Received:**	01-DEC-09	**Lot Number :**	H04040+G34050
Type:	Reagent/Solvent	**Expires:**	20-DEC-09	**Solvent :**	3%HCL+1%HNO3
Employee:	Helen Camello				
Supplier:	GEL				
Description:	3%HCL+1%HNO3 RINSE SOLN.				
Comments:	None				

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-643-1

Sample Analysis

Sample ID	Client ID
241614001	RE03-10-2742
241614002	RE03-10-2755
241614003	RE03-10-6971
241614004	RE03-10-6973
1201978492	Method Blank (MB) **ICP**
1201978493	Laboratory Control Sample (LCS)
1201978496	241614001(RE03-10-2742L) Serial Dilution (SD)
1201978494	241614001(RE03-10-2742D) Sample Duplicate (DUP)
1201978495	241614001(RE03-10-2742S) Matrix Spike (MS)
1201978497	Method Blank (MB) **ICP-MS**
1201978498	Laboratory Control Sample (LCS)
1201978501	241614001(RE03-10-2742L) Serial Dilution (SD)
1201978499	241614001(RE03-10-2742D) Sample Duplicate (DUP)
1201978500	241614001(RE03-10-2742S) Matrix Spike (MS)
1201978978	Method Blank (MB) **CVAA**
1201978979	Laboratory Control Sample (LCS)
1201978982	241614001(RE03-10-2742L) Serial Dilution (SD)
1201978980	241614001(RE03-10-2742D) Sample Duplicate (DUP)
1201978981	241614001(RE03-10-2742S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	925431, 925433 and 925641
Prep Batch :	925430, 925432 and 925638
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 241614001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson **Date:** 12/16/09

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614001 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-2742 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 14:45	120409A-1	925431
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 14:45	120409A-1	925431
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/07/09 21:52	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 21:52	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 14:45	120409A-1	925431
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	12/07/09 21:52	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:34	100809W4-3	925641
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 14:45	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-21-3	Silicon	50.3	ug/L	J	25	100	100	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 21:52	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 14:45	120409A-1	925431
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 14:45	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614002 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-2755 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	222	ug/L		68	200	200	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-39-3	Barium	3.5	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-70-2	Calcium	160	ug/L	J	50	200	200	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-47-3	Chromium	1.42	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 15:27	120409A-1	925431
7439-89-6	Iron	152	ug/L		30	100	100	1	P	HSC	12/04/09 15:27	120409A-1	925431
7439-92-1	Lead	0.50	ug/L	J	0.5	2	2	1	MS	PRB	12/07/09 22:16	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 22:16	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 15:27	120409A-1	925431
7439-96-5	Manganese	4.42	ug/L	J	1	5	5	1	MS	PRB	12/07/09 22:16	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:46	100809W4-3	925641
7440-02-0	Nickel	1.53	ug/L	J	1.5	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-09-7	Potassium	128	ug/L	J	50	150	150	1	P	HSC	12/04/09 15:27	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-21-3	Silicon	546	ug/L		25	100	100	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-23-5	Sodium	377	ug/L		100	300	300	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-32-6	Titanium	3.14	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 22:16	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:27	120409A-1	925431
7440-66-6	Zinc	3.41	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 15:27	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614003 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-6971 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	142	ug/L	J	68	200	200	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-39-3	Barium	2.06	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-70-2	Calcium	95.1	ug/L	J	50	200	200	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-47-3	Chromium	1.39	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 15:34	120409A-1	925431
7439-89-6	Iron	141	ug/L		30	100	100	1	P	HSC	12/04/09 15:34	120409A-1	925431
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/07/09 22:22	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 22:22	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 15:34	120409A-1	925431
7439-96-5	Manganese	4.37	ug/L	J	1	5	5	1	MS	PRB	12/07/09 22:22	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:48	100809W4-3	925641
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 15:34	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-21-3	Silicon	269	ug/L		25	100	100	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-23-5	Sodium	320	ug/L		100	300	300	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-32-6	Titanium	2.46	ug/L	J	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 22:22	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:34	120409A-1	925431
7440-66-6	Zinc	5.2	ug/L	J	3.3	10	10	1	P	HSC	12/04/09 15:34	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-643-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241614004 **BASIS:** As Received **DATE COLLECTED** 19-NOV-09

CLIENT ID: RE03-10-6973 **LEVEL:** Low **DATE RECEIVED** 21-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/04/09 15:41	120409A-1	925431
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/04/09 15:41	120409A-1	925431
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	12/07/09 22:27	091207-2	925433
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	PRB	12/07/09 22:27	091207-2	925433
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/04/09 15:41	120409A-1	925431
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	12/07/09 22:27	091207-2	925433
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 13:50	100809W4-3	925641
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/04/09 15:41	120409A-1	925431
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-21-3	Silicon	49.2	ug/L	J	25	100	100	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	12/07/09 22:27	091207-2	925433
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/04/09 15:41	120409A-1	925431
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/04/09 15:41	120409A-1	925431

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925431	925430	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925433	925432	SW846 3005A	50	mL	50	mL	11/23/09	BCD1
925641	925638	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Nickel	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Selenium	2660	ug/L	2500	ug/L	106.6	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Silicon	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04-DEC-09 09:34	120409A-1
	Antimony	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Beryllium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Cadmium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Lead	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Lithium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Manganese	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Thallium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Uranium	54.8	ug/L	50	ug/L	109.7	90.0 – 110.0	MS	07-DEC-09 19:17	091207-2
	Mercury	4.9	ug/L	5	ug/L	98	90.0 – 110.0	AV	08-DEC-09 10:04	100809W4-3
CCV01										
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Boron	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Selenium	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Silicon	2460	ug/L	2500	ug/L	98.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Titanium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04-DEC-09 10:35	120409A-1
	Antimony	48.1	ug/L	50	ug/L	96.1	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Beryllium	52.2	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Lead	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Lithium	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Manganese	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Thallium	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Uranium	54.1	ug/L	50	ug/L	108.1	90.0 – 110.0	MS	07-DEC-09 19:45	091207-2
	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	08-DEC-09 10:10	100809W4-3
CCV02										
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1
	Arsenic	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04-DEC-09 10:56	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Boron	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Chromium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Nickel	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Selenium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Titanium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 10:56	120409A–1
	Antimony	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Beryllium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Cadmium	49.6	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Lead	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Lithium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Manganese	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Thallium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Uranium	54.3	ug/L	50	ug/L	108.6	90.0 – 110.0	MS	07–DEC–09 20:03	091207–2
	Mercury	4.98	ug/L	5	ug/L	99.6	80.0 – 120.0	AV	08–DEC–09 10:33	100809W4–3
CCV03										
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Arsenic	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 12:13	120409A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Nickel	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Selenium	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:13	120409A-1
	Antimony	46.8	ug/L	50	ug/L	93.5	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Beryllium	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Cadmium	48.3	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Lead	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Lithium	48	ug/L	50	ug/L	96	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Manganese	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Thallium	48.1	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Uranium	53.8	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	07-DEC-09 21:00	091207-2
	Mercury	4.98	ug/L	5	ug/L	99.6	80.0 – 120.0	AV	08-DEC-09 10:56	100809W4-3
CCV04										
	Aluminum	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Arsenic	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Selenium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-DEC-09 12:48	120409A-1
	Antimony	47.2	ug/L	50	ug/L	94.4	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Beryllium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Cadmium	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Lead	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Lithium	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Manganese	48.7	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Thallium	45.7	ug/L	50	ug/L	91.5	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Uranium	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	07-DEC-09 21:41	091207-2
	Mercury	4.95	ug/L	5	ug/L	99	80.0 – 120.0	AV	08-DEC-09 11:19	100809W4-3
CCV05										
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04-DEC-09 13:57	120409A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Nickel	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Selenium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–1
	Antimony	46.7	ug/L	50	ug/L	93.3	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Beryllium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Cadmium	48.1	ug/L	50	ug/L	96.2	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Lead	49.7	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Lithium	48.9	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Manganese	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Thallium	46.3	ug/L	50	ug/L	92.5	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Uranium	52.9	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	07–DEC–09 22:33	091207–2
	Mercury	4.92	ug/L	5	ug/L	98.4	80.0 – 120.0	AV	08–DEC–09 11:42	100809W4–3
CCV06										
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Boron	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Nickel	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Selenium	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silicon	2500	ug/L	2500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–1
	Mercury	4.93	ug/L	5	ug/L	98.5	80.0 – 120.0	AV	08–DEC–09 12:05	100809W4–3
CCV07										
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Boron	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Copper	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Nickel	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Selenium	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silicon	2520	ug/L	2500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–643–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–1
	Mercury	4.95	ug/L	5	ug/L	99	80.0 – 120.0	AV	08–DEC–09 12:28	100809W4–3
CCV08										
	Mercury	4.98	ug/L	5	ug/L	99.5	80.0 – 120.0	AV	08–DEC–09 12:52	100809W4–3
CCV09										
	Mercury	4.9	ug/L	5	ug/L	98	80.0 – 120.0	AV	08–DEC–09 13:15	100809W4–3
CCV10										
	Mercury	5	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	08–DEC–09 13:38	100809W4–3
CCV11										
	Mercury	5	ug/L	5	ug/L	100.1	80.0 – 120.0	AV	08–DEC–09 14:02	100809W4–3

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Lead	2.15	ug/L	2	ug/L	107.4	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Uranium	.244	ug/L	.2	ug/L	122	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Manganese	5.56	ug/L	5	ug/L	111.1	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Thallium	1.06	ug/L	1	ug/L	106.2	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Lithium	11.3	ug/L	10	ug/L	113	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Cadmium	1.05	ug/L	1	ug/L	105	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Beryllium	.598	ug/L	.5	ug/L	119.6	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Antimony	2.96	ug/L	3	ug/L	98.6	70.0 - 130.0	MS	07-DEC-09 19:28	091207-2
	Mercury	.164	ug/L	.2	ug/L	82	70.0 - 130.0	AV	08-DEC-09 10:08	100809W4-3
PQL01										
	Aluminum	206	ug/L	200	ug/L	103	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Nickel	5.43	ug/L	5	ug/L	108.5	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Potassium	162	ug/L	150	ug/L	107.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Sodium	292	ug/L	300	ug/L	97.4	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Arsenic	29.2	ug/L	30	ug/L	97.5	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Barium	5.2	ug/L	5	ug/L	104	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Chromium	5.1	ug/L	5	ug/L	102	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Calcium	203	ug/L	200	ug/L	101.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Selenium	29.4	ug/L	30	ug/L	98	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Silicon	103	ug/L	100	ug/L	102.8	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 - 130.0	P	04-DEC-09 09:48	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-643-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 09:41	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 09:41	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 09:41	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 09:41	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 09:41	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 09:41	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 09:41	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 09:41	120409A-1
	Antimony	1.54	+/-3	J	1.0	3.0	LIQ	MS	07-DEC-09 19:23	091207-2
	Beryllium	-0.105	+/-.5	J	0.1	0.5	LIQ	MS	07-DEC-09 19:23	091207-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	07-DEC-09 19:23	091207-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	07-DEC-09 19:23	091207-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	07-DEC-09 19:23	091207-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	07-DEC-09 19:23	091207-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	07-DEC-09 19:23	091207-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	07-DEC-09 19:23	091207-2
	Mercury	-0.082	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 10:06	100809W4-3
CCB01										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 10:42	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 10:42	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 10:42	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Potassium	101.63	+/–150	J	50.0	150	LIQ	P	04–DEC–09 10:42	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 10:42	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 10:42	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 10:42	120409A–1
	Antimony	1.14	+/–3	J	1.0	3.0	LIQ	MS	07–DEC–09 19:51	091207–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	07–DEC–09 19:51	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	07–DEC–09 19:51	091207–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	07–DEC–09 19:51	091207–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	07–DEC–09 19:51	091207–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	07–DEC–09 19:51	091207–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	07–DEC–09 19:51	091207–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	07–DEC–09 19:51	091207–2
	Mercury	–0.077	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:12	100809W4–3
CCB02										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 11:03	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 11:03	120409A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 11:03	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 11:03	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 11:03	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 11:03	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 11:03	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 11:03	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 11:03	120409A–1
	Antimony	2.56	+/–3	J	1.0	3.0	LIQ	MS	07–DEC–09 20:08	091207–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	07–DEC–09 20:08	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	07–DEC–09 20:08	091207–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	07–DEC–09 20:08	091207–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	07–DEC–09 20:08	091207–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	07–DEC–09 20:08	091207–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	07–DEC–09 20:08	091207–2
	Uranium	0.096	+/–.2	J	0.05	0.2	LIQ	MS	07–DEC–09 20:08	091207–2
	Mercury	–0.068	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:35	100809W4–3
CCB03										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 12:20	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 12:20	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 12:20	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 12:20	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 12:20	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 12:20	120409A–1
	Antimony	1.14	+/–3	J	1.0	3.0	LIQ	MS	07–DEC–09 21:06	091207–2
	Beryllium	–0.123	+/–.5	J	0.1	0.5	LIQ	MS	07–DEC–09 21:06	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	07–DEC–09 21:06	091207–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	07–DEC–09 21:06	091207–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	07–DEC–09 21:06	091207–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	07–DEC–09 21:06	091207–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	07–DEC–09 21:06	091207–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	07–DEC–09 21:06	091207–2
	Mercury	–0.068	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:58	100809W4–3
CCB04										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 12:55	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 12:55	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 12:55	120409A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-643-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	04-DEC-09 12:55	120409A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	04-DEC-09 12:55	120409A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	04-DEC-09 12:55	120409A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	04-DEC-09 12:55	120409A-1
	Antimony	1.2	+/-3	J	1.0	3.0	LIQ	MS	07-DEC-09 21:47	091207-2
	Beryllium	-0.12	+/-.5	J	0.1	0.5	LIQ	MS	07-DEC-09 21:47	091207-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	07-DEC-09 21:47	091207-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	07-DEC-09 21:47	091207-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	07-DEC-09 21:47	091207-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	07-DEC-09 21:47	091207-2
	Thallium	0.401	+/-1	J	0.3	1.0	LIQ	MS	07-DEC-09 21:47	091207-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	07-DEC-09 21:47	091207-2
	Mercury	-0.073	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 11:21	100809W4-3
CCB05										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	04-DEC-09 14:03	120409A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	04-DEC-09 14:03	120409A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	04-DEC-09 14:03	120409A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	04-DEC-09 14:03	120409A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–643–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 14:03	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 14:03	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 14:03	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 14:03	120409A–1
	Antimony	1.35	+/–3	J	1.0	3.0	LIQ	MS	07–DEC–09 22:39	091207–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	07–DEC–09 22:39	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	07–DEC–09 22:39	091207–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	07–DEC–09 22:39	091207–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	07–DEC–09 22:39	091207–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	07–DEC–09 22:39	091207–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	07–DEC–09 22:39	091207–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	07–DEC–09 22:39	091207–2
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 11:44	100809W4–3
CCB06										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 14:59	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 14:59	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 14:59	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 14:59	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 14:59	120409A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–643–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 14:59	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 14:59	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 14:59	120409A–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 12:07	100809W4–3
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	04–DEC–09 15:55	120409A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	04–DEC–09 15:55	120409A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	04–DEC–09 15:55	120409A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	04–DEC–09 15:55	120409A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	04–DEC–09 15:55	120409A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	04–DEC–09 15:55	120409A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	04–DEC–09 15:55	120409A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	04–DEC–09 15:55	120409A–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 12:30	100809W4–3
CCB08										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 12:54	100809W4–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–643–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB09										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 13:17	100809W4–3
CCB10										
	Mercury	–0.075	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 13:40	100809W4–3
CCB11										
	Mercury	–0.07	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 14:04	100809W4–3

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–643–1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978492								
	Aluminum	68	ug/L	+/–200	U	P	68	200
	Arsenic	5	ug/L	+/–30.0	U	P	5	30
	Boron	15	ug/L	+/–50.0	U	P	15	50
	Barium	1	ug/L	+/–5.0	U	P	1	5
	Cobalt	1	ug/L	+/–5.0	U	P	1	5
	Iron	30	ug/L	+/–100	U	P	30	100
	Nickel	1.5	ug/L	+/–5.0	U	P	1.5	5
	Selenium	5	ug/L	+/–30.0	U	P	5	30
	Silver	1	ug/L	+/–5.0	U	P	1	5
	Zinc	3.98	ug/L	+/–10.0	J	P	3.3	10
	Vanadium	1	ug/L	+/–5.0	U	P	1	5
	Titanium	1	ug/L	+/–5.0	U	P	1	5
	Sodium	100	ug/L	+/–300	U	P	100	300
	Silicon	25	ug/L	+/–100	U	P	25	100
	Potassium	50	ug/L	+/–150	U	P	50	150
	Magnesium	85	ug/L	+/–300	U	P	85	300
	Copper	3	ug/L	+/–10.0	U	P	3	10
	Chromium	1	ug/L	+/–5.0	U	P	1	5
	Calcium	50	ug/L	+/–200	U	P	50	200
1201978497								
	Antimony	1	ug/L	+/–3.0	U	MS	1	3
	Beryllium	–0.11	ug/L	+/–0.5	J	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/–1.0	U	MS	0.11	1
	Lead	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Lithium	2	ug/L	+/–10.0	U	MS	2	10
	Manganese	1	ug/L	+/–5.0	U	MS	1	5
	Thallium	0.3	ug/L	+/–1.0	U	MS	0.3	1
	Uranium	0.05	ug/L	+/–0.2	U	MS	0.05	0.2
1201978978								
	Mercury	–0.1	ug/L	+/–0.2	J	AV	0.066	0.2

METALS
-4-
Interference Check Sample

SDG No: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Arsenic	-0.564	ug/L					04-DEC-09 09:55	120409A-1
	Barium	1.92	ug/L					04-DEC-09 09:55	120409A-1
	Boron	-5.89	ug/L					04-DEC-09 09:55	120409A-1
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Chromium	1.28	ug/L					04-DEC-09 09:55	120409A-1
	Cobalt	-1.39	ug/L					04-DEC-09 09:55	120409A-1
	Copper	1.06	ug/L					04-DEC-09 09:55	120409A-1
	Iron	184000	ug/L	200000	ug/L	92	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 - 120.0	04-DEC-09 09:55	120409A-1
	Nickel	3.73	ug/L					04-DEC-09 09:55	120409A-1
	Potassium	-19.7	ug/L					04-DEC-09 09:55	120409A-1
	Selenium	-0.0013	ug/L					04-DEC-09 09:55	120409A-1
	Silicon	0.455	ug/L					04-DEC-09 09:55	120409A-1
	Silver	-1.58	ug/L					04-DEC-09 09:55	120409A-1
	Sodium	24.7	ug/L					04-DEC-09 09:55	120409A-1
	Titanium	-0.536	ug/L					04-DEC-09 09:55	120409A-1
	Vanadium	-1.65	ug/L					04-DEC-09 09:55	120409A-1
	Zinc	-7.1	ug/L					04-DEC-09 09:55	120409A-1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Arsenic	512	ug/L	500	ug/L	102	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Barium	505	ug/L	500	ug/L	101	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Boron	519	ug/L	500	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Chromium	482	ug/L	500	ug/L	96.3	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Copper	574	ug/L	500	ug/L	115	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 - 120.0	04-DEC-09 10:01	120409A-1

METALS
-4-
Interference Check Sample

SDG No: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Nickel	462	ug/L	500	ug/L	92.4	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Potassium	5530	ug/L	5000	ug/L	111	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Selenium	2610	ug/L	2500	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Silicon	5370	ug/L	5000	ug/L	107	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Silver	274	ug/L	250	ug/L	110	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Sodium	5210	ug/L	5000	ug/L	104	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Titanium	514	ug/L	500	ug/L	103	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Vanadium	513	ug/L	500	ug/L	103	80.0 - 120.0	04-DEC-09 10:01	120409A-1
	Zinc	488	ug/L	500	ug/L	97.7	80.0 - 120.0	04-DEC-09 10:01	120409A-1

METALS
–4–
Interference Check Sample

SDG No: 10–643–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.273	ug/L					07–DEC–09 19:34	091207–2
	Beryllium	–0.033	ug/L					07–DEC–09 19:34	091207–2
	Cadmium	0.466	ug/L					07–DEC–09 19:34	091207–2
	Lead	0.184	ug/L					07–DEC–09 19:34	091207–2
	Lithium	0.012	ug/L					07–DEC–09 19:34	091207–2
	Manganese	6.0	ug/L					07–DEC–09 19:34	091207–2
	Thallium	0.022	ug/L					07–DEC–09 19:34	091207–2
	Uranium	0.012	ug/L					07–DEC–09 19:34	091207–2
ICSAB01									
	Antimony	22.9	ug/L	20.1	ug/L	114	80.0 – 120.0	07–DEC–09 19:40	091207–2
	Beryllium	19.3	ug/L	20	ug/L	96.3	80.0 – 120.0	07–DEC–09 19:40	091207–2
	Cadmium	21.1	ug/L	20.4	ug/L	103	80.0 – 120.0	07–DEC–09 19:40	091207–2
	Lead	20.4	ug/L	20.5	ug/L	99.4	80.0 – 120.0	07–DEC–09 19:40	091207–2
	Lithium	20.6	ug/L	20	ug/L	103	80.0 – 120.0	07–DEC–09 19:40	091207–2
	Manganese	26.7	ug/L	25.8	ug/L	103	80.0 – 120.0	07–DEC–09 19:40	091207–2
	Thallium	19.8	ug/L	20	ug/L	98.9	80.0 – 120.0	07–DEC–09 19:40	091207–2
	Uranium	22.4	ug/L	20	ug/L	112	80.0 – 120.0	07–DEC–09 19:40	091207–2

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–643–1 **Client ID:** RE03–10–2742S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241614001 **Spike ID:** 1201978495

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5360		68	U	5000	107		P
Arsenic	ug/L	75–125	512		5	U	500	102		P
Barium	ug/L	75–125	536		1	U	500	107		P
Boron	ug/L	75–125	509		15	U	500	102		P
Calcium	ug/L	75–125	5270		50	U	5000	105		P
Chromium	ug/L	75–125	522		1	U	500	104		P
Cobalt	ug/L	75–125	511		1	U	500	102		P
Copper	ug/L	75–125	528		3	U	500	106		P
Iron	ug/L	75–125	5290		30	U	5000	106		P
Magnesium	ug/L	75–125	5360		85	U	5000	106		P
Nickel	ug/L	75–125	518		1.5	U	500	104		P
Potassium	ug/L	75–125	5170		50	U	5000	103		P
Selenium	ug/L	75–125	516		5	U	500	103		P
Silicon	ug/L	75–125	5190		50.3	J	5000	103		P
Silver	ug/L	75–125	524		1	U	500	105		P
Sodium	ug/L	75–125	5170		100	U	5000	103		P
Titanium	ug/L	75–125	525		1	U	500	105		P
Vanadium	ug/L	75–125	533		1	U	500	107		P
Zinc	ug/L	75–125	512		3.3	U	500	102		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-643-1 **Client ID** RE03-10-2742S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241614001 **Spike ID:** 1201978500

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Lead	ug/L	75-125	41.3		0.5	U	40	103		MS
Lithium	ug/L	75-125	52.2		2	U	50	104		MS
Manganese	ug/L	75-125	49.6		1	U	50	99.1		MS
Thallium	ug/L	75-125	98.1		0.3	U	100	97.9		MS
Uranium	ug/L	75-125	53.8		0.05	U	50	108		MS
Antimony	ug/L	75-125	184		1	U	200	91.8		MS
Beryllium	ug/L	75-125	53.7		0.1	U	50	107		MS
Cadmium	ug/L	75-125	10.1		0.11	U	10	101		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–643–1 **Client ID** RE03–10–2742S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241614001 **Spike ID:** 1201978981

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	1.89		0.066	U	2	94.4		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–2742D

Sample ID: 241614001 **Duplicate ID:** 1201978494 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Boron	ug/L		15	U	15	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L		50	U	50	U			P
Selenium	ug/L		5	U	5	U			P
Silicon	ug/L	+/–100	50.3	J	50.4	J	.189		P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L		100	U	100	U			P
Titanium	ug/L		1	U	1	U			P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		3.3	U	3.3	U			P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–643–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–2742D

Sample ID: 241614001 **Duplicate ID:** 1201978499 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Lithium	ug/L		2	U	2	U			MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.3	U	0.3	U			MS
Uranium	ug/L		0.05	U	0.05	U			MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-643-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03-10-2742D

Sample ID: 241614001 **Duplicate ID:** 1201978980 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

METALS
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Laboratory Control Sample Summary

SDG NO. 10–643–1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978493								
	Selenium	ug/L	500	524		105	80–120	P
	Silicon	ug/L	5000	5140		103	80–120	P
	Silver	ug/L	500	521		104	80–120	P
	Sodium	ug/L	5000	5110		102	80–120	P
	Titanium	ug/L	500	524		105	80–120	P
	Vanadium	ug/L	500	531		106	80–120	P
	Zinc	ug/L	500	516		103	80–120	P
	Potassium	ug/L	5000	5130		103	80–120	P
	Aluminum	ug/L	5000	5290		106	80–120	P
	Arsenic	ug/L	500	508		102	80–120	P
	Barium	ug/L	500	533		107	80–120	P
	Boron	ug/L	500	510		102	80–120	P
	Calcium	ug/L	5000	5270		105	80–120	P
	Chromium	ug/L	500	520		104	80–120	P
	Cobalt	ug/L	500	509		102	80–120	P
	Copper	ug/L	500	527		105	80–120	P
	Iron	ug/L	5000	5300		106	80–120	P
	Magnesium	ug/L	5000	5370		107	80–120	P
	Nickel	ug/L	500	517		103	80–120	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–643–1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978498								
	Antimony	ug/L	50	42		84	80–120	MS
	Beryllium	ug/L	50	53		106	80–120	MS
	Cadmium	ug/L	50	51.5		103	80–120	MS
	Lead	ug/L	50	53.2		106	80–120	MS
	Lithium	ug/L	50	52.3		105	80–120	MS
	Manganese	ug/L	50	51.6		103	80–120	MS
	Thallium	ug/L	50	51.2		102	80–120	MS
	Uranium	ug/L	50	55.5		111	80–120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-643-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978979								
	Mercury	ug/L	2	1.87		93.6	80-120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-643-1 **Client ID** RE03-10-2742L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241614001 **Serial Dilution ID:** 1201978496

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Boron	15	U	75	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silicon	50.3	J	125	U	100			P
Silver	1	U	5	U				P
Sodium	100	U	500	U				P
Titanium	1	U	5	U				P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-643-1 **Client ID** RE03-10-2742L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241614001 **Serial Dilution ID:** 1201978501

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	19.3					MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Lithium	2	U	10	U				MS
Manganese	1	U	5	U				MS
Thallium	.3	U	1.5	U				MS
Uranium	.05	U	.25	U				MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–643–1 **Client ID** RE03–10–2742L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241614001 **Serial Dilution ID:** 1201978982

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-643-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925430						
1201978492	MB for batch 925430	MB	W	23-NOV-09	50mL	50mL	
1201978493	LCS for batch 925430	LCS	W	23-NOV-09	50mL	50mL	
1201978495	RE03-10-2742S	MS	W	23-NOV-09	50mL	50mL	
1201978494	RE03-10-2742D	DUP	W	23-NOV-09	50mL	50mL	
241614001	RE03-10-2742	SAMPLE	W	23-NOV-09	50mL	50mL	
241614002	RE03-10-2755	SAMPLE	W	23-NOV-09	50mL	50mL	
241614003	RE03-10-6971	SAMPLE	W	23-NOV-09	50mL	50mL	
241614004	RE03-10-6973	SAMPLE	W	23-NOV-09	50mL	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-643-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925432						
1201978497	MB for batch 925432	MB	W	23-NOV-09	50mL	50mL	
1201978498	LCS for batch 925432	LCS	W	23-NOV-09	50mL	50mL	
1201978500	RE03-10-2742S	MS	W	23-NOV-09	50mL	50mL	
1201978499	RE03-10-2742D	DUP	W	23-NOV-09	50mL	50mL	
241614001	RE03-10-2742	SAMPLE	W	23-NOV-09	50mL	50mL	
241614002	RE03-10-2755	SAMPLE	W	23-NOV-09	50mL	50mL	
241614003	RE03-10-6971	SAMPLE	W	23-NOV-09	50mL	50mL	
241614004	RE03-10-6973	SAMPLE	W	23-NOV-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-643-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925638						
1201978978	MB for batch 925638	MB	W	07-DEC-09	20mL	20mL	
1201978979	LCS for batch 925638	LCS	W	07-DEC-09	20mL	20mL	
1201978981	RE03-10-2742S	MS	W	07-DEC-09	20mL	20mL	
1201978980	RE03-10-2742D	DUP	W	07-DEC-09	20mL	20mL	
241614001	RE03-10-2742	SAMPLE	W	07-DEC-09	20mL	20mL	
241614002	RE03-10-2755	SAMPLE	W	07-DEC-09	20mL	20mL	
241614003	RE03-10-6971	SAMPLE	W	07-DEC-09	20mL	20mL	
241614004	RE03-10-6973	SAMPLE	W	07-DEC-09	20mL	20mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 04–DEC–09

Client Sdg: 10–643–1
Method P
Data File: 120409A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S0.1	1	09:08			X	X		X			X	X	X							X	X	X	X	X			X		X	X
S0.5	1	09:14	X		X	X		X		X	X	X	X				X			X	X	X	X	X			X		X	X
SCAL	1	09:21	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S10	1	09:28	X							X				X			X								X					
ICV01	1	09:34	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICB01	1	09:41	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
PQL01	1	09:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSA01	1	09:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSAB01	1	10:01	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR01	1	10:06	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR02	1	10:12	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB01	1	10:42	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR03	1	10:49	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV02	1	10:56	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB02	1	11:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB03	1	12:20	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV04	1	12:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB04	1	12:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	14:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978492	1	14:10	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978493	1	14:18	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
241614001	1	14:45	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV06	1	14:52	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB06	1	14:59	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978494	1	15:06	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978495	1	15:13	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201978496	5	15:20	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241614002	1	15:27	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241614003	1	15:34	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241614004	1	15:41	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV07	1	15:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB07	1	15:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–643–1
Method AV
Data File: 100809W4–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:52																	X											
S0.2	1	09:54																	X											
S0.5	1	09:56																	X											
S2.0	1	09:58																	X											
S5.0	1	10:00																	X											
S10.0	1	10:02																	X											
ICV01	1	10:04																	X											
ICB01	1	10:06																	X											
CRDL01	1	10:08																	X											
CCV01	1	10:10																	X											
CCB01	1	10:12																	X											
ZZZZZZ	1	10:14																												
ZZZZZZ	1	10:15																												
ZZZZZZ	1	10:17																												
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	5	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
CCV02	1	10:33																	X											
CCB02	1	10:35																	X											
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												
ZZZZZZ	1	10:40																												
ZZZZZZ	1	10:42																												
ZZZZZZ	1	10:44																												
ZZZZZZ	5	10:46																												
ZZZZZZ	1	10:48																												
ZZZZZZ	1	10:50																												
ZZZZZZ	1	10:52																												
ZZZZZZ	1	10:54																												
CCV03	1	10:56																	X											
CCB03	1	10:58																	X											
ZZZZZZ	1	11:00																												
ZZZZZZ	5	11:02																												
ZZZZZZ	1	11:03																												
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:09																											
ZZZZZZ	1	11:11																											
ZZZZZZ	1	11:13																											
ZZZZZZ	5	11:15																											
ZZZZZZ	1	11:17																											
CCV04	1	11:19															X												
CCB04	1	11:21															X												
ZZZZZZ	1	11:23																											
ZZZZZZ	1	11:25																											
ZZZZZZ	1	11:27																											
ZZZZZZ	1	11:29																											
ZZZZZZ	5	11:30																											
ZZZZZZ	1	11:32																											
ZZZZZZ	1	11:34																											
ZZZZZZ	1	11:36																											
ZZZZZZ	1	11:38																											
ZZZZZZ	1	11:40																											
CCV05	1	11:42															X												
CCB05	1	11:44															X												
ZZZZZZ	1	11:46																											
ZZZZZZ	5	11:48																											
ZZZZZZ	1	11:50																											
ZZZZZZ	1	11:52																											
ZZZZZZ	1	11:54																											
ZZZZZZ	1	11:56																											
ZZZZZZ	1	11:57																											
ZZZZZZ	1	11:59																											
ZZZZZZ	1	12:01																											
ZZZZZZ	1	12:03																											
CCV06	1	12:05															X												
CCB06	1	12:07															X												
ZZZZZZ	1	12:09																											
ZZZZZZ	1	12:11																											
ZZZZZZ	1	12:13																											
ZZZZZZ	1	12:15																											
ZZZZZZ	1	12:17																											
ZZZZZZ	1	12:19																											
ZZZZZZ	5	12:21																											
ZZZZZZ	1	12:23																											
ZZZZZZ	1	12:25																											

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	12:27																												
CCV07	1	12:28																	X											
CCB07	1	12:30																	X											
ZZZZZZ	1	12:32																												
ZZZZZZ	1	12:34																												
ZZZZZZ	1	12:36																												
ZZZZZZ	1	12:38																												
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:42																												
ZZZZZZ	1	12:44																												
ZZZZZZ	1	12:46																												
ZZZZZZ	1	12:48																												
ZZZZZZ	1	12:50																												
CCV08	1	12:52																	X											
CCB08	1	12:54																	X											
ZZZZZZ	1	12:56																												
ZZZZZZ	5	12:57																												
ZZZZZZ	1	12:59																												
ZZZZZZ	1	13:01																												
ZZZZZZ	1	13:03																												
ZZZZZZ	1	13:05																												
ZZZZZZ	1	13:07																												
ZZZZZZ	1	13:09																												
ZZZZZZ	1	13:11																												
ZZZZZZ	1	13:13																												
CCV09	1	13:15																	X											
CCB09	1	13:17																	X											
ZZZZZZ	1	13:19																												
ZZZZZZ	1	13:21																												
ZZZZZZ	1	13:23																												
ZZZZZZ	1	13:25																												
1201978978	1	13:27																	X											
1201978979	1	13:29																	X											
ZZZZZZ	1	13:31																												
ZZZZZZ	1	13:32																												
241614001	1	13:34																	X											
1201978980	1	13:36																	X											
CCV10	1	13:38																	X											
CCB10	1	13:40																	X											
1201978981	1	13:42																	X											

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
1201978982	5	13:44																X										
241614002	1	13:46																X										
241614003	1	13:48																X										
241614004	1	13:50																X										
ZZZZZZ	1	13:52																										
ZZZZZZ	1	13:54																										
ZZZZZZ	1	13:56																										
ZZZZZZ	1	13:58																										
ZZZZZZ	1	14:00																										
CCV11	1	14:02																X										
CCB11	1	14:04																X										

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 07-DEC-09 **End Date:** 07-DEC-09

Client Sdg: 10-643-1
Method MS
Data File: 091207-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:00		X			X		X						X	X		X								X		X		
S10	1	19:05		X			X		X						X	X		X								X		X		
S100	1	19:11		X			X		X						X	X		X								X		X		
ICV01	1	19:17		X			X		X						X	X		X								X		X		
ICB01	1	19:23		X			X		X						X	X		X								X		X		
CRDL01	1	19:28		X			X		X						X	X		X								X		X		
ICSA01	1	19:34		X			X		X						X	X		X								X		X		
ICSAB01	1	19:40		X			X		X						X	X		X								X		X		
CCV01	1	19:45		X			X		X						X	X		X								X		X		
CCB01	1	19:51		X			X		X						X	X		X								X		X		
LR01	1	19:57		X			X		X						X	X		X								X		X		
CCV02	1	20:03		X			X		X						X	X		X								X		X		
CCB02	1	20:08		X			X		X						X	X		X								X		X		
ZZZZZZ	1	20:14																												
ZZZZZZ	1	20:20																												
ZZZZZZ	1	20:26																												
ZZZZZZ	1	20:32																												
ZZZZZZ	1	20:37																												
ZZZZZZ	1	20:43																												
ZZZZZZ	1	20:49																												
ZZZZZZ	5	20:55																												
CCV03	1	21:00		X			X		X						X	X		X								X		X		
CCB03	1	21:06		X			X		X						X	X		X								X		X		
1201978497	1	21:12		X			X		X						X	X		X								X		X		
1201978498	1	21:18		X			X		X						X	X		X								X		X		
ZZZZZZ	1	21:24																												
ZZZZZZ	1	21:29																												
ZZZZZZ	1	21:35																												
CCV04	1	21:41		X			X		X						X	X		X								X		X		
CCB04	1	21:47		X			X		X						X	X		X								X		X		
241614001	1	21:52		X			X		X						X	X		X								X		X		
1201978499	1	21:58		X			X		X						X	X		X								X		X		
1201978500	1	22:04		X			X		X						X	X		X								X		X		
1201978501	5	22:10		X			X		X						X	X		X								X		X		
241614002	1	22:16		X			X		X						X	X		X								X		X		
241614003	1	22:22		X			X		X						X	X		X								X		X		
241614004	1	22:27		X			X		X						X	X		X								X		X		
CCV05	1	22:33		X			X		X						X	X		X								X		X		
CCB05	1	22:39		X			X		X						X	X		X								X		X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-643-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–643–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-643-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	15.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silicon	251.611	25.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-643-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–643–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–643–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

Raw Data

Method: Hg_ReAlign
Result: 121109

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

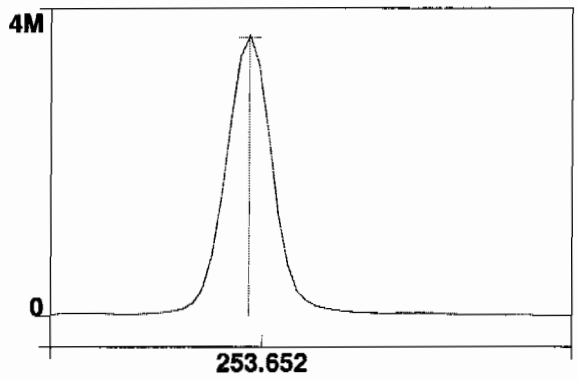

Intensity: 3630000.1 cps
Conc:

1

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00]	ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00]	ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00]	ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00]	ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00]	ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00]	ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00]	ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00]	ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00]	ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00]	ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00]	ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00]	ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00]	ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00]	ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00]	ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00]	ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00]	ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00]	ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00]	ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00]	ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00]	ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00]	ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00]	ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00]	ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00]	ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00]	ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00]	ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00]	ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00]	ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00]	ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43	%	09:04:58
2	Sc Radial	4907.6	4907.6	100.0	%	09:03:36
2	Y 371.029	887859.3	887859.3	100.38	%	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74	%	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00]	ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00]	ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00]	ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00]	ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00]	ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00]	ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00]	ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00]	ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00]	ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00]	ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00]	ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00]	ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00]	ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00]	ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00]	ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00]	ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00]	ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00]	ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00]	ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00]	ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00]	ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00]	ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00]	ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00]	ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00]	ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00]	ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00]	ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00]	ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00]	ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00]	ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00]	ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260	%	09:05:29
3	Sc Radial	4823.8	4823.8	98.2	%	09:04:01
3	Y 371.029	877949.7	877949.7	99.263	%	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13	%	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00] ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00] ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00] ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00] ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00] ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00] ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00] ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00] ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00] ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00] ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00] ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00] ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00] ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00] ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00] ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00] ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00] ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00] ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00] ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00] ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00] ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00] ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00] ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00] ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00] ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00] ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00] ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00] ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00] ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00] ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00] ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00] ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7	ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22	ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3	ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80	ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2	ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9	ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52	ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75	ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38	ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56	ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50	ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65	ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16	ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453	ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293	%		09:38:03
3	Sc Radial	4901.3	4901.3	99.8	%		09:36:44
3	Y 371.029	861618.1	861618.1	97.417	%		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79	%		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44	ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6	ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49	ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04	ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71	ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45	ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3	ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32	ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52	ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91	ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13	ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4	ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2	ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8	ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16	ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72	ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3	ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30	ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6	ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68	ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4	ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17	ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8	ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3	ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45	ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46	ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68	ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65	ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14	ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35	ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97	ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560	ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

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Ca 317.933Radial†        2844.7      5036.6 ug/L        62.48      5036.6 ppb        62.48   1.24%
   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†             58712.0      511.84 ug/L        0.548      511.84 ppb        0.548   0.11%
   QC value within limits for Cd 226.502  Recovery = 102.37%
Co 228.616†             31299.0      515.85 ug/L        4.347      515.85 ppb        4.347   0.84%
   QC value within limits for Co 228.616  Recovery = 103.17%
Cr 267.716†             55808.3      502.22 ug/L        0.664      502.22 ppb        0.664   0.13%
   QC value within limits for Cr 267.716  Recovery = 100.44%
Cu 324.752†            194870.1      520.66 ug/L        0.629      520.66 ppb        0.629   0.12%
   QC value within limits for Cu 324.752  Recovery = 104.13%
Fe 238.204 Radial†        417.6      5064.8 ug/L        94.14      5064.8 ppb        94.14   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.30%
K 766.490 Radial†       13749.0      2500.5 ug/L         7.68      2500.5 ppb         7.68   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.02%
Mg 279.077 IEC†           117.5      5266.4 ug/L        91.10      5266.4 ppb        91.10   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†            554773.8      525.75 ug/L        0.407      525.75 ppb        0.407   0.08%
   QC value within limits for Mn 257.610  Recovery = 105.15%
Mo 202.031†             10431.0      553.90 ug/L        4.052      553.90 ppb        4.052   0.73%
   QC value greater than the upper limit for Mo 202.031  Recovery = 110.78%
Na 589.592 Radial†       8728.4      2448.3 ug/L        22.68      2448.3 ppb        22.68   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 97.93%
Ni 231.604†             26132.9      511.71 ug/L        4.139      511.71 ppb        4.139   0.81%
   QC value within limits for Ni 231.604  Recovery = 102.34%
P 214.914†               5812.7      2521.9 ug/L        18.35      2521.9 ppb        18.35   0.73%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              5504.1      518.39 ug/L        2.831      518.39 ppb        2.831   0.55%
   QC value within limits for Pb 220.353  Recovery = 103.68%
S 181.975 Axial†         2375.5      2558.4 ug/L        15.13      2558.4 ppb        15.13   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†              1947.3      522.68 ug/L        3.231      522.68 ppb        3.231   0.62%
   QC value within limits for Sb 206.836  Recovery = 104.54%
Se 196.026†              5969.5      2664.5 ug/L        20.95      2664.5 ppb        20.95   0.79%
   QC value within limits for Se 196.026  Recovery = 106.58%
Si 251.611†            193620.3      4905.1 ug/L         2.68      4905.1 ppb         2.68   0.05%
   QC value within limits for Si 251.611  Recovery = 98.10%
Sn 189.927†              4161.1      550.94 ug/L        4.468      550.94 ppb        4.468   0.81%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.19%
Sr 421.552†            100372.3      526.55 ug/L        0.859      526.55 ppb        0.859   0.16%
   QC value within limits for Sr 421.552  Recovery = 105.31%
Ti 334.940†            367149.6      506.26 ug/L        0.490      506.26 ppb        0.490   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.25%
Tl 190.801†              2251.7      547.80 ug/L        5.406      547.80 ppb        5.406   0.99%
   QC value within limits for Tl 190.801  Recovery = 109.56%
U 409.014†              19450.3      501.27 ug/L        1.183      501.27 ppb        1.183   0.24%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†              90935.8      528.06 ug/L        0.368      528.06 ppb        0.368   0.07%
   QC value within limits for V 292.402  Recovery = 105.61%
Zn 213.857†             71271.1      519.16 ug/L        0.195      519.16 ppb        0.195   0.04%
   QC value within limits for Zn 213.857  Recovery = 103.83%
SiO2†                  194471.8       10543 ug/L         82.7       10543 ppb         82.7   0.78%
   QC value within limits for SiO2  Recovery = 98.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573	ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874	ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858	ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828	ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035	ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137	ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619	ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177	ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430	ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693	ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067	ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993	ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191	ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448	ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62	%		09:45:16
3	Sc Radial	4809.8	4809.8	98.0	%		09:43:49
3	Y 371.029	891134.4	891134.4	100.75	%		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29	%		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441	ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723	ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610	ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180	ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992	ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472	ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457	ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343	ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153	ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058	ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762	ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825	ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115	ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478	ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335	ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760	ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264	ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146	ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869	ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168	ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676	ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895	ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168	ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177	ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090	ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625	ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335	ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911	ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862	ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122	ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761	ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033	ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

```
Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23 ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387 ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017 ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160 ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294 ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85 ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483 ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642 ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361 ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945 ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466 ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882 ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097 ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27 ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712 %		09:52:18
3	Sc Radial	4852.1	4852.1	98.8 %		09:50:51
3	Y 371.029	874548.6	874548.6	98.878 %		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10 %		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183 ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16 ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185 ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770 ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077 ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838 ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66 ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913 ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038 ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662 ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654 ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396 ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98 ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24 ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527 ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109 ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89 ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387 ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08 ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097 ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743 ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303 ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402 ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45 ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476 ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669 ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664 ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232 ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640 ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539 ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441 ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06 ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

Ca 317.933Radial†	114.9	203.44 ug/L	5.843	203.44 ppb	5.843	2.87%
QC value within limits for Ca 317.933Radial Recovery = 101.72%						
Cd 226.502†	583.9	5.0878 ug/L	0.03067	5.0878 ppb	0.03067	0.60%
QC value within limits for Cd 226.502 Recovery = 101.76%						
Co 228.616†	304.8	5.0359 ug/L	0.08115	5.0359 ppb	0.08115	1.61%
QC value within limits for Co 228.616 Recovery = 100.72%						
Cr 267.716†	568.2	5.0983 ug/L	0.10423	5.0983 ppb	0.10423	2.04%
QC value within limits for Cr 267.716 Recovery = 101.97%						
Cu 324.752†	3983.8	10.643 ug/L	0.4808	10.643 ppb	0.4808	4.52%
QC value within limits for Cu 324.752 Recovery = 106.43%						
Fe 238.204 Radial†	6.6	79.730 ug/L	29.0033	79.730 ppb	29.0033	36.38%
QC value within limits for Fe 238.204 Radial Recovery = 79.73%						
K 766.490 Radial†	889.4	161.88 ug/L	26.810	161.88 ppb	26.810	16.56%
QC value within limits for K 766.490 Radial Recovery = 107.92%						
Mg 279.077 IEC†	7.3	326.69 ug/L	36.025	326.69 ppb	36.025	11.03%
QC value within limits for Mg 279.077 IEC Recovery = 108.90%						
Mn 257.610†	11132.0	10.543 ug/L	0.1659	10.543 ppb	0.1659	1.57%
QC value within limits for Mn 257.610 Recovery = 105.43%						
Mo 202.031†	195.8	10.395 ug/L	0.7057	10.395 ppb	0.7057	6.79%
QC value within limits for Mo 202.031 Recovery = 103.95%						
Na 589.592 Radial†	1041.2	292.04 ug/L	11.429	292.04 ppb	11.429	3.91%
QC value within limits for Na 589.592 Radial Recovery = 97.35%						
Ni 231.604†	277.1	5.4266 ug/L	0.08048	5.4266 ppb	0.08048	1.48%
QC value within limits for Ni 231.604 Recovery = 108.53%						
P 214.914†	338.0	149.63 ug/L	3.816	149.63 ppb	3.816	2.55%
QC value within limits for P 214.914 Recovery = 99.75%						
Pb 220.353†	96.3	9.0961 ug/L	1.14169	9.0961 ppb	1.14169	12.55%
QC value within limits for Pb 220.353 Recovery = 90.96%						
S 181.975 Axial†	89.5	96.357 ug/L	7.4396	96.357 ppb	7.4396	7.72%
QC value within limits for S 181.975 Axial Recovery = 96.36%						
Sb 206.836†	43.7	11.807 ug/L	0.5867	11.807 ppb	0.5867	4.97%
QC value within limits for Sb 206.836 Recovery = 118.07%						
Se 196.026†	65.7	29.405 ug/L	2.6665	29.405 ppb	2.6665	9.07%
QC value within limits for Se 196.026 Recovery = 98.02%						
Si 251.611†	4059.5	102.83 ug/L	1.217	102.83 ppb	1.217	1.18%
QC value within limits for Si 251.611 Recovery = 102.83%						
Sn 189.927†	80.0	10.600 ug/L	0.2084	10.600 ppb	0.2084	1.97%
QC value within limits for Sn 189.927 Recovery = 106.00%						
Sr 421.552†	936.7	4.9127 ug/L	0.04891	4.9127 ppb	0.04891	1.00%
QC value within limits for Sr 421.552 Recovery = 98.25%						
Ti 334.940†	3574.6	4.9172 ug/L	0.11528	4.9172 ppb	0.11528	2.34%
QC value within limits for Ti 334.940 Recovery = 98.34%						
Tl 190.801†	82.0	19.906 ug/L	0.6555	19.906 ppb	0.6555	3.29%
QC value within limits for Tl 190.801 Recovery = 99.53%						
U 409.014†	1925.7	49.768 ug/L	2.3685	49.768 ppb	2.3685	4.76%
QC value within limits for U 409.014 Recovery = 99.54%						
V 292.402†	835.7	5.0170 ug/L	0.03359	5.0170 ppb	0.03359	0.67%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	1408.8	10.286 ug/L	0.1748	10.286 ppb	0.1748	1.70%
QC value within limits for Zn 213.857 Recovery = 102.86%						
SiO2†	4025.3	218.19 ug/L	1.897	218.19 ppb	1.897	0.87%
QC value within limits for SiO2 Recovery = 102.44%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125 ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358 ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332 ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716 ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926 ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720 ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740 ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396 ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397 ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291 ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433 ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413 ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610 ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770 ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657 %		09:58:28
3	Sc Radial	4452.3	4452.3	90.7 %		09:57:29
3	Y 371.029	763138.6	763138.6	86.282 %		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26 %		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167 ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860 ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512 ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439 ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675 ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922 ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820 ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732 ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789 ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279 ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638 ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310 ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175 ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750 ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540 ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843 ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311 ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227 ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915 ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746 ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932 ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176 ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896 ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226 ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013 ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829 ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545 ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683 ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715 ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573 ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528 ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768 ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

Ca 317.933Radial†	272506.6	482480 ug/L	5269.3	482480 ppb	5269.3	1.09%
QC value within limits for Ca 317.933Radial Recovery = 96.50%						
Cd 226.502†	56301.0	472.81 ug/L	3.758	472.81 ppb	3.758	0.79%
QC value within limits for Cd 226.502 Recovery = 94.56%						
Co 228.616†	28228.3	462.55 ug/L	3.948	462.55 ppb	3.948	0.85%
QC value within limits for Co 228.616 Recovery = 92.51%						
Cr 267.716†	53154.8	481.60 ug/L	2.521	481.60 ppb	2.521	0.52%
QC value within limits for Cr 267.716 Recovery = 96.32%						
Cu 324.752†	211552.8	574.38 ug/L	6.835	574.38 ppb	6.835	1.19%
QC value within limits for Cu 324.752 Recovery = 114.88%						
Fe 238.204 Radial†	15285.8	184820 ug/L	1613.6	184820 ppb	1613.6	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 92.41%						
K 766.490 Radial†	30276.9	5529.3 ug/L	61.46	5529.3 ppb	61.46	1.11%
QC value within limits for K 766.490 Radial Recovery = 110.59%						
Mg 279.077 IEC†	11072.2	495270 ug/L	3223.1	495270 ppb	3223.1	0.65%
QC value within limits for Mg 279.077 IEC Recovery = 99.05%						
Mn 257.610†	519055.3	500.72 ug/L	5.664	500.72 ppb	5.664	1.13%
QC value within limits for Mn 257.610 Recovery = 100.14%						
Mo 202.031†	9037.2	492.69 ug/L	3.967	492.69 ppb	3.967	0.81%
QC value within limits for Mo 202.031 Recovery = 98.54%						
Na 589.592 Radial†	18579.3	5211.5 ug/L	48.18	5211.5 ppb	48.18	0.92%
QC value within limits for Na 589.592 Radial Recovery = 104.23%						
Ni 231.604†	23602.9	462.17 ug/L	3.523	462.17 ppb	3.523	0.76%
QC value within limits for Ni 231.604 Recovery = 92.43%						
P 214.914†	5752.3	2520.4 ug/L	39.08	2520.4 ppb	39.08	1.55%
QC value within limits for P 214.914 Recovery = 100.81%						
Pb 220.353†	3920.0	473.36 ug/L	5.165	473.36 ppb	5.165	1.09%
QC value within limits for Pb 220.353 Recovery = 94.67%						
S 181.975 Axial†	2522.0	2612.1 ug/L	33.01	2612.1 ppb	33.01	1.26%
QC value within limits for S 181.975 Axial Recovery = 104.49%						
Sb 206.836†	2110.6	551.22 ug/L	2.592	551.22 ppb	2.592	0.47%
QC value within limits for Sb 206.836 Recovery = 110.24%						
Se 196.026†	4382.9	2608.9 ug/L	24.27	2608.9 ppb	24.27	0.93%
QC value within limits for Se 196.026 Recovery = 104.36%						
Si 251.611†	211822.2	5368.0 ug/L	59.89	5368.0 ppb	59.89	1.12%
QC value within limits for Si 251.611 Recovery = 107.36%						
Sn 189.927†	3306.5	490.18 ug/L	5.219	490.18 ppb	5.219	1.06%
QC value within limits for Sn 189.927 Recovery = 98.04%						
Sr 421.552†	95213.6	495.06 ug/L	5.584	495.06 ppb	5.584	1.13%
QC value within limits for Sr 421.552 Recovery = 99.01%						
Ti 334.940†	354526.5	513.76 ug/L	5.094	513.76 ppb	5.094	0.99%
QC value within limits for Ti 334.940 Recovery = 102.75%						
Tl 190.801†	1932.2	484.94 ug/L	3.312	484.94 ppb	3.312	0.68%
QC value within limits for Tl 190.801 Recovery = 96.99%						
U 409.014†	20126.5	496.18 ug/L	5.005	496.18 ppb	5.005	1.01%
QC value within limits for U 409.014 Recovery = 99.24%						
V 292.402†	91259.0	512.63 ug/L	5.805	512.63 ppb	5.805	1.13%
QC value within limits for V 292.402 Recovery = 102.53%						
Zn 213.857†	71647.8	488.25 ug/L	4.200	488.25 ppb	4.200	0.86%
QC value within limits for Zn 213.857 Recovery = 97.65%						
SiO2†	212042.7	11499 ug/L	145.5	11499 ppb	145.5	1.27%
QC value within limits for SiO2 Recovery = 107.52%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756	ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667	ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135	ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848	ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093	ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797	ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198	ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818	ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763	ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182	ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618	ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359	ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817	ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239	ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303	%		10:09:54
3	Sc Radial	4249.7	4249.7	86.6	%		10:08:52
3	Y 371.029	725964.8	725964.8	82.079	%		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68	%		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798	ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190	ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643	ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484	ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540	ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451	ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510	ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493	ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166	ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306	ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824	ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920	ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523	ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000	ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543	ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915	ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130	ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607	ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07	ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769	ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606	ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498	ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648	ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634	ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188	ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173	ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661	ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929	ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598	ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512	ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635	ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674	ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731	ug/L	14731 ppb	10:16:40
2	Pb 220.353†	248482.1	260348.9	24447	ug/L	24447 ppb	10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788	ug/L	51788 ppb	10:16:40
2	Sb 206.836†	38447.2	40237.0	10413	ug/L	10413 ppb	10:16:40
2	Se 196.026†	22029.2	23096.0	10261	ug/L	10261 ppb	10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861	ug/L	47861 ppb	10:16:35
2	Sn 189.927†	75436.2	79020.2	10451	ug/L	10451 ppb	10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6	ug/L	9440.6 ppb	10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9	ug/L	9887.9 ppb	10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4	ug/L	9993.4 ppb	10:16:40
2	U 409.014†	-1890.4	793.9	-25.762	ug/L	-25.762 ppb	10:16:40
2	V 292.402†	1672052.7	1753005.2	10154	ug/L	10154 ppb	10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064	ug/L	14064 ppb	10:16:35
2	SiO2†	1854816.0	1942233.7	104910	ug/L	104910 ppb	10:17:14
3	Sc 361.383	988641.8	988641.8	95.109	%		10:16:54
3	Sc Radial	4729.3	4729.3	96.3	%		10:15:38
3	Y 371.029	819320.7	819320.7	92.634	%		10:16:54
3	Y RADIAL	5365.7	5365.7	95.02	%		10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602	ug/L	3.2602 ppb	10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512	ug/L	89.512 ppb	10:15:38
3	As 188.979†	30234.5	31825.9	10000	ug/L	10000 ppb	10:17:00
3	B 249.677†	253820.4	267339.4	5029.4	ug/L	5029.4 ppb	10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711	ug/L	13711 ppb	10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8	ug/L	2949.8 ppb	10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255	ug/L	41.255 ppb	10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7	ug/L	9764.7 ppb	10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6	ug/L	9048.6 ppb	10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049	ug/L	24049 ppb	10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842	ug/L	20842 ppb	10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040	ug/L	-4.8040 ppb	10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920	ug/L	288920 ppb	10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120	ug/L	67.120 ppb	10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3	ug/L	9608.3 ppb	10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1	ug/L	9732.1 ppb	10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49	ug/L	158.49 ppb	10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0	ug/L	9890.0 ppb	10:16:54
3	P 214.914†	38530.7	40247.0	14805	ug/L	14805 ppb	10:17:00
3	Pb 220.353†	247695.8	260509.3	24462	ug/L	24462 ppb	10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768	ug/L	51768 ppb	10:17:00
3	Sb 206.836†	38484.3	40428.7	10462	ug/L	10462 ppb	10:17:00
3	Se 196.026†	22001.3	23154.1	10287	ug/L	10287 ppb	10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957	ug/L	47957 ppb	10:16:54
3	Sn 189.927†	75099.1	78965.5	10444	ug/L	10444 ppb	10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4	ug/L	9338.4 ppb	10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1	ug/L	9968.1 ppb	10:16:48
3	Tl 190.801†	39204.4	41264.8	10043	ug/L	10043 ppb	10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525	ug/L	-16.525 ppb	10:17:00
3	V 292.402†	1668512.3	1755925.1	10171	ug/L	10171 ppb	10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095	ug/L	14095 ppb	10:16:54
3	SiO2†	1844505.7	1938761.5	104720	ug/L	104720 ppb	10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

```
   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb        20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L         28.6       24016 ppb         28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L         68.9       20784 ppb         68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L      12.73507      7.1483 ppb     12.73507 178.15%
K 766.490 Radial†   1604818.8      292410 ug/L       3446.4      292410 ppb       3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†         -5.2     -33.655 ug/L      97.1262     -33.655 ppb      97.1262 288.59%
Mn 257.610†        10099618.1      9563.8 ug/L        44.75      9563.8 ppb        44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb         5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb        0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb        11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb         37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb         16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb         14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb         35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb         21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb         48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb          3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb       113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb        40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb         24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb       5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb          8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb         18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb       1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

Ca 317.933Radial†	2842.6	5033.0 ug/L	38.86	5033.0 ppb	38.86	0.77%
QC value within limits for Ca 317.933Radial Recovery = 100.66%						
Cd 226.502†	57296.6	499.49 ug/L	1.604	499.49 ppb	1.604	0.32%
QC value within limits for Cd 226.502 Recovery = 99.90%						
Co 228.616†	29764.2	490.44 ug/L	1.510	490.44 ppb	1.510	0.31%
QC value within limits for Co 228.616 Recovery = 98.09%						
Cr 267.716†	55373.5	498.28 ug/L	1.039	498.28 ppb	1.039	0.21%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	186833.2	499.20 ug/L	1.013	499.20 ppb	1.013	0.20%
QC value within limits for Cu 324.752 Recovery = 99.84%						
Fe 238.204 Radial†	413.6	5016.3 ug/L	43.97	5016.3 ppb	43.97	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 100.33%						
K 766.490 Radial†	27646.2	5030.3 ug/L	29.10	5030.3 ppb	29.10	0.58%
QC value within limits for K 766.490 Radial Recovery = 100.61%						
Mg 279.077 IEC†	115.0	5152.7 ug/L	45.64	5152.7 ppb	45.64	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 103.05%						
Mn 257.610†	527884.4	500.28 ug/L	0.793	500.28 ppb	0.793	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%						
Mo 202.031†	9375.3	497.87 ug/L	2.477	497.87 ppb	2.477	0.50%
QC value within limits for Mo 202.031 Recovery = 99.57%						
Na 589.592 Radial†	34004.4	9538.2 ug/L	12.76	9538.2 ppb	12.76	0.13%
QC value within limits for Na 589.592 Radial Recovery = 95.38%						
Ni 231.604†	25164.0	492.74 ug/L	1.916	492.74 ppb	1.916	0.39%
QC value within limits for Ni 231.604 Recovery = 98.55%						
P 214.914†	5537.8	2401.6 ug/L	5.33	2401.6 ppb	5.33	0.22%
QC value within limits for P 214.914 Recovery = 96.06%						
Pb 220.353†	5333.7	502.25 ug/L	2.030	502.25 ppb	2.030	0.40%
QC value within limits for Pb 220.353 Recovery = 100.45%						
S 181.975 Axial†	914.8	984.56 ug/L	14.228	984.56 ppb	14.228	1.45%
QC value within limits for S 181.975 Axial Recovery = 98.46%						
Sb 206.836†	1878.1	502.30 ug/L	0.614	502.30 ppb	0.614	0.12%
QC value within limits for Sb 206.836 Recovery = 100.46%						
Se 196.026†	1126.1	518.56 ug/L	3.244	518.56 ppb	3.244	0.63%
QC value within limits for Se 196.026 Recovery = 103.71%						
Si 251.611†	97340.7	2460.2 ug/L	4.93	2460.2 ppb	4.93	0.20%
QC value within limits for Si 251.611 Recovery = 98.41%						
Sn 189.927†	3741.6	495.45 ug/L	2.400	495.45 ppb	2.400	0.48%
QC value within limits for Sn 189.927 Recovery = 99.09%						
Sr 421.552†	93386.6	489.90 ug/L	1.389	489.90 ppb	1.389	0.28%
QC value within limits for Sr 421.552 Recovery = 97.98%						
Ti 334.940†	359415.4	495.61 ug/L	0.472	495.61 ppb	0.472	0.10%
QC value within limits for Ti 334.940 Recovery = 99.12%						
Tl 190.801†	2062.9	502.10 ug/L	2.272	502.10 ppb	2.272	0.45%
QC value within limits for Tl 190.801 Recovery = 100.42%						
U 409.014†	18512.1	477.03 ug/L	1.407	477.03 ppb	1.407	0.29%
QC value within limits for U 409.014 Recovery = 95.41%						
V 292.402†	86553.8	502.14 ug/L	0.660	502.14 ppb	0.660	0.13%
QC value within limits for V 292.402 Recovery = 100.43%						
Zn 213.857†	67981.0	495.14 ug/L	0.700	495.14 ppb	0.700	0.14%
QC value within limits for Zn 213.857 Recovery = 99.03%						
SiO2†	97459.5	5271.0 ug/L	21.25	5271.0 ppb	21.25	0.40%
QC value within limits for SiO2 Recovery = 98.57%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142 ug/L	-1.7142 ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204 ug/L	-0.0204 ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748 ug/L	-0.0748 ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236 ug/L	4.2236 ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607 ug/L	-1.5607 ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238 ug/L	1.5238 ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416 ug/L	0.4416 ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924 ug/L	-0.0924 ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677 ug/L	-0.0677 ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894 ug/L	-0.1894 ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750 ug/L	-3.2750 ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873 ug/L	-0.1873 ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359 ug/L	0.5359 ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940 ug/L	3.4940 ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70 %		10:46:30
3	Sc Radial	4898.4	4898.4	99.8 %		10:45:03
3	Y 371.029	891482.0	891482.0	100.79 %		10:46:30
3	Y RADIAL	5630.5	5630.5	99.70 %		10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626 ug/L	-0.0626 ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479 ug/L	10.479 ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415 ug/L	0.5415 ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651 ug/L	9.3651 ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466 ug/L	0.1466 ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383 ug/L	0.0383 ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758 ug/L	11.758 ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172 ug/L	0.4172 ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063 ug/L	-0.0063 ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401 ug/L	0.4401 ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056 ug/L	-0.1056 ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671 ug/L	-5.2671 ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339 ug/L	89.339 ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75 ug/L	102.75 ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452 ug/L	0.0452 ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415 ug/L	0.4415 ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775 ug/L	16.775 ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537 ug/L	0.2537 ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081 ug/L	1.3081 ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238 ug/L	-0.1238 ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446 ug/L	-3.4446 ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873 ug/L	5.3873 ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933 ug/L	-4.2933 ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715 ug/L	1.3715 ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116 ug/L	1.8116 ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563 ug/L	-0.0563 ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284 ug/L	-0.0284 ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025 ug/L	2.8025 ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651 ug/L	-8.2651 ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454 ug/L	-0.2454 ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553 ug/L	0.3553 ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424 ug/L	1.1424 ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5      -1.5484 ug/L       2.77737      -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2      -4.5703 ug/L       5.15146      -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2       3.7743 ug/L       1.87844       3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3      -1.9597 ug/L       2.16197      -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2       1.5615 ug/L       0.21151       1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5       1.5214 ug/L       0.96781       1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5      -0.0343 ug/L       0.07167      -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1      -0.0500 ug/L       0.01994      -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446       0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -175.7      -4.5411 ug/L       3.27969      -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -22.7      -0.1300 ug/L       0.15236      -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217       0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3       2.3658 ug/L       1.17872       2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753	ug/L	-8.3753 ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374	ug/L	0.9374 ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728	ug/L	17.728 ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640	ug/L	1.8640 ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03	ug/L	183.03 ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144	ug/L	-36.144 ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244	ug/L	-0.8244 ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527	ug/L	0.3527 ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635	ug/L	-0.1635 ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719	ug/L	-3.3719 ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309	ug/L	4.2309 ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606	ug/L	-6.7606 ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455	ug/L	-0.4455 ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451	ug/L	-81.451 ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220	%		10:53:23
3	Sc Radial	4812.6	4812.6	98.0	%		10:52:05
3	Y 371.029	862360.3	862360.3	97.500	%		10:53:23
3	Y RADIAL	5507.3	5507.3	97.52	%		10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149	ug/L	-2.3149 ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070	ug/L	-4.1070 ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627	ug/L	-11.627 ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198	ug/L	1.4198 ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813	ug/L	-0.0813 ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080	ug/L	0.0080 ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437	ug/L	21.437 ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926	ug/L	-0.8926 ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116	ug/L	0.0116 ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157	ug/L	0.1157 ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678	ug/L	-5.1678 ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140	ug/L	382140 ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864	ug/L	62.864 ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088	ug/L	-8.8088 ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260	ug/L	-6.2260 ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035	ug/L	0.0035 ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218	ug/L	10.218 ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003	ug/L	2.5003 ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049	ug/L	-17.049 ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633	ug/L	0.8633 ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577	ug/L	16.577 ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703	ug/L	1.2703 ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98	ug/L	187.98 ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230	ug/L	-36.230 ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851	ug/L	0.0851 ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075	ug/L	0.5075 ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587	ug/L	-0.1587 ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379	ug/L	-1.5379 ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506	ug/L	6.4506 ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115	ug/L	-7.3115 ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488	ug/L	-0.5488 ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404	ug/L	-87.404 ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774	13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122	678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903	2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898	87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095	54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575	16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955	33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103	38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019	16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134	87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174	2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643	0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699	166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835	18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037	6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860	37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671	54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332	7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455	68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899	5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8 ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07 ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86 ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37 ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66 ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8 ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84 ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95 ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61 ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62 ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09 ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56 ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99 ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0 ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71 %		11:00:17
3	Sc Radial	4925.8	4925.8	100 %		10:58:53
3	Y 371.029	877905.3	877905.3	99.258 %		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84 %		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35 ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8 ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79 ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35 ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61 ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82 ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2 ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62 ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69 ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61 ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06 ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7 ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2 ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0 ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71 ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33 ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1 ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55 ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1 ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20 ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00 ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56 ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51 ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1 ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74 ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39 ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24 ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29 ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34 ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66 ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31 ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1 ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

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Ca 317.933Radial†        2795.2      4949.0 ug/L        61.06      4949.0 ppb        61.06   1.23%
   QC value within limits for Ca 317.933Radial  Recovery = 98.98%
Cd 226.502†             57300.2      499.53 ug/L        1.852      499.53 ppb        1.852   0.37%
   QC value within limits for Cd 226.502  Recovery = 99.91%
Co 228.616†             29608.9      487.87 ug/L        1.689      487.87 ppb        1.689   0.35%
   QC value within limits for Co 228.616  Recovery = 97.57%
Cr 267.716†             55297.6      497.60 ug/L        1.743      497.60 ppb        1.743   0.35%
   QC value within limits for Cr 267.716  Recovery = 99.52%
Cu 324.752†            186009.6      496.99 ug/L        1.464      496.99 ppb        1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 99.40%
Fe 238.204 Radial†        405.0      4912.1 ug/L        80.46      4912.1 ppb        80.46   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.24%
K 766.490 Radial†       27016.4      4915.6 ug/L        26.56      4915.6 ppb        26.56   0.54%
   QC value within limits for K 766.490 Radial  Recovery = 98.31%
Mg 279.077 IEC†           111.4      4989.5 ug/L        96.39      4989.5 ppb        96.39   1.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.79%
Mn 257.610†            527731.1      500.13 ug/L        1.476      500.13 ppb        1.476   0.30%
   QC value within limits for Mn 257.610  Recovery = 100.03%
Mo 202.031†             9298.8      493.81 ug/L        2.195      493.81 ppb        2.195   0.44%
   QC value within limits for Mo 202.031  Recovery = 98.76%
Na 589.592 Radial†      33372.8      9361.1 ug/L        50.41      9361.1 ppb        50.41   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†             25005.0      489.63 ug/L        1.726      489.63 ppb        1.726   0.35%
   QC value within limits for Ni 231.604  Recovery = 97.93%
P 214.914†               5502.4      2386.1 ug/L        11.15      2386.1 ppb        11.15   0.47%
   QC value within limits for P 214.914  Recovery = 95.45%
Pb 220.353†              5299.9      499.06 ug/L        1.860      499.06 ppb        1.860   0.37%
   QC value within limits for Pb 220.353  Recovery = 99.81%
S 181.975 Axial†          903.8      972.73 ug/L        4.706      972.73 ppb        4.706   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 97.27%
Sb 206.836†             1847.1      494.01 ug/L        3.403      494.01 ppb        3.403   0.69%
   QC value within limits for Sb 206.836  Recovery = 98.80%
Se 196.026†             1106.9      509.66 ug/L        6.212      509.66 ppb        6.212   1.22%
   QC value within limits for Se 196.026  Recovery = 101.93%
Si 251.611†            97204.8      2456.9 ug/L         7.70      2456.9 ppb         7.70   0.31%
   QC value within limits for Si 251.611  Recovery = 98.28%
Sn 189.927†             3719.5      492.52 ug/L        2.434      492.52 ppb        2.434   0.49%
   QC value within limits for Sn 189.927  Recovery = 98.50%
Sr 421.552†            92292.4      484.16 ug/L        1.112      484.16 ppb        1.112   0.23%
   QC value within limits for Sr 421.552  Recovery = 96.83%
Ti 334.940†           358750.6      494.69 ug/L        1.509      494.69 ppb        1.509   0.31%
   QC value within limits for Ti 334.940  Recovery = 98.94%
Tl 190.801†             2050.0      498.98 ug/L        1.719      498.98 ppb        1.719   0.34%
   QC value within limits for Tl 190.801  Recovery = 99.80%
U 409.014†             18423.6      474.75 ug/L        1.188      474.75 ppb        1.188   0.25%
   QC value within limits for U 409.014  Recovery = 94.95%
V 292.402†             86361.9      501.00 ug/L        1.491      501.00 ppb        1.491   0.30%
   QC value within limits for V 292.402  Recovery = 100.20%
Zn 213.857†            67835.2      494.11 ug/L        1.146      494.11 ppb        1.146   0.23%
   QC value within limits for Zn 213.857  Recovery = 98.82%
SiO2†                  96661.6      5227.9 ug/L        22.02      5227.9 ppb        22.02   0.42%
   QC value within limits for SiO2  Recovery = 97.76%
All analyte(s) passed QC.
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Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951 ug/L	0.9951 ppb		11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458 ug/L	1.7458 ppb		11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298 ug/L	-2.7298 ppb		11:07:08
2	Sb 206.836†	45.4	10.9	2.8989 ug/L	2.8989 ppb		11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951 ug/L	-3.2951 ppb		11:07:08
2	Si 251.611†	577.7	21.7	0.5309 ug/L	0.5309 ppb		11:07:08
2	Sn 189.927†	5.2	9.6	1.2661 ug/L	1.2661 ppb		11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167 ug/L	-0.1167 ppb		11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867 ug/L	-0.0867 ppb		11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171 ug/L	-1.7171 ppb		11:07:08
2	U 409.014†	-2739.0	27.3	0.7062 ug/L	0.7062 ppb		11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749 ug/L	-0.3749 ppb		11:06:48
2	Zn 213.857†	908.7	25.7	0.1912 ug/L	0.1912 ppb		11:07:08
2	SiO2†	642.4	45.1	2.4073 ug/L	2.4073 ppb		11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43 %			11:07:13
3	Sc Radial	4909.9	4909.9	100 %			11:05:46
3	Y 371.029	889449.2	889449.2	100.56 %			11:07:13
3	Y RADIAL	5657.3	5657.3	100.2 %			11:05:46
3	Ag 328.068†	489.6	13.4	0.0605 ug/L	0.0605 ppb		11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350 ug/L	22.350 ppb		11:05:46
3	As 188.979†	-34.4	2.3	0.7242 ug/L	0.7242 ppb		11:07:38
3	B 249.677†	-82.1	384.4	7.2618 ug/L	7.2618 ppb		11:07:18
3	Ba 233.527†	11.7	11.7	0.0758 ug/L	0.0758 ppb		11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242 ug/L	0.0242 ppb		11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990 ug/L	3.8990 ppb		11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798 ug/L	0.1798 ppb		11:07:38
3	Co 228.616†	-86.4	0.3	0.0058 ug/L	0.0058 ppb		11:07:38
3	Cr 267.716†	107.2	19.0	0.1718 ug/L	0.1718 ppb		11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108 ug/L	-0.2108 ppb		11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976 ug/L	16.976 ppb		11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709 ug/L	25.709 ppb		11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52 ug/L	-176.52 ppb		11:06:06
3	Mn 257.610†	607.1	27.8	0.0313 ug/L	0.0313 ppb		11:07:38
3	Mo 202.031†	33.0	3.6	0.1939 ug/L	0.1939 ppb		11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755 ug/L	1.0755 ppb		11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707 ug/L	-0.0707 ppb		11:07:38
3	P 214.914†	267.3	1.0	0.5232 ug/L	0.5232 ppb		11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380 ug/L	0.5380 ppb		11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618 ug/L	-7.9618 ppb		11:07:38
3	Sb 206.836†	43.4	8.5	2.2903 ug/L	2.2903 ppb		11:07:38
3	Se 196.026†	-20.8	0.6	0.3492 ug/L	0.3492 ppb		11:07:38
3	Si 251.611†	584.3	24.2	0.5962 ug/L	0.5962 ppb		11:07:38
3	Sn 189.927†	12.4	16.7	2.2103 ug/L	2.2103 ppb		11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222 ug/L	-0.0222 ppb		11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947 ug/L	-0.0947 ppb		11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125 ug/L	-2.2125 ppb		11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983 ug/L	-2.0983 ppb		11:07:13
3	V 292.402†	-1610.3	5.0	0.0210 ug/L	0.0210 ppb		11:07:18
3	Zn 213.857†	931.7	42.2	0.3153 ug/L	0.3153 ppb		11:07:38
3	SiO2†	634.7	32.9	1.7484 ug/L	1.7484 ppb		11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

```
Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5 ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62 ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4 ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79 ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50 ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7 ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14 ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22 ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73 ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06 ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23 ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73 ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1 ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2 %		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86 %		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9 ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9 ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0 ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6 ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3 ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8 ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49 ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849 %		12:17:52
3	Y 371.029	872084.7	872084.7	98.600 %		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61 ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35 ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70 ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37 ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30 ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46 ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38 ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43 ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62 ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50 ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54 ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00 ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1 ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64 ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0 ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03 ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64 ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1 ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18 ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49 ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93 ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25 ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98 ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35 ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4 ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L        3.149      507.31 ppb        3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L        3.818      500.79 ppb        3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L        3.018      504.61 ppb        3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L        2.623      506.08 ppb        2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L       45.45      5082.5 ppb       45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L       68.50      4957.3 ppb       68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L       11.74      5217.9 ppb       11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L        3.320      507.64 ppb        3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L        3.216      507.25 ppb        3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L      135.46      9625.8 ppb      135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L        3.555      502.09 ppb        3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L       11.55      2454.7 ppb       11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L        3.072      511.03 ppb        3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L        2.21      1000.2 ppb        2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L        3.960      508.48 ppb        3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L        3.225      525.79 ppb        3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L       14.63      2500.7 ppb       14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L        3.651      502.21 ppb        3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L        6.861      494.05 ppb        6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L        2.661      502.89 ppb        2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L        2.825      511.74 ppb        2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L        2.617      485.15 ppb        2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L        2.757      508.62 ppb        2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L        3.269      502.43 ppb        3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L       57.67      5346.1 ppb       57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -23.990 ug/L       73.3513     -23.990 ppb       73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time: 11/30/2009 06:07:59**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/4/2009 12:48:33**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L         53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L         85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L        105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L         48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L        151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L         43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L         52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L         47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750	ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466	ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347	ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960	ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216	ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014	ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740	ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164	ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635	ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594	ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408	ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073	ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106	ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8	%		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0	%		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013	ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244	ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453	ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928	ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436	ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845	ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165	ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628	%		12:59:35
3	Y 371.029	880903.4	880903.4	99.597	%		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441	ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565	ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068	ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624	ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288	ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633	ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888	ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060	ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141	ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162	ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630	ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537	ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106	ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791	ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859	ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539	ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160	ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207	ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458	ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330	ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739	ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096	ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533	ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302	ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247	ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8     34.227 ug/L       24.6248     34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Sn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
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Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758	ug/L	7.6758 ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119	ug/L	2.2119 ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324	ug/L	-7.1324 ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069	ug/L	3.1069 ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363	ug/L	-1.9363 ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149	ug/L	1.8149 ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313	ug/L	0.4313 ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017	ug/L	0.1017 ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009	ug/L	-1.3009 ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491	ug/L	-1.7491 ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527	ug/L	0.3527 ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144	ug/L	0.3144 ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249	ug/L	3.2249 ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0	%		14:06:39
3	Y RADIAL	5653.4	5653.4	100.1	%		14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078	ug/L	9.0078 ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238	ug/L	25.238 ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557	ug/L	-11.557 ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614	ug/L	26.614 ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277	ug/L	-67.277 ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433	ug/L	13.433 ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743	ug/L	-0.0743 ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53	%		14:08:07
3	Y 371.029	887847.1	887847.1	100.38	%		14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092	ug/L	-0.0092 ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368	ug/L	0.7368 ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077	ug/L	3.0077 ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964	ug/L	0.0964 ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077	ug/L	-0.0077 ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791	ug/L	0.1791 ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226	ug/L	-0.0226 ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834	ug/L	0.0834 ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251	ug/L	0.3251 ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064	ug/L	0.0064 ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662	ug/L	-0.0662 ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191	ug/L	-0.1191 ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622	ug/L	-4.6622 ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536	ug/L	-1.2536 ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407	ug/L	-6.9407 ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302	ug/L	2.5302 ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220	ug/L	-5.9220 ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899	ug/L	2.1899 ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576	ug/L	-0.1576 ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379	ug/L	0.0379 ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674	ug/L	-2.8674 ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636	ug/L	2.5636 ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930	ug/L	-0.1930 ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247	ug/L	0.2247 ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671	ug/L	4.2671 ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       141.0      25.699 ug/L        9.7077      25.699 ppb        9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.9     -40.386 ug/L       44.6154     -40.386 ppb       44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       56.4      15.809 ug/L       12.6890      15.809 ppb        12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: 1201978492|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 12/4/2009 14:10:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978492|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5014.1	5014.1	102	%			14:12:50
1	Y RADIAL	5763.9	5763.9	102.1	%			14:12:50
1	Al 396.153Radial†	-29.8	14.6	9.6405	ug/L	9.6405	ppb	14:12:50
1	Ca 317.933Radial†	21.6	3.3	5.7923	ug/L	5.7923	ppb	14:13:10
1	Fe 238.204 Radial†	10.1	-1.1	-13.637	ug/L	-13.637	ppb	14:13:10
1	K 766.490 Radial†	2701.9	76.2	13.859	ug/L	13.859	ppb	14:12:50
1	Mg 279.077 IEC†	0.6	-2.0	-87.447	ug/L	-87.447	ppb	14:13:10
1	Na 589.592 Radial†	-1123.5	179.9	50.448	ug/L	50.448	ppb	14:12:50
1	Sr 421.552†	-9.6	-2.0	-0.0105	ug/L	-0.0105	ppb	14:12:50
1	Sc 361.383	1063758.3	1063758.3	102.34	%			14:14:07
1	Y 371.029	901473.6	901473.6	101.92	%			14:14:07
1	Ag 328.068†	389.4	-93.6	-0.3781	ug/L	-0.3781	ppb	14:14:12
1	As 188.979†	-34.9	2.5	0.7897	ug/L	0.7897	ppb	14:14:32
1	B 249.677†	-433.0	43.0	0.8146	ug/L	0.8146	ppb	14:14:32
1	Ba 233.527†	-1.0	-1.0	-0.0074	ug/L	-0.0074	ppb	14:14:32
1	Be 313.107†	-4836.9	147.4	0.0462	ug/L	0.0462	ppb	14:14:12
1	Cd 226.502†	-222.2	18.5	0.1626	ug/L	0.1626	ppb	14:14:32
1	Co 228.616†	-100.0	-11.4	-0.1880	ug/L	-0.1880	ppb	14:14:32
1	Cr 267.716†	102.7	12.6	0.1117	ug/L	0.1117	ppb	14:14:32
1	Cu 324.752†	9064.5	-79.9	-0.2141	ug/L	-0.2141	ppb	14:14:12
1	Mn 257.610†	630.7	39.6	0.0378	ug/L	0.0378	ppb	14:14:32
1	Mo 202.031†	28.7	-1.2	-0.0660	ug/L	-0.0660	ppb	14:14:32
1	Ni 231.604†	142.1	6.9	0.1349	ug/L	0.1349	ppb	14:14:32
1	P 214.914†	266.3	-4.9	-2.1410	ug/L	-2.1410	ppb	14:14:32
1	Pb 220.353†	-67.4	9.7	0.9097	ug/L	0.9097	ppb	14:14:32
1	S 181.975 Axial†	61.5	-0.0	-0.0098	ug/L	-0.0098	ppb	14:14:32
1	Sb 206.836†	44.3	8.7	2.3012	ug/L	2.3012	ppb	14:14:32
1	Se 196.026†	-28.2	-6.2	-2.7868	ug/L	-2.7868	ppb	14:14:32
1	Si 251.611†	763.8	188.7	4.7876	ug/L	4.7876	ppb	14:14:32
1	Sn 189.927†	1.2	5.5	0.7298	ug/L	0.7298	ppb	14:14:32
1	Ti 334.940†	-1195.9	91.8	0.1259	ug/L	0.1259	ppb	14:14:12
1	Tl 190.801†	-47.3	-1.9	-0.4630	ug/L	-0.4630	ppb	14:14:32
1	U 409.014†	-2750.3	86.4	2.2353	ug/L	2.2353	ppb	14:14:07
1	V 292.402†	-1684.8	-37.9	-0.2134	ug/L	-0.2134	ppb	14:14:12
1	Zn 213.857†	1452.4	533.7	3.9252	ug/L	3.9252	ppb	14:14:32
1	SiO2†	815.4	197.7	10.733	ug/L	10.733	ppb	14:15:38
2	Sc Radial	5068.5	5068.5	103	%			14:13:15
2	Y RADIAL	5776.0	5776.0	102.3	%			14:13:15
2	Al 396.153Radial†	-22.3	22.2	14.638	ug/L	14.638	ppb	14:13:15
2	Ca 317.933Radial†	23.1	4.6	8.0754	ug/L	8.0754	ppb	14:13:35
2	Fe 238.204 Radial†	13.0	1.6	19.424	ug/L	19.424	ppb	14:13:35
2	K 766.490 Radial†	2580.6	-69.8	-12.727	ug/L	-12.727	ppb	14:13:15
2	Mg 279.077 IEC†	3.2	0.6	27.954	ug/L	27.954	ppb	14:13:35
2	Na 589.592 Radial†	-1230.5	88.0	24.681	ug/L	24.681	ppb	14:13:15
2	Sr 421.552†	-22.6	-14.4	-0.0758	ug/L	-0.0758	ppb	14:13:15
2	Sc 361.383	1051679.5	1051679.5	101.17	%			14:14:37
2	Y 371.029	893962.0	893962.0	101.07	%			14:14:37
2	Ag 328.068†	439.8	-39.4	-0.1529	ug/L	-0.1529	ppb	14:14:42
2	As 188.979†	-45.1	-7.9	-2.4725	ug/L	-2.4725	ppb	14:15:03
2	B 249.677†	-401.5	69.2	1.3053	ug/L	1.3053	ppb	14:15:03
2	Ba 233.527†	3.3	3.3	0.0226	ug/L	0.0226	ppb	14:15:03
2	Be 313.107†	-4882.0	48.5	0.0154	ug/L	0.0154	ppb	14:14:42
2	Cd 226.502†	-235.5	2.9	0.0234	ug/L	0.0234	ppb	14:15:03
2	Co 228.616†	-77.7	9.5	0.1560	ug/L	0.1560	ppb	14:15:03
2	Cr 267.716†	98.7	9.8	0.0872	ug/L	0.0872	ppb	14:15:03
2	Cu 324.752†	9160.2	116.5	0.3121	ug/L	0.3121	ppb	14:14:42
2	Mn 257.610†	618.1	34.2	0.0338	ug/L	0.0338	ppb	14:15:03
2	Mo 202.031†	31.4	1.8	0.0965	ug/L	0.0965	ppb	14:15:03
2	Ni 231.604†	148.3	14.6	0.2861	ug/L	0.2861	ppb	14:15:03

2	P 214.914†	281.4	13.0	5.7843 ug/L	5.7843 ppb		14:15:03
2	Pb 220.353†	-82.9	-6.3	-0.5931 ug/L	-0.5931 ppb		14:15:03
2	S 181.975 Axial†	56.8	-4.0	-4.2866 ug/L	-4.2866 ppb		14:15:03
2	Sb 206.836†	33.6	-1.5	-0.3677 ug/L	-0.3677 ppb		14:15:03
2	Se 196.026†	-16.4	5.2	2.3758 ug/L	2.3758 ppb		14:15:03
2	Si 251.611†	762.3	195.8	4.9730 ug/L	4.9730 ppb		14:15:03
2	Sn 189.927†	2.2	6.5	0.8640 ug/L	0.8640 ppb		14:15:03
2	Ti 334.940†	-1164.9	109.1	0.1490 ug/L	0.1490 ppb		14:14:42
2	Tl 190.801†	-48.5	-3.7	-0.8892 ug/L	-0.8892 ppb		14:15:03
2	U 409.014†	-2640.4	164.2	4.2432 ug/L	4.2432 ppb		14:14:37
2	V 292.402†	-1589.3	37.6	0.2225 ug/L	0.2225 ppb		14:14:42
2	Zn 213.857†	1444.8	542.5	3.9812 ug/L	3.9812 ppb		14:15:03
2	SiO2†	833.1	224.4	12.196 ug/L	12.196 ppb		14:15:43
3	Sc Radial	5120.1	5120.1	104 %			14:13:40
3	Y RADIAL	5835.5	5835.5	103.3 %			14:13:40
3	Al 396.153Radial†	-34.2	11.0	7.3051 ug/L	7.3051 ppb		14:13:40
3	Ca 317.933Radial†	20.2	1.5	2.6868 ug/L	2.6868 ppb		14:14:00
3	Fe 238.204 Radial†	12.4	0.9	10.671 ug/L	10.671 ppb		14:14:00
3	K 766.490 Radial†	2671.4	-7.8	-1.4459 ug/L	-1.4459 ppb		14:13:40
3	Mg 279.077 IEC†	4.2	1.6	69.846 ug/L	69.846 ppb		14:14:00
3	Na 589.592 Radial†	-1182.7	145.8	40.911 ug/L	40.911 ppb		14:13:40
3	Sr 421.552†	-28.5	-20.0	-0.1048 ug/L	-0.1048 ppb		14:13:40
3	Sc 361.383	1063363.0	1063363.0	102.30 %			14:15:08
3	Y 371.029	903471.4	903471.4	102.15 %			14:15:08
3	Ag 328.068†	456.5	-27.8	-0.1099 ug/L	-0.1099 ppb		14:15:13
3	As 188.979†	-45.6	-8.0	-2.4878 ug/L	-2.4878 ppb		14:15:33
3	B 249.677†	-416.5	58.9	1.1125 ug/L	1.1125 ppb		14:15:33
3	Ba 233.527†	-3.0	-2.9	-0.0175 ug/L	-0.0175 ppb		14:15:33
3	Be 313.107†	-4900.9	83.1	0.0263 ug/L	0.0263 ppb		14:15:13
3	Cd 226.502†	-237.9	3.1	0.0260 ug/L	0.0260 ppb		14:15:33
3	Co 228.616†	-85.3	2.9	0.0470 ug/L	0.0470 ppb		14:15:33
3	Cr 267.716†	105.8	15.7	0.1398 ug/L	0.1398 ppb		14:15:33
3	Cu 324.752†	9144.1	1.2	0.0038 ug/L	0.0038 ppb		14:15:13
3	Mn 257.610†	632.3	41.4	0.0390 ug/L	0.0390 ppb		14:15:33
3	Mo 202.031†	23.8	-6.0	-0.3188 ug/L	-0.3188 ppb		14:15:33
3	Ni 231.604†	135.4	0.4	0.0085 ug/L	0.0085 ppb		14:15:33
3	P 214.914†	271.9	0.7	0.2888 ug/L	0.2888 ppb		14:15:33
3	Pb 220.353†	-70.4	6.7	0.6304 ug/L	0.6304 ppb		14:15:33
3	S 181.975 Axial†	58.1	-3.3	-3.5272 ug/L	-3.5272 ppb		14:15:33
3	Sb 206.836†	37.3	1.9	0.4857 ug/L	0.4857 ppb		14:15:33
3	Se 196.026†	-20.8	1.0	0.4803 ug/L	0.4803 ppb		14:15:33
3	Si 251.611†	766.1	191.2	4.8624 ug/L	4.8624 ppb		14:15:33
3	Sn 189.927†	-2.6	1.8	0.2359 ug/L	0.2359 ppb		14:15:33
3	Ti 334.940†	-1143.7	142.4	0.1944 ug/L	0.1944 ppb		14:15:13
3	Tl 190.801†	-56.6	-11.0	-2.6671 ug/L	-2.6671 ppb		14:15:33
3	U 409.014†	-2654.4	179.2	4.6317 ug/L	4.6317 ppb		14:15:08
3	V 292.402†	-1599.8	44.6	0.2595 ug/L	0.2595 ppb		14:15:13
3	Zn 213.857†	1467.7	549.2	4.0321 ug/L	4.0321 ppb		14:15:33
3	SiO2†	786.1	169.4	9.2205 ug/L	9.2205 ppb		14:15:48

Mean Data: 1201978492|925431|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1059600.3	101.94	%	0.660				0.65%
Sc Radial	5067.6	103	%	1.1				1.05%
Y 371.029	899635.6	101.71	%	0.567				0.56%
Y RADIAL	5791.8	102.6	%	0.68				0.66%
Ag 328.068†	-53.6	-0.2136	ug/L	0.14402	-0.2136	ppb	0.14402	67.42%
Al 396.153Radial†	15.9	10.528	ug/L	3.7461	10.528	ppb	3.7461	35.58%
As 188.979†	-4.5	-1.3902	ug/L	1.88786	-1.3902	ppb	1.88786	135.80%
B 249.677†	57.1	1.0775	ug/L	0.24725	1.0775	ppb	0.24725	22.95%
Ba 233.527†	-0.2	-0.0008	ug/L	0.02086	-0.0008	ppb	0.02086	>999.9%
Be 313.107†	93.0	0.0293	ug/L	0.01562	0.0293	ppb	0.01562	53.29%
Ca 317.933Radial†	3.1	5.5182	ug/L	2.70476	5.5182	ppb	2.70476	49.02%
Cd 226.502†	8.2	0.0707	ug/L	0.07962	0.0707	ppb	0.07962	112.68%
Co 228.616†	0.3	0.0050	ug/L	0.17583	0.0050	ppb	0.17583	>999.9%
Cr 267.716†	12.7	0.1129	ug/L	0.02630	0.1129	ppb	0.02630	23.29%
Cu 324.752†	12.6	0.0339	ug/L	0.26436	0.0339	ppb	0.26436	778.86%
Fe 238.204 Radial†	0.5	5.4859	ug/L	17.12950	5.4859	ppb	17.12950	312.25%
K 766.490 Radial†	-0.5	-0.1046	ug/L	13.34374	-0.1046	ppb	13.34374	>999.9%

Mg 279.077 IEC†	0.1	3.4509	ug/L	81.45929	3.4509	ppb	81.45929 >999.9%
Mn 257.610†	38.4	0.0369	ug/L	0.00268	0.0369	ppb	0.00268 7.28%
Mo 202.031†	-1.8	-0.0961	ug/L	0.20932	-0.0961	ppb	0.20932 217.80%
Na 589.592 Radial†	137.9	38.680	ug/L	13.0274	38.680	ppb	13.0274 33.68%
Ni 231.604†	7.3	0.1432	ug/L	0.13896	0.1432	ppb	0.13896 97.06%
P 214.914†	2.9	1.3107	ug/L	4.06025	1.3107	ppb	4.06025 309.78%
Pb 220.353†	3.3	0.3157	ug/L	0.79930	0.3157	ppb	0.79930 253.22%
S 181.975 Axial†	-2.4	-2.6078	ug/L	2.28180	-2.6078	ppb	2.28180 87.50%
Sb 206.836†	3.0	0.8064	ug/L	1.36307	0.8064	ppb	1.36307 169.04%
Se 196.026†	0.0	0.0231	ug/L	2.61148	0.0231	ppb	2.61148 >999.9%
Si 251.611†	191.9	4.8743	ug/L	0.09328	4.8743	ppb	0.09328 1.91%
Sn 189.927†	4.6	0.6099	ug/L	0.33079	0.6099	ppb	0.33079 54.24%
Sr 421.552†	-12.1	-0.0637	ug/L	0.04829	-0.0637	ppb	0.04829 75.82%
Ti 334.940†	114.4	0.1564	ug/L	0.03486	0.1564	ppb	0.03486 22.28%
Tl 190.801†	-5.5	-1.3398	ug/L	1.16914	-1.3398	ppb	1.16914 87.26%
U 409.014†	143.3	3.7034	ug/L	1.28618	3.7034	ppb	1.28618 34.73%
V 292.402†	14.8	0.0895	ug/L	0.26301	0.0895	ppb	0.26301 293.83%
Zn 213.857†	541.8	3.9795	ug/L	0.05349	3.9795	ppb	0.05349 1.34%
SiO2†	197.2	10.717	ug/L	1.4880	10.717	ppb	1.4880 13.88%

Sequence No.: 14
Sample ID: 1201978493|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 12/4/2009 14:18:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978493|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4813.6	4813.6	98.0	%			14:19:53
1	Y RADIAL	5521.7	5521.7	97.78	%			14:19:53
1	Al 396.153Radial†	7913.6	8115.4	5336.9	ug/L	5336.9	ppb	14:19:53
1	Ca 317.933Radial†	2963.7	3005.1	5320.6	ug/L	5320.6	ppb	14:20:13
1	Fe 238.204 Radial†	441.7	439.5	5329.7	ug/L	5329.7	ppb	14:20:13
1	K 766.490 Radial†	30378.0	28415.1	5172.1	ug/L	5172.1	ppb	14:19:53
1	Mg 279.077 IEC†	121.4	121.4	5436.3	ug/L	5436.3	ppb	14:20:13
1	Na 589.592 Radial†	16842.2	18458.5	5177.6	ug/L	5177.6	ppb	14:19:53
1	Sr 421.552†	97666.9	99624.5	522.62	ug/L	522.62	ppb	14:19:53
1	Sc 361.383	1057894.5	1057894.5	101.77	%			14:21:12
1	Y 371.029	885500.8	885500.8	100.12	%			14:21:12
1	Ag 328.068†	133521.9	130724.1	521.39	ug/L	521.39	ppb	14:21:12
1	As 188.979†	1593.4	1602.3	503.86	ug/L	503.86	ppb	14:21:32
1	B 249.677†	27113.5	27107.7	510.31	ug/L	510.31	ppb	14:21:12
1	Ba 233.527†	84295.0	82828.0	533.48	ug/L	533.48	ppb	14:21:12
1	Be 313.107†	1657419.1	1633448.1	510.33	ug/L	510.33	ppb	14:21:12
1	Cd 226.502†	60399.1	59583.6	519.41	ug/L	519.41	ppb	14:21:12
1	Co 228.616†	31154.4	30698.5	505.80	ug/L	505.80	ppb	14:21:32
1	Cr 267.716†	58976.2	57862.0	520.68	ug/L	520.68	ppb	14:21:12
1	Cu 324.752†	210246.2	197649.7	528.10	ug/L	528.10	ppb	14:21:12
1	Mn 257.610†	570711.8	560202.7	530.91	ug/L	530.91	ppb	14:21:12
1	Mo 202.031†	9811.0	9611.1	510.41	ug/L	510.41	ppb	14:21:32
1	Ni 231.604†	26856.1	26256.8	514.14	ug/L	514.14	ppb	14:21:32
1	P 214.914†	1606.6	1313.6	507.91	ug/L	507.91	ppb	14:21:32
1	Pb 220.353†	5593.5	5571.7	524.63	ug/L	524.63	ppb	14:21:32
1	S 181.975 Axial†	4924.7	4778.9	5147.8	ug/L	5147.8	ppb	14:21:32
1	Sb 206.836†	2018.5	1948.8	521.42	ug/L	521.42	ppb	14:21:32
1	Se 196.026†	1133.3	1134.9	523.64	ug/L	523.64	ppb	14:21:32
1	Si 251.611†	207590.8	203420.3	5153.9	ug/L	5153.9	ppb	14:21:12
1	Sn 189.927†	4148.7	4080.9	540.36	ug/L	540.36	ppb	14:21:32
1	Ti 334.940†	385925.0	380469.0	524.63	ug/L	524.63	ppb	14:21:12
1	Tl 190.801†	2149.7	2156.6	525.02	ug/L	525.02	ppb	14:21:32
1	U 409.014†	18136.3	20594.7	530.78	ug/L	530.78	ppb	14:21:12
1	V 292.402†	91592.1	91606.5	531.27	ug/L	531.27	ppb	14:21:12
1	Zn 213.857†	73031.1	70874.5	516.19	ug/L	516.19	ppb	14:21:12
1	SiO2†	205808.8	201628.0	10932	ug/L	10932	ppb	14:22:33
2	Sc Radial	4841.5	4841.5	98.6	%			14:20:18
2	Y RADIAL	5523.9	5523.9	97.82	%			14:20:18
2	Al 396.153Radial†	7919.2	8074.6	5309.8	ug/L	5309.8	ppb	14:20:18
2	Ca 317.933Radial†	2984.8	3009.0	5327.6	ug/L	5327.6	ppb	14:20:38
2	Fe 238.204 Radial†	450.5	445.9	5406.7	ug/L	5406.7	ppb	14:20:38
2	K 766.490 Radial†	30356.7	28215.0	5135.7	ug/L	5135.7	ppb	14:20:18
2	Mg 279.077 IEC†	121.8	121.0	5420.0	ug/L	5420.0	ppb	14:20:38
2	Na 589.592 Radial†	16669.6	18184.5	5100.7	ug/L	5100.7	ppb	14:20:18
2	Sr 421.552†	96967.4	98341.5	515.89	ug/L	515.89	ppb	14:20:18
2	Sc 361.383	1055969.3	1055969.3	101.59	%			14:21:39
2	Y 371.029	884658.8	884658.8	100.02	%			14:21:39
2	Ag 328.068†	131708.0	129177.7	515.27	ug/L	515.27	ppb	14:21:39
2	As 188.979†	1608.3	1619.8	509.27	ug/L	509.27	ppb	14:22:00
2	B 249.677†	26763.6	26811.8	504.70	ug/L	504.70	ppb	14:21:39
2	Ba 233.527†	83405.8	82103.7	528.82	ug/L	528.82	ppb	14:21:39
2	Be 313.107†	1639609.4	1618885.5	505.77	ug/L	505.77	ppb	14:21:39
2	Cd 226.502†	59761.0	59063.7	514.88	ug/L	514.88	ppb	14:21:39
2	Co 228.616†	31310.4	30907.9	509.27	ug/L	509.27	ppb	14:22:00
2	Cr 267.716†	58211.9	57215.3	514.86	ug/L	514.86	ppb	14:21:39
2	Cu 324.752†	206669.8	194505.7	519.71	ug/L	519.71	ppb	14:21:39
2	Mn 257.610†	563159.0	553790.2	524.85	ug/L	524.85	ppb	14:21:39
2	Mo 202.031†	9868.2	9684.9	514.33	ug/L	514.33	ppb	14:22:00
2	Ni 231.604†	26975.4	26422.3	517.38	ug/L	517.38	ppb	14:22:00

2	P 214.914†	1596.3	1306.3	505.97 ug/L	505.97 ppb	14:22:00
2	Pb 220.353†	5614.4	5602.3	527.50 ug/L	527.50 ppb	14:22:00
2	S 181.975 Axial†	4964.2	4826.6	5199.1 ug/L	5199.1 ppb	14:22:00
2	Sb 206.836†	2036.6	1970.1	527.34 ug/L	527.34 ppb	14:22:00
2	Se 196.026†	1131.1	1134.8	523.86 ug/L	523.86 ppb	14:22:00
2	Si 251.611†	204485.3	200735.2	5085.6 ug/L	5085.6 ppb	14:21:39
2	Sn 189.927†	4160.2	4099.5	542.83 ug/L	542.83 ppb	14:22:00
2	Ti 334.940†	380268.4	375592.0	517.91 ug/L	517.91 ppb	14:21:39
2	Tl 190.801†	2153.7	2164.3	526.79 ug/L	526.79 ppb	14:22:00
2	U 409.014†	17623.6	20122.4	518.58 ug/L	518.58 ppb	14:21:39
2	V 292.402†	90410.6	90607.6	525.58 ug/L	525.58 ppb	14:21:39
2	Zn 213.857†	72286.7	70272.6	511.75 ug/L	511.75 ppb	14:21:39
2	SiO2†	207029.7	203198.5	11017 ug/L	11017 ppb	14:22:38
3	Sc Radial	4971.8	4971.8	101 %		14:20:43
3	Y RADIAL	5689.8	5689.8	100.8 %		14:20:43
3	Al 396.153Radial†	8016.3	7959.9	5234.0 ug/L	5234.0 ppb	14:20:43
3	Ca 317.933Radial†	2970.2	2915.2	5161.5 ug/L	5161.5 ppb	14:21:03
3	Fe 238.204 Radial†	443.1	426.6	5173.6 ug/L	5173.6 ppb	14:21:03
3	K 766.490 Radial†	30826.1	27871.4	5073.0 ug/L	5073.0 ppb	14:20:43
3	Mg 279.077 IEC†	121.2	117.1	5247.4 ug/L	5247.4 ppb	14:21:03
3	Na 589.592 Radial†	16976.9	18044.7	5061.5 ug/L	5061.5 ppb	14:20:43
3	Sr 421.552†	98609.6	97384.7	510.88 ug/L	510.88 ppb	14:20:43
3	Sc 361.383	1050816.7	1050816.7	101.09 %		14:22:07
3	Y 371.029	880964.9	880964.9	99.604 %		14:22:07
3	Ag 328.068†	133999.0	132079.7	526.73 ug/L	526.73 ppb	14:22:07
3	As 188.979†	1602.1	1621.4	509.83 ug/L	509.83 ppb	14:22:27
3	B 249.677†	27210.8	27383.4	515.53 ug/L	515.53 ppb	14:22:07
3	Ba 233.527†	84387.7	83477.5	537.66 ug/L	537.66 ppb	14:22:07
3	Be 313.107†	1664152.3	1651077.9	515.83 ug/L	515.83 ppb	14:22:07
3	Cd 226.502†	60510.6	60093.6	523.88 ug/L	523.88 ppb	14:22:07
3	Co 228.616†	31260.1	31009.3	510.92 ug/L	510.92 ppb	14:22:27
3	Cr 267.716†	59128.6	58403.1	525.54 ug/L	525.54 ppb	14:22:07
3	Cu 324.752†	210895.2	199683.1	533.52 ug/L	533.52 ppb	14:22:07
3	Mn 257.610†	571344.1	564605.3	535.07 ug/L	535.07 ppb	14:22:07
3	Mo 202.031†	9853.6	9718.0	516.08 ug/L	516.08 ppb	14:22:27
3	Ni 231.604†	26900.1	26478.0	518.47 ug/L	518.47 ppb	14:22:27
3	P 214.914†	1614.3	1331.8	515.35 ug/L	515.35 ppb	14:22:27
3	Pb 220.353†	5613.0	5628.0	529.91 ug/L	529.91 ppb	14:22:27
3	S 181.975 Axial†	4951.4	4837.9	5211.3 ug/L	5211.3 ppb	14:22:27
3	Sb 206.836†	2036.6	1980.0	529.75 ug/L	529.75 ppb	14:22:27
3	Se 196.026†	1126.2	1135.4	523.30 ug/L	523.30 ppb	14:22:27
3	Si 251.611†	207680.6	204883.1	5191.0 ug/L	5191.0 ppb	14:22:07
3	Sn 189.927†	4156.9	4116.4	545.04 ug/L	545.04 ppb	14:22:27
3	Ti 334.940†	387048.2	384134.2	529.67 ug/L	529.67 ppb	14:22:07
3	Tl 190.801†	2161.1	2182.1	531.20 ug/L	531.20 ppb	14:22:27
3	U 409.014†	18279.1	20855.9	537.55 ug/L	537.55 ppb	14:22:07
3	V 292.402†	91899.5	92516.8	536.59 ug/L	536.59 ppb	14:22:07
3	Zn 213.857†	73177.7	71502.9	520.80 ug/L	520.80 ppb	14:22:07
3	SiO2†	205407.1	202592.7	10984 ug/L	10984 ppb	14:22:43

Mean Data: 1201978493|925431|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1054893.5	101.48	%	0.352				0.35%
Sc Radial	4875.6	99.3	%	1.72				1.73%
Y 371.029	883708.2	99.914	%	0.2728				0.27%
Y RADIAL	5578.5	98.78	%	1.707				1.73%
Ag 328.068†	130660.5	521.13	ug/L	5.733	521.13	ppb	5.733	1.10%
Al 396.153Radial†	8050.0	5293.6	ug/L	53.36	5293.6	ppb	53.36	1.01%
As 188.979†	1614.5	507.65	ug/L	3.299	507.65	ppb	3.299	0.65%
B 249.677†	27101.0	510.18	ug/L	5.416	510.18	ppb	5.416	1.06%
Ba 233.527†	82803.1	533.32	ug/L	4.423	533.32	ppb	4.423	0.83%
Be 313.107†	1634470.5	510.65	ug/L	5.038	510.65	ppb	5.038	0.99%
Ca 317.933Radial†	2976.4	5269.9	ug/L	93.91	5269.9	ppb	93.91	1.78%
Cd 226.502†	59580.3	519.39	ug/L	4.503	519.39	ppb	4.503	0.87%
Co 228.616†	30871.9	508.66	ug/L	2.615	508.66	ppb	2.615	0.51%
Cr 267.716†	57826.8	520.36	ug/L	5.347	520.36	ppb	5.347	1.03%
Cu 324.752†	197279.5	527.11	ug/L	6.960	527.11	ppb	6.960	1.32%
Fe 238.204 Radial†	437.3	5303.3	ug/L	118.78	5303.3	ppb	118.78	2.24%
K 766.490 Radial†	28167.2	5126.9	ug/L	50.12	5126.9	ppb	50.12	0.98%

Mg 279.077 IEC†	119.8	5367.9	ug/L	104.63	5367.9	ppb	104.63	1.95%
Mn 257.610†	559532.7	530.28	ug/L	5.140	530.28	ppb	5.140	0.97%
Mo 202.031†	9671.3	513.61	ug/L	2.902	513.61	ppb	2.902	0.57%
Na 589.592 Radial†	18229.2	5113.3	ug/L	59.04	5113.3	ppb	59.04	1.15%
Ni 231.604†	26385.7	516.67	ug/L	2.253	516.67	ppb	2.253	0.44%
P 214.914†	1317.2	509.74	ug/L	4.953	509.74	ppb	4.953	0.97%
Pb 220.353†	5600.7	527.35	ug/L	2.645	527.35	ppb	2.645	0.50%
S 181.975 Axial†	4814.5	5186.0	ug/L	33.70	5186.0	ppb	33.70	0.65%
Sb 206.836†	1966.3	526.17	ug/L	4.285	526.17	ppb	4.285	0.81%
Se 196.026†	1135.0	523.60	ug/L	0.283	523.60	ppb	0.283	0.05%
Si 251.611†	203012.9	5143.5	ug/L	53.43	5143.5	ppb	53.43	1.04%
Sn 189.927†	4098.9	542.74	ug/L	2.341	542.74	ppb	2.341	0.43%
Sr 421.552†	98450.2	516.46	ug/L	5.896	516.46	ppb	5.896	1.14%
Ti 334.940†	380065.1	524.07	ug/L	5.901	524.07	ppb	5.901	1.13%
Tl 190.801†	2167.6	527.67	ug/L	3.185	527.67	ppb	3.185	0.60%
U 409.014†	20524.3	528.97	ug/L	9.616	528.97	ppb	9.616	1.82%
V 292.402†	91577.0	531.15	ug/L	5.504	531.15	ppb	5.504	1.04%
Zn 213.857†	70883.3	516.25	ug/L	4.523	516.25	ppb	4.523	0.88%
SiO2†	202473.1	10978	ug/L	43.0	10978	ppb	43.0	0.39%

Sequence No.: 18
Sample ID: 241614001|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 12/4/2009 14:45:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241614001|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5096.5	5096.5	104	%			14:47:48
1	Y RADIAL	5818.1	5818.1	103.0	%			14:47:48
1	Al 396.153Radial†	-31.5	13.4	8.8897	ug/L	8.8897	ppb	14:47:48
1	Ca 317.933Radial†	19.9	1.3	2.2801	ug/L	2.2801	ppb	14:48:08
1	Fe 238.204 Radial†	10.7	-0.7	-7.9557	ug/L	-7.9557	ppb	14:48:08
1	K 766.490 Radial†	2491.0	-169.8	-30.978	ug/L	-30.978	ppb	14:47:48
1	Mg 279.077 IEC†	3.8	1.1	49.882	ug/L	49.882	ppb	14:48:08
1	Na 589.592 Radial†	-1120.5	200.5	56.249	ug/L	56.249	ppb	14:47:48
1	Sr 421.552†	-5.7	1.9	0.0100	ug/L	0.0100	ppb	14:47:48
1	Sc 361.383	1070684.0	1070684.0	103.00	%			14:49:05
1	Y 371.029	908021.2	908021.2	102.66	%			14:49:05
1	Ag 328.068†	495.4	6.9	0.0212	ug/L	0.0212	ppb	14:49:10
1	As 188.979†	-48.9	-10.9	-3.4020	ug/L	-3.4020	ppb	14:49:30
1	B 249.677†	-494.9	-14.4	-0.2711	ug/L	-0.2711	ppb	14:49:30
1	Ba 233.527†	5.1	5.0	0.0314	ug/L	0.0314	ppb	14:49:30
1	Be 313.107†	-4927.5	90.0	0.0283	ug/L	0.0283	ppb	14:49:10
1	Cd 226.502†	-243.0	-0.3	-0.0016	ug/L	-0.0016	ppb	14:49:30
1	Co 228.616†	-86.1	2.7	0.0422	ug/L	0.0422	ppb	14:49:30
1	Cr 267.716†	93.2	2.7	0.0230	ug/L	0.0230	ppb	14:49:30
1	Cu 324.752†	9107.3	-95.6	-0.2557	ug/L	-0.2557	ppb	14:49:10
1	Mn 257.610†	597.6	3.5	0.0016	ug/L	0.0016	ppb	14:49:30
1	Mo 202.031†	13.6	-16.0	-0.8494	ug/L	-0.8494	ppb	14:49:30
1	Ni 231.604†	149.4	13.1	0.2567	ug/L	0.2567	ppb	14:49:30
1	P 214.914†	292.1	18.5	8.3384	ug/L	8.3384	ppb	14:49:30
1	Pb 220.353†	-90.3	-12.1	-1.1382	ug/L	-1.1382	ppb	14:49:30
1	S 181.975 Axial†	52.3	-9.3	-10.045	ug/L	-10.045	ppb	14:49:30
1	Sb 206.836†	28.9	-6.6	-1.7564	ug/L	-1.7564	ppb	14:49:30
1	Se 196.026†	-16.5	5.3	2.3286	ug/L	2.3286	ppb	14:49:30
1	Si 251.611†	2585.3	1952.4	49.607	ug/L	49.607	ppb	14:49:30
1	Sn 189.927†	-1.0	3.4	0.4472	ug/L	0.4472	ppb	14:49:30
1	Ti 334.940†	-1207.9	87.8	0.1195	ug/L	0.1195	ppb	14:49:10
1	Tl 190.801†	-54.4	-8.6	-2.0688	ug/L	-2.0688	ppb	14:49:30
1	U 409.014†	-2710.9	142.1	3.6735	ug/L	3.6735	ppb	14:49:05
1	V 292.402†	-1676.5	-19.2	-0.1124	ug/L	-0.1124	ppb	14:49:10
1	Zn 213.857†	1164.5	245.0	1.7979	ug/L	1.7979	ppb	14:49:30
1	SiO2†	2753.7	2074.4	112.80	ug/L	112.80	ppb	14:50:36
2	Sc Radial	5000.4	5000.4	102	%			14:48:13
2	Y RADIAL	5718.7	5718.7	101.3	%			14:48:13
2	Al 396.153Radial†	-20.6	23.5	15.552	ug/L	15.552	ppb	14:48:13
2	Ca 317.933Radial†	18.5	0.3	0.5783	ug/L	0.5783	ppb	14:48:33
2	Fe 238.204 Radial†	10.0	-1.2	-14.764	ug/L	-14.764	ppb	14:48:33
2	K 766.490 Radial†	2681.4	63.3	11.535	ug/L	11.535	ppb	14:48:13
2	Mg 279.077 IEC†	4.7	2.2	96.552	ug/L	96.552	ppb	14:48:33
2	Na 589.592 Radial†	-1246.0	56.6	15.873	ug/L	15.873	ppb	14:48:13
2	Sr 421.552†	-2.8	4.7	0.0245	ug/L	0.0245	ppb	14:48:13
2	Sc 361.383	1077721.0	1077721.0	103.68	%			14:49:35
2	Y 371.029	915305.8	915305.8	103.49	%			14:49:35
2	Ag 328.068†	412.4	-76.3	-0.3129	ug/L	-0.3129	ppb	14:49:40
2	As 188.979†	-37.1	0.8	0.2467	ug/L	0.2467	ppb	14:50:00
2	B 249.677†	-490.6	-7.1	-0.1313	ug/L	-0.1313	ppb	14:50:00
2	Ba 233.527†	17.8	17.2	0.1102	ug/L	0.1102	ppb	14:50:00
2	Be 313.107†	-4946.0	103.4	0.0325	ug/L	0.0325	ppb	14:49:40
2	Cd 226.502†	-244.8	-0.5	-0.0027	ug/L	-0.0027	ppb	14:50:00
2	Co 228.616†	-90.3	-0.7	-0.0128	ug/L	-0.0128	ppb	14:50:00
2	Cr 267.716†	111.8	20.1	0.1778	ug/L	0.1778	ppb	14:50:00
2	Cu 324.752†	9146.4	-115.6	-0.3094	ug/L	-0.3094	ppb	14:49:40
2	Mn 257.610†	602.2	4.2	0.0007	ug/L	0.0007	ppb	14:50:00
2	Mo 202.031†	27.4	-2.8	-0.1512	ug/L	-0.1512	ppb	14:50:00
2	Ni 231.604†	126.9	-9.5	-0.1870	ug/L	-0.1870	ppb	14:50:00

2	P 214.914†	272.6	-2.2	-0.9101	ug/L	-0.9101 ppb	14:50:00
2	Pb 220.353†	-82.5	-4.0	-0.3751	ug/L	-0.3751 ppb	14:50:00
2	S 181.975 Axial†	49.1	-12.7	-13.712	ug/L	-13.712 ppb	14:50:00
2	Sb 206.836†	41.9	5.8	1.5420	ug/L	1.5420 ppb	14:50:00
2	Se 196.026†	-19.1	2.9	1.2461	ug/L	1.2461 ppb	14:50:00
2	Si 251.611†	2615.9	1965.4	49.909	ug/L	49.909 ppb	14:50:00
2	Sn 189.927†	7.7	11.7	1.5512	ug/L	1.5512 ppb	14:50:00
2	Ti 334.940†	-1209.1	94.2	0.1270	ug/L	0.1270 ppb	14:49:40
2	Tl 190.801†	-59.8	-13.4	-3.2445	ug/L	-3.2445 ppb	14:50:00
2	U 409.014†	-2609.2	257.3	6.6551	ug/L	6.6551 ppb	14:49:35
2	V 292.402†	-1668.1	-0.4	0.0128	ug/L	0.0128 ppb	14:49:40
2	Zn 213.857†	1179.3	251.9	1.8505	ug/L	1.8505 ppb	14:50:00
2	SiO2†	2729.4	2033.5	110.51	ug/L	110.51 ppb	14:50:41
3	Sc Radial	4921.1	4921.1	100	%		14:48:38
3	Y RADIAL	5650.3	5650.3	100.1	%		14:48:38
3	Al 396.153Radial†	-26.0	17.8	11.774	ug/L	11.774 ppb	14:48:38
3	Ca 317.933Radial†	24.9	7.0	12.479	ug/L	12.479 ppb	14:48:58
3	Fe 238.204 Radial†	11.1	0.0	0.5616	ug/L	0.5616 ppb	14:48:58
3	K 766.490 Radial†	2649.0	73.3	13.356	ug/L	13.356 ppb	14:48:38
3	Mg 279.077 IEC†	1.4	-1.1	-51.085	ug/L	-51.085 ppb	14:48:58
3	Na 589.592 Radial†	-1180.5	102.2	28.670	ug/L	28.670 ppb	14:48:38
3	Sr 421.552†	-18.0	-10.6	-0.0556	ug/L	-0.0556 ppb	14:48:38
3	Sc 361.383	1051078.3	1051078.3	101.12	%		14:50:05
3	Y 371.029	892726.3	892726.3	100.93	%		14:50:05
3	Ag 328.068†	452.5	-26.5	-0.1041	ug/L	-0.1041 ppb	14:50:10
3	As 188.979†	-36.6	0.4	0.1311	ug/L	0.1311 ppb	14:50:30
3	B 249.677†	-473.2	-1.9	-0.0367	ug/L	-0.0367 ppb	14:50:30
3	Ba 233.527†	7.1	7.0	0.0446	ug/L	0.0446 ppb	14:50:30
3	Be 313.107†	-4860.1	67.5	0.0213	ug/L	0.0213 ppb	14:50:10
3	Cd 226.502†	-236.1	2.1	0.0185	ug/L	0.0185 ppb	14:50:30
3	Co 228.616†	-67.7	19.4	0.3185	ug/L	0.3185 ppb	14:50:30
3	Cr 267.716†	118.4	29.3	0.2638	ug/L	0.2638 ppb	14:50:30
3	Cu 324.752†	9090.4	52.6	0.1406	ug/L	0.1406 ppb	14:50:10
3	Mn 257.610†	586.5	3.3	0.0041	ug/L	0.0041 ppb	14:50:30
3	Mo 202.031†	26.0	-3.5	-0.1845	ug/L	-0.1845 ppb	14:50:30
3	Ni 231.604†	144.5	11.0	0.2149	ug/L	0.2149 ppb	14:50:30
3	P 214.914†	293.1	24.7	11.039	ug/L	11.039 ppb	14:50:30
3	Pb 220.353†	-84.9	-8.4	-0.7866	ug/L	-0.7866 ppb	14:50:30
3	S 181.975 Axial†	60.6	-0.1	-0.1379	ug/L	-0.1379 ppb	14:50:30
3	Sb 206.836†	44.5	9.4	2.4478	ug/L	2.4478 ppb	14:50:30
3	Se 196.026†	-16.5	5.0	2.2359	ug/L	2.2359 ppb	14:50:30
3	Si 251.611†	2608.8	2022.4	51.362	ug/L	51.362 ppb	14:50:30
3	Sn 189.927†	-8.3	-3.9	-0.5113	ug/L	-0.5113 ppb	14:50:30
3	Ti 334.940†	-1173.7	99.7	0.1390	ug/L	0.1390 ppb	14:50:10
3	Tl 190.801†	-52.0	-7.2	-1.7355	ug/L	-1.7355 ppb	14:50:30
3	U 409.014†	-2885.7	-79.9	-2.0665	ug/L	-2.0665 ppb	14:50:05
3	V 292.402†	-1656.7	-29.9	-0.1794	ug/L	-0.1794 ppb	14:50:10
3	Zn 213.857†	1189.6	290.9	2.1376	ug/L	2.1376 ppb	14:50:30
3	SiO2†	2761.8	2132.3	115.89	ug/L	115.89 ppb	14:50:46

Mean Data: 241614001|925431|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1066494.4	102.60	%	1.328				1.29%
Sc Radial	5006.0	102	%	1.8				1.75%
Y 371.029	905351.1	102.36	%	1.303				1.27%
Y RADIAL	5729.0	101.4	%	1.49				1.47%
Ag 328.068†	-32.0	-0.1319	ug/L	0.16878	-0.1319	ppb	0.16878	127.92%
Al 396.153Radial†	18.3	12.072	ug/L	3.3413	12.072	ppb	3.3413	27.68%
As 188.979†	-3.2	-1.0080	ug/L	2.07403	-1.0080	ppb	2.07403	205.75%
B 249.677†	-7.8	-0.1464	ug/L	0.11797	-0.1464	ppb	0.11797	80.60%
Ba 233.527†	9.7	0.0621	ug/L	0.04218	0.0621	ppb	0.04218	67.97%
Be 313.107†	87.0	0.0274	ug/L	0.00566	0.0274	ppb	0.00566	20.67%
Ca 317.933Radial†	2.9	5.1123	ug/L	6.43584	5.1123	ppb	6.43584	125.89%
Cd 226.502†	0.5	0.0047	ug/L	0.01193	0.0047	ppb	0.01193	252.19%
Co 228.616†	7.1	0.1160	ug/L	0.17754	0.1160	ppb	0.17754	153.05%
Cr 267.716†	17.4	0.1549	ug/L	0.12202	0.1549	ppb	0.12202	78.78%
Cu 324.752†	-52.9	-0.1415	ug/L	0.24576	-0.1415	ppb	0.24576	173.66%
Fe 238.204 Radial†	-0.6	-7.3860	ug/L	7.67863	-7.3860	ppb	7.67863	103.96%
K 766.490 Radial†	-11.0	-2.0287	ug/L	25.08707	-2.0287	ppb	25.08707	>999.9%

Mg 279.077 IEC†	0.7	31.783	ug/L	75.4639	31.783	ppb	75.4639 237.44%
Mn 257.610†	3.7	0.0021	ug/L	0.00180	0.0021	ppb	0.00180 83.94%
Mo 202.031†	-7.4	-0.3950	ug/L	0.39383	-0.3950	ppb	0.39383 99.69%
Na 589.592 Radial†	119.8	33.597	ug/L	20.6337	33.597	ppb	20.6337 61.41%
Ni 231.604†	4.8	0.0949	ug/L	0.24499	0.0949	ppb	0.24499 258.22%
P 214.914†	13.7	6.1558	ug/L	6.26638	6.1558	ppb	6.26638 101.80%
Pb 220.353†	-8.2	-0.7666	ug/L	0.38193	-0.7666	ppb	0.38193 49.82%
S 181.975 Axial†	-7.4	-7.9649	ug/L	7.02188	-7.9649	ppb	7.02188 88.16%
Sb 206.836†	2.8	0.7445	ug/L	2.21270	0.7445	ppb	2.21270 297.22%
Se 196.026†	4.4	1.9369	ug/L	0.60002	1.9369	ppb	0.60002 30.98%
Si 251.611†	1980.0	50.292	ug/L	0.9381	50.292	ppb	0.9381 1.87%
Sn 189.927†	3.7	0.4957	ug/L	1.03210	0.4957	ppb	1.03210 208.22%
Sr 421.552†	-1.3	-0.0070	ug/L	0.04271	-0.0070	ppb	0.04271 605.85%
Ti 334.940†	93.9	0.1285	ug/L	0.00983	0.1285	ppb	0.00983 7.65%
Tl 190.801†	-9.7	-2.3496	ug/L	0.79271	-2.3496	ppb	0.79271 33.74%
U 409.014†	106.5	2.7540	ug/L	4.43291	2.7540	ppb	4.43291 160.96%
V 292.402†	-16.5	-0.0930	ug/L	0.09757	-0.0930	ppb	0.09757 104.90%
Zn 213.857†	262.6	1.9286	ug/L	0.18289	1.9286	ppb	0.18289 9.48%
SiO2†	2080.1	113.07	ug/L	2.703	113.07	ppb	2.703 2.39%

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb         59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb         14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb        179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb         10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb         13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L          5.14      2504.1 ppb           5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb         40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237	ug/L	8.7237 ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503	ug/L	-0.7503 ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231	ug/L	-7.3231 ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716	ug/L	4.0716 ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231	ug/L	-1.9231 ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718	ug/L	1.4718 ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274	ug/L	1.5274 ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146	ug/L	-0.1146 ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667	ug/L	-0.1667 ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992	ug/L	-4.3992 ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848	ug/L	-0.0848 ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817	ug/L	0.1817 ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213	ug/L	3.4213 ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101	%		15:02:30
3	Y RADIAL	5692.8	5692.8	100.8	%		15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650	ug/L	-1.9650 ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501	ug/L	16.501 ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962	ug/L	-12.962 ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364	ug/L	13.364 ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663	ug/L	48.663 ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078	ug/L	36.078 ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131	ug/L	-0.1131 ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06	%		15:03:57
3	Y 371.029	884765.2	884765.2	100.03	%		15:03:57
3	Ag 328.068†	546.5	72.1	0.2822	ug/L	0.2822 ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412	ug/L	1.2412 ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362	ug/L	0.7362 ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116	ug/L	-0.0116 ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116	ug/L	0.0116 ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212	ug/L	0.0212 ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510	ug/L	0.2510 ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157	ug/L	0.3157 ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543	ug/L	0.3543 ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154	ug/L	0.0154 ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656	ug/L	-0.0656 ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330	ug/L	-0.1330 ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179	ug/L	1.9179 ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499	ug/L	-1.5499 ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618	ug/L	-1.6618 ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470	ug/L	1.9470 ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666	ug/L	-1.0666 ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213	ug/L	1.7213 ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060	ug/L	-0.0060 ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030	ug/L	0.0030 ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751	ug/L	1.5751 ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249	ug/L	-2.0249 ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440	ug/L	-0.2440 ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181	ug/L	0.3181 ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869	ug/L	1.9869 ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3     -15.423 ug/L        6.5866     -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2      20.428 ug/L       19.9912      20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      29.809 ug/L       20.4595      29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2      32.884 ug/L        2.9232      32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: 1201978494|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 12/4/2009 15:06:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978494|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5022.2	5022.2	102	%			15:08:40
1	Y RADIAL	5733.4	5733.4	101.5	%			15:08:40
1	Al 396.153Radial†	-56.5	-11.4	-7.5732	ug/L	-7.5732	ppb	15:08:40
1	Ca 317.933Radial†	17.6	-0.7	-1.1965	ug/L	-1.1965	ppb	15:09:00
1	Fe 238.204 Radial†	10.3	-0.9	-10.763	ug/L	-10.763	ppb	15:09:00
1	K 766.490 Radial†	2547.3	-79.3	-14.464	ug/L	-14.464	ppb	15:08:40
1	Mg 279.077 IEC†	3.6	1.0	46.586	ug/L	46.586	ppb	15:09:00
1	Na 589.592 Radial†	-1163.2	142.8	40.067	ug/L	40.067	ppb	15:08:40
1	Sr 421.552†	-18.4	-10.6	-0.0557	ug/L	-0.0557	ppb	15:08:40
1	Sc 361.383	1080208.4	1080208.4	103.92	%			15:09:57
1	Y 371.029	916856.5	916856.5	103.66	%			15:09:57
1	Ag 328.068†	461.5	-29.9	-0.1202	ug/L	-0.1202	ppb	15:10:02
1	As 188.979†	-43.4	-5.2	-1.6111	ug/L	-1.6111	ppb	15:10:22
1	B 249.677†	-503.2	-18.1	-0.3406	ug/L	-0.3406	ppb	15:10:22
1	Ba 233.527†	9.3	9.0	0.0581	ug/L	0.0581	ppb	15:10:22
1	Be 313.107†	-4955.9	104.9	0.0329	ug/L	0.0329	ppb	15:10:02
1	Cd 226.502†	-247.5	-2.5	-0.0210	ug/L	-0.0210	ppb	15:10:22
1	Co 228.616†	-94.0	-4.2	-0.0676	ug/L	-0.0676	ppb	15:10:22
1	Cr 267.716†	95.2	3.8	0.0346	ug/L	0.0346	ppb	15:10:22
1	Cu 324.752†	9122.2	-159.2	-0.4258	ug/L	-0.4258	ppb	15:10:02
1	Mn 257.610†	558.6	-39.2	-0.0390	ug/L	-0.0390	ppb	15:10:22
1	Mo 202.031†	37.1	6.4	0.3400	ug/L	0.3400	ppb	15:10:22
1	Ni 231.604†	151.1	13.5	0.2640	ug/L	0.2640	ppb	15:10:22
1	P 214.914†	296.0	19.8	8.9287	ug/L	8.9287	ppb	15:10:22
1	Pb 220.353†	-84.2	-5.5	-0.5141	ug/L	-0.5141	ppb	15:10:22
1	S 181.975 Axial†	51.6	-10.4	-11.216	ug/L	-11.216	ppb	15:10:22
1	Sb 206.836†	30.9	-4.9	-1.2839	ug/L	-1.2839	ppb	15:10:22
1	Se 196.026†	-19.5	2.6	1.1238	ug/L	1.1238	ppb	15:10:22
1	Si 251.611†	2598.4	1942.8	49.338	ug/L	49.338	ppb	15:10:22
1	Sn 189.927†	1.0	5.3	0.7060	ug/L	0.7060	ppb	15:10:22
1	Ti 334.940†	-1212.4	93.8	0.1297	ug/L	0.1297	ppb	15:10:02
1	Tl 190.801†	-41.7	4.2	1.0060	ug/L	1.0060	ppb	15:10:22
1	U 409.014†	-2920.9	-36.8	-0.9501	ug/L	-0.9501	ppb	15:09:57
1	V 292.402†	-1626.3	43.5	0.2546	ug/L	0.2546	ppb	15:10:02
1	Zn 213.857†	1048.2	123.1	0.9031	ug/L	0.9031	ppb	15:10:22
1	SiO2†	2711.8	2010.5	109.26	ug/L	109.26	ppb	15:11:28
2	Sc Radial	4936.4	4936.4	101	%			15:09:05
2	Y RADIAL	5667.1	5667.1	100.4	%			15:09:05
2	Al 396.153Radial†	-28.6	15.4	10.182	ug/L	10.182	ppb	15:09:05
2	Ca 317.933Radial†	21.6	3.7	6.4833	ug/L	6.4833	ppb	15:09:25
2	Fe 238.204 Radial†	10.1	-1.0	-11.993	ug/L	-11.993	ppb	15:09:25
2	K 766.490 Radial†	2612.0	28.4	5.1502	ug/L	5.1502	ppb	15:09:05
2	Mg 279.077 IEC†	3.6	1.1	49.665	ug/L	49.665	ppb	15:09:25
2	Na 589.592 Radial†	-1155.2	131.0	36.744	ug/L	36.744	ppb	15:09:05
2	Sr 421.552†	-7.0	0.5	0.0024	ug/L	0.0024	ppb	15:09:05
2	Sc 361.383	1058515.0	1058515.0	101.83	%			15:10:27
2	Y 371.029	899527.1	899527.1	101.70	%			15:10:27
2	Ag 328.068†	479.1	-3.5	-0.0163	ug/L	-0.0163	ppb	15:10:32
2	As 188.979†	-46.8	-9.3	-2.9082	ug/L	-2.9082	ppb	15:10:52
2	B 249.677†	-476.1	-1.4	-0.0260	ug/L	-0.0260	ppb	15:10:52
2	Ba 233.527†	2.7	2.7	0.0165	ug/L	0.0165	ppb	15:10:52
2	Be 313.107†	-4876.8	84.8	0.0269	ug/L	0.0269	ppb	15:10:32
2	Cd 226.502†	-237.4	2.5	0.0233	ug/L	0.0233	ppb	15:10:52
2	Co 228.616†	-81.9	5.9	0.0942	ug/L	0.0942	ppb	15:10:52
2	Cr 267.716†	80.4	-8.8	-0.0787	ug/L	-0.0787	ppb	15:10:52
2	Cu 324.752†	9032.0	-67.9	-0.1818	ug/L	-0.1818	ppb	15:10:32
2	Mn 257.610†	576.9	-10.2	-0.0118	ug/L	-0.0118	ppb	15:10:52
2	Mo 202.031†	12.0	-17.4	-0.9251	ug/L	-0.9251	ppb	15:10:52
2	Ni 231.604†	134.1	-0.3	-0.0056	ug/L	-0.0056	ppb	15:10:52

2	P 214.914†	289.4	19.1	8.5677 ug/L	8.5677 ppb	15:10:52
2	Pb 220.353†	-96.5	-19.2	-1.7977 ug/L	-1.7977 ppb	15:10:52
2	S 181.975 Axial†	58.2	-2.9	-3.1574 ug/L	-3.1574 ppb	15:10:52
2	Sb 206.836†	32.5	-2.7	-0.7301 ug/L	-0.7301 ppb	15:10:52
2	Se 196.026†	-19.6	2.2	0.9090 ug/L	0.9090 ppb	15:10:52
2	Si 251.611†	2609.7	2005.1	50.938 ug/L	50.938 ppb	15:10:52
2	Sn 189.927†	-4.2	0.2	0.0314 ug/L	0.0314 ppb	15:10:52
2	Ti 334.940†	-1091.6	188.4	0.2614 ug/L	0.2614 ppb	15:10:32
2	Tl 190.801†	-53.2	-8.0	-1.9370 ug/L	-1.9370 ppb	15:10:52
2	U 409.014†	-2928.6	-101.9	-2.6335 ug/L	-2.6335 ppb	15:10:27
2	V 292.402†	-1665.6	-27.2	-0.1712 ug/L	-0.1712 ppb	15:10:32
2	Zn 213.857†	1061.9	157.3	1.1555 ug/L	1.1555 ppb	15:10:52
2	SiO2†	2751.0	2102.5	114.30 ug/L	114.30 ppb	15:11:33
3	Sc Radial	4896.4	4896.4	99.7 %		15:09:30
3	Y RADIAL	5641.2	5641.2	99.89 %		15:09:30
3	Al 396.153Radial†	-14.2	29.6	19.536 ug/L	19.536 ppb	15:09:30
3	Ca 317.933Radial†	22.1	4.4	7.7164 ug/L	7.7164 ppb	15:09:50
3	Fe 238.204 Radial†	8.8	-2.1	-25.694 ug/L	-25.694 ppb	15:09:50
3	K 766.490 Radial†	2516.0	-46.7	-8.5222 ug/L	-8.5222 ppb	15:09:30
3	Mg 279.077 IEC†	2.6	0.1	4.9153 ug/L	4.9153 ppb	15:09:50
3	Na 589.592 Radial†	-1228.6	48.0	13.471 ug/L	13.471 ppb	15:09:30
3	Sr 421.552†	1.5	8.9	0.0467 ug/L	0.0467 ppb	15:09:30
3	Sc 361.383	1058758.9	1058758.9	101.85 %		15:10:57
3	Y 371.029	900652.7	900652.7	101.83 %		15:10:57
3	Ag 328.068†	534.1	50.3	0.1903 ug/L	0.1903 ppb	15:11:03
3	As 188.979†	-40.8	-3.5	-1.0876 ug/L	-1.0876 ppb	15:11:23
3	B 249.677†	-466.0	8.6	0.1649 ug/L	0.1649 ppb	15:11:23
3	Ba 233.527†	11.4	11.3	0.0720 ug/L	0.0720 ppb	15:11:23
3	Be 313.107†	-4944.5	19.5	0.0066 ug/L	0.0066 ppb	15:11:03
3	Cd 226.502†	-243.8	-3.7	-0.0296 ug/L	-0.0296 ppb	15:11:23
3	Co 228.616†	-74.4	13.3	0.2182 ug/L	0.2182 ppb	15:11:23
3	Cr 267.716†	125.1	35.1	0.3142 ug/L	0.3142 ppb	15:11:23
3	Cu 324.752†	9130.8	27.0	0.0709 ug/L	0.0709 ppb	15:11:03
3	Mn 257.610†	571.9	-15.2	-0.0170 ug/L	-0.0170 ppb	15:11:23
3	Mo 202.031†	25.5	-4.2	-0.2226 ug/L	-0.2226 ppb	15:11:23
3	Ni 231.604†	147.9	13.2	0.2591 ug/L	0.2591 ppb	15:11:23
3	P 214.914†	288.5	18.2	8.1266 ug/L	8.1266 ppb	15:11:23
3	Pb 220.353†	-78.5	-1.5	-0.1366 ug/L	-0.1366 ppb	15:11:23
3	S 181.975 Axial†	58.1	-3.1	-3.3201 ug/L	-3.3201 ppb	15:11:23
3	Sb 206.836†	45.5	10.0	2.6064 ug/L	2.6064 ppb	15:11:23
3	Se 196.026†	-26.5	-4.6	-2.1363 ug/L	-2.1363 ppb	15:11:23
3	Si 251.611†	2608.4	2003.3	50.886 ug/L	50.886 ppb	15:11:23
3	Sn 189.927†	-11.9	-7.3	-0.9672 ug/L	-0.9672 ppb	15:11:23
3	Ti 334.940†	-1070.2	209.8	0.2886 ug/L	0.2886 ppb	15:11:03
3	Tl 190.801†	-43.1	1.9	0.4600 ug/L	0.4600 ppb	15:11:23
3	U 409.014†	-2733.3	90.4	2.3401 ug/L	2.3401 ppb	15:10:57
3	V 292.402†	-1584.6	52.8	0.3070 ug/L	0.3070 ppb	15:11:03
3	Zn 213.857†	1046.4	141.8	1.0425 ug/L	1.0425 ppb	15:11:23
3	SiO2†	2748.8	2099.7	114.14 ug/L	114.14 ppb	15:11:38

Mean Data: 1201978494|925431|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1065827.4	102.53	%	1.198				1.17%
Sc Radial	4951.7	101	%	1.3				1.30%
Y 371.029	905678.8	102.40	%	1.096				1.07%
Y RADIAL	5680.6	100.6	%	0.84				0.84%
Ag 328.068†	5.6	0.0179	ug/L	0.15803	0.0179	ppb	0.15803	881.68%
Al 396.153Radial†	11.2	7.3816	ug/L	13.76991	7.3816	ppb	13.76991	186.54%
As 188.979†	-6.0	-1.8690	ug/L	0.93724	-1.8690	ppb	0.93724	50.15%
B 249.677†	-3.7	-0.0672	ug/L	0.25526	-0.0672	ppb	0.25526	379.72%
Ba 233.527†	7.7	0.0489	ug/L	0.02891	0.0489	ppb	0.02891	59.16%
Be 313.107†	69.7	0.0222	ug/L	0.01379	0.0222	ppb	0.01379	62.18%
Ca 317.933Radial†	2.4	4.3344	ug/L	4.82944	4.3344	ppb	4.82944	111.42%
Cd 226.502†	-1.2	-0.0091	ug/L	0.02837	-0.0091	ppb	0.02837	311.83%
Co 228.616†	5.0	0.0816	ug/L	0.14331	0.0816	ppb	0.14331	175.62%
Cr 267.716†	10.0	0.0901	ug/L	0.20224	0.0901	ppb	0.20224	224.58%
Cu 324.752†	-66.7	-0.1789	ug/L	0.24834	-0.1789	ppb	0.24834	138.82%
Fe 238.204 Radial†	-1.3	-16.150	ug/L	8.2881	-16.150	ppb	8.2881	51.32%
K 766.490 Radial†	-32.5	-5.9455	ug/L	10.05799	-5.9455	ppb	10.05799	169.17%

Mg 279.077 IEC†	0.8	33.722	ug/L	24.9946	33.722	ppb	24.9946	74.12%
Mn 257.610†	-21.5	-0.0226	ug/L	0.01446	-0.0226	ppb	0.01446	63.92%
Mo 202.031†	-5.1	-0.2692	ug/L	0.63383	-0.2692	ppb	0.63383	235.45%
Na 589.592 Radial†	107.3	30.094	ug/L	14.4915	30.094	ppb	14.4915	48.15%
Ni 231.604†	8.8	0.1725	ug/L	0.15428	0.1725	ppb	0.15428	89.45%
P 214.914†	19.0	8.5410	ug/L	0.40171	8.5410	ppb	0.40171	4.70%
Pb 220.353†	-8.7	-0.8161	ug/L	0.87078	-0.8161	ppb	0.87078	106.69%
S 181.975 Axial†	-5.5	-5.8978	ug/L	4.60623	-5.8978	ppb	4.60623	78.10%
Sb 206.836†	0.8	0.1975	ug/L	2.10451	0.1975	ppb	2.10451	>999.9%
Se 196.026†	0.1	-0.0345	ug/L	1.82340	-0.0345	ppb	1.82340	>999.9%
Si 251.611†	1983.8	50.387	ug/L	0.9091	50.387	ppb	0.9091	1.80%
Sn 189.927†	-0.6	-0.0766	ug/L	0.84179	-0.0766	ppb	0.84179	>999.9%
Sr 421.552†	-0.4	-0.0022	ug/L	0.05136	-0.0022	ppb	0.05136	>999.9%
Ti 334.940†	164.0	0.2266	ug/L	0.08499	0.2266	ppb	0.08499	37.51%
Tl 190.801†	-0.7	-0.1570	ug/L	1.56549	-0.1570	ppb	1.56549	997.18%
U 409.014†	-16.1	-0.4145	ug/L	2.52968	-0.4145	ppb	2.52968	610.31%
V 292.402†	23.0	0.1301	ug/L	0.26224	0.1301	ppb	0.26224	201.51%
Zn 213.857†	140.7	1.0337	ug/L	0.12640	1.0337	ppb	0.12640	12.23%
SiO2†	2070.9	112.57	ug/L	2.863	112.57	ppb	2.863	2.54%

Sequence No.: 22
Sample ID: 1201978495|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 12/4/2009 15:13:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978495|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4926.7	4926.7	100	%			15:15:40
1	Y RADIAL	5643.7	5643.7	99.94	%			15:15:40
1	Al 396.153Radial†	8130.8	8146.5	5357.3	ug/L	5357.3	ppb	15:15:40
1	Ca 317.933Radial†	2991.4	2963.2	5246.4	ug/L	5246.4	ppb	15:16:00
1	Fe 238.204 Radial†	448.9	436.4	5292.1	ug/L	5292.1	ppb	15:16:00
1	K 766.490 Radial†	31052.9	28376.1	5165.0	ug/L	5165.0	ppb	15:15:40
1	Mg 279.077 IEC†	123.9	120.9	5417.0	ug/L	5417.0	ppb	15:16:00
1	Na 589.592 Radial†	17315.0	18535.1	5199.1	ug/L	5199.1	ppb	15:15:40
1	Sr 421.552†	100204.9	99866.3	523.89	ug/L	523.89	ppb	15:15:40
1	Sc 361.383	1056484.8	1056484.8	101.64	%			15:17:00
1	Y 371.029	884572.9	884572.9	100.01	%			15:17:00
1	Ag 328.068†	133848.7	131220.7	523.36	ug/L	523.36	ppb	15:17:00
1	As 188.979†	1615.6	1626.2	511.32	ug/L	511.32	ppb	15:17:20
1	B 249.677†	26994.9	27026.6	508.77	ug/L	508.77	ppb	15:17:00
1	Ba 233.527†	84698.2	83335.3	536.75	ug/L	536.75	ppb	15:17:00
1	Be 313.107†	1658973.4	1637150.5	511.48	ug/L	511.48	ppb	15:17:00
1	Cd 226.502†	60611.5	59871.7	521.93	ug/L	521.93	ppb	15:17:00
1	Co 228.616†	31309.0	30891.5	508.98	ug/L	508.98	ppb	15:17:20
1	Cr 267.716†	59062.1	58023.8	522.13	ug/L	522.13	ppb	15:17:00
1	Cu 324.752†	210028.7	197711.4	528.26	ug/L	528.26	ppb	15:17:00
1	Mn 257.610†	570101.5	560350.6	531.05	ug/L	531.05	ppb	15:17:00
1	Mo 202.031†	9839.0	9651.4	512.55	ug/L	512.55	ppb	15:17:20
1	Ni 231.604†	26914.1	26349.1	515.95	ug/L	515.95	ppb	15:17:20
1	P 214.914†	1622.9	1331.7	516.04	ug/L	516.04	ppb	15:17:20
1	Pb 220.353†	5626.0	5611.0	528.33	ug/L	528.33	ppb	15:17:20
1	S 181.975 Axial†	4928.6	4789.2	5158.8	ug/L	5158.8	ppb	15:17:20
1	Sb 206.836†	2005.2	1938.3	518.71	ug/L	518.71	ppb	15:17:20
1	Se 196.026†	1100.9	1104.6	510.05	ug/L	510.05	ppb	15:17:20
1	Si 251.611†	209250.0	205325.0	5202.2	ug/L	5202.2	ppb	15:17:00
1	Sn 189.927†	4155.2	4092.7	541.91	ug/L	541.91	ppb	15:17:20
1	Ti 334.940†	385975.4	381024.6	525.40	ug/L	525.40	ppb	15:17:00
1	Tl 190.801†	2156.7	2166.3	527.35	ug/L	527.35	ppb	15:17:20
1	U 409.014†	17872.4	20358.8	524.69	ug/L	524.69	ppb	15:17:00
1	V 292.402†	91747.6	91879.7	532.86	ug/L	532.86	ppb	15:17:00
1	Zn 213.857†	72512.8	70460.3	513.14	ug/L	513.14	ppb	15:17:00
1	SiO2†	209753.0	205778.5	11157	ug/L	11157	ppb	15:18:20
2	Sc Radial	4911.3	4911.3	100	%			15:16:06
2	Y RADIAL	5626.9	5626.9	99.64	%			15:16:06
2	Al 396.153Radial†	8074.2	8115.4	5336.7	ug/L	5336.7	ppb	15:16:06
2	Ca 317.933Radial†	2997.4	2978.6	5273.7	ug/L	5273.7	ppb	15:16:26
2	Fe 238.204 Radial†	447.5	436.4	5292.3	ug/L	5292.3	ppb	15:16:26
2	K 766.490 Radial†	30904.3	28325.1	5155.7	ug/L	5155.7	ppb	15:16:06
2	Mg 279.077 IEC†	121.6	119.1	5332.8	ug/L	5332.8	ppb	15:16:26
2	Na 589.592 Radial†	16982.5	18257.1	5121.1	ug/L	5121.1	ppb	15:16:06
2	Sr 421.552†	99304.4	99280.6	520.82	ug/L	520.82	ppb	15:16:06
2	Sc 361.383	1054534.0	1054534.0	101.45	%			15:17:27
2	Y 371.029	884172.7	884172.7	99.967	%			15:17:27
2	Ag 328.068†	133635.1	131253.8	523.48	ug/L	523.48	ppb	15:17:27
2	As 188.979†	1610.6	1624.3	510.70	ug/L	510.70	ppb	15:17:47
2	B 249.677†	26911.2	26993.2	508.14	ug/L	508.14	ppb	15:17:27
2	Ba 233.527†	84341.9	83138.2	535.48	ug/L	535.48	ppb	15:17:27
2	Be 313.107†	1655777.8	1637020.0	511.44	ug/L	511.44	ppb	15:17:27
2	Cd 226.502†	60292.8	59667.9	520.16	ug/L	520.16	ppb	15:17:27
2	Co 228.616†	31347.8	30986.7	510.56	ug/L	510.56	ppb	15:17:47
2	Cr 267.716†	58882.2	57954.0	521.50	ug/L	521.50	ppb	15:17:27
2	Cu 324.752†	209504.6	197577.0	527.90	ug/L	527.90	ppb	15:17:27
2	Mn 257.610†	568201.8	559515.5	530.26	ug/L	530.26	ppb	15:17:27
2	Mo 202.031†	9883.8	9713.4	515.84	ug/L	515.84	ppb	15:17:47
2	Ni 231.604†	26954.5	26437.8	517.69	ug/L	517.69	ppb	15:17:47

2	P 214.914†	1610.9	1322.8	512.13 ug/L	512.13 ppb	15:17:47
2	Pb 220.353†	5653.0	5647.9	531.80 ug/L	531.80 ppb	15:17:47
2	S 181.975 Axial†	4949.7	4818.9	5190.8 ug/L	5190.8 ppb	15:17:47
2	Sb 206.836†	2028.0	1964.4	525.69 ug/L	525.69 ppb	15:17:47
2	Se 196.026†	1122.2	1127.6	520.27 ug/L	520.27 ppb	15:17:47
2	Si 251.611†	208393.7	204861.8	5190.4 ug/L	5190.4 ppb	15:17:27
2	Sn 189.927†	4159.7	4104.7	543.50 ug/L	543.50 ppb	15:17:47
2	Ti 334.940†	385065.5	380830.2	525.13 ug/L	525.13 ppb	15:17:27
2	Tl 190.801†	2153.2	2166.7	527.45 ug/L	527.45 ppb	15:17:47
2	U 409.014†	18172.2	20686.8	533.17 ug/L	533.17 ppb	15:17:27
2	V 292.402†	91486.8	91789.6	532.40 ug/L	532.40 ppb	15:17:27
2	Zn 213.857†	72211.2	70295.0	511.92 ug/L	511.92 ppb	15:17:27
2	SiO2†	208114.9	204545.6	11090 ug/L	11090 ppb	15:18:25
3	Sc Radial	4832.2	4832.2	98.4 %		15:16:31
3	Y RADIAL	5550.6	5550.6	98.29 %		15:16:31
3	Al 396.153Radial†	8024.4	8196.9	5390.4 ug/L	5390.4 ppb	15:16:31
3	Ca 317.933Radial†	2964.5	2994.2	5301.4 ug/L	5301.4 ppb	15:16:51
3	Fe 238.204 Radial†	439.9	436.0	5287.3 ug/L	5287.3 ppb	15:16:51
3	K 766.490 Radial†	30663.9	28586.4	5203.3 ug/L	5203.3 ppb	15:16:31
3	Mg 279.077 IEC†	119.3	118.7	5318.7 ug/L	5318.7 ppb	15:16:51
3	Na 589.592 Radial†	16989.1	18541.7	5200.9 ug/L	5200.9 ppb	15:16:31
3	Sr 421.552†	98215.1	99798.4	523.54 ug/L	523.54 ppb	15:16:31
3	Sc 361.383	1049182.5	1049182.5	100.93 %		15:17:54
3	Y 371.029	880417.7	880417.7	99.542 %		15:17:54
3	Ag 328.068†	133175.5	131470.3	524.34 ug/L	524.34 ppb	15:17:54
3	As 188.979†	1610.3	1632.0	513.10 ug/L	513.10 ppb	15:18:15
3	B 249.677†	26859.7	27077.5	509.72 ug/L	509.72 ppb	15:17:54
3	Ba 233.527†	83924.2	83148.4	535.54 ug/L	535.54 ppb	15:17:54
3	Be 313.107†	1649775.7	1639398.3	512.18 ug/L	512.18 ppb	15:17:54
3	Cd 226.502†	59889.2	59571.2	519.31 ug/L	519.31 ppb	15:17:54
3	Co 228.616†	31353.0	31149.5	513.25 ug/L	513.25 ppb	15:18:15
3	Cr 267.716†	58545.8	57916.8	521.17 ug/L	521.17 ppb	15:17:54
3	Cu 324.752†	208442.1	197577.6	527.90 ug/L	527.90 ppb	15:17:54
3	Mn 257.610†	565167.3	559365.9	530.12 ug/L	530.12 ppb	15:17:54
3	Mo 202.031†	9885.6	9765.0	518.58 ug/L	518.58 ppb	15:18:15
3	Ni 231.604†	26961.8	26580.6	520.48 ug/L	520.48 ppb	15:18:15
3	P 214.914†	1600.5	1320.6	511.27 ug/L	511.27 ppb	15:18:15
3	Pb 220.353†	5606.1	5629.9	530.12 ug/L	530.12 ppb	15:18:15
3	S 181.975 Axial†	4926.8	4821.2	5193.3 ug/L	5193.3 ppb	15:18:15
3	Sb 206.836†	2040.4	1986.9	531.79 ug/L	531.79 ppb	15:18:15
3	Se 196.026†	1111.5	1122.6	518.06 ug/L	518.06 ppb	15:18:15
3	Si 251.611†	207378.4	204903.7	5191.4 ug/L	5191.4 ppb	15:17:54
3	Sn 189.927†	4178.8	4144.5	548.77 ug/L	548.77 ppb	15:18:15
3	Ti 334.940†	382836.4	380557.7	524.75 ug/L	524.75 ppb	15:17:54
3	Tl 190.801†	2165.6	2189.9	533.03 ug/L	533.03 ppb	15:18:15
3	U 409.014†	17988.1	20595.8	530.82 ug/L	530.82 ppb	15:17:54
3	V 292.402†	90986.7	91754.1	532.24 ug/L	532.24 ppb	15:17:54
3	Zn 213.857†	71851.6	70301.8	511.95 ug/L	511.95 ppb	15:17:54
3	SiO2†	207402.1	204885.8	11108 ug/L	11108 ppb	15:18:31

Mean Data: 1201978495|925431|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1053400.4	101.34	%	0.364				0.36%
Sc Radial	4890.1	99.6	%	1.03				1.04%
Y 371.029	883054.4	99.840	%	0.2592				0.26%
Y RADIAL	5607.1	99.29	%	0.879				0.89%
Ag 328.068†	131314.9	523.73	ug/L	0.534	523.73	ppb	0.534	0.10%
Al 396.153Radial†	8152.9	5361.5	ug/L	27.08	5361.5	ppb	27.08	0.51%
As 188.979†	1627.5	511.71	ug/L	1.243	511.71	ppb	1.243	0.24%
B 249.677†	27032.4	508.88	ug/L	0.799	508.88	ppb	0.799	0.16%
Ba 233.527†	83207.3	535.92	ug/L	0.714	535.92	ppb	0.714	0.13%
Be 313.107†	1637856.3	511.70	ug/L	0.416	511.70	ppb	0.416	0.08%
Ca 317.933Radial†	2978.7	5273.8	ug/L	27.46	5273.8	ppb	27.46	0.52%
Cd 226.502†	59703.6	520.47	ug/L	1.336	520.47	ppb	1.336	0.26%
Co 228.616†	31009.2	510.93	ug/L	2.158	510.93	ppb	2.158	0.42%
Cr 267.716†	57964.9	521.60	ug/L	0.490	521.60	ppb	0.490	0.09%
Cu 324.752†	197622.0	528.02	ug/L	0.207	528.02	ppb	0.207	0.04%
Fe 238.204 Radial†	436.3	5290.6	ug/L	2.82	5290.6	ppb	2.82	0.05%
K 766.490 Radial†	28429.2	5174.7	ug/L	25.25	5174.7	ppb	25.25	0.49%

Mg 279.077 IEC†	119.6	5356.1 ug/L	53.14	5356.1 ppb	53.14	0.99%
Mn 257.610†	559744.0	530.47 ug/L	0.502	530.47 ppb	0.502	0.09%
Mo 202.031†	9710.0	515.66 ug/L	3.018	515.66 ppb	3.018	0.59%
Na 589.592 Radial†	18444.6	5173.7 ug/L	45.57	5173.7 ppb	45.57	0.88%
Ni 231.604†	26455.8	518.04 ug/L	2.287	518.04 ppb	2.287	0.44%
P 214.914†	1325.0	513.15 ug/L	2.544	513.15 ppb	2.544	0.50%
Pb 220.353†	5629.6	530.09 ug/L	1.733	530.09 ppb	1.733	0.33%
S 181.975 Axial†	4809.8	5181.0 ug/L	19.24	5181.0 ppb	19.24	0.37%
Sb 206.836†	1963.2	525.40 ug/L	6.545	525.40 ppb	6.545	1.25%
Se 196.026†	1118.3	516.13 ug/L	5.376	516.13 ppb	5.376	1.04%
Si 251.611†	205030.2	5194.7 ug/L	6.56	5194.7 ppb	6.56	0.13%
Sn 189.927†	4114.0	544.73 ug/L	3.591	544.73 ppb	3.591	0.66%
Sr 421.552†	99648.4	522.75 ug/L	1.681	522.75 ppb	1.681	0.32%
Ti 334.940†	380804.2	525.09 ug/L	0.323	525.09 ppb	0.323	0.06%
Tl 190.801†	2174.3	529.28 ug/L	3.249	529.28 ppb	3.249	0.61%
U 409.014†	20547.1	529.56 ug/L	4.379	529.56 ppb	4.379	0.83%
V 292.402†	91807.8	532.50 ug/L	0.321	532.50 ppb	0.321	0.06%
Zn 213.857†	70352.4	512.34 ug/L	0.696	512.34 ppb	0.696	0.14%
SiO2†	205070.0	11119 ug/L	34.7	11119 ppb	34.7	0.31%

Sequence No.: 23
Sample ID: 1201978496|925431|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 12/4/2009 15:20:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978496|925431|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4972.4	4972.4	101	%			15:22:34
1	Y RADIAL	5695.1	5695.1	100.8	%			15:22:34
1	Al 396.153Radial†	-39.7	4.5	2.9648	ug/L	2.9648	ppb	15:22:34
1	Ca 317.933Radial†	19.9	1.8	3.1317	ug/L	3.1317	ppb	15:22:54
1	Fe 238.204 Radial†	10.5	-0.6	-7.6174	ug/L	-7.6174	ppb	15:22:54
1	K 766.490 Radial†	2698.2	94.7	17.242	ug/L	17.242	ppb	15:22:34
1	Mg 279.077 IEC†	2.7	0.2	8.6213	ug/L	8.6213	ppb	15:22:54
1	Na 589.592 Radial†	-1174.7	120.1	33.693	ug/L	33.693	ppb	15:22:34
1	Sr 421.552†	17.9	25.1	0.1315	ug/L	0.1315	ppb	15:22:34
1	Sc 361.383	1046184.4	1046184.4	100.64	%			15:23:51
1	Y 371.029	888069.2	888069.2	100.41	%			15:23:51
1	Ag 328.068†	436.0	-40.9	-0.1642	ug/L	-0.1642	ppb	15:23:56
1	As 188.979†	-35.5	1.4	0.4250	ug/L	0.4250	ppb	15:24:16
1	B 249.677†	-385.8	82.8	1.5662	ug/L	1.5662	ppb	15:24:16
1	Ba 233.527†	10.8	10.8	0.0688	ug/L	0.0688	ppb	15:24:16
1	Be 313.107†	-4822.6	82.2	0.0257	ug/L	0.0257	ppb	15:23:56
1	Cd 226.502†	-217.1	19.9	0.1743	ug/L	0.1743	ppb	15:24:16
1	Co 228.616†	-94.0	-7.1	-0.1148	ug/L	-0.1148	ppb	15:24:16
1	Cr 267.716†	115.4	26.9	0.2414	ug/L	0.2414	ppb	15:24:16
1	Cu 324.752†	8910.0	-84.5	-0.2261	ug/L	-0.2261	ppb	15:23:56
1	Mn 257.610†	569.3	-11.1	-0.0114	ug/L	-0.0114	ppb	15:24:16
1	Mo 202.031†	44.9	15.4	0.8147	ug/L	0.8147	ppb	15:24:16
1	Ni 231.604†	135.7	2.9	0.0564	ug/L	0.0564	ppb	15:24:16
1	P 214.914†	278.0	11.1	5.0081	ug/L	5.0081	ppb	15:24:16
1	Pb 220.353†	-97.5	-21.3	-1.9939	ug/L	-1.9939	ppb	15:24:16
1	S 181.975 Axial†	58.6	-1.9	-2.0004	ug/L	-2.0004	ppb	15:24:16
1	Sb 206.836†	37.8	2.9	0.7995	ug/L	0.7995	ppb	15:24:16
1	Se 196.026†	-16.9	4.5	1.9894	ug/L	1.9894	ppb	15:24:16
1	Si 251.611†	1007.8	443.7	11.244	ug/L	11.244	ppb	15:24:16
1	Sn 189.927†	5.4	9.7	1.2813	ug/L	1.2813	ppb	15:24:16
1	Ti 334.940†	-1254.3	14.2	0.0200	ug/L	0.0200	ppb	15:23:56
1	Tl 190.801†	-41.2	3.3	0.8074	ug/L	0.8074	ppb	15:24:16
1	U 409.014†	-2824.6	-32.5	-0.8396	ug/L	-0.8396	ppb	15:23:51
1	V 292.402†	-1637.6	-18.6	-0.0951	ug/L	-0.0951	ppb	15:23:56
1	Zn 213.857†	958.7	66.9	0.4923	ug/L	0.4923	ppb	15:24:16
1	SiO2†	1080.1	474.1	25.715	ug/L	25.715	ppb	15:25:22
2	Sc Radial	4823.5	4823.5	98.2	%			15:22:59
2	Y RADIAL	5541.0	5541.0	98.12	%			15:22:59
2	Al 396.153Radial†	-48.7	-5.8	-3.7822	ug/L	-3.7822	ppb	15:22:59
2	Ca 317.933Radial†	20.1	2.6	4.5763	ug/L	4.5763	ppb	15:23:19
2	Fe 238.204 Radial†	9.6	-1.2	-14.433	ug/L	-14.433	ppb	15:23:19
2	K 766.490 Radial†	2645.3	123.1	22.424	ug/L	22.424	ppb	15:22:59
2	Mg 279.077 IEC†	1.9	-0.6	-25.277	ug/L	-25.277	ppb	15:23:19
2	Na 589.592 Radial†	-1194.6	64.0	17.942	ug/L	17.942	ppb	15:22:59
2	Sr 421.552†	0.4	7.8	0.0411	ug/L	0.0411	ppb	15:22:59
2	Sc 361.383	1042972.1	1042972.1	100.34	%			15:24:21
2	Y 371.029	886525.0	886525.0	100.23	%			15:24:21
2	Ag 328.068†	441.7	-33.8	-0.1385	ug/L	-0.1385	ppb	15:24:26
2	As 188.979†	-29.4	7.3	2.2753	ug/L	2.2753	ppb	15:24:46
2	B 249.677†	-375.8	91.5	1.7320	ug/L	1.7320	ppb	15:24:46
2	Ba 233.527†	-1.0	-1.0	-0.0074	ug/L	-0.0074	ppb	15:24:46
2	Be 313.107†	-4903.9	-13.5	-0.0040	ug/L	-0.0040	ppb	15:24:26
2	Cd 226.502†	-230.0	6.4	0.0574	ug/L	0.0574	ppb	15:24:46
2	Co 228.616†	-105.2	-18.6	-0.3071	ug/L	-0.3071	ppb	15:24:46
2	Cr 267.716†	121.0	32.9	0.2950	ug/L	0.2950	ppb	15:24:46
2	Cu 324.752†	9070.0	102.2	0.2722	ug/L	0.2722	ppb	15:24:26
2	Mn 257.610†	573.4	-5.2	-0.0059	ug/L	-0.0059	ppb	15:24:46
2	Mo 202.031†	20.9	-8.5	-0.4498	ug/L	-0.4498	ppb	15:24:46
2	Ni 231.604†	131.7	-0.7	-0.0125	ug/L	-0.0125	ppb	15:24:46

2	P 214.914†	275.2	9.2	4.0768	ug/L	4.0768 ppb	15:24:46
2	Pb 220.353†	-69.2	6.6	0.6197	ug/L	0.6197 ppb	15:24:46
2	S 181.975 Axial†	58.1	-2.2	-2.4146	ug/L	-2.4146 ppb	15:24:46
2	Sb 206.836†	48.3	13.5	3.5591	ug/L	3.5591 ppb	15:24:46
2	Se 196.026†	-22.9	-1.5	-0.7066	ug/L	-0.7066 ppb	15:24:46
2	Si 251.611†	1007.3	446.3	11.335	ug/L	11.335 ppb	15:24:46
2	Sn 189.927†	-1.2	3.1	0.4146	ug/L	0.4146 ppb	15:24:46
2	Ti 334.940†	-1192.6	71.8	0.0998	ug/L	0.0998 ppb	15:24:26
2	Tl 190.801†	-47.4	-3.0	-0.7165	ug/L	-0.7165 ppb	15:24:46
2	U 409.014†	-2835.5	-52.0	-1.3436	ug/L	-1.3436 ppb	15:24:21
2	V 292.402†	-1654.5	-40.5	-0.2394	ug/L	-0.2394 ppb	15:24:26
2	Zn 213.857†	947.6	58.8	0.4343	ug/L	0.4343 ppb	15:24:46
2	SiO2†	1036.9	434.4	23.606	ug/L	23.606 ppb	15:25:27
3	Sc Radial	4835.7	4835.7	98.5	%		15:23:24
3	Y RADIAL	5557.7	5557.7	98.42	%		15:23:24
3	Al 396.153Radial†	-29.0	14.4	9.4844	ug/L	9.4844 ppb	15:23:24
3	Ca 317.933Radial†	20.8	3.3	5.8806	ug/L	5.8806 ppb	15:23:44
3	Fe 238.204 Radial†	14.9	4.1	49.576	ug/L	49.576 ppb	15:23:44
3	K 766.490 Radial†	2494.5	-36.9	-6.7375	ug/L	-6.7375 ppb	15:23:24
3	Mg 279.077 IEC†	4.5	2.1	92.878	ug/L	92.878 ppb	15:23:44
3	Na 589.592 Radial†	-1107.8	155.2	43.534	ug/L	43.534 ppb	15:23:24
3	Sr 421.552†	-5.4	1.9	0.0101	ug/L	0.0101 ppb	15:23:24
3	Sc 361.383	1050307.3	1050307.3	101.04	%		15:24:51
3	Y 371.029	891876.2	891876.2	100.84	%		15:24:51
3	Ag 328.068†	486.9	7.8	0.0476	ug/L	0.0476 ppb	15:24:56
3	As 188.979†	-31.7	5.2	1.6315	ug/L	1.6315 ppb	15:25:16
3	B 249.677†	-395.9	74.2	1.3964	ug/L	1.3964 ppb	15:25:16
3	Ba 233.527†	-8.1	-8.0	-0.0497	ug/L	-0.0497 ppb	15:25:16
3	Be 313.107†	-4812.6	110.9	0.0347	ug/L	0.0347 ppb	15:24:56
3	Cd 226.502†	-237.3	0.8	0.0023	ug/L	0.0023 ppb	15:25:16
3	Co 228.616†	-91.5	-4.2	-0.0695	ug/L	-0.0695 ppb	15:25:16
3	Cr 267.716†	96.4	7.6	0.0695	ug/L	0.0695 ppb	15:25:16
3	Cu 324.752†	8972.9	-57.1	-0.1499	ug/L	-0.1499 ppb	15:24:56
3	Mn 257.610†	584.3	1.5	0.0047	ug/L	0.0047 ppb	15:25:16
3	Mo 202.031†	32.7	3.1	0.1683	ug/L	0.1683 ppb	15:25:16
3	Ni 231.604†	157.1	23.6	0.4618	ug/L	0.4618 ppb	15:25:16
3	P 214.914†	279.1	11.1	4.9505	ug/L	4.9505 ppb	15:25:16
3	Pb 220.353†	-68.1	8.2	0.7644	ug/L	0.7644 ppb	15:25:16
3	S 181.975 Axial†	57.1	-3.5	-3.8239	ug/L	-3.8239 ppb	15:25:16
3	Sb 206.836†	52.0	16.8	4.4387	ug/L	4.4387 ppb	15:25:16
3	Se 196.026†	-26.8	-5.2	-2.1106	ug/L	-2.1106 ppb	15:25:16
3	Si 251.611†	1021.9	453.8	11.522	ug/L	11.522 ppb	15:25:16
3	Sn 189.927†	-0.5	3.8	0.5101	ug/L	0.5101 ppb	15:25:16
3	Ti 334.940†	-1219.3	53.7	0.0748	ug/L	0.0748 ppb	15:24:56
3	Tl 190.801†	-54.7	-9.9	-2.3952	ug/L	-2.3952 ppb	15:25:16
3	U 409.014†	-2850.4	-47.0	-1.2223	ug/L	-1.2223 ppb	15:24:51
3	V 292.402†	-1635.4	-10.0	-0.0629	ug/L	-0.0629 ppb	15:24:56
3	Zn 213.857†	949.8	54.5	0.3896	ug/L	0.3896 ppb	15:25:16
3	SiO2†	1101.9	491.5	26.710	ug/L	26.710 ppb	15:25:32

Mean Data: 1201978496|925431|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1046487.9	100.67	%	0.354				0.35%
Sc Radial	4877.2	99.3	%	1.68				1.70%
Y 371.029	888823.5	100.49	%	0.311				0.31%
Y RADIAL	5598.0	99.13	%	1.498				1.51%
Ag 328.068†	-22.3	-0.0850	ug/L	0.11555	-0.0850	ppb	0.11555	135.89%
Al 396.153Radial†	4.4	2.8890	ug/L	6.63363	2.8890	ppb	6.63363	229.62%
As 188.979†	4.6	1.4439	ug/L	0.93930	1.4439	ppb	0.93930	65.05%
B 249.677†	82.8	1.5649	ug/L	0.16779	1.5649	ppb	0.16779	10.72%
Ba 233.527†	0.6	0.0039	ug/L	0.06004	0.0039	ppb	0.06004	>999.9%
Be 313.107†	59.9	0.0188	ug/L	0.02027	0.0188	ppb	0.02027	107.91%
Ca 317.933Radial†	2.6	4.5295	ug/L	1.37503	4.5295	ppb	1.37503	30.36%
Cd 226.502†	9.0	0.0780	ug/L	0.08782	0.0780	ppb	0.08782	112.60%
Co 228.616†	-10.0	-0.1638	ug/L	0.12616	-0.1638	ppb	0.12616	77.02%
Cr 267.716†	22.4	0.2020	ug/L	0.11782	0.2020	ppb	0.11782	58.34%
Cu 324.752†	-13.1	-0.0346	ug/L	0.26841	-0.0346	ppb	0.26841	775.72%
Fe 238.204 Radial†	0.8	9.1751	ug/L	35.15333	9.1751	ppb	35.15333	383.14%
K 766.490 Radial†	60.3	10.976	ug/L	15.5578	10.976	ppb	15.5578	141.74%

Mg 279.077 IEC†	0.6	25.408	ug/L	60.8400	25.408	ppb	60.8400 239.46%
Mn 257.610†	-4.9	-0.0042	ug/L	0.00816	-0.0042	ppb	0.00816 194.67%
Mo 202.031†	3.3	0.1777	ug/L	0.63230	0.1777	ppb	0.63230 355.79%
Na 589.592 Radial†	113.1	31.723	ug/L	12.9090	31.723	ppb	12.9090 40.69%
Ni 231.604†	8.6	0.1686	ug/L	0.25631	0.1686	ppb	0.25631 152.05%
P 214.914†	10.4	4.6785	ug/L	0.52181	4.6785	ppb	0.52181 11.15%
Pb 220.353†	-2.2	-0.2033	ug/L	1.55242	-0.2033	ppb	1.55242 763.71%
S 181.975 Axial†	-2.5	-2.7463	ug/L	0.95594	-2.7463	ppb	0.95594 34.81%
Sb 206.836†	11.1	2.9324	ug/L	1.89879	2.9324	ppb	1.89879 64.75%
Se 196.026†	-0.7	-0.2760	ug/L	2.08364	-0.2760	ppb	2.08364 755.06%
Si 251.611†	447.9	11.367	ug/L	0.1420	11.367	ppb	0.1420 1.25%
Sn 189.927†	5.6	0.7353	ug/L	0.47524	0.7353	ppb	0.47524 64.63%
Sr 421.552†	11.6	0.0609	ug/L	0.06310	0.0609	ppb	0.06310 103.65%
Ti 334.940†	46.6	0.0649	ug/L	0.04079	0.0649	ppb	0.04079 62.87%
Tl 190.801†	-3.2	-0.7681	ug/L	1.60195	-0.7681	ppb	1.60195 208.56%
U 409.014†	-43.8	-1.1352	ug/L	0.26303	-1.1352	ppb	0.26303 23.17%
V 292.402†	-23.0	-0.1324	ug/L	0.09399	-0.1324	ppb	0.09399 70.97%
Zn 213.857†	60.1	0.4387	ug/L	0.05147	0.4387	ppb	0.05147 11.73%
SiO2†	466.7	25.344	ug/L	1.5849	25.344	ppb	1.5849 6.25%

Sequence No.: 24
Sample ID: 241614002|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 12/4/2009 15:27:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241614002|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5060.0	5060.0	103	%			15:29:35
1	Y RADIAL	5816.4	5816.4	103.0	%			15:29:35
1	Al 396.153Radial†	295.3	330.3	218.12	ug/L	218.12	ppb	15:29:35
1	Ca 317.933Radial†	110.1	89.0	157.59	ug/L	157.59	ppb	15:29:55
1	Fe 238.204 Radial†	24.9	13.2	159.57	ug/L	159.57	ppb	15:29:55
1	K 766.490 Radial†	3355.1	685.9	124.81	ug/L	124.81	ppb	15:29:35
1	Mg 279.077 IEC†	2.8	0.2	9.3549	ug/L	9.3549	ppb	15:29:55
1	Na 589.592 Radial†	61.4	1339.5	375.74	ug/L	375.74	ppb	15:29:35
1	Sr 421.552†	301.4	299.8	1.5717	ug/L	1.5717	ppb	15:29:35
1	Sc 361.383	1078063.5	1078063.5	103.71	%			15:30:52
1	Y 371.029	913667.2	913667.2	103.30	%			15:30:52
1	Ag 328.068†	394.2	-94.0	-0.3230	ug/L	-0.3230	ppb	15:30:57
1	As 188.979†	-44.3	-6.1	-1.8497	ug/L	-1.8497	ppb	15:31:17
1	B 249.677†	-437.9	43.9	0.8075	ug/L	0.8075	ppb	15:31:17
1	Ba 233.527†	554.8	535.0	3.4440	ug/L	3.4440	ppb	15:31:17
1	Be 313.107†	-5092.6	-36.4	-0.0052	ug/L	-0.0052	ppb	15:30:57
1	Cd 226.502†	-212.5	30.7	0.2529	ug/L	0.2529	ppb	15:31:17
1	Co 228.616†	-73.8	15.2	0.2422	ug/L	0.2422	ppb	15:31:17
1	Cr 267.716†	242.4	146.0	1.3146	ug/L	1.3146	ppb	15:31:17
1	Cu 324.752†	9807.7	519.2	1.3948	ug/L	1.3948	ppb	15:30:57
1	Mn 257.610†	6203.2	5404.6	5.1336	ug/L	5.1336	ppb	15:30:57
1	Mo 202.031†	34.0	3.6	0.2008	ug/L	0.2008	ppb	15:31:17
1	Ni 231.604†	203.6	64.4	1.2619	ug/L	1.2619	ppb	15:31:17
1	P 214.914†	295.1	19.4	8.4220	ug/L	8.4220	ppb	15:31:17
1	Pb 220.353†	-70.9	7.2	0.7097	ug/L	0.7097	ppb	15:31:17
1	S 181.975 Axial†	66.0	3.6	3.8002	ug/L	3.8002	ppb	15:31:17
1	Sb 206.836†	31.7	-4.1	-1.0980	ug/L	-1.0980	ppb	15:31:17
1	Se 196.026†	-28.5	-6.1	-2.1154	ug/L	-2.1154	ppb	15:31:17
1	Si 251.611†	22759.7	21387.6	543.12	ug/L	543.12	ppb	15:30:57
1	Sn 189.927†	5.6	9.8	1.3098	ug/L	1.3098	ppb	15:31:17
1	Ti 334.940†	1047.6	2270.5	3.1390	ug/L	3.1390	ppb	15:30:57
1	Tl 190.801†	-63.4	-16.9	-4.0293	ug/L	-4.0293	ppb	15:31:17
1	U 409.014†	-2838.0	37.5	0.9467	ug/L	0.9467	ppb	15:30:52
1	V 292.402†	-1583.0	82.2	0.4470	ug/L	0.4470	ppb	15:30:57
1	Zn 213.857†	1389.5	454.3	3.3127	ug/L	3.3127	ppb	15:31:17
1	SiO2†	22431.1	21029.4	1142.8	ug/L	1142.8	ppb	15:32:23
2	Sc Radial	5107.5	5107.5	104	%			15:30:00
2	Y RADIAL	5830.6	5830.6	103.2	%			15:30:00
2	Al 396.153Radial†	303.0	335.0	221.22	ug/L	221.22	ppb	15:30:00
2	Ca 317.933Radial†	112.4	90.2	159.79	ug/L	159.79	ppb	15:30:20
2	Fe 238.204 Radial†	23.5	11.6	140.72	ug/L	140.72	ppb	15:30:20
2	K 766.490 Radial†	3403.8	702.4	127.81	ug/L	127.81	ppb	15:30:00
2	Mg 279.077 IEC†	2.3	-0.3	-15.082	ug/L	-15.082	ppb	15:30:20
2	Na 589.592 Radial†	71.0	1348.2	378.16	ug/L	378.16	ppb	15:30:00
2	Sr 421.552†	279.8	276.3	1.4483	ug/L	1.4483	ppb	15:30:00
2	Sc 361.383	1071757.0	1071757.0	103.10	%			15:31:22
2	Y 371.029	909626.0	909626.0	102.84	%			15:31:22
2	Ag 328.068†	386.7	-99.0	-0.3497	ug/L	-0.3497	ppb	15:31:27
2	As 188.979†	-35.5	2.1	0.7134	ug/L	0.7134	ppb	15:31:48
2	B 249.677†	-438.0	41.3	0.7605	ug/L	0.7605	ppb	15:31:48
2	Ba 233.527†	573.4	556.2	3.5794	ug/L	3.5794	ppb	15:31:48
2	Be 313.107†	-4985.1	39.0	0.0186	ug/L	0.0186	ppb	15:31:27
2	Cd 226.502†	-216.6	25.6	0.2101	ug/L	0.2101	ppb	15:31:48
2	Co 228.616†	-78.3	10.4	0.1639	ug/L	0.1639	ppb	15:31:48
2	Cr 267.716†	264.0	168.2	1.5142	ug/L	1.5142	ppb	15:31:48
2	Cu 324.752†	9708.3	478.5	1.2850	ug/L	1.2850	ppb	15:31:27
2	Mn 257.610†	6165.3	5402.9	5.1306	ug/L	5.1306	ppb	15:31:27
2	Mo 202.031†	37.4	7.0	0.3837	ug/L	0.3837	ppb	15:31:48
2	Ni 231.604†	231.2	92.3	1.8092	ug/L	1.8092	ppb	15:31:48

2	P 214.914†	290.5	16.6	7.1922	ug/L	7.1922 ppb	15:31:48
2	Pb 220.353†	-82.0	-3.9	-0.3308	ug/L	-0.3308 ppb	15:31:48
2	S 181.975 Axial†	73.8	11.4	12.290	ug/L	12.290 ppb	15:31:48
2	Sb 206.836†	34.4	-1.2	-0.3514	ug/L	-0.3514 ppb	15:31:48
2	Se 196.026†	-23.3	-1.3	-0.0440	ug/L	-0.0440 ppb	15:31:48
2	Si 251.611†	22942.2	21693.7	550.89	ug/L	550.89 ppb	15:31:27
2	Sn 189.927†	2.7	7.0	0.9430	ug/L	0.9430 ppb	15:31:48
2	Ti 334.940†	1153.8	2379.5	3.2890	ug/L	3.2890 ppb	15:31:27
2	Tl 190.801†	-53.8	-7.9	-1.8536	ug/L	-1.8536 ppb	15:31:48
2	U 409.014†	-2782.8	75.0	1.9179	ug/L	1.9179 ppb	15:31:22
2	V 292.402†	-1566.7	89.0	0.4928	ug/L	0.4928 ppb	15:31:27
2	Zn 213.857†	1396.1	468.5	3.4168	ug/L	3.4168 ppb	15:31:48
2	SiO2†	22988.4	21697.1	1179.1	ug/L	1179.1 ppb	15:32:28
3	Sc Radial	5113.3	5113.3	104	%		15:30:25
3	Y RADIAL	5848.8	5848.8	103.6	%		15:30:25
3	Al 396.153Radial†	312.1	343.5	226.84	ug/L	226.84 ppb	15:30:25
3	Ca 317.933Radial†	114.0	91.6	162.22	ug/L	162.22 ppb	15:30:46
3	Fe 238.204 Radial†	24.8	12.9	155.42	ug/L	155.42 ppb	15:30:46
3	K 766.490 Radial†	3433.9	727.6	132.41	ug/L	132.41 ppb	15:30:25
3	Mg 279.077 IEC†	0.7	-1.8	-81.869	ug/L	-81.869 ppb	15:30:46
3	Na 589.592 Radial†	70.2	1347.4	377.94	ug/L	377.94 ppb	15:30:25
3	Sr 421.552†	304.5	299.8	1.5714	ug/L	1.5714 ppb	15:30:25
3	Sc 361.383	1072419.5	1072419.5	103.17	%		15:31:53
3	Y 371.029	910614.7	910614.7	102.96	%		15:31:53
3	Ag 328.068†	481.8	-7.1	0.0187	ug/L	0.0187 ppb	15:31:58
3	As 188.979†	-38.3	-0.5	-0.1085	ug/L	-0.1085 ppb	15:32:18
3	B 249.677†	-447.8	32.0	0.5847	ug/L	0.5847 ppb	15:32:18
3	Ba 233.527†	558.6	541.5	3.4846	ug/L	3.4846 ppb	15:32:18
3	Be 313.107†	-4982.8	44.2	0.0196	ug/L	0.0196 ppb	15:31:58
3	Cd 226.502†	-225.0	17.6	0.1390	ug/L	0.1390 ppb	15:32:18
3	Co 228.616†	-87.8	1.2	0.0112	ug/L	0.0112 ppb	15:32:18
3	Cr 267.716†	256.0	160.4	1.4434	ug/L	1.4434 ppb	15:32:18
3	Cu 324.752†	9684.4	449.5	1.2082	ug/L	1.2082 ppb	15:31:58
3	Mn 257.610†	6162.7	5396.7	5.1274	ug/L	5.1274 ppb	15:31:58
3	Mo 202.031†	22.5	-7.5	-0.3858	ug/L	-0.3858 ppb	15:32:18
3	Ni 231.604†	216.6	78.0	1.5291	ug/L	1.5291 ppb	15:32:18
3	P 214.914†	295.8	21.6	9.4029	ug/L	9.4029 ppb	15:32:18
3	Pb 220.353†	-72.8	5.0	0.5010	ug/L	0.5010 ppb	15:32:18
3	S 181.975 Axial†	73.5	11.2	11.972	ug/L	11.972 ppb	15:32:18
3	Sb 206.836†	36.4	0.7	0.1284	ug/L	0.1284 ppb	15:32:18
3	Se 196.026†	-29.3	-7.0	-2.5427	ug/L	-2.5427 ppb	15:32:18
3	Si 251.611†	22661.4	21407.7	543.65	ug/L	543.65 ppb	15:31:58
3	Sn 189.927†	-4.4	0.1	0.0332	ug/L	0.0332 ppb	15:32:18
3	Ti 334.940†	927.2	2159.2	2.9854	ug/L	2.9854 ppb	15:31:58
3	Tl 190.801†	-48.9	-3.1	-0.6949	ug/L	-0.6949 ppb	15:32:18
3	U 409.014†	-2808.4	51.8	1.3181	ug/L	1.3181 ppb	15:31:53
3	V 292.402†	-1628.2	30.4	0.1414	ug/L	0.1414 ppb	15:31:58
3	Zn 213.857†	1406.3	477.5	3.4856	ug/L	3.4856 ppb	15:32:18
3	SiO2†	22429.9	21142.0	1149.0	ug/L	1149.0 ppb	15:32:33

Mean Data: 241614002|925431|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1074080.0	103.33	%	0.333				0.32%
Sc Radial	5093.6	104	%	0.6				0.57%
Y 371.029	911302.6	103.03	%	0.238				0.23%
Y RADIAL	5831.9	103.3	%	0.29				0.28%
Ag 328.068†	-66.7	-0.2180	ug/L	0.20542	-0.2180	ppb	0.20542	94.22%
Al 396.153Radial†	336.3	222.06	ug/L	4.421	222.06	ppb	4.421	1.99%
As 188.979†	-1.5	-0.4149	ug/L	1.30871	-0.4149	ppb	1.30871	315.40%
B 249.677†	39.1	0.7176	ug/L	0.11743	0.7176	ppb	0.11743	16.36%
Ba 233.527†	544.2	3.5027	ug/L	0.06950	3.5027	ppb	0.06950	1.98%
Be 313.107†	15.6	0.0110	ug/L	0.01405	0.0110	ppb	0.01405	127.56%
Ca 317.933Radial†	90.3	159.87	ug/L	2.316	159.87	ppb	2.316	1.45%
Cd 226.502†	24.6	0.2007	ug/L	0.05755	0.2007	ppb	0.05755	28.68%
Co 228.616†	8.9	0.1391	ug/L	0.11750	0.1391	ppb	0.11750	84.46%
Cr 267.716†	158.2	1.4240	ug/L	0.10118	1.4240	ppb	0.10118	7.11%
Cu 324.752†	482.4	1.2960	ug/L	0.09375	1.2960	ppb	0.09375	7.23%
Fe 238.204 Radial†	12.6	151.90	ug/L	9.904	151.90	ppb	9.904	6.52%
K 766.490 Radial†	705.3	128.34	ug/L	3.827	128.34	ppb	3.827	2.98%

Mg 279.077 IEC†	-0.6	-29.199	ug/L	47.2220	-29.199	ppb	47.2220	161.73%
Mn 257.610†	5401.4	5.1305	ug/L	0.00307	5.1305	ppb	0.00307	0.06%
Mo 202.031†	1.0	0.0662	ug/L	0.40197	0.0662	ppb	0.40197	606.91%
Na 589.592 Radial†	1345.0	377.28	ug/L	1.338	377.28	ppb	1.338	0.35%
Ni 231.604†	78.3	1.5334	ug/L	0.27369	1.5334	ppb	0.27369	17.85%
P 214.914†	19.2	8.3391	ug/L	1.10771	8.3391	ppb	1.10771	13.28%
Pb 220.353†	2.7	0.2933	ug/L	0.55047	0.2933	ppb	0.55047	187.68%
S 181.975 Axial†	8.7	9.3542	ug/L	4.81258	9.3542	ppb	4.81258	51.45%
Sb 206.836†	-1.5	-0.4403	ug/L	0.61804	-0.4403	ppb	0.61804	140.35%
Se 196.026†	-4.8	-1.5674	ug/L	1.33646	-1.5674	ppb	1.33646	85.27%
Si 251.611†	21496.3	545.89	ug/L	4.343	545.89	ppb	4.343	0.80%
Sn 189.927†	5.6	0.7620	ug/L	0.65730	0.7620	ppb	0.65730	86.26%
Sr 421.552†	292.0	1.5305	ug/L	0.07111	1.5305	ppb	0.07111	4.65%
Ti 334.940†	2269.7	3.1378	ug/L	0.15177	3.1378	ppb	0.15177	4.84%
Tl 190.801†	-9.3	-2.1926	ug/L	1.69286	-2.1926	ppb	1.69286	77.21%
U 409.014†	54.8	1.3943	ug/L	0.49006	1.3943	ppb	0.49006	35.15%
V 292.402†	67.2	0.3604	ug/L	0.19106	0.3604	ppb	0.19106	53.01%
Zn 213.857†	466.8	3.4050	ug/L	0.08702	3.4050	ppb	0.08702	2.56%
SiO2†	21289.5	1157.0	ug/L	19.42	1157.0	ppb	19.42	1.68%

Sequence No.: 25
Sample ID: 241614003|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 12/4/2009 15:34:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241614003|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5009.1	5009.1	102	%			15:36:38
1	Y RADIAL	5722.7	5722.7	101.3	%			15:36:38
1	Al 396.153Radial†	229.8	269.0	177.62	ug/L	177.62	ppb	15:36:38
1	Ca 317.933Radial†	68.1	48.9	86.543	ug/L	86.543	ppb	15:36:58
1	Fe 238.204 Radial†	23.2	11.8	142.50	ug/L	142.50	ppb	15:36:58
1	K 766.490 Radial†	2802.6	177.4	32.161	ug/L	32.161	ppb	15:36:38
1	Mg 279.077 IEC†	2.2	-0.3	-15.445	ug/L	-15.445	ppb	15:36:58
1	Na 589.592 Radial†	-125.8	1156.6	324.43	ug/L	324.43	ppb	15:36:38
1	Sr 421.552†	74.5	80.4	0.4210	ug/L	0.4210	ppb	15:36:38
1	Sc 361.383	1071441.4	1071441.4	103.07	%			15:37:54
1	Y 371.029	908434.0	908434.0	102.71	%			15:37:54
1	Ag 328.068†	398.7	-87.3	-0.3036	ug/L	-0.3036	ppb	15:37:59
1	As 188.979†	-39.0	-1.3	-0.3513	ug/L	-0.3513	ppb	15:38:19
1	B 249.677†	-499.6	-18.6	-0.3707	ug/L	-0.3707	ppb	15:38:19
1	Ba 233.527†	324.6	315.0	2.0297	ug/L	2.0297	ppb	15:38:19
1	Be 313.107†	-5016.5	7.1	0.0068	ug/L	0.0068	ppb	15:37:59
1	Cd 226.502†	-236.4	6.3	0.0415	ug/L	0.0415	ppb	15:38:19
1	Co 228.616†	-75.5	13.0	0.2085	ug/L	0.2085	ppb	15:38:19
1	Cr 267.716†	249.2	154.0	1.3851	ug/L	1.3851	ppb	15:38:19
1	Cu 324.752†	9335.0	119.1	0.3252	ug/L	0.3252	ppb	15:37:59
1	Mn 257.610†	5618.6	4874.3	4.6302	ug/L	4.6302	ppb	15:37:59
1	Mo 202.031†	32.0	1.8	0.1043	ug/L	0.1043	ppb	15:38:19
1	Ni 231.604†	188.7	51.2	1.0022	ug/L	1.0022	ppb	15:38:19
1	P 214.914†	291.4	17.6	7.7749	ug/L	7.7749	ppb	15:38:19
1	Pb 220.353†	-91.3	-13.0	-1.1932	ug/L	-1.1932	ppb	15:38:19
1	S 181.975 Axial†	70.8	8.6	9.2358	ug/L	9.2358	ppb	15:38:19
1	Sb 206.836†	34.4	-1.2	-0.3328	ug/L	-0.3328	ppb	15:38:19
1	Se 196.026†	-24.1	-2.0	-0.3841	ug/L	-0.3841	ppb	15:38:19
1	Si 251.611†	11554.2	10651.9	270.51	ug/L	270.51	ppb	15:37:59
1	Sn 189.927†	8.2	12.3	1.6333	ug/L	1.6333	ppb	15:38:19
1	Ti 334.940†	447.8	1694.9	2.3399	ug/L	2.3399	ppb	15:37:59
1	Tl 190.801†	-45.8	-0.2	0.0051	ug/L	0.0051	ppb	15:38:19
1	U 409.014†	-2697.6	156.8	4.0344	ug/L	4.0344	ppb	15:37:54
1	V 292.402†	-1579.6	76.0	0.4194	ug/L	0.4194	ppb	15:37:59
1	Zn 213.857†	1640.9	706.4	5.1706	ug/L	5.1706	ppb	15:38:19
1	SiO2†	11541.4	10598.1	575.97	ug/L	575.97	ppb	15:39:25
2	Sc Radial	5043.3	5043.3	103	%			15:37:03
2	Y RADIAL	5817.7	5817.7	103.0	%			15:37:03
2	Al 396.153Radial†	153.1	192.8	127.31	ug/L	127.31	ppb	15:37:03
2	Ca 317.933Radial†	72.7	52.9	93.701	ug/L	93.701	ppb	15:37:23
2	Fe 238.204 Radial†	23.9	12.2	147.99	ug/L	147.99	ppb	15:37:23
2	K 766.490 Radial†	2790.0	146.6	26.535	ug/L	26.535	ppb	15:37:03
2	Mg 279.077 IEC†	3.5	0.9	42.006	ug/L	42.006	ppb	15:37:23
2	Na 589.592 Radial†	-140.8	1142.9	320.59	ug/L	320.59	ppb	15:37:03
2	Sr 421.552†	127.1	131.1	0.6870	ug/L	0.6870	ppb	15:37:03
2	Sc 361.383	1068984.9	1068984.9	102.84	%			15:38:25
2	Y 371.029	906232.8	906232.8	102.46	%			15:38:25
2	Ag 328.068†	315.6	-167.2	-0.6209	ug/L	-0.6209	ppb	15:38:30
2	As 188.979†	-41.3	-3.5	-1.0608	ug/L	-1.0608	ppb	15:38:50
2	B 249.677†	-492.7	-13.0	-0.2662	ug/L	-0.2662	ppb	15:38:50
2	Ba 233.527†	324.1	315.2	2.0301	ug/L	2.0301	ppb	15:38:50
2	Be 313.107†	-4943.1	67.2	0.0258	ug/L	0.0258	ppb	15:38:30
2	Cd 226.502†	-234.3	7.9	0.0540	ug/L	0.0540	ppb	15:38:50
2	Co 228.616†	-83.9	4.7	0.0715	ug/L	0.0715	ppb	15:38:50
2	Cr 267.716†	252.3	157.5	1.4164	ug/L	1.4164	ppb	15:38:50
2	Cu 324.752†	9421.7	224.2	0.6063	ug/L	0.6063	ppb	15:38:30
2	Mn 257.610†	5530.6	4801.3	4.5605	ug/L	4.5605	ppb	15:38:30
2	Mo 202.031†	36.0	5.8	0.3187	ug/L	0.3187	ppb	15:38:50
2	Ni 231.604†	165.2	28.7	0.5619	ug/L	0.5619	ppb	15:38:50

2	P 214.914†	283.5	10.6	4.5605 ug/L	4.5605 ppb	15:38:50
2	Pb 220.353†	-72.5	5.1	0.4954 ug/L	0.4954 ppb	15:38:50
2	S 181.975 Axial†	68.1	6.2	6.6107 ug/L	6.6107 ppb	15:38:50
2	Sb 206.836†	33.5	-2.1	-0.5745 ug/L	-0.5745 ppb	15:38:50
2	Se 196.026†	-24.2	-2.2	-0.4163 ug/L	-0.4163 ppb	15:38:50
2	Si 251.611†	11436.7	10563.4	268.26 ug/L	268.26 ppb	15:38:30
2	Sn 189.927†	2.8	7.1	0.9457 ug/L	0.9457 ppb	15:38:50
2	Ti 334.940†	543.7	1789.2	2.4705 ug/L	2.4705 ppb	15:38:30
2	Tl 190.801†	-43.7	1.8	0.4795 ug/L	0.4795 ppb	15:38:50
2	U 409.014†	-2703.3	145.3	3.7347 ug/L	3.7347 ppb	15:38:25
2	V 292.402†	-1686.6	-31.5	-0.1936 ug/L	-0.1936 ppb	15:38:30
2	Zn 213.857†	1635.0	704.3	5.1553 ug/L	5.1553 ppb	15:38:50
2	SiO2†	11455.1	10539.9	572.81 ug/L	572.81 ppb	15:39:31
3	Sc Radial	5040.1	5040.1	103 %		15:37:28
3	Y RADIAL	5822.7	5822.7	103.1 %		15:37:28
3	Al 396.153Radial†	141.7	181.8	120.04 ug/L	120.04 ppb	15:37:28
3	Ca 317.933Radial†	79.2	59.3	105.00 ug/L	105.00 ppb	15:37:48
3	Fe 238.204 Radial†	22.6	11.0	133.23 ug/L	133.23 ppb	15:37:48
3	K 766.490 Radial†	2732.1	91.9	16.557 ug/L	16.557 ppb	15:37:28
3	Mg 279.077 IEC†	4.9	2.3	102.94 ug/L	102.94 ppb	15:37:48
3	Na 589.592 Radial†	-158.3	1125.8	315.78 ug/L	315.78 ppb	15:37:28
3	Sr 421.552†	134.9	138.8	0.7273 ug/L	0.7273 ppb	15:37:28
3	Sc 361.383	1064081.2	1064081.2	102.37 %		15:38:55
3	Y 371.029	903173.0	903173.0	102.11 %		15:38:55
3	Ag 328.068†	450.8	-33.7	-0.0953 ug/L	-0.0953 ppb	15:39:00
3	As 188.979†	-49.3	-11.6	-3.5587 ug/L	-3.5587 ppb	15:39:20
3	B 249.677†	-500.1	-22.4	-0.4421 ug/L	-0.4421 ppb	15:39:20
3	Ba 233.527†	336.5	328.7	2.1171 ug/L	2.1171 ppb	15:39:20
3	Be 313.107†	-4942.5	45.6	0.0193 ug/L	0.0193 ppb	15:39:00
3	Cd 226.502†	-244.2	-2.9	-0.0376 ug/L	-0.0376 ppb	15:39:20
3	Co 228.616†	-75.7	12.4	0.1966 ug/L	0.1966 ppb	15:39:20
3	Cr 267.716†	247.1	153.6	1.3817 ug/L	1.3817 ppb	15:39:20
3	Cu 324.752†	9362.7	208.8	0.5644 ug/L	0.5644 ppb	15:39:00
3	Mn 257.610†	5516.1	4811.9	4.5680 ug/L	4.5680 ppb	15:39:00
3	Mo 202.031†	26.5	-3.3	-0.1665 ug/L	-0.1665 ppb	15:39:20
3	Ni 231.604†	192.6	56.3	1.1020 ug/L	1.1020 ppb	15:39:20
3	P 214.914†	287.0	15.3	6.6870 ug/L	6.6870 ppb	15:39:20
3	Pb 220.353†	-83.0	-5.6	-0.5069 ug/L	-0.5069 ppb	15:39:20
3	S 181.975 Axial†	69.8	8.0	8.6453 ug/L	8.6453 ppb	15:39:20
3	Sb 206.836†	48.7	12.9	3.3577 ug/L	3.3577 ppb	15:39:20
3	Se 196.026†	-10.3	11.3	5.5016 ug/L	5.5016 ppb	15:39:20
3	Si 251.611†	11406.4	10585.0	268.82 ug/L	268.82 ppb	15:39:00
3	Sn 189.927†	-3.9	0.6	0.0864 ug/L	0.0864 ppb	15:39:20
3	Ti 334.940†	613.4	1859.7	2.5682 ug/L	2.5682 ppb	15:39:00
3	Tl 190.801†	-45.1	0.2	0.0869 ug/L	0.0869 ppb	15:39:20
3	U 409.014†	-2682.7	153.3	3.9443 ug/L	3.9443 ppb	15:38:55
3	V 292.402†	-1606.7	38.9	0.2068 ug/L	0.2068 ppb	15:39:00
3	Zn 213.857†	1644.6	721.0	5.2740 ug/L	5.2740 ppb	15:39:20
3	SiO2†	11394.9	10532.5	572.44 ug/L	572.44 ppb	15:39:36

Mean Data: 241614003|925431|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1068169.2	102.76	%	0.360				0.35%
Sc Radial	5030.8	102	%	0.4				0.37%
Y 371.029	905946.6	102.43	%	0.299				0.29%
Y RADIAL	5787.7	102.5	%	1.00				0.97%
Ag 328.068†	-96.1	-0.3399	ug/L	0.26469	-0.3399	ppb	0.26469	77.86%
Al 396.153Radial†	214.5	141.66	ug/L	31.357	141.66	ppb	31.357	22.14%
As 188.979†	-5.5	-1.6569	ug/L	1.68474	-1.6569	ppb	1.68474	101.68%
B 249.677†	-18.0	-0.3597	ug/L	0.08848	-0.3597	ppb	0.08848	24.60%
Ba 233.527†	319.6	2.0590	ug/L	0.05034	2.0590	ppb	0.05034	2.44%
Be 313.107†	40.0	0.0173	ug/L	0.00966	0.0173	ppb	0.00966	55.87%
Ca 317.933Radial†	53.7	95.081	ug/L	9.3060	95.081	ppb	9.3060	9.79%
Cd 226.502†	3.8	0.0193	ug/L	0.04969	0.0193	ppb	0.04969	257.30%
Co 228.616†	10.1	0.1589	ug/L	0.07592	0.1589	ppb	0.07592	47.79%
Cr 267.716†	155.0	1.3944	ug/L	0.01913	1.3944	ppb	0.01913	1.37%
Cu 324.752†	184.0	0.4986	ug/L	0.15165	0.4986	ppb	0.15165	30.41%
Fe 238.204 Radial†	11.7	141.24	ug/L	7.459	141.24	ppb	7.459	5.28%
K 766.490 Radial†	138.6	25.085	ug/L	7.9025	25.085	ppb	7.9025	31.50%

Mg 279.077 IEC†	1.0	43.168	ug/L	59.2029	43.168	ppb	59.2029 137.15%
Mn 257.610†	4829.2	4.5863	ug/L	0.03825	4.5863	ppb	0.03825 0.83%
Mo 202.031†	1.4	0.0855	ug/L	0.24311	0.0855	ppb	0.24311 284.34%
Na 589.592 Radial†	1141.8	320.27	ug/L	4.335	320.27	ppb	4.335 1.35%
Ni 231.604†	45.4	0.8887	ug/L	0.28737	0.8887	ppb	0.28737 32.34%
P 214.914†	14.5	6.3408	ug/L	1.63491	6.3408	ppb	1.63491 25.78%
Pb 220.353†	-4.5	-0.4016	ug/L	0.84922	-0.4016	ppb	0.84922 211.48%
S 181.975 Axial†	7.6	8.1639	ug/L	1.37719	8.1639	ppb	1.37719 16.87%
Sb 206.836†	3.2	0.8168	ug/L	2.20380	0.8168	ppb	2.20380 269.80%
Se 196.026†	2.4	1.5671	ug/L	3.40746	1.5671	ppb	3.40746 217.44%
Si 251.611†	10600.1	269.19	ug/L	1.169	269.19	ppb	1.169 0.43%
Sn 189.927†	6.6	0.8884	ug/L	0.77505	0.8884	ppb	0.77505 87.24%
Sr 421.552†	116.8	0.6118	ug/L	0.16641	0.6118	ppb	0.16641 27.20%
Ti 334.940†	1781.2	2.4595	ug/L	0.11455	2.4595	ppb	0.11455 4.66%
Tl 190.801†	0.6	0.1905	ug/L	0.25364	0.1905	ppb	0.25364 133.14%
U 409.014†	151.8	3.9045	ug/L	0.15376	3.9045	ppb	0.15376 3.94%
V 292.402†	27.8	0.1442	ug/L	0.31125	0.1442	ppb	0.31125 215.89%
Zn 213.857†	710.5	5.1999	ug/L	0.06455	5.1999	ppb	0.06455 1.24%
SiO2†	10556.8	573.74	ug/L	1.941	573.74	ppb	1.941 0.34%

Sequence No.: 26
Sample ID: 241614004|925431|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/4/2009 15:41:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241614004|925431|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5015.4	5015.4	102	%			15:43:40
1	Y RADIAL	5739.8	5739.8	101.6	%			15:43:40
1	Al 396.153Radial†	-56.0	-11.1	-7.3095	ug/L	-7.3095	ppb	15:43:40
1	Ca 317.933Radial†	10.7	-7.3	-13.011	ug/L	-13.011	ppb	15:44:00
1	Fe 238.204 Radial†	11.3	0.1	0.6480	ug/L	0.6480	ppb	15:44:00
1	K 766.490 Radial†	2535.9	-87.1	-15.883	ug/L	-15.883	ppb	15:43:40
1	Mg 279.077 IEC†	-0.3	-2.8	-123.06	ug/L	-123.06	ppb	15:44:00
1	Na 589.592 Radial†	-1152.8	151.4	42.471	ug/L	42.471	ppb	15:43:40
1	Sr 421.552†	-13.7	-6.0	-0.0312	ug/L	-0.0312	ppb	15:43:40
1	Sc 361.383	1054758.7	1054758.7	101.47	%			15:44:57
1	Y 371.029	894104.0	894104.0	101.09	%			15:44:57
1	Ag 328.068†	518.0	36.4	0.1399	ug/L	0.1399	ppb	15:45:02
1	As 188.979†	-35.6	1.5	0.4657	ug/L	0.4657	ppb	15:45:22
1	B 249.677†	-562.1	-87.9	-1.6613	ug/L	-1.6613	ppb	15:45:22
1	Ba 233.527†	12.6	12.4	0.0795	ug/L	0.0795	ppb	15:45:22
1	Be 313.107†	-4994.5	-48.2	-0.0149	ug/L	-0.0149	ppb	15:45:02
1	Cd 226.502†	-245.4	-6.2	-0.0538	ug/L	-0.0538	ppb	15:45:22
1	Co 228.616†	-84.3	3.3	0.0545	ug/L	0.0545	ppb	15:45:22
1	Cr 267.716†	101.0	11.7	0.1035	ug/L	0.1035	ppb	15:45:22
1	Cu 324.752†	9151.5	81.5	0.2176	ug/L	0.2176	ppb	15:45:02
1	Mn 257.610†	587.3	2.1	0.0043	ug/L	0.0043	ppb	15:45:22
1	Mo 202.031†	34.2	4.5	0.2383	ug/L	0.2383	ppb	15:45:22
1	Ni 231.604†	133.5	-0.3	-0.0063	ug/L	-0.0063	ppb	15:45:22
1	P 214.914†	299.4	29.9	13.356	ug/L	13.356	ppb	15:45:22
1	Pb 220.353†	-68.0	8.5	0.7993	ug/L	0.7993	ppb	15:45:22
1	S 181.975 Axial†	55.0	-5.9	-6.3813	ug/L	-6.3813	ppb	15:45:22
1	Sb 206.836†	38.8	3.6	0.9706	ug/L	0.9706	ppb	15:45:22
1	Se 196.026†	-21.5	0.2	0.0799	ug/L	0.0799	ppb	15:45:22
1	Si 251.611†	2540.4	1946.0	49.421	ug/L	49.421	ppb	15:45:22
1	Sn 189.927†	1.2	5.5	0.7295	ug/L	0.7295	ppb	15:45:22
1	Ti 334.940†	-1225.1	53.1	0.0704	ug/L	0.0704	ppb	15:45:02
1	Tl 190.801†	-38.4	6.4	1.5551	ug/L	1.5551	ppb	15:45:22
1	U 409.014†	-2626.1	185.9	4.8062	ug/L	4.8062	ppb	15:44:57
1	V 292.402†	-1667.6	-34.9	-0.1903	ug/L	-0.1903	ppb	15:45:02
1	Zn 213.857†	1035.2	134.6	0.9932	ug/L	0.9932	ppb	15:45:22
1	SiO2†	2605.3	1968.5	106.99	ug/L	106.99	ppb	15:46:28
2	Sc Radial	4906.0	4906.0	99.9	%			15:44:05
2	Y RADIAL	5655.0	5655.0	100.1	%			15:44:05
2	Al 396.153Radial†	-29.3	14.5	9.5809	ug/L	9.5809	ppb	15:44:05
2	Ca 317.933Radial†	21.0	3.2	5.6644	ug/L	5.6644	ppb	15:44:25
2	Fe 238.204 Radial†	10.0	-1.0	-12.146	ug/L	-12.146	ppb	15:44:25
2	K 766.490 Radial†	2626.6	59.1	10.759	ug/L	10.759	ppb	15:44:05
2	Mg 279.077 IEC†	2.8	0.3	14.353	ug/L	14.353	ppb	15:44:25
2	Na 589.592 Radial†	-1154.1	125.0	35.052	ug/L	35.052	ppb	15:44:05
2	Sr 421.552†	-30.0	-22.6	-0.1185	ug/L	-0.1185	ppb	15:44:05
2	Sc 361.383	1055239.7	1055239.7	101.52	%			15:45:27
2	Y 371.029	895293.2	895293.2	101.22	%			15:45:27
2	Ag 328.068†	510.2	28.5	0.1117	ug/L	0.1117	ppb	15:45:32
2	As 188.979†	-39.4	-2.2	-0.7007	ug/L	-0.7007	ppb	15:45:52
2	B 249.677†	-556.9	-82.4	-1.5562	ug/L	-1.5562	ppb	15:45:52
2	Ba 233.527†	7.7	7.6	0.0496	ug/L	0.0496	ppb	15:45:52
2	Be 313.107†	-4949.4	-1.6	-0.0004	ug/L	-0.0004	ppb	15:45:32
2	Cd 226.502†	-237.9	1.3	0.0123	ug/L	0.0123	ppb	15:45:52
2	Co 228.616†	-92.0	-4.3	-0.0716	ug/L	-0.0716	ppb	15:45:52
2	Cr 267.716†	115.0	25.5	0.2301	ug/L	0.2301	ppb	15:45:52
2	Cu 324.752†	9074.2	1.3	0.0027	ug/L	0.0027	ppb	15:45:32
2	Mn 257.610†	569.3	-15.9	-0.0165	ug/L	-0.0165	ppb	15:45:52
2	Mo 202.031†	30.5	0.9	0.0443	ug/L	0.0443	ppb	15:45:52
2	Ni 231.604†	147.8	13.6	0.2668	ug/L	0.2668	ppb	15:45:52

2	P 214.914†	279.3	10.1	4.5219 ug/L	4.5219 ppb		15:45:52
2	Pb 220.353†	-73.6	3.0	0.2885 ug/L	0.2885 ppb		15:45:52
2	S 181.975 Axial†	57.5	-3.4	-3.6927 ug/L	-3.6927 ppb		15:45:52
2	Sb 206.836†	44.5	9.2	2.4479 ug/L	2.4479 ppb		15:45:52
2	Se 196.026†	-16.4	5.2	2.2720 ug/L	2.2720 ppb		15:45:52
2	Si 251.611†	2557.7	1961.9	49.818 ug/L	49.818 ppb		15:45:52
2	Sn 189.927†	2.9	7.2	0.9478 ug/L	0.9478 ppb		15:45:52
2	Ti 334.940†	-1225.7	53.1	0.0736 ug/L	0.0736 ppb		15:45:32
2	Tl 190.801†	-45.8	-0.8	-0.2028 ug/L	-0.2028 ppb		15:45:52
2	U 409.014†	-2829.2	-13.0	-0.3339 ug/L	-0.3339 ppb		15:45:27
2	V 292.402†	-1534.2	97.3	0.5588 ug/L	0.5588 ppb		15:45:32
2	Zn 213.857†	1044.7	143.5	1.0537 ug/L	1.0537 ppb		15:45:52
2	SiO2†	2628.1	1989.9	108.13 ug/L	108.13 ppb		15:46:33
3	Sc Radial	4990.1	4990.1	102 %			15:44:30
3	Y RADIAL	5735.3	5735.3	101.6 %			15:44:30
3	Al 396.153Radial†	-61.4	-16.6	-10.960 ug/L	-10.960 ppb		15:44:30
3	Ca 317.933Radial†	22.5	4.3	7.6713 ug/L	7.6713 ppb		15:44:50
3	Fe 238.204 Radial†	6.7	-4.4	-52.618 ug/L	-52.618 ppb		15:44:50
3	K 766.490 Radial†	2588.2	-23.0	-4.2078 ug/L	-4.2078 ppb		15:44:30
3	Mg 279.077 IEC†	0.6	-1.9	-83.957 ug/L	-83.957 ppb		15:44:50
3	Na 589.592 Radial†	-1220.8	78.9	22.118 ug/L	22.118 ppb		15:44:30
3	Sr 421.552†	-28.5	-20.6	-0.1082 ug/L	-0.1082 ppb		15:44:30
3	Sc 361.383	1066747.8	1066747.8	102.62 %			15:45:58
3	Y 371.029	905228.0	905228.0	102.35 %			15:45:58
3	Ag 328.068†	480.7	-5.7	-0.0417 ug/L	-0.0417 ppb		15:46:03
3	As 188.979†	-38.4	-0.8	-0.2518 ug/L	-0.2518 ppb		15:46:23
3	B 249.677†	-500.2	-21.3	-0.3967 ug/L	-0.3967 ppb		15:46:23
3	Ba 233.527†	12.6	12.3	0.0769 ug/L	0.0769 ppb		15:46:23
3	Be 313.107†	-5001.9	-0.1	0.0004 ug/L	0.0004 ppb		15:46:03
3	Cd 226.502†	-241.0	0.8	0.0123 ug/L	0.0123 ppb		15:46:23
3	Co 228.616†	-80.4	8.0	0.1314 ug/L	0.1314 ppb		15:46:23
3	Cr 267.716†	133.7	42.6	0.3805 ug/L	0.3805 ppb		15:46:23
3	Cu 324.752†	9140.7	-30.4	-0.0839 ug/L	-0.0839 ppb		15:46:03
3	Mn 257.610†	582.1	-9.4	-0.0126 ug/L	-0.0126 ppb		15:46:23
3	Mo 202.031†	25.9	-4.0	-0.2176 ug/L	-0.2176 ppb		15:46:23
3	Ni 231.604†	151.6	15.8	0.3098 ug/L	0.3098 ppb		15:46:23
3	P 214.914†	273.3	1.2	0.6101 ug/L	0.6101 ppb		15:46:23
3	Pb 220.353†	-82.2	-4.5	-0.4222 ug/L	-0.4222 ppb		15:46:23
3	S 181.975 Axial†	60.4	-1.3	-1.3671 ug/L	-1.3671 ppb		15:46:23
3	Sb 206.836†	45.2	9.5	2.4840 ug/L	2.4840 ppb		15:46:23
3	Se 196.026†	-27.2	-5.2	-2.4800 ug/L	-2.4800 ppb		15:46:23
3	Si 251.611†	2527.7	1905.4	48.395 ug/L	48.395 ppb		15:46:23
3	Sn 189.927†	-1.6	2.8	0.3692 ug/L	0.3692 ppb		15:46:23
3	Ti 334.940†	-1116.8	172.2	0.2367 ug/L	0.2367 ppb		15:46:03
3	Tl 190.801†	-61.7	-15.8	-3.8318 ug/L	-3.8318 ppb		15:46:23
3	U 409.014†	-2750.2	94.1	2.4390 ug/L	2.4390 ppb		15:45:58
3	V 292.402†	-1659.1	-8.2	-0.0395 ug/L	-0.0395 ppb		15:46:03
3	Zn 213.857†	1045.6	133.3	0.9853 ug/L	0.9853 ppb		15:46:23
3	SiO2†	2640.3	1973.8	107.29 ug/L	107.29 ppb		15:46:38

Mean Data: 241614004|925431|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1058915.4	101.87	%	0.653				0.64%
Sc Radial	4970.5	101	%	1.2				1.15%
Y 371.029	898208.4	101.55	%	0.691				0.68%
Y RADIAL	5710.0	101.1	%	0.85				0.84%
Ag 328.068†	19.8	0.0700	ug/L	0.09771	0.0700	ppb	0.09771	139.64%
Al 396.153Radial†	-4.4	-2.8961	ug/L	10.95849	-2.8961	ppb	10.95849	378.38%
As 188.979†	-0.5	-0.1622	ug/L	0.58831	-0.1622	ppb	0.58831	362.62%
B 249.677†	-63.9	-1.2047	ug/L	0.70175	-1.2047	ppb	0.70175	58.25%
Ba 233.527†	10.8	0.0687	ug/L	0.01662	0.0687	ppb	0.01662	24.19%
Be 313.107†	-16.6	-0.0049	ug/L	0.00863	-0.0049	ppb	0.00863	174.69%
Ca 317.933Radial†	0.1	0.1083	ug/L	11.40579	0.1083	ppb	11.40579	>999.9%
Cd 226.502†	-1.4	-0.0097	ug/L	0.03815	-0.0097	ppb	0.03815	392.59%
Co 228.616†	2.3	0.0381	ug/L	0.10247	0.0381	ppb	0.10247	268.93%
Cr 267.716†	26.6	0.2380	ug/L	0.13864	0.2380	ppb	0.13864	58.25%
Cu 324.752†	17.4	0.0455	ug/L	0.15522	0.0455	ppb	0.15522	341.20%
Fe 238.204 Radial†	-1.8	-21.372	ug/L	27.8058	-21.372	ppb	27.8058	130.10%
K 766.490 Radial†	-17.0	-3.1104	ug/L	13.35475	-3.1104	ppb	13.35475	429.36%

Mg 279.077 IEC†	-1.4	-64.221	ug/L	70.7994	-64.221	ppb	70.7994 110.24%
Mn 257.610†	-7.8	-0.0083	ug/L	0.01109	-0.0083	ppb	0.01109 133.91%
Mo 202.031†	0.4	0.0216	ug/L	0.22880	0.0216	ppb	0.22880 >999.9%
Na 589.592 Radial†	118.4	33.214	ug/L	10.3001	33.214	ppb	10.3001 31.01%
Ni 231.604†	9.7	0.1901	ug/L	0.17144	0.1901	ppb	0.17144 90.19%
P 214.914†	13.7	6.1628	ug/L	6.52964	6.1628	ppb	6.52964 105.95%
Pb 220.353†	2.4	0.2219	ug/L	0.61348	0.2219	ppb	0.61348 276.53%
S 181.975 Axial†	-3.5	-3.8137	ug/L	2.50933	-3.8137	ppb	2.50933 65.80%
Sb 206.836†	7.4	1.9675	ug/L	0.86353	1.9675	ppb	0.86353 43.89%
Se 196.026†	0.1	-0.0427	ug/L	2.37835	-0.0427	ppb	2.37835 >999.9%
Si 251.611†	1937.8	49.211	ug/L	0.7345	49.211	ppb	0.7345 1.49%
Sn 189.927†	5.2	0.6822	ug/L	0.29216	0.6822	ppb	0.29216 42.83%
Sr 421.552†	-16.4	-0.0860	ug/L	0.04767	-0.0860	ppb	0.04767 55.45%
Ti 334.940†	92.8	0.1269	ug/L	0.09510	0.1269	ppb	0.09510 74.95%
Tl 190.801†	-3.4	-0.8265	ug/L	2.74712	-0.8265	ppb	2.74712 332.39%
U 409.014†	89.0	2.3037	ug/L	2.57272	2.3037	ppb	2.57272 111.68%
V 292.402†	18.0	0.1097	ug/L	0.39621	0.1097	ppb	0.39621 361.25%
Zn 213.857†	137.1	1.0108	ug/L	0.03737	1.0108	ppb	0.03737 3.70%
SiO2†	1977.4	107.47	ug/L	0.594	107.47	ppb	0.594 0.55%

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0 ug/L	2481.0 ppb	15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05 ug/L	513.05 ppb	15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9 ug/L	1001.9 ppb	15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63 ug/L	513.63 ppb	15:52:48
2	Se 196.026†	1115.8	1144.5	526.78 ug/L	526.78 ppb	15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1 ug/L	2516.1 ppb	15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20 ug/L	506.20 ppb	15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14 ug/L	507.14 ppb	15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80 ug/L	506.80 ppb	15:52:48
2	U 409.014†	16293.2	19173.4	494.10 ug/L	494.10 ppb	15:52:28
2	V 292.402†	86011.3	88180.9	511.61 ug/L	511.61 ppb	15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22 ug/L	506.22 ppb	15:52:28
2	SiO2†	98811.2	98856.7	5346.6 ug/L	5346.6 ppb	15:53:26
3	Sc Radial	4894.3	4894.3	99.7 %		15:51:32
3	Y RADIAL	5564.8	5564.8	98.54 %		15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1 ug/L	5082.1 ppb	15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9 ug/L	5025.9 ppb	15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2 ug/L	5000.2 ppb	15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1 ug/L	4921.1 ppb	15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9 ug/L	5042.9 ppb	15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8 ug/L	9778.8 ppb	15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74 ug/L	497.74 ppb	15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815 %		15:52:56
3	Y 371.029	861949.0	861949.0	97.454 %		15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28 ug/L	507.28 ppb	15:52:56
3	As 188.979†	1570.4	1625.8	510.98 ug/L	510.98 ppb	15:53:16
3	B 249.677†	25709.4	26483.7	498.56 ug/L	498.56 ppb	15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51 ug/L	509.51 ppb	15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59 ug/L	508.59 ppb	15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24 ug/L	509.24 ppb	15:52:56
3	Co 228.616†	30179.0	30627.1	504.66 ug/L	504.66 ppb	15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70 ug/L	506.70 ppb	15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53 ug/L	509.53 ppb	15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66 ug/L	510.66 ppb	15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15 ug/L	509.15 ppb	15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60 ug/L	504.60 ppb	15:53:16
3	P 214.914†	5924.9	5730.8	2486.5 ug/L	2486.5 ppb	15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81 ug/L	512.81 ppb	15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2 ug/L	1006.2 ppb	15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57 ug/L	519.57 ppb	15:53:16
3	Se 196.026†	1107.8	1142.4	525.76 ug/L	525.76 ppb	15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5 ug/L	2511.5 ppb	15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05 ug/L	508.05 ppb	15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30 ug/L	506.30 ppb	15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85 ug/L	508.85 ppb	15:53:16
3	U 409.014†	16077.4	19044.1	490.76 ug/L	490.76 ppb	15:52:56
3	V 292.402†	85532.7	88166.6	511.55 ug/L	511.55 ppb	15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41 ug/L	505.41 ppb	15:52:56
3	SiO2†	98725.0	99309.5	5371.2 ug/L	5371.2 ppb	15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

```
   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L        2.287      511.43 ppb        2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L        1.146      503.91 ppb        1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L        1.662      508.31 ppb        1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L        2.326      511.16 ppb        2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L       25.16      5027.1 ppb       25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L       44.05      4939.1 ppb       44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L       81.91      5126.5 ppb       81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L        2.081      512.46 ppb        2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L        1.419      507.72 ppb        1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L       66.05      9820.7 ppb       66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L        1.302      503.63 ppb        1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L       10.07      2478.2 ppb       10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L        0.126      512.95 ppb        0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L        2.77      1003.1 ppb        2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L        3.500      515.53 ppb        3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L        2.058      527.42 ppb        2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L        9.97      2519.4 ppb        9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L        1.147      506.74 ppb        1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L        3.343      499.14 ppb        3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L        2.319      508.04 ppb        2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L        1.578      508.52 ppb        1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L        2.387      493.42 ppb        2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L        2.377      512.95 ppb        2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L        1.824      506.84 ppb        1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L       37.27      5379.2 ppb       37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120	ug/L	2.5120	ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279	ug/L	-1.9279	ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495	ug/L	-0.1495	ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770	ug/L	1.6770	ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989	ug/L	-2.4989	ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415	ug/L	1.7415	ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240	ug/L	2.0240	ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840	ug/L	0.0840	ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260	ug/L	-1.7260	ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950	ug/L	0.4950	ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658	ug/L	0.1658	ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793	ug/L	0.3793	ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045	ug/L	1.4045	ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9	%			15:58:24
3	Y RADIAL	5536.8	5536.8	98.05	%			15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014	ug/L	-2.7014	ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137	ug/L	10.137	ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928	ug/L	-19.928	ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858	ug/L	37.858	ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734	ug/L	69.734	ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211	ug/L	45.211	ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220	ug/L	-0.2220	ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773	%			15:59:52
3	Y 371.029	882258.7	882258.7	99.750	%			15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838	ug/L	-0.2838	ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697	ug/L	0.9697	ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790	ug/L	1.1790	ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208	ug/L	0.0208	ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339	ug/L	0.0339	ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026	ug/L	0.1026	ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501	ug/L	-0.2501	ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010	ug/L	0.1010	ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474	ug/L	0.1474	ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012	ug/L	0.0012	ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361	ug/L	0.1361	ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230	ug/L	0.2230	ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402	ug/L	3.5402	ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038	ug/L	1.3038	ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872	ug/L	-2.2872	ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858	ug/L	5.1858	ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930	ug/L	-1.6930	ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103	ug/L	1.3103	ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187	ug/L	1.9187	ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536	ug/L	0.0536	ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928	ug/L	-0.6928	ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296	ug/L	1.2296	ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732	ug/L	-0.2732	ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459	ug/L	0.3459	ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862	ug/L	3.4862	ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -20.252 ug/L       10.1579     -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3      -0.0001 ug/L      0.00110      -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3       0.1199 ug/L      0.38503       0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L       7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7       0.1902 ug/L      0.25151       0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2       4.1321 ug/L      1.98348       4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4      -0.1226 ug/L      1.64883      -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0      -0.0008 ug/L      2.36420      -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3       2.4728 ug/L      2.41558       2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1      -2.3223 ug/L      0.56214      -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0       1.3081 ug/L      0.43456       1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6       1.3975 ug/L      0.99535       1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5      -0.0971 ug/L      0.11058      -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5       0.0132 ug/L      0.09750       0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3      -0.5672 ug/L      1.22641      -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9       0.7761 ug/L      0.39651       0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4      -0.0073 ug/L      0.23376      -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0       0.3381 ug/L      0.04566       0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6       2.8325 ug/L      1.23816       2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, December 07, 2009 11:44:15
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.5132
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	473.8	473.808	11.777	2.5
	Mg	24.0	4610.1	4610.144	106.262	2.3
	Co	58.9	19074.9	19074.928	218.304	1.1
	Rh	102.9	46166.1	46166.080	416.681	0.9
	In	114.9	74753.5	74753.476	372.710	0.5
	Pb	208.0	47868.7	47868.672	508.631	1.1
⌈>	Ba	137.9	63447.3	63447.272	557.852	0.9
⌊	Ba++	69.0	785.4	0.012	0.000	1.3
⌈>	Ce	139.9	76907.5	76907.470	587.328	0.8
⌊	CeO	155.9	1060.3	0.014	0.000	2.7
	Bkgd	220.0	5.9	5.900	1.557	26.4

Current Optimization File Data

Current Value	Description
0.96	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1812.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.5	375.0
Co	59	17	8.0	18778.0
In	115	17	8.8	90490.4

ICPMS#3 Instrument Tuning Report

File Name: 091207.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	586	2030	0.690
Be	9.0	9.0	2068	2010	0.718
Mg	24.0	24.0	5728	2090	0.739
Mg	25.0	25.0	5885	2010	0.688
Mg	26.0	26.1	6254	2110	0.706
Co	58.9	58.9	14200	2100	0.677
Rh	102.9	102.9	24898	2150	0.699
In	114.9	114.9	27827	2160	0.704
Ce	139.9	139.8	33911	2200	0.660
Pb	206.0	206.0	50016	2270	0.691
Pb	207.0	207.0	50270	2310	0.643
Pb	208.0	208.0	50498	2290	0.640
U	238.1	238.0	57846	2330	0.687

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 07, 2009 19:00:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\Blank.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		9	
	Be	9		ug/L		12	
	B	11		ug/L		222	
	Na	23		ug/L		2000	
	Mg	24		ug/L		333	
	Al	27		ug/L		333	
	P	31		ug/L		1034	
	K	39		ug/L		164275	
	Ca	43		ug/L		114	
>	Sc	45		ug/L		222169	
	Ti	47		ug/L		59	
	V	51		ug/L		-809	
	Cr	52		ug/L		1142	
	Cr	53		ug/L		48554	
	Mn	55		ug/L		308	
	Fe	57		ug/L		2365	
	Co	59		ug/L		70	
	Ni	60		ug/L		27	
	Cu	63		ug/L		76	
	Cu	65		ug/L		61	
	Zn	66		ug/L		38	
	Zn	67		ug/L		1930	
	Zn	68		ug/L		275	
>	Ge	74		ug/L		102398	
	As	75		ug/L		503	
	Se	77		ug/L		2842	
	Se	82		ug/L		5	
	Kr	83		ug/L		36	
	Sr	88		ug/L		36	
	Y	89		ug/L		12	
	Zr	90		ug/L		69	
	Mo	98		ug/L		10	
	Ag	107		ug/L		11	
	Cd	111		ug/L		3	
	Cd	114		ug/L		11	
>	In	115		ug/L		88441	
	Sn	120		ug/L		52	
	Sb	121		ug/L		323	
	Sb	123		ug/L		255	
	Ba	135		ug/L		8	
	Ba	137		ug/L		11	
	Ho	165		ug/L		13	
>	Lu	175		ug/L		160607	
	Tl	205		ug/L		275	
	Pb	208		ug/L		98	
	Th	232		ug/L		190	
	U	238		ug/L		24	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Simple Linear	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Zr	90	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Th	232	Simple Linear	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 07, 2009 19:05:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\Standard 1.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.045	562	0.002
	Be	9	10.000	ug/L	5.589	462	0.002
	B	11	20.000	ug/L	3.939	1094	0.004
	Na	23	1000.000	ug/L	21.813	330546	1.453
	Mg	24	1000.000	ug/L	14.100	342435	1.511
	Al	27	1000.000	ug/L	17.327	515618	2.278
	P	31	1000.000	ug/L	3.976	39374	0.169
	K	39	1000.000	ug/L	5.310	1039149	3.850
	Ca	43	1000.000	ug/L	7.369	1987	0.008
>	Sc	45		ug/L		226555	226554.751
	Ti	47	10.000	ug/L	2.509	1054	0.004
	V	51	10.000	ug/L	7.931	11504	0.054
	Cr	52	10.000	ug/L	3.195	13405	0.054
	Cr	53		ug/L		43077	-0.028
	Mn	55	10.000	ug/L	2.391	21126	0.092
	Fe	57	1000.000	ug/L	1.486	44076	0.184
	Co	59	10.000	ug/L	2.206	15425	0.068
	Ni	60	10.000	ug/L	1.713	3230	0.014
	Cu	63		ug/L		7068	0.031
	Cu	65	10.000	ug/L	1.696	3253	0.014
	Zn	66	10.000	ug/L	5.412	2281	0.021
	Zn	67		ug/L		2007	0.000
	Zn	68		ug/L		1944	0.016
>	Ge	74		ug/L		104515	104514.987
	As	75	10.000	ug/L	2.526	3648	0.030
	Se	77		ug/L		2345	-0.005
	Se	82	10.000	ug/L	3.790	276	0.003
	Kr	83		ug/L		30	-0.000
	Sr	88	10.000	ug/L	0.513	35030	0.383
	Y	89		ug/L		16	0.000
	Zr	90	10.000	ug/L	5.570	13776	0.150
	Mo	98	10.000	ug/L	1.650	9320	0.102
	Ag	107	10.000	ug/L	1.254	16991	0.186
	Cd	111	10.000	ug/L	0.453	4337	0.047
	Cd	114		ug/L		10760	0.118
>	In	115		ug/L		91266	91265.575
	Sn	120	10.000	ug/L	2.337	19767	0.216
	Sb	121	10.000	ug/L	9.127	15954	0.171
	Sb	123		ug/L		12158	0.130
	Ba	135		ug/L		4700	0.029
	Ba	137	10.000	ug/L	0.379	8136	0.050
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		163646	163646.349
	Tl	205	10.000	ug/L	0.494	74996	0.457
	Pb	208	10.000	ug/L	2.092	85890	0.524
	Th	232	10.000	ug/L	3.709	94969	0.579
	U	238	10.000	ug/L	1.452	101259	0.619

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, December 07, 2009 19:11:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\Standard 2.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.027**	**ug/L**	1.607	5557	0.025
	Be	9	**100.010**	**ug/L**	3.736	4449	0.020
	B	11	**200.071**	**ug/L**	2.178	9004	0.040
	Na	23	**9997.551**	**ug/L**	8.270	3138213	14.180
	Mg	24	**9993.802**	**ug/L**	13.964	3146741	14.222
	Al	27	**10004.832**	**ug/L**	11.618	5297740	23.953
	P	31	**10000.071**	**ug/L**	1.357	375567	1.694
	K	39	**10006.079**	**ug/L**	4.281	9234450	41.019
	Ca	43	**10001.355**	**ug/L**	2.050	18644	0.084
>	Sc	45		**ug/L**		221143	221143.414
	Ti	47	**99.985**	**ug/L**	2.063	9613	0.043
	V	51	**99.894**	**ug/L**	0.943	107855	0.491
	Cr	52	**100.023**	**ug/L**	1.749	123496	0.553
	Cr	53		**ug/L**		52934	0.021
	Mn	55	**100.019**	**ug/L**	2.743	207331	0.936
	Fe	57	**10000.647**	**ug/L**	0.920	411803	1.851
	Co	59	**100.006**	**ug/L**	1.470	150980	0.682
	Ni	60	**99.981**	**ug/L**	2.237	30718	0.139
	Cu	63		**ug/L**		68533	0.310
	Cu	65	**100.016**	**ug/L**	2.296	31719	0.143
	Zn	66	**99.957**	**ug/L**	1.598	21380	0.206
	Zn	67		**ug/L**		5080	0.030
	Zn	68		**ug/L**		16852	0.160
>	Ge	74		**ug/L**		103720	103719.581
	As	75	**100.037**	**ug/L**	1.337	32822	0.312
	Se	77		**ug/L**		3771	0.009
	Se	82	**99.955**	**ug/L**	1.388	2575	0.025
	Kr	83		**ug/L**		35	-0.000
	Sr	88	**99.999**	**ug/L**	0.797	341826	3.829
	Y	89		**ug/L**		41	0.000
	Zr	90	**100.295**	**ug/L**	1.278	190595	2.135
	Mo	98	**100.007**	**ug/L**	1.451	91735	1.028
	Ag	107	**100.028**	**ug/L**	2.132	170866	1.914
	Cd	111	**100.015**	**ug/L**	1.339	43057	0.482
	Cd	114		**ug/L**		106685	1.195
>	In	115		**ug/L**		89259	89259.198
	Sn	120	**100.013**	**ug/L**	3.259	195461	2.190
	Sb	121	**100.101**	**ug/L**	6.570	170340	1.905
	Sb	123		**ug/L**		131467	1.470
	Ba	135		**ug/L**		46976	0.287
	Ba	137	**100.006**	**ug/L**	2.950	81894	0.500
	Ho	165		**ug/L**		24	0.000
>	Lu	175		**ug/L**		163972	163971.593
	Tl	205	**99.965**	**ug/L**	1.579	723165	4.410
	Pb	208	**99.972**	**ug/L**	2.275	836035	5.100
	Th	232	**100.007**	**ug/L**	0.862	956518	5.833
	U	238	**99.956**	**ug/L**	2.301	971246	5.925

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, December 07, 2009 19:17:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 1.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.777**	**ug/L**	3.132	2819	0.013
	Be	9	**52.408**	**ug/L**	0.423	2333	0.011
	B	11	**98.485**	**ug/L**	2.546	4535	0.020
	Na	23	**4919.999**	**ug/L**	0.853	1542348	6.978
	Mg	24	**4649.274**	**ug/L**	10.628	1459696	6.616
	Al	27	**4890.011**	**ug/L**	3.012	2583857	11.707
	P	31	**5019.031**	**ug/L**	3.319	188604	0.850
	K	39	**5057.569**	**ug/L**	5.889	4739776	20.733
	Ca	43	**4940.040**	**ug/L**	0.980	9249	0.041
>	Sc	45		**ug/L**		220724	220723.798
	Ti	47	**50.632**	**ug/L**	2.573	4889	0.022
	V	51	**50.523**	**ug/L**	2.614	54063	0.249
	Cr	52	**50.842**	**ug/L**	1.802	63200	0.281
	Cr	53		**ug/L**		46143	-0.009
	Mn	55	**51.365**	**ug/L**	0.677	106432	0.481
	Fe	57	**4939.847**	**ug/L**	0.824	204195	0.915
	Co	59	**49.179**	**ug/L**	1.493	74126	0.336
	Ni	60	**50.506**	**ug/L**	0.587	15502	0.070
	Cu	63		**ug/L**		35252	0.159
	Cu	65	**51.288**	**ug/L**	1.277	16264	0.073
	Zn	66	**50.954**	**ug/L**	0.850	10825	0.105
	Zn	67		**ug/L**		3358	0.014
	Zn	68		**ug/L**		8660	0.082
>	Ge	74		**ug/L**		102824	102824.093
	As	75	**46.539**	**ug/L**	2.394	15408	0.145
	Se	77		**ug/L**		2745	-0.001
	Se	82	**49.185**	**ug/L**	2.533	1258	0.012
	Kr	83		**ug/L**		38	0.000
	Sr	88	**50.073**	**ug/L**	1.849	169866	1.917
	Y	89		**ug/L**		19	0.000
	Zr	90	**45.458**	**ug/L**	3.799	85777	0.968
	Mo	98	**50.408**	**ug/L**	0.106	45892	0.518
	Ag	107	**49.946**	**ug/L**	2.201	84666	0.956
	Cd	111	**50.492**	**ug/L**	1.372	21573	0.244
	Cd	114		**ug/L**		52840	0.596
>	In	115		**ug/L**		88574	88574.059
	Sn	120	**51.003**	**ug/L**	0.978	98957	1.117
	Sb	121	**49.796**	**ug/L**	6.678	84280	0.948
	Sb	123		**ug/L**		64631	0.727
	Ba	135		**ug/L**		23517	0.146
	Ba	137	**51.031**	**ug/L**	2.721	41107	0.255
	Ho	165		**ug/L**		31	0.000
>	Lu	175		**ug/L**		161248	161247.947
	Tl	205	**49.598**	**ug/L**	1.098	353087	2.188
	Pb	208	**51.910**	**ug/L**	1.003	427053	2.648
	Th	232	**52.233**	**ug/L**	0.436	491420	3.046
	U	238	**54.834**	**ug/L**	0.377	524131	3.250

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9996
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.555				
	Be	9	104.815				
	B	11	98.485				
	Na	23	98.400				
	Mg	24	92.985				
	Al	27	96.832				
	P	31	100.381				
	K	39	101.151				
	Ca	43	98.801				
>	Sc	45		99.3			
	Ti	47	101.263				
	V	51	101.046				
	Cr	52	101.684				
	Cr	53					
	Mn	55	102.731				
	Fe	57	98.797				
	Co	59	98.357				
	Ni	60	101.011				
	Cu	63					
	Cu	65	102.577				
	Zn	66	101.909				
	Zn	67					
	Zn	68					
>	Ge	74		100.4			
	As	75	93.079				
	Se	77					
	Se	82	98.371				
	Kr	83					
	Sr	88	100.146				
	Y	89					
	Zr	90	90.916				
	Mo	98	100.816				
	Ag	107	99.893				
	Cd	111	100.984				
	Cd	114					
>	In	115		100.2			
	Sn	120	102.006				
	Sb	121	99.592				
	Sb	123					
	Ba	135					
	Ba	137	102.062				
	Ho	165					
>	Lu	175		100.4			
	Tl	205	99.196				
	Pb	208	103.821				
	Th	232	104.467				
	U	238	109.668				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, December 07, 2009 19:23:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 2.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.031	ug/L	295.309	10	0.000
	Be	9	-0.105	ug/L	26.887	7	-0.000
	B	11	0.603	ug/L	79.569	239	0.000
	Na	23	2.506	ug/L	81.110	2667	0.004
	Mg	24	-1.054	ug/L	0.000	0	-0.002
	Al	27	0.023	ug/L	4854.315	333	0.000
	P	31	0.468	ug/L	191.668	1008	0.000
	K	39	-0.065	ug/L	34884.689	157542	-0.000
	Ca	43	1.820	ug/L	440.603	113	0.000
>	Sc	45		ug/L		212892	212892.479
	Ti	47	0.135	ug/L	32.896	69	0.000
	V	51	1.012	ug/L	188.774	257	0.005
	Cr	52	-0.034	ug/L	370.636	1054	-0.000
	Cr	53		ug/L		45731	-0.004
	Mn	55	-0.001	ug/L	2701.638	294	-0.000
	Fe	57	5.126	ug/L	46.471	2467	0.001
	Co	59	0.007	ug/L	54.321	78	0.000
	Ni	60	0.031	ug/L	36.664	35	0.000
	Cu	63		ug/L		85	0.000
	Cu	65	0.005	ug/L	494.415	60	0.000
	Zn	66	-0.010	ug/L	167.977	35	-0.000
	Zn	67		ug/L		1945	0.000
	Zn	68		ug/L		266	-0.000
>	Ge	74		ug/L		101065	101064.642
	As	75	0.162	ug/L	122.777	547	0.001
	Se	77		ug/L		2271	-0.005
	Se	82	-0.050	ug/L	781.653	4	-0.000
	Kr	83		ug/L		36	-0.000
	Sr	88	0.005	ug/L	80.641	51	0.000
	Y	89		ug/L		13	0.000
	Zr	90	0.485	ug/L	5.673	953	0.010
	Mo	98	0.099	ug/L	23.685	97	0.001
	Ag	107	0.003	ug/L	108.483	15	0.000
	Cd	111	0.008	ug/L	105.188	7	0.000
	Cd	114		ug/L		8	-0.000
>	In	115		ug/L		85963	85963.243
	Sn	120	0.251	ug/L	15.187	521	0.005
	Sb	121	1.539	ug/L	18.485	2829	0.029
	Sb	123		ug/L		2201	0.023
	Ba	135		ug/L		13	0.000
	Ba	137	0.007	ug/L	27.048	16	0.000
	Ho	165		ug/L		21	0.000
>	Lu	175		ug/L		158488	158487.982
	Tl	205	0.076	ug/L	28.032	804	0.003
	Pb	208	0.005	ug/L	37.981	138	0.000
	Th	232	0.307	ug/L	22.751	3027	0.018
	U	238	0.012	ug/L	21.511	135	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, December 07, 2009 19:28:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 3.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.296**	ug/L	1.535	622	0.003
	Be	9	**0.598**	ug/L	14.855	38	0.000
	B	11	**14.591**	ug/L	4.993	844	0.003
	Na	23	**263.432**	ug/L	13.789	82910	0.374
	Mg	24	**17.324**	ug/L	28.099	5668	0.025
	Al	27	**32.863**	ug/L	22.858	17344	0.079
	P	31	**50.807**	ug/L	5.996	2871	0.009
	K	39	**320.471**	ug/L	8.016	444484	1.314
	Ca	43	**214.039**	ug/L	7.741	499	0.002
>	Sc	45		ug/L		216539	216538.641
	Ti	47	**9.264**	ug/L	0.572	924	0.004
	V	51	**12.076**	ug/L	1.273	12074	0.059
	Cr	52	**10.217**	ug/L	0.981	13351	0.057
	Cr	53		ug/L		41141	-0.029
	Mn	55	**5.555**	ug/L	1.210	11560	0.052
	Fe	57	**114.758**	ug/L	1.163	6906	0.021
	Co	59	**1.026**	ug/L	3.788	1584	0.007
	Ni	60	**2.102**	ug/L	5.269	658	0.003
	Cu	63		ug/L		855	0.004
	Cu	65	**1.144**	ug/L	2.556	414	0.002
	Zn	66	**10.886**	ug/L	1.560	2295	0.022
	Zn	67		ug/L		2005	0.001
	Zn	68		ug/L		1970	0.017
>	Ge	74		ug/L		100724	100723.548
	As	75	**6.209**	ug/L	7.983	2442	0.019
	Se	77		ug/L		1857	-0.009
	Se	82	**5.569**	ug/L	9.059	144	0.001
	Kr	83		ug/L		32	-0.000
	Sr	88	**10.866**	ug/L	1.224	36899	0.416
	Y	89		ug/L		14	0.000
	Zr	90	**1.935**	ug/L	1.841	3718	0.041
	Mo	98	**0.540**	ug/L	2.937	502	0.006
	Ag	107	**0.999**	ug/L	2.379	1705	0.019
	Cd	111	**1.050**	ug/L	0.686	452	0.005
	Cd	114		ug/L		1112	0.012
>	In	115		ug/L		88594	88593.916
	Sn	120	**5.280**	ug/L	0.340	10294	0.116
	Sb	121	**2.959**	ug/L	8.273	5314	0.056
	Sb	123		ug/L		4049	0.043
	Ba	135		ug/L		960	0.006
	Ba	137	**2.068**	ug/L	2.539	1671	0.010
	Ho	165		ug/L		17	0.000
>	Lu	175		ug/L		160783	160783.000
	Tl	205	**1.062**	ug/L	0.690	7804	0.047
	Pb	208	**2.147**	ug/L	1.248	17703	0.110
	Th	232	**1.064**	ug/L	3.479	10167	0.062
	U	238	**0.244**	ug/L	3.248	2346	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	112.958				
	Be	9	119.672				
	B	11	97.273				
	Na	23	105.373				
	Mg	24	115.493				
	Al	27	109.544				
	P	31	101.614				
	K	39	106.824				
	Ca	43	107.019				
>	Sc	45			97.5		
	Ti	47	92.640				
	V	51	120.758				
	Cr	52	102.174				
	Cr	53					
	Mn	55	111.106				
	Fe	57	114.758				
	Co	59	102.572				
	Ni	60	105.096				
	Cu	63					
	Cu	65	114.394				
	Zn	66	108.863				
	Zn	67					
	Zn	68					
>	Ge	74			98.4		
	As	75	124.177				
	Se	77					
	Se	82	111.388				
	Kr	83					
	Sr	88	108.657				
	Y	89					
	Zr	90	96.750				
	Mo	98	107.951				
	Ag	107	99.937				
	Cd	111	105.044				
	Cd	114					
>	In	115			100.2		
	Sn	120	105.606				
	Sb	121	98.631				
	Sb	123					
	Ba	135					
	Ba	137	103.389				
	Ho	165					
>	Lu	175			100.1		
	Tl	205	106.150				
	Pb	208	107.344				
	Th	232	106.393				
	U	238	121.869				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, December 07, 2009 19:34:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 4.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.012**	**ug/L**	620.032	9	0.000
	Be	9	**-0.033**	**ug/L**	64.912	10	-0.000
	B	11	**0.083**	**ug/L**	804.014	208	0.000
	Na	23	**94242.242**	**ug/L**	3.397	27370335	133.668
	Mg	24	**97010.285**	**ug/L**	7.516	28242042	138.050
	Al	27	**93654.504**	**ug/L**	6.656	45875959	224.224
	P	31	**98179.453**	**ug/L**	2.359	3405196	16.628
	K	39	**102199.882**	**ug/L**	2.992	85944251	418.958
	Ca	43	**98393.921**	**ug/L**	0.323	168932	0.824
>	Sc	45		**ug/L**		204784	204784.106
	Ti	47	**1552.768**	**ug/L**	2.016	137426	0.671
	V	51	**0.832**	**ug/L**	127.708	99	0.004
	Cr	52	**2.347**	**ug/L**	1.581	3711	0.013
	Cr	53		**ug/L**		34739	-0.049
	Mn	55	**5.996**	**ug/L**	1.699	11775	0.056
	Fe	57	**102354.823**	**ug/L**	1.029	3882334	18.949
	Co	59	**0.230**	**ug/L**	7.016	386	0.002
	Ni	60	**2.349**	**ug/L**	3.857	692	0.003
	Cu	63		**ug/L**		2490	0.012
	Cu	65	**4.208**	**ug/L**	4.409	1289	0.006
	Zn	66	**2.713**	**ug/L**	5.390	576	0.006
	Zn	67		**ug/L**		1615	-0.002
	Zn	68		**ug/L**		380	0.001
>	Ge	74		**ug/L**		96677	96677.382
	As	75	**-0.239**	**ug/L**	176.356	403	-0.001
	Se	77		**ug/L**		2108	-0.006
	Se	82	**0.162**	**ug/L**	295.698	9	0.000
	Kr	83		**ug/L**		48	0.000
	Sr	88	**1.188**	**ug/L**	2.139	3775	0.045
	Y	89		**ug/L**		88	0.001
	Zr	90	**5.338**	**ug/L**	56.694	9434	0.114
	Mo	98	**1957.056**	**ug/L**	1.658	1654261	20.111
	Ag	107	**0.050**	**ug/L**	25.985	89	0.001
	Cd	111	**0.466**	**ug/L**	28.620	188	0.002
	Cd	114		**ug/L**		1769	0.021
>	In	115		**ug/L**		82262	82262.324
	Sn	120	**0.168**	**ug/L**	7.513	350	0.004
	Sb	121	**0.273**	**ug/L**	8.299	727	0.005
	Sb	123		**ug/L**		544	0.004
	Ba	135		**ug/L**		306	0.002
	Ba	137	**0.686**	**ug/L**	1.423	545	0.003
	Ho	165		**ug/L**		388	0.002
>	Lu	175		**ug/L**		155953	155953.179
	Tl	205	**0.022**	**ug/L**	7.112	420	0.001
	Pb	208	**0.184**	**ug/L**	2.666	1556	0.009
	Th	232	**0.125**	**ug/L**	21.183	1318	0.007
	U	238	**0.012**	**ug/L**	7.082	131	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	94.242				
	Mg	24	97.010				
	Al	27	93.655				
	P	31	98.179				
	K	39	102.200				
	Ca	43	98.394				
>	Sc	45			92.2		
	Ti	47	77.638				
	V	51					
	Cr	52	63.438				
	Cr	53					
	Mn	55	103.373				
	Fe	57	102.355				
	Co	59	92.031				
	Ni	60	87.003				
	Cu	63					
	Cu	65	145.106				
	Zn	66	75.368				
	Zn	67					
	Zn	68					
>	Ge	74			94.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	98.967				
	Y	89					
	Zr	90					
	Mo	98	97.853				
	Ag	107					
	Cd	111	116.487				
	Cd	114					
>	In	115			93.0		
	Sn	120					
	Sb	121	272.557				
	Sb	123					
	Ba	135					
	Ba	137	102.432				
	Ho	165					
>	Lu	175			97.1		
	Tl	205					
	Pb	208	91.815				
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits
QC Std 4	Zr	90ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, December 07, 2009 19:40:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 5.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.594**	ug/L	3.291	1075	0.005
	Be	9	**19.258**	ug/L	1.575	810	0.004
	B	11	**19.423**	ug/L	3.578	1003	0.004
	Na	23	**102723.940**	ug/L	5.477	30097628	145.698
	Mg	24	**98519.115**	ug/L	6.137	28960931	140.198
	Al	27	**98146.931**	ug/L	3.044	48543166	234.979
	P	31	**97517.674**	ug/L	1.750	3412905	16.516
	K	39	**101931.889**	ug/L	8.954	86496592	417.860
	Ca	43	**98621.059**	ug/L	2.062	170837	0.826
>	Sc	45		ug/L		206591	206590.516
	Ti	47	**1556.005**	ug/L	2.222	138957	0.672
	V	51	**21.021**	ug/L	0.311	20609	0.103
	Cr	52	**22.289**	ug/L	1.594	26531	0.123
	Cr	53		ug/L		38038	-0.034
	Mn	55	**26.660**	ug/L	2.624	51835	0.250
	Fe	57	**101204.141**	ug/L	2.134	3872511	18.736
	Co	59	**20.465**	ug/L	2.433	28911	0.140
	Ni	60	**22.509**	ug/L	0.635	6481	0.031
	Cu	63		ug/L		15294	0.074
	Cu	65	**24.085**	ug/L	3.725	7178	0.034
	Zn	66	**22.644**	ug/L	1.903	4609	0.047
	Zn	67		ug/L		2305	0.005
	Zn	68		ug/L		3452	0.033
>	Ge	74		ug/L		98090	98090.259
	As	75	**20.415**	ug/L	2.566	6720	0.064
	Se	77		ug/L		2463	-0.003
	Se	82	**21.406**	ug/L	5.388	525	0.005
	Kr	83		ug/L		58	0.000
	Sr	88	**23.030**	ug/L	1.331	73084	0.882
	Y	89		ug/L		92	0.001
	Zr	90	**21.918**	ug/L	3.253	38700	0.467
	Mo	98	**1946.997**	ug/L	1.941	1657266	20.008
	Ag	107	**19.865**	ug/L	2.431	31500	0.380
	Cd	111	**21.098**	ug/L	2.262	8432	0.102
	Cd	114		ug/L		21874	0.264
>	In	115		ug/L		82850	82849.530
	Sn	120	**20.746**	ug/L	2.065	37670	0.454
	Sb	121	**22.892**	ug/L	0.871	36396	0.436
	Sb	123		ug/L		27660	0.331
	Ba	135		ug/L		9418	0.061
	Ba	137	**21.225**	ug/L	2.474	16419	0.106
	Ho	165		ug/L		360	0.002
>	Lu	175		ug/L		154791	154790.782
	Tl	205	**19.786**	ug/L	1.570	135346	0.873
	Pb	208	**20.378**	ug/L	0.994	160988	1.040
	Th	232	**21.391**	ug/L	1.558	193300	1.248
	U	238	**22.444**	ug/L	1.606	205925	1.330

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9996
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.971				
	Be	9	96.288				
	B	11	97.113				
	Na	23	102.724				
	Mg	24	98.519				
	Al	27	98.147				
	P	31	97.518				
	K	39	101.932				
	Ca	43	98.621				
>	Sc	45			93.0		
	Ti	47	77.800				
	V	51	105.104				
	Cr	52	94.048				
	Cr	53					
	Mn	55	103.333				
	Fe	57	101.204				
	Co	59	101.063				
	Ni	60	99.159				
	Cu	63					
	Cu	65	105.174				
	Zn	66	95.948				
	Zn	67					
	Zn	68					
>	Ge	74			95.8		
	As	75	102.076				
	Se	77					
	Se	82	107.032				
	Kr	83					
	Sr	88	108.630				
	Y	89					
	Zr	90	109.590				
	Mo	98	97.350				
	Ag	107	99.323				
	Cd	111	103.424				
	Cd	114					
>	In	115			93.7		
	Sn	120	103.729				
	Sb	121	113.888				
	Sb	123					
	Ba	135					
	Ba	137	102.686				
	Ho	165					
>	Lu	175			96.4		
	Tl	205	98.932				
	Pb	208	100.884				
	Th	232	106.953				
	U	238	112.221				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 19:45:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.053**	**ug/L**	1.642	2824	0.013
	Be	9	**52.225**	**ug/L**	0.227	2316	0.010
	B	11	**98.763**	**ug/L**	1.281	4528	0.020
	Na	23	**4919.174**	**ug/L**	5.831	1536293	6.977
	Mg	24	**4411.649**	**ug/L**	2.574	1379914	6.278
	Al	27	**4931.618**	**ug/L**	9.254	2593859	11.807
	P	31	**4955.434**	**ug/L**	2.347	185463	0.839
	K	39	**4845.937**	**ug/L**	5.491	4530922	19.865
	Ca	43	**5029.258**	**ug/L**	1.195	9374	0.042
>	Sc	45		**ug/L**		219804	219803.816
	Ti	47	**50.902**	**ug/L**	1.235	4893	0.022
	V	51	**50.661**	**ug/L**	0.930	53978	0.249
	Cr	52	**50.359**	**ug/L**	2.364	62346	0.279
	Cr	53		**ug/L**		46558	-0.007
	Mn	55	**51.057**	**ug/L**	1.801	105340	0.478
	Fe	57	**5062.677**	**ug/L**	2.647	208316	0.937
	Co	59	**49.600**	**ug/L**	1.926	74446	0.338
	Ni	60	**50.216**	**ug/L**	1.795	15347	0.070
	Cu	63		**ug/L**		35525	0.161
	Cu	65	**51.389**	**ug/L**	2.187	16226	0.074
	Zn	66	**50.926**	**ug/L**	1.348	10992	0.105
	Zn	67		**ug/L**		3334	0.013
	Zn	68		**ug/L**		8557	0.079
>	Ge	74		**ug/L**		104477	104477.426
	As	75	**45.440**	**ug/L**	2.437	15296	0.142
	Se	77		**ug/L**		2798	-0.001
	Se	82	**49.631**	**ug/L**	2.367	1290	0.012
	Kr	83		**ug/L**		30	-0.000
	Sr	88	**49.296**	**ug/L**	1.507	169863	1.888
	Y	89		**ug/L**		27	0.000
	Zr	90	**41.921**	**ug/L**	9.223	80325	0.892
	Mo	98	**50.654**	**ug/L**	1.243	46844	0.521
	Ag	107	**50.109**	**ug/L**	0.936	86290	0.959
	Cd	111	**50.212**	**ug/L**	2.443	21789	0.242
	Cd	114		**ug/L**		54580	0.607
>	In	115		**ug/L**		89979	89979.169
	Sn	120	**49.803**	**ug/L**	2.264	98152	1.090
	Sb	121	**48.054**	**ug/L**	8.283	82571	0.915
	Sb	123		**ug/L**		63461	0.703
	Ba	135		**ug/L**		23512	0.143
	Ba	137	**49.811**	**ug/L**	0.691	40791	0.249
	Ho	165		**ug/L**		33	0.000
>	Lu	175		**ug/L**		163884	163884.393
	Tl	205	**48.767**	**ug/L**	1.180	352794	2.151
	Pb	208	**51.497**	**ug/L**	0.505	430602	2.627
	Th	232	**51.627**	**ug/L**	1.907	493618	3.011
	U	238	**54.046**	**ug/L**	2.702	524940	3.204

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.106				
	Be	9	104.451				
	B	11	98.763				
	Na	23	98.383				
	Mg	24	88.233				
	Al	27	97.656				
	P	31	99.109				
	K	39	96.919				
	Ca	43	100.585				
>	Sc	45			98.9		
	Ti	47	101.805				
	V	51	101.322				
	Cr	52	100.717				
	Cr	53					
	Mn	55	102.114				
	Fe	57	101.254				
	Co	59	99.201				
	Ni	60	100.432				
	Cu	63					
	Cu	65	102.779				
	Zn	66	101.852				
	Zn	67					
	Zn	68					
>	Ge	74			102.0		
	As	75	90.880				
	Se	77					
	Se	82	99.263				
	Kr	83					
	Sr	88	98.593				
	Y	89					
	Zr	90	83.841				
	Mo	98	101.308				
	Ag	107	100.219				
	Cd	111	100.424				
	Cd	114					
>	In	115			101.7		
	Sn	120	99.605				
	Sb	121	96.107				
	Sb	123					
	Ba	135					
	Ba	137	99.622				
	Ho	165					
>	Lu	175			102.0		
	Tl	205	97.533				
	Pb	208	102.994				
	Th	232	103.255				
	U	238	108.092				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 19:51:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.053	ug/L	168.584	11	0.000
	Be	9	-0.055	ug/L	163.527	10	-0.000
	B	11	-0.123	ug/L	303.060	213	-0.000
	Na	23	3.448	ug/L	191.907	3000	0.005
	Mg	24	1.125	ug/L	335.554	667	0.002
	Al	27	0.645	ug/L	170.813	667	0.002
	P	31	-0.725	ug/L	341.641	986	-0.000
	K	39	21.838	ug/L	96.540	180475	0.090
	Ca	43	14.252	ug/L	98.151	138	0.000
>	Sc	45		ug/L		217680	217680.168
	Ti	47	0.321	ug/L	70.801	88	0.000
	V	51	2.049	ug/L	6.457	1399	0.010
	Cr	52	-0.260	ug/L	32.785	806	-0.001
	Cr	53		ug/L		46292	-0.006
	Mn	55	0.009	ug/L	33.260	320	0.000
	Fe	57	4.491	ug/L	35.923	2499	0.001
	Co	59	-0.004	ug/L	52.846	64	-0.000
	Ni	60	0.006	ug/L	675.911	28	0.000
	Cu	63		ug/L		74	-0.000
	Cu	65	0.024	ug/L	63.247	67	0.000
	Zn	66	0.055	ug/L	47.384	49	0.000
	Zn	67		ug/L		1954	0.000
	Zn	68		ug/L		259	-0.000
>	Ge	74		ug/L		102066	102066.341
	As	75	-0.063	ug/L	495.180	482	-0.000
	Se	77		ug/L		2246	-0.006
	Se	82	0.173	ug/L	92.047	9	0.000
	Kr	83		ug/L		31	-0.000
	Sr	88	0.002	ug/L	145.375	42	0.000
	Y	89		ug/L		11	-0.000
	Zr	90	0.447	ug/L	6.446	897	0.010
	Mo	98	0.238	ug/L	5.645	223	0.002
	Ag	107	0.006	ug/L	44.709	20	0.000
	Cd	111	-0.008	ug/L	186.827	-0	-0.000
	Cd	114		ug/L		12	0.000
>	In	115		ug/L		87154	87154.264
	Sn	120	0.206	ug/L	11.353	445	0.005
	Sb	121	1.136	ug/L	19.916	2205	0.022
	Sb	123		ug/L		1658	0.016
	Ba	135		ug/L		10	0.000
	Ba	137	0.002	ug/L	109.144	12	0.000
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		159299	159299.328
	Tl	205	0.079	ug/L	29.500	824	0.003
	Pb	208	0.004	ug/L	51.479	129	0.000
	Th	232	0.312	ug/L	24.954	3084	0.018
	U	238	0.009	ug/L	39.093	105	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Monday, December 07, 2009 19:57:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 10.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**983.501**	ug/L	0.634	52340	0.247
	Be	9	**955.185**	ug/L	2.679	40665	0.192
	B	11	**-0.263**	ug/L	208.607	201	-0.000
	Na	23	**52739.761**	ug/L	9.376	15876743	74.803
	Mg	24	**47660.970**	ug/L	8.343	14390604	67.824
	Al	27	**47067.994**	ug/L	4.719	23898174	112.688
	P	31	**23972.875**	ug/L	1.976	862177	4.060
	K	39	**54316.769**	ug/L	6.628	47390853	222.666
	Ca	43	**50408.171**	ug/L	1.145	89712	0.422
>	Sc	45		ug/L		212129	212129.240
	Ti	47	**30.853**	ug/L	1.678	2884	0.013
	V	51	**943.987**	ug/L	1.460	984127	4.643
	Cr	52	**946.398**	ug/L	2.935	1111404	5.235
	Cr	53		ug/L		174020	0.602
	Mn	55	**926.746**	ug/L	1.852	1840248	8.674
	Fe	57	**46870.101**	ug/L	1.405	1842907	8.677
	Co	59	**921.827**	ug/L	1.230	1334214	6.290
	Ni	60	**981.485**	ug/L	1.044	289039	1.363
	Cu	63		ug/L		624924	2.946
	Cu	65	**956.582**	ug/L	0.629	290518	1.369
	Zn	66	**2406.066**	ug/L	1.471	495318	4.954
	Zn	67		ug/L		81617	0.797
	Zn	68		ug/L		370251	3.700
>	Ge	74		ug/L		99983	99983.328
	As	75	**917.306**	ug/L	0.933	286132	2.857
	Se	77		ug/L		11335	0.086
	Se	82	**506.673**	ug/L	2.735	12560	0.126
	Kr	83		ug/L		40	0.000
	Sr	88	**990.612**	ug/L	2.025	3313303	37.932
	Y	89		ug/L		102	0.001
	Zr	90	**499.833**	ug/L	1.329	929168	10.638
	Mo	98	**985.262**	ug/L	1.042	884328	10.125
	Ag	107	**250.337**	ug/L	2.015	418383	4.791
	Cd	111	**971.005**	ug/L	0.994	409066	4.683
	Cd	114		ug/L		979513	11.214
>	In	115		ug/L		87343	87343.314
	Sn	120	**961.675**	ug/L	0.488	1838950	21.054
	Sb	121	**246.407**	ug/L	6.910	410113	4.689
	Sb	123		ug/L		314833	3.600
	Ba	135		ug/L		453404	2.795
	Ba	137	**967.128**	ug/L	1.559	783892	4.831
	Ho	165		ug/L		115	0.001
>	Lu	175		ug/L		162272	162272.489
	Tl	205	**461.215**	ug/L	0.630	3301601	20.345
	Pb	208	**4747.705**	ug/L	1.645	39296600	242.188
	Th	232	**2436.533**	ug/L	0.594	23060899	142.108
	U	238	**5147.577**	ug/L	0.919	49510563	305.129

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	98.350				
	Be	9	95.518				
	B	11					
	Na	23	105.480				
	Mg	24	95.322				
	Al	27	94.136				
	P	31	95.891				
	K	39	108.634				
	Ca	43	100.816				
>	Sc	45		95.5			
	Ti	47					
	V	51	94.399				
	Cr	52	94.640				
	Cr	53					
	Mn	55	92.675				
	Fe	57	93.740				
	Co	59	92.183				
	Ni	60	98.148				
	Cu	63					
	Cu	65	95.658				
	Zn	66	96.243				
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75	91.731				
	Se	77					
	Se	82	101.335				
	Kr	83					
	Sr	88	99.061				
	Y	89					
	Zr	90	99.967				
	Mo	98	98.526				
	Ag	107	100.135				
	Cd	111	97.100				
	Cd	114					
>	In	115		98.8			
	Sn	120	96.168				
	Sb	121	98.563				
	Sb	123					
	Ba	135					
	Ba	137	96.713				
	Ho	165					
>	Lu	175		101.0			
	Tl	205	92.243				
	Pb	208	94.954				
	Th	232	97.461				
	U	238	102.952				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Monday, December 07, 2009 20:03:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 11.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.552**	**ug/L**	2.861	2914	0.013
	Be	9	**51.501**	**ug/L**	2.293	2335	0.010
	B	11	**97.124**	**ug/L**	2.442	4557	0.019
	Na	23	**4589.800**	**ug/L**	5.595	1465307	6.510
	Mg	24	**4523.657**	**ug/L**	2.742	1447539	6.437
	Al	27	**5292.381**	**ug/L**	4.192	2847243	12.671
	P	31	**4884.314**	**ug/L**	1.849	186943	0.827
	K	39	**5049.291**	**ug/L**	5.878	4817449	20.699
	Ca	43	**4988.712**	**ug/L**	2.750	9508	0.042
>	Sc	45		**ug/L**		224756	224756.031
	Ti	47	**50.203**	**ug/L**	0.449	4936	0.022
	V	51	**51.435**	**ug/L**	4.038	56024	0.253
	Cr	52	**49.970**	**ug/L**	2.435	63266	0.276
	Cr	53		**ug/L**		46777	-0.010
	Mn	55	**50.392**	**ug/L**	1.160	106324	0.472
	Fe	57	**4930.320**	**ug/L**	1.997	207512	0.913
	Co	59	**49.190**	**ug/L**	2.549	75489	0.336
	Ni	60	**50.166**	**ug/L**	1.884	15677	0.070
	Cu	63		**ug/L**		35875	0.159
	Cu	65	**51.793**	**ug/L**	1.375	16723	0.074
	Zn	66	**50.406**	**ug/L**	1.917	10953	0.104
	Zn	67		**ug/L**		3375	0.013
	Zn	68		**ug/L**		8700	0.080
>	Ge	74		**ug/L**		105185	105185.224
	As	75	**47.092**	**ug/L**	2.523	15943	0.147
	Se	77		**ug/L**		2666	-0.002
	Se	82	**50.120**	**ug/L**	3.975	1311	0.012
	Kr	83		**ug/L**		35	-0.000
	Sr	88	**49.365**	**ug/L**	1.145	172170	1.890
	Y	89		**ug/L**		21	0.000
	Zr	90	**55.023**	**ug/L**	5.439	106693	1.171
	Mo	98	**49.972**	**ug/L**	1.898	46768	0.514
	Ag	107	**49.201**	**ug/L**	2.727	85736	0.942
	Cd	111	**49.641**	**ug/L**	1.107	21805	0.239
	Cd	114		**ug/L**		53984	0.593
>	In	115		**ug/L**		91059	91059.090
	Sn	120	**52.006**	**ug/L**	1.966	103723	1.139
	Sb	121	**51.508**	**ug/L**	4.354	89594	0.980
	Sb	123		**ug/L**		69509	0.760
	Ba	135		**ug/L**		23828	0.147
	Ba	137	**51.096**	**ug/L**	0.766	41416	0.255
	Ho	165		**ug/L**		35	0.000
>	Lu	175		**ug/L**		162222	162221.818
	Tl	205	**49.182**	**ug/L**	0.354	352218	2.169
	Pb	208	**51.430**	**ug/L**	1.184	425677	2.624
	Th	232	**52.747**	**ug/L**	0.463	499259	3.076
	U	238	**54.286**	**ug/L**	1.826	522041	3.218

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.104				
	Be	9	103.003				
	B	11	97.124				
	Na	23	91.796				
	Mg	24	90.473				
	Al	27	104.800				
	P	31	97.686				
	K	39	100.986				
	Ca	43	99.774				
>	Sc	45		101.2			
	Ti	47	100.407				
	V	51	102.870				
	Cr	52	99.940				
	Cr	53					
	Mn	55	100.784				
	Fe	57	98.606				
	Co	59	98.380				
	Ni	60	100.332				
	Cu	63					
	Cu	65	103.586				
	Zn	66	100.811				
	Zn	67					
	Zn	68					
>	Ge	74		102.7			
	As	75	94.185				
	Se	77					
	Se	82	100.241				
	Kr	83					
	Sr	88	98.730				
	Y	89					
	Zr	90	110.045				
	Mo	98	99.945				
	Ag	107	98.402				
	Cd	111	99.283				
	Cd	114					
>	In	115		103.0			
	Sn	120	104.012				
	Sb	121	103.017				
	Sb	123					
	Ba	135					
	Ba	137	102.193				
	Ho	165					
>	Lu	175		101.0			
	Tl	205	98.364				
	Pb	208	102.860				
	Th	232	105.494				
	U	238	108.572				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 11	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Monday, December 07, 2009 20:08:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 12.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.167**	**ug/L**	17.104	18	0.000
	Be	9	**-0.049**	**ug/L**	88.719	10	-0.000
	B	11	**0.081**	**ug/L**	789.830	222	0.000
	Na	23	**9.799**	**ug/L**	33.662	5001	0.014
	Mg	24	**1.096**	**ug/L**	339.826	667	0.002
	Al	27	**1.289**	**ug/L**	149.601	1000	0.003
	P	31	**-0.619**	**ug/L**	135.250	994	-0.000
	K	39	**4.174**	**ug/L**	71.284	165284	0.017
	Ca	43	**18.420**	**ug/L**	81.666	146	0.000
>	Sc	45		**ug/L**		218464	218464.035
	Ti	47	**-0.007**	**ug/L**	893.156	57	-0.000
	V	51	**1.238**	**ug/L**	31.982	533	0.006
	Cr	52	**-0.216**	**ug/L**	24.768	861	-0.001
	Cr	53		**ug/L**		46465	-0.006
	Mn	55	**0.003**	**ug/L**	489.028	309	0.000
	Fe	57	**4.787**	**ug/L**	10.839	2519	0.001
	Co	59	**0.020**	**ug/L**	58.076	99	0.000
	Ni	60	**0.015**	**ug/L**	179.172	31	0.000
	Cu	63		**ug/L**		126	0.000
	Cu	65	**0.066**	**ug/L**	35.701	80	0.000
	Zn	66	**0.051**	**ug/L**	89.566	49	0.000
	Zn	67		**ug/L**		1940	0.000
	Zn	68		**ug/L**		257	-0.000
>	Ge	74		**ug/L**		102845	102845.230
	As	75	**0.913**	**ug/L**	11.739	798	0.003
	Se	77		**ug/L**		2251	-0.006
	Se	82	**-0.184**	**ug/L**	185.476	0	-0.000
	Kr	83		**ug/L**		36	-0.000
	Sr	88	**0.007**	**ug/L**	45.110	61	0.000
	Y	89		**ug/L**		15	0.000
	Zr	90	**0.579**	**ug/L**	3.178	1157	0.012
	Mo	98	**0.302**	**ug/L**	11.151	284	0.003
	Ag	107	**0.009**	**ug/L**	8.271	25	0.000
	Cd	111	**0.026**	**ug/L**	47.032	14	0.000
	Cd	114		**ug/L**		13	0.000
>	In	115		**ug/L**		88367	88366.525
	Sn	120	**1.206**	**ug/L**	13.061	2384	0.026
	Sb	121	**2.561**	**ug/L**	10.548	4629	0.049
	Sb	123		**ug/L**		3542	0.037
	Ba	135		**ug/L**		19	0.000
	Ba	137	**0.013**	**ug/L**	27.535	21	0.000
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		158037	158036.587
	Tl	205	**0.148**	**ug/L**	23.761	1302	0.007
	Pb	208	**0.049**	**ug/L**	14.565	493	0.003
	Th	232	**0.481**	**ug/L**	16.298	4615	0.028
	U	238	**0.096**	**ug/L**	4.847	922	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			98.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			100.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.4		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 21:00:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.976**	**ug/L**	3.257	2510	0.012
	Be	9	**50.952**	**ug/L**	2.438	2137	0.010
	B	11	**91.648**	**ug/L**	5.657	3990	0.018
	Na	23	**4563.294**	**ug/L**	7.206	1347543	6.472
	Mg	24	**4261.391**	**ug/L**	1.924	1261355	6.064
	Al	27	**4410.296**	**ug/L**	3.304	2195445	10.559
	P	31	**4763.936**	**ug/L**	2.476	168713	0.807
	K	39	**4982.137**	**ug/L**	6.903	4401467	20.424
	Ca	43	**4805.237**	**ug/L**	1.756	8478	0.040
>	Sc	45		**ug/L**		207932	207931.812
	Ti	47	**47.497**	**ug/L**	2.285	4322	0.021
	V	51	**49.748**	**ug/L**	6.035	50104	0.245
	Cr	52	**48.378**	**ug/L**	2.186	56705	0.268
	Cr	53		**ug/L**		46906	0.007
	Mn	55	**48.777**	**ug/L**	0.615	95219	0.457
	Fe	57	**4735.935**	**ug/L**	2.700	184503	0.877
	Co	59	**46.733**	**ug/L**	2.206	66362	0.319
	Ni	60	**47.508**	**ug/L**	1.220	13739	0.066
	Cu	63		**ug/L**		31904	0.153
	Cu	65	**49.711**	**ug/L**	0.582	14853	0.071
	Zn	66	**48.159**	**ug/L**	2.502	9834	0.099
	Zn	67		**ug/L**		3300	0.015
	Zn	68		**ug/L**		7961	0.078
>	Ge	74		**ug/L**		98831	98831.390
	As	75	**43.301**	**ug/L**	0.500	13815	0.135
	Se	77		**ug/L**		2662	-0.001
	Se	82	**46.493**	**ug/L**	2.218	1143	0.012
	Kr	83		**ug/L**		38	0.000
	Sr	88	**47.190**	**ug/L**	1.057	154089	1.807
	Y	89		**ug/L**		21	0.000
	Zr	90	**41.966**	**ug/L**	8.763	76165	0.893
	Mo	98	**47.964**	**ug/L**	1.177	42030	0.493
	Ag	107	**47.798**	**ug/L**	2.487	77989	0.915
	Cd	111	**48.326**	**ug/L**	2.045	19873	0.233
	Cd	114		**ug/L**		48854	0.573
>	In	115		**ug/L**		85264	85264.373
	Sn	120	**48.425**	**ug/L**	1.997	90429	1.060
	Sb	121	**46.764**	**ug/L**	9.771	76120	0.890
	Sb	123		**ug/L**		58062	0.679
	Ba	135		**ug/L**		21795	0.137
	Ba	137	**47.144**	**ug/L**	1.771	37403	0.236
	Ho	165		**ug/L**		34	0.000
>	Lu	175		**ug/L**		158789	158788.594
	Tl	205	**48.133**	**ug/L**	2.349	337406	2.123
	Pb	208	**50.734**	**ug/L**	0.156	411042	2.588
	Th	232	**51.207**	**ug/L**	0.388	474427	2.987
	U	238	**53.759**	**ug/L**	1.919	505974	3.187

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	95.953				
	Be	9	101.905				
	B	11	91.648				
	Na	23	91.266				
	Mg	24	85.228				
	Al	27	87.333				
	P	31	95.279				
	K	39	99.643				
	Ca	43	96.105				
>	Sc	45		93.6			
	Ti	47	94.994				
	V	51	99.495				
	Cr	52	96.755				
	Cr	53					
	Mn	55	97.555				
	Fe	57	94.719				
	Co	59	93.465				
	Ni	60	95.015				
	Cu	63					
	Cu	65	99.422				
	Zn	66	96.317				
	Zn	67					
	Zn	68					
>	Ge	74		96.5			
	As	75	86.601				
	Se	77					
	Se	82	92.986				
	Kr	83					
	Sr	88	94.380				
	Y	89					
	Zr	90	83.932				
	Mo	98	95.927				
	Ag	107	95.597				
	Cd	111	96.651				
	Cd	114					
>	In	115		96.4			
	Sn	120	96.849				
	Sb	121	93.527				
	Sb	123					
	Ba	135					
	Ba	137	94.289				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	96.266				
	Pb	208	101.468				
	Th	232	102.414				
	U	238	107.518				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)
QC Std 6	As	75CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 21:06:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.084**	ug/L	89.739	12	0.000
	Be	9	**-0.123**	ug/L	31.015	6	-0.000
	B	11	**-0.377**	ug/L	64.282	191	-0.000
	Na	23	**1.642**	ug/L	320.253	2334	0.002
	Mg	24	**0.091**	ug/L	2182.951	333	0.000
	Al	27	**-0.627**	ug/L	0.000	0	-0.002
	P	31	**-0.137**	ug/L	985.587	954	-0.000
	K	39	**22.560**	ug/L	45.858	171357	0.092
	Ca	43	**12.539**	ug/L	31.792	127	0.000
>	Sc	45		ug/L		205974	205973.721
	Ti	47	**0.022**	ug/L	290.595	57	0.000
	V	51	**1.723**	ug/L	41.598	994	0.008
	Cr	52	**-0.119**	ug/L	40.507	924	-0.001
	Cr	53		ug/L		46156	0.006
	Mn	55	**0.010**	ug/L	81.940	305	0.000
	Fe	57	**10.020**	ug/L	13.713	2574	0.002
	Co	59	**0.005**	ug/L	37.018	72	0.000
	Ni	60	**0.003**	ug/L	570.256	26	0.000
	Cu	63		ug/L		80	0.000
	Cu	65	**-0.005**	ug/L	756.241	55	-0.000
	Zn	66	**0.037**	ug/L	43.272	44	0.000
	Zn	67		ug/L		1991	0.001
	Zn	68		ug/L		256	-0.000
>	Ge	74		ug/L		98554	98553.783
	As	75	**-0.096**	ug/L	833.467	454	-0.000
	Se	77		ug/L		2225	-0.005
	Se	82	**-0.405**	ug/L	123.154	-5	-0.000
	Kr	83		ug/L		37	0.000
	Sr	88	**0.004**	ug/L	121.409	47	0.000
	Y	89		ug/L		10	-0.000
	Zr	90	**0.430**	ug/L	10.126	836	0.009
	Mo	98	**0.091**	ug/L	21.606	89	0.001
	Ag	107	**0.005**	ug/L	22.734	18	0.000
	Cd	111	**-0.002**	ug/L	528.092	2	-0.000
	Cd	114		ug/L		13	0.000
>	In	115		ug/L		84095	84094.879
	Sn	120	**0.172**	ug/L	21.040	366	0.004
	Sb	121	**1.143**	ug/L	15.702	2136	0.022
	Sb	123		ug/L		1644	0.017
	Ba	135		ug/L		9	0.000
	Ba	137	**0.008**	ug/L	29.857	17	0.000
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		157502	157501.781
	Tl	205	**0.122**	ug/L	5.086	1118	0.005
	Pb	208	**0.011**	ug/L	23.749	187	0.001
	Th	232	**0.278**	ug/L	25.042	2734	0.016
	U	238	**0.015**	ug/L	17.795	165	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			92.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.1		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978497
Sample Date/Time: Monday, December 07, 2009 21:12:30
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978497.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.005**	ug/L	1375.998	8	0.000
	Be	9	**-0.110**	ug/L	113.595	7	-0.000
	B	11	**-0.751**	ug/L	17.962	177	-0.000
	Na	23	**1.645**	ug/L	485.869	2334	0.002
	Mg	24	**-1.054**	ug/L	0.000	0	-0.002
	Al	27	**1.397**	ug/L	144.263	1000	0.003
	P	31	**-4.560**	ug/L	17.090	805	-0.001
	K	39	**19.646**	ug/L	64.562	170008	0.081
	Ca	43	**10.482**	ug/L	70.422	125	0.000
>	Sc	45		ug/L		207409	207408.691
	Ti	47	**0.014**	ug/L	274.684	56	0.000
	V	51	**1.720**	ug/L	38.360	1000	0.008
	Cr	52	**-0.478**	ug/L	20.378	517	-0.003
	Cr	53		ug/L		27966	-0.084
	Mn	55	**-0.011**	ug/L	72.153	267	-0.000
	Fe	57	**8.701**	ug/L	12.337	2542	0.002
	Co	59	**0.011**	ug/L	134.843	81	0.000
	Ni	60	**0.020**	ug/L	100.101	31	0.000
	Cu	63		ug/L		159	0.000
	Cu	65	**0.116**	ug/L	12.682	91	0.000
	Zn	66	**1.223**	ug/L	2.762	283	0.003
	Zn	67		ug/L		1223	-0.006
	Zn	68		ug/L		372	0.001
>	Ge	74		ug/L		97977	97977.488
	As	75	**-0.511**	ug/L	47.442	326	-0.002
	Se	77		ug/L		820	-0.019
	Se	82	**0.079**	ug/L	275.551	7	0.000
	Kr	83		ug/L		33	-0.000
	Sr	88	**0.023**	ug/L	43.663	112	0.001
	Y	89		ug/L		15	0.000
	Zr	90	**0.160**	ug/L	8.516	361	0.003
	Mo	98	**0.030**	ug/L	21.261	36	0.000
	Ag	107	**0.004**	ug/L	46.551	17	0.000
	Cd	111	**-0.002**	ug/L	987.627	2	-0.000
	Cd	114		ug/L		12	0.000
>	In	115		ug/L		86197	86197.308
	Sn	120	**0.037**	ug/L	21.972	120	0.001
	Sb	121	**-0.063**	ug/L	11.950	211	-0.001
	Sb	123		ug/L		169	-0.001
	Ba	135		ug/L		21	0.000
	Ba	137	**0.019**	ug/L	45.393	26	0.000
	Ho	165		ug/L		15	0.000
>	Lu	175		ug/L		157681	157680.727
	Tl	205	**0.058**	ug/L	9.424	673	0.003
	Pb	208	**0.014**	ug/L	25.943	205	0.001
	Th	232	**0.005**	ug/L	60.073	228	0.000
	U	238	**0.012**	ug/L	29.910	138	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.2		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978498
Sample Date/Time: Monday, December 07, 2009 21:18:18
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978498.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.275**	ug/L	2.062	2756	0.013
	Be	9	**53.049**	ug/L	2.348	2242	0.011
	B	11	**98.582**	ug/L	3.655	4311	0.020
	Na	23	**2110.308**	ug/L	4.724	628888	2.993
	Mg	24	**2045.752**	ug/L	2.013	610443	2.911
	Al	27	**1956.092**	ug/L	1.496	981604	4.683
	P	31	**2047.952**	ug/L	1.335	73655	0.347
	K	39	**2189.775**	ug/L	20.489	2033937	8.977
	Ca	43	**2121.900**	ug/L	2.883	3833	0.018
>	Sc	45		ug/L		209560	209559.742
	Ti	47	**48.154**	ug/L	0.429	4416	0.021
	V	51	**53.114**	ug/L	3.110	53986	0.261
	Cr	52	**50.476**	ug/L	2.578	59582	0.279
	Cr	53		ug/L		32386	-0.064
	Mn	55	**51.555**	ug/L	1.297	101406	0.483
	Fe	57	**2065.966**	ug/L	2.853	82376	0.382
	Co	59	**50.698**	ug/L	1.643	72552	0.346
	Ni	60	**52.831**	ug/L	0.920	15394	0.073
	Cu	63		ug/L		33993	0.162
	Cu	65	**52.428**	ug/L	0.592	15785	0.075
	Zn	66	**54.718**	ug/L	2.005	11165	0.113
	Zn	67		ug/L		2858	0.010
	Zn	68		ug/L		8901	0.087
>	Ge	74		ug/L		98805	98804.871
	As	75	**46.894**	ug/L	3.225	14913	0.146
	Se	77		ug/L		1747	-0.010
	Se	82	**51.053**	ug/L	5.344	1254	0.013
	Kr	83		ug/L		37	0.000
	Sr	88	**52.014**	ug/L	1.628	173264	1.992
	Y	89		ug/L		22	0.000
	Zr	90	**48.939**	ug/L	1.093	90662	1.042
	Mo	98	**51.109**	ug/L	1.688	45687	0.525
	Ag	107	**51.377**	ug/L	1.525	85520	0.983
	Cd	111	**51.484**	ug/L	0.446	21601	0.248
	Cd	114		ug/L		53148	0.611
>	In	115		ug/L		86977	86977.497
	Sn	120	**49.290**	ug/L	0.639	93910	1.079
	Sb	121	**42.017**	ug/L	14.215	69888	0.800
	Sb	123		ug/L		53575	0.613
	Ba	135		ug/L		22968	0.144
	Ba	137	**50.795**	ug/L	0.491	40490	0.254
	Ho	165		ug/L		28	0.000
>	Lu	175		ug/L		159526	159526.497
	Tl	205	**51.150**	ug/L	2.538	360115	2.256
	Pb	208	**53.156**	ug/L	1.267	432607	2.712
	Th	232	**51.932**	ug/L	2.411	483297	3.029
	U	238	**55.504**	ug/L	3.551	524683	3.290

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9996
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.3		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 21:41:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.200

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.698**	**ug/L**	1.994	2647	0.012
	Be	9	**50.347**	**ug/L**	1.486	2194	0.010
	B	11	**94.327**	**ug/L**	0.775	4260	0.019
	Na	23	**4397.412**	**ug/L**	6.658	1348965	6.237
	Mg	24	**4629.977**	**ug/L**	6.314	1423362	6.589
	Al	27	**4665.814**	**ug/L**	5.729	2412155	11.171
	P	31	**4828.078**	**ug/L**	1.822	177622	0.818
	K	39	**4817.431**	**ug/L**	5.663	4425632	19.749
	Ca	43	**4874.751**	**ug/L**	0.756	8933	0.041
>	Sc	45		**ug/L**		216010	216009.832
	Ti	47	**48.644**	**ug/L**	0.434	4598	0.021
	V	51	**50.505**	**ug/L**	3.040	52863	0.248
	Cr	52	**49.202**	**ug/L**	2.363	59891	0.272
	Cr	53		**ug/L**		42346	-0.022
	Mn	55	**48.651**	**ug/L**	1.188	98660	0.455
	Fe	57	**4782.163**	**ug/L**	2.619	193500	0.885
	Co	59	**47.081**	**ug/L**	2.053	69449	0.321
	Ni	60	**48.295**	**ug/L**	2.316	14506	0.067
	Cu	63		**ug/L**		33434	0.154
	Cu	65	**49.528**	**ug/L**	0.766	15373	0.071
	Zn	66	**48.757**	**ug/L**	0.845	10303	0.100
	Zn	67		**ug/L**		3115	0.012
	Zn	68		**ug/L**		8237	0.078
>	Ge	74		**ug/L**		102264	102264.091
	As	75	**44.230**	**ug/L**	1.543	14590	0.138
	Se	77		**ug/L**		2592	-0.002
	Se	82	**47.093**	**ug/L**	1.499	1198	0.012
	Kr	83		**ug/L**		32	-0.000
	Sr	88	**47.954**	**ug/L**	0.164	162066	1.836
	Y	89		**ug/L**		28	0.000
	Zr	90	**46.683**	**ug/L**	3.953	87753	0.994
	Mo	98	**48.334**	**ug/L**	0.448	43839	0.497
	Ag	107	**48.710**	**ug/L**	1.376	82261	0.932
	Cd	111	**48.271**	**ug/L**	1.882	20545	0.233
	Cd	114		**ug/L**		50710	0.575
>	In	115		**ug/L**		88240	88239.736
	Sn	120	**48.537**	**ug/L**	0.399	93820	1.063
	Sb	121	**47.180**	**ug/L**	6.859	79567	0.898
	Sb	123		**ug/L**		60548	0.683
	Ba	135		**ug/L**		22514	0.136
	Ba	137	**47.741**	**ug/L**	1.884	39374	0.238
	Ho	165		**ug/L**		29	0.000
>	Lu	175		**ug/L**		165066	165065.512
	Tl	205	**45.731**	**ug/L**	0.956	333248	2.017
	Pb	208	**50.208**	**ug/L**	0.978	422849	2.561
	Th	232	**50.287**	**ug/L**	1.091	484305	2.933
	U	238	**52.603**	**ug/L**	0.969	514713	3.118

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	97.396				
	Be	9	100.694				
	B	11	94.327				
	Na	23	87.948				
	Mg	24	92.600				
	Al	27	92.392				
	P	31	96.562				
	K	39	96.349				
	Ca	43	97.495				
>	Sc	45		97.2			
	Ti	47	97.289				
	V	51	101.009				
	Cr	52	98.405				
	Cr	53					
	Mn	55	97.301				
	Fe	57	95.643				
	Co	59	94.162				
	Ni	60	96.590				
	Cu	63					
	Cu	65	99.056				
	Zn	66	97.513				
	Zn	67					
	Zn	68					
>	Ge	74		99.9			
	As	75	88.460				
	Se	77					
	Se	82	94.186				
	Kr	83					
	Sr	88	95.908				
	Y	89					
	Zr	90	93.365				
	Mo	98	96.668				
	Ag	107	97.420				
	Cd	111	96.543				
	Cd	114					
>	In	115		99.8			
	Sn	120	97.074				
	Sb	121	94.361				
	Sb	123					
	Ba	135					
	Ba	137	95.482				
	Ho	165					
>	Lu	175		102.8			
	Tl	205	91.462				
	Pb	208	100.415				
	Th	232	100.573				
	U	238	105.207				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	As	75CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 21:47:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.051**	**ug/L**	103.649	11	0.000
	Be	9	**-0.120**	**ug/L**	29.223	7	-0.000
	B	11	**-0.081**	**ug/L**	480.659	209	-0.000
	Na	23	**2.498**	**ug/L**	77.744	2667	0.004
	Mg	24	**-1.054**	**ug/L**	0.000	0	-0.002
	Al	27	**0.663**	**ug/L**	336.857	667	0.002
	P	31	**-0.752**	**ug/L**	257.613	962	-0.000
	K	39	**30.217**	**ug/L**	48.171	183507	0.124
	Ca	43	**6.827**	**ug/L**	92.020	121	0.000
>	Sc	45		**ug/L**		212679	212679.169
	Ti	47	**0.060**	**ug/L**	17.947	62	0.000
	V	51	**1.430**	**ug/L**	36.869	727	0.007
	Cr	52	**-0.162**	**ug/L**	68.196	901	-0.001
	Cr	53		**ug/L**		43638	-0.013
	Mn	55	**-0.003**	**ug/L**	280.120	289	-0.000
	Fe	57	**5.445**	**ug/L**	1.371	2478	0.001
	Co	59	**0.004**	**ug/L**	104.070	73	0.000
	Ni	60	**0.009**	**ug/L**	370.571	28	0.000
	Cu	63		**ug/L**		85	0.000
	Cu	65	**0.040**	**ug/L**	75.836	70	0.000
	Zn	66	**0.040**	**ug/L**	211.384	45	0.000
	Zn	67		**ug/L**		1840	-0.001
	Zn	68		**ug/L**		246	-0.000
>	Ge	74		**ug/L**		100498	100498.307
	As	75	**-0.145**	**ug/L**	694.504	446	-0.000
	Se	77		**ug/L**		2154	-0.006
	Se	82	**0.411**	**ug/L**	59.810	15	0.000
	Kr	83		**ug/L**		26	-0.000
	Sr	88	**0.004**	**ug/L**	53.453	49	0.000
	Y	89		**ug/L**		12	0.000
	Zr	90	**0.476**	**ug/L**	4.556	944	0.010
	Mo	98	**0.070**	**ug/L**	33.588	73	0.001
	Ag	107	**0.004**	**ug/L**	159.018	17	0.000
	Cd	111	**0.019**	**ug/L**	109.504	11	0.000
	Cd	114		**ug/L**		15	0.000
>	In	115		**ug/L**		86444	86444.414
	Sn	120	**0.228**	**ug/L**	8.738	483	0.005
	Sb	121	**1.196**	**ug/L**	16.252	2286	0.023
	Sb	123		**ug/L**		1729	0.017
	Ba	135		**ug/L**		9	0.000
	Ba	137	**0.007**	**ug/L**	117.935	16	0.000
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		158593	158592.514
	Tl	205	**0.401**	**ug/L**	18.088	3071	0.018
	Pb	208	**0.013**	**ug/L**	7.781	203	0.001
	Th	232	**0.229**	**ug/L**	25.813	2298	0.013
	U	238	**0.016**	**ug/L**	2.626	174	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241614001
Sample Date/Time: Monday, December 07, 2009 21:52:59
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241614001.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.029**	ug/L	204.931	10	0.000
	Be	9	**-0.146**	ug/L	41.016	6	-0.000
	B	11	**-1.129**	ug/L	17.994	169	-0.000
	Na	23	**-1.961**	ug/L	259.509	1333	-0.003
	Mg	24	**0.008**	ug/L	24052.575	333	0.000
	Al	27	**1.952**	ug/L	60.187	1333	0.005
	P	31	**-3.037**	ug/L	23.649	899	-0.001
	K	39	**19.083**	ug/L	52.617	177769	0.078
	Ca	43	**6.542**	ug/L	54.664	123	0.000
>	Sc	45		ug/L		217289	217289.305
	Ti	47	**0.064**	ug/L	193.681	64	0.000
	V	51	**1.802**	ug/L	15.086	1131	0.009
	Cr	52	**-0.491**	ug/L	12.458	528	-0.003
	Cr	53		ug/L		26095	-0.098
	Mn	55	**-0.015**	ug/L	5.654	272	-0.000
	Fe	57	**11.773**	ug/L	9.394	2787	0.002
	Co	59	**0.002**	ug/L	719.958	72	0.000
	Ni	60	**-0.005**	ug/L	386.186	25	-0.000
	Cu	63		ug/L		196	0.001
	Cu	65	**0.177**	ug/L	8.008	114	0.000
	Zn	66	**1.220**	ug/L	4.147	291	0.003
	Zn	67		ug/L		1129	-0.008
	Zn	68		ug/L		384	0.001
>	Ge	74		ug/L		101209	101209.309
	As	75	**-0.584**	ug/L	13.092	314	-0.002
	Se	77		ug/L		767	-0.020
	Se	82	**-0.013**	ug/L	2669.344	5	-0.000
	Kr	83		ug/L		32	-0.000
	Sr	88	**0.018**	ug/L	30.417	100	0.001
	Y	89		ug/L		18	0.000
	Zr	90	**0.387**	ug/L	12.985	808	0.008
	Mo	98	**0.045**	ug/L	17.789	52	0.000
	Ag	107	**0.011**	ug/L	34.012	30	0.000
	Cd	111	**-0.004**	ug/L	270.745	1	-0.000
	Cd	114		ug/L		12	0.000
>	In	115		ug/L		89636	89636.217
	Sn	120	**0.041**	ug/L	16.699	133	0.001
	Sb	121	**-0.067**	ug/L	1.708	213	-0.001
	Sb	123		ug/L		178	-0.001
	Ba	135		ug/L		91	0.001
	Ba	137	**0.170**	ug/L	11.040	149	0.001
	Ho	165		ug/L		20	0.000
>	Lu	175		ug/L		163263	163262.915
	Tl	205	**0.215**	ug/L	18.383	1831	0.010
	Pb	208	**0.037**	ug/L	6.614	410	0.002
	Th	232	**0.009**	ug/L	19.464	279	0.001
	U	238	**0.005**	ug/L	28.374	71	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		97.8			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		98.8			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		101.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		101.7			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978499
Sample Date/Time: Monday, December 07, 2009 21:58:48
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978499.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.070	ug/L	14.734	5	-0.000
	Be	9	-0.077	ug/L	34.065	9	-0.000
	B	11	-1.013	ug/L	29.886	173	-0.000
	Na	23	2.347	ug/L	81.212	2667	0.003
	Mg	24	-1.054	ug/L	0.000	0	-0.002
	Al	27	0.014	ug/L	7661.314	333	0.000
	P	31	-3.934	ug/L	21.254	863	-0.001
	K	39	15.902	ug/L	49.879	174055	0.065
	Ca	43	-6.054	ug/L	123.557	100	-0.000
>	Sc	45		ug/L		216351	216351.473
	Ti	47	0.059	ug/L	104.746	63	0.000
	V	51	2.077	ug/L	8.173	1423	0.010
	Cr	52	-0.418	ug/L	6.598	612	-0.002
	Cr	53		ug/L		23927	-0.108
	Mn	55	-0.013	ug/L	64.777	273	-0.000
	Fe	57	12.858	ug/L	21.666	2818	0.002
	Co	59	0.002	ug/L	298.351	72	0.000
	Ni	60	0.001	ug/L	810.295	27	0.000
	Cu	63		ug/L		185	0.001
	Cu	65	0.156	ug/L	16.619	107	0.000
	Zn	66	1.112	ug/L	1.538	269	0.002
	Zn	67		ug/L		1108	-0.008
	Zn	68		ug/L		380	0.001
>	Ge	74		ug/L		101383	101382.860
	As	75	-0.506	ug/L	99.399	338	-0.002
	Se	77		ug/L		702	-0.021
	Se	82	-0.184	ug/L	195.635	0	-0.000
	Kr	83		ug/L		35	-0.000
	Sr	88	0.014	ug/L	20.146	86	0.001
	Y	89		ug/L		20	0.000
	Zr	90	0.260	ug/L	6.170	561	0.006
	Mo	98	0.014	ug/L	26.902	23	0.000
	Ag	107	0.013	ug/L	21.359	33	0.000
	Cd	111	0.002	ug/L	142.760	4	0.000
	Cd	114		ug/L		9	-0.000
>	In	115		ug/L		88975	88975.388
	Sn	120	0.031	ug/L	11.689	112	0.001
	Sb	121	-0.103	ug/L	3.761	151	-0.002
	Sb	123		ug/L		114	-0.002
	Ba	135		ug/L		24	0.000
	Ba	137	0.027	ug/L	28.543	32	0.000
	Ho	165		ug/L		19	0.000
>	Lu	175		ug/L		161207	161207.151
	Tl	205	0.094	ug/L	20.116	942	0.004
	Pb	208	0.037	ug/L	13.392	406	0.002
	Th	232	0.001	ug/L	434.831	196	0.000
	U	238	0.002	ug/L	57.753	43	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978500
Sample Date/Time: Monday, December 07, 2009 22:04:38
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978500.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.200**	ug/L	1.188	2858	0.013
	Be	9	**53.656**	ug/L	3.333	2355	0.011
	B	11	**95.831**	ug/L	0.422	4357	0.019
	Na	23	**1918.343**	ug/L	1.382	594104	2.721
	Mg	24	**2093.690**	ug/L	2.329	648743	2.979
	Al	27	**1959.005**	ug/L	9.870	1020740	4.690
	P	31	**2004.490**	ug/L	0.170	74895	0.339
	K	39	**1955.032**	ug/L	7.187	1905385	8.014
	Ca	43	**2086.357**	ug/L	1.815	3916	0.017
>	Sc	45		ug/L		217622	217622.229
	Ti	47	**47.505**	ug/L	1.969	4525	0.021
	V	51	**51.966**	ug/L	1.947	54836	0.256
	Cr	52	**49.903**	ug/L	1.132	61190	0.276
	Cr	53		ug/L		30553	-0.078
	Mn	55	**49.553**	ug/L	2.895	101236	0.464
	Fe	57	**2012.836**	ug/L	2.078	83407	0.373
	Co	59	**49.345**	ug/L	1.929	73338	0.337
	Ni	60	**50.883**	ug/L	1.735	15399	0.071
	Cu	63		ug/L		34642	0.159
	Cu	65	**51.106**	ug/L	1.229	15980	0.073
	Zn	66	**52.014**	ug/L	1.526	11005	0.107
	Zn	67		ug/L		2789	0.008
	Zn	68		ug/L		8734	0.083
>	Ge	74		ug/L		102421	102420.865
	As	75	**70.473**	ug/L	2.238	22982	0.219
	Se	77		ug/L		1143	-0.017
	Se	82	**19.885**	ug/L	3.365	510	0.005
	Kr	83		ug/L		28	-0.000
	Sr	88	**51.075**	ug/L	1.462	175272	1.956
	Y	89		ug/L		19	0.000
	Zr	90	**54.200**	ug/L	5.520	103392	1.154
	Mo	98	**49.911**	ug/L	5.822	45936	0.513
	Ag	107	**49.867**	ug/L	1.536	85518	0.954
	Cd	111	**10.054**	ug/L	1.916	4348	0.048
	Cd	114		ug/L		10823	0.121
>	In	115		ug/L		89622	89622.486
	Sn	120	**49.804**	ug/L	3.638	97712	1.090
	Sb	121	**183.513**	ug/L	14.135	313075	3.492
	Sb	123		ug/L		240064	2.677
	Ba	135		ug/L		23463	0.140
	Ba	137	**48.612**	ug/L	1.600	40628	0.243
	Ho	165		ug/L		97	0.000
>	Lu	175		ug/L		167277	167277.080
	Tl	205	**98.090**	ug/L	0.067	724079	4.327
	Pb	208	**41.327**	ug/L	1.658	352706	2.108
	Th	232	**51.941**	ug/L	1.122	506980	3.029
	U	238	**53.839**	ug/L	0.299	533879	3.191

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.2			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1201978501
Sample Date/Time: Monday, December 07, 2009 22:10:27
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925433|5|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978501.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.039**	**ug/L**	105.828	10	0.000
	Be	9	**-0.121**	**ug/L**	53.803	7	-0.000
	B	11	**-0.465**	**ug/L**	51.890	193	-0.000
	Na	23	**2.574**	**ug/L**	275.522	2667	0.004
	Mg	24	**-1.054**	**ug/L**	0.000	0	-0.002
	Al	27	**1.347**	**ug/L**	145.582	1000	0.003
	P	31	**-0.517**	**ug/L**	100.570	971	-0.000
	K	39	**24.022**	**ug/L**	47.957	178106	0.098
	Ca	43	**1.678**	**ug/L**	238.910	112	0.000
>	Sc	45		**ug/L**		212595	212595.260
	Ti	47	**0.211**	**ug/L**	54.588	76	0.000
	V	51	**1.503**	**ug/L**	45.153	805	0.007
	Cr	52	**-0.060**	**ug/L**	113.452	1022	-0.000
	Cr	53		**ug/L**		37631	-0.041
	Mn	55	**0.000**	**ug/L**	2696.287	296	0.000
	Fe	57	**8.449**	**ug/L**	37.681	2594	0.002
	Co	59	**0.007**	**ug/L**	82.912	77	0.000
	Ni	60	**-0.016**	**ug/L**	29.645	21	-0.000
	Cu	63		**ug/L**		110	0.000
	Cu	65	**0.046**	**ug/L**	77.292	72	0.000
	Zn	66	**0.256**	**ug/L**	13.764	90	0.001
	Zn	67		**ug/L**		1535	-0.004
	Zn	68		**ug/L**		276	0.000
>	Ge	74		**ug/L**		100169	100168.716
	As	75	**-0.079**	**ug/L**	312.482	467	-0.000
	Se	77		**ug/L**		1842	-0.009
	Se	82	**0.441**	**ug/L**	74.277	16	0.000
	Kr	83		**ug/L**		28	-0.000
	Sr	88	**0.010**	**ug/L**	11.670	69	0.000
	Y	89		**ug/L**		9	-0.000
	Zr	90	**0.051**	**ug/L**	7.766	161	0.001
	Mo	98	**0.084**	**ug/L**	28.785	85	0.001
	Ag	107	**0.006**	**ug/L**	45.307	20	0.000
	Cd	111	**-0.012**	**ug/L**	41.370	-2	-0.000
	Cd	114		**ug/L**		10	-0.000
>	In	115		**ug/L**		86918	86917.702
	Sn	120	**0.356**	**ug/L**	14.145	728	0.008
	Sb	121	**3.857**	**ug/L**	14.530	6700	0.073
	Sb	123		**ug/L**		5170	0.057
	Ba	135		**ug/L**		19	0.000
	Ba	137	**0.019**	**ug/L**	37.407	26	0.000
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		161622	161622.422
	Tl	205	**0.028**	**ug/L**	7.998	478	0.001
	Pb	208	**0.012**	**ug/L**	11.274	193	0.001
	Th	232	**0.245**	**ug/L**	16.966	2501	0.014
	U	238	**0.009**	**ug/L**	22.533	107	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.6		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241614002
Sample Date/Time: Monday, December 07, 2009 22:16:14
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241614002.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.118**	**ug/L**	102.857	15	0.000
	Be	9	**-0.056**	**ug/L**	146.656	10	-0.000
	B	11	**-1.151**	**ug/L**	23.901	169	-0.000
	Na	23	**349.802**	**ug/L**	10.232	110428	0.496
	Mg	24	**58.945**	**ug/L**	18.176	18679	0.084
	Al	27	**322.921**	**ug/L**	19.709	169016	0.773
	P	31	**0.162**	**ug/L**	372.214	1023	0.000
	K	39	**166.614**	**ug/L**	13.603	310681	0.683
	Ca	43	**115.273**	**ug/L**	3.665	323	0.001
>	Sc	45		**ug/L**		218560	218559.691
	Ti	47	**2.387**	**ug/L**	5.381	283	0.001
	V	51	**2.110**	**ug/L**	22.152	1467	0.010
	Cr	52	**1.136**	**ug/L**	7.777	2497	0.006
	Cr	53		**ug/L**		25393	-0.102
	Mn	55	**4.422**	**ug/L**	2.444	9347	0.041
	Fe	57	**161.653**	**ug/L**	6.504	8863	0.030
	Co	59	**0.089**	**ug/L**	2.311	202	0.001
	Ni	60	**1.617**	**ug/L**	1.583	517	0.002
	Cu	63		**ug/L**		1029	0.004
	Cu	65	**1.356**	**ug/L**	2.756	484	0.002
	Zn	66	**4.320**	**ug/L**	4.839	938	0.009
	Zn	67		**ug/L**		1232	-0.007
	Zn	68		**ug/L**		888	0.006
>	Ge	74		**ug/L**		101341	101340.906
	As	75	**-0.441**	**ug/L**	71.872	360	-0.001
	Se	77		**ug/L**		767	-0.020
	Se	82	**-0.315**	**ug/L**	58.342	-3	-0.000
	Kr	83		**ug/L**		32	-0.000
	Sr	88	**1.242**	**ug/L**	1.612	4277	0.048
	Y	89		**ug/L**		1524	0.017
	Zr	90	**1.031**	**ug/L**	1.898	2025	0.022
	Mo	98	**0.117**	**ug/L**	5.857	118	0.001
	Ag	107	**0.010**	**ug/L**	26.403	27	0.000
	Cd	111	**0.108**	**ug/L**	29.188	50	0.001
	Cd	114		**ug/L**		108	0.001
>	In	115		**ug/L**		89157	89157.026
	Sn	120	**0.080**	**ug/L**	10.864	208	0.002
	Sb	121	**0.168**	**ug/L**	8.567	610	0.003
	Sb	123		**ug/L**		495	0.003
	Ba	135		**ug/L**		1453	0.009
	Ba	137	**3.109**	**ug/L**	1.630	2548	0.016
	Ho	165		**ug/L**		179	0.001
>	Lu	175		**ug/L**		163344	163343.636
	Tl	205	**0.030**	**ug/L**	10.301	494	0.001
	Pb	208	**0.500**	**ug/L**	0.817	4267	0.026
	Th	232	**0.082**	**ug/L**	10.473	973	0.005
	U	238	**0.024**	**ug/L**	6.141	261	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9996
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			98.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241614003
Sample Date/Time: Monday, December 07, 2009 22:22:03
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241614003.207

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.099**	ug/L	120.864	14	0.000
	Be	9	**-0.096**	ug/L	104.057	8	-0.000
	B	11	**-1.474**	ug/L	37.676	151	-0.000
	Na	23	**323.836**	ug/L	9.393	99681	0.459
	Mg	24	**32.919**	ug/L	46.657	10338	0.047
	Al	27	**126.444**	ug/L	6.182	64814	0.303
	P	31	**-5.599**	ug/L	20.393	790	-0.001
	K	39	**62.029**	ug/L	28.614	211558	0.254
	Ca	43	**77.149**	ug/L	15.274	247	0.001
>	Sc	45		ug/L		213092	213092.335
	Ti	47	**2.593**	ug/L	4.897	295	0.001
	V	51	**1.497**	ug/L	30.974	788	0.007
	Cr	52	**0.920**	ug/L	7.264	2180	0.005
	Cr	53		ug/L		23706	-0.107
	Mn	55	**4.374**	ug/L	1.948	9019	0.041
	Fe	57	**173.713**	ug/L	2.940	9119	0.032
	Co	59	**0.105**	ug/L	11.370	221	0.001
	Ni	60	**0.853**	ug/L	3.969	278	0.001
	Cu	63		ug/L		482	0.002
	Cu	65	**0.617**	ug/L	10.323	246	0.001
	Zn	66	**5.406**	ug/L	5.708	1154	0.011
	Zn	67		ug/L		1145	-0.007
	Zn	68		ug/L		1030	0.008
>	Ge	74		ug/L		100411	100410.678
	As	75	**-0.809**	ug/L	47.213	241	-0.003
	Se	77		ug/L		754	-0.020
	Se	82	**0.193**	ug/L	111.376	10	0.000
	Kr	83		ug/L		34	-0.000
	Sr	88	**0.753**	ug/L	1.857	2557	0.029
	Y	89		ug/L		594	0.007
	Zr	90	**0.252**	ug/L	7.405	538	0.005
	Mo	98	**0.108**	ug/L	1.712	107	0.001
	Ag	107	**0.015**	ug/L	17.999	35	0.000
	Cd	111	**0.007**	ug/L	68.058	6	0.000
	Cd	114		ug/L		11	-0.000
>	In	115		ug/L		87369	87368.769
	Sn	120	**0.046**	ug/L	15.427	138	0.001
	Sb	121	**-0.021**	ug/L	29.817	284	-0.000
	Sb	123		ug/L		220	-0.000
	Ba	135		ug/L		993	0.006
	Ba	137	**2.173**	ug/L	3.237	1766	0.011
	Ho	165		ug/L		69	0.000
>	Lu	175		ug/L		161700	161700.072
	Tl	205	**0.029**	ug/L	13.350	485	0.001
	Pb	208	**0.164**	ug/L	7.579	1452	0.008
	Th	232	**0.011**	ug/L	16.180	290	0.001
	U	238	**0.011**	ug/L	18.305	132	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 241614004
Sample Date/Time: Monday, December 07, 2009 22:27:51
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925433|1|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241614004.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.028	ug/L	238.517	7	-0.000
	Be	9	-0.101	ug/L	11.559	8	-0.000
	B	11	-1.455	ug/L	6.694	155	-0.000
	Na	23	2.265	ug/L	216.756	2667	0.003
	Mg	24	-1.054	ug/L	0.000	0	-0.002
	Al	27	3.857	ug/L	29.936	2334	0.009
	P	31	-3.007	ug/L	32.046	902	-0.001
	K	39	23.261	ug/L	64.981	181822	0.095
	Ca	43	3.824	ug/L	177.753	119	0.000
>	Sc	45		ug/L		217708	217707.598
	Ti	47	0.126	ug/L	16.484	70	0.000
	V	51	1.520	ug/L	55.256	840	0.007
	Cr	52	-0.361	ug/L	11.306	685	-0.002
	Cr	53		ug/L		23369	-0.111
	Mn	55	0.003	ug/L	86.520	307	0.000
	Fe	57	12.512	ug/L	31.175	2822	0.002
	Co	59	0.001	ug/L	719.459	71	0.000
	Ni	60	0.002	ug/L	960.128	27	0.000
	Cu	63		ug/L		200	0.001
	Cu	65	0.123	ug/L	12.975	98	0.000
	Zn	66	1.346	ug/L	2.307	316	0.003
	Zn	67		ug/L		1008	-0.009
	Zn	68		ug/L		390	0.001
>	Ge	74		ug/L		100611	100610.531
	As	75	-0.834	ug/L	38.397	234	-0.003
	Se	77		ug/L		732	-0.020
	Se	82	-0.329	ug/L	63.696	-3	-0.000
	Kr	83		ug/L		37	0.000
	Sr	88	0.018	ug/L	19.833	98	0.001
	Y	89		ug/L		17	0.000
	Zr	90	0.023	ug/L	28.412	112	0.000
	Mo	98	0.027	ug/L	19.196	35	0.000
	Ag	107	0.014	ug/L	20.454	34	0.000
	Cd	111	-0.005	ug/L	230.606	1	-0.000
	Cd	114		ug/L		10	-0.000
>	In	115		ug/L		88748	88748.456
	Sn	120	0.036	ug/L	18.675	122	0.001
	Sb	121	-0.037	ug/L	29.069	262	-0.001
	Sb	123		ug/L		208	-0.001
	Ba	135		ug/L		22	0.000
	Ba	137	0.027	ug/L	15.454	32	0.000
	Ho	165		ug/L		21	0.000
>	Lu	175		ug/L		161346	161346.091
	Tl	205	0.017	ug/L	25.703	395	0.001
	Pb	208	0.035	ug/L	11.715	388	0.002
	Th	232	0.003	ug/L	59.645	215	0.000
	U	238	0.001	ug/L	88.286	32	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			98.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.5		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 22:33:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.866**	ug/L	4.823	2669	0.012
	Be	9	**51.558**	ug/L	3.332	2258	0.010
	B	11	**92.637**	ug/L	5.982	4208	0.018
	Na	23	**4661.749**	ug/L	10.645	1437679	6.612
	Mg	24	**4321.947**	ug/L	4.220	1336109	6.150
	Al	27	**4805.957**	ug/L	2.841	2498839	11.506
	P	31	**4827.356**	ug/L	3.017	178522	0.818
	K	39	**4968.525**	ug/L	10.074	4580978	20.368
	Ca	43	**4823.180**	ug/L	1.407	8887	0.040
>	Sc	45		ug/L		217169	217168.672
	Ti	47	**48.784**	ug/L	2.269	4635	0.021
	V	51	**50.713**	ug/L	2.696	53370	0.249
	Cr	52	**48.503**	ug/L	3.699	59362	0.268
	Cr	53		ug/L		41409	-0.028
	Mn	55	**48.990**	ug/L	3.586	99847	0.459
	Fe	57	**4756.912**	ug/L	2.378	193517	0.881
	Co	59	**47.108**	ug/L	1.755	69862	0.321
	Ni	60	**47.559**	ug/L	2.809	14360	0.066
	Cu	63		ug/L		33719	0.155
	Cu	65	**49.967**	ug/L	2.930	15588	0.072
	Zn	66	**48.057**	ug/L	1.771	10223	0.099
	Zn	67		ug/L		3149	0.012
	Zn	68		ug/L		8286	0.078
>	Ge	74		ug/L		102947	102947.313
	As	75	**44.828**	ug/L	3.112	14881	0.140
	Se	77		ug/L		2493	-0.004
	Se	82	**48.498**	ug/L	4.577	1243	0.012
	Kr	83		ug/L		42	0.000
	Sr	88	**47.238**	ug/L	1.424	160445	1.809
	Y	89		ug/L		19	0.000
	Zr	90	**42.854**	ug/L	5.916	80990	0.912
	Mo	98	**47.671**	ug/L	2.640	43447	0.490
	Ag	107	**47.628**	ug/L	1.342	80844	0.911
	Cd	111	**48.112**	ug/L	2.947	20579	0.232
	Cd	114		ug/L		51208	0.577
>	In	115		ug/L		88694	88694.371
	Sn	120	**48.066**	ug/L	3.314	93355	1.052
	Sb	121	**46.668**	ug/L	5.493	79126	0.888
	Sb	123		ug/L		61275	0.688
	Ba	135		ug/L		22164	0.135
	Ba	137	**47.768**	ug/L	2.240	39104	0.239
	Ho	165		ug/L		32	0.000
>	Lu	175		ug/L		163857	163857.092
	Tl	205	**46.254**	ug/L	1.365	334615	2.040
	Pb	208	**49.743**	ug/L	2.094	415807	2.537
	Th	232	**50.768**	ug/L	0.829	485391	2.961
	U	238	**52.923**	ug/L	1.382	514083	3.137

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	97.731				
	Be	9	103.115				
	B	11	92.637				
	Na	23	93.235				
	Mg	24	86.439				
	Al	27	95.167				
	P	31	96.547				
	K	39	99.370				
	Ca	43	96.464				
>	Sc	45		97.7			
	Ti	47	97.569				
	V	51	101.426				
	Cr	52	97.005				
	Cr	53					
	Mn	55	97.980				
	Fe	57	95.138				
	Co	59	94.216				
	Ni	60	95.118				
	Cu	63					
	Cu	65	99.934				
	Zn	66	96.114				
	Zn	67					
	Zn	68					
>	Ge	74		100.5			
	As	75	89.655				
	Se	77					
	Se	82	96.995				
	Kr	83					
	Sr	88	94.476				
	Y	89					
	Zr	90	85.708				
	Mo	98	95.343				
	Ag	107	95.256				
	Cd	111	96.223				
	Cd	114					
>	In	115		100.3			
	Sn	120	96.131				
	Sb	121	93.336				
	Sb	123					
	Ba	135					
	Ba	137	95.535				
	Ho	165					
>	Lu	175		102.0			
	Tl	205	92.508				
	Pb	208	99.486				
	Th	232	101.537				
	U	238	105.847				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	As	75CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 22:39:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.012**	**ug/L**	377.095	8	-0.000
	Be	9	**-0.097**	**ug/L**	61.523	8	-0.000
	B	11	**-0.500**	**ug/L**	132.170	192	-0.000
	Na	23	**4.725**	**ug/L**	146.772	3334	0.007
	Mg	24	**-1.054**	**ug/L**	0.000	0	-0.002
	Al	27	**2.638**	**ug/L**	112.954	1667	0.006
	P	31	**-0.977**	**ug/L**	83.214	955	-0.000
	K	39	**11.655**	**ug/L**	221.941	167658	0.048
	Ca	43	**-2.161**	**ug/L**	214.780	105	-0.000
>	Sc	45		**ug/L**		212861	212861.305
	Ti	47	**0.031**	**ug/L**	298.274	59	0.000
	V	51	**2.295**	**ug/L**	19.541	1630	0.011
	Cr	52	**-0.095**	**ug/L**	68.030	982	-0.001
	Cr	53		**ug/L**		43271	-0.015
	Mn	55	**-0.009**	**ug/L**	125.469	278	-0.000
	Fe	57	**7.404**	**ug/L**	42.922	2557	0.001
	Co	59	**0.007**	**ug/L**	53.216	78	0.000
	Ni	60	**-0.020**	**ug/L**	52.644	20	-0.000
	Cu	63		**ug/L**		96	0.000
	Cu	65	**0.008**	**ug/L**	365.063	61	0.000
	Zn	66	**0.005**	**ug/L**	468.624	38	0.000
	Zn	67		**ug/L**		1869	-0.000
	Zn	68		**ug/L**		246	-0.000
>	Ge	74		**ug/L**		99584	99584.222
	As	75	**0.138**	**ug/L**	677.148	533	0.000
	Se	77		**ug/L**		2069	-0.007
	Se	82	**0.306**	**ug/L**	110.711	12	0.000
	Kr	83		**ug/L**		27	-0.000
	Sr	88	**0.004**	**ug/L**	32.662	50	0.000
	Y	89		**ug/L**		9	-0.000
	Zr	90	**0.454**	**ug/L**	7.249	913	0.010
	Mo	98	**0.086**	**ug/L**	22.971	87	0.001
	Ag	107	**0.003**	**ug/L**	10.683	16	0.000
	Cd	111	**0.009**	**ug/L**	40.086	7	0.000
	Cd	114		**ug/L**		13	0.000
>	In	115		**ug/L**		87410	87409.578
	Sn	120	**0.194**	**ug/L**	19.133	422	0.004
	Sb	121	**1.345**	**ug/L**	12.674	2554	0.026
	Sb	123		**ug/L**		1934	0.019
	Ba	135		**ug/L**		10	0.000
	Ba	137	**0.009**	**ug/L**	15.308	18	0.000
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		162750	162749.870
	Tl	205	**0.267**	**ug/L**	16.513	2197	0.012
	Pb	208	**0.011**	**ug/L**	7.067	191	0.001
	Th	232	**0.252**	**ug/L**	23.727	2583	0.015
	U	238	**0.015**	**ug/L**	16.348	168	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9996
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.3		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120809W1.SIF
Batch ID:
Results Data Set: 100809W4
Results Library: C:\data-AA\Administrator\Results\Results.mdb

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/8/2009 09:51:17**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0021	0.0004	09:52:17	Yes
2		[0.00]	0.0003	0.0001	0.0003	09:52:52	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0001				
%RSD:		0.00	34.40				

Auto-zero performed.

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/8/2009 09:53:10**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0029	0.0136	0.0032	09:54:11	Yes
2		[0.2]	0.0028	0.0136	0.0032	09:54:46	Yes
Mean:		[0.2]	0.0028				
SD:		0.0	0.0000				
%RSD:		0.0	0.41				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01424 Intercept: 0.00000

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/8/2009 09:55:05**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0067	0.0304	0.0070	09:56:06	Yes
2		[0.5]	0.0067	0.0305	0.0070	09:56:41	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.27				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999513 Slope: 0.01328 Intercept: 0.00007

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/8/2009 09:57:00**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[2.0]	0.0231	0.1034	0.0234	09:58:02	Yes
2	[2.0]	0.0232	0.1045	0.0236	09:58:37	Yes
Mean:	[2.0]	0.0232				
SD:	0.0	0.0001				
%RSD:	0.0	0.47				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999245 Slope: 0.01141 Intercept: 0.00046

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/8/2009 09:58:57**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0650	0.2803	0.0653	09:59:59	Yes
2		[5.0]	0.0648	0.2800	0.0651	10:00:33	Yes
Mean:		[5.0]	0.0649				
SD:		0.0	0.0001				
%RSD:		0.0	0.22				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.998857 Slope: 0.01287 Intercept: -0.00032

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/8/2009 10:00:54**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1157	0.5157	0.1161	10:01:54	Yes
2		[10.0]	0.1154	0.5121	0.1157	10:02:29	Yes
Mean:		[10.0]	0.1155				
SD:		0.0	0.0002				
%RSD:		0.0	0.21				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.998206 Slope: 0.01170 Intercept: 0.00101

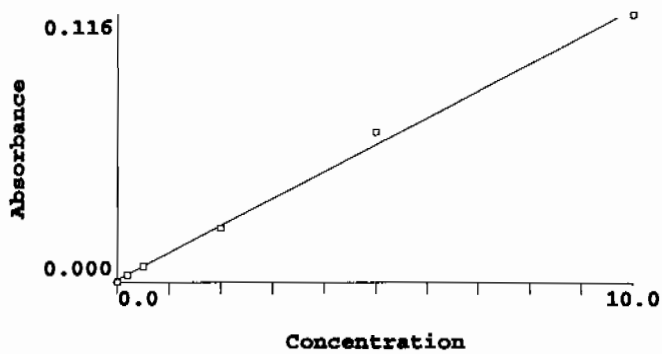

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.087	0.00	34.4
S0.2	0.0028	0.2	0.157	0.00	0.4
S0.5	0.0067	0.5	0.483	0.00	0.3
S2.0	0.0232	2.0	1.893	0.00	0.5
S5.0	0.0649	5.0	5.462	0.00	0.2
S10.0	0.1155	10.0	9.792	0.00	0.2

Correlation Coef.: 0.998206 Slope: 0.01170 Intercept: 0.00101

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/8/2009 10:02:47**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.908	4.908	0.0584	0.2621	0.0588	10:03:49	Yes
2	4.889	4.889	0.0582	0.2585	0.0585	10:04:23	Yes
Mean:	4.898	4.898	0.0583				
SD:	0.013	0.013	0.0002				
%RSD:	0.274	0.274	0.27				

QC value within limits for Hg 253.7 Recovery = 97.96%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/8/2009 10:04:43**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.078	-0.078	0.0001	0.0028	0.0004	10:05:44	Yes
2	-0.085	-0.085	0.0000	0.0013	0.0004	10:06:19	Yes
Mean:	-0.082	-0.082	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	6.033	6.033	96.64				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/8/2009 10:06:39**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0028	0.0141	0.0031	10:07:40	Yes
2	0.178	0.178	0.0031	0.0145	0.0034	10:08:15	Yes
Mean:	0.164	0.164	0.0029				
SD:	0.020	0.020	0.0002				
%RSD:	11.93	11.93	7.81				

QC value within limits for Hg 253.7 Recovery = 82.25%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 10:08:35**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.017	5.017	0.0597	0.2649	0.0600	10:09:35	Yes
2	4.963	4.963	0.0591	0.2620	0.0594	10:10:10	Yes
Mean:	4.990	4.990	0.0594				
SD:	0.038	0.038	0.0004				
%RSD:	0.766	0.766	0.75				

QC value within limits for Hg 253.7 Recovery = 99.79%
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:10:29**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.079	-0.079	0.0001	0.0015	0.0004	10:11:30	Yes
2	-0.074	-0.074	0.0001	0.0018	0.0005	10:12:05	Yes
Mean:	-0.077	-0.077	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.972	3.972	30.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 12
Sample ID: 1201986021|928785|1 Date Collected: 12/8/2009 10:12:24
Analyst: JXL1 Data Type: Original

Replicate Data: 1201986021|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0001	0.0007	0.0003	10:13:27	Yes
2	-0.091	-0.091	-0.0000	0.0008	0.0003	10:14:01	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.191	1.191	21.88				

Sequence No.: 13 Autosampler Location: 13
Sample ID: 1201986022|928785|1 Date Collected: 12/8/2009 10:14:22
Analyst: JXL1 Data Type: Original

Replicate Data: 1201986022|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.979	1.979	0.0242	0.1085	0.0245	10:15:24	Yes
2	1.990	1.990	0.0243	0.1086	0.0246	10:15:58	Yes
Mean:	1.985	1.985	0.0242				
SD:	0.008	0.008	0.0001				
%RSD:	0.401	0.401	0.38				

Sequence No.: 14 Autosampler Location: 14
Sample ID: 241837002|928785|1 Date Collected: 12/8/2009 10:16:19
Analyst: JXL1 Data Type: Original

Replicate Data: 241837002|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0000	0.0009	0.0003	10:17:19	Yes
2	-0.085	-0.085	0.0000	0.0015	0.0004	10:17:54	Yes
Mean:	-0.087	-0.087	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.672	2.672	>999.9%				

Sequence No.: 15 Autosampler Location: 15
Sample ID: 1201986023|928785|1 Date Collected: 12/8/2009 10:18:13
Analyst: JXL1 Data Type: Original

Replicate Data: 1201986023|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0000	0.0011	0.0003	10:19:13	Yes
2	-0.083	-0.083	0.0000	0.0017	0.0004	10:19:49	Yes
Mean:	-0.086	-0.086	0.0000				
SD:	0.004	0.004	0.0000				

1	-0.082	-0.082	0.0001	0.0017	0.0004	10:28:47	Yes
2	-0.112	-0.112	-0.0003	-0.0036	0.0000	10:29:22	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.021	0.021	0.0002				
%RSD:	21.75	21.75	199.27				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 241842007|928788|1 **Date Collected: 12/8/2009 10:29:41**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241842007|928788|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0008	0.0002	10:30:42	Yes
2	-0.095	-0.095	-0.0001	0.0009	0.0003	10:31:17	Yes
Mean:	-0.095	-0.095	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.401	0.401	4.72				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 10:31:37**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.999	4.999	0.0595	0.2653	0.0598	10:32:37	Yes
2	4.964	4.964	0.0591	0.2626	0.0594	10:33:12	Yes
Mean:	4.981	4.981	0.0593				
SD:	0.025	0.025	0.0003				
%RSD:	0.505	0.505	0.50				

QC value within limits for Hg 253.7 Recovery = 99.63%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:33:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.069	-0.069	0.0002	0.0021	0.0005	10:34:32	Yes
2	-0.067	-0.067	0.0002	0.0021	0.0006	10:35:07	Yes
Mean:	-0.068	-0.068	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	2.056	2.056	7.55				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 241842011|928788|1 **Date Collected: 12/8/2009 10:35:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241842011|928788|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0012	0.0068	0.0015	10:36:27	Yes
2	0.017	0.017	0.0012	0.0069	0.0016	10:37:03	Yes
Mean:	0.015	0.015	0.0012				
SD:	0.003	0.003	0.0000				
%RSD:	16.97	16.97	2.52				

SD:	0.001	0.001	0.0000
%RSD:	0.597	0.597	7.43

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 1201988770|929941|1 **Date Collected: 12/8/2009 10:47:04**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988770|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0001	0.0010	0.0003	10:48:04	Yes
2	-0.090	-0.090	-0.0000	0.0015	0.0003	10:48:39	Yes
Mean:	-0.091	-0.091	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.150	2.150	42.41				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 1201988771|929941|1 **Date Collected: 12/8/2009 10:48:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988771|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.983	1.983	0.0242	0.1076	0.0245	10:49:59	Yes
2	1.972	1.972	0.0241	0.1073	0.0244	10:50:34	Yes
Mean:	1.977	1.977	0.0241				
SD:	0.008	0.008	0.0001				
%RSD:	0.398	0.398	0.38				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 242276001|929941|1 **Date Collected: 12/8/2009 10:50:53**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242276001|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0005	0.0002	10:51:54	Yes
2	-0.094	-0.094	-0.0001	0.0011	0.0003	10:52:29	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	3.765	3.765	35.93				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 1201988772|929941|1 **Date Collected: 12/8/2009 10:52:48**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988772|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0013	0.0002	10:53:48	Yes
2	-0.096	-0.096	-0.0001	0.0009	0.0002	10:54:23	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.089	0.089	0.93				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 10:54:43**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.974	4.974	0.0592	0.2626	0.0595	10:55:43	Yes
2	4.983	4.983	0.0593	0.2623	0.0596	10:56:18	Yes
Mean:	4.978	4.978	0.0592				
SD:	0.007	0.007	0.0001				
%RSD:	0.137	0.137	0.13				

QC value within limits for Hg 253.7 Recovery = 99.57%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:56:37**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.067	-0.067	0.0002	0.0024	0.0006	10:57:38	Yes
2	-0.069	-0.069	0.0002	0.0022	0.0006	10:58:13	Yes
Mean:	-0.068	-0.068	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.428	1.428	5.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 1201988773|929941|1 **Date Collected: 12/8/2009 10:58:32**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988773|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.000	2.000	0.0244	0.1089	0.0247	10:59:33	Yes
2	1.994	1.994	0.0243	0.1090	0.0247	11:00:08	Yes
Mean:	1.997	1.997	0.0244				
SD:	0.004	0.004	0.0000				
%RSD:	0.209	0.209	0.20				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 1201988774|929941|5 **Date Collected: 12/8/2009 11:00:28**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988774|929941|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0014	0.0002	11:01:29	Yes
2	-0.095	-0.095	-0.0001	0.0008	0.0002	11:02:03	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.698	0.698	7.33				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 242276002|929941|1 **Date Collected: 12/8/2009 11:02:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242276002|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.057	-0.057	0.0003	0.0040	0.0007	11:03:24	Yes
2	-0.094	-0.094	-0.0001	0.0009	0.0003	11:03:59	Yes
Mean:	-0.076	-0.076	0.0001				
SD:	0.026	0.026	0.0003				
%RSD:	34.26	34.26	233.10				

Mean:	1.794	1.794	0.0220
SD:	0.006	0.006	0.0001
%RSD:	0.312	0.312	0.30

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1201987593|929389|5 **Date Collected: 12/8/2009 11:14:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987593|929389|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0008	0.0003	11:15:01	Yes
2	-0.090	-0.090	-0.0000	0.0010	0.0003	11:15:35	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.256	3.256	59.12				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 1201985288|928451|1 **Date Collected: 12/8/2009 11:15:55**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985288|928451|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.084	-0.084	0.0000	0.0015	0.0004	11:16:56	Yes
2	-0.077	-0.077	0.0001	0.0021	0.0005	11:17:31	Yes
Mean:	-0.081	-0.081	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	6.330	6.330	86.01				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 11:17:50**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.953	4.953	0.0589	0.2614	0.0593	11:18:51	Yes
2	4.947	4.947	0.0589	0.2617	0.0592	11:19:26	Yes
Mean:	4.950	4.950	0.0589				
SD:	0.004	0.004	0.0000				
%RSD:	0.085	0.085	0.08				

QC value within limits for Hg 253.7 Recovery = 98.99%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 11:19:45**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0001	-0.0012	0.0003	11:20:46	Yes
2	-0.053	-0.053	0.0004	0.0043	0.0007	11:21:20	Yes
Mean:	-0.073	-0.073	0.0002				
SD:	0.028	0.028	0.0003				
%RSD:	37.89	37.89	194.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 48 **Autosampler Location: 42**
Sample ID: 1201985289|928451|1 **Date Collected: 12/8/2009 11:21:40**

2	-0.084	-0.084	0.0000	0.0019	0.0004	11:40:40	Yes
Mean:	-0.084	-0.084	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.816	0.816	25.85				

==========

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 11:41:00**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.922	4.922	0.0586	0.2622	0.0589	11:42:00	Yes
2	4.913	4.913	0.0585	0.2597	0.0588	11:42:35	Yes
Mean:	4.918	4.918	0.0585				
SD:	0.007	0.007	0.0001				
%RSD:	0.133	0.133	0.13				

QC value within limits for Hg 253.7 Recovery = 98.35%
All analyte(s) passed QC.

==========

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 11:42:54**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0003	0.0028	0.0007	11:43:55	Yes
2	-0.053	-0.053	0.0004	0.0035	0.0007	11:44:30	Yes
Mean:	-0.056	-0.056	0.0004				
SD:	0.004	0.004	0.0001				
%RSD:	7.737	7.737	13.95				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 1201987596|929392|1 **Date Collected: 12/8/2009 11:44:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987596|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0007	0.0002	11:45:50	Yes
2	-0.102	-0.102	-0.0002	0.0006	0.0002	11:46:25	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	1.805	1.805	13.41				

==========

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 1201987599|929392|5 **Date Collected: 12/8/2009 11:46:45**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987599|929392|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.073	-0.073	0.0002	0.0046	0.0005	11:47:46	Yes
2	-0.068	-0.068	0.0002	0.0039	0.0006	11:48:20	Yes
Mean:	-0.070	-0.070	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	4.907	4.907	21.03				

==========

Sequence No.: 62 **Autosampler Location: 54**

%RSD: 0.697 0.697 5.27

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 241089015|929392|1 **Date Collected: 12/8/2009 11:58:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089015|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0015	0.0002	11:59:20	Yes
2	-0.097	-0.097	-0.0001	0.0009	0.0002	11:59:55	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.126	1.126	11.70				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241089016|929392|1 **Date Collected: 12/8/2009 12:00:15**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089016|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0008	0.0002	12:01:16	Yes
2	-0.100	-0.100	-0.0002	0.0010	0.0002	12:01:52	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	0.973	0.973	7.14				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 241089017|929392|1 **Date Collected: 12/8/2009 12:02:12**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089017|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0012	0.0002	12:03:14	Yes
2	-0.099	-0.099	-0.0001	0.0009	0.0002	12:03:48	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.564	1.564	13.46				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 12:04:09**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.920	4.920	0.0586	0.2608	0.0589	12:05:09	Yes
2	4.929	4.929	0.0587	0.2616	0.0590	12:05:44	Yes
Mean:	4.925	4.925	0.0586				
SD:	0.006	0.006	0.0001				
%RSD:	0.129	0.129	0.13				

QC value within limits for Hg 253.7 Recovery = 98.50%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:06:03**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	0.0004	0.0038	0.0008	12:07:04	Yes
2	-0.049	-0.049	0.0004	0.0034	0.0008	12:07:39	Yes
Mean:	-0.049	-0.049	0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.062	0.062	0.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 72 **Autosampler Location: 62**
Sample ID: 1201985228|929400|1 **Date Collected: 12/8/2009 12:07:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985228|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0007	0.0002	12:08:59	Yes
2	-0.096	-0.096	-0.0001	0.0013	0.0002	12:09:34	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.030	3.030	25.19				

==========

Sequence No.: 73 **Autosampler Location: 63**
Sample ID: 1201987600|929400|1 **Date Collected: 12/8/2009 12:09:54**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987600|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0006	0.0002	12:10:55	Yes
2	-0.097	-0.097	-0.0001	0.0011	0.0002	12:11:30	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.028	2.028	17.43				

==========

Sequence No.: 74 **Autosampler Location: 64**
Sample ID: 1201987601|929400|1 **Date Collected: 12/8/2009 12:11:50**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987601|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.905	1.905	0.0233	0.1045	0.0236	12:12:51	Yes
2	1.916	1.916	0.0234	0.1047	0.0238	12:13:27	Yes
Mean:	1.911	1.911	0.0234				
SD:	0.008	0.008	0.0001				
%RSD:	0.403	0.403	0.39				

==========

Sequence No.: 75 **Autosampler Location: 65**
Sample ID: 241089018|929400|1 **Date Collected: 12/8/2009 12:13:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089018|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0010	0.0002	12:14:48	Yes
2	-0.098	-0.098	-0.0001	-0.0000	0.0002	12:15:23	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.563	1.563	15.04				

==========

SD:	0.000	0.000	0.0000
%RSD:	0.309	0.309	2.36

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 241089021|929400|1 **Date Collected: 12/8/2009 12:25:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089021|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	12:26:26	Yes
2	-0.099	-0.099	-0.0001	0.0009	0.0002	12:27:00	Yes
Mean:	-0.101	-0.101	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.186	2.186	15.74				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 12:27:20**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.967	4.967	0.0591	0.2642	0.0594	12:28:21	Yes
2	4.936	4.936	0.0588	0.2620	0.0591	12:28:56	Yes
Mean:	4.951	4.951	0.0589				
SD:	0.021	0.021	0.0002				
%RSD:	0.429	0.429	0.42				

QC value within limits for Hg 253.7 Recovery = 99.03%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:29:15**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	0.0006	0.0042	0.0010	12:30:16	Yes
2	-0.036	-0.036	0.0006	0.0041	0.0009	12:30:51	Yes
Mean:	-0.035	-0.035	0.0006				
SD:	0.002	0.002	0.0000				
%RSD:	5.377	5.377	3.59				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 241089022|929400|1 **Date Collected: 12/8/2009 12:31:10**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089022|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0003	0.0002	12:32:12	Yes
2	-0.102	-0.102	-0.0002	0.0006	0.0002	12:32:46	Yes
Mean:	-0.102	-0.102	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.377	0.377	2.57				

==========

Sequence No.: 85 **Autosampler Location: 73**
Sample ID: 241089023|929400|1 **Date Collected: 12/8/2009 12:33:07**
Analyst: JXL1 **Data Type: Original**

Sequence No.: 90
Sample ID: 1201988783|929949|1
Analyst: JXL1
Autosampler Location: 78
Date Collected: 12/8/2009 12:42:49
Data Type: Original

Replicate Data: 1201988783|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0006	0.0002	12:43:51	Yes
2	-0.099	-0.099	-0.0001	0.0006	0.0002	12:44:26	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.440	1.440	11.01				

Sequence No.: 91
Sample ID: 1201988784|929949|1
Analyst: JXL1
Autosampler Location: 79
Date Collected: 12/8/2009 12:44:46
Data Type: Original

Replicate Data: 1201988784|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.918	1.918	0.0235	0.1063	0.0238	12:45:48	Yes
2	1.934	1.934	0.0236	0.1057	0.0240	12:46:23	Yes
Mean:	1.926	1.926	0.0235				
SD:	0.011	0.011	0.0001				
%RSD:	0.581	0.581	0.56				

Sequence No.: 92
Sample ID: 241087014|929949|1
Analyst: JXL1
Autosampler Location: 80
Date Collected: 12/8/2009 12:46:43
Data Type: Original

Replicate Data: 241087014|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0009	0.0003	12:47:44	Yes
2	-0.098	-0.098	-0.0001	0.0010	0.0002	12:48:19	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.544	2.544	25.85				

Sequence No.: 93
Sample ID: 1201985216|929949|1
Analyst: JXL1
Autosampler Location: 81
Date Collected: 12/8/2009 12:48:39
Data Type: Original

Replicate Data: 1201985216|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.000	1.000	0.0127	0.0577	0.0131	12:49:40	Yes
2	1.001	1.001	0.0127	0.0576	0.0131	12:50:15	Yes
Mean:	1.001	1.001	0.0127				
SD:	0.000	0.000	0.0000				
%RSD:	0.044	0.044	0.04				

Sequence No.: 94
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/8/2009 12:50:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.992	4.992	0.0594	0.2644	0.0597	12:51:36	Yes
2	4.958	4.958	0.0590	0.2616	0.0593	12:52:11	Yes

Mean:	4.975	4.975	0.0592
SD:	0.024	0.024	0.0003
%RSD:	0.486	0.486	0.48

QC value within limits for Hg 253.7 Recovery = 99.50%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:52:30**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0005	0.0034	0.0009	12:53:31	Yes
2	-0.037	-0.037	0.0006	0.0043	0.0009	12:54:06	Yes
Mean:	-0.040	-0.040	0.0006				
SD:	0.003	0.003	0.0000				
%RSD:	7.817	7.817	6.57				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 1201988785|929949|1 **Date Collected: 12/8/2009 12:54:25**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988785|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0004	0.0002	12:55:27	Yes
2	-0.099	-0.099	-0.0001	0.0006	0.0002	12:56:02	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.119	1.119	8.47				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 1201988787|929949|5 **Date Collected: 12/8/2009 12:56:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988787|929949|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0005	0.0002	12:57:23	Yes
2	-0.099	-0.099	-0.0001	0.0007	0.0002	12:57:58	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.678	0.678	5.35				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 241087015|929949|1 **Date Collected: 12/8/2009 12:58:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087015|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0006	0.0002	12:59:20	Yes
2	-0.099	-0.099	-0.0001	0.0005	0.0002	12:59:55	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.431	0.431	3.30				

Sequence No.: 99 **Autosampler Location: 85**
Sample ID: 241087016|929949|1 **Date Collected: 12/8/2009 13:00:15**

Sequence No.: 104
Sample ID: 241087021|929949|1
Analyst: JXL1
Autosampler Location: 90
Date Collected: 12/8/2009 13:10:00
Data Type: Original

Replicate Data: 241087021|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0010	0.0002	13:11:01	Yes
2	-0.101	-0.101	-0.0002	0.0005	0.0002	13:11:36	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.974	2.974	23.41				

Sequence No.: 105
Sample ID: 241087022|929949|1
Analyst: JXL1
Autosampler Location: 91
Date Collected: 12/8/2009 13:11:56
Data Type: Original

Replicate Data: 241087022|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0010	0.0002	13:12:58	Yes
2	-0.098	-0.098	-0.0001	0.0009	0.0002	13:13:33	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.266	2.266	21.61				

Sequence No.: 106
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/8/2009 13:13:53
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.939	4.939	0.0588	0.2596	0.0591	13:14:53	Yes
2	4.859	4.859	0.0578	0.2573	0.0582	13:15:28	Yes
Mean:	4.899	4.899	0.0583				
SD:	0.056	0.056	0.0007				
%RSD:	1.153	1.153	1.13				

QC value within limits for Hg 253.7 Recovery = 97.99%
All analyte(s) passed QC.

Sequence No.: 107
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/8/2009 13:15:47
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0006	0.0038	0.0009	13:16:48	Yes
2	-0.041	-0.041	0.0005	0.0037	0.0009	13:17:23	Yes
Mean:	-0.040	-0.040	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	3.294	3.294	2.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 108
Sample ID: 241087023|929949|1
Analyst: JXL1
Autosampler Location: 92
Date Collected: 12/8/2009 13:17:42
Data Type: Original

Replicate Data: 241087023|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0012	0.0002	13:18:44	Yes
2	-0.095	-0.095	-0.0001	0.0010	0.0002	13:19:20	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.063	1.063	11.47				

==========

Sequence No.: 109 Autosampler Location: 93
Sample ID: 241087024|929949|1 Date Collected: 12/8/2009 13:19:40
Analyst: JXL1 Data Type: Original

Replicate Data: 241087024|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.072	-0.072	0.0002	0.0049	0.0005	13:20:42	Yes
2	-0.092	-0.092	-0.0001	0.0019	0.0003	13:21:17	Yes
Mean:	-0.082	-0.082	0.0001				
SD:	0.014	0.014	0.0002				
%RSD:	16.47	16.47	288.97				

==========

Sequence No.: 110 Autosampler Location: 94
Sample ID: 241087025|929949|1 Date Collected: 12/8/2009 13:21:37
Analyst: JXL1 Data Type: Original

Replicate Data: 241087025|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	13:22:38	Yes
2	-0.100	-0.100	-0.0002	0.0007	0.0002	13:23:13	Yes
Mean:	-0.101	-0.101	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	1.523	1.523	10.94				

==========

Sequence No.: 111 Autosampler Location: 95
Sample ID: 241087026|929949|1 Date Collected: 12/8/2009 13:23:33
Analyst: JXL1 Data Type: Original

Replicate Data: 241087026|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	13:24:35	Yes
2	-0.104	-0.104	-0.0002	0.0004	0.0001	13:25:10	Yes
Mean:	-0.103	-0.103	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	1.472	1.472	9.18				

==========

Sequence No.: 112 Autosampler Location: 96
Sample ID: 1201978978|925641|1 Date Collected: 12/8/2009 13:25:30
Analyst: JXL1 Data Type: Original

Replicate Data: 1201978978|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0001	0.0006	0.0002	13:26:31	Yes
2	-0.101	-0.101	-0.0002	0.0004	0.0002	13:27:06	Yes
Mean:	-0.100	-0.100	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.574	1.574	12.24				

==========

Sequence No.: 113 Autosampler Location: 97

Sample ID: 1201978979|925641|1
Analyst: JXL1
Date Collected: 12/8/2009 13:27:26
Data Type: Original

Replicate Data: 1201978979|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.880	1.880	0.0230	0.1032	0.0233	13:28:28	Yes
2	1.861	1.861	0.0228	0.1023	0.0231	13:29:03	Yes
Mean:	1.871	1.871	0.0229				
SD:	0.014	0.014	0.0002				
%RSD:	0.735	0.735	0.70				

Sequence No.: 114
Autosampler Location: 98
Sample ID: 241612001|925641|1
Date Collected: 12/8/2009 13:29:24
Analyst: JXL1
Data Type: Original

Replicate Data: 241612001|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0010	0.0002	13:30:26	Yes
2	-0.097	-0.097	-0.0001	0.0009	0.0002	13:31:01	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.129	0.129	1.23				

Sequence No.: 115
Autosampler Location: 99
Sample ID: 241612002|925641|1
Date Collected: 12/8/2009 13:31:21
Analyst: JXL1
Data Type: Original

Replicate Data: 241612002|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0013	0.0002	13:32:23	Yes
2	-0.098	-0.098	-0.0001	0.0013	0.0002	13:32:58	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.828	0.828	7.78				

Sequence No.: 116
Autosampler Location: 100
Sample ID: 241614001|925641|1
Date Collected: 12/8/2009 13:33:19
Analyst: JXL1
Data Type: Original

Replicate Data: 241614001|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0006	0.0002	13:34:21	Yes
2	-0.101	-0.101	-0.0002	0.0008	0.0002	13:34:56	Yes
Mean:	-0.102	-0.102	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.085	1.085	7.40				

Sequence No.: 117
Autosampler Location: 101
Sample ID: 1201978980|925641|1
Date Collected: 12/8/2009 13:35:16
Analyst: JXL1
Data Type: Original

Replicate Data: 1201978980|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0008	0.0002	13:36:18	Yes
2	-0.097	-0.097	-0.0001	0.0011	0.0002	13:36:53	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.001	0.001	0.0000				

%RSD: 1.025 1.025 8.78

==========

Sequence No.: 118 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 13:37:13**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.987	4.987	0.0593	0.2617	0.0597	13:38:14	Yes
2	5.002	5.002	0.0595	0.2611	0.0599	13:38:48	Yes
Mean:	4.995	4.995	0.0594				
SD:	0.011	0.011	0.0001				
%RSD:	0.219	0.219	0.22				

QC value within limits for Hg 253.7 Recovery = 99.89%
All analyte(s) passed QC.

==========

Sequence No.: 119 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 13:39:07**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.076	-0.076	0.0001	0.0018	0.0005	13:40:08	Yes
2	-0.073	-0.073	0.0002	0.0024	0.0005	13:40:43	Yes
Mean:	-0.075	-0.075	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.229	2.229	13.71				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 120 **Autosampler Location: 102**
Sample ID: 1201978981|925641|1 **Date Collected: 12/8/2009 13:41:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978981|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.889	1.889	0.0231	0.1042	0.0235	13:42:04	Yes
2	1.888	1.888	0.0231	0.1039	0.0234	13:42:39	Yes
Mean:	1.888	1.888	0.0231				
SD:	0.001	0.001	0.0000				
%RSD:	0.055	0.055	0.05				

==========

Sequence No.: 121 **Autosampler Location: 103**
Sample ID: 1201978982|925641|5 **Date Collected: 12/8/2009 13:42:59**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978982|925641|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	13:44:01	Yes
2	-0.098	-0.098	-0.0001	0.0007	0.0002	13:44:36	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	2.523	2.523	19.36				

==========

Sequence No.: 122 **Autosampler Location: 104**
Sample ID: 241614002|925641|1 **Date Collected: 12/8/2009 13:44:56**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241614002|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0008	0.0002	13:45:58	Yes
2	-0.098	-0.098	-0.0001	0.0009	0.0002	13:46:33	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.719	0.719	6.18				

Sequence No.: 123
Sample ID: 241614003|925641|1
Analyst: JXL1
Autosampler Location: 105
Date Collected: 12/8/2009 13:46:54
Data Type: Original

Replicate Data: 241614003|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0007	0.0002	13:47:56	Yes
2	-0.097	-0.097	-0.0001	0.0012	0.0002	13:48:30	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.186	2.186	18.33				

Sequence No.: 124
Sample ID: 241614004|925641|1
Analyst: JXL1
Autosampler Location: 106
Date Collected: 12/8/2009 13:48:51
Data Type: Original

Replicate Data: 241614004|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.103	-0.103	-0.0002	0.0003	0.0002	13:49:53	Yes
2	-0.101	-0.101	-0.0002	0.0006	0.0002	13:50:28	Yes
Mean:	-0.102	-0.102	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	1.593	1.593	10.80				

Sequence No.: 125
Sample ID: 1201981600|926820|1
Analyst: JXL1
Autosampler Location: 107
Date Collected: 12/8/2009 13:50:48
Data Type: Original

Replicate Data: 1201981600|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0009	0.0002	13:51:50	Yes
2	-0.100	-0.100	-0.0001	0.0005	0.0002	13:52:25	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.951	1.951	16.71				

Sequence No.: 126
Sample ID: 1201981601|926820|1
Analyst: JXL1
Autosampler Location: 108
Date Collected: 12/8/2009 13:52:46
Data Type: Original

Replicate Data: 1201981601|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.895	1.895	0.0232	0.1043	0.0235	13:53:48	Yes
2	1.907	1.907	0.0233	0.1048	0.0237	13:54:23	Yes
Mean:	1.901	1.901	0.0232				
SD:	0.008	0.008	0.0001				
%RSD:	0.417	0.417	0.40				

Sequence No.: 127
Sample ID: 241713001|926820|1
Analyst: JXL1

Autosampler Location: 109
Date Collected: 12/8/2009 13:54:43
Data Type: Original

Replicate Data: 241713001|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0008	0.0002	13:55:45	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	13:56:20	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.082	1.082	8.50				

Sequence No.: 128
Sample ID: 1201981602|926820|1
Analyst: JXL1

Autosampler Location: 110
Date Collected: 12/8/2009 13:56:40
Data Type: Original

Replicate Data: 1201981602|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0006	0.0002	13:57:43	Yes
2	-0.097	-0.097	-0.0001	0.0010	0.0002	13:58:17	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.655	2.655	21.44				

Sequence No.: 129
Sample ID: 1201981603|926820|1
Analyst: JXL1

Autosampler Location: 111
Date Collected: 12/8/2009 13:58:38
Data Type: Original

Replicate Data: 1201981603|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.897	1.897	0.0232	0.1055	0.0235	13:59:40	Yes
2	1.900	1.900	0.0232	0.1056	0.0236	14:00:15	Yes
Mean:	1.898	1.898	0.0232				
SD:	0.002	0.002	0.0000				
%RSD:	0.090	0.090	0.09				

Sequence No.: 130
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 12/8/2009 14:00:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.027	5.027	0.0598	0.2648	0.0601	14:01:36	Yes
2	4.978	4.978	0.0592	0.2637	0.0596	14:02:12	Yes
Mean:	5.003	5.003	0.0595				
SD:	0.034	0.034	0.0004				
%RSD:	0.681	0.681	0.67				

QC value within limits for Hg 253.7 Recovery = 100.05%
All analyte(s) passed QC.

Sequence No.: 131
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 12/8/2009 14:02:31
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.072	-0.072	0.0002	0.0024	0.0005	14:03:31	Yes

2	-0.069	-0.069	0.0002	0.0029	0.0005	14:04:06	Yes
Mean:	-0.070	-0.070	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.444	2.444	10.56				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 132 **Autosampler Location: 112**
Sample ID: 1201981607|926820|5 **Date Collected: 12/8/2009 14:04:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981607|926820|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0007	0.0002	14:05:28	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	14:06:02	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.263	0.263	2.00				

==========

Sequence No.: 133 **Autosampler Location: 113**
Sample ID: 241713002|926820|1 **Date Collected: 12/8/2009 14:06:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241713002|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0001	0.0008	0.0002	14:07:25	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	14:08:00	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.492	1.492	12.03				

==========

Sequence No.: 134 **Autosampler Location: 114**
Sample ID: 1201984328|928040|1 **Date Collected: 12/8/2009 14:08:21**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984328|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0007	0.0002	14:09:23	Yes
2	-0.097	-0.097	-0.0001	0.0008	0.0002	14:09:58	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.134	1.134	9.97				

==========

Sequence No.: 135 **Autosampler Location: 115**
Sample ID: 1201984329|928040|1 **Date Collected: 12/8/2009 14:10:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984329|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.894	1.894	0.0232	0.1045	0.0235	14:11:20	Yes
2	1.896	1.896	0.0232	0.1046	0.0235	14:11:56	Yes
Mean:	1.895	1.895	0.0232				
SD:	0.001	0.001	0.0000				
%RSD:	0.063	0.063	0.06				

==========

Sequence No.: 136 **Autosampler Location: 116**
Sample ID: 241835001|928040|1 **Date Collected: 12/8/2009 14:12:16**
Analyst: JXL1 **Data Type: Original**

Miscellaneous

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925432

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978498	UI091119-A00	.5	mL
LCS	1201978498	UI091119-B	.5	mL
MS	1201978500	UI090930-A	.5	mL
MS	1201978500	UI090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978497		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
LCS	1201978498		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SAMPLE	241606001		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SAMPLE	241612001		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SAMPLE	241612002		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SAMPLE	241614001		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
DUP	1201978499	241614001	SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
MS	1201978500	241614001	SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SDILT	1201978501	241614001	SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SAMPLE	241614002		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SAMPLE	241614003		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER
SAMPLE	241614004		SW846 3005A	23-NOV-2009 14:15	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
I215803	2.5 mL	HYDROCHLORIC ACID
1100721TCLP	1 mL	Nitric Acid CONC.

Comments:

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925638

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978979	WHG091207-13	.2	mL
MS	1201978981	WHG091207-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978978		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
LCS	1201978979		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241612001		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241612002		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241614001		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
DUP	1201978980	241614001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
MS	1201978981	241614001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SDILT	1201978982	241614001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241614002		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241614003		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241614004		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1236359-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091207-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091207-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091207-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091207-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091207-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091207-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments: Digestion Start Date: 07-DEC-09 12:10
Digestion End Date: 07-DEC-09 14:10

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 925430

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978493	UI091119-01	.25	mL
LCS	1201978493	UI091119-06	.25	mL
MS	1201978495	UI091119-01	.25	mL
MS	1201978495	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978492		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
LCS	1201978493		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SAMPLE	241606001		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SAMPLE	241612001		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SAMPLE	241612002		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SAMPLE	241614001		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
DUP	1201978494	241614001	SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
MS	1201978495	241614001	SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SDILT	1201978496	241614001	SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SAMPLE	241614002		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SAMPLE	241614003		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER
SAMPLE	241614004		SW846 3005A	23-NOV-2009 14:09	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1215803	2.5 mL	HYDROCHLORIC ACID
1230937	1 mL	Nitric Acid CONC.

Comments:

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID:	UI090701-40	**Opened:**	01-JUL-09	**Amount :**	500 mL
Name:	TRACE ICP Stock PQL St	**Received:**	30-JUN-09	**Catalog Number :**	160543-01-03
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016475
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3+TrHF
Supplier:	02si				
Description:	TRACE ICP Stock PQL Standard				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID:	UI090814-12	**Opened:**	14-AUG-09	**Amount :**	250 mL
Name:	ICP-MS ICSAB Master B	**Received:**	14-AUG-09	**Catalog Number :**	160033-02
Type:	Source Material	**Expires:**	14-AUG-10	**Lot Number :**	1016930
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 2% HNO3
Supplier:	02SI				
Description:	ICPMS ICSAB Master B				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Standard Logbook

Serial ID:	UI090814-13	**Opened:**	14-AUG-09	**Amount :**	250 mL
Name:	ICP-MS ICSAB Master C	**Received:**	14-AUG-09	**Catalog Number :**	160033-03
Type:	Source Material	**Expires:**	14-AUG-10	**Lot Number :**	1016926
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 2% HNO3
Supplier:	02SI				
Description:	ICPMS ICSAB Master C				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID:	UI090828-42	**Opened:**	16-SEP-09	**Amount :**	500 mL
Name:	TRACE ICP Na-1000SOUR	**Received:**	27-AUG-09	**Catalog Number :**	060011-02-03
Type:	Source Material	**Expires:**	16-SEP-10	**Lot Number :**	1017098
Employee:	Helen Camello			**Solvent :**	1%HNO3
Supplier:	02SI				
Description:	Sodium 1000 +/- 3 ug/mL in 1% HNO3				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID:	UI090925-40	**Opened:**	23-OCT-09	**Amount :**	500 mL
Name:	SECOND SOURCE STD -1	**Received:**	25-SEP-09	**Catalog Number :**	SGELMX38-500N
Type:	Source Material	**Expires:**	30-SEP-10	**Lot Number :**	4909129
Employee:	Helen Camello			**Solvent :**	5%HNO3
Supplier:	SPECTRO PURE				
Description:	SECOND SOURCE STD #1A 5%HNO3				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Standard Logbook

Serial ID:	UI090925-41	**Opened:**	23-OCT-09	**Amount :**	500 mL
Name:	SECOND SOURCE STD -1	**Received:**	25-SEP-09	**Catalog Number :**	SGELMX39-500B
Type:	Source Material	**Expires:**	30-SEP-10	**Lot Number :**	4909130
Employee:	Helen Camello			**Solvent :**	5%HNO3,TR.HF
Supplier:	SPECTRO PURE				
Description:	SECOND SOURCE STD #1B				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID:	UI090929-06	**Opened:**	29-SEP-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master A	**Received:**	29-SEP-09	**Catalog Number :**	160055-01
Type:	Source Material	**Expires:**	29-SEP-10	**Lot Number :**	1017426
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV SOLN A - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID:	UI090929-07	**Opened:**	29-SEP-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master B	**Received:**	29-SEP-09	**Catalog Number :**	160054-02
Type:	Source Material	**Expires:**	29-SEP-10	**Lot Number :**	1017428
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV Soln B - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L

Analyte	Concentration	Analyte	Concentration
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Standard Logbook

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL

Analyte	Concentration	Analyte	Concentration
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091119-A00 **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091119-B **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091207-01 **Opened:** 07-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 07-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 08-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091207-02 **Opened:** 07-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 08-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091207-01 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG091207-02 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091207-03 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091207-04 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG091207-05 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG091207-06 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091207-13 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091207-04 **Opened:** 07-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 07-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091207-04A **Opened:** 07-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091207-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091207-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091207-05 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091207-07 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 07-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-08 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-70 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER

Standard Logbook

Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-643

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	925673	**Method:**	SW846 9012A
Prep Batch :	925672	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241613001	RE03-09-14108
241613002	RE03-09-14106
241613003	RE03-09-14107
241613004	RE03-09-14109
241613005	RE03-09-14252
241613006	RE03-09-14250
241613007	RE03-09-14255
241613008	RE03-09-14256
241613009	RE03-09-14254
241613010	RE03-09-14249
241613011	RE03-09-14248
241613012	RE03-09-14247
241613013	RE03-09-14246
241613014	RE03-09-14253
241613015	RE03-09-14251
241613016	RE03-09-14257
241613017	RE03-10-2729
241613018	RE03-10-6969
1201979071	Method Blank (MB)
1201979072	241611008(RE03-09-13917) Sample Duplicate (DUP)
1201979073	241611009(RE03-10-7033) Sample Duplicate (DUP)
1201979074	241611008(RE03-09-13917) Matrix Spike (MS)
1201979075	241611009(RE03-10-7033) Matrix Spike (MS)
1201979076	241611008(RE03-09-13917) Matrix Spike Duplicate (MSD)
1201979077	241611009(RE03-10-7033) Matrix Spike Duplicate (MSD)
1201979078	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 241611008 (RE03-09-13917) and 241611009 (RE03-10-7033).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The spike recovery falls outside of the established acceptance limits due to matrix interference: 1201979075 (RE03-10-7033). The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1201979074 (RE03-09-13917).

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the established acceptance limits due to matrix interference: 1201979077 (RE03-10-7033).

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The Relative Percent Difference (RPD) between the sample and its duplicate falls outside of the normal acceptance limits for sample 1201979073 (RE03-10-7033) because of the heterogeneous matrix of the sample.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201979078 (LCS).

Sample Re-analysis
The following sample was re-analyzed due to instrument failure: 1201979078 (LCS).

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 765683 1201979073 (RE03-10-7033), 1201979074 (RE03-09-13917), 1201979075 (RE03-10-7033) and 1201979077 (RE03-10-7033).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 17Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-643 GEL Work Order: 241613

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14108	Project:	LANL01004
Sample ID:	241613001	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	7.23%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.9	250	ug/kg	1	AXC2 12/03/09	1114	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14106	Project:	LANL01004
Sample ID:	241613002	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.44%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.6	271	ug/kg	1	AXC2 12/03/09	1114	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14107	Project:	LANL01004
Sample ID:	241613003	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	12.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	77.5	285	ug/kg	1	AXC2 12/03/09	1115	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14109	Project:	LANL01004
Sample ID:	241613004	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	5.43%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.4	240	ug/kg	1	AXC2 12/03/09	1116	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14252	Project:	LANL01004
Sample ID:	241613005	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	6.63%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.0	257	ug/kg	1	AXC2 12/03/09	1117	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14250	Project:	LANL01004
Sample ID:	241613006	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	6.93%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.9	253	ug/kg	1	AXC2 12/03/09	1118	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14255	Project:	LANL01004
Sample ID:	241613007	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.25%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.9	275	ug/kg	1	AXC2 12/03/09	1119	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14256	Project:	LANL01004
Sample ID:	241613008	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	8.25%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.7	267	ug/kg	1	AXC2 12/03/09	1120	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14254	Project:	LANL01004
Sample ID:	241613009	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	5.86%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.7	241	ug/kg	1	AXC2 12/03/09	1121	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14249	Project:	LANL01004
Sample ID:	241613010	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	10.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.3	262	ug/kg	1	AXC2 12/03/09	1125	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14248	Project:	LANL01004
Sample ID:	241613011	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	10.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	66.7	245	ug/kg	1	AXC2 12/03/09	1126	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14247	Project:	LANL01004
Sample ID:	241613012	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.2	258	ug/kg	1	AXC2 12/03/09	1127	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14246	Project:	LANL01004
Sample ID:	241613013	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	7.97%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.4	266	ug/kg	1	AXC2 12/03/09	1128	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14253	Project:	LANL01004
Sample ID:	241613014	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.13%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.6	241	ug/kg	1	AXC2 12/03/09	1129	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14251	Project:	LANL01004
Sample ID:	241613015	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	9.46%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.1	276	ug/kg	1	AXC2 12/03/09	1130	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-09-14257	Project:	LANL01004
Sample ID:	241613016	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	1.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.8	253	ug/kg	1	AXC2 12/03/09	1130	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-10-2729	Project:	LANL01004
Sample ID:	241613017	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	8.62%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.4	274	ug/kg	1	AXC2 12/03/09	1131	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 16, 2009

Client SDG: 10-643

Client Sample ID:	RE03-10-6969	Project:	LANL01004
Sample ID:	241613018	Client ID:	LANL010
Matrix:	S		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		
Moisture:	4.86%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.1	258	ug/kg	1	AXC2 12/03/09	1132	925673	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	925672

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

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QC Summary

Report Date: December 16, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
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Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241613

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 925673											
QC1201979072 241611008 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	12/03/09 11:03
QC1201979073 241611009 DUP											
Cyanide, Total			977		343	ug/kg	96.0* ^		(+/-314)		12/03/09 11:07
QC1201979078 LCS											
Cyanide, Total	67900				63800	ug/kg		93.9	(46%-145%)		12/03/09 11:06
QC1201979071 MB											
Cyanide, Total				U	250	ug/kg					12/03/09 11:00
QC1201979074 241611008 MS											
Cyanide, Total	5350	U	ND		3790	ug/kg		70.9	(50%-130%)		12/03/09 11:04
QC1201979075 241611009 MS											
Cyanide, Total	6170		977		5460	ug/kg		72.8	(50%-130%)		12/03/09 11:08
QC1201979076 241611008 MSD											
Cyanide, Total	5250	U	ND		4230	ug/kg	11.0	80.6	(0%-30%)		12/03/09 11:05
QC1201979077 241611009 MSD											
Cyanide, Total	6290		977		5200	ug/kg	4.91	67.2	(0%-30%)		12/03/09 11:13

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: 241613

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 16-DEC-2009 14:26

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-643

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**03-DEC-2009 10:55:18**	**OM_12-3-2009_10-47-23**	**147**	**150**	**98**	**(90%-110%)**	**Yes**
CCV	03-DEC-2009 11:09:36	OM_12-3-2009_10-47-23	101	100	101	(90%-110%)	Yes
CCV	03-DEC-2009 11:22:00	OM_12-3-2009_10-47-23	98.2	100	98	(90%-110%)	Yes
CCV	03-DEC-2009 11:34:26	OM_12-3-2009_10-47-23	98.7	100	99	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**03-DEC-2009 10:57:08**	**OM_12-3-2009_10-47-23**	**2.2**	**5**	**Yes**
CCB	03-DEC-2009 11:11:26	OM_12-3-2009_10-47-23	0.78	5	Yes
CCB	03-DEC-2009 11:23:51	OM_12-3-2009_10-47-23	1	5	Yes
CCB	03-DEC-2009 11:36:16	OM_12-3-2009_10-47-23	0.32	5	Yes

Cyanide, Total

Prep LogBook

Analyst: SXJ1 Verified by:_____

Batch: 925672

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979078	URF1200957-01	.25	g
MS	1201979074	URF1184831-02	.025	mL
MS	1201979075	URF1184831-02	.025	mL
MSD	1201979076	URF1184831-02	.025	mL
MSD	1201979077	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201979071		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
LCS	1201979078		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241611008		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.56 g	25 mL	44.64286	SOIL
DUP	1201979072	241611008	SW846 9010B Prep	02-DEC-2009 12:00	>12	0.57 g	25 mL	43.85965	SOIL
MS	1201979074	241611008	SW846 9010B Prep	02-DEC-2009 12:00	>12	0.56 g	25 mL	44.64286	SOIL
MSD	1201979076	241611008	SW846 9010B Prep	02-DEC-2009 12:00	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241611009		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.56 g	25 mL	44.64286	SOIL
DUP	1201979073	241611009	SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
MS	1201979075	241611009	SW846 9010B Prep	02-DEC-2009 12:00	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1201979077	241611009	SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241613001		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241613002		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241613003		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241613004		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241613005		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241613006		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241613007		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241613008		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241613009		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241613010		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241613011		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241613012		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241613013		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241613014		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241613015		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241613016		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241613017		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241613018		SW846 9010B Prep	02-DEC-2009 12:00	>12	0.51 g	25 mL	49.01961	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091202-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/3/2009 10:48:08	OM_12-3-2009_10-47-23
150 ppb		1	axc2	12/3/2009 10:49:00	OM_12-3-2009_10-47-23
100 ppb		1	axc2	12/3/2009 10:49:53	OM_12-3-2009_10-47-23
50 ppb		1	axc2	12/3/2009 10:50:46	OM_12-3-2009_10-47-23
10 ppb		1	axc2	12/3/2009 10:51:39	OM_12-3-2009_10-47-23
CRDL 5.0 ppb		1	axc2	12/3/2009 10:52:33	OM_12-3-2009_10-47-23
ICAL-00		1	axc2	12/3/2009 10:53:27	OM_12-3-2009_10-47-23
ICV		1	axc2	12/3/2009 10:55:18	OM_12-3-2009_10-47-23
ICB		1	axc2	12/3/2009 10:57:08	OM_12-3-2009_10-47-23
CRDL		1	axc2	12/3/2009 10:58:58	OM_12-3-2009_10-47-23
1201979071	925673	1	axc2	12/3/2009 11:00:47	OM_12-3-2009_10-47-23
1201979078*	925673	25	axc2	12/3/2009 11:01:41	OM_12-3-2009_10-47-23
241611008	925673	1	axc2	12/3/2009 11:02:34	OM_12-3-2009_10-47-23
1201979072	925673	1	axc2	12/3/2009 11:03:27	OM_12-3-2009_10-47-23
1201979074	925673	1	axc2	12/3/2009 11:04:20	OM_12-3-2009_10-47-23
1201979076	925673	1	axc2	12/3/2009 11:05:13	OM_12-3-2009_10-47-23
1201979078	925673	25	axc2	12/3/2009 11:06:06	OM_12-3-2009_10-47-23
241611009	925673	1	axc2	12/3/2009 11:06:58	OM_12-3-2009_10-47-23
1201979073	925673	1	axc2	12/3/2009 11:07:51	OM_12-3-2009_10-47-23
1201979075	925673	1	axc2	12/3/2009 11:08:43	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:09:36	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:11:26	OM_12-3-2009_10-47-23
1201979077	925673	1	axc2	12/3/2009 11:13:15	OM_12-3-2009_10-47-23
241613001	925673	1	axc2	12/3/2009 11:14:07	OM_12-3-2009_10-47-23
241613002	925673	1	axc2	12/3/2009 11:14:59	OM_12-3-2009_10-47-23
241613003	925673	1	axc2	12/3/2009 11:15:50	OM_12-3-2009_10-47-23
241613004	925673	1	axc2	12/3/2009 11:16:43	OM_12-3-2009_10-47-23
241613005	925673	1	axc2	12/3/2009 11:17:34	OM_12-3-2009_10-47-23
241613006	925673	1	axc2	12/3/2009 11:18:28	OM_12-3-2009_10-47-23
241613007	925673	1	axc2	12/3/2009 11:19:21	OM_12-3-2009_10-47-23
241613008	925673	1	axc2	12/3/2009 11:20:15	OM_12-3-2009_10-47-23
241613009	925673	1	axc2	12/3/2009 11:21:08	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:22:00	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:23:51	OM_12-3-2009_10-47-23
241613010	925673	1	axc2	12/3/2009 11:25:41	OM_12-3-2009_10-47-23
241613011	925673	1	axc2	12/3/2009 11:26:34	OM_12-3-2009_10-47-23
241613012	925673	1	axc2	12/3/2009 11:27:27	OM_12-3-2009_10-47-23
241613013	925673	1	axc2	12/3/2009 11:28:20	OM_12-3-2009_10-47-23
241613014	925673	1	axc2	12/3/2009 11:29:12	OM_12-3-2009_10-47-23
241613015	925673	1	axc2	12/3/2009 11:30:05	OM_12-3-2009_10-47-23
241613016	925673	1	axc2	12/3/2009 11:30:57	OM_12-3-2009_10-47-23
241613017	925673	1	axc2	12/3/2009 11:31:49	OM_12-3-2009_10-47-23
241613018	925673	1	axc2	12/3/2009 11:32:41	OM_12-3-2009_10-47-23
1201982097	927057	1	axc2	12/3/2009 11:33:33	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:34:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:36:16	OM_12-3-2009_10-47-23
1201982101	927057	25	axc2	12/3/2009 11:38:04	OM_12-3-2009_10-47-23
241711006	927057	1	axc2	12/3/2009 11:38:59	OM_12-3-2009_10-47-23
1201982098	927057	1	axc2	12/3/2009 11:39:52	OM_12-3-2009_10-47-23
1201982099	927057	1	axc2	12/3/2009 11:40:45	OM_12-3-2009_10-47-23
1201982100	927057	1	axc2	12/3/2009 11:41:39	OM_12-3-2009_10-47-23
241711007	927057	1	axc2	12/3/2009 11:42:32	OM_12-3-2009_10-47-23
241773001	927057	1	axc2	12/3/2009 11:43:25	OM_12-3-2009_10-47-23
241797001	927057	1	axc2	12/3/2009 11:44:19	OM_12-3-2009_10-47-23
241832001	927057	1	axc2	12/3/2009 11:45:12	OM_12-3-2009_10-47-23
241832002	927057	1	axc2	12/3/2009 11:46:04	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:46:56	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:48:48	OM_12-3-2009_10-47-23

241832003	927057	1	axc2	12/3/2009	11:50:36	OM_12-3-2009_10-47-23
241832004	927057	1	axc2	12/3/2009	11:51:28	OM_12-3-2009_10-47-23
241838002	927057	1	axc2	12/3/2009	11:52:21	OM_12-3-2009_10-47-23
241913002	927057	1	axc2	12/3/2009	11:53:12	OM_12-3-2009_10-47-23
1201982530	927057	1	axc2	12/3/2009	11:54:05	OM_12-3-2009_10-47-23
1201982531	927057	1	axc2	12/3/2009	11:54:57	OM_12-3-2009_10-47-23
1201982532	927057	1	axc2	12/3/2009	11:55:51	OM_12-3-2009_10-47-23
241916001	927057	1	axc2	12/3/2009	11:56:45	OM_12-3-2009_10-47-23
241916002	927057	1	axc2	12/3/2009	11:57:39	OM_12-3-2009_10-47-23
241916003	927057	1	axc2	12/3/2009	11:58:32	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	11:59:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:01:15	OM_12-3-2009_10-47-23
241916004	927057	1	axc2	12/3/2009	12:03:04	OM_12-3-2009_10-47-23
241916005	927057	1	axc2	12/3/2009	12:03:58	OM_12-3-2009_10-47-23
241916006	927057	1	axc2	12/3/2009	12:04:51	OM_12-3-2009_10-47-23
241916007	927057	1	axc2	12/3/2009	12:05:44	OM_12-3-2009_10-47-23
241916008	927057	1	axc2	12/3/2009	12:06:37	OM_12-3-2009_10-47-23
241916009	927057	1	axc2	12/3/2009	12:07:30	OM_12-3-2009_10-47-23
241916010	927057	1	axc2	12/3/2009	12:08:23	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	12:09:15	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:11:05	OM_12-3-2009_10-47-23

Author: axc2 Date : 12/3/2009

Original Run Filename: OM_12-3-2009_10-47-23.OMN created 12/3/2009 10:47:23
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-3-2009_10-47-23.OMN last modified 12/3/2009 12:12:10
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091203-01	1	S1	200	7.99	12/3/2009@10:48:08			200 ppb
WCN091203-02	1	S2	150	6.19	12/3/2009@10:49:00			150 ppb
WCN091203-03	1	S3	100	4.24	12/3/2009@10:49:53			100 ppb
WCN091203-04	1	S4	50.0	2.09	12/3/2009@10:50:46			50 ppb
WCN091203-05	1	S5	10.0	0.592	12/3/2009@10:51:39			10 ppb
WCN091203-06	1	S6	5.00	0.278	12/3/2009@10:52:33			CRDL 5.0 ppb
WCN091203-08	1	S7	0.00	0.0373	12/3/2009@10:53:27			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99957 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091203-07	1	S8	147	6.01	12/3/2009@10:55:18			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091203-08	1	S7	2.20	0.208	12/3/2009@10:57:08			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091203-06	1	S6	4.06	0.283	12/3/2009@10:58:58			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.06 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.06 > 2.50					
		Message	Pass					
		Action	None					
1201979071|925673|MB	1	1	-1.68	0.0532	12/3/2009@11:00:47			
1201979078||LCS	1	2	11.7	0.589	12/3/2009@11:01:41		25.00	
241611008	1	3	-0.599	0.0965	12/3/2009@11:02:34			
1201979072||DUP	1	4	-0.795	0.0887	12/3/2009@11:03:27			
1201979074||MS	1	5	70.9	2.95	12/3/2009@11:04:20			
1201979076||MSD	1	6	80.6	3.34	12/3/2009@11:05:13			
1201979078||LCS	1	2	25.5	1.14	12/3/2009@11:06:06		25.00	
241611009	1	7	17.4	0.817	12/3/2009@11:06:58			
1201979073||DUP	1	8	5.46	0.339	12/3/2009@11:07:51			
1201979075||MS	1	9	88.6	3.66	12/3/2009@11:08:43			
WCN091203-03	1	S3	101	4.15	12/3/2009@11:09:36			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.7 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.780	0.152	12/3/2009@11:11:26			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.780 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.780 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979077||MSD	1	10	82.7	3.43	12/3/2009@11:13:15			
241613001	1	11	0.938	0.158	12/3/2009@11:14:07			
241613002	1	12	-1.31	0.0680	12/3/2009@11:14:59			
241613003	1	13	-0.466	0.102	12/3/2009@11:15:50			
241613004	1	14	-1.77	0.0499	12/3/2009@11:16:43			
241613005	1	15	-2.01	0.0401	12/3/2009@11:17:34			
241613006	1	16	-1.04	0.0791	12/3/2009@11:18:28			
241613007	1	17	-3.14	-0.00502	12/3/2009@11:19:21			
241613008	1	18	-1.19	0.0728	12/3/2009@11:20:15			
241613009	1	19	-1.89	0.0448	12/3/2009@11:21:08			
WCN091203-03	1	S3	98.2	4.05	12/3/2009@11:22:00			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.00	0.161	12/3/2009@11:23:51			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.00 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.00 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241613010	1	20	-1.14	0.0750	12/3/2009@11:25:41			
241613011	1	21	-1.02	0.0798	12/3/2009@11:26:34			
241613012	1	22	-1.37	0.0656	12/3/2009@11:27:27			
241613013	1	23	-1.94	0.0429	12/3/2009@11:28:20			
241613014	1	24	-1.11	0.0762	12/3/2009@11:29:12			
241613015	1	25	-1.39	0.0648	12/3/2009@11:30:05			
241613016	1	26	-2.32	0.0277	12/3/2009@11:30:57			
241613017	1	27	-1.67	0.0537	12/3/2009@11:31:49			
241613018	1	28	-1.71	0.0522	12/3/2009@11:32:41			
1201982097|927057|MB	1	29	-2.09	0.0369	12/3/2009@11:33:33			
WCN091203-03	1	S3	98.7	4.07	12/3/2009@11:34:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.320	0.133	12/3/2009@11:36:16			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	0.320 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.320 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982101||LCS	1	30	21.8	0.993	12/3/2009@11:38:04		25.00	
241711006	1	31	-0.519	0.0997	12/3/2009@11:38:59			
1201982098||DUP	1	32	-1.52	0.0599	12/3/2009@11:39:52			
1201982099||MS	1	33	54.8	2.31	12/3/2009@11:40:45			
1201982100||MSD	1	34	71.1	2.96	12/3/2009@11:41:39			
241711007	1	35	3.43	0.258	12/3/2009@11:42:32			
241773001	1	36	-0.499	0.101	12/3/2009@11:43:25			
241797001	1	37	14.2	0.686	12/3/2009@11:44:19			
241832001	1	38	-1.40	0.0644	12/3/2009@11:45:12			
241832002	1	39	-1.84	0.0467	12/3/2009@11:46:04			
WCN091203-03	1	S3	97.9	4.04	12/3/2009@11:46:56			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.40	0.177	12/3/2009@11:48:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.40 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.40 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241832003	1	40	-1.85	0.0466	12/3/2009@11:50:36			
241832004	1	41	-2.42	0.0238	12/3/2009@11:51:28			
241838002	1	42	-1.55	0.0586	12/3/2009@11:52:21			
241913002	1	43	-1.87	0.0457	12/3/2009@11:53:12			
1201982530||DUP	1	44	-2.04	0.0388	12/3/2009@11:54:05			
1201982531||MS	1	45	87.3	3.61	12/3/2009@11:54:57			
1201982532||MSD	1	46	107	4.40	12/3/2009@11:55:51			
241916001	1	47	4.73	0.309	12/3/2009@11:56:45			
241916002	1	48	-1.83	0.0471	12/3/2009@11:57:39			
241916003	1	49	-0.985	0.0811	12/3/2009@11:58:32			
WCN091203-03	1	S3	98.0	4.04	12/3/2009@11:59:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.487	0.140	12/3/2009@12:01:15			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.487 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.487 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241916004	1	50	0.626	0.145	12/3/2009@12:03:04			
241916005	1	51	1.13	0.166	12/3/2009@12:03:58			
241916006	1	52	0.169	0.127	12/3/2009@12:04:51			
241916007	1	53	1.78	0.192	12/3/2009@12:05:44			
241916008	1	54	-0.0502	0.118	12/3/2009@12:06:37			
241916009	1	55	1.36	0.175	12/3/2009@12:07:30			
241916010	1	56	2.34	0.214	12/3/2009@12:08:23			
WCN091203-03	1	S3	97.4	4.02	12/3/2009@12:09:15			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.892	0.156	12/3/2009@12:11:05			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.892 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.892 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-3-2009_10-47-23.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 12/3/2009

Channel 1: Current View

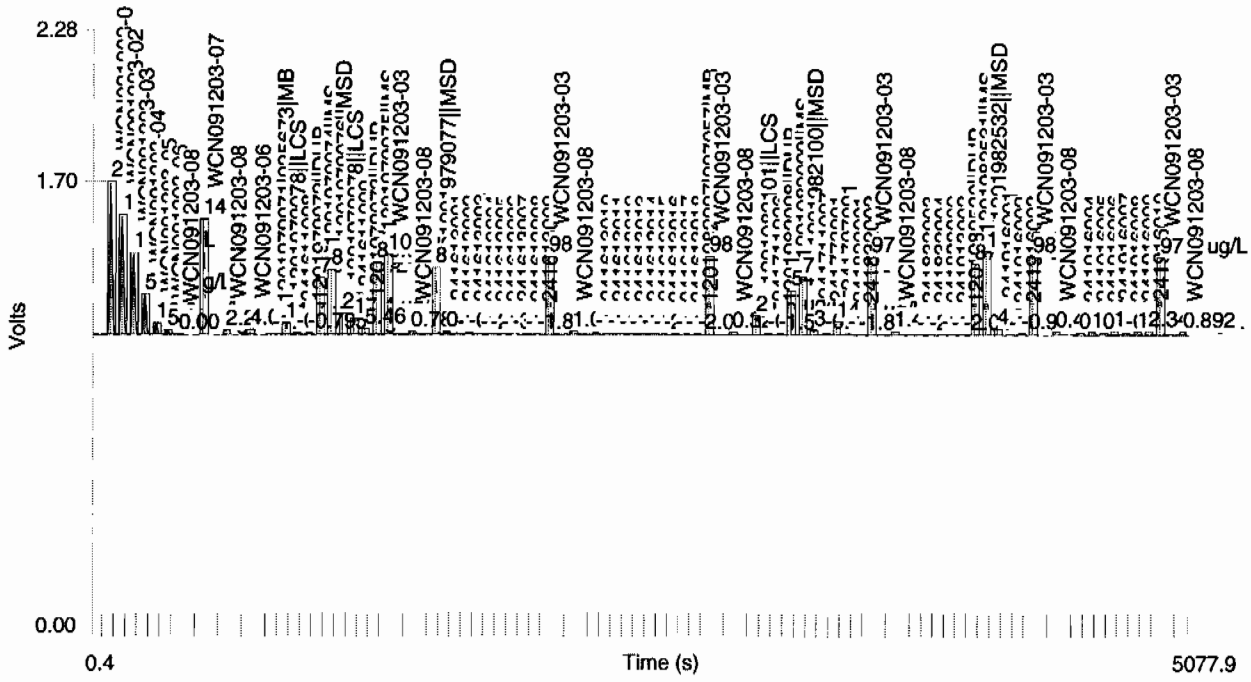

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.99	0.588	1.5	12/3/2009	10:49:12
2	150	1	6.19	0.459	-1.3	12/3/2009	10:50:04
3	100	1	4.24	0.313	-3.1	12/3/2009	10:50:56
4	50.0	1	2.09	0.153	1.3	12/3/2009	10:51:49
5	10.0	1	0.592	0.0436	-13.4	12/3/2009	10:52:42
6	5.00	1	0.278	0.0191	14.0	12/3/2009	10:53:36
7	0.00	1	0.0373	6.20e-4		12/3/2009	10:54:30

Figure 1: TCYANIDE

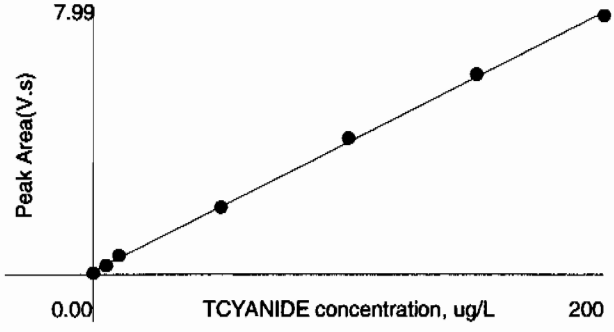

Area = 0.0399 * Conc + 0.123
Conc = 25.0 * Area - 3.01
Correlation Coefficient (r) = 0.99957

No Weighting

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
04-DEC-09			
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
		%Null%	
Batch ID: 925673	**Sample Numbers:** 241611009, 1201979073, 1201979074, 1201979075, 1201979077		

Potentially affected work order(s)(SDG): 241611(10-642),241613(10-643)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201979073DUP	1. The relative percent difference (RPD) between the sample and its duplicate falls outside of the required acceptance limits due to the heterogeneous matrix of the sample(soil).
2. Failed recovery for MS: QC 1201979074MS	2. The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported (soil).
3. Failed recovery for MS/MSD: QC 1201979075MS QC 1201979077MSD	3.The spike recovery falls outside of the established acceptance limits due to matrix interference. The Matrix spike duplicate verified the result with a passing RPD (soil).

Originator's Name:

Ashley Earl 04-DEC-09

Data Validator/Group Leader:

Elzbieta Szulc 15-DEC-09

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-643-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	925667	**Method:**	SW846 9012A
Prep Batch :	925666	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241614001	RE03-10-2742
241614002	RE03-10-2755
241614003	RE03-10-6971
241614004	RE03-10-6973
1201979044	Method Blank (MB)
1201979046	241563001(CAMO-10-5483) Sample Duplicate (DUP)
1201979047	241537001(RE03-10-3935) Sample Duplicate (DUP)
1201979049	241563001(CAMO-10-5483) Matrix Spike (MS)
1201979050	241537001(RE03-10-3935) Matrix Spike (MS)
1201979052	241563001(CAMO-10-5483) Matrix Spike Duplicate (MSD)
1201979053	241537001(RE03-10-3935) Matrix Spike Duplicate (MSD)
1201979054	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241537001 (RE03-10-3935) and 241563001 (CAMO-10-5483).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 17Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-643-1 GEL Work Order: 241614

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID:	RE03-10-2742	Project:	LANL01004
Sample ID:	241614001	Client ID:	LANL010
Matrix:	W		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1111	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID: RE03-10-2755
Sample ID: 241614002
Matrix: W
Collect Date: 19-NOV-09 12:00
Receive Date: 21-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1112	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID:	RE03-10-6971	Project:	LANL01004
Sample ID:	241614003	Client ID:	LANL010
Matrix:	W		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1112	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 3, 2009

Client SDG: 10-643-1

Client Sample ID:	RE03-10-6973	Project:	LANL01004
Sample ID:	241614004	Client ID:	LANL010
Matrix:	W		
Collect Date:	19-NOV-09 12:00		
Receive Date:	21-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 11/30/09	1113	925667	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/25/09	1557	925666

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 3, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241614

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 925667											
QC1201979046 241563001 DUP											
Cyanide, Total		U	ND	U	ND	ug/L	N/A			AXC2	11/30/09 10:59
QC1201979047 241537001 DUP											
Cyanide, Total		U	ND	U	ND	ug/L	N/A				11/30/09 10:54
QC1201979054 LCS											
Cyanide, Total	50.0				52.4	ug/L		105	(90%-110%)		11/30/09 10:42
QC1201979044 MB											
Cyanide, Total				U	5.00	ug/L					11/30/09 10:41
QC1201979049 241563001 MS											
Cyanide, Total	100	U	ND		110	ug/L		110	(60%-127%)		11/30/09 11:00
QC1201979050 241537001 MS											
Cyanide, Total	100	U	ND		104	ug/L		104	(60%-127%)		11/30/09 10:55
QC1201979052 241563001 MSD											
Cyanide, Total	100	U	ND		115	ug/L	4.44	115	(0%-20%)		11/30/09 11:01
QC1201979053 241537001 MSD											
Cyanide, Total	100	U	ND		112	ug/L	7.41	112	(0%-20%)		11/30/09 10:56

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

QC Summary

Workorder: 241614

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 03-DEC-2009 11:14

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-643-1

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**30-NOV-2009 10:36:13**	**OM_11-30-2009_10-25-45**	**153**	**150**	**102**	**(90%-110%)**	**Yes**
CCV	30-NOV-2009 10:50:35	OM_11-30-2009_10-25-45	106	100	106	(90%-110%)	Yes
CCV	30-NOV-2009 11:03:02	OM_11-30-2009_10-25-45	108	100	108	(90%-110%)	Yes
CCV	30-NOV-2009 11:14:44	OM_11-30-2009_10-25-45	108	100	108	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**30-NOV-2009 10:38:03**	**OM_11-30-2009_10-25-45**	**1.59**	**5**	**Yes**
CCB	30-NOV-2009 10:52:24	OM_11-30-2009_10-25-45	0.988	5	Yes
CCB	30-NOV-2009 11:04:53	OM_11-30-2009_10-25-45	1.14	5	Yes
CCB	30-NOV-2009 11:16:35	OM_11-30-2009_10-25-45	1.11	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925666

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979054	URF1184831-02	.0125	mL
MS	1201979048	URF1184831-02	.025	mL
MS	1201979049	URF1184831-02	.025	mL
MS	1201979050	URF1184831-02	.025	mL
MSD	1201979051	URF1184831-02	.025	mL
MSD	1201979052	URF1184831-02	.025	mL
MSD	1201979053	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201979044		EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
LCS	1201979054		EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241449002		EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
DUP	1201979045	241449002	EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MS	1201979048	241449002	EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MSD	1201979051	241449002	EPA 335.3	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241472001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	241511001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241511003		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241537001		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
DUP	1201979047	241537001	SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MS	1201979050	241537001	SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
MSD	1201979053	241537001	SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241537002		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241542013		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241563001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201979046	241563001	EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
MS	1201979049	241563001	EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201979052	241563001	EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241590001		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241600002		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241601002		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241601004		EPA 335.4	25-NOV-2009 15:57	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241612001		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241612002		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241614001		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925666

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979054	URF1184831-02	.0125	mL
MS	1201979048	URF1184831-02	.025	mL
MS	1201979049	URF1184831-02	.025	mL
MS	1201979050	URF1184831-02	.025	mL
MSD	1201979051	URF1184831-02	.025	mL
MSD	1201979052	URF1184831-02	.025	mL
MSD	1201979053	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
SAMPLE	241614002		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241614003		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER
SAMPLE	241614004		SW846 9010B Prep	25-NOV-2009 15:57	>12	25 mL	25 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091124-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	11/30/2009 10:29:03	OM_11-30-2009_10-25-45
150 ppb		1	axc2	11/30/2009 10:29:55	OM_11-30-2009_10-25-45
100 ppb		1	axc2	11/30/2009 10:30:48	OM_11-30-2009_10-25-45
50 ppb		1	axc2	11/30/2009 10:31:41	OM_11-30-2009_10-25-45
10 ppb		1	axc2	11/30/2009 10:32:34	OM_11-30-2009_10-25-45
CRDL 5.0 ppb		1	axc2	11/30/2009 10:33:28	OM_11-30-2009_10-25-45
ICAL-00		1	axc2	11/30/2009 10:34:22	OM_11-30-2009_10-25-45
ICV		1	axc2	11/30/2009 10:36:13	OM_11-30-2009_10-25-45
ICB		1	axc2	11/30/2009 10:38:03	OM_11-30-2009_10-25-45
CRDL		1	axc2	11/30/2009 10:39:53	OM_11-30-2009_10-25-45
1201979044	925667	1	axc2	11/30/2009 10:41:42	OM_11-30-2009_10-25-45
1201979054	925667	1	axc2	11/30/2009 10:42:34	OM_11-30-2009_10-25-45
241449002	925667	1	axc2	11/30/2009 10:43:27	OM_11-30-2009_10-25-45
1201979045	925667	1	axc2	11/30/2009 10:44:19	OM_11-30-2009_10-25-45
1201979048	925667	1	axc2	11/30/2009 10:45:13	OM_11-30-2009_10-25-45
1201979051	925667	1	axc2	11/30/2009 10:46:07	OM_11-30-2009_10-25-45
241472001	925667	1	axc2	11/30/2009 10:47:01	OM_11-30-2009_10-25-45
241511001	925667	1	axc2	11/30/2009 10:47:55	OM_11-30-2009_10-25-45
241511003	925667	1	axc2	11/30/2009 10:48:49	OM_11-30-2009_10-25-45
241537001	925667	1	axc2	11/30/2009 10:49:42	OM_11-30-2009_10-25-45
CCV		1	axc2	11/30/2009 10:50:35	OM_11-30-2009_10-25-45
CCB		1	axc2	11/30/2009 10:52:24	OM_11-30-2009_10-25-45
1201979047	925667	1	axc2	11/30/2009 10:54:14	OM_11-30-2009_10-25-45
1201979050	925667	1	axc2	11/30/2009 10:55:08	OM_11-30-2009_10-25-45
1201979053	925667	1	axc2	11/30/2009 10:56:00	OM_11-30-2009_10-25-45
241537002	925667	1	axc2	11/30/2009 10:56:53	OM_11-30-2009_10-25-45
241542013	925667	1	axc2	11/30/2009 10:57:46	OM_11-30-2009_10-25-45
241563001	925667	1	axc2	11/30/2009 10:58:39	OM_11-30-2009_10-25-45
1201979046	925667	1	axc2	11/30/2009 10:59:32	OM_11-30-2009_10-25-45
1201979049	925667	1	axc2	11/30/2009 11:00:24	OM_11-30-2009_10-25-45
1201979052	925667	1	axc2	11/30/2009 11:01:16	OM_11-30-2009_10-25-45
241590001	925667	1	axc2	11/30/2009 11:02:11	OM_11-30-2009_10-25-45
CCV		1	axc2	11/30/2009 11:03:02	OM_11-30-2009_10-25-45
CCB		1	axc2	11/30/2009 11:04:53	OM_11-30-2009_10-25-45
241600002	925667	1	axc2	11/30/2009 11:06:44	OM_11-30-2009_10-25-45
241601002	925667	1	axc2	11/30/2009 11:07:37	OM_11-30-2009_10-25-45
241601004	925667	1	axc2	11/30/2009 11:08:32	OM_11-30-2009_10-25-45
241612001	925667	1	axc2	11/30/2009 11:09:26	OM_11-30-2009_10-25-45
241612002	925667	1	axc2	11/30/2009 11:10:19	OM_11-30-2009_10-25-45
241614001	925667	1	axc2	11/30/2009 11:11:12	OM_11-30-2009_10-25-45
241614002	925667	1	axc2	11/30/2009 11:12:06	OM_11-30-2009_10-25-45
241614003	925667	1	axc2	11/30/2009 11:12:59	OM_11-30-2009_10-25-45
241614004	925667	1	axc2	11/30/2009 11:13:52	OM_11-30-2009_10-25-45
CCV		1	axc2	11/30/2009 11:14:44	OM_11-30-2009_10-25-45
CCB		1	axc2	11/30/2009 11:16:35	OM_11-30-2009_10-25-45

Author: axc2 Date : 11/30/2009

Original Run Filename: OM_11-30-2009_10-25-45.OMN created 11/30/2009 10:25:45
Original Run Author's Signature: [axc2]
Current Run Filename: OM_11-30-2009_10-25-45.OMN last modified 11/30/2009 11:17:40
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091130-01	1	S1	200	6.80	11/30/2009@10:29:03			200 ppb
WCN091130-02	1	S2	150	5.13	11/30/2009@10:29:55			150 ppb
WCN091130-03	1	S3	100	3.46	11/30/2009@10:30:48			100 ppb
WCN091130-04	1	S4	50.0	1.80	11/30/2009@10:31:41			50 ppb
WCN091130-05	1	S5	10.0	0.512	11/30/2009@10:32:34			10 ppb
WCN091130-06	1	S6	5.00	0.250	11/30/2009@10:33:28			CRDL 5.0 ppb
WCN091130-08	1	S7	0.00	0.0367	11/30/2009@10:34:22			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99987 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091130-07	1	S8	153	5.24	11/30/2009@10:36:13			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	2.1 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.1 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091130-08	1	S7	1.59	0.155	11/30/2009@10:38:03			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.59 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.59 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091130-06	1	S6	4.59	0.255	11/30/2009@10:39:53			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.59 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.59 > 2.50					
		Message	Pass					
		Action	None					
1201979044|925667|MB	1	57	-1.70	0.0443	11/30/2009@10:41:42			
1201979054||LCS	1	58	52.4	1.86	11/30/2009@10:42:34			
241449002	1	59	0.214	0.109	11/30/2009@10:43:27			
1201979045||DUP	1	60	-1.16	0.0626	11/30/2009@10:44:19			
1201979048||MS	1	61	109	3.75	11/30/2009@10:45:13			
1201979051||MSD	1	62	111	3.82	11/30/2009@10:46:07			
241472001	1	63	1.68	0.158	11/30/2009@10:47:01			
241511001	1	64	2.29	0.178	11/30/2009@10:47:55			
241511003	1	65	-1.93	0.0367	11/30/2009@10:48:49			
241537001	1	66	-2.05	0.0326	11/30/2009@10:49:42			
WCN091130-03	1	S3	106	3.67	11/30/2009@10:50:35			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.4 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	6.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091130-08	1	S7	0.988	0.135	11/30/2009@10:52:24			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.988 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.988 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979047||DUP	1	67	-1.68	0.0452	11/30/2009@10:54:14			
1201979050||MS	1	68	104	3.58	11/30/2009@10:55:08			
1201979053||MSD	1	69	112	3.86	11/30/2009@10:56:00			
241537002	1	70	0.955	0.134	11/30/2009@10:56:53			
241542013	1	71	-0.864	0.0725	11/30/2009@10:57:46			
241563001	1	72	-1.72	0.0437	11/30/2009@10:58:39			
1201979046||DUP	1	73	-2.05	0.0326	11/30/2009@10:59:32			
1201979049||MS	1	74	110	3.79	11/30/2009@11:00:24			
1201979052||MSD	1	75	115	3.98	11/30/2009@11:01:16			
241590001	1	76	1.21	0.142	11/30/2009@11:02:11			
WCN091130-03	1	S3	108	3.73	11/30/2009@11:03:02			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	8.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091130-08	1	S7	1.14	0.140	11/30/2009@11:04:53			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	1.14 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	1.14 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241600002	1	77	-1.50	0.0511	11/30/2009@11:06:44			
241601002	1	78	-2.05	0.0326	11/30/2009@11:07:37			
241601004	1	79	-2.20	0.0278	11/30/2009@11:08:32			
241612001	1	80	-1.65	0.0461	11/30/2009@11:09:26			
241612002	1	81	-1.68	0.0450	11/30/2009@11:10:19			
241614001	1	82	-2.21	0.0274	11/30/2009@11:11:12			
241614002	1	83	-2.01	0.0341	11/30/2009@11:12:06			
241614003	1	84	-1.95	0.0359	11/30/2009@11:12:59			
241614004	1	85	-3.03	-1.48e-4	11/30/2009@11:13:52			
WCN091130-03	1	S3	108	3.73	11/30/2009@11:14:44			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	8.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091130-08	1	S7	1.11	0.139	11/30/2009@11:16:35			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						

Author: axc2 Date : 11/30/2009

Result:	1.11 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.11 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_11-30-2009_10-25-45.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

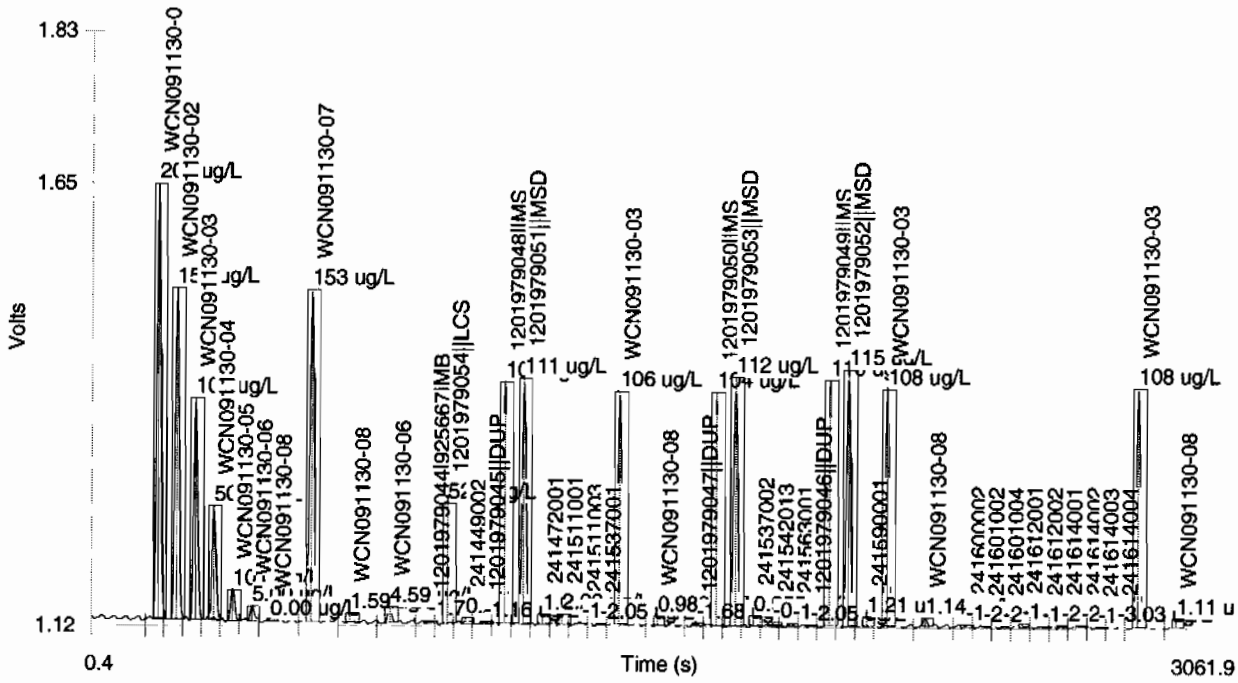

Author: axc2

Date : 11/30/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.80	0.527	0.1	11/30/2009	10:30:07
2	150	1	5.13	0.400	0.0	11/30/2009	10:30:59
3	100	1	3.46	0.267	-0.0	11/30/2009	10:31:51
4	50.0	1	1.80	0.136	-1.0	11/30/2009	10:32:44
5	10.0	1	0.512	0.0374	-17.0	11/30/2009	10:33:37
6	5.00	1	0.250	0.0178	7.3	11/30/2009	10:34:31
7	0.00	1	0.0367	7.85e-4		11/30/2009	10:35:25

Figure 1: TCYANIDE

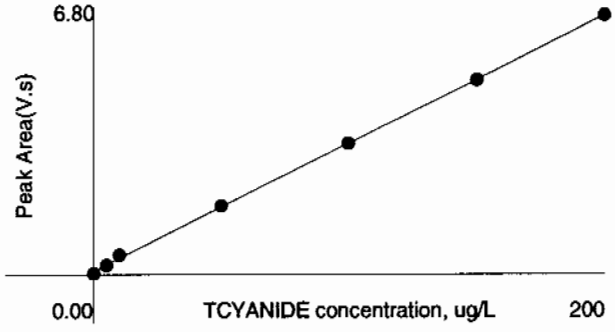

Area = 0.0335 * Conc + 0.102
Conc = 29.8 * Area - 3.03
Correlation Coefficient (r) = 0.99987

No Weighting

Thursday, November 19, 2009

REQUEST NUMBER: 10-608

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-608

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	HASL-300:ISOU	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:6010B	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:6850	1	RE03-10-6904	W	11/18/2009	
		1	RE03-10-6905	W	11/18/2009	
		1	RE03-10-6906	W	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-608

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6850	1	RE03-10-6907	W	11/18/2009	
	SW-846:8015M_EXTRACTABLE	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8082	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8260B	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8270C	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	

Final Page of REQUEST NUMBER 10-608

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-608

REQUEST NUMBER: 10-608

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-10-6907	1	POLY	SW-846:6850	Ice	W
RE03-10-6906	1	POLY	SW-846:6850	Ice	W
RE03-10-6904	1	POLY	SW-846:6850	Ice	W
RE03-10-6905	1	POLY	SW-846:6850	Ice	W
RE03-10-6903	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6903	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6903	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6903	1	POLY	Metals +CLO4	Ice	S
RE03-10-6902	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6902	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6902	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6902	1	POLY	Metals +CLO4	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/19/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-6902 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1033	SUB-MEDIA:	SOIL	↓
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608291	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / ~~NA~~		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / ~~NA~~

BOREHOLE: YES / NO / ~~NA~~ BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals+CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13866

SAMPLE COMMENTS: Identified plant Roots in sample

LOCATION DESC: 03-15-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm Samples: MDA
Background screening: α = 16 dpm β = 1352

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) M Wack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Wack	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-6903 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1240	SUB-MEDIA:	SOIL	
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	03-608295	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13874

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-6904 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1052	SUB-MEDIA:	OTHER	
PRS ID:	03-015	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608292	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-EES-6	1 LITER POLY	Nitric Acid	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13869

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Vaut

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vaut (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-6905 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1225	SUB-MEDIA:	OTHER	
PRS ID:	03-015	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608294	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-EES-6	1 LITER POLY	Nitric Acid	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-18873

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-6906 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1052	SUB-MEDIA:	OTHER	
PRS ID:	03-015	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608292	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-EES-6	1 LITER POLY	Nitric Acid	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13869

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** M. Vauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vauck (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-10-6907 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1225	SUB-MEDIA:	OTHER	
PRS ID:	03-015	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608294	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-EES-6	1 LITER POLY	Nitric Acid	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-13873

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** J. Josh

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-608 VALIDATION DATE: 02/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV and/or CCV %Ds were >20% for acetone, 2-butanone and 2-hexanone. The associated sample results were NDs and, thus, were qualified UJ,V7c.

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/02/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	927001	Inst:	VOA4.I	Dilution:	1
Run Date:	11/26/2009 00:58	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/25/2009 21:33	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4m311.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17	
74-87-3	Chloromethane	U	1.17	ug/kg	0.352	1.17	
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.352	1.17	
74-83-9	Bromomethane	U	1.17	ug/kg	0.352	1.17	
75-00-3	Chloroethane	U	1.17	ug/kg	0.352	1.17	
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.352	1.17	
67-64-1	Acetone	U	5.86	ug/kg	1.94	5.86	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.352	1.17	
74-88-4	Iodomethane	U	5.86	ug/kg	1.87	5.86	
75-09-2	Methylene chloride	U	5.86	ug/kg	2.34	5.86	
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.46	5.86	
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17	
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.352	1.17	
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17	
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17	
67-66-3	Chloroform	U	1.17	ug/kg	0.352	1.17	
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17	
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.352	1.17	
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.352	1.17	
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.352	1.17	
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.352	1.17	
71-43-2	Benzene	U	1.17	ug/kg	0.352	1.17	
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17	
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17	
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.352	1.17	
74-95-3	Dibromomethane	U	1.17	ug/kg	0.352	1.17	
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.46	5.86	
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17	
108-88-3	Toluene	U	1.17	ug/kg	0.352	1.17	
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17	
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.352	1.17	
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.352	1.17	
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.352	1.17	
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.352	1.17	
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.352	1.17	
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.352	1.17	

P.S. 2/2/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6902**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:58**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:33**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m311.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.352	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.352	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.352	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.352	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.352	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.352	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.352	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.352	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.352	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.352	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.352	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.352	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.352	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.352	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.86	ug/kg	1.87	5.86
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 2/2/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	927001	Inst:	VOA4.I	Dilution:	1
Run Date:	11/26/2009 00:31	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	11/25/2009 21:30	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4m310.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07	
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07	
67-64-1	Acetone	U	5.35	ug/kg	1.77	5.35	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07	
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35	
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35	
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07	
78-93-3	2-Butanone	U	5.35	ug/kg	1.60	5.35	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07	
108-88-3	Toluene	J	0.766	ug/kg	0.321	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07	
591-78-6	2-Hexanone	U	5.35	ug/kg	1.60	5.35	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6903**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m310.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	J	0.332	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 2/2/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-608 VALIDATION DATE: 02/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV %Ds were >20% for hexachlorocyclopentadiene and 2,4-dinitrophenol. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The LCS %R was > the laboratory UAL for 4-nitroaniline. The associated sample results were NDs and, thus, were not qualified.
3. The MS/MSD RPD for hexachlorocyclopentadiene did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for SVOCs, no sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/02/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☒	☐	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6902**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926641**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:40**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 10:20**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510318.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.1	390	
108-95-2	Phenol	U	390	ug/kg	78.1	390	
95-57-8	2-Chlorophenol	U	390	ug/kg	78.1	390	
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.1	390	
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.1	390	
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.1	390	
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0	
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390	
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390	
87-86-5	Pentachlorophenol	U	390	ug/kg	97.6	390	
129-00-0	Pyrene		152	ug/kg	11.7	39.0	
110-86-1	Pyridine	U	390	ug/kg	78.1	390	
62-53-3	Aniline	U	390	ug/kg	117	390	
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.1	390	
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.1	390	
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390	
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.1	390	
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.1	390	
95-48-7	o-Cresol	U	390	ug/kg	78.1	390	
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390	
67-72-1	Hexachloroethane	U	390	ug/kg	78.1	390	
98-95-3	Nitrobenzene	U	390	ug/kg	78.1	390	
78-59-1	Isophorone	U	390	ug/kg	78.1	390	
88-75-5	2-Nitrophenol	U	390	ug/kg	78.1	390	
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390	
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.1	390	
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.1	390	
65-85-0	Benzoic acid	U	781	ug/kg	195	781	
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0	
106-47-8	4-Chloroaniline	U	390	ug/kg	78.1	390	
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.1	390	
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.81	39.0	
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.1	390	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.1	390	
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.1	390	
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	390	ug/kg	78.1	390	
99-09-2	3-Nitroaniline	U	390	ug/kg	78.1	390	

P.S. 2/2/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:40	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	390	ug/kg	78.1	390	
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390	
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0	
51-28-5	2,4-Dinitrophenol	U	781	ug/kg	148	781	UJ,SV7c
132-64-9	Dibenzofuran	U	390	ug/kg	78.1	390	
84-66-2	Diethylphthalate	U	390	ug/kg	78.1	390	
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0	
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.1	390	
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.1	390	
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	390	ug/kg	78.1	390	
122-66-7	Azobenzene	U	390	ug/kg	78.1	390	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.1	390	
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.1	390	
85-01-8	Phenanthrene		96.1	ug/kg	11.7	39.0	
120-12-7	Anthracene	J	19.8	ug/kg	7.81	39.0	
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.1	390	
206-44-0	Fluoranthene		174	ug/kg	11.7	39.0	
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.1	390	
56-55-3	Benzo(a)anthracene		79.6	ug/kg	11.7	39.0	
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390	
218-01-9	Chrysene		83.6	ug/kg	11.7	39.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.1	390	
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.1	390	
205-99-2	Benzo(b)fluoranthene		91.6	ug/kg	11.7	39.0	
207-08-9	Benzo(k)fluoranthene		44.9	ug/kg	11.7	39.0	
50-32-8	Benzo(a)pyrene		73.8	ug/kg	11.7	39.0	
193-39-5	Indeno(1,2,3-cd)pyrene		84.5	ug/kg	11.7	39.0	
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0	
191-24-2	Benzo(ghi)perylene		56.5	ug/kg	11.7	39.0	
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.1	390	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	388	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	9.04	185	ug/kg	99	NJ

P.S. 2/2/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:40	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5085-72-3	D:A-Friedooleanan-3-ol, (3.alpha.)-	10.05	444	ug/kg	86	NJ
300574-36-1	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	10.13	517	ug/kg	90	NJ
	Unknown	10.43	221	ug/kg		J
	Unknown	10.54	169	ug/kg		J
	Unknown	10.95	224	ug/kg		J
112-95-8	Eicosane	11.84	260	ug/kg	96	NJ
	Unknown	12.1	199	ug/kg		J
	Unknown	12.88	195	ug/kg		J
	Unknown	13.2	160	ug/kg		J
83-46-5	.beta.-Sitosterol	13.92	231	ug/kg	96	NJ

P.S. 2/2/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:17	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.1	355	
108-95-2	Phenol	U	355	ug/kg	71.1	355	
95-57-8	2-Chlorophenol	U	355	ug/kg	71.1	355	
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.1	355	
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.1	355	
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.1	355	
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5	
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355	
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355	
87-86-5	Pentachlorophenol	U	355	ug/kg	88.8	355	
129-00-0	Pyrene	J	23.0	ug/kg	10.7	35.5	
110-86-1	Pyridine	U	355	ug/kg	71.1	355	
62-53-3	Aniline	U	355	ug/kg	107	355	
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.1	355	
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.1	355	
100-51-6	Benzyl alcohol	U	355	ug/kg	107	355	
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.1	355	
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.1	355	
95-48-7	o-Cresol	U	355	ug/kg	71.1	355	
65794-96-9	m,p-Cresols	U	355	ug/kg	107	355	
67-72-1	Hexachloroethane	U	355	ug/kg	71.1	355	
98-95-3	Nitrobenzene	U	355	ug/kg	71.1	355	
78-59-1	Isophorone	U	355	ug/kg	71.1	355	
88-75-5	2-Nitrophenol	U	355	ug/kg	71.1	355	
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355	
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.1	355	
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.1	355	
65-85-0	Benzoic acid	U	711	ug/kg	178	711	
91-20-3	Naphthalene	U	35.5	ug/kg	10.7	35.5	
106-47-8	4-Chloroaniline	U	355	ug/kg	71.1	355	
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.1	355	
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.11	35.5	
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.1	355	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.1	355	
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.1	355	
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	355	ug/kg	71.1	355	
99-09-2	3-Nitroaniline	U	355	ug/kg	71.1	355	

P.S. 2/2/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:17	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	355	ug/kg	71.1	355	
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355	
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.7	35.5	
51-28-5	2,4-Dinitrophenol	U	711	ug/kg	135	711	UJ,SV7c
132-64-9	Dibenzofuran	U	355	ug/kg	71.1	355	
84-66-2	Diethylphthalate	U	355	ug/kg	71.1	355	
86-73-7	Fluorene	U	35.5	ug/kg	10.7	35.5	
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.1	355	
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.1	355	
100-01-6	4-Nitroaniline	U	355	ug/kg	107	355	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	355	ug/kg	71.1	355	
122-66-7	Azobenzene	U	355	ug/kg	71.1	355	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.1	355	
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.1	355	
85-01-8	Phenanthrene	J	12.3	ug/kg	10.7	35.5	
120-12-7	Anthracene	U	35.5	ug/kg	7.11	35.5	
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.1	355	
206-44-0	Fluoranthene	J	26.5	ug/kg	10.7	35.5	
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.1	355	
56-55-3	Benzo(a)anthracene	J	15.1	ug/kg	10.7	35.5	
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	107	355	
218-01-9	Chrysene	J	12.8	ug/kg	10.7	35.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.1	355	
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.1	355	
205-99-2	Benzo(b)fluoranthene	J	15.7	ug/kg	10.7	35.5	
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.7	35.5	
50-32-8	Benzo(a)pyrene	J	12.6	ug/kg	10.7	35.5	
193-39-5	Indeno(1,2,3-cd)pyrene		47.7	ug/kg	10.7	35.5	
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.7	35.5	
191-24-2	Benzo(ghi)perylene	J	12.5	ug/kg	10.7	35.5	
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.1	355	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	370	ug/kg		JA
	Unknown	7.31	172	ug/kg		J

P.S. 2/2/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:17	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
112-95-8	Eicosane	11.84	173	ug/kg	97	NJ
	Unknown	13.35	183	ug/kg		J
83-46-5	.beta.-Sitosterol	13.91	275	ug/kg	96	NJ

P.S. 2/2/10

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-608 VALIDATION DATE: 02/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☒ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the parent samples for both the solid QC analyses were from another LANL RN. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/02/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☒	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R. PERC7f
☐	☒	☐	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
☐	☒	☐	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
☐	☒	☐	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
☐	☒	☐	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
☐	☒	☐	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
☐	☒	☐	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
☐	☒	☐	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
☐	☒	☐	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
☐	☒	☐	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
☐	☒	☐	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
☐	☒	☐	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 **LC/MS/MS Perchlorate Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
☐	☐	☒	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
☐	☐	☒	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
☐	☐	☒	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
☐	☐	☒	31. The Interference Check Sample was not within ±20% of the known value.	UJ, PERC16a	J, PERC16a
☐	☐	☒	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
☐	☒	☐	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6907

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558001

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 14:55	per1122025a
	Perchlorate Isotope Ratio						1	22-NOV-09 14:55	per1122025a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 14:55	per1122025a
	Perchlorate-O(18)			0.467	ug/L		1	22-NOV-09 14:55	per1122025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

P.S. 2/2/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6906

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558002

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:14	per1122028a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:14	per1122028a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:14	per1122028a
	Perchlorate-O(18)			0.472	ug/L		1	22-NOV-09 15:14	per1122028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

P.S. 2/2/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6904

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558003

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:21	per1122029a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:21	per1122029a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:21	per1122029a
	Perchlorate-O(18)			0.475	ug/L		1	22-NOV-09 15:21	per1122029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6905

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558004

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:27	per1122030a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:27	per1122030a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:27	per1122030a
	Perchlorate-O(18)			0.476	ug/L		1	22-NOV-09 15:27	per1122030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

P.S. 2/2/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6903

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 241559001

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	0.535	ug/kg	U	1	02-DEC-09 17:29	per1202037a
	Perchlorate Isotope Ratio						1	02-DEC-09 17:29	per1202037a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	02-DEC-09 17:29	per1202037a
	Perchlorate-O(18)			5.46	ug/kg		1	02-DEC-09 17:29	per1202037a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6902

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 241559002

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.34	0.824	ug/kg	J	1	02-DEC-09 17:37	per1202038a
	Perchlorate Isotope Ratio			2.92			1	02-DEC-09 17:37	per1202038a
14797-73-0	Perchlorate-101	.586	2.34	0.844	ug/kg	J	1	02-DEC-09 17:37	per1202038a
	Perchlorate-O(18)			6.05	ug/kg		1	02-DEC-09 17:37	per1202038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-608 VALIDATION DATE: 02/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL parent sample from another RN. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/02/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 14:35	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		7.50	mg/kg	2.31	7.11

P.S. 2/2/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 03:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	030f3001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		13.9	mg/kg	2.54	7.80

P.S. 2/2/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-608 VALIDATION DATE: 02/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL parent sample from another RN. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/02/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6902	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 16:35	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	059f5901.d	**Column:**	1 CLP1	**Level:**	LOW
	059b5901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.90	ug/kg	1.30	3.90	1
11104-28-2	Aroclor-1221	U	3.90	ug/kg	1.30	3.90	1
11141-16-5	Aroclor-1232	U	3.90	ug/kg	1.30	3.90	1
53469-21-9	Aroclor-1242	U	3.90	ug/kg	1.30	3.90	1
12672-29-6	Aroclor-1248	U	3.90	ug/kg	1.30	3.90	1
11097-69-1	Aroclor-1254	P	16.1	ug/kg	1.30	3.90	1
11096-82-5	Aroclor-1260		17.9	ug/kg	1.30	3.90	2

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6903	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 16:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	058f5801.d	**Column:**	1 CLP1	**Level:**	LOW
	058b5801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260		4.10	ug/kg	1.18	3.55	2

P.S. 2/2/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-608 VALIDATION DATE: 02/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the MB, Sb, Mn, K and Fe were detected. The Sb result for sample RE03-10-6902 was a detect ≤5X the MB concentration and, thus, was qualified U,I4. The remaining Sb sample result was an ND and, thus, was not qualified. All other associated sample results were detects >50X the MB concentration and, thus, were not qualified, based on professional judgment.
2. In the CCBs, Sb, K and Cu were detected. The Sb result for sample -6902 was a detect ≤5X the greatest associated blank concentration and, thus, was qualified U,I4b. The remaining Sb sample result was an ND and, thus, was not qualified. All other associated sample results were detects >5X the greatest associated blank concentrations and, thus, were not qualified.
3. The MS %R was < the laboratory LAL but ≥10% for Se. The associated sample results were NDs and, thus, were qualified UJ,I6a. The MS %Rs were > the laboratory UAL for Hg, Ba, Mg, K and Li. The associated sample results were detects and, thus, were qualified J+,I6b. Also, the MS %Rs were > the laboratory UAL for Al, Fe, Mn and Ti. However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.
4. It should be noted the matrix QC analyses for Hg were performed on LANL samples from other RNs. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 2/2/10

DATA VALIDATION COVER SHEET

5118-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/02/10

Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

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Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-608-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241559001 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-6903 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8870000	ug/Kg		6940	20400	20400	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-36-0	Antimony	1020	ug/Kg	U	337	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-38-2	Arsenic	3	mg/kg	*	0.198	0.988	0.988	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-39-3	Barium J+,I6b	113000	ug/Kg	N	102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-41-7	Beryllium	0.828	mg/kg	*	0.0198	0.0988	0.0988	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-42-8	Boron	2340	ug/Kg	J	1020	5100	5100	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-43-9	Cadmium	510	ug/Kg	U	102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-70-2	Calcium	1700000	ug/Kg	N	8160	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-47-3	Chromium	9560	ug/Kg		153	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-48-4	Cobalt	7390	ug/Kg	*	153	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-50-8	Copper	6640	ug/Kg		306	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-89-6	Iron	13300000	ug/Kg		8160	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-92-1	Lead	16100	ug/Kg		255	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-93-2	Lithium J+,I6b	10.5	mg/kg	N	0.395	1.98	1.98	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7439-95-4	Magnesium J+,I6b	1770000	ug/Kg	N	8670	30600	30600	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-96-5	Manganese	456000	ug/Kg	*	204	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-97-6	Mercury J+,I6b	21.2	ug/kg		3.81	11.2	11.2	1	AV	JXL1	12/07/09 12:47	120709S1-5	925634
7440-02-0	Nickel	7.51	mg/kg		0.0988	0.395	0.395	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-09-7	Potassium J+,I6b	1110000	ug/Kg	N	6530	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7782-49-2	Selenium UJ,I6a	0.988	mg/kg	UN	0.494	0.988	0.988	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-21-3	Silicon	996000	ug/Kg	N	1580	10600	10600	1	P	HSC	12/15/09 06:52	121509-1	932716
7440-22-4	Silver	295	ug/Kg	J	102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-23-5	Sodium	535000	ug/Kg		7140	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-28-0	Thallium	0.246	mg/kg		0.0593	0.198	0.198	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-32-6	Titanium	395000	ug/Kg		102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-61-1	Uranium	1.23	mg/kg		0.013	0.0395	0.0395	2	MS	BAJ	11/29/09 07:03	091128-3	925492
7440-62-2	Vanadium	29700	ug/Kg		102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-66-6	Zinc	25300	ug/Kg		337	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925490	925489	SW846 3050B	0.524	g	50	mL	11/24/09	BXA1
925492	925491	SW846 3050B	0.541	g	50	mL	11/24/09	BXA1
925634	925633	SW846 7471A Prep	0.573	g	30	mL	12/04/09	TXB3

P.S. 2/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-608-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241559002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-6902 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8470000	ug/Kg		7830	23000	23000	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-36-0	Antimony U,I4	996	ug/Kg	J	380	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-38-2	Arsenic	2.01	mg/kg	*	0.215	1.08	1.08	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-39-3	Barium J+,I6b	295000	ug/Kg	N	115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-41-7	Beryllium	0.664	mg/kg	*	0.0215	0.108	0.108	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-42-8	Boron	2620	ug/Kg	J	1150	5750	5750	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-43-9	Cadmium	575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-70-2	Calcium	4170000	ug/Kg	N	9210	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-47-3	Chromium	7720	ug/Kg		173	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-48-4	Cobalt	3080	ug/Kg	*	173	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-50-8	Copper	6030	ug/Kg		345	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-89-6	Iron	14800000	ug/Kg		9210	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-92-1	Lead	26000	ug/Kg		288	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-93-2	Lithium J+,I6b	15.9	mg/kg	N	0.431	2.15	2.15	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7439-95-4	Magnesium J+,I6b	1750000	ug/Kg	N	9780	34500	34500	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-96-5	Manganese	244000	ug/Kg	*	230	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-97-6	Mercury J+,I6b	20.1	ug/kg		4.78	14.1	14.1	1	AV	JXL1	12/07/09 12:49	120709S1-5	925634
7440-02-0	Nickel	5.84	mg/kg		0.108	0.431	0.431	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-09-7	Potassium J+,I6b	1060000	ug/Kg	N	7370	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7782-49-2	Selenium UJ,I6a	1.08	mg/kg	UN	0.538	1.08	1.08	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-21-3	Silicon	1150000	ug/Kg	N	1690	11200	11200	1	P	HSC	12/15/09 07:09	121509-1	932716
7440-22-4	Silver	298	ug/Kg	J	115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-23-5	Sodium	449000	ug/Kg		8060	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-28-0	Thallium	0.298	mg/kg		0.0646	0.215	0.215	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-32-6	Titanium	390000	ug/Kg		115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-61-1	Uranium	0.718	mg/kg		0.0142	0.0431	0.0431	2	MS	BAJ	11/29/09 07:11	091128-3	925492
7440-62-2	Vanadium	18600	ug/Kg		115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-66-6	Zinc	51900	ug/Kg		380	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925490	925489	SW846 3050B	0.509	g	50	mL	11/24/09	BXA1
925492	925491	SW846 3050B	0.544	g	50	mL	11/24/09	BXA1
925634	925633	SW846 7471A Prep	0.5	g	30	mL	12/04/09	TXB3

P.S. 2/2/10

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-608 VALIDATION DATE: 02/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☒ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that all associated QC analyses were performed on LANL samples from other RNs. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 2/2/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/02/10

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☐	☒	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☐	☒	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☒	☐	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 **Rad Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☒	☐	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☒	☐	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☐	☒	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☐	☒	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID:	RE03-10-6903	Project:	LANL01004
Sample ID:	241559001	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.47%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00182	0.0215	+/-0.00189	0.050	pCi/g		MXE1	12/11/09	1133	928304	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.0154	0.0312	+/-0.0102	0.050	pCi/g		MXE1	12/11/09	1157	928305	4
Plutonium-239/240	U	0.00767	0.0351	+/-0.00608	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.929	0.113	+/-0.0876	0.100	pCi/g		MXE1	12/14/09	1208	931796	5
Uranium-235/236	U	0.0646	0.0689	+/-0.0178	0.100	pCi/g						
Uranium-238		1.07	0.0626	+/-0.0979	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Am-05-RC Modified
4	DOE EML HASL-300, Pu-11-RC Modified
5	DOE EML HASL-300, U-02-RC Modified
6	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	90.6	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	58.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	96.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound

P.S. 2/2/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID:	RE03-10-6902	Project:	LANL01004
Sample ID:	241559002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	14.7%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.000991	0.0278	+/-0.00141	0.050	pCi/g		MXE1	12/10/09	1239	928304	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-2.84E-10	0.0194	+/-0.00239	0.050	pCi/g		MXE1	12/11/09	1157	928305	3
Plutonium-239/240	U	0.00835	0.0218	+/-0.00432	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.610	0.0755	+/-0.0569	0.100	pCi/g		MXE1	12/14/09	1220	931796	4
Uranium-235/236		0.0615	0.0459	+/-0.0144	0.100	pCi/g						
Uranium-238		0.629	0.0417	+/-0.0584	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, U-02-RC Modified
5	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	78.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.6	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	98.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported

P.S. 2/2/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-608

REQUEST NUMBER: 10-608

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241558, 241559 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-10-6907	1	POLY	SW-846:6850	Ice	W
RE03-10-6906	1	POLY	SW-846:6850	Ice	W
RE03-10-6904	1	POLY	SW-846:6850	Ice	W
RE03-10-6905	1	POLY	SW-846:6850	Ice	W
RE03-10-6903	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6903	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6903	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6903	1	POLY	Metals+CLO4	Ice	S
RE03-10-6902	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6902	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6902	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6902	1	POLY	Metals+CLO4	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]			Patricia Dover-Dent	P. Dover-Dent	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

Thursday, November 19, 2009

REQUEST NUMBER: 10-608

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-608

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	HASL-300:ISOU	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:6010B	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:6850	1	RE03-10-6904	W	11/18/2009	
		1	RE03-10-6905	W	11/18/2009	
		1	RE03-10-6906	W	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-608

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6850	1	RE03-10-6907	W	11/18/2009	
	SW-846:8015M_EXTRACTABLE	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8082	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8260B	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8270C	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	

Final Page of REQUEST NUMBER 10-608

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241558 241559
SDG: 10-608

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-608
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241558 and 241559
SDG: 10-608

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LC/MS/MS Perchlorate Analysis **423**
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Standards Data 459
Quality Control 476
Miscellaneous Data 481

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Quality Control Summary 496

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Quality Control Data 539
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Quality Control Data 1297
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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241558 and 241559
SDG # : 10-608

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. The containers for radiochemistry were received at 15C temperature. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241558001	RE03-10-6907
241558002	RE03-10-6906
241558003	RE03-10-6904
241558004	RE03-10-6905
241559001	RE03-10-6903
241559002	RE03-10-6902

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile, GC/MS Volatile, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis
Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-608

REQUEST NUMBER: 10-608

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241558, 241559 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-10-6907	1	POLY	SW-846:6850	Ice	W
RE03-10-6906	1	POLY	SW-846:6850	Ice	W
RE03-10-6904	1	POLY	SW-846:6850	Ice	W
RE03-10-6905	1	POLY	SW-846:6850	Ice	W
RE03-10-6903	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6903	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6903	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6903	1	POLY	Metals+CLO4	Ice	S
RE03-10-6902	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-6902	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-6902	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-10-6902	1	POLY	Metals+CLO4	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	[illegible]	[illegible]	Patricia Dover-Dent	P. Dover-Dent	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-608

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-608

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	HASL-300:ISOU	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:6010B	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:6850	1	RE03-10-6904	W	11/18/2009	
		1	RE03-10-6905	W	11/18/2009	
		1	RE03-10-6906	W	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-608

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6850	1	RE03-10-6907	W	11/18/2009	
	SW-846:8015M_EXTRACTABLE	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8082	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8260B	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	
	SW-846:8270C	1	RE03-10-6902	S	11/18/2009	
		1	RE03-10-6903	S	11/18/2009	

Final Page of REQUEST NUMBER 10-608

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-608**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **1-5,15**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time on Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 4C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PMA) review: Initials _____ Date 11/23/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1C

FedEx Express

2 of 2
MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 08-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
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(843)556-8171
REF: 6B010AMR2A054196D0

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2 of 2
MPS# 0263 7209 7848 9855
Mstr# 7209 7848 9844 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 08-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2C

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1 of 3
TRK# 0201 7209 7848 9796
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
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LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMR1A015AGWL0

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2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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(843)556-8171
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TRK# 0201 7209 7848 9844
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
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TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AWEPR1315W200

2c

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RADIOACTIVE SAMPLES

TRK# 0201 7209 7848 9877

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

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1 of 2
TRK# 0201 7209 7848 9822
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

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SC-US
CHS

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TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

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TRK# 0201 7209 7848 9752

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

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3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMR3A056AB800

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TRK# 0201 7209 7848 9866

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

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CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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(843)556-8171
REF: 6B010AMR1A015AGWK0

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3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

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SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-608-1

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	927001
Prep Batch Number:	926999

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201981949	Method Blank (MB)
1201981952	Laboratory Control Sample (LCS)
1201981953	Laboratory Control Sample (LCS)
1201981950	241559001(RE03-10-6903) Post Spike (PS)
1201981951	241559001(RE03-10-6903) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241559001 (RE03-10-6903) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-608-1 GEL Work Order: 241559

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 12 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-608-1 VOA

This roadmap was analyzed by acj on 12-03-2009, 17:59.
This roadmap was reviewed by sar00518 on 12-07-2009, 20:49.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/112509v4/4m310.d	241559001	RE03-10-6903	26-NOV-2009	00:31	10-608-1.sub	1	927001	
☐	N	/chem/VOA4.i/112509v4/4m311.d	241559002	RE03-10-6902	26-NOV-2009	00:58	10-608-1.sub	1	927001	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/112509v4/4m303ll.d	1201981952	LCS	lcs	25-NOV-2009	21:20	all.sub	1	927001	
☐	N	/chem/VOA4.i/112509v4/4m305sl.d	1201981953	LCS	lcs	25-NOV-2009	22:15	all.sub	1	927001	
☐	N	/chem/VOA4.i/112509v4/4m307bl.d	1201981949	BLANK	mb	25-NOV-2009	23:10	all.sub	1	927001	
☐	N	/chem/VOA4.i/112509v4/4m317.d	1201981950	RE03-10-6903MS	ms	26-NOV-2009	03:41	10-608-1.sub	1	927001	
☐	N	/chem/VOA4.i/112509v4/4m318.d	1201981951	RE03-10-6903MSD	msd	26-NOV-2009	04:09	10-608-1.sub	1	927001	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6902	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927001	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/26/2009 00:58	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 21:33	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m311.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.352	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.352	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.352	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.352	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.352	1.17
67-64-1	Acetone	U	5.86	ug/kg	1.94	5.86
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
74-88-4	Iodomethane	U	5.86	ug/kg	1.87	5.86
75-09-2	Methylene chloride	U	5.86	ug/kg	2.34	5.86
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.46	5.86
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.352	1.17
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.352	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.352	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.352	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.352	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.352	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.352	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.352	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.352	1.17
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.46	5.86
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.352	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.352	1.17
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.352	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.352	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.352	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.352	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.352	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6902**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:58**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:33**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m311.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.352	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.352	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.352	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.352	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.352	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.352	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.352	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.352	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.352	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.352	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.352	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.352	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.352	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.352	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.86	ug/kg	1.87	5.86
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6903**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m310.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.77	5.35
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.60	5.35
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	J	0.766	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.60	5.35
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6903	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927001	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/26/2009 00:31	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 21:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m310.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	J	0.332	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-608-1

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201981952	LCS for batch 926999	103	92	95
1201981953	LCS for batch 926999	97	95	97
1201981949	MB for batch 926999	115	112	121
241559001	RE03-10-6903	99	106	121
241559002	RE03-10-6902	90	96	111
1201981950	RE03-10-6903PS	110	108	131
1201981951	RE03-10-6903PSD	109	106	126

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6903PS
Lab Sample ID: 1201981950
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 6.5
Analysis Date: 11/26/2009 03:41
Prep Batch ID: 926999
Batch ID: 927001
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	38.7	77	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	38.7	77	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	42.7	85	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	37.2	74	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	43.4	87	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	42.1	84	51-151
67-64-1	PS	Acetone	250	0.00	U	111	44	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	44.8	90	61-125
74-88-4	PS	Iodomethane	250	0.00	U	187	75	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	44.5	89	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	220	88	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	45.1	90	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	47.3	95	62-125
78-93-3	PS	2-Butanone	250	0.00	U	141	57	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	45.5	91	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	46.0	92	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	44.9	90	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	43.4	87	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	47.3	95	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	46.4	93	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	47.4	95	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	44.4	89	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6903PS
Lab Sample ID: 1201981950
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 6.5
Analysis Date: 11/26/2009 03:41
Prep Batch ID: 926999
Batch ID: 927001

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	44.1	88	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	44.4	89	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	44.6	89	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	44.2	88	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	43.6	87	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	202	81	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	37.0	74	54-133
108-88-3	PS	Toluene	50.0	0.717	J	46.3	91	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	39.6	79	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	45.6	91	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	118	47	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	45.3	91	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	44.1	88	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	45.5	91	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	43.1	86	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	44.6	89	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	45.1	90	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	88.8	89	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	44.8	90	52-127
100-42-5	PS	Styrene	50.0	0.310	J	41.6	83	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	54.6	109	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	56.8	114	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6903PS
Lab Sample ID: 1201981950
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 6.5
Analysis Date: 11/26/2009 03:41
Dilution: 1
Prep Batch ID: 926999
Batch ID: 927001

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	57.5	115	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	52.6	105	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	57.8	116	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	55.8	112	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	60.4	121	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	56.8	114	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	54.0	108	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	57.0	114	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	53.7	107	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	55.2	110	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	50.2	100	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	46.9	94	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	45.6	91	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	49.7	99	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	45.5	91	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	45.8	92	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	43.6	87	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6903PSD
Lab Sample ID: 1201981951
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 6.5
Analysis Date: 11/26/2009 04:09
Dilution: 1
Prep Batch ID: 926999
Batch ID: 927001

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	40.5	81	25-149	5	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	40.2	80	39-140	4	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	44.6	89	47-129	4	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	38.7	77	31-135	4	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	44.8	90	53-128	3	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	47.0	94	51-151	11	0-25
67-64-1	PSD	Acetone	250	0.00	U	107	43	21-153	3	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	47.4	95	61-125	6	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	194	78	53-142	4	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	46.7	93	59-136	5	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	227	91	46-129	3	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	47.6	95	56-126	5	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	49.2	98	62-125	4	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	142	57	26-152	1	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	47.0	94	60-130	3	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	47.7	95	55-135	3	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	46.7	93	60-127	4	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	46.2	92	61-131	6	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	49.7	99	59-131	5	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	48.3	97	57-128	4	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	50.0	100	58-136	5	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	45.9	92	58-126	3	0-25

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6903PSD
Lab Sample ID: 1201981951
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 6.5
Analysis Date: 11/26/2009 04:09
Dilution: 1
Prep Batch ID: 926999
Batch ID: 927001

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	45.2	90	56-123	2	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	45.6	91	51-137	3	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	46.6	93	60-126	4	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	46.5	93	55-138	5	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	44.7	89	60-132	2	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	204	82	58-136	1	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	38.2	76	54-133	3	0-25
108-88-3	PSD	Toluene	50.0	0.717	J	46.8	92	52-128	1	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	40.5	81	53-137	2	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	46.1	92	59-130	1	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	118	47	31-148	0	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	47.0	94	57-127	4	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	44.9	90	51-128	2	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	46.8	94	59-139	3	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	44.4	89	57-133	3	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	44.5	89	53-122	0	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	44.6	89	51-125	1	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	88.8	89	50-126	0	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	44.7	89	52-127	0	0-25
100-42-5	PSD	Styrene	50.0	0.310	J	41.1	82	49-135	1	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	55.2	110	57-149	1	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	56.4	113	63-127	1	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6903PSD
Lab Sample ID: 1201981951
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 6.5
Analysis Date: 11/26/2009 04:09
Dilution: 1
Prep Batch ID: 926999
Batch ID: 927001

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	56.5	113	57-149	2	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	51.9	104	49-131	1	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	55.3	111	40-136	4	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	53.5	107	44-135	4	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	58.4	117	44-140	3	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	53.8	108	42-140	5	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	51.5	103	44-132	5	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	55.0	110	42-142	4	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	50.8	102	43-137	6	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	52.3	105	39-139	5	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	44.1	88	38-145	13	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	45.4	91	43-129	3	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	44.4	89	44-125	3	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	45.2	90	36-141	9	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	46.9	94	47-151	3	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	46.6	93	59-131	2	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	42.8	86	43-129	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 926999
Lab Sample ID: 1201981952
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 21:20
Dilution: 1
Prep Batch ID: 926999
Batch ID: 927001

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	44.1	88	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	43.3	87	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	47.5	95	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	46.2	92	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	47.2	94	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	50.8	102	67-151
67-64-1	LCS	Acetone	250	0.0	188	75	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	49.6	99	70-125
74-88-4	LCS	Iodomethane	250	0.0	239	95	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	46.2	92	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	254	101	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	52.1	104	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	51.2	102	75-120
78-93-3	LCS	2-Butanone	250	0.0	198	79	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	50.0	100	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	55.5	111	74-135
67-66-3	LCS	Chloroform	50.0	0.0	50.1	100	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	47.0	94	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	55.4	111	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	55.1	110	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	56.7	113	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	47.7	95	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 926999
Lab Sample ID: 1201981952
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 21:20
Dilution: 1
Prep Batch ID: 926999
Batch ID: 927001

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	49.2	98	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	52.1	104	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	49.1	98	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	49.6	99	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	47.0	94	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	222	89	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	49.8	100	80-125
108-88-3	LCS	Toluene	50.0	0.0	48.1	96	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	47.9	96	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	45.5	91	76-120
591-78-6	LCS	2-Hexanone	250	0.0	194	78	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	45.5	91	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	51.6	103	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	48.2	96	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	47.0	94	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	48.4	97	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	48.4	97	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	97.9	98	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	48.3	97	74-120
100-42-5	LCS	Styrene	50.0	0.0	48.1	96	76-125
75-25-2	LCS	Bromoform	50.0	0.0	47.5	95	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	45.2	90	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 926999
Lab Sample ID: 1201981952
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 21:20
Dilution: 1
Prep Batch ID: 926999
Batch ID: 927001

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	44.9	90	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	46.7	93	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	48.5	97	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	46.2	92	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	48.5	97	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	47.5	95	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	47.7	95	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	48.4	97	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	47.2	94	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	48.8	98	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	49.0	98	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	47.8	96	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	47.3	95	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	49.3	99	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	45.6	91	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	47.6	95	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	45.8	92	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 926999
Lab Sample ID: 1201981953
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/25/2009 22:15
Prep Batch ID: 926999
Batch ID: 927001
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	277	111	52-139

Method Blank Summary

SDG Number:	10-608-1	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926999	Instrument ID:	VOA4.I	Data File:	4m307bl.d
Lab Sample ID:	1201981949	Prep Date:	11/25/2009 20:00	Analyzed:	11/25/09 23:10
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926999	1201981952	4m303ll.d	11/25/09	2120
02	LCS for batch 926999	1201981953	4m305sl.d	11/25/09	2215
03	RE03-10-6903	241559001	4m310.d	11/26/09	0031
04	RE03-10-6902	241559002	4m311.d	11/26/09	0058
05	RE03-10-6903PS	1201981950	4m317.d	11/26/09	0341
06	RE03-10-6903PSD	1201981951	4m318.d	11/26/09	0409

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-608-1

Instrument ID: VOA4.I **Injection Date/Time:** 22-NOV-09 09:20

Column Description: DB-624 **Lab File ID** /112209v4/4l701.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	99.3
175	5.0 -9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W4VM091122-01	/112209v4/4l703.d	22-NOV-09 10:14
VSTD001	W4VM091122-02	/112209v4/4l704.d	22-NOV-09 10:41
VSTD002	W4VM091122-04	/112209v4/4l706.d	22-NOV-09 11:36
VSTD005	W4VM091122-05	/112209v4/4l707.d	22-NOV-09 12:04
VSTD010	W4VM091122-06	/112209v4/4l708.d	22-NOV-09 12:31
VSTD020	W4VM091122-07	/112209v4/4l709.d	22-NOV-09 12:59
VSTD050	W4VM091122-08	/112209v4/4l710.d	22-NOV-09 13:27
VSTD100	W4VM091122-09	/112209v4/4l711.d	22-NOV-09 13:54
VSTD005S	W4VM091122-10	/112209v4/4l713.d	22-NOV-09 14:48
VSTD010S	W4VM091122-11	/112209v4/4l714.d	22-NOV-09 15:16
VSTD025S	W4VM091122-12	/112209v4/4l715.d	22-NOV-09 15:43
VSTD050S	W4VM091122-13	/112209v4/4l716.d	22-NOV-09 16:10
VSTD250S	W4VM091122-15	/112209v4/4l718.d	22-NOV-09 17:04
VSTD500S	W4VM091122-16	/112209v4/4l719.d	22-NOV-09 17:32
SECOND SOURCE	W4VM091122-18	/112209v4/4l722.d	22-NOV-09 18:53
SHORT SECOND SOURCE	W4VM091122-19	/112209v4/4l723.d	22-NOV-09 19:21

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-608-1

Instrument ID: VOA4.I **Injection Date/Time:** 25-NOV-09 20:26

Column Description: DB-624 **Lab File ID** /112509v4/4m301.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.6
75	30.0 - 60.0% of mass 95	46.6
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	96.2
175	5.0 -9.0% of mass 174	6.6
176	95.0 - 101.0% of mass 174	96.4
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091125-01	/112509v4/4m302.d	25-NOV-09 20:53
LCS	1201981952	/112509v4/4m303ll.d	25-NOV-09 21:20
VSTD250S	W4VM091125-03	/112509v4/4m304.d	25-NOV-09 21:47
LCS	1201981953	/112509v4/4m305sl.d	25-NOV-09 22:15
BLANK	1201981949	/112509v4/4m307bl.d	25-NOV-09 23:10
RE03-10-6903	241559001	/112509v4/4m310.d	26-NOV-09 00:31
RE03-10-6902	241559002	/112509v4/4m311.d	26-NOV-09 00:58
RE03-10-6903MS	1201981950	/112509v4/4m317.d	26-NOV-09 03:41
RE03-10-6903MSD	1201981951	/112509v4/4m318.d	26-NOV-09 04:09

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-608-1

STD Analysis Time: 25-NOV-09 20:53

Data File: 4m302.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1593469		10.6	1231708		13.8	851758		16.2
Upper Limit	3186938		11.1	2463416		14.3	1703516		16.7
Lower Limit	796735		10.1	615854		13.3	425879		15.7
Sample ID									
BLK01LCS	1790218		10.6	1392484		13.8	971751		16.2
BLK01SLCS	1673077		10.6	1294315		13.8	888490		16.2
BLK01	1541165		10.6	1174674		13.8	745748		16.2
RE03-10-6903	1612963		10.6	1113759		13.8	546599		16.2
RE03-10-6902	1692618		10.6	1206153		13.8	625973		16.2
RE03-10-6903MS	1538420		10.6	1086453		13.8	548656		16.2
RE03-10-6903MSD	1559522		10.6	1127297		13.8	582088		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6902**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:58**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:33**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m311.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.352	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.352	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.352	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.352	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.352	1.17
67-64-1	Acetone	U	5.86	ug/kg	1.94	5.86
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
74-88-4	Iodomethane	U	5.86	ug/kg	1.87	5.86
75-09-2	Methylene chloride	U	5.86	ug/kg	2.34	5.86
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.46	5.86
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.352	1.17
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.352	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.352	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.352	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.352	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.352	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.352	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.352	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.352	1.17
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.46	5.86
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.352	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.352	1.17
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.352	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.352	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.352	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.352	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.352	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6902	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927001	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/26/2009 00:58	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 21:33	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m311.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.352	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.352	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.352	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.352	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.352	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.352	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.352	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.352	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.352	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.352	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.352	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.352	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.352	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.352	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.86	ug/kg	1.87	5.86
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m311.d
Lab Smp Id: 241559002 Client Smp ID: RE03-10-6902
Inj Date : 26-NOV-2009 00:58
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241559002|927001|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.65250	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1692618	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1206153	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	625973	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	297754	44.7878	52.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1004078	47.7951	56.0
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	402931	55.5872	65.1

ION RATIO REPORT

VOA REPORT

Data file: 4m311.d
Report Date: 11/27/2009 15:07
Lab. ID: 241559002 SampleType: SAMPLE
Injection Date: 26-NOV-2009 00:58
Operator: ACJ Instrument: VOA4.i
Sample Info: |241559002|927001|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-608-1
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	21544	10.62	10.34	80-120	100	(T)
64	4108	10.62	10.34	2- 62	19	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8179	12.25	12.02	80-120	100	(T)
43	4693	12.25	12.02	228-288	57	(QT)
100	702778	12.25	12.02	8- 68	8592	(QT)
66 Bromoform				CAS#: 75-25-2		
173	2055	14.96	14.66	80-120	100	(T)
175	25914	14.95	14.66	18- 78	1261	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m311.d
Lab Smp Id: 241559002 Client Smp ID: RE03-10-6902
Inj Date : 26-NOV-2009 00:58
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241559002|927001|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112509v4/4m311.d
Date : 26-NOV-2009 00:58
Client ID: RE03-10-6902
Sample Info: |2415590021927001|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

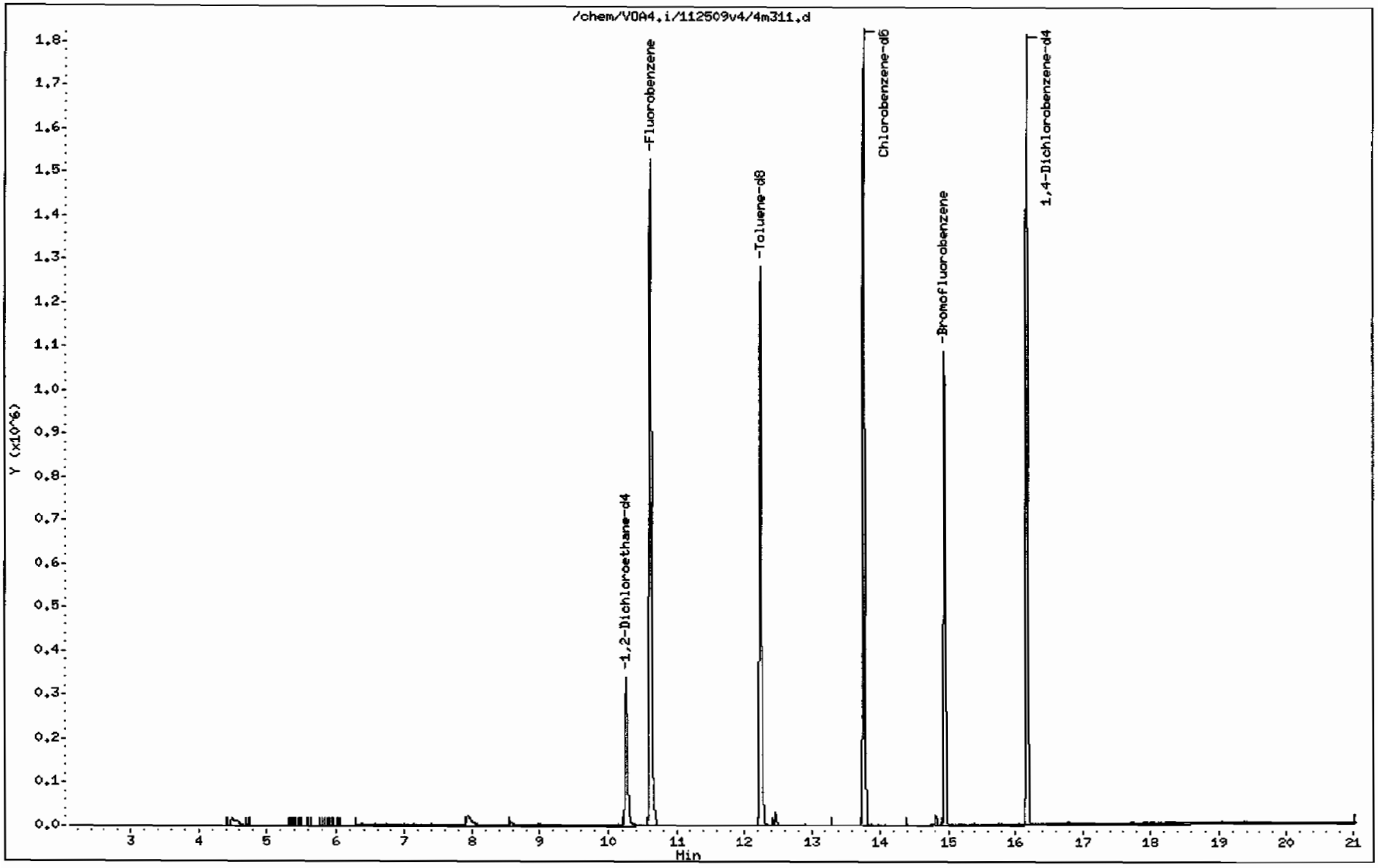

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6903**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m310.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.77	5.35
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.60	5.35
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	J	0.766	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.60	5.35
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559001**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6903**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 00:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m310.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	J	0.332	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m310.d
Lab Smp Id: 241559001 Client Smp ID: RE03-10-6903
Inj Date : 26-NOV-2009 00:31
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241559001|927001|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.46570	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1612963	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1113759	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	546599	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	313688	49.5148	52.9
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1030836	53.1395	56.8
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	381521	60.2767	64.4
50 Toluene	92	12.327	12.327	(0.895)	13991	0.71678	0.77(a)
65 Styrene	104	14.406	14.399	(1.046)	8199	0.31038	0.33(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

QC Flag Legend

H - Operator selected an alternate compound hit.

ION RATIO REPORT

VOA REPORT

Data file: 4m310.d
Report Date: 11/27/2009 15:07
Lab. ID: 241559001 SampleType: SAMPLE
Injection Date: 26-NOV-2009 00:31
Operator: ACJ Instrument: VOA4.i
Sample Info: |241559001|927001|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-608-1
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20896	10.61	10.34	80-120	100	(T)
64	3836	10.62	10.34	2- 62	18	(T)
39 Trichloroethylene			CAS#: 79-01-6			
95	137772	10.62	11.00	80-120	100	(T)
97	108141	10.61	11.00	35- 95	78	(T)
130	389	11.00	11.00	71-131	0	(Q)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8173	12.25	12.02	80-120	100	(T)
43	4772	12.25	12.02	228-288	58	(QT)
100	712724	12.25	12.02	8- 68	8720	(QT)
50 Toluene			CAS#: 108-88-3			
92	13991	12.33	12.33	80-120	100	( )
91	25167	12.32	12.33	135-195	180	( )
65 Styrene			CAS#: 100-42-5			
104	8199	14.41	14.40	80-120	100	( )
78	4212	14.41	14.40	21- 81	51	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m310.d
Lab Smp Id: 241559001 Client Smp ID: RE03-10-6903
Inj Date : 26-NOV-2009 00:31
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241559001|927001|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112509v4/4m310.d
Date : 26-NOV-2009 00:31
Client ID: RE03-10-6903
Sample Info: |241559001|927001|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

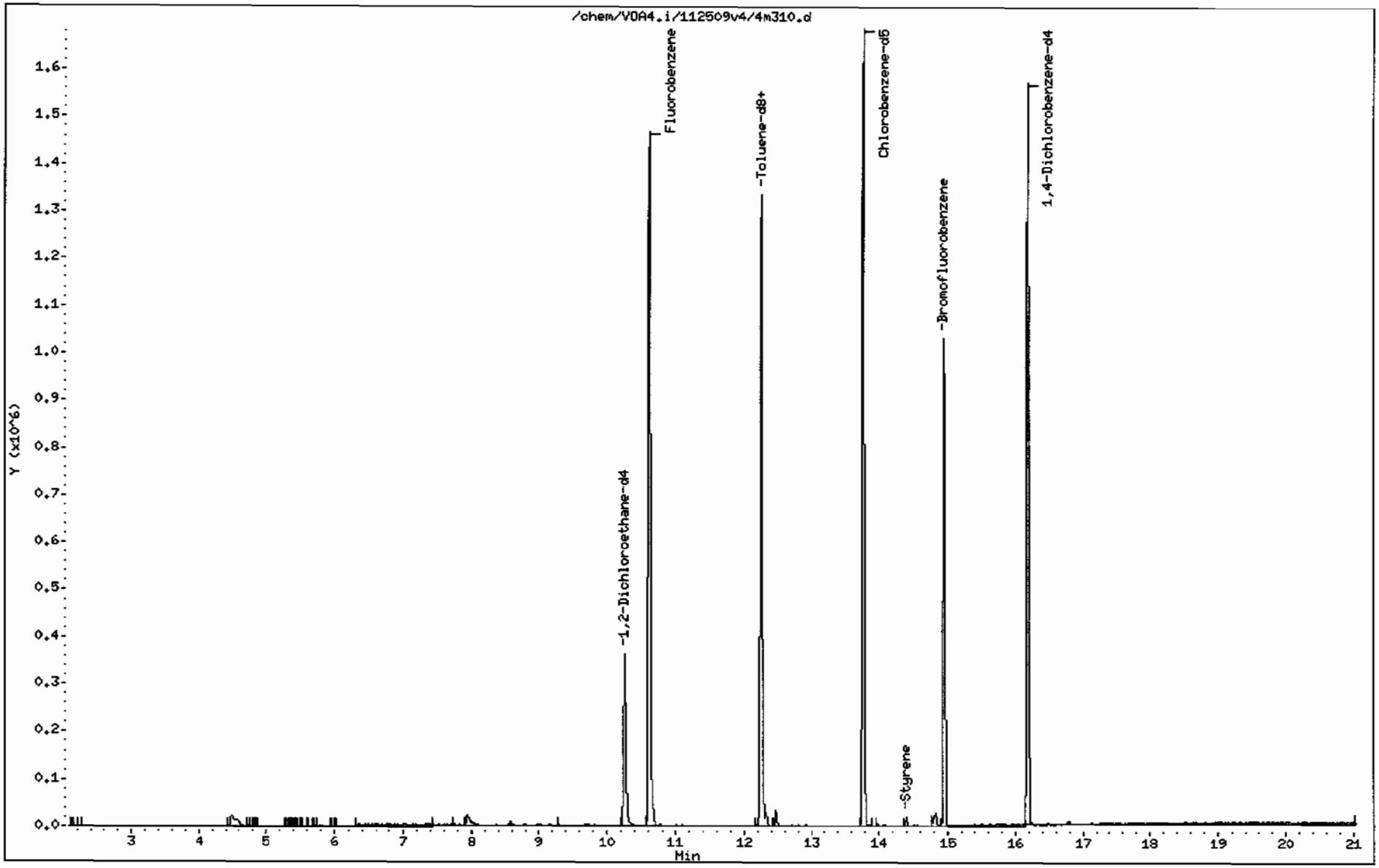

Data File: /chem/VOA4.i/112509v4/4m310.d

Date : 26-NOV-2009 00:31

Client ID: RE03-10-6903

Instrument: VOA4.i

Sample Info: |2415590011927001|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

50 Toluene

Concentration: 0.77 ug/Kg

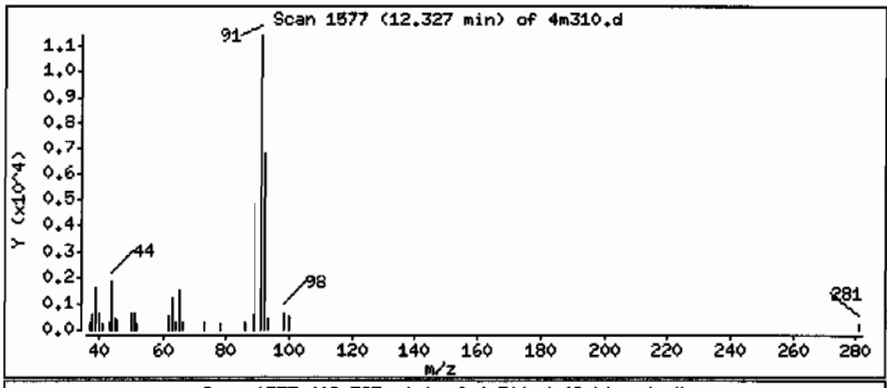

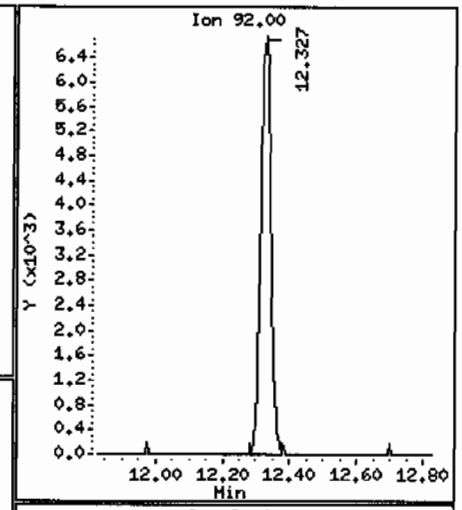

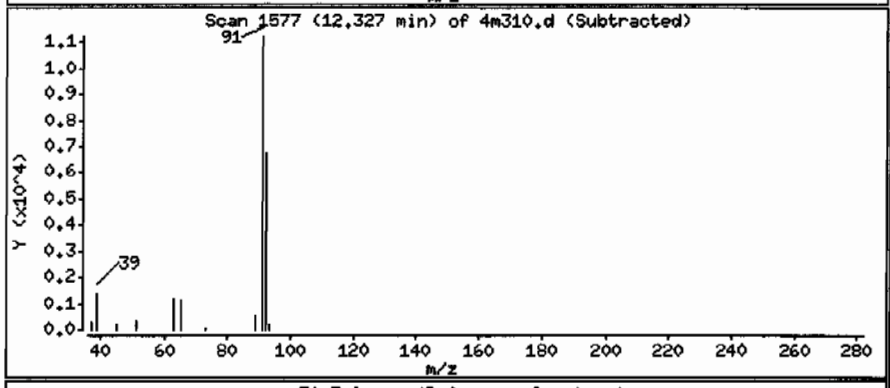

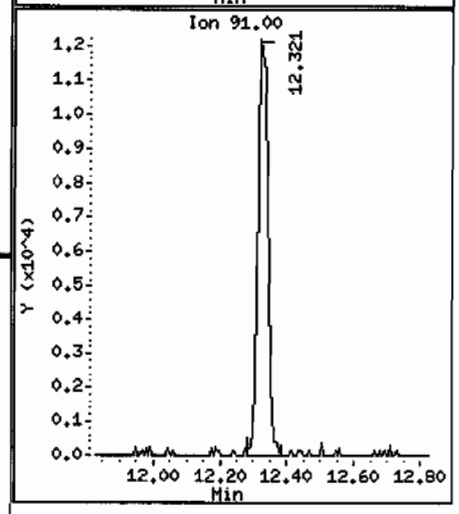

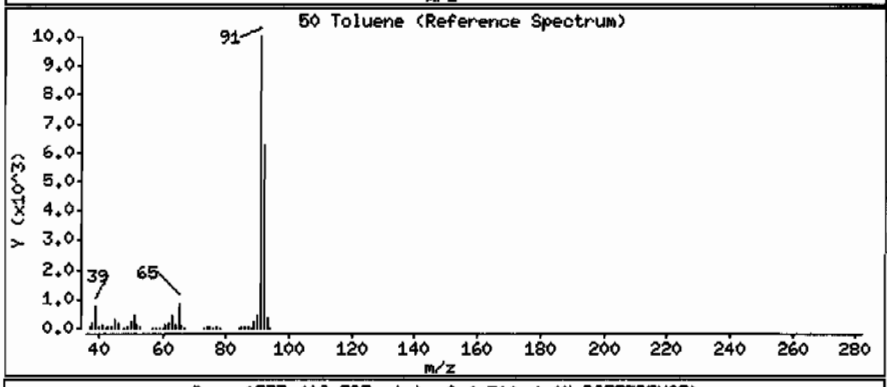

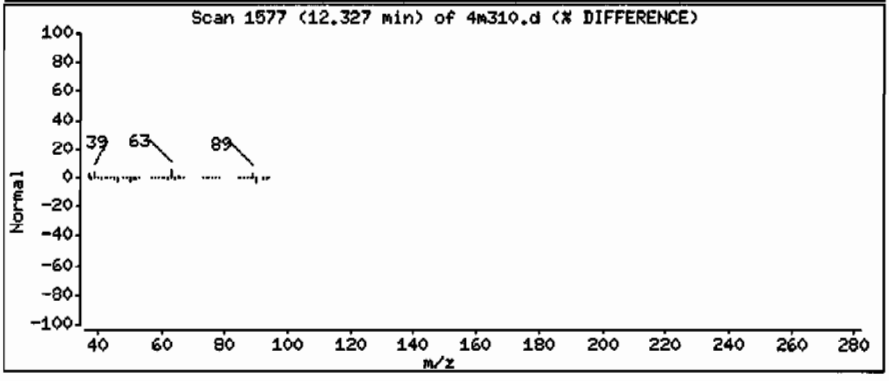

Data File: /chem/VOA4.i/112509v4/4m310.d

Date : 26-NOV-2009 00:31

Client ID: RE03-10-6903

Instrument: VOA4.i

Sample Info: |2415590001|927001|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

65 Styrene

Concentration: 0.33 ug/Kg

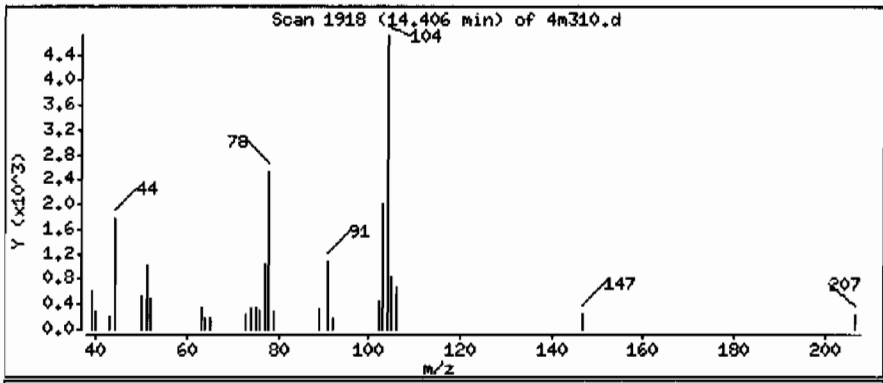

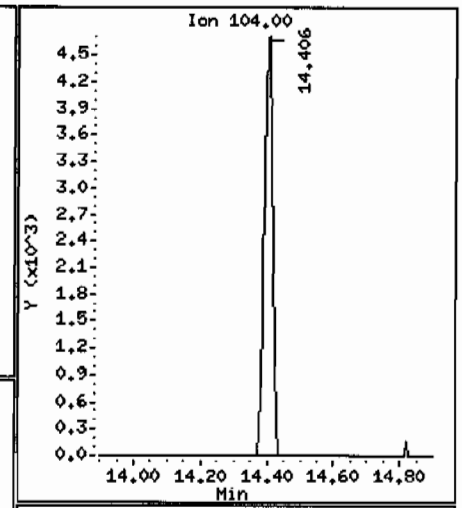

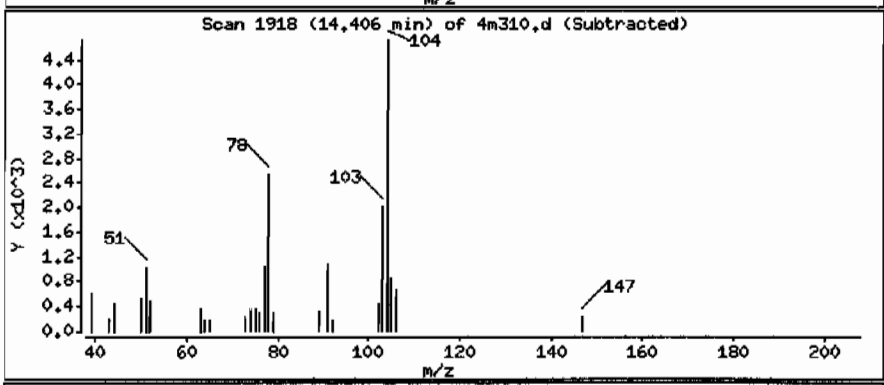

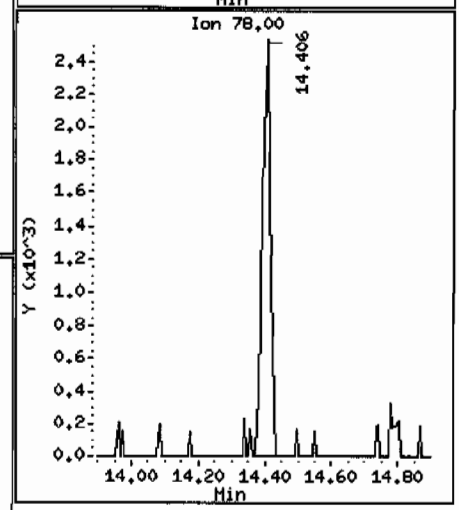

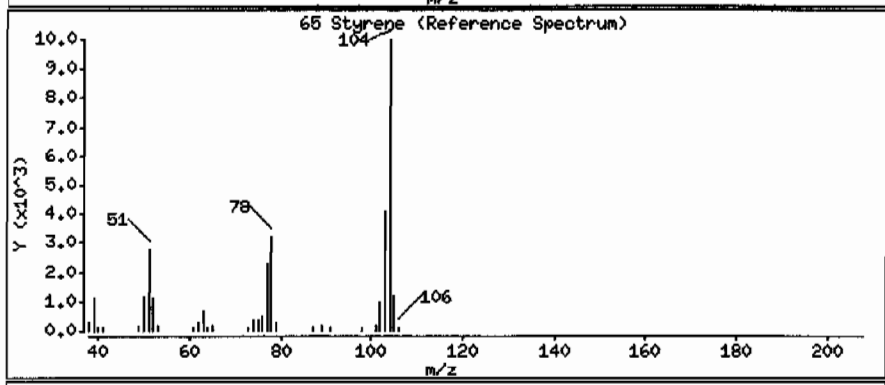

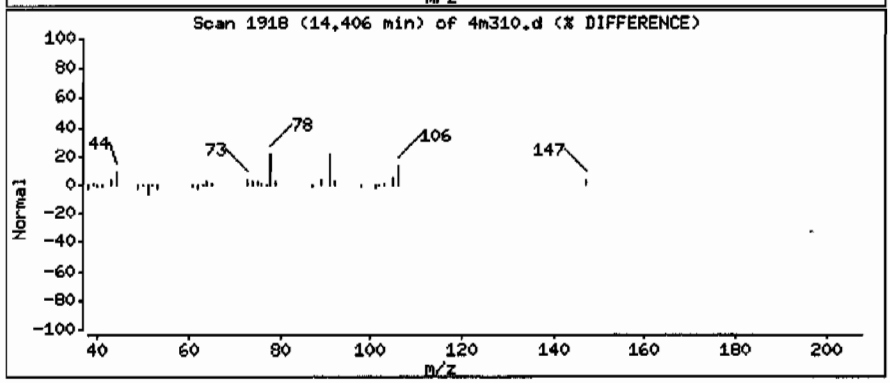

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 03-Dec-2009 17:53

Calibration History

Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Start Cal Date: 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
22-NOV-2009 14:48	ICALsubS	/chem/VOA4.i/112209v4/41713.d
22-NOV-2009 10:41	CALsubL+	/chem/VOA4.i/112209v4/41704.d
Cal Level: 2 , Cal Amount: 2.00000		
22-NOV-2009 15:16	ICALsubS	/chem/VOA4.i/112209v4/41714.d
22-NOV-2009 11:36	CALsubL+	/chem/VOA4.i/112209v4/41706.d
Cal Level: 3 , Cal Amount: 5.00000		
22-NOV-2009 15:43	ICALsubS	/chem/VOA4.i/112209v4/41715.d
22-NOV-2009 12:04	CALsubL+	/chem/VOA4.i/112209v4/41707.d
Cal Level: 4 , Cal Amount: 10.00000		
22-NOV-2009 16:10	ICALsubS	/chem/VOA4.i/112209v4/41716.d
22-NOV-2009 12:31	CALsubL+	/chem/VOA4.i/112209v4/41708.d
Cal Level: 5 , Cal Amount: 20.00000		
22-NOV-2009 16:37	ICALsubS	/chem/VOA4.i/112209v4/41717.d
22-NOV-2009 12:59	CALsubL+	/chem/VOA4.i/112209v4/41709.d
Cal Level: 6 , Cal Amount: 50.00000		
22-NOV-2009 17:04	ICALsubS	/chem/VOA4.i/112209v4/41718.d
22-NOV-2009 13:27	CALsubL+	/chem/VOA4.i/112209v4/41710.d
Cal Level: 7 , Cal Amount: 100.00000		
22-NOV-2009 17:32	ICALsubS	/chem/VOA4.i/112209v4/41719.d
22-NOV-2009 13:54	CALsubL+	/chem/VOA4.i/112209v4/41711.d
Cal Level: 8 , Cal Amount: 200.00000		
22-NOV-2009 10:14	BENZENE+	/chem/VOA4.i/112209v4/41703.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
25-NOV-2009 20:53	CALsubL+	/chem/VOA4.i/112509v4/4m302.d
Ccal Level: 6 , Ccal Amount: 50.0		
25-NOV-2009 21:47	CALsubS+SS	/chem/VOA4.i/112509v4/4m304.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Cal Date : 27-Nov-2009 15:03 amj

Calibration File Names:
Level 1: /chem/VOA4.i/112209v4/41713.d
Level 2: /chem/VOA4.i/112209v4/41714.d
Level 3: /chem/VOA4.i/112209v4/41715.d
Level 4: /chem/VOA4.i/112209v4/41716.d
Level 5: /chem/VOA4.i/112209v4/41717.d
Level 6: /chem/VOA4.i/112209v4/41718.d
Level 7: /chem/VOA4.i/112209v4/41719.d
Level 8: /chem/VOA4.i/112209v4/41703.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.70135	0.67482	0.71847	0.71001	0.64315	0.71607					
	0.60192	++++++					AVRG		0.68083		6.46217
M 2 1,2-Dichloroethylene (total)	0.39740	0.38742	0.40356	0.41339	0.36979	0.42144					
	0.36963	++++++					AVRG		0.39466		5.12263
M 135 1,3-Dichloropropylene	0.41350	0.40551	0.44628	0.45853	0.42258	0.48108					
	0.42557	++++++					AVRG		0.43615		6.18797
153 Chlorotrifluoroethylene	0.13143	0.18372	0.17447	0.18248	++++++	0.19006					
	++++++	++++++					AVRG		0.17243		13.67715
154 2-Chloro-1,1,1-trifluoroethan	0.26186	0.25912	0.25634	0.25645	++++++	0.26647					
	0.25722	++++++					AVRG		0.25958		1.52910

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
3 Dichlorodifluoromethane	0.21952	0.20478	0.24778	0.23830	0.25344	0.24626					
	0.22084	+++++					AVRG		0.23299		7.76928
4 Chloromethane	0.36252	0.34713	0.37649	0.35126	0.36111	0.38641					
	0.33300	+++++					AVRG		0.35970		5.00875
5 Vinyl chloride	0.33360	0.31585	0.35122	0.33159	0.33730	0.35659					
	0.30468	+++++					AVRG		0.33298		5.49023
6 Bromomethane	0.26744	0.25913	0.27384	0.26317	0.25533	0.28190					
	0.23741	+++++					AVRG		0.26260		5.43369
7 Chloroethane	0.24641	0.22492	0.25216	0.24499	0.24862	0.26778					
	0.22546	+++++					AVRG		0.24433		6.17830
8 Trichlorofluoromethane	0.39788	0.40451	0.41714	0.40395	0.41072	0.45146					
	0.39022	+++++					AVRG		0.41084		4.83812
134 Ethyl Ether	0.20013	0.22799	0.22695	0.23007	0.22323	0.24848					
	0.21817	+++++					AVRG		0.22500		6.43554
9 Acrolein	0.05592	0.05545	0.05313	0.05620	+++++	0.05350					
	0.05200	+++++					AVRG		0.05437		3.16611
12 Trichlorotrifluoroethane	0.10763	0.09987	0.09425	0.09433	+++++	0.08318					
	0.08283	+++++					AVRG		0.09368		10.25666

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INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	ml	m2	%RSD or R^2
10 Acetone	0.21715	0.21091	0.19514	0.20925	0.18498	0.22820					
	0.17644	+++++					AVRG		0.20316		9.05187
11 1,1-Dichloroethylene	0.43010	0.40719	0.43561	0.43488	0.39281	0.46160					
	0.40074	+++++					AVRG		0.42328		5.70354
147 Isopropyl Alcohol	0.02541	0.02962	0.02587	0.02812	+++++	0.02700					
	0.02584	+++++					AVRG		0.02698		6.03712
13 Iodomethane	0.49411	0.49115	0.52557	0.53262	0.47737	0.55006					
	0.47344	+++++					AVRG		0.50633		5.85556
15 Acetonitrile	0.04684	0.04644	0.04649	0.04892	0.04391	0.04889					
	0.03979	+++++					AVRG		0.04590		6.94320
128 Methyl acetate	0.25731	0.23806	0.23684	0.24780	0.21890	0.24259					
	0.19845	+++++					AVRG		0.23428		8.40002
14 Carbon disulfide	0.91167	0.87511	0.91689	0.92639	0.82243	0.92593					
	0.76534	+++++					AVRG		0.87768		7.06555
16 Allyl chloride	0.47481	0.44851	0.43469	0.44980	+++++	0.41236					
	0.38471	+++++					AVRG		0.43415		7.30172
148 tert-Butyl Alcohol	0.03756	0.04508	0.03881	0.04200	+++++	0.04059					
	0.03810	+++++					AVRG		0.04036		7.04178

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Integrator : HP RTE
Method file : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
17 Methylene chloride	+++++	89613	104945	156326	244699	561681					
	1084465	+++++					LINR	-0.13197	0.29325		0.99269
18 Acrylonitrile	0.10599	0.11761	0.10731	0.11347	+++++	0.10855					
	0.10484	+++++					AVRG		0.10963		4.48945
20 tert-Butyl methyl ether	0.79558	0.87853	0.81726	0.87060	0.77996	0.85442					
	0.74022	+++++					AVRG		0.81951		6.25004
21 trans-1,2-Dichloroethylene	0.35735	0.37592	0.38478	0.39437	0.35468	0.40358					
	0.35165	+++++					AVRG		0.37462		5.51097
23 Vinyl acetate	0.49838	0.54680	0.57711	0.57802	0.55244	0.60012					
	0.46080	+++++					AVRG		0.54481		9.01724
149 Isopropyl ether	0.95978	0.92001	0.90178	0.92165	+++++	0.89996					
	0.89878	+++++					AVRG		0.91700		2.54124
22 1,1-Dichloroethane	0.46140	0.44295	0.49088	0.48216	0.44328	0.50152					
	0.43956	+++++					AVRG		0.46596		5.47805
24 2-Chloro-1,3-butadiene	0.42752	0.41435	0.41736	0.41116	+++++	0.40092					
	0.40151	+++++					AVRG		0.41214		2.44686
150 Ethyl tert-butyl ether	0.84482	0.84737	0.83195	0.85512	+++++	0.82219					
	0.83043	+++++					AVRG		0.83865		1.47845

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Method file : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
30 2-Butanone	0.23385	0.23579	0.22472	0.23959	0.21992	0.26519					
	0.21714	+++++					AVRG		0.23374		6.93171
26 Ethyl acetate	0.32623	0.34240	0.30347	0.31352	+++++	0.29024					
	0.26820	+++++					AVRG		0.30734		8.56310
31 cis-1,2-Dichloroethylene	0.43746	0.39893	0.42234	0.43240	0.38490	0.43930					
	0.38761	+++++					AVRG		0.41470		5.71138
25 2,2-Dichloropropane	0.29466	0.25782	0.28219	0.27714	0.24901	0.27503					
	0.24787	+++++					AVRG		0.26910		6.62310
28 Propionitrile	0.04376	0.05227	0.04399	0.04681	+++++	0.04559					
	0.04383	+++++					AVRG		0.04604		7.13467
27 Methacrylonitrile	0.17978	0.19710	0.18112	0.18893	+++++	0.17963					
	0.16721	+++++					AVRG		0.18229		5.51523
29 Bromochloromethane	0.14402	0.13910	0.15114	0.15508	0.13476	0.15841					
	0.14035	+++++					AVRG		0.14612		6.07266
32 Chloroform	0.50037	0.46709	0.47945	0.48569	0.43681	0.49308					
	0.43321	+++++					AVRG		0.47081		5.65257
72 Tetrahydrofuran	28285	49603	91261	180946	+++++	811740					
	1542403	+++++					LINR	-0.21156	0.17273		0.99744

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Method file : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
36 1,1,1-Trichloroethane	0.34177	0.33797	0.36697	0.35793	0.32888	0.37723					
	0.33495	+++++					AVRG		0.34939		5.19290
19 Isobutyl alcohol	0.01333	0.01535	0.01335	0.01471	+++++	0.01411					
	0.01295	+++++					AVRG		0.01397		6.66101
129 Cyclohexane	0.43240	0.40010	0.41453	0.40591	0.37242	0.42674					
	0.37265	+++++					AVRG		0.40354		5.92718
34 1,1-Dichloropropene	0.34396	0.33259	0.36640	0.35168	0.33247	0.37748					
	0.32857	+++++					AVRG		0.34759		5.37228
33 Carbon tetrachloride	0.33357	0.32239	0.34241	0.34257	0.31834	0.36936					
	0.33037	+++++					AVRG		0.33700		5.03062
37 1,2-Dichloroethane	0.36646	0.37339	0.38216	0.38288	0.34836	0.39447					
	0.34689	+++++					AVRG		0.37066		4.84641
38 Benzene	1.08632	1.03953	1.11726	1.09466	0.97346	1.10695					
	0.94618	1.20943					AVRG		1.07172		7.84406
151 Methyl tert-amyl ether	0.84827	0.86006	0.82129	0.84576	+++++	0.81709					
	0.82104	+++++					AVRG		0.83559		2.15534
139 Cyclohexene	0.52887	0.49537	0.52023	0.51530	0.47626	0.53834					
	0.47205	+++++					AVRG		0.50663		5.09965

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Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01024	0.01084	0.01043	0.01203	0.00875	0.01249					
	0.01024	0.01084					AVRG		0.01073		10.73836
39 Trichloroethylene	0.27049	0.26768	0.27901	0.28025	0.25066	0.28409					
	0.25133	+++++					AVRG		0.26907		5.04764
42 Methyl methacrylate	0.20522	0.21958	0.20097	0.21212	+++++	0.19781					
	0.18497	+++++					AVRG		0.20344		5.89043
130 Methylcyclohexane	0.45782	0.40944	0.44364	0.43070	0.40942	0.45487					
	0.39748	+++++					AVRG		0.42905		5.61039
41 1,2-Dichloropropane	0.28007	0.27751	0.28731	0.29540	0.26480	0.30111					
	0.26062	+++++					AVRG		0.28098		5.32401
97 1,4-Dioxane	0.00367	0.00391	0.00331	0.00381	+++++	0.00364					
	0.00350	+++++					AVRG		0.00364		5.86751
43 Dibromomethane	0.17297	0.16928	0.17293	0.18369	0.16407	0.18681					
	0.16513	+++++					AVRG		0.17355		5.03688
45 Bromodichloromethane	0.35810	0.34545	0.37438	0.36950	0.34403	0.39092					
	0.34862	+++++					AVRG		0.36157		4.83779
48 2-Nitropropane	0.09325	0.09886	0.08717	0.09749	+++++	0.09739					
	0.09420	+++++					AVRG		0.09473		4.51184

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Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
44 2-Chloroethylvinyl ether	0.15167	0.15840	0.16203	0.16999	0.15822	0.17712					
	0.14523	+++++					AVRG		0.16038		6.68189
46 cis-1,3-Dichloropropylene	0.42560	0.42436	0.46605	0.47362	0.43654	0.49344					
	0.43654	+++++					AVRG		0.45088		5.94621
49 4-Methyl-2-pentanone	0.16704	0.16573	0.16058	0.16558	0.15177	0.17455					
	0.14456	+++++					AVRG		0.16140		6.28749
50 Toluene	0.95599	0.89242	0.92210	0.90343	0.80436	0.89036					
	0.76529	+++++					AVRG		0.87628		7.67500
51 Ethyl methacrylate	0.52301	0.54250	0.51464	0.52715	+++++	0.46530					
	0.41126	+++++					AVRG		0.49731		9.98259
53 trans-1,3-Dichloropropylene	0.55667	0.52412	0.57667	0.58556	0.53379	0.60809					
	0.53039	+++++					AVRG		0.55933		5.70215
54 1,1,2-Trichloroethane	0.28664	0.26669	0.29062	0.29122	0.26059	0.29539					
	0.25448	+++++					AVRG		0.27795		6.04778
55 2-Hexanone	0.44966	0.43839	0.43114	0.45156	0.41544	0.47289					
	0.38534	+++++					AVRG		0.43492		6.50323
52 1,3-Dichloropropane	0.58992	0.56247	0.59158	0.58963	0.53126	0.58281					
	0.48934	+++++					AVRG		0.56243		6.91458

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
56 Tetrachloroethylene	0.36707	0.34242	0.34742	0.34437	0.31600	0.35293					
	0.31257	+++++					AVRG		0.34040		5.76135
57 Dibromochloromethane	0.36430	0.36503	0.37424	0.40158	0.37199	0.42902					
	0.38635	+++++					AVRG		0.38465		6.12123
59 1,2-Dibromoethane	0.34061	0.33398	0.36106	0.36598	0.34272	0.38240					
	0.33925	+++++					AVRG		0.35228		5.05692
152 1-Chlorohexane	0.27943	0.25644	0.23756	0.24653	+++++	0.25264					
	0.25465	+++++					AVRG		0.25454		5.49819
62 Chlorobenzene	1.00079	1.01568	1.05757	1.06100	0.94511	1.07380					
	0.92098	+++++					AVRG		1.01070		5.87902
60 1,1,1,2-Tetrachloroethane	0.39361	0.35697	0.40153	0.39299	0.36161	0.40793					
	0.35713	+++++					AVRG		0.38168		5.82855
58 Ethylbenzene	1.84025	1.71034	1.78402	1.76603	1.58732	1.73971					
	1.41449	+++++					AVRG		1.69174		8.58326
63 m,p-Xylenes	0.70030	0.66453	0.70747	0.70329	0.63579	0.70407					
	0.59219	+++++					AVRG		0.67252		6.59440
64 o-Xylene	0.70344	0.69541	0.74047	0.72343	0.65786	0.74007					
	0.62137	+++++					AVRG		0.69744		6.34185

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	1.21077	1.15199	1.23797	1.24119	1.13289	1.27542					
	1.05111	+++++					AVRG		1.18591		6.57939
66 Bromoform	0.49404	0.47895	0.51340	0.55884	0.52075	0.63851					
	0.57125	+++++					AVRG		0.53939		10.14098
67 Isopropylbenzene	2.81546	2.75017	2.84421	2.84280	2.56688	2.84161					
	2.30776	+++++					AVRG		2.70984		7.50228
68 cis-1,4-Dichloro-2-butene	0.20831	0.23800	0.22368	0.22817	+++++	0.22092					
	0.20566	+++++					AVRG		0.22079		5.52375
70 Cyclohexanone	0.03515	0.04094	0.03660	0.04054	+++++	0.03802					
	0.03639	+++++					AVRG		0.03794		6.20501
73 1,1,2,2-Tetrachloroethane	0.75747	0.79219	0.83626	0.84224	0.76143	0.85606					
	0.71570	+++++					AVRG		0.79448		6.59872
69 trans-1,4-Dichloro-2-butene	0.21501	0.23443	0.20845	0.21973	+++++	0.20938					
	0.19312	+++++					AVRG		0.21335		6.41608
74 1,2,3-Trichloropropane	0.20845	0.20706	0.21761	0.22120	0.20235	0.23283					
	0.19379	+++++					AVRG		0.21190		6.12869
75 Bromobenzene	0.86711	0.84553	0.88263	0.88735	0.79663	0.92286					
	0.79096	+++++					AVRG		0.85615		5.67234

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
76 n-Propylbenzene	3.39349	3.26326	3.49629	3.38979	3.04662	3.32860					
	2.61397	+++++					AVRG		3.21886		9.37389
78 1,3,5-Trimethylbenzene	2.48326	2.44997	2.58869	2.55937	2.29300	2.53053					
	2.01793	+++++					AVRG		2.41754		8.32003
77 2-Chlorotoluene	2.50052	2.28701	2.46919	2.41383	2.13859	2.33326					
	1.85746	+++++					AVRG		2.28570		9.84026
80 4-Chlorotoluene	2.21104	2.08272	2.22413	2.19063	1.96458	2.21541					
	1.81428	+++++					AVRG		2.10040		7.51638
81 tert-Butylbenzene	2.56778	2.48368	2.56772	2.56479	2.28412	2.57734					
	2.10600	+++++					AVRG		2.45020		7.52754
79 1,2,4-Trimethylbenzene	2.72525	2.55215	2.74018	2.72725	2.37980	2.63816					
	2.14623	+++++					AVRG		2.55843		8.70457
82 Pentachloroethane	0.50501	0.48269	0.48049	0.45126	+++++	0.35124					
	0.40108	+++++					AVRG		0.44529		13.11002
83 sec-Butylbenzene	3.45534	3.21255	3.53229	3.46947	3.10653	3.41341					
	2.68756	+++++					AVRG		3.26817		9.11754
84 4-Isopropyltoluene	2.82093	2.66835	2.87406	2.82119	2.51181	2.79014					
	2.27080	+++++					AVRG		2.67961		8.13997

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85 1,3-Dichlorobenzene	1.63923	1.59498	1.69316	1.70724	1.50639	1.69998					
	1.43192	+++++					AVRG		1.61041		6.61020
87 1,4-Dichlorobenzene	1.71875	1.59053	1.69010	1.67669	1.50062	1.69539					
	1.44149	+++++					AVRG		1.61622		6.70439
88 Benzyl chloride	1.30649	1.38444	1.30279	1.33389	+++++	1.17735					
	0.96630	+++++					AVRG		1.24521		12.26968
89 n-Butylbenzene	2.60812	2.52813	2.66438	2.61551	2.36712	2.57681					
	2.08133	+++++					AVRG		2.49163		8.21192
90 1,2-Dichlorobenzene	1.64359	1.51915	1.65273	1.62268	1.47619	1.63698					
	1.39061	+++++					AVRG		1.56313		6.54277
91 bis(2-Chloroisopropyl)ether	0.37069	0.42630	0.35573	0.38220	+++++	0.37313					
	0.32169	+++++					AVRG		0.37162		9.20525
92 1,2-Dibromo-3-chloropropane	0.16090	0.17023	0.16881	0.18391	0.17674	0.19572					
	0.17820	+++++					AVRG		0.17636		6.41964
93 1,2,4-Trichlorobenzene	0.86804	0.82729	0.90400	0.95532	0.88491	0.92567					
	0.83336	+++++					AVRG		0.88551		5.30559
94 Hexachlorobutadiene	0.65645	0.61705	0.64747	0.65029	0.59424	0.63287					
	0.57806	+++++					AVRG		0.62520		4.80208

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Cal Date : 27-Nov-2009 15:03 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	1.52349	1.43037	1.51173	1.63279	1.54736	1.60261					
	1.40026	+++++					AVRG		1.52123		5.54782
96 1,2,3-Trichlorobenzene	0.70644	0.66598	0.72623	0.74703	0.68968	0.70642					
	0.65102	+++++					AVRG		0.69897		4.75877
$ 138 1,2-Dichloroethane-d4	0.17578	0.18570	0.19564	0.20439	0.18848	0.20826					
	0.21644	+++++					AVRG		0.19639		7.22804
$ 47 Toluene-d8	0.83900	0.85325	0.89204	0.90684	0.83870	0.92761					
	0.83861	+++++					AVRG		0.87087		4.28714
$ 71 Bromofluorobenzene	0.52483	0.55505	0.58369	0.61009	0.55725	0.63913					
	0.58288	+++++					AVRG		0.57899		6.53887

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Cal Date : 27-Nov-2009 15:03 amj

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.69132	0.69132	0.050	1.54202	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.40630	0.40630	0.050	2.95007	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.43846	0.43846	0.050	0.52968	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.21510	0.21510	0.050	-7.67900	30.00000	Averaged	
4 Chloromethane	0.35970	0.31949	0.31949	0.100	-11.17813	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.32061	0.32061	0.050	-3.71515	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.24826	0.24826	0.050	-5.45987	30.00000	Averaged	
7 Chloroethane	0.24433	0.23602	0.23602	0.050	-3.40156	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.40966	0.40966	0.050	-0.28572	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.21166	0.21166	0.001	-5.93017	30.00000	Averaged	
10 Acetone	0.20316	0.14150	0.14150	0.050	-30.34976	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04069	0.04069	0.010	-11.34196	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.42893	0.42893	0.050	1.33577	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.19676	0.19676	0.010	-16.01466	40.00000	Averaged	
13 Iodomethane	0.50633	0.51727	0.51727	0.050	2.16046	30.00000	Averaged	
17 Methylene chloride	51.31291	50.00000	0.33965	0.050	2.62581	30.00000	Linear	
14 Carbon disulfide	0.87768	0.91718	0.91718	0.050	4.50062	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.75110	0.75110	0.050	-8.34781	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.38832	0.38832	0.050	3.65819	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.49355	0.49355	0.010	-9.40872	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.48122	0.48122	0.100	3.27446	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.17581	0.17581	0.030	-24.78714	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.42429	0.42429	0.050	2.31050	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.27404	0.27404	0.050	1.83530	30.00000	Averaged	
32 Chloroform	0.47081	0.47569	0.47569	0.010	1.03561	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.14549	0.14549	0.010	-0.43079	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.36751	0.36751	0.010	5.18800	30.00000	Averaged	
129 Cyclohexane	0.40354	0.42421	0.42421	0.010	5.12308	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.36893	0.36893	0.010	6.13735	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01040	0.01040	0.001	-3.06093	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.35930	0.35930	0.010	6.61503	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.20547	0.20547	0.001	4.62716	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.35941	0.35941	0.010	-3.03368	30.00000	Averaged	
38 Benzene	1.07172	1.07229	1.07229	0.010	0.05259	30.00000	Averaged	
139 Cyclohexene	0.50663	0.51278	0.51278	0.001	1.21436	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 41722.d
Analysis Type: WATER
Lab Sample ID: W4VM091122-18
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Injection Date: 22-NOV-2009 18:53
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.28019	0.28019	0.010	4.13279	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.28134	0.28134	0.010	0.13000	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.44411	0.44411	0.010	3.50875	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.36895	0.36895	0.010	2.04004	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.16757	0.16757	0.010	-3.44731	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14096	0.14096	0.005	-12.11088	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.13941	0.13941	0.010	-13.62299	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.45323	0.45323	0.010	0.52137	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.86829	0.86829	0.010	-0.29589	30.00000	Averaged	
	50 Toluene	0.87628	0.86307	0.86307	0.010	-1.50792	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.54837	0.54837	0.010	-1.95885	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26103	0.26103	0.010	-6.08674	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.29367	0.29367	0.010	-32.47630	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.53703	0.53703	0.010	-4.51590	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.34775	0.34775	0.010	2.16113	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38777	0.38777	0.010	0.81133	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.34520	0.34520	0.010	-2.00984	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.03137	1.03137	0.300	2.04472	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.38883	0.38883	0.010	1.87227	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.67584	1.67584	0.010	-0.93937	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.68291	0.68291	0.010	1.54543	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70815	0.70815	0.010	1.53566	30.00000	Averaged	
	65 Styrene	1.18591	1.21191	1.21191	0.010	2.19258	30.00000	Averaged	
	66 Bromoform	0.53939	0.54722	0.54722	0.100	1.45063	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.67215	2.67215	0.010	-1.39091	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.72562	0.72562	0.300	-8.66743	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.58218	0.58218	0.010	0.55182	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.19674	0.19674	0.010	-7.15485	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.86007	0.86007	0.010	0.45779	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.16972	3.16972	0.010	-1.52666	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.21699	2.21699	0.010	-3.00590	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.39741	2.39741	0.010	-0.83248	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.09083	2.09083	0.010	-0.45555	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.46685	2.46685	0.010	0.67956	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.51478	2.51478	0.010	-1.70627	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.26146	3.26146	0.010	-0.20528	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 41722.d
Analysis Type: WATER
Lab Sample ID: W4VM091122-18
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Injection Date: 22-NOV-2009 18:53
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.67217	2.67217	0.010	-0.27751	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.61689	1.61689	0.010	0.40229	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.59751	1.59751	0.010	-1.15795	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.47231	2.47231	0.010	-0.77540	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.53519	1.53519	0.010	-1.78760	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17202	0.17202	0.010	-2.46241	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.94077	0.94077	0.010	6.24058	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66766	0.66766	0.010	6.79105	30.00000	Averaged
95 Naphthalene	1.52123	1.56791	1.56791	0.010	3.06878	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.76536	0.76536	0.010	9.49837	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41722.d
Lab Smp Id: W4VM091122-18 Client Smp ID: SECOND SOURCE
Inj Date : 22-NOV-2009 18:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-18|ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01C/IVM091122-01
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2583514	150.000	152
M 2 1,2-Dichloroethylene (total)	96				1310123	100.000	103
M 135 1,3-Dichloropropylene	75				1413814	100.000	100
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	346786	50.0000	46.2
4 Chloromethane	50	5.299	5.299	(0.499)	515104	50.0000	44.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	516895	50.0000	48.1
6 Bromomethane	94	6.138	6.138	(0.578)	400262	50.0000	47.3
7 Chloroethane	64	6.288	6.288	(0.592)	380525	50.0000	48.3
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	660479	50.0000	49.8
134 Ethyl Ether	59	7.003	7.003	(0.660)	341247	50.0000	47.0
10 Acetone	43	7.357	7.357	(0.693)	1140649	250.000	174
15 Acetonitrile	41	7.705	7.705	(0.726)	1640110	1250.00	1110
11 1,1-Dichloroethylene	61	7.394	7.394	(0.696)	691539	50.0000	50.7
128 Methyl acetate	43	7.753	7.753	(0.730)	1586132	250.000	210
13 Iodomethane	142	7.631	7.631	(0.719)	4169845	250.000	255
17 Methylene chloride	84	7.942	7.942	(0.748)	547607	50.0000	51.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7393616	250.000	261
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1210958	50.0000	45.8
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	626069	50.0000	51.8
23 Vinyl acetate	43	8.710	8.710	(0.820)	3978626	250.000	226
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	775846	50.0000	51.6
30 2-Butanone	43	9.326	9.326	(0.878)	1417213	250.000	188
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	684054	50.0000	51.2
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	441819	50.0000	50.9
32 Chloroform	83	9.692	9.692	(0.913)	766928	50.0000	50.5
29 Bromochloromethane	128	9.662	9.662	(0.910)	234568	50.0000	49.8
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	592518	50.0000	52.6
129 Cyclohexane	56	10.082	10.082	(0.949)	683928	50.0000	52.6
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	594801	50.0000	53.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1677330	5000.00	4850
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	579271	50.0000	53.3
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	331271	50.0000	52.3
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	579461	50.0000	48.5
38 Benzene	78	10.375	10.375	(0.977)	1728792	50.0000	50.0
139 Cyclohexene	67	10.497	10.497	(0.989)	826734	50.0000	50.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1612245	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	451741	50.0000	52.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	453589	50.0000	50.1
130 Methylcyclohexane	83	11.265	11.265	(1.061)	716009	50.0000	51.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	594832	50.0000	51.0
43 Dibromomethane	93	11.375	11.375	(1.071)	270167	50.0000	48.3
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1136285	250.000	220
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	868329	250.000	216
46 cis-1,3-Dichloropropylene	75	11.935	11.935	(1.124)	730715	50.0000	50.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1081613	50.0000	49.8
50 Toluene	92	12.326	12.326	(0.895)	1075108	50.0000	49.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	683099	50.0000	49.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	325158	50.0000	47.0
55 2-Hexanone	43	12.856	12.856	(0.934)	1829103	250.000	169
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	668969	50.0000	47.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	433189	50.0000	51.1
57 Dibromochloromethane	129	13.149	13.149	(0.955)	483033	50.0000	50.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	430015	50.0000	49.0
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1245683	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1284761	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	484356	50.0000	50.9
58 Ethylbenzene	91	13.862	13.862	(1.007)	2087570	50.0000	49.5
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1701387	100.000	102
64 o-Xylene	106	14.404	14.404	(1.046)	882126	50.0000	50.8
65 Styrene	104	14.404	14.404	(1.046)	1509654	50.0000	51.1
66 Bromoform	173	14.661	14.661	(0.906)	479720	50.0000	50.7
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2342561	50.0000	49.3
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	636119	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	510376	50.0000	50.3
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	172470	50.0000	46.4
75 Bromobenzene	156	15.167	15.167	(0.937)	753987	50.0000	50.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2778758	50.0000	49.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1943541	50.0000	48.5
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2101707	50.0000	49.6
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1832943	50.0000	49.8
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2162586	50.0000	50.3
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2204597	50.0000	49.1
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	2859180	50.0000	49.9
84 4-Isopropyltoluene	119	16.050	16.050	(0.992)	2342581	50.0000	49.9
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1417460	50.0000	50.2
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	876657	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1400467	50.0000	49.4
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2167366	50.0000	49.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1345835	50.0000	49.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	150799	50.0000	48.8
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	824735	50.0000	53.1
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	585310	50.0000	53.4
95 Naphthalene	128	19.032	19.032	(1.176)	1374522	50.0000	51.5
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	670958	50.0000	54.7

Data File: /chem/VOA4.i/112209v4/41722.d
Date : 22-NOV-2009 19:53
Client ID: SECOND SOURCE
Sample Info: IW4VH091122-18|ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

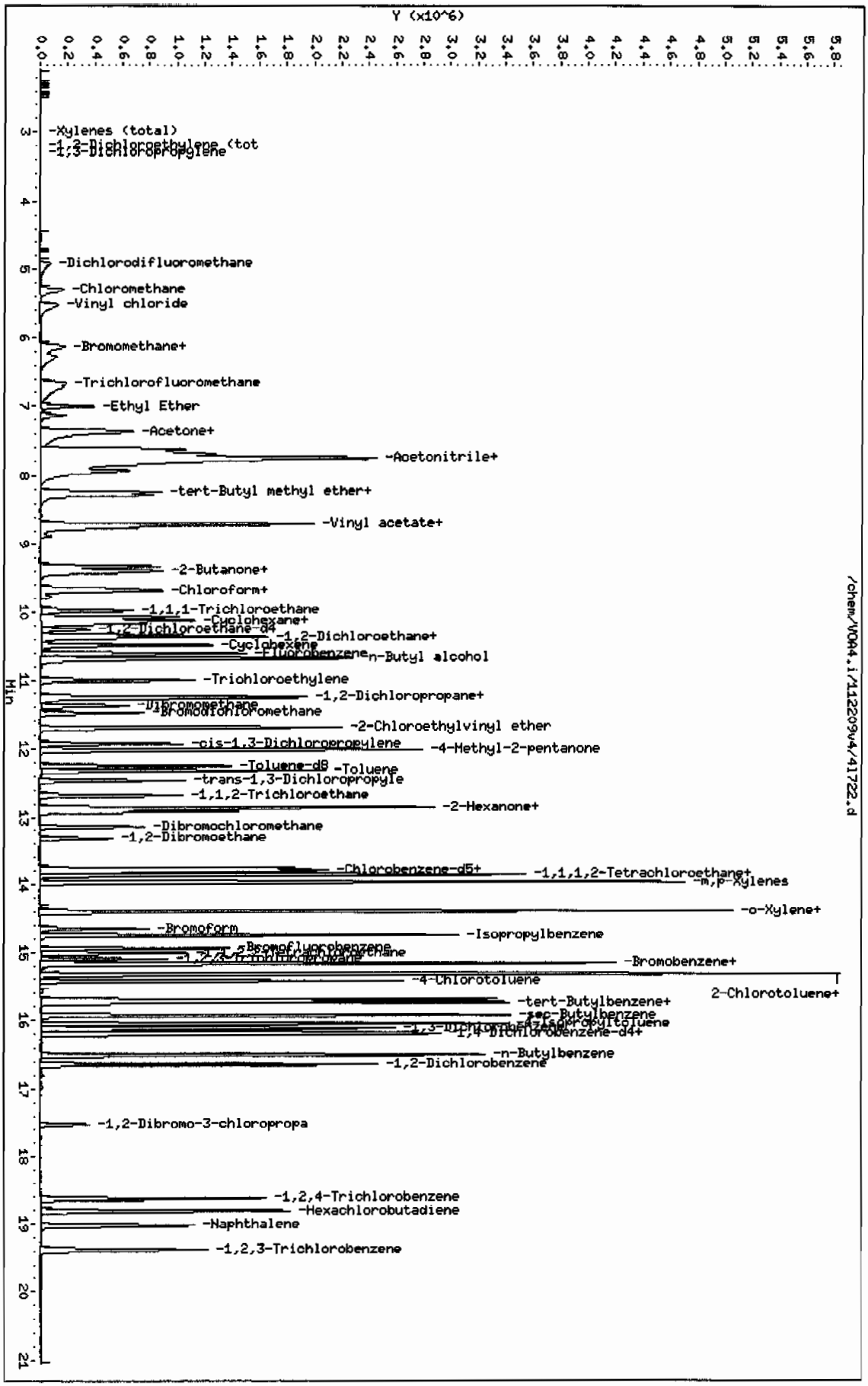

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
153 Chlorotrifluoroethylene	0.17243	0.13061	0.13061	0.010	-24.25152	30.00000	Averaged	
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.25736	0.25736	0.010	-0.85465	30.00000	Averaged	
9 Acrolein	0.05437	0.04991	0.04991	0.001	-8.19106	30.00000	Averaged	
12 Trichlorotrifluoroethane	0.09368	0.10008	0.10008	0.050	6.83147	30.00000	Averaged	
147 Isopropyl Alcohol	0.02698	0.02517	0.02517	0.010	-6.71050	40.00000	Averaged	
16 Allyl chloride	0.43415	0.41792	0.41792	0.010	-3.73840	30.00000	Averaged	
148 tert-Butyl Alcohol	0.04036	0.03739	0.03739	0.010	-7.33967	40.00000	Averaged	
18 Acrylonitrile	0.10963	0.10530	0.10530	0.010	-3.94603	30.00000	Averaged	
149 Isopropyl ether	0.91700	0.84326	0.84326	0.010	-8.04141	30.00000	Averaged	
24 2-Chloro-1,3-butadiene	0.41214	0.40649	0.40649	0.010	-1.36927	30.00000	Averaged	
150 Ethyl tert-butyl ether	0.83865	0.77645	0.77645	0.010	-7.41578	30.00000	Averaged	
28 Propionitrile	0.04604	0.04193	0.04193	0.010	-8.93871	30.00000	Averaged	
26 Ethyl acetate	0.30734	0.26429	0.26429	0.010	-14.00741	40.00000	Averaged	
27 Methacrylonitrile	0.18229	0.17171	0.17171	0.010	-5.80832	30.00000	Averaged	
72 Tetrahydrofuran	255	250	0.18327	0.010	1.87504	30.00000	Linear	
19 Isobutyl alcohol	0.01397	0.01249	0.01249	0.005	-10.58475	40.00000	Averaged	
151 Methyl tert-amyl ether	0.83559	0.76954	0.76954	0.010	-7.90398	30.00000	Averaged	
42 Methyl methacrylate	0.20344	0.18796	0.18796	0.010	-7.61187	30.00000	Averaged	
51 Ethyl methacrylate	0.49731	0.45252	0.45252	0.010	-9.00773	30.00000	Averaged	
152 1-Chlorohexane	0.25454	0.23444	0.23444	0.010	-7.89735	30.00000	Averaged	
97 1,4-Dioxane	0.00364	0.00345	0.00345	0.001	-5.31429	40.00000	Averaged	
48 2-Nitropropane	0.09473	0.09142	0.09142	0.010	-3.49078	30.00000	Averaged	
68 cis-1,4-Dichloro-2-butene	0.22079	0.21768	0.21768	0.010	-1.40961	30.00000	Averaged	
70 Cyclohexanone	0.03794	0.02005	0.02005	0.005	-47.14610	40.00000	Averaged	<-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20712	0.20712	0.010	-2.91969	30.00000	Averaged	
82 Pentachloroethane	0.44529	0.35466	0.35466	0.010	-20.35311	30.00000	Averaged	
88 Benzyl chloride	1.24521	1.01385	1.01385	0.010	-18.57992	30.00000	Averaged	
91 bis(2-Chloroisopropyl)ether	0.37162	0.34611	0.34611	0.010	-6.86391	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.19105	0.19105	0.001	-2.71473	30.00000	Averaged	
$ 47 Toluene-d8	0.87087	0.87045	0.87045	0.010	-0.04734	30.00000	Averaged	
$ 71 Bromofluorobenzene	0.57899	0.57621	0.57621	0.010	-0.48047	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	8.44016
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41723.d
Lab Smp Id: W4VM091122-19 Client Smp ID: SHORT SECOND SOURCE
Inj Date : 22-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02B/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	635460	150.000	114
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1252089	150.000	149
9 Acrolein	56	7.186	7.186	(0.677)	404736	250.000	230
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	811524	250.000	267
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2040774	2500.00	2330
16 Allyl chloride	41	7.802	7.802	(0.735)	3388727	250.000	241
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3032185	2500.00	2320
18 Acrylonitrile	53	8.180	8.180	(0.770)	853858	250.000	240
149 Isopropyl ether	45	8.747	8.747	(0.824)	1367530	50.0000	46.0
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	659221	50.0000	49.3
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1259195	50.0000	46.3
28 Propionitrile	54	9.393	9.393	(0.885)	339970	250.000	228
26 Ethyl acetate	43	9.345	9.345	(0.880)	2143053	250.000	215
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1392303	250.000	235
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	777504	250.000	255
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1012586	2500.00	2240

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1247986	50.0000	46.0
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1524080	250.000	231
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2794372	250.000	227
152 1-Chlorohexane	55	13.667	13.667	(1.287)	380193	50.0000	46.0
97 1,4-Dioxane	88	11.332	11.332	(1.067)	279362	2500.00	2370
48 2-Nitropropane	43	11.673	11.673	(1.099)	741303	250.000	241
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	923462	250.000	246
70 Cyclohexanone	42	14.904	14.904	(1.082)	619165	1250.00	661
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	878692	250.000	243
82 Pentachloroethane	167	15.776	15.776	(0.975)	1504604	250.000	199
88 Benzyl chloride	91	16.319	16.319	(1.009)	4301119	250.000	204
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1468339	250.000	233
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1621726	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1235040	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	848470	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	309837	50.0000	48.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1075045	50.0000	50.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	488894	50.0000	49.8

Data File: /chem/VOA4.i/112209v4/41723.d
Date : 22-NOV-2009 19:24
Client ID: SHORT SECOND SOURCE
Sample Info: IW4VW091122-191SHORTICV1I1VOAF1I1
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

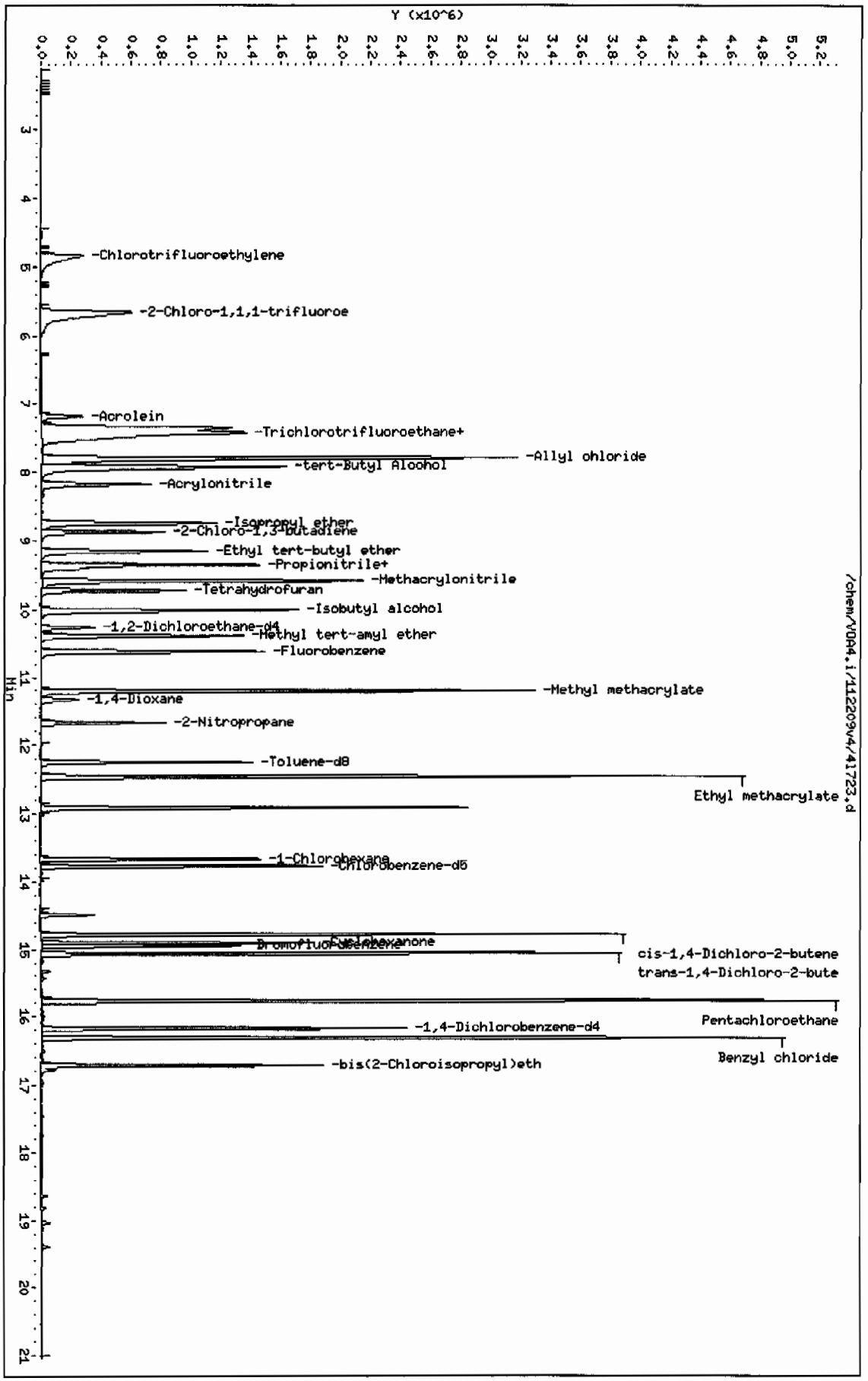

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4m302.d
Analysis Type: WATER
Lab Sample ID: W4VM091125-01 Quant Type: ISTD
Method: /chem/VOA4.i/112509v4/VOA4-8260-112209.m

Injection Date: 25-NOV-2009 20:53
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.69666	0.69666	0.050	2.32511	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.41932	0.41932	0.050	6.24905	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.45647	0.45647	0.050	4.65846	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.20746	0.20746	0.050	-10.95716	30.00000	Averaged	
4 Chloromethane	0.35970	0.32941	0.32941	0.100	-8.42144	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.32621	0.32621	0.050	-2.03077	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.25744	0.25744	0.050	-1.96624	30.00000	Averaged	
7 Chloroethane	0.24433	0.24360	0.24360	0.050	-0.29802	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.41823	0.41823	0.050	1.79919	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.21973	0.21973	0.001	-2.34304	30.00000	Averaged	
10 Acetone	0.20316	0.15625	0.15625	0.050	-23.08801	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04211	0.04211	0.010	-8.24703	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.43332	0.43332	0.050	2.37382	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.20685	0.20685	0.010	-11.70850	40.00000	Averaged	
13 Iodomethane	0.50633	0.50269	0.50269	0.050	-0.71922	30.00000	Averaged	
17 Methylene chloride	49.64524	50.00000	0.32987	0.050	-0.70952	30.00000	Linear	
14 Carbon disulfide	0.87768	0.92063	0.92063	0.050	4.89305	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.78500	0.78500	0.050	-4.21139	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.39973	0.39973	0.050	6.70370	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.59159	0.59159	0.010	8.58634	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.49700	0.49700	0.100	6.66063	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.18972	0.18972	0.030	-18.83421	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.43892	0.43892	0.050	5.83845	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.30625	0.30625	0.050	13.80590	30.00000	Averaged	
32 Chloroform	0.47081	0.48841	0.48841	0.010	3.73781	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.14686	0.14686	0.010	0.50351	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.39531	0.39531	0.010	13.14355	30.00000	Averaged	
129 Cyclohexane	0.40354	0.44460	0.44460	0.010	10.17604	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.39040	0.39040	0.010	12.31488	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01068	0.01068	0.001	-0.47059	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.38339	0.38339	0.010	13.76593	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.22198	0.22198	0.001	13.03063	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.37565	0.37565	0.010	1.34661	30.00000	Averaged	
38 Benzene	1.07172	1.08764	1.08764	0.010	1.48499	30.00000	Averaged	
139 Cyclohexene	0.50663	0.54206	0.54206	0.001	6.99303	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 25-NOV-2009 20:53
Lab File ID: 4m302.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091125-01 Quant Type: ISTD
Method: /chem/VOA4.i/112509v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
39 Trichloroethylene	0.26907	0.28983	0.28983	0.010	7.71561	30.00000	Averaged	
41 1,2-Dichloropropane	0.28098	0.29273	0.29273	0.010	4.18538	20.00000	Averaged	ccc
130 Methylcyclohexane	0.42905	0.48157	0.48157	0.010	12.24117	30.00000	Averaged	
45 Bromodichloromethane	0.36157	0.37820	0.37820	0.010	4.60046	30.00000	Averaged	
43 Dibromomethane	0.17355	0.17320	0.17320	0.010	-0.20228	30.00000	Averaged	
44 2-Chloroethylvinyl ether	0.16038	0.13760	0.13760	0.005	-14.20267	30.00000	Averaged	
49 4-Methyl-2-pentanone	0.16140	0.14844	0.14844	0.010	-8.03372	40.00000	Averaged	
46 cis-1,3-Dichloropropylene	0.45088	0.47137	0.47137	0.010	4.54554	30.00000	Averaged	
$ 47 Toluene-d8	0.87087	0.88335	0.88335	0.010	1.43397	30.00000	Averaged	
50 Toluene	0.87628	0.88069	0.88069	0.010	0.50353	20.00000	Averaged	ccc
53 trans-1,3-Dichloropropylene	0.55933	0.57126	0.57126	0.010	2.13237	30.00000	Averaged	
54 1,1,2-Trichloroethane	0.27795	0.27024	0.27024	0.010	-2.77132	30.00000	Averaged	
55 2-Hexanone	0.43492	0.34986	0.34986	0.010	-19.55602	40.00000	Averaged	
52 1,3-Dichloropropane	0.56243	0.54402	0.54402	0.010	-3.27336	30.00000	Averaged	
56 Tetrachloroethylene	0.34040	0.35081	0.35081	0.010	3.06059	30.00000	Averaged	
57 Dibromochloromethane	0.38465	0.39317	0.39317	0.010	2.21682	30.00000	Averaged	
59 1,2-Dibromoethane	0.35228	0.34639	0.34639	0.010	-1.67454	30.00000	Averaged	
62 Chlorobenzene	1.01070	1.04327	1.04327	0.300	3.22175	30.00000	Averaged	spcc
60 1,1,1,2-Tetrachloroethane	0.38168	0.38885	0.38885	0.010	1.87766	30.00000	Averaged	
58 Ethylbenzene	1.69174	1.71514	1.71514	0.010	1.38352	20.00000	Averaged	ccc
63 m,p-Xylenes	0.67252	0.68822	0.68822	0.010	2.33412	30.00000	Averaged	
64 o-Xylene	0.69744	0.71353	0.71353	0.010	2.30793	30.00000	Averaged	
65 Styrene	1.18591	1.20804	1.20804	0.010	1.86603	30.00000	Averaged	
66 Bromoform	0.53939	0.53762	0.53762	0.100	-0.32873	30.00000	Averaged	spcc
67 Isopropylbenzene	2.70984	2.77083	2.77083	0.010	2.25065	30.00000	Averaged	
73 1,1,2,2-Tetrachloroethane	0.79448	0.77014	0.77014	0.300	-3.06374	30.00000	Averaged	spcc
$ 71 Bromofluorobenzene	0.57899	0.60788	0.60788	0.010	4.99037	30.00000	Averaged	
74 1,2,3-Trichloropropane	0.21190	0.20000	0.20000	0.010	-5.61633	30.00000	Averaged	
75 Bromobenzene	0.85615	0.85839	0.85839	0.010	0.26178	30.00000	Averaged	
76 n-Propylbenzene	3.21886	3.33057	3.33057	0.010	3.47055	30.00000	Averaged	
77 2-Chlorotoluene	2.28570	2.28665	2.28665	0.010	0.04172	30.00000	Averaged	
78 1,3,5-Trimethylbenzene	2.41754	2.46587	2.46587	0.010	1.99929	30.00000	Averaged	
80 4-Chlorotoluene	2.10040	2.18671	2.18671	0.010	4.10911	30.00000	Averaged	
81 tert-Butylbenzene	2.45020	2.55176	2.55176	0.010	4.14481	30.00000	Averaged	
79 1,2,4-Trimethylbenzene	2.55843	2.60775	2.60775	0.010	1.92779	30.00000	Averaged	
83 sec-Butylbenzene	3.26817	3.41201	3.41201	0.010	4.40155	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4m302.d
Analysis Type: WATER
Lab Sample ID: W4VM091125-01
Method: /chem/VOA4.i/112509v4/VOA4-8260-112209.m

Injection Date: 25-NOV-2009 20:53
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.78581	2.78581	0.010	3.96322	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.63275	1.63275	0.010	1.38683	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.62604	1.62604	0.010	0.60763	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.61245	2.61245	0.010	4.84901	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.54152	1.54152	0.010	-1.38290	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.16612	0.16612	0.010	-5.80503	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.90206	0.90206	0.010	1.86841	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.64269	0.64269	0.010	2.79627	30.00000	Averaged
95 Naphthalene	1.52123	1.45176	1.45176	0.010	-4.56653	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.69600	0.69600	0.010	-0.42484	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.98757
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m302.d
Lab Smp Id: W4VM091125-01 Client Smp ID: VSTD050
Inj Date : 25-NOV-2009 20:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091125-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2574230	150.000	153
M 2 1,2-Dichloroethylene (total)	96				1336359	100.000	106
M 135 1,3-Dichloropropylene	75				1454738	100.000	105
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	330577	50.0000	44.5
4 Chloromethane	50	5.306	5.306	(0.500)	524906	50.0000	45.8
5 Vinyl chloride	62	5.528	5.528	(0.521)	519813	50.0000	49.0
6 Bromomethane	94	6.137	6.137	(0.578)	410220	50.0000	49.0
7 Chloroethane	64	6.288	6.288	(0.592)	388177	50.0000	49.8
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	666436	50.0000	50.9
134 Ethyl Ether	59	6.998	6.998	(0.659)	350134	50.0000	48.8
10 Acetone	43	7.358	7.358	(0.693)	1244904	250.000	192
15 Acetonitrile	41	7.706	7.706	(0.726)	1677597	1250.00	1150
11 1,1-Dichloroethylene	61	7.382	7.382	(0.695)	690487	50.0000	51.2
128 Methyl acetate	43	7.748	7.748	(0.730)	1648038	250.000	221
13 Iodomethane	142	7.626	7.626	(0.718)	4005113	250.000	248
17 Methylene chloride *	84	7.937	7.937	(0.747)	525644	50.0000	49.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.773	7.773	(0.732)	7334950	250.000	262
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1250871	50.0000	47.9
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	636958	50.0000	53.4
23 Vinyl acetate	43	8.711	8.711	(0.820)	4713401	250.000	271
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	791953	50.0000	53.3
30 2-Butanone	43	9.327	9.327	(0.878)	1511571	250.000	203
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	699401	50.0000	52.9
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	488004	50.0000	56.9
32 Chloroform	83	9.693	9.693	(0.913)	778269	50.0000	51.9
29 Bromochloromethane	128	9.656	9.656	(0.909)	234012	50.0000	50.2
36 1,1,1-Trichloroethane	97	9.980	9.980	(0.940)	629909	50.0000	56.6
129 Cyclohexane	56	10.083	10.083	(0.949)	708455	50.0000	55.1
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	622090	50.0000	56.2
131 n-Butyl alcohol	56	10.693	10.693	(1.007)	1702094	5000.00	4980
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	610926	50.0000	56.9
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	353711	50.0000	56.5
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	598584	50.0000	50.7
38 Benzene	78	10.370	10.370	(0.976)	1733120	50.0000	50.7
139 Cyclohexene	67	10.492	10.492	(0.988)	863758	50.0000	53.5
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1593469	50.0000	
39 Trichloroethylene	95	11.004	11.004	(1.036)	461842	50.0000	53.8
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	466464	50.0000	52.1
130 Methylcyclohexane	83	11.266	11.266	(1.061)	767373	50.0000	56.1
45 Bromodichloromethane	83	11.485	11.485	(1.082)	602657	50.0000	52.3
43 Dibromomethane	93	11.376	11.376	(1.071)	275995	50.0000	49.9
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1096323	250.000	214
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	914145	250.000	230
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	751117	50.0000	52.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1088034	50.0000	50.7
50 Toluene	92	12.327	12.327	(0.895)	1084757	50.0000	50.2
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	703621	50.0000	51.1
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	332861	50.0000	48.6
55 2-Hexanone	43	12.857	12.857	(0.934)	2154645	250.000	201
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	670072	50.0000	48.4
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	432101	50.0000	51.5
57 Dibromochloromethane	129	13.144	13.144	(0.954)	484273	50.0000	51.1
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	426646	50.0000	49.2
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1231708	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1285000	50.0000	51.6
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	478948	50.0000	50.9
58 Ethylbenzene	91	13.863	13.863	(1.007)	2112553	50.0000	50.7
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1695366	100.000	102
64 o-Xylene	106	14.405	14.405	(1.046)	878864	50.0000	51.2
65 Styrene	104	14.399	14.399	(1.046)	1487948	50.0000	50.9
66 Bromoform	173	14.655	14.655	(0.906)	457920	50.0000	49.8
67 Isopropylbenzene	105	14.759	14.759	(0.912)	2360078	50.0000	51.1
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	655972	50.0000	48.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	517769	50.0000	52.5
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	170349	50.0000	47.2
75 Bromobenzene	156	15.168	15.168	(0.937)	731143	50.0000	50.1
76 n-Propylbenzene	91	15.180	15.180	(0.938)	2836842	50.0000	51.7
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	1947672	50.0000	50.0
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	2100324	50.0000	51.0
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1862546	50.0000	52.0
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2173482	50.0000	52.1
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	2221173	50.0000	51.0
83 sec-Butylbenzene	105	15.930	15.930	(0.985)	2906211	50.0000	52.2
84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	2372835	50.0000	52.0
85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	1390705	50.0000	50.7
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	851758	50.0000	
87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	1384996	50.0000	50.3
89 n-Butylbenzene	91	16.503	16.503	(1.020)	2225172	50.0000	52.4
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1312998	50.0000	49.3
92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	141495	50.0000	47.1
93 1,2,4-Trichlorobenzene	180	18.630	18.630	(1.151)	768334	50.0000	50.9
94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	547413	50.0000	51.4
95 Naphthalene	128	19.033	19.033	(1.176)	1236550	50.0000	47.7
96 1,2,3-Trichlorobenzene	180	19.386	19.386	(1.198)	592823	50.0000	49.8

Data File: /chem/VOA4.i/112509v4/4m302.d
Date : 25-NOV-2009 20:53
Client ID: VSTD050
Sample Info: IW4VM091125-01ICV/LCS111VOAF111
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

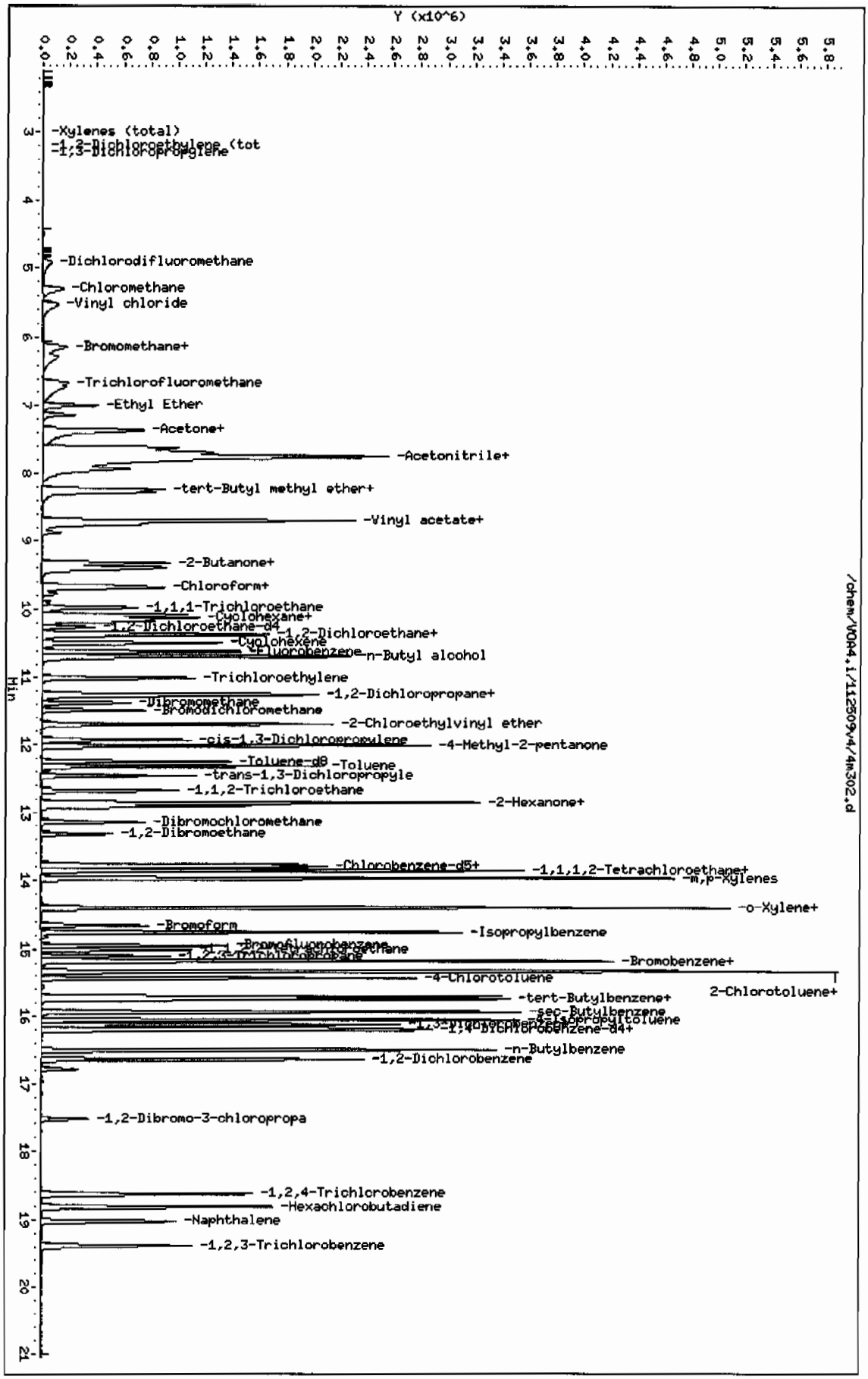

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 25-NOV-2009 21:47
Lab File ID: 4m304.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091125-03 Quant Type: ISTD
Method: /chem/VOA4.i/112509v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
153 Chlorotrifluoroethylene	0.17243	0.19977	0.19977	0.010	15.85464	30.00000	Averaged	
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.31573	0.31573	0.010	21.63413	30.00000	Averaged	
9 Acrolein	0.05437	0.05206	0.05206	0.001	-4.24906	30.00000	Averaged	
12 Trichlorotrifluoroethane	0.09368	0.09808	0.09808	0.050	4.69322	30.00000	Averaged	
147 Isopropyl Alcohol	0.02698	0.02474	0.02474	0.010	-8.31393	40.00000	Averaged	
16 Allyl chloride	0.43415	0.42851	0.42851	0.010	-1.29935	30.00000	Averaged	
148 tert-Butyl Alcohol	0.04036	0.03689	0.03689	0.010	-8.58608	40.00000	Averaged	
18 Acrylonitrile	0.10963	0.10166	0.10166	0.010	-7.26440	30.00000	Averaged	
149 Isopropyl ether	0.91700	0.94916	0.94916	0.010	3.50806	30.00000	Averaged	
24 2-Chloro-1,3-butadiene	0.41214	0.42632	0.42632	0.010	3.44133	30.00000	Averaged	
150 Ethyl tert-butyl ether	0.83865	0.85349	0.85349	0.010	1.77027	30.00000	Averaged	
28 Propionitrile	0.04604	0.04139	0.04139	0.010	-10.10845	30.00000	Averaged	
26 Ethyl acetate	0.30734	0.25821	0.25821	0.010	-15.98498	40.00000	Averaged	
27 Methacrylonitrile	0.18229	0.16604	0.16604	0.010	-8.91794	30.00000	Averaged	
72 Tetrahydrofuran	247	250	0.17773	0.010	-1.33545	30.00000	Linear	
19 Isobutyl alcohol	0.01397	0.01208	0.01208	0.005	-13.49137	40.00000	Averaged	
151 Methyl tert-amyl ether	0.83559	0.83044	0.83044	0.010	-0.61647	30.00000	Averaged	
42 Methyl methacrylate	0.20344	0.18571	0.18571	0.010	-8.71514	30.00000	Averaged	
51 Ethyl methacrylate	0.49731	0.45112	0.45112	0.010	-9.28828	30.00000	Averaged	
152 1-Chlorohexane	0.25454	0.29637	0.29637	0.010	16.43195	30.00000	Averaged	
97 1,4-Dioxane	0.00364	0.00339	0.00339	0.001	-6.81873	40.00000	Averaged	
48 2-Nitropropane	0.09473	0.09042	0.09042	0.010	-4.54337	30.00000	Averaged	
68 cis-1,4-Dichloro-2-butene	0.22079	0.22785	0.22785	0.010	3.19955	30.00000	Averaged	
70 Cyclohexanone	0.03794	0.02000	0.02000	0.005	-47.27904	40.00000	Averaged	<-
69 trans-1,4-Dichloro-2-butene	0.21335	0.21610	0.21610	0.010	1.28533	30.00000	Averaged	
82 Pentachloroethane	0.44529	0.53065	0.53065	0.010	19.16949	30.00000	Averaged	
88 Benzyl chloride	1.24521	1.27097	1.27097	0.010	2.06815	30.00000	Averaged	
91 bis(2-Chloroisopropyl)ether	0.37162	0.33509	0.33509	0.010	-9.82981	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.19863	0.19863	0.001	1.14062	30.00000	Averaged	
$ 47 Toluene-d8	0.87087	0.89077	0.89077	0.010	2.28574	30.00000	Averaged	
$ 71 Bromofluorobenzene	0.57899	0.59184	0.59184	0.010	2.22034	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4m304.d
Analysis Type: WATER
Lab Sample ID: W4VM091125-03
Method: /chem/VOA4.i/112509v4/VOA4-8260-112209.m

Injection Date: 25-NOV-2009 21:47
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

Average %D / Drift Results.	
Calculated Average %D/Drift =	4.98757
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m304.d
Lab Smp Id: W4VM091125-03 Client Smp ID: VSTD250S
Inj Date : 25-NOV-2009 21:47
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091125-03|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	967675	150.000	174
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1529397	150.000	182
9 Acrolein	56	7.186	7.186	(0.677)	420273	250.000	239
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	791812	250.000	262
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	1996950	2500.00	2290
16 Allyl chloride	41	7.802	7.802	(0.735)	3459436	250.000	247
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	2978351	2500.00	2280
18 Acrylonitrile	53	8.180	8.180	(0.770)	820765	250.000	232
149 Isopropyl ether	45	8.747	8.747	(0.824)	1532571	50.0000	51.8
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	688358	50.0000	51.7
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1378094	50.0000	50.9
28 Propionitrile	54	9.393	9.393	(0.885)	334140	250.000	225
26 Ethyl acetate	43	9.338	9.338	(0.879)	2084637	250.000	210
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1340466	250.000	228
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	743834	250.000	247
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	975397	2500.00	2160

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1340865	50.0000	49.7
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1499312	250.000	228
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2755934	250.000	227
152 1-Chlorohexane	55	13.661	13.661	(1.286)	478527	50.0000	58.2
97 1,4-Dioxane	88	11.332	11.332	(1.067)	273725	2500.00	2330
48 2-Nitropropane	43	11.673	11.673	(1.099)	730020	250.000	239
68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	953628	250.000	258
70 Cyclohexanone	42	14.904	14.904	(1.082)	610996	1250.00	659
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	904417	250.000	253
82 Pentachloroethane	167	15.776	15.776	(0.975)	2220932	250.000	298(A)
88 Benzyl chloride	91	16.319	16.319	(1.009)	5319332	250.000	255
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1402452	250.000	225
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1614653	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1221819	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	837054	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	320710	50.0000	50.6
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1088361	50.0000	51.1
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	495405	50.0000	51.1

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/112509v4/4m304.d
Date : 25-NOV-2009 21:47
Client ID: VSTD250S
Sample Info: IW4VH091125-03|SHORT|1|VOAF1|1
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

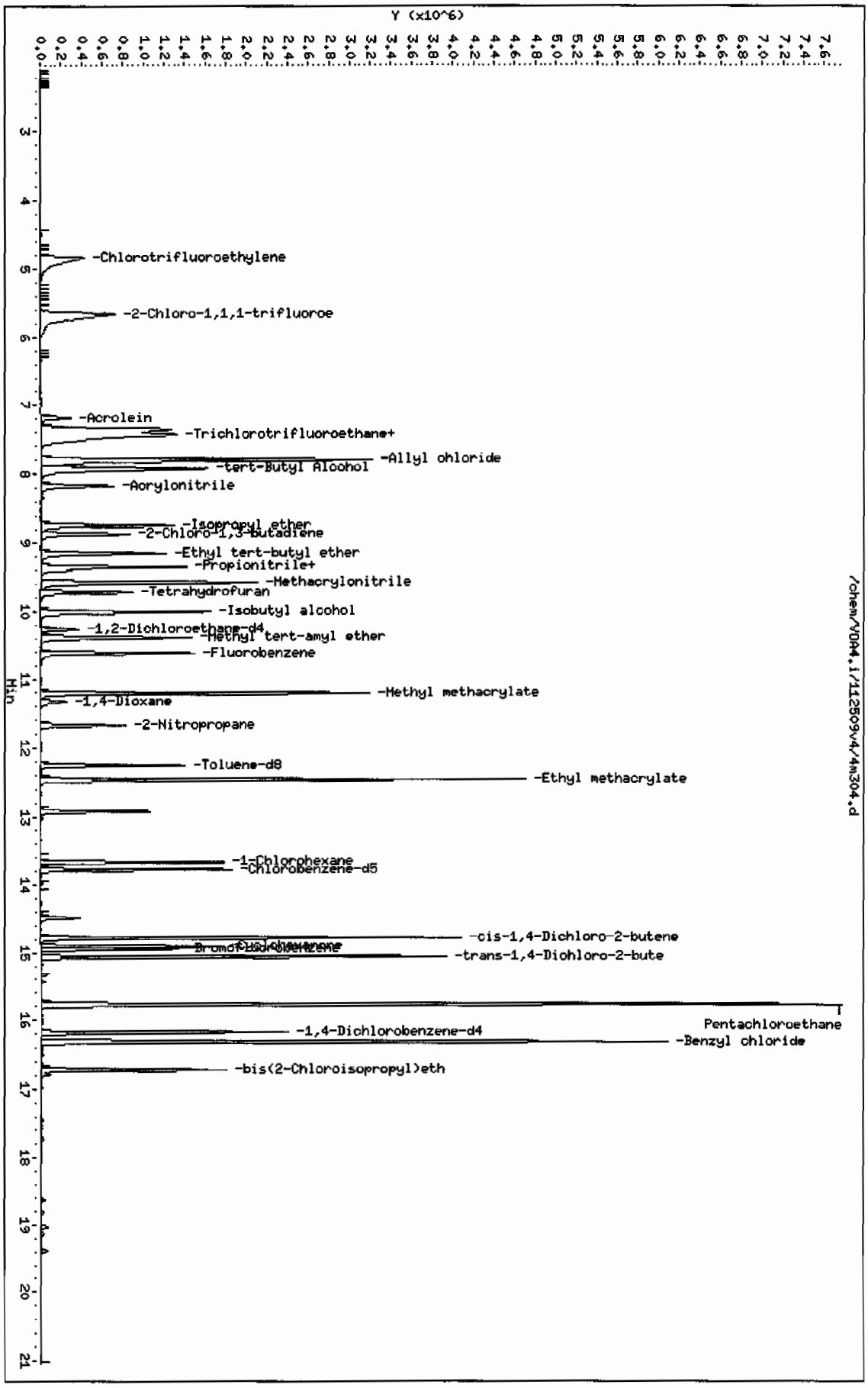

Page 1

QC Data

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

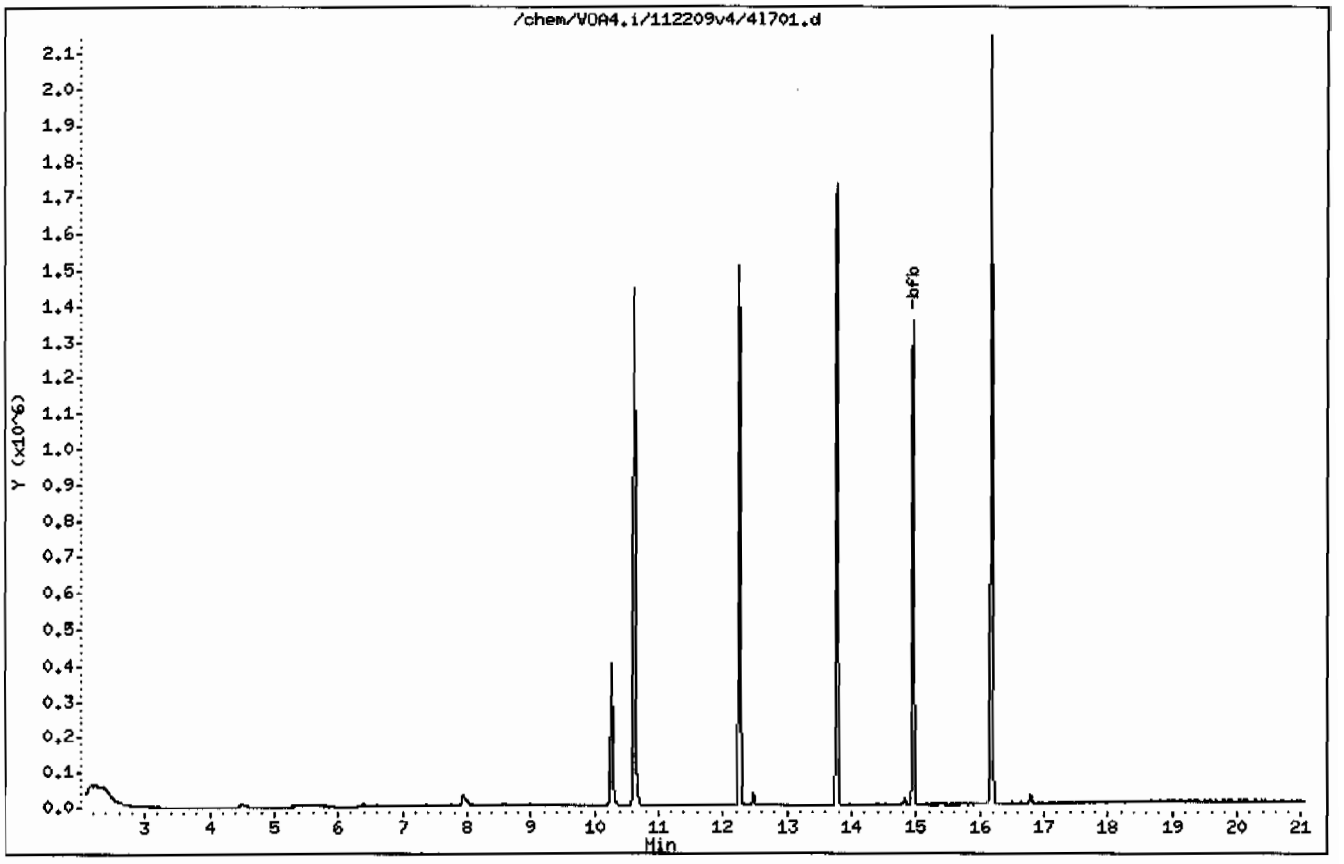

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

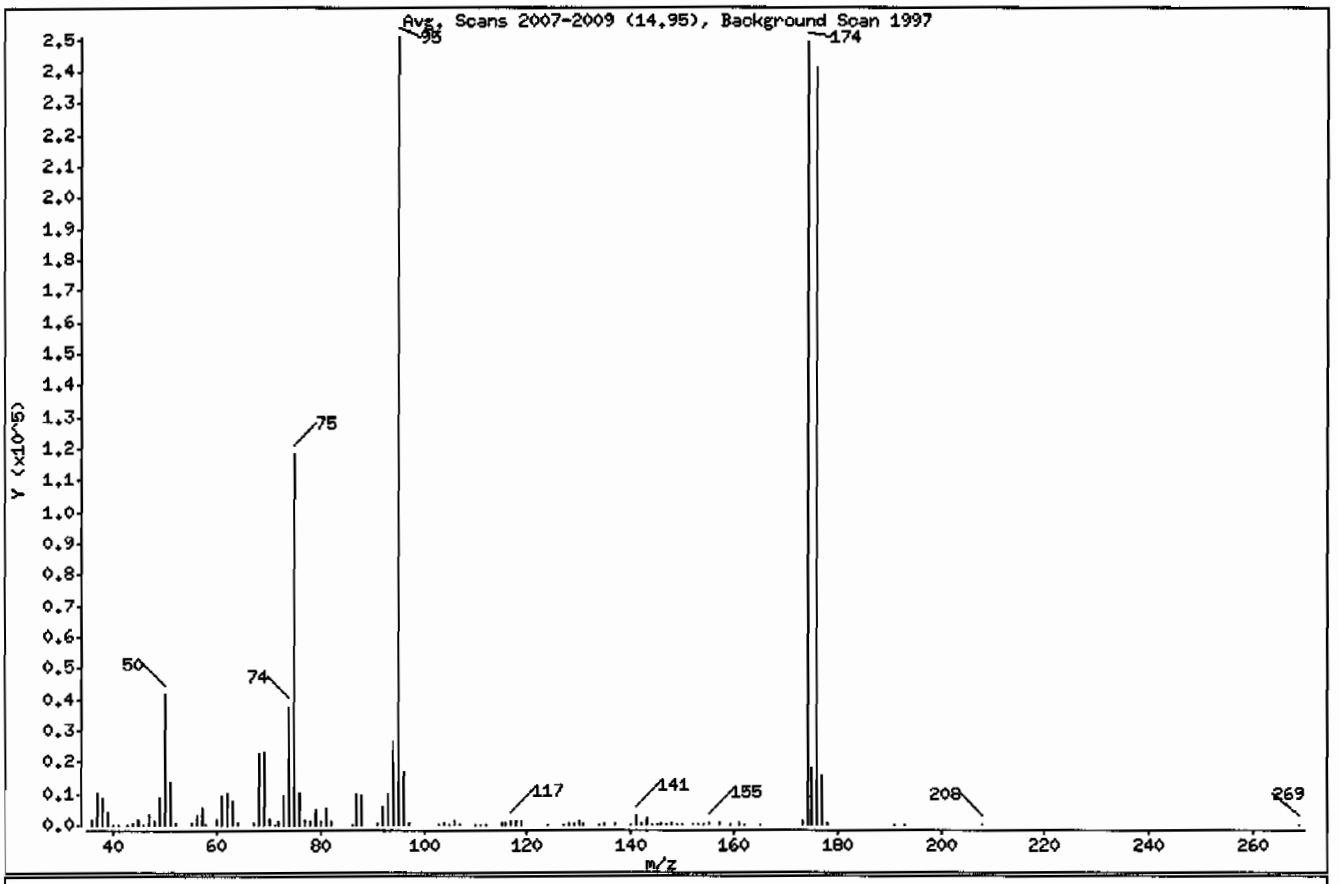

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.46
75	30.00 - 60.00% of mass 95	47.01
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.43 (0.43)
174	50.00 - 100.00% of mass 95	99.29
175	5.00 - 9.00% of mass 174	7.09 (7.14)
176	95.00 - 101.00% of mass 174	96.07 (96.76)
177	5.00 - 9.00% of mass 176	6.11 (6.36)

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVH091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 41701.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1997
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1852	68.00	22712	104.00	786	145.00	227
37.00	10469	69.00	23288	105.00	216	146.00	338
38.00	8405	70.00	1742	106.00	913	147.00	212
39.00	4011	71.00	281	107.00	271	148.00	588
40.00	10	72.00	1018	110.00	50	149.00	261
41.00	174	73.00	9172	111.00	93	150.00	273
43.00	32	74.00	37232	112.00	54	152.00	51
44.00	673	75.00	118008	115.00	294	153.00	133
45.00	1913	76.00	10049	116.00	814	154.00	263
46.00	181	77.00	1447	117.00	1364	155.00	862
47.00	3182	78.00	1010	118.00	999	157.00	488
48.00	1157	79.00	4497	119.00	1228	159.00	282
49.00	8549	80.00	1297	124.00	61	161.00	368
50.00	41280	81.00	4964	127.00	56	162.00	58
51.00	13197	82.00	981	128.00	697	165.00	52
52.00	604	86.00	130	129.00	382	173.00	1069
55.00	416	87.00	9653	130.00	872	174.00	249216
56.00	2604	88.00	9450	131.00	389	175.00	17792
57.00	5395	91.00	777	134.00	56	176.00	241152
58.00	216	92.00	6052	135.00	375	177.00	15329
60.00	1746	93.00	9586	137.00	534	178.00	346
61.00	9083	94.00	26584	140.00	119	191.00	57
62.00	9883	95.00	251008	141.00	2645	193.00	50
63.00	7531	96.00	16696	142.00	321	208.00	106
64.00	738	97.00	497	143.00	2486	269.00	58
67.00	656	103.00	132	144.00	135		

Data File: /chem/VOA4.i/112509v4/4m301.d

Page 1

Date : 25-NOV-2009 20:26

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

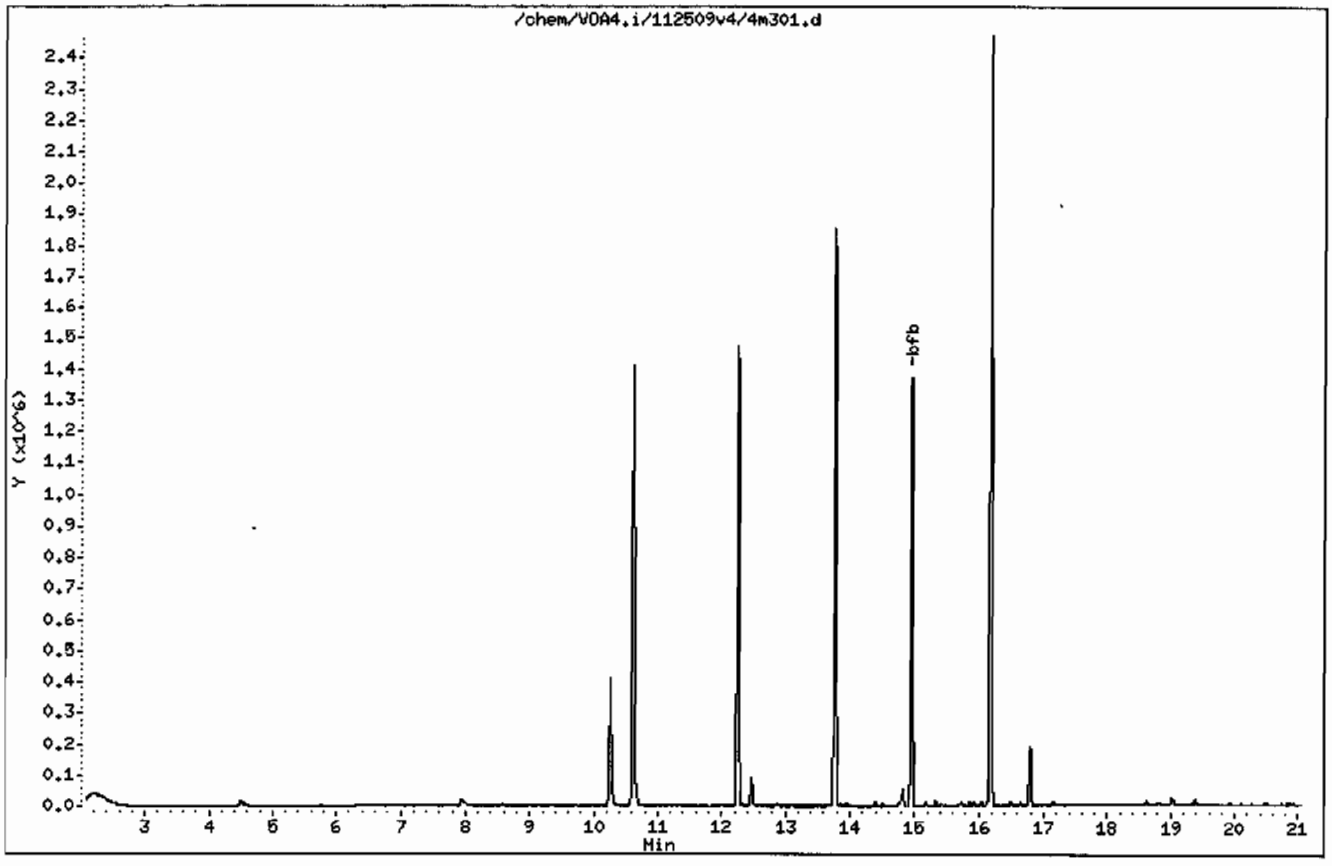

Data File: /chem/VOA4.i/112509v4/4m301.d

Date : 25-NOV-2009 20:26

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

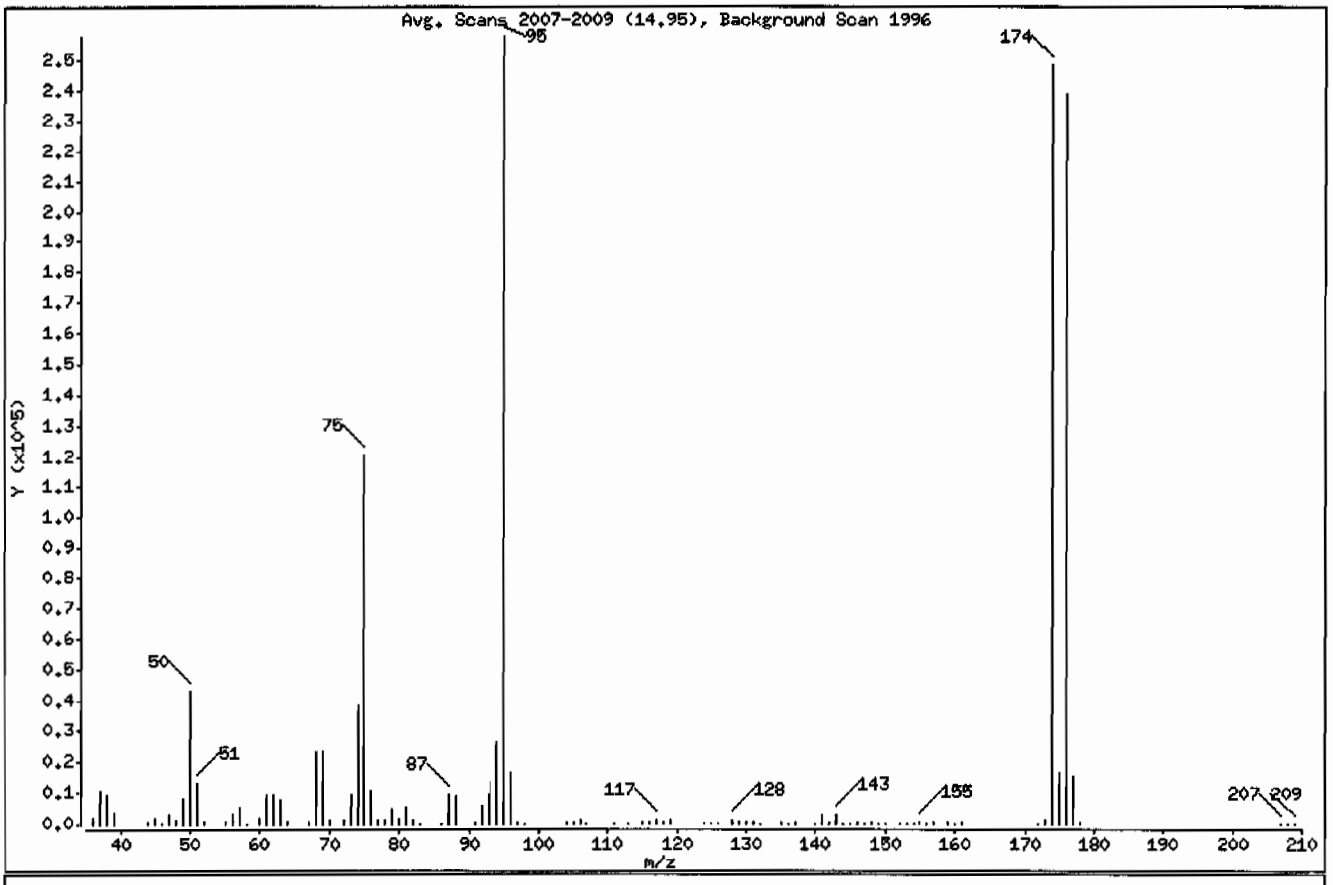

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.63
75	30.00 - 60.00% of mass 95	46.60
96	5.00 - 9.00% of mass 95	6.55
173	Less than 2.00% of mass 174	0.48 (0.50)
174	50.00 - 100.00% of mass 95	96.23
175	5.00 - 9.00% of mass 174	6.38 (6.63)
176	95.00 - 101.00% of mass 174	92.75 (96.39)
177	5.00 - 9.00% of mass 176	6.05 (6.52)

Date : 25-NOV-2009 20:26

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVH091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4m301.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1996
Location of Maximum: 95.00
Number of points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1748	72.00	1029	107.00	206	147.00	283
37.00	10391	73.00	9290	111.00	68	148.00	762
38.00	9374	74.00	38256	113.00	106	149.00	241
39.00	3574	75.00	120160	115.00	302	150.00	186
44.00	527	76.00	10407	116.00	879	152.00	134
45.00	2040	77.00	1352	117.00	1291	153.00	192
46.00	50	78.00	1062	118.00	797	154.00	242
47.00	2847	79.00	4844	119.00	1194	155.00	633
48.00	1433	80.00	1725	124.00	76	156.00	108
49.00	8495	81.00	5047	125.00	57	157.00	630
50.00	42872	82.00	1047	126.00	63	159.00	359
51.00	13190	83.00	209	128.00	1064	160.00	57
52.00	536	86.00	180	129.00	474	161.00	321
55.00	569	87.00	9530	130.00	834	172.00	53
56.00	3148	88.00	8879	131.00	386	173.00	1245
57.00	5493	91.00	758	132.00	51	174.00	248128
58.00	253	92.00	5853	135.00	442	175.00	16456
60.00	1622	93.00	9354	136.00	60	176.00	239168
61.00	9427	94.00	26904	137.00	331	177.00	15591
62.00	9716	95.00	257856	140.00	64	178.00	454
63.00	7995	96.00	16888	141.00	2879	207.00	278
64.00	792	97.00	505	142.00	394	208.00	154
67.00	657	98.00	55	143.00	2989	209.00	56
68.00	23136	104.00	792	144.00	187		
69.00	23664	105.00	400	145.00	258		
70.00	1475	106.00	1022	146.00	364		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981949**				
Client Sample:	**QC for batch 926999**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 926999**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 23:10**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 20:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m307bl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1			**Matrix:**	SOIL
Lab Sample ID:	1201981949				
Client Sample:	QC for batch 926999	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926999	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927001	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 23:10	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 20:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m307bl.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m307bl.d
Lab Smp Id: 1201981949 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 23:10
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201981949|927001|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	348029	57.4947	57.5
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1541165	50.0000	
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1149054	56.1619	56.2
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1174674	50.0000	
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	520355	60.2570	60.2
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	745748	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m307bl.d
Lab Smp Id: 1201981949 Client Smp ID: BLANK
Inj Date : 25-NOV-2009 23:10
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201981949|927001|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/112509v4/4m307bl.d
Date : 25-NOV-2009 23:10
Client ID: BLANK
Sample Info: |120198194919270011|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

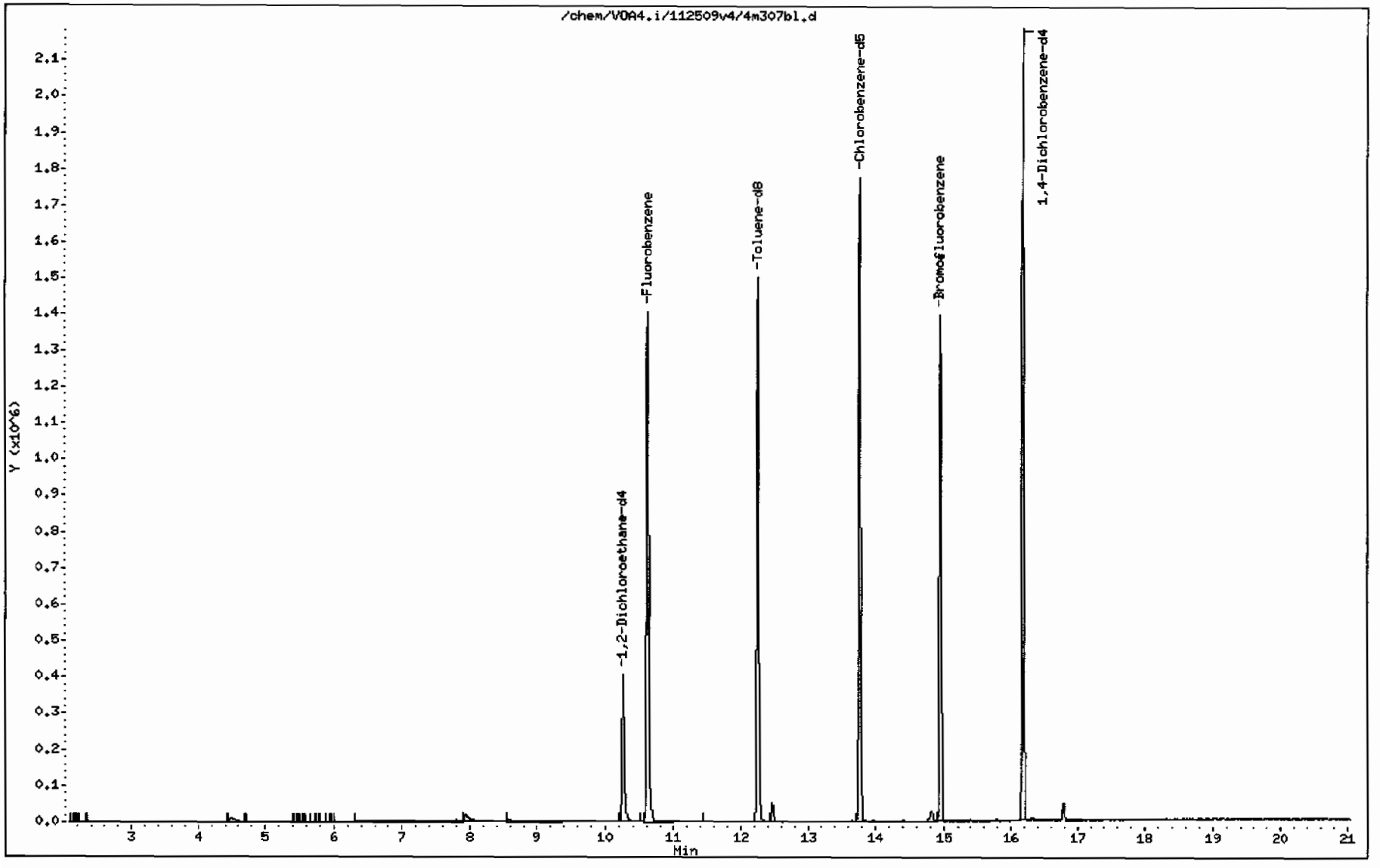

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981952**				
Client Sample:	**QC for batch 926999**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926999**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 19:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m3031l.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		44.1	ug/kg	0.340	1.00
74-87-3	Chloromethane		43.3	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		47.5	ug/kg	0.300	1.00
74-83-9	Bromomethane		46.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		47.2	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		50.8	ug/kg	0.300	1.00
67-64-1	Acetone		188	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		49.6	ug/kg	0.300	1.00
74-88-4	Iodomethane		239	ug/kg	1.60	5.00
75-09-2	Methylene chloride		46.2	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		254	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		52.1	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		51.2	ug/kg	0.300	1.00
78-93-3	2-Butanone		198	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		50.0	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		55.5	ug/kg	0.300	1.00
67-66-3	Chloroform		50.1	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		47.0	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		55.4	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		55.1	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		56.7	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		47.7	ug/kg	0.300	1.00
71-43-2	Benzene		49.2	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		52.1	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		49.1	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		49.6	ug/kg	0.300	1.00
74-95-3	Dibromomethane		47.0	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		222	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		49.8	ug/kg	0.300	1.00
108-88-3	Toluene		48.1	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		47.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		45.5	ug/kg	0.300	1.00
591-78-6	2-Hexanone		194	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		45.5	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		51.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		48.2	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		47.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		48.4	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981952**				
Client Sample:	**QC for batch 926999**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926999**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 21:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 19:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m303ll.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		48.4	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		97.9	ug/kg	0.300	2.00
95-47-6	o-Xylene		48.3	ug/kg	0.300	1.00
100-42-5	Styrene		48.1	ug/kg	0.300	1.00
75-25-2	Bromoform		47.5	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		45.2	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		44.9	ug/kg	0.300	1.00
108-86-1	Bromobenzene		46.7	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		48.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		46.2	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		48.5	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		47.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		47.7	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		48.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		47.2	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		48.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		49.0	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		47.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		47.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		49.3	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		45.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		47.6	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		45.8	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m30311.d
Lab Smp Id: 1201981952 Client Smp ID: LCS
Inj Date : 25-NOV-2009 21:20
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201981952|927001|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01D/IVM091122-01
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2773088	146.270	146
M 2 1,2-Dichloroethylene (total)	96				1440206	102.029	102
M 135 1,3-Dichloropropylene	75				1550079	99.2616	99.3
3 Dichlorodifluoromethane	85	4.912	4.911	(0.462)	368151	44.1327	44.1
4 Chloromethane	50	5.306	5.306	(0.500)	558272	43.3477	43.3
5 Vinyl chloride	62	5.528	5.528	(0.521)	566665	47.5310	47.5
6 Bromomethane	94	6.138	6.137	(0.578)	434677	46.2310	46.2
7 Chloroethane	64	6.288	6.288	(0.592)	413136	47.2253	47.2
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	746890	50.7750	50.8
134 Ethyl Ether	59	7.005	6.998	(0.660)	373522	46.3653	46.4
10 Acetone	43	7.358	7.358	(0.693)	1369115	188.224	188
11 1,1-Dichloroethylene	61	7.389	7.382	(0.696)	751623	49.5954	49.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.626	7.626	(0.718)	4325395	238.591	238
15 Acetonitrile	41	7.706	7.706	(0.726)	1785662	1086.62	1090
128 Methyl acetate	43	7.748	7.748	(0.730)	1746257	208.179	208
14 Carbon disulfide	76	7.767	7.773	(0.731)	7967778	253.551	254
17 Methylene chloride	84	7.937	7.937	(0.747)	554302	46.1933	46.2
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1334084	45.4666	45.5
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	698491	52.0759	52.1
23 Vinyl acetate	43	8.712	8.711	(0.820)	4885041	250.430	250
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	854763	51.2340	51.2
30 2-Butanone	43	9.327	9.327	(0.878)	1656454	197.925	198
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	741715	49.9530	50.0
25 2,2-Dichloropropane	77	9.425	9.419	(0.887)	534902	55.5167	55.5
29 Bromochloromethane	128	9.657	9.656	(0.909)	245972	47.0150	47.0
32 Chloroform	83	9.693	9.693	(0.913)	844705	50.1095	50.1
36 1,1,1-Trichloroethane	97	9.980	9.980	(0.940)	693331	55.4243	55.4
129 Cyclohexane	56	10.083	10.083	(0.949)	795086	55.0296	55.0
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	685700	55.0967	55.1
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	684045	56.6912	56.7
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	363099	51.6393	51.6
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	632996	47.6972	47.7
38 Benzene	78	10.376	10.370	(0.977)	1889165	49.2324	49.2
139 Cyclohexene	67	10.492	10.492	(0.988)	967514	53.3370	53.3
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1790218	50.0000	
131 n-Butyl alcohol	56	10.693	10.693	(1.007)	1935360	5036.60	5040
39 Trichloroethylene	95	11.004	11.004	(1.036)	502202	52.1280	52.1
130 Methylcyclohexane	83	11.266	11.266	(1.061)	859475	55.9483	55.9
41 1,2-Dichloropropane	63	11.242	11.241	(1.059)	494418	49.1463	49.1
43 Dibromomethane	93	11.376	11.376	(1.071)	292075	47.0026	47.0
45 Bromodichloromethane	83	11.486	11.485	(1.081)	642178	49.6051	49.6
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1150791	200.405	200
46 cis-1,3-Dichloropropylene	75	11.931	11.930	(1.123)	804195	49.8158	49.8
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	999231	222.299	222
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	1119182	46.1455	46.1
50 Toluene	92	12.327	12.327	(0.895)	1174946	48.1453	48.1
53 trans-1,3-Dichloropropylene	75	12.467	12.461	(0.905)	745884	47.8832	47.9
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	352194	45.4989	45.5
55 2-Hexanone	43	12.857	12.857	(0.934)	2352959	194.263	194
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	712956	45.5171	45.5
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	488781	51.5596	51.6
57 Dibromochloromethane	129	13.150	13.144	(0.955)	516671	48.2318	48.2
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	461102	46.9984	47.0
* 61 Chlorobenzene-d5	117	13.772	13.771	(1.000)	1392484	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1361685	48.3763	48.4
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	506366	47.6368	47.6
58 Ethylbenzene	91	13.863	13.863	(1.007)	2278225	48.3553	48.4
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1834383	97.9410	97.9
64 o-Xylene	106	14.406	14.405	(1.046)	938705	48.3286	48.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
65 Styrene	104	14.400	14.399	(1.046)	1589517	48.1276	48.1
66 Bromoform	173	14.656	14.655	(0.906)	497863	47.4921	47.5
67 Isopropylbenzene	105	14.759	14.759	(0.912)	2555492	48.5228	48.5
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	534940	47.5390	47.5
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	697639	45.1817	45.2
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	185083	44.9423	44.9
75 Bromobenzene	156	15.168	15.168	(0.937)	776367	46.6586	46.6
76 n-Propylbenzene	91	15.180	15.180	(0.938)	3034282	48.5030	48.5
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	2233652	47.5398	47.5
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	2050383	46.1564	46.2
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1946829	47.6915	47.7
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2306689	48.4397	48.4
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	2345496	47.1711	47.2
83 sec-Butylbenzene	105	15.930	15.930	(0.985)	3096776	48.7552	48.8
84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	2551924	49.0017	49.0
85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	1494720	47.7571	47.8
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	971751	50.0000	
87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	1487051	47.3412	47.3
89 n-Butylbenzene	91	16.503	16.503	(1.020)	2388226	49.3182	49.3
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1391323	45.7981	45.8
92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	156393	45.6284	45.6
93 1,2,4-Trichlorobenzene	180	18.630	18.630	(1.151)	835743	48.5617	48.6
94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	582401	47.9309	47.9
95 Naphthalene	128	19.033	19.033	(1.176)	1391121	47.0528	47.0
96 1,2,3-Trichlorobenzene	180	19.386	19.386	(1.198)	657447	48.3969	48.4

Data File: /chem/VOA4.i/112509v4/4m30311.d
Date : 25-NOV-2009 21:20
Client ID: LCS
Sample Info: 1120198195219270011111VOAF111
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

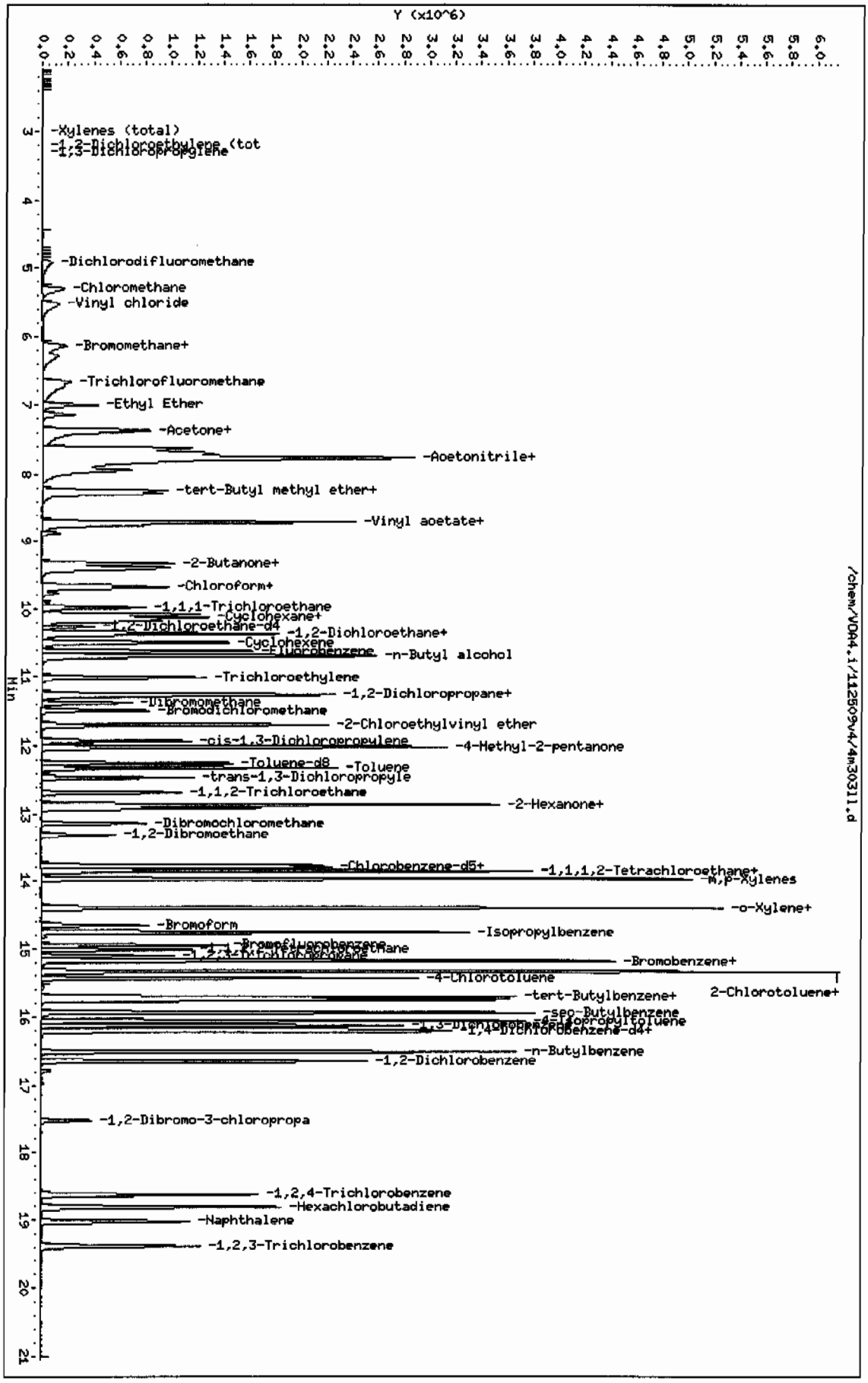

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1			**Matrix:**	SOIL
Lab Sample ID:	1201981953				
Client Sample:	QC for batch 926999	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 926999	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927001	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/25/2009 22:15	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 19:45	**Allquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m305sl.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981953**				
Client Sample:	**QC for batch 926999**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926999**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/25/2009 22:15**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 19:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m305sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		277	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m305sl.d
Lab Smp Id: 1201981953 Client Smp ID: LCS
Inj Date : 25-NOV-2009 22:15
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201981953|927001|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091105-02C/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	901750	156.288	156(A)
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1509789	173.823	174
9 Acrolein	56	7.180	7.186	(0.676)	428172	235.360	235
12 Trichlorotrifluoroethane	85	7.363	7.357	(0.693)	868443	277.039	277
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2184374	2419.73	2420
16 Allyl chloride	41	7.802	7.802	(0.735)	3394242	233.647	234
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3291254	2437.26	2440
18 Acrylonitrile	53	8.180	8.180	(0.770)	860608	234.605	235
149 Isopropyl ether	45	8.747	8.747	(0.824)	1519378	49.5168	49.5
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	683765	49.5815	49.6
150 Ethyl tert-butyl ether	59	9.143	9.149	(0.861)	1392055	49.6057	49.6
26 Ethyl acetate	43	9.338	9.338	(0.879)	2181064	212.079	212

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
28 Propionitrile	54	9.399	9.393	(0.885)	346150	224.677	225
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1393438	228.438	228
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	782965	244.518	244
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1054593	2256.66	2260
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	317665	48.3409	48.3
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1378871	49.3158	49.3
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1673077	50.0000	
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1549743	227.651	228
97 1,4-Dioxane	88	11.326	11.332	(1.067)	283449	2328.05	2330
48 2-Nitropropane	43	11.673	11.673	(1.099)	753501	237.716	238
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1071189	47.5165	47.5
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2836122	220.306	220
152 1-Chlorohexane	55	13.661	13.661	(1.286)	454593	53.3730	53.4
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1294315	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	991441	252.701	253
70 Cyclohexanone	42	14.904	14.904	(1.082)	659263	671.244	671
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	500325	48.6294	48.6
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	945992	249.520	250
82 Pentachloroethane	167	15.776	15.776	(0.975)	1880364	237.636	238
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	888490	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	5409322	244.465	244
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1537587	232.839	233

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/112509v4/4m305sl.d
Date : 25-NOV-2009 22:15
Client ID: LCS
Sample Info: 1120198195319270011|1|VOAF|1|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

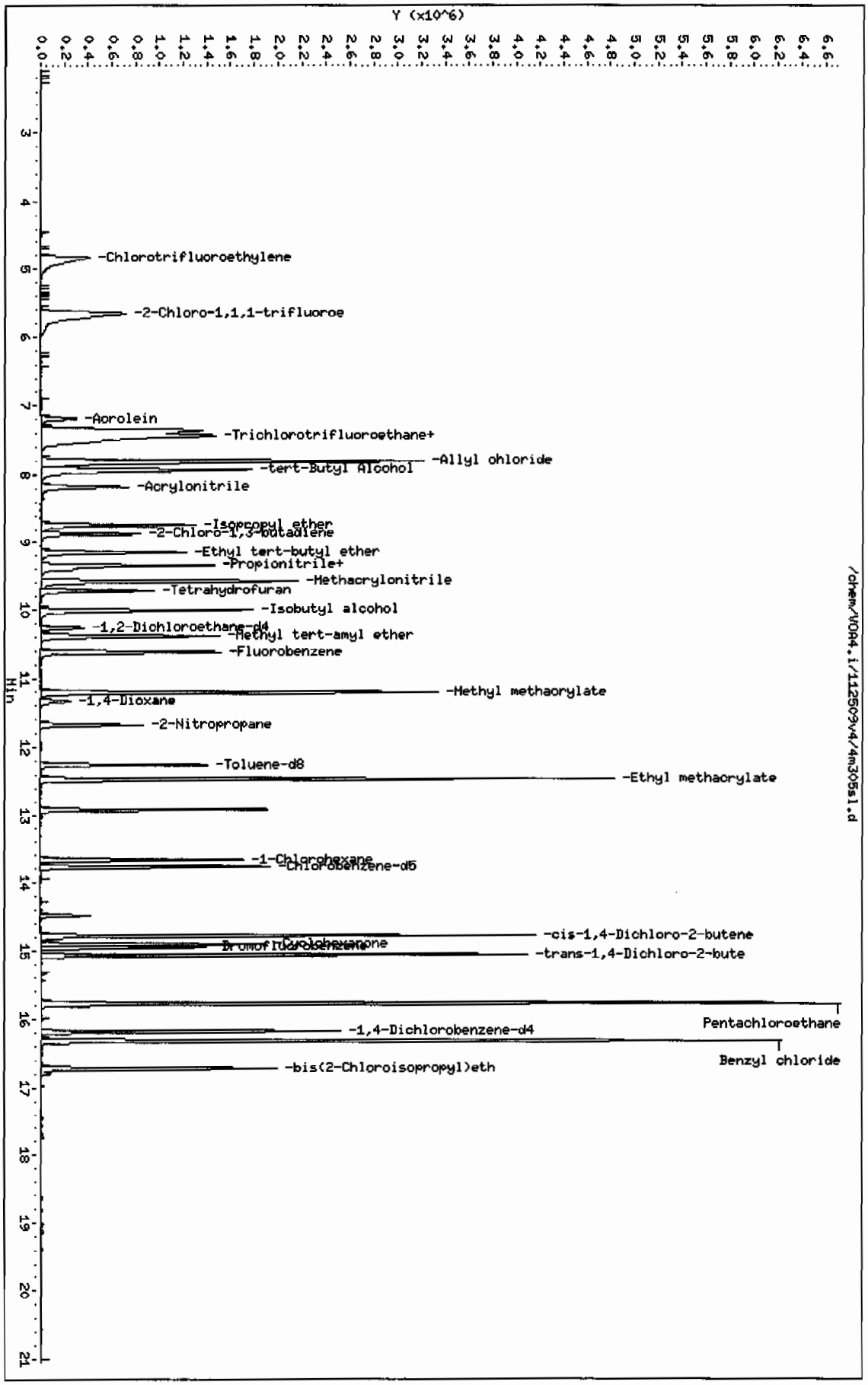

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201981950**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.5**
Client Sample:	**QC for batch 926999**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-10-6903PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 03:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m317.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.3	ug/kg	0.364	1.07
74-87-3	Chloromethane		41.4	ug/kg	0.321	1.07
75-01-4	Vinyl chloride		45.7	ug/kg	0.321	1.07
74-83-9	Bromomethane		39.8	ug/kg	0.321	1.07
75-00-3	Chloroethane		46.4	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane		45.0	ug/kg	0.321	1.07
67-64-1	Acetone		119	ug/kg	1.77	5.35
75-35-4	1,1-Dichloroethylene		47.9	ug/kg	0.321	1.07
74-88-4	Iodomethane		199	ug/kg	1.71	5.35
75-09-2	Methylene chloride		47.5	ug/kg	2.14	5.35
75-15-0	Carbon disulfide		235	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene		48.3	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane		50.5	ug/kg	0.321	1.07
78-93-3	2-Butanone		151	ug/kg	1.60	5.35
156-59-2	cis-1,2-Dichloroethylene		48.6	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane		49.2	ug/kg	0.321	1.07
67-66-3	Chloroform		48.0	ug/kg	0.321	1.07
74-97-5	Bromochloromethane		46.4	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane		50.5	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene		49.6	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride		50.7	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane		47.5	ug/kg	0.321	1.07
71-43-2	Benzene		47.2	ug/kg	0.321	1.07
79-01-6	Trichloroethylene		47.5	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane		47.7	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane		47.2	ug/kg	0.321	1.07
74-95-3	Dibromomethane		46.7	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone		216	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene		39.5	ug/kg	0.321	1.07
108-88-3	Toluene		49.5	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene		42.4	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane		48.7	ug/kg	0.321	1.07
591-78-6	2-Hexanone		127	ug/kg	1.60	5.35
142-28-9	1,3-Dichloropropane		48.4	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene		47.2	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane		48.7	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane		46.0	ug/kg	0.321	1.07
108-90-7	Chlorobenzene		47.7	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201981950**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**6.5**
Client Sample:	**QC for batch 926999**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-10-6903PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**927001**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/26/2009 03:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/25/2009 21:31**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4m317.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		48.2	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes		94.9	ug/kg	0.321	2.14
95-47-6	o-Xylene		47.9	ug/kg	0.321	1.07
100-42-5	Styrene		44.5	ug/kg	0.321	1.07
75-25-2	Bromoform		58.4	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane		60.8	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane		61.4	ug/kg	0.321	1.07
108-86-1	Bromobenzene		56.2	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene		61.8	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene		59.6	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene		64.6	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene		60.7	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene		57.7	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene		60.9	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene		57.4	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene		59.0	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene		53.6	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene		50.2	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene		48.8	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene		53.1	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane		48.6	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane		48.9	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene		46.6	ug/kg	0.321	1.07

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m317.d
Lab Smp Id: 1201981950 Client Smp ID: RE03-10-6903MS
Inj Date : 26-NOV-2009 03:41
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201981950|927001|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241559001
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.46570	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1538420	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1086453	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	548656	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	331813	54.9136	58.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1022908	54.0561	57.8
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	414693	65.2719	69.8
3 Dichlorodifluoromethane	85	4.919	4.911	(0.463)	277178	38.6655	41.3
4 Chloromethane	50	5.299	5.306	(0.499)	428496	38.7166	41.4
5 Vinyl chloride	62	5.528	5.528	(0.521)	437951	42.7471	45.7
6 Bromomethane	94	6.130	6.137	(0.577)	300649	37.2098	39.8
7 Chloroethane	64	6.288	6.288	(0.592)	326333	43.4084	46.4
8 Trichlorofluoromethane	101	6.662	6.663	(0.627)	531980	42.0843	45.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.363	7.358	(0.693)	693050	110.874	118
11 1,1-Dichloroethylene	61	7.394	7.382	(0.696)	583650	44.8151	47.9
87 1,4-Dichlorobenzene	146	16.209	16.204	(1.002)	808746	45.6017	48.8
13 Iodomethane	142	7.631	7.626	(0.719)	2905495	186.500	199
17 Methylene chloride	84	7.942	7.937	(0.748)	460614	44.4506	47.5
14 Carbon disulfide	76	7.778	7.773	(0.732)	5945322	220.158	235
21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.780)	520315	45.1413	48.3
22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	677610	47.2632	50.5
30 2-Butanone	43	9.326	9.327	(0.878)	1016241	141.303	151
31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.884)	580502	45.4946	48.6
85 1,3-Dichlorobenzene	146	16.124	16.119	(0.997)	828970	46.9106	50.2
25 2,2-Dichloropropane	77	9.424	9.419	(0.887)	381168	46.0359	49.2
32 Chloroform	83	9.692	9.693	(0.913)	650849	44.9290	48.0
90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	747416	43.5749	46.6
29 Bromochloromethane	128	9.662	9.656	(0.910)	194976	43.3674	46.4
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	508025	47.2580	50.5
34 1,1-Dichloropropene	75	10.131	10.132	(0.954)	496030	46.3800	49.6
33 Carbon tetrachloride	117	10.180	10.175	(0.959)	491554	47.4060	50.7
37 1,2-Dichloroethane	62	10.344	10.339	(0.974)	506231	44.3886	47.4
38 Benzene	78	10.375	10.370	(0.977)	1454783	44.1174	47.2
39 Trichloroethylene	95	11.003	11.004	(1.036)	367541	44.3946	47.5
41 1,2-Dichloropropane	63	11.247	11.241	(1.059)	385322	44.5709	47.6
45 Bromodichloromethane	83	11.484	11.485	(1.082)	491388	44.1699	47.2
43 Dibromomethane	93	11.375	11.376	(1.071)	233047	43.6417	46.6
49 4-Methyl-2-pentanone	58	12.021	12.016	(0.873)	707884	201.842	216
46 cis-1,3-Dichloropropylene	75	11.936	11.930	(1.124)	513114	36.9871	39.5
50 Toluene	92	12.326	12.327	(0.895)	882387	46.3420	49.5
53 trans-1,3-Dichloropropylene	75	12.466	12.461	(0.905)	481778	39.6404	42.4
54 1,1,2-Trichloroethane	83	12.685	12.686	(0.921)	275377	45.5959	48.7
55 2-Hexanone	43	12.856	12.857	(0.934)	1119691	118.482	127
52 1,3-Dichloropropane	76	12.880	12.875	(0.935)	553350	45.2784	48.4
56 Tetrachloroethylene	164	12.923	12.918	(0.938)	326365	44.1243	47.2
57 Dibromochloromethane	129	13.149	13.144	(0.955)	380683	45.5473	48.7
59 1,2-Dibromoethane	107	13.319	13.320	(0.967)	329688	43.0693	46.0
62 Chlorobenzene	112	13.801	13.802	(1.002)	979077	44.5812	47.7
60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	379659	45.7774	48.9
58 Ethylbenzene	91	13.862	13.863	(1.007)	1657429	45.0881	48.2
63 m,p-Xylenes	106	13.972	13.973	(1.015)	1297572	88.7943	94.9
64 o-Xylene	106	14.405	14.405	(1.046)	678487	44.7709	47.9
65 Styrene	104	14.405	14.399	(1.046)	1072482	41.6197	44.5
66 Bromoform	173	14.661	14.655	(0.906)	323144	54.5962	58.4
73 1,1,2,2-Tetrachloroethane	83	15.020	15.015	(0.928)	495587	56.8469	60.8
74 1,2,3-Trichloropropane	110	15.106	15.107	(0.934)	133615	57.4644	61.4
75 Bromobenzene	156	15.167	15.168	(0.937)	494023	52.5855	56.2
76 n-Propylbenzene	91	15.185	15.180	(0.939)	2041494	57.7984	61.8
77 2-Chlorotoluene	91	15.331	15.332	(0.948)	1399116	55.7834	59.6
67 Isopropylbenzene	105	14.758	14.759	(0.912)	1797029	60.4339	64.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	1506444	56.7871	60.7
80 4-Chlorotoluene	91	15.429	15.430	(0.954)	1243646	53.9591	57.7
81 tert-Butylbenzene	119	15.703	15.704	(0.971)	1532736	57.0079	60.9
79 1,2,4-Trimethylbenzene	105	15.746	15.741	(0.973)	1508558	53.7351	57.4
83 sec-Butylbenzene	105	15.935	15.930	(0.985)	1979251	55.1908	59.0
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	1474620	50.1509	53.6
89 n-Butylbenzene	91	16.508	16.503	(1.020)	1357821	49.6626	53.1
92 1,2-Dibromo-3-chloropropane	157	17.526	17.527	(1.083)	88021	45.4840	48.6

Data File: /chem/VOA4.i/112509v4/4m317.d
Date : 26-NOV-2009 03:41
Client ID: RE03-10-6303MS
Sample Info: 1120198195011927001|1|VOAF|1|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

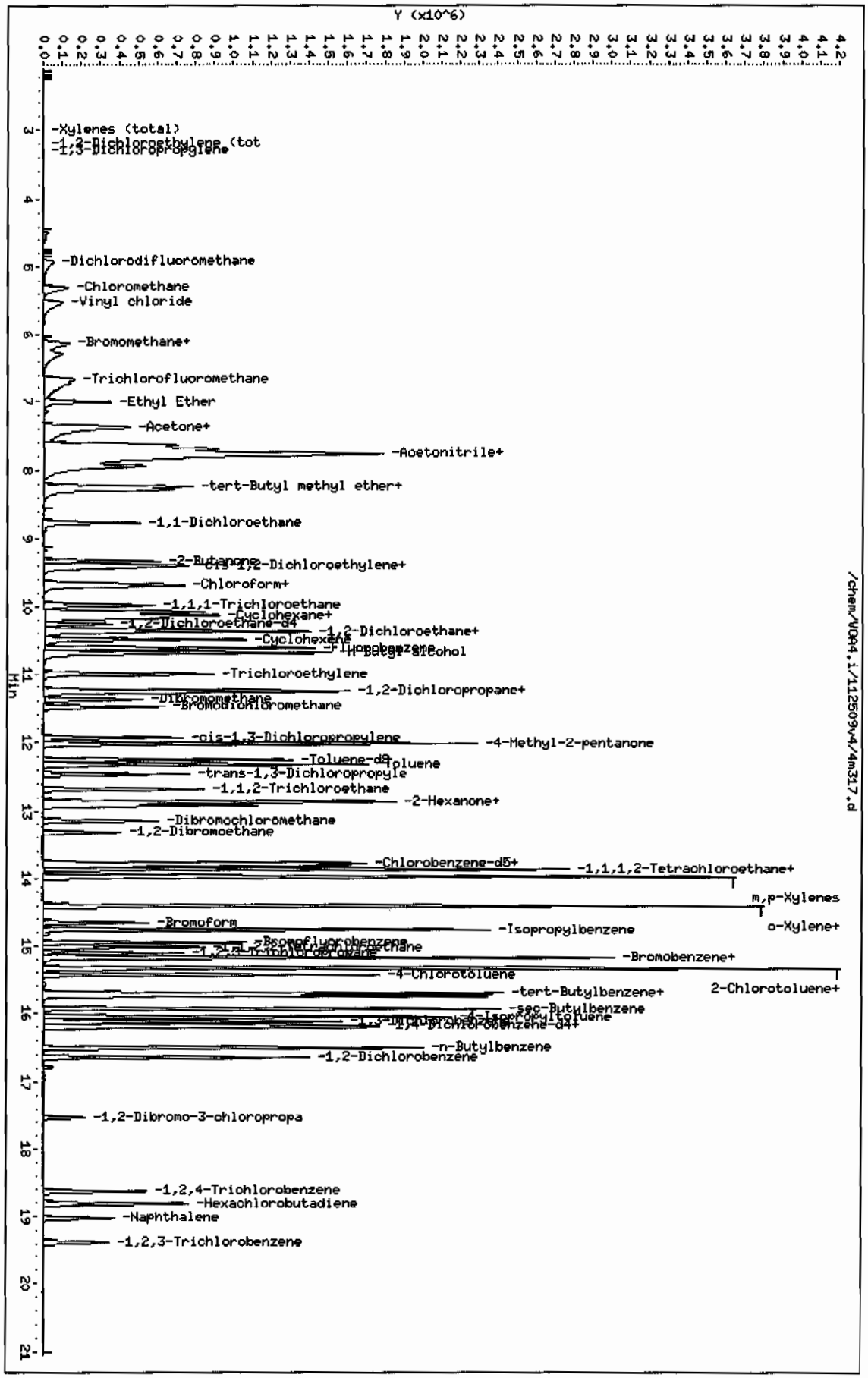

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981951	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
Client Sample:	QC for batch 926999	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-10-6903PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927001	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/26/2009 04:09	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 21:32	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m318.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		43.3	ug/kg	0.364	1.07
74-87-3	Chloromethane		43.0	ug/kg	0.321	1.07
75-01-4	Vinyl chloride		47.7	ug/kg	0.321	1.07
74-83-9	Bromomethane		41.4	ug/kg	0.321	1.07
75-00-3	Chloroethane		47.9	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane		50.3	ug/kg	0.321	1.07
67-64-1	Acetone		115	ug/kg	1.77	5.35
75-35-4	1,1-Dichloroethylene		50.6	ug/kg	0.321	1.07
74-88-4	Iodomethane		207	ug/kg	1.71	5.35
75-09-2	Methylene chloride		49.9	ug/kg	2.14	5.35
75-15-0	Carbon disulfide		243	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene		50.9	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane		52.6	ug/kg	0.321	1.07
78-93-3	2-Butanone		152	ug/kg	1.60	5.35
156-59-2	cis-1,2-Dichloroethylene		50.3	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane		51.0	ug/kg	0.321	1.07
67-66-3	Chloroform		50.0	ug/kg	0.321	1.07
74-97-5	Bromochloromethane		49.4	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane		53.1	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene		51.7	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride		53.5	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane		49.1	ug/kg	0.321	1.07
71-43-2	Benzene		48.3	ug/kg	0.321	1.07
79-01-6	Trichloroethylene		48.7	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane		49.8	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane		49.7	ug/kg	0.321	1.07
74-95-3	Dibromomethane		47.8	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone		218	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene		40.9	ug/kg	0.321	1.07
108-88-3	Toluene		50.0	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene		43.3	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane		49.3	ug/kg	0.321	1.07
591-78-6	2-Hexanone		126	ug/kg	1.60	5.35
142-28-9	1,3-Dichloropropane		50.3	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene		48.0	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane		50.1	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane		47.5	ug/kg	0.321	1.07
108-90-7	Chlorobenzene		47.6	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981951	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
Client Sample:	QC for batch 926999	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-10-6903PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	927001	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/26/2009 04:09	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/25/2009 21:32	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4m318.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.7	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes		95.0	ug/kg	0.321	2.14
95-47-6	o-Xylene		47.8	ug/kg	0.321	1.07
100-42-5	Styrene		44.0	ug/kg	0.321	1.07
75-25-2	Bromoform		59.0	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane		60.3	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane		60.5	ug/kg	0.321	1.07
108-86-1	Bromobenzene		55.5	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene		59.2	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene		57.2	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene		62.4	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene		57.5	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene		55.1	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene		58.8	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene		54.3	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene		55.9	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene		47.1	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene		48.6	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene		47.4	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene		48.3	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane		50.1	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane		49.8	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene		45.7	ug/kg	0.321	1.07

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112509v4/4m318.d
Lab Smp Id: 1201981951 Client Smp ID: RE03-10-6903MSD
Inj Date : 26-NOV-2009 04:09
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201981951|927001|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241559001
Comment :
Method : /chem/VOA4.i/112509v4/VOA4-8260-112209.m
Meth Date : 27-Nov-2009 15:03 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.46570	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1559522	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1127297	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	582088	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	335037	54.6969	58.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1044554	53.2000	56.9
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	424725	63.0114	67.4
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	294400	40.5122	43.3
4 Chloromethane	50	5.306	5.306	(0.500)	450922	40.1916	43.0
5 Vinyl chloride	62	5.521	5.528	(0.520)	463622	44.6405	47.7
6 Bromomethane	94	6.137	6.137	(0.578)	316907	38.6913	41.4
7 Chloroethane	64	6.295	6.288	(0.593)	341377	44.7951	47.9
8 Trichlorofluoromethane	101	6.675	6.663	(0.629)	602577	47.0241	50.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.358	7.358	(0.693)	679076	107.169	114
11 1,1-Dichloroethylene	61	7.388	7.382	(0.696)	625360	47.3681	50.6
87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	834776	44.3660	47.4
13 Iodomethane	142	7.638	7.626	(0.719)	3061651	193.864	207
17 Methylene chloride	84	7.943	7.937	(0.748)	487279	46.6751	49.9
14 Carbon disulfide	76	7.779	7.773	(0.732)	6226923	227.465	243
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	555765	47.5644	50.8
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	715611	49.2384	52.6
30 2-Butanone	43	9.327	9.327	(0.878)	1036620	142.186	152
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	608579	47.0496	50.3
85 1,3-Dichlorobenzene	146	16.118	16.119	(0.996)	851468	45.4164	48.6
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	400129	47.6720	51.0
32 Chloroform	83	9.693	9.693	(0.913)	686448	46.7452	50.0
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	777990	42.7523	45.7
29 Bromochloromethane	128	9.656	9.656	(0.909)	210609	46.2107	49.4
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	541455	49.6863	53.1
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	524133	48.3446	51.7
33 Carbon tetrachloride	117	10.174	10.175	(0.958)	525900	50.0321	53.5
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	531164	45.9446	49.1
38 Benzene	78	10.370	10.370	(0.976)	1510600	45.1903	48.3
39 Trichloroethylene	95	11.004	11.004	(1.036)	382372	45.5610	48.7
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	408139	46.5714	49.8
45 Bromodichloromethane	83	11.485	11.485	(1.082)	524197	46.4815	49.7
43 Dibromomethane	93	11.375	11.376	(1.071)	242024	44.7095	47.8
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	742316	203.991	218
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	537908	38.2497	40.9
50 Toluene	92	12.326	12.327	(0.895)	923678	46.7529	50.0
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	510427	40.4760	43.3
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	288703	46.0704	49.2
55 2-Hexanone	43	12.857	12.857	(0.934)	1156881	117.982	126
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	596123	47.0110	50.3
56 Tetrachloroethylene	164	12.924	12.918	(0.938)	344473	44.8851	48.0
57 Dibromochloromethane	129	13.143	13.144	(0.954)	406263	46.8467	50.1
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	353014	44.4457	47.5
62 Chlorobenzene	112	13.802	13.802	(1.002)	1013874	44.4930	47.6
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	400777	46.5728	49.8
58 Ethylbenzene	91	13.863	13.863	(1.007)	1700217	44.5763	47.6
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1346952	88.8339	95.0
64 o-Xylene	106	14.399	14.405	(1.046)	703642	44.7485	47.8
65 Styrene	104	14.399	14.399	(1.046)	1100035	41.1422	44.0
66 Bromoform	173	14.655	14.655	(0.906)	346794	55.2268	59.0
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	521524	56.3862	60.3
74 1,2,3-Trichloropropane	110	15.106	15.107	(0.934)	139495	56.5475	60.4
75 Bromobenzene	156	15.167	15.168	(0.937)	517405	51.9112	55.5
76 n-Propylbenzene	91	15.180	15.180	(0.938)	2073310	55.3278	59.2
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	1423669	53.5022	57.2
67 Isopropylbenzene	105	14.759	14.759	(0.912)	1841561	58.3745	62.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	1513261	53.7678	57.5
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1259588	51.5119	55.1
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	1568099	54.9734	58.8
79 1,2,4-Trimethylbenzene	105	15.740	15.741	(0.973)	1512459	50.7798	54.3
83 sec-Butylbenzene	105	15.929	15.930	(0.985)	1990641	52.3203	55.9
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	1375080	44.0796	47.1
89 n-Butylbenzene	91	16.503	16.503	(1.020)	1310250	45.1703	48.3
92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	96206	46.8583	50.1

Data File: /chem/VOA4.i/112509v4/4m318.d
Date : 26-NOV-2009 04:09
Client ID: RE03-10-6903MSD
Sample Info: 1120198195119270041|1|VOAF1|1
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

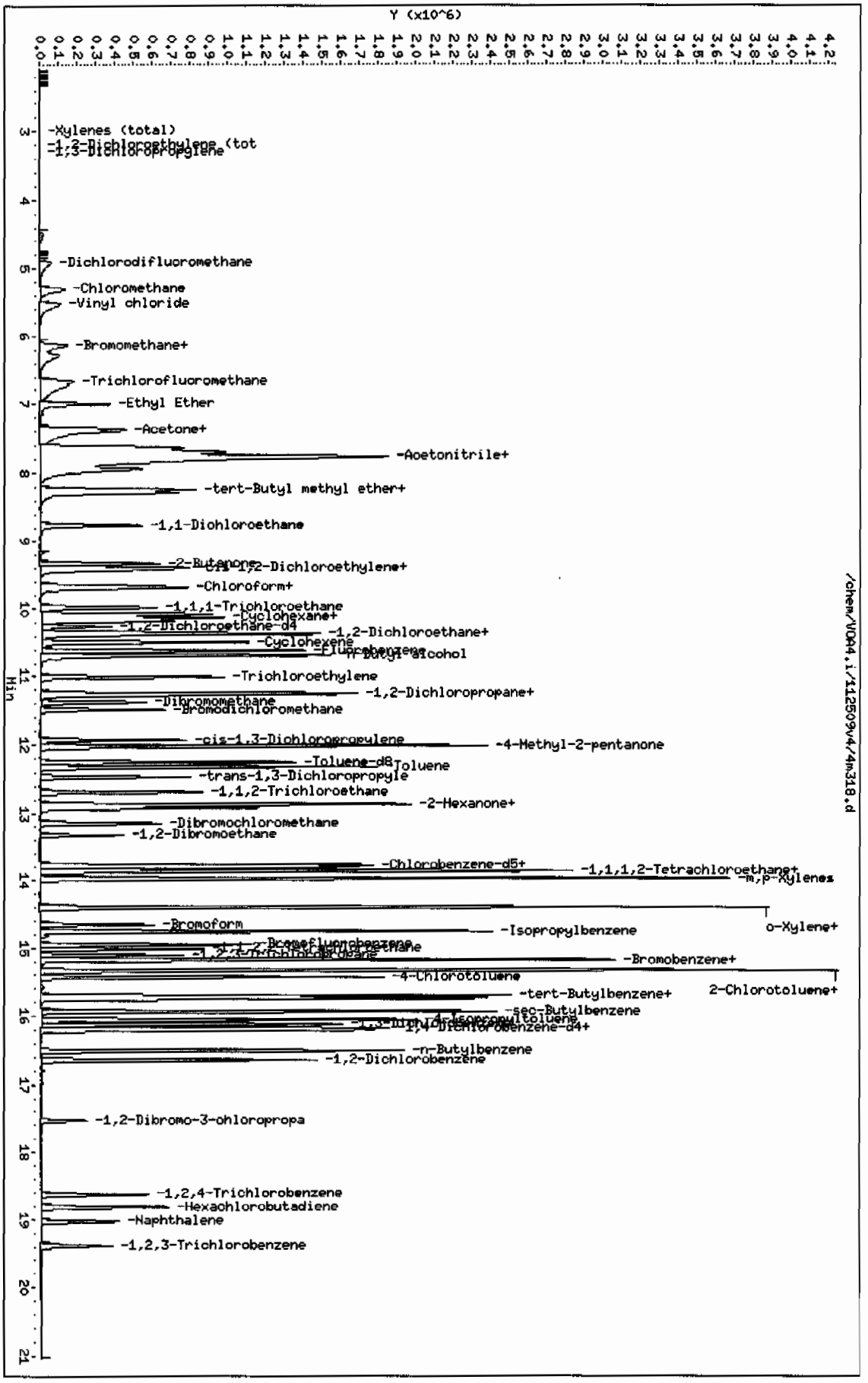

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **926999** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201981952 LCS	25-NOV-2009 19:30:00	Soil	5	5	1	
1201981953 LCS	25-NOV-2009 19:45:00	Soil	5	5	1	
1201981949 MB	25-NOV-2009 20:00:00	Soil	5	5	1	
241559001	25-NOV-2009 21:30:00	Soil	5	5	1	
1201981950 PS (241559001)	25-NOV-2009 21:31:00	Soil	5	5	1	
1201981951 PSD (241559001)	25-NOV-2009 21:32:00	Soil	5	5	1	
241559002	25-NOV-2009 21:33:00	Soil	5	5	1	
241604001	25-NOV-2009 21:34:00	Soil	5	5	1	
241604002	25-NOV-2009 21:35:00	Soil	5	5	1	
241604003	25-NOV-2009 21:36:00	Soil	5	5	1	
241608001	25-NOV-2009 21:37:00	Soil	5	5	1	
1201985603 LCS	27-NOV-2009 15:30:00	Soil	5	5	1	
1201985604 LCS	27-NOV-2009 15:45:00	Soil	5	5	1	
1201985602 MB	27-NOV-2009 16:00:00	Soil	5	5	1	
241608002	27-NOV-2009 19:04:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/22/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 112209V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS					
BFB	UVM091020-02				1
SHORT					
DHEC					

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/22/2009 9:20	4L701.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/22/2009 9:47	4L702.D	12019—	GEL	BLANK	5ML	1	N/A	2	w	ACJ	N/A	X	
11/22/2009 10:14	4L703.D	W4VM091122-01	GEL	VSTD0005	5ML	1	N/A	3	w	ACJ	N/A	O	UVM090911-01C/UVM091116-01A
11/22/2009 10:41	4L704.D	W4VM091122-02	GEL	VSTD001	5ML	1	N/A	4	w	ACJ	N/A	X	UVM090911-02C/UVM091116-02A;NOT NEEDED
11/22/2009 11:09	4L705.D	W4VM091122-03	GEL	VSTD001	5ML	1	N/A	5	w	ACJ	N/A	O	UVM090911-02C/UVM091116-02A
11/22/2009 11:36	4L706.D	W4VM091122-04	GEL	VSTD002	5ML	1	N/A	6	w	ACJ	N/A	O	UVM090911-03C/UVM091116-03A
11/22/2009 12:04	4L707.D	W4VM091122-05	GEL	VSTD005	5ML	1	N/A	7	w	ACJ	N/A	O	UVM090911-04C/UVM091116-04A
11/22/2009 12:31	4L708.D	W4VM091122-06	GEL	VSTD010	5ML	1	N/A	8	w	ACJ	N/A	O	UVM090911-05C/UVM091116-05A
11/22/2009 12:59	4L709.D	W4VM091122-07	GEL	VSTD020	5ML	1	N/A	9	w	ACJ	N/A	O	UVM090911-06C/UVM091116-06A
11/22/2009 13:27	4L710.D	W4VM091122-08	GEL	VSTD050	5ML	1	N/A	10	w	ACJ	N/A	O	UVM090911-07C/UVM091116-07A
11/22/2009 13:54	4L711.D	W4VM091122-09	GEL	VSTD100	5ML	1	N/A	11	w	ACJ	N/A	O	UVM090911-08C/UVM091116-08A
11/22/2009 14:21	4L712.D	12019—	GEL	BLANK	5ML	1	N/A	12	w	ACJ	N/A	X	
11/22/2009 14:48	4L713.D	W4VM091122-10	GEL	VSTD005S	5ML	1	N/A	13	w	ACJ	N/A	O	UVM091110-01A/UVM091118-01
11/22/2009 15:16	4L714.D	W4VM091122-11	GEL	VSTD010S	5ML	1	N/A	14	w	ACJ	N/A	O	UVM091110-02A/UVM091118-02
11/22/2009 15:43	4L715.D	W4VM091122-12	GEL	VSTD025S	5ML	1	N/A	15	w	ACJ	N/A	O	UVM091110-03A/UVM091118-03
11/22/2009 16:10	4L716.D	W4VM091122-13	GEL	VSTD050S	5ML	1	N/A	16	w	ACJ	N/A	O	UVM091110-04A/UVM091118-04
11/22/2009 16:37	4L717.D	W4VM091122-14	GEL	VSTD100S	5ML	1	N/A	17	w	ACJ	N/A	X	UVM091110-05A/UVM091118-05; chlorotrifluoroethylene high
11/22/2009 17:04	4L718.D	W4VM091122-15	GEL	VSTD250S	5ML	1	N/A	18	w	ACJ	N/A	O	UVM091110-06A/UVM091118-06
11/22/2009 17:32	4L719.D	W4VM091122-16	GEL	VSTD500S	5ML	1	N/A	19	w	ACJ	N/A	O	UVM091110-07A/UVM091118-07
11/22/2009 17:59	4L720.D	12019—-	GEL	BLANK	5ML	1	N/A	20	w	ACJ	N/A	X	
11/22/2009 18:26	4L721.D	W4VM091122-17	GEL	ICV	5ML	1	N/A	21	w	ACJ	N/A	X	UVM091105-01A/IVM091122-01
11/22/2009 18:53	4L722.D	W4VM091122-18	GEL	ICV	5ML	1	N/A	22	w	ACJ	N/A	O	UVM091111-01C/IVM091122-01
11/22/2009 19:21	4L723.D	W4VM091122-19	GEL	SHORTICV	5ML	1	N/A	23	w	ACJ	N/A	O	UVM091105-02B/UVM091118-08A

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/25/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: ____
DATE: ____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 112509V4

Daily Standard — Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091125-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS	W4VM091125-01/02			5+5	
BFB	UVM091020-02				1
SHORT	W4VM091125-03/04		5+5	5+5	
DHEC	N/A			5	

Purge Amount

5	Water Purge Vol:
VARIED	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
100	ul
CY840	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/25/2009	20:26	4M301.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/25/2009	20:53	4M302.D	W4VM091125-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009	21:20	4M303.D	W4VM091125-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091111-01D/IVM091122-01
11/25/2009	21:47	4M304.D	W4VM091125-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/25/2009	22:15	4M305.D	W4VM091125-04	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	UVM091105-02C/UVM091118-08A
11/25/2009	22:42	4M306.D	12019----	GEL	BLANK	5ML	1	N/A	6	W	ACJ	N/A	O	
11/25/2009	23:10	4M307.D	12019----	GEL	BLANK	5G	1	N/A	7	S	ACJ	N/A	O	
11/25/2009	23:37	4M308.D	1201981948	GEL	926998	100UL	50	N/A	8	S	ACJ	N/A	O	HB
11/26/2009	0:04	4M309.D	241604003	LANL	927001	5G	1	N/A	9	S	ACJ	N/A	O	
11/26/2009	0:31	4M310.D	241559001	LANL	927001	5G	1	N/A	10	S	ACJ	N/A	O	
11/26/2009	0:58	4M311.D	241559002	LANL	927001	5G	1	N/A	11	S	ACJ	N/A	O	
11/26/2009	1:26	4M312.D	241604001	LANL	927001	5G	1	N/A	12	S	ACJ	N/A	O	CONFIRMED BY 4M509
11/26/2009	1:53	4M313.D	241604002	LANL	927001	5G	1	N/A	13	S	ACJ	N/A	O	CONFIRMED BY 4M510
11/26/2009	2:20	4M314.D	241608001	LANL	927001	5G	1	N/A	14	S	ACJ	N/A	O	CONFIRMED BY 4M511
11/26/2009	2:47	4M315.D	241608002	LANL	927001	5G	1	N/A	15	S	ACJ	N/A	X	IS LOW; SEE 4M512
11/26/2009	3:14	4M316.D	241696001	CARE	926998	100UL	50	N/A	16	S	ACJ	N/A	O	5.1G/5ML
11/26/2009	3:41	4M317.D	1201981950	LANL	927001	5G	1	N/A	17	S	ACJ	N/A	O	MS 241559001
11/26/2009	4:09	4M318.D	1201981951	LANL	927001	5G	1	N/A	18	S	ACJ	N/A	O	MSD 241559001
11/26/2009	4:36	4M319.D	1201981945	CARE	926998	100UL	50	N/A	19	S	ACJ	N/A	O	MS 241696001
11/26/2009	5:03	4M320.D	1201981946	CARE	926998	100UL	50	N/A	20	S	ACJ	N/A	O	MSD 241696001

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-608-1

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	926641
Prep Batch Number:	926640

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201981224	Method Blank (MB)
1201981225	241559002(RE03-10-6902) Matrix Spike (MS)
1201981226	241559002(RE03-10-6902) Matrix Spike Duplicate (MSD)
1201981227	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS (1201981227) recovered p-Nitroaniline at 183% (limits are 44%-139%). The failure represented less than 5% of the requested spike analyte list. That satisfied the clients acceptance criteria and the data have been reported.

QC Sample Designation
Sample 241559002 (RE03-10-6902) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The MS/MSD RPD value for Hexachlorocyclopentadiene was 32% (limit: 30%). Because the individual MS and MSD recoveries for that analyte were acceptable, the data have been reported un-qualified for the RPD value failure.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 766603. It is located in the Miscellaneous Section of the data report.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD5.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: [illegible] **Date:** 12-17-09

Roadmap for LANL 10-608-1 SVOA

This roadmap was analyzed by rmb on 12-07-2009, 08:55.
This roadmap was reviewed by bar00895 on 12-09-2009, 09:34.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s120309.b/s5l0317.d	241559001	03-DEC-2009	17:17	10-608-1.sub	RE03-10-6903	1	926641	
☐	N	/chem/MSD5.i/s120309.b/s5l0318.d	241559002	03-DEC-2009	17:40	10-608-1.sub	RE03-10-6902	1	926641	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	Y	/chem/MSD5.i/s120309.b/s5l0307.d	1201981224	mb	03-DEC-2009	13:30	10-608-1.sub	SBLK01	1.00000	926641	
☐	Y	/chem/MSD5.i/s120309.b/s5l0308.d	1201981227	lcs	03-DEC-2009	13:52	10-608-1.sub	SBLK01LCS	1.00000	926641	
☐	Y	/chem/MSD5.i/s120309.b/s5l0319.d	1201981225	ms	03-DEC-2009	18:03	10-608-1.sub	RE03-10-6902MS	1.00000	926641	
☐	Y	/chem/MSD5.i/s120309.b/s5l0320.d	1201981226	msd	03-DEC-2009	18:26	10-608-1.sub	RE03-10-6902MSD	1.00000	926641	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:40	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.1	390
108-95-2	Phenol	U	390	ug/kg	78.1	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.1	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.1	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.1	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.1	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.6	390
129-00-0	Pyrene		152	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.1	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.1	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.1	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.1	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.1	390
95-48-7	o-Cresol	U	390	ug/kg	78.1	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.1	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.1	390
78-59-1	Isophorone	U	390	ug/kg	78.1	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.1	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.1	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.1	390
65-85-0	Benzoic acid	U	781	ug/kg	195	781
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.1	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.1	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.81	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.1	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.1	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.1	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.1	390
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.1	390

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6902**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926641**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:40**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 10:20**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510318.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	390	ug/kg	78.1	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	781	ug/kg	148	781
132-64-9	Dibenzofuran	U	390	ug/kg	78.1	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.1	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.1	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.1	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	p-Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.1	390
122-66-7	Azobenzene	U	390	ug/kg	78.1	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.1	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.1	390
85-01-8	Phenanthrene		96.1	ug/kg	11.7	39.0
120-12-7	Anthracene	J	19.8	ug/kg	7.81	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.1	390
206-44-0	Fluoranthene		174	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.1	390
56-55-3	Benzo(a)anthracene		79.6	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene		83.6	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.1	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.1	390
205-99-2	Benzo(b)fluoranthene		91.6	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene		44.9	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene		73.8	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene		84.5	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene		56.5	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.1	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	388	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	9.04	185	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6902	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926641	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/03/2009 17:40	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 10:20	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s510318.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5085-72-3	D:A-Friedooleanan-3-ol, (3.alpha.)-	10.05	444	ug/kg	86	NJ
300574-36-1	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	10.13	517	ug/kg	90	NJ
	Unknown	10.43	221	ug/kg		J
	Unknown	10.54	169	ug/kg		J
	Unknown	10.95	224	ug/kg		J
112-95-8	Eicosane	11.84	260	ug/kg	96	NJ
	Unknown	12.1	199	ug/kg		J
	Unknown	12.88	195	ug/kg		J
	Unknown	13.2	160	ug/kg		J
83-46-5	.beta.-Sitosterol	13.92	231	ug/kg	96	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:17	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.1	355
108-95-2	Phenol	U	355	ug/kg	71.1	355
95-57-8	2-Chlorophenol	U	355	ug/kg	71.1	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.1	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.1	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.1	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.8	355
129-00-0	Pyrene	J	23.0	ug/kg	10.7	35.5
110-86-1	Pyridine	U	355	ug/kg	71.1	355
62-53-3	Aniline	U	355	ug/kg	107	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.1	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.1	355
100-51-6	Benzyl alcohol	U	355	ug/kg	107	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.1	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.1	355
95-48-7	o-Cresol	U	355	ug/kg	71.1	355
65794-96-9	m,p-Cresols	U	355	ug/kg	107	355
67-72-1	Hexachloroethane	U	355	ug/kg	71.1	355
98-95-3	Nitrobenzene	U	355	ug/kg	71.1	355
78-59-1	Isophorone	U	355	ug/kg	71.1	355
88-75-5	2-Nitrophenol	U	355	ug/kg	71.1	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.1	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.1	355
65-85-0	Benzoic acid	U	711	ug/kg	178	711
91-20-3	Naphthalene	U	35.5	ug/kg	10.7	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	71.1	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.1	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.11	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.1	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.1	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.1	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	71.1	355
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	355	ug/kg	71.1	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:17	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s5l0317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	71.1	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.7	35.5
51-28-5	2,4-Dinitrophenol	U	711	ug/kg	135	711
132-64-9	Dibenzofuran	U	355	ug/kg	71.1	355
84-66-2	Diethylphthalate	U	355	ug/kg	71.1	355
86-73-7	Fluorene	U	35.5	ug/kg	10.7	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.1	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.1	355
100-01-6	4-Nitroaniline	U	355	ug/kg	107	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	71.1	355
122-66-7	Azobenzene	U	355	ug/kg	71.1	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.1	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.1	355
85-01-8	Phenanthrene	J	12.3	ug/kg	10.7	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.11	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.1	355
206-44-0	Fluoranthene	J	26.5	ug/kg	10.7	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.1	355
56-55-3	Benzo(a)anthracene	J	15.1	ug/kg	10.7	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	107	355
218-01-9	Chrysene	J	12.8	ug/kg	10.7	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.1	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.1	355
205-99-2	Benzo(b)fluoranthene	J	15.7	ug/kg	10.7	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.7	35.5
50-32-8	Benzo(a)pyrene	J	12.6	ug/kg	10.7	35.5
193-39-5	Indeno(1,2,3-cd)pyrene		47.7	ug/kg	10.7	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.7	35.5
191-24-2	Benzo(ghi)perylene	J	12.5	ug/kg	10.7	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.1	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	370	ug/kg		JA
	Unknown	7.31	172	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6903	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926641	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/03/2009 17:17	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 10:20	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	s5l0317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	11.84	173	ug/kg	97	NJ
	Unknown	13.35	183	ug/kg		J
83-46-5	.beta.-Sitosterol	13.91	275	ug/kg	96	NJ

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-608-1

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201981224	MB for batch 926640	68	66	66	69	79	101
1201981227	LCS for batch 926640	81	78	83	81	90	95
241559001	RE03-10-6903	72	72	75	73	76	85
241559002	RE03-10-6902	59	59	56	55	69	72
1201981225	RE03-10-6902MS	64	62	62	61	68	71
1201981226	RE03-10-6902MSD	66	63	65	64	77	82

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(35%-96%)
PHL	=	Phenol-d5	(36%-96%)
NBZ	=	Nitrobenzene-d5	(34%-104%)
FBP	=	2-Fluorobiphenyl	(36%-100%)
TBP	=	2,4,6-Tribromophenol	(37%-106%)
TPH	=	p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6902MS
Lab Sample ID: 1201981225
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 14.7
Analysis Date: 12/03/2009 18:03
Prep Batch ID: 926640
Batch ID: 926641
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1950	0.00	U	1060	54	32-90
108-95-2	MS	Phenol	1950	0.00	U	1200	61	32-105
95-57-8	MS	2-Chlorophenol	1950	0.00	U	1130	58	33-106
106-46-7	MS	1,4-Dichlorobenzene	1950	0.00	U	651	33	33-95
621-64-7	MS	N-Nitrosodipropylamine	1950	0.00	U	1270	65	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1950	0.00	U	1270	65	38-119
83-32-9	MS	Acenaphthene	1950	0.00	U	1190	61	39-100
121-14-2	MS	2,4-Dinitrotoluene	1950	0.00	U	1300	67	42-107
100-02-7	MS	4-Nitrophenol	1950	0.00	U	1340	69	24-120
87-86-5	MS	Pentachlorophenol	1950	0.00	U	1300	66	26-121
129-00-0	MS	Pyrene	1950	152		1620	75	34-120
110-86-1	MS	Pyridine	1950	0.00	U	1020	52	30-95
62-53-3	MS	Aniline	1950	0.00	U	1110	57	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1950	0.00	U	1090	56	34-101
541-73-1	MS	1,3-Dichlorobenzene	1950	0.00	U	641	33	31-97
100-51-6	MS	Benzyl alcohol	1950	0.00	U	1210	62	17-120
95-50-1	MS	1,2-Dichlorobenzene	1950	0.00	U	728	37	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1950	0.00	U	1110	57	32-113
95-48-7	MS	o-Cresol	1950	0.00	U	1200	61	31-119
65794-96-9	MS	m,p-Cresols	1950	0.00	U	1260	65	35-125
67-72-1	MS	Hexachloroethane	1950	0.00	U	593	30	30-100
98-95-3	MS	Nitrobenzene	1950	0.00	U	1220	63	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6902MS
Lab Sample ID: 1201981225
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 14.7
Analysis Date: 12/03/2009 18:03
Prep Batch ID: 926640
Batch ID: 926641
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1950	0.00	U	1280	65	34-110
88-75-5	MS	2-Nitrophenol	1950	0.00	U	1170	60	32-108
105-67-9	MS	2,4-Dimethylphenol	1950	0.00	U	1210	62	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1950	0.00	U	1220	62	35-108
120-83-2	MS	2,4-Dichlorophenol	1950	0.00	U	1280	66	38-110
65-85-0	MS	Benzoic acid	3900	0.00	U	1880	48	18-134
91-20-3	MS	Naphthalene	1950	0.00	U	1110	57	31-105
106-47-8	MS	4-Chloroaniline	1950	0.00	U	1320	68	29-123
87-68-3	MS	Hexachlorobutadiene	1950	0.00	U	841	43	31-109
91-57-6	MS	2-Methylnaphthalene	1950	0.00	U	1220	62	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1950	0.00	U	500	26	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1950	0.00	U	1220	63	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1950	0.00	U	1280	66	37-116
91-58-7	MS	2-Chloronaphthalene	1950	0.00	U	1110	57	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1950	0.00	U	1230	63	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1950	0.00	U	1710	87	39-117
131-11-3	MS	Dimethylphthalate	1950	0.00	U	1280	66	41-105
606-20-2	MS	2,6-Dinitrotoluene	1950	0.00	U	1260	65	41-103
208-96-8	MS	Acenaphthylene	1950	0.00	U	1260	65	41-103
51-28-5	MS	2,4-Dinitrophenol	1950	0.00	U	1040	54	25-104
132-64-9	MS	Dibenzofuran	1950	0.00	U	1460	75	40-114
84-66-2	MS	Diethylphthalate	1950	0.00	U	1280	65	43-110

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-608-1

Client ID: RE03-10-6902MS

Lab Sample ID: 1201981225

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: S

%Moisture: 14.7

Analysis Date: 12/03/2009 18:03

Dilution: 1

Prep Batch ID: 926640

Batch ID: 926641

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1950	0.00	U	1310	67	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1950	0.00	U	1190	61	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1950	0.00	U	1050	54	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1950	0.00	U	2360	121	35-139
122-39-4	MS	Diphenylamine	1950	0.00	U	1350	69	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1950	0.00	U	1350	69	37-118
101-55-3	MS	4-Bromophenylphenylether	1950	0.00	U	1250	64	39-112
118-74-1	MS	Hexachlorobenzene	1950	0.00	U	1180	61	38-113
85-01-8	MS	Phenanthrene	1950	96.1		1480	71	38-110
120-12-7	MS	Anthracene	1950	19.8	J	1360	69	38-112
84-74-2	MS	Di-n-butylphthalate	1950	0.00	U	1370	70	42-119
206-44-0	MS	Fluoranthene	1950	174		1680	77	38-119
85-68-7	MS	Butylbenzylphthalate	1950	0.00	U	1360	70	39-126
56-55-3	MS	Benzo(a)anthracene	1950	79.6		1440	70	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1950	0.00	U	1070	55	35-106
218-01-9	MS	Chrysene	1950	83.6		1450	70	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1950	0.00	U	1250	64	40-125
117-84-0	MS	Di-n-octylphthalate	1950	0.00	U	1300	67	30-147
205-99-2	MS	Benzo(b)fluoranthene	1950	91.6		1470	71	38-117
207-08-9	MS	Benzo(k)fluoranthene	1950	44.9		1340	67	39-120
50-32-8	MS	Benzo(a)pyrene	1950	73.8		1460	71	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1950	84.5		1310	63	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6902MS
Lab Sample ID: 1201981225
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 14.7
Analysis Date: 12/03/2009 18:03
Prep Batch ID: 926640
Batch ID: 926641

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1950	0.00	U	1240	64	32-124
191-24-2	MS	Benzo(ghi)perylene	1950	56.5		1370	67	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1950	0.00	U	940	48	31-105

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-608-1

Client ID: RE03-10-6902MSD

Lab Sample ID: 1201981226

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: S

%Moisture: 14.7

Analysis Date: 12/03/2009 18:26

Dilution: 1

Prep Batch ID: 926640

Batch ID: 926641

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1950	0.00	U	1170	60	32-90	11	0-30
108-95-2	MSD Phenol	1950	0.00	U	1270	65	32-105	6	0-30
95-57-8	MSD 2-Chlorophenol	1950	0.00	U	1200	62	33-106	6	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1950	0.00	U	730	37	33-95	11	0-30
621-64-7	MSD N-Nitrosodipropylamine	1950	0.00	U	1470	75	31-109	14	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1950	0.00	U	1410	72	38-119	11	0-30
83-32-9	MSD Acenaphthene	1950	0.00	U	1330	68	39-100	11	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1950	0.00	U	1470	75	42-107	12	0-30
100-02-7	MSD 4-Nitrophenol	1950	0.00	U	1600	82	24-120	18	0-30
87-86-5	MSD Pentachlorophenol	1950	0.00	U	1530	79	26-121	17	0-30
129-00-0	MSD Pyrene	1950	152		1790	84	34-120	10	0-30
110-86-1	MSD Pyridine	1950	0.00	U	1140	58	30-95	11	0-30
62-53-3	MSD Aniline	1950	0.00	U	1110	57	34-111	0	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1950	0.00	U	1150	59	34-101	5	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1950	0.00	U	710	36	31-97	10	0-30
100-51-6	MSD Benzyl alcohol	1950	0.00	U	1260	65	17-120	5	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1950	0.00	U	808	41	32-102	10	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1950	0.00	U	1180	61	32-113	7	0-30
95-48-7	MSD o-Cresol	1950	0.00	U	1310	67	31-119	9	0-30
65794-96-9	MSD m,p-Cresols	1950	0.00	U	1370	70	35-125	8	0-30
67-72-1	MSD Hexachloroethane	1950	0.00	U	681	35	30-100	14	0-30
98-95-3	MSD Nitrobenzene	1950	0.00	U	1360	70	33-108	11	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6902MSD
Lab Sample ID: 1201981226
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 14.7
Analysis Date: 12/03/2009 18:26
Dilution: 1
Prep Batch ID: 926640
Batch ID: 926641

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1950	0.00	U	1370	70	34-110	7	0-30
88-75-5	MSD 2-Nitrophenol	1950	0.00	U	1300	66	32-108	10	0-30
105-67-9	MSD 2,4-Dimethylphenol	1950	0.00	U	1330	68	32-115	10	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1950	0.00	U	1330	68	35-108	9	0-30
120-83-2	MSD 2,4-Dichlorophenol	1950	0.00	U	1410	72	38-110	10	0-30
65-85-0	MSD Benzoic acid	3900	0.00	U	2330	60	18-134	21	0-30
91-20-3	MSD Naphthalene	1950	0.00	U	1190	61	31-105	7	0-30
106-47-8	MSD 4-Chloroaniline	1950	0.00	U	1390	71	29-123	5	0-30
87-68-3	MSD Hexachlorobutadiene	1950	0.00	U	938	48	31-109	11	0-30
91-57-6	MSD 2-Methylnaphthalene	1950	0.00	U	1310	67	32-110	7	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1950	0.00	U	694	36	21-122	33 *	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1950	0.00	U	1340	69	37-108	9	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1950	0.00	U	1480	76	37-116	14	0-30
91-58-7	MSD 2-Chloronaphthalene	1950	0.00	U	1230	63	37-103	10	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1950	0.00	U	1340	68	36-115	9	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1950	0.00	U	1830	94	39-117	7	0-30
131-11-3	MSD Dimethylphthalate	1950	0.00	U	1400	72	41-105	9	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1950	0.00	U	1410	72	41-103	11	0-30
208-96-8	MSD Acenaphthylene	1950	0.00	U	1360	70	41-103	8	0-30
51-28-5	MSD 2,4-Dinitrophenol	1950	0.00	U	1280	66	25-104	20	0-30
132-64-9	MSD Dibenzofuran	1950	0.00	U	1580	81	40-114	8	0-30
84-66-2	MSD Diethylphthalate	1950	0.00	U	1390	71	43-110	9	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: RE03-10-6902MSD
Lab Sample ID: 1201981226
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 14.7
Analysis Date: 12/03/2009 18:26
Dilution: 1
Prep Batch ID: 926640
Batch ID: 926641

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1950	0.00	U	1420	73	48-99	8	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1950	0.00	U	1330	68	42-111	11	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1950	0.00	U	1280	66	19-118	20	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1950	0.00	U	2520	129	35-139	7	0-30
122-39-4	MSD	Diphenylamine	1950	0.00	U	1500	77	41-112	11	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1950	0.00	U	1470	76	37-118	9	0-30
101-55-3	MSD	4-Bromophenylphenylether	1950	0.00	U	1380	70	39-112	10	0-30
118-74-1	MSD	Hexachlorobenzene	1950	0.00	U	1320	68	38-113	11	0-30
85-01-8	MSD	Phenanthrene	1950	96.1		1640	79	38-110	11	0-30
120-12-7	MSD	Anthracene	1950	19.8	J	1520	77	38-112	11	0-30
84-74-2	MSD	Di-n-butylphthalate	1950	0.00	U	1450	75	42-119	6	0-30
206-44-0	MSD	Fluoranthene	1950	174		1820	84	38-119	8	0-30
85-68-7	MSD	Butylbenzylphthalate	1950	0.00	U	1520	78	39-126	11	0-30
56-55-3	MSD	Benzo(a)anthracene	1950	79.6		1590	77	39-110	10	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1950	0.00	U	1010	52	35-106	6	0-30
218-01-9	MSD	Chrysene	1950	83.6		1590	77	39-109	10	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1950	0.00	U	1330	68	40-125	7	0-30
117-84-0	MSD	Di-n-octylphthalate	1950	0.00	U	1560	80	30-147	18	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1950	91.6		1690	82	38-117	14	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1950	44.9		1640	82	39-120	20	0-30
50-32-8	MSD	Benzo(a)pyrene	1950	73.8		1630	80	40-115	11	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1950	84.5		1190	57	32-120	9	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number:	10-608-1	Sample Type:	Matrix Spike Duplicate
Client ID:	RE03-10-6902MSD	Matrix:	S
Lab Sample ID:	1201981226	%Moisture:	14.7
Instrument:	MSD5.I	Analysis Date:	12/03/2009 18:26
Analyst:	RMB	Prep Batch ID:	926640
Inj. Vol:	.5 uL	Batch ID:	926641

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1950	0.00	U	1170	60	32-124	6	0-30
191-24-2	MSD Benzo(ghi)perylene	1950	56.5		1200	59	28-119	13	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1950	0.00	U	1050	54	31-105	11	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 926640
Lab Sample ID: 1201981227
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 13:52
Dilution: 1
Prep Batch ID: 926640
Batch ID: 926641

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1190	71	31-95
108-95-2	LCS	Phenol	1670	0.0	1300	78	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1220	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	988	59	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1520	91	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1370	82	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1340	80	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1480	89	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1530	92	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1470	88	38-116
129-00-0	LCS	Pyrene	1670	0.0	1450	87	43-108
110-86-1	LCS	Pyridine	1670	0.0	1080	65	13-129
62-53-3	LCS	Aniline	1670	0.0	1300	78	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1190	71	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	973	58	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1540	92	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1030	62	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1250	75	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1190	71	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1380	83	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1000	60	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1370	82	37-110

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-608-1

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 926640

Matrix: SOIL

Lab Sample ID: 1201981227

Instrument: MSD5.I

Analysis Date: 12/03/2009 13:52

Dilution: 1

Analyst: RMB

Prep Batch ID: 926640

Inj. Vol: .5 uL

Batch ID: 926641

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1370	82	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1260	76	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1330	80	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1300	78	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1380	83	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	3350	100	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1260	75	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1480	89	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1180	71	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1360	82	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1480	89	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1360	81	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1370	82	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1260	76	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1320	79	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1810	109	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1390	84	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1400	84	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1390	84	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1510	91	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1590	96	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1380	83	50-108

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-608-1

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 926640

Matrix: SOIL

Lab Sample ID: 1201981227

Instrument: MSD5.I

Analysis Date: 12/03/2009 13:52

Dilution: 1

Analyst: RMB

Prep Batch ID: 926640

Inj. Vol: .5 uL

Batch ID: 926641

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1420	85	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1350	81	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1410	84	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	3040	183 *	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1520	91	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1460	88	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1380	83	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1350	81	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1410	85	45-107
120-12-7	LCS	Anthracene	1670	0.0	1440	87	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1460	88	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1520	91	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1480	89	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1460	88	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1280	77	45-98
218-01-9	LCS	Chrysene	1670	0.0	1450	87	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1410	84	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1450	87	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1490	90	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1470	88	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1530	92	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1450	87	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 926640
Lab Sample ID: 1201981227
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 13:52
Dilution: 1
Prep Batch ID 926640
Batch ID: 926641

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1430	86	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1570	94	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1170	70	36-109

Method Blank Summary

SDG Number:	10-608-1	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926640	Instrument ID:	MSD5.I	Data File:	s5I0307-3.d
Lab Sample ID:	1201981224	Prep Date:	11/27/2009 10:20	Analyzed:	12/03/09 13:30
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 926640	1201981227	s5I0308-2.d	12/03/09	1352
02	RE03-10-6903	241559001	s5I0317.d	12/03/09	1717
03	RE03-10-6902	241559002	s5I0318.d	12/03/09	1740
04	RE03-10-6902MS	1201981225	s5I0319.d	12/03/09	1803
05	RE03-10-6902MSD	1201981226	s5I0320.d	12/03/09	1826

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-608-1

Instrument ID: MSD5.I **Injection Date/Time:** 03-DEC-09 11:40

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s120309.b/s510302.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	32.4
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	38.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	44.7
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.1
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	76.9
442	Greater than 40% of mass 198	63.7
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD5.i/s120309.b/s510303	03-DEC-09 11:53
AP12CVS	WBN091201-03.4	/chem/MSD5.i/s120309.b/s510304	03-DEC-09 12:21
SBLK01	1201981224	/chem/MSD5.i/s120309.b/s510307	03-DEC-09 13:30
SBLK01LCS	1201981227	/chem/MSD5.i/s120309.b/s510308	03-DEC-09 13:52
RE03-10-6903	241559001	/chem/MSD5.i/s120309.b/s510317	03-DEC-09 17:17
RE03-10-6902	241559002	/chem/MSD5.i/s120309.b/s510318	03-DEC-09 17:40
RE03-10-6902MS	1201981225	/chem/MSD5.i/s120309.b/s510319	03-DEC-09 18:03
RE03-10-6902MSD	1201981226	/chem/MSD5.i/s120309.b/s510320	03-DEC-09 18:26

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-608-1

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN091106-08	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:09
MEGAICAL010	WBN091106-07	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:38
MEGAICAL020	WBN091106-06	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:06
MEGAICAL040	WBN091106-05.1	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:34
MEGAICAL050	WBN091106-04	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:02
MEGAICAL080	WBN091106-03	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:31
MEGAICAL100	WBN091106-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 16:59
MEGAICAL120	WBN091106-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 17:28
MEGAICV	WBN091106-09.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:20
AP12ICAL010	WBN091111-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:48
AP12ICAL020	WBN091111-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:10
AP12ICAL040	WBN091111-03.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:34
AP12ICAL050	WBN091111-04	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:57
AP12ICAL080	WBN091111-05	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:20
AP12ICAL100	WBN091111-06	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:42
AP12ICAL120	WBN091111-07	/chem/MSD5.i/s113009.b/s5k303	30-NOV-09 21:05

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-608-1

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICV	WBN091111-08.1	/chem/MSD5.i/s113009.b/s5k303	01-DEC-09 00:10

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-608-1

Instrument: MSD5.I

STD Analysis Time: 03-DEC-09 11:53

GC Column: J&W DB-5MS

Data File: s5l0303.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	385614		3.94	1458717		4.81	846395		6.07	1539777		7.24	1575164		9.67	1435753		11.4
Upper Limit	771228		4.44	2917434		5.31	1692790		6.57	3079554		7.74	3150328		10.2	2871506		11.9
Lower Limit	192807		3.44	729359		4.31	423198		5.57	769889		6.74	787582		9.17	717877		10.9
Sample ID																		
BLK01	342707		3.93	1186234		4.8	739929		6.06	1347800		7.24	1392283		9.65	1294264		11.4
BLK01LCS	361342		3.93	1388766		4.8	814150		6.06	1537372		7.24	1686500		9.66	1593212		11.4
RE03-10-6903	423618		3.93	1476509		4.8	942297		6.06	1733420		7.24	1813661		9.65	1739267		11.4
RE03-10-6902	377882		3.93	1322755		4.8	841360		6.06	1568126		7.24	1646434		9.65	1514778		11.4
RE03-10-6902MS	312610		3.93	1199538		4.8	714648		6.06	1333952		7.24	1414033		9.66	1363165		11.4
RE03-10-6902MSD	401228		3.93	1506832		4.8	890765		6.07	1657708		7.24	1722479		9.66	1439669		11.4

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:40	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.1	390
108-95-2	Phenol	U	390	ug/kg	78.1	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.1	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.1	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.1	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.1	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.6	390
129-00-0	Pyrene		152	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.1	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.1	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.1	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.1	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.1	390
95-48-7	o-Cresol	U	390	ug/kg	78.1	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.1	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.1	390
78-59-1	Isophorone	U	390	ug/kg	78.1	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.1	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.1	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.1	390
65-85-0	Benzoic acid	U	781	ug/kg	195	781
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.1	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.1	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.81	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.1	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.1	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.1	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	390	ug/kg	78.1	390
99-09-2	3-Nitroaniline	U	390	ug/kg	78.1	390

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:40	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510318.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	390	ug/kg	78.1	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	781	ug/kg	148	781
132-64-9	Dibenzofuran	U	390	ug/kg	78.1	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.1	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.1	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.1	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	p-Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.1	390
122-66-7	Azobenzene	U	390	ug/kg	78.1	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.1	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.1	390
85-01-8	Phenanthrene		96.1	ug/kg	11.7	39.0
120-12-7	Anthracene	J	19.8	ug/kg	7.81	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.1	390
206-44-0	Fluoranthene		174	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.1	390
56-55-3	Benzo(a)anthracene		79.6	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene		83.6	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.1	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.1	390
205-99-2	Benzo(b)fluoranthene		91.6	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene		44.9	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene		73.8	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene		84.5	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene		56.5	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.1	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	388	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	9.04	185	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6902**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926641**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:40**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 10:20**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0318.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5085-72-3	D:A-Friedooleanan-3-ol, (3.alpha.)-	10.05	444	ug/kg	86	NJ
300574-36-1	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	10.13	517	ug/kg	90	NJ
	Unknown	10.43	221	ug/kg		J
	Unknown	10.54	169	ug/kg		J
	Unknown	10.95	224	ug/kg		J
112-95-8	Eicosane	11.84	260	ug/kg	96	NJ
	Unknown	12.1	199	ug/kg		J
	Unknown	12.88	195	ug/kg		J
	Unknown	13.2	160	ug/kg		J
83-46-5	.beta.-Sitosterol	13.92	231	ug/kg	96	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510318.d
Lab Smp Id: 241559002 Client Smp ID: RE03-10-6902
Inj Date : 03-DEC-2009 17:40
Operator : RMB Inst ID: MSD5.i
Smp Info : |241559002|926641|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	14.65250	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	377882	40.0000	
* 29 Naphthalene-d8	136	4.801	4.812	(1.000)	1322755	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.068	(1.000)	841360	40.0000	
* 67 Phenanthrene-d10	188	7.237	7.243	(1.000)	1568126	40.0000	
* 91 Chrysene-d12	240	9.654	9.665	(1.000)	1646434	40.0000	
* 98 Perylene-d12	264	11.354	11.365	(1.000)	1514778	40.0000	
$ 3 2-Fluorophenol	112	3.113	3.117	(0.792)	460563	58.8541	2300
$ 5 Phenol-d5	99	3.643	3.646	(0.927)	576378	59.3839	2320
$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	236804	28.0010	1090
$ 39 2-Fluorobiphenyl	172	5.543	5.553	(0.915)	582013	27.3822	1070
$ 60 2,4,6-Tribromophenol	329	6.660	6.665	(1.099)	214871	69.0406	2700
$ 81 p-Terphenyl-d14	244	8.619	8.625	(0.893)	846907	35.9687	1400

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	8.519	8.529	(0.882)	129714	3.88949	152
68 Phenanthrene	178	7.254	7.263	(1.002)	72469	2.46066	96.1
69 Anthracene	178	7.295	7.306	(1.008)	14887	0.50822	19.8(a)
76 Fluoranthene	202	8.301	8.312	(1.147)	143307	4.44399	174
89 Benzo(a)anthracene	228	9.642	9.651	(0.999)	67667	2.03806	79.6
92 Chrysene	228	9.678	9.689	(1.002)	64811	2.14133	83.6
95 Benzo(b)fluoranthene	252	10.819	10.835	(0.953)	74506	2.34721	91.6
96 Benzo(k)fluoranthene	252	10.854	10.874	(0.956)	36415	1.14928	44.9
97 Benzo(a)pyrene	252	11.266	11.283	(0.992)	52934	1.89133	73.8
99 Indeno(1,2,3-cd)pyrene	276	13.136	13.166	(1.157)	34272	2.16478	84.5
101 Benzo(ghi)perylene	276	13.677	13.715	(1.205)	35631	1.44682	56.5

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

SV REPORT

Data file: s510318.d
Report Date: 12/04/2009 07:23
Lab. ID: 241559002 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:40
Operator: RMB Instrument: MSD5.i
Sample Info: |241559002|926641|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091117-01
Comment:
Method used: /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-608-1
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	34459	3.64	3.72	80-120	100	(T)
93	354	3.70	3.72	227-287	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	35009	4.30	4.18	80-120	100	(T)
42	17680	4.29	4.18	26- 86	51	(T)
22 Isophorone			CAS#: 78-59-1			
82	234678	4.30	4.47	80-120	100	(T)
138	265	4.46	4.47	0- 51	0	( )
43 Dimethylphthalate			CAS#: 131-11-3			
163	151429	6.06	5.83	80-120	100	(T)
164	841360	6.06	5.83	0- 40	556	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	110884	6.06	5.88	80-120	100	(T)
63	1256	6.06	5.88	39- 99	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	110884	6.06	6.18	80-120	100	(T)
89	1705	6.06	6.18	36- 96	2	(QT)
63	1256	6.06	6.18	11- 71	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
52 4-Nitrophenol			CAS#: 100-02-7			
139	159	6.07	6.11	80-120	100	( )
109	1808	6.06	6.11	41-101	1134	(Q)
65	3947	6.06	6.10	60-120	2475	(Q)
53 Fluorene			CAS#: 86-73-7			
166	10253	6.66	6.48	80-120	100	(T)
165	10712	6.66	6.48	62-122	104	(T)
167	3971	6.66	6.48	0- 44	39	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	925	6.66	6.49	80-120	100	(T)
105	1742	6.66	6.49	6- 66	188	(QT)
51	1200	6.66	6.49	21- 81	130	(QT)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	14248	6.66	6.84	80-120	100	(T)
141	85176	6.66	6.84	35- 95	598	(QT)
250	27723	6.66	6.84	69-129	195	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	72469	7.25	7.26	80-120	100	( )
179	12333	7.25	7.26	0- 46	17	( )
176	13828	7.25	7.26	0- 49	19	( )
69 Anthracene			CAS#: 120-12-7			
178	14887	7.30	7.31	80-120	100	( )
179	4080	7.30	7.31	0- 46	27	( )
176	3390	7.30	7.31	0- 49	23	( )
76 Fluoranthene			CAS#: 206-44-0			
202	143307	8.30	8.31	80-120	100	( )
203	24865	8.30	8.31	0- 48	17	( )
101	15141	8.30	8.31	0- 40	11	( )
79 Pyrene			CAS#: 129-00-0			
202	129714	8.52	8.53	80-120	100	( )
200	28537	8.52	8.53	0- 51	22	( )
101	16191	8.51	8.52	0- 42	12	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	67667	9.64	9.65	80-120	100	( )
226	18665	9.64	9.65	0- 57	28	( )
229	19972	9.64	9.65	0- 50	30	( )
92 Chrysene			CAS#: 218-01-9			
228	64811	9.68	9.69	80-120	100	( )
229	14199	9.68	9.69	0- 50	22	( )
226	18061	9.68	9.69	0- 60	28	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	74506	10.82	10.84	80-120	100	( )
253	17542	10.82	10.84	0- 52	24	( )
125	11510	10.84	10.84	0- 39	15	( )
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	36415	10.85	10.87	80-120	100	( )
253	8704	10.85	10.87	0- 52	24	( )
125	11510	10.84	10.87	0- 40	32	( )
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	52934	11.27	11.28	80-120	100	( )
253	13024	11.27	11.28	0- 52	25	( )
125	4821	11.27	11.28	0- 30	9	( )
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	34272	13.14	13.17	80-120	100	( )
138	6741	13.14	13.17	0- 53	20	( )
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	9294	13.15	13.18	80-120	100	( )
139	929	13.14	13.18	0- 30	10	( )
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	35631	13.68	13.72	80-120	100	( )
138	6727	13.67	13.72	0- 30	19	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510318.d
Lab Smp Id: 241559002 Client Smp ID: RE03-10-6902
Inj Date : 03-DEC-2009 17:40
Operator : RMB Inst ID: MSD5.i
Smp Info : |241559002|926641|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	14.65250	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.931	2226184	40.000
* 91 Chrysene-d12	9.654	4709474	40.000
* 98 Perylene-d12	11.354	4300827	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.949	553001	9.93629403	388	0		0	10
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
9.042	556881	4.72987906	185	99	NIST05.L	112657	91
D:A-Friedooleanan-3-ol, (3.alpha.)-					CAS #: 5085-72-3		
10.048	1337546	11.3604665	444	86	NIST05.L	176947	91
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur					CAS #: 300574-36-1		
10.130	1558602	13.2380115	517	90	NIST05.L	68738	91
Unknown					CAS #:		
10.430	667016	5.66531153	221	0		0	91
Unknown					CAS #:		
10.536	464808	4.32296560	169	0		0	98
Unknown					CAS #:		
10.948	617664	5.74460427	224	0		0	98
Eicosane					CAS #: 112-95-8		
11.836	715092	6.65074057	260	96	NIST05.L	113489	98
Unknown					CAS #:		
12.101	548262	5.09912836	199	0		0	98
Unknown					CAS #:		
12.877	536636	4.99100628	195	0		0	98
Unknown					CAS #:		
13.201	440758	4.09928306	160	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.918	637386	5.92803142	231	96	NIST05.L	174399	98

Data File: /chem/MSD5.i/s120309.b/s510318.d
Date : 03-DEC-2009 17:40
Client ID: RE03-10-6902
Sample Info: 1241559002|926641|1|SVMF11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RNB
Column diameter: 0.20

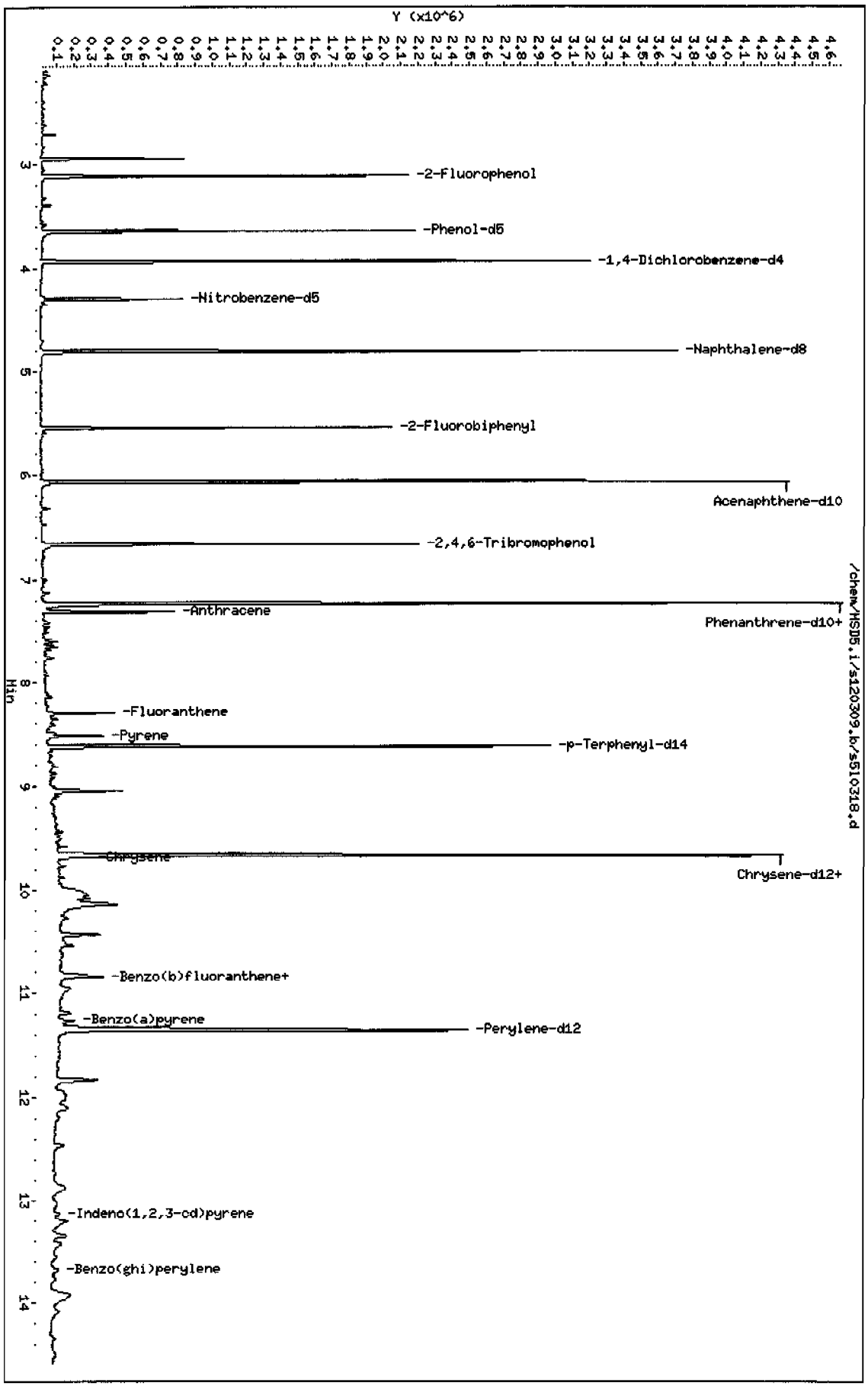

Page 1

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 152 ug/Kg

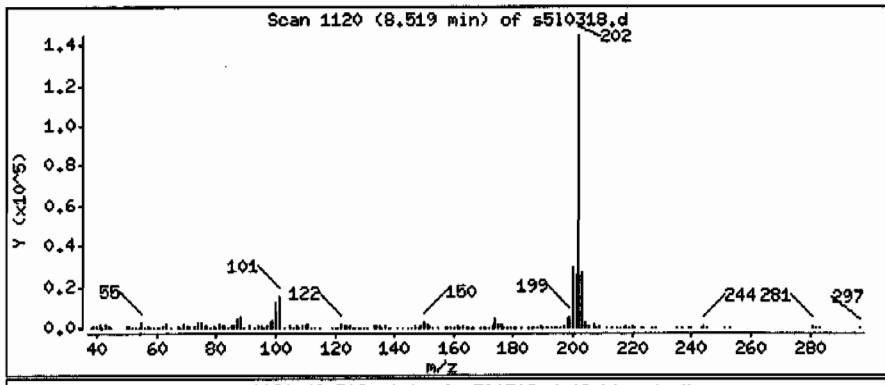

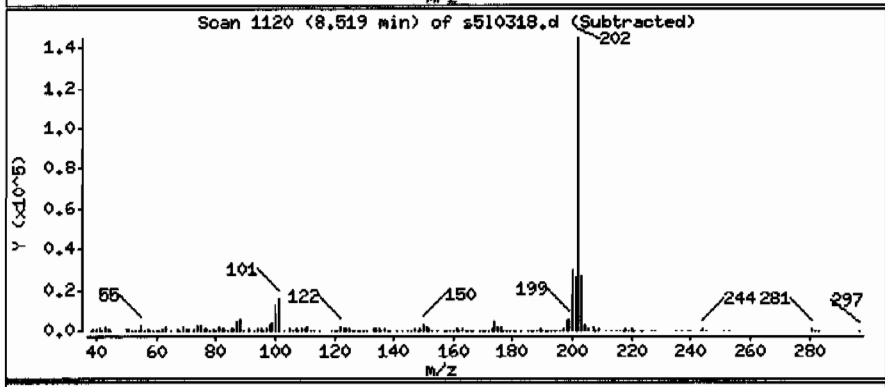

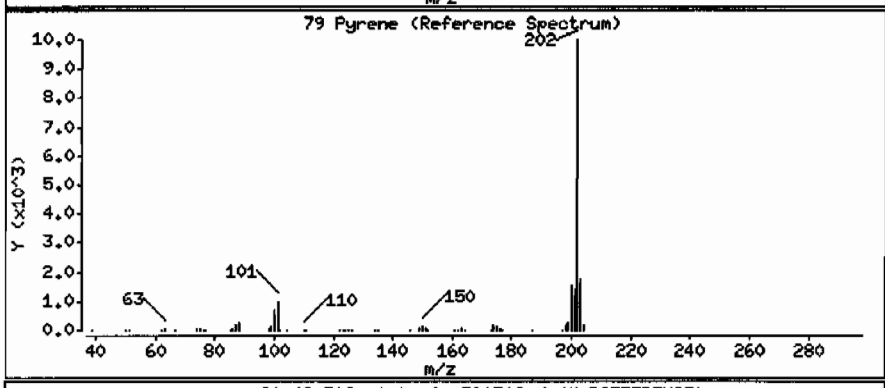

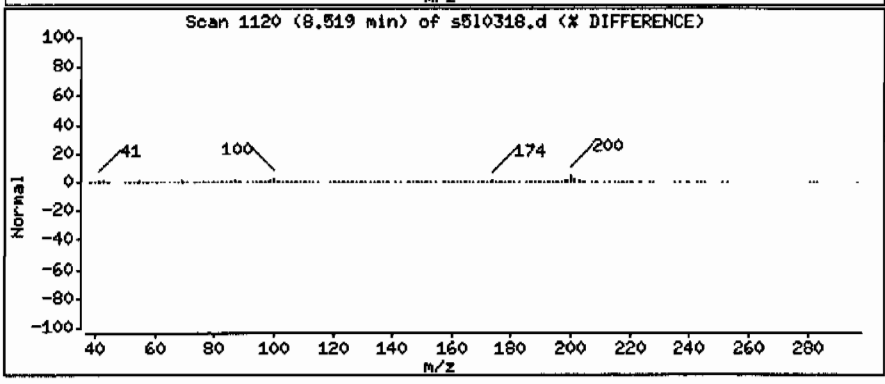

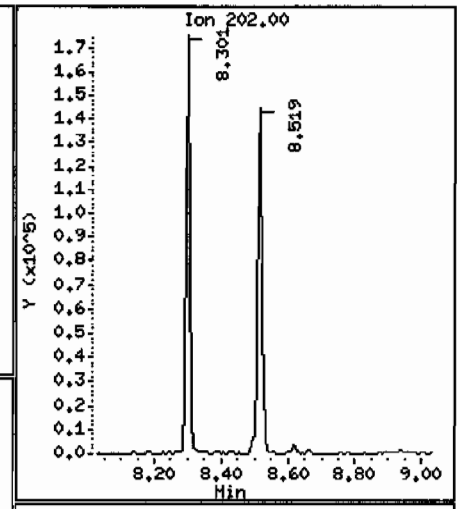

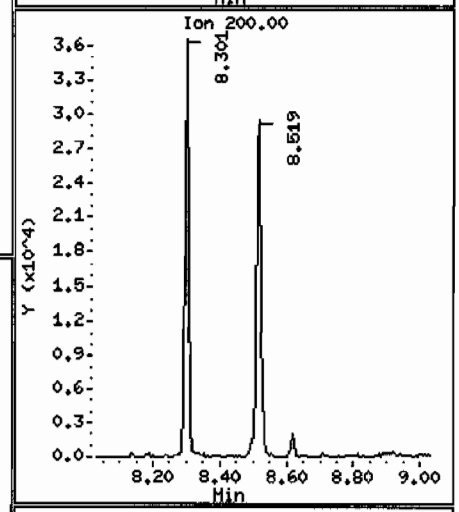

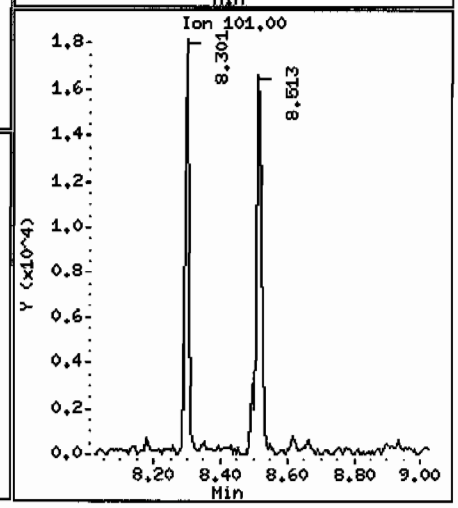

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2418559002|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 96.1 ug/Kg

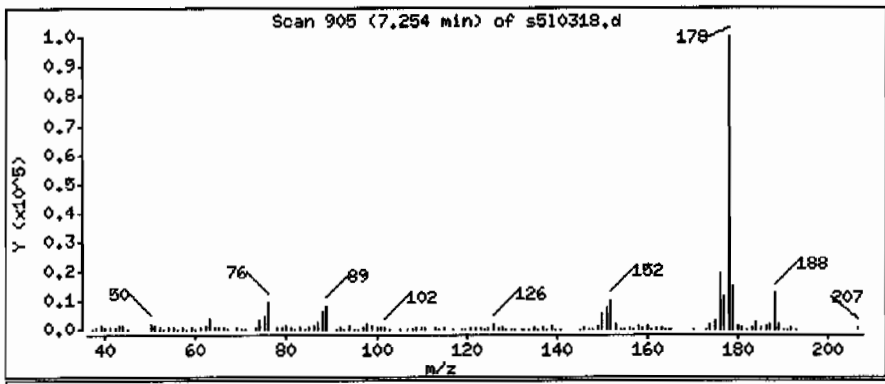

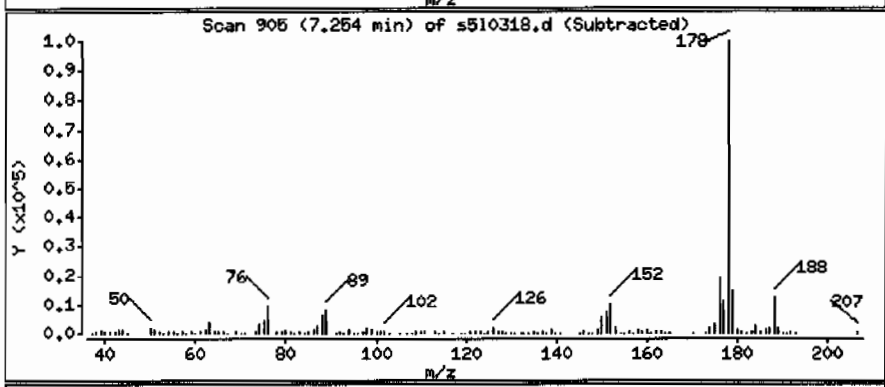

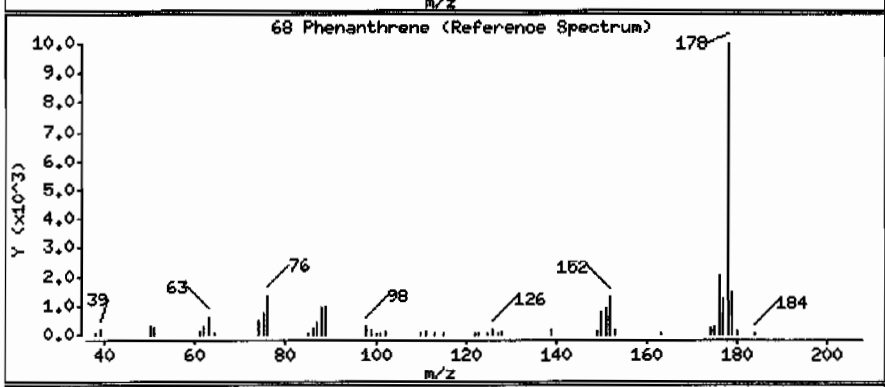

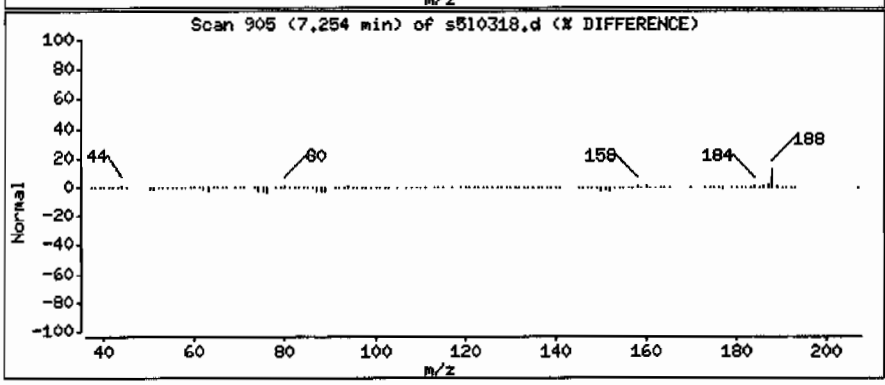

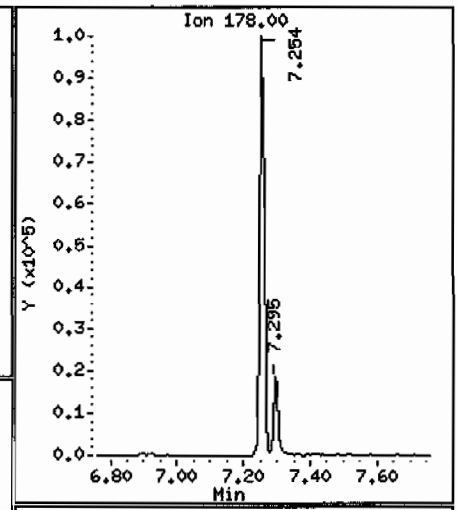

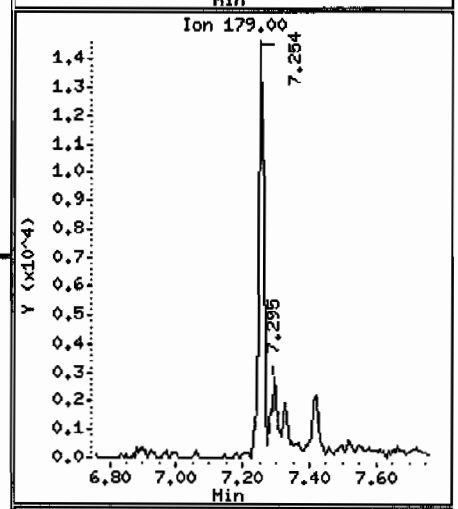

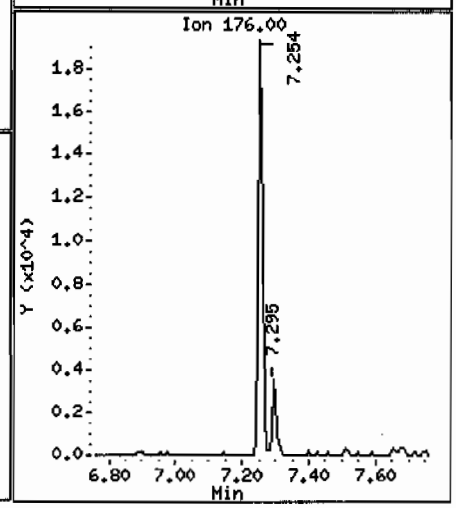

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 19.8 ug/Kg

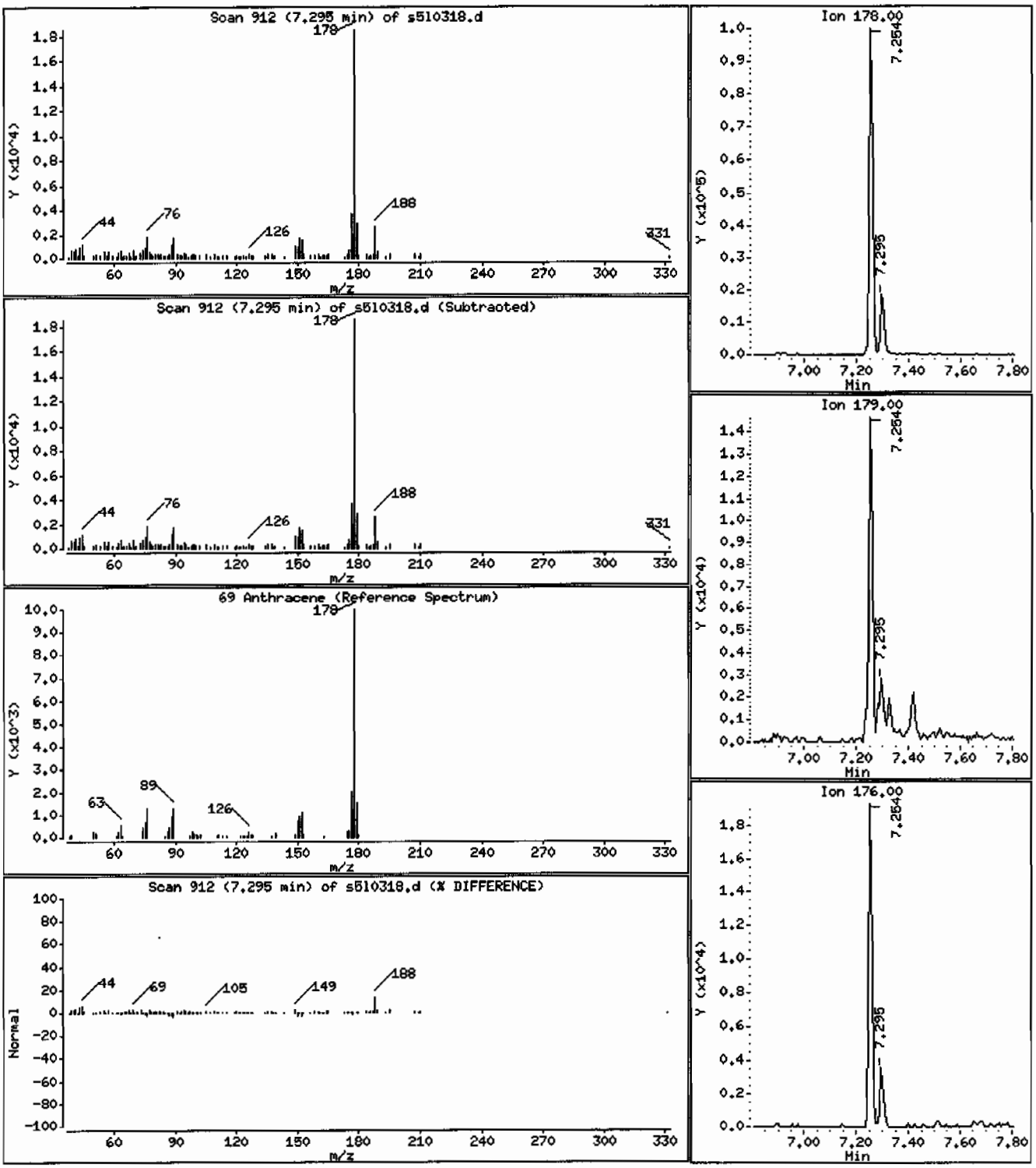

Data File: /chem/MSD5.i/s120309.b/s510318.d

Page 5

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 174 ug/Kg

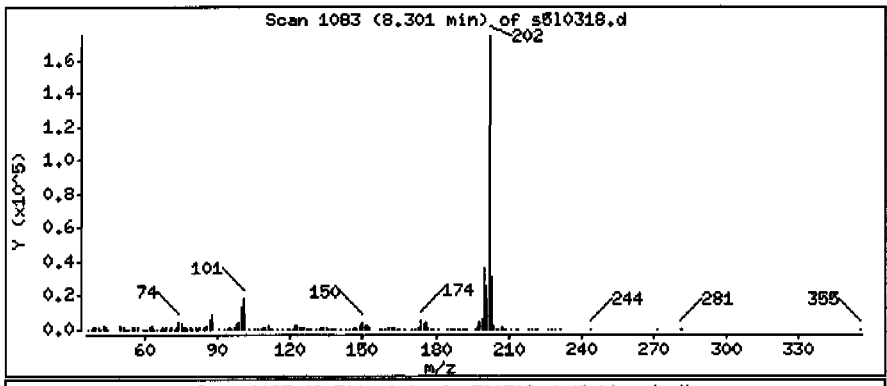

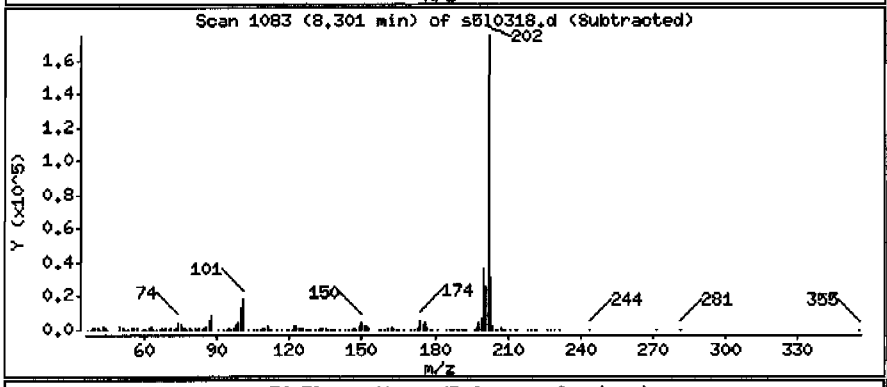

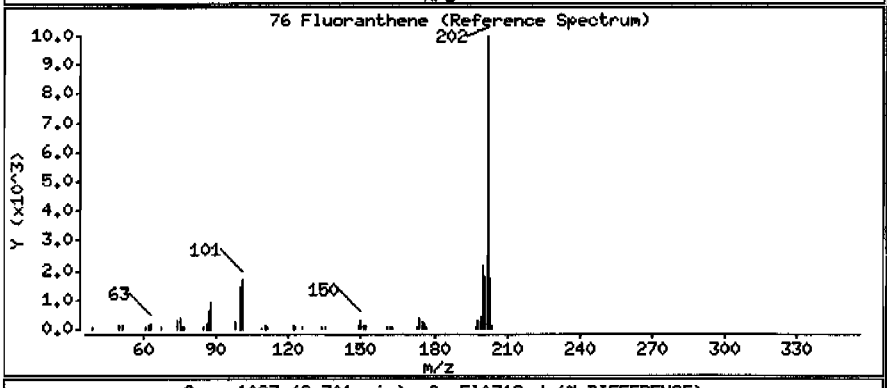

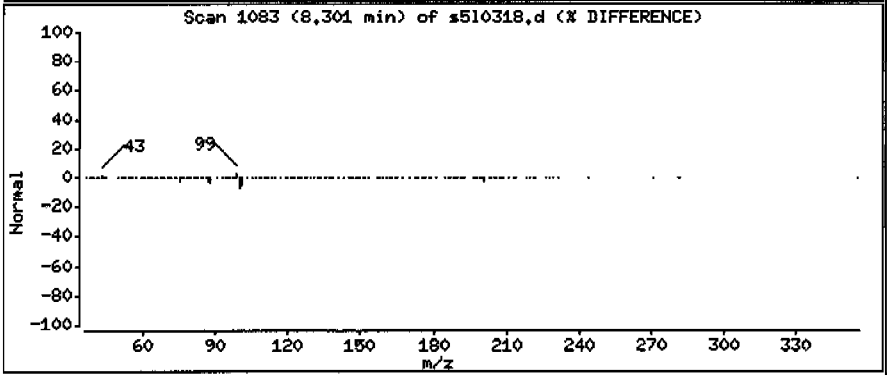

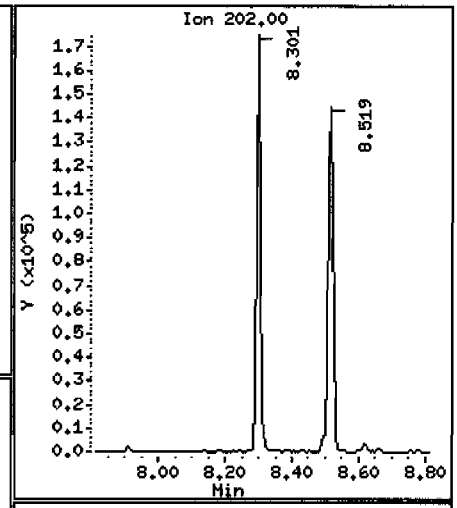

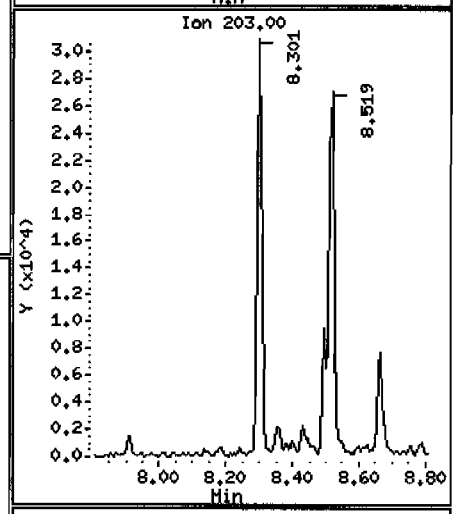

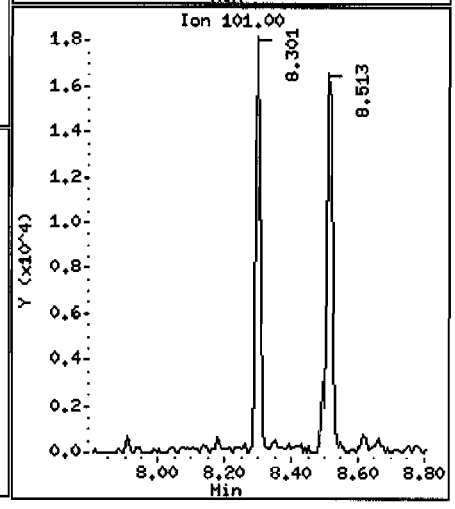

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2418559002|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 79.6 ug/Kg

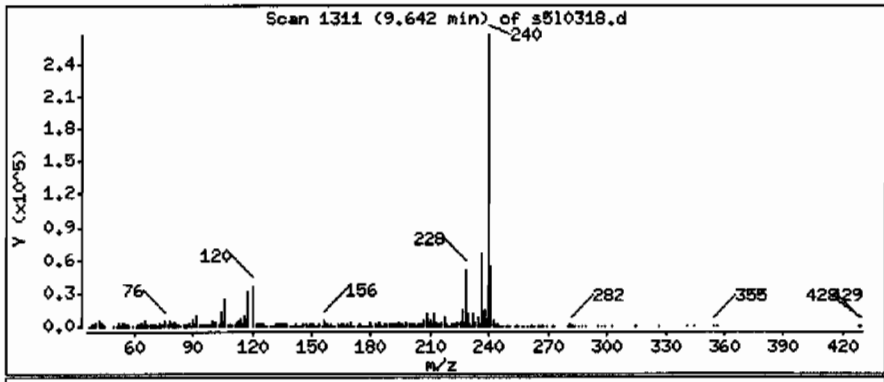

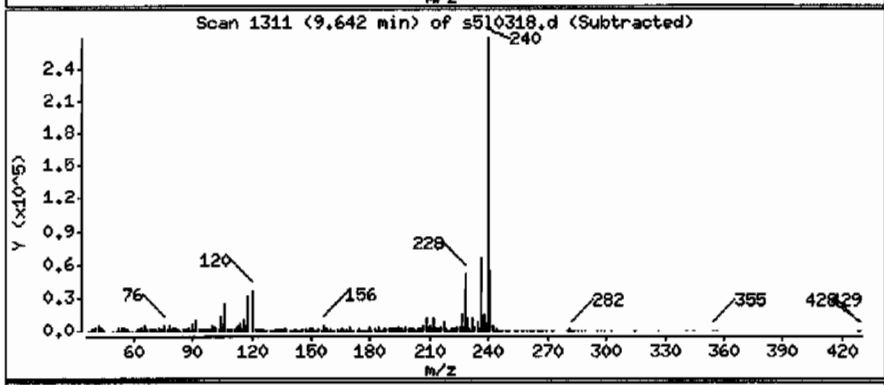

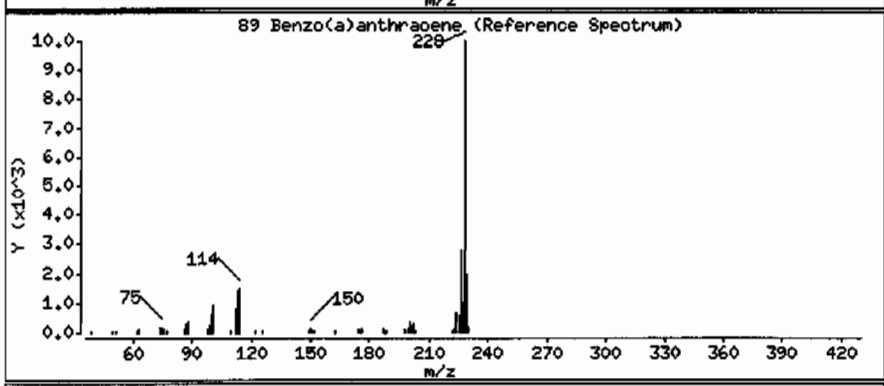

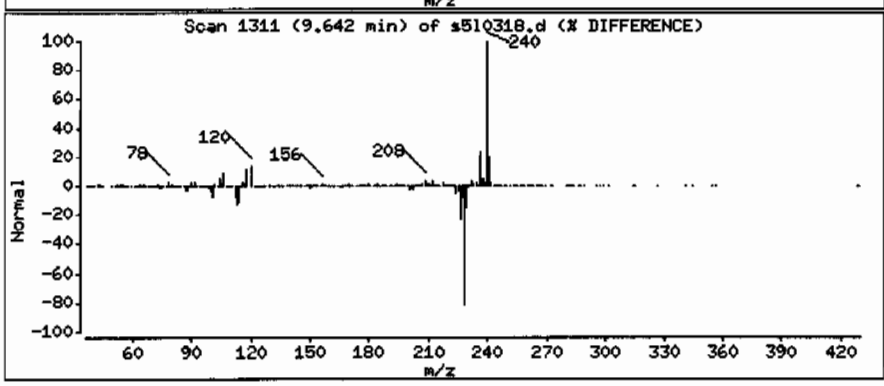

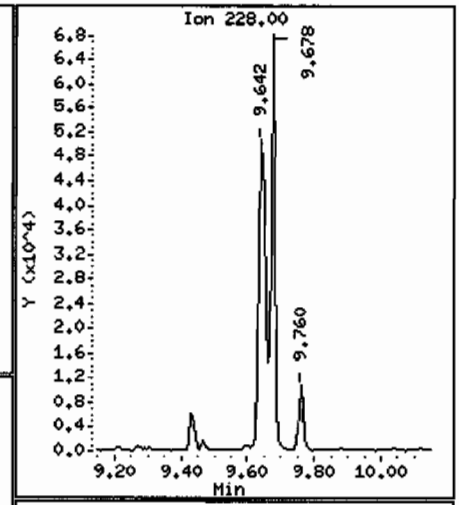

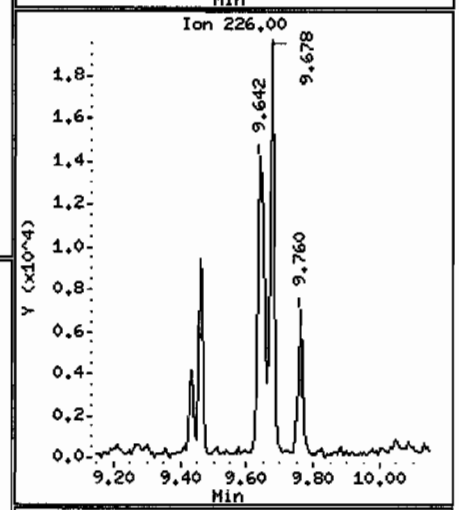

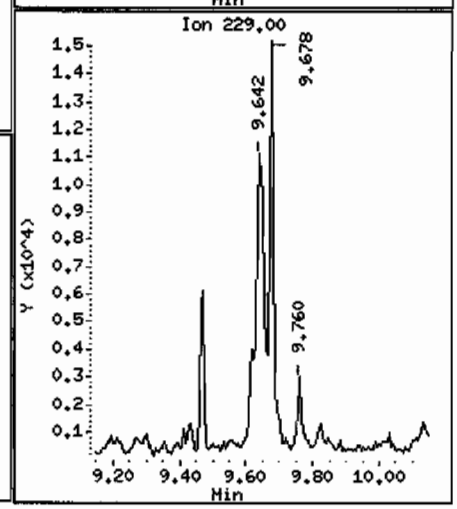

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 83.6 ug/Kg

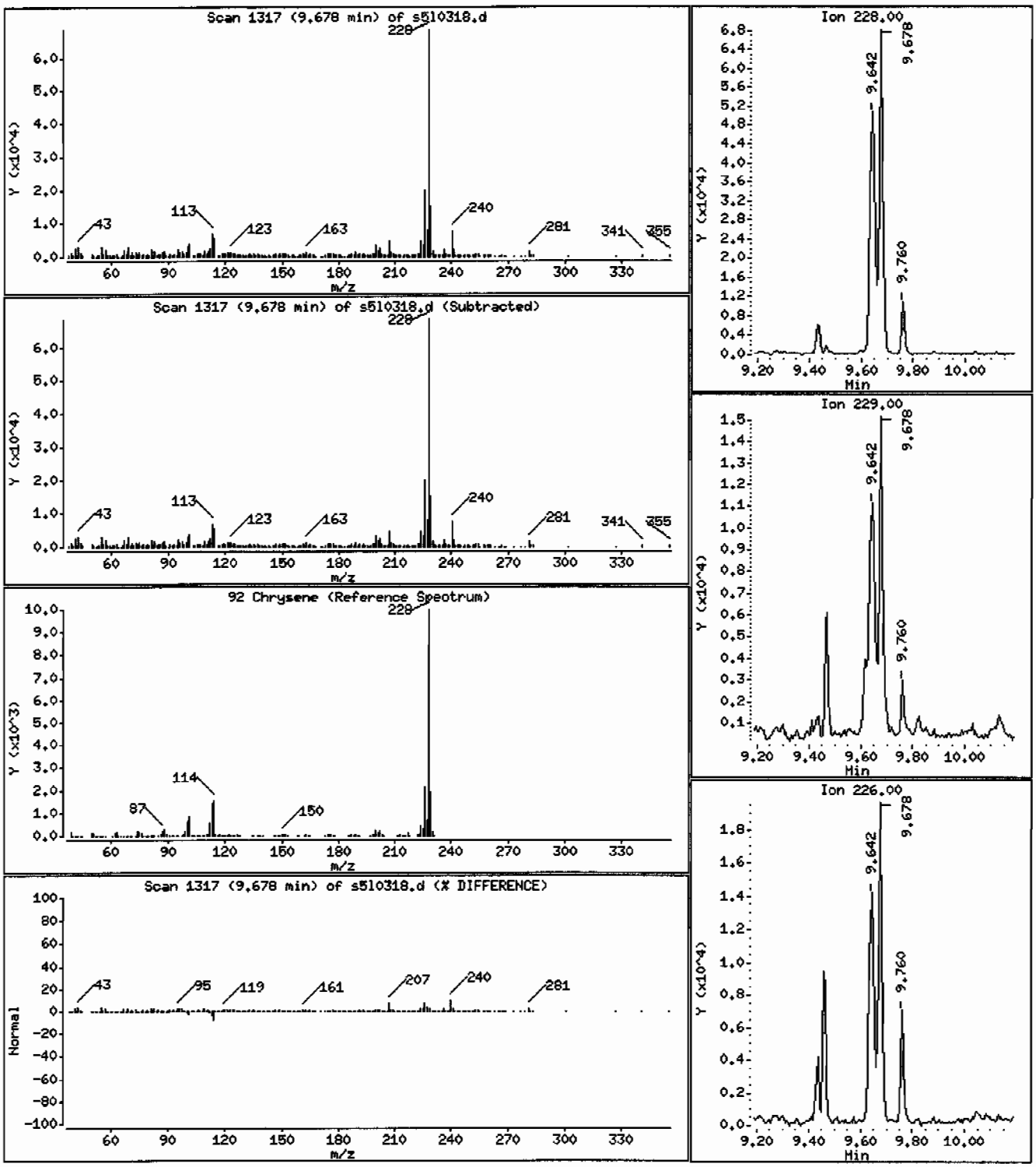

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902 Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

95 Benzo(b)fluoranthene Concentration: 91.6 ug/Kg

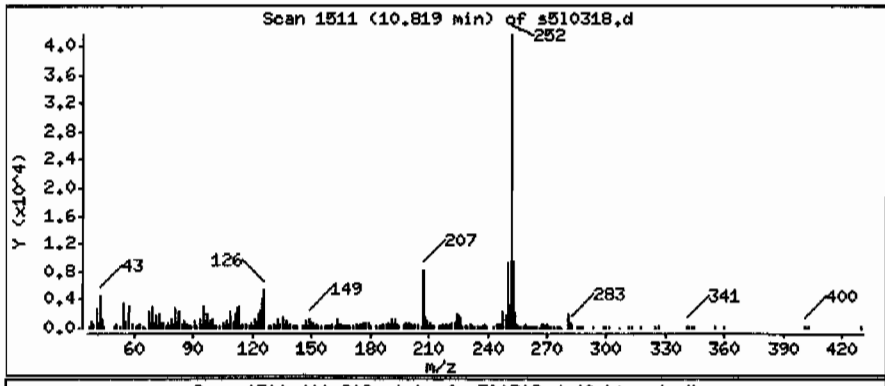

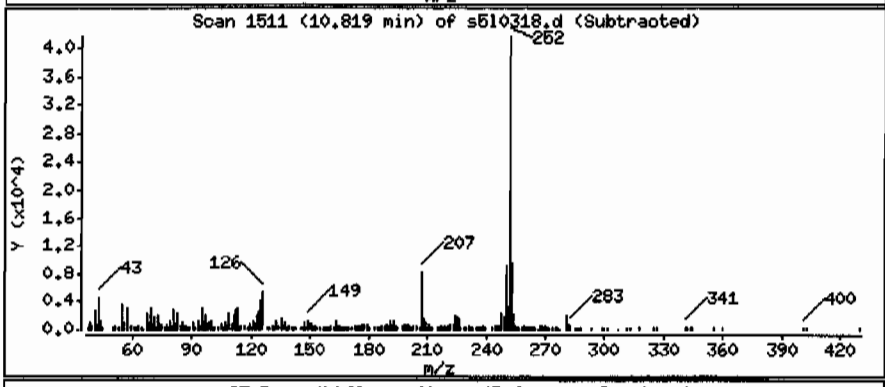

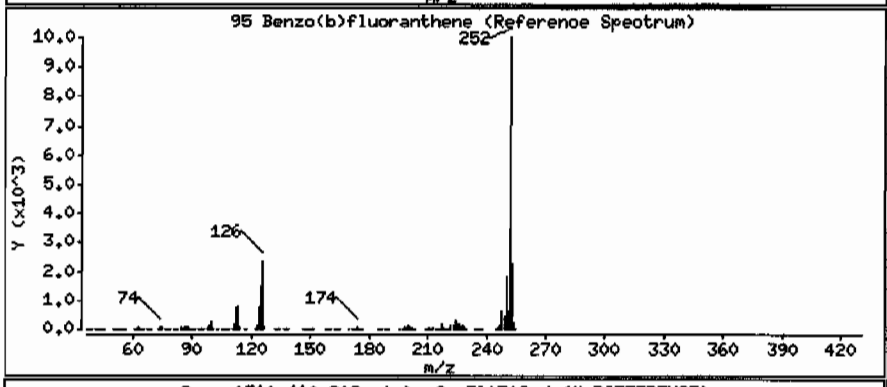

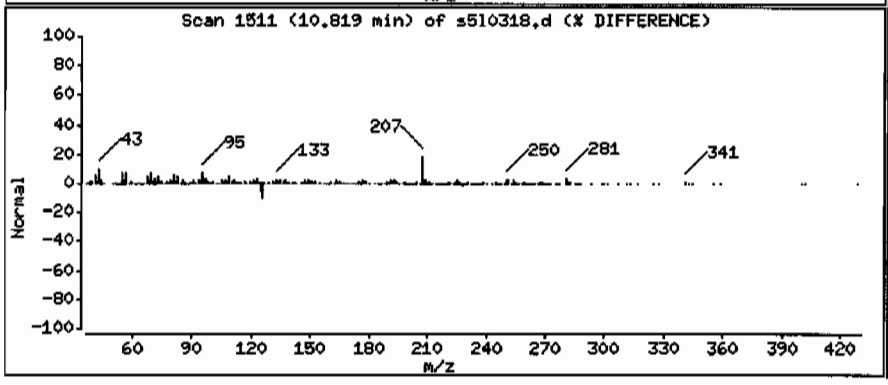

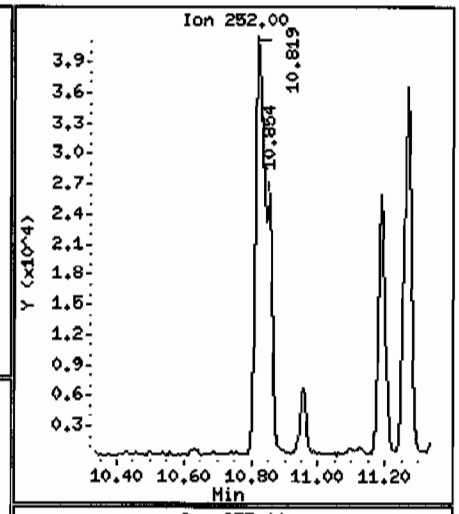

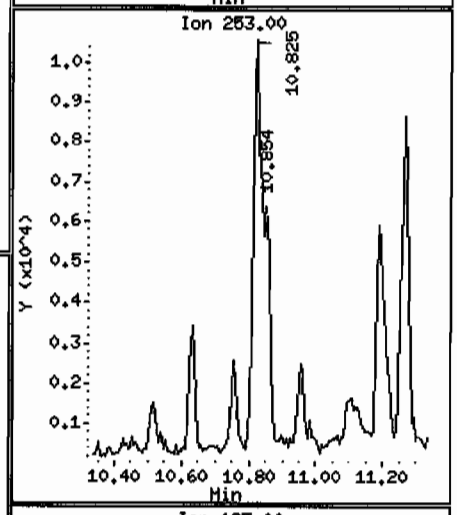

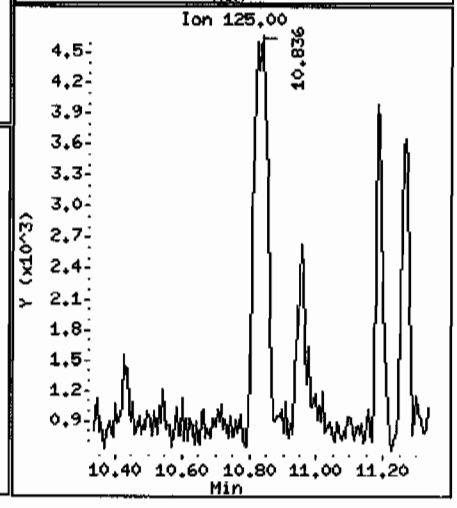

Data File: /chem/MSD5.i/s120309.b/s510318.d

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Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

96 Benzo(k)fluoranthene

Concentration: 44.9 ug/Kg

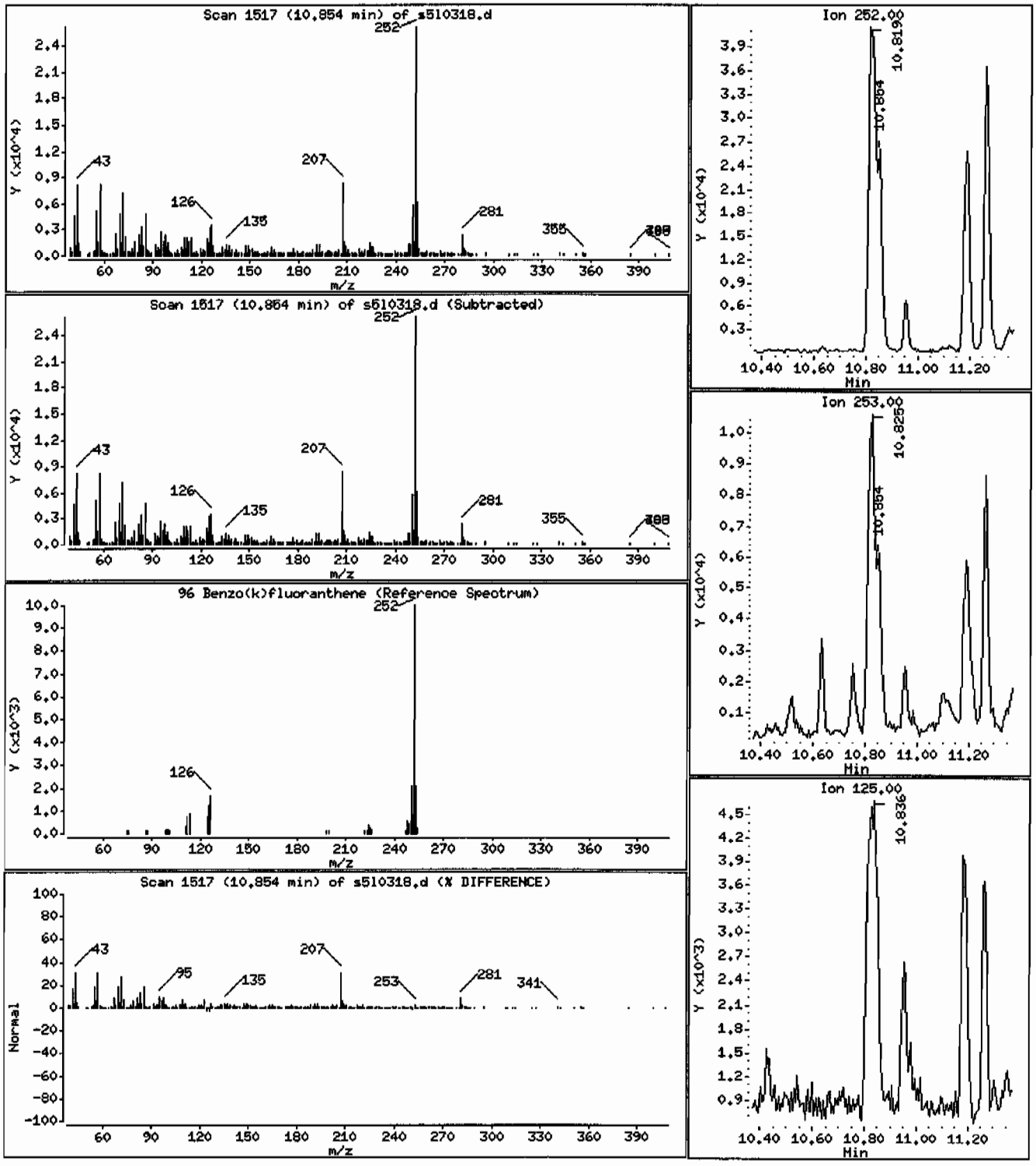

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 73.8 ug/Kg

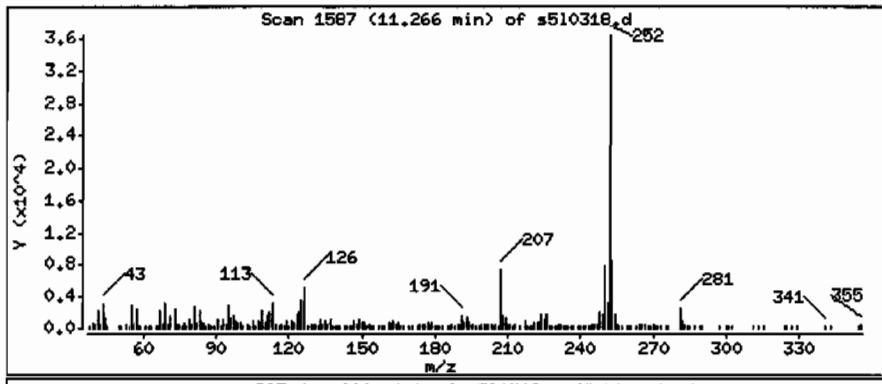

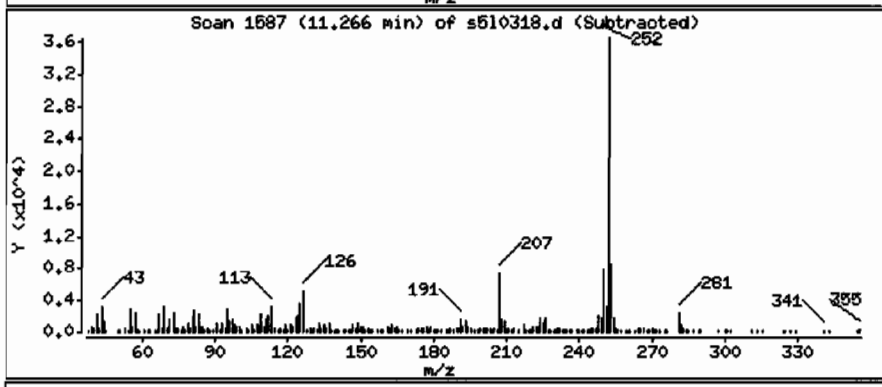

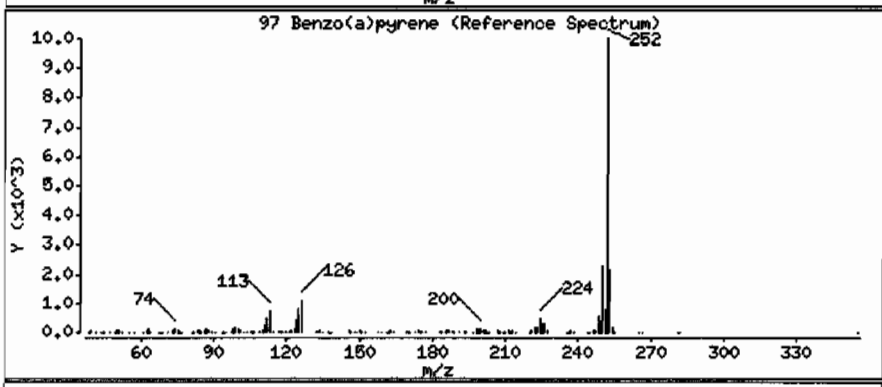

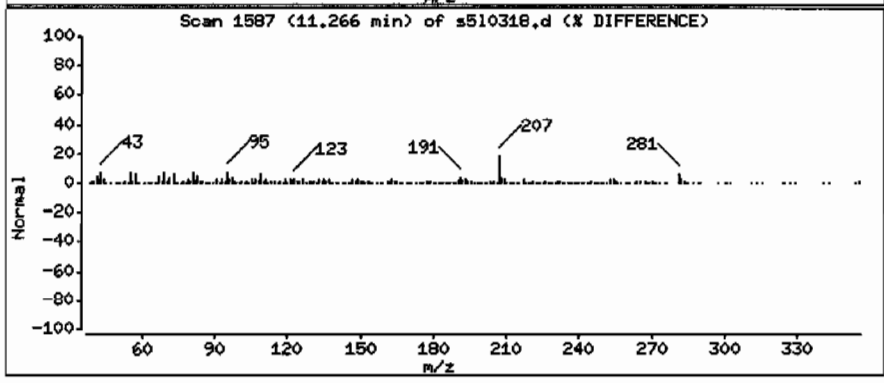

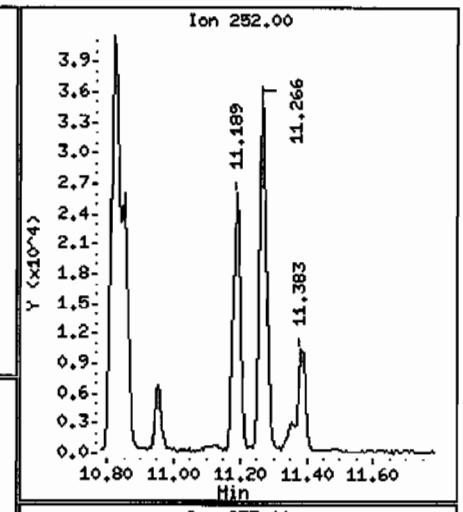

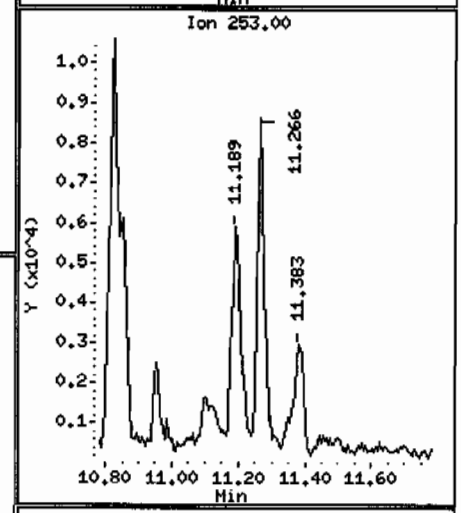

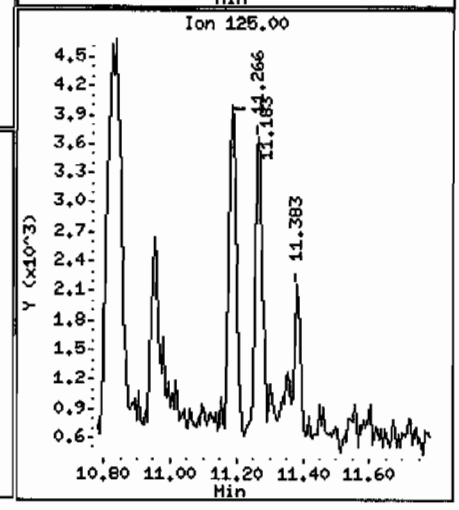

Data File: /chem/HSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: HSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 84.5 ug/Kg

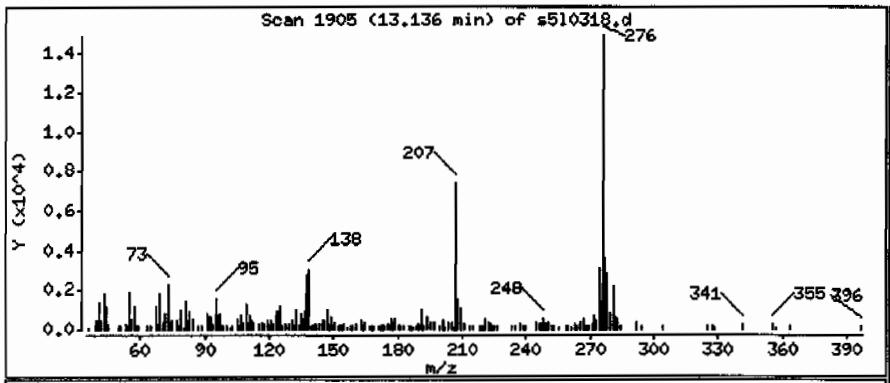

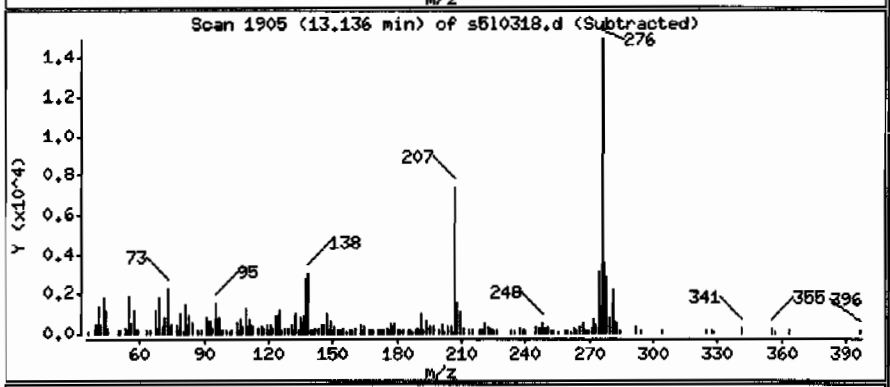

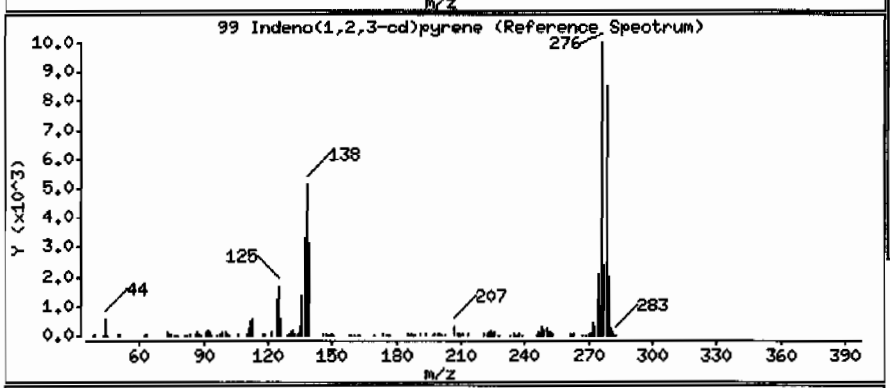

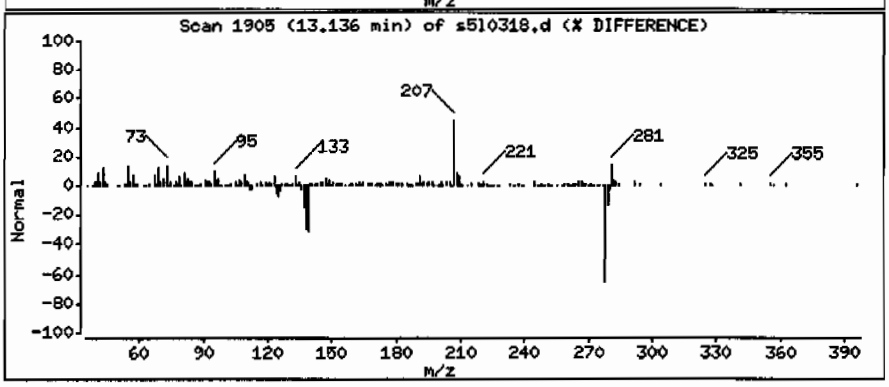

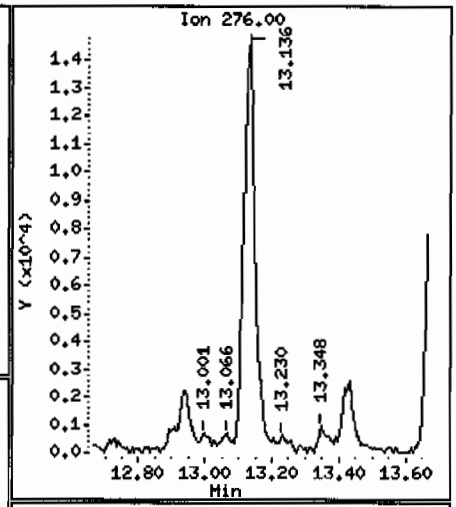

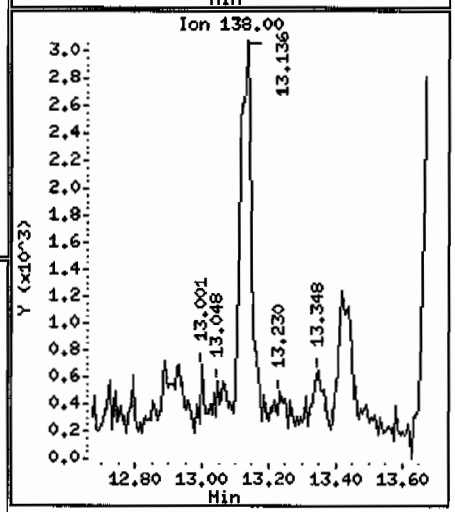

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |241559002|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 56.5 ug/Kg

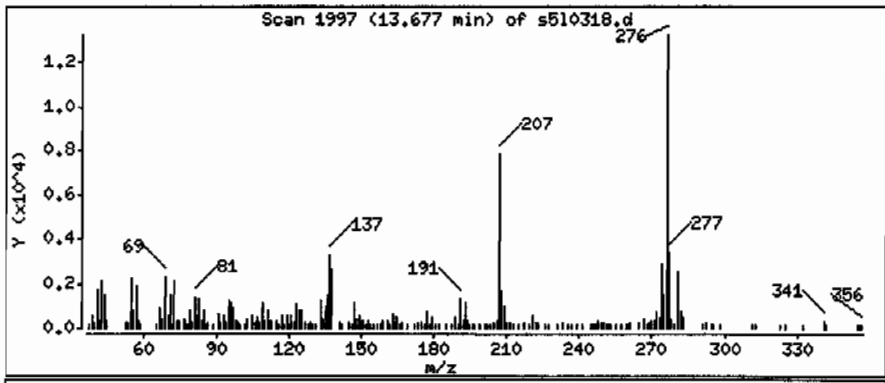

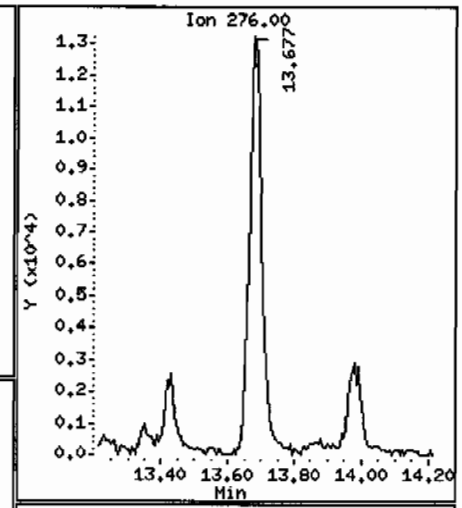

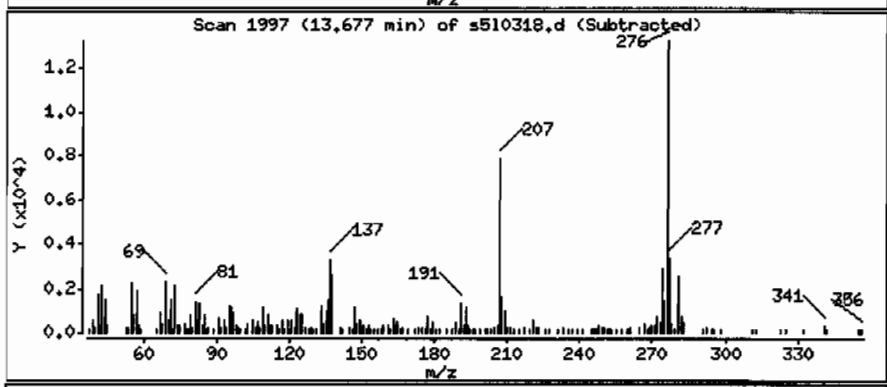

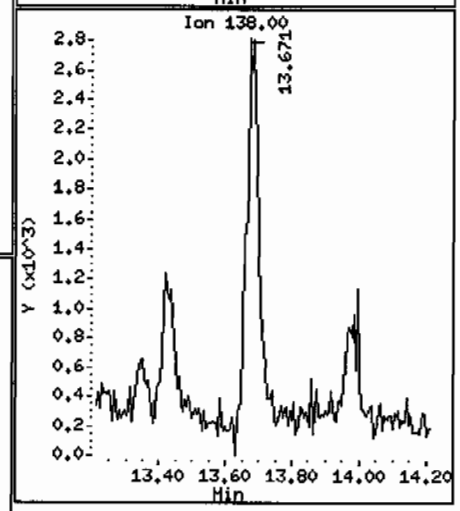

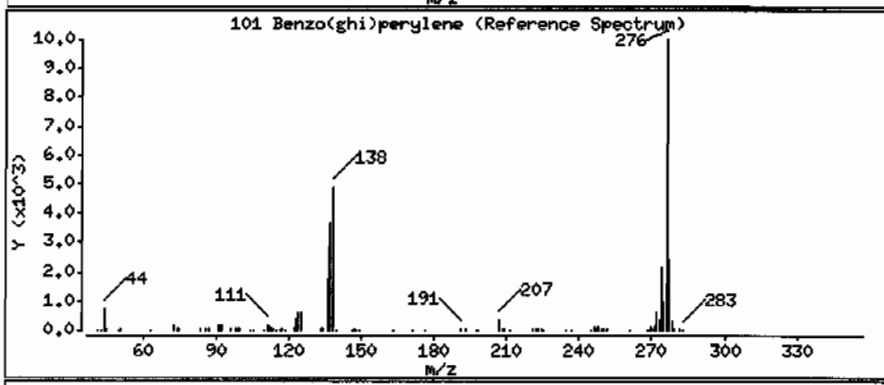

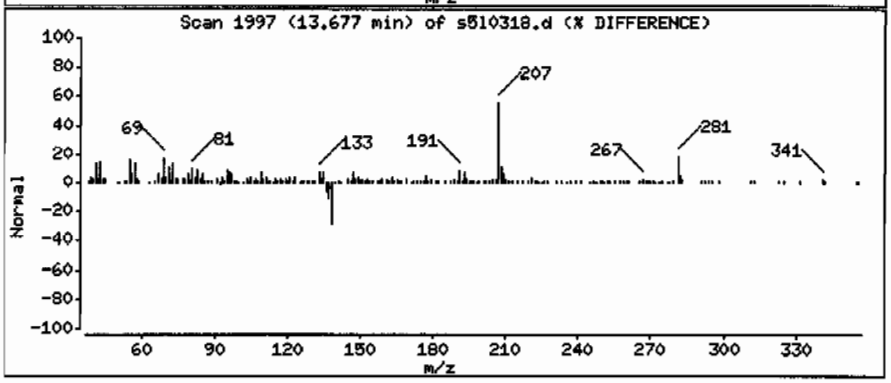

Data File: /chem/MSD5.i/s120309.b/s510318.d

Page 1

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |24155900219266411|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116

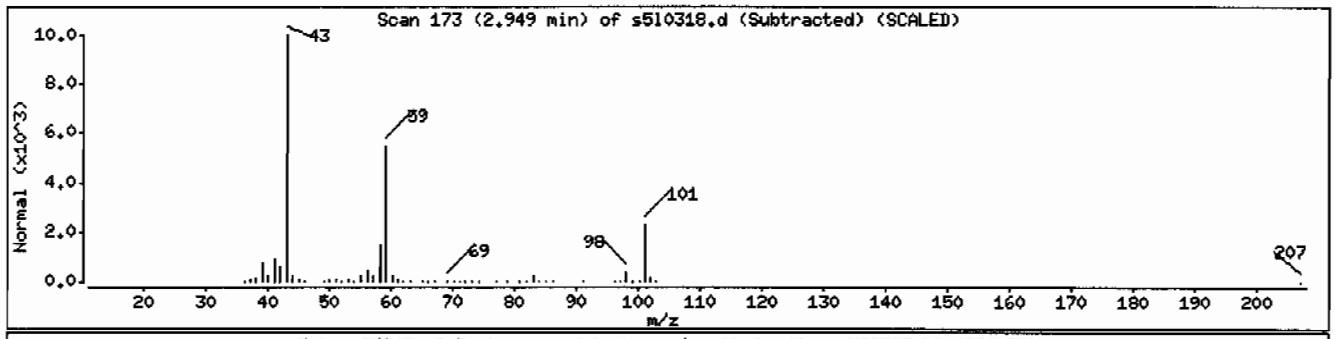

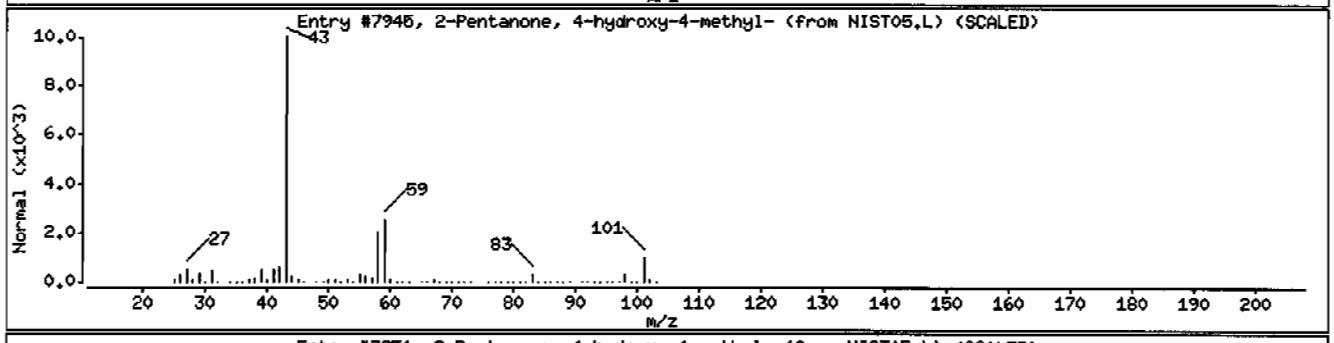

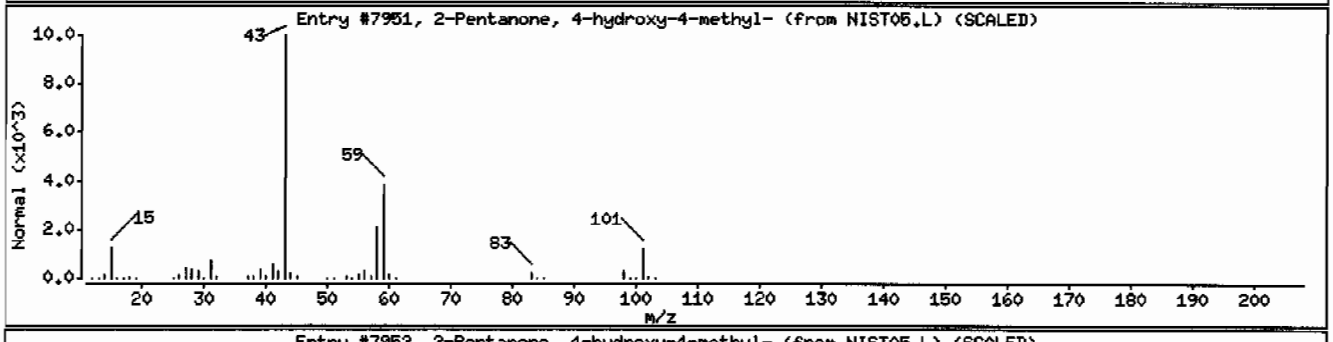

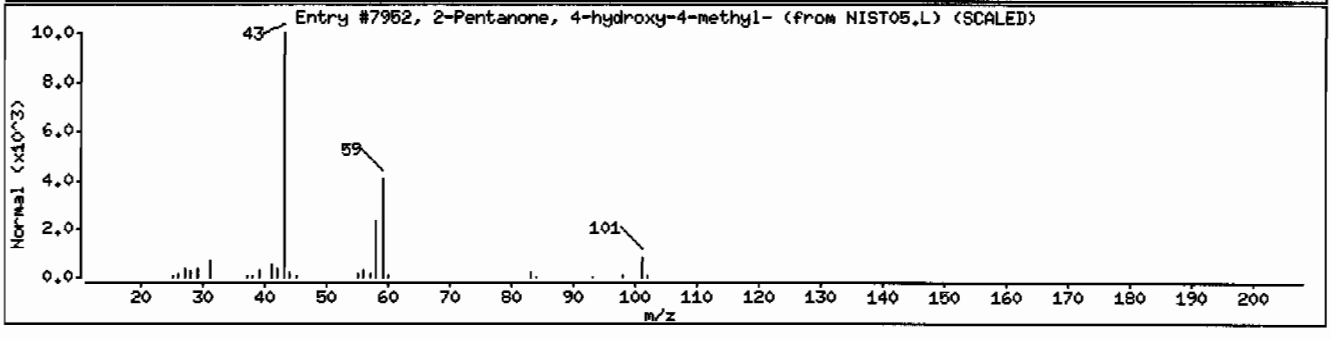

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	99	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	94	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	64	C18H35NO	281

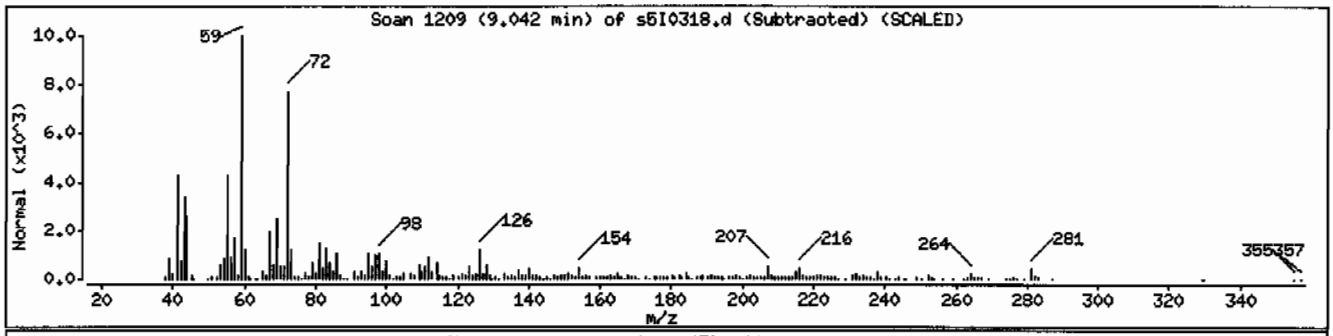

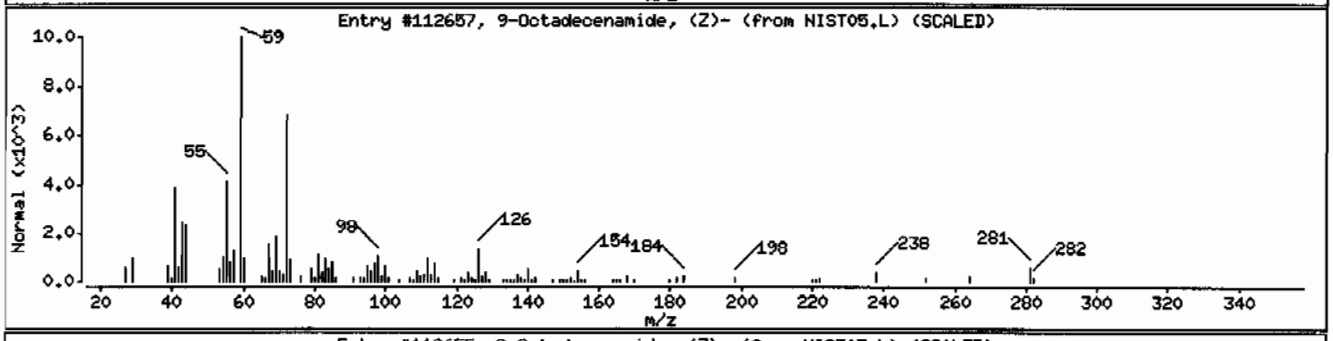

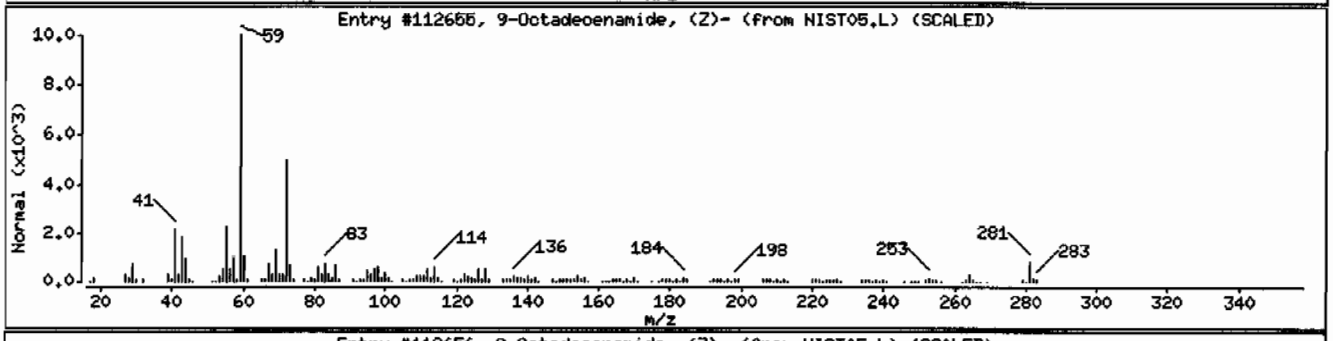

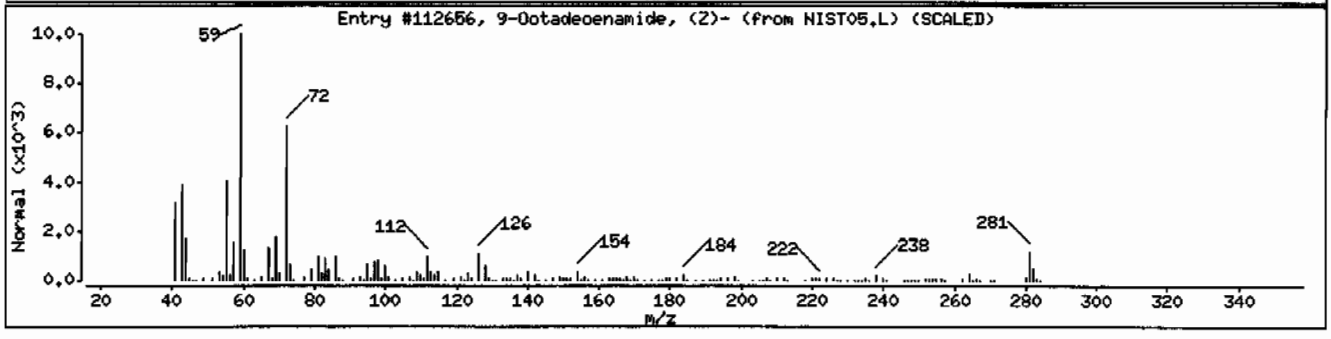

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
D:A-Friedooleanan-3-ol, (3,alpha,)-	5085-72-3	NIST05,L	176947	86	C30H520	428
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05,L	62199	38	C13H21NO	207
1H-Purine-2,6-dione, 7-(2-chloroethyl)-3	5878-61-5	NIST05,L	87047	25	C9H11ClN4O2	242

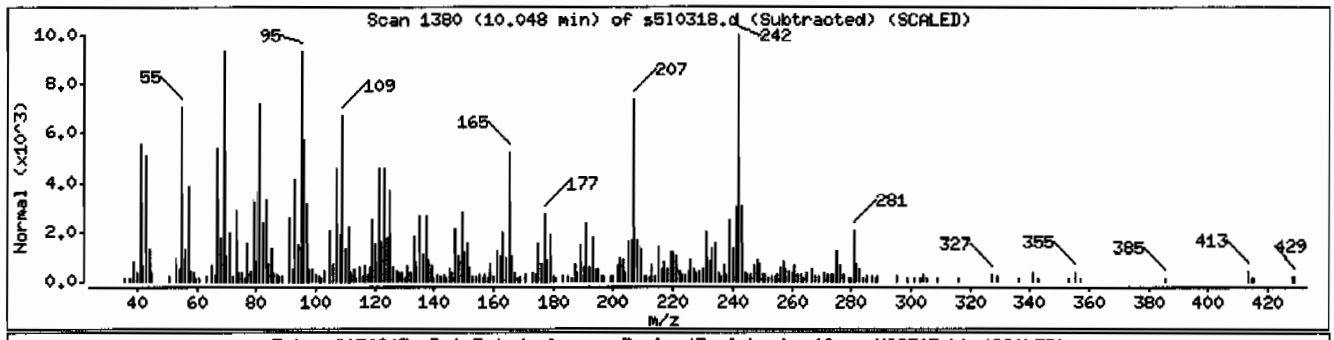

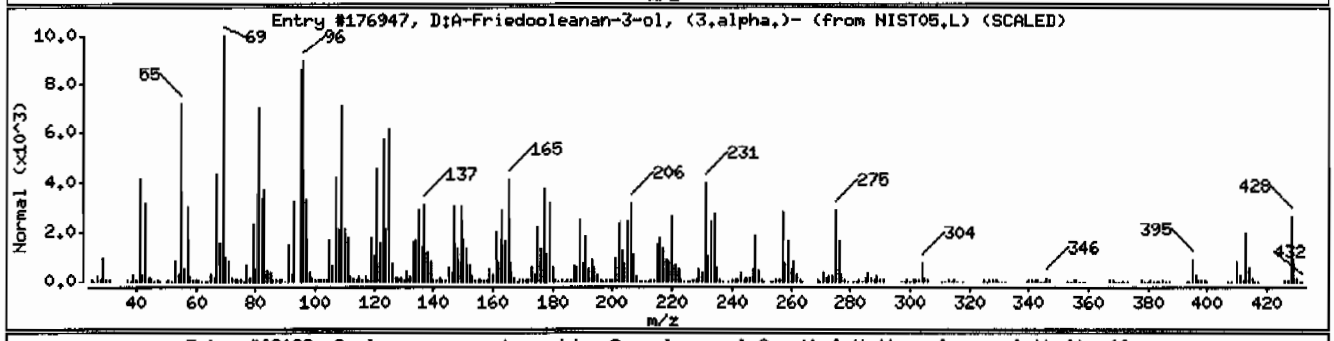

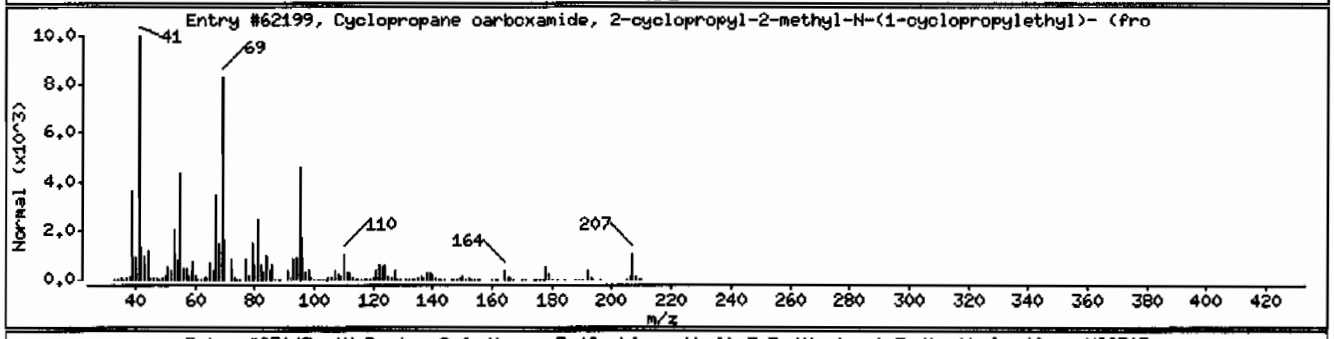

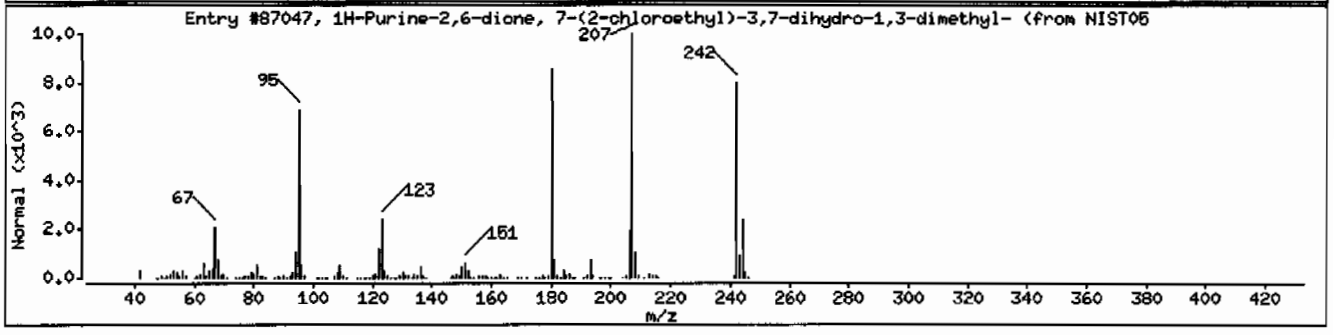

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902 Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
6-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	300574-36-1	NIST05.L	68738	90	C6H6BrN2O2	216
1-Cyclohexene-1-butanal, .alpha.,2,6,6-t	21632-06-4	NIST05.L	62963	58	C14H24O	208
D:A-Friedoursan-3-one	89950-00-5	NIST05.L	176576	51	C30H50O	426

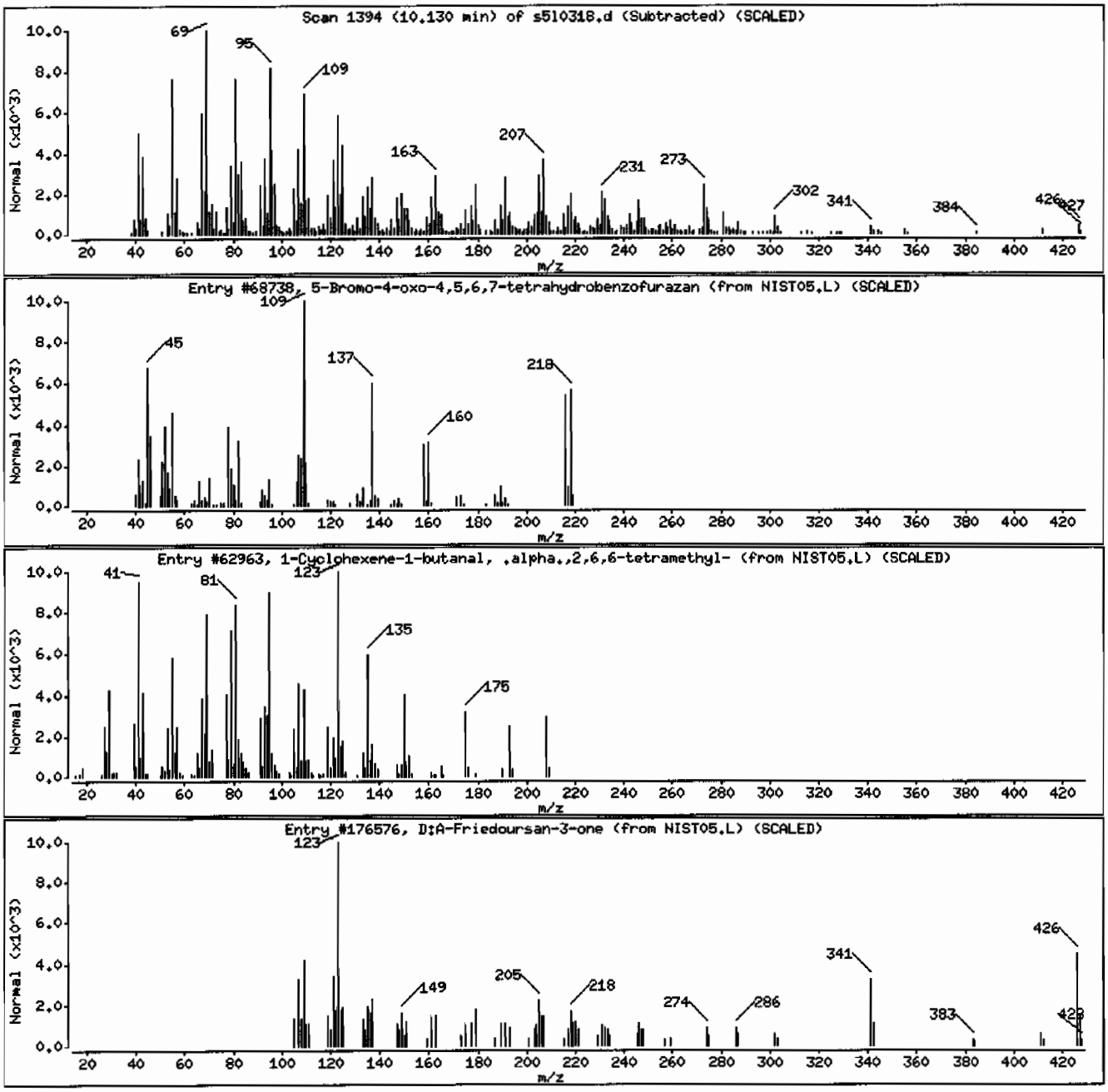

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	86	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	86	C18H35NO	281

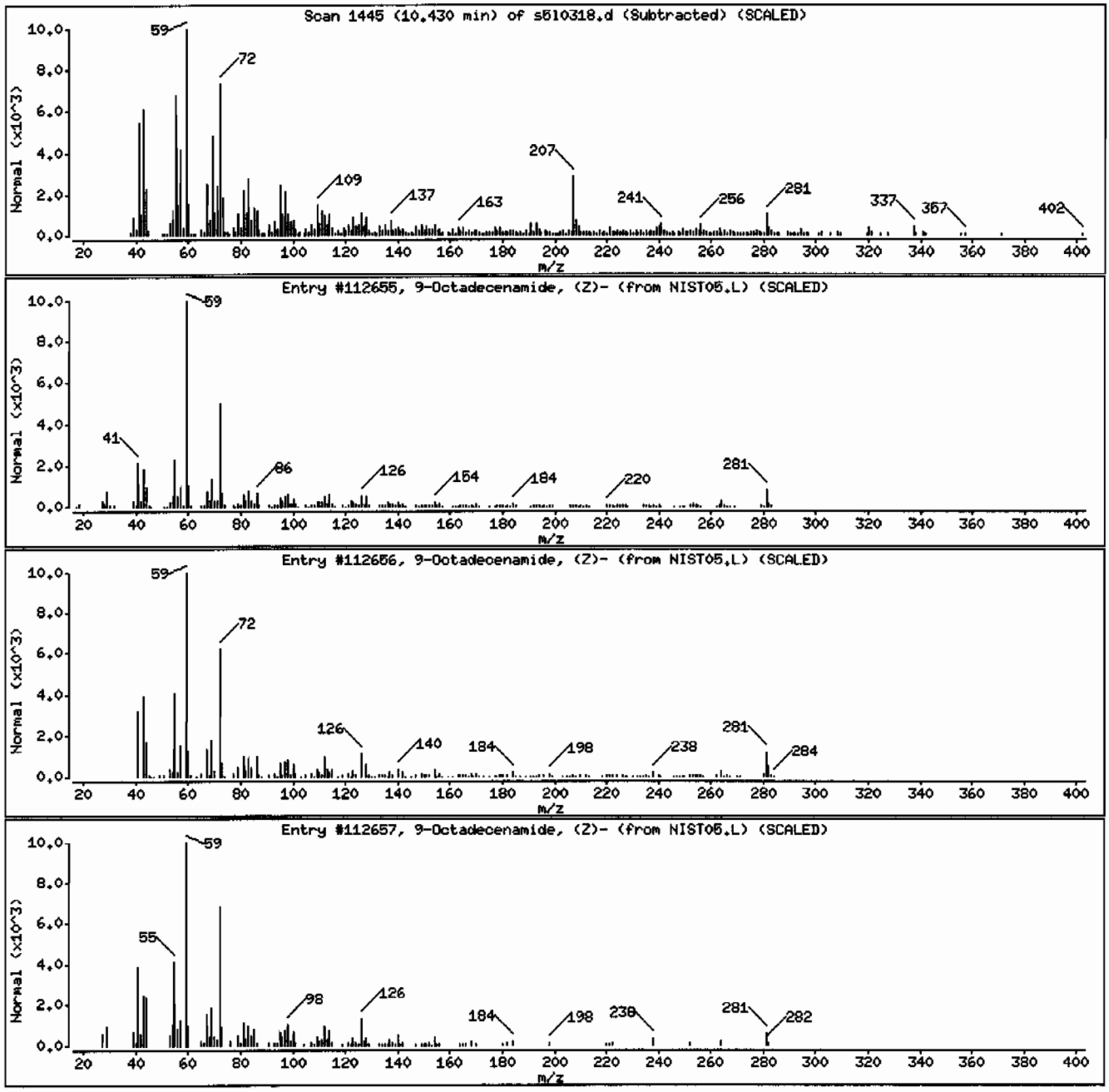

Data File: /chem/MSD5.i/s120309.b/s510318.d

Page 6

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |241559002|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3,7,11-Trimethyl-dodeca-2,6,10-trienoic	7548-13-2	NIST05.L	82488	43	C15H2402	236
3-Hydroxy-.beta.-damascone	1000314-35-7	NIST05.L	62798	37	C13H2002	208
2-(3-Hydroxy-4,4,10,13,14-pentamethyl-2,	1000194-83-3	NIST05.L	178747	32	C30H4802	440

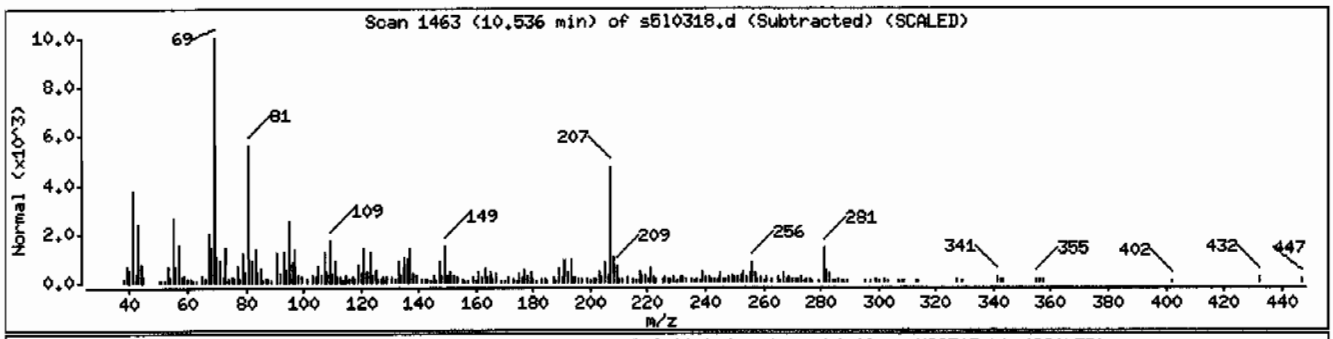

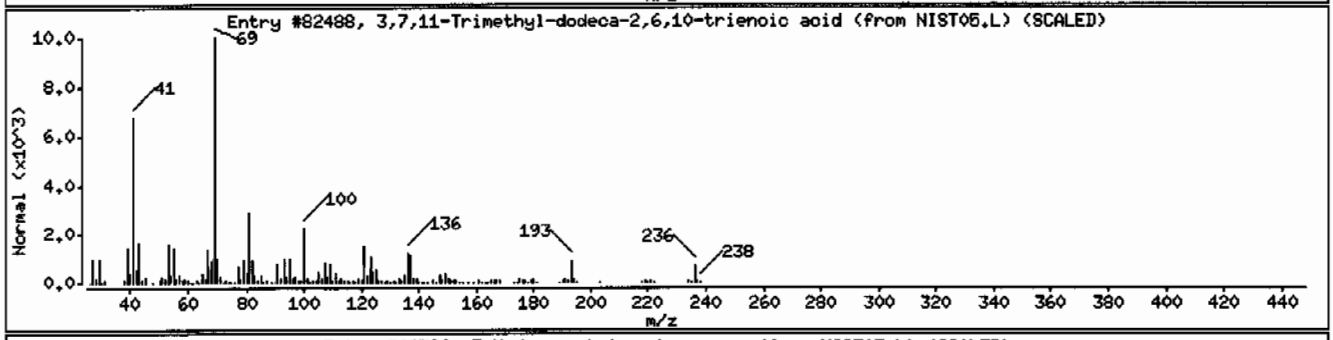

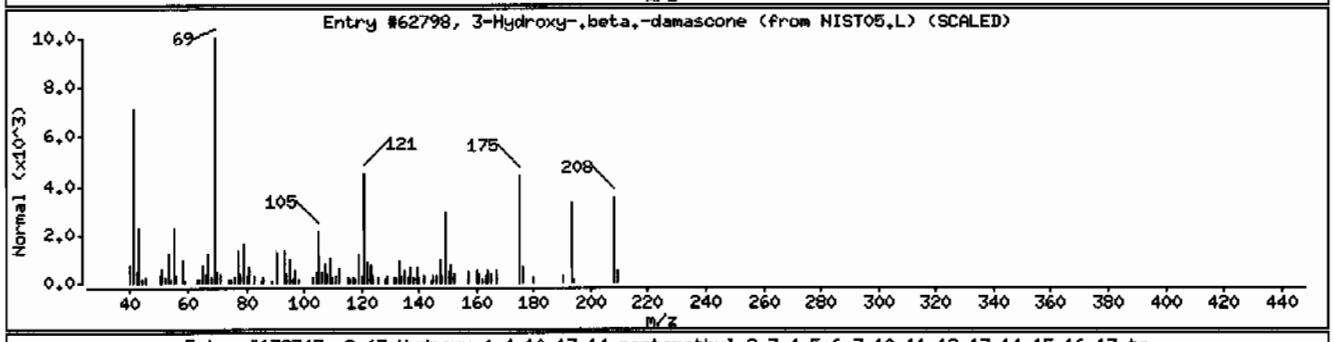

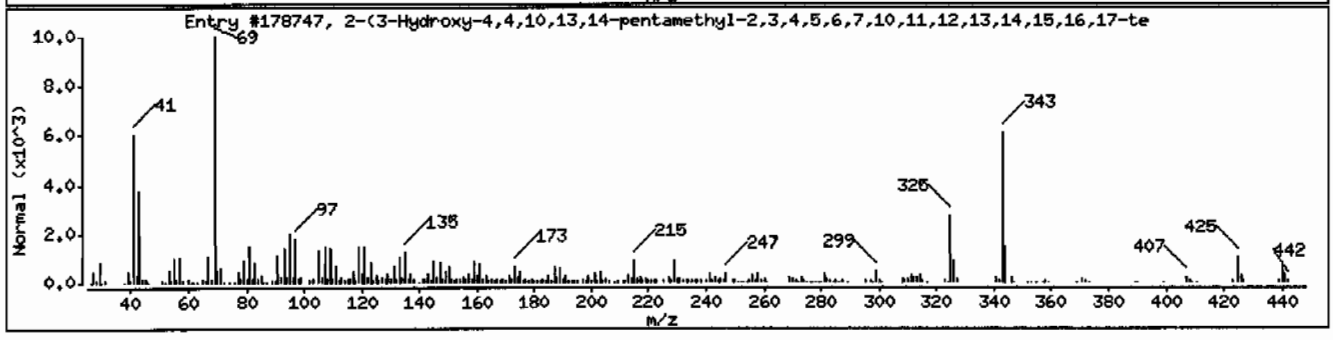

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: 1241559002|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phosphonic difluoride, (pentafluorophenyl	22474-68-6	NIST05.L	93602	55	C6F7OP	252
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	53	C13H10F3N3O	281
17-Pentatriacontene	6971-40-0	NIST05.L	183897	53	C35H70	491

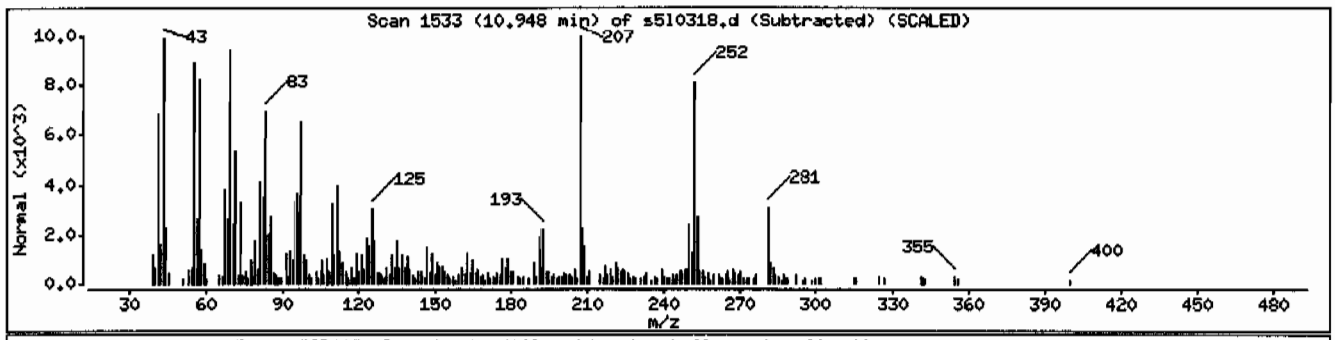

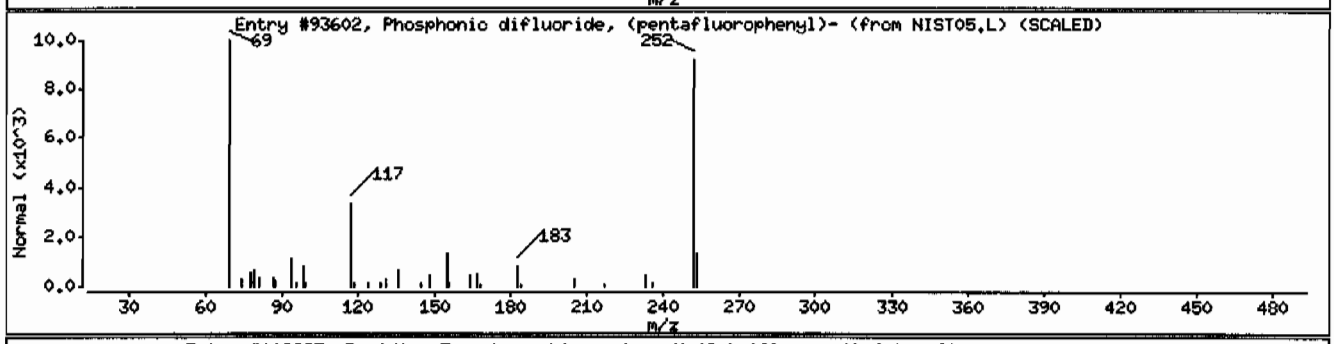

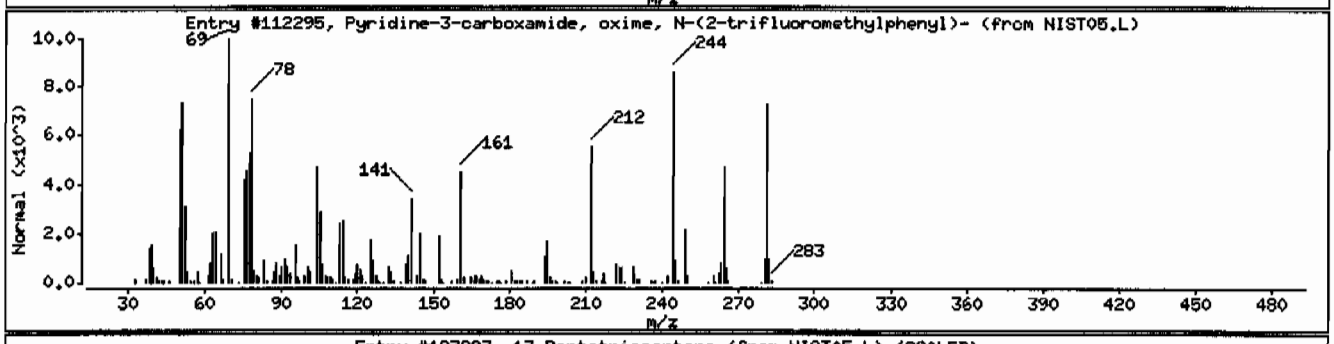

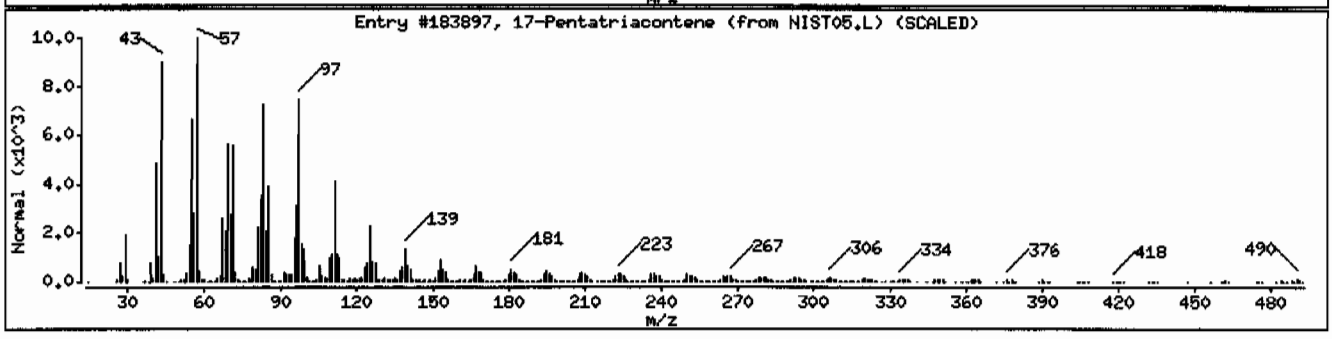

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282
Nonadecane	629-92-5	NIST05.L	104272	95	C19H40	268

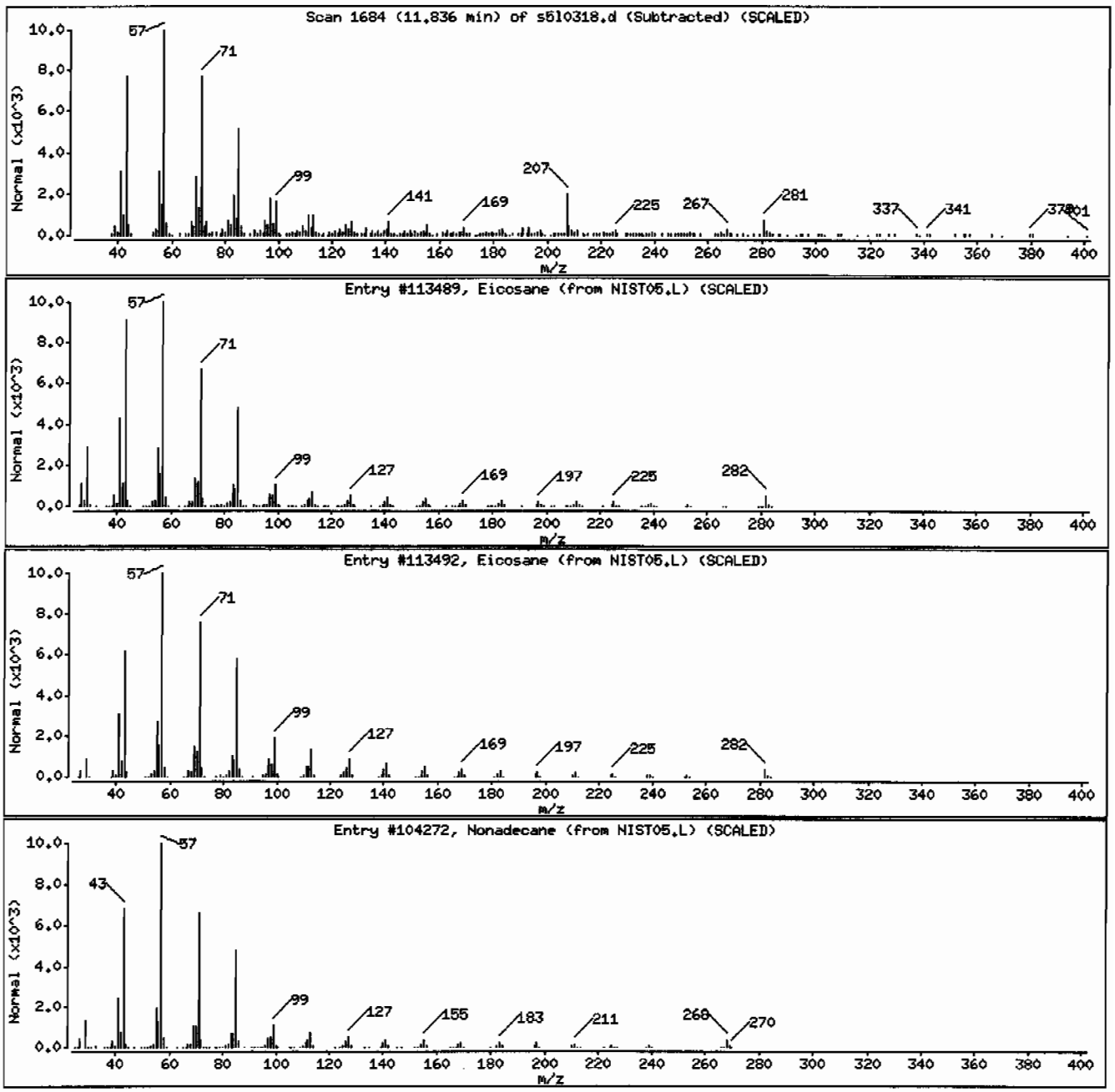

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Benzenediol, 2,5-bis(1,1-dimethyleth	88-58-4	NIST05.L	72748	51	C14H2202	222
1,2,4-Benzenetricarboxylic acid, 4-butyl	43049-07-6	NIST05.L	120729	41	C15H1806	294
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207

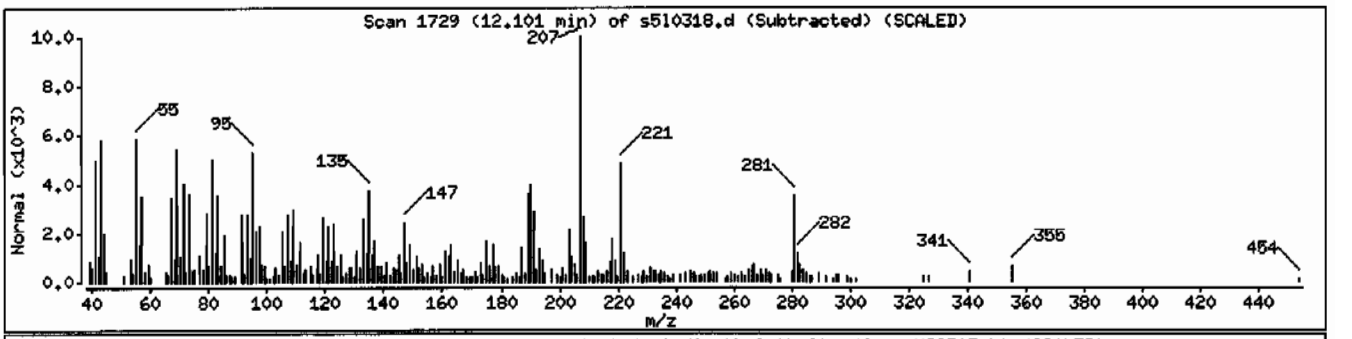

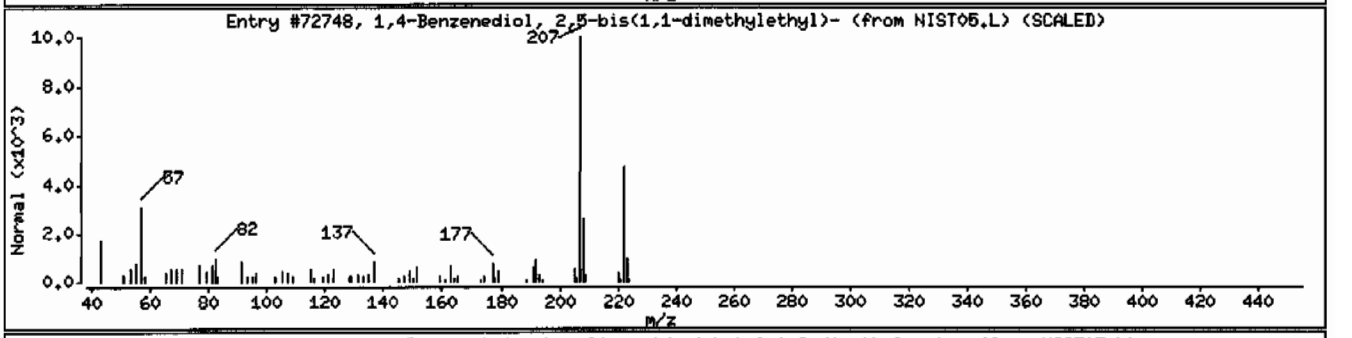

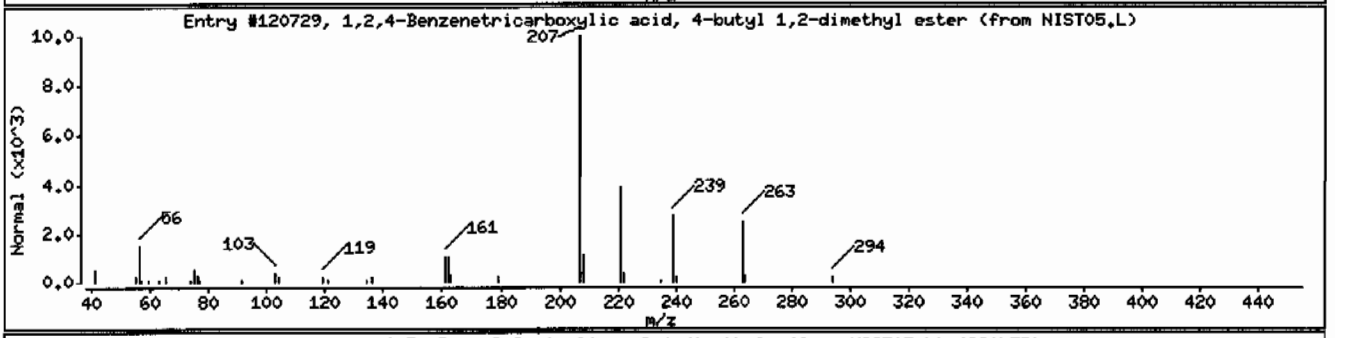

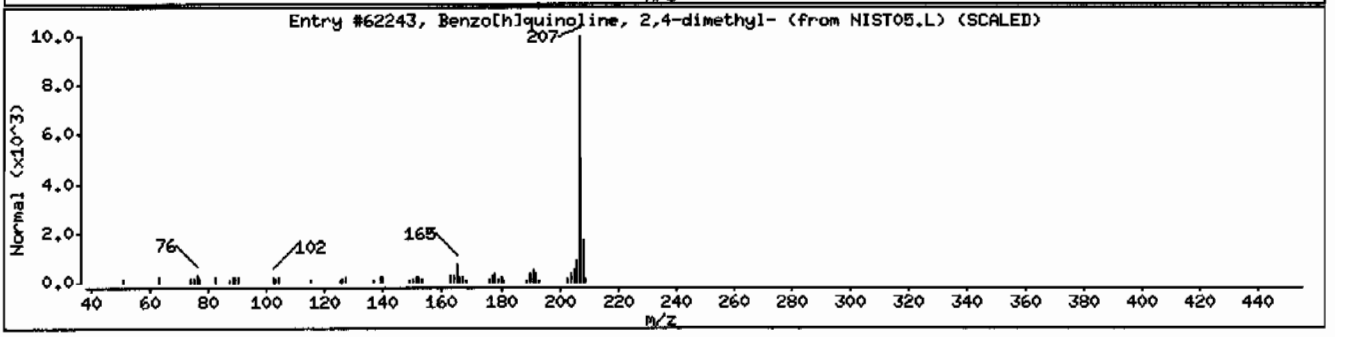

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902 Instrument: MSD5.i

Sample Info: |2415590021926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	55	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	50	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	42	C13H21NO	207

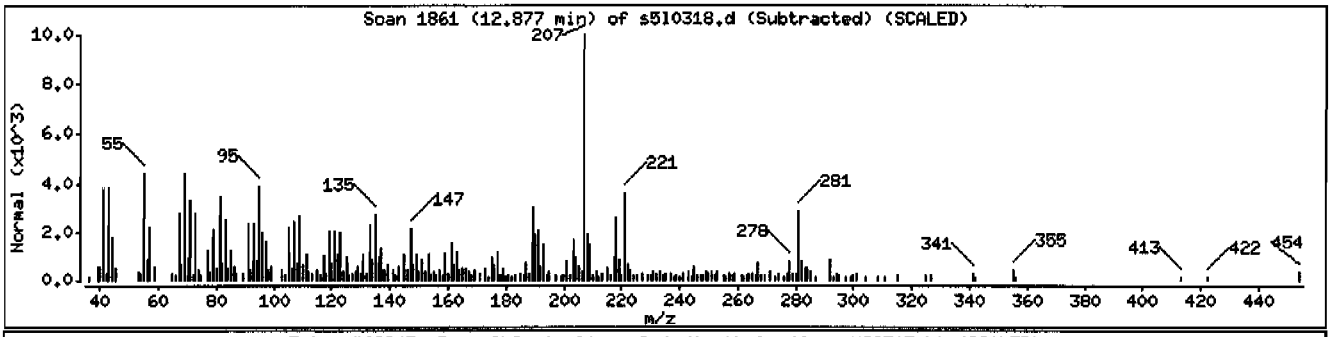

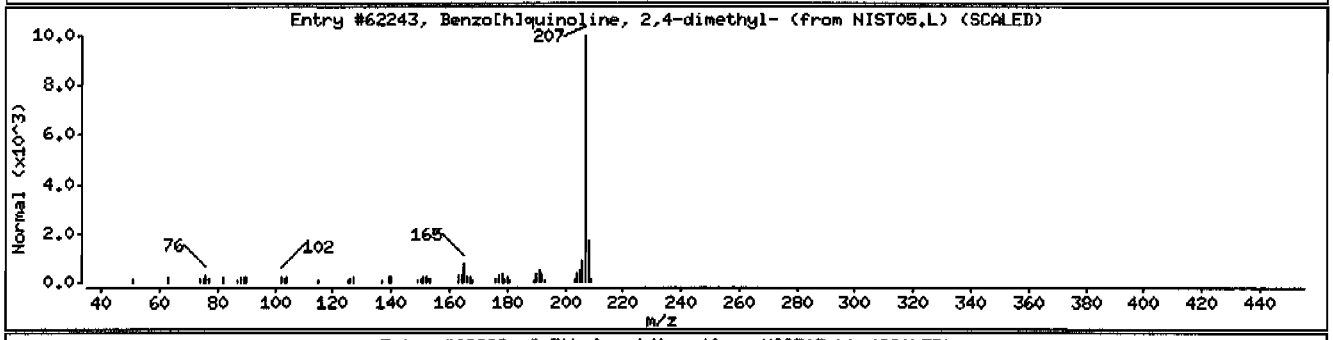

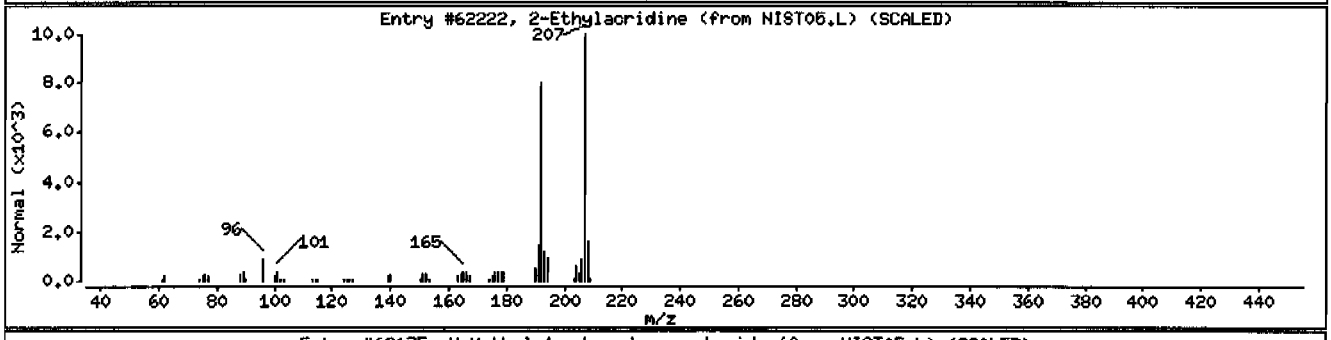

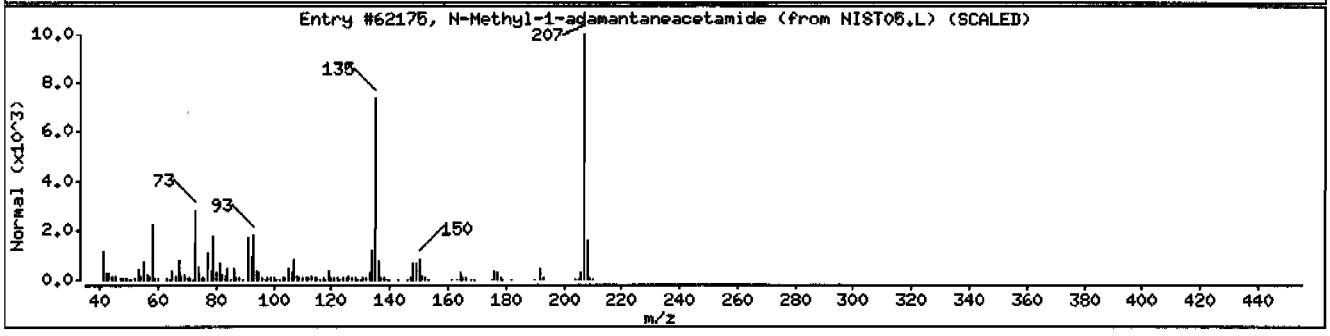

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902 Instrument: MSD5.i

Sample Info: 1241559002|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282
Docosane	629-97-0	NIST05.L	131156	70	C22H46	310
Eicosane	112-95-8	NIST05.L	113492	70	C20H42	282

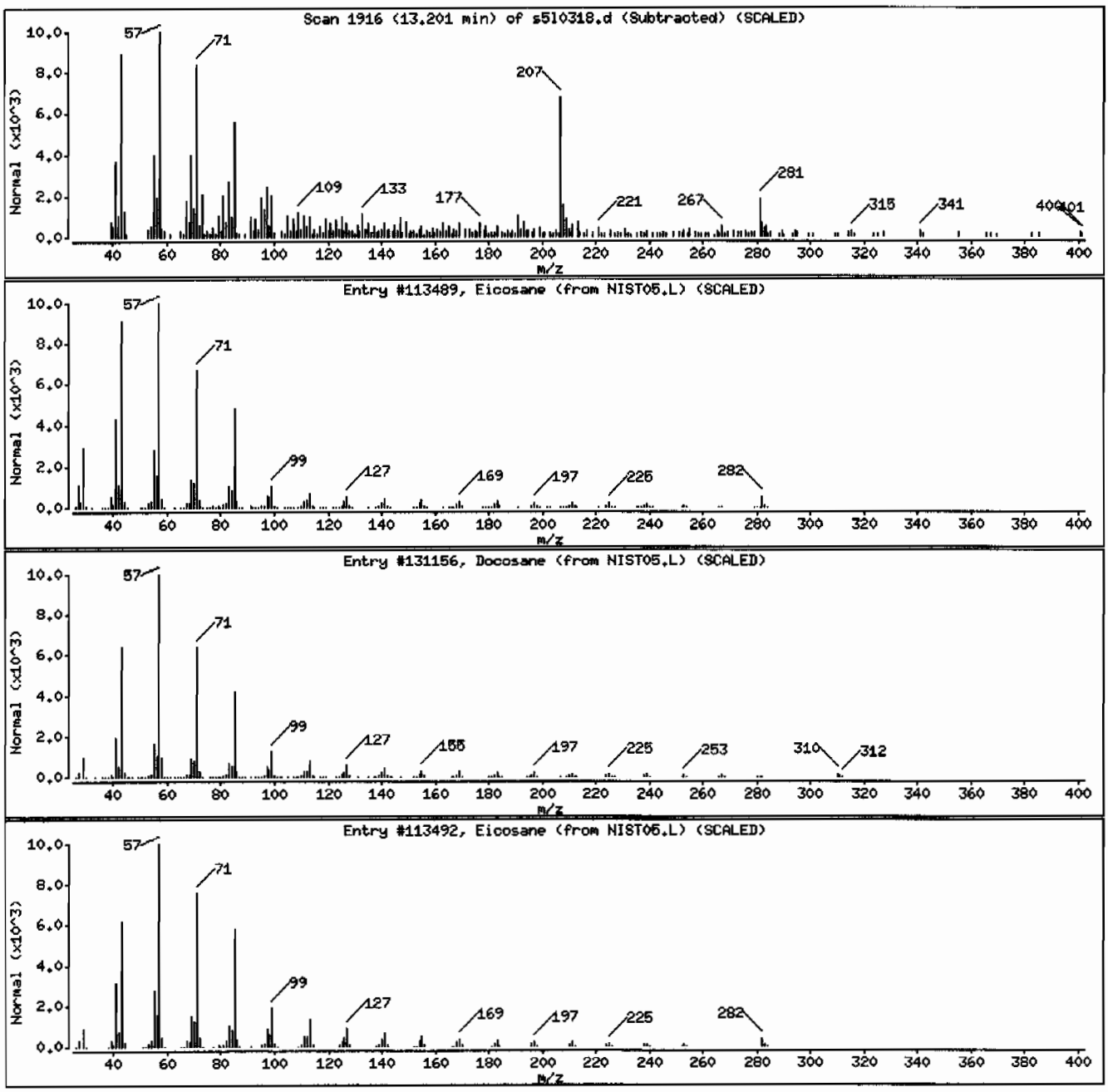

Data File: /chem/MSD5.i/s120309.b/s510318.d

Date : 03-DEC-2009 17:40

Client ID: RE03-10-6902

Instrument: MSD5.i

Sample Info: |241559002|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	96	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	95	C29H50O	414

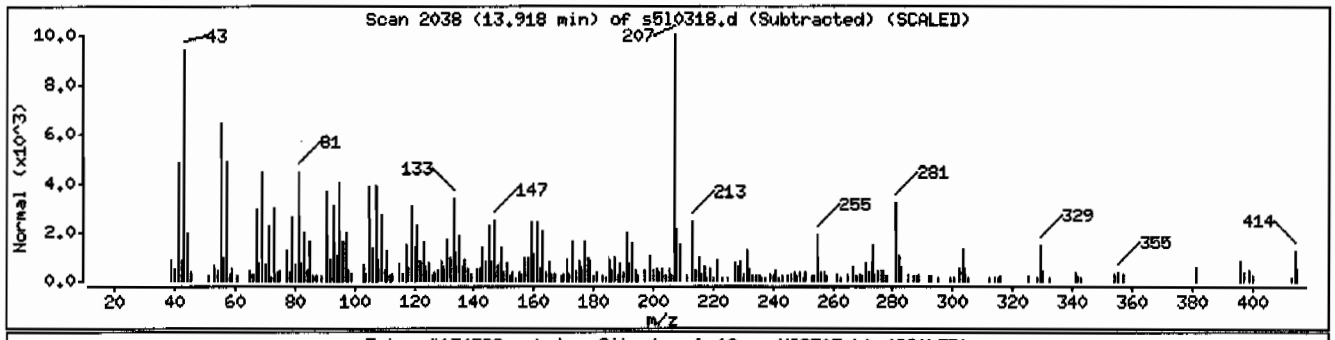

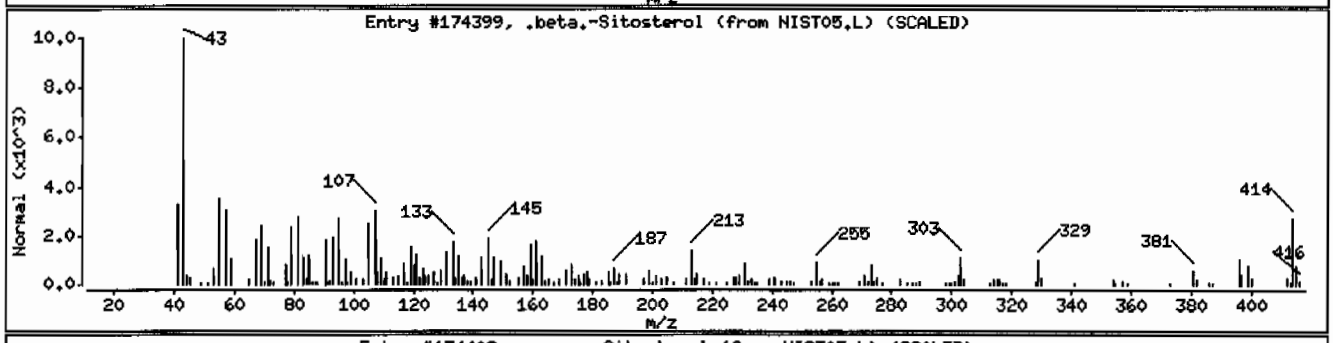

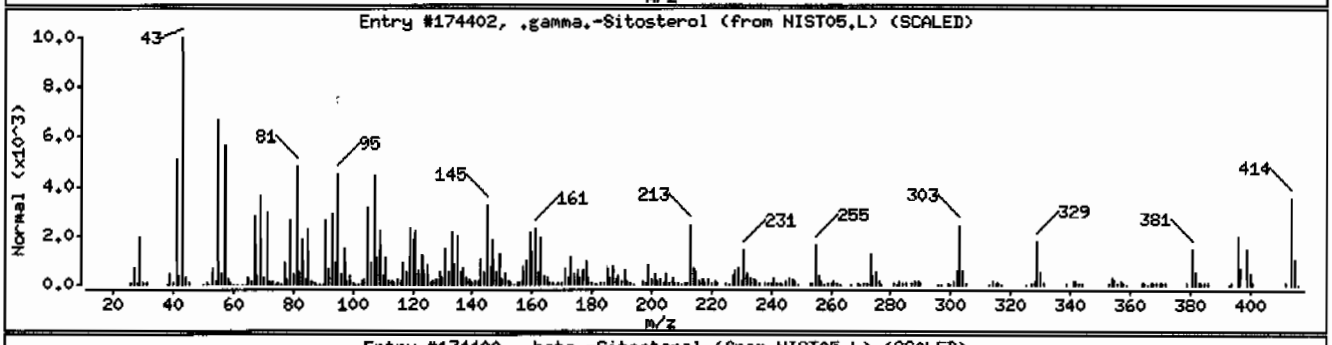

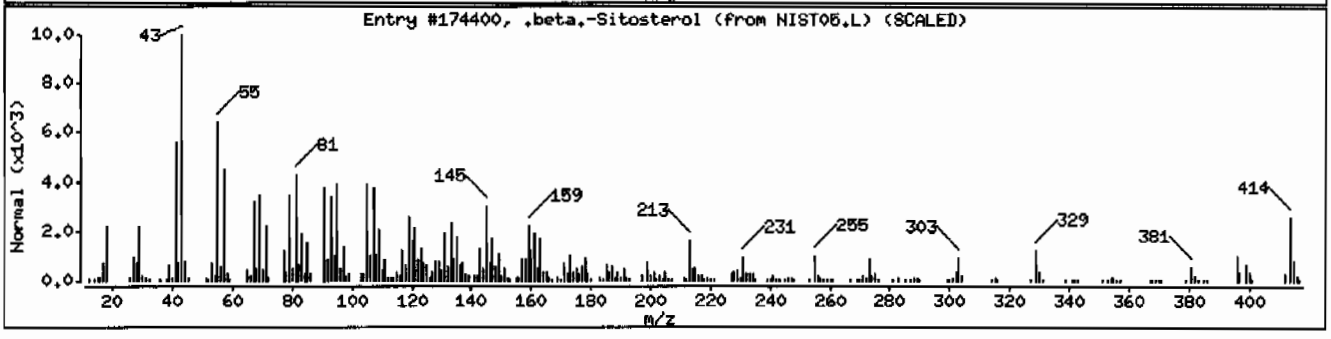

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:17	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.1	355
108-95-2	Phenol	U	355	ug/kg	71.1	355
95-57-8	2-Chlorophenol	U	355	ug/kg	71.1	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.1	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.1	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.1	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.8	355
129-00-0	Pyrene	J	23.0	ug/kg	10.7	35.5
110-86-1	Pyridine	U	355	ug/kg	71.1	355
62-53-3	Aniline	U	355	ug/kg	107	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.1	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.1	355
100-51-6	Benzyl alcohol	U	355	ug/kg	107	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.1	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.1	355
95-48-7	o-Cresol	U	355	ug/kg	71.1	355
65794-96-9	m,p-Cresols	U	355	ug/kg	107	355
67-72-1	Hexachloroethane	U	355	ug/kg	71.1	355
98-95-3	Nitrobenzene	U	355	ug/kg	71.1	355
78-59-1	Isophorone	U	355	ug/kg	71.1	355
88-75-5	2-Nitrophenol	U	355	ug/kg	71.1	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.1	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.1	355
65-85-0	Benzoic acid	U	711	ug/kg	178	711
91-20-3	Naphthalene	U	35.5	ug/kg	10.7	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	71.1	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.1	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.11	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.1	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.1	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.1	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	355	ug/kg	71.1	355
99-09-2	3-Nitroaniline	U	355	ug/kg	71.1	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 17:17	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510317.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	71.1	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.7	35.5
51-28-5	2,4-Dinitrophenol	U	711	ug/kg	135	711
132-64-9	Dibenzofuran	U	355	ug/kg	71.1	355
84-66-2	Diethylphthalate	U	355	ug/kg	71.1	355
86-73-7	Fluorene	U	35.5	ug/kg	10.7	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.1	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.1	355
100-01-6	4-Nitroaniline	U	355	ug/kg	107	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	71.1	355
122-66-7	Azobenzene	U	355	ug/kg	71.1	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.1	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.1	355
85-01-8	Phenanthrene	J	12.3	ug/kg	10.7	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.11	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.1	355
206-44-0	Fluoranthene	J	26.5	ug/kg	10.7	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.1	355
56-55-3	Benzo(a)anthracene	J	15.1	ug/kg	10.7	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	107	355
218-01-9	Chrysene	J	12.8	ug/kg	10.7	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.1	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.1	355
205-99-2	Benzo(b)fluoranthene	J	15.7	ug/kg	10.7	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.7	35.5
50-32-8	Benzo(a)pyrene	J	12.6	ug/kg	10.7	35.5
193-39-5	Indeno(1,2,3-cd)pyrene		47.7	ug/kg	10.7	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.7	35.5
191-24-2	Benzo(ghi)perylene	J	12.5	ug/kg	10.7	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.1	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	370	ug/kg		JA
	Unknown	7.31	172	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6903	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926641	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/03/2009 17:17	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 10:20	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	s5l0317.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-95-8	Eicosane	11.84	173	ug/kg	97	NJ
	Unknown	13.35	183	ug/kg		J
83-46-5	.beta.-Sitosterol	13.91	275	ug/kg	96	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510317.d
Lab Smp Id: 241559001 Client Smp ID: RE03-10-6903
Inj Date : 03-DEC-2009 17:17
Operator : RMB Inst ID: MSD5.i
Smp Info : |241559001|926641|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	6.46570	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	423618	40.0000	
* 29 Naphthalene-d8	136	4.801	4.812	(1.000)	1476509	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.068	(1.000)	942297	40.0000	
* 67 Phenanthrene-d10	188	7.236	7.243	(1.000)	1733420	40.0000	
* 91 Chrysene-d12	240	9.654	9.665	(1.000)	1813661	40.0000	
* 98 Perylene-d12	264	11.360	11.365	(1.000)	1739267	40.0000	
$ 3 2-Fluorophenol	112	3.113	3.117	(0.792)	635825	72.4782	2580
$ 5 Phenol-d5	99	3.637	3.646	(0.925)	780876	71.7671	2550
$ 20 Nitrobenzene-d5	82	4.290	4.301	(0.893)	356296	37.7432	1340
$ 39 2-Fluorobiphenyl	172	5.542	5.553	(0.915)	870827	36.5816	1300
$ 60 2,4,6-Tribromophenol	329	6.660	6.665	(1.099)	264607	75.9141	2700
$ 81 p-Terphenyl-d14	244	8.619	8.625	(0.893)	1108272	42.7291	1520

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	8.519	8.529	(0.882)	23777	0.64722	23.0(a)
68 Phenanthrene	178	7.254	7.263	(1.002)	11313	0.34750	12.3(a)
76 Fluoranthene	202	8.301	8.312	(1.147)	26562	0.74515	26.5(a)
89 Benzo(a)anthracene	228	9.642	9.651	(0.999)	15532	0.42467	15.1(a)
92 Chrysene	228	9.677	9.689	(1.002)	12002	0.35998	12.8(a)
95 Benzo(b)fluoranthene	252	10.824	10.835	(0.953)	16070	0.44092	15.7(a)
97 Benzo(a)pyrene	252	11.266	11.283	(0.992)	11386	0.35431	12.6(a)
99 Indeno(1,2,3-cd)pyrene	276	13.130	13.166	(1.156)	8916	1.34244	47.7
101 Benzo(ghi)perylene	276	13.689	13.715	(1.205)	9986	0.35315	12.5(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s510317.d
Report Date: 12/04/2009 07:22
Lab. ID: 241559001 SampleType: SAMPLE
Injection Date: 03-DEC-2009 17:17
Operator: RMB Instrument: MSD5.i
Sample Info: |241559001|926641|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091117-01
Comment:
Method used: /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-608-1
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline			CAS#: 62-53-3			
66	48895	3.64	3.72	80-120	100	(T)
93	213	3.61	3.72	227-287	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	54987	4.29	4.18	80-120	100	(T)
42	26297	4.29	4.18	26- 86	48	(T)
41 m-Nitroaniline			CAS#: 99-09-2			
138	327	6.05	6.02	80-120	100	( )
92	5059	6.06	6.02	75-135	1543	(Q)
108	19371	6.06	6.02	0- 40	5910	(Q)
43 Dimethylphthalate			CAS#: 131-11-3			
163	169853	6.06	5.83	80-120	100	(T)
164	942297	6.06	5.83	0- 40	555	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	126393	6.06	5.88	80-120	100	(T)
63	1642	6.06	5.88	39- 99	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	126393	6.06	6.18	80-120	100	(T)
89	1781	6.06	6.18	36- 96	1	(QT)
63	1642	6.06	6.18	11- 71	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	12369	6.66	6.48	80-120	100	(T)
165	13251	6.66	6.48	62-122	107	(T)
167	4588	6.66	6.48	0- 44	37	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	855	6.66	6.49	80-120	100	(T)
105	2320	6.66	6.49	6- 66	271	(QT)
51	1409	6.66	6.49	21- 81	165	(QT)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	17992	6.66	6.84	80-120	100	(T)
141	106544	6.66	6.84	35- 95	592	(QT)
250	35296	6.66	6.84	69-129	196	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	11313	7.25	7.26	80-120	100	( )
179	1794	7.25	7.26	0- 46	16	( )
176	2107	7.25	7.26	0- 49	19	( )
69 Anthracene			CAS#: 120-12-7			
178	11313	7.25	7.31	80-120	100	( )
179	1794	7.25	7.31	0- 46	16	( )
176	2107	7.25	7.31	0- 49	19	( )
76 Fluoranthene			CAS#: 206-44-0			
202	26562	8.30	8.31	80-120	100	( )
203	5011	8.30	8.31	0- 48	19	( )
101	2719	8.30	8.31	0- 40	10	( )
79 Pyrene			CAS#: 129-00-0			
202	23777	8.52	8.53	80-120	100	( )
200	5074	8.51	8.53	0- 51	21	( )
101	2735	8.51	8.52	0- 42	12	( )
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	15532	9.64	9.65	80-120	100	( )
226	4320	9.64	9.65	0- 57	28	( )
229	4231	9.64	9.65	0- 50	27	( )
92 Chrysene			CAS#: 218-01-9			
228	12002	9.68	9.69	80-120	100	( )
229	2982	9.68	9.69	0- 50	25	( )
226	4545	9.68	9.69	0- 60	38	( )
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	16070	10.82	10.84	80-120	100	( )
253	3829	10.82	10.84	0- 52	24	( )
125	1660	10.82	10.84	0- 39	10	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	16070	10.82	10.87	80-120	100	( )
253	3829	10.82	10.87	0- 52	24	( )
125	1660	10.82	10.87	0- 40	10	( )
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	11386	11.27	11.28	80-120	100	( )
253	2341	11.27	11.28	0- 52	21	( )
125	1566	11.27	11.28	0- 30	14	( )
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	8916	13.13	13.17	80-120	100	( )
138	2986	13.13	13.17	0- 53	33	( )
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	4129	13.15	13.18	80-120	100	( )
139	1605	13.13	13.18	0- 30	39	(Q)
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	9986	13.69	13.72	80-120	100	( )
138	3785	13.68	13.72	0- 30	38	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510317.d
Lab Smp Id: 241559001 Client Smp ID: RE03-10-6903
Inj Date : 03-DEC-2009 17:17
Operator : RMB Inst ID: MSD5.i
Smp Info : |241559001|926641|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	6.46570	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.931	2489186	40.000
* 67 Phenanthrene-d10	7.236	4321661	40.000
* 98 Perylene-d12	11.360	4595119	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.948	648199	10.4162331	370	0		0	10
Unknown				CAS #:			
7.313	522573	4.83677566	172	0		0	67
Eicosane				CAS #: 112-95-8			
11.836	559136	4.86721731	173	97	NIST05.L	113492	98
Unknown				CAS #:			
13.348	590798	5.14283174	183	0		0	98
.beta.-Sitosterol				CAS #: 83-46-5			
13.907	889338	7.74158507	275	96	NIST05.L	174400	98

Data File: /chem/MSD5.i/s120309.b/s510317.d
Date : 03-DEC-2009 17:17
Client ID: REO3-10-6903
Sample Info: 1241559001|926641|1|SVMF11||LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

Page 1

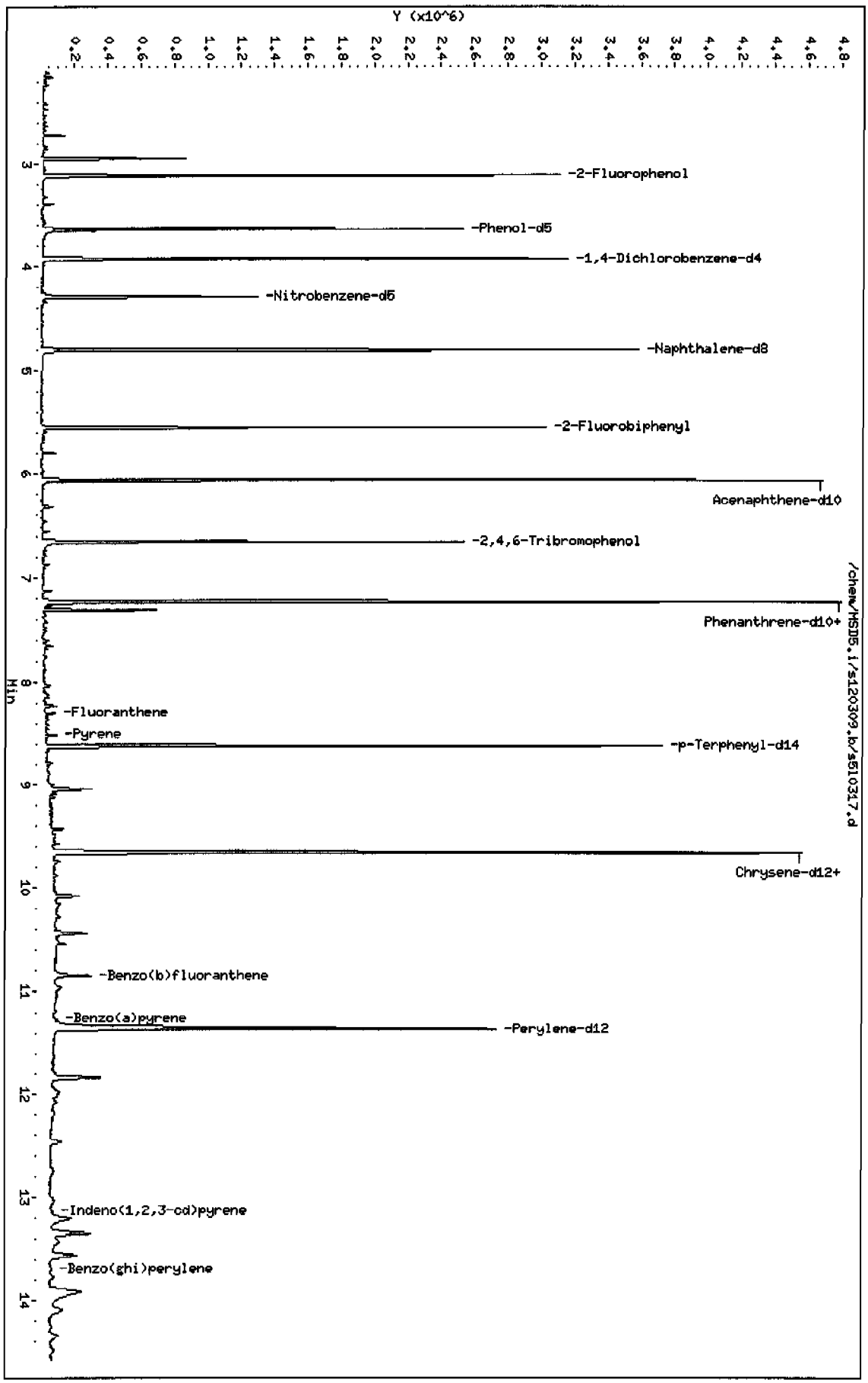

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |241559001|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 23.0 ug/Kg

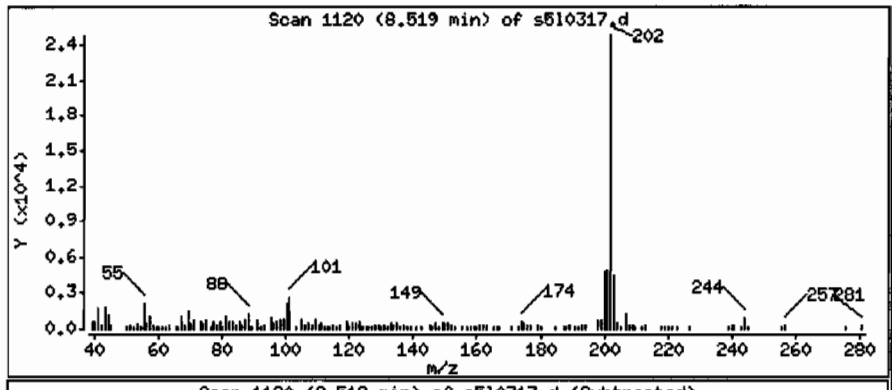

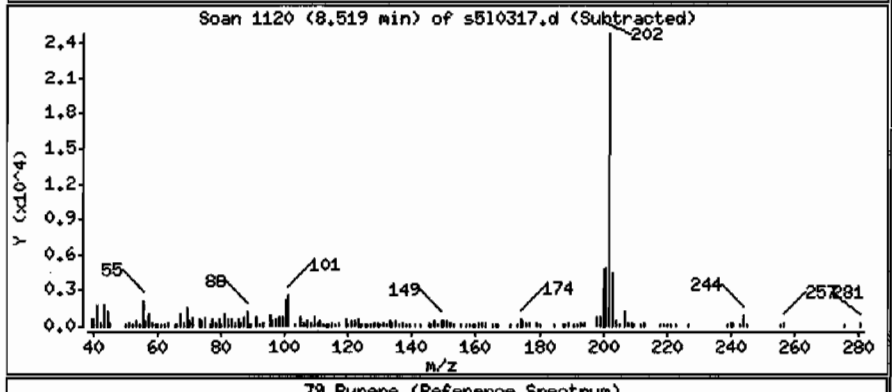

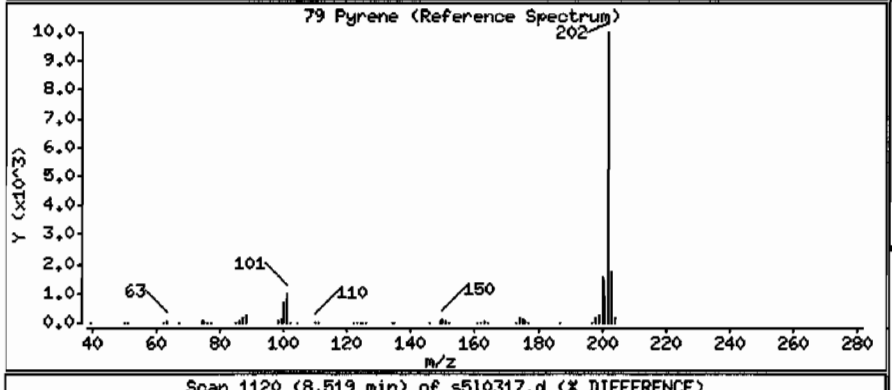

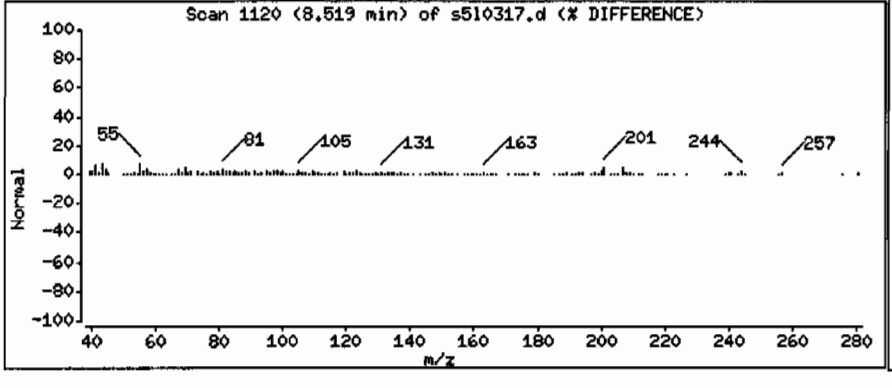

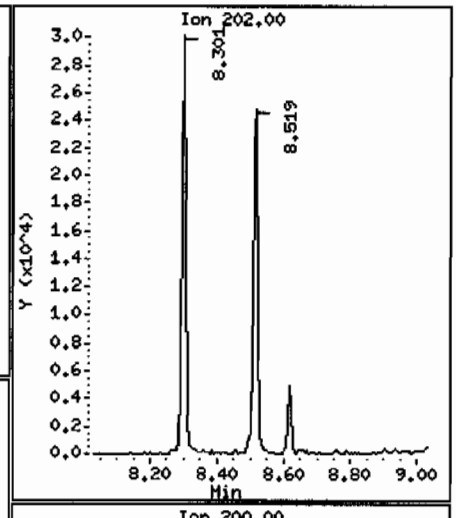

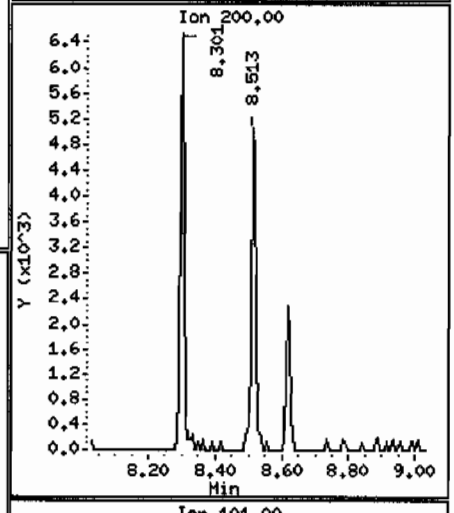

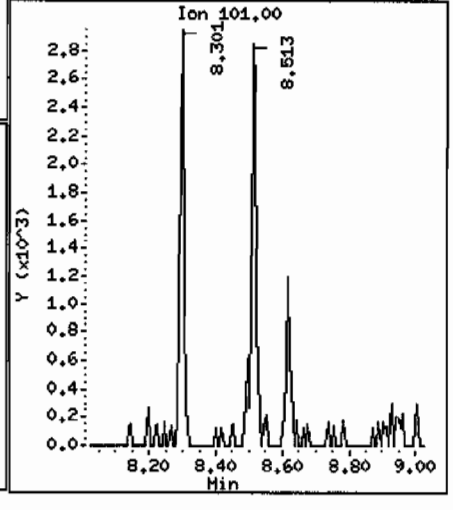

Data File: /chem/HSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: HSD5.i

Sample Info: |2415590011926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5HS

Column diameter: 0.20

68 Phenanthrene

Concentration: 12.3 ug/Kg

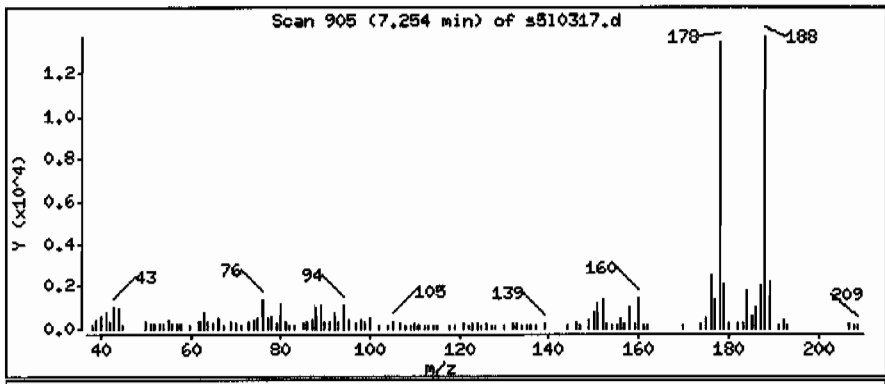

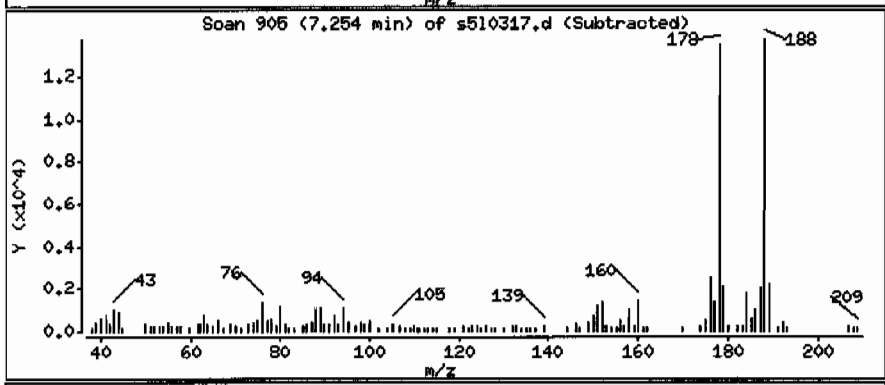

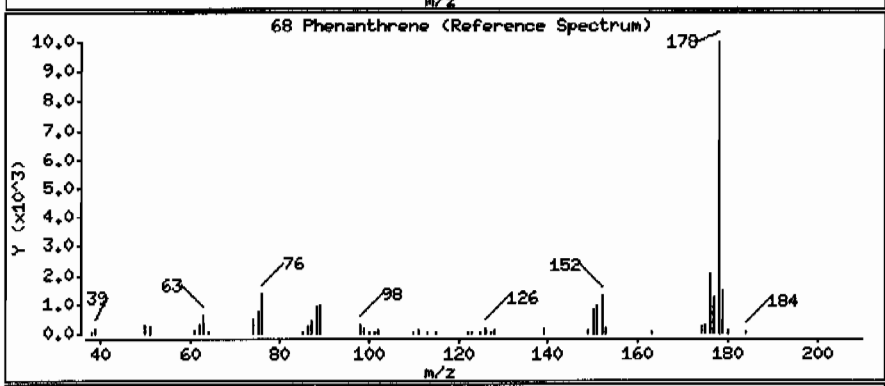

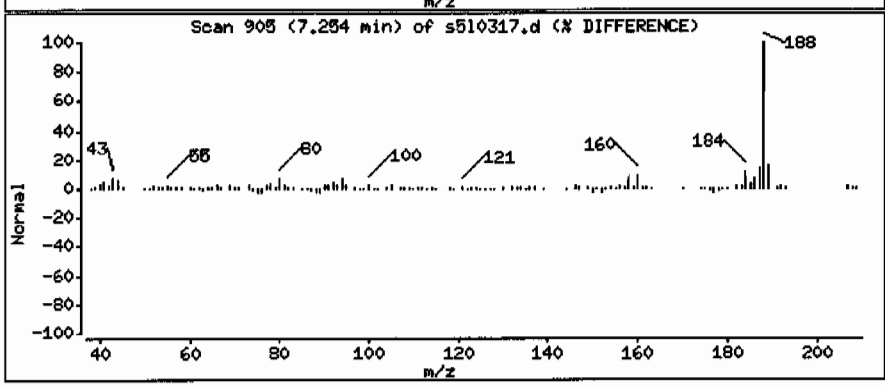

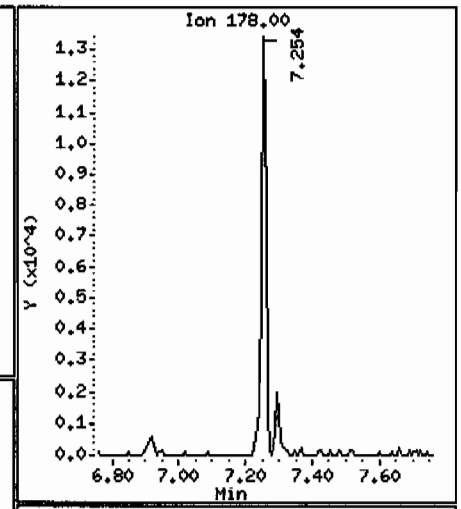

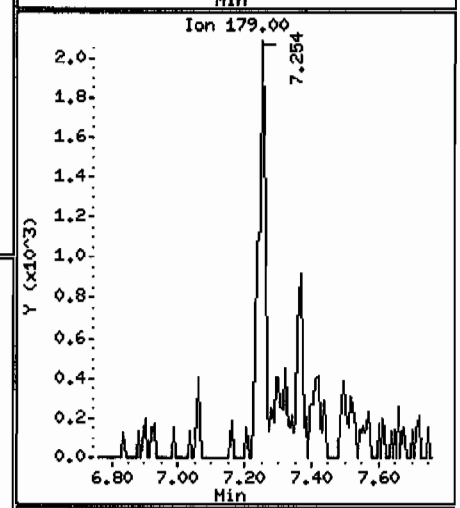

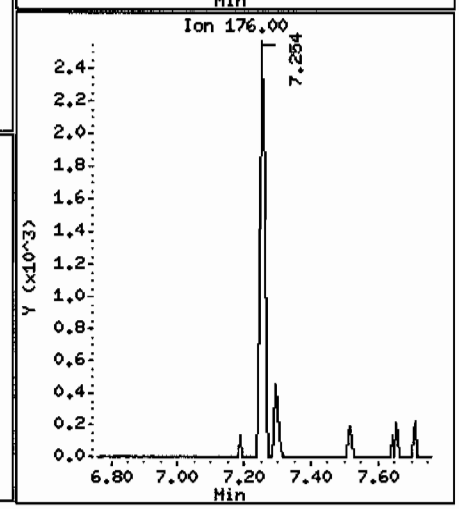

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |2415590011926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 26.5 ug/Kg

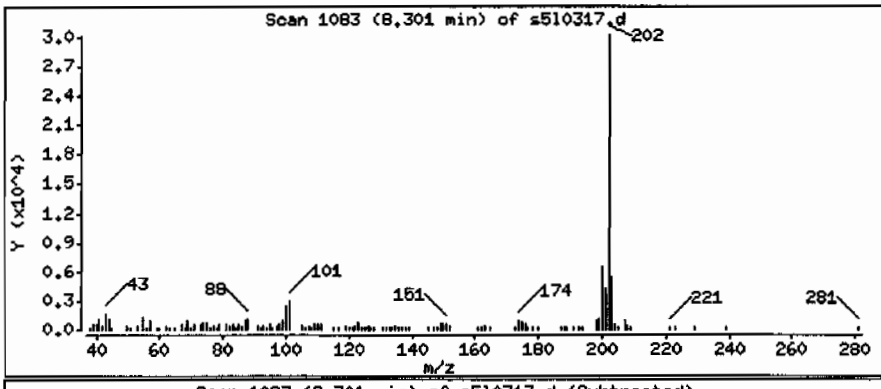

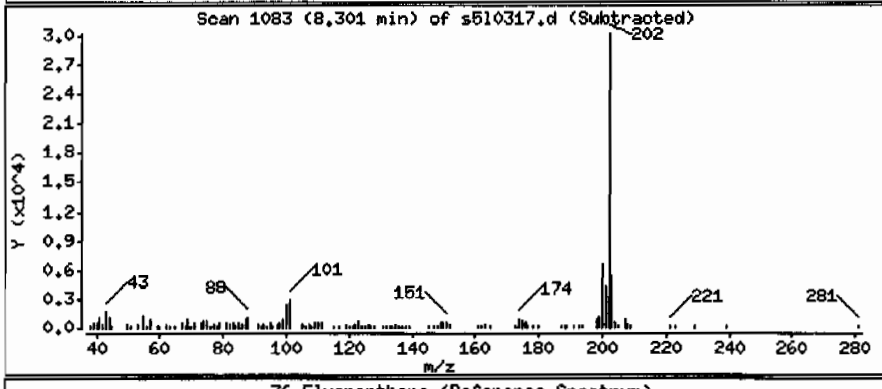

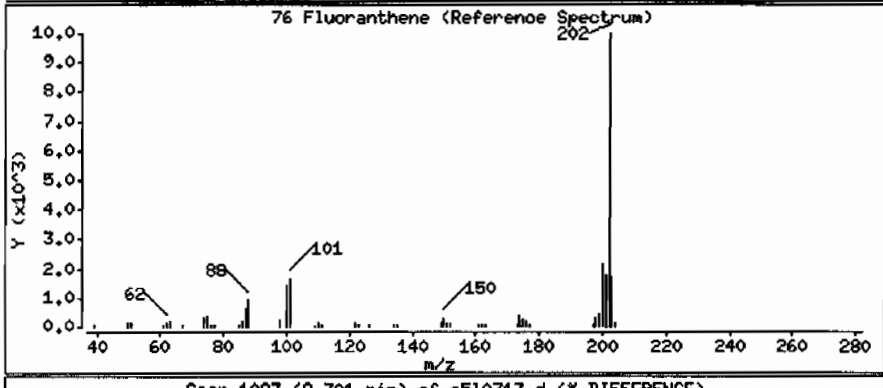

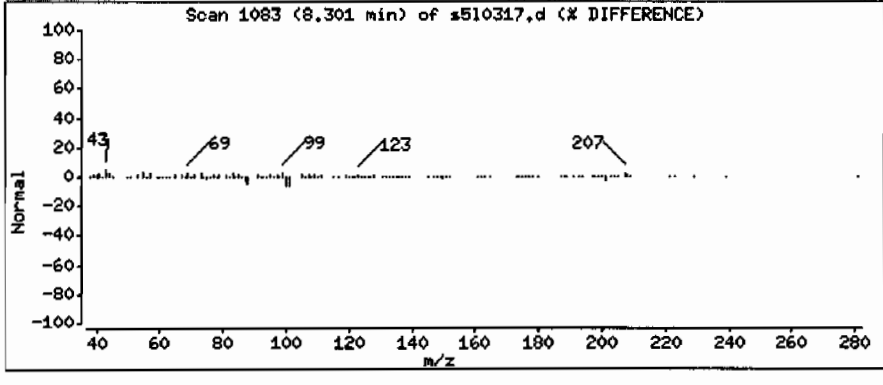

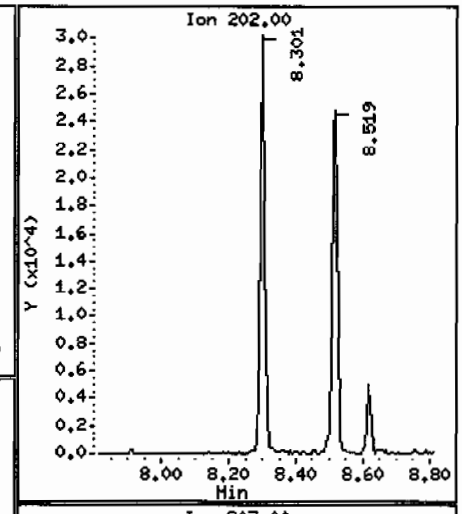

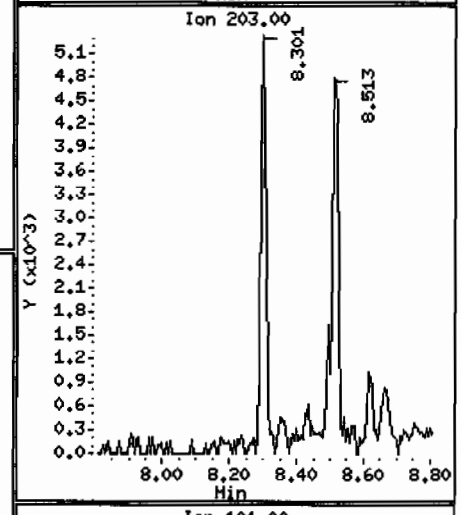

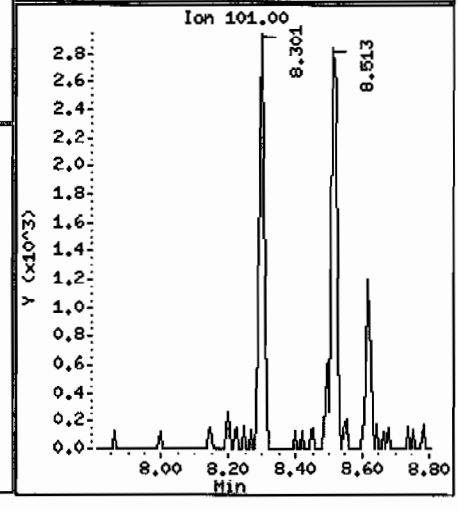

Data File: /chem/MSD5.i/s120309.b/s510317.d

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Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |241559001|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 15.1 ug/Kg

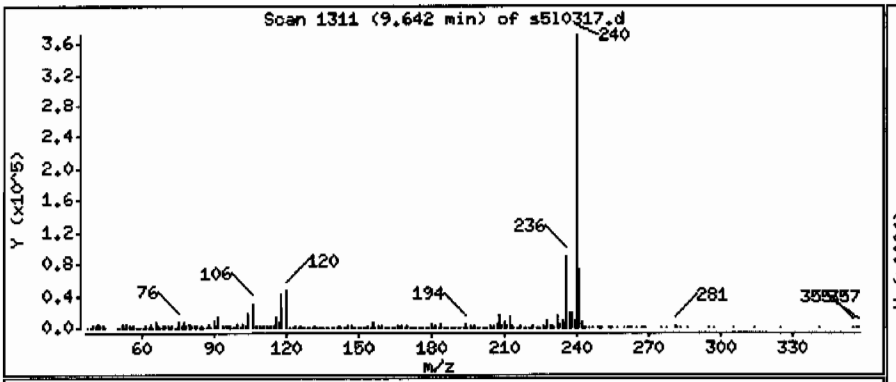

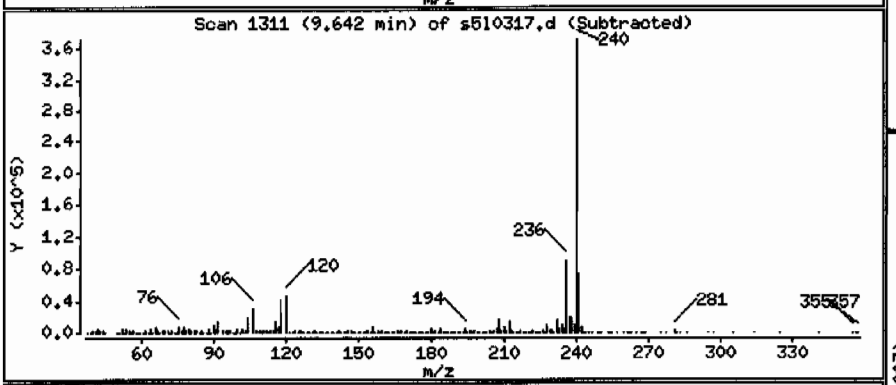

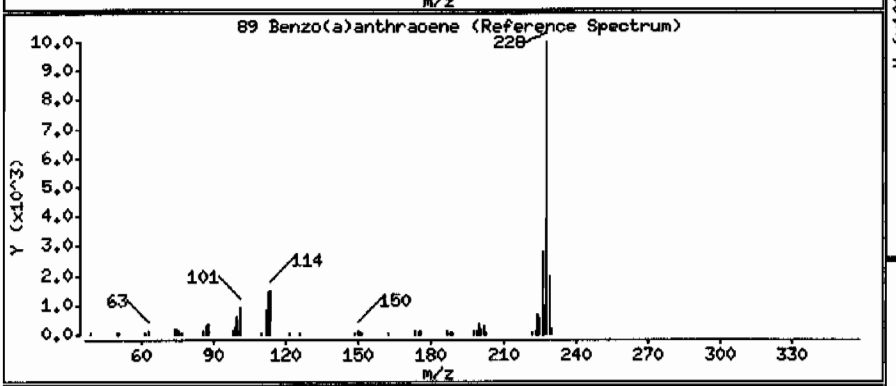

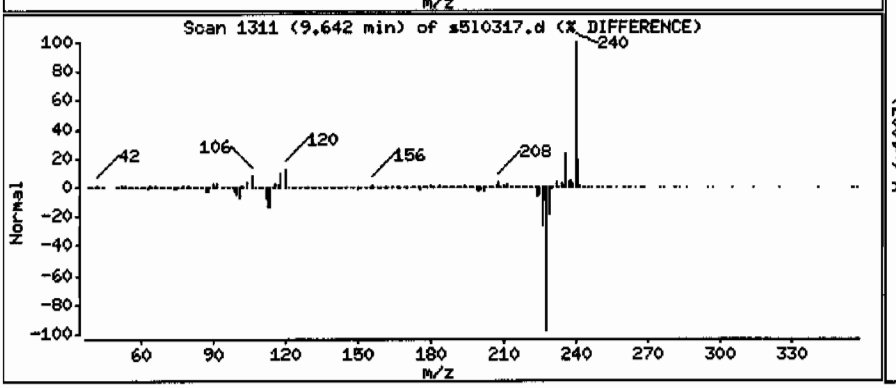

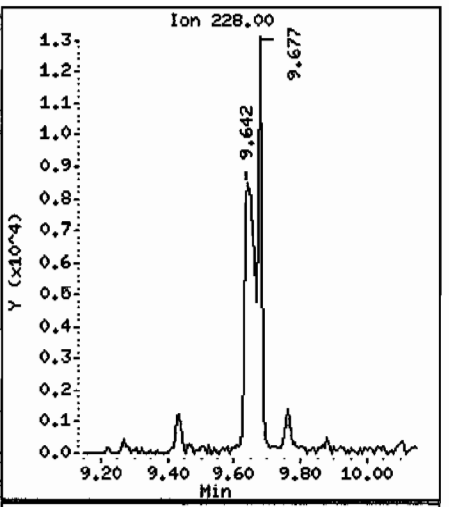

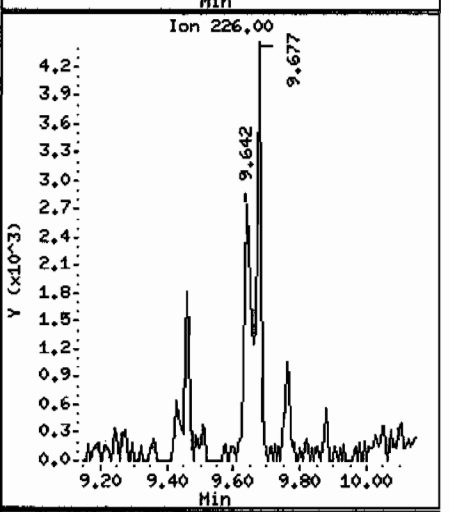

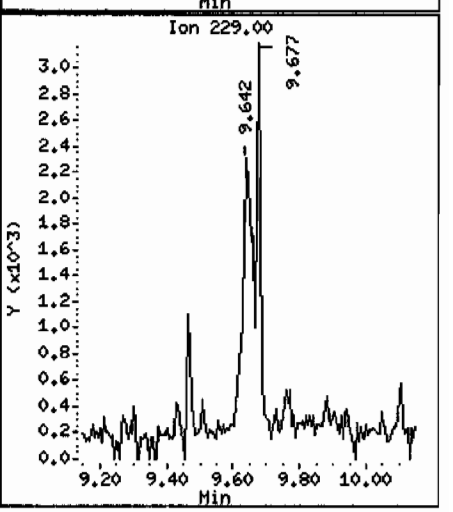

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |241559001|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 12.8 ug/Kg

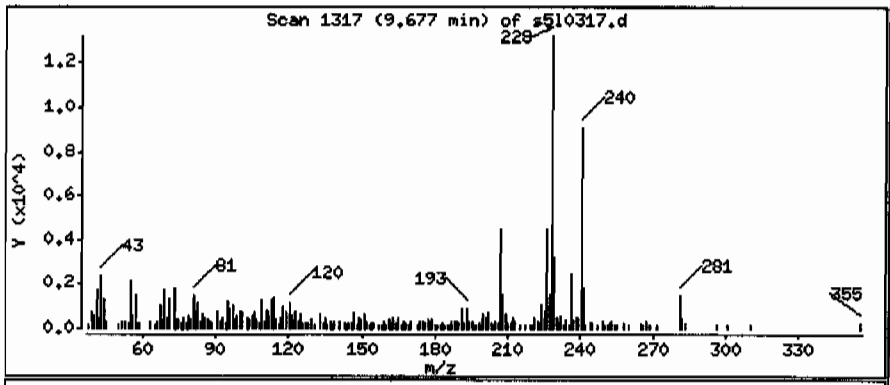

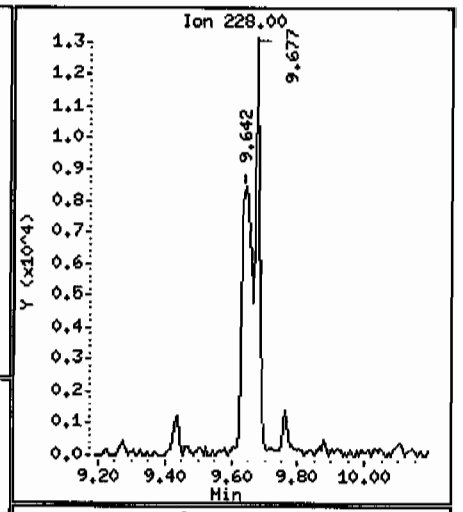

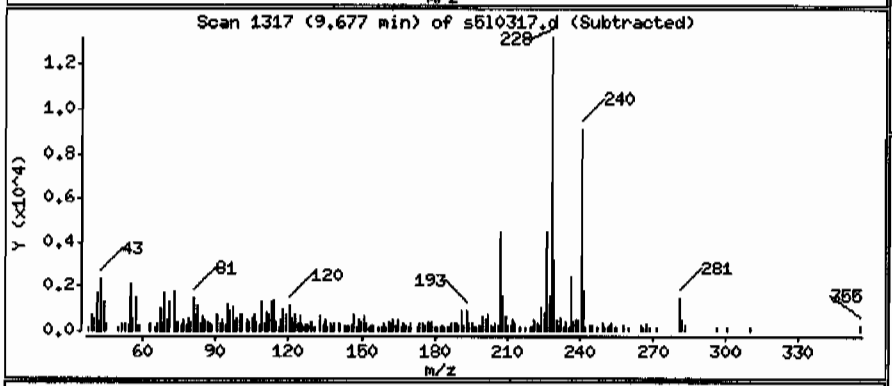

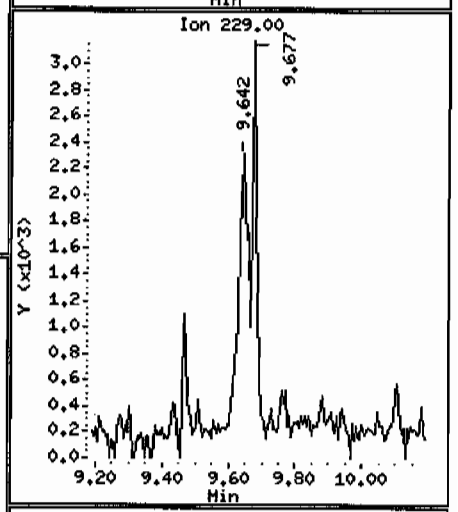

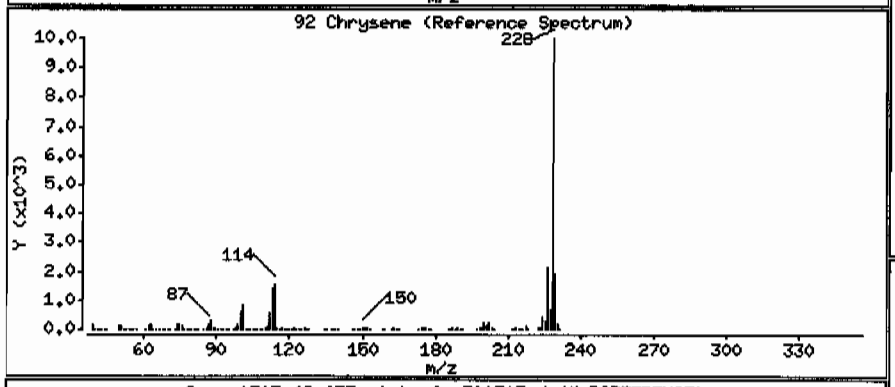

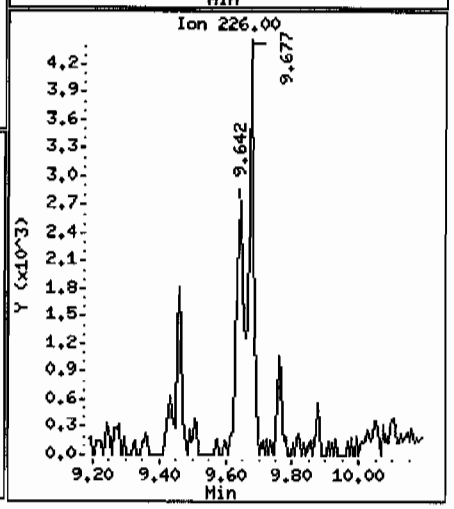

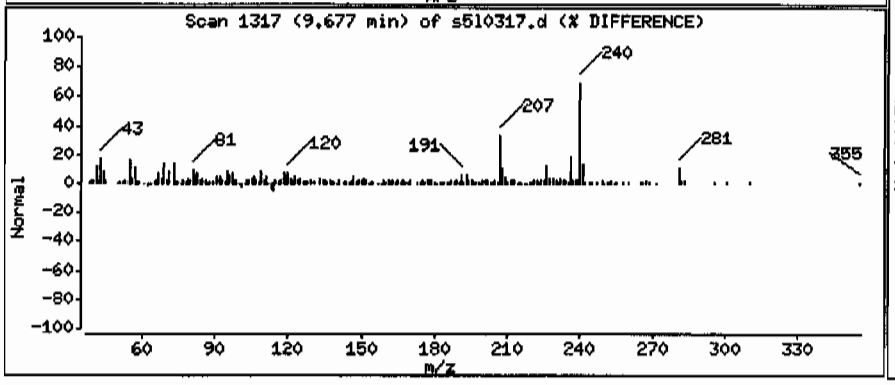

Data File: /chem/MSD5.i/s120309.b/s510317.d

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Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: 1241559001|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 15.7 ug/Kg

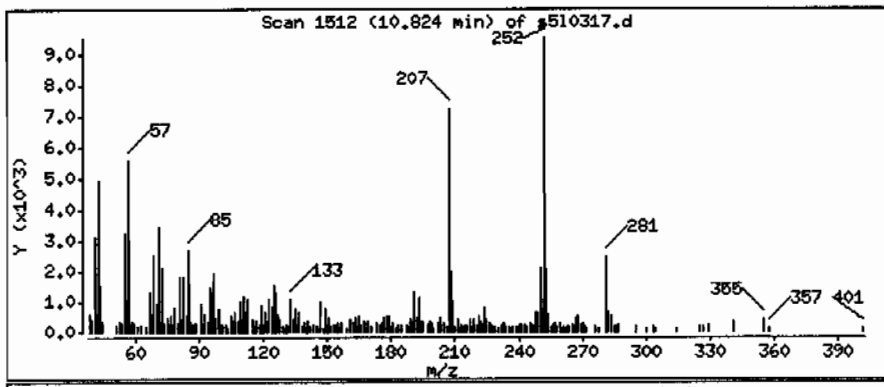

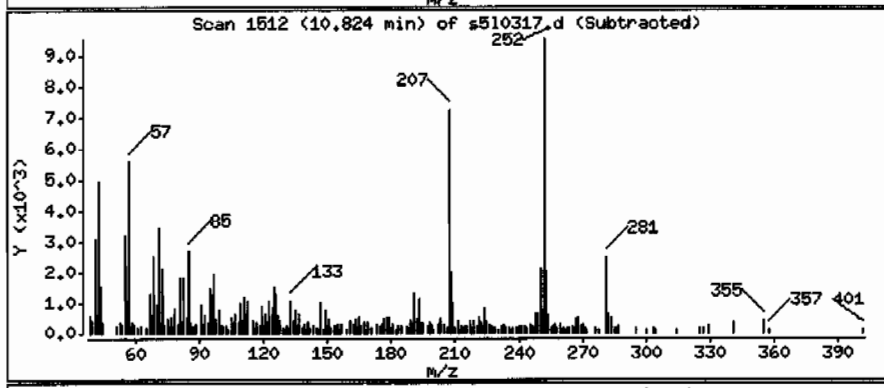

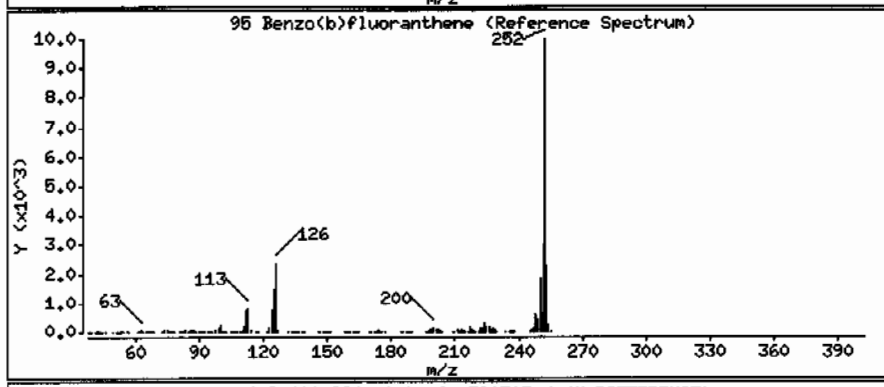

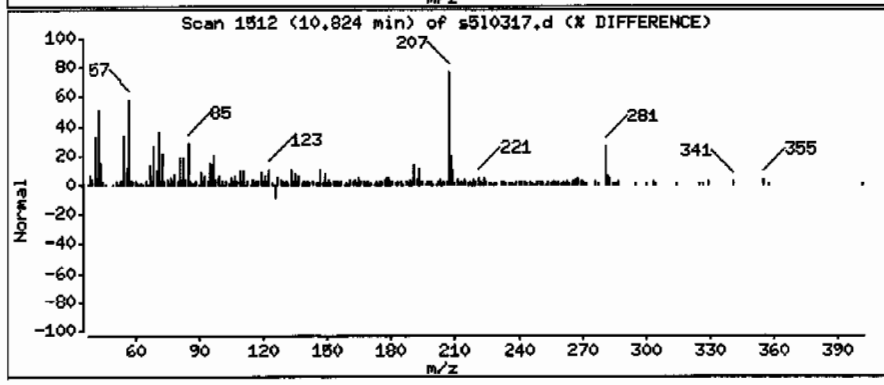

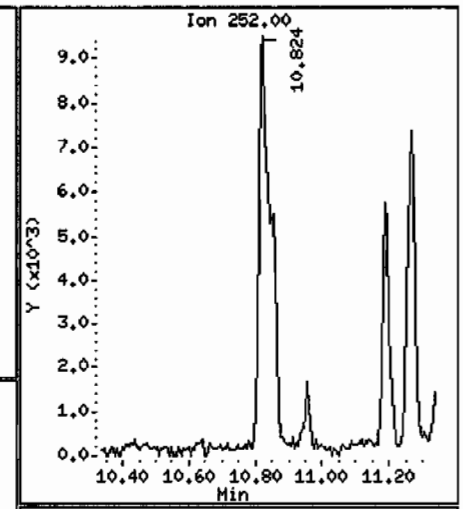

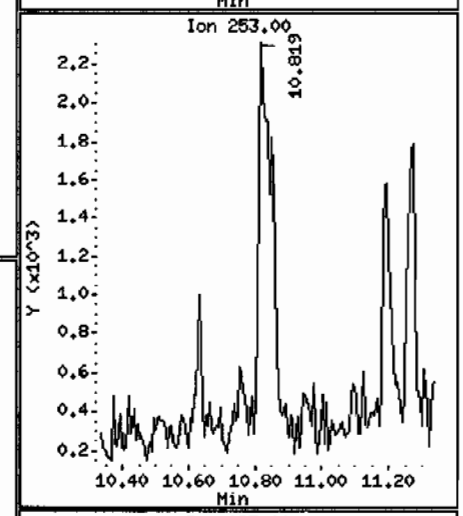

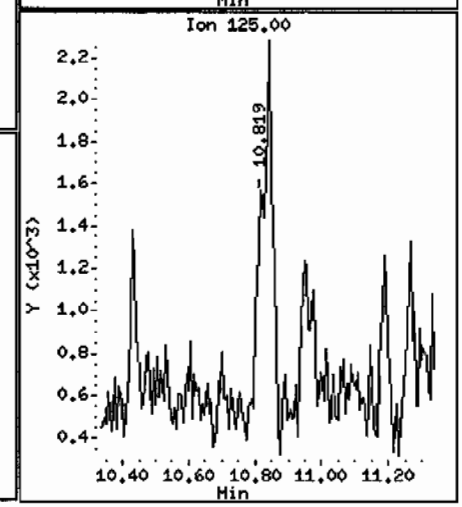

Data File: /ohem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: 1241559001|926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 12.6 ug/Kg

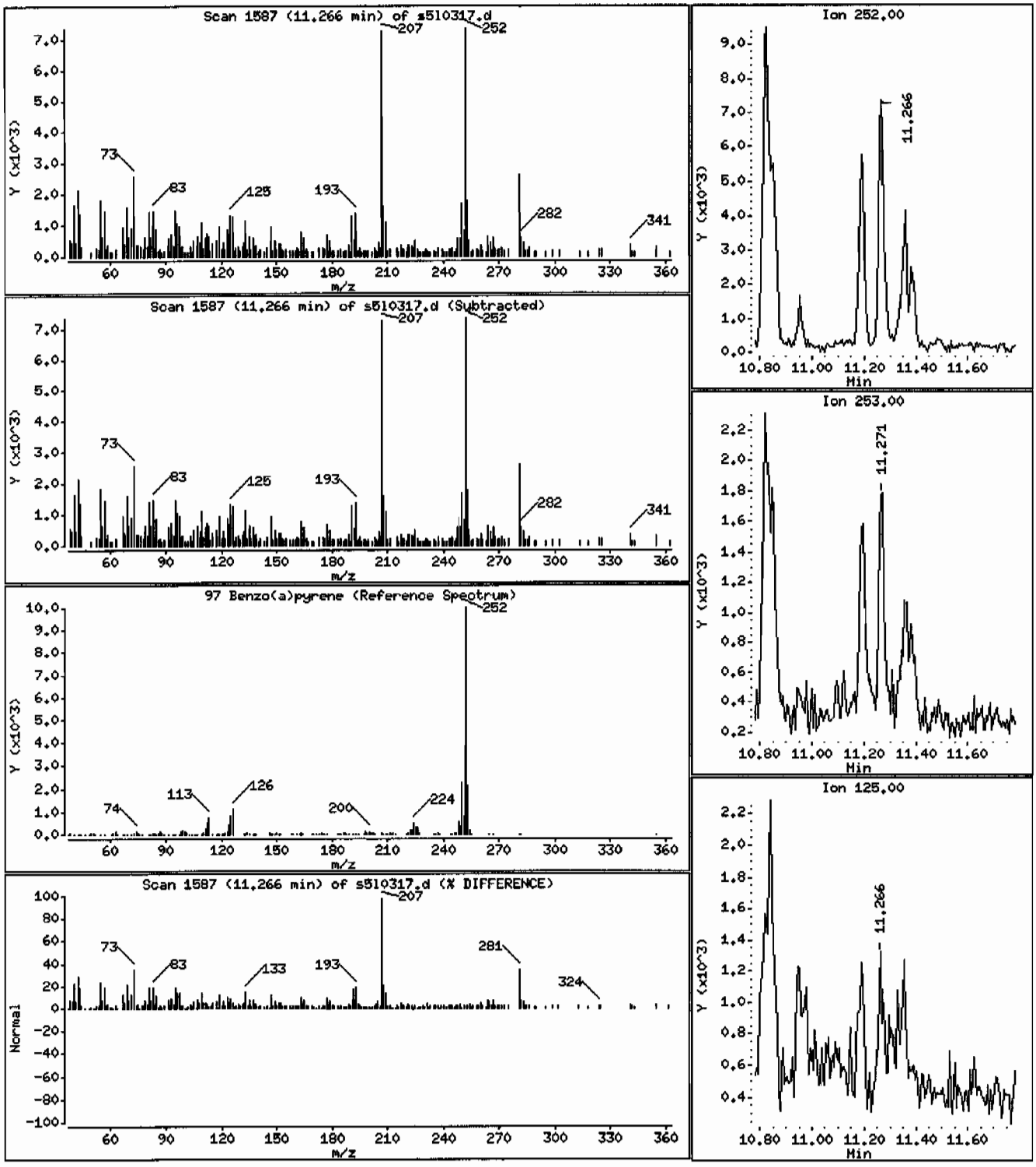

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |2415590011926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 47.7 ug/Kg

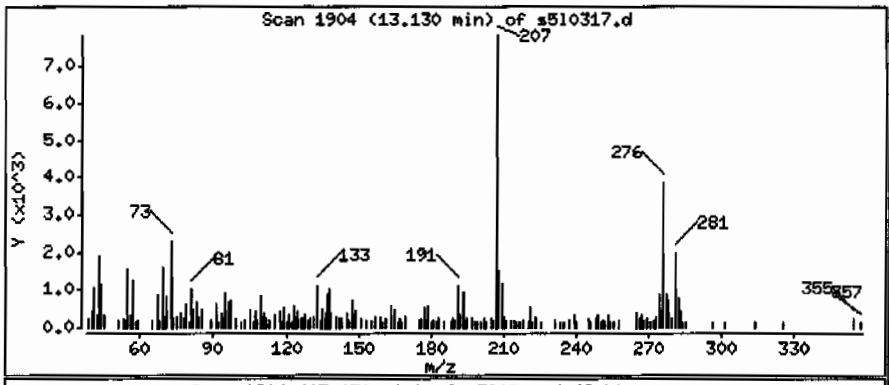

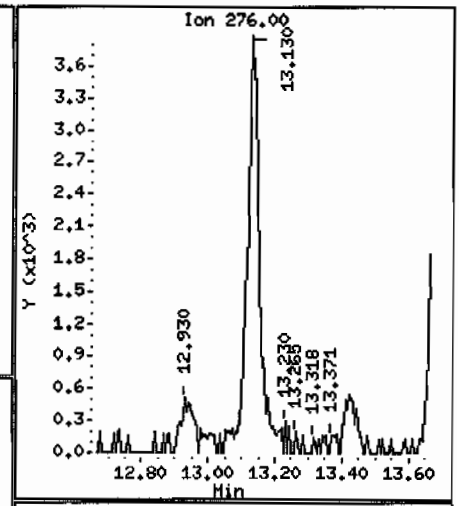

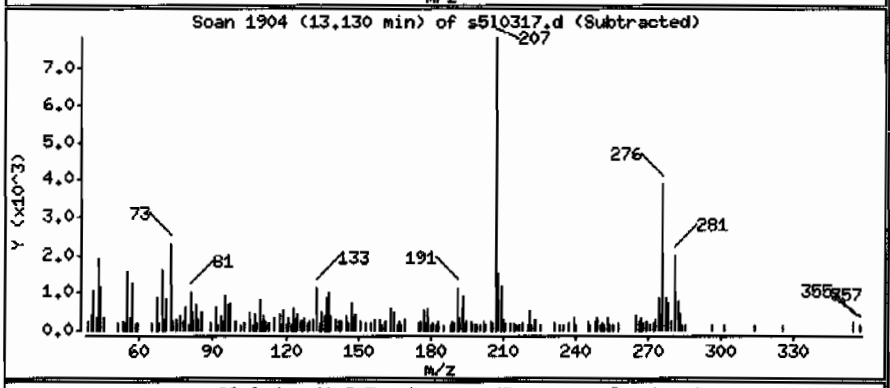

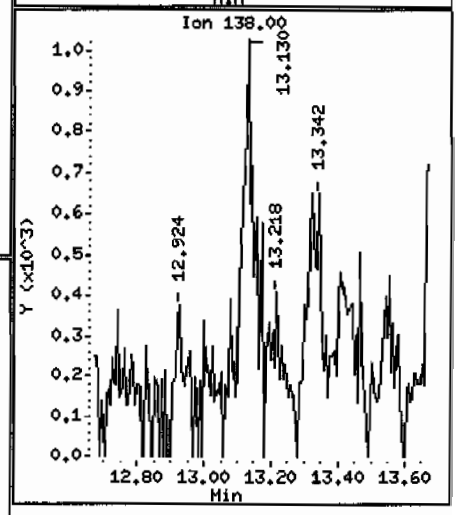

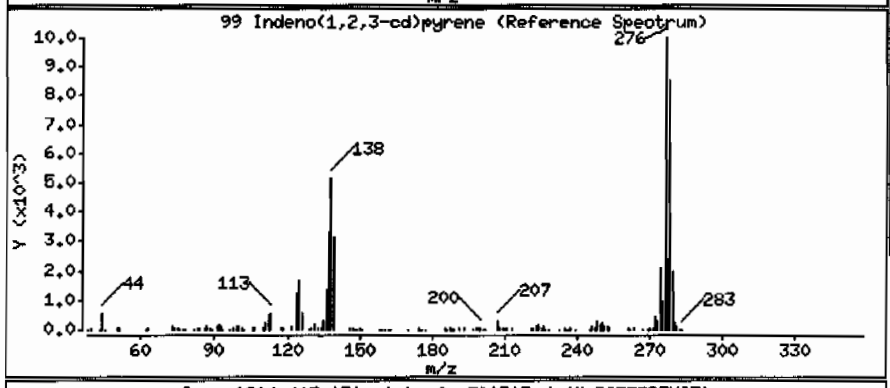

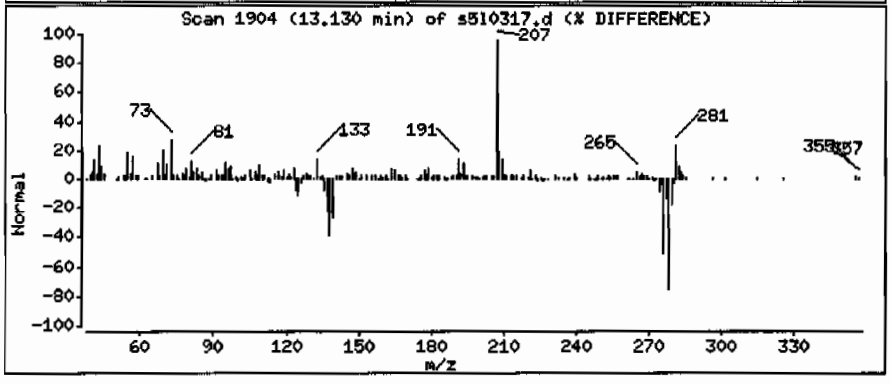

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903 Instrument: MSD5.i

Sample Info: |241559001|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

101 Benzo(ghi)perylene Concentration: 12.5 ug/Kg

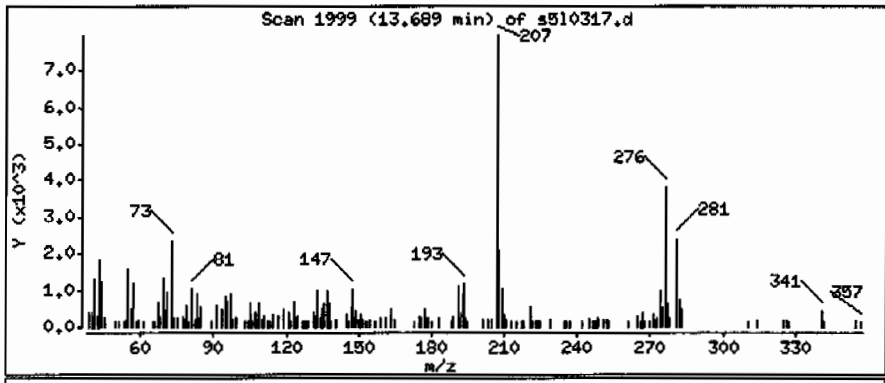

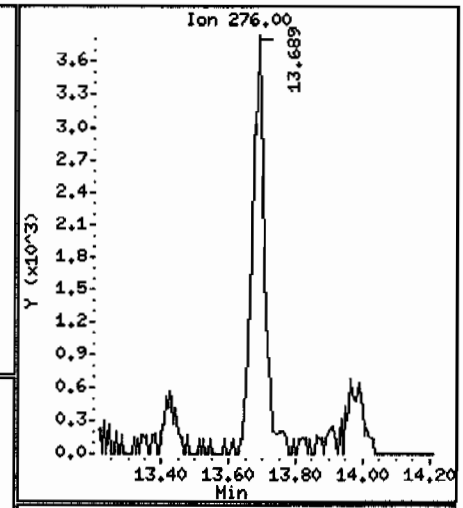

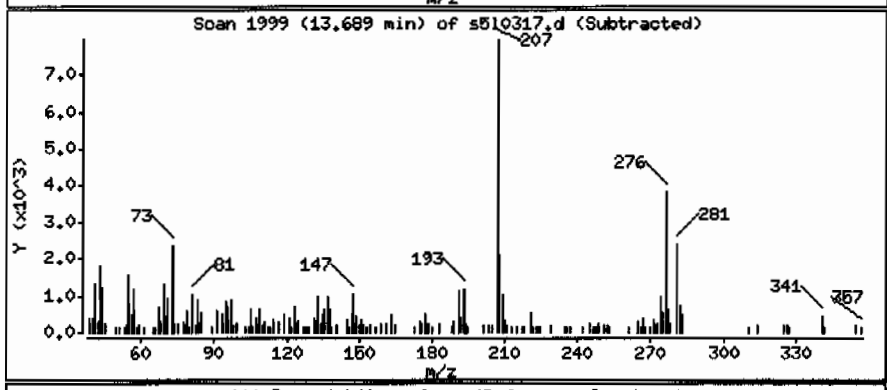

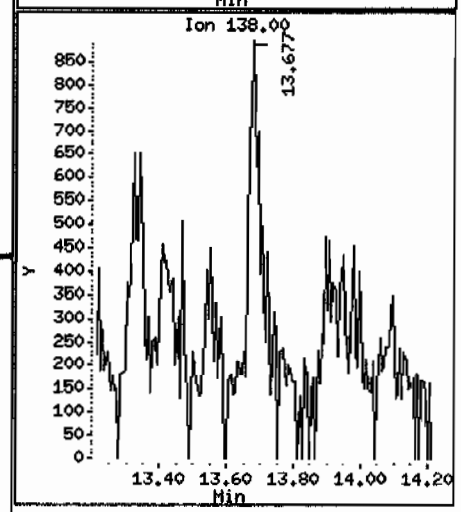

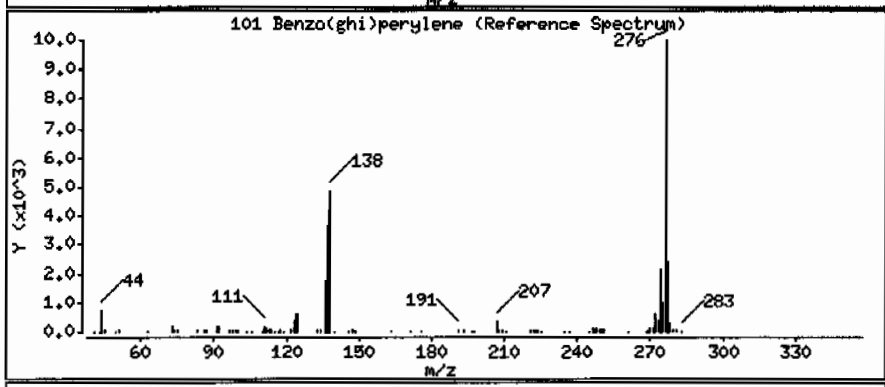

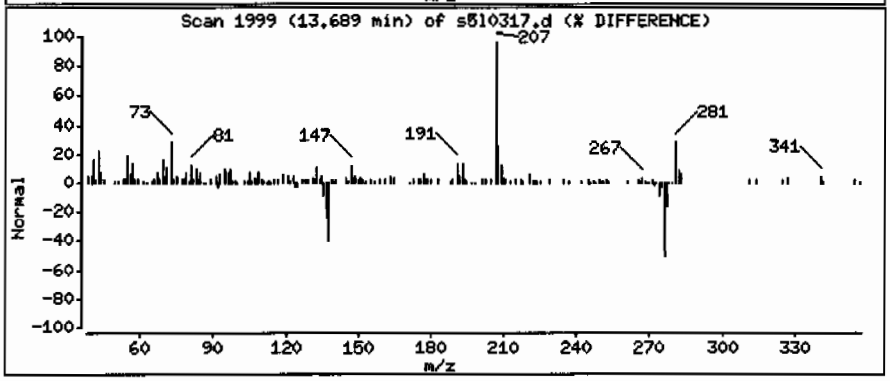

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |241559001|926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	46	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
Acetamide, N-(aminocarbonyl)-	591-07-1	NIST05.L	4100	37	C3H6N2O2	102

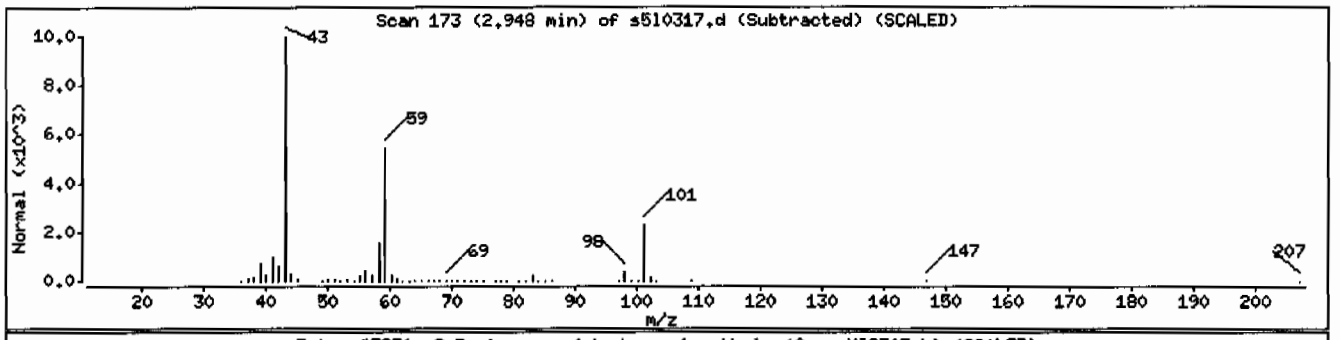

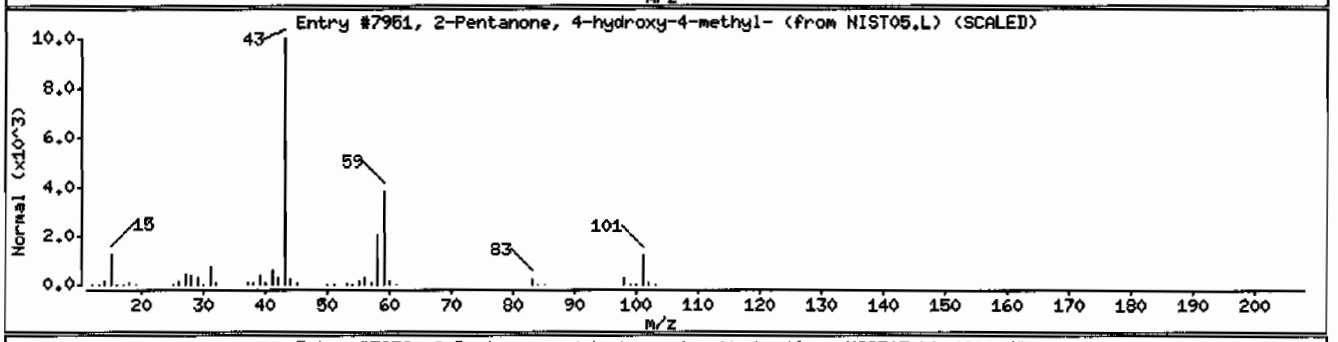

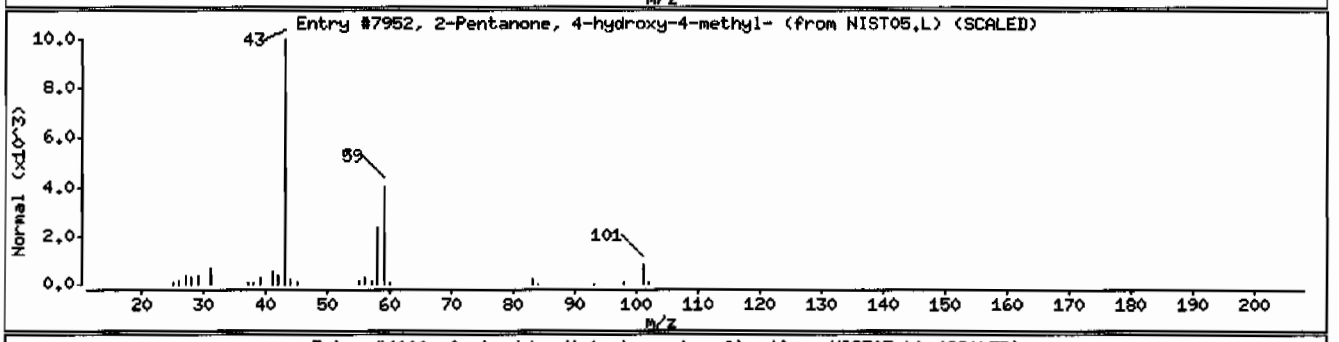

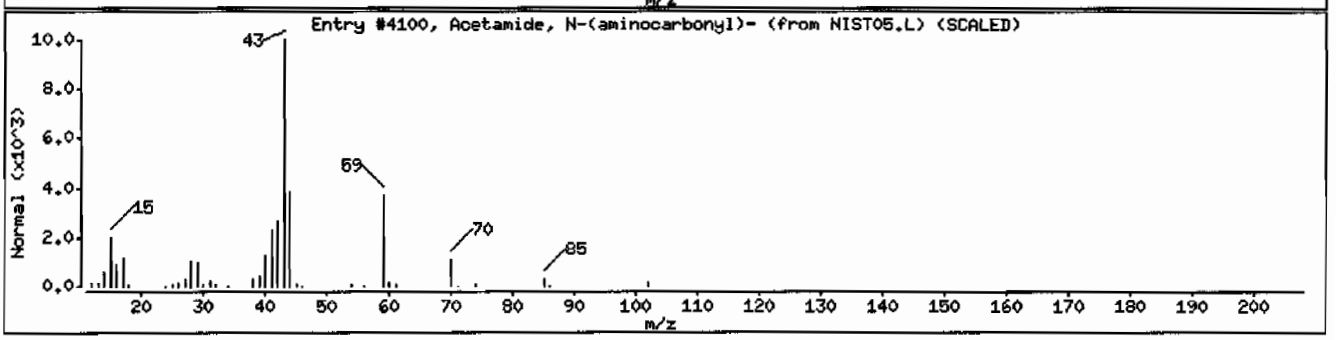

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |241559001|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phthalic acid, isobutyl nonyl ester	1000309-04-4	NIST05.L	151810	78	C21H32O4	348
1,2-Benzenedicarboxylic acid, bis(2-meth	84-69-5	NIST05.L	110591	78	C16H22O4	278
1,2-Benzenedicarboxylic acid, butyl 2-et	85-69-8	NIST05.L	144826	78	C20H30O4	334

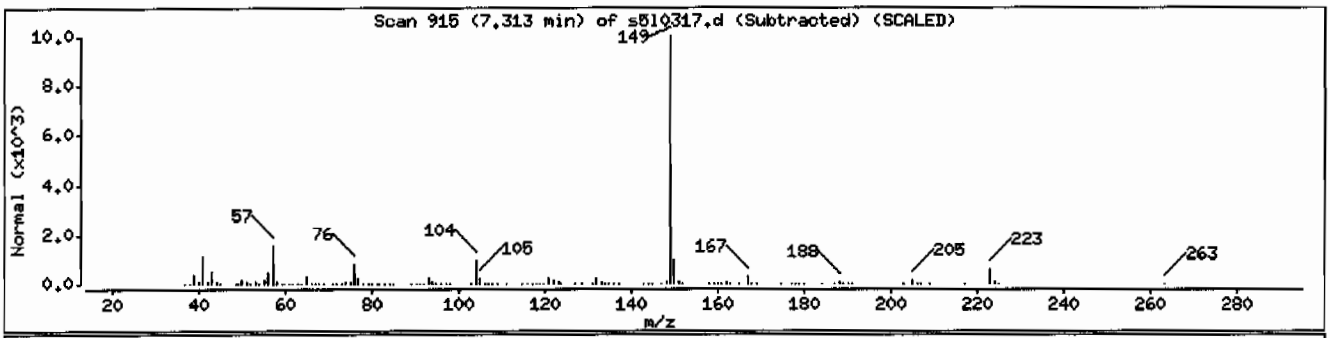

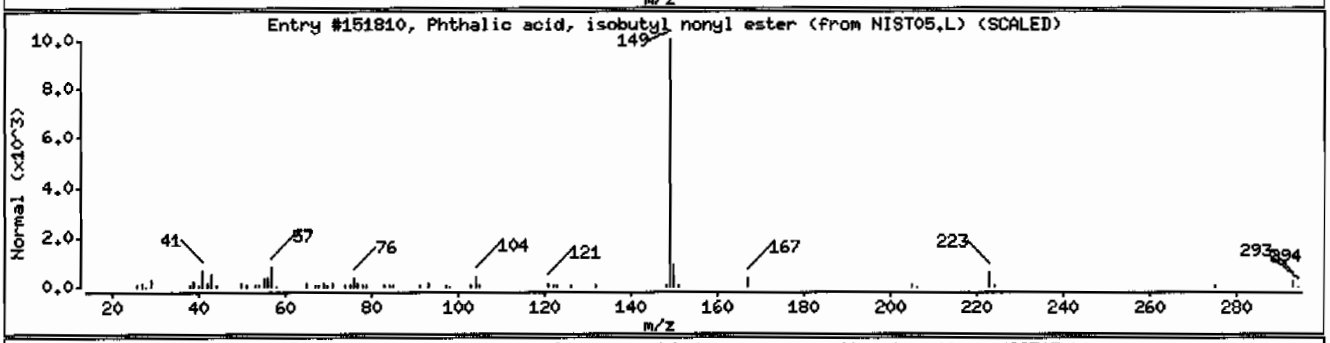

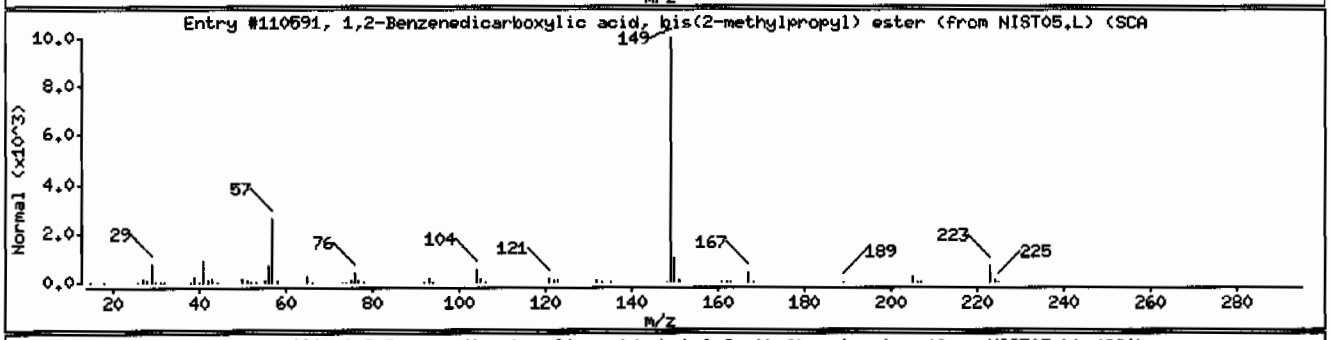

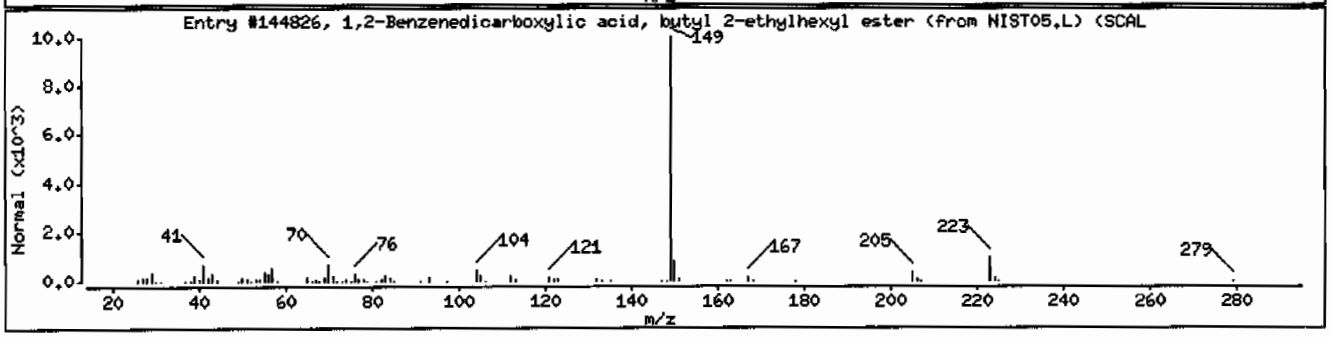

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |241559001|926641|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113492	97	C20H42	282
Hexadecane	544-76-3	NIST05.L	76088	95	C16H34	226
Eicosane	112-95-8	NIST05.L	113488	95	C20H42	282

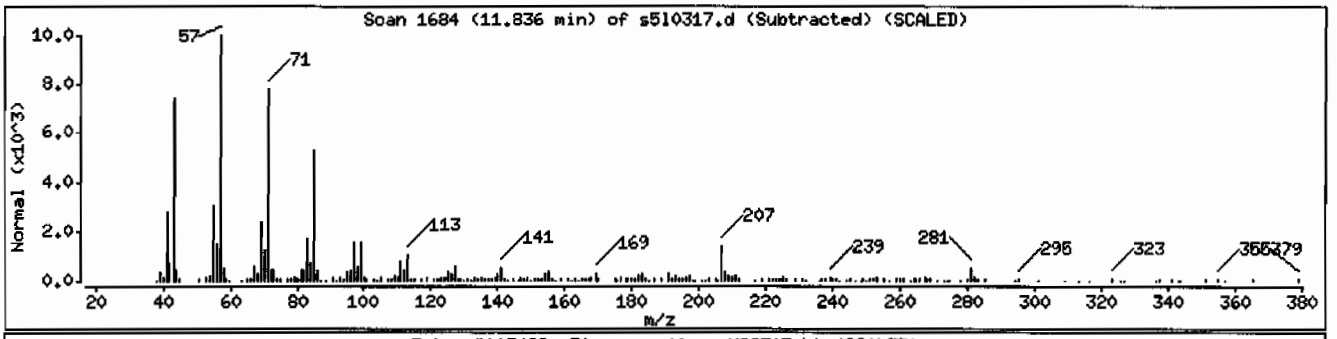

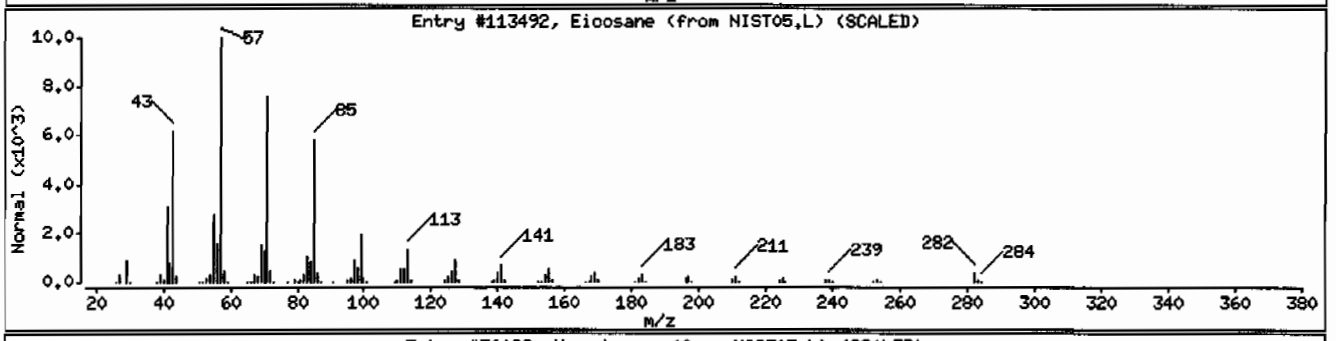

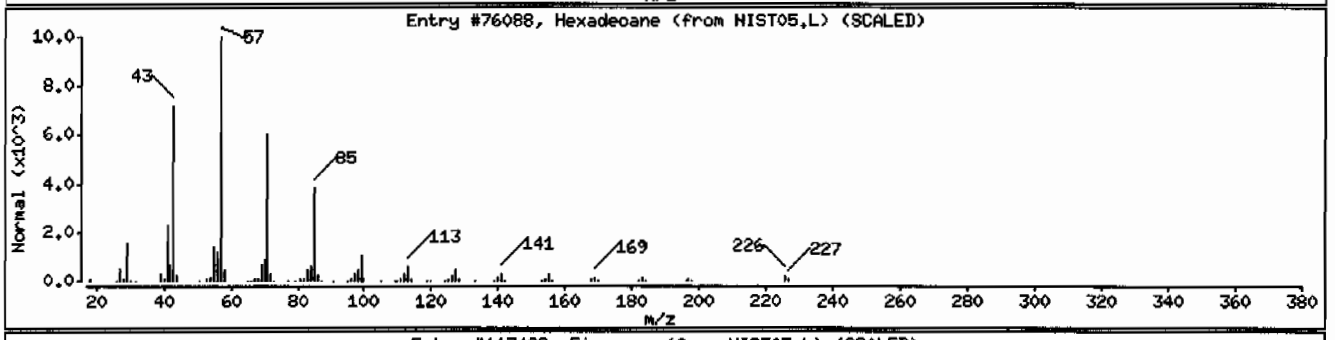

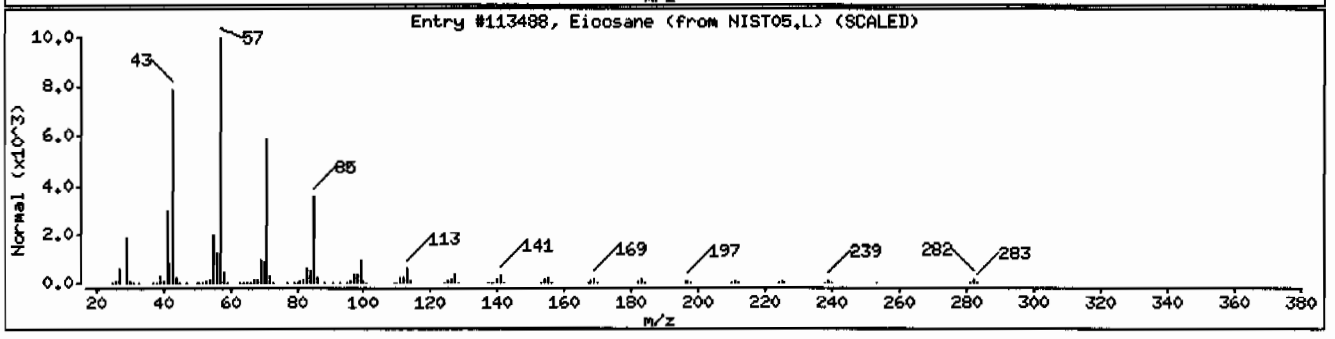

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |2415590011926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	60	C15H24	204
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	49	C15H24	204
1,1,4a-Trimethyl-5,6-dimethylenedecahydr	1000193-60-8	NIST05.L	59893	49	C15H24	204

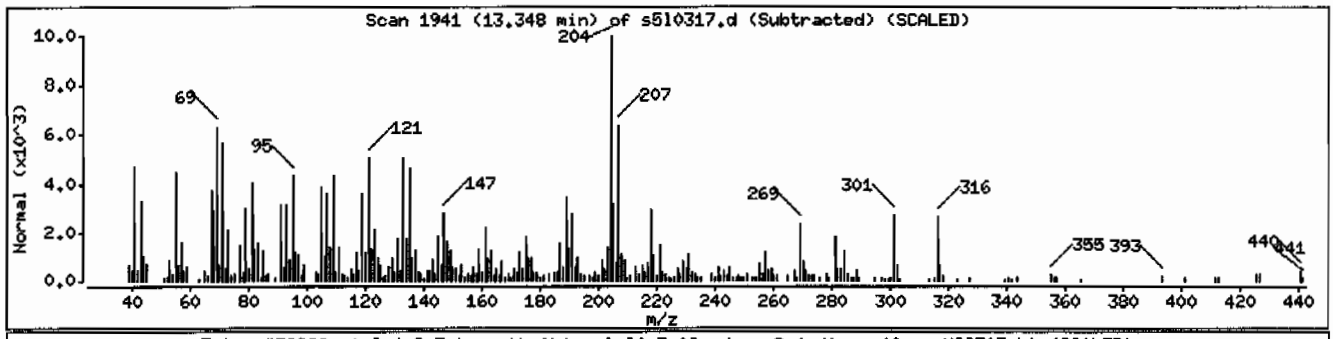

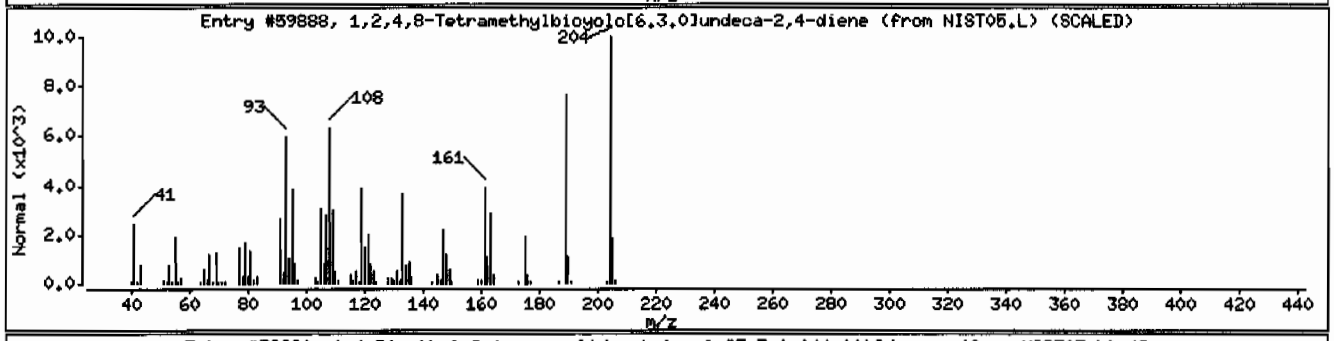

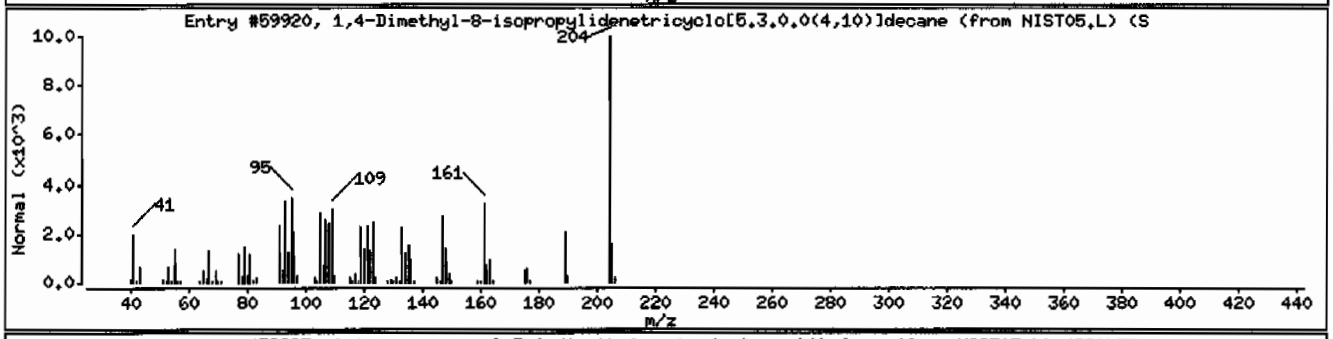

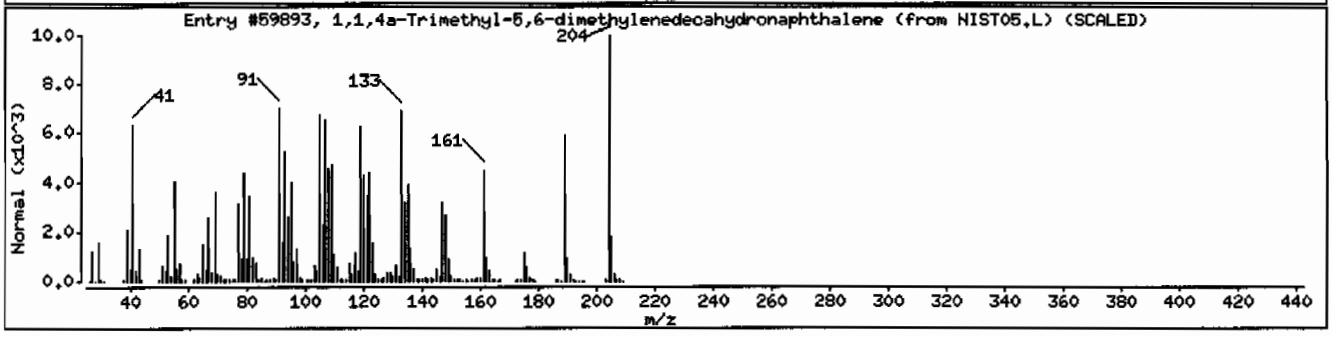

Data File: /chem/MSD5.i/s120309.b/s510317.d

Date : 03-DEC-2009 17:17

Client ID: RE03-10-6903

Instrument: MSD5.i

Sample Info: |2415590011926641|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	96	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	86	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	42	C29H50O	414

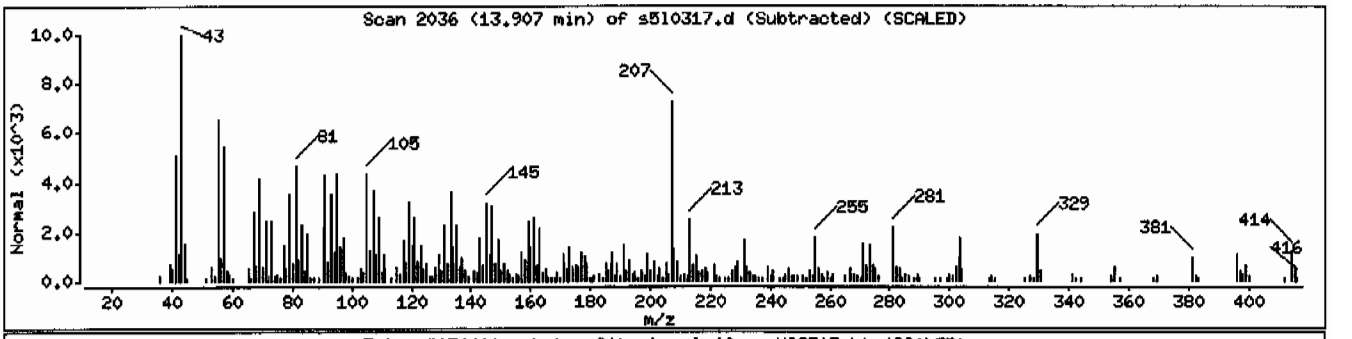

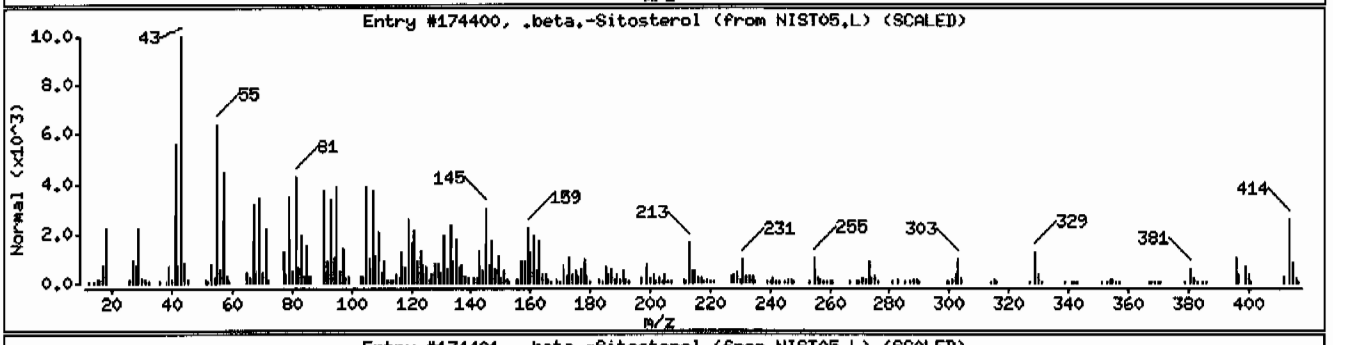

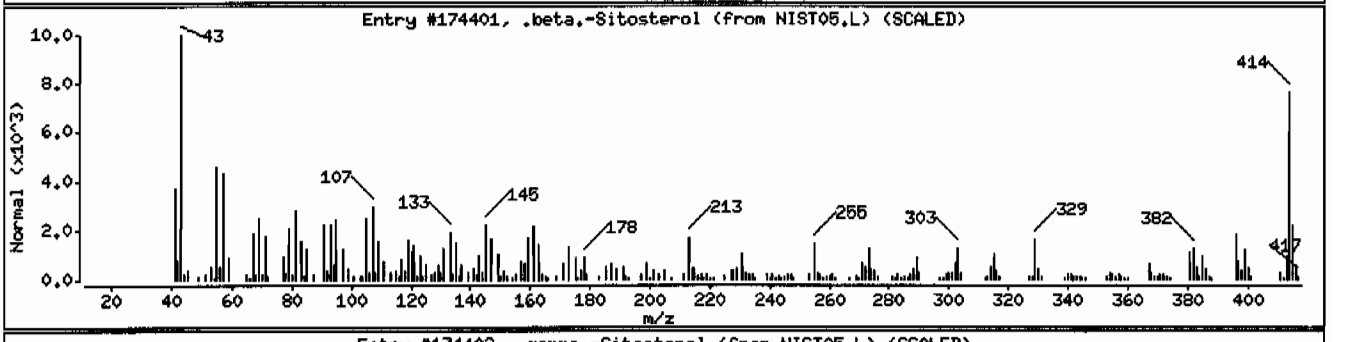

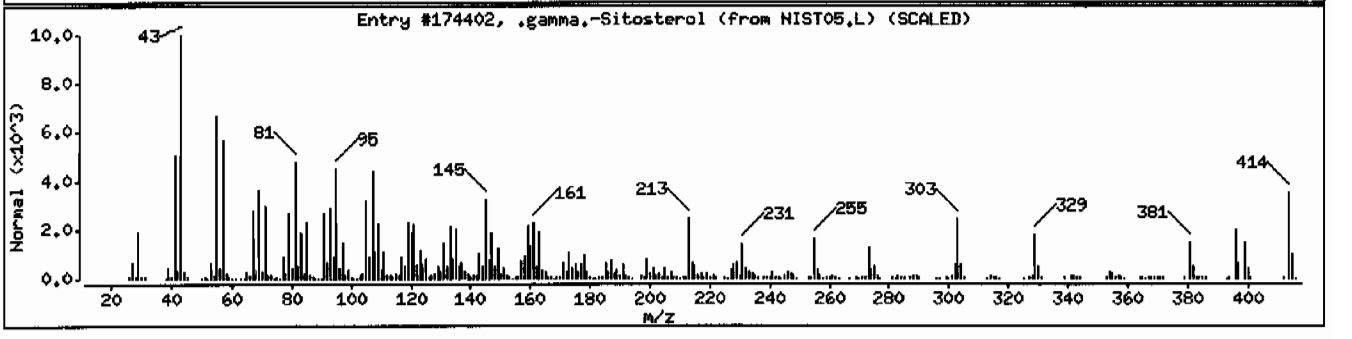

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 03-Dec-2009 12:15

Calibration History

Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Start Cal Date: 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
30-NOV-2009 14:09	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3014.d
Cal Level: 2 , Cal Amount: 10.00000		
01-DEC-2009 12:54	hex	/chem/MSD5.i/s113009.b/s5k3048.d
01-DEC-2009 10:15	pest	/chem/MSD5.i/s113009.b/s5k3041.d
30-NOV-2009 21:28	nev	/chem/MSD5.i/s113009.b/s5k3031.d
30-NOV-2009 18:48	ap12	/chem/MSD5.i/s113009.b/s5k3024.d
30-NOV-2009 14:38	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3015.d
Cal Level: 3 , Cal Amount: 20.00000		
01-DEC-2009 13:18	hex	/chem/MSD5.i/s113009.b/s5k3049.d
01-DEC-2009 10:38	pest	/chem/MSD5.i/s113009.b/s5k3042.d
30-NOV-2009 21:51	nev	/chem/MSD5.i/s113009.b/s5k3032.d
30-NOV-2009 19:10	ap12	/chem/MSD5.i/s113009.b/s5k3025.d
30-NOV-2009 15:06	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3016.d
Cal Level: 4 , Cal Amount: 40.00000		
01-DEC-2009 13:41	hex	/chem/MSD5.i/s113009.b/s5k3050.d
01-DEC-2009 11:00	pest	/chem/MSD5.i/s113009.b/s5k3043.d
30-NOV-2009 22:14	nev	/chem/MSD5.i/s113009.b/s5k3033.d
30-NOV-2009 19:34	ap12	/chem/MSD5.i/s113009.b/s5k3026.d
30-NOV-2009 15:34	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3017.d
Cal Level: 5 , Cal Amount: 50.00000		
01-DEC-2009 14:03	hex	/chem/MSD5.i/s113009.b/s5k3051.d
01-DEC-2009 11:23	pest	/chem/MSD5.i/s113009.b/s5k3044.d
30-NOV-2009 22:38	nev	/chem/MSD5.i/s113009.b/s5k3034.d
30-NOV-2009 19:57	ap12	/chem/MSD5.i/s113009.b/s5k3027.d
30-NOV-2009 16:02	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3018.d
Cal Level: 6 , Cal Amount: 80.00000		
01-DEC-2009 14:25	hex	/chem/MSD5.i/s113009.b/s5k3052.d
01-DEC-2009 11:46	pest	/chem/MSD5.i/s113009.b/s5k3045.d
30-NOV-2009 23:01	nev	/chem/MSD5.i/s113009.b/s5k3035.d
30-NOV-2009 20:20	ap12	/chem/MSD5.i/s113009.b/s5k3028.d
30-NOV-2009 16:31	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3019.d
Cal Level: 7 , Cal Amount: 100.00000		

01-DEC-2009 14:48	hex	/chem/MSD5.i/s113009.b/s5k3053.d
01-DEC-2009 12:09	pest	/chem/MSD5.i/s113009.b/s5k3046.d
30-NOV-2009 23:23	nev	/chem/MSD5.i/s113009.b/s5k3036.d
30-NOV-2009 20:42	ap12	/chem/MSD5.i/s113009.b/s5k3029.d
30-NOV-2009 16:59	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3020.d

Cal Level: 8 , Cal Amount: 120.00000		
01-DEC-2009 12:32	pest	/chem/MSD5.i/s113009.b/s5k3047.d
30-NOV-2009 23:46	nev	/chem/MSD5.i/s113009.b/s5k3037.d
30-NOV-2009 21:05	ap12	/chem/MSD5.i/s113009.b/s5k3030.d
30-NOV-2009 17:28	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3021.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
03-DEC-2009 11:53	MEGAIICARE	/chem/MSD5.i/s120309.b/s510303.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Calibration File Names:
Level 1: /chem/MSD5.i/s113009.b/s5k3014.d
Level 2: /chem/MSD5.i/s113009.b/s5k3048.d
Level 3: /chem/MSD5.i/s113009.b/s5k3049.d
Level 4: /chem/MSD5.i/s113009.b/s5k3050.d
Level 5: /chem/MSD5.i/s113009.b/s5k3051.d
Level 6: /chem/MSD5.i/s113009.b/s5k3052.d
Level 7: /chem/MSD5.i/s113009.b/s5k3053.d
Level 8: /chem/MSD5.i/s113009.b/s5k3047.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.43200	0.48159	0.46738	0.44822	0.47531					
	0.43671	0.47324					AVRG		0.45921		4.34760
2 Pyridine	+++++	0.63985	0.64672	0.62506	0.69334	0.71690					
	0.67003	0.56775					AVRG		0.65138		7.47986
4 Aniline	+++++	0.38715	0.40911	0.40667	0.39891	0.39925					
	0.39855	0.40838					AVRG		0.40115		1.92425
209 Benzaldehyde	+++++	0.75175	0.80370	+++++	+++++	0.73680					
	0.71705	0.69889					AVRG		0.74164		5.39700
6 Phenol	+++++	0.99962	1.09329	1.11449	1.08724	1.08038					
	1.05465	1.08077					AVRG		1.07292		3.43976

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.59944	0.61498	0.62541	0.67247	0.65894	0.63803					
	0.62832	0.63351					AVRG		0.63389		3.66603
8 2-Chlorophenol	+++++	0.87217	0.92912	0.93403	0.92801	0.92624					
	0.91350	0.93801					AVRG		0.92015		2.44524
203 n-Decane	+++++	0.88013	0.89146	0.85550	0.84815	0.81672					
	0.77891	0.76359					AVRG		0.83349		5.87400
9 1,3-Dichlorobenzene	+++++	1.09685	1.13817	1.12405	1.11357	1.09144					
	1.06829	1.08058					AVRG		1.10185		2.24200
11 1,4-Dichlorobenzene	+++++	1.11385	1.14638	1.14426	1.12409	1.10651					
	1.09004	1.10462					AVRG		1.11854		1.87546
12 Benzyl alcohol	+++++	0.51602	0.57510	0.61563	0.58809	0.58621					
	0.58334	0.59941					AVRG		0.58054		5.39098
13 1,2-Dichlorobenzene	+++++	1.04255	1.08183	1.08505	1.06637	1.06273					
	1.03252	1.03867					AVRG		1.05853		1.98597
14 bis(2-Chloroisopropyl)ether	+++++	1.03868	1.06626	1.05750	1.03794	0.97107					
	0.95293	0.92855					AVRG		1.00756		5.49466
15 o-Cresol	+++++	0.69067	0.73824	0.77014	0.74119	0.73428					
	0.72745	0.73902					AVRG		0.73443		3.20276

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	0.99878	1.06200	+++++	+++++	1.04834					
	1.01728	1.04524					AVRG		1.03433		2.48185
17 N-Nitrosodipropylamine	0.39105	0.46274	0.53774	0.54714	0.48085	0.50719					
	0.46219	0.47357					AVRG		0.48281		10.23361
18 m,p-Cresols	+++++	0.87022	0.92832	0.99766	0.95002	0.92840					
	0.92726	0.94238					AVRG		0.93489		4.03823
19 Hexachloroethane	+++++	0.38940	0.41936	0.42131	0.41952	0.41531					
	0.40832	0.41760					AVRG		0.41297		2.72046
21 Nitrobenzene	+++++	0.24845	0.26680	0.25685	0.24412	0.23043					
	0.21217	0.20803					AVRG		0.23812		9.31912
22 Isophorone	+++++	0.45816	0.49226	0.49029	0.45241	0.41992					
	0.39415	0.38838					AVRG		0.44222		9.62880
23 2-Nitrophenol	+++++	0.11547	0.14223	0.13108	0.12558	0.12127					
	0.11523	0.11724					AVRG		0.12401		7.98047
24 2,4-Dimethylphenol	+++++	0.21966	0.23281	0.23194	0.21573	0.20764					
	0.19429	0.19541					AVRG		0.21392		7.35461
25 bis(2-Chloroethoxy)methane	+++++	0.25854	0.27287	0.27115	0.25218	0.23628					
	0.22333	0.21759					AVRG		0.24742		8.96356

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
26 2,4-Dichlorophenol	+++++	0.19659	0.21717	0.21714	0.20372	0.19511					
	0.18313	0.18359					AVRG		0.19949		7.05929
27 Benzoic acid	+++++	+++++	0.09002	0.11803	0.10197	0.11586					
	0.10794	0.12814					AVRG		0.11033		12.12819
28 1,2,4-Trichlorobenzene	+++++	0.26481	0.27523	0.26908	0.25466	0.24111					
	0.22459	0.22030					AVRG		0.24997		8.71723
30 Naphthalene	0.81705	0.74573	0.76657	0.72847	0.68863	0.63949					
	0.59297	0.55942					AVRG		0.69229		12.86965
204 alpha-Terpineol	+++++	0.17262	0.18143	0.17832	0.16468	0.15346					
	0.14288	0.13778					AVRG		0.16160		10.68187
31 4-Chloroaniline	+++++	0.26766	0.22783	0.30909	0.29015	0.28897					
	0.27710	0.27967					AVRG		0.27721		9.14686
189 Caprolactam	+++++	0.06063	0.07077	+++++	+++++	0.07699					
	0.07770	0.07957					AVRG		0.07313		10.57301
32 Hexachlorobutadiene	+++++	0.16663	0.17799	0.17401	0.16606	0.15880					
	0.14863	0.14597					AVRG		0.16258		7.45567
33 4-Chloro-3-methylphenol	+++++	0.19010	0.21662	0.21855	0.20067	0.19059					
	0.18078	0.17853					AVRG		0.19655		8.18892

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.51678	0.50700	0.52401	0.52107	0.47972	0.44344					
	0.42192	0.40565					AVRG		0.47745		9.97925
35 1-Methylnaphthalene	0.49817	0.48888	0.50948	0.50950	0.46873	0.43532					
	0.40747	0.39405					AVRG		0.46395		9.93014
36 Hexachlorocyclopentadiene	+++++	0.11559	0.14894	0.17638	0.16699	0.17517					
	0.15973	0.18699					AVRG		0.16140		14.65548
208 1,1'-Biphenyl	+++++	1.06821	1.07871	+++++	+++++	1.07139					
	1.04410	1.03663					AVRG		1.05981		1.73080
205 2,3-Dichloroaniline	+++++	0.42334	0.44162	0.48367	0.45837	0.47569					
	0.46389	0.48191					AVRG		0.46121		4.82890
37 2,4,6-Trichlorophenol	+++++	0.24410	0.27355	0.30569	0.28842	0.30698					
	0.30109	0.31371					AVRG		0.29051		8.42918
38 2,4,5-Trichlorophenol	+++++	0.26102	0.29598	0.31509	0.31354	0.30818					
	0.30243	0.32875					AVRG		0.30357		7.06061
40 2-Chloronaphthalene	0.79673	0.82048	0.87010	0.90775	0.85133	0.85068					
	0.82317	0.83198					AVRG		0.84403		4.05738
42 o-Nitroaniline	+++++	0.19115	0.21865	0.24505	0.22880	0.22737					
	0.22383	0.23238					AVRG		0.22389		7.41961

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INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	14483	15051	82754	119707	239651					
	283774	430579					LINR	0.33554	0.19860		0.99002
43 Dimethylphthalate	+++++	0.95484	1.02595	1.06444	0.99695	0.99604					
	0.94535	0.98159					AVRG		0.99502		4.11153
44 2,6-Dinitrotoluene	+++++	0.20821	0.23299	0.24910	0.23478	0.23887					
	0.22604	0.23758					AVRG		0.23251		5.49531
45 Acenaphthylene	1.14802	1.28799	1.36835	1.40207	1.30955	1.28653					
	1.24364	1.23741					AVRG		1.28545		6.16797
47 Acenaphthene	0.74181	0.78832	0.85183	0.88393	0.83890	0.85177					
	0.82987	0.84268					AVRG		0.82864		5.31903
48 2,4-Dinitrophenol	+++++	+++++	21200	54725	74212	150262					
	173409	+++++					LINR	0.32072	0.11919		0.99343
49 Dibenzofuran	+++++	1.18297	1.25042	1.30282	1.21056	1.17947					
	1.14114	1.14741					AVRG		1.20211		4.81916
50 2,4-Dinitrotoluene	+++++	0.25307	0.29824	0.31858	0.30040	0.30633					
	0.29555	0.30981					AVRG		0.29743		7.08057
51 Diethylphthalate	+++++	0.94215	1.02610	1.07432	0.99980	0.98701					
	0.95141	0.95004					AVRG		0.99012		4.86022

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	14071	43969	105849	128396	217824					
	255018	390419					LINR	0.15210	0.16724		0.99652
53 Fluorene	0.89941	0.94917	1.03641	1.08233	1.01112	1.00641					
	0.97983	0.99090					AVRG		0.99445		5.53573
54 4-Chlorophenylphenylether	+++++	0.51413	0.55022	0.58370	0.54287	0.55212					
	0.53675	0.55173					AVRG		0.54736		3.80860
55 2-Methyl-4,6-dinitrophenol	+++++	12837	44459	104894	133773	234249					
	277848	423559					LINR	0.19850	0.09795		0.99570
56 p-Nitroaniline	+++++	0.09524	0.09753	0.09849	0.08778	0.10616					
	0.11333	+++++					AVRG		0.09976		8.91814
133 Diphenylamine	+++++	0.41220	0.39607	0.40064	0.37402	0.38072					
	0.37482	0.41332					AVRG		0.39311		4.27057
58 1,2-Diphenylhydrazine	+++++	0.47390	0.51146	0.53163	0.49408	0.48123					
	0.45859	0.46295					AVRG		0.48769		5.44241
59 Tributylphosphate	+++++	0.93611	1.00727	1.01733	1.06767	1.06421					
	1.07800	1.05488					AVRG		1.03221		4.83912
61 4-Bromophenylphenylether	+++++	0.16555	0.17995	0.19299	0.18038	0.18154					
	0.17572	0.18754					AVRG		0.18052		4.81438

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
63 Hexachlorobenzene	+++++	0.18110	0.19756	0.20396	0.19230	0.19237						
	0.18432	0.19174					AVRG		0.19191		3.99111	
207 Atrazine	+++++	0.03457	0.03304	+++++	+++++	0.01580						
	0.01516	0.00441					AVRG		0.02060		62.59737	<-
65 Pentachlorophenol	+++++	17155	54261	133219	158706	275325						
	328732	490942					LINR	0.16286	0.11297		0.99712	
206 n-Octadecane	+++++	0.25432	0.27323	0.28870	0.26891	0.26490						
	0.25081	0.24964					AVRG		0.26436		5.33437	
68 Phenanthrene	0.73862	0.73226	0.78776	0.80554	0.76127	0.74608						
	0.70950	0.72888					AVRG		0.75124		4.26078	
69 Anthracene	0.68052	0.72323	0.79165	0.82251	0.76761	0.74693						
	0.71967	0.72544					AVRG		0.74720		6.05239	
72 Di-n-butylphthalate	+++++	0.80580	0.90274	0.94252	0.89139	0.85974						
	0.81610	0.79872					AVRG		0.85957		6.41454	
76 Fluoranthene	0.68758	0.79740	0.87718	0.92162	0.85800	0.83122						
	0.80482	0.80275					AVRG		0.82257		8.43347	
77 Benzidine	+++++	0.14241	0.11832	+++++	+++++	0.11685						
	0.13749	0.14337					AVRG		0.13169		9.93091	

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Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	0.74327	0.79248	0.86122	0.90593	0.82217	0.81621					
	0.77247	0.76811					AVRG		0.81023		6.58630
85 Butylbenzylphthalate	+++++	0.30152	0.35532	0.39574	0.36768	0.37392					
	0.36173	0.36416					AVRG		0.36001		8.01244
89 Benzo(a)anthracene	0.79661	0.75905	0.83143	0.88224	0.81756	0.80052					
	0.77503	0.79063					AVRG		0.80663		4.71092
90 3,3'-Dichlorobenzidine	+++++	0.22472	0.25680	+++++	+++++	0.28651					
	0.28815	0.29645					AVRG		0.27053		10.97312
92 Chrysene	0.71796	0.71455	0.77592	0.80262	0.74759	0.72786					
	0.70016	0.69597					AVRG		0.73533		5.11466
93 bis(2-Ethylhexyl)phthalate	7926	152141	400766	842654	992598	1555489					
	+++++	+++++					LINR	0.01278	0.54227		0.99788
94 Di-n-octylphthalate	+++++	0.69447	0.85556	0.97066	0.89544	0.90662					
	0.87221	0.86997					AVRG		0.86642		9.77684
95 Benzo(b)fluoranthene	0.64856	0.76776	0.86873	0.91742	0.84122	0.88072					
	0.82904	0.95219					AVRG		0.83820		11.32092
96 Benzo(k)fluoranthene	0.75511	0.78301	0.85963	0.94418	0.88393	0.83753					
	0.84838	0.78179					AVRG		0.83669		7.42267

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.49746	0.67779	0.77735	0.83560	0.78424	0.78360					
	0.76362	0.79281					AVRG		0.73906		14.50348
99 Indeno(1,2,3-cd)pyrene	13655	230839	571625	1119329	1485270	2231964					
	2740272	3942157					LINR	0.02754	0.85117		0.99928
100 Dibenzo(a,h)anthracene	11383	194289	484055	941279	1242196	1871982					
	2304325	3322133					LINR	0.02870	0.71627		0.99919
101 Benzo(ghi)perylene	0.45435	0.62075	0.67088	0.67953	0.70274	0.68415					
	0.68870	0.70141					AVRG		0.65031		12.80349
102 1,4-Dioxane	+++++	0.24634	0.28025	+++++	+++++	0.30356					
	0.29319	0.26953					AVRG		0.27857		7.94884
103 Methyl methacrylate	+++++	0.16872	0.16444	+++++	+++++	0.16505					
	0.18086	0.15892					AVRG		0.16760		4.89346
104 Ethyl methacrylate	+++++	0.66031	0.70980	+++++	+++++	0.69504					
	0.68531	0.66714					AVRG		0.68352		2.95664
105 2-Picoline	+++++	1.01746	1.07832	+++++	+++++	1.04828					
	1.03935	1.02355					AVRG		1.04139		2.30595
106 N-Nitrosomethylethylamine	+++++	0.31757	0.35447	+++++	+++++	0.37185					
	0.37790	0.37352					AVRG		0.35906		6.92083

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.44871	0.47910	+++++	+++++	0.44075					
	0.43643	0.44457					AVRG		0.44991		3.76452
108 N-Nitrosodiethylamine	+++++	0.30410	0.36077	+++++	+++++	0.37459					
	0.37925	0.38070					AVRG		0.35988		8.93633
109 Ethyl Methanesulfonate	+++++	0.52387	0.54987	+++++	+++++	0.53861					
	0.52806	0.54078					AVRG		0.53624		1.93775
110 Pentachloroethane	+++++	0.30723	0.32723	+++++	+++++	0.32393					
	0.32208	0.31995					AVRG		0.32008		2.39449
111 N-Nitrosopyrrolidine	+++++	18119	50578	+++++	+++++	275191					
	347837	418958					LINR	0.09385	0.41052		0.99979
113 N-Nitrosomorpholine	+++++	0.31286	0.38027	+++++	+++++	0.40465					
	0.39989	0.39689					AVRG		0.37891		10.04075
114 o-Toluidine	+++++	1.35701	1.45906	+++++	+++++	1.45255					
	1.43423	1.43439					AVRG		1.42745		2.86402
115 N-Nitrosopiperidine	+++++	0.09506	0.11290	+++++	+++++	0.12040					
	0.12000	0.12173					AVRG		0.11402		9.77130
116 a,a-Dimethylphenethylamine	+++++	67223	221950	+++++	+++++	1304888					
	1645063	1941742					LINR	0.12017	0.55348		0.99966

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Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
117 Triethylphosphorothioate	+++++	0.16537	0.16522	0.16826	0.17549	0.18113						
	0.18346	0.18351					AVRG		0.17464		4.76002	
118 2,6-Dichlorophenol	+++++	0.17667	0.20374	+++++	+++++	0.21733						
	0.21628	0.22228					AVRG		0.20726		8.88487	
119 Hexachloropropene	+++++	0.09341	0.12175	+++++	+++++	0.12774						
	0.13457	0.13555					AVRG		0.12260		14.06913	
120 p-Phenylenediamine	+++++	0.04451	0.09259	+++++	+++++	0.11802						
	0.14321	0.07722					AVRG		0.09511		39.77786	<-
121 N-Nitrosodi-n-butylamine	+++++	0.12388	0.14468	+++++	+++++	0.14675						
	0.14779	0.14275					AVRG		0.14117		6.98114	
122 Safrole	+++++	0.18511	0.20314	+++++	+++++	0.20383						
	0.19860	0.20325					AVRG		0.19879		3.98688	
123 1,2,4,5-Tetrachlorobenzene	+++++	0.44675	0.47581	+++++	+++++	0.47640						
	0.47142	0.46516					AVRG		0.46711		2.61935	
124 Isosafrole	+++++	0.28246	0.31435	+++++	+++++	0.32006						
	0.31708	0.32066					AVRG		0.31092		5.18056	
125 1,4-Naphthoquinone	+++++	0.26279	0.33670	+++++	+++++	0.28475						
	0.25902	0.21482					AVRG		0.27162		16.33213	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.13426	0.16096	0.17529	0.16515	0.17075					
	0.16615	0.17238					AVRG		0.16356		8.43299
127 Pentachlorobenzene	+++++	0.41386	0.44358	+++++	+++++	0.43445					
	0.42287	0.42694					AVRG		0.42834		2.63934
128 1-Naphthylamine	+++++	0.64290	0.71157	+++++	+++++	0.72798					
	0.75065	0.72826					AVRG		0.71227		5.78366
129 2-Naphthylamine	+++++	0.63606	0.67439	+++++	+++++	0.58978					
	0.64536	0.64782					AVRG		0.63868		4.82722
130 2,3,4,6-Tetrachlorophenol	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
131 5-Nitro-o-toluidine	+++++	27455	74724	+++++	+++++	413995					
	505367	634837					LINR	0.10089	0.28578		0.99956
132 Thionazin	+++++	0.13988	0.14775	0.15045	0.15424	0.15690					
	0.16203	0.16237					AVRG		0.15337		5.26573
134 Sulfotepp	+++++	0.11412	0.11494	0.11319	0.11600	0.11480					
	0.11400	0.11009					AVRG		0.11388		1.65743
135 Phorate	+++++	0.28388	0.29681	0.29037	0.30244	0.30088					
	0.30582	0.29054					AVRG		0.29582		2.65683

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	13955	48364	+++++	+++++	268631					
	340694	456398					LINR	0.16614	0.10906		0.99628
137 Phenacetin	+++++	0.17628	0.21001	+++++	+++++	0.23782					
	0.23708	0.23917					AVRG		0.22007		12.41888
138 Diallate	+++++	0.16761	0.18197	+++++	+++++	0.18302					
	0.17779	0.17698					AVRG		0.17747		3.43512
139 Dimethoate	+++++	0.13778	0.14938	0.15610	0.16928	0.17565					
	0.17871	0.17715					AVRG		0.16343		9.72135
140 4-Aminobiphenyl	+++++	0.37135	0.35332	+++++	+++++	0.32358					
	0.31870	0.29146					AVRG		0.33168		9.40668
141 Pentachloronitrobenzene	+++++	0.07139	0.07657	+++++	+++++	0.08321					
	0.08092	0.07832					AVRG		0.07808		5.77895
142 Pronamide	+++++	0.22821	0.24842	+++++	+++++	0.26720					
	0.25993	0.25910					AVRG		0.25257		6.00962
143 Dinoseb	+++++	17592	65243	160618	206017	370757					
	432801	653659					LINR	0.20878	0.15287		0.99661
144 Disulfoton	+++++	0.23435	0.24175	0.24250	0.25185	0.25151					
	0.25868	0.24626					AVRG		0.24670		3.25947

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	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.10756	0.12574	0.13745	0.15086	0.15374					
	0.16380	0.16473					AVRG		0.14341		14.69707
146 4-Nitroquinoline-1-oxide	+++++	0.00937	0.01228	+++++	+++++	0.00993					
	0.00944	0.00861					AVRG		0.00993		14.10180
147 Methapyrilene	+++++	0.23032	0.26350	+++++	+++++	0.25837					
	0.25388	0.25397					AVRG		0.25201		5.05822
148 Isodrin	+++++	0.08985	0.09732	+++++	+++++	0.10370					
	0.10020	0.10192					AVRG		0.09860		5.50608
149 Aramite	+++++	0.03284	0.03952	+++++	+++++	0.04489					
	0.04319	0.04214					AVRG		0.04052		11.63768
150 Kepone	+++++	0.07101	0.07864	+++++	+++++	0.07592					
	0.07559	0.08027					AVRG		0.07629		4.63038
151 p-(Dimethylamino)azobenzene	+++++	0.17522	0.21262	+++++	+++++	0.22053					
	0.21845	0.21324					AVRG		0.20801		8.95997
152 Chlorobenzilate	+++++	0.23225	0.25848	+++++	+++++	0.28615					
	0.27698	0.27112					AVRG		0.26500		7.87735
153 3,3'-Dimethylbenzidine	+++++	0.33926	0.36462	+++++	+++++	0.35940					
	0.37441	0.36902					AVRG		0.36134		3.74367

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
154 Famphur	+++++	0.25103	0.28114	0.28876	0.31048	0.31944						
	0.33910	0.31592					AVRG		0.30084		9.73369	
155 2-Acetylaminofluorene	+++++	47120	145263	+++++	+++++	949702						
	1100767	1503747					LINR	0.14865	0.33609		0.99853	
157 7,12Dimethylbenz(a)anthracene	+++++	0.38032	0.42131	+++++	+++++	0.44350						
	0.44038	0.42979					AVRG		0.42306		6.01820	
158 3-Methylcholanthrene	+++++	0.30375	0.34529	+++++	+++++	0.39857						
	0.39085	0.39392					AVRG		0.36648		11.21865	
26 Phthalic anhydride	+++++	0.07507	0.06934	0.09549	0.09747	0.09550						
	0.08993	0.08635					AVRG		0.08702		12.56366	
173 Carbazole	14837	139367	246691	487385	568160	1090154						
	1254429	+++++					LINR	0.04109	0.39552		0.99187	
174 Hexachlorophene	+++++	435932	2361068	+++++	4538044	4556630						
	4552314	+++++					LINR	9.14609	0.09969		0.99353	
179 Dibenzo(a,e)pyrene	+++++	0.31362	0.35554	0.33118	0.43912	0.41638						
	0.44192	0.45643					AVRG		0.39346		14.89785	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	ml	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	4343	14231	37456	44264	71290					
	83708	+++++					LINR	0.08539	0.11280		0.99437
191 Parathion	+++++	0.06337	0.07126	0.07805	0.08155	0.08375					
	0.08775	0.08748					AVRG		0.07903		11.34928
192 Methoxychlor	+++++	0.37316	0.43593	0.46907	0.48881	0.49691					
	0.47438	0.46605					AVRG		0.45776		9.18359
210 m-Toluidine	+++++	1.01730	0.95828	1.04153	1.07045	1.03819					
	1.06035	1.06455					AVRG		1.03581		3.74343
211 p-Toluidine	+++++	49683	78529	211799	266816	507067					
	569514	+++++					LINR	0.14181	0.78212		0.99497
212 Cis Diallate	+++++	0.14773	0.16624	+++++	+++++	0.17545					
	0.17147	0.16996					AVRG		0.16617		6.51318
213 Trans Diallate	+++++	0.19719	0.21409	+++++	+++++	0.21532					
	0.20917	0.20821					AVRG		0.20879		3.43512
214 1,4-Dinitrobenzene	+++++	0.12784	0.15121	0.16974	0.15587	0.16620					
	0.16695	0.17540					AVRG		0.15903		10.07655
215 2-Ethoxyethanol	+++++	0.38685	0.41544	0.41160	0.40973	0.41987					
	0.40092	0.36487					AVRG		0.40133		4.83383

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
216 Methylenebis(2-chloroaniline)	+++++	0.09027	0.07877	0.09631	0.10183	0.11537					
	0.11302	+++++					AVRG		0.09926		13.99534
229 2,2'-Dichlorobenzil	+++++	0.40624	0.44915	0.45206	0.46835	0.49924					
	0.50127	0.49121					AVRG		0.46679		7.33567
230 4-Chlorothioanisole	+++++	0.23519	0.25134	0.25866	0.26118	0.27506					
	0.27431	0.27443					AVRG		0.26145		5.67051
231 4-Chlorothiophenol	+++++	33730	109582	208710	270504	591872					
	637096	698168					LINR	0.16729	0.22127		0.99837
232 bis(p-Chlorophenyl)sulfone	+++++	0.27790	0.28817	0.28727	0.29340	0.31372					
	0.31573	0.30820					AVRG		0.29777		4.94706
233 bis(p-Chlorophenyl)disulfide	+++++	0.08649	0.09716	0.09996	0.10104	0.11282					
	0.11321	0.11036					AVRG		0.10301		9.49989
234 Diphenyl disulfide	+++++	0.17703	0.18827	0.19313	0.19397	0.19743					
	0.19934	0.19498					AVRG		0.19202		3.89349
235 Diphenyl sulfide	+++++	0.73815	0.76067	0.76884	0.77583	0.77384					
	0.77835	0.76108					AVRG		0.76525		1.80366
236 Phenyl sulfone	+++++	0.32490	0.33335	0.34401	0.34629	0.34828					
	0.35151	0.34243					AVRG		0.34154		2.72169

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
237 Hydroxymethyl phthalimide	+++++	0.15868	0.13541	0.13994	0.13819	0.13830					
	0.13473	0.14129					AVRG		0.14093		5.78993
238 Phthalic acid	+++++	34594	90147	182251	231472	444665					
	541872	587383					LINR	0.16006	0.18293		0.99675
239 Thiophenol	+++++	0.64619	0.81626	0.89508	0.92244	0.99432					
	1.00016	1.00671					AVRG		0.89731		14.54651
240 bis(Chloromethyl)ether	+++++	0.74313	0.76318	0.75550	0.73293	0.77257					
	0.73038	0.75865					AVRG		0.75091		2.10971
241 Octachlorostyrene	+++++	0.08120	0.08332	0.08290	0.08503	0.08678					
	0.08899	0.08481					AVRG		0.08472		3.05713
M 225 Trichlorophenols	+++++	0.25256	0.28477	0.31039	0.30098	0.30758					
	0.30176	0.32123					AVRG		0.29704		7.57948
M 226 Tetrachlorophenols	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
M 227 Benzo(b,k)fluoranthene	0.70183	0.77538	0.86418	0.93080	0.86257	0.85913					
	0.83871	0.86699					AVRG		0.83745		8.27901
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.77799	0.82940	0.84165	0.83307	0.84646						
	0.82089	0.84901					AVRG		0.82835		2.93507	
$ 5 Phenol-d5	+++++	0.94004	1.02783	1.06321	1.02953	1.04638						
	1.02443	1.06043					AVRG		1.02741		4.04817	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27903	0.29718	0.29088	0.25443	0.23402						
	0.21749	0.21713					AVRG		0.25574		13.28145	
$ 39 2-Fluorobiphenyl	+++++	0.99517	1.04673	1.06867	1.00896	1.00442						
	0.97367	0.97597					AVRG		1.01051		3.50349	
$ 60 2,4,6-Tribromophenol	+++++	0.12029	0.14713	0.16005	0.15035	0.15227						
	0.14829	0.15735					AVRG		0.14796		8.83326	
$ 81 p-Terphenyl-d14	+++++	0.54698	0.59094	0.62904	0.57872	0.57377						
	0.54438	0.54045					AVRG		0.57204		5.54873	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Cal Date : 03-Dec-2009 12:14 rmb

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	0.82835	0.83029	0.83029	0.000	0.23433	60.00000	Averaged	
$	5 Phenol-d5	1.02741	0.99434	0.99434	0.000	-3.21879	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.25574	0.27844	0.27844	0.000	8.87699	60.00000	Averaged	
$	39 2-Fluorobiphenyl	1.01051	1.03773	1.03773	0.000	2.69384	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.14796	0.14657	0.14657	0.000	-0.93966	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.57204	0.62712	0.62712	0.000	9.62917	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.45921	0.42939	0.42939	0.000	-6.49389	60.00000	Averaged	
	2 Pyridine	0.65138	0.55949	0.55949	0.000	-14.10583	60.00000	Averaged	
	4 Aniline	0.40115	0.39878	0.39878	0.000	-0.58986	60.00000	Averaged	
	6 Phenol	1.07292	1.03238	1.03238	0.001	-3.77875	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.63389	0.62332	0.62332	0.000	-1.66734	60.00000	Averaged	
	8 2-Chlorophenol	0.92015	0.89132	0.89132	0.000	-3.13291	60.00000	Averaged	
	203 n-Decane	0.83349	0.87112	0.87112	0.000	4.51494	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.10185	1.09484	1.09484	0.000	-0.63588	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.11853	1.10496	1.10496	0.001	-1.21340	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.05853	1.04676	1.04676	0.000	-1.11250	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	1.00756	0.99850	0.99850	0.000	-0.89937	60.00000	Averaged	
	12 Benzyl alcohol	0.58054	0.55960	0.55960	0.000	-3.60740	60.00000	Averaged	
	15 o-Cresol	0.73443	0.71543	0.71543	0.000	-2.58644	60.00000	Averaged	
	18 m,p-Cresols	0.93489	0.91075	0.91075	0.000	-2.58249	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.48281	0.48060	0.48060	0.050	-0.45716	60.00000	Averaged	spcc
	19 Hexachloroethane	0.41297	0.38700	0.38700	0.000	-6.28851	60.00000	Averaged	
	21 Nitrobenzene	0.23812	0.24737	0.24737	0.000	3.88288	60.00000	Averaged	
	22 Isophorone	0.44222	0.44350	0.44350	0.000	0.28843	60.00000	Averaged	
	23 2-Nitrophenol	0.12401	0.11747	0.11747	0.001	-5.27545	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.21392	0.21469	0.21469	0.000	0.35583	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.24742	0.23888	0.23888	0.000	-3.45098	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.19949	0.19843	0.19843	0.001	-0.53268	20.00000	Averaged	ccc
	27 Benzoic acid	0.11033	0.11800	0.11800	0.000	6.95226	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24997	0.24504	0.24504	0.000	-1.97055	60.00000	Averaged	
	30 Naphthalene	0.69229	0.76058	0.76058	0.000	9.86346	60.00000	Averaged	
	204 alpha-Terpineol	0.16160	0.15093	0.15093	0.000	-6.60421	60.00000	Averaged	
	31 4-Chloroaniline	0.27721	0.26915	0.26915	0.000	-2.90716	60.00000	Averaged	
	32 Hexachlorobutadiene	0.16258	0.16847	0.16847	0.001	3.62286	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.19655	0.18982	0.18982	0.001	-3.42299	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.47745	0.54686	0.54686	0.000	14.53758	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.46395	0.51084	0.51084	0.000	10.10698	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16140	0.11816	0.11816	0.050	-26.78720	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.46121	0.43794	0.43794	0.000	-5.04574	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.29051	0.26846	0.26846	0.001	-7.58993	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.30357	0.30531	0.30531	0.000	0.57382	60.00000	Averaged	
40 2-Chloronaphthalene	0.84403	0.82711	0.82711	0.000	-2.00427	60.00000	Averaged	
42 o-Nitroaniline	0.22389	0.21429	0.21429	0.000	-4.28607	60.00000	Averaged	
41 m-Nitroaniline	32.25605	40.00000	0.09351	0.000	-19.35986	60.00000	Linear	
43 Dimethylphthalate	0.99502	1.00014	1.00014	0.000	0.51409	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.23251	0.22347	0.22347	0.000	-3.88808	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.29743	0.29372	0.29372	0.000	-1.24745	60.00000	Averaged	
45 Acenaphthylene	1.28545	1.44563	1.44563	0.000	12.46144	60.00000	Averaged	
47 Acenaphthene	0.82864	0.86500	0.86500	0.001	4.38855	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	31.49171	40.00000	0.05561	0.050	-21.27072	60.00000	Linear	spcc
49 Dibenzofuran	1.20211	1.19562	1.19562	0.000	-0.53995	60.00000	Averaged	
51 Diethylphthalate	0.99012	1.00550	1.00550	0.000	1.55350	60.00000	Averaged	
52 4-Nitrophenol	35.69942	40.00000	0.12382	0.050	-10.75144	60.00000	Linear	spcc
53 Fluorene	0.99445	1.07305	1.07305	0.000	7.90438	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.54736	0.53200	0.53200	0.000	-2.80637	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	39.60786	40.00000	0.07755	0.000	-0.98036	60.00000	Linear	
56 p-Nitroaniline	0.09976	0.09283	0.09283	0.000	-6.94521	60.00000	Averaged	
133 Diphenylamine	0.39311	0.36704	0.36704	0.001	-6.63338	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.48769	0.48502	0.48502	0.000	-0.54741	60.00000	Averaged	
61 4-Bromophenylphenylether	0.18052	0.17126	0.17126	0.000	-5.13387	60.00000	Averaged	
63 Hexachlorobenzene	0.19191	0.18523	0.18523	0.000	-3.47929	60.00000	Averaged	
65 Pentachlorophenol	36.05605	40.00000	0.08343	0.001	-9.85987	20.00000	Linear	ccc
206 n-Octadecane	0.26436	0.25557	0.25557	0.000	-3.32275	60.00000	Averaged	
68 Phenanthrene	0.75124	0.80888	0.80888	0.000	7.67214	60.00000	Averaged	
69 Anthracene	0.74720	0.83500	0.83500	0.000	11.75132	60.00000	Averaged	
72 Di-n-butylphthalate	0.85957	0.89892	0.89892	0.000	4.57698	60.00000	Averaged	
76 Fluoranthene	0.82257	0.93022	0.93022	0.001	13.08693	20.00000	Averaged	ccc
79 Pyrene	0.81023	0.89526	0.89526	0.000	10.49463	60.00000	Averaged	
85 Butylbenzylphthalate	0.36001	0.36740	0.36740	0.000	2.05224	60.00000	Averaged	
89 Benzo(a)anthracene	0.80663	0.86024	0.86024	0.000	6.64603	60.00000	Averaged	
92 Chrysene	0.73533	0.80028	0.80028	0.000	8.83303	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	39.93372	40.00000	0.53444	0.000	-0.16569	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.87303	0.87303	0.001	0.76265	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.92559	0.92559	0.000	10.42552	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.89887	0.89887	0.000	7.43117	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.83326	0.83326	0.001	12.74672	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	42.59286	40.00000	0.88290	0.000	6.48214	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	42.30047	40.00000	0.73690	0.000	5.75119	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.75185	0.75185	0.000	15.61349	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.15432	0.15432	0.000	-5.65249	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
	143 Dinoseb	32.63928	40.00000	0.09282	0.000	-18.40180	60.00000	Linear	
	173 Carbazole	38.13875	40.00000	0.36087	0.000	-4.65311	60.00000	Linear	
	184 p-Benzoquinone	36.94068	40.00000	0.09454	0.000	-7.64830	60.00000	Linear	
	192 Methoxychlor	0.45776	0.42935	0.42935	0.000	-6.20645	60.00000	Averaged	
	211 p-Toluidine	36.08309	40.00000	0.59462	0.000	-9.79228	60.00000	Linear	
	210 m-Toluidine	1.03581	0.92304	0.92304	0.000	-10.88701	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.10069	0.10069	0.000	15.70689	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.28402	0.28402	0.000	-27.81494	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.15861	0.15861	0.000	-0.26496	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.33769	0.33769	0.000	-15.85683	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.08744	0.08744	0.000	-11.91594	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.28689	0.28689	0.000	-3.41833	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.91223	0.91223	0.000	8.92968	60.00000	Averaged	

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Data file : /chem/MSD5.i/s113009.b/s5k3023.d
Lab Smp Id: WBN091106-09.3 Client Smp ID: MEGAICV
Inj Date : 30-NOV-2009 18:20
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-09.3|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 01-Dec-2009 07:52 rmb Quant Type: ISTD
Cal Date : 30-NOV-2009 17:28 Cal File: s5k3021.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	241000	40.0000	
* 29 Naphthalene-d8	136	4.826	4.826	(1.000)	918322	40.0000	
* 46 Acenaphthene-d10	164	6.088	6.088	(1.000)	516156	40.0000	
* 67 Phenanthrene-d10	188	7.268	7.268	(1.000)	970034	40.0000	
* 91 Chrysene-d12	240	9.694	9.694	(1.000)	1047303	40.0000	
* 98 Perylene-d12	264	11.414	11.414	(1.000)	981599	40.0000	
$ 3 2-Fluorophenol	112	3.126	3.126	(0.791)	200101	40.0000	40.1
$ 5 Phenol-d5	99	3.661	3.661	(0.926)	239635	40.0000	38.7
$ 20 Nitrobenzene-d5	82	4.321	4.321	(0.895)	255698	40.0000	43.6
$ 39 2-Fluorobiphenyl	172	5.568	5.568	(0.915)	535633	40.0000	41.1
$ 60 2,4,6-Tribromophenol	329	6.685	6.685	(1.098)	75654	40.0000	39.6
$ 81 p-Terphenyl-d14	244	8.650	8.650	(0.892)	656788	40.0000	43.8
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.419	(0.612)	103482	40.0000	37.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.452	2.452	(0.620)	134838	40.0000	34.4
4 Aniline	66	3.738	3.738	(0.945)	96106	40.0000	39.8
6 Phenol	94	3.670	3.670	(0.928)	248803	40.0000	38.5(Q)
7 bis(2-Chloroethyl) ether	63	3.752	3.752	(0.949)	150220	40.0000	39.3
8 2-Chlorophenol	128	3.820	3.820	(0.966)	214809	40.0000	38.7
203 n-Decane	43	3.800	3.800	(0.961)	209941	40.0000	41.8
9 1,3-Dichlorobenzene	146	3.921	3.921	(0.991)	263857	40.0000	39.7
11 1,4-Dichlorobenzene	146	3.964	3.964	(1.002)	266296	40.0000	39.5
13 1,2-Dichlorobenzene	146	4.070	4.070	(1.029)	252268	40.0000	39.6
14 bis(2-Chloroisopropyl)ether	45	4.099	4.099	(1.037)	240639	40.0000	39.6
12 Benzyl alcohol	108	4.017	4.017	(1.016)	134864	40.0000	38.6
15 o-Cresol	107	4.070	4.070	(1.029)	172419	40.0000	39.0
18 m,p-Cresols	107	4.166	4.166	(1.054)	219491	40.0000	39.0
17 N-Nitrosodipropylamine	70	4.191	4.191	(1.060)	115825	40.0000	39.8(H)
19 Hexachloroethane	117	4.301	4.301	(1.088)	93268	40.0000	37.5
21 Nitrobenzene	77	4.330	4.330	(0.897)	227163	40.0000	41.6
22 Isophorone	82	4.484	4.484	(0.929)	407276	40.0000	40.1
23 2-Nitrophenol	139	4.547	4.547	(0.942)	107877	40.0000	37.9
24 2,4-Dimethylphenol	122	4.537	4.537	(0.940)	197151	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.605	4.605	(0.954)	219371	40.0000	38.6
26 2,4-Dichlorophenol	162	4.706	4.706	(0.975)	182222	40.0000	39.8
27 Benzoic acid	105	4.590	4.590	(0.951)	108359	40.0000	42.8
28 1,2,4-Trichlorobenzene	180	4.773	4.773	(0.989)	225027	40.0000	39.2
30 Naphthalene	128	4.841	4.841	(1.003)	698453	40.0000	43.9
204 alpha-Terpineol	59	4.812	4.812	(0.997)	138598	40.0000	37.4
31 4-Chloroaniline	127	4.841	4.841	(1.003)	247168	40.0000	38.8
32 Hexachlorobutadiene	225	4.908	4.908	(1.017)	154713	40.0000	41.4
33 4-Chloro-3-methylphenol	107	5.163	5.163	(1.070)	174316	40.0000	38.6
34 2-Methylnaphthalene	142	5.322	5.322	(1.103)	502193	40.0000	45.8
35 1-Methylnaphthalene	142	5.399	5.399	(1.119)	469118	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.428	5.428	(0.892)	60991	40.0000	29.3
205 2,3-Dichloroaniline	161	5.520	5.520	(0.907)	226045	40.0000	38.0
37 2,4,6-Trichlorophenol	196	5.510	5.510	(0.905)	138566	40.0000	37.0
38 2,4,5-Trichlorophenol	196	5.539	5.539	(0.910)	157589	40.0000	40.2
40 2-Chloronaphthalene	162	5.678	5.678	(0.933)	426918	40.0000	39.2
42 o-Nitroaniline	65	5.736	5.736	(0.942)	110609	40.0000	38.3
41 m-Nitroaniline	138	6.035	6.035	(0.991)	48268	40.0000	32.2
43 Dimethylphthalate	163	5.842	5.842	(0.960)	516226	40.0000	40.2
44 2,6-Dinitrotoluene	165	5.900	5.900	(0.969)	115345	40.0000	38.4
50 2,4-Dinitrotoluene	165	6.199	6.199	(1.018)	151603	40.0000	39.5
45 Acenaphthylene	152	5.987	5.987	(0.983)	746171	40.0000	45.0
47 Acenaphthene	154	6.112	6.112	(1.004)	446477	40.0000	41.8
48 2,4-Dinitrophenol	184	6.102	6.102	(1.002)	28705	40.0000	31.5
49 Dibenzofuran	168	6.237	6.237	(1.025)	617128	40.0000	39.8
51 Diethylphthalate	149	6.353	6.353	(1.044)	518995	40.0000	40.6
52 4-Nitrophenol	139	6.117	6.117	(1.005)	63912	40.0000	35.7
53 Fluorene	166	6.502	6.502	(1.068)	553863	40.0000	43.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.473	6.473	(1.063)	274594	40.0000	38.9
55 2-Methyl-4,6-dinitrophenol	198	6.512	6.512	(0.896)	75224	40.0000	39.6
56 p-Nitroaniline	138	6.497	6.497	(1.067)	47914	40.0000	37.2
133 Diphenylamine	169	6.564	6.564	(0.903)	356038	40.0000	37.3
58 1,2-Diphenylhydrazine	77	6.598	6.598	(0.908)	470487	40.0000	39.8
61 4-Bromophenylphenylether	248	6.868	6.868	(0.945)	166125	40.0000	37.9
63 Hexachlorobenzene	284	6.940	6.940	(0.955)	179680	40.0000	38.6
65 Pentachlorophenol	266	7.089	7.089	(0.975)	80931	40.0000	36.0
206 n-Octadecane	57	7.075	7.075	(0.973)	247915	40.0000	38.7
68 Phenanthrene	178	7.287	7.287	(1.003)	784638	40.0000	43.1
69 Anthracene	178	7.330	7.330	(1.009)	809979	40.0000	44.7
72 Di-n-butylphthalate	149	7.686	7.686	(1.058)	871980	40.0000	41.8
76 Fluoranthene	202	8.337	8.337	(1.147)	902346	40.0000	45.2
79 Pyrene	202	8.553	8.553	(0.882)	937612	40.0000	44.2
85 Butylbenzylphthalate	149	9.083	9.083	(0.937)	384776	40.0000	40.8
89 Benzo(a)anthracene	228	9.680	9.680	(0.998)	900935	40.0000	42.6
92 Chrysene	228	9.719	9.719	(1.002)	838136	40.0000	43.5
93 bis(2-Ethylhexyl)phthalate	149	9.608	9.608	(0.991)	559723	40.0000	39.9
94 Di-n-octylphthalate	149	10.277	10.277	(0.900)	856961	40.0000	40.3
95 Benzo(b)fluoranthene	252	10.879	10.879	(0.953)	908560	40.0000	44.2(H)
96 Benzo(k)fluoranthene	252	10.918	10.918	(0.957)	882331	40.0000	43.0
97 Benzo(a)pyrene	252	11.332	11.332	(0.993)	817930	40.0000	45.1
99 Indeno(1,2,3-cd)pyrene	276	13.239	13.239	(1.160)	866655	40.0000	42.6
100 Dibenzo(a,h)anthracene	278	13.253	13.253	(1.161)	723343	40.0000	42.3
101 Benzo(ghi)perylene	276	13.797	13.797	(1.209)	738017	40.0000	46.2
126 m-Dinitrobenzene	168	5.881	5.881	(0.966)	79652	40.0000	37.7
130 2,3,4,6-Tetrachlorophenol	232	6.314	6.314	(1.037)	122646	40.0000	36.3
143 Dinoseb	211	7.210	7.210	(0.992)	90043	40.0000	32.6
173 Carbazole	167	7.446	7.446	(1.024)	350056	40.0000	38.1
184 p-Benzoquinone	54	3.435	3.435	(0.868)	22785	40.0000	36.9
192 Methoxychlor	227	9.560	9.560	(0.986)	449656	40.0000	37.5
211 p-Toluidine	106	4.229	4.229	(1.069)	143304	40.0000	36.1
210 m-Toluidine	106	4.253	4.253	(1.075)	222452	40.0000	35.6
26 Phthalic anhydride	104	5.351	5.351	(1.109)	92464	40.0000	46.3
179 Dibenzo(a,e)pyrene	302	18.054	18.054	(1.582)	278791	40.0000	28.9(H)
214 1,4-Dinitrobenzene	75	5.823	5.823	(0.956)	81867	40.0000	39.9
215 2-Ethoxyethanol	59	2.255	2.255	(0.570)	81383	40.0000	33.6
216 Methylenebis(2-chloroaniline)	231	9.622	9.622	(0.993)	91571	40.0000	35.2(Q)
M 225 Trichlorophenols	196				296155	80.0000	77.3
M 226 Tetrachlorophenols	232				122646	40.0000	36.3
M 227 Benzo(b,k)fluoranthene	252				1790891	80.0000	87.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s113009.b/s5k3023.d
Date : 30-NOV-2009 18:20
Client ID: MEGAICV
Sample Info: IWBN091106-09,3140 PPM|1|SVH|1|MEGAICV
Volume Injected (ul): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

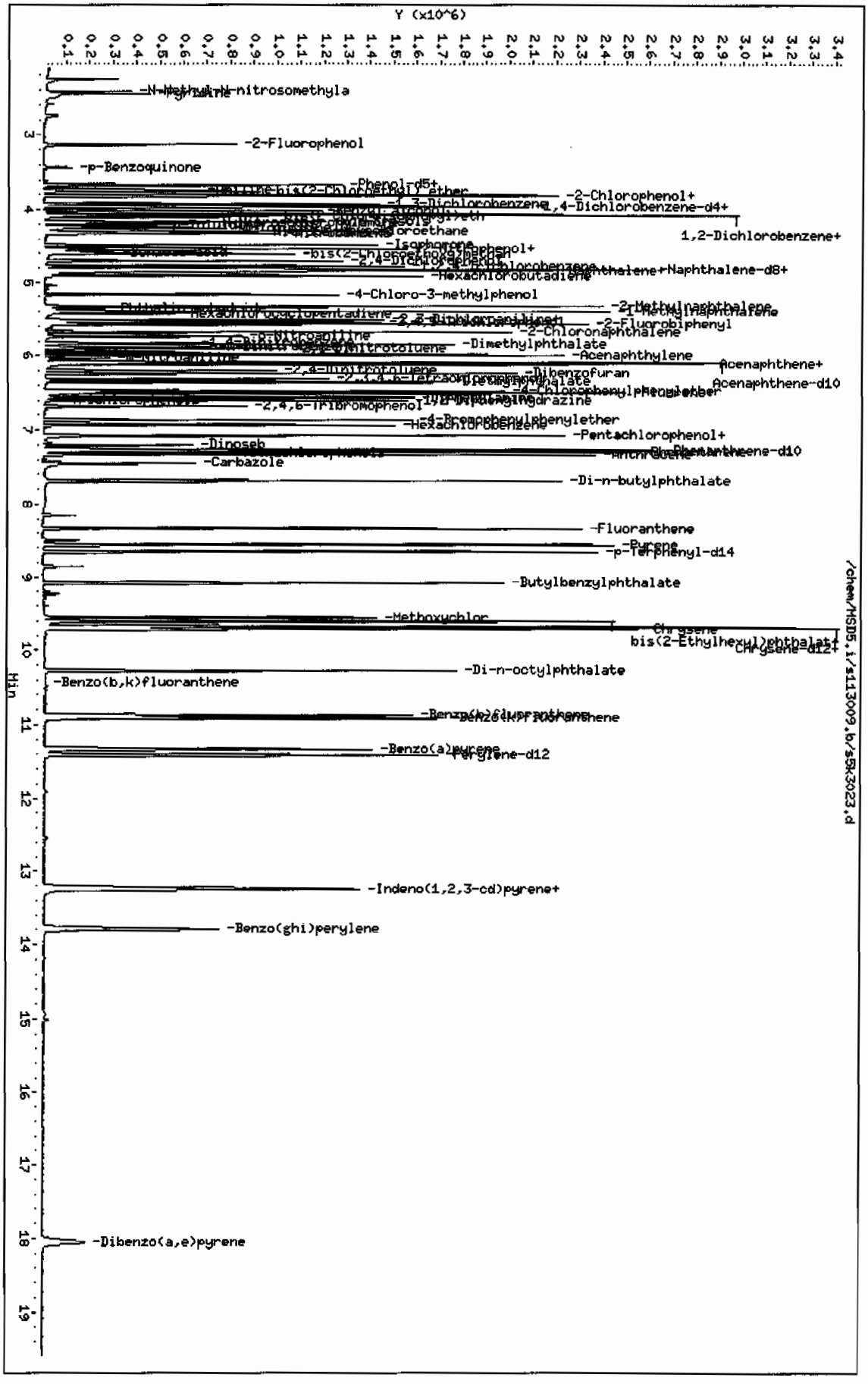

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 01-DEC-2009 00:10
Lab File ID: s5k3038.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.65043	0.65043	0.000	-12.29758	60.00000	Averaged
16 Acetophenone	1.03433	1.03897	1.03897	0.000	0.44885	60.00000	Averaged
189 Caprolactam	0.07313	0.07820	0.07820	0.000	6.93169	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.14668	1.14668	0.000	8.19727	60.00000	Averaged
207 Atrazine	0.02060	0.02454	0.02454	0.000	19.14280	60.00000	Averaged
77 Benzidine	0.13169	0.08089	0.08089	0.000	-38.57488	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.27627	0.27627	0.000	2.12244	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.33600	0.33600	0.000	20.61484	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.19248	0.19248	0.000	14.84568	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.84583	0.84583	0.000	23.74639	60.00000	Averaged
105 2-Picoline	1.04139	1.00530	1.00530	0.000	-3.46598	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.36760	0.36760	0.000	2.37797	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.50459	0.50459	0.000	12.15234	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.35101	0.35101	0.000	-2.46475	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.67398	0.67398	0.000	25.68542	60.00000	Averaged
110 Pentachloroethane	0.32008	0.45290	0.45290	0.000	41.49317	60.00000	Averaged
111 N-Nitrosopyrrolidine	36.47218	40.00000	0.33578	0.000	-8.81956	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.37347	0.37347	0.000	-1.43685	60.00000	Averaged
114 o-Toluidine	1.42745	1.44299	1.44299	0.000	1.08876	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.11246	0.11246	0.000	-1.36442	60.00000	Averaged
116 a,a-Dimethylphenethylamine	38.19678	40.00000	0.46202	0.000	-4.50804	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.21709	0.21709	0.000	4.74185	60.00000	Averaged
119 Hexachloropropene	0.12260	0.18393	0.18393	0.000	50.01830	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.10774	0.10774	0.000	13.27805	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.14117	0.13700	0.13700	0.000	-2.95714	60.00000	Averaged
122 Safrole	0.19879	0.23876	0.23876	0.000	20.10710	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.51426	0.51426	0.000	10.09541	60.00000	Averaged
124 Isosafrole	0.31092	0.42686	0.42686	0.000	37.28900	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.33682	0.33682	0.000	24.00722	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.45613	0.45613	0.000	6.48820	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.70896	0.70896	0.000	-0.46534	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.51413	0.51413	0.000	-19.50189	60.00000	Averaged
131 5-Nitro-o-toluidine	38.89551	40.00000	0.24906	0.000	-2.76124	60.00000	Linear
136 1,3,5-Trinitrobenzene	45.79543	40.00000	0.10675	0.000	14.48858	60.00000	Linear
137 Phenacetin	0.22007	0.24075	0.24075	0.000	9.39579	60.00000	Averaged
138 Diallate	0.17747	0.17603	0.17603	0.000	-0.81534	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 01-DEC-2009 00:10
Lab File ID: s5k3038.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.22410	0.22410	0.000	34.86393	60.00000	Averaged
213 Trans Diallate	0.20879	0.20709	0.20709	0.000	-0.81534	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.31377	0.31377	0.000	-5.40004	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08582	0.08582	0.000	9.90245	60.00000	Averaged
142 Pronamide	0.25257	0.28719	0.28719	0.000	13.70900	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01196	0.01196	0.000	20.41909	60.00000	Averaged
147 Methapyrilene	0.25201	0.29827	0.29827	0.000	18.35726	60.00000	Averaged
148 Isodrin	0.09860	0.09378	0.09378	0.000	-4.88678	60.00000	Averaged
149 Aramite	0.04052	0.04013	0.04013	0.000	-0.95220	60.00000	Averaged
150 Kepone	0.07629	0.06942	0.06942	0.000	-9.00509	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.21652	0.21652	0.000	4.09057	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.26342	0.26342	0.000	-0.59569	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.33149	0.33149	0.000	-8.26293	60.00000	Averaged
155 2-Acetylaminofluorene	38.79550	40.00000	0.27601	0.000	-3.01125	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.43251	0.43251	0.000	2.23307	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.40112	0.40112	0.000	9.45325	60.00000	Averaged

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Data file : /chem/MSD5.i/s113009.b/s5k3038.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: AP12ICV
Inj Date : 01-DEC-2009 00:10
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091111-08.1|50 PPM|1|SVM|1|AP12ICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 02-Dec-2009 13:38 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 12:54 Cal File: s5k3048.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.948	3.948	(1.000)	321448	40.0000	
* 29 Naphthalene-d8	136	4.825	4.825	(1.000)	1142641	40.0000	
* 46 Acenaphthene-d10	164	6.084	6.084	(1.000)	698479	40.0000	
* 67 Phenanthrene-d10	188	7.260	7.260	(1.000)	1290991	40.0000	
* 91 Chrysene-d12	240	9.683	9.683	(1.000)	1365925	40.0000	
* 98 Perylene-d12	264	11.407	11.407	(1.000)	1246471	40.0000	
209 Benzaldehyde	77	3.672	3.672	(0.930)	209081	40.0000	35.1
16 Acetophenone	105	4.201	4.201	(1.064)	333975	40.0000	40.2
189 Caprolactam	113	5.095	5.095	(1.056)	89358	40.0000	42.8
208 1,1'-Biphenyl	154	5.648	5.648	(0.928)	800935	40.0000	43.3
207 Atrazine	173	6.954	6.954	(0.958)	31680	40.0000	47.6
77 Benzidine	184	8.419	8.419	(0.869)	110489	40.0000	24.6
90 3,3'-Dichlorobenzidine	252	9.619	9.619	(0.993)	377361	40.0000	40.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.260	2.260	(0.572)	108007	40.0000	48.2
103 Methyl methacrylate	100	2.254	2.254	(0.571)	61872	40.0000	45.9
104 Ethyl methacrylate	69	2.637	2.637	(0.668)	271891	40.0000	49.5
105 2-Picoline	93	2.837	2.837	(0.718)	323151	40.0000	38.6
106 N-Nitrosomethylethylamine	88	2.884	2.884	(0.730)	118164	40.0000	41.0
107 Methyl methanesulfonate	80	3.037	3.037	(0.769)	162199	40.0000	44.9
108 N-Nitrosodiethylamine	102	3.278	3.278	(0.830)	112832	40.0000	39.0
109 Ethyl Methanesulfonate	79	3.431	3.431	(0.869)	216648	40.0000	50.3
110 Pentachloroethane	167	3.778	3.778	(0.957)	145583	40.0000	56.6
111 N-Nitrosopyrrolidine	100	4.190	4.190	(1.061)	107937	40.0000	36.5
113 N-Nitrosomorpholine	56	4.207	4.207	(1.066)	120050	40.0000	39.4
114 o-Toluidine	106	4.231	4.231	(1.071)	463846	40.0000	40.4
115 N-Nitrosopiperidine	114	4.431	4.431	(0.918)	128504	40.0000	39.4
116 a,a-Dimethylphenethylamine	58	4.737	4.737	(0.982)	527921	40.0000	38.2
118 2,6-Dichlorophenol	162	4.866	4.866	(1.009)	248053	40.0000	41.9
119 Hexachloropropene	213	4.895	4.895	(1.015)	210163	40.0000	60.0
120 p-Phenylenediamine	108	5.101	5.101	(1.057)	123106	40.0000	45.3
121 N-Nitrosodi-n-butylamine	84	5.066	5.066	(1.050)	156538	40.0000	38.8(T)
122 Safrole	162	5.237	5.237	(1.085)	272812	40.0000	48.0
123 1,2,4,5-Tetrachlorobenzene	216	5.437	5.437	(0.894)	359203	40.0000	44.0
124 Isosafrole	162	5.607	5.607	(0.922)	298154	40.0000	54.9
125 1,4-Naphthoquinone	158	5.795	5.795	(0.953)	235264	40.0000	49.6
127 Pentachlorobenzene	250	6.201	6.201	(1.019)	318599	40.0000	42.6
128 1-Naphthylamine	143	6.290	6.290	(1.034)	495191	40.0000	39.8
129 2-Naphthylamine	143	6.342	6.342	(1.043)	359107	40.0000	32.2
131 5-Nitro-o-toluidine	152	6.484	6.484	(1.066)	173960	40.0000	38.9
136 1,3,5-Trinitrobenzene	75	6.737	6.737	(0.928)	137808	40.0000	45.8
137 Phenacetin	108	6.778	6.778	(0.934)	310807	40.0000	43.8
138 Diallate	86	6.772	6.772	(0.933)	227250	40.0000	39.7
212 Cis Diallate	86	6.848	6.848	(0.943)	43397	6.00000	8.1(a)
213 Trans Diallate	86	6.772	6.772	(0.933)	227250	34.0000	33.7
140 4-Aminobiphenyl	169	7.072	7.072	(0.974)	405072	40.0000	37.8
141 Pentachloronitrobenzene	237	7.095	7.095	(0.977)	110788	40.0000	44.0
142 Pronamide	173	7.089	7.089	(0.976)	370764	40.0000	45.5
146 4-Nitroquinoline-1-oxide	101	7.936	7.936	(1.093)	15434	40.0000	48.2
147 Methapyrilene	58	7.972	7.972	(1.098)	385063	40.0000	47.3
148 Isodrin	193	8.195	8.195	(1.129)	121070	40.0000	38.0
149 Aramite	185	8.595	8.595	(1.184)	51810	40.0000	39.6
150 Kepone	272	9.183	9.183	(1.265)	89616	40.0000	36.4
151 p-(Dimethylamino)azobenzene	120	8.778	8.778	(0.906)	295751	40.0000	41.6
152 Chlorobenzilate	251	8.807	8.807	(0.909)	359810	40.0000	39.8
153 3,3'-Dimethylbenzidine	212	9.089	9.089	(0.939)	452784	40.0000	36.7
155 2-Acetylaminofluorene	181	9.342	9.342	(0.965)	377007	40.0000	38.8
157 7,12Dimethylbenz(a)anthracene	256	10.848	10.848	(0.951)	539106	40.0000	40.9
158 3-Methylcholanthrene	268	11.824	11.824	(1.037)	499987	40.0000	43.8

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/MSD5.i/s113009.b/s5k3038.d
Date : 01-DEC-2009 00:10
Client ID: AP12ICV
Sample Info: IWBN091111-08,1150 PPM11ISVM11AP12ICV
Volume Injected (ul): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

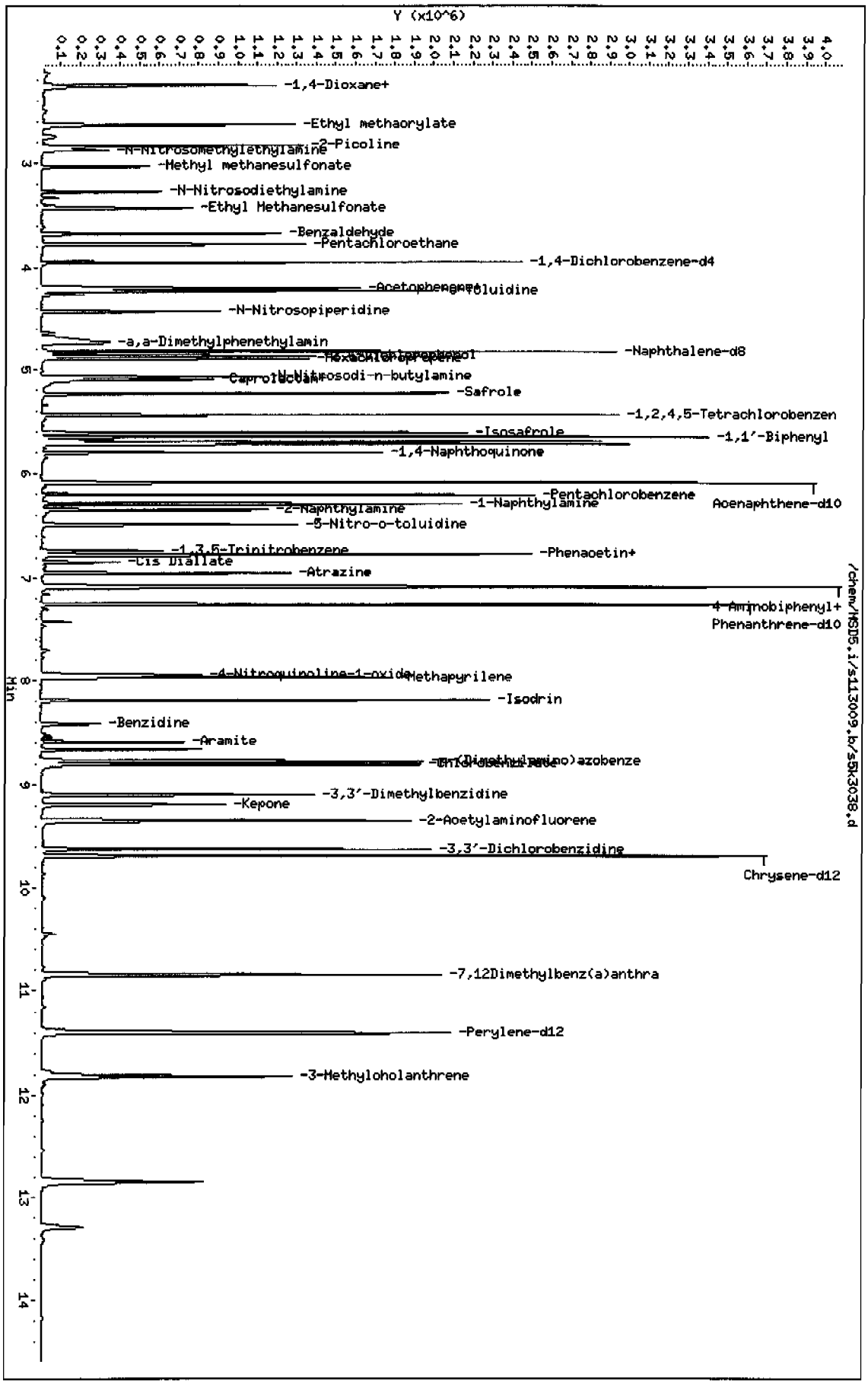

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 03-DEC-2009 11:53
Lab File ID: s510303.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.79074	0.79074	0.000	-4.54030	60.00000	Averaged
$ 5 Phenol-d5	1.02741	1.00607	1.00607	0.000	-2.07640	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.24627	0.24627	0.000	-3.70143	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.02883	1.02883	0.000	1.81269	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.15195	0.15195	0.000	2.69450	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.60235	0.60235	0.000	5.29872	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.44667	0.44667	0.000	-2.73013	60.00000	Averaged
2 Pyridine	0.65138	0.67535	0.67535	0.000	3.68117	60.00000	Averaged
4 Aniline	0.40115	0.40609	0.40609	0.000	1.23240	60.00000	Averaged
6 Phenol	1.07292	1.03795	1.03795	0.001	-3.25943	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.63389	0.64526	0.64526	0.000	1.79378	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.89142	0.89142	0.000	-3.12276	60.00000	Averaged
203 n-Decane	0.83349	0.84909	0.84909	0.000	1.87160	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.07723	1.07723	0.000	-2.23410	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11854	1.10626	1.10626	0.001	-1.09706	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.05853	1.05781	1.05781	0.000	-0.06801	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	1.02440	1.02440	0.000	1.67096	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.56685	0.56685	0.000	-2.35858	60.00000	Averaged
15 o-Cresol	0.73443	0.71069	0.71069	0.000	-3.23244	60.00000	Averaged
18 m,p-Cresols	0.93489	0.91211	0.91211	0.000	-2.43699	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.51329	0.51329	0.050	6.31283	60.00000	Averaged spcc
19 Hexachloroethane	0.41297	0.40750	0.40750	0.000	-1.32600	60.00000	Averaged
21 Nitrobenzene	0.23812	0.24928	0.24928	0.000	4.68664	60.00000	Averaged
22 Isophorone	0.44222	0.44880	0.44880	0.000	1.48699	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.12654	0.12654	0.001	2.03948	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21392	0.22260	0.22260	0.000	4.05539	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.26228	0.26228	0.000	6.00581	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.21960	0.21960	0.001	10.07954	20.00000	Averaged ccc
27 Benzoic acid	0.11033	0.10027	0.10027	0.000	-9.11186	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.26704	0.26704	0.000	6.83170	60.00000	Averaged
30 Naphthalene	0.69229	0.71942	0.71942	0.000	3.91806	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.17219	0.17219	0.000	6.55466	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.32008	0.32008	0.000	15.46472	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.17316	0.17316	0.001	6.50473	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19655	0.20082	0.20082	0.001	2.17371	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.47745	0.49690	0.49690	0.000	4.07415	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 03-DEC-2009 11:53
Lab File ID: s510303.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.46395	0.48640	0.48640	0.000	4.83952	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16140	0.17011	0.17011	0.050	5.39777	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.46121	0.45709	0.45709	0.000	-0.89442	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.29051	0.29678	0.29678	0.001	2.15893	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.30357	0.31164	0.31164	0.000	2.65673	60.00000	Averaged	
40 2-Chloronaphthalene	0.84403	0.84240	0.84240	0.000	-0.19334	60.00000	Averaged	
42 o-Nitroaniline	0.22389	0.22053	0.22053	0.000	-1.50249	60.00000	Averaged	
41 m-Nitroaniline	42.08754	40.00000	0.14233	0.000	5.21886	60.00000	Linear	
43 Dimethylphthalate	0.99502	0.98987	0.98987	0.000	-0.51785	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.23251	0.22734	0.22734	0.000	-2.22250	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.29743	0.28811	0.28811	0.000	-3.13165	60.00000	Averaged	
45 Acenaphthylene	1.28545	1.30806	1.30806	0.000	1.75939	60.00000	Averaged	
47 Acenaphthene	0.82864	0.84279	0.84279	0.001	1.70831	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	41.96239	40.00000	0.08681	0.050	4.90598	60.00000	Linear	spcc
49 Dibenzofuran	1.20211	1.17524	1.17524	0.000	-2.23528	60.00000	Averaged	
51 Diethylphthalate	0.99012	0.95767	0.95767	0.000	-3.27703	60.00000	Averaged	
52 4-Nitrophenol	40.84997	40.00000	0.14536	0.050	2.12493	60.00000	Linear	spcc
53 Fluorene	0.99445	0.99421	0.99421	0.000	-0.02414	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.54736	0.54248	0.54248	0.000	-0.89166	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	38.47001	40.00000	0.07476	0.000	-3.82497	60.00000	Linear	
56 p-Nitroaniline	0.09976	0.10896	0.10896	0.000	9.22772	60.00000	Averaged	
133 Diphenylamine	0.39311	0.41443	0.41443	0.001	5.42190	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.48769	0.50420	0.50420	0.000	3.38563	60.00000	Averaged	
61 4-Bromophenylphenylether	0.18052	0.18696	0.18696	0.000	3.56412	60.00000	Averaged	
63 Hexachlorobenzene	0.19191	0.19597	0.19597	0.000	2.11645	60.00000	Averaged	
65 Pentachlorophenol	41.79760	40.00000	0.09965	0.001	4.49400	20.00000	Linear	ccc
206 n-Octadecane	0.26436	0.28195	0.28195	0.000	6.65358	60.00000	Averaged	
68 Phenanthrene	0.75124	0.75669	0.75669	0.000	0.72592	60.00000	Averaged	
69 Anthracene	0.74720	0.76401	0.76401	0.000	2.24976	60.00000	Averaged	
72 Di-n-butylphthalate	0.85957	0.89047	0.89047	0.000	3.59457	60.00000	Averaged	
76 Fluoranthene	0.82257	0.84212	0.84212	0.001	2.37680	20.00000	Averaged	ccc
79 Pyrene	0.81023	0.87191	0.87191	0.000	7.61231	60.00000	Averaged	
85 Butylbenzylphthalate	0.36001	0.38149	0.38149	0.000	5.96611	60.00000	Averaged	
89 Benzo(a)anthracene	0.80663	0.80969	0.80969	0.000	0.37876	60.00000	Averaged	
92 Chrysene	0.73533	0.73984	0.73984	0.000	0.61393	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	42.57244	40.00000	0.57021	0.000	6.43111	60.00000	Linear	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 03-DEC-2009 11:53
Lab File ID: s510303.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.97379	0.97379	0.001	12.39298	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.86639	0.86639	0.000	3.36200	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.84125	0.84125	0.000	0.54473	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.76417	0.76417	0.001	3.39742	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	37.78505	40.00000	0.78060	0.000	-5.53736	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	35.92066	40.00000	0.62266	0.000	-10.19835	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.64277	0.64277	0.000	-1.16084	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.15859	0.15859	0.000	-3.04102	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.27690	0.27690	0.000	5.84151	60.00000	Averaged	
	143 Dinoseb	39.02120	40.00000	0.11722	0.000	-2.44701	60.00000	Linear	
	173 Carbazole	34.91810	40.00000	0.32902	0.000	-12.70475	60.00000	Linear	
	184 p-Benzoquinone	30.98065	40.00000	0.07774	0.000	-22.54838	60.00000	Linear	
	192 Methoxychlor	0.45776	0.47175	0.47175	0.000	3.05772	60.00000	Averaged	
	211 p-Toluidine	45.42154	40.00000	0.77722	0.000	13.55384	60.00000	Linear	
	210 m-Toluidine	1.03581	1.05344	1.05344	0.000	1.70215	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.09805	0.09805	0.000	12.68078	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.34572	0.34572	0.000	-12.13281	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.16523	0.16523	0.000	3.90148	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.38635	0.38635	0.000	-3.73107	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.09519	0.09519	0.000	-4.09951	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.30421	0.30421	0.000	2.41327	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.27690	0.27690	0.000	5.84151	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.85382	0.85382	0.000	1.95462	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510303.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 03-DEC-2009 11:53
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.940	3.940	(1.000)	385614	40.0000		
* 29 Naphthalene-d8	136	4.812	4.812	(1.000)	1458717	40.0000		
* 46 Acenaphthene-d10	164	6.068	6.068	(1.000)	846395	40.0000		
* 67 Phenanthrene-d10	188	7.243	7.243	(1.000)	1539777	40.0000		(H)
* 91 Chrysene-d12	240	9.665	9.665	(1.000)	1575164	40.0000		(H)
* 98 Perylene-d12	264	11.365	11.365	(1.000)	1435753	40.0000		(H)
$ 3 2-Fluorophenol	112	3.117	3.117	(0.791)	304922	40.0000	38.2	
$ 5 Phenol-d5	99	3.646	3.646	(0.925)	387956	40.0000	39.2	
$ 20 Nitrobenzene-d5	82	4.301	4.301	(0.894)	359242	40.0000	38.5	
$ 39 2-Fluorobiphenyl	172	5.553	5.553	(0.915)	870797	40.0000	40.7	
$ 60 2,4,6-Tribromophenol	329	6.665	6.665	(1.098)	128609	40.0000	41.1	
$ 81 p-Terphenyl-d14	244	8.625	8.625	(0.887)	948802	40.0000	42.1	
1 N-Methyl-N-nitrosomethylamine	74	2.409	2.409	(0.611)	172242	40.0000	38.9	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.442	2.442	(0.620)	260426	40.0000	41.5
4 Aniline	66	3.718	3.718	(0.944)	156594	40.0000	40.5
6 Phenol	94	3.656	3.656	(0.928)	400248	40.0000	38.7(Q)
7 bis(2-Chloroethyl) ether	63	3.738	3.738	(0.949)	248821	40.0000	40.7
8 2-Chlorophenol	128	3.800	3.800	(0.965)	343743	40.0000	38.8
203 n-Decane	43	3.786	3.786	(0.961)	327422	40.0000	40.7
9 1,3-Dichlorobenzene	146	3.906	3.906	(0.991)	415396	40.0000	39.1
11 1,4-Dichlorobenzene	146	3.950	3.950	(1.002)	426591	40.0000	39.6
13 1,2-Dichlorobenzene	146	4.056	4.056	(1.029)	407907	40.0000	40.0
14 bis(2-Chloroisopropyl)ether	45	4.080	4.080	(1.035)	395023	40.0000	40.7
12 Benzyl alcohol	108	4.003	4.003	(1.016)	218586	40.0000	39.0
15 o-Cresol	107	4.056	4.056	(1.029)	274051	40.0000	38.7
18 m,p-Cresols	107	4.157	4.157	(1.055)	351723	40.0000	39.0
17 N-Nitrosodipropylamine	70	4.176	4.176	(1.060)	197931	40.0000	42.5
19 Hexachloroethane	117	4.287	4.287	(1.088)	157137	40.0000	39.5
21 Nitrobenzene	77	4.316	4.316	(0.897)	363631	40.0000	41.9
22 Isophorone	82	4.470	4.470	(0.929)	654673	40.0000	40.6
23 2-Nitrophenol	139	4.532	4.532	(0.942)	184591	40.0000	40.8
24 2,4-Dimethylphenol	122	4.523	4.523	(0.940)	324711	40.0000	41.6
25 bis(2-Chloroethoxy)methane	93	4.590	4.590	(0.954)	382593	40.0000	42.4
26 2,4-Dichlorophenol	162	4.691	4.691	(0.975)	320334	40.0000	44.0
27 Benzoic acid	105	4.580	4.580	(0.952)	146271	40.0000	36.4
28 1,2,4-Trichlorobenzene	180	4.759	4.759	(0.989)	389542	40.0000	42.7
30 Naphthalene	128	4.826	4.826	(1.003)	1049424	40.0000	41.6(Q)
204 alpha-Terpineol	59	4.797	4.797	(0.997)	251176	40.0000	42.6
31 4-Chloroaniline	127	4.840	4.840	(1.006)	466907	40.0000	46.2
32 Hexachlorobutadiene	225	4.889	4.889	(1.016)	252590	40.0000	42.6
33 4-Chloro-3-methylphenol	107	5.149	5.149	(1.070)	292940	40.0000	40.9
34 2-Methylnaphthalene	142	5.308	5.308	(1.103)	724839	40.0000	41.6
35 1-Methylnaphthalene	142	5.380	5.380	(1.118)	709526	40.0000	41.9
36 Hexachlorocyclopentadiene	237	5.409	5.409	(0.891)	143980	40.0000	42.2(H)
205 2,3-Dichloroaniline	161	5.505	5.505	(0.907)	386875	40.0000	39.6
37 2,4,6-Trichlorophenol	196	5.495	5.495	(0.906)	251192	40.0000	40.9(H)
38 2,4,5-Trichlorophenol	196	5.524	5.524	(0.910)	263767	40.0000	41.1
40 2-Chloronaphthalene	162	5.664	5.664	(0.933)	712999	40.0000	39.9
42 o-Nitroaniline	65	5.717	5.717	(0.942)	186652	40.0000	39.4
41 m-Nitroaniline	138	6.015	6.015	(0.991)	120466	40.0000	42.1
43 Dimethylphthalate	163	5.828	5.828	(0.960)	837819	40.0000	39.8
44 2,6-Dinitrotoluene	165	5.881	5.881	(0.969)	192421	40.0000	39.1
50 2,4-Dinitrotoluene	165	6.184	6.184	(1.019)	243856	40.0000	38.7
45 Acenaphthylene	152	5.967	5.967	(0.983)	1107137	40.0000	40.7
47 Acenaphthene	154	6.092	6.092	(1.004)	713337	40.0000	40.7
48 2,4-Dinitrophenol	184	6.088	6.088	(1.003)	73479	40.0000	42.0
49 Dibenzofuran	168	6.218	6.218	(1.025)	994720	40.0000	39.1
51 Diethylphthalate	149	6.338	6.338	(1.044)	810569	40.0000	38.7
52 4-Nitrophenol	139	6.107	6.107	(1.006)	123030	40.0000	40.8
53 Fluorene	166	6.482	6.482	(1.068)	841493	40.0000	40.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.454	6.454	(1.063)	459151	40.0000	39.6
55 2-Methyl-4,6-dinitrophenol	198	6.492	6.492	(0.891)	115116	40.0000	38.5
56 p-Nitroaniline	138	6.478	6.478	(1.067)	92225	40.0000	43.7
133 Diphenylamine	169	6.545	6.545	(0.898)	638126	40.0000	42.2
58 1,2-Diphenylhydrazine	77	6.579	6.579	(0.903)	776359	40.0000	41.4
61 4-Bromophenylphenylether	248	6.844	6.844	(0.939)	287875	40.0000	41.4
63 Hexachlorobenzene	284	6.916	6.916	(0.949)	301749	40.0000	40.8
65 Pentachlorophenol	266	7.065	7.065	(0.970)	153433	40.0000	41.8
206 n-Octadecane	57	7.051	7.051	(0.968)	434135	40.0000	42.7
68 Phenanthrene	178	7.263	7.263	(0.997)	1165140	40.0000	40.3(H)
69 Anthracene	178	7.306	7.306	(1.003)	1176398	40.0000	40.9
72 Di-n-butylphthalate	149	7.662	7.662	(1.052)	1371129	40.0000	41.4
76 Fluoranthene	202	8.312	8.312	(1.141)	1296681	40.0000	41.0(H)
79 Pyrene	202	8.529	8.529	(0.877)	1373401	40.0000	43.0(H)
85 Butylbenzylphthalate	149	9.059	9.059	(0.932)	600905	40.0000	42.4(H)
89 Benzo(a)anthracene	228	9.651	9.651	(0.993)	1275393	40.0000	40.2(H)
92 Chrysene	228	9.689	9.689	(0.997)	1165374	40.0000	40.2
93 bis(2-Ethylhexyl)phthalate	149	9.583	9.583	(0.986)	898182	40.0000	42.6
94 Di-n-octylphthalate	149	10.243	10.243	(0.894)	1398126	40.0000	45.0(H)
95 Benzo(b)fluoranthene	252	10.835	10.835	(0.946)	1243915	40.0000	41.3(H)
96 Benzo(k)fluoranthene	252	10.874	10.874	(0.949)	1207831	40.0000	40.2(H)
97 Benzo(a)pyrene	252	11.283	11.283	(0.985)	1097154	40.0000	41.4(H)
99 Indeno(1,2,3-cd)pyrene	276	13.166	13.166	(1.149)	1120742	40.0000	37.8
100 Dibenzo(a,h)anthracene	278	13.181	13.181	(1.150)	893988	40.0000	35.9
101 Benzo(ghi)perylene	276	13.715	13.715	(1.197)	922853	40.0000	39.5(H)
126 m-Dinitrobenzene	168	5.866	5.866	(0.967)	134229	40.0000	38.8
130 2,3,4,6-Tetrachlorophenol	232	6.299	6.299	(1.038)	234366	40.0000	42.3
143 Dinoseb	211	7.185	7.185	(0.986)	180485	40.0000	39.0
173 Carbazole	167	7.421	7.421	(1.018)	506623	40.0000	34.9
184 p-Benzoquinone	54	3.420	3.420	(0.868)	29976	40.0000	31.0
192 Methoxychlor	227	9.531	9.531	(0.980)	743090	40.0000	41.2(H)
211 p-Toluidine	106	4.214	4.214	(1.070)	299706	40.0000	45.4(H)
210 m-Toluidine	106	4.239	4.239	(1.076)	406220	40.0000	40.7
26 Phthalic anhydride	104	5.341	5.341	(1.110)	143034	40.0000	45.1
179 Dibenzo(a,e)pyrene	302	17.928	17.928	(1.565)	496368	40.0000	35.1(H)
214 1,4-Dinitrobenzene	75	5.808	5.808	(0.957)	139854	40.0000	41.6
215 2-Ethoxyethanol	59	2.245	2.245	(0.570)	148983	40.0000	38.5
216 Methylenebis(2-chloroaniline)	231	9.593	9.593	(0.987)	149946	40.0000	38.4(QH)
M 225 Trichlorophenols	196				514959	80.0000	81.9
M 226 Tetrachlorophenols	232				234366	40.0000	42.3
M 227 Benzo(b,k)fluoranthene	252				2451746	80.0000	81.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s120309.b/s510303.d
Date : 03-DEC-2009 11:53
Client ID: MEGACVS
Sample Info: WBN091106-05,3140 PPM|1|SVM|1|MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

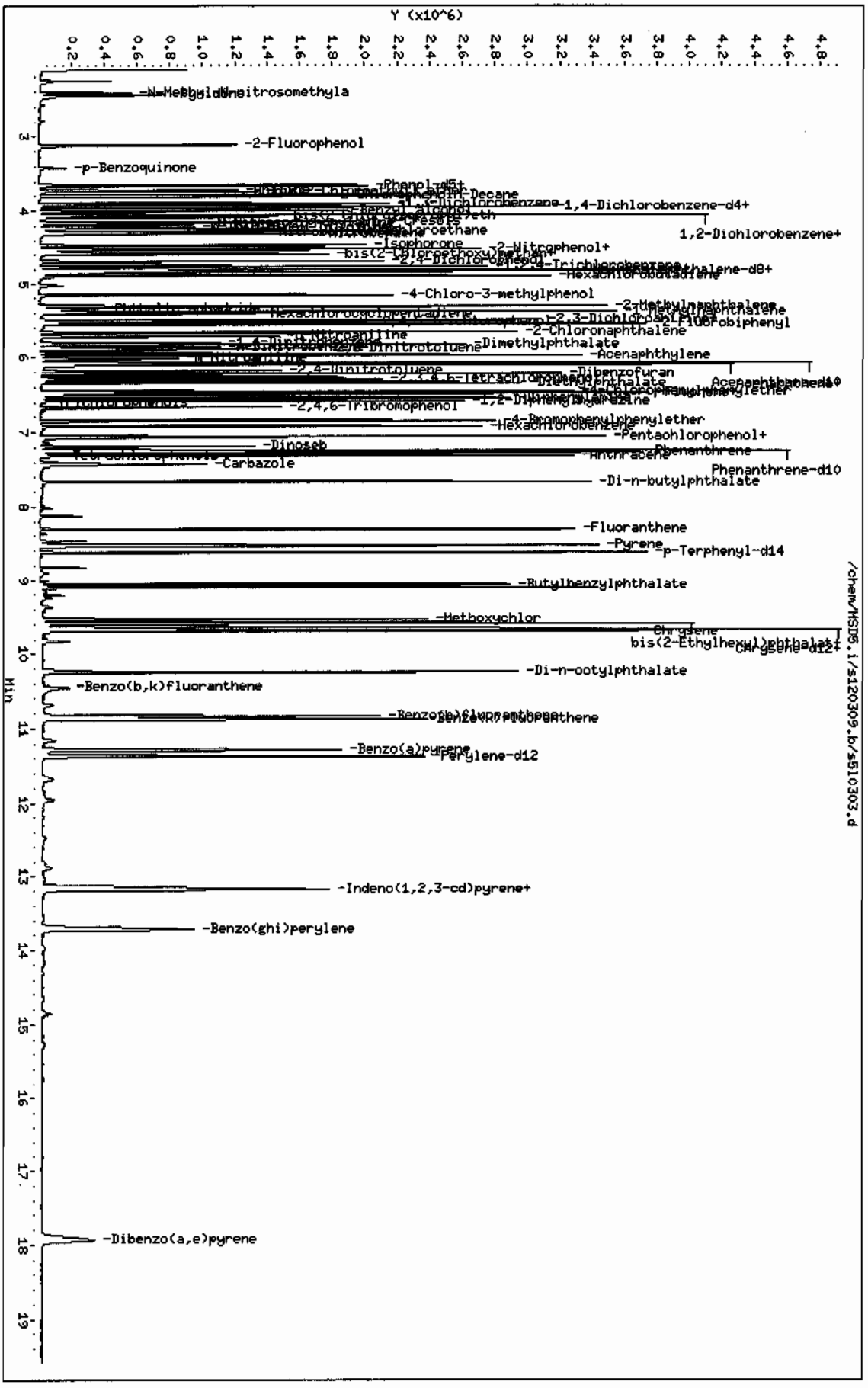

Page 1

Data File: /chem/MSD5.i/s120309.b/s510304.d
Report Date: 03-Dec-2009 12:33

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510304.d
Analysis Type: WATER
Lab Sample ID: WBN091201-03.4
Method: /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m

Injection Date: 03-DEC-2009 12:21
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.77136	0.77136	0.000	4.00712	60.00000	Averaged
16 Acetophenone	1.03433	1.03865	1.03865	0.000	0.41746	60.00000	Averaged
189 Caprolactam	0.07313	0.07605	0.07605	0.000	3.98139	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.11440	1.11440	0.000	5.15146	60.00000	Averaged
207 Atrazine	0.02060	0.02359	0.02359	0.000	14.51338	60.00000	Averaged
77 Benzidine	0.13169	0.18740	0.18740	0.000	42.30321	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.28266	0.28266	0.000	4.48510	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.30641	0.30641	0.000	9.99162	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.17730	0.17730	0.000	5.79074	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.69510	0.69510	0.000	1.69396	60.00000	Averaged
105 2-Picoline	1.04139	1.04968	1.04968	0.000	0.79570	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.37405	0.37405	0.000	4.17350	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.44735	0.44735	0.000	-0.56957	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.37734	0.37734	0.000	4.85088	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.52412	0.52412	0.000	-2.26031	60.00000	Averaged
110 Pentachloroethane	0.32008	0.32307	0.32307	0.000	0.93203	60.00000	Averaged
111 N-Nitrosopyrrolidine	42.38466	40.00000	0.39646	0.000	5.96164	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.40092	0.40092	0.000	5.80862	60.00000	Averaged
114 o-Toluidine	1.42745	1.40763	1.40763	0.000	-1.38842	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.12096	0.12096	0.000	6.09287	60.00000	Averaged
116 a,a-Dimethylphenethylamine	42.25727	40.00000	0.51820	0.000	5.64316	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.22840	0.22840	0.000	10.19781	60.00000	Averaged
119 Hexachloropropene	0.12260	0.15241	0.15241	0.000	24.31530	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.16658	0.16658	0.000	75.15033	60.00000	Averaged <-
121 N-Nitrosodi-n-butylamine	0.14117	0.15024	0.15024	0.000	6.42155	60.00000	Averaged
122 Safrole	0.19879	0.21072	0.21072	0.000	6.00399	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.48241	0.48241	0.000	3.27627	60.00000	Averaged
124 Isosafrole	0.31092	0.32465	0.32465	0.000	4.41575	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.29551	0.29551	0.000	8.79748	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.44295	0.44295	0.000	3.41066	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.78454	0.78454	0.000	10.14624	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.62007	0.62007	0.000	-2.91432	60.00000	Averaged
131 5-Nitro-o-toluidine	42.88664	40.00000	0.27757	0.000	7.21661	60.00000	Linear
136 1,3,5-Trinitrobenzene	44.38625	40.00000	0.10290	0.000	10.96562	60.00000	Linear
137 Phenacetin	0.22007	0.22606	0.22606	0.000	2.72226	60.00000	Averaged
138 Diallate	0.17747	0.18046	0.18046	0.000	1.68457	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 03-DEC-2009 12:21
Lab File ID: s510304.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091201-03.4 Quant Type: ISTD
Method: /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.17442	0.17442	0.000	4.96406	60.00000	Averaged
213 Trans Diallate	0.20879	0.21231	0.21231	0.000	1.68457	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.39685	0.39685	0.000	19.64760	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08145	0.08145	0.000	4.31471	60.00000	Averaged
142 Pronamide	0.25257	0.26047	0.26047	0.000	3.12765	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01125	0.01125	0.000	13.27880	60.00000	Averaged
147 Methapyrilene	0.25201	0.25911	0.25911	0.000	2.81640	60.00000	Averaged
148 Isodrin	0.09860	0.09964	0.09964	0.000	1.05725	60.00000	Averaged
149 Aramite	0.04052	0.04271	0.04271	0.000	5.41316	60.00000	Averaged
150 Kepone	0.07629	0.07276	0.07276	0.000	-4.62512	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.20498	0.20498	0.000	-1.45589	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.26329	0.26329	0.000	-0.64336	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.42546	0.42546	0.000	17.74503	60.00000	Averaged
155 2-Acetylaminofluorene	41.27356	40.00000	0.29683	0.000	3.18391	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.42405	0.42405	0.000	0.23392	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.39118	0.39118	0.000	6.74094	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510304.d
Lab Smp Id: WBN091201-03.4 Client Smp ID: AP12CVS
Inj Date : 03-DEC-2009 12:21
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091201-03.4|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 12:33 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.931	(1.000)	376237	40.0000	
* 29 Naphthalene-d8	136	4.801	4.801	(1.000)	1284207	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.060	(1.000)	809976	40.0000	
* 67 Phenanthrene-d10	188	7.236	7.236	(1.000)	1542200	40.0000	
* 91 Chrysene-d12	240	9.654	9.654	(1.000)	1705109	40.0000	
* 98 Perylene-d12	264	11.354	11.354	(1.000)	1611076	40.0000	
209 Benzaldehyde	77	3.654	3.654	(0.930)	290213	40.0000	41.6
16 Acetophenone	105	4.184	4.184	(1.064)	390777	40.0000	40.2
189 Caprolactam	113	5.078	5.078	(1.058)	97658	40.0000	41.6
208 1,1'-Biphenyl	154	5.625	5.625	(0.928)	902641	40.0000	42.1
207 Atrazine	173	6.936	6.936	(0.959)	36374	40.0000	45.8
77 Benzidine	184	8.389	8.389	(0.869)	319531	40.0000	56.9
90 3,3'-Dichlorobenzidine	252	9.589	9.589	(0.993)	481965	40.0000	41.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.254	2.254	(0.574)	115282	40.0000	44.0
103 Methyl methacrylate	100	2.249	2.249	(0.572)	66708	40.0000	42.3
104 Ethyl methacrylate	69	2.625	2.625	(0.668)	261522	40.0000	40.7
105 2-Picoline	93	2.825	2.825	(0.719)	394928	40.0000	40.3
106 N-Nitrosomethylethylamine	88	2.866	2.866	(0.729)	140730	40.0000	41.7
107 Methyl methanesulfonate	80	3.019	3.019	(0.768)	168310	40.0000	39.8
108 N-Nitrosodiethylamine	102	3.260	3.260	(0.829)	141969	40.0000	41.9
109 Ethyl Methanesulfonate	79	3.413	3.413	(0.868)	197193	40.0000	39.1
110 Pentachloroethane	167	3.754	3.754	(0.955)	121550	40.0000	40.4
111 N-Nitrosopyrrolidine	100	4.172	4.172	(1.061)	149164	40.0000	42.4
113 N-Nitrosomorpholine	56	4.196	4.196	(1.067)	150841	40.0000	42.3
114 o-Toluidine	106	4.213	4.213	(1.072)	529602	40.0000	39.4
115 N-Nitrosopiperidine	114	4.413	4.413	(0.919)	155344	40.0000	42.4
116 a,a-Dimethylphenethylamine	58	4.695	4.695	(0.978)	665480	40.0000	42.2
118 2,6-Dichlorophenol	162	4.843	4.843	(1.009)	293307	40.0000	44.1
119 Hexachloropropene	213	4.872	4.872	(1.015)	195732	40.0000	49.7
120 p-Phenylenediamine	108	5.078	5.078	(1.058)	213929	40.0000	70.1(H)
121 N-Nitrosodi-n-butylamine	84	5.048	5.048	(1.051)	192935	40.0000	42.6(T)
122 Safrole	162	5.213	5.213	(1.086)	270609	40.0000	42.4
123 1,2,4,5-Tetrachlorobenzene	216	5.419	5.419	(0.894)	390742	40.0000	41.3
124 Isosafrole	162	5.584	5.584	(0.921)	262960	40.0000	41.8
125 1,4-Naphthoquinone	158	5.772	5.772	(0.952)	239357	40.0000	43.5
127 Pentachlorobenzene	250	6.178	6.178	(1.019)	358779	40.0000	41.4(H)
128 1-Naphthylamine	143	6.266	6.266	(1.034)	635458	40.0000	44.0
129 2-Naphthylamine	143	6.325	6.325	(1.044)	502241	40.0000	38.8
131 5-Nitro-o-toluidine	152	6.466	6.466	(1.067)	224825	40.0000	42.9
136 1,3,5-Trinitrobenzene	75	6.719	6.719	(0.928)	158698	40.0000	44.4(H)
137 Phenacetin	108	6.760	6.760	(0.934)	348636	40.0000	41.1
138 Diallate	86	6.748	6.748	(0.933)	278312	40.0000	40.7
212 Cis Diallate	86	6.825	6.825	(0.943)	40348	6.00000	6.3(a)
213 Trans Diallate	86	6.748	6.748	(0.933)	278312	34.0000	34.6
140 4-Aminobiphenyl	169	7.048	7.048	(0.974)	612016	40.0000	47.8
141 Pentachloronitrobenzene	237	7.072	7.072	(0.977)	125617	40.0000	41.7
142 Pronamide	173	7.066	7.066	(0.976)	401694	40.0000	41.2
146 4-Nitroquinoline-1-oxide	101	7.907	7.907	(1.093)	17344	40.0000	45.3
147 Methapyrilene	58	7.942	7.942	(1.098)	399592	40.0000	41.1
148 Isodrin	193	8.166	8.166	(1.128)	153667	40.0000	40.4
149 Aramite	185	8.566	8.566	(1.184)	65869	40.0000	42.2
150 Kepone	272	9.154	9.154	(1.265)	112207	40.0000	38.1
151 p-(Dimethylamino)azobenzene	120	8.748	8.748	(0.906)	349519	40.0000	39.4
152 Chlorobenzilate	251	8.778	8.778	(0.909)	448942	40.0000	39.7(H)
153 3,3'-Dimethylbenzidine	212	9.066	9.066	(0.939)	725461	40.0000	47.1
155 2-Acetylaminofluorene	181	9.313	9.313	(0.965)	506127	40.0000	41.3
157 7,12Dimethylbenz(a)anthracene	256	10.801	10.801	(0.951)	683174	40.0000	40.1
158 3-Methylcholanthrene	268	11.766	11.766	(1.036)	630224	40.0000	42.7(H)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s120309.b/s510304.d
Date : 03-DEC-2009 12:21
Client ID: AP12CVS
Sample Info: IWBN091201-03,4140 PPM11SVM11AP12CVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

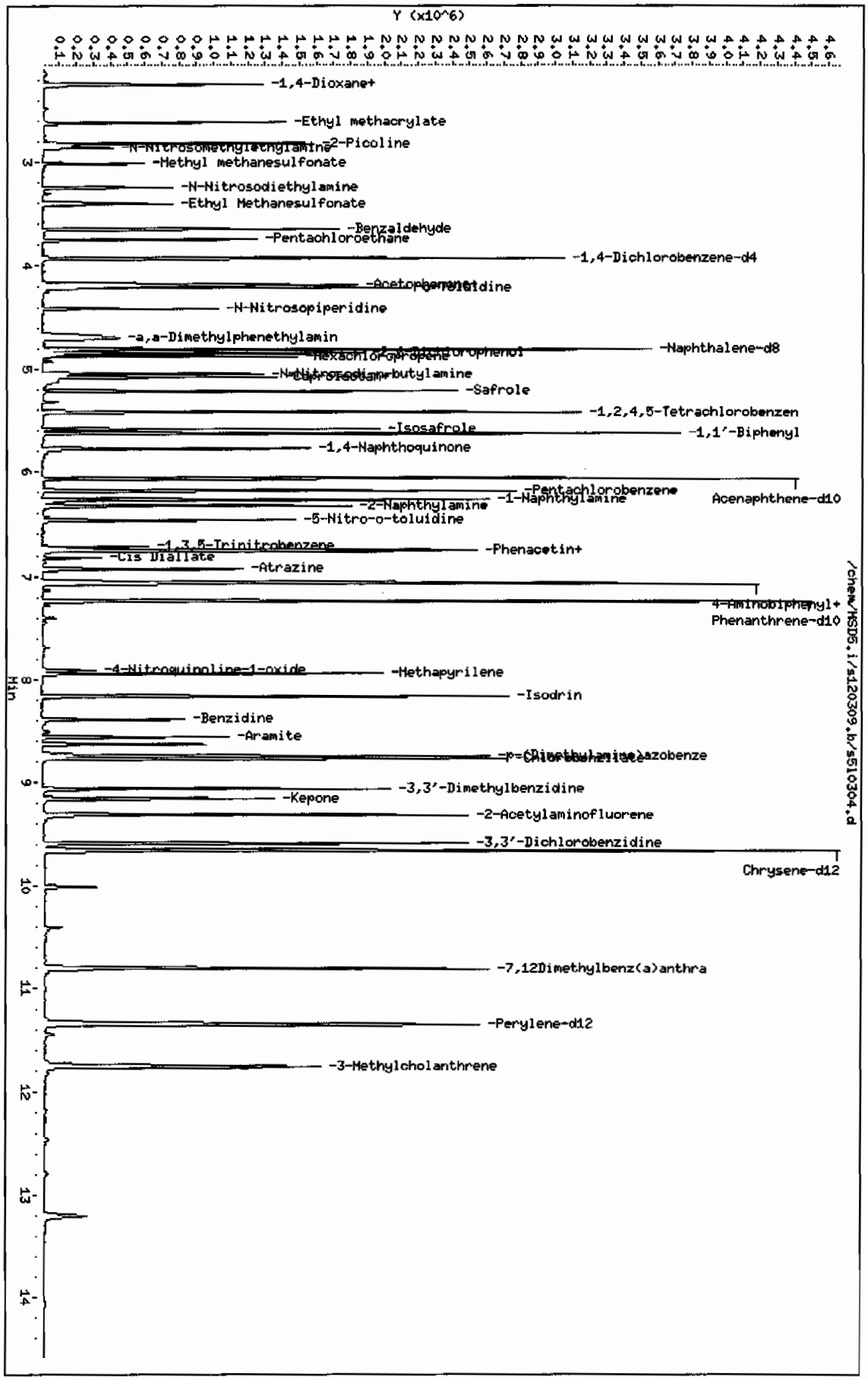

Page 1

QC Data

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Page 1

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

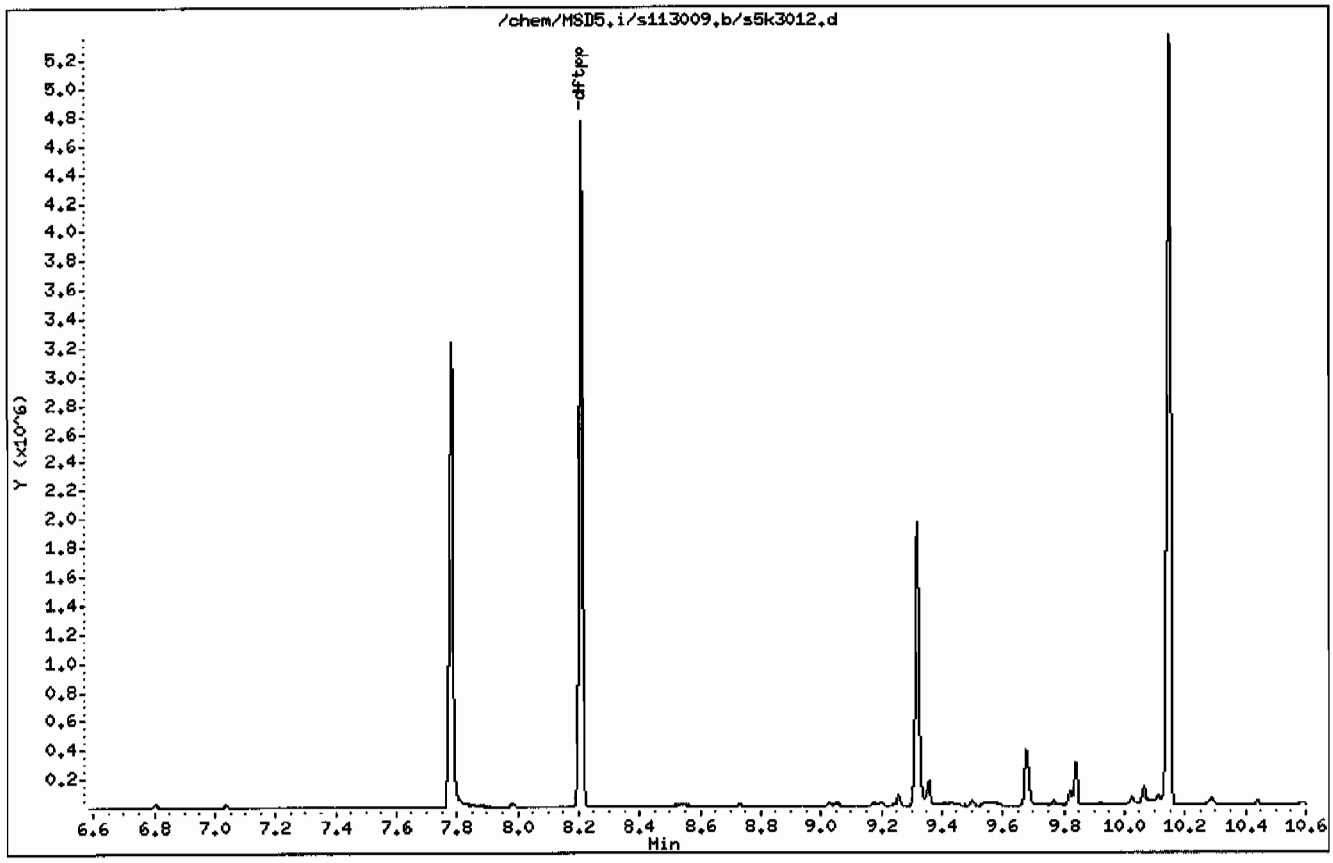

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVHF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

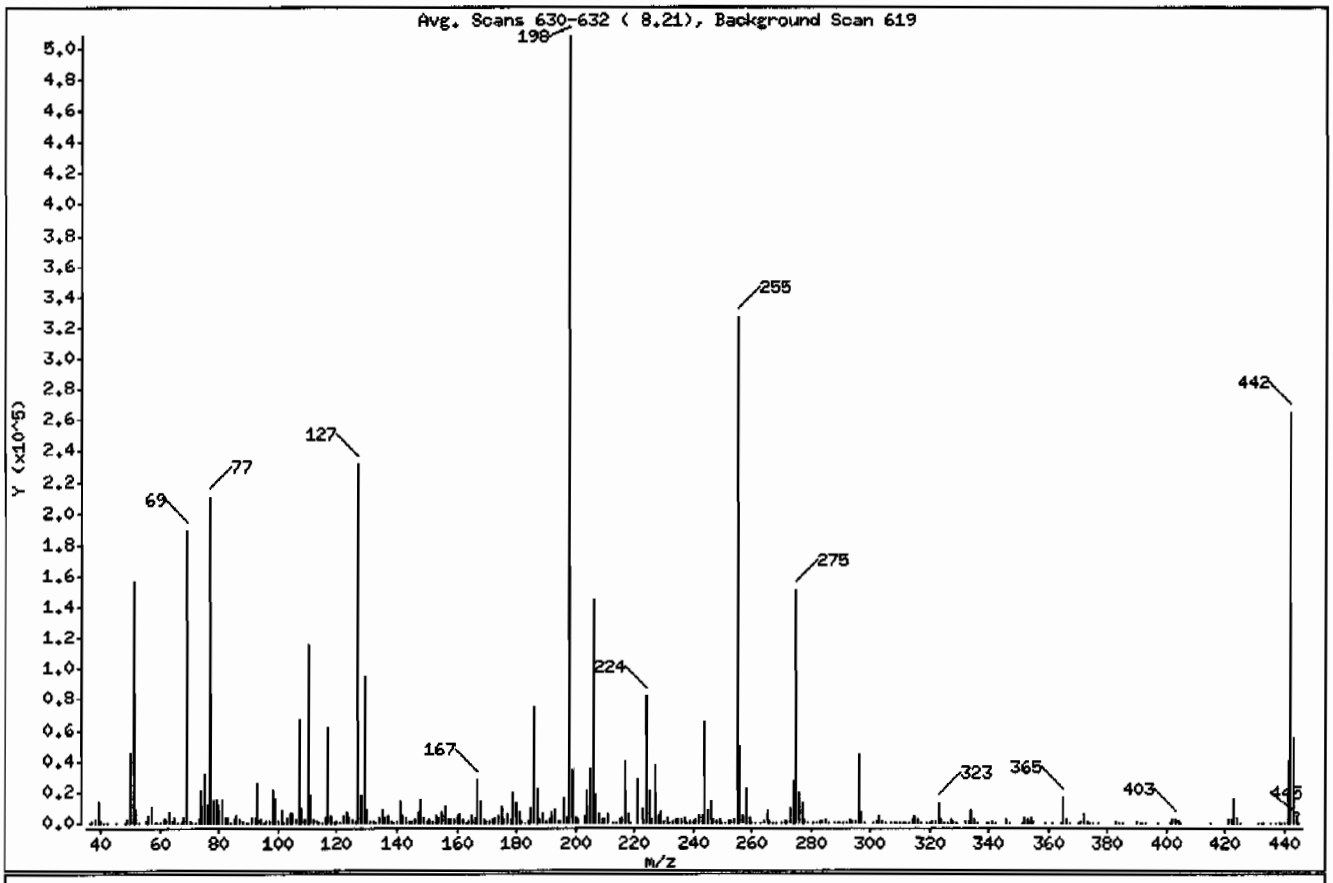

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	30.79
68	Less than 2.00% of mass 69	0.58 (1.57)
69	Mass 69 relative abundance	37.28
70	Less than 2.00% of mass 69	0.19 (0.51)
127	40.00 - 60.00% of mass 198	45.60
197	Less than 1.00% of mass 198	0.70
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	29.60
365	Greater than 1.00% of mass 198	3.10
441	Present, but less than mass 443	7.74
442	Greater than 40.00% of mass 198	52.24
443	17.00 - 23.00% of mass 442	10.70 (20.48)

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	125	126.00	680	213.00	464	307.00	50
37.00	987	127.00	231616	214.00	157	308.00	501
38.00	2716	128.00	17920	215.00	1808	309.00	450
39.00	13632	129.00	94528	216.00	3180	310.00	506
40.00	706	130.00	7593	217.00	39768	311.00	48
41.00	445	131.00	1598	218.00	5515	312.00	106
42.00	45	132.00	1119	219.00	464	313.00	308
45.00	260	133.00	463	221.00	28528	314.00	1959
48.00	107	134.00	3180	223.00	8943	315.00	4843
49.00	1759	135.00	8128	224.00	82288	316.00	2594
50.00	46048	136.00	3126	225.00	21312	317.00	470
51.00	156416	137.00	4122	226.00	2341	319.00	122
52.00	7789	138.00	895	227.00	37768	320.00	161
53.00	334	139.00	564	228.00	5098	321.00	1232
55.00	910	140.00	1328	229.00	7275	322.00	651
56.00	4777	141.00	13534	230.00	1075	323.00	12618
57.00	10418	142.00	4180	231.00	2968	324.00	2388
58.00	476	143.00	3277	232.00	577	325.00	236
59.00	113	144.00	760	233.00	743	326.00	206
60.00	309	145.00	649	234.00	2540	327.00	2542
61.00	2312	146.00	2181	235.00	2704	328.00	1058
62.00	2701	147.00	6737	236.00	1787	329.00	194
63.00	7253	148.00	15544	237.00	2968	332.00	1010
64.00	840	149.00	3108	238.00	525	333.00	1207
65.00	3370	150.00	944	239.00	1657	334.00	8064
66.00	347	151.00	2363	240.00	1214	335.00	1901
67.00	386	152.00	899	241.00	2080	336.00	205
68.00	2964	153.00	4270	242.00	4897	339.00	105
69.00	189376	154.00	3325	243.00	4687	340.00	196
70.00	963	155.00	7175	244.00	65392	341.00	1323
71.00	55	156.00	10369	245.00	8442	342.00	450
72.00	236	157.00	2283	246.00	13909	346.00	2820
73.00	1852	158.00	2547	247.00	2750	347.00	441
74.00	21008	159.00	1763	248.00	604	351.00	300
75.00	31368	160.00	4127	249.00	2266	352.00	3392

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	11187	161.00	6032	250.00	324	353.00	2458
77.00	210112	162.00	1867	251.00	428	354.00	3352
78.00	13990	163.00	483	252.00	693	355.00	682
79.00	15435	164.00	669	253.00	1399	359.00	140
80.00	11406	165.00	5171	254.00	2631	361.00	68
81.00	14908	166.00	3857	255.00	327168	364.00	54
82.00	3682	167.00	27936	256.00	48920	365.00	15765
83.00	3239	168.00	13823	257.00	4149	366.00	2273
84.00	304	169.00	2332	258.00	21704	367.00	171
85.00	2673	170.00	964	259.00	3552	370.00	223
86.00	4546	171.00	1326	260.00	516	371.00	611
87.00	2199	172.00	2399	261.00	573	372.00	5622
88.00	779	173.00	3174	263.00	216	373.00	1163
89.00	404	174.00	5250	264.00	756	374.00	207
90.00	45	175.00	10362	265.00	8624	375.00	45
91.00	3378	176.00	2819	266.00	1292	377.00	57
92.00	3994	177.00	5390	267.00	158	383.00	1213
93.00	26184	178.00	1798	268.00	96	384.00	220
94.00	1810	179.00	20272	270.00	353	385.00	62
95.00	353	180.00	13307	271.00	742	390.00	764
96.00	1108	181.00	6536	272.00	994	391.00	439
97.00	629	182.00	917	273.00	9575	392.00	334
98.00	21264	183.00	578	274.00	27024	393.00	51
99.00	15464	184.00	1707	275.00	150336	397.00	55
100.00	1213	185.00	9598	276.00	20064	401.00	130
101.00	7941	186.00	75040	277.00	13332	402.00	1809
102.00	407	187.00	21824	278.00	2250	403.00	2548
103.00	3032	188.00	2208	279.00	421	404.00	780
104.00	5846	189.00	5334	281.00	219	405.00	122
105.00	5629	190.00	872	282.00	258	415.00	50
106.00	1800	191.00	2140	283.00	1655	421.00	1997
107.00	67056	192.00	6866	284.00	1098	422.00	1842
108.00	9675	193.00	8056	285.00	2171	423.00	15273
109.00	2337	194.00	1522	286.00	558	424.00	3590
110.00	115352	195.00	1001	288.00	235	425.00	219

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d

Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	17720	196.00	16896	289.00	389	431.00	68
112.00	2652	197.00	3561	290.00	463	432.00	65
113.00	730	198.00	507968	291.00	366	433.00	52
114.00	171	199.00	33816	292.00	523	435.00	55
115.00	254	200.00	2938	293.00	2767	437.00	294
116.00	3878	201.00	2726	294.00	806	438.00	170
117.00	62200	203.00	4278	295.00	870	439.00	365
118.00	4275	204.00	21168	296.00	44632	440.00	62
119.00	548	205.00	35144	297.00	6459	441.00	39312
120.00	883	206.00	144384	298.00	439	442.00	265344
121.00	352	207.00	19096	301.00	457	443.00	54336
122.00	4776	208.00	5385	302.00	797	444.00	5092
123.00	7064	209.00	2007	303.00	4856	445.00	267
124.00	2977	210.00	2161	304.00	1329		
125.00	2892	211.00	5880	305.00	86		

Data File: /chem/MSD5.i/s120309.b/s510302.d

Date : 03-DEC-2009 11:40

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

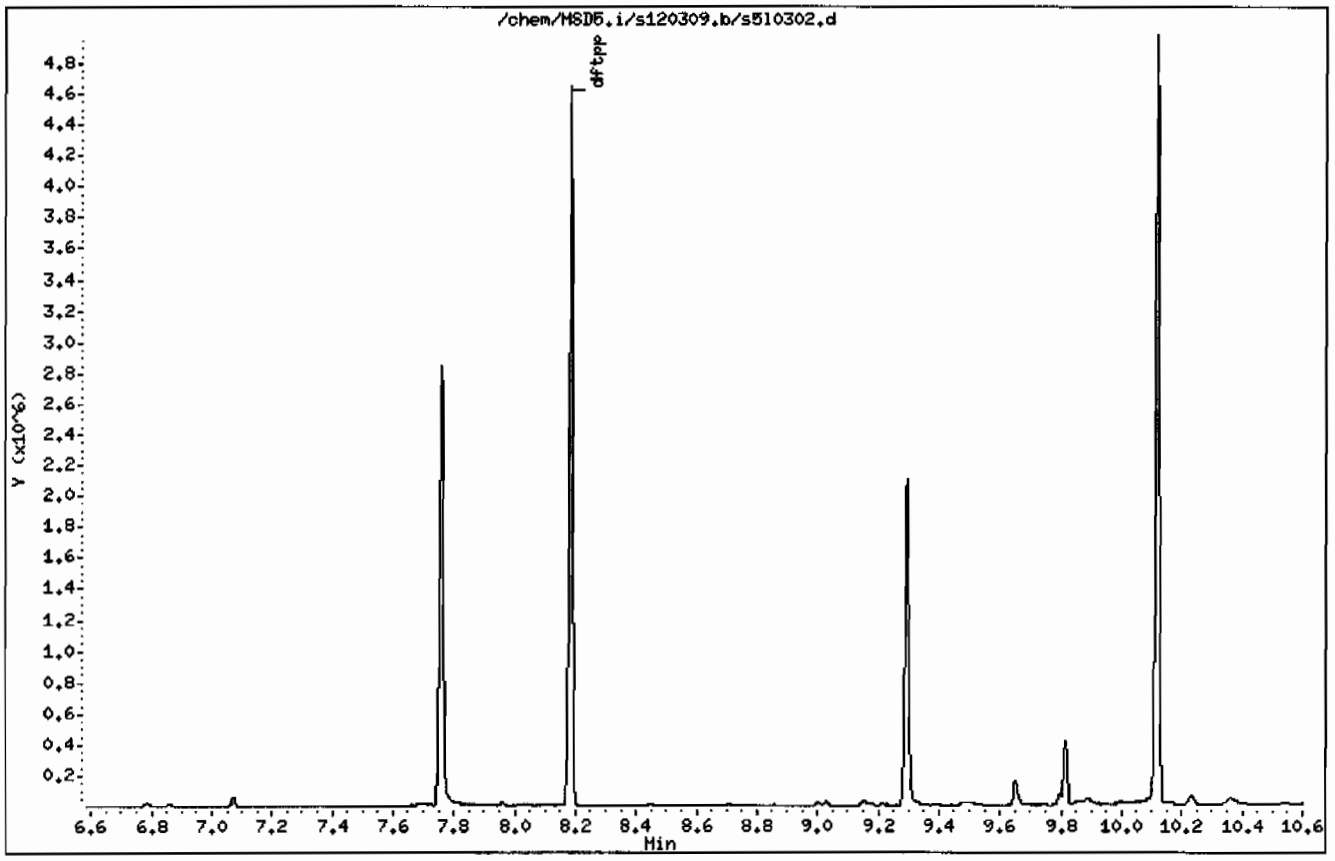

Data File: /chem/MSD5.i/s120309.b/s510302.d

Date : 03-DEC-2009 11:40

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

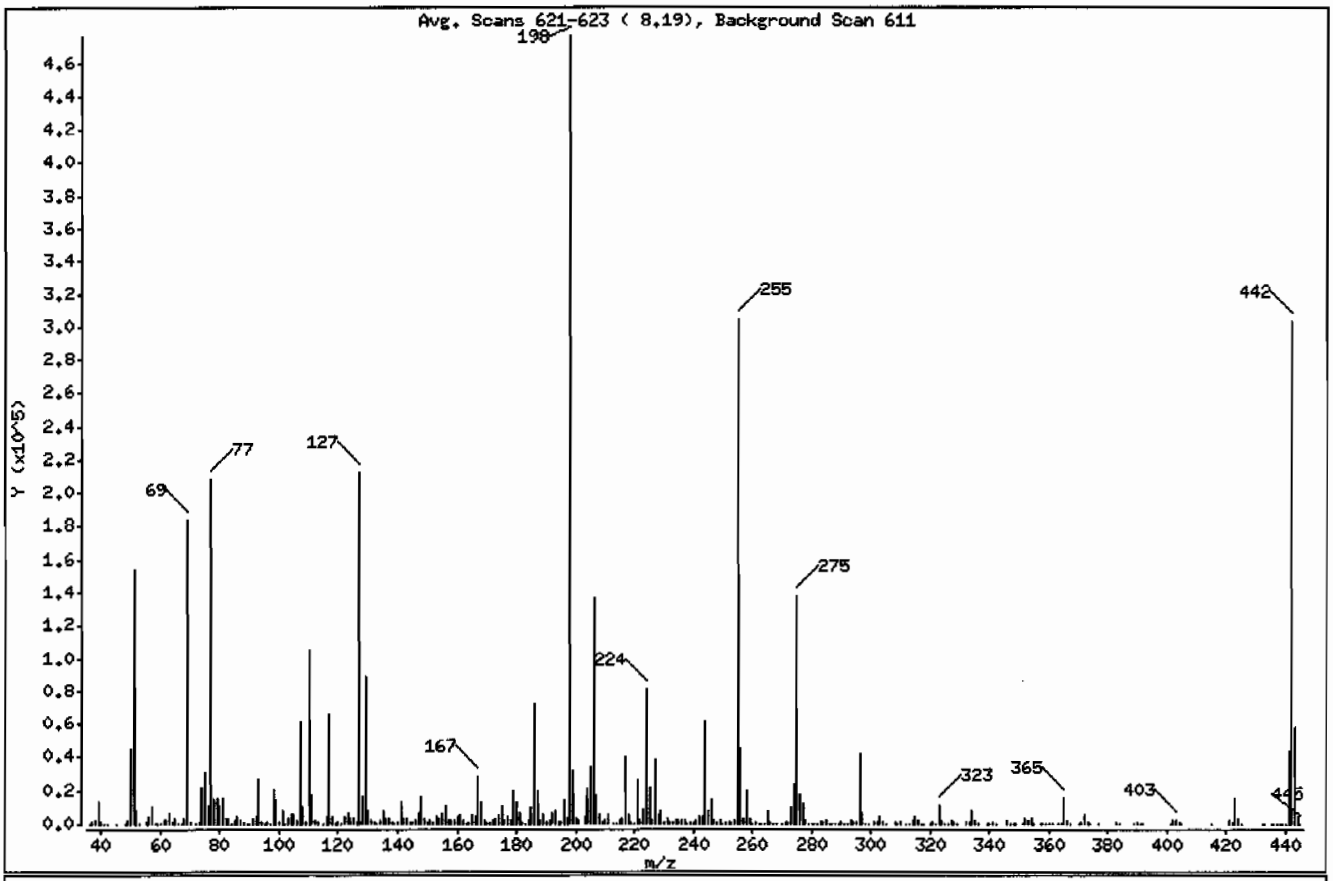

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.37
68	Less than 2.00% of mass 69	0.73 (1.89)
69	Mass 69 relative abundance	38.64
70	Less than 2.00% of mass 69	0.19 (0.49)
127	40.00 - 60.00% of mass 198	44.71
197	Less than 1.00% of mass 198	0.63
199	5.00 - 9.00% of mass 198	6.73
275	10.00 - 30.00% of mass 198	29.07
365	Greater than 1.00% of mass 198	3.32
441	Present, but less than mass 443	9.30
442	Greater than 40.00% of mass 198	63.68
443	17.00 - 23.00% of mass 442	12.11 (19.01)

Data File: /chem/MSD5.i/s120309.b/s510302.d

Date : 03-DEC-2009 11:40

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510302.d
Spectrum: Avg. Scans 621-623 (8.19), Background Scan 611
Location of Maximum: 198.00
Number of points: 343

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	232	129.00	88680	217.00	40200	305.00	120
37.00	829	130.00	7222	218.00	5117	308.00	689
38.00	2492	131.00	1706	219.00	651	309.00	366
39.00	13487	132.00	783	220.00	278	310.00	636
40.00	572	133.00	511	221.00	26600	312.00	108
41.00	234	134.00	2649	222.00	2650	313.00	476
42.00	62	135.00	7379	223.00	8555	314.00	1785
45.00	280	136.00	2972	224.00	80760	315.00	4639
48.00	47	137.00	3493	225.00	21448	316.00	2413
49.00	1656	138.00	909	226.00	2012	317.00	380
50.00	45072	139.00	470	227.00	37752	318.00	60
51.00	154048	140.00	1407	228.00	4958	320.00	96
52.00	7736	141.00	13036	229.00	7313	321.00	1358
53.00	375	142.00	3826	230.00	1101	322.00	466
55.00	702	143.00	2916	231.00	2991	323.00	11024
56.00	4852	144.00	709	232.00	628	324.00	2125
57.00	9925	145.00	667	233.00	564	325.00	90
58.00	471	146.00	2527	234.00	2334	326.00	273
59.00	63	147.00	6087	235.00	2372	327.00	2083
60.00	214	148.00	16202	236.00	1768	328.00	1049
61.00	2330	149.00	3377	237.00	2683	329.00	220
62.00	2463	150.00	566	238.00	368	332.00	895
63.00	6993	151.00	1705	239.00	1545	333.00	1113
64.00	837	152.00	1031	240.00	1202	334.00	7126
65.00	3096	153.00	4113	241.00	1955	335.00	1862
66.00	194	154.00	2905	242.00	4178	336.00	172
67.00	374	155.00	6879	243.00	4426	339.00	239
68.00	3470	156.00	10617	244.00	61688	340.00	241
69.00	183936	157.00	2181	245.00	7743	341.00	1372
70.00	900	158.00	2684	246.00	13735	342.00	432
72.00	78	159.00	1707	247.00	2708	346.00	2713
73.00	1345	160.00	3940	248.00	661	347.00	532
74.00	21376	161.00	5680	249.00	2232	348.00	48
75.00	30104	162.00	1850	250.00	463	349.00	42
76.00	10402	163.00	483	251.00	692	351.00	131

Data File: /chem/MSD5.i/s120309.b/s510302.d

Date : 03-DEC-2009 11:40

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVHF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510302.d
Spectrum: Avg. Scans 621-623 (8.19), Background Scan 611
Location of Maximum: 198.00
Number of points: 343

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	207872	164.00	812	252.00	659	352.00	3329
78.00	14123	165.00	4946	253.00	1417	353.00	2208
79.00	14816	166.00	3955	254.00	2216	354.00	3624
80.00	10547	167.00	28576	255.00	304192	355.00	505
81.00	14961	168.00	13569	256.00	44760	357.00	55
82.00	3583	169.00	1970	257.00	3402	358.00	51
83.00	3145	170.00	961	258.00	20088	359.00	228
84.00	404	171.00	909	259.00	3053	360.00	65
85.00	2569	172.00	2140	260.00	403	361.00	61
86.00	4746	173.00	3498	261.00	632	363.00	55
87.00	1844	174.00	5972	262.00	135	364.00	43
88.00	730	175.00	10477	263.00	160	365.00	15819
89.00	331	176.00	2658	264.00	346	366.00	2313
90.00	58	177.00	4876	265.00	8074	367.00	241
91.00	3177	178.00	1822	266.00	1206	370.00	454
92.00	3948	179.00	19576	267.00	156	371.00	946
93.00	25920	180.00	13465	268.00	37	372.00	5348
94.00	1634	181.00	6407	270.00	507	373.00	1344
95.00	437	182.00	1151	271.00	668	374.00	137
96.00	1210	183.00	379	272.00	635	377.00	187
97.00	344	184.00	1742	273.00	9429	383.00	1083
98.00	21104	185.00	9572	274.00	24488	384.00	325
99.00	14524	186.00	71880	275.00	138368	389.00	65
100.00	1223	187.00	19712	276.00	17744	390.00	700
101.00	8110	188.00	2195	277.00	12082	391.00	484
102.00	432	189.00	5236	278.00	2057	392.00	405
103.00	2773	190.00	595	279.00	334	401.00	174
104.00	5199	191.00	2324	280.00	68	402.00	1903
105.00	5580	192.00	6975	281.00	107	403.00	2443
106.00	1783	193.00	7415	282.00	364	404.00	896
107.00	60736	194.00	1498	283.00	1492	405.00	67
108.00	9361	195.00	891	284.00	873	415.00	118
109.00	1342	196.00	14605	285.00	2307	421.00	2139
110.00	105256	197.00	2985	286.00	370	422.00	1329
111.00	17216	198.00	475968	287.00	43	423.00	15210

Data File: /chem/MSD5.i/s120309.b/s510302.d

Date : 03-DEC-2009 11:40

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510302.d
Spectrum: Avg. Scans 621-623 (8.19), Background Scan 611
Location of Maximum: 198.00
Number of points: 343

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	2001	199.00	32032	288.00	122	424.00	3239
113.00	600	200.00	2878	289.00	451	425.00	241
115.00	218	201.00	2687	290.00	563	432.00	83
116.00	3935	203.00	4329	291.00	260	433.00	52
117.00	65240	204.00	20904	292.00	459	435.00	160
118.00	4504	205.00	34184	293.00	2661	436.00	64
119.00	414	206.00	137152	294.00	844	437.00	208
120.00	903	207.00	17904	295.00	829	438.00	201
121.00	384	208.00	5129	296.00	42000	439.00	62
122.00	4866	209.00	1623	297.00	6372	440.00	191
123.00	6989	210.00	2539	298.00	189	441.00	44288
124.00	3475	211.00	6007	299.00	63	442.00	303104
125.00	2923	213.00	491	301.00	598	443.00	57616
126.00	714	214.00	214	302.00	648	444.00	4781
127.00	212800	215.00	1807	303.00	4646	445.00	252
128.00	16231	216.00	3068	304.00	997		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1			Matrix:	SOIL
Lab Sample ID:	1201981224				
Client Sample:	QC for batch 926640	Client:	LANL010	Project:	QC
Client ID:	MB for batch 926640	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 13:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s5l0307-3.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1			Matrix:	SOIL
Lab Sample ID:	1201981224				
Client Sample:	QC for batch 926640	Client:	LANL010	Project:	QC
Client ID:	MB for batch 926640	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 13:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s5l0307-3.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	321	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510307.d
Lab Smp Id: 1201981224 Client Smp ID: SBLK01
Inj Date : 03-DEC-2009 13:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201981224|926641|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	342707	40.0000	
* 29 Naphthalene-d8	136	4.801	4.812	(1.000)	1186234	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.068	(1.000)	739929	40.0000	
* 67 Phenanthrene-d10	188	7.237	7.243	(1.000)	1347800	40.0000	
* 91 Chrysene-d12	240	9.654	9.665	(1.000)	1392283	40.0000	
* 98 Perylene-d12	264	11.354	11.365	(1.000)	1294264	40.0000	
$ 3 2-Fluorophenol	112	3.113	3.117	(0.792)	483611	68.1424	2270
$ 5 Phenol-d5	99	3.643	3.646	(0.927)	581331	66.0417	2200
$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	250003	32.9639	1100
$ 39 2-Fluorobiphenyl	172	5.543	5.553	(0.915)	641809	34.3347	1140
$ 60 2,4,6-Tribromophenol	329	6.660	6.665	(1.099)	215105	78.5904	2620
$ 81 p-Terphenyl-d14	244	8.619	8.625	(0.893)	1010142	50.7327	1690

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510307.d
Lab Smp Id: 1201981224 Client Smp ID: SBLK01
Inj Date : 03-DEC-2009 13:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201981224|926641|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.931	2021928	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.949	486488	9.62424260	321	0		0	10

Data File: /chem/MSD5.i/s120309.b/s510307.d
Date : 03-DEC-2009 13:30
Client ID: SBLK01
Sample Info: 1120198122419266411|1|SVHF1|1|SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

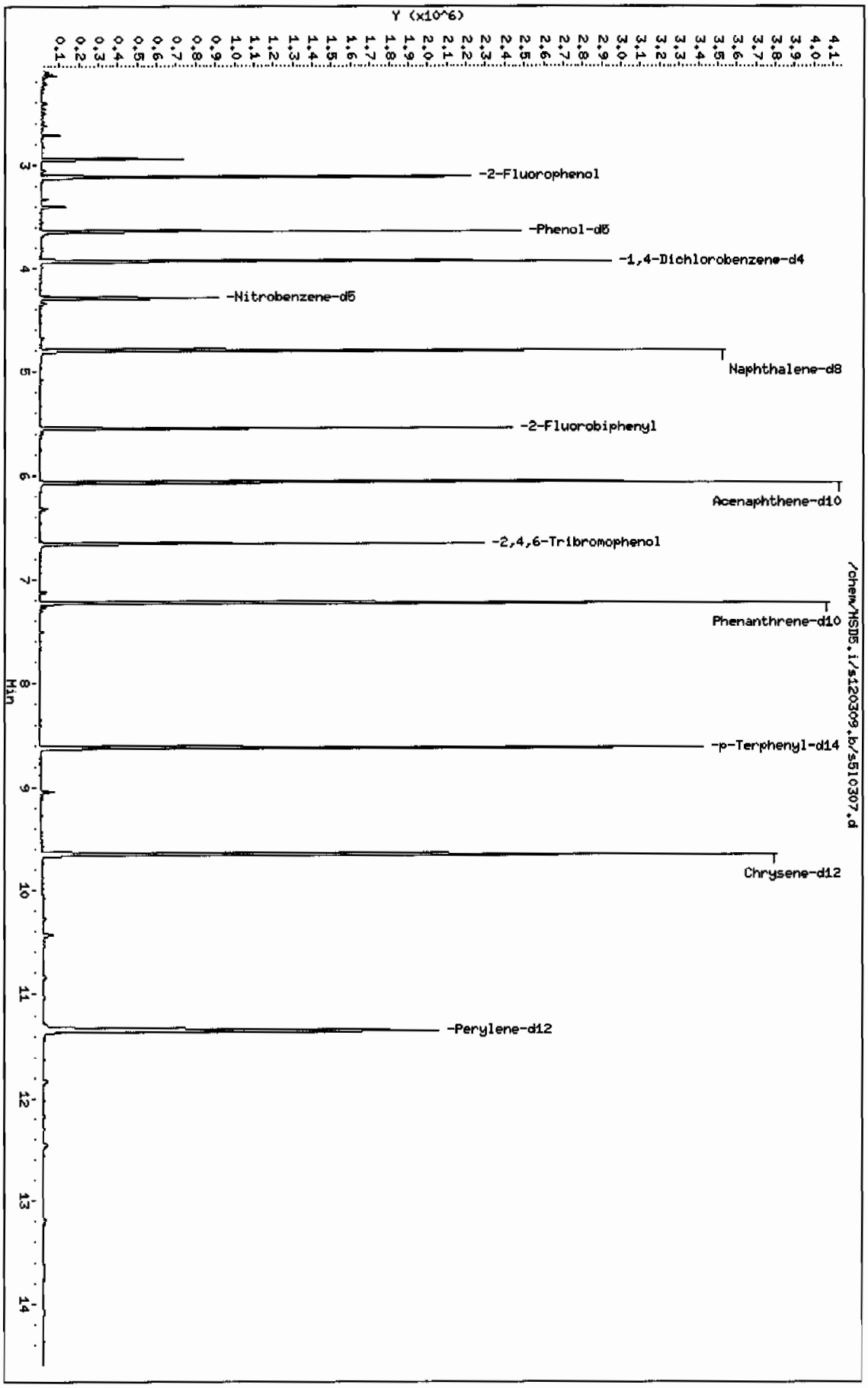

Page 1

Data File: /chem/MSD5.i/s120309.b/s510307.d

Date : 03-DEC-2009 13:30

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: |120198122419266411|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	46	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3944	35	C4H7NO2	101

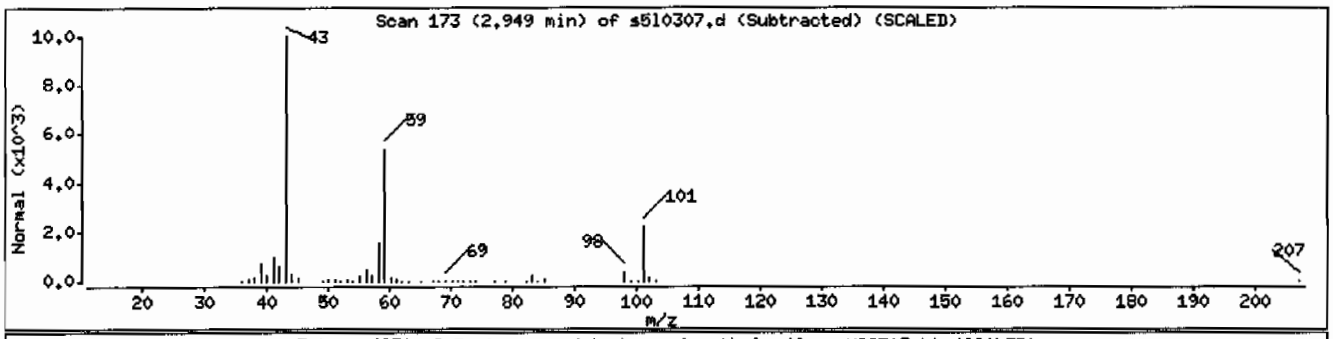

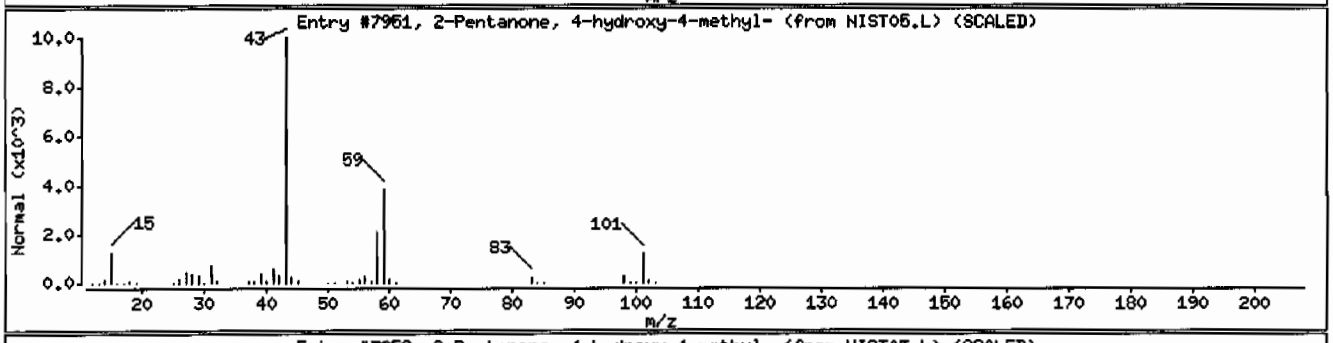

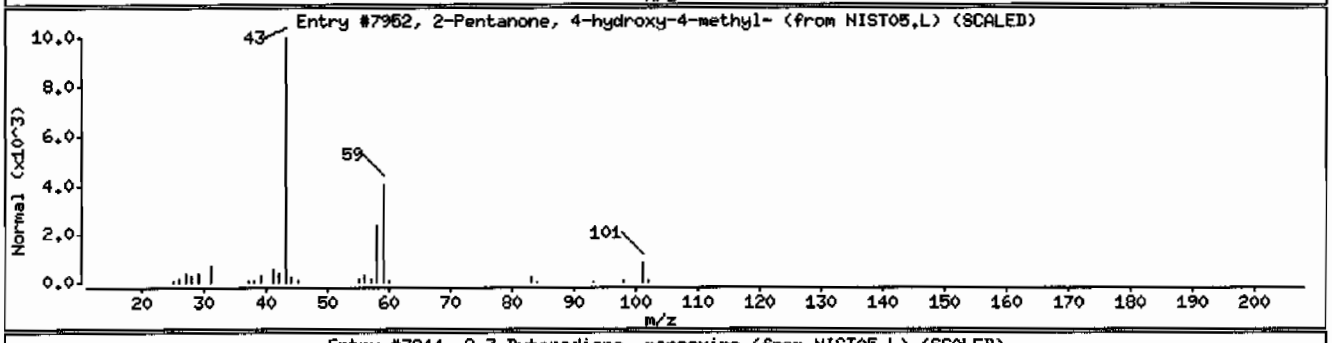

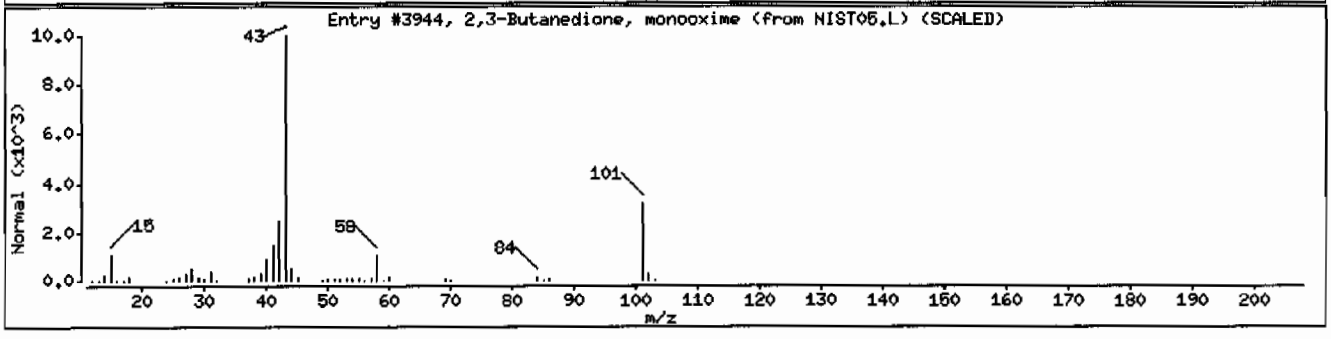

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201981227**				
Client Sample:	**QC for batch 926640**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 926640**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**926641**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 13:52**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**11/27/2009 10:20**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510308-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1190	ug/kg	66.7	333
108-95-2	Phenol		1300	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1220	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		988	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1520	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1370	ug/kg	66.7	333
83-32-9	Acenaphthene		1340	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1480	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1530	ug/kg	110	333
87-86-5	Pentachlorophenol		1470	ug/kg	83.3	333
129-00-0	Pyrene		1450	ug/kg	10.0	33.3
110-86-1	Pyridine		1080	ug/kg	66.7	333
62-53-3	Aniline		1300	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1190	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		973	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1540	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1030	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1250	ug/kg	66.7	333
95-48-7	o-Cresol		1190	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1380	ug/kg	100	333
67-72-1	Hexachloroethane		1000	ug/kg	66.7	333
98-95-3	Nitrobenzene		1370	ug/kg	66.7	333
78-59-1	Isophorone		1370	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1260	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1330	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1300	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1380	ug/kg	66.7	333
65-85-0	Benzoic acid		3350	ug/kg	167	667
91-20-3	Naphthalene		1260	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1480	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1180	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1360	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1480	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1360	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1370	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1260	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1320	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1810	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1			Matrix:	SOIL
Lab Sample ID:	1201981227				
Client Sample:	QC for batch 926640	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926640	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 13:52	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510308-2.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1390	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1400	ug/kg	33.3	333
208-96-8	Acenaphthylene		1390	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1510	ug/kg	127	667
132-64-9	Dibenzofuran		1590	ug/kg	66.7	333
84-66-2	Diethylphthalate		1380	ug/kg	66.7	333
86-73-7	Fluorene		1420	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1350	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1410	ug/kg	66.7	333
100-01-6	4-Nitroaniline		3040	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1520	ug/kg	66.7	333
122-66-7	Azobenzene		1460	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1380	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1350	ug/kg	66.7	333
85-01-8	Phenanthrene		1410	ug/kg	10.0	33.3
120-12-7	Anthracene		1440	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1460	ug/kg	66.7	333
206-44-0	Fluoranthene		1520	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1480	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1460	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1280	ug/kg	100	333
218-01-9	Chrysene		1450	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1410	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1450	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1490	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1470	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1530	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1450	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1430	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1570	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1170	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510308.d
Lab Smp Id: 1201981227 Client Smp ID: SBLK01LCS
Inj Date : 03-DEC-2009 13:52
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201981227|926641|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	361342	40.0000	
* 29 Naphthalene-d8	136	4.801	4.812	(1.000)	1388766	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.068	(1.000)	814150	40.0000	
* 67 Phenanthrene-d10	188	7.237	7.243	(1.000)	1537372	40.0000	
* 91 Chrysene-d12	240	9.660	9.665	(1.000)	1686500	40.0000	
* 98 Perylene-d12	264	11.360	11.365	(1.000)	1593212	40.0000	
$ 3 2-Fluorophenol	112	3.113	3.117	(0.792)	609348	81.4313	2710
$ 5 Phenol-d5	99	3.643	3.646	(0.927)	724222	78.0317	2600
$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	366311	41.2558	1380
$ 39 2-Fluorobiphenyl	172	5.548	5.553	(0.916)	830330	40.3705	1340
$ 60 2,4,6-Tribromophenol	329	6.666	6.665	(1.100)	272225	90.3925	3010
$ 81 p-Terphenyl-d14	244	8.619	8.625	(0.892)	1143589	47.4151	1580

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.654	3.656	(0.930)	378997	39.1030	1300(Q)
8 2-Chlorophenol	128	3.796	3.800	(0.966)	304531	36.6365	1220
11 1,4-Dichlorobenzene	146	3.943	3.950	(1.003)	299482	29.6389	988
17 N-Nitrosodipropylamine	70	4.166	4.176	(1.060)	198511	45.5146	1520(Q)
28 1,2,4-Trichlorobenzene	180	4.754	4.759	(0.990)	305178	35.1643	1170
33 4-Chloro-3-methylphenol	107	5.154	5.149	(1.073)	280772	41.1449	1370
47 Acenaphthene	154	6.090	6.092	(1.005)	678788	40.2461	1340
50 2,4-Dinitrotoluene	165	6.178	6.184	(1.019)	268066	44.2812	1480
52 4-Nitrophenol	139	6.101	6.107	(1.007)	135533	45.9000	1530
65 Pentachlorophenol	266	7.066	7.065	(0.976)	162759	44.0008	1470
79 Pyrene	202	8.525	8.529	(0.882)	1483955	43.4395	1450
2 Pyridine	79	2.460	2.442	(0.626)	191441	32.5346	1080
4 Aniline	66	3.713	3.718	(0.945)	140877	38.8757	1300
7 bis(2-Chloroethyl) ether	63	3.725	3.738	(0.948)	204089	35.6409	1190
9 1,3-Dichlorobenzene	146	3.896	3.906	(0.991)	290453	29.1808	973
12 Benzyl alcohol	108	4.001	4.003	(1.018)	241814	46.1092	1540
13 1,2-Dichlorobenzene	146	4.049	4.056	(1.030)	296105	30.9659	1030
14 bis(2-Chloroisopropyl)ether	45	4.072	4.080	(1.036)	341816	37.5545	1250
15 o-Cresol	107	4.054	4.056	(1.031)	235912	35.5585	1180
18 m,p-Cresols	107	4.149	4.157	(1.055)	350533	41.5058	1380
19 Hexachloroethane	117	4.278	4.287	(1.088)	112044	30.0337	1000
21 Nitrobenzene	77	4.307	4.316	(0.897)	340147	41.1433	1370
22 Isophorone	82	4.460	4.470	(0.929)	629524	41.0015	1370
23 2-Nitrophenol	139	4.525	4.532	(0.942)	162865	37.8259	1260
24 2,4-Dimethylphenol	122	4.513	4.523	(0.940)	296565	39.9292	1330
25 bis(2-Chloroethoxy)methane	93	4.584	4.590	(0.955)	336188	39.1360	1300
26 2,4-Dichlorophenol	162	4.684	4.691	(0.975)	287378	41.4915	1380
27 Benzoic acid	105	4.590	4.580	(0.956)	384531	100.388	3350
30 Naphthalene	128	4.819	4.826	(1.004)	906689	37.7225	1260(Q)
31 4-Chloroaniline	127	4.837	4.840	(1.007)	427998	44.4695	1480
32 Hexachlorobutadiene	225	4.884	4.889	(1.017)	200577	35.5335	1180
34 2-Methylnaphthalene	142	5.301	5.308	(1.104)	678305	40.9193	1360
36 Hexachlorocyclopentadiene	237	5.401	5.409	(0.891)	146191	44.5019	1480
37 2,4,6-Trichlorophenol	196	5.490	5.495	(0.906)	240774	40.7201	1360
38 2,4,5-Trichlorophenol	196	5.519	5.524	(0.911)	254849	41.2457	1370
40 2-Chloronaphthalene	162	5.654	5.664	(0.933)	651289	37.9117	1260
42 o-Nitroaniline	65	5.713	5.717	(0.943)	180420	39.5919	1320
41 m-Nitroaniline	138	6.007	6.015	(0.991)	165122	54.2701	1810
43 Dimethylphthalate	163	5.819	5.828	(0.960)	845859	41.7658	1390
44 2,6-Dinitrotoluene	165	5.878	5.881	(0.970)	198201	41.8815	1400
45 Acenaphthylene	152	5.960	5.967	(0.984)	1093008	41.7758	1390
48 2,4-Dinitrophenol	184	6.084	6.088	(1.004)	78924	45.3610	1510(Q)
49 Dibenzofuran	168	6.213	6.218	(1.025)	1169045	47.7794	1590
51 Diethylphthalate	149	6.331	6.338	(1.045)	831892	41.2796	1380
53 Fluorene	166	6.478	6.482	(1.069)	863017	42.6376	1420
54 4-Chlorophenylphenylether	204	6.448	6.454	(1.064)	451866	40.5595	1350
55 2-Methyl-4,6-dinitrophenol	198	6.490	6.492	(0.897)	128794	42.1510	1400

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.472	6.478	(1.068)	185413	91.3172	3040(R)
133 Diphenylamine	169	6.537	6.545	(0.903)	689742	45.6509	1520
58 1,2-Diphenylhydrazine	77	6.578	6.579	(0.909)	822725	43.8926	1460
61 4-Bromophenylphenylether	248	6.842	6.844	(0.946)	286500	41.2923	1380
63 Hexachlorobenzene	284	6.913	6.916	(0.955)	297987	40.4005	1350
68 Phenanthrene	178	7.260	7.263	(1.003)	1221121	42.2922	1410
69 Anthracene	178	7.301	7.306	(1.009)	1243509	43.3008	1440
72 Di-n-butylphthalate	149	7.660	7.662	(1.059)	1446682	43.7895	1460
76 Fluoranthene	202	8.307	8.312	(1.148)	1443172	45.6484	1520
85 Butylbenzylphthalate	149	9.054	9.059	(0.937)	673033	44.3401	1480
89 Benzo(a)anthracene	228	9.648	9.651	(0.999)	1491674	43.8602	1460
90 3,3'-Dichlorobenzidine	252	9.595	9.589	(0.993)	438408	38.4364	1280
92 Chrysene	228	9.683	9.689	(1.002)	1347872	43.4751	1450
93 bis(2-Ethylhexyl)phthalate	149	9.578	9.583	(0.991)	953853	42.2306	1410
94 Di-n-octylphthalate	149	10.236	10.243	(0.901)	1505819	43.6347	1450
95 Benzo(b)fluoranthene	252	10.830	10.835	(0.953)	1494859	44.7751	1490
96 Benzo(k)fluoranthene	252	10.872	10.874	(0.957)	1470651	44.1295	1470
97 Benzo(a)pyrene	252	11.277	11.283	(0.993)	1349823	45.8549	1530
99 Indeno(1,2,3-cd)pyrene	276	13.160	13.166	(1.158)	1439002	43.5472	1450
100 Dibenzo(a,h)anthracene	278	13.177	13.181	(1.160)	1188099	42.7932	1430
101 Benzo(ghi)perylene	276	13.713	13.715	(1.207)	1216528	46.9661	1560
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.409	(0.615)	147831	35.6370	1190

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD5.i/s120309.b/s510308.d
Date : 03-DEC-2009 13:52
Client ID: SBLK01LCS
Sample Info: 1120198122719266411|SVMF1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

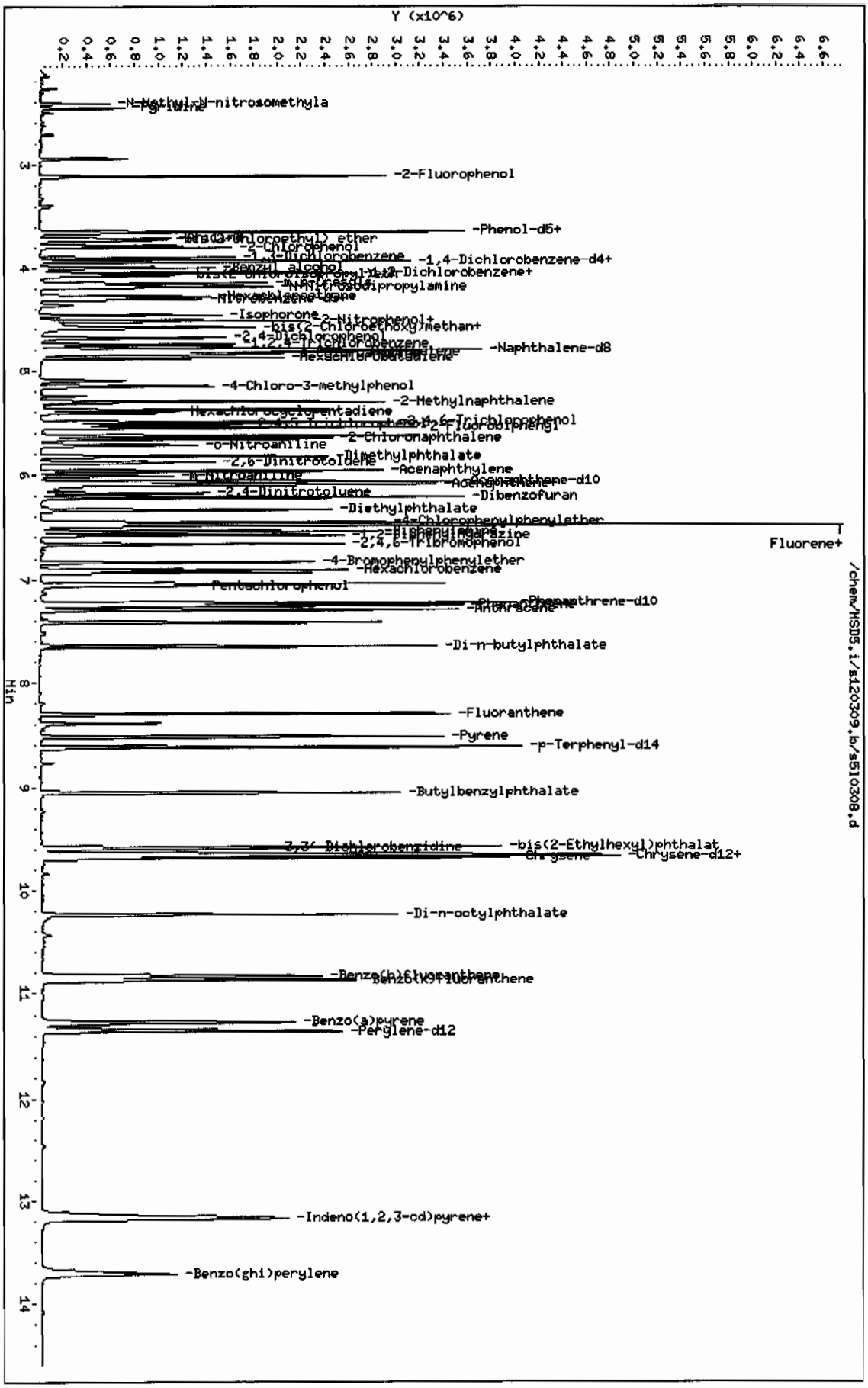

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981225	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.7
Client Sample:	QC for batch 926640	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-10-6902MS	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926641	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/03/2009 18:03	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 10:20	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s5l0319.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1060	ug/kg	78.0	390
108-95-2	Phenol		1200	ug/kg	78.0	390
95-57-8	2-Chlorophenol		1130	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene		651	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine		1270	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol		1270	ug/kg	78.0	390
83-32-9	Acenaphthene		1190	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene		1300	ug/kg	39.0	390
100-02-7	4-Nitrophenol		1340	ug/kg	129	390
87-86-5	Pentachlorophenol		1300	ug/kg	97.5	390
129-00-0	Pyrene		1620	ug/kg	11.7	39.0
110-86-1	Pyridine		1020	ug/kg	78.0	390
62-53-3	Aniline		1110	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether		1090	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene		641	ug/kg	78.0	390
100-51-6	Benzyl alcohol		1210	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene		728	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether		1110	ug/kg	78.0	390
95-48-7	o-Cresol		1200	ug/kg	78.0	390
65794-96-9	m,p-Cresols		1260	ug/kg	117	390
67-72-1	Hexachloroethane		593	ug/kg	78.0	390
98-95-3	Nitrobenzene		1220	ug/kg	78.0	390
78-59-1	Isophorone		1280	ug/kg	78.0	390
88-75-5	2-Nitrophenol		1170	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol		1210	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane		1220	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol		1280	ug/kg	78.0	390
65-85-0	Benzoic acid		1880	ug/kg	195	780
91-20-3	Naphthalene		1110	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline		1320	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene		841	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene		1220	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene		500	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol		1220	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol		1280	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene		1110	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline		1230	ug/kg	78.0	390
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1710	ug/kg	78.0	390

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	1201981225	Date Received:	11/20/2009 08:50	%Moisture:	14.7
Client Sample:	QC for batch 926640	Client:	LANL010	Project:	QC
Client ID:	RE03-10-6902MS	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 18:03	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s510319.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1280	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene		1260	ug/kg	39.0	390
208-96-8	Acenaphthylene		1260	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol		1040	ug/kg	148	780
132-64-9	Dibenzofuran		1460	ug/kg	78.0	390
84-66-2	Diethylphthalate		1280	ug/kg	78.0	390
86-73-7	Fluorene		1310	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether		1190	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol		1050	ug/kg	78.0	390
100-01-6	4-Nitroaniline		2360	ug/kg	117	390
	p-Nitroaniline					
122-39-4	Diphenylamine		1350	ug/kg	78.0	390
122-66-7	Azobenzene		1350	ug/kg	78.0	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1250	ug/kg	78.0	390
118-74-1	Hexachlorobenzene		1180	ug/kg	78.0	390
85-01-8	Phenanthrene		1480	ug/kg	11.7	39.0
120-12-7	Anthracene		1360	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate		1370	ug/kg	78.0	390
206-44-0	Fluoranthene		1680	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate		1360	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene		1440	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine		1070	ug/kg	117	390
218-01-9	Chrysene		1450	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate		1250	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate		1300	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene		1470	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene		1340	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene		1460	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene		1310	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene		1240	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene		1370	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene		940	ug/kg	78.0	390

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510319.d
Lab Smp Id: 1201981225 Client Smp ID: RE03-10-6902MS
Inj Date : 03-DEC-2009 18:03
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201981225|926641|1|SVMF|1|LANL59002MS
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 19 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	14.65250	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	312610	40.0000	
* 29 Naphthalene-d8	136	4.801	4.812	(1.000)	1199538	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.068	(1.000)	714648	40.0000	
* 67 Phenanthrene-d10	188	7.236	7.243	(1.000)	1333952	40.0000	
* 91 Chrysene-d12	240	9.660	9.665	(1.000)	1414033	40.0000	
* 98 Perylene-d12	264	11.360	11.365	(1.000)	1363165	40.0000	
$ 3 2-Fluorophenol	112	3.113	3.117	(0.792)	413522	63.8762	2490
$ 5 Phenol-d5	99	3.643	3.646	(0.927)	496352	61.8164	2410
$ 20 Nitrobenzene-d5	82	4.295	4.301	(0.895)	238745	31.1305	1210
$ 39 2-Fluorobiphenyl	172	5.548	5.553	(0.916)	553080	30.6347	1190
$ 60 2,4,6-Tribromophenol	329	6.660	6.665	(1.099)	180198	68.1660	2660
$ 81 p-Terphenyl-d14	244	8.619	8.625	(0.892)	722872	35.7467	1390

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.654	3.656	(0.930)	257403	30.6974	1200(Q)
8 2-Chlorophenol	128	3.796	3.800	(0.966)	208182	28.9495	1130
11 1,4-Dichlorobenzene	146	3.943	3.950	(1.003)	145935	16.6943	651
17 N-Nitrosodipropylamine	70	4.166	4.176	(1.060)	123257	32.6657	1270(Q)
28 1,2,4-Trichlorobenzene	180	4.754	4.759	(0.990)	180714	24.1077	940
33 4-Chloro-3-methylphenol	107	5.148	5.149	(1.072)	192188	32.6066	1270
47 Acenaphthene	154	6.084	6.092	(1.004)	451827	30.5193	1190
50 2,4-Dinitrotoluene	165	6.172	6.184	(1.018)	177046	33.3179	1300
52 4-Nitrophenol	139	6.101	6.107	(1.007)	84693	34.4290	1340
65 Pentachlorophenol	266	7.066	7.065	(0.976)	100667	33.2356	1300
79 Pyrene	202	8.519	8.529	(0.882)	1191528	41.6002	1620
2 Pyridine	79	2.454	2.442	(0.624)	133472	26.2190	1020
4 Aniline	66	3.713	3.718	(0.945)	89026	28.3970	1110
7 bis(2-Chloroethyl) ether	63	3.725	3.738	(0.948)	138396	27.9362	1090
9 1,3-Dichlorobenzene	146	3.896	3.906	(0.991)	141624	16.4464	641
12 Benzyl alcohol	108	4.001	4.003	(1.018)	140212	30.9035	1200
13 1,2-Dichlorobenzene	146	4.048	4.056	(1.030)	154491	18.6748	728
14 bis(2-Chloroisopropyl)ether	45	4.072	4.080	(1.036)	224079	28.4567	1110
15 o-Cresol	107	4.054	4.056	(1.031)	176340	30.7227	1200
18 m,p-Cresols	107	4.148	4.157	(1.055)	235750	32.2660	1260
19 Hexachloroethane	117	4.278	4.287	(1.088)	49069	15.2035	593
21 Nitrobenzene	77	4.307	4.316	(0.897)	223176	31.2532	1220
22 Isophorone	82	4.460	4.470	(0.929)	434266	32.7461	1280
23 2-Nitrophenol	139	4.525	4.532	(0.942)	111884	30.0845	1170
24 2,4-Dimethylphenol	122	4.513	4.523	(0.940)	198657	30.9663	1210
25 bis(2-Chloroethoxy)methane	93	4.584	4.590	(0.955)	231288	31.1719	1220
26 2,4-Dichlorophenol	162	4.684	4.691	(0.975)	195985	32.7600	1280
27 Benzoic acid	105	4.566	4.580	(0.951)	159828	48.3082	1880
30 Naphthalene	128	4.819	4.826	(1.004)	593350	28.5804	1110
31 4-Chloroaniline	127	4.837	4.840	(1.007)	282091	33.9332	1320
32 Hexachlorobutadiene	225	4.884	4.889	(1.017)	105178	21.5723	841
34 2-Methylnaphthalene	142	5.301	5.308	(1.104)	447365	31.2450	1220
36 Hexachlorocyclopentadiene	237	5.401	5.409	(0.891)	36940	12.8107	500
37 2,4,6-Trichlorophenol	196	5.490	5.495	(0.906)	162812	31.3689	1220
38 2,4,5-Trichlorophenol	196	5.519	5.524	(0.911)	178056	32.8296	1280
40 2-Chloronaphthalene	162	5.654	5.664	(0.933)	430431	28.5440	1110
42 o-Nitroaniline	65	5.713	5.717	(0.943)	125799	31.4494	1230
41 m-Nitroaniline	138	6.007	6.015	(0.991)	107541	43.7298	1700
43 Dimethylphthalate	163	5.819	5.828	(0.960)	583498	32.8228	1280
44 2,6-Dinitrotoluene	165	5.872	5.881	(0.969)	134671	32.4192	1260
45 Acenaphthylene	152	5.960	5.967	(0.983)	741798	32.2998	1260
48 2,4-Dinitrophenol	184	6.084	6.088	(1.004)	29729	26.7893	1040(Q)
49 Dibenzofuran	168	6.213	6.218	(1.025)	803180	37.3969	1460
51 Diethylphthalate	149	6.331	6.338	(1.045)	578328	32.6930	1280
53 Fluorene	166	6.472	6.482	(1.068)	598461	33.6838	1310
54 4-Chlorophenylphenylether	204	6.448	6.454	(1.064)	298767	30.5513	1190
55 2-Methyl-4,6-dinitrophenol	198	6.489	6.492	(0.897)	61834	26.8695	1050

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.472	6.478	(1.068)	107679	60.4166	2360
133 Diphenylamine	169	6.537	6.545	(0.903)	454421	34.6626	1350
58 1,2-Diphenylhydrazine	77	6.572	6.579	(0.908)	561050	34.4967	1340
61 4-Bromophenylphenylether	248	6.836	6.844	(0.945)	192210	31.9272	1240
63 Hexachlorobenzene	284	6.913	6.916	(0.955)	193961	30.3071	1180
68 Phenanthrene	178	7.260	7.263	(1.003)	949108	37.8841	1480
69 Anthracene	178	7.301	7.306	(1.009)	868602	34.8583	1360
72 Di-n-butylphthalate	149	7.660	7.662	(1.059)	1008888	35.1949	1370
76 Fluoranthene	202	8.301	8.312	(1.147)	1181056	43.0543	1680
85 Butylbenzylphthalate	149	9.048	9.059	(0.937)	444963	34.9632	1360
89 Benzo(a)anthracene	228	9.642	9.651	(0.998)	1054668	36.9862	1440
90 3,3'-Dichlorobenzidine	252	9.589	9.589	(0.993)	263519	27.5552	1070
92 Chrysene	228	9.683	9.689	(1.002)	963635	37.0708	1440
93 bis(2-Ethylhexyl)phthalate	149	9.572	9.583	(0.991)	603016	31.9679	1250
94 Di-n-octylphthalate	149	10.236	10.243	(0.901)	983377	33.3046	1300
95 Benzo(b)fluoranthene	252	10.830	10.835	(0.953)	1078042	37.7396	1470
96 Benzo(k)fluoranthene	252	10.866	10.874	(0.956)	983163	34.4802	1340
97 Benzo(a)pyrene	252	11.277	11.283	(0.993)	942214	37.4096	1460
99 Indeno(1,2,3-cd)pyrene	276	13.154	13.166	(1.158)	939586	33.4932	1310
100 Dibenzo(a,h)anthracene	278	13.171	13.181	(1.159)	749438	31.8505	1240
101 Benzo(ghi)perylene	276	13.707	13.715	(1.207)	779305	35.1638	1370
1 N-Methyl-N-nitrosomethylamine	74	2.413	2.409	(0.614)	97141	27.0679	1060

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s120309.b/s510319.d
Date : 03-DEC-2009 18:03
Client ID: RE03-10-69024MS
Sample Info: 1120198122519266411!SVMF!1!LANL59002MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

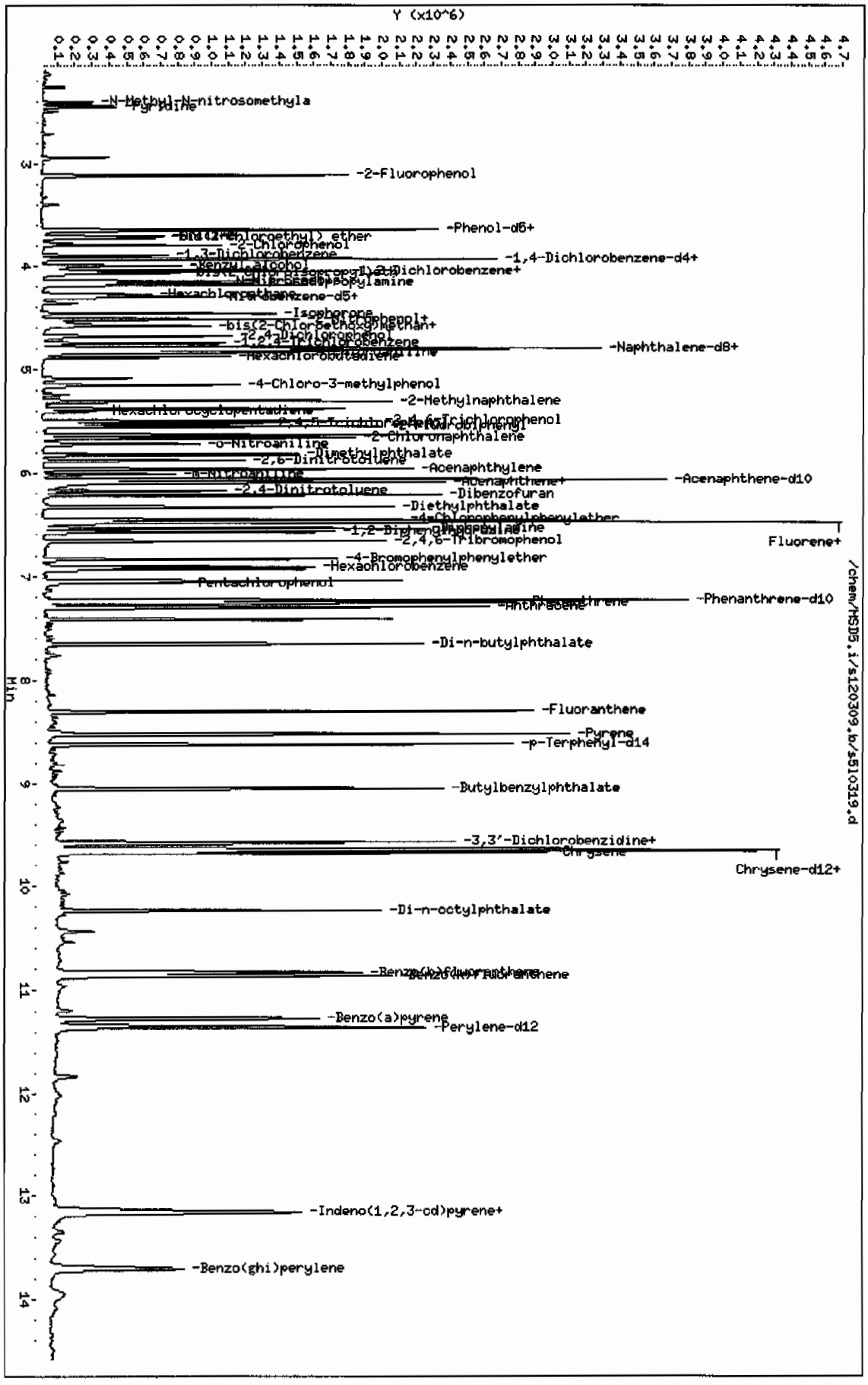

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201981226	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.7
Client Sample:	QC for batch 926640	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-10-6902MSD	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	926641	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/03/2009 18:26	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	11/27/2009 10:20	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s510320.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1170	ug/kg	78.1	390
108-95-2	Phenol		1270	ug/kg	78.1	390
95-57-8	2-Chlorophenol		1200	ug/kg	78.1	390
106-46-7	1,4-Dichlorobenzene		730	ug/kg	78.1	390
621-64-7	N-Nitrosodipropylamine		1470	ug/kg	78.1	390
59-50-7	4-Chloro-3-methylphenol		1410	ug/kg	78.1	390
83-32-9	Acenaphthene		1330	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene		1470	ug/kg	39.0	390
100-02-7	4-Nitrophenol		1600	ug/kg	129	390
87-86-5	Pentachlorophenol		1530	ug/kg	97.6	390
129-00-0	Pyrene		1790	ug/kg	11.7	39.0
110-86-1	Pyridine		1140	ug/kg	78.1	390
62-53-3	Aniline		1110	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether		1150	ug/kg	78.1	390
541-73-1	1,3-Dichlorobenzene		710	ug/kg	78.1	390
100-51-6	Benzyl alcohol		1260	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene		808	ug/kg	78.1	390
108-60-1	bis(2-Chloroisopropyl)ether		1180	ug/kg	78.1	390
95-48-7	o-Cresol		1310	ug/kg	78.1	390
65794-96-9	m,p-Cresols		1370	ug/kg	117	390
67-72-1	Hexachloroethane		681	ug/kg	78.1	390
98-95-3	Nitrobenzene		1360	ug/kg	78.1	390
78-59-1	Isophorone		1370	ug/kg	78.1	390
88-75-5	2-Nitrophenol		1300	ug/kg	78.1	390
105-67-9	2,4-Dimethylphenol		1330	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane		1330	ug/kg	78.1	390
120-83-2	2,4-Dichlorophenol		1410	ug/kg	78.1	390
65-85-0	Benzoic acid		2330	ug/kg	195	781
91-20-3	Naphthalene		1190	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline		1390	ug/kg	78.1	390
87-68-3	Hexachlorobutadiene		938	ug/kg	78.1	390
91-57-6	2-Methylnaphthalene		1310	ug/kg	7.81	39.0
77-47-4	Hexachlorocyclopentadiene		694	ug/kg	78.1	390
88-06-2	2,4,6-Trichlorophenol		1340	ug/kg	78.1	390
95-95-4	2,4,5-Trichlorophenol		1480	ug/kg	78.1	390
91-58-7	2-Chloronaphthalene		1230	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline		1340	ug/kg	78.1	390
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1830	ug/kg	78.1	390

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	1201981226	Date Received:	11/20/2009 08:50	%Moisture:	14.7
Client Sample:	QC for batch 926640	Client:	LANL010	Project:	QC
Client ID:	RE03-10-6902MSD	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	926641	Inst:	MSD5.I	Dilution:	1
Run Date:	12/03/2009 18:26	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	11/27/2009 10:20	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510320.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1400	ug/kg	78.1	390
606-20-2	2,6-Dinitrotoluene		1410	ug/kg	39.0	390
208-96-8	Acenaphthylene		1360	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol		1280	ug/kg	148	781
132-64-9	Dibenzofuran		1580	ug/kg	78.1	390
84-66-2	Diethylphthalate		1390	ug/kg	78.1	390
86-73-7	Fluorene		1420	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether		1330	ug/kg	78.1	390
534-52-1	2-Methyl-4,6-dinitrophenol		1280	ug/kg	78.1	390
100-01-6	4-Nitroaniline		2520	ug/kg	117	390
	p-Nitroaniline					
122-39-4	Diphenylamine		1500	ug/kg	78.1	390
122-66-7	Azobenzene		1470	ug/kg	78.1	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1380	ug/kg	78.1	390
118-74-1	Hexachlorobenzene		1320	ug/kg	78.1	390
85-01-8	Phenanthrene		1640	ug/kg	11.7	39.0
120-12-7	Anthracene		1520	ug/kg	7.81	39.0
84-74-2	Di-n-butylphthalate		1450	ug/kg	78.1	390
206-44-0	Fluoranthene		1820	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate		1520	ug/kg	78.1	390
56-55-3	Benzo(a)anthracene		1590	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine		1010	ug/kg	117	390
218-01-9	Chrysene		1590	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate		1330	ug/kg	78.1	390
117-84-0	Di-n-octylphthalate		1560	ug/kg	78.1	390
205-99-2	Benzo(b)fluoranthene		1690	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene		1640	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene		1630	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene		1190	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene		1170	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene		1200	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene		1050	ug/kg	78.1	390

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120309.b/s510320.d
Lab Smp Id: 1201981226 Client Smp ID: RE03-10-6902MSD
Inj Date : 03-DEC-2009 18:26
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201981226|926641|1|SVMF|1|LANL59002MSD
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120309.b/MSD5-M8270C-113009.m
Meth Date : 03-Dec-2009 13:19 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 20 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-608-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	14.65250	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	401228	40.0000	
* 29 Naphthalene-d8	136	4.801	4.812	(1.000)	1506832	40.0000	
* 46 Acenaphthene-d10	164	6.066	6.068	(1.000)	890765	40.0000	
* 67 Phenanthrene-d10	188	7.237	7.243	(1.000)	1657708	40.0000	
* 91 Chrysene-d12	240	9.660	9.665	(1.000)	1722479	40.0000	
* 98 Perylene-d12	264	11.360	11.365	(1.000)	1439669	40.0000	
$ 3 2-Fluorophenol	112	3.119	3.117	(0.794)	545692	65.6750	2560
$ 5 Phenol-d5	99	3.649	3.646	(0.928)	653114	63.3746	2470
$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	313737	32.5661	1270
$ 39 2-Fluorobiphenyl	172	5.548	5.553	(0.915)	723989	32.1727	1260
$ 60 2,4,6-Tribromophenol	329	6.666	6.665	(1.099)	252620	76.6681	2990
$ 81 p-Terphenyl-d14	244	8.619	8.625	(0.892)	1003926	40.7550	1590

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.654	3.656	(0.930)	349408	32.4663	1270(Q)
8 2-Chlorophenol	128	3.796	3.800	(0.966)	284531	30.8275	1200
11 1,4-Dichlorobenzene	146	3.943	3.950	(1.003)	209757	18.6955	730
17 N-Nitrosodipropylamine	70	4.166	4.176	(1.060)	181804	37.5403	1460(Q)
28 1,2,4-Trichlorobenzene	180	4.754	4.759	(0.990)	254303	27.0062	1050
33 4-Chloro-3-methylphenol	107	5.154	5.149	(1.073)	268039	36.2014	1410
47 Acenaphthene	154	6.090	6.092	(1.004)	628118	34.0387	1330
50 2,4-Dinitrotoluene	165	6.178	6.184	(1.018)	248694	37.5478	1460
52 4-Nitrophenol	139	6.107	6.107	(1.007)	130117	41.0213	1600
65 Pentachlorophenol	266	7.066	7.065	(0.976)	153345	39.2688	1530
79 Pyrene	202	8.525	8.529	(0.882)	1599483	45.8433	1790
2 Pyridine	79	2.460	2.442	(0.626)	190659	29.1806	1140
4 Aniline	66	3.713	3.718	(0.945)	114169	28.3736	1110
7 bis(2-Chloroethyl) ether	63	3.725	3.738	(0.948)	186773	29.3744	1150
9 1,3-Dichlorobenzene	146	3.896	3.906	(0.991)	201033	18.1892	710
12 Benzyl alcohol	108	4.001	4.003	(1.018)	188599	32.3871	1260
13 1,2-Dichlorobenzene	146	4.048	4.056	(1.030)	219633	20.6853	808
14 bis(2-Chloroisopropyl)ether	45	4.072	4.080	(1.036)	306643	30.3410	1180
15 o-Cresol	107	4.054	4.056	(1.031)	247948	33.6573	1310
18 m,p-Cresols	107	4.148	4.157	(1.055)	328440	35.0236	1370
19 Hexachloroethane	117	4.278	4.287	(1.088)	72250	17.4417	681
21 Nitrobenzene	77	4.307	4.316	(0.897)	312881	34.8800	1360
22 Isophorone	82	4.460	4.470	(0.929)	584866	35.1082	1370
23 2-Nitrophenol	139	4.525	4.532	(0.942)	155166	33.2141	1300
24 2,4-Dimethylphenol	122	4.519	4.523	(0.941)	275141	34.1420	1330
25 bis(2-Chloroethoxy)methane	93	4.584	4.590	(0.955)	317472	34.0616	1330
26 2,4-Dichlorophenol	162	4.690	4.691	(0.977)	271802	36.1679	1410
27 Benzoic acid	105	4.578	4.580	(0.953)	248154	59.7087	2330
30 Naphthalene	128	4.819	4.826	(1.004)	796213	30.5306	1190(Q)
31 4-Chloroaniline	127	4.837	4.840	(1.007)	372223	35.6442	1390
32 Hexachlorobutadiene	225	4.884	4.889	(1.017)	147085	24.0154	938
34 2-Methylnaphthalene	142	5.301	5.308	(1.104)	604161	33.5908	1310
36 Hexachlorocyclopentadiene	237	5.407	5.409	(0.891)	63843	17.7629	694
37 2,4,6-Trichlorophenol	196	5.490	5.495	(0.905)	222783	34.4368	1340
38 2,4,5-Trichlorophenol	196	5.525	5.524	(0.911)	255907	37.8547	1480
40 2-Chloronaphthalene	162	5.654	5.664	(0.932)	591391	31.4641	1230
42 o-Nitroaniline	65	5.713	5.717	(0.942)	170726	34.2423	1340
41 m-Nitroaniline	138	6.007	6.015	(0.990)	147457	46.7625	1820
43 Dimethylphthalate	163	5.819	5.828	(0.959)	796626	35.9517	1400
44 2,6-Dinitrotoluene	165	5.878	5.881	(0.969)	186912	36.0989	1410
45 Acenaphthylene	152	5.960	5.967	(0.983)	995916	34.7909	1360
48 2,4-Dinitrophenol	184	6.084	6.088	(1.003)	52926	32.7681	1280(Q)
49 Dibenzofuran	168	6.213	6.218	(1.024)	1086527	40.5875	1580
51 Diethylphthalate	149	6.331	6.338	(1.044)	784110	35.5620	1390
53 Fluorene	166	6.478	6.482	(1.068)	805427	36.3698	1420
54 4-Chlorophenylphenylether	204	6.448	6.454	(1.063)	415352	34.0754	1330
55 2-Methyl-4,6-dinitrophenol	198	6.489	6.492	(0.897)	100727	32.7536	1280

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.472	6.478	(1.067)	143124	64.4269	2520
133 Diphenylamine	169	6.537	6.545	(0.903)	626950	38.4828	1500
58 1,2-Diphenylhydrazine	77	6.578	6.579	(0.909)	763296	37.7660	1470
61 4-Bromophenylphenylether	248	6.842	6.844	(0.946)	263656	35.2414	1380
63 Hexachlorobenzene	284	6.913	6.916	(0.955)	269794	33.9228	1320
68 Phenanthrene	178	7.260	7.263	(1.003)	1309477	42.0602	1640
69 Anthracene	178	7.301	7.306	(1.009)	1202341	38.8281	1520
72 Di-n-butylphthalate	149	7.660	7.662	(1.059)	1327084	37.2535	1450
76 Fluoranthene	202	8.307	8.312	(1.148)	1584760	46.4881	1820
85 Butylbenzylphthalate	149	9.054	9.059	(0.937)	603433	38.9245	1520
89 Benzo(a)anthracene	228	9.648	9.651	(0.999)	1416428	40.7779	1590
90 3,3'-Dichlorobenzidine	252	9.595	9.589	(0.993)	300890	25.8289	1010
92 Chrysene	228	9.689	9.689	(1.003)	1290481	40.7546	1590
93 bis(2-Ethylhexyl)phthalate	149	9.578	9.583	(0.991)	784741	34.1172	1330
94 Di-n-octylphthalate	149	10.236	10.243	(0.901)	1243087	39.8631	1560
95 Benzo(b)fluoranthene	252	10.830	10.835	(0.953)	1302548	43.1759	1680
96 Benzo(k)fluoranthene	252	10.866	10.874	(0.956)	1267382	42.0860	1640
97 Benzo(a)pyrene	252	11.277	11.283	(0.993)	1113750	41.8704	1630
99 Indeno(1,2,3-cd)pyrene	276	13.154	13.166	(1.158)	901875	30.5409	1190
100 Dibenzo(a,h)anthracene	278	13.166	13.181	(1.159)	740280	29.8637	1160
101 Benzo(ghi)perylene	276	13.707	13.715	(1.207)	719736	30.7501	1200
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.409	(0.615)	138537	30.0765	1170

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s120309.b/s510320.d
Date : 03-DEC-2009 18:26
Client ID: RE03-10-6902MSD
Sample Info: 1120198122619266441 1!SVMF11!LANL59002MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

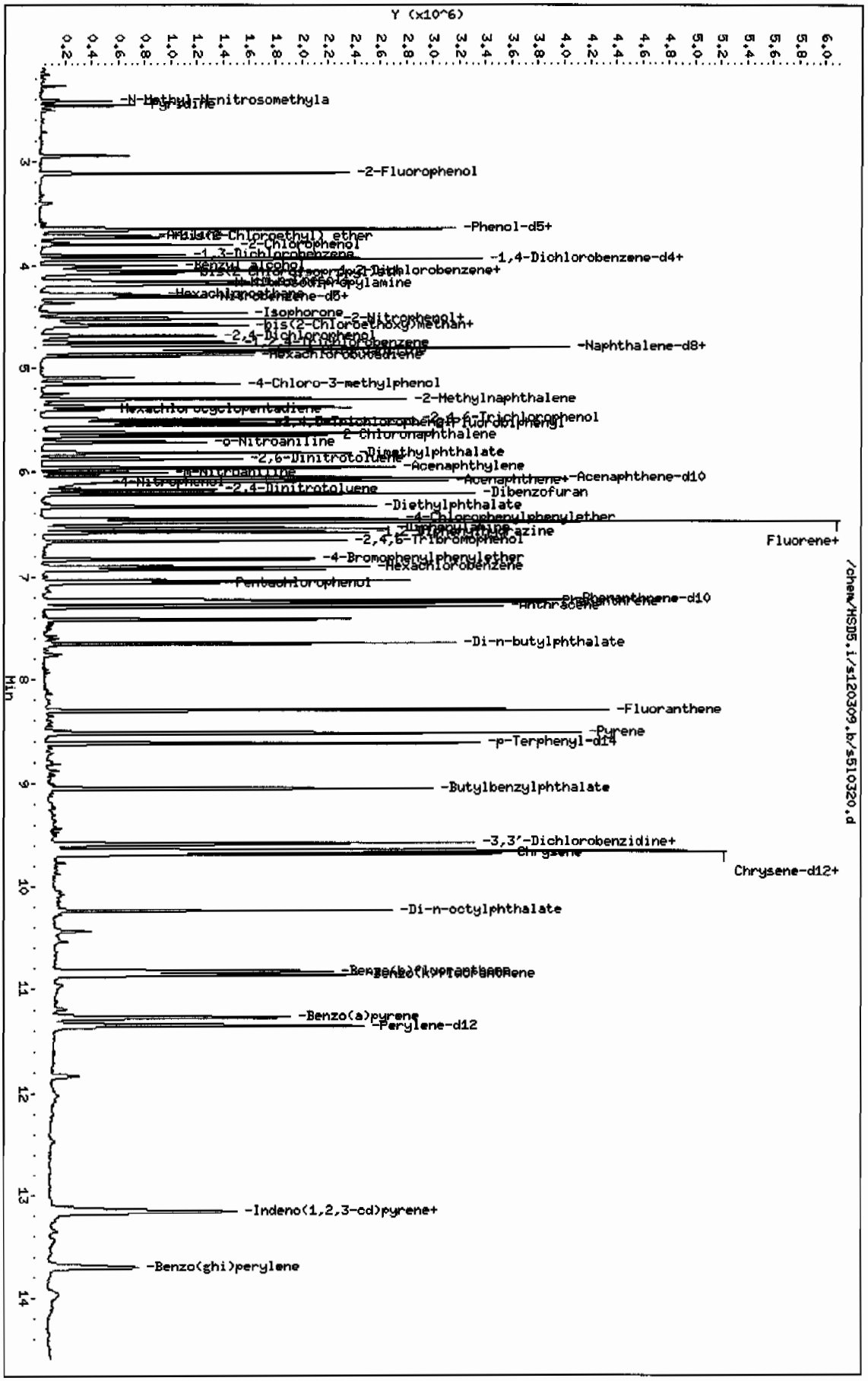

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Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926640 **Verified by:** _____

Analyst: Joshua McCartney

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981224 MB	27-NOV-2009 10:20:55	30	1	0.03333
1201981227 LCS	27-NOV-2009 10:20:55	30	1	0.03333
241559001	27-NOV-2009 10:20:55	30.09	1	0.03323
241559002	27-NOV-2009 10:20:55	30.01	1	0.03332
1201981225 MS (241559002)	27-NOV-2009 10:20:55	30.04	1	0.03329
1201981226 MSD (241559002)	27-NOV-2009 10:20:55	30.01	1	0.03332
241604001	27-NOV-2009 10:20:55	30	1	0.03333
241604002	27-NOV-2009 10:20:55	30.01	1	0.03332
241608001	27-NOV-2009 10:20:55	30.09	1	0.03323
241608002	27-NOV-2009 10:20:55	30.03	1	0.0333
241609001	27-NOV-2009 10:20:55	30.03	1	0.0333
241609002	27-NOV-2009 10:20:55	30.09	1	0.03323
241609003	27-NOV-2009 10:20:55	30.04	1	0.03329
241609004	27-NOV-2009 10:20:55	30.01	1	0.03332
241609005	27-NOV-2009 10:20:55	30.01	1	0.03332
241609006	27-NOV-2009 10:20:55	30.02	1	0.03331
241609007	27-NOV-2009 10:20:55	30.09	1	0.03323
241609008	27-NOV-2009 10:20:55	30.04	1	0.03329
241609010	27-NOV-2009 10:20:55	30.02	1	0.03331

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981227	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201981227	BENZIDINE LCS	UE091117-20	1	mL
MS	1201981225	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201981225	BENZIDINE LCS	UE091117-20	1	mL
MSD	1201981226	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201981226	BENZIDINE LCS	UE091117-20	1	mL
SURR	All	BNA for all Surrogate	UE091114-10	1	mL
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Methylene Chloride	1231728-D	150	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: RWH

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 12/03/2009 METHOD:8270C MSD5-DFTPPx.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s120309.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s510301.d	WBN091128-01	rmb	03-DEC-2009 08:33	50PPM	s120309	1.0	DFTPP	DUSE - clean IP
s510302.d	WBN091128-01	rmb	03-DEC-2009 11:40	50PPM	s120309	1.0	DFTPP	
s510303.d	WBN091106-05.3	RMB	03-DEC-2009 11:53	40 PPM	s120309	1.0	MEGACVS	385614
s510304.d	WBN091201-03.4	RMB	03-DEC-2009 12:21	40 PPM	s120309	1.0	AP12CVS	
s510305.d	UBN091117-08.3	RMB	03-DEC-2009 12:44	40 PPM	s120309	1.0	NEVADACVS	
s510306.d	WBN090920-23.4	RMB	03-DEC-2009 13:07	40 PPM	s120309	1.0	PESTCVS	
s510307-2.d	1201981224	RMB	03-DEC-2009 13:30	926641	10-638	1.0	SBLK01	
s510307-3.d	1201981224	RMB	03-DEC-2009 13:30	926641	10-639	1.0	SBLK01	
s510307-4.d	1201981224	RMB	03-DEC-2009 13:30	926641	10-640	1.0	SBLK01	
s510307.d	1201981224	RMB	03-DEC-2009 13:30	926641	10-608-1	1.0	SBLK01	
s510308-2.d	1201981227	RMB	03-DEC-2009 13:52	926641	10-638	1.0	SBLK01LCS	
s510308-3.d	1201981227	RMB	03-DEC-2009 13:52	926641	10-639	1.0	SBLK01LCS	
s510308-4.d	1201981227	RMB	03-DEC-2009 13:52	926641	10-640	1.0	SBLK01LCS	
s510308.d	1201981227	RMB	03-DEC-2009 13:52	926641	10-608-1	1.0	SBLK01LCS	
s510309.d	241673014	RMB	03-DEC-2009 14:15	927721	241673	1.0	BRCM	
s510310.d	241673015	RMB	03-DEC-2009 14:37	927721	241673	1.0	BRCM	
s510311.d	241673016	RMB	03-DEC-2009 15:00	927721	241673	1.0	BRCM	
s510312.d	241673017	RMB	03-DEC-2009 15:23	927721	241673	1.0	BRCM	
s510313.d	1201983713	RMB	03-DEC-2009 15:45	927721	241673	1.0	BRCM73017MS	

s510314.d	1201983716	RMB	03-DEC-2009 16:09	927721	241673	1.0	BRCM73017MSD	
s510315.d	241673018	RMB	03-DEC-2009 16:32	927721	241673	1.0	BRCM	
s510316.d	241673019	RMB	03-DEC-2009 16:54	927721	241673	1.0	BRCM	
s510317.d	241559001	RMB	03-DEC-2009 17:17	926641	10-608-1	1.0	LANL	
s510318.d	241559002	RMB	03-DEC-2009 17:40	926641	10-608-1	1.0	LANL	
s510319.d	1201981225	RMB	03-DEC-2009 18:03	926641	10-608-1	1.0	LANL59002MS	
s510320.d	1201981226	RMB	03-DEC-2009 18:26	926641	10-608-1	1.0	LANL59002MSD	
s510321.d	241604001	RMB	03-DEC-2009 18:49	926641	10-638	1.0	LANL	Fail SS - Rx(MSD1 data did not confirm) - out of hold - report both
s510322.d	241604002	RMB	03-DEC-2009 19:12	926641	10-638	1.0	LANL	
s510323.d	241608001	RMB	03-DEC-2009 19:35	926641	10-639	1.0	LANL	
s510324.d	241608002	RMB	03-DEC-2009 19:58	926641	10-639	1.0	LANL	
s510325.d	241609001	RMB	03-DEC-2009 20:21	926641	10-640	1.0	LANL	
s510326.d	241609002	RMB	03-DEC-2009 20:44	926641	10-640	1.0	LANL	Fail IS - confirmed by s510407
s510327.d	241609003	RMB	03-DEC-2009 21:07	926641	10-640	1.0	LANL	
s510328.d	241609004	RMB	03-DEC-2009 21:29	926641	10-640	1.0	LANL	
s510329.d	241609005	RMB	03-DEC-2009 21:52	926641	10-640	1.0	LANL	
s510330.d	241609006	RMB	03-DEC-2009 22:15	926641	10-640	1.0	LANL	
s510331.d	241609007	RMB	03-DEC-2009 22:38	926641	10-640	1.0	LANL	
s510332.d	241609008	RMB	03-DEC-2009 23:01	926641	10-640	1.0	LANL	
s510333.d	241609010	RMB	03-DEC-2009 23:24	926641	10-640	1.0	LANL	

Instrument Batch: /chem/MSD5.i/s120309.b

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GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 11/30/2009 METHOD:8270C MSD5-DFTPP8270D.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3001-D.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3001.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3002.d	instrument blank	RMB	30-NOV-2009 08:11		s113009	1.0		DUSE
s5k3003.d	WBN091106-08	RMB	30-NOV-2009 08:34	1 PPM	s113009	1.0	MEGAICAL001	DUSE
s5k3004.d	WBN091106-07	RMB	30-NOV-2009 09:02	10 PPM	s113009	1.0	MEGAICAL010	DUSE
s5k3005.d	WBN091106-06	RMB	30-NOV-2009 09:30	20 PPM	s113009	1.0	MEGAICAL020	DUSE
s5k3006.d	WBN091106-05.1	RMB	30-NOV-2009 09:58	40 PPM	s113009	1.0	MEGAICAL040	DUSE
s5k3007.d	WBN091106-04	RMB	30-NOV-2009 10:27	50 PPM	s113009	1.0	MEGAICAL050	DUSE
s5k3008.d	WBN091106-03	RMB	30-NOV-2009 10:55	80 PPM	s113009	1.0	MEGAICAL080	DUSE
s5k3009.d	WBN091106-02	RMB	30-NOV-2009 11:24	100 PPM	s113009	1.0	MEGAICAL100	DUSE
s5k3010.d	WBN091106-01	RMB	30-NOV-2009 12:23	120 PPM	s113009	1.0	MEGAICAL120	DUSE
s5k3011.d	instrument blank	RMB	30-NOV-2009 12:51		s113009	1.0		DUSE
s5k3012-D.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3012.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3013.d	instrument blank	RMB	30-NOV-2009 13:46		s113009	1.0		
s5k3014-TEST.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3014.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3015-TEST.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	
s5k3015.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	

s5k3016.d	WBN091106-06	RMB	30-NOV-2009 15:06	20 PPM	s113009		1.0	MEGAICAL020
s5k3017.d	WBN091106-05.1	RMB	30-NOV-2009 15:34	40 PPM	s113009		1.0	MEGAICAL040
s5k3018.d	WBN091106-04	RMB	30-NOV-2009 16:02	50 PPM	s113009		1.0	MEGAICAL050
s5k3019.d	WBN091106-03	RMB	30-NOV-2009 16:31	80 PPM	s113009		1.0	MEGAICAL080
s5k3020.d	WBN091106-02	RMB	30-NOV-2009 16:59	100 PPM	s113009		1.0	MEGAICAL100
s5k3021.d	WBN091106-01	RMB	30-NOV-2009 17:28	120 PPM	s113009		1.0	MEGAICAL120
s5k3022.d	instrument blank	RMB	30-NOV-2009 17:56		s113009		1.0	
s5k3023-625.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 625 - 113009
s5k3023-8270D.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 8270D - 113009
s5k3023-BOE.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - BOE - 113009
s5k3023.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 8270C - 113009
s5k3024-TEST.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009		1.0	AP12ICAL010
s5k3024.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009		1.0	AP12ICAL010
s5k3025.d	WBN091111-02	RMB	30-NOV-2009 19:10	20 PPM	s113009		1.0	AP12ICAL020
s5k3026.d	WBN091111-03.3	RMB	30-NOV-2009 19:34	40 PPM	s113009		1.0	AP12ICAL040
s5k3027.d	WBN091111-04	RMB	30-NOV-2009 19:57	50 PPM	s113009		1.0	AP12ICAL050
s5k3028.d	WBN091111-05	RMB	30-NOV-2009 20:20	80 PPM	s113009		1.0	AP12ICAL080
s5k3029.d	WBN091111-06	RMB	30-NOV-2009 20:42	100 PPM	s113009		1.0	AP12ICAL100
s5k3030.d	WBN091111-07	RMB	30-NOV-2009 21:05	120 PPM	s113009		1.0	AP12ICAL120
s5k3031-TEST.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009		1.0	NEVADAICAL010
s5k3031.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009		1.0	NEVADAICAL010
s5k3032.d	UBN091117-02	RMB	30-NOV-2009 21:51	20 PPM	s113009		1.0	NEVADAICAL020

Instrument Batch: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3033.d	UBN091117-03	RMB	30-NOV-2009 22:14	40 PPM	s113009		1.0	NEVADAICAL040
s5k3034.d	UBN091117-04	RMB	30-NOV-2009 22:38	50 PPM	s113009		1.0	NEVADAICAL050
s5k3035.d	UBN091117-05	RMB	30-NOV-2009 23:01	80 PPM	s113009		1.0	NEVADAICAL080

s5k3036.d	UBN091117-06	RMB	30-NOV-2009 23:23	100 PPM	s113009		1.0	NEVADAICAL100
s5k3037.d	UBN091117-07	RMB	30-NOV-2009 23:46	120 PPM	s113009		1.0	NEVADAICAL120
s5k3038-625.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 625 - 113009
s5k3038-8270D.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 8270D - 113009
s5k3038.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 8270C - 113009
Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3039-D.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009		1.0	DFTPP
s5k3039.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009		1.0	DFTPP
s5k3040.d	instrument blank	RMB	01-DEC-2009 09:52		s113009		1.0	
s5k3041.d	WBN091029-25	RMB	01-DEC-2009 10:15	10 PPM	s113009		1.0	PESTICAL010
s5k3042.d	WBN091029-24	RMB	01-DEC-2009 10:38	20 PPM	s113009		1.0	PESTICAL020
s5k3043.d	WBN091029-23.1	RMB	01-DEC-2009 11:00	40 PPM	s113009		1.0	PESTICAL040
s5k3044.d	WBN091029-22	RMB	01-DEC-2009 11:23	50 PPM	s113009		1.0	PESTICAL050
s5k3045.d	WBN091029-21	RMB	01-DEC-2009 11:46	80 PPM	s113009		1.0	PESTICAL080
s5k3046.d	WBN091029-20	RMB	01-DEC-2009 12:09	100 PPM	s113009		1.0	PESTICAL100
s5k3047.d	WBN091029-19	RMB	01-DEC-2009 12:32	120 PPM	s113009		1.0	PESTICAL120
s5k3048-TEST.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009		1.0	HEXICAL500
s5k3048.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009		1.0	HEXICAL500
s5k3049.d	WBN091016-15	RMB	01-DEC-2009 13:18	1000 PPM	s113009		1.0	HEXICAL1000
s5k3050.d	WBN091016-14	RMB	01-DEC-2009 13:41	1250 PPM	s113009		1.0	HEXICAL1250
s5k3051.d	WBN091016-13	RMB	01-DEC-2009 14:03	1500 PPM	s113009		1.0	HEXICAL1500
s5k3052.d	WBN091016-12	RMB	01-DEC-2009 14:25	1750 PPM	s113009		1.0	HEXICAL1750
s5k3053.d	UBN090828-02	RMB	01-DEC-2009 14:48	2000 PPM	s113009		1.0	HEXICAL2000
s5k3054-625.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 625 - 113009
s5k3054-8270D.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 8270D - 113009
s5k3054.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 8270C - 113009
s5k3055-625.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009		1.0	HEXICV	HEXICV - 625 - 113009

s5k3055-8270D.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 8270D - 113009
s5k3055.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 8270C - 11300

Instrument Batch: /chem/MSD5.i/s113009.b

Page: 2

NCR Report No.: 766603
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
926641	See Below		

Potentially affected work order(s)(SDG): 241559(10-608-1),241604(10-638),241608(10-639),241609(10-640)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for LCS/LCSD

Failed Yield for Surrogates

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS(1201981227) recovered p-Nitroaniline at 183%. The limits are 44%-139%.	1. The LCS failure represented less than 5% of the total requested spike analyte list. That satisfied the acceptance criteria for the client and the data results have been reported.
2. Sample 241604001 recovered 2-Fluorophenol at 33%. The limits are 35%-96%.	2. The sample was re-extract out of holding in batch 929337. Since the re-extraction did not confirm surrogate failure, both sets of data results have been reported.
3. The MS(1201981225)/MSD(1201981226) RPD for Hexachlorocyclopentadiene was 32%. The limit is 30%.	3. Since Hexachlorocyclopentadiene was individually within the acceptance limits for the MS and MSD, the data results have been reported.

Originator's Name:

Richard Bomar 07-DEC-09

Data Validator/Group Leader:

Barbara Bailey 07-DEC-09

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-608

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	925306
Prep Batch Number:	925304

Sample Analysis

Sample ID	Client ID
241558001	RE03-10-6907
241558002	RE03-10-6906
241558003	RE03-10-6904
241558004	RE03-10-6905
1201978163	Interference Check Sample (ICS)
1201978155	Method Blank (MB)
1201978156	Laboratory Control Sample (LCS)
1201978160	241558001(RE03-10-6907) Matrix Spike (MS)
1201978162	241558001(RE03-10-6907) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

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Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241558001 (RE03-10-6907) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

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Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Sample 1201978156 (LCS) failed acceptance criteria. It was re-analyzed and passed acceptance criteria. The re-analysis is reported.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

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Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M Mauer **Date:** 12/02/09

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6907

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558001

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 14:55	per1122025a
	Perchlorate Isotope Ratio						1	22-NOV-09 14:55	per1122025a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 14:55	per1122025a
	Perchlorate-O(18)			0.467	ug/L		1	22-NOV-09 14:55	per1122025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6906

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558002

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:14	per1122028a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:14	per1122028a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:14	per1122028a
	Perchlorate-O(18)			0.472	ug/L		1	22-NOV-09 15:14	per1122028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6904

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558003

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:21	per1122029a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:21	per1122029a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:21	per1122029a
	Perchlorate-O(18)			0.475	ug/L		1	22-NOV-09 15:21	per1122029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6905

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558004

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:27	per1122030a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:27	per1122030a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:27	per1122030a
	Perchlorate-O(18)			0.476	ug/L		1	22-NOV-09 15:27	per1122030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-608

Extract Batch Code: 925304

Date Filtered: 21-NOV-09

Matrix: WASTE WATER

Sample ID: 1201978156

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.227	ug/L	113		85 - 115
Perchlorate Isotope Ratio		2.99				-
Perchlorate-101	0.200	.223	ug/L	111		85 - 115
Perchlorate-O(18)		.467	ug/L			-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–608

Extract Batch Code: 925304

Date Filtered: 21–NOV–09

Matrix: GROUND WATER

Sample ID: 1201978163

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.202	ug/L	101		70 – 130
Perchlorate Isotope Ratio		2.97				
Perchlorate–101	0.200	.214	ug/L	107		70 – 130
Perchlorate–O(18)		.484	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122014a
Date: 22-Nov-2009
Time: 13:42:57
ID: 1201978163
Vial: 1:3,C

LANL | 925306 | LIQ | IC5 | 1 |

aw 11-23-09

Perchlorate

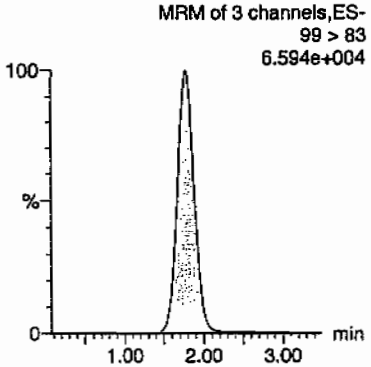

Perchlorate

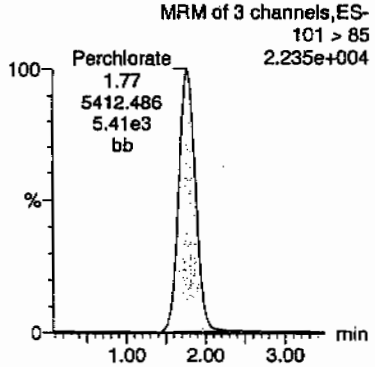

Perchlorate-101

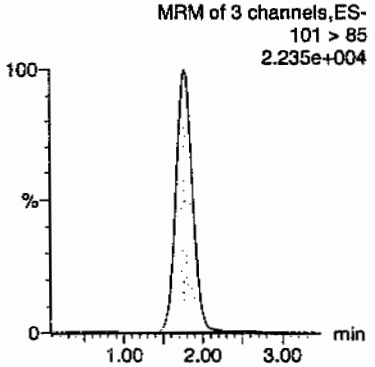

Perchlorate-O(18)

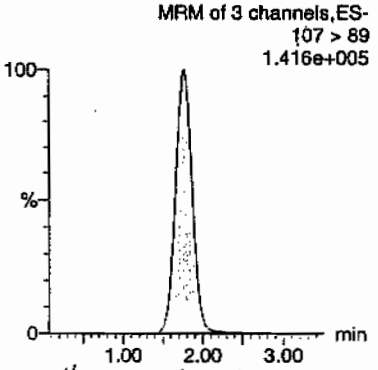

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201978163	Perchlorate	99 > 83	1.78	16082.051	16082.051	bb			0.2021	101.05	1.05	7614.3...	2.97
1201978163	Perchlorate-101	101 > 85	1.77	5412.486	5412.486	bb			0.2139	106.97	6.97	3533.2...	
1201978163	Perchlorate-O(18)	107 > 89	1.77	34535.316	34535.316	bb			0.4836	96.73	-3.27	6470.9...	

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–608

Extract Batch Code: 925304

Date Extracted: 21–NOV–09

GEL MS/PS ID: 1201978160

Client ID: RE03–10–6907

GEL MSD/PSD ID: 1201978162

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00134	ug/L	0.193	95.7	.197	98.1	2.43	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.04		3.15		0		–
Perchlorate–101	0.200	0.00105	ug/L	0.199	99.1	.197	98	1.1	30	75 – 125
Perchlorate–O(18)	0	0.467	ug/L	0.490		.474		3.33		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	22–NOV–09	per1122001a	IPB001
Perchlorate–101	0.00	0	NA	22–NOV–09	per1122001a	IPB001
Perchlorate	0.00	0	NA	22–NOV–09	per1122002a	IPB001
Perchlorate–101	0.00	0	NA	22–NOV–09	per1122002a	IPB001
Perchlorate	0.00	0	NA	23–NOV–09	per1123001a	IPB001
Perchlorate–101	0.00	0	NA	23–NOV–09	per1123001a	IPB001
Perchlorate	0.00	0	NA	23–NOV–09	per1123002a	IPB001
Perchlorate–101	0.00	0	NA	23–NOV–09	per1123002a	IPB001

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112209a.mdb 22 Nov 2009 12:02:51
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112209a.cdb 23 Nov 2009 07:42:55

Name: per1122001a
Date: 22-Nov-2009
Time: 12:17:02
ID: IPB001
Vial: 1:1,A

CWW
11-23-09

Perchlorate

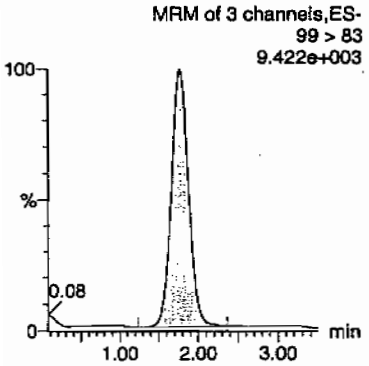

Perchlorate

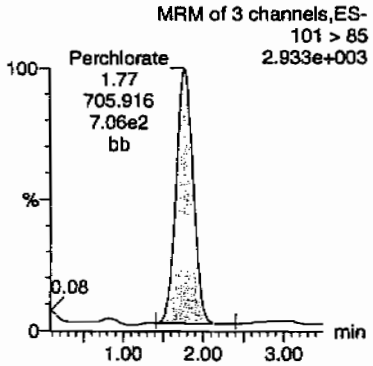

Perchlorate-101

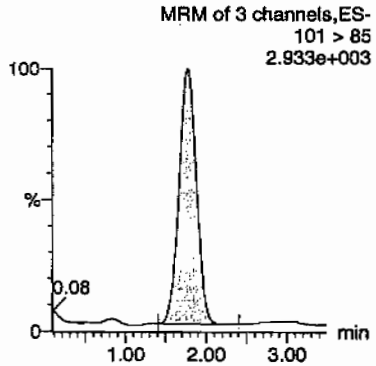

Perchlorate-O(18)

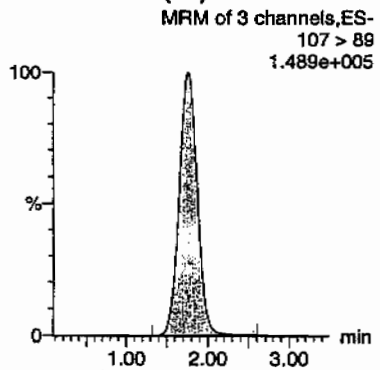

Hmm 11/25/09

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83	1.77	2370.952	2370.952	bb			0.0298	<0.0500		377.228	3.36
PB001	Perchlorate-101	101 > 85	1.77	705.916	705.916	bb			0.0279			134.901	
PB001	Perchlorate-O(18)	107 > 89	1.76	37323.297	37323.297	bb			0.5227	104.54	4.54	4032.7...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122002a
Date: 22-Nov-2009
Time: 12:23:45
ID: IPB001
Vial: 1:1,A

11-23-09

Perchlorate

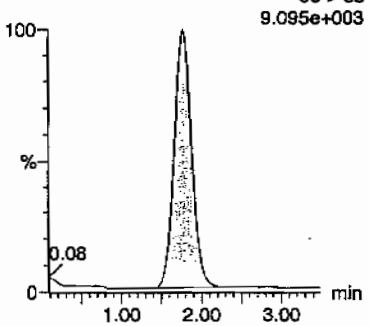

Perchlorate

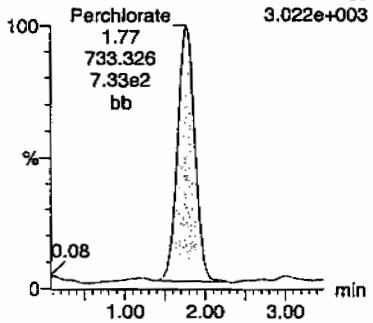

Perchlorate-101

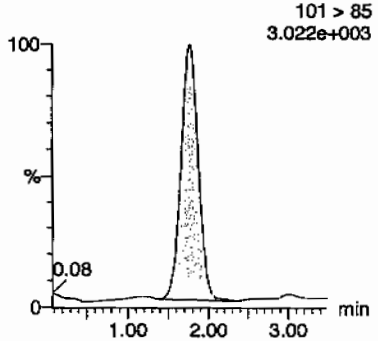

Perchlorate-O(18)

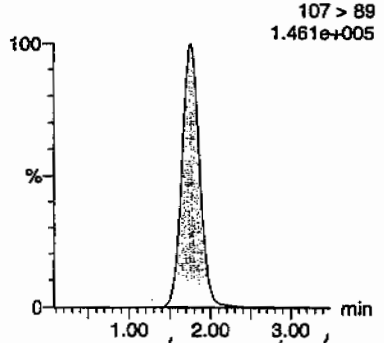

HMW 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.77	2276.211	2276.211	bb			0.0286	<0.0500		132.419	3.10
IPB001	Perchlorate-101	101 > 85	1.77	733.326	733.326	bb			0.0290			126.493	
IPB001	Perchlorate-O(18)	107 > 89	1.76	36644.238	36644.238	bb			0.5132	102.63	2.63	2746.2...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112309a.mdb 23 Nov 2009 16:16:07
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112309a.cdb 24 Nov 2009 08:36:20

Name: per1123001a
Date: 23-Nov-2009
Time: 15:00:54
ID: IPB001
Vial: 1:1,A

CWW 11-24-09

Perchlorate

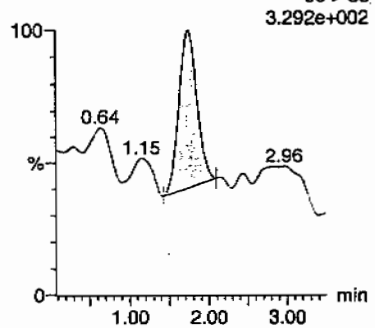

Perchlorate

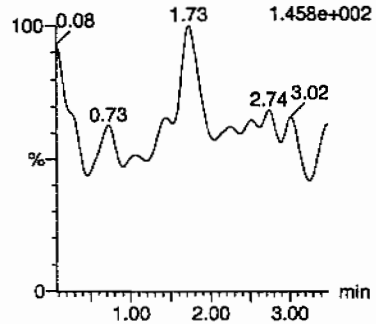

Perchlorate-101

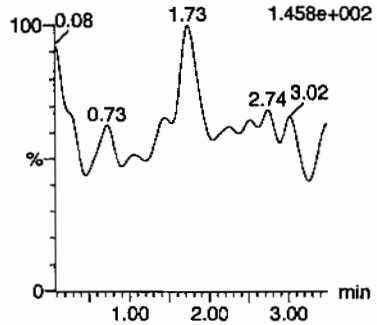

Perchlorate-O(18)

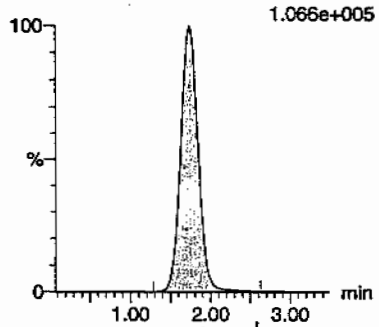

Hmm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.73	52.472	52.472	bb			0.0009			12.618	0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	1.73	26779.854	26779.854	bb			0.5212	104.24	4.24	5808.3...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123002a
Date: 23-Nov-2009
Time: 15:07:37
ID: IPB001
Vial: 1:1,A

CWW
11-24-09

Perchlorate

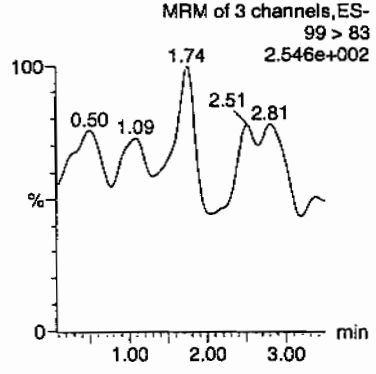

Perchlorate

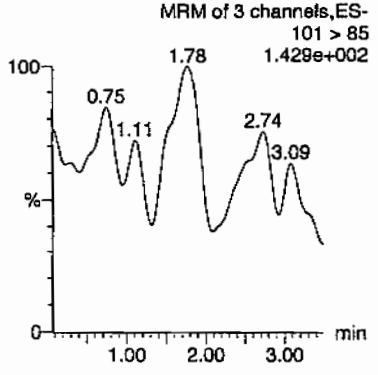

Perchlorate-101

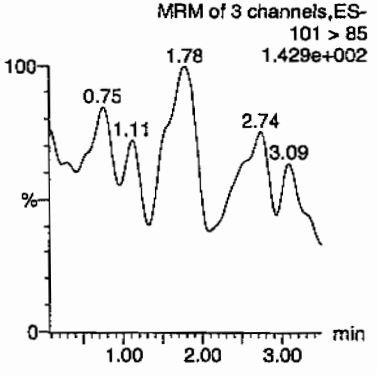

Perchlorate-O(18)

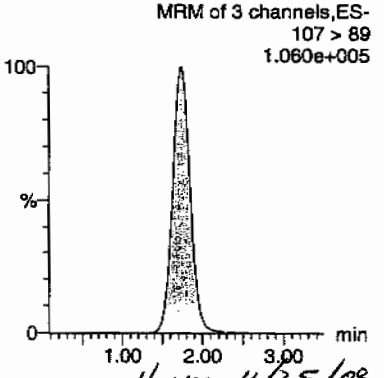

HJM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	1.74	26684.338	26684.338	bb			0.5193	103.86	3.86	4466.7...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	22–NOV–09	per1122008a	IPB002
Perchlorate–101	0.00	0	NA	22–NOV–09	per1122008a	IPB002
Perchlorate	0.00	0	NA	22–NOV–09	per1122010a	IPB003
Perchlorate–101	0.00	0	NA	22–NOV–09	per1122010a	IPB003
Perchlorate	0.00	0	NA	22–NOV–09	per1122023a	IPB004
Perchlorate–101	0.00	0	NA	22–NOV–09	per1122023a	IPB004
Perchlorate	0.00	0	NA	22–NOV–09	per1122034a	IPB005
Perchlorate–101	0.00	0	NA	22–NOV–09	per1122034a	IPB005
Perchlorate	0.00	0	NA	23–NOV–09	per1123008a	IPB002
Perchlorate–101	0.00	0	NA	23–NOV–09	per1123008a	IPB002
Perchlorate	0.00	0	NA	23–NOV–09	per1123010a	IPB003
Perchlorate–101	0.00	0	NA	23–NOV–09	per1123010a	IPB003
Perchlorate	0.00	0	NA	23–NOV–09	per1123023a	IPB004

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate–101	0.00	0	NA	23–NOV–09	per1123023a	IPB004
Perchlorate	0.00	0	NA	23–NOV–09	per1123033a	IPB005
Perchlorate–101	0.00	0	NA	23–NOV–09	per1123033a	IPB005
Perchlorate	0.00	0	NA	23–NOV–09	per1123036a	IPB006
Perchlorate–101	0.00	0	NA	23–NOV–09	per1123036a	IPB006

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122008a
Date: 22-Nov-2009
Time: 13:03:26
ID: IPB002
Vial: 1:1,A

11-23-09

Perchlorate

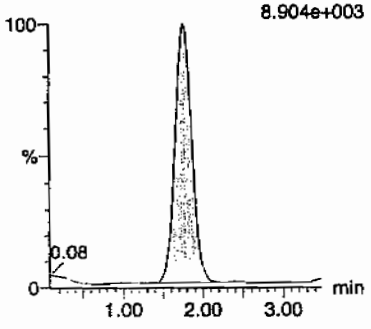

Perchlorate

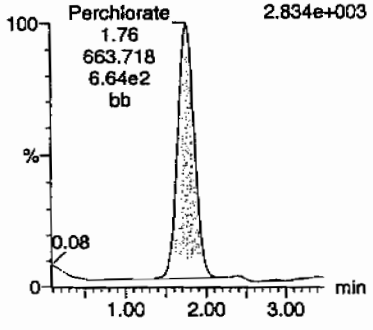

Perchlorate-101

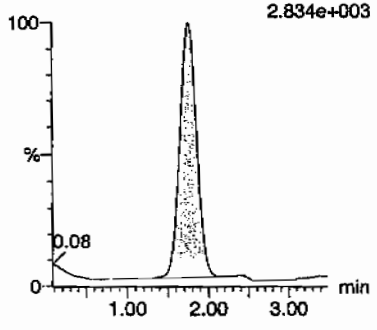

Perchlorate-O(18)

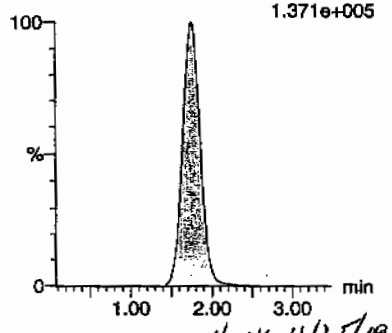

Hanne 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83	1.77	2178.414	2178.414	bb			0.0274	<0.050		779.824	3.28
IPB002	Perchlorate-101	101 > 85	1.76	663.718	663.718	bb			0.0262			203.057	
IPB002	Perchlorate-O(18)	107 > 89	1.76	34307.961	34307.961	bb			0.4805	96.09	-3.91	1863.9...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122010a
Date: 22-Nov-2009
Time: 13:16:30
ID: IPB003
Vial: 1:1,A

CWW 11-23-09

Perchlorate

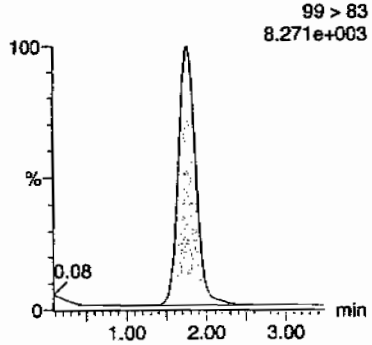

Perchlorate

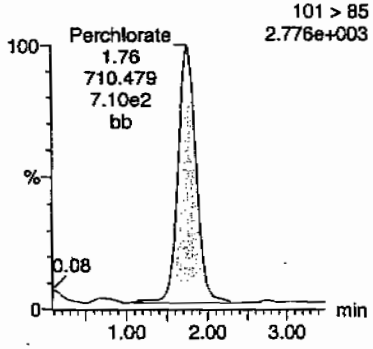

Perchlorate-101

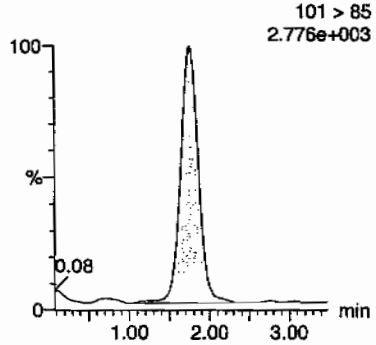

Perchlorate-O(18)

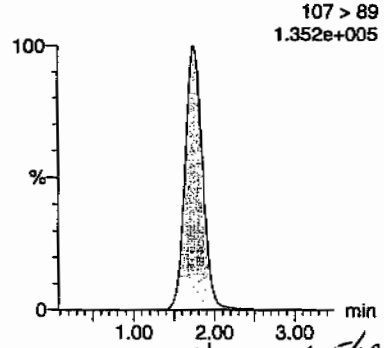

Hmm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83	1.76	2082.857	2082.857	bb			0.0262	LO 0.0500		635.725	2.93
IPB003	Perchlorate-101	101 > 85	1.76	710.479	710.479	bb			0.0281			241.677	
IPB003	Perchlorate-O(18)	107 > 89	1.74	33833.539	33833.539	bb			0.4738	94.76	-5.24	8568.8...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122023a
Date: 22-Nov-2009
Time: 14:41:56
ID: IPB004
Vial: 1:1,A

CWW
11-23-09

Perchlorate

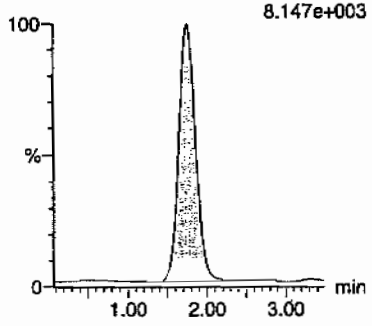

Perchlorate

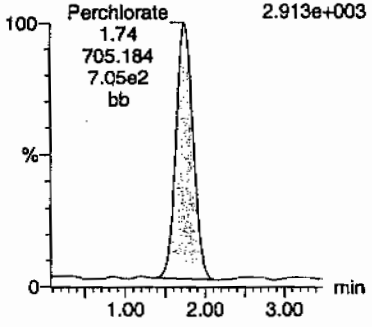

Perchlorate-101

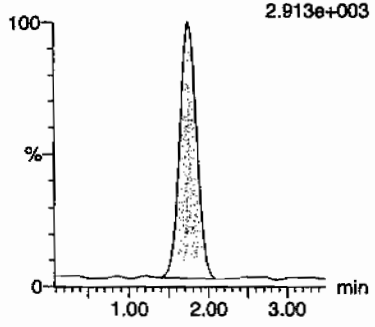

Perchlorate-O(18)

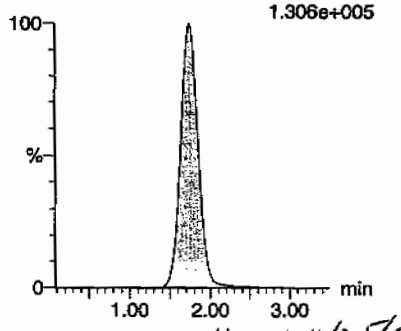

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83	1.76	1987.226	1987.226	bb			0.0250	200.500		335.115	2.82
IPB004	Perchlorate-101	101 > 85	1.74	705.184	705.184	bb			0.0279			261.761	
IPB004	Perchlorate-O(18)	107 > 89	1.74	32686.348	32686.348	bb			0.4577	91.55	-8.45	6046.8...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122034a
Date: 22-Nov-2009
Time: 15:54:16
ID: IPB005
Vial: 1:1,A

CW 11-23-09

Perchlorate

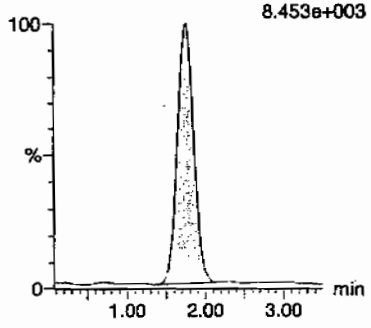

Perchlorate

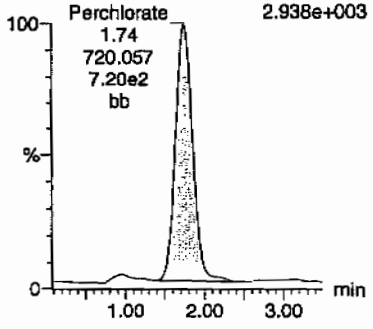

Perchlorate-101

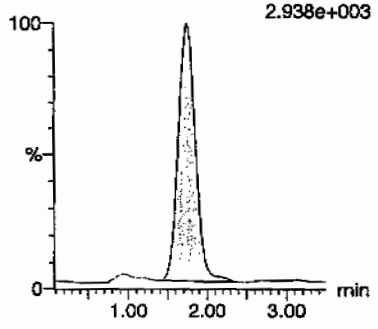

Perchlorate-O(18)

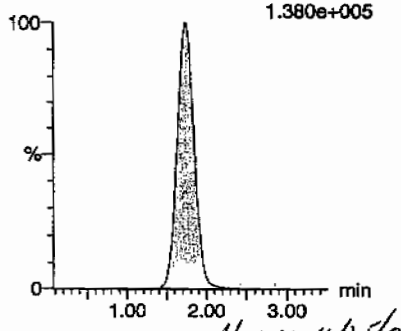

Hmm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83	1.76	2039.702	2039.702	bb			0.0256	<0.0500		381.167	2.83
IPB005	Perchlorate-101	101 > 85	1.74	720.057	720.057	bb			0.0285			255.502	
IPB005	Perchlorate-O(18)	107 > 89	1.74	34442.980	34442.980	bb			0.4823	96.47	-3.53	2065.3...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123008a
Date: 23-Nov-2009
Time: 15:46:45
ID: IPB002
Vial: 1:1,A

CWW 11-24-09

Perchlorate

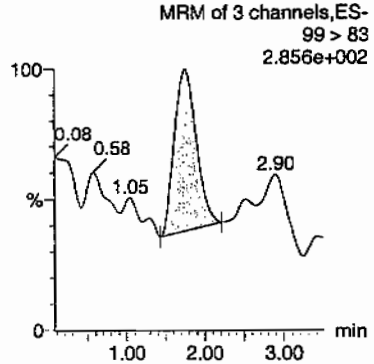

Perchlorate

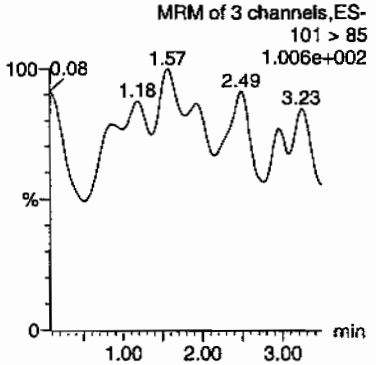

Perchlorate-101

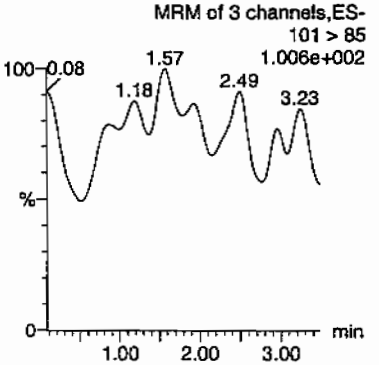

Perchlorate-O(18)

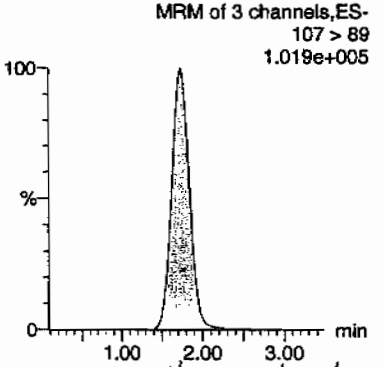

Hmm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83	1.76	57.527	57.527	bb			0.0010			13.852	0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	1.73	25644.193	25644.193	bb			0.4991	99.82	-0.18	3503.7...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123010a
Date: 23-Nov-2009
Time: 15:59:50
ID: IPB003
Vial: 1:1,A

cwo
11-24-09

Perchlorate

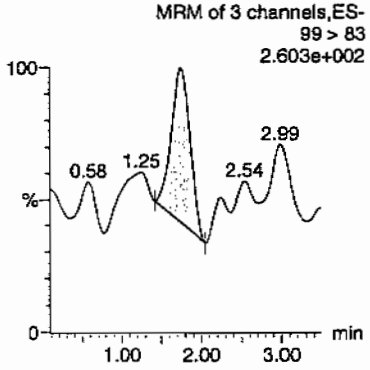

Perchlorate

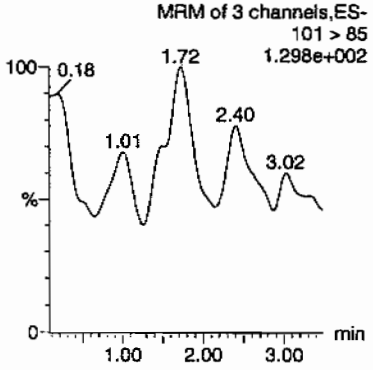

Perchlorate-101

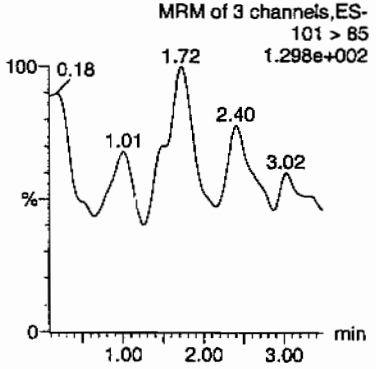

Perchlorate-O(18)

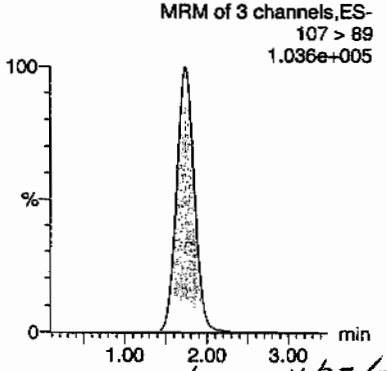

Hmm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83	1.74	42.151	42.151	bb			0.0007			7.830	0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	1.74	25958.346	25958.346	bb			0.5052	101.04	1.04	4862.2...	

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The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123023a
Date: 23-Nov-2009
Time: 17:30:07
ID: IPB004
Vial: 1:1,A

11-24-09

Perchlorate

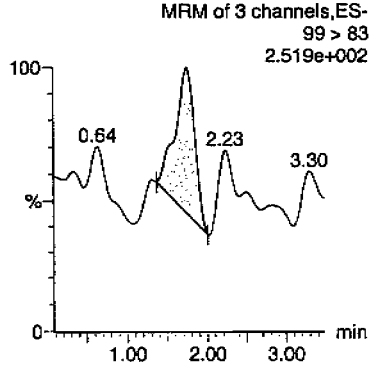

Perchlorate

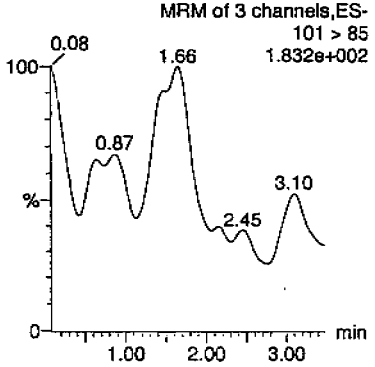

Perchlorate-101

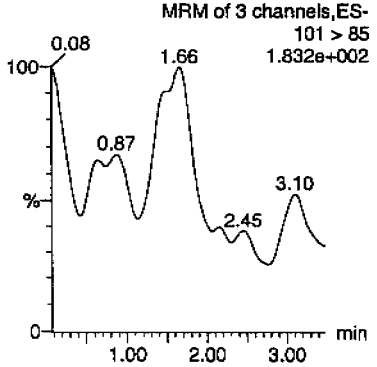

Perchlorate-O(18)

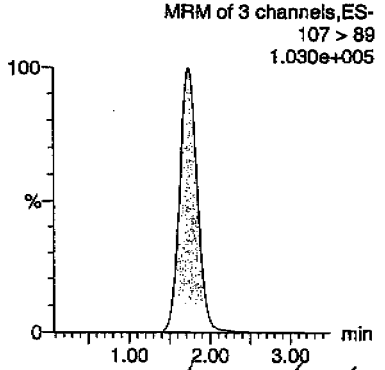

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83	1.74	39.199	39.199	bb			0.0007			8.890	0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	1.73	25867.729	25867.729	bb			0.5034	100.69	0.69	1093.9...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123033a
Date: 23-Nov-2009
Time: 18:35:44
ID: IPB005
Vial: 1:1,A

CWW
11-24-09

Perchlorate

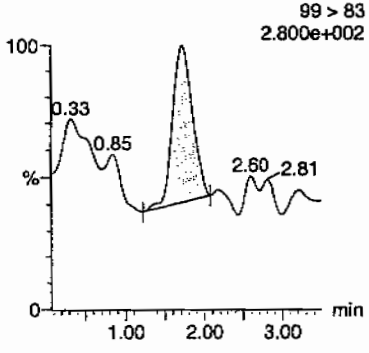

Perchlorate

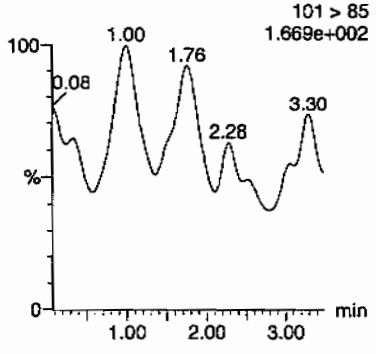

Perchlorate-101

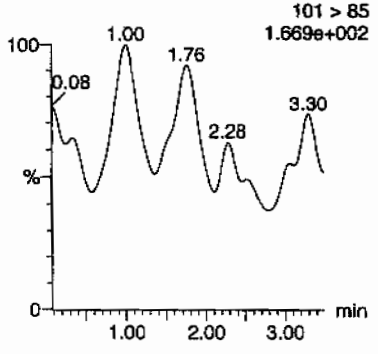

Perchlorate-O(18)

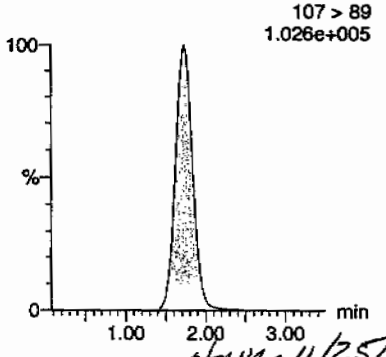

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83	1.72	48.821	48.821	bb			0.0008			2.567	0.00
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	1.73	25595.193	25595.193	bb			0.4981	99.63	-0.37	12244....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123036a
Date: 23-Nov-2009
Time: 18:55:23
ID: IPB006
Vial: 1:1,A

11-24-09

Perchlorate

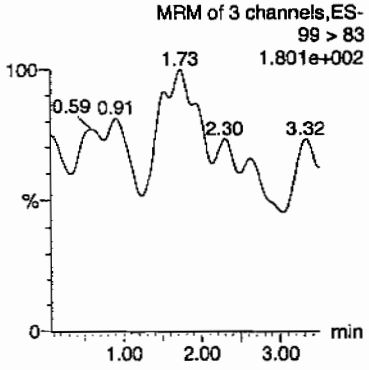

Perchlorate

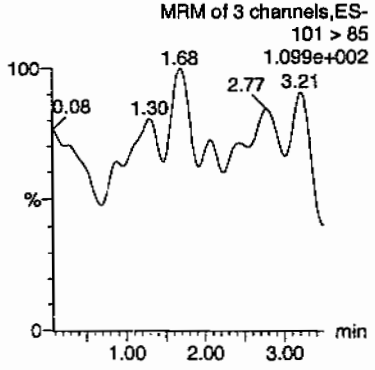

Perchlorate-101

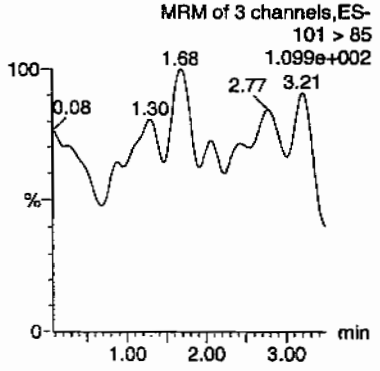

Perchlorate-O(18)

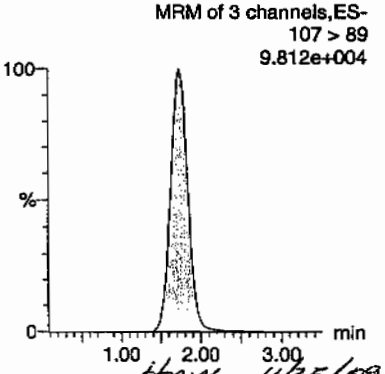

HMK 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	1.73	24524.639	24524.639	bb			0.4773	95.46	-4.54	4529.8...	

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWW 01-09-08

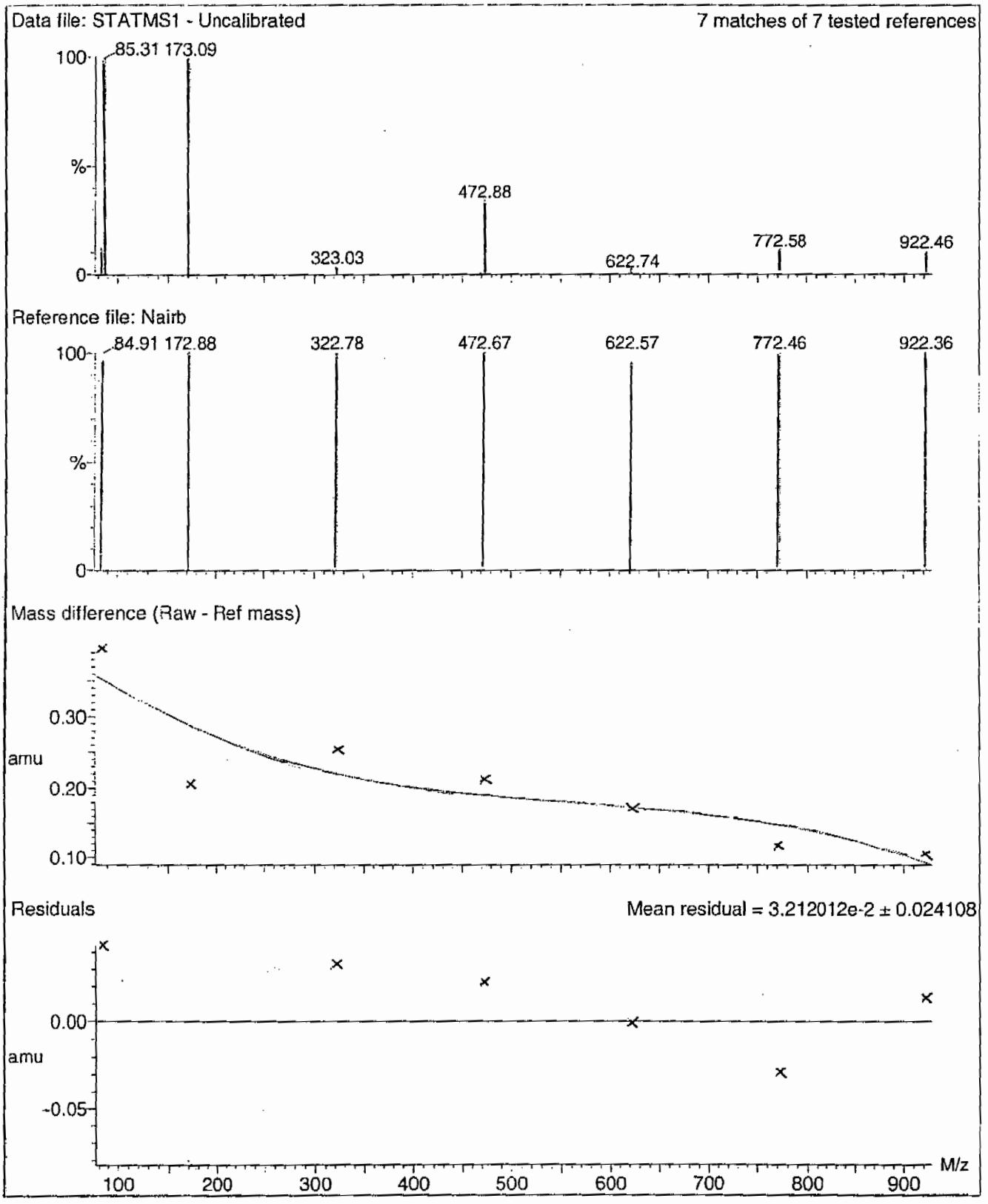

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Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

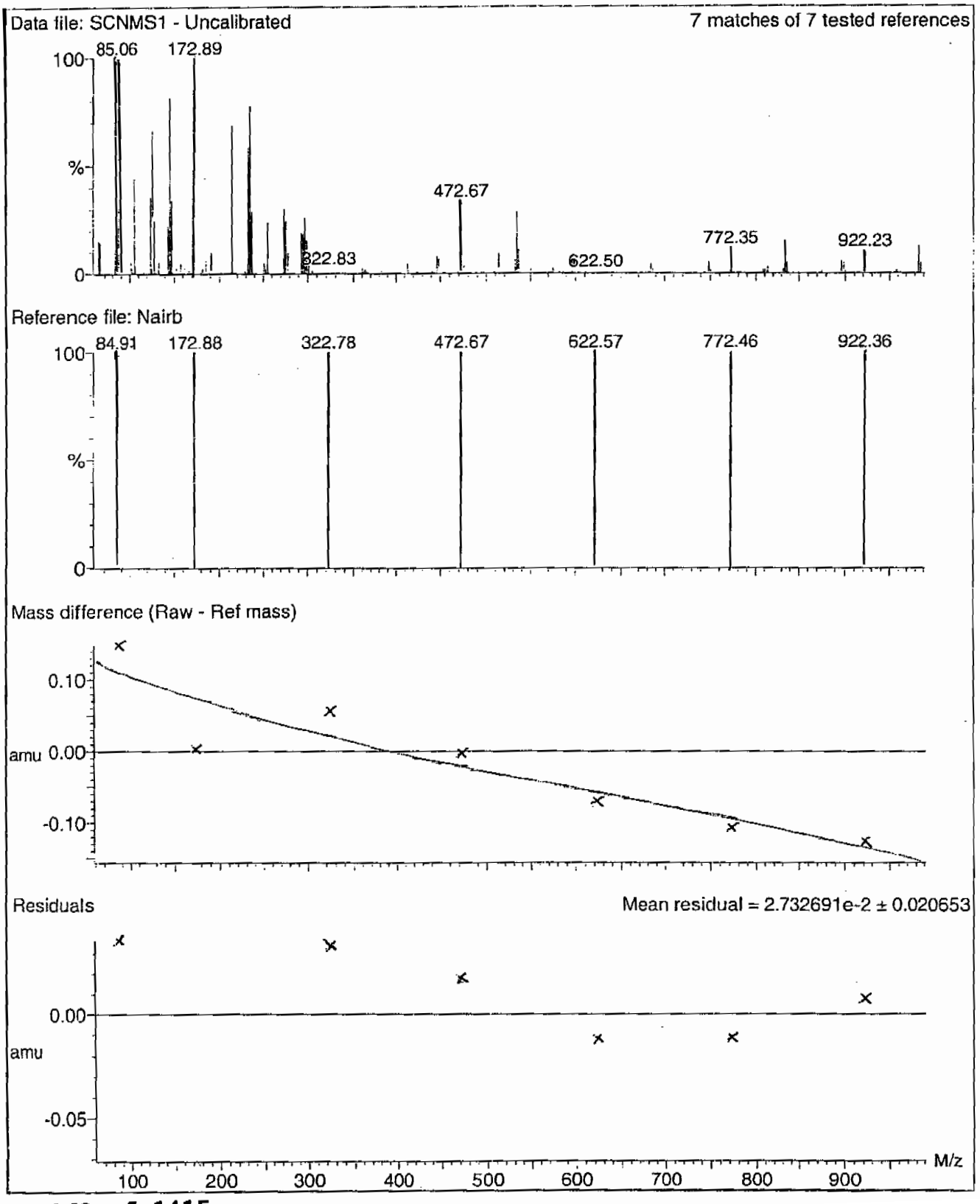

PROPRIETARY INFORMATION -- No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:21:04 2008

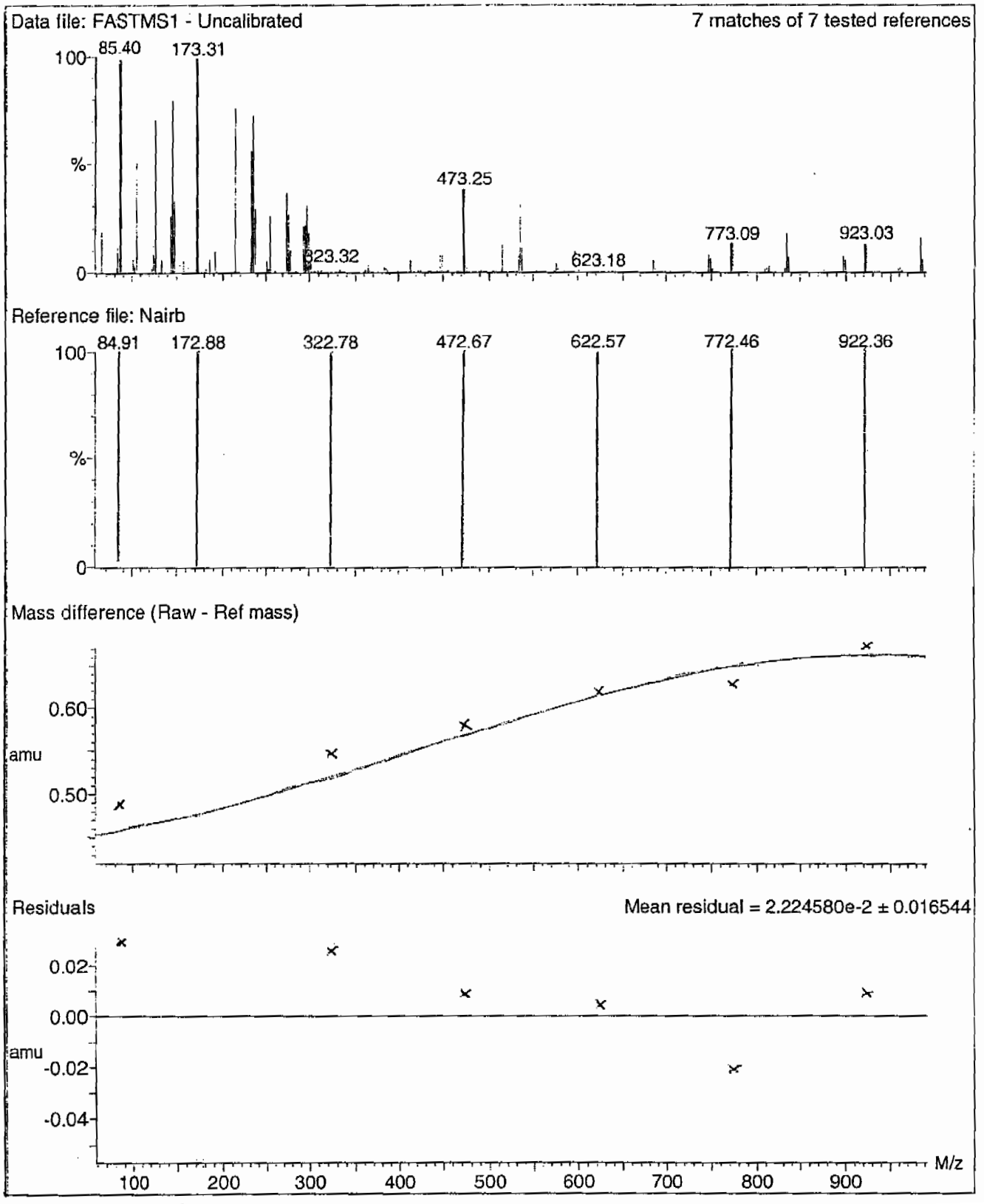

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:21:59 2008

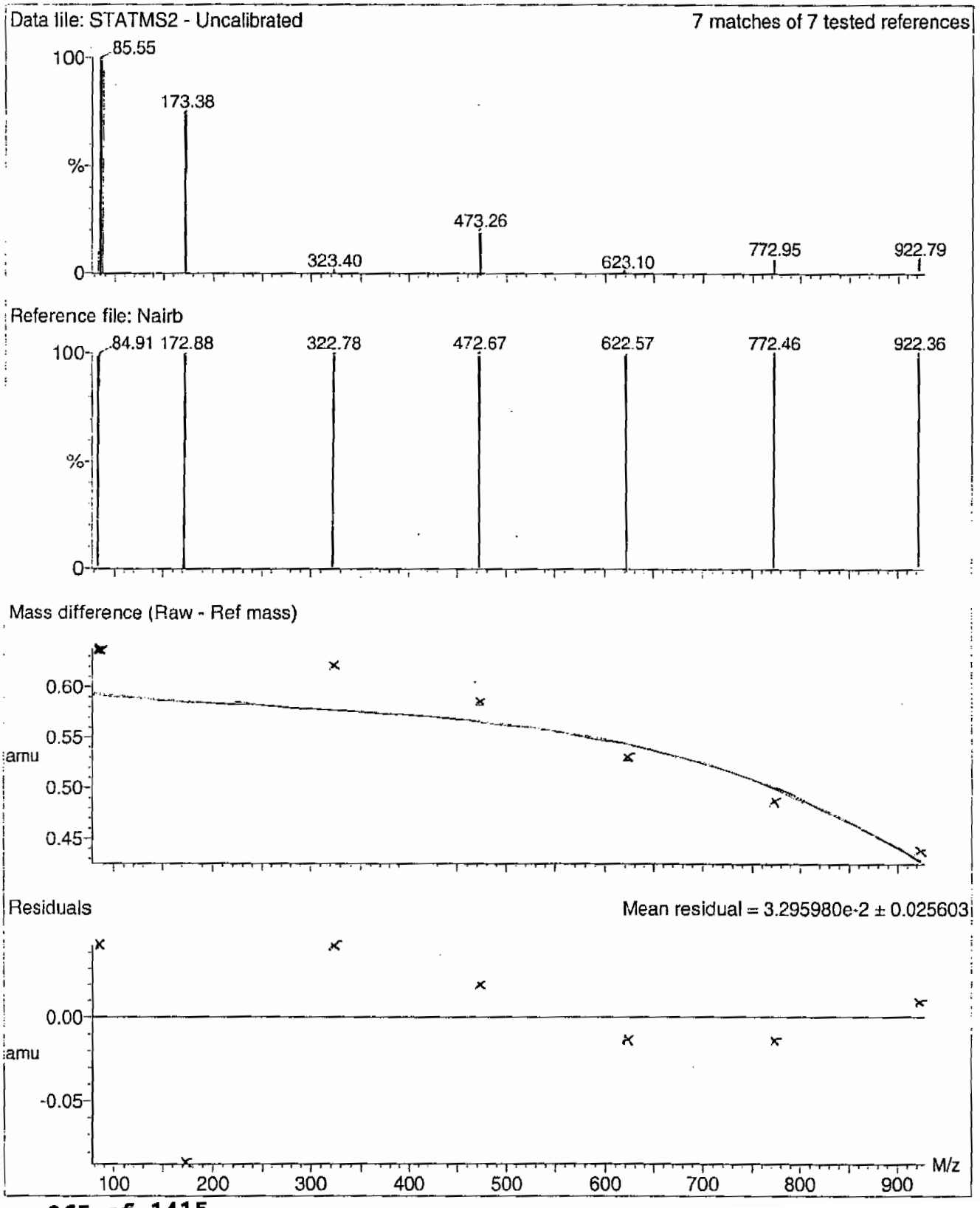

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scanning

Printed: Tue Jan 08 12:22:56 2008

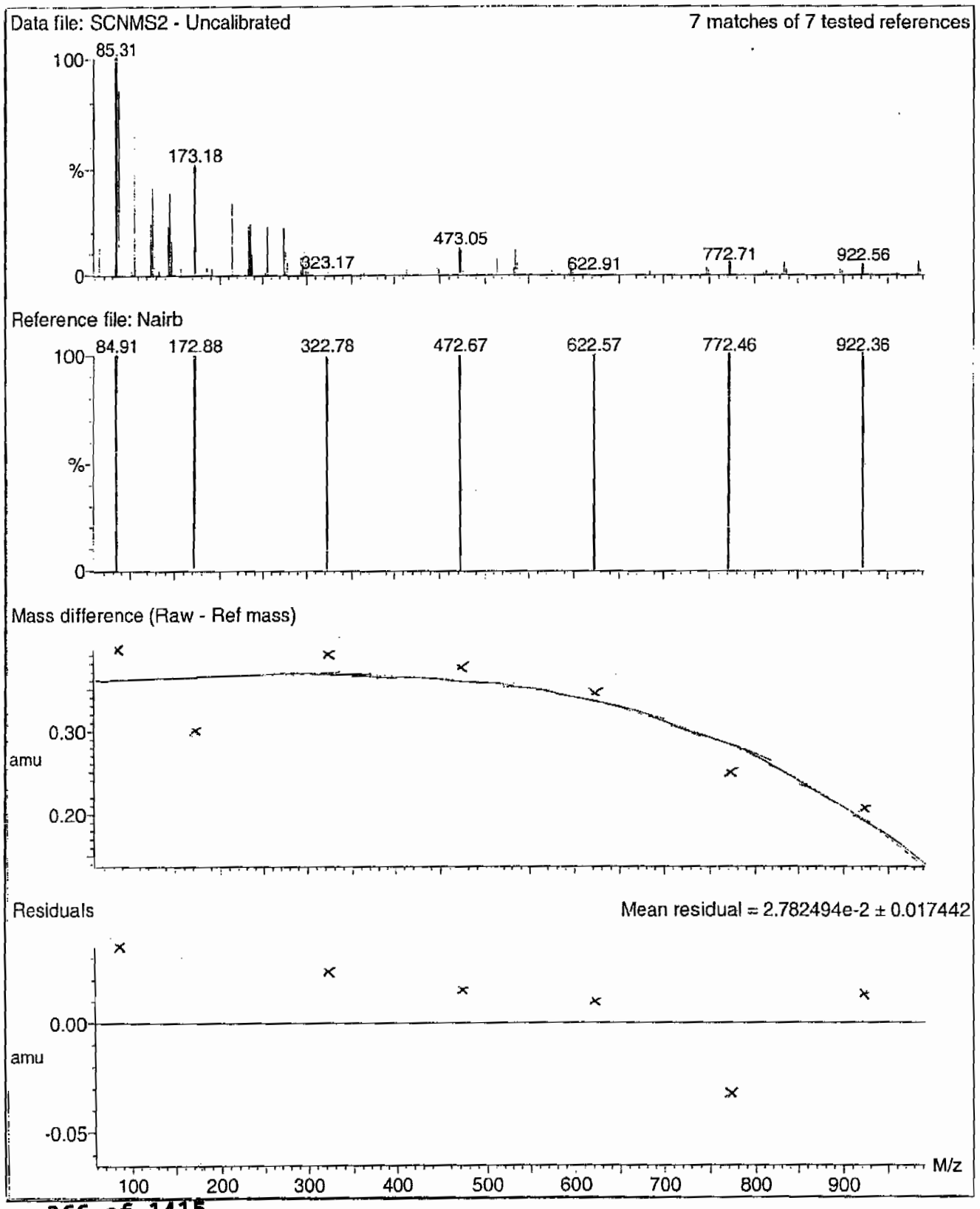

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:23:51 2008

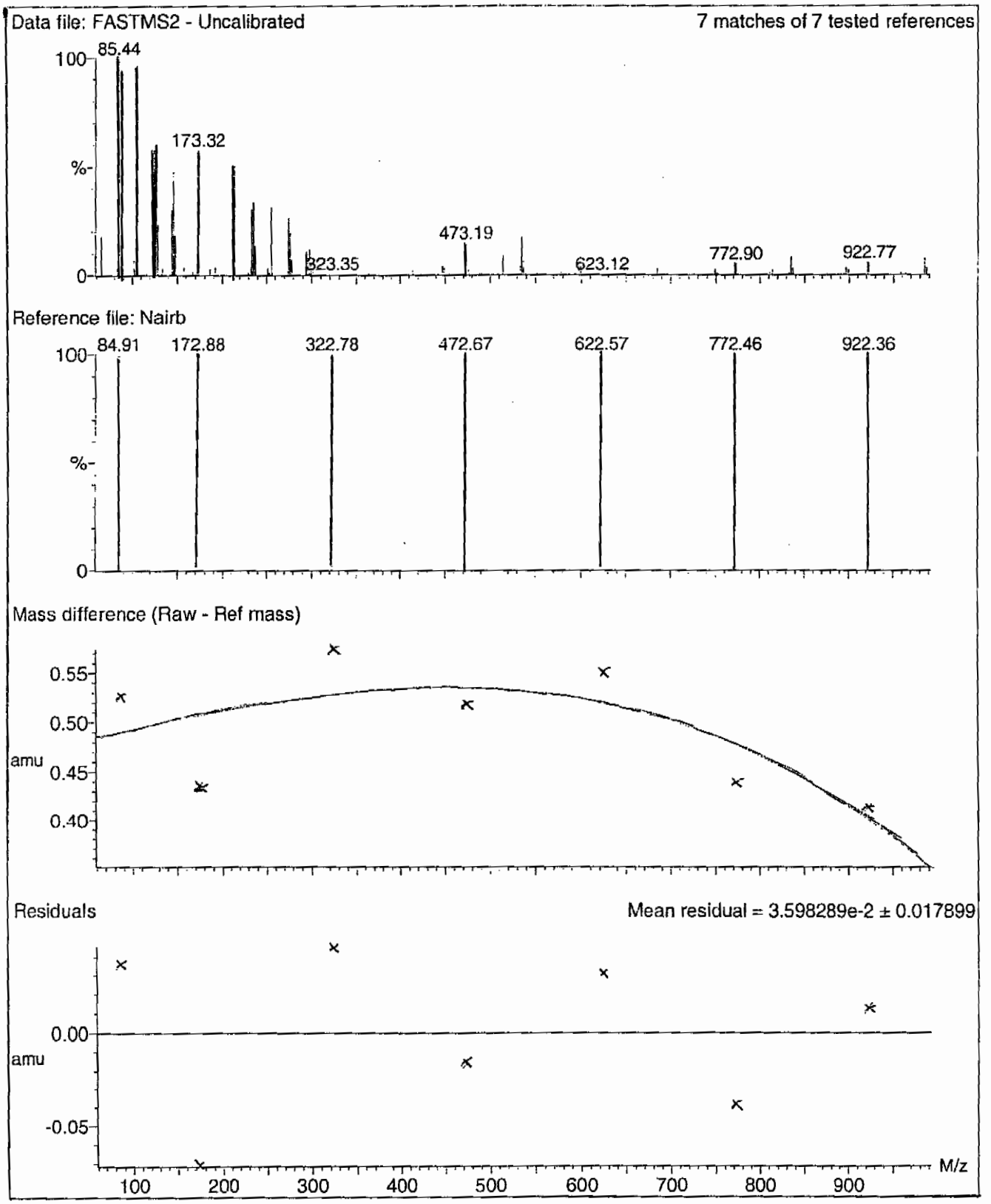

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Tune Parameters **MassLynx 4.0 SP4**

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Sunday, November 22, 2009 11:09:35 Eastern Standard Time

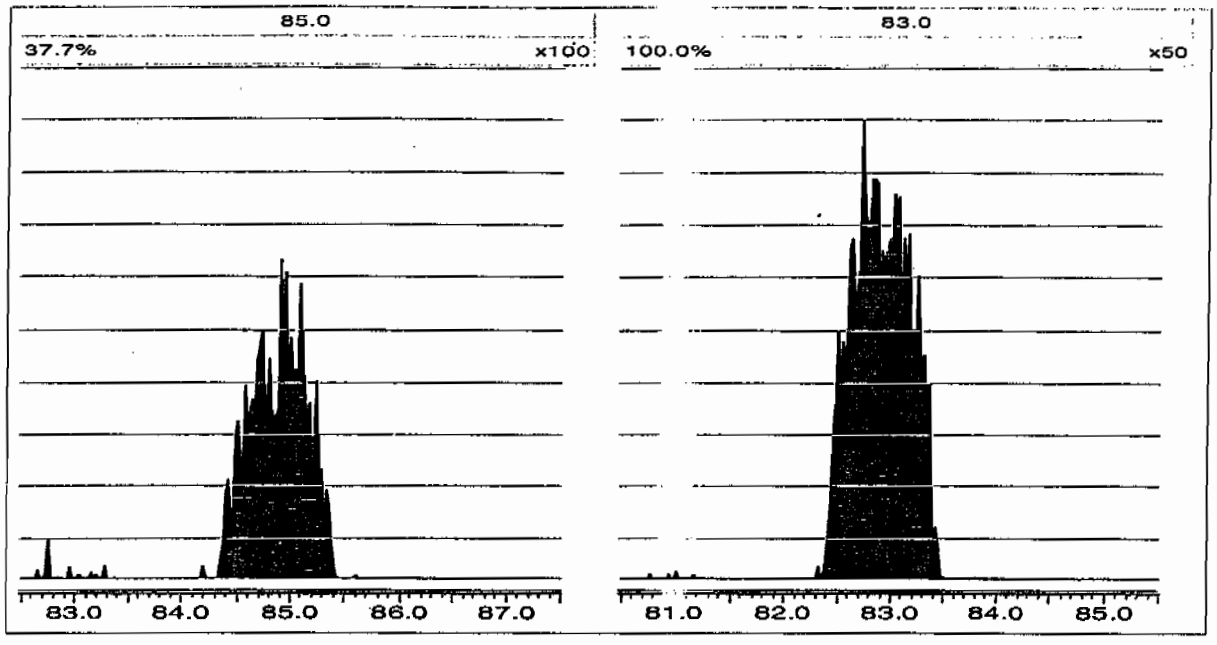

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Tune Parameters **MassLynx 4.0 SP4**

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Monday, November 23, 2009 13:36:02 Eastern Standard Time

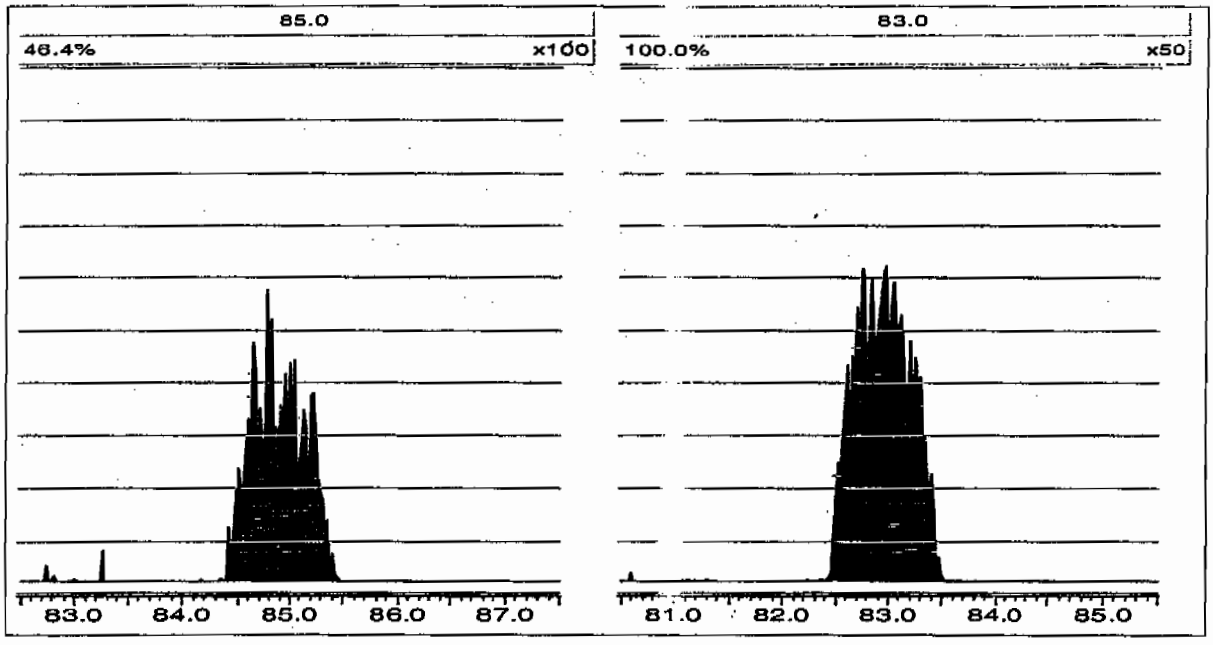

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1122006a**	**22–NOV–09**	**35710.3**				
Lower Area Limit			**17855.15**				
Upper Area Limit			**71420.6**				
1201978155	per1122012a	22–NOV–09 13:29	33344.1	1.74	1.75617	1.009	
1201978163	per1122014a	22–NOV–09 13:42	34535.3	1.77	1.78097	1.006	
241558001	per1122025a	22–NOV–09 14:55	33371.9	1.74	1.75615	1.009	
1201978160	per1122026a	22–NOV–09 15:01	35015.4	1.74	1.75613	1.009	
1201978162	per1122027a	22–NOV–09 15:08	33869.3	1.74	1.75613	1.009	
241558002	per1122028a	22–NOV–09 15:14	33690.9	1.74	1.75617	1.009	
241558003	per1122029a	22–NOV–09 15:21	33917	1.74	1.7437	1.002	
241558004	per1122030a	22–NOV–09 15:27	33954.6	1.74	1.75618	1.009	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1123006a**	**23–NOV–09**	**25916.5**				
Lower Area Limit			**12958.25**				
Upper Area Limit			**51833**				
1201978156	per1123034a	23–NOV–09 18:42	23973.9	1.73	1.74367	1.008	

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SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6907

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558001

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 14:55	per1122025a
	Perchlorate Isotope Ratio						1	22-NOV-09 14:55	per1122025a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 14:55	per1122025a
	Perchlorate-O(18)			0.467	ug/L		1	22-NOV-09 14:55	per1122025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122025a
Date: 22-Nov-2009
Time: 14:55:07
ID: 241558001
Vial: 1:4,E

|LANL|925306|LCQ|1|

CWW 11-23-09

Perchlorate

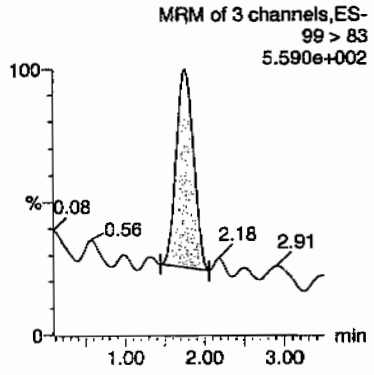

Perchlorate

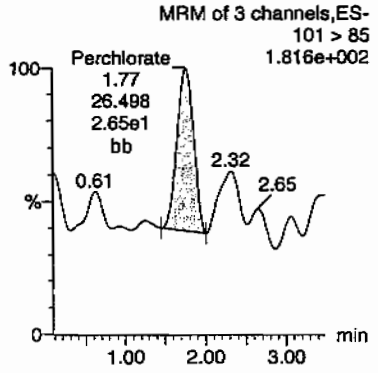

Perchlorate-101

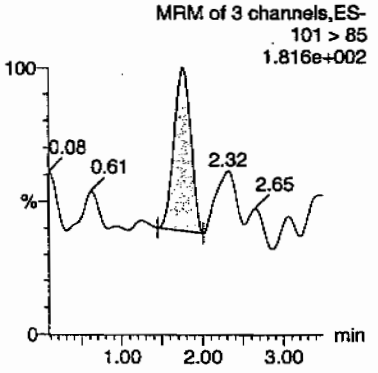

Perchlorate-O(18)

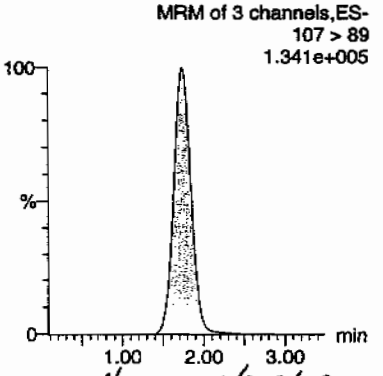

Hmc 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241558001	Perchlorate	99 > 83	1.76	106.466	106.466	bb			0.0013			21.602	4.02
241558001	Perchlorate-101	101 > 85	1.77	26.498	26.498	bb			0.0010			16.532	
241558001	Perchlorate-O(18)	107 > 89	1.74	33371.883	33371.883	bb			0.4673	93.47	-6.53	9849.6...	

OKAY 12/05/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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PROPRIETARY REPORT — No unauthorized reproduction without written permission from GEL.

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6906

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558002

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:14	per1122028a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:14	per1122028a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:14	per1122028a
	Perchlorate-O(18)			0.472	ug/L		1	22-NOV-09 15:14	per1122028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122028a
Date: 22-Nov-2009
Time: 15:14:53
ID: 241558002
Vial: 1:5,B

LANL | 925306 | LCQ | 11

CW 11-23-09

Perchlorate

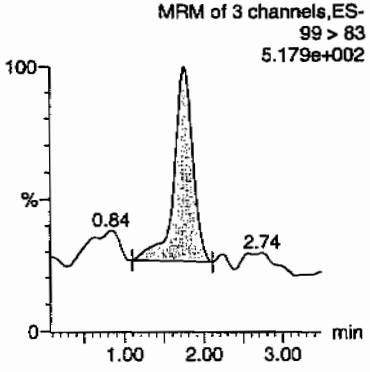

Perchlorate

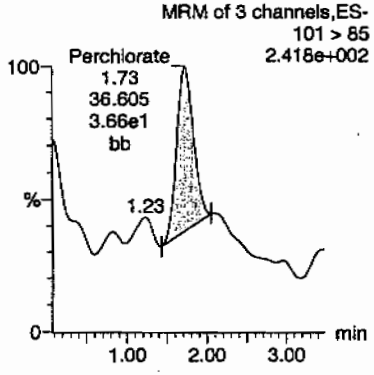

Perchlorate-101

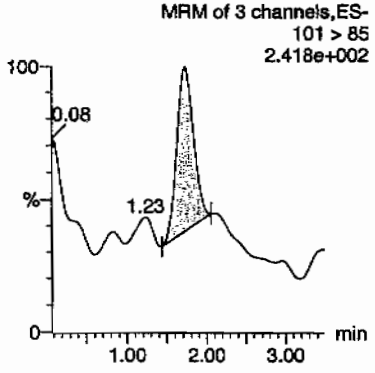

Perchlorate-O(18)

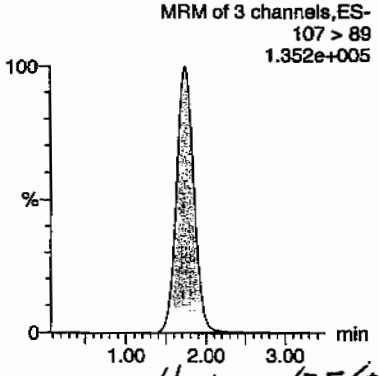

HM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241558002	Perchlorate	99 > 83	1.76	106.592	106.592	bb			0.0013			7.175	2.91
241558002	Perchlorate-101	101 > 85	1.73	36.605	36.605	bb			0.0014			28.196	
241558002	Perchlorate-O(18)	107 > 89	1.74	33690.934	33690.934	bb			0.4718	94.36	-5.64	10254....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6904

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558003

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:21	per1122029a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:21	per1122029a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:21	per1122029a
	Perchlorate-O(18)			0.475	ug/L		1	22-NOV-09 15:21	per1122029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122029a
Date: 22-Nov-2009
Time: 15:21:26
ID: 241558003 | LANL | 925306 | LCQ | 1 |
Vial: 1:5,C

AWD 11-23-09

Perchlorate

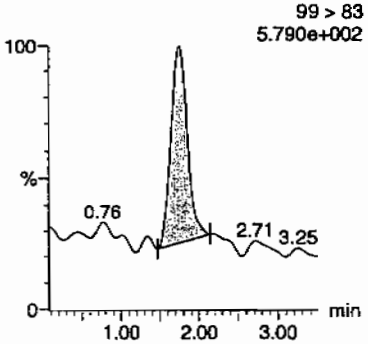

Perchlorate

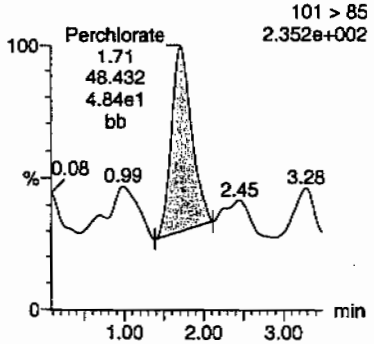

Perchlorate-101

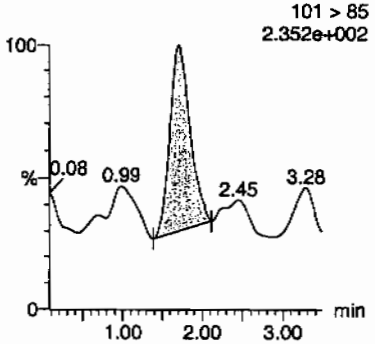

Perchlorate-O(18)

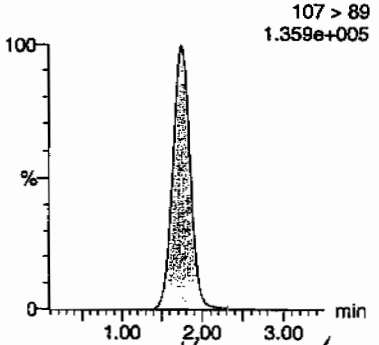

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241558003	Perchlorate	99 > 83	1.74	104.986	104.986	bb			0.0013			33.450	2.17
241558003	Perchlorate-101	101 > 85	1.71	48.432	48.432	bb			0.0019			10.171	
241558003	Perchlorate-O(18)	107 > 89	1.74	33916.953	33916.953	bb			0.4750	95.00	-5.00	3473.2...	

out
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GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6905

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 241558004

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:27	per1122030a
	Perchlorate Isotope Ratio						1	22-NOV-09 15:27	per1122030a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 15:27	per1122030a
	Perchlorate-O(18)			0.476	ug/L		1	22-NOV-09 15:27	per1122030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122030a
Date: 22-Nov-2009
Time: 15:27:59
ID: 241558004
Vial: 1:5,D

ILANL | 925306 | LCQ | 11

GWO 11-23-09

Perchlorate

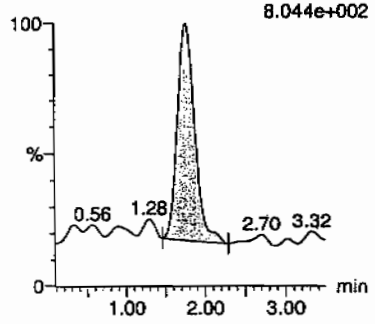

Perchlorate

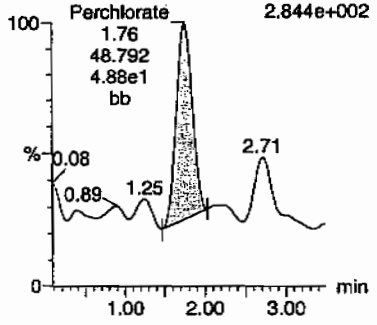

Perchlorate-101

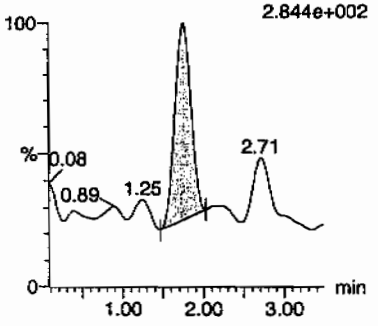

Perchlorate-O(18)

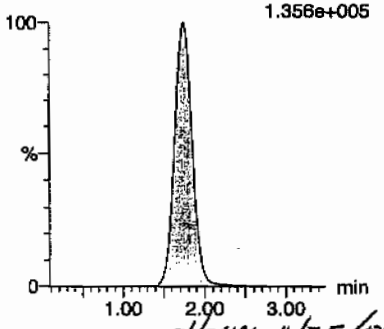

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241558004	Perchlorate	99 > 83	1.76	168.286	168.286	bb			0.0021			20.430	3.45
241558004	Perchlorate-101	101 > 85	1.76	48.792	48.792	bb			0.0019			12.346	
241558004	Perchlorate-O(18)	107 > 89	1.74	33954.586	33954.586	bb			0.4755	95.10	-4.90	30274....	

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 22–NOV–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 79572.4

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 22–NOV–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 25299.32

Response Type: External Standard

Curve Type: RF

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Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112209a.mdb 22 Nov 2009 12:02:51
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112209a.cdb 23 Nov 2009 07:42:55

Compound name: Perchlorate
Response Factor: 79572.4
RRF SD: 2160.73, % Relative SD: 2.71542
Response type: External Std, Area
Curve type: RF

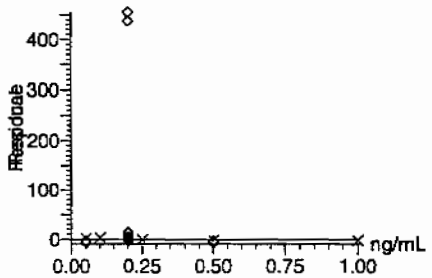

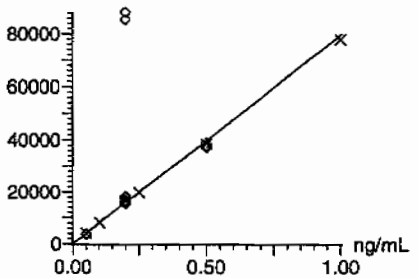

CW
11-23-09

Compound name: Perchlorate-101
Response Factor: 25299.3
RRF SD: 798.263, % Relative SD: 3.15527
Response type: External Std, Area
Curve type: RF

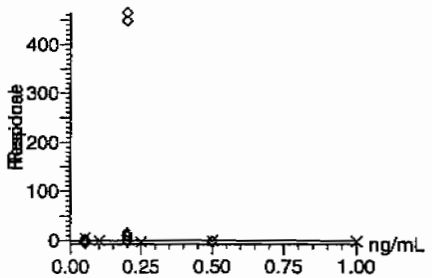

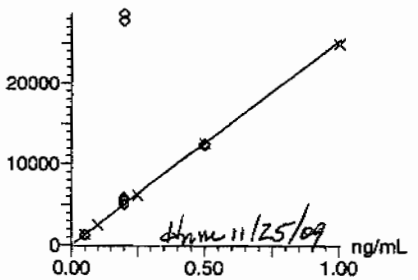

Hmm 11/25/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Calibration Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 71407.6
RRF SD: 1147, % Relative SD: 1.60627
Response type: External Std, Area
Curve type: RF

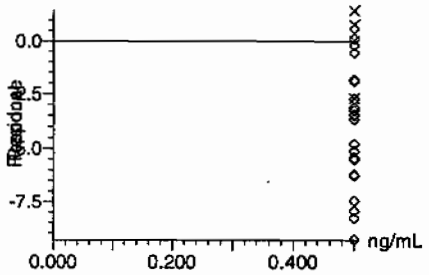

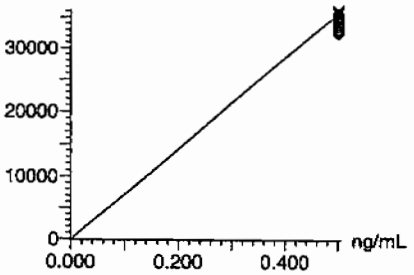

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 23–NOV–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 57966.36

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 23–NOV–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 19717.5

Response Type: External Standard

Curve Type: RF

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per112309a.mdb 23 Nov 2009 16:16:07
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per112309a.cdb 24 Nov 2009 08:36:20

Compound name: Perchlorate
Response Factor: 57966.4
RRF SD: 996.865, % Relative SD: 1.71973
Response type: External Std, Area
Curve type: RF

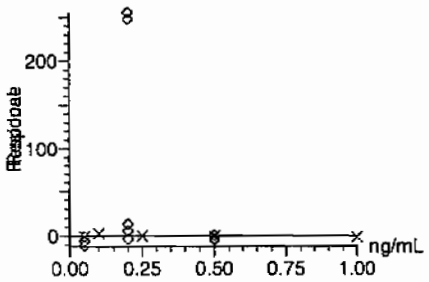

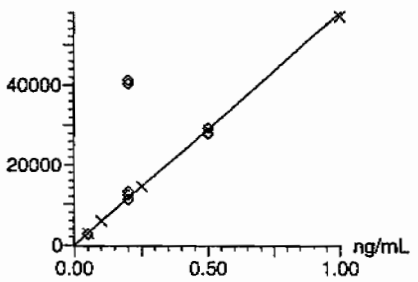

aw
11-24-09

Compound name: Perchlorate-101
Response Factor: 19717.5
RRF SD: 776.838, % Relative SD: 3.93984
Response type: External Std, Area
Curve type: RF

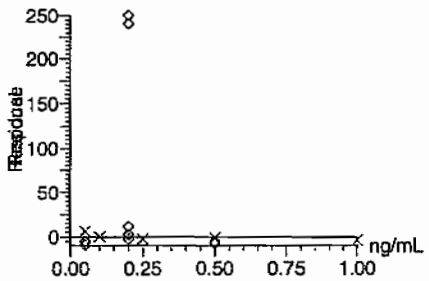

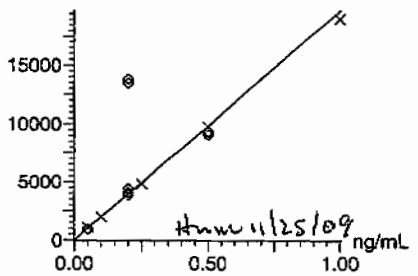

tmw 11/25/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Calibration Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 51382.9
RRF SD: 320.326, % Relative SD: 0.62341
Response type: External Std, Area
Curve type: RF

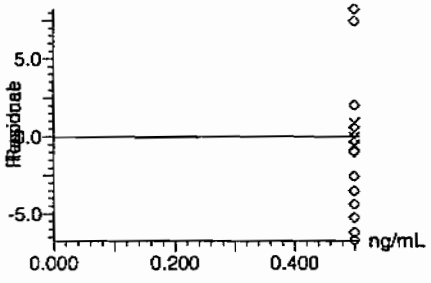

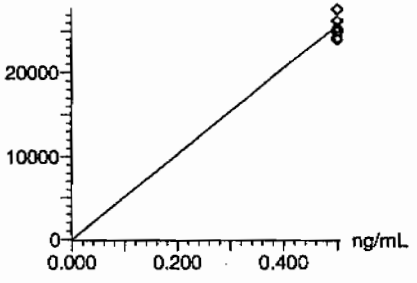

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Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	97.93	22–NOV–09 13:09	per1122009a
Perchlorate Isotope Ratio		3.12		22–NOV–09 13:09	per1122009a
Perchlorate–101	.5	.49	98.82	22–NOV–09 13:09	per1122009a
Perchlorate	.5	.48	96.63	23–NOV–09 15:53	per1123009a
Perchlorate Isotope Ratio		2.99		23–NOV–09 15:53	per1123009a
Perchlorate–101	.5	.48	95.02	23–NOV–09 15:53	per1123009a

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122009a
Date: 22-Nov-2009
Time: 13:09:58
ID: WCL091120-06ICV
Vial: 1:2,A

Pass
11-23-09

Perchlorate

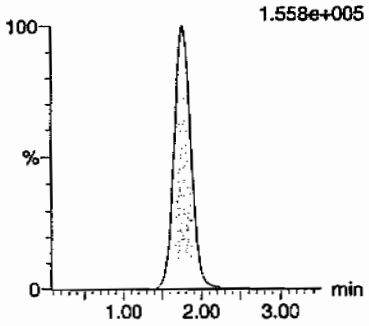

Perchlorate

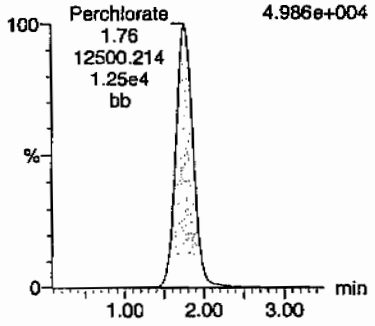

Perchlorate-101

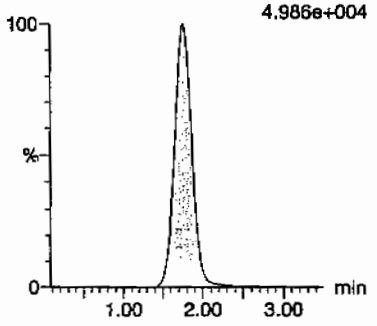

Perchlorate-O(18)

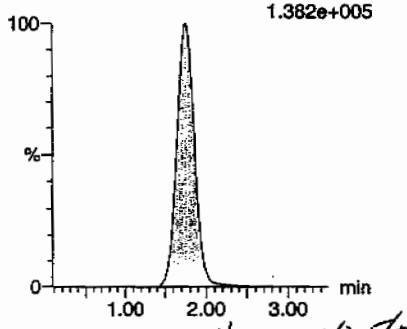

Hmm 11/23/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06ICV	Perchlorate	99 > 83	1.77	38964.039	38964.039	bb			0.4897	97.93	-2.07	5038.1...	3.12
WCL091120-06ICV	Perchlorate-101	101 > 85	1.76	12500.214	12500.214	bb			0.4941	98.82	-1.18	2541.2...	
WCL091120-06ICV	Perchlorate-O(18)	107 > 89	1.76	34584.785	34584.785	bb			0.4843	96.87	-3.13	7932.1...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123009a
Date: 23-Nov-2009
Time: 15:53:18
ID: WCL091120-06ICV
Vial: 1:2,A

CWW 11-24-09

Perchlorate

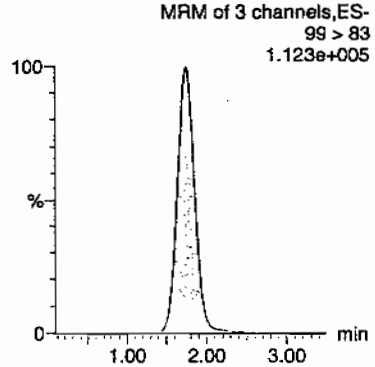

Perchlorate

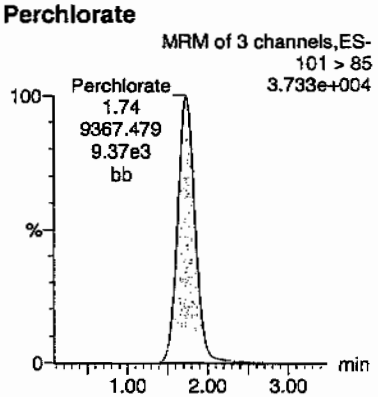

Perchlorate-101

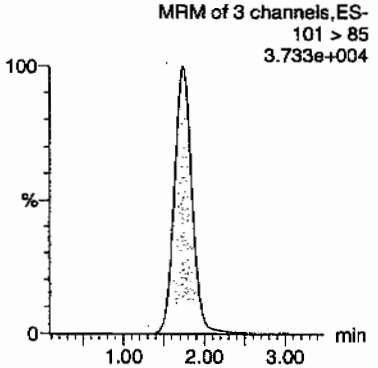

Perchlorate-O(18)

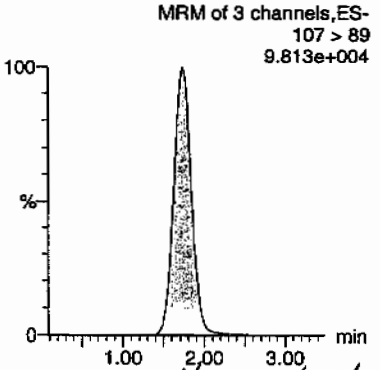

HMW 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06ICV	Perchlorate	99 > 83	1.74	28005.221	28005.221	bb			0.4831	96.63	-3.37	5864.7...	2.99
WCL091120-06ICV	Perchlorate-101	101 > 85	1.74	9367.479	9367.479	bb			0.4751	95.02	-4.98	2770.8...	
WCL091120-06ICV	Perchlorate-O(18)	107 > 89	1.73	24562.264	24562.264	bb			0.4780	95.60	-4.40	5237.0...	

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	95.65	22–NOV–09 14:35	per1122022a
Perchlorate Isotope Ratio		3.08		22–NOV–09 14:35	per1122022a
Perchlorate–101	.5	.49	97.79	22–NOV–09 14:35	per1122022a
Perchlorate	.5	.47	93.41	22–NOV–09 15:47	per1122033a
Perchlorate Isotope Ratio		3.04		22–NOV–09 15:47	per1122033a
Perchlorate–101	.5	.48	96.7	22–NOV–09 15:47	per1122033a
Perchlorate	.5	.5	100.91	23–NOV–09 17:23	per1123022a
Perchlorate Isotope Ratio		3.15		23–NOV–09 17:23	per1123022a
Perchlorate–101	.5	.47	94.32	23–NOV–09 17:23	per1123022a
Perchlorate	.5	.48	95.87	23–NOV–09 18:48	per1123035a
Perchlorate Isotope Ratio		3.06		23–NOV–09 18:48	per1123035a
Perchlorate–101	.5	.46	92.1	23–NOV–09 18:48	per1123035a

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qid

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122022a
Date: 22-Nov-2009
Time: 14:35:23
ID: WCL091120-06CCV
Vial: 1:2,A

Pass
11-23-09

Perchlorate

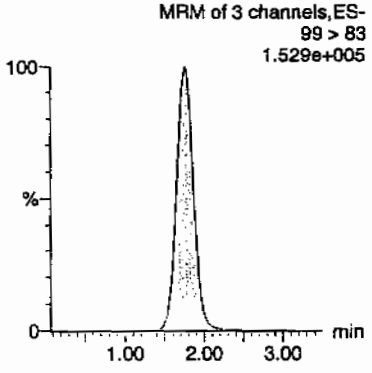

Perchlorate

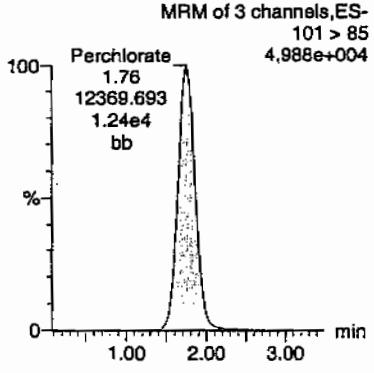

Perchlorate-101

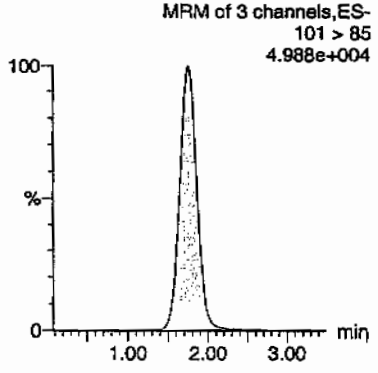

Perchlorate-O(18)

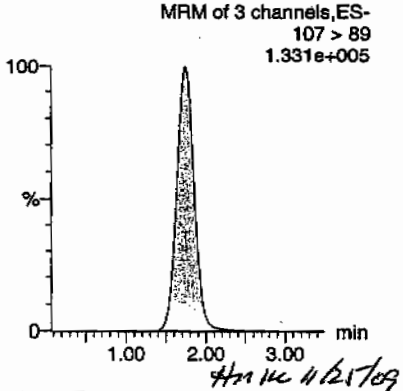

HM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.76	38057.375	38057.375	bb			0.4783	95.65	-4.35	8356.9...	3.08
WCL091120-06CCV	Perchlorate-101	101 > 85	1.76	12369.693	12369.693	bb			0.4889	97.79	-2.21	4676.6...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.74	33470.871	33470.871	bb			0.4687	93.75	-6.25	17438....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122033a
Date: 22-Nov-2009
Time: 15:47:36
ID: WCL091120-06CCV
Vial: 1:2,A

Pass
11-23-09

Perchlorate

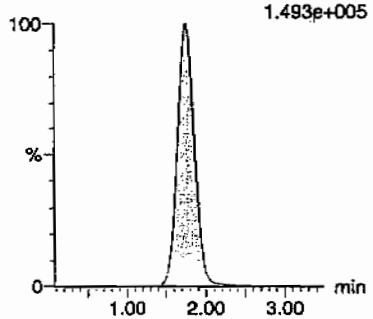

Perchlorate

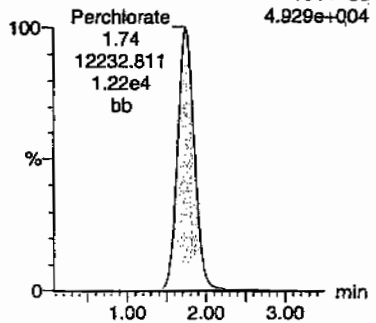

Perchlorate-101

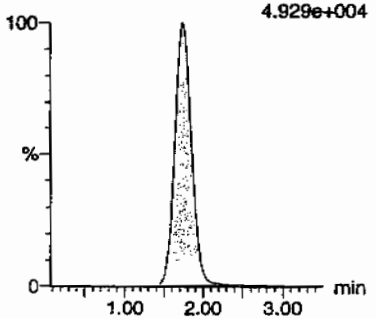

Perchlorate-O(18)

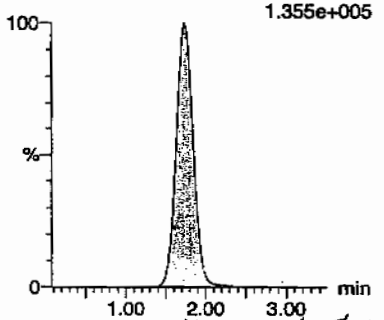

Hnm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.76	37163.590	37163.590	bb			0.4670	93.41	-6.59	8943.9...	3.04
WCL091120-06CCV	Perchlorate-101	101 > 85	1.74	12232.811	12232.811	bb			0.4835	96.70	-3.30	2583.1...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.74	33776.270	33776.270	bb			0.4730	94.60	-5.40	1201.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123022a
Date: 23-Nov-2009
Time: 17:23:35
ID: WCL091120-06CCV
Vial: 1:2,A

Pass
aw
11-24-09

Perchlorate

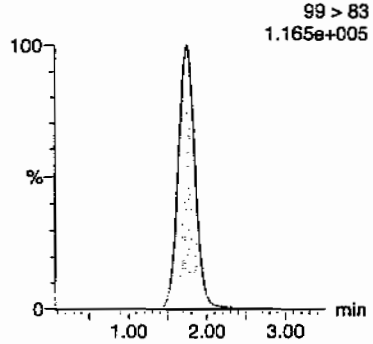

Perchlorate

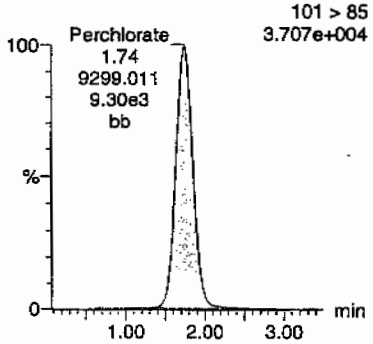

Perchlorate-101

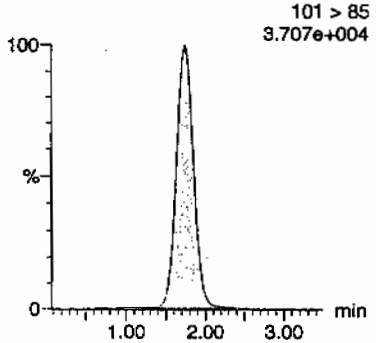

Perchlorate-O(18)

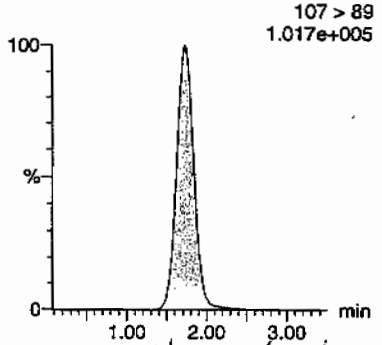

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.74	29246.289	29246.289	bb			0.5045	100.91	0.91	3039.0...	3.15
WCL091120-06CCV	Perchlorate-101	101 > 85	1.74	9299.011	9299.011	bb			0.4716	94.32	-5.68	1626.8...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.73	25461.057	25461.057	bb			0.4955	99.10	-0.90	11610....	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

PWD
CWW
11-24-09

Name: per1123035a
Date: 23-Nov-2009
Time: 18:48:50
ID: WCL091120-06CCV
Vial: 1:2,A

Perchlorate

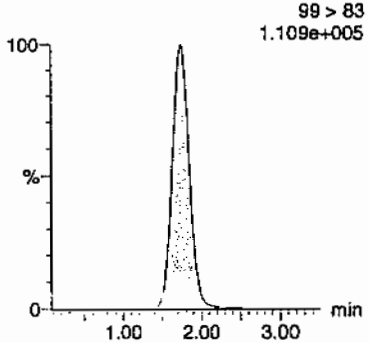

Perchlorate

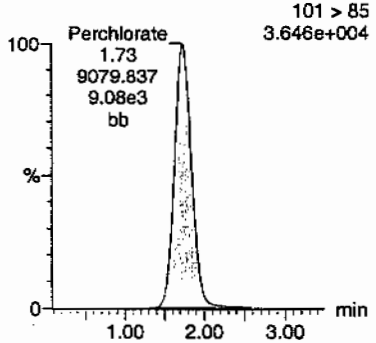

Perchlorate-101

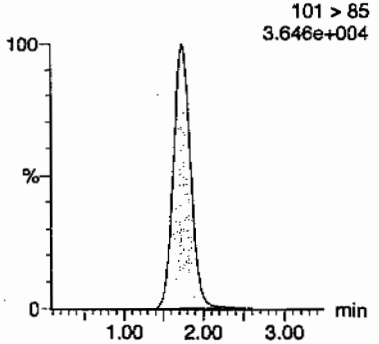

Perchlorate-O(18)

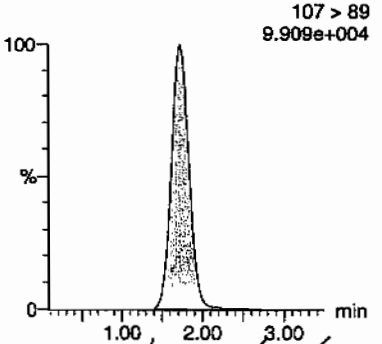

Hum 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.74	27787.189	27787.189	bb			0.4794	95.87	-4.13	1470.4...	3.06
WCL091120-06CCV	Perchlorate-101	101 > 85	1.73	9079.837	9079.837	bb			0.4605	92.10	-7.90	2614.3...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.73	24787.986	24787.986	bb			0.4824	96.48	-3.52	11836....	

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-608

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.51	22-NOV-09 13:23	per1122011a
Perchlorate Isotope Ratio		3.09		22-NOV-09 13:23	per1122011a
Perchlorate-101	.05	.05	99.11	22-NOV-09 13:23	per1122011a
Perchlorate	.05	.05	97.38	22-NOV-09 14:48	per1122024a
Perchlorate Isotope Ratio		3.19		22-NOV-09 14:48	per1122024a
Perchlorate-101	.05	.05	96.02	22-NOV-09 14:48	per1122024a
Perchlorate	.05	.05	97.55	22-NOV-09 16:00	per1122035a
Perchlorate Isotope Ratio		3.05		22-NOV-09 16:00	per1122035a
Perchlorate-101	.05	.05	100.55	22-NOV-09 16:00	per1122035a
Perchlorate	.05	.05	98.77	23-NOV-09 16:06	per1123011a
Perchlorate Isotope Ratio		3.07		23-NOV-09 16:06	per1123011a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608

Lab Code: GEL

Reporting Units: ug/L

Perchlorate–101	.05	.05	94.61	23–NOV–09 16:06	per1123011a
Perchlorate	.05	.05	94.66	23–NOV–09 17:36	per1123024a
Perchlorate Isotope Ratio		2.92		23–NOV–09 17:36	per1123024a
Perchlorate–101	.05	.05	95.46	23–NOV–09 17:36	per1123024a
Perchlorate	.05	.04	89.28	23–NOV–09 19:01	per1123037a
Perchlorate Isotope Ratio		2.88		23–NOV–09 19:01	per1123037a
Perchlorate–101	.05	.05	91.19	23–NOV–09 19:01	per1123037a

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122011a
Date: 22-Nov-2009
Time: 13:23:02
ID: WCL091120-07CRI
Vial: 1:2,B

Pass
11-23-09

Perchlorate

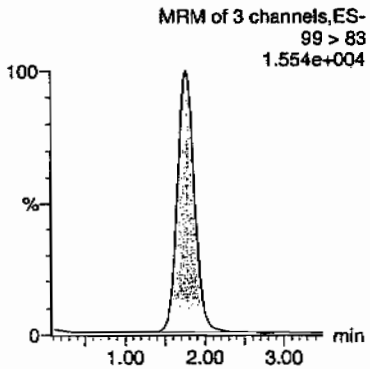

Perchlorate

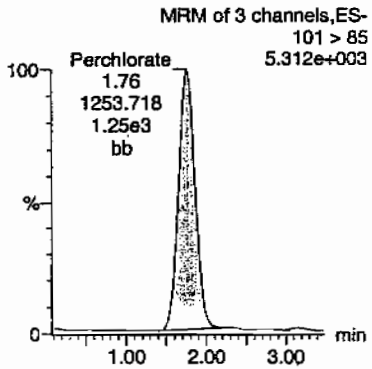

Perchlorate-101

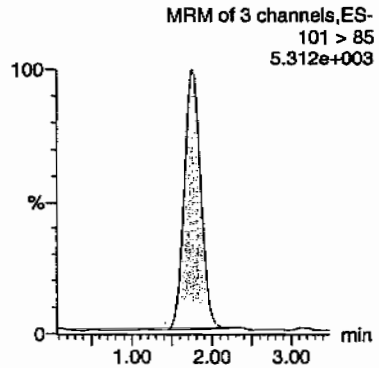

Perchlorate-O(18)

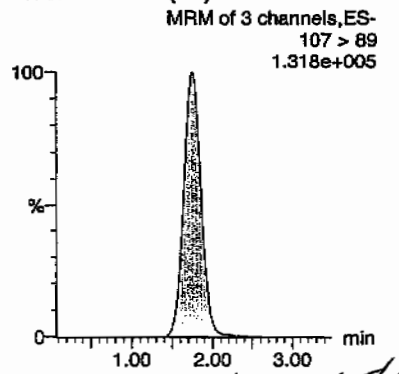

Hm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.77	3879.658	3879.658	bb			0.0488	97.51	-2.49	274.853	3.09
WCL091120-07CRI	Perchlorate-101	101 > 85	1.76	1253.718	1253.718	bb			0.0496	99.11	-0.89	478.527	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.76	33050.219	33050.219	bb			0.4628	92.57	-7.43	2377.6...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122024a
Date: 22-Nov-2009
Time: 14:48:28
ID: WCL091120-07CRI
Vial: 1:2,B

11-23-09

Perchlorate

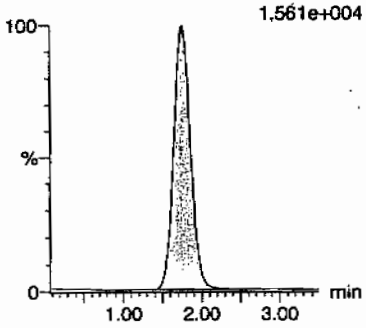

Perchlorate

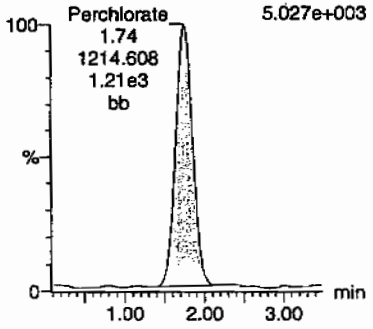

Perchlorate-101

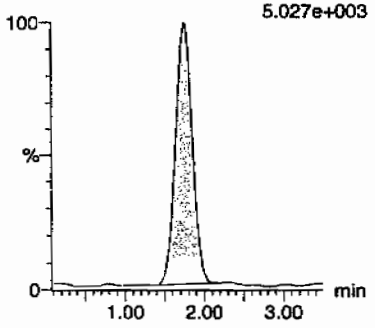

Perchlorate-O(18)

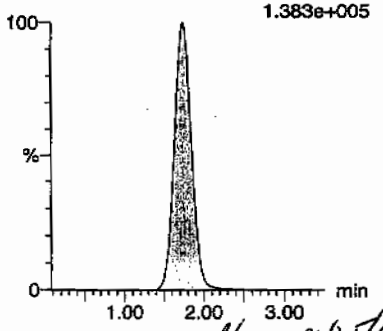

Hmc 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.76	3874.561	3874.561	bb			0.0487	97.38	-2.62	1131.5...	3.19
WCL091120-07CRI	Perchlorate-101	101 > 85	1.74	1214.608	1214.608	bb			0.0480	96.02	-3.98	315.131	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.74	34449.484	34449.484	bb			0.4824	96.49	-3.51	2244.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Pass
and 11-23-09
and 11-23-09

Name: per1122035a
Date: 22-Nov-2009
Time: 16:00:56
ID: WCL091120-07CRI
Vial: 1:2,B

Perchlorate

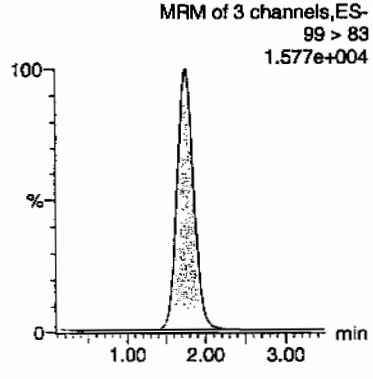

Perchlorate

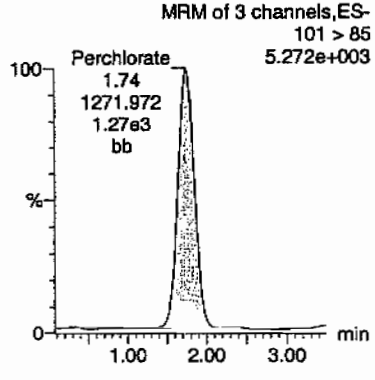

Perchlorate-101

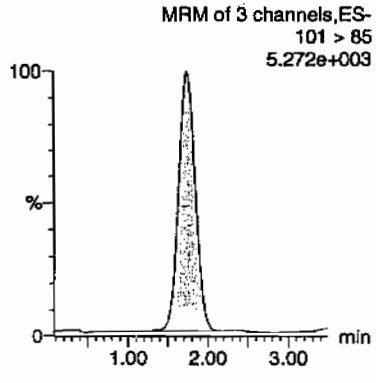

Perchlorate-O(18)

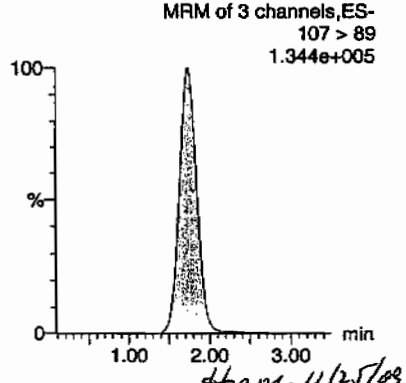

tbrine 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.74	3881.240	3881.240	bb			0.0488	97.55	-2.45	808.912	3.05
WCL091120-07CRI	Perchlorate-101	101 > 85	1.74	1271.972	1271.972	bb			0.0503	100.55	0.55	863.429	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.74	33498.539	33498.539	bb			0.4691	93.82	-6.18	6415.6...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123011a
Date: 23-Nov-2009
Time: 16:06:23
ID: WCL091120-07CRI
Vial: 1:2,B

11-24-09

Perchlorate

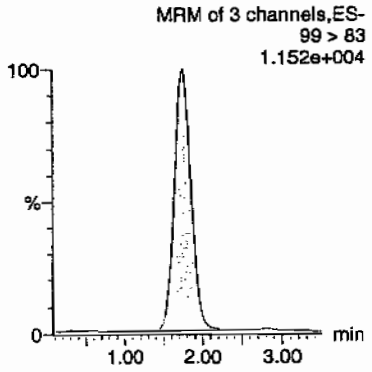

Perchlorate

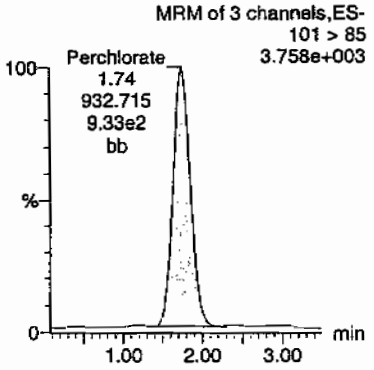

Perchlorate-101

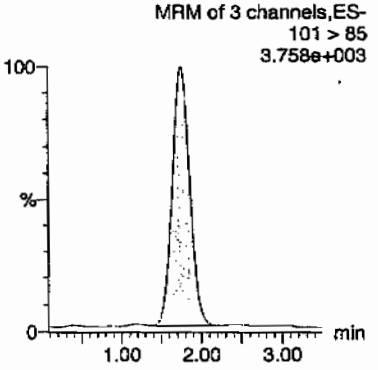

Perchlorate-O(18)

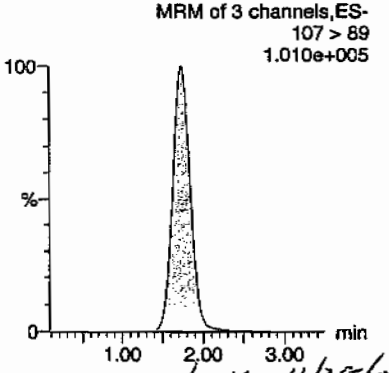

mm 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.76	2862.625	2862.625	bb			0.0494	98.77	-1.23	186.721	3.07
WCL091120-07CRI	Perchlorate-101	101 > 85	1.74	932.715	932.715	bb			0.0473	94.61	-5.39	606.579	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.73	25432.994	25432.994	bb			0.4950	98.99	-1.01	4035.3...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Pass
and
11-24-09

Name: per1123024a
Date: 23-Nov-2009
Time: 17:36:40
ID: WCL091120-07CRI
Vial: 1:2,B

Perchlorate

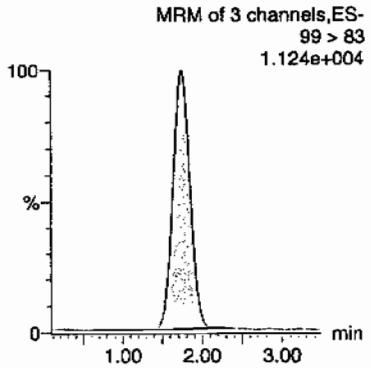

Perchlorate

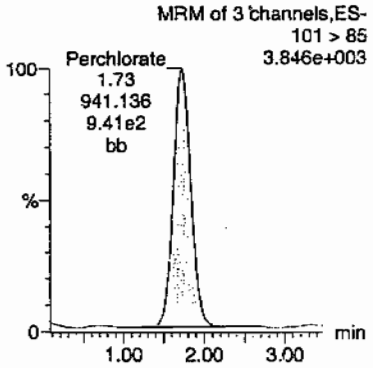

Perchlorate-101

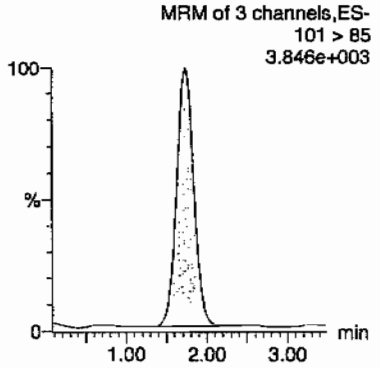

Perchlorate-O(18)

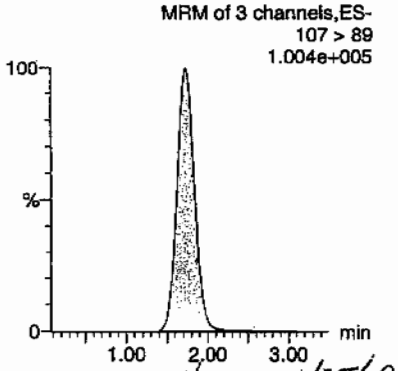

Hmc 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.74	2743.467	2743.467	bb			0.0473	94.66	-5.34	953.519	2.92
WCL091120-07CRI	Perchlorate-101	101 > 85	1.73	941.136	941.136	bb			0.0477	95.46	-4.54	1077.1...	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.73	25036.299	25036.299	bb			0.4872	97.45	-2.55	11146....	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123037a
Date: 23-Nov-2009
Time: 19:01:56
ID: WCL091120-07CRI
Vial: 1:2,B

Pass
aw
11-24-09

Perchlorate

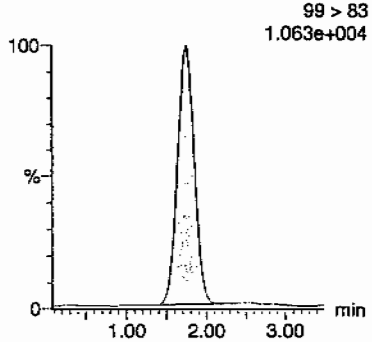

Perchlorate

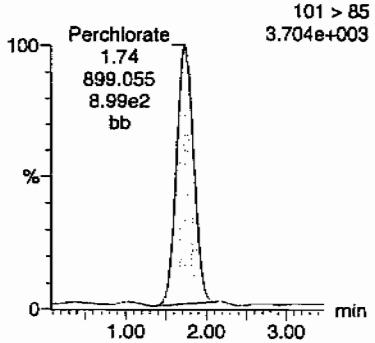

Perchlorate-101

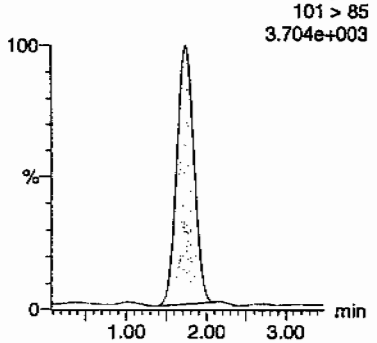

Perchlorate-O(18)

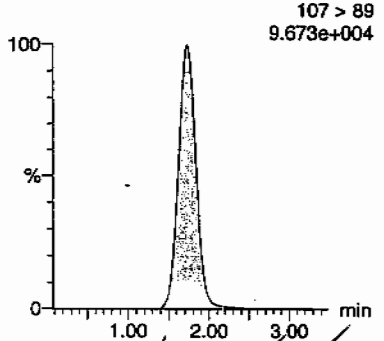

HMW 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.74	2587.648	2587.648	bb			0.0446	89.28	-10.72	631.401	2.88
WCL091120-07CRI	Perchlorate-101	101 > 85	1.74	899.055	899.055	bb			0.0456	91.19	-8.81	393.217	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.73	24098.025	24098.025	bb			0.4690	93.80	-6.20	5463.5...	

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QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WASTE WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 21-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 1201978155

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	22-NOV-09 13:29	per1122012a
	Perchlorate Isotope Ratio						1	22-NOV-09 13:29	per1122012a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	22-NOV-09 13:29	per1122012a
	Perchlorate-O(18)			0.467	ug/L		1	22-NOV-09 13:29	per1122012a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122012a
Date: 22-Nov-2009
Time: 13:29:44
ID: 1201978155
Vial: 1:3,A

|LANL|925306|LZQ|MB|1|

11-23-09

Perchlorate

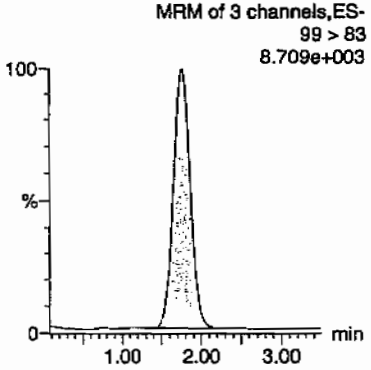

Perchlorate

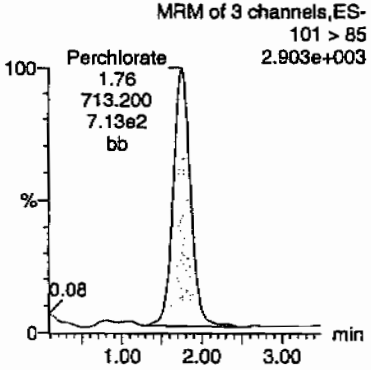

Perchlorate-101

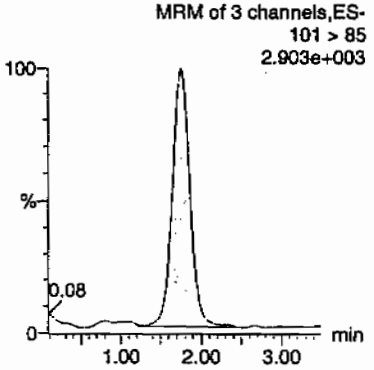

Perchlorate-O(18)

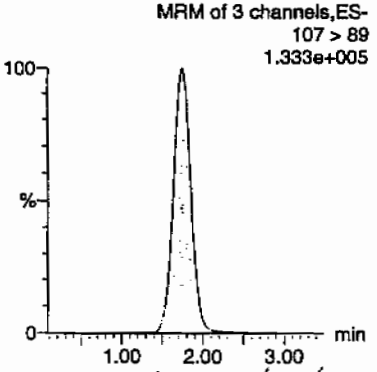

HMC 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201978155	Perchlorate	99 > 83	1.76	2109.086	2109.086	bb			0.0265	<0.0300		851.371	2.96
1201978155	Perchlorate-101	101 > 85	1.76	713.200	713.200	bb			0.0282			134.857	
1201978155	Perchlorate-O(18)	107 > 89	1.74	33344.086	33344.086	bb			0.4670	93.39	-6.61	11003....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WASTE WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 21-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 1201978156

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.227	ug/L		1	23-NOV-09 18:42	per1123034a
	Perchlorate Isotope Ratio			2.99			1	23-NOV-09 18:42	per1123034a
14797-73-0	Perchlorate-101	.05	.2	0.223	ug/L		1	23-NOV-09 18:42	per1123034a
	Perchlorate-O(18)			0.467	ug/L		1	23-NOV-09 18:42	per1123034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112309a.qld

Last Altered: Tuesday, November 24, 2009 8:36:21 AM Eastern Standard Time
Printed: Tuesday, November 24, 2009 8:45:04 AM Eastern Standard Time

Name: per1123034a
Date: 23-Nov-2009
Time: 18:42:16
ID: 1201978156
Vial: 1:6,A

|LANL|925306|LCQ|LCS|1|NA

CW
11-24-09

Perchlorate

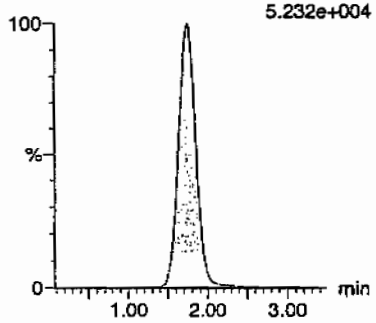

Perchlorate

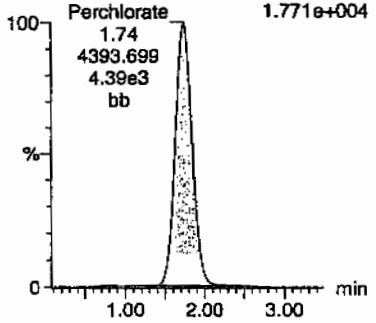

Perchlorate-101

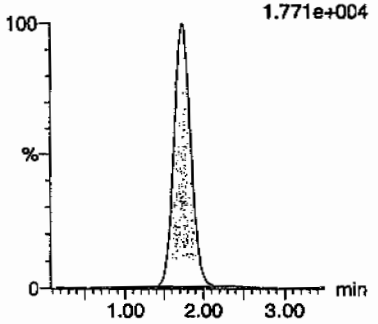

Perchlorate-O(18)

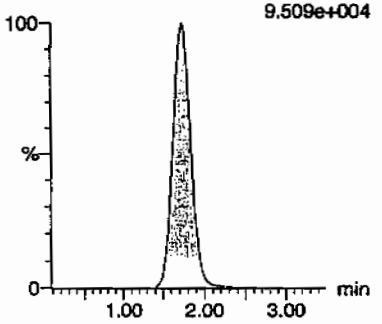

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201978156	Perchlorate	99 > 83	1.74	13134.248	13134.248	bb			0.2266	113.29	13.29	976.349	2.99
1201978156	Perchlorate-101	101 > 85	1.74	4393.699	4393.699	bb			0.2228	111.42	11.42	630.248	
1201978156	Perchlorate-O(18)	107 > 89	1.73	23973.873	23973.873	bb			0.4666	93.31	-6.69	8260.9...	

$$\frac{13134.248}{57966.4} = 0.2266$$

HMW
11/25/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6907MS

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 1201978160

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.193	ug/L	J	1	22-NOV-09 15:01	per1122026a
	Perchlorate Isotope Ratio			3.04			1	22-NOV-09 15:01	per1122026a
14797-73-0	Perchlorate-101	.05	.2	0.199	ug/L	J	1	22-NOV-09 15:01	per1122026a
	Perchlorate-O(18)			0.490	ug/L		1	22-NOV-09 15:01	per1122026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122026a
Date: 22-Nov-2009
Time: 15:01:40
ID: 1201978160
Vial: 1:4,F

ILANL | 925306 | LIQ | MS | 11

11-23-09

Perchlorate

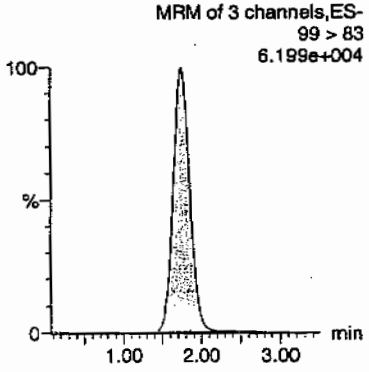

Perchlorate

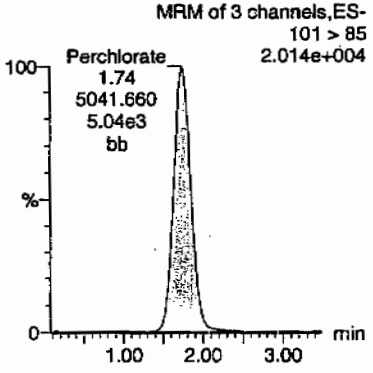

Perchlorate-101

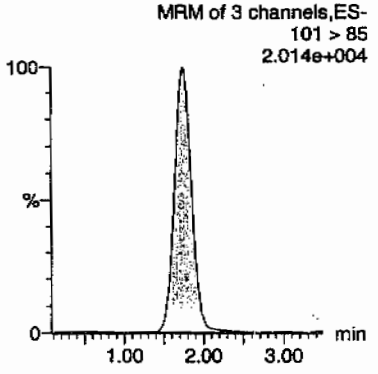

Perchlorate-O(18)

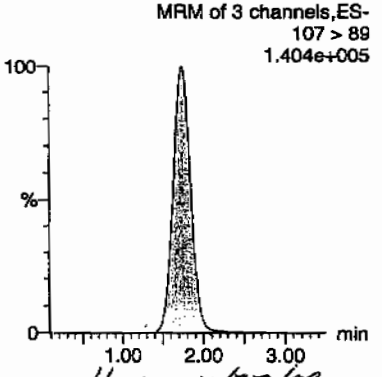

HNM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201978160	Perchlorate	99 > 83	1.76	15336.059	15336.059	bb			0.1927	96.37	-3.63	6404.8...	3.04
1201978160	Perchlorate-101	101 > 85	1.74	5041.660	5041.660	bb			0.1993	99.64	-0.36	1320.9...	
1201978160	Perchlorate-O(18)	107 > 89	1.74	35015.395	35015.395	bb			0.4904	98.07	-1.93	12147....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 925304

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE03-10-6907MSD

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608

GEL Sample ID: 1201978162

Date Filtered: 21-NOV-09

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.197	ug/L	J	1	22-NOV-09 15:08	per1122027a
	Perchlorate Isotope Ratio			3.15			1	22-NOV-09 15:08	per1122027a
14797-73-0	Perchlorate-101	.05	.2	0.197	ug/L	J	1	22-NOV-09 15:08	per1122027a
	Perchlorate-O(18)			0.474	ug/L		1	22-NOV-09 15:08	per1122027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per112209a.qld

Last Altered: Monday, November 23, 2009 7:42:56 AM Eastern Standard Time
Printed: Monday, November 23, 2009 7:57:31 AM Eastern Standard Time

Name: per1122027a
Date: 22-Nov-2009
Time: 15:08:12
ID: 1201978162
Vial: 1:5,A

|LANL|925306|LZQ|MSD|1|

11-23-09

Perchlorate

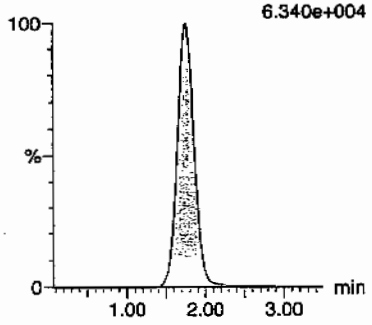

Perchlorate

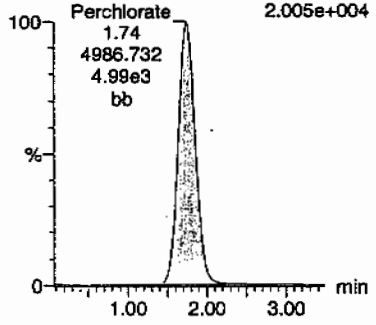

Perchlorate-101

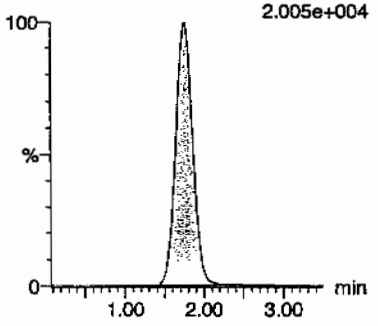

Perchlorate-O(18)

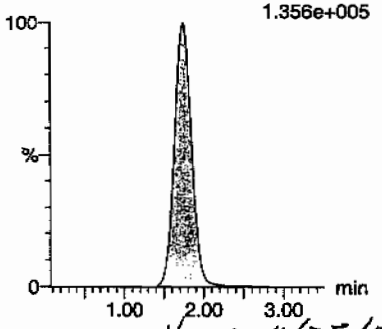

HMM 11/25/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201978162	Perchlorate	99 > 83	1.76	15712.608	15712.608	bb			0.1975	98.73	-1.27	2508.6...	3.15
1201978162	Perchlorate-101	101 > 85	1.74	4986.732	4986.732	bb			0.1971	98.55	-1.45	728.308	
1201978162	Perchlorate-O(18)	107 > 89	1.74	33869.254	33869.254	bb			0.4743	94.86	-5.14	7385.8...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 925304 **Verified by:** _____

Analyst: Jareth Shirley

Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6

Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1201978155 MB	21-NOV-2009 12:12:31	10	10	1
1201978156 LCS	21-NOV-2009 12:12:31	10	10	1
241511002	21-NOV-2009 12:12:31	10	10	1
1201978159 MS (241511002)	21-NOV-2009 12:12:31	10	10	1
1201978161 MSD (241511002)	21-NOV-2009 12:12:31	10	10	1
241511004	21-NOV-2009 12:12:31	10	10	1
241529001	21-NOV-2009 12:12:31	10	10	1
1201978157 MS (241529001)	21-NOV-2009 12:12:31	10	10	1
1201978158 MSD (241529001)	21-NOV-2009 12:12:31	10	10	1
241558001	21-NOV-2009 12:12:31	10	10	1
1201978160 MS (241558001)	21-NOV-2009 12:12:31	10	10	1
1201978162 MSD (241558001)	21-NOV-2009 12:12:31	10	10	1
241558002	21-NOV-2009 12:12:31	10	10	1
241558003	21-NOV-2009 12:12:31	10	10	1
241558004	21-NOV-2009 12:12:31	10	10	1
241563002	21-NOV-2009 12:12:31	10	10	1
241590002	21-NOV-2009 12:12:31	10	10	1
1201978163 ICS	21-NOV-2009 12:12:31	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201978163	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
LCS	1201978156	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MS	1201978157	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MS	1201978159	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MS	1201978160	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MSD	1201978158	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MSD	1201978161	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
MSD	1201978162	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1133543	10	mL
RGNT	All	O2SI HPLC Grade Water	1197509	10	mL

Comments:

Desalting cartridges used: 090914-1-H & 090817-1-Ba

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GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS#2

Date: 11/22/09
Extr. Injection Volume: 20uL
Sequence Number: per112209a
Initial Calibration Date: 11/22/09

Method: EPA 6850-Modified
Int. Std.: UCL090612-01.2
Mobile Phase Lot#: 1191829, 1197509
Standard-Samp Reagent Lot#:: 1197509

Reviewed BY: [illegible]
Date: 11/25/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091120-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1122001a	IPB001	CWW	11/22/2009 12:17			1		USE	B
per1122002a	IPB001	CWW	11/22/2009 12:23			1		USE	B
per1122003a	WCLICAL-01	CWW	11/22/2009 12:30			1		USE	I
per1122004a	WCLICAL-02	CWW	11/22/2009 12:36			1		USE	I
per1122005a	WCLICAL-03	CWW	11/22/2009 12:43			1		USE	I
per1122006a	WCLICAL-04	CWW	11/22/2009 12:50			1		USE	I
per1122007a	WCLICAL-05	CWW	11/22/2009 12:56			1		USE	I
per1122008a	IPB002	CWW	11/22/2009 13:03			1		USE	B
per1122009a	WCLICV	CWW	11/22/2009 13:09			1		USE	C
per1122010a	IPB003	CWW	11/22/2009 13:16			1		USE	B
per1122011a	WCLCRI	CWW	11/22/2009 13:23			1		USE	C
per1122012a	1201978155	CWW	11/22/2009 13:29	925306	VARIOUS	1	LANL	USE	S
per1122013a	1201978156	CWW	11/22/2009 13:36	925306	VARIOUS	1	LANL	DUSE-RA	S
per1122014a	1201978163	CWW	11/22/2009 13:42	925306	VARIOUS	1	LANL	USE	S
per1122015a	241511002	CWW	11/22/2009 13:49	925306	10-595	1	LANL	USE	S
per1122016a	1201978159	CWW	11/22/2009 13:56	925306	10-595	1	LANL	USE	S
per1122017a	1201978161	CWW	11/22/2009 14:02	925306	10-595	1	LANL	USE	S
per1122018a	241511004	CWW	11/22/2009 14:09	925306	10-595	1	LANL	DUSE-RA	S
per1122019a	241529001	CWW	11/22/2009 14:15	925306	10-618	1	LANL	USE	S
per1122020a	1201978157	CWW	11/22/2009 14:22	925306	10-618	1	LANL	USE	S
per1122021a	1201978158	CWW	11/22/2009 14:28	925306	10-618	1	LANL	USE	S
per1122022a	WCLCCV	CWW	11/22/2009 14:35			1		USE	C
per1122023a	IPB004	CWW	11/22/2009 14:41			1		USE	B
per1122024a	WCLCRI	CWW	11/22/2009 14:48			1		USE	C
per1122025a	241558001	CWW	11/22/2009 14:55	925306	10-608	1	LANL	USE	S
per1122026a	1201978160	CWW	11/22/2009 15:01	925306	10-608	1	LANL	USE	S
per1122027a	1201978162	CWW	11/22/2009 15:08	925306	10-608	1	LANL	USE	S
per1122028a	241558002	CWW	11/22/2009 15:14	925306	10-608	1	LANL	USE	S
per1122029a	241558003	CWW	11/22/2009 15:21	925306	10-608	1	LANL	USE	S

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per1122030a	241558004	CWW	11/22/2009 15:27	925306	10-608	1	LANL	USE	S
per1122031a	241563002	CWW	11/22/2009 15:34	925306	10-615	1	LANL	USE	S
per1122032a	241590002	CWW	11/22/2009 15:41	925306	10-625	1	LANL	USE	S
per1122033a	WCLCCV	CWW	11/22/2009 15:47			1		USE	C
per1122034a	IPB005	CWW	11/22/2009 15:54			1		USE	B
per1122035a	WCLCRI	CWW	11/22/2009 16:00			1		USE	C
per1122036a	1201976887	CWW	11/22/2009 16:07	924756	10-517	1	LANL	USE	S
per1122037a	1201976888	CWW	11/22/2009 16:14	924756	10-517	1	LANL	USE	S
per1122038a	1201976891	CWW	11/22/2009 16:21	924756	10-517	1	LANL	USE	S
per1122039a	241178001	CWW	11/22/2009 16:27	924756	10-517	1	LANL	USE	S
per1122040a	1201976889	CWW	11/22/2009 16:34	924756	10-517	1	LANL	USE	S
per1122041a	1201976890	CWW	11/22/2009 16:40	924756	10-517	1	LANL	USE	S
per1122042a	241178002	CWW	11/22/2009 16:47	924756	10-517	1	LANL	USE	S
per1122043a	241178003	CWW	11/22/2009 16:54	924756	10-517	1	LANL	USE	S
per1122044a	WCLCCV	CWW	11/22/2009 17:00			1		USE	C
per1122045a	IPB006	CWW	11/22/2009 17:07			1		USE	B
per1122046a	WCLCRI	CWW	11/22/2009 17:14			1		USE	C
per1122047a	241178004	CWW	11/22/2009 17:20	924756	10-517	1	LANL	USE	S
per1122048a	241178005	CWW	11/22/2009 17:27	924756	10-517	1	LANL	USE	S
per1122049a	241178006	CWW	11/22/2009 17:34	924756	10-517	1	LANL	USE	S
per1122050a	241178007	CWW	11/22/2009 17:40	924756	10-517	1	LANL	USE	S
per1122051a	241178008	CWW	11/22/2009 17:47	924756	10-517	1	LANL	USE	S
per1122052a	241178009	CWW	11/22/2009 17:53	924756	10-517	1	LANL	USE	S
per1122053a	241178010	CWW	11/22/2009 18:00	924756	10-517	1	LANL	USE	S
per1122054a	241178011	CWW	11/22/2009 18:06	924756	10-517	1	LANL	USE	S
per1122055a	WCLCCV	CWW	11/22/2009 18:13			1		USE	C
per1122056a	IPB007	CWW	11/22/2009 18:20			1		USE	B
per1122057a	WCLCRI	CWW	11/22/2009 18:26			1		USE	C
per1122058a	241178012	CWW	11/22/2009 18:33	924756	10-517	1	LANL	USE	S
per1122059a	241178013	CWW	11/22/2009 18:40	924756	10-517	1	LANL	USE	S
per1122060a	241178014	CWW	11/22/2009 18:46	924756	10-517	1	LANL	USE	S
per1122061a	241178015	CWW	11/22/2009 18:53	924756	10-517	1	LANL	USE	S
per1122062a	241178016	CWW	11/22/2009 18:59	924756	10-517	1	LANL	USE	S
per1122063a	241178017	CWW	11/22/2009 19:06	924756	10-517	1	LANL	USE	S
per1122064a	241178018	CWW	11/22/2009 19:12	924756	10-517	1	LANL	USE	S
per1122065a	241178019	CWW	11/22/2009 19:19	924756	10-517	1	LANL	USE	S
per1122066a	IPB008	CWW	11/22/2009 19:25			1		USE	B

per1122067a	241511004	CWW	11/22/2009 19:32	925306	10-595	1	LANL	USE	S
per1122068a	WCLCCV	CWW	11/22/2009 19:39			1		USE	C
per1122069a	IPB009	CWW	11/22/2009 19:46			1		USE	B
per1122070a	WCLCRI	CWW	11/22/2009 19:52			1		USE	C

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 11/23/09
Extr. Injection Volume: 20uL
Sequence Number: per112309a
Initial Calibration Date: 11/23/09

Method: EPA 6850-Modified
Int. Std.: UCL090612-01.2
Mobile Phase Lot#: 1191829, 1197509
Standard-Samp Reagent Lot#:: 1197509

Reviewed BY: [illegible]
Date: 11/25/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091120-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1123001a	IPB001	CWW	11/23/2009 15:00			1		USE	B
per1123002a	IPB001	CWW	11/23/2009 15:07			1		USE	B
per1123003a	WCLICAL-01	CWW	11/23/2009 15:14			1		USE	I
per1123004a	WCLICAL-02	CWW	11/23/2009 15:20			1		USE	I
per1123005a	WCLICAL-03	CWW	11/23/2009 15:27			1		USE	I
per1123006a	WCLICAL-04	CWW	11/23/2009 15:33			1		USE	I
per1123007a	WCLICAL-05	CWW	11/23/2009 15:40			1		USE	I
per1123008a	IPB002	CWW	11/23/2009 15:46			1		USE	B
per1123009a	WCLICV	CWW	11/23/2009 15:53			1		USE	C
per1123010a	IPB003	CWW	11/23/2009 15:59			1		USE	B
per1123011a	WCLCRI	CWW	11/23/2009 16:06			1		USE	C
per1123012a	1201977161	CWW	11/23/2009 16:12	924864	VARIOUS	1	LANL	USE	S
per1123013a	1201977162	CWW	11/23/2009 16:19	924864	VARIOUS	1	LANL	USE	S
per1123014a	1201977165	CWW	11/23/2009 16:26	924864	VARIOUS	1	LANL	USE	S
per1123015a	241173001	CWW	11/23/2009 16:37	924864	10-515	1	LANL	USE	S
per1123016a	241173003	CWW	11/23/2009 16:44	924864	10-515	1	LANL	USE	S
per1123017a	241176001	CWW	11/23/2009 16:50	924864	10-507	1	LANL	USE	S
per1123018a	241308002	CWW	11/23/2009 16:57	924864	10-536	1	LANL	USE	S
per1123019a	241308003	CWW	11/23/2009 17:03	924864	10-536	1	LANL	USE	S
per1123020a	241312001	CWW	11/23/2009 17:10	924864	10-541	1	LANL	USE	S
per1123021a	241312003	CWW	11/23/2009 17:17	924864	10-541	1	LANL	USE	S
per1123022a	WCLCCV	CWW	11/23/2009 17:23			1		USE	C
per1123023a	IPB004	CWW	11/23/2009 17:30			1		USE	B
per1123024a	WCLCRI	CWW	11/23/2009 17:36			1		USE	C
per1123025a	241339005	CWW	11/23/2009 17:43	924864	10-547	1	LANL	USE	S
per1123026a	1201977163	CWW	11/23/2009 17:49	924864	10-547	1	LANL	USE	S
per1123027a	1201977164	CWW	11/23/2009 17:56	924864	10-547	1	LANL	USE	S
per1123028a	241339006	CWW	11/23/2009 18:03	924864	10-547	1	LANL	USE	S
per1123029a	241339007	CWW	11/23/2009 18:09	924864	10-547	1	LANL	USE	S

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per1123030a	241339008	CWW	11/23/2009 18:16	924864	10-547	1	LANL	USE	S
per1123031a	241339009	CWW	11/23/2009 18:22	924864	10-547	1	LANL	DUSE-DL	S
per1123032a	241340002	CWW	11/23/2009 18:29	924864	10-553	1	LANL	DUSE-DL	S
per1123033a	IPB005	CWW	11/23/2009 18:35			1		USE	B
per1123034a	1201978156	CWW	11/23/2009 18:42	925306	VARIOUS	1	LANL	USE	S
per1123035a	WCLCCV	CWW	11/23/2009 18:48			1		USE	C
per1123036a	IPB006	CWW	11/23/2009 18:55			1		USE	B
per1123037a	WCLCRI	CWW	11/23/2009 19:01			1		USE	C

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-608-1

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	928181
Prep Batch Number:	928180

Sample Analysis

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201984660	Interference Check Sample (ICS)
1201984656	Method Blank (MB)
1201984657	Laboratory Control Sample (LCS)
1201984658	241611002(RE03-09-13916) Matrix Spike (MS)
1201984659	241611002(RE03-09-13916) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

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CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Client sample 241611002 (RE03-09-13916) from SDG 10-642 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

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Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M Mauer **Date:** 12/15/09

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6903

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 241559001

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	0.535	ug/kg	U	1	02-DEC-09 17:29	per1202037a
	Perchlorate Isotope Ratio						1	02-DEC-09 17:29	per1202037a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	02-DEC-09 17:29	per1202037a
	Perchlorate-O(18)			5.46	ug/kg		1	02-DEC-09 17:29	per1202037a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6902

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 241559002

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.34	0.824	ug/kg	J	1	02-DEC-09 17:37	per1202038a
	Perchlorate Isotope Ratio			2.92			1	02-DEC-09 17:37	per1202038a
14797-73-0	Perchlorate-101	.586	2.34	0.844	ug/kg	J	1	02-DEC-09 17:37	per1202038a
	Perchlorate-O(18)			6.05	ug/kg		1	02-DEC-09 17:37	per1202038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-608-1

Extract Batch Code: 928180

Date Filtered: 02-DEC-09

Matrix: SOIL

Sample ID: 1201984657

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.89	ug/kg	94.4		70 – 130
Perchlorate Isotope Ratio		2.87				–
Perchlorate-101	2.00	1.97	ug/kg	98.5		70 – 130
Perchlorate-O(18)		4.88	ug/kg			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–608–1

Extract Batch Code: 928180

Date Filtered: 02–DEC–09

Matrix: SOIL

Sample ID: 1201984660

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.99	ug/kg	99.6		70 – 130
Perchlorate Isotope Ratio		3.04				
Perchlorate–101	2.00	1.96	ug/kg	98.1		70 – 130
Perchlorate–O(18)		5.07	ug/kg			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202036a
Date: 02-Dec-2009
Time: 17:21:21
ID: 1201984660
Vial: 2:1,C

|LANL|928181|SDL20|ICS|1|

GWJ 12-03-09

Perchlorate

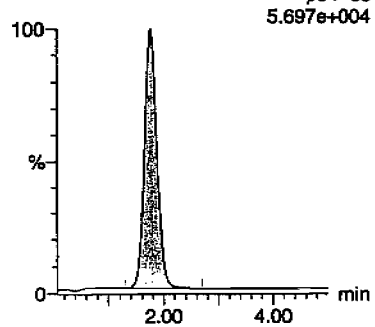

Perchlorate

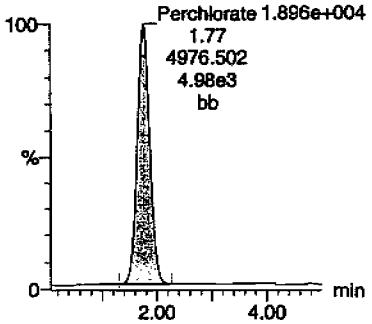

Perchlorate-101

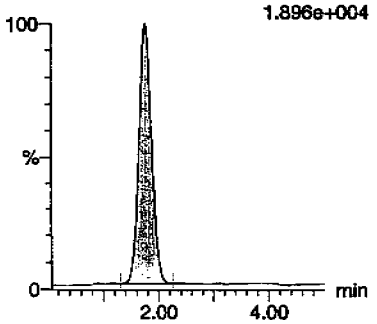

Perchlorate-O(18)

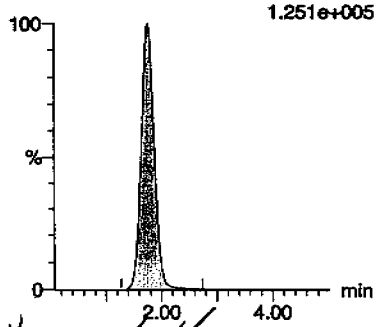

Hmm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	%Dev	S/N	Ion Ratio
1201984660	Perchlorate	99 > 83	1.77	15120.667	15120.667	bb			0.1993	99.63	-0.37	1270.7...	3.04
1201984660	Perchlorate-101	101 > 85	1.77	4976.502	4976.502	bb			0.1962	98.09	-1.91	801.264	
1201984660	Perchlorate-O(18)	107 > 89	1.76	33689.012	33689.012	bb			0.5068	101.36	1.36	1255.3...	

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–608–1

Extract Batch Code: 928180

Date Extracted: 02–DEC–09

GEL MS/PS ID: 1201984658

Client ID: RE03–09–13916

GEL MSD/PSD ID: 1201984659

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.17	0.0369	ug/kg	2.23	101	2.21	100	.744	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.05		3.01		0		–
Perchlorate–101	2.17	0.0434	ug/kg	2.18	98.4	2.2	99	.64	30	75 – 125
Perchlorate–O(18)	0	5.60	ug/kg	5.68		5.69		.217		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608–1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	02–DEC–09	per1202001a	IPB001
Perchlorate–101	0.00	0	NA	02–DEC–09	per1202001a	IPB001
Perchlorate	0.00	0	NA	02–DEC–09	per1202002a	IPB001
Perchlorate–101	0.00	0	NA	02–DEC–09	per1202002a	IPB001

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per120209a.mdb 02 Dec 2009 14:00:19
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per120209a.cdb 03 Dec 2009 07:17:25

Name: per1202001a
Date: 02-Dec-2009
Time: 12:37:46
ID: IPB001
Vial: 1:1,A

12-03-09

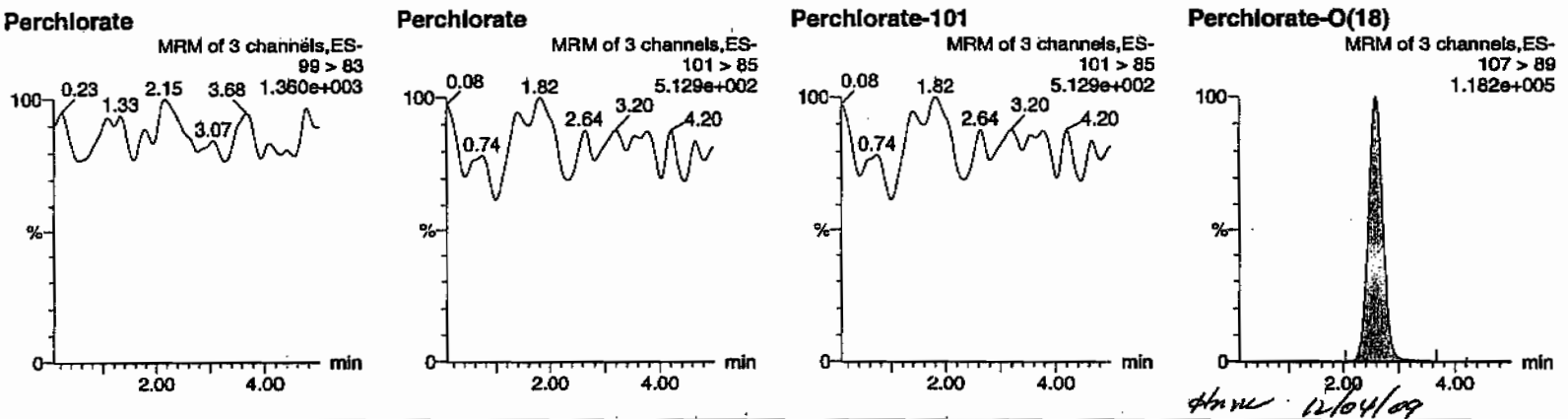

12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	2.59	35397.910	35397.910	bb			0.5325	106.50	6.50	5109.5...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202002a
Date: 02-Dec-2009
Time: 12:45:59
ID: IPB001
Vial: 1:1,A

CW 12-03-09

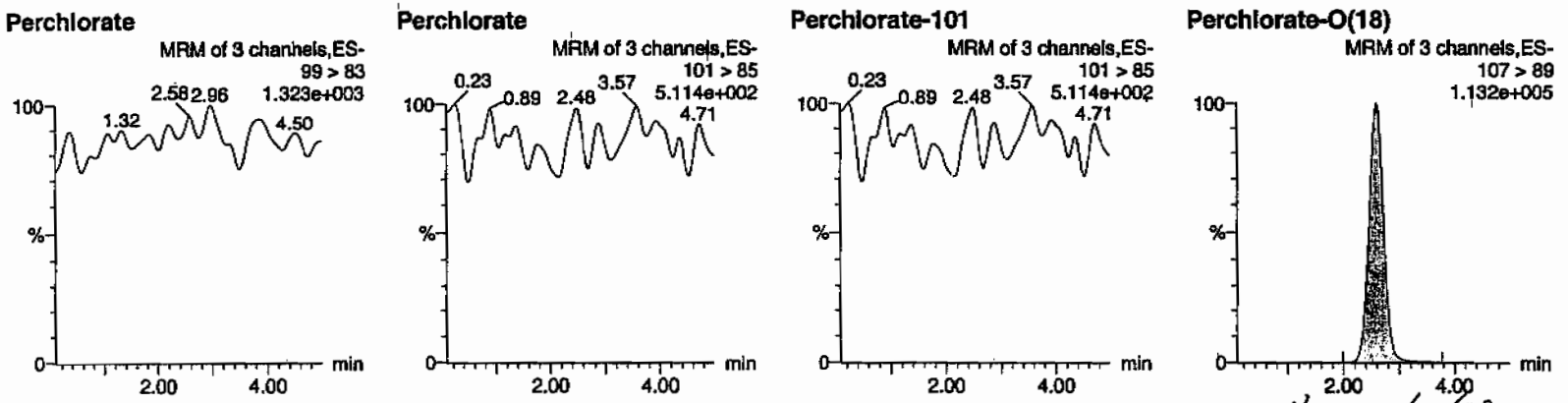

Hmm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	2.59	34088.566	34088.566	bb			0.5128	102.56	2.56	11943....	

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-608-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	02-DEC-09	per1202008a	IPB002
Perchlorate-101	0.00	0	NA	02-DEC-09	per1202008a	IPB002
Perchlorate	0.00	0	NA	02-DEC-09	per1202010a	IPB003
Perchlorate-101	0.00	0	NA	02-DEC-09	per1202010a	IPB003
Perchlorate	0.00	0	NA	02-DEC-09	per1202021a	IPB004
Perchlorate-101	0.00	0	NA	02-DEC-09	per1202021a	IPB004
Perchlorate	0.00	0	NA	02-DEC-09	per1202032a	IPB005
Perchlorate-101	0.00	0	NA	02-DEC-09	per1202032a	IPB005
Perchlorate	0.00	0	NA	02-DEC-09	per1202045a	IPB006
Perchlorate-101	0.00	0	NA	02-DEC-09	per1202045a	IPB006

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202008a
Date: 02-Dec-2009
Time: 13:34:28
ID: IPB002
Vial: 1:1,A

12 03 09

Perchlorate

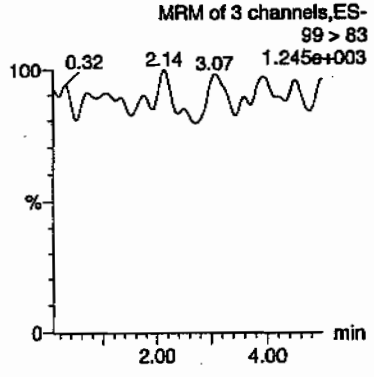

Perchlorate

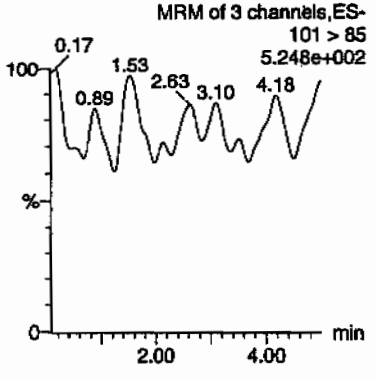

Perchlorate-101

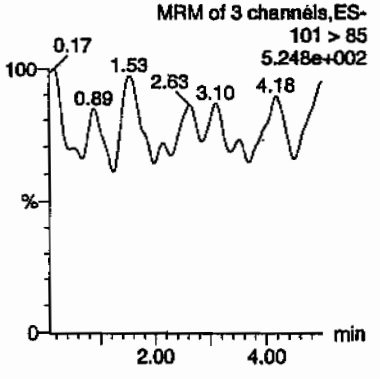

Perchlorate-O(18)

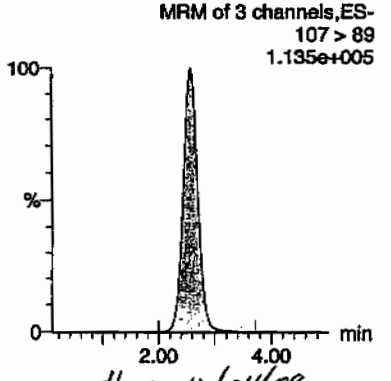

thru 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	2.58	34016.828	34016.828	bb			0.5117	102.34	2.34	8344.2...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202010a
Date: 02-Dec-2009
Time: 13:50:33
ID: IPB003
Vial: 1:1,A

CWO 12-03-09

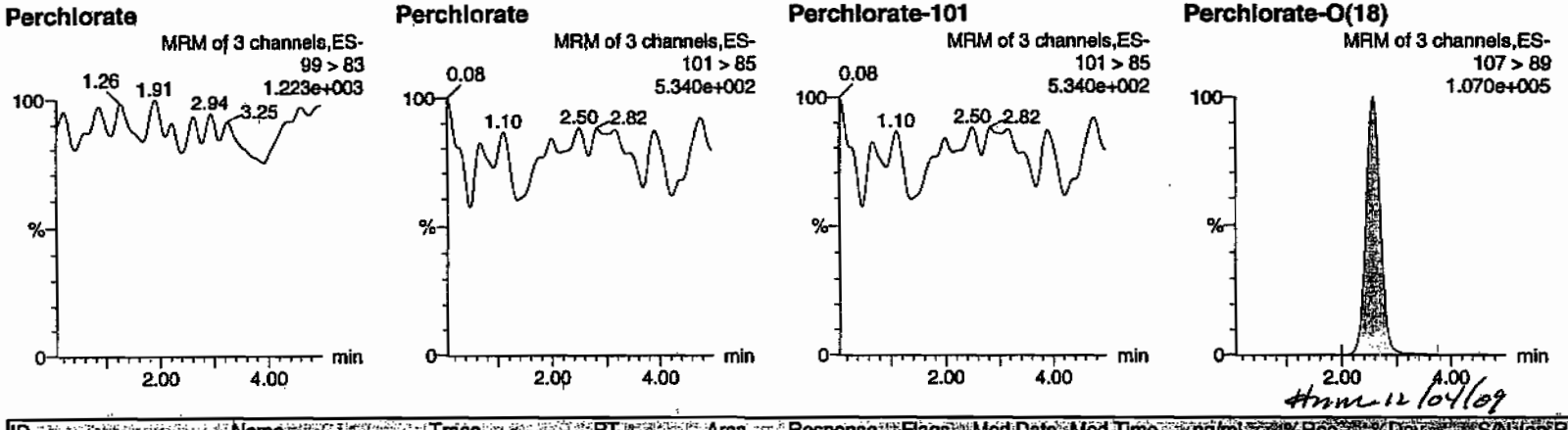

HMM 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	2.58	32217.574	32217.574	bb			0.4846	96.93	-3.07	17708....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202021a
Date: 02-Dec-2009
Time: 15:19:40
ID: IPB004
Vial: 1:1,A

CMD 12-03-09

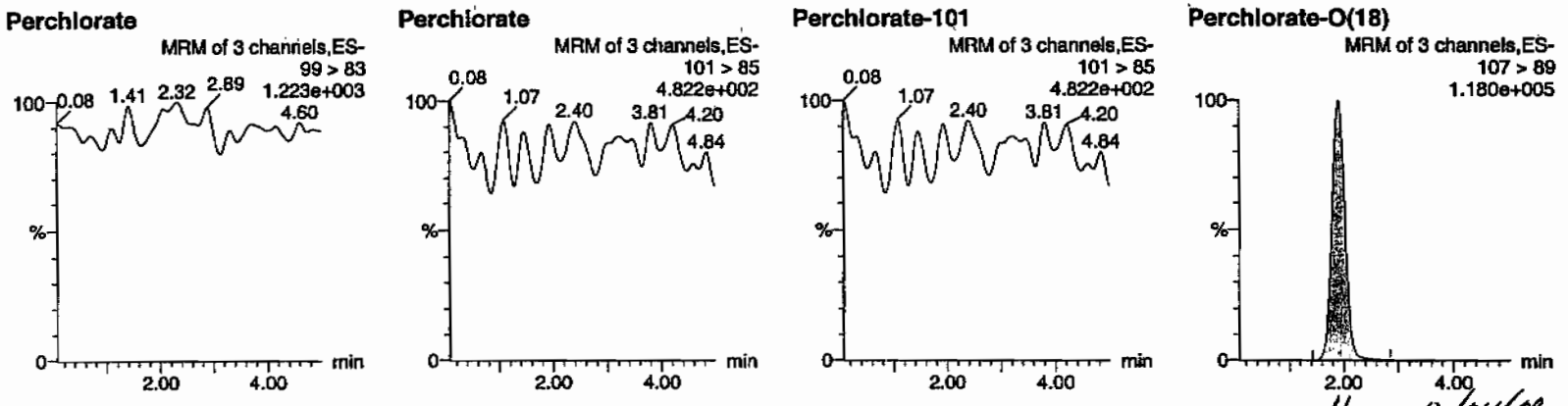

Hmm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	1.91	32236.088	32236.088	bb			0.4849	96.99	-3.01	4897.5...	

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202032a
Date: 02-Dec-2009
Time: 16:48:33
ID: IPB005
Vial: 1:1,A

CWJ
12-03-09

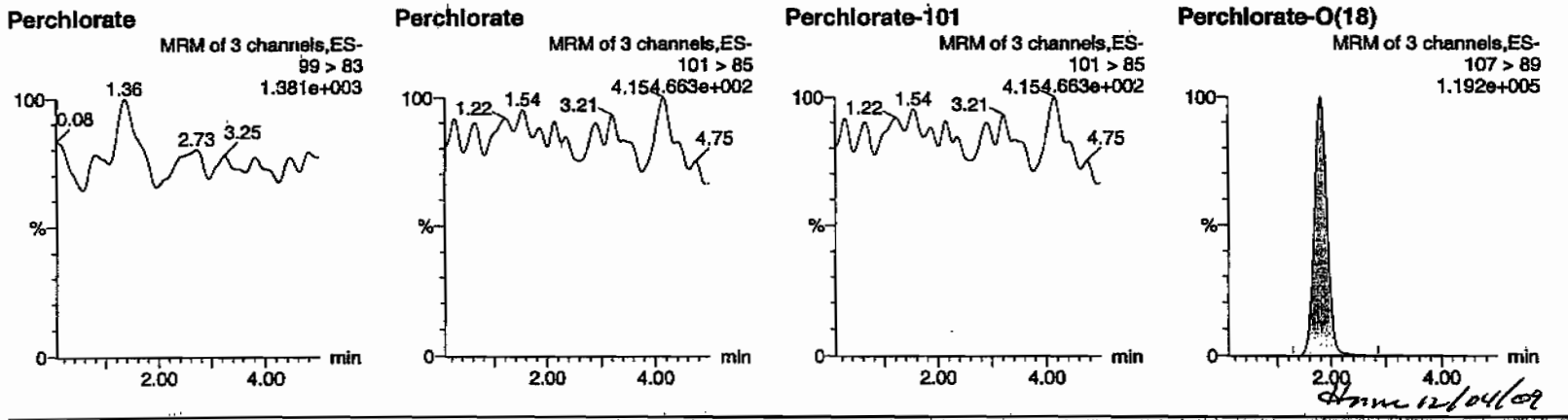

Amm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83											0.00
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	1.81	31977.059	31977.059	bb			0.4810	96.21	-3.79	3492.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202045a
Date: 02-Dec-2009
Time: 18:35:57
ID: IPB006
Vial: 1:1,A

CW 12-03-09

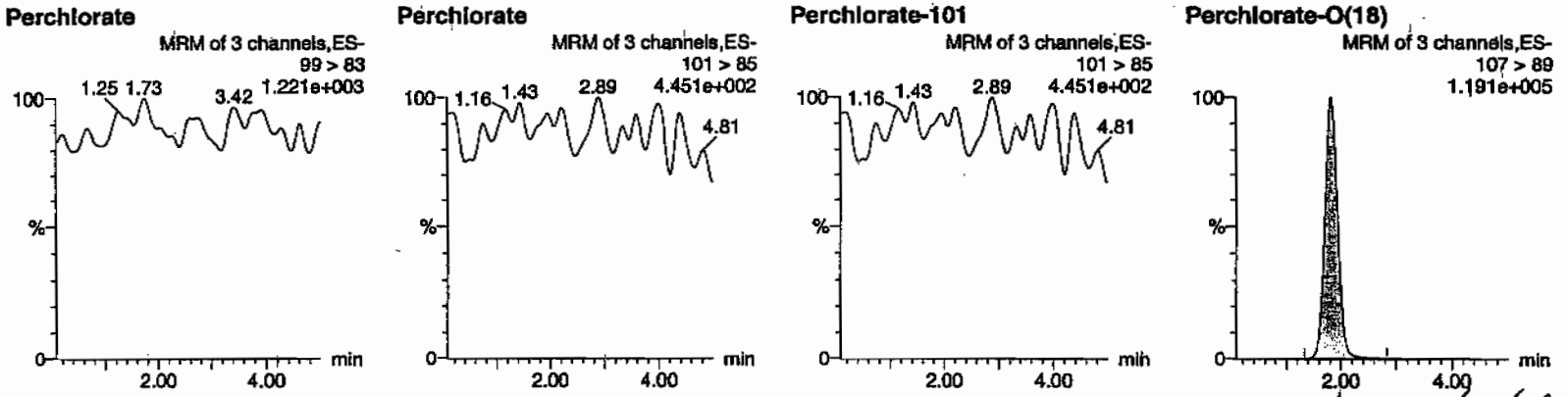

HMM 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	1.83	32157.061	32157.061	bb			0.4837	96.75	-3.25	8685.1...	

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWW 01-09-08

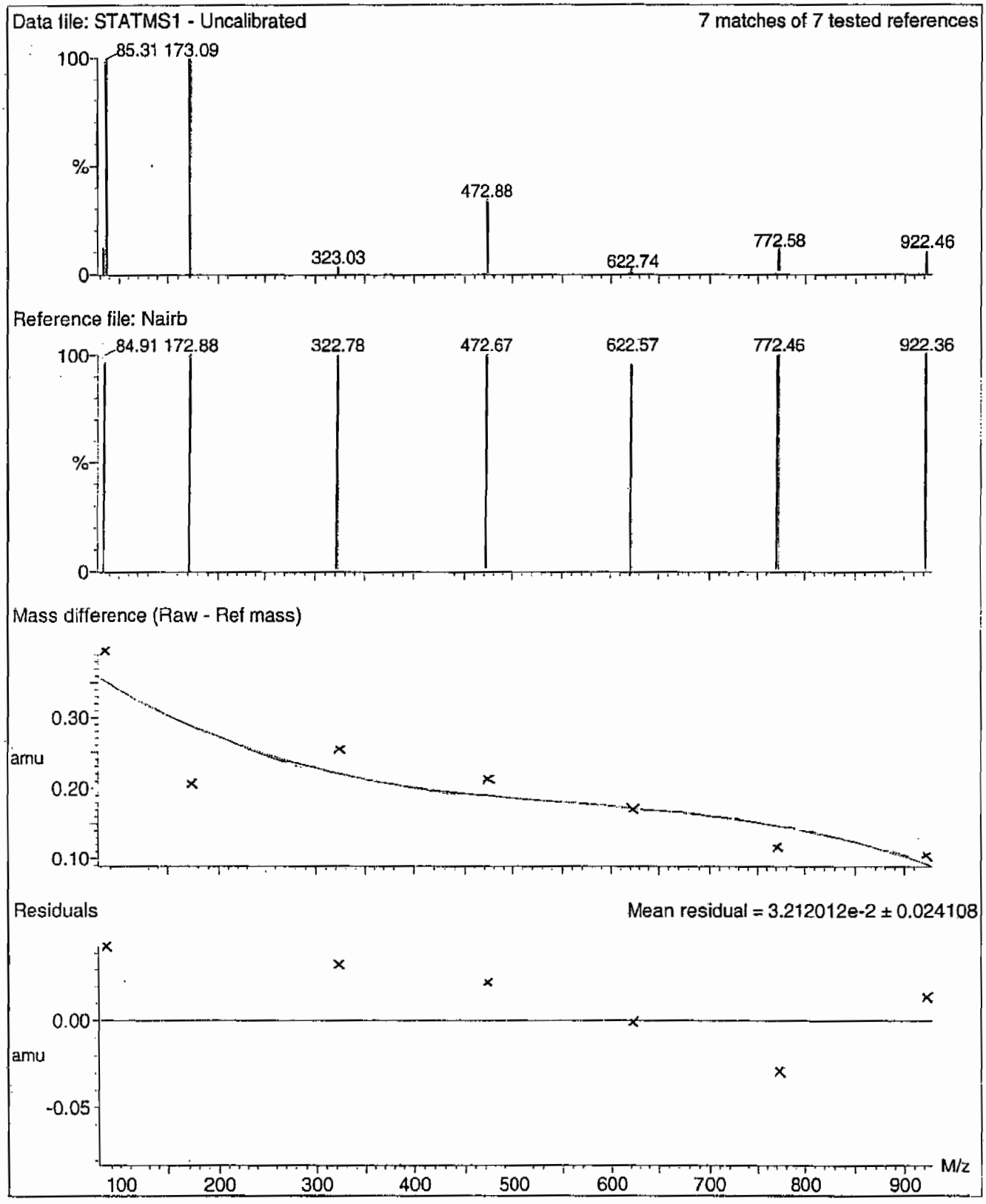

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Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

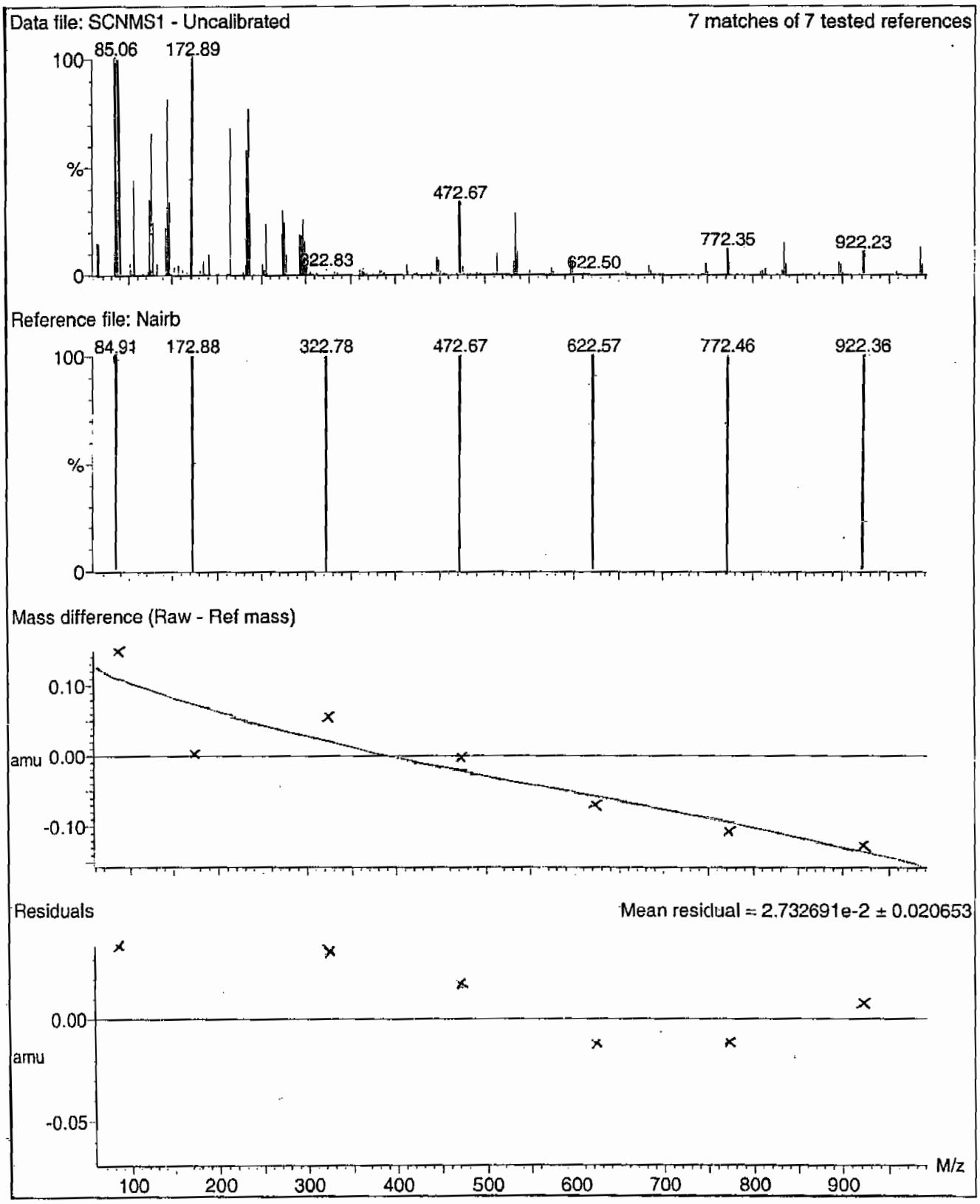

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:21:04 2008

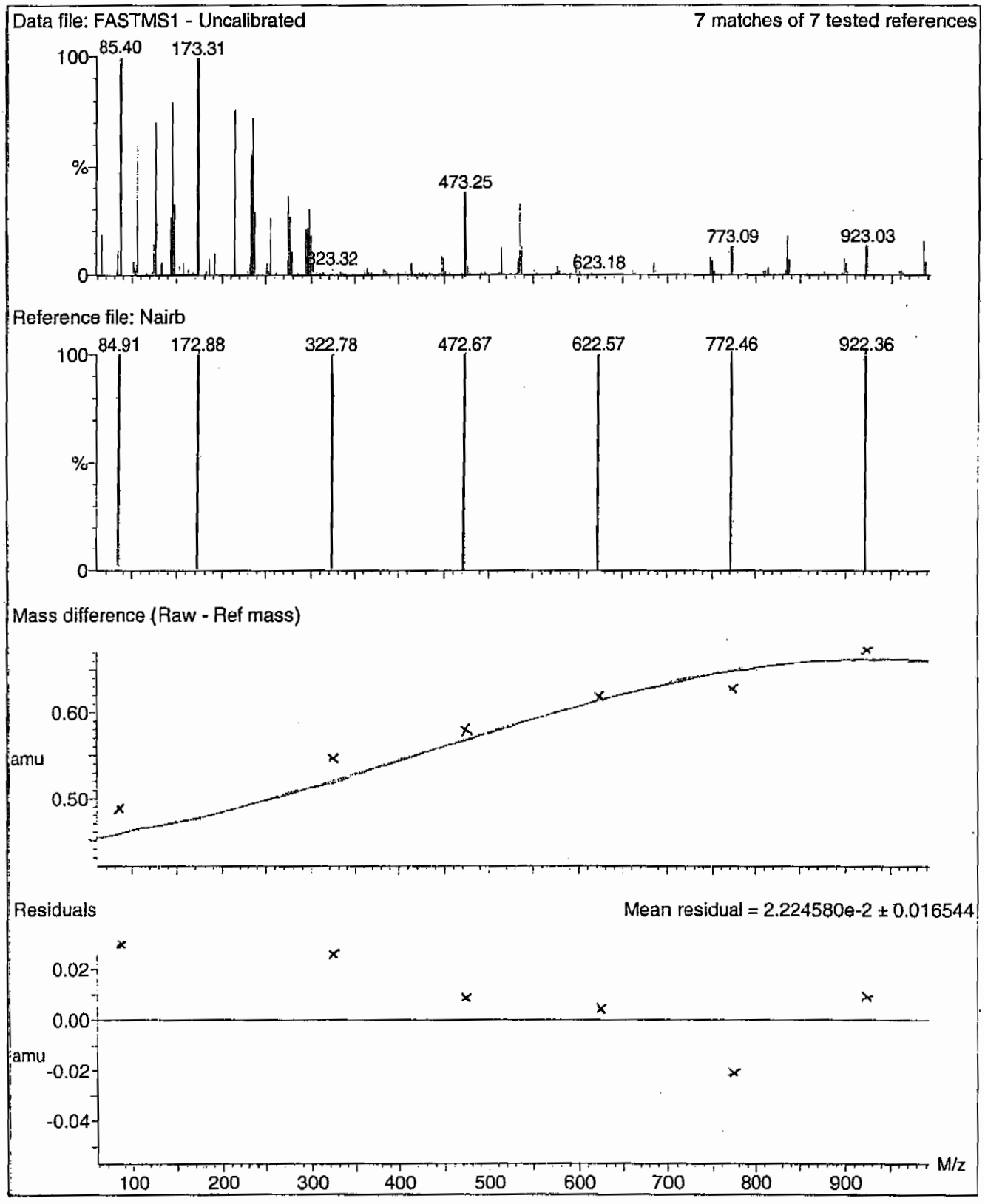

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Calibration Report - MS2 Static

Printed: Tue Jan 08 12:21:59 2008

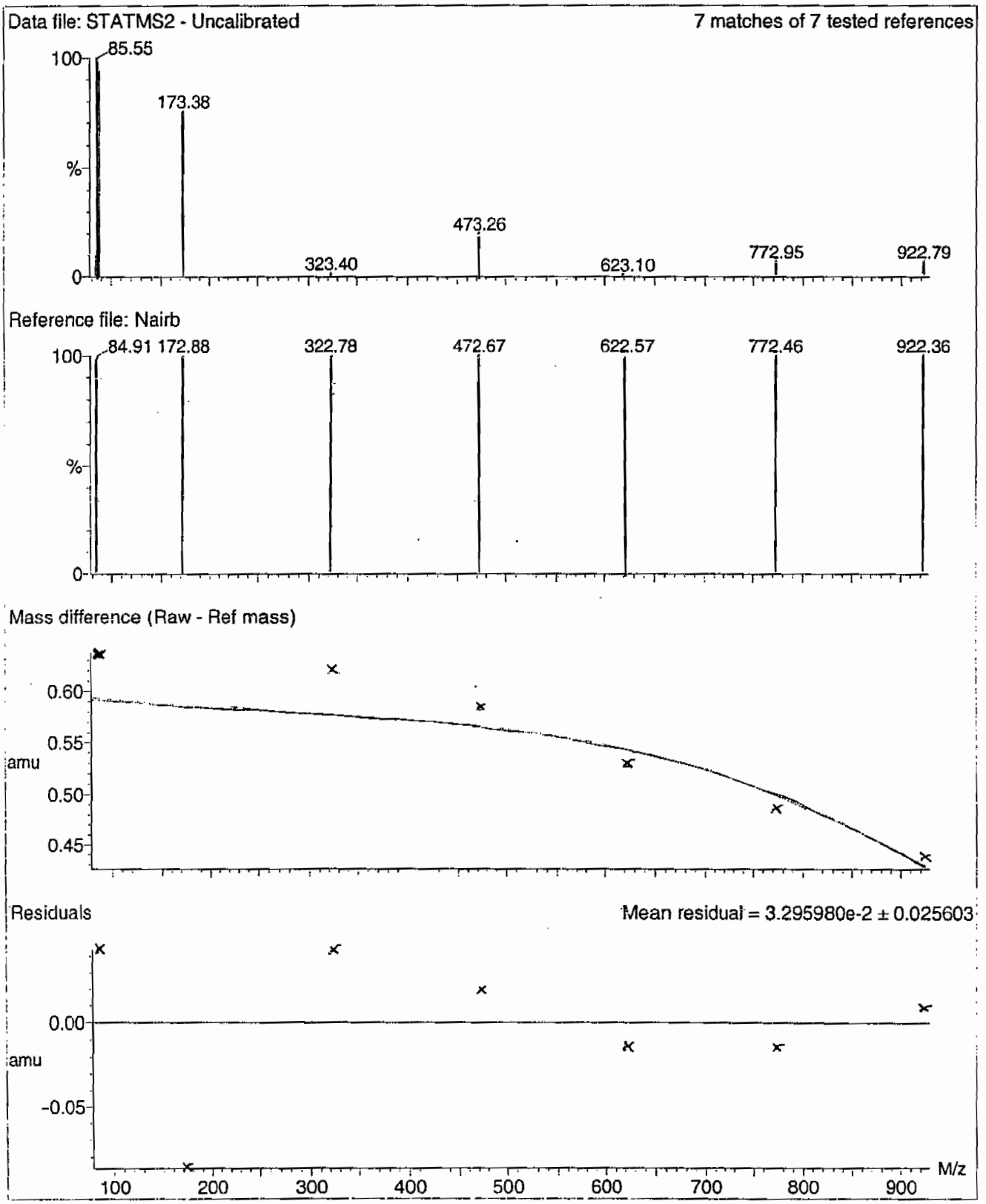

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:22:56 2008

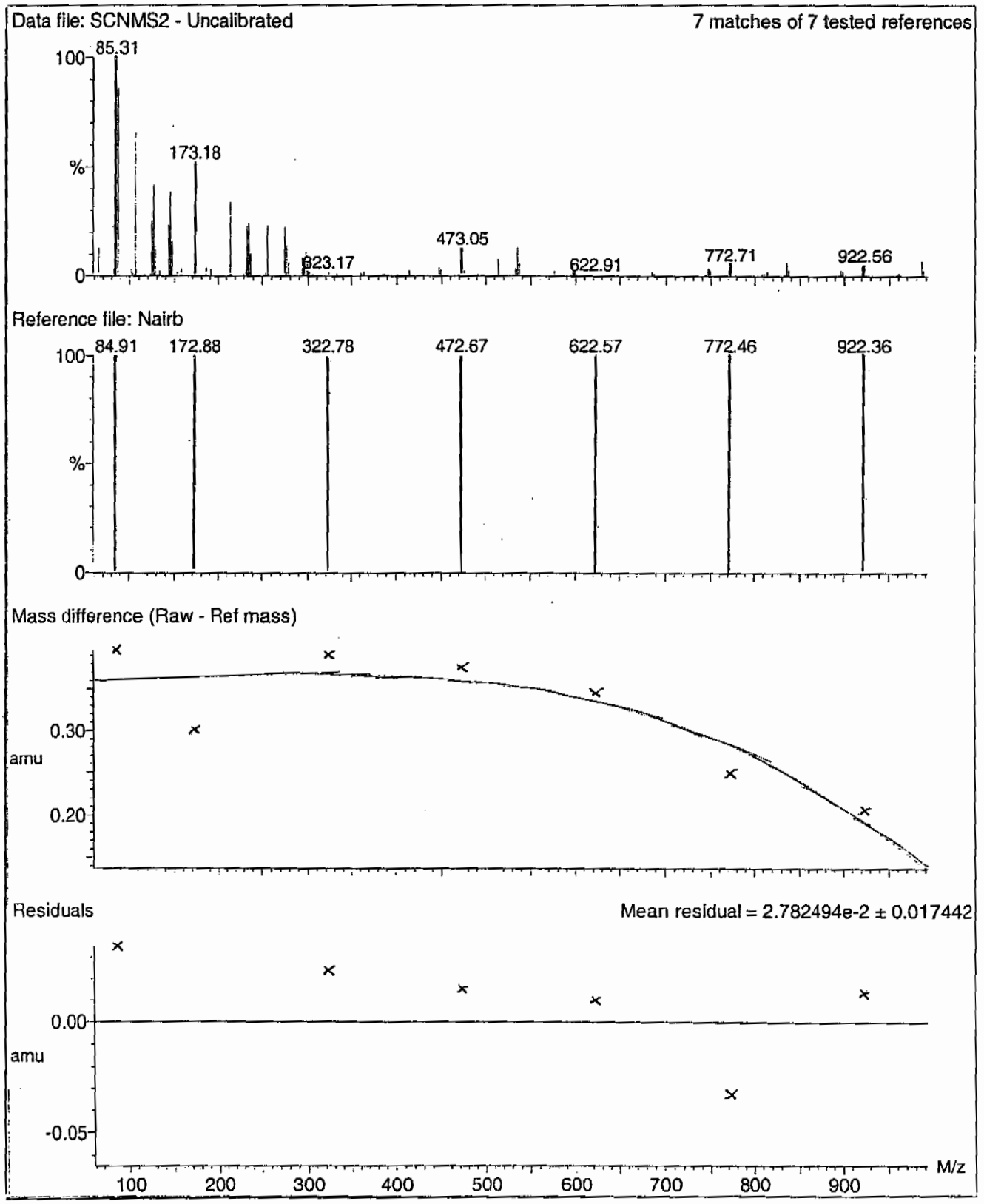

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scan Speed Compensation

Printed: Tue Jan 08 12:23:51 2008

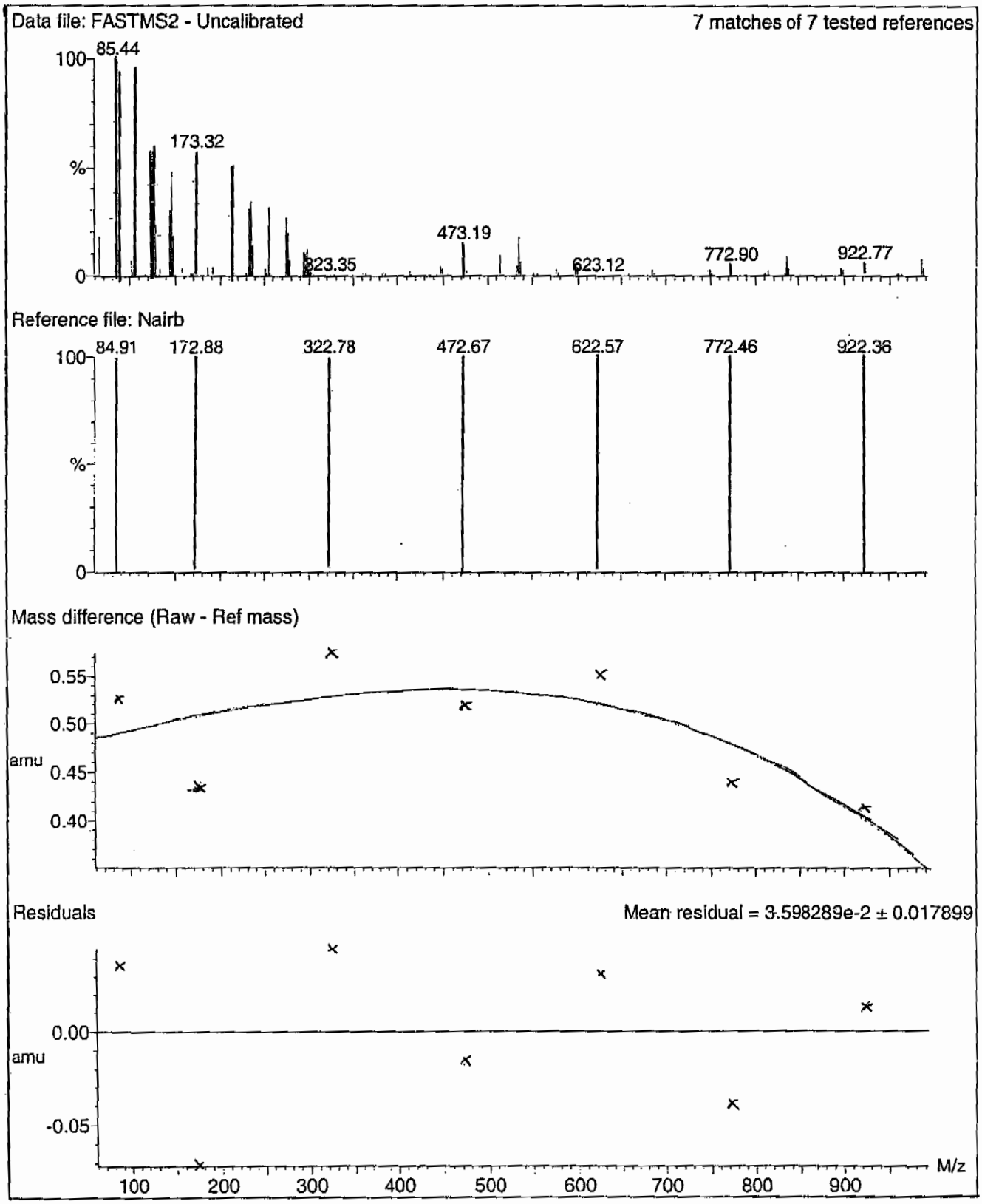

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File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Wednesday, December 02, 2009 10:07:51 Eastern Standard Time

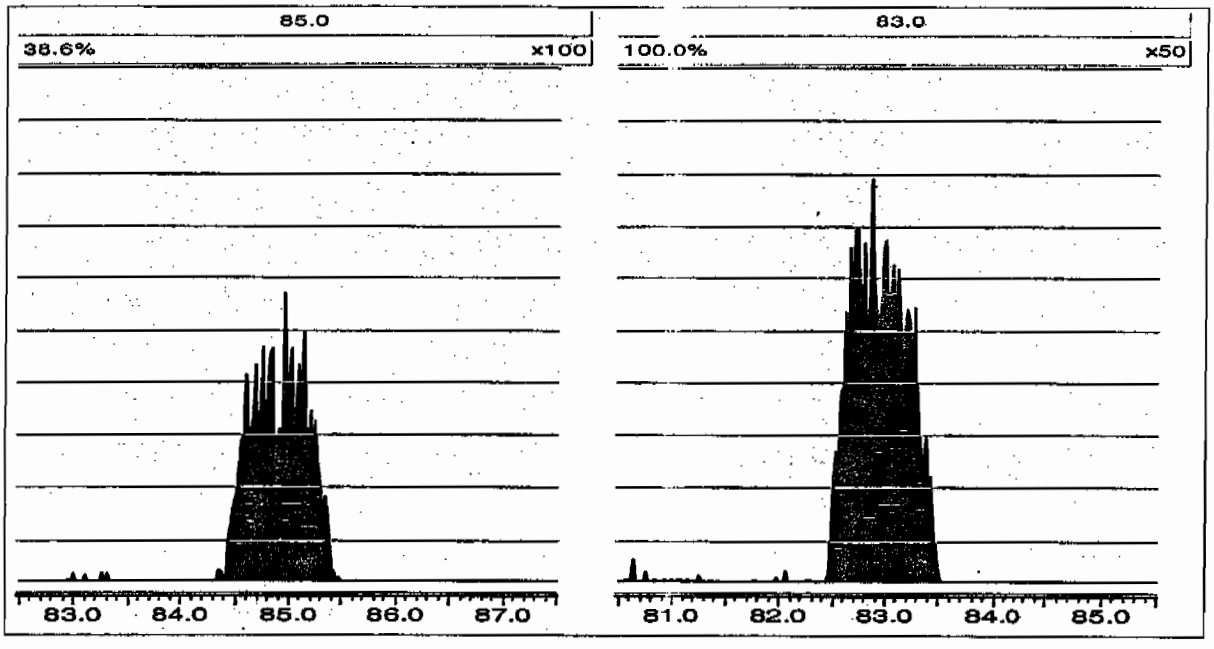

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608–1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1202006a**	**02–DEC–09**	**32929.6**				
Lower Area Limit			**16464.8**				
Upper Area Limit			**65859.2**				
1201984656	per1202034a	02–DEC–09 17:04	32054.2	1.81			
1201984657	per1202035a	02–DEC–09 17:13	32448.1	1.82	1.83067	1.006	
1201984660	per1202036a	02–DEC–09 17:21	33689	1.76	1.76847	1.005	
241559001	per1202037a	02–DEC–09 17:29	33955.5	1.83	1.84302	1.007	
241559002	per1202038a	02–DEC–09 17:37	34305.1	1.83	1.84303	1.007	

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SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6903

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 241559001

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	0.535	ug/kg	U	1	02-DEC-09 17:29	per1202037a
	Perchlorate Isotope Ratio						1	02-DEC-09 17:29	per1202037a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	02-DEC-09 17:29	per1202037a
	Perchlorate-O(18)			5.46	ug/kg		1	02-DEC-09 17:29	per1202037a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202037a
Date: 02-Dec-2009
Time: 17:29:30
ID: 241559001
Vial: 2:1,D

|LANL|928181|SDL20|1|

ann 12-03-09

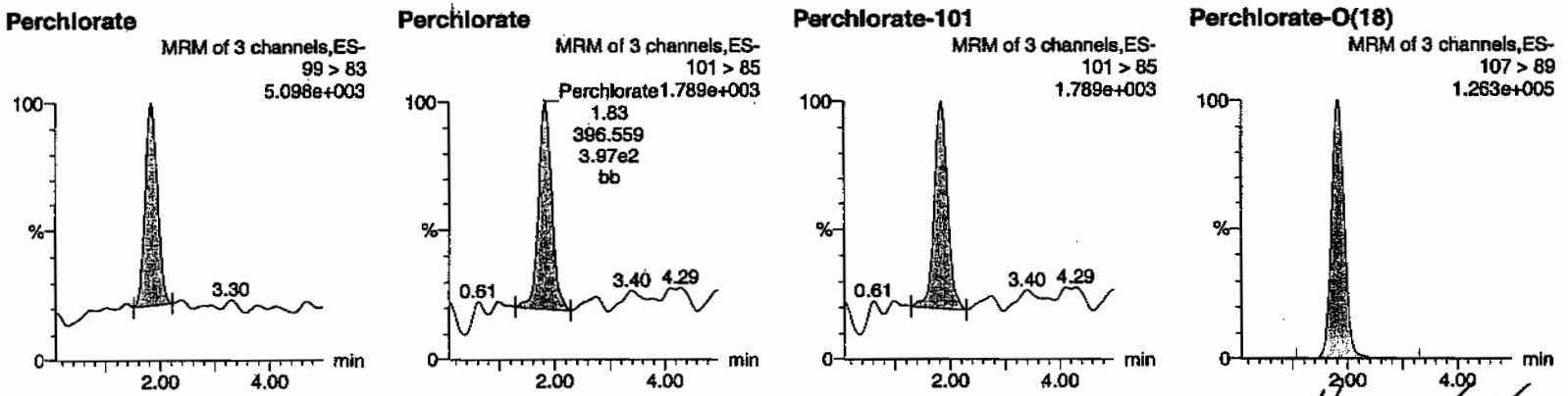

HMM 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241559001	Perchlorate	99 > 83	1.84	1035.583	1035.583	bb			0.0136			56.799	2.61
241559001	Perchlorate-101	101 > 85	1.83	396.559	396.559	bb			0.0156			41.168	
241559001	Perchlorate-O(18)	107 > 89	1.83	33955.547	33955.547	bb			0.5108	102.16	2.16	13031....	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-10-6902

Date Received: 20-NOV-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 241559002

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.34	0.824	ug/kg	J	1	02-DEC-09 17:37	per1202038a
	Perchlorate Isotope Ratio			2.92			1	02-DEC-09 17:37	per1202038a
14797-73-0	Perchlorate-101	.586	2.34	0.844	ug/kg	J	1	02-DEC-09 17:37	per1202038a
	Perchlorate-O(18)			6.05	ug/kg		1	02-DEC-09 17:37	per1202038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202038a
Date: 02-Dec-2009
Time: 17:37:40
ID: 241559002
Vial: 2:1,E

|LANL|928181|50620|1|

12-03-09

Perchlorate

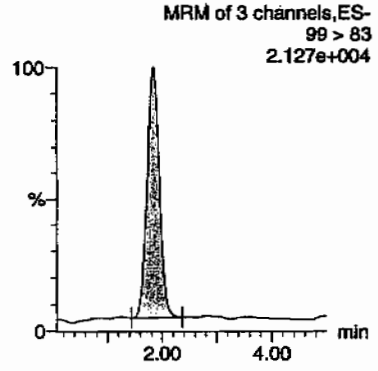

Perchlorate

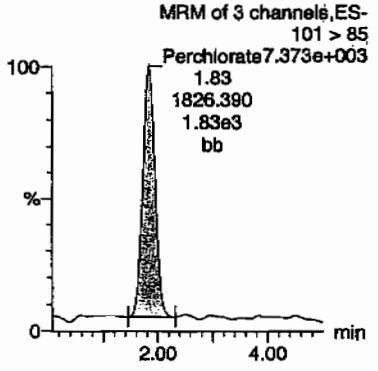

Perchlorate-101

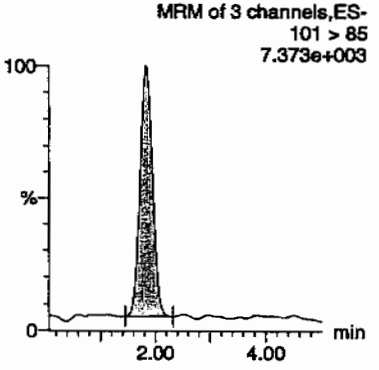

Perchlorate-O(18)

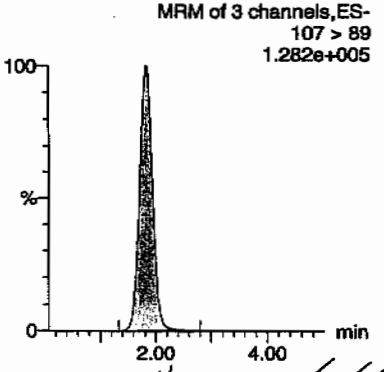

Hamm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
241559002	Perchlorate	99 > 83	1.84	5335.734	5335.734	bb			0.0703			231.596	2.92
241559002	Perchlorate-101	101 > 85	1.83	1826.390	1826.390	bb			0.0720			152.098	
241559002	Perchlorate-O(18)	107 > 89	1.83	34305.086	34305.086	bb			0.5161	103.21	3.21	7688.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–608–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 02–DEC–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 75884.66

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-608-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 02-DEC-09

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 25367.84

Response Type: External Standard

Curve Type: RF

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Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per120209a.mdb 02 Dec 2009 14:00:19
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per120209a.cdb 03 Dec 2009 07:17:25

Compound name: Perchlorate
Response Factor: 75884.7
RRF SD: 5061.56, % Relative SD: 6.67007
Response type: External Std, Area
Curve type: RF

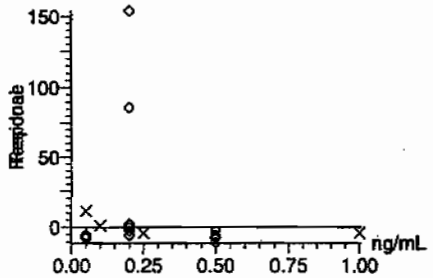

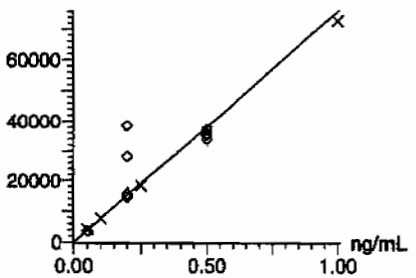

12-03-09

Compound name: Perchlorate-101
Response Factor: 25367.8
RRF SD: 2144.01, % Relative SD: 8.45168
Response type: External Std, Area
Curve type: RF

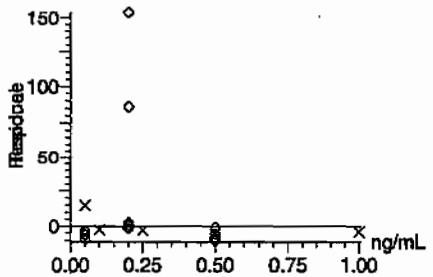

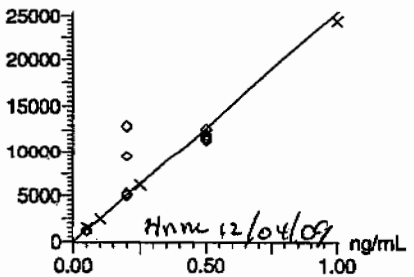

Hnm 12/04/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Calibration Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 66476.1
RRF SD: 582,157, % Relative SD: 0.875739
Response type: External Std, Area
Curve type: RF

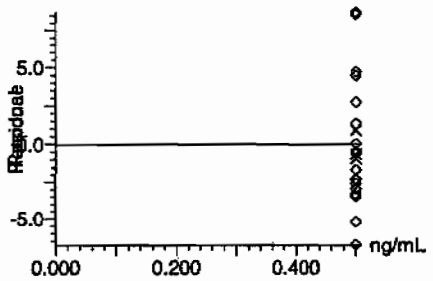

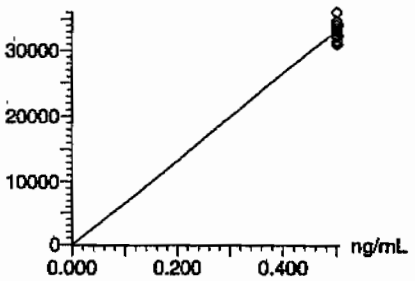

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-608-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	97.79	02-DEC-09 13:42	per1202009a
Perchlorate Isotope Ratio		2.94		02-DEC-09 13:42	per1202009a
Perchlorate-101	.5	.5	99.43	02-DEC-09 13:42	per1202009a

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per120209a
Date: 02-Dec-2009
Time: 13:42:31
ID: WCL091120-06ICV
Vial: 1:2,A

Pass
aw
12 03-09

Perchlorate

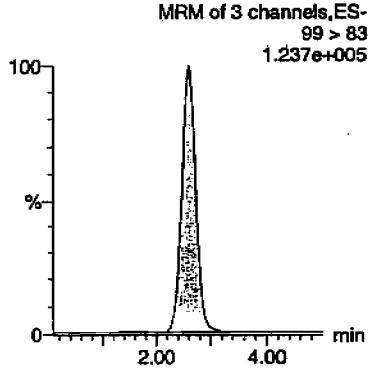

Perchlorate

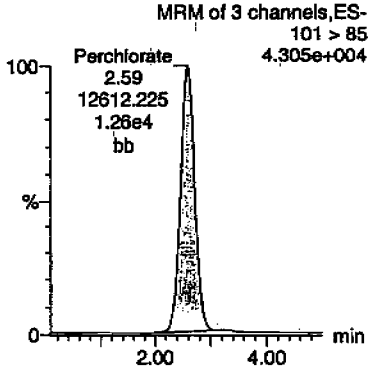

Perchlorate-101

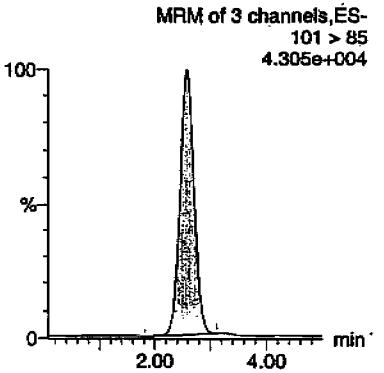

Perchlorate-O(18)

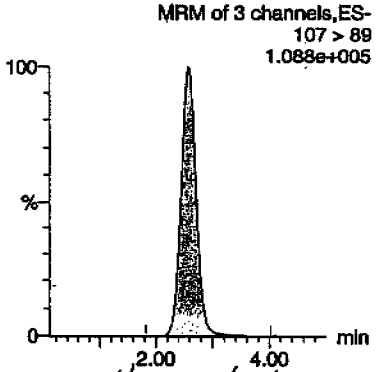

Hmm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06ICV	Perchlorate	99 > 83	2.60	37103.953	37103.953	bb			0.4890	97.79	-2.21	1561.6...	2.94
WCL091120-06ICV	Perchlorate-101	101 > 85	2.59	12612.225	12612.225	bb			0.4972	99.43	-0.57	1494.0...	
WCL091120-06ICV	Perchlorate-O(18)	107 > 89	2.58	33080.859	33080.859	bb			0.4976	99.53	-0.47	4892.7...	

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-608-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.45	89.5	02-DEC-09 15:11	per1202020a
Perchlorate Isotope Ratio		2.99		02-DEC-09 15:11	per1202020a
Perchlorate-101	.5	.45	89.67	02-DEC-09 15:11	per1202020a
Perchlorate	.5	.46	92.83	02-DEC-09 16:40	per1202031a
Perchlorate Isotope Ratio		3.04		02-DEC-09 16:40	per1202031a
Perchlorate-101	.5	.46	91.35	02-DEC-09 16:40	per1202031a
Perchlorate	.5	.47	93.1	02-DEC-09 18:27	per1202044a
Perchlorate Isotope Ratio		3.01		02-DEC-09 18:27	per1202044a
Perchlorate-101	.5	.46	92.59	02-DEC-09 18:27	per1202044a

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202020a
Date: 02-Dec-2009
Time: 15:11:30
ID: WCL091120-06CCV
Vial: 1:2,A

Pass
12-03-09

Perchlorate

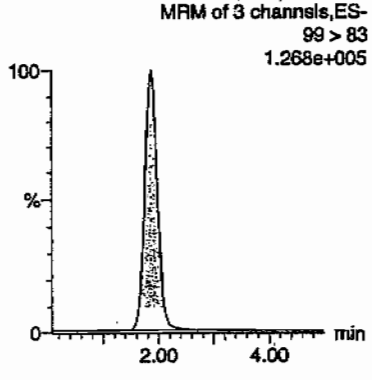

Perchlorate

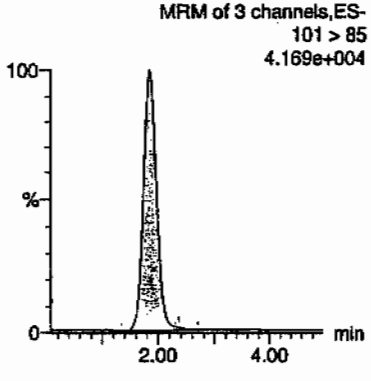

Perchlorate-101

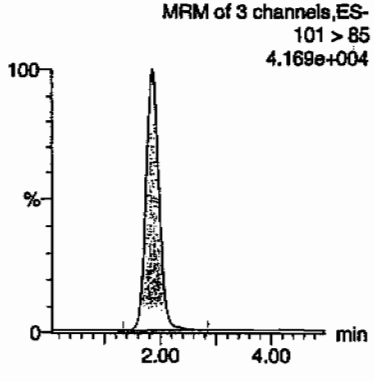

Perchlorate-O(18)

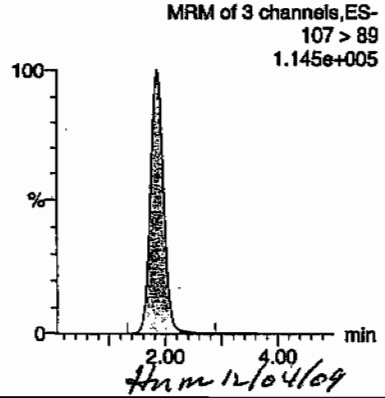

Hmm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.87	33960.164	33960.164	bb			0.4475	89.50	-10.50	551.596	2.99
WCL091120-06CCV	Perchlorate-101	101 > 85	1.86	11373.718	11373.718	bb			0.4484	89.67	-10.33	1393.0...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.86	30993.248	30993.248	bb			0.4662	93.25	-6.75	1693.8...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202031a
Date: 02-Dec-2009
Time: 16:40:22
ID: WCL091120-06CCV
Vial: 1:2,A

Pass
12 03-09

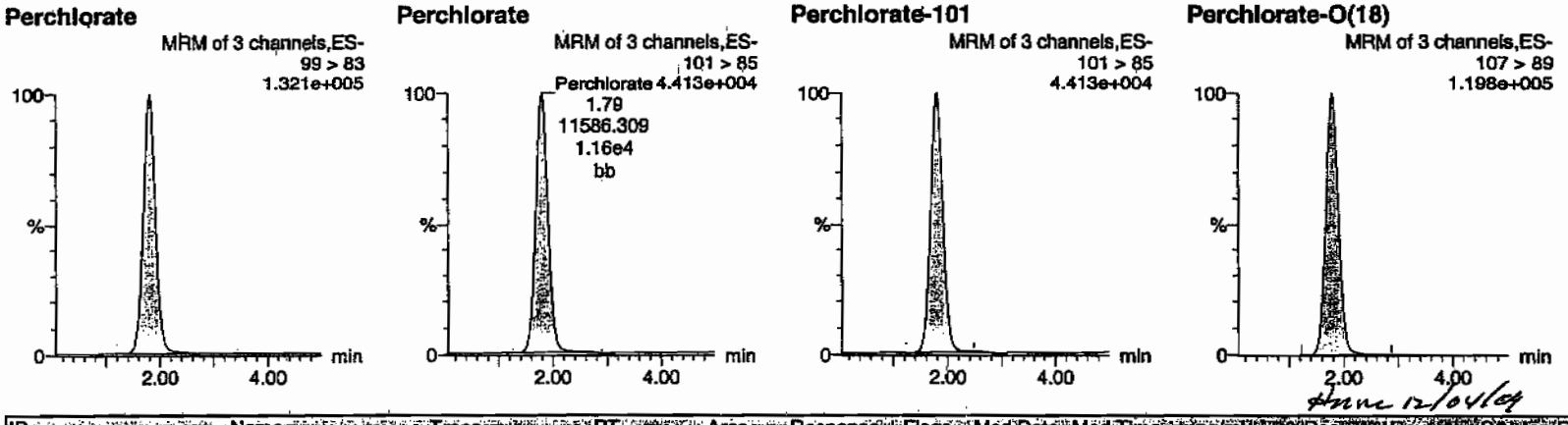

Anne 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.81	35223.215	35223.215	bb			0.4642	92.83	-7.17	1492.7...	3.04
WCL091120-06CCV	Perchlorate-101	101 > 85	1.79	11586.309	11586.309	bb			0.4567	91.35	-8.65	847.393	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.79	32088.568	32088.568	bb			0.4827	96.54	-3.46	2616.2...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202044a
Date: 02-Dec-2009
Time: 18:27:18
ID: WCL091120-06CCV
Vial: 1:2,A

Pass
12-03-09

Perchlorate

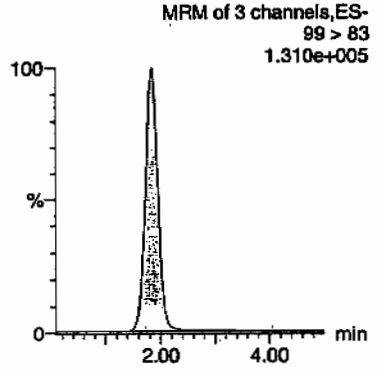

Perchlorate

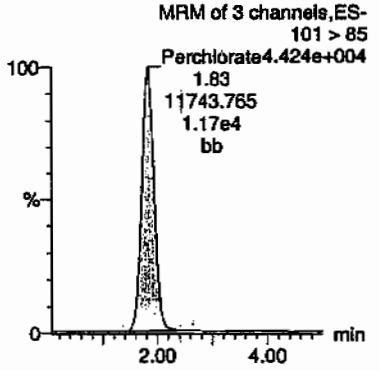

Perchlorate-101

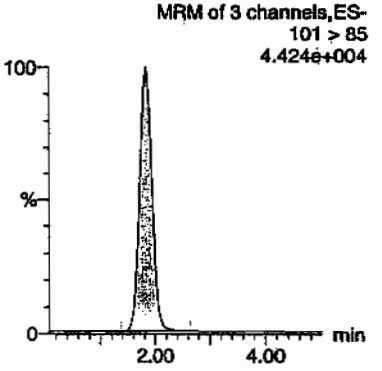

Perchlorate-O(18)

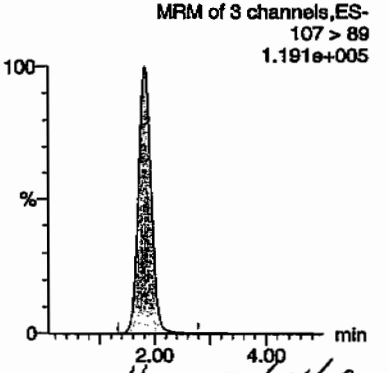

Hmc 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-06CCV	Perchlorate	99 > 83	1.83	35325.520	35325.520	bb			0.4655	93.10	-6.90	1488.6...	3.01
WCL091120-06CCV	Perchlorate-101	101 > 85	1.83	11743.765	11743.765	bb			0.4629	92.59	-7.41	2820.6...	
WCL091120-06CCV	Perchlorate-O(18)	107 > 89	1.82	32149.396	32149.396	bb			0.4836	96.72	-3.28	5451.3...	

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–608–1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	94.93	02–DEC–09 13:58	per1202011a
Perchlorate Isotope Ratio		2.94		02–DEC–09 13:58	per1202011a
Perchlorate–101	.05	.05	96.56	02–DEC–09 13:58	per1202011a
Perchlorate	.05	.05	93.31	02–DEC–09 15:27	per1202022a
Perchlorate Isotope Ratio		2.98		02–DEC–09 15:27	per1202022a
Perchlorate–101	.05	.05	93.63	02–DEC–09 15:27	per1202022a
Perchlorate	.05	.05	92.49	02–DEC–09 16:56	per1202033a
Perchlorate Isotope Ratio		2.85		02–DEC–09 16:56	per1202033a
Perchlorate–101	.05	.05	97.02	02–DEC–09 16:56	per1202033a
Perchlorate	.05	.05	95.01	02–DEC–09 18:44	per1202046a
Perchlorate Isotope Ratio		3		02–DEC–09 18:44	per1202046a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-608-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	94.67	02-DEC-09 18:44	per1202046a

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202011a
Date: 02-Dec-2009
Time: 13:58:44
ID: WCL091120-07CRI
Vial: 1:2,B

Pass
ans
12-03-09

Perchlorate

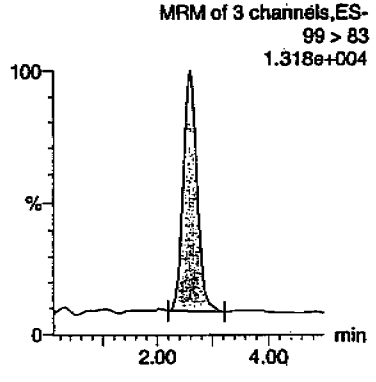

Perchlorate

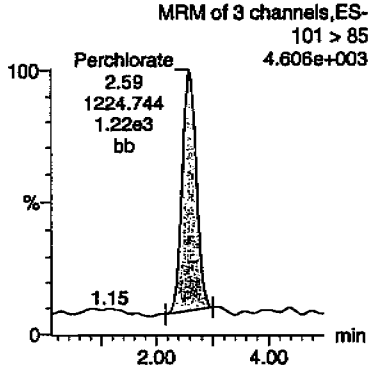

Perchlorate-101

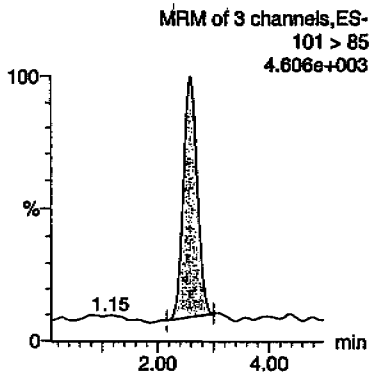

Perchlorate-O(18)

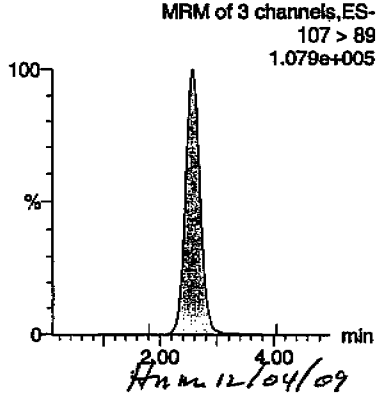

Hm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	2.60	3601.814	3601.814	bb			0.0475	94.93	-5.07	224.381	2.94
WCL091120-07CRI	Perchlorate-101	101 > 85	2.59	1224.744	1224.744	bb			0.0483	96.56	-3.44	118.975	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	2.58	32493.420	32493.420	bb			0.4888	97.76	-2.24	6675.1...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202022a
Date: 02-Dec-2009
Time: 15:27:50
ID: WCL091120-07CRI
Vial: 1:2,B

Pass
12-03-09

Perchlorate

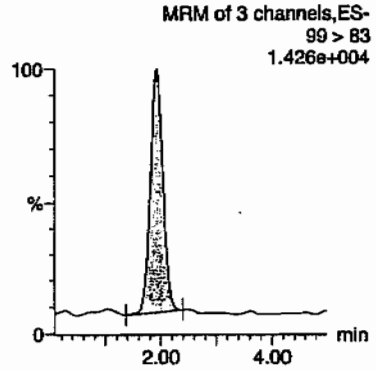

Perchlorate

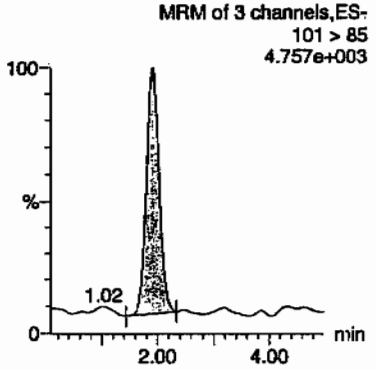

Perchlorate-101

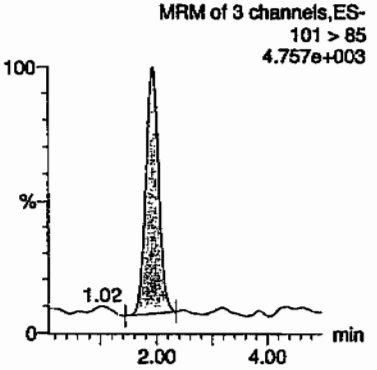

Perchlorate-O(18)

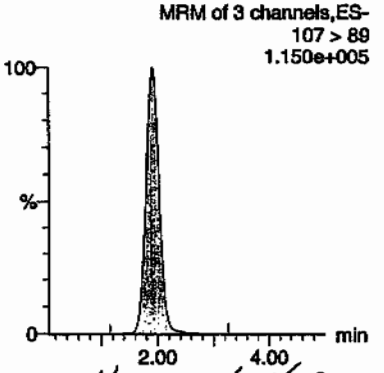

dhm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.93	3540.285	3540.285	bb			0.0467	93.31	-6.69	193.901	2.98
WCL091120-07CRI	Perchlorate-101	101 > 85	1.92	1187.604	1187.604	bb			0.0468	93.63	-6.37	111.325	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.91	31503.672	31503.672	bb			0.4739	94.78	-5.22	3702.7...	

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRC\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202033a
Date: 02-Dec-2009
Time: 16:56:47
ID: WCL091120-07CRI
Vial: 1:2,B

Pass
ad
12-03-09

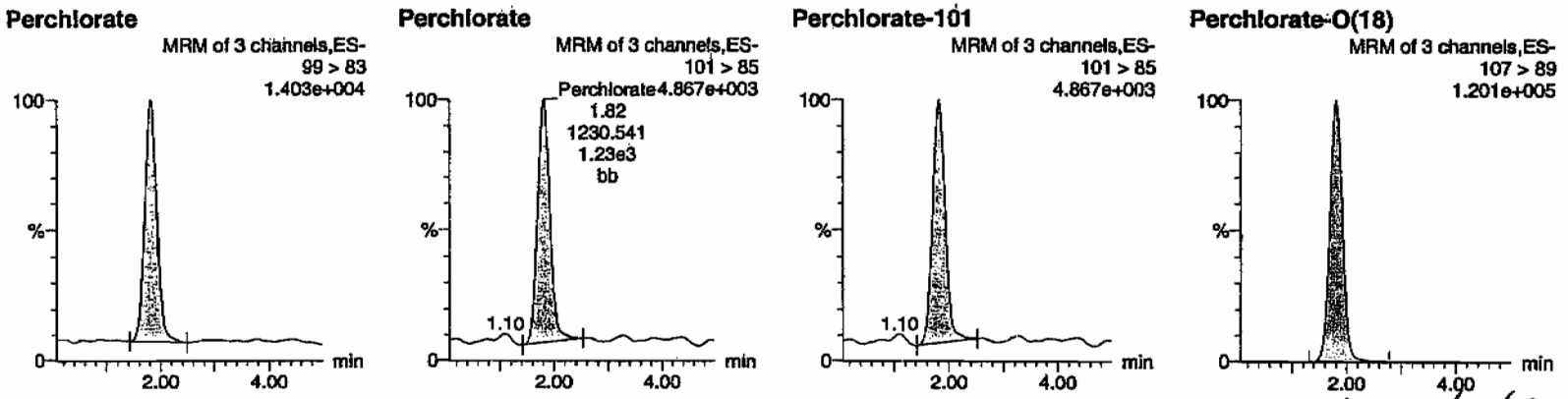

Hmc 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.82	3509.140	3509.140	bb			0.0462	92.49	-7.51	276.648	2.85
WCL091120-07CRI	Perchlorate-101	101 > 85	1.82	1230.541	1230.541	bb			0.0485	97.02	-2.98	167.075	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.81	32100.131	32100.131	bb			0.4829	96.58	-3.42	3361.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202046a
Date: 02-Dec-2009
Time: 18:44:20
ID: WCL091120-07CRI
Vial: 1:2,B

Pass
12-03-09

Perchlorate

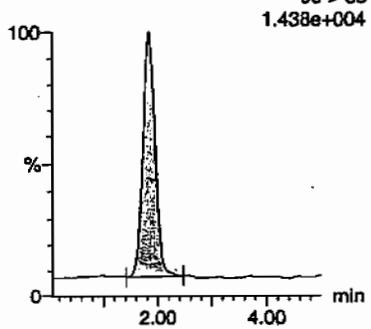

Perchlorate

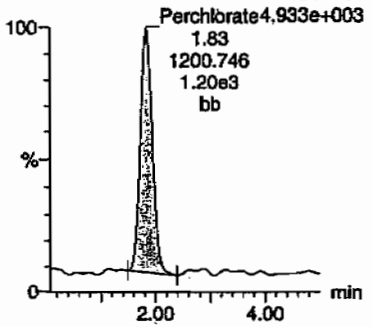

Perchlorate-101

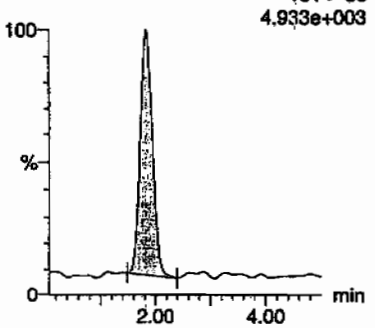

Perchlorate-O(18)

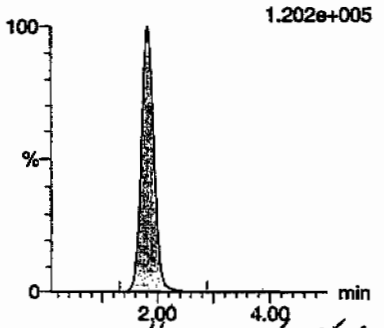

Hmm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
WCL091120-07CRI	Perchlorate	99 > 83	1.84	3604.826	3604.826	bb			0.0475	95.01	-4.99	255.286	3.00
WCL091120-07CRI	Perchlorate-101	101 > 85	1.83	1200.746	1200.746	bb			0.0473	94.67	-5.33	58.687	
WCL091120-07CRI	Perchlorate-O(18)	107 > 89	1.83	32247.652	32247.652	bb			0.4851	97.02	-2.98	4128.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 02-DEC-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 1201984656

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	02-DEC-09 17:04	per1202034a
	Perchlorate Isotope Ratio						1	02-DEC-09 17:04	per1202034a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	02-DEC-09 17:04	per1202034a
	Perchlorate-O(18)			4.82	ug/kg		1	02-DEC-09 17:04	per1202034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202034a
Date: 02-Dec-2009
Time: 17:04:59
ID: 1201984656
Vial: 2:1,A

|LANL|928181|SOLLO|MB|1|

CW 12-03-09

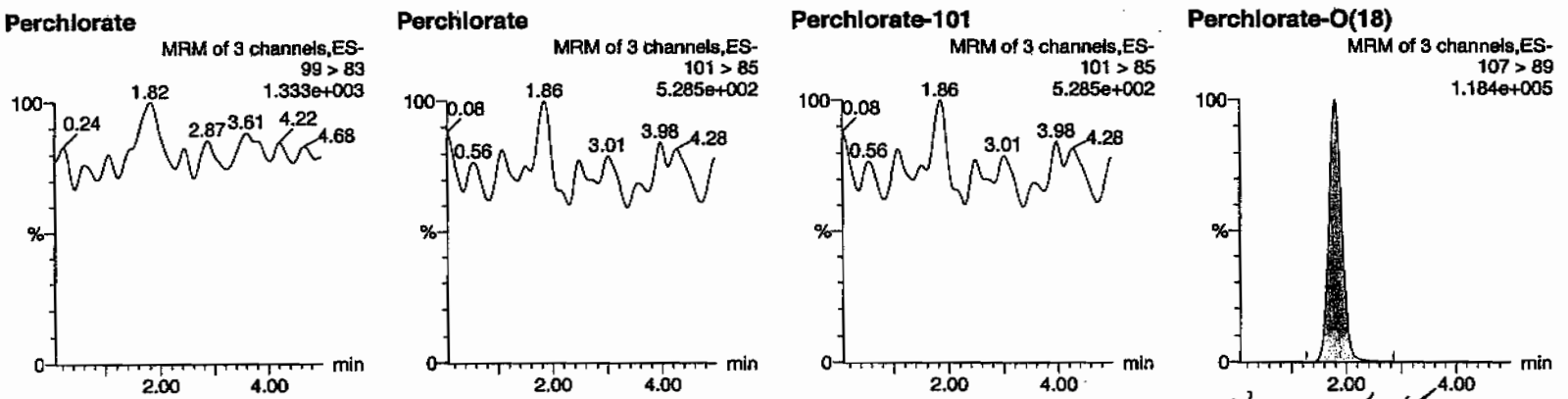

Anne 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201984656	Perchlorate	99 > 83											0.00
1201984656	Perchlorate-101	101 > 85											
1201984656	Perchlorate-O(18)	107 > 89	1.81	32054.211	32054.211	bb			0.4822	96.44	-3.56	1479.7...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 928180

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 02-DEC-09

GEL Job No (SDG): 10-608-1

GEL Sample ID: 1201984657

Date Filtered: 02-DEC-09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	1.89	ug/kg	J	1	02-DEC-09 17:13	per1202035a
	Perchlorate Isotope Ratio			2.87			1	02-DEC-09 17:13	per1202035a
14797-73-0	Perchlorate-101	.5	2	1.97	ug/kg	J	1	02-DEC-09 17:13	per1202035a
	Perchlorate-O(18)			4.88	ug/kg		1	02-DEC-09 17:13	per1202035a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202035a
Date: 02-Dec-2009
Time: 17:13:12
ID: 1201984657
Vial: 2:1,B

|LANL|928181|50020|LCS|1|

CWJ
12-03-09

Perchlorate

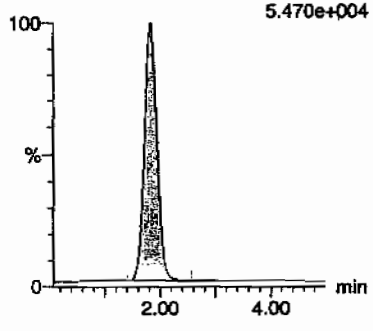

Perchlorate

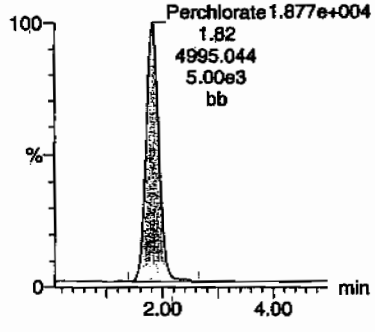

Perchlorate-101

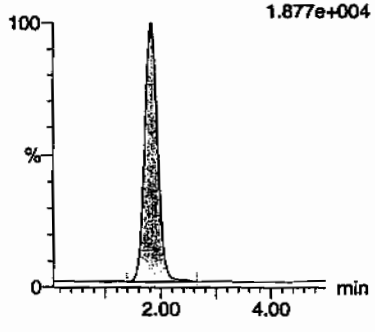

Perchlorate-O(18)

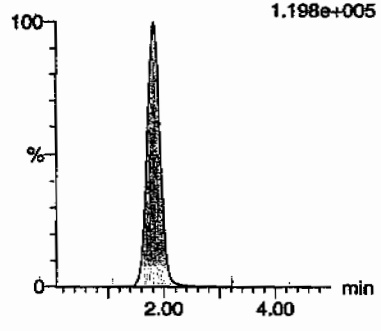

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201984657	Perchlorate	99 > 83	1.83	14333.111	14333.111	bb			0.1889	94.44	-5.56	984.368	2.87
1201984657	Perchlorate-101	101 > 85	1.82	4995.044	4995.044	bb			0.1969	98.45	-1.55	572.156	
1201984657	Perchlorate-O(18)	107 > 89	1.82	32448.121	32448.121	bb			0.4881	97.62	-2.38	14576....	

$\frac{14333.111}{75884.7} = 0.1889$
HMM 12/04/09

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 928180 **Verified by:** _____

Analyst: Jareth Shirley

Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6

Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984656 MB	02-DEC-2009 09:49:11	2	20	10
1201984657 LCS	02-DEC-2009 09:49:11	2	20	10
241559001	02-DEC-2009 09:49:11	2	20	10
241559002	02-DEC-2009 09:49:11	2	20	10
241611001	02-DEC-2009 09:49:11	2	20	10
241611002	02-DEC-2009 09:49:11	2	20	10
1201984658 MS (241611002)	02-DEC-2009 09:49:11	2	20	10
1201984659 MSD (241611002)	02-DEC-2009 09:49:11	2	20	10
241611003	02-DEC-2009 09:49:11	2	20	10
241611004	02-DEC-2009 09:49:11	2	20	10
241611005	02-DEC-2009 09:49:11	2	20	10
241611006	02-DEC-2009 09:49:11	2	20	10
241611007	02-DEC-2009 09:49:11	2	20	10
241611008	02-DEC-2009 09:49:11	2	20	10
241611009	02-DEC-2009 09:49:11	2	20	10
241909001	02-DEC-2009 09:49:11	2	20	10
241909002	02-DEC-2009 09:49:11	2	20	10
241913001	02-DEC-2009 09:49:11	2	20	10
241913002	02-DEC-2009 09:49:11	2	20	10
1201984660 ICS	02-DEC-2009 09:49:11	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201984660	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL
LCS	1201984657	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL
MS	1201984658	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL
MSD	1201984659	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL

Comments:

Desalting cartridges used: 090415-1-Ba & 090902-1-H

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 12/02/09
Extr. Injection Volume: 20uL
Sequence Number: per120209a
Initial Calibration Date: 12/02/09

Method: EPA 6850-Modified
Int. Std.: UCL090612-01.2
Mobile Phase Lot#: 1233781, 1233976
Standard-Samp Reagent Lot#:: 1197509

Reviewed BY: [illegible]
Date: 12/04/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091120-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1202001a	IPB001	CWW	12/2/2009 12:37			1		USE	B
per1202002a	IPB001	CWW	12/2/2009 12:45			1		USE	B
per1202003a	WCLICAL-01	CWW	12/2/2009 12:54			1		USE	I
per1202004a	WCLICAL-02	CWW	12/2/2009 13:02			1		USE	I
per1202005a	WCLICAL-03	CWW	12/2/2009 13:10			1		USE	I
per1202006a	WCLICAL-04	CWW	12/2/2009 13:18			1		USE	I
per1202007a	WCLICAL-05	CWW	12/2/2009 13:26			1		USE	I
per1202008a	IPB002	CWW	12/2/2009 13:34			1		USE	B
per1202009a	WCLICV	CWW	12/2/2009 13:42			1		USE	C
per1202010a	IPB003	CWW	12/2/2009 13:50			1		USE	B
per1202011a	WCLCRI	CWW	12/2/2009 13:58			1		USE	C
per1202012a	1201980947	CWW	12/2/2009 14:06	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202013a	1201980948	CWW	12/2/2009 14:15	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202014a	1201980951	CWW	12/2/2009 14:23	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202015a	241081001	CWW	12/2/2009 14:31	926516	2009-9-30-LAPP	1	FONZ	DUSE-DL	S
per1202016a	241081002	CWW	12/2/2009 14:39	926516	2009-9-30-LAPP	1	FONZ	DUSE-RA	S
per1202017a	241081003	CWW	12/2/2009 14:47	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202018a	241081004	CWW	12/2/2009 14:55	926516	2009-9-30-LAPP	1	FONZ	DUSE-DL	S
per1202019a	241081005	CWW	12/2/2009 15:03	926516	2009-9-30-LAPP	1	FONZ	DUSE-DL	S
per1202020a	WCLCCV	CWW	12/2/2009 15:11			1		USE	C
per1202021a	IPB004	CWW	12/2/2009 15:19			1		USE	B
per1202022a	WCLCRI	CWW	12/2/2009 15:27			1		USE	C
per1202023a	241081006	CWW	12/2/2009 15:36	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202024a	241081007	CWW	12/2/2009 15:44	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202025a	241081008	CWW	12/2/2009 15:52	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202026a	241081009	CWW	12/2/2009 16:00	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202027a	241081010	CWW	12/2/2009 16:08	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202028a	241081011	CWW	12/2/2009 16:16	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202029a	1201980949	CWW	12/2/2009 16:24	926516	2009-9-30-LAPP	1	FONZ	USE	S

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GRL.

per1202030a	1201980950	CWW	12/2/2009 16:32	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202031a	WCLCCV	CWW	12/2/2009 16:40			1		USE	C
per1202032a	IPB005	CWW	12/2/2009 16:48			1		USE	B
per1202033a	WCLCRI	CWW	12/2/2009 16:56			1		USE	C
per1202034a	1201984656	CWW	12/2/2009 17:04	928181	VARIOUS	1	LANL	USE	S
per1202035a	1201984657	CWW	12/2/2009 17:13	928181	VARIOUS	1	LANL	USE	S
per1202036a	1201984660	CWW	12/2/2009 17:21	928181	VARIOUS	1	LANL	USE	S
per1202037a	241559001	CWW	12/2/2009 17:29	928181	10-608-1	1	LANL	USE	S
per1202038a	241559002	CWW	12/2/2009 17:37	928181	10-608-1	1	LANL	USE	S
per1202039a	241611001	CWW	12/2/2009 17:45	928181	10-642	1	LANL	USE	S
per1202040a	241611002	CWW	12/2/2009 17:53	928181	10-642	1	LANL	USE	S
per1202041a	1201984658	CWW	12/2/2009 18:01	928181	10-642	1	LANL	USE	S
per1202042a	1201984659	CWW	12/2/2009 18:10	928181	10-642	1	LANL	USE	S
per1202043a	241611003	CWW	12/2/2009 18:18	928181	10-642	1	LANL	USE	S
per1202044a	WCLCCV	CWW	12/2/2009 18:27			1		USE	C
per1202045a	IPB006	CWW	12/2/2009 18:35			1		USE	B
per1202046a	WCLCRI	CWW	12/2/2009 18:44			1		USE	C
per1202047a	241611004	CWW	12/2/2009 18:52	928181	10-642	1	LANL	USE	S
per1202048a	241611005	CWW	12/2/2009 19:01	928181	10-642	1	LANL	USE	S
per1202049a	241611006	CWW	12/2/2009 19:09	928181	10-642	1	LANL	USE	S
per1202050a	241611007	CWW	12/2/2009 19:17	928181	10-642	1	LANL	USE	S
per1202051a	241611008	CWW	12/2/2009 19:25	928181	10-642	1	LANL	USE	S
per1202052a	241611009	CWW	12/2/2009 19:34	928181	10-642	1	LANL	USE	S
per1202053a	241909001	CWW	12/2/2009 19:43	928181	10-693	1	LANL	USE	S
per1202054a	241909002	CWW	12/2/2009 19:51	928181	10-693	1	LANL	USE	S
per1202055a	241913001	CWW	12/2/2009 19:59	928181	10-695	1	LANL	USE	S
per1202056a	241913002	CWW	12/2/2009 20:08	928181	10-695	1	LANL	USE	S
per1202057a	WCLCCV	CWW	12/2/2009 20:16			1		USE	C
per1202058a	IPB007	CWW	12/2/2009 20:25			1		USE	B
per1202059a	WCLCRI	CWW	12/2/2009 20:33			1		USE	C
per1202060a	241081001	CWW	12/2/2009 20:41	926516	2009-9-30-LAPP	5	FONZ	USE	S
per1202061a	241081002	CWW	12/2/2009 20:50	926516	2009-9-30-LAPP	1	FONZ	USE	S
per1202062a	241081004	CWW	12/2/2009 20:58	926516	2009-9-30-LAPP	50	FONZ	USE	S
per1202063a	241081005	CWW	12/2/2009 21:06	926516	2009-9-30-LAPP	50	FONZ	USE	S
per1202064a	WCLCCV	CWW	12/2/2009 21:14			1		USE	C
per1202065a	IPB008	CWW	12/2/2009 21:22			1		USE	B
per1202066a	WCLCRI	CWW	12/2/2009 21:30			1		USE	C

Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202041a
Date: 02-Dec-2009
Time: 18:01:59
ID: 1201984658
Vial: 2:2,B

|LANL|928181|50L20|MS|1|

GW 12-03-09

Perchlorate

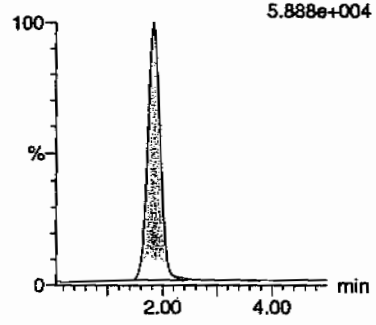

Perchlorate

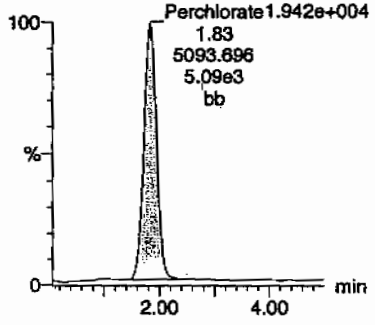

Perchlorate-101

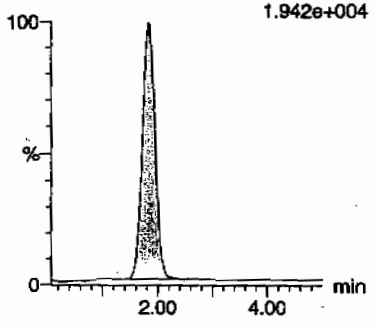

Perchlorate-O(18)

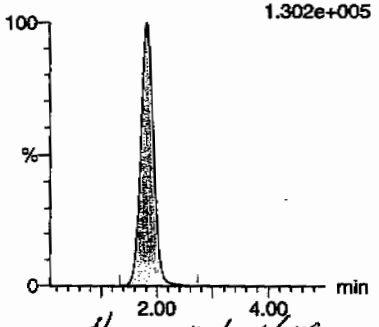

HMM 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
1201984658	Perchlorate	99 > 83	1.84	15557.185	15557.185	bb			0.2050	102.51	2.51	1127.6...	3.05
1201984658	Perchlorate-101	101 > 85	1.83	5093.696	5093.696	bb			0.2008	100.40	0.40	587.310	
1201984658	Perchlorate-O(18)	107 > 89	1.82	34726.289	34726.289	bb			0.5224	104.48	4.48	3701.6...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charles Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per120209a.qld

Last Altered: Thursday, December 03, 2009 7:17:26 AM Eastern Standard Time
Printed: Thursday, December 03, 2009 7:30:07 AM Eastern Standard Time

Name: per1202042a
Date: 02-Dec-2009
Time: 18:10:38
ID: 1201984659
Vial: 2:2,C

|LANL|928181|5020|MSD|11

12.03-09

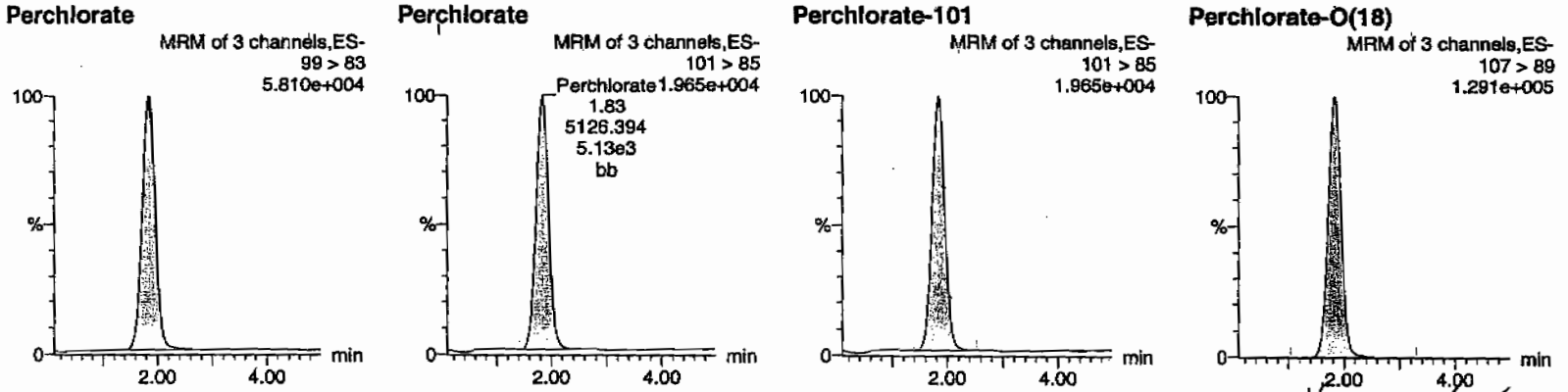

Hmm 12/04/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1201984659	Perchlorate	99 > 83	1.83	15441.924	15441.924	bb			0.2035	101.75	1.75	911.371	3.01
1201984659	Perchlorate-101	101 > 85	1.83	5126.394	5126.394	bb			0.2021	101.04	1.04	657.621	
1201984659	Perchlorate-O(18)	107 > 89	1.83	34801.867	34801.867	bb			0.5235	104.70	4.70	3653.7...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

GC SEMIVOLATILE DRO ANALYSIS

FID Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-608-1

Method/Analysis Information

Procedure:	**Analysis of Non-Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	926874
Prep Batch Number:	926873

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201981725	Method Blank (MB)
1201981728	Laboratory Control Sample (LCS)
1201981726	241540003(RE03-09-13868) Matrix Spike (MS)
1201981727	241540003(RE03-09-13868) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is

adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-604) was selected for the matrix spike and matrix spike duplicate analysis for this batch.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak

profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID7.I	Agilent GC FID	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock **Date:** 12-14-2009

Roadmap for LANL 10-608-1 DRO

This roadmap was analyzed by kev01577 on 12-03-2009, 10:52.
This roadmap was reviewed by jcb on 12-07-2009, 10:33.
This roadmap was packaged by jim01140 on 12-11-2009, 15:15.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/fid7.i/113009dr/029f2901.d	241559001	01-DEC-2009	03:10	10-608-1.sub	RE03-10-6903	1.00000	926874	DUSE, OVERRANGE RERUN
□	N	/chem/fid7.i/120109dr/006f0601.d	241559001	01-DEC-2009	14:35	10-608-1.sub	RE03-10-6903	1.00000	926874	USE
□	N	/chem/fid7.i/113009dr/030f3001.d	241559002	01-DEC-2009	03:47	10-608-1.sub	RE03-10-6902	1.00000	926874	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/fid7.i/113009dr/005f0501a.d	1201981725	mb	30-NOV-2009	12:26	10-608-1.sub	DBLK01	1.00000	926874	
□	N	/chem/fid7.i/113009dr/006f0601a.d	1201981728	lcs	30-NOV-2009	13:02	10-608-1.sub	DBLK01LCS	1.00000	926874	

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6903	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 14:35	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		7.50	mg/kg	2.31	7.11

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 03:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	030f3001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		13.9	mg/kg	2.54	7.80

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10-608-1

Matrix Type: SOLID

CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC
1201981725	MB for batch 926873	53
1201981728	LCS for batch 926873	85
241559002	RE03-10-6902	65
241559001	RE03-10-6903	59

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 926873
Lab Sample ID: 1201981728
Instrument: FID7.I
Analyst: KXR2
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 11/30/2009 13:02
Dilution: 1
Prep Batch ID: 926873
Batch ID: 926874

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	25.3	76	53--114

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10–604**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03–09–13868MS**	**Matrix:**	**S**
Lab Sample ID:	**1201981726**	**%Moisture:**	**11.4**
Instrument:	**FID7.I**	**Analysis Date:**	**11/30/2009 15:30**
Analyst:	**KXR2**	**Prep Batch ID:**	**926873**
Inj. Vol:	**1 uL**	**Batch ID:**	**926874**

Dilution: 1

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	37.6	6.05	J	36.7	81	21–122

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10–604**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03–09–13868MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201981727**	**%Moisture:**	**11.4**
Instrument:	**FID7.I**	**Analysis Date:**	**11/30/2009 16:06**
Analyst:	**KXR2**	**Prep Batch ID:**	**926873**
Inj. Vol:	**1 uL**	**Batch ID:**	**926874**

Dilution: 1

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	37.4	6.05	J	35.4	79	21–122	3	0–30

Method Blank Summary

SDG Number:	10-608-1	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 926873	Instrument ID:	FID7.I	Data File:	005f0501.d
Lab Sample ID:	1201981725	Prep Date:	11/29/2009 20:09	Analyzed:	11/30/09 12:26
Column:	DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 926873	1201981728	006f0601.d	11/30/09	1302
04 RE03-10-6902	241559002	030f3001.d	12/01/09	0347
05 RE03-10-6903	241559001	006f0601.d	12/01/09	1435

SAMPLE
DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–608–1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559001	Date Received:	11/20/2009 08:50	%Moisture:	6.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–6903	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 14:35	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		7.50	mg/kg	2.31	7.11

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/006f0601.d
Lab Smp Id: 241559001 Client Smp ID: RE03-10-6903
Inj Date : 01-DEC-2009 14:35
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241559001|1
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weigth of sample extracted (g)
M	6.46570	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501	17.890		2990392	210.990	7.5	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.611	13.616	-0.005	294125	11.7156	0.42	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/120109dr/006f0601.d
Date : 01-DEC-2009 14:35
Client ID: RE03-10-6903
Sample Info: |2415590011|1
Volume Injected (uL): 1.0
Column phase: DB-5HS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

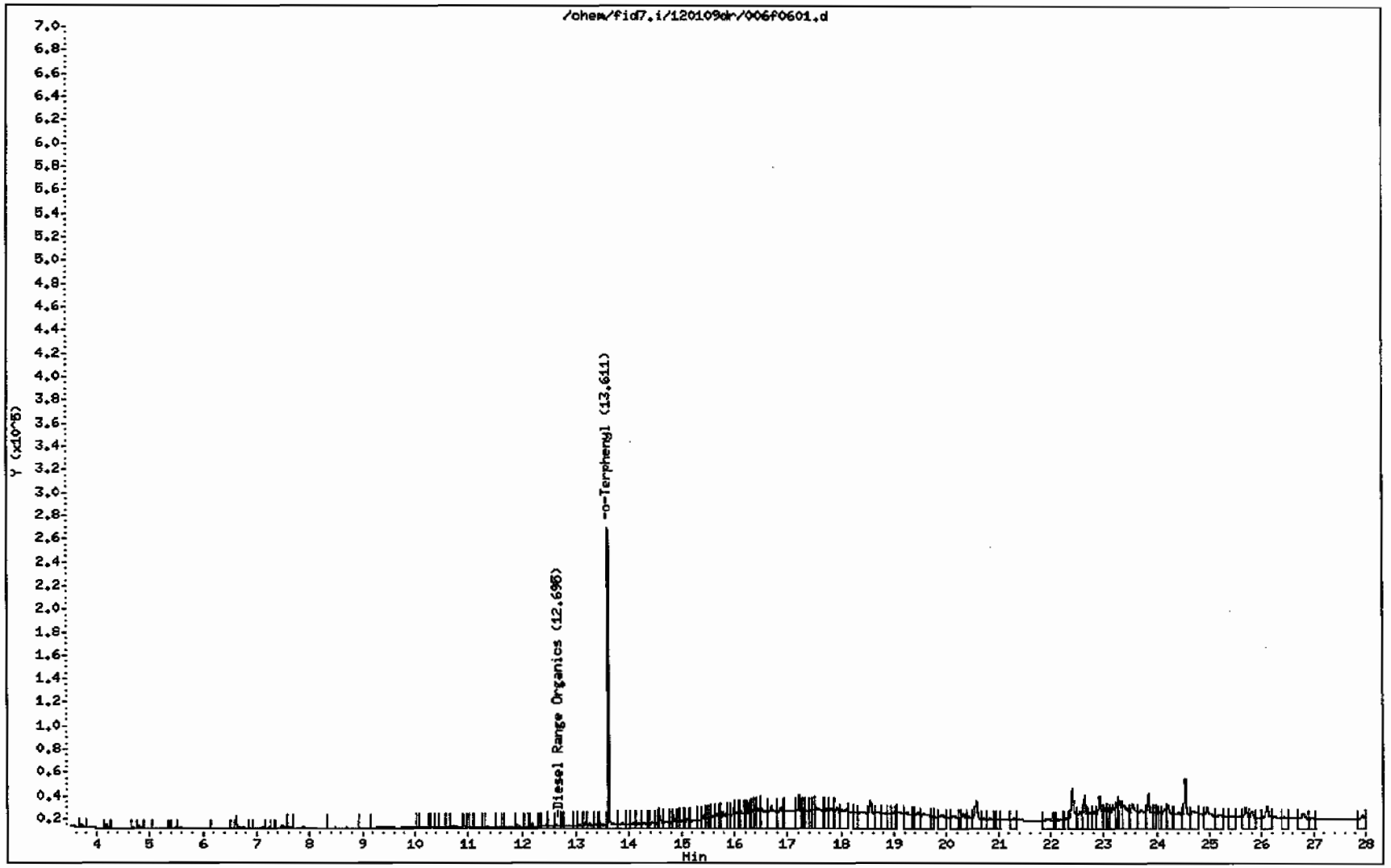

Data File: /chem/fid7.i/120109dr/006f0601.d
Injection Date: 01-DEC-2009 14:35
Instrument: fid7.i
Client Sample ID: RE03-10-6903

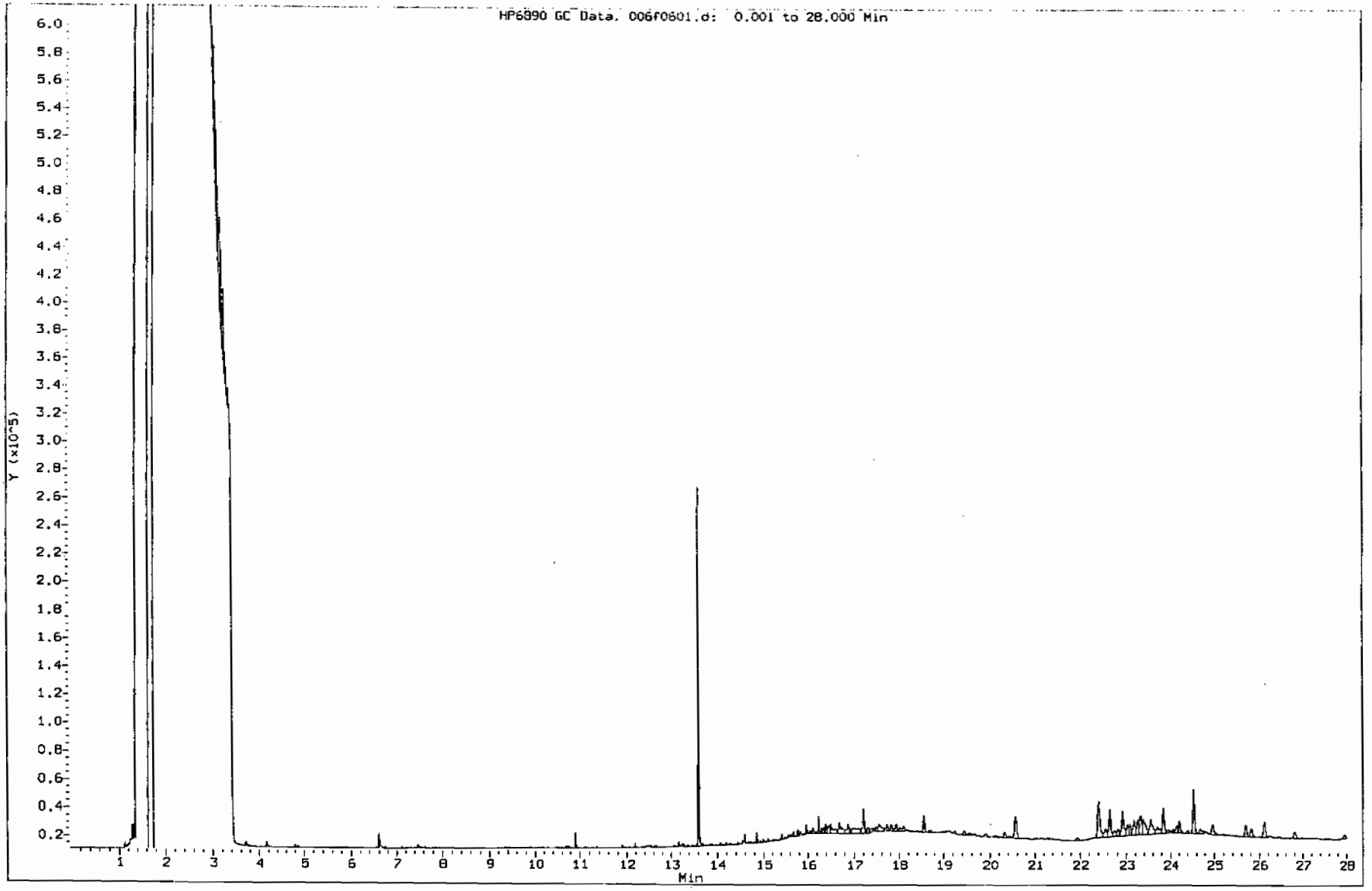

Data File: /chem/fid7.i/120109dr/006f0601.d
Injection Date: 01-DEC-2009 14:35
Instrument: fid7.i
Client Sample ID: RE03-10-6903

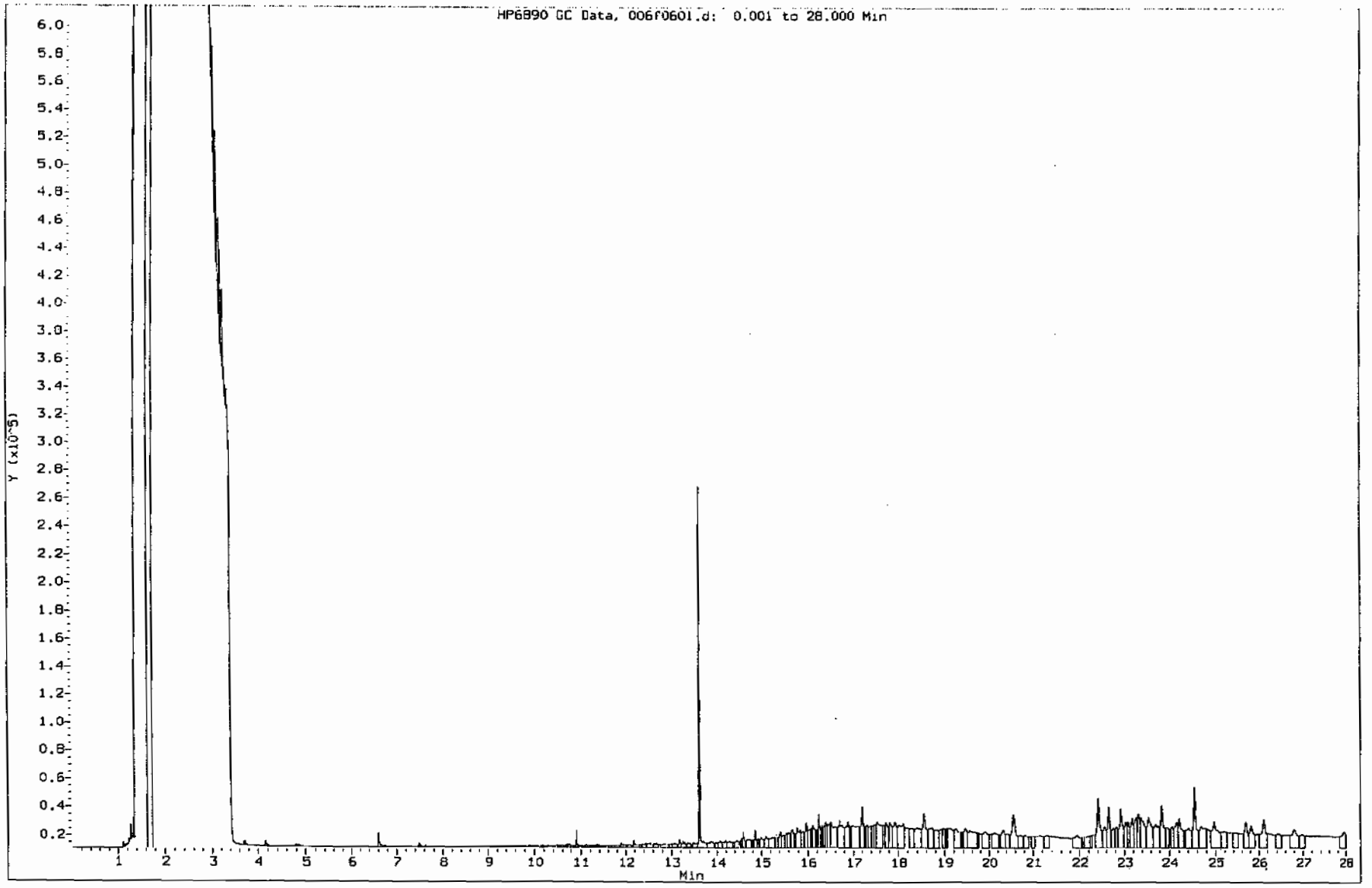

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	Date Collected:	11/18/2009 12:00	Matrix:	S
Lab Sample ID:	241559002	Date Received:	11/20/2009 08:50	%Moisture:	14.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-6902	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	12/01/2009 03:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	030f3001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		13.9	mg/kg	2.54	7.80

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/030f3001.d
Lab Smp Id: 241559002 Client Smp ID: RE03-10-6902
Inj Date : 01-DEC-2009 03:47
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241559002|1
Misc Info : |FIDDRO_SF|926874|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	14.65250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			5032635	355.083	13.8	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.615	13.616	-0.001	325307	12.9577	0.50	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/030f3001.d
Date : 01-DEC-2009 03:47
Client ID: RE03-10-6902
Sample Info: |2415590021|1
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

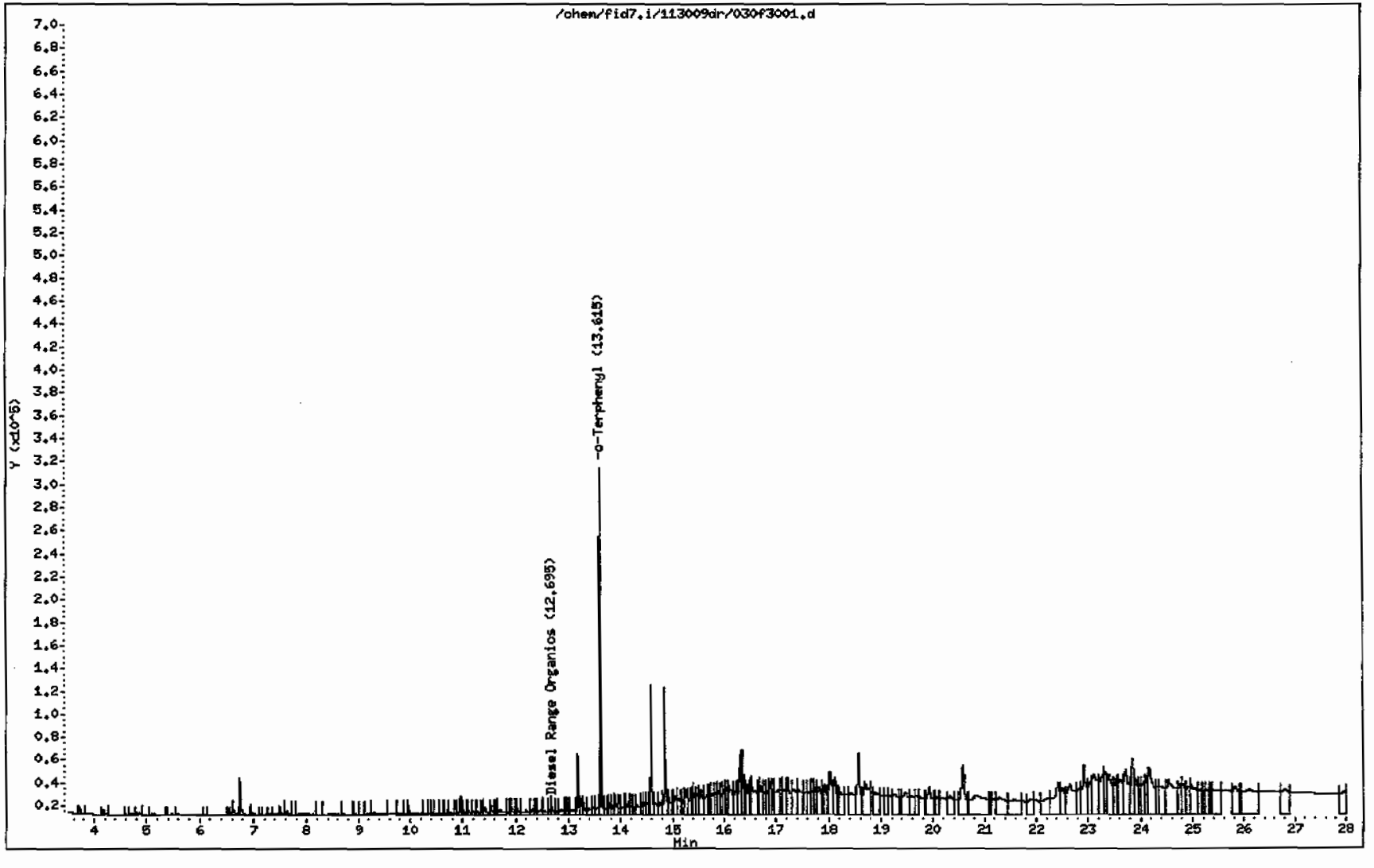

Below FTM 12/1/09

Data File: /chem/fid7.i/113009dr/030f3001.d
Injection Date: 01-DEC-2009 03:47
Instrument: fid7.i
Client Sample ID: RE03-10-6902

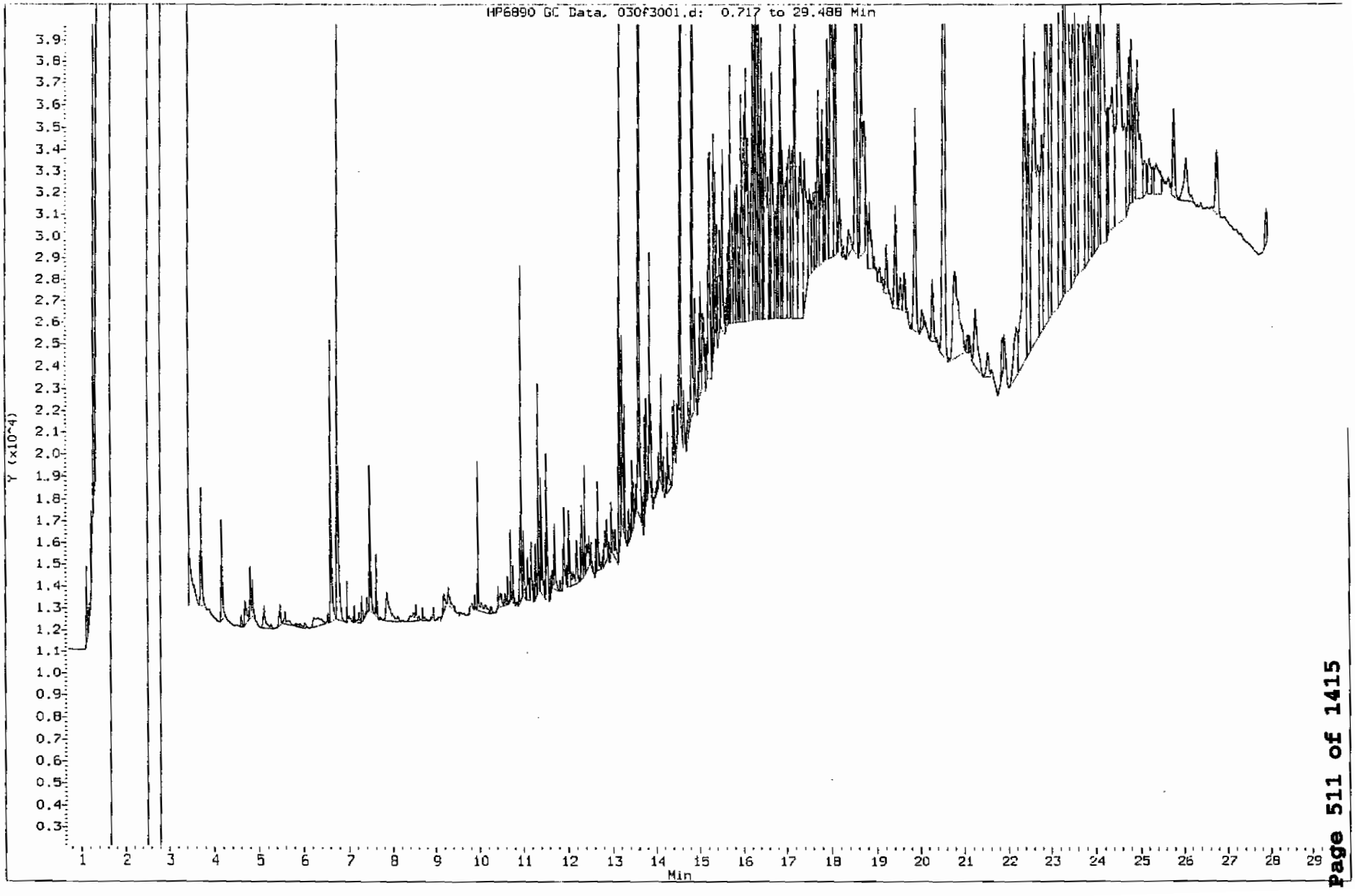

Data File: /chem/fid7.i/113009dr/030f3001.d
Injection Date: 01-DEC-2009 03:47
Instrument: fid7.i
Client Sample ID: RE03-10-6902

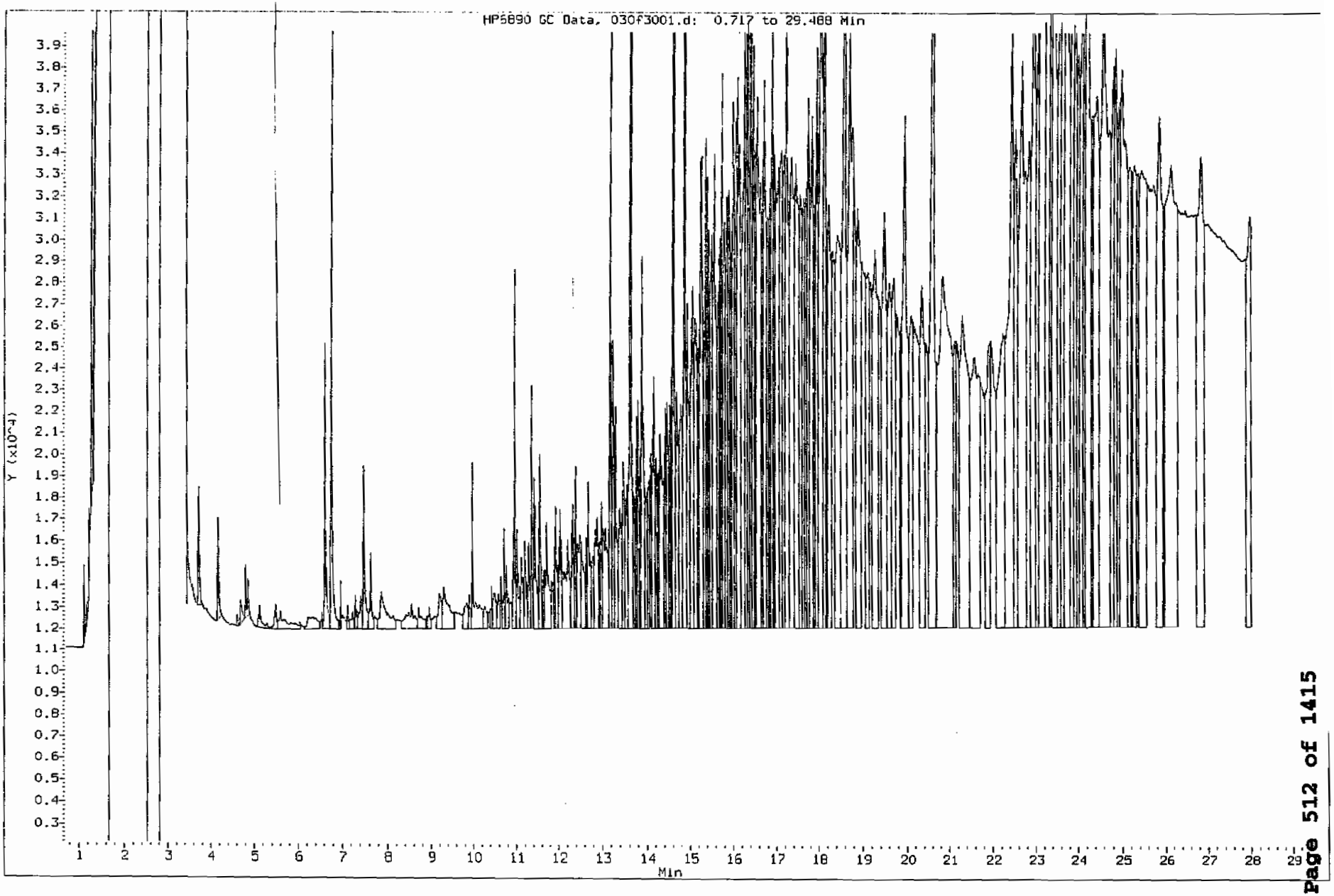

STANDARDS DATA

Report Date: 03-Dec-2009 08:53

Calibration History

Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Start Cal Date: 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
18-NOV-2009 21:40	dro	/chem/fid7.i/111809dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
18-NOV-2009 22:17	dro	/chem/fid7.i/111809dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
18-NOV-2009 22:54	dro	/chem/fid7.i/111809dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
18-NOV-2009 23:31	dro	/chem/fid7.i/111809dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
19-NOV-2009 00:07	dro	/chem/fid7.i/111809dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 04:24	dro	/chem/fid7.i/113009dr/031f3101.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 22:51	dro	/chem/fid7.i/113009dr/022f2201.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 17:19	dro	/chem/fid7.i/113009dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
30-NOV-2009 11:12	dro	/chem/fid7.i/113009dr/003f0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 01-Dec-2009 10:35 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	100.000000
Initial:End Threshold	50.000000
Initial:Area Threshold	100.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	11.000000
Initial:Negative Peaks	OFF
Initial:Tension	7.000000
5.000:Force Cluster ON	n/a
17.000:Force Cluster OFF	n/a
17.371:Tension	1.000000

	Compound	RT	RT Window	RF
	3 Decane (C10)	7.526	7.496-7.556	
S	1 Diesel Range Organics	12.695	7.501-17.890	1.417e+04
$	2 o-Terphenyl	13.616	13.586-13.646	2.511e+04
	4 Octacosane (C28)	17.861	17.831-17.891	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Cal Date : 01-Dec-2009 10:35 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid7.i/111809dr/003f0301.d
Level 4: /chem/fid7.i/111809dr/004f0401.d
Level 5: /chem/fid7.i/111809dr/005f0501.d
Level 6: /chem/fid7.i/111809dr/006f0601.d
Level 7: /chem/fid7.i/111809dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	14564	14133	13971	14374	13824	14173	2.108
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	26761	28259	25829	22405	22273	25105	10.638

Report Date: 03-Dec-2009 16:34

Calibration History

Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Start Cal Date: 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
18-NOV-2009 21:40	dro	/chem/fid7.i/111809dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
18-NOV-2009 22:17	dro	/chem/fid7.i/111809dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
18-NOV-2009 22:54	dro	/chem/fid7.i/111809dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
18-NOV-2009 23:31	dro	/chem/fid7.i/111809dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
19-NOV-2009 00:07	dro	/chem/fid7.i/111809dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 02:17	dro	/chem/fid7.i/120109dr/064f6401.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 23:12	dro	/chem/fid7.i/120109dr/059f5901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 17:01	dro	/chem/fid7.i/120109dr/049f4901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 10:53	dro	/chem/fid7.i/120109dr/039f3901.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 04:45	dro	/chem/fid7.i/120109dr/029f2901.d
Ccal Level: 5 , Ccal Amount: 1000		

01-DEC-2009 21:58	dro	/chem/fid7.i/120109dr/018f1801.d
Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 15:12	dro	/chem/fid7.i/120109dr/007f0701.d
Ccal Level: 5 , Ccal Amount: 1000		
01-DEC-2009 12:45	dro	/chem/fid7.i/120109dr/003f0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 03-Dec-2009 08:42 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	100.000000
Initial:End Threshold	50.000000
Initial:Area Threshold	100.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	11.000000
Initial:Negative Peaks	OFF
Initial:Tension	7.000000
5.000:Force Cluster ON	n/a
17.000:Force Cluster OFF	n/a
17.371:Tension	1.000000

	Compound	RT	RT Window	RF
	3 Decane (C10)	7.525	7.495-7.555	
S	1 Diesel Range Organics	12.695	7.501-17.890	1.417e+04
$	2 o-Terphenyl	13.616	13.586-13.646	2.511e+04
	4 Octacosane (C28)	17.861	17.831-17.891	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Cal Date : 08-Dec-2009 08:33 jc
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid7.i/111809dr/003f0301.d
Level 4: /chem/fid7.i/111809dr/004f0401.d
Level 5: /chem/fid7.i/111809dr/005f0501.d
Level 6: /chem/fid7.i/111809dr/006f0601.d
Level 7: /chem/fid7.i/111809dr/007f0701.d

Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 1 Diesel Range Organics	14564	14133	13971	14374	13824	14173	2.108
4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 o-Terphenyl	26761	28259	25829	22405	22273	25105	10.638

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: FID7 Calibration Date: 11/30/09 Time: 1112

Lab File ID: 003F0301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14284.419	0.01	0.8	15.0
o-Terphenyl	25105.366	25500.619	0.01	1.6	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: FID7 Calibration Date: 11/30/09 Time: 2251

Lab File ID: 022F2201 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14659.076	0.01	3.4	15.0
o-Terphenyl	25105.366	26323.377	0.01	4.8	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: FID7 Calibration Date: 12/01/09 Time: 0424

Lab File ID: 031F3101 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	15664.514	0.01	10.5	15.0
o-Terphenyl	25105.366	28651.207	0.01	14.1	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: FID7 Calibration Date: 12/01/09 Time: 1245

Lab File ID: 003F0301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13229.911	0.01	-6.6	15.0
o-Terpheny1	25105.366	23768.181	0.01	-5.3	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: FID7 Calibration Date: 12/01/09 Time: 1512

Lab File ID: 007F0701 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13076.694	0.01	-7.7	15.0
o-Terphenyl	25105.366	23591.371	0.01	-6.0	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/003f0301.d
Lab Smp Id: WFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 30-NOV-2009 11:12
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			14284418	1000.00	1010
$	2 o-Terphenyl					CAS #: 84-15-1
	13.616	13.616	0.000	637515	25.0000	25.4

Data File: /chem/fid7.i/113009dr/003f0301.d

Date : 30-NOV-2009 11:12

Client ID: DSTD01

Sample Info: IWFI091118-01 D1

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

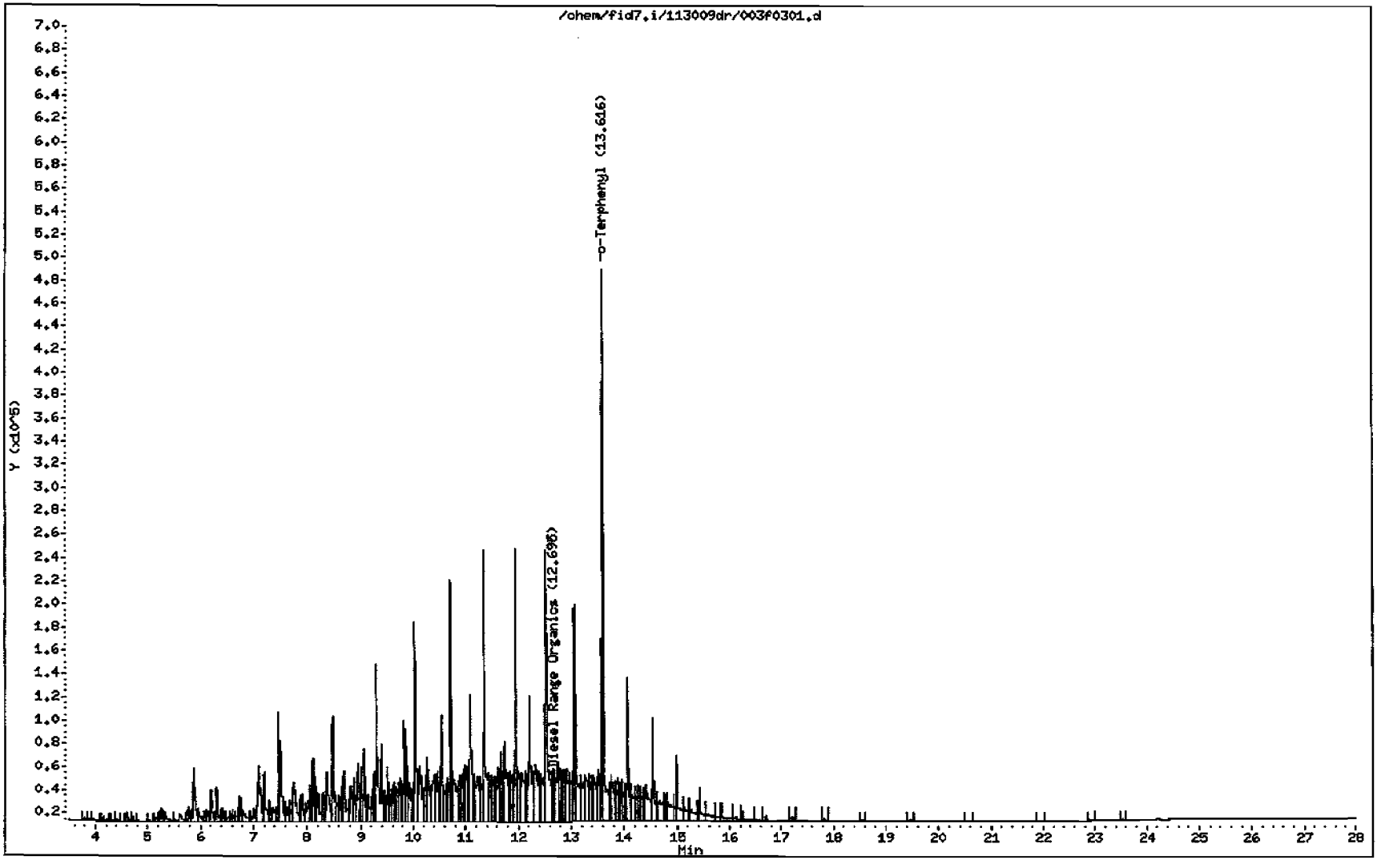

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/022f2201.d
Lab Smp Id: WFI091118-01 D3 Client Smp ID: DSTD03
Inj Date : 30-NOV-2009 22:51
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-01 D3
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			14659076	1000.00	1030
$	2 o-Terphenyl					CAS #: 84-15-1
	13.616	13.616	0.000	658084	25.0000	26.2

Data File: /chem/fid7.i/113009dr/022f2201.d

Date : 30-NOV-2009 22:51

Client ID: DSTD03

Sample Info: IWFI091118-01 D3

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

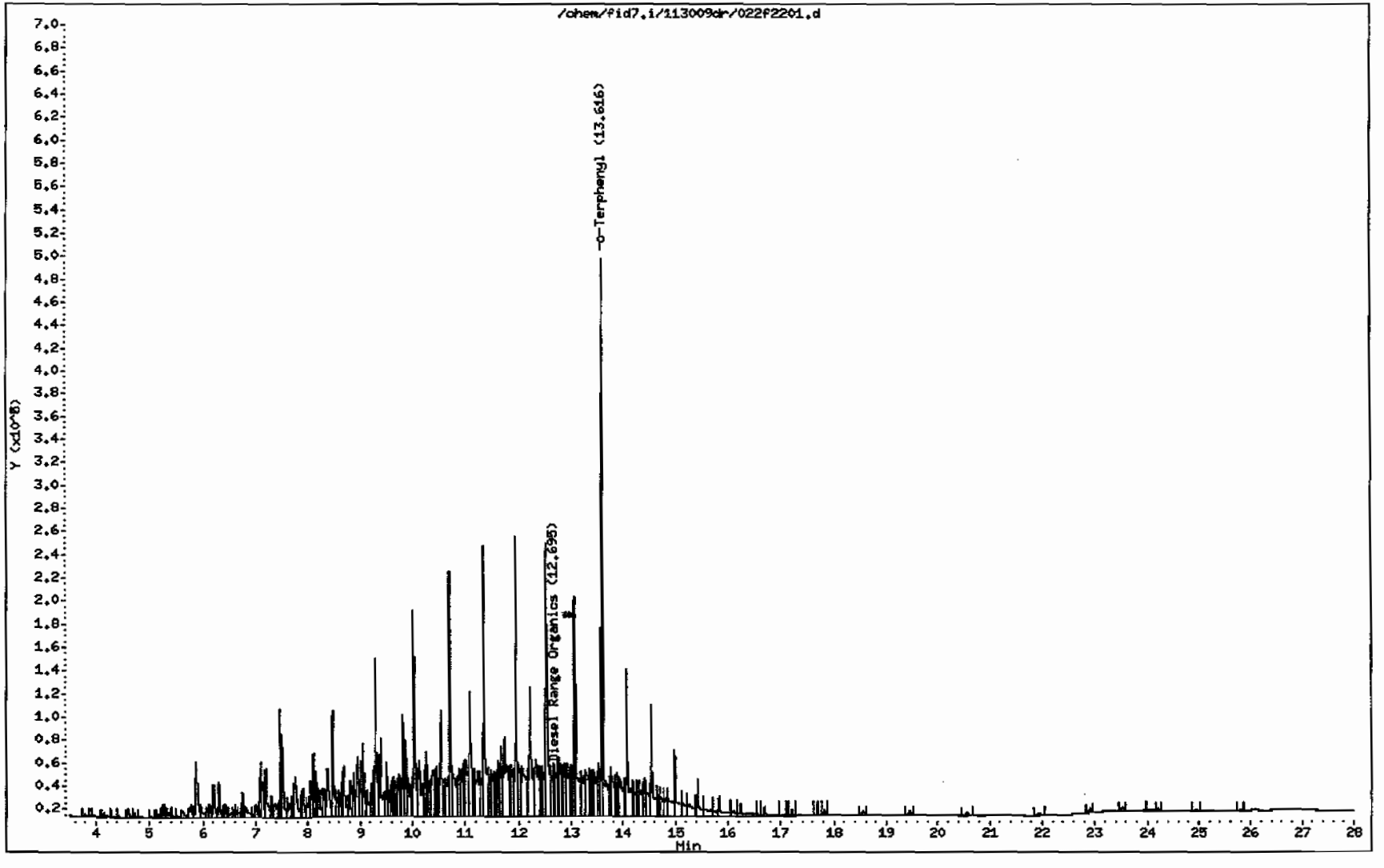

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/031f3101.d
Lab Smp Id: WFI091118-01 D4 Client Smp ID: DSTD04
Inj Date : 01-DEC-2009 04:24
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-01 D4
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
RT	EXP RT	DLT RT	RESPONSE		
S 1 Diesel Range Organics					CAS #:
7.501- 17.890			15664513	1000.00	1100
$ 2 o-Terphenyl					CAS #: 84-15-1
13.619	13.616	0.003	716280	25.0000	28.5

Data File: /chem/fid7.i/113009dr/031f3101.d
Date : 01-DEC-2009 04:24
Client ID: DSTD04
Sample Info: IWFI091118-01 D4

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

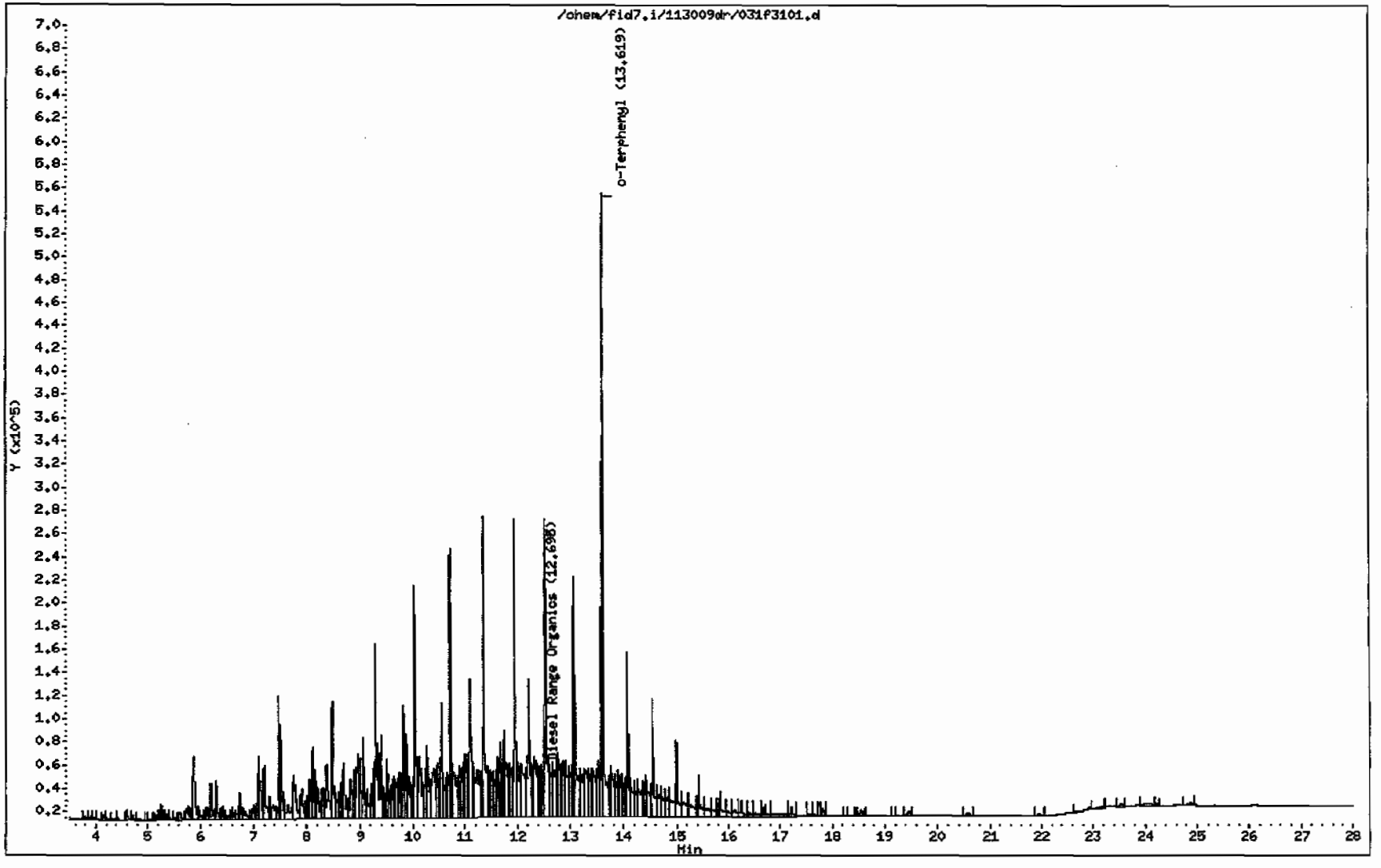

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/003f0301.d
Lab Smp Id: WFI091118-02 D1 Client Smp ID: DSTD01
Inj Date : 01-DEC-2009 12:45
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
$	1 Diesel Range Organics						CAS #:
	7.501- 17.890			13229911	1000.00		933
$	2 o-Terphenyl						CAS #: 84-15-1
	13.616	13.616	0.000	594204	25.0000		23.7

Data File: /chem/fid7.i/120109dr/003f0301.d
Date : 01-DEC-2009 12:45
Client ID: DSTD01
Sample Info: |WFI091118-02 D1

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

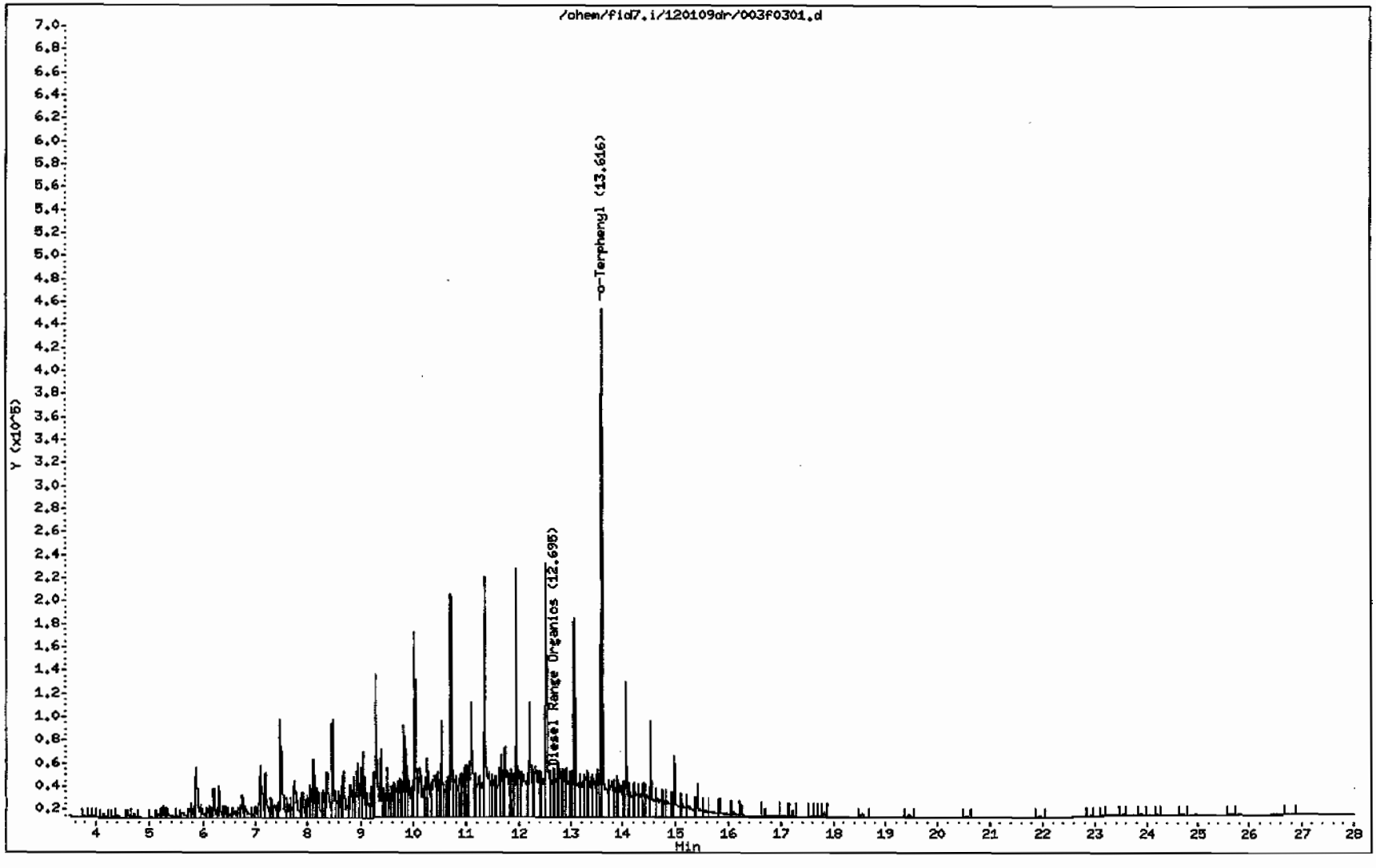

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120109dr/007f0701.d
Lab Smp Id: WFI091118-02 D2 Client Smp ID: DSTD02
Inj Date : 01-DEC-2009 15:12
Operator : KXR2 Inst ID: fid7.i
Smp Info : |WFI091118-02 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120109dr/FID7a.i_b_DRO_111809.m
Meth Date : 03-Dec-2009 08:42 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
$	1 Diesel Range Organics					CAS #:
	7.501~ 17.890			13076694	1000.00	923
$	2 o-Terphenyl					CAS #: 84-15-1
	13.614	13.616	-0.002	589784	25.0000	23.5

Data File: /chem/fid7.i/120109dr/007f0701.d
Date : 01-DEC-2009 15:12
Client ID: DSTB02
Sample Info: |WF1091118-02 B2

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

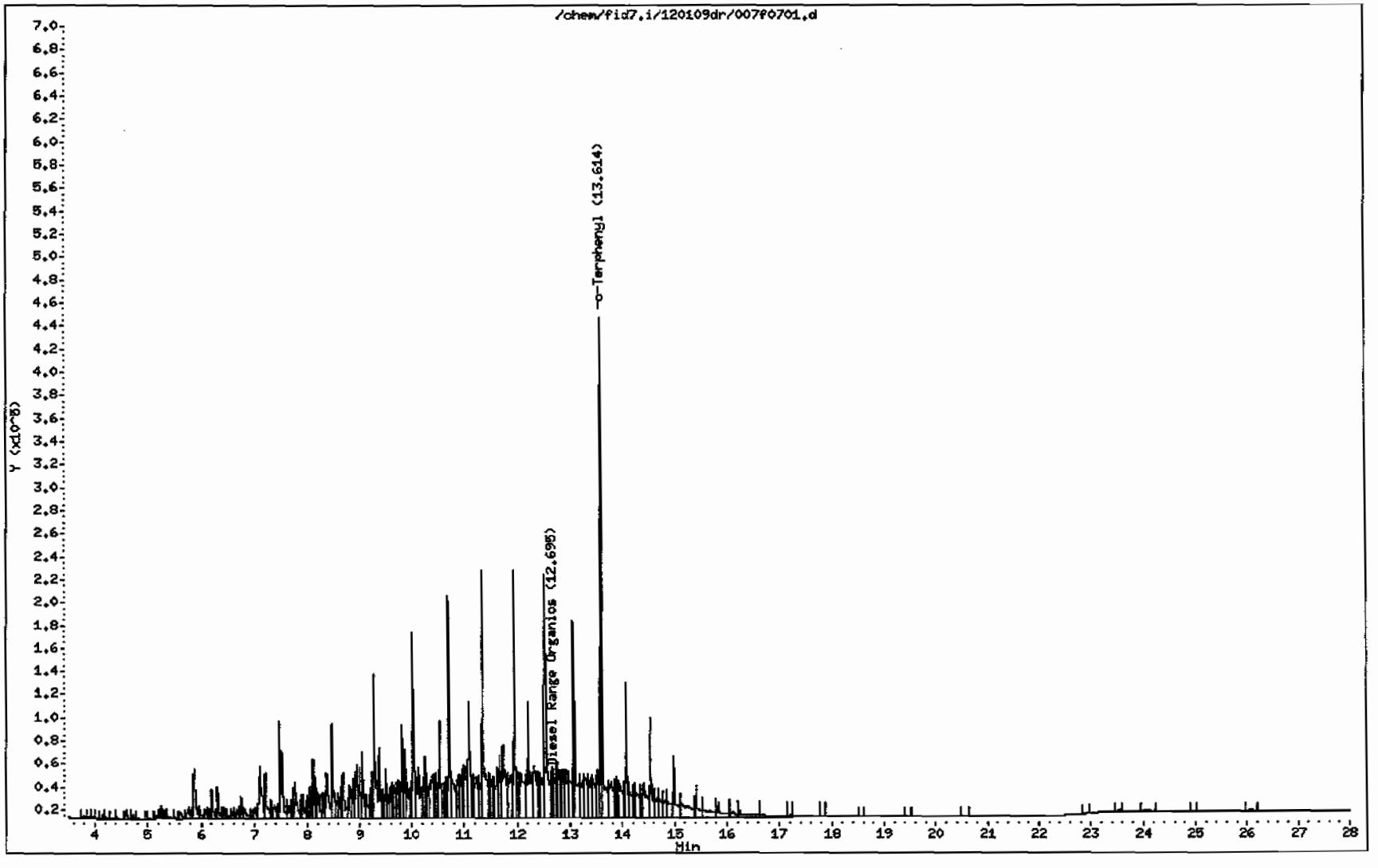

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/18/09	2026	13.61	
02	RTMARKER	UFI091013-03	11/18/09	2103		
03	CSTD01	UFI090827-10	11/18/09	2140	13.61	
04	CSTD02	UFI090827-11	11/18/09	2217	13.61	
05	CSTD03	UFI090827-12	11/18/09	2254	13.62	
06	CSTD04	UFI090827-13	11/18/09	2331	13.63	
07	CSTD05	UFI090827-14	11/19/09	0007	13.64	
08	DSTD01	WFI090928-01	11/19/09	0044	13.62	
09	DIBLK02	WFI090723-06	11/19/09	0121	13.61	
10	ZZZZZ	ZZZZZ	11/19/09	0158	13.61	
11	ZZZZZ	ZZZZZ	11/19/09	0236	13.61	
12	ZZZZZ	ZZZZZ	11/19/09	0313	13.61	
13	ZZZZZ	ZZZZZ	11/19/09	0350	13.61	
14	ZZZZZ	ZZZZZ	11/19/09	0427	13.62	
15	ZZZZZ	ZZZZZ	11/19/09	0504	13.62	
16	ZZZZZ	ZZZZZ	11/19/09	0541	13.61	
17	ZZZZZ	ZZZZZ	11/19/09	0618	13.61	
18	ZZZZZ	ZZZZZ	11/19/09	0655	13.62	
19	ZZZZZ	ZZZZZ	11/19/09	0731	13.62	
20	ZZZZZ	ZZZZZ	11/19/09	0809	13.62	
21	DSTD02	UFI090911-02	11/19/09	0846	13.62	
22	DIBLK03	WFI090723-06	11/19/09	0923	13.62	
23	ZZZZZ	ZZZZZ	11/19/09	1000	13.58*	
24	ZZZZZ	ZZZZZ	11/19/09	1037	13.62	
25	ZZZZZ	ZZZZZ	11/19/09	1114	13.61	
26	ZZZZZ	ZZZZZ	11/19/09	1150	13.61	
27	ZZZZZ	ZZZZZ	11/19/09	1227	13.61	
28	ZZZZZ	ZZZZZ	11/19/09	1304	13.61	
29	ZZZZZ	ZZZZZ	11/19/09	1341	13.61	
30	ZZZZZ	ZZZZZ	11/19/09	1418	13.62	
31	ZZZZZ	ZZZZZ	11/19/09	1455	13.62	
32	ZZZZZ	ZZZZZ	11/19/09	1531	13.62	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	11/30/09	0959	13.61	
02	RTMARKER	UFI091013-03	11/30/09	1036		
03	DSTD01	WFI091118-01	11/30/09	1112	13.62	
04	DIBLK02	WFI091130-06	11/30/09	1149	13.61	
05	DBLK01	1201981725	11/30/09	1226	13.61	
06	DBLK01LCS	1201981728	11/30/09	1302	13.61	
07	ZZZZZ	ZZZZZ	11/30/09	1339	13.61	
08	ZZZZZ	ZZZZZ	11/30/09	1416	13.61	
09	ZZZZZ	ZZZZZ	11/30/09	1453	13.61	
10	ZZZZZ	ZZZZZ	11/30/09	1530	13.61	
11	ZZZZZ	ZZZZZ	11/30/09	1606	13.61	
12	ZZZZZ	ZZZZZ	11/30/09	1643	13.61	
13	DSTD02	WFI091118-01	11/30/09	1719	13.62	
14	DIBLK03	WFI091130-06	11/30/09	1757	13.61	
15	ZZZZZ	ZZZZZ	11/30/09	1834	13.61	
16	ZZZZZ	ZZZZZ	11/30/09	1910	13.61	
17	ZZZZZ	ZZZZZ	11/30/09	1947	13.61	
18	ZZZZZ	ZZZZZ	11/30/09	2023	13.61	
19	ZZZZZ	ZZZZZ	11/30/09	2100	13.61	
20	ZZZZZ	ZZZZZ	11/30/09	2137	13.61	
21	ZZZZZ	ZZZZZ	11/30/09	2214	13.61	
22	DSTD03	WFI091118-01	11/30/09	2251	13.62	
23	DIBLK04	WFI091130-06	11/30/09	2328	13.61	
24	ZZZZZ	ZZZZZ	12/01/09	0005	13.61	
25	ZZZZZ	ZZZZZ	12/01/09	0042	13.61	
26	ZZZZZ	ZZZZZ	12/01/09	0119	13.61	
27	ZZZZZ	ZZZZZ	12/01/09	0155	13.61	
28	ZZZZZ	ZZZZZ	12/01/09	0233	13.62	
29	ZZZZZ	ZZZZZ	12/01/09	0310	13.62	
30	RE03-10-6902	241559002	12/01/09	0347	13.62	
31	DSTD04	WFI091118-01	12/01/09	0424	13.62	
32	DIBLK05	WFI091130-06	12/01/09	0500	13.61	

QC LIMITS
S1 = o-Terphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT
01	DIBLK01	WFI091130-06	12/01/09	1132	13.61		
02	RTMARKER	UFI091013-03	12/01/09	1208			
03	DSTD01	WFI091118-02	12/01/09	1245	13.62		
04	DIBLK02	WFI091130-06	12/01/09	1322	13.61		
05	ZZZZZ	ZZZZZ	12/01/09	1359	13.61		
06	RE03-10-6903	241559001	12/01/09	1435	13.61		
07	DSTD02	WFI091118-02	12/01/09	1512	13.61		
08	DIBLK03	WFI091130-06	12/01/09	1549	13.61		
09	ZZZZZ	ZZZZZ	12/01/09	1626	13.61		
10	ZZZZZ	ZZZZZ	12/01/09	1703	13.61		
11	ZZZZZ	ZZZZZ	12/01/09	1740	13.61		
12	ZZZZZ	ZZZZZ	12/01/09	1817	13.61		
13	ZZZZZ	ZZZZZ	12/01/09	1854	13.61		
14	ZZZZZ	ZZZZZ	12/01/09	1931	13.61		
15	ZZZZZ	ZZZZZ	12/01/09	2008	13.61		
16	ZZZZZ	ZZZZZ	12/01/09	2044	13.61		
17	ZZZZZ	ZZZZZ	12/01/09	2121	13.61		
18	DSTD03	WFI091118-02	12/01/09	2158	13.61		
19	DIBLK04	WFI091130-06	12/01/09	2235	13.61		
20	ZZZZZ	ZZZZZ	12/01/09	2312	13.61		
21	ZZZZZ	ZZZZZ	12/01/09	2349	13.61		
22	ZZZZZ	ZZZZZ	12/02/09	0026	13.61		
23	ZZZZZ	ZZZZZ	12/02/09	0103	13.61		
24	ZZZZZ	ZZZZZ	12/02/09	0140	13.61		
25	ZZZZZ	ZZZZZ	12/02/09	0216	13.61		
26	ZZZZZ	ZZZZZ	12/02/09	0253	13.62		
27	ZZZZZ	ZZZZZ	12/02/09	0331	13.62		
28	ZZZZZ	ZZZZZ	12/02/09	0408	13.61		
29	DSTD04	WFI091118-02	12/02/09	0445	13.61		
30	DIBLK05	WFI091130-06	12/02/09	0522	13.61		
31	ZZZZZ	ZZZZZ	12/02/09	0558	13.61		
32	ZZZZZ	ZZZZZ	12/02/09	0636	13.61		

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–608–1			**Matrix:**	SOIL
Lab Sample ID:	1201981725				
Client Sample:	QC for batch 926873	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 926873	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	926874	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	11/30/2009 12:26	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 20:09	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/005f0501a.d
Lab Smp Id: 1201981725 Client Smp ID: DBLK01
Inj Date : 30-NOV-2009 12:26
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981725|1|
Misc Info : |FIDDRO_SF|926874|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.610	13.616	-0.006	267699	10.6630	0.36

Data File: /chem/fid7.i/113009dr/005f0501a.d
Date : 30-NOV-2009 12:26
Client ID: DBLK01
Sample Info: |120198172511|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

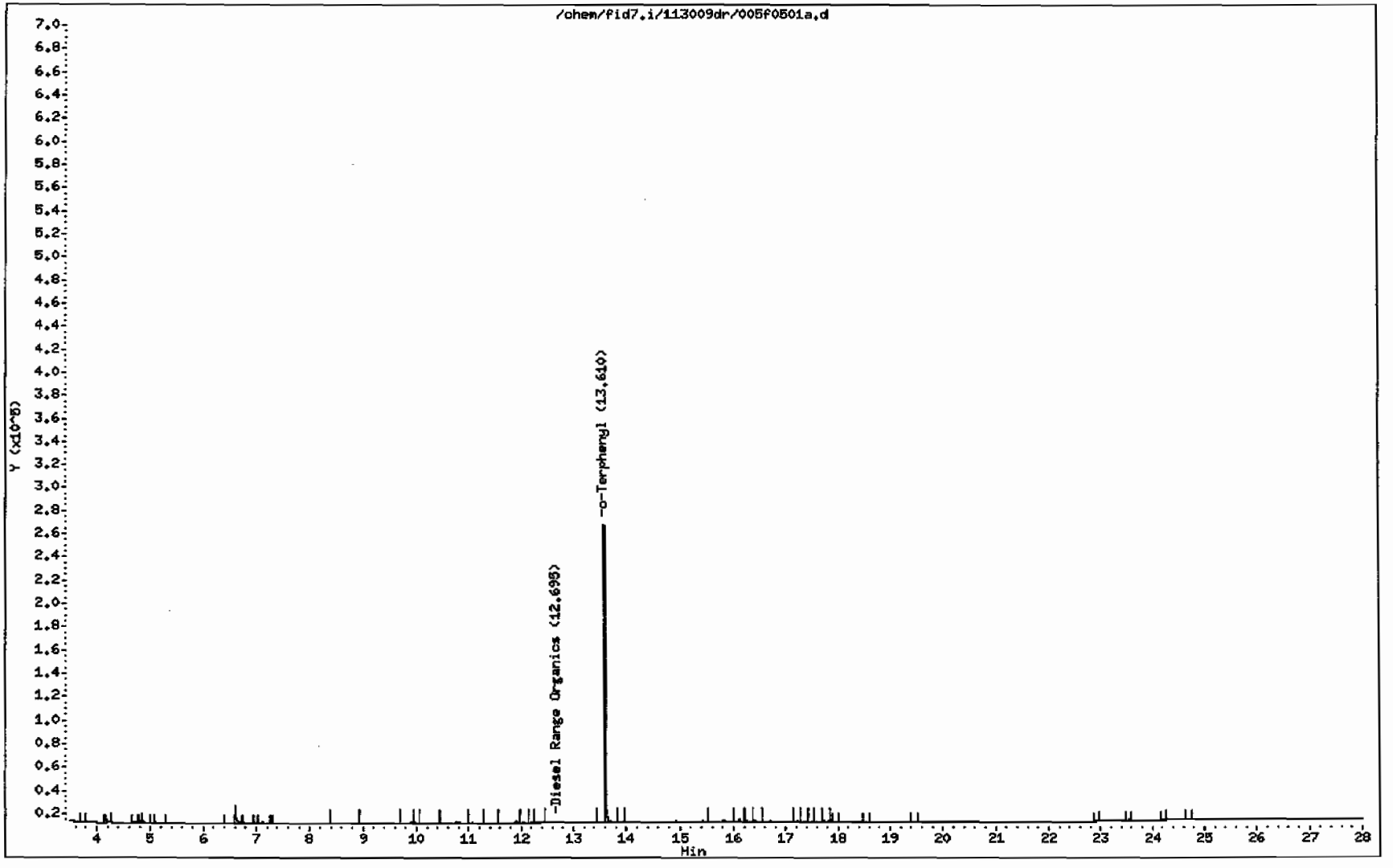

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–608–1			Matrix:	SOIL
Lab Sample ID:	1201981728				
Client Sample:	QC for batch 926873	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 926873	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	926874	Inst:	FID7.I	Dilution:	1
Run Date:	11/30/2009 13:02	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	11/29/2009 20:09	Aliquot:	30 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		25.3	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/006f0601a.d
Lab Smp Id: 1201981728 Client Smp ID: DBLK01LCS
Inj Date : 30-NOV-2009 13:02
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981728|1|
Misc Info : |FIDDRO_SF|926874|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
7.501- 17.890			10748579	758.377	25.3
$ 2 o-Terphenyl					CAS #: 84-15-1
13.612	13.616	-0.004	428083	17.0515	0.57

Data File: /chem/fid7.i/113009dr/006f0601a.d
Date : 30-NOV-2009 13:02
Client ID: DBLK01LCS
Sample Info: |1201981728|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

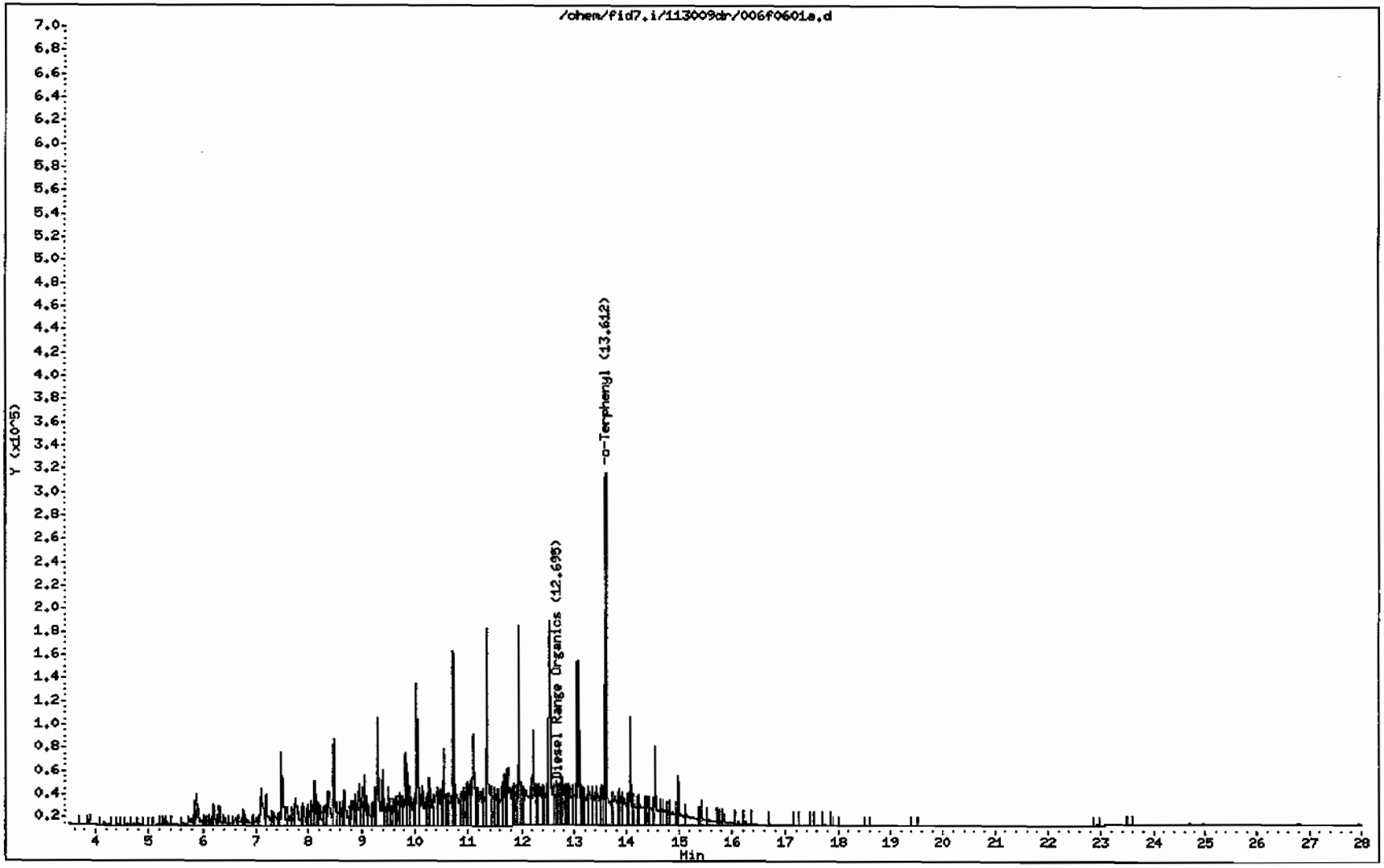

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 11/20/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111809DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	18-NOV-2009 20:26		SDGa07719	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	18-NOV-2009 21:03		SDGa00208	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	18-NOV-2009 21:40		SDGa07719	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	18-NOV-2009 22:17		SDGa07719	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	18-NOV-2009 22:54		SDGa07719	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	18-NOV-2009 23:31		SDGa07719	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	19-NOV-2009 00:07		SDGa07719	1.0		CAL. LEVEL 5
008f0801.d	WFI090928-01 D1	KXR2	19-NOV-2009 00:44		SDGa07719	1.0		PASSES, SECOND VENDOR ICV
009f0901.d	WFI090723-06 B2	KXR2	19-NOV-2009 01:21		SDGa07719	1.0		CLEAN
010f1001.d	1201974631	KXR2	19-NOV-2009 01:58	923777	10-435	1.0	MB	USE
011f1101.d	1201974632	KXR2	19-NOV-2009 02:36	923777	10-435	1.0	LCS	USE
012f1201.d	240828001	KXR2	19-NOV-2009 03:13	923777	10-435	1.0	LANL	USE
013f1301.d	240828002	KXR2	19-NOV-2009 03:50	923777	10-435	1.0	LANL	USE
014f1401.d	240828003	KXR2	19-NOV-2009 04:27	923777	10-435	1.0	LANL	USE
015f1501.d	240828004	KXR2	19-NOV-2009 05:04	923777	10-435	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	240828005	KXR2	19-NOV-2009 05:41	923777	10-435	1.0	LANL	USE

017f1701.d	240828006	KXR2	19-NOV-2009 06:18	923777	10-435		1.0	LANL	USE
018f1801.d	240828007	KXR2	19-NOV-2009 06:55	923777	10-435		1.0	LANL	USE
019f1901.d	240828008	KXR2	19-NOV-2009 07:31	923777	10-435		1.0	LANL	DUSE,OVERRANGE RERUN @10X SEE FILE 35
020f2001.d	240828009	KXR2	19-NOV-2009 08:09	923777	10-435		1.0	LANL	DUSE,SEE FILE 36
021f2101.d	UFI090911-02 D2	KXR2	19-NOV-2009 08:46		SDGa07719		1.0		PASSES
022f2201.d	WFI090723-06 B3	KXR2	19-NOV-2009 09:23		SDGa07719		1.0		CLEAN
023f2301.d	240828010	KXR2	19-NOV-2009 10:00	923777	10-435		20.0	LANL	USE
024f2401.d	240828011	KXR2	19-NOV-2009 10:37	923777	10-435		1.0	LANL	USE
025f2501.d	240865001	KXR2	19-NOV-2009 11:14	923777	10-444		1.0	LANL	USE
026f2601.d	240865002	KXR2	19-NOV-2009 11:50	923777	10-444		1.0	LANL	USE
027f2701.d	240865003	KXR2	19-NOV-2009 12:27	923777	10-444		1.0	LANL	USE
028f2801.d	240866001	KXR2	19-NOV-2009 13:04	923777	10-445		1.0	LANL	USE
029f2901.d	240866002	KXR2	19-NOV-2009 13:41	923777	10-445		1.0	LANL	USE
030f3001.d	241038002	KXR2	19-NOV-2009 14:18	923777	10-462		1.0	LANL	USE
031f3101.d	1201974633	KXR2	19-NOV-2009 14:55	923777	10-462		1.0	MS	USE
032f3201.d	1201974634	KXR2	19-NOV-2009 15:31	923777	10-462		1.0	MSD	USE
033f3301.d	UFI090911-02 D3	KXR2	19-NOV-2009 16:08		SDGa07719		1.0		PASSES
034f3401.d	WFI090723-06 B4	KXR2	19-NOV-2009 16:44		SDGa07719		1.0		CLEAN
035f3501.d	240828008	KXR2	19-NOV-2009 17:21	923777	10-435		10.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	240828009	KXR2	19-NOV-2009 17:59	923777	10-435	1.0	LANL	USE
037f3701.d	UFI091118-01 D4	KXR2	19-NOV-2009 18:36		SDGa07719	1.0		PASSES
038f3801.d	WFI090723-06 B5	KXR2	19-NOV-2009 19:13		SDGa07719	1.0		CLEAN
039f3901.d	1201975287	KXR2	19-NOV-2009 19:49	924008	241212	1.0	MB	USE
040f4001.d	1201975288	KXR2	19-NOV-2009 20:27	924008	241212	1.0	LCS	USE
041f4101.d	1201975292	KXR2	19-NOV-2009 21:04	924008	241212	1.0	LCSD	USE

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 12/02/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:113009DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	30-NOV-2009 09:59		SDGa20170	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	30-NOV-2009 10:36		SDGa20170	1.0		RTMARKER
003f0301.d	WFI091118-01 D1	KXR2	30-NOV-2009 11:12		SDGa20170	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	30-NOV-2009 11:49		SDGa20170	1.0		CLEAN
005f0501.d	1201981725	KXR2	30-NOV-2009 12:26	926874	10-604	1.0	MB	USE
006f0601.d	1201981728	KXR2	30-NOV-2009 13:02	926874	10-604	1.0	LCS	USE
007f0701.d	241540001	KXR2	30-NOV-2009 13:39	926874	10-604	1.0	LANL	USE
008f0801.d	241540002	KXR2	30-NOV-2009 14:16	926874	10-604	5.0	LANL	USE
009f0901.d	241540003	KXR2	30-NOV-2009 14:53	926874	10-604	1.0	LANL	USE
010f1001.d	1201981726	KXR2	30-NOV-2009 15:30	926874	10-604	1.0	MS	USE
011f1101.d	1201981727	KXR2	30-NOV-2009 16:06	926874	10-604	1.0	MSD	USE
012f1201.d	241540004	KXR2	30-NOV-2009 16:43	926874	10-604	1.0	LANL	USE
013f1301.d	WFI091118-01 D2	KXR2	30-NOV-2009 17:19		SDGa20170	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	30-NOV-2009 17:57		SDGa20170	1.0		CLEAN
015f1501.d	241540005	KXR2	30-NOV-2009 18:34	926874	10-604	20.0	LANL	USE

Instrument Batch: /chem/fid7.i/113009dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241540006	KXR2	30-NOV-2009 19:10	926874	10-604	1.0	LANL	USE

017f1701.d	241540007	KXR2	30-NOV-2009 19:47	926874	10-604	1.0	LANL	USE
018f1801.d	241540008	KXR2	30-NOV-2009 20:23	926874	10-604	1.0	LANL	USE
019f1901.d	241540009	KXR2	30-NOV-2009 21:00	926874	10-604	1.0	LANL	USE
020f2001.d	241540010	KXR2	30-NOV-2009 21:37	926874	10-604	1.0	LANL	USE
021f2101.d	241540011	KXR2	30-NOV-2009 22:14	926874	10-604	1.0	LANL	USE
022f2201.d	WFI091118-01 D3	KXR2	30-NOV-2009 22:51		SDGa20170	1.0		PASSES
023f2301.d	WFI091130-06 B4	KXR2	30-NOV-2009 23:28		SDGa20170	1.0		CLEAN
024f2401.d	241540012	KXR2	01-DEC-2009 00:05	926874	10-604	1.0	LANL	USE
025f2501.d	241540013	KXR2	01-DEC-2009 00:42	926874	10-604	1.0	LANL	USE
026f2601.d	241540014	KXR2	01-DEC-2009 01:19	926874	10-604	1.0	LANL	USE
027f2701.d	241540015	KXR2	01-DEC-2009 01:55	926874	10-604	1.0	LANL	USE
028f2801.d	241540016	KXR2	01-DEC-2009 02:33	926874	10-604	1.0	LANL	DUSE,OVERRANGE RERUN AT 10X
029f2901.d	241559001	KXR2	01-DEC-2009 03:10	926874	10-608-1	1.0	LANL	DUSE,OVERRANGE RERUN
030f3001.d	241559002	KXR2	01-DEC-2009 03:47	926874	10-608-1	1.0	LANL	USE
031f3101.d	WFI091118-01 D4	KXR2	01-DEC-2009 04:24		SDGa20170	1.0		PASSES
032f3201.d	WFI091130-06 B5	KXR2	01-DEC-2009 05:00		SDGa20170	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 12/03/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:120109DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	01-DEC-2009 11:32		SDGa14584	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	01-DEC-2009 12:08		SDGa14584	1.0		RTMARKER
003f0301.d	WFI091118-02 D1	KXR2	01-DEC-2009 12:45		SDGa14584	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	01-DEC-2009 13:22		SDGa14584	1.0		CLEAN
005f0501.d	241540016	KXR2	01-DEC-2009 13:59	926874	10-604	10.0	LANL	USE
006f0601.d	241559001	KXR2	01-DEC-2009 14:35	926874	10-608-1	1.0	LANL	USE
007f0701.d	WFI091118-02 D2	KXR2	01-DEC-2009 15:12		SDGa14584	1.0		PASSES
008f0801.d	WFI091130-06 B3	KXR2	01-DEC-2009 15:49		SDGa14584	1.0		CLEAN
009f0901.d	1201983217	KXR2	01-DEC-2009 16:26	927561	10-650	1.0	MB	USE
010f1001.d	1201983218	KXR2	01-DEC-2009 17:03	927561	10-650	1.0	LCS	USE
011f1101.d	241714002	KXR2	01-DEC-2009 17:40	927561	10-650	1.0	LANL	USE
012f1201.d	241718001	KXR2	01-DEC-2009 18:17	927561	10-653	1.0	LANL	USE
013f1301.d	241728002	KXR2	01-DEC-2009 18:54	927561	10-654	1.0	LANL	USE
014f1401.d	241750002	KXR2	01-DEC-2009 19:31	927561	10-655	1.0	LANL	USE
015f1501.d	241750003	KXR2	01-DEC-2009 20:08	927561	10-655	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241750004	KXR2	01-DEC-2009 20:44	927561	10-655	1.0	LANL	USE

018f1701.d	241750005	KXR2	01-DEC-2009 21:21	927561	10-655		1.0	LANL	USE
019f1801.d	WFI091118-02 D3	KXR2	01-DEC-2009 21:58		SDGa14584		1.0		PASSES
019f1901.d	WFI091130-06 B4	KXR2	01-DEC-2009 22:35		SDGa14584		1.0		CLEAN
020f2001.d	241750006	KXR2	01-DEC-2009 23:12	927561	10-655		1.0	LANL	USE
021f2101.d	241750007	KXR2	01-DEC-2009 23:49	927561	10-655		1.0	LANL	USE
022f2201.d	241750008	KXR2	02-DEC-2009 00:26	927561	10-655		1.0	LANL	USE
023f2301.d	241750009	KXR2	02-DEC-2009 01:03	927561	10-655		1.0	LANL	USE
024f2401.d	241750010	KXR2	02-DEC-2009 01:40	927561	10-655		1.0	LANL	USE
025f2501.d	241750011	KXR2	02-DEC-2009 02:16	927561	10-655		1.0	LANL	USE
026f2601.d	241899001	KXR2	02-DEC-2009 02:53	927561	10-687		20.0	LANL	DUSE,OVERRANGE RERUN @ 200X
027f2701.d	1201983219	KXR2	02-DEC-2009 03:31	927561	10-687		20.0	MS	DUSE,OVERRANGE RERUN @ 200X
028f2801.d	1201983220	KXR2	02-DEC-2009 04:08	927561	10-687		20.0	MSD	DUSE,OVERRANGE RERUN @ 200X
029f2901.d	WFI091118-02 D4	KXR2	02-DEC-2009 04:45		SDGa14584		1.0		PASSES
030f3001.d	WFI091130-06 B5	KXR2	02-DEC-2009 05:22		SDGa14584		1.0		CLEAN
031f3101.d	1201982260	KXR2	02-DEC-2009 05:58	927152	10-644		1.0	MB	USE
032f3201.d	1201982263	KXR2	02-DEC-2009 06:36	927152	10-644		1.0	LCS	USE
033f3301.d	241615001	KXR2	02-DEC-2009 07:13	927152	10-644		1.0	LANL	USE
034f3401.d	241615002	KXR2	02-DEC-2009 07:49	927152	10-644		1.0	LANL	USE
035f3501.d	241615003	KXR2	02-DEC-2009 08:26	927152	10-644		1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241615004	KXR2	02-DEC-2009 09:02	927152	10-644	1.0	LANL	USE
037f3701.d	241615005	KXR2	02-DEC-2009 09:39	927152	10-644	1.0	LANL	USE
038f3801.d	241615006	KXR2	02-DEC-2009 10:16	927152	10-644	1.0	LANL	USE
039f3901.d	WFI091118-02 D5	KXR2	02-DEC-2009 10:53		SDGa14584	1.0		PASSES
040f4001.d	WFI091130-06 B6	KXR2	02-DEC-2009 11:29		SDGa14584	1.0		CLEAN
041f4101.d	241615007	KXR2	02-DEC-2009 12:07	927152	10-644	1.0	LANL	USE

042f4201.d	241615008	KXR2	02-DEC-2009 12:43	927152	10-644		1.0	LANL	USE
043f4301.d	241615009	KXR2	02-DEC-2009 13:20	927152	10-644		1.0	LANL	USE
044f4401.d	241615010	KXR2	02-DEC-2009 13:56	927152	10-644		1.0	LANL	USE
045f4501.d	241615011	KXR2	02-DEC-2009 14:34	927152	10-644		1.0	LANL	USE
046f4601.d	241615012	KXR2	02-DEC-2009 15:11	927152	10-644		1.0	LANL	USE
047f4701.d	1201982261	KXR2	02-DEC-2009 15:47	927152	10-644		1.0	MS	USE
048f4801.d	1201982262	KXR2	02-DEC-2009 16:25	927152	10-644		1.0	MSD	USE
049f4901.d	WFI091118-02 D6	KXR2	02-DEC-2009 17:01		SDGa14584		1.0		PASSES
050f5001.d	WFI091130-06 B7	KXR2	02-DEC-2009 17:38		SDGa14584		1.0		CLEAN
051f5101.d	241615013	KXR2	02-DEC-2009 18:15	927152	10-644		1.0	LANL	USE
052f5201.d	241615014	KXR2	02-DEC-2009 18:53	927152	10-644		1.0	LANL	USE
053f5301.d	241615015	KXR2	02-DEC-2009 19:30	927152	10-644		1.0	LANL	USE
054f5401.d	241615016	KXR2	02-DEC-2009 20:07	927152	10-644		1.0	LANL	USE
055f5501.d	241615018	KXR2	02-DEC-2009 20:44	927152	10-644		1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120109dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241615020	KXR2	02-DEC-2009 21:21	927152	10-644	1.0	LANL	USE
057f5701.d	241697003	KXR2	02-DEC-2009 21:58	927152	10-648	1.0	LANL	USE
058f5801.d	241697004	KXR2	02-DEC-2009 22:35	927152	10-648	1.0	LANL	USE
059f5901.d	WFI091118-02 D7	KXR2	02-DEC-2009 23:12		SDGa14584	1.0		PASSES
060f6001.d	WFI091130-06 B8	KXR2	02-DEC-2009 23:49		SDGa14584	1.0		CLEAN
061f6101.d	241899001	KXR2	03-DEC-2009 00:26	927561	10-687	200.0	LANL	USE
062f6201.d	1201983219	KXR2	03-DEC-2009 01:03	927561	10-687	200.0	MS	USE
063f6301.d	1201983220	KXR2	03-DEC-2009 01:40	927561	10-687	200.0	MSD	USE
064f6401.d	WFI091118-02 D8	KXR2	03-DEC-2009 02:17		SDGa14584	1.0		PASSES
065f6501.d	WFI091130-06 B9	KXR2	03-DEC-2009 02:54		SDGa14584	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 926873 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201981725 MB	29–NOV–2009 20:09:19	30	1	0.03333
1201981728 LCS	29–NOV–2009 20:09:19	30	1	0.03333
241540001	29–NOV–2009 20:09:19	30.16	1	0.03316
241540002	29–NOV–2009 20:09:19	30.17	1	0.03315
241540003	29–NOV–2009 20:09:19	30.02	1	0.03331
1201981726 MS (241540003)	29–NOV–2009 20:09:19	30.03	1	0.0333
1201981727 MSD (241540003)	29–NOV–2009 20:09:19	30.17	1	0.03315
241540004	29–NOV–2009 20:09:19	30.15	1	0.03317
241540005	29–NOV–2009 20:09:19	30.02	1	0.03331
241540006	29–NOV–2009 20:09:19	30.09	1	0.03323
241540007	29–NOV–2009 20:09:19	30.16	1	0.03316
241540008	29–NOV–2009 20:09:19	30.01	1	0.03332
241540009	29–NOV–2009 20:09:19	30.07	1	0.03326
241540010	29–NOV–2009 20:09:19	30.02	1	0.03331
241540011	29–NOV–2009 20:09:19	30.02	1	0.03331
241540012	29–NOV–2009 20:09:19	30.12	1	0.0332
241540013	29–NOV–2009 20:09:19	30.15	1	0.03317
241540014	29–NOV–2009 20:09:19	30.01	1	0.03332
241540015	29–NOV–2009 20:09:19	30.19	1	0.03312
241540016	29–NOV–2009 20:09:19	30.02	1	0.03331
241559001	29–NOV–2009 20:09:19	30.08	1	0.03324
241559002	29–NOV–2009 20:09:19	30.03	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201981728	TPH DRO LCS	UE091030–08	1	mL
MS	1201981726	TPH DRO LCS	UE091030–08	1	mL
MSD	1201981727	TPH DRO LCS	UE091030–08	1	mL
SURR	All	20 ppm surrogate	WE09112t–04	1	mL
REGNT	All	Methylene Chloride	1234878–D	300	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/010f1001.d
Lab Smp Id: 1201981726 Client Smp ID: RE03-09-13868MS
Inj Date : 30-NOV-2009 15:30
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981726|1|
Misc Info : |FIDDRO_SF|926874|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	11.36220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			13827718	975.629	36.6	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.613	13.616	-0.003	460757	18.3530	0.69	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/010f1001.d
Date : 30-NOV-2009 15:30
Client ID: RE03-09-13868MS
Sample Info: |120198172611|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

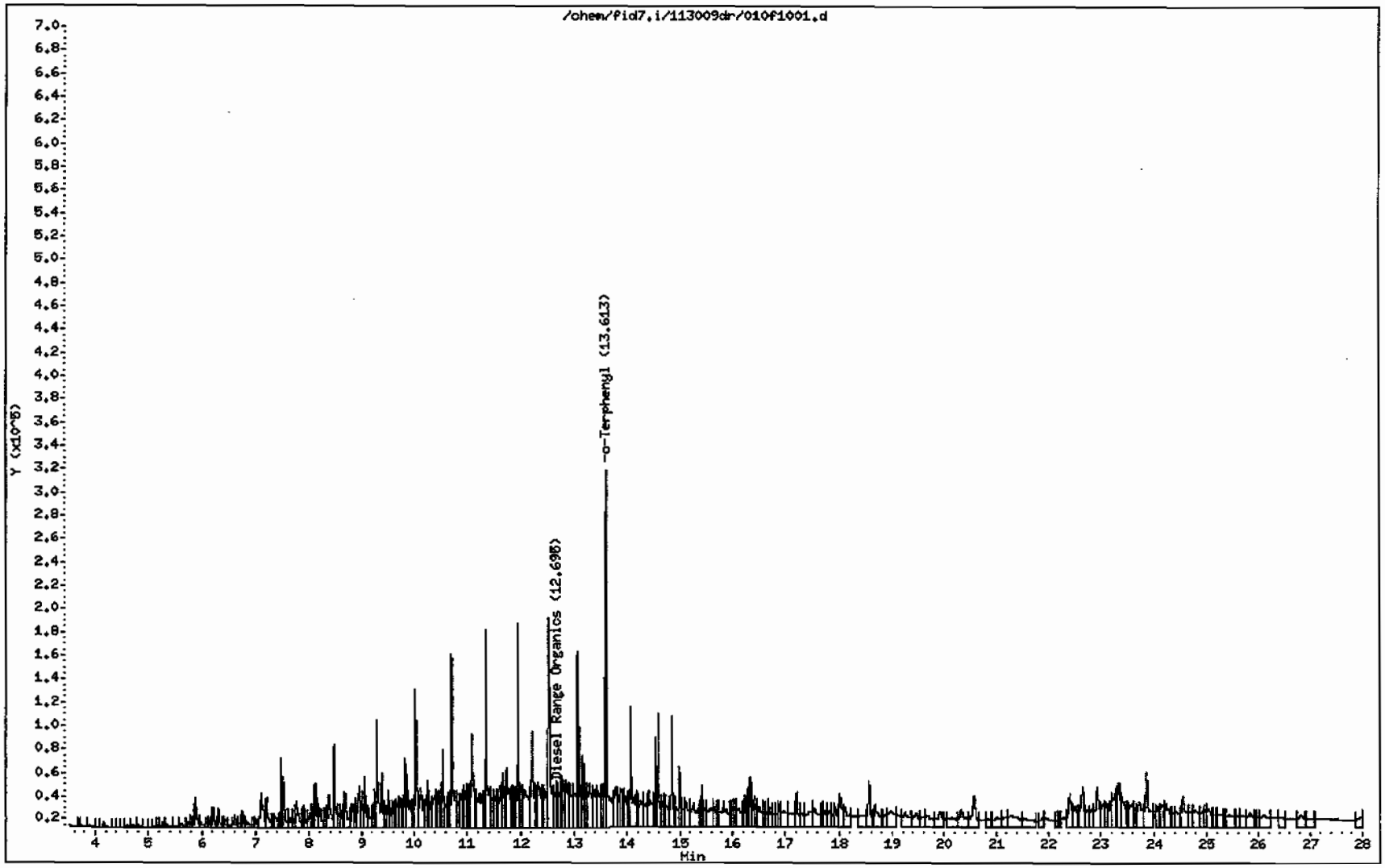

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/113009dr/011f1101.d
Lab Smp Id: 1201981727 Client Smp ID: RE03-09-13868MSD
Inj Date : 30-NOV-2009 16:06
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201981727|1|
Misc Info : |FIDDRO_SF|926874|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/113009dr/FID7a.i_b_DRO_111809.m
Meth Date : 01-Dec-2009 10:35 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 11 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	11.36220	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			13431354	947.663	35.4	
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.614	13.616	-0.002	461126	18.3676	0.69	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/113009dr/011f1101.d

Date : 30-NOV-2009 16:06

Client ID: RE03-09-13868MSD

Sample Info: !120198172711!

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

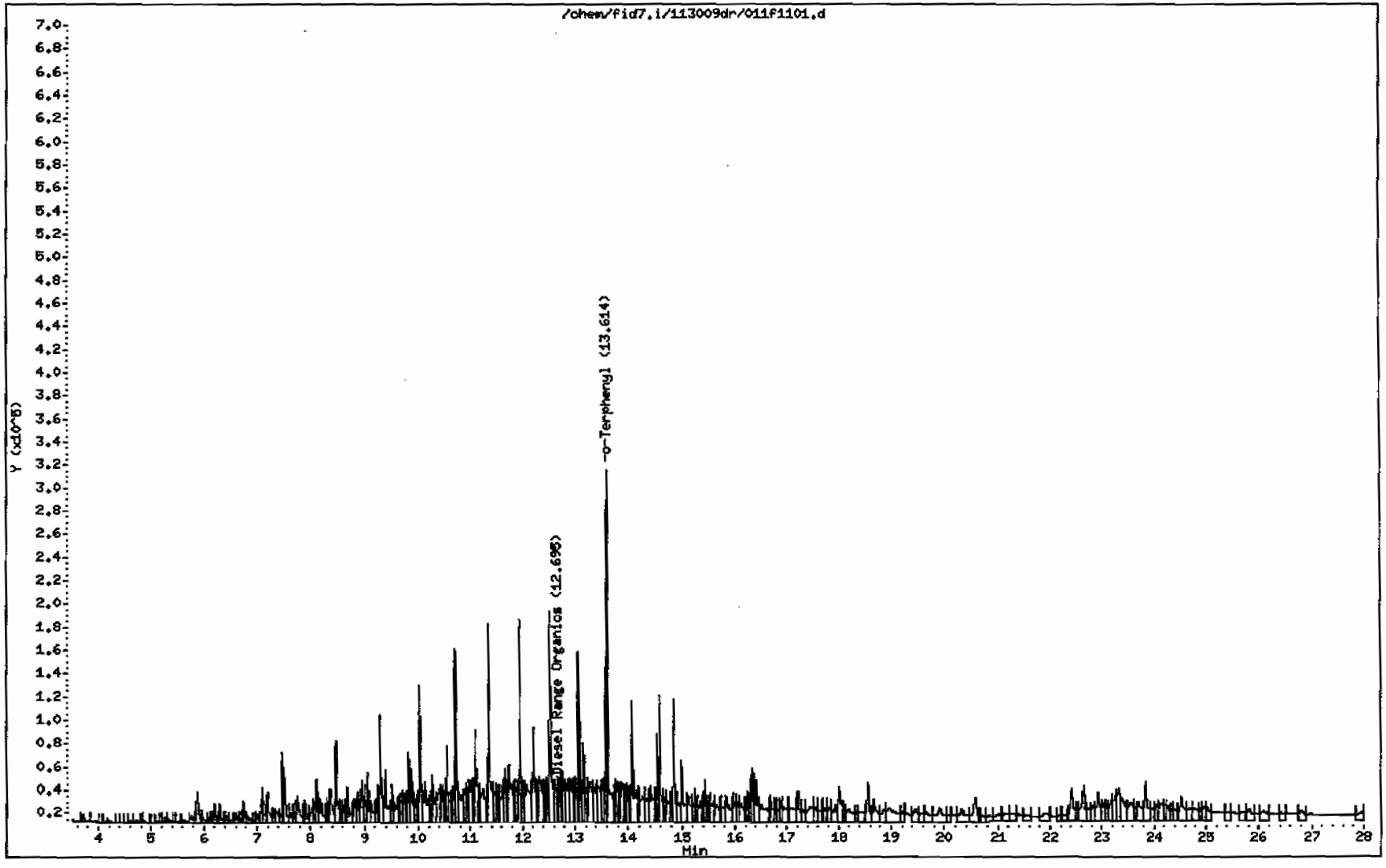

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-608-1

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927083
Prep Batch Number:	927082

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201982139	Method Blank (MB)
1201982140	241540004(RE03-09-13867) Matrix Spike (MS)
1201982141	241540004(RE03-09-13867) Matrix Spike Duplicate (MSD)
1201982142	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-604) was selected for the matrix spike and matrix spike duplicate analysis for this batch.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the

analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 12/17/09

Roadmap for LANL 10-608-1 PCB

This roadmap was analyzed by yip00818 on 12-05-2009, 11:21.
This roadmap was reviewed by jos00786 on 12-07-2009, 11:17.
This roadmap was packaged by sha01289 on 12-15-2009, 19:32.
This roadmap was reviewed by jim01140 on 12-17-2009, 13:43.
This roadmap was reviewed by yml on 12-17-2009, 14:14.
This roadmap was packaged by yml on 12-17-2009, 14:22.
This roadmap was packaged by jim01140 on 12-17-2009, 15:11.
This roadmap was validated by jim01140 on 12-17-2009, 15:17.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/058f5801.d	241559001	sample	04-DEC-2009	16:22	10-608-1.sub	RE03-10-6903	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/059f5901.d	241559002	sample	04-DEC-2009	16:35	10-608-1.sub	RE03-10-6902	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/058b5801.d	241559001	sample	04-DEC-2009	16:22	10-608-1.sub	RE03-10-6903	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/059b5901.d	241559002	sample	04-DEC-2009	16:35	10-608-1.sub	RE03-10-6902	1.00000	927083	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/034f3401-1.d	1201982139	mb	04-DEC-2009	11:28	10-608-1.sub	PBLK01	1.00000	927083	
☐	N	/chem/ecd1a.i/120409.b/035f3501-1.d	1201982142	lcs	04-DEC-2009	11:41	10-608-1.sub	PBLK01LCS	1.00000	927083	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/034b3401-1.d	1201982139	mb	04-DEC-2009	11:28	10-608-1.sub	PBLK01	1.00000	927083	
☐	N	/chem/ecd1a.i/120409.b/035b3501-1.d	1201982142	lcs	04-DEC-2009	11:41	10-608-1.sub	PBLK01LCS	1.00000	927083	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559002	**Date Received:**	11/20/2009 08:50	**%Moisture:**	14.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6902	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 16:35	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	059f5901.d	**Column:**	1 CLP1	**Level:**	LOW
	059b5901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.90	ug/kg	1.30	3.90	1
11104-28-2	Aroclor-1221	U	3.90	ug/kg	1.30	3.90	1
11141-16-5	Aroclor-1232	U	3.90	ug/kg	1.30	3.90	1
53469-21-9	Aroclor-1242	U	3.90	ug/kg	1.30	3.90	1
12672-29-6	Aroclor-1248	U	3.90	ug/kg	1.30	3.90	1
11097-69-1	Aroclor-1254	P	16.1	ug/kg	1.30	3.90	1
11096-82-5	Aroclor-1260		17.9	ug/kg	1.30	3.90	2

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–608–1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–6903	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 16:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	058f5801.d	**Column:**	1 CLP1	**Level:**	LOW
	058b5801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.55	ug/kg	1.18	3.55	1
11104–28–2	Aroclor–1221	U	3.55	ug/kg	1.18	3.55	1
11141–16–5	Aroclor–1232	U	3.55	ug/kg	1.18	3.55	1
53469–21–9	Aroclor–1242	U	3.55	ug/kg	1.18	3.55	1
12672–29–6	Aroclor–1248	U	3.55	ug/kg	1.18	3.55	1
11097–69–1	Aroclor–1254	U	3.55	ug/kg	1.18	3.55	1
11096–82–5	Aroclor–1260		4.10	ug/kg	1.18	3.55	2

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-608-1

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201982139	MB for batch 927082	77	75	79	81
1201982142	LCS for batch 927082	72	70	77	84
241559001	RE03-10-6903	70	70	60	62
241559002	RE03-10-6902	57	55	57	61

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-608-1
Client ID: LCS for batch 927082
Lab Sample ID: 1201982142
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:41
Dilution: 1
Prep Batch ID: 927082
Batch ID: 927083

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	25.0	75	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	28.6	86	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MS
Lab Sample ID: 1201982140
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 12:44
Prep Batch ID: 927082
Batch ID: 927083
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	38.0	0.00	U	26.2	69	23-117
11096-82-5	MS	Aroclor-1260	38.0	6.80		32.9	69	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-604
Client ID: RE03-09-13867MSD
Lab Sample ID: 1201982141
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 12.3
Analysis Date: 12/04/2009 12:56
Prep Batch ID: 927082
Batch ID: 927083
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	38.0	0.00	U	26.9	71	23-117	3	0-30
11096-82-5	MSD Aroclor-1260	38.0	6.80		34.2	72	27-116	4	0-30

Method Blank Summary

SDG Number:	10-608-1	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927082	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	034b3401-1.d 034f3401-1.d
Lab Sample ID:	1201982139			Analyzed:	12/04/09 11:28
Column:	CLP2 CLP1	Prep Date:	11/29/2009 16:38		
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927082	1201982142	035f3501-1.d 035b3501-1.d	12/04/09	1141
04 RE03-10-6903	241559001	058f5801.d 058b5801.d	12/04/09	1622
05 RE03-10-6902	241559002	059f5901.d 059b5901.d	12/04/09	1635

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**	**Date Collected:**	**11/18/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241559002**	**Date Received:**	**11/20/2009 08:50**	**%Moisture:**	**14.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-6902**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 16:35**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**059f5901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	059b5901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.90	ug/kg	1.30	3.90	1
11104-28-2	Aroclor-1221	U	3.90	ug/kg	1.30	3.90	1
11141-16-5	Aroclor-1232	U	3.90	ug/kg	1.30	3.90	1
53469-21-9	Aroclor-1242	U	3.90	ug/kg	1.30	3.90	1
12672-29-6	Aroclor-1248	U	3.90	ug/kg	1.30	3.90	1
11097-69-1	Aroclor-1254	P	16.1	ug/kg	1.30	3.90	1
11096-82-5	Aroclor-1260		17.9	ug/kg	1.30	3.90	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/059f5901.d
Lab Smp Id: 241559002 Client Smp ID: RE03-10-6902
Inj Date : 04-DEC-2009 16:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241559002|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-10-6902|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	14.65250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	51048267	114.388	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	46237381	113.117	4.4	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.287	3.279	0.008	14153848	923.467	36.0	80.00- 120.00	100.00
3.432	3.435	-0.003	3684729	176.049	6.9	90.43- 130.43	26.03
3.665	3.668	-0.003	4444544	167.619	6.5	30.38- 70.38	31.40
3.829	3.832	-0.003	4003167	196.240	7.6	11.32- 51.32	28.28

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
3.936	3.940	-0.004	12228410	604.422	23.6	423.12- 463.12	86.40
		Average of Peak Concentrations =			16.1		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	7164867	334.067	13.0	80.00- 120.00	100.00
3.936	3.938	-0.002	12228410	379.822	14.8	131.51- 171.51	170.67
4.167	4.168	-0.001	8977965	438.857	17.1	73.81- 113.81	125.31
4.309	4.312	-0.003	5904331	294.015	11.5	75.82- 115.82	82.41
4.489	4.491	-0.002	16778851	362.402	14.1	202.56- 242.56	234.18
		Average of Peak Concentrations =			14.1		

Data File: /chem/ecd1a.i/120409.b/059f5901.d

Page 1

Date : 04-DEC-2009 16:35

Client ID: RE03-10-6902

Instrument: ecd1a.i

Sample Info: |24155900211|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

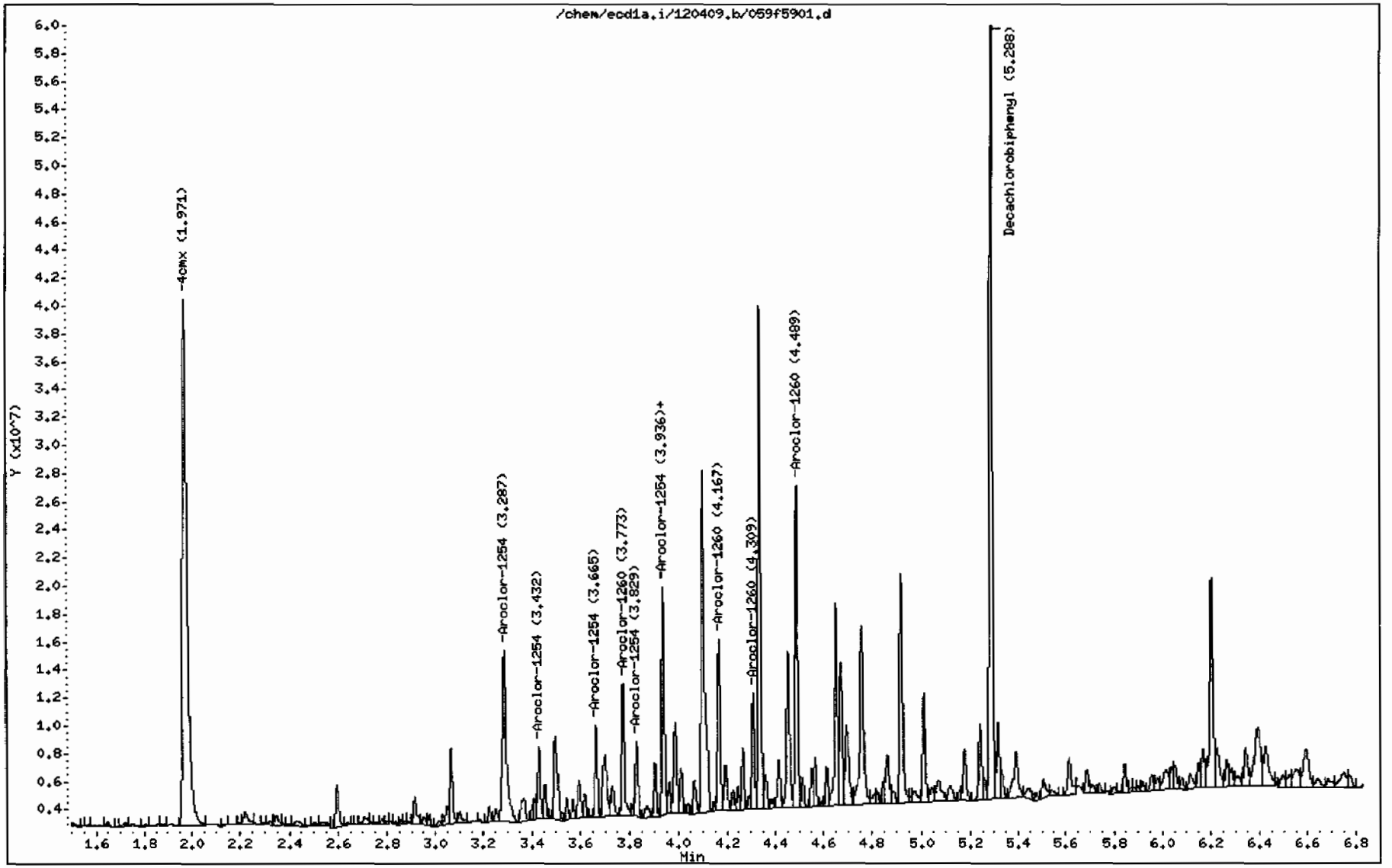

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/059b5901.d
Lab Smp Id: 241559002 Client Smp ID: RE03-10-6902
Inj Date : 04-DEC-2009 16:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241559002|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-10-6902|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	14.65250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	41015185	110.465	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	36970688	122.999	4.8	80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1		
3.421	3.422	-0.001	1524562	182.944	7.1	80.00- 120.00	100.00(M)
3.844	3.846	-0.002	2591105	173.281	6.8	161.63- 201.63	169.96
3.961	3.962	-0.001	3033135	185.179	7.2	181.54- 221.54	198.95
4.237	4.239	-0.002	5360061	242.037	9.4	260.06- 300.06	351.58

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
6 Aroclor-1254 (continued)							
4.373	4.375	-0.002	3716381	220.252	8.6	195.48- 235.48	243.77
Average of Peak Concentrations =					7.8		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	7478888	413.955	16.1	80.00- 120.00	100.00(M)
4.478	4.479	-0.001	8598216	388.058	15.1	106.71- 146.71	114.97
4.743	4.745	-0.002	9515507	538.277	21.0	80.51- 120.51	127.23
4.918	4.919	-0.001	8004965	465.029	18.1	79.62- 119.62	107.03
5.065	5.067	-0.002	18897715	489.209	19.1	209.66- 249.66	252.68
Average of Peak Concentrations =					17.9		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/059b5901.d
Date : 04-DEC-2009 16:35
Client ID: RE03-10-6902
Sample Info: |2415590021|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

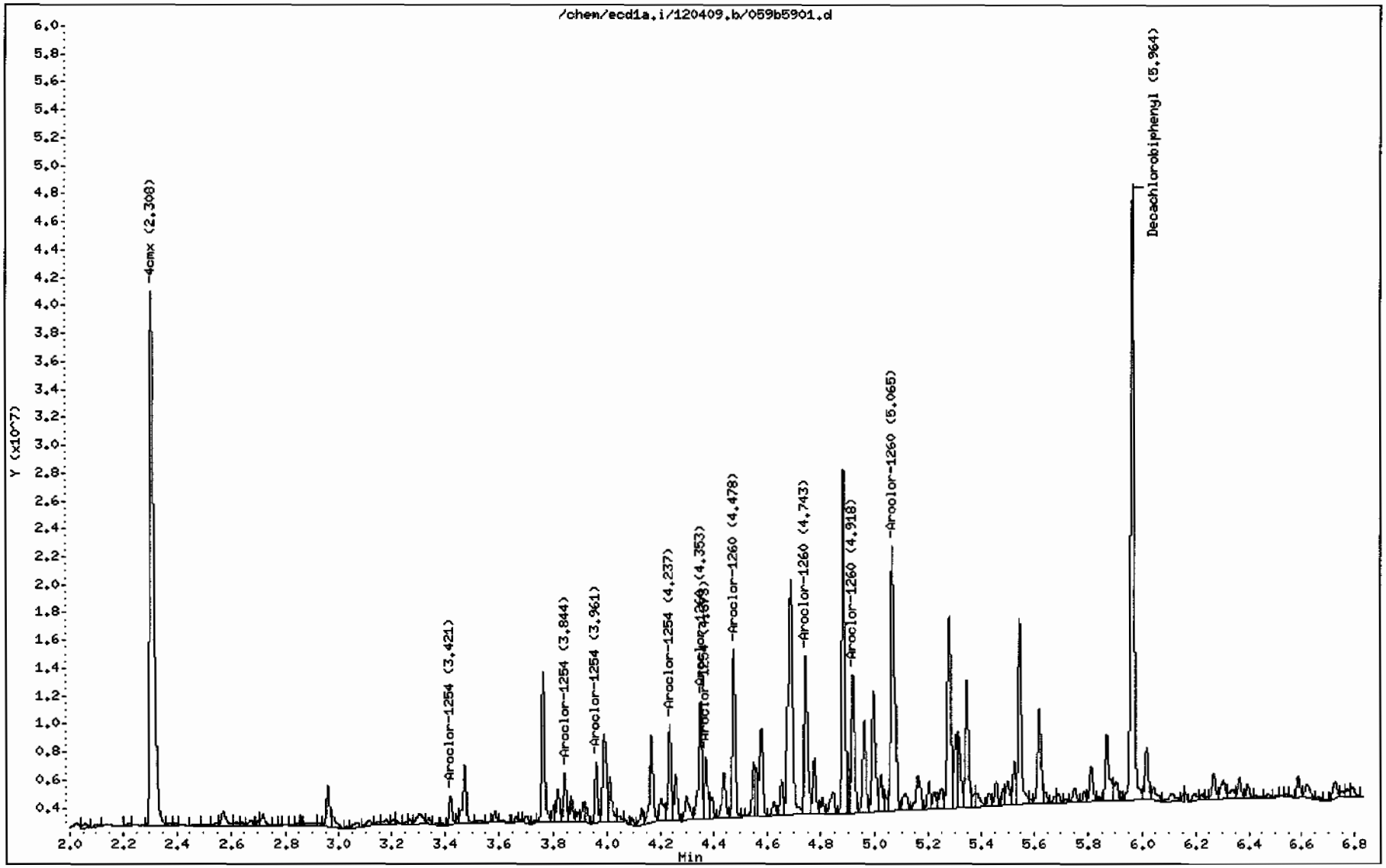

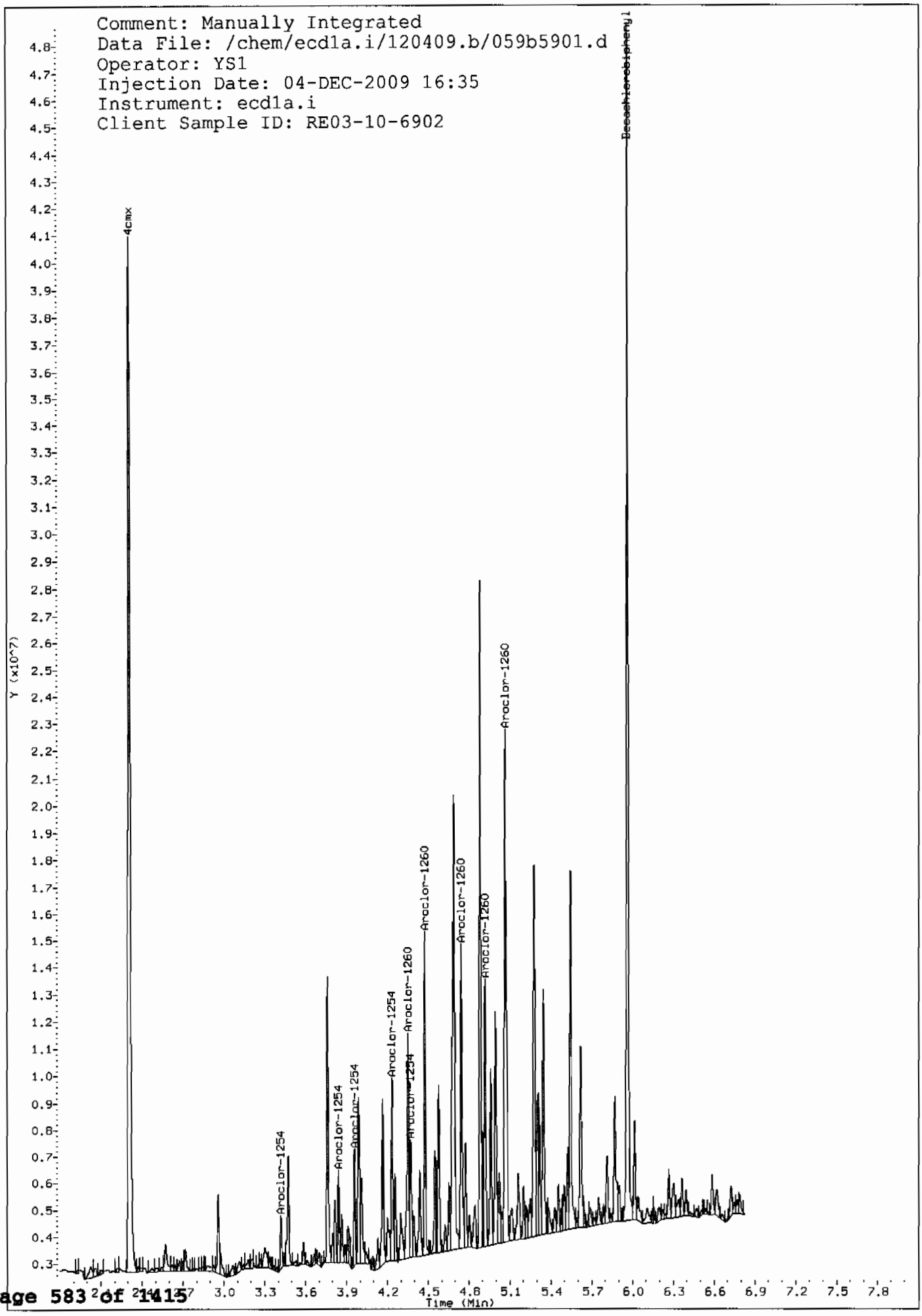
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/059b5901.d
Operator: YS1
Injection Date: 04-DEC-2009 16:35
Instrument: ecd1a.i
Client Sample ID: RE03-10-6902
4cmx
Decachlorobiphenyl
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^7)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-059b59[illegible]1.d
Operator: YS1
Injection Date: 04-DEC-2009 16:35
Instrument: ecd1a.i
Client Sample ID: RE03-10-6902

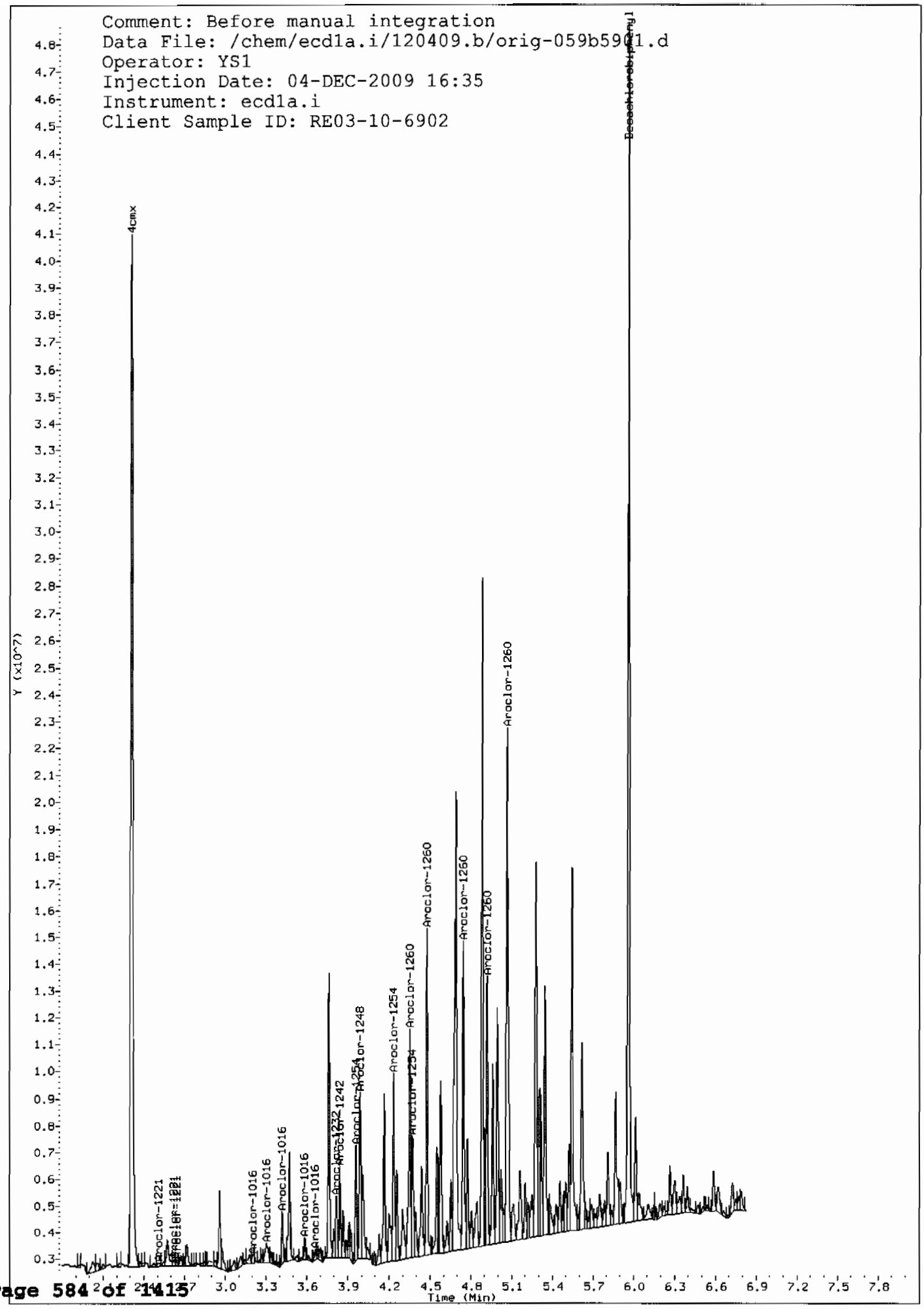

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-608-1	**Date Collected:**	11/18/2009 12:00	**Matrix:**	S
Lab Sample ID:	241559001	**Date Received:**	11/20/2009 08:50	**%Moisture:**	6.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-6903	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927083	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 16:22	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:38	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	058f5801.d	**Column:**	1 CLP1	**Level:**	LOW
	058b5801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260		4.10	ug/kg	1.18	3.55	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/058f5801.d
Lab Smp Id: 241559001 Client Smp ID: RE03-10-6903
Inj Date : 04-DEC-2009 16:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241559001|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-10-6903|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	6.46570	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	62652000	140.389	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	49327631	120.677	4.3	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	3389664	158.045	5.6	80.00- 120.00	100.00(aM)
3.938	3.938	0.000	3979441	123.604	4.4	131.51- 171.51	117.40
4.167	4.168	-0.001	1428610	69.8327	2.5	73.81- 113.81	42.15
4.311	4.312	-0.001	755146	37.6036	1.3	75.82- 115.82	22.28

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260 (continued)							
4.491	4.491	0.000	3653065	78.9016	2.8	202.56- 242.56	107.77
Average of Peak Concentrations =					3.3		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/058f5801.d

Date : 04-DEC-2009 16:22

Client ID: RE03-10-6903

Sample Info: |241559001|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

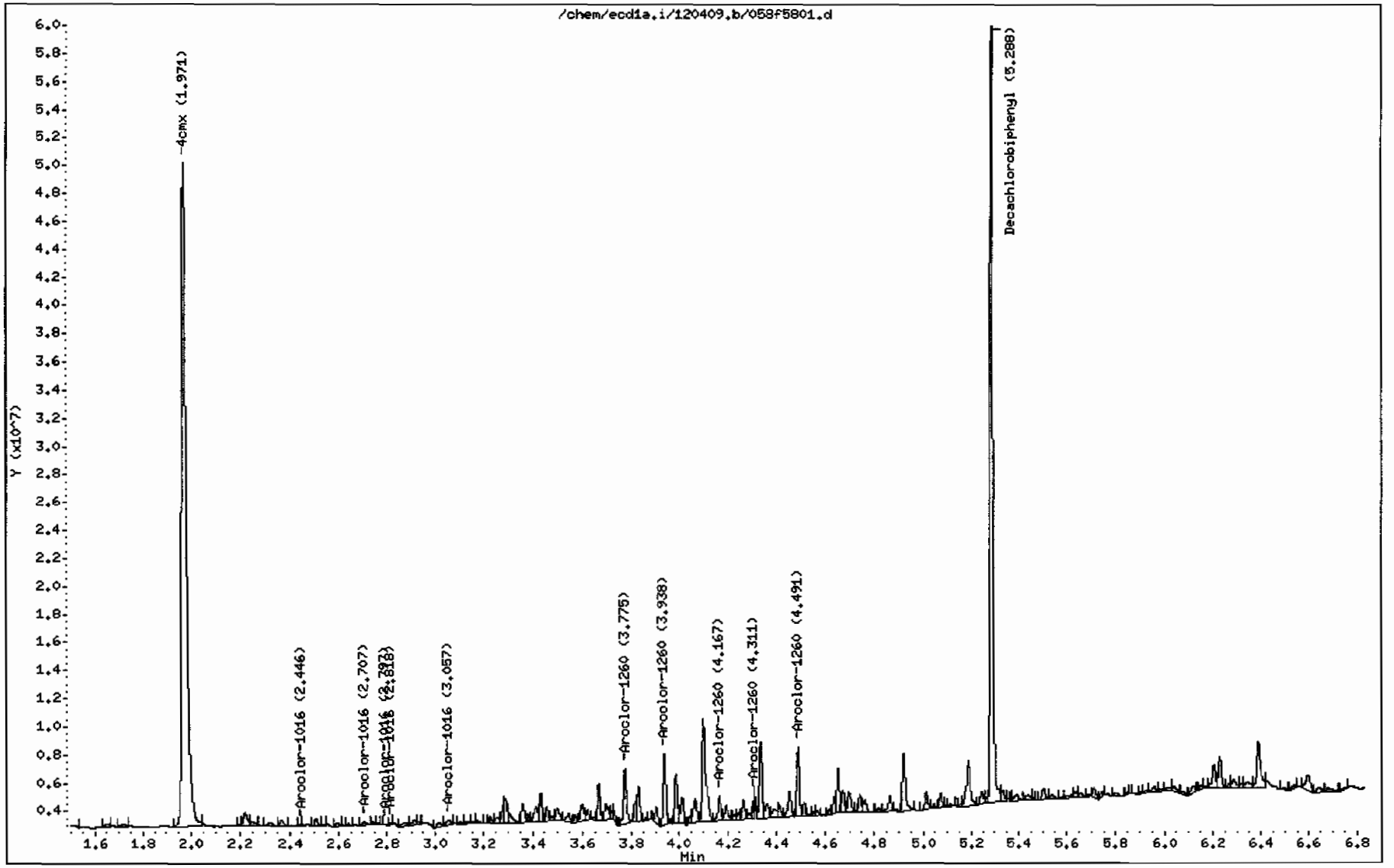

Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/05815801.d
Operator: YS1
Injection Date: 04-DEC-2009 16:22
Instrument: ecd1a.i
Client Sample ID: RE03-10-6903

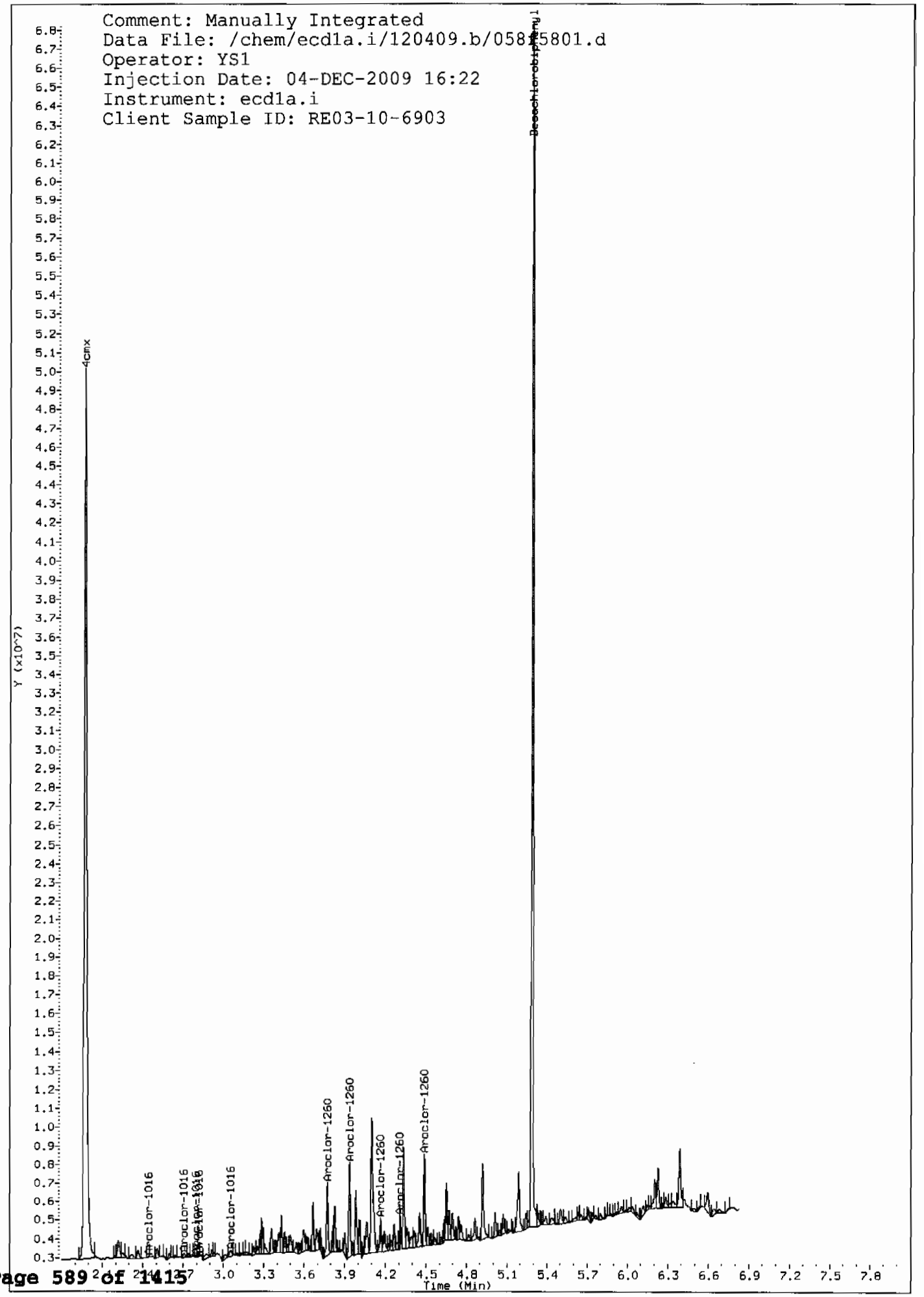

Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-058f5801.d
Operator: YS1
Injection Date: 04-DEC-2009 16:22
Instrument: ecd1a.i
Client Sample ID: RE03-10-6903

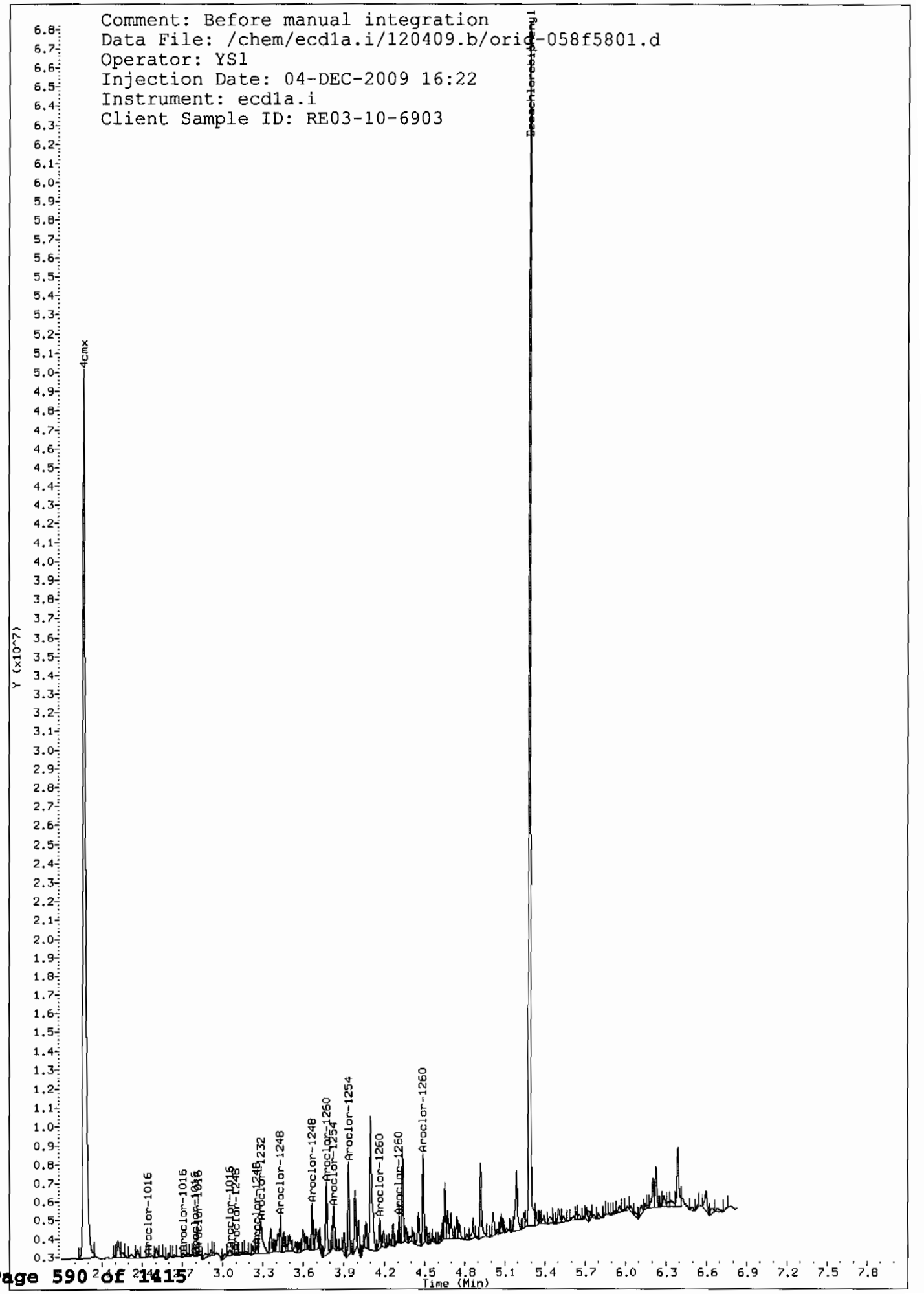

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/058b5801.d
Lab Smp Id: 241559001 Client Smp ID: RE03-10-6903
Inj Date : 04-DEC-2009 16:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241559001|1|
Misc Info : |ECD82P_1SF|927083|SVAF|LANL|SOIL|RE03-10-6903|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	6.46570	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	51830763	139.594	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	37028885	123.192	4.4	80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	2012097	111.369	3.9	80.00- 120.00	100.00
4.478	4.479	-0.001	3339640	150.726	5.3	106.50- 146.50	165.98
4.746	4.745	0.001	2077742	117.534	4.2	80.04- 120.04	103.26
4.919	4.919	0.000	1438902	83.5895	3.0	79.68- 119.68	71.51

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
**	******	********	========	=======	=======	==========	=====
7 Aroclor-1260 (continued)							
5.066	5.067	-0.001	4369144	113.105	4.0	209.23- 249.23	217.14
Average of Peak Concentrations =					4.1		

Data File: /chem/ecd1a.i/120409.b/058b5801.d
Date : 04-DEC-2009 16:22
Client ID: RE03-10-6903
Sample Info: |241559001|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

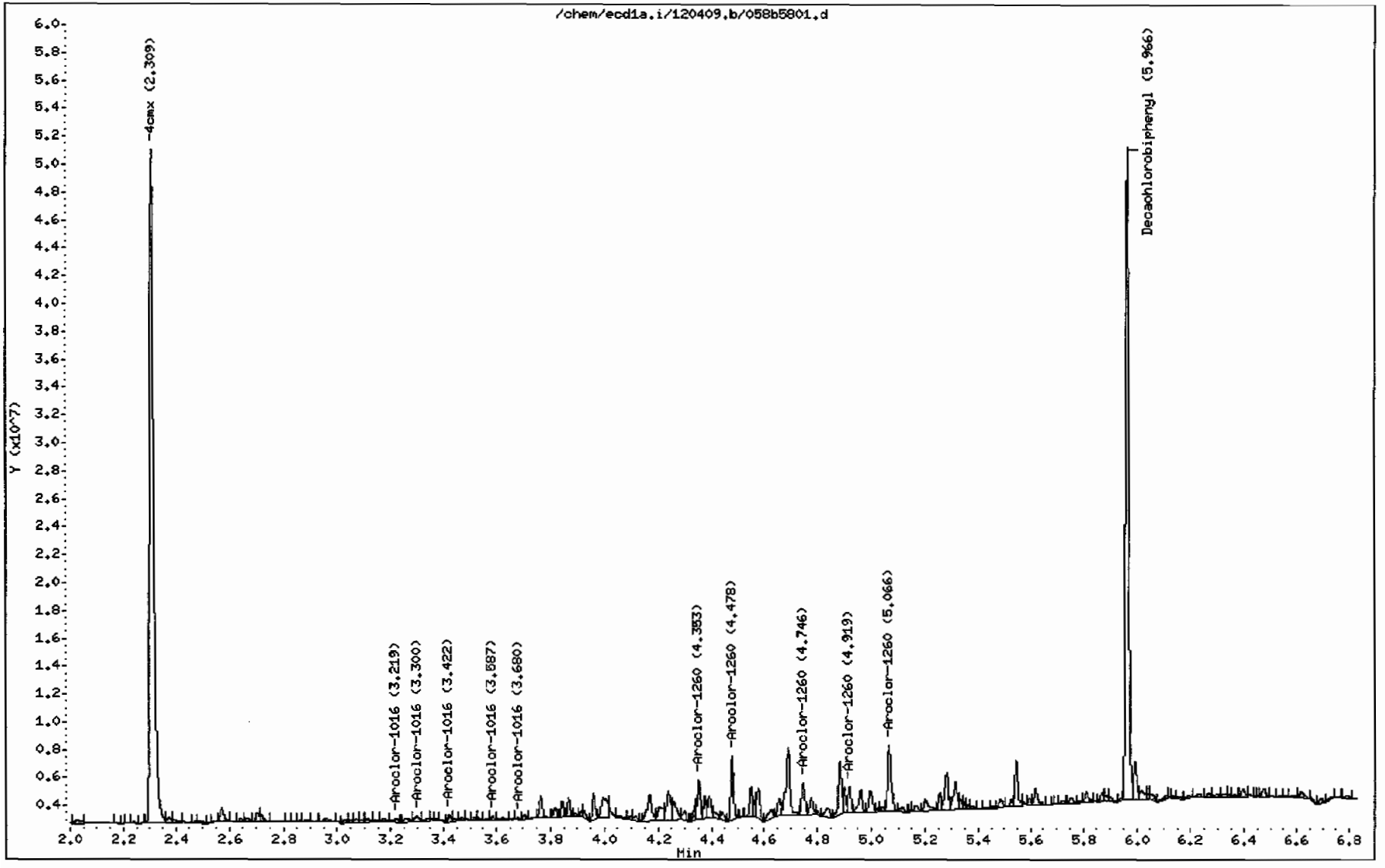

STANDARDS DATA

Report Date: 05-Dec-2009 10:57

Calibration History

Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Start Cal Date: 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010f1001.d
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029f2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023f2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017f1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011f1101.d
Cal Level: 2 , Cal Amount: 200.00000		
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011f1101.d
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030f3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024f2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018f1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012f1201.d
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031f3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025f2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019f1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014f1401.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032f3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026f2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020f2001.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010f1001.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013f1301.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008f0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007f0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006f0601.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013f1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014f1401.d
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033f3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027f2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021f2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:10	AR1660	/chem/ecd1a.i/120409.b/091f9101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:58	AR1660	/chem/ecd1a.i/120409.b/085f8501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:27	AR1660	/chem/ecd1a.i/120409.b/073f7301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:00	PCB	/chem/ecd1a.i/120409.b/061f6101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 16:01	AR1660	/chem/ecd1a.i/120409.b/056f5601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 13:34	AR1660	/chem/ecd1a.i/120409.b/044f4401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 11:07	AR1660	/chem/ecd1a.i/120409.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:33	AR1660	/chem/ecd1a.i/120409.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:13	AR1660	/chem/ecd1a.i/120409.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:57	AR1254	/chem/ecd1a.i/120409.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:47	AR1268	/chem/ecd1a.i/120409.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:36	AR1262	/chem/ecd1a.i/120409.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:26	AR1221	/chem/ecd1a.i/120409.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:15	AR1232	/chem/ecd1a.i/120409.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:05	AR1248	/chem/ecd1a.i/120409.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:54	AR1242	/chem/ecd1a.i/120409.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:33	AR1660	/chem/ecd1a.i/120409.b/002f0201.d

Report Date: 05-Dec-2009 10:57

Calibration History

Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Start Cal Date: 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029b2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023b2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017b1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011b1101.d
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010b1001.d
Cal Level: 2 , Cal Amount: 200.00000		
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030b3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024b2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018b1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012b1201.d
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011b1101.d
Cal Level: 3 , Cal Amount: 500.00000		
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031b3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025b2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019b1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014b1401.d
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012b1201.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032b3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026b2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020b2001.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013b1301.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010b1001.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008b0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007b0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006b0601.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013b1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033b3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027b2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021b2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015b1501.d
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014b1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:58	AR1660	/chem/ecd1a.i/120409.b/085b8501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:00	AR1660	/chem/ecd1a.i/120409.b/061b6101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:10	AR1660	/chem/ecd1a.i/120409.b/091b9101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:27	AR1660	/chem/ecd1a.i/120409.b/073b7301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 16:01	AR1660	/chem/ecd1a.i/120409.b/056b5601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 13:34	AR1660	/chem/ecd1a.i/120409.b/044b4401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 11:07	AR1660	/chem/ecd1a.i/120409.b/032b3201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:33	AR1660	/chem/ecd1a.i/120409.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:13	AR1660	/chem/ecd1a.i/120409.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:57	AR1254	/chem/ecd1a.i/120409.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:47	AR1268	/chem/ecd1a.i/120409.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:36	AR1262	/chem/ecd1a.i/120409.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:26	AR1221	/chem/ecd1a.i/120409.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:15	AR1232	/chem/ecd1a.i/120409.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:05	AR1248	/chem/ecd1a.i/120409.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:54	AR1242	/chem/ecd1a.i/120409.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:33	AR1660	/chem/ecd1a.i/120409.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 08:33 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.430	2.400-2.460	1.709e+04
	2.719	2.689-2.749	2.124e+04
	2.800	2.770-2.830	1.403e+04
	2.838	2.808-2.868	8.417e+03
	3.049	3.019-3.079	1.079e+04
63 4,4-DDD	3.956	3.936-3.976	4.873e+05
64 4,4-DDE	3.607	3.587-3.627	4.621e+05
62 4,4-DDT	4.119	4.099-4.139	1.399e+05
2 Aroclor-1221	2.084	2.054-2.114	5.950e+03
	2.179	2.148-2.208	3.282e+03
	2.204	2.174-2.234	1.440e+04
3 Aroclor-1232	2.431	2.401-2.461	7.786e+03
	2.720	2.690-2.750	1.025e+04
	2.801	2.771-2.831	6.616e+03
	3.050	3.020-3.080	4.921e+03
	3.305	3.275-3.335	4.520e+03
4 Aroclor-1242	2.430	2.400-2.460	1.503e+04
	2.720	2.690-2.750	1.854e+04
	2.839	2.809-2.869	7.392e+03
	3.050	3.020-3.080	9.592e+03
	3.303	3.273-3.333	9.387e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.101	3.071-3.131	9.766e+03
	3.253	3.223-3.283	8.699e+03
	3.304	3.274-3.334	1.693e+04
	3.436	3.406-3.466	1.387e+04
	3.668	3.638-3.698	9.663e+03
6 Aroclor-1254	3.279	3.249-3.309	1.533e+04
	3.435	3.405-3.465	2.093e+04
	3.668	3.638-3.698	2.652e+04
	3.832	3.802-3.862	2.040e+04
	3.940	3.910-3.970	2.023e+04
7 Aroclor-1260	3.776	3.746-3.806	2.145e+04
	3.938	3.908-3.968	3.220e+04
	4.168	4.138-4.198	2.046e+04
	4.312	4.282-4.342	2.008e+04
	4.491	4.461-4.521	4.630e+04
8 Aroclor-1262	3.776	3.746-3.806	1.805e+04
	3.939	3.909-3.969	2.434e+04
	4.169	4.139-4.199	3.192e+04
	4.312	4.282-4.342	2.761e+04
	4.491	4.461-4.521	5.903e+04
9 Aroclor-1268	4.676	4.646-4.706	6.476e+04
	4.700	4.670-4.730	6.428e+04
	4.811	4.781-4.841	4.874e+04
	5.015	4.985-5.045	2.069e+04
	5.180	5.150-5.210	1.402e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.973	1.943-2.003	4.463e+05
$ 12 Decachlorobiphenyl	5.289	5.259-5.319	4.088e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 08:33 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.213	3.183-3.243	1.686e+04
	3.296	3.266-3.326	1.154e+04
	3.422	3.392-3.452	6.951e+03
	3.587	3.557-3.617	9.181e+03
	3.663	3.633-3.693	8.509e+03
62 4,4-DDT	4.695	4.675-4.715	8.846e+04
63 4,4-DDE	4.163	4.143-4.183	3.629e+05
64 4,4-DDD	4.509	4.489-4.529	3.599e+05
2 Aroclor-1221	2.509	2.478-2.538	5.108e+03
	2.603	2.574-2.634	3.283e+03
	2.644	2.614-2.674	1.145e+04
3 Aroclor-1232	2.645	2.615-2.675	7.297e+03
	3.213	3.183-3.243	8.233e+03
	3.297	3.267-3.327	5.504e+03
	3.588	3.558-3.618	4.272e+03
	3.822	3.792-3.852	4.143e+03
4 Aroclor-1242	3.212	3.182-3.242	1.482e+04
	3.296	3.266-3.326	1.016e+04
	3.587	3.557-3.617	8.262e+03
	3.663	3.633-3.693	7.732e+03
	3.849	3.819-3.879	9.404e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.422	3.392-3.452	1.037e+04
	3.588	3.558-3.618	1.280e+04
	3.822	3.792-3.852	1.461e+04
	3.849	3.819-3.879	1.623e+04
	3.987	3.957-4.017	1.566e+04
6 Aroclor-1254	3.422	3.392-3.452	8.334e+03
	3.846	3.816-3.876	1.495e+04
	3.962	3.932-3.992	1.638e+04
	4.239	4.209-4.269	2.215e+04
	4.375	4.345-4.405	1.687e+04
7 Aroclor-1260	4.354	4.324-4.384	1.807e+04
	4.479	4.449-4.509	2.216e+04
	4.745	4.715-4.775	1.768e+04
	4.919	4.889-4.949	1.721e+04
	5.067	5.037-5.097	3.863e+04
8 Aroclor-1262	4.480	4.450-4.510	1.838e+04
	4.745	4.715-4.775	2.607e+04
	4.920	4.890-4.950	2.257e+04
	5.066	5.036-5.096	4.615e+04
	5.280	5.250-5.310	3.242e+04
9 Aroclor-1268	5.279	5.249-5.309	5.681e+04
	5.306	5.276-5.336	5.436e+04
	5.456	5.426-5.486	4.114e+04
	5.620	5.590-5.650	1.776e+04
	5.814	5.784-5.844	1.099e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.309	2.279-2.339	3.713e+05
$ 12 Decachlorobiphenyl	5.966	5.936-5.996	3.006e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/110909.b/010f1001.d
Level 2: /chem/ecd1a.i/110909.b/011f1101.d
Level 3: /chem/ecd1a.i/110909.b/012f1201.d
Level 4: /chem/ecd1a.i/111009b.b/032f3201.d
Level 5: /chem/ecd1a.i/110909.b/014f1401.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20658	18482	17001	15583	13722	17089	15.563
(2)	24543	22131	20883	20176	18452	21237	10.722
(3)	16548	15095	13829	12774	11916	14032	13.123
(4)	9698	9043	8332	7728	7282	8417	11.585
(5)	12784	11504	10586	9800	9293	10793	12.897
63 4,4-DDD	+++++	+++++	+++++	487303	+++++	487303	0.000
64 4,4-DDE	+++++	+++++	+++++	462145	+++++	462145	0.000
62 4,4-DDT	+++++	+++++	+++++	139891	+++++	139891	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5950	+++++	5950	0.000
(2)	+++++	+++++	+++++	3282	+++++	3282	0.000
(3)	+++++	+++++	+++++	14405	+++++	14405	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7786	+++++	7786	0.000
(2)	+++++	+++++	+++++	10255	+++++	10255	0.000
(3)	+++++	+++++	+++++	6616	+++++	6616	0.000
(4)	+++++	+++++	+++++	4921	+++++	4921	0.000
(5)	+++++	+++++	+++++	4520	+++++	4520	0.000
4 Aroclor-1242(1)	17412	15553	15178	14343	12670	15031	11.528
(2)	20986	19324	18457	17508	16436	18542	9.380
(3)	8533	7719	7363	6848	6494	7392	10.720
(4)	11366	9954	9518	8750	8373	9592	12.199
(5)	10712	9680	9208	8779	8557	9387	9.120
5 Aroclor-1248(1)	11448	10174	9548	8978	8682	9766	11.261
(2)	10027	9078	8468	8103	7821	8699	10.098
(3)	19335	17548	16321	15814	15622	16928	9.102
(4)	16098	14147	13625	13026	12432	13866	10.125
(5)	11252	10016	9528	9039	8481	9663	10.921

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

	Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
	6 Aroclor-1254(1)	17517	15970	14901	14485	13761	15327	9.541
	(2)	23476	21771	20197	19941	19266	20930	8.092
	(3)	28419	27206	25987	25832	25135	26516	4.901
	(4)	21904	21069	19942	19739	19343	20399	5.185
	(5)	21473	21181	19923	19591	18991	20232	5.235
	7 Aroclor-1260(1)	24604	22318	20876	20266	19173	21447	9.785
	(2)	35844	33345	31633	30611	29543	32195	7.686
	(3)	22847	21262	20066	19413	18699	20458	7.992
	(4)	22180	20845	19753	19032	18598	20082	7.215
	(5)	49574	47568	45834	44759	43761	46299	4.992
	8 Aroclor-1262(1)	+++++	+++++	+++++	18047	+++++	18047	0.000
	(2)	+++++	+++++	+++++	24345	+++++	24345	0.000
	(3)	+++++	+++++	+++++	31917	+++++	31917	0.000
	(4)	+++++	+++++	+++++	27612	+++++	27612	0.000
	(5)	+++++	+++++	+++++	59026	+++++	59026	0.000
	9 Aroclor-1268(1)	68327	66126	65237	63266	60847	64761	4.392
	(2)	68601	64443	65877	62667	59795	64277	5.158
	(3)	52175	49424	49256	47362	45464	48736	5.146
	(4)	22181	21170	20804	20096	19178	20686	5.461
	(5)	146769	142521	141652	137032	132906	140176	3.807
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	11 4cmx	466250	545108	422258	406785	390967	446274	13.887
$	12 Decachlorobiphenyl	430420	504395	383103	370310	355553	408756	14.772

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/111009b.b/029b2901.d
Level 2: /chem/ecd1a.i/111009b.b/030b3001.d
Level 3: /chem/ecd1a.i/111009b.b/031b3101.d
Level 4: /chem/ecd1a.i/111009b.b/032b3201.d
Level 5: /chem/ecd1a.i/111009b.b/033b3301.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20143	17832	16713	15449	14165	16860	13.590
(2)	14035	12488	11357	10499	9300	11536	15.783
(3)	8596	7569	6813	6230	5549	6951	17.011
(4)	11079	9913	9060	8322	7528	9181	15.037
(5)	10190	9095	8398	7765	7096	8509	14.067
62 4,4-DDT	+++++	+++++	+++++	88461	+++++	88461	0.000
63 4,4-DDE	+++++	+++++	+++++	362852	+++++	362852	0.000
64 4,4-DDD	+++++	+++++	+++++	359922	+++++	359922	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5108	+++++	5108	0.000
(2)	+++++	+++++	+++++	3283	+++++	3283	0.000
(3)	+++++	+++++	+++++	11452	+++++	11452	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7297	+++++	7297	0.000
(2)	+++++	+++++	+++++	8233	+++++	8233	0.000
(3)	+++++	+++++	+++++	5504	+++++	5504	0.000
(4)	+++++	+++++	+++++	4272	+++++	4272	0.000
(5)	+++++	+++++	+++++	4143	+++++	4143	0.000
4 Aroclor-1242(1)	17172	15118	14593	14231	12964	14816	10.382
(2)	12255	10735	10080	9299	8450	10164	14.252
(3)	9734	8902	8100	7577	6997	8262	13.081
(4)	9161	8279	7511	7126	6585	7732	13.052
(5)	11158	9837	9355	8577	8092	9404	12.659
5 Aroclor-1248(1)	12701	11102	10208	9399	8419	10366	15.810
(2)	15478	13606	12645	11722	10563	12803	14.618
(3)	17430	15245	14486	13522	12342	14605	13.123
(4)	19368	17007	16145	14983	13634	16227	13.342
(5)	18762	16275	15487	14453	13334	15662	13.124

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	10034	8978	8141	7651	6863	8334	14.663
(2)	17568	15909	14674	13904	12711	14953	12.491
(3)	19039	17387	16070	15329	14072	16379	11.670
(4)	24937	23339	21906	20911	19635	22146	9.335
(5)	19077	18105	16810	15765	14609	16873	10.573
7 Aroclor-1260(1)	22503	19003	17476	16529	14825	18067	16.085
(2)	25650	23506	21850	21066	18712	22157	11.763
(3)	20595	18951	17412	16547	14884	17678	12.422
(4)	20138	18349	16944	16067	14572	17214	12.395
(5)	44064	40843	38492	36572	33174	38629	10.709
8 Aroclor-1262(1)	+++++	+++++	+++++	18376	+++++	18376	0.000
(2)	+++++	+++++	+++++	26068	+++++	26068	0.000
(3)	+++++	+++++	+++++	22571	+++++	22571	0.000
(4)	+++++	+++++	+++++	46151	+++++	46151	0.000
(5)	+++++	+++++	+++++	32422	+++++	32422	0.000
9 Aroclor-1268(1)	64233	59607	57611	53879	48726	56811	10.321
(2)	60168	56519	56119	51372	47642	54364	8.990
(3)	46456	42771	41694	38901	35867	41138	9.727
(4)	19817	18449	17847	16818	15872	17760	8.524
(5)	122099	114124	111138	104603	97770	109947	8.427
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	404105	466906	350017	331939	303513	371296	17.462
$ 12 Decachlorobiphenyl	328640	378740	282742	266616	246153	300578	17.707

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0533

Lab File ID: 002F0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	14970.481	0.01	-12.4	15.0
(2)	21236.796	20135.606	0.01	-5.2	15.0
(3)	14032.402	12547.766	0.01	-10.6	15.0
(4)	8416.650	7602.078	0.01	-9.7	15.0
(5)	10793.469	9796.814	0.01	-9.2	15.0
Aroclor-1260	21447.416	20044.215	0.01	-6.5	15.0
(2)	32195.147	30463.079	0.01	-5.4	15.0
(3)	20457.594	19227.240	0.01	-6.0	15.0
(4)	20081.764	19479.682	0.01	-3.0	15.0
(5)	46299.014	45369.023	0.01	-2.0	15.0
4cmx	446273.70	434622.62	0.01	-2.6	15.0
Decachlorobiphenyl	408756.19	397828.40	0.01	-2.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0533

Lab File ID: 002B0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16807.912	0.01	-0.3	15.0
(2)	11535.631	10552.164	0.01	-8.5	15.0
(3)	6951.234	6359.866	0.01	-8.5	15.0
(4)	9180.580	8689.648	0.01	-5.3	15.0
(5)	8508.868	8099.265	0.01	-4.8	15.0
Aroclor-1260	18066.901	17233.768	0.01	-4.6	15.0
(2)	22157.029	21873.356	0.01	-1.3	15.0
(3)	17677.720	17288.221	0.01	-2.2	15.0
(4)	17213.904	17030.080	0.01	-1.1	15.0
(5)	38629.119	39351.006	0.01	1.9	15.0
4cmx	371295.92	364879.64	0.01	-1.7	15.0
Decachlorobiphenyl	300578.33	303887.95	0.01	1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0657

Lab File ID: 010F1001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 1052 1134

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	15326.864	12966.828	0.01	-15.4	15.0	<-
(2)	20930.167	17552.929	0.01	-16.1	15.0	<-
(3)	26515.714	23179.232	0.01	-12.6	15.0	
(4)	20399.308	17516.529	0.01	-14.1	15.0	
(5)	20231.586	17473.669	0.01	-13.6	15.0	
4cmx	446273.70	402963.45	0.01	-9.7	15.0	
Decachlorobiphenyl	408756.19	377350.30	0.01	-7.7	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0657

Lab File ID: 010B1001 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 1052 1134

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1254	8333.507	7024.457	0.01	-15.7	15.0	<-
(2)	14953.207	12758.805	0.01	-14.7	15.0	
(3)	16379.447	14156.860	0.01	-13.6	15.0	
(4)	22145.610	19672.431	0.01	-11.2	15.0	
(5)	16873.312	15136.600	0.01	-10.3	15.0	
4cmx	371295.92	340221.03	0.01	-8.4	15.0	
Decachlorobiphenyl	300578.33	287120.47	0.01	-4.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1107

Lab File ID: 032F3201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16529.920	0.01	-3.3	15.0
(2)	21236.796	21539.753	0.01	1.4	15.0
(3)	14032.402	13174.200	0.01	-6.1	15.0
(4)	8416.650	8050.003	0.01	-4.4	15.0
(5)	10793.469	10263.065	0.01	-4.9	15.0
Aroclor-1260	21447.416	21244.595	0.01	-0.9	15.0
(2)	32195.147	32175.050	0.01	-0.1	15.0
(3)	20457.594	20076.720	0.01	-1.9	15.0
(4)	20081.764	20485.102	0.01	2.0	15.0
(5)	46299.014	47647.097	0.01	2.9	15.0
4cmx	446273.70	457452.17	0.01	2.5	15.0
Decachlorobiphenyl	408756.19	414255.91	0.01	1.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1107

Lab File ID: 032B3201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16676.840	0.01	-1.1	15.0
(2)	11535.631	10982.454	0.01	-4.8	15.0
(3)	6951.234	6587.435	0.01	-5.2	15.0
(4)	9180.580	8853.851	0.01	-3.6	15.0
(5)	8508.868	8277.180	0.01	-2.7	15.0
Aroclor-1260	18066.901	17966.560	0.01	-0.6	15.0
(2)	22157.029	22743.313	0.01	2.6	15.0
(3)	17677.720	18096.633	0.01	2.4	15.0
(4)	17213.904	17955.776	0.01	4.3	15.0
(5)	38629.119	41172.560	0.01	6.6	15.0
4cmx	371295.92	380837.31	0.01	2.6	15.0
Decachlorobiphenyl	300578.33	312907.61	0.01	4.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1334

Lab File ID: 044F4401 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16587.869	0.01	-2.9	15.0
(2)	21236.796	21328.534	0.01	0.4	15.0
(3)	14032.402	13234.956	0.01	-5.7	15.0
(4)	8416.650	8090.880	0.01	-3.9	15.0
(5)	10793.469	10310.909	0.01	-4.5	15.0
Aroclor-1260	21447.416	21238.635	0.01	-1.0	15.0
(2)	32195.147	31962.442	0.01	-0.7	15.0
(3)	20457.594	19820.627	0.01	-3.1	15.0
(4)	20081.764	20244.908	0.01	0.8	15.0
(5)	46299.014	47150.417	0.01	1.8	15.0
4cmx	446273.70	459015.16	0.01	2.8	15.0
Decachlorobiphenyl	408756.19	406080.12	0.01	-0.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1334

Lab File ID: 044B4401 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16723.886	0.01	-0.8	15.0
(2)	11535.631	11020.916	0.01	-4.5	15.0
(3)	6951.234	6643.260	0.01	-4.4	15.0
(4)	9180.580	9099.233	0.01	-0.9	15.0
(5)	8508.868	8426.710	0.01	-1.0	15.0
Aroclor-1260	18066.901	17891.685	0.01	-1.0	15.0
(2)	22157.029	22570.402	0.01	1.9	15.0
(3)	17677.720	17832.218	0.01	0.9	15.0
(4)	17213.904	17702.115	0.01	2.8	15.0
(5)	38629.119	40806.311	0.01	5.6	15.0
4cmx	371295.92	382526.61	0.01	3.0	15.0
Decachlorobiphenyl	300578.33	309876.03	0.01	3.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1601

Lab File ID: 056F5601 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16943.472	0.01	-0.8	15.0
(2)	21236.796	21834.260	0.01	2.8	15.0
(3)	14032.402	13509.398	0.01	-3.7	15.0
(4)	8416.650	8208.757	0.01	-2.5	15.0
(5)	10793.469	10349.102	0.01	-4.1	15.0
Aroclor-1260	21447.416	21236.090	0.01	-1.0	15.0
(2)	32195.147	32094.524	0.01	-0.3	15.0
(3)	20457.594	19595.052	0.01	-4.2	15.0
(4)	20081.764	19822.003	0.01	-1.3	15.0
(5)	46299.014	46109.859	0.01	-0.4	15.0
4cmx	446273.70	469429.86	0.01	5.2	15.0
Decachlorobiphenyl	408756.19	386309.43	0.01	-5.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1601

Lab File ID: 056B5601 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	16860.477	16592.250	0.01	-1.6	15.0	
(2)	11535.631	10936.406	0.01	-5.2	15.0	
(3)	6951.234	6543.946	0.01	-5.8	15.0	
(4)	9180.580	8712.165	0.01	-5.1	15.0	
(5)	8508.868	8169.660	0.01	-4.0	15.0	
Aroclor-1260	18066.901	17273.804	0.01	-4.4	15.0	
(2)	22157.029	21689.978	0.01	-2.1	15.0	
(3)	17677.720	16796.594	0.01	-5.0	15.0	
(4)	17213.904	16542.240	0.01	-3.9	15.0	
(5)	38629.119	38014.671	0.01	-1.6	15.0	
4cmx	371295.92	386241.64	0.01	4.0	15.0	
Decachlorobiphenyl	300578.33	238877.07	0.01	-20.5	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1700

Lab File ID: 061F6101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16585.829	0.01	-2.9	15.0
(2)	21236.796	21268.253	0.01	0.1	15.0
(3)	14032.402	13312.591	0.01	-5.1	15.0
(4)	8416.650	8116.433	0.01	-3.6	15.0
(5)	10793.469	10365.510	0.01	-4.0	15.0
Aroclor-1260	21447.416	21115.698	0.01	-1.5	15.0
(2)	32195.147	31817.274	0.01	-1.2	15.0
(3)	20457.594	19703.673	0.01	-3.7	15.0
(4)	20081.764	20116.774	0.01	0.2	15.0
(5)	46299.014	46618.762	0.01	0.7	15.0
4cmx	446273.70	455596.85	0.01	2.1	15.0
Decachlorobiphenyl	408756.19	393105.11	0.01	-3.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1700

Lab File ID: 061B6101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16701.570	0.01	-0.9	15.0
(2)	11535.631	10974.937	0.01	-4.9	15.0
(3)	6951.234	6528.241	0.01	-6.1	15.0
(4)	9180.580	8767.726	0.01	-4.5	15.0
(5)	8508.868	8075.462	0.01	-5.1	15.0
Aroclor-1260	18066.901	17606.161	0.01	-2.6	15.0
(2)	22157.029	22261.947	0.01	0.5	15.0
(3)	17677.720	17504.600	0.01	-1.0	15.0
(4)	17213.904	17285.472	0.01	0.4	15.0
(5)	38629.119	39770.333	0.01	3.0	15.0
4cmx	371295.92	379876.64	0.01	2.3	15.0
Decachlorobiphenyl	300578.33	292924.50	0.01	-2.5	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 05:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.973	1.973	0.000	43462262	100.000	97.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	39782840	100.000	97.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.430	0.000	14970481	1000.00	876	80.00- 120.00	100.00
2.719	2.719	0.000	20135606	1000.00	948	114.50- 154.50	134.50
2.800	2.800	0.000	12547766	1000.00	894	63.82- 103.82	83.82
2.838	2.838	0.000	7602078	1000.00	903	30.78- 70.78	50.78
3.049	3.049	0.000	9796814	1000.00	908	45.44- 85.44	65.44
Average of Peak Amounts =					906		
7 Aroclor-1260					CAS #: 11096-82-5		
3.776	3.776	0.000	20044215	1000.00	934	80.00- 120.00	100.00
3.938	3.938	0.000	30463079	1000.00	946	131.98- 171.98	151.98
4.168	4.168	0.000	19227240	1000.00	940	75.92- 115.92	95.92
4.312	4.312	0.000	19479682	1000.00	970	77.18- 117.18	97.18
4.491	4.491	0.000	45369023	1000.00	980	206.34- 246.34	226.34
Average of Peak Amounts =					954		

Data File: /chem/ecd1a.i/120409.b/002f0201.d
Date : 04-DEC-2009 05:33
Client ID: AR166001
Sample Info: !WAR091119-60 01

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

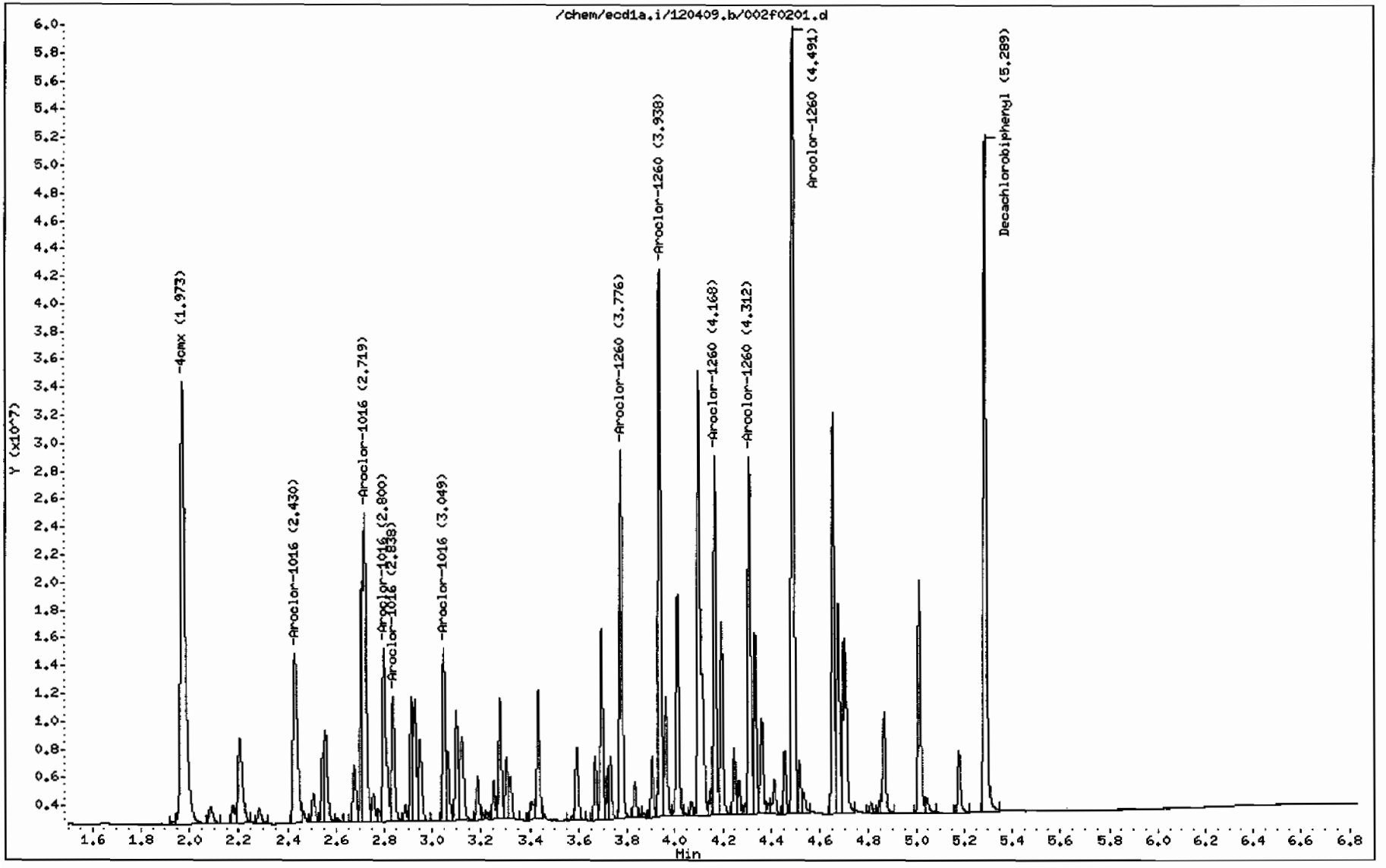

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 05:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:12 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	36487964	100.000	98.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	30388795	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.213	3.213	0.000	16807912	1000.00	997	80.00- 120.00	100.00(M)
3.296	3.296	0.000	10552164	1000.00	915	42.78- 82.78	62.78
3.422	3.422	0.000	6359866	1000.00	915	17.84- 57.84	37.84
3.587	3.587	0.000	8689648	1000.00	946	31.70- 71.70	51.70
3.663	3.663	0.000	8099265	1000.00	952	28.19- 68.19	48.19
Average of Peak Amounts =					945		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	17233768	1000.00	954	80.00- 120.00	100.00
4.479	4.479	0.000	21873356	1000.00	987	106.92- 146.92	126.92
4.745	4.745	0.000	17288221	1000.00	978	80.32- 120.32	100.32
4.919	4.919	0.000	17030080	1000.00	989	78.82- 118.82	98.82
5.067	5.067	0.000	39351006	1000.00	1020	208.34- 248.34	228.34
Average of Peak Amounts =					985		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/002b0201.d
Date : 04-DEC-2009 05:33
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

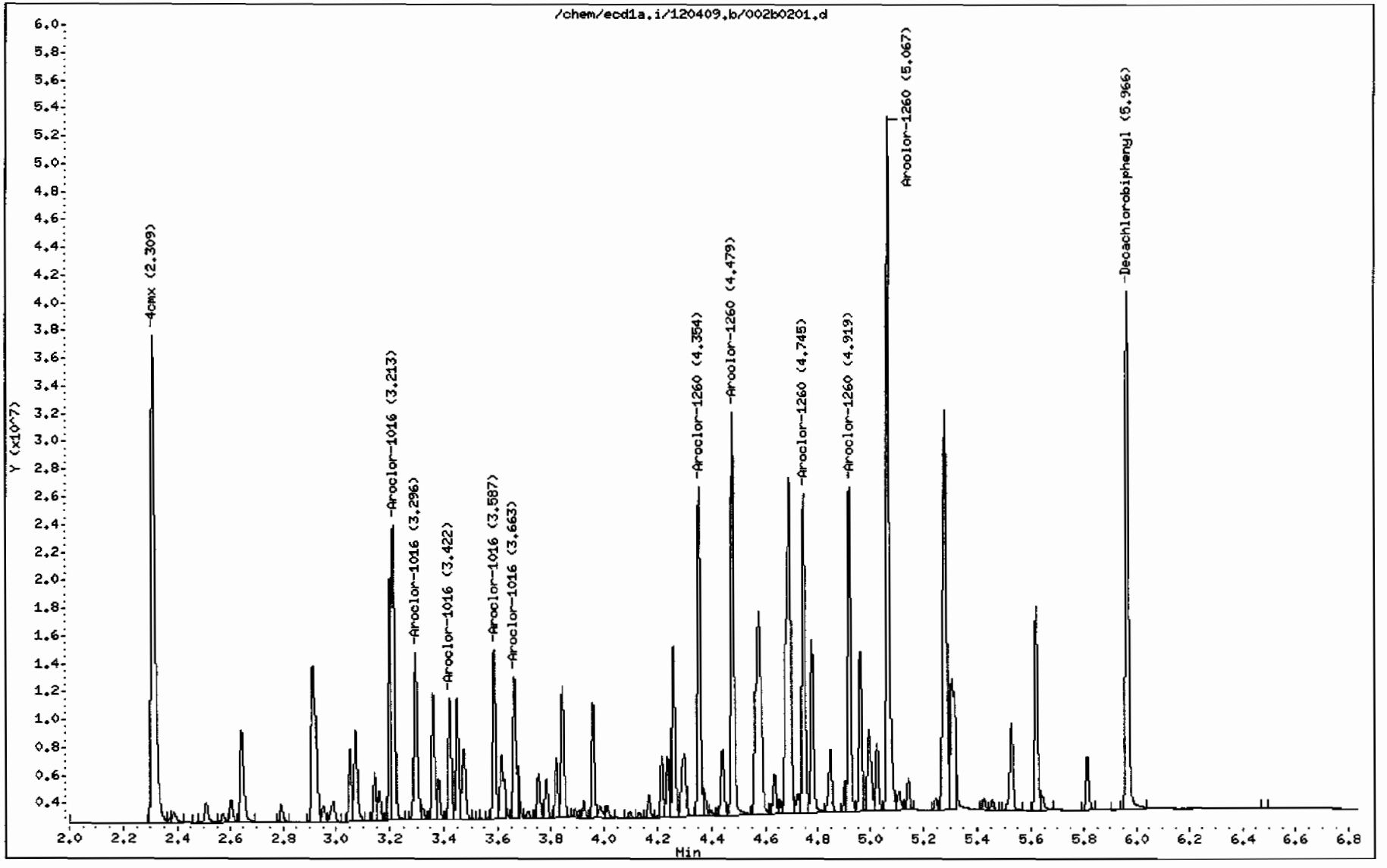

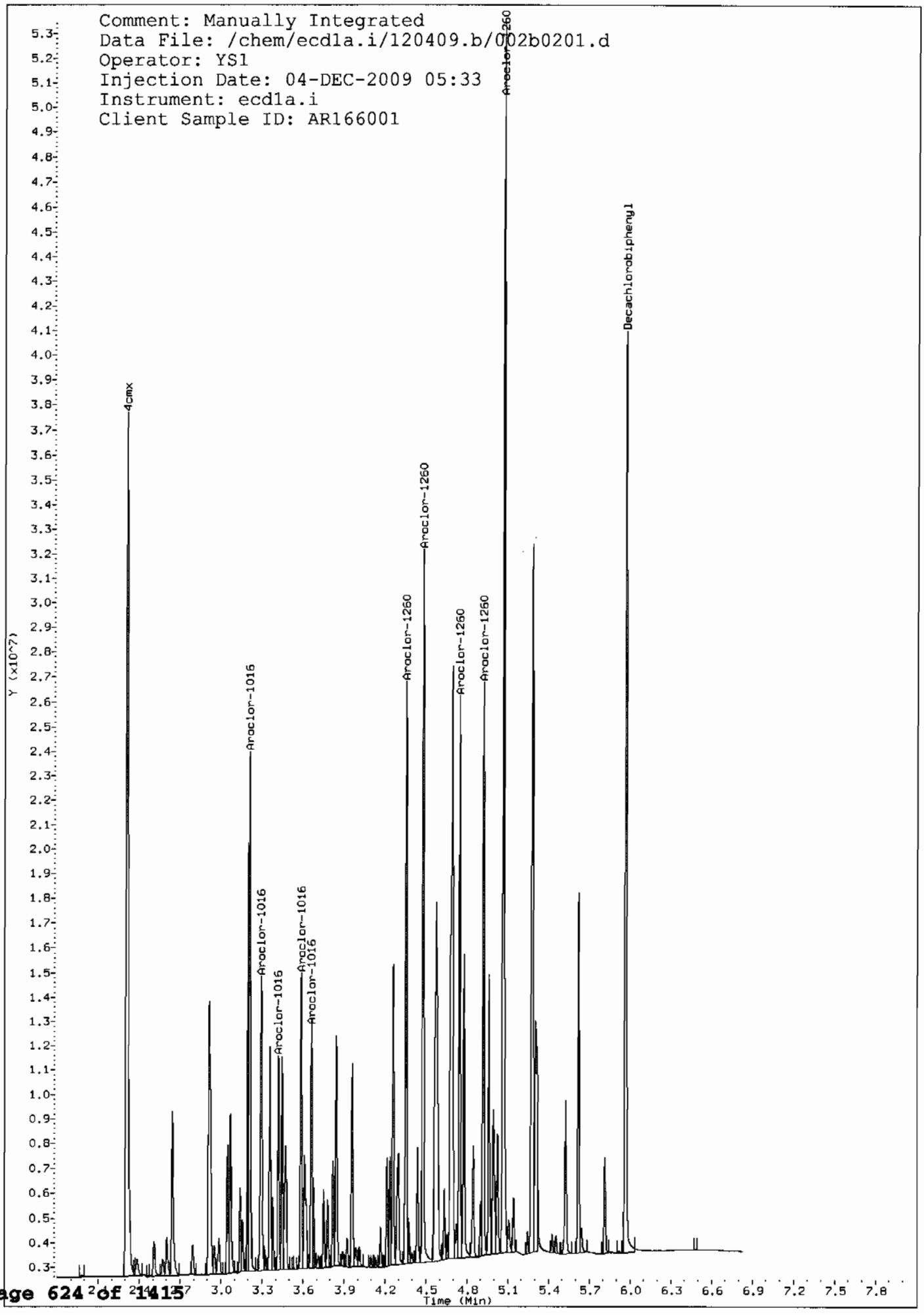
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Data File: /chem/ecd1a.i/120409.b/002b0201.d
Operator: YS1
Injection Date: 04-DEC-2009 05:33
Instrument: ecd1a.i
Client Sample ID: AR166001
Y (x10^7)
Time (Min)
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

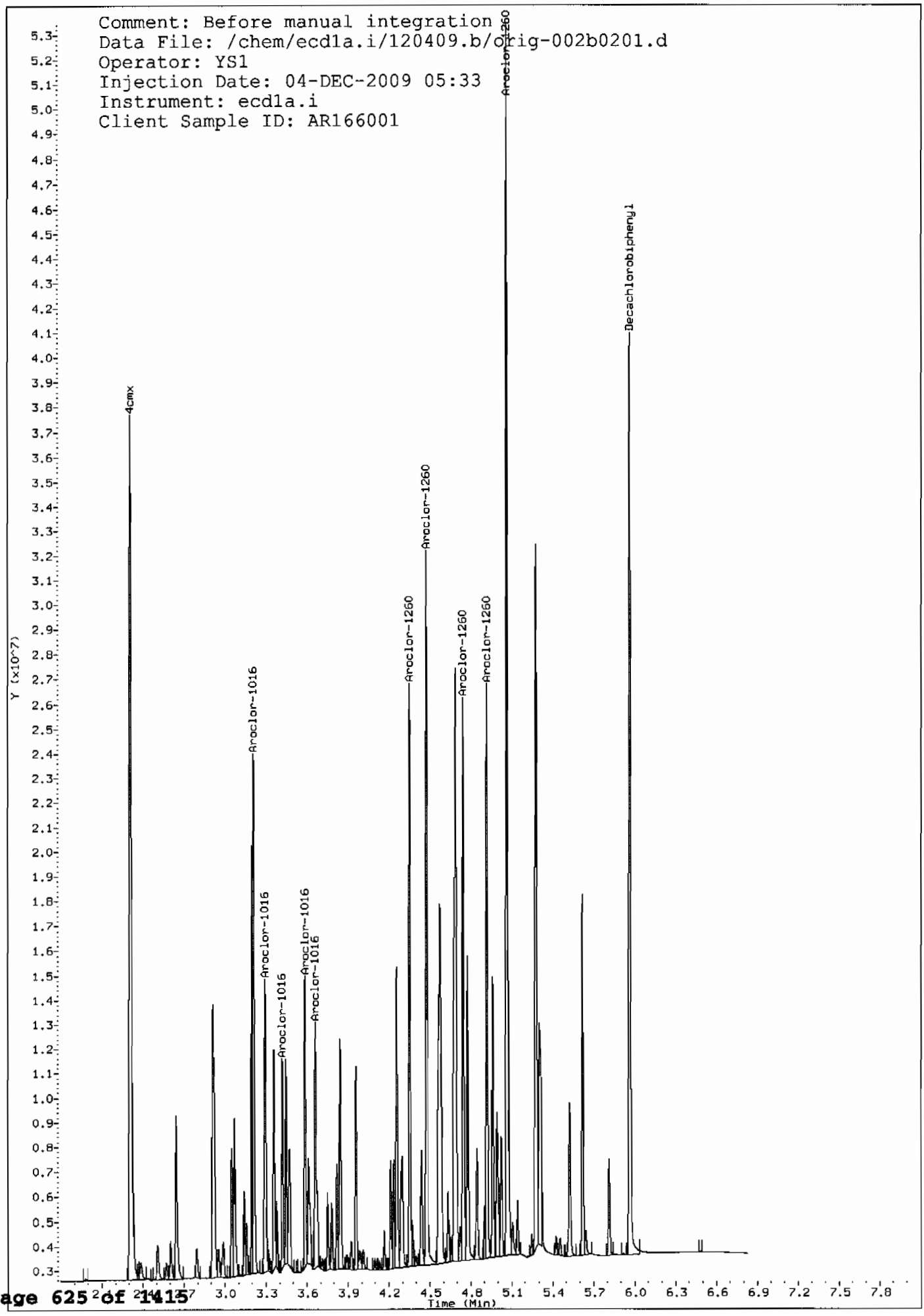
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Data File: /chem/ecd1a.i/120409.b/orig-002b0201.d
Operator: YS1
Injection Date: 04-DEC-2009 05:33
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 05:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	49116502	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.289	0.002	45673417	100.000	112	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.430	2.430	0.000	14500573	1000.00	965	80.00- 120.00	100.00
2.720	2.720	0.000	18525391	1000.00	999	107.76- 147.76	127.76
2.839	2.839	0.000	6894623	1000.00	933	27.55- 67.55	47.55
3.050	3.050	0.000	8997367	1000.00	938	42.05- 82.05	62.05
3.303	3.303	0.000	8660029	1000.00	922	39.72- 79.72	59.72
Average of Peak Amounts =					951		

Data File: /chem/ecd1a.i/120409.b/004f0401.d
Date : 04-DEC-2009 05:54
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

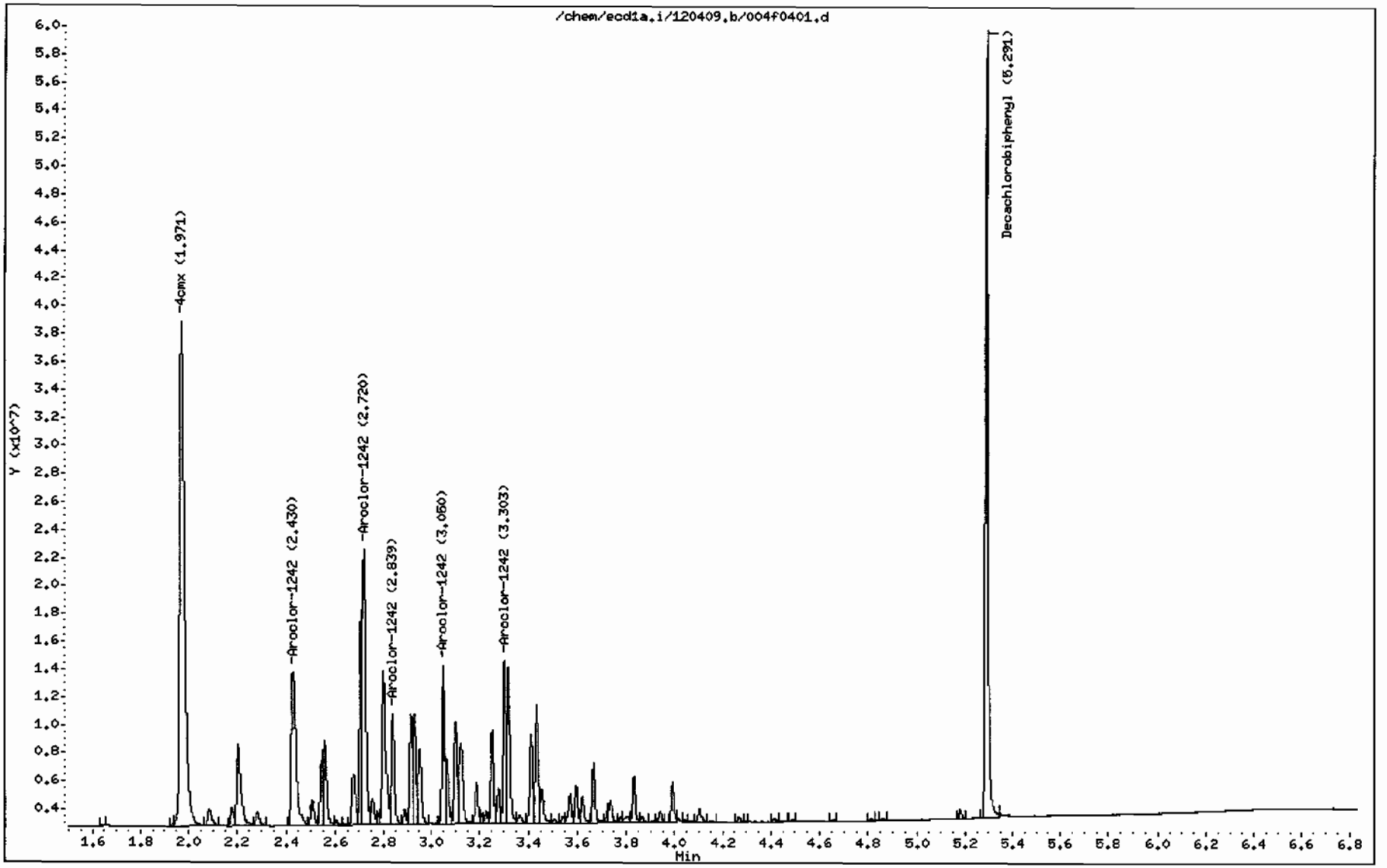

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 05:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40905353	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	34688267	100.000	115	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.212	3.212	0.000	14364525	1000.00	970	80.00- 120.00	100.00(M)
3.296	3.296	0.000	9453819	1000.00	930	45.81- 85.81	65.81
3.587	3.587	0.000	7886318	1000.00	954	34.90- 74.90	54.90
3.663	3.663	0.000	7489570	1000.00	968	32.14- 72.14	52.14
3.849	3.849	0.000	8915925	1000.00	948	42.07- 82.07	62.07
Average of Peak Amounts =					954		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/004b0401.d

Date : 04-DEC-2009 05:54

Client ID: AR124201

Sample Info: !WAR091102-42

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

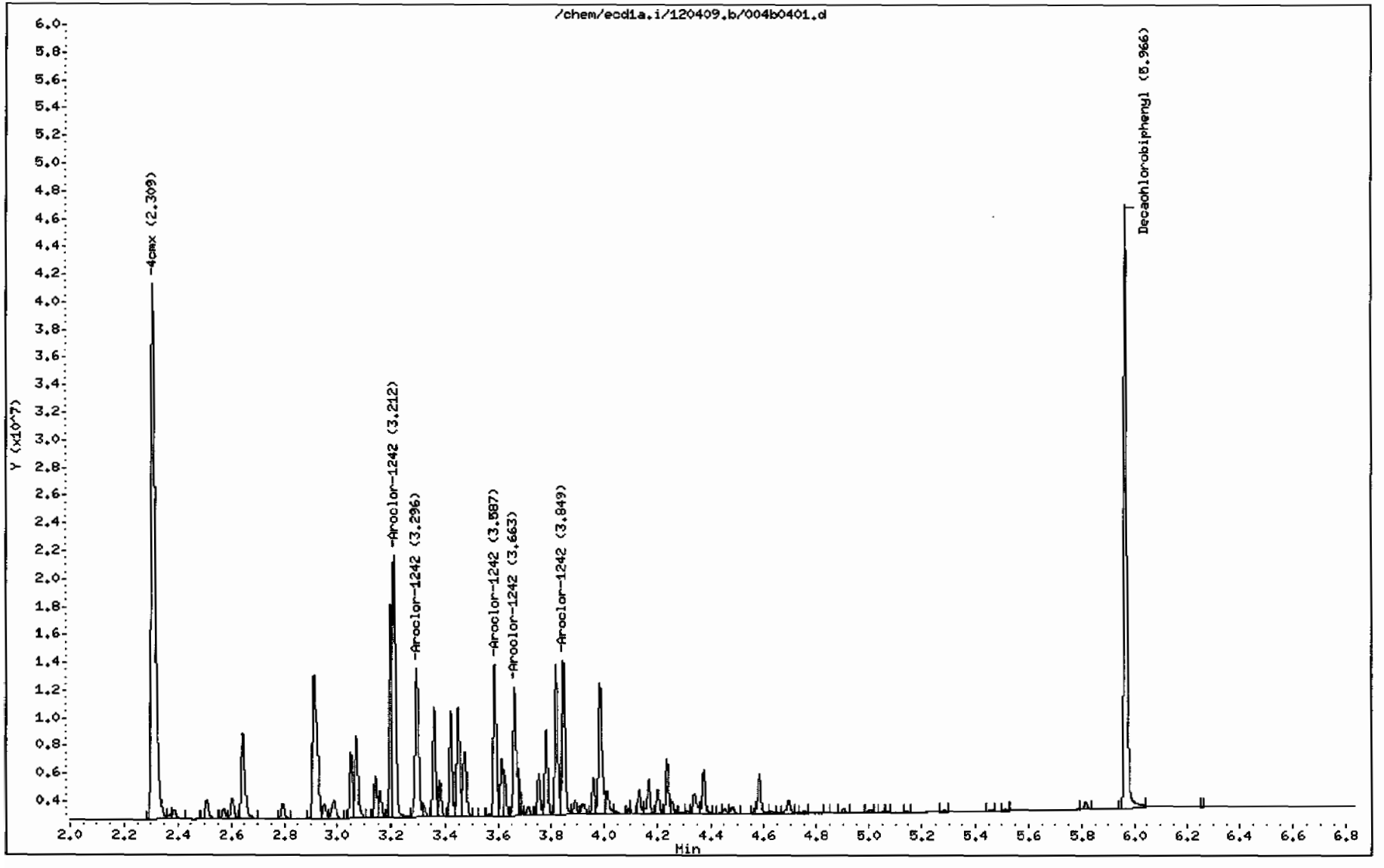

Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/004b0401.d
Operator: YS1
Injection Date: 04-DEC-2009 05:54
Instrument: ecd1a.i
Client Sample ID: AR124201

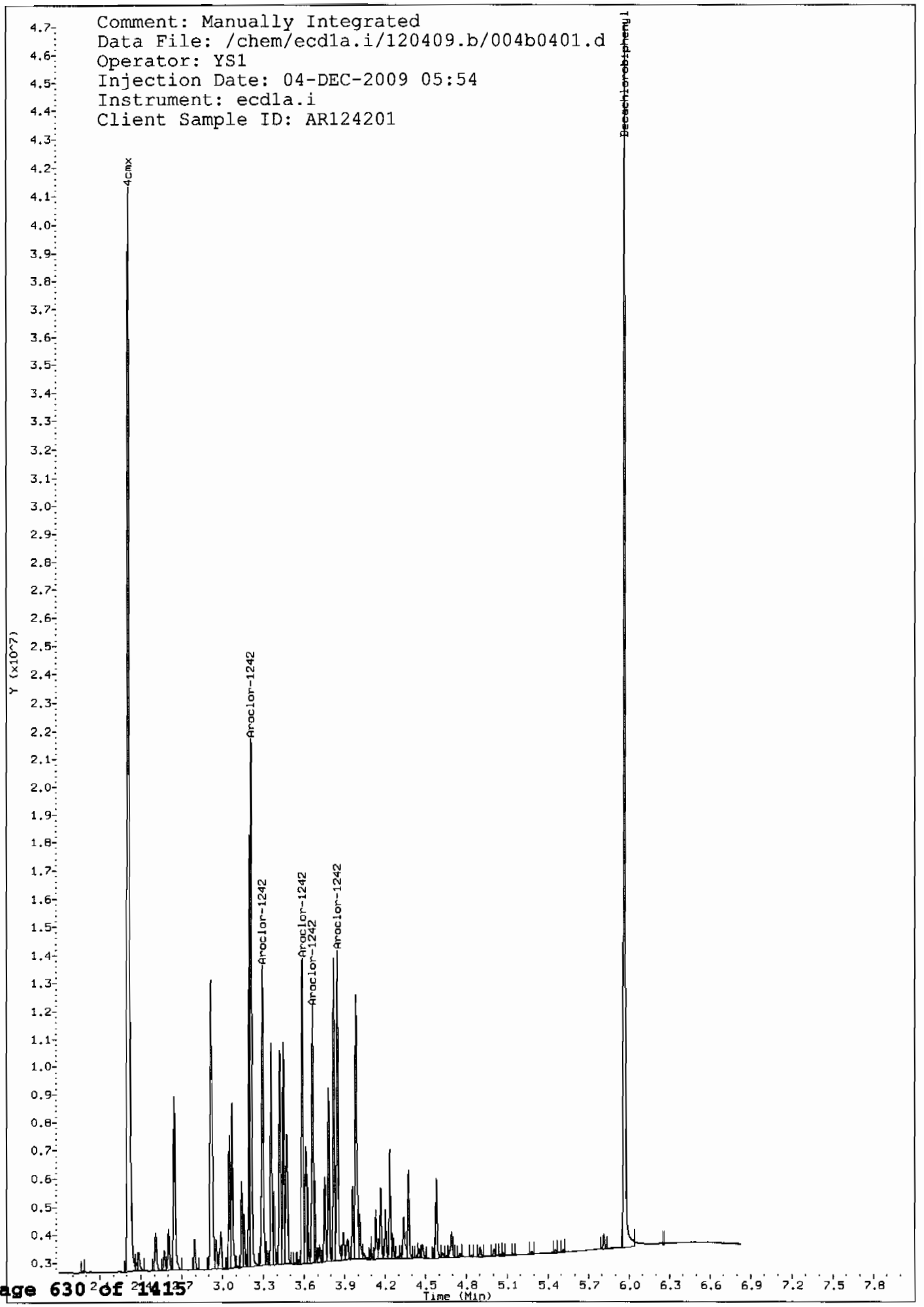

Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-004b0401.d
Operator: YS1
Injection Date: 04-DEC-2009 05:54
Instrument: ecd1a.i
Client Sample ID: AR124201

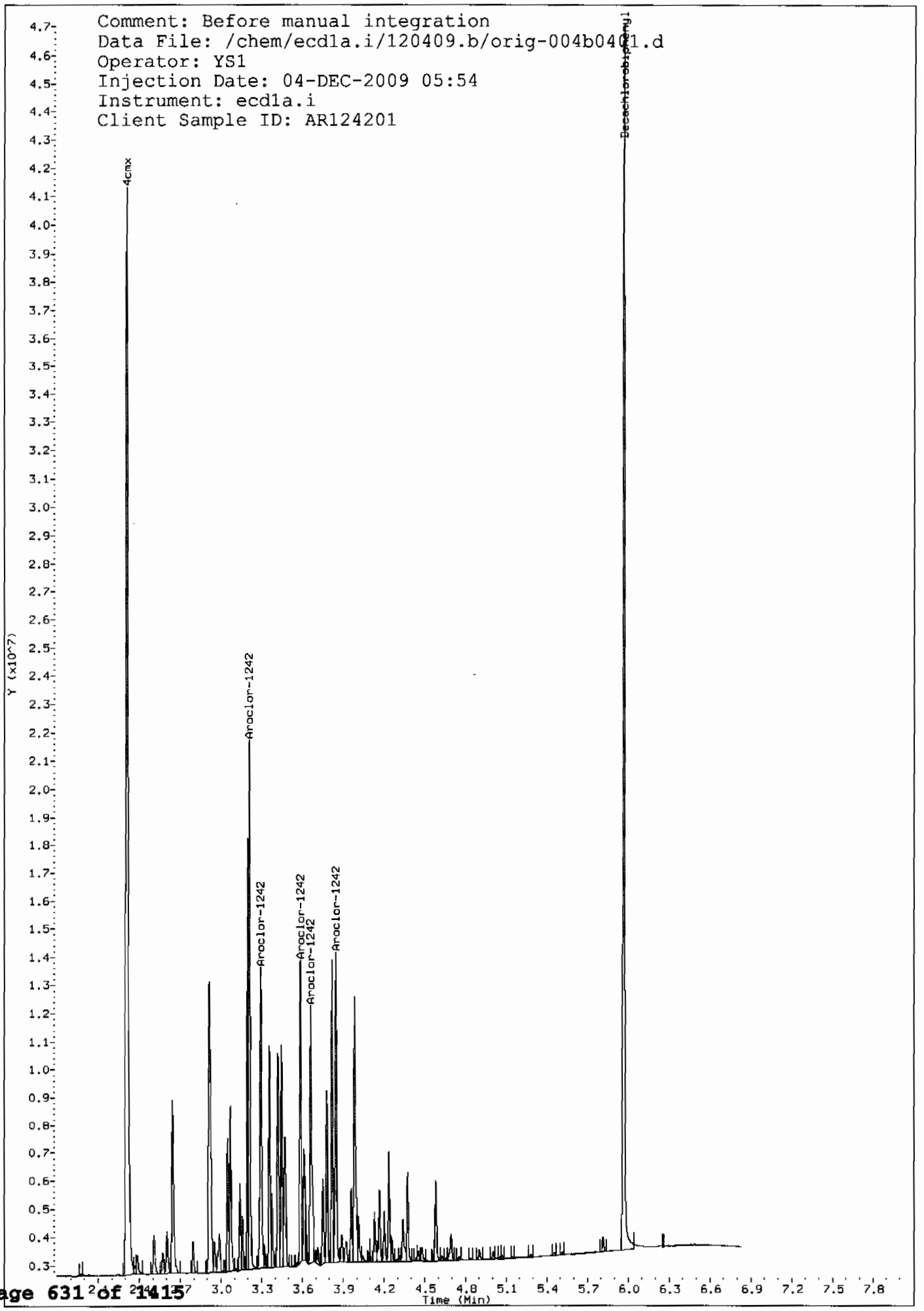

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 06:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	44770020	100.000	100	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	42629135	100.000	104	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.101	3.101	0.000	8676559	1000.00	888	80.00- 120.00	100.00
3.253	3.253	0.000	7580443	1000.00	871	67.37- 107.37	87.37
3.304	3.304	0.000	14957669	1000.00	884	152.39- 192.39	172.39
3.436	3.436	0.000	12123984	1000.00	874	119.73- 159.73	139.73
3.668	3.668	0.000	8392103	1000.00	868	76.72- 116.72	96.72
Average of Peak Amounts =					877		

Data File: /chem/ecd1a.i/120409.b/005f0501.d
Date : 04-DEC-2009 06:05
Client ID: AR124801
Sample Info: |WAR091027-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

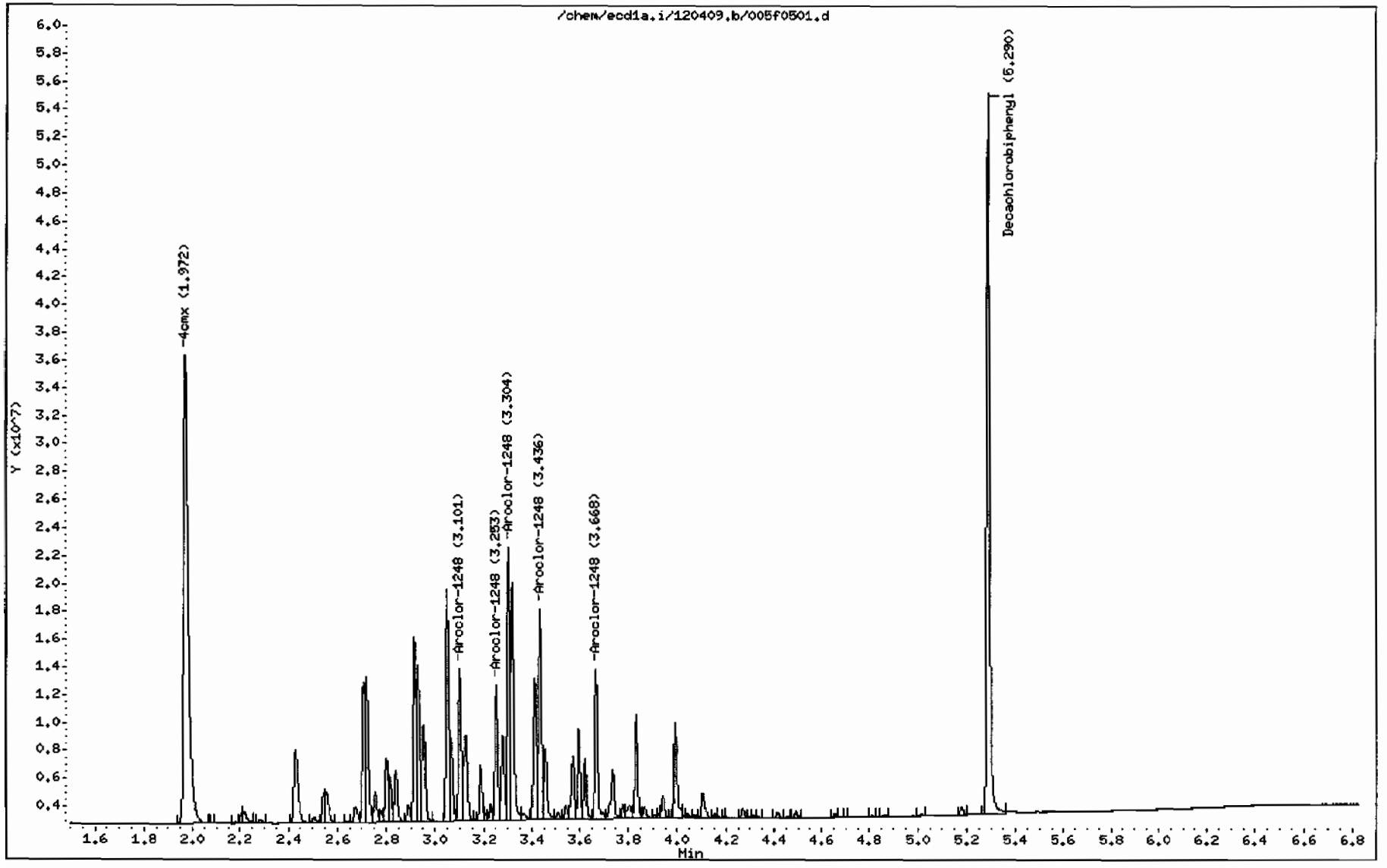

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 06:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37697200	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	32022061	100.000	106	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.422	3.422	0.000	9301057	1000.00	897	80.00- 120.00	100.00
3.588	3.588	0.000	11566108	1000.00	903	104.35- 144.35	124.35
3.822	3.822	0.000	12967440	1000.00	888	119.42- 159.42	139.42
3.849	3.849	0.000	14543667	1000.00	896	136.37- 176.37	156.37
3.987	3.987	0.000	13991089	1000.00	893	130.42- 170.42	150.42
			Average of Peak Amounts =		896		

Data File: /chem/ecd1a.i/120409.b/005b0501.d

Date : 04-DEC-2009 06:05

Client ID: AR124801

Sample Info: |WAR091027-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

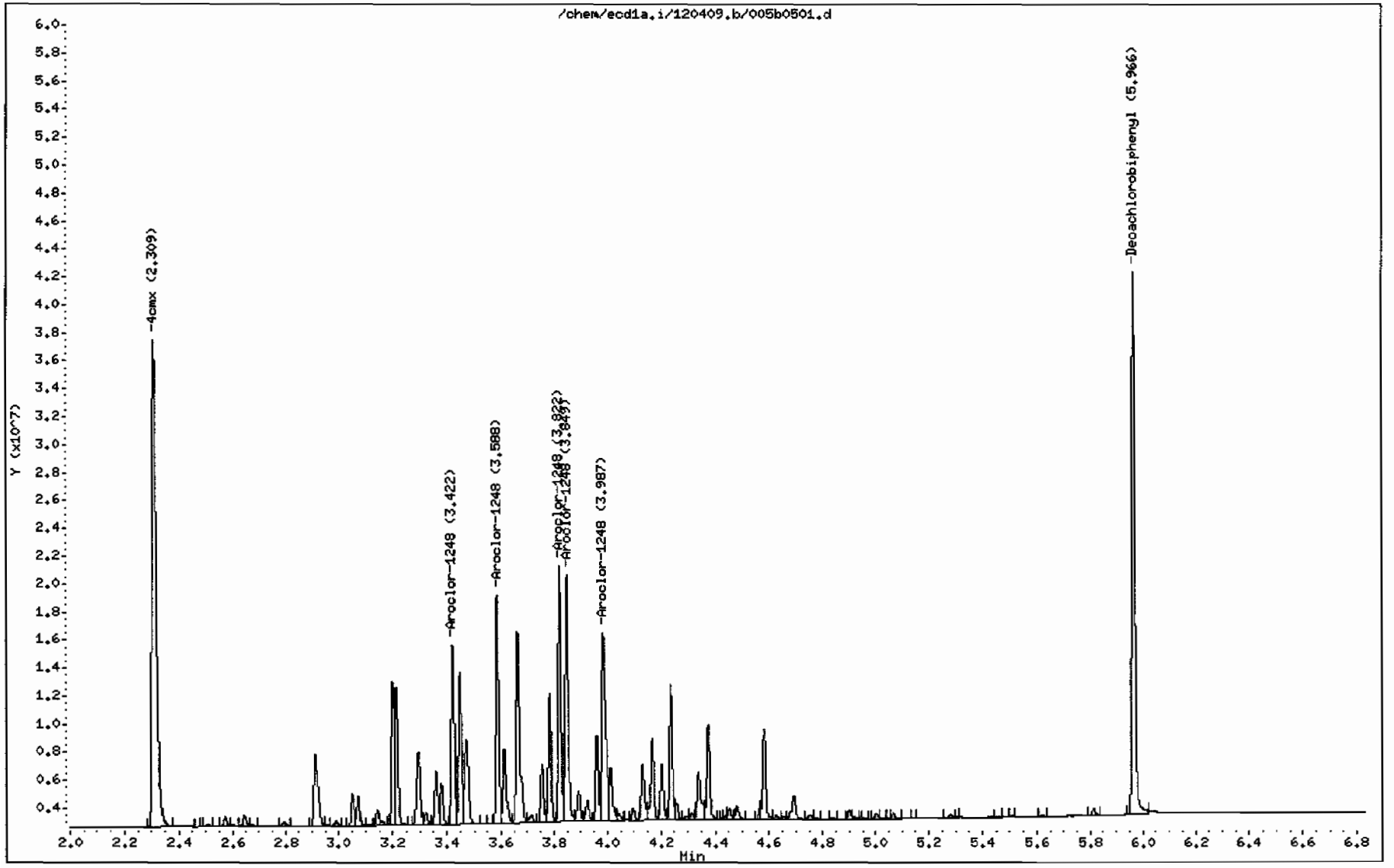

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 06:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	51530881	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	47835549	100.000	117	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.431	2.431	0.000	7153363	1000.00	919	80.00- 120.00	100.00
2.720	2.720	0.000	9314491	1000.00	908	110.21- 150.21	130.21
2.801	2.801	0.000	5975391	1000.00	903	63.53- 103.53	83.53
3.050	3.050	0.000	4433717	1000.00	901	41.98- 81.98	61.98
3.305	3.305	0.000	4066617	1000.00	900	36.85- 76.85	56.85
Average of Peak Amounts =					906		

Data File: /chem/ecd1a.i/120409.b/006f0601.d

Date : 04-DEC-2009 06:15

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

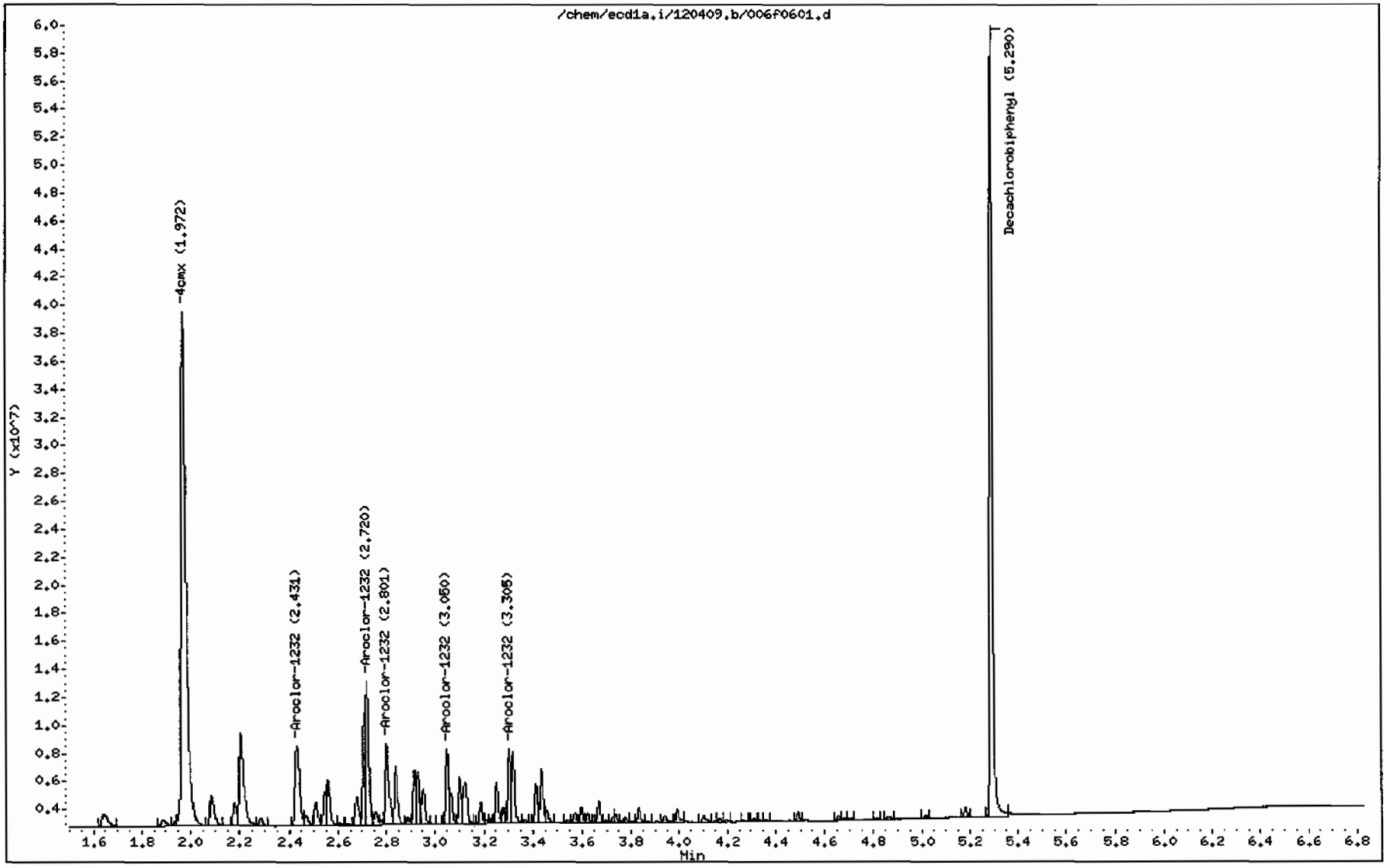

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 06:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	42721319	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	36105328	100.000	120	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.645	2.645	0.000	6884944	1000.00	944	80.00- 120.00	100.00
3.213	3.213	0.000	7655162	1000.00	930	91.19- 131.19	111.19
3.297	3.297	0.000	5114376	1000.00	929	54.28- 94.28	74.28
3.588	3.588	0.000	3872381	1000.00	906	36.24- 76.24	56.24
3.822	3.822	0.000	3796983	1000.00	916	35.15- 75.15	55.15
			Average of Peak Amounts =		925		

Data File: /chem/ecd1a.i/120409.b/006b0601.d
Date : 04-DEC-2009 06:15
Client ID: AR123201
Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

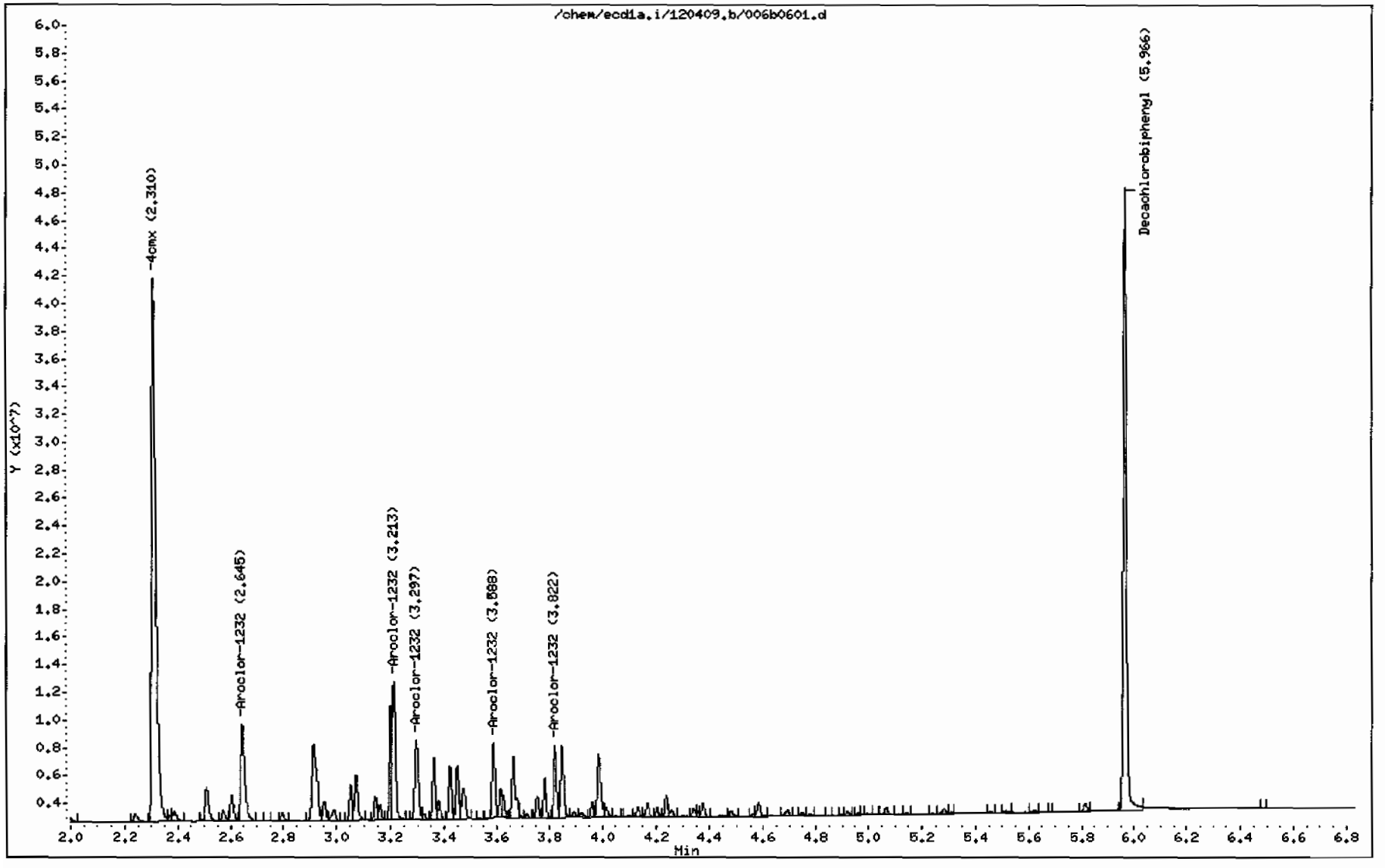

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/007f0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 06:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	40959245	100.000	91.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.289	0.002	38105593	100.000	93.2	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.084	2.084	0.000	4870864	1000.00	819	80.00- 120.00	100.00
2.179	2.179	0.000	2566454	1000.00	782	32.69- 72.69	52.69
2.204	2.204	0.000	11800443	1000.00	819	222.27- 262.27	242.27
			Average of Peak Amounts =		807		

Data File: /chem/ecd1a.i/120409.b/007f0701.d
Date : 04-DEC-2009 06:26
Client ID: AR122101
Sample Info: IWAR090803-21

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

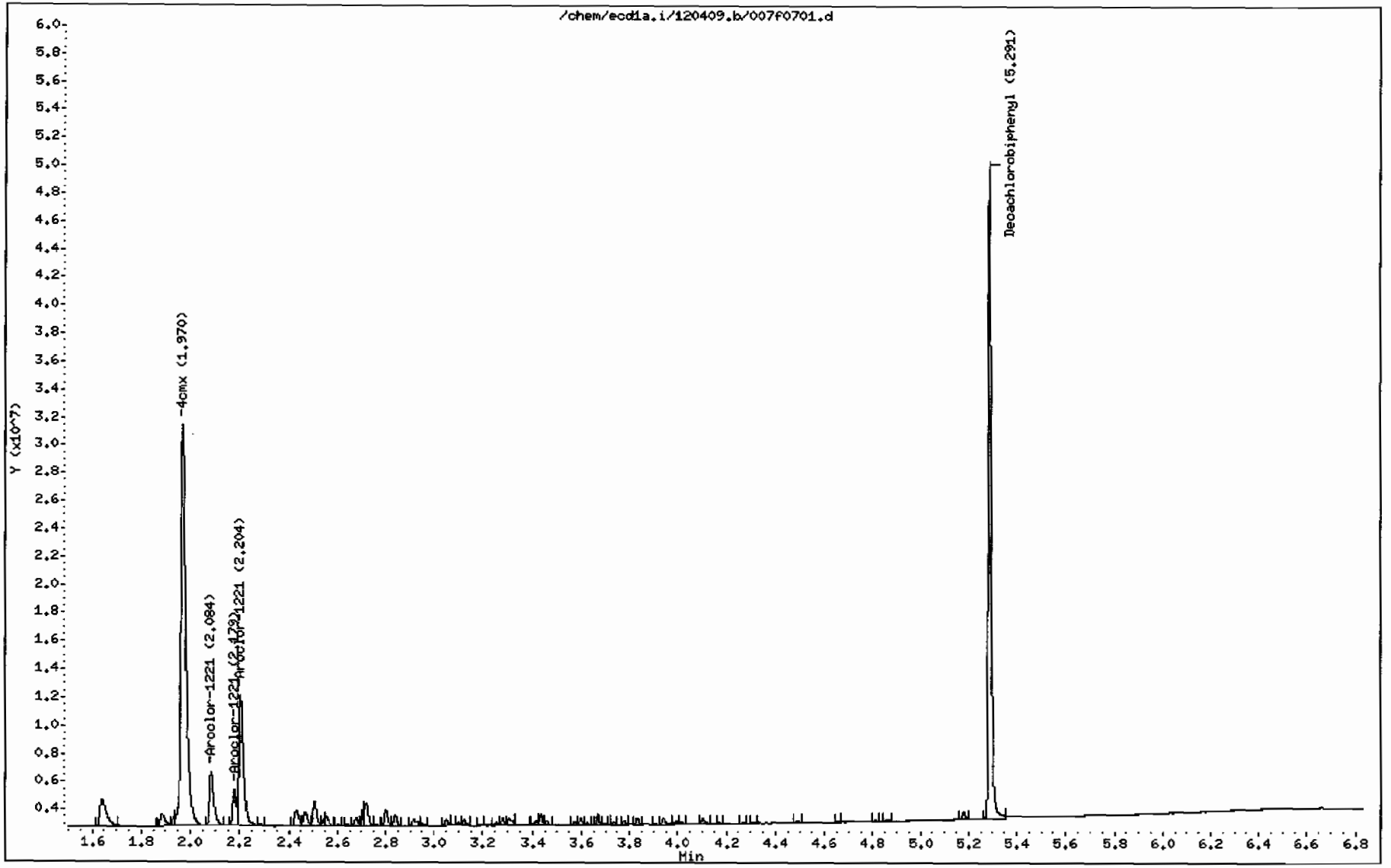

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/007b0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 06:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	33870716	100.000	91.2	80.00- 120.00	100.00
$ 12 Decachlorobipheny1					CAS #: 2051-24-3		
5.967	5.966	0.001	29119422	100.000	96.9	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.509	2.509	0.000	4289723	1000.00	840	80.00- 120.00	100.00
2.603	2.603	0.000	2765110	1000.00	842	44.46- 84.46	64.46
2.644	2.644	0.000	9593845	1000.00	838	203.65- 243.65	223.65
Average of Peak Amounts =					840		

Data File: /chem/ecd1a.i/120409.b/007b0701.d
Date : 04-DEC-2009 06:26
Client ID: AR122101
Sample Info: IWAR090803-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

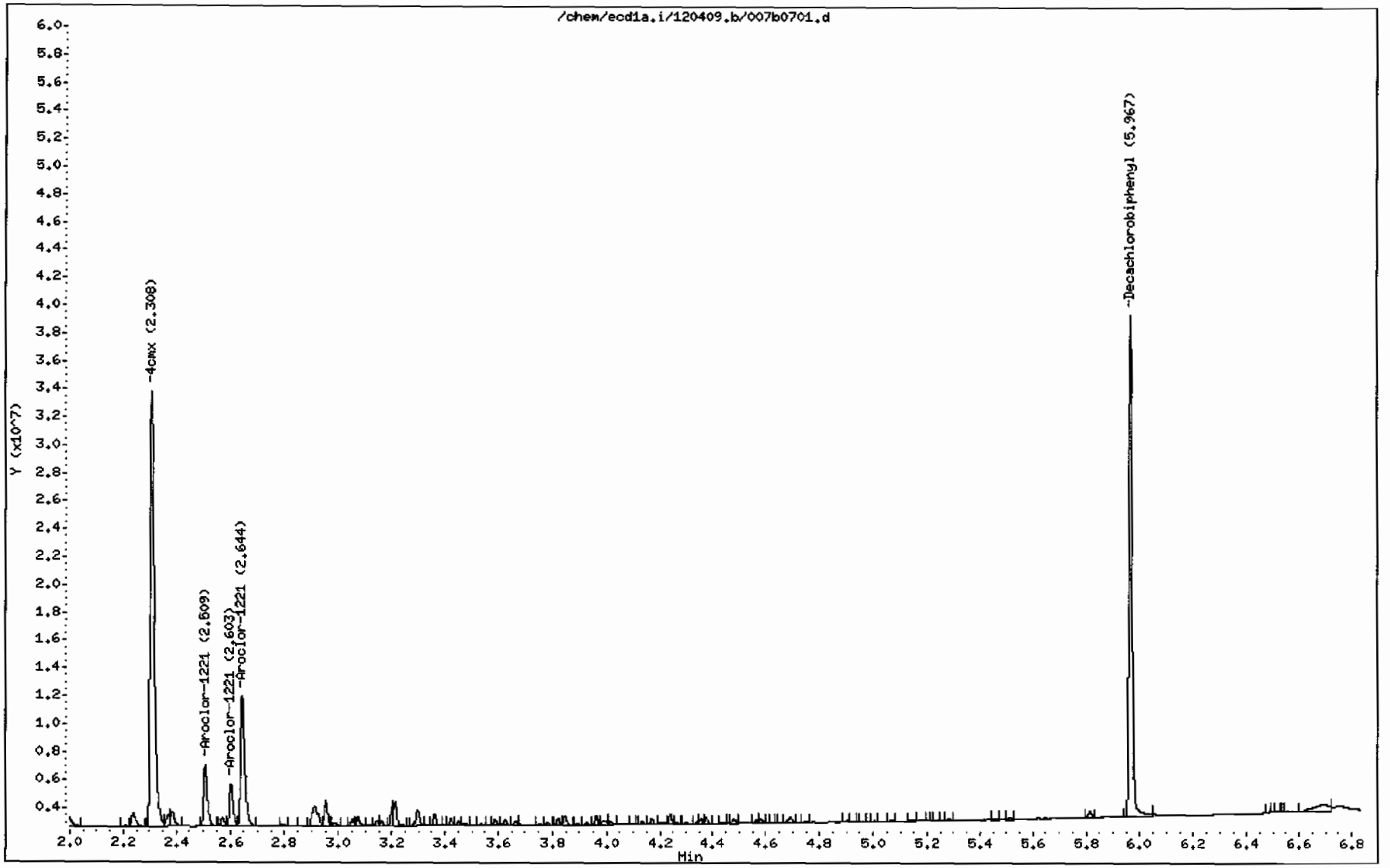

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/010f1001.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 06:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 07:16 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	40296345	100.000	90.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	37735030	100.000	92.3	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.279	3.279	0.000	12966828	1000.00	846	80.00- 120.00	100.00
3.435	3.435	0.000	17552929	1000.00	839	115.37- 155.37	135.37
3.668	3.668	0.000	23179232	1000.00	874	158.76- 198.76	178.76
3.832	3.832	0.000	17516529	1000.00	859	115.09- 155.09	135.09
3.940	3.940	0.000	17473669	1000.00	864	114.76- 154.76	134.76
Average of Peak Amounts =					856		

Data File: /chem/ecd1a.i/120409.b/010f1001.d
Date : 04-DEC-2009 06:57
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

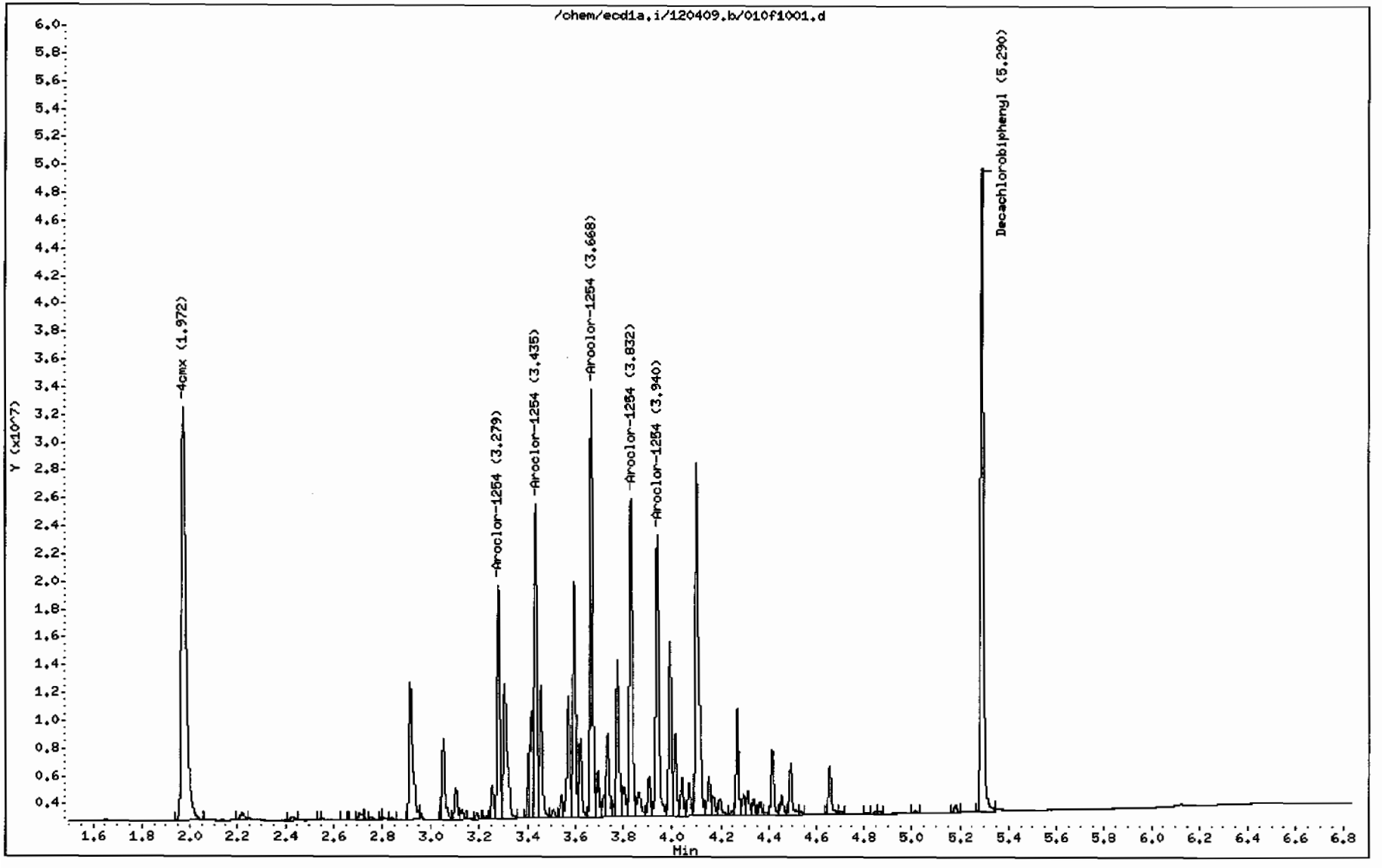

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/010b1001.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 06:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 07:16 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	34022103	100.000	91.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	28712047	100.000	95.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.422	3.422	0.000	7024457	1000.00	843	80.00- 120.00	100.00
3.846	3.846	0.000	12758805	1000.00	853	161.63- 201.63	181.63
3.962	3.962	0.000	14156860	1000.00	864	181.54- 221.54	201.54
4.239	4.239	0.000	19672431	1000.00	888	260.06- 300.06	280.06
4.375	4.375	0.000	15136600	1000.00	897	195.48- 235.48	215.48
			Average of Peak Amounts =		869		

Data File: /chem/ecd1a.i/120409.b/010b1001.d
Date : 04-DEC-2009 06:57
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

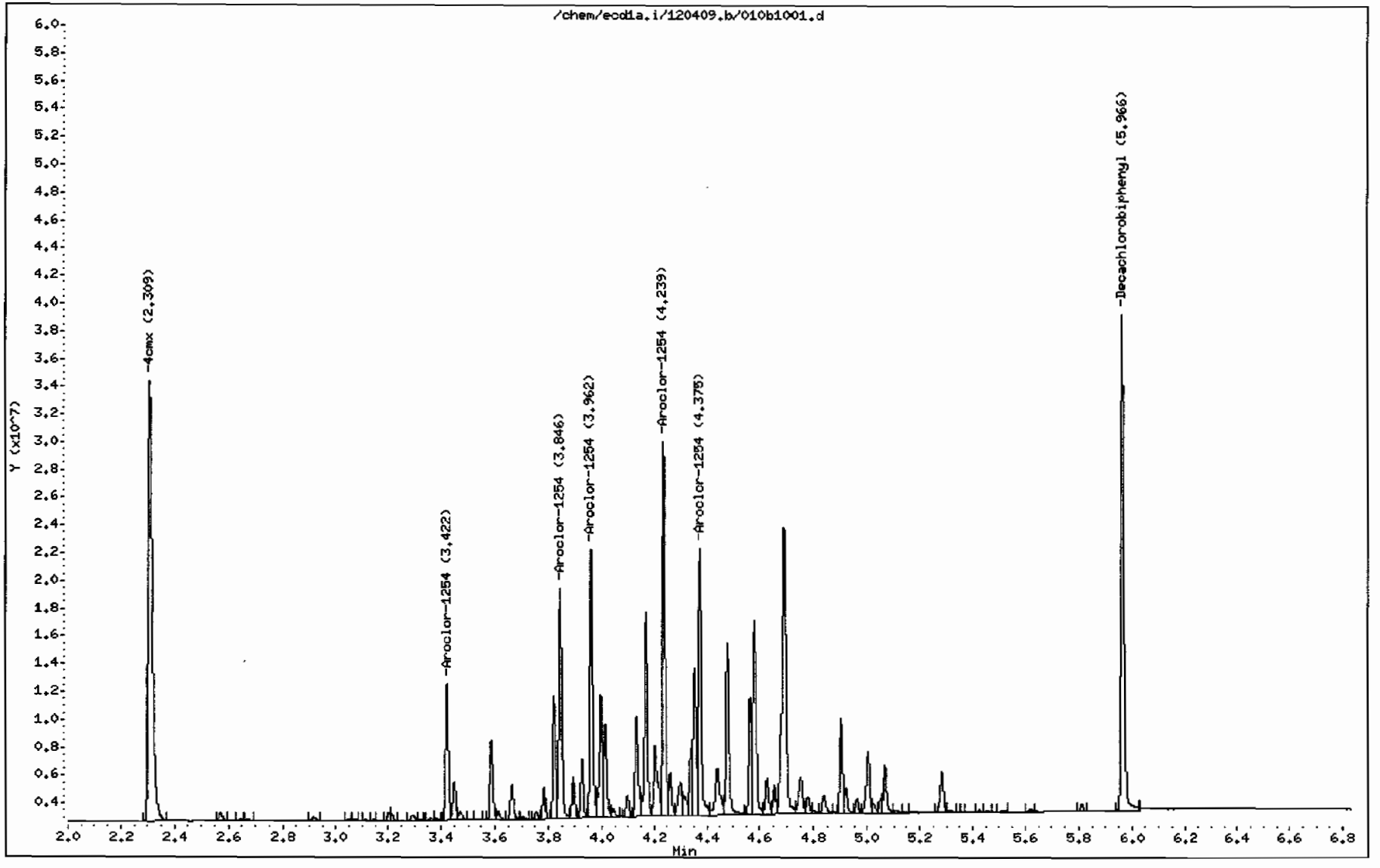

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/032f3201.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 04-DEC-2009 11:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 32 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	45745217	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	41425591	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.431	2.430	0.001	16529920	1000.00	967	80.00- 120.00	100.00
2.719	2.719	0.000	21539752	1000.00	1010	110.31- 150.31	130.31
2.800	2.800	0.000	13174199	1000.00	939	59.70- 99.70	79.70
2.837	2.838	-0.001	8050002	1000.00	956	28.70- 68.70	48.70
3.048	3.049	-0.001	10263065	1000.00	951	42.09- 82.09	62.09
Average of Peak Amounts =					966		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21244595	1000.00	990	80.00- 120.00	100.00
3.937	3.938	-0.001	32175050	1000.00	999	131.45- 171.45	151.45
4.167	4.168	-0.001	20076720	1000.00	981	74.50- 114.50	94.50
4.310	4.312	-0.002	20485101	1000.00	1020	76.43- 116.43	96.43
4.490	4.491	-0.001	47647097	1000.00	1030	204.28- 244.28	224.28
Average of Peak Amounts =					1e+03		

Data File: /chem/ecdia.i/120409.b/032f3201.d
Date : 04-DEC-2009 11:07
Client ID: AR166004
Sample Info: MWAR091119-60 04

Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

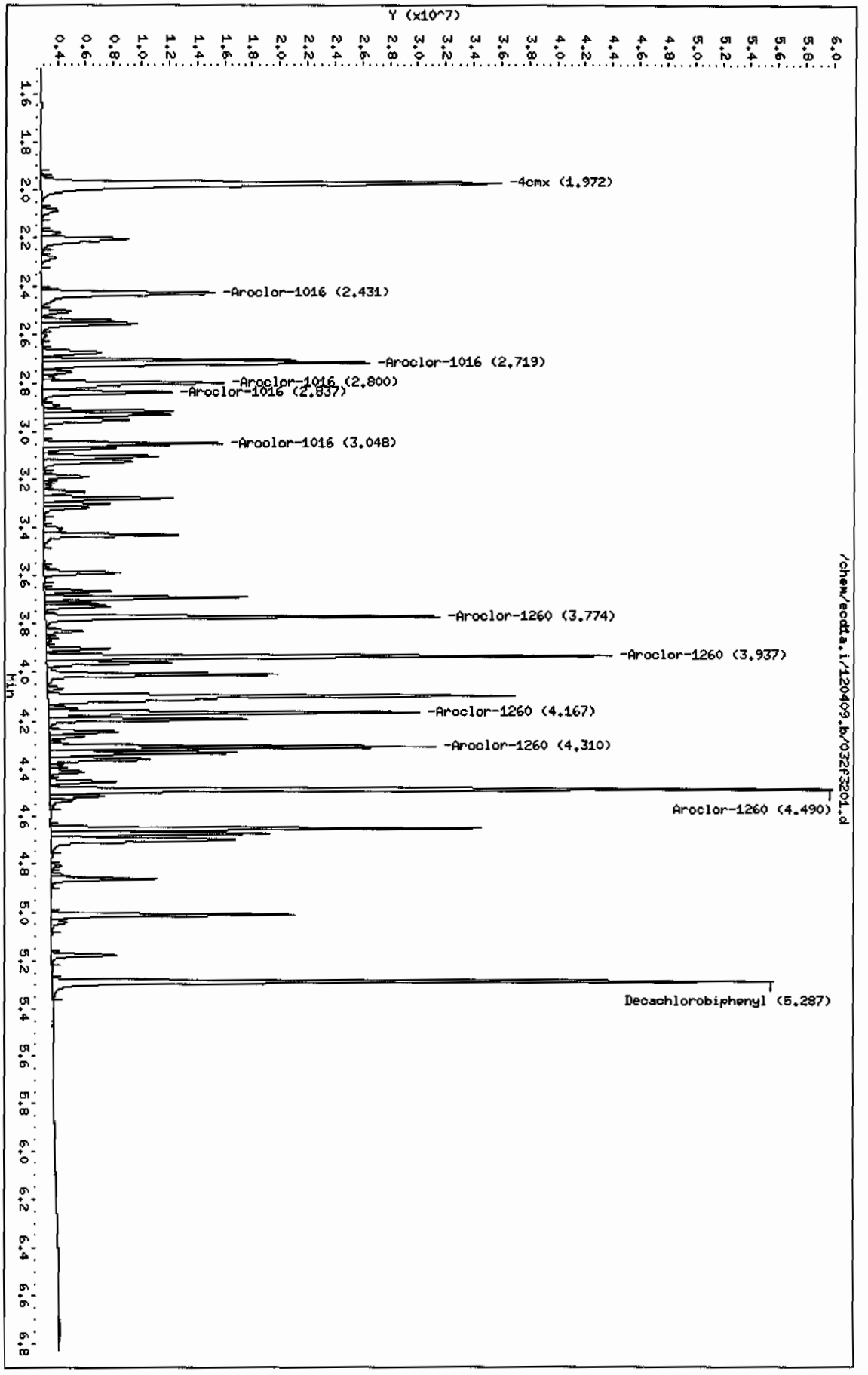

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/032b3201.d
Lab Smp Id: WAR091119-60 04 Client Smp ID: AR166004
Inj Date : 04-DEC-2009 11:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:05 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 32 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	38083731	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	31290761	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.213	-0.001	16676839	1000.00	989	80.00- 120.00	100.00
3.295	3.296	-0.001	10982453	1000.00	952	45.85- 85.85	65.85
3.421	3.422	-0.001	6587434	1000.00	948	19.50- 59.50	39.50
3.587	3.587	0.000	8853851	1000.00	964	33.09- 73.09	53.09
3.662	3.663	-0.001	8277179	1000.00	973	29.63- 69.63	49.63
Average of Peak Amounts =					965		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	17966560	1000.00	994	80.00- 120.00	100.00
4.478	4.479	-0.001	22743312	1000.00	1030	106.59- 146.59	126.59
4.744	4.745	-0.001	18096633	1000.00	1020	80.72- 120.72	100.72
4.918	4.919	-0.001	17955775	1000.00	1040	79.94- 119.94	99.94
5.065	5.067	-0.002	41172559	1000.00	1060	209.16- 249.16	229.16
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd1a.i/120409.b/032b3201.d
Date : 04-DEC-2009 11:07
Client ID: AR166004
Sample Info: IWAR091119-60 04

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

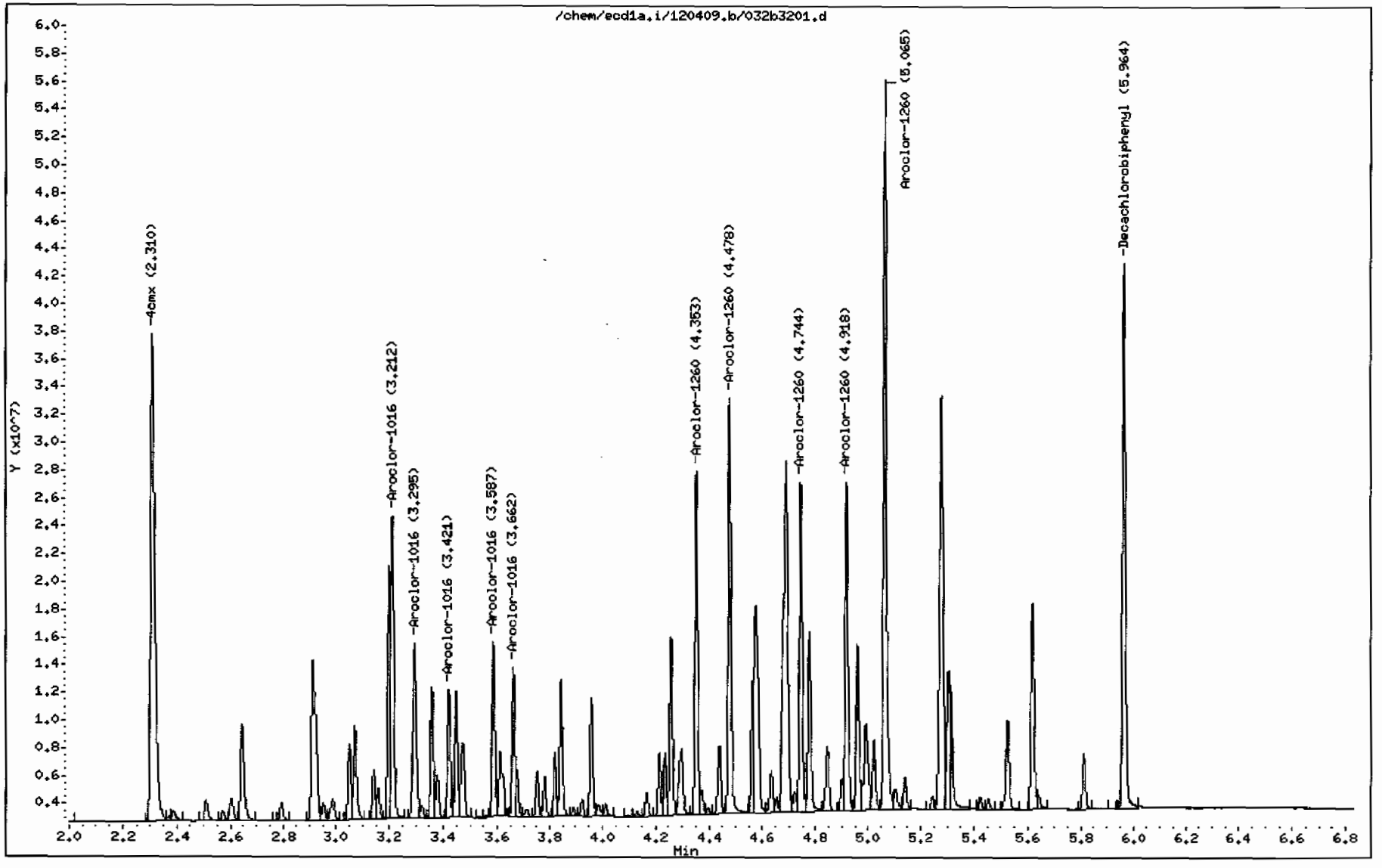

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/044f4401.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 04-DEC-2009 13:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	45901516	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	40608012	100.000	99.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16587868	1000.00	971	80.00- 120.00	100.00
2.718	2.719	-0.001	21328534	1000.00	1000	108.58- 148.58	128.58
2.799	2.800	-0.001	13234956	1000.00	943	59.79- 99.79	79.79
2.837	2.838	-0.001	8090880	1000.00	961	28.78- 68.78	48.78
3.048	3.049	-0.001	10310908	1000.00	955	42.16- 82.16	62.16
Average of Peak Amounts =					967		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21238635	1000.00	990	80.00- 120.00	100.00
3.936	3.938	-0.002	31962441	1000.00	993	130.49- 170.49	150.49
4.166	4.168	-0.002	19820626	1000.00	969	73.32- 113.32	93.32
4.309	4.312	-0.003	20244907	1000.00	1010	75.32- 115.32	95.32
4.489	4.491	-0.002	47150417	1000.00	1020	202.00- 242.00	222.00
Average of Peak Amounts =					996		

Data File: /chem/ecd1a.i/120409.b/044f4401.d

Date : 04-DEC-2009 13:34

Client ID: AR166005

Sample Info: !WAR091119-60 05

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

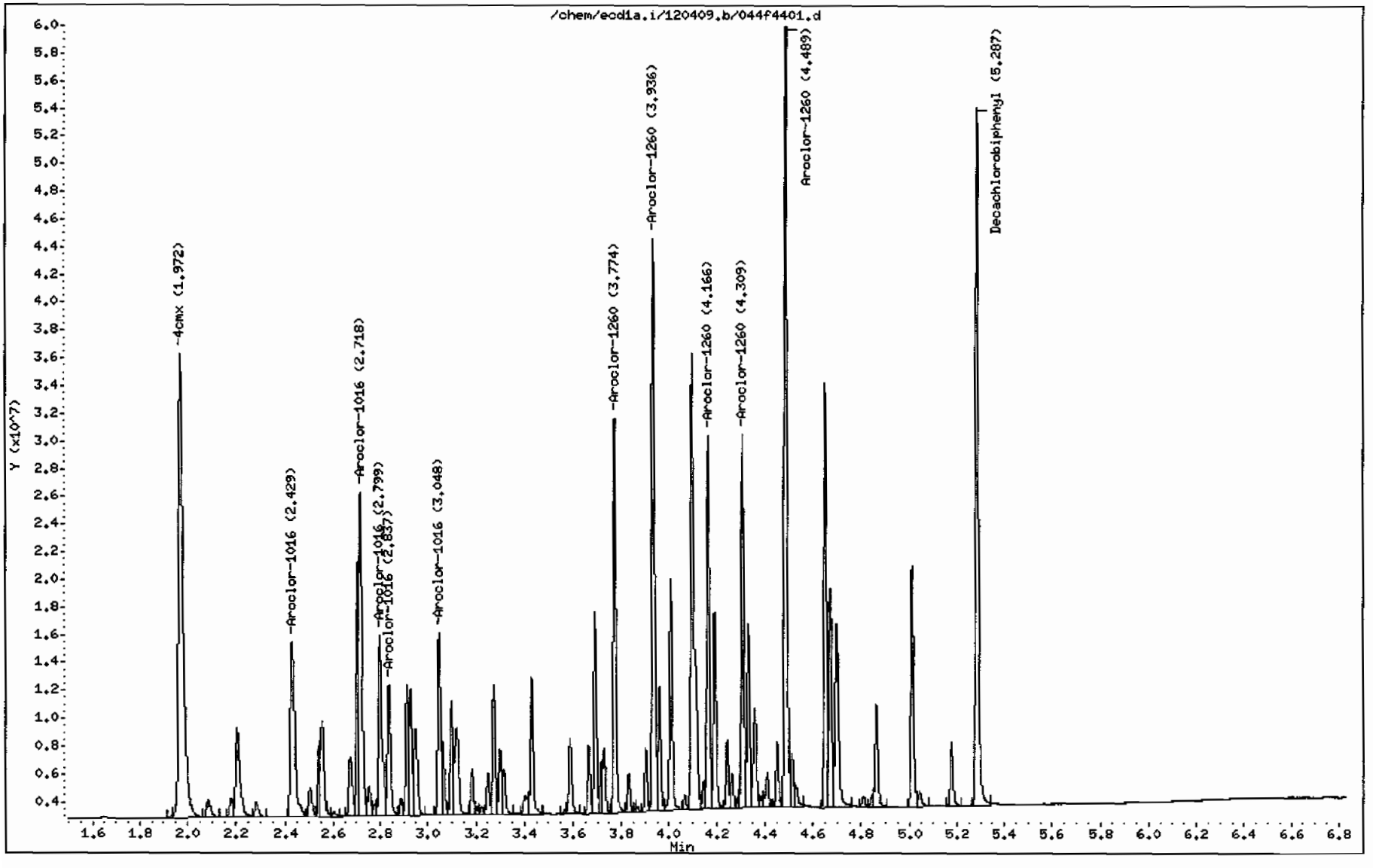

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/044b4401.d
Lab Smp Id: WAR091119-60 05 Client Smp ID: AR166005
Inj Date : 04-DEC-2009 13:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38252661	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	30987603	100.000	103	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16723885	1000.00	992	80.00- 120.00	100.00
3.294	3.296	-0.002	11020915	1000.00	955	45.90- 85.90	65.90
3.420	3.422	-0.002	6643260	1000.00	956	19.72- 59.72	39.72
3.585	3.587	-0.002	9099232	1000.00	991	34.41- 74.41	54.41
3.661	3.663	-0.002	8426710	1000.00	990	30.39- 70.39	50.39
Average of Peak Amounts =					977		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	17891685	1000.00	990	80.00- 120.00	100.00
4.477	4.479	-0.002	22570401	1000.00	1020	106.15- 146.15	126.15
4.744	4.745	-0.001	17832217	1000.00	1010	79.67- 119.67	99.67
4.917	4.919	-0.002	17702115	1000.00	1030	78.94- 118.94	98.94
5.064	5.067	-0.003	40806311	1000.00	1060	208.07- 248.07	228.07
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd1a.i/120409.b/044b4401.d

Date : 04-DEC-2009 13:34

Client ID: AR166005

Sample Info: IWAR091119-60 05

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

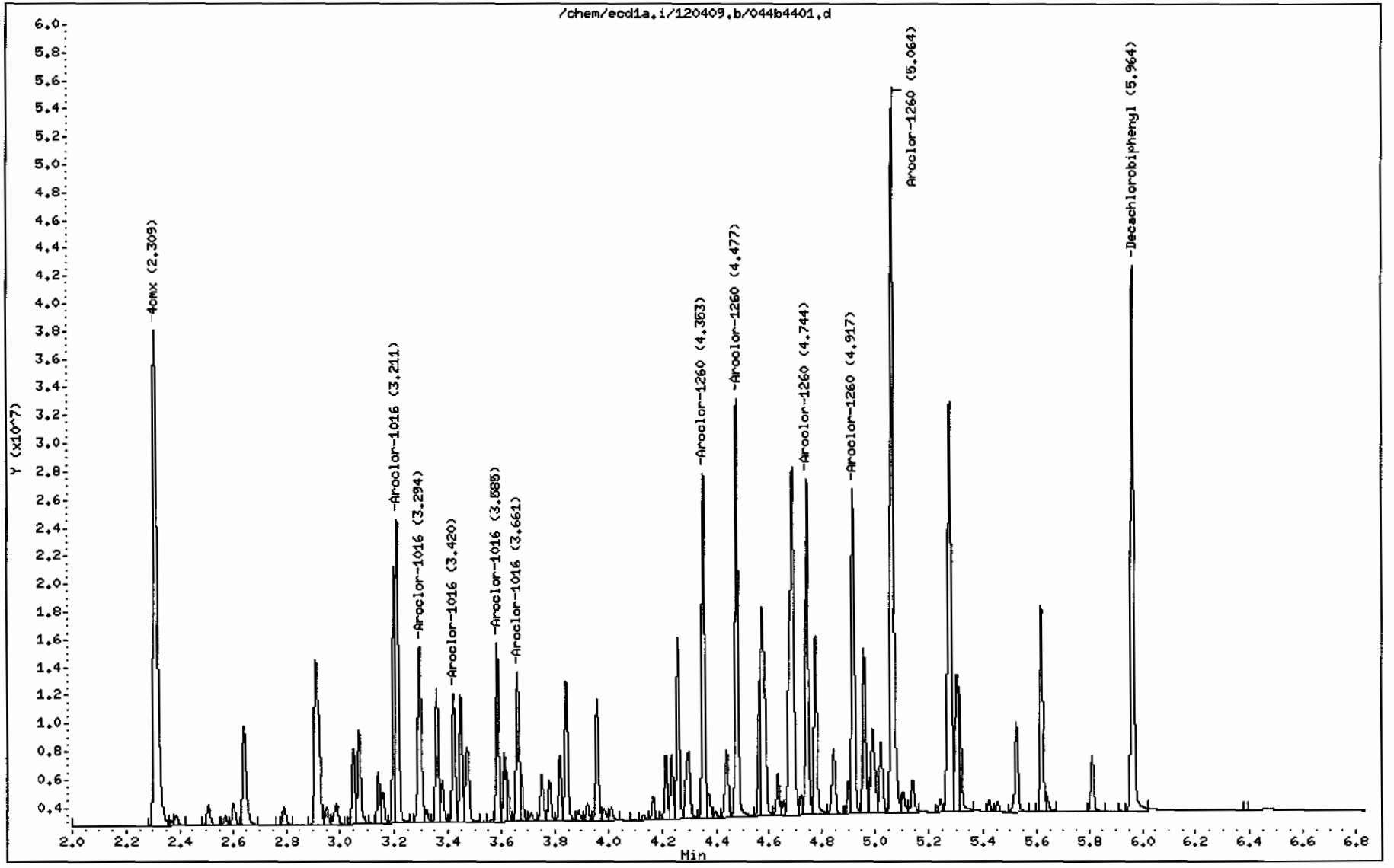

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/056f5601.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 04-DEC-2009 16:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 56 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	46942986	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	38630943	100.000	94.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.428	2.430	-0.002	16943471	1000.00	991	80.00- 120.00	100.00
2.717	2.719	-0.002	21834259	1000.00	1030	108.87- 148.87	128.87
2.798	2.800	-0.002	13509398	1000.00	963	59.73- 99.73	79.73
2.836	2.838	-0.002	8208757	1000.00	975	28.45- 68.45	48.45
3.047	3.049	-0.002	10349102	1000.00	959	41.08- 81.08	61.08
Average of Peak Amounts =					983		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	21236090	1000.00	990	80.00- 120.00	100.00
3.937	3.938	-0.001	32094523	1000.00	997	131.13- 171.13	151.13
4.166	4.168	-0.002	19595051	1000.00	958	72.27- 112.27	92.27
4.309	4.312	-0.003	19822003	1000.00	987	73.34- 113.34	93.34
4.488	4.491	-0.003	46109859	1000.00	996	197.13- 237.13	217.13
Average of Peak Amounts =					986		

Data File: /chem/ecd1a.i/120409.b/056f5601.d
Date : 04-DEC-2009 16:01
Client ID: AR166006
Sample Info: IWAR091119-60 06

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

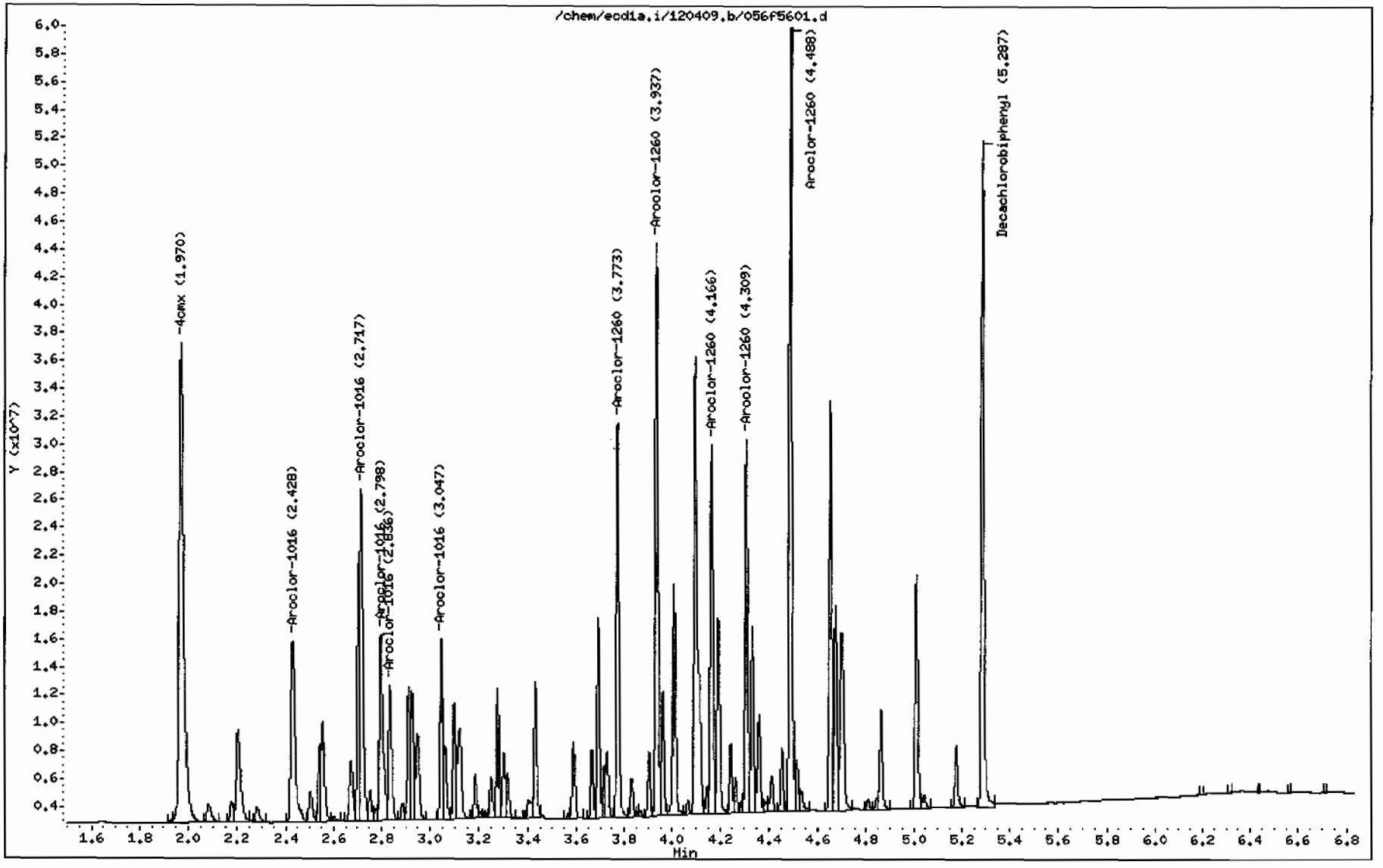

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/056b5601.d
Lab Smp Id: WAR091119-60 06 Client Smp ID: AR166006
Inj Date : 04-DEC-2009 16:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 16:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 56 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	38624164	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	23887707	100.000	79.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16592250	1000.00	984	80.00- 120.00	100.00(M)
3.294	3.296	-0.002	10936406	1000.00	948	45.91- 85.91	65.91
3.420	3.422	-0.002	6543946	1000.00	941	19.44- 59.44	39.44
3.586	3.587	-0.001	8712165	1000.00	949	32.51- 72.51	52.51
3.661	3.663	-0.002	8169660	1000.00	960	29.24- 69.24	58.76
Average of Peak Amounts =					957		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	17273804	1000.00	956	80.00- 120.00	100.00
4.478	4.479	-0.001	21689978	1000.00	979	105.57- 145.57	125.57
4.744	4.745	-0.001	16796594	1000.00	950	77.24- 117.24	97.24
4.918	4.919	-0.001	16542240	1000.00	961	75.76- 115.76	95.76
5.064	5.067	-0.003	38014671	1000.00	984	200.07- 240.07	220.07
Average of Peak Amounts =					966		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/056b5601.d
Date : 04-DEC-2009 16:01
Client ID: AR166006
Sample Info: IWAR091119-60 06

Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

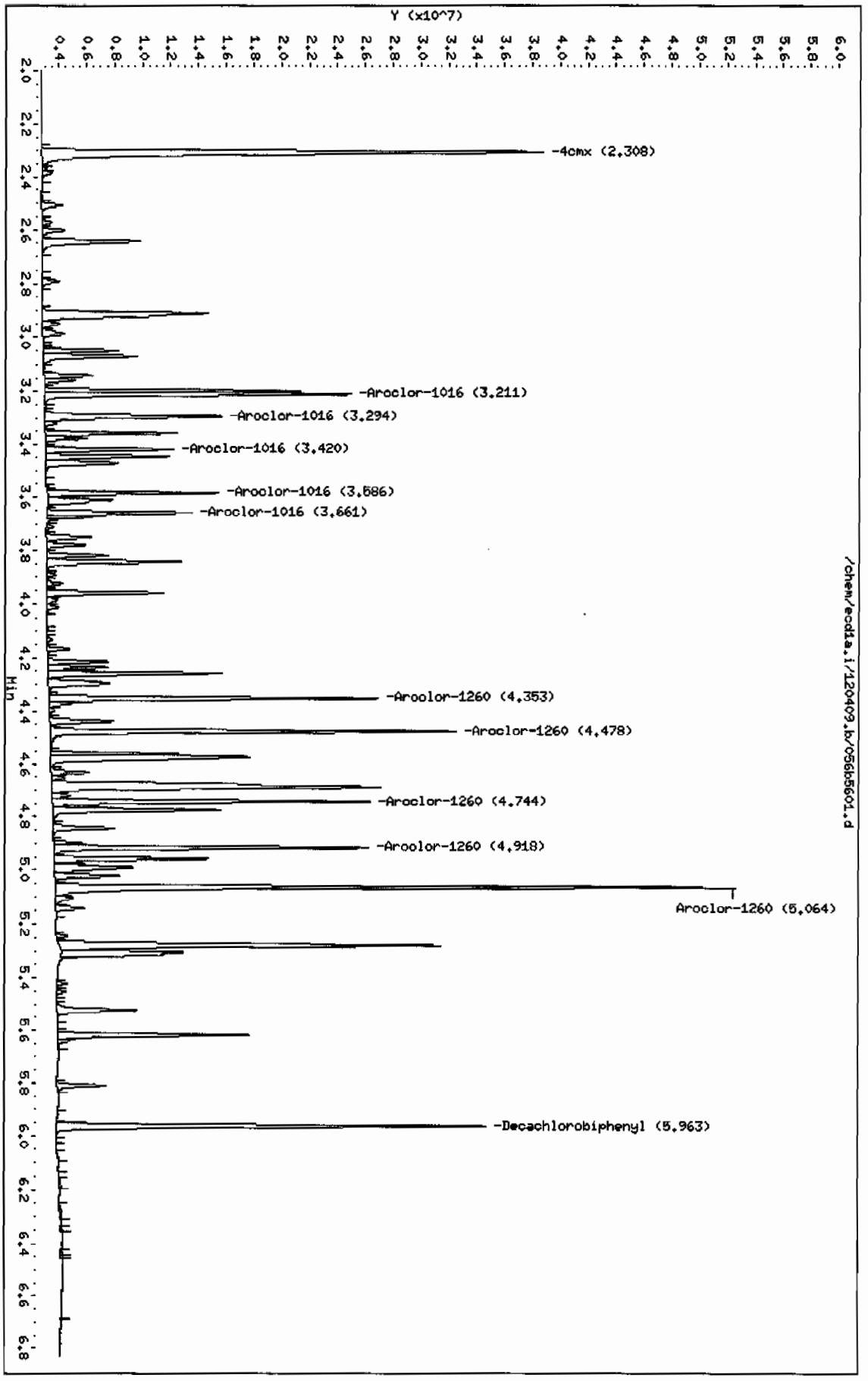

Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/056b5601.d
Operator: YS1
Injection Date: 04-DEC-2009 16:01
Instrument: ecd1a.i
Client Sample ID: AR166006

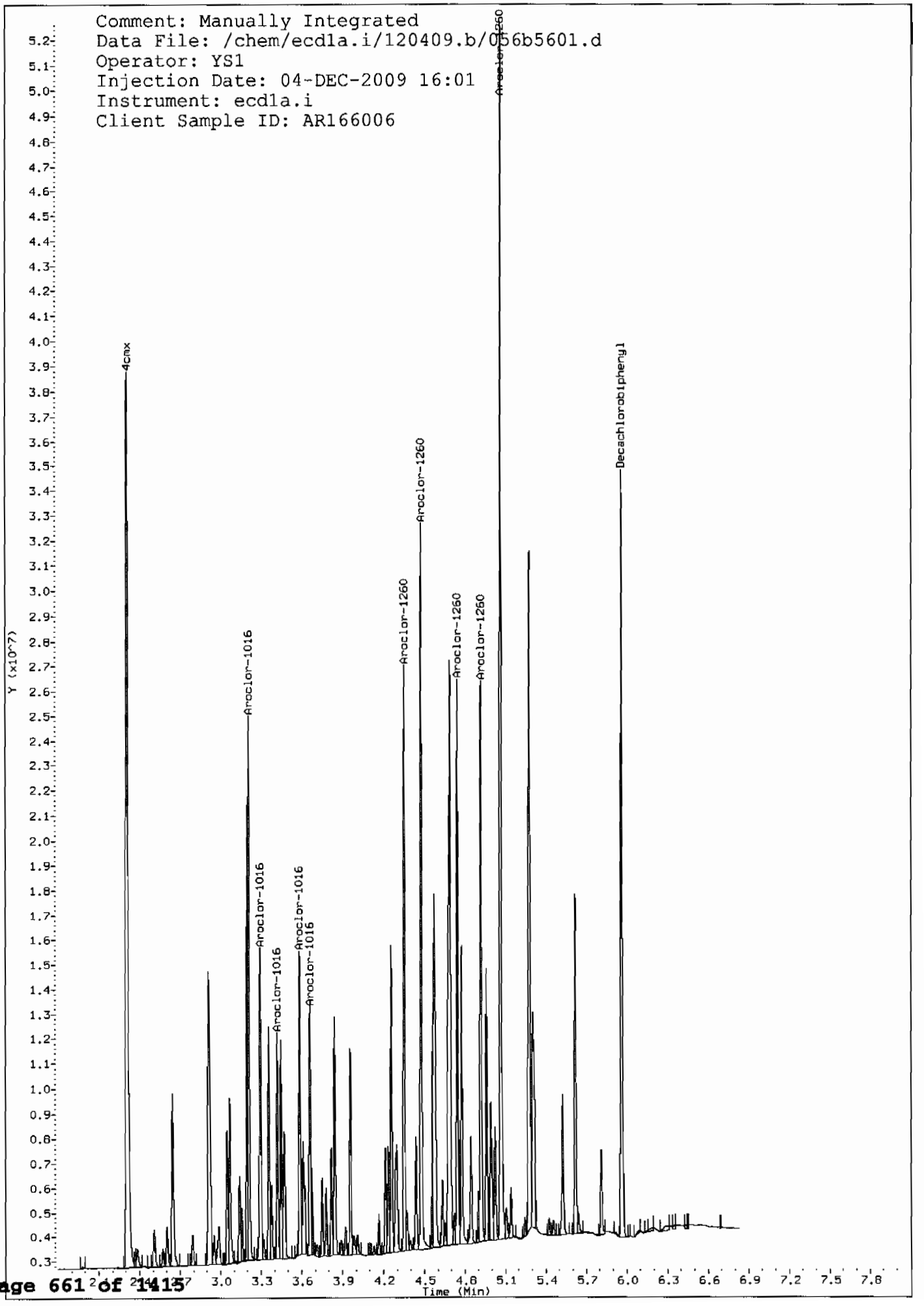

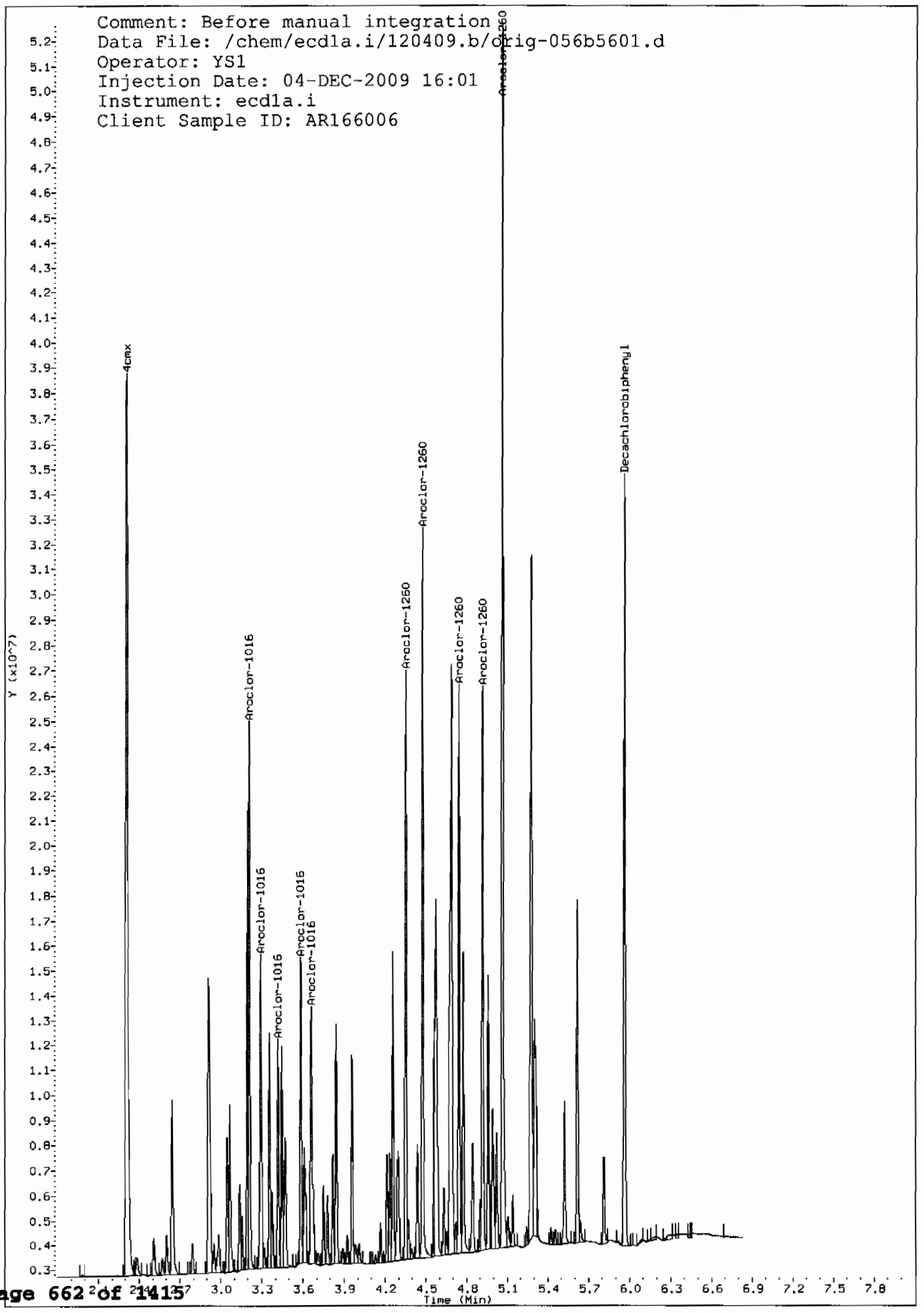
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-056b5601.d
Operator: YS1
Injection Date: 04-DEC-2009 16:01
Instrument: ecd1a.i
Client Sample ID: AR166006
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/061f6101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 61 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	45559685	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.286	5.289	-0.003	39310511	100.000	96.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16585828	1000.00	970	80.00- 120.00	100.00
2.718	2.719	-0.001	21268252	1000.00	1000	107.86- 147.86	128.23
2.799	2.800	-0.001	13312591	1000.00	949	59.89- 99.89	80.26
2.837	2.838	-0.001	8116433	1000.00	964	28.72- 68.72	48.94
3.048	3.049	-0.001	10365509	1000.00	960	41.98- 81.98	62.50
Average of Peak Amounts =					969		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21115698	1000.00	984	80.00- 120.00	100.00
3.937	3.938	-0.001	31817274	1000.00	988	131.51- 171.51	150.68
4.167	4.168	-0.001	19703672	1000.00	963	73.81- 113.81	93.31
4.309	4.312	-0.003	20116773	1000.00	1000	75.82- 115.82	95.27
4.489	4.491	-0.002	46618762	1000.00	1010	202.56- 242.56	220.78
Average of Peak Amounts =					989		

Data File: /chem/ecd1a.i/120409.b/061f6101.d
Date : 04-DEC-2009 17:00
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

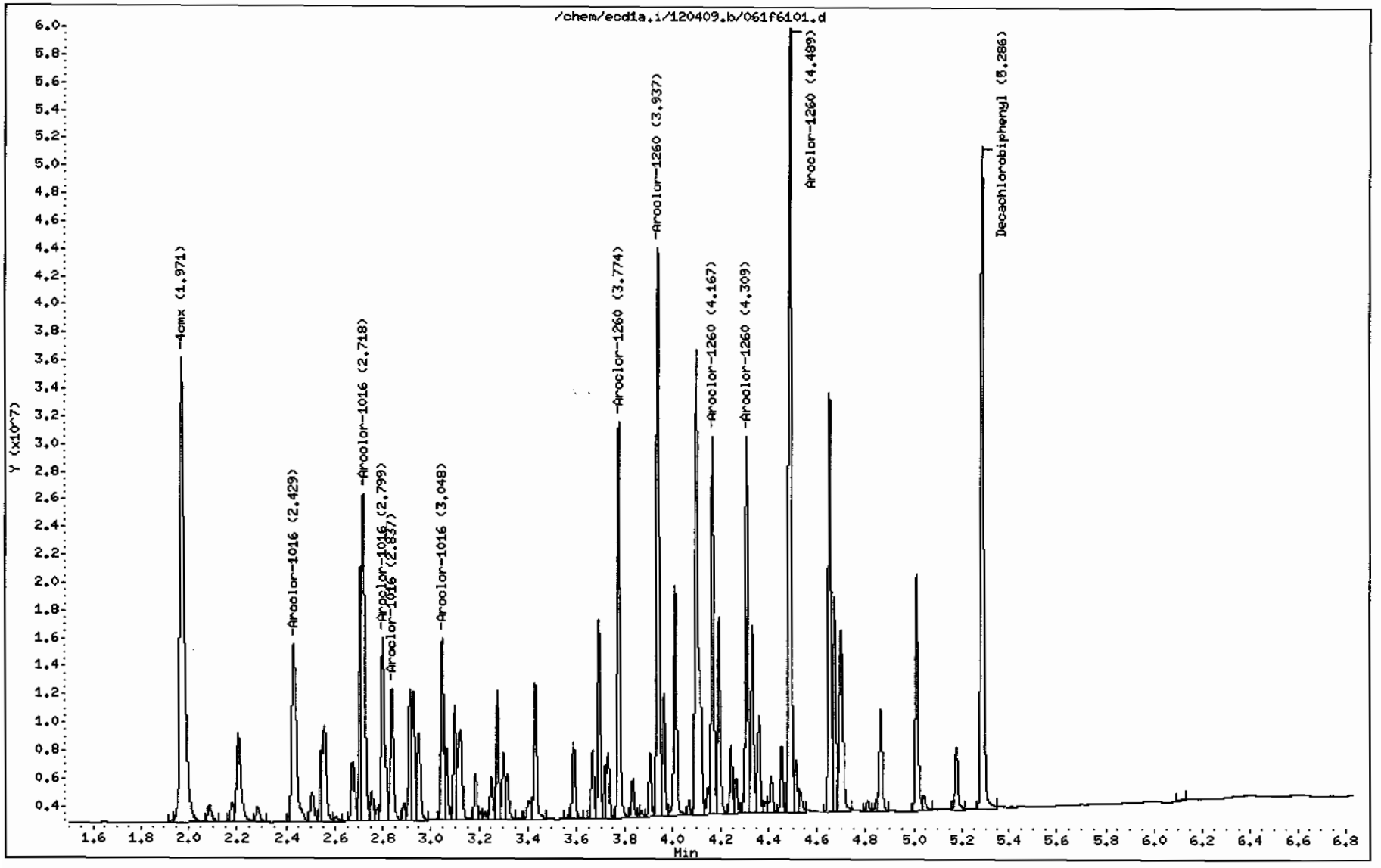

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/061b6101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 61 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37987664	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	29292450	100.000	97.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16701570	1000.00	990	80.00- 120.00	100.00(M)
3.294	3.296	-0.002	10974937	1000.00	951	45.71- 85.71	65.71
3.420	3.422	-0.002	6528241	1000.00	939	19.09- 59.09	39.09
3.586	3.587	-0.001	8767726	1000.00	955	32.50- 72.50	52.50
3.661	3.663	-0.002	8075462	1000.00	949	28.35- 68.35	48.35
Average of Peak Amounts =					957		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	17606161	1000.00	974	80.00- 120.00	100.00
4.477	4.479	-0.002	22261947	1000.00	1000	106.44- 146.44	126.44
4.744	4.745	-0.001	17504600	1000.00	990	79.42- 119.42	99.42
4.918	4.919	-0.001	17285472	1000.00	1000	78.18- 118.18	98.18
5.064	5.067	-0.003	39770333	1000.00	1030	205.89- 245.89	225.89
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/061b6101.d

Date : 04-DEC-2009 17:00

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

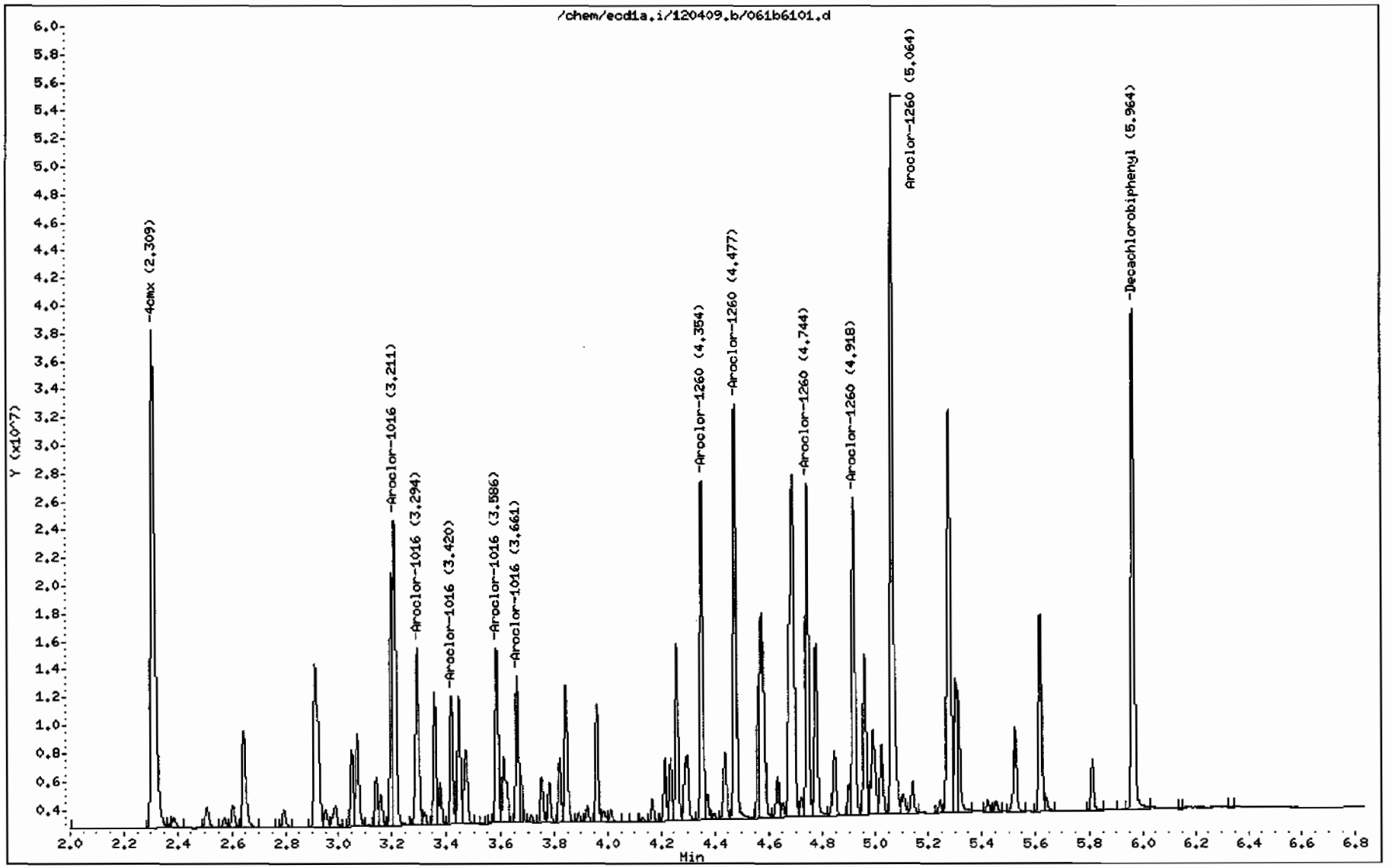

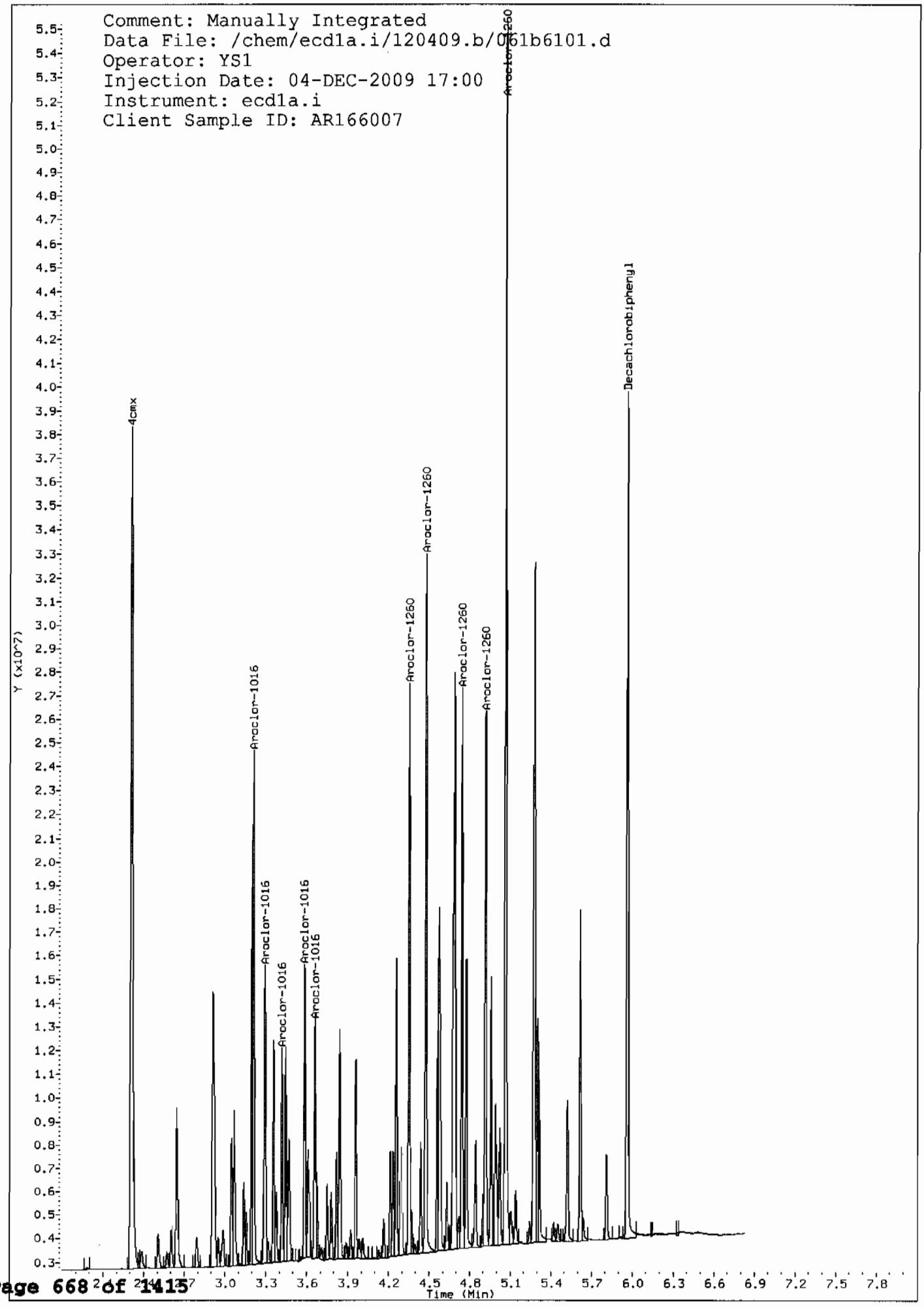
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/061b6101.d
Operator: YS1
Injection Date: 04-DEC-2009 17:00
Instrument: ecd1a.i
Client Sample ID: AR166007
Y (x10^7)
Time (Min)
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl

Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-061b6101.d
Operator: YS1
Injection Date: 04-DEC-2009 17:00
Instrument: ecd1a.i
Client Sample ID: AR166007

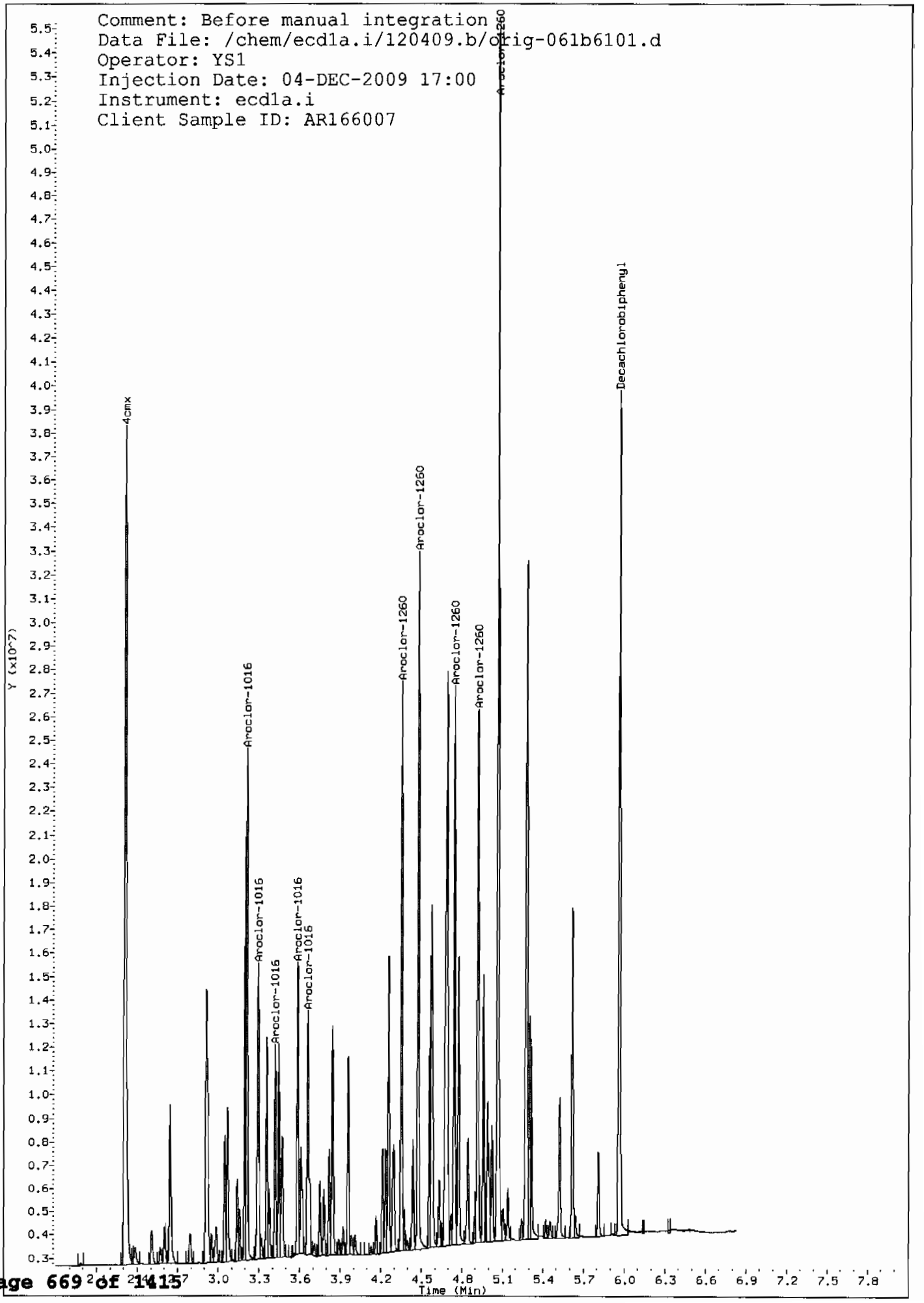

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	1.97	5.29
02	ZZZZZ	ZZZZZ	11/10/09	0814	1.97	5.29
03	ZZZZZ	ZZZZZ	11/10/09	0825	1.98	5.29
04	ZZZZZ	ZZZZZ	11/10/09	0835	1.98	5.29
05	ZZZZZ	ZZZZZ	11/10/09	0846	1.98	5.30
06	AR123201	WAR090930-32	11/10/09	0856	1.98	5.29
07	AR122101	WAR090803-21	11/10/09	0907	1.97	5.30
08	AR126201	WAR090803-62	11/10/09	0917	1.98	5.29
09	AR126801	WAR091106-68	11/10/09	0928	1.98	5.29
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	1.98	5.30
12	AR166002	WAR091110-02	11/10/09	0959	1.98	5.30
13	AR166003	WAR091110-04	11/10/09	1010	1.98	5.30
14	AR166004	WAR091110-03	11/10/09	1021	1.98	5.30
15	AR166005	IAR091102-01	11/10/09	1031	1.98	5.29
16	AR166001	WAR091102-60	11/10/09	1042	1.98	5.30
17	AR125401	WAR091110-05	11/10/09	1052	1.97	5.30
18	AR125402	WAR091110-06	11/10/09	1103	1.98	5.30
19	AR125403	WAR091110-07	11/10/09	1113	1.98	5.29
20	AR125404	WAR091110-08	11/10/09	1124	1.98	5.30
21	AR125405	IAR091027-01	11/10/09	1134	1.98	5.30
22	AR125401	WAR091102-54	11/10/09	1145	1.98	5.30
23	AR124201	WAR091110-09	11/10/09	1155	1.98	5.30
24	AR124202	WAR091110-10	11/10/09	1206	1.98	5.29
25	AR124203	WAR091110-11	11/10/09	1217	1.98	5.30
26	AR124204	WAR091110-12	11/10/09	1227	1.98	5.30
27	AR124205	IAR090914-01	11/10/09	1238	1.98	5.30
28	AR124201	WAR091102-42	11/10/09	1248	1.98	5.30
29	AR124801	WAR091110-13	11/10/09	1259	1.98	5.30
30	AR124802	WAR091110-14	11/10/09	1309	1.98	5.30
31	AR124803	WAR091110-15	11/10/09	1320	1.98	5.29
32	AR124804	WAR091110-16	11/10/09	1330	1.98	5.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	1.98	5.29
02	AR124801	WAR091027-48	11/10/09	1351	1.98	5.30
03	PIBLK02	WAR090916-99	11/10/09	1402	1.98	5.30
04	ZZZZZ	ZZZZZ	11/10/09	1412	1.98	5.30
05	ZZZZZ	ZZZZZ	11/10/09	1423	1.98	5.30
06	ZZZZZ	ZZZZZ	11/10/09	1433	1.98	5.30
07	ZZZZZ	ZZZZZ	11/10/09	1444	1.98	5.30
08	ZZZZZ	ZZZZZ	11/10/09	1457	1.97	5.30
09	ZZZZZ	ZZZZZ	11/10/09	1509	1.97	5.29
10	ZZZZZ	ZZZZZ	11/10/09	1522	1.97	5.29
11	AR166002	WAR091102-60	11/10/09	1534	1.98	5.29
12	PIBLK003	WAR090916-99	11/10/09	1545	1.98	5.30
13	ZZZZZ	ZZZZZ	11/10/09	1555	1.97	5.30
14	ZZZZZ	ZZZZZ	11/10/09	1608	1.97	5.29
15	ZZZZZ	ZZZZZ	11/10/09	1620	1.98	5.29
16	ZZZZZ	ZZZZZ	11/10/09	1633	1.97	5.29
17	ZZZZZ	ZZZZZ	11/10/09	1645	1.97	5.29
18	ZZZZZ	ZZZZZ	11/10/09	1658	1.98	5.29
19	ZZZZZ	ZZZZZ	11/10/09	1711	1.97	5.29
20	ZZZZZ	ZZZZZ	11/10/09	1723	1.98	5.29
21	ZZZZZ	ZZZZZ	11/10/09	1736	1.97	5.29
22	ZZZZZ	ZZZZZ	11/10/09	1748	1.98	5.29
23	AR166003	WAR091102-60	11/10/09	1801	1.98	5.29
24	PIBLK04	WAR090916-99	11/10/09	1812	1.98	5.30
25	ZZZZZ	ZZZZZ	11/10/09	1822	1.98	5.30
26	ZZZZZ	ZZZZZ	11/10/09	1835	1.98	5.29
27	ZZZZZ	ZZZZZ	11/10/09	1847	1.98	5.29
28	ZZZZZ	ZZZZZ	11/10/09	1900	1.98	5.29
29	ZZZZZ	ZZZZZ	11/10/09	1912	1.98	5.29
30	ZZZZZ	ZZZZZ	11/10/09	1925	1.98	5.29
31	ZZZZZ	ZZZZZ	11/10/09	1938	1.97	5.29
32	ZZZZZ	ZZZZZ	11/10/09	1950	1.98	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	2.31	5.97
02	ZZZZZ	ZZZZZ	11/10/09	0814	2.31	5.97
03	ZZZZZ	ZZZZZ	11/10/09	0825	2.32	5.97
04	ZZZZZ	ZZZZZ	11/10/09	0835	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	0846	2.31	5.97
06	AR123201	WAR090930-32	11/10/09	0856	2.31	5.97
07	AR122101	WAR090803-21	11/10/09	0907	2.31	5.97
08	AR126201	WAR090803-62	11/10/09	0917	2.31	5.97
09	AR126801	WAR091106-68	11/10/09	0928	2.31	5.97
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	2.31	5.97
12	AR166002	WAR091110-02	11/10/09	0959	2.31	5.97
13	AR166003	WAR091110-04	11/10/09	1010	2.31	5.97
14	AR166004	WAR091110-03	11/10/09	1021	2.31	5.97
15	AR166005	IAR091102-01	11/10/09	1031	2.31	5.97
16	AR166001	WAR091102-60	11/10/09	1042	2.31	5.97
17	AR125401	WAR091110-05	11/10/09	1052	2.31	5.97
18	AR125402	WAR091110-06	11/10/09	1103	2.31	5.97
19	AR125403	WAR091110-07	11/10/09	1113	2.31	5.97
20	AR125404	WAR091110-08	11/10/09	1124	2.32	5.97
21	AR125405	IAR091027-01	11/10/09	1134	2.32	5.97
22	AR125401	WAR091102-54	11/10/09	1145	2.32	5.97
23	AR124201	WAR091110-09	11/10/09	1155	2.32	5.97
24	AR124202	WAR091110-10	11/10/09	1206	2.31	5.97
25	AR124203	WAR091110-11	11/10/09	1217	2.31	5.97
26	AR124204	WAR091110-12	11/10/09	1227	2.32	5.97
27	AR124205	IAR090914-01	11/10/09	1238	2.32	5.97
28	AR124201	WAR091102-42	11/10/09	1248	2.32	5.97
29	AR124801	WAR091110-13	11/10/09	1259	2.31	5.97
30	AR124802	WAR091110-14	11/10/09	1309	2.31	5.97
31	AR124803	WAR091110-15	11/10/09	1320	2.31	5.97
32	AR124804	WAR091110-16	11/10/09	1330	2.31	5.97

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	2.31	5.97
02	AR124801	WAR091027-48	11/10/09	1351	2.31	5.97
03	PIBLK02	WAR090916-99	11/10/09	1402	2.31	5.97
04	ZZZZZ	ZZZZZ	11/10/09	1412	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	1423	2.31	5.97
06	ZZZZZ	ZZZZZ	11/10/09	1433	2.31	5.97
07	ZZZZZ	ZZZZZ	11/10/09	1444	2.31	5.97
08	ZZZZZ	ZZZZZ	11/10/09	1457	2.31	5.97
09	ZZZZZ	ZZZZZ	11/10/09	1509	2.31	5.97
10	ZZZZZ	ZZZZZ	11/10/09	1522	2.31	5.97
11	AR166002	WAR091102-60	11/10/09	1534	2.31	5.97
12	PIBLK03	WAR090916-99	11/10/09	1545	2.31	5.97
13	ZZZZZ	ZZZZZ	11/10/09	1555	2.31	5.97
14	ZZZZZ	ZZZZZ	11/10/09	1608	2.31	5.97
15	ZZZZZ	ZZZZZ	11/10/09	1620	2.31	5.97
16	ZZZZZ	ZZZZZ	11/10/09	1633	2.31	5.97
17	ZZZZZ	ZZZZZ	11/10/09	1645	2.31	5.97
18	ZZZZZ	ZZZZZ	11/10/09	1658	2.31	5.97
19	ZZZZZ	ZZZZZ	11/10/09	1711	2.31	5.97
20	ZZZZZ	ZZZZZ	11/10/09	1723	2.31	5.97
21	ZZZZZ	ZZZZZ	11/10/09	1736	2.31	5.97
22	ZZZZZ	ZZZZZ	11/10/09	1748	2.31	5.97
23	AR166003	WAR091102-60	11/10/09	1801	2.31	5.97
24	PIBLK04	WAR090916-99	11/10/09	1812	2.31	5.97
25	ZZZZZ	ZZZZZ	11/10/09	1822	2.31	5.97
26	ZZZZZ	ZZZZZ	11/10/09	1835	2.31	5.97
27	ZZZZZ	ZZZZZ	11/10/09	1847	2.31	5.97
28	ZZZZZ	ZZZZZ	11/10/09	1900	2.31	5.97
29	ZZZZZ	ZZZZZ	11/10/09	1912	2.31	5.97
30	ZZZZZ	ZZZZZ	11/10/09	1925	2.31	5.97
31	ZZZZZ	ZZZZZ	11/10/09	1938	2.31	5.97
32	ZZZZZ	ZZZZZ	11/10/09	1950	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0523	1.97	5.29
02	AR166001	WAR091119-60	12/04/09	0533	1.97	5.29
03	ZZZZZ	ZZZZZ	12/04/09	0544	1.97	5.29
04	AR124201	WAR091102-42	12/04/09	0554	1.97	5.29
05	AR124801	WAR091027-48	12/04/09	0605	1.97	5.29
06	AR123201	WAR090930-32	12/04/09	0615	1.97	5.29
07	AR122101	WAR090803-21	12/04/09	0626	1.97	5.29
08	AR126201	WAR090803-62	12/04/09	0636	1.97	5.29
09	AR126801	WAR091106-68	12/04/09	0647	1.97	5.29
10	AR125401	WAR091102-54	12/04/09	0657	1.97	5.29
11	DDTANALOGSTD	WAR091020-DD	12/04/09	0708		
12	PIBLK02	WAR090916-99	12/04/09	0718	1.97	5.29
13	ZZZZZ	ZZZZZ	12/04/09	0729	1.97	5.29
14	ZZZZZ	ZZZZZ	12/04/09	0739	1.97	5.29
15	ZZZZZ	ZZZZZ	12/04/09	0750	1.97	5.29
16	ZZZZZ	ZZZZZ	12/04/09	0800	1.97	5.29
17	AR166002	WAR091119-60	12/04/09	0813	1.97	5.29
18	PIBLK03	WAR090916-99	12/04/09	0823	1.97	5.29
19	ZZZZZ	ZZZZZ	12/04/09	0834	1.97	5.29
20	ZZZZZ	ZZZZZ	12/04/09	0845	1.97	5.29
21	ZZZZZ	ZZZZZ	12/04/09	0855	1.97	5.29
22	ZZZZZ	ZZZZZ	12/04/09	0906	1.97	5.29
23	ZZZZZ	ZZZZZ	12/04/09	0918	1.97	5.29
24	ZZZZZ	ZZZZZ	12/04/09	0931	1.96	5.29
25	ZZZZZ	ZZZZZ	12/04/09	0943	1.97	5.29
26	ZZZZZ	ZZZZZ	12/04/09	0956	1.97	5.29
27	ZZZZZ	ZZZZZ	12/04/09	1008	1.97	5.29
28	ZZZZZ	ZZZZZ	12/04/09	1021	1.97	5.29
29	AR166003	WAR091119-60	12/04/09	1033	1.97	5.29
30	PIBLK04	WAR090916-99	12/04/09	1044	1.97	5.29
31	ZZZZZ	ZZZZZ	12/04/09	1055	1.97	5.29
32	AR166004	WAR091119-60	12/04/09	1107	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK03	WAR090916-99	12/04/09	1118	1.97	5.29
02	PBLK01	1201982139	12/04/09	1128	1.97	5.29
03	PBLK01LCS	1201982142	12/04/09	1141	1.97	5.29
04	ZZZZZ	ZZZZZ	12/04/09	1153	1.97	5.29
05	ZZZZZ	ZZZZZ	12/04/09	1206	1.97	5.29
06	ZZZZZ	ZZZZZ	12/04/09	1218	1.97	5.29
07	ZZZZZ	ZZZZZ	12/04/09	1231	1.97	5.29
08	ZZZZZ	ZZZZZ	12/04/09	1244	1.97	5.29
09	ZZZZZ	ZZZZZ	12/04/09	1256	1.97	5.29
10	ZZZZZ	ZZZZZ	12/04/09	1309	1.97	5.29
11	ZZZZZ	ZZZZZ	12/04/09	1322	1.97	5.29
12	AR166005	WAR091119-60	12/04/09	1334	1.97	5.29
13	PIBLK06	WAR090916-99	12/04/09	1345	1.97	5.29
14	ZZZZZ	ZZZZZ	12/04/09	1355	1.97	5.29
15	ZZZZZ	ZZZZZ	12/04/09	1408	1.97	5.29
16	ZZZZZ	ZZZZZ	12/04/09	1420	1.97	5.29
17	ZZZZZ	ZZZZZ	12/04/09	1433	1.97	5.29
18	ZZZZZ	ZZZZZ	12/04/09	1445	1.97	5.29
19	ZZZZZ	ZZZZZ	12/04/09	1458	1.97	5.29
20	ZZZZZ	ZZZZZ	12/04/09	1511	1.97	5.29
21	ZZZZZ	ZZZZZ	12/04/09	1523	1.97	5.29
22	ZZZZZ	ZZZZZ	12/04/09	1536	1.97	5.29
23	ZZZZZ	ZZZZZ	12/04/09	1548	1.97	5.29
24	AR166006	WAR091119-60	12/04/09	1601	1.97	5.29
25	PIBLK07	WAR090916-99	12/04/09	1612	1.97	5.29
26	RE03-10-6903	241559001	12/04/09	1622	1.97	5.29
27	RE03-10-6902	241559002	12/04/09	1635	1.97	5.29
28	ZZZZZ	ZZZZZ	12/04/09	1647	1.97	5.29
29	AR166007	WAR091119-60	12/04/09	1700	1.97	5.29
30	PIBLK08	WAR090916-99	12/04/09	1710	1.97	5.29
31	ZZZZZ	ZZZZZ	12/04/09	1721	1.97	5.29
32	ZZZZZ	ZZZZZ	12/04/09	1733	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0523	2.31	5.96
02	AR166001	WAR091119-60	12/04/09	0533	2.31	5.97
03	ZZZZZ	ZZZZZ	12/04/09	0544	2.31	5.97
04	AR124201	WAR091102-42	12/04/09	0554	2.31	5.97
05	AR124801	WAR091027-48	12/04/09	0605	2.31	5.97
06	AR123201	WAR090930-32	12/04/09	0615	2.31	5.97
07	AR122101	WAR090803-21	12/04/09	0626	2.31	5.97
08	AR126201	WAR090803-62	12/04/09	0636	2.31	5.97
09	AR126801	WAR091106-68	12/04/09	0647	2.31	5.97
10	AR125401	WAR091102-54	12/04/09	0657	2.31	5.97
11	DDTANALOGSTD	WAR091020-DD	12/04/09	0708		
12	PIBLK02	WAR090916-99	12/04/09	0718	2.31	5.97
13	ZZZZZ	ZZZZZ	12/04/09	0729	2.31	5.97
14	ZZZZZ	ZZZZZ	12/04/09	0739	2.31	5.97
15	ZZZZZ	ZZZZZ	12/04/09	0750	2.31	5.97
16	ZZZZZ	ZZZZZ	12/04/09	0800	2.31	5.97
17	AR166002	WAR091119-60	12/04/09	0813	2.31	5.96
18	PIBLK03	WAR090916-99	12/04/09	0823	2.31	5.96
19	ZZZZZ	ZZZZZ	12/04/09	0834	2.31	5.97
20	ZZZZZ	ZZZZZ	12/04/09	0845	2.31	5.97
21	ZZZZZ	ZZZZZ	12/04/09	0855	2.31	5.97
22	ZZZZZ	ZZZZZ	12/04/09	0906	2.31	5.96
23	ZZZZZ	ZZZZZ	12/04/09	0918	2.31	5.96
24	ZZZZZ	ZZZZZ	12/04/09	0931	2.31	5.96
25	ZZZZZ	ZZZZZ	12/04/09	0943	2.31	5.96
26	ZZZZZ	ZZZZZ	12/04/09	0956	2.31	5.96
27	ZZZZZ	ZZZZZ	12/04/09	1008	2.31	5.96
28	ZZZZZ	ZZZZZ	12/04/09	1021	2.31	5.96
29	AR166003	WAR091119-60	12/04/09	1033	2.31	5.96
30	PIBLK04	WAR090916-99	12/04/09	1044	2.31	5.96
31	ZZZZZ	ZZZZZ	12/04/09	1055	2.31	5.96
32	AR166004	WAR091119-60	12/04/09	1107	2.31	5.96

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-608-1

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK05	WAR090916-99	12/04/09	1118	2.31	5.96
02	PBLK01	1201982139	12/04/09	1128	2.31	5.97
03	PBLK01LCS	1201982142	12/04/09	1141	2.31	5.96
04	ZZZZZ	ZZZZZ	12/04/09	1153	2.31	5.96
05	ZZZZZ	ZZZZZ	12/04/09	1206	2.31	5.96
06	ZZZZZ	ZZZZZ	12/04/09	1218	2.31	5.96
07	ZZZZZ	ZZZZZ	12/04/09	1231	2.31	5.96
08	ZZZZZ	ZZZZZ	12/04/09	1244	2.31	5.96
09	ZZZZZ	ZZZZZ	12/04/09	1256	2.31	5.96
10	ZZZZZ	ZZZZZ	12/04/09	1309	2.31	5.96
11	ZZZZZ	ZZZZZ	12/04/09	1322	2.31	5.96
12	AR166005	WAR091119-60	12/04/09	1334	2.31	5.96
13	PIBLK06	WAR090916-99	12/04/09	1345	2.31	5.96
14	ZZZZZ	ZZZZZ	12/04/09	1355	2.31	5.96
15	ZZZZZ	ZZZZZ	12/04/09	1408	2.31	5.96
16	ZZZZZ	ZZZZZ	12/04/09	1420	2.31	5.96
17	ZZZZZ	ZZZZZ	12/04/09	1433	2.31	5.96
18	ZZZZZ	ZZZZZ	12/04/09	1445	2.31	5.96
19	ZZZZZ	ZZZZZ	12/04/09	1458	2.31	5.96
20	ZZZZZ	ZZZZZ	12/04/09	1511	2.31	5.96
21	ZZZZZ	ZZZZZ	12/04/09	1523	2.31	5.96
22	ZZZZZ	ZZZZZ	12/04/09	1536	2.31	5.96
23	ZZZZZ	ZZZZZ	12/04/09	1548	2.31	5.96
24	AR166006	WAR091119-60	12/04/09	1601	2.31	5.96
25	PIBLK07	WAR090916-99	12/04/09	1612	2.31	5.96
26	RE03-10-6903	241559001	12/04/09	1622	2.31	5.97
27	RE03-10-6902	241559002	12/04/09	1635	2.31	5.96
28	ZZZZZ	ZZZZZ	12/04/09	1647	2.31	5.96
29	AR166007	WAR091119-60	12/04/09	1700	2.31	5.96
30	PIBLK08	WAR090916-99	12/04/09	1710	2.31	5.97
31	ZZZZZ	ZZZZZ	12/04/09	1721	2.31	5.96
32	ZZZZZ	ZZZZZ	12/04/09	1733	2.31	5.96

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–608–1 **Client ID:** LCS for batch 927082

Lab Sample ID: 1201982142

Data File:	035f3501.d	**Data File:**	035b3501.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 11:41	**Analyzed:**	04–DEC–09 11:41

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							.965
Column 1	1	2.43	2.4 – 2.46	24.8		ug/kg	
	2	2.72	2.69 – 2.75	25.3		ug/kg	
	3	2.8	2.77 – 2.83	24.5		ug/kg	
	4	2.84	2.81 – 2.87	24.7		ug/kg	
	5	3.05	3.02 – 3.08	24.8		ug/kg	
					24.8		
Column 2	1	3.21	3.18 – 3.24	25.5		ug/kg	
	2	3.29	3.27 – 3.33	24.6		ug/kg	
	3	3.42	3.39 – 3.45	24.9		ug/kg	
	4	3.59	3.56 – 3.62	25		ug/kg	
	5	3.66	3.63 – 3.69	25.1		ug/kg	
					25		
Aroclor–1260							4.56
Column 1	1	3.77	3.75 – 3.81	26.4		ug/kg	
	2	3.94	3.91 – 3.97	26.9		ug/kg	
	3	4.17	4.14 – 4.2	26.7		ug/kg	
	4	4.31	4.28 – 4.34	27.7		ug/kg	
	5	4.49	4.46 – 4.52	28.7		ug/kg	
					27.3		
Column 2	1	4.35	4.32 – 4.38	27		ug/kg	
	2	4.48	4.45 – 4.51	28.4		ug/kg	
	3	4.74	4.72 – 4.78	28.3		ug/kg	
	4	4.92	4.89 – 4.95	29		ug/kg	
	5	5.07	5.04 – 5.1	30.1		ug/kg	
					28.5		

Identification Summary

SDG Number: 10–608–1 **Client ID:** RE03–10–6902

Lab Sample ID: 241559002

Data File:	059f5901.d	**Data File:**	059b5901.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 16:35	**Analyzed:**	04–DEC–09 16:35

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1254							69.3
Column 1	1	3.29	3.25 – 3.31	36		ug/kg	
	2	3.43	3.4 – 3.46	6.86		ug/kg	
	3	3.67	3.64 – 3.7	6.54		ug/kg	
	4	3.83	3.8 – 3.86	7.65		ug/kg	
	5	3.94	3.91 – 3.97	23.6		ug/kg	
					16.1		
Column 2	1	3.42	3.39 – 3.45	7.13		ug/kg	
	2	3.84	3.82 – 3.88	6.76		ug/kg	
	3	3.96	3.93 – 3.99	7.22		ug/kg	
	4	4.24	4.21 – 4.27	9.44		ug/kg	
	5	4.37	4.34 – 4.4	8.59		ug/kg	
					7.83		
Aroclor–1260							23.7
Column 1	1	3.77	3.75 – 3.81	13		ug/kg	
	2	3.94	3.91 – 3.97	14.8		ug/kg	
	3	4.17	4.14 – 4.2	17.1		ug/kg	
	4	4.31	4.28 – 4.34	11.5		ug/kg	
	5	4.49	4.46 – 4.52	14.1		ug/kg	
					14.1		
Column 2	1	4.35	4.32 – 4.38	16.1		ug/kg	
	2	4.48	4.45 – 4.51	15.1		ug/kg	
	3	4.74	4.72 – 4.78	21		ug/kg	
	4	4.92	4.89 – 4.95	18.1		ug/kg	
	5	5.07	5.04 – 5.1	19.1		ug/kg	
					17.9		

Identification Summary

SDG Number: 10–608–1 **Client ID:** RE03–10–6903

Lab Sample ID: 241559001

Data File:	058f5801.d	**Data File:**	058b5801.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 16:22	**Analyzed:**	04–DEC–09 16:22

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1260							20.7
Column 1	1	3.77	3.75 – 3.81	5.6		ug/kg	
	2	3.94	3.91 – 3.97	4.38		ug/kg	
	3	4.17	4.14 – 4.2	2.48		ug/kg	
	4	4.31	4.28 – 4.34	1.33		ug/kg	
	5	4.49	4.46 – 4.52	2.8		ug/kg	
					3.32		
Column 2	1	4.35	4.32 – 4.38	3.95		ug/kg	
	2	4.48	4.45 – 4.51	5.35		ug/kg	
	3	4.75	4.72 – 4.78	4.17		ug/kg	
	4	4.92	4.89 – 4.95	2.96		ug/kg	
	5	5.07	5.04 – 5.1	4.01		ug/kg	
					4.09		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-608-1**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982139**				
Client Sample:	**QC for batch 927082**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927082**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:28**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**034f3401-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	034b3401-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/034f3401-1.d
Lab Smp Id: 1201982139 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 11:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982139|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	68544634	153.593	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	64424044	157.610	5.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/034f3401-1.d

Date : 04-DEC-2009 11:28

Client ID: PBLK01

Sample Info: |120198213911|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

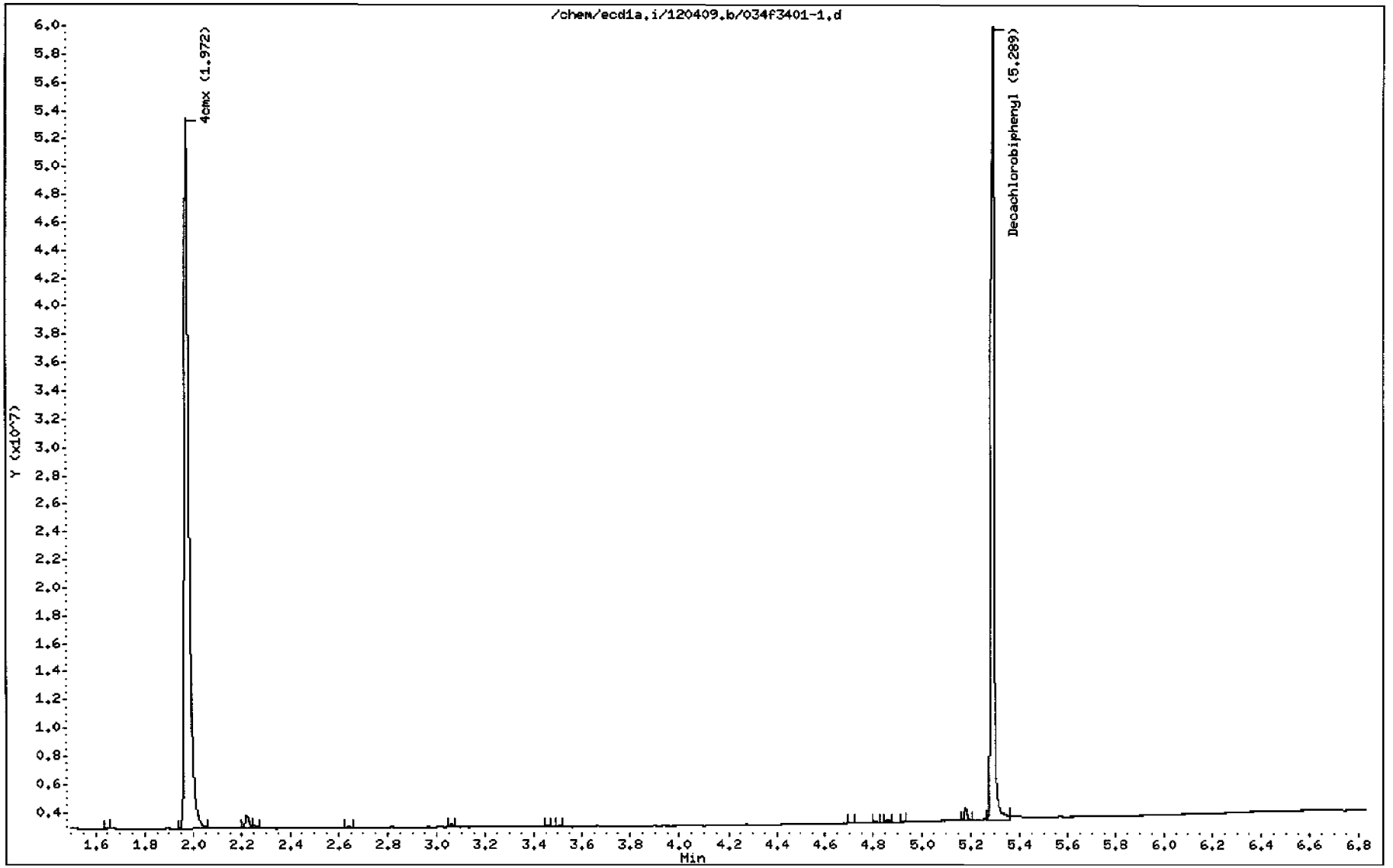

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/034b3401-1.d
Lab Smp Id: 1201982139 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 11:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982139|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	56051930	150.963	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	48857458	162.545	5.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/034b3401-1.d

Date : 04-DEC-2009 11:28

Client ID: PBLK01

Sample Info: |1201982139|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

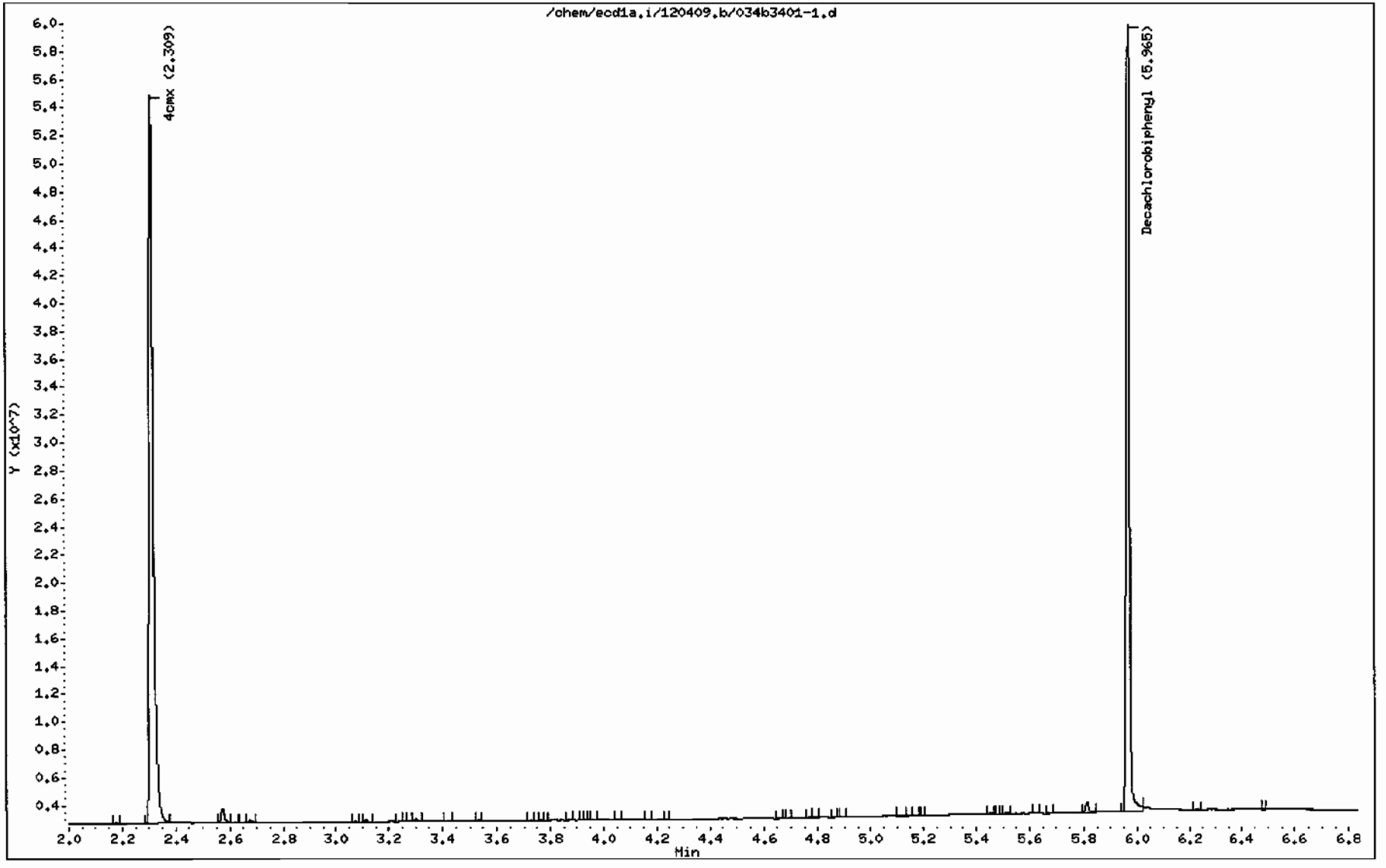

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–608–1**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982142**				
Client Sample:	**QC for batch 927082**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927082**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927083**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:41**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:38**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**035f3501–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	035b3501–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		25.0	ug/kg	1.11	3.33	2
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		28.6	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/035f3501-1.d
Lab Smp Id: 1201982142 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 11:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982142|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 35 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	64580921	144.711	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	62933256	153.963	5.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.430	0.000	12700286	743.171	24.8	80.00- 120.00	100.00
2.718	2.719	-0.001	16116478	758.894	25.3	107.86- 147.86	126.90
2.799	2.800	-0.001	10295159	733.670	24.4	59.89- 99.89	81.06
2.836	2.838	-0.002	6246690	742.182	24.7	28.72- 68.72	49.19

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	8019586	743.004	24.8	41.98- 81.98	63.14
			Average of Peak Concentrations =		24.8		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	16982798	791.834	26.4	80.00- 120.00	100.00
3.937	3.938	-0.001	25990814	807.290	26.9	131.51- 171.51	153.04
4.168	4.168	0.000	16375091	800.441	26.7	73.81- 113.81	96.42
4.311	4.312	-0.001	16713166	832.256	27.7	75.82- 115.82	98.41
4.490	4.491	-0.001	39812525	859.900	28.7	202.56- 242.56	234.43
			Average of Peak Concentrations =		27.3		

Data File: /chem/ecd1a.i/120409.b/035f3501-1.d
Date : 04-DEC-2009 11:41
Client ID: PBLK01LCS
Sample Info: |1201982142|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

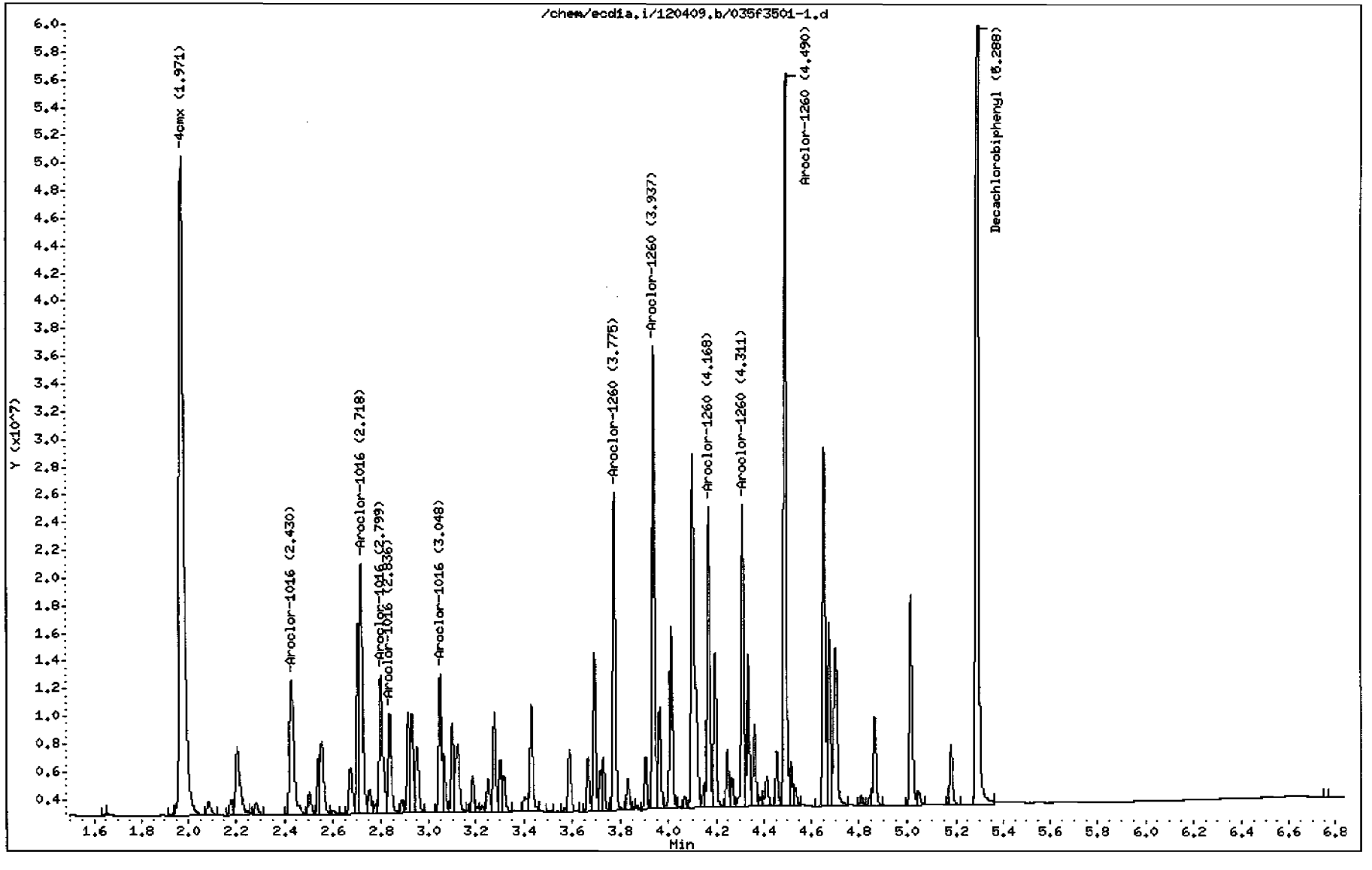

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/035b3501-1.d
Lab Smp Id: 1201982142 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 11:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982142|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 35 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-608-1.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	51684562	139.200	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	50545001	168.159	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.213	-0.001	12923273	766.483	25.5	80.00- 120.00	100.00
3.295	3.296	-0.001	8505161	737.295	24.6	44.69- 84.69	65.81
3.421	3.422	-0.001	5201674	748.309	24.9	18.77- 58.77	40.25
3.586	3.587	-0.001	6898796	751.455	25.0	33.44- 73.44	53.38

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.662	3.663	-0.001	6411139	753.466	25.1	29.19- 69.19	49.61
Average of Peak Concentrations =					25.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	14627019	809.603	27.0	80.00- 120.00	100.00
4.479	4.479	0.000	18850271	850.758	28.4	106.50- 146.50	128.87
4.745	4.745	0.000	15035515	850.535	28.4	80.04- 120.04	102.79
4.919	4.919	0.000	14970593	869.680	29.0	79.68- 119.68	102.35
5.066	5.067	-0.001	34843240	901.994	30.1	209.23- 249.23	238.21
Average of Peak Concentrations =					28.6		

Data File: /chem/ecd1a.i/120409.b/035b3501-1.d
Date : 04-DEC-2009 11:41
Client ID: PBLK01LCS
Sample Info: !120198214211!
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

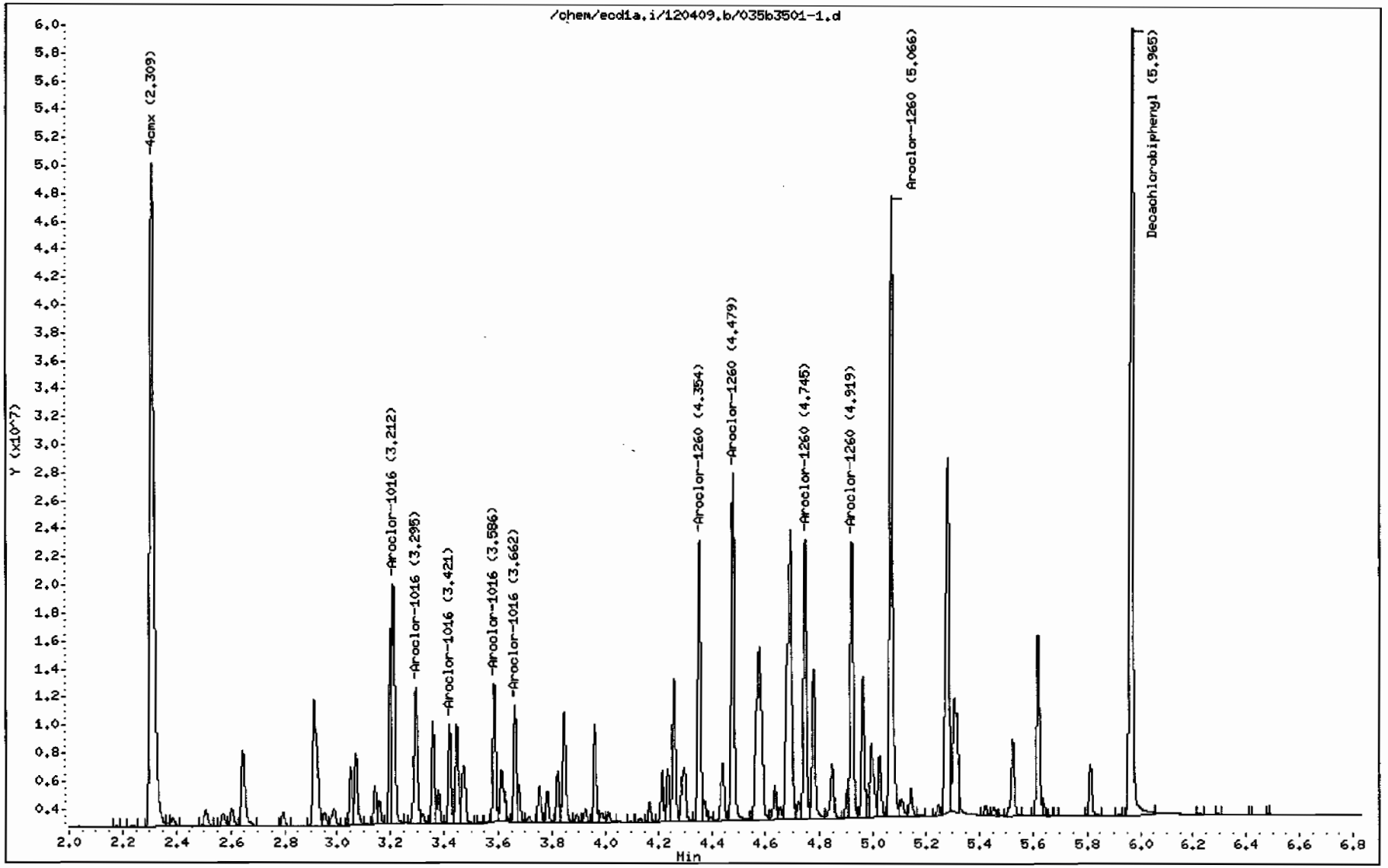

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 11/11/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ600
ALUMINA LOT 1193715-A
COPPER LOT 091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/111009b.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	10-NOV-2009 08:02		111009b	1.0	CLEAN	
002f0201.d	WAR091102-60	YS1	10-NOV-2009 08:14		111009b	1.0	DUSE RE-I-CAL	
003f0301.d	WAR091102-54	YS1	10-NOV-2009 08:25		111009b	1.0	DUSE RE-I-CAL	
004f0401.d	WAR091102-42	YS1	10-NOV-2009 08:35		111009b	1.0	DUSE RE-I-CAL	
005f0501.d	WAR091027-48	YS1	10-NOV-2009 08:46		111009b	1.0	DUSE RE-I-CAL	
006f0601.d	WAR090930-32	YS1	10-NOV-2009 08:56		111009b	1.0	PATTERN ONLY	
007f0701.d	WAR090803-21	YS1	10-NOV-2009 09:07		111009b	1.0	PATTERN ONLY	
008f0801.d	WAR090803-62	YS1	10-NOV-2009 09:17		111009b	1.0	PATTERN ONLY	
009f0901.d	WAR091106-68	YS1	10-NOV-2009 09:28		111009b	1.0	PATTERN ONLY	
010f1001.d	WAR091020-DDT	YS1	10-NOV-2009 09:38		111009b	1.0	DDT ANALOG STANDARD	
011f1101.d	WAR091110-01 60	YS1	10-NOV-2009 09:49		111009b	1.0	AR1660 I-CAL LEVEL 1	
012f1201.d	WAR091110-02 60	YS1	10-NOV-2009 09:59		111009b	1.0	AR1660 I-CAL LEVEL 2	
013f1301.d	WAR091110-04 60	YS1	10-NOV-2009 10:10		111009b	1.0	AR1660 I-CAL LEVEL 4	
014f1401.d	WAR091110-03 60	YS1	10-NOV-2009 10:21		111009b	1.0	AR1660 I-CAL LEVEL 3	
015f1501.d	IAR091102-01	YS1	10-NOV-2009 10:31		111009b	1.0	AR1660 I-CAL LEVEL 5	

Instrument Batch: /chem/ecd1a.i/111009b.b Page: 1

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments |

016f1601.d	WAR091102-60	YS1	10-NOV-2009 10:42		111009b	1.0	PASSED ON BOTH COLUMNS
017f1701.d	WAR091110-05 54	YS1	10-NOV-2009 10:52		111009b	1.0	AR1254 I-CAL LEVEL 1
018f1801.d	WAR091110-06 54	YS1	10-NOV-2009 11:03		111009b	1.0	AR1254 I-CAL LEVEL 2
019f1901.d	WAR091110-07 54	YS1	10-NOV-2009 11:13		111009b	1.0	AR1254 I-CAL LEVEL 3
020f2001.d	WAR091110-08 54	YS1	10-NOV-2009 11:24		111009b	1.0	AR1254 I-CAL LEVEL 4
021f2101.d	IAR091027-01	YS1	10-NOV-2009 11:34		111009b	1.0	AR1254 I-CAL LEVEL 5
022f2201.d	WAR091102-54	YS1	10-NOV-2009 11:45		111009b	1.0	PASSED ON BOTH COLUMNS
023f2301.d	WAR091110-09 42	YS1	10-NOV-2009 11:55		111009b	1.0	AR1242 I-CAL LEVEL 1
024f2401.d	WAR091110-10 42	YS1	10-NOV-2009 12:06		111009b	1.0	AR1242 I-CAL LEVEL 2
025f2501.d	WAR091110-11 42	YS1	10-NOV-2009 12:17		111009b	1.0	AR1242 I-CAL LEVEL 3
026f2601.d	WAR091110-12 42	YS1	10-NOV-2009 12:27		111009b	1.0	AR1242 I-CAL LEVEL 4
027f2701.d	IAR090914-01	YS1	10-NOV-2009 12:38		111009b	1.0	AR1242 I-CAL LEVEL 5
028f2801.d	WAR091102-42	YS1	10-NOV-2009 12:48		111009b	1.0	PASSED ON BOTH COLUMNS
029f2901.d	WAR091110-13 48	YS1	10-NOV-2009 12:59		111009b	1.0	AR1248 I-CAL LEVEL 1
030f3001.d	WAR091110-14 48	YS1	10-NOV-2009 13:09		111009b	1.0	AR1248 I-CAL LEVEL 2
031f3101.d	WAR091110-15 48	YS1	10-NOV-2009 13:20		111009b	1.0	AR1248 I-CAL LEVEL 3
032f3201.d	WAR091110-16 48	YS1	10-NOV-2009 13:30		111009b	1.0	AR1248 I-CAL LEVEL 4
033f3301.d	IAR091027-02	YS1	10-NOV-2009 13:41		111009b	1.0	AR1248 I-CAL LEVEL 5
034f3401.d	WAR091027-48	YS1	10-NOV-2009 13:51		111009b	1.0	PASSED ON BOTH COLUMNS
035f3501.d	WAR090916-99 02	YS1	10-NOV-2009 14:02		111009b	1.0	CLEAN

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201966793	YS1	10-NOV-2009 14:12	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	1201966796	YS1	10-NOV-2009 14:23	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	1201966797	YS1	10-NOV-2009 14:33	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	240542001	YS1	10-NOV-2009 14:44	920460	EUI-7374	25.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	240610001	YS1	10-NOV-2009 14:57	920460	EUI-7377	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201966794	YS1	10-NOV-2009 15:09	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1201966795	YS1	10-NOV-2009 15:22	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	WAR091102-60 02	YS1	10-NOV-2009 15:34		111009b	1.0		PASSED ON BOTH COLUMNS
044f4401.d	WAR090916-99 03	YS1	10-NOV-2009 15:45		111009b	1.0		CLEAN
045f4501.d	1201966802	YS1	10-NOV-2009 15:55	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1201966803	YS1	10-NOV-2009 16:08	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	240151001	YS1	10-NOV-2009 16:20	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	1201966804	YS1	10-NOV-2009 16:33	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201966805	YS1	10-NOV-2009 16:45	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	240151002	YS1	10-NOV-2009 16:58	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	240151003	YS1	10-NOV-2009 17:11	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	240151004	YS1	10-NOV-2009 17:23	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	240151005	YS1	10-NOV-2009 17:36	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	240151006	YS1	10-NOV-2009 17:48	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	WAR091102-60 03	YS1	10-NOV-2009 18:01		111009b	1.0		PASSED ON BOTH COLUMNS

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 04	YS1	10-NOV-2009 18:12		111009b	1.0		CLEAN
057f5701.d	240151007	YS1	10-NOV-2009 18:22	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	240151008	YS1	10-NOV-2009 18:35	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	240151009	YS1	10-NOV-2009 18:47	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	240151010	YS1	10-NOV-2009 19:00	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	240151011	YS1	10-NOV-2009 19:12	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	240151012	YS1	10-NOV-2009 19:25	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	240151013	YS1	10-NOV-2009 19:38	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	240151014	YS1	10-NOV-2009 19:50	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	240151015	YS1	10-NOV-2009 20:03	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	240151016	YS1	10-NOV-2009 20:15	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	WAR091102-60 04	YS1	10-NOV-2009 20:28		111009b	1.0		PASSED ON BOTH COLUMNS
068f6801.d	WAR090916-99 05	YS1	10-NOV-2009 20:39		111009b	1.0		CLEAN
069f6901.d	240151017	YS1	10-NOV-2009 20:49	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	240151018	YS1	10-NOV-2009 21:02	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	240151019	YS1	10-NOV-2009 21:14	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	240151020	YS1	10-NOV-2009 21:27	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091102-60 05	YS1	10-NOV-2009 21:40		111009b	1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 06	YS1	10-NOV-2009 21:50		111009b	1.0		CLEAN
075f7501.d	1201967438	YS1	10-NOV-2009 22:00	920740	111009b	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201967439	YS1	10-NOV-2009 22:13	920740	240688	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	240688001	YS1	10-NOV-2009 22:26	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	1201967440	YS1	10-NOV-2009 22:38	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	1201967441	YS1	10-NOV-2009 22:51	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	240688002	YS1	10-NOV-2009 23:04	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	WAR091102-60 06	YS1	10-NOV-2009 23:16		111009b	1.0		PASSED ON BOTH COLUMNS
082f8201.d	WAR090916-99 07	YS1	10-NOV-2009 23:27		111009b	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 12/05/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ454
ALUMINA LOT 1230997-A
COPPER LOT 207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/120409.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	04-DEC-2009 05:23		120409	1.0		CLEAN
002f0201.d	WAR091119-60 01	YS1	04-DEC-2009 05:33		120409	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR091102-54	YS1	04-DEC-2009 05:44		120409	1.0		DUSE PASSED RR FILE 10
004f0401.d	WAR091102-42	YS1	04-DEC-2009 05:54		120409	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091027-48	YS1	04-DEC-2009 06:05		120409	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR090930-32	YS1	04-DEC-2009 06:15		120409	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	04-DEC-2009 06:26		120409	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	04-DEC-2009 06:36		120409	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	04-DEC-2009 06:47		120409	1.0		PATTERN ONLY
010f1001.d	WAR091102-54	YS1	04-DEC-2009 06:57		120409	1.0		PASSED ON BOTH COLUMNS
011f1101.d	WAR091020-DDT	YS1	04-DEC-2009 07:08		120409	1.0		DDT ANALOG STANDARD
012f1201.d	WAR090916-99 02	YS1	04-DEC-2009 07:18		120409	1.0		CLEAN
013f1301.d	1201986700	YS1	04-DEC-2009 07:29	929002	120409	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	1201986701	YS1	04-DEC-2009 07:39	929002	241763	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1201986702	YS1	04-DEC-2009 07:50	929002	241763	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	241763005	YS1	04-DEC-2009 08:00	929002	241763		5.0	IMPA	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	WAR091119-60 02	YS1	04-DEC-2009 08:13		120409		1.0		PASSED ON BOTH COLUMNS
018f1801.d	WAR090916-99 03	YS1	04-DEC-2009 08:23		120409		1.0		CLEAN
019f1901.d	1201985520	YS1	04-DEC-2009 08:34	928531	EUI-7402		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	1201985521	YS1	04-DEC-2009 08:45	928531	EUI-7402		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	1201985524	YS1	04-DEC-2009 08:55	928531	EUI-7402		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	241701001	YS1	04-DEC-2009 09:06	928531	EUI-7402		5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	241705001	YS1	04-DEC-2009 09:18	928531	EUI-7403		1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	241706001	YS1	04-DEC-2009 09:31	928531	EUI-7404		100.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	241795001	YS1	04-DEC-2009 09:43	928531	EUI-7407		100.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	241797001	YS1	04-DEC-2009 09:56	928531	EUI-7408		5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	1201985522	YS1	04-DEC-2009 10:08	928531	EUI-7408		5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	1201985523	YS1	04-DEC-2009 10:21	928531	EUI-7408		5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	WAR091119-60 03	YS1	04-DEC-2009 10:33		120409		1.0		PASSED ON BOTH COLUMNS
030f3001.d	WAR090916-99 04	YS1	04-DEC-2009 10:44		120409		1.0		CLEAN
031f3101.d	242027001	YS1	04-DEC-2009 10:55		EUI-7409		1.0	CARE	SURROGATE LOW RE
032f3201.d	WAR091119-60 04	YS1	04-DEC-2009 11:07		120409		1.0		PASSED ON BOTH COLUMNS
033f3301.d	WAR090916-99 05	YS1	04-DEC-2009 11:18		120409		1.0		CLEAN
034f3401.d	1201982139	YS1	04-DEC-2009 11:28	927083	10-604		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	1201982142	YS1	04-DEC-2009 11:41	927083	10-604		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241540001	YS1	04-DEC-2009 11:53	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	241540002	YS1	04-DEC-2009 12:06	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	241540003	YS1	04-DEC-2009 12:18	927083	10-604	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	241540004	YS1	04-DEC-2009 12:31	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	1201982140	YS1	04-DEC-2009 12:44	927083	AR1660	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201982141	YS1	04-DEC-2009 12:56	927083	10-604		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	241540005	YS1	04-DEC-2009 13:09	927083	10-604		25.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	241540006	YS1	04-DEC-2009 13:22	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	WAR091119-60 05	YS1	04-DEC-2009 13:34		120409		1.0		PASSED ON BOTH COLUMNS
045f4501.d	WAR090916-99 06	YS1	04-DEC-2009 13:45		120409		1.0		CLEAN
046f4601.d	241540007	YS1	04-DEC-2009 13:55	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	241540008	YS1	04-DEC-2009 14:08	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	241540009	YS1	04-DEC-2009 14:20	927083	10-604		5.0	LANL	DUSE RR 25X
049f4901.d	241540010	YS1	04-DEC-2009 14:33	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	241540011	YS1	04-DEC-2009 14:45	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	241540012	YS1	04-DEC-2009 14:58	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	241540013	YS1	04-DEC-2009 15:11	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	241540014	YS1	04-DEC-2009 15:23	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	241540015	YS1	04-DEC-2009 15:36	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	241540016	YS1	04-DEC-2009 15:48	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR091119-60 06	YS1	04-DEC-2009 16:01		120409	1.0		PASSED ON BOTH COLUMNS
057f5701.d	WAR090916-99 07	YS1	04-DEC-2009 16:12		120409	1.0		CLEAN
058f5801.d	241559001	YS1	04-DEC-2009 16:22	927083	10-608-1	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	241559002	YS1	04-DEC-2009 16:35	927083	10-608-1	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	241540009	YS1	04-DEC-2009 16:47	927083	10-604	25.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	WAR091119-60 07	YS1	04-DEC-2009 17:00		120409	1.0		PASSED ON BOTH COLUMNS
062f6201.d	WAR090916-99 08	YS1	04-DEC-2009 17:10		120409	1.0		CLEAN
063f6301.d	1201982309	YS1	04-DEC-2009 17:21	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1201982312	YS1	04-DEC-2009 17:33	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	241819001	YS1	04-DEC-2009 17:46	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	241819002	YS1	04-DEC-2009 17:58	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	241819003	YS1	04-DEC-2009 18:11	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
068f6801.d	241819004	YS1	04-DEC-2009 18:24	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	241819005	YS1	04-DEC-2009 18:36	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	241819006	YS1	04-DEC-2009 18:49	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	241819007	YS1	04-DEC-2009 19:02	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	241819008	YS1	04-DEC-2009 19:14	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091119-60 08	YS1	04-DEC-2009 19:27		120409		1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 09	YS1	04-DEC-2009 19:39		120409		1.0		CLEAN
075f7501.d	241819009	YS1	04-DEC-2009 19:52	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241819010	YS1	04-DEC-2009 20:05	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	241819011	YS1	04-DEC-2009 20:17	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	241819012	YS1	04-DEC-2009 20:30	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	241819013	YS1	04-DEC-2009 20:43	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	241819014	YS1	04-DEC-2009 20:55	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	241819015	YS1	04-DEC-2009 21:08	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
082f8201.d	241819016	YS1	04-DEC-2009 21:20	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	1201982310	YS1	04-DEC-2009 21:33	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	1201982311	YS1	04-DEC-2009 21:46	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	WAR091119-60 09	YS1	04-DEC-2009 21:58		120409	1.0		PASSED ON BOTH COLUMNS
086f8601.d	WAR090916-99 10	YS1	04-DEC-2009 22:09		120409	1.0		CLEAN
087f8701.d	241819017	YS1	04-DEC-2009 22:19	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	241819018	YS1	04-DEC-2009 22:32	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
089f8901.d	241819019	YS1	04-DEC-2009 22:44	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

090f9001.d	241819020	YS1	04-DEC-2009 22:57	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
091f9101.d	WAR091119-60 10	YS1	04-DEC-2009 23:10		120409		1.0		PASSED ON BOTH COLUMNS
092f9201.d	WAR090916-99 11	YS1	04-DEC-2009 23:20		120409		1.0		CLEAN
093f9301.d	1664-4	YS1	04-DEC-2009 23:31		120409		1.0		Screen duse PASSED ON BOTH COLUMNS

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/040b4001.d
Lab Smp Id: 1201982140 Client Smp ID: RE03-09-13867MS
Inj Date : 04-DEC-2009 12:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982140|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	50627151	136.353	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	43307088	144.079	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.212	3.213	-0.001	11984270	710.791	27.0	80.00- 120.00	100.00
3.296	3.296	0.000	8144526	706.032	26.8	45.90- 85.90	67.96
3.421	3.422	-0.001	4895252	704.228	26.8	19.72- 59.72	40.85
3.587	3.587	0.000	6432401	700.653	26.6	34.41- 74.41	53.67

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.663	3.663	0.000	5962793	700.774	26.6	30.39- 70.39	49.76
Average of Peak Concentrations =					26.8		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	14716828	814.574	31.0	80.00- 120.00	100.00(M)
4.478	4.479	-0.001	18182672	820.628	31.2	106.15- 146.15	123.55
4.744	4.745	-0.001	15706313	888.481	33.8	79.67- 119.67	106.72
4.918	4.919	-0.001	15222185	884.296	33.6	78.94- 118.94	103.43
5.065	5.067	-0.002	35644343	922.733	35.1	208.07- 248.07	242.20
Average of Peak Concentrations =					32.9		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/040b4001.d
Date : 04-DEC-2009 12:44
Client ID: RE03-09-13867MS
Sample Info: |120198214011|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

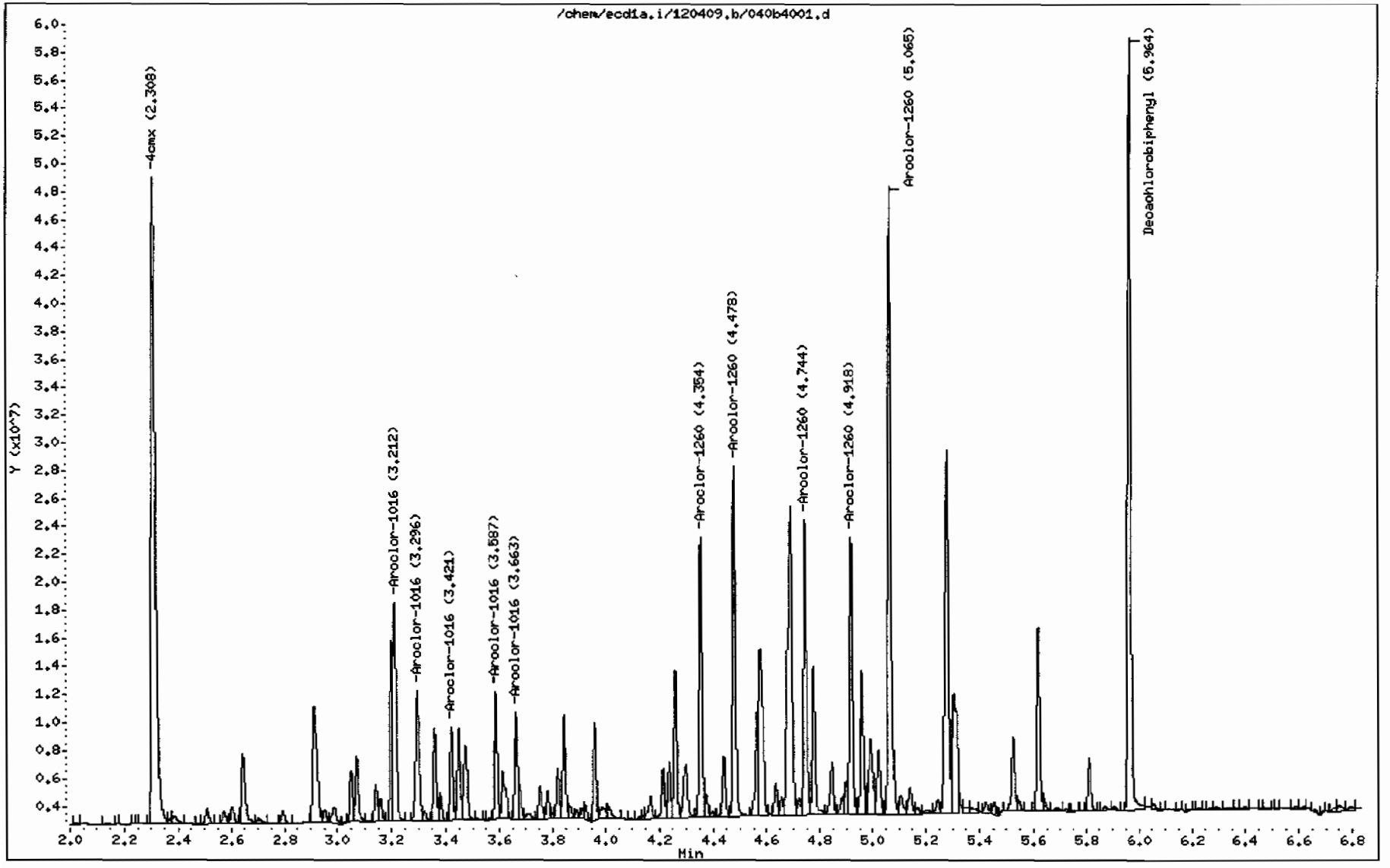

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/040f4001.d
Lab Smp Id: 1201982140 Client Smp ID: RE03-09-13867MS
Inj Date : 04-DEC-2009 12:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982140|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	61153884	137.032	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	57656877	141.054	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	11926037	697.865	26.5	80.00- 120.00	100.00
2.718	2.719	-0.001	15383770	724.392	27.5	107.86- 147.86	128.99
2.800	2.800	0.000	9539797	679.841	25.8	59.89- 99.89	79.99
2.838	2.838	0.000	5634829	669.486	25.4	28.72- 68.72	47.25

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	7308723	677.143	25.7	41.98- 81.98	61.28
Average of Peak Concentrations =					26.2		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	17067371	795.778	30.2	80.00- 120.00	100.00
3.938	3.938	0.000	25872832	803.625	30.5	131.51- 171.51	151.59
4.168	4.168	0.000	17181055	839.838	31.9	73.81- 113.81	100.67
4.310	4.312	-0.002	16430317	818.171	31.1	75.82- 115.82	96.27
4.489	4.491	-0.002	40699602	879.060	33.4	202.56- 242.56	238.46
Average of Peak Concentrations =					31.4		

Data File: /chem/ecd1a.i/120409.b/040f4001.d
Date : 04-DEC-2009 12:44
Client ID: RE03-09-13867MS
Sample Info: |120198214011|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

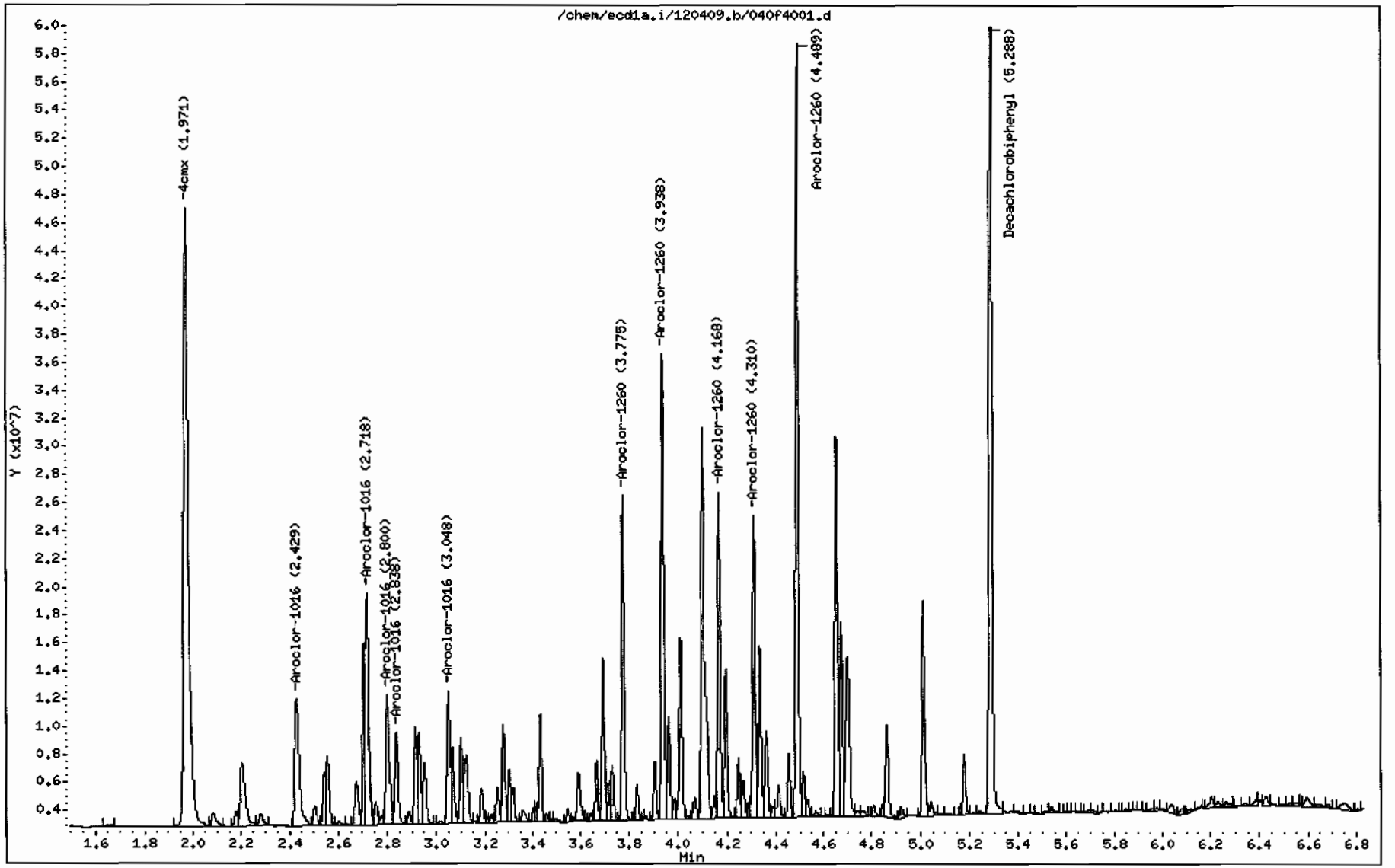

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/041b4101.d
Lab Smp Id: 1201982141 Client Smp ID: RE03-09-13867MSD
Inj Date : 04-DEC-2009 12:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982141|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	50674662	136.481	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	43792067	145.693	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	12470635	739.637	28.1	80.00- 120.00	100.00
3.296	3.296	0.000	8423810	730.243	27.8	45.90- 85.90	67.55
3.421	3.422	-0.001	5128217	737.742	28.0	19.72- 59.72	41.12
3.587	3.587	0.000	6619529	721.036	27.4	34.41- 74.41	53.08

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.662	3.663	-0.001	7360597	865.050	32.9	30.39- 70.39	59.02
Average of Peak Concentrations =					28.8		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	15407069	852.779	32.4	80.00- 120.00	100.00
4.479	4.479	0.000	18886240	852.381	32.4	106.15- 146.15	122.58
4.745	4.745	0.000	16389498	927.127	35.2	79.67- 119.67	106.38
4.919	4.919	0.000	15712453	912.777	34.7	78.94- 118.94	101.98
5.066	5.067	-0.001	36810257	952.915	36.2	208.07- 248.07	238.92
Average of Peak Concentrations =					34.2		

Data File: /chem/ecd1a.i/120409.b/041b4101.d
Date : 04-DEC-2009 12:56
Client ID: RE03-09-13867MSD
Sample Info: |120198214|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

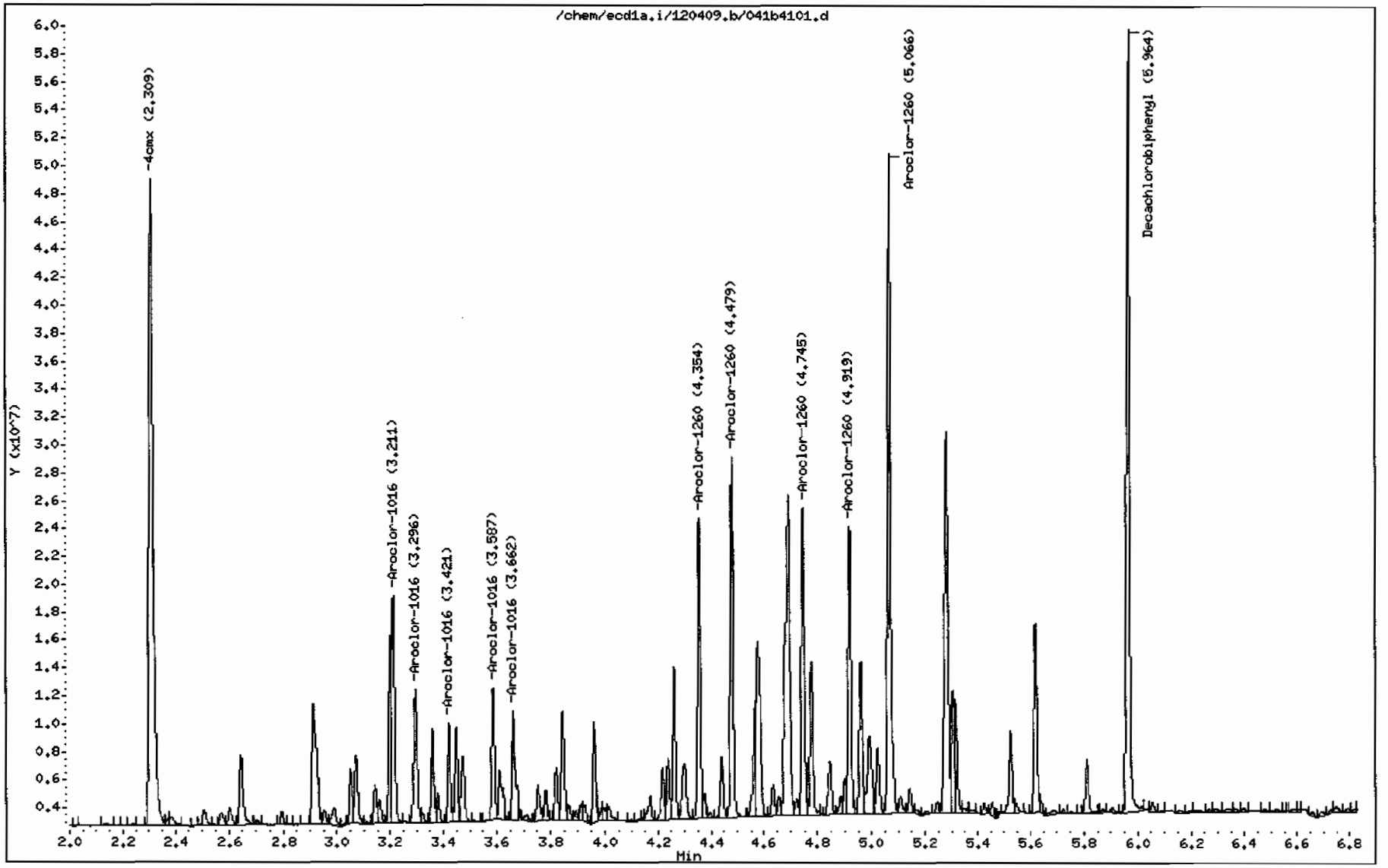

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/041f4101.d
Lab Smp Id: 1201982141 Client Smp ID: RE03-09-13867MSD
Inj Date : 04-DEC-2009 12:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982141|1|
Misc Info : |ECD82P_1SF|927083|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 13:57 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-604.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	12.33560	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	61653636	138.152	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	55903204	136.764	5.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	12253342	717.017	27.2	80.00- 120.00	100.00
2.718	2.719	-0.001	15865003	747.053	28.4	108.58- 148.58	129.47
2.799	2.800	-0.001	9796884	698.162	26.5	59.79- 99.79	79.95
2.837	2.838	-0.001	5797088	688.764	26.2	28.78- 68.78	47.31

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	7467060	691.813	26.3	42.16- 82.16	60.94
Average of Peak Concentrations =					26.9		
7 Aroclor-1260					CAS #: 11096-82-5		
3.775	3.776	-0.001	17994049	838.984	31.9	80.00- 120.00	100.00
3.937	3.938	-0.001	27095951	841.616	32.0	130.49- 170.49	150.58
4.167	4.168	-0.001	18077213	883.643	33.6	73.32- 113.32	100.46
4.310	4.312	-0.002	17026451	847.856	32.2	75.32- 115.32	94.62
4.490	4.491	-0.001	42611996	920.365	35.0	202.00- 242.00	236.81
Average of Peak Concentrations =					32.9		

Data File: /chem/ecd1a.i/120409.b/041f4101.d
Date : 04-DEC-2009 12:56
Client ID: RE03-09-13867MSD
Sample Info: |120198214|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

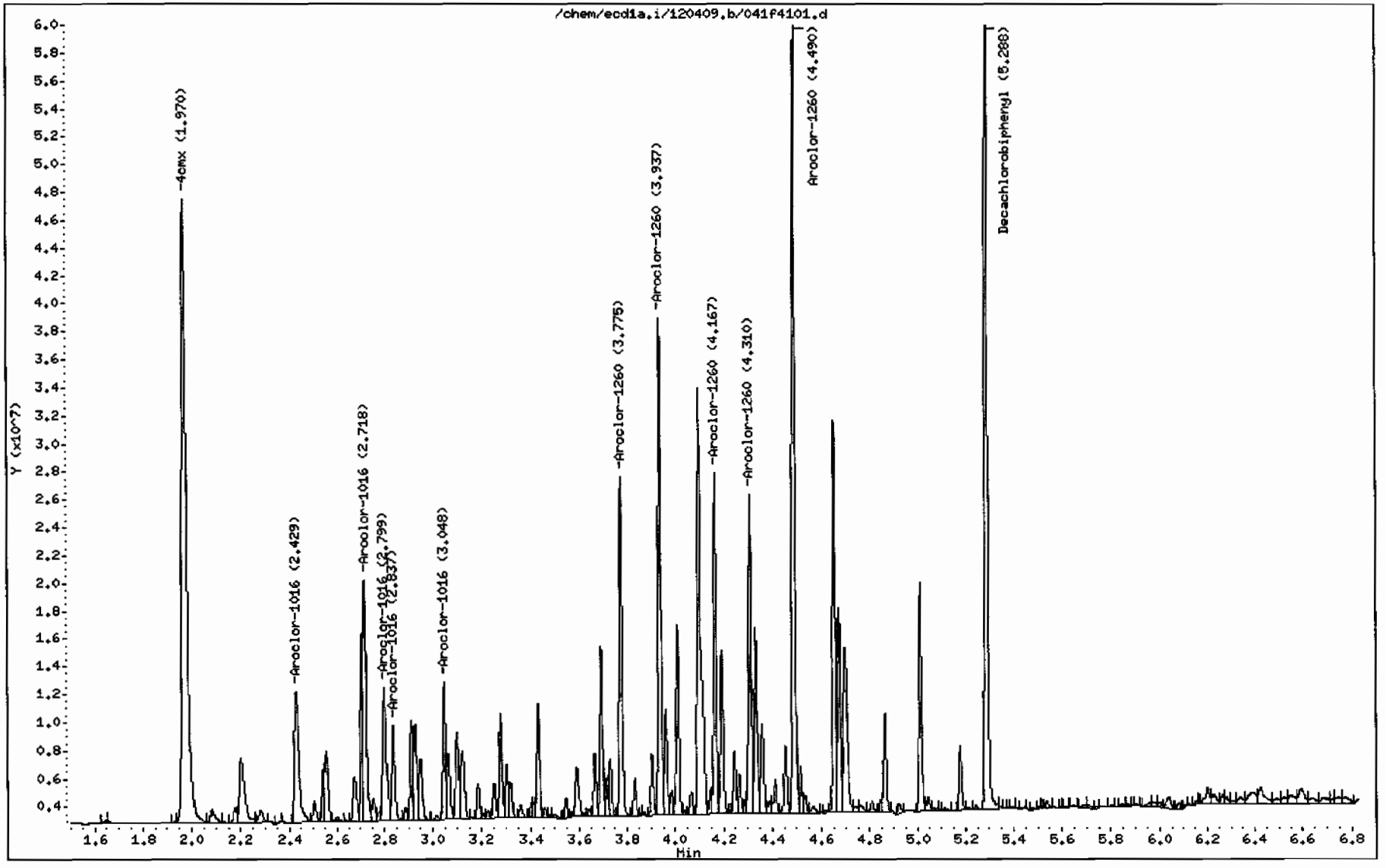

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927082 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982139 MB	29–NOV–2009 16:38:35	30	H2SO4/KMn2		2	9	1	0.03333
1201982142 LCS	29–NOV–2009 16:38:35	30	H2SO4/KMn2		2	9	1	0.03333
241540001	29–NOV–2009 16:38:35	30.04	H2SO4/KMn2		2	9	1	0.03329
241540002	29–NOV–2009 16:38:35	30.14	H2SO4/KMn2		2	9	1	0.03318
241540003	29–NOV–2009 16:38:35	30.04	H2SO4/KMn2		2	9	1	0.03329
241540004	29–NOV–2009 16:38:35	30.01	H2SO4/KMn2		2	9	1	0.03332
1201982140 MS (241540004)	29–NOV–2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
1201982141 MSD (241540004)	29–NOV–2009 16:38:35	30.01	H2SO4/KMn2		2	9	1	0.03332
241540005	29–NOV–2009 16:38:35	30.03	H2SO4/KMn2		2	9	1	0.0333
241540006	29–NOV–2009 16:38:35	30.13	H2SO4/KMn2		2	9	1	0.03319
241540007	29–NOV–2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
241540008	29–NOV–2009 16:38:35	30.03	H2SO4/KMn2		2	9	1	0.0333
241540009	29–NOV–2009 16:38:35	30.05	H2SO4/KMn2		2	9	1	0.03328
241540010	29–NOV–2009 16:38:35	30.05	H2SO4/KMn2		2	9	1	0.03328
241540011	29–NOV–2009 16:38:35	30.08	H2SO4/KMn2		2	9	1	0.03324
241540012	29–NOV–2009 16:38:35	30.18	H2SO4/KMn2		2	9	1	0.03313
241540013	29–NOV–2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
241540014	29–NOV–2009 16:38:35	30.02	H2SO4/KMn2		2	9	1	0.03331
241540015	29–NOV–2009 16:38:35	30.11	H2SO4/KMn2		2	9	1	0.03321
241540016	29–NOV–2009 16:38:35	30.18	H2SO4/KMn2		2	9	1	0.03313
241559001	29–NOV–2009 16:38:35	30.15	H2SO4/KMn2		2	9	1	0.03317
241559002	29–NOV–2009 16:38:35	30.05	H2SO4/KMn2		2	9	1	0.03328

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982142	PCB Laboratory Control	WE091113–07	1	mL
MS	1201982140	PCB Laboratory Control	WE091113–07	1	mL
MSD	1201982141	PCB Laboratory Control	WE091113–07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114–15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925–B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457–F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/29/09

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–037

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-608-1

Sample Analysis

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201978631	Method Blank (MB) **ICP**
1201995270	Method Blank (MB) **ICP**
1201978636	Laboratory Control Sample (LCS)
1201995271	Laboratory Control Sample (LCS)
1201978633	241559001(RE03-10-6903L) Serial Dilution (SD)
1201978632	241559001(RE03-10-6903D) Sample Duplicate (DUP)
1201978634	241559001(RE03-10-6903S) Matrix Spike (MS)
1201978635	241559001(RE03-10-6903SD) Matrix Spike Duplicate (MSD)
1201978637	Method Blank (MB) **ICP-MS**
1201978642	Laboratory Control Sample (LCS)
1201978639	241559001(RE03-10-6903L) Serial Dilution (SD)
1201978638	241559001(RE03-10-6903D) Sample Duplicate (DUP)
1201978640	241559001(RE03-10-6903S) Matrix Spike (MS)
1201978641	241559001(RE03-10-6903SD) Matrix Spike Duplicate (MSD)
1201978959	Method Blank (MB) **CVAA**
1201978960	Laboratory Control Sample (LCS)
1201978963	241611001(RE03-09-13919L) Serial Dilution (SD)
1201978961	241611001(RE03-09-13919D) Sample Duplicate (DUP)
1201978962	241611001(RE03-09-13919S) Matrix Spike (MS)
1201978964	241611001(RE03-09-13919SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch: 925490, 932716, 925492 and 925634

Prep Batch :	925489, 932715, 925491 and 925633
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS analyzed with this SDG met the acceptance criteria of percent recovery.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241559001 (RE03-10-6903)-ICP and ICP-MS and 241611001 (RE03-09-13919)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of barium, magnesium, potassium, lithium, selenium and mercury as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of calcium, magnesium, potassium, silicon, lithium, selenium and mercury as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of manganese as indicated by the "*" qualifier.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of cobalt, manganese, arsenic and beryllium as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all

initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 763229, 766722, 769421 and 770295. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nik-Lidia A. Elmore **Date:** 12.17.09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-608-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241559001 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-6903 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8870000	ug/Kg		6940	20400	20400	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-36-0	Antimony	1020	ug/Kg	U	337	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-38-2	Arsenic	3	mg/kg	*	0.198	0.988	0.988	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-39-3	Barium	113000	ug/Kg	N	102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-41-7	Beryllium	0.828	mg/kg	*	0.0198	0.0988	0.0988	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-42-8	Boron	2340	ug/Kg	J	1020	5100	5100	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-43-9	Cadmium	510	ug/Kg	U	102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-70-2	Calcium	1700000	ug/Kg	N	8160	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-47-3	Chromium	9560	ug/Kg		153	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-48-4	Cobalt	7390	ug/Kg	*	153	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-50-8	Copper	6640	ug/Kg		306	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-89-6	Iron	13300000	ug/Kg		8160	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-92-1	Lead	16100	ug/Kg		255	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-93-2	Lithium	10.5	mg/kg	N	0.395	1.98	1.98	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7439-95-4	Magnesium	1770000	ug/Kg	N	8670	30600	30600	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-96-5	Manganese	456000	ug/Kg	*	204	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490
7439-97-6	Mercury	21.2	ug/kg		3.81	11.2	11.2	1	AV	JXL1	12/07/09 12:47	120709S1-5	925634
7440-02-0	Nickel	7.51	mg/kg		0.0988	0.395	0.395	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-09-7	Potassium	1110000	ug/Kg	N	6530	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7782-49-2	Selenium	0.988	mg/kg	UN	0.494	0.988	0.988	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-21-3	Silicon	996000	ug/Kg	N	1580	10600	10600	1	P	HSC	12/15/09 06:52	121509-1	932716
7440-22-4	Silver	295	ug/Kg	J	102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-23-5	Sodium	535000	ug/Kg		7140	25500	25500	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-28-0	Thallium	0.246	mg/kg		0.0593	0.198	0.198	2	MS	BAJ	11/29/09 08:54	091128-4	925492
7440-32-6	Titanium	395000	ug/Kg		102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-61-1	Uranium	1.23	mg/kg		0.013	0.0395	0.0395	2	MS	BAJ	11/29/09 07:03	091128-3	925492
7440-62-2	Vanadium	29700	ug/Kg		102	510	510	1	P	HSC	12/05/09 07:59	120409A-2	925490
7440-66-6	Zinc	25300	ug/Kg		337	1020	1020	1	P	HSC	12/05/09 07:59	120409A-2	925490

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925490	925489	SW846 3050B	0.524	g	50	mL	11/24/09	BXA1
925492	925491	SW846 3050B	0.541	g	50	mL	11/24/09	BXA1
925634	925633	SW846 7471A Prep	0.573	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

932716	932715	SW846 3050B	0.506	g	50	mL	12/14/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-608-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241559002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-10-6902 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8470000	ug/Kg		7830	23000	23000	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-36-0	Antimony	996	ug/Kg	J	380	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-38-2	Arsenic	2.01	mg/kg	*	0.215	1.08	1.08	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-39-3	Barium	295000	ug/Kg	N	115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-41-7	Beryllium	0.664	mg/kg	*	0.0215	0.108	0.108	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-42-8	Boron	2620	ug/Kg	J	1150	5750	5750	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-43-9	Cadmium	575	ug/Kg	U	115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-70-2	Calcium	4170000	ug/Kg	N	9210	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-47-3	Chromium	7720	ug/Kg		173	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-48-4	Cobalt	3080	ug/Kg	*	173	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-50-8	Copper	6030	ug/Kg		345	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-89-6	Iron	14800000	ug/Kg		9210	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-92-1	Lead	26000	ug/Kg		288	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-93-2	Lithium	15.9	mg/kg	N	0.431	2.15	2.15	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7439-95-4	Magnesium	1750000	ug/Kg	N	9780	34500	34500	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-96-5	Manganese	244000	ug/Kg	*	230	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490
7439-97-6	Mercury	20.1	ug/kg		4.78	14.1	14.1	1	AV	JXL1	12/07/09 12:49	120709S1-5	925634
7440-02-0	Nickel	5.84	mg/kg		0.108	0.431	0.431	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-09-7	Potassium	1060000	ug/Kg	N	7370	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7782-49-2	Selenium	1.08	mg/kg	UN	0.538	1.08	1.08	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-21-3	Silicon	1150000	ug/Kg	N	1690	11200	11200	1	P	HSC	12/15/09 07:09	121509-1	932716
7440-22-4	Silver	298	ug/Kg	J	115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-23-5	Sodium	449000	ug/Kg		8060	28800	28800	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-28-0	Thallium	0.298	mg/kg		0.0646	0.215	0.215	2	MS	BAJ	11/29/09 09:25	091128-4	925492
7440-32-6	Titanium	390000	ug/Kg		115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-61-1	Uranium	0.718	mg/kg		0.0142	0.0431	0.0431	2	MS	BAJ	11/29/09 07:11	091128-3	925492
7440-62-2	Vanadium	18600	ug/Kg		115	575	575	1	P	HSC	12/05/09 08:33	120409A-2	925490
7440-66-6	Zinc	51900	ug/Kg		380	1150	1150	1	P	HSC	12/05/09 08:33	120409A-2	925490

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925490	925489	SW846 3050B	0.509	g	50	mL	11/24/09	BXA1
925492	925491	SW846 3050B	0.544	g	50	mL	11/24/09	BXA1
925634	925633	SW846 7471A Prep	0.5	g	30	mL	12/04/09	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

932716	932715	SW846 3050B	0.521	g	50	mL	12/14/09	FGA

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Uranium	53.4	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	29–NOV–09 06:19	091128–3
	Arsenic	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	29–NOV–09 07:35	091128–4
	Beryllium	53.8	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	29–NOV–09 07:35	091128–4
	Lithium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	29–NOV–09 07:35	091128–4
	Nickel	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	29–NOV–09 07:35	091128–4
	Selenium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	29–NOV–09 07:35	091128–4
	Thallium	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	29–NOV–09 07:35	091128–4
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Antimony	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Boron	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Lead	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Manganese	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Sodium	2450	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Titanium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Vanadium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04–DEC–09 09:34	120409A–2
	Mercury	5.19	ug/L	5	ug/L	103.8	90.0 – 110.0	AV	07–DEC–09 10:07	120709S1–5
	Silicon	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	15–DEC–09 03:24	121509–1
CCV01										
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	29–NOV–09 06:27	091128–3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-608-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	47.1	ug/L	50	ug/L	94.2	90.0 - 110.0	MS	29-NOV-09 08:05	091128-4
	Beryllium	49.5	ug/L	50	ug/L	99	90.0 - 110.0	MS	29-NOV-09 08:05	091128-4
	Lithium	48.6	ug/L	50	ug/L	97.2	90.0 - 110.0	MS	29-NOV-09 08:05	091128-4
	Nickel	49.5	ug/L	50	ug/L	99	90.0 - 110.0	MS	29-NOV-09 08:05	091128-4
	Selenium	50.2	ug/L	50	ug/L	100.4	90.0 - 110.0	MS	29-NOV-09 08:05	091128-4
	Thallium	52.3	ug/L	50	ug/L	104.5	90.0 - 110.0	MS	29-NOV-09 08:05	091128-4
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Antimony	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Barium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Boron	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Cadmium	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Chromium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Copper	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Lead	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Manganese	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Silver	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Titanium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Zinc	495	ug/L	500	ug/L	99	90.0 - 110.0	P	04-DEC-09 10:35	120409A-2
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 - 120.0	AV	07-DEC-09 10:13	120709S1-5
	Silicon	2450	ug/L	2500	ug/L	97.8	90.0 - 110.0	P	15-DEC-09 03:47	121509-1
CCV02										
	Uranium	53.4	ug/L	50	ug/L	106.9	90.0 - 110.0	MS	29-NOV-09 06:44	091128-3
	Arsenic	46.8	ug/L	50	ug/L	93.5	90.0 - 110.0	MS	29-NOV-09 08:24	091128-4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-608-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Beryllium	48.4	ug/L	50	ug/L	96.8	90.0 - 110.0	MS	29-NOV-09 08:24	091128-4
	Lithium	48	ug/L	50	ug/L	95.9	90.0 - 110.0	MS	29-NOV-09 08:24	091128-4
	Nickel	47	ug/L	50	ug/L	94.1	90.0 - 110.0	MS	29-NOV-09 08:24	091128-4
	Selenium	50	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	29-NOV-09 08:24	091128-4
	Thallium	51.2	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	29-NOV-09 08:24	091128-4
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Antimony	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Barium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Boron	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Cadmium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Calcium	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Chromium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Copper	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Lead	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Manganese	500	ug/L	500	ug/L	100	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Silver	495	ug/L	500	ug/L	99	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Titanium	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Zinc	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	04-DEC-09 10:56	120409A-2
	Mercury	5.38	ug/L	5	ug/L	107.7	80.0 - 120.0	AV	07-DEC-09 10:37	120709S1-5
	Silicon	2480	ug/L	2500	ug/L	99.1	90.0 - 110.0	P	15-DEC-09 04:34	121509-1
CCV03										
	Uranium	53.5	ug/L	50	ug/L	106.9	90.0 - 110.0	MS	29-NOV-09 06:53	091128-3
	Arsenic	47.4	ug/L	50	ug/L	94.8	90.0 - 110.0	MS	29-NOV-09 09:31	091128-4
	Beryllium	50.1	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	29-NOV-09 09:31	091128-4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lithium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	29–NOV–09 09:31	091128–4
	Nickel	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	29–NOV–09 09:31	091128–4
	Selenium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	29–NOV–09 09:31	091128–4
	Thallium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	29–NOV–09 09:31	091128–4
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Cadmium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Lead	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Manganese	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 12:13	120409A–2
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	07–DEC–09 11:01	120709S1–5
	Silicon	2460	ug/L	2500	ug/L	98.6	90.0 – 110.0	P	15–DEC–09 05:19	121509–1
CCV04										
	Uranium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	29–NOV–09 07:13	091128–3
	Aluminum	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Lead	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 12:48	120409A–2
	Mercury	5.79	ug/L	5	ug/L	115.9	80.0 – 120.0	AV	07–DEC–09 11:24	120709S1–5
	Silicon	2370	ug/L	2500	ug/L	94.9	90.0 – 110.0	P	15–DEC–09 05:33	121509–1
CCV05										
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Copper	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 13:57	120409A–2
	Mercury	5.49	ug/L	5	ug/L	109.7	80.0 – 120.0	AV	07–DEC–09 11:48	120709S1–5
	Silicon	2430	ug/L	2500	ug/L	97.2	90.0 – 110.0	P	15–DEC–09 06:00	121509–1
CCV06										
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Antimony	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Boron	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Cadmium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Lead	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Manganese	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 14:52	120409A–2

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Mercury	5.57	ug/L	5	ug/L	111.4	80.0 – 120.0	AV	07–DEC–09 12:12	120709S1–5
	Silicon	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	15–DEC–09 06:39	121509–1
CCV07										
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Antimony	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Barium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Boron	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Copper	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Lead	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Manganese	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 15:48	120409A–2
	Mercury	5.54	ug/L	5	ug/L	110.8	80.0 – 120.0	AV	07–DEC–09 12:35	120709S1–5
	Silicon	2460	ug/L	2500	ug/L	98.6	90.0 – 110.0	P	15–DEC–09 07:13	121509–1
CCV08										
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Antimony	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Boron	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Chromium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Lead	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Sodium	9750	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Titanium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 16:58	120409A–2
	Mercury	5.68	ug/L	5	ug/L	113.6	80.0 – 120.0	AV	07–DEC–09 12:59	120709S1–5
CCV09										
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Boron	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Cadmium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Manganese	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04–DEC–09 18:01	120409A–2
	Mercury	5.48	ug/L	5	ug/L	109.5	80.0 – 120.0	AV	07–DEC–09 13:21	120709S1–5
CCV10										
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Antimony	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Calcium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Chromium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Cobalt	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Copper	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Lead	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Sodium	9790	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 19:19	120409A–2
CCV11										
	Aluminum	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Barium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Calcium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Iron	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Lead	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Manganese	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Titanium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Vanadium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
	Zinc	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–DEC–09 20:30	120409A–2
CCV12										
	Aluminum	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Antimony	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Barium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Boron	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Copper	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Lead	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Magnesium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04–DEC–09 21:40	120409A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-608-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Silver	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 21:40	120409A-2
CCV13										
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Antimony	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Barium	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Boron	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Chromium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Copper	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Lead	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Manganese	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Silver	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Titanium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Vanadium	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
	Zinc	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	04-DEC-09 23:14	120409A-2
CCV14										
	Aluminum	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Antimony	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Barium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-608-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Chromium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Copper	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Iron	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Lead	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Silver	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Sodium	10500	ug/L	10000	ug/L	104.7	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Titanium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
	Zinc	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	05-DEC-09 00:36	120409A-2
CCV15										
	Aluminum	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Antimony	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Barium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Boron	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Cadmium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Chromium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Copper	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Iron	5350	ug/L	5000	ug/L	107.1	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Lead	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Magnesium	5430	ug/L	5000	ug/L	108.5	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2
	Manganese	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-DEC-09 01:47	120409A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Silver	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Sodium	10600	ug/L	10000	ug/L	106.1	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Titanium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
	Zinc	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	05–DEC–09 01:47	120409A–2
CCV16										
	Aluminum	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Antimony	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Barium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Boron	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Cadmium	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Calcium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Chromium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Copper	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Lead	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Magnesium	5290	ug/L	5000	ug/L	105.7	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Manganese	515	ug/L	500	ug/L	103	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Silver	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Sodium	10200	ug/L	10000	ug/L	102.4	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Titanium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Vanadium	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
	Zinc	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	05–DEC–09 02:42	120409A–2
CCV17										
	Aluminum	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	05–DEC–09 03:30	120409A–2
	Antimony	529	ug/L	500	ug/L	105.7	90.0 – 110.0	P	05–DEC–09 03:30	120409A–2
	Barium	520	ug/L	500	ug/L	104	90.0 – 110.0	P	05–DEC–09 03:30	120409A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-608-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Cadmium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Calcium	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Chromium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Cobalt	515	ug/L	500	ug/L	103	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Copper	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Lead	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Magnesium	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Manganese	522	ug/L	500	ug/L	104.3	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Potassium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Silver	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Sodium	10600	ug/L	10000	ug/L	105.7	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Titanium	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Vanadium	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
	Zinc	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	05-DEC-09 03:30	120409A-2
CCV18										
	Aluminum	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Antimony	533	ug/L	500	ug/L	106.6	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Boron	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Cadmium	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Calcium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Chromium	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Cobalt	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Copper	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Iron	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Lead	529	ug/L	500	ug/L	105.7	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Magnesium	5280	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2
	Manganese	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	05-DEC-09 04:48	120409A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	05–DEC–09 04:48	120409A–2
	Silver	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	05–DEC–09 04:48	120409A–2
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 – 110.0	P	05–DEC–09 04:48	120409A–2
	Titanium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	05–DEC–09 04:48	120409A–2
	Vanadium	526	ug/L	500	ug/L	105.3	90.0 – 110.0	P	05–DEC–09 04:48	120409A–2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	05–DEC–09 04:48	120409A–2
CCV19										
	Aluminum	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Antimony	530	ug/L	500	ug/L	106	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Barium	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Boron	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Cadmium	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Calcium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Chromium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Cobalt	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Copper	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Iron	5190	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Lead	527	ug/L	500	ug/L	105.3	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Magnesium	5410	ug/L	5000	ug/L	108.3	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Manganese	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Silver	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Sodium	10200	ug/L	10000	ug/L	101.7	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Titanium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Vanadium	525	ug/L	500	ug/L	105	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
	Zinc	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	05–DEC–09 06:05	120409A–2
CCV20										
	Aluminum	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Antimony	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Barium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Calcium	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Chromium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Copper	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Iron	5320	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Lead	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Magnesium	5350	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Potassium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Silver	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Sodium	10900	ug/L	10000	ug/L	109.4	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Titanium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Vanadium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	05–DEC–09 07:30	120409A–2
CCV21										
	Aluminum	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Antimony	531	ug/L	500	ug/L	106.3	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Boron	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Cadmium	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Calcium	5310	ug/L	5000	ug/L	106.2	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Chromium	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Cobalt	520	ug/L	500	ug/L	104	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Copper	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Iron	5400	ug/L	5000	ug/L	108	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Lead	527	ug/L	500	ug/L	105.3	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Magnesium	5420	ug/L	5000	ug/L	108.5	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Manganese	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Silver	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Sodium	11000	ug/L	10000	ug/L	109.5	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Titanium	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Vanadium	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2
	Zinc	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	05–DEC–09 08:40	120409A–2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Uranium	.248	ug/L	.2	ug/L	124	70.0 – 130.0	MS	29–NOV–09 06:22	091128–3
	Nickel	2.17	ug/L	2	ug/L	108.7	70.0 – 130.0	MS	29–NOV–09 07:47	091128–4
	Thallium	1.18	ug/L	1	ug/L	117.7	70.0 – 130.0	MS	29–NOV–09 07:47	091128–4
	Selenium	5.5	ug/L	5	ug/L	110	70.0 – 130.0	MS	29–NOV–09 07:47	091128–4
	Beryllium	.586	ug/L	.5	ug/L	117.2	70.0 – 130.0	MS	29–NOV–09 07:47	091128–4
	Arsenic	5.24	ug/L	5	ug/L	104.8	70.0 – 130.0	MS	29–NOV–09 07:47	091128–4
	Lithium	11	ug/L	10	ug/L	110.3	70.0 – 130.0	MS	29–NOV–09 07:47	091128–4
	Mercury	.155	ug/L	.2	ug/L	77.4	70.0 – 130.0	AV	07–DEC–09 10:11	120709S1–5
PQL01										
	Titanium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Magnesium	327	ug/L	300	ug/L	108.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Chromium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Cadmium	5.09	ug/L	5	ug/L	101.8	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Barium	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Antimony	11.8	ug/L	10	ug/L	118.1	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Silver	4.99	ug/L	5	ug/L	99.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Potassium	162	ug/L	150	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Manganese	10.5	ug/L	10	ug/L	105.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Boron	51.8	ug/L	50	ug/L	103.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Calcium	203	ug/L	200	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Zinc	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Vanadium	5.02	ug/L	5	ug/L	100.3	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Copper	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Lead	9.1	ug/L	10	ug/L	91	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Aluminum	206	ug/L	200	ug/L	103	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Iron	79.7	ug/L	100	ug/L	79.7	70.0 – 130.0	P	04–DEC–09 09:48	120409A–2
	Silicon	104	ug/L	100	ug/L	104.3	70.0 – 130.0	P	15–DEC–09 03:31	121509–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
PQL02										
	Aluminum	213	ug/L	200	ug/L	106.5	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Iron	107	ug/L	100	ug/L	106.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Lead	10	ug/L	10	ug/L	100.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Magnesium	232	ug/L	300	ug/L	77.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Manganese	10.7	ug/L	10	ug/L	106.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Vanadium	4.98	ug/L	5	ug/L	99.5	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Copper	10.8	ug/L	10	ug/L	107.9	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Cobalt	4.93	ug/L	5	ug/L	98.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Titanium	5.01	ug/L	5	ug/L	100.2	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Boron	49.9	ug/L	50	ug/L	99.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Calcium	207	ug/L	200	ug/L	103.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Zinc	10.2	ug/L	10	ug/L	101.7	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Potassium	168	ug/L	150	ug/L	112.3	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Silver	4.88	ug/L	5	ug/L	97.7	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Sodium	343	ug/L	300	ug/L	114.4	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Antimony	14.9	ug/L	10	ug/L	149	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Barium	5.08	ug/L	5	ug/L	101.6	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Cadmium	5.08	ug/L	5	ug/L	101.5	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Chromium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	04–DEC–09 23:20	120409A–2
	Silicon	103	ug/L	100	ug/L	102.8	70.0 – 130.0	P	15–DEC–09 04:38	121509–1
PQL03										
	Silicon	104	ug/L	100	ug/L	103.8	70.0 – 130.0	P	15–DEC–09 05:22	121509–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	29–NOV–09 06:20	091128–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	29–NOV–09 07:41	091128–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	29–NOV–09 07:41	091128–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	29–NOV–09 07:41	091128–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	29–NOV–09 07:41	091128–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	29–NOV–09 07:41	091128–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	29–NOV–09 07:41	091128–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 09:41	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 09:41	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 09:41	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 09:41	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 09:41	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 09:41	120409A–2
	Mercury	–0.096	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:09	120709S1–5
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 03:28	121509–1
CCB01										
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	29–NOV–09 06:29	091128–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	29–NOV–09 08:12	091128–4

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-608-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	29-NOV-09 08:12	091128-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	29-NOV-09 08:12	091128-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	29-NOV-09 08:12	091128-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	29-NOV-09 08:12	091128-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	29-NOV-09 08:12	091128-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 10:42	120409A-2
	Antimony	3.77	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Boron	10.73	+/-50	J	10.0	50.0	SOL	P	04-DEC-09 10:42	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 10:42	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Potassium	101.63	+/-250	J	64.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 10:42	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 10:42	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 10:42	120409A-2
	Mercury	-0.098	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:15	120709S1-5
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 03:51	121509-1
CCB02										
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	29-NOV-09 06:46	091128-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	29-NOV-09 08:30	091128-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	29-NOV-09 08:30	091128-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	29-NOV-09 08:30	091128-4

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-608-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	29-NOV-09 08:30	091128-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	29-NOV-09 08:30	091128-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	29-NOV-09 08:30	091128-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 11:03	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 11:03	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 11:03	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 11:03	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 11:03	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 11:03	120409A-2
	Mercury	-0.091	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:39	120709S1-5
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 04:42	121509-1
CCB03										
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	29-NOV-09 06:55	091128-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	29-NOV-09 09:37	091128-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	29-NOV-09 09:37	091128-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	29-NOV-09 09:37	091128-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	29-NOV-09 09:37	091128-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	29-NOV-09 09:37	091128-4

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-608-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	29-NOV-09 09:37	091128-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 12:20	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 12:20	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 12:20	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 12:20	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:20	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 12:20	120409A-2
	Mercury	-0.117	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 11:03	120709S1-5
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 05:26	121509-1
CCB04										
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	29-NOV-09 07:15	091128-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 12:55	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 12:55	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 12:55	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 12:55	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 12:55	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 12:55	120409A-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 12:55	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 12:55	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 12:55	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 12:55	120409A–2
	Mercury	–0.136	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:26	120709S1–5
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 05:37	121509–1
CCB05										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 14:03	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 14:03	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:03	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 14:03	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 14:03	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 14:03	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 14:03	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 14:03	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 14:03	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-608-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:03	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 14:03	120409A-2
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 11:50	120709S1-5
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 06:04	121509-1
CCB06										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 14:59	120409A-2
	Antimony	3.35	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 14:59	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 14:59	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:59	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 14:59	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 14:59	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 14:59	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 14:59	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 14:59	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 14:59	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 14:59	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 14:59	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 14:59	120409A-2
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 12:14	120709S1-5
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	15-DEC-09 06:42	121509-1
CCB07										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 15:55	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 15:55	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 15:55	120409A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 15:55	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 15:55	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 15:55	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 15:55	120409A–2
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:38	120709S1–5
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	15–DEC–09 07:17	121509–1
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 17:05	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 17:05	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 17:05	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 17:05	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 17:05	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 17:05	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 17:05	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 17:05	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 17:05	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 17:05	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 17:05	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 17:05	120409A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 17:05	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 17:05	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 17:05	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 17:05	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 17:05	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 17:05	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 17:05	120409A–2
	Mercury	–0.081	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:01	120709S1–5
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 18:08	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 18:08	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 18:08	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 18:08	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 18:08	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 18:08	120409A–2
	Mercury	–0.071	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:23	120709S1–5
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 19:26	120409A–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-608-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	3.31	+/-10	J	3.3	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 19:26	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 19:26	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 19:26	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 19:26	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	04-DEC-09 19:26	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	04-DEC-09 19:26	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	04-DEC-09 19:26	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 19:26	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 19:26	120409A-2
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	04-DEC-09 20:36	120409A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	04-DEC-09 20:36	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 20:36	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-DEC-09 20:36	120409A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	04-DEC-09 20:36	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	04-DEC-09 20:36	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	04-DEC-09 20:36	120409A-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 20:36	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 20:36	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 20:36	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 20:36	120409A–2
CCB12										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 21:47	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 21:47	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 21:47	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 21:47	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 21:47	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 21:47	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 21:47	120409A–2
CCB13										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	04–DEC–09 23:27	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	04–DEC–09 23:27	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	04–DEC–09 23:27	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	04–DEC–09 23:27	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	04–DEC–09 23:27	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	04–DEC–09 23:27	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	04–DEC–09 23:27	120409A–2
CCB14										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 00:43	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 00:43	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 00:43	120409A–2
	Potassium	137.31	+/–250	J	64.0	250	SOL	P	05–DEC–09 00:43	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 00:43	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 00:43	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 00:43	120409A–2
CCB15										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 01:54	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 01:54	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 01:54	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 01:54	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 01:54	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 01:54	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 01:54	120409A–2
CCB16										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 02:49	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 02:49	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 02:49	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 02:49	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 02:49	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 02:49	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 02:49	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 02:49	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 02:49	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 02:49	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 02:49	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 02:49	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 02:49	120409A–2
CCB17										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 03:37	120409A–2
	Antimony	3.63	+/–10	J	3.3	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 03:37	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 03:37	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 03:37	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 03:37	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 03:37	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 03:37	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 03:37	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 03:37	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 03:37	120409A–2
CCB18										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 04:54	120409A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 04:54	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 04:54	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 04:54	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 04:54	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 04:54	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 04:54	120409A–2
CCB19										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 06:12	120409A–2
	Antimony	3.88	+/–10	J	3.3	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 06:12	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 06:12	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–608–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 06:12	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 06:12	120409A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 06:12	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 06:12	120409A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–DEC–09 06:12	120409A–2
CCB20										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–DEC–09 07:37	120409A–2
	Antimony	4.85	+/–10	J	3.3	10.0	SOL	P	05–DEC–09 07:37	120409A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 07:37	120409A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	05–DEC–09 07:37	120409A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 07:37	120409A–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 07:37	120409A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 07:37	120409A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–DEC–09 07:37	120409A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–DEC–09 07:37	120409A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–DEC–09 07:37	120409A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–DEC–09 07:37	120409A–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–DEC–09 07:37	120409A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–DEC–09 07:37	120409A–2
	Potassium	94.85	+/–250	J	64.0	250	SOL	P	05–DEC–09 07:37	120409A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 07:37	120409A–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–DEC–09 07:37	120409A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 07:37	120409A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–DEC–09 07:37	120409A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-608-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	05-DEC-09 07:37	120409A-2
CCB21										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	05-DEC-09 08:47	120409A-2
	Antimony	5.7	+/-10	J	3.3	10.0	SOL	P	05-DEC-09 08:47	120409A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 08:47	120409A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	05-DEC-09 08:47	120409A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 08:47	120409A-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	05-DEC-09 08:47	120409A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	05-DEC-09 08:47	120409A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	05-DEC-09 08:47	120409A-2
	Copper	3.19	+/-10	J	3.0	10.0	SOL	P	05-DEC-09 08:47	120409A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	05-DEC-09 08:47	120409A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	05-DEC-09 08:47	120409A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	05-DEC-09 08:47	120409A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	05-DEC-09 08:47	120409A-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	05-DEC-09 08:47	120409A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 08:47	120409A-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	05-DEC-09 08:47	120409A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	05-DEC-09 08:47	120409A-2
	Vanadium	-1.22	+/-5	J	1.0	5.0	SOL	P	05-DEC-09 08:47	120409A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	05-DEC-09 08:47	120409A-2

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-608-1

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978631								
	Aluminum	6320	ug/Kg	+/-18587.361	U	P	6320	18600
	Antimony	352	ug/Kg	+/-929.368	J	P	307	929
	Boron	929	ug/Kg	+/-4646.84	U	P	929	4650
	Barium	92.9	ug/Kg	+/-464.684	U	P	92.9	465
	Chromium	139	ug/Kg	+/-464.684	U	P	139	465
	Copper	279	ug/Kg	+/-929.368	U	P	279	929
	Lead	232	ug/Kg	+/-929.368	U	P	232	929
	Manganese	214	ug/Kg	+/-929.368	J	P	186	929
	Silver	92.9	ug/Kg	+/-464.684	U	P	92.9	465
	Zinc	307	ug/Kg	+/-929.368	U	P	307	929
	Vanadium	92.9	ug/Kg	+/-464.684	U	P	92.9	465
	Titanium	92.9	ug/Kg	+/-464.684	U	P	92.9	465
	Sodium	6510	ug/Kg	+/-23234.201	U	P	6510	23200
	Potassium	6770	ug/Kg	+/-23234.201	J	P	5950	23200
	Magnesium	7900	ug/Kg	+/-27881.041	U	P	7900	27900
	Iron	7570	ug/Kg	+/-23234.201	J	P	7430	23200
	Cobalt	139	ug/Kg	+/-464.684	U	P	139	465
	Calcium	7430	ug/Kg	+/-23234.201	U	P	7430	23200
	Cadmium	92.9	ug/Kg	+/-464.684	U	P	92.9	465
1201978637								
	Arsenic	0.194	mg/kg	+/-0.969	U	MS	0.194	0.969
	Beryllium	0.0194	mg/kg	+/-0.097	U	MS	0.0194	0.0969
	Lithium	0.388	mg/kg	+/-1.938	U	MS	0.388	1.94
	Nickel	0.0969	mg/kg	+/-0.388	U	MS	0.0969	0.388
	Selenium	0.485	mg/kg	+/-0.969	U	MS	0.485	0.969
	Thallium	0.0581	mg/kg	+/-0.194	U	MS	0.0581	0.194
	Uranium	0.0128	mg/kg	+/-0.039	U	MS	0.0128	0.0388
1201978959								
	Mercury	-4.45	ug/kg	+/-11.278	J	AV	3.83	11.3
1201995270								
	Silicon	1320	ug/Kg	+/-8818.342	U	P	1320	8820

METALS
–4–
Interference Check Sample

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Silicon	20.7	ug/L					15–DEC–09 03:35	121509–1
ICSAB01									
	Silicon	5140	ug/L	5000	ug/L	103	80.0 – 120.0	15–DEC–09 03:38	121509–1

METALS
–4–
Interference Check Sample

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 – 120.0	04–DEC–09 09:55	120409A–2
	Antimony	4.98	ug/L					04–DEC–09 09:55	120409A–2
	Barium	1.92	ug/L					04–DEC–09 09:55	120409A–2
	Boron	–5.89	ug/L					04–DEC–09 09:55	120409A–2
	Cadmium	–0.11	ug/L					04–DEC–09 09:55	120409A–2
	Calcium	475000	ug/L	500000	ug/L	95.1	80.0 – 120.0	04–DEC–09 09:55	120409A–2
	Chromium	1.28	ug/L					04–DEC–09 09:55	120409A–2
	Cobalt	–1.39	ug/L					04–DEC–09 09:55	120409A–2
	Copper	1.06	ug/L					04–DEC–09 09:55	120409A–2
	Iron	184000	ug/L	200000	ug/L	92	80.0 – 120.0	04–DEC–09 09:55	120409A–2
	Lead	–2.66	ug/L					04–DEC–09 09:55	120409A–2
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	04–DEC–09 09:55	120409A–2
	Manganese	7.66	ug/L					04–DEC–09 09:55	120409A–2
	Potassium	–19.7	ug/L					04–DEC–09 09:55	120409A–2
	Silver	–1.58	ug/L					04–DEC–09 09:55	120409A–2
	Sodium	24.7	ug/L					04–DEC–09 09:55	120409A–2
	Titanium	–0.536	ug/L					04–DEC–09 09:55	120409A–2
	Vanadium	–1.65	ug/L					04–DEC–09 09:55	120409A–2
	Zinc	–7.1	ug/L					04–DEC–09 09:55	120409A–2
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Antimony	551	ug/L	500	ug/L	110	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Barium	505	ug/L	500	ug/L	101	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Boron	519	ug/L	500	ug/L	104	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Cadmium	473	ug/L	500	ug/L	94.6	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Chromium	482	ug/L	500	ug/L	96.3	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Copper	574	ug/L	500	ug/L	115	80.0 – 120.0	04–DEC–09 10:01	120409A–2

METALS
–4–
Interference Check Sample

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Iron	185000	ug/L	200000	ug/L	92.4	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Lead	473	ug/L	500	ug/L	94.7	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Manganese	501	ug/L	500	ug/L	100	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Potassium	5530	ug/L	5000	ug/L	111	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Silver	274	ug/L	250	ug/L	110	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Sodium	5210	ug/L	5000	ug/L	104	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Titanium	514	ug/L	500	ug/L	103	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Vanadium	513	ug/L	500	ug/L	103	80.0 – 120.0	04–DEC–09 10:01	120409A–2
	Zinc	488	ug/L	500	ug/L	97.7	80.0 – 120.0	04–DEC–09 10:01	120409A–2

METALS
-4-
Interference Check Sample

SDG No: 10-608-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	-0.012	ug/L					29-NOV-09 06:24	091128-3
ICSAB01									
	Uranium	22.8	ug/L	20	ug/L	114	80.0 - 120.0	29-NOV-09 06:25	091128-3

METALS
–4–
Interference Check Sample

SDG No: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.366	ug/L					29–NOV–09 07:53	091128–4
	Beryllium	0.07	ug/L					29–NOV–09 07:53	091128–4
	Lithium	0.091	ug/L					29–NOV–09 07:53	091128–4
	Nickel	3.42	ug/L					29–NOV–09 07:53	091128–4
	Selenium	–1.43	ug/L					29–NOV–09 07:53	091128–4
	Thallium	–0.013	ug/L					29–NOV–09 07:53	091128–4
ICSAB01									
	Arsenic	20.7	ug/L	20	ug/L	104	80.0 – 120.0	29–NOV–09 07:59	091128–4
	Beryllium	19.4	ug/L	20	ug/L	96.8	80.0 – 120.0	29–NOV–09 07:59	091128–4
	Lithium	20.4	ug/L	20	ug/L	102	80.0 – 120.0	29–NOV–09 07:59	091128–4
	Nickel	22.2	ug/L	22.7	ug/L	97.9	80.0 – 120.0	29–NOV–09 07:59	091128–4
	Selenium	19.3	ug/L	20	ug/L	96.7	80.0 – 120.0	29–NOV–09 07:59	091128–4
	Thallium	22.3	ug/L	20	ug/L	111	80.0 – 120.0	29–NOV–09 07:59	091128–4

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-608-1 **Client ID** RE03-10-6903S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 241559001 **Spike ID:** 1201978634

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Zinc	ug/Kg	75-125	77100		25300		50100	103		P
Aluminum	ug/Kg		14300000		8870000		501000	1080	N/A	P
Antimony	ug/Kg	75-125	47400		337	U	50100	94.1		P
Barium	ug/Kg	75-125	193000		113000		50100	158	N	P
Boron	ug/Kg	75-125	55100		2340	J	50100	105		P
Cadmium	ug/Kg	75-125	50700		102	U	50100	101		P
Calcium	ug/Kg	75-125	2330000		1700000		501000	125		P
Chromium	ug/Kg	75-125	62400		9560		50100	105		P
Cobalt	ug/Kg	75-125	63300		7390		50100	112		P
Copper	ug/Kg	75-125	63000		6640		50100	112		P
Iron	ug/Kg		15200000		13300000		501000	372	N/A	P
Lead	ug/Kg	75-125	71400		16100		50100	110		P
Magnesium	ug/Kg	75-125	2680000		1770000		501000	181	N	P
Manganese	ug/Kg		709000		456000		50100	504	N/A	P
Potassium	ug/Kg	75-125	1960000		1110000		501000	170	N	P
Silicon	ug/Kg	75-125	1380000		996000		509000	75.3		P
Silver	ug/Kg	75-125	54400		295	J	50100	108		P
Sodium	ug/Kg	75-125	1090000		535000		501000	111		P
Titanium	ug/Kg		500000		395000		50100	209	N/A	P
Vanadium	ug/Kg	75-125	85700		29700		50100	112		P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–608–1 **Client ID** RE03–10–6903SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 241559001 **Spike ID:** 1201978635

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		15000000		8870000		465000	1310	N/A	P
Antimony	ug/Kg	75–125	43300		337	U	46500	92.6		P
Barium	ug/Kg	75–125	171000		113000		46500	125		P
Boron	ug/Kg	75–125	51200		2340	J	46500	105		P
Cadmium	ug/Kg	75–125	47300		102	U	46500	102		P
Calcium	ug/Kg	75–125	2420000		1700000		465000	154	N	P
Chromium	ug/Kg	75–125	58700		9560		46500	106		P
Cobalt	ug/Kg	75–125	54200		7390		46500	101		P
Copper	ug/Kg	75–125	59300		6640		46500	113		P
Iron	ug/Kg		14500000		13300000		465000	263	N/A	P
Lead	ug/Kg	75–125	63600		16100		46500	102		P
Magnesium	ug/Kg	75–125	2720000		1770000		465000	205	N	P
Manganese	ug/Kg		416000		456000		46500	–87	N/A	P
Potassium	ug/Kg	75–125	1950000		1110000		465000	182	N	P
Silicon	ug/Kg	75–125	1380000		996000		511000	74.4	N	P
Silver	ug/Kg	75–125	50600		295	J	46500	108		P
Sodium	ug/Kg	75–125	1080000		535000		465000	118		P
Titanium	ug/Kg		484000		395000		46500	192	N/A	P
Vanadium	ug/Kg	75–125	79200		29700		46500	107		P
Zinc	ug/Kg	75–125	74900		25300		46500	107		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–608–1 **Client ID** RE03–10–6903S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 241559001 **Spike ID:** 1201978640

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	11.5		3		7.95	107		MS
Beryllium	mg/kg	75–125	5.66		0.828		4.97	97.2		MS
Lithium	mg/kg	75–125	17.1		10.5		4.97	133	N	MS
Nickel	mg/kg	75–125	12.8		7.51		4.97	107		MS
Selenium	mg/kg	75–125	1.29		0.494	U	1.99	65.1	N	MS
Thallium	mg/kg	75–125	11.2		0.246		9.94	110		MS
Uranium	mg/kg	75–125	7		1.23		4.97	116		MS

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-608-1 **Client ID** RE03-10-6903SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 241559001 **Spike ID:** 1201978641

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.65		3		8.13	81.8		MS
Beryllium	mg/kg	75-125	5.4		0.828		5.08	89.9		MS
Lithium	mg/kg	75-125	16.9		10.5		5.08	126	N	MS
Nickel	mg/kg	75-125	12.2		7.51		5.08	92.3		MS
Selenium	mg/kg	75-125	1.25		0.494	U	2.03	61.5	N	MS
Thallium	mg/kg	75-125	11		0.246		10.2	105		MS
Uranium	mg/kg	75-125	6.6		1.23		5.08	106		MS

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-608-1 **Client ID** RE03-09-13919S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 85

Sample ID: 241611001 **Spike ID:** 1201978962

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	174		4.56	U	130	135	N	AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–608–1 **Client ID** RE03–09–13919SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 85

Sample ID: 241611001 **Spike ID:** 1201978964

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	187		4.56	U	140	133	N	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–10–6903D

Sample ID: 241559001 **Duplicate ID:** 1201978632 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	8870000		8260000		7.1		P
Antimony	ug/Kg		337	U	345	U			P
Barium	ug/Kg	+/–20%	113000		105000		7.15		P
Boron	ug/Kg	+/–5220	2340	J	2020	J	14.5		P
Cadmium	ug/Kg		102	U	104	U			P
Calcium	ug/Kg	+/–20%	1700000		1660000		2.36		P
Chromium	ug/Kg	+/–20%	9560		9200		3.8		P
Cobalt	ug/Kg	+/–20%	7390		5720		25.5	*	P
Copper	ug/Kg	+/–20%	6640		6420		3.28		P
Iron	ug/Kg	+/–20%	13300000		12400000		7.06		P
Lead	ug/Kg	+/–20%	16100		13400		18.7		P
Magnesium	ug/Kg	+/–20%	1770000		1700000		3.64		P
Manganese	ug/Kg	+/–20%	456000		352000		25.8	*	P
Potassium	ug/Kg	+/–20%	1110000		1050000		4.93		P
Silicon	ug/Kg	+/–20%	996000		975000		2.13		P
Silver	ug/Kg	+/–522	295	J	273	J	7.75		P
Sodium	ug/Kg	+/–20%	535000		509000		5.06		P
Titanium	ug/Kg	+/–20%	395000		392000		.859		P
Vanadium	ug/Kg	+/–20%	29700		27500		7.38		P
Zinc	ug/Kg	+/–20%	25300		21900		14.1		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–10–6903SD

Sample ID: 1201978634 **Duplicate ID:** 1201978635 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	14300000		15000000		4.79		P
Antimony	ug/Kg	+/–20	47400		43300		9.16		P
Barium	ug/Kg	+/–20	193000		171000		11.8		P
Boron	ug/Kg	+/–20	55100		51200		7.41		P
Cadmium	ug/Kg	+/–20	50700		47300		7.04		P
Calcium	ug/Kg	+/–20	2330000		2420000		3.67		P
Chromium	ug/Kg	+/–20	62400		58700		6.19		P
Cobalt	ug/Kg	+/–20	63300		54200		15.6		P
Copper	ug/Kg	+/–20	63000		59300		6.05		P
Iron	ug/Kg	+/–20	15200000		14500000		4.33		P
Lead	ug/Kg	+/–20	71400		63600		11.6		P
Magnesium	ug/Kg	+/–20	2680000		2720000		1.67		P
Manganese	ug/Kg	+/–20	709000		416000		52.1	*	P
Potassium	ug/Kg	+/–20	1960000		1950000		.369		P
Silicon	ug/Kg	+/–20	1380000		1380000		.225		P
Silver	ug/Kg	+/–20	54400		50600		7.23		P
Sodium	ug/Kg	+/–20	1090000		1080000		.653		P
Titanium	ug/Kg	+/–20	500000		484000		3.14		P
Vanadium	ug/Kg	+/–20	85700		79200		7.89		P
Zinc	ug/Kg	+/–20	77100		74900		2.84		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–10–6903D

Sample ID: 241559001 **Duplicate ID:** 1201978638 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.04	3		5.44		57.8	*	MS
Beryllium	mg/kg	+/–20%	0.828		1.03		21.6	*	MS
Lithium	mg/kg	+/–20%	10.5		11.2		6.56		MS
Nickel	mg/kg	+/–20%	7.51		7.44		.96		MS
Selenium	mg/kg		0.494	U	0.522	U			MS
Thallium	mg/kg	+/–.209	0.246		0.224		9.38		MS
Uranium	mg/kg	+/–20%	1.23		1.13		8.71		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–10–6903SD

Sample ID: 1201978640 **Duplicate ID:** 1201978641 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	11.5		9.65		17.7		MS
Beryllium	mg/kg	+/–20	5.66		5.4		4.73		MS
Lithium	mg/kg	+/–20	17.1		16.9		1.09		MS
Nickel	mg/kg	+/–20	12.8		12.2		5.14		MS
Selenium	mg/kg	+/–20	1.29		1.25		3.53		MS
Thallium	mg/kg	+/–20	11.2		11		2.1		MS
Uranium	mg/kg	+/–20	7		6.6		5.8		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-608-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-13919D

Sample ID: 241611001 **Duplicate ID:** 1201978961 **Percent Solids for Dup:** 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		4.56	U	4.72	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–608–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13919SD

Sample ID: 1201978962 **Duplicate ID:** 1201978964 **Percent Solids for Dup:** 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	174		187		7.05		AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-608-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978636								
	Aluminum	ug/Kg	7290000	6850000		94	63.5-118	P
	Antimony	ug/Kg	121000	107000		88.5	39.1-132.1	P
	Barium	ug/Kg	475000	473000		99.5	82-110.6	P
	Boron	ug/Kg	139000	138000		99.2	74.9-113.6	P
	Cadmium	ug/Kg	116000	113000		97.8	77.9-115.2	P
	Calcium	ug/Kg	3720000	3580000		96.1	77.4-111.7	P
	Chromium	ug/Kg	84000	75800		90.2	66.6-116.5	P
	Cobalt	ug/Kg	83000	81700		98.4	79-113.9	P
	Copper	ug/Kg	105000	102000		97.6	77.6-112	P
	Iron	ug/Kg	20000000	17700000		88.6	51.5-145.5	P
	Lead	ug/Kg	161000	165000		102	83.1-114.7	P
	Magnesium	ug/Kg	2980000	2930000		98.3	81-114.3	P
	Manganese	ug/Kg	398000	369000		92.7	76.6-106.6	P
	Potassium	ug/Kg	2390000	2220000		92.9	72.2-111.1	P
	Silver	ug/Kg	133000	132000		99.2	81.7-115.7	P
	Sodium	ug/Kg	614000	590000		96.1	71.5-109.3	P
	Titanium	ug/Kg	382000	349000		91.4	41.7-148.3	P
	Vanadium	ug/Kg	166000	150000		90.2	65-118.6	P
	Zinc	ug/Kg	195000	196000		100	82.8-111.9	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-608-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978642								
	Arsenic	mg/kg	255	242		95	83-120	MS
	Beryllium	mg/kg	86.4	87.7		101	81.2-126.8	MS
	Lithium	mg/kg	8.01	7.58	J	94.6	66.7-133.7	MS
	Nickel	mg/kg	101	102		101	83.3-121.4	MS
	Selenium	mg/kg	171	173		101	80.2-125.9	MS
	Thallium	mg/kg	203	214		105	78-123.2	MS
	Uranium	mg/kg	2.12	1.7		80	61.9-130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-608-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978960								
	Mercury	ug/kg	5150	6540		127	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-608-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201995271								
	Silicon	ug/Kg	1210000	952000		78.6	10-190	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-608-1 **Client ID** RE03-10-6903L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241559001 **Serial Dilution ID:** 1201978633

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	87000		87500		.575		10	P
Antimony	3.3	U	16.5	U				P
Barium	1110		1140		2.7		10	P
Boron	22.9	J	50	U	100			P
Cadmium	1	U	5	U				P
Calcium	16700		17100		2.1		10	P
Chromium	93.7		97.5		4.06		10	P
Cobalt	72.5		75.5		4.14			P
Copper	65.1		64		1.69			P
Iron	131000		132000		.763		10	P
Lead	158		163		3.16		10	P
Magnesium	17300		17700		2.02		10	P
Manganese	4470		4700		5.03		10	P
Potassium	10800		11000		1.39		10	P
Silicon	9430		9300		1.38		10	P
Silver	2.89	J	5	U	100			P
Sodium	5250		5300		.952		10	P
Titanium	3870		3950		1.94		10	P
Vanadium	291		293		.687		10	P
Zinc	248		256		3.02		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-608-1 **Client ID** RE03-10-6903L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241559001 **Serial Dilution ID:** 1201978639

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	15.2		16.4	J	7.89			MS
Beryllium	4.19		4.52		7.88			MS
Lithium	53.2		54.5		2.44			MS
Nickel	38		39.9		4.87			MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.24		1.5	U	100			MS
Uranium	6.21		6.35		2.25			MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-608-1 **Client ID** RE03-09-13919L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241611001 **Serial Dilution ID:** 1201978963

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.068	U	.34	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-608-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925489							
1201978631	MB for batch 925489	MB	S	24-NOV-09	.538g	50mL	
1201978636	LCS for batch 925489	LCS	S	24-NOV-09	.508g	50mL	
1201978634	RE03-10-6903S	MS	S	24-NOV-09	.533g	50mL	
1201978635	RE03-10-6903SD	MSD	S	24-NOV-09	.575g	50mL	
1201978632	RE03-10-6903D	DUP	S	24-NOV-09	.512g	50mL	
241559001	RE03-10-6903	SAMPLE	S	24-NOV-09	.524g	50mL	
241559002	RE03-10-6902	SAMPLE	S	24-NOV-09	.509g	50mL	
Batch Number 932715							
1201995270	MB for batch 932715	MB	S	14-DEC-09	.567g	50mL	
1201995271	LCS for batch 932715	LCS	S	14-DEC-09	.525g	50mL	
1201978634	RE03-10-6903S	MS	S	14-DEC-09	.525g	50mL	
1201978635	RE03-10-6903SD	MSD	S	14-DEC-09	.523g	50mL	
1201978632	RE03-10-6903D	DUP	S	14-DEC-09	.521g	50mL	
241559001	RE03-10-6903	SAMPLE	S	14-DEC-09	.506g	50mL	
241559002	RE03-10-6902	SAMPLE	S	14-DEC-09	.521g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-608-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925491							
1201978637	MB for batch 925491	MB	S	24-NOV-09	.516g	50mL	
1201978642	LCS for batch 925491	LCS	S	24-NOV-09	.5g	50mL	
1201978640	RE03-10-6903S	MS	S	24-NOV-09	.538g	50mL	
1201978641	RE03-10-6903SD	MSD	S	24-NOV-09	.526g	50mL	
1201978638	RE03-10-6903D	DUP	S	24-NOV-09	.512g	50mL	
241559001	RE03-10-6903	SAMPLE	S	24-NOV-09	.541g	50mL	
241559002	RE03-10-6902	SAMPLE	S	24-NOV-09	.544g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-608-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925633						
1201978959	MB for batch 925633	MB	S	04-DEC-09	.532g	30mL	
1201978960	LCS for batch 925633	LCS	S	04-DEC-09	.2g	30mL	
1201978962	RE03-09-13919S	MS	S	04-DEC-09	.547g	30mL	
1201978964	RE03-09-13919SD	MSD	S	04-DEC-09	.505g	30mL	
1201978961	RE03-09-13919D	DUP	S	04-DEC-09	.511g	30mL	
241559001	RE03-10-6903	SAMPLE	S	04-DEC-09	.573g	30mL	
241559002	RE03-10-6902	SAMPLE	S	04-DEC-09	.5g	30mL	

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 29-NOV-09 **End Date:** 29-NOV-09

Client Sdg: 10-608-1
Method MS
Data File: 091128-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	06:13																										X		
S10	1	06:15																										X		
S100	1	06:17																										X		
ICV01	1	06:19																										X		
ICB01	1	06:20																										X		
CRDL01	1	06:22																										X		
ICSA01	1	06:24																										X		
ICSAB01	1	06:25																										X		
CCV01	1	06:27																										X		
CCB01	1	06:29																										X		
ZZZZZZ	2	06:30																												
ZZZZZZ	20	06:32																												
ZZZZZZ	40	06:34																												
ZZZZZZ	2	06:36																												
ZZZZZZ	2	06:37																												
ZZZZZZ	2	06:39																												
ZZZZZZ	2	06:41																												
ZZZZZZ	10	06:43																												
CCV02	1	06:44																										X		
CCB02	1	06:46																										X		
ZZZZZZ	2	06:48																												
ZZZZZZ	2	06:49																												
ZZZZZZ	2	06:51																												
CCV03	1	06:53																										X		
CCB03	1	06:55																										X		
1201978637	2	06:58																										X		
ZZZZZZ	20	06:59																												
1201978642	40	07:01																										X		
241559001	2	07:03																										X		
1201978638	2	07:04																										X		
1201978640	2	07:06																										X		
1201978641	2	07:08																										X		
1201978639	10	07:10																										X		
241559002	2	07:11																										X		
CCV04	1	07:13																										X		
CCB04	1	07:15																										X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 29–NOV–09 **End Date:** 29–NOV–09

Client Sdg: 10–608–1
Method MS
Data File: 091128–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:17			X		X									X				X		X				X				
S10	1	07:23			X		X									X				X		X				X				
S100	1	07:29			X		X									X				X		X				X				
ICV01	1	07:35			X		X									X				X		X				X				
ICB01	1	07:41			X		X									X				X		X				X				
CRDL01	1	07:47			X		X									X				X		X				X				
ICSA01	1	07:53			X		X									X				X		X				X				
ICSAB01	1	07:59			X		X									X				X		X				X				
CCV01	1	08:05			X		X									X				X		X				X				
CCB01	1	08:12			X		X									X				X		X				X				
LR01	1	08:18			X		X									X				X		X				X				
CCV02	1	08:24			X		X									X				X		X				X				
CCB02	1	08:30			X		X									X				X		X				X				
1201978637	2	08:36			X		X									X				X		X				X				
1201978642	20	08:42														X														
1201978642	40	08:48			X		X													X		X				X				
241559001	2	08:54			X		X									X				X		X				X				
1201978638	2	09:00			X		X									X				X		X				X				
1201978640	2	09:07			X		X									X				X		X				X				
1201978641	2	09:13			X		X									X				X		X				X				
1201978639	10	09:19			X		X									X				X		X				X				
241559002	2	09:25			X		X									X				X		X				X				
CCV03	1	09:31			X		X									X				X		X				X				
CCB03	1	09:37			X		X									X				X		X				X				

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 04–DEC–09 **End Date:** 05–DEC–09

Client Sdg: 10–608–1
Method P
Data File: 120409A–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	09:08		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	09:14	X	X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	09:21	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	09:28	X							X				X			X								X					
ICV01	1	09:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	09:41	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	09:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	09:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	10:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	10:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	10:12	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:26																												
CCV01	1	10:35	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	10:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	10:49	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	10:56	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	11:03	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:16																												
ZZZZZZ	2	11:24																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:52																												
ZZZZZZ	5	11:59																												
ZZZZZZ	1	12:06																												
CCV03	1	12:13	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	12:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV04	1	12:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	12:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	5	13:02																												
ZZZZZZ	5	13:09																												
ZZZZZZ	5	13:16																												
ZZZZZZ	5	13:22																												
ZZZZZZ	5	13:29																												
ZZZZZZ	5	13:36																												
ZZZZZZ	5	13:43																												
ZZZZZZ	25	13:50																												
CCV05	1	13:57	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
CCB05	1	14:03	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:31																												
ZZZZZZ	1	14:38																												
ZZZZZZ	1	14:45																												
CCV06	1	14:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	14:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	15:06																												
ZZZZZZ	1	15:13																												
ZZZZZZ	5	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	15:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	16:02																												
ZZZZZZ	1	16:09																												
ZZZZZZ	1	16:16																												
ZZZZZZ	1	16:23																												
ZZZZZZ	1	16:30																												
ZZZZZZ	5	16:37																												
ZZZZZZ	1	16:44																												
ZZZZZZ	1	16:51																												
CCV08	1	16:58	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	17:05	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	17:12																												
ZZZZZZ	1	17:19																												
ZZZZZZ	1	17:26																												
ZZZZZZ	1	17:33																												
ZZZZZZ	1	17:40																												
ZZZZZZ	1	17:47																												
ZZZZZZ	1	17:54																												
CCV09	1	18:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	18:08	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	18:15																												
ZZZZZZ	2	18:22																												
ZZZZZZ	1	18:29																												
ZZZZZZ	1	18:36																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	18:43																												
ZZZZZZ	1	18:50																												
ZZZZZZ	5	18:58																												
ZZZZZZ	1	19:05																												
ZZZZZZ	1	19:12																												
CCV10	1	19:19	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB10	1	19:26	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	19:33																												
ZZZZZZ	1	19:40																												
ZZZZZZ	1	19:47																												
ZZZZZZ	1	19:54																												
ZZZZZZ	1	20:01																												
ZZZZZZ	1	20:08																												
ZZZZZZ	1	20:15																												
ZZZZZZ	1	20:22																												
CCV11	1	20:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB11	1	20:36	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	20:43																												
ZZZZZZ	1	20:50																												
ZZZZZZ	1	20:58																												
ZZZZZZ	1	21:05																												
ZZZZZZ	1	21:12																												
ZZZZZZ	1	21:19																												
ZZZZZZ	1	21:26																												
ZZZZZZ	1	21:33																												
CCV12	1	21:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB12	1	21:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	22:03																												
ZZZZZZ	1	22:10																												
ZZZZZZ	1	22:17																												
ZZZZZZ	1	22:24																												
ZZZZZZ	1	22:31																												
ZZZZZZ	1	22:38																												
ZZZZZZ	1	22:45																												
ZZZZZZ	1	22:53																												
ZZZZZZ	5	23:00																												
ZZZZZZ	1	23:07																												
CCV13	1	23:14	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL02	1	23:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB13	1	23:27	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	23:34																											
ZZZZZZ	2	23:41																											
ZZZZZZ	1	23:48																											
ZZZZZZ	1	23:55																											
ZZZZZZ	1	00:02																											
ZZZZZZ	1	00:10																											
ZZZZZZ	1	00:16																											
ZZZZZZ	1	00:24																											
ZZZZZZ	1	00:30																											
CCV14	1	00:36	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB14	1	00:43	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	5	00:50																											
ZZZZZZ	1	00:57																											
ZZZZZZ	1	01:04																											
ZZZZZZ	1	01:11																											
ZZZZZZ	1	01:18																											
ZZZZZZ	1	01:25																											
ZZZZZZ	1	01:33																											
ZZZZZZ	1	01:40																											
CCV15	1	01:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB15	1	01:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	02:01																											
ZZZZZZ	1	02:08																											
ZZZZZZ	1	02:15																											
ZZZZZZ	1	02:21																											
ZZZZZZ	1	02:28																											
ZZZZZZ	5	02:35																											
CCV16	1	02:42	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB16	1	02:49	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	02:56																											
ZZZZZZ	1	03:03																											
ZZZZZZ	1	03:10																											
ZZZZZZ	1	03:16																											
ZZZZZZ	1	03:23																											
CCV17	1	03:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB17	1	03:37	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	03:44																											
ZZZZZZ	2	03:51																											
ZZZZZZ	1	03:58																											
ZZZZZZ	1	04:05																											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	04:12																												
ZZZZZZ	1	04:19																												
ZZZZZZ	5	04:26																												
ZZZZZZ	1	04:33																												
ZZZZZZ	1	04:40																												
CCV18	1	04:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB18	1	04:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	05:02																												
ZZZZZZ	1	05:08																												
ZZZZZZ	1	05:16																												
ZZZZZZ	1	05:23																												
ZZZZZZ	1	05:30																												
ZZZZZZ	1	05:37																												
ZZZZZZ	1	05:44																												
ZZZZZZ	1	05:51																												
ZZZZZZ	1	05:58																												
CCV19	1	06:05	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB19	1	06:12	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	06:19																												
ZZZZZZ	1	06:26																												
ZZZZZZ	1	06:33																												
ZZZZZZ	1	06:40																												
ZZZZZZ	1	06:47																												
ZZZZZZ	1	06:54																												
ZZZZZZ	5	07:02																												
ZZZZZZ	1	07:09																												
ZZZZZZ	1	07:16																												
ZZZZZZ	1	07:23																												
CCV20	1	07:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB20	1	07:37	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978631	1	07:45	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978636	2	07:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241559001	1	07:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978632	1	08:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978634	1	08:14	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978635	1	08:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978633	5	08:26	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241559002	1	08:33	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV21	1	08:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB21	1	08:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–608–1
Method AV
Data File: 120709S1–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:55																	X											
S0.2	1	09:57																	X											
S0.5	1	09:59																	X											
S2.0	1	10:01																	X											
S5.0	1	10:03																	X											
S10	1	10:05																	X											
ICV01	1	10:07																	X											
ICB01	1	10:09																	X											
CRDL01	1	10:11																	X											
CCV01	1	10:13																	X											
CCB01	1	10:15																	X											
ZZZZZZ	1	10:17																												
ZZZZZZ	10	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
ZZZZZZ	1	10:35																												
CCV02	1	10:37																	X											
CCB02	1	10:39																	X											
ZZZZZZ	1	10:41																												
ZZZZZZ	10	10:43																												
ZZZZZZ	1	10:45																												
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	1	10:55																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	10:59																												
CCV03	1	11:01																	X											
CCB03	1	11:03																	X											
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:10																												
ZZZZZZ	1	11:12																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:14																											
ZZZZZZ	1	11:16																											
ZZZZZZ	1	11:18																											
ZZZZZZ	1	11:20																											
ZZZZZZ	1	11:22																											
CCV04	1	11:24															X												
CCB04	1	11:26															X												
ZZZZZZ	1	11:28																											
ZZZZZZ	1	11:30																											
ZZZZZZ	1	11:32																											
ZZZZZZ	1	11:34																											
ZZZZZZ	5	11:36																											
ZZZZZZ	1	11:38																											
ZZZZZZ	1	11:40																											
ZZZZZZ	10	11:42																											
ZZZZZZ	1	11:44																											
ZZZZZZ	1	11:46																											
CCV05	1	11:48															X												
CCB05	1	11:50															X												
ZZZZZZ	1	11:52																											
ZZZZZZ	1	11:54																											
ZZZZZZ	1	11:56																											
ZZZZZZ	1	11:58																											
ZZZZZZ	1	12:00																											
ZZZZZZ	1	12:02																											
ZZZZZZ	5	12:04																											
ZZZZZZ	1	12:06																											
ZZZZZZ	1	12:08																											
ZZZZZZ	1	12:10																											
CCV06	1	12:12															X												
CCB06	1	12:14															X												
ZZZZZZ	1	12:16																											
ZZZZZZ	1	12:18																											
ZZZZZZ	1	12:20																											
ZZZZZZ	1	12:22																											
ZZZZZZ	1	12:24																											
ZZZZZZ	1	12:26																											
ZZZZZZ	1	12:28																											
ZZZZZZ	1	12:30																											
ZZZZZZ	1	12:31																											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	12:33																												
CCV07	1	12:35																	X											
CCB07	1	12:38																	X											
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:41																												
1201978959	1	12:43																	X											
1201978960	10	12:45																	X											
241559001	1	12:47																	X											
241559002	1	12:49																	X											
ZZZZZZ	1	12:51																												
1201978961	1	12:53																	X											
1201978962	1	12:55																	X											
1201978964	1	12:57																	X											
CCV08	1	12:59																	X											
CCB08	1	13:01																	X											
1201978963	5	13:03																	X											
ZZZZZZ	1	13:05																												
ZZZZZZ	1	13:07																												
ZZZZZZ	1	13:09																												
ZZZZZZ	1	13:11																												
ZZZZZZ	1	13:13																												
ZZZZZZ	1	13:15																												
ZZZZZZ	1	13:17																												
ZZZZZZ	1	13:19																												
CCV09	1	13:21																	X											
CCB09	1	13:23																	X											

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 15-DEC-09 **End Date:** 15-DEC-09

Client Sdg: 10-608-1
Method P
Data File: 121509-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	03:09																					X							
S0.1	1	03:13																					X							
S0.5	1	03:15																					X							
SCAL	1	03:19																					X							
S10	1	03:23																												
ICV01	1	03:24																					X							
ICB01	1	03:28																					X							
PQL01	1	03:31																					X							
ICSA01	1	03:35																					X							
ICSAB01	1	03:38																					X							
LR01	1	03:41																					X							
LR02	1	03:43																					X							
CCV01	1	03:47																					X							
CCB01	1	03:51																					X							
ZZZZZZ	1	04:01																												
ZZZZZZ	1	04:04																												
ZZZZZZ	1	04:08																												
ZZZZZZ	1	04:12																												
ZZZZZZ	1	04:16																												
ZZZZZZ	1	04:19																												
ZZZZZZ	5	04:23																												
ZZZZZZ	1	04:27																												
ZZZZZZ	1	04:30																												
CCV02	1	04:34																					X							
PQL02	1	04:38																					X							
CCB02	1	04:42																					X							
ZZZZZZ	1	04:45																												
ZZZZZZ	1	04:49																												
ZZZZZZ	1	04:53																												
ZZZZZZ	1	04:57																												
ZZZZZZ	1	05:00																												
ZZZZZZ	1	05:04																												
ZZZZZZ	1	05:08																												
ZZZZZZ	1	05:11																												
ZZZZZZ	1	05:15																												
CCV03	1	05:19																					X							
PQL03	1	05:22																					X							
CCB03	1	05:26																					X							
ZZZZZZ	100	05:30																												
CCV04	1	05:33																					X							

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
CCB04	1	05:37																				X							
CCV05	1	06:00																				X							
CCB05	1	06:04																				X							
ZZZZZZ	1	06:08																											
ZZZZZZ	1	06:11																											
ZZZZZZ	1	06:15																											
ZZZZZZ	1	06:18																											
ZZZZZZ	1	06:22																											
ZZZZZZ	5	06:26																											
ZZZZZZ	1	06:29																											
ZZZZZZ	1	06:33																											
ZZZZZZ	1	06:36																											
CCV06	1	06:39																				X							
CCB06	1	06:42																				X							
1201995270	1	06:46																				X							
1201995271	1	06:50																				X							
241559001	1	06:52																				X							
1201978632	1	06:56																				X							
1201978634	1	07:00																				X							
1201978635	1	07:03																				X							
1201978633	5	07:06																				X							
241559002	1	07:09																				X							
CCV07	1	07:13																				X							
CCB07	1	07:17																				X							

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-608-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	2
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–608–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-608-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–608–1
Effective Dates: 01–NOV–09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	–0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	–0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	–0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	–0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	–0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	–0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	–0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–608–1
Effective Dates: 01–NOV–09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	–0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-608-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–608–1
Effective Dates: 01–NOV–09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	–0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	–0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	–0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-608-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-608-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–608–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10-608-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

Raw Data

12/15/2009 03:03:33 Hg ReAlign... Actual peak offset (nm): 0.006
Drift (nm): -0.000 Slit adjustment: -3

Analysis Begun

Start Time: 12/15/2009 03:09:39 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409E.SIF
Batch ID:
Results Data Set: 121509
Results Library: c:\pe\optima1\Results\Results.mdb

Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/14/2009 14:51:32**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/15/2009 03:09:41**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time

1	Sc RADIAL	111965.5	111965.5	101	%	03:10:16
1	Al 396.153Radial†	149.3	148.4	[0.00]	µg/L	03:10:16
1	Ca 317.933Radial†	417.8	415.3	[0.00]	µg/L	03:10:36
1	Fe 238.204 Radial†	5.2	5.2	[0.00]	µg/L	03:10:36
1	K 766.490 Radial†	821.1	816.2	[0.00]	µg/L	03:10:16
1	Mg 279.077 IEC†	14.1	14.0	[0.00]	µg/L	03:10:36
1	Na 589.592 Radial†	-496.6	-493.6	[0.00]	µg/L	03:10:16
1	Sr 421.552†	-92.5	-92.0	[0.00]	µg/L	03:10:16
1	Sc 361.383	1946827.1	1946827.1	100.11	%	03:11:38
1	Y 371.029	1182437.6	1182437.6	100.10	%	03:11:38
1	Ag 328.068†	-72.1	-72.0	[0.00]	µg/L	03:11:43
1	As 188.979†	4.9	4.9	[0.00]	µg/L	03:12:04
1	B 249.677†	164.1	163.9	[0.00]	µg/L	03:11:43
1	Ba 233.527†	-83.7	-83.6	[0.00]	µg/L	03:12:04
1	Be 313.107†	3646.3	3642.3	[0.00]	µg/L	03:11:43
1	Cd 226.502†	-90.5	-90.4	[0.00]	µg/L	03:12:04
1	Co 228.616†	-67.1	-67.0	[0.00]	µg/L	03:12:04
1	Cr 267.716†	-147.8	-147.6	[0.00]	µg/L	03:11:43
1	Cu 324.752†	3268.7	3265.1	[0.00]	µg/L	03:11:43
1	Mn 257.610†	-220.7	-220.5	[0.00]	µg/L	03:12:04
1	Mo 202.031†	-2.6	-2.6	[0.00]	µg/L	03:12:04
1	Ni 231.604†	278.8	278.5	[0.00]	µg/L	03:12:04
1	P 214.914†	204.6	204.4	[0.00]	µg/L	03:12:04
1	Pb 220.353†	56.8	56.7	[0.00]	µg/L	03:12:04
1	S 181.975 Axial†	40.6	40.5	[0.00]	µg/L	03:12:04
1	Sb 206.836†	15.1	15.1	[0.00]	µg/L	03:12:04
1	Se 196.026†	5.7	5.7	[0.00]	µg/L	03:12:04
1	SiO2†	2075.3	2073.0	[0.00]	µg/L	03:11:43
1	Si 251.611†	310.4	310.0	[0.00]	µg/L	03:12:04
1	Sn 189.927†	20.7	20.7	[0.00]	µg/L	03:12:04
1	Ti 334.940†	815.5	814.6	[0.00]	µg/L	03:11:43
1	Tl 190.801†	-22.0	-21.9	[0.00]	µg/L	03:12:04
1	U 409.014†	818.8	817.9	[0.00]	µg/L	03:11:43
1	V 292.402†	-49.5	-49.4	[0.00]	µg/L	03:11:43
1	Zn 213.857†	509.8	509.2	[0.00]	µg/L	03:12:04
2	Sc RADIAL	111350.2	111350.2	100	%	03:10:42
2	Al 396.153Radial†	156.6	156.5	[0.00]	µg/L	03:10:42
2	Ca 317.933Radial†	386.9	386.7	[0.00]	µg/L	03:11:02
2	Fe 238.204 Radial†	7.6	7.6	[0.00]	µg/L	03:11:02
2	K 766.490 Radial†	837.0	836.5	[0.00]	µg/L	03:10:42
2	Mg 279.077 IEC†	16.5	16.5	[0.00]	µg/L	03:11:02
2	Na 589.592 Radial†	-522.1	-521.8	[0.00]	µg/L	03:10:42
2	Sr 421.552†	-89.2	-89.1	[0.00]	µg/L	03:10:42
2	Sc 361.383	1940993.2	1940993.2	99.810	%	03:12:09
2	Y 371.029	1179302.3	1179302.3	99.834	%	03:12:09
2	Ag 328.068†	-131.3	-131.6	[0.00]	µg/L	03:12:15
2	As 188.979†	8.3	8.3	[0.00]	µg/L	03:12:35
2	B 249.677†	170.3	170.6	[0.00]	µg/L	03:12:15
2	Ba 233.527†	-72.4	-72.6	[0.00]	µg/L	03:12:35
2	Be 313.107†	3686.8	3693.8	[0.00]	µg/L	03:12:15
2	Cd 226.502†	-97.7	-97.9	[0.00]	µg/L	03:12:35
2	Co 228.616†	-64.6	-64.8	[0.00]	µg/L	03:12:35
2	Cr 267.716†	-108.9	-109.1	[0.00]	µg/L	03:12:15
2	Cu 324.752†	3234.2	3240.3	[0.00]	µg/L	03:12:15
2	Mn 257.610†	-234.9	-235.3	[0.00]	µg/L	03:12:35
2	Mo 202.031†	-2.4	-2.4	[0.00]	µg/L	03:12:35
2	Ni 231.604†	277.8	278.3	[0.00]	µg/L	03:12:35
2	P 214.914†	201.9	202.3	[0.00]	µg/L	03:12:35
2	Pb 220.353†	53.3	53.4	[0.00]	µg/L	03:12:35
2	S 181.975 Axial†	37.8	37.9	[0.00]	µg/L	03:12:35
2	Sb 206.836†	17.0	17.0	[0.00]	µg/L	03:12:35
2	Se 196.026†	12.2	12.3	[0.00]	µg/L	03:12:35
2	SiO2†	2074.9	2078.8	[0.00]	µg/L	03:12:15
2	Si 251.611†	312.8	313.4	[0.00]	µg/L	03:12:35
2	Sn 189.927†	27.4	27.5	[0.00]	µg/L	03:12:35
2	Ti 334.940†	811.3	812.8	[0.00]	µg/L	03:12:15
2	Tl 190.801†	-16.4	-16.4	[0.00]	µg/L	03:12:35
2	U 409.014†	800.6	802.1	[0.00]	µg/L	03:12:15
2	V 292.402†	-110.7	-110.9	[0.00]	µg/L	03:12:15
2	Zn 213.857†	517.3	518.2	[0.00]	µg/L	03:12:35
3	Sc RADIAL	110559.1	110559.1	99.3	%	03:11:07

3	Al 396.153Radial†	184.0	185.2	[0.00]	µg/L	03:11:07
3	Ca 317.933Radial†	417.4	420.2	[0.00]	µg/L	03:11:28
3	Fe 238.204 Radial†	8.1	8.1	[0.00]	µg/L	03:11:28
3	K 766.490 Radial†	861.3	867.1	[0.00]	µg/L	03:11:07
3	Mg 279.077 IEC†	15.6	15.7	[0.00]	µg/L	03:11:28
3	Na 589.592 Radial†	-499.5	-502.9	[0.00]	µg/L	03:11:07
3	Sr 421.552†	-66.4	-66.8	[0.00]	µg/L	03:11:07
3	Sc 361.383	1946222.1	1946222.1	100.08	%	03:12:41
3	Y 371.029	1182037.9	1182037.9	100.07	%	03:12:41
3	Ag 328.068†	-100.2	-100.2	[0.00]	µg/L	03:12:47
3	As 188.979†	2.1	2.1	[0.00]	µg/L	03:13:07
3	B 249.677†	119.1	119.0	[0.00]	µg/L	03:12:47
3	Ba 233.527†	-81.5	-81.4	[0.00]	µg/L	03:13:07
3	Be 313.107†	3663.7	3660.8	[0.00]	µg/L	03:12:47
3	Cd 226.502†	-104.2	-104.1	[0.00]	µg/L	03:13:07
3	Co 228.616†	-70.4	-70.3	[0.00]	µg/L	03:13:07
3	Cr 267.716†	-124.9	-124.8	[0.00]	µg/L	03:12:47
3	Cu 324.752†	3295.3	3292.7	[0.00]	µg/L	03:12:47
3	Mn 257.610†	-238.1	-237.9	[0.00]	µg/L	03:13:07
3	Mo 202.031†	-9.6	-9.5	[0.00]	µg/L	03:13:07
3	Ni 231.604†	288.5	288.3	[0.00]	µg/L	03:13:07
3	P 214.914†	206.0	205.8	[0.00]	µg/L	03:13:07
3	Pb 220.353†	57.9	57.9	[0.00]	µg/L	03:13:07
3	S 181.975 Axial†	38.1	38.1	[0.00]	µg/L	03:13:07
3	Sb 206.836†	24.8	24.7	[0.00]	µg/L	03:13:07
3	Se 196.026†	14.5	14.5	[0.00]	µg/L	03:13:07
3	SiO2†	2076.8	2075.2	[0.00]	µg/L	03:12:47
3	Si 251.611†	320.8	320.5	[0.00]	µg/L	03:13:07
3	Sn 189.927†	24.9	24.9	[0.00]	µg/L	03:13:07
3	Ti 334.940†	763.1	762.5	[0.00]	µg/L	03:12:47
3	Tl 190.801†	-19.6	-19.6	[0.00]	µg/L	03:13:07
3	U 409.014†	857.1	856.4	[0.00]	µg/L	03:12:47
3	V 292.402†	-69.4	-69.4	[0.00]	µg/L	03:12:47
3	Zn 213.857†	527.6	527.2	[0.00]	µg/L	03:13:07

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1944680.8	3207.83	0.16%	100.00	%
Sc RADIAL	111291.6	705.05	0.63%	100	%
Y 371.029	1181259.3	1706.54	0.14%	100.000	%
Ag 328.068†	-101.3	29.80	29.42%	[0.00]	µg/L
Al 396.153Radial†	163.4	19.36	11.85%	[0.00]	µg/L
As 188.979†	5.1	3.12	60.97%	[0.00]	µg/L
B 249.677†	151.2	28.06	18.56%	[0.00]	µg/L
Ba 233.527†	-79.2	5.83	7.36%	[0.00]	µg/L
Be 313.107†	3665.6	26.07	0.71%	[0.00]	µg/L
Ca 317.933Radial†	407.4	18.08	4.44%	[0.00]	µg/L
Cd 226.502†	-97.5	6.83	7.01%	[0.00]	µg/L
Co 228.616†	-67.4	2.80	4.15%	[0.00]	µg/L
Cr 267.716†	-127.2	19.35	15.22%	[0.00]	µg/L
Cu 324.752†	3266.0	26.19	0.80%	[0.00]	µg/L
Fe 238.204 Radial†	7.0	1.58	22.72%	[0.00]	µg/L
K 766.490 Radial†	839.9	25.60	3.05%	[0.00]	µg/L
Mg 279.077 IEC†	15.4	1.29	8.35%	[0.00]	µg/L
Mn 257.610†	-231.2	9.40	4.07%	[0.00]	µg/L
Mo 202.031†	-4.8	4.07	83.96%	[0.00]	µg/L
Na 589.592 Radial†	-506.1	14.35	2.84%	[0.00]	µg/L
Ni 231.604†	281.7	5.70	2.02%	[0.00]	µg/L
P 214.914†	204.1	1.80	0.88%	[0.00]	µg/L
Pb 220.353†	56.0	2.31	4.13%	[0.00]	µg/L
S 181.975 Axial†	38.8	1.46	3.77%	[0.00]	µg/L
Sb 206.836†	18.9	5.13	27.09%	[0.00]	µg/L
Se 196.026†	10.8	4.57	42.22%	[0.00]	µg/L
SiO2†	2075.7	2.93	0.14%	[0.00]	µg/L
Si 251.611†	314.7	5.36	1.70%	[0.00]	µg/L
Sn 189.927†	24.4	3.42	14.04%	[0.00]	µg/L
Sr 421.552†	-82.6	13.79	16.69%	[0.00]	µg/L
Ti 334.940†	796.6	29.58	3.71%	[0.00]	µg/L
Tl 190.801†	-19.3	2.77	14.35%	[0.00]	µg/L

U 409.014†	825.5	27.92	3.38%	[0.00] µg/L
V 292.402†	-76.6	31.36	40.95%	[0.00] µg/L
Zn 213.857†	518.2	8.99	1.73%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/15/2009 03:13:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113735.0	113735.0	102	%	03:13:51
1	K 766.490 Radial†	2687.8	1790.1	[1000]	µg/L	03:13:51
1	Sr 421.552†	17850.4	17549.5	[100]	µg/L	03:13:51
1	Sc 361.383	1952351.7	1952351.7	100.39	%	03:14:13
1	Y 371.029	1184654.8	1184654.8	100.29	%	03:14:13
1	Ag 328.068†	10581.1	10640.8	[100]	µg/L	03:14:18
1	As 188.979†	55.3	49.9	[100]	µg/L	03:14:39
1	B 249.677†	2263.4	2103.4	[100]	µg/L	03:14:18
1	Ba 233.527†	3746.7	3811.1	[100]	µg/L	03:14:18
1	Be 313.107†	156310.4	152030.7	[100]	µg/L	03:14:13
1	Cd 226.502†	3581.1	3664.5	[100]	µg/L	03:14:18
1	Co 228.616†	1924.8	1984.6	[100]	µg/L	03:14:39
1	Cr 267.716†	4474.9	4584.6	[100]	µg/L	03:14:18
1	Cu 324.752†	17090.9	13757.7	[100]	µg/L	03:14:18
1	Mn 257.610†	30352.4	30464.3	[100]	µg/L	03:14:18
1	Mo 202.031†	833.1	834.7	[100]	µg/L	03:14:39
1	Ni 231.604†	2067.2	1777.4	[100]	µg/L	03:14:18
1	P 214.914†	427.5	221.7	[500]	µg/L	03:14:39
1	Pb 220.353†	436.8	379.1	[100]	µg/L	03:14:39
1	S 181.975 Axial†	78.5	39.4	[200]	µg/L	03:14:39
1	Sb 206.836†	113.4	94.0	[100]	µg/L	03:14:39
1	Se 196.026†	84.1	72.9	[100]	µg/L	03:14:39
1	SiO2†	7389.4	5284.7	[1069.5]	µg/L	03:14:18
1	Si 251.611†	6579.3	6238.8	[500]	µg/L	03:14:18
1	Sn 189.927†	216.0	190.8	[100]	µg/L	03:14:39
1	Ti 334.940†	42787.6	41822.9	[100]	µg/L	03:14:18
1	Tl 190.801†	46.2	65.3	[100]	µg/L	03:14:39
1	U 409.014†	1906.5	1073.6	[100]	µg/L	03:14:18
1	V 292.402†	8287.2	8331.2	[100]	µg/L	03:14:18
1	Zn 213.857†	4165.9	3631.3	[100]	µg/L	03:14:18
2	Sc RADIAL	113693.4	113693.4	102	%	03:13:57
2	K 766.490 Radial†	2658.6	1762.5	[1000]	µg/L	03:13:57
2	Sr 421.552†	17920.7	17624.8	[100]	µg/L	03:13:57
2	Sc 361.383	1938752.5	1938752.5	99.695	%	03:14:45
2	Y 371.029	1175789.0	1175789.0	99.537	%	03:14:45
2	Ag 328.068†	10802.5	10936.8	[100]	µg/L	03:14:50
2	As 188.979†	52.7	47.7	[100]	µg/L	03:15:11
2	B 249.677†	2252.9	2108.6	[100]	µg/L	03:14:50
2	Ba 233.527†	3790.8	3881.6	[100]	µg/L	03:14:50
2	Be 313.107†	156151.9	152963.7	[100]	µg/L	03:14:45
2	Cd 226.502†	3604.9	3713.4	[100]	µg/L	03:14:50
2	Co 228.616†	1923.8	1997.1	[100]	µg/L	03:15:11
2	Cr 267.716†	4501.7	4642.7	[100]	µg/L	03:14:50
2	Cu 324.752†	17215.8	14002.4	[100]	µg/L	03:14:50
2	Mn 257.610†	30658.9	30983.8	[100]	µg/L	03:14:50
2	Mo 202.031†	841.8	849.2	[100]	µg/L	03:15:11
2	Ni 231.604†	2099.2	1823.9	[100]	µg/L	03:14:50
2	P 214.914†	425.7	222.8	[500]	µg/L	03:15:11
2	Pb 220.353†	447.2	392.6	[100]	µg/L	03:15:11
2	S 181.975 Axial†	80.4	41.8	[200]	µg/L	03:15:11
2	Sb 206.836†	117.3	98.8	[100]	µg/L	03:15:11
2	Se 196.026†	79.9	69.3	[100]	µg/L	03:15:11
2	SiO2†	7462.5	5409.7	[1069.5]	µg/L	03:14:50
2	Si 251.611†	6641.9	6347.6	[500]	µg/L	03:14:50
2	Sn 189.927†	216.0	192.3	[100]	µg/L	03:15:11
2	Ti 334.940†	43165.9	42501.2	[100]	µg/L	03:14:50
2	Tl 190.801†	47.7	67.2	[100]	µg/L	03:15:11
2	U 409.014†	1945.8	1126.2	[100]	µg/L	03:14:50
2	V 292.402†	8453.6	8556.0	[100]	µg/L	03:14:50

2	Zn 213.857†	4211.9	3706.6	[100]	µg/L	03:14:50
3	Sc RADIAL	113280.3	113280.3	102	%	03:14:03
3	K 766.490 Radial†	2693.6	1806.4	[1000]	µg/L	03:14:03
3	Sr 421.552†	17962.3	17729.6	[100]	µg/L	03:14:03
3	Sc 361.383	1928873.5	1928873.5	99.187	%	03:15:17
3	Y 371.029	1170741.2	1170741.2	99.110	%	03:15:17
3	Ag 328.068†	10538.6	10726.3	[100]	µg/L	03:15:22
3	As 188.979†	51.6	47.0	[100]	µg/L	03:15:43
3	B 249.677†	2266.8	2134.2	[100]	µg/L	03:15:22
3	Ba 233.527†	3724.3	3834.0	[100]	µg/L	03:15:22
3	Be 313.107†	155187.0	152793.1	[100]	µg/L	03:15:17
3	Cd 226.502†	3563.0	3689.6	[100]	µg/L	03:15:22
3	Co 228.616†	1925.2	2008.4	[100]	µg/L	03:15:43
3	Cr 267.716†	4473.6	4637.4	[100]	µg/L	03:15:22
3	Cu 324.752†	17081.5	13955.4	[100]	µg/L	03:15:22
3	Mn 257.610†	30247.0	30726.1	[100]	µg/L	03:15:22
3	Mo 202.031†	840.1	851.9	[100]	µg/L	03:15:43
3	Ni 231.604†	2055.1	1790.2	[100]	µg/L	03:15:22
3	P 214.914†	427.7	227.1	[500]	µg/L	03:15:43
3	Pb 220.353†	432.9	380.4	[100]	µg/L	03:15:43
3	S 181.975 Axial†	76.7	38.5	[200]	µg/L	03:15:43
3	Sb 206.836†	112.1	94.1	[100]	µg/L	03:15:43
3	Se 196.026†	82.2	72.1	[100]	µg/L	03:15:43
3	SiO2†	7413.0	5398.1	[1069.5]	µg/L	03:15:22
3	Si 251.611†	6564.9	6304.0	[500]	µg/L	03:15:22
3	Sn 189.927†	218.1	195.5	[100]	µg/L	03:15:43
3	Ti 334.940†	42680.9	42234.0	[100]	µg/L	03:15:22
3	Tl 190.801†	47.2	66.9	[100]	µg/L	03:15:43
3	U 409.014†	1911.0	1101.1	[100]	µg/L	03:15:22
3	V 292.402†	8309.9	8454.6	[100]	µg/L	03:15:22
3	Zn 213.857†	4150.7	3666.5	[100]	µg/L	03:15:22

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1939992.6	11788.11	0.61%	99.759	%
Sc RADIAL	113569.6	251.38	0.22%	102	%
Y 371.029	1177061.7	7043.56	0.60%	99.645	%
Ag 328.068†	10768.0	152.35	1.41%	[100]	µg/L
As 188.979†	48.2	1.54	3.20%	[100]	µg/L
B 249.677†	2115.4	16.49	0.78%	[100]	µg/L
Ba 233.527†	3842.2	35.96	0.94%	[100]	µg/L
Be 313.107†	152595.8	496.82	0.33%	[100]	µg/L
Cd 226.502†	3689.1	24.46	0.66%	[100]	µg/L
Co 228.616†	1996.7	11.90	0.60%	[100]	µg/L
Cr 267.716†	4621.5	32.13	0.70%	[100]	µg/L
Cu 324.752†	13905.2	129.86	0.93%	[100]	µg/L
K 766.490 Radial†	1786.3	22.21	1.24%	[1000]	µg/L
Mn 257.610†	30724.7	259.75	0.85%	[100]	µg/L
Mo 202.031†	845.2	9.26	1.10%	[100]	µg/L
Ni 231.604†	1797.2	24.04	1.34%	[100]	µg/L
P 214.914†	223.9	2.84	1.27%	[500]	µg/L
Pb 220.353†	384.0	7.44	1.94%	[100]	µg/L
S 181.975 Axial†	39.9	1.69	4.24%	[200]	µg/L
Sb 206.836†	95.6	2.73	2.86%	[100]	µg/L
Se 196.026†	71.4	1.88	2.64%	[100]	µg/L
SiO2†	5364.1	69.07	1.29%	[1069.5]	µg/L
Si 251.611†	6296.8	54.74	0.87%	[500]	µg/L
Sn 189.927†	192.9	2.41	1.25%	[100]	µg/L
Sr 421.552†	17634.6	90.43	0.51%	[100]	µg/L
Ti 334.940†	42186.1	341.71	0.81%	[100]	µg/L
Tl 190.801†	66.5	1.02	1.53%	[100]	µg/L
U 409.014†	1100.3	26.35	2.39%	[100]	µg/L
V 292.402†	8447.3	112.60	1.33%	[100]	µg/L
Zn 213.857†	3668.1	37.69	1.03%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/15/2009 03:15:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112021.2	112021.2	101	%	03:16:24
1	Al 396.153Radial†	10024.6	9796.0	[5000]	µg/L	03:16:24
1	Ca 317.933Radial†	13293.5	12799.5	[5000]	µg/L	03:16:45
1	K 766.490 Radial†	10014.4	9109.3	[5000]	µg/L	03:16:24
1	Mg 279.077 IEC†	953.7	932.1	[5000]	µg/L	03:16:45
1	Sr 421.552†	88704.7	88209.5	[500]	µg/L	03:16:24
1	Sc 361.383	1959942.4	1959942.4	100.78	%	03:17:48
1	Y 371.029	1184979.2	1184979.2	100.31	%	03:17:48
1	Ag 328.068†	53674.6	53357.9	[500]	µg/L	03:17:54
1	As 188.979†	257.9	250.7	[500]	µg/L	03:18:14
1	B 249.677†	11029.5	10792.4	[500]	µg/L	03:17:54
1	Ba 233.527†	19021.9	18953.0	[500]	µg/L	03:17:54
1	Be 313.107†	769495.2	759837.7	[500]	µg/L	03:17:48
1	Cd 226.502†	18219.0	18174.6	[500]	µg/L	03:17:54
1	Co 228.616†	10084.6	10073.4	[500]	µg/L	03:17:54
1	Cr 267.716†	22828.7	22778.1	[500]	µg/L	03:17:54
1	Cu 324.752†	72002.0	68175.3	[500]	µg/L	03:17:54
1	Mn 257.610†	152407.8	151452.2	[500]	µg/L	03:17:48
1	Mo 202.031†	4203.5	4175.7	[500]	µg/L	03:18:14
1	Ni 231.604†	9200.8	8847.5	[500]	µg/L	03:17:54
1	P 214.914†	1329.0	1114.5	[2500]	µg/L	03:18:14
1	Pb 220.353†	1970.7	1899.4	[500]	µg/L	03:18:14
1	S 181.975 Axial†	227.4	186.8	[1000]	µg/L	03:18:14
1	Sb 206.836†	502.7	479.9	[500]	µg/L	03:18:14
1	Se 196.026†	360.3	346.7	[500]	µg/L	03:18:14
1	SiO2†	28694.3	26395.1	[5347.5]	µg/L	03:17:54
1	Si 251.611†	31556.4	30996.0	[2500]	µg/L	03:17:54
1	Sn 189.927†	993.1	961.0	[500]	µg/L	03:18:14
1	Ti 334.940†	216509.5	214027.0	[500]	µg/L	03:17:48
1	Tl 190.801†	295.3	312.3	[500]	µg/L	03:18:14
1	U 409.014†	5899.8	5028.4	[500]	µg/L	03:17:54
1	V 292.402†	42260.9	42008.4	[500]	µg/L	03:17:54
1	Zn 213.857†	18841.8	18176.9	[500]	µg/L	03:17:54
2	Sc RADIAL	112027.8	112027.8	101	%	03:16:50
2	Al 396.153Radial†	10134.1	9904.1	[5000]	µg/L	03:16:50
2	Ca 317.933Radial†	13271.2	12776.5	[5000]	µg/L	03:17:11
2	K 766.490 Radial†	9958.8	9053.4	[5000]	µg/L	03:16:50
2	Mg 279.077 IEC†	949.3	927.7	[5000]	µg/L	03:17:11
2	Sr 421.552†	89655.1	89148.6	[500]	µg/L	03:16:50
2	Sc 361.383	1968190.0	1968190.0	101.21	%	03:18:22
2	Y 371.029	1188870.2	1188870.2	100.64	%	03:18:22
2	Ag 328.068†	53475.1	52937.7	[500]	µg/L	03:18:27
2	As 188.979†	261.6	253.3	[500]	µg/L	03:18:48
2	B 249.677†	10937.5	10655.7	[500]	µg/L	03:18:27
2	Ba 233.527†	18942.9	18795.8	[500]	µg/L	03:18:27
2	Be 313.107†	766039.8	753224.2	[500]	µg/L	03:18:22
2	Cd 226.502†	18103.7	17984.9	[500]	µg/L	03:18:27
2	Co 228.616†	10021.2	9968.9	[500]	µg/L	03:18:27
2	Cr 267.716†	22721.2	22577.0	[500]	µg/L	03:18:27
2	Cu 324.752†	71646.6	67524.8	[500]	µg/L	03:18:27
2	Mn 257.610†	151631.4	150051.4	[500]	µg/L	03:18:22
2	Mo 202.031†	4200.1	4154.8	[500]	µg/L	03:18:48
2	Ni 231.604†	9140.6	8749.7	[500]	µg/L	03:18:27
2	P 214.914†	1325.7	1105.7	[2500]	µg/L	03:18:48
2	Pb 220.353†	1951.9	1872.6	[500]	µg/L	03:18:48
2	S 181.975 Axial†	221.9	180.4	[1000]	µg/L	03:18:48
2	Sb 206.836†	499.1	474.2	[500]	µg/L	03:18:48
2	Se 196.026†	351.7	336.7	[500]	µg/L	03:18:48
2	SiO2†	28658.2	26240.2	[5347.5]	µg/L	03:18:27

2	Si 251.611†	31512.8	30821.7	[2500]	µg/L	03:18:27
2	Sn 189.927†	989.1	952.9	[500]	µg/L	03:18:48
2	Ti 334.940†	215609.7	212237.7	[500]	µg/L	03:18:22
2	Tl 190.801†	295.4	311.2	[500]	µg/L	03:18:48
2	U 409.014†	5863.2	4967.7	[500]	µg/L	03:18:27
2	V 292.402†	42108.3	41682.0	[500]	µg/L	03:18:27
2	Zn 213.857†	18739.3	17997.2	[500]	µg/L	03:18:27
3	Sc RADIAL	111791.6	111791.6	100	%	03:17:16
3	Al 396.153Radial†	10086.5	9878.0	[5000]	µg/L	03:17:16
3	Ca 317.933Radial†	13341.4	12874.3	[5000]	µg/L	03:17:37
3	K 766.490 Radial†	10035.2	9150.4	[5000]	µg/L	03:17:16
3	Mg 279.077 IEC†	949.3	929.6	[5000]	µg/L	03:17:37
3	Sr 421.552†	89405.8	89088.5	[500]	µg/L	03:17:16
3	Sc 361.383	1951288.7	1951288.7	100.34	%	03:18:55
3	Y 371.029	1179176.0	1179176.0	99.824	%	03:18:55
3	Ag 328.068†	54060.0	53978.2	[500]	µg/L	03:19:00
3	As 188.979†	256.3	250.3	[500]	µg/L	03:19:21
3	B 249.677†	11048.0	10859.4	[500]	µg/L	03:19:00
3	Ba 233.527†	19195.4	19209.5	[500]	µg/L	03:19:00
3	Be 313.107†	766774.1	760511.8	[500]	µg/L	03:18:55
3	Cd 226.502†	18338.4	18373.8	[500]	µg/L	03:19:00
3	Co 228.616†	10096.3	10129.4	[500]	µg/L	03:19:00
3	Cr 267.716†	22941.1	22990.6	[500]	µg/L	03:19:00
3	Cu 324.752†	72328.0	68817.1	[500]	µg/L	03:19:00
3	Mn 257.610†	151736.4	151453.8	[500]	µg/L	03:18:55
3	Mo 202.031†	4193.6	4184.2	[500]	µg/L	03:19:21
3	Ni 231.604†	9284.5	8971.4	[500]	µg/L	03:19:00
3	P 214.914†	1326.7	1118.1	[2500]	µg/L	03:19:21
3	Pb 220.353†	1953.4	1890.8	[500]	µg/L	03:19:21
3	S 181.975 Axial†	229.4	189.8	[1000]	µg/L	03:19:21
3	Sb 206.836†	496.0	475.4	[500]	µg/L	03:19:21
3	Se 196.026†	360.7	348.6	[500]	µg/L	03:19:21
3	SiO2†	28987.2	26813.3	[5347.5]	µg/L	03:19:00
3	Si 251.611†	31774.6	31352.3	[2500]	µg/L	03:19:00
3	Sn 189.927†	994.6	966.9	[500]	µg/L	03:19:21
3	Ti 334.940†	215756.8	214229.5	[500]	µg/L	03:18:55
3	Tl 190.801†	297.4	315.7	[500]	µg/L	03:19:21
3	U 409.014†	5904.4	5059.0	[500]	µg/L	03:19:00
3	V 292.402†	42600.2	42532.5	[500]	µg/L	03:19:00
3	Zn 213.857†	18934.7	18352.4	[500]	µg/L	03:19:00

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1959807.0	8451.51	0.43%	100.78	%
Sc RADIAL	111946.9	134.50	0.12%	101	%
Y 371.029	1184341.8	4878.41	0.41%	100.26	%
Ag 328.068†	53424.6	523.48	0.98%	[500]	µg/L
Al 396.153Radial†	9859.4	56.45	0.57%	[5000]	µg/L
As 188.979†	251.5	1.65	0.66%	[500]	µg/L
B 249.677†	10769.2	103.86	0.96%	[500]	µg/L
Ba 233.527†	18986.1	208.83	1.10%	[500]	µg/L
Be 313.107†	757857.9	4027.05	0.53%	[500]	µg/L
Ca 317.933Radial†	12816.8	51.13	0.40%	[5000]	µg/L
Cd 226.502†	18177.8	194.48	1.07%	[500]	µg/L
Co 228.616†	10057.3	81.49	0.81%	[500]	µg/L
Cr 267.716†	22781.9	206.87	0.91%	[500]	µg/L
Cu 324.752†	68172.4	646.12	0.95%	[500]	µg/L
K 766.490 Radial†	9104.4	48.68	0.53%	[5000]	µg/L
Mg 279.077 IEC†	929.8	2.23	0.24%	[5000]	µg/L
Mn 257.610†	150985.8	809.19	0.54%	[500]	µg/L
Mo 202.031†	4171.6	15.14	0.36%	[500]	µg/L
Ni 231.604†	8856.2	111.11	1.25%	[500]	µg/L
P 214.914†	1112.8	6.35	0.57%	[2500]	µg/L
Pb 220.353†	1887.6	13.68	0.72%	[500]	µg/L
S 181.975 Axial†	185.6	4.79	2.58%	[1000]	µg/L
Sb 206.836†	476.5	2.99	0.63%	[500]	µg/L
Se 196.026†	344.0	6.38	1.86%	[500]	µg/L
SiO2†	26482.9	296.46	1.12%	[5347.5]	µg/L
Si 251.611†	31056.7	270.42	0.87%	[2500]	µg/L

Sn 189.927†	960.3	7.01	0.73%	[500] µg/L
Sr 421.552†	88815.5	525.67	0.59%	[500] µg/L
Ti 334.940†	213498.1	1096.22	0.51%	[500] µg/L
Tl 190.801†	313.1	2.32	0.74%	[500] µg/L
U 409.014†	5018.4	46.47	0.93%	[500] µg/L
V 292.402†	42074.3	429.07	1.02%	[500] µg/L
Zn 213.857†	18175.5	177.59	0.98%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/15/2009 03:19:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112968.3	112968.3	102	%	03:20:03
1	Al 396.153Radial†	19892.8	19434.2	[10000]	µg/L	03:20:03
1	Ca 317.933Radial†	26156.5	25360.8	[10000]	µg/L	03:20:23
1	Fe 238.204 Radial†	2004.3	1967.6	[10000]	µg/L	03:20:23
1	K 766.490 Radial†	18871.4	17751.4	[10000]	µg/L	03:20:03
1	Mg 279.077 IEC†	1867.7	1824.5	[10000]	µg/L	03:20:23
1	Na 589.592 Radial†	36349.1	36315.7	[10000]	µg/L	03:20:03
1	Sr 421.552†	177625.6	175071.9	[1000]	µg/L	03:20:03
1	Sc 361.383	1960537.7	1960537.7	100.82	%	03:21:28
1	Y 371.029	1182592.3	1182592.3	100.11	%	03:21:28
1	Ag 328.068†	103325.0	102590.6	[1000]	µg/L	03:21:33
1	As 188.979†	507.1	497.9	[1000]	µg/L	03:21:54
1	B 249.677†	21186.4	20863.8	[1000]	µg/L	03:21:33
1	Ba 233.527†	36655.6	36438.4	[1000]	µg/L	03:21:33
1	Be 313.107†	1514521.7	1498606.6	[1000]	µg/L	03:21:28
1	Cd 226.502†	34737.9	34554.4	[1000]	µg/L	03:21:33
1	Co 228.616†	19274.6	19186.1	[1000]	µg/L	03:21:33
1	Cr 267.716†	44135.8	43906.0	[1000]	µg/L	03:21:33
1	Cu 324.752†	135452.7	131091.1	[1000]	µg/L	03:21:33
1	Mn 257.610†	301081.6	298877.6	[1000]	µg/L	03:21:28
1	Mo 202.031†	8243.5	8181.7	[1000]	µg/L	03:21:33
1	Ni 231.604†	17327.8	16905.9	[1000]	µg/L	03:21:33
1	P 214.914†	2410.0	2186.3	[5000]	µg/L	03:21:54
1	Pb 220.353†	3802.7	3715.9	[1000]	µg/L	03:21:54
1	S 181.975 Axial†	415.1	372.9	[2000]	µg/L	03:21:54
1	Sb 206.836†	962.7	936.0	[1000]	µg/L	03:21:54
1	Se 196.026†	673.7	657.4	[1000]	µg/L	03:21:54
1	SiO2†	53980.4	51468.1	[10695]	µg/L	03:21:33
1	Si 251.611†	61022.9	60214.7	[5000]	µg/L	03:21:33
1	Sn 189.927†	1949.0	1908.9	[1000]	µg/L	03:21:54
1	Ti 334.940†	429737.4	425465.1	[1000]	µg/L	03:21:28
1	Tl 190.801†	605.9	620.4	[1000]	µg/L	03:21:54
1	U 409.014†	10493.3	9583.0	[1000]	µg/L	03:21:33
1	V 292.402†	81611.6	81028.1	[1000]	µg/L	03:21:33
1	Zn 213.857†	35200.3	34397.4	[1000]	µg/L	03:21:33
2	Sc RADIAL	113193.7	113193.7	102	%	03:20:29
2	Al 396.153Radial†	19798.6	19302.5	[10000]	µg/L	03:20:29
2	Ca 317.933Radial†	26321.4	25471.7	[10000]	µg/L	03:20:49
2	Fe 238.204 Radial†	2008.5	1967.8	[10000]	µg/L	03:20:49
2	K 766.490 Radial†	18830.2	17673.9	[10000]	µg/L	03:20:29
2	Mg 279.077 IEC†	1877.4	1830.4	[10000]	µg/L	03:20:49
2	Na 589.592 Radial†	36304.2	36200.2	[10000]	µg/L	03:20:29
2	Sr 421.552†	176933.7	174043.2	[1000]	µg/L	03:20:29
2	Sc 361.383	1961017.0	1961017.0	100.84	%	03:22:01
2	Y 371.029	1184075.6	1184075.6	100.24	%	03:22:01
2	Ag 328.068†	106263.5	105479.5	[1000]	µg/L	03:22:07
2	As 188.979†	505.6	496.3	[1000]	µg/L	03:22:27
2	B 249.677†	21801.7	21468.8	[1000]	µg/L	03:22:07
2	Ba 233.527†	37792.2	37556.5	[1000]	µg/L	03:22:07
2	Be 313.107†	1518104.5	1501792.3	[1000]	µg/L	03:22:01
2	Cd 226.502†	35952.9	35750.9	[1000]	µg/L	03:22:07
2	Co 228.616†	19902.1	19803.6	[1000]	µg/L	03:22:07
2	Cr 267.716†	45461.3	45209.8	[1000]	µg/L	03:22:07
2	Cu 324.752†	138799.3	134377.0	[1000]	µg/L	03:22:07
2	Mn 257.610†	301776.1	299493.4	[1000]	µg/L	03:22:01
2	Mo 202.031†	8442.3	8376.8	[1000]	µg/L	03:22:07
2	Ni 231.604†	17813.3	17383.2	[1000]	µg/L	03:22:07
2	P 214.914†	2439.0	2214.5	[5000]	µg/L	03:22:27
2	Pb 220.353†	3818.3	3730.5	[1000]	µg/L	03:22:27

2	S 181.975 Axial†	417.1	374.8	[2000]	µg/L	03:22:27
2	Sb 206.836†	974.2	947.2	[1000]	µg/L	03:22:27
2	Se 196.026†	676.6	660.1	[1000]	µg/L	03:22:27
2	SiO2†	55551.8	53013.3	[10695]	µg/L	03:22:07
2	Si 251.611†	62863.9	62025.6	[5000]	µg/L	03:22:07
2	Sn 189.927†	1964.4	1923.7	[1000]	µg/L	03:22:27
2	Ti 334.940†	430555.9	426172.5	[1000]	µg/L	03:22:01
2	Tl 190.801†	607.0	621.3	[1000]	µg/L	03:22:27
2	U 409.014†	10864.1	9948.1	[1000]	µg/L	03:22:07
2	V 292.402†	84036.1	83412.6	[1000]	µg/L	03:22:07
2	Zn 213.857†	36269.6	35449.2	[1000]	µg/L	03:22:07
3	Sc RADIAL	112527.5	112527.5	101	%	03:20:55
3	Al 396.153Radial†	19727.2	19347.1	[10000]	µg/L	03:20:55
3	Ca 317.933Radial†	26255.9	25560.1	[10000]	µg/L	03:21:15
3	Fe 238.204 Radial†	2007.5	1978.5	[10000]	µg/L	03:21:15
3	K 766.490 Radial†	18805.2	17758.8	[10000]	µg/L	03:20:55
3	Mg 279.077 IEC†	1882.9	1846.8	[10000]	µg/L	03:21:15
3	Na 589.592 Radial†	36194.6	36303.2	[10000]	µg/L	03:20:55
3	Sr 421.552†	176171.7	174319.4	[1000]	µg/L	03:20:55
3	Sc 361.383	1950071.9	1950071.9	100.28	%	03:22:34
3	Y 371.029	1177507.0	1177507.0	99.682	%	03:22:34
3	Ag 328.068†	105870.4	105678.9	[1000]	µg/L	03:22:40
3	As 188.979†	513.8	507.2	[1000]	µg/L	03:23:00
3	B 249.677†	21703.5	21492.3	[1000]	µg/L	03:22:40
3	Ba 233.527†	37647.6	37622.7	[1000]	µg/L	03:22:40
3	Be 313.107†	1506521.0	1498690.5	[1000]	µg/L	03:22:34
3	Cd 226.502†	35811.8	35810.2	[1000]	µg/L	03:22:40
3	Co 228.616†	19827.6	19840.2	[1000]	µg/L	03:22:40
3	Cr 267.716†	45247.7	45249.8	[1000]	µg/L	03:22:40
3	Cu 324.752†	138328.8	134680.4	[1000]	µg/L	03:22:40
3	Mn 257.610†	299256.1	298660.0	[1000]	µg/L	03:22:34
3	Mo 202.031†	8446.2	8427.7	[1000]	µg/L	03:22:40
3	Ni 231.604†	17771.8	17440.9	[1000]	µg/L	03:22:40
3	P 214.914†	2431.2	2220.3	[5000]	µg/L	03:23:00
3	Pb 220.353†	3804.6	3738.1	[1000]	µg/L	03:23:00
3	S 181.975 Axial†	415.8	375.8	[2000]	µg/L	03:23:00
3	Sb 206.836†	974.6	953.0	[1000]	µg/L	03:23:00
3	Se 196.026†	680.0	667.3	[1000]	µg/L	03:23:00
3	SiO2†	55349.0	53120.3	[10695]	µg/L	03:22:40
3	Si 251.611†	62604.5	62116.8	[5000]	µg/L	03:22:40
3	Sn 189.927†	1961.9	1932.1	[1000]	µg/L	03:23:00
3	Ti 334.940†	427118.2	425140.8	[1000]	µg/L	03:22:34
3	Tl 190.801†	608.2	625.8	[1000]	µg/L	03:23:00
3	U 409.014†	10809.5	9954.1	[1000]	µg/L	03:22:40
3	V 292.402†	83670.2	83515.5	[1000]	µg/L	03:22:40
3	Zn 213.857†	36140.9	35522.8	[1000]	µg/L	03:22:40

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1957208.8	6185.45	0.32%	100.64	%
Sc RADIAL	112896.5	338.82	0.30%	101	%
Y 371.029	1181391.6	3444.96	0.29%	100.01	%
Ag 328.068†	104583.0	1728.36	1.65%	[1000]	µg/L
Al 396.153Radial†	19361.3	66.98	0.35%	[10000]	µg/L
As 188.979†	500.5	5.91	1.18%	[1000]	µg/L
B 249.677†	21275.0	356.28	1.67%	[1000]	µg/L
Ba 233.527†	37205.9	665.49	1.79%	[1000]	µg/L
Be 313.107†	1499696.5	1815.54	0.12%	[1000]	µg/L
Ca 317.933Radial†	25464.2	99.83	0.39%	[10000]	µg/L
Cd 226.502†	35371.8	708.55	2.00%	[1000]	µg/L
Co 228.616†	19610.0	367.53	1.87%	[1000]	µg/L
Cr 267.716†	44788.5	764.54	1.71%	[1000]	µg/L
Cu 324.752†	133382.8	1990.47	1.49%	[1000]	µg/L
Fe 238.204 Radial†	1971.3	6.25	0.32%	[10000]	µg/L
K 766.490 Radial†	17728.0	47.02	0.27%	[10000]	µg/L
Mg 279.077 IEC†	1833.9	11.55	0.63%	[10000]	µg/L
Mn 257.610†	299010.3	432.26	0.14%	[1000]	µg/L
Mo 202.031†	8328.7	129.84	1.56%	[1000]	µg/L
Na 589.592 Radial†	36273.0	63.37	0.17%	[10000]	µg/L

Ni 231.604†	17243.3	293.63	1.70%	[1000]	µg/L
P 214.914†	2207.1	18.18	0.82%	[5000]	µg/L
Pb 220.353†	3728.2	11.27	0.30%	[1000]	µg/L
S 181.975 Axial†	374.5	1.47	0.39%	[2000]	µg/L
Sb 206.836†	945.4	8.65	0.91%	[1000]	µg/L
Se 196.026†	661.6	5.12	0.77%	[1000]	µg/L
SiO2†	52533.9	924.54	1.76%	[10695]	µg/L
Si 251.611†	61452.4	1072.80	1.75%	[5000]	µg/L
Sn 189.927†	1921.6	11.78	0.61%	[1000]	µg/L
Sr 421.552†	174478.2	532.43	0.31%	[1000]	µg/L
Ti 334.940†	425592.8	527.60	0.12%	[1000]	µg/L
Tl 190.801†	622.5	2.91	0.47%	[1000]	µg/L
U 409.014†	9828.4	212.55	2.16%	[1000]	µg/L
V 292.402†	82652.1	1407.32	1.70%	[1000]	µg/L
Zn 213.857†	35123.1	629.61	1.79%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/15/2009 03:23:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113208.9	113208.9	102	%	03:23:42
1	Al 396.153Radial†	98217.9	96391.1	[50000]	µg/L	03:23:42
1	Ca 317.933Radial†	129949.4	127341.2	[50000]	µg/L	03:23:42
1	Fe 238.204 Radial†	3955.3	3881.3	[20000]	µg/L	03:23:47
1	Mg 279.077 IEC†	9149.7	8979.3	[50000]	µg/L	03:23:47
1	Na 589.592 Radial†	72514.5	71792.5	[20000]	µg/L	03:23:42
1	Sc 361.383	1968602.7	1968602.7	101.23	%	03:24:21
1	Y 371.029	1179730.7	1179730.7	99.871	%	03:24:21
2	Sc RADIAL	113830.4	113830.4	102	%	03:23:53
2	Al 396.153Radial†	98518.4	96157.7	[50000]	µg/L	03:23:53
2	Ca 317.933Radial†	130703.3	127380.8	[50000]	µg/L	03:23:53
2	Fe 238.204 Radial†	3951.1	3856.0	[20000]	µg/L	03:23:58
2	Mg 279.077 IEC†	9113.5	8894.8	[50000]	µg/L	03:23:58
2	Na 589.592 Radial†	72804.8	71687.1	[20000]	µg/L	03:23:53
2	Sc 361.383	1967223.4	1967223.4	101.16	%	03:24:29
2	Y 371.029	1179417.3	1179417.3	99.844	%	03:24:29
3	Sc RADIAL	113662.2	113662.2	102	%	03:24:04
3	Al 396.153Radial†	97503.1	95306.1	[50000]	µg/L	03:24:04
3	Ca 317.933Radial†	129151.1	126050.0	[50000]	µg/L	03:24:04
3	Fe 238.204 Radial†	3989.2	3899.0	[20000]	µg/L	03:24:09
3	Mg 279.077 IEC†	9176.8	8969.9	[50000]	µg/L	03:24:09
3	Na 589.592 Radial†	72124.1	71125.9	[20000]	µg/L	03:24:04
3	Sc 361.383	1974024.1	1974024.1	101.51	%	03:24:37
3	Y 371.029	1183546.3	1183546.3	100.19	%	03:24:37

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1969950.1	3594.98	0.18%	101.30	%
Sc RADIAL	113567.2	321.47	0.28%	102	%
Y 371.029	1180898.1	2298.73	0.19%	99.969	%
Al 396.153Radial†	95951.7	571.12	0.60%	[50000]	µg/L
Ca 317.933Radial†	126924.0	757.15	0.60%	[50000]	µg/L
Fe 238.204 Radial†	3878.8	21.63	0.56%	[20000]	µg/L
Mg 279.077 IEC†	8948.0	46.31	0.52%	[50000]	µg/L
Na 589.592 Radial†	71535.1	358.32	0.50%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	105.1	0.00000	0.999961	
Al 396.153Radial	3	Lin Thru 0	0.0	1.920	0.00000	0.999995	
As 188.979	3	Lin Thru 0	0.0	0.5008	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	21.33	0.00000	0.999988	
Ba 233.527	3	Lin Thru 0	0.0	37.37	0.00000	0.999963	
Be 313.107	3	Lin Thru 0	0.0	1503	0.00000	0.999990	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.539	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	35.58	0.00000	0.999934	
Co 228.616	3	Lin Thru 0	0.0	19.71	0.00000	0.999947	
Cr 267.716	3	Lin Thru 0	0.0	44.95	0.00000	0.999973	
Cu 324.752	3	Lin Thru 0	0.0	134.0	0.00000	0.999956	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1946	0.00000	0.999979	
K 766.490 Radial	3	Lin Thru 0	0.0	1.782	0.00000	0.999942	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1792	0.00000	0.999982	
Mn 257.610	3	Lin Thru 0	0.0	299.7	0.00000	0.999990	
Mo 202.031	3	Lin Thru 0	0.0	8.333	0.00000	0.999999	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.587	0.00000	0.999984	

Ni 231.604	3	Lin Thru 0	0.0	17.34	0.00000	0.999937
P 214.914	3	Lin Thru 0	0.0	0.4422	0.00000	0.999994
Pb 220.353	3	Lin Thru 0	0.0	3.738	0.00000	0.999984
S 181.975 Axial	3	Lin Thru 0	0.0	0.1870	0.00000	0.999977
Sb 206.836	3	Lin Thru 0	0.0	0.9470	0.00000	0.999994
Se 196.026	3	Lin Thru 0	0.0	0.6673	0.00000	0.999856
SiO2	3	Lin Thru 0	0.0	4.921	0.00000	0.999993
Si 251.611	3	Lin Thru 0	0.0	12.32	0.00000	0.999989
Sn 189.927	3	Lin Thru 0	0.0	1.921	0.00000	1.000000
Sr 421.552	3	Lin Thru 0	0.0	175.1	0.00000	0.999974
Ti 334.940	3	Lin Thru 0	0.0	425.8	0.00000	0.999999
Tl 190.801	3	Lin Thru 0	0.0	0.6235	0.00000	0.999980
U 409.014	3	Lin Thru 0	0.0	9.879	0.00000	0.999913
V 292.402	3	Lin Thru 0	0.0	82.96	0.00000	0.999973
Zn 213.857	3	Lin Thru 0	0.0	35.38	0.00000	0.999899

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/15/2009 03:24:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112766.8	112766.8	101	%			03:25:19
1	Al 396.153Radial†	9993.6	9699.4	5031.6	µg/L	5031.6	ppb	03:25:19
1	Ca 317.933Radial†	13042.9	12464.9	4909.3	µg/L	4909.3	ppb	03:25:39
1	Fe 238.204 Radial†	1002.4	982.3	5065.2	µg/L	5065.2	ppb	03:25:39
1	K 766.490 Radial†	5103.1	4196.4	2354.3	µg/L	2354.3	ppb	03:25:19
1	Mg 279.077 IEC†	945.5	917.7	5126.8	µg/L	5126.8	ppb	03:25:39
1	Na 589.592 Radial†	8475.2	8870.4	2473.0	µg/L	2473.0	ppb	03:25:19
1	Sr 421.552†	92131.4	91008.8	519.70	µg/L	519.70	ppb	03:25:19
1	Sc 361.383	1969687.2	1969687.2	101.29	%			03:26:43
1	Y 371.029	1191883.9	1191883.9	100.90	%			03:26:43
1	Ag 328.068†	26571.9	26335.9	254.48	µg/L	254.48	ppb	03:26:49
1	As 188.979†	246.2	238.0	474.02	µg/L	474.02	ppb	03:27:10
1	B 249.677†	11223.7	10930.0	510.92	µg/L	510.92	ppb	03:26:49
1	Ba 233.527†	19072.6	18909.6	507.09	µg/L	507.09	ppb	03:26:49
1	Be 313.107†	392240.8	383595.5	255.03	µg/L	255.03	ppb	03:26:43
1	Cd 226.502†	17720.8	17593.2	494.96	µg/L	494.96	ppb	03:26:49
1	Co 228.616†	9992.7	9933.2	504.09	µg/L	504.09	ppb	03:26:49
1	Cr 267.716†	21955.2	21803.7	486.19	µg/L	486.19	ppb	03:26:49
1	Cu 324.752†	71580.1	67405.3	504.05	µg/L	504.05	ppb	03:26:49
1	Mn 257.610†	151354.9	149664.6	500.08	µg/L	500.08	ppb	03:26:43
1	Mo 202.031†	4367.8	4317.2	518.32	µg/L	518.32	ppb	03:27:10
1	Ni 231.604†	8871.6	8477.3	488.80	µg/L	488.80	ppb	03:26:49
1	P 214.914†	1317.7	1096.8	2425.9	µg/L	2425.9	ppb	03:27:10
1	Pb 220.353†	1917.4	1837.0	492.22	µg/L	492.22	ppb	03:27:10
1	S 181.975 Axial†	490.6	445.6	2381.0	µg/L	2381.0	ppb	03:27:10
1	Sb 206.836†	495.1	469.9	494.77	µg/L	494.77	ppb	03:27:10
1	Se 196.026†	1674.5	1642.4	2463.5	µg/L	2463.5	ppb	03:27:10
1	SiO2†	54139.6	51376.6	10441	µg/L	10441	ppb	03:26:49
1	Si 251.611†	61159.1	60068.0	4828.6	µg/L	4828.6	ppb	03:26:49
1	Sn 189.927†	1044.8	1007.2	526.91	µg/L	526.91	ppb	03:27:10
1	Ti 334.940†	209391.5	205936.5	483.32	µg/L	483.32	ppb	03:26:43
1	Tl 190.801†	303.5	319.0	513.80	µg/L	513.80	ppb	03:27:10
1	U 409.014†	5543.6	4647.8	469.64	µg/L	469.64	ppb	03:26:49
1	V 292.402†	41674.7	41222.1	501.66	µg/L	501.66	ppb	03:26:49
1	Zn 213.857†	18369.6	17618.2	494.04	µg/L	494.04	ppb	03:26:49
2	Sc RADIAL	113886.2	113886.2	102	%			03:25:45
2	Al 396.153Radial†	10022.6	9630.9	4995.6	µg/L	4995.6	ppb	03:25:45
2	Ca 317.933Radial†	13090.4	12384.8	4877.8	µg/L	4877.8	ppb	03:26:06
2	Fe 238.204 Radial†	1011.9	981.9	5062.9	µg/L	5062.9	ppb	03:26:06
2	K 766.490 Radial†	5139.1	4182.1	2346.2	µg/L	2346.2	ppb	03:25:45
2	Mg 279.077 IEC†	950.6	913.5	5103.8	µg/L	5103.8	ppb	03:26:06
2	Na 589.592 Radial†	8440.0	8753.8	2440.5	µg/L	2440.5	ppb	03:25:45
2	Sr 421.552†	92221.5	90203.1	515.10	µg/L	515.10	ppb	03:25:45
2	Sc 361.383	1962806.4	1962806.4	100.93	%			03:27:17
2	Y 371.029	1188120.6	1188120.6	100.58	%			03:27:17
2	Ag 328.068†	26627.5	26482.9	255.89	µg/L	255.89	ppb	03:27:23
2	As 188.979†	242.7	235.3	468.74	µg/L	468.74	ppb	03:27:43
2	B 249.677†	11228.4	10973.5	512.97	µg/L	512.97	ppb	03:27:23
2	Ba 233.527†	19008.4	18912.1	507.16	µg/L	507.16	ppb	03:27:23
2	Be 313.107†	389692.3	382428.1	254.25	µg/L	254.25	ppb	03:27:17
2	Cd 226.502†	17692.2	17626.3	495.89	µg/L	495.89	ppb	03:27:23
2	Co 228.616†	9952.9	9928.3	503.87	µg/L	503.87	ppb	03:27:23
2	Cr 267.716†	21935.7	21860.3	487.45	µg/L	487.45	ppb	03:27:23
2	Cu 324.752†	71543.3	67616.6	505.63	µg/L	505.63	ppb	03:27:23
2	Mn 257.610†	150571.9	149412.6	499.24	µg/L	499.24	ppb	03:27:17
2	Mo 202.031†	4429.3	4393.2	527.43	µg/L	527.43	ppb	03:27:43
2	Ni 231.604†	8876.0	8512.3	490.82	µg/L	490.82	ppb	03:27:23
2	P 214.914†	1329.9	1113.5	2463.5	µg/L	2463.5	ppb	03:27:43
2	Pb 220.353†	1948.5	1874.5	502.27	µg/L	502.27	ppb	03:27:43

2	S 181.975 Axial†	495.7	452.3	2417.0 µg/L	2417.0 ppb	03:27:43
2	Sb 206.836†	487.1	463.7	488.16 µg/L	488.16 ppb	03:27:43
2	Se 196.026†	1696.0	1669.6	2504.2 µg/L	2504.2 ppb	03:27:43
2	SiO2†	54221.4	51645.0	10495 µg/L	10495 ppb	03:27:23
2	Si 251.611†	61071.4	60192.8	4838.5 µg/L	4838.5 ppb	03:27:23
2	Sn 189.927†	1048.0	1014.0	530.41 µg/L	530.41 ppb	03:27:43
2	Ti 334.940†	208377.3	205656.5	482.67 µg/L	482.67 ppb	03:27:17
2	Tl 190.801†	308.3	324.7	523.06 µg/L	523.06 ppb	03:27:43
2	U 409.014†	5516.1	4639.7	468.82 µg/L	468.82 ppb	03:27:23
2	V 292.402†	41630.0	41322.1	502.92 µg/L	502.92 ppb	03:27:23
2	Zn 213.857†	18269.1	17582.1	493.01 µg/L	493.01 ppb	03:27:23
3	Sc RADIAL	114298.6	114298.6	103 %		03:26:11
3	Al 396.153Radial†	10070.0	9641.7	5001.4 µg/L	5001.4 ppb	03:26:11
3	Ca 317.933Radial†	13050.0	12299.3	4844.1 µg/L	4844.1 ppb	03:26:32
3	Fe 238.204 Radial†	1006.0	972.6	5015.2 µg/L	5015.2 ppb	03:26:32
3	K 766.490 Radial†	5217.0	4239.9	2378.7 µg/L	2378.7 ppb	03:26:11
3	Mg 279.077 IEC†	940.2	900.0	5028.3 µg/L	5028.3 ppb	03:26:32
3	Na 589.592 Radial†	8531.1	8812.7	2456.9 µg/L	2456.9 ppb	03:26:11
3	Sr 421.552†	92869.5	90508.9	516.84 µg/L	516.84 ppb	03:26:11
3	Sc 361.383	1961077.1	1961077.1	100.84 %		03:27:50
3	Y 371.029	1186344.2	1186344.2	100.43 %		03:27:50
3	Ag 328.068†	26928.5	26804.6	258.99 µg/L	258.99 ppb	03:27:56
3	As 188.979†	235.1	228.0	454.22 µg/L	454.22 ppb	03:28:17
3	B 249.677†	11312.2	11066.5	517.34 µg/L	517.34 ppb	03:27:56
3	Ba 233.527†	19192.7	19111.4	512.50 µg/L	512.50 ppb	03:27:56
3	Be 313.107†	388610.0	381695.3	253.76 µg/L	253.76 ppb	03:27:50
3	Cd 226.502†	17925.3	17872.8	502.84 µg/L	502.84 ppb	03:27:56
3	Co 228.616†	10063.5	10046.8	509.86 µg/L	509.86 ppb	03:27:56
3	Cr 267.716†	22223.3	22164.7	494.24 µg/L	494.24 ppb	03:27:56
3	Cu 324.752†	72220.1	68350.3	511.09 µg/L	511.09 ppb	03:27:56
3	Mn 257.610†	150161.3	149137.0	498.31 µg/L	498.31 ppb	03:27:50
3	Mo 202.031†	4363.6	4332.0	520.08 µg/L	520.08 ppb	03:28:17
3	Ni 231.604†	8955.6	8599.0	495.82 µg/L	495.82 ppb	03:27:56
3	P 214.914†	1310.9	1095.8	2422.7 µg/L	2422.7 ppb	03:28:17
3	Pb 220.353†	1915.5	1843.5	493.95 µg/L	493.95 ppb	03:28:17
3	S 181.975 Axial†	487.8	444.8	2377.1 µg/L	2377.1 ppb	03:28:17
3	Sb 206.836†	488.7	465.7	490.28 µg/L	490.28 ppb	03:28:17
3	Se 196.026†	1674.6	1649.8	2474.5 µg/L	2474.5 ppb	03:28:17
3	SiO2†	54703.6	52170.6	10602 µg/L	10602 ppb	03:27:56
3	Si 251.611†	61648.1	60818.0	4889.5 µg/L	4889.5 ppb	03:27:56
3	Sn 189.927†	1042.2	1009.1	527.84 µg/L	527.84 ppb	03:28:17
3	Ti 334.940†	207565.9	205033.8	481.21 µg/L	481.21 ppb	03:27:50
3	Tl 190.801†	306.2	323.0	520.22 µg/L	520.22 ppb	03:28:17
3	U 409.014†	5580.4	4708.3	475.78 µg/L	475.78 ppb	03:27:56
3	V 292.402†	42052.6	41777.5	508.37 µg/L	508.37 ppb	03:27:56
3	Zn 213.857†	18520.2	17847.1	500.47 µg/L	500.47 ppb	03:27:56

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1964523.6	101.02	%	0.234				0.23%
Sc RADIAL	113650.5	102	%	0.7				0.70%
Y 371.029	1188782.9	100.64	%	0.239				0.24%
Ag 328.068†	26541.1	256.45	µg/L	2.304	256.45	ppb	2.304	0.90%
QC value within limits for Ag 328.068 Recovery = 102.58%								
Al 396.153Radial†	9657.3	5009.5	µg/L	19.34	5009.5	ppb	19.34	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.19%								
As 188.979†	233.8	465.66	µg/L	10.254	465.66	ppb	10.254	2.20%
QC value within limits for As 188.979 Recovery = 93.13%								
B 249.677†	10990.0	513.74	µg/L	3.277	513.74	ppb	3.277	0.64%
QC value within limits for B 249.677 Recovery = 102.75%								
Ba 233.527†	18977.7	508.92	µg/L	3.107	508.92	ppb	3.107	0.61%
QC value within limits for Ba 233.527 Recovery = 101.78%								
Be 313.107†	382572.9	254.35	µg/L	0.637	254.35	ppb	0.637	0.25%
QC value within limits for Be 313.107 Recovery = 101.74%								
Ca 317.933Radial†	12383.0	4877.1	µg/L	32.63	4877.1	ppb	32.63	0.67%
QC value within limits for Ca 317.933Radial Recovery = 97.54%								
Cd 226.502†	17697.5	497.90	µg/L	4.303	497.90	ppb	4.303	0.86%
QC value within limits for Cd 226.502 Recovery = 99.58%								
Co 228.616†	9969.4	505.94	µg/L	3.397	505.94	ppb	3.397	0.67%

QC value within limits for Co 228.616 Recovery = 101.19%

Cr 267.716†	21942.9	489.29 µg/L	4.327	489.29 ppb	4.327	0.88%

QC value within limits for Cr 267.716 Recovery = 97.86%

Cu 324.752†	67790.7	506.92 µg/L	3.695	506.92 ppb	3.695	0.73%

QC value within limits for Cu 324.752 Recovery = 101.38%

Fe 238.204 Radial†	978.9	5047.8 µg/L	28.19	5047.8 ppb	28.19	0.56%

QC value within limits for Fe 238.204 Radial Recovery = 100.96%

K 766.490 Radial†	4206.1	2359.7 µg/L	16.89	2359.7 ppb	16.89	0.72%

QC value within limits for K 766.490 Radial Recovery = 94.39%

Mg 279.077 IEC†	910.4	5086.3 µg/L	51.56	5086.3 ppb	51.56	1.01%

QC value within limits for Mg 279.077 IEC Recovery = 101.73%

Mn 257.610†	149404.7	499.21 µg/L	0.884	499.21 ppb	0.884	0.18%

QC value within limits for Mn 257.610 Recovery = 99.84%

Mo 202.031†	4347.5	521.94 µg/L	4.836	521.94 ppb	4.836	0.93%

QC value within limits for Mo 202.031 Recovery = 104.39%

Na 589.592 Radial†	8812.3	2456.8 µg/L	16.25	2456.8 ppb	16.25	0.66%

QC value within limits for Na 589.592 Radial Recovery = 98.27%

Ni 231.604†	8529.5	491.82 µg/L	3.614	491.82 ppb	3.614	0.73%

QC value within limits for Ni 231.604 Recovery = 98.36%

P 214.914†	1102.0	2437.4 µg/L	22.66	2437.4 ppb	22.66	0.93%

QC value within limits for P 214.914 Recovery = 97.49%

Pb 220.353†	1851.7	496.14 µg/L	5.373	496.14 ppb	5.373	1.08%

QC value within limits for Pb 220.353 Recovery = 99.23%

S 181.975 Axial†	447.6	2391.7 µg/L	21.96	2391.7 ppb	21.96	0.92%

QC value within limits for S 181.975 Axial Recovery = 95.67%

Sb 206.836†	466.4	491.07 µg/L	3.378	491.07 ppb	3.378	0.69%

QC value within limits for Sb 206.836 Recovery = 98.21%

Se 196.026†	1653.9	2480.7 µg/L	21.04	2480.7 ppb	21.04	0.85%

QC value within limits for Se 196.026 Recovery = 99.23%

SiO2†	51730.7	10513 µg/L	82.1	10513 ppb	82.1	0.78%

QC value within limits for SiO2 Recovery = 98.29%

Si 251.611†	60359.6	4852.2 µg/L	32.68	4852.2 ppb	32.68	0.67%

QC value within limits for Si 251.611 Recovery = 97.04%

Sn 189.927†	1010.1	528.39 µg/L	1.811	528.39 ppb	1.811	0.34%

QC value within limits for Sn 189.927 Recovery = 105.68%

Sr 421.552†	90573.6	517.21 µg/L	2.323	517.21 ppb	2.323	0.45%

QC value within limits for Sr 421.552 Recovery = 103.44%

Ti 334.940†	205542.3	482.40 µg/L	1.083	482.40 ppb	1.083	0.22%

QC value within limits for Ti 334.940 Recovery = 96.48%

Tl 190.801†	322.2	519.03 µg/L	4.742	519.03 ppb	4.742	0.91%

QC value within limits for Tl 190.801 Recovery = 103.81%

U 409.014†	4665.2	471.41 µg/L	3.801	471.41 ppb	3.801	0.81%

QC value within limits for U 409.014 Recovery = 94.28%

V 292.402†	41440.6	504.32 µg/L	3.566	504.32 ppb	3.566	0.71%

QC value within limits for V 292.402 Recovery = 100.86%

Zn 213.857†	17682.5	495.84 µg/L	4.045	495.84 ppb	4.045	0.82%

QC value within limits for Zn 213.857 Recovery = 99.17%

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/15/2009 03:28:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110840.2	110840.2	99.6	%			03:28:58
1	Al 396.153Radial†	151.5	-11.3	-5.8740	µg/L	-5.8740	ppb	03:28:58
1	Ca 317.933Radial†	419.5	13.8	5.4418	µg/L	5.4418	ppb	03:29:19
1	Fe 238.204 Radial†	7.1	0.2	1.0295	µg/L	1.0295	ppb	03:29:19
1	K 766.490 Radial†	837.6	1.1	0.6323	µg/L	0.6323	ppb	03:28:58
1	Mg 279.077 IEC†	16.0	0.7	3.7477	µg/L	3.7477	ppb	03:29:19
1	Na 589.592 Radial†	-581.1	-77.4	-21.575	µg/L	-21.575	ppb	03:28:58
1	Sr 421.552†	-62.4	20.0	0.1140	µg/L	0.1140	ppb	03:28:58
1	Sc 361.383	1947270.4	1947270.4	100.13	%			03:30:20
1	Y 371.029	1183083.7	1183083.7	100.15	%			03:30:20
1	Ag 328.068†	-42.2	59.2	0.5637	µg/L	0.5637	ppb	03:30:26
1	As 188.979†	2.7	-2.4	-4.8305	µg/L	-4.8305	ppb	03:30:47
1	B 249.677†	150.7	-0.7	-0.0330	µg/L	-0.0330	ppb	03:30:26
1	Ba 233.527†	-69.1	10.2	0.2724	µg/L	0.2724	ppb	03:30:47
1	Be 313.107†	3650.2	-20.3	-0.0136	µg/L	-0.0136	ppb	03:30:26
1	Cd 226.502†	-85.8	11.8	0.3231	µg/L	0.3231	ppb	03:30:47
1	Co 228.616†	-74.7	-7.2	-0.3669	µg/L	-0.3669	ppb	03:30:47
1	Cr 267.716†	-103.1	24.2	0.5387	µg/L	0.5387	ppb	03:30:26
1	Cu 324.752†	3271.0	0.7	0.0052	µg/L	0.0052	ppb	03:30:26
1	Mn 257.610†	-207.3	24.2	0.0809	µg/L	0.0809	ppb	03:30:47
1	Mo 202.031†	-4.6	0.2	0.0248	µg/L	0.0248	ppb	03:30:47
1	Ni 231.604†	285.0	2.9	0.1665	µg/L	0.1665	ppb	03:30:47
1	P 214.914†	205.9	1.5	3.4808	µg/L	3.4808	ppb	03:30:47
1	Pb 220.353†	51.8	-4.3	-1.1434	µg/L	-1.1434	ppb	03:30:47
1	S 181.975 Axial†	39.9	1.0	5.3472	µg/L	5.3472	ppb	03:30:47
1	Sb 206.836†	15.3	-3.7	-3.8700	µg/L	-3.8700	ppb	03:30:47
1	Se 196.026†	9.9	-0.9	-1.3975	µg/L	-1.3975	ppb	03:30:47
1	SiO2†	2017.4	-60.9	-12.382	µg/L	-12.382	ppb	03:30:26
1	Si 251.611†	365.8	50.6	4.0632	µg/L	4.0632	ppb	03:30:47
1	Sn 189.927†	26.2	1.8	0.9637	µg/L	0.9637	ppb	03:30:47
1	Ti 334.940†	896.8	99.0	0.2321	µg/L	0.2321	ppb	03:30:26
1	Tl 190.801†	-19.3	0.0	0.0147	µg/L	0.0147	ppb	03:30:47
1	U 409.014†	722.3	-104.1	-10.538	µg/L	-10.538	ppb	03:30:26
1	V 292.402†	-70.7	5.9	0.0549	µg/L	0.0549	ppb	03:30:26
1	Zn 213.857†	515.4	-3.5	-0.1000	µg/L	-0.1000	ppb	03:30:47
2	Sc RADIAL	110874.2	110874.2	99.6	%			03:29:24
2	Al 396.153Radial†	145.2	-17.6	-9.1691	µg/L	-9.1691	ppb	03:29:24
2	Ca 317.933Radial†	409.7	3.9	1.5179	µg/L	1.5179	ppb	03:29:44
2	Fe 238.204 Radial†	10.3	3.4	17.221	µg/L	17.221	ppb	03:29:44
2	K 766.490 Radial†	813.9	-23.0	-12.901	µg/L	-12.901	ppb	03:29:24
2	Mg 279.077 IEC†	17.6	2.2	12.447	µg/L	12.447	ppb	03:29:44
2	Na 589.592 Radial†	-558.7	-54.7	-15.259	µg/L	-15.259	ppb	03:29:24
2	Sr 421.552†	-32.8	49.7	0.2841	µg/L	0.2841	ppb	03:29:24
2	Sc 361.383	1955518.5	1955518.5	100.56	%			03:30:53
2	Y 371.029	1187921.1	1187921.1	100.56	%			03:30:53
2	Ag 328.068†	-69.3	32.4	0.3091	µg/L	0.3091	ppb	03:30:58
2	As 188.979†	0.5	-4.7	-9.3188	µg/L	-9.3188	ppb	03:31:19
2	B 249.677†	148.2	-3.8	-0.1818	µg/L	-0.1818	ppb	03:30:58
2	Ba 233.527†	-65.8	13.7	0.3670	µg/L	0.3670	ppb	03:31:19
2	Be 313.107†	3665.1	-20.8	-0.0138	µg/L	-0.0138	ppb	03:30:58
2	Cd 226.502†	-92.8	5.2	0.1354	µg/L	0.1354	ppb	03:31:19
2	Co 228.616†	-72.0	-4.3	-0.2154	µg/L	-0.2154	ppb	03:31:19
2	Cr 267.716†	-158.4	-30.3	-0.6750	µg/L	-0.6750	ppb	03:30:58
2	Cu 324.752†	3273.8	-10.3	-0.0733	µg/L	-0.0733	ppb	03:30:58
2	Mn 257.610†	-206.7	25.7	0.0879	µg/L	0.0879	ppb	03:31:19
2	Mo 202.031†	-4.3	0.6	0.0736	µg/L	0.0736	ppb	03:31:19
2	Ni 231.604†	282.3	-1.0	-0.0568	µg/L	-0.0568	ppb	03:31:19
2	P 214.914†	197.5	-7.8	-17.554	µg/L	-17.554	ppb	03:31:19
2	Pb 220.353†	59.1	2.8	0.7568	µg/L	0.7568	ppb	03:31:19

2	S 181.975 Axial†	39.6	0.5	2.9302	µg/L	2.9302 ppb	03:31:19
2	Sb 206.836†	20.7	1.7	1.7462	µg/L	1.7462 ppb	03:31:19
2	Se 196.026†	9.6	-1.3	-1.9307	µg/L	-1.9307 ppb	03:31:19
2	SiO2†	2025.6	-61.3	-12.456	µg/L	-12.456 ppb	03:30:58
2	Si 251.611†	362.9	46.3	3.7481	µg/L	3.7481 ppb	03:31:19
2	Sn 189.927†	25.4	0.9	0.4673	µg/L	0.4673 ppb	03:31:19
2	Ti 334.940†	729.6	-71.0	-0.1669	µg/L	-0.1669 ppb	03:30:58
2	Tl 190.801†	-20.4	-1.0	-1.5307	µg/L	-1.5307 ppb	03:31:19
2	U 409.014†	702.9	-126.5	-12.804	µg/L	-12.804 ppb	03:30:58
2	V 292.402†	-83.4	-6.4	-0.0960	µg/L	-0.0960 ppb	03:30:58
2	Zn 213.857†	519.4	-1.7	-0.0498	µg/L	-0.0498 ppb	03:31:19
3	Sc RADIAL	110376.4	110376.4	99.2	%		03:29:50
3	Al 396.153Radial†	158.8	-3.3	-1.7001	µg/L	-1.7001 ppb	03:29:50
3	Ca 317.933Radial†	402.5	-1.6	-0.6108	µg/L	-0.6108 ppb	03:30:10
3	Fe 238.204 Radial†	8.1	1.2	6.4096	µg/L	6.4096 ppb	03:30:10
3	K 766.490 Radial†	797.8	-35.5	-19.944	µg/L	-19.944 ppb	03:29:50
3	Mg 279.077 IEC†	22.8	7.6	42.346	µg/L	42.346 ppb	03:30:10
3	Na 589.592 Radial†	-606.7	-105.6	-29.453	µg/L	-29.453 ppb	03:29:50
3	Sr 421.552†	-87.0	-5.1	-0.0290	µg/L	-0.0290 ppb	03:29:50
3	Sc 361.383	1954900.2	1954900.2	100.53	%		03:31:25
3	Y 371.029	1187921.3	1187921.3	100.56	%		03:31:25
3	Ag 328.068†	-73.5	28.1	0.2693	µg/L	0.2693 ppb	03:31:30
3	As 188.979†	-1.9	-7.0	-13.942	µg/L	-13.942 ppb	03:31:51
3	B 249.677†	167.2	15.2	0.7101	µg/L	0.7101 ppb	03:31:30
3	Ba 233.527†	-77.6	2.0	0.0535	µg/L	0.0535 ppb	03:31:51
3	Be 313.107†	3756.5	71.2	0.0474	µg/L	0.0474 ppb	03:31:30
3	Cd 226.502†	-91.1	6.8	0.1844	µg/L	0.1844 ppb	03:31:51
3	Co 228.616†	-63.7	4.1	0.2048	µg/L	0.2048 ppb	03:31:51
3	Cr 267.716†	-131.7	-3.8	-0.0836	µg/L	-0.0836 ppb	03:31:30
3	Cu 324.752†	3252.6	-30.4	-0.2258	µg/L	-0.2258 ppb	03:31:30
3	Mn 257.610†	-201.7	30.5	0.1027	µg/L	0.1027 ppb	03:31:51
3	Mo 202.031†	-7.3	-2.4	-0.2884	µg/L	-0.2884 ppb	03:31:51
3	Ni 231.604†	282.7	-0.4	-0.0251	µg/L	-0.0251 ppb	03:31:51
3	P 214.914†	202.0	-3.2	-7.2671	µg/L	-7.2671 ppb	03:31:51
3	Pb 220.353†	51.1	-5.2	-1.3783	µg/L	-1.3783 ppb	03:31:51
3	S 181.975 Axial†	38.4	-0.6	-3.3613	µg/L	-3.3613 ppb	03:31:51
3	Sb 206.836†	21.7	2.7	2.8420	µg/L	2.8420 ppb	03:31:51
3	Se 196.026†	9.3	-1.5	-2.3035	µg/L	-2.3035 ppb	03:31:51
3	SiO2†	2021.1	-65.2	-13.240	µg/L	-13.240 ppb	03:31:30
3	Si 251.611†	357.9	41.4	3.4914	µg/L	3.4914 ppb	03:31:51
3	Sn 189.927†	18.6	-5.9	-3.0410	µg/L	-3.0410 ppb	03:31:51
3	Ti 334.940†	800.9	0.1	0.0003	µg/L	0.0003 ppb	03:31:30
3	Tl 190.801†	-20.5	-1.1	-1.7971	µg/L	-1.7971 ppb	03:31:51
3	U 409.014†	741.0	-88.4	-8.9446	µg/L	-8.9446 ppb	03:31:30
3	V 292.402†	-64.5	12.4	0.1340	µg/L	0.1340 ppb	03:31:30
3	Zn 213.857†	508.9	-11.9	-0.3383	µg/L	-0.3383 ppb	03:31:51

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1952563.1	100.41	%	0.236				0.24%
Sc RADIAL	110696.9	99.5	%	0.25				0.25%
Y 371.029	1186308.7	100.43	%	0.236				0.24%
Ag 328.068†	39.9	0.3807	µg/L	0.15974	0.3807	ppb	0.15974	41.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.7	-5.5811	µg/L	3.74309	-5.5811	ppb	3.74309	67.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.7	-9.3636	µg/L	4.55570	-9.3636	ppb	4.55570	48.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	3.6	0.1651	µg/L	0.47779	0.1651	ppb	0.47779	289.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.6	0.2309	µg/L	0.16082	0.2309	ppb	0.16082	69.64%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	10.0	0.0067	µg/L	0.03526	0.0067	ppb	0.03526	528.41%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.4	2.1163	µg/L	3.07037	2.1163	ppb	3.07037	145.08%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.9	0.2143	µg/L	0.09737	0.2143	ppb	0.09737	45.44%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.5	-0.1259	µg/L	0.29618	-0.1259	ppb	0.29618	235.34%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -3.3     -0.0733 µg/L       0.60688     -0.0733 ppb        0.60688 827.88%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -13.4     -0.0980 µg/L       0.11745     -0.0980 ppb        0.11745 119.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.6      8.2198 µg/L       8.24593      8.2198 ppb        8.24593 100.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -19.1     -10.737 µg/L       10.4571     -10.737 ppb        10.4571  97.39%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             3.5      19.514 µg/L       20.2465      19.514 ppb        20.2465 103.76%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                26.8      0.0905 µg/L       0.01113      0.0905 ppb        0.01113  12.30%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.5     -0.0633 µg/L       0.19644     -0.0633 ppb        0.19644 310.30%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -79.3     -22.096 µg/L        7.1114     -22.096 ppb         7.1114  32.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.5      0.0282 µg/L       0.12082      0.0282 ppb        0.12082 428.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.1     -7.1134 µg/L      10.51815     -7.1134 ppb       10.51815 147.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.2     -0.5883 µg/L       1.17077     -0.5883 ppb        1.17077 199.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.3      1.6387 µg/L       4.49559      1.6387 ppb        4.49559 274.33%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.2      0.2394 µg/L       3.60074      0.2394 ppb        3.60074 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.3     -1.8772 µg/L       0.45533     -1.8772 ppb        0.45533  24.26%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -62.5     -12.693 µg/L        0.4753     -12.693 ppb         0.4753   3.74%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                46.1      3.7676 µg/L       0.28636      3.7676 ppb        0.28636   7.60%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.0     -0.5367 µg/L       2.18300     -0.5367 ppb        2.18300 406.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                21.5      0.1230 µg/L       0.15675      0.1230 ppb        0.15675 127.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.3      0.0218 µg/L       0.20038      0.0218 ppb        0.20038 918.34%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.7     -1.1044 µg/L       0.97828     -1.1044 ppb        0.97828  88.58%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -106.3     -10.762 µg/L        1.9393     -10.762 ppb         1.9393  18.02%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  4.0      0.0310 µg/L       0.11684      0.0310 ppb        0.11684 377.41%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -5.7     -0.1627 µg/L       0.15416     -0.1627 ppb        0.15416  94.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/15/2009 03:31:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110960.7	110960.7	99.7	%			03:32:32
1	Al 396.153Radial†	573.3	411.7	214.00	µg/L	214.00	ppb	03:32:32
1	Ca 317.933Radial†	926.2	521.5	205.41	µg/L	205.41	ppb	03:32:52
1	Fe 238.204 Radial†	30.4	23.5	120.87	µg/L	120.87	ppb	03:32:52
1	K 766.490 Radial†	1131.5	294.9	165.47	µg/L	165.47	ppb	03:32:32
1	Mg 279.077 IEC†	72.6	57.4	320.46	µg/L	320.46	ppb	03:32:52
1	Na 589.592 Radial†	576.3	1084.1	302.24	µg/L	302.24	ppb	03:32:32
1	Sr 421.552†	835.8	920.9	5.2588	µg/L	5.2588	ppb	03:32:32
1	Sc 361.383	1965685.2	1965685.2	101.08	%			03:33:55
1	Y 371.029	1194564.6	1194564.6	101.13	%			03:33:55
1	Ag 328.068†	420.3	517.0	4.9658	µg/L	4.9658	ppb	03:34:00
1	As 188.979†	17.9	12.6	25.031	µg/L	25.031	ppb	03:34:21
1	B 249.677†	1224.3	1060.0	49.666	µg/L	49.666	ppb	03:34:00
1	Ba 233.527†	104.3	182.4	4.8924	µg/L	4.8924	ppb	03:34:21
1	Be 313.107†	11247.8	7461.9	4.9626	µg/L	4.9626	ppb	03:34:00
1	Cd 226.502†	84.4	180.9	5.1148	µg/L	5.1148	ppb	03:34:21
1	Co 228.616†	27.8	94.9	4.8276	µg/L	4.8276	ppb	03:34:21
1	Cr 267.716†	154.1	279.7	6.2329	µg/L	6.2329	ppb	03:34:00
1	Cu 324.752†	4643.2	1327.6	9.9323	µg/L	9.9323	ppb	03:34:00
1	Mn 257.610†	2929.6	3129.5	10.459	µg/L	10.459	ppb	03:34:00
1	Mo 202.031†	79.6	83.6	10.043	µg/L	10.043	ppb	03:34:21
1	Ni 231.604†	380.8	95.1	5.4817	µg/L	5.4817	ppb	03:34:21
1	P 214.914†	270.6	63.5	142.52	µg/L	142.52	ppb	03:34:21
1	Pb 220.353†	95.0	38.0	10.149	µg/L	10.149	ppb	03:34:21
1	S 181.975 Axial†	53.3	13.9	74.135	µg/L	74.135	ppb	03:34:21
1	Sb 206.836†	26.4	7.2	7.5382	µg/L	7.5382	ppb	03:34:21
1	Se 196.026†	29.7	18.5	27.769	µg/L	27.769	ppb	03:34:21
1	SiO2†	3108.5	999.6	203.14	µg/L	203.14	ppb	03:34:00
1	Si 251.611†	1615.1	1283.1	103.56	µg/L	103.56	ppb	03:34:00
1	Sn 189.927†	34.1	9.3	4.9886	µg/L	4.9886	ppb	03:34:21
1	Ti 334.940†	2921.6	2093.8	4.9053	µg/L	4.9053	ppb	03:34:00
1	Tl 190.801†	-2.6	16.7	26.863	µg/L	26.863	ppb	03:34:21
1	U 409.014†	1297.3	458.0	46.341	µg/L	46.341	ppb	03:34:00
1	V 292.402†	347.8	420.6	5.2249	µg/L	5.2249	ppb	03:34:00
1	Zn 213.857†	896.9	369.1	10.367	µg/L	10.367	ppb	03:34:21
2	Sc RADIAL	110566.6	110566.6	99.3	%			03:32:58
2	Al 396.153Radial†	580.5	420.9	218.81	µg/L	218.81	ppb	03:32:58
2	Ca 317.933Radial†	921.1	519.8	204.71	µg/L	204.71	ppb	03:33:18
2	Fe 238.204 Radial†	31.2	24.5	125.92	µg/L	125.92	ppb	03:33:18
2	K 766.490 Radial†	1159.3	327.0	183.44	µg/L	183.44	ppb	03:32:58
2	Mg 279.077 IEC†	74.0	59.1	329.84	µg/L	329.84	ppb	03:33:18
2	Na 589.592 Radial†	565.0	1074.8	299.64	µg/L	299.64	ppb	03:32:58
2	Sr 421.552†	875.5	963.9	5.5042	µg/L	5.5042	ppb	03:32:58
2	Sc 361.383	1956897.5	1956897.5	100.63	%			03:34:27
2	Y 371.029	1189435.2	1189435.2	100.69	%			03:34:27
2	Ag 328.068†	493.4	591.6	5.6743	µg/L	5.6743	ppb	03:34:32
2	As 188.979†	17.1	11.9	23.750	µg/L	23.750	ppb	03:34:53
2	B 249.677†	1215.1	1056.4	49.494	µg/L	49.494	ppb	03:34:32
2	Ba 233.527†	111.7	190.2	5.0991	µg/L	5.0991	ppb	03:34:53
2	Be 313.107†	11364.8	7628.2	5.0731	µg/L	5.0731	ppb	03:34:32
2	Cd 226.502†	89.9	186.8	5.2777	µg/L	5.2777	ppb	03:34:53
2	Co 228.616†	28.6	95.8	4.8730	µg/L	4.8730	ppb	03:34:53
2	Cr 267.716†	102.2	228.8	5.1012	µg/L	5.1012	ppb	03:34:32
2	Cu 324.752†	4740.0	1444.4	10.805	µg/L	10.805	ppb	03:34:32
2	Mn 257.610†	2945.8	3158.6	10.556	µg/L	10.556	ppb	03:34:32
2	Mo 202.031†	78.4	82.7	9.9333	µg/L	9.9333	ppb	03:34:53
2	Ni 231.604†	364.2	80.2	4.6248	µg/L	4.6248	ppb	03:34:53
2	P 214.914†	274.8	68.9	154.63	µg/L	154.63	ppb	03:34:53
2	Pb 220.353†	90.1	33.6	8.9746	µg/L	8.9746	ppb	03:34:53

2	S 181.975 Axial†	59.3	20.1	107.28 µg/L	107.28 ppb	03:34:53
2	Sb 206.836†	33.5	14.3	15.114 µg/L	15.114 ppb	03:34:53
2	Se 196.026†	29.6	18.6	27.857 µg/L	27.857 ppb	03:34:53
2	SiO2†	3156.9	1061.5	215.71 µg/L	215.71 ppb	03:34:32
2	Si 251.611†	1634.9	1310.1	105.64 µg/L	105.64 ppb	03:34:32
2	Sn 189.927†	38.7	14.1	7.4424 µg/L	7.4424 ppb	03:34:53
2	Ti 334.940†	2991.8	2176.5	5.0994 µg/L	5.0994 ppb	03:34:32
2	Tl 190.801†	-9.6	9.8	15.751 µg/L	15.751 ppb	03:34:53
2	U 409.014†	1262.1	428.7	43.379 µg/L	43.379 ppb	03:34:32
2	V 292.402†	326.4	400.9	4.9819 µg/L	4.9819 ppb	03:34:32
2	Zn 213.857†	883.8	360.0	10.114 µg/L	10.114 ppb	03:34:53
3	Sc RADIAL	110713.7	110713.7	99.5 %		03:33:24
3	Al 396.153Radial†	582.1	421.7	219.25 µg/L	219.25 ppb	03:33:24
3	Ca 317.933Radial†	911.0	508.4	200.23 µg/L	200.23 ppb	03:33:44
3	Fe 238.204 Radial†	33.0	26.2	134.83 µg/L	134.83 ppb	03:33:44
3	K 766.490 Radial†	1075.5	241.1	135.29 µg/L	135.29 ppb	03:33:24
3	Mg 279.077 IEC†	72.3	57.3	319.56 µg/L	319.56 ppb	03:33:44
3	Na 589.592 Radial†	557.2	1066.2	297.25 µg/L	297.25 ppb	03:33:24
3	Sr 421.552†	854.9	942.0	5.3790 µg/L	5.3790 ppb	03:33:24
3	Sc 361.383	1974075.8	1974075.8	101.51 %		03:34:59
3	Y 371.029	1199056.6	1199056.6	101.51 %		03:34:59
3	Ag 328.068†	466.1	560.4	5.3799 µg/L	5.3799 ppb	03:35:05
3	As 188.979†	17.8	12.4	24.710 µg/L	24.710 ppb	03:35:25
3	B 249.677†	1235.2	1065.6	49.924 µg/L	49.924 ppb	03:35:05
3	Ba 233.527†	118.6	196.0	5.2561 µg/L	5.2561 ppb	03:35:25
3	Be 313.107†	11255.5	7422.2	4.9361 µg/L	4.9361 ppb	03:35:05
3	Cd 226.502†	83.1	179.4	5.0643 µg/L	5.0643 ppb	03:35:25
3	Co 228.616†	33.1	100.0	5.0840 µg/L	5.0840 ppb	03:35:25
3	Cr 267.716†	101.2	226.9	5.0592 µg/L	5.0592 ppb	03:35:05
3	Cu 324.752†	4683.4	1347.7	10.085 µg/L	10.085 ppb	03:35:05
3	Mn 257.610†	2939.1	3126.6	10.451 µg/L	10.451 ppb	03:35:05
3	Mo 202.031†	80.9	84.6	10.155 µg/L	10.155 ppb	03:35:25
3	Ni 231.604†	386.7	99.2	5.7200 µg/L	5.7200 ppb	03:35:25
3	P 214.914†	265.1	57.0	127.82 µg/L	127.82 ppb	03:35:25
3	Pb 220.353†	95.0	37.6	10.052 µg/L	10.052 ppb	03:35:25
3	S 181.975 Axial†	55.7	16.0	85.371 µg/L	85.371 ppb	03:35:25
3	Sb 206.836†	30.4	11.0	11.636 µg/L	11.636 ppb	03:35:25
3	Se 196.026†	28.8	17.6	26.315 µg/L	26.315 ppb	03:35:25
3	SiO2†	3127.8	1005.5	204.33 µg/L	204.33 ppb	03:35:05
3	Si 251.611†	1626.2	1287.4	103.78 µg/L	103.78 ppb	03:35:05
3	Sn 189.927†	40.7	15.8	8.3376 µg/L	8.3376 ppb	03:35:25
3	Ti 334.940†	2990.8	2149.7	5.0368 µg/L	5.0368 ppb	03:35:05
3	Tl 190.801†	-7.8	11.7	18.740 µg/L	18.740 ppb	03:35:25
3	U 409.014†	1221.6	377.9	38.232 µg/L	38.232 ppb	03:35:05
3	V 292.402†	355.5	426.8	5.2882 µg/L	5.2882 ppb	03:35:05
3	Zn 213.857†	879.8	348.5	9.7829 µg/L	9.7829 ppb	03:35:25

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1965552.8	101.07	%	0.442				0.44%
Sc RADIAL	110747.0	99.5	%	0.18				0.18%
Y 371.029	1194352.1	101.11	%	0.408				0.40%
Ag 328.068†	556.3	5.3400	µg/L	0.35595	5.3400	ppb	0.35595	6.67%
QC value within limits for Ag 328.068 Recovery = 106.80%								
Al 396.153Radial†	418.1	217.35	µg/L	2.912	217.35	ppb	2.912	1.34%
QC value within limits for Al 396.153Radial Recovery = 108.68%								
As 188.979†	12.3	24.497	µg/L	0.6668	24.497	ppb	0.6668	2.72%
QC value within limits for As 188.979 Recovery = 81.66%								
B 249.677†	1060.7	49.695	µg/L	0.2166	49.695	ppb	0.2166	0.44%
QC value within limits for B 249.677 Recovery = 99.39%								
Ba 233.527†	189.5	5.0825	µg/L	0.18240	5.0825	ppb	0.18240	3.59%
QC value within limits for Ba 233.527 Recovery = 101.65%								
Be 313.107†	7504.1	4.9906	µg/L	0.07267	4.9906	ppb	0.07267	1.46%
QC value within limits for Be 313.107 Recovery = 99.81%								
Ca 317.933Radial†	516.6	203.45	µg/L	2.809	203.45	ppb	2.809	1.38%
QC value within limits for Ca 317.933Radial Recovery = 101.72%								
Cd 226.502†	182.4	5.1523	µg/L	0.11151	5.1523	ppb	0.11151	2.16%
QC value within limits for Cd 226.502 Recovery = 103.05%								
Co 228.616†	96.9	4.9282	µg/L	0.13685	4.9282	ppb	0.13685	2.78%

QC value within limits for Co 228.616 Recovery = 98.56%

Cr 267.716†	245.1	5.4644 µg/L	0.66583	5.4644 ppb	0.66583	12.18%

QC value within limits for Cr 267.716 Recovery = 109.29%

Cu 324.752†	1373.2	10.274 µg/L	0.4659	10.274 ppb	0.4659	4.53%

QC value within limits for Cu 324.752 Recovery = 102.74%

Fe 238.204 Radial†	24.7	127.21 µg/L	7.070	127.21 ppb	7.070	5.56%

QC value within limits for Fe 238.204 Radial Recovery = 127.21%

K 766.490 Radial†	287.7	161.40 µg/L	24.333	161.40 ppb	24.333	15.08%

QC value within limits for K 766.490 Radial Recovery = 107.60%

Mg 279.077 IEC†	57.9	323.29 µg/L	5.695	323.29 ppb	5.695	1.76%

QC value within limits for Mg 279.077 IEC Recovery = 107.76%

Mn 257.610†	3138.2	10.489 µg/L	0.0589	10.489 ppb	0.0589	0.56%

QC value within limits for Mn 257.610 Recovery = 104.89%

Mo 202.031†	83.6	10.044 µg/L	0.1107	10.044 ppb	0.1107	1.10%

QC value within limits for Mo 202.031 Recovery = 100.44%

Na 589.592 Radial†	1075.0	299.71 µg/L	2.498	299.71 ppb	2.498	0.83%

QC value within limits for Na 589.592 Radial Recovery = 99.90%

Ni 231.604†	91.5	5.2755 µg/L	0.57598	5.2755 ppb	0.57598	10.92%

QC value within limits for Ni 231.604 Recovery = 105.51%

P 214.914†	63.2	141.66 µg/L	13.425	141.66 ppb	13.425	9.48%

QC value within limits for P 214.914 Recovery = 94.44%

Pb 220.353†	36.4	9.7253 µg/L	0.65188	9.7253 ppb	0.65188	6.70%

QC value within limits for Pb 220.353 Recovery = 97.25%

S 181.975 Axial†	16.6	88.930 µg/L	16.8585	88.930 ppb	16.8585	18.96%

QC value within limits for S 181.975 Axial Recovery = 88.93%

Sb 206.836†	10.8	11.429 µg/L	3.7923	11.429 ppb	3.7923	33.18%

QC value within limits for Sb 206.836 Recovery = 114.29%

Se 196.026†	18.2	27.313 µg/L	0.8658	27.313 ppb	0.8658	3.17%

QC value within limits for Se 196.026 Recovery = 91.04%

SiO2†	1022.2	207.73 µg/L	6.936	207.73 ppb	6.936	3.34%

QC value within limits for SiO2 Recovery = 97.52%

Si 251.611†	1293.5	104.33 µg/L	1.142	104.33 ppb	1.142	1.09%

QC value within limits for Si 251.611 Recovery = 104.33%

Sn 189.927†	13.1	6.9228 µg/L	1.73391	6.9228 ppb	1.73391	25.05%

QC value less than the lower limit for Sn 189.927 Recovery = 69.23%

Sr 421.552†	942.3	5.3807 µg/L	0.12270	5.3807 ppb	0.12270	2.28%

QC value within limits for Sr 421.552 Recovery = 107.61%

Ti 334.940†	2140.0	5.0138 µg/L	0.09910	5.0138 ppb	0.09910	1.98%

QC value within limits for Ti 334.940 Recovery = 100.28%

Tl 190.801†	12.7	20.451 µg/L	5.7506	20.451 ppb	5.7506	28.12%

QC value within limits for Tl 190.801 Recovery = 102.26%

U 409.014†	421.5	42.651 µg/L	4.1028	42.651 ppb	4.1028	9.62%

QC value within limits for U 409.014 Recovery = 85.30%

V 292.402†	416.1	5.1650 µg/L	0.16167	5.1650 ppb	0.16167	3.13%

QC value within limits for V 292.402 Recovery = 103.30%

Zn 213.857†	359.2	10.088 µg/L	0.2931	10.088 ppb	0.2931	2.91%

QC value within limits for Zn 213.857 Recovery = 100.88%

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/15/2009 03:35:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107316.5	107316.5	96.4	%			03:36:16
1	Al 396.153Radial†	962855.1	998356.8	519930	µg/L	519930	ppb	03:36:10
1	Ca 317.933Radial†	1211802.4	1256281.3	494790	µg/L	494790	ppb	03:36:10
1	Fe 238.204 Radial†	36070.5	37399.6	192210	µg/L	192210	ppb	03:36:16
1	K 766.490 Radial†	794.3	-16.2	-9.1047	µg/L	-9.1047	ppb	03:36:16
1	Mg 279.077 IEC†	85065.1	88200.6	491920	µg/L	491920	ppb	03:36:16
1	Na 589.592 Radial†	-466.1	22.7	6.3306	µg/L	6.3306	ppb	03:36:16
1	Sr 421.552†	501.3	602.5	3.4407	µg/L	3.4407	ppb	03:36:16
1	Sc 361.383	1805186.3	1805186.3	92.827	%			03:36:50
1	Y 371.029	1081767.1	1081767.1	91.577	%			03:36:50
1	Ag 328.068†	-1937.3	-1985.7	-3.8319	µg/L	-3.8319	ppb	03:36:50
1	As 188.979†	53.2	52.2	1.1575	µg/L	1.1575	ppb	03:37:11
1	B 249.677†	1977.7	1979.3	32.370	µg/L	32.370	ppb	03:36:50
1	Ba 233.527†	118.7	207.0	5.5111	µg/L	5.5111	ppb	03:37:11
1	Be 313.107†	2633.3	-828.9	-0.5610	µg/L	-0.5610	ppb	03:36:50
1	Cd 226.502†	469.4	603.2	2.0757	µg/L	2.0757	ppb	03:37:11
1	Co 228.616†	-90.8	-30.5	-1.6327	µg/L	-1.6327	ppb	03:37:11
1	Cr 267.716†	-226.4	-116.7	-2.6293	µg/L	-2.6293	ppb	03:37:11
1	Cu 324.752†	-1210.5	-4570.0	7.1861	µg/L	7.1861	ppb	03:36:50
1	Mn 257.610†	-2147.9	-2082.7	17.211	µg/L	17.211	ppb	03:36:50
1	Mo 202.031†	-109.3	-112.9	-5.9972	µg/L	-5.9972	ppb	03:37:11
1	Ni 231.604†	254.6	-7.4	-0.4269	µg/L	-0.4269	ppb	03:37:11
1	P 214.914†	200.4	11.8	-8.4280	µg/L	-8.4280	ppb	03:37:11
1	Pb 220.353†	-45.1	-104.6	14.921	µg/L	14.921	ppb	03:37:11
1	S 181.975 Axial†	72.6	39.4	111.96	µg/L	111.96	ppb	03:37:11
1	Sb 206.836†	71.8	58.4	15.342	µg/L	15.342	ppb	03:37:11
1	Se 196.026†	16.8	7.2	11.939	µg/L	11.939	ppb	03:37:11
1	SiO2†	1734.4	-207.3	-42.120	µg/L	-42.120	ppb	03:37:11
1	Si 251.611†	422.5	140.5	19.681	µg/L	19.681	ppb	03:37:11
1	Sn 189.927†	-392.4	-447.1	-1.9304	µg/L	-1.9304	ppb	03:37:11
1	Ti 334.940†	10984.0	11036.2	-1.9059	µg/L	-1.9059	ppb	03:36:50
1	Tl 190.801†	19.0	39.8	-2.1480	µg/L	-2.1480	ppb	03:37:11
1	U 409.014†	992.9	244.2	0.5525	µg/L	0.5525	ppb	03:36:50
1	V 292.402†	-1148.2	-1160.3	1.6398	µg/L	1.6398	ppb	03:36:50
1	Zn 213.857†	1636.6	1244.9	1.3497	µg/L	1.3497	ppb	03:37:11
2	Sc RADIAL	107035.4	107035.4	96.2	%			03:36:27
2	Al 396.153Radial†	963495.6	1001644.8	521640	µg/L	521640	ppb	03:36:22
2	Ca 317.933Radial†	1207462.4	1255068.7	494310	µg/L	494310	ppb	03:36:22
2	Fe 238.204 Radial†	36266.9	37702.1	193760	µg/L	193760	ppb	03:36:27
2	K 766.490 Radial†	808.5	0.7	0.4173	µg/L	0.4173	ppb	03:36:27
2	Mg 279.077 IEC†	85655.3	89045.9	496630	µg/L	496630	ppb	03:36:27
2	Na 589.592 Radial†	-483.8	3.0	0.8427	µg/L	0.8427	ppb	03:36:27
2	Sr 421.552†	526.1	629.7	3.5956	µg/L	3.5956	ppb	03:36:27
2	Sc 361.383	1784623.0	1784623.0	91.769	%			03:37:18
2	Y 371.029	1069765.8	1069765.8	90.561	%			03:37:18
2	Ag 328.068†	-1960.6	-2035.2	-4.1781	µg/L	-4.1781	ppb	03:37:18
2	As 188.979†	52.0	51.6	-0.1833	µg/L	-0.1833	ppb	03:37:38
2	B 249.677†	1926.3	1947.9	30.406	µg/L	30.406	ppb	03:37:18
2	Ba 233.527†	131.5	222.5	5.9256	µg/L	5.9256	ppb	03:37:38
2	Be 313.107†	2623.4	-806.9	-0.5465	µg/L	-0.5465	ppb	03:37:18
2	Cd 226.502†	448.5	586.2	1.4757	µg/L	1.4757	ppb	03:37:38
2	Co 228.616†	-87.4	-27.9	-1.4987	µg/L	-1.4987	ppb	03:37:38
2	Cr 267.716†	-221.5	-114.2	-2.5723	µg/L	-2.5723	ppb	03:37:38
2	Cu 324.752†	-1144.1	-4512.8	7.9473	µg/L	7.9473	ppb	03:37:18
2	Mn 257.610†	-2127.9	-2087.5	17.390	µg/L	17.390	ppb	03:37:18
2	Mo 202.031†	-102.0	-106.3	-5.1372	µg/L	-5.1372	ppb	03:37:38
2	Ni 231.604†	252.5	-6.6	-0.3802	µg/L	-0.3802	ppb	03:37:38
2	P 214.914†	186.8	-0.6	-37.753	µg/L	-37.753	ppb	03:37:38
2	Pb 220.353†	-56.0	-117.0	11.719	µg/L	11.719	ppb	03:37:38

2	S 181.975 Axial†	81.2	49.6	165.78 µg/L	165.78 ppb	03:37:38
2	Sb 206.836†	65.5	52.5	9.1379 µg/L	9.1379 ppb	03:37:38
2	Se 196.026†	29.4	21.2	31.897 µg/L	31.897 ppb	03:37:38
2	SiO2†	1736.6	-183.3	-37.250 µg/L	-37.250 ppb	03:37:38
2	Si 251.611†	423.5	146.8	20.488 µg/L	20.488 ppb	03:37:38
2	Sn 189.927†	-402.4	-462.8	-9.0809 µg/L	-9.0809 ppb	03:37:38
2	Ti 334.940†	10942.3	11127.1	-1.6656 µg/L	-1.6656 ppb	03:37:18
2	Tl 190.801†	18.9	39.9	-1.9407 µg/L	-1.9407 ppb	03:37:38
2	U 409.014†	954.4	214.5	-2.7555 µg/L	-2.7555 ppb	03:37:18
2	V 292.402†	-1115.5	-1139.0	2.0250 µg/L	2.0250 ppb	03:37:18
2	Zn 213.857†	1642.6	1271.8	1.8144 µg/L	1.8144 ppb	03:37:38
3	Sc RADIAL	106210.9	106210.9	95.4 %		03:36:39
3	Al 396.153Radial†	963473.0	1009398.1	525680 µg/L	525680 ppb	03:36:34
3	Ca 317.933Radial†	1210057.5	1267534.2	499220 µg/L	499220 ppb	03:36:34
3	Fe 238.204 Radial†	36261.7	37989.4	195240 µg/L	195240 ppb	03:36:39
3	K 766.490 Radial†	811.5	10.3	5.8054 µg/L	5.8054 ppb	03:36:39
3	Mg 279.077 IEC†	85497.8	89572.2	499570 µg/L	499570 ppb	03:36:39
3	Na 589.592 Radial†	-479.0	4.2	1.1741 µg/L	1.1741 ppb	03:36:39
3	Sr 421.552†	504.8	611.6	3.4927 µg/L	3.4927 ppb	03:36:39
3	Sc 361.383	1782612.0	1782612.0	91.666 %		03:37:45
3	Y 371.029	1069076.9	1069076.9	90.503 %		03:37:45
3	Ag 328.068†	-2036.5	-2120.4	-4.8767 µg/L	-4.8767 ppb	03:37:45
3	As 188.979†	58.5	58.7	13.039 µg/L	13.039 ppb	03:38:06
3	B 249.677†	1968.0	1995.7	32.184 µg/L	32.184 ppb	03:37:45
3	Ba 233.527†	116.5	206.2	5.4894 µg/L	5.4894 ppb	03:38:06
3	Be 313.107†	2663.5	-760.0	-0.5155 µg/L	-0.5155 ppb	03:37:45
3	Cd 226.502†	458.6	597.7	1.6897 µg/L	1.6897 ppb	03:38:06
3	Co 228.616†	-81.1	-21.1	-1.1598 µg/L	-1.1598 ppb	03:38:06
3	Cr 267.716†	-198.6	-89.5	-2.0236 µg/L	-2.0236 ppb	03:38:06
3	Cu 324.752†	-1285.6	-4668.5	7.1021 µg/L	7.1021 ppb	03:37:45
3	Mn 257.610†	-2154.3	-2119.0	17.471 µg/L	17.471 ppb	03:37:45
3	Mo 202.031†	-112.2	-117.6	-6.4366 µg/L	-6.4366 ppb	03:38:06
3	Ni 231.604†	254.6	-3.9	-0.2250 µg/L	-0.2250 ppb	03:38:06
3	P 214.914†	209.6	24.5	19.017 µg/L	19.017 ppb	03:38:06
3	Pb 220.353†	-43.5	-103.5	15.678 µg/L	15.678 ppb	03:38:06
3	S 181.975 Axial†	75.8	43.8	134.19 µg/L	134.19 ppb	03:38:06
3	Sb 206.836†	56.1	42.3	-2.0896 µg/L	-2.0896 ppb	03:38:06
3	Se 196.026†	27.7	19.4	29.700 µg/L	29.700 ppb	03:38:06
3	SiO2†	1728.0	-190.6	-38.724 µg/L	-38.724 ppb	03:38:06
3	Si 251.611†	440.4	165.8	21.859 µg/L	21.859 ppb	03:38:06
3	Sn 189.927†	-394.3	-454.6	-2.9449 µg/L	-2.9449 ppb	03:38:06
3	Ti 334.940†	11169.3	11388.1	-1.3286 µg/L	-1.3286 ppb	03:37:45
3	Tl 190.801†	19.3	40.4	-1.8362 µg/L	-1.8362 ppb	03:38:06
3	U 409.014†	999.6	265.0	2.1993 µg/L	2.1993 ppb	03:37:45
3	V 292.402†	-1157.8	-1186.5	1.5716 µg/L	1.5716 ppb	03:37:45
3	Zn 213.857†	1636.9	1267.5	1.4579 µg/L	1.4579 ppb	03:38:06

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1790807.1	92.087	%	0.6424				0.70%
Sc RADIAL	106854.3	96.0	%	0.52				0.54%
Y 371.029	1073536.6	90.881	%	0.6041				0.66%
Ag 328.068†	-2047.1	-4.2956	µg/L	0.53223	-4.2956	ppb	0.53223	12.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1003133.2	522410	µg/L	2952.4	522410	ppb	2952.4	0.57%
QC value within limits for Al 396.153Radial Recovery = 104.48%								
As 188.979†	54.1	4.6709	µg/L	7.27754	4.6709	ppb	7.27754	155.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1974.3	31.653	µg/L	1.0843	31.653	ppb	1.0843	3.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	211.9	5.6420	µg/L	0.24585	5.6420	ppb	0.24585	4.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-798.6	-0.5410	µg/L	0.02326	-0.5410	ppb	0.02326	4.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1259628.1	496110	µg/L	2707.2	496110	ppb	2707.2	0.55%
QC value within limits for Ca 317.933Radial Recovery = 99.22%								
Cd 226.502†	595.7	1.7471	µg/L	0.30409	1.7471	ppb	0.30409	17.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-26.5	-1.4304	µg/L	0.24374	-1.4304	ppb	0.24374	17.04%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -106.8     -2.4084 µg/L      0.33444     -2.4084 ppb       0.33444  13.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4583.8      7.4118 µg/L      0.46561      7.4118 ppb       0.46561   6.28%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    37697.0      193740 µg/L       1515.7      193740 ppb        1515.7   0.78%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.87%
K 766.490 Radial†        -1.7     -0.9607 µg/L      7.54995     -0.9607 ppb       7.54995 785.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       88939.6      496040 µg/L       3859.2      496040 ppb        3859.2   0.78%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.21%
Mn 257.610†           -2096.4      17.357 µg/L       0.1331      17.357 ppb        0.1331   0.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -112.2     -5.8570 µg/L      0.66094     -5.8570 ppb       0.66094  11.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       10.0      2.7825 µg/L      3.07721      2.7825 ppb       3.07721 110.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -6.0     -0.3440 µg/L      0.10569     -0.3440 ppb       0.10569  30.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               11.9     -9.0546 µg/L     28.39029     -9.0546 ppb      28.39029 313.55%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -108.4      14.106 µg/L       2.1013      14.106 ppb        2.1013  14.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         44.3      137.31 µg/L       27.046      137.31 ppb        27.046  19.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              51.0      7.4635 µg/L      8.83559      7.4635 ppb       8.83559 118.38%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              15.9      24.512 µg/L      10.9436      24.512 ppb       10.9436  44.65%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -193.7     -39.365 µg/L       2.4972     -39.365 ppb        2.4972   6.34%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             151.0      20.676 µg/L       1.1007      20.676 ppb        1.1007   5.32%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -454.8     -4.6520 µg/L      3.86888     -4.6520 ppb       3.86888  83.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             614.6      3.5097 µg/L      0.07885      3.5097 ppb       0.07885   2.25%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11183.8     -1.6334 µg/L      0.29003     -1.6334 ppb       0.29003  17.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              40.0     -1.9749 µg/L      0.15870     -1.9749 ppb       0.15870   8.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              241.2     -0.0012 µg/L      2.52338     -0.0012 ppb       2.52338 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1161.9      1.7455 µg/L      0.24446      1.7455 ppb       0.24446  14.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1261.4      1.5406 µg/L      0.24315      1.5406 ppb       0.24315  15.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/15/2009 03:38:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107260.3	107260.3	96.4	%			03:38:54
1	Al 396.153Radial†	961185.3	997147.1	519280	µg/L	519280	ppb	03:38:48
1	Ca 317.933Radial†	1205650.3	1250556.1	492540	µg/L	492540	ppb	03:38:48
1	Fe 238.204 Radial†	36145.4	37496.9	192720	µg/L	192720	ppb	03:38:54
1	K 766.490 Radial†	9750.3	9276.9	5204.6	µg/L	5204.6	ppb	03:38:54
1	Mg 279.077 IEC†	85880.3	89092.6	496910	µg/L	496910	ppb	03:38:54
1	Na 589.592 Radial†	17457.5	18619.7	5191.1	µg/L	5191.1	ppb	03:38:54
1	Sr 421.552†	85882.5	89192.9	509.33	µg/L	509.33	ppb	03:38:54
1	Sc 361.383	1796346.4	1796346.4	92.372	%			03:39:28
1	Y 371.029	1078440.2	1078440.2	91.296	%			03:39:28
1	Ag 328.068†	23743.4	25805.3	264.25	µg/L	264.25	ppb	03:39:34
1	As 188.979†	278.3	296.2	489.13	µg/L	489.13	ppb	03:39:55
1	B 249.677†	12175.1	13029.2	550.35	µg/L	550.35	ppb	03:39:34
1	Ba 233.527†	17135.3	18629.5	499.59	µg/L	499.59	ppb	03:39:34
1	Be 313.107†	341978.0	366551.4	243.67	µg/L	243.67	ppb	03:39:28
1	Cd 226.502†	15921.5	17333.7	473.07	µg/L	473.07	ppb	03:39:34
1	Co 228.616†	7852.1	8567.9	434.66	µg/L	434.66	ppb	03:39:55
1	Cr 267.716†	19797.3	21559.3	480.76	µg/L	480.76	ppb	03:39:34
1	Cu 324.752†	67085.7	69359.3	558.94	µg/L	558.94	ppb	03:39:34
1	Mn 257.610†	128141.8	138954.4	487.93	µg/L	487.93	ppb	03:39:34
1	Mo 202.031†	3699.5	4009.8	488.80	µg/L	488.80	ppb	03:39:55
1	Ni 231.604†	7301.6	7622.8	439.54	µg/L	439.54	ppb	03:39:55
1	P 214.914†	1232.7	1130.3	2463.3	µg/L	2463.3	ppb	03:39:55
1	Pb 220.353†	1580.5	1655.0	485.88	µg/L	485.88	ppb	03:39:55
1	S 181.975 Axial†	522.9	527.2	2719.4	µg/L	2719.4	ppb	03:39:55
1	Sb 206.836†	495.3	517.3	499.24	µg/L	499.24	ppb	03:39:55
1	Se 196.026†	1461.9	1571.8	2354.7	µg/L	2354.7	ppb	03:39:55
1	SiO2†	52147.6	54378.1	11051	µg/L	11051	ppb	03:39:34
1	Si 251.611†	59288.2	63869.4	5145.2	µg/L	5145.2	ppb	03:39:34
1	Sn 189.927†	497.5	514.3	498.96	µg/L	498.96	ppb	03:39:55
1	Ti 334.940†	207218.3	223532.9	497.22	µg/L	497.22	ppb	03:39:34
1	Tl 190.801†	295.1	338.8	480.89	µg/L	480.89	ppb	03:39:55
1	U 409.014†	5019.1	4608.1	442.14	µg/L	442.14	ppb	03:39:34
1	V 292.402†	38112.2	41335.9	518.07	µg/L	518.07	ppb	03:39:34
1	Zn 213.857†	17336.2	18249.5	478.72	µg/L	478.72	ppb	03:39:34
2	Sc RADIAL	108732.2	108732.2	97.7	%			03:39:06
2	Al 396.153Radial†	957603.7	979980.6	510340	µg/L	510340	ppb	03:39:00
2	Ca 317.933Radial†	1200299.8	1228145.2	483710	µg/L	483710	ppb	03:39:00
2	Fe 238.204 Radial†	36917.5	37779.5	194180	µg/L	194180	ppb	03:39:06
2	K 766.490 Radial†	9901.5	9294.6	5214.5	µg/L	5214.5	ppb	03:39:06
2	Mg 279.077 IEC†	87439.4	89482.1	499080	µg/L	499080	ppb	03:39:06
2	Na 589.592 Radial†	17790.5	18715.3	5217.7	µg/L	5217.7	ppb	03:39:06
2	Sr 421.552†	87452.3	89593.4	511.62	µg/L	511.62	ppb	03:39:06
2	Sc 361.383	1791516.6	1791516.6	92.124	%			03:40:01
2	Y 371.029	1075771.5	1075771.5	91.070	%			03:40:01
2	Ag 328.068†	23645.2	25768.0	264.01	µg/L	264.01	ppb	03:40:07
2	As 188.979†	286.4	305.8	509.36	µg/L	509.36	ppb	03:40:28
2	B 249.677†	12176.8	13066.7	551.65	µg/L	551.65	ppb	03:40:07
2	Ba 233.527†	17083.5	18623.2	499.43	µg/L	499.43	ppb	03:40:07
2	Be 313.107†	340676.3	366136.5	243.40	µg/L	243.40	ppb	03:40:01
2	Cd 226.502†	15793.5	17241.2	470.36	µg/L	470.36	ppb	03:40:07
2	Co 228.616†	7846.4	8584.6	435.51	µg/L	435.51	ppb	03:40:28
2	Cr 267.716†	19774.5	21592.3	481.49	µg/L	481.49	ppb	03:40:07
2	Cu 324.752†	66987.1	69448.0	559.92	µg/L	559.92	ppb	03:40:07
2	Mn 257.610†	127628.7	138771.4	487.50	µg/L	487.50	ppb	03:40:07
2	Mo 202.031†	3678.8	3998.2	487.45	µg/L	487.45	ppb	03:40:28
2	Ni 231.604†	7293.6	7635.5	440.26	µg/L	440.26	ppb	03:40:28
2	P 214.914†	1253.8	1156.8	2518.1	µg/L	2518.1	ppb	03:40:28
2	Pb 220.353†	1584.7	1664.2	487.54	µg/L	487.54	ppb	03:40:28

2	S 181.975 Axial†	526.2	532.3	2746.3 µg/L	2746.3	ppb	03:40:28
2	Sb 206.836†	489.7	512.7	495.21 µg/L	495.21	ppb	03:40:28
2	Se 196.026†	1446.6	1559.5	2335.1 µg/L	2335.1	ppb	03:40:28
2	SiO2†	51853.4	54210.9	11017 µg/L	11017	ppb	03:40:07
2	Si 251.611†	59032.3	63764.6	5136.9 µg/L	5136.9	ppb	03:40:07
2	Sn 189.927†	486.5	503.8	492.17 µg/L	492.17	ppb	03:40:28
2	Ti 334.940†	206581.8	223446.7	497.52 µg/L	497.52	ppb	03:40:07
2	Tl 190.801†	273.4	316.1	445.60 µg/L	445.60	ppb	03:40:28
2	U 409.014†	5051.3	4657.7	446.68 µg/L	446.68	ppb	03:40:07
2	V 292.402†	38065.9	41396.9	518.92 µg/L	518.92	ppb	03:40:07
2	Zn 213.857†	17254.4	18211.4	477.42 µg/L	477.42	ppb	03:40:07
3	Sc RADIAL	107673.5	107673.5	96.7 %			03:39:17
3	Al 396.153Radial†	965660.3	997945.1	519690 µg/L	519690	ppb	03:39:12
3	Ca 317.933Radial†	1213047.7	1253401.2	493660 µg/L	493660	ppb	03:39:12
3	Fe 238.204 Radial†	36036.3	37240.2	191410 µg/L	191410	ppb	03:39:17
3	K 766.490 Radial†	9697.6	9183.6	5152.2 µg/L	5152.2	ppb	03:39:17
3	Mg 279.077 IEC†	85520.0	88378.2	492920 µg/L	492920	ppb	03:39:17
3	Na 589.592 Radial†	17417.7	18509.1	5160.2 µg/L	5160.2	ppb	03:39:17
3	Sr 421.552†	85489.5	88444.8	505.06 µg/L	505.06	ppb	03:39:17
3	Sc 361.383	1799071.6	1799071.6	92.512 %			03:40:34
3	Y 371.029	1080091.5	1080091.5	91.436 %			03:40:34
3	Ag 328.068†	23709.9	25730.1	263.43 µg/L	263.43	ppb	03:40:40
3	As 188.979†	281.7	299.4	495.54 µg/L	495.54	ppb	03:41:00
3	B 249.677†	12229.8	13068.5	552.60 µg/L	552.60	ppb	03:40:40
3	Ba 233.527†	17177.2	18646.6	500.05 µg/L	500.05	ppb	03:40:40
3	Be 313.107†	339624.6	363446.8	241.61 µg/L	241.61	ppb	03:40:34
3	Cd 226.502†	15903.4	17288.0	471.89 µg/L	471.89	ppb	03:40:40
3	Co 228.616†	7852.6	8555.5	434.02 µg/L	434.02	ppb	03:41:00
3	Cr 267.716†	19929.7	21669.9	483.22 µg/L	483.22	ppb	03:40:40
3	Cu 324.752†	67307.9	69489.6	559.63 µg/L	559.63	ppb	03:40:40
3	Mn 257.610†	128281.4	138895.2	487.56 µg/L	487.56	ppb	03:40:40
3	Mo 202.031†	3675.1	3977.4	484.86 µg/L	484.86	ppb	03:41:00
3	Ni 231.604†	7292.5	7601.0	438.28 µg/L	438.28	ppb	03:41:00
3	P 214.914†	1237.9	1134.0	2473.2 µg/L	2473.2	ppb	03:41:00
3	Pb 220.353†	1592.1	1665.0	488.58 µg/L	488.58	ppb	03:41:00
3	S 181.975 Axial†	515.7	518.6	2674.3 µg/L	2674.3	ppb	03:41:00
3	Sb 206.836†	500.5	522.1	504.18 µg/L	504.18	ppb	03:41:00
3	Se 196.026†	1454.7	1561.6	2340.2 µg/L	2340.2	ppb	03:41:00
3	SiO2†	52195.6	54344.4	11044 µg/L	11044	ppb	03:40:40
3	Si 251.611†	59400.6	63893.6	5147.2 µg/L	5147.2	ppb	03:40:40
3	Sn 189.927†	497.8	513.8	497.99 µg/L	497.99	ppb	03:41:00
3	Ti 334.940†	207454.8	223448.7	496.96 µg/L	496.96	ppb	03:40:40
3	Tl 190.801†	292.5	335.4	475.34 µg/L	475.34	ppb	03:41:00
3	U 409.014†	5125.2	4714.5	453.18 µg/L	453.18	ppb	03:40:40
3	V 292.402†	38179.4	41346.1	518.08 µg/L	518.08	ppb	03:40:40
3	Zn 213.857†	17368.6	18256.1	479.16 µg/L	479.16	ppb	03:40:40

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1795644.9	92.336	%	0.1967				0.21%
Sc RADIAL	107888.7	96.9	%	0.68				0.70%
Y 371.029	1078101.1	91.267	%	0.1845				0.20%
Ag 328.068†	25767.8	263.90	µg/L	0.422	263.90	ppb	0.422	0.16%
QC value within limits for Ag 328.068 Recovery = 105.56%								
Al 396.153Radial†	991691.0	516440	µg/L	5285.6	516440	ppb	5285.6	1.02%
QC value within limits for Al 396.153Radial Recovery = 103.29%								
As 188.979†	300.4	498.01	µg/L	10.336	498.01	ppb	10.336	2.08%
QC value within limits for As 188.979 Recovery = 99.60%								
B 249.677†	13054.8	551.53	µg/L	1.131	551.53	ppb	1.131	0.21%
QC value within limits for B 249.677 Recovery = 110.31%								
Ba 233.527†	18633.1	499.69	µg/L	0.324	499.69	ppb	0.324	0.06%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	365378.2	242.89	µg/L	1.121	242.89	ppb	1.121	0.46%
QC value within limits for Be 313.107 Recovery = 97.16%								
Ca 317.933Radial†	1244034.2	489970	µg/L	5448.4	489970	ppb	5448.4	1.11%
QC value within limits for Ca 317.933Radial Recovery = 97.99%								
Cd 226.502†	17287.6	471.77	µg/L	1.358	471.77	ppb	1.358	0.29%
QC value within limits for Cd 226.502 Recovery = 94.35%								
Co 228.616†	8569.4	434.73	µg/L	0.744	434.73	ppb	0.744	0.17%

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   QC value within limits for Co 228.616  Recovery = 86.95%
Cr 267.716†          21607.2      481.82 µg/L        1.263      481.82 ppb        1.263   0.26%
   QC value within limits for Cr 267.716  Recovery = 96.36%
Cu 324.752†          69432.3      559.50 µg/L        0.501      559.50 ppb        0.501   0.09%
   QC value within limits for Cu 324.752  Recovery = 111.90%
Fe 238.204 Radial†   37505.5      192770 µg/L       1386.3      192770 ppb       1386.3   0.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.38%
K 766.490 Radial†     9251.7      5190.4 µg/L        33.47      5190.4 ppb        33.47   0.64%
   QC value within limits for K 766.490 Radial  Recovery = 103.81%
Mg 279.077 IEC†      88984.3      496300 µg/L       3122.2      496300 ppb       3122.2   0.63%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.26%
Mn 257.610†         138873.6      487.66 µg/L        0.231      487.66 ppb        0.231   0.05%
   QC value within limits for Mn 257.610  Recovery = 97.53%
Mo 202.031†           3995.1      487.04 µg/L        2.004      487.04 ppb        2.004   0.41%
   QC value within limits for Mo 202.031  Recovery = 97.41%
Na 589.592 Radial†   18614.7      5189.7 µg/L        28.78      5189.7 ppb        28.78   0.55%
   QC value within limits for Na 589.592 Radial  Recovery = 103.79%
Ni 231.604†           7619.8      439.36 µg/L        1.004      439.36 ppb        1.004   0.23%
   QC value within limits for Ni 231.604  Recovery = 87.87%
P 214.914†            1140.4      2484.9 µg/L        29.18      2484.9 ppb        29.18   1.17%
   QC value within limits for P 214.914  Recovery = 99.40%
Pb 220.353†           1661.4      487.33 µg/L        1.364      487.33 ppb        1.364   0.28%
   QC value within limits for Pb 220.353  Recovery = 97.47%
S 181.975 Axial†       526.0      2713.3 µg/L        36.37      2713.3 ppb        36.37   1.34%
   QC value within limits for S 181.975 Axial  Recovery = 108.53%
Sb 206.836†            517.3      499.54 µg/L        4.493      499.54 ppb        4.493   0.90%
   QC value within limits for Sb 206.836  Recovery = 99.91%
Se 196.026†           1564.3      2343.3 µg/L        10.15      2343.3 ppb        10.15   0.43%
   QC value within limits for Se 196.026  Recovery = 93.73%
SiO2†                54311.1       11037 µg/L         18.0       11037 ppb         18.0   0.16%
   QC value within limits for SiO2  Recovery = 103.20%
Si 251.611†          63842.5      5143.1 µg/L         5.47      5143.1 ppb         5.47   0.11%
   QC value within limits for Si 251.611  Recovery = 102.86%
Sn 189.927†            510.6      496.38 µg/L        3.674      496.38 ppb        3.674   0.74%
   QC value within limits for Sn 189.927  Recovery = 99.28%
Sr 421.552†          89077.0      508.67 µg/L        3.329      508.67 ppb        3.329   0.65%
   QC value within limits for Sr 421.552  Recovery = 101.73%
Ti 334.940†         223476.1      497.24 µg/L        0.278      497.24 ppb        0.278   0.06%
   QC value within limits for Ti 334.940  Recovery = 99.45%
Tl 190.801†            330.1      467.28 µg/L       18.973      467.28 ppb       18.973   4.06%
   QC value within limits for Tl 190.801  Recovery = 93.46%
U 409.014†            4660.1      447.33 µg/L        5.552      447.33 ppb        5.552   1.24%
   QC value within limits for U 409.014  Recovery = 89.47%
V 292.402†           41359.6      518.36 µg/L        0.490      518.36 ppb        0.490   0.09%
   QC value within limits for V 292.402  Recovery = 103.67%
Zn 213.857†          18239.0      478.43 µg/L        0.903      478.43 ppb        0.903   0.19%
   QC value within limits for Zn 213.857  Recovery = 95.69%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/15/2009 03:41:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106846.8	106846.8	96.0	%			03:41:51
1	Al 396.153Radial†	946898.4	986125.3	513560	µg/L	513560	ppb	03:41:45
1	Ca 317.933Radial†	1197647.7	1247061.6	491160	µg/L	491160	ppb	03:41:45
1	Fe 238.204 Radial†	87548.3	91183.3	468620	µg/L	468620	ppb	03:41:51
1	K 766.490 Radial†	836.5	31.3	17.582	µg/L	17.582	ppb	03:41:51
1	Mg 279.077 IEC†	84793.7	88305.7	492100	µg/L	492100	ppb	03:41:51
1	Na 589.592 Radial†	1707204.9	1778729.5	495900	µg/L	495900	ppb	03:41:45
1	Sr 421.552†	856.0	974.2	5.5630	µg/L	5.5630	ppb	03:41:51
1	Sc 361.383	1759164.6	1759164.6	90.460	%			03:42:28
1	Y 371.029	1048091.0	1048091.0	88.727	%			03:42:28
1	Ag 328.068†	-3919.9	-4232.0	-3.6767	µg/L	-3.6767	ppb	03:42:28
1	As 188.979†	46.3	46.1	-50.630	µg/L	-50.630	ppb	03:42:48
1	B 249.677†	4577.3	4908.8	82.813	µg/L	82.813	ppb	03:42:28
1	Ba 233.527†	240.8	345.4	9.1306	µg/L	9.1306	ppb	03:42:48
1	Be 313.107†	-1893.4	-5758.7	-3.8469	µg/L	-3.8469	ppb	03:42:28
1	Cd 226.502†	1184.6	1407.0	13.806	µg/L	13.806	ppb	03:42:28
1	Co 228.616†	33.3	104.1	5.1347	µg/L	5.1347	ppb	03:42:48
1	Cr 267.716†	-229.8	-126.8	-2.9465	µg/L	-2.9465	ppb	03:42:48
1	Cu 324.752†	-8384.6	-12534.8	7.1279	µg/L	7.1279	ppb	03:42:28
1	Mn 257.610†	-12978.4	-14115.8	11.800	µg/L	11.800	ppb	03:42:28
1	Mo 202.031†	-198.5	-214.5	-7.3310	µg/L	-7.3310	ppb	03:42:48
1	Ni 231.604†	237.7	-19.0	-1.0945	µg/L	-1.0945	ppb	03:42:48
1	P 214.914†	361.2	195.2	84.902	µg/L	84.902	ppb	03:42:48
1	Pb 220.353†	45.6	-5.6	24.978	µg/L	24.978	ppb	03:42:48
1	S 181.975 Axial†	89.4	60.0	180.93	µg/L	180.93	ppb	03:42:48
1	Sb 206.836†	55.1	42.0	6.7817	µg/L	6.7817	ppb	03:42:48
1	Se 196.026†	-101.7	-123.3	9.3013	µg/L	9.3013	ppb	03:42:48
1	SiO2†	1629.3	-274.6	-55.797	µg/L	-55.797	ppb	03:42:48
1	Si 251.611†	-220.6	-558.5	-36.250	µg/L	-36.250	ppb	03:42:48
1	Sn 189.927†	-436.6	-507.1	-1.4305	µg/L	-1.4305	ppb	03:42:48
1	Ti 334.940†	17051.3	18052.9	14.776	µg/L	14.776	ppb	03:42:28
1	Tl 190.801†	13.7	34.5	-10.343	µg/L	-10.343	ppb	03:42:48
1	U 409.014†	133315.6	146549.1	14758	µg/L	14758	ppb	03:42:28
1	V 292.402†	-4100.6	-4456.5	8.3319	µg/L	8.3319	ppb	03:42:28
1	Zn 213.857†	2772.1	2546.2	8.7726	µg/L	8.7726	ppb	03:42:48
2	Sc RADIAL	106233.8	106233.8	95.5	%			03:42:03
2	Al 396.153Radial†	938784.8	983317.2	512100	µg/L	512100	ppb	03:41:58
2	Ca 317.933Radial†	1183320.8	1239251.8	488080	µg/L	488080	ppb	03:41:58
2	Fe 238.204 Radial†	87475.0	91632.7	470930	µg/L	470930	ppb	03:42:03
2	K 766.490 Radial†	789.7	-12.6	-7.0653	µg/L	-7.0653	ppb	03:42:03
2	Mg 279.077 IEC†	84786.1	88807.3	494890	µg/L	494890	ppb	03:42:03
2	Na 589.592 Radial†	1693038.7	1774151.0	494620	µg/L	494620	ppb	03:41:58
2	Sr 421.552†	884.8	1009.5	5.7648	µg/L	5.7648	ppb	03:42:03
2	Sc 361.383	1745068.3	1745068.3	89.735	%			03:42:55
2	Y 371.029	1039428.7	1039428.7	87.993	%			03:42:55
2	Ag 328.068†	-3859.1	-4199.3	-3.1735	µg/L	-3.1735	ppb	03:42:55
2	As 188.979†	36.2	35.3	-72.046	µg/L	-72.046	ppb	03:43:16
2	B 249.677†	4553.2	4922.8	82.742	µg/L	82.742	ppb	03:42:55
2	Ba 233.527†	260.3	369.3	9.7724	µg/L	9.7724	ppb	03:43:16
2	Be 313.107†	-1959.0	-5848.7	-3.9068	µg/L	-3.9068	ppb	03:42:55
2	Cd 226.502†	1144.3	1372.7	12.720	µg/L	12.720	ppb	03:42:55
2	Co 228.616†	48.5	121.4	6.0092	µg/L	6.0092	ppb	03:43:16
2	Cr 267.716†	-222.9	-121.2	-2.8190	µg/L	-2.8190	ppb	03:43:16
2	Cu 324.752†	-8184.4	-12386.6	8.7301	µg/L	8.7301	ppb	03:42:55
2	Mn 257.610†	-12993.0	-14248.0	11.650	µg/L	11.650	ppb	03:42:55
2	Mo 202.031†	-203.1	-221.5	-8.0705	µg/L	-8.0705	ppb	03:43:16
2	Ni 231.604†	261.1	9.3	0.5365	µg/L	0.5365	ppb	03:43:16
2	P 214.914†	354.0	190.3	70.617	µg/L	70.617	ppb	03:43:16
2	Pb 220.353†	34.3	-17.7	21.512	µg/L	21.512	ppb	03:43:16

2	S 181.975 Axial†	76.6	46.5	108.18	µg/L	108.18 ppb	03:43:16
2	Sb 206.836†	51.0	38.0	2.8115	µg/L	2.8115 ppb	03:43:16
2	Se 196.026†	-92.5	-113.9	23.384	µg/L	23.384 ppb	03:43:16
2	SiO2†	1666.5	-218.6	-44.415	µg/L	-44.415 ppb	03:43:16
2	Si 251.611†	-142.3	-473.2	-29.318	µg/L	-29.318 ppb	03:43:16
2	Sn 189.927†	-432.0	-505.8	-0.5933	µg/L	-0.5933 ppb	03:43:16
2	Ti 334.940†	16828.8	17957.1	14.724	µg/L	14.724 ppb	03:42:55
2	Tl 190.801†	1.6	21.1	-31.432	µg/L	-31.432 ppb	03:43:16
2	U 409.014†	132939.5	147320.6	14836	µg/L	14836 ppb	03:42:55
2	V 292.402†	-3964.7	-4341.7	10.025	µg/L	10.025 ppb	03:42:55
2	Zn 213.857†	2776.0	2575.3	9.2626	µg/L	9.2626 ppb	03:43:16
3	Sc RADIAL	106507.7	106507.7	95.7	%		03:42:16
3	Al 396.153Radial†	948525.6	990966.4	516080	µg/L	516080 ppb	03:42:11
3	Ca 317.933Radial†	1197687.1	1251075.3	492740	µg/L	492740 ppb	03:42:11
3	Fe 238.204 Radial†	87855.7	91794.8	471770	µg/L	471770 ppb	03:42:16
3	K 766.490 Radial†	850.5	48.8	27.367	µg/L	27.367 ppb	03:42:16
3	Mg 279.077 IEC†	85029.0	88832.7	495030	µg/L	495030 ppb	03:42:16
3	Na 589.592 Radial†	1710493.7	1787828.7	498440	µg/L	498440 ppb	03:42:11
3	Sr 421.552†	886.8	1009.3	5.7633	µg/L	5.7633 ppb	03:42:16
3	Sc 361.383	1765063.2	1765063.2	90.764	%		03:43:22
3	Y 371.029	1050978.9	1050978.9	88.971	%		03:43:22
3	Ag 328.068†	-3793.2	-4077.9	-1.9559	µg/L	-1.9559 ppb	03:43:22
3	As 188.979†	33.2	31.4	-80.566	µg/L	-80.566 ppb	03:43:43
3	B 249.677†	4558.5	4871.2	80.061	µg/L	80.061 ppb	03:43:22
3	Ba 233.527†	274.5	381.6	10.101	µg/L	10.101 ppb	03:43:43
3	Be 313.107†	-2079.0	-5956.2	-3.9781	µg/L	-3.9781 ppb	03:43:22
3	Cd 226.502†	1194.1	1413.1	13.680	µg/L	13.680 ppb	03:43:22
3	Co 228.616†	47.3	119.5	5.9147	µg/L	5.9147 ppb	03:43:43
3	Cr 267.716†	-224.0	-119.6	-2.7855	µg/L	-2.7855 ppb	03:43:43
3	Cu 324.752†	-8187.0	-12286.1	9.6586	µg/L	9.6586 ppb	03:43:22
3	Mn 257.610†	-12965.8	-14054.0	12.402	µg/L	12.402 ppb	03:43:22
3	Mo 202.031†	-194.1	-209.0	-6.5467	µg/L	-6.5467 ppb	03:43:43
3	Ni 231.604†	246.0	-10.6	-0.6121	µg/L	-0.6121 ppb	03:43:43
3	P 214.914†	365.7	198.8	90.194	µg/L	90.194 ppb	03:43:43
3	Pb 220.353†	34.4	-18.1	21.888	µg/L	21.888 ppb	03:43:43
3	S 181.975 Axial†	79.4	48.6	119.44	µg/L	119.44 ppb	03:43:43
3	Sb 206.836†	50.2	36.4	0.6331	µg/L	0.6331 ppb	03:43:43
3	Se 196.026†	-104.3	-125.8	6.7734	µg/L	6.7734 ppb	03:43:43
3	SiO2†	1596.9	-316.3	-64.275	µg/L	-64.275 ppb	03:43:43
3	Si 251.611†	-234.1	-572.6	-37.464	µg/L	-37.464 ppb	03:43:43
3	Sn 189.927†	-434.3	-502.9	2.0476	µg/L	2.0476 ppb	03:43:43
3	Ti 334.940†	16836.4	17753.0	13.983	µg/L	13.983 ppb	03:43:22
3	Tl 190.801†	10.9	31.4	-15.510	µg/L	-15.510 ppb	03:43:43
3	U 409.014†	133092.5	145810.8	14683	µg/L	14683 ppb	03:43:22
3	V 292.402†	-4049.7	-4385.2	9.3312	µg/L	9.3312 ppb	03:43:22
3	Zn 213.857†	2759.0	2521.5	7.6553	µg/L	7.6553 ppb	03:43:43

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1756432.0	90.320	%	0.5283				0.58%
Sc RADIAL	106529.4	95.7	%	0.28				0.29%
Y 371.029	1046166.2	88.564	%	0.5089				0.57%
Ag 328.068†	-4169.7	-2.9354	µg/L	0.88478	-2.9354	ppb	0.88478	30.14%
Al 396.153Radial†	986803.0	513910	µg/L	2015.1	513910	ppb	2015.1	0.39%
QC value within limits for Al 396.153Radial Recovery = 102.78%								
As 188.979†	37.6	-67.747	µg/L	15.4240	-67.747	ppb	15.4240	22.77%
B 249.677†	4900.9	81.872	µg/L	1.5691	81.872	ppb	1.5691	1.92%
Ba 233.527†	365.4	9.6681	µg/L	0.49366	9.6681	ppb	0.49366	5.11%
Be 313.107†	-5854.5	-3.9106	µg/L	0.06565	-3.9106	ppb	0.06565	1.68%
Ca 317.933Radial†	1245796.2	490660	µg/L	2368.0	490660	ppb	2368.0	0.48%
QC value within limits for Ca 317.933Radial Recovery = 98.13%								
Cd 226.502†	1397.6	13.402	µg/L	0.5940	13.402	ppb	0.5940	4.43%
Co 228.616†	115.0	5.6862	µg/L	0.47993	5.6862	ppb	0.47993	8.44%
Cr 267.716†	-122.5	-2.8503	µg/L	0.08500	-2.8503	ppb	0.08500	2.98%
Cu 324.752†	-12402.5	8.5055	µg/L	1.28019	8.5055	ppb	1.28019	15.05%
Fe 238.204 Radial†	91536.9	470440	µg/L	1628.4	470440	ppb	1628.4	0.35%
QC value within limits for Fe 238.204 Radial Recovery = 94.09%								
K 766.490 Radial†	22.5	12.628	µg/L	17.7427	12.628	ppb	17.7427	140.50%
Mg 279.077 IEC†	88648.6	494010	µg/L	1656.4	494010	ppb	1656.4	0.34%

QC value within limits for Mg 279.077 IEC Recovery = 98.80%

Mn 257.610†	-14139.3	11.951 µg/L	0.3980	11.951 ppb	0.3980	3.33%
Mo 202.031†	-215.0	-7.3161 µg/L	0.76202	-7.3161 ppb	0.76202	10.42%
Na 589.592 Radial†	1780236.4	496320 µg/L	1941.0	496320 ppb	1941.0	0.39%

QC value within limits for Na 589.592 Radial Recovery = 99.26%

Ni 231.604†	-6.8	-0.3901 µg/L	0.83786	-0.3901 ppb	0.83786	214.80%
P 214.914†	194.8	81.904 µg/L	10.1270	81.904 ppb	10.1270	12.36%
Pb 220.353†	-13.8	22.792 µg/L	1.9019	22.792 ppb	1.9019	8.34%
S 181.975 Axial†	51.7	136.19 µg/L	39.158	136.19 ppb	39.158	28.75%
Sb 206.836†	38.8	3.4088 µg/L	3.11751	3.4088 ppb	3.11751	91.45%
Se 196.026†	-121.0	13.153 µg/L	8.9502	13.153 ppb	8.9502	68.05%
SiO2†	-269.8	-54.829 µg/L	9.9655	-54.829 ppb	9.9655	18.18%
Si 251.611†	-534.7	-34.344 µg/L	4.3945	-34.344 ppb	4.3945	12.80%
Sn 189.927†	-505.2	0.0079 µg/L	1.81529	0.0079 ppb	1.81529	>999.9%
Sr 421.552†	997.7	5.6970 µg/L	0.11603	5.6970 ppb	0.11603	2.04%
Ti 334.940†	17921.0	14.494 µg/L	0.4436	14.494 ppb	0.4436	3.06%
Tl 190.801†	29.0	-19.095 µg/L	10.9919	-19.095 ppb	10.9919	57.56%
U 409.014†	146560.2	14759 µg/L	76.4	14759 ppb	76.4	0.52%

QC value within limits for U 409.014 Recovery = 98.39%

V 292.402†	-4394.5	9.2293 µg/L	0.85105	9.2293 ppb	0.85105	9.22%
Zn 213.857†	2547.7	8.5635 µg/L	0.82381	8.5635 ppb	0.82381	9.62%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/15/2009 03:43:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109681.4	109681.4	98.6	%			03:44:35
1	Al 396.153Radial†	881.7	731.3	8.3462	µg/L	8.3462	ppb	03:44:35
1	Ca 317.933Radial†	733.4	336.7	132.61	µg/L	132.61	ppb	03:44:55
1	Fe 238.204 Radial†	-2.9	-9.9	268.27	µg/L	268.27	ppb	03:44:55
1	K 766.490 Radial†	537964.0	545021.8	305770	µg/L	305770	ppb	03:44:29
1	Mg 279.077 IEC†	-31.0	-46.8	-16.757	µg/L	-16.757	ppb	03:44:55
1	Na 589.592 Radial†	-139.0	365.0	101.77	µg/L	101.77	ppb	03:44:35
1	Sr 421.552†	1728629.0	1754089.3	10017	µg/L	10017	ppb	03:44:29
1	Sc 361.383	1945251.8	1945251.8	100.03	%			03:46:27
1	Y 371.029	1165798.0	1165798.0	98.691	%			03:46:27
1	Ag 328.068†	-7106.0	-7002.6	2.7486	µg/L	2.7486	ppb	03:46:27
1	As 188.979†	5010.7	5004.1	10001	µg/L	10001	ppb	03:46:32
1	B 249.677†	105959.8	105777.5	4960.0	µg/L	4960.0	ppb	03:46:27
1	Ba 233.527†	539592.3	539513.2	14459	µg/L	14459	ppb	03:46:27
1	Be 313.107†	4474640.1	4469661.1	2970.0	µg/L	2970.0	ppb	03:46:16
1	Cd 226.502†	350125.1	350119.8	9851.4	µg/L	9851.4	ppb	03:46:27
1	Co 228.616†	190085.2	190096.8	9645.2	µg/L	9645.2	ppb	03:46:27
1	Cr 267.716†	1098616.3	1098421.0	24458	µg/L	24458	ppb	03:46:27
1	Cu 324.752†	2782515.0	2778432.3	20732	µg/L	20732	ppb	03:46:27
1	Mn 257.610†	2849171.3	2848566.3	9505.9	µg/L	9505.9	ppb	03:46:27
1	Mo 202.031†	81637.7	81618.5	9795.1	µg/L	9795.1	ppb	03:46:27
1	Ni 231.604†	170675.6	170343.8	9822.1	µg/L	9822.1	ppb	03:46:27
1	P 214.914†	8358.7	8152.1	16118	µg/L	16118	ppb	03:46:32
1	Pb 220.353†	93310.4	93227.0	24938	µg/L	24938	ppb	03:46:27
1	S 181.975 Axial†	9503.3	9461.6	50592	µg/L	50592	ppb	03:46:32
1	Sb 206.836†	9590.7	9569.0	10012	µg/L	10012	ppb	03:46:32
1	Se 196.026†	6538.5	6525.8	9780.0	µg/L	9780.0	ppb	03:46:32
1	SiO2†	495659.3	493438.1	100280	µg/L	100280	ppb	03:46:27
1	Si 251.611†	575223.5	574740.0	45602	µg/L	45602	ppb	03:46:27
1	Sn 189.927†	20408.9	20378.6	10606	µg/L	10606	ppb	03:46:32
1	Ti 334.940†	4266102.4	4264053.6	10013	µg/L	10013	ppb	03:46:16
1	Tl 190.801†	5997.6	6015.1	9708.0	µg/L	9708.0	ppb	03:46:32
1	U 409.014†	1860.3	1034.3	104.71	µg/L	104.71	ppb	03:46:27
1	V 292.402†	840555.9	840385.8	10198	µg/L	10198	ppb	03:46:27
1	Zn 213.857†	530607.1	529933.1	14898	µg/L	14898	ppb	03:46:27
2	Sc RADIAL	111197.6	111197.6	99.9	%			03:45:07
2	Al 396.153Radial†	835.3	672.6	-15.160	µg/L	-15.160	ppb	03:45:07
2	Ca 317.933Radial†	588.9	182.0	71.673	µg/L	71.673	ppb	03:45:27
2	Fe 238.204 Radial†	-10.2	-17.2	224.59	µg/L	224.59	ppb	03:45:27
2	K 766.490 Radial†	540524.9	540141.8	303030	µg/L	303030	ppb	03:45:01
2	Mg 279.077 IEC†	-47.9	-63.3	-113.47	µg/L	-113.47	ppb	03:45:27
2	Na 589.592 Radial†	-257.6	248.3	69.227	µg/L	69.227	ppb	03:45:07
2	Sr 421.552†	1739938.0	1741490.9	9944.6	µg/L	9944.6	ppb	03:45:01
2	Sc 361.383	1957777.6	1957777.6	100.67	%			03:46:52
2	Y 371.029	1173337.7	1173337.7	99.329	%			03:46:52
2	Ag 328.068†	-7041.7	-6893.3	2.5584	µg/L	2.5584	ppb	03:46:52
2	As 188.979†	4991.1	4952.6	9898.3	µg/L	9898.3	ppb	03:46:57
2	B 249.677†	104816.7	103964.3	4875.0	µg/L	4875.0	ppb	03:46:52
2	Ba 233.527†	532964.4	529478.2	14190	µg/L	14190	ppb	03:46:52
2	Be 313.107†	4466378.2	4432834.1	2945.5	µg/L	2945.5	ppb	03:46:41
2	Cd 226.502†	345535.5	343321.4	9660.1	µg/L	9660.1	ppb	03:46:52
2	Co 228.616†	187669.3	186481.3	9461.5	µg/L	9461.5	ppb	03:46:52
2	Cr 267.716†	1085158.9	1078026.8	24004	µg/L	24004	ppb	03:46:52
2	Cu 324.752†	2753375.0	2731689.8	20383	µg/L	20383	ppb	03:46:52
2	Mn 257.610†	2814863.7	2796264.5	9331.3	µg/L	9331.3	ppb	03:46:52
2	Mo 202.031†	80605.9	80071.5	9609.5	µg/L	9609.5	ppb	03:46:52
2	Ni 231.604†	168308.6	166901.0	9623.6	µg/L	9623.6	ppb	03:46:52
2	P 214.914†	8358.6	8098.5	16039	µg/L	16039	ppb	03:46:57
2	Pb 220.353†	92120.1	91447.9	24462	µg/L	24462	ppb	03:46:52

2	S 181.975 Axial†	9588.1	9485.1	50718 µg/L	50718 ppb		03:46:57
2	Sb 206.836†	9647.5	9564.0	10009 µg/L	10009 ppb		03:46:57
2	Se 196.026†	6516.2	6461.8	9684.1 µg/L	9684.1 ppb		03:46:57
2	SiO2†	489844.7	484492.1	98457 µg/L	98457 ppb		03:46:52
2	Si 251.611†	568531.0	564413.1	44773 µg/L	44773 ppb		03:46:52
2	Sn 189.927†	20472.5	20311.2	10571 µg/L	10571 ppb		03:46:57
2	Ti 334.940†	4256796.3	4227523.2	9927.5 µg/L	9927.5 ppb		03:46:41
2	Tl 190.801†	6037.1	6016.0	9709.1 µg/L	9709.1 ppb		03:46:57
2	U 409.014†	1792.9	955.4	96.732 µg/L	96.732 ppb		03:46:52
2	V 292.402†	831000.5	825518.0	10018 µg/L	10018 ppb		03:46:52
2	Zn 213.857†	523563.5	519542.9	14605 µg/L	14605 ppb		03:46:52
3	Sc RADIAL	111960.7	111960.7	101 %			03:45:39
3	Al 396.153Radial†	761.5	593.5	-68.030 µg/L	-68.030 ppb		03:45:39
3	Ca 317.933Radial†	592.1	181.1	71.345 µg/L	71.345 ppb		03:45:59
3	Fe 238.204 Radial†	-13.5	-20.4	218.10 µg/L	218.10 ppb		03:45:59
3	K 766.490 Radial†	543539.2	539451.2	302650 µg/L	302650 ppb		03:45:33
3	Mg 279.077 IEC†	-40.9	-56.1	-65.345 µg/L	-65.345 ppb		03:45:59
3	Na 589.592 Radial†	-307.8	200.1	55.783 µg/L	55.783 ppb		03:45:39
3	Sr 421.552†	1749981.7	1739606.7	9933.9 µg/L	9933.9 ppb		03:45:33
3	Sc 361.383	1959469.0	1959469.0	100.76 %			03:47:17
3	Y 371.029	1173630.8	1173630.8	99.354 %			03:47:17
3	Ag 328.068†	-7309.5	-7153.1	2.1349 µg/L	2.1349 ppb		03:47:17
3	As 188.979†	5039.9	4996.8	9985.9 µg/L	9985.9 ppb		03:47:22
3	B 249.677†	108270.5	107302.2	5031.5 µg/L	5031.5 ppb		03:47:17
3	Ba 233.527†	550240.6	546167.1	14638 µg/L	14638 ppb		03:47:17
3	Be 313.107†	4459066.5	4421748.0	2938.1 µg/L	2938.1 ppb		03:47:06
3	Cd 226.502†	357533.6	354932.8	9986.8 µg/L	9986.8 ppb		03:47:17
3	Co 228.616†	193804.9	192409.6	9763.0 µg/L	9763.0 ppb		03:47:17
3	Cr 267.716†	1119468.9	1111147.4	24742 µg/L	24742 ppb		03:47:17
3	Cu 324.752†	2834813.2	2810152.7	20969 µg/L	20969 ppb		03:47:17
3	Mn 257.610†	2902941.5	2881264.0	9615.0 µg/L	9615.0 ppb		03:47:17
3	Mo 202.031†	83254.7	82631.2	9916.7 µg/L	9916.7 ppb		03:47:17
3	Ni 231.604†	173852.2	172258.5	9932.5 µg/L	9932.5 ppb		03:47:17
3	P 214.914†	8426.9	8159.1	16106 µg/L	16106 ppb		03:47:22
3	Pb 220.353†	95249.3	94474.5	25272 µg/L	25272 ppb		03:47:17
3	S 181.975 Axial†	9673.1	9561.3	51125 µg/L	51125 ppb		03:47:22
3	Sb 206.836†	9761.2	9668.6	10115 µg/L	10115 ppb		03:47:22
3	Se 196.026†	6560.3	6500.0	9741.3 µg/L	9741.3 ppb		03:47:22
3	SiO2†	505742.8	499850.2	101580 µg/L	101580 ppb		03:47:17
3	Si 251.611†	586841.9	582098.3	46200 µg/L	46200 ppb		03:47:17
3	Sn 189.927†	20675.0	20494.7	10666 µg/L	10666 ppb		03:47:22
3	Ti 334.940†	4251424.3	4218541.9	9906.4 µg/L	9906.4 ppb		03:47:06
3	Tl 190.801†	6087.9	6061.2	9781.1 µg/L	9781.1 ppb		03:47:22
3	U 409.014†	1848.6	1009.2	102.17 µg/L	102.17 ppb		03:47:17
3	V 292.402†	856733.9	850344.6	10319 µg/L	10319 ppb		03:47:17
3	Zn 213.857†	540433.6	535836.7	15064 µg/L	15064 ppb		03:47:17

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1954166.1	100.49	%	0.399				0.40%
Sc RADIAL	110946.6	99.7	%	1.04				1.05%
Y 371.029	1170922.1	99.125	%	0.3759				0.38%
Ag 328.068†	-7016.3	2.4807	µg/L	0.31415	2.4807	ppb	0.31415	12.66%
Al 396.153Radial†	665.8	-24.948	µg/L	39.1178	-24.948	ppb	39.1178	156.80%
As 188.979†	4984.5	9961.7	µg/L	55.49	9961.7	ppb	55.49	0.56%
QC value within limits for As 188.979 Recovery = 99.62%								
B 249.677†	105681.3	4955.5	µg/L	78.36	4955.5	ppb	78.36	1.58%
QC value within limits for B 249.677 Recovery = 99.11%								
Ba 233.527†	538386.2	14429	µg/L	225.1	14429	ppb	225.1	1.56%
QC value within limits for Ba 233.527 Recovery = 96.19%								
Be 313.107†	4441414.4	2951.2	µg/L	16.67	2951.2	ppb	16.67	0.56%
QC value within limits for Be 313.107 Recovery = 98.37%								
Ca 317.933Radial†	233.3	91.878	µg/L	35.2798	91.878	ppb	35.2798	38.40%
Cd 226.502†	349458.0	9832.8	µg/L	164.14	9832.8	ppb	164.14	1.67%
QC value within limits for Cd 226.502 Recovery = 98.33%								
Co 228.616†	189662.6	9623.2	µg/L	151.94	9623.2	ppb	151.94	1.58%
QC value within limits for Co 228.616 Recovery = 96.23%								
Cr 267.716†	1095865.1	24401	µg/L	372.0	24401	ppb	372.0	1.52%
QC value within limits for Cr 267.716 Recovery = 97.61%								

Cu 324.752†	2773425.0	20695 µg/L	294.5	20695 ppb	294.5	1.42%
QC value within limits for Cu 324.752 Recovery = 103.47%						
Fe 238.204 Radial†	-15.8	236.99 µg/L	27.285	236.99 ppb	27.285	11.51%
K 766.490 Radial†	541538.2	303820 µg/L	1703.6	303820 ppb	1703.6	0.56%
QC value within limits for K 766.490 Radial Recovery = 101.27%						
Mg 279.077 IEC†	-55.4	-65.189 µg/L	48.3546	-65.189 ppb	48.3546	74.18%
Mn 257.610†	2842031.6	9484.1 µg/L	143.08	9484.1 ppb	143.08	1.51%
QC value within limits for Mn 257.610 Recovery = 94.84%						
Mo 202.031†	81440.4	9773.7 µg/L	154.71	9773.7 ppb	154.71	1.58%
QC value within limits for Mo 202.031 Recovery = 97.74%						
Na 589.592 Radial†	271.1	75.594 µg/L	23.6464	75.594 ppb	23.6464	31.28%
Ni 231.604†	169834.4	9792.8 µg/L	156.54	9792.8 ppb	156.54	1.60%
QC value within limits for Ni 231.604 Recovery = 97.93%						
P 214.914†	8136.6	16088 µg/L	42.6	16088 ppb	42.6	0.26%
QC value within limits for P 214.914 Recovery = 107.25%						
Pb 220.353†	93049.8	24891 µg/L	406.9	24891 ppb	406.9	1.63%
QC value within limits for Pb 220.353 Recovery = 99.56%						
S 181.975 Axial†	9502.7	50812 µg/L	278.6	50812 ppb	278.6	0.55%
QC value within limits for S 181.975 Axial Recovery = 101.62%						
Sb 206.836†	9600.5	10045 µg/L	60.6	10045 ppb	60.6	0.60%
QC value within limits for Sb 206.836 Recovery = 100.45%						
Se 196.026†	6495.9	9735.1 µg/L	48.23	9735.1 ppb	48.23	0.50%
QC value within limits for Se 196.026 Recovery = 97.35%						
SiO2†	492593.5	100100 µg/L	1567.6	100100 ppb	1567.6	1.57%
QC value within limits for SiO2 Recovery = 93.55%						
Si 251.611†	573750.5	45525 µg/L	716.9	45525 ppb	716.9	1.57%
QC value within limits for Si 251.611 Recovery = 91.05%						
Sn 189.927†	20394.8	10614 µg/L	48.3	10614 ppb	48.3	0.45%
QC value within limits for Sn 189.927 Recovery = 106.14%						
Sr 421.552†	1745062.3	9965.0 µg/L	44.96	9965.0 ppb	44.96	0.45%
QC value within limits for Sr 421.552 Recovery = 99.65%						
Ti 334.940†	4236706.2	9949.0 µg/L	56.60	9949.0 ppb	56.60	0.57%
QC value within limits for Ti 334.940 Recovery = 99.49%						
Tl 190.801†	6030.8	9732.7 µg/L	41.86	9732.7 ppb	41.86	0.43%
QC value within limits for Tl 190.801 Recovery = 97.33%						
U 409.014†	999.6	101.20 µg/L	4.076	101.20 ppb	4.076	4.03%
V 292.402†	838749.5	10178 µg/L	151.7	10178 ppb	151.7	1.49%
QC value within limits for V 292.402 Recovery = 101.78%						
Zn 213.857†	528437.6	14856 µg/L	231.9	14856 ppb	231.9	1.56%
QC value within limits for Zn 213.857 Recovery = 99.04%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 03:47:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115792.8	115792.8	104	%			03:48:09
1	Al 396.153Radial†	10284.2	9721.1	5043.5	µg/L	5043.5	ppb	03:48:09
1	Ca 317.933Radial†	13941.1	12991.7	5116.8	µg/L	5116.8	ppb	03:48:09
1	Fe 238.204 Radial†	1049.7	1001.9	5166.1	µg/L	5166.1	ppb	03:48:30
1	K 766.490 Radial†	10131.9	8898.1	4992.1	µg/L	4992.1	ppb	03:48:09
1	Mg 279.077 IEC†	987.3	933.5	5214.5	µg/L	5214.5	ppb	03:48:30
1	Na 589.592 Radial†	37109.6	36173.1	10085	µg/L	10085	ppb	03:48:09
1	Sr 421.552†	91231.9	87768.0	501.19	µg/L	501.19	ppb	03:48:09
1	Sc 361.383	1996771.4	1996771.4	102.68	%			03:49:34
1	Y 371.029	1207097.6	1207097.6	102.19	%			03:49:34
1	Ag 328.068†	54470.0	53150.3	509.79	µg/L	509.79	ppb	03:49:39
1	As 188.979†	267.2	255.2	508.40	µg/L	508.40	ppb	03:50:00
1	B 249.677†	11201.8	10758.4	502.85	µg/L	502.85	ppb	03:49:39
1	Ba 233.527†	19412.5	18985.3	509.13	µg/L	509.13	ppb	03:49:39
1	Be 313.107†	788508.6	764272.9	508.28	µg/L	508.28	ppb	03:49:34
1	Cd 226.502†	18528.4	18142.5	510.43	µg/L	510.43	ppb	03:49:39
1	Co 228.616†	10233.5	10033.9	509.11	µg/L	509.11	ppb	03:49:39
1	Cr 267.716†	23283.4	22803.2	508.45	µg/L	508.45	ppb	03:49:39
1	Cu 324.752†	73192.0	68016.6	508.63	µg/L	508.63	ppb	03:49:39
1	Mn 257.610†	156342.6	152495.2	509.54	µg/L	509.54	ppb	03:49:34
1	Mo 202.031†	4286.4	4179.4	501.78	µg/L	501.78	ppb	03:50:00
1	Ni 231.604†	9294.7	8770.6	505.72	µg/L	505.72	ppb	03:49:39
1	P 214.914†	1343.8	1104.6	2442.4	µg/L	2442.4	ppb	03:50:00
1	Pb 220.353†	2006.7	1898.3	508.55	µg/L	508.55	ppb	03:50:00
1	S 181.975 Axial†	244.2	199.0	1062.7	µg/L	1062.7	ppb	03:50:00
1	Sb 206.836†	512.7	480.4	505.86	µg/L	505.86	ppb	03:50:00
1	Se 196.026†	358.3	338.1	508.84	µg/L	508.84	ppb	03:50:00
1	SiO2†	29246.0	26407.4	5366.4	µg/L	5366.4	ppb	03:49:39
1	Si 251.611†	32161.6	31007.9	2468.9	µg/L	2468.9	ppb	03:49:39
1	Sn 189.927†	1019.7	968.7	506.97	µg/L	506.97	ppb	03:50:00
1	Ti 334.940†	222580.2	215977.0	506.89	µg/L	506.89	ppb	03:49:34
1	Tl 190.801†	309.3	320.5	516.47	µg/L	516.47	ppb	03:50:00
1	U 409.014†	5826.7	4849.2	490.02	µg/L	490.02	ppb	03:49:39
1	V 292.402†	43029.2	41983.3	510.76	µg/L	510.76	ppb	03:49:39
1	Zn 213.857†	19140.6	18123.1	508.20	µg/L	508.20	ppb	03:49:39
2	Sc RADIAL	116258.9	116258.9	104	%			03:48:35
2	Al 396.153Radial†	10350.0	9744.4	5055.5	µg/L	5055.5	ppb	03:48:35
2	Ca 317.933Radial†	13985.9	12980.9	5112.6	µg/L	5112.6	ppb	03:48:35
2	Fe 238.204 Radial†	1051.9	1000.0	5156.2	µg/L	5156.2	ppb	03:48:56
2	K 766.490 Radial†	10093.0	8821.9	4949.3	µg/L	4949.3	ppb	03:48:35
2	Mg 279.077 IEC†	987.6	930.0	5194.9	µg/L	5194.9	ppb	03:48:56
2	Na 589.592 Radial†	37174.5	36092.3	10062	µg/L	10062	ppb	03:48:35
2	Sr 421.552†	91415.4	87592.2	500.19	µg/L	500.19	ppb	03:48:35
2	Sc 361.383	2002962.4	2002962.4	103.00	%			03:50:07
2	Y 371.029	1210662.5	1210662.5	102.49	%			03:50:07
2	Ag 328.068†	54277.6	52799.5	506.43	µg/L	506.43	ppb	03:50:12
2	As 188.979†	263.3	250.5	499.17	µg/L	499.17	ppb	03:50:33
2	B 249.677†	11203.1	10726.0	501.33	µg/L	501.33	ppb	03:50:12
2	Ba 233.527†	19413.3	18927.6	507.58	µg/L	507.58	ppb	03:50:12
2	Be 313.107†	779330.6	752988.2	500.78	µg/L	500.78	ppb	03:50:07
2	Cd 226.502†	18516.3	18075.0	508.53	µg/L	508.53	ppb	03:50:12
2	Co 228.616†	10205.7	9976.1	506.20	µg/L	506.20	ppb	03:50:12
2	Cr 267.716†	23341.0	22789.0	508.12	µg/L	508.12	ppb	03:50:12
2	Cu 324.752†	73386.8	67985.4	508.40	µg/L	508.40	ppb	03:50:12
2	Mn 257.610†	154932.5	150655.5	503.40	µg/L	503.40	ppb	03:50:07
2	Mo 202.031†	4329.5	4208.3	505.25	µg/L	505.25	ppb	03:50:33
2	Ni 231.604†	9342.0	8788.4	506.75	µg/L	506.75	ppb	03:50:12
2	P 214.914†	1360.7	1116.9	2470.4	µg/L	2470.4	ppb	03:50:33
2	Pb 220.353†	2027.0	1912.0	512.23	µg/L	512.23	ppb	03:50:33

2	S 181.975 Axial†	242.1	196.2	1047.8 µg/L	1047.8 ppb	03:50:33
2	Sb 206.836†	515.3	481.4	506.90 µg/L	506.90 ppb	03:50:33
2	Se 196.026†	360.2	338.9	510.05 µg/L	510.05 ppb	03:50:33
2	SiO2†	29174.1	26249.5	5334.3 µg/L	5334.3 ppb	03:50:12
2	Si 251.611†	32080.2	30832.1	2454.7 µg/L	2454.7 ppb	03:50:12
2	Sn 189.927†	1027.7	973.4	509.39 µg/L	509.39 ppb	03:50:33
2	Ti 334.940†	220404.8	213194.9	500.36 µg/L	500.36 ppb	03:50:07
2	Tl 190.801†	306.0	316.4	509.79 µg/L	509.79 ppb	03:50:33
2	U 409.014†	5837.7	4842.3	489.32 µg/L	489.32 ppb	03:50:12
2	V 292.402†	42942.5	41769.5	508.20 µg/L	508.20 ppb	03:50:12
2	Zn 213.857†	19087.6	18014.0	505.11 µg/L	505.11 ppb	03:50:12
3	Sc RADIAL	116269.3	116269.3	104 %		03:49:01
3	Al 396.153Radial†	10302.2	9697.8	5031.5 µg/L	5031.5 ppb	03:49:01
3	Ca 317.933Radial†	13930.7	12926.9	5091.3 µg/L	5091.3 ppb	03:49:01
3	Fe 238.204 Radial†	1040.3	988.8	5098.1 µg/L	5098.1 ppb	03:49:22
3	K 766.490 Radial†	10080.3	8808.9	4942.0 µg/L	4942.0 ppb	03:49:01
3	Mg 279.077 IEC†	981.8	924.3	5163.1 µg/L	5163.1 ppb	03:49:22
3	Na 589.592 Radial†	37050.3	35970.2	10028 µg/L	10028 ppb	03:49:01
3	Sr 421.552†	90930.4	87120.1	497.49 µg/L	497.49 ppb	03:49:01
3	Sc 361.383	2014240.8	2014240.8	103.58 %		03:50:40
3	Y 371.029	1217696.4	1217696.4	103.08 %		03:50:40
3	Ag 328.068†	53957.9	52195.8	500.63 µg/L	500.63 ppb	03:50:46
3	As 188.979†	265.5	251.3	500.64 µg/L	500.64 ppb	03:51:06
3	B 249.677†	11090.3	10556.1	493.38 µg/L	493.38 ppb	03:50:46
3	Ba 233.527†	19199.4	18615.5	499.22 µg/L	499.22 ppb	03:50:46
3	Be 313.107†	790108.4	759157.1	504.88 µg/L	504.88 ppb	03:50:40
3	Cd 226.502†	18295.2	17760.8	499.69 µg/L	499.69 ppb	03:50:46
3	Co 228.616†	10090.3	9809.2	497.71 µg/L	497.71 ppb	03:50:46
3	Cr 267.716†	23013.2	22345.6	498.25 µg/L	498.25 ppb	03:50:46
3	Cu 324.752†	72625.0	66850.9	499.92 µg/L	499.92 ppb	03:50:46
3	Mn 257.610†	156959.0	151769.7	507.11 µg/L	507.11 ppb	03:50:40
3	Mo 202.031†	4286.5	4143.3	497.44 µg/L	497.44 ppb	03:51:06
3	Ni 231.604†	9216.7	8616.7	496.84 µg/L	496.84 ppb	03:50:46
3	P 214.914†	1341.5	1091.1	2412.8 µg/L	2412.8 ppb	03:51:06
3	Pb 220.353†	2006.4	1881.1	503.95 µg/L	503.95 ppb	03:51:06
3	S 181.975 Axial†	242.7	195.5	1043.9 µg/L	1043.9 ppb	03:51:06
3	Sb 206.836†	504.8	468.4	493.25 µg/L	493.25 ppb	03:51:06
3	Se 196.026†	352.5	329.5	495.96 µg/L	495.96 ppb	03:51:06
3	SiO2†	28919.9	25845.5	5252.3 µg/L	5252.3 ppb	03:50:46
3	Si 251.611†	31728.6	30318.2	2413.4 µg/L	2413.4 ppb	03:50:46
3	Sn 189.927†	1013.4	954.1	499.31 µg/L	499.31 ppb	03:51:06
3	Ti 334.940†	223233.4	214727.6	503.96 µg/L	503.96 ppb	03:50:40
3	Tl 190.801†	299.4	308.4	497.03 µg/L	497.03 ppb	03:51:06
3	U 409.014†	5868.5	4840.3	489.13 µg/L	489.13 ppb	03:50:46
3	V 292.402†	42583.3	41189.3	501.15 µg/L	501.15 ppb	03:50:46
3	Zn 213.857†	18923.2	17751.5	497.77 µg/L	497.77 ppb	03:50:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2004658.2	103.08	%	0.455				0.44%
Sc RADIAL	116107.0	104	%	0.2				0.23%
Y 371.029	1211818.8	102.59	%	0.457				0.45%
Ag 328.068†	52715.2	505.62	µg/L	4.632	505.62	ppb	4.632	0.92%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	9721.1	5043.5	µg/L	11.99	5043.5	ppb	11.99	0.24%
QC value within limits for Al 396.153Radial Recovery = 100.87%								
As 188.979†	252.3	502.74	µg/L	4.963	502.74	ppb	4.963	0.99%
QC value within limits for As 188.979 Recovery = 100.55%								
B 249.677†	10680.2	499.19	µg/L	5.083	499.19	ppb	5.083	1.02%
QC value within limits for B 249.677 Recovery = 99.84%								
Ba 233.527†	18842.8	505.31	µg/L	5.334	505.31	ppb	5.334	1.06%
QC value within limits for Ba 233.527 Recovery = 101.06%								
Be 313.107†	758806.1	504.65	µg/L	3.758	504.65	ppb	3.758	0.74%
QC value within limits for Be 313.107 Recovery = 100.93%								
Ca 317.933Radial†	12966.5	5106.9	µg/L	13.68	5106.9	ppb	13.68	0.27%
QC value within limits for Ca 317.933Radial Recovery = 102.14%								
Cd 226.502†	17992.8	506.22	µg/L	5.728	506.22	ppb	5.728	1.13%
QC value within limits for Cd 226.502 Recovery = 101.24%								
Co 228.616†	9939.7	504.34	µg/L	5.924	504.34	ppb	5.924	1.17%

```
   QC value within limits for Co 228.616  Recovery = 100.87%
Cr 267.716†            22645.9      504.94 µg/L        5.799      504.94 ppb          5.799   1.15%
   QC value within limits for Cr 267.716  Recovery = 100.99%
Cu 324.752†            67617.6      505.65 µg/L        4.964      505.65 ppb          4.964   0.98%
   QC value within limits for Cu 324.752  Recovery = 101.13%
Fe 238.204 Radial†       996.9      5140.1 µg/L       36.75      5140.1 ppb         36.75   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.80%
K 766.490 Radial†       8843.0      4961.1 µg/L       27.05      4961.1 ppb         27.05   0.55%
   QC value within limits for K 766.490 Radial  Recovery = 99.22%
Mg 279.077 IEC†          929.3      5190.8 µg/L       25.98      5190.8 ppb         25.98   0.50%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.82%
Mn 257.610†           151640.2      506.68 µg/L        3.092      506.68 ppb          3.092   0.61%
   QC value within limits for Mn 257.610  Recovery = 101.34%
Mo 202.031†             4177.0      501.49 µg/L        3.911      501.49 ppb          3.911   0.78%
   QC value within limits for Mo 202.031  Recovery = 100.30%
Na 589.592 Radial†     36078.5       10059 µg/L         28.5       10059 ppb           28.5   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 100.59%
Ni 231.604†             8725.2      503.10 µg/L        5.445      503.10 ppb          5.445   1.08%
   QC value within limits for Ni 231.604  Recovery = 100.62%
P 214.914†              1104.2      2441.9 µg/L       28.82      2441.9 ppb         28.82   1.18%
   QC value within limits for P 214.914  Recovery = 97.67%
Pb 220.353†             1897.2      508.24 µg/L        4.146      508.24 ppb          4.146   0.82%
   QC value within limits for Pb 220.353  Recovery = 101.65%
S 181.975 Axial†         196.9      1051.5 µg/L        9.87      1051.5 ppb          9.87   0.94%
   QC value within limits for S 181.975 Axial  Recovery = 105.15%
Sb 206.836†              476.8      502.00 µg/L        7.599      502.00 ppb          7.599   1.51%
   QC value within limits for Sb 206.836  Recovery = 100.40%
Se 196.026†              335.5      504.95 µg/L        7.811      504.95 ppb          7.811   1.55%
   QC value within limits for Se 196.026  Recovery = 100.99%
SiO2†                  26167.4      5317.7 µg/L       58.89      5317.7 ppb         58.89   1.11%
   QC value within limits for SiO2  Recovery = 99.44%
Si 251.611†            30719.4      2445.7 µg/L       28.83      2445.7 ppb         28.83   1.18%
   QC value within limits for Si 251.611  Recovery = 97.83%
Sn 189.927†              965.4      505.22 µg/L        5.261      505.22 ppb          5.261   1.04%
   QC value within limits for Sn 189.927  Recovery = 101.04%
Sr 421.552†            87493.4      499.62 µg/L        1.913      499.62 ppb          1.913   0.38%
   QC value within limits for Sr 421.552  Recovery = 99.92%
Ti 334.940†           214633.2      503.73 µg/L        3.272      503.73 ppb          3.272   0.65%
   QC value within limits for Ti 334.940  Recovery = 100.75%
Tl 190.801†              315.1      507.76 µg/L        9.878      507.76 ppb          9.878   1.95%
   QC value within limits for Tl 190.801  Recovery = 101.55%
U 409.014†              4844.0      489.49 µg/L        0.467      489.49 ppb          0.467   0.10%
   QC value within limits for U 409.014  Recovery = 97.90%
V 292.402†             41647.4      506.70 µg/L        4.976      506.70 ppb          4.976   0.98%
   QC value within limits for V 292.402  Recovery = 101.34%
Zn 213.857†            17962.8      503.69 µg/L        5.361      503.69 ppb          5.361   1.06%
   QC value within limits for Zn 213.857  Recovery = 100.74%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 03:51:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113831.0	113831.0	102	%			03:51:48
1	Al 396.153Radial†	225.4	57.0	29.637	µg/L	29.637	ppb	03:51:48
1	Ca 317.933Radial†	507.3	88.5	34.870	µg/L	34.870	ppb	03:52:08
1	Fe 238.204 Radial†	12.7	5.4	27.979	µg/L	27.979	ppb	03:52:08
1	K 766.490 Radial†	822.6	-35.6	-19.988	µg/L	-19.988	ppb	03:51:48
1	Mg 279.077 IEC†	24.9	8.9	49.742	µg/L	49.742	ppb	03:52:08
1	Na 589.592 Radial†	-556.5	-38.0	-10.599	µg/L	-10.599	ppb	03:51:48
1	Sr 421.552†	15.8	98.1	0.5600	µg/L	0.5600	ppb	03:51:48
1	Sc 361.383	1993600.9	1993600.9	102.52	%			03:53:11
1	Y 371.029	1210616.8	1210616.8	102.49	%			03:53:11
1	Ag 328.068†	-14.3	87.3	0.8374	µg/L	0.8374	ppb	03:53:16
1	As 188.979†	3.1	-2.1	-4.2524	µg/L	-4.2524	ppb	03:53:37
1	B 249.677†	227.7	70.9	3.3158	µg/L	3.3158	ppb	03:53:16
1	Ba 233.527†	-37.6	42.5	1.1379	µg/L	1.1379	ppb	03:53:37
1	Be 313.107†	4044.1	279.2	0.1854	µg/L	0.1854	ppb	03:53:16
1	Cd 226.502†	-60.4	38.6	1.0741	µg/L	1.0741	ppb	03:53:37
1	Co 228.616†	-59.6	9.2	0.4662	µg/L	0.4662	ppb	03:53:37
1	Cr 267.716†	-17.5	110.1	2.4500	µg/L	2.4500	ppb	03:53:16
1	Cu 324.752†	3456.5	105.6	0.7941	µg/L	0.7941	ppb	03:53:16
1	Mn 257.610†	11.3	242.2	0.8118	µg/L	0.8118	ppb	03:53:37
1	Mo 202.031†	-0.1	4.8	0.5748	µg/L	0.5748	ppb	03:53:37
1	Ni 231.604†	305.8	16.6	0.9590	µg/L	0.9590	ppb	03:53:37
1	P 214.914†	197.4	-11.6	-26.478	µg/L	-26.478	ppb	03:53:37
1	Pb 220.353†	55.6	-1.7	-0.4516	µg/L	-0.4516	ppb	03:53:37
1	S 181.975 Axial†	40.9	1.0	5.5001	µg/L	5.5001	ppb	03:53:37
1	Sb 206.836†	17.5	-1.8	-1.9377	µg/L	-1.9377	ppb	03:53:37
1	Se 196.026†	15.4	4.2	6.2985	µg/L	6.2985	ppb	03:53:37
1	SiO2†	2104.4	-23.0	-4.6683	µg/L	-4.6683	ppb	03:53:16
1	Si 251.611†	395.6	71.2	5.8403	µg/L	5.8403	ppb	03:53:37
1	Sn 189.927†	20.2	-4.6	-2.3826	µg/L	-2.3826	ppb	03:53:37
1	Ti 334.940†	1221.0	394.4	0.9241	µg/L	0.9241	ppb	03:53:16
1	Tl 190.801†	-16.7	3.1	4.9312	µg/L	4.9312	ppb	03:53:37
1	U 409.014†	726.9	-116.4	-11.786	µg/L	-11.786	ppb	03:53:16
1	V 292.402†	-31.8	45.6	0.5366	µg/L	0.5366	ppb	03:53:16
1	Zn 213.857†	562.5	30.5	0.8519	µg/L	0.8519	ppb	03:53:37
2	Sc RADIAL	113812.4	113812.4	102	%			03:52:14
2	Al 396.153Radial†	224.5	56.1	29.206	µg/L	29.206	ppb	03:52:14
2	Ca 317.933Radial†	494.1	75.7	29.820	µg/L	29.820	ppb	03:52:34
2	Fe 238.204 Radial†	14.2	6.9	35.528	µg/L	35.528	ppb	03:52:34
2	K 766.490 Radial†	826.3	-31.9	-17.923	µg/L	-17.923	ppb	03:52:14
2	Mg 279.077 IEC†	22.9	6.9	38.658	µg/L	38.658	ppb	03:52:34
2	Na 589.592 Radial†	-569.9	-51.2	-14.265	µg/L	-14.265	ppb	03:52:14
2	Sr 421.552†	38.9	120.7	0.6891	µg/L	0.6891	ppb	03:52:14
2	Sc 361.383	1991815.5	1991815.5	102.42	%			03:53:43
2	Y 371.029	1210794.5	1210794.5	102.50	%			03:53:43
2	Ag 328.068†	-98.1	5.5	0.0562	µg/L	0.0562	ppb	03:53:48
2	As 188.979†	0.7	-4.4	-8.7729	µg/L	-8.7729	ppb	03:54:09
2	B 249.677†	191.1	35.4	1.6496	µg/L	1.6496	ppb	03:53:48
2	Ba 233.527†	-49.7	30.6	0.8200	µg/L	0.8200	ppb	03:54:09
2	Be 313.107†	4005.6	245.2	0.1630	µg/L	0.1630	ppb	03:53:48
2	Cd 226.502†	-70.1	29.0	0.8029	µg/L	0.8029	ppb	03:54:09
2	Co 228.616†	-56.1	12.6	0.6394	µg/L	0.6394	ppb	03:54:09
2	Cr 267.716†	-57.3	71.3	1.5859	µg/L	1.5859	ppb	03:53:48
2	Cu 324.752†	3384.9	38.8	0.2972	µg/L	0.2972	ppb	03:53:48
2	Mn 257.610†	-32.6	199.4	0.6699	µg/L	0.6699	ppb	03:54:09
2	Mo 202.031†	2.3	7.1	0.8497	µg/L	0.8497	ppb	03:54:09
2	Ni 231.604†	284.6	-3.8	-0.2200	µg/L	-0.2200	ppb	03:54:09
2	P 214.914†	202.2	-6.7	-15.181	µg/L	-15.181	ppb	03:54:09
2	Pb 220.353†	60.6	3.2	0.8634	µg/L	0.8634	ppb	03:54:09

2	S 181.975 Axial†	41.8	2.0	10.594	µg/L	10.594 ppb	03:54:09
2	Sb 206.836†	19.5	0.1	0.0972	µg/L	0.0972 ppb	03:54:09
2	Se 196.026†	12.6	1.5	2.2589	µg/L	2.2589 ppb	03:54:09
2	SiO2†	2060.8	-63.6	-12.934	µg/L	-12.934 ppb	03:53:48
2	Si 251.611†	420.8	96.2	7.7537	µg/L	7.7537 ppb	03:54:09
2	Sn 189.927†	26.5	1.5	0.7961	µg/L	0.7961 ppb	03:54:09
2	Ti 334.940†	1047.2	225.8	0.5286	µg/L	0.5286 ppb	03:53:48
2	Tl 190.801†	-18.6	1.2	1.9204	µg/L	1.9204 ppb	03:54:09
2	U 409.014†	701.9	-140.2	-14.197	µg/L	-14.197 ppb	03:53:48
2	V 292.402†	-61.0	17.0	0.1907	µg/L	0.1907 ppb	03:53:48
2	Zn 213.857†	563.1	31.6	0.8878	µg/L	0.8878 ppb	03:54:09
3	Sc RADIAL	112529.7	112529.7	101	%		03:52:40
3	Al 396.153Radial†	247.0	80.9	42.154	µg/L	42.154 ppb	03:52:40
3	Ca 317.933Radial†	510.0	97.0	38.191	µg/L	38.191 ppb	03:53:00
3	Fe 238.204 Radial†	13.8	6.6	34.188	µg/L	34.188 ppb	03:53:00
3	K 766.490 Radial†	848.5	-0.7	-0.4198	µg/L	-0.4198 ppb	03:52:40
3	Mg 279.077 IEC†	25.1	9.4	52.127	µg/L	52.127 ppb	03:53:00
3	Na 589.592 Radial†	-542.6	-30.6	-8.5226	µg/L	-8.5226 ppb	03:52:40
3	Sr 421.552†	48.2	130.3	0.7443	µg/L	0.7443 ppb	03:52:40
3	Sc 361.383	1983398.1	1983398.1	101.99	%		03:54:15
3	Y 371.029	1204482.0	1204482.0	101.97	%		03:54:15
3	Ag 328.068†	-81.5	21.4	0.2099	µg/L	0.2099 ppb	03:54:20
3	As 188.979†	0.8	-4.3	-8.6878	µg/L	-8.6878 ppb	03:54:41
3	B 249.677†	201.2	46.1	2.1494	µg/L	2.1494 ppb	03:54:20
3	Ba 233.527†	-42.2	37.8	1.0133	µg/L	1.0133 ppb	03:54:41
3	Be 313.107†	3894.4	152.7	0.1013	µg/L	0.1013 ppb	03:54:20
3	Cd 226.502†	-67.7	31.0	0.8631	µg/L	0.8631 ppb	03:54:41
3	Co 228.616†	-60.0	8.5	0.4302	µg/L	0.4302 ppb	03:54:41
3	Cr 267.716†	-25.3	102.4	2.2786	µg/L	2.2786 ppb	03:54:20
3	Cu 324.752†	3348.2	16.8	0.1326	µg/L	0.1326 ppb	03:54:20
3	Mn 257.610†	-29.4	202.4	0.6796	µg/L	0.6796 ppb	03:54:41
3	Mo 202.031†	-6.6	-1.6	-0.1903	µg/L	-0.1903 ppb	03:54:41
3	Ni 231.604†	289.5	2.1	0.1228	µg/L	0.1228 ppb	03:54:41
3	P 214.914†	195.6	-12.4	-28.102	µg/L	-28.102 ppb	03:54:41
3	Pb 220.353†	61.5	4.3	1.1507	µg/L	1.1507 ppb	03:54:41
3	S 181.975 Axial†	40.6	1.0	5.2816	µg/L	5.2816 ppb	03:54:41
3	Sb 206.836†	23.4	4.0	4.1900	µg/L	4.1900 ppb	03:54:41
3	Se 196.026†	1.6	-9.3	-13.931	µg/L	-13.931 ppb	03:54:41
3	SiO2†	2025.3	-89.9	-18.271	µg/L	-18.271 ppb	03:54:20
3	Si 251.611†	384.0	61.8	5.0101	µg/L	5.0101 ppb	03:54:41
3	Sn 189.927†	24.0	-0.8	-0.4096	µg/L	-0.4096 ppb	03:54:41
3	Ti 334.940†	1144.3	325.3	0.7618	µg/L	0.7618 ppb	03:54:20
3	Tl 190.801†	-19.3	0.4	0.6354	µg/L	0.6354 ppb	03:54:41
3	U 409.014†	749.5	-90.6	-9.1731	µg/L	-9.1731 ppb	03:54:20
3	V 292.402†	-29.3	47.9	0.5636	µg/L	0.5636 ppb	03:54:20
3	Zn 213.857†	551.1	22.1	0.6196	µg/L	0.6196 ppb	03:54:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1989604.8	102.31	%	0.280				0.27%
Sc RADIAL	113391.0	102	%	0.7				0.66%
Y 371.029	1208631.1	102.32	%	0.304				0.30%
Ag 328.068†	38.1	0.3678	µg/L	0.41382	0.3678	ppb	0.41382	112.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	64.7	33.666	µg/L	7.3542	33.666	ppb	7.3542	21.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.2377	µg/L	2.58571	-7.2377	ppb	2.58571	35.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	50.8	2.3716	µg/L	0.85502	2.3716	ppb	0.85502	36.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	37.0	0.9904	µg/L	0.16018	0.9904	ppb	0.16018	16.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	225.7	0.1499	µg/L	0.04354	0.1499	ppb	0.04354	29.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	87.1	34.293	µg/L	4.2152	34.293	ppb	4.2152	12.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	32.9	0.9134	µg/L	0.14240	0.9134	ppb	0.14240	15.59%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	10.1	0.5119	µg/L	0.11184	0.5119	ppb	0.11184	21.85%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                94.6      2.1048 µg/L       0.45750      2.1048 ppb        0.45750  21.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                53.7      0.4080 µg/L       0.34443      0.4080 ppb        0.34443  84.43%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          6.3      32.565 µg/L        4.0273      32.565 ppb         4.0273  12.37%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -22.8     -12.777 µg/L       10.7511     -12.777 ppb        10.7511  84.15%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             8.4      46.843 µg/L        7.1875      46.843 ppb         7.1875  15.34%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               214.7      0.7204 µg/L       0.07930      0.7204 ppb        0.07930  11.01%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.4      0.4114 µg/L       0.53894      0.4114 ppb        0.53894 131.00%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -39.9     -11.129 µg/L        2.9078     -11.129 ppb         2.9078  26.13%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.0      0.2873 µg/L       0.60646      0.2873 ppb        0.60646 211.13%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -10.2     -23.254 µg/L        7.0380     -23.254 ppb         7.0380  30.27%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.9      0.5208 µg/L       0.85429      0.5208 ppb        0.85429 164.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.3      7.1254 µg/L       3.00627      7.1254 ppb        3.00627  42.19%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.8      0.7832 µg/L       3.12094      0.7832 ppb        3.12094 398.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.2     -1.7912 µg/L      10.70562     -1.7912 ppb       10.70562 597.68%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -58.8     -11.958 µg/L        6.8539     -11.958 ppb         6.8539  57.32%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                76.4      6.2014 µg/L       1.40704      6.2014 ppb        1.40704  22.69%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.3     -0.6654 µg/L       1.60469     -0.6654 ppb        1.60469 241.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               116.4      0.6644 µg/L       0.09457      0.6644 ppb        0.09457  14.23%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               315.2      0.7382 µg/L       0.19883      0.7382 ppb        0.19883  26.94%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.6      2.4957 µg/L       2.20493      2.4957 ppb        2.20493  88.35%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -115.7     -11.719 µg/L        2.5125     -11.719 ppb         2.5125  21.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 36.8      0.4303 µg/L       0.20792      0.4303 ppb        0.20792  48.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                28.1      0.7864 µg/L       0.14562      0.7864 ppb        0.14562  18.52%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 04:34:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111534.1	111534.1	100	%			04:35:22
1	Al 396.153Radial†	10314.3	10128.5	5255.4	µg/L	5255.4	ppb	04:35:22
1	Ca 317.933Radial†	13514.5	13077.8	5150.7	µg/L	5150.7	ppb	04:35:43
1	Fe 238.204 Radial†	1044.3	1035.1	5336.4	µg/L	5336.4	ppb	04:35:43
1	K 766.490 Radial†	10184.9	9322.8	5230.3	µg/L	5230.3	ppb	04:35:22
1	Mg 279.077 IEC†	983.7	966.1	5396.3	µg/L	5396.3	ppb	04:35:43
1	Na 589.592 Radial†	36895.3	37321.2	10405	µg/L	10405	ppb	04:35:22
1	Sr 421.552†	90247.4	90133.8	514.70	µg/L	514.70	ppb	04:35:22
1	Sc 361.383	1958966.7	1958966.7	100.73	%			04:36:46
1	Y 371.029	1184212.7	1184212.7	100.25	%			04:36:46
1	Ag 328.068†	54229.6	53935.3	517.30	µg/L	517.30	ppb	04:36:52
1	As 188.979†	260.6	253.6	505.30	µg/L	505.30	ppb	04:37:12
1	B 249.677†	11006.7	10775.2	503.58	µg/L	503.58	ppb	04:36:52
1	Ba 233.527†	19121.1	19060.9	511.16	µg/L	511.16	ppb	04:36:52
1	Be 313.107†	774359.1	765046.4	508.80	µg/L	508.80	ppb	04:36:46
1	Cd 226.502†	18181.2	18146.1	510.52	µg/L	510.52	ppb	04:36:52
1	Co 228.616†	10065.0	10059.0	510.39	µg/L	510.39	ppb	04:36:52
1	Cr 267.716†	22870.7	22831.1	509.08	µg/L	509.08	ppb	04:36:52
1	Cu 324.752†	72754.8	68958.2	515.70	µg/L	515.70	ppb	04:36:52
1	Mn 257.610†	153477.1	152589.0	509.87	µg/L	509.87	ppb	04:36:46
1	Mo 202.031†	4258.3	4232.1	508.11	µg/L	508.11	ppb	04:37:12
1	Ni 231.604†	9217.1	8868.2	511.35	µg/L	511.35	ppb	04:36:52
1	P 214.914†	1325.0	1111.2	2456.5	µg/L	2456.5	ppb	04:37:12
1	Pb 220.353†	1967.1	1896.7	508.14	µg/L	508.14	ppb	04:37:12
1	S 181.975 Axial†	217.6	177.1	945.55	µg/L	945.55	ppb	04:37:12
1	Sb 206.836†	513.9	491.2	517.26	µg/L	517.26	ppb	04:37:12
1	Se 196.026†	353.8	340.4	512.35	µg/L	512.35	ppb	04:37:12
1	SiO2†	28871.0	26584.8	5402.5	µg/L	5402.5	ppb	04:36:52
1	Si 251.611†	31776.6	31230.2	2486.5	µg/L	2486.5	ppb	04:36:52
1	Sn 189.927†	1008.1	976.4	510.99	µg/L	510.99	ppb	04:37:12
1	Ti 334.940†	219105.3	216710.9	508.61	µg/L	508.61	ppb	04:36:46
1	Tl 190.801†	304.4	321.5	517.99	µg/L	517.99	ppb	04:37:12
1	U 409.014†	5795.9	4928.2	497.98	µg/L	497.98	ppb	04:36:52
1	V 292.402†	42549.5	42315.7	514.83	µg/L	514.83	ppb	04:36:52
1	Zn 213.857†	18790.0	18134.8	508.47	µg/L	508.47	ppb	04:36:52
2	Sc RADIAL	111458.0	111458.0	100	%			04:35:48
2	Al 396.153Radial†	10234.7	10056.1	5217.8	µg/L	5217.8	ppb	04:35:48
2	Ca 317.933Radial†	13508.8	13081.2	5152.1	µg/L	5152.1	ppb	04:36:09
2	Fe 238.204 Radial†	1036.0	1027.5	5297.5	µg/L	5297.5	ppb	04:36:09
2	K 766.490 Radial†	10146.3	9291.3	5212.6	µg/L	5212.6	ppb	04:35:48
2	Mg 279.077 IEC†	975.9	959.0	5356.7	µg/L	5356.7	ppb	04:36:09
2	Na 589.592 Radial†	36791.2	37242.3	10383	µg/L	10383	ppb	04:35:48
2	Sr 421.552†	89957.9	89906.2	513.40	µg/L	513.40	ppb	04:35:48
2	Sc 361.383	1971856.7	1971856.7	101.40	%			04:37:20
2	Y 371.029	1191315.0	1191315.0	100.85	%			04:37:20
2	Ag 328.068†	54330.2	53682.7	514.88	µg/L	514.88	ppb	04:37:25
2	As 188.979†	264.0	255.3	508.63	µg/L	508.63	ppb	04:37:46
2	B 249.677†	11116.5	10812.1	505.32	µg/L	505.32	ppb	04:37:25
2	Ba 233.527†	19172.1	18987.0	509.18	µg/L	509.18	ppb	04:37:25
2	Be 313.107†	783035.7	768578.4	511.15	µg/L	511.15	ppb	04:37:20
2	Cd 226.502†	18230.0	18076.2	508.56	µg/L	508.56	ppb	04:37:25
2	Co 228.616†	10085.7	10014.1	508.11	µg/L	508.11	ppb	04:37:25
2	Cr 267.716†	22976.9	22787.4	508.10	µg/L	508.10	ppb	04:37:25
2	Cu 324.752†	72826.3	68556.6	512.69	µg/L	512.69	ppb	04:37:25
2	Mn 257.610†	155143.8	153236.8	512.03	µg/L	512.03	ppb	04:37:20
2	Mo 202.031†	4270.9	4216.9	506.28	µg/L	506.28	ppb	04:37:46
2	Ni 231.604†	9237.8	8828.8	509.07	µg/L	509.07	ppb	04:37:25
2	P 214.914†	1332.3	1109.8	2453.6	µg/L	2453.6	ppb	04:37:46
2	Pb 220.353†	1979.9	1896.7	508.11	µg/L	508.11	ppb	04:37:46

2	S 181.975 Axial†	227.5	185.5	990.35 µg/L	990.35 ppb	04:37:46
2	Sb 206.836†	508.1	482.2	507.76 µg/L	507.76 ppb	04:37:46
2	Se 196.026†	352.9	337.2	507.59 µg/L	507.59 ppb	04:37:46
2	SiO2†	28992.8	26517.5	5388.8 µg/L	5388.8 ppb	04:37:25
2	Si 251.611†	31812.6	31059.6	2472.9 µg/L	2472.9 ppb	04:37:25
2	Sn 189.927†	1003.6	965.4	505.30 µg/L	505.30 ppb	04:37:46
2	Ti 334.940†	221363.3	217515.9	510.50 µg/L	510.50 ppb	04:37:20
2	Tl 190.801†	301.9	317.1	510.99 µg/L	510.99 ppb	04:37:46
2	U 409.014†	5894.2	4987.5	503.99 µg/L	503.99 ppb	04:37:25
2	V 292.402†	42650.6	42139.4	512.70 µg/L	512.70 ppb	04:37:25
2	Zn 213.857†	18849.9	18071.9	506.71 µg/L	506.71 ppb	04:37:25
3	Sc RADIAL	112764.1	112764.1	101 %		04:36:14
3	Al 396.153Radial†	10330.5	10032.2	5205.3 µg/L	5205.3 ppb	04:36:14
3	Ca 317.933Radial†	13510.4	12926.6	5091.2 µg/L	5091.2 ppb	04:36:34
3	Fe 238.204 Radial†	1034.4	1013.9	5227.9 µg/L	5227.9 ppb	04:36:34
3	K 766.490 Radial†	10229.7	9256.2	5193.0 µg/L	5193.0 ppb	04:36:14
3	Mg 279.077 IEC†	983.6	955.4	5336.3 µg/L	5336.3 ppb	04:36:34
3	Na 589.592 Radial†	36943.6	36967.3	10306 µg/L	10306 ppb	04:36:14
3	Sr 421.552†	90674.6	89573.1	511.50 µg/L	511.50 ppb	04:36:14
3	Sc 361.383	1965620.4	1965620.4	101.08 %		04:37:53
3	Y 371.029	1187943.6	1187943.6	100.57 %		04:37:53
3	Ag 328.068†	54225.3	53748.9	515.51 µg/L	515.51 ppb	04:37:58
3	As 188.979†	266.1	258.2	514.44 µg/L	514.44 ppb	04:38:19
3	B 249.677†	11032.9	10764.2	503.10 µg/L	503.10 ppb	04:37:58
3	Ba 233.527†	19111.6	18987.2	509.19 µg/L	509.19 ppb	04:37:58
3	Be 313.107†	778263.9	766307.5	509.63 µg/L	509.63 ppb	04:37:53
3	Cd 226.502†	18161.7	18065.6	508.27 µg/L	508.27 ppb	04:37:58
3	Co 228.616†	10070.1	10030.2	508.93 µg/L	508.93 ppb	04:37:58
3	Cr 267.716†	22876.0	22759.5	507.48 µg/L	507.48 ppb	04:37:58
3	Cu 324.752†	72870.5	68828.2	514.70 µg/L	514.70 ppb	04:37:58
3	Mn 257.610†	154330.6	152917.8	510.95 µg/L	510.95 ppb	04:37:53
3	Mo 202.031†	4272.6	4232.0	508.09 µg/L	508.09 ppb	04:38:19
3	Ni 231.604†	9170.0	8790.6	506.87 µg/L	506.87 ppb	04:37:58
3	P 214.914†	1334.0	1115.6	2466.6 µg/L	2466.6 ppb	04:38:19
3	Pb 220.353†	1971.9	1894.9	507.65 µg/L	507.65 ppb	04:38:19
3	S 181.975 Axial†	221.7	180.5	963.39 µg/L	963.39 ppb	04:38:19
3	Sb 206.836†	506.9	482.6	508.19 µg/L	508.19 ppb	04:38:19
3	Se 196.026†	355.4	340.8	512.92 µg/L	512.92 ppb	04:38:19
3	SiO2†	28860.2	26477.1	5380.6 µg/L	5380.6 ppb	04:37:58
3	Si 251.611†	31733.9	31081.2	2474.5 µg/L	2474.5 ppb	04:37:58
3	Sn 189.927†	1007.3	972.2	508.78 µg/L	508.78 ppb	04:38:19
3	Ti 334.940†	220182.1	217039.9	509.39 µg/L	509.39 ppb	04:37:53
3	Tl 190.801†	299.5	315.6	508.63 µg/L	508.63 ppb	04:38:19
3	U 409.014†	5888.0	4999.8	505.25 µg/L	505.25 ppb	04:37:58
3	V 292.402†	42506.7	42130.4	512.60 µg/L	512.60 ppb	04:37:58
3	Zn 213.857†	18828.4	18109.6	507.80 µg/L	507.80 ppb	04:37:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1965481.3	101.07	%	0.331				0.33%
Sc RADIAL	111918.8	101	%	0.7				0.66%
Y 371.029	1187823.8	100.56	%	0.301				0.30%
Ag 328.068†	53789.0	515.90	µg/L	1.258	515.90	ppb	1.258	0.24%
QC value within limits for Ag 328.068 Recovery = 103.18%								
Al 396.153Radial†	10072.3	5226.2	µg/L	26.11	5226.2	ppb	26.11	0.50%
QC value within limits for Al 396.153Radial Recovery = 104.52%								
As 188.979†	255.7	509.46	µg/L	4.628	509.46	ppb	4.628	0.91%
QC value within limits for As 188.979 Recovery = 101.89%								
B 249.677†	10783.8	504.00	µg/L	1.169	504.00	ppb	1.169	0.23%
QC value within limits for B 249.677 Recovery = 100.80%								
Ba 233.527†	19011.7	509.84	µg/L	1.143	509.84	ppb	1.143	0.22%
QC value within limits for Ba 233.527 Recovery = 101.97%								
Be 313.107†	766644.1	509.86	µg/L	1.190	509.86	ppb	1.190	0.23%
QC value within limits for Be 313.107 Recovery = 101.97%								
Ca 317.933Radial†	13028.5	5131.3	µg/L	34.77	5131.3	ppb	34.77	0.68%
QC value within limits for Ca 317.933Radial Recovery = 102.63%								
Cd 226.502†	18096.0	509.12	µg/L	1.224	509.12	ppb	1.224	0.24%
QC value within limits for Cd 226.502 Recovery = 101.82%								
Co 228.616†	10034.4	509.15	µg/L	1.157	509.15	ppb	1.157	0.23%

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   QC value within limits for Co 228.616  Recovery = 101.83%
Cr 267.716†            22792.7      508.22 µg/L        0.806      508.22 ppb        0.806   0.16%
   QC value within limits for Cr 267.716  Recovery = 101.64%
Cu 324.752†            68781.0      514.36 µg/L        1.531      514.36 ppb        1.531   0.30%
   QC value within limits for Cu 324.752  Recovery = 102.87%
Fe 238.204 Radial†      1025.5      5287.3 µg/L       55.01      5287.3 ppb       55.01   1.04%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.75%
K 766.490 Radial†       9290.1      5212.0 µg/L       18.69      5212.0 ppb       18.69   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 104.24%
Mg 279.077 IEC†          960.2      5363.1 µg/L       30.51      5363.1 ppb       30.51   0.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.26%
Mn 257.610†           152914.5      510.95 µg/L        1.078      510.95 ppb        1.078   0.21%
   QC value within limits for Mn 257.610  Recovery = 102.19%
Mo 202.031†             4227.0      507.49 µg/L        1.047      507.49 ppb        1.047   0.21%
   QC value within limits for Mo 202.031  Recovery = 101.50%
Na 589.592 Radial†     37176.9       10365 µg/L        51.8       10365 ppb        51.8   0.50%
   QC value within limits for Na 589.592 Radial  Recovery = 103.65%
Ni 231.604†             8829.2      509.10 µg/L        2.237      509.10 ppb        2.237   0.44%
   QC value within limits for Ni 231.604  Recovery = 101.82%
P 214.914†              1112.2      2458.9 µg/L        6.82      2458.9 ppb        6.82   0.28%
   QC value within limits for P 214.914  Recovery = 98.35%
Pb 220.353†             1896.1      507.97 µg/L        0.274      507.97 ppb        0.274   0.05%
   QC value within limits for Pb 220.353  Recovery = 101.59%
S 181.975 Axial†         181.0      966.43 µg/L       22.554      966.43 ppb       22.554   2.33%
   QC value within limits for S 181.975 Axial  Recovery = 96.64%
Sb 206.836†              485.3      511.07 µg/L        5.363      511.07 ppb        5.363   1.05%
   QC value within limits for Sb 206.836  Recovery = 102.21%
Se 196.026†              339.5      510.95 µg/L        2.928      510.95 ppb        2.928   0.57%
   QC value within limits for Se 196.026  Recovery = 102.19%
SiO2†                   26526.5      5390.6 µg/L       11.06      5390.6 ppb       11.06   0.21%
   QC value within limits for SiO2  Recovery = 100.81%
Si 251.611†             31123.7      2478.0 µg/L        7.46      2478.0 ppb        7.46   0.30%
   QC value within limits for Si 251.611  Recovery = 99.12%
Sn 189.927†              971.3      508.36 µg/L        2.869      508.36 ppb        2.869   0.56%
   QC value within limits for Sn 189.927  Recovery = 101.67%
Sr 421.552†             89871.1      513.20 µg/L        1.610      513.20 ppb        1.610   0.31%
   QC value within limits for Sr 421.552  Recovery = 102.64%
Ti 334.940†            217088.9      509.50 µg/L        0.950      509.50 ppb        0.950   0.19%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†              318.1      512.54 µg/L        4.870      512.54 ppb        4.870   0.95%
   QC value within limits for Tl 190.801  Recovery = 102.51%
U 409.014†              4971.8      502.41 µg/L        3.883      502.41 ppb        3.883   0.77%
   QC value within limits for U 409.014  Recovery = 100.48%
V 292.402†              42195.2      513.38 µg/L        1.260      513.38 ppb        1.260   0.25%
   QC value within limits for V 292.402  Recovery = 102.68%
Zn 213.857†             18105.5      507.66 µg/L        0.885      507.66 ppb        0.885   0.17%
   QC value within limits for Zn 213.857  Recovery = 101.53%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/15/2009 04:38:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111753.6	111753.6	100	%			04:39:02
1	Al 396.153Radial†	606.8	440.9	229.23	µg/L	229.23	ppb	04:39:02
1	Ca 317.933Radial†	943.1	531.8	209.43	µg/L	209.43	ppb	04:39:23
1	Fe 238.204 Radial†	28.8	21.8	111.97	µg/L	111.97	ppb	04:39:23
1	K 766.490 Radial†	1031.5	187.3	105.07	µg/L	105.07	ppb	04:39:02
1	Mg 279.077 IEC†	82.8	67.0	374.22	µg/L	374.22	ppb	04:39:23
1	Na 589.592 Radial†	583.9	1087.6	303.22	µg/L	303.22	ppb	04:39:02
1	Sr 421.552†	864.7	943.7	5.3890	µg/L	5.3890	ppb	04:39:02
1	Sc 361.383	2011530.6	2011530.6	103.44	%			04:40:25
1	Y 371.029	1223829.6	1223829.6	103.60	%			04:40:25
1	Ag 328.068†	481.0	566.3	5.4332	µg/L	5.4332	ppb	04:40:30
1	As 188.979†	15.9	10.3	20.503	µg/L	20.503	ppb	04:40:51
1	B 249.677†	1254.5	1061.7	49.747	µg/L	49.747	ppb	04:40:30
1	Ba 233.527†	141.0	215.5	5.7768	µg/L	5.7768	ppb	04:40:51
1	Be 313.107†	11404.5	7359.8	4.8947	µg/L	4.8947	ppb	04:40:30
1	Cd 226.502†	91.9	186.3	5.2603	µg/L	5.2603	ppb	04:40:51
1	Co 228.616†	24.2	90.8	4.6201	µg/L	4.6201	ppb	04:40:51
1	Cr 267.716†	98.5	222.4	4.9590	µg/L	4.9590	ppb	04:40:30
1	Cu 324.752†	4706.7	1284.2	9.6067	µg/L	9.6067	ppb	04:40:30
1	Mn 257.610†	3009.6	3140.8	10.495	µg/L	10.495	ppb	04:40:30
1	Mo 202.031†	84.6	86.7	10.404	µg/L	10.404	ppb	04:40:51
1	Ni 231.604†	365.2	71.3	4.1140	µg/L	4.1140	ppb	04:40:51
1	P 214.914†	265.9	52.9	118.59	µg/L	118.59	ppb	04:40:51
1	Pb 220.353†	101.6	42.3	11.308	µg/L	11.308	ppb	04:40:51
1	S 181.975 Axial†	55.2	14.5	77.363	µg/L	77.363	ppb	04:40:51
1	Sb 206.836†	24.5	4.8	5.0569	µg/L	5.0569	ppb	04:40:51
1	Se 196.026†	29.5	17.7	26.537	µg/L	26.537	ppb	04:40:51
1	SiO2†	3148.8	968.4	196.80	µg/L	196.80	ppb	04:40:30
1	Si 251.611†	1649.8	1280.3	103.31	µg/L	103.31	ppb	04:40:51
1	Sn 189.927†	37.0	11.4	6.0867	µg/L	6.0867	ppb	04:40:51
1	Ti 334.940†	2997.7	2101.5	4.9231	µg/L	4.9231	ppb	04:40:30
1	Tl 190.801†	-5.5	14.0	22.524	µg/L	22.524	ppb	04:40:51
1	U 409.014†	1264.2	396.7	40.138	µg/L	40.138	ppb	04:40:30
1	V 292.402†	343.0	408.2	5.0668	µg/L	5.0668	ppb	04:40:30
1	Zn 213.857†	897.0	348.9	9.8057	µg/L	9.8057	ppb	04:40:51
2	Sc RADIAL	110263.0	110263.0	99.1	%			04:39:28
2	Al 396.153Radial†	605.8	448.1	232.98	µg/L	232.98	ppb	04:39:28
2	Ca 317.933Radial†	935.0	536.3	211.22	µg/L	211.22	ppb	04:39:49
2	Fe 238.204 Radial†	28.9	22.2	114.50	µg/L	114.50	ppb	04:39:49
2	K 766.490 Radial†	1061.3	231.3	129.77	µg/L	129.77	ppb	04:39:28
2	Mg 279.077 IEC†	73.4	58.6	327.26	µg/L	327.26	ppb	04:39:49
2	Na 589.592 Radial†	517.8	1028.7	286.80	µg/L	286.80	ppb	04:39:28
2	Sr 421.552†	893.3	984.2	5.6203	µg/L	5.6203	ppb	04:39:28
2	Sc 361.383	1977581.0	1977581.0	101.69	%			04:40:57
2	Y 371.029	1202241.1	1202241.1	101.78	%			04:40:57
2	Ag 328.068†	538.5	630.8	6.0478	µg/L	6.0478	ppb	04:41:03
2	As 188.979†	21.1	15.6	31.164	µg/L	31.164	ppb	04:41:23
2	B 249.677†	1244.4	1072.5	50.256	µg/L	50.256	ppb	04:41:03
2	Ba 233.527†	131.1	208.1	5.5794	µg/L	5.5794	ppb	04:41:23
2	Be 313.107†	11407.2	7551.8	5.0223	µg/L	5.0223	ppb	04:41:03
2	Cd 226.502†	86.0	182.0	5.1456	µg/L	5.1456	ppb	04:41:23
2	Co 228.616†	36.3	103.1	5.2435	µg/L	5.2435	ppb	04:41:23
2	Cr 267.716†	114.7	240.0	5.3511	µg/L	5.3511	ppb	04:41:03
2	Cu 324.752†	4719.5	1375.0	10.284	µg/L	10.284	ppb	04:41:03
2	Mn 257.610†	3031.7	3212.4	10.735	µg/L	10.735	ppb	04:41:03
2	Mo 202.031†	80.4	83.9	10.078	µg/L	10.078	ppb	04:41:23
2	Ni 231.604†	389.7	101.5	5.8543	µg/L	5.8543	ppb	04:41:23
2	P 214.914†	264.9	56.4	126.35	µg/L	126.35	ppb	04:41:23
2	Pb 220.353†	97.7	40.0	10.705	µg/L	10.705	ppb	04:41:23

2	S 181.975 Axial†	52.4	12.7	67.995 µg/L	67.995 ppb	04:41:23
2	Sb 206.836†	28.8	9.4	9.8883 µg/L	9.8883 ppb	04:41:23
2	Se 196.026†	30.3	19.0	28.402 µg/L	28.402 ppb	04:41:23
2	SiO2†	3131.1	1003.3	203.88 µg/L	203.88 ppb	04:41:03
2	Si 251.611†	1615.9	1274.3	102.66 µg/L	102.66 ppb	04:41:23
2	Sn 189.927†	44.0	18.9	9.9637 µg/L	9.9637 ppb	04:41:23
2	Ti 334.940†	2992.4	2146.0	5.0275 µg/L	5.0275 ppb	04:41:03
2	Tl 190.801†	-7.0	12.4	19.958 µg/L	19.958 ppb	04:41:23
2	U 409.014†	1281.0	434.2	43.938 µg/L	43.938 ppb	04:41:03
2	V 292.402†	347.8	418.6	5.1958 µg/L	5.1958 ppb	04:41:03
2	Zn 213.857†	883.6	350.7	9.8450 µg/L	9.8450 ppb	04:41:23
3	Sc RADIAL	111080.8	111080.8	99.8 %		04:39:54
3	Al 396.153Radial†	554.3	392.0	203.77 µg/L	203.77 ppb	04:39:54
3	Ca 317.933Radial†	937.1	531.4	209.31 µg/L	209.31 ppb	04:40:15
3	Fe 238.204 Radial†	28.4	21.4	110.40 µg/L	110.40 ppb	04:40:15
3	K 766.490 Radial†	1073.5	235.6	132.20 µg/L	132.20 ppb	04:39:54
3	Mg 279.077 IEC†	85.1	69.8	389.58 µg/L	389.58 ppb	04:40:15
3	Na 589.592 Radial†	556.0	1063.1	296.40 µg/L	296.40 ppb	04:39:54
3	Sr 421.552†	855.9	940.2	5.3688 µg/L	5.3688 ppb	04:39:54
3	Sc 361.383	1991721.4	1991721.4	102.42 %		04:41:29
3	Y 371.029	1210632.9	1210632.9	102.49 %		04:41:29
3	Ag 328.068†	544.3	632.7	6.0668 µg/L	6.0668 ppb	04:41:35
3	As 188.979†	18.1	12.6	25.010 µg/L	25.010 ppb	04:41:56
3	B 249.677†	1204.4	1024.8	48.017 µg/L	48.017 ppb	04:41:35
3	Ba 233.527†	146.8	222.5	5.9648 µg/L	5.9648 ppb	04:41:56
3	Be 313.107†	11356.1	7422.2	4.9361 µg/L	4.9361 ppb	04:41:35
3	Cd 226.502†	91.9	187.2	5.2855 µg/L	5.2855 ppb	04:41:56
3	Co 228.616†	34.5	101.1	5.1389 µg/L	5.1389 ppb	04:41:56
3	Cr 267.716†	120.1	244.5	5.4505 µg/L	5.4505 ppb	04:41:35
3	Cu 324.752†	4676.4	1300.0	9.7238 µg/L	9.7238 ppb	04:41:35
3	Mn 257.610†	3008.7	3168.9	10.589 µg/L	10.589 ppb	04:41:35
3	Mo 202.031†	76.9	79.9	9.5942 µg/L	9.5942 ppb	04:41:56
3	Ni 231.604†	369.2	78.8	4.5425 µg/L	4.5425 ppb	04:41:56
3	P 214.914†	268.1	57.6	129.19 µg/L	129.19 ppb	04:41:56
3	Pb 220.353†	98.3	39.9	10.684 µg/L	10.684 ppb	04:41:56
3	S 181.975 Axial†	48.2	8.2	43.700 µg/L	43.700 ppb	04:41:56
3	Sb 206.836†	28.8	9.2	9.6712 µg/L	9.6712 ppb	04:41:56
3	Se 196.026†	28.3	16.8	25.119 µg/L	25.119 ppb	04:41:56
3	SiO2†	3132.7	983.0	199.76 µg/L	199.76 ppb	04:41:35
3	Si 251.611†	1622.3	1269.4	102.39 µg/L	102.39 ppb	04:41:56
3	Sn 189.927†	38.1	12.8	6.8163 µg/L	6.8163 ppb	04:41:56
3	Ti 334.940†	3003.8	2136.3	5.0048 µg/L	5.0048 ppb	04:41:35
3	Tl 190.801†	-3.2	16.2	25.999 µg/L	25.999 ppb	04:41:56
3	U 409.014†	1248.9	393.9	39.858 µg/L	39.858 ppb	04:41:35
3	V 292.402†	359.7	427.8	5.2969 µg/L	5.2969 ppb	04:41:35
3	Zn 213.857†	883.5	344.5	9.6764 µg/L	9.6764 ppb	04:41:56

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1993611.0	102.52	%	0.877				0.86%
Sc RADIAL	111032.5	99.8	%	0.67				0.67%
Y 371.029	1212234.5	102.62	%	0.921				0.90%
Ag 328.068†	609.9	5.8492	µg/L	0.36047	5.8492	ppb	0.36047	6.16%
QC value within limits for Ag 328.068 Recovery = 116.98%								
Al 396.153Radial†	427.0	221.99	µg/L	15.889	221.99	ppb	15.889	7.16%
QC value within limits for Al 396.153Radial Recovery = 111.00%								
As 188.979†	12.8	25.559	µg/L	5.3514	25.559	ppb	5.3514	20.94%
QC value within limits for As 188.979 Recovery = 85.20%								
B 249.677†	1053.0	49.340	µg/L	1.1733	49.340	ppb	1.1733	2.38%
QC value within limits for B 249.677 Recovery = 98.68%								
Ba 233.527†	215.4	5.7737	µg/L	0.19270	5.7737	ppb	0.19270	3.34%
QC value within limits for Ba 233.527 Recovery = 115.47%								
Be 313.107†	7444.6	4.9511	µg/L	0.06513	4.9511	ppb	0.06513	1.32%
QC value within limits for Be 313.107 Recovery = 99.02%								
Ca 317.933Radial†	533.2	209.99	µg/L	1.069	209.99	ppb	1.069	0.51%
QC value within limits for Ca 317.933Radial Recovery = 104.99%								
Cd 226.502†	185.2	5.2305	µg/L	0.07460	5.2305	ppb	0.07460	1.43%
QC value within limits for Cd 226.502 Recovery = 104.61%								
Co 228.616†	98.3	5.0009	µg/L	0.33383	5.0009	ppb	0.33383	6.68%

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   QC value within limits for Co 228.616  Recovery = 100.02%
Cr 267.716†              235.6      5.2535 µg/L       0.25988      5.2535 ppb        0.25988   4.95%
   QC value within limits for Cr 267.716  Recovery = 105.07%
Cu 324.752†             1319.7      9.8716 µg/L       0.36214      9.8716 ppb        0.36214   3.67%
   QC value within limits for Cu 324.752  Recovery = 98.72%
Fe 238.204 Radial†        21.8      112.29 µg/L         2.067      112.29 ppb          2.067   1.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 112.29%
K 766.490 Radial†        218.1      122.35 µg/L        15.015      122.35 ppb         15.015  12.27%
   QC value within limits for K 766.490 Radial  Recovery = 81.57%
Mg 279.077 IEC†           65.2      363.69 µg/L        32.465      363.69 ppb         32.465   8.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 121.23%
Mn 257.610†             3174.0      10.606 µg/L        0.1206      10.606 ppb         0.1206   1.14%
   QC value within limits for Mn 257.610  Recovery = 106.06%
Mo 202.031†               83.5      10.025 µg/L        0.4076      10.025 ppb         0.4076   4.07%
   QC value within limits for Mo 202.031  Recovery = 100.25%
Na 589.592 Radial†      1059.8      295.47 µg/L         8.249      295.47 ppb          8.249   2.79%
   QC value within limits for Na 589.592 Radial  Recovery = 98.49%
Ni 231.604†               83.9      4.8369 µg/L       0.90677      4.8369 ppb        0.90677  18.75%
   QC value within limits for Ni 231.604  Recovery = 96.74%
P 214.914†                55.6      124.71 µg/L         5.491      124.71 ppb          5.491   4.40%
   QC value within limits for P 214.914  Recovery = 83.14%
Pb 220.353†               40.7      10.899 µg/L        0.3548      10.899 ppb         0.3548   3.26%
   QC value within limits for Pb 220.353  Recovery = 108.99%
S 181.975 Axial†          11.8      63.020 µg/L       17.3744      63.020 ppb        17.3744  27.57%
   QC value less than the lower limit for S 181.975 Axial  Recovery = 63.02%
Sb 206.836†                7.8      8.2055 µg/L       2.72893      8.2055 ppb        2.72893  33.26%
   QC value within limits for Sb 206.836  Recovery = 82.05%
Se 196.026†               17.8      26.686 µg/L        1.6466      26.686 ppb         1.6466   6.17%
   QC value within limits for Se 196.026  Recovery = 88.95%
SiO2†                    984.9      200.15 µg/L         3.555      200.15 ppb          3.555   1.78%
   QC value within limits for SiO2  Recovery = 93.97%
Si 251.611†             1274.7      102.79 µg/L         0.471      102.79 ppb          0.471   0.46%
   QC value within limits for Si 251.611  Recovery = 102.79%
Sn 189.927†               14.4      7.6222 µg/L       2.06035      7.6222 ppb        2.06035  27.03%
   QC value within limits for Sn 189.927  Recovery = 76.22%
Sr 421.552†              956.0      5.4594 µg/L       0.13975      5.4594 ppb        0.13975   2.56%
   QC value within limits for Sr 421.552  Recovery = 109.19%
Ti 334.940†             2127.9      4.9851 µg/L       0.05493      4.9851 ppb        0.05493   1.10%
   QC value within limits for Ti 334.940  Recovery = 99.70%
Tl 190.801†               14.2      22.827 µg/L        3.0319      22.827 ppb         3.0319  13.28%
   QC value within limits for Tl 190.801  Recovery = 114.14%
U 409.014†               408.3      41.311 µg/L        2.2790      41.311 ppb         2.2790   5.52%
   QC value within limits for U 409.014  Recovery = 82.62%
V 292.402†               418.2      5.1865 µg/L       0.11533      5.1865 ppb        0.11533   2.22%
   QC value within limits for V 292.402  Recovery = 103.73%
Zn 213.857†              348.0      9.7757 µg/L       0.08823      9.7757 ppb        0.08823   0.90%
   QC value within limits for Zn 213.857  Recovery = 97.76%
QC Failed.  Continue with analysis.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 04:42:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111568.2	111568.2	100	%			04:42:38
1	Al 396.153Radial†	140.5	-23.2	-12.086	µg/L	-12.086	ppb	04:42:38
1	Ca 317.933Radial†	425.3	16.8	6.6268	µg/L	6.6268	ppb	04:42:58
1	Fe 238.204 Radial†	6.9	-0.1	-0.4164	µg/L	-0.4164	ppb	04:42:58
1	K 766.490 Radial†	756.0	-85.8	-48.146	µg/L	-48.146	ppb	04:42:38
1	Mg 279.077 IEC†	13.6	-1.8	-10.253	µg/L	-10.253	ppb	04:42:58
1	Na 589.592 Radial†	-618.0	-110.4	-30.781	µg/L	-30.781	ppb	04:42:38
1	Sr 421.552†	-46.7	36.1	0.2059	µg/L	0.2059	ppb	04:42:38
1	Sc 361.383	1986441.4	1986441.4	102.15	%			04:44:00
1	Y 371.029	1207282.2	1207282.2	102.20	%			04:44:00
1	Ag 328.068†	-26.9	74.9	0.7109	µg/L	0.7109	ppb	04:44:06
1	As 188.979†	4.5	-0.8	-1.5157	µg/L	-1.5157	ppb	04:44:26
1	B 249.677†	153.1	-1.3	-0.0588	µg/L	-0.0588	ppb	04:44:26
1	Ba 233.527†	-80.8	0.1	0.0026	µg/L	0.0026	ppb	04:44:26
1	Be 313.107†	3543.5	-196.6	-0.1307	µg/L	-0.1307	ppb	04:44:06
1	Cd 226.502†	-96.1	3.4	0.0865	µg/L	0.0865	ppb	04:44:26
1	Co 228.616†	-70.3	-1.5	-0.0755	µg/L	-0.0755	ppb	04:44:26
1	Cr 267.716†	-125.4	4.4	0.0973	µg/L	0.0973	ppb	04:44:06
1	Cu 324.752†	3261.0	-73.6	-0.5492	µg/L	-0.5492	ppb	04:44:06
1	Mn 257.610†	-216.5	19.3	0.0644	µg/L	0.0644	ppb	04:44:26
1	Mo 202.031†	-4.3	0.6	0.0751	µg/L	0.0751	ppb	04:44:26
1	Ni 231.604†	290.8	3.0	0.1711	µg/L	0.1711	ppb	04:44:26
1	P 214.914†	198.6	-9.8	-22.079	µg/L	-22.079	ppb	04:44:26
1	Pb 220.353†	61.2	3.9	1.0465	µg/L	1.0465	ppb	04:44:26
1	S 181.975 Axial†	33.0	-6.6	-35.207	µg/L	-35.207	ppb	04:44:26
1	Sb 206.836†	20.7	1.3	1.3620	µg/L	1.3620	ppb	04:44:26
1	Se 196.026†	10.3	-0.7	-1.0976	µg/L	-1.0976	ppb	04:44:26
1	SiO2†	1998.8	-118.9	-24.171	µg/L	-24.171	ppb	04:44:06
1	Si 251.611†	334.3	12.6	1.1640	µg/L	1.1640	ppb	04:44:26
1	Sn 189.927†	18.8	-6.0	-3.0982	µg/L	-3.0982	ppb	04:44:26
1	Ti 334.940†	745.3	-67.0	-0.1577	µg/L	-0.1577	ppb	04:44:06
1	Tl 190.801†	-21.3	-1.6	-2.5052	µg/L	-2.5052	ppb	04:44:26
1	U 409.014†	728.2	-112.6	-11.394	µg/L	-11.394	ppb	04:44:06
1	V 292.402†	-107.1	-28.3	-0.3587	µg/L	-0.3587	ppb	04:44:06
1	Zn 213.857†	508.2	-20.7	-0.5843	µg/L	-0.5843	ppb	04:44:26
2	Sc RADIAL	111477.9	111477.9	100	%			04:43:04
2	Al 396.153Radial†	172.6	9.0	4.6791	µg/L	4.6791	ppb	04:43:04
2	Ca 317.933Radial†	408.1	-0.0	-0.0094	µg/L	-0.0094	ppb	04:43:24
2	Fe 238.204 Radial†	8.2	1.2	6.1970	µg/L	6.1970	ppb	04:43:24
2	K 766.490 Radial†	731.7	-109.4	-61.383	µg/L	-61.383	ppb	04:43:04
2	Mg 279.077 IEC†	12.4	-3.0	-16.824	µg/L	-16.824	ppb	04:43:24
2	Na 589.592 Radial†	-597.0	-89.9	-25.058	µg/L	-25.058	ppb	04:43:04
2	Sr 421.552†	-47.8	35.0	0.1996	µg/L	0.1996	ppb	04:43:04
2	Sc 361.383	1984705.6	1984705.6	102.06	%			04:44:32
2	Y 371.029	1205602.5	1205602.5	102.06	%			04:44:32
2	Ag 328.068†	-25.5	76.3	0.7291	µg/L	0.7291	ppb	04:44:38
2	As 188.979†	1.9	-3.3	-6.5332	µg/L	-6.5332	ppb	04:44:59
2	B 249.677†	150.2	-4.0	-0.1909	µg/L	-0.1909	ppb	04:44:59
2	Ba 233.527†	-63.9	16.6	0.4437	µg/L	0.4437	ppb	04:44:59
2	Be 313.107†	3633.6	-105.3	-0.0701	µg/L	-0.0701	ppb	04:44:38
2	Cd 226.502†	-89.0	10.2	0.2765	µg/L	0.2765	ppb	04:44:59
2	Co 228.616†	-68.5	0.2	0.0113	µg/L	0.0113	ppb	04:44:59
2	Cr 267.716†	-115.3	14.2	0.3170	µg/L	0.3170	ppb	04:44:38
2	Cu 324.752†	3197.9	-132.6	-0.9884	µg/L	-0.9884	ppb	04:44:38
2	Mn 257.610†	-199.2	36.0	0.1211	µg/L	0.1211	ppb	04:44:59
2	Mo 202.031†	-6.1	-1.2	-0.1397	µg/L	-0.1397	ppb	04:44:59
2	Ni 231.604†	286.6	-0.9	-0.0516	µg/L	-0.0516	ppb	04:44:59
2	P 214.914†	196.3	-11.8	-26.679	µg/L	-26.679	ppb	04:44:59
2	Pb 220.353†	63.1	5.9	1.5829	µg/L	1.5829	ppb	04:44:59

2	S 181.975 Axial†	34.9	-4.7	-24.900 µg/L	-24.900 ppb		04:44:59
2	Sb 206.836†	13.9	-5.3	-5.6102 µg/L	-5.6102 ppb		04:44:59
2	Se 196.026†	13.9	2.8	4.2154 µg/L	4.2154 ppb		04:44:59
2	SiO2†	2044.6	-72.3	-14.701 µg/L	-14.701 ppb		04:44:38
2	Si 251.611†	346.7	25.1	2.1430 µg/L	2.1430 ppb		04:44:59
2	Sn 189.927†	20.7	-4.1	-2.1185 µg/L	-2.1185 ppb		04:44:59
2	Ti 334.940†	795.0	-17.7	-0.0415 µg/L	-0.0415 ppb		04:44:38
2	Tl 190.801†	-18.0	1.7	2.6585 µg/L	2.6585 ppb		04:44:59
2	U 409.014†	701.0	-138.6	-14.034 µg/L	-14.034 ppb		04:44:38
2	V 292.402†	-48.9	28.6	0.3219 µg/L	0.3219 ppb		04:44:38
2	Zn 213.857†	504.0	-24.4	-0.6888 µg/L	-0.6888 ppb		04:44:59
3	Sc RADIAL	112027.7	112027.7	101 %			04:43:30
3	Al 396.153Radial†	187.1	22.5	11.712 µg/L	11.712 ppb		04:43:30
3	Ca 317.933Radial†	405.6	-4.5	-1.7546 µg/L	-1.7546 ppb		04:43:50
3	Fe 238.204 Radial†	7.9	0.9	4.7087 µg/L	4.7087 ppb		04:43:50
3	K 766.490 Radial†	796.2	-49.0	-27.493 µg/L	-27.493 ppb		04:43:30
3	Mg 279.077 IEC†	18.7	3.2	17.749 µg/L	17.749 ppb		04:43:50
3	Na 589.592 Radial†	-601.0	-91.0	-25.365 µg/L	-25.365 ppb		04:43:30
3	Sr 421.552†	-31.0	51.8	0.2960 µg/L	0.2960 ppb		04:43:30
3	Sc 361.383	1983231.4	1983231.4	101.98 %			04:45:05
3	Y 371.029	1205290.5	1205290.5	102.03 %			04:45:05
3	Ag 328.068†	-8.4	93.0	0.8808 µg/L	0.8808 ppb		04:45:10
3	As 188.979†	3.2	-1.9	-3.8864 µg/L	-3.8864 ppb		04:45:31
3	B 249.677†	149.3	-4.8	-0.2277 µg/L	-0.2277 ppb		04:45:31
3	Ba 233.527†	-51.4	28.8	0.7700 µg/L	0.7700 ppb		04:45:31
3	Be 313.107†	3504.0	-229.7	-0.1529 µg/L	-0.1529 ppb		04:45:10
3	Cd 226.502†	-85.7	13.4	0.3695 µg/L	0.3695 ppb		04:45:31
3	Co 228.616†	-65.4	3.2	0.1652 µg/L	0.1652 ppb		04:45:31
3	Cr 267.716†	-124.5	5.1	0.1112 µg/L	0.1112 ppb		04:45:10
3	Cu 324.752†	3196.1	-132.1	-0.9844 µg/L	-0.9844 ppb		04:45:10
3	Mn 257.610†	-195.5	39.5	0.1323 µg/L	0.1323 ppb		04:45:31
3	Mo 202.031†	-3.4	1.5	0.1853 µg/L	0.1853 ppb		04:45:31
3	Ni 231.604†	275.5	-11.6	-0.6674 µg/L	-0.6674 ppb		04:45:31
3	P 214.914†	201.7	-6.4	-14.355 µg/L	-14.355 ppb		04:45:31
3	Pb 220.353†	49.5	-7.4	-1.9783 µg/L	-1.9783 ppb		04:45:31
3	S 181.975 Axial†	34.3	-5.2	-27.689 µg/L	-27.689 ppb		04:45:31
3	Sb 206.836†	15.1	-4.1	-4.3735 µg/L	-4.3735 ppb		04:45:31
3	Se 196.026†	17.5	6.3	9.4882 µg/L	9.4882 ppb		04:45:31
3	SiO2†	2032.0	-83.2	-16.914 µg/L	-16.914 ppb		04:45:10
3	Si 251.611†	367.2	45.4	3.7683 µg/L	3.7683 ppb		04:45:31
3	Sn 189.927†	21.1	-3.7	-1.9254 µg/L	-1.9254 ppb		04:45:31
3	Ti 334.940†	830.5	17.7	0.0417 µg/L	0.0417 ppb		04:45:10
3	Tl 190.801†	-20.2	-0.5	-0.7889 µg/L	-0.7889 ppb		04:45:31
3	U 409.014†	737.6	-102.2	-10.348 µg/L	-10.348 ppb		04:45:10
3	V 292.402†	-141.3	-61.9	-0.7617 µg/L	-0.7617 ppb		04:45:10
3	Zn 213.857†	506.5	-21.5	-0.6047 µg/L	-0.6047 ppb		04:45:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984792.8	102.06	%	0.083				0.08%
Sc RADIAL	111691.3	100	%	0.3				0.26%
Y 371.029	1206058.4	102.10	%	0.091				0.09%
Ag 328.068†	81.4	0.7736	µg/L	0.09328	0.7736	ppb	0.09328	12.06%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.8	1.4351	µg/L	12.22637	1.4351	ppb	12.22637	851.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-3.9784	µg/L	2.51003	-3.9784	ppb	2.51003	63.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.4	-0.1592	µg/L	0.08882	-0.1592	ppb	0.08882	55.81%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.4054	µg/L	0.38513	0.4054	ppb	0.38513	95.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-177.2	-0.1179	µg/L	0.04287	-0.1179	ppb	0.04287	36.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.1	1.6209	µg/L	4.42217	1.6209	ppb	4.42217	272.82%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.0	0.2441	µg/L	0.14424	0.2441	ppb	0.14424	59.08%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.7	0.0337	µg/L	0.12192	0.0337	ppb	0.12192	362.31%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.9      0.1752 µg/L       0.12303      0.1752 ppb        0.12303  70.22%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -112.8     -0.8407 µg/L       0.25242     -0.8407 ppb        0.25242  30.03%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.7      3.4964 µg/L       3.46932      3.4964 ppb        3.46932  99.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -81.4     -45.674 µg/L       17.0799     -45.674 ppb        17.0799  37.40%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.6     -3.1092 µg/L      18.36042     -3.1092 ppb       18.36042 590.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               31.6      0.1059 µg/L       0.03642      0.1059 ppb        0.03642  34.38%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.3      0.0402 µg/L       0.16524      0.0402 ppb        0.16524 410.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -97.1     -27.068 µg/L        3.2194     -27.068 ppb         3.2194  11.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -3.2     -0.1826 µg/L       0.43435     -0.1826 ppb        0.43435 237.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.3     -21.038 µg/L        6.2277     -21.038 ppb         6.2277  29.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                0.8      0.2170 µg/L       1.92008      0.2170 ppb        1.92008 884.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.5     -29.265 µg/L        5.3311     -29.265 ppb         5.3311  18.22%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.7     -2.8739 µg/L       3.72015     -2.8739 ppb        3.72015 129.45%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.8      4.2020 µg/L       5.29287      4.2020 ppb        5.29287 125.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -91.5     -18.595 µg/L        4.9538     -18.595 ppb         4.9538  26.64%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               27.7      2.3584 µg/L       1.31547      2.3584 ppb        1.31547  55.78%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -4.6     -2.3807 µg/L       0.62884     -2.3807 ppb        0.62884  26.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               40.9      0.2338 µg/L       0.05390      0.2338 ppb        0.05390  23.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -22.3     -0.0525 µg/L       0.10016     -0.0525 ppb        0.10016 190.69%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.1     -0.2119 µg/L       2.62978     -0.2119 ppb        2.62978 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -117.8     -11.925 µg/L        1.8994     -11.925 ppb         1.8994  15.93%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -20.5     -0.2662 µg/L       0.54767     -0.2662 ppb        0.54767 205.76%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -22.2     -0.6259 µg/L       0.05538     -0.6259 ppb        0.05538   8.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 05:19:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114062.3	114062.3	102	%			05:19:43
1	Al 396.153Radial†	10267.1	9854.3	5112.8	µg/L	5112.8	ppb	05:19:43
1	Ca 317.933Radial†	13462.0	12727.6	5012.8	µg/L	5012.8	ppb	05:20:03
1	Fe 238.204 Radial†	1028.4	996.4	5137.9	µg/L	5137.9	ppb	05:20:03
1	K 766.490 Radial†	10018.4	8935.2	5012.9	µg/L	5012.9	ppb	05:19:43
1	Mg 279.077 IEC†	983.2	943.9	5272.6	µg/L	5272.6	ppb	05:20:03
1	Na 589.592 Radial†	36872.4	36482.8	10171	µg/L	10171	ppb	05:19:43
1	Sr 421.552†	89801.0	87702.3	500.82	µg/L	500.82	ppb	05:19:43
1	Sc 361.383	1992103.7	1992103.7	102.44	%			05:21:07
1	Y 371.029	1204847.5	1204847.5	102.00	%			05:21:07
1	Ag 328.068†	54632.7	53433.4	512.49	µg/L	512.49	ppb	05:21:13
1	As 188.979†	262.0	250.7	499.51	µg/L	499.51	ppb	05:21:33
1	B 249.677†	11127.6	10711.5	500.66	µg/L	500.66	ppb	05:21:13
1	Ba 233.527†	19337.2	18956.1	508.35	µg/L	508.35	ppb	05:21:13
1	Be 313.107†	781319.6	759054.3	504.81	µg/L	504.81	ppb	05:21:07
1	Cd 226.502†	18402.9	18062.3	508.18	µg/L	508.18	ppb	05:21:13
1	Co 228.616†	10178.7	10003.8	507.59	µg/L	507.59	ppb	05:21:13
1	Cr 267.716†	23160.0	22735.8	506.95	µg/L	506.95	ppb	05:21:13
1	Cu 324.752†	73358.2	68345.8	511.08	µg/L	511.08	ppb	05:21:13
1	Mn 257.610†	154773.4	151320.2	505.61	µg/L	505.61	ppb	05:21:07
1	Mo 202.031†	4292.8	4195.5	503.70	µg/L	503.70	ppb	05:21:33
1	Ni 231.604†	9276.2	8773.7	505.89	µg/L	505.89	ppb	05:21:13
1	P 214.914†	1328.7	1093.0	2415.8	µg/L	2415.8	ppb	05:21:33
1	Pb 220.353†	1971.8	1868.9	500.68	µg/L	500.68	ppb	05:21:33
1	S 181.975 Axial†	220.6	176.5	942.10	µg/L	942.10	ppb	05:21:33
1	Sb 206.836†	511.0	479.9	505.33	µg/L	505.33	ppb	05:21:33
1	Se 196.026†	352.2	333.0	501.20	µg/L	501.20	ppb	05:21:33
1	SiO2†	29240.3	26468.5	5378.9	µg/L	5378.9	ppb	05:21:13
1	Si 251.611†	32080.6	31002.2	2468.6	µg/L	2468.6	ppb	05:21:13
1	Sn 189.927†	1011.3	962.9	503.90	µg/L	503.90	ppb	05:21:33
1	Ti 334.940†	220973.4	214916.4	504.40	µg/L	504.40	ppb	05:21:07
1	Tl 190.801†	298.3	310.5	500.46	µg/L	500.46	ppb	05:21:33
1	U 409.014†	5895.6	4929.7	498.17	µg/L	498.17	ppb	05:21:13
1	V 292.402†	43034.2	42086.3	512.02	µg/L	512.02	ppb	05:21:13
1	Zn 213.857†	19038.3	18066.8	506.61	µg/L	506.61	ppb	05:21:13
2	Sc RADIAL	113647.8	113647.8	102	%			05:20:09
2	Al 396.153Radial†	10337.7	9960.0	5167.9	µg/L	5167.9	ppb	05:20:09
2	Ca 317.933Radial†	13401.1	12715.9	5008.2	µg/L	5008.2	ppb	05:20:30
2	Fe 238.204 Radial†	1033.5	1005.1	5182.2	µg/L	5182.2	ppb	05:20:30
2	K 766.490 Radial†	10161.9	9111.3	5111.7	µg/L	5111.7	ppb	05:20:09
2	Mg 279.077 IEC†	978.4	942.7	5265.6	µg/L	5265.6	ppb	05:20:30
2	Na 589.592 Radial†	37004.1	36743.0	10244	µg/L	10244	ppb	05:20:09
2	Sr 421.552†	90359.9	88569.1	505.77	µg/L	505.77	ppb	05:20:09
2	Sc 361.383	1989340.7	1989340.7	102.30	%			05:21:41
2	Y 371.029	1202856.9	1202856.9	101.83	%			05:21:41
2	Ag 328.068†	53991.7	52880.9	507.19	µg/L	507.19	ppb	05:21:46
2	As 188.979†	259.1	248.2	494.46	µg/L	494.46	ppb	05:22:07
2	B 249.677†	10954.7	10557.6	493.43	µg/L	493.43	ppb	05:21:46
2	Ba 233.527†	19049.9	18701.4	501.52	µg/L	501.52	ppb	05:21:46
2	Be 313.107†	778441.2	757299.9	503.64	µg/L	503.64	ppb	05:21:41
2	Cd 226.502†	18125.4	17815.9	501.24	µg/L	501.24	ppb	05:21:46
2	Co 228.616†	10023.5	9865.8	500.60	µg/L	500.60	ppb	05:21:46
2	Cr 267.716†	22784.6	22400.2	499.47	µg/L	499.47	ppb	05:21:46
2	Cu 324.752†	72404.7	67513.2	504.88	µg/L	504.88	ppb	05:21:46
2	Mn 257.610†	154032.7	150806.0	503.90	µg/L	503.90	ppb	05:21:41
2	Mo 202.031†	4279.7	4188.5	502.87	µg/L	502.87	ppb	05:22:07
2	Ni 231.604†	9126.3	8639.7	498.17	µg/L	498.17	ppb	05:21:46
2	P 214.914†	1325.7	1091.8	2413.8	µg/L	2413.8	ppb	05:22:07
2	Pb 220.353†	1969.5	1869.3	500.80	µg/L	500.80	ppb	05:22:07

2	S 181.975 Axial†	224.8	180.9	966.03 µg/L	966.03 ppb	05:22:07
2	Sb 206.836†	511.4	481.0	506.51 µg/L	506.51 ppb	05:22:07
2	Se 196.026†	366.0	346.9	522.06 µg/L	522.06 ppb	05:22:07
2	SiO2†	28730.4	26009.7	5285.6 µg/L	5285.6 ppb	05:21:46
2	Si 251.611†	31601.7	30577.6	2434.2 µg/L	2434.2 ppb	05:21:46
2	Sn 189.927†	1005.7	958.8	501.75 µg/L	501.75 ppb	05:22:07
2	Ti 334.940†	220116.6	214378.5	503.14 µg/L	503.14 ppb	05:21:41
2	Tl 190.801†	301.4	313.9	505.90 µg/L	505.90 ppb	05:22:07
2	U 409.014†	5825.4	4869.1	492.03 µg/L	492.03 ppb	05:21:46
2	V 292.402†	42332.7	41459.0	504.45 µg/L	504.45 ppb	05:21:46
2	Zn 213.857†	18772.8	17833.1	500.05 µg/L	500.05 ppb	05:21:46
3	Sc RADIAL	113921.8	113921.8	102 %		05:20:35
3	Al 396.153Radial†	10272.9	9872.4	5122.3 µg/L	5122.3 ppb	05:20:35
3	Ca 317.933Radial†	13461.7	12743.5	5019.0 µg/L	5019.0 ppb	05:20:56
3	Fe 238.204 Radial†	1036.1	1005.2	5183.0 µg/L	5183.0 ppb	05:20:56
3	K 766.490 Radial†	9990.5	8919.9	5004.3 µg/L	5004.3 ppb	05:20:35
3	Mg 279.077 IEC†	979.2	941.2	5257.2 µg/L	5257.2 ppb	05:20:56
3	Na 589.592 Radial†	36758.1	36415.5	10152 µg/L	10152 ppb	05:20:35
3	Sr 421.552†	89565.9	87580.7	500.12 µg/L	500.12 ppb	05:20:35
3	Sc 361.383	1971136.0	1971136.0	101.36 %		05:22:14
3	Y 371.029	1191965.6	1191965.6	100.91 %		05:22:14
3	Ag 328.068†	54618.4	53986.6	517.79 µg/L	517.79 ppb	05:22:20
3	As 188.979†	254.9	246.4	490.91 µg/L	490.91 ppb	05:22:40
3	B 249.677†	11132.9	10832.3	506.31 µg/L	506.31 ppb	05:22:20
3	Ba 233.527†	19331.1	19150.8	513.57 µg/L	513.57 ppb	05:22:20
3	Be 313.107†	774161.8	760105.9	505.51 µg/L	505.51 ppb	05:22:14
3	Cd 226.502†	18392.3	18242.9	513.27 µg/L	513.27 ppb	05:22:20
3	Co 228.616†	10141.3	10072.5	511.07 µg/L	511.07 ppb	05:22:20
3	Cr 267.716†	23142.0	22958.6	511.92 µg/L	511.92 ppb	05:22:20
3	Cu 324.752†	73279.0	69029.5	516.20 µg/L	516.20 ppb	05:22:20
3	Mn 257.610†	153255.8	151430.2	505.98 µg/L	505.98 ppb	05:22:14
3	Mo 202.031†	4219.7	4167.9	500.40 µg/L	500.40 ppb	05:22:40
3	Ni 231.604†	9293.3	8886.9	512.42 µg/L	512.42 ppb	05:22:20
3	P 214.914†	1318.9	1097.0	2424.3 µg/L	2424.3 ppb	05:22:40
3	Pb 220.353†	1936.8	1854.8	496.89 µg/L	496.89 ppb	05:22:40
3	S 181.975 Axial†	224.0	182.1	972.44 µg/L	972.44 ppb	05:22:40
3	Sb 206.836†	501.8	476.1	501.32 µg/L	501.32 ppb	05:22:40
3	Se 196.026†	344.5	329.1	495.29 µg/L	495.29 ppb	05:22:40
3	SiO2†	29159.0	26692.0	5424.3 µg/L	5424.3 ppb	05:22:20
3	Si 251.611†	32014.4	31270.1	2490.4 µg/L	2490.4 ppb	05:22:20
3	Sn 189.927†	1000.4	962.7	503.79 µg/L	503.79 ppb	05:22:40
3	Ti 334.940†	218840.0	215106.3	504.85 µg/L	504.85 ppb	05:22:14
3	Tl 190.801†	296.7	312.1	502.87 µg/L	502.87 ppb	05:22:40
3	U 409.014†	5974.3	5068.7	512.23 µg/L	512.23 ppb	05:22:20
3	V 292.402†	42902.8	42403.6	515.85 µg/L	515.85 ppb	05:22:20
3	Zn 213.857†	18970.2	18197.3	510.25 µg/L	510.25 ppb	05:22:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984193.5	102.03	%	0.586				0.57%
Sc RADIAL	113877.3	102	%	0.2				0.19%
Y 371.029	1199890.0	101.58	%	0.587				0.58%
Ag 328.068†	53433.7	512.49	µg/L	5.301	512.49	ppb	5.301	1.03%
QC value within limits for Ag 328.068 Recovery = 102.50%								
Al 396.153Radial†	9895.6	5134.3	µg/L	29.44	5134.3	ppb	29.44	0.57%
QC value within limits for Al 396.153Radial Recovery = 102.69%								
As 188.979†	248.4	494.96	µg/L	4.319	494.96	ppb	4.319	0.87%
QC value within limits for As 188.979 Recovery = 98.99%								
B 249.677†	10700.5	500.13	µg/L	6.457	500.13	ppb	6.457	1.29%
QC value within limits for B 249.677 Recovery = 100.03%								
Ba 233.527†	18936.1	507.81	µg/L	6.043	507.81	ppb	6.043	1.19%
QC value within limits for Ba 233.527 Recovery = 101.56%								
Be 313.107†	758820.0	504.66	µg/L	0.943	504.66	ppb	0.943	0.19%
QC value within limits for Be 313.107 Recovery = 100.93%								
Ca 317.933Radial†	12729.0	5013.3	µg/L	5.45	5013.3	ppb	5.45	0.11%
QC value within limits for Ca 317.933Radial Recovery = 100.27%								
Cd 226.502†	18040.4	507.56	µg/L	6.039	507.56	ppb	6.039	1.19%
QC value within limits for Cd 226.502 Recovery = 101.51%								
Co 228.616†	9980.7	506.42	µg/L	5.335	506.42	ppb	5.335	1.05%

QC value within limits for Co 228.616 Recovery = 101.28%

Cr 267.716†	22698.2	506.11 µg/L	6.266	506.11 ppb	6.266	1.24%

QC value within limits for Cr 267.716 Recovery = 101.22%

Cu 324.752†	68296.2	510.72 µg/L	5.666	510.72 ppb	5.666	1.11%

QC value within limits for Cu 324.752 Recovery = 102.14%

Fe 238.204 Radial†	1002.2	5167.7 µg/L	25.83	5167.7 ppb	25.83	0.50%

QC value within limits for Fe 238.204 Radial Recovery = 103.35%

K 766.490 Radial†	8988.8	5042.9 µg/L	59.67	5042.9 ppb	59.67	1.18%

QC value within limits for K 766.490 Radial Recovery = 100.86%

Mg 279.077 IEC†	942.6	5265.1 µg/L	7.70	5265.1 ppb	7.70	0.15%

QC value within limits for Mg 279.077 IEC Recovery = 105.30%

Mn 257.610†	151185.4	505.17 µg/L	1.111	505.17 ppb	1.111	0.22%

QC value within limits for Mn 257.610 Recovery = 101.03%

Mo 202.031†	4184.0	502.32 µg/L	1.718	502.32 ppb	1.718	0.34%

QC value within limits for Mo 202.031 Recovery = 100.46%

Na 589.592 Radial†	36547.1	10189 µg/L	48.2	10189 ppb	48.2	0.47%

QC value within limits for Na 589.592 Radial Recovery = 101.89%

Ni 231.604†	8766.7	505.49 µg/L	7.134	505.49 ppb	7.134	1.41%

QC value within limits for Ni 231.604 Recovery = 101.10%

P 214.914†	1093.9	2418.0 µg/L	5.58	2418.0 ppb	5.58	0.23%

QC value within limits for P 214.914 Recovery = 96.72%

Pb 220.353†	1864.3	499.46 µg/L	2.224	499.46 ppb	2.224	0.45%

QC value within limits for Pb 220.353 Recovery = 99.89%

S 181.975 Axial†	179.9	960.19 µg/L	15.988	960.19 ppb	15.988	1.67%

QC value within limits for S 181.975 Axial Recovery = 96.02%

Sb 206.836†	479.0	504.38 µg/L	2.720	504.38 ppb	2.720	0.54%

QC value within limits for Sb 206.836 Recovery = 100.88%

Se 196.026†	336.3	506.18 µg/L	14.060	506.18 ppb	14.060	2.78%

QC value within limits for Se 196.026 Recovery = 101.24%

SiO2†	26390.1	5362.9 µg/L	70.68	5362.9 ppb	70.68	1.32%

QC value within limits for SiO2 Recovery = 100.29%

Si 251.611†	30950.0	2464.4 µg/L	28.31	2464.4 ppb	28.31	1.15%

QC value within limits for Si 251.611 Recovery = 98.58%

Sn 189.927†	961.4	503.15 µg/L	1.208	503.15 ppb	1.208	0.24%

QC value within limits for Sn 189.927 Recovery = 100.63%

Sr 421.552†	87950.7	502.24 µg/L	3.078	502.24 ppb	3.078	0.61%

QC value within limits for Sr 421.552 Recovery = 100.45%

Ti 334.940†	214800.4	504.13 µg/L	0.886	504.13 ppb	0.886	0.18%

QC value within limits for Ti 334.940 Recovery = 100.83%

Tl 190.801†	312.2	503.08 µg/L	2.728	503.08 ppb	2.728	0.54%

QC value within limits for Tl 190.801 Recovery = 100.62%

U 409.014†	4955.9	500.81 µg/L	10.355	500.81 ppb	10.355	2.07%

QC value within limits for U 409.014 Recovery = 100.16%

V 292.402†	41983.0	510.77 µg/L	5.802	510.77 ppb	5.802	1.14%

QC value within limits for V 292.402 Recovery = 102.15%

Zn 213.857†	18032.4	505.64 µg/L	5.171	505.64 ppb	5.171	1.02%

QC value within limits for Zn 213.857 Recovery = 101.13%

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 12/15/2009 05:22:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112172.6	112172.6	101	%			05:23:27
1	Al 396.153Radial†	564.5	396.7	206.22	µg/L	206.22	ppb	05:23:27
1	Ca 317.933Radial†	935.0	520.2	204.89	µg/L	204.89	ppb	05:23:47
1	Fe 238.204 Radial†	26.9	19.8	101.68	µg/L	101.68	ppb	05:23:47
1	K 766.490 Radial†	1104.4	255.8	143.49	µg/L	143.49	ppb	05:23:27
1	Mg 279.077 IEC†	71.5	55.5	309.85	µg/L	309.85	ppb	05:23:47
1	Na 589.592 Radial†	588.0	1089.5	303.75	µg/L	303.75	ppb	05:23:27
1	Sr 421.552†	849.5	925.4	5.2845	µg/L	5.2845	ppb	05:23:27
1	Sc 361.383	1974609.4	1974609.4	101.54	%			05:24:49
1	Y 371.029	1200113.7	1200113.7	101.60	%			05:24:49
1	Ag 328.068†	505.8	599.4	5.7477	µg/L	5.7477	ppb	05:24:55
1	As 188.979†	20.5	15.1	30.102	µg/L	30.102	ppb	05:25:15
1	B 249.677†	1230.5	1060.7	49.705	µg/L	49.705	ppb	05:24:55
1	Ba 233.527†	112.9	190.3	5.1043	µg/L	5.1043	ppb	05:25:15
1	Be 313.107†	11502.2	7662.2	5.0957	µg/L	5.0957	ppb	05:24:55
1	Cd 226.502†	81.4	177.6	5.0194	µg/L	5.0194	ppb	05:25:15
1	Co 228.616†	36.5	103.3	5.2503	µg/L	5.2503	ppb	05:25:15
1	Cr 267.716†	116.6	242.0	5.3950	µg/L	5.3950	ppb	05:24:55
1	Cu 324.752†	4618.6	1282.6	9.5922	µg/L	9.5922	ppb	05:24:55
1	Mn 257.610†	3030.9	3216.2	10.745	µg/L	10.745	ppb	05:24:55
1	Mo 202.031†	76.3	80.0	9.6021	µg/L	9.6021	ppb	05:25:15
1	Ni 231.604†	372.3	85.0	4.9001	µg/L	4.9001	ppb	05:25:15
1	P 214.914†	279.5	71.1	159.77	µg/L	159.77	ppb	05:25:15
1	Pb 220.353†	88.6	31.3	8.3564	µg/L	8.3564	ppb	05:25:15
1	S 181.975 Axial†	51.9	12.3	65.638	µg/L	65.638	ppb	05:25:15
1	Sb 206.836†	27.0	7.7	8.0927	µg/L	8.0927	ppb	05:25:15
1	Se 196.026†	35.8	24.4	36.560	µg/L	36.560	ppb	05:25:15
1	SiO2†	3147.5	1024.1	208.11	µg/L	208.11	ppb	05:24:55
1	Si 251.611†	1627.2	1287.9	103.80	µg/L	103.80	ppb	05:25:15
1	Sn 189.927†	42.0	17.0	8.9823	µg/L	8.9823	ppb	05:25:15
1	Ti 334.940†	3079.2	2235.9	5.2391	µg/L	5.2391	ppb	05:24:55
1	Tl 190.801†	-5.3	14.1	22.655	µg/L	22.655	ppb	05:25:15
1	U 409.014†	1267.1	422.4	42.747	µg/L	42.747	ppb	05:24:55
1	V 292.402†	340.4	411.8	5.1080	µg/L	5.1080	ppb	05:24:55
1	Zn 213.857†	896.6	364.8	10.252	µg/L	10.252	ppb	05:25:15
2	Sc RADIAL	111571.0	111571.0	100	%			05:23:53
2	Al 396.153Radial†	589.3	424.4	220.63	µg/L	220.63	ppb	05:23:53
2	Ca 317.933Radial†	931.4	521.7	205.47	µg/L	205.47	ppb	05:24:13
2	Fe 238.204 Radial†	29.4	22.4	115.07	µg/L	115.07	ppb	05:24:13
2	K 766.490 Radial†	1025.6	183.1	102.73	µg/L	102.73	ppb	05:23:53
2	Mg 279.077 IEC†	78.1	62.5	348.69	µg/L	348.69	ppb	05:24:13
2	Na 589.592 Radial†	518.2	1023.0	285.22	µg/L	285.22	ppb	05:23:53
2	Sr 421.552†	871.8	952.3	5.4380	µg/L	5.4380	ppb	05:23:53
2	Sc 361.383	1973989.8	1973989.8	101.51	%			05:25:21
2	Y 371.029	1200109.8	1200109.8	101.60	%			05:25:21
2	Ag 328.068†	482.5	576.6	5.5286	µg/L	5.5286	ppb	05:25:27
2	As 188.979†	16.9	11.5	22.925	µg/L	22.925	ppb	05:25:48
2	B 249.677†	1214.8	1045.6	48.991	µg/L	48.991	ppb	05:25:27
2	Ba 233.527†	127.3	204.6	5.4844	µg/L	5.4844	ppb	05:25:48
2	Be 313.107†	11426.5	7591.2	5.0486	µg/L	5.0486	ppb	05:25:27
2	Cd 226.502†	92.2	188.2	5.3132	µg/L	5.3132	ppb	05:25:48
2	Co 228.616†	28.7	95.6	4.8638	µg/L	4.8638	ppb	05:25:48
2	Cr 267.716†	94.2	220.0	4.9039	µg/L	4.9039	ppb	05:25:27
2	Cu 324.752†	4655.0	1319.8	9.8730	µg/L	9.8730	ppb	05:25:27
2	Mn 257.610†	3001.9	3188.5	10.655	µg/L	10.655	ppb	05:25:27
2	Mo 202.031†	84.5	88.1	10.572	µg/L	10.572	ppb	05:25:48
2	Ni 231.604†	368.9	81.7	4.7110	µg/L	4.7110	ppb	05:25:48
2	P 214.914†	262.5	54.5	122.13	µg/L	122.13	ppb	05:25:48
2	Pb 220.353†	93.6	36.2	9.6910	µg/L	9.6910	ppb	05:25:48

2	S 181.975 Axial†	58.6	18.8	100.68 µg/L	100.68 ppb	05:25:48
2	Sb 206.836†	30.7	11.4	11.967 µg/L	11.967 ppb	05:25:48
2	Se 196.026†	33.3	21.9	32.858 µg/L	32.858 ppb	05:25:48
2	SiO2†	3113.1	991.2	201.43 µg/L	201.43 ppb	05:25:27
2	Si 251.611†	1625.3	1286.5	103.77 µg/L	103.77 ppb	05:25:48
2	Sn 189.927†	38.3	13.4	7.0845 µg/L	7.0845 ppb	05:25:48
2	Ti 334.940†	2943.5	2103.2	4.9273 µg/L	4.9273 ppb	05:25:27
2	Tl 190.801†	-0.8	18.5	29.675 µg/L	29.675 ppb	05:25:48
2	U 409.014†	1202.1	358.8	36.300 µg/L	36.300 ppb	05:25:27
2	V 292.402†	306.2	378.2	4.7002 µg/L	4.7002 ppb	05:25:27
2	Zn 213.857†	888.7	357.3	10.040 µg/L	10.040 ppb	05:25:48
3	Sc RADIAL	111886.5	111886.5	101 %		05:24:19
3	Al 396.153Radial†	582.9	416.5	216.50 µg/L	216.50 ppb	05:24:19
3	Ca 317.933Radial†	927.6	515.3	202.94 µg/L	202.94 ppb	05:24:39
3	Fe 238.204 Radial†	31.0	23.9	122.81 µg/L	122.81 ppb	05:24:39
3	K 766.490 Radial†	1072.6	226.9	127.32 µg/L	127.32 ppb	05:24:19
3	Mg 279.077 IEC†	70.8	55.0	306.87 µg/L	306.87 ppb	05:24:39
3	Na 589.592 Radial†	525.0	1028.3	286.69 µg/L	286.69 ppb	05:24:19
3	Sr 421.552†	836.6	914.7	5.2236 µg/L	5.2236 ppb	05:24:19
3	Sc 361.383	1970395.2	1970395.2	101.32 %		05:25:54
3	Y 371.029	1197857.3	1197857.3	101.41 %		05:25:54
3	Ag 328.068†	463.8	559.0	5.3611 µg/L	5.3611 ppb	05:25:59
3	As 188.979†	9.7	4.5	8.9148 µg/L	8.9148 ppb	05:26:20
3	B 249.677†	1232.5	1065.2	49.909 µg/L	49.909 ppb	05:25:59
3	Ba 233.527†	120.0	197.7	5.2990 µg/L	5.2990 ppb	05:26:20
3	Be 313.107†	11427.4	7612.6	5.0628 µg/L	5.0628 ppb	05:25:59
3	Cd 226.502†	89.3	185.6	5.2443 µg/L	5.2443 ppb	05:26:20
3	Co 228.616†	29.0	96.0	4.8815 µg/L	4.8815 ppb	05:26:20
3	Cr 267.716†	111.9	237.6	5.2968 µg/L	5.2968 ppb	05:25:59
3	Cu 324.752†	4706.1	1378.6	10.313 µg/L	10.313 ppb	05:25:59
3	Mn 257.610†	3020.7	3212.5	10.736 µg/L	10.736 ppb	05:25:59
3	Mo 202.031†	81.7	85.5	10.268 µg/L	10.268 ppb	05:26:20
3	Ni 231.604†	379.1	92.4	5.3282 µg/L	5.3282 ppb	05:26:20
3	P 214.914†	262.4	54.8	122.84 µg/L	122.84 ppb	05:26:20
3	Pb 220.353†	95.3	38.1	10.178 µg/L	10.178 ppb	05:26:20
3	S 181.975 Axial†	51.2	11.7	62.448 µg/L	62.448 ppb	05:26:20
3	Sb 206.836†	25.0	5.8	6.0787 µg/L	6.0787 ppb	05:26:20
3	Se 196.026†	33.5	22.2	33.324 µg/L	33.324 ppb	05:26:20
3	SiO2†	3128.0	1011.5	205.55 µg/L	205.55 ppb	05:25:59
3	Si 251.611†	1622.4	1286.6	103.75 µg/L	103.75 ppb	05:26:20
3	Sn 189.927†	38.9	14.0	7.4160 µg/L	7.4160 ppb	05:26:20
3	Ti 334.940†	3031.0	2194.8	5.1426 µg/L	5.1426 ppb	05:25:59
3	Tl 190.801†	-4.1	15.2	24.447 µg/L	24.447 ppb	05:26:20
3	U 409.014†	1286.0	443.7	44.896 µg/L	44.896 ppb	05:25:59
3	V 292.402†	291.8	364.6	4.5484 µg/L	4.5484 ppb	05:25:59
3	Zn 213.857†	887.5	357.7	10.047 µg/L	10.047 ppb	05:26:20

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1972998.2	101.46	%	0.117				0.12%
Sc RADIAL	111876.7	101	%	0.3				0.27%
Y 371.029	1199360.3	101.53	%	0.110				0.11%
Ag 328.068†	578.4	5.5458	µg/L	0.19387	5.5458	ppb	0.19387	3.50%
QC value within limits for Ag 328.068 Recovery = 110.92%								
Al 396.153Radial†	412.5	214.45	µg/L	7.424	214.45	ppb	7.424	3.46%
QC value within limits for Al 396.153Radial Recovery = 107.22%								
As 188.979†	10.4	20.647	µg/L	10.7758	20.647	ppb	10.7758	52.19%
QC value less than the lower limit for As 188.979 Recovery = 68.82%								
B 249.677†	1057.2	49.535	µg/L	0.4821	49.535	ppb	0.4821	0.97%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	197.5	5.2959	µg/L	0.19005	5.2959	ppb	0.19005	3.59%
QC value within limits for Ba 233.527 Recovery = 105.92%								
Be 313.107†	7622.0	5.0690	µg/L	0.02418	5.0690	ppb	0.02418	0.48%
QC value within limits for Be 313.107 Recovery = 101.38%								
Ca 317.933Radial†	519.1	204.43	µg/L	1.323	204.43	ppb	1.323	0.65%
QC value within limits for Ca 317.933Radial Recovery = 102.22%								
Cd 226.502†	183.8	5.1923	µg/L	0.15362	5.1923	ppb	0.15362	2.96%
QC value within limits for Cd 226.502 Recovery = 103.85%								
Co 228.616†	98.3	4.9986	µg/L	0.21822	4.9986	ppb	0.21822	4.37%

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   QC value within limits for Co 228.616  Recovery = 99.97%
Cr 267.716†              233.2      5.1986 µg/L       0.25985      5.1986 ppb        0.25985   5.00%
   QC value within limits for Cr 267.716  Recovery = 103.97%
Cu 324.752†             1327.0      9.9263 µg/L       0.36355      9.9263 ppb        0.36355   3.66%
   QC value within limits for Cu 324.752  Recovery = 99.26%
Fe 238.204 Radial†        22.0      113.19 µg/L        10.692      113.19 ppb         10.692   9.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 113.19%
K 766.490 Radial†        221.9      124.52 µg/L        20.527      124.52 ppb         20.527  16.49%
   QC value within limits for K 766.490 Radial  Recovery = 83.01%
Mg 279.077 IEC†           57.7      321.80 µg/L        23.334      321.80 ppb         23.334   7.25%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.27%
Mn 257.610†             3205.7      10.712 µg/L        0.0497      10.712 ppb         0.0497   0.46%
   QC value within limits for Mn 257.610  Recovery = 107.12%
Mo 202.031†               84.5      10.147 µg/L        0.4961      10.147 ppb         0.4961   4.89%
   QC value within limits for Mo 202.031  Recovery = 101.47%
Na 589.592 Radial†      1047.0      291.88 µg/L        10.302      291.88 ppb         10.302   3.53%
   QC value within limits for Na 589.592 Radial  Recovery = 97.29%
Ni 231.604†               86.4      4.9798 µg/L       0.31626      4.9798 ppb        0.31626   6.35%
   QC value within limits for Ni 231.604  Recovery = 99.60%
P 214.914†                60.1      134.91 µg/L        21.530      134.91 ppb         21.530  15.96%
   QC value within limits for P 214.914  Recovery = 89.94%
Pb 220.353†               35.2      9.4086 µg/L       0.94323      9.4086 ppb        0.94323  10.03%
   QC value within limits for Pb 220.353  Recovery = 94.09%
S 181.975 Axial†          14.3      76.255 µg/L       21.2110      76.255 ppb        21.2110  27.82%
   QC value within limits for S 181.975 Axial  Recovery = 76.25%
Sb 206.836†                8.3      8.7128 µg/L       2.99270      8.7128 ppb        2.99270  34.35%
   QC value within limits for Sb 206.836  Recovery = 87.13%
Se 196.026†               22.9      34.247 µg/L        2.0166      34.247 ppb         2.0166   5.89%
   QC value within limits for Se 196.026  Recovery = 114.16%
SiO2†                   1008.9      205.03 µg/L         3.370      205.03 ppb          3.370   1.64%
   QC value within limits for SiO2  Recovery = 96.26%
Si 251.611†             1287.0      103.77 µg/L         0.026      103.77 ppb          0.026   0.02%
   QC value within limits for Si 251.611  Recovery = 103.77%
Sn 189.927†               14.8      7.8276 µg/L       1.01361      7.8276 ppb        1.01361  12.95%
   QC value within limits for Sn 189.927  Recovery = 78.28%
Sr 421.552†              930.8      5.3153 µg/L       0.11048      5.3153 ppb        0.11048   2.08%
   QC value within limits for Sr 421.552  Recovery = 106.31%
Ti 334.940†             2178.0      5.1030 µg/L       0.15962      5.1030 ppb        0.15962   3.13%
   QC value within limits for Ti 334.940  Recovery = 102.06%
Tl 190.801†               15.9      25.592 µg/L        3.6471      25.592 ppb         3.6471  14.25%
   QC value within limits for Tl 190.801  Recovery = 127.96%
U 409.014†               408.3      41.314 µg/L        4.4732      41.314 ppb         4.4732  10.83%
   QC value within limits for U 409.014  Recovery = 82.63%
V 292.402†               384.8      4.7855 µg/L       0.28938      4.7855 ppb        0.28938   6.05%
   QC value within limits for V 292.402  Recovery = 95.71%
Zn 213.857†              360.0      10.113 µg/L        0.1206      10.113 ppb         0.1206   1.19%
   QC value within limits for Zn 213.857  Recovery = 101.13%
QC Failed.  Continue with analysis.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 05:26:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112335.8	112335.8	101	%			05:27:07
1	Al 396.153Radial†	180.7	15.6	8.1159	µg/L	8.1159	ppb	05:27:07
1	Ca 317.933Radial†	415.1	3.8	1.5101	µg/L	1.5101	ppb	05:27:28
1	Fe 238.204 Radial†	8.0	1.0	4.8962	µg/L	4.8962	ppb	05:27:28
1	K 766.490 Radial†	763.6	-83.4	-46.799	µg/L	-46.799	ppb	05:27:07
1	Mg 279.077 IEC†	13.6	-2.0	-11.162	µg/L	-11.162	ppb	05:27:28
1	Na 589.592 Radial†	-595.0	-83.4	-23.246	µg/L	-23.246	ppb	05:27:07
1	Sr 421.552†	-98.2	-14.7	-0.0837	µg/L	-0.0837	ppb	05:27:07
1	Sc 361.383	1988635.1	1988635.1	102.26	%			05:28:29
1	Y 371.029	1207903.6	1207903.6	102.26	%			05:28:29
1	Ag 328.068†	-78.1	24.9	0.2348	µg/L	0.2348	ppb	05:28:35
1	As 188.979†	2.6	-2.6	-5.1097	µg/L	-5.1097	ppb	05:28:56
1	B 249.677†	144.0	-10.4	-0.4894	µg/L	-0.4894	ppb	05:28:35
1	Ba 233.527†	-88.8	-7.7	-0.2059	µg/L	-0.2059	ppb	05:28:56
1	Be 313.107†	3568.9	-175.6	-0.1168	µg/L	-0.1168	ppb	05:28:35
1	Cd 226.502†	-100.1	-0.4	-0.0196	µg/L	-0.0196	ppb	05:28:56
1	Co 228.616†	-65.6	3.2	0.1638	µg/L	0.1638	ppb	05:28:56
1	Cr 267.716†	-147.5	-17.1	-0.3809	µg/L	-0.3809	ppb	05:28:35
1	Cu 324.752†	3249.3	-88.5	-0.6597	µg/L	-0.6597	ppb	05:28:35
1	Mn 257.610†	-221.0	15.1	0.0509	µg/L	0.0509	ppb	05:28:56
1	Mo 202.031†	-3.5	1.4	0.1713	µg/L	0.1713	ppb	05:28:56
1	Ni 231.604†	285.9	-2.2	-0.1246	µg/L	-0.1246	ppb	05:28:56
1	P 214.914†	194.5	-13.9	-31.414	µg/L	-31.414	ppb	05:28:56
1	Pb 220.353†	56.5	-0.7	-0.1785	µg/L	-0.1785	ppb	05:28:56
1	S 181.975 Axial†	32.4	-7.2	-38.268	µg/L	-38.268	ppb	05:28:56
1	Sb 206.836†	15.7	-3.6	-3.8236	µg/L	-3.8236	ppb	05:28:56
1	Se 196.026†	10.4	-0.6	-0.9512	µg/L	-0.9512	ppb	05:28:56
1	SiO2†	2010.1	-110.0	-22.363	µg/L	-22.363	ppb	05:28:35
1	Si 251.611†	349.8	27.4	2.3631	µg/L	2.3631	ppb	05:28:56
1	Sn 189.927†	18.6	-6.2	-3.2357	µg/L	-3.2357	ppb	05:28:56
1	Ti 334.940†	821.8	7.0	0.0164	µg/L	0.0164	ppb	05:28:35
1	Tl 190.801†	-20.7	-0.9	-1.4421	µg/L	-1.4421	ppb	05:28:56
1	U 409.014†	749.5	-92.5	-9.3650	µg/L	-9.3650	ppb	05:28:35
1	V 292.402†	-114.4	-35.3	-0.4396	µg/L	-0.4396	ppb	05:28:35
1	Zn 213.857†	516.4	-13.2	-0.3712	µg/L	-0.3712	ppb	05:28:56
2	Sc RADIAL	112390.5	112390.5	101	%			05:27:33
2	Al 396.153Radial†	138.1	-26.6	-13.843	µg/L	-13.843	ppb	05:27:33
2	Ca 317.933Radial†	414.1	2.6	1.0326	µg/L	1.0326	ppb	05:27:53
2	Fe 238.204 Radial†	3.7	-3.3	-17.151	µg/L	-17.151	ppb	05:27:53
2	K 766.490 Radial†	840.5	-7.6	-4.2604	µg/L	-4.2604	ppb	05:27:33
2	Mg 279.077 IEC†	16.7	1.1	6.3228	µg/L	6.3228	ppb	05:27:53
2	Na 589.592 Radial†	-626.5	-114.3	-31.874	µg/L	-31.874	ppb	05:27:33
2	Sr 421.552†	-35.3	47.7	0.2723	µg/L	0.2723	ppb	05:27:33
2	Sc 361.383	1961357.0	1961357.0	100.86	%			05:29:02
2	Y 371.029	1192322.5	1192322.5	100.94	%			05:29:02
2	Ag 328.068†	17.0	118.1	1.1207	µg/L	1.1207	ppb	05:29:07
2	As 188.979†	-0.7	-5.8	-11.587	µg/L	-11.587	ppb	05:29:28
2	B 249.677†	142.8	-9.6	-0.4438	µg/L	-0.4438	ppb	05:29:07
2	Ba 233.527†	-72.8	7.0	0.1863	µg/L	0.1863	ppb	05:29:28
2	Be 313.107†	3559.3	-136.6	-0.0909	µg/L	-0.0909	ppb	05:29:07
2	Cd 226.502†	-99.4	-1.1	-0.0347	µg/L	-0.0347	ppb	05:29:28
2	Co 228.616†	-63.6	4.3	0.2175	µg/L	0.2175	ppb	05:29:28
2	Cr 267.716†	-128.5	-0.2	-0.0053	µg/L	-0.0053	ppb	05:29:07
2	Cu 324.752†	3225.8	-67.6	-0.5085	µg/L	-0.5085	ppb	05:29:07
2	Mn 257.610†	-193.8	39.1	0.1283	µg/L	0.1283	ppb	05:29:28
2	Mo 202.031†	-7.3	-2.4	-0.2911	µg/L	-0.2911	ppb	05:29:28
2	Ni 231.604†	279.4	-4.7	-0.2717	µg/L	-0.2717	ppb	05:29:28
2	P 214.914†	200.4	-5.5	-12.283	µg/L	-12.283	ppb	05:29:28
2	Pb 220.353†	54.3	-2.2	-0.5813	µg/L	-0.5813	ppb	05:29:28

2	S 181.975 Axial†	33.9	-5.3	-28.129	µg/L	-28.129 ppb	05:29:28
2	Sb 206.836†	17.3	-1.8	-1.8688	µg/L	-1.8688 ppb	05:29:28
2	Se 196.026†	13.2	2.2	3.3320	µg/L	3.3320 ppb	05:29:28
2	SiO2†	2005.1	-87.7	-17.815	µg/L	-17.815 ppb	05:29:07
2	Si 251.611†	345.8	28.2	2.3189	µg/L	2.3189 ppb	05:29:28
2	Sn 189.927†	23.4	-1.1	-0.5865	µg/L	-0.5865 ppb	05:29:28
2	Ti 334.940†	794.0	-9.3	-0.0220	µg/L	-0.0220 ppb	05:29:07
2	Tl 190.801†	-22.5	-3.0	-4.8270	µg/L	-4.8270 ppb	05:29:28
2	U 409.014†	770.4	-61.6	-6.2303	µg/L	-6.2303 ppb	05:29:07
2	V 292.402†	-106.3	-28.8	-0.3610	µg/L	-0.3610 ppb	05:29:07
2	Zn 213.857†	509.8	-12.8	-0.3571	µg/L	-0.3571 ppb	05:29:28
3	Sc RADIAL	111266.3	111266.3	100.0	%		05:27:59
3	Al 396.153Radial†	183.8	20.4	10.661	µg/L	10.661 ppb	05:27:59
3	Ca 317.933Radial†	421.9	14.5	5.7261	µg/L	5.7261 ppb	05:28:19
3	Fe 238.204 Radial†	5.3	-1.6	-8.3398	µg/L	-8.3398 ppb	05:28:19
3	K 766.490 Radial†	840.0	0.3	0.1480	µg/L	0.1480 ppb	05:27:59
3	Mg 279.077 IEC†	15.1	-0.4	-2.0645	µg/L	-2.0645 ppb	05:28:19
3	Na 589.592 Radial†	-618.7	-112.7	-31.426	µg/L	-31.426 ppb	05:27:59
3	Sr 421.552†	-45.2	37.4	0.2136	µg/L	0.2136 ppb	05:27:59
3	Sc 361.383	2043522.5	2043522.5	105.08	%		05:29:34
3	Y 371.029	1241046.2	1241046.2	105.06	%		05:29:34
3	Ag 328.068†	-29.7	73.0	0.6952	µg/L	0.6952 ppb	05:29:39
3	As 188.979†	3.6	-1.7	-3.3397	µg/L	-3.3397 ppb	05:30:00
3	B 249.677†	167.1	7.8	0.3682	µg/L	0.3682 ppb	05:29:39
3	Ba 233.527†	-64.8	17.6	0.4699	µg/L	0.4699 ppb	05:30:00
3	Be 313.107†	3502.0	-333.0	-0.2215	µg/L	-0.2215 ppb	05:29:39
3	Cd 226.502†	-94.3	7.7	0.2077	µg/L	0.2077 ppb	05:30:00
3	Co 228.616†	-63.2	7.2	0.3637	µg/L	0.3637 ppb	05:30:00
3	Cr 267.716†	-122.1	11.0	0.2448	µg/L	0.2448 ppb	05:29:39
3	Cu 324.752†	3276.8	-147.7	-1.1038	µg/L	-1.1038 ppb	05:29:39
3	Mn 257.610†	-198.1	42.7	0.1415	µg/L	0.1415 ppb	05:30:00
3	Mo 202.031†	-10.0	-4.6	-0.5555	µg/L	-0.5555 ppb	05:30:00
3	Ni 231.604†	279.8	-15.4	-0.8895	µg/L	-0.8895 ppb	05:30:00
3	P 214.914†	196.1	-17.6	-39.604	µg/L	-39.604 ppb	05:30:00
3	Pb 220.353†	67.6	8.3	2.2372	µg/L	2.2372 ppb	05:30:00
3	S 181.975 Axial†	32.0	-8.3	-44.638	µg/L	-44.638 ppb	05:30:00
3	Sb 206.836†	17.1	-2.7	-2.8156	µg/L	-2.8156 ppb	05:30:00
3	Se 196.026†	8.9	-2.4	-3.5437	µg/L	-3.5437 ppb	05:30:00
3	SiO2†	2046.6	-128.1	-26.023	µg/L	-26.023 ppb	05:29:39
3	Si 251.611†	344.0	12.7	1.0841	µg/L	1.0841 ppb	05:30:00
3	Sn 189.927†	23.3	-2.1	-1.1190	µg/L	-1.1190 ppb	05:30:00
3	Ti 334.940†	789.1	-45.7	-0.1075	µg/L	-0.1075 ppb	05:29:39
3	Tl 190.801†	-28.4	-7.7	-12.292	µg/L	-12.292 ppb	05:30:00
3	U 409.014†	753.5	-108.4	-10.973	µg/L	-10.973 ppb	05:29:39
3	V 292.402†	-72.0	8.0	0.0745	µg/L	0.0745 ppb	05:29:39
3	Zn 213.857†	504.8	-37.8	-1.0610	µg/L	-1.0610 ppb	05:30:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1997838.2	102.73	%	2.152				2.09%
Sc RADIAL	111997.6	101	%	0.6				0.57%
Y 371.029	1213757.4	102.75	%	2.107				2.05%
Ag 328.068†	72.0	0.6836	µg/L	0.44304	0.6836	ppb	0.44304	64.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	1.6447	µg/L	13.47308	1.6447	ppb	13.47308	819.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-6.6787	µg/L	4.34169	-6.6787	ppb	4.34169	65.01%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-4.1	-0.1883	µg/L	0.48253	-0.1883	ppb	0.48253	256.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.6	0.1501	µg/L	0.33937	0.1501	ppb	0.33937	226.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-215.1	-0.1431	µg/L	0.06916	-0.1431	ppb	0.06916	48.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	7.0	2.7563	µg/L	2.58301	2.7563	ppb	2.58301	93.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.0	0.0511	µg/L	0.13580	0.0511	ppb	0.13580	265.53%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.9	0.2483	µg/L	0.10345	0.2483	ppb	0.10345	41.66%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -2.1     -0.0471 µg/L       0.31493     -0.0471 ppb        0.31493 668.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -101.3     -0.7573 µg/L       0.30944     -0.7573 ppb        0.30944  40.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.3     -6.8649 µg/L      11.09734     -6.8649 ppb       11.09734 161.65%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -30.2     -16.970 µg/L       25.9259     -16.970 ppb        25.9259 152.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4     -2.3012 µg/L       8.74472     -2.3012 ppb        8.74472 380.01%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              32.3      0.1069 µg/L       0.04895      0.1069 ppb        0.04895  45.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.9     -0.2251 µg/L       0.36787     -0.2251 ppb        0.36787 163.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -103.5     -28.849 µg/L        4.8570     -28.849 ppb         4.8570  16.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -7.4     -0.4286 µg/L       0.40587     -0.4286 ppb        0.40587  94.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -12.3     -27.767 µg/L       14.0206     -27.767 ppb        14.0206  50.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.8      0.4925 µg/L       1.52437      0.4925 ppb        1.52437 309.53%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.9     -37.012 µg/L        8.3261     -37.012 ppb         8.3261  22.50%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.7     -2.8360 µg/L       0.97753     -2.8360 ppb        0.97753  34.47%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.3     -0.3877 µg/L       3.47235     -0.3877 ppb        3.47235 895.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -108.6     -22.067 µg/L        4.1120     -22.067 ppb         4.1120  18.63%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              22.8      1.9220 µg/L       0.72599      1.9220 ppb        0.72599  37.77%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -3.2     -1.6471 µg/L       1.40129     -1.6471 ppb        1.40129  85.08%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              23.5      0.1341 µg/L       0.19086      0.1341 ppb        0.19086 142.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -16.0     -0.0377 µg/L       0.06343     -0.0377 ppb        0.06343 168.13%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.9     -6.1869 µg/L       5.55113     -6.1869 ppb        5.55113  89.72%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -87.5     -8.8562 µg/L       2.41210     -8.8562 ppb        2.41210  27.24%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.7     -0.2421 µg/L .     0.27691     -0.2421 ppb        0.27691 114.40%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -21.2     -0.5964 µg/L       0.40241     -0.5964 ppb        0.40241  67.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 05:33:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113970.9	113970.9	102	%			05:34:19
1	Al 396.153Radial†	10227.0	9823.2	5096.9	µg/L	5096.9	ppb	05:34:19
1	Ca 317.933Radial†	13415.7	12692.9	4999.1	µg/L	4999.1	ppb	05:34:40
1	Fe 238.204 Radial†	1035.3	1004.0	5176.3	µg/L	5176.3	ppb	05:34:40
1	K 766.490 Radial†	9983.4	8908.8	4998.1	µg/L	4998.1	ppb	05:34:19
1	Mg 279.077 IEC†	981.5	943.0	5267.0	µg/L	5267.0	ppb	05:34:40
1	Na 589.592 Radial†	36633.8	36278.6	10114	µg/L	10114	ppb	05:34:19
1	Sr 421.552†	89333.6	87316.1	498.61	µg/L	498.61	ppb	05:34:19
1	Sc 361.383	1989871.5	1989871.5	102.32	%			05:35:43
1	Y 371.029	1202401.8	1202401.8	101.79	%			05:35:43
1	Ag 328.068†	54150.3	53021.8	508.53	µg/L	508.53	ppb	05:35:49
1	As 188.979†	254.7	243.8	485.76	µg/L	485.76	ppb	05:36:10
1	B 249.677†	11032.4	10630.7	496.86	µg/L	496.86	ppb	05:35:49
1	Ba 233.527†	19064.1	18710.3	501.76	µg/L	501.76	ppb	05:35:49
1	Be 313.107†	780956.9	759555.5	505.14	µg/L	505.14	ppb	05:35:43
1	Cd 226.502†	18140.2	17825.6	501.51	µg/L	501.51	ppb	05:35:49
1	Co 228.616†	10036.9	9876.4	501.11	µg/L	501.11	ppb	05:35:49
1	Cr 267.716†	22804.6	22413.9	499.77	µg/L	499.77	ppb	05:35:49
1	Cu 324.752†	72684.9	67768.2	506.78	µg/L	506.78	ppb	05:35:49
1	Mn 257.610†	154392.4	151117.3	504.94	µg/L	504.94	ppb	05:35:43
1	Mo 202.031†	4218.9	4127.9	495.60	µg/L	495.60	ppb	05:36:10
1	Ni 231.604†	9163.2	8673.4	500.11	µg/L	500.11	ppb	05:35:49
1	P 214.914†	1320.5	1086.3	2401.2	µg/L	2401.2	ppb	05:36:10
1	Pb 220.353†	1951.2	1850.9	495.85	µg/L	495.85	ppb	05:36:10
1	S 181.975 Axial†	221.8	177.9	949.71	µg/L	949.71	ppb	05:36:10
1	Sb 206.836†	500.5	470.2	495.12	µg/L	495.12	ppb	05:36:10
1	Se 196.026†	353.3	334.5	503.40	µg/L	503.40	ppb	05:36:10
1	SiO2†	28798.3	26068.6	5297.6	µg/L	5297.6	ppb	05:35:49
1	Si 251.611†	31604.0	30571.6	2434.0	µg/L	2434.0	ppb	05:35:49
1	Sn 189.927†	1000.8	953.7	499.13	µg/L	499.13	ppb	05:36:10
1	Ti 334.940†	220588.9	214782.6	504.09	µg/L	504.09	ppb	05:35:43
1	Tl 190.801†	294.2	306.8	494.54	µg/L	494.54	ppb	05:36:10
1	U 409.014†	5796.6	4839.5	489.03	µg/L	489.03	ppb	05:35:49
1	V 292.402†	42443.9	41556.5	505.57	µg/L	505.57	ppb	05:35:49
1	Zn 213.857†	18812.9	17867.4	501.00	µg/L	501.00	ppb	05:35:49
2	Sc RADIAL	113856.9	113856.9	102	%			05:34:45
2	Al 396.153Radial†	10214.0	9820.4	5095.5	µg/L	5095.5	ppb	05:34:45
2	Ca 317.933Radial†	13430.1	12720.0	5009.8	µg/L	5009.8	ppb	05:35:06
2	Fe 238.204 Radial†	1035.1	1004.9	5180.9	µg/L	5180.9	ppb	05:35:06
2	K 766.490 Radial†	10040.2	8974.1	5034.7	µg/L	5034.7	ppb	05:34:45
2	Mg 279.077 IEC†	973.6	936.3	5229.5	µg/L	5229.5	ppb	05:35:06
2	Na 589.592 Radial†	36627.8	36308.6	10123	µg/L	10123	ppb	05:34:45
2	Sr 421.552†	89507.5	87573.4	500.08	µg/L	500.08	ppb	05:34:45
2	Sc 361.383	1998071.5	1998071.5	102.75	%			05:36:17
2	Y 371.029	1206699.5	1206699.5	102.15	%			05:36:17
2	Ag 328.068†	54341.4	52990.6	508.23	µg/L	508.23	ppb	05:36:22
2	As 188.979†	257.8	245.8	489.69	µg/L	489.69	ppb	05:36:43
2	B 249.677†	11049.8	10603.3	495.57	µg/L	495.57	ppb	05:36:22
2	Ba 233.527†	19123.9	18692.1	501.27	µg/L	501.27	ppb	05:36:22
2	Be 313.107†	770487.3	746233.4	496.28	µg/L	496.28	ppb	05:36:17
2	Cd 226.502†	18191.5	17802.9	500.87	µg/L	500.87	ppb	05:36:22
2	Co 228.616†	10058.5	9857.1	500.15	µg/L	500.15	ppb	05:36:22
2	Cr 267.716†	22895.2	22410.6	499.70	µg/L	499.70	ppb	05:36:22
2	Cu 324.752†	72967.8	67752.0	506.66	µg/L	506.66	ppb	05:36:22
2	Mn 257.610†	152666.1	148817.9	497.27	µg/L	497.27	ppb	05:36:17
2	Mo 202.031†	4233.0	4124.7	495.22	µg/L	495.22	ppb	05:36:43
2	Ni 231.604†	9180.4	8653.4	498.96	µg/L	498.96	ppb	05:36:22
2	P 214.914†	1329.2	1089.5	2408.3	µg/L	2408.3	ppb	05:36:43
2	Pb 220.353†	1968.3	1859.7	498.20	µg/L	498.20	ppb	05:36:43

2	S 181.975 Axial†	222.7	177.9	949.50 µg/L	949.50 ppb	05:36:43
2	Sb 206.836†	506.1	473.6	498.71 µg/L	498.71 ppb	05:36:43
2	Se 196.026†	359.4	338.9	510.12 µg/L	510.12 ppb	05:36:43
2	SiO2†	28895.6	26047.8	5293.4 µg/L	5293.4 ppb	05:36:22
2	Si 251.611†	31709.9	30547.9	2432.3 µg/L	2432.3 ppb	05:36:22
2	Sn 189.927†	1005.8	954.6	499.59 µg/L	499.59 ppb	05:36:43
2	Ti 334.940†	218428.3	211795.1	497.07 µg/L	497.07 ppb	05:36:17
2	Tl 190.801†	298.5	309.8	499.23 µg/L	499.23 ppb	05:36:43
2	U 409.014†	5796.6	4816.3	486.68 µg/L	486.68 ppb	05:36:22
2	V 292.402†	42580.3	41519.0	505.11 µg/L	505.11 ppb	05:36:22
2	Zn 213.857†	18841.2	17819.5	499.66 µg/L	499.66 ppb	05:36:22
3	Sc RADIAL	114329.6	114329.6	103 %		05:35:11
3	Al 396.153Radial†	10261.3	9825.3	5097.9 µg/L	5097.9 ppb	05:35:11
3	Ca 317.933Radial†	13361.5	12599.0	4962.2 µg/L	4962.2 ppb	05:35:32
3	Fe 238.204 Radial†	1029.4	995.1	5129.7 µg/L	5129.7 ppb	05:35:32
3	K 766.490 Radial†	9973.9	8869.0	4975.7 µg/L	4975.7 ppb	05:35:11
3	Mg 279.077 IEC†	977.0	935.6	5226.3 µg/L	5226.3 ppb	05:35:32
3	Na 589.592 Radial†	36761.4	36290.7	10118 µg/L	10118 ppb	05:35:11
3	Sr 421.552†	89449.5	87155.2	497.69 µg/L	497.69 ppb	05:35:11
3	Sc 361.383	1977428.3	1977428.3	101.68 %		05:36:50
3	Y 371.029	1195383.6	1195383.6	101.20 %		05:36:50
3	Ag 328.068†	49911.8	49186.5	471.78 µg/L	471.78 ppb	05:36:56
3	As 188.979†	254.1	244.8	487.73 µg/L	487.73 ppb	05:37:16
3	B 249.677†	10149.7	9830.4	459.34 µg/L	459.34 ppb	05:36:56
3	Ba 233.527†	17589.8	17377.7	466.02 µg/L	466.02 ppb	05:36:56
3	Be 313.107†	775388.4	758881.9	504.70 µg/L	504.70 ppb	05:36:50
3	Cd 226.502†	16604.7	16427.1	462.15 µg/L	462.15 ppb	05:36:56
3	Co 228.616†	9250.5	9164.7	465.02 µg/L	465.02 ppb	05:36:56
3	Cr 267.716†	21036.8	20815.6	464.14 µg/L	464.14 ppb	05:36:56
3	Cu 324.752†	67384.5	63002.6	471.21 µg/L	471.21 ppb	05:36:56
3	Mn 257.610†	153472.1	151161.7	505.08 µg/L	505.08 ppb	05:36:50
3	Mo 202.031†	4221.0	4155.9	498.96 µg/L	498.96 ppb	05:37:16
3	Ni 231.604†	8457.2	8035.4	463.33 µg/L	463.33 ppb	05:36:56
3	P 214.914†	1315.9	1089.9	2413.8 µg/L	2413.8 ppb	05:37:16
3	Pb 220.353†	1956.0	1867.6	500.41 µg/L	500.41 ppb	05:37:16
3	S 181.975 Axial†	223.7	181.1	966.86 µg/L	966.86 ppb	05:37:16
3	Sb 206.836†	503.8	476.6	501.98 µg/L	501.98 ppb	05:37:16
3	Se 196.026†	349.7	333.1	501.34 µg/L	501.34 ppb	05:37:16
3	SiO2†	26622.1	24105.5	4898.7 µg/L	4898.7 ppb	05:36:56
3	Si 251.611†	29125.5	28328.5	2251.7 µg/L	2251.7 ppb	05:36:56
3	Sn 189.927†	1000.5	959.5	502.13 µg/L	502.13 ppb	05:37:16
3	Ti 334.940†	219283.2	214855.1	504.26 µg/L	504.26 ppb	05:36:50
3	Tl 190.801†	301.9	316.2	509.75 µg/L	509.75 ppb	05:37:16
3	U 409.014†	5445.3	4529.7	457.67 µg/L	457.67 ppb	05:36:56
3	V 292.402†	39169.2	38597.1	469.87 µg/L	469.87 ppb	05:36:56
3	Zn 213.857†	17222.2	16418.7	460.31 µg/L	460.31 ppb	05:36:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1988457.1	102.25	%	0.534				0.52%
Sc RADIAL	114052.5	102	%	0.2				0.22%
Y 371.029	1201495.0	101.71	%	0.484				0.48%
Ag 328.068†	51733.0	496.18	µg/L	21.134	496.18	ppb	21.134	4.26%
QC value within limits for Ag 328.068 Recovery = 99.24%								
Al 396.153Radial†	9823.0	5096.7	µg/L	1.19	5096.7	ppb	1.19	0.02%
QC value within limits for Al 396.153Radial Recovery = 101.93%								
As 188.979†	244.8	487.73	µg/L	1.964	487.73	ppb	1.964	0.40%
QC value within limits for As 188.979 Recovery = 97.55%								
B 249.677†	10354.8	483.92	µg/L	21.296	483.92	ppb	21.296	4.40%
QC value within limits for B 249.677 Recovery = 96.78%								
Ba 233.527†	18260.0	489.69	µg/L	20.494	489.69	ppb	20.494	4.19%
QC value within limits for Ba 233.527 Recovery = 97.94%								
Be 313.107†	754890.3	502.04	µg/L	4.991	502.04	ppb	4.991	0.99%
QC value within limits for Be 313.107 Recovery = 100.41%								
Ca 317.933Radial†	12670.7	4990.4	µg/L	25.01	4990.4	ppb	25.01	0.50%
QC value within limits for Ca 317.933Radial Recovery = 99.81%								
Cd 226.502†	17351.9	488.18	µg/L	22.545	488.18	ppb	22.545	4.62%
QC value within limits for Cd 226.502 Recovery = 97.64%								
Co 228.616†	9632.7	488.76	µg/L	20.567	488.76	ppb	20.567	4.21%

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   QC value within limits for Co 228.616  Recovery = 97.75%
Cr 267.716†            21880.0      487.87 µg/L        20.553      487.87 ppb         20.553   4.21%
   QC value within limits for Cr 267.716  Recovery = 97.57%
Cu 324.752†            66174.3      494.89 µg/L        20.502      494.89 ppb         20.502   4.14%
   QC value within limits for Cu 324.752  Recovery = 98.98%
Fe 238.204 Radial†      1001.3      5162.3 µg/L         28.30      5162.3 ppb          28.30   0.55%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.25%
K 766.490 Radial†       8917.3      5002.8 µg/L         29.76      5002.8 ppb          29.76   0.59%
   QC value within limits for K 766.490 Radial  Recovery = 100.06%
Mg 279.077 IEC†          938.3      5241.0 µg/L         22.65      5241.0 ppb          22.65   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.82%
Mn 257.610†           150365.6      502.43 µg/L         4.472      502.43 ppb          4.472   0.89%
   QC value within limits for Mn 257.610  Recovery = 100.49%
Mo 202.031†             4136.2      496.59 µg/L         2.059      496.59 ppb          2.059   0.41%
   QC value within limits for Mo 202.031  Recovery = 99.32%
Na 589.592 Radial†     36292.6       10118 µg/L           4.2       10118 ppb            4.2   0.04%
   QC value within limits for Na 589.592 Radial  Recovery = 101.18%
Ni 231.604†             8454.1      487.47 µg/L        20.913      487.47 ppb         20.913   4.29%
   QC value within limits for Ni 231.604  Recovery = 97.49%
P 214.914†              1088.6      2407.8 µg/L          6.32      2407.8 ppb          6.32   0.26%
   QC value within limits for P 214.914  Recovery = 96.31%
Pb 220.353†             1859.4      498.16 µg/L         2.283      498.16 ppb          2.283   0.46%
   QC value within limits for Pb 220.353  Recovery = 99.63%
S 181.975 Axial†         179.0      955.36 µg/L         9.965      955.36 ppb          9.965   1.04%
   QC value within limits for S 181.975 Axial  Recovery = 95.54%
Sb 206.836†              473.5      498.60 µg/L         3.433      498.60 ppb          3.433   0.69%
   QC value within limits for Sb 206.836  Recovery = 99.72%
Se 196.026†              335.5      504.95 µg/L         4.589      504.95 ppb          4.589   0.91%
   QC value within limits for Se 196.026  Recovery = 100.99%
SiO2†                  25407.3      5163.2 µg/L        229.11      5163.2 ppb         229.11   4.44%
   QC value within limits for SiO2  Recovery = 96.55%
Si 251.611†            29816.0      2372.7 µg/L        104.74      2372.7 ppb         104.74   4.41%
   QC value within limits for Si 251.611  Recovery = 94.91%
Sn 189.927†              956.0      500.29 µg/L         1.617      500.29 ppb          1.617   0.32%
   QC value within limits for Sn 189.927  Recovery = 100.06%
Sr 421.552†            87348.2      498.79 µg/L         1.204      498.79 ppb          1.204   0.24%
   QC value within limits for Sr 421.552  Recovery = 99.76%
Ti 334.940†           213810.9      501.81 µg/L         4.101      501.81 ppb          4.101   0.82%
   QC value within limits for Ti 334.940  Recovery = 100.36%
Tl 190.801†              311.0      501.17 µg/L         7.789      501.17 ppb          7.789   1.55%
   QC value within limits for Tl 190.801  Recovery = 100.23%
U 409.014†              4728.5      477.79 µg/L        17.463      477.79 ppb         17.463   3.66%
   QC value within limits for U 409.014  Recovery = 95.56%
V 292.402†             40557.6      493.51 µg/L        20.482      493.51 ppb         20.482   4.15%
   QC value within limits for V 292.402  Recovery = 98.70%
Zn 213.857†            17368.6      486.99 µg/L        23.118      486.99 ppb         23.118   4.75%
   QC value within limits for Zn 213.857  Recovery = 97.40%
All analyte(s) passed QC.
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Sequence No.: 27
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 05:37:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111744.9	111744.9	100	%			05:37:58
1	Al 396.153Radial†	193.2	29.1	15.138	µg/L	15.138	ppb	05:37:58
1	Ca 317.933Radial†	403.6	-5.5	-2.1494	µg/L	-2.1494	ppb	05:38:18
1	Fe 238.204 Radial†	8.3	1.3	6.8799	µg/L	6.8799	ppb	05:38:18
1	K 766.490 Radial†	735.0	-107.9	-60.547	µg/L	-60.547	ppb	05:37:58
1	Mg 279.077 IEC†	18.1	2.6	14.307	µg/L	14.307	ppb	05:38:18
1	Na 589.592 Radial†	-585.3	-76.8	-21.416	µg/L	-21.416	ppb	05:37:58
1	Sr 421.552†	-82.3	0.7	0.0040	µg/L	0.0040	ppb	05:37:58
1	Sc 361.383	1967501.5	1967501.5	101.17	%			05:39:21
1	Y 371.029	1196023.5	1196023.5	101.25	%			05:39:21
1	Ag 328.068†	-54.4	47.5	0.4505	µg/L	0.4505	ppb	05:39:26
1	As 188.979†	3.5	-1.6	-3.2194	µg/L	-3.2194	ppb	05:39:47
1	B 249.677†	133.6	-19.2	-0.9012	µg/L	-0.9012	ppb	05:39:26
1	Ba 233.527†	-73.4	6.6	0.1757	µg/L	0.1757	ppb	05:39:47
1	Be 313.107†	3745.1	36.0	0.0240	µg/L	0.0240	ppb	05:39:26
1	Cd 226.502†	-92.9	5.6	0.1546	µg/L	0.1546	ppb	05:39:47
1	Co 228.616†	-65.2	2.9	0.1490	µg/L	0.1490	ppb	05:39:47
1	Cr 267.716†	-86.4	41.8	0.9293	µg/L	0.9293	ppb	05:39:26
1	Cu 324.752†	3283.6	-20.5	-0.1516	µg/L	-0.1516	ppb	05:39:26
1	Mn 257.610†	-213.0	20.7	0.0700	µg/L	0.0700	ppb	05:39:47
1	Mo 202.031†	-3.2	1.7	0.1998	µg/L	0.1998	ppb	05:39:47
1	Ni 231.604†	288.4	3.3	0.1926	µg/L	0.1926	ppb	05:39:47
1	P 214.914†	195.0	-11.4	-25.882	µg/L	-25.882	ppb	05:39:47
1	Pb 220.353†	58.0	1.3	0.3593	µg/L	0.3593	ppb	05:39:47
1	S 181.975 Axial†	35.7	-3.6	-18.992	µg/L	-18.992	ppb	05:39:47
1	Sb 206.836†	21.8	2.6	2.7411	µg/L	2.7411	ppb	05:39:47
1	Se 196.026†	12.3	1.3	1.9843	µg/L	1.9843	ppb	05:39:47
1	SiO2†	2011.8	-87.2	-17.723	µg/L	-17.723	ppb	05:39:26
1	Si 251.611†	330.8	12.3	1.0825	µg/L	1.0825	ppb	05:39:47
1	Sn 189.927†	21.5	-3.1	-1.6333	µg/L	-1.6333	ppb	05:39:47
1	Ti 334.940†	809.3	3.3	0.0079	µg/L	0.0079	ppb	05:39:26
1	Tl 190.801†	-18.6	0.9	1.4663	µg/L	1.4663	ppb	05:39:47
1	U 409.014†	787.1	-47.5	-4.8055	µg/L	-4.8055	ppb	05:39:26
1	V 292.402†	-104.5	-26.7	-0.3276	µg/L	-0.3276	ppb	05:39:26
1	Zn 213.857†	518.6	-5.6	-0.1599	µg/L	-0.1599	ppb	05:39:47
2	Sc RADIAL	112615.7	112615.7	101	%			05:38:24
2	Al 396.153Radial†	161.2	-4.1	-2.1196	µg/L	-2.1196	ppb	05:38:24
2	Ca 317.933Radial†	421.0	8.6	3.3849	µg/L	3.3849	ppb	05:38:44
2	Fe 238.204 Radial†	6.9	-0.2	-0.7609	µg/L	-0.7609	ppb	05:38:44
2	K 766.490 Radial†	793.9	-55.4	-31.067	µg/L	-31.067	ppb	05:38:24
2	Mg 279.077 IEC†	10.9	-4.6	-25.723	µg/L	-25.723	ppb	05:38:44
2	Na 589.592 Radial†	-606.1	-92.9	-25.888	µg/L	-25.888	ppb	05:38:24
2	Sr 421.552†	-66.1	17.3	0.0991	µg/L	0.0991	ppb	05:38:24
2	Sc 361.383	1988637.7	1988637.7	102.26	%			05:39:53
2	Y 371.029	1208971.9	1208971.9	102.35	%			05:39:53
2	Ag 328.068†	-9.7	91.7	0.8714	µg/L	0.8714	ppb	05:39:58
2	As 188.979†	2.2	-2.9	-5.8497	µg/L	-5.8497	ppb	05:40:19
2	B 249.677†	194.6	39.1	1.8326	µg/L	1.8326	ppb	05:39:58
2	Ba 233.527†	-76.5	4.4	0.1161	µg/L	0.1161	ppb	05:40:19
2	Be 313.107†	3635.3	-110.6	-0.0736	µg/L	-0.0736	ppb	05:39:58
2	Cd 226.502†	-97.3	2.3	0.0569	µg/L	0.0569	ppb	05:40:19
2	Co 228.616†	-59.4	9.3	0.4725	µg/L	0.4725	ppb	05:40:19
2	Cr 267.716†	-152.6	-22.0	-0.4905	µg/L	-0.4905	ppb	05:39:58
2	Cu 324.752†	3249.8	-88.1	-0.6572	µg/L	-0.6572	ppb	05:39:58
2	Mn 257.610†	-210.2	25.7	0.0857	µg/L	0.0857	ppb	05:40:19
2	Mo 202.031†	-4.9	0.0	0.0036	µg/L	0.0036	ppb	05:40:19
2	Ni 231.604†	276.6	-11.2	-0.6461	µg/L	-0.6461	ppb	05:40:19
2	P 214.914†	197.3	-11.2	-25.377	µg/L	-25.377	ppb	05:40:19
2	Pb 220.353†	48.3	-8.7	-2.3302	µg/L	-2.3302	ppb	05:40:19

2	S 181.975 Axial†	32.6	-7.0	-37.251 µg/L	-37.251 ppb	05:40:19
2	Sb 206.836†	17.3	-2.0	-2.1529 µg/L	-2.1529 ppb	05:40:19
2	Se 196.026†	12.4	1.3	1.9036 µg/L	1.9036 ppb	05:40:19
2	SiO2†	2003.6	-116.4	-23.651 µg/L	-23.651 ppb	05:39:58
2	Si 251.611†	338.2	16.1	1.3943 µg/L	1.3943 ppb	05:40:19
2	Sn 189.927†	21.2	-3.7	-1.9087 µg/L	-1.9087 ppb	05:40:19
2	Ti 334.940†	786.9	-27.1	-0.0639 µg/L	-0.0639 ppb	05:39:58
2	Tl 190.801†	-19.5	0.3	0.4182 µg/L	0.4182 ppb	05:40:19
2	U 409.014†	750.5	-91.6	-9.2699 µg/L	-9.2699 ppb	05:39:58
2	V 292.402†	-100.2	-21.5	-0.2737 µg/L	-0.2737 ppb	05:39:58
2	Zn 213.857†	514.6	-15.0	-0.4184 µg/L	-0.4184 ppb	05:40:19
3	Sc RADIAL	110635.6	110635.6	99.4 %		05:38:50
3	Al 396.153Radial†	173.5	11.2	5.8457 µg/L	5.8457 ppb	05:38:50
3	Ca 317.933Radial†	415.6	10.7	4.1947 µg/L	4.1947 ppb	05:39:10
3	Fe 238.204 Radial†	7.3	0.4	1.9517 µg/L	1.9517 ppb	05:39:10
3	K 766.490 Radial†	785.1	-50.1	-28.129 µg/L	-28.129 ppb	05:38:50
3	Mg 279.077 IEC†	20.6	5.3	29.604 µg/L	29.604 ppb	05:39:10
3	Na 589.592 Radial†	-605.8	-103.3	-28.796 µg/L	-28.796 ppb	05:38:50
3	Sr 421.552†	-37.9	44.5	0.2542 µg/L	0.2542 ppb	05:38:50
3	Sc 361.383	1989526.6	1989526.6	102.31 %		05:40:25
3	Y 371.029	1209301.3	1209301.3	102.37 %		05:40:25
3	Ag 328.068†	-4.9	96.5	0.9190 µg/L	0.9190 ppb	05:40:30
3	As 188.979†	-2.1	-7.2	-14.300 µg/L	-14.300 ppb	05:40:51
3	B 249.677†	147.4	-7.1	-0.3332 µg/L	-0.3332 ppb	05:40:30
3	Ba 233.527†	-68.4	12.3	0.3290 µg/L	0.3290 ppb	05:40:51
3	Be 313.107†	3593.1	-153.5	-0.1021 µg/L	-0.1021 ppb	05:40:30
3	Cd 226.502†	-93.5	6.0	0.1610 µg/L	0.1610 ppb	05:40:51
3	Co 228.616†	-77.6	-8.5	-0.4321 µg/L	-0.4321 ppb	05:40:51
3	Cr 267.716†	-88.3	40.9	0.9091 µg/L	0.9091 ppb	05:40:30
3	Cu 324.752†	3208.7	-129.6	-0.9667 µg/L	-0.9667 ppb	05:40:30
3	Mn 257.610†	-209.4	26.5	0.0887 µg/L	0.0887 ppb	05:40:51
3	Mo 202.031†	-8.2	-3.2	-0.3847 µg/L	-0.3847 ppb	05:40:51
3	Ni 231.604†	278.9	-9.0	-0.5216 µg/L	-0.5216 ppb	05:40:51
3	P 214.914†	192.8	-15.7	-35.357 µg/L	-35.357 ppb	05:40:51
3	Pb 220.353†	59.5	2.2	0.5911 µg/L	0.5911 ppb	05:40:51
3	S 181.975 Axial†	31.9	-7.6	-40.799 µg/L	-40.799 ppb	05:40:51
3	Sb 206.836†	17.4	-1.9	-1.9958 µg/L	-1.9958 ppb	05:40:51
3	Se 196.026†	12.2	1.1	1.6078 µg/L	1.6078 ppb	05:40:51
3	SiO2†	2000.2	-120.6	-24.500 µg/L	-24.500 ppb	05:40:30
3	Si 251.611†	339.3	17.0	1.5323 µg/L	1.5323 ppb	05:40:51
3	Sn 189.927†	17.9	-6.9	-3.5864 µg/L	-3.5864 ppb	05:40:51
3	Ti 334.940†	813.2	-1.8	-0.0044 µg/L	-0.0044 ppb	05:40:30
3	Tl 190.801†	-12.6	7.0	11.233 µg/L	11.233 ppb	05:40:51
3	U 409.014†	734.3	-107.8	-10.908 µg/L	-10.908 ppb	05:40:30
3	V 292.402†	-68.7	9.4	0.0936 µg/L	0.0936 ppb	05:40:30
3	Zn 213.857†	512.5	-17.3	-0.4859 µg/L	-0.4859 ppb	05:40:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1981888.6	101.91	%	0.641				0.63%
Sc RADIAL	111665.4	100	%	0.9				0.89%
Y 371.029	1204765.6	101.99	%	0.641				0.63%
Ag 328.068†	78.6	0.7470	µg/L	0.25786	0.7470	ppb	0.25786	34.52%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.1	6.2881	µg/L	8.63739	6.2881	ppb	8.63739	137.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.9	-7.7898	µg/L	5.78957	-7.7898	ppb	5.78957	74.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4.3	0.1994	µg/L	1.44261	0.1994	ppb	1.44261	723.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.7	0.2070	µg/L	0.10984	0.2070	ppb	0.10984	53.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-76.0	-0.0506	µg/L	0.06612	-0.0506	ppb	0.06612	130.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.6	1.8101	µg/L	3.45286	1.8101	ppb	3.45286	190.76%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.6	0.1242	µg/L	0.05833	0.1242	ppb	0.05833	46.98%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.2	0.0631	µg/L	0.45838	0.0631	ppb	0.45838	726.31%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              20.2      0.4493 µg/L       0.81395      0.4493 ppb        0.81395 181.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -79.4     -0.5918 µg/L       0.41148     -0.5918 ppb        0.41148  69.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      2.6903 µg/L       3.87357      2.6903 ppb        3.87357 143.98%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -71.1     -39.914 µg/L       17.9286     -39.914 ppb        17.9286  44.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.1      6.0625 µg/L      28.56989      6.0625 ppb       28.56989 471.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              24.3      0.0815 µg/L       0.01005      0.0815 ppb        0.01005  12.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.5     -0.0604 µg/L       0.29745     -0.0604 ppb        0.29745 492.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -91.0     -25.367 µg/L        3.7178     -25.367 ppb         3.7178  14.66%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.6     -0.3250 µg/L       0.45254     -0.3250 ppb        0.45254 139.23%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -12.8     -28.872 µg/L        5.6217     -28.872 ppb         5.6217  19.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -1.7     -0.4599 µg/L       1.62384     -0.4599 ppb        1.62384 353.09%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.0     -32.347 µg/L       11.7013     -32.347 ppb        11.7013  36.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -0.4     -0.4692 µg/L       2.78128     -0.4692 ppb        2.78128 592.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.2      1.8319 µg/L       0.19823      1.8319 ppb        0.19823  10.82%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -108.1     -21.958 µg/L        3.6920     -21.958 ppb         3.6920  16.81%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              15.1      1.3364 µg/L       0.23042      1.3364 ppb        0.23042  17.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -4.6     -2.3761 µg/L       1.05715     -2.3761 ppb        1.05715  44.49%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              20.9      0.1191 µg/L       0.12632      0.1191 ppb        0.12632 106.07%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -8.5     -0.0201 µg/L       0.03836     -0.0201 ppb        0.03836 190.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.7      4.3723 µg/L       5.96417      4.3723 ppb        5.96417 136.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -82.3     -8.3277 µg/L       3.15833     -8.3277 ppb        3.15833  37.93%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -12.9     -0.1692 µg/L       0.22920     -0.1692 ppb        0.22920 135.46%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -12.6     -0.3547 µg/L       0.17209     -0.3547 ppb        0.17209  48.52%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/15/2009 06:00:41 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121509A.sif
Batch ID:
Results Data Set: 121509
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/15/2009 06:00:44**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112361.1	112361.1	101	%			06:01:24
1	Al 396.153Radial†	10265.1	10004.0	5190.9	µg/L	5190.9	ppb	06:01:24
1	Ca 317.933Radial†	13273.3	12739.5	5017.5	µg/L	5017.5	ppb	06:01:44
1	Fe 238.204 Radial†	1021.5	1004.8	5180.6	µg/L	5180.6	ppb	06:01:44
1	K 766.490 Radial†	10014.0	9078.8	5093.4	µg/L	5093.4	ppb	06:01:24
1	Mg 279.077 IEC†	964.8	940.2	5251.7	µg/L	5251.7	ppb	06:01:44
1	Na 589.592 Radial†	36346.1	36506.2	10178	µg/L	10178	ppb	06:01:24
1	Sr 421.552†	88903.3	88139.7	503.31	µg/L	503.31	ppb	06:01:24
1	Sc 361.383	1985476.1	1985476.1	102.10	%			06:02:47
1	Y 371.029	1197687.8	1197687.8	101.39	%			06:02:47
1	Ag 328.068†	53652.7	52651.6	504.97	µg/L	504.97	ppb	06:02:53
1	As 188.979†	261.6	251.1	500.41	µg/L	500.41	ppb	06:03:13
1	B 249.677†	10862.3	10487.9	490.16	µg/L	490.16	ppb	06:02:53
1	Ba 233.527†	18819.2	18511.7	496.44	µg/L	496.44	ppb	06:02:53
1	Be 313.107†	770455.7	750959.7	499.43	µg/L	499.43	ppb	06:02:47
1	Cd 226.502†	17861.3	17591.8	494.93	µg/L	494.93	ppb	06:02:53
1	Co 228.616†	9898.2	9762.2	495.33	µg/L	495.33	ppb	06:02:53
1	Cr 267.716†	22511.6	22176.2	494.47	µg/L	494.47	ppb	06:02:53
1	Cu 324.752†	71894.6	67151.3	502.18	µg/L	502.18	ppb	06:02:53
1	Mn 257.610†	153472.5	150550.3	503.05	µg/L	503.05	ppb	06:02:47
1	Mo 202.031†	4239.8	4157.6	499.16	µg/L	499.16	ppb	06:03:13
1	Ni 231.604†	9015.7	8548.7	492.92	µg/L	492.92	ppb	06:02:53
1	P 214.914†	1318.8	1087.5	2404.5	µg/L	2404.5	ppb	06:03:13
1	Pb 220.353†	1962.2	1865.9	499.88	µg/L	499.88	ppb	06:03:13
1	S 181.975 Axial†	217.9	174.6	932.18	µg/L	932.18	ppb	06:03:13
1	Sb 206.836†	506.1	476.8	502.13	µg/L	502.13	ppb	06:03:13
1	Se 196.026†	356.5	338.3	509.20	µg/L	509.20	ppb	06:03:13
1	SiO2†	28460.0	25799.5	5242.9	µg/L	5242.9	ppb	06:02:53
1	Si 251.611†	31177.2	30221.9	2405.6	µg/L	2405.6	ppb	06:02:53
1	Sn 189.927†	1000.6	955.7	500.17	µg/L	500.17	ppb	06:03:13
1	Ti 334.940†	218838.7	213545.6	501.19	µg/L	501.19	ppb	06:02:47
1	Tl 190.801†	299.2	312.3	503.34	µg/L	503.34	ppb	06:03:13
1	U 409.014†	5769.0	4825.0	487.56	µg/L	487.56	ppb	06:02:53
1	V 292.402†	41854.9	41071.5	499.74	µg/L	499.74	ppb	06:02:53
1	Zn 213.857†	18562.6	17662.9	495.27	µg/L	495.27	ppb	06:02:53
2	Sc RADIAL	112377.0	112377.0	101	%			06:01:50
2	Al 396.153Radial†	10108.8	9847.8	5109.9	µg/L	5109.9	ppb	06:01:50
2	Ca 317.933Radial†	13277.5	12741.9	5018.4	µg/L	5018.4	ppb	06:02:10
2	Fe 238.204 Radial†	1018.3	1001.5	5163.8	µg/L	5163.8	ppb	06:02:10
2	K 766.490 Radial†	10029.7	9092.9	5101.3	µg/L	5101.3	ppb	06:01:50
2	Mg 279.077 IEC†	970.1	945.3	5280.1	µg/L	5280.1	ppb	06:02:10
2	Na 589.592 Radial†	36216.4	36372.7	10141	µg/L	10141	ppb	06:01:50
2	Sr 421.552†	88274.7	87504.7	499.69	µg/L	499.69	ppb	06:01:50
2	Sc 361.383	1971318.6	1971318.6	101.37	%			06:03:19
2	Y 371.029	1188997.1	1188997.1	100.66	%			06:03:19
2	Ag 328.068†	53858.1	53231.6	510.55	µg/L	510.55	ppb	06:03:25
2	As 188.979†	248.4	239.9	478.01	µg/L	478.01	ppb	06:03:45

2	B 249.677†	10962.8	10663.5	498.40	µg/L	498.40 ppb	06:03:25
2	Ba 233.527†	18960.7	18783.7	503.73	µg/L	503.73 ppb	06:03:25
2	Be 313.107†	768265.7	754218.8	501.59	µg/L	501.59 ppb	06:03:19
2	Cd 226.502†	17997.2	17851.5	502.24	µg/L	502.24 ppb	06:03:25
2	Co 228.616†	9944.0	9877.0	501.14	µg/L	501.14 ppb	06:03:25
2	Cr 267.716†	22678.9	22499.6	501.69	µg/L	501.69 ppb	06:03:25
2	Cu 324.752†	72284.4	68041.7	508.82	µg/L	508.82 ppb	06:03:25
2	Mn 257.610†	152923.4	151088.2	504.84	µg/L	504.84 ppb	06:03:19
2	Mo 202.031†	4149.6	4098.3	492.05	µg/L	492.05 ppb	06:03:45
2	Ni 231.604†	9073.5	8669.2	499.87	µg/L	499.87 ppb	06:03:25
2	P 214.914†	1295.4	1073.8	2372.5	µg/L	2372.5 ppb	06:03:45
2	Pb 220.353†	1921.2	1839.2	492.71	µg/L	492.71 ppb	06:03:45
2	S 181.975 Axial†	222.1	180.2	962.25	µg/L	962.25 ppb	06:03:45
2	Sb 206.836†	499.0	473.3	498.39	µg/L	498.39 ppb	06:03:45
2	Se 196.026†	348.4	332.9	501.04	µg/L	501.04 ppb	06:03:45
2	SiO2†	28639.8	26177.1	5319.6	µg/L	5319.6 ppb	06:03:25
2	Si 251.611†	31398.6	30659.6	2441.3	µg/L	2441.3 ppb	06:03:25
2	Sn 189.927†	982.3	944.6	494.41	µg/L	494.41 ppb	06:03:45
2	Ti 334.940†	218239.3	214493.7	503.41	µg/L	503.41 ppb	06:03:19
2	Tl 190.801†	289.8	305.2	491.85	µg/L	491.85 ppb	06:03:45
2	U 409.014†	5773.1	4869.6	492.08	µg/L	492.08 ppb	06:03:25
2	V 292.402†	42271.6	41777.0	508.20	µg/L	508.20 ppb	06:03:25
2	Zn 213.857†	18656.4	17886.1	501.53	µg/L	501.53 ppb	06:03:25
3	Sc RADIAL	112994.0	112994.0	102	%		06:02:16
3	Al 396.153Radial†	10185.0	9868.2	5120.1	µg/L	5120.1 ppb	06:02:16
3	Ca 317.933Radial†	13248.3	12641.3	4978.8	µg/L	4978.8 ppb	06:02:36
3	Fe 238.204 Radial†	1022.0	999.7	5154.3	µg/L	5154.3 ppb	06:02:36
3	K 766.490 Radial†	10062.4	9070.9	5089.0	µg/L	5089.0 ppb	06:02:16
3	Mg 279.077 IEC†	962.0	932.1	5206.3	µg/L	5206.3 ppb	06:02:36
3	Na 589.592 Radial†	36337.7	36296.3	10119	µg/L	10119 ppb	06:02:16
3	Sr 421.552†	88570.9	87319.1	498.63	µg/L	498.63 ppb	06:02:16
3	Sc 361.383	1967794.2	1967794.2	101.19	%		06:03:51
3	Y 371.029	1187602.9	1187602.9	100.54	%		06:03:51
3	Ag 328.068†	53944.0	53411.7	512.27	µg/L	512.27 ppb	06:03:57
3	As 188.979†	252.9	244.8	487.67	µg/L	487.67 ppb	06:04:18
3	B 249.677†	10944.3	10664.6	498.45	µg/L	498.45 ppb	06:03:57
3	Ba 233.527†	18980.7	18837.0	505.16	µg/L	505.16 ppb	06:03:57
3	Be 313.107†	761989.4	749373.5	498.37	µg/L	498.37 ppb	06:03:51
3	Cd 226.502†	18050.8	17936.3	504.64	µg/L	504.64 ppb	06:03:57
3	Co 228.616†	9978.8	9929.0	503.80	µg/L	503.80 ppb	06:03:57
3	Cr 267.716†	22701.1	22561.7	503.07	µg/L	503.07 ppb	06:03:57
3	Cu 324.752†	72532.0	68414.0	511.60	µg/L	511.60 ppb	06:03:57
3	Mn 257.610†	151700.8	150150.1	501.71	µg/L	501.71 ppb	06:03:51
3	Mo 202.031†	4226.4	4181.6	502.05	µg/L	502.05 ppb	06:04:18
3	Ni 231.604†	9135.8	8746.8	504.35	µg/L	504.35 ppb	06:03:57
3	P 214.914†	1315.4	1095.8	2422.1	µg/L	2422.1 ppb	06:04:18
3	Pb 220.353†	1952.0	1873.1	501.79	µg/L	501.79 ppb	06:04:18
3	S 181.975 Axial†	219.9	178.4	952.59	µg/L	952.59 ppb	06:04:18
3	Sb 206.836†	498.3	473.5	498.55	µg/L	498.55 ppb	06:04:18
3	Se 196.026†	351.6	336.6	506.61	µg/L	506.61 ppb	06:04:18
3	SiO2†	28718.1	26305.1	5345.6	µg/L	5345.6 ppb	06:03:57
3	Si 251.611†	31378.5	30695.3	2443.8	µg/L	2443.8 ppb	06:03:57
3	Sn 189.927†	1000.2	964.1	504.51	µg/L	504.51 ppb	06:04:18
3	Ti 334.940†	216476.6	213137.2	500.23	µg/L	500.23 ppb	06:03:51
3	Tl 190.801†	298.5	314.3	506.48	µg/L	506.48 ppb	06:04:18
3	U 409.014†	5867.6	4973.2	502.56	µg/L	502.56 ppb	06:03:57
3	V 292.402†	42290.3	41870.1	509.41	µg/L	509.41 ppb	06:03:57
3	Zn 213.857†	18711.7	17973.7	503.98	µg/L	503.98 ppb	06:03:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1974863.0	101.55	%	0.481				0.47%
Sc RADIAL	112577.4	101	%	0.3				0.32%
Y 371.029	1191429.3	100.86	%	0.463				0.46%
Ag 328.068†	53098.3	509.26	µg/L	3.815	509.26	ppb	3.815	0.75%
QC value within limits for Ag 328.068 Recovery = 101.85%								
Al 396.153Radial†	9906.7	5140.3	µg/L	44.15	5140.3	ppb	44.15	0.86%
QC value within limits for Al 396.153Radial Recovery = 102.81%								
As 188.979†	245.3	488.70	µg/L	11.234	488.70	ppb	11.234	2.30%

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   QC value within limits for As 188.979  Recovery = 97.74%
B 249.677†            10605.3      495.67 µg/L        4.771      495.67 ppb          4.771   0.96%
   QC value within limits for B 249.677  Recovery = 99.13%
Ba 233.527†           18710.8      501.78 µg/L        4.679      501.78 ppb          4.679   0.93%
   QC value within limits for Ba 233.527  Recovery = 100.36%
Be 313.107†          751517.3      499.80 µg/L        1.643      499.80 ppb          1.643   0.33%
   QC value within limits for Be 313.107  Recovery = 99.96%
Ca 317.933Radial†     12707.6      5004.9 µg/L        22.60      5004.9 ppb          22.60   0.45%
   QC value within limits for Ca 317.933Radial  Recovery = 100.10%
Cd 226.502†           17793.2      500.60 µg/L        5.057      500.60 ppb          5.057   1.01%
   QC value within limits for Cd 226.502  Recovery = 100.12%
Co 228.616†            9856.1      500.09 µg/L        4.330      500.09 ppb          4.330   0.87%
   QC value within limits for Co 228.616  Recovery = 100.02%
Cr 267.716†           22412.5      499.74 µg/L        4.616      499.74 ppb          4.616   0.92%
   QC value within limits for Cr 267.716  Recovery = 99.95%
Cu 324.752†           67869.0      507.53 µg/L        4.838      507.53 ppb          4.838   0.95%
   QC value within limits for Cu 324.752  Recovery = 101.51%
Fe 238.204 Radial†     1002.0      5166.2 µg/L        13.31      5166.2 ppb          13.31   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.32%
K 766.490 Radial†      9080.8      5094.6 µg/L         6.25      5094.6 ppb           6.25   0.12%
   QC value within limits for K 766.490 Radial  Recovery = 101.89%
Mg 279.077 IEC†         939.2      5246.0 µg/L        37.19      5246.0 ppb          37.19   0.71%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.92%
Mn 257.610†          150596.2      503.20 µg/L        1.571      503.20 ppb          1.571   0.31%
   QC value within limits for Mn 257.610  Recovery = 100.64%
Mo 202.031†            4145.8      497.75 µg/L        5.145      497.75 ppb          5.145   1.03%
   QC value within limits for Mo 202.031  Recovery = 99.55%
Na 589.592 Radial†    36391.7       10146 µg/L         29.6       10146 ppb           29.6   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 101.46%
Ni 231.604†            8654.9      499.05 µg/L        5.755      499.05 ppb          5.755   1.15%
   QC value within limits for Ni 231.604  Recovery = 99.81%
P 214.914†             1085.7      2399.7 µg/L        25.18      2399.7 ppb          25.18   1.05%
   QC value within limits for P 214.914  Recovery = 95.99%
Pb 220.353†            1859.4      498.13 µg/L        4.786      498.13 ppb          4.786   0.96%
   QC value within limits for Pb 220.353  Recovery = 99.63%
S 181.975 Axial†        177.8      949.01 µg/L       15.352      949.01 ppb         15.352   1.62%
   QC value within limits for S 181.975 Axial  Recovery = 94.90%
Sb 206.836†             474.5      499.69 µg/L        2.112      499.69 ppb          2.112   0.42%
   QC value within limits for Sb 206.836  Recovery = 99.94%
Se 196.026†             335.9      505.62 µg/L        4.170      505.62 ppb          4.170   0.82%
   QC value within limits for Se 196.026  Recovery = 101.12%
SiO2†                  26093.9      5302.7 µg/L        53.41      5302.7 ppb          53.41   1.01%
   QC value within limits for SiO2  Recovery = 99.16%
Si 251.611†            30525.6      2430.2 µg/L        21.41      2430.2 ppb          21.41   0.88%
   QC value within limits for Si 251.611  Recovery = 97.21%
Sn 189.927†             954.8      499.70 µg/L        5.066      499.70 ppb          5.066   1.01%
   QC value within limits for Sn 189.927  Recovery = 99.94%
Sr 421.552†            87654.5      500.54 µg/L        2.457      500.54 ppb          2.457   0.49%
   QC value within limits for Sr 421.552  Recovery = 100.11%
Ti 334.940†           213725.5      501.61 µg/L        1.633      501.61 ppb          1.633   0.33%
   QC value within limits for Ti 334.940  Recovery = 100.32%
Tl 190.801†             310.6      500.56 µg/L        7.701      500.56 ppb          7.701   1.54%
   QC value within limits for Tl 190.801  Recovery = 100.11%
U 409.014†             4889.3      494.07 µg/L        7.698      494.07 ppb          7.698   1.56%
   QC value within limits for U 409.014  Recovery = 98.81%
V 292.402†             41572.8      505.79 µg/L        5.268      505.79 ppb          5.268   1.04%
   QC value within limits for V 292.402  Recovery = 101.16%
Zn 213.857†            17840.9      500.26 µg/L        4.494      500.26 ppb          4.494   0.90%
   QC value within limits for Zn 213.857  Recovery = 100.05%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 06:04:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111064.6	111064.6	99.8	%			06:05:01
1	Al 396.153Radial†	151.1	-12.0	-6.2774	µg/L	-6.2774	ppb	06:05:01
1	Ca 317.933Radial†	423.6	17.1	6.7261	µg/L	6.7261	ppb	06:05:21
1	Fe 238.204 Radial†	5.5	-1.5	-7.5099	µg/L	-7.5099	ppb	06:05:21
1	K 766.490 Radial†	780.9	-57.5	-32.236	µg/L	-32.236	ppb	06:05:01
1	Mg 279.077 IEC†	12.0	-3.4	-19.059	µg/L	-19.059	ppb	06:05:21
1	Na 589.592 Radial†	-625.4	-120.6	-33.620	µg/L	-33.620	ppb	06:05:01
1	Sr 421.552†	-72.1	10.4	0.0595	µg/L	0.0595	ppb	06:05:01
1	Sc 361.383	1983722.6	1983722.6	102.01	%			06:06:23
1	Y 371.029	1204934.1	1204934.1	102.00	%			06:06:23
1	Ag 328.068†	-65.5	37.1	0.3518	µg/L	0.3518	ppb	06:06:29
1	As 188.979†	0.3	-4.8	-9.6507	µg/L	-9.6507	ppb	06:06:49
1	B 249.677†	149.8	-4.3	-0.1994	µg/L	-0.1994	ppb	06:06:49
1	Ba 233.527†	-72.0	8.6	0.2295	µg/L	0.2295	ppb	06:06:49
1	Be 313.107†	3624.1	-112.9	-0.0750	µg/L	-0.0750	ppb	06:06:29
1	Cd 226.502†	-84.0	15.1	0.4248	µg/L	0.4248	ppb	06:06:49
1	Co 228.616†	-75.0	-6.2	-0.3110	µg/L	-0.3110	ppb	06:06:49
1	Cr 267.716†	-124.9	4.8	0.1061	µg/L	0.1061	ppb	06:06:29
1	Cu 324.752†	3206.3	-122.8	-0.9182	µg/L	-0.9182	ppb	06:06:29
1	Mn 257.610†	-207.5	27.8	0.0919	µg/L	0.0919	ppb	06:06:49
1	Mo 202.031†	1.4	6.2	0.7449	µg/L	0.7449	ppb	06:06:49
1	Ni 231.604†	281.5	-5.8	-0.3322	µg/L	-0.3322	ppb	06:06:49
1	P 214.914†	192.6	-15.3	-34.603	µg/L	-34.603	ppb	06:06:49
1	Pb 220.353†	55.5	-1.6	-0.4233	µg/L	-0.4233	ppb	06:06:49
1	S 181.975 Axial†	29.7	-9.7	-52.088	µg/L	-52.088	ppb	06:06:49
1	Sb 206.836†	19.0	-0.3	-0.2872	µg/L	-0.2872	ppb	06:06:49
1	Se 196.026†	15.7	4.6	6.9137	µg/L	6.9137	ppb	06:06:49
1	SiO2†	2029.3	-86.3	-17.537	µg/L	-17.537	ppb	06:06:29
1	Si 251.611†	317.7	-3.2	-0.1224	µg/L	-0.1224	ppb	06:06:49
1	Sn 189.927†	18.6	-6.2	-3.2094	µg/L	-3.2094	ppb	06:06:49
1	Ti 334.940†	679.4	-130.6	-0.3071	µg/L	-0.3071	ppb	06:06:29
1	Tl 190.801†	-17.2	2.4	3.8884	µg/L	3.8884	ppb	06:06:49
1	U 409.014†	850.2	8.0	0.8150	µg/L	0.8150	ppb	06:06:29
1	V 292.402†	-81.3	-3.1	-0.0316	µg/L	-0.0316	ppb	06:06:29
1	Zn 213.857†	506.1	-22.1	-0.6203	µg/L	-0.6203	ppb	06:06:49
2	Sc RADIAL	112275.3	112275.3	101	%			06:05:26
2	Al 396.153Radial†	161.9	-2.9	-1.5275	µg/L	-1.5275	ppb	06:05:26
2	Ca 317.933Radial†	412.2	1.2	0.4649	µg/L	0.4649	ppb	06:05:47
2	Fe 238.204 Radial†	9.8	2.8	14.144	µg/L	14.144	ppb	06:05:47
2	K 766.490 Radial†	699.3	-146.7	-82.327	µg/L	-82.327	ppb	06:05:26
2	Mg 279.077 IEC†	15.6	0.0	0.2595	µg/L	0.2595	ppb	06:05:47
2	Na 589.592 Radial†	-643.7	-131.9	-36.786	µg/L	-36.786	ppb	06:05:26
2	Sr 421.552†	-45.0	38.0	0.2169	µg/L	0.2169	ppb	06:05:26
2	Sc 361.383	1976212.3	1976212.3	101.62	%			06:06:55
2	Y 371.029	1200297.5	1200297.5	101.61	%			06:06:55
2	Ag 328.068†	-0.7	100.6	0.9582	µg/L	0.9582	ppb	06:07:01
2	As 188.979†	3.2	-1.9	-3.8792	µg/L	-3.8792	ppb	06:07:21
2	B 249.677†	133.9	-19.4	-0.9138	µg/L	-0.9138	ppb	06:07:21
2	Ba 233.527†	-70.9	9.4	0.2521	µg/L	0.2521	ppb	06:07:21
2	Be 313.107†	3725.8	0.8	0.0005	µg/L	0.0005	ppb	06:07:01
2	Cd 226.502†	-85.2	13.6	0.3714	µg/L	0.3714	ppb	06:07:21
2	Co 228.616†	-70.2	-1.7	-0.0846	µg/L	-0.0846	ppb	06:07:21
2	Cr 267.716†	-125.9	3.3	0.0739	µg/L	0.0739	ppb	06:07:01
2	Cu 324.752†	3157.8	-158.6	-1.1806	µg/L	-1.1806	ppb	06:07:01
2	Mn 257.610†	-213.4	21.2	0.0725	µg/L	0.0725	ppb	06:07:21
2	Mo 202.031†	0.7	5.5	0.6604	µg/L	0.6604	ppb	06:07:21
2	Ni 231.604†	275.4	-10.7	-0.6167	µg/L	-0.6167	ppb	06:07:21
2	P 214.914†	201.7	-5.7	-12.792	µg/L	-12.792	ppb	06:07:21
2	Pb 220.353†	53.8	-3.0	-0.7949	µg/L	-0.7949	ppb	06:07:21

2	S 181.975 Axial†	36.5	-2.9	-15.640 µg/L	-15.640 ppb	06:07:21
2	Sb 206.836†	22.5	3.2	3.3697 µg/L	3.3697 ppb	06:07:21
2	Se 196.026†	16.9	5.8	8.7494 µg/L	8.7494 ppb	06:07:21
2	SiO2†	1998.9	-108.7	-22.094 µg/L	-22.094 ppb	06:07:01
2	Si 251.611†	327.9	8.0	0.7484 µg/L	0.7484 ppb	06:07:21
2	Sn 189.927†	20.8	-3.9	-2.0166 µg/L	-2.0166 ppb	06:07:21
2	Ti 334.940†	809.5	0.0	0.0000 µg/L	0.0000 ppb	06:07:01
2	Tl 190.801†	-22.6	-2.9	-4.7061 µg/L	-4.7061 ppb	06:07:21
2	U 409.014†	693.0	-143.5	-14.529 µg/L	-14.529 ppb	06:07:01
2	V 292.402†	-82.2	-4.3	-0.0693 µg/L	-0.0693 ppb	06:07:01
2	Zn 213.857†	503.0	-23.2	-0.6526 µg/L	-0.6526 ppb	06:07:21
3	Sc RADIAL	112057.6	112057.6	101 %		06:05:52
3	Al 396.153Radial†	171.0	6.4	3.3340 µg/L	3.3340 ppb	06:05:52
3	Ca 317.933Radial†	410.5	0.2	0.0979 µg/L	0.0979 ppb	06:06:13
3	Fe 238.204 Radial†	5.9	-1.1	-5.5072 µg/L	-5.5072 ppb	06:06:13
3	K 766.490 Radial†	748.5	-96.5	-54.135 µg/L	-54.135 ppb	06:05:52
3	Mg 279.077 IEC†	18.0	2.5	13.695 µg/L	13.695 ppb	06:06:13
3	Na 589.592 Radial†	-633.9	-123.5	-34.436 µg/L	-34.436 ppb	06:05:52
3	Sr 421.552†	-60.9	22.1	0.1262 µg/L	0.1262 ppb	06:05:52
3	Sc 361.383	1983922.9	1983922.9	102.02 %		06:07:27
3	Y 371.029	1204631.4	1204631.4	101.98 %		06:07:27
3	Ag 328.068†	-102.1	1.2	0.0094 µg/L	0.0094 ppb	06:07:33
3	As 188.979†	-2.4	-7.5	-14.990 µg/L	-14.990 ppb	06:07:53
3	B 249.677†	139.9	-14.1	-0.6588 µg/L	-0.6588 ppb	06:07:53
3	Ba 233.527†	-71.5	9.1	0.2443 µg/L	0.2443 ppb	06:07:53
3	Be 313.107†	3650.3	-87.5	-0.0582 µg/L	-0.0582 ppb	06:07:33
3	Cd 226.502†	-86.0	13.1	0.3592 µg/L	0.3592 ppb	06:07:53
3	Co 228.616†	-80.6	-11.7	-0.5920 µg/L	-0.5920 ppb	06:07:53
3	Cr 267.716†	-123.3	6.3	0.1406 µg/L	0.1406 ppb	06:07:33
3	Cu 324.752†	3192.4	-136.8	-1.0219 µg/L	-1.0219 ppb	06:07:33
3	Mn 257.610†	-213.2	22.2	0.0734 µg/L	0.0734 ppb	06:07:53
3	Mo 202.031†	-4.3	0.7	0.0809 µg/L	0.0809 ppb	06:07:53
3	Ni 231.604†	278.9	-8.3	-0.4813 µg/L	-0.4813 ppb	06:07:53
3	P 214.914†	200.2	-7.9	-17.944 µg/L	-17.944 ppb	06:07:53
3	Pb 220.353†	48.5	-8.5	-2.2613 µg/L	-2.2613 ppb	06:07:53
3	S 181.975 Axial†	27.6	-11.8	-63.192 µg/L	-63.192 ppb	06:07:53
3	Sb 206.836†	22.2	2.9	3.0393 µg/L	3.0393 ppb	06:07:53
3	Se 196.026†	18.4	7.2	10.854 µg/L	10.854 ppb	06:07:53
3	SiO2†	1955.5	-158.9	-32.290 µg/L	-32.290 ppb	06:07:33
3	Si 251.611†	331.2	10.0	1.0145 µg/L	1.0145 ppb	06:07:53
3	Sn 189.927†	15.8	-8.8	-4.5938 µg/L	-4.5938 ppb	06:07:53
3	Ti 334.940†	747.5	-63.9	-0.1501 µg/L	-0.1501 ppb	06:07:33
3	Tl 190.801†	-20.6	-0.8	-1.3548 µg/L	-1.3548 ppb	06:07:53
3	U 409.014†	699.7	-139.6	-14.132 µg/L	-14.132 ppb	06:07:33
3	V 292.402†	-96.8	-18.3	-0.2437 µg/L	-0.2437 ppb	06:07:33
3	Zn 213.857†	505.7	-22.5	-0.6329 µg/L	-0.6329 ppb	06:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1981285.9	101.88	%	0.226				0.22%
Sc RADIAL	111799.2	100	%	0.6				0.58%
Y 371.029	1203287.7	101.86	%	0.220				0.22%
Ag 328.068†	46.3	0.4398	µg/L	0.48052	0.4398	ppb	0.48052	109.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.8	-1.4903	µg/L	4.80578	-1.4903	ppb	4.80578	322.46%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.8	-9.5065	µg/L	5.55670	-9.5065	ppb	5.55670	58.45%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-12.6	-0.5907	µg/L	0.36203	-0.5907	ppb	0.36203	61.29%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.1	0.2420	µg/L	0.01150	0.2420	ppb	0.01150	4.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-66.5	-0.0442	µg/L	0.03963	-0.0442	ppb	0.03963	89.64%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.2	2.4296	µg/L	3.72536	2.4296	ppb	3.72536	153.33%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	14.0	0.3851	µg/L	0.03490	0.3851	ppb	0.03490	9.06%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-6.5	-0.3292	µg/L	0.25420	-0.3292	ppb	0.25420	77.22%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.8      0.1069 µg/L       0.03335      0.1069 ppb        0.03335  31.21%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -139.4     -1.0402 µg/L       0.13218     -1.0402 ppb        0.13218  12.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.1      0.3757 µg/L      11.96585      0.3757 ppb       11.96585 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -100.2     -56.232 µg/L       25.1113     -56.232 ppb        25.1113  44.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.3     -1.7014 µg/L      16.46457     -1.7014 ppb       16.46457 967.69%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                23.7      0.0793 µg/L       0.01096      0.0793 ppb        0.01096  13.82%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.1      0.4954 µg/L       0.36144      0.4954 ppb        0.36144  72.96%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -125.4     -34.947 µg/L        1.6440     -34.947 ppb         1.6440   4.70%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -8.3     -0.4767 µg/L       0.14229     -0.4767 ppb        0.14229  29.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -9.7     -21.780 µg/L       11.4000     -21.780 ppb        11.4000  52.34%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -4.4     -1.1598 µg/L       0.97180     -1.1598 ppb        0.97180  83.79%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -8.2     -43.640 µg/L       24.8762     -43.640 ppb        24.8762  57.00%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.9      2.0406 µg/L       2.02269      2.0406 ppb        2.02269  99.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.9      8.8390 µg/L       1.97165      8.8390 ppb        1.97165  22.31%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -118.0     -23.974 µg/L        7.5537     -23.974 ppb         7.5537  31.51%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                 5.0      0.5468 µg/L       0.59467      0.5468 ppb        0.59467 108.75%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -6.3     -3.2733 µg/L       1.28979     -3.2733 ppb        1.28979  39.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.5      0.1342 µg/L       0.07898      0.1342 ppb        0.07898  58.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -64.8     -0.1524 µg/L       0.15357     -0.1524 ppb        0.15357 100.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.5     -0.7242 µg/L       4.33183     -0.7242 ppb        4.33183 598.19%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -91.7     -9.2819 µg/L       8.74649     -9.2819 ppb        8.74649  94.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -8.6     -0.1149 µg/L       0.11318     -0.1149 ppb        0.11318  98.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -22.6     -0.6353 µg/L       0.01629     -0.6353 ppb        0.01629   2.56%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 06:39:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111222.4	111222.4	99.9	%			06:39:42
1	Al 396.153Radial†	10291.9	10135.0	5259.0	µg/L	5259.0	ppb	06:39:42
1	Ca 317.933Radial†	13257.6	12858.5	5064.4	µg/L	5064.4	ppb	06:40:03
1	Fe 238.204 Radial†	1027.2	1020.8	5263.2	µg/L	5263.2	ppb	06:40:03
1	K 766.490 Radial†	10010.3	9176.6	5148.3	µg/L	5148.3	ppb	06:39:42
1	Mg 279.077 IEC†	980.3	965.4	5392.4	µg/L	5392.4	ppb	06:40:03
1	Na 589.592 Radial†	36150.1	36678.7	10226	µg/L	10226	ppb	06:39:42
1	Sr 421.552†	87975.1	88112.5	503.16	µg/L	503.16	ppb	06:39:42
1	Sc 361.383	1987270.5	1987270.5	102.19	%			06:41:06
1	Y 371.029	1201281.6	1201281.6	101.69	%			06:41:06
1	Ag 328.068†	54218.4	53157.7	509.86	µg/L	509.86	ppb	06:41:12
1	As 188.979†	260.5	249.8	497.67	µg/L	497.67	ppb	06:41:32
1	B 249.677†	11031.2	10643.6	497.44	µg/L	497.44	ppb	06:41:12
1	Ba 233.527†	19128.2	18797.4	504.10	µg/L	504.10	ppb	06:41:12
1	Be 313.107†	778277.1	757932.0	504.06	µg/L	504.06	ppb	06:41:06
1	Cd 226.502†	18220.5	17927.4	504.38	µg/L	504.38	ppb	06:41:12
1	Co 228.616†	10086.5	9937.7	504.24	µg/L	504.24	ppb	06:41:12
1	Cr 267.716†	22918.7	22554.7	502.91	µg/L	502.91	ppb	06:41:12
1	Cu 324.752†	72857.0	68029.6	508.75	µg/L	508.75	ppb	06:41:12
1	Mn 257.610†	154228.1	151154.0	505.07	µg/L	505.07	ppb	06:41:06
1	Mo 202.031†	4268.2	4181.6	502.05	µg/L	502.05	ppb	06:41:32
1	Ni 231.604†	9181.9	8703.4	501.84	µg/L	501.84	ppb	06:41:12
1	P 214.914†	1332.1	1099.4	2430.5	µg/L	2430.5	ppb	06:41:32
1	Pb 220.353†	1981.6	1883.2	504.50	µg/L	504.50	ppb	06:41:32
1	S 181.975 Axial†	217.7	174.2	929.71	µg/L	929.71	ppb	06:41:32
1	Sb 206.836†	512.7	482.8	508.42	µg/L	508.42	ppb	06:41:32
1	Se 196.026†	350.1	331.7	499.32	µg/L	499.32	ppb	06:41:32
1	SiO2†	28949.6	26253.5	5335.2	µg/L	5335.2	ppb	06:41:12
1	Si 251.611†	31765.9	30770.4	2449.8	µg/L	2449.8	ppb	06:41:12
1	Sn 189.927†	1007.9	962.0	503.48	µg/L	503.48	ppb	06:41:32
1	Ti 334.940†	220370.9	214851.4	504.25	µg/L	504.25	ppb	06:41:06
1	Tl 190.801†	304.8	317.6	511.71	µg/L	511.71	ppb	06:41:32
1	U 409.014†	5925.2	4972.8	502.50	µg/L	502.50	ppb	06:41:12
1	V 292.402†	42654.6	41817.0	508.78	µg/L	508.78	ppb	06:41:12
1	Zn 213.857†	18897.5	17974.3	504.00	µg/L	504.00	ppb	06:41:12
2	Sc RADIAL	111310.1	111310.1	100	%			06:40:08
2	Al 396.153Radial†	10271.0	10105.9	5243.9	µg/L	5243.9	ppb	06:40:08
2	Ca 317.933Radial†	13310.0	12900.4	5080.8	µg/L	5080.8	ppb	06:40:28
2	Fe 238.204 Radial†	1030.2	1023.1	5275.0	µg/L	5275.0	ppb	06:40:28
2	K 766.490 Radial†	10016.9	9175.4	5147.6	µg/L	5147.6	ppb	06:40:08
2	Mg 279.077 IEC†	980.4	964.8	5389.1	µg/L	5389.1	ppb	06:40:28
2	Na 589.592 Radial†	36090.2	36590.3	10201	µg/L	10201	ppb	06:40:08
2	Sr 421.552†	88095.4	88163.4	503.45	µg/L	503.45	ppb	06:40:08
2	Sc 361.383	1964770.9	1964770.9	101.03	%			06:41:40
2	Y 371.029	1188198.3	1188198.3	100.59	%			06:41:40
2	Ag 328.068†	54117.2	53665.1	514.71	µg/L	514.71	ppb	06:41:45
2	As 188.979†	258.8	251.0	500.10	µg/L	500.10	ppb	06:42:06
2	B 249.677†	11053.1	10788.9	504.24	µg/L	504.24	ppb	06:41:45
2	Ba 233.527†	19077.0	18961.1	508.49	µg/L	508.49	ppb	06:41:45
2	Be 313.107†	766868.6	755361.6	502.36	µg/L	502.36	ppb	06:41:40
2	Cd 226.502†	18147.8	18059.7	508.11	µg/L	508.11	ppb	06:41:45
2	Co 228.616†	10070.9	10035.3	509.19	µg/L	509.19	ppb	06:41:45
2	Cr 267.716†	22839.5	22733.2	506.89	µg/L	506.89	ppb	06:41:45
2	Cu 324.752†	72697.2	68687.9	513.67	µg/L	513.67	ppb	06:41:45
2	Mn 257.610†	152127.4	150803.1	503.90	µg/L	503.90	ppb	06:41:40
2	Mo 202.031†	4221.6	4183.3	502.25	µg/L	502.25	ppb	06:42:06
2	Ni 231.604†	9166.8	8791.4	506.92	µg/L	506.92	ppb	06:41:45
2	P 214.914†	1316.4	1098.8	2428.5	µg/L	2428.5	ppb	06:42:06
2	Pb 220.353†	1947.8	1871.9	501.46	µg/L	501.46	ppb	06:42:06

2	S 181.975 Axial†	216.7	175.7	937.68	µg/L	937.68 ppb	06:42:06
2	Sb 206.836†	493.6	469.6	494.46	µg/L	494.46 ppb	06:42:06
2	Se 196.026†	345.0	330.6	497.66	µg/L	497.66 ppb	06:42:06
2	SiO2†	28912.9	26541.6	5393.7	µg/L	5393.7 ppb	06:41:45
2	Si 251.611†	31662.0	31023.6	2470.4	µg/L	2470.4 ppb	06:41:45
2	Sn 189.927†	996.2	961.6	503.29	µg/L	503.29 ppb	06:42:06
2	Ti 334.940†	217204.2	214186.6	502.69	µg/L	502.69 ppb	06:41:40
2	Tl 190.801†	300.3	316.6	510.08	µg/L	510.08 ppb	06:42:06
2	U 409.014†	5980.4	5093.8	514.75	µg/L	514.75 ppb	06:41:45
2	V 292.402†	42493.8	42135.9	512.65	µg/L	512.65 ppb	06:41:45
2	Zn 213.857†	18835.7	18124.9	508.22	µg/L	508.22 ppb	06:41:45
3	Sc RADIAL	111369.2	111369.2	100	%		06:40:34
3	Al 396.153Radial†	10275.0	10104.5	5243.2	µg/L	5243.2 ppb	06:40:34
3	Ca 317.933Radial†	13378.9	12962.2	5105.2	µg/L	5105.2 ppb	06:40:54
3	Fe 238.204 Radial†	1030.1	1022.4	5271.4	µg/L	5271.4 ppb	06:40:54
3	K 766.490 Radial†	10122.8	9275.8	5204.0	µg/L	5204.0 ppb	06:40:34
3	Mg 279.077 IEC†	987.9	971.8	5427.7	µg/L	5427.7 ppb	06:40:54
3	Na 589.592 Radial†	36269.4	36750.2	10246	µg/L	10246 ppb	06:40:34
3	Sr 421.552†	88311.8	88332.9	504.42	µg/L	504.42 ppb	06:40:34
3	Sc 361.383	1974259.4	1974259.4	101.52	%		06:42:13
3	Y 371.029	1193562.9	1193562.9	101.04	%		06:42:13
3	Ag 328.068†	54283.2	53571.2	513.82	µg/L	513.82 ppb	06:42:18
3	As 188.979†	260.8	251.8	501.69	µg/L	501.69 ppb	06:42:39
3	B 249.677†	11011.8	10695.7	499.87	µg/L	499.87 ppb	06:42:18
3	Ba 233.527†	19120.3	18913.0	507.20	µg/L	507.20 ppb	06:42:18
3	Be 313.107†	772114.8	756881.3	503.37	µg/L	503.37 ppb	06:42:13
3	Cd 226.502†	18161.2	17986.5	506.04	µg/L	506.04 ppb	06:42:18
3	Co 228.616†	10045.1	9962.0	505.47	µg/L	505.47 ppb	06:42:18
3	Cr 267.716†	22911.9	22695.8	506.06	µg/L	506.06 ppb	06:42:18
3	Cu 324.752†	72922.3	68563.8	512.74	µg/L	512.74 ppb	06:42:18
3	Mn 257.610†	153129.4	151066.4	504.78	µg/L	504.78 ppb	06:42:13
3	Mo 202.031†	4229.2	4170.6	500.73	µg/L	500.73 ppb	06:42:39
3	Ni 231.604†	9153.6	8734.8	503.65	µg/L	503.65 ppb	06:42:18
3	P 214.914†	1313.7	1089.9	2408.5	µg/L	2408.5 ppb	06:42:39
3	Pb 220.353†	1970.2	1884.6	504.88	µg/L	504.88 ppb	06:42:39
3	S 181.975 Axial†	221.2	179.1	955.98	µg/L	955.98 ppb	06:42:39
3	Sb 206.836†	504.8	478.4	503.70	µg/L	503.70 ppb	06:42:39
3	Se 196.026†	349.9	333.9	502.51	µg/L	502.51 ppb	06:42:39
3	SiO2†	28894.6	26386.0	5362.1	µg/L	5362.1 ppb	06:42:18
3	Si 251.611†	31735.9	30945.8	2464.2	µg/L	2464.2 ppb	06:42:18
3	Sn 189.927†	994.3	955.1	499.89	µg/L	499.89 ppb	06:42:39
3	Ti 334.940†	218591.1	214519.5	503.47	µg/L	503.47 ppb	06:42:13
3	Tl 190.801†	303.0	317.8	512.12	µg/L	512.12 ppb	06:42:39
3	U 409.014†	5940.5	5026.0	507.89	µg/L	507.89 ppb	06:42:18
3	V 292.402†	42654.7	42092.2	512.10	µg/L	512.10 ppb	06:42:18
3	Zn 213.857†	18853.4	18052.7	506.20	µg/L	506.20 ppb	06:42:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1975433.6	101.58	%	0.581				0.57%
Sc RADIAL	111300.6	100	%	0.1				0.07%
Y 371.029	1194347.6	101.11	%	0.557				0.55%
Ag 328.068†	53464.7	512.79	µg/L	2.584	512.79	ppb	2.584	0.50%
QC value within limits for Ag 328.068 Recovery = 102.56%								
Al 396.153Radial†	10115.1	5248.7	µg/L	8.94	5248.7	ppb	8.94	0.17%
QC value within limits for Al 396.153Radial Recovery = 104.97%								
As 188.979†	250.9	499.82	µg/L	2.024	499.82	ppb	2.024	0.40%
QC value within limits for As 188.979 Recovery = 99.96%								
B 249.677†	10709.4	500.52	µg/L	3.450	500.52	ppb	3.450	0.69%
QC value within limits for B 249.677 Recovery = 100.10%								
Ba 233.527†	18890.5	506.60	µg/L	2.256	506.60	ppb	2.256	0.45%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	756725.0	503.26	µg/L	0.859	503.26	ppb	0.859	0.17%
QC value within limits for Be 313.107 Recovery = 100.65%								
Ca 317.933Radial†	12907.0	5083.5	µg/L	20.55	5083.5	ppb	20.55	0.40%
QC value within limits for Ca 317.933Radial Recovery = 101.67%								
Cd 226.502†	17991.2	506.18	µg/L	1.869	506.18	ppb	1.869	0.37%
QC value within limits for Cd 226.502 Recovery = 101.24%								
Co 228.616†	9978.3	506.30	µg/L	2.579	506.30	ppb	2.579	0.51%

QC value within limits for Co 228.616 Recovery = 101.26%

Cr 267.716†	22661.2	505.29 µg/L	2.099	505.29 ppb	2.099	0.42%

QC value within limits for Cr 267.716 Recovery = 101.06%

Cu 324.752†	68427.1	511.72 µg/L	2.611	511.72 ppb	2.611	0.51%

QC value within limits for Cu 324.752 Recovery = 102.34%

Fe 238.204 Radial†	1022.1	5269.8 µg/L	6.05	5269.8 ppb	6.05	0.11%

QC value within limits for Fe 238.204 Radial Recovery = 105.40%

K 766.490 Radial†	9209.2	5166.6 µg/L	32.33	5166.6 ppb	32.33	0.63%

QC value within limits for K 766.490 Radial Recovery = 103.33%

Mg 279.077 IEC†	967.3	5403.1 µg/L	21.38	5403.1 ppb	21.38	0.40%

QC value within limits for Mg 279.077 IEC Recovery = 108.06%

Mn 257.610†	151007.8	504.59 µg/L	0.609	504.59 ppb	0.609	0.12%

QC value within limits for Mn 257.610 Recovery = 100.92%

Mo 202.031†	4178.5	501.67 µg/L	0.824	501.67 ppb	0.824	0.16%

QC value within limits for Mo 202.031 Recovery = 100.33%

Na 589.592 Radial†	36673.1	10224 µg/L	22.3	10224 ppb	22.3	0.22%

QC value within limits for Na 589.592 Radial Recovery = 102.24%

Ni 231.604†	8743.2	504.14 µg/L	2.572	504.14 ppb	2.572	0.51%

QC value within limits for Ni 231.604 Recovery = 100.83%

P 214.914†	1096.0	2422.5 µg/L	12.17	2422.5 ppb	12.17	0.50%

QC value within limits for P 214.914 Recovery = 96.90%

Pb 220.353†	1879.9	503.61 µg/L	1.873	503.61 ppb	1.873	0.37%

QC value within limits for Pb 220.353 Recovery = 100.72%

S 181.975 Axial†	176.3	941.12 µg/L	13.469	941.12 ppb	13.469	1.43%

QC value within limits for S 181.975 Axial Recovery = 94.11%

Sb 206.836†	476.9	502.20 µg/L	7.101	502.20 ppb	7.101	1.41%

QC value within limits for Sb 206.836 Recovery = 100.44%

Se 196.026†	332.1	499.83 µg/L	2.462	499.83 ppb	2.462	0.49%

QC value within limits for Se 196.026 Recovery = 99.97%

SiO2†	26393.7	5363.7 µg/L	29.30	5363.7 ppb	29.30	0.55%

QC value within limits for SiO2 Recovery = 100.30%

Si 251.611†	30913.3	2461.4 µg/L	10.57	2461.4 ppb	10.57	0.43%

QC value within limits for Si 251.611 Recovery = 98.46%

Sn 189.927†	959.5	502.22 µg/L	2.021	502.22 ppb	2.021	0.40%

QC value within limits for Sn 189.927 Recovery = 100.44%

Sr 421.552†	88202.9	503.68 µg/L	0.659	503.68 ppb	0.659	0.13%

QC value within limits for Sr 421.552 Recovery = 100.74%

Ti 334.940†	214519.2	503.47 µg/L	0.781	503.47 ppb	0.781	0.16%

QC value within limits for Ti 334.940 Recovery = 100.69%

Tl 190.801†	317.3	511.30 µg/L	1.078	511.30 ppb	1.078	0.21%

QC value within limits for Tl 190.801 Recovery = 102.26%

U 409.014†	5030.8	508.38 µg/L	6.139	508.38 ppb	6.139	1.21%

QC value within limits for U 409.014 Recovery = 101.68%

V 292.402†	42015.0	511.18 µg/L	2.092	511.18 ppb	2.092	0.41%

QC value within limits for V 292.402 Recovery = 102.24%

Zn 213.857†	18050.6	506.14 µg/L	2.112	506.14 ppb	2.112	0.42%

QC value within limits for Zn 213.857 Recovery = 101.23%

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 06:42:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110738.7	110738.7	99.5	%			06:43:21
1	Al 396.153Radial†	283.3	121.4	63.179	µg/L	63.179	ppb	06:43:21
1	Ca 317.933Radial†	518.9	114.1	44.938	µg/L	44.938	ppb	06:43:42
1	Fe 238.204 Radial†	11.7	4.8	24.404	µg/L	24.404	ppb	06:43:42
1	K 766.490 Radial†	802.9	-33.0	-18.527	µg/L	-18.527	ppb	06:43:21
1	Mg 279.077 IEC†	20.5	5.2	28.947	µg/L	28.947	ppb	06:43:42
1	Na 589.592 Radial†	-601.8	-98.7	-27.510	µg/L	-27.510	ppb	06:43:21
1	Sr 421.552†	-63.5	18.9	0.1077	µg/L	0.1077	ppb	06:43:21
1	Sc 361.383	1975477.9	1975477.9	101.58	%			06:44:44
1	Y 371.029	1200878.9	1200878.9	101.66	%			06:44:44
1	Ag 328.068†	-13.0	88.5	0.8470	µg/L	0.8470	ppb	06:44:49
1	As 188.979†	-0.8	-5.9	-11.781	µg/L	-11.781	ppb	06:45:10
1	B 249.677†	141.1	-12.2	-0.5817	µg/L	-0.5817	ppb	06:45:10
1	Ba 233.527†	-67.2	13.0	0.3486	µg/L	0.3486	ppb	06:45:10
1	Be 313.107†	3733.9	10.1	0.0067	µg/L	0.0067	ppb	06:44:49
1	Cd 226.502†	-92.5	6.4	0.1631	µg/L	0.1631	ppb	06:45:10
1	Co 228.616†	-78.2	-9.6	-0.4852	µg/L	-0.4852	ppb	06:45:10
1	Cr 267.716†	-113.9	15.0	0.3351	µg/L	0.3351	ppb	06:44:49
1	Cu 324.752†	3262.2	-54.7	-0.4027	µg/L	-0.4027	ppb	06:44:49
1	Mn 257.610†	-190.5	43.7	0.1488	µg/L	0.1488	ppb	06:45:10
1	Mo 202.031†	1.2	6.0	0.7263	µg/L	0.7263	ppb	06:45:10
1	Ni 231.604†	275.2	-10.8	-0.6199	µg/L	-0.6199	ppb	06:45:10
1	P 214.914†	201.8	-5.5	-12.502	µg/L	-12.502	ppb	06:45:10
1	Pb 220.353†	50.8	-6.0	-1.5908	µg/L	-1.5908	ppb	06:45:10
1	S 181.975 Axial†	30.7	-8.6	-45.862	µg/L	-45.862	ppb	06:45:10
1	Sb 206.836†	25.1	5.8	6.0560	µg/L	6.0560	ppb	06:45:10
1	Se 196.026†	14.8	3.8	5.6345	µg/L	5.6345	ppb	06:45:10
1	SiO2†	2045.4	-62.2	-12.642	µg/L	-12.642	ppb	06:44:49
1	Si 251.611†	358.0	37.8	3.1426	µg/L	3.1426	ppb	06:45:10
1	Sn 189.927†	20.3	-4.4	-2.2840	µg/L	-2.2840	ppb	06:45:10
1	Ti 334.940†	874.7	64.4	0.1487	µg/L	0.1487	ppb	06:44:49
1	Tl 190.801†	-18.0	1.6	2.5551	µg/L	2.5551	ppb	06:45:10
1	U 409.014†	635.3	-200.0	-20.253	µg/L	-20.253	ppb	06:44:49
1	V 292.402†	-45.2	32.1	0.3613	µg/L	0.3613	ppb	06:44:49
1	Zn 213.857†	510.5	-15.7	-0.4423	µg/L	-0.4423	ppb	06:45:10
2	Sc RADIAL	110278.0	110278.0	99.1	%			06:43:47
2	Al 396.153Radial†	264.2	103.3	53.773	µg/L	53.773	ppb	06:43:47
2	Ca 317.933Radial†	513.5	110.8	43.656	µg/L	43.656	ppb	06:44:07
2	Fe 238.204 Radial†	12.1	5.3	27.179	µg/L	27.179	ppb	06:44:07
2	K 766.490 Radial†	828.4	-3.9	-2.1971	µg/L	-2.1971	ppb	06:43:47
2	Mg 279.077 IEC†	19.8	4.5	25.122	µg/L	25.122	ppb	06:44:07
2	Na 589.592 Radial†	-620.0	-119.6	-33.351	µg/L	-33.351	ppb	06:43:47
2	Sr 421.552†	-28.0	54.4	0.3108	µg/L	0.3108	ppb	06:43:47
2	Sc 361.383	1959738.6	1959738.6	100.77	%			06:45:16
2	Y 371.029	1190675.3	1190675.3	100.80	%			06:45:16
2	Ag 328.068†	-74.6	27.2	0.2615	µg/L	0.2615	ppb	06:45:21
2	As 188.979†	3.2	-1.9	-3.8666	µg/L	-3.8666	ppb	06:45:42
2	B 249.677†	139.5	-12.8	-0.6085	µg/L	-0.6085	ppb	06:45:42
2	Ba 233.527†	-75.0	4.7	0.1264	µg/L	0.1264	ppb	06:45:42
2	Be 313.107†	3675.8	-18.0	-0.0120	µg/L	-0.0120	ppb	06:45:21
2	Cd 226.502†	-86.7	11.4	0.3058	µg/L	0.3058	ppb	06:45:42
2	Co 228.616†	-73.4	-5.5	-0.2784	µg/L	-0.2784	ppb	06:45:42
2	Cr 267.716†	-103.5	24.4	0.5438	µg/L	0.5438	ppb	06:45:21
2	Cu 324.752†	3190.1	-100.5	-0.7438	µg/L	-0.7438	ppb	06:45:21
2	Mn 257.610†	-168.7	63.8	0.2164	µg/L	0.2164	ppb	06:45:42
2	Mo 202.031†	-2.7	2.1	0.2561	µg/L	0.2561	ppb	06:45:42
2	Ni 231.604†	278.5	-5.4	-0.3106	µg/L	-0.3106	ppb	06:45:42
2	P 214.914†	193.1	-12.5	-28.195	µg/L	-28.195	ppb	06:45:42
2	Pb 220.353†	55.8	-0.6	-0.1511	µg/L	-0.1511	ppb	06:45:42

2	S 181.975 Axial†	27.5	-11.5	-61.658 µg/L	-61.658 ppb	06:45:42
2	Sb 206.836†	24.1	5.0	5.2609 µg/L	5.2609 ppb	06:45:42
2	Se 196.026†	10.4	-0.5	-0.7397 µg/L	-0.7397 ppb	06:45:42
2	SiO2†	2037.9	-53.4	-10.857 µg/L	-10.857 ppb	06:45:21
2	Si 251.611†	361.8	44.3	3.6433 µg/L	3.6433 ppb	06:45:42
2	Sn 189.927†	21.9	-2.6	-1.3541 µg/L	-1.3541 ppb	06:45:42
2	Ti 334.940†	852.3	49.1	0.1129 µg/L	0.1129 ppb	06:45:21
2	Tl 190.801†	-20.0	-0.5	-0.8653 µg/L	-0.8653 ppb	06:45:42
2	U 409.014†	664.8	-165.8	-16.788 µg/L	-16.788 ppb	06:45:21
2	V 292.402†	-77.7	-0.5	-0.0294 µg/L	-0.0294 ppb	06:45:21
2	Zn 213.857†	512.6	-9.5	-0.2697 µg/L	-0.2697 ppb	06:45:42
3	Sc RADIAL	111500.2	111500.2	100 %		06:44:13
3	Al 396.153Radial†	403.0	238.9	124.40 µg/L	124.40 ppb	06:44:13
3	Ca 317.933Radial†	509.9	101.6	40.000 µg/L	40.000 ppb	06:44:33
3	Fe 238.204 Radial†	12.7	5.7	29.444 µg/L	29.444 ppb	06:44:33
3	K 766.490 Radial†	789.0	-52.4	-29.409 µg/L	-29.409 ppb	06:44:13
3	Mg 279.077 IEC†	25.1	9.6	53.431 µg/L	53.431 ppb	06:44:33
3	Na 589.592 Radial†	-595.2	-88.0	-24.541 µg/L	-24.541 ppb	06:44:13
3	Sr 421.552†	-101.8	-19.0	-0.1082 µg/L	-0.1082 ppb	06:44:13
3	Sc 361.383	1968916.5	1968916.5	101.25 %		06:45:48
3	Y 371.029	1196610.0	1196610.0	101.30 %		06:45:48
3	Ag 328.068†	-56.3	45.7	0.4364 µg/L	0.4364 ppb	06:45:53
3	As 188.979†	-2.2	-7.3	-14.541 µg/L	-14.541 ppb	06:46:14
3	B 249.677†	140.1	-12.8	-0.6087 µg/L	-0.6087 ppb	06:46:14
3	Ba 233.527†	-70.8	9.3	0.2474 µg/L	0.2474 ppb	06:46:14
3	Be 313.107†	3743.9	32.2	0.0215 µg/L	0.0215 ppb	06:45:53
3	Cd 226.502†	-93.4	5.2	0.1364 µg/L	0.1364 ppb	06:46:14
3	Co 228.616†	-56.3	11.8	0.5983 µg/L	0.5983 ppb	06:46:14
3	Cr 267.716†	-107.7	20.8	0.4632 µg/L	0.4632 ppb	06:45:53
3	Cu 324.752†	3278.8	-27.6	-0.1997 µg/L	-0.1997 ppb	06:45:53
3	Mn 257.610†	-171.5	61.9	0.2102 µg/L	0.2102 ppb	06:46:14
3	Mo 202.031†	-5.7	-0.8	-0.0972 µg/L	-0.0972 ppb	06:46:14
3	Ni 231.604†	280.1	-5.0	-0.2889 µg/L	-0.2889 ppb	06:46:14
3	P 214.914†	202.7	-3.9	-8.8873 µg/L	-8.8873 ppb	06:46:14
3	Pb 220.353†	62.8	6.0	1.6283 µg/L	1.6283 ppb	06:46:14
3	S 181.975 Axial†	31.9	-7.4	-39.440 µg/L	-39.440 ppb	06:46:14
3	Sb 206.836†	14.6	-4.5	-4.7750 µg/L	-4.7750 ppb	06:46:14
3	Se 196.026†	17.5	6.4	9.6218 µg/L	9.6218 ppb	06:46:14
3	SiO2†	2049.9	-51.0	-10.360 µg/L	-10.360 ppb	06:45:53
3	Si 251.611†	402.4	82.8	6.7934 µg/L	6.7934 ppb	06:46:14
3	Sn 189.927†	21.9	-2.7	-1.3901 µg/L	-1.3901 ppb	06:46:14
3	Ti 334.940†	735.1	-70.5	-0.1679 µg/L	-0.1679 ppb	06:45:53
3	Tl 190.801†	-16.6	3.0	4.7390 µg/L	4.7390 ppb	06:46:14
3	U 409.014†	729.7	-104.8	-10.610 µg/L	-10.610 ppb	06:45:53
3	V 292.402†	-87.7	-10.0	-0.1360 µg/L	-0.1360 ppb	06:45:53
3	Zn 213.857†	519.0	-5.6	-0.1611 µg/L	-0.1611 ppb	06:46:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1968044.4	101.20	%	0.407				0.40%
Sc RADIAL	110839.0	99.6	%	0.55				0.56%
Y 371.029	1196054.7	101.25	%	0.434				0.43%
Ag 328.068†	53.8	0.5149	µg/L	0.30058	0.5149	ppb	0.30058	58.37%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	154.5	80.451	µg/L	38.3518	80.451	ppb	38.3518	47.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.0	-10.063	µg/L	5.5406	-10.063	ppb	5.5406	55.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-12.6	-0.5996	µg/L	0.01552	-0.5996	ppb	0.01552	2.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.0	0.2408	µg/L	0.11129	0.2408	ppb	0.11129	46.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	8.1	0.0054	µg/L	0.01679	0.0054	ppb	0.01679	313.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	108.8	42.865	µg/L	2.5623	42.865	ppb	2.5623	5.98%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.7	0.2018	µg/L	0.09106	0.2018	ppb	0.09106	45.13%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.1	-0.0551	µg/L	0.57520	-0.0551	ppb	0.57520	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              20.1      0.4474 µg/L       0.10526      0.4474 ppb        0.10526  23.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -60.9     -0.4487 µg/L       0.27492     -0.4487 ppb        0.27492  61.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        5.3      27.009 µg/L        2.5240      27.009 ppb         2.5240   9.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -29.8     -16.711 µg/L       13.6964     -16.711 ppb        13.6964  81.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           6.4      35.834 µg/L       15.3597      35.834 ppb        15.3597  42.86%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              56.4      0.1918 µg/L       0.03736      0.1918 ppb        0.03736  19.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.4      0.2951 µg/L       0.41312      0.2951 ppb        0.41312 140.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -102.1     -28.467 µg/L        4.4827     -28.467 ppb         4.4827  15.75%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -7.0     -0.4065 µg/L       0.18517     -0.4065 ppb        0.18517  45.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.3     -16.528 µg/L       10.2642     -16.528 ppb        10.2642  62.10%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -0.2     -0.0379 µg/L       1.61255     -0.0379 ppb        1.61255 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -9.2     -48.987 µg/L       11.4338     -48.987 ppb        11.4338  23.34%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.1      2.1806 µg/L       6.03686      2.1806 ppb        6.03686 276.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.2      4.8389 µg/L       5.22637      4.8389 ppb        5.22637 108.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -55.5     -11.286 µg/L        1.1999     -11.286 ppb         1.1999  10.63%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              55.0      4.5264 µg/L       1.97914      4.5264 ppb        1.97914  43.72%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -3.3     -1.6761 µg/L       0.52678     -1.6761 ppb        0.52678  31.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.1      0.1034 µg/L       0.20953      0.1034 ppb        0.20953 202.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              14.3      0.0312 µg/L       0.17339      0.0312 ppb        0.17339 555.23%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.3      2.1430 µg/L       2.82479      2.1430 ppb        2.82479 131.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -156.9     -15.884 µg/L        4.8845     -15.884 ppb         4.8845  30.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                7.2      0.0653 µg/L       0.26185      0.0653 ppb        0.26185 401.06%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -10.3     -0.2911 µg/L       0.14179     -0.2911 ppb        0.14179  48.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: 1201995270|932716|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 308
Date Collected: 12/15/2009 06:46:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201995270|932716|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109737.6	109737.6	98.6	%			06:47:02
1	Al 396.153Radial†	214.0	53.7	27.970	µg/L	27.970	ppb	06:47:02
1	Ca 317.933Radial†	514.3	114.2	44.960	µg/L	44.960	ppb	06:47:22
1	Fe 238.204 Radial†	19.0	12.3	63.381	µg/L	63.381	ppb	06:47:22
1	K 766.490 Radial†	756.1	-73.1	-40.993	µg/L	-40.993	ppb	06:47:02
1	Mg 279.077 IEC†	17.3	2.1	11.771	µg/L	11.771	ppb	06:47:22
1	Na 589.592 Radial†	-613.7	-116.3	-32.436	µg/L	-32.436	ppb	06:47:02
1	Sr 421.552†	-48.4	33.5	0.1915	µg/L	0.1915	ppb	06:47:02
1	Sc 361.383	1952742.6	1952742.6	100.41	%			06:48:24
1	Y 371.029	1183414.8	1183414.8	100.18	%			06:48:24
1	Ag 328.068†	-4.5	96.8	0.9279	µg/L	0.9279	ppb	06:48:29
1	As 188.979†	1.6	-3.6	-7.1226	µg/L	-7.1226	ppb	06:48:50
1	B 249.677†	126.4	-25.3	-1.2078	µg/L	-1.2078	ppb	06:48:29
1	Ba 233.527†	-72.6	6.9	0.1860	µg/L	0.1860	ppb	06:48:50
1	Be 313.107†	3662.0	-18.7	-0.0126	µg/L	-0.0126	ppb	06:48:29
1	Cd 226.502†	-91.8	6.0	0.1636	µg/L	0.1636	ppb	06:48:50
1	Co 228.616†	-59.6	8.1	0.4075	µg/L	0.4075	ppb	06:48:50
1	Cr 267.716†	-76.3	51.2	1.1394	µg/L	1.1394	ppb	06:48:29
1	Cu 324.752†	3215.0	-64.3	-0.4660	µg/L	-0.4660	ppb	06:48:29
1	Mn 257.610†	-87.7	143.9	0.4882	µg/L	0.4882	ppb	06:48:50
1	Mo 202.031†	-6.3	-1.5	-0.1744	µg/L	-0.1744	ppb	06:48:50
1	Ni 231.604†	282.5	-0.4	-0.0232	µg/L	-0.0232	ppb	06:48:50
1	P 214.914†	197.1	-7.8	-17.717	µg/L	-17.717	ppb	06:48:50
1	Pb 220.353†	52.2	-4.0	-1.0775	µg/L	-1.0775	ppb	06:48:50
1	S 181.975 Axial†	45.9	6.8	36.454	µg/L	36.454	ppb	06:48:50
1	Sb 206.836†	22.8	3.8	4.0012	µg/L	4.0012	ppb	06:48:50
1	Se 196.026†	12.7	1.8	2.7629	µg/L	2.7629	ppb	06:48:50
1	SiO2†	2160.8	76.2	15.477	µg/L	15.477	ppb	06:48:29
1	Si 251.611†	427.2	110.8	9.0116	µg/L	9.0116	ppb	06:48:50
1	Sn 189.927†	23.8	-0.7	-0.3418	µg/L	-0.3418	ppb	06:48:50
1	Ti 334.940†	928.3	127.8	0.2976	µg/L	0.2976	ppb	06:48:29
1	Tl 190.801†	-20.6	-1.2	-1.8503	µg/L	-1.8503	ppb	06:48:50
1	U 409.014†	820.2	-8.6	-0.8851	µg/L	-0.8851	ppb	06:48:29
1	V 292.402†	-55.8	21.0	0.2559	µg/L	0.2559	ppb	06:48:29
1	Zn 213.857†	601.1	80.4	2.2670	µg/L	2.2670	ppb	06:48:50
2	Sc RADIAL	110472.8	110472.8	99.3	%			06:47:28
2	Al 396.153Radial†	223.1	61.4	31.967	µg/L	31.967	ppb	06:47:28
2	Ca 317.933Radial†	476.3	72.4	28.515	µg/L	28.515	ppb	06:47:48
2	Fe 238.204 Radial†	13.2	6.4	32.720	µg/L	32.720	ppb	06:47:48
2	K 766.490 Radial†	728.2	-106.3	-59.644	µg/L	-59.644	ppb	06:47:28
2	Mg 279.077 IEC†	20.2	4.9	27.333	µg/L	27.333	ppb	06:47:48
2	Na 589.592 Radial†	-647.8	-146.5	-40.833	µg/L	-40.833	ppb	06:47:28
2	Sr 421.552†	-37.1	45.3	0.2584	µg/L	0.2584	ppb	06:47:28
2	Sc 361.383	1935664.1	1935664.1	99.536	%			06:48:55
2	Y 371.029	1174150.8	1174150.8	99.398	%			06:48:55
2	Ag 328.068†	-108.2	-7.4	-0.0681	µg/L	-0.0681	ppb	06:49:01
2	As 188.979†	1.5	-3.6	-7.1764	µg/L	-7.1764	ppb	06:49:22
2	B 249.677†	136.2	-14.4	-0.6834	µg/L	-0.6834	ppb	06:49:01
2	Ba 233.527†	-76.8	2.0	0.0546	µg/L	0.0546	ppb	06:49:22
2	Be 313.107†	3745.7	97.5	0.0648	µg/L	0.0648	ppb	06:49:01
2	Cd 226.502†	-88.1	9.0	0.2497	µg/L	0.2497	ppb	06:49:22
2	Co 228.616†	-66.4	0.6	0.0308	µg/L	0.0308	ppb	06:49:22
2	Cr 267.716†	-94.2	32.5	0.7236	µg/L	0.7236	ppb	06:49:01
2	Cu 324.752†	3299.6	49.0	0.3723	µg/L	0.3723	ppb	06:49:01
2	Mn 257.610†	-83.2	147.7	0.4969	µg/L	0.4969	ppb	06:49:22
2	Mo 202.031†	-3.6	1.2	0.1474	µg/L	0.1474	ppb	06:49:22
2	Ni 231.604†	278.6	-1.8	-0.1050	µg/L	-0.1050	ppb	06:49:22
2	P 214.914†	203.0	-0.2	-0.5991	µg/L	-0.5991	ppb	06:49:22
2	Pb 220.353†	61.6	5.9	1.5828	µg/L	1.5828	ppb	06:49:22

2	S 181.975 Axial†	38.0	-0.7	-3.5869 µg/L	-3.5869 ppb	06:49:22
2	Sb 206.836†	16.1	-2.8	-2.9108 µg/L	-2.9108 ppb	06:49:22
2	Se 196.026†	6.4	-4.4	-6.5593 µg/L	-6.5593 ppb	06:49:22
2	SiO2†	2136.4	70.6	14.354 µg/L	14.354 ppb	06:49:01
2	Si 251.611†	439.4	126.8	10.286 µg/L	10.286 ppb	06:49:22
2	Sn 189.927†	25.0	0.8	0.4254 µg/L	0.4254 ppb	06:49:22
2	Ti 334.940†	906.9	114.5	0.2674 µg/L	0.2674 ppb	06:49:01
2	Tl 190.801†	-19.6	-0.4	-0.5670 µg/L	-0.5670 ppb	06:49:22
2	U 409.014†	823.2	1.6	0.1530 µg/L	0.1530 ppb	06:49:01
2	V 292.402†	-79.2	-3.0	-0.0318 µg/L	-0.0318 ppb	06:49:01
2	Zn 213.857†	598.2	82.8	2.3359 µg/L	2.3359 ppb	06:49:22
3	Sc RADIAL	111232.6	111232.6	99.9 %		06:47:53
3	Al 396.153Radial†	185.6	22.3	11.612 µg/L	11.612 ppb	06:47:53
3	Ca 317.933Radial†	499.6	92.5	36.421 µg/L	36.421 ppb	06:48:14
3	Fe 238.204 Radial†	15.7	8.7	44.870 µg/L	44.870 ppb	06:48:14
3	K 766.490 Radial†	713.2	-126.4	-70.907 µg/L	-70.907 ppb	06:47:53
3	Mg 279.077 IEC†	17.9	2.5	13.655 µg/L	13.655 ppb	06:48:14
3	Na 589.592 Radial†	-642.0	-136.2	-37.984 µg/L	-37.984 ppb	06:47:53
3	Sr 421.552†	-74.0	8.6	0.0492 µg/L	0.0492 ppb	06:47:53
3	Sc 361.383	1949286.5	1949286.5	100.24 %		06:49:27
3	Y 371.029	1181915.7	1181915.7	100.06 %		06:49:27
3	Ag 328.068†	-8.8	92.5	0.8802 µg/L	0.8802 ppb	06:49:33
3	As 188.979†	5.4	0.3	0.5114 µg/L	0.5114 ppb	06:49:53
3	B 249.677†	171.8	20.2	0.9334 µg/L	0.9334 ppb	06:49:33
3	Ba 233.527†	-72.6	6.7	0.1783 µg/L	0.1783 ppb	06:49:53
3	Be 313.107†	3701.0	26.6	0.0176 µg/L	0.0176 ppb	06:49:33
3	Cd 226.502†	-94.8	2.9	0.0830 µg/L	0.0830 ppb	06:49:53
3	Co 228.616†	-76.6	-9.0	-0.4592 µg/L	-0.4592 ppb	06:49:53
3	Cr 267.716†	-115.7	11.7	0.2595 µg/L	0.2595 ppb	06:49:33
3	Cu 324.752†	3228.3	-45.3	-0.3287 µg/L	-0.3287 ppb	06:49:33
3	Mn 257.610†	-89.2	142.2	0.4801 µg/L	0.4801 ppb	06:49:53
3	Mo 202.031†	-5.1	-0.2	-0.0238 µg/L	-0.0238 ppb	06:49:53
3	Ni 231.604†	290.2	7.9	0.4534 µg/L	0.4534 ppb	06:49:53
3	P 214.914†	195.7	-8.9	-20.115 µg/L	-20.115 ppb	06:49:53
3	Pb 220.353†	59.0	2.8	0.7550 µg/L	0.7550 ppb	06:49:53
3	S 181.975 Axial†	42.2	3.2	17.324 µg/L	17.324 ppb	06:49:53
3	Sb 206.836†	24.2	5.2	5.5051 µg/L	5.5051 ppb	06:49:53
3	Se 196.026†	16.9	6.0	9.0473 µg/L	9.0473 ppb	06:49:53
3	SiO2†	2080.2	-0.4	-0.0778 µg/L	-0.0778 ppb	06:49:33
3	Si 251.611†	432.3	116.7	9.5380 µg/L	9.5380 ppb	06:49:53
3	Sn 189.927†	22.0	-2.4	-1.2499 µg/L	-1.2499 ppb	06:49:53
3	Ti 334.940†	899.4	100.6	0.2343 µg/L	0.2343 ppb	06:49:33
3	Tl 190.801†	-13.2	6.2	9.9215 µg/L	9.9215 ppb	06:49:53
3	U 409.014†	887.1	59.5	6.0143 µg/L	6.0143 ppb	06:49:33
3	V 292.402†	-124.9	-48.0	-0.5654 µg/L	-0.5654 ppb	06:49:33
3	Zn 213.857†	602.4	82.8	2.3328 µg/L	2.3328 ppb	06:49:53

Mean Data: 1201995270|932716|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945897.7	100.06	%	0.464				0.46%
Sc RADIAL	110481.0	99.3	%	0.67				0.68%
Y 371.029	1179827.1	99.879	%	0.4210				0.42%
Ag 328.068†	60.6	0.5800	µg/L	0.56176	0.5800	ppb	0.56176	96.85%
Al 396.153Radial†	45.8	23.850	µg/L	10.7846	23.850	ppb	10.7846	45.22%
As 188.979†	-2.3	-4.5959	µg/L	4.42307	-4.5959	ppb	4.42307	96.24%
B 249.677†	-6.5	-0.3193	µg/L	1.11610	-0.3193	ppb	1.11610	349.55%
Ba 233.527†	5.2	0.1396	µg/L	0.07374	0.1396	ppb	0.07374	52.81%
Be 313.107†	35.1	0.0233	µg/L	0.03898	0.0233	ppb	0.03898	167.45%
Ca 317.933Radial†	93.0	36.632	µg/L	8.2245	36.632	ppb	8.2245	22.45%
Cd 226.502†	6.0	0.1654	µg/L	0.08334	0.1654	ppb	0.08334	50.38%
Co 228.616†	-0.1	-0.0070	µg/L	0.43459	-0.0070	ppb	0.43459	>999.9%
Cr 267.716†	31.8	0.7075	µg/L	0.44019	0.7075	ppb	0.44019	62.21%
Cu 324.752†	-20.2	-0.1408	µg/L	0.44966	-0.1408	ppb	0.44966	319.37%
Fe 238.204 Radial†	9.1	46.990	µg/L	15.4401	46.990	ppb	15.4401	32.86%
K 766.490 Radial†	-101.9	-57.182	µg/L	15.1082	-57.182	ppb	15.1082	26.42%
Mg 279.077 IEC†	3.2	17.586	µg/L	8.4930	17.586	ppb	8.4930	48.29%
Mn 257.610†	144.6	0.4884	µg/L	0.00840	0.4884	ppb	0.00840	1.72%
Mo 202.031†	-0.2	-0.0169	µg/L	0.16099	-0.0169	ppb	0.16099	951.30%
Na 589.592 Radial†	-133.0	-37.084	µg/L	4.2704	-37.084	ppb	4.2704	11.52%

Ni 231.604†	1.9	0.1084	µg/L	0.30158	0.1084	ppb	0.30158 278.18%
P 214.914†	-5.6	-12.810	µg/L	10.6430	-12.810	ppb	10.6430 83.08%
Pb 220.353†	1.6	0.4201	µg/L	1.36141	0.4201	ppb	1.36141 324.09%
S 181.975 Axial†	3.1	16.730	µg/L	20.0270	16.730	ppb	20.0270 119.70%
Sb 206.836†	2.1	2.1985	µg/L	4.48825	2.1985	ppb	4.48825 204.15%
Se 196.026†	1.1	1.7503	µg/L	7.85243	1.7503	ppb	7.85243 448.64%
SiO2†	48.8	9.9179	µg/L	8.67473	9.9179	ppb	8.67473 87.47%
Si 251.611†	118.1	9.6120	µg/L	0.64057	9.6120	ppb	0.64057 6.66%
Sn 189.927†	-0.8	-0.3888	µg/L	0.83862	-0.3888	ppb	0.83862 215.72%
Sr 421.552†	29.1	0.1664	µg/L	0.10683	0.1664	ppb	0.10683 64.20%
Ti 334.940†	114.3	0.2664	µg/L	0.03170	0.2664	ppb	0.03170 11.90%
Tl 190.801†	1.6	2.5014	µg/L	6.45792	2.5014	ppb	6.45792 258.17%
U 409.014†	17.5	1.7607	µg/L	3.72007	1.7607	ppb	3.72007 211.28%
V 292.402†	-10.0	-0.1138	µg/L	0.41676	-0.1138	ppb	0.41676 366.29%
Zn 213.857†	82.0	2.3119	µg/L	0.03891	2.3119	ppb	0.03891 1.68%

Sequence No.: 15
Sample ID: 1201995271|932716|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 309
Date Collected: 12/15/2009 06:50:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201995271|932716|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112553.0	112553.0	101	%			06:50:41
1	Al 396.153Radial†	182262.4	180056.4	93749	µg/L	93749	ppb	06:50:36
1	Ca 317.933Radial†	269030.6	265608.1	104610	µg/L	104610	ppb	06:50:36
1	Fe 238.204 Radial†	40095.8	39639.4	203750	µg/L	203750	ppb	06:50:41
1	K 766.490 Radial†	80348.8	78608.4	44101	µg/L	44101	ppb	06:50:36
1	Mg 279.077 IEC†	7574.5	7474.2	41423	µg/L	41423	ppb	06:50:41
1	Na 589.592 Radial†	38345.0	38421.4	10712	µg/L	10712	ppb	06:50:41
1	Sr 421.552†	427380.7	422673.6	2413.6	µg/L	2413.6	ppb	06:50:36
1	Sc 361.383	1969901.7	1969901.7	101.30	%			06:51:16
1	Y 371.029	1213047.6	1213047.6	102.69	%			06:51:16
1	Ag 328.068†	33488.4	33160.9	340.49	µg/L	340.49	ppb	06:51:22
1	As 188.979†	594.2	581.4	1130.6	µg/L	1130.6	ppb	06:51:42
1	B 249.677†	36063.8	35450.9	1598.2	µg/L	1598.2	ppb	06:51:22
1	Ba 233.527†	76283.3	75385.8	2020.1	µg/L	2020.1	ppb	06:51:22
1	Be 313.107†	1306406.8	1286015.1	853.38	µg/L	853.38	ppb	06:51:16
1	Cd 226.502†	23337.6	23136.3	636.01	µg/L	636.01	ppb	06:51:22
1	Co 228.616†	19657.9	19473.6	976.73	µg/L	976.73	ppb	06:51:22
1	Cr 267.716†	114672.7	113331.7	2524.1	µg/L	2524.1	ppb	06:51:22
1	Cu 324.752†	271507.7	264765.6	2019.4	µg/L	2019.4	ppb	06:51:22
1	Mn 257.610†	1721264.7	1699458.4	5696.8	µg/L	5696.8	ppb	06:51:16
1	Mo 202.031†	4643.1	4588.5	558.67	µg/L	558.67	ppb	06:51:42
1	Ni 231.604†	25328.2	24722.2	1425.5	µg/L	1425.5	ppb	06:51:22
1	P 214.914†	3990.5	3735.2	8021.5	µg/L	8021.5	ppb	06:51:42
1	Pb 220.353†	3503.7	3402.8	914.85	µg/L	914.85	ppb	06:51:42
1	S 181.975 Axial†	797.7	748.6	3966.9	µg/L	3966.9	ppb	06:51:42
1	Sb 206.836†	1923.8	1880.2	1985.1	µg/L	1985.1	ppb	06:51:42
1	Se 196.026†	1958.1	1922.2	3020.8	µg/L	3020.8	ppb	06:51:42
1	SiO2†	112602.1	109084.8	22168	µg/L	22168	ppb	06:51:22
1	Si 251.611†	129063.7	127096.6	10037	µg/L	10037	ppb	06:51:22
1	Sn 189.927†	2051.6	2001.0	1096.7	µg/L	1096.7	ppb	06:51:42
1	Ti 334.940†	2563672.8	2530053.2	5935.4	µg/L	5935.4	ppb	06:51:16
1	Tl 190.801†	787.3	796.5	1323.9	µg/L	1323.9	ppb	06:51:42
1	U 409.014†	226.3	-602.1	-96.501	µg/L	-96.501	ppb	06:51:22
1	V 292.402†	107475.8	106176.3	1300.2	µg/L	1300.2	ppb	06:51:22
1	Zn 213.857†	223866.2	220481.8	6198.9	µg/L	6198.9	ppb	06:51:22
2	Sc RADIAL	112066.6	112066.6	101	%			06:50:52
2	Al 396.153Radial†	183683.8	182250.1	94891	µg/L	94891	ppb	06:50:47
2	Ca 317.933Radial†	271013.7	268732.0	105840	µg/L	105840	ppb	06:50:47
2	Fe 238.204 Radial†	40412.8	40126.3	206260	µg/L	206260	ppb	06:50:52
2	K 766.490 Radial†	80769.7	79371.2	44529	µg/L	44529	ppb	06:50:47
2	Mg 279.077 IEC†	7626.7	7558.5	41890	µg/L	41890	ppb	06:50:52
2	Na 589.592 Radial†	38492.4	38732.3	10798	µg/L	10798	ppb	06:50:52
2	Sr 421.552†	430189.7	427297.2	2440.0	µg/L	2440.0	ppb	06:50:47
2	Sc 361.383	1953340.9	1953340.9	100.45	%			06:51:49
2	Y 371.029	1203481.3	1203481.3	101.88	%			06:51:49
2	Ag 328.068†	33294.9	33248.5	341.55	µg/L	341.55	ppb	06:51:55
2	As 188.979†	604.6	596.8	1160.6	µg/L	1160.6	ppb	06:52:16
2	B 249.677†	35940.4	35629.9	1605.9	µg/L	1605.9	ppb	06:51:55
2	Ba 233.527†	75851.4	75594.3	2025.7	µg/L	2025.7	ppb	06:51:55
2	Be 313.107†	1296460.4	1287046.9	854.07	µg/L	854.07	ppb	06:51:49
2	Cd 226.502†	23203.8	23198.3	637.57	µg/L	637.57	ppb	06:51:55
2	Co 228.616†	19529.4	19510.2	978.62	µg/L	978.62	ppb	06:51:55
2	Cr 267.716†	113918.9	113541.0	2528.7	µg/L	2528.7	ppb	06:51:55
2	Cu 324.752†	270070.5	265607.1	2026.2	µg/L	2026.2	ppb	06:51:55
2	Mn 257.610†	1710600.9	1703248.2	5709.8	µg/L	5709.8	ppb	06:51:49
2	Mo 202.031†	4665.5	4649.7	566.11	µg/L	566.11	ppb	06:52:16
2	Ni 231.604†	25167.9	24774.6	1428.5	µg/L	1428.5	ppb	06:51:55
2	P 214.914†	4028.6	3806.6	8180.0	µg/L	8180.0	ppb	06:52:16
2	Pb 220.353†	3517.7	3446.1	926.50	µg/L	926.50	ppb	06:52:16

2	S 181.975 Axial†	798.4	756.0	4006.0 µg/L	4006.0 ppb	06:52:16
2	Sb 206.836†	1929.6	1902.1	2008.1 µg/L	2008.1 ppb	06:52:16
2	Se 196.026†	1975.8	1956.2	3073.6 µg/L	3073.6 ppb	06:52:16
2	SiO2†	111371.1	108801.7	22110 µg/L	22110 ppb	06:51:55
2	Si 251.611†	127811.5	126930.2	10022 µg/L	10022 ppb	06:51:55
2	Sn 189.927†	2065.3	2031.8	1113.4 µg/L	1113.4 ppb	06:52:16
2	Ti 334.940†	2539980.1	2527922.5	5930.3 µg/L	5930.3 ppb	06:51:49
2	Tl 190.801†	784.4	800.3	1329.8 µg/L	1329.8 ppb	06:52:16
2	U 409.014†	327.7	-499.2	-86.526 µg/L	-86.526 ppb	06:51:55
2	V 292.402†	106940.0	106542.5	1304.8 µg/L	1304.8 ppb	06:51:55
2	Zn 213.857†	222722.9	221217.2	6219.4 µg/L	6219.4 ppb	06:51:55
3	Sc RADIAL	113534.2	113534.2	102 %		06:51:03
3	Al 396.153Radial†	183226.6	179444.1	93430 µg/L	93430 ppb	06:50:58
3	Ca 317.933Radial†	269954.8	264215.1	104060 µg/L	104060 ppb	06:50:58
3	Fe 238.204 Radial†	40485.9	39679.2	203960 µg/L	203960 ppb	06:51:03
3	K 766.490 Radial†	80465.3	78036.0	43780 µg/L	43780 ppb	06:50:58
3	Mg 279.077 IEC†	7653.5	7486.9	41494 µg/L	41494 ppb	06:51:03
3	Na 589.592 Radial†	38634.7	38377.7	10699 µg/L	10699 ppb	06:51:03
3	Sr 421.552†	428587.7	420204.7	2399.5 µg/L	2399.5 ppb	06:50:58
3	Sc 361.383	1962390.9	1962390.9	100.91 %		06:52:23
3	Y 371.029	1209137.5	1209137.5	102.36 %		06:52:23
3	Ag 328.068†	33240.8	33042.1	339.32 µg/L	339.32 ppb	06:52:29
3	As 188.979†	592.6	582.1	1131.9 µg/L	1131.9 ppb	06:52:49
3	B 249.677†	35713.1	35239.6	1588.3 µg/L	1588.3 ppb	06:52:29
3	Ba 233.527†	75336.9	74736.2	2002.7 µg/L	2002.7 ppb	06:52:29
3	Be 313.107†	1300648.8	1285245.2	852.88 µg/L	852.88 ppb	06:52:23
3	Cd 226.502†	23060.2	22949.6	630.75 µg/L	630.75 ppb	06:52:29
3	Co 228.616†	19377.7	19270.2	966.44 µg/L	966.44 ppb	06:52:29
3	Cr 267.716†	113402.9	112506.6	2505.7 µg/L	2505.7 ppb	06:52:29
3	Cu 324.752†	269239.9	263544.0	2010.3 µg/L	2010.3 ppb	06:52:29
3	Mn 257.610†	1714756.5	1699512.5	5697.0 µg/L	5697.0 ppb	06:52:23
3	Mo 202.031†	4630.5	4593.6	559.29 µg/L	559.29 ppb	06:52:49
3	Ni 231.604†	25085.5	24577.4	1417.2 µg/L	1417.2 ppb	06:52:29
3	P 214.914†	4002.8	3762.6	8084.2 µg/L	8084.2 ppb	06:52:49
3	Pb 220.353†	3508.5	3420.8	919.64 µg/L	919.64 ppb	06:52:49
3	S 181.975 Axial†	798.5	752.4	3987.1 µg/L	3987.1 ppb	06:52:49
3	Sb 206.836†	1929.7	1893.3	1999.0 µg/L	1999.0 ppb	06:52:49
3	Se 196.026†	1967.6	1939.0	3046.1 µg/L	3046.1 ppb	06:52:49
3	SiO2†	110921.5	107844.8	21916 µg/L	21916 ppb	06:52:29
3	Si 251.611†	127201.9	125739.3	9926.9 µg/L	9926.9 ppb	06:52:29
3	Sn 189.927†	2050.6	2007.8	1100.2 µg/L	1100.2 ppb	06:52:49
3	Ti 334.940†	2548619.8	2524822.6	5923.2 µg/L	5923.2 ppb	06:52:23
3	Tl 190.801†	782.6	794.9	1321.3 µg/L	1321.3 ppb	06:52:49
3	U 409.014†	407.6	-421.6	-78.280 µg/L	-78.280 ppb	06:52:29
3	V 292.402†	106356.0	105472.8	1291.7 µg/L	1291.7 ppb	06:52:29
3	Zn 213.857†	221510.1	218992.8	6156.8 µg/L	6156.8 ppb	06:52:29

Mean Data: 1201995271|932716|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1961877.8	100.88	%	0.426				0.42%
Sc RADIAL	112717.9	101	%	0.7				0.66%
Y 371.029	1208555.5	102.31	%	0.407				0.40%
Ag 328.068†	33150.5	340.45	µg/L	1.118	340.45	ppb	1.118	0.33%
Al 396.153Radial†	180583.5	94024	µg/L	768.2	94024	ppb	768.2	0.82%
As 188.979†	586.8	1141.0	µg/L	16.98	1141.0	ppb	16.98	1.49%
B 249.677†	35440.1	1597.5	µg/L	8.82	1597.5	ppb	8.82	0.55%
Ba 233.527†	75238.8	2016.2	µg/L	11.99	2016.2	ppb	11.99	0.59%
Be 313.107†	1286102.4	853.45	µg/L	0.600	853.45	ppb	0.600	0.07%
Ca 317.933Radial†	266185.1	104840	µg/L	911.0	104840	ppb	911.0	0.87%
Cd 226.502†	23094.7	634.77	µg/L	3.574	634.77	ppb	3.574	0.56%
Co 228.616†	19418.0	973.93	µg/L	6.554	973.93	ppb	6.554	0.67%
Cr 267.716†	113126.4	2519.5	µg/L	12.18	2519.5	ppb	12.18	0.48%
Cu 324.752†	264638.9	2018.6	µg/L	7.97	2018.6	ppb	7.97	0.39%
Fe 238.204 Radial†	39815.0	204660	µg/L	1389.6	204660	ppb	1389.6	0.68%
K 766.490 Radial†	78671.9	44137	µg/L	375.8	44137	ppb	375.8	0.85%
Mg 279.077 IEC†	7506.5	41602	µg/L	251.6	41602	ppb	251.6	0.60%
Mn 257.610†	1700739.7	5701.2	µg/L	7.42	5701.2	ppb	7.42	0.13%
Mo 202.031†	4610.6	561.36	µg/L	4.129	561.36	ppb	4.129	0.74%
Na 589.592 Radial†	38510.4	10737	µg/L	53.9	10737	ppb	53.9	0.50%

Ni 231.604†	24691.4	1423.7	µg/L	5.89	1423.7	ppb	5.89	0.41%
P 214.914†	3768.1	8095.2	µg/L	79.85	8095.2	ppb	79.85	0.99%
Pb 220.353†	3423.2	920.33	µg/L	5.856	920.33	ppb	5.856	0.64%
S 181.975 Axial†	752.4	3986.7	µg/L	19.56	3986.7	ppb	19.56	0.49%
Sb 206.836†	1891.9	1997.4	µg/L	11.56	1997.4	ppb	11.56	0.58%
Se 196.026†	1939.1	3046.9	µg/L	26.41	3046.9	ppb	26.41	0.87%
SiO2†	108577.1	22065	µg/L	132.0	22065	ppb	132.0	0.60%
Si 251.611†	126588.7	9995.3	µg/L	59.69	9995.3	ppb	59.69	0.60%
Sn 189.927†	2013.5	1103.4	µg/L	8.81	1103.4	ppb	8.81	0.80%
Sr 421.552†	423391.8	2417.7	µg/L	20.56	2417.7	ppb	20.56	0.85%
Ti 334.940†	2527599.4	5929.6	µg/L	6.16	5929.6	ppb	6.16	0.10%
Tl 190.801†	797.2	1325.0	µg/L	4.33	1325.0	ppb	4.33	0.33%
U 409.014†	-507.6	-87.102	µg/L	9.1243	-87.102	ppb	9.1243	10.48%
V 292.402†	106063.8	1298.9	µg/L	6.65	1298.9	ppb	6.65	0.51%
Zn 213.857†	220230.6	6191.7	µg/L	31.88	6191.7	ppb	31.88	0.51%

Sequence No.: 16
Sample ID: 241559001|932716|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 310
Date Collected: 12/15/2009 06:52:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241559001|932716|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113850.5	113850.5	102	%			06:53:31
1	Al 396.153Radial†	153894.3	150272.0	78259	µg/L	78259	ppb	06:53:31
1	Ca 317.933Radial†	48876.4	47370.4	18657	µg/L	18657	ppb	06:53:31
1	Fe 238.204 Radial†	26781.8	26172.9	134510	µg/L	134510	ppb	06:53:52
1	K 766.490 Radial†	20245.4	18950.4	10632	µg/L	10632	ppb	06:53:31
1	Mg 279.077 IEC†	2971.2	2889.0	15923	µg/L	15923	ppb	06:53:52
1	Na 589.592 Radial†	20801.8	20840.3	5810.2	µg/L	5810.2	ppb	06:53:31
1	Sr 421.552†	40289.3	39466.4	225.37	µg/L	225.37	ppb	06:53:31
1	Sc 361.383	1983478.5	1983478.5	102.00	%			06:54:55
1	Y 371.029	1235740.4	1235740.4	104.61	%			06:54:55
1	Ag 328.068†	-1421.3	-1292.3	0.3812	µg/L	0.3812	ppb	06:55:01
1	As 188.979†	30.8	25.1	36.583	µg/L	36.583	ppb	06:55:22
1	B 249.677†	1896.6	1708.4	37.807	µg/L	37.807	ppb	06:55:01
1	Ba 233.527†	41714.1	40977.3	1097.2	µg/L	1097.2	ppb	06:55:01
1	Be 313.107†	18291.9	14268.5	8.2737	µg/L	8.2737	ppb	06:55:01
1	Cd 226.502†	337.2	428.0	1.6390	µg/L	1.6390	ppb	06:55:22
1	Co 228.616†	1426.3	1465.8	67.490	µg/L	67.490	ppb	06:55:22
1	Cr 267.716†	4074.1	4121.6	92.393	µg/L	92.393	ppb	06:55:01
1	Cu 324.752†	8872.1	5432.5	69.430	µg/L	69.430	ppb	06:55:01
1	Mn 257.610†	1451036.4	1422884.7	4765.2	µg/L	4765.2	ppb	06:54:55
1	Mo 202.031†	33.8	37.9	9.8398	µg/L	9.8398	ppb	06:55:22
1	Ni 231.604†	1356.9	1048.6	60.465	µg/L	60.465	ppb	06:55:22
1	P 214.914†	824.7	604.4	1231.2	µg/L	1231.2	ppb	06:55:22
1	Pb 220.353†	673.6	604.4	166.82	µg/L	166.82	ppb	06:55:22
1	S 181.975 Axial†	221.2	178.1	929.82	µg/L	929.82	ppb	06:55:22
1	Sb 206.836†	27.3	7.9	18.412	µg/L	18.412	ppb	06:55:22
1	Se 196.026†	-29.2	-39.4	31.121	µg/L	31.121	ppb	06:55:22
1	SiO2†	106260.5	102106.3	20750	µg/L	20750	ppb	06:55:01
1	Si 251.611†	121581.5	118888.7	9529.9	µg/L	9529.9	ppb	06:55:01
1	Sn 189.927†	-74.3	-97.2	-27.445	µg/L	-27.445	ppb	06:55:22
1	Ti 334.940†	1430948.5	1402161.9	3291.6	µg/L	3291.6	ppb	06:54:55
1	Tl 190.801†	-41.4	-21.2	6.7367	µg/L	6.7367	ppb	06:55:22
1	U 409.014†	361.4	-471.2	-72.364	µg/L	-72.364	ppb	06:55:01
1	V 292.402†	25470.8	25049.1	312.86	µg/L	312.86	ppb	06:55:01
1	Zn 213.857†	9414.7	8712.4	231.12	µg/L	231.12	ppb	06:55:01
2	Sc RADIAL	114352.8	114352.8	103	%			06:53:57
2	Al 396.153Radial†	153322.0	149054.3	77625	µg/L	77625	ppb	06:53:57
2	Ca 317.933Radial†	48610.8	46902.1	18473	µg/L	18473	ppb	06:53:57
2	Fe 238.204 Radial†	26726.5	26004.1	133650	µg/L	133650	ppb	06:54:18
2	K 766.490 Radial†	20219.3	18838.1	10569	µg/L	10569	ppb	06:53:57
2	Mg 279.077 IEC†	2972.1	2877.1	15859	µg/L	15859	ppb	06:54:18
2	Na 589.592 Radial†	20704.9	20656.7	5759.0	µg/L	5759.0	ppb	06:53:57
2	Sr 421.552†	40031.0	39042.0	222.95	µg/L	222.95	ppb	06:53:57
2	Sc 361.383	1991665.3	1991665.3	102.42	%			06:55:28
2	Y 371.029	1241014.6	1241014.6	105.06	%			06:55:28
2	Ag 328.068†	-1377.6	-1243.8	0.7640	µg/L	0.7640	ppb	06:55:34
2	As 188.979†	30.5	24.7	35.986	µg/L	35.986	ppb	06:55:54
2	B 249.677†	1882.2	1686.6	37.060	µg/L	37.060	ppb	06:55:34
2	Ba 233.527†	41672.3	40768.4	1091.6	µg/L	1091.6	ppb	06:55:34
2	Be 313.107†	18223.4	14127.9	8.1830	µg/L	8.1830	ppb	06:55:34
2	Cd 226.502†	359.6	448.6	2.2902	µg/L	2.2902	ppb	06:55:54
2	Co 228.616†	1435.5	1469.0	67.665	µg/L	67.665	ppb	06:55:54
2	Cr 267.716†	4077.2	4108.2	92.092	µg/L	92.092	ppb	06:55:34
2	Cu 324.752†	8873.7	5398.3	68.988	µg/L	68.988	ppb	06:55:34
2	Mn 257.610†	1452714.1	1418675.0	4751.0	µg/L	4751.0	ppb	06:55:28
2	Mo 202.031†	31.0	35.1	9.4639	µg/L	9.4639	ppb	06:55:54
2	Ni 231.604†	1371.9	1057.8	60.994	µg/L	60.994	ppb	06:55:54
2	P 214.914†	840.1	616.2	1258.5	µg/L	1258.5	ppb	06:55:54
2	Pb 220.353†	655.8	584.3	161.39	µg/L	161.39	ppb	06:55:54

2	S 181.975 Axial†	218.9	174.9	913.02 µg/L	913.02 ppb	06:55:54
2	Sb 206.836†	23.6	4.1	14.439 µg/L	14.439 ppb	06:55:54
2	Se 196.026†	-38.6	-48.5	16.974 µg/L	16.974 ppb	06:55:54
2	SiO2†	104462.8	99922.8	20306 µg/L	20306 ppb	06:55:34
2	Si 251.611†	119418.4	116286.6	9319.2 µg/L	9319.2 ppb	06:55:34
2	Sn 189.927†	-86.9	-109.2	-33.856 µg/L	-33.856 ppb	06:55:54
2	Ti 334.940†	1433518.9	1398904.7	3284.0 µg/L	3284.0 ppb	06:55:28
2	Tl 190.801†	-36.1	-15.9	15.193 µg/L	15.193 ppb	06:55:54
2	U 409.014†	432.7	-403.0	-65.308 µg/L	-65.308 ppb	06:55:34
2	V 292.402†	25452.2	24928.3	311.34 µg/L	311.34 ppb	06:55:34
2	Zn 213.857†	9391.9	8652.1	229.51 µg/L	229.51 ppb	06:55:34
3	Sc RADIAL	114034.4	114034.4	102 %		06:54:23
3	Al 396.153Radial†	153145.2	149298.2	77752 µg/L	77752 ppb	06:54:23
3	Ca 317.933Radial†	48439.3	46866.8	18459 µg/L	18459 ppb	06:54:23
3	Fe 238.204 Radial†	26797.6	26146.0	134380 µg/L	134380 ppb	06:54:44
3	K 766.490 Radial†	20137.0	18812.7	10554 µg/L	10554 ppb	06:54:23
3	Mg 279.077 IEC†	2976.0	2889.0	15924 µg/L	15924 ppb	06:54:44
3	Na 589.592 Radial†	20777.3	20783.6	5794.4 µg/L	5794.4 ppb	06:54:23
3	Sr 421.552†	39991.4	39112.1	223.35 µg/L	223.35 ppb	06:54:23
3	Sc 361.383	1989780.7	1989780.7	102.32 %		06:56:01
3	Y 371.029	1239187.4	1239187.4	104.90 %		06:56:01
3	Ag 328.068†	-1456.5	-1322.2	0.0976 µg/L	0.0976 ppb	06:56:07
3	As 188.979†	28.1	22.3	31.107 µg/L	31.107 ppb	06:56:27
3	B 249.677†	1917.7	1723.0	38.538 µg/L	38.538 ppb	06:56:07
3	Ba 233.527†	42241.9	41363.6	1107.6 µg/L	1107.6 ppb	06:56:07
3	Be 313.107†	18376.7	14294.5	8.2999 µg/L	8.2999 ppb	06:56:07
3	Cd 226.502†	342.2	431.9	1.7678 µg/L	1.7678 ppb	06:56:27
3	Co 228.616†	1433.4	1468.3	67.666 µg/L	67.666 ppb	06:56:27
3	Cr 267.716†	4124.7	4158.4	93.216 µg/L	93.216 ppb	06:56:07
3	Cu 324.752†	8968.5	5499.2	69.898 µg/L	69.898 ppb	06:56:07
3	Mn 257.610†	1450056.8	1417421.4	4746.9 µg/L	4746.9 ppb	06:56:01
3	Mo 202.031†	28.8	33.0	9.2436 µg/L	9.2436 ppb	06:56:27
3	Ni 231.604†	1361.6	1049.0	60.486 µg/L	60.486 ppb	06:56:27
3	P 214.914†	838.0	614.9	1254.7 µg/L	1254.7 ppb	06:56:27
3	Pb 220.353†	656.3	585.4	161.67 µg/L	161.67 ppb	06:56:27
3	S 181.975 Axial†	220.4	176.5	921.78 µg/L	921.78 ppb	06:56:27
3	Sb 206.836†	25.2	5.7	16.105 µg/L	16.105 ppb	06:56:27
3	Se 196.026†	-45.0	-54.8	7.9503 µg/L	7.9503 ppb	06:56:27
3	SiO2†	105744.9	101272.4	20580 µg/L	20580 ppb	06:56:07
3	Si 251.611†	120894.8	117840.0	9445.7 µg/L	9445.7 ppb	06:56:07
3	Sn 189.927†	-78.7	-101.2	-29.624 µg/L	-29.624 ppb	06:56:27
3	Ti 334.940†	1425050.7	1391954.2	3267.7 µg/L	3267.7 ppb	06:56:01
3	Tl 190.801†	-32.1	-12.1	21.147 µg/L	21.147 ppb	06:56:27
3	U 409.014†	508.8	-328.2	-57.876 µg/L	-57.876 ppb	06:56:07
3	V 292.402†	25706.7	25200.6	314.69 µg/L	314.69 ppb	06:56:07
3	Zn 213.857†	9485.6	8752.4	232.27 µg/L	232.27 ppb	06:56:07

Mean Data: 241559001|932716|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1988308.2	102.24	%	0.220				0.22%
Sc RADIAL	114079.2	103	%	0.2				0.22%
Y 371.029	1238647.5	104.86	%	0.227				0.22%
Ag 328.068†	-1286.1	0.4142	µg/L	0.33444	0.4142	ppb	0.33444	80.74%
Al 396.153Radial†	149541.5	77878	µg/L	335.5	77878	ppb	335.5	0.43%
As 188.979†	24.0	34.559	µg/L	3.0044	34.559	ppb	3.0044	8.69%
B 249.677†	1706.0	37.802	µg/L	0.7390	37.802	ppb	0.7390	1.95%
Ba 233.527†	41036.4	1098.8	µg/L	8.08	1098.8	ppb	8.08	0.74%
Be 313.107†	14230.3	8.2522	µg/L	0.06136	8.2522	ppb	0.06136	0.74%
Ca 317.933Radial†	47046.4	18529	µg/L	110.7	18529	ppb	110.7	0.60%
Cd 226.502†	436.2	1.8990	µg/L	0.34487	1.8990	ppb	0.34487	18.16%
Co 228.616†	1467.7	67.607	µg/L	0.1012	67.607	ppb	0.1012	0.15%
Cr 267.716†	4129.4	92.567	µg/L	0.5819	92.567	ppb	0.5819	0.63%
Cu 324.752†	5443.3	69.438	µg/L	0.4548	69.438	ppb	0.4548	0.66%
Fe 238.204 Radial†	26107.7	134180	µg/L	466.3	134180	ppb	466.3	0.35%
K 766.490 Radial†	18867.1	10585	µg/L	41.1	10585	ppb	41.1	0.39%
Mg 279.077 IEC†	2885.0	15902	µg/L	37.5	15902	ppb	37.5	0.24%
Mn 257.610†	1419660.4	4754.4	µg/L	9.58	4754.4	ppb	9.58	0.20%
Mo 202.031†	35.4	9.5157	µg/L	0.30142	9.5157	ppb	0.30142	3.17%
Na 589.592 Radial†	20760.2	5787.8	µg/L	26.21	5787.8	ppb	26.21	0.45%

Ni 231.604†	1051.8	60.648	µg/L	0.2997	60.648	ppb	0.2997	0.49%
P 214.914†	611.8	1248.1	µg/L	14.76	1248.1	ppb	14.76	1.18%
Pb 220.353†	591.4	163.30	µg/L	3.056	163.30	ppb	3.056	1.87%
S 181.975 Axial†	176.5	921.54	µg/L	8.405	921.54	ppb	8.405	0.91%
Sb 206.836†	5.9	16.319	µg/L	1.9950	16.319	ppb	1.9950	12.23%
Se 196.026†	-47.6	18.682	µg/L	11.6796	18.682	ppb	11.6796	62.52%
SiO2†	101100.5	20545	µg/L	223.9	20545	ppb	223.9	1.09%
Si 251.611†	117671.8	9431.6	µg/L	106.05	9431.6	ppb	106.05	1.12%
Sn 189.927†	-102.5	-30.308	µg/L	3.2598	-30.308	ppb	3.2598	10.76%
Sr 421.552†	39206.8	223.89	µg/L	1.299	223.89	ppb	1.299	0.58%
Ti 334.940†	1397673.6	3281.1	µg/L	12.24	3281.1	ppb	12.24	0.37%
Tl 190.801†	-16.4	14.359	µg/L	7.2415	14.359	ppb	7.2415	50.43%
U 409.014†	-400.8	-65.182	µg/L	7.2450	-65.182	ppb	7.2450	11.11%
V 292.402†	25059.4	312.96	µg/L	1.679	312.96	ppb	1.679	0.54%
Zn 213.857†	8705.6	230.97	µg/L	1.386	230.97	ppb	1.386	0.60%

Sequence No.: 17
Sample ID: 1201978632|932716|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 311
Date Collected: 12/15/2009 06:56:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978632|932716|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112686.3	112686.3	101	%			06:57:09
1	Al 396.153Radial†	142453.2	140526.6	73184	µg/L	73184	ppb	06:57:09
1	Ca 317.933Radial†	43864.1	42913.7	16902	µg/L	16902	ppb	06:57:09
1	Fe 238.204 Radial†	24013.4	23709.2	121850	µg/L	121850	ppb	06:57:30
1	K 766.490 Radial†	19724.6	18640.5	10458	µg/L	10458	ppb	06:57:09
1	Mg 279.077 IEC†	2953.5	2901.6	16012	µg/L	16012	ppb	06:57:30
1	Na 589.592 Radial†	19425.7	19691.4	5489.8	µg/L	5489.8	ppb	06:57:09
1	Sr 421.552†	38363.5	37971.3	216.83	µg/L	216.83	ppb	06:57:09
1	Sc 361.383	1976506.9	1976506.9	101.64	%			06:58:33
1	Y 371.029	1231582.3	1231582.3	104.26	%			06:58:33
1	Ag 328.068†	-1268.4	-1146.7	0.5371	µg/L	0.5371	ppb	06:58:39
1	As 188.979†	26.5	21.0	31.638	µg/L	31.638	ppb	06:59:00
1	B 249.677†	1735.1	1556.0	34.644	µg/L	34.644	ppb	06:58:39
1	Ba 233.527†	41851.8	41257.1	1104.7	µg/L	1104.7	ppb	06:58:39
1	Be 313.107†	18269.0	14309.2	8.1519	µg/L	8.1519	ppb	06:58:39
1	Cd 226.502†	300.6	393.2	1.6406	µg/L	1.6406	ppb	06:59:00
1	Co 228.616†	1481.5	1525.1	69.647	µg/L	69.647	ppb	06:59:00
1	Cr 267.716†	3866.0	3930.9	88.074	µg/L	88.074	ppb	06:58:39
1	Cu 324.752†	8978.5	5567.9	67.720	µg/L	67.720	ppb	06:58:39
1	Mn 257.610†	1331373.9	1310167.1	4387.4	µg/L	4387.4	ppb	06:58:33
1	Mo 202.031†	4.6	9.4	5.9109	µg/L	5.9109	ppb	06:59:00
1	Ni 231.604†	1399.7	1095.4	63.163	µg/L	63.163	ppb	06:59:00
1	P 214.914†	810.2	593.0	1218.4	µg/L	1218.4	ppb	06:59:00
1	Pb 220.353†	648.9	582.4	160.65	µg/L	160.65	ppb	06:59:00
1	S 181.975 Axial†	215.8	173.5	907.21	µg/L	907.21	ppb	06:59:00
1	Sb 206.836†	20.8	1.5	13.386	µg/L	13.386	ppb	06:59:00
1	Se 196.026†	-35.9	-46.1	11.939	µg/L	11.939	ppb	06:59:00
1	SiO2†	105680.1	101902.7	20708	µg/L	20708	ppb	06:58:39
1	Si 251.611†	121004.3	118741.2	9503.6	µg/L	9503.6	ppb	06:58:39
1	Sn 189.927†	-80.0	-103.1	-32.372	µg/L	-32.372	ppb	06:59:00
1	Ti 334.940†	1600032.4	1573471.8	3694.0	µg/L	3694.0	ppb	06:58:33
1	Tl 190.801†	-41.0	-21.0	8.6442	µg/L	8.6442	ppb	06:59:00
1	U 409.014†	315.5	-515.1	-74.487	µg/L	-74.487	ppb	06:58:39
1	V 292.402†	22539.2	22252.8	278.09	µg/L	278.09	ppb	06:58:39
1	Zn 213.857†	9515.7	8844.3	236.18	µg/L	236.18	ppb	06:58:39
2	Sc RADIAL	113643.3	113643.3	102	%			06:57:35
2	Al 396.153Radial†	143220.1	140093.0	72958	µg/L	72958	ppb	06:57:35
2	Ca 317.933Radial†	44050.9	42731.9	16830	µg/L	16830	ppb	06:57:35
2	Fe 238.204 Radial†	24065.1	23560.2	121090	µg/L	121090	ppb	06:57:55
2	K 766.490 Radial†	19795.5	18545.9	10405	µg/L	10405	ppb	06:57:35
2	Mg 279.077 IEC†	2958.7	2882.0	15905	µg/L	15905	ppb	06:57:55
2	Na 589.592 Radial†	19483.1	19586.1	5460.5	µg/L	5460.5	ppb	06:57:35
2	Sr 421.552†	38561.4	37846.1	216.12	µg/L	216.12	ppb	06:57:35
2	Sc 361.383	1977449.9	1977449.9	101.69	%			06:59:06
2	Y 371.029	1232157.8	1232157.8	104.31	%			06:59:06
2	Ag 328.068†	-1273.3	-1151.0	0.4412	µg/L	0.4412	ppb	06:59:12
2	As 188.979†	27.9	22.3	34.610	µg/L	34.610	ppb	06:59:32
2	B 249.677†	1748.3	1568.2	35.456	µg/L	35.456	ppb	06:59:12
2	Ba 233.527†	41991.0	41374.4	1107.8	µg/L	1107.8	ppb	06:59:12
2	Be 313.107†	18327.4	14358.0	8.1637	µg/L	8.1637	ppb	06:59:12
2	Cd 226.502†	315.7	408.0	2.1224	µg/L	2.1224	ppb	06:59:32
2	Co 228.616†	1519.6	1561.8	71.391	µg/L	71.391	ppb	06:59:32
2	Cr 267.716†	3862.7	3925.8	87.962	µg/L	87.962	ppb	06:59:12
2	Cu 324.752†	8955.8	5541.3	67.357	µg/L	67.357	ppb	06:59:12
2	Mn 257.610†	1354323.3	1332111.5	4460.6	µg/L	4460.6	ppb	06:59:06
2	Mo 202.031†	-3.5	1.4	4.9242	µg/L	4.9242	ppb	06:59:32
2	Ni 231.604†	1425.7	1120.4	64.603	µg/L	64.603	ppb	06:59:32
2	P 214.914†	828.3	610.5	1258.6	µg/L	1258.6	ppb	06:59:32
2	Pb 220.353†	655.6	588.8	162.32	µg/L	162.32	ppb	06:59:32

2	S 181.975 Axial†	224.1	181.5	950.32 µg/L	950.32 ppb	06:59:32
2	Sb 206.836†	12.9	-6.2	5.4655 µg/L	5.4655 ppb	06:59:32
2	Se 196.026†	-31.6	-41.9	17.824 µg/L	17.824 ppb	06:59:32
2	SiO2†	106713.2	102869.1	20905 µg/L	20905 ppb	06:59:12
2	Si 251.611†	122034.0	119697.1	9579.3 µg/L	9579.3 ppb	06:59:12
2	Sn 189.927†	-79.9	-102.9	-32.436 µg/L	-32.436 ppb	06:59:32
2	Ti 334.940†	1624972.1	1597247.4	3749.9 µg/L	3749.9 ppb	06:59:06
2	Tl 190.801†	-40.3	-20.3	10.545 µg/L	10.545 ppb	06:59:32
2	U 409.014†	393.7	-438.3	-66.578 µg/L	-66.578 ppb	06:59:12
2	V 292.402†	22617.5	22319.3	278.83 µg/L	278.83 ppb	06:59:12
2	Zn 213.857†	9527.4	8851.3	236.46 µg/L	236.46 ppb	06:59:12
3	Sc RADIAL	114957.7	114957.7	103 %		06:58:01
3	Al 396.153Radial†	143882.0	139130.2	72457 µg/L	72457 ppb	06:58:01
3	Ca 317.933Radial†	44359.7	42537.6	16754 µg/L	16754 ppb	06:58:01
3	Fe 238.204 Radial†	23983.7	23211.9	119300 µg/L	119300 ppb	06:58:21
3	K 766.490 Radial†	19883.2	18409.2	10328 µg/L	10328 ppb	06:58:01
3	Mg 279.077 IEC†	2949.1	2839.6	15671 µg/L	15671 ppb	06:58:21
3	Na 589.592 Radial†	19642.1	19521.8	5442.6 µg/L	5442.6 ppb	06:58:01
3	Sr 421.552†	38800.0	37645.3	214.97 µg/L	214.97 ppb	06:58:01
3	Sc 361.383	1981079.1	1981079.1	101.87 %		06:59:39
3	Y 371.029	1234883.6	1234883.6	104.54 %		06:59:39
3	Ag 328.068†	-1228.5	-1104.7	0.7406 µg/L	0.7406 ppb	06:59:45
3	As 188.979†	19.9	14.5	19.140 µg/L	19.140 ppb	07:00:05
3	B 249.677†	1719.8	1537.0	34.558 µg/L	34.558 ppb	06:59:45
3	Ba 233.527†	42050.9	41357.5	1107.3 µg/L	1107.3 ppb	06:59:45
3	Be 313.107†	18354.5	14351.6	8.1587 µg/L	8.1587 ppb	06:59:45
3	Cd 226.502†	326.5	418.0	2.5444 µg/L	2.5444 ppb	07:00:05
3	Co 228.616†	1510.7	1550.3	70.808 µg/L	70.808 ppb	07:00:05
3	Cr 267.716†	3841.6	3898.3	87.348 µg/L	87.348 ppb	06:59:45
3	Cu 324.752†	9017.9	5586.2	67.308 µg/L	67.308 ppb	06:59:45
3	Mn 257.610†	1354576.7	1329920.3	4453.0 µg/L	4453.0 ppb	06:59:39
3	Mo 202.031†	3.6	8.4	5.6909 µg/L	5.6909 ppb	07:00:05
3	Ni 231.604†	1426.4	1118.5	64.493 µg/L	64.493 ppb	07:00:05
3	P 214.914†	828.9	609.5	1258.3 µg/L	1258.3 ppb	07:00:05
3	Pb 220.353†	656.5	588.4	162.20 µg/L	162.20 ppb	07:00:05
3	S 181.975 Axial†	216.2	173.4	907.21 µg/L	907.21 ppb	07:00:05
3	Sb 206.836†	24.2	4.9	17.161 µg/L	17.161 ppb	07:00:05
3	Se 196.026†	-31.8	-42.0	16.408 µg/L	16.408 ppb	07:00:05
3	SiO2†	105253.6	101244.0	20575 µg/L	20575 ppb	06:59:45
3	Si 251.611†	120458.5	117930.6	9435.9 µg/L	9435.9 ppb	06:59:45
3	Sn 189.927†	-84.7	-107.5	-35.065 µg/L	-35.065 ppb	07:00:05
3	Ti 334.940†	1628816.0	1598093.2	3751.8 µg/L	3751.8 ppb	06:59:39
3	Tl 190.801†	-41.5	-21.4	8.7016 µg/L	8.7016 ppb	07:00:05
3	U 409.014†	409.0	-424.0	-64.798 µg/L	-64.798 ppb	06:59:45
3	V 292.402†	22656.1	22316.4	278.66 µg/L	278.66 ppb	06:59:45
3	Zn 213.857†	9555.9	8862.1	236.96 µg/L	236.96 ppb	06:59:45

Mean Data: 1201978632|932716|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1978345.3	101.73	%	0.124				0.12%
Sc RADIAL	113762.4	102	%	1.0				1.00%
Y 371.029	1232874.6	104.37	%	0.149				0.14%
Ag 328.068†	-1134.1	0.5730	µg/L	0.15290	0.5730	ppb	0.15290	26.68%
Al 396.153Radial†	139916.6	72866	µg/L	372.2	72866	ppb	372.2	0.51%
As 188.979†	19.3	28.462	µg/L	8.2094	28.462	ppb	8.2094	28.84%
B 249.677†	1553.7	34.886	µg/L	0.4955	34.886	ppb	0.4955	1.42%
Ba 233.527†	41329.6	1106.6	µg/L	1.70	1106.6	ppb	1.70	0.15%
Be 313.107†	14339.6	8.1581	µg/L	0.00593	8.1581	ppb	0.00593	0.07%
Ca 317.933Radial†	42727.7	16828	µg/L	74.1	16828	ppb	74.1	0.44%
Cd 226.502†	406.4	2.1025	µg/L	0.45221	2.1025	ppb	0.45221	21.51%
Co 228.616†	1545.7	70.615	µg/L	0.8879	70.615	ppb	0.8879	1.26%
Cr 267.716†	3918.4	87.795	µg/L	0.3905	87.795	ppb	0.3905	0.44%
Cu 324.752†	5565.2	67.462	µg/L	0.2252	67.462	ppb	0.2252	0.33%
Fe 238.204 Radial†	23493.7	120750	µg/L	1311.6	120750	ppb	1311.6	1.09%
K 766.490 Radial†	18531.9	10397	µg/L	65.2	10397	ppb	65.2	0.63%
Mg 279.077 IEC†	2874.4	15863	µg/L	174.8	15863	ppb	174.8	1.10%
Mn 257.610†	1324066.3	4433.7	µg/L	40.23	4433.7	ppb	40.23	0.91%
Mo 202.031†	6.4	5.5087	µg/L	0.51796	5.5087	ppb	0.51796	9.40%
Na 589.592 Radial†	19599.7	5464.3	µg/L	23.87	5464.3	ppb	23.87	0.44%

Ni 231.604†	1111.5	64.086 µg/L	0.8019	64.086 ppb	0.8019	1.25%
P 214.914†	604.3	1245.1 µg/L	23.15	1245.1 ppb	23.15	1.86%
Pb 220.353†	586.5	161.72 µg/L	0.934	161.72 ppb	0.934	0.58%
S 181.975 Axial†	176.1	921.58 µg/L	24.888	921.58 ppb	24.888	2.70%
Sb 206.836†	0.0	12.004 µg/L	5.9689	12.004 ppb	5.9689	49.72%
Se 196.026†	-43.3	15.390 µg/L	3.0717	15.390 ppb	3.0717	19.96%
SiO2†	102005.3	20729 µg/L	166.1	20729 ppb	166.1	0.80%
Si 251.611†	118789.6	9506.3 µg/L	71.72	9506.3 ppb	71.72	0.75%
Sn 189.927†	-104.5	-33.291 µg/L	1.5365	-33.291 ppb	1.5365	4.62%
Sr 421.552†	37820.9	215.97 µg/L	0.939	215.97 ppb	0.939	0.43%
Ti 334.940†	1589604.2	3731.9 µg/L	32.83	3731.9 ppb	32.83	0.88%
Tl 190.801†	-20.9	9.2968 µg/L	1.08100	9.2968 ppb	1.08100	11.63%
U 409.014†	-459.1	-68.621 µg/L	5.1575	-68.621 ppb	5.1575	7.52%
V 292.402†	22296.2	278.53 µg/L	0.390	278.53 ppb	0.390	0.14%
Zn 213.857†	8852.6	236.53 µg/L	0.394	236.53 ppb	0.394	0.17%

Sequence No.: 18
Sample ID: 1201978634|932716|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 312
Date Collected: 12/15/2009 07:00:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978634|932716|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113695.4	113695.4	102	%			07:00:48
1	Al 396.153Radial†	269525.9	263664.2	137290	µg/L	137290	ppb	07:00:48
1	Ca 317.933Radial†	59818.5	58146.4	22901	µg/L	22901	ppb	07:00:53
1	Fe 238.204 Radial†	28256.5	27652.1	142130	µg/L	142130	ppb	07:00:53
1	K 766.490 Radial†	36506.1	34894.4	19577	µg/L	19577	ppb	07:00:48
1	Mg 279.077 IEC†	4803.2	4686.2	25954	µg/L	25954	ppb	07:00:53
1	Na 589.592 Radial†	39125.0	38803.9	10818	µg/L	10818	ppb	07:00:48
1	Sr 421.552†	135852.5	133062.9	759.84	µg/L	759.84	ppb	07:00:48
1	Sc 361.383	1956593.3	1956593.3	100.61	%			07:01:28
1	Y 371.029	1216176.0	1216176.0	102.96	%			07:01:28
1	Ag 328.068†	53998.4	53770.9	528.52	µg/L	528.52	ppb	07:01:34
1	As 188.979†	271.7	265.0	516.92	µg/L	516.92	ppb	07:01:54
1	B 249.677†	12646.8	12418.6	537.63	µg/L	537.63	ppb	07:01:34
1	Ba 233.527†	65104.9	64787.7	1735.5	µg/L	1735.5	ppb	07:01:34
1	Be 313.107†	808054.8	799469.4	530.13	µg/L	530.13	ppb	07:01:28
1	Cd 226.502†	18380.1	18365.7	506.11	µg/L	506.11	ppb	07:01:34
1	Co 228.616†	10827.8	10829.2	540.55	µg/L	540.55	ppb	07:01:54
1	Cr 267.716†	27862.6	27820.2	620.74	µg/L	620.74	ppb	07:01:34
1	Cu 324.752†	84269.3	80490.2	631.13	µg/L	631.13	ppb	07:01:34
1	Mn 257.610†	1348332.3	1340354.3	4490.7	µg/L	4490.7	ppb	07:01:28
1	Mo 202.031†	4013.0	3993.4	484.84	µg/L	484.84	ppb	07:01:54
1	Ni 231.604†	9995.0	9652.4	556.56	µg/L	556.56	ppb	07:01:54
1	P 214.914†	1129.2	918.2	1895.6	µg/L	1895.6	ppb	07:01:54
1	Pb 220.353†	2434.4	2363.6	642.65	µg/L	642.65	ppb	07:01:54
1	S 181.975 Axial†	1167.5	1121.5	5972.2	µg/L	5972.2	ppb	07:01:54
1	Sb 206.836†	448.0	426.3	462.42	µg/L	462.42	ppb	07:01:54
1	Se 196.026†	287.9	275.4	504.67	µg/L	504.67	ppb	07:01:54
1	SiO2†	148691.9	145710.9	29611	µg/L	29611	ppb	07:01:34
1	Si 251.611†	170870.9	169515.9	13557	µg/L	13557	ppb	07:01:34
1	Sn 189.927†	880.3	850.6	469.66	µg/L	469.66	ppb	07:01:54
1	Ti 334.940†	2032943.2	2019769.2	4741.7	µg/L	4741.7	ppb	07:01:28
1	Tl 190.801†	259.6	277.4	493.06	µg/L	493.06	ppb	07:01:54
1	U 409.014†	5325.9	4468.0	426.28	µg/L	426.28	ppb	07:01:34
1	V 292.402†	66695.5	66366.0	815.61	µg/L	815.61	ppb	07:01:34
1	Zn 213.857†	29684.5	28985.6	799.68	µg/L	799.68	ppb	07:01:34
2	Sc RADIAL	114177.1	114177.1	103	%			07:00:59
2	Al 396.153Radial†	269477.0	262503.3	136690	µg/L	136690	ppb	07:00:59
2	Ca 317.933Radial†	59534.6	57622.6	22695	µg/L	22695	ppb	07:01:04
2	Fe 238.204 Radial†	28266.9	27545.6	141590	µg/L	141590	ppb	07:01:04
2	K 766.490 Radial†	36572.6	34808.3	19528	µg/L	19528	ppb	07:00:59
2	Mg 279.077 IEC†	4784.3	4647.9	25741	µg/L	25741	ppb	07:01:04
2	Na 589.592 Radial†	39145.9	38662.7	10779	µg/L	10779	ppb	07:00:59
2	Sr 421.552†	135777.6	132428.7	756.22	µg/L	756.22	ppb	07:00:59
2	Sc 361.383	1963879.0	1963879.0	100.99	%			07:02:01
2	Y 371.029	1221042.9	1221042.9	103.37	%			07:02:01
2	Ag 328.068†	53811.5	53386.7	524.78	µg/L	524.78	ppb	07:02:07
2	As 188.979†	283.6	275.7	538.36	µg/L	538.36	ppb	07:02:28
2	B 249.677†	12548.4	12274.6	531.04	µg/L	531.04	ppb	07:02:07
2	Ba 233.527†	64751.6	64197.8	1719.7	µg/L	1719.7	ppb	07:02:07
2	Be 313.107†	808059.4	796494.5	528.16	µg/L	528.16	ppb	07:02:01
2	Cd 226.502†	18282.1	18200.9	501.54	µg/L	501.54	ppb	07:02:07
2	Co 228.616†	11065.7	11024.9	550.54	µg/L	550.54	ppb	07:02:28
2	Cr 267.716†	27754.8	27610.7	616.07	µg/L	616.07	ppb	07:02:07
2	Cu 324.752†	83914.9	79828.5	626.08	µg/L	626.08	ppb	07:02:07
2	Mn 257.610†	1348698.4	1335745.3	4475.3	µg/L	4475.3	ppb	07:02:01
2	Mo 202.031†	4104.0	4068.8	493.86	µg/L	493.86	ppb	07:02:28
2	Ni 231.604†	10205.4	9824.0	566.46	µg/L	566.46	ppb	07:02:28
2	P 214.914†	1148.7	933.3	1931.1	µg/L	1931.1	ppb	07:02:28
2	Pb 220.353†	2492.0	2411.7	655.50	µg/L	655.50	ppb	07:02:28

2	S 181.975 Axial†	1188.8	1138.3	6061.9 µg/L	6061.9 ppb	07:02:28
2	Sb 206.836†	458.3	434.9	471.42 µg/L	471.42 ppb	07:02:28
2	Se 196.026†	294.5	280.8	512.52 µg/L	512.52 ppb	07:02:28
2	SiO2†	149716.6	146177.3	29706 µg/L	29706 ppb	07:02:07
2	Si 251.611†	171947.7	169952.1	13592 µg/L	13592 ppb	07:02:07
2	Sn 189.927†	902.0	868.8	478.99 µg/L	478.99 ppb	07:02:28
2	Ti 334.940†	2032559.1	2011892.9	4723.2 µg/L	4723.2 ppb	07:02:01
2	Tl 190.801†	266.7	283.5	502.58 µg/L	502.58 ppb	07:02:28
2	U 409.014†	5402.5	4524.2	432.07 µg/L	432.07 ppb	07:02:07
2	V 292.402†	66513.2	65939.5	810.50 µg/L	810.50 ppb	07:02:07
2	Zn 213.857†	29556.2	28749.0	793.01 µg/L	793.01 ppb	07:02:07
3	Sc RADIAL	114239.5	114239.5	103 %		07:01:10
3	Al 396.153Radial†	271558.0	264387.2	137670 µg/L	137670 ppb	07:01:10
3	Ca 317.933Radial†	59756.3	57806.9	22767 µg/L	22767 ppb	07:01:15
3	Fe 238.204 Radial†	28411.1	27671.0	142230 µg/L	142230 ppb	07:01:15
3	K 766.490 Radial†	36873.7	35082.2	19682 µg/L	19682 ppb	07:01:10
3	Mg 279.077 IEC†	4788.8	4649.8	25750 µg/L	25750 ppb	07:01:15
3	Na 589.592 Radial†	39429.9	38918.5	10850 µg/L	10850 ppb	07:01:10
3	Sr 421.552†	136966.0	133514.2	762.42 µg/L	762.42 ppb	07:01:10
3	Sc 361.383	1974557.2	1974557.2	101.54 %		07:02:35
3	Y 371.029	1227347.1	1227347.1	103.90 %		07:02:35
3	Ag 328.068†	53798.7	53086.0	521.93 µg/L	521.93 ppb	07:02:41
3	As 188.979†	277.5	268.2	523.42 µg/L	523.42 ppb	07:03:01
3	B 249.677†	12546.7	12205.7	527.61 µg/L	527.61 ppb	07:02:41
3	Ba 233.527†	64746.0	63845.6	1710.2 µg/L	1710.2 ppb	07:02:41
3	Be 313.107†	814013.8	798031.6	529.17 µg/L	529.17 ppb	07:02:35
3	Cd 226.502†	18270.6	18091.6	498.41 µg/L	498.41 ppb	07:02:41
3	Co 228.616†	11064.4	10964.4	547.42 µg/L	547.42 ppb	07:03:01
3	Cr 267.716†	27691.3	27399.5	611.35 µg/L	611.35 ppb	07:02:41
3	Cu 324.752†	83959.5	79423.1	623.19 µg/L	623.19 ppb	07:02:41
3	Mn 257.610†	1357782.8	1337469.8	4481.1 µg/L	4481.1 ppb	07:02:35
3	Mo 202.031†	4108.6	4051.2	491.78 µg/L	491.78 ppb	07:03:01
3	Ni 231.604†	10229.6	9793.1	564.68 µg/L	564.68 ppb	07:03:01
3	P 214.914†	1138.7	917.3	1894.9 µg/L	1894.9 ppb	07:03:01
3	Pb 220.353†	2495.6	2401.9	652.97 µg/L	652.97 ppb	07:03:01
3	S 181.975 Axial†	1194.0	1137.0	6055.1 µg/L	6055.1 ppb	07:03:01
3	Sb 206.836†	470.6	444.6	481.71 µg/L	481.71 ppb	07:03:01
3	Se 196.026†	295.3	280.0	511.82 µg/L	511.82 ppb	07:03:01
3	SiO2†	149420.3	145083.8	29484 µg/L	29484 ppb	07:02:41
3	Si 251.611†	171791.9	168877.9	13504 µg/L	13504 ppb	07:02:41
3	Sn 189.927†	907.4	869.3	479.35 µg/L	479.35 ppb	07:03:01
3	Ti 334.940†	2053004.0	2021144.0	4745.0 µg/L	4745.0 ppb	07:02:35
3	Tl 190.801†	266.8	282.1	500.60 µg/L	500.60 ppb	07:03:01
3	U 409.014†	5317.7	4411.8	420.57 µg/L	420.57 ppb	07:02:41
3	V 292.402†	66327.4	65400.4	804.02 µg/L	804.02 ppb	07:02:41
3	Zn 213.857†	29501.8	28537.3	786.97 µg/L	786.97 ppb	07:02:41

Mean Data: 1201978634|932716|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1965009.9	101.05	%	0.465				0.46%
Sc RADIAL	114037.3	102	%	0.3				0.26%
Y 371.029	1221522.0	103.41	%	0.474				0.46%
Ag 328.068†	53414.5	525.08	µg/L	3.306	525.08	ppb	3.306	0.63%
Al 396.153Radial†	263518.2	137220	µg/L	495.0	137220	ppb	495.0	0.36%
As 188.979†	269.6	526.23	µg/L	10.995	526.23	ppb	10.995	2.09%
B 249.677†	12299.6	532.09	µg/L	5.089	532.09	ppb	5.089	0.96%
Ba 233.527†	64277.0	1721.8	µg/L	12.75	1721.8	ppb	12.75	0.74%
Be 313.107†	797998.5	529.15	µg/L	0.986	529.15	ppb	0.986	0.19%
Ca 317.933Radial†	57858.6	22788	µg/L	104.6	22788	ppb	104.6	0.46%
Cd 226.502†	18219.4	502.02	µg/L	3.875	502.02	ppb	3.875	0.77%
Co 228.616†	10939.5	546.17	µg/L	5.110	546.17	ppb	5.110	0.94%
Cr 267.716†	27610.1	616.05	µg/L	4.693	616.05	ppb	4.693	0.76%
Cu 324.752†	79914.0	626.80	µg/L	4.020	626.80	ppb	4.020	0.64%
Fe 238.204 Radial†	27622.9	141980	µg/L	347.4	141980	ppb	347.4	0.24%
K 766.490 Radial†	34928.3	19596	µg/L	78.6	19596	ppb	78.6	0.40%
Mg 279.077 IEC†	4661.3	25815	µg/L	120.3	25815	ppb	120.3	0.47%
Mn 257.610†	1337856.5	4482.4	µg/L	7.80	4482.4	ppb	7.80	0.17%
Mo 202.031†	4037.8	490.16	µg/L	4.722	490.16	ppb	4.722	0.96%
Na 589.592 Radial†	38795.0	10816	µg/L	35.7	10816	ppb	35.7	0.33%

Ni 231.604†	9756.5	562.57 µg/L	5.273	562.57 ppb	5.273	0.94%
P 214.914†	922.9	1907.2 µg/L	20.68	1907.2 ppb	20.68	1.08%
Pb 220.353†	2392.4	650.37 µg/L	6.808	650.37 ppb	6.808	1.05%
S 181.975 Axial†	1132.3	6029.7 µg/L	49.97	6029.7 ppb	49.97	0.83%
Sb 206.836†	435.3	471.85 µg/L	9.652	471.85 ppb	9.652	2.05%
Se 196.026†	278.7	509.67 µg/L	4.344	509.67 ppb	4.344	0.85%
SiO2†	145657.3	29600 µg/L	111.5	29600 ppb	111.5	0.38%
Si 251.611†	169448.7	13551 µg/L	44.3	13551 ppb	44.3	0.33%
Sn 189.927†	862.9	476.00 µg/L	5.497	476.00 ppb	5.497	1.15%
Sr 421.552†	133002.0	759.50 µg/L	3.114	759.50 ppb	3.114	0.41%
Ti 334.940†	2017602.0	4736.6 µg/L	11.72	4736.6 ppb	11.72	0.25%
Tl 190.801†	281.0	498.75 µg/L	5.019	498.75 ppb	5.019	1.01%
U 409.014†	4468.0	426.31 µg/L	5.749	426.31 ppb	5.749	1.35%
V 292.402†	65902.0	810.04 µg/L	5.809	810.04 ppb	5.809	0.72%
Zn 213.857†	28757.3	793.22 µg/L	6.356	793.22 ppb	6.356	0.80%

Sequence No.: 19
Sample ID: 1201978635|932716|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 313
Date Collected: 12/15/2009 07:03:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978635|932716|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113300.4	113300.4	102	%			07:03:44
1	Al 396.153Radial†	264487.1	259634.5	135190	µg/L	135190	ppb	07:03:44
1	Ca 317.933Radial†	58257.4	56817.1	22378	µg/L	22378	ppb	07:03:49
1	Fe 238.204 Radial†	35346.4	34712.7	178420	µg/L	178420	ppb	07:03:49
1	K 766.490 Radial†	35936.4	34459.4	19333	µg/L	19333	ppb	07:03:44
1	Mg 279.077 IEC†	4764.5	4664.6	25779	µg/L	25779	ppb	07:03:49
1	Na 589.592 Radial†	38355.6	38181.7	10645	µg/L	10645	ppb	07:03:44
1	Sr 421.552†	132166.5	129905.9	741.82	µg/L	741.82	ppb	07:03:44
1	Sc 361.383	1983233.6	1983233.6	101.98	%			07:04:24
1	Y 371.029	1234873.6	1234873.6	104.54	%			07:04:24
1	Ag 328.068†	52932.2	52004.5	515.34	µg/L	515.34	ppb	07:04:30
1	As 188.979†	291.7	280.9	543.68	µg/L	543.68	ppb	07:04:50
1	B 249.677†	12848.8	12447.8	527.58	µg/L	527.58	ppb	07:04:30
1	Ba 233.527†	63431.0	62277.2	1668.5	µg/L	1668.5	ppb	07:04:30
1	Be 313.107†	801337.2	782094.1	518.54	µg/L	518.54	ppb	07:04:24
1	Cd 226.502†	18192.9	17936.7	491.24	µg/L	491.24	ppb	07:04:30
1	Co 228.616†	11010.7	10864.0	542.17	µg/L	542.17	ppb	07:04:50
1	Cr 267.716†	29136.2	28697.0	640.51	µg/L	640.51	ppb	07:04:30
1	Cu 324.752†	82704.4	77830.7	619.08	µg/L	619.08	ppb	07:04:30
1	Mn 257.610†	1531627.0	1502084.4	5035.0	µg/L	5035.0	ppb	07:04:24
1	Mo 202.031†	4059.9	3985.8	485.35	µg/L	485.35	ppb	07:04:50
1	Ni 231.604†	10035.1	9558.3	551.14	µg/L	551.14	ppb	07:04:50
1	P 214.914†	1192.4	965.1	1960.6	µg/L	1960.6	ppb	07:04:50
1	Pb 220.353†	2841.5	2730.3	740.14	µg/L	740.14	ppb	07:04:50
1	S 181.975 Axial†	1177.5	1115.8	5936.1	µg/L	5936.1	ppb	07:04:50
1	Sb 206.836†	458.4	430.6	467.15	µg/L	467.15	ppb	07:04:50
1	Se 196.026†	262.1	246.2	486.33	µg/L	486.33	ppb	07:04:50
1	SiO2†	150599.5	145596.3	29588	µg/L	29588	ppb	07:04:30
1	Si 251.611†	173090.1	169410.7	13546	µg/L	13546	ppb	07:04:30
1	Sn 189.927†	892.4	850.7	473.83	µg/L	473.83	ppb	07:04:50
1	Ti 334.940†	2091447.1	2049994.2	4812.7	µg/L	4812.7	ppb	07:04:24
1	Tl 190.801†	259.9	274.1	490.51	µg/L	490.51	ppb	07:04:50
1	U 409.014†	5432.5	4501.4	422.87	µg/L	422.87	ppb	07:04:30
1	V 292.402†	77179.8	75756.1	931.75	µg/L	931.75	ppb	07:04:30
1	Zn 213.857†	29680.5	28585.3	784.56	µg/L	784.56	ppb	07:04:30
2	Sc RADIAL	114863.6	114863.6	103	%			07:03:55
2	Al 396.153Radial†	268695.3	260176.1	135480	µg/L	135480	ppb	07:03:55
2	Ca 317.933Radial†	57274.2	55085.6	21696	µg/L	21696	ppb	07:04:00
2	Fe 238.204 Radial†	34835.0	33744.7	173440	µg/L	173440	ppb	07:04:00
2	K 766.490 Radial†	36356.9	34386.3	19292	µg/L	19292	ppb	07:03:55
2	Mg 279.077 IEC†	4689.6	4528.4	25027	µg/L	25027	ppb	07:04:00
2	Na 589.592 Radial†	38901.7	38198.0	10649	µg/L	10649	ppb	07:03:55
2	Sr 421.552†	134272.9	130179.9	743.38	µg/L	743.38	ppb	07:03:55
2	Sc 361.383	1970965.0	1970965.0	101.35	%			07:04:57
2	Y 371.029	1228130.5	1228130.5	103.97	%			07:04:57
2	Ag 328.068†	52734.5	52132.5	516.19	µg/L	516.19	ppb	07:05:03
2	As 188.979†	290.3	281.3	545.46	µg/L	545.46	ppb	07:05:24
2	B 249.677†	12694.3	12373.8	525.68	µg/L	525.68	ppb	07:05:03
2	Ba 233.527†	63104.5	62342.1	1670.3	µg/L	1670.3	ppb	07:05:03
2	Be 313.107†	798910.7	784591.0	520.20	µg/L	520.20	ppb	07:04:57
2	Cd 226.502†	18117.7	17973.6	492.67	µg/L	492.67	ppb	07:05:03
2	Co 228.616†	11006.4	10927.0	545.32	µg/L	545.32	ppb	07:05:24
2	Cr 267.716†	29002.4	28742.8	641.54	µg/L	641.54	ppb	07:05:03
2	Cu 324.752†	82403.3	78038.4	619.56	µg/L	619.56	ppb	07:05:03
2	Mn 257.610†	1527787.3	1507644.3	5052.9	µg/L	5052.9	ppb	07:04:57
2	Mo 202.031†	4060.3	4011.0	488.18	µg/L	488.18	ppb	07:05:24
2	Ni 231.604†	10041.9	9626.3	555.06	µg/L	555.06	ppb	07:05:24
2	P 214.914†	1196.4	976.3	1991.7	µg/L	1991.7	ppb	07:05:24
2	Pb 220.353†	2846.4	2752.4	746.15	µg/L	746.15	ppb	07:05:24

2	S 181.975 Axial†	1178.9	1124.3	5982.5 µg/L	5982.5 ppb	07:05:24
2	Sb 206.836†	462.1	437.0	474.09 µg/L	474.09 ppb	07:05:24
2	Se 196.026†	272.2	257.7	500.37 µg/L	500.37 ppb	07:05:24
2	SiO2†	149709.1	145636.9	29596 µg/L	29596 ppb	07:05:03
2	Si 251.611†	172138.2	169528.0	13554 µg/L	13554 ppb	07:05:03
2	Sn 189.927†	888.1	851.9	473.58 µg/L	473.58 ppb	07:05:24
2	Ti 334.940†	2090121.4	2061451.5	4839.7 µg/L	4839.7 ppb	07:04:57
2	Tl 190.801†	262.7	278.6	498.00 µg/L	498.00 ppb	07:05:24
2	U 409.014†	5388.6	4491.3	422.76 µg/L	422.76 ppb	07:05:03
2	V 292.402†	76976.4	76026.5	934.62 µg/L	934.62 ppb	07:05:03
2	Zn 213.857†	29607.4	28694.3	788.17 µg/L	788.17 ppb	07:05:03
3	Sc RADIAL	114991.9	114991.9	103 %		07:04:06
3	Al 396.153Radial†	266647.3	257903.6	134290 µg/L	134290 ppb	07:04:06
3	Ca 317.933Radial†	57785.7	55518.8	21866 µg/L	21866 ppb	07:04:11
3	Fe 238.204 Radial†	35072.6	33937.0	174430 µg/L	174430 ppb	07:04:11
3	K 766.490 Radial†	36190.1	34185.7	19179 µg/L	19179 ppb	07:04:06
3	Mg 279.077 IEC†	4735.5	4567.7	25245 µg/L	25245 ppb	07:04:11
3	Na 589.592 Radial†	38741.6	38001.0	10594 µg/L	10594 ppb	07:04:06
3	Sr 421.552†	133385.5	129176.0	737.65 µg/L	737.65 ppb	07:04:06
3	Sc 361.383	1964398.6	1964398.6	101.01 %		07:05:31
3	Y 371.029	1223895.8	1223895.8	103.61 %		07:05:31
3	Ag 328.068†	52130.0	51708.1	512.18 µg/L	512.18 ppb	07:05:37
3	As 188.979†	282.9	274.9	532.45 µg/L	532.45 ppb	07:05:57
3	B 249.677†	12646.4	12368.3	525.11 µg/L	525.11 ppb	07:05:37
3	Ba 233.527†	62396.4	61849.3	1657.1 µg/L	1657.1 ppb	07:05:37
3	Be 313.107†	797561.3	785890.1	521.06 µg/L	521.06 ppb	07:05:31
3	Cd 226.502†	17888.1	17806.0	487.88 µg/L	487.88 ppb	07:05:37
3	Co 228.616†	11000.8	10957.8	546.89 µg/L	546.89 ppb	07:05:57
3	Cr 267.716†	28697.5	28536.7	636.94 µg/L	636.94 ppb	07:05:37
3	Cu 324.752†	81684.7	77598.8	616.49 µg/L	616.49 ppb	07:05:37
3	Mn 257.610†	1525159.2	1510081.5	5061.2 µg/L	5061.2 ppb	07:05:31
3	Mo 202.031†	4060.3	4024.4	489.82 µg/L	489.82 ppb	07:05:57
3	Ni 231.604†	10036.4	9654.0	556.65 µg/L	556.65 ppb	07:05:57
3	P 214.914†	1201.4	985.2	2010.6 µg/L	2010.6 ppb	07:05:57
3	Pb 220.353†	2837.9	2753.4	746.31 µg/L	746.31 ppb	07:05:57
3	S 181.975 Axial†	1171.0	1120.4	5961.5 µg/L	5961.5 ppb	07:05:57
3	Sb 206.836†	460.3	436.8	473.84 µg/L	473.84 ppb	07:05:57
3	Se 196.026†	264.2	250.7	490.50 µg/L	490.50 ppb	07:05:57
3	SiO2†	146673.8	143125.8	29086 µg/L	29086 ppb	07:05:37
3	Si 251.611†	168486.4	166480.5	13307 µg/L	13307 ppb	07:05:37
3	Sn 189.927†	884.5	851.3	473.45 µg/L	473.45 ppb	07:05:57
3	Ti 334.940†	2081822.5	2060129.4	4836.6 µg/L	4836.6 ppb	07:05:31
3	Tl 190.801†	259.7	276.4	494.53 µg/L	494.53 ppb	07:05:57
3	U 409.014†	5313.1	4434.3	416.81 µg/L	416.81 ppb	07:05:37
3	V 292.402†	76156.8	75468.9	927.99 µg/L	927.99 ppb	07:05:37
3	Zn 213.857†	29255.3	28443.4	780.96 µg/L	780.96 ppb	07:05:37

Mean Data: 1201978635|932716|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1972865.7	101.45	%	0.492				0.48%
Sc RADIAL	114385.3	103	%	0.8				0.82%
Y 371.029	1228966.6	104.04	%	0.469				0.45%
Ag 328.068†	51948.4	514.57	µg/L	2.112	514.57	ppb	2.112	0.41%
Al 396.153Radial†	259238.1	134990	µg/L	618.2	134990	ppb	618.2	0.46%
As 188.979†	279.0	540.53	µg/L	7.052	540.53	ppb	7.052	1.30%
B 249.677†	12396.6	526.12	µg/L	1.297	526.12	ppb	1.297	0.25%
Ba 233.527†	62156.2	1665.3	µg/L	7.17	1665.3	ppb	7.17	0.43%
Be 313.107†	784191.7	519.93	µg/L	1.279	519.93	ppb	1.279	0.25%
Ca 317.933Radial†	55807.2	21980	µg/L	354.9	21980	ppb	354.9	1.61%
Cd 226.502†	17905.4	490.59	µg/L	2.459	490.59	ppb	2.459	0.50%
Co 228.616†	10916.3	544.79	µg/L	2.403	544.79	ppb	2.403	0.44%
Cr 267.716†	28658.8	639.66	µg/L	2.415	639.66	ppb	2.415	0.38%
Cu 324.752†	77822.6	618.38	µg/L	1.650	618.38	ppb	1.650	0.27%
Fe 238.204 Radial†	34131.5	175430	µg/L	2633.6	175430	ppb	2633.6	1.50%
K 766.490 Radial†	34343.8	19268	µg/L	79.5	19268	ppb	79.5	0.41%
Mg 279.077 IEC†	4586.9	25350	µg/L	387.3	25350	ppb	387.3	1.53%
Mn 257.610†	1506603.4	5049.7	µg/L	13.39	5049.7	ppb	13.39	0.27%
Mo 202.031†	4007.1	487.78	µg/L	2.260	487.78	ppb	2.260	0.46%
Na 589.592 Radial†	38126.9	10630	µg/L	30.5	10630	ppb	30.5	0.29%

Ni 231.604†	9612.9	554.28	µg/L	2.838	554.28	ppb	2.838	0.51%
P 214.914†	975.5	1987.6	µg/L	25.25	1987.6	ppb	25.25	1.27%
Pb 220.353†	2745.4	744.20	µg/L	3.522	744.20	ppb	3.522	0.47%
S 181.975 Axial†	1120.2	5960.0	µg/L	23.27	5960.0	ppb	23.27	0.39%
Sb 206.836†	434.8	471.69	µg/L	3.935	471.69	ppb	3.935	0.83%
Se 196.026†	251.5	492.40	µg/L	7.209	492.40	ppb	7.209	1.46%
SiO2†	144786.3	29423	µg/L	292.3	29423	ppb	292.3	0.99%
Si 251.611†	168473.1	13469	µg/L	140.4	13469	ppb	140.4	1.04%
Sn 189.927†	851.3	473.62	µg/L	0.192	473.62	ppb	0.192	0.04%
Sr 421.552†	129754.0	740.95	µg/L	2.963	740.95	ppb	2.963	0.40%
Ti 334.940†	2057191.7	4829.6	µg/L	14.74	4829.6	ppb	14.74	0.31%
Tl 190.801†	276.4	494.35	µg/L	3.748	494.35	ppb	3.748	0.76%
U 409.014†	4475.7	420.82	µg/L	3.467	420.82	ppb	3.467	0.82%
V 292.402†	75750.5	931.45	µg/L	3.329	931.45	ppb	3.329	0.36%
Zn 213.857†	28574.3	784.56	µg/L	3.603	784.56	ppb	3.603	0.46%

Sequence No.: 20
Sample ID: 1201978633|932716|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 314
Date Collected: 12/15/2009 07:06:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978633|932716|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111790.0	111790.0	100	%			07:06:39
1	Al 396.153Radial†	30200.3	29902.3	15573	µg/L	15573	ppb	07:06:39
1	Ca 317.933Radial†	9694.1	9243.5	3640.6	µg/L	3640.6	ppb	07:07:00
1	Fe 238.204 Radial†	5376.3	5345.4	27472	µg/L	27472	ppb	07:07:00
1	K 766.490 Radial†	4626.2	3765.7	2112.6	µg/L	2112.6	ppb	07:06:39
1	Mg 279.077 IEC†	601.0	582.8	3212.1	µg/L	3212.1	ppb	07:07:00
1	Na 589.592 Radial†	3565.1	4055.3	1130.6	µg/L	1130.6	ppb	07:06:39
1	Sr 421.552†	7822.5	7870.3	44.942	µg/L	44.942	ppb	07:06:39
1	Sc 361.383	2005270.8	2005270.8	103.12	%			07:08:03
1	Y 371.029	1222491.2	1222491.2	103.49	%			07:08:03
1	Ag 328.068†	-359.6	-247.5	0.2184	µg/L	0.2184	ppb	07:08:08
1	As 188.979†	14.4	8.8	14.828	µg/L	14.828	ppb	07:08:29
1	B 249.677†	540.4	372.9	8.8479	µg/L	8.8479	ppb	07:08:08
1	Ba 233.527†	8402.8	8228.1	220.32	µg/L	220.32	ppb	07:08:08
1	Be 313.107†	6457.4	2596.7	1.4872	µg/L	1.4872	ppb	07:08:08
1	Cd 226.502†	-6.2	91.5	0.4444	µg/L	0.4444	ppb	07:08:29
1	Co 228.616†	234.6	294.9	13.604	µg/L	13.604	ppb	07:08:29
1	Cr 267.716†	711.3	817.0	18.314	µg/L	18.314	ppb	07:08:08
1	Cu 324.752†	4312.1	915.8	12.734	µg/L	12.734	ppb	07:08:08
1	Mn 257.610†	296400.0	287675.4	963.45	µg/L	963.45	ppb	07:08:03
1	Mo 202.031†	-2.3	2.6	1.3954	µg/L	1.3954	ppb	07:08:29
1	Ni 231.604†	502.9	206.0	11.880	µg/L	11.880	ppb	07:08:29
1	P 214.914†	322.4	108.5	217.65	µg/L	217.65	ppb	07:08:29
1	Pb 220.353†	184.3	122.7	33.839	µg/L	33.839	ppb	07:08:29
1	S 181.975 Axial†	70.1	29.1	151.16	µg/L	151.16	ppb	07:08:29
1	Sb 206.836†	16.9	-2.6	-0.7261	µg/L	-0.7261	ppb	07:08:29
1	Se 196.026†	4.2	-6.7	8.3389	µg/L	8.3389	ppb	07:08:29
1	SiO2†	22600.6	19842.0	4032.2	µg/L	4032.2	ppb	07:08:08
1	Si 251.611†	24262.4	23214.6	1860.7	µg/L	1860.7	ppb	07:08:08
1	Sn 189.927†	1.0	-23.4	-7.4917	µg/L	-7.4917	ppb	07:08:29
1	Ti 334.940†	285937.2	276500.9	649.10	µg/L	649.10	ppb	07:08:03
1	Tl 190.801†	-19.6	0.3	8.5829	µg/L	8.5829	ppb	07:08:29
1	U 409.014†	695.5	-151.0	-20.327	µg/L	-20.327	ppb	07:08:08
1	V 292.402†	4997.1	4922.7	61.554	µg/L	61.554	ppb	07:08:08
1	Zn 213.857†	2256.9	1670.5	44.133	µg/L	44.133	ppb	07:08:29
2	Sc RADIAL	112351.7	112351.7	101	%			07:07:05
2	Al 396.153Radial†	30249.0	29800.2	15519	µg/L	15519	ppb	07:07:05
2	Ca 317.933Radial†	9732.4	9233.2	3636.5	µg/L	3636.5	ppb	07:07:26
2	Fe 238.204 Radial†	5397.7	5339.8	27444	µg/L	27444	ppb	07:07:26
2	K 766.490 Radial†	4587.2	3704.0	2078.1	µg/L	2078.1	ppb	07:07:05
2	Mg 279.077 IEC†	600.5	579.4	3192.8	µg/L	3192.8	ppb	07:07:26
2	Na 589.592 Radial†	3584.4	4056.7	1131.0	µg/L	1131.0	ppb	07:07:05
2	Sr 421.552†	7759.6	7769.0	44.365	µg/L	44.365	ppb	07:07:05
2	Sc 361.383	2001952.6	2001952.6	102.95	%			07:08:36
2	Y 371.029	1220670.0	1220670.0	103.34	%			07:08:36
2	Ag 328.068†	-264.3	-155.5	1.0908	µg/L	1.0908	ppb	07:08:41
2	As 188.979†	11.1	5.7	8.6032	µg/L	8.6032	ppb	07:09:02
2	B 249.677†	505.6	339.9	7.3102	µg/L	7.3102	ppb	07:08:41
2	Ba 233.527†	8363.9	8203.8	219.67	µg/L	219.67	ppb	07:08:41
2	Be 313.107†	6503.7	2652.0	1.5236	µg/L	1.5236	ppb	07:08:41
2	Cd 226.502†	1.1	98.5	0.6460	µg/L	0.6460	ppb	07:09:02
2	Co 228.616†	233.4	294.1	13.564	µg/L	13.564	ppb	07:09:02
2	Cr 267.716†	745.6	851.5	19.080	µg/L	19.080	ppb	07:08:41
2	Cu 324.752†	4237.0	849.8	12.236	µg/L	12.236	ppb	07:08:41
2	Mn 257.610†	296281.6	288036.9	964.65	µg/L	964.65	ppb	07:08:36
2	Mo 202.031†	5.4	10.1	2.2881	µg/L	2.2881	ppb	07:09:02
2	Ni 231.604†	508.5	212.3	12.239	µg/L	12.239	ppb	07:09:02
2	P 214.914†	322.6	109.2	219.27	µg/L	219.27	ppb	07:09:02
2	Pb 220.353†	180.7	119.5	32.987	µg/L	32.987	ppb	07:09:02

2	S 181.975 Axial†	66.3	25.6	132.29 µg/L	132.29 ppb	07:09:02
2	Sb 206.836†	21.8	2.2	4.3280 µg/L	4.3280 ppb	07:09:02
2	Se 196.026†	0.5	-10.4	2.8929 µg/L	2.8929 ppb	07:09:02
2	SiO2†	22876.0	20145.8	4094.0 µg/L	4094.0 ppb	07:08:41
2	Si 251.611†	24503.9	23488.3	1882.9 µg/L	1882.9 ppb	07:08:41
2	Sn 189.927†	-1.4	-25.7	-8.7080 µg/L	-8.7080 ppb	07:09:02
2	Ti 334.940†	285955.4	276978.2	650.22 µg/L	650.22 ppb	07:08:36
2	Tl 190.801†	-24.8	-4.8	0.4900 µg/L	0.4900 ppb	07:09:02
2	U 409.014†	726.4	-119.9	-17.174 µg/L	-17.174 ppb	07:08:41
2	V 292.402†	4975.4	4909.6	61.406 µg/L	61.406 ppb	07:08:41
2	Zn 213.857†	2272.7	1689.5	44.671 µg/L	44.671 ppb	07:09:02
3	Sc RADIAL	111632.6	111632.6	100 %		07:07:31
3	Al 396.153Radial†	30310.9	30054.9	15652 µg/L	15652 ppb	07:07:31
3	Ca 317.933Radial†	9743.9	9306.7	3665.5 µg/L	3665.5 ppb	07:07:52
3	Fe 238.204 Radial†	5411.8	5388.3	27693 µg/L	27693 ppb	07:07:52
3	K 766.490 Radial†	4574.1	3720.2	2087.1 µg/L	2087.1 ppb	07:07:31
3	Mg 279.077 IEC†	601.0	583.7	3216.7 µg/L	3216.7 ppb	07:07:52
3	Na 589.592 Radial†	3580.5	4075.6	1136.3 µg/L	1136.3 ppb	07:07:31
3	Sr 421.552†	7767.8	7826.7	44.694 µg/L	44.694 ppb	07:07:31
3	Sc 361.383	2002385.4	2002385.4	102.97 %		07:09:09
3	Y 371.029	1220765.5	1220765.5	103.34 %		07:09:09
3	Ag 328.068†	-303.7	-193.7	0.7446 µg/L	0.7446 ppb	07:09:14
3	As 188.979†	5.8	0.5	-1.8559 µg/L	-1.8559 ppb	07:09:35
3	B 249.677†	526.1	359.7	8.1591 µg/L	8.1591 ppb	07:09:14
3	Ba 233.527†	8320.4	8159.8	218.49 µg/L	218.49 ppb	07:09:14
3	Be 313.107†	6484.1	2631.6	1.5083 µg/L	1.5083 ppb	07:09:14
3	Cd 226.502†	-5.9	91.7	0.4317 µg/L	0.4317 ppb	07:09:35
3	Co 228.616†	241.7	302.1	13.956 µg/L	13.956 ppb	07:09:35
3	Cr 267.716†	757.1	862.5	19.325 µg/L	19.325 ppb	07:09:14
3	Cu 324.752†	4254.6	866.0	12.410 µg/L	12.410 ppb	07:09:14
3	Mn 257.610†	296288.3	287981.1	964.50 µg/L	964.50 ppb	07:09:09
3	Mo 202.031†	-2.3	2.6	1.4026 µg/L	1.4026 ppb	07:09:35
3	Ni 231.604†	499.8	203.7	11.743 µg/L	11.743 ppb	07:09:35
3	P 214.914†	330.4	116.7	236.04 µg/L	236.04 ppb	07:09:35
3	Pb 220.353†	176.8	115.7	31.977 µg/L	31.977 ppb	07:09:35
3	S 181.975 Axial†	66.3	25.6	132.21 µg/L	132.21 ppb	07:09:35
3	Sb 206.836†	20.5	1.0	3.0806 µg/L	3.0806 ppb	07:09:35
3	Se 196.026†	-4.0	-14.7	-3.5305 µg/L	-3.5305 ppb	07:09:35
3	SiO2†	22487.3	19763.6	4016.3 µg/L	4016.3 ppb	07:09:14
3	Si 251.611†	24081.9	23073.3	1849.1 µg/L	1849.1 ppb	07:09:14
3	Sn 189.927†	-1.9	-26.2	-8.9041 µg/L	-8.9041 ppb	07:09:35
3	Ti 334.940†	287996.3	278900.2	654.73 µg/L	654.73 ppb	07:09:09
3	Tl 190.801†	-25.0	-5.0	0.2268 µg/L	0.2268 ppb	07:09:35
3	U 409.014†	660.4	-184.1	-23.721 µg/L	-23.721 ppb	07:09:14
3	V 292.402†	4950.5	4884.5	61.106 µg/L	61.106 ppb	07:09:14
3	Zn 213.857†	2261.5	1678.2	44.326 µg/L	44.326 ppb	07:09:35

Mean Data: 1201978633|932716|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2003202.9	103.01	%	0.093				0.09%
Sc RADIAL	111924.7	101	%	0.3				0.34%
Y 371.029	1221308.9	103.39	%	0.087				0.08%
Ag 328.068†	-198.9	0.6846	µg/L	0.43928	0.6846	ppb	0.43928	64.17%
Al 396.153Radial†	29919.2	15581	µg/L	66.8	15581	ppb	66.8	0.43%
As 188.979†	5.0	7.1917	µg/L	8.43089	7.1917	ppb	8.43089	117.23%
B 249.677†	357.5	8.1057	µg/L	0.77022	8.1057	ppb	0.77022	9.50%
Ba 233.527†	8197.2	219.49	µg/L	0.927	219.49	ppb	0.927	0.42%
Be 313.107†	2626.8	1.5064	µg/L	0.01827	1.5064	ppb	0.01827	1.21%
Ca 317.933Radial†	9261.1	3647.5	µg/L	15.67	3647.5	ppb	15.67	0.43%
Cd 226.502†	93.9	0.5074	µg/L	0.12021	0.5074	ppb	0.12021	23.69%
Co 228.616†	297.0	13.708	µg/L	0.2156	13.708	ppb	0.2156	1.57%
Cr 267.716†	843.7	18.906	µg/L	0.5273	18.906	ppb	0.5273	2.79%
Cu 324.752†	877.2	12.460	µg/L	0.2530	12.460	ppb	0.2530	2.03%
Fe 238.204 Radial†	5357.8	27536	µg/L	136.5	27536	ppb	136.5	0.50%
K 766.490 Radial†	3730.0	2092.6	µg/L	17.93	2092.6	ppb	17.93	0.86%
Mg 279.077 IEC†	582.0	3207.2	µg/L	12.64	3207.2	ppb	12.64	0.39%
Mn 257.610†	287897.8	964.20	µg/L	0.654	964.20	ppb	0.654	0.07%
Mo 202.031†	5.1	1.6954	µg/L	0.51332	1.6954	ppb	0.51332	30.28%
Na 589.592 Radial†	4062.5	1132.6	µg/L	3.16	1132.6	ppb	3.16	0.28%

Ni 231.604†	207.3	11.954 µg/L	0.2560	11.954 ppb	0.2560	2.14%
P 214.914†	111.5	224.32 µg/L	10.182	224.32 ppb	10.182	4.54%
Pb 220.353†	119.3	32.934 µg/L	0.9319	32.934 ppb	0.9319	2.83%
S 181.975 Axial†	26.8	138.55 µg/L	10.917	138.55 ppb	10.917	7.88%
Sb 206.836†	0.2	2.2275 µg/L	2.63286	2.2275 ppb	2.63286	118.20%
Se 196.026†	-10.6	2.5671 µg/L	5.94136	2.5671 ppb	5.94136	231.44%
SiO2†	19917.1	4047.5 µg/L	41.03	4047.5 ppb	41.03	1.01%
Si 251.611†	23258.7	1864.2 µg/L	17.19	1864.2 ppb	17.19	0.92%
Sn 189.927†	-25.1	-8.3679 µg/L	0.76515	-8.3679 ppb	0.76515	9.14%
Sr 421.552†	7822.0	44.667 µg/L	0.2899	44.667 ppb	0.2899	0.65%
Ti 334.940†	277459.7	651.35 µg/L	2.982	651.35 ppb	2.982	0.46%
Tl 190.801†	-3.2	3.0999 µg/L	4.75023	3.0999 ppb	4.75023	153.24%
U 409.014†	-151.7	-20.407 µg/L	3.2741	-20.407 ppb	3.2741	16.04%
V 292.402†	4905.6	61.355 µg/L	0.2283	61.355 ppb	0.2283	0.37%
Zn 213.857†	1679.4	44.376 µg/L	0.2726	44.376 ppb	0.2726	0.61%

Sequence No.: 21
Sample ID: 241559002|932716|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 315
Date Collected: 12/15/2009 07:09:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241559002|932716|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114020.0	114020.0	102	%			07:10:16
1	Al 396.153Radial†	141970.0	138409.3	72081	µg/L	72081	ppb	07:10:16
1	Ca 317.933Radial†	92424.3	89805.2	35370	µg/L	35370	ppb	07:10:16
1	Fe 238.204 Radial†	25021.7	24416.0	125480	µg/L	125480	ppb	07:10:37
1	K 766.490 Radial†	16423.4	15190.4	8522.2	µg/L	8522.2	ppb	07:10:16
1	Mg 279.077 IEC†	2811.2	2728.5	15042	µg/L	15042	ppb	07:10:37
1	Na 589.592 Radial†	13251.0	13440.0	3747.0	µg/L	3747.0	ppb	07:10:16
1	Sr 421.552†	41303.2	40397.5	230.69	µg/L	230.69	ppb	07:10:16
1	Sc 361.383	1975467.6	1975467.6	101.58	%			07:11:41
1	Y 371.029	1238765.3	1238765.3	104.87	%			07:11:41
1	Ag 328.068†	-1291.9	-1170.5	-0.1393	µg/L	-0.1393	ppb	07:11:47
1	As 188.979†	27.1	21.5	27.036	µg/L	27.036	ppb	07:12:07
1	B 249.677†	1863.2	1683.0	39.459	µg/L	39.459	ppb	07:11:47
1	Ba 233.527†	31165.0	30758.5	823.47	µg/L	823.47	ppb	07:11:47
1	Be 313.107†	16117.9	12201.0	7.0684	µg/L	7.0684	ppb	07:11:47
1	Cd 226.502†	323.9	416.3	1.9950	µg/L	1.9950	ppb	07:12:07
1	Co 228.616†	613.8	671.6	28.173	µg/L	28.173	ppb	07:12:07
1	Cr 267.716†	2776.3	2860.3	64.004	µg/L	64.004	ppb	07:12:07
1	Cu 324.752†	7632.1	4247.2	58.645	µg/L	58.645	ppb	07:11:47
1	Mn 257.610†	664346.9	654224.6	2199.0	µg/L	2199.0	ppb	07:11:41
1	Mo 202.031†	74.3	78.0	14.297	µg/L	14.297	ppb	07:12:07
1	Ni 231.604†	1162.4	862.6	49.740	µg/L	49.740	ppb	07:12:07
1	P 214.914†	866.0	648.3	1339.8	µg/L	1339.8	ppb	07:12:07
1	Pb 220.353†	854.8	785.4	214.84	µg/L	214.84	ppb	07:12:07
1	S 181.975 Axial†	214.1	171.9	898.35	µg/L	898.35	ppb	07:12:07
1	Sb 206.836†	27.9	8.5	15.946	µg/L	15.946	ppb	07:12:07
1	Se 196.026†	-58.1	-68.0	-15.282	µg/L	-15.282	ppb	07:12:07
1	SiO2†	113855.3	110005.2	22355	µg/L	22355	ppb	07:11:47
1	Si 251.611†	130322.7	127977.1	10285	µg/L	10285	ppb	07:11:47
1	Sn 189.927†	-91.9	-114.9	-34.220	µg/L	-34.220	ppb	07:12:07
1	Ti 334.940†	1226402.7	1206493.2	2831.2	µg/L	2831.2	ppb	07:11:41
1	Tl 190.801†	-21.9	-2.2	21.309	µg/L	21.309	ppb	07:12:07
1	U 409.014†	334.3	-496.4	-72.834	µg/L	-72.834	ppb	07:11:41
1	V 292.402†	13469.3	13336.0	170.97	µg/L	170.97	ppb	07:11:47
1	Zn 213.857†	15784.1	15019.9	410.46	µg/L	410.46	ppb	07:11:47
2	Sc RADIAL	113405.5	113405.5	102	%			07:10:42
2	Al 396.153Radial†	142985.6	140156.9	72991	µg/L	72991	ppb	07:10:42
2	Ca 317.933Radial†	92713.4	90577.8	35674	µg/L	35674	ppb	07:10:42
2	Fe 238.204 Radial†	25187.6	24711.1	127000	µg/L	127000	ppb	07:11:03
2	K 766.490 Radial†	16625.4	15475.6	8682.2	µg/L	8682.2	ppb	07:10:42
2	Mg 279.077 IEC†	2833.8	2765.6	15246	µg/L	15246	ppb	07:11:03
2	Na 589.592 Radial†	13428.0	13683.8	3815.0	µg/L	3815.0	ppb	07:10:42
2	Sr 421.552†	41555.9	40863.9	233.35	µg/L	233.35	ppb	07:10:42
2	Sc 361.383	1963999.3	1963999.3	100.99	%			07:12:15
2	Y 371.029	1231187.5	1231187.5	104.23	%			07:12:15
2	Ag 328.068†	-1375.0	-1260.2	-0.8808	µg/L	-0.8808	ppb	07:12:20
2	As 188.979†	31.2	25.7	35.144	µg/L	35.144	ppb	07:12:41
2	B 249.677†	1812.1	1643.1	37.109	µg/L	37.109	ppb	07:12:20
2	Ba 233.527†	30888.5	30663.8	820.94	µg/L	820.94	ppb	07:12:20
2	Be 313.107†	15920.7	12098.5	7.0038	µg/L	7.0038	ppb	07:12:20
2	Cd 226.502†	323.1	417.3	1.9125	µg/L	1.9125	ppb	07:12:41
2	Co 228.616†	613.7	675.1	28.368	µg/L	28.368	ppb	07:12:41
2	Cr 267.716†	2772.6	2872.6	64.275	µg/L	64.275	ppb	07:12:41
2	Cu 324.752†	7572.9	4232.4	58.861	µg/L	58.861	ppb	07:12:20
2	Mn 257.610†	656856.4	650626.6	2187.2	µg/L	2187.2	ppb	07:12:15
2	Mo 202.031†	72.5	76.6	14.187	µg/L	14.187	ppb	07:12:41
2	Ni 231.604†	1147.9	854.9	49.297	µg/L	49.297	ppb	07:12:41
2	P 214.914†	880.9	668.1	1383.0	µg/L	1383.0	ppb	07:12:41
2	Pb 220.353†	855.8	791.3	216.48	µg/L	216.48	ppb	07:12:41

2	S 181.975 Axial†	216.2	175.2	915.73	µg/L	915.73 ppb	07:12:41
2	Sb 206.836†	26.2	7.0	14.271	µg/L	14.271 ppb	07:12:41
2	Se 196.026†	-42.5	-52.9	8.2983	µg/L	8.2983 ppb	07:12:41
2	SiO2†	112351.0	109170.2	22185	µg/L	22185 ppb	07:12:20
2	Si 251.611†	128535.5	126956.6	10203	µg/L	10203 ppb	07:12:20
2	Sn 189.927†	-92.4	-115.9	-34.452	µg/L	-34.452 ppb	07:12:41
2	Ti 334.940†	1215115.2	1202366.4	2821.5	µg/L	2821.5 ppb	07:12:15
2	Tl 190.801†	-30.0	-10.4	8.1056	µg/L	8.1056 ppb	07:12:41
2	U 409.014†	416.6	-413.0	-64.667	µg/L	-64.667 ppb	07:12:15
2	V 292.402†	13304.0	13249.8	170.06	µg/L	170.06 ppb	07:12:20
2	Zn 213.857†	15649.3	14977.1	409.09	µg/L	409.09 ppb	07:12:20
3	Sc RADIAL	113364.0	113364.0	102	%		07:11:08
3	Al 396.153Radial†	142734.0	139961.3	72889	µg/L	72889 ppb	07:11:08
3	Ca 317.933Radial†	92355.1	90259.3	35549	µg/L	35549 ppb	07:11:08
3	Fe 238.204 Radial†	25051.2	24586.2	126360	µg/L	126360 ppb	07:11:29
3	K 766.490 Radial†	16458.3	15317.5	8593.5	µg/L	8593.5 ppb	07:11:08
3	Mg 279.077 IEC†	2807.9	2741.1	15111	µg/L	15111 ppb	07:11:29
3	Na 589.592 Radial†	13386.3	13647.7	3804.9	µg/L	3804.9 ppb	07:11:08
3	Sr 421.552†	41366.2	40692.6	232.37	µg/L	232.37 ppb	07:11:08
3	Sc 361.383	1973545.9	1973545.9	101.48	%		07:12:48
3	Y 371.029	1237273.4	1237273.4	104.74	%		07:12:48
3	Ag 328.068†	-1340.6	-1219.7	-0.5546	µg/L	-0.5546 ppb	07:12:54
3	As 188.979†	30.0	24.5	32.751	µg/L	32.751 ppb	07:13:14
3	B 249.677†	1774.5	1597.4	35.167	µg/L	35.167 ppb	07:12:54
3	Ba 233.527†	30776.5	30405.6	814.02	µg/L	814.02 ppb	07:12:54
3	Be 313.107†	15832.4	11935.3	6.8929	µg/L	6.8929 ppb	07:12:54
3	Cd 226.502†	292.9	386.1	1.0845	µg/L	1.0845 ppb	07:13:14
3	Co 228.616†	610.5	668.9	28.042	µg/L	28.042 ppb	07:13:14
3	Cr 267.716†	2751.6	2838.5	63.515	µg/L	63.515 ppb	07:13:14
3	Cu 324.752†	7633.2	4255.5	58.896	µg/L	58.896 ppb	07:12:54
3	Mn 257.610†	660208.1	650783.1	2187.6	µg/L	2187.6 ppb	07:12:48
3	Mo 202.031†	71.5	75.3	14.002	µg/L	14.002 ppb	07:13:14
3	Ni 231.604†	1146.4	847.9	48.893	µg/L	48.893 ppb	07:13:14
3	P 214.914†	864.5	647.7	1337.6	µg/L	1337.6 ppb	07:13:14
3	Pb 220.353†	859.4	790.9	216.34	µg/L	216.34 ppb	07:13:14
3	S 181.975 Axial†	215.5	173.5	906.82	µg/L	906.82 ppb	07:13:14
3	Sb 206.836†	32.5	13.1	20.755	µg/L	20.755 ppb	07:13:14
3	Se 196.026†	-47.0	-57.1	1.5670	µg/L	1.5670 ppb	07:13:14
3	SiO2†	112907.1	109180.0	22187	µg/L	22187 ppb	07:12:54
3	Si 251.611†	129159.0	126955.3	10202	µg/L	10202 ppb	07:12:54
3	Sn 189.927†	-87.2	-110.3	-31.676	µg/L	-31.676 ppb	07:13:14
3	Ti 334.940†	1223581.4	1204888.7	2827.4	µg/L	2827.4 ppb	07:12:48
3	Tl 190.801†	-27.0	-7.3	13.049	µg/L	13.049 ppb	07:13:14
3	U 409.014†	424.4	-407.3	-63.973	µg/L	-63.973 ppb	07:12:48
3	V 292.402†	13260.5	13143.1	168.73	µg/L	168.73 ppb	07:12:54
3	Zn 213.857†	15598.5	14852.2	405.63	µg/L	405.63 ppb	07:12:54

Mean Data: 241559002|932716|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1971004.3	101.35	%	0.316				0.31%
Sc RADIAL	113596.5	102	%	0.3				0.32%
Y 371.029	1235742.1	104.61	%	0.340				0.32%
Ag 328.068†	-1216.8	-0.5249	µg/L	0.37164	-0.5249	ppb	0.37164	70.80%
Al 396.153Radial†	139509.2	72654	µg/L	498.7	72654	ppb	498.7	0.69%
As 188.979†	23.9	31.644	µg/L	4.1658	31.644	ppb	4.1658	13.16%
B 249.677†	1641.2	37.245	µg/L	2.1492	37.245	ppb	2.1492	5.77%
Ba 233.527†	30609.3	819.48	µg/L	4.891	819.48	ppb	4.891	0.60%
Be 313.107†	12078.3	6.9884	µg/L	0.08872	6.9884	ppb	0.08872	1.27%
Ca 317.933Radial†	90214.1	35531	µg/L	152.9	35531	ppb	152.9	0.43%
Cd 226.502†	406.6	1.6640	µg/L	0.50358	1.6640	ppb	0.50358	30.26%
Co 228.616†	671.9	28.195	µg/L	0.1639	28.195	ppb	0.1639	0.58%
Cr 267.716†	2857.1	63.932	µg/L	0.3849	63.932	ppb	0.3849	0.60%
Cu 324.752†	4245.0	58.801	µg/L	0.1358	58.801	ppb	0.1358	0.23%
Fe 238.204 Radial†	24571.1	126280	µg/L	761.5	126280	ppb	761.5	0.60%
K 766.490 Radial†	15327.8	8599.3	µg/L	80.13	8599.3	ppb	80.13	0.93%
Mg 279.077 IEC†	2745.1	15133	µg/L	104.0	15133	ppb	104.0	0.69%
Mn 257.610†	651878.1	2191.2	µg/L	6.70	2191.2	ppb	6.70	0.31%
Mo 202.031†	76.7	14.162	µg/L	0.1490	14.162	ppb	0.1490	1.05%
Na 589.592 Radial†	13590.5	3789.0	µg/L	36.68	3789.0	ppb	36.68	0.97%

Ni 231.604†	855.2	49.310	µg/L	0.4236	49.310	ppb	0.4236	0.86%
P 214.914†	654.7	1353.5	µg/L	25.58	1353.5	ppb	25.58	1.89%
Pb 220.353†	789.2	215.89	µg/L	0.906	215.89	ppb	0.906	0.42%
S 181.975 Axial†	173.5	906.97	µg/L	8.695	906.97	ppb	8.695	0.96%
Sb 206.836†	9.5	16.991	µg/L	3.3659	16.991	ppb	3.3659	19.81%
Se 196.026†	-59.3	-1.8056	µg/L	12.14669	-1.8056	ppb	12.14669	672.71%
SiO2†	109451.8	22243	µg/L	97.4	22243	ppb	97.4	0.44%
Si 251.611†	127296.3	10230	µg/L	47.8	10230	ppb	47.8	0.47%
Sn 189.927†	-113.7	-33.449	µg/L	1.5400	-33.449	ppb	1.5400	4.60%
Sr 421.552†	40651.3	232.14	µg/L	1.347	232.14	ppb	1.347	0.58%
Ti 334.940†	1204582.8	2826.7	µg/L	4.89	2826.7	ppb	4.89	0.17%
Tl 190.801†	-6.6	14.154	µg/L	6.6705	14.154	ppb	6.6705	47.13%
U 409.014†	-438.9	-67.158	µg/L	4.9278	-67.158	ppb	4.9278	7.34%
V 292.402†	13242.9	169.92	µg/L	1.127	169.92	ppb	1.127	0.66%
Zn 213.857†	14949.7	408.39	µg/L	2.489	408.39	ppb	2.489	0.61%

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/15/2009 07:13:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111977.2	111977.2	101	%			07:14:01
1	Al 396.153Radial†	10264.8	10038.6	5208.9	µg/L	5208.9	ppb	07:14:01
1	Ca 317.933Radial†	13177.5	12689.4	4997.8	µg/L	4997.8	ppb	07:14:21
1	Fe 238.204 Radial†	1031.5	1018.2	5249.7	µg/L	5249.7	ppb	07:14:21
1	K 766.490 Radial†	9986.7	9085.6	5097.3	µg/L	5097.3	ppb	07:14:01
1	Mg 279.077 IEC†	965.5	944.1	5273.5	µg/L	5273.5	ppb	07:14:21
1	Na 589.592 Radial†	36381.5	36664.8	10222	µg/L	10222	ppb	07:14:01
1	Sr 421.552†	88837.9	88376.6	504.67	µg/L	504.67	ppb	07:14:01
1	Sc 361.383	1966763.4	1966763.4	101.14	%			07:15:24
1	Y 371.029	1189118.2	1189118.2	100.67	%			07:15:24
1	Ag 328.068†	54166.1	53659.2	514.64	µg/L	514.64	ppb	07:15:30
1	As 188.979†	256.7	248.7	495.48	µg/L	495.48	ppb	07:15:50
1	B 249.677†	10928.2	10654.3	497.94	µg/L	497.94	ppb	07:15:30
1	Ba 233.527†	19035.6	18901.1	506.88	µg/L	506.88	ppb	07:15:30
1	Be 313.107†	766107.4	753840.0	501.34	µg/L	501.34	ppb	07:15:24
1	Cd 226.502†	17950.9	17846.8	502.11	µg/L	502.11	ppb	07:15:30
1	Co 228.616†	9988.5	9943.7	504.54	µg/L	504.54	ppb	07:15:30
1	Cr 267.716†	22703.3	22575.6	503.38	µg/L	503.38	ppb	07:15:30
1	Cu 324.752†	72642.1	68560.4	512.71	µg/L	512.71	ppb	07:15:30
1	Mn 257.610†	152355.7	150876.3	504.14	µg/L	504.14	ppb	07:15:24
1	Mo 202.031†	4218.5	4176.0	501.37	µg/L	501.37	ppb	07:15:50
1	Ni 231.604†	9109.5	8725.5	503.12	µg/L	503.12	ppb	07:15:30
1	P 214.914†	1322.3	1103.3	2438.7	µg/L	2438.7	ppb	07:15:50
1	Pb 220.353†	1957.4	1879.4	503.48	µg/L	503.48	ppb	07:15:50
1	S 181.975 Axial†	216.3	175.0	934.19	µg/L	934.19	ppb	07:15:50
1	Sb 206.836†	504.6	480.0	505.50	µg/L	505.50	ppb	07:15:50
1	Se 196.026†	343.7	329.0	495.28	µg/L	495.28	ppb	07:15:50
1	SiO2†	28839.9	26440.4	5373.1	µg/L	5373.1	ppb	07:15:30
1	Si 251.611†	31643.5	30973.6	2466.5	µg/L	2466.5	ppb	07:15:30
1	Sn 189.927†	989.1	953.6	499.10	µg/L	499.10	ppb	07:15:50
1	Ti 334.940†	217856.5	214613.8	503.69	µg/L	503.69	ppb	07:15:24
1	Tl 190.801†	300.4	316.3	509.73	µg/L	509.73	ppb	07:15:50
1	U 409.014†	5862.9	4971.6	502.39	µg/L	502.39	ppb	07:15:30
1	V 292.402†	42354.6	41955.6	510.45	µg/L	510.45	ppb	07:15:30
1	Zn 213.857†	18667.7	17939.9	503.02	µg/L	503.02	ppb	07:15:30
2	Sc RADIAL	111871.4	111871.4	101	%			07:14:26
2	Al 396.153Radial†	10191.8	9975.6	5176.1	µg/L	5176.1	ppb	07:14:26
2	Ca 317.933Radial†	13210.5	12734.6	5015.6	µg/L	5015.6	ppb	07:14:47
2	Fe 238.204 Radial†	1028.4	1016.1	5238.7	µg/L	5238.7	ppb	07:14:47
2	K 766.490 Radial†	10058.6	9166.5	5142.7	µg/L	5142.7	ppb	07:14:26
2	Mg 279.077 IEC†	968.3	947.9	5294.4	µg/L	5294.4	ppb	07:14:47
2	Na 589.592 Radial†	36237.4	36555.6	10192	µg/L	10192	ppb	07:14:26
2	Sr 421.552†	88621.6	88245.0	503.92	µg/L	503.92	ppb	07:14:26
2	Sc 361.383	1978971.9	1978971.9	101.76	%			07:15:58
2	Y 371.029	1196366.0	1196366.0	101.28	%			07:15:58
2	Ag 328.068†	54398.7	53557.3	513.67	µg/L	513.67	ppb	07:16:03
2	As 188.979†	258.0	248.5	495.04	µg/L	495.04	ppb	07:16:24
2	B 249.677†	10968.8	10627.5	496.69	µg/L	496.69	ppb	07:16:03
2	Ba 233.527†	19099.6	18847.9	505.45	µg/L	505.45	ppb	07:16:03
2	Be 313.107†	771967.9	754925.8	502.06	µg/L	502.06	ppb	07:15:58
2	Cd 226.502†	18122.0	17905.5	503.76	µg/L	503.76	ppb	07:16:03
2	Co 228.616†	10083.8	9976.4	506.19	µg/L	506.19	ppb	07:16:03
2	Cr 267.716†	22796.3	22528.5	502.33	µg/L	502.33	ppb	07:16:03
2	Cu 324.752†	73099.1	68566.4	512.75	µg/L	512.75	ppb	07:16:03
2	Mn 257.610†	153379.5	150953.0	504.40	µg/L	504.40	ppb	07:15:58
2	Mo 202.031†	4224.8	4156.4	499.02	µg/L	499.02	ppb	07:16:24
2	Ni 231.604†	9204.6	8763.4	505.30	µg/L	505.30	ppb	07:16:03
2	P 214.914†	1322.7	1095.6	2421.3	µg/L	2421.3	ppb	07:16:24
2	Pb 220.353†	1957.9	1868.0	500.43	µg/L	500.43	ppb	07:16:24

2	S 181.975 Axial†	217.1	174.5	931.49 µg/L	931.49 ppb	07:16:24
2	Sb 206.836†	501.1	473.5	498.64 µg/L	498.64 ppb	07:16:24
2	Se 196.026†	342.9	326.2	490.99 µg/L	490.99 ppb	07:16:24
2	SiO2†	28956.5	26379.1	5360.7 µg/L	5360.7 ppb	07:16:03
2	Si 251.611†	31827.4	30961.2	2465.6 µg/L	2465.6 ppb	07:16:03
2	Sn 189.927†	991.3	949.8	497.08 µg/L	497.08 ppb	07:16:24
2	Ti 334.940†	219428.4	214829.5	504.20 µg/L	504.20 ppb	07:15:58
2	Tl 190.801†	301.0	315.1	507.75 µg/L	507.75 ppb	07:16:24
2	U 409.014†	5868.4	4941.3	499.32 µg/L	499.32 ppb	07:16:03
2	V 292.402†	42577.4	41916.2	509.95 µg/L	509.95 ppb	07:16:03
2	Zn 213.857†	18819.5	17975.2	504.01 µg/L	504.01 ppb	07:16:03
3	Sc RADIAL	111268.3	111268.3	100.0 %		07:14:52
3	Al 396.153Radial†	10198.2	10037.0	5208.2 µg/L	5208.2 ppb	07:14:52
3	Ca 317.933Radial†	13197.2	12792.5	5038.4 µg/L	5038.4 ppb	07:15:13
3	Fe 238.204 Radial†	1023.3	1016.6	5241.1 µg/L	5241.1 ppb	07:15:13
3	K 766.490 Radial†	10015.8	9178.0	5149.1 µg/L	5149.1 ppb	07:14:52
3	Mg 279.077 IEC†	963.5	948.3	5296.7 µg/L	5296.7 ppb	07:15:13
3	Na 589.592 Radial†	36109.2	36622.8	10210 µg/L	10210 ppb	07:14:52
3	Sr 421.552†	88198.7	88299.8	504.23 µg/L	504.23 ppb	07:14:52
3	Sc 361.383	1973342.4	1973342.4	101.47 %		07:16:31
3	Y 371.029	1192253.8	1192253.8	100.93 %		07:16:31
3	Ag 328.068†	54072.3	53388.2	512.05 µg/L	512.05 ppb	07:16:37
3	As 188.979†	258.4	249.6	497.24 µg/L	497.24 ppb	07:16:57
3	B 249.677†	10944.9	10634.8	497.03 µg/L	497.03 ppb	07:16:37
3	Ba 233.527†	18979.5	18783.0	503.72 µg/L	503.72 ppb	07:16:37
3	Be 313.107†	765969.8	751178.9	499.57 µg/L	499.57 ppb	07:16:31
3	Cd 226.502†	17970.0	17806.4	500.97 µg/L	500.97 ppb	07:16:37
3	Co 228.616†	9970.1	9892.6	501.95 µg/L	501.95 ppb	07:16:37
3	Cr 267.716†	22776.2	22572.6	503.31 µg/L	503.31 ppb	07:16:37
3	Cu 324.752†	72666.5	68345.0	511.10 µg/L	511.10 ppb	07:16:37
3	Mn 257.610†	152125.0	150146.7	501.71 µg/L	501.71 ppb	07:16:31
3	Mo 202.031†	4199.3	4143.1	497.42 µg/L	497.42 ppb	07:16:57
3	Ni 231.604†	9115.0	8701.0	501.70 µg/L	501.70 ppb	07:16:37
3	P 214.914†	1301.6	1078.5	2382.9 µg/L	2382.9 ppb	07:16:57
3	Pb 220.353†	1963.1	1878.6	503.27 µg/L	503.27 ppb	07:16:57
3	S 181.975 Axial†	217.1	175.1	934.88 µg/L	934.88 ppb	07:16:57
3	Sb 206.836†	504.1	477.9	503.21 µg/L	503.21 ppb	07:16:57
3	Se 196.026†	341.9	326.1	490.90 µg/L	490.90 ppb	07:16:57
3	SiO2†	28822.1	26327.7	5350.3 µg/L	5350.3 ppb	07:16:37
3	Si 251.611†	31698.9	30923.8	2462.7 µg/L	2462.7 ppb	07:16:37
3	Sn 189.927†	984.4	945.8	495.02 µg/L	495.02 ppb	07:16:57
3	Ti 334.940†	217756.8	213797.4	501.78 µg/L	501.78 ppb	07:16:31
3	Tl 190.801†	299.1	314.1	506.18 µg/L	506.18 ppb	07:16:57
3	U 409.014†	5746.8	4837.9	488.86 µg/L	488.86 ppb	07:16:37
3	V 292.402†	42387.2	41848.1	509.10 µg/L	509.10 ppb	07:16:37
3	Zn 213.857†	18640.8	17851.9	500.54 µg/L	500.54 ppb	07:16:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1973025.9	101.46	%	0.314				0.31%
Sc RADIAL	111705.6	100	%	0.3				0.34%
Y 371.029	1192579.3	100.96	%	0.308				0.30%
Ag 328.068†	53534.9	513.45	µg/L	1.308	513.45	ppb	1.308	0.25%
QC value within limits for Ag 328.068 Recovery = 102.69%								
Al 396.153Radial†	10017.1	5197.7	µg/L	18.69	5197.7	ppb	18.69	0.36%
QC value within limits for Al 396.153Radial Recovery = 103.95%								
As 188.979†	248.9	495.92	µg/L	1.163	495.92	ppb	1.163	0.23%
QC value within limits for As 188.979 Recovery = 99.18%								
B 249.677†	10638.9	497.22	µg/L	0.648	497.22	ppb	0.648	0.13%
QC value within limits for B 249.677 Recovery = 99.44%								
Ba 233.527†	18844.0	505.35	µg/L	1.584	505.35	ppb	1.584	0.31%
QC value within limits for Ba 233.527 Recovery = 101.07%								
Be 313.107†	753314.9	500.99	µg/L	1.282	500.99	ppb	1.282	0.26%
QC value within limits for Be 313.107 Recovery = 100.20%								
Ca 317.933Radial†	12738.8	5017.2	µg/L	20.36	5017.2	ppb	20.36	0.41%
QC value within limits for Ca 317.933Radial Recovery = 100.34%								
Cd 226.502†	17852.9	502.28	µg/L	1.405	502.28	ppb	1.405	0.28%
QC value within limits for Cd 226.502 Recovery = 100.46%								
Co 228.616†	9937.6	504.23	µg/L	2.142	504.23	ppb	2.142	0.42%

QC value within limits for Co 228.616 Recovery = 100.85%

Cr 267.716†	22558.9	503.01 µg/L	0.586	503.01 ppb	0.586	0.12%

QC value within limits for Cr 267.716 Recovery = 100.60%

Cu 324.752†	68490.6	512.19 µg/L	0.941	512.19 ppb	0.941	0.18%

QC value within limits for Cu 324.752 Recovery = 102.44%

Fe 238.204 Radial†	1016.9	5243.1 µg/L	5.77	5243.1 ppb	5.77	0.11%

QC value within limits for Fe 238.204 Radial Recovery = 104.86%

K 766.490 Radial†	9143.4	5129.7 µg/L	28.25	5129.7 ppb	28.25	0.55%

QC value within limits for K 766.490 Radial Recovery = 102.59%

Mg 279.077 IEC†	946.8	5288.2 µg/L	12.78	5288.2 ppb	12.78	0.24%

QC value within limits for Mg 279.077 IEC Recovery = 105.76%

Mn 257.610†	150658.6	503.42 µg/L	1.485	503.42 ppb	1.485	0.30%

QC value within limits for Mn 257.610 Recovery = 100.68%

Mo 202.031†	4158.5	499.27 µg/L	1.986	499.27 ppb	1.986	0.40%

QC value within limits for Mo 202.031 Recovery = 99.85%

Na 589.592 Radial†	36614.4	10208 µg/L	15.4	10208 ppb	15.4	0.15%

QC value within limits for Na 589.592 Radial Recovery = 102.08%

Ni 231.604†	8730.0	503.37 µg/L	1.814	503.37 ppb	1.814	0.36%

QC value within limits for Ni 231.604 Recovery = 100.67%

P 214.914†	1092.5	2414.3 µg/L	28.55	2414.3 ppb	28.55	1.18%

QC value within limits for P 214.914 Recovery = 96.57%

Pb 220.353†	1875.3	502.39 µg/L	1.705	502.39 ppb	1.705	0.34%

QC value within limits for Pb 220.353 Recovery = 100.48%

S 181.975 Axial†	174.9	933.52 µg/L	1.792	933.52 ppb	1.792	0.19%

QC value within limits for S 181.975 Axial Recovery = 93.35%

Sb 206.836†	477.2	502.45 µg/L	3.492	502.45 ppb	3.492	0.69%

QC value within limits for Sb 206.836 Recovery = 100.49%

Se 196.026†	327.1	492.39 µg/L	2.507	492.39 ppb	2.507	0.51%

QC value within limits for Se 196.026 Recovery = 98.48%

SiO2†	26382.4	5361.4 µg/L	11.46	5361.4 ppb	11.46	0.21%

QC value within limits for SiO2 Recovery = 100.26%

Si 251.611†	30952.9	2464.9 µg/L	1.96	2464.9 ppb	1.96	0.08%

QC value within limits for Si 251.611 Recovery = 98.60%

Sn 189.927†	949.7	497.07 µg/L	2.041	497.07 ppb	2.041	0.41%

QC value within limits for Sn 189.927 Recovery = 99.41%

Sr 421.552†	88307.1	504.27 µg/L	0.378	504.27 ppb	0.378	0.07%

QC value within limits for Sr 421.552 Recovery = 100.85%

Ti 334.940†	214413.6	503.22 µg/L	1.279	503.22 ppb	1.279	0.25%

QC value within limits for Ti 334.940 Recovery = 100.64%

Tl 190.801†	315.2	507.89 µg/L	1.778	507.89 ppb	1.778	0.35%

QC value within limits for Tl 190.801 Recovery = 101.58%

U 409.014†	4916.9	496.85 µg/L	7.094	496.85 ppb	7.094	1.43%

QC value within limits for U 409.014 Recovery = 99.37%

V 292.402†	41906.6	509.83 µg/L	0.680	509.83 ppb	0.680	0.13%

QC value within limits for V 292.402 Recovery = 101.97%

Zn 213.857†	17922.3	502.52 µg/L	1.785	502.52 ppb	1.785	0.36%

QC value within limits for Zn 213.857 Recovery = 100.50%

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/15/2009 07:17:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111029.7	111029.7	99.8	%			07:17:39
1	Al 396.153Radial†	178.1	15.2	7.8988	µg/L	7.8988	ppb	07:17:39
1	Ca 317.933Radial†	415.0	8.6	3.3774	µg/L	3.3774	ppb	07:18:00
1	Fe 238.204 Radial†	10.7	3.8	19.461	µg/L	19.461	ppb	07:18:00
1	K 766.490 Radial†	703.7	-134.5	-75.477	µg/L	-75.477	ppb	07:17:39
1	Mg 279.077 IEC†	17.9	2.5	13.976	µg/L	13.976	ppb	07:18:00
1	Na 589.592 Radial†	-666.4	-161.9	-45.125	µg/L	-45.125	ppb	07:17:39
1	Sr 421.552†	-71.7	10.7	0.0614	µg/L	0.0614	ppb	07:17:39
1	Sc 361.383	1978829.3	1978829.3	101.76	%			07:19:02
1	Y 371.029	1202067.8	1202067.8	101.76	%			07:19:02
1	Ag 328.068†	-91.5	11.4	0.1092	µg/L	0.1092	ppb	07:19:07
1	As 188.979†	0.3	-4.9	-9.7207	µg/L	-9.7207	ppb	07:19:28
1	B 249.677†	132.2	-21.3	-1.0035	µg/L	-1.0035	ppb	07:19:28
1	Ba 233.527†	-73.1	7.3	0.1959	µg/L	0.1959	ppb	07:19:28
1	Be 313.107†	3640.0	-88.5	-0.0590	µg/L	-0.0590	ppb	07:19:07
1	Cd 226.502†	-87.5	11.4	0.3074	µg/L	0.3074	ppb	07:19:28
1	Co 228.616†	-64.6	3.9	0.1987	µg/L	0.1987	ppb	07:19:28
1	Cr 267.716†	-117.5	11.7	0.2609	µg/L	0.2609	ppb	07:19:07
1	Cu 324.752†	3228.7	-93.1	-0.6902	µg/L	-0.6902	ppb	07:19:07
1	Mn 257.610†	-154.9	79.0	0.2660	µg/L	0.2660	ppb	07:19:28
1	Mo 202.031†	-2.0	2.9	0.3513	µg/L	0.3513	ppb	07:19:28
1	Ni 231.604†	275.0	-11.4	-0.6601	µg/L	-0.6601	ppb	07:19:28
1	P 214.914†	198.8	-8.7	-19.716	µg/L	-19.716	ppb	07:19:28
1	Pb 220.353†	50.7	-6.2	-1.6490	µg/L	-1.6490	ppb	07:19:28
1	S 181.975 Axial†	25.0	-14.3	-76.473	µg/L	-76.473	ppb	07:19:28
1	Sb 206.836†	17.5	-1.7	-1.8137	µg/L	-1.8137	ppb	07:19:28
1	Se 196.026†	19.7	8.5	12.808	µg/L	12.808	ppb	07:19:28
1	SiO2†	2036.4	-74.4	-15.119	µg/L	-15.119	ppb	07:19:07
1	Si 251.611†	465.2	142.5	11.580	µg/L	11.580	ppb	07:19:28
1	Sn 189.927†	24.9	0.1	0.0692	µg/L	0.0692	ppb	07:19:28
1	Ti 334.940†	938.8	126.0	0.2956	µg/L	0.2956	ppb	07:19:07
1	Tl 190.801†	-16.5	3.1	4.9809	µg/L	4.9809	ppb	07:19:28
1	U 409.014†	677.7	-159.5	-16.148	µg/L	-16.148	ppb	07:19:07
1	V 292.402†	-87.1	-9.0	-0.1308	µg/L	-0.1308	ppb	07:19:07
1	Zn 213.857†	505.4	-21.5	-0.6068	µg/L	-0.6068	ppb	07:19:28
2	Sc RADIAL	110647.3	110647.3	99.4	%			07:18:05
2	Al 396.153Radial†	189.2	26.9	14.017	µg/L	14.017	ppb	07:18:05
2	Ca 317.933Radial†	422.6	17.6	6.9455	µg/L	6.9455	ppb	07:18:26
2	Fe 238.204 Radial†	14.4	7.5	38.376	µg/L	38.376	ppb	07:18:26
2	K 766.490 Radial†	706.9	-128.9	-72.296	µg/L	-72.296	ppb	07:18:05
2	Mg 279.077 IEC†	15.6	0.2	1.2671	µg/L	1.2671	ppb	07:18:26
2	Na 589.592 Radial†	-679.5	-177.3	-49.443	µg/L	-49.443	ppb	07:18:05
2	Sr 421.552†	-34.2	48.2	0.2755	µg/L	0.2755	ppb	07:18:05
2	Sc 361.383	1966936.4	1966936.4	101.14	%			07:19:34
2	Y 371.029	1195154.6	1195154.6	101.18	%			07:19:34
2	Ag 328.068†	12.3	113.5	1.0827	µg/L	1.0827	ppb	07:19:40
2	As 188.979†	3.6	-1.6	-3.1776	µg/L	-3.1776	ppb	07:20:00
2	B 249.677†	156.6	3.6	0.1570	µg/L	0.1570	ppb	07:20:00
2	Ba 233.527†	-77.7	2.3	0.0619	µg/L	0.0619	ppb	07:20:00
2	Be 313.107†	3593.6	-112.6	-0.0750	µg/L	-0.0750	ppb	07:19:40
2	Cd 226.502†	-89.3	9.2	0.2472	µg/L	0.2472	ppb	07:20:00
2	Co 228.616†	-71.9	-3.7	-0.1884	µg/L	-0.1884	ppb	07:20:00
2	Cr 267.716†	-71.5	56.5	1.2570	µg/L	1.2570	ppb	07:19:40
2	Cu 324.752†	3216.0	-86.4	-0.6365	µg/L	-0.6365	ppb	07:19:40
2	Mn 257.610†	-162.1	70.9	0.2416	µg/L	0.2416	ppb	07:20:00
2	Mo 202.031†	-6.1	-1.2	-0.1403	µg/L	-0.1403	ppb	07:20:00
2	Ni 231.604†	279.3	-5.5	-0.3190	µg/L	-0.3190	ppb	07:20:00
2	P 214.914†	196.2	-10.2	-22.972	µg/L	-22.972	ppb	07:20:00
2	Pb 220.353†	58.1	1.5	0.4063	µg/L	0.4063	ppb	07:20:00

2	S 181.975 Axial†	28.0	-11.2	-59.783	µg/L	-59.783	ppb	07:20:00
2	Sb 206.836†	15.7	-3.4	-3.5620	µg/L	-3.5620	ppb	07:20:00
2	Se 196.026†	9.4	-1.5	-2.2574	µg/L	-2.2574	ppb	07:20:00
2	SiO2†	2059.0	-40.0	-8.1222	µg/L	-8.1222	ppb	07:19:40
2	Si 251.611†	445.1	125.4	10.213	µg/L	10.213	ppb	07:20:00
2	Sn 189.927†	24.5	-0.1	-0.0676	µg/L	-0.0676	ppb	07:20:00
2	Ti 334.940†	830.0	23.9	0.0558	µg/L	0.0558	ppb	07:19:40
2	Tl 190.801†	-17.6	1.9	3.1058	µg/L	3.1058	ppb	07:20:00
2	U 409.014†	724.6	-109.1	-11.048	µg/L	-11.048	ppb	07:19:40
2	V 292.402†	-81.4	-3.9	-0.0623	µg/L	-0.0623	ppb	07:19:40
2	Zn 213.857†	502.1	-21.8	-0.6178	µg/L	-0.6178	ppb	07:20:00
3	Sc RADIAL	110408.6	110408.6	99.2	%			07:18:31
3	Al 396.153Radial†	173.2	11.2	5.8175	µg/L	5.8175	ppb	07:18:31
3	Ca 317.933Radial†	417.8	13.7	5.3960	µg/L	5.3960	ppb	07:18:51
3	Fe 238.204 Radial†	12.1	5.2	26.962	µg/L	26.962	ppb	07:18:51
3	K 766.490 Radial†	746.7	-87.3	-48.976	µg/L	-48.976	ppb	07:18:31
3	Mg 279.077 IEC†	16.3	1.0	5.4760	µg/L	5.4760	ppb	07:18:51
3	Na 589.592 Radial†	-657.8	-156.9	-43.753	µg/L	-43.753	ppb	07:18:31
3	Sr 421.552†	-61.3	20.8	0.1190	µg/L	0.1190	ppb	07:18:31
3	Sc 361.383	1952505.1	1952505.1	100.40	%			07:20:06
3	Y 371.029	1187104.0	1187104.0	100.49	%			07:20:06
3	Ag 328.068†	-35.7	65.7	0.6280	µg/L	0.6280	ppb	07:20:12
3	As 188.979†	2.6	-2.5	-5.0029	µg/L	-5.0029	ppb	07:20:32
3	B 249.677†	144.8	-7.0	-0.3362	µg/L	-0.3362	ppb	07:20:32
3	Ba 233.527†	-68.3	11.2	0.2986	µg/L	0.2986	ppb	07:20:32
3	Be 313.107†	3576.4	-103.5	-0.0692	µg/L	-0.0692	ppb	07:20:12
3	Cd 226.502†	-88.5	9.3	0.2518	µg/L	0.2518	ppb	07:20:32
3	Co 228.616†	-67.7	-0.0	-0.0024	µg/L	-0.0024	ppb	07:20:32
3	Cr 267.716†	-139.7	-11.9	-0.2651	µg/L	-0.2651	ppb	07:20:12
3	Cu 324.752†	3182.7	-96.1	-0.7113	µg/L	-0.7113	ppb	07:20:12
3	Mn 257.610†	-147.5	84.3	0.2846	µg/L	0.2846	ppb	07:20:32
3	Mo 202.031†	-4.7	0.1	0.0158	µg/L	0.0158	ppb	07:20:32
3	Ni 231.604†	283.3	0.5	0.0277	µg/L	0.0277	ppb	07:20:32
3	P 214.914†	195.5	-9.4	-21.234	µg/L	-21.234	ppb	07:20:32
3	Pb 220.353†	63.3	7.0	1.8830	µg/L	1.8830	ppb	07:20:32
3	S 181.975 Axial†	30.5	-8.5	-45.395	µg/L	-45.395	ppb	07:20:32
3	Sb 206.836†	16.0	-3.0	-3.1856	µg/L	-3.1856	ppb	07:20:32
3	Se 196.026†	14.6	3.7	5.5843	µg/L	5.5843	ppb	07:20:32
3	SiO2†	2506.2	420.5	85.443	µg/L	85.443	ppb	07:20:12
3	Si 251.611†	407.4	91.1	7.4795	µg/L	7.4795	ppb	07:20:32
3	Sn 189.927†	19.7	-4.7	-2.4400	µg/L	-2.4400	ppb	07:20:32
3	Ti 334.940†	1170.5	369.2	0.8667	µg/L	0.8667	ppb	07:20:12
3	Tl 190.801†	-19.9	-0.5	-0.8049	µg/L	-0.8049	ppb	07:20:32
3	U 409.014†	728.5	-99.9	-10.116	µg/L	-10.116	ppb	07:20:12
3	V 292.402†	-76.0	0.9	-0.0035	µg/L	-0.0035	ppb	07:20:12
3	Zn 213.857†	508.6	-11.7	-0.3324	µg/L	-0.3324	ppb	07:20:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1966090.3	101.10	%	0.678				0.67%
Sc RADIAL	110695.2	99.5	%	0.28				0.28%
Y 371.029	1194775.5	101.14	%	0.634				0.63%
Ag 328.068†	63.5	0.6067	µg/L	0.48713	0.6067	ppb	0.48713	80.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.8	9.2446	µg/L	4.26242	9.2446	ppb	4.26242	46.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.0	-5.9671	µg/L	3.37641	-5.9671	ppb	3.37641	56.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-8.2	-0.3942	µg/L	0.58243	-0.3942	ppb	0.58243	147.74%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.9	0.1855	µg/L	0.11870	0.1855	ppb	0.11870	63.99%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-101.5	-0.0677	µg/L	0.00810	-0.0677	ppb	0.00810	11.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.3	5.2396	µg/L	1.78917	5.2396	ppb	1.78917	34.15%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.0	0.2688	µg/L	0.03350	0.2688	ppb	0.03350	12.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.1	0.0027	µg/L	0.19360	0.0027	ppb	0.19360	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.8      0.4176 µg/L       0.77304      0.4176 ppb        0.77304 185.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -91.9     -0.6794 µg/L       0.03857     -0.6794 ppb        0.03857   5.68%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        5.5      28.267 µg/L        9.5246      28.267 ppb         9.5246  33.70%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -116.9     -65.583 µg/L       14.4700     -65.583 ppb        14.4700  22.06%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.2      6.9063 µg/L       6.47400      6.9063 ppb        6.47400  93.74%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              78.1      0.2641 µg/L       0.02157      0.2641 ppb        0.02157   8.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.6      0.0756 µg/L       0.25121      0.0756 ppb        0.25121 332.30%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -165.4     -46.107 µg/L        2.9692     -46.107 ppb         2.9692   6.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.5     -0.3171 µg/L       0.34393     -0.3171 ppb        0.34393 108.45%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -9.4     -21.307 µg/L        1.6293     -21.307 ppb         1.6293   7.65%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               0.8      0.2134 µg/L       1.77389      0.2134 ppb        1.77389 831.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -11.3     -60.551 µg/L       15.5535     -60.551 ppb        15.5535  25.69%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.7     -2.8538 µg/L       0.92017     -2.8538 ppb        0.92017  32.24%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.6      5.3782 µg/L       7.53466      5.3782 ppb        7.53466 140.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   102.0      20.734 µg/L       56.1490      20.734 ppb        56.1490 270.80%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             119.7      9.7575 µg/L       2.08776      9.7575 ppb        2.08776  21.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.6     -0.8128 µg/L       1.41087     -0.8128 ppb        1.41087 173.58%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              26.6      0.1519 µg/L       0.11078      0.1519 ppb        0.11078  72.91%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             173.0      0.4061 µg/L       0.41657      0.4061 ppb        0.41657 102.59%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.5      2.4273 µg/L       2.95203      2.4273 ppb        2.95203 121.62%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -122.8     -12.437 µg/L        3.2470     -12.437 ppb         3.2470  26.11%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -4.0     -0.0655 µg/L       0.06372     -0.0655 ppb        0.06372  97.22%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -18.3     -0.5190 µg/L       0.16170     -0.5190 ppb        0.16170  31.16%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120409
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120409A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/4/2009 11:11:52**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/4/2009 09:01:19**
Analyst: **Data Type: Reprocessed on 12/4/2009 11:13:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1042653.7	1042653.7	100.30	%	09:04:28
1	Sc Radial	4997.7	4997.7	102	%	09:03:11
1	Y 371.029	887595.1	887595.1	100.35	%	09:04:28
1	Y RADIAL	5767.5	5767.5	102.1	%	09:03:11
1	Ag 328.068†	478.7	477.3	[0.00]	ug/L	09:04:33

1	Al 396.153Radial†	-54.5	-53.5	[0.00]	ug/L	09:03:11
1	As 188.979†	-36.0	-35.9	[0.00]	ug/L	09:04:53
1	B 249.677†	-473.7	-472.2	[0.00]	ug/L	09:04:53
1	Ba 233.527†	-0.9	-0.9	[0.00]	ug/L	09:04:53
1	Be 313.107†	-4876.4	-4861.6	[0.00]	ug/L	09:04:33
1	Ca 317.933Radial†	21.6	21.2	[0.00]	ug/L	09:03:31
1	Cd 226.502†	-237.6	-236.9	[0.00]	ug/L	09:04:53
1	Co 228.616†	-85.2	-84.9	[0.00]	ug/L	09:04:53
1	Cr 267.716†	85.3	85.0	[0.00]	ug/L	09:04:53
1	Cu 324.752†	8934.4	8907.2	[0.00]	ug/L	09:04:33
1	Fe 238.204 Radial†	9.8	9.6	[0.00]	ug/L	09:03:31
1	K 766.490 Radial†	2540.4	2495.7	[0.00]	ug/L	09:03:11
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	09:03:31
1	Mn 257.610†	580.2	578.4	[0.00]	ug/L	09:04:53
1	Mo 202.031†	33.3	33.2	[0.00]	ug/L	09:04:53
1	Na 589.592 Radial†	-1252.4	-1230.3	[0.00]	ug/L	09:03:11
1	Ni 231.604†	122.5	122.1	[0.00]	ug/L	09:04:53
1	P 214.914†	253.9	253.1	[0.00]	ug/L	09:04:53
1	Pb 220.353†	-64.7	-64.5	[0.00]	ug/L	09:04:53
1	S 181.975 Axial†	60.9	60.7	[0.00]	ug/L	09:04:53
1	Sb 206.836†	41.2	41.1	[0.00]	ug/L	09:04:53
1	Se 196.026†	-15.2	-15.2	[0.00]	ug/L	09:04:53
1	Si 251.611†	569.7	567.9	[0.00]	ug/L	09:04:53
1	Sn 189.927†	-6.7	-6.7	[0.00]	ug/L	09:04:53
1	Sr 421.552†	-6.5	-6.3	[0.00]	ug/L	09:03:11
1	Ti 334.940†	-1295.0	-1291.1	[0.00]	ug/L	09:04:33
1	Tl 190.801†	-38.4	-38.3	[0.00]	ug/L	09:04:53
1	U 409.014†	-2674.6	-2666.5	[0.00]	ug/L	09:04:28
1	V 292.402†	-1607.6	-1602.7	[0.00]	ug/L	09:04:33
1	Zn 213.857†	899.3	896.6	[0.00]	ug/L	09:04:53
1	SiO2†	601.5	599.7	[0.00]	ug/L	09:05:59
2	Sc 361.383	1044000.4	1044000.4	100.43	%	09:04:58
2	Sc Radial	4907.6	4907.6	100.0	%	09:03:36
2	Y 371.029	887859.3	887859.3	100.38	%	09:04:58
2	Y RADIAL	5632.6	5632.6	99.74	%	09:03:36
2	Ag 328.068†	550.7	548.4	[0.00]	ug/L	09:05:03
2	Al 396.153Radial†	-17.1	-17.1	[0.00]	ug/L	09:03:36
2	As 188.979†	-35.2	-35.1	[0.00]	ug/L	09:05:23
2	B 249.677†	-478.0	-476.0	[0.00]	ug/L	09:05:23
2	Ba 233.527†	7.6	7.5	[0.00]	ug/L	09:05:23
2	Be 313.107†	-4891.1	-4869.9	[0.00]	ug/L	09:05:03
2	Ca 317.933Radial†	17.2	17.2	[0.00]	ug/L	09:03:56
2	Cd 226.502†	-235.7	-234.7	[0.00]	ug/L	09:05:23
2	Co 228.616†	-99.4	-98.9	[0.00]	ug/L	09:05:23
2	Cr 267.716†	79.7	79.3	[0.00]	ug/L	09:05:23
2	Cu 324.752†	8989.0	8950.1	[0.00]	ug/L	09:05:03
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	ug/L	09:03:56
2	K 766.490 Radial†	2535.2	2536.3	[0.00]	ug/L	09:03:36
2	Mg 279.077 IEC†	3.9	3.9	[0.00]	ug/L	09:03:56
2	Mn 257.610†	578.4	575.9	[0.00]	ug/L	09:05:23
2	Mo 202.031†	29.3	29.2	[0.00]	ug/L	09:05:23
2	Na 589.592 Radial†	-1261.2	-1261.7	[0.00]	ug/L	09:03:36
2	Ni 231.604†	127.8	127.3	[0.00]	ug/L	09:05:23
2	P 214.914†	262.6	261.5	[0.00]	ug/L	09:05:23
2	Pb 220.353†	-73.8	-73.5	[0.00]	ug/L	09:05:23
2	S 181.975 Axial†	64.7	64.4	[0.00]	ug/L	09:05:23
2	Sb 206.836†	31.2	31.1	[0.00]	ug/L	09:05:23
2	Se 196.026†	-22.7	-22.7	[0.00]	ug/L	09:05:23
2	Si 251.611†	566.4	563.9	[0.00]	ug/L	09:05:23
2	Sn 189.927†	-5.1	-5.1	[0.00]	ug/L	09:05:23
2	Sr 421.552†	1.4	1.4	[0.00]	ug/L	09:03:36
2	Ti 334.940†	-1224.9	-1219.6	[0.00]	ug/L	09:05:03
2	Tl 190.801†	-49.4	-49.2	[0.00]	ug/L	09:05:23
2	U 409.014†	-2835.4	-2823.2	[0.00]	ug/L	09:04:58
2	V 292.402†	-1544.3	-1537.6	[0.00]	ug/L	09:05:03
2	Zn 213.857†	879.4	875.6	[0.00]	ug/L	09:05:23
2	SiO2†	619.7	617.1	[0.00]	ug/L	09:06:04
3	Sc 361.383	1031796.1	1031796.1	99.260	%	09:05:29
3	Sc Radial	4823.8	4823.8	98.2	%	09:04:01
3	Y 371.029	877949.7	877949.7	99.263	%	09:05:29
3	Y RADIAL	5541.4	5541.4	98.13	%	09:04:01

3	Ag 328.068†	393.6	396.5	[0.00]	ug/L	09:05:34
3	Al 396.153Radial†	-59.6	-60.7	[0.00]	ug/L	09:04:01
3	As 188.979†	-38.5	-38.8	[0.00]	ug/L	09:05:54
3	B 249.677†	-446.8	-450.1	[0.00]	ug/L	09:05:54
3	Ba 233.527†	-6.7	-6.8	[0.00]	ug/L	09:05:54
3	Be 313.107†	-4854.1	-4890.3	[0.00]	ug/L	09:05:34
3	Ca 317.933Radial†	14.8	15.1	[0.00]	ug/L	09:04:21
3	Cd 226.502†	-233.7	-235.4	[0.00]	ug/L	09:05:54
3	Co 228.616†	-74.5	-75.1	[0.00]	ug/L	09:05:54
3	Cr 267.716†	98.2	99.0	[0.00]	ug/L	09:05:54
3	Cu 324.752†	8888.9	8955.1	[0.00]	ug/L	09:05:34
3	Fe 238.204 Radial†	10.8	11.0	[0.00]	ug/L	09:04:21
3	K 766.490 Radial†	2629.7	2676.6	[0.00]	ug/L	09:04:01
3	Mg 279.077 IEC†	1.7	1.7	[0.00]	ug/L	09:04:21
3	Mn 257.610†	571.5	575.7	[0.00]	ug/L	09:05:54
3	Mo 202.031†	25.1	25.3	[0.00]	ug/L	09:05:54
3	Na 589.592 Radial†	-1324.2	-1347.8	[0.00]	ug/L	09:04:01
3	Ni 231.604†	145.3	146.4	[0.00]	ug/L	09:05:54
3	P 214.914†	278.7	280.7	[0.00]	ug/L	09:05:54
3	Pb 220.353†	-88.0	-88.7	[0.00]	ug/L	09:05:54
3	S 181.975 Axial†	54.8	55.2	[0.00]	ug/L	09:05:54
3	Sb 206.836†	31.4	31.7	[0.00]	ug/L	09:05:54
3	Se 196.026†	-26.1	-26.3	[0.00]	ug/L	09:05:54
3	Si 251.611†	537.1	541.1	[0.00]	ug/L	09:05:54
3	Sn 189.927†	-1.2	-1.2	[0.00]	ug/L	09:05:54
3	Sr 421.552†	-16.9	-17.2	[0.00]	ug/L	09:04:01
3	Ti 334.940†	-1261.3	-1270.7	[0.00]	ug/L	09:05:34
3	Tl 190.801†	-45.0	-45.3	[0.00]	ug/L	09:05:54
3	U 409.014†	-2811.3	-2832.2	[0.00]	ug/L	09:05:29
3	V 292.402†	-1672.8	-1685.2	[0.00]	ug/L	09:05:34
3	Zn 213.857†	877.9	884.5	[0.00]	ug/L	09:05:54
3	SiO2†	576.1	580.4	[0.00]	ug/L	09:06:09

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039483.4	6691.39	0.64%	100.00	%
Sc Radial	4909.7	87.01	1.77%	100	%
Y 371.029	884468.0	5646.60	0.64%	100.00	%
Y RADIAL	5647.2	113.75	2.01%	100.00	%
Ag 328.068†	474.1	75.97	16.03%	[0.00]	ug/L
Al 396.153Radial†	-43.8	23.36	53.33%	[0.00]	ug/L
As 188.979†	-36.6	1.98	5.42%	[0.00]	ug/L
B 249.677†	-466.1	13.98	3.00%	[0.00]	ug/L
Ba 233.527†	-0.0	7.19	>999.9%	[0.00]	ug/L
Be 313.107†	-4873.9	14.78	0.30%	[0.00]	ug/L
Ca 317.933Radial†	17.8	3.09	17.33%	[0.00]	ug/L
Cd 226.502†	-235.6	1.12	0.47%	[0.00]	ug/L
Co 228.616†	-86.3	11.99	13.89%	[0.00]	ug/L
Cr 267.716†	87.8	10.11	11.52%	[0.00]	ug/L
Cu 324.752†	8937.5	26.31	0.29%	[0.00]	ug/L
Fe 238.204 Radial†	11.0	1.38	12.52%	[0.00]	ug/L
K 766.490 Radial†	2569.5	94.94	3.69%	[0.00]	ug/L
Mg 279.077 IEC†	2.5	1.21	48.44%	[0.00]	ug/L
Mn 257.610†	576.7	1.50	0.26%	[0.00]	ug/L
Mo 202.031†	29.2	3.96	13.54%	[0.00]	ug/L
Na 589.592 Radial†	-1280.0	60.84	4.75%	[0.00]	ug/L
Ni 231.604†	131.9	12.81	9.71%	[0.00]	ug/L
P 214.914†	265.1	14.17	5.34%	[0.00]	ug/L
Pb 220.353†	-75.6	12.22	16.17%	[0.00]	ug/L
S 181.975 Axial†	60.1	4.64	7.72%	[0.00]	ug/L
Sb 206.836†	34.6	5.62	16.22%	[0.00]	ug/L
Se 196.026†	-21.4	5.66	26.49%	[0.00]	ug/L
Si 251.611†	557.6	14.51	2.60%	[0.00]	ug/L
Sn 189.927†	-4.3	2.82	65.08%	[0.00]	ug/L
Sr 421.552†	-7.4	9.34	126.04%	[0.00]	ug/L
Ti 334.940†	-1260.4	36.82	2.92%	[0.00]	ug/L
Tl 190.801†	-44.3	5.53	12.49%	[0.00]	ug/L
U 409.014†	-2774.0	93.17	3.36%	[0.00]	ug/L
V 292.402†	-1608.5	73.97	4.60%	[0.00]	ug/L

Zn 213.857†	885.6	10.52	1.19%	[0.00] ug/L
SiO2†	599.0	18.36	3.07%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2009 09:08:20
Data Type: Reprocessed on 12/4/2009 11:13:21

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1034115.0	1034115.0	99.484	%	09:10:45
1	Sc Radial	4917.4	4917.4	100	%	09:10:18
1	Y 371.029	877110.7	877110.7	99.168	%	09:10:45
1	Y RADIAL	5677.6	5677.6	100.5	%	09:10:18
1	Ag 328.068†	25663.9	25323.1	[100]	ug/L	09:10:45
1	As 188.979†	273.9	311.9	[100]	ug/L	09:11:05
1	B 249.677†	4580.0	5069.9	[100]	ug/L	09:10:45
1	Ba 233.527†	15612.6	15693.7	[100]	ug/L	09:10:45
1	Be 313.107†	312681.0	319178.2	[100]	ug/L	09:10:45
1	Cd 226.502†	11047.6	11340.6	[100]	ug/L	09:11:05
1	Co 228.616†	5973.3	6090.6	[100]	ug/L	09:11:05
1	Cr 267.716†	11174.8	11145.1	[100]	ug/L	09:10:45
1	Cu 324.752†	45831.5	37131.9	[100]	ug/L	09:10:45
1	K 766.490 Radial†	8026.3	5444.2	[1000]	ug/L	09:10:13
1	Mn 257.610†	107107.3	107086.7	[100]	ug/L	09:10:45
1	Mo 202.031†	1916.3	1897.0	[100]	ug/L	09:11:05
1	Ni 231.604†	5255.5	5150.9	[100]	ug/L	09:11:05
1	P 214.914†	1387.2	1129.3	[500]	ug/L	09:11:05
1	Pb 220.353†	1000.1	1080.8	[100]	ug/L	09:11:05
1	S 181.975 Axial†	239.3	180.5	[200]	ug/L	09:11:05
1	Sb 206.836†	409.5	377.0	[100]	ug/L	09:11:05
1	Se 196.026†	187.1	209.5	[100]	ug/L	09:11:05
1	Si 251.611†	19924.6	19470.4	[500]	ug/L	09:10:45
1	Sn 189.927†	741.5	749.7	[100]	ug/L	09:11:05
1	Sr 421.552†	18911.5	18889.3	[100]	ug/L	09:10:18
1	Ti 334.940†	70450.6	72076.8	[100]	ug/L	09:10:45
1	Tl 190.801†	355.2	401.3	[100]	ug/L	09:11:05
1	U 409.014†	1114.8	3894.6	[100]	ug/L	09:10:45
1	V 292.402†	15533.5	17222.6	[100]	ug/L	09:10:45
1	Zn 213.857†	14447.4	13636.8	[100]	ug/L	09:10:45
1	SiO2†	20034.5	19539.5	[1069.5]	ug/L	09:12:02
2	Sc 361.383	1037172.3	1037172.3	99.778	%	09:11:11
2	Sc Radial	4884.7	4884.7	99.5	%	09:10:28
2	Y 371.029	879336.2	879336.2	99.420	%	09:11:11
2	Y RADIAL	5626.4	5626.4	99.63	%	09:10:28
2	Ag 328.068†	25666.6	25249.7	[100]	ug/L	09:11:11
2	As 188.979†	285.2	322.5	[100]	ug/L	09:11:31
2	B 249.677†	4522.8	4999.0	[100]	ug/L	09:11:11
2	Ba 233.527†	15639.9	15674.8	[100]	ug/L	09:11:11
2	Be 313.107†	313491.8	319064.3	[100]	ug/L	09:11:11
2	Cd 226.502†	11113.7	11374.1	[100]	ug/L	09:11:31
2	Co 228.616†	6016.2	6115.9	[100]	ug/L	09:11:31
2	Cr 267.716†	11224.6	11161.9	[100]	ug/L	09:11:11
2	Cu 324.752†	45920.3	37085.2	[100]	ug/L	09:11:11
2	K 766.490 Radial†	7977.7	5449.1	[1000]	ug/L	09:10:23
2	Mn 257.610†	107502.0	107164.8	[100]	ug/L	09:11:11
2	Mo 202.031†	1933.5	1908.6	[100]	ug/L	09:11:31
2	Ni 231.604†	5292.7	5172.6	[100]	ug/L	09:11:31
2	P 214.914†	1380.9	1118.9	[500]	ug/L	09:11:31
2	Pb 220.353†	1024.4	1102.2	[100]	ug/L	09:11:31
2	S 181.975 Axial†	239.3	179.8	[200]	ug/L	09:11:31
2	Sb 206.836†	405.2	371.5	[100]	ug/L	09:11:31
2	Se 196.026†	206.8	228.6	[100]	ug/L	09:11:31
2	Si 251.611†	19996.7	19483.6	[500]	ug/L	09:11:11
2	Sn 189.927†	750.6	756.6	[100]	ug/L	09:11:31
2	Sr 421.552†	18773.1	18876.6	[100]	ug/L	09:10:28
2	Ti 334.940†	70803.1	72221.3	[100]	ug/L	09:11:11
2	Tl 190.801†	372.3	417.4	[100]	ug/L	09:11:31

2	U 409.014†	1169.5	3946.1	[100]	ug/L	09:11:11
2	V 292.402†	15537.8	17181.0	[100]	ug/L	09:11:11
2	Zn 213.857†	14505.6	13652.3	[100]	ug/L	09:11:11
2	SiO2†	19894.5	19339.8	[1069.5]	ug/L	09:12:07
3	Sc 361.383	1035982.4	1035982.4	99.663	%	09:11:37
3	Sc Radial	4837.2	4837.2	98.5	%	09:10:38
3	Y 371.029	879445.6	879445.6	99.432	%	09:11:37
3	Y RADIAL	5566.7	5566.7	98.57	%	09:10:38
3	Ag 328.068†	25528.3	25140.5	[100]	ug/L	09:11:37
3	As 188.979†	280.0	317.6	[100]	ug/L	09:11:57
3	B 249.677†	4572.9	5054.5	[100]	ug/L	09:11:37
3	Ba 233.527†	15606.9	15659.6	[100]	ug/L	09:11:37
3	Be 313.107†	312839.6	318770.7	[100]	ug/L	09:11:37
3	Cd 226.502†	11026.9	11299.8	[100]	ug/L	09:11:57
3	Co 228.616†	5966.4	6072.9	[100]	ug/L	09:11:57
3	Cr 267.716†	11201.4	11151.5	[100]	ug/L	09:11:37
3	Cu 324.752†	45876.3	37093.8	[100]	ug/L	09:11:37
3	K 766.490 Radial†	8026.3	5577.2	[1000]	ug/L	09:10:33
3	Mn 257.610†	107062.9	106848.0	[100]	ug/L	09:11:37
3	Mo 202.031†	1911.6	1888.8	[100]	ug/L	09:11:57
3	Ni 231.604†	5226.8	5112.5	[100]	ug/L	09:11:57
3	P 214.914†	1356.1	1095.6	[500]	ug/L	09:11:57
3	Pb 220.353†	1013.9	1092.9	[100]	ug/L	09:11:57
3	S 181.975 Axial†	237.2	177.9	[200]	ug/L	09:11:57
3	Sb 206.836†	413.3	380.0	[100]	ug/L	09:11:57
3	Se 196.026†	196.7	218.7	[100]	ug/L	09:11:57
3	Si 251.611†	19914.3	19424.0	[500]	ug/L	09:11:37
3	Sn 189.927†	743.2	750.1	[100]	ug/L	09:11:57
3	Sr 421.552†	18530.3	18815.7	[100]	ug/L	09:10:38
3	Ti 334.940†	70447.6	71946.1	[100]	ug/L	09:11:37
3	Tl 190.801†	351.0	396.5	[100]	ug/L	09:11:57
3	U 409.014†	1207.5	3985.6	[100]	ug/L	09:11:37
3	V 292.402†	15524.7	17185.7	[100]	ug/L	09:11:37
3	Zn 213.857†	14433.0	13596.2	[100]	ug/L	09:11:37
3	SiO2†	19988.0	19456.5	[1069.5]	ug/L	09:12:12

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1035756.6	1541.13	0.15%	99.641	%
Sc Radial	4879.8	40.36	0.83%	99.4	%
Y 371.029	878630.8	1317.57	0.15%	99.340	%
Y RADIAL	5623.6	55.53	0.99%	99.58	%
Ag 328.068†	25237.8	91.86	0.36%	[100]	ug/L
As 188.979†	317.3	5.27	1.66%	[100]	ug/L
B 249.677†	5041.1	37.28	0.74%	[100]	ug/L
Ba 233.527†	15676.0	17.06	0.11%	[100]	ug/L
Be 313.107†	319004.4	210.23	0.07%	[100]	ug/L
Cd 226.502†	11338.2	37.22	0.33%	[100]	ug/L
Co 228.616†	6093.1	21.64	0.36%	[100]	ug/L
Cr 267.716†	11152.8	8.49	0.08%	[100]	ug/L
Cu 324.752†	37103.6	24.85	0.07%	[100]	ug/L
K 766.490 Radial†	5490.2	75.44	1.37%	[1000]	ug/L
Mn 257.610†	107033.2	165.03	0.15%	[100]	ug/L
Mo 202.031†	1898.1	9.93	0.52%	[100]	ug/L
Ni 231.604†	5145.3	30.42	0.59%	[100]	ug/L
P 214.914†	1114.6	17.28	1.55%	[500]	ug/L
Pb 220.353†	1092.0	10.73	0.98%	[100]	ug/L
S 181.975 Axial†	179.4	1.30	0.72%	[200]	ug/L
Sb 206.836†	376.2	4.35	1.16%	[100]	ug/L
Se 196.026†	218.9	9.59	4.38%	[100]	ug/L
Si 251.611†	19459.3	31.31	0.16%	[500]	ug/L
Sn 189.927†	752.1	3.88	0.52%	[100]	ug/L
Sr 421.552†	18860.5	39.37	0.21%	[100]	ug/L
Ti 334.940†	72081.4	137.65	0.19%	[100]	ug/L
Tl 190.801†	405.0	10.93	2.70%	[100]	ug/L
U 409.014†	3942.1	45.63	1.16%	[100]	ug/L
V 292.402†	17196.4	22.81	0.13%	[100]	ug/L
Zn 213.857†	13628.5	28.97	0.21%	[100]	ug/L
SiO2†	19445.3	100.32	0.52%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2009 09:14:23
Data Type: Reprocessed on 12/4/2009 11:13:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1031883.9	1031883.9	99.269	%	09:17:35
1	Sc Radial	4725.3	4725.3	96.2	%	09:16:16
1	Y 371.029	865902.0	865902.0	97.901	%	09:17:35
1	Y RADIAL	5397.4	5397.4	95.58	%	09:16:16
1	Ag 328.068†	126420.2	126877.2	[500]	ug/L	09:17:35
1	Al 396.153Radial†	7485.7	7821.6	[5000]	ug/L	09:16:16
1	As 188.979†	1582.3	1630.5	[500]	ug/L	09:17:55
1	B 249.677†	25754.2	26410.0	[500]	ug/L	09:17:35
1	Ba 233.527†	78197.4	78773.4	[500]	ug/L	09:17:35
1	Be 313.107†	1611086.4	1627825.5	[500]	ug/L	09:17:35
1	Ca 317.933Radial†	2850.7	2944.1	[5000]	ug/L	09:16:36
1	Cd 226.502†	57558.4	58218.0	[500]	ug/L	09:17:35
1	Co 228.616†	29991.1	30298.3	[500]	ug/L	09:17:55
1	Cr 267.716†	55954.3	56278.6	[500]	ug/L	09:17:35
1	Cu 324.752†	197613.9	190131.8	[500]	ug/L	09:17:35
1	K 766.490 Radial†	29016.8	27579.7	[5000]	ug/L	09:16:16
1	Mg 279.077 IEC†	118.7	120.8	[5000]	ug/L	09:16:36
1	Mn 257.610†	533416.6	536768.3	[500]	ug/L	09:17:35
1	Mo 202.031†	9472.6	9513.1	[500]	ug/L	09:17:55
1	Ni 231.604†	25491.0	25546.8	[500]	ug/L	09:17:55
1	P 214.914†	5863.7	5641.8	[2500]	ug/L	09:17:55
1	Pb 220.353†	5288.3	5402.8	[500]	ug/L	09:17:55
1	S 181.975 Axial†	986.6	933.7	[1000]	ug/L	09:17:55
1	Sb 206.836†	1915.6	1895.1	[500]	ug/L	09:17:55
1	Se 196.026†	1116.1	1145.7	[500]	ug/L	09:17:55
1	Si 251.611†	98829.6	98999.8	[2500]	ug/L	09:17:35
1	Sn 189.927†	3756.7	3788.7	[500]	ug/L	09:17:55
1	Sr 421.552†	92089.2	95690.3	[500]	ug/L	09:16:16
1	Ti 334.940†	361312.4	365233.8	[500]	ug/L	09:17:35
1	Tl 190.801†	2027.8	2087.0	[500]	ug/L	09:17:55
1	U 409.014†	16069.6	18962.0	[500]	ug/L	09:17:35
1	V 292.402†	85740.6	87980.6	[500]	ug/L	09:17:35
1	Zn 213.857†	69494.5	69120.7	[500]	ug/L	09:17:35
1	SiO2†	98933.6	99063.1	[5347.5]	ug/L	09:18:55
2	Sc 361.383	1022186.3	1022186.3	98.336	%	09:18:02
2	Sc Radial	4842.7	4842.7	98.6	%	09:16:41
2	Y 371.029	857509.0	857509.0	96.952	%	09:18:02
2	Y RADIAL	5533.5	5533.5	97.99	%	09:16:41
2	Ag 328.068†	125023.3	126664.9	[500]	ug/L	09:18:02
2	Al 396.153Radial†	7582.2	7730.9	[5000]	ug/L	09:16:41
2	As 188.979†	1559.3	1622.3	[500]	ug/L	09:18:22
2	B 249.677†	25530.5	26428.6	[500]	ug/L	09:18:02
2	Ba 233.527†	77333.5	78642.1	[500]	ug/L	09:18:02
2	Be 313.107†	1593743.4	1625586.2	[500]	ug/L	09:18:02
2	Ca 317.933Radial†	2832.8	2854.1	[5000]	ug/L	09:17:01
2	Cd 226.502†	57178.5	58381.7	[500]	ug/L	09:18:02
2	Co 228.616†	29821.2	30412.2	[500]	ug/L	09:18:22
2	Cr 267.716†	55454.1	56304.7	[500]	ug/L	09:18:02
2	Cu 324.752†	195212.0	189577.8	[500]	ug/L	09:18:02
2	K 766.490 Radial†	29459.2	27297.3	[5000]	ug/L	09:16:41
2	Mg 279.077 IEC†	113.8	112.9	[5000]	ug/L	09:17:01
2	Mn 257.610†	527720.1	536073.3	[500]	ug/L	09:18:02
2	Mo 202.031†	9446.6	9577.2	[500]	ug/L	09:18:22
2	Ni 231.604†	25411.4	25709.5	[500]	ug/L	09:18:22
2	P 214.914†	5842.7	5676.5	[2500]	ug/L	09:18:22
2	Pb 220.353†	5269.3	5434.0	[500]	ug/L	09:18:22
2	S 181.975 Axial†	980.1	936.6	[1000]	ug/L	09:18:22
2	Sb 206.836†	1921.0	1918.8	[500]	ug/L	09:18:22

2	Se 196.026†	1116.5	1156.8	[500]	ug/L	09:18:22
2	Si 251.611†	97630.3	98724.7	[2500]	ug/L	09:18:02
2	Sn 189.927†	3749.5	3817.3	[500]	ug/L	09:18:22
2	Sr 421.552†	92820.6	94112.6	[500]	ug/L	09:16:41
2	Ti 334.940†	357398.0	364706.2	[500]	ug/L	09:18:02
2	Tl 190.801†	2014.2	2092.6	[500]	ug/L	09:18:22
2	U 409.014†	15695.0	18734.5	[500]	ug/L	09:18:02
2	V 292.402†	84873.8	87918.5	[500]	ug/L	09:18:02
2	Zn 213.857†	68803.3	69082.0	[500]	ug/L	09:18:02
2	SiO2†	98094.8	99155.6	[5347.5]	ug/L	09:19:00
3	Sc 361.383	1019696.2	1019696.2	98.096	%	09:18:30
3	Sc Radial	4932.5	4932.5	100	%	09:17:06
3	Y 371.029	856975.2	856975.2	96.892	%	09:18:30
3	Y RADIAL	5600.6	5600.6	99.18	%	09:17:06
3	Ag 328.068†	124458.4	126399.5	[500]	ug/L	09:18:30
3	Al 396.153Radial†	7744.8	7752.9	[5000]	ug/L	09:17:06
3	As 188.979†	1579.5	1646.7	[500]	ug/L	09:18:50
3	B 249.677†	25387.3	26346.0	[500]	ug/L	09:18:30
3	Ba 233.527†	77024.7	78519.4	[500]	ug/L	09:18:30
3	Be 313.107†	1588739.9	1624443.2	[500]	ug/L	09:18:30
3	Ca 317.933Radial†	2817.5	2786.7	[5000]	ug/L	09:17:26
3	Cd 226.502†	56673.9	58009.3	[500]	ug/L	09:18:30
3	Co 228.616†	30084.8	30755.0	[500]	ug/L	09:18:50
3	Cr 267.716†	55218.1	56201.8	[500]	ug/L	09:18:30
3	Cu 324.752†	194598.3	189437.0	[500]	ug/L	09:18:30
3	K 766.490 Radial†	29661.6	26955.3	[5000]	ug/L	09:17:06
3	Mg 279.077 IEC†	111.0	108.0	[5000]	ug/L	09:17:26
3	Mn 257.610†	525039.9	534651.6	[500]	ug/L	09:18:30
3	Mo 202.031†	9508.8	9664.1	[500]	ug/L	09:18:50
3	Ni 231.604†	25647.9	26013.6	[500]	ug/L	09:18:50
3	P 214.914†	5879.8	5728.8	[2500]	ug/L	09:18:50
3	Pb 220.353†	5314.3	5493.0	[500]	ug/L	09:18:50
3	S 181.975 Axial†	989.1	948.2	[1000]	ug/L	09:18:50
3	Sb 206.836†	1921.7	1924.3	[500]	ug/L	09:18:50
3	Se 196.026†	1108.9	1151.8	[500]	ug/L	09:18:50
3	Si 251.611†	97317.0	98647.8	[2500]	ug/L	09:18:30
3	Sn 189.927†	3778.3	3856.0	[500]	ug/L	09:18:50
3	Sr 421.552†	94804.6	94375.0	[500]	ug/L	09:17:06
3	Ti 334.940†	355895.9	364062.5	[500]	ug/L	09:18:30
3	Tl 190.801†	2031.2	2114.8	[500]	ug/L	09:18:50
3	U 409.014†	15729.6	18808.8	[500]	ug/L	09:18:30
3	V 292.402†	84674.4	87926.0	[500]	ug/L	09:18:30
3	Zn 213.857†	68469.1	68912.2	[500]	ug/L	09:18:30
3	SiO2†	99245.4	100572.2	[5347.5]	ug/L	09:19:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1024588.8	6439.24	0.63%	98.567	%
Sc Radial	4833.5	103.87	2.15%	98.4	%
Y 371.029	860128.7	5006.87	0.58%	97.248	%
Y RADIAL	5510.5	103.55	1.88%	97.58	%
Ag 328.068†	126647.2	239.36	0.19%	[500]	ug/L
Al 396.153Radial†	7768.5	47.30	0.61%	[5000]	ug/L
As 188.979†	1633.2	12.43	0.76%	[500]	ug/L
B 249.677†	26394.9	43.32	0.16%	[500]	ug/L
Ba 233.527†	78645.0	126.99	0.16%	[500]	ug/L
Be 313.107†	1625951.6	1720.46	0.11%	[500]	ug/L
Ca 317.933Radial†	2861.7	78.97	2.76%	[5000]	ug/L
Cd 226.502†	58203.0	186.69	0.32%	[500]	ug/L
Co 228.616†	30488.5	237.68	0.78%	[500]	ug/L
Cr 267.716†	56261.7	53.49	0.10%	[500]	ug/L
Cu 324.752†	189715.5	367.29	0.19%	[500]	ug/L
K 766.490 Radial†	27277.4	312.63	1.15%	[5000]	ug/L
Mg 279.077 IEC†	113.9	6.47	5.68%	[5000]	ug/L
Mn 257.610†	535831.1	1078.96	0.20%	[500]	ug/L
Mo 202.031†	9584.8	75.76	0.79%	[500]	ug/L
Ni 231.604†	25756.6	236.96	0.92%	[500]	ug/L
P 214.914†	5682.4	43.78	0.77%	[2500]	ug/L
Pb 220.353†	5443.3	45.82	0.84%	[500]	ug/L

S 181.975 Axial†	939.5	7.68	0.82%	[1000]	ug/L
Sb 206.836†	1912.7	15.53	0.81%	[500]	ug/L
Se 196.026†	1151.4	5.57	0.48%	[500]	ug/L
Si 251.611†	98790.8	185.05	0.19%	[2500]	ug/L
Sn 189.927†	3820.7	33.78	0.88%	[500]	ug/L
Sr 421.552†	94726.0	845.39	0.89%	[500]	ug/L
Ti 334.940†	364667.5	586.61	0.16%	[500]	ug/L
Tl 190.801†	2098.1	14.73	0.70%	[500]	ug/L
U 409.014†	18835.1	115.97	0.62%	[500]	ug/L
V 292.402†	87941.7	33.90	0.04%	[500]	ug/L
Zn 213.857†	69038.3	110.92	0.16%	[500]	ug/L
SiO2†	99597.0	845.81	0.85%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2009 09:21:17
Data Type: Reprocessed on 12/4/2009 11:13:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033952.1	1033952.1	99.468	%	09:24:29
1	Sc Radial	4781.8	4781.8	97.4	%	09:23:10
1	Y 371.029	865548.0	865548.0	97.861	%	09:24:29
1	Y RADIAL	5444.2	5444.2	96.41	%	09:23:10
1	Ag 328.068†	251070.7	251939.8	[1000]	ug/L	09:24:34
1	Al 396.153Radial†	15265.0	15717.1	[10000]	ug/L	09:23:10
1	As 188.979†	3158.3	3211.8	[1000]	ug/L	09:24:54
1	B 249.677†	52190.0	52935.3	[1000]	ug/L	09:24:34
1	Ba 233.527†	154439.9	155266.2	[1000]	ug/L	09:24:34
1	Be 313.107†	3163709.2	3185507.8	[1000]	ug/L	09:24:29
1	Ca 317.933Radial†	5733.9	5869.5	[10000]	ug/L	09:23:10
1	Cd 226.502†	113545.9	114389.0	[1000]	ug/L	09:24:34
1	Co 228.616†	60235.9	60644.5	[1000]	ug/L	09:24:34
1	Cr 267.716†	110548.0	111051.6	[1000]	ug/L	09:24:34
1	Cu 324.752†	379621.0	372714.3	[1000]	ug/L	09:24:34
1	Fe 238.204 Radial†	818.4	829.3	[10000]	ug/L	09:23:30
1	K 766.490 Radial†	56574.7	55518.3	[10000]	ug/L	09:23:10
1	Mg 279.077 IEC†	223.5	227.0	[10000]	ug/L	09:23:30
1	Mn 257.610†	1042568.7	1047569.4	[1000]	ug/L	09:24:29
1	Mo 202.031†	18744.8	18815.8	[1000]	ug/L	09:24:54
1	Na 589.592 Radial†	33298.8	35469.4	[10000]	ug/L	09:23:10
1	Ni 231.604†	50778.7	50918.4	[1000]	ug/L	09:24:34
1	P 214.914†	11386.1	11181.9	[5000]	ug/L	09:24:54
1	Pb 220.353†	10490.2	10621.9	[1000]	ug/L	09:24:54
1	S 181.975 Axial†	1908.4	1858.5	[2000]	ug/L	09:24:54
1	Sb 206.836†	3817.5	3803.3	[1000]	ug/L	09:24:54
1	Se 196.026†	2220.3	2253.5	[1000]	ug/L	09:24:54
1	Si 251.611†	196207.9	196699.9	[5000]	ug/L	09:24:34
1	Sn 189.927†	7518.7	7563.2	[1000]	ug/L	09:24:54
1	Sr 421.552†	188805.9	193863.0	[1000]	ug/L	09:23:10
1	Ti 334.940†	715230.5	720317.2	[1000]	ug/L	09:24:29
1	Tl 190.801†	4074.8	4140.9	[1000]	ug/L	09:24:54
1	U 409.014†	35888.5	38854.5	[1000]	ug/L	09:24:34
1	V 292.402†	171974.6	174503.1	[1000]	ug/L	09:24:34
1	Zn 213.857†	135862.8	135704.0	[1000]	ug/L	09:24:34
1	SiO2†	197299.1	197755.5	[10695]	ug/L	09:26:04
2	Sc 361.383	1037206.2	1037206.2	99.781	%	09:25:01
2	Sc Radial	4775.3	4775.3	97.3	%	09:23:35
2	Y 371.029	868604.7	868604.7	98.206	%	09:25:01
2	Y RADIAL	5466.3	5466.3	96.80	%	09:23:35
2	Ag 328.068†	251727.3	251805.9	[1000]	ug/L	09:25:06
2	Al 396.153Radial†	14988.9	15454.8	[10000]	ug/L	09:23:35
2	As 188.979†	3133.0	3176.5	[1000]	ug/L	09:25:27
2	B 249.677†	52398.8	52980.0	[1000]	ug/L	09:25:06
2	Ba 233.527†	154651.4	154991.0	[1000]	ug/L	09:25:06
2	Be 313.107†	3189225.9	3201101.8	[1000]	ug/L	09:25:01
2	Ca 317.933Radial†	5638.8	5779.7	[10000]	ug/L	09:23:35
2	Cd 226.502†	113553.9	114038.8	[1000]	ug/L	09:25:06
2	Co 228.616†	60397.1	60616.0	[1000]	ug/L	09:25:06
2	Cr 267.716†	110714.6	110869.9	[1000]	ug/L	09:25:06
2	Cu 324.752†	381400.9	373300.7	[1000]	ug/L	09:25:06
2	Fe 238.204 Radial†	818.5	830.5	[10000]	ug/L	09:23:55
2	K 766.490 Radial†	55894.0	54898.2	[10000]	ug/L	09:23:35
2	Mg 279.077 IEC†	226.3	230.1	[10000]	ug/L	09:23:55
2	Mn 257.610†	1052420.3	1054154.2	[1000]	ug/L	09:25:01
2	Mo 202.031†	18673.0	18684.7	[1000]	ug/L	09:25:27
2	Na 589.592 Radial†	32585.2	34782.6	[10000]	ug/L	09:23:35
2	Ni 231.604†	50920.6	50900.4	[1000]	ug/L	09:25:06

2	P 214.914†	11302.2	11061.9	[5000]	ug/L	09:25:27
2	Pb 220.353†	10452.5	10551.0	[1000]	ug/L	09:25:27
2	S 181.975 Axial†	1902.9	1846.9	[2000]	ug/L	09:25:27
2	Sb 206.836†	3789.2	3762.9	[1000]	ug/L	09:25:27
2	Se 196.026†	2211.1	2237.4	[1000]	ug/L	09:25:27
2	Si 251.611†	196781.5	196655.9	[5000]	ug/L	09:25:06
2	Sn 189.927†	7482.9	7503.6	[1000]	ug/L	09:25:27
2	Sr 421.552†	185034.5	190251.8	[1000]	ug/L	09:23:35
2	Ti 334.940†	722965.3	725813.0	[1000]	ug/L	09:25:01
2	Tl 190.801†	4035.3	4088.4	[1000]	ug/L	09:25:27
2	U 409.014†	36052.9	38906.1	[1000]	ug/L	09:25:06
2	V 292.402†	172185.9	174172.5	[1000]	ug/L	09:25:06
2	Zn 213.857†	135917.9	135330.7	[1000]	ug/L	09:25:06
2	SiO2†	195195.0	195024.5	[10695]	ug/L	09:26:10
3	Sc 361.383	1037624.8	1037624.8	99.821	%	09:25:33
3	Sc Radial	4816.7	4816.7	98.1	%	09:24:00
3	Y 371.029	868750.7	868750.7	98.223	%	09:25:33
3	Y RADIAL	5497.1	5497.1	97.34	%	09:24:00
3	Ag 328.068†	252350.9	252328.9	[1000]	ug/L	09:25:39
3	Al 396.153Radial†	15058.1	15392.6	[10000]	ug/L	09:24:00
3	As 188.979†	3156.0	3198.3	[1000]	ug/L	09:25:59
3	B 249.677†	52435.5	52995.5	[1000]	ug/L	09:25:39
3	Ba 233.527†	155189.6	155467.6	[1000]	ug/L	09:25:39
3	Be 313.107†	3191621.0	3202211.7	[1000]	ug/L	09:25:33
3	Ca 317.933Radial†	5681.1	5773.0	[10000]	ug/L	09:24:00
3	Cd 226.502†	113874.0	114313.6	[1000]	ug/L	09:25:39
3	Co 228.616†	60491.4	60686.1	[1000]	ug/L	09:25:39
3	Cr 267.716†	110980.2	111091.2	[1000]	ug/L	09:25:39
3	Cu 324.752†	381989.7	373736.4	[1000]	ug/L	09:25:39
3	Fe 238.204 Radial†	811.0	815.7	[10000]	ug/L	09:24:20
3	K 766.490 Radial†	55908.4	54418.5	[10000]	ug/L	09:24:00
3	Mg 279.077 IEC†	227.3	229.2	[10000]	ug/L	09:24:20
3	Mn 257.610†	1052884.4	1054193.7	[1000]	ug/L	09:25:33
3	Mo 202.031†	18778.7	18783.1	[1000]	ug/L	09:25:59
3	Na 589.592 Radial†	32574.8	34483.8	[10000]	ug/L	09:24:00
3	Ni 231.604†	50963.3	50922.6	[1000]	ug/L	09:25:39
3	P 214.914†	11396.2	11151.5	[5000]	ug/L	09:25:59
3	Pb 220.353†	10507.7	10602.1	[1000]	ug/L	09:25:59
3	S 181.975 Axial†	1905.1	1848.4	[2000]	ug/L	09:25:59
3	Sb 206.836†	3818.3	3790.5	[1000]	ug/L	09:25:59
3	Se 196.026†	2223.8	2249.2	[1000]	ug/L	09:25:59
3	Si 251.611†	197019.3	196814.5	[5000]	ug/L	09:25:39
3	Sn 189.927†	7539.0	7556.8	[1000]	ug/L	09:25:59
3	Sr 421.552†	185045.7	188626.5	[1000]	ug/L	09:24:00
3	Ti 334.940†	723262.4	725818.4	[1000]	ug/L	09:25:33
3	Tl 190.801†	4081.2	4132.7	[1000]	ug/L	09:25:59
3	U 409.014†	36170.3	39009.1	[1000]	ug/L	09:25:39
3	V 292.402†	172638.6	174556.3	[1000]	ug/L	09:25:39
3	Zn 213.857†	136367.9	135726.6	[1000]	ug/L	09:25:39
3	SiO2†	196066.2	195818.4	[10695]	ug/L	09:26:15

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1036261.0	2010.51	0.19%	99.690	%
Sc Radial	4791.3	22.27	0.46%	97.6	%
Y 371.029	867634.5	1808.42	0.21%	98.097	%
Y RADIAL	5469.2	26.56	0.49%	96.85	%
Ag 328.068†	252024.9	271.68	0.11%	[1000]	ug/L
Al 396.153Radial†	15521.5	172.20	1.11%	[10000]	ug/L
As 188.979†	3195.5	17.83	0.56%	[1000]	ug/L
B 249.677†	52970.3	31.24	0.06%	[1000]	ug/L
Ba 233.527†	155241.6	239.26	0.15%	[1000]	ug/L
Be 313.107†	3196273.8	9340.11	0.29%	[1000]	ug/L
Ca 317.933Radial†	5807.4	53.87	0.93%	[10000]	ug/L
Cd 226.502†	114247.1	184.29	0.16%	[1000]	ug/L
Co 228.616†	60648.9	35.27	0.06%	[1000]	ug/L
Cr 267.716†	111004.2	117.98	0.11%	[1000]	ug/L
Cu 324.752†	373250.5	512.92	0.14%	[1000]	ug/L
Fe 238.204 Radial†	825.1	8.23	1.00%	[10000]	ug/L

K 766.490 Radial†	54945.0	551.40	1.00%	[10000]	ug/L
Mg 279.077 IEC†	228.7	1.63	0.71%	[10000]	ug/L
Mn 257.610†	1051972.4	3813.18	0.36%	[1000]	ug/L
Mo 202.031†	18761.2	68.25	0.36%	[1000]	ug/L
Na 589.592 Radial†	34911.9	505.37	1.45%	[10000]	ug/L
Ni 231.604†	50913.8	11.78	0.02%	[1000]	ug/L
P 214.914†	11131.8	62.40	0.56%	[5000]	ug/L
Pb 220.353†	10591.7	36.57	0.35%	[1000]	ug/L
S 181.975 Axial†	1851.3	6.30	0.34%	[2000]	ug/L
Sb 206.836†	3785.6	20.63	0.54%	[1000]	ug/L
Se 196.026†	2246.7	8.37	0.37%	[1000]	ug/L
Si 251.611†	196723.4	81.91	0.04%	[5000]	ug/L
Sn 189.927†	7541.2	32.70	0.43%	[1000]	ug/L
Sr 421.552†	190913.8	2680.29	1.40%	[1000]	ug/L
Ti 334.940†	723982.9	3174.58	0.44%	[1000]	ug/L
Tl 190.801†	4120.7	28.24	0.69%	[1000]	ug/L
U 409.014†	38923.2	78.69	0.20%	[1000]	ug/L
V 292.402†	174410.6	207.98	0.12%	[1000]	ug/L
Zn 213.857†	135587.1	222.32	0.16%	[1000]	ug/L
SiO2†	196199.5	1404.82	0.72%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2009 09:28:26
Data Type: Reprocessed on 12/4/2009 11:13:26
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005713.3	1005713.3	96.751	%	09:31:37
1	Sc Radial	4805.0	4805.0	97.9	%	09:30:39
1	Y 371.029	838676.6	838676.6	94.823	%	09:31:37
1	Y RADIAL	5445.6	5445.6	96.43	%	09:30:39
1	Al 396.153Radial†	72853.7	74484.7	[50000]	ug/L	09:30:19
1	Ca 317.933Radial†	27182.8	27757.1	[50000]	ug/L	09:30:19
1	Fe 238.204 Radial†	1632.9	1657.5	[20000]	ug/L	09:30:39
1	Mg 279.077 IEC†	1092.4	1113.7	[50000]	ug/L	09:30:39
1	Na 589.592 Radial†	67977.2	70738.2	[20000]	ug/L	09:30:19
2	Sc 361.383	989632.5	989632.5	95.204	%	09:31:43
2	Sc Radial	4772.5	4772.5	97.2	%	09:31:04
2	Y 371.029	825378.3	825378.3	93.319	%	09:31:43
2	Y RADIAL	5409.4	5409.4	95.79	%	09:31:04
2	Al 396.153Radial†	73928.9	76098.3	[50000]	ug/L	09:30:44
2	Ca 317.933Radial†	27561.1	28335.7	[50000]	ug/L	09:30:44
2	Fe 238.204 Radial†	1620.8	1656.4	[20000]	ug/L	09:31:04
2	Mg 279.077 IEC†	1087.6	1116.3	[50000]	ug/L	09:31:04
2	Na 589.592 Radial†	68530.8	71781.1	[20000]	ug/L	09:30:44
3	Sc 361.383	1001291.2	1001291.2	96.326	%	09:31:49
3	Sc Radial	4807.2	4807.2	97.9	%	09:31:29
3	Y 371.029	834463.9	834463.9	94.346	%	09:31:49
3	Y RADIAL	5441.6	5441.6	96.36	%	09:31:29
3	Al 396.153Radial†	74659.4	76295.4	[50000]	ug/L	09:31:09
3	Ca 317.933Radial†	27942.5	28520.5	[50000]	ug/L	09:31:09
3	Fe 238.204 Radial†	1628.0	1651.7	[20000]	ug/L	09:31:29
3	Mg 279.077 IEC†	1097.6	1118.6	[50000]	ug/L	09:31:29
3	Na 589.592 Radial†	69725.9	72492.8	[20000]	ug/L	09:31:09

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	998879.0	8307.33	0.83%	96.094	%
Sc Radial	4794.9	19.44	0.41%	97.7	%
Y 371.029	832839.6	6796.33	0.82%	94.163	%
Y RADIAL	5432.2	19.83	0.37%	96.19	%
Al 396.153Radial†	75626.1	993.37	1.31%	[50000]	ug/L
Ca 317.933Radial†	28204.5	398.26	1.41%	[50000]	ug/L
Fe 238.204 Radial†	1655.2	3.07	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1116.2	2.44	0.22%	[50000]	ug/L
Na 589.592 Radial†	71670.7	882.51	1.23%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	252.3	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.514	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	3.209	0.00000	0.999961	
B 249.677	3	Lin Thru 0	0.0	52.91	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	155.7	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	3207	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5648	0.00000	0.999983	
Cd 226.502	3	Lin Thru 0	0.0	114.7	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	60.72	0.00000	0.999998	
Cr 267.716	3	Lin Thru 0	0.0	111.3	0.00000	0.999985	
Cu 324.752	3	Lin Thru 0	0.0	374.5	0.00000	0.999978	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0827	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.487	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0223	0.00000	0.999987
Mn 257.610	3	Lin Thru 0	0.0	1056	0.00000	0.999972
Mo 202.031	3	Lin Thru 0	0.0	18.84	0.00000	0.999963
Na 589.592 Radia	2	Lin Thru 0	0.0	3.565	0.00000	0.999946
Ni 231.604	3	Lin Thru 0	0.0	51.04	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	2.236	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	10.65	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.9282	0.00000	0.999978
Sb 206.836	3	Lin Thru 0	0.0	3.793	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	2.257	0.00000	0.999947
Si 251.611	3	Lin Thru 0	0.0	39.38	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	7.561	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	190.6	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	725.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	4.135	0.00000	0.999972
U 409.014	3	Lin Thru 0	0.0	38.68	0.00000	0.999915
V 292.402	3	Lin Thru 0	0.0	174.7	0.00000	0.999993
Zn 213.857	3	Lin Thru 0	0.0	136.1	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	18.40	0.00000	0.999981

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/4/2009 09:34:01
Data Type: Reprocessed on 12/4/2009 11:13:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1020679.3	1020679.3	98.191	%			09:37:11
1	Sc Radial	4886.0	4886.0	99.5	%			09:35:53
1	Y 371.029	860787.1	860787.1	97.323	%			09:37:11
1	Y RADIAL	5597.9	5597.9	99.13	%			09:35:53
1	Ag 328.068†	65474.3	66206.5	265.61	ug/L	265.61	ppb	09:37:11
1	Al 396.153Radial†	7869.8	7951.8	5227.0	ug/L	5227.0	ppb	09:35:53
1	As 188.979†	1511.3	1575.8	495.34	ug/L	495.34	ppb	09:37:31
1	B 249.677†	27018.5	27982.4	526.83	ug/L	526.83	ppb	09:37:11
1	Ba 233.527†	79919.2	81391.6	524.24	ug/L	524.24	ppb	09:37:11
1	Be 313.107†	833349.6	853576.5	267.13	ug/L	267.13	ppb	09:37:11
1	Ca 317.933Radial†	2881.8	2877.9	5095.5	ug/L	5095.5	ppb	09:36:14
1	Cd 226.502†	57432.8	58726.6	511.96	ug/L	511.96	ppb	09:37:11
1	Co 228.616†	30715.1	31367.3	516.98	ug/L	516.98	ppb	09:37:31
1	Cr 267.716†	54880.0	55803.3	502.18	ug/L	502.18	ppb	09:37:11
1	Cu 324.752†	199855.9	194600.4	519.95	ug/L	519.95	ppb	09:37:11
1	Fe 238.204 Radial†	435.0	426.1	5167.8	ug/L	5167.8	ppb	09:36:14
1	K 766.490 Radial†	16223.4	13732.6	2497.5	ug/L	2497.5	ppb	09:35:53
1	Mg 279.077 IEC†	121.7	119.8	5366.7	ug/L	5366.7	ppb	09:36:14
1	Mn 257.610†	545291.2	554760.5	525.74	ug/L	525.74	ppb	09:37:11
1	Mo 202.031†	10278.9	10439.1	554.34	ug/L	554.34	ppb	09:37:31
1	Na 589.592 Radial†	7497.6	8814.0	2472.3	ug/L	2472.3	ppb	09:35:53
1	Ni 231.604†	25836.3	26180.3	512.64	ug/L	512.64	ppb	09:37:31
1	P 214.914†	5977.6	5822.6	2526.4	ug/L	2526.4	ppb	09:37:31
1	Pb 220.353†	5339.5	5513.4	519.26	ug/L	519.26	ppb	09:37:31
1	S 181.975 Axial†	2393.4	2377.4	2560.4	ug/L	2560.4	ppb	09:37:31
1	Sb 206.836†	1943.7	1944.9	522.05	ug/L	522.05	ppb	09:37:31
1	Se 196.026†	5846.2	5975.3	2667.4	ug/L	2667.4	ppb	09:37:31
1	Si 251.611†	190549.4	193502.3	4902.1	ug/L	4902.1	ppb	09:37:11
1	Sn 189.927†	4080.9	4160.4	550.86	ug/L	550.86	ppb	09:37:31
1	Sr 421.552†	99859.6	100351.9	526.44	ug/L	526.44	ppb	09:35:53
1	Ti 334.940†	358884.6	366756.8	505.73	ug/L	505.73	ppb	09:37:11
1	Tl 190.801†	2181.3	2265.7	551.18	ug/L	551.18	ppb	09:37:31
1	U 409.014†	16371.3	19446.9	501.17	ug/L	501.17	ppb	09:37:11
1	V 292.402†	87733.2	90958.1	528.18	ug/L	528.18	ppb	09:37:11
1	Zn 213.857†	70880.3	71300.5	519.36	ug/L	519.36	ppb	09:37:11
1	SiO2†	192858.9	195812.9	10616	ug/L	10616	ppb	09:38:29
2	Sc 361.383	1031832.5	1031832.5	99.264	%			09:37:37
2	Sc Radial	4960.5	4960.5	101	%			09:36:19
2	Y 371.029	870187.5	870187.5	98.385	%			09:37:37
2	Y RADIAL	5662.2	5662.2	100.3	%			09:36:19
2	Ag 328.068†	66102.0	66118.0	265.20	ug/L	265.20	ppb	09:37:37
2	Al 396.153Radial†	7929.8	7892.4	5188.0	ug/L	5188.0	ppb	09:36:19
2	As 188.979†	1516.0	1563.8	491.59	ug/L	491.59	ppb	09:37:57
2	B 249.677†	27383.6	28052.7	528.20	ug/L	528.20	ppb	09:37:37
2	Ba 233.527†	80689.2	81287.5	523.57	ug/L	523.57	ppb	09:37:37
2	Be 313.107†	842855.5	853979.1	267.26	ug/L	267.26	ppb	09:37:37
2	Ca 317.933Radial†	2854.7	2807.7	4971.0	ug/L	4971.0	ppb	09:36:39
2	Cd 226.502†	57977.3	58642.9	511.24	ug/L	511.24	ppb	09:37:37
2	Co 228.616†	30694.3	31008.3	511.05	ug/L	511.05	ppb	09:37:57
2	Cr 267.716†	55414.0	55737.1	501.58	ug/L	501.58	ppb	09:37:37
2	Cu 324.752†	202399.9	194963.2	520.91	ug/L	520.91	ppb	09:37:37
2	Fe 238.204 Radial†	426.2	410.8	4983.3	ug/L	4983.3	ppb	09:36:39
2	K 766.490 Radial†	16455.4	13717.5	2494.7	ug/L	2494.7	ppb	09:36:19
2	Mg 279.077 IEC†	119.5	115.8	5188.7	ug/L	5188.7	ppb	09:36:39
2	Mn 257.610†	550845.1	554352.9	525.34	ug/L	525.34	ppb	09:37:37
2	Mo 202.031†	10303.8	10351.0	549.65	ug/L	549.65	ppb	09:37:57
2	Na 589.592 Radial†	7449.6	8653.3	2427.2	ug/L	2427.2	ppb	09:36:19
2	Ni 231.604†	25842.1	25901.8	507.18	ug/L	507.18	ppb	09:37:57

2	P 214.914†	5988.4	5767.7	2501.7	ug/L	2501.7 ppb	09:37:57
2	Pb 220.353†	5355.2	5470.4	515.22	ug/L	515.22 ppb	09:37:57
2	S 181.975 Axial†	2402.9	2360.7	2542.3	ug/L	2542.3 ppb	09:37:57
2	Sb 206.836†	1957.1	1937.0	519.80	ug/L	519.80 ppb	09:37:57
2	Se 196.026†	5855.1	5919.9	2642.2	ug/L	2642.2 ppb	09:37:57
2	Si 251.611†	192778.3	193650.1	4905.9	ug/L	4905.9 ppb	09:37:37
2	Sn 189.927†	4093.1	4127.7	546.52	ug/L	546.52 ppb	09:37:57
2	Sr 421.552†	101248.6	100219.7	525.75	ug/L	525.75 ppb	09:36:19
2	Ti 334.940†	363283.8	367237.9	506.38	ug/L	506.38 ppb	09:37:37
2	Tl 190.801†	2165.5	2225.8	541.56	ug/L	541.56 ppb	09:37:57
2	U 409.014†	16600.4	19497.5	502.50	ug/L	502.50 ppb	09:37:37
2	V 292.402†	88606.5	90872.0	527.65	ug/L	527.65 ppb	09:37:37
2	Zn 213.857†	71619.6	71265.1	519.16	ug/L	519.16 ppb	09:37:37
2	SiO2†	191988.9	192813.4	10453	ug/L	10453 ppb	09:38:34
3	Sc 361.383	1021741.5	1021741.5	98.293	%		09:38:03
3	Sc Radial	4901.3	4901.3	99.8	%		09:36:44
3	Y 371.029	861618.1	861618.1	97.417	%		09:38:03
3	Y RADIAL	5579.0	5579.0	98.79	%		09:36:44
3	Ag 328.068†	65509.0	66172.5	265.44	ug/L	265.44 ppb	09:38:03
3	Al 396.153Radial†	7889.6	7946.9	5223.6	ug/L	5223.6 ppb	09:36:44
3	As 188.979†	1529.2	1592.4	500.49	ug/L	500.49 ppb	09:38:23
3	B 249.677†	27057.1	27993.0	527.04	ug/L	527.04 ppb	09:38:03
3	Ba 233.527†	80075.2	81465.7	524.71	ug/L	524.71 ppb	09:38:03
3	Be 313.107†	835223.5	854600.6	267.45	ug/L	267.45 ppb	09:38:03
3	Ca 317.933Radial†	2861.4	2848.5	5043.3	ug/L	5043.3 ppb	09:37:04
3	Cd 226.502†	57531.8	58766.4	512.32	ug/L	512.32 ppb	09:38:03
3	Co 228.616†	30898.6	31521.5	519.52	ug/L	519.52 ppb	09:38:23
3	Cr 267.716†	55016.9	55884.5	502.91	ug/L	502.91 ppb	09:38:03
3	Cu 324.752†	200502.5	195046.6	521.13	ug/L	521.13 ppb	09:38:03
3	Fe 238.204 Radial†	426.1	415.8	5043.4	ug/L	5043.4 ppb	09:37:04
3	K 766.490 Radial†	16338.4	13796.8	2509.2	ug/L	2509.2 ppb	09:36:44
3	Mg 279.077 IEC†	119.3	117.0	5243.8	ug/L	5243.8 ppb	09:37:04
3	Mn 257.610†	546298.7	555208.1	526.16	ug/L	526.16 ppb	09:38:03
3	Mo 202.031†	10352.4	10502.9	557.72	ug/L	557.72 ppb	09:38:23
3	Na 589.592 Radial†	7425.1	8717.7	2445.3	ug/L	2445.3 ppb	09:36:44
3	Ni 231.604†	25997.0	26316.5	515.30	ug/L	515.30 ppb	09:38:23
3	P 214.914†	6008.5	5847.7	2537.6	ug/L	2537.6 ppb	09:38:23
3	Pb 220.353†	5359.7	5528.3	520.68	ug/L	520.68 ppb	09:38:23
3	S 181.975 Axial†	2406.9	2388.6	2572.4	ug/L	2572.4 ppb	09:38:23
3	Sb 206.836†	1960.6	1960.0	526.17	ug/L	526.17 ppb	09:38:23
3	Se 196.026†	5889.5	6013.2	2683.8	ug/L	2683.8 ppb	09:38:23
3	Si 251.611†	190950.4	193708.5	4907.3	ug/L	4907.3 ppb	09:38:03
3	Sn 189.927†	4119.4	4195.2	555.45	ug/L	555.45 ppb	09:38:23
3	Sr 421.552†	100366.6	100545.4	527.46	ug/L	527.46 ppb	09:36:44
3	Ti 334.940†	359943.5	367454.2	506.68	ug/L	506.68 ppb	09:38:03
3	Tl 190.801†	2181.4	2263.5	550.65	ug/L	550.65 ppb	09:38:23
3	U 409.014†	16348.7	19406.6	500.14	ug/L	500.14 ppb	09:38:03
3	V 292.402†	87843.6	90977.5	528.35	ug/L	528.35 ppb	09:38:03
3	Zn 213.857†	70902.1	71247.7	518.97	ug/L	518.97 ppb	09:38:03
3	SiO2†	192053.3	194789.2	10560	ug/L	10560 ppb	09:38:39

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024751.1	98.583	%	0.5922				0.60%
Sc Radial	4915.9	100	%	0.8				0.80%
Y 371.029	864197.6	97.708	%	0.5884				0.60%
Y RADIAL	5613.0	99.40	%	0.772				0.78%
Ag 328.068†	66165.7	265.42	ug/L	0.206	265.42	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 106.17%								
Al 396.153Radial†	7930.4	5212.9	ug/L	21.62	5212.9	ppb	21.62	0.41%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1577.3	495.80	ug/L	4.469	495.80	ppb	4.469	0.90%
QC value within limits for As 188.979 Recovery = 99.16%								
B 249.677†	28009.4	527.36	ug/L	0.737	527.36	ppb	0.737	0.14%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	81381.6	524.17	ug/L	0.577	524.17	ppb	0.577	0.11%
QC value within limits for Ba 233.527 Recovery = 104.83%								
Be 313.107†	854052.1	267.28	ug/L	0.162	267.28	ppb	0.162	0.06%
QC value within limits for Be 313.107 Recovery = 106.91%								

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Ca 317.933Radial†        2844.7      5036.6 ug/L        62.48      5036.6 ppb        62.48   1.24%
   QC value within limits for Ca 317.933Radial  Recovery = 100.73%
Cd 226.502†             58712.0      511.84 ug/L        0.548      511.84 ppb        0.548   0.11%
   QC value within limits for Cd 226.502  Recovery = 102.37%
Co 228.616†             31299.0      515.85 ug/L        4.347      515.85 ppb        4.347   0.84%
   QC value within limits for Co 228.616  Recovery = 103.17%
Cr 267.716†             55808.3      502.22 ug/L        0.664      502.22 ppb        0.664   0.13%
   QC value within limits for Cr 267.716  Recovery = 100.44%
Cu 324.752†            194870.1      520.66 ug/L        0.629      520.66 ppb        0.629   0.12%
   QC value within limits for Cu 324.752  Recovery = 104.13%
Fe 238.204 Radial†        417.6      5064.8 ug/L        94.14      5064.8 ppb        94.14   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.30%
K 766.490 Radial†       13749.0      2500.5 ug/L         7.68      2500.5 ppb         7.68   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.02%
Mg 279.077 IEC†           117.5      5266.4 ug/L        91.10      5266.4 ppb        91.10   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†            554773.8      525.75 ug/L        0.407      525.75 ppb        0.407   0.08%
   QC value within limits for Mn 257.610  Recovery = 105.15%
Mo 202.031†             10431.0      553.90 ug/L        4.052      553.90 ppb        4.052   0.73%
   QC value greater than the upper limit for Mo 202.031  Recovery = 110.78%
Na 589.592 Radial†       8728.4      2448.3 ug/L        22.68      2448.3 ppb        22.68   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 97.93%
Ni 231.604†             26132.9      511.71 ug/L        4.139      511.71 ppb        4.139   0.81%
   QC value within limits for Ni 231.604  Recovery = 102.34%
P 214.914†               5812.7      2521.9 ug/L        18.35      2521.9 ppb        18.35   0.73%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              5504.1      518.39 ug/L        2.831      518.39 ppb        2.831   0.55%
   QC value within limits for Pb 220.353  Recovery = 103.68%
S 181.975 Axial†         2375.5      2558.4 ug/L        15.13      2558.4 ppb        15.13   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†              1947.3      522.68 ug/L        3.231      522.68 ppb        3.231   0.62%
   QC value within limits for Sb 206.836  Recovery = 104.54%
Se 196.026†              5969.5      2664.5 ug/L        20.95      2664.5 ppb        20.95   0.79%
   QC value within limits for Se 196.026  Recovery = 106.58%
Si 251.611†            193620.3      4905.1 ug/L         2.68      4905.1 ppb         2.68   0.05%
   QC value within limits for Si 251.611  Recovery = 98.10%
Sn 189.927†              4161.1      550.94 ug/L        4.468      550.94 ppb        4.468   0.81%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.19%
Sr 421.552†            100372.3      526.55 ug/L        0.859      526.55 ppb        0.859   0.16%
   QC value within limits for Sr 421.552  Recovery = 105.31%
Ti 334.940†            367149.6      506.26 ug/L        0.490      506.26 ppb        0.490   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.25%
Tl 190.801†              2251.7      547.80 ug/L        5.406      547.80 ppb        5.406   0.99%
   QC value within limits for Tl 190.801  Recovery = 109.56%
U 409.014†              19450.3      501.27 ug/L        1.183      501.27 ppb        1.183   0.24%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†              90935.8      528.06 ug/L        0.368      528.06 ppb        0.368   0.07%
   QC value within limits for V 292.402  Recovery = 105.61%
Zn 213.857†             71271.1      519.16 ug/L        0.195      519.16 ppb        0.195   0.04%
   QC value within limits for Zn 213.857  Recovery = 103.83%
SiO2†                  194471.8       10543 ug/L         82.7       10543 ppb         82.7   0.78%
   QC value within limits for SiO2  Recovery = 98.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/4/2009 09:41:05
Data Type: Reprocessed on 12/4/2009 11:13:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047230.4	1047230.4	100.75	%			09:44:15
1	Sc Radial	4853.9	4853.9	98.9	%			09:42:58
1	Y 371.029	890866.8	890866.8	100.72	%			09:44:15
1	Y RADIAL	5565.2	5565.2	98.55	%			09:42:58
1	Ag 328.068†	474.8	-2.7	-0.0170	ug/L	-0.0170	ppb	09:44:20
1	Al 396.153Radial†	-49.7	-6.5	-4.2598	ug/L	-4.2598	ppb	09:42:58
1	As 188.979†	-44.6	-7.7	-2.3901	ug/L	-2.3901	ppb	09:44:40
1	B 249.677†	-326.5	142.0	2.6875	ug/L	2.6875	ppb	09:44:20
1	Ba 233.527†	17.3	17.2	0.1084	ug/L	0.1084	ppb	09:44:40
1	Be 313.107†	-4849.5	60.3	0.0187	ug/L	0.0187	ppb	09:44:20
1	Ca 317.933Radial†	26.0	8.4	14.905	ug/L	14.905	ppb	09:43:18
1	Cd 226.502†	-211.5	25.7	0.2270	ug/L	0.2270	ppb	09:44:40
1	Co 228.616†	-87.2	-0.2	-0.0030	ug/L	-0.0030	ppb	09:44:40
1	Cr 267.716†	84.9	-3.5	-0.0309	ug/L	-0.0309	ppb	09:44:40
1	Cu 324.752†	8963.4	-40.4	-0.1091	ug/L	-0.1091	ppb	09:44:20
1	Fe 238.204 Radial†	8.9	-2.0	-24.343	ug/L	-24.343	ppb	09:43:18
1	K 766.490 Radial†	2777.8	240.2	43.781	ug/L	43.781	ppb	09:42:58
1	Mg 279.077 IEC†	3.3	0.9	39.815	ug/L	39.815	ppb	09:43:18
1	Mn 257.610†	607.0	25.8	0.0213	ug/L	0.0213	ppb	09:44:40
1	Mo 202.031†	27.2	-2.3	-0.1221	ug/L	-0.1221	ppb	09:44:40
1	Na 589.592 Radial†	-1263.5	1.9	0.5447	ug/L	0.5447	ppb	09:42:58
1	Ni 231.604†	133.7	0.8	0.0147	ug/L	0.0147	ppb	09:44:40
1	P 214.914†	268.3	1.2	0.5729	ug/L	0.5729	ppb	09:44:40
1	Pb 220.353†	-76.1	0.0	0.0051	ug/L	0.0051	ppb	09:44:40
1	S 181.975 Axial†	56.8	-3.8	-4.0538	ug/L	-4.0538	ppb	09:44:40
1	Sb 206.836†	44.9	10.0	2.6318	ug/L	2.6318	ppb	09:44:40
1	Se 196.026†	-21.9	-0.4	-0.2677	ug/L	-0.2677	ppb	09:44:40
1	Si 251.611†	583.9	21.9	0.5423	ug/L	0.5423	ppb	09:44:40
1	Sn 189.927†	-0.5	3.8	0.5040	ug/L	0.5040	ppb	09:44:40
1	Sr 421.552†	-6.7	0.7	0.0034	ug/L	0.0034	ppb	09:42:58
1	Ti 334.940†	-1295.8	-25.8	-0.0329	ug/L	-0.0329	ppb	09:44:20
1	Tl 190.801†	-45.5	-0.9	-0.2109	ug/L	-0.2109	ppb	09:44:40
1	U 409.014†	-2956.3	-160.5	-4.1455	ug/L	-4.1455	ppb	09:44:15
1	V 292.402†	-1697.2	-76.2	-0.4412	ug/L	-0.4412	ppb	09:44:20
1	Zn 213.857†	885.8	-6.3	-0.0453	ug/L	-0.0453	ppb	09:44:40
1	SiO2†	647.9	44.0	2.3622	ug/L	2.3622	ppb	09:45:46
2	Sc 361.383	1037310.7	1037310.7	99.791	%			09:44:45
2	Sc Radial	4933.1	4933.1	100	%			09:43:23
2	Y 371.029	883752.4	883752.4	99.919	%			09:44:45
2	Y RADIAL	5661.9	5661.9	100.3	%			09:43:23
2	Ag 328.068†	514.7	41.7	0.1739	ug/L	0.1739	ppb	09:44:51
2	Al 396.153Radial†	-34.3	9.7	6.3593	ug/L	6.3593	ppb	09:43:23
2	As 188.979†	-37.5	-1.0	-0.3091	ug/L	-0.3091	ppb	09:45:11
2	B 249.677†	-276.2	189.3	3.5756	ug/L	3.5756	ppb	09:44:51
2	Ba 233.527†	9.5	9.5	0.0614	ug/L	0.0614	ppb	09:45:11
2	Be 313.107†	-4755.9	108.0	0.0334	ug/L	0.0334	ppb	09:44:51
2	Ca 317.933Radial†	19.9	2.0	3.5251	ug/L	3.5251	ppb	09:43:43
2	Cd 226.502†	-226.5	8.6	0.0737	ug/L	0.0737	ppb	09:45:11
2	Co 228.616†	-86.3	-0.1	-0.0002	ug/L	-0.0002	ppb	09:45:11
2	Cr 267.716†	97.9	10.4	0.0944	ug/L	0.0944	ppb	09:45:11
2	Cu 324.752†	8853.3	-65.6	-0.1743	ug/L	-0.1743	ppb	09:44:51
2	Fe 238.204 Radial†	12.6	1.6	18.965	ug/L	18.965	ppb	09:43:43
2	K 766.490 Radial†	2772.7	190.0	34.639	ug/L	34.639	ppb	09:43:23
2	Mg 279.077 IEC†	5.0	2.5	110.39	ug/L	110.39	ppb	09:43:43
2	Mn 257.610†	615.7	40.3	0.0380	ug/L	0.0380	ppb	09:45:11
2	Mo 202.031†	41.1	11.9	0.6351	ug/L	0.6351	ppb	09:45:11
2	Na 589.592 Radial†	-1309.5	-23.3	-6.5374	ug/L	-6.5374	ppb	09:43:23
2	Ni 231.604†	144.3	12.7	0.2482	ug/L	0.2482	ppb	09:45:11

2	P 214.914†	263.9	-0.6	-0.2573	ug/L	-0.2573 ppb	09:45:11
2	Pb 220.353†	-83.8	-8.4	-0.7874	ug/L	-0.7874 ppb	09:45:11
2	S 181.975 Axial†	51.4	-8.6	-9.2858	ug/L	-9.2858 ppb	09:45:11
2	Sb 206.836†	38.9	4.4	1.1828	ug/L	1.1828 ppb	09:45:11
2	Se 196.026†	-23.3	-2.0	-0.8035	ug/L	-0.8035 ppb	09:45:11
2	Si 251.611†	589.5	33.1	0.8137	ug/L	0.8137 ppb	09:45:11
2	Sn 189.927†	3.7	8.0	1.0619	ug/L	1.0619 ppb	09:45:11
2	Sr 421.552†	-10.8	-3.4	-0.0177	ug/L	-0.0177 ppb	09:43:23
2	Ti 334.940†	-1362.6	-105.0	-0.1430	ug/L	-0.1430 ppb	09:44:51
2	Tl 190.801†	-51.5	-7.3	-1.7693	ug/L	-1.7693 ppb	09:45:11
2	U 409.014†	-2915.0	-147.1	-3.8067	ug/L	-3.8067 ppb	09:44:45
2	V 292.402†	-1640.1	-35.1	-0.1993	ug/L	-0.1993 ppb	09:44:51
2	Zn 213.857†	882.1	-1.7	-0.0191	ug/L	-0.0191 ppb	09:45:11
2	SiO2†	598.0	0.2	-0.0448	ug/L	-0.0448 ppb	09:45:51
3	Sc 361.383	1045968.8	1045968.8	100.62	%		09:45:16
3	Sc Radial	4809.8	4809.8	98.0	%		09:43:49
3	Y 371.029	891134.4	891134.4	100.75	%		09:45:16
3	Y RADIAL	5494.0	5494.0	97.29	%		09:43:49
3	Ag 328.068†	463.8	-13.1	-0.0441	ug/L	-0.0441 ppb	09:45:21
3	Al 396.153Radial†	-25.5	17.8	11.723	ug/L	11.723 ppb	09:43:49
3	As 188.979†	-45.4	-8.5	-2.6610	ug/L	-2.6610 ppb	09:45:41
3	B 249.677†	-318.8	149.3	2.8180	ug/L	2.8180 ppb	09:45:21
3	Ba 233.527†	15.4	15.4	0.0992	ug/L	0.0992 ppb	09:45:41
3	Be 313.107†	-4751.7	151.7	0.0472	ug/L	0.0472 ppb	09:45:21
3	Ca 317.933Radial†	20.7	3.2	5.7457	ug/L	5.7457 ppb	09:44:09
3	Cd 226.502†	-232.9	4.2	0.0343	ug/L	0.0343 ppb	09:45:41
3	Co 228.616†	-79.8	7.0	0.1153	ug/L	0.1153 ppb	09:45:41
3	Cr 267.716†	100.1	11.7	0.1058	ug/L	0.1058 ppb	09:45:41
3	Cu 324.752†	8964.1	-29.0	-0.0762	ug/L	-0.0762 ppb	09:45:21
3	Fe 238.204 Radial†	12.8	2.1	24.825	ug/L	24.825 ppb	09:44:09
3	K 766.490 Radial†	2781.1	269.4	49.115	ug/L	49.115 ppb	09:43:49
3	Mg 279.077 IEC†	1.8	-0.7	-31.478	ug/L	-31.478 ppb	09:44:09
3	Mn 257.610†	612.6	32.1	0.0335	ug/L	0.0335 ppb	09:45:41
3	Mo 202.031†	34.6	5.2	0.2760	ug/L	0.2760 ppb	09:45:41
3	Na 589.592 Radial†	-1289.7	-36.6	-10.264	ug/L	-10.264 ppb	09:43:49
3	Ni 231.604†	148.9	16.1	0.3146	ug/L	0.3146 ppb	09:45:41
3	P 214.914†	270.1	3.3	1.4869	ug/L	1.4869 ppb	09:45:41
3	Pb 220.353†	-83.7	-7.6	-0.7168	ug/L	-0.7168 ppb	09:45:41
3	S 181.975 Axial†	57.6	-2.8	-3.0676	ug/L	-3.0676 ppb	09:45:41
3	Sb 206.836†	44.2	9.3	2.4895	ug/L	2.4895 ppb	09:45:41
3	Se 196.026†	-28.8	-7.2	-3.1168	ug/L	-3.1168 ppb	09:45:41
3	Si 251.611†	578.7	17.5	0.4177	ug/L	0.4177 ppb	09:45:41
3	Sn 189.927†	9.4	13.7	1.8090	ug/L	1.8090 ppb	09:45:41
3	Sr 421.552†	4.4	11.9	0.0625	ug/L	0.0625 ppb	09:43:49
3	Ti 334.940†	-1293.2	-24.8	-0.0335	ug/L	-0.0335 ppb	09:45:21
3	Tl 190.801†	-43.3	1.2	0.2911	ug/L	0.2911 ppb	09:45:41
3	U 409.014†	-2825.6	-34.1	-0.8862	ug/L	-0.8862 ppb	09:45:16
3	V 292.402†	-1655.5	-36.7	-0.2122	ug/L	-0.2122 ppb	09:45:21
3	Zn 213.857†	881.1	-9.9	-0.0761	ug/L	-0.0761 ppb	09:45:41
3	SiO2†	603.9	1.1	0.0033	ug/L	0.0033 ppb	09:45:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1043503.3	100.39	%	0.519				0.52%
Sc Radial	4865.6	99.1	%	1.27				1.28%
Y 371.029	888584.5	100.47	%	0.473				0.47%
Y RADIAL	5573.7	98.70	%	1.492				1.51%
Ag 328.068†	8.6	0.0376	ug/L	0.11880	0.0376	ppb	0.11880	316.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6074	ug/L	8.13399	4.6074	ppb	8.13399	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-1.7867	ug/L	1.28680	-1.7867	ppb	1.28680	72.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.2	3.0270	ug/L	0.47955	3.0270	ppb	0.47955	15.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.0	0.0897	ug/L	0.02492	0.0897	ppb	0.02492	27.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.7	0.0331	ug/L	0.01426	0.0331	ppb	0.01426	43.07%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          4.6      8.0585 ug/L       6.03201      8.0585 ppb        6.03201  74.85%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               12.9      0.1117 ug/L       0.10177      0.1117 ppb        0.10177  91.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.2      0.0373 ug/L       0.06750      0.0373 ppb        0.06750 180.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                6.2      0.0564 ug/L       0.07586      0.0564 ppb        0.07586 134.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -45.0     -0.1199 ug/L       0.04991     -0.1199 ppb        0.04991  41.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      6.4821 ug/L      26.85589      6.4821 ppb       26.85589 414.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        233.2     42.512 ug/L        7.3213     42.512 ppb         7.3213  17.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.9     39.576 ug/L       70.9349     39.576 ppb        70.9349 179.24%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.7      0.0309 ug/L       0.00862      0.0309 ppb        0.00862  27.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.9      0.2630 ug/L       0.37878      0.2630 ppb        0.37878 144.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -19.3     -5.4189 ug/L       5.49051     -5.4189 ppb        5.49051 101.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.8      0.1925 ug/L       0.15752      0.1925 ppb        0.15752  81.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.3      0.6008 ug/L       0.87245      0.6008 ppb        0.87245 145.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -5.3     -0.4997 ug/L       0.43857     -0.4997 ppb        0.43857  87.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.1     -5.4691 ug/L       3.34200     -5.4691 ppb        3.34200  61.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.9      2.1013 ug/L       0.79866      2.1013 ppb        0.79866  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.2     -1.3960 ug/L       1.51416     -1.3960 ppb        1.51416 108.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.2      0.5912 ug/L       0.20247      0.5912 ppb        0.20247  34.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.5      1.1250 ug/L       0.65479      1.1250 ppb        0.65479  58.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.1      0.0161 ug/L       0.04159      0.0161 ppb        0.04159 258.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -51.8     -0.0698 ug/L       0.06336     -0.0698 ppb        0.06336  90.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.3     -0.5631 ug/L       1.07436     -0.5631 ppb        1.07436 190.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -113.9     -2.9461 ug/L       1.79199     -2.9461 ppb        1.79199  60.83%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -49.3     -0.2842 ug/L       0.13605     -0.2842 ppb        0.13605  47.86%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.0     -0.0468 ug/L       0.02852     -0.0468 ppb        0.02852  60.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.1      0.7736 ug/L       1.37601      0.7736 ppb        1.37601 177.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2009 09:48:07
Data Type: Reprocessed on 12/4/2009 11:13:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1031241.9	1031241.9	99.207	%			09:51:17
1	Sc Radial	4958.4	4958.4	101	%			09:50:01
1	Y 371.029	877279.4	877279.4	99.187	%			09:51:17
1	Y RADIAL	5696.5	5696.5	100.9	%			09:50:01
1	Ag 328.068†	1698.0	1237.5	4.9125	ug/L	4.9125	ppb	09:51:22
1	Al 396.153Radial†	245.4	286.7	188.89	ug/L	188.89	ppb	09:50:01
1	As 188.979†	54.3	91.3	28.481	ug/L	28.481	ppb	09:51:42
1	B 249.677†	2302.2	2786.7	52.637	ug/L	52.637	ppb	09:51:22
1	Ba 233.527†	804.2	810.6	5.2227	ug/L	5.2227	ppb	09:51:42
1	Be 313.107†	11333.8	16298.3	5.0916	ug/L	5.0916	ppb	09:51:22
1	Ca 317.933Radial†	131.0	111.9	198.07	ug/L	198.07	ppb	09:50:21
1	Cd 226.502†	349.2	587.6	5.1165	ug/L	5.1165	ppb	09:51:42
1	Co 228.616†	218.1	306.2	5.0579	ug/L	5.0579	ppb	09:51:42
1	Cr 267.716†	663.6	581.2	5.2148	ug/L	5.2148	ppb	09:51:42
1	Cu 324.752†	12994.7	4161.1	11.118	ug/L	11.118	ppb	09:51:22
1	Fe 238.204 Radial†	20.5	9.3	113.08	ug/L	113.08	ppb	09:50:21
1	K 766.490 Radial†	3353.1	750.6	136.58	ug/L	136.58	ppb	09:50:01
1	Mg 279.077 IEC†	10.7	8.0	360.23	ug/L	360.23	ppb	09:50:21
1	Mn 257.610†	11794.6	11312.1	10.717	ug/L	10.717	ppb	09:51:22
1	Mo 202.031†	222.9	195.4	10.379	ug/L	10.379	ppb	09:51:42
1	Na 589.592 Radial†	-196.6	1085.3	304.42	ug/L	304.42	ppb	09:50:01
1	Ni 231.604†	409.4	280.7	5.4968	ug/L	5.4968	ppb	09:51:42
1	P 214.914†	602.9	342.6	151.58	ug/L	151.58	ppb	09:51:42
1	Pb 220.353†	7.5	83.1	7.8526	ug/L	7.8526	ppb	09:51:42
1	S 181.975 Axial†	153.9	95.0	102.31	ug/L	102.31	ppb	09:51:42
1	Sb 206.836†	78.3	44.3	11.959	ug/L	11.959	ppb	09:51:42
1	Se 196.026†	41.7	63.4	28.519	ug/L	28.519	ppb	09:51:42
1	Si 251.611†	4633.4	4112.8	104.19	ug/L	104.19	ppb	09:51:22
1	Sn 189.927†	76.8	81.8	10.841	ug/L	10.841	ppb	09:51:42
1	Sr 421.552†	937.4	935.6	4.9069	ug/L	4.9069	ppb	09:50:01
1	Ti 334.940†	2391.8	3671.3	5.0492	ug/L	5.0492	ppb	09:51:22
1	Tl 190.801†	40.1	84.7	20.542	ug/L	20.542	ppb	09:51:42
1	U 409.014†	-748.1	2019.9	52.198	ug/L	52.198	ppb	09:51:17
1	V 292.402†	-768.1	834.3	5.0089	ug/L	5.0089	ppb	09:51:22
1	Zn 213.857†	2281.6	1414.2	10.321	ug/L	10.321	ppb	09:51:42
1	SiO2†	4588.3	4026.0	218.24	ug/L	218.24	ppb	09:52:48
2	Sc 361.383	1042018.4	1042018.4	100.24	%			09:51:48
2	Sc Radial	4839.2	4839.2	98.6	%			09:50:26
2	Y 371.029	887771.2	887771.2	100.37	%			09:51:48
2	Y RADIAL	5554.2	5554.2	98.35	%			09:50:26
2	Ag 328.068†	1697.4	1219.2	4.8287	ug/L	4.8287	ppb	09:51:53
2	Al 396.153Radial†	290.2	338.2	222.90	ug/L	222.90	ppb	09:50:26
2	As 188.979†	60.0	96.4	30.060	ug/L	30.060	ppb	09:52:13
2	B 249.677†	2245.2	2705.8	51.115	ug/L	51.115	ppb	09:51:53
2	Ba 233.527†	789.2	787.3	5.0711	ug/L	5.0711	ppb	09:52:13
2	Be 313.107†	11152.5	15999.3	4.9980	ug/L	4.9980	ppb	09:51:53
2	Ca 317.933Radial†	130.4	114.4	202.59	ug/L	202.59	ppb	09:50:46
2	Cd 226.502†	345.2	580.1	5.0555	ug/L	5.0555	ppb	09:52:13
2	Co 228.616†	213.6	299.4	4.9461	ug/L	4.9461	ppb	09:52:13
2	Cr 267.716†	648.1	558.7	5.0138	ug/L	5.0138	ppb	09:52:13
2	Cu 324.752†	12770.5	3802.0	10.157	ug/L	10.157	ppb	09:51:53
2	Fe 238.204 Radial†	16.2	5.4	65.714	ug/L	65.714	ppb	09:50:46
2	K 766.490 Radial†	3394.0	874.0	159.07	ug/L	159.07	ppb	09:50:26
2	Mg 279.077 IEC†	8.8	6.4	288.61	ug/L	288.61	ppb	09:50:46
2	Mn 257.610†	11571.5	10966.6	10.386	ug/L	10.386	ppb	09:51:53
2	Mo 202.031†	212.4	182.7	9.6975	ug/L	9.6975	ppb	09:52:13
2	Na 589.592 Radial†	-243.2	1033.2	289.83	ug/L	289.83	ppb	09:50:26
2	Ni 231.604†	411.0	278.0	5.4442	ug/L	5.4442	ppb	09:52:13

2	P 214.914†	594.5	328.0	145.23	ug/L	145.23 ppb	09:52:13
2	Pb 220.353†	23.3	98.8	9.3387	ug/L	9.3387 ppb	09:52:13
2	S 181.975 Axial†	142.2	81.7	88.017	ug/L	88.017 ppb	09:52:13
2	Sb 206.836†	76.1	41.3	11.160	ug/L	11.160 ppb	09:52:13
2	Se 196.026†	39.7	61.0	27.294	ug/L	27.294 ppb	09:52:13
2	Si 251.611†	4589.1	4020.3	101.85	ug/L	101.85 ppb	09:51:53
2	Sn 189.927†	74.9	79.1	10.483	ug/L	10.483 ppb	09:52:13
2	Sr 421.552†	925.6	946.6	4.9642	ug/L	4.9642 ppb	09:50:26
2	Ti 334.940†	2260.1	3515.1	4.8361	ug/L	4.8361 ppb	09:51:53
2	Tl 190.801†	38.0	82.2	19.945	ug/L	19.945 ppb	09:52:13
2	U 409.014†	-939.6	1836.6	47.466	ug/L	47.466 ppb	09:51:48
2	V 292.402†	-777.5	832.9	4.9882	ug/L	4.9882 ppb	09:51:53
2	Zn 213.857†	2273.7	1382.6	10.097	ug/L	10.097 ppb	09:52:13
2	SiO2†	4599.7	3989.4	216.27	ug/L	216.27 ppb	09:52:54
3	Sc 361.383	1026092.4	1026092.4	98.712	%		09:52:18
3	Sc Radial	4852.1	4852.1	98.8	%		09:50:51
3	Y 371.029	874548.6	874548.6	98.878	%		09:52:18
3	Y RADIAL	5596.1	5596.1	99.10	%		09:50:51
3	Ag 328.068†	1769.3	1318.3	5.2183	ug/L	5.2183 ppb	09:52:23
3	Al 396.153Radial†	266.0	312.9	206.16	ug/L	206.16 ppb	09:50:51
3	As 188.979†	56.3	93.6	29.185	ug/L	29.185 ppb	09:52:43
3	B 249.677†	2245.1	2740.5	51.770	ug/L	51.770 ppb	09:52:23
3	Ba 233.527†	813.5	824.2	5.3077	ug/L	5.3077 ppb	09:52:43
3	Be 313.107†	11253.6	16274.4	5.0838	ug/L	5.0838 ppb	09:52:23
3	Ca 317.933Radial†	134.7	118.4	209.66	ug/L	209.66 ppb	09:51:11
3	Cd 226.502†	344.0	584.1	5.0913	ug/L	5.0913 ppb	09:52:43
3	Co 228.616†	219.6	308.8	5.1038	ug/L	5.1038 ppb	09:52:43
3	Cr 267.716†	644.0	564.6	5.0662	ug/L	5.0662 ppb	09:52:43
3	Cu 324.752†	12759.5	3988.5	10.654	ug/L	10.654 ppb	09:52:23
3	Fe 238.204 Radial†	15.8	5.0	60.396	ug/L	60.396 ppb	09:51:11
3	K 766.490 Radial†	3570.7	1043.5	189.98	ug/L	189.98 ppb	09:50:51
3	Mg 279.077 IEC†	9.8	7.4	331.24	ug/L	331.24 ppb	09:51:11
3	Mn 257.610†	11543.2	11117.1	10.527	ug/L	10.527 ppb	09:52:23
3	Mo 202.031†	235.4	209.2	11.109	ug/L	11.109 ppb	09:52:43
3	Na 589.592 Radial†	-271.8	1004.9	281.89	ug/L	281.89 ppb	09:50:51
3	Ni 231.604†	399.4	272.6	5.3387	ug/L	5.3387 ppb	09:52:43
3	P 214.914†	600.7	343.4	152.08	ug/L	152.08 ppb	09:52:43
3	Pb 220.353†	31.0	106.9	10.097	ug/L	10.097 ppb	09:52:43
3	S 181.975 Axial†	149.8	91.7	98.743	ug/L	98.743 ppb	09:52:43
3	Sb 206.836†	79.1	45.5	12.303	ug/L	12.303 ppb	09:52:43
3	Se 196.026†	50.5	72.6	32.402	ug/L	32.402 ppb	09:52:43
3	Si 251.611†	4543.7	4045.4	102.45	ug/L	102.45 ppb	09:52:23
3	Sn 189.927†	73.7	79.0	10.476	ug/L	10.476 ppb	09:52:43
3	Sr 421.552†	909.8	928.0	4.8669	ug/L	4.8669 ppb	09:50:51
3	Ti 334.940†	2247.7	3537.5	4.8664	ug/L	4.8664 ppb	09:52:23
3	Tl 190.801†	34.5	79.2	19.232	ug/L	19.232 ppb	09:52:43
3	U 409.014†	-842.3	1920.7	49.640	ug/L	49.640 ppb	09:52:18
3	V 292.402†	-758.8	839.8	5.0539	ug/L	5.0539 ppb	09:52:23
3	Zn 213.857†	2285.3	1429.6	10.441	ug/L	10.441 ppb	09:52:43
3	SiO2†	4599.6	4060.6	220.06	ug/L	220.06 ppb	09:52:59

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1033117.6	99.388	%	0.7818				0.79%
Sc Radial	4883.2	99.5	%	1.33				1.34%
Y 371.029	879866.4	99.480	%	0.7892				0.79%
Y RADIAL	5615.6	99.44	%	1.295				1.30%
Ag 328.068†	1258.3	4.9865	ug/L	0.20508	4.9865	ppb	0.20508	4.11%
QC value within limits for Ag 328.068 Recovery = 99.73%								
Al 396.153Radial†	312.6	205.98	ug/L	17.001	205.98	ppb	17.001	8.25%
QC value within limits for Al 396.153Radial Recovery = 102.99%								
As 188.979†	93.8	29.242	ug/L	0.7910	29.242	ppb	0.7910	2.70%
QC value within limits for As 188.979 Recovery = 97.47%								
B 249.677†	2744.3	51.841	ug/L	0.7635	51.841	ppb	0.7635	1.47%
QC value within limits for B 249.677 Recovery = 103.68%								
Ba 233.527†	807.4	5.2005	ug/L	0.11985	5.2005	ppb	0.11985	2.30%
QC value within limits for Ba 233.527 Recovery = 104.01%								
Be 313.107†	16190.7	5.0578	ug/L	0.05196	5.0578	ppb	0.05196	1.03%
QC value within limits for Be 313.107 Recovery = 101.16%								

Ca 317.933Radial†	114.9	203.44 ug/L	5.843	203.44 ppb	5.843	2.87%
QC value within limits for Ca 317.933Radial Recovery = 101.72%						
Cd 226.502†	583.9	5.0878 ug/L	0.03067	5.0878 ppb	0.03067	0.60%
QC value within limits for Cd 226.502 Recovery = 101.76%						
Co 228.616†	304.8	5.0359 ug/L	0.08115	5.0359 ppb	0.08115	1.61%
QC value within limits for Co 228.616 Recovery = 100.72%						
Cr 267.716†	568.2	5.0983 ug/L	0.10423	5.0983 ppb	0.10423	2.04%
QC value within limits for Cr 267.716 Recovery = 101.97%						
Cu 324.752†	3983.8	10.643 ug/L	0.4808	10.643 ppb	0.4808	4.52%
QC value within limits for Cu 324.752 Recovery = 106.43%						
Fe 238.204 Radial†	6.6	79.730 ug/L	29.0033	79.730 ppb	29.0033	36.38%
QC value within limits for Fe 238.204 Radial Recovery = 79.73%						
K 766.490 Radial†	889.4	161.88 ug/L	26.810	161.88 ppb	26.810	16.56%
QC value within limits for K 766.490 Radial Recovery = 107.92%						
Mg 279.077 IEC†	7.3	326.69 ug/L	36.025	326.69 ppb	36.025	11.03%
QC value within limits for Mg 279.077 IEC Recovery = 108.90%						
Mn 257.610†	11132.0	10.543 ug/L	0.1659	10.543 ppb	0.1659	1.57%
QC value within limits for Mn 257.610 Recovery = 105.43%						
Mo 202.031†	195.8	10.395 ug/L	0.7057	10.395 ppb	0.7057	6.79%
QC value within limits for Mo 202.031 Recovery = 103.95%						
Na 589.592 Radial†	1041.2	292.04 ug/L	11.429	292.04 ppb	11.429	3.91%
QC value within limits for Na 589.592 Radial Recovery = 97.35%						
Ni 231.604†	277.1	5.4266 ug/L	0.08048	5.4266 ppb	0.08048	1.48%
QC value within limits for Ni 231.604 Recovery = 108.53%						
P 214.914†	338.0	149.63 ug/L	3.816	149.63 ppb	3.816	2.55%
QC value within limits for P 214.914 Recovery = 99.75%						
Pb 220.353†	96.3	9.0961 ug/L	1.14169	9.0961 ppb	1.14169	12.55%
QC value within limits for Pb 220.353 Recovery = 90.96%						
S 181.975 Axial†	89.5	96.357 ug/L	7.4396	96.357 ppb	7.4396	7.72%
QC value within limits for S 181.975 Axial Recovery = 96.36%						
Sb 206.836†	43.7	11.807 ug/L	0.5867	11.807 ppb	0.5867	4.97%
QC value within limits for Sb 206.836 Recovery = 118.07%						
Se 196.026†	65.7	29.405 ug/L	2.6665	29.405 ppb	2.6665	9.07%
QC value within limits for Se 196.026 Recovery = 98.02%						
Si 251.611†	4059.5	102.83 ug/L	1.217	102.83 ppb	1.217	1.18%
QC value within limits for Si 251.611 Recovery = 102.83%						
Sn 189.927†	80.0	10.600 ug/L	0.2084	10.600 ppb	0.2084	1.97%
QC value within limits for Sn 189.927 Recovery = 106.00%						
Sr 421.552†	936.7	4.9127 ug/L	0.04891	4.9127 ppb	0.04891	1.00%
QC value within limits for Sr 421.552 Recovery = 98.25%						
Ti 334.940†	3574.6	4.9172 ug/L	0.11528	4.9172 ppb	0.11528	2.34%
QC value within limits for Ti 334.940 Recovery = 98.34%						
Tl 190.801†	82.0	19.906 ug/L	0.6555	19.906 ppb	0.6555	3.29%
QC value within limits for Tl 190.801 Recovery = 99.53%						
U 409.014†	1925.7	49.768 ug/L	2.3685	49.768 ppb	2.3685	4.76%
QC value within limits for U 409.014 Recovery = 99.54%						
V 292.402†	835.7	5.0170 ug/L	0.03359	5.0170 ppb	0.03359	0.67%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	1408.8	10.286 ug/L	0.1748	10.286 ppb	0.1748	1.70%
QC value within limits for Zn 213.857 Recovery = 102.86%						
SiO2†	4025.3	218.19 ug/L	1.897	218.19 ppb	1.897	0.87%
QC value within limits for SiO2 Recovery = 102.44%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2009 09:55:10
Data Type: Reprocessed on 12/4/2009 11:13:30
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	895468.1	895468.1	86.145	%			09:57:36
1	Sc Radial	4457.8	4457.8	90.8	%			09:57:08
1	Y 371.029	741960.9	741960.9	83.888	%			09:57:36
1	Y RADIAL	5032.6	5032.6	89.12	%			09:57:08
1	Ag 328.068†	-11131.4	-13395.6	-1.8071	ug/L	-1.8071	ppb	09:57:36
1	Al 396.153Radial†	707587.2	779355.4	514620	ug/L	514620	ppb	09:57:03
1	As 188.979†	-115.6	-97.6	-2.3381	ug/L	-2.3381	ppb	09:57:56
1	B 249.677†	377.1	903.8	-7.1901	ug/L	-7.1901	ppb	09:57:36
1	Ba 233.527†	-669.3	-776.9	1.8287	ug/L	1.8287	ppb	09:57:56
1	Be 313.107†	-5216.1	-1181.1	-0.4176	ug/L	-0.4176	ppb	09:57:36
1	Ca 317.933Radial†	243884.2	268587.6	475540	ug/L	475540	ppb	09:57:03
1	Cd 226.502†	1620.0	2116.2	0.1674	ug/L	0.1674	ppb	09:57:56
1	Co 228.616†	-8.4	76.6	-1.3374	ug/L	-1.3374	ppb	09:57:56
1	Cr 267.716†	-111.4	-217.0	1.3403	ug/L	1.3403	ppb	09:57:56
1	Cu 324.752†	5001.2	-3132.0	0.9680	ug/L	0.9680	ppb	09:57:36
1	Fe 238.204 Radial†	13748.6	15131.2	182940	ug/L	182940	ppb	09:57:08
1	K 766.490 Radial†	2122.2	-232.2	-26.444	ug/L	-26.444	ppb	09:57:03
1	Mg 279.077 IEC†	9948.8	10954.7	490000	ug/L	490000	ppb	09:57:08
1	Mn 257.610†	-847.9	-1560.9	7.6393	ug/L	7.6393	ppb	09:57:36
1	Mo 202.031†	-238.9	-306.6	-3.2920	ug/L	-3.2920	ppb	09:57:56
1	Na 589.592 Radial†	-1088.0	81.7	22.906	ug/L	22.906	ppb	09:57:08
1	Ni 231.604†	263.0	173.4	3.3960	ug/L	3.3960	ppb	09:57:56
1	P 214.914†	213.0	-17.8	19.405	ug/L	19.405	ppb	09:57:56
1	Pb 220.353†	-1013.7	-1101.1	-2.9278	ug/L	-2.9278	ppb	09:57:56
1	S 181.975 Axial†	94.2	49.2	-48.177	ug/L	-48.177	ppb	09:57:56
1	Sb 206.836†	78.3	56.2	2.4637	ug/L	2.4637	ppb	09:57:56
1	Se 196.026†	-1309.9	-1499.2	-4.9730	ug/L	-4.9730	ppb	09:57:56
1	Si 251.611†	522.1	48.4	1.7155	ug/L	1.7155	ppb	09:57:56
1	Sn 189.927†	-397.4	-457.0	-8.3436	ug/L	-8.3436	ppb	09:57:56
1	Sr 421.552†	612.3	681.8	-0.8309	ug/L	-0.8309	ppb	09:57:08
1	Ti 334.940†	-16767.7	-18204.0	-0.3141	ug/L	-0.3141	ppb	09:57:36
1	Tl 190.801†	-112.4	-86.3	-7.0075	ug/L	-7.0075	ppb	09:57:56
1	U 409.014†	-1495.7	1037.7	3.8172	ug/L	3.8172	ppb	09:57:36
1	V 292.402†	958.5	2721.1	-1.3459	ug/L	-1.3459	ppb	09:57:56
1	Zn 213.857†	3994.9	3751.8	-6.6885	ug/L	-6.6885	ppb	09:57:56
1	SiO2†	424.2	-106.7	-4.7404	ug/L	-4.7404	ppb	09:58:53
2	Sc 361.383	896436.7	896436.7	86.239	%			09:58:02
2	Sc Radial	4466.1	4466.1	91.0	%			09:57:19
2	Y 371.029	741714.9	741714.9	83.860	%			09:58:02
2	Y RADIAL	5086.6	5086.6	90.07	%			09:57:19
2	Ag 328.068†	-11282.4	-13556.8	-2.2076	ug/L	-2.2076	ppb	09:58:02
2	Al 396.153Radial†	706757.4	777003.7	513070	ug/L	513070	ppb	09:57:14
2	As 188.979†	-102.9	-82.7	2.3960	ug/L	2.3960	ppb	09:58:22
2	B 249.677†	452.1	990.4	-5.6408	ug/L	-5.6408	ppb	09:58:02
2	Ba 233.527†	-654.7	-759.2	1.9670	ug/L	1.9670	ppb	09:58:22
2	Be 313.107†	-5157.5	-1106.6	-0.3960	ug/L	-0.3960	ppb	09:58:02
2	Ca 317.933Radial†	243257.0	267402.0	473440	ug/L	473440	ppb	09:57:14
2	Cd 226.502†	1619.1	2113.1	0.0761	ug/L	0.0761	ppb	09:58:22
2	Co 228.616†	-14.1	70.0	-1.4568	ug/L	-1.4568	ppb	09:58:22
2	Cr 267.716†	-166.0	-280.3	0.7839	ug/L	0.7839	ppb	09:58:22
2	Cu 324.752†	5153.2	-2962.0	1.4553	ug/L	1.4553	ppb	09:58:02
2	Fe 238.204 Radial†	13823.1	15185.1	183590	ug/L	183590	ppb	09:57:19
2	K 766.490 Radial†	2161.2	-193.7	-19.417	ug/L	-19.417	ppb	09:57:14
2	Mg 279.077 IEC†	9999.1	10989.8	491570	ug/L	491570	ppb	09:57:19
2	Mn 257.610†	-937.7	-1664.0	7.5775	ug/L	7.5775	ppb	09:58:02
2	Mo 202.031†	-265.4	-337.0	-4.8588	ug/L	-4.8588	ppb	09:58:22
2	Na 589.592 Radial†	-1089.8	81.9	22.983	ug/L	22.983	ppb	09:57:19
2	Ni 231.604†	275.8	187.9	3.6804	ug/L	3.6804	ppb	09:58:22

2	P 214.914†	251.5	26.5	38.125	ug/L	38.125 ppb	09:58:22
2	Pb 220.353†	-1031.3	-1120.3	-5.1358	ug/L	-5.1358 ppb	09:58:22
2	S 181.975 Axial†	101.9	58.1	-38.332	ug/L	-38.332 ppb	09:58:22
2	Sb 206.836†	100.8	82.3	9.3716	ug/L	9.3716 ppb	09:58:22
2	Se 196.026†	-1333.4	-1524.8	-13.926	ug/L	-13.926 ppb	09:58:22
2	Si 251.611†	451.0	-34.7	-0.3720	ug/L	-0.3720 ppb	09:58:22
2	Sn 189.927†	-393.4	-451.9	-7.8740	ug/L	-7.8740 ppb	09:58:22
2	Sr 421.552†	608.5	676.4	-0.8396	ug/L	-0.8396 ppb	09:57:19
2	Ti 334.940†	-17296.1	-18795.6	-1.2397	ug/L	-1.2397 ppb	09:58:02
2	Tl 190.801†	-91.8	-62.2	-1.2291	ug/L	-1.2291 ppb	09:58:22
2	U 409.014†	-1487.1	1049.6	4.0433	ug/L	4.0433 ppb	09:58:02
2	V 292.402†	973.0	2736.8	-1.3413	ug/L	-1.3413 ppb	09:58:22
2	Zn 213.857†	4004.6	3758.0	-6.7610	ug/L	-6.7610 ppb	09:58:22
2	SiO2†	563.7	54.6	4.0770	ug/L	4.0770 ppb	09:58:58
3	Sc 361.383	921569.7	921569.7	88.657	%		09:58:28
3	Sc Radial	4452.3	4452.3	90.7	%		09:57:29
3	Y 371.029	763138.6	763138.6	86.282	%		09:58:28
3	Y RADIAL	5097.1	5097.1	90.26	%		09:57:29
3	Ag 328.068†	-11375.7	-13305.3	-0.7167	ug/L	-0.7167 ppb	09:58:28
3	Al 396.153Radial†	709776.2	782736.6	516860	ug/L	516860 ppb	09:57:24
3	As 188.979†	-118.3	-96.9	-1.7512	ug/L	-1.7512 ppb	09:58:48
3	B 249.677†	512.9	1044.6	-4.8439	ug/L	-4.8439 ppb	09:58:28
3	Ba 233.527†	-681.6	-768.8	1.9675	ug/L	1.9675 ppb	09:58:48
3	Be 313.107†	-5297.0	-1100.9	-0.3922	ug/L	-0.3922 ppb	09:58:28
3	Ca 317.933Radial†	244236.8	269309.9	476820	ug/L	476820 ppb	09:57:24
3	Cd 226.502†	1616.0	2058.4	-0.5732	ug/L	-0.5732 ppb	09:58:48
3	Co 228.616†	-8.8	76.4	-1.3789	ug/L	-1.3789 ppb	09:58:48
3	Cr 267.716†	-80.4	-178.4	1.7279	ug/L	1.7279 ppb	09:58:48
3	Cu 324.752†	5039.0	-3253.8	0.7638	ug/L	0.7638 ppb	09:58:28
3	Fe 238.204 Radial†	13909.6	15327.6	185310	ug/L	185310 ppb	09:57:29
3	K 766.490 Radial†	2184.8	-160.2	-13.175	ug/L	-13.175 ppb	09:57:24
3	Mg 279.077 IEC†	10032.6	11060.8	494750	ug/L	494750 ppb	09:57:29
3	Mn 257.610†	-904.0	-1596.4	7.7540	ug/L	7.7540 ppb	09:58:28
3	Mo 202.031†	-270.3	-334.1	-4.5843	ug/L	-4.5843 ppb	09:58:48
3	Na 589.592 Radial†	-1069.2	100.9	28.311	ug/L	28.311 ppb	09:57:29
3	Ni 231.604†	303.5	210.5	4.1227	ug/L	4.1227 ppb	09:58:48
3	P 214.914†	216.4	-21.0	16.915	ug/L	16.915 ppb	09:58:48
3	Pb 220.353†	-1017.7	-1072.4	0.0746	ug/L	0.0746 ppb	09:58:48
3	S 181.975 Axial†	113.1	67.5	-28.932	ug/L	-28.932 ppb	09:58:48
3	Sb 206.836†	82.8	58.7	3.1176	ug/L	3.1176 ppb	09:58:48
3	Se 196.026†	-1317.5	-1464.7	18.896	ug/L	18.896 ppb	09:58:48
3	Si 251.611†	477.9	-18.6	0.0226	ug/L	0.0226 ppb	09:58:48
3	Sn 189.927†	-383.0	-427.7	-4.3013	ug/L	-4.3013 ppb	09:58:48
3	Sr 421.552†	673.7	750.4	-0.4829	ug/L	-0.4829 ppb	09:57:29
3	Ti 334.940†	-17131.7	-18063.2	-0.0545	ug/L	-0.0545 ppb	09:58:28
3	Tl 190.801†	-95.3	-63.2	-1.3683	ug/L	-1.3683 ppb	09:58:48
3	U 409.014†	-1455.2	1132.6	5.9715	ug/L	5.9715 ppb	09:58:28
3	V 292.402†	887.1	2609.2	-2.2573	ug/L	-2.2573 ppb	09:58:48
3	Zn 213.857†	4018.3	3646.9	-7.8528	ug/L	-7.8528 ppb	09:58:48
3	SiO2†	429.1	-115.0	-5.1768	ug/L	-5.1768 ppb	09:59:03

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	904491.5	87.014	%	1.4236				1.64%
Sc Radial	4458.8	90.8	%	0.14				0.16%
Y 371.029	748938.1	84.677	%	1.3905				1.64%
Y RADIAL	5072.1	89.82	%	0.613				0.68%
Ag 328.068†	-13419.2	-1.5772	ug/L	0.77157	-1.5772	ppb	0.77157	48.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	779698.6	514850	ug/L	1902.9	514850	ppb	1902.9	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%								
As 188.979†	-92.4	-0.5644	ug/L	2.58057	-0.5644	ppb	2.58057	457.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	979.6	-5.8916	ug/L	1.19304	-5.8916	ppb	1.19304	20.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-768.3	1.9211	ug/L	0.07998	1.9211	ppb	0.07998	4.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1129.5	-0.4019	ug/L	0.01371	-0.4019	ppb	0.01371	3.41%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     268433.2      475270 ug/L        1705.6      475270 ppb        1705.6   0.36%
   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†             2095.9     -0.1099 ug/L       0.40381     -0.1099 ppb       0.40381 367.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               74.3     -1.3910 ug/L       0.06062     -1.3910 ppb       0.06062   4.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -225.2      1.2841 ug/L       0.47451      1.2841 ppb       0.47451  36.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3115.9      1.0624 ug/L       0.35526      1.0624 ppb       0.35526  33.44%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     15214.6      183950 ug/L        1226.4      183950 ppb        1226.4   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.97%
K 766.490 Radial†       -195.4     -19.678 ug/L        6.6381     -19.678 ppb        6.6381  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        11001.8      492110 ug/L        2416.6      492110 ppb        2416.6   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.42%
Mn 257.610†            -1607.1      7.6569 ug/L       0.08961      7.6569 ppb       0.08961   1.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -325.9     -4.2450 ug/L       0.83672     -4.2450 ppb       0.83672  19.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        88.2      24.734 ug/L        3.0988      24.734 ppb        3.0988  12.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              190.6      3.7330 ug/L       0.36623      3.7330 ppb       0.36623   9.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.1      24.815 ug/L       11.5943      24.815 ppb       11.5943  46.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -1097.9     -2.6630 ug/L       2.61530     -2.6630 ppb       2.61530  98.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          58.3     -38.480 ug/L        9.6233     -38.480 ppb        9.6233  25.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               65.7      4.9843 ug/L       3.81357      4.9843 ppb       3.81357  76.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1496.2     -0.0013 ug/L      16.96634     -0.0013 ppb      16.96634 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -1.6      0.4554 ug/L       1.10897      0.4554 ppb       1.10897 243.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -445.5     -6.8396 ug/L       2.21075     -6.8396 ppb       2.21075  32.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              702.9     -0.7178 ug/L       0.20347     -0.7178 ppb       0.20347  28.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -18354.3     -0.5361 ug/L       0.62298     -0.5361 ppb       0.62298 116.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -70.5     -3.2016 ug/L       3.29669     -3.2016 ppb       3.29669 102.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1073.3      4.6106 ug/L       1.18392      4.6106 ppb       1.18392  25.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2689.0     -1.6482 ug/L       0.52751     -1.6482 ppb       0.52751  32.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3718.9     -7.1007 ug/L       0.65228     -7.1007 ppb       0.65228   9.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -55.7     -1.9467 ug/L       5.22123     -1.9467 ppb       5.22123 268.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/4/2009 10:01:15
Data Type: Reprocessed on 12/4/2009 11:13:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896765.4	896765.4	86.270	%			10:03:40
1	Sc Radial	4310.3	4310.3	87.8	%			10:03:12
1	Y 371.029	743168.1	743168.1	84.024	%			10:03:40
1	Y RADIAL	4973.2	4973.2	88.07	%			10:03:12
1	Ag 328.068†	48312.0	55526.7	273.94	ug/L	273.94	ppb	10:03:40
1	Al 396.153Radial†	718365.0	818302.9	540320	ug/L	540320	ppb	10:03:07
1	As 188.979†	1266.9	1505.1	501.27	ug/L	501.27	ppb	10:03:45
1	B 249.677†	24350.6	28692.0	516.30	ug/L	516.30	ppb	10:03:40
1	Ba 233.527†	66310.8	76864.1	501.89	ug/L	501.89	ppb	10:03:40
1	Be 313.107†	673762.6	785864.2	245.98	ug/L	245.98	ppb	10:03:40
1	Ca 317.933Radial†	241999.5	275633.6	488020	ug/L	488020	ppb	10:03:07
1	Cd 226.502†	48346.6	56276.5	472.42	ug/L	472.42	ppb	10:03:45
1	Co 228.616†	24243.2	28187.8	461.86	ug/L	461.86	ppb	10:03:45
1	Cr 267.716†	45823.5	53028.4	480.49	ug/L	480.49	ppb	10:03:45
1	Cu 324.752†	189190.9	210362.6	571.30	ug/L	571.30	ppb	10:03:40
1	Fe 238.204 Radial†	13559.8	15434.4	186620	ug/L	186620	ppb	10:03:12
1	K 766.490 Radial†	29136.3	30618.5	5591.8	ug/L	5591.8	ppb	10:03:07
1	Mg 279.077 IEC†	9793.5	11152.8	498880	ug/L	498880	ppb	10:03:12
1	Mn 257.610†	446058.5	516470.9	498.39	ug/L	498.39	ppb	10:03:40
1	Mo 202.031†	7817.3	9032.2	492.55	ug/L	492.55	ppb	10:03:45
1	Na 589.592 Radial†	15358.6	18774.2	5266.2	ug/L	5266.2	ppb	10:03:12
1	Ni 231.604†	20405.2	23520.7	460.56	ug/L	460.56	ppb	10:03:45
1	P 214.914†	5137.7	5690.2	2493.8	ug/L	2493.8	ppb	10:03:45
1	Pb 220.353†	3335.0	3941.3	476.65	ug/L	476.65	ppb	10:03:45
1	S 181.975 Axial†	2209.5	2501.1	2588.4	ug/L	2588.4	ppb	10:03:45
1	Sb 206.836†	1857.7	2118.7	553.22	ug/L	553.22	ppb	10:03:45
1	Se 196.026†	3751.4	4369.8	2609.6	ug/L	2609.6	ppb	10:03:45
1	Si 251.611†	182401.0	210872.1	5343.9	ug/L	5343.9	ppb	10:03:40
1	Sn 189.927†	2840.1	3296.5	489.45	ug/L	489.45	ppb	10:03:45
1	Sr 421.552†	84616.3	96390.3	501.18	ug/L	501.18	ppb	10:03:07
1	Ti 334.940†	303489.0	353049.0	512.01	ug/L	512.01	ppb	10:03:40
1	Tl 190.801†	1637.7	1942.6	487.61	ug/L	487.61	ppb	10:03:45
1	U 409.014†	14882.6	20025.1	493.33	ug/L	493.33	ppb	10:03:40
1	V 292.402†	77060.5	90933.0	510.56	ug/L	510.56	ppb	10:03:40
1	Zn 213.857†	62451.0	71504.3	486.92	ug/L	486.92	ppb	10:03:45
1	SiO2†	182042.5	210415.0	11411	ug/L	11411	ppb	10:04:12
2	Sc 361.383	887713.5	887713.5	85.399	%			10:03:51
2	Sc Radial	4415.2	4415.2	89.9	%			10:03:22
2	Y 371.029	735652.5	735652.5	83.175	%			10:03:51
2	Y RADIAL	5027.2	5027.2	89.02	%			10:03:22
2	Ag 328.068†	48539.7	56364.3	276.45	ug/L	276.45	ppb	10:03:51
2	Al 396.153Radial†	719328.0	799938.3	528190	ug/L	528190	ppb	10:03:17
2	As 188.979†	1307.2	1567.3	520.22	ug/L	520.22	ppb	10:03:56
2	B 249.677†	24577.1	29245.1	527.16	ug/L	527.16	ppb	10:03:51
2	Ba 233.527†	66923.8	78365.6	511.43	ug/L	511.43	ppb	10:03:51
2	Be 313.107†	678380.0	799234.7	250.17	ug/L	250.17	ppb	10:03:51
2	Ca 317.933Radial†	242559.2	269708.6	477530	ug/L	477530	ppb	10:03:17
2	Cd 226.502†	48252.0	56737.2	476.75	ug/L	476.75	ppb	10:03:56
2	Co 228.616†	24252.3	28485.0	466.80	ug/L	466.80	ppb	10:03:56
2	Cr 267.716†	45744.5	53477.5	484.48	ug/L	484.48	ppb	10:03:56
2	Cu 324.752†	190824.5	214511.8	582.22	ug/L	582.22	ppb	10:03:51
2	Fe 238.204 Radial†	13657.5	15176.2	183500	ug/L	183500	ppb	10:03:22
2	K 766.490 Radial†	29241.9	29947.6	5469.0	ug/L	5469.0	ppb	10:03:17
2	Mg 279.077 IEC†	9906.9	11014.0	492670	ug/L	492670	ppb	10:03:22
2	Mn 257.610†	449662.7	525963.6	507.18	ug/L	507.18	ppb	10:03:51
2	Mo 202.031†	7809.1	9115.0	496.72	ug/L	496.72	ppb	10:03:56
2	Na 589.592 Radial†	15497.9	18513.7	5193.1	ug/L	5193.1	ppb	10:03:22
2	Ni 231.604†	20445.6	23809.2	466.21	ug/L	466.21	ppb	10:03:56

2	P 214.914†	5228.4	5857.2	2565.2 ug/L	2565.2 ppb	10:03:56
2	Pb 220.353†	3318.1	3960.9	476.03 ug/L	476.03 ppb	10:03:56
2	S 181.975 Axial†	2193.1	2508.0	2598.2 ug/L	2598.2 ppb	10:03:56
2	Sb 206.836†	1834.2	2113.2	552.16 ug/L	552.16 ppb	10:03:56
2	Se 196.026†	3780.0	4447.7	2632.9 ug/L	2632.9 ppb	10:03:56
2	Si 251.611†	183666.9	214510.3	5436.2 ug/L	5436.2 ppb	10:03:51
2	Sn 189.927†	2859.3	3352.5	495.72 ug/L	495.72 ppb	10:03:56
2	Sr 421.552†	84784.1	94287.5	490.25 ug/L	490.25 ppb	10:03:17
2	Ti 334.940†	305401.9	358876.1	519.50 ug/L	519.50 ppb	10:03:51
2	Tl 190.801†	1599.6	1917.3	481.23 ug/L	481.23 ppb	10:03:56
2	U 409.014†	15004.5	20343.8	501.96 ug/L	501.96 ppb	10:03:51
2	V 292.402†	77508.4	92368.3	519.18 ug/L	519.18 ppb	10:03:51
2	Zn 213.857†	62469.0	72263.6	492.96 ug/L	492.96 ppb	10:03:56
2	SiO2†	184235.8	215135.0	11667 ug/L	11667 ppb	10:04:18
3	Sc 361.383	902331.3	902331.3	86.806 %		10:04:02
3	Sc Radial	4307.6	4307.6	87.7 %		10:03:33
3	Y 371.029	747696.5	747696.5	84.536 %		10:04:02
3	Y RADIAL	4961.1	4961.1	87.85 %		10:03:33
3	Ag 328.068†	48340.3	55213.9	272.06 ug/L	272.06 ppb	10:04:02
3	Al 396.153Radial†	708529.6	807602.4	533250 ug/L	533250 ppb	10:03:28
3	As 188.979†	1311.2	1547.1	514.00 ug/L	514.00 ppb	10:04:07
3	B 249.677†	24388.1	28561.1	514.14 ug/L	514.14 ppb	10:04:02
3	Ba 233.527†	66538.9	76652.7	500.44 ug/L	500.44 ppb	10:04:02
3	Be 313.107†	675797.6	783391.1	245.21 ug/L	245.21 ppb	10:04:02
3	Ca 317.933Radial†	238816.8	272177.7	481900 ug/L	481900 ppb	10:03:28
3	Cd 226.502†	48310.4	55889.1	469.26 ug/L	469.26 ppb	10:04:07
3	Co 228.616†	24241.1	28012.1	458.99 ug/L	458.99 ppb	10:04:07
3	Cr 267.716†	46047.2	52958.5	479.82 ug/L	479.82 ppb	10:04:07
3	Cu 324.752†	189862.9	209784.1	569.64 ug/L	569.64 ppb	10:04:02
3	Fe 238.204 Radial†	13386.8	15246.9	184350 ug/L	184350 ppb	10:03:33
3	K 766.490 Radial†	28807.8	30264.7	5527.1 ug/L	5527.1 ppb	10:03:28
3	Mg 279.077 IEC†	9697.0	11049.8	494270 ug/L	494270 ppb	10:03:33
3	Mn 257.610†	447317.0	514731.3	496.60 ug/L	496.60 ppb	10:04:02
3	Mo 202.031†	7807.0	8964.4	488.79 ug/L	488.79 ppb	10:04:07
3	Na 589.592 Radial†	15064.5	18450.0	5175.2 ug/L	5175.2 ppb	10:03:33
3	Ni 231.604†	20495.4	23478.7	459.74 ug/L	459.74 ppb	10:04:07
3	P 214.914†	5186.2	5709.4	2502.0 ug/L	2502.0 ppb	10:04:07
3	Pb 220.353†	3283.2	3857.8	467.41 ug/L	467.41 ppb	10:04:07
3	S 181.975 Axial†	2271.6	2556.8	2649.8 ug/L	2649.8 ppb	10:04:07
3	Sb 206.836†	1852.9	2099.9	548.29 ug/L	548.29 ppb	10:04:07
3	Se 196.026†	3741.3	4331.3	2584.4 ug/L	2584.4 ppb	10:04:07
3	Si 251.611†	182849.2	210084.2	5324.0 ug/L	5324.0 ppb	10:04:02
3	Sn 189.927†	2835.3	3270.6	485.36 ug/L	485.36 ppb	10:04:07
3	Sr 421.552†	83311.5	94963.1	493.75 ug/L	493.75 ppb	10:03:28
3	Ti 334.940†	304162.2	351654.5	509.77 ug/L	509.77 ppb	10:04:02
3	Tl 190.801†	1642.7	1936.6	485.97 ug/L	485.97 ppb	10:04:07
3	U 409.014†	14962.4	20010.6	493.25 ug/L	493.25 ppb	10:04:02
3	V 292.402†	77142.0	90475.9	508.14 ug/L	508.14 ppb	10:04:02
3	Zn 213.857†	62553.1	71175.5	484.88 ug/L	484.88 ppb	10:04:07
3	SiO2†	183314.0	210578.2	11420 ug/L	11420 ppb	10:04:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895603.4	86.159	%	0.7098				0.82%
Sc Radial	4344.4	88.5	%	1.25				1.41%
Y 371.029	742172.4	83.912	%	0.6878				0.82%
Y RADIAL	4987.2	88.31	%	0.623				0.71%
Ag 328.068†	55701.6	274.15	ug/L	2.201	274.15	ppb	2.201	0.80%
QC value within limits for Ag 328.068 Recovery = 109.66%								
Al 396.153Radial†	808614.6	533920	ug/L	6090.9	533920	ppb	6090.9	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.78%								
As 188.979†	1539.9	511.83	ug/L	9.661	511.83	ppb	9.661	1.89%
QC value within limits for As 188.979 Recovery = 102.37%								
B 249.677†	28832.7	519.20	ug/L	6.977	519.20	ppb	6.977	1.34%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	77294.1	504.59	ug/L	5.975	504.59	ppb	5.975	1.18%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	789496.7	247.12	ug/L	2.668	247.12	ppb	2.668	1.08%
QC value within limits for Be 313.107 Recovery = 98.85%								

Ca 317.933Radial†	272506.6	482480 ug/L	5269.3	482480 ppb	5269.3	1.09%
QC value within limits for Ca 317.933Radial Recovery = 96.50%						
Cd 226.502†	56301.0	472.81 ug/L	3.758	472.81 ppb	3.758	0.79%
QC value within limits for Cd 226.502 Recovery = 94.56%						
Co 228.616†	28228.3	462.55 ug/L	3.948	462.55 ppb	3.948	0.85%
QC value within limits for Co 228.616 Recovery = 92.51%						
Cr 267.716†	53154.8	481.60 ug/L	2.521	481.60 ppb	2.521	0.52%
QC value within limits for Cr 267.716 Recovery = 96.32%						
Cu 324.752†	211552.8	574.38 ug/L	6.835	574.38 ppb	6.835	1.19%
QC value within limits for Cu 324.752 Recovery = 114.88%						
Fe 238.204 Radial†	15285.8	184820 ug/L	1613.6	184820 ppb	1613.6	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 92.41%						
K 766.490 Radial†	30276.9	5529.3 ug/L	61.46	5529.3 ppb	61.46	1.11%
QC value within limits for K 766.490 Radial Recovery = 110.59%						
Mg 279.077 IEC†	11072.2	495270 ug/L	3223.1	495270 ppb	3223.1	0.65%
QC value within limits for Mg 279.077 IEC Recovery = 99.05%						
Mn 257.610†	519055.3	500.72 ug/L	5.664	500.72 ppb	5.664	1.13%
QC value within limits for Mn 257.610 Recovery = 100.14%						
Mo 202.031†	9037.2	492.69 ug/L	3.967	492.69 ppb	3.967	0.81%
QC value within limits for Mo 202.031 Recovery = 98.54%						
Na 589.592 Radial†	18579.3	5211.5 ug/L	48.18	5211.5 ppb	48.18	0.92%
QC value within limits for Na 589.592 Radial Recovery = 104.23%						
Ni 231.604†	23602.9	462.17 ug/L	3.523	462.17 ppb	3.523	0.76%
QC value within limits for Ni 231.604 Recovery = 92.43%						
P 214.914†	5752.3	2520.4 ug/L	39.08	2520.4 ppb	39.08	1.55%
QC value within limits for P 214.914 Recovery = 100.81%						
Pb 220.353†	3920.0	473.36 ug/L	5.165	473.36 ppb	5.165	1.09%
QC value within limits for Pb 220.353 Recovery = 94.67%						
S 181.975 Axial†	2522.0	2612.1 ug/L	33.01	2612.1 ppb	33.01	1.26%
QC value within limits for S 181.975 Axial Recovery = 104.49%						
Sb 206.836†	2110.6	551.22 ug/L	2.592	551.22 ppb	2.592	0.47%
QC value within limits for Sb 206.836 Recovery = 110.24%						
Se 196.026†	4382.9	2608.9 ug/L	24.27	2608.9 ppb	24.27	0.93%
QC value within limits for Se 196.026 Recovery = 104.36%						
Si 251.611†	211822.2	5368.0 ug/L	59.89	5368.0 ppb	59.89	1.12%
QC value within limits for Si 251.611 Recovery = 107.36%						
Sn 189.927†	3306.5	490.18 ug/L	5.219	490.18 ppb	5.219	1.06%
QC value within limits for Sn 189.927 Recovery = 98.04%						
Sr 421.552†	95213.6	495.06 ug/L	5.584	495.06 ppb	5.584	1.13%
QC value within limits for Sr 421.552 Recovery = 99.01%						
Ti 334.940†	354526.5	513.76 ug/L	5.094	513.76 ppb	5.094	0.99%
QC value within limits for Ti 334.940 Recovery = 102.75%						
Tl 190.801†	1932.2	484.94 ug/L	3.312	484.94 ppb	3.312	0.68%
QC value within limits for Tl 190.801 Recovery = 96.99%						
U 409.014†	20126.5	496.18 ug/L	5.005	496.18 ppb	5.005	1.01%
QC value within limits for U 409.014 Recovery = 99.24%						
V 292.402†	91259.0	512.63 ug/L	5.805	512.63 ppb	5.805	1.13%
QC value within limits for V 292.402 Recovery = 102.53%						
Zn 213.857†	71647.8	488.25 ug/L	4.200	488.25 ppb	4.200	0.86%
QC value within limits for Zn 213.857 Recovery = 97.65%						
SiO2†	212042.7	11499 ug/L	145.5	11499 ppb	145.5	1.27%
QC value within limits for SiO2 Recovery = 107.52%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/4/2009 10:06:33
Data Type: Reprocessed on 12/4/2009 11:13:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885487.9	885487.9	85.185	%			10:09:00
1	Sc Radial	4230.1	4230.1	86.2	%			10:08:31
1	Y 371.029	732135.8	732135.8	82.777	%			10:09:00
1	Y RADIAL	4861.3	4861.3	86.08	%			10:08:31
1	Ag 328.068†	-26677.6	-31791.2	-7.4128	ug/L	-7.4128	ppb	10:09:00
1	Al 396.153Radial†	699744.0	812201.5	536310	ug/L	536310	ppb	10:08:26
1	As 188.979†	-242.3	-247.9	-10.317	ug/L	-10.317	ppb	10:09:20
1	B 249.677†	1504.1	2231.7	-15.387	ug/L	-15.387	ppb	10:09:00
1	Ba 233.527†	-1968.2	-2310.5	1.3033	ug/L	1.3033	ppb	10:09:20
1	Be 313.107†	-12669.5	-9998.9	-3.1445	ug/L	-3.1445	ppb	10:09:00
1	Ca 317.933Radial†	233582.5	271089.6	479970	ug/L	479970	ppb	10:08:26
1	Cd 226.502†	4104.5	5053.9	0.7060	ug/L	0.7060	ppb	10:09:20
1	Co 228.616†	224.7	350.1	-0.4925	ug/L	-0.4925	ppb	10:09:20
1	Cr 267.716†	105.3	35.8	3.4009	ug/L	3.4009	ppb	10:09:20
1	Cu 324.752†	1616.9	-7039.4	3.3310	ug/L	3.3310	ppb	10:09:00
1	Fe 238.204 Radial†	30925.1	35882.2	433820	ug/L	433820	ppb	10:08:31
1	K 766.490 Radial†	2956.7	862.2	-29.952	ug/L	-29.952	ppb	10:08:26
1	Mg 279.077 IEC†	9457.3	10974.1	490660	ug/L	490660	ppb	10:08:31
1	Mn 257.610†	-31444.5	-37489.7	-1.3808	ug/L	-1.3808	ppb	10:09:00
1	Mo 202.031†	-569.7	-698.0	-6.2694	ug/L	-6.2694	ppb	10:09:00
1	Na 589.592 Radial†	1489928.3	1730564.8	485420	ug/L	485420	ppb	10:08:26
1	Ni 231.604†	317.3	240.6	4.7104	ug/L	4.7104	ppb	10:09:20
1	P 214.914†	700.6	557.3	83.308	ug/L	83.308	ppb	10:09:20
1	Pb 220.353†	-736.7	-789.3	10.574	ug/L	10.574	ppb	10:09:20
1	S 181.975 Axial†	132.4	95.3	-2.8085	ug/L	-2.8085	ppb	10:09:20
1	Sb 206.836†	84.4	64.5	7.5118	ug/L	7.5118	ppb	10:09:20
1	Se 196.026†	-3111.8	-3631.6	-38.465	ug/L	-38.465	ppb	10:09:20
1	Si 251.611†	-720.3	-1403.2	-34.836	ug/L	-34.836	ppb	10:09:20
1	Sn 189.927†	-430.4	-501.0	-10.331	ug/L	-10.331	ppb	10:09:20
1	Sr 421.552†	832.9	974.1	0.6618	ug/L	0.6618	ppb	10:08:31
1	Ti 334.940†	-9531.8	-9929.0	4.8627	ug/L	4.8627	ppb	10:09:00
1	Tl 190.801†	-149.4	-131.2	-17.428	ug/L	-17.428	ppb	10:09:20
1	U 409.014†	481186.6	567643.8	14621	ug/L	14621	ppb	10:09:00
1	V 292.402†	2385.8	4409.2	-1.6887	ug/L	-1.6887	ppb	10:09:00
1	Zn 213.857†	7347.1	7739.3	-1.3663	ug/L	-1.3663	ppb	10:09:20
1	SiO2†	-595.3	-1297.9	-68.808	ug/L	-68.808	ppb	10:10:19
2	Sc 361.383	882716.9	882716.9	84.919	%			10:09:27
2	Sc Radial	4203.7	4203.7	85.6	%			10:08:41
2	Y 371.029	731812.4	731812.4	82.740	%			10:09:27
2	Y RADIAL	4837.2	4837.2	85.66	%			10:08:41
2	Ag 328.068†	-26460.5	-31633.8	-6.8994	ug/L	-6.8994	ppb	10:09:27
2	Al 396.153Radial†	694240.6	810880.4	535440	ug/L	535440	ppb	10:08:36
2	As 188.979†	-251.4	-259.5	-13.969	ug/L	-13.969	ppb	10:09:47
2	B 249.677†	1385.9	2098.1	-17.872	ug/L	-17.872	ppb	10:09:27
2	Ba 233.527†	-1976.6	-2327.7	1.1792	ug/L	1.1792	ppb	10:09:47
2	Be 313.107†	-12742.2	-10131.2	-3.1854	ug/L	-3.1854	ppb	10:09:27
2	Ca 317.933Radial†	232532.4	271567.9	480820	ug/L	480820	ppb	10:08:36
2	Cd 226.502†	4119.3	5086.5	1.0216	ug/L	1.0216	ppb	10:09:47
2	Co 228.616†	213.5	337.8	-0.6980	ug/L	-0.6980	ppb	10:09:47
2	Cr 267.716†	107.2	38.5	3.4193	ug/L	3.4193	ppb	10:09:47
2	Cu 324.752†	1600.3	-7052.9	3.2793	ug/L	3.2793	ppb	10:09:27
2	Fe 238.204 Radial†	30710.2	35857.0	433510	ug/L	433510	ppb	10:08:41
2	K 766.490 Radial†	3036.5	977.0	-8.9923	ug/L	-8.9923	ppb	10:08:36
2	Mg 279.077 IEC†	9350.4	10918.3	488160	ug/L	488160	ppb	10:08:41
2	Mn 257.610†	-31420.5	-37577.4	-1.4478	ug/L	-1.4478	ppb	10:09:27
2	Mo 202.031†	-603.2	-739.6	-8.4954	ug/L	-8.4954	ppb	10:09:27
2	Na 589.592 Radial†	1479023.0	1728701.3	484900	ug/L	484900	ppb	10:08:36
2	Ni 231.604†	368.7	302.2	5.9185	ug/L	5.9185	ppb	10:09:47

2	P 214.914†	682.2	538.2	74.756	ug/L	74.756 ppb	10:09:47
2	Pb 220.353†	-732.0	-786.4	10.667	ug/L	10.667 ppb	10:09:47
2	S 181.975 Axial†	126.1	88.4	-10.135	ug/L	-10.135 ppb	10:09:47
2	Sb 206.836†	83.3	63.5	7.2848	ug/L	7.2848 ppb	10:09:47
2	Se 196.026†	-3128.0	-3662.1	-53.093	ug/L	-53.093 ppb	10:09:47
2	Si 251.611†	-617.1	-1284.4	-31.797	ug/L	-31.797 ppb	10:09:47
2	Sn 189.927†	-409.7	-478.1	-7.2198	ug/L	-7.2198 ppb	10:09:47
2	Sr 421.552†	864.9	1017.5	0.8818	ug/L	0.8818 ppb	10:08:41
2	Ti 334.940†	-9398.6	-9807.4	5.0763	ug/L	5.0763 ppb	10:09:27
2	Tl 190.801†	-121.8	-99.2	-9.7182	ug/L	-9.7182 ppb	10:09:47
2	U 409.014†	479559.1	567500.5	14618	ug/L	14618 ppb	10:09:27
2	V 292.402†	2230.2	4234.8	-2.7359	ug/L	-2.7359 ppb	10:09:27
2	Zn 213.857†	7379.4	7804.3	-0.7817	ug/L	-0.7817 ppb	10:09:47
2	SiO2†	-663.4	-1380.3	-73.239	ug/L	-73.239 ppb	10:10:24
3	Sc 361.383	876320.3	876320.3	84.303	%		10:09:54
3	Sc Radial	4249.7	4249.7	86.6	%		10:08:52
3	Y 371.029	725964.8	725964.8	82.079	%		10:09:54
3	Y RADIAL	4895.1	4895.1	86.68	%		10:08:52
3	Ag 328.068†	-26403.7	-31793.9	-8.2798	ug/L	-8.2798 ppb	10:09:54
3	Al 396.153Radial†	696263.8	804442.0	531190	ug/L	531190 ppb	10:08:47
3	As 188.979†	-250.3	-260.4	-14.643	ug/L	-14.643 ppb	10:10:14
3	B 249.677†	1377.8	2100.5	-17.484	ug/L	-17.484 ppb	10:09:54
3	Ba 233.527†	-2018.6	-2394.4	0.6540	ug/L	0.6540 ppb	10:10:14
3	Be 313.107†	-12542.9	-10004.3	-3.1451	ug/L	-3.1451 ppb	10:09:54
3	Ca 317.933Radial†	232972.1	269136.4	476510	ug/L	476510 ppb	10:08:47
3	Cd 226.502†	4096.1	5094.4	1.3493	ug/L	1.3493 ppb	10:10:14
3	Co 228.616†	234.6	364.6	-0.2166	ug/L	-0.2166 ppb	10:10:14
3	Cr 267.716†	26.8	-56.0	2.5306	ug/L	2.5306 ppb	10:10:14
3	Cu 324.752†	1694.6	-6927.3	3.4824	ug/L	3.4824 ppb	10:09:54
3	Fe 238.204 Radial†	30860.5	35642.3	430920	ug/L	430920 ppb	10:08:52
3	K 766.490 Radial†	2969.7	861.5	-28.523	ug/L	-28.523 ppb	10:08:47
3	Mg 279.077 IEC†	9391.6	10847.6	485000	ug/L	485000 ppb	10:08:52
3	Mn 257.610†	-31109.8	-37478.8	-1.5543	ug/L	-1.5543 ppb	10:09:54
3	Mo 202.031†	-581.5	-719.1	-7.5915	ug/L	-7.5915 ppb	10:09:54
3	Na 589.592 Radial†	1483574.2	1715263.1	481130	ug/L	481130 ppb	10:08:47
3	Ni 231.604†	350.6	284.0	5.5607	ug/L	5.5607 ppb	10:10:14
3	P 214.914†	725.8	595.8	101.07	ug/L	101.07 ppb	10:10:14
3	Pb 220.353†	-743.3	-806.2	8.0769	ug/L	8.0769 ppb	10:10:14
3	S 181.975 Axial†	147.8	115.2	19.606	ug/L	19.606 ppb	10:10:14
3	Sb 206.836†	90.5	72.7	9.7498	ug/L	9.7498 ppb	10:10:14
3	Se 196.026†	-3136.1	-3698.6	-78.648	ug/L	-78.648 ppb	10:10:14
3	Si 251.611†	-673.7	-1356.8	-33.634	ug/L	-33.634 ppb	10:10:14
3	Sn 189.927†	-435.3	-512.0	-12.188	ug/L	-12.188 ppb	10:10:14
3	Sr 421.552†	840.6	978.6	0.7173	ug/L	0.7173 ppb	10:08:52
3	Ti 334.940†	-9082.8	-9513.5	5.2661	ug/L	5.2661 ppb	10:09:54
3	Tl 190.801†	-124.8	-103.7	-10.929	ug/L	-10.929 ppb	10:10:14
3	U 409.014†	475436.9	566733.0	14598	ug/L	14598 ppb	10:09:54
3	V 292.402†	2211.8	4232.1	-2.4512	ug/L	-2.4512 ppb	10:09:54
3	Zn 213.857†	7404.7	7897.9	0.2635	ug/L	0.2635 ppb	10:10:14
3	SiO2†	-712.0	-1443.6	-76.674	ug/L	-76.674 ppb	10:10:29

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881508.4	84.803	%	0.4523				0.53%
Sc Radial	4227.9	86.1	%	0.47				0.55%
Y 371.029	729971.0	82.532	%	0.3927				0.48%
Y RADIAL	4864.6	86.14	%	0.515				0.60%
Ag 328.068†	-31739.6	-7.5307	ug/L	0.69773	-7.5307	ppb	0.69773	9.27%
Al 396.153Radial†	809174.7	534310	ug/L	2741.3	534310	ppb	2741.3	0.51%
QC value within limits for Al 396.153Radial Recovery = 106.86%								
As 188.979†	-255.9	-12.976	ug/L	2.3274	-12.976	ppb	2.3274	17.94%
B 249.677†	2143.4	-16.915	ug/L	1.3367	-16.915	ppb	1.3367	7.90%
Ba 233.527†	-2344.2	1.0455	ug/L	0.34467	1.0455	ppb	0.34467	32.97%
Be 313.107†	-10044.8	-3.1583	ug/L	0.02347	-3.1583	ppb	0.02347	0.74%
Ca 317.933Radial†	270598.0	479100	ug/L	2280.7	479100	ppb	2280.7	0.48%
QC value within limits for Ca 317.933Radial Recovery = 95.82%								
Cd 226.502†	5078.3	1.0257	ug/L	0.32170	1.0257	ppb	0.32170	31.36%
Co 228.616†	350.8	-0.4690	ug/L	0.24158	-0.4690	ppb	0.24158	51.51%
Cr 267.716†	6.1	3.1169	ug/L	0.50787	3.1169	ppb	0.50787	16.29%

Cu 324.752†	-7006.6	3.3643	ug/L	0.10555	3.3643	ppb	0.10555	3.14%
Fe 238.204 Radial†	35793.8	432750	ug/L	1593.6	432750	ppb	1593.6	0.37%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.55%								
K 766.490 Radial†	900.2	-22.489	ug/L	11.7103	-22.489	ppb	11.7103	52.07%
Mg 279.077 IEC†	10913.4	487940	ug/L	2835.3	487940	ppb	2835.3	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 97.59%								
Mn 257.610†	-37515.3	-1.4610	ug/L	0.08752	-1.4610	ppb	0.08752	5.99%
Mo 202.031†	-718.9	-7.4521	ug/L	1.11956	-7.4521	ppb	1.11956	15.02%
Na 589.592 Radial†	1724843.1	483820	ug/L	2341.8	483820	ppb	2341.8	0.48%
QC value within limits for Na 589.592 Radial Recovery = 96.76%								
Ni 231.604†	275.6	5.3966	ug/L	0.62054	5.3966	ppb	0.62054	11.50%
P 214.914†	563.8	86.378	ug/L	13.4225	86.378	ppb	13.4225	15.54%
Pb 220.353†	-794.0	9.7727	ug/L	1.46934	9.7727	ppb	1.46934	15.04%
S 181.975 Axial†	99.6	2.2207	ug/L	15.49518	2.2207	ppb	15.49518	697.76%
Sb 206.836†	66.9	8.1822	ug/L	1.36238	8.1822	ppb	1.36238	16.65%
Se 196.026†	-3664.1	-56.735	ug/L	20.3373	-56.735	ppb	20.3373	35.85%
Si 251.611†	-1348.1	-33.422	ug/L	1.5302	-33.422	ppb	1.5302	4.58%
Sn 189.927†	-497.0	-9.9132	ug/L	2.51056	-9.9132	ppb	2.51056	25.33%
Sr 421.552†	990.1	0.7536	ug/L	0.11439	0.7536	ppb	0.11439	15.18%
Ti 334.940†	-9750.0	5.0684	ug/L	0.20181	5.0684	ppb	0.20181	3.98%
Tl 190.801†	-111.4	-12.692	ug/L	4.1461	-12.692	ppb	4.1461	32.67%
U 409.014†	567292.5	14612	ug/L	12.5	14612	ppb	12.5	0.09%
QC value within limits for U 409.014 Recovery = 97.42%								
V 292.402†	4292.0	-2.2919	ug/L	0.54151	-2.2919	ppb	0.54151	23.63%
Zn 213.857†	7813.8	-0.6282	ug/L	0.82572	-0.6282	ppb	0.82572	131.45%
SiO2†	-1373.9	-72.907	ug/L	3.9435	-72.907	ppb	3.9435	5.41%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/4/2009 10:12:39
Data Type: Reprocessed on 12/4/2009 11:13:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	995343.4	995343.4	95.754	%			10:16:15
1	Sc Radial	4685.3	4685.3	95.4	%			10:14:37
1	Y 371.029	824980.9	824980.9	93.274	%			10:16:15
1	Y RADIAL	5341.8	5341.8	94.59	%			10:14:37
1	Ag 328.068†	-8154.1	-8989.7	3.7082	ug/L	3.7082	ppb	10:16:20
1	Al 396.153Radial†	674.9	751.1	79.204	ug/L	79.204	ppb	10:14:37
1	As 188.979†	30524.1	31914.3	10028	ug/L	10028	ppb	10:16:20
1	B 249.677†	255613.4	267415.1	5030.9	ug/L	5030.9	ppb	10:16:15
1	Ba 233.527†	2036214.9	2126513.9	13684	ug/L	13684	ppb	10:16:15
1	Be 313.107†	8949730.7	9351493.9	2935.3	ug/L	2935.3	ppb	10:16:08
1	Ca 317.933Radial†	40.2	24.3	43.088	ug/L	43.088	ppb	10:14:57
1	Cd 226.502†	1068885.4	1116522.4	9743.3	ug/L	9743.3	ppb	10:16:15
1	Co 228.616†	523626.6	546934.0	9009.4	ug/L	9009.4	ppb	10:16:20
1	Cr 267.716†	2556233.6	2669505.9	24000	ug/L	24000	ppb	10:16:15
1	Cu 324.752†	7467302.8	7789514.1	20802	ug/L	20802	ppb	10:16:08
1	Fe 238.204 Radial†	-10.3	-21.8	20.543	ug/L	20.543	ppb	10:14:57
1	K 766.490 Radial†	1551738.7	1623486.1	295810	ug/L	295810	ppb	10:14:32
1	Mg 279.077 IEC†	-4.5	-7.2	-126.67	ug/L	-126.67	ppb	10:14:57
1	Mn 257.610†	9671719.2	10100049.4	9564.2	ug/L	9564.2	ppb	10:16:08
1	Mo 202.031†	175665.5	183426.4	9733.9	ug/L	9733.9	ppb	10:16:20
1	Na 589.592 Radial†	-688.4	558.6	156.68	ug/L	156.68	ppb	10:14:37
1	Ni 231.604†	483091.7	504383.2	9876.9	ug/L	9876.9	ppb	10:16:15
1	P 214.914†	38721.5	40173.5	14778	ug/L	14778	ppb	10:16:20
1	Pb 220.353†	249557.5	260700.1	24480	ug/L	24480	ppb	10:16:20
1	S 181.975 Axial†	46090.3	48074.2	51795	ug/L	51795	ppb	10:16:20
1	Sb 206.836†	38809.9	40496.4	10481	ug/L	10481	ppb	10:16:20
1	Se 196.026†	22186.9	23192.2	10304	ug/L	10304	ppb	10:16:20
1	Si 251.611†	1818494.9	1898581.1	47917	ug/L	47917	ppb	10:16:15
1	Sn 189.927†	75649.6	79008.7	10450	ug/L	10450	ppb	10:16:20
1	Sr 421.552†	1739873.1	1823207.7	9565.4	ug/L	9565.4	ppb	10:14:32
1	Ti 334.940†	6898126.7	7205295.0	9929.6	ug/L	9929.6	ppb	10:16:08
1	Tl 190.801†	39366.8	41156.9	10016	ug/L	10016	ppb	10:16:20
1	U 409.014†	-1595.5	1107.7	-17.652	ug/L	-17.652	ppb	10:16:20
1	V 292.402†	1678189.1	1754219.5	10161	ug/L	10161	ppb	10:16:15
1	Zn 213.857†	1844717.6	1925638.8	14062	ug/L	14062	ppb	10:16:15
1	SiO2†	1815930.5	1895861.7	102380	ug/L	102380	ppb	10:17:07
2	Sc 361.383	992391.4	992391.4	95.470	%			10:16:35
2	Sc Radial	4677.1	4677.1	95.3	%			10:15:08
2	Y 371.029	822392.7	822392.7	92.982	%			10:16:35
2	Y RADIAL	5346.6	5346.6	94.68	%			10:15:08
2	Ag 328.068†	-8127.0	-8986.7	3.6950	ug/L	3.6950	ppb	10:16:40
2	Al 396.153Radial†	666.0	742.9	74.204	ug/L	74.204	ppb	10:15:08
2	As 188.979†	30260.0	31732.5	9970.6	ug/L	9970.6	ppb	10:16:40
2	B 249.677†	254179.7	266707.4	5017.5	ug/L	5017.5	ppb	10:16:35
2	Ba 233.527†	2030515.4	2126869.6	13686	ug/L	13686	ppb	10:16:35
2	Be 313.107†	8883766.2	9310201.8	2922.3	ug/L	2922.3	ppb	10:16:28
2	Ca 317.933Radial†	39.4	23.6	41.698	ug/L	41.698	ppb	10:15:28
2	Cd 226.502†	1065331.8	1116120.7	9739.8	ug/L	9739.8	ppb	10:16:35
2	Co 228.616†	522494.8	547375.1	9016.8	ug/L	9016.8	ppb	10:16:40
2	Cr 267.716†	2548446.6	2669290.3	23998	ug/L	23998	ppb	10:16:35
2	Cu 324.752†	7411507.3	7754268.4	20708	ug/L	20708	ppb	10:16:28
2	Fe 238.204 Radial†	-11.5	-23.1	5.7057	ug/L	5.7057	ppb	10:15:28
2	K 766.490 Radial†	1531682.1	1605291.4	292490	ug/L	292490	ppb	10:15:03
2	Mg 279.077 IEC†	-2.7	-5.3	-41.419	ug/L	-41.419	ppb	10:15:28
2	Mn 257.610†	9597303.6	10052148.1	9518.8	ug/L	9518.8	ppb	10:16:28
2	Mo 202.031†	174974.2	183248.0	9724.4	ug/L	9724.4	ppb	10:16:40
2	Na 589.592 Radial†	-686.6	559.2	156.87	ug/L	156.87	ppb	10:15:08
2	Ni 231.604†	481207.5	503910.3	9867.7	ug/L	9867.7	ppb	10:16:35

2	P 214.914†	38473.8	40034.4	14731 ug/L	14731 ppb		10:16:40
2	Pb 220.353†	248482.1	260348.9	24447 ug/L	24447 ppb		10:16:40
2	S 181.975 Axial†	45947.3	48067.5	51788 ug/L	51788 ppb		10:16:40
2	Sb 206.836†	38447.2	40237.0	10413 ug/L	10413 ppb		10:16:40
2	Se 196.026†	22029.2	23096.0	10261 ug/L	10261 ppb		10:16:40
2	Si 251.611†	1810929.8	1896306.3	47861 ug/L	47861 ppb		10:16:35
2	Sn 189.927†	75436.2	79020.2	10451 ug/L	10451 ppb		10:16:40
2	Sr 421.552†	1714171.0	1799433.4	9440.6 ug/L	9440.6 ppb		10:15:03
2	Ti 334.940†	6848783.4	7175039.4	9887.9 ug/L	9887.9 ppb		10:16:28
2	Tl 190.801†	39162.4	41065.1	9993.4 ug/L	9993.4 ppb		10:16:40
2	U 409.014†	-1890.4	793.9	-25.762 ug/L	-25.762 ppb		10:16:40
2	V 292.402†	1672052.7	1753005.2	10154 ug/L	10154 ppb		10:16:35
2	Zn 213.857†	1839407.0	1925806.9	14064 ug/L	14064 ppb		10:16:35
2	SiO2†	1854816.0	1942233.7	104910 ug/L	104910 ppb		10:17:14
3	Sc 361.383	988641.8	988641.8	95.109 %			10:16:54
3	Sc Radial	4729.3	4729.3	96.3 %			10:15:38
3	Y 371.029	819320.7	819320.7	92.634 %			10:16:54
3	Y RADIAL	5365.7	5365.7	95.02 %			10:15:38
3	Ag 328.068†	-8213.6	-9110.0	3.2602 ug/L	3.2602 ppb		10:17:00
3	Al 396.153Radial†	696.2	766.6	89.512 ug/L	89.512 ppb		10:15:38
3	As 188.979†	30234.5	31825.9	10000 ug/L	10000 ppb		10:17:00
3	B 249.677†	253820.4	267339.4	5029.4 ug/L	5029.4 ppb		10:16:54
3	Ba 233.527†	2026560.8	2130778.1	13711 ug/L	13711 ppb		10:16:54
3	Be 313.107†	8933625.7	9397917.0	2949.8 ug/L	2949.8 ppb		10:16:48
3	Ca 317.933Radial†	39.6	23.3	41.255 ug/L	41.255 ppb		10:15:58
3	Cd 226.502†	1064014.2	1118967.5	9764.7 ug/L	9764.7 ppb		10:16:54
3	Co 228.616†	522368.9	549318.4	9048.6 ug/L	9048.6 ppb		10:17:00
3	Cr 267.716†	2544151.7	2674898.6	24049 ug/L	24049 ppb		10:16:54
3	Cu 324.752†	7431348.9	7804573.3	20842 ug/L	20842 ppb		10:16:48
3	Fe 238.204 Radial†	-12.5	-24.0	-4.8040 ug/L	-4.8040 ppb		10:15:58
3	K 766.490 Radial†	1529879.8	1585678.8	288920 ug/L	288920 ppb		10:15:33
3	Mg 279.077 IEC†	-0.4	-2.9	67.120 ug/L	67.120 ppb		10:15:58
3	Mn 257.610†	9650928.4	10146656.9	9608.3 ug/L	9608.3 ppb		10:16:48
3	Mo 202.031†	174449.4	183391.4	9732.1 ug/L	9732.1 ppb		10:17:00
3	Na 589.592 Radial†	-688.6	565.0	158.49 ug/L	158.49 ppb		10:15:38
3	Ni 231.604†	480476.8	505053.7	9890.0 ug/L	9890.0 ppb		10:16:54
3	P 214.914†	38530.7	40247.0	14805 ug/L	14805 ppb		10:17:00
3	Pb 220.353†	247695.8	260509.3	24462 ug/L	24462 ppb		10:17:00
3	S 181.975 Axial†	45756.0	48048.9	51768 ug/L	51768 ppb		10:17:00
3	Sb 206.836†	38484.3	40428.7	10462 ug/L	10462 ppb		10:17:00
3	Se 196.026†	22001.3	23154.1	10287 ug/L	10287 ppb		10:17:00
3	Si 251.611†	1807645.1	1900046.8	47957 ug/L	47957 ppb		10:16:54
3	Sn 189.927†	75099.1	78965.5	10444 ug/L	10444 ppb		10:17:00
3	Sr 421.552†	1714533.6	1779954.5	9338.4 ug/L	9338.4 ppb		10:15:33
3	Ti 334.940†	6878183.7	7233159.1	9968.1 ug/L	9968.1 ppb		10:16:48
3	Tl 190.801†	39204.4	41264.8	10043 ug/L	10043 ppb		10:17:00
3	U 409.014†	-1540.0	1154.8	-16.525 ug/L	-16.525 ppb		10:17:00
3	V 292.402†	1668512.3	1755925.1	10171 ug/L	10171 ppb		10:16:54
3	Zn 213.857†	1836555.6	1930116.1	14095 ug/L	14095 ppb		10:16:54
3	SiO2†	1844505.7	1938761.5	104720 ug/L	104720 ppb		10:17:22

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992125.5	95.444	%	0.3231				0.34%
Sc Radial	4697.2	95.7	%	0.57				0.60%
Y 371.029	822231.4	92.963	%	0.3204				0.34%
Y RADIAL	5351.3	94.76	%	0.224				0.24%
Ag 328.068†	-9028.8	3.5545	ug/L	0.25493	3.5545	ppb	0.25493	7.17%
Al 396.153Radial†	753.5	80.973	ug/L	7.8057	80.973	ppb	7.8057	9.64%
As 188.979†	31824.2	9999.6	ug/L	28.50	9999.6	ppb	28.50	0.29%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	267153.9	5025.9	ug/L	7.33	5025.9	ppb	7.33	0.15%
QC value within limits for B 249.677 Recovery = 100.52%								
Ba 233.527†	2128053.9	13694	ug/L	15.2	13694	ppb	15.2	0.11%
QC value within limits for Ba 233.527 Recovery = 91.29%								
Be 313.107†	9353204.2	2935.8	ug/L	13.76	2935.8	ppb	13.76	0.47%
QC value within limits for Be 313.107 Recovery = 97.86%								
Ca 317.933Radial†	23.7	42.014	ug/L	0.9565	42.014	ppb	0.9565	2.28%
Cd 226.502†	1117203.5	9749.3	ug/L	13.44	9749.3	ppb	13.44	0.14%

```
   QC value within limits for Cd 226.502  Recovery = 97.49%
Co 228.616†          547875.8      9024.9 ug/L        20.83      9024.9 ppb          20.83   0.23%
   QC value within limits for Co 228.616  Recovery = 90.25%
Cr 267.716†         2671231.6       24016 ug/L         28.6       24016 ppb           28.6   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.06%
Cu 324.752†         7782785.2       20784 ug/L         68.9       20784 ppb           68.9   0.33%
   QC value within limits for Cu 324.752  Recovery = 103.92%
Fe 238.204 Radial†      -23.0      7.1483 ug/L      12.73507      7.1483 ppb       12.73507 178.15%
K 766.490 Radial†   1604818.8      292410 ug/L       3446.4      292410 ppb         3446.4   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 97.47%
Mg 279.077 IEC†          -5.2     -33.655 ug/L      97.1262     -33.655 ppb        97.1262 288.59%
Mn 257.610†        10099618.1      9563.8 ug/L        44.75      9563.8 ppb          44.75   0.47%
   QC value within limits for Mn 257.610  Recovery = 95.64%
Mo 202.031†          183355.2      9730.1 ug/L         5.02      9730.1 ppb           5.02   0.05%
   QC value within limits for Mo 202.031  Recovery = 97.30%
Na 589.592 Radial†      560.9      157.34 ug/L        0.999      157.34 ppb          0.999   0.63%
Ni 231.604†          504449.1      9878.2 ug/L        11.25      9878.2 ppb          11.25   0.11%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†            40151.7       14771 ug/L         37.2       14771 ppb           37.2   0.25%
   QC value within limits for P 214.914  Recovery = 98.48%
Pb 220.353†          260519.4       24463 ug/L         16.5       24463 ppb           16.5   0.07%
   QC value within limits for Pb 220.353  Recovery = 97.85%
S 181.975 Axial†      48063.5       51783 ug/L         14.1       51783 ppb           14.1   0.03%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†           40387.4       10452 ug/L         35.3       10452 ppb           35.3   0.34%
   QC value within limits for Sb 206.836  Recovery = 104.52%
Se 196.026†           23147.4       10284 ug/L         21.5       10284 ppb           21.5   0.21%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†         1898311.4       47911 ug/L         48.3       47911 ppb           48.3   0.10%
   QC value within limits for Si 251.611  Recovery = 95.82%
Sn 189.927†           78998.1       10448 ug/L          3.8       10448 ppb            3.8   0.04%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†         1800865.2      9448.1 ug/L       113.65      9448.1 ppb          113.65   1.20%
   QC value within limits for Sr 421.552  Recovery = 94.48%
Ti 334.940†         7204497.8      9928.5 ug/L        40.08      9928.5 ppb          40.08   0.40%
   QC value within limits for Ti 334.940  Recovery = 99.29%
Tl 190.801†           41162.2       10017 ug/L         24.6       10017 ppb           24.6   0.25%
   QC value within limits for Tl 190.801  Recovery = 100.17%
U 409.014†             1018.8     -19.980 ug/L       5.0391     -19.980 ppb        5.0391  25.22%
V 292.402†          1754383.3       10162 ug/L          8.4       10162 ppb            8.4   0.08%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†         1927187.2       14074 ug/L         18.5       14074 ppb           18.5   0.13%
   QC value within limits for Zn 213.857  Recovery = 93.82%
SiO2†               1925618.9      104000 ug/L       1406.0      104000 ppb         1406.0   1.35%
   QC value within limits for SiO2  Recovery = 97.20%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:35:27
Data Type: Reprocessed on 12/4/2009 11:13:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1047259.4	1047259.4	100.75	%			10:38:38
1	Sc Radial	4761.2	4761.2	97.0	%			10:37:19
1	Y 371.029	877801.3	877801.3	99.246	%			10:38:38
1	Y RADIAL	5448.6	5448.6	96.48	%			10:37:19
1	Ag 328.068†	126050.2	124640.2	497.12	ug/L	497.12	ppb	10:38:38
1	Al 396.153Radial†	7440.9	7716.7	5074.2	ug/L	5074.2	ppb	10:37:19
1	As 188.979†	1564.9	1589.9	499.71	ug/L	499.71	ppb	10:38:58
1	B 249.677†	26439.3	26709.1	502.85	ug/L	502.85	ppb	10:38:38
1	Ba 233.527†	78257.0	77676.0	500.31	ug/L	500.31	ppb	10:38:38
1	Be 313.107†	1609637.8	1602560.0	500.64	ug/L	500.64	ppb	10:38:38
1	Ca 317.933Radial†	2795.0	2864.3	5071.4	ug/L	5071.4	ppb	10:37:39
1	Cd 226.502†	57701.5	57508.7	501.33	ug/L	501.33	ppb	10:38:38
1	Co 228.616†	29916.8	29781.0	490.71	ug/L	490.71	ppb	10:38:58
1	Cr 267.716†	56009.9	55506.2	499.47	ug/L	499.47	ppb	10:38:38
1	Cu 324.752†	197285.0	186882.6	499.33	ug/L	499.33	ppb	10:38:38
1	Fe 238.204 Radial†	414.6	416.5	5051.1	ug/L	5051.1	ppb	10:37:39
1	K 766.490 Radial†	29244.8	27587.5	5019.6	ug/L	5019.6	ppb	10:37:19
1	Mg 279.077 IEC†	112.9	114.0	5105.0	ug/L	5105.0	ppb	10:37:39
1	Mn 257.610†	533325.2	528788.5	501.14	ug/L	501.14	ppb	10:38:38
1	Mo 202.031†	9482.5	9382.8	498.28	ug/L	498.28	ppb	10:38:58
1	Na 589.592 Radial†	31766.0	34036.8	9547.3	ug/L	9547.3	ppb	10:37:19
1	Ni 231.604†	25490.6	25169.4	492.85	ug/L	492.85	ppb	10:38:58
1	P 214.914†	5838.6	5530.1	2398.1	ug/L	2398.1	ppb	10:38:58
1	Pb 220.353†	5306.5	5342.6	503.08	ug/L	503.08	ppb	10:38:58
1	S 181.975 Axial†	974.8	907.5	976.69	ug/L	976.69	ppb	10:38:58
1	Sb 206.836†	1928.6	1879.6	502.67	ug/L	502.67	ppb	10:38:58
1	Se 196.026†	1111.3	1124.5	517.96	ug/L	517.96	ppb	10:38:58
1	Si 251.611†	98838.0	97546.5	2465.5	ug/L	2465.5	ppb	10:38:38
1	Sn 189.927†	3759.8	3736.3	494.75	ug/L	494.75	ppb	10:38:58
1	Sr 421.552†	90481.6	93311.2	489.50	ug/L	489.50	ppb	10:37:19
1	Ti 334.940†	360977.5	359557.7	495.81	ug/L	495.81	ppb	10:38:38
1	Tl 190.801†	2036.0	2065.2	502.65	ug/L	502.65	ppb	10:38:58
1	U 409.014†	15855.8	18512.1	477.02	ug/L	477.02	ppb	10:38:38
1	V 292.402†	85658.6	86631.1	502.58	ug/L	502.58	ppb	10:38:38
1	Zn 213.857†	69492.3	68090.8	495.95	ug/L	495.95	ppb	10:38:38
1	SiO2†	98362.4	97033.1	5247.9	ug/L	5247.9	ppb	10:39:59
2	Sc 361.383	1037422.6	1037422.6	99.802	%			10:39:06
2	Sc Radial	4868.2	4868.2	99.2	%			10:37:44
2	Y 371.029	871512.6	871512.6	98.535	%			10:39:06
2	Y RADIAL	5580.6	5580.6	98.82	%			10:37:44
2	Ag 328.068†	124787.7	124561.6	496.79	ug/L	496.79	ppb	10:39:06
2	Al 396.153Radial†	7577.6	7686.0	5053.8	ug/L	5053.8	ppb	10:37:44
2	As 188.979†	1573.3	1613.0	506.90	ug/L	506.90	ppb	10:39:26
2	B 249.677†	26209.2	26727.3	503.20	ug/L	503.20	ppb	10:39:06
2	Ba 233.527†	77326.6	77480.2	499.05	ug/L	499.05	ppb	10:39:06
2	Be 313.107†	1594936.0	1602978.2	500.77	ug/L	500.77	ppb	10:39:06
2	Ca 317.933Radial†	2814.3	2820.5	4993.7	ug/L	4993.7	ppb	10:38:04
2	Cd 226.502†	56855.6	57204.2	498.69	ug/L	498.69	ppb	10:39:06
2	Co 228.616†	29700.5	29845.8	491.79	ug/L	491.79	ppb	10:39:26
2	Cr 267.716†	55296.8	55318.9	497.79	ug/L	497.79	ppb	10:39:06
2	Cu 324.752†	194982.3	186432.2	498.12	ug/L	498.12	ppb	10:39:06
2	Fe 238.204 Radial†	417.0	409.5	4966.9	ug/L	4966.9	ppb	10:38:04
2	K 766.490 Radial†	29839.3	27524.1	5008.1	ug/L	5008.1	ppb	10:37:44
2	Mg 279.077 IEC†	117.5	116.0	5195.9	ug/L	5195.9	ppb	10:38:04
2	Mn 257.610†	526678.7	527148.3	499.58	ug/L	499.58	ppb	10:39:06
2	Mo 202.031†	9428.2	9417.7	500.12	ug/L	500.12	ppb	10:39:26
2	Na 589.592 Radial†	32396.3	33952.4	9523.6	ug/L	9523.6	ppb	10:37:44
2	Ni 231.604†	25340.7	25259.1	494.60	ug/L	494.60	ppb	10:39:26

2	P 214.914†	5804.6	5551.0	2407.7 ug/L	2407.7 ppb	10:39:26
2	Pb 220.353†	5263.4	5349.4	503.72 ug/L	503.72 ppb	10:39:26
2	S 181.975 Axial†	988.1	930.0	1001.0 ug/L	1001.0 ppb	10:39:26
2	Sb 206.836†	1909.8	1879.0	502.65 ug/L	502.65 ppb	10:39:26
2	Se 196.026†	1110.8	1134.4	522.07 ug/L	522.07 ppb	10:39:26
2	Si 251.611†	97526.6	97162.7	2455.7 ug/L	2455.7 ppb	10:39:06
2	Sn 189.927†	3750.1	3761.8	498.13 ug/L	498.13 ppb	10:39:26
2	Sr 421.552†	92372.8	93167.6	488.75 ug/L	488.75 ppb	10:37:44
2	Ti 334.940†	357055.8	359025.5	495.07 ug/L	495.07 ppb	10:39:06
2	Tl 190.801†	2022.7	2071.0	504.04 ug/L	504.04 ppb	10:39:26
2	U 409.014†	15652.6	18457.6	475.62 ug/L	475.62 ppb	10:39:06
2	V 292.402†	84825.5	86602.5	502.46 ug/L	502.46 ppb	10:39:06
2	Zn 213.857†	68685.8	67936.7	494.81 ug/L	494.81 ppb	10:39:06
2	SiO2†	98206.6	97802.6	5289.6 ug/L	5289.6 ppb	10:40:04
3	Sc 361.383	1051298.3	1051298.3	101.14 %		10:39:33
3	Sc Radial	4830.5	4830.5	98.4 %		10:38:10
3	Y 371.029	882448.4	882448.4	99.772 %		10:39:33
3	Y RADIAL	5567.5	5567.5	98.59 %		10:38:10
3	Ag 328.068†	126352.4	124458.3	496.39 ug/L	496.39 ppb	10:39:33
3	Al 396.153Radial†	7584.8	7753.0	5098.3 ug/L	5098.3 ppb	10:38:10
3	As 188.979†	1571.1	1590.1	499.78 ug/L	499.78 ppb	10:39:53
3	B 249.677†	26600.7	26767.9	503.97 ug/L	503.97 ppb	10:39:33
3	Ba 233.527†	78444.5	77562.9	499.58 ug/L	499.58 ppb	10:39:33
3	Be 313.107†	1616743.5	1603447.8	500.92 ug/L	500.92 ppb	10:39:33
3	Ca 317.933Radial†	2814.8	2843.1	5033.9 ug/L	5033.9 ppb	10:38:30
3	Cd 226.502†	57588.5	57177.0	498.44 ug/L	498.44 ppb	10:39:33
3	Co 228.616†	29915.6	29665.7	488.81 ug/L	488.81 ppb	10:39:53
3	Cr 267.716†	56012.6	55295.4	497.58 ug/L	497.58 ppb	10:39:33
3	Cu 324.752†	198351.4	187184.8	500.14 ug/L	500.14 ppb	10:39:33
3	Fe 238.204 Radial†	419.0	414.8	5031.0 ug/L	5031.0 ppb	10:38:30
3	K 766.490 Radial†	29905.8	27826.9	5063.3 ug/L	5063.3 ppb	10:38:10
3	Mg 279.077 IEC†	115.7	115.1	5157.2 ug/L	5157.2 ppb	10:38:30
3	Mn 257.610†	534297.7	527716.4	500.12 ug/L	500.12 ppb	10:39:33
3	Mo 202.031†	9460.8	9325.2	495.22 ug/L	495.22 ppb	10:39:53
3	Na 589.592 Radial†	32215.5	34024.0	9543.7 ug/L	9543.7 ppb	10:38:10
3	Ni 231.604†	25482.0	25063.7	490.78 ug/L	490.78 ppb	10:39:53
3	P 214.914†	5863.3	5532.3	2399.0 ug/L	2399.0 ppb	10:39:53
3	Pb 220.353†	5293.0	5309.1	499.93 ug/L	499.93 ppb	10:39:53
3	S 181.975 Axial†	977.9	906.8	976.01 ug/L	976.01 ppb	10:39:53
3	Sb 206.836†	1932.1	1875.7	501.59 ug/L	501.59 ppb	10:39:53
3	Se 196.026†	1110.6	1119.5	515.66 ug/L	515.66 ppb	10:39:53
3	Si 251.611†	98982.9	97312.8	2459.6 ug/L	2459.6 ppb	10:39:33
3	Sn 189.927†	3764.7	3726.7	493.48 ug/L	493.48 ppb	10:39:53
3	Sr 421.552†	92161.4	93680.9	491.44 ug/L	491.44 ppb	10:38:10
3	Ti 334.940†	362476.2	359663.0	495.95 ug/L	495.95 ppb	10:39:33
3	Tl 190.801†	2031.1	2052.5	499.60 ug/L	499.60 ppb	10:39:53
3	U 409.014†	15972.3	18566.7	478.44 ug/L	478.44 ppb	10:39:33
3	V 292.402†	85783.4	86427.9	501.38 ug/L	501.38 ppb	10:39:33
3	Zn 213.857†	69583.1	67915.5	494.67 ug/L	494.67 ppb	10:39:33
3	SiO2†	99257.4	97542.8	5275.7 ug/L	5275.7 ppb	10:40:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1045326.8	100.56	%	0.687				0.68%
Sc Radial	4820.0	98.2	%	1.11				1.13%
Y 371.029	877254.1	99.184	%	0.6205				0.63%
Y RADIAL	5532.2	97.96	%	1.288				1.31%
Ag 328.068†	124553.4	496.77	ug/L	0.367	496.77	ppb	0.367	0.07%
QC value within limits for Ag 328.068 Recovery = 99.35%								
Al 396.153Radial†	7718.6	5075.4	ug/L	22.28	5075.4	ppb	22.28	0.44%
QC value within limits for Al 396.153Radial Recovery = 101.51%								
As 188.979†	1597.6	502.13	ug/L	4.128	502.13	ppb	4.128	0.82%
QC value within limits for As 188.979 Recovery = 100.43%								
B 249.677†	26734.8	503.34	ug/L	0.571	503.34	ppb	0.571	0.11%
QC value within limits for B 249.677 Recovery = 100.67%								
Ba 233.527†	77573.1	499.65	ug/L	0.633	499.65	ppb	0.633	0.13%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1602995.4	500.78	ug/L	0.139	500.78	ppb	0.139	0.03%
QC value within limits for Be 313.107 Recovery = 100.16%								

Ca 317.933Radial†	2842.6	5033.0 ug/L	38.86	5033.0 ppb	38.86	0.77%
QC value within limits for Ca 317.933Radial Recovery = 100.66%						
Cd 226.502†	57296.6	499.49 ug/L	1.604	499.49 ppb	1.604	0.32%
QC value within limits for Cd 226.502 Recovery = 99.90%						
Co 228.616†	29764.2	490.44 ug/L	1.510	490.44 ppb	1.510	0.31%
QC value within limits for Co 228.616 Recovery = 98.09%						
Cr 267.716†	55373.5	498.28 ug/L	1.039	498.28 ppb	1.039	0.21%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	186833.2	499.20 ug/L	1.013	499.20 ppb	1.013	0.20%
QC value within limits for Cu 324.752 Recovery = 99.84%						
Fe 238.204 Radial†	413.6	5016.3 ug/L	43.97	5016.3 ppb	43.97	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 100.33%						
K 766.490 Radial†	27646.2	5030.3 ug/L	29.10	5030.3 ppb	29.10	0.58%
QC value within limits for K 766.490 Radial Recovery = 100.61%						
Mg 279.077 IEC†	115.0	5152.7 ug/L	45.64	5152.7 ppb	45.64	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 103.05%						
Mn 257.610†	527884.4	500.28 ug/L	0.793	500.28 ppb	0.793	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%						
Mo 202.031†	9375.3	497.87 ug/L	2.477	497.87 ppb	2.477	0.50%
QC value within limits for Mo 202.031 Recovery = 99.57%						
Na 589.592 Radial†	34004.4	9538.2 ug/L	12.76	9538.2 ppb	12.76	0.13%
QC value within limits for Na 589.592 Radial Recovery = 95.38%						
Ni 231.604†	25164.0	492.74 ug/L	1.916	492.74 ppb	1.916	0.39%
QC value within limits for Ni 231.604 Recovery = 98.55%						
P 214.914†	5537.8	2401.6 ug/L	5.33	2401.6 ppb	5.33	0.22%
QC value within limits for P 214.914 Recovery = 96.06%						
Pb 220.353†	5333.7	502.25 ug/L	2.030	502.25 ppb	2.030	0.40%
QC value within limits for Pb 220.353 Recovery = 100.45%						
S 181.975 Axial†	914.8	984.56 ug/L	14.228	984.56 ppb	14.228	1.45%
QC value within limits for S 181.975 Axial Recovery = 98.46%						
Sb 206.836†	1878.1	502.30 ug/L	0.614	502.30 ppb	0.614	0.12%
QC value within limits for Sb 206.836 Recovery = 100.46%						
Se 196.026†	1126.1	518.56 ug/L	3.244	518.56 ppb	3.244	0.63%
QC value within limits for Se 196.026 Recovery = 103.71%						
Si 251.611†	97340.7	2460.2 ug/L	4.93	2460.2 ppb	4.93	0.20%
QC value within limits for Si 251.611 Recovery = 98.41%						
Sn 189.927†	3741.6	495.45 ug/L	2.400	495.45 ppb	2.400	0.48%
QC value within limits for Sn 189.927 Recovery = 99.09%						
Sr 421.552†	93386.6	489.90 ug/L	1.389	489.90 ppb	1.389	0.28%
QC value within limits for Sr 421.552 Recovery = 97.98%						
Ti 334.940†	359415.4	495.61 ug/L	0.472	495.61 ppb	0.472	0.10%
QC value within limits for Ti 334.940 Recovery = 99.12%						
Tl 190.801†	2062.9	502.10 ug/L	2.272	502.10 ppb	2.272	0.45%
QC value within limits for Tl 190.801 Recovery = 100.42%						
U 409.014†	18512.1	477.03 ug/L	1.407	477.03 ppb	1.407	0.29%
QC value within limits for U 409.014 Recovery = 95.41%						
V 292.402†	86553.8	502.14 ug/L	0.660	502.14 ppb	0.660	0.13%
QC value within limits for V 292.402 Recovery = 100.43%						
Zn 213.857†	67981.0	495.14 ug/L	0.700	495.14 ppb	0.700	0.14%
QC value within limits for Zn 213.857 Recovery = 99.03%						
SiO2†	97459.5	5271.0 ug/L	21.25	5271.0 ppb	21.25	0.40%
QC value within limits for SiO2 Recovery = 98.57%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 10:42:20
Data Type: Reprocessed on 12/4/2009 11:13:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1059835.6	1059835.6	101.96	%			10:45:29
1	Sc Radial	4967.0	4967.0	101	%			10:44:12
1	Y 371.029	900661.3	900661.3	101.83	%			10:45:29
1	Y RADIAL	5733.9	5733.9	101.5	%			10:44:12
1	Ag 328.068†	415.5	-66.5	-0.2709	ug/L	-0.2709	ppb	10:45:34
1	Al 396.153Radial†	-32.2	12.0	7.9092	ug/L	7.9092	ppb	10:44:12
1	As 188.979†	-33.3	3.9	1.2121	ug/L	1.2121	ppb	10:45:54
1	B 249.677†	138.5	602.0	11.380	ug/L	11.380	ppb	10:45:34
1	Ba 233.527†	31.8	31.2	0.1997	ug/L	0.1997	ppb	10:45:54
1	Be 313.107†	-4805.0	161.2	0.0502	ug/L	0.0502	ppb	10:45:34
1	Ca 317.933Radial†	26.1	8.0	14.083	ug/L	14.083	ppb	10:44:32
1	Cd 226.502†	-193.5	45.8	0.4026	ug/L	0.4026	ppb	10:45:54
1	Co 228.616†	-76.8	11.0	0.1816	ug/L	0.1816	ppb	10:45:54
1	Cr 267.716†	119.3	29.2	0.2628	ug/L	0.2628	ppb	10:45:54
1	Cu 324.752†	9057.6	-53.9	-0.1453	ug/L	-0.1453	ppb	10:45:34
1	Fe 238.204 Radial†	8.8	-2.3	-28.284	ug/L	-28.284	ppb	10:44:32
1	K 766.490 Radial†	3190.6	584.3	106.47	ug/L	106.47	ppb	10:44:12
1	Mg 279.077 IEC†	2.8	0.3	12.880	ug/L	12.880	ppb	10:44:32
1	Mn 257.610†	617.9	29.3	0.0247	ug/L	0.0247	ppb	10:45:54
1	Mo 202.031†	29.9	0.1	0.0020	ug/L	0.0020	ppb	10:45:54
1	Na 589.592 Radial†	-1142.1	151.0	42.361	ug/L	42.361	ppb	10:44:12
1	Ni 231.604†	142.0	7.4	0.1446	ug/L	0.1446	ppb	10:45:54
1	P 214.914†	260.5	-9.7	-4.2392	ug/L	-4.2392	ppb	10:45:54
1	Pb 220.353†	-57.8	18.9	1.7762	ug/L	1.7762	ppb	10:45:54
1	S 181.975 Axial†	51.6	-9.5	-10.192	ug/L	-10.192	ppb	10:45:54
1	Sb 206.836†	41.8	6.4	1.7119	ug/L	1.7119	ppb	10:45:54
1	Se 196.026†	-21.6	0.2	-0.0249	ug/L	-0.0249	ppb	10:45:54
1	Si 251.611†	642.1	72.1	1.7894	ug/L	1.7894	ppb	10:45:54
1	Sn 189.927†	13.4	17.5	2.3108	ug/L	2.3108	ppb	10:45:54
1	Sr 421.552†	1.3	8.7	0.0458	ug/L	0.0458	ppb	10:44:12
1	Ti 334.940†	-1326.2	-40.3	-0.0540	ug/L	-0.0540	ppb	10:45:34
1	Tl 190.801†	-54.4	-9.1	-2.1940	ug/L	-2.1940	ppb	10:45:54
1	U 409.014†	-2910.6	-80.7	-2.0832	ug/L	-2.0832	ppb	10:45:29
1	V 292.402†	-1632.5	7.4	0.0427	ug/L	0.0427	ppb	10:45:34
1	Zn 213.857†	969.0	64.8	0.4776	ug/L	0.4776	ppb	10:45:54
1	SiO2†	658.7	47.0	2.4610	ug/L	2.4610	ppb	10:47:00
2	Sc 361.383	1042657.7	1042657.7	100.31	%			10:45:59
2	Sc Radial	4900.5	4900.5	99.8	%			10:44:37
2	Y 371.029	888302.7	888302.7	100.43	%			10:45:59
2	Y RADIAL	5646.4	5646.4	99.99	%			10:44:37
2	Ag 328.068†	478.1	2.6	0.0056	ug/L	0.0056	ppb	10:46:05
2	Al 396.153Radial†	-41.6	2.1	1.3804	ug/L	1.3804	ppb	10:44:37
2	As 188.979†	-31.0	5.7	1.7594	ug/L	1.7594	ppb	10:46:25
2	B 249.677†	140.4	606.1	11.457	ug/L	11.457	ppb	10:46:05
2	Ba 233.527†	34.0	33.9	0.2169	ug/L	0.2169	ppb	10:46:25
2	Be 313.107†	-4790.6	97.9	0.0304	ug/L	0.0304	ppb	10:46:05
2	Ca 317.933Radial†	22.1	4.3	7.6393	ug/L	7.6393	ppb	10:44:57
2	Cd 226.502†	-197.5	38.8	0.3403	ug/L	0.3403	ppb	10:46:25
2	Co 228.616†	-91.0	-4.4	-0.0701	ug/L	-0.0701	ppb	10:46:25
2	Cr 267.716†	148.3	60.0	0.5397	ug/L	0.5397	ppb	10:46:25
2	Cu 324.752†	9081.6	116.5	0.3101	ug/L	0.3101	ppb	10:46:05
2	Fe 238.204 Radial†	9.3	-1.7	-20.765	ug/L	-20.765	ppb	10:44:57
2	K 766.490 Radial†	3162.0	598.5	109.07	ug/L	109.07	ppb	10:44:37
2	Mg 279.077 IEC†	3.7	1.2	54.768	ug/L	54.768	ppb	10:44:57
2	Mn 257.610†	652.8	74.2	0.0671	ug/L	0.0671	ppb	10:46:25
2	Mo 202.031†	40.2	10.8	0.5733	ug/L	0.5733	ppb	10:46:25
2	Na 589.592 Radial†	-1230.9	46.7	13.098	ug/L	13.098	ppb	10:44:37
2	Ni 231.604†	141.8	9.4	0.1844	ug/L	0.1844	ppb	10:46:25

2	P 214.914†	262.1	-3.8	-1.7142	ug/L	-1.7142	ppb	10:46:25
2	Pb 220.353†	-76.0	-0.3	-0.0204	ug/L	-0.0204	ppb	10:46:25
2	S 181.975 Axial†	60.2	-0.1	-0.0748	ug/L	-0.0748	ppb	10:46:25
2	Sb 206.836†	50.8	16.0	4.2236	ug/L	4.2236	ppb	10:46:25
2	Se 196.026†	-24.8	-3.4	-1.5607	ug/L	-1.5607	ppb	10:46:25
2	Si 251.611†	621.4	61.9	1.5238	ug/L	1.5238	ppb	10:46:25
2	Sn 189.927†	-1.0	3.3	0.4416	ug/L	0.4416	ppb	10:46:25
2	Sr 421.552†	-25.0	-17.6	-0.0924	ug/L	-0.0924	ppb	10:44:37
2	Ti 334.940†	-1314.8	-50.3	-0.0677	ug/L	-0.0677	ppb	10:46:05
2	Tl 190.801†	-45.2	-0.8	-0.1894	ug/L	-0.1894	ppb	10:46:25
2	U 409.014†	-2909.6	-126.7	-3.2750	ug/L	-3.2750	ppb	10:45:59
2	V 292.402†	-1647.3	-33.8	-0.1873	ug/L	-0.1873	ppb	10:46:05
2	Zn 213.857†	961.6	73.1	0.5359	ug/L	0.5359	ppb	10:46:25
2	SiO2†	667.3	66.2	3.4940	ug/L	3.4940	ppb	10:47:05
3	Sc 361.383	1046719.8	1046719.8	100.70	%			10:46:30
3	Sc Radial	4898.4	4898.4	99.8	%			10:45:03
3	Y 371.029	891482.0	891482.0	100.79	%			10:46:30
3	Y RADIAL	5630.5	5630.5	99.70	%			10:45:03
3	Ag 328.068†	460.4	-16.9	-0.0626	ug/L	-0.0626	ppb	10:46:35
3	Al 396.153Radial†	-27.8	15.9	10.479	ug/L	10.479	ppb	10:45:03
3	As 188.979†	-35.1	1.8	0.5415	ug/L	0.5415	ppb	10:46:55
3	B 249.677†	29.6	495.5	9.3651	ug/L	9.3651	ppb	10:46:35
3	Ba 233.527†	23.1	22.9	0.1466	ug/L	0.1466	ppb	10:46:55
3	Be 313.107†	-4784.0	123.0	0.0383	ug/L	0.0383	ppb	10:46:35
3	Ca 317.933Radial†	24.4	6.6	11.758	ug/L	11.758	ppb	10:45:23
3	Cd 226.502†	-189.2	47.8	0.4172	ug/L	0.4172	ppb	10:46:55
3	Co 228.616†	-87.4	-0.5	-0.0063	ug/L	-0.0063	ppb	10:46:55
3	Cr 267.716†	137.5	48.8	0.4401	ug/L	0.4401	ppb	10:46:55
3	Cu 324.752†	8960.0	-39.4	-0.1056	ug/L	-0.1056	ppb	10:46:35
3	Fe 238.204 Radial†	10.5	-0.4	-5.2671	ug/L	-5.2671	ppb	10:45:23
3	K 766.490 Radial†	3052.6	490.2	89.339	ug/L	89.339	ppb	10:45:03
3	Mg 279.077 IEC†	4.8	2.3	102.75	ug/L	102.75	ppb	10:45:23
3	Mn 257.610†	631.4	50.3	0.0452	ug/L	0.0452	ppb	10:46:55
3	Mo 202.031†	37.8	8.3	0.4415	ug/L	0.4415	ppb	10:46:55
3	Na 589.592 Radial†	-1217.3	59.8	16.775	ug/L	16.775	ppb	10:45:03
3	Ni 231.604†	145.9	12.9	0.2537	ug/L	0.2537	ppb	10:46:55
3	P 214.914†	269.8	2.8	1.3081	ug/L	1.3081	ppb	10:46:55
3	Pb 220.353†	-77.5	-1.4	-0.1238	ug/L	-0.1238	ppb	10:46:55
3	S 181.975 Axial†	57.3	-3.2	-3.4446	ug/L	-3.4446	ppb	10:46:55
3	Sb 206.836†	55.3	20.3	5.3873	ug/L	5.3873	ppb	10:46:55
3	Se 196.026†	-31.2	-9.7	-4.2933	ug/L	-4.2933	ppb	10:46:55
3	Si 251.611†	617.6	55.7	1.3715	ug/L	1.3715	ppb	10:46:55
3	Sn 189.927†	9.4	13.7	1.8116	ug/L	1.8116	ppb	10:46:55
3	Sr 421.552†	-18.1	-10.7	-0.0563	ug/L	-0.0563	ppb	10:45:03
3	Ti 334.940†	-1293.0	-23.6	-0.0284	ug/L	-0.0284	ppb	10:46:35
3	Tl 190.801†	-32.9	11.6	2.8025	ug/L	2.8025	ppb	10:46:55
3	U 409.014†	-3115.2	-319.7	-8.2651	ug/L	-8.2651	ppb	10:46:30
3	V 292.402†	-1661.7	-41.7	-0.2454	ug/L	-0.2454	ppb	10:46:35
3	Zn 213.857†	941.0	49.0	0.3553	ug/L	0.3553	ppb	10:46:55
3	SiO2†	626.1	22.8	1.1424	ug/L	1.1424	ppb	10:47:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1049737.7	100.99	%	0.864				0.86%
Sc Radial	4921.9	100	%	0.8				0.79%
Y 371.029	893482.0	101.02	%	0.726				0.72%
Y RADIAL	5670.3	100.4	%	0.99				0.98%
Ag 328.068†	-26.9	-0.1093	ug/L	0.14402	-0.1093	ppb	0.14402	131.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.0	6.5896	ug/L	4.69075	6.5896	ppb	4.69075	71.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.1710	ug/L	0.60995	1.1710	ppb	0.60995	52.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	567.8	10.734	ug/L	1.1860	10.734	ppb	1.1860	11.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.4	0.1877	ug/L	0.03663	0.1877	ppb	0.03663	19.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.4	0.0396	ug/L	0.00995	0.0396	ppb	0.00995	25.13%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          6.3      11.160 ug/L        3.2631      11.160 ppb        3.2631  29.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               44.1       0.3867 ug/L       0.04082       0.3867 ppb       0.04082  10.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.1       0.0350 ug/L       0.13087       0.0350 ppb       0.13087 373.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               46.0       0.4142 ug/L       0.14022       0.4142 ppb       0.14022  33.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                7.7       0.0197 ug/L       0.25222       0.0197 ppb       0.25222 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.5     -18.105 ug/L       11.7366     -18.105 ppb       11.7366  64.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        557.7      101.63 ug/L        10.722      101.63 ppb        10.722  10.55%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.3      56.801 ug/L       44.9718      56.801 ppb       44.9718  79.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               51.3       0.0457 ug/L       0.02121       0.0457 ppb       0.02121  46.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.4       0.3389 ug/L       0.29915       0.3389 ppb       0.29915  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        85.8      24.078 ug/L       15.9399      24.078 ppb       15.9399  66.20%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.9       0.1942 ug/L       0.05521       0.1942 ppb       0.05521  28.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -3.5      -1.5484 ug/L       2.77737      -1.5484 ppb       2.77737 179.37%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.8       0.5440 ug/L       1.06836       0.5440 ppb       1.06836 196.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2      -4.5703 ug/L       5.15146      -4.5703 ppb       5.15146 112.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.2       3.7743 ug/L       1.87844       3.7743 ppb       1.87844  49.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3      -1.9597 ug/L       2.16197      -1.9597 ppb       2.16197 110.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               63.2       1.5615 ug/L       0.21151       1.5615 ppb       0.21151  13.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.5       1.5214 ug/L       0.96781       1.5214 ppb       0.96781  63.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.5      -0.0343 ug/L       0.07167      -0.0343 ppb       0.07167 208.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -38.1      -0.0500 ug/L       0.01994      -0.0500 ppb       0.01994  39.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6       0.1397 ug/L       2.51446       0.1397 ppb       2.51446 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -175.7      -4.5411 ug/L       3.27969      -4.5411 ppb       3.27969  72.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -22.7      -0.1300 ug/L       0.15236      -0.1300 ppb       0.15236 117.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               62.3       0.4562 ug/L       0.09217       0.4562 ppb       0.09217  20.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     45.3       2.3658 ug/L       1.17872       2.3658 ppb       1.17872  49.82%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/4/2009 10:49:21
Data Type: Reprocessed on 12/4/2009 11:13:39
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1003622.4	1003622.4	96.550	%			10:52:32
1	Sc Radial	4781.7	4781.7	97.4	%			10:51:15
1	Y 371.029	847471.2	847471.2	95.817	%			10:52:32
1	Y RADIAL	5504.0	5504.0	97.46	%			10:51:15
1	Ag 328.068†	-29966.0	-31510.8	-2.1237	ug/L	-2.1237	ppb	10:52:32
1	Al 396.153Radial†	-67.7	-25.7	-15.884	ug/L	-15.884	ppb	10:51:15
1	As 188.979†	-280.2	-253.6	-19.502	ug/L	-19.502	ppb	10:52:52
1	B 249.677†	2197.4	2742.0	0.6945	ug/L	0.6945	ppb	10:52:32
1	Ba 233.527†	-2247.1	-2327.4	-0.5442	ug/L	-0.5442	ppb	10:52:52
1	Be 313.107†	-4622.0	86.8	0.0267	ug/L	0.0267	ppb	10:52:32
1	Ca 317.933Radial†	27.1	10.0	17.676	ug/L	17.676	ppb	10:51:35
1	Cd 226.502†	3971.5	4349.0	-0.5907	ug/L	-0.5907	ppb	10:52:52
1	Co 228.616†	246.8	341.9	0.0694	ug/L	0.0694	ppb	10:52:52
1	Cr 267.716†	-631.3	-741.6	0.3039	ug/L	0.3039	ppb	10:52:52
1	Cu 324.752†	-356.5	-9306.7	-5.1995	ug/L	-5.1995	ppb	10:52:32
1	Fe 238.204 Radial†	31048.1	31868.0	385290	ug/L	385290	ppb	10:51:15
1	K 766.490 Radial†	2731.1	234.6	55.448	ug/L	55.448	ppb	10:51:15
1	Mg 279.077 IEC†	11.9	9.7	104.19	ug/L	104.19	ppb	10:51:35
1	Mn 257.610†	-44660.1	-46832.6	-5.9338	ug/L	-5.9338	ppb	10:52:32
1	Mo 202.031†	-430.7	-475.3	2.1088	ug/L	2.1088	ppb	10:52:32
1	Na 589.592 Radial†	-1210.8	36.8	10.314	ug/L	10.314	ppb	10:51:15
1	Ni 231.604†	248.3	125.2	2.4500	ug/L	2.4500	ppb	10:52:52
1	P 214.914†	885.0	651.5	-15.346	ug/L	-15.346	ppb	10:52:52
1	Pb 220.353†	269.9	355.1	1.6616	ug/L	1.6616	ppb	10:52:52
1	S 181.975 Axial†	69.5	11.8	12.758	ug/L	12.758	ppb	10:52:52
1	Sb 206.836†	34.9	1.5	6.3397	ug/L	6.3397	ppb	10:52:52
1	Se 196.026†	-2684.1	-2758.6	177.63	ug/L	177.63	ppb	10:52:52
1	Si 251.611†	-836.9	-1424.5	-35.735	ug/L	-35.735	ppb	10:52:52
1	Sn 189.927†	-42.7	-39.9	-0.1202	ug/L	-0.1202	ppb	10:52:52
1	Sr 421.552†	68.7	78.0	0.4088	ug/L	0.4088	ppb	10:51:15
1	Ti 334.940†	-1328.7	-115.7	-0.1785	ug/L	-0.1785	ppb	10:52:52
1	Tl 190.801†	-54.3	-12.0	-3.2994	ug/L	-3.2994	ppb	10:52:52
1	U 409.014†	-799.2	1946.3	1.8581	ug/L	1.8581	ppb	10:52:32
1	V 292.402†	7310.0	9179.7	-6.3064	ug/L	-6.3064	ppb	10:52:52
1	Zn 213.857†	5677.6	4994.9	-0.0832	ug/L	-0.0832	ppb	10:52:52
1	SiO2†	-843.4	-1472.5	-79.077	ug/L	-79.077	ppb	10:53:49
2	Sc 361.383	1007227.3	1007227.3	96.897	%			10:52:58
2	Sc Radial	4783.7	4783.7	97.4	%			10:51:40
2	Y 371.029	850950.5	850950.5	96.210	%			10:52:58
2	Y RADIAL	5514.7	5514.7	97.65	%			10:51:40
2	Ag 328.068†	-30065.4	-31502.3	-2.6793	ug/L	-2.6793	ppb	10:52:58
2	Al 396.153Radial†	-66.0	-24.0	-14.743	ug/L	-14.743	ppb	10:51:40
2	As 188.979†	-258.3	-229.9	-12.415	ug/L	-12.415	ppb	10:53:18
2	B 249.677†	2134.7	2669.1	-0.4390	ug/L	-0.4390	ppb	10:52:58
2	Ba 233.527†	-2256.7	-2328.9	-0.6236	ug/L	-0.6236	ppb	10:53:18
2	Be 313.107†	-4654.5	70.4	0.0217	ug/L	0.0217	ppb	10:52:58
2	Ca 317.933Radial†	30.2	13.2	23.319	ug/L	23.319	ppb	10:52:00
2	Cd 226.502†	3941.7	4303.5	-0.8044	ug/L	-0.8044	ppb	10:53:18
2	Co 228.616†	246.7	340.9	0.0786	ug/L	0.0786	ppb	10:53:18
2	Cr 267.716†	-661.2	-770.1	0.0130	ug/L	0.0130	ppb	10:53:18
2	Cu 324.752†	-307.0	-9254.4	-5.1534	ug/L	-5.1534	ppb	10:52:58
2	Fe 238.204 Radial†	30913.1	31716.1	383450	ug/L	383450	ppb	10:51:40
2	K 766.490 Radial†	2692.2	193.6	47.910	ug/L	47.910	ppb	10:51:40
2	Mg 279.077 IEC†	6.3	3.9	-152.23	ug/L	-152.23	ppb	10:52:00
2	Mn 257.610†	-44839.7	-46852.3	-6.1309	ug/L	-6.1309	ppb	10:52:58
2	Mo 202.031†	-437.0	-480.3	1.7134	ug/L	1.7134	ppb	10:52:58
2	Na 589.592 Radial†	-1162.1	87.3	24.485	ug/L	24.485	ppb	10:51:40
2	Ni 231.604†	219.2	94.3	1.8432	ug/L	1.8432	ppb	10:53:18

2	P 214.914†	900.1	663.8	-8.3753	ug/L	-8.3753 ppb	10:53:18
2	Pb 220.353†	261.8	345.8	0.9374	ug/L	0.9374 ppb	10:53:18
2	S 181.975 Axial†	74.2	16.5	17.728	ug/L	17.728 ppb	10:53:18
2	Sb 206.836†	18.8	-15.3	1.8640	ug/L	1.8640 ppb	10:53:18
2	Se 196.026†	-2667.3	-2731.4	183.03	ug/L	183.03 ppb	10:53:18
2	Si 251.611†	-855.9	-1440.9	-36.144	ug/L	-36.144 ppb	10:53:18
2	Sn 189.927†	-47.8	-45.0	-0.8244	ug/L	-0.8244 ppb	10:53:18
2	Sr 421.552†	58.3	67.3	0.3527	ug/L	0.3527 ppb	10:51:40
2	Ti 334.940†	-1322.5	-104.4	-0.1635	ug/L	-0.1635 ppb	10:53:18
2	Tl 190.801†	-54.8	-12.3	-3.3719	ug/L	-3.3719 ppb	10:53:18
2	U 409.014†	-721.8	2029.1	4.2309	ug/L	4.2309 ppb	10:52:58
2	V 292.402†	7213.0	9052.5	-6.7606	ug/L	-6.7606 ppb	10:53:18
2	Zn 213.857†	5625.5	4920.1	-0.4455	ug/L	-0.4455 ppb	10:53:18
2	SiO2†	-889.1	-1516.6	-81.451	ug/L	-81.451 ppb	10:53:54
3	Sc 361.383	1020977.6	1020977.6	98.220	%		10:53:23
3	Sc Radial	4812.6	4812.6	98.0	%		10:52:05
3	Y 371.029	862360.3	862360.3	97.500	%		10:53:23
3	Y RADIAL	5507.3	5507.3	97.52	%		10:52:05
3	Ag 328.068†	-30281.1	-31304.0	-2.3149	ug/L	-2.3149 ppb	10:53:23
3	Al 396.153Radial†	-50.7	-8.0	-4.1070	ug/L	-4.1070 ppb	10:52:05
3	As 188.979†	-258.7	-226.8	-11.627	ug/L	-11.627 ppb	10:53:44
3	B 249.677†	2251.4	2758.3	1.4198	ug/L	1.4198 ppb	10:53:23
3	Ba 233.527†	-2196.9	-2236.7	-0.0813	ug/L	-0.0813 ppb	10:53:44
3	Be 313.107†	-4761.2	26.4	0.0080	ug/L	0.0080 ppb	10:53:23
3	Ca 317.933Radial†	29.4	12.1	21.437	ug/L	21.437 ppb	10:52:25
3	Cd 226.502†	3970.7	4278.3	-0.8926	ug/L	-0.8926 ppb	10:53:44
3	Co 228.616†	245.2	336.0	0.0116	ug/L	0.0116 ppb	10:53:44
3	Cr 267.716†	-656.2	-755.8	0.1157	ug/L	0.1157 ppb	10:53:44
3	Cu 324.752†	-291.9	-9234.7	-5.1678	ug/L	-5.1678 ppb	10:53:23
3	Fe 238.204 Radial†	30993.4	31607.7	382140	ug/L	382140 ppb	10:52:05
3	K 766.490 Radial†	2789.1	275.9	62.864	ug/L	62.864 ppb	10:52:05
3	Mg 279.077 IEC†	9.4	7.1	-8.8088	ug/L	-8.8088 ppb	10:52:25
3	Mn 257.610†	-45412.1	-46811.9	-6.2260	ug/L	-6.2260 ppb	10:53:23
3	Mo 202.031†	-472.9	-510.7	0.0035	ug/L	0.0035 ppb	10:53:23
3	Na 589.592 Radial†	-1218.9	36.4	10.218	ug/L	10.218 ppb	10:52:05
3	Ni 231.604†	255.1	127.8	2.5003	ug/L	2.5003 ppb	10:53:44
3	P 214.914†	891.0	642.1	-17.049	ug/L	-17.049 ppb	10:53:44
3	Pb 220.353†	263.5	343.9	0.8633	ug/L	0.8633 ppb	10:53:44
3	S 181.975 Axial†	74.1	15.4	16.577	ug/L	16.577 ppb	10:53:44
3	Sb 206.836†	17.0	-17.4	1.2703	ug/L	1.2703 ppb	10:53:44
3	Se 196.026†	-2682.2	-2709.4	187.98	ug/L	187.98 ppb	10:53:44
3	Si 251.611†	-871.7	-1445.1	-36.230	ug/L	-36.230 ppb	10:53:44
3	Sn 189.927†	-41.6	-38.0	0.0851	ug/L	0.0851 ppb	10:53:44
3	Sr 421.552†	87.6	96.8	0.5075	ug/L	0.5075 ppb	10:52:05
3	Ti 334.940†	-1336.3	-100.1	-0.1587	ug/L	-0.1587 ppb	10:53:44
3	Tl 190.801†	-48.1	-4.7	-1.5379	ug/L	-1.5379 ppb	10:53:44
3	U 409.014†	-653.6	2108.6	6.4506	ug/L	6.4506 ppb	10:53:23
3	V 292.402†	7185.4	8924.2	-7.3115	ug/L	-7.3115 ppb	10:53:44
3	Zn 213.857†	5673.0	4890.2	-0.5488	ug/L	-0.5488 ppb	10:53:44
3	SiO2†	-1009.6	-1626.9	-87.404	ug/L	-87.404 ppb	10:53:59

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1010609.1	97.222	%	0.8811				0.91%
Sc Radial	4792.7	97.6	%	0.35				0.36%
Y 371.029	853594.0	96.509	%	0.8806				0.91%
Y RADIAL	5508.7	97.55	%	0.098				0.10%
Ag 328.068†	-31439.1	-2.3726	ug/L	0.28222	-2.3726	ppb	0.28222	11.89%
Al 396.153Radial†	-19.2	-11.578	ug/L	6.4950	-11.578	ppb	6.4950	56.10%
As 188.979†	-236.8	-14.514	ug/L	4.3372	-14.514	ppb	4.3372	29.88%
B 249.677†	2723.2	0.5584	ug/L	0.93685	0.5584	ppb	0.93685	167.76%
Ba 233.527†	-2297.7	-0.4164	ug/L	0.29286	-0.4164	ppb	0.29286	70.34%
Be 313.107†	61.2	0.0188	ug/L	0.00972	0.0188	ppb	0.00972	51.72%
Ca 317.933Radial†	11.8	20.811	ug/L	2.8731	20.811	ppb	2.8731	13.81%
Cd 226.502†	4310.3	-0.7626	ug/L	0.15522	-0.7626	ppb	0.15522	20.36%
Co 228.616†	339.6	0.0532	ug/L	0.03633	0.0532	ppb	0.03633	68.24%
Cr 267.716†	-755.8	0.1442	ug/L	0.14756	0.1442	ppb	0.14756	102.33%
Cu 324.752†	-9265.3	-5.1736	ug/L	0.02357	-5.1736	ppb	0.02357	0.46%
Fe 238.204 Radial†	31730.6	383630	ug/L	1580.9	383630	ppb	1580.9	0.41%

K 766.490 Radial†	234.7	55.407	ug/L	7.4774	55.407	ppb	7.4774 13.50%
Mg 279.077 IEC†	6.9	-18.948	ug/L	128.5122	-18.948	ppb	128.5122 678.22%
Mn 257.610†	-46832.3	-6.0969	ug/L	0.14903	-6.0969	ppb	0.14903 2.44%
Mo 202.031†	-488.8	1.2753	ug/L	1.11898	1.2753	ppb	1.11898 87.75%
Na 589.592 Radial†	53.5	15.006	ug/L	8.2095	15.006	ppb	8.2095 54.71%
Ni 231.604†	115.8	2.2645	ug/L	0.36575	2.2645	ppb	0.36575 16.15%
P 214.914†	652.5	-13.590	ug/L	4.5955	-13.590	ppb	4.5955 33.82%
Pb 220.353†	348.3	1.1541	ug/L	0.44103	1.1541	ppb	0.44103 38.21%
S 181.975 Axial†	14.6	15.688	ug/L	2.6019	15.688	ppb	2.6019 16.59%
Sb 206.836†	-10.4	3.1580	ug/L	2.77134	3.1580	ppb	2.77134 87.76%
Se 196.026†	-2733.1	182.88	ug/L	5.174	182.88	ppb	5.174 2.83%
Si 251.611†	-1436.9	-36.036	ug/L	0.2643	-36.036	ppb	0.2643 0.73%
Sn 189.927†	-40.9	-0.2865	ug/L	0.47699	-0.2865	ppb	0.47699 166.49%
Sr 421.552†	80.7	0.4230	ug/L	0.07835	0.4230	ppb	0.07835 18.52%
Ti 334.940†	-106.7	-0.1669	ug/L	0.01037	-0.1669	ppb	0.01037 6.21%
Tl 190.801†	-9.6	-2.7364	ug/L	1.03860	-2.7364	ppb	1.03860 37.96%
U 409.014†	2028.0	4.1799	ug/L	2.29671	4.1799	ppb	2.29671 54.95%
V 292.402†	9052.1	-6.7928	ug/L	0.50332	-6.7928	ppb	0.50332 7.41%
Zn 213.857†	4935.1	-0.3592	ug/L	0.24455	-0.3592	ppb	0.24455 68.09%
SiO2†	-1538.7	-82.644	ug/L	4.2899	-82.644	ppb	4.2899 5.19%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 10:56:10
Data Type: Reprocessed on 12/4/2009 11:13:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1049825.4	1049825.4	100.99	%			10:59:22
1	Sc Radial	4800.5	4800.5	97.8	%			10:58:03
1	Y 371.029	881016.5	881016.5	99.610	%			10:59:22
1	Y RADIAL	5500.4	5500.4	97.40	%			10:58:03
1	Ag 328.068†	125470.0	123759.9	493.61	ug/L	493.61	ppb	10:59:22
1	Al 396.153Radial†	7492.4	7706.6	5067.8	ug/L	5067.8	ppb	10:58:03
1	As 188.979†	1543.9	1565.3	492.03	ug/L	492.03	ppb	10:59:42
1	B 249.677†	26126.2	26335.0	495.80	ug/L	495.80	ppb	10:59:22
1	Ba 233.527†	78114.7	77345.3	498.18	ug/L	498.18	ppb	10:59:22
1	Be 313.107†	1609232.7	1598253.9	499.29	ug/L	499.29	ppb	10:59:22
1	Ca 317.933Radial†	2789.1	2834.7	5019.0	ug/L	5019.0	ppb	10:58:23
1	Cd 226.502†	57468.0	57137.5	498.10	ug/L	498.10	ppb	10:59:22
1	Co 228.616†	29697.6	29491.3	485.93	ug/L	485.93	ppb	10:59:42
1	Cr 267.716†	55832.5	55194.7	496.67	ug/L	496.67	ppb	10:59:22
1	Cu 324.752†	196253.9	185383.1	495.32	ug/L	495.32	ppb	10:59:22
1	Fe 238.204 Radial†	413.3	411.8	4993.6	ug/L	4993.6	ppb	10:58:23
1	K 766.490 Radial†	29076.4	27168.4	4943.3	ug/L	4943.3	ppb	10:58:03
1	Mg 279.077 IEC†	113.4	113.5	5085.6	ug/L	5085.6	ppb	10:58:23
1	Mn 257.610†	532131.5	526312.7	498.79	ug/L	498.79	ppb	10:59:22
1	Mo 202.031†	9372.9	9251.3	491.30	ug/L	491.30	ppb	10:59:42
1	Na 589.592 Radial†	31581.5	33579.9	9419.2	ug/L	9419.2	ppb	10:58:03
1	Ni 231.604†	25284.4	24903.3	487.64	ug/L	487.64	ppb	10:59:42
1	P 214.914†	5798.3	5476.1	2374.5	ug/L	2374.5	ppb	10:59:42
1	Pb 220.353†	5253.2	5277.0	496.92	ug/L	496.92	ppb	10:59:42
1	S 181.975 Axial†	968.4	898.8	967.34	ug/L	967.34	ppb	10:59:42
1	Sb 206.836†	1901.1	1847.8	494.10	ug/L	494.10	ppb	10:59:42
1	Se 196.026†	1084.6	1095.3	504.80	ug/L	504.80	ppb	10:59:42
1	Si 251.611†	98411.4	96884.3	2448.8	ug/L	2448.8	ppb	10:59:22
1	Sn 189.927†	3732.7	3700.3	489.99	ug/L	489.99	ppb	10:59:42
1	Sr 421.552†	90415.3	92479.7	485.14	ug/L	485.14	ppb	10:58:03
1	Ti 334.940†	359968.9	357683.2	493.22	ug/L	493.22	ppb	10:59:22
1	Tl 190.801†	2017.6	2042.0	497.03	ug/L	497.03	ppb	10:59:42
1	U 409.014†	15769.5	18388.1	473.82	ug/L	473.82	ppb	10:59:22
1	V 292.402†	85388.4	86155.8	499.77	ug/L	499.77	ppb	10:59:22
1	Zn 213.857†	69255.0	67687.2	493.03	ug/L	493.03	ppb	10:59:22
1	SiO2†	98372.1	96803.9	5235.8	ug/L	5235.8	ppb	11:00:42
2	Sc 361.383	1047940.9	1047940.9	100.81	%			10:59:49
2	Sc Radial	4898.3	4898.3	99.8	%			10:58:28
2	Y 371.029	878115.5	878115.5	99.282	%			10:59:49
2	Y RADIAL	5578.5	5578.5	98.78	%			10:58:28
2	Ag 328.068†	125656.8	124168.6	495.20	ug/L	495.20	ppb	10:59:49
2	Al 396.153Radial†	7569.5	7631.0	5017.7	ug/L	5017.7	ppb	10:58:28
2	As 188.979†	1564.0	1587.9	499.09	ug/L	499.09	ppb	11:00:10
2	B 249.677†	26185.1	26439.9	497.78	ug/L	497.78	ppb	10:59:49
2	Ba 233.527†	78158.2	77527.4	499.35	ug/L	499.35	ppb	10:59:49
2	Be 313.107†	1602798.1	1594736.5	498.20	ug/L	498.20	ppb	10:59:49
2	Ca 317.933Radial†	2791.3	2780.0	4922.0	ug/L	4922.0	ppb	10:58:48
2	Cd 226.502†	57451.9	57223.9	498.86	ug/L	498.86	ppb	10:59:49
2	Co 228.616†	29831.8	29677.3	489.00	ug/L	489.00	ppb	11:00:10
2	Cr 267.716†	55714.3	55176.9	496.51	ug/L	496.51	ppb	10:59:49
2	Cu 324.752†	196760.8	186235.3	497.59	ug/L	497.59	ppb	10:59:49
2	Fe 238.204 Radial†	414.9	404.8	4910.0	ug/L	4910.0	ppb	10:58:48
2	K 766.490 Radial†	29378.5	26877.5	4890.3	ug/L	4890.3	ppb	10:58:28
2	Mg 279.077 IEC†	111.5	109.2	4892.8	ug/L	4892.8	ppb	10:58:48
2	Mn 257.610†	532341.2	527468.3	499.88	ug/L	499.88	ppb	10:59:49
2	Mo 202.031†	9422.8	9317.6	494.80	ug/L	494.80	ppb	11:00:10
2	Na 589.592 Radial†	31904.0	33258.3	9328.9	ug/L	9328.9	ppb	10:58:28
2	Ni 231.604†	25396.2	25059.3	490.69	ug/L	490.69	ppb	11:00:10

2	P 214.914†	5838.6	5526.3	2396.8	ug/L	2396.8 ppb	11:00:10
2	Pb 220.353†	5277.7	5310.7	500.07	ug/L	500.07 ppb	11:00:10
2	S 181.975 Axial†	973.7	905.7	974.86	ug/L	974.86 ppb	11:00:10
2	Sb 206.836†	1909.6	1859.5	497.37	ug/L	497.37 ppb	11:00:10
2	Se 196.026†	1110.3	1122.7	516.66	ug/L	516.66 ppb	11:00:10
2	Si 251.611†	98592.9	97239.6	2457.8	ug/L	2457.8 ppb	10:59:49
2	Sn 189.927†	3763.1	3737.1	494.84	ug/L	494.84 ppb	11:00:10
2	Sr 421.552†	91840.8	92062.3	482.95	ug/L	482.95 ppb	10:58:28
2	Ti 334.940†	360341.9	358694.2	494.61	ug/L	494.61 ppb	10:59:49
2	Tl 190.801†	2024.7	2052.7	499.62	ug/L	499.62 ppb	11:00:10
2	U 409.014†	15829.1	18475.3	476.09	ug/L	476.09 ppb	10:59:49
2	V 292.402†	85363.9	86283.5	500.56	ug/L	500.56 ppb	10:59:49
2	Zn 213.857†	69264.5	67819.9	493.99	ug/L	493.99 ppb	10:59:49
2	SiO2†	98368.6	96975.7	5245.0	ug/L	5245.0 ppb	11:00:48
3	Sc 361.383	1046835.4	1046835.4	100.71	%		11:00:17
3	Sc Radial	4925.8	4925.8	100	%		10:58:53
3	Y 371.029	877905.3	877905.3	99.258	%		11:00:17
3	Y RADIAL	5638.1	5638.1	99.84	%		10:58:53
3	Ag 328.068†	125819.8	124462.1	496.35	ug/L	496.35 ppb	11:00:17
3	Al 396.153Radial†	7656.2	7675.0	5046.8	ug/L	5046.8 ppb	10:58:53
3	As 188.979†	1564.6	1590.2	499.79	ug/L	499.79 ppb	11:00:37
3	B 249.677†	26133.8	26416.3	497.35	ug/L	497.35 ppb	11:00:17
3	Ba 233.527†	78430.7	77879.9	501.61	ug/L	501.61 ppb	11:00:17
3	Be 313.107†	1612795.9	1606343.0	501.82	ug/L	501.82 ppb	11:00:17
3	Ca 317.933Radial†	2798.0	2771.0	4906.2	ug/L	4906.2 ppb	10:59:13
3	Cd 226.502†	57708.9	57539.3	501.62	ug/L	501.62 ppb	11:00:17
3	Co 228.616†	29781.0	29658.2	488.69	ug/L	488.69 ppb	11:00:37
3	Cr 267.716†	56002.3	55521.2	499.61	ug/L	499.61 ppb	11:00:17
3	Cu 324.752†	196729.5	186410.3	498.06	ug/L	498.06 ppb	11:00:17
3	Fe 238.204 Radial†	410.8	398.4	4832.7	ug/L	4832.7 ppb	10:59:13
3	K 766.490 Radial†	29669.6	27003.4	4913.2	ug/L	4913.2 ppb	10:58:53
3	Mg 279.077 IEC†	114.3	111.4	4990.0	ug/L	4990.0 ppb	10:59:13
3	Mn 257.610†	533737.5	529412.3	501.71	ug/L	501.71 ppb	11:00:17
3	Mo 202.031†	9423.0	9327.6	495.33	ug/L	495.33 ppb	11:00:37
3	Na 589.592 Radial†	32104.8	33280.1	9335.1	ug/L	9335.1 ppb	10:58:53
3	Ni 231.604†	25362.4	25052.4	490.55	ug/L	490.55 ppb	11:00:37
3	P 214.914†	5810.6	5504.7	2387.1	ug/L	2387.1 ppb	11:00:37
3	Pb 220.353†	5273.3	5311.9	500.20	ug/L	500.20 ppb	11:00:37
3	S 181.975 Axial†	973.8	906.8	976.00	ug/L	976.00 ppb	11:00:37
3	Sb 206.836†	1882.0	1834.1	490.56	ug/L	490.56 ppb	11:00:37
3	Se 196.026†	1089.0	1102.7	507.51	ug/L	507.51 ppb	11:00:37
3	Si 251.611†	98741.7	97490.6	2464.1	ug/L	2464.1 ppb	11:00:17
3	Sn 189.927†	3743.2	3721.2	492.74	ug/L	492.74 ppb	11:00:37
3	Sr 421.552†	92629.9	92335.3	484.39	ug/L	484.39 ppb	10:58:53
3	Ti 334.940†	361150.4	359874.4	496.24	ug/L	496.24 ppb	11:00:17
3	Tl 190.801†	2025.3	2055.3	500.29	ug/L	500.29 ppb	11:00:37
3	U 409.014†	15743.9	18407.3	474.34	ug/L	474.34 ppb	11:00:17
3	V 292.402†	85639.3	86646.4	502.66	ug/L	502.66 ppb	11:00:17
3	Zn 213.857†	69371.3	67998.5	495.31	ug/L	495.31 ppb	11:00:17
3	SiO2†	97489.0	96205.3	5203.1	ug/L	5203.1 ppb	11:00:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1048200.6	100.84	%	0.145				0.14%
Sc Radial	4874.9	99.3	%	1.34				1.35%
Y 371.029	879012.4	99.383	%	0.1966				0.20%
Y RADIAL	5572.3	98.67	%	1.223				1.24%
Ag 328.068†	124130.2	495.06	ug/L	1.378	495.06	ppb	1.378	0.28%
QC value within limits for Ag 328.068 Recovery = 99.01%								
Al 396.153Radial†	7670.9	5044.1	ug/L	25.16	5044.1	ppb	25.16	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	1581.1	496.97	ug/L	4.294	496.97	ppb	4.294	0.86%
QC value within limits for As 188.979 Recovery = 99.39%								
B 249.677†	26397.1	496.98	ug/L	1.044	496.98	ppb	1.044	0.21%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	77584.2	499.71	ug/L	1.747	499.71	ppb	1.747	0.35%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1599777.8	499.77	ug/L	1.858	499.77	ppb	1.858	0.37%
QC value within limits for Be 313.107 Recovery = 99.95%								

Ca 317.933Radial†	2795.2	4949.0 ug/L	61.06	4949.0 ppb	61.06	1.23%
QC value within limits for Ca 317.933Radial Recovery = 98.98%						
Cd 226.502†	57300.2	499.53 ug/L	1.852	499.53 ppb	1.852	0.37%
QC value within limits for Cd 226.502 Recovery = 99.91%						
Co 228.616†	29608.9	487.87 ug/L	1.689	487.87 ppb	1.689	0.35%
QC value within limits for Co 228.616 Recovery = 97.57%						
Cr 267.716†	55297.6	497.60 ug/L	1.743	497.60 ppb	1.743	0.35%
QC value within limits for Cr 267.716 Recovery = 99.52%						
Cu 324.752†	186009.6	496.99 ug/L	1.464	496.99 ppb	1.464	0.29%
QC value within limits for Cu 324.752 Recovery = 99.40%						
Fe 238.204 Radial†	405.0	4912.1 ug/L	80.46	4912.1 ppb	80.46	1.64%
QC value within limits for Fe 238.204 Radial Recovery = 98.24%						
K 766.490 Radial†	27016.4	4915.6 ug/L	26.56	4915.6 ppb	26.56	0.54%
QC value within limits for K 766.490 Radial Recovery = 98.31%						
Mg 279.077 IEC†	111.4	4989.5 ug/L	96.39	4989.5 ppb	96.39	1.93%
QC value within limits for Mg 279.077 IEC Recovery = 99.79%						
Mn 257.610†	527731.1	500.13 ug/L	1.476	500.13 ppb	1.476	0.30%
QC value within limits for Mn 257.610 Recovery = 100.03%						
Mo 202.031†	9298.8	493.81 ug/L	2.195	493.81 ppb	2.195	0.44%
QC value within limits for Mo 202.031 Recovery = 98.76%						
Na 589.592 Radial†	33372.8	9361.1 ug/L	50.41	9361.1 ppb	50.41	0.54%
QC value within limits for Na 589.592 Radial Recovery = 93.61%						
Ni 231.604†	25005.0	489.63 ug/L	1.726	489.63 ppb	1.726	0.35%
QC value within limits for Ni 231.604 Recovery = 97.93%						
P 214.914†	5502.4	2386.1 ug/L	11.15	2386.1 ppb	11.15	0.47%
QC value within limits for P 214.914 Recovery = 95.45%						
Pb 220.353†	5299.9	499.06 ug/L	1.860	499.06 ppb	1.860	0.37%
QC value within limits for Pb 220.353 Recovery = 99.81%						
S 181.975 Axial†	903.8	972.73 ug/L	4.706	972.73 ppb	4.706	0.48%
QC value within limits for S 181.975 Axial Recovery = 97.27%						
Sb 206.836†	1847.1	494.01 ug/L	3.403	494.01 ppb	3.403	0.69%
QC value within limits for Sb 206.836 Recovery = 98.80%						
Se 196.026†	1106.9	509.66 ug/L	6.212	509.66 ppb	6.212	1.22%
QC value within limits for Se 196.026 Recovery = 101.93%						
Si 251.611†	97204.8	2456.9 ug/L	7.70	2456.9 ppb	7.70	0.31%
QC value within limits for Si 251.611 Recovery = 98.28%						
Sn 189.927†	3719.5	492.52 ug/L	2.434	492.52 ppb	2.434	0.49%
QC value within limits for Sn 189.927 Recovery = 98.50%						
Sr 421.552†	92292.4	484.16 ug/L	1.112	484.16 ppb	1.112	0.23%
QC value within limits for Sr 421.552 Recovery = 96.83%						
Ti 334.940†	358750.6	494.69 ug/L	1.509	494.69 ppb	1.509	0.31%
QC value within limits for Ti 334.940 Recovery = 98.94%						
Tl 190.801†	2050.0	498.98 ug/L	1.719	498.98 ppb	1.719	0.34%
QC value within limits for Tl 190.801 Recovery = 99.80%						
U 409.014†	18423.6	474.75 ug/L	1.188	474.75 ppb	1.188	0.25%
QC value within limits for U 409.014 Recovery = 94.95%						
V 292.402†	86361.9	501.00 ug/L	1.491	501.00 ppb	1.491	0.30%
QC value within limits for V 292.402 Recovery = 100.20%						
Zn 213.857†	67835.2	494.11 ug/L	1.146	494.11 ppb	1.146	0.23%
QC value within limits for Zn 213.857 Recovery = 98.82%						
SiO2†	96661.6	5227.9 ug/L	22.02	5227.9 ppb	22.02	0.42%
QC value within limits for SiO2 Recovery = 97.76%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 11:03:02
Data Type: Reprocessed on 12/4/2009 11:13:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1037608.8	1037608.8	99.820	%			11:06:12
1	Sc Radial	4873.4	4873.4	99.3	%			11:04:55
1	Y 371.029	883432.3	883432.3	99.883	%			11:06:12
1	Y RADIAL	5614.7	5614.7	99.42	%			11:04:55
1	Ag 328.068†	563.4	90.3	0.3642	ug/L	0.3642	ppb	11:06:17
1	Al 396.153Radial†	-41.1	2.4	1.5734	ug/L	1.5734	ppb	11:04:55
1	As 188.979†	-37.7	-1.2	-0.3763	ug/L	-0.3763	ppb	11:06:37
1	B 249.677†	-111.1	354.8	6.7029	ug/L	6.7029	ppb	11:06:17
1	Ba 233.527†	10.7	10.7	0.0682	ug/L	0.0682	ppb	11:06:37
1	Be 313.107†	-4756.4	108.9	0.0340	ug/L	0.0340	ppb	11:06:17
1	Ca 317.933Radial†	20.7	3.0	5.2555	ug/L	5.2555	ppb	11:05:15
1	Cd 226.502†	-212.1	23.1	0.2013	ug/L	0.2013	ppb	11:06:37
1	Co 228.616†	-66.2	20.0	0.3283	ug/L	0.3283	ppb	11:06:37
1	Cr 267.716†	129.6	42.1	0.3800	ug/L	0.3800	ppb	11:06:37
1	Cu 324.752†	8911.4	-10.0	-0.0265	ug/L	-0.0265	ppb	11:06:17
1	Fe 238.204 Radial†	11.4	0.5	5.9140	ug/L	5.9140	ppb	11:05:15
1	K 766.490 Radial†	2926.5	378.8	69.038	ug/L	69.038	ppb	11:04:55
1	Mg 279.077 IEC†	2.9	0.4	17.659	ug/L	17.659	ppb	11:05:15
1	Mn 257.610†	617.2	41.7	0.0397	ug/L	0.0397	ppb	11:06:37
1	Mo 202.031†	28.2	-1.0	-0.0519	ug/L	-0.0519	ppb	11:06:37
1	Na 589.592 Radial†	-1247.0	23.7	6.6453	ug/L	6.6453	ppb	11:04:55
1	Ni 231.604†	138.6	6.9	0.1346	ug/L	0.1346	ppb	11:06:37
1	P 214.914†	259.3	-5.4	-2.3839	ug/L	-2.3839	ppb	11:06:37
1	Pb 220.353†	-57.1	18.3	1.7194	ug/L	1.7194	ppb	11:06:37
1	S 181.975 Axial†	57.7	-2.3	-2.5279	ug/L	-2.5279	ppb	11:06:37
1	Sb 206.836†	47.2	12.6	3.3370	ug/L	3.3370	ppb	11:06:37
1	Se 196.026†	-27.3	-6.0	-2.6299	ug/L	-2.6299	ppb	11:06:37
1	Si 251.611†	601.3	44.8	1.1115	ug/L	1.1115	ppb	11:06:37
1	Sn 189.927†	3.3	7.7	1.0142	ug/L	1.0142	ppb	11:06:37
1	Sr 421.552†	46.2	54.0	0.2833	ug/L	0.2833	ppb	11:04:55
1	Ti 334.940†	-1253.7	4.5	0.0093	ug/L	0.0093	ppb	11:06:17
1	Tl 190.801†	-48.2	-4.0	-0.9732	ug/L	-0.9732	ppb	11:06:37
1	U 409.014†	-3031.3	-262.8	-6.7959	ug/L	-6.7959	ppb	11:06:12
1	V 292.402†	-1666.0	-60.5	-0.3608	ug/L	-0.3608	ppb	11:06:17
1	Zn 213.857†	909.7	25.7	0.1871	ug/L	0.1871	ppb	11:06:37
1	SiO2†	574.3	-23.7	-1.3421	ug/L	-1.3421	ppb	11:07:43
2	Sc 361.383	1036612.8	1036612.8	99.724	%			11:06:43
2	Sc Radial	4881.3	4881.3	99.4	%			11:05:21
2	Y 371.029	882062.6	882062.6	99.728	%			11:06:43
2	Y RADIAL	5627.5	5627.5	99.65	%			11:05:21
2	Ag 328.068†	560.2	87.7	0.3462	ug/L	0.3462	ppb	11:06:48
2	Al 396.153Radial†	-39.6	4.0	2.6295	ug/L	2.6295	ppb	11:05:21
2	As 188.979†	-29.2	7.3	2.2629	ug/L	2.2629	ppb	11:07:08
2	B 249.677†	-121.7	344.0	6.5012	ug/L	6.5012	ppb	11:06:48
2	Ba 233.527†	14.1	14.2	0.0903	ug/L	0.0903	ppb	11:07:08
2	Be 313.107†	-4805.6	55.0	0.0170	ug/L	0.0170	ppb	11:06:48
2	Ca 317.933Radial†	19.5	1.8	3.2015	ug/L	3.2015	ppb	11:05:41
2	Cd 226.502†	-221.0	14.1	0.1224	ug/L	0.1224	ppb	11:07:08
2	Co 228.616†	-75.6	10.5	0.1737	ug/L	0.1737	ppb	11:07:08
2	Cr 267.716†	121.9	34.5	0.3089	ug/L	0.3089	ppb	11:07:08
2	Cu 324.752†	8869.5	-43.4	-0.1159	ug/L	-0.1159	ppb	11:06:48
2	Fe 238.204 Radial†	11.1	0.2	2.2069	ug/L	2.2069	ppb	11:05:41
2	K 766.490 Radial†	2802.6	249.4	45.444	ug/L	45.444	ppb	11:05:21
2	Mg 279.077 IEC†	1.0	-1.5	-67.366	ug/L	-67.366	ppb	11:05:41
2	Mn 257.610†	581.5	6.5	0.0076	ug/L	0.0076	ppb	11:07:08
2	Mo 202.031†	30.6	1.4	0.0765	ug/L	0.0765	ppb	11:07:08
2	Na 589.592 Radial†	-1236.5	36.3	10.179	ug/L	10.179	ppb	11:05:21
2	Ni 231.604†	130.7	-0.8	-0.0163	ug/L	-0.0163	ppb	11:07:08

2	P 214.914†	266.5	2.1	0.9951	ug/L	0.9951	ppb	11:07:08
2	Pb 220.353†	-56.8	18.6	1.7458	ug/L	1.7458	ppb	11:07:08
2	S 181.975 Axial†	57.4	-2.5	-2.7298	ug/L	-2.7298	ppb	11:07:08
2	Sb 206.836†	45.4	10.9	2.8989	ug/L	2.8989	ppb	11:07:08
2	Se 196.026†	-28.8	-7.5	-3.2951	ug/L	-3.2951	ppb	11:07:08
2	Si 251.611†	577.7	21.7	0.5309	ug/L	0.5309	ppb	11:07:08
2	Sn 189.927†	5.2	9.6	1.2661	ug/L	1.2661	ppb	11:07:08
2	Sr 421.552†	-29.5	-22.2	-0.1167	ug/L	-0.1167	ppb	11:05:21
2	Ti 334.940†	-1319.5	-62.7	-0.0867	ug/L	-0.0867	ppb	11:06:48
2	Tl 190.801†	-51.2	-7.1	-1.7171	ug/L	-1.7171	ppb	11:07:08
2	U 409.014†	-2739.0	27.3	0.7062	ug/L	0.7062	ppb	11:06:43
2	V 292.402†	-1669.5	-65.6	-0.3749	ug/L	-0.3749	ppb	11:06:48
2	Zn 213.857†	908.7	25.7	0.1912	ug/L	0.1912	ppb	11:07:08
2	SiO2†	642.4	45.1	2.4073	ug/L	2.4073	ppb	11:07:48
3	Sc 361.383	1043922.7	1043922.7	100.43	%			11:07:13
3	Sc Radial	4909.9	4909.9	100	%			11:05:46
3	Y 371.029	889449.2	889449.2	100.56	%			11:07:13
3	Y RADIAL	5657.3	5657.3	100.2	%			11:05:46
3	Ag 328.068†	489.6	13.4	0.0605	ug/L	0.0605	ppb	11:07:18
3	Al 396.153Radial†	-9.9	33.9	22.350	ug/L	22.350	ppb	11:05:46
3	As 188.979†	-34.4	2.3	0.7242	ug/L	0.7242	ppb	11:07:38
3	B 249.677†	-82.1	384.4	7.2618	ug/L	7.2618	ppb	11:07:18
3	Ba 233.527†	11.7	11.7	0.0758	ug/L	0.0758	ppb	11:07:38
3	Be 313.107†	-4816.1	78.3	0.0242	ug/L	0.0242	ppb	11:07:18
3	Ca 317.933Radial†	20.0	2.2	3.8990	ug/L	3.8990	ppb	11:06:06
3	Cd 226.502†	-215.7	20.8	0.1798	ug/L	0.1798	ppb	11:07:38
3	Co 228.616†	-86.4	0.3	0.0058	ug/L	0.0058	ppb	11:07:38
3	Cr 267.716†	107.2	19.0	0.1718	ug/L	0.1718	ppb	11:07:38
3	Cu 324.752†	8896.1	-79.3	-0.2108	ug/L	-0.2108	ppb	11:07:18
3	Fe 238.204 Radial†	12.4	1.4	16.976	ug/L	16.976	ppb	11:06:06
3	K 766.490 Radial†	2710.6	141.0	25.709	ug/L	25.709	ppb	11:05:46
3	Mg 279.077 IEC†	-1.4	-3.9	-176.52	ug/L	-176.52	ppb	11:06:06
3	Mn 257.610†	607.1	27.8	0.0313	ug/L	0.0313	ppb	11:07:38
3	Mo 202.031†	33.0	3.6	0.1939	ug/L	0.1939	ppb	11:07:38
3	Na 589.592 Radial†	-1276.2	3.8	1.0755	ug/L	1.0755	ppb	11:05:46
3	Ni 231.604†	128.9	-3.6	-0.0707	ug/L	-0.0707	ppb	11:07:38
3	P 214.914†	267.3	1.0	0.5232	ug/L	0.5232	ppb	11:07:38
3	Pb 220.353†	-70.2	5.7	0.5380	ug/L	0.5380	ppb	11:07:38
3	S 181.975 Axial†	52.9	-7.4	-7.9618	ug/L	-7.9618	ppb	11:07:38
3	Sb 206.836†	43.4	8.5	2.2903	ug/L	2.2903	ppb	11:07:38
3	Se 196.026†	-20.8	0.6	0.3492	ug/L	0.3492	ppb	11:07:38
3	Si 251.611†	584.3	24.2	0.5962	ug/L	0.5962	ppb	11:07:38
3	Sn 189.927†	12.4	16.7	2.2103	ug/L	2.2103	ppb	11:07:38
3	Sr 421.552†	-11.6	-4.2	-0.0222	ug/L	-0.0222	ppb	11:05:46
3	Ti 334.940†	-1335.5	-69.4	-0.0947	ug/L	-0.0947	ppb	11:07:18
3	Tl 190.801†	-53.6	-9.1	-2.2125	ug/L	-2.2125	ppb	11:07:38
3	U 409.014†	-2867.2	-81.1	-2.0983	ug/L	-2.0983	ppb	11:07:13
3	V 292.402†	-1610.3	5.0	0.0210	ug/L	0.0210	ppb	11:07:18
3	Zn 213.857†	931.7	42.2	0.3153	ug/L	0.3153	ppb	11:07:38
3	SiO2†	634.7	32.9	1.7484	ug/L	1.7484	ppb	11:07:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1039381.4	99.990	%	0.3814				0.38%
Sc Radial	4888.2	99.6	%	0.39				0.39%
Y 371.029	884981.4	100.06	%	0.444				0.44%
Y RADIAL	5633.2	99.75	%	0.387				0.39%
Ag 328.068†	63.8	0.2570	ug/L	0.17040	0.2570	ppb	0.17040	66.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.4	8.8511	ug/L	11.70267	8.8511	ppb	11.70267	132.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	0.8703	ug/L	1.32561	0.8703	ppb	1.32561	152.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	361.1	6.8220	ug/L	0.39404	6.8220	ppb	0.39404	5.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0781	ug/L	0.01119	0.0781	ppb	0.01119	14.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.7	0.0251	ug/L	0.00852	0.0251	ppb	0.00852	34.02%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          2.3      4.1187 ug/L       1.04445      4.1187 ppb        1.04445  25.36%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               19.3      0.1678 ug/L       0.04082      0.1678 ppb        0.04082  24.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               10.3      0.1693 ug/L       0.16132      0.1693 ppb        0.16132  95.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               31.9      0.2869 ug/L       0.10585      0.2869 ppb        0.10585  36.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -44.2     -0.1177 ug/L       0.09218     -0.1177 ppb        0.09218  78.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      8.3656 ug/L       7.68377      8.3656 ppb        7.68377  91.85%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        256.4     46.731 ug/L       21.6932     46.731 ppb        21.6932  46.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.7    -75.407 ug/L       97.3372    -75.407 ppb        97.3372 129.08%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               25.3      0.0262 ug/L       0.01666      0.0262 ppb        0.01666  63.56%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.4      0.0728 ug/L       0.12296      0.0728 ppb        0.12296 168.85%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        21.3      5.9666 ug/L       4.58946      5.9666 ppb        4.58946  76.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.8      0.0159 ug/L       0.10636      0.0159 ppb        0.10636 670.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -0.2885 ug/L       1.82992     -0.2885 ppb        1.82992 634.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               14.2      1.3344 ug/L       0.68983      1.3344 ppb        0.68983  51.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.1     -4.4065 ug/L       3.08066     -4.4065 ppb        3.08066  69.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               10.7      2.8421 ug/L       0.52567      2.8421 ppb        0.52567  18.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.3     -1.8586 ug/L       1.94071     -1.8586 ppb        1.94071 104.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.2      0.7462 ug/L       0.31809      0.7462 ppb        0.31809  42.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.3      1.4969 ug/L       0.63056      1.4969 ppb        0.63056  42.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                9.2      0.0481 ug/L       0.20908      0.0481 ppb        0.20908 434.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -42.5     -0.0574 ug/L       0.05784     -0.0574 ppb        0.05784 100.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -6.8     -1.6343 ug/L       0.62381     -1.6343 ppb        0.62381  38.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -105.5     -2.7293 ug/L       3.79063     -2.7293 ppb        3.79063 138.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -40.3     -0.2382 ug/L       0.22464     -0.2382 ppb        0.22464  94.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.2      0.2312 ug/L       0.07285      0.2312 ppb        0.07285  31.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     18.1      0.9379 ug/L       2.00181      0.9379 ppb        2.00181 213.44%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 12:13:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.8	4827.8	98.3	%			12:15:37
1	Y RADIAL	5464.8	5464.8	96.77	%			12:15:37
1	Al 396.153Radial†	7535.8	7707.6	5067.6	ug/L	5067.6	ppb	12:15:37
1	Ca 317.933Radial†	2848.4	2878.9	5097.2	ug/L	5097.2	ppb	12:15:57
1	Fe 238.204 Radial†	426.8	423.1	5131.1	ug/L	5131.1	ppb	12:15:57
1	K 766.490 Radial†	29213.2	27139.6	4937.9	ug/L	4937.9	ppb	12:15:37
1	Mg 279.077 IEC†	116.7	116.2	5205.9	ug/L	5205.9	ppb	12:15:57
1	Na 589.592 Radial†	32210.4	34037.2	9547.4	ug/L	9547.4	ppb	12:15:37
1	Sr 421.552†	91973.1	93542.0	490.72	ug/L	490.72	ppb	12:15:37
1	Sc 361.383	1025545.7	1025545.7	98.659	%			12:16:57
1	Y 371.029	858809.2	858809.2	97.099	%			12:16:57
1	Ag 328.068†	125875.3	127111.9	506.97	ug/L	506.97	ppb	12:16:57
1	As 188.979†	1571.1	1629.1	512.01	ug/L	512.01	ppb	12:17:17
1	B 249.677†	26094.9	26915.6	506.71	ug/L	506.71	ppb	12:16:57
1	Ba 233.527†	78193.4	79256.1	510.49	ug/L	510.49	ppb	12:16:57
1	Be 313.107†	1603591.1	1630258.6	509.30	ug/L	509.30	ppb	12:16:57
1	Cd 226.502†	57592.7	58611.1	510.95	ug/L	510.95	ppb	12:16:57
1	Co 228.616†	30044.5	30539.2	503.21	ug/L	503.21	ppb	12:17:17
1	Cr 267.716†	55789.9	56460.3	508.06	ug/L	508.06	ppb	12:16:57
1	Cu 324.752†	196804.7	190541.9	509.11	ug/L	509.11	ppb	12:16:57
1	Mn 257.610†	533018.7	539686.0	511.47	ug/L	511.47	ppb	12:16:57
1	Mo 202.031†	9489.4	9589.1	509.23	ug/L	509.23	ppb	12:17:17
1	Ni 231.604†	25516.5	25731.3	503.85	ug/L	503.85	ppb	12:17:17
1	P 214.914†	5867.6	5682.2	2464.7	ug/L	2464.7	ppb	12:17:17
1	Pb 220.353†	5288.2	5435.7	511.83	ug/L	511.83	ppb	12:17:17
1	S 181.975 Axial†	974.1	927.3	998.02	ug/L	998.02	ppb	12:17:17
1	Sb 206.836†	1921.3	1912.8	511.61	ug/L	511.61	ppb	12:17:17
1	Se 196.026†	1101.5	1137.9	524.22	ug/L	524.22	ppb	12:17:17
1	Si 251.611†	98814.1	99599.4	2517.4	ug/L	2517.4	ppb	12:16:57
1	Sn 189.927†	3760.5	3816.0	505.30	ug/L	505.30	ppb	12:17:17
1	Ti 334.940†	360761.1	366924.5	505.96	ug/L	505.96	ppb	12:16:57
1	Tl 190.801†	2042.3	2114.3	514.58	ug/L	514.58	ppb	12:17:17
1	U 409.014†	15952.3	18943.1	488.13	ug/L	488.13	ppb	12:16:57
1	V 292.402†	85415.6	88185.0	511.63	ug/L	511.63	ppb	12:16:57
1	Zn 213.857†	69440.0	69498.2	506.20	ug/L	506.20	ppb	12:16:57
1	SiO2†	98546.3	99286.6	5369.9	ug/L	5369.9	ppb	12:18:17
2	Sc Radial	4796.1	4796.1	97.7	%			12:16:03
2	Y RADIAL	5522.6	5522.6	97.79	%			12:16:03
2	Al 396.153Radial†	7659.5	7884.7	5184.6	ug/L	5184.6	ppb	12:16:03
2	Ca 317.933Radial†	2823.0	2872.1	5085.1	ug/L	5085.1	ppb	12:16:23
2	Fe 238.204 Radial†	419.5	418.5	5075.3	ug/L	5075.3	ppb	12:16:23
2	K 766.490 Radial†	29533.6	27663.6	5033.4	ug/L	5033.4	ppb	12:16:03
2	Mg 279.077 IEC†	116.2	116.5	5218.5	ug/L	5218.5	ppb	12:16:23
2	Na 589.592 Radial†	32817.0	34874.3	9782.2	ug/L	9782.2	ppb	12:16:03
2	Sr 421.552†	93460.5	95681.6	501.94	ug/L	501.94	ppb	12:16:03
2	Sc 361.383	1030038.1	1030038.1	99.091	%			12:17:24
2	Y 371.029	864410.5	864410.5	97.732	%			12:17:24
2	Ag 328.068†	125411.4	126087.4	502.88	ug/L	502.88	ppb	12:17:24
2	As 188.979†	1561.3	1612.2	506.71	ug/L	506.71	ppb	12:17:44
2	B 249.677†	25908.0	26611.6	500.97	ug/L	500.97	ppb	12:17:24
2	Ba 233.527†	77686.2	78398.6	504.96	ug/L	504.96	ppb	12:17:24
2	Be 313.107†	1598583.8	1618116.5	505.50	ug/L	505.50	ppb	12:17:24
2	Cd 226.502†	57227.8	57988.2	505.52	ug/L	505.52	ppb	12:17:24
2	Co 228.616†	30148.8	30511.6	502.76	ug/L	502.76	ppb	12:17:44
2	Cr 267.716†	55516.0	55937.3	503.35	ug/L	503.35	ppb	12:17:24
2	Cu 324.752†	195961.5	188820.9	504.51	ug/L	504.51	ppb	12:17:24
2	Mn 257.610†	529602.3	533882.0	505.97	ug/L	505.97	ppb	12:17:24
2	Mo 202.031†	9526.3	9584.4	508.98	ug/L	508.98	ppb	12:17:44
2	Ni 231.604†	25657.7	25761.0	504.43	ug/L	504.43	ppb	12:17:44

2	P 214.914†	5875.7	5664.4	2457.5 ug/L	2457.5 ppb	12:17:44
2	Pb 220.353†	5330.0	5454.5	513.62 ug/L	513.62 ppb	12:17:44
2	S 181.975 Axial†	982.5	931.4	1002.4 ug/L	1002.4 ppb	12:17:44
2	Sb 206.836†	1922.6	1905.6	509.79 ug/L	509.79 ppb	12:17:44
2	Se 196.026†	1118.6	1150.2	529.50 ug/L	529.50 ppb	12:17:44
2	Si 251.611†	98361.1	98705.4	2494.7 ug/L	2494.7 ppb	12:17:24
2	Sn 189.927†	3760.9	3799.7	503.14 ug/L	503.14 ppb	12:17:44
2	Ti 334.940†	358934.5	363486.4	501.22 ug/L	501.22 ppb	12:17:24
2	Tl 190.801†	2039.7	2102.7	511.73 ug/L	511.73 ppb	12:17:44
2	U 409.014†	15865.5	18785.0	484.06 ug/L	484.06 ppb	12:17:24
2	V 292.402†	84853.6	87240.2	506.23 ug/L	506.23 ppb	12:17:24
2	Zn 213.857†	69006.6	68753.8	500.73 ug/L	500.73 ppb	12:17:24
2	SiO2†	99309.6	99621.2	5388.1 ug/L	5388.1 ppb	12:18:22
3	Sc Radial	4870.7	4870.7	99.2 %		12:16:28
3	Y RADIAL	5526.2	5526.2	97.86 %		12:16:28
3	Al 396.153Radial†	7593.8	7698.5	5061.9 ug/L	5061.9 ppb	12:16:28
3	Ca 317.933Radial†	2830.9	2835.8	5020.9 ug/L	5020.9 ppb	12:16:48
3	Fe 238.204 Radial†	423.3	415.7	5041.0 ug/L	5041.0 ppb	12:16:48
3	K 766.490 Radial†	29269.3	26934.5	4900.6 ug/L	4900.6 ppb	12:16:28
3	Mg 279.077 IEC†	118.3	116.7	5229.3 ug/L	5229.3 ppb	12:16:48
3	Na 589.592 Radial†	32498.0	34038.5	9547.8 ug/L	9547.8 ppb	12:16:28
3	Sr 421.552†	92559.0	93308.7	489.49 ug/L	489.49 ppb	12:16:28
3	Sc 361.383	1037918.1	1037918.1	99.849 %		12:17:52
3	Y 371.029	872084.7	872084.7	98.600 %		12:17:52
3	Ag 328.068†	126304.5	126020.9	502.61 ug/L	502.61 ppb	12:17:52
3	As 188.979†	1565.7	1604.6	504.35 ug/L	504.35 ppb	12:18:12
3	B 249.677†	26090.7	26596.1	500.70 ug/L	500.70 ppb	12:17:52
3	Ba 233.527†	78187.2	78305.2	504.37 ug/L	504.37 ppb	12:17:52
3	Be 313.107†	1613369.1	1620676.2	506.30 ug/L	506.30 ppb	12:17:52
3	Cd 226.502†	57659.2	57981.8	505.46 ug/L	505.46 ppb	12:17:52
3	Co 228.616†	29993.6	30125.1	496.38 ug/L	496.38 ppb	12:18:12
3	Cr 267.716†	55838.4	55834.8	502.43 ug/L	502.43 ppb	12:17:52
3	Cu 324.752†	197503.0	188863.4	504.62 ug/L	504.62 ppb	12:17:52
3	Mn 257.610†	533164.3	533391.7	505.50 ug/L	505.50 ppb	12:17:52
3	Mo 202.031†	9496.8	9481.9	503.54 ug/L	503.54 ppb	12:18:12
3	Ni 231.604†	25526.2	25432.7	498.00 ug/L	498.00 ppb	12:18:12
3	P 214.914†	5886.4	5630.2	2442.1 ug/L	2442.1 ppb	12:18:12
3	Pb 220.353†	5307.5	5391.1	507.64 ug/L	507.64 ppb	12:18:12
3	S 181.975 Axial†	987.7	929.1	1000.0 ug/L	1000.0 ppb	12:18:12
3	Sb 206.836†	1916.1	1884.4	504.03 ug/L	504.03 ppb	12:18:12
3	Se 196.026†	1114.3	1137.4	523.64 ug/L	523.64 ppb	12:18:12
3	Si 251.611†	98926.5	98518.1	2490.1 ug/L	2490.1 ppb	12:17:52
3	Sn 189.927†	3752.2	3762.2	498.18 ug/L	498.18 ppb	12:18:12
3	Ti 334.940†	361879.9	363686.1	501.49 ug/L	501.49 ppb	12:17:52
3	Tl 190.801†	2043.7	2091.0	508.93 ug/L	508.93 ppb	12:18:12
3	U 409.014†	15955.3	18753.3	483.25 ug/L	483.25 ppb	12:17:52
3	V 292.402†	85821.6	87559.5	507.98 ug/L	507.98 ppb	12:17:52
3	Zn 213.857†	69476.9	68696.2	500.35 ug/L	500.35 ppb	12:17:52
3	SiO2†	98084.3	97633.2	5280.4 ug/L	5280.4 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031167.3	99.200	%	0.6025				0.61%
Sc Radial	4831.5	98.4	%	0.76				0.77%
Y 371.029	865101.5	97.810	%	0.7535				0.77%
Y RADIAL	5504.5	97.47	%	0.611				0.63%
Ag 328.068†	126406.7	504.15	ug/L	2.445	504.15	ppb	2.445	0.49%
QC value within limits for Ag 328.068 Recovery = 100.83%								
Al 396.153Radial†	7763.6	5104.7	ug/L	69.26	5104.7	ppb	69.26	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.09%								
As 188.979†	1615.3	507.69	ug/L	3.925	507.69	ppb	3.925	0.77%
QC value within limits for As 188.979 Recovery = 101.54%								
B 249.677†	26707.8	502.79	ug/L	3.393	502.79	ppb	3.393	0.67%
QC value within limits for B 249.677 Recovery = 100.56%								
Ba 233.527†	78653.3	506.61	ug/L	3.374	506.61	ppb	3.374	0.67%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1623017.1	507.03	ug/L	2.001	507.03	ppb	2.001	0.39%
QC value within limits for Be 313.107 Recovery = 101.41%								
Ca 317.933Radial†	2862.3	5067.7	ug/L	41.03	5067.7	ppb	41.03	0.81%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            58193.7      507.31 ug/L         3.149      507.31 ppb          3.149   0.62%
   QC value within limits for Cd 226.502  Recovery = 101.46%
Co 228.616†            30391.9      500.79 ug/L         3.818      500.79 ppb          3.818   0.76%
   QC value within limits for Co 228.616  Recovery = 100.16%
Cr 267.716†            56077.5      504.61 ug/L         3.018      504.61 ppb          3.018   0.60%
   QC value within limits for Cr 267.716  Recovery = 100.92%
Cu 324.752†           189408.7      506.08 ug/L         2.623      506.08 ppb          2.623   0.52%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       419.1      5082.5 ug/L        45.45      5082.5 ppb          45.45   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†      27245.9      4957.3 ug/L        68.50      4957.3 ppb          68.50   1.38%
   QC value within limits for K 766.490 Radial  Recovery = 99.15%
Mg 279.077 IEC†          116.5      5217.9 ug/L        11.74      5217.9 ppb          11.74   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.36%
Mn 257.610†           535653.3      507.64 ug/L         3.320      507.64 ppb          3.320   0.65%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             9551.8      507.25 ug/L         3.216      507.25 ppb          3.216   0.63%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34316.7      9625.8 ug/L       135.46      9625.8 ppb         135.46   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 96.26%
Ni 231.604†            25641.7      502.09 ug/L         3.555      502.09 ppb          3.555   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              5659.0      2454.7 ug/L        11.55      2454.7 ppb          11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.19%
Pb 220.353†             5427.1      511.03 ug/L         3.072      511.03 ppb          3.072   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.21%
S 181.975 Axial†         929.2      1000.2 ug/L         2.21      1000.2 ppb           2.21   0.22%
   QC value within limits for S 181.975 Axial  Recovery = 100.02%
Sb 206.836†             1900.9      508.48 ug/L         3.960      508.48 ppb          3.960   0.78%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†             1141.8      525.79 ug/L         3.225      525.79 ppb          3.225   0.61%
   QC value within limits for Se 196.026  Recovery = 105.16%
Si 251.611†            98940.9      2500.7 ug/L        14.63      2500.7 ppb          14.63   0.59%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             3792.6      502.21 ug/L         3.651      502.21 ppb          3.651   0.73%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†            94177.4      494.05 ug/L         6.861      494.05 ppb          6.861   1.39%
   QC value within limits for Sr 421.552  Recovery = 98.81%
Ti 334.940†           364699.0      502.89 ug/L         2.661      502.89 ppb          2.661   0.53%
   QC value within limits for Ti 334.940  Recovery = 100.58%
Tl 190.801†             2102.7      511.74 ug/L         2.825      511.74 ppb          2.825   0.55%
   QC value within limits for Tl 190.801  Recovery = 102.35%
U 409.014†             18827.1      485.15 ug/L         2.617      485.15 ppb          2.617   0.54%
   QC value within limits for U 409.014  Recovery = 97.03%
V 292.402†             87661.6      508.62 ug/L         2.757      508.62 ppb          2.757   0.54%
   QC value within limits for V 292.402  Recovery = 101.72%
Zn 213.857†            68982.7      502.43 ug/L         3.269      502.43 ppb          3.269   0.65%
   QC value within limits for Zn 213.857  Recovery = 100.49%
SiO2†                  98847.0      5346.1 ug/L        57.67      5346.1 ppb          57.67   1.08%
   QC value within limits for SiO2  Recovery = 99.97%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4888.4	4888.4	99.6	%			12:22:30
1	Y RADIAL	5666.1	5666.1	100.3	%			12:22:30
1	Al 396.153Radial†	-35.2	8.4	5.5807	ug/L	5.5807	ppb	12:22:30
1	Ca 317.933Radial†	25.5	7.7	13.683	ug/L	13.683	ppb	12:22:50
1	Fe 238.204 Radial†	9.4	-1.5	-18.411	ug/L	-18.411	ppb	12:22:50
1	K 766.490 Radial†	2723.5	165.8	30.214	ug/L	30.214	ppb	12:22:30
1	Mg 279.077 IEC†	0.3	-2.2	-100.45	ug/L	-100.45	ppb	12:22:50
1	Na 589.592 Radial†	-1220.4	54.3	15.218	ug/L	15.218	ppb	12:22:30
1	Sr 421.552†	-27.9	-20.6	-0.1083	ug/L	-0.1083	ppb	12:22:30
1	Sc 361.383	1039246.9	1039246.9	99.977	%			12:23:47
1	Y 371.029	883534.1	883534.1	99.894	%			12:23:47
1	Ag 328.068†	538.1	64.1	0.2491	ug/L	0.2491	ppb	12:23:52
1	As 188.979†	-37.9	-1.3	-0.4132	ug/L	-0.4132	ppb	12:24:12
1	B 249.677†	-95.2	370.9	7.0117	ug/L	7.0117	ppb	12:23:52
1	Ba 233.527†	-3.3	-3.3	-0.0229	ug/L	-0.0229	ppb	12:24:12
1	Be 313.107†	-4851.0	21.8	0.0070	ug/L	0.0070	ppb	12:23:52
1	Cd 226.502†	-226.0	9.6	0.0855	ug/L	0.0855	ppb	12:24:12
1	Co 228.616†	-88.8	-2.5	-0.0415	ug/L	-0.0415	ppb	12:24:12
1	Cr 267.716†	106.9	19.2	0.1724	ug/L	0.1724	ppb	12:24:12
1	Cu 324.752†	9026.9	91.4	0.2432	ug/L	0.2432	ppb	12:23:52
1	Mn 257.610†	630.3	53.7	0.0509	ug/L	0.0509	ppb	12:24:12
1	Mo 202.031†	28.1	-1.1	-0.0595	ug/L	-0.0595	ppb	12:24:12
1	Ni 231.604†	133.2	1.3	0.0249	ug/L	0.0249	ppb	12:24:12
1	P 214.914†	253.7	-11.3	-5.0683	ug/L	-5.0683	ppb	12:24:12
1	Pb 220.353†	-82.1	-6.6	-0.6158	ug/L	-0.6158	ppb	12:24:12
1	S 181.975 Axial†	59.7	-0.4	-0.4058	ug/L	-0.4058	ppb	12:24:12
1	Sb 206.836†	39.6	5.0	1.3267	ug/L	1.3267	ppb	12:24:12
1	Se 196.026†	-27.8	-6.5	-2.9262	ug/L	-2.9262	ppb	12:24:12
1	Si 251.611†	777.1	219.6	5.5652	ug/L	5.5652	ppb	12:24:12
1	Sn 189.927†	4.0	8.3	1.1010	ug/L	1.1010	ppb	12:24:12
1	Ti 334.940†	-1198.4	61.8	0.0872	ug/L	0.0872	ppb	12:23:52
1	Tl 190.801†	-53.2	-9.0	-2.1635	ug/L	-2.1635	ppb	12:24:12
1	U 409.014†	-2890.3	-117.0	-3.0231	ug/L	-3.0231	ppb	12:23:47
1	V 292.402†	-1680.1	-72.0	-0.4185	ug/L	-0.4185	ppb	12:23:52
1	Zn 213.857†	926.5	41.2	0.3073	ug/L	0.3073	ppb	12:24:12
1	SiO2†	734.1	135.2	7.3211	ug/L	7.3211	ppb	12:25:18
2	Sc Radial	4858.6	4858.6	99.0	%			12:22:55
2	Y RADIAL	5608.6	5608.6	99.32	%			12:22:55
2	Al 396.153Radial†	-50.3	-7.0	-4.6174	ug/L	-4.6174	ppb	12:22:55
2	Ca 317.933Radial†	20.8	3.2	5.6194	ug/L	5.6194	ppb	12:23:15
2	Fe 238.204 Radial†	11.5	0.6	7.3767	ug/L	7.3767	ppb	12:23:15
2	K 766.490 Radial†	2765.8	225.4	41.074	ug/L	41.074	ppb	12:22:55
2	Mg 279.077 IEC†	3.5	1.0	45.802	ug/L	45.802	ppb	12:23:15
2	Na 589.592 Radial†	-1208.3	59.0	16.546	ug/L	16.546	ppb	12:22:55
2	Sr 421.552†	16.0	23.5	0.1235	ug/L	0.1235	ppb	12:22:55
2	Sc 361.383	1034250.1	1034250.1	99.497	%			12:24:17
2	Y 371.029	878642.7	878642.7	99.341	%			12:24:17
2	Ag 328.068†	480.8	9.2	0.0388	ug/L	0.0388	ppb	12:24:23
2	As 188.979†	-35.7	0.7	0.2275	ug/L	0.2275	ppb	12:24:43
2	B 249.677†	-69.3	396.4	7.4903	ug/L	7.4903	ppb	12:24:23
2	Ba 233.527†	10.6	10.7	0.0685	ug/L	0.0685	ppb	12:24:43
2	Be 313.107†	-4907.5	-58.4	-0.0177	ug/L	-0.0177	ppb	12:24:23
2	Cd 226.502†	-222.8	11.7	0.1014	ug/L	0.1014	ppb	12:24:43
2	Co 228.616†	-77.0	8.9	0.1459	ug/L	0.1459	ppb	12:24:43
2	Cr 267.716†	111.4	24.2	0.2171	ug/L	0.2171	ppb	12:24:43
2	Cu 324.752†	8927.8	35.5	0.0951	ug/L	0.0951	ppb	12:24:23
2	Mn 257.610†	616.1	42.5	0.0401	ug/L	0.0401	ppb	12:24:43
2	Mo 202.031†	27.6	-1.5	-0.0796	ug/L	-0.0796	ppb	12:24:43
2	Ni 231.604†	122.8	-8.5	-0.1670	ug/L	-0.1670	ppb	12:24:43

2	P 214.914†	266.5	2.7	1.2305 ug/L	1.2305 ppb	12:24:43
2	Pb 220.353†	-80.3	-5.1	-0.4852 ug/L	-0.4852 ppb	12:24:43
2	S 181.975 Axial†	53.3	-6.6	-7.0896 ug/L	-7.0896 ppb	12:24:43
2	Sb 206.836†	44.8	10.4	2.7541 ug/L	2.7541 ppb	12:24:43
2	Se 196.026†	-32.1	-10.9	-4.7844 ug/L	-4.7844 ppb	12:24:43
2	Si 251.611†	765.6	211.8	5.3609 ug/L	5.3609 ppb	12:24:43
2	Sn 189.927†	8.8	13.2	1.7415 ug/L	1.7415 ppb	12:24:43
2	Ti 334.940†	-1053.4	201.7	0.2787 ug/L	0.2787 ppb	12:24:23
2	Tl 190.801†	-50.4	-6.4	-1.5425 ug/L	-1.5425 ppb	12:24:43
2	U 409.014†	-2785.5	-25.6	-0.6624 ug/L	-0.6624 ppb	12:24:17
2	V 292.402†	-1621.9	-21.6	-0.1266 ug/L	-0.1266 ppb	12:24:23
2	Zn 213.857†	922.1	41.2	0.3015 ug/L	0.3015 ppb	12:24:43
2	SiO2†	764.8	169.7	9.1813 ug/L	9.1813 ppb	12:25:23
3	Sc Radial	4899.3	4899.3	99.8 %		12:23:21
3	Y RADIAL	5623.9	5623.9	99.59 %		12:23:21
3	Al 396.153Radial†	-24.1	19.7	13.008 ug/L	13.008 ppb	12:23:21
3	Ca 317.933Radial†	17.2	-0.6	-0.9943 ug/L	-0.9943 ppb	12:23:41
3	Fe 238.204 Radial†	10.4	-0.6	-7.2970 ug/L	-7.2970 ppb	12:23:41
3	K 766.490 Radial†	2766.8	203.2	37.030 ug/L	37.030 ppb	12:23:21
3	Mg 279.077 IEC†	2.1	-0.4	-17.327 ug/L	-17.327 ppb	12:23:41
3	Na 589.592 Radial†	-1231.4	46.0	12.892 ug/L	12.892 ppb	12:23:21
3	Sr 421.552†	-54.6	-47.3	-0.2484 ug/L	-0.2484 ppb	12:23:21
3	Sc 361.383	1034684.4	1034684.4	99.538 %		12:24:48
3	Y 371.029	881779.5	881779.5	99.696 %		12:24:48
3	Ag 328.068†	472.5	0.6	0.0017 ug/L	0.0017 ppb	12:24:53
3	As 188.979†	-35.2	1.2	0.3820 ug/L	0.3820 ppb	12:25:13
3	B 249.677†	-186.8	278.4	5.2622 ug/L	5.2622 ppb	12:24:53
3	Ba 233.527†	12.4	12.4	0.0797 ug/L	0.0797 ppb	12:25:13
3	Be 313.107†	-4843.7	7.8	0.0026 ug/L	0.0026 ppb	12:24:53
3	Cd 226.502†	-234.0	0.5	0.0052 ug/L	0.0052 ppb	12:25:13
3	Co 228.616†	-82.7	3.2	0.0519 ug/L	0.0519 ppb	12:25:13
3	Cr 267.716†	108.2	20.9	0.1883 ug/L	0.1883 ppb	12:25:13
3	Cu 324.752†	8946.2	50.2	0.1336 ug/L	0.1336 ppb	12:24:53
3	Mn 257.610†	617.2	43.4	0.0407 ug/L	0.0407 ppb	12:25:13
3	Mo 202.031†	25.5	-3.6	-0.1923 ug/L	-0.1923 ppb	12:25:13
3	Ni 231.604†	129.0	-2.3	-0.0453 ug/L	-0.0453 ppb	12:25:13
3	P 214.914†	265.5	1.6	0.7164 ug/L	0.7164 ppb	12:25:13
3	Pb 220.353†	-68.0	7.2	0.6797 ug/L	0.6797 ppb	12:25:13
3	S 181.975 Axial†	58.3	-1.6	-1.7008 ug/L	-1.7008 ppb	12:25:13
3	Sb 206.836†	39.0	4.6	1.2158 ug/L	1.2158 ppb	12:25:13
3	Se 196.026†	-33.7	-12.5	-5.5684 ug/L	-5.5684 ppb	12:25:13
3	Si 251.611†	769.4	215.3	5.4557 ug/L	5.4557 ppb	12:25:13
3	Sn 189.927†	6.3	10.6	1.4045 ug/L	1.4045 ppb	12:25:13
3	Ti 334.940†	-1196.0	58.9	0.0819 ug/L	0.0819 ppb	12:24:53
3	Tl 190.801†	-34.6	9.5	2.3017 ug/L	2.3017 ppb	12:25:13
3	U 409.014†	-2825.6	-64.7	-1.6724 ug/L	-1.6724 ppb	12:24:48
3	V 292.402†	-1596.5	4.6	0.0208 ug/L	0.0208 ppb	12:24:53
3	Zn 213.857†	942.1	60.9	0.4487 ug/L	0.4487 ppb	12:25:13
3	SiO2†	764.4	168.9	9.1490 ug/L	9.1490 ppb	12:25:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036060.5	99.671	%	0.2663				0.27%
Sc Radial	4882.1	99.4	%	0.43				0.43%
Y 371.029	881318.8	99.644	%	0.2802				0.28%
Y RADIAL	5632.9	99.75	%	0.527				0.53%
Ag 328.068†	24.7	0.0966	ug/L	0.13344	0.0966	ppb	0.13344	138.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.0	4.6571	ug/L	8.84896	4.6571	ppb	8.84896	190.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0654	ug/L	0.42161	0.0654	ppb	0.42161	644.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	348.6	6.5881	ug/L	1.17291	6.5881	ppb	1.17291	17.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0418	ug/L	0.05629	0.0418	ppb	0.05629	134.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-9.6	-0.0027	ug/L	0.01315	-0.0027	ppb	0.01315	487.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	6.1026	ug/L	7.35044	6.1026	ppb	7.35044	120.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.3      0.0640 ug/L       0.05156      0.0640 ppb        0.05156  80.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                3.2      0.0521 ug/L       0.09370      0.0521 ppb        0.09370 179.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               21.4      0.1926 ug/L       0.02271      0.1926 ppb        0.02271  11.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               59.0      0.1573 ug/L       0.07685      0.1573 ppb        0.07685  48.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.5     -6.1106 ug/L      12.93494     -6.1106 ppb       12.93494 211.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        198.1      36.106 ug/L        5.4885      36.106 ppb         5.4885  15.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.5     -23.990 ug/L       73.3513     -23.990 ppb        73.3513 305.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               46.5      0.0439 ug/L       0.00608      0.0439 ppb        0.00608  13.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -2.1     -0.1104 ug/L       0.07158     -0.1104 ppb        0.07158  64.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        53.1      14.885 ug/L        1.8497      14.885 ppb         1.8497  12.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -3.2     -0.0625 ug/L       0.09710     -0.0625 ppb        0.09710 155.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.3     -1.0405 ug/L       3.49765     -1.0405 ppb        3.49765 336.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -1.5     -0.1404 ug/L       0.71325     -0.1404 ppb        0.71325 507.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -2.8     -3.0654 ug/L       3.54469     -3.0654 ppb        3.54469 115.64%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                6.6      1.7655 ug/L       0.85791      1.7655 ppb        0.85791  48.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -9.9     -4.4263 ug/L       1.35700     -4.4263 ppb        1.35700  30.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              215.6      5.4606 ug/L       0.10220      5.4606 ppb        0.10220   1.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               10.7      1.4157 ug/L       0.32036      1.4157 ppb        0.32036  22.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -14.8     -0.0777 ug/L       0.18782     -0.0777 ppb        0.18782 241.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              107.5      0.1493 ug/L       0.11210      0.1493 ppb        0.11210  75.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.9     -0.4681 ug/L       2.41873     -0.4681 ppb        2.41873 516.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -69.1     -1.7860 ug/L       1.18440     -1.7860 ppb        1.18440  66.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -29.7     -0.1748 ug/L       0.22359     -0.1748 ppb        0.22359 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               47.8      0.3525 ug/L       0.08334      0.3525 ppb        0.08334  23.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    157.9      8.5505 ug/L       1.06478      8.5505 ppb        1.06478  12.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/4/2009 12:48:32 **Plasma On Time:** 11/30/2009 06:07:59
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/4/2009 12:48:33
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.4	4773.4	97.2	%			12:50:26
1	Y RADIAL	5469.7	5469.7	96.86	%			12:50:26
1	Al 396.153Radial†	7588.7	7849.2	5161.0	ug/L	5161.0	ppb	12:50:26
1	Ca 317.933Radial†	2802.6	2864.8	5072.3	ug/L	5072.3	ppb	12:50:46
1	Fe 238.204 Radial†	408.6	409.3	4964.0	ug/L	4964.0	ppb	12:50:46
1	K 766.490 Radial†	29100.9	27362.4	4978.5	ug/L	4978.5	ppb	12:50:26
1	Mg 279.077 IEC†	115.4	116.2	5203.2	ug/L	5203.2	ppb	12:50:46
1	Na 589.592 Radial†	31590.0	33772.1	9473.1	ug/L	9473.1	ppb	12:50:26
1	Sr 421.552†	91599.1	94222.3	494.28	ug/L	494.28	ppb	12:50:26
1	Sc 361.383	1016712.9	1016712.9	97.809	%			12:51:45
1	Y 371.029	852399.0	852399.0	96.374	%			12:51:45
1	Ag 328.068†	126954.1	129323.4	515.71	ug/L	515.71	ppb	12:51:45
1	As 188.979†	1568.6	1640.3	515.56	ug/L	515.56	ppb	12:52:05
1	B 249.677†	26183.7	27236.2	512.78	ug/L	512.78	ppb	12:51:45
1	Ba 233.527†	78872.5	80639.0	519.38	ug/L	519.38	ppb	12:51:45
1	Be 313.107†	1619440.7	1660584.0	518.77	ug/L	518.77	ppb	12:51:45
1	Cd 226.502†	58061.7	59597.7	519.57	ug/L	519.57	ppb	12:51:45
1	Co 228.616†	30080.3	30840.3	508.16	ug/L	508.16	ppb	12:52:05
1	Cr 267.716†	56261.3	57433.5	516.81	ug/L	516.81	ppb	12:51:45
1	Cu 324.752†	198305.1	193808.8	517.82	ug/L	517.82	ppb	12:51:45
1	Mn 257.610†	537621.5	549085.5	520.35	ug/L	520.35	ppb	12:51:45
1	Mo 202.031†	9482.0	9665.1	513.25	ug/L	513.25	ppb	12:52:05
1	Ni 231.604†	25549.7	25990.0	508.91	ug/L	508.91	ppb	12:52:05
1	P 214.914†	5880.7	5747.3	2492.6	ug/L	2492.6	ppb	12:52:05
1	Pb 220.353†	5297.1	5491.3	517.09	ug/L	517.09	ppb	12:52:05
1	S 181.975 Axial†	977.4	939.2	1010.9	ug/L	1010.9	ppb	12:52:05
1	Sb 206.836†	1914.7	1922.9	514.26	ug/L	514.26	ppb	12:52:05
1	Se 196.026†	1104.3	1150.4	529.16	ug/L	529.16	ppb	12:52:05
1	Si 251.611†	99482.2	101152.6	2556.7	ug/L	2556.7	ppb	12:51:45
1	Sn 189.927†	3770.3	3859.1	511.00	ug/L	511.00	ppb	12:52:05
1	Ti 334.940†	364221.7	373639.3	515.22	ug/L	515.22	ppb	12:51:45
1	Tl 190.801†	2040.4	2130.3	518.54	ug/L	518.54	ppb	12:52:05
1	U 409.014†	15944.4	19075.5	491.56	ug/L	491.56	ppb	12:51:45
1	V 292.402†	86113.7	89650.8	520.10	ug/L	520.10	ppb	12:51:45
1	Zn 213.857†	69978.0	70659.7	514.70	ug/L	514.70	ppb	12:51:45
1	SiO2†	97861.8	99454.5	5378.8	ug/L	5378.8	ppb	12:53:06
2	Sc Radial	4682.8	4682.8	95.4	%			12:50:51
2	Y RADIAL	5379.6	5379.6	95.26	%			12:50:51
2	Al 396.153Radial†	7674.5	8090.2	5320.6	ug/L	5320.6	ppb	12:50:51
2	Ca 317.933Radial†	2800.5	2918.4	5167.1	ug/L	5167.1	ppb	12:51:11
2	Fe 238.204 Radial†	413.8	422.9	5128.7	ug/L	5128.7	ppb	12:51:11
2	K 766.490 Radial†	29315.3	28166.5	5125.1	ug/L	5125.1	ppb	12:50:51
2	Mg 279.077 IEC†	111.1	114.0	5106.1	ug/L	5106.1	ppb	12:51:11
2	Na 589.592 Radial†	31679.7	34494.9	9675.8	ug/L	9675.8	ppb	12:50:51
2	Sr 421.552†	92092.1	96562.4	506.56	ug/L	506.56	ppb	12:50:51
2	Sc 361.383	1037983.0	1037983.0	99.856	%			12:52:13
2	Y 371.029	870940.2	870940.2	98.471	%			12:52:13

2	Ag 328.068†	125698.3	125405.9	500.19 ug/L	500.19 ppb	12:52:13
2	As 188.979†	1568.4	1607.3	505.18 ug/L	505.18 ppb	12:52:33
2	B 249.677†	26016.9	26520.6	499.26 ug/L	499.26 ppb	12:52:13
2	Ba 233.527†	78028.6	78141.4	503.31 ug/L	503.31 ppb	12:52:13
2	Be 313.107†	1603398.6	1610590.3	503.15 ug/L	503.15 ppb	12:52:13
2	Cd 226.502†	57373.3	57691.8	502.93 ug/L	502.93 ppb	12:52:13
2	Co 228.616†	29980.1	30109.8	496.13 ug/L	496.13 ppb	12:52:33
2	Cr 267.716†	55729.2	55721.9	501.42 ug/L	501.42 ppb	12:52:13
2	Cu 324.752†	196438.7	187785.2	501.74 ug/L	501.74 ppb	12:52:13
2	Mn 257.610†	531565.5	531757.2	503.96 ug/L	503.96 ppb	12:52:13
2	Mo 202.031†	9480.5	9465.0	502.64 ug/L	502.64 ppb	12:52:33
2	Ni 231.604†	25544.3	25449.2	498.33 ug/L	498.33 ppb	12:52:33
2	P 214.914†	5873.7	5617.1	2436.7 ug/L	2436.7 ppb	12:52:33
2	Pb 220.353†	5287.8	5371.0	505.80 ug/L	505.80 ppb	12:52:33
2	S 181.975 Axial†	980.4	921.8	992.04 ug/L	992.04 ppb	12:52:33
2	Sb 206.836†	1912.0	1880.2	502.92 ug/L	502.92 ppb	12:52:33
2	Se 196.026†	1109.0	1132.0	521.57 ug/L	521.57 ppb	12:52:33
2	Si 251.611†	98488.5	98073.3	2478.7 ug/L	2478.7 ppb	12:52:13
2	Sn 189.927†	3756.3	3766.0	498.70 ug/L	498.70 ppb	12:52:33
2	Ti 334.940†	360290.9	362072.2	499.28 ug/L	499.28 ppb	12:52:13
2	Tl 190.801†	2037.9	2085.1	507.49 ug/L	507.49 ppb	12:52:33
2	U 409.014†	15895.4	18692.3	481.66 ug/L	481.66 ppb	12:52:13
2	V 292.402†	85350.0	87081.9	505.22 ug/L	505.22 ppb	12:52:13
2	Zn 213.857†	69084.9	68299.2	497.43 ug/L	497.43 ppb	12:52:13
2	SiO2†	98154.4	97697.2	5283.7 ug/L	5283.7 ppb	12:53:11
3	Sc Radial	4810.7	4810.7	98.0 %		12:51:16
3	Y RADIAL	5522.9	5522.9	97.80 %		12:51:16
3	Al 396.153Radial†	7566.2	7765.6	5106.6 ug/L	5106.6 ppb	12:51:16
3	Ca 317.933Radial†	2827.8	2868.2	5078.2 ug/L	5078.2 ppb	12:51:36
3	Fe 238.204 Radial†	415.4	413.0	5008.1 ug/L	5008.1 ppb	12:51:36
3	K 766.490 Radial†	29018.4	27045.9	4921.0 ug/L	4921.0 ppb	12:51:16
3	Mg 279.077 IEC†	115.2	115.1	5156.4 ug/L	5156.4 ppb	12:51:36
3	Na 589.592 Radial†	31507.7	33436.0	9378.8 ug/L	9378.8 ppb	12:51:16
3	Sr 421.552†	91091.7	92973.3	487.73 ug/L	487.73 ppb	12:51:16
3	Sc 361.383	1050834.0	1050834.0	101.09 %		12:52:40
3	Y 371.029	881587.5	881587.5	99.674 %		12:52:40
3	Ag 328.068†	126060.8	124225.1	495.46 ug/L	495.46 ppb	12:52:40
3	As 188.979†	1562.7	1582.4	497.38 ug/L	497.38 ppb	12:53:00
3	B 249.677†	26099.5	26283.7	494.82 ug/L	494.82 ppb	12:52:40
3	Ba 233.527†	78262.3	77416.9	498.64 ug/L	498.64 ppb	12:52:40
3	Be 313.107†	1612124.4	1599584.9	499.71 ug/L	499.71 ppb	12:52:40
3	Cd 226.502†	57624.3	57237.6	498.97 ug/L	498.97 ppb	12:52:40
3	Co 228.616†	29970.1	29732.7	489.91 ug/L	489.91 ppb	12:53:00
3	Cr 267.716†	55859.7	55168.6	496.44 ug/L	496.44 ppb	12:52:40
3	Cu 324.752†	196887.1	185822.9	496.50 ug/L	496.50 ppb	12:52:40
3	Mn 257.610†	533616.6	527276.0	499.70 ug/L	499.70 ppb	12:52:40
3	Mo 202.031†	9458.1	9326.7	495.30 ug/L	495.30 ppb	12:53:00
3	Ni 231.604†	25492.0	25084.7	491.19 ug/L	491.19 ppb	12:53:00
3	P 214.914†	5876.3	5547.7	2406.4 ug/L	2406.4 ppb	12:53:00
3	Pb 220.353†	5284.8	5303.3	499.39 ug/L	499.39 ppb	12:53:00
3	S 181.975 Axial†	974.6	904.0	972.92 ug/L	972.92 ppb	12:53:00
3	Sb 206.836†	1918.0	1862.7	498.13 ug/L	498.13 ppb	12:53:00
3	Se 196.026†	1104.8	1114.2	513.26 ug/L	513.26 ppb	12:53:00
3	Si 251.611†	98853.7	97228.3	2457.5 ug/L	2457.5 ppb	12:52:40
3	Sn 189.927†	3737.7	3701.7	490.18 ug/L	490.18 ppb	12:53:00
3	Ti 334.940†	361174.9	358534.1	494.40 ug/L	494.40 ppb	12:52:40
3	Tl 190.801†	2025.0	2047.4	498.35 ug/L	498.35 ppb	12:53:00
3	U 409.014†	15916.2	18518.2	477.19 ug/L	477.19 ppb	12:52:40
3	V 292.402†	85615.7	86299.4	500.65 ug/L	500.65 ppb	12:52:40
3	Zn 213.857†	69510.0	67873.6	494.37 ug/L	494.37 ppb	12:52:40
3	SiO2†	100273.7	98591.6	5332.8 ug/L	5332.8 ppb	12:53:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1035176.6	99.586	%	1.6578				1.66%
Sc Radial	4755.6	96.9	%	1.34				1.38%
Y 371.029	868308.9	98.173	%	1.6701				1.70%
Y RADIAL	5457.4	96.64	%	1.283				1.33%
Ag 328.068†	126318.1	503.79	ug/L	10.597	503.79	ppb	10.597	2.10%

```
   QC value within limits for Ag 328.068  Recovery = 100.76%
Al 396.153Radial†       7901.7      5196.1 ug/L        111.22      5196.1 ppb        111.22   2.14%
   QC value within limits for Al 396.153Radial  Recovery = 103.92%
As 188.979†             1610.0      506.04 ug/L         9.120      506.04 ppb         9.120   1.80%
   QC value within limits for As 188.979  Recovery = 101.21%
B 249.677†             26680.2      502.29 ug/L         9.354      502.29 ppb         9.354   1.86%
   QC value within limits for B 249.677  Recovery = 100.46%
Ba 233.527†            78732.4      507.11 ug/L        10.880      507.11 ppb        10.880   2.15%
   QC value within limits for Ba 233.527  Recovery = 101.42%
Be 313.107†          1623586.4      507.21 ug/L        10.158      507.21 ppb        10.158   2.00%
   QC value within limits for Be 313.107  Recovery = 101.44%
Ca 317.933Radial†       2883.8      5105.9 ug/L         53.13      5105.9 ppb         53.13   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 102.12%
Cd 226.502†            58175.7      507.16 ug/L        10.931      507.16 ppb        10.931   2.16%
   QC value within limits for Cd 226.502  Recovery = 101.43%
Co 228.616†            30227.6      498.07 ug/L         9.277      498.07 ppb         9.277   1.86%
   QC value within limits for Co 228.616  Recovery = 99.61%
Cr 267.716†            56108.0      504.89 ug/L        10.623      504.89 ppb        10.623   2.10%
   QC value within limits for Cr 267.716  Recovery = 100.98%
Cu 324.752†           189139.0      505.35 ug/L        11.111      505.35 ppb        11.111   2.20%
   QC value within limits for Cu 324.752  Recovery = 101.07%
Fe 238.204 Radial†       415.0      5033.6 ug/L         85.28      5033.6 ppb         85.28   1.69%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.67%
K 766.490 Radial†      27524.9      5008.2 ug/L        105.25      5008.2 ppb        105.25   2.10%
   QC value within limits for K 766.490 Radial  Recovery = 100.16%
Mg 279.077 IEC†          115.1      5155.2 ug/L         48.54      5155.2 ppb         48.54   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.10%
Mn 257.610†           536039.6      508.01 ug/L        10.902      508.01 ppb        10.902   2.15%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             9485.6      503.73 ug/L         9.028      503.73 ppb         9.028   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     33901.0      9509.2 ug/L        151.79      9509.2 ppb        151.79   1.60%
   QC value within limits for Na 589.592 Radial  Recovery = 95.09%
Ni 231.604†            25508.0      499.48 ug/L         8.918      499.48 ppb         8.918   1.79%
   QC value within limits for Ni 231.604  Recovery = 99.90%
P 214.914†              5637.4      2445.2 ug/L         43.73      2445.2 ppb         43.73   1.79%
   QC value within limits for P 214.914  Recovery = 97.81%
Pb 220.353†             5388.5      507.43 ug/L         8.959      507.43 ppb         8.959   1.77%
   QC value within limits for Pb 220.353  Recovery = 101.49%
S 181.975 Axial†         921.6      991.95 ug/L        18.977      991.95 ppb        18.977   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1888.6      505.10 ug/L         8.281      505.10 ppb         8.281   1.64%
   QC value within limits for Sb 206.836  Recovery = 101.02%
Se 196.026†             1132.2      521.33 ug/L         7.955      521.33 ppb         7.955   1.53%
   QC value within limits for Se 196.026  Recovery = 104.27%
Si 251.611†            98818.1      2497.6 ug/L         52.27      2497.6 ppb         52.27   2.09%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†             3775.6      499.96 ug/L        10.468      499.96 ppb        10.468   2.09%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            94586.0      496.19 ug/L         9.559      496.19 ppb         9.559   1.93%
   QC value within limits for Sr 421.552  Recovery = 99.24%
Ti 334.940†           364748.5      502.96 ug/L        10.889      502.96 ppb        10.889   2.16%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             2087.6      508.12 ug/L        10.113      508.12 ppb        10.113   1.99%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             18762.0      483.47 ug/L         7.356      483.47 ppb         7.356   1.52%
   QC value within limits for U 409.014  Recovery = 96.69%
V 292.402†             87677.4      508.66 ug/L        10.169      508.66 ppb        10.169   2.00%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            68944.2      502.17 ug/L        10.964      502.17 ppb        10.964   2.18%
   QC value within limits for Zn 213.857  Recovery = 100.43%
SiO2†                  98581.1      5331.8 ug/L         47.57      5331.8 ppb         47.57   0.89%
   QC value within limits for SiO2  Recovery = 99.71%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 12:55:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.0	4540.0	92.5	%			12:57:18
1	Y RADIAL	5259.0	5259.0	93.13	%			12:57:18
1	Al 396.153Radial†	-43.6	-3.4	-2.1871	ug/L	-2.1871	ppb	12:57:18
1	Ca 317.933Radial†	26.3	10.6	18.692	ug/L	18.692	ppb	12:57:38
1	Fe 238.204 Radial†	12.3	2.3	27.295	ug/L	27.295	ppb	12:57:38
1	K 766.490 Radial†	2682.1	331.0	60.336	ug/L	60.336	ppb	12:57:18
1	Mg 279.077 IEC†	0.5	-2.0	-87.595	ug/L	-87.595	ppb	12:57:38
1	Na 589.592 Radial†	-1235.0	-55.6	-15.596	ug/L	-15.596	ppb	12:57:18
1	Sr 421.552†	10.9	19.2	0.1008	ug/L	0.1008	ppb	12:57:18
1	Sc 361.383	1032213.6	1032213.6	99.301	%			12:58:35
1	Y 371.029	876451.6	876451.6	99.094	%			12:58:35
1	Ag 328.068†	473.2	2.4	0.0158	ug/L	0.0158	ppb	12:58:40
1	As 188.979†	-35.9	0.5	0.1442	ug/L	0.1442	ppb	12:59:00
1	B 249.677†	-224.7	239.9	4.5289	ug/L	4.5289	ppb	12:58:40
1	Ba 233.527†	4.8	4.8	0.0302	ug/L	0.0302	ppb	12:59:00
1	Be 313.107†	-4767.6	72.7	0.0224	ug/L	0.0224	ppb	12:58:40
1	Cd 226.502†	-222.3	11.8	0.1005	ug/L	0.1005	ppb	12:59:00
1	Co 228.616†	-76.6	9.1	0.1486	ug/L	0.1486	ppb	12:59:00
1	Cr 267.716†	95.8	8.7	0.0775	ug/L	0.0775	ppb	12:59:00
1	Cu 324.752†	8896.6	21.8	0.0595	ug/L	0.0595	ppb	12:58:40
1	Mn 257.610†	618.3	45.9	0.0479	ug/L	0.0479	ppb	12:59:00
1	Mo 202.031†	16.5	-12.6	-0.6683	ug/L	-0.6683	ppb	12:59:00
1	Ni 231.604†	142.4	11.5	0.2254	ug/L	0.2254	ppb	12:59:00
1	P 214.914†	262.1	-1.1	-0.5328	ug/L	-0.5328	ppb	12:59:00
1	Pb 220.353†	-66.9	8.2	0.7689	ug/L	0.7689	ppb	12:59:00
1	S 181.975 Axial†	49.1	-10.7	-11.521	ug/L	-11.521	ppb	12:59:00
1	Sb 206.836†	47.6	13.3	3.5115	ug/L	3.5115	ppb	12:59:00
1	Se 196.026†	-28.1	-6.9	-2.9652	ug/L	-2.9652	ppb	12:59:00
1	Si 251.611†	646.0	92.9	2.3490	ug/L	2.3490	ppb	12:59:00
1	Sn 189.927†	2.1	6.5	0.8597	ug/L	0.8597	ppb	12:59:00
1	Ti 334.940†	-1340.1	-89.1	-0.1215	ug/L	-0.1215	ppb	12:58:40
1	Tl 190.801†	-46.6	-2.7	-0.6525	ug/L	-0.6525	ppb	12:59:00
1	U 409.014†	-2797.5	-43.2	-1.1207	ug/L	-1.1207	ppb	12:58:35
1	V 292.402†	-1738.9	-142.6	-0.8340	ug/L	-0.8340	ppb	12:58:40
1	Zn 213.857†	933.0	54.0	0.3957	ug/L	0.3957	ppb	12:59:00
1	SiO2†	707.9	113.9	6.1636	ug/L	6.1636	ppb	13:00:06
2	Sc Radial	4874.9	4874.9	99.3	%			12:57:43
2	Y RADIAL	5627.8	5627.8	99.66	%			12:57:43
2	Al 396.153Radial†	-39.7	3.8	2.5394	ug/L	2.5394	ppb	12:57:43
2	Ca 317.933Radial†	21.3	3.6	6.4470	ug/L	6.4470	ppb	12:58:03
2	Fe 238.204 Radial†	11.4	0.5	5.9521	ug/L	5.9521	ppb	12:58:03
2	K 766.490 Radial†	2613.5	62.7	11.419	ug/L	11.419	ppb	12:57:43
2	Mg 279.077 IEC†	4.9	2.5	111.27	ug/L	111.27	ppb	12:58:03
2	Na 589.592 Radial†	-1238.9	32.2	9.0368	ug/L	9.0368	ppb	12:57:43
2	Sr 421.552†	25.4	33.0	0.1732	ug/L	0.1732	ppb	12:57:43
2	Sc 361.383	1036448.0	1036448.0	99.708	%			12:59:05
2	Y 371.029	880937.1	880937.1	99.601	%			12:59:05
2	Ag 328.068†	490.6	18.0	0.0724	ug/L	0.0724	ppb	12:59:10
2	As 188.979†	-36.4	0.1	0.0306	ug/L	0.0306	ppb	12:59:30
2	B 249.677†	-243.2	222.1	4.1974	ug/L	4.1974	ppb	12:59:10
2	Ba 233.527†	15.2	15.2	0.0969	ug/L	0.0969	ppb	12:59:30
2	Be 313.107†	-4813.4	46.5	0.0141	ug/L	0.0141	ppb	12:59:10
2	Cd 226.502†	-227.3	7.7	0.0668	ug/L	0.0668	ppb	12:59:30
2	Co 228.616†	-84.9	1.1	0.0178	ug/L	0.0178	ppb	12:59:30
2	Cr 267.716†	101.3	13.8	0.1241	ug/L	0.1241	ppb	12:59:30
2	Cu 324.752†	8909.2	-2.2	-0.0055	ug/L	-0.0055	ppb	12:59:10
2	Mn 257.610†	598.4	23.5	0.0208	ug/L	0.0208	ppb	12:59:30
2	Mo 202.031†	20.1	-9.0	-0.4794	ug/L	-0.4794	ppb	12:59:30
2	Ni 231.604†	145.7	14.2	0.2780	ug/L	0.2780	ppb	12:59:30

2	P 214.914†	266.0	1.7	0.7750 ug/L	0.7750 ppb	12:59:30
2	Pb 220.353†	-73.8	1.6	0.1466 ug/L	0.1466 ppb	12:59:30
2	S 181.975 Axial†	56.0	-3.9	-4.2347 ug/L	-4.2347 ppb	12:59:30
2	Sb 206.836†	39.8	5.3	1.3960 ug/L	1.3960 ppb	12:59:30
2	Se 196.026†	-27.3	-6.0	-2.6216 ug/L	-2.6216 ppb	12:59:30
2	Si 251.611†	681.7	126.0	3.2014 ug/L	3.2014 ppb	12:59:30
2	Sn 189.927†	6.0	10.4	1.3740 ug/L	1.3740 ppb	12:59:30
2	Ti 334.940†	-1414.0	-157.7	-0.2164 ug/L	-0.2164 ppb	12:59:10
2	Tl 190.801†	-51.8	-7.7	-1.8635 ug/L	-1.8635 ppb	12:59:30
2	U 409.014†	-2833.7	-68.0	-1.7594 ug/L	-1.7594 ppb	12:59:05
2	V 292.402†	-1696.5	-93.0	-0.5408 ug/L	-0.5408 ppb	12:59:10
2	Zn 213.857†	925.5	42.7	0.3073 ug/L	0.3073 ppb	12:59:30
2	SiO2†	665.4	68.3	3.7106 ug/L	3.7106 ppb	13:00:11
3	Sc Radial	4901.0	4901.0	99.8 %		12:58:08
3	Y RADIAL	5648.1	5648.1	100.0 %		12:58:08
3	Al 396.153Radial†	-27.1	16.7	11.013 ug/L	11.013 ppb	12:58:08
3	Ca 317.933Radial†	18.6	0.8	1.4244 ug/L	1.4244 ppb	12:58:28
3	Fe 238.204 Radial†	10.2	-0.8	-9.9453 ug/L	-9.9453 ppb	12:58:28
3	K 766.490 Radial†	2734.4	169.7	30.928 ug/L	30.928 ppb	12:58:08
3	Mg 279.077 IEC†	2.1	-0.4	-19.436 ug/L	-19.436 ppb	12:58:28
3	Na 589.592 Radial†	-1192.8	85.0	23.845 ug/L	23.845 ppb	12:58:08
3	Sr 421.552†	-4.3	3.1	0.0165 ug/L	0.0165 ppb	12:58:08
3	Sc 361.383	1035612.0	1035612.0	99.628 %		12:59:35
3	Y 371.029	880903.4	880903.4	99.597 %		12:59:35
3	Ag 328.068†	534.0	61.9	0.2441 ug/L	0.2441 ppb	12:59:41
3	As 188.979†	-38.2	-1.8	-0.5565 ug/L	-0.5565 ppb	13:00:01
3	B 249.677†	-253.2	212.0	4.0068 ug/L	4.0068 ppb	12:59:41
3	Ba 233.527†	9.8	9.9	0.0624 ug/L	0.0624 ppb	13:00:01
3	Be 313.107†	-4763.5	92.6	0.0288 ug/L	0.0288 ppb	12:59:41
3	Cd 226.502†	-242.1	-7.4	-0.0633 ug/L	-0.0633 ppb	13:00:01
3	Co 228.616†	-80.6	5.4	0.0888 ug/L	0.0888 ppb	13:00:01
3	Cr 267.716†	121.3	34.0	0.3060 ug/L	0.3060 ppb	13:00:01
3	Cu 324.752†	8984.3	80.4	0.2141 ug/L	0.2141 ppb	12:59:41
3	Mn 257.610†	592.3	17.8	0.0162 ug/L	0.0162 ppb	13:00:01
3	Mo 202.031†	30.3	1.2	0.0630 ug/L	0.0630 ppb	13:00:01
3	Ni 231.604†	139.3	7.8	0.1537 ug/L	0.1537 ppb	13:00:01
3	P 214.914†	258.5	-5.6	-2.5106 ug/L	-2.5106 ppb	13:00:01
3	Pb 220.353†	-78.3	-3.0	-0.2791 ug/L	-0.2791 ppb	13:00:01
3	S 181.975 Axial†	61.6	1.8	1.8859 ug/L	1.8859 ppb	13:00:01
3	Sb 206.836†	45.6	11.2	2.9539 ug/L	2.9539 ppb	13:00:01
3	Se 196.026†	-24.9	-3.6	-1.6160 ug/L	-1.6160 ppb	13:00:01
3	Si 251.611†	651.1	95.9	2.4207 ug/L	2.4207 ppb	13:00:01
3	Sn 189.927†	4.3	8.7	1.1458 ug/L	1.1458 ppb	13:00:01
3	Ti 334.940†	-1280.7	-25.0	-0.0330 ug/L	-0.0330 ppb	12:59:41
3	Tl 190.801†	-46.0	-2.0	-0.4739 ug/L	-0.4739 ppb	13:00:01
3	U 409.014†	-2891.2	-128.0	-3.3096 ug/L	-3.3096 ppb	12:59:35
3	V 292.402†	-1645.8	-43.5	-0.2533 ug/L	-0.2533 ppb	12:59:41
3	Zn 213.857†	940.5	58.5	0.4302 ug/L	0.4302 ppb	13:00:01
3	SiO2†	704.2	107.8	5.8247 ug/L	5.8247 ppb	13:00:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034757.9	99.545	%	0.2158				0.22%
Sc Radial	4772.0	97.2	%	4.10				4.22%
Y 371.029	879430.7	99.430	%	0.2917				0.29%
Y RADIAL	5511.6	97.60	%	3.879				3.97%
Ag 328.068†	27.4	0.1108	ug/L	0.11886	0.1108	ppb	0.11886	107.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	3.7883	ug/L	6.68802	3.7883	ppb	6.68802	176.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.1272	ug/L	0.37606	-0.1272	ppb	0.37606	295.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	224.7	4.2444	ug/L	0.26418	4.2444	ppb	0.26418	6.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.0	0.0632	ug/L	0.03335	0.0632	ppb	0.03335	52.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	70.6	0.0218	ug/L	0.00740	0.0218	ppb	0.00740	33.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.0	8.8546	ug/L	8.88210	8.8546	ppb	8.88210	100.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.0      0.0347 ug/L       0.08645      0.0347 ppb        0.08645 249.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.2      0.0851 ug/L       0.06550      0.0851 ppb        0.06550  76.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.8      0.1692 ug/L       0.12077      0.1692 ppb        0.12077  71.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.0894 ug/L       0.11279      0.0894 ppb        0.11279 126.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      7.7674 ug/L      18.68659      7.7674 ppb       18.68659 240.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         187.8     34.227 ug/L       24.6248     34.227 ppb        24.6248  71.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      1.4144 ug/L     101.06059      1.4144 ppb      101.06059 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                29.1      0.0283 ug/L       0.01710      0.0283 ppb        0.01710  60.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -6.8     -0.3616 ug/L       0.37958     -0.3616 ppb        0.37958 104.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         20.5      5.7619 ug/L      19.92326      5.7619 ppb       19.92326 345.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.2      0.2190 ug/L       0.06237      0.2190 ppb        0.06237  28.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.7561 ug/L       1.65418     -0.7561 ppb        1.65418 218.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.3      0.2121 ug/L       0.52709      0.2121 ppb        0.52709 248.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -4.6232 ug/L       6.71169     -4.6232 ppb        6.71169 145.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.9      2.6205 ug/L       1.09645      2.6205 ppb        1.09645  41.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -2.4009 ug/L       0.70116     -2.4009 ppb        0.70116  29.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      2.6571 ug/L       0.47280      2.6571 ppb        0.47280  17.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.5      1.1265 ug/L       0.25770      1.1265 ppb        0.25770  22.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                18.5      0.0968 ug/L       0.07845      0.0968 ppb        0.07845  81.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -90.6     -0.1237 ug/L       0.09172     -0.1237 ppb        0.09172  74.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.1     -0.9967 ug/L       0.75602     -0.9967 ppb        0.75602  75.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -79.8     -2.0632 ug/L       1.12562     -2.0632 ppb        1.12562  54.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -93.0     -0.5427 ug/L       0.29036     -0.5427 ppb        0.29036  53.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                51.7      0.3777 ug/L       0.06338      0.3777 ppb        0.06338  16.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      96.6      5.2330 ug/L       1.32925      5.2330 ppb        1.32925  25.40%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 13:57:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.7	4803.7	97.8	%			13:58:57
1	Y RADIAL	5501.5	5501.5	97.42	%			13:58:57
1	Al 396.153Radial†	7538.8	7748.9	5095.1	ug/L	5095.1	ppb	13:58:57
1	Ca 317.933Radial†	2840.2	2885.0	5108.0	ug/L	5108.0	ppb	13:59:17
1	Fe 238.204 Radial†	428.5	427.0	5178.3	ug/L	5178.3	ppb	13:59:17
1	K 766.490 Radial†	29169.2	27243.2	4956.7	ug/L	4956.7	ppb	13:58:57
1	Mg 279.077 IEC†	118.6	118.7	5317.1	ug/L	5317.1	ppb	13:59:17
1	Na 589.592 Radial†	33223.3	35236.2	9883.8	ug/L	9883.8	ppb	13:58:57
1	Sr 421.552†	93261.6	95326.6	500.08	ug/L	500.08	ppb	13:58:57
1	Sc 361.383	1039295.1	1039295.1	99.982	%			14:00:16
1	Y 371.029	869370.3	869370.3	98.293	%			14:00:16
1	Ag 328.068†	126877.0	126426.0	504.25	ug/L	504.25	ppb	14:00:16
1	As 188.979†	1588.7	1625.6	510.93	ug/L	510.93	ppb	14:00:36
1	B 249.677†	25967.1	26438.0	497.68	ug/L	497.68	ppb	14:00:16
1	Ba 233.527†	78841.3	78855.7	507.91	ug/L	507.91	ppb	14:00:16
1	Be 313.107†	1613522.1	1618688.4	505.69	ug/L	505.69	ppb	14:00:16
1	Cd 226.502†	57995.0	58241.1	507.71	ug/L	507.71	ppb	14:00:16
1	Co 228.616†	30276.5	30368.4	500.39	ug/L	500.39	ppb	14:00:36
1	Cr 267.716†	56155.0	56077.4	504.61	ug/L	504.61	ppb	14:00:16
1	Cu 324.752†	198404.1	189502.5	506.33	ug/L	506.33	ppb	14:00:16
1	Mn 257.610†	538133.6	537654.4	509.55	ug/L	509.55	ppb	14:00:16
1	Mo 202.031†	9528.7	9501.2	504.57	ug/L	504.57	ppb	14:00:36
1	Ni 231.604†	25658.1	25530.8	499.92	ug/L	499.92	ppb	14:00:36
1	P 214.914†	5908.5	5644.5	2448.2	ug/L	2448.2	ppb	14:00:36
1	Pb 220.353†	5337.2	5413.7	509.76	ug/L	509.76	ppb	14:00:36
1	S 181.975 Axial†	982.3	922.4	992.73	ug/L	992.73	ppb	14:00:36
1	Sb 206.836†	1947.0	1912.7	511.56	ug/L	511.56	ppb	14:00:36
1	Se 196.026†	1120.6	1142.2	526.27	ug/L	526.27	ppb	14:00:36
1	Si 251.611†	99458.0	98918.4	2500.2	ug/L	2500.2	ppb	14:00:16
1	Sn 189.927†	3804.2	3809.3	504.41	ug/L	504.41	ppb	14:00:36
1	Ti 334.940†	364115.6	365442.0	503.92	ug/L	503.92	ppb	14:00:16
1	Tl 190.801†	2039.5	2084.2	507.30	ug/L	507.30	ppb	14:00:36
1	U 409.014†	16194.1	18971.0	488.86	ug/L	488.86	ppb	14:00:16
1	V 292.402†	85912.5	87536.6	507.86	ug/L	507.86	ppb	14:00:16
1	Zn 213.857†	69987.9	69115.0	503.40	ug/L	503.40	ppb	14:00:16
1	SiO2†	99692.6	99111.6	5360.6	ug/L	5360.6	ppb	14:01:36
2	Sc Radial	4903.9	4903.9	99.9	%			13:59:22
2	Y RADIAL	5563.6	5563.6	98.52	%			13:59:22
2	Al 396.153Radial†	7629.8	7682.7	5051.5	ug/L	5051.5	ppb	13:59:22
2	Ca 317.933Radial†	2869.5	2855.0	5054.9	ug/L	5054.9	ppb	13:59:42
2	Fe 238.204 Radial†	430.2	419.7	5090.0	ug/L	5090.0	ppb	13:59:42
2	K 766.490 Radial†	29544.8	27010.5	4914.3	ug/L	4914.3	ppb	13:59:22
2	Mg 279.077 IEC†	115.9	113.6	5086.8	ug/L	5086.8	ppb	13:59:42
2	Na 589.592 Radial†	33570.9	34890.9	9786.9	ug/L	9786.9	ppb	13:59:22
2	Sr 421.552†	94637.2	94757.3	497.09	ug/L	497.09	ppb	13:59:22
2	Sc 361.383	1040415.9	1040415.9	100.09	%			14:00:43
2	Y 371.029	871835.6	871835.6	98.572	%			14:00:43
2	Ag 328.068†	126618.1	126030.6	502.66	ug/L	502.66	ppb	14:00:43
2	As 188.979†	1578.8	1614.0	507.28	ug/L	507.28	ppb	14:01:03
2	B 249.677†	25988.1	26430.9	497.57	ug/L	497.57	ppb	14:00:43
2	Ba 233.527†	78576.2	78505.8	505.65	ug/L	505.65	ppb	14:00:43
2	Be 313.107†	1613361.0	1616788.9	505.09	ug/L	505.09	ppb	14:00:43
2	Cd 226.502†	57924.1	58107.9	506.56	ug/L	506.56	ppb	14:00:43
2	Co 228.616†	30134.5	30193.8	497.51	ug/L	497.51	ppb	14:01:03
2	Cr 267.716†	55999.6	55861.6	502.67	ug/L	502.67	ppb	14:00:43
2	Cu 324.752†	198264.1	189148.9	505.38	ug/L	505.38	ppb	14:00:43
2	Mn 257.610†	536256.2	535198.8	507.22	ug/L	507.22	ppb	14:00:43
2	Mo 202.031†	9495.0	9457.2	502.23	ug/L	502.23	ppb	14:01:03
2	Ni 231.604†	25578.2	25423.3	497.82	ug/L	497.82	ppb	14:01:03

2	P 214.914†	5888.2	5617.8	2436.4 ug/L	2436.4 ppb	14:01:03
2	Pb 220.353†	5330.7	5401.5	508.61 ug/L	508.61 ppb	14:01:03
2	S 181.975 Axial†	979.9	918.9	989.03 ug/L	989.03 ppb	14:01:03
2	Sb 206.836†	1930.3	1893.9	506.56 ug/L	506.56 ppb	14:01:03
2	Se 196.026†	1111.5	1131.9	521.41 ug/L	521.41 ppb	14:01:03
2	Si 251.611†	99308.8	98662.1	2493.7 ug/L	2493.7 ppb	14:00:43
2	Śn 189.927†	3787.9	3788.8	501.70 ug/L	501.70 ppb	14:01:03
2	Ti 334.940†	363362.7	364297.5	502.34 ug/L	502.34 ppb	14:00:43
2	Tl 190.801†	2031.3	2073.7	504.75 ug/L	504.75 ppb	14:01:03
2	U 409.014†	16156.7	18916.2	487.45 ug/L	487.45 ppb	14:00:43
2	V 292.402†	85824.5	87356.1	506.80 ug/L	506.80 ppb	14:00:43
2	Zn 213.857†	69798.5	68850.4	501.49 ug/L	501.49 ppb	14:00:43
2	SiO2†	99037.9	98350.1	5319.3 ug/L	5319.3 ppb	14:01:41
3	Sc Radial	4905.2	4905.2	99.9 %		13:59:47
3	Y RADIAL	5578.4	5578.4	98.78 %		13:59:47
3	Al 396.153Radial†	7662.0	7712.9	5071.4 ug/L	5071.4 ppb	13:59:47
3	Ca 317.933Radial†	2851.3	2836.1	5021.5 ug/L	5021.5 ppb	14:00:07
3	Fe 238.204 Radial†	428.2	417.6	5064.8 ug/L	5064.8 ppb	14:00:07
3	K 766.490 Radial†	29667.9	27125.7	4935.3 ug/L	4935.3 ppb	13:59:47
3	Mg 279.077 IEC†	118.6	116.2	5205.9 ug/L	5205.9 ppb	14:00:07
3	Na 589.592 Radial†	33849.7	35160.9	9862.6 ug/L	9862.6 ppb	13:59:47
3	Sr 421.552†	94892.1	94987.0	498.30 ug/L	498.30 ppb	13:59:47
3	Sc 361.383	1034406.5	1034406.5	99.512 %		14:01:11
3	Y 371.029	866902.9	866902.9	98.014 %		14:01:11
3	Ag 328.068†	126098.9	126243.8	503.50 ug/L	503.50 ppb	14:01:11
3	As 188.979†	1567.7	1612.0	506.67 ug/L	506.67 ppb	14:01:31
3	B 249.677†	25934.9	26528.3	499.41 ug/L	499.41 ppb	14:01:11
3	Ba 233.527†	78325.0	78709.5	506.96 ug/L	506.96 ppb	14:01:11
3	Be 313.107†	1606151.5	1618908.4	505.75 ug/L	505.75 ppb	14:01:11
3	Cd 226.502†	57395.7	57913.1	504.86 ug/L	504.86 ppb	14:01:11
3	Co 228.616†	30128.0	30362.2	500.29 ug/L	500.29 ppb	14:01:31
3	Cr 267.716†	55725.5	55911.2	503.12 ug/L	503.12 ppb	14:01:11
3	Cu 324.752†	197561.1	189593.2	506.57 ug/L	506.57 ppb	14:01:11
3	Mn 257.610†	533822.4	535865.7	507.84 ug/L	507.84 ppb	14:01:11
3	Mo 202.031†	9482.4	9499.7	504.48 ug/L	504.48 ppb	14:01:31
3	Ni 231.604†	25542.6	25536.0	500.02 ug/L	500.02 ppb	14:01:31
3	P 214.914†	5892.3	5656.1	2453.4 ug/L	2453.4 ppb	14:01:31
3	Pb 220.353†	5317.8	5419.4	510.30 ug/L	510.30 ppb	14:01:31
3	S 181.975 Axial†	980.9	925.6	996.24 ug/L	996.24 ppb	14:01:31
3	Sb 206.836†	1936.4	1911.2	511.17 ug/L	511.17 ppb	14:01:31
3	Se 196.026†	1110.3	1137.2	523.65 ug/L	523.65 ppb	14:01:31
3	Si 251.611†	98884.3	98812.0	2497.5 ug/L	2497.5 ppb	14:01:11
3	Sn 189.927†	3771.0	3793.8	502.36 ug/L	502.36 ppb	14:01:31
3	Ti 334.940†	361898.4	364935.1	503.22 ug/L	503.22 ppb	14:01:11
3	Tl 190.801†	2029.2	2083.4	507.10 ug/L	507.10 ppb	14:01:31
3	U 409.014†	15893.0	18745.0	483.03 ug/L	483.03 ppb	14:01:11
3	V 292.402†	85556.9	87585.3	508.14 ug/L	508.14 ppb	14:01:11
3	Zn 213.857†	69422.8	68878.0	501.67 ug/L	501.67 ppb	14:01:11
3	SiO2†	99203.9	99091.7	5359.5 ug/L	5359.5 ppb	14:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038039.2	99.861	%	0.3074				0.31%
Sc Radial	4870.9	99.2	%	1.19				1.19%
Y 371.029	869369.6	98.293	%	0.2789				0.28%
Y RADIAL	5547.8	98.24	%	0.723				0.74%
Ag 328.068†	126233.4	503.47	ug/L	0.799	503.47	ppb	0.799	0.16%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153Radial†	7714.8	5072.7	ug/L	21.84	5072.7	ppb	21.84	0.43%
QC value within limits for Al 396.153Radial Recovery = 101.45%								
As 188.979†	1617.2	508.29	ug/L	2.303	508.29	ppb	2.303	0.45%
QC value within limits for As 188.979 Recovery = 101.66%								
B 249.677†	26465.7	498.22	ug/L	1.029	498.22	ppb	1.029	0.21%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	78690.3	506.84	ug/L	1.132	506.84	ppb	1.132	0.22%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1618128.5	505.51	ug/L	0.365	505.51	ppb	0.365	0.07%
QC value within limits for Be 313.107 Recovery = 101.10%								
Ca 317.933Radial†	2858.7	5061.5	ug/L	43.63	5061.5	ppb	43.63	0.86%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.23%
Cd 226.502†            58087.4      506.38 ug/L         1.433      506.38 ppb          1.433   0.28%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            30308.1      499.40 ug/L         1.633      499.40 ppb          1.633   0.33%
   QC value within limits for Co 228.616  Recovery = 99.88%
Cr 267.716†            55950.1      503.47 ug/L         1.016      503.47 ppb          1.016   0.20%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           189414.9      506.10 ug/L         0.627      506.10 ppb          0.627   0.12%
   QC value within limits for Cu 324.752  Recovery = 101.22%
Fe 238.204 Radial†       421.4      5111.0 ug/L        59.61      5111.0 ppb         59.61   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.22%
K 766.490 Radial†      27126.5      4935.4 ug/L        21.18      4935.4 ppb         21.18   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 98.71%
Mg 279.077 IEC†          116.2      5203.3 ug/L       115.16      5203.3 ppb        115.16   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.07%
Mn 257.610†           536239.7      508.20 ug/L         1.206      508.20 ppb          1.206   0.24%
   QC value within limits for Mn 257.610  Recovery = 101.64%
Mo 202.031†             9486.0      503.76 ug/L         1.326      503.76 ppb          1.326   0.26%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†     35096.0      9844.4 ug/L        50.94      9844.4 ppb         50.94   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25496.7      499.25 ug/L         1.245      499.25 ppb          1.245   0.25%
   QC value within limits for Ni 231.604  Recovery = 99.85%
P 214.914†              5639.5      2446.0 ug/L         8.70      2446.0 ppb          8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.84%
Pb 220.353†             5411.5      509.56 ug/L         0.863      509.56 ppb          0.863   0.17%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         922.3      992.67 ug/L         3.608      992.67 ppb          3.608   0.36%
   QC value within limits for S 181.975 Axial  Recovery = 99.27%
Sb 206.836†             1905.9      509.77 ug/L         2.778      509.77 ppb          2.778   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†             1137.1      523.78 ug/L         2.435      523.78 ppb          2.435   0.46%
   QC value within limits for Se 196.026  Recovery = 104.76%
Si 251.611†            98797.5      2497.1 ug/L         3.24      2497.1 ppb          3.24   0.13%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             3797.3      502.82 ug/L         1.415      502.82 ppb          1.415   0.28%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†            95023.6      498.49 ug/L         1.502      498.49 ppb          1.502   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           364891.5      503.16 ug/L         0.792      503.16 ppb          0.792   0.16%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             2080.4      506.38 ug/L         1.414      506.38 ppb          1.414   0.28%
   QC value within limits for Tl 190.801  Recovery = 101.28%
U 409.014†             18877.4      486.45 ug/L         3.041      486.45 ppb          3.041   0.63%
   QC value within limits for U 409.014  Recovery = 97.29%
V 292.402†             87492.7      507.60 ug/L         0.707      507.60 ppb          0.707   0.14%
   QC value within limits for V 292.402  Recovery = 101.52%
Zn 213.857†            68947.8      502.19 ug/L         1.055      502.19 ppb          1.055   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.44%
SiO2†                  98851.1      5346.5 ug/L        23.52      5346.5 ppb         23.52   0.44%
   QC value within limits for SiO2  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4831.0	4831.0	98.4	%			14:05:49
1	Y RADIAL	5564.1	5564.1	98.53	%			14:05:49
1	Al 396.153Radial†	-38.6	4.6	3.0139	ug/L	3.0139	ppb	14:05:49
1	Ca 317.933Radial†	28.4	11.0	19.556	ug/L	19.556	ppb	14:06:09
1	Fe 238.204 Radial†	11.0	0.2	2.1217	ug/L	2.1217	ppb	14:06:09
1	K 766.490 Radial†	2716.8	191.6	34.917	ug/L	34.917	ppb	14:05:49
1	Mg 279.077 IEC†	1.0	-1.5	-64.997	ug/L	-64.997	ppb	14:06:09
1	Na 589.592 Radial†	-1243.7	16.0	4.4759	ug/L	4.4759	ppb	14:05:49
1	Sr 421.552†	19.8	27.5	0.1440	ug/L	0.1440	ppb	14:05:49
1	Sc 361.383	1024790.7	1024790.7	98.587	%			14:07:06
1	Y 371.029	870561.7	870561.7	98.428	%			14:07:06
1	Ag 328.068†	446.5	-21.2	-0.0863	ug/L	-0.0863	ppb	14:07:11
1	As 188.979†	-32.8	3.3	1.0428	ug/L	1.0428	ppb	14:07:31
1	B 249.677†	-327.2	134.2	2.5361	ug/L	2.5361	ppb	14:07:31
1	Ba 233.527†	4.4	4.5	0.0282	ug/L	0.0282	ppb	14:07:31
1	Be 313.107†	-4797.5	7.6	0.0024	ug/L	0.0024	ppb	14:07:11
1	Cd 226.502†	-216.5	16.0	0.1397	ug/L	0.1397	ppb	14:07:31
1	Co 228.616†	-91.5	-6.5	-0.1057	ug/L	-0.1057	ppb	14:07:31
1	Cr 267.716†	132.4	46.5	0.4164	ug/L	0.4164	ppb	14:07:31
1	Cu 324.752†	8928.3	118.8	0.3175	ug/L	0.3175	ppb	14:07:11
1	Mn 257.610†	606.7	38.7	0.0381	ug/L	0.0381	ppb	14:07:31
1	Mo 202.031†	35.4	6.6	0.3522	ug/L	0.3522	ppb	14:07:31
1	Ni 231.604†	154.7	25.0	0.4895	ug/L	0.4895	ppb	14:07:31
1	P 214.914†	267.7	6.4	2.8325	ug/L	2.8325	ppb	14:07:31
1	Pb 220.353†	-80.2	-5.8	-0.5432	ug/L	-0.5432	ppb	14:07:31
1	S 181.975 Axial†	49.8	-9.6	-10.308	ug/L	-10.308	ppb	14:07:31
1	Sb 206.836†	34.1	-0.0	0.0160	ug/L	0.0160	ppb	14:07:31
1	Se 196.026†	-36.1	-15.2	-6.7218	ug/L	-6.7218	ppb	14:07:31
1	Si 251.611†	638.4	89.9	2.2610	ug/L	2.2610	ppb	14:07:31
1	Sn 189.927†	5.7	10.2	1.3465	ug/L	1.3465	ppb	14:07:31
1	Ti 334.940†	-1228.9	14.0	0.0196	ug/L	0.0196	ppb	14:07:11
1	Tl 190.801†	-52.7	-9.2	-2.2183	ug/L	-2.2183	ppb	14:07:31
1	U 409.014†	-2692.4	43.0	1.1108	ug/L	1.1108	ppb	14:07:06
1	V 292.402†	-1667.9	-83.3	-0.4717	ug/L	-0.4717	ppb	14:07:11
1	Zn 213.857†	920.0	47.7	0.3487	ug/L	0.3487	ppb	14:07:31
1	SiO2†	640.4	50.5	2.6983	ug/L	2.6983	ppb	14:08:37
2	Sc Radial	4920.6	4920.6	100	%			14:06:14
2	Y RADIAL	5654.6	5654.6	100.1	%			14:06:14
2	Al 396.153Radial†	-52.3	-8.4	-5.5671	ug/L	-5.5671	ppb	14:06:14
2	Ca 317.933Radial†	27.7	9.8	17.368	ug/L	17.368	ppb	14:06:34
2	Fe 238.204 Radial†	13.2	2.2	26.046	ug/L	26.046	ppb	14:06:34
2	K 766.490 Radial†	2660.9	85.5	15.566	ug/L	15.566	ppb	14:06:14
2	Mg 279.077 IEC†	2.8	0.2	11.114	ug/L	11.114	ppb	14:06:34
2	Na 589.592 Radial†	-1177.3	105.2	29.518	ug/L	29.518	ppb	14:06:14
2	Sr 421.552†	-7.9	-0.5	-0.0028	ug/L	-0.0028	ppb	14:06:14
2	Sc 361.383	1035837.9	1035837.9	99.649	%			14:07:36
2	Y 371.029	880941.2	880941.2	99.601	%			14:07:36
2	Ag 328.068†	459.3	-13.1	-0.0412	ug/L	-0.0412	ppb	14:07:41
2	As 188.979†	-38.8	-2.3	-0.7273	ug/L	-0.7273	ppb	14:08:01
2	B 249.677†	-355.2	109.6	2.0683	ug/L	2.0683	ppb	14:08:01
2	Ba 233.527†	-6.1	-6.1	-0.0376	ug/L	-0.0376	ppb	14:08:01
2	Be 313.107†	-4851.2	5.7	0.0020	ug/L	0.0020	ppb	14:07:41
2	Cd 226.502†	-225.7	9.2	0.0772	ug/L	0.0772	ppb	14:08:01
2	Co 228.616†	-88.0	-2.0	-0.0335	ug/L	-0.0335	ppb	14:08:01
2	Cr 267.716†	98.5	11.1	0.1012	ug/L	0.1012	ppb	14:08:01
2	Cu 324.752†	9068.5	162.9	0.4365	ug/L	0.4365	ppb	14:07:41
2	Mn 257.610†	597.4	22.9	0.0240	ug/L	0.0240	ppb	14:08:01
2	Mo 202.031†	30.6	1.4	0.0787	ug/L	0.0787	ppb	14:08:01
2	Ni 231.604†	129.8	-1.7	-0.0329	ug/L	-0.0329	ppb	14:08:01

2	P 214.914†	281.5	17.4	7.6758	ug/L	7.6758 ppb	14:08:01
2	Pb 220.353†	-51.8	23.6	2.2119	ug/L	2.2119 ppb	14:08:01
2	S 181.975 Axial†	53.3	-6.6	-7.1324	ug/L	-7.1324 ppb	14:08:01
2	Sb 206.836†	46.2	11.8	3.1069	ug/L	3.1069 ppb	14:08:01
2	Se 196.026†	-25.9	-4.6	-1.9363	ug/L	-1.9363 ppb	14:08:01
2	Si 251.611†	627.2	71.8	1.8149	ug/L	1.8149 ppb	14:08:01
2	Sn 189.927†	-1.1	3.2	0.4313	ug/L	0.4313 ppb	14:08:01
2	Ti 334.940†	-1183.7	72.6	0.1017	ug/L	0.1017 ppb	14:07:41
2	Tl 190.801†	-49.5	-5.4	-1.3009	ug/L	-1.3009 ppb	14:08:01
2	U 409.014†	-2831.5	-67.5	-1.7491	ug/L	-1.7491 ppb	14:07:36
2	V 292.402†	-1540.4	62.7	0.3527	ug/L	0.3527 ppb	14:07:41
2	Zn 213.857†	925.5	43.2	0.3144	ug/L	0.3144 ppb	14:08:01
2	SiO2†	656.4	59.7	3.2249	ug/L	3.2249 ppb	14:08:42
3	Sc Radial	4907.7	4907.7	100.0	%		14:06:39
3	Y RADIAL	5653.4	5653.4	100.1	%		14:06:39
3	Al 396.153Radial†	-30.1	13.6	9.0078	ug/L	9.0078 ppb	14:06:39
3	Ca 317.933Radial†	32.1	14.3	25.238	ug/L	25.238 ppb	14:06:59
3	Fe 238.204 Radial†	10.0	-1.0	-11.557	ug/L	-11.557 ppb	14:06:59
3	K 766.490 Radial†	2714.4	146.1	26.614	ug/L	26.614 ppb	14:06:39
3	Mg 279.077 IEC†	1.0	-1.5	-67.277	ug/L	-67.277 ppb	14:06:59
3	Na 589.592 Radial†	-1231.6	47.9	13.433	ug/L	13.433 ppb	14:06:39
3	Sr 421.552†	-21.5	-14.1	-0.0743	ug/L	-0.0743 ppb	14:06:39
3	Sc 361.383	1044966.2	1044966.2	100.53	%		14:08:07
3	Y 371.029	887847.1	887847.1	100.38	%		14:08:07
3	Ag 328.068†	476.0	-0.6	-0.0092	ug/L	-0.0092 ppb	14:08:12
3	As 188.979†	-34.4	2.4	0.7368	ug/L	0.7368 ppb	14:08:32
3	B 249.677†	-308.7	159.1	3.0077	ug/L	3.0077 ppb	14:08:32
3	Ba 233.527†	15.2	15.1	0.0964	ug/L	0.0964 ppb	14:08:32
3	Be 313.107†	-4924.8	-25.0	-0.0077	ug/L	-0.0077 ppb	14:08:12
3	Cd 226.502†	-216.4	20.4	0.1791	ug/L	0.1791 ppb	14:08:32
3	Co 228.616†	-88.2	-1.4	-0.0226	ug/L	-0.0226 ppb	14:08:32
3	Cr 267.716†	97.7	9.4	0.0834	ug/L	0.0834 ppb	14:08:32
3	Cu 324.752†	9107.2	122.0	0.3251	ug/L	0.3251 ppb	14:08:12
3	Mn 257.610†	586.4	6.7	0.0064	ug/L	0.0064 ppb	14:08:32
3	Mo 202.031†	28.2	-1.2	-0.0662	ug/L	-0.0662 ppb	14:08:32
3	Ni 231.604†	126.5	-6.1	-0.1191	ug/L	-0.1191 ppb	14:08:32
3	P 214.914†	256.1	-10.3	-4.6622	ug/L	-4.6622 ppb	14:08:32
3	Pb 220.353†	-89.4	-13.4	-1.2536	ug/L	-1.2536 ppb	14:08:32
3	S 181.975 Axial†	53.9	-6.4	-6.9407	ug/L	-6.9407 ppb	14:08:32
3	Sb 206.836†	44.5	9.6	2.5302	ug/L	2.5302 ppb	14:08:32
3	Se 196.026†	-34.8	-13.3	-5.9220	ug/L	-5.9220 ppb	14:08:32
3	Si 251.611†	647.6	86.5	2.1899	ug/L	2.1899 ppb	14:08:32
3	Sn 189.927†	-5.6	-1.2	-0.1576	ug/L	-0.1576 ppb	14:08:32
3	Ti 334.940†	-1239.6	27.3	0.0379	ug/L	0.0379 ppb	14:08:12
3	Tl 190.801†	-56.4	-11.9	-2.8674	ug/L	-2.8674 ppb	14:08:32
3	U 409.014†	-2689.0	99.1	2.5636	ug/L	2.5636 ppb	14:08:07
3	V 292.402†	-1651.6	-34.4	-0.1930	ug/L	-0.1930 ppb	14:08:12
3	Zn 213.857†	920.5	30.1	0.2247	ug/L	0.2247 ppb	14:08:32
3	SiO2†	681.4	78.8	4.2671	ug/L	4.2671 ppb	14:08:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1035198.3	99.588	%	0.9719				0.98%
Sc Radial	4886.5	99.5	%	0.99				0.99%
Y 371.029	879783.3	99.470	%	0.9837				0.99%
Y RADIAL	5624.0	99.59	%	0.918				0.92%
Ag 328.068†	-11.6	-0.0456	ug/L	0.03874	-0.0456	ppb	0.03874	85.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	2.1515	ug/L	7.32561	2.1515	ppb	7.32561	340.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.3508	ug/L	0.94607	0.3508	ppb	0.94607	269.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.3	2.5374	ug/L	0.46969	2.5374	ppb	0.46969	18.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0290	ug/L	0.06701	0.0290	ppb	0.06701	231.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0011	ug/L	0.00573	-0.0011	ppb	0.00573	514.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.7	20.721	ug/L	4.0623	20.721	ppb	4.0623	19.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.2      0.1320 ug/L       0.05139      0.1320 ppb        0.05139  38.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -3.3     -0.0539 ug/L       0.04514     -0.0539 ppb        0.04514  83.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.3      0.2003 ug/L       0.18736      0.2003 ppb        0.18736  93.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               134.6      0.3597 ug/L       0.06661      0.3597 ppb        0.06661  18.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      5.5367 ug/L      19.03292      5.5367 ppb       19.03292 343.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         141.0      25.699 ug/L        9.7077      25.699 ppb         9.7077  37.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.9     -40.386 ug/L       44.6154     -40.386 ppb        44.6154 110.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.8      0.0229 ug/L       0.01588      0.0229 ppb        0.01588  69.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1216 ug/L       0.21243      0.1216 ppb        0.21243 174.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         56.4      15.809 ug/L       12.6890      15.809 ppb        12.6890  80.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.7      0.1125 ug/L       0.32937      0.1125 ppb        0.32937 292.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.5      1.9487 ug/L       6.21633      1.9487 ppb        6.21633 319.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.5      0.1384 ug/L       1.83055      0.1384 ppb        1.83055 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -7.5     -8.1271 ug/L       1.89129     -8.1271 ppb        1.89129  23.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.1      1.8844 ug/L       1.64357      1.8844 ppb        1.64357  87.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -11.0     -4.8600 ug/L       2.56342     -4.8600 ppb        2.56342  52.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                82.7      2.0886 ug/L       0.23968      2.0886 ppb        0.23968  11.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.1      0.5401 ug/L       0.75795      0.5401 ppb        0.75795 140.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 4.3      0.0223 ug/L       0.11131      0.0223 ppb        0.11131 498.62%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                38.0      0.0531 ug/L       0.04312      0.0531 ppb        0.04312  81.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -8.8     -2.1289 ug/L       0.78706     -2.1289 ppb        0.78706  36.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 24.9      0.6417 ug/L       2.19427      0.6417 ppb        2.19427 341.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -18.4     -0.1040 ug/L       0.41932     -0.1040 ppb        0.41932 403.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                40.3      0.2959 ug/L       0.06405      0.2959 ppb        0.06405  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      63.0      3.3968 ug/L       0.79839      3.3968 ppb        0.79839  23.50%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 14:52:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4810.1	4810.1	98.0	%			14:54:48
1	Y RADIAL	5502.7	5502.7	97.44	%			14:54:48
1	Al 396.153Radial†	7642.7	7844.8	5158.3	ug/L	5158.3	ppb	14:54:48
1	Ca 317.933Radial†	2843.3	2884.3	5106.7	ug/L	5106.7	ppb	14:55:08
1	Fe 238.204 Radial†	421.0	418.7	5078.1	ug/L	5078.1	ppb	14:55:08
1	K 766.490 Radial†	29439.8	27480.0	4999.9	ug/L	4999.9	ppb	14:54:48
1	Mg 279.077 IEC†	118.9	118.9	5326.5	ug/L	5326.5	ppb	14:55:08
1	Na 589.592 Radial†	32726.1	34683.8	9728.8	ug/L	9728.8	ppb	14:54:48
1	Sr 421.552†	93211.8	95149.6	499.15	ug/L	499.15	ppb	14:54:48
1	Sc 361.383	1036294.7	1036294.7	99.693	%			14:56:07
1	Y 371.029	868336.1	868336.1	98.176	%			14:56:07
1	Ag 328.068†	126959.0	126875.6	506.02	ug/L	506.02	ppb	14:56:07
1	As 188.979†	1598.8	1640.3	515.51	ug/L	515.51	ppb	14:56:27
1	B 249.677†	25899.4	26445.2	497.82	ug/L	497.82	ppb	14:56:07
1	Ba 233.527†	78925.5	79168.3	509.92	ug/L	509.92	ppb	14:56:07
1	Be 313.107†	1615903.2	1625749.2	507.89	ug/L	507.89	ppb	14:56:07
1	Cd 226.502†	58136.3	58550.9	510.43	ug/L	510.43	ppb	14:56:07
1	Co 228.616†	30454.8	30634.8	504.79	ug/L	504.79	ppb	14:56:27
1	Cr 267.716†	56261.4	56346.8	507.04	ug/L	507.04	ppb	14:56:07
1	Cu 324.752†	198361.1	190033.9	507.75	ug/L	507.75	ppb	14:56:07
1	Mn 257.610†	537421.4	538498.4	510.34	ug/L	510.34	ppb	14:56:07
1	Mo 202.031†	9588.1	9588.3	509.19	ug/L	509.19	ppb	14:56:27
1	Ni 231.604†	25865.9	25813.5	505.46	ug/L	505.46	ppb	14:56:27
1	P 214.914†	5946.8	5700.0	2473.0	ug/L	2473.0	ppb	14:56:27
1	Pb 220.353†	5356.5	5448.5	513.06	ug/L	513.06	ppb	14:56:27
1	S 181.975 Axial†	993.3	936.2	1007.7	ug/L	1007.7	ppb	14:56:27
1	Sb 206.836†	1932.8	1904.1	509.44	ug/L	509.44	ppb	14:56:27
1	Se 196.026†	1115.4	1140.2	525.06	ug/L	525.06	ppb	14:56:27
1	Si 251.611†	99500.0	99248.5	2508.5	ug/L	2508.5	ppb	14:56:07
1	Sn 189.927†	3838.0	3854.1	510.34	ug/L	510.34	ppb	14:56:27
1	Ti 334.940†	363903.2	366283.3	505.08	ug/L	505.08	ppb	14:56:07
1	Tl 190.801†	2043.2	2093.8	509.60	ug/L	509.60	ppb	14:56:27
1	U 409.014†	16040.6	18863.9	486.09	ug/L	486.09	ppb	14:56:07
1	V 292.402†	86157.3	88030.9	510.76	ug/L	510.76	ppb	14:56:07
1	Zn 213.857†	70029.1	69359.0	505.17	ug/L	505.17	ppb	14:56:07
1	SiO2†	99222.7	98929.0	5350.4	ug/L	5350.4	ppb	14:57:27
2	Sc Radial	4652.6	4652.6	94.8	%			14:55:13
2	Y RADIAL	5332.8	5332.8	94.43	%			14:55:13
2	Al 396.153Radial†	7384.7	7836.7	5153.0	ug/L	5153.0	ppb	14:55:13
2	Ca 317.933Radial†	2831.1	2969.7	5258.0	ug/L	5258.0	ppb	14:55:33
2	Fe 238.204 Radial†	416.4	428.4	5195.6	ug/L	5195.6	ppb	14:55:33
2	K 766.490 Radial†	28587.4	27598.0	5021.4	ug/L	5021.4	ppb	14:55:13
2	Mg 279.077 IEC†	116.9	120.8	5412.8	ug/L	5412.8	ppb	14:55:33
2	Na 589.592 Radial†	31593.8	34620.0	9710.9	ug/L	9710.9	ppb	14:55:13
2	Sr 421.552†	90044.9	95029.2	498.52	ug/L	498.52	ppb	14:55:13
2	Sc 361.383	1037637.6	1037637.6	99.822	%			14:56:34
2	Y 371.029	870770.0	870770.0	98.451	%			14:56:34
2	Ag 328.068†	126916.8	126668.5	505.23	ug/L	505.23	ppb	14:56:34
2	As 188.979†	1568.2	1607.6	505.32	ug/L	505.32	ppb	14:56:54
2	B 249.677†	25963.6	26475.9	498.40	ug/L	498.40	ppb	14:56:34
2	Ba 233.527†	78919.2	79059.6	509.23	ug/L	509.23	ppb	14:56:34
2	Be 313.107†	1621104.9	1628862.6	508.86	ug/L	508.86	ppb	14:56:34
2	Cd 226.502†	58150.3	58489.4	509.88	ug/L	509.88	ppb	14:56:34
2	Co 228.616†	30166.6	30306.6	499.37	ug/L	499.37	ppb	14:56:54
2	Cr 267.716†	56287.6	56299.9	506.62	ug/L	506.62	ppb	14:56:34
2	Cu 324.752†	198508.2	189923.8	507.46	ug/L	507.46	ppb	14:56:34
2	Mn 257.610†	537855.0	538235.1	510.10	ug/L	510.10	ppb	14:56:34
2	Mo 202.031†	9543.2	9530.9	506.15	ug/L	506.15	ppb	14:56:54
2	Ni 231.604†	25658.2	25571.9	500.73	ug/L	500.73	ppb	14:56:54

2	P 214.914†	5894.8	5640.1	2446.1 ug/L	2446.1 ppb	14:56:54
2	Pb 220.353†	5340.8	5425.9	510.92 ug/L	510.92 ppb	14:56:54
2	S 181.975 Axial†	981.9	923.6	994.02 ug/L	994.02 ppb	14:56:54
2	Sb 206.836†	1938.9	1907.7	510.22 ug/L	510.22 ppb	14:56:54
2	Se 196.026†	1110.6	1133.9	522.69 ug/L	522.69 ppb	14:56:54
2	Si 251.611†	99503.2	99122.5	2505.3 ug/L	2505.3 ppb	14:56:34
2	Sn 189.927†	3791.8	3802.9	503.58 ug/L	503.58 ppb	14:56:54
2	Ti 334.940†	364554.4	366463.3	505.33 ug/L	505.33 ppb	14:56:34
2	Tl 190.801†	2036.2	2084.0	507.28 ug/L	507.28 ppb	14:56:54
2	U 409.014†	16258.1	19061.0	491.18 ug/L	491.18 ppb	14:56:34
2	V 292.402†	86357.8	88119.9	511.22 ug/L	511.22 ppb	14:56:34
2	Zn 213.857†	70054.8	69293.9	504.70 ug/L	504.70 ppb	14:56:34
2	SiO2†	98035.8	97611.1	5278.9 ug/L	5278.9 ppb	14:57:32
3	Sc Radial	4782.1	4782.1	97.4 %		14:55:38
3	Y RADIAL	5495.1	5495.1	97.31 %		14:55:38
3	Al 396.153Radial†	7586.5	7832.7	5150.4 ug/L	5150.4 ppb	14:55:38
3	Ca 317.933Radial†	2827.1	2884.7	5107.4 ug/L	5107.4 ppb	14:55:58
3	Fe 238.204 Radial†	422.3	422.6	5125.1 ug/L	5125.1 ppb	14:55:58
3	K 766.490 Radial†	29420.2	27635.7	5028.3 ug/L	5028.3 ppb	14:55:38
3	Mg 279.077 IEC†	112.6	113.1	5067.8 ug/L	5067.8 ppb	14:55:58
3	Na 589.592 Radial†	32471.9	34618.3	9710.4 ug/L	9710.4 ppb	14:55:38
3	Sr 421.552†	92857.0	95342.0	500.16 ug/L	500.16 ppb	14:55:38
3	Sc 361.383	1034093.0	1034093.0	99.481 %		14:57:02
3	Y 371.029	868202.8	868202.8	98.161 %		14:57:02
3	Ag 328.068†	126469.5	126654.7	505.16 ug/L	505.16 ppb	14:57:02
3	As 188.979†	1564.0	1608.8	505.68 ug/L	505.68 ppb	14:57:22
3	B 249.677†	25777.9	26378.4	496.56 ug/L	496.56 ppb	14:57:02
3	Ba 233.527†	78503.1	78912.4	508.28 ug/L	508.28 ppb	14:57:02
3	Be 313.107†	1614788.9	1628080.2	508.61 ug/L	508.61 ppb	14:57:02
3	Cd 226.502†	57693.3	58229.7	507.62 ug/L	507.62 ppb	14:57:02
3	Co 228.616†	30141.5	30384.9	500.67 ug/L	500.67 ppb	14:57:22
3	Cr 267.716†	55958.3	56162.2	505.38 ug/L	505.38 ppb	14:57:02
3	Cu 324.752†	197749.1	189842.4	507.24 ug/L	507.24 ppb	14:57:02
3	Mn 257.610†	534606.2	536816.3	508.75 ug/L	508.75 ppb	14:57:02
3	Mo 202.031†	9528.2	9548.6	507.08 ug/L	507.08 ppb	14:57:22
3	Ni 231.604†	25634.3	25636.0	501.98 ug/L	501.98 ppb	14:57:22
3	P 214.914†	5915.5	5681.2	2464.6 ug/L	2464.6 ppb	14:57:22
3	Pb 220.353†	5328.8	5432.1	511.51 ug/L	511.51 ppb	14:57:22
3	S 181.975 Axial†	977.4	922.4	992.73 ug/L	992.73 ppb	14:57:22
3	Sb 206.836†	1931.2	1906.6	510.03 ug/L	510.03 ppb	14:57:22
3	Se 196.026†	1112.6	1139.8	525.04 ug/L	525.04 ppb	14:57:22
3	Si 251.611†	98893.4	98851.3	2498.4 ug/L	2498.4 ppb	14:57:02
3	Sn 189.927†	3800.1	3824.3	506.40 ug/L	506.40 ppb	14:57:22
3	Ti 334.940†	362454.3	365604.1	504.14 ug/L	504.14 ppb	14:57:02
3	Tl 190.801†	2040.8	2095.6	510.06 ug/L	510.06 ppb	14:57:22
3	U 409.014†	15931.1	18788.2	484.13 ug/L	484.13 ppb	14:57:02
3	V 292.402†	86073.1	88130.3	511.28 ug/L	511.28 ppb	14:57:02
3	Zn 213.857†	69632.5	69109.9	503.36 ug/L	503.36 ppb	14:57:02
3	SiO2†	98964.6	98881.5	5347.9 ug/L	5347.9 ppb	14:57:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036008.4	99.666	%	0.1722				0.17%
Sc Radial	4748.3	96.7	%	1.71				1.77%
Y 371.029	869102.9	98.263	%	0.1634				0.17%
Y RADIAL	5443.5	96.39	%	1.699				1.76%
Ag 328.068†	126732.9	505.47	ug/L	0.476	505.47	ppb	0.476	0.09%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	7838.1	5153.9	ug/L	4.01	5153.9	ppb	4.01	0.08%
QC value within limits for Al 396.153Radial Recovery = 103.08%								
As 188.979†	1618.9	508.84	ug/L	5.781	508.84	ppb	5.781	1.14%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	26433.2	497.60	ug/L	0.939	497.60	ppb	0.939	0.19%
QC value within limits for B 249.677 Recovery = 99.52%								
Ba 233.527†	79046.8	509.14	ug/L	0.824	509.14	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	1627564.0	508.45	ug/L	0.505	508.45	ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.69%								
Ca 317.933Radial†	2912.9	5157.4	ug/L	87.12	5157.4	ppb	87.12	1.69%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.15%
Cd 226.502†            58423.3      509.31 ug/L         1.488      509.31 ppb          1.488   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.86%
Co 228.616†            30442.1      501.61 ug/L         2.828      501.61 ppb          2.828   0.56%
   QC value within limits for Co 228.616  Recovery = 100.32%
Cr 267.716†            56269.6      506.35 ug/L         0.861      506.35 ppb          0.861   0.17%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           189933.4      507.48 ug/L         0.255      507.48 ppb          0.255   0.05%
   QC value within limits for Cu 324.752  Recovery = 101.50%
Fe 238.204 Radial†       423.2      5132.9 ug/L        59.15      5132.9 ppb         59.15   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      27571.2      5016.5 ug/L        14.81      5016.5 ppb         14.81   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 100.33%
Mg 279.077 IEC†          117.6      5269.0 ug/L       179.54      5269.0 ppb        179.54   3.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.38%
Mn 257.610†           537849.9      509.73 ug/L         0.854      509.73 ppb          0.854   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.95%
Mo 202.031†             9556.0      507.47 ug/L         1.556      507.47 ppb          1.556   0.31%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     34640.7      9716.7 ug/L        10.47      9716.7 ppb         10.47   0.11%
   QC value within limits for Na 589.592 Radial  Recovery = 97.17%
Ni 231.604†            25673.8      502.72 ug/L         2.451      502.72 ppb          2.451   0.49%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              5673.8      2461.2 ug/L        13.76      2461.2 ppb         13.76   0.56%
   QC value within limits for P 214.914  Recovery = 98.45%
Pb 220.353†             5435.5      511.83 ug/L         1.105      511.83 ppb          1.105   0.22%
   QC value within limits for Pb 220.353  Recovery = 102.37%
S 181.975 Axial†         927.4      998.14 ug/L         8.273      998.14 ppb          8.273   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 99.81%
Sb 206.836†             1906.1      509.90 ug/L         0.408      509.90 ppb          0.408   0.08%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†             1138.0      524.26 ug/L         1.359      524.26 ppb          1.359   0.26%
   QC value within limits for Se 196.026  Recovery = 104.85%
Si 251.611†            99074.1      2504.1 ug/L         5.14      2504.1 ppb          5.14   0.21%
   QC value within limits for Si 251.611  Recovery = 100.16%
Sn 189.927†             3827.1      506.77 ug/L         3.397      506.77 ppb          3.397   0.67%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95173.6      499.27 ug/L         0.828      499.27 ppb          0.828   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†           366116.9      504.85 ug/L         0.626      504.85 ppb          0.626   0.12%
   QC value within limits for Ti 334.940  Recovery = 100.97%
Tl 190.801†             2091.2      508.98 ug/L         1.494      508.98 ppb          1.494   0.29%
   QC value within limits for Tl 190.801  Recovery = 101.80%
U 409.014†             18904.3      487.13 ug/L         3.634      487.13 ppb          3.634   0.75%
   QC value within limits for U 409.014  Recovery = 97.43%
V 292.402†             88093.7      511.09 ug/L         0.286      511.09 ppb          0.286   0.06%
   QC value within limits for V 292.402  Recovery = 102.22%
Zn 213.857†            69254.2      504.41 ug/L         0.937      504.41 ppb          0.937   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.88%
SiO2†                  98473.9      5325.8 ug/L        40.57      5325.8 ppb         40.57   0.76%
   QC value within limits for SiO2  Recovery = 99.59%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 14:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.0	4865.0	99.1	%			15:01:40
1	Y RADIAL	5627.6	5627.6	99.65	%			15:01:40
1	Al 396.153Radial†	-40.0	3.4	2.2829	ug/L	2.2829	ppb	15:01:40
1	Ca 317.933Radial†	24.7	7.1	12.536	ug/L	12.536	ppb	15:02:00
1	Fe 238.204 Radial†	9.0	-1.9	-22.886	ug/L	-22.886	ppb	15:02:00
1	K 766.490 Radial†	2779.9	236.0	42.992	ug/L	42.992	ppb	15:01:40
1	Mg 279.077 IEC†	2.7	0.2	8.0536	ug/L	8.0536	ppb	15:02:00
1	Na 589.592 Radial†	-1161.1	108.2	30.342	ug/L	30.342	ppb	15:01:40
1	Sr 421.552†	-51.1	-44.2	-0.2320	ug/L	-0.2320	ppb	15:01:40
1	Sc 361.383	1044993.3	1044993.3	100.53	%			15:02:57
1	Y 371.029	887768.8	887768.8	100.37	%			15:02:57
1	Ag 328.068†	535.4	58.6	0.2285	ug/L	0.2285	ppb	15:03:02
1	As 188.979†	-39.0	-2.2	-0.6942	ug/L	-0.6942	ppb	15:03:22
1	B 249.677†	-373.3	94.7	1.7937	ug/L	1.7937	ppb	15:03:22
1	Ba 233.527†	4.5	4.5	0.0285	ug/L	0.0285	ppb	15:03:22
1	Be 313.107†	-4741.0	157.9	0.0492	ug/L	0.0492	ppb	15:03:02
1	Cd 226.502†	-218.6	18.2	0.1612	ug/L	0.1612	ppb	15:03:22
1	Co 228.616†	-89.7	-2.9	-0.0482	ug/L	-0.0482	ppb	15:03:22
1	Cr 267.716†	108.2	19.9	0.1798	ug/L	0.1798	ppb	15:03:22
1	Cu 324.752†	8955.6	-29.1	-0.0790	ug/L	-0.0790	ppb	15:03:02
1	Mn 257.610†	568.7	-10.9	-0.0128	ug/L	-0.0128	ppb	15:03:22
1	Mo 202.031†	25.8	-3.6	-0.1921	ug/L	-0.1921	ppb	15:03:22
1	Ni 231.604†	131.8	-0.8	-0.0163	ug/L	-0.0163	ppb	15:03:22
1	P 214.914†	255.0	-11.5	-5.0897	ug/L	-5.0897	ppb	15:03:22
1	Pb 220.353†	-94.5	-18.4	-1.7260	ug/L	-1.7260	ppb	15:03:22
1	S 181.975 Axial†	59.6	-0.8	-0.8575	ug/L	-0.8575	ppb	15:03:22
1	Sb 206.836†	50.2	15.3	4.0332	ug/L	4.0332	ppb	15:03:22
1	Se 196.026†	-28.2	-6.7	-3.0327	ug/L	-3.0327	ppb	15:03:22
1	Si 251.611†	623.2	62.3	1.5679	ug/L	1.5679	ppb	15:03:22
1	Sn 189.927†	4.1	8.5	1.1202	ug/L	1.1202	ppb	15:03:22
1	Ti 334.940†	-1267.1	0.0	0.0021	ug/L	0.0021	ppb	15:03:02
1	Tl 190.801†	-35.6	8.8	2.1310	ug/L	2.1310	ppb	15:03:22
1	U 409.014†	-2920.3	-130.9	-3.3817	ug/L	-3.3817	ppb	15:02:57
1	V 292.402†	-1576.2	40.6	0.2267	ug/L	0.2267	ppb	15:03:02
1	Zn 213.857†	932.5	42.0	0.3110	ug/L	0.3110	ppb	15:03:22
1	SiO2†	640.4	38.0	2.0314	ug/L	2.0314	ppb	15:04:28
2	Sc Radial	4955.4	4955.4	101	%			15:02:05
2	Y RADIAL	5719.8	5719.8	101.3	%			15:02:05
2	Al 396.153Radial†	-35.3	8.8	5.8042	ug/L	5.8042	ppb	15:02:05
2	Ca 317.933Radial†	20.0	2.0	3.4699	ug/L	3.4699	ppb	15:02:25
2	Fe 238.204 Radial†	10.2	-0.9	-10.421	ug/L	-10.421	ppb	15:02:25
2	K 766.490 Radial†	2620.8	27.1	4.9272	ug/L	4.9272	ppb	15:02:05
2	Mg 279.077 IEC†	3.3	0.7	32.709	ug/L	32.709	ppb	15:02:25
2	Na 589.592 Radial†	-1175.9	114.9	32.233	ug/L	32.233	ppb	15:02:05
2	Sr 421.552†	28.3	35.5	0.1861	ug/L	0.1861	ppb	15:02:05
2	Sc 361.383	1031443.8	1031443.8	99.227	%			15:03:27
2	Y 371.029	877281.2	877281.2	99.187	%			15:03:27
2	Ag 328.068†	467.0	-3.4	-0.0133	ug/L	-0.0133	ppb	15:03:32
2	As 188.979†	-38.3	-2.0	-0.6264	ug/L	-0.6264	ppb	15:03:52
2	B 249.677†	-390.8	72.2	1.3670	ug/L	1.3670	ppb	15:03:52
2	Ba 233.527†	9.7	9.8	0.0621	ug/L	0.0621	ppb	15:03:52
2	Be 313.107†	-4807.4	29.1	0.0088	ug/L	0.0088	ppb	15:03:32
2	Cd 226.502†	-231.8	2.0	0.0189	ug/L	0.0189	ppb	15:03:52
2	Co 228.616†	-93.3	-7.7	-0.1254	ug/L	-0.1254	ppb	15:03:52
2	Cr 267.716†	94.8	7.8	0.0711	ug/L	0.0711	ppb	15:03:52
2	Cu 324.752†	8963.2	95.6	0.2547	ug/L	0.2547	ppb	15:03:32
2	Mn 257.610†	585.8	13.7	0.0113	ug/L	0.0113	ppb	15:03:52
2	Mo 202.031†	34.4	5.5	0.2891	ug/L	0.2891	ppb	15:03:52
2	Ni 231.604†	162.0	31.3	0.6143	ug/L	0.6143	ppb	15:03:52

2	P 214.914†	282.4	19.5	8.7237	ug/L	8.7237 ppb	15:03:52
2	Pb 220.353†	-82.9	-8.0	-0.7503	ug/L	-0.7503 ppb	15:03:52
2	S 181.975 Axial†	52.9	-6.8	-7.3231	ug/L	-7.3231 ppb	15:03:52
2	Sb 206.836†	49.6	15.3	4.0716	ug/L	4.0716 ppb	15:03:52
2	Se 196.026†	-25.4	-4.3	-1.9231	ug/L	-1.9231 ppb	15:03:52
2	Si 251.611†	611.3	58.4	1.4718	ug/L	1.4718 ppb	15:03:52
2	Sn 189.927†	7.2	11.5	1.5274	ug/L	1.5274 ppb	15:03:52
2	Ti 334.940†	-1334.7	-84.6	-0.1146	ug/L	-0.1146 ppb	15:03:32
2	Tl 190.801†	-44.6	-0.7	-0.1667	ug/L	-0.1667 ppb	15:03:52
2	U 409.014†	-2921.4	-170.2	-4.3992	ug/L	-4.3992 ppb	15:03:27
2	V 292.402†	-1610.4	-14.5	-0.0848	ug/L	-0.0848 ppb	15:03:32
2	Zn 213.857†	903.8	25.3	0.1817	ug/L	0.1817 ppb	15:03:52
2	SiO2†	657.3	63.4	3.4213	ug/L	3.4213 ppb	15:04:33
3	Sc Radial	4948.3	4948.3	101	%		15:02:30
3	Y RADIAL	5692.8	5692.8	100.8	%		15:02:30
3	Al 396.153Radial†	-47.1	-3.0	-1.9650	ug/L	-1.9650 ppb	15:02:30
3	Ca 317.933Radial†	27.4	9.3	16.501	ug/L	16.501 ppb	15:02:50
3	Fe 238.204 Radial†	10.0	-1.1	-12.962	ug/L	-12.962 ppb	15:02:50
3	K 766.490 Radial†	2663.7	73.4	13.364	ug/L	13.364 ppb	15:02:30
3	Mg 279.077 IEC†	3.6	1.1	48.663	ug/L	48.663 ppb	15:02:50
3	Na 589.592 Radial†	-1160.4	128.6	36.078	ug/L	36.078 ppb	15:02:30
3	Sr 421.552†	-29.2	-21.5	-0.1131	ug/L	-0.1131 ppb	15:02:30
3	Sc 361.383	1040084.7	1040084.7	100.06	%		15:03:57
3	Y 371.029	884765.2	884765.2	100.03	%		15:03:57
3	Ag 328.068†	546.5	72.1	0.2822	ug/L	0.2822 ppb	15:04:03
3	As 188.979†	-32.6	4.0	1.2412	ug/L	1.2412 ppb	15:04:23
3	B 249.677†	-427.4	38.9	0.7362	ug/L	0.7362 ppb	15:04:23
3	Ba 233.527†	-1.7	-1.6	-0.0116	ug/L	-0.0116 ppb	15:04:23
3	Be 313.107†	-4839.4	37.3	0.0116	ug/L	0.0116 ppb	15:04:03
3	Cd 226.502†	-233.5	2.3	0.0212	ug/L	0.0212 ppb	15:04:23
3	Co 228.616†	-71.1	15.2	0.2510	ug/L	0.2510 ppb	15:04:23
3	Cr 267.716†	123.0	35.1	0.3157	ug/L	0.3157 ppb	15:04:23
3	Cu 324.752†	9075.6	132.9	0.3543	ug/L	0.3543 ppb	15:04:03
3	Mn 257.610†	595.6	18.6	0.0154	ug/L	0.0154 ppb	15:04:23
3	Mo 202.031†	28.0	-1.2	-0.0656	ug/L	-0.0656 ppb	15:04:23
3	Ni 231.604†	125.2	-6.8	-0.1330	ug/L	-0.1330 ppb	15:04:23
3	P 214.914†	269.7	4.4	1.9179	ug/L	1.9179 ppb	15:04:23
3	Pb 220.353†	-92.1	-16.5	-1.5499	ug/L	-1.5499 ppb	15:04:23
3	S 181.975 Axial†	58.6	-1.5	-1.6618	ug/L	-1.6618 ppb	15:04:23
3	Sb 206.836†	42.1	7.4	1.9470	ug/L	1.9470 ppb	15:04:23
3	Se 196.026†	-23.7	-2.3	-1.0666	ug/L	-1.0666 ppb	15:04:23
3	Si 251.611†	625.9	67.9	1.7213	ug/L	1.7213 ppb	15:04:23
3	Sn 189.927†	-4.4	-0.1	-0.0060	ug/L	-0.0060 ppb	15:04:23
3	Ti 334.940†	-1260.2	1.0	0.0030	ug/L	0.0030 ppb	15:04:03
3	Tl 190.801†	-37.8	6.5	1.5751	ug/L	1.5751 ppb	15:04:23
3	U 409.014†	-2854.0	-78.4	-2.0249	ug/L	-2.0249 ppb	15:03:57
3	V 292.402†	-1651.8	-42.3	-0.2440	ug/L	-0.2440 ppb	15:04:03
3	Zn 213.857†	929.4	43.3	0.3181	ug/L	0.3181 ppb	15:04:23
3	SiO2†	636.1	36.7	1.9869	ug/L	1.9869 ppb	15:04:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1038840.6	99.938	%	0.6599				0.66%
Sc Radial	4922.9	100	%	1.0				1.02%
Y 371.029	883271.7	99.865	%	0.6106				0.61%
Y RADIAL	5680.1	100.6	%	0.84				0.83%
Ag 328.068†	42.4	0.1658	ug/L	0.15744	0.1658	ppb	0.15744	94.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.1	2.0407	ug/L	3.89023	2.0407	ppb	3.89023	190.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0264	ug/L	1.09831	-0.0264	ppb	1.09831	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	1.2990	ug/L	0.53204	1.2990	ppb	0.53204	40.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.2	0.0263	ug/L	0.03692	0.0263	ppb	0.03692	140.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.8	0.0232	ug/L	0.02257	0.0232	ppb	0.02257	97.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.836	ug/L	6.6798	10.836	ppb	6.6798	61.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.5      0.0671 ug/L       0.08149      0.0671 ppb        0.08149 121.39%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.5      0.0258 ug/L       0.19884      0.0258 ppb        0.19884 770.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.9      0.1889 ug/L       0.12255      0.1889 ppb        0.12255  64.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                66.4      0.1767 ug/L       0.22693      0.1767 ppb        0.22693 128.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3    -15.423 ug/L        6.5866    -15.423 ppb         6.5866  42.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.2     20.428 ug/L       19.9912      20.428 ppb        19.9912  97.86%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7     29.809 ug/L       20.4595      29.809 ppb        20.4595  68.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.1      0.0047 ug/L       0.01526      0.0047 ppb        0.01526 327.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.2      0.0104 ug/L       0.24945      0.0104 ppb        0.24945 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        117.2     32.884 ug/L        2.9232     32.884 ppb         2.9232   8.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.1550 ug/L       0.40203      0.1550 ppb        0.40203 259.36%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.1      1.8506 ug/L       6.90692      1.8506 ppb        6.90692 373.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -14.3     -1.3421 ug/L       0.52000     -1.3421 ppb        0.52000  38.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -3.2808 ug/L       3.52375     -3.2808 ppb        3.52375 107.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.7      3.3506 ug/L       1.21570      3.3506 ppb        1.21570  36.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.4     -2.0075 ug/L       0.98577     -2.0075 ppb        0.98577  49.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.9      1.5870 ug/L       0.12582      1.5870 ppb        0.12582   7.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.7      0.8805 ug/L       0.79428      0.8805 ppb        0.79428  90.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.1     -0.0530 ug/L       0.21542     -0.0530 ppb        0.21542 406.29%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -27.9     -0.0365 ug/L       0.06764     -0.0365 ppb        0.06764 185.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.1798 ug/L       1.19875      1.1798 ppb        1.19875 101.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -126.5     -3.2686 ug/L       1.19118     -3.2686 ppb        1.19118  36.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.4     -0.0340 ug/L       0.23944     -0.0340 ppb        0.23944 703.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                36.9      0.2703 ug/L       0.07680      0.2703 ppb        0.07680  28.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      46.0      2.4799 ug/L       0.81558      2.4799 ppb        0.81558  32.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 15:48:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4840.5	4840.5	98.6	%			15:50:42
1	Y RADIAL	5544.3	5544.3	98.18	%			15:50:42
1	Al 396.153Radial†	7632.5	7785.5	5119.2	ug/L	5119.2	ppb	15:50:42
1	Ca 317.933Radial†	2806.4	2828.8	5008.4	ug/L	5008.4	ppb	15:51:02
1	Fe 238.204 Radial†	421.4	416.4	5050.1	ug/L	5050.1	ppb	15:51:02
1	K 766.490 Radial†	29569.0	27422.6	4989.3	ug/L	4989.3	ppb	15:50:42
1	Mg 279.077 IEC†	115.4	114.5	5129.8	ug/L	5129.8	ppb	15:51:02
1	Na 589.592 Radial†	33523.1	35282.8	9896.8	ug/L	9896.8	ppb	15:50:42
1	Sr 421.552†	94516.0	95875.9	502.96	ug/L	502.96	ppb	15:50:42
1	Sc 361.383	1034609.1	1034609.1	99.531	%			15:52:01
1	Y 371.029	866650.8	866650.8	97.986	%			15:52:01
1	Ag 328.068†	127956.1	128084.8	510.81	ug/L	510.81	ppb	15:52:01
1	As 188.979†	1578.0	1622.1	509.87	ug/L	509.87	ppb	15:52:21
1	B 249.677†	26176.4	26765.8	503.89	ug/L	503.89	ppb	15:52:01
1	Ba 233.527†	79294.8	79668.4	513.14	ug/L	513.14	ppb	15:52:01
1	Be 313.107†	1626702.8	1639240.4	512.11	ug/L	512.11	ppb	15:52:01
1	Cd 226.502†	58426.7	58937.6	513.80	ug/L	513.80	ppb	15:52:01
1	Co 228.616†	30273.4	30502.4	502.59	ug/L	502.59	ppb	15:52:21
1	Cr 267.716†	56499.6	56678.0	510.02	ug/L	510.02	ppb	15:52:01
1	Cu 324.752†	200305.2	192311.4	513.83	ug/L	513.83	ppb	15:52:01
1	Mn 257.610†	541173.2	543146.1	514.74	ug/L	514.74	ppb	15:52:01
1	Mo 202.031†	9518.6	9534.2	506.31	ug/L	506.31	ppb	15:52:21
1	Ni 231.604†	25655.7	25644.7	502.15	ug/L	502.15	ppb	15:52:21
1	P 214.914†	5926.1	5688.9	2467.0	ug/L	2467.0	ppb	15:52:21
1	Pb 220.353†	5347.3	5448.1	513.00	ug/L	513.00	ppb	15:52:21
1	S 181.975 Axial†	985.5	930.1	1001.0	ug/L	1001.0	ppb	15:52:21
1	Sb 206.836†	1945.4	1919.9	513.39	ug/L	513.39	ppb	15:52:21
1	Se 196.026†	1124.3	1151.0	529.72	ug/L	529.72	ppb	15:52:21
1	Si 251.611†	100203.3	100117.8	2530.6	ug/L	2530.6	ppb	15:52:01
1	Sn 189.927†	3798.8	3821.0	505.96	ug/L	505.96	ppb	15:52:21
1	Ti 334.940†	367357.3	370348.4	510.67	ug/L	510.67	ppb	15:52:01
1	Tl 190.801†	2040.8	2094.7	509.90	ug/L	509.90	ppb	15:52:21
1	U 409.014†	16372.4	19223.5	495.39	ug/L	495.39	ppb	15:52:01
1	V 292.402†	86881.1	88899.0	515.70	ug/L	515.70	ppb	15:52:01
1	Zn 213.857†	70417.5	69863.7	508.90	ug/L	508.90	ppb	15:52:01
1	SiO2†	100330.4	100204.1	5419.9	ug/L	5419.9	ppb	15:53:21
2	Sc Radial	4910.1	4910.1	100	%			15:51:07
2	Y RADIAL	5640.5	5640.5	99.88	%			15:51:07
2	Al 396.153Radial†	7664.5	7707.6	5067.7	ug/L	5067.7	ppb	15:51:07
2	Ca 317.933Radial†	2853.0	2834.9	5019.3	ug/L	5019.3	ppb	15:51:27
2	Fe 238.204 Radial†	425.8	414.8	5030.8	ug/L	5030.8	ppb	15:51:27
2	K 766.490 Radial†	29542.1	26970.2	4906.9	ug/L	4906.9	ppb	15:51:07
2	Mg 279.077 IEC†	118.7	116.2	5206.6	ug/L	5206.6	ppb	15:51:27
2	Na 589.592 Radial†	33612.1	34889.3	9786.4	ug/L	9786.4	ppb	15:51:07
2	Sr 421.552†	94688.7	94688.3	496.73	ug/L	496.73	ppb	15:51:07
2	Sc 361.383	1032747.1	1032747.1	99.352	%			15:52:28
2	Y 371.029	864634.4	864634.4	97.758	%			15:52:28
2	Ag 328.068†	126812.1	127165.2	507.15	ug/L	507.15	ppb	15:52:28
2	As 188.979†	1581.1	1628.0	511.69	ug/L	511.69	ppb	15:52:48
2	B 249.677†	26009.0	26644.7	501.60	ug/L	501.60	ppb	15:52:28
2	Ba 233.527†	78825.2	79339.4	511.02	ug/L	511.02	ppb	15:52:28
2	Be 313.107†	1612355.9	1627746.8	508.52	ug/L	508.52	ppb	15:52:28
2	Cd 226.502†	58030.2	58644.3	511.25	ug/L	511.25	ppb	15:52:28
2	Co 228.616†	30332.0	30616.1	504.47	ug/L	504.47	ppb	15:52:48
2	Cr 267.716†	56198.3	56477.1	508.21	ug/L	508.21	ppb	15:52:28
2	Cu 324.752†	198570.2	190927.9	510.13	ug/L	510.13	ppb	15:52:28
2	Mn 257.610†	537296.4	540224.3	511.97	ug/L	511.97	ppb	15:52:28
2	Mo 202.031†	9527.6	9560.5	507.71	ug/L	507.71	ppb	15:52:48
2	Ni 231.604†	25710.8	25746.5	504.15	ug/L	504.15	ppb	15:52:48

2	P 214.914†	5945.3	5719.0	2481.0	ug/L	2481.0 ppb	15:52:48
2	Pb 220.353†	5338.3	5448.7	513.05	ug/L	513.05 ppb	15:52:48
2	S 181.975 Axial†	984.6	930.9	1001.9	ug/L	1001.9 ppb	15:52:48
2	Sb 206.836†	1942.5	1920.5	513.63	ug/L	513.63 ppb	15:52:48
2	Se 196.026†	1115.8	1144.5	526.78	ug/L	526.78 ppb	15:52:48
2	Si 251.611†	99455.0	99546.1	2516.1	ug/L	2516.1 ppb	15:52:28
2	Sn 189.927†	3793.8	3822.9	506.20	ug/L	506.20 ppb	15:52:48
2	Ti 334.940†	364151.3	367787.0	507.14	ug/L	507.14 ppb	15:52:28
2	Tl 190.801†	2024.6	2082.1	506.80	ug/L	506.80 ppb	15:52:48
2	U 409.014†	16293.2	19173.4	494.10	ug/L	494.10 ppb	15:52:28
2	V 292.402†	86011.3	88180.9	511.61	ug/L	511.61 ppb	15:52:28
2	Zn 213.857†	69929.5	69500.0	506.22	ug/L	506.22 ppb	15:52:28
2	SiO2†	98811.2	98856.7	5346.6	ug/L	5346.6 ppb	15:53:26
3	Sc Radial	4894.3	4894.3	99.7	%		15:51:32
3	Y RADIAL	5564.8	5564.8	98.54	%		15:51:32
3	Al 396.153Radial†	7661.5	7729.5	5082.1	ug/L	5082.1 ppb	15:51:32
3	Ca 317.933Radial†	2847.5	2838.6	5025.9	ug/L	5025.9 ppb	15:51:52
3	Fe 238.204 Radial†	421.9	412.3	5000.2	ug/L	5000.2 ppb	15:51:52
3	K 766.490 Radial†	29524.2	27047.9	4921.1	ug/L	4921.1 ppb	15:51:32
3	Mg 279.077 IEC†	114.7	112.6	5042.9	ug/L	5042.9 ppb	15:51:52
3	Na 589.592 Radial†	33476.3	34861.9	9778.8	ug/L	9778.8 ppb	15:51:32
3	Sr 421.552†	94575.7	94881.5	497.74	ug/L	497.74 ppb	15:51:32
3	Sc 361.383	1027169.8	1027169.8	98.815	%		15:52:56
3	Y 371.029	861949.0	861949.0	97.454	%		15:52:56
3	Ag 328.068†	126161.5	127199.9	507.28	ug/L	507.28 ppb	15:52:56
3	As 188.979†	1570.4	1625.8	510.98	ug/L	510.98 ppb	15:53:16
3	B 249.677†	25709.4	26483.7	498.56	ug/L	498.56 ppb	15:52:56
3	Ba 233.527†	78167.2	79104.3	509.51	ug/L	509.51 ppb	15:52:56
3	Be 313.107†	1603881.1	1627982.2	508.59	ug/L	508.59 ppb	15:52:56
3	Cd 226.502†	57488.9	58413.7	509.24	ug/L	509.24 ppb	15:52:56
3	Co 228.616†	30179.0	30627.1	504.66	ug/L	504.66 ppb	15:53:16
3	Cr 267.716†	55728.9	56309.2	506.70	ug/L	506.70 ppb	15:52:56
3	Cu 324.752†	197276.8	190704.2	509.53	ug/L	509.53 ppb	15:52:56
3	Mn 257.610†	533034.2	538847.4	510.66	ug/L	510.66 ppb	15:52:56
3	Mo 202.031†	9503.1	9587.8	509.15	ug/L	509.15 ppb	15:53:16
3	Ni 231.604†	25594.8	25769.7	504.60	ug/L	504.60 ppb	15:53:16
3	P 214.914†	5924.9	5730.8	2486.5	ug/L	2486.5 ppb	15:53:16
3	Pb 220.353†	5306.8	5446.0	512.81	ug/L	512.81 ppb	15:53:16
3	S 181.975 Axial†	983.2	934.9	1006.2	ug/L	1006.2 ppb	15:53:16
3	Sb 206.836†	1953.8	1942.6	519.57	ug/L	519.57 ppb	15:53:16
3	Se 196.026†	1107.8	1142.4	525.76	ug/L	525.76 ppb	15:53:16
3	Si 251.611†	98740.7	99366.7	2511.5	ug/L	2511.5 ppb	15:52:56
3	Sn 189.927†	3787.1	3836.9	508.05	ug/L	508.05 ppb	15:53:16
3	Ti 334.940†	361581.5	367176.5	506.30	ug/L	506.30 ppb	15:52:56
3	Tl 190.801†	2022.1	2090.6	508.85	ug/L	508.85 ppb	15:53:16
3	U 409.014†	16077.4	19044.1	490.76	ug/L	490.76 ppb	15:52:56
3	V 292.402†	85532.7	88166.6	511.55	ug/L	511.55 ppb	15:52:56
3	Zn 213.857†	69443.1	69390.0	505.41	ug/L	505.41 ppb	15:52:56
3	SiO2†	98725.0	99309.5	5371.2	ug/L	5371.2 ppb	15:53:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1031508.7	99.233	%	0.3724				0.38%
Sc Radial	4881.6	99.4	%	0.74				0.75%
Y 371.029	864411.4	97.732	%	0.2667				0.27%
Y RADIAL	5583.2	98.87	%	0.897				0.91%
Ag 328.068†	127483.3	508.41	ug/L	2.080	508.41	ppb	2.080	0.41%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 396.153Radial†	7740.9	5089.7	ug/L	26.57	5089.7	ppb	26.57	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.79%								
As 188.979†	1625.3	510.85	ug/L	0.915	510.85	ppb	0.915	0.18%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.677†	26631.4	501.35	ug/L	2.673	501.35	ppb	2.673	0.53%
QC value within limits for B 249.677 Recovery = 100.27%								
Ba 233.527†	79370.7	511.22	ug/L	1.826	511.22	ppb	1.826	0.36%
QC value within limits for Ba 233.527 Recovery = 102.24%								
Be 313.107†	1631656.5	509.74	ug/L	2.053	509.74	ppb	2.053	0.40%
QC value within limits for Be 313.107 Recovery = 101.95%								
Ca 317.933Radial†	2834.1	5017.9	ug/L	8.84	5017.9	ppb	8.84	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58665.2      511.43 ug/L         2.287      511.43 ppb          2.287   0.45%
   QC value within limits for Cd 226.502  Recovery = 102.29%
Co 228.616†            30581.9      503.91 ug/L         1.146      503.91 ppb          1.146   0.23%
   QC value within limits for Co 228.616  Recovery = 100.78%
Cr 267.716†            56488.1      508.31 ug/L         1.662      508.31 ppb          1.662   0.33%
   QC value within limits for Cr 267.716  Recovery = 101.66%
Cu 324.752†           191314.5      511.16 ug/L         2.326      511.16 ppb          2.326   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.23%
Fe 238.204 Radial†       414.5      5027.1 ug/L        25.16      5027.1 ppb          25.16   0.50%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.54%
K 766.490 Radial†      27146.9      4939.1 ug/L        44.05      4939.1 ppb          44.05   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 98.78%
Mg 279.077 IEC†          114.4      5126.5 ug/L        81.91      5126.5 ppb          81.91   1.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           540739.3      512.46 ug/L         2.081      512.46 ppb          2.081   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.49%
Mo 202.031†             9560.8      507.72 ug/L         1.419      507.72 ppb          1.419   0.28%
   QC value within limits for Mo 202.031  Recovery = 101.54%
Na 589.592 Radial†     35011.3      9820.7 ug/L        66.05      9820.7 ppb          66.05   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 98.21%
Ni 231.604†            25720.3      503.63 ug/L         1.302      503.63 ppb          1.302   0.26%
   QC value within limits for Ni 231.604  Recovery = 100.73%
P 214.914†              5712.9      2478.2 ug/L        10.07      2478.2 ppb          10.07   0.41%
   QC value within limits for P 214.914  Recovery = 99.13%
Pb 220.353†             5447.6      512.95 ug/L         0.126      512.95 ppb          0.126   0.02%
   QC value within limits for Pb 220.353  Recovery = 102.59%
S 181.975 Axial†         931.9      1003.1 ug/L          2.77      1003.1 ppb           2.77   0.28%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1927.7      515.53 ug/L         3.500      515.53 ppb          3.500   0.68%
   QC value within limits for Sb 206.836  Recovery = 103.11%
Se 196.026†             1146.0      527.42 ug/L         2.058      527.42 ppb          2.058   0.39%
   QC value within limits for Se 196.026  Recovery = 105.48%
Si 251.611†            99676.8      2519.4 ug/L          9.97      2519.4 ppb           9.97   0.40%
   QC value within limits for Si 251.611  Recovery = 100.78%
Sn 189.927†             3826.9      506.74 ug/L         1.147      506.74 ppb          1.147   0.23%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            95148.6      499.14 ug/L         3.343      499.14 ppb          3.343   0.67%
   QC value within limits for Sr 421.552  Recovery = 99.83%
Ti 334.940†           368437.3      508.04 ug/L         2.319      508.04 ppb          2.319   0.46%
   QC value within limits for Ti 334.940  Recovery = 101.61%
Tl 190.801†             2089.1      508.52 ug/L         1.578      508.52 ppb          1.578   0.31%
   QC value within limits for Tl 190.801  Recovery = 101.70%
U 409.014†             19147.0      493.42 ug/L         2.387      493.42 ppb          2.387   0.48%
   QC value within limits for U 409.014  Recovery = 98.68%
V 292.402†             88415.5      512.95 ug/L         2.377      512.95 ppb          2.377   0.46%
   QC value within limits for V 292.402  Recovery = 102.59%
Zn 213.857†            69584.6      506.84 ug/L         1.824      506.84 ppb          1.824   0.36%
   QC value within limits for Zn 213.857  Recovery = 101.37%
SiO2†                  99456.8      5379.2 ug/L        37.27      5379.2 ppb          37.27   0.69%
   QC value within limits for SiO2  Recovery = 100.59%
All analyte(s) passed QC.
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Sequence No.: 28
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 15:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4866.8	4866.8	99.1	%			15:57:34
1	Y RADIAL	5589.6	5589.6	98.98	%			15:57:34
1	Al 396.153Radial†	-13.3	30.4	20.055	ug/L	20.055	ppb	15:57:34
1	Ca 317.933Radial†	24.9	7.3	12.862	ug/L	12.862	ppb	15:57:54
1	Fe 238.204 Radial†	8.4	-2.5	-30.568	ug/L	-30.568	ppb	15:57:54
1	K 766.490 Radial†	2546.4	-0.7	-0.1465	ug/L	-0.1465	ppb	15:57:34
1	Mg 279.077 IEC†	3.1	0.6	26.316	ug/L	26.316	ppb	15:57:54
1	Na 589.592 Radial†	-1083.1	187.3	52.542	ug/L	52.542	ppb	15:57:34
1	Sr 421.552†	-18.3	-11.0	-0.0581	ug/L	-0.0581	ppb	15:57:34
1	Sc 361.383	1031255.3	1031255.3	99.208	%			15:58:51
1	Y 371.029	876282.1	876282.1	99.074	%			15:58:51
1	Ag 328.068†	422.7	-48.0	-0.2005	ug/L	-0.2005	ppb	15:58:56
1	As 188.979†	-38.7	-2.4	-0.7447	ug/L	-0.7447	ppb	15:59:16
1	B 249.677†	-443.3	19.3	0.3683	ug/L	0.3683	ppb	15:59:16
1	Ba 233.527†	-0.5	-0.5	-0.0039	ug/L	-0.0039	ppb	15:59:16
1	Be 313.107†	-4923.3	-88.7	-0.0278	ug/L	-0.0278	ppb	15:58:56
1	Cd 226.502†	-229.6	4.2	0.0398	ug/L	0.0398	ppb	15:59:16
1	Co 228.616†	-72.6	13.1	0.2184	ug/L	0.2184	ppb	15:59:16
1	Cr 267.716†	112.3	25.4	0.2277	ug/L	0.2277	ppb	15:59:16
1	Cu 324.752†	8986.6	120.8	0.3209	ug/L	0.3209	ppb	15:58:56
1	Mn 257.610†	575.2	3.1	-0.0006	ug/L	-0.0006	ppb	15:59:16
1	Mo 202.031†	38.3	9.4	0.4965	ug/L	0.4965	ppb	15:59:16
1	Ni 231.604†	152.4	21.6	0.4237	ug/L	0.4237	ppb	15:59:16
1	P 214.914†	277.1	14.2	6.3442	ug/L	6.3442	ppb	15:59:16
1	Pb 220.353†	-72.3	2.6	0.2563	ug/L	0.2563	ppb	15:59:16
1	S 181.975 Axial†	61.9	2.3	2.4342	ug/L	2.4342	ppb	15:59:16
1	Sb 206.836†	36.4	2.1	0.5554	ug/L	0.5554	ppb	15:59:16
1	Se 196.026†	-27.2	-6.0	-2.7749	ug/L	-2.7749	ppb	15:59:16
1	Si 251.611†	587.7	34.7	0.8724	ug/L	0.8724	ppb	15:59:16
1	Sn 189.927†	-2.4	1.9	0.2498	ug/L	0.2498	ppb	15:59:16
1	Ti 334.940†	-1321.2	-71.3	-0.0980	ug/L	-0.0980	ppb	15:58:56
1	Tl 190.801†	-41.0	3.0	0.7171	ug/L	0.7171	ppb	15:59:16
1	U 409.014†	-2729.0	23.2	0.6036	ug/L	0.6036	ppb	15:58:51
1	V 292.402†	-1583.3	12.5	0.0854	ug/L	0.0854	ppb	15:58:56
1	Zn 213.857†	917.7	39.5	0.2890	ug/L	0.2890	ppb	15:59:16
1	SiO2†	660.5	66.7	3.6068	ug/L	3.6068	ppb	16:00:22
2	Sc Radial	4768.8	4768.8	97.1	%			15:57:59
2	Y RADIAL	5510.5	5510.5	97.58	%			15:57:59
2	Al 396.153Radial†	-23.6	19.5	12.911	ug/L	12.911	ppb	15:57:59
2	Ca 317.933Radial†	22.1	4.9	8.6966	ug/L	8.6966	ppb	15:58:19
2	Fe 238.204 Radial†	9.9	-0.8	-10.260	ug/L	-10.260	ppb	15:58:19
2	K 766.490 Radial†	2565.5	71.8	13.067	ug/L	13.067	ppb	15:57:59
2	Mg 279.077 IEC†	1.3	-1.2	-52.701	ug/L	-52.701	ppb	15:58:19
2	Na 589.592 Radial†	-1114.7	132.3	37.119	ug/L	37.119	ppb	15:57:59
2	Sr 421.552†	-9.3	-2.2	-0.0114	ug/L	-0.0114	ppb	15:57:59
2	Sc 361.383	1043767.9	1043767.9	100.41	%			15:59:21
2	Y 371.029	886581.4	886581.4	100.24	%			15:59:21
2	Ag 328.068†	441.0	-34.9	-0.1413	ug/L	-0.1413	ppb	15:59:26
2	As 188.979†	-33.6	3.2	0.9922	ug/L	0.9922	ppb	15:59:46
2	B 249.677†	-419.5	48.3	0.9133	ug/L	0.9133	ppb	15:59:46
2	Ba 233.527†	-0.5	-0.5	-0.0030	ug/L	-0.0030	ppb	15:59:46
2	Be 313.107†	-4789.9	103.7	0.0325	ug/L	0.0325	ppb	15:59:26
2	Cd 226.502†	-226.9	9.7	0.0852	ug/L	0.0852	ppb	15:59:46
2	Co 228.616†	-73.5	13.1	0.2148	ug/L	0.2148	ppb	15:59:46
2	Cr 267.716†	118.5	30.3	0.2719	ug/L	0.2719	ppb	15:59:46
2	Cu 324.752†	8936.1	-38.1	-0.1022	ug/L	-0.1022	ppb	15:59:26
2	Mn 257.610†	578.3	-0.8	-0.0008	ug/L	-0.0008	ppb	15:59:46
2	Mo 202.031†	24.2	-5.1	-0.2730	ug/L	-0.2730	ppb	15:59:46
2	Ni 231.604†	128.6	-3.9	-0.0761	ug/L	-0.0761	ppb	15:59:46

2	P 214.914†	271.7	5.5	2.5120 ug/L	2.5120 ppb	15:59:46
2	Pb 220.353†	-96.5	-20.6	-1.9279 ug/L	-1.9279 ppb	15:59:46
2	S 181.975 Axial†	60.2	-0.1	-0.1495 ug/L	-0.1495 ppb	15:59:46
2	Sb 206.836†	41.1	6.3	1.6770 ug/L	1.6770 ppb	15:59:46
2	Se 196.026†	-27.0	-5.6	-2.4989 ug/L	-2.4989 ppb	15:59:46
2	Si 251.611†	629.0	68.8	1.7415 ug/L	1.7415 ppb	15:59:46
2	Sn 189.927†	11.0	15.3	2.0240 ug/L	2.0240 ppb	15:59:46
2	Ti 334.940†	-1204.6	60.8	0.0840 ug/L	0.0840 ppb	15:59:26
2	Tl 190.801†	-51.6	-7.1	-1.7260 ug/L	-1.7260 ppb	15:59:46
2	U 409.014†	-2766.2	19.1	0.4950 ug/L	0.4950 ppb	15:59:21
2	V 292.402†	-1585.6	29.5	0.1658 ug/L	0.1658 ppb	15:59:26
2	Zn 213.857†	940.6	51.2	0.3793 ug/L	0.3793 ppb	15:59:46
2	SiO2†	627.7	26.1	1.4045 ug/L	1.4045 ppb	16:00:27
3	Sc Radial	4805.1	4805.1	97.9 %		15:58:24
3	Y RADIAL	5536.8	5536.8	98.05 %		15:58:24
3	Al 396.153Radial†	-46.9	-4.1	-2.7014 ug/L	-2.7014 ppb	15:58:24
3	Ca 317.933Radial†	23.1	5.7	10.137 ug/L	10.137 ppb	15:58:44
3	Fe 238.204 Radial†	9.1	-1.6	-19.928 ug/L	-19.928 ppb	15:58:44
3	K 766.490 Radial†	2718.2	207.8	37.858 ug/L	37.858 ppb	15:58:24
3	Mg 279.077 IEC†	4.0	1.6	69.734 ug/L	69.734 ppb	15:58:44
3	Na 589.592 Radial†	-1094.9	161.2	45.211 ug/L	45.211 ppb	15:58:24
3	Sr 421.552†	-48.6	-42.3	-0.2220 ug/L	-0.2220 ppb	15:58:24
3	Sc 361.383	1037122.5	1037122.5	99.773 %		15:59:52
3	Y 371.029	882258.7	882258.7	99.750 %		15:59:52
3	Ag 328.068†	403.7	-69.4	-0.2838 ug/L	-0.2838 ppb	15:59:57
3	As 188.979†	-33.4	3.1	0.9697 ug/L	0.9697 ppb	16:00:17
3	B 249.677†	-403.0	62.2	1.1790 ug/L	1.1790 ppb	16:00:17
3	Ba 233.527†	3.4	3.5	0.0208 ug/L	0.0208 ppb	16:00:17
3	Be 313.107†	-4754.8	108.3	0.0339 ug/L	0.0339 ppb	15:59:57
3	Cd 226.502†	-223.6	11.5	0.1026 ug/L	0.1026 ppb	16:00:17
3	Co 228.616†	-101.3	-15.2	-0.2501 ug/L	-0.2501 ppb	16:00:17
3	Cr 267.716†	98.9	11.4	0.1010 ug/L	0.1010 ppb	16:00:17
3	Cu 324.752†	8972.6	55.6	0.1474 ug/L	0.1474 ppb	15:59:57
3	Mn 257.610†	580.1	4.7	0.0012 ug/L	0.0012 ppb	16:00:17
3	Mo 202.031†	31.8	2.6	0.1361 ug/L	0.1361 ppb	16:00:17
3	Ni 231.604†	143.0	11.4	0.2230 ug/L	0.2230 ppb	16:00:17
3	P 214.914†	272.4	7.9	3.5402 ug/L	3.5402 ppb	16:00:17
3	Pb 220.353†	-61.5	13.9	1.3038 ug/L	1.3038 ppb	16:00:17
3	S 181.975 Axial†	57.8	-2.1	-2.2872 ug/L	-2.2872 ppb	16:00:17
3	Sb 206.836†	54.1	19.5	5.1858 ug/L	5.1858 ppb	16:00:17
3	Se 196.026†	-25.0	-3.7	-1.6930 ug/L	-1.6930 ppb	16:00:17
3	Si 251.611†	608.7	52.4	1.3103 ug/L	1.3103 ppb	16:00:17
3	Sn 189.927†	10.1	14.5	1.9187 ug/L	1.9187 ppb	16:00:17
3	Ti 334.940†	-1218.8	38.9	0.0536 ug/L	0.0536 ppb	15:59:57
3	Tl 190.801†	-47.0	-2.9	-0.6928 ug/L	-0.6928 ppb	16:00:17
3	U 409.014†	-2720.3	47.5	1.2296 ug/L	1.2296 ppb	15:59:52
3	V 292.402†	-1654.0	-49.3	-0.2732 ug/L	-0.2732 ppb	15:59:57
3	Zn 213.857†	930.8	47.3	0.3459 ug/L	0.3459 ppb	16:00:17
3	SiO2†	662.5	65.0	3.4862 ug/L	3.4862 ppb	16:00:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1037381.9	99.798	%	0.6023				0.60%
Sc Radial	4813.6	98.0	%	1.01				1.03%
Y 371.029	881707.4	99.688	%	0.5847				0.59%
Y RADIAL	5545.6	98.20	%	0.714				0.73%
Ag 328.068†	-50.8	-0.2085	ug/L	0.07158	-0.2085	ppb	0.07158	34.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.3	10.088	ug/L	11.6380	10.088	ppb	11.6380	115.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4057	ug/L	0.99635	0.4057	ppb	0.99635	245.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	43.3	0.8202	ug/L	0.41332	0.8202	ppb	0.41332	50.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0046	ug/L	0.01404	0.0046	ppb	0.01404	302.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.1	0.0128	ug/L	0.03524	0.0128	ppb	0.03524	274.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.0	10.565	ug/L	2.1155	10.565	ppb	2.1155	20.02%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.5      0.0758 ug/L       0.03241      0.0758 ppb        0.03241  42.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.7      0.0610 ug/L       0.26944      0.0610 ppb        0.26944 441.54%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.4      0.2002 ug/L       0.08871      0.2002 ppb        0.08871  44.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                46.1      0.1220 ug/L       0.21268      0.1220 ppb        0.21268 174.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -20.252 ug/L       10.1579     -20.252 ppb        10.1579  50.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          93.0      16.926 ug/L       19.2942      16.926 ppb        19.2942 113.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      14.450 ug/L       62.0739      14.450 ppb        62.0739 429.59%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.3     -0.0001 ug/L       0.00110     -0.0001 ppb        0.00110 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.1199 ug/L       0.38503      0.1199 ppb        0.38503 321.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        160.3      44.957 ug/L        7.7150      44.957 ppb         7.7150  17.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.7      0.1902 ug/L       0.25151      0.1902 ppb        0.25151 132.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      4.1321 ug/L       1.98348      4.1321 ppb        1.98348  48.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.4     -0.1226 ug/L       1.64883     -0.1226 ppb        1.64883 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0     -0.0008 ug/L       2.36420     -0.0008 ppb        2.36420 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      2.4728 ug/L       2.41558      2.4728 ppb        2.41558  97.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.1     -2.3223 ug/L       0.56214     -2.3223 ppb        0.56214  24.21%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                52.0      1.3081 ug/L       0.43456      1.3081 ppb        0.43456  33.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.3975 ug/L       0.99535      1.3975 ppb        0.99535  71.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.5     -0.0971 ug/L       0.11058     -0.0971 ppb        0.11058 113.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 9.5      0.0132 ug/L       0.09750      0.0132 ppb        0.09750 738.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -0.5672 ug/L       1.22641     -0.5672 ppb        1.22641 216.21%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.9      0.7761 ug/L       0.39651      0.7761 ppb        0.39651  51.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.4     -0.0073 ug/L       0.23376     -0.0073 ppb        0.23376 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.0      0.3381 ug/L       0.04566      0.3381 ppb        0.04566  13.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.6      2.8325 ug/L       1.23816      2.8325 ppb        1.23816  43.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2009 16:58:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4763.0	4763.0	97.0	%			17:00:29
1	Y RADIAL	5446.7	5446.7	96.45	%			17:00:29
1	Al 396.153Radial†	7584.4	7861.7	5169.4	ug/L	5169.4	ppb	17:00:29
1	Ca 317.933Radial†	2838.1	2907.7	5148.2	ug/L	5148.2	ppb	17:00:49
1	Fe 238.204 Radial†	416.3	418.1	5070.5	ug/L	5070.5	ppb	17:00:49
1	K 766.490 Radial†	29021.4	27345.7	4975.3	ug/L	4975.3	ppb	17:00:29
1	Mg 279.077 IEC†	116.3	117.4	5256.7	ug/L	5256.7	ppb	17:00:49
1	Na 589.592 Radial†	32646.0	34931.4	9798.2	ug/L	9798.2	ppb	17:00:29
1	Sr 421.552†	93204.2	96082.0	504.04	ug/L	504.04	ppb	17:00:29
1	Sc 361.383	1028794.0	1028794.0	98.972	%			17:01:48
1	Y 371.029	863435.4	863435.4	97.622	%			17:01:48
1	Ag 328.068†	127096.7	127943.2	510.25	ug/L	510.25	ppb	17:01:48
1	As 188.979†	1570.3	1623.2	510.22	ug/L	510.22	ppb	17:02:08
1	B 249.677†	25926.0	26661.5	501.91	ug/L	501.91	ppb	17:01:48
1	Ba 233.527†	78794.0	79612.8	512.78	ug/L	512.78	ppb	17:01:48
1	Be 313.107†	1615879.7	1637543.0	511.57	ug/L	511.57	ppb	17:01:48
1	Cd 226.502†	58191.1	59031.3	514.62	ug/L	514.62	ppb	17:01:48
1	Co 228.616†	30269.1	30670.0	505.36	ug/L	505.36	ppb	17:02:08
1	Cr 267.716†	56214.8	56711.1	510.31	ug/L	510.31	ppb	17:01:48
1	Cu 324.752†	198305.0	191427.9	511.47	ug/L	511.47	ppb	17:01:48
1	Mn 257.610†	536974.7	541977.3	513.63	ug/L	513.63	ppb	17:01:48
1	Mo 202.031†	9524.6	9594.3	509.50	ug/L	509.50	ppb	17:02:08
1	Ni 231.604†	25647.3	25781.9	504.84	ug/L	504.84	ppb	17:02:08
1	P 214.914†	5926.7	5723.2	2482.7	ug/L	2482.7	ppb	17:02:08
1	Pb 220.353†	5344.5	5475.6	515.61	ug/L	515.61	ppb	17:02:08
1	S 181.975 Axial†	991.3	941.5	1013.3	ug/L	1013.3	ppb	17:02:08
1	Sb 206.836†	1952.1	1937.7	518.18	ug/L	518.18	ppb	17:02:08
1	Se 196.026†	1109.5	1142.4	526.01	ug/L	526.01	ppb	17:02:08
1	Si 251.611†	99527.5	100003.9	2527.7	ug/L	2527.7	ppb	17:01:48
1	Sn 189.927†	3785.3	3829.0	507.02	ug/L	507.02	ppb	17:02:08
1	Ti 334.940†	364225.3	369270.1	509.19	ug/L	509.19	ppb	17:01:48
1	Tl 190.801†	2025.8	2091.1	509.00	ug/L	509.00	ppb	17:02:08
1	U 409.014†	16311.9	19255.4	496.21	ug/L	496.21	ppb	17:01:48
1	V 292.402†	86286.8	88791.9	515.13	ug/L	515.13	ppb	17:01:48
1	Zn 213.857†	69938.4	69779.5	508.26	ug/L	508.26	ppb	17:01:48
1	SiO2†	99670.8	100107.3	5414.5	ug/L	5414.5	ppb	17:03:08
2	Sc Radial	4698.2	4698.2	95.7	%			17:00:54
2	Y RADIAL	5409.5	5409.5	95.79	%			17:00:54
2	Al 396.153Radial†	7475.6	7856.0	5165.7	ug/L	5165.7	ppb	17:00:54
2	Ca 317.933Radial†	2828.8	2938.3	5202.4	ug/L	5202.4	ppb	17:01:14
2	Fe 238.204 Radial†	415.7	423.4	5134.8	ug/L	5134.8	ppb	17:01:14
2	K 766.490 Radial†	28796.6	27523.8	5007.8	ug/L	5007.8	ppb	17:00:54
2	Mg 279.077 IEC†	114.9	117.5	5265.2	ug/L	5265.2	ppb	17:01:14
2	Na 589.592 Radial†	31917.9	34635.2	9715.2	ug/L	9715.2	ppb	17:00:54
2	Sr 421.552†	91457.5	95583.4	501.42	ug/L	501.42	ppb	17:00:54
2	Sc 361.383	1028335.1	1028335.1	98.928	%			17:02:15
2	Y 371.029	863184.9	863184.9	97.594	%			17:02:15
2	Ag 328.068†	126729.0	127628.8	509.03	ug/L	509.03	ppb	17:02:15
2	As 188.979†	1558.4	1611.9	506.69	ug/L	506.69	ppb	17:02:35
2	B 249.677†	25860.7	26607.1	500.88	ug/L	500.88	ppb	17:02:15
2	Ba 233.527†	78573.1	79425.0	511.58	ug/L	511.58	ppb	17:02:15
2	Be 313.107†	1612574.4	1634930.5	510.76	ug/L	510.76	ppb	17:02:15
2	Cd 226.502†	57780.8	58642.9	511.22	ug/L	511.22	ppb	17:02:15
2	Co 228.616†	30071.3	30483.6	502.28	ug/L	502.28	ppb	17:02:35
2	Cr 267.716†	56091.3	56611.6	509.42	ug/L	509.42	ppb	17:02:15
2	Cu 324.752†	198318.5	191531.0	511.75	ug/L	511.75	ppb	17:02:15
2	Mn 257.610†	535564.0	540793.4	512.52	ug/L	512.52	ppb	17:02:15
2	Mo 202.031†	9487.9	9561.5	507.77	ug/L	507.77	ppb	17:02:35
2	Ni 231.604†	25540.2	25685.2	502.94	ug/L	502.94	ppb	17:02:35

2	P 214.914†	5889.5	5688.3	2467.0 ug/L	2467.0 ppb	17:02:35
2	Pb 220.353†	5283.1	5416.0	510.00 ug/L	510.00 ppb	17:02:35
2	S 181.975 Axial†	967.7	918.0	988.08 ug/L	988.08 ppb	17:02:35
2	Sb 206.836†	1926.9	1913.2	511.65 ug/L	511.65 ppb	17:02:35
2	Se 196.026†	1101.6	1134.9	522.91 ug/L	522.91 ppb	17:02:35
2	Si 251.611†	99337.2	99856.5	2523.9 ug/L	2523.9 ppb	17:02:15
2	Sn 189.927†	3768.5	3813.7	505.00 ug/L	505.00 ppb	17:02:35
2	Ti 334.940†	363444.1	368644.7	508.34 ug/L	508.34 ppb	17:02:15
2	Tl 190.801†	2009.8	2075.9	505.32 ug/L	505.32 ppb	17:02:35
2	U 409.014†	16132.6	19081.4	491.71 ug/L	491.71 ppb	17:02:15
2	V 292.402†	85992.6	88533.4	513.61 ug/L	513.61 ppb	17:02:15
2	Zn 213.857†	69638.7	69508.1	506.27 ug/L	506.27 ppb	17:02:15
2	SiO2†	99096.4	99571.7	5385.4 ug/L	5385.4 ppb	17:03:13
3	Sc Radial	4783.8	4783.8	97.4 %		17:01:19
3	Y RADIAL	5474.3	5474.3	96.94 %		17:01:19
3	Al 396.153Radial†	7595.0	7838.7	5154.1 ug/L	5154.1 ppb	17:01:19
3	Ca 317.933Radial†	2820.5	2876.9	5093.7 ug/L	5093.7 ppb	17:01:39
3	Fe 238.204 Radial†	413.2	413.1	5010.5 ug/L	5010.5 ppb	17:01:39
3	K 766.490 Radial†	29310.4	27512.3	5005.8 ug/L	5005.8 ppb	17:01:19
3	Mg 279.077 IEC†	116.5	117.1	5244.6 ug/L	5244.6 ppb	17:01:39
3	Na 589.592 Radial†	32564.0	34701.1	9733.6 ug/L	9733.6 ppb	17:01:19
3	Sr 421.552†	93070.7	95527.8	501.13 ug/L	501.13 ppb	17:01:19
3	Sc 361.383	1023624.5	1023624.5	98.474 %		17:02:43
3	Y 371.029	860032.6	860032.6	97.237 %		17:02:43
3	Ag 328.068†	126165.8	127646.5	509.06 ug/L	509.06 ppb	17:02:43
3	As 188.979†	1574.3	1635.3	513.94 ug/L	513.94 ppb	17:03:03
3	B 249.677†	25888.6	26755.8	503.69 ug/L	503.69 ppb	17:02:43
3	Ba 233.527†	78153.4	79364.3	511.18 ug/L	511.18 ppb	17:02:43
3	Be 313.107†	1607300.6	1637076.2	511.43 ug/L	511.43 ppb	17:02:43
3	Cd 226.502†	57531.4	58658.4	511.37 ug/L	511.37 ppb	17:02:43
3	Co 228.616†	30331.0	30887.2	508.95 ug/L	508.95 ppb	17:03:03
3	Cr 267.716†	55884.5	56662.5	509.88 ug/L	509.88 ppb	17:02:43
3	Cu 324.752†	197207.2	191325.0	511.19 ug/L	511.19 ppb	17:02:43
3	Mn 257.610†	532641.0	540316.5	512.05 ug/L	512.05 ppb	17:02:43
3	Mo 202.031†	9559.1	9677.9	513.93 ug/L	513.93 ppb	17:03:03
3	Ni 231.604†	25690.1	25956.1	508.25 ug/L	508.25 ppb	17:03:03
3	P 214.914†	5929.5	5756.2	2497.7 ug/L	2497.7 ppb	17:03:03
3	Pb 220.353†	5340.4	5498.7	517.78 ug/L	517.78 ppb	17:03:03
3	S 181.975 Axial†	980.0	935.1	1006.4 ug/L	1006.4 ppb	17:03:03
3	Sb 206.836†	1936.1	1931.4	516.71 ug/L	516.71 ppb	17:03:03
3	Se 196.026†	1126.1	1164.9	535.77 ug/L	535.77 ppb	17:03:03
3	Si 251.611†	98755.7	99728.0	2520.5 ug/L	2520.5 ppb	17:02:43
3	Sn 189.927†	3806.3	3869.6	512.39 ug/L	512.39 ppb	17:03:03
3	Ti 334.940†	361503.2	368364.3	507.94 ug/L	507.94 ppb	17:02:43
3	Tl 190.801†	2043.7	2119.6	515.85 ug/L	515.85 ppb	17:03:03
3	U 409.014†	16138.4	19162.4	493.81 ug/L	493.81 ppb	17:02:43
3	V 292.402†	85723.1	88659.8	514.45 ug/L	514.45 ppb	17:02:43
3	Zn 213.857†	69327.7	69516.3	506.31 ug/L	506.31 ppb	17:02:43
3	SiO2†	99466.9	100408.9	5430.6 ug/L	5430.6 ppb	17:03:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026917.9	98.791	%	0.2753				0.28%
Sc Radial	4748.3	96.7	%	0.91				0.94%
Y 371.029	862217.6	97.484	%	0.2144				0.22%
Y RADIAL	5443.5	96.39	%	0.576				0.60%
Ag 328.068†	127739.5	509.45	ug/L	0.700	509.45	ppb	0.700	0.14%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7852.2	5163.1	ug/L	8.03	5163.1	ppb	8.03	0.16%
QC value within limits for Al 396.153Radial Recovery = 103.26%								
As 188.979†	1623.5	510.29	ug/L	3.628	510.29	ppb	3.628	0.71%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	26674.8	502.16	ug/L	1.421	502.16	ppb	1.421	0.28%
QC value within limits for B 249.677 Recovery = 100.43%								
Ba 233.527†	79467.3	511.85	ug/L	0.834	511.85	ppb	0.834	0.16%
QC value within limits for Ba 233.527 Recovery = 102.37%								
Be 313.107†	1636516.6	511.25	ug/L	0.435	511.25	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 102.25%								
Ca 317.933Radial†	2907.7	5148.1	ug/L	54.38	5148.1	ppb	54.38	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.96%
Cd 226.502†            58777.5      512.41 ug/L         1.918      512.41 ppb          1.918   0.37%
   QC value within limits for Cd 226.502  Recovery = 102.48%
Co 228.616†            30680.3      505.53 ug/L         3.337      505.53 ppb          3.337   0.66%
   QC value within limits for Co 228.616  Recovery = 101.11%
Cr 267.716†            56661.7      509.87 ug/L         0.447      509.87 ppb          0.447   0.09%
   QC value within limits for Cr 267.716  Recovery = 101.97%
Cu 324.752†           191428.0      511.47 ug/L         0.278      511.47 ppb          0.278   0.05%
   QC value within limits for Cu 324.752  Recovery = 102.29%
Fe 238.204 Radial†       418.2      5072.0 ug/L        62.16      5072.0 ppb          62.16   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      27460.6      4996.3 ug/L        18.20      4996.3 ppb          18.20   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          117.3      5255.5 ug/L        10.34      5255.5 ppb          10.34   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.11%
Mn 257.610†           541029.1      512.73 ug/L         0.811      512.73 ppb          0.811   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.55%
Mo 202.031†             9611.3      510.40 ug/L         3.181      510.40 ppb          3.181   0.62%
   QC value within limits for Mo 202.031  Recovery = 102.08%
Na 589.592 Radial†     34755.9      9749.0 ug/L        43.62      9749.0 ppb          43.62   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 97.49%
Ni 231.604†            25807.7      505.34 ug/L         2.688      505.34 ppb          2.688   0.53%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              5722.6      2482.4 ug/L        15.35      2482.4 ppb          15.35   0.62%
   QC value within limits for P 214.914  Recovery = 99.30%
Pb 220.353†             5463.4      514.46 ug/L         4.019      514.46 ppb          4.019   0.78%
   QC value within limits for Pb 220.353  Recovery = 102.89%
S 181.975 Axial†         931.5      1002.6 ug/L        13.04      1002.6 ppb          13.04   1.30%
   QC value within limits for S 181.975 Axial  Recovery = 100.26%
Sb 206.836†             1927.5      515.51 ug/L         3.422      515.51 ppb          3.422   0.66%
   QC value within limits for Sb 206.836  Recovery = 103.10%
Se 196.026†             1147.4      528.23 ug/L         6.713      528.23 ppb          6.713   1.27%
   QC value within limits for Se 196.026  Recovery = 105.65%
Si 251.611†            99862.8      2524.0 ug/L          3.56      2524.0 ppb           3.56   0.14%
   QC value within limits for Si 251.611  Recovery = 100.96%
Sn 189.927†             3837.4      508.14 ug/L         3.816      508.14 ppb          3.816   0.75%
   QC value within limits for Sn 189.927  Recovery = 101.63%
Sr 421.552†            95731.1      502.20 ug/L         1.601      502.20 ppb          1.601   0.32%
   QC value within limits for Sr 421.552  Recovery = 100.44%
Ti 334.940†           368759.7      508.49 ug/L         0.640      508.49 ppb          0.640   0.13%
   QC value within limits for Ti 334.940  Recovery = 101.70%
Tl 190.801†             2095.5      510.06 ug/L         5.345      510.06 ppb          5.345   1.05%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19166.4      493.91 ug/L         2.254      493.91 ppb          2.254   0.46%
   QC value within limits for U 409.014  Recovery = 98.78%
V 292.402†             88661.7      514.40 ug/L         0.762      514.40 ppb          0.762   0.15%
   QC value within limits for V 292.402  Recovery = 102.88%
Zn 213.857†            69601.3      506.95 ug/L         1.137      506.95 ppb          1.137   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.39%
SiO2†                 100029.3      5410.2 ug/L        22.91      5410.2 ppb          22.91   0.42%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
```

Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2009 17:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4878.0	4878.0	99.4	%			17:07:21
1	Y RADIAL	5591.0	5591.0	99.01	%			17:07:21
1	Al 396.153Radial†	-29.0	14.6	9.6452	ug/L	9.6452	ppb	17:07:21
1	Ca 317.933Radial†	26.4	8.7	15.391	ug/L	15.391	ppb	17:07:41
1	Fe 238.204 Radial†	12.9	2.0	24.029	ug/L	24.029	ppb	17:07:41
1	K 766.490 Radial†	2711.2	159.3	29.027	ug/L	29.027	ppb	17:07:21
1	Mg 279.077 IEC†	0.8	-1.7	-74.442	ug/L	-74.442	ppb	17:07:41
1	Na 589.592 Radial†	-1155.0	117.4	32.938	ug/L	32.938	ppb	17:07:21
1	Sr 421.552†	26.5	34.1	0.1788	ug/L	0.1788	ppb	17:07:21
1	Sc 361.383	1034022.6	1034022.6	99.475	%			17:08:38
1	Y 371.029	878748.3	878748.3	99.353	%			17:08:38
1	Ag 328.068†	529.6	58.4	0.2396	ug/L	0.2396	ppb	17:08:43
1	As 188.979†	-46.5	-10.1	-3.1496	ug/L	-3.1496	ppb	17:09:03
1	B 249.677†	-392.7	71.4	1.3455	ug/L	1.3455	ppb	17:09:03
1	Ba 233.527†	-9.5	-9.5	-0.0608	ug/L	-0.0608	ppb	17:09:03
1	Be 313.107†	-4867.0	-18.8	-0.0058	ug/L	-0.0058	ppb	17:08:43
1	Cd 226.502†	-225.1	9.4	0.0796	ug/L	0.0796	ppb	17:09:03
1	Co 228.616†	-87.7	-1.9	-0.0324	ug/L	-0.0324	ppb	17:09:03
1	Cr 267.716†	99.0	11.7	0.1057	ug/L	0.1057	ppb	17:09:03
1	Cu 324.752†	9043.4	153.6	0.4115	ug/L	0.4115	ppb	17:08:43
1	Mn 257.610†	584.7	11.1	0.0143	ug/L	0.0143	ppb	17:09:03
1	Mo 202.031†	23.1	-6.0	-0.3182	ug/L	-0.3182	ppb	17:09:03
1	Ni 231.604†	135.1	3.9	0.0767	ug/L	0.0767	ppb	17:09:03
1	P 214.914†	274.5	10.8	4.7728	ug/L	4.7728	ppb	17:09:03
1	Pb 220.353†	-71.5	3.7	0.3442	ug/L	0.3442	ppb	17:09:03
1	S 181.975 Axial†	54.9	-4.9	-5.3125	ug/L	-5.3125	ppb	17:09:03
1	Sb 206.836†	53.5	19.1	5.0391	ug/L	5.0391	ppb	17:09:03
1	Se 196.026†	-22.8	-1.6	-0.6028	ug/L	-0.6028	ppb	17:09:03
1	Si 251.611†	602.5	48.0	1.2155	ug/L	1.2155	ppb	17:09:03
1	Sn 189.927†	-2.7	1.7	0.2204	ug/L	0.2204	ppb	17:09:03
1	Ti 334.940†	-1248.7	5.1	0.0088	ug/L	0.0088	ppb	17:08:43
1	Tl 190.801†	-42.7	1.3	0.3225	ug/L	0.3225	ppb	17:09:03
1	U 409.014†	-2849.2	-90.3	-2.3375	ug/L	-2.3375	ppb	17:08:38
1	V 292.402†	-1657.0	-57.2	-0.3419	ug/L	-0.3419	ppb	17:08:43
1	Zn 213.857†	960.0	79.5	0.5835	ug/L	0.5835	ppb	17:09:03
1	SiO2†	637.9	42.3	2.2866	ug/L	2.2866	ppb	17:10:09
2	Sc Radial	4907.8	4907.8	100.0	%			17:07:47
2	Y RADIAL	5660.3	5660.3	100.2	%			17:07:47
2	Al 396.153Radial†	-40.8	3.0	1.9606	ug/L	1.9606	ppb	17:07:47
2	Ca 317.933Radial†	21.5	3.7	6.4987	ug/L	6.4987	ppb	17:08:07
2	Fe 238.204 Radial†	10.6	-0.4	-4.8538	ug/L	-4.8538	ppb	17:08:07
2	K 766.490 Radial†	2680.3	111.8	20.367	ug/L	20.367	ppb	17:07:47
2	Mg 279.077 IEC†	-0.1	-2.6	-114.24	ug/L	-114.24	ppb	17:08:07
2	Na 589.592 Radial†	-1126.9	152.6	42.811	ug/L	42.811	ppb	17:07:47
2	Sr 421.552†	-6.6	0.8	0.0043	ug/L	0.0043	ppb	17:07:47
2	Sc 361.383	1029368.1	1029368.1	99.027	%			17:09:09
2	Y 371.029	875922.4	875922.4	99.034	%			17:09:09
2	Ag 328.068†	432.1	-37.7	-0.1500	ug/L	-0.1500	ppb	17:09:14
2	As 188.979†	-38.0	-1.8	-0.5501	ug/L	-0.5501	ppb	17:09:34
2	B 249.677†	-415.9	46.1	0.8725	ug/L	0.8725	ppb	17:09:34
2	Ba 233.527†	36.6	37.0	0.2363	ug/L	0.2363	ppb	17:09:34
2	Be 313.107†	-4892.3	-66.4	-0.0206	ug/L	-0.0206	ppb	17:09:14
2	Cd 226.502†	-217.7	15.8	0.1381	ug/L	0.1381	ppb	17:09:34
2	Co 228.616†	-83.2	2.3	0.0383	ug/L	0.0383	ppb	17:09:34
2	Cr 267.716†	110.0	23.3	0.2094	ug/L	0.2094	ppb	17:09:34
2	Cu 324.752†	9096.6	248.5	0.6634	ug/L	0.6634	ppb	17:09:14
2	Mn 257.610†	619.3	48.7	0.0477	ug/L	0.0477	ppb	17:09:34
2	Mo 202.031†	37.0	8.1	0.4314	ug/L	0.4314	ppb	17:09:34
2	Ni 231.604†	131.2	0.5	0.0107	ug/L	0.0107	ppb	17:09:34

2	P 214.914†	257.9	-4.6	-2.1628 ug/L	-2.1628 ppb	17:09:34
2	Pb 220.353†	-60.1	14.9	1.3982 ug/L	1.3982 ppb	17:09:34
2	S 181.975 Axial†	61.9	2.4	2.6236 ug/L	2.6236 ppb	17:09:34
2	Sb 206.836†	49.9	15.7	4.1740 ug/L	4.1740 ppb	17:09:34
2	Se 196.026†	-24.7	-3.6	-1.6105 ug/L	-1.6105 ppb	17:09:34
2	Si 251.611†	628.2	76.8	1.9315 ug/L	1.9315 ppb	17:09:34
2	Sn 189.927†	5.3	9.7	1.2851 ug/L	1.2851 ppb	17:09:34
2	Ti 334.940†	-1199.1	49.5	0.0699 ug/L	0.0699 ppb	17:09:14
2	Tl 190.801†	-44.7	-0.9	-0.2234 ug/L	-0.2234 ppb	17:09:34
2	U 409.014†	-2864.6	-118.8	-3.0719 ug/L	-3.0719 ppb	17:09:09
2	V 292.402†	-1662.6	-70.5	-0.4052 ug/L	-0.4052 ppb	17:09:14
2	Zn 213.857†	959.6	83.5	0.6171 ug/L	0.6171 ppb	17:09:34
2	SiO2†	603.8	10.7	0.5423 ug/L	0.5423 ppb	17:10:14
3	Sc Radial	4823.8	4823.8	98.3 %		17:08:12
3	Y RADIAL	5537.0	5537.0	98.05 %		17:08:12
3	Al 396.153Radial†	-25.4	17.9	11.834 ug/L	11.834 ppb	17:08:12
3	Ca 317.933Radial†	23.2	5.8	10.300 ug/L	10.300 ppb	17:08:32
3	Fe 238.204 Radial†	9.3	-1.5	-18.132 ug/L	-18.132 ppb	17:08:32
3	K 766.490 Radial†	2599.2	75.9	13.822 ug/L	13.822 ppb	17:08:12
3	Mg 279.077 IEC†	3.8	1.3	60.369 ug/L	60.369 ppb	17:08:32
3	Na 589.592 Radial†	-1151.7	107.8	30.232 ug/L	30.232 ppb	17:08:12
3	Sr 421.552†	12.6	20.3	0.1063 ug/L	0.1063 ppb	17:08:12
3	Sc 361.383	1039971.4	1039971.4	100.05 %		17:09:39
3	Y 371.029	885792.9	885792.9	100.15 %		17:09:39
3	Ag 328.068†	393.0	-81.3	-0.3296 ug/L	-0.3296 ppb	17:09:44
3	As 188.979†	-34.7	1.9	0.5789 ug/L	0.5789 ppb	17:10:04
3	B 249.677†	-424.2	42.1	0.7986 ug/L	0.7986 ppb	17:10:04
3	Ba 233.527†	12.8	12.8	0.0818 ug/L	0.0818 ppb	17:10:04
3	Be 313.107†	-4697.3	178.9	0.0557 ug/L	0.0557 ppb	17:09:44
3	Cd 226.502†	-222.8	12.9	0.1147 ug/L	0.1147 ppb	17:10:04
3	Co 228.616†	-81.4	5.0	0.0830 ug/L	0.0830 ppb	17:10:04
3	Cr 267.716†	106.9	19.1	0.1704 ug/L	0.1704 ppb	17:10:04
3	Cu 324.752†	8997.4	55.7	0.1477 ug/L	0.1477 ppb	17:09:44
3	Mn 257.610†	610.1	33.1	0.0284 ug/L	0.0284 ppb	17:10:04
3	Mo 202.031†	31.4	2.1	0.1121 ug/L	0.1121 ppb	17:10:04
3	Ni 231.604†	133.0	1.0	0.0189 ug/L	0.0189 ppb	17:10:04
3	P 214.914†	272.4	7.2	3.2450 ug/L	3.2450 ppb	17:10:04
3	Pb 220.353†	-74.2	1.4	0.1314 ug/L	0.1314 ppb	17:10:04
3	S 181.975 Axial†	59.3	-0.9	-0.9316 ug/L	-0.9316 ppb	17:10:04
3	Sb 206.836†	35.8	1.1	0.3268 ug/L	0.3268 ppb	17:10:04
3	Se 196.026†	-26.1	-4.7	-2.1605 ug/L	-2.1605 ppb	17:10:04
3	Si 251.611†	612.6	54.6	1.3742 ug/L	1.3742 ppb	17:10:04
3	Sn 189.927†	12.1	16.5	2.1777 ug/L	2.1777 ppb	17:10:04
3	Ti 334.940†	-1273.8	-12.8	-0.0180 ug/L	-0.0180 ppb	17:09:44
3	Tl 190.801†	-52.4	-8.1	-1.9673 ug/L	-1.9673 ppb	17:10:04
3	U 409.014†	-2701.8	73.4	1.9008 ug/L	1.9008 ppb	17:09:39
3	V 292.402†	-1606.8	2.4	0.0234 ug/L	0.0234 ppb	17:09:44
3	Zn 213.857†	941.9	55.9	0.4102 ug/L	0.4102 ppb	17:10:04
3	SiO2†	646.1	46.8	2.5143 ug/L	2.5143 ppb	17:10:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1034454.0	99.516	%	0.5113				0.51%
Sc Radial	4869.9	99.2	%	0.87				0.87%
Y 371.029	880154.5	99.512	%	0.5747				0.58%
Y RADIAL	5596.1	99.10	%	1.094				1.10%
Ag 328.068†	-20.2	-0.0800	ug/L	0.29098	-0.0800	ppb	0.29098	363.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	7.8134	ug/L	5.18552	7.8134	ppb	5.18552	66.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0403	ug/L	1.91201	-1.0403	ppb	1.91201	183.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.0056	ug/L	0.29672	1.0056	ppb	0.29672	29.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.4	0.0858	ug/L	0.14861	0.0858	ppb	0.14861	173.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.2	0.0098	ug/L	0.04048	0.0098	ppb	0.04048	414.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.1	10.730	ug/L	4.4617	10.730	ppb	4.4617	41.58%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              12.7      0.1108 ug/L       0.02941      0.1108 ppb        0.02941  26.54%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               1.8      0.0297 ug/L       0.05817      0.0297 ppb        0.05817 196.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.0      0.1618 ug/L       0.05236      0.1618 ppb        0.05236  32.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             152.6      0.4075 ug/L       0.25786      0.4075 ppb        0.25786  63.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.0      0.3477 ug/L      21.55610      0.3477 ppb       21.55610 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       115.7      21.072 ug/L        7.6270      21.072 ppb         7.6270  36.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.0     -42.772 ug/L       91.5125     -42.772 ppb        91.5125 213.96%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              31.0      0.0301 ug/L       0.01678      0.0301 ppb        0.01678  55.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.4      0.0751 ug/L       0.37617      0.0751 ppb        0.37617 500.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      125.9      35.327 ug/L        6.6209      35.327 ppb         6.6209  18.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               1.8      0.0354 ug/L       0.03597      0.0354 ppb        0.03597 101.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.5      1.9517 ug/L       3.64422      1.9517 ppb        3.64422 186.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.6      0.6246 ug/L       0.67835      0.6246 ppb        0.67835 108.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.1     -1.2068 ug/L       3.97519     -1.2068 ppb        3.97519 329.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              12.0      3.1800 ug/L       2.50846      3.1800 ppb        2.50846  78.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -3.3     -1.4579 ug/L       0.78997     -1.4579 ppb        0.78997  54.18%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              59.8      1.5071 ug/L       0.37605      1.5071 ppb        0.37605  24.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               9.3      1.2277 ug/L       0.97992      1.2277 ppb        0.97992  79.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.4      0.0965 ug/L       0.08767      0.0965 ppb        0.08767  90.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              13.9      0.0203 ug/L       0.04506      0.0203 ppb        0.04506 222.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.6     -0.6227 ug/L       1.19600     -0.6227 ppb        1.19600 192.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -45.2     -1.1695 ug/L       2.68424     -1.1695 ppb        2.68424 229.52%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -41.7     -0.2412 ug/L       0.23133     -0.2412 ppb        0.23133  95.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              73.0      0.5369 ug/L       0.11101      0.5369 ppb        0.11101  20.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    33.3      1.7810 ug/L       1.07881      1.7810 ppb        1.07881  60.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 18:01:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4830.0	4830.0	98.4	%			18:03:34
1	Y RADIAL	5529.5	5529.5	97.92	%			18:03:34
1	Al 396.153Radial†	7608.5	7777.9	5114.3	ug/L	5114.3	ppb	18:03:34
1	Ca 317.933Radial†	2838.8	2867.8	5077.6	ug/L	5077.6	ppb	18:03:54
1	Fe 238.204 Radial†	423.3	419.3	5084.9	ug/L	5084.9	ppb	18:03:54
1	K 766.490 Radial†	29286.1	27199.9	4948.8	ug/L	4948.8	ppb	18:03:34
1	Mg 279.077 IEC†	113.0	112.4	5035.0	ug/L	5035.0	ppb	18:03:54
1	Na 589.592 Radial†	33434.5	35266.2	9892.2	ug/L	9892.2	ppb	18:03:34
1	Sr 421.552†	94452.4	96018.5	503.71	ug/L	503.71	ppb	18:03:34
1	Sc 361.383	1035614.3	1035614.3	99.628	%			18:04:53
1	Y 371.029	868981.8	868981.8	98.249	%			18:04:53
1	Ag 328.068†	126389.0	126387.2	504.08	ug/L	504.08	ppb	18:04:53
1	As 188.979†	1566.5	1609.0	505.73	ug/L	505.73	ppb	18:05:13
1	B 249.677†	25789.7	26352.1	496.08	ug/L	496.08	ppb	18:04:53
1	Ba 233.527†	78461.3	78754.5	507.26	ug/L	507.26	ppb	18:04:53
1	Be 313.107†	1611683.8	1622579.0	506.90	ug/L	506.90	ppb	18:04:53
1	Cd 226.502†	57528.7	57979.3	505.44	ug/L	505.44	ppb	18:04:53
1	Co 228.616†	30048.6	30247.1	498.39	ug/L	498.39	ppb	18:05:13
1	Cr 267.716†	55897.5	56018.6	504.09	ug/L	504.09	ppb	18:04:53
1	Cu 324.752†	197518.4	189318.8	505.84	ug/L	505.84	ppb	18:04:53
1	Mn 257.610†	534062.2	535480.8	507.48	ug/L	507.48	ppb	18:04:53
1	Mo 202.031†	9485.8	9492.0	504.07	ug/L	504.07	ppb	18:05:13
1	Ni 231.604†	25499.9	25463.2	498.60	ug/L	498.60	ppb	18:05:13
1	P 214.914†	5884.7	5641.6	2447.0	ug/L	2447.0	ppb	18:05:13
1	Pb 220.353†	5298.3	5393.7	507.89	ug/L	507.89	ppb	18:05:13
1	S 181.975 Axial†	974.6	918.2	988.21	ug/L	988.21	ppb	18:05:13
1	Sb 206.836†	1936.0	1908.6	510.46	ug/L	510.46	ppb	18:05:13
1	Se 196.026†	1104.7	1130.2	520.64	ug/L	520.64	ppb	18:05:13
1	Si 251.611†	99034.8	98847.1	2498.4	ug/L	2498.4	ppb	18:04:53
1	Sn 189.927†	3777.7	3796.2	502.67	ug/L	502.67	ppb	18:05:13
1	Ti 334.940†	362106.9	364720.2	502.92	ug/L	502.92	ppb	18:04:53
1	Tl 190.801†	2016.9	2068.7	503.55	ug/L	503.55	ppb	18:05:13
1	U 409.014†	15956.3	18789.9	484.19	ug/L	484.19	ppb	18:04:53
1	V 292.402†	85828.1	87757.3	509.11	ug/L	509.11	ppb	18:04:53
1	Zn 213.857†	69570.7	68945.1	502.18	ug/L	502.18	ppb	18:04:53
1	SiO2†	99394.4	99166.7	5363.6	ug/L	5363.6	ppb	18:06:13
2	Sc Radial	4837.6	4837.6	98.5	%			18:03:59
2	Y RADIAL	5523.5	5523.5	97.81	%			18:03:59
2	Al 396.153Radial†	7635.5	7793.2	5124.5	ug/L	5124.5	ppb	18:03:59
2	Ca 317.933Radial†	2827.0	2851.3	5048.3	ug/L	5048.3	ppb	18:04:19
2	Fe 238.204 Radial†	425.3	420.7	5101.5	ug/L	5101.5	ppb	18:04:19
2	K 766.490 Radial†	29236.2	27102.5	4931.0	ug/L	4931.0	ppb	18:03:59
2	Mg 279.077 IEC†	116.1	115.4	5167.3	ug/L	5167.3	ppb	18:04:19
2	Na 589.592 Radial†	33358.2	35135.5	9855.5	ug/L	9855.5	ppb	18:03:59
2	Sr 421.552†	94046.6	95456.0	500.76	ug/L	500.76	ppb	18:03:59
2	Sc 361.383	1035808.6	1035808.6	99.646	%			18:05:20
2	Y 371.029	867528.3	867528.3	98.085	%			18:05:20
2	Ag 328.068†	126769.6	126745.3	505.50	ug/L	505.50	ppb	18:05:20
2	As 188.979†	1557.5	1599.7	502.84	ug/L	502.84	ppb	18:05:41
2	B 249.677†	25701.8	26259.1	494.32	ug/L	494.32	ppb	18:05:20
2	Ba 233.527†	78605.2	78884.1	508.09	ug/L	508.09	ppb	18:05:20
2	Be 313.107†	1608110.3	1618689.4	505.69	ug/L	505.69	ppb	18:05:20
2	Cd 226.502†	57666.3	58106.5	506.55	ug/L	506.55	ppb	18:05:20
2	Co 228.616†	29927.7	30120.2	496.29	ug/L	496.29	ppb	18:05:41
2	Cr 267.716†	55912.4	56023.0	504.13	ug/L	504.13	ppb	18:05:20
2	Cu 324.752†	197921.4	189686.1	506.82	ug/L	506.82	ppb	18:05:20
2	Mn 257.610†	534944.8	536266.0	508.23	ug/L	508.23	ppb	18:05:20
2	Mo 202.031†	9432.8	9437.1	501.16	ug/L	501.16	ppb	18:05:41
2	Ni 231.604†	25444.8	25403.1	497.42	ug/L	497.42	ppb	18:05:41

2	P 214.914†	5862.9	5618.6	2436.5 ug/L	2436.5 ppb	18:05:41
2	Pb 220.353†	5283.8	5378.1	506.42 ug/L	506.42 ppb	18:05:41
2	S 181.975 Axial†	962.8	906.1	975.23 ug/L	975.23 ppb	18:05:41
2	Sb 206.836†	1917.4	1889.5	505.30 ug/L	505.30 ppb	18:05:41
2	Se 196.026†	1087.0	1112.2	512.72 ug/L	512.72 ppb	18:05:41
2	Si 251.611†	99182.7	98977.0	2501.8 ug/L	2501.8 ppb	18:05:20
2	Sn 189.927†	3754.3	3771.9	499.47 ug/L	499.47 ppb	18:05:41
2	Ti 334.940†	362842.0	365389.7	503.84 ug/L	503.84 ppb	18:05:20
2	Tl 190.801†	1992.7	2044.0	497.59 ug/L	497.59 ppb	18:05:41
2	U 409.014†	15978.8	18809.5	484.69 ug/L	484.69 ppb	18:05:20
2	V 292.402†	85852.5	87765.6	509.12 ug/L	509.12 ppb	18:05:20
2	Zn 213.857†	69526.6	68887.7	501.76 ug/L	501.76 ppb	18:05:20
2	SiO2†	99499.1	99253.0	5368.4 ug/L	5368.4 ppb	18:06:19
3	Sc Radial	4799.2	4799.2	97.7 %		18:04:24
3	Y RADIAL	5498.6	5498.6	97.37 %		18:04:24
3	Al 396.153Radial†	7619.7	7839.0	5154.6 ug/L	5154.6 ppb	18:04:24
3	Ca 317.933Radial†	2853.2	2901.0	5136.3 ug/L	5136.3 ppb	18:04:44
3	Fe 238.204 Radial†	431.9	430.9	5225.2 ug/L	5225.2 ppb	18:04:44
3	K 766.490 Radial†	29093.2	27193.5	4947.7 ug/L	4947.7 ppb	18:04:24
3	Mg 279.077 IEC†	119.0	119.2	5339.1 ug/L	5339.1 ppb	18:04:44
3	Na 589.592 Radial†	32907.5	34945.0	9802.1 ug/L	9802.1 ppb	18:04:24
3	Sr 421.552†	93251.9	95406.2	500.50 ug/L	500.50 ppb	18:04:24
3	Sc 361.383	1038206.6	1038206.6	99.877 %		18:05:48
3	Y 371.029	871182.2	871182.2	98.498 %		18:05:48
3	Ag 328.068†	126926.4	126608.4	504.99 ug/L	504.99 ppb	18:05:48
3	As 188.979†	1576.5	1615.1	507.65 ug/L	507.65 ppb	18:06:08
3	B 249.677†	25829.6	26327.4	495.59 ug/L	495.59 ppb	18:05:48
3	Ba 233.527†	78220.4	78316.7	504.45 ug/L	504.45 ppb	18:05:48
3	Be 313.107†	1610405.9	1617260.4	505.24 ug/L	505.24 ppb	18:05:48
3	Cd 226.502†	57420.6	57726.9	503.22 ug/L	503.22 ppb	18:05:48
3	Co 228.616†	30208.3	30331.8	499.79 ug/L	499.79 ppb	18:06:08
3	Cr 267.716†	55861.2	55842.1	502.50 ug/L	502.50 ppb	18:05:48
3	Cu 324.752†	198284.6	189591.0	506.57 ug/L	506.57 ppb	18:05:48
3	Mn 257.610†	533597.1	533676.7	505.78 ug/L	505.78 ppb	18:05:48
3	Mo 202.031†	9542.9	9525.4	505.86 ug/L	505.86 ppb	18:06:08
3	Ni 231.604†	25662.7	25562.4	500.54 ug/L	500.54 ppb	18:06:08
3	P 214.914†	5892.8	5635.0	2443.9 ug/L	2443.9 ppb	18:06:08
3	Pb 220.353†	5325.7	5407.8	509.22 ug/L	509.22 ppb	18:06:08
3	S 181.975 Axial†	987.2	928.3	999.15 ug/L	999.15 ppb	18:06:08
3	Sb 206.836†	1957.6	1925.3	514.98 ug/L	514.98 ppb	18:06:08
3	Se 196.026†	1116.3	1139.0	525.06 ug/L	525.06 ppb	18:06:08
3	Si 251.611†	98993.5	98557.6	2491.0 ug/L	2491.0 ppb	18:05:48
3	Sn 189.927†	3799.2	3808.2	504.27 ug/L	504.27 ppb	18:06:08
3	Ti 334.940†	362935.3	364642.1	502.82 ug/L	502.82 ppb	18:05:48
3	Tl 190.801†	2018.1	2064.8	502.60 ug/L	502.60 ppb	18:06:08
3	U 409.014†	16280.7	19074.7	491.53 ug/L	491.53 ppb	18:05:48
3	V 292.402†	85865.0	87579.2	508.12 ug/L	508.12 ppb	18:05:48
3	Zn 213.857†	69400.3	68600.1	499.61 ug/L	499.61 ppb	18:05:48
3	SiO2†	98935.3	98458.0	5325.0 ug/L	5325.0 ppb	18:06:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1036543.2	99.717	%	0.1389				0.14%
Sc Radial	4822.3	98.2	%	0.41				0.42%
Y 371.029	869230.8	98.277	%	0.2080				0.21%
Y RADIAL	5517.2	97.70	%	0.290				0.30%
Ag 328.068†	126580.3	504.86	ug/L	0.722	504.86	ppb	0.722	0.14%
QC value within limits for Ag 328.068 Recovery = 100.97%								
Al 396.153Radial†	7803.3	5131.1	ug/L	20.93	5131.1	ppb	20.93	0.41%
QC value within limits for Al 396.153Radial Recovery = 102.62%								
As 188.979†	1607.9	505.41	ug/L	2.420	505.41	ppb	2.420	0.48%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	26312.9	495.33	ug/L	0.906	495.33	ppb	0.906	0.18%
QC value within limits for B 249.677 Recovery = 99.07%								
Ba 233.527†	78651.7	506.60	ug/L	1.909	506.60	ppb	1.909	0.38%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	1619509.6	505.94	ug/L	0.858	505.94	ppb	0.858	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	2873.4	5087.4	ug/L	44.83	5087.4	ppb	44.83	0.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.75%
Cd 226.502†            57937.6      505.07 ug/L         1.691      505.07 ppb          1.691   0.33%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†            30233.1      498.16 ug/L         1.760      498.16 ppb          1.760   0.35%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            55961.2      503.57 ug/L         0.928      503.57 ppb          0.928   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.71%
Cu 324.752†           189532.0      506.41 ug/L         0.510      506.41 ppb          0.510   0.10%
   QC value within limits for Cu 324.752  Recovery = 101.28%
Fe 238.204 Radial†       423.6      5137.2 ug/L        76.66      5137.2 ppb          76.66   1.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27165.3      4942.5 ug/L         9.94      4942.5 ppb           9.94   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          115.6      5180.4 ug/L       152.48      5180.4 ppb         152.48   2.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.61%
Mn 257.610†           535141.2      507.16 ug/L         1.252      507.16 ppb          1.252   0.25%
   QC value within limits for Mn 257.610  Recovery = 101.43%
Mo 202.031†             9484.8      503.70 ug/L         2.371      503.70 ppb          2.371   0.47%
   QC value within limits for Mo 202.031  Recovery = 100.74%
Na 589.592 Radial†     35115.6      9849.9 ug/L        45.31      9849.9 ppb          45.31   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†            25476.2      498.85 ug/L         1.575      498.85 ppb          1.575   0.32%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              5631.7      2442.5 ug/L         5.37      2442.5 ppb           5.37   0.22%
   QC value within limits for P 214.914  Recovery = 97.70%
Pb 220.353†             5393.2      507.84 ug/L         1.401      507.84 ppb          1.401   0.28%
   QC value within limits for Pb 220.353  Recovery = 101.57%
S 181.975 Axial†         917.5      987.53 ug/L        11.972      987.53 ppb         11.972   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 98.75%
Sb 206.836†             1907.8      510.25 ug/L         4.840      510.25 ppb          4.840   0.95%
   QC value within limits for Sb 206.836  Recovery = 102.05%
Se 196.026†             1127.2      519.48 ug/L         6.252      519.48 ppb          6.252   1.20%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            98793.9      2497.0 ug/L         5.50      2497.0 ppb           5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 99.88%
Sn 189.927†             3792.1      502.14 ug/L         2.448      502.14 ppb          2.448   0.49%
   QC value within limits for Sn 189.927  Recovery = 100.43%
Sr 421.552†            95626.9      501.65 ug/L         1.784      501.65 ppb          1.784   0.36%
   QC value within limits for Sr 421.552  Recovery = 100.33%
Ti 334.940†           364917.3      503.19 ug/L         0.566      503.19 ppb          0.566   0.11%
   QC value within limits for Ti 334.940  Recovery = 100.64%
Tl 190.801†             2059.2      501.25 ug/L         3.199      501.25 ppb          3.199   0.64%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†             18891.3      486.80 ug/L         4.105      486.80 ppb          4.105   0.84%
   QC value within limits for U 409.014  Recovery = 97.36%
V 292.402†             87700.7      508.78 ug/L         0.576      508.78 ppb          0.576   0.11%
   QC value within limits for V 292.402  Recovery = 101.76%
Zn 213.857†            68811.0      501.18 ug/L         1.379      501.18 ppb          1.379   0.28%
   QC value within limits for Zn 213.857  Recovery = 100.24%
SiO2†                  98959.2      5352.4 ug/L        23.80      5352.4 ppb          23.80   0.44%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
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Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 18:08:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4766.6	4766.6	97.1	%			18:10:25
1	Y RADIAL	5473.3	5473.3	96.92	%			18:10:25
1	Al 396.153Radial†	-20.4	22.8	15.038	ug/L	15.038	ppb	18:10:25
1	Ca 317.933Radial†	22.5	5.3	9.4050	ug/L	9.4050	ppb	18:10:45
1	Fe 238.204 Radial†	8.0	-2.8	-33.253	ug/L	-33.253	ppb	18:10:45
1	K 766.490 Radial†	2545.0	51.9	9.4686	ug/L	9.4686	ppb	18:10:25
1	Mg 279.077 IEC†	4.0	1.6	72.341	ug/L	72.341	ppb	18:10:45
1	Na 589.592 Radial†	-1272.2	-30.5	-8.5443	ug/L	-8.5443	ppb	18:10:25
1	Sr 421.552†	-32.1	-25.7	-0.1348	ug/L	-0.1348	ppb	18:10:25
1	Sc 361.383	1034609.2	1034609.2	99.531	%			18:11:42
1	Y 371.029	881696.7	881696.7	99.687	%			18:11:42
1	Ag 328.068†	446.5	-25.5	-0.1118	ug/L	-0.1118	ppb	18:11:47
1	As 188.979†	-33.8	2.6	0.8128	ug/L	0.8128	ppb	18:12:07
1	B 249.677†	-454.8	9.1	0.1770	ug/L	0.1770	ppb	18:12:07
1	Ba 233.527†	-2.6	-2.6	-0.0192	ug/L	-0.0192	ppb	18:12:07
1	Be 313.107†	-4791.6	59.7	0.0187	ug/L	0.0187	ppb	18:11:47
1	Cd 226.502†	-228.8	5.7	0.0536	ug/L	0.0536	ppb	18:12:07
1	Co 228.616†	-84.4	1.6	0.0263	ug/L	0.0263	ppb	18:12:07
1	Cr 267.716†	106.0	18.8	0.1679	ug/L	0.1679	ppb	18:12:07
1	Cu 324.752†	8941.8	46.4	0.1223	ug/L	0.1223	ppb	18:11:47
1	Mn 257.610†	570.8	-3.2	-0.0077	ug/L	-0.0077	ppb	18:12:07
1	Mo 202.031†	29.9	0.8	0.0391	ug/L	0.0391	ppb	18:12:07
1	Ni 231.604†	151.8	20.6	0.4030	ug/L	0.4030	ppb	18:12:07
1	P 214.914†	248.4	-15.6	-6.9397	ug/L	-6.9397	ppb	18:12:07
1	Pb 220.353†	-71.0	4.3	0.4060	ug/L	0.4060	ppb	18:12:07
1	S 181.975 Axial†	60.8	0.9	1.0132	ug/L	1.0132	ppb	18:12:07
1	Sb 206.836†	49.6	15.2	4.0184	ug/L	4.0184	ppb	18:12:07
1	Se 196.026†	-29.1	-7.9	-3.6032	ug/L	-3.6032	ppb	18:12:07
1	Si 251.611†	580.7	25.8	0.6494	ug/L	0.6494	ppb	18:12:07
1	Sn 189.927†	0.4	4.7	0.6278	ug/L	0.6278	ppb	18:12:07
1	Ti 334.940†	-1230.3	24.3	0.0350	ug/L	0.0350	ppb	18:11:47
1	Tl 190.801†	-42.1	1.9	0.4708	ug/L	0.4708	ppb	18:12:07
1	U 409.014†	-2850.8	-90.3	-2.3302	ug/L	-2.3302	ppb	18:11:42
1	V 292.402†	-1689.4	-88.8	-0.5058	ug/L	-0.5058	ppb	18:11:47
1	Zn 213.857†	887.3	5.9	0.0415	ug/L	0.0415	ppb	18:12:07
1	SiO2†	594.9	-1.3	-0.0849	ug/L	-0.0849	ppb	18:13:13
2	Sc Radial	4831.6	4831.6	98.4	%			18:10:50
2	Y RADIAL	5539.0	5539.0	98.08	%			18:10:50
2	Al 396.153Radial†	-19.9	23.6	15.571	ug/L	15.571	ppb	18:10:50
2	Ca 317.933Radial†	20.6	3.1	5.4395	ug/L	5.4395	ppb	18:11:10
2	Fe 238.204 Radial†	12.0	1.2	14.105	ug/L	14.105	ppb	18:11:10
2	K 766.490 Radial†	2640.1	113.3	20.647	ug/L	20.647	ppb	18:10:50
2	Mg 279.077 IEC†	6.5	4.1	183.27	ug/L	183.27	ppb	18:11:10
2	Na 589.592 Radial†	-1259.8	-0.2	-0.0693	ug/L	-0.0693	ppb	18:10:50
2	Sr 421.552†	-7.2	0.1	0.0004	ug/L	0.0004	ppb	18:10:50
2	Sc 361.383	1027067.1	1027067.1	98.806	%			18:12:12
2	Y 371.029	874594.2	874594.2	98.884	%			18:12:12
2	Ag 328.068†	449.8	-18.9	-0.0704	ug/L	-0.0704	ppb	18:12:17
2	As 188.979†	-40.3	-4.2	-1.3039	ug/L	-1.3039	ppb	18:12:37
2	B 249.677†	-427.8	33.1	0.6230	ug/L	0.6230	ppb	18:12:37
2	Ba 233.527†	-2.6	-2.6	-0.0166	ug/L	-0.0166	ppb	18:12:37
2	Be 313.107†	-4776.7	39.5	0.0122	ug/L	0.0122	ppb	18:12:17
2	Cd 226.502†	-219.3	13.7	0.1183	ug/L	0.1183	ppb	18:12:37
2	Co 228.616†	-75.9	9.5	0.1565	ug/L	0.1565	ppb	18:12:37
2	Cr 267.716†	97.6	11.0	0.0989	ug/L	0.0989	ppb	18:12:37
2	Cu 324.752†	8954.3	125.1	0.3347	ug/L	0.3347	ppb	18:12:17
2	Mn 257.610†	567.3	-2.6	-0.0044	ug/L	-0.0044	ppb	18:12:37
2	Mo 202.031†	27.2	-1.7	-0.0888	ug/L	-0.0888	ppb	18:12:37
2	Ni 231.604†	137.1	6.8	0.1336	ug/L	0.1336	ppb	18:12:37

2	P 214.914†	289.4	27.8	12.395 ug/L	12.395 ppb	18:12:37
2	Pb 220.353†	-86.1	-11.5	-1.0822 ug/L	-1.0822 ppb	18:12:37
2	S 181.975 Axial†	51.7	-7.8	-8.3923 ug/L	-8.3923 ppb	18:12:37
2	Sb 206.836†	34.7	0.5	0.1412 ug/L	0.1412 ppb	18:12:37
2	Se 196.026†	-20.9	0.2	0.1369 ug/L	0.1369 ppb	18:12:37
2	Si 251.611†	575.3	24.6	0.6161 ug/L	0.6161 ppb	18:12:37
2	Sn 189.927†	3.8	8.2	1.0891 ug/L	1.0891 ppb	18:12:37
2	Ti 334.940†	-1271.1	-26.0	-0.0353 ug/L	-0.0353 ppb	18:12:17
2	Tl 190.801†	-40.7	3.1	0.7471 ug/L	0.7471 ppb	18:12:37
2	U 409.014†	-2766.3	-25.8	-0.6692 ug/L	-0.6692 ppb	18:12:12
2	V 292.402†	-1617.8	-28.8	-0.1657 ug/L	-0.1657 ppb	18:12:17
2	Zn 213.857†	888.8	14.0	0.0937 ug/L	0.0937 ppb	18:12:37
2	SiO2†	620.8	29.3	1.5731 ug/L	1.5731 ppb	18:13:18
3	Sc Radial	4720.5	4720.5	96.1 %		18:11:15
3	Y RADIAL	5456.3	5456.3	96.62 %		18:11:15
3	Al 396.153Radial†	-34.8	7.6	5.0192 ug/L	5.0192 ppb	18:11:15
3	Ca 317.933Radial†	12.2	-5.1	-9.1137 ug/L	-9.1137 ppb	18:11:35
3	Fe 238.204 Radial†	9.7	-0.9	-10.769 ug/L	-10.769 ppb	18:11:35
3	K 766.490 Radial†	2595.0	129.5	23.622 ug/L	23.622 ppb	18:11:15
3	Mg 279.077 IEC†	2.1	-0.3	-11.938 ug/L	-11.938 ppb	18:11:35
3	Na 589.592 Radial†	-1312.6	-85.3	-23.919 ug/L	-23.919 ppb	18:11:15
3	Sr 421.552†	1.0	8.4	0.0443 ug/L	0.0443 ppb	18:11:15
3	Sc 361.383	1017127.6	1017127.6	97.849 %		18:12:42
3	Y 371.029	865924.7	865924.7	97.903 %		18:12:42
3	Ag 328.068†	366.4	-99.6	-0.4011 ug/L	-0.4011 ppb	18:12:47
3	As 188.979†	-29.3	6.6	2.0560 ug/L	2.0560 ppb	18:13:07
3	B 249.677†	-440.2	16.3	0.3089 ug/L	0.3089 ppb	18:13:07
3	Ba 233.527†	9.3	9.5	0.0592 ug/L	0.0592 ppb	18:13:07
3	Be 313.107†	-4801.3	-32.9	-0.0104 ug/L	-0.0104 ppb	18:12:47
3	Cd 226.502†	-236.4	-5.9	-0.0502 ug/L	-0.0502 ppb	18:13:07
3	Co 228.616†	-91.6	-7.3	-0.1196 ug/L	-0.1196 ppb	18:13:07
3	Cr 267.716†	114.8	29.6	0.2642 ug/L	0.2642 ppb	18:13:07
3	Cu 324.752†	8925.1	183.8	0.4903 ug/L	0.4903 ppb	18:12:47
3	Mn 257.610†	576.7	12.7	0.0111 ug/L	0.0111 ppb	18:13:07
3	Mo 202.031†	31.1	2.6	0.1363 ug/L	0.1363 ppb	18:13:07
3	Ni 231.604†	141.1	12.2	0.2399 ug/L	0.2399 ppb	18:13:07
3	P 214.914†	272.2	13.1	5.7950 ug/L	5.7950 ppb	18:13:07
3	Pb 220.353†	-73.4	0.5	0.0523 ug/L	0.0523 ppb	18:13:07
3	S 181.975 Axial†	54.0	-4.9	-5.2941 ug/L	-5.2941 ppb	18:13:07
3	Sb 206.836†	34.2	0.3	0.1003 ug/L	0.1003 ppb	18:13:07
3	Se 196.026†	-20.9	0.0	-0.0283 ug/L	-0.0283 ppb	18:13:07
3	Si 251.611†	567.7	22.6	0.5592 ug/L	0.5592 ppb	18:13:07
3	Sn 189.927†	3.6	8.0	1.0610 ug/L	1.0610 ppb	18:13:07
3	Ti 334.940†	-1272.2	-39.7	-0.0555 ug/L	-0.0555 ppb	18:12:47
3	Tl 190.801†	-39.6	3.8	0.9126 ug/L	0.9126 ppb	18:13:07
3	U 409.014†	-2696.8	17.9	0.4644 ug/L	0.4644 ppb	18:12:42
3	V 292.402†	-1683.0	-111.5	-0.6339 ug/L	-0.6339 ppb	18:12:47
3	Zn 213.857†	892.5	26.6	0.1945 ug/L	0.1945 ppb	18:13:07
3	SiO2†	608.0	22.3	1.1842 ug/L	1.1842 ppb	18:13:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026268.0	98.729	%	0.8435				0.85%
Sc Radial	4772.9	97.2	%	1.14				1.17%
Y 371.029	874071.9	98.825	%	0.8931				0.90%
Y RADIAL	5489.5	97.21	%	0.774				0.80%
Ag 328.068†	-48.0	-0.1945	ug/L	0.18018	-0.1945	ppb	0.18018	92.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.0	11.876	ug/L	5.9441	11.876	ppb	5.9441	50.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.7	0.5216	ug/L	1.69881	0.5216	ppb	1.69881	325.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.5	0.3696	ug/L	0.22913	0.3696	ppb	0.22913	61.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0078	ug/L	0.04452	0.0078	ppb	0.04452	572.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.1	0.0069	ug/L	0.01526	0.0069	ppb	0.01526	222.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	1.9103	ug/L	9.75075	1.9103	ppb	9.75075	510.44%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                4.5      0.0406 ug/L       0.08501      0.0406 ppb        0.08501 209.62%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.3      0.0211 ug/L       0.13814      0.0211 ppb        0.13814 655.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               19.8      0.1770 ug/L       0.08304      0.1770 ppb        0.08304  46.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              118.4      0.3158 ug/L       0.18470      0.3158 ppb        0.18470  58.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.8     -9.9724 ug/L      23.68902     -9.9724 ppb       23.68902 237.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         98.3      17.912 ug/L        7.4622      17.912 ppb         7.4622  41.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.8      81.225 ug/L       97.9077      81.225 ppb        97.9077 120.54%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                2.3     -0.0003 ug/L       0.01006     -0.0003 ppb        0.01006 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.6      0.0289 ug/L       0.11291      0.0289 ppb        0.11291 390.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -38.7     -10.844 ug/L      12.0902     -10.844 ppb       12.0902 111.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               13.2      0.2588 ug/L       0.13570      0.2588 ppb        0.13570  52.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 8.4      3.7502 ug/L       9.82845      3.7502 ppb        9.82845 262.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.3     -0.2079 ug/L       0.77747     -0.2079 ppb        0.77747 373.89%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.9     -4.2244 ug/L       4.79313     -4.2244 ppb        4.79313 113.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                5.3      1.4200 ug/L       2.25041      1.4200 ppb        2.25041 158.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.5     -1.1649 ug/L       2.11326     -1.1649 ppb        2.11326 181.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               24.3      0.6082 ug/L       0.04564      0.6082 ppb        0.04564   7.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                7.0      0.9260 ug/L       0.25857      0.9260 ppb        0.25857  27.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -5.7     -0.0300 ug/L       0.09336     -0.0300 ppb        0.09336 310.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -13.8     -0.0186 ug/L       0.04751     -0.0186 ppb        0.04751 255.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                2.9      0.7102 ug/L       0.22320      0.7102 ppb        0.22320  31.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -32.7     -0.8450 ug/L       1.40556     -0.8450 ppb        1.40556 166.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -76.4     -0.4351 ug/L       0.24200     -0.4351 ppb        0.24200  55.62%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               15.5      0.1099 ug/L       0.07776      0.1099 ppb        0.07776  70.77%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     16.8      0.8908 ug/L       0.86705      0.8908 ppb        0.86705  97.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 19:19:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4734.3	4734.3	96.4	%			19:21:09
1	Y RADIAL	5406.0	5406.0	95.73	%			19:21:09
1	Al 396.153Radial†	7520.0	7842.3	5156.8	ug/L	5156.8	ppb	19:21:09
1	Ca 317.933Radial†	2824.2	2911.0	5154.0	ug/L	5154.0	ppb	19:21:29
1	Fe 238.204 Radial†	417.6	422.1	5118.6	ug/L	5118.6	ppb	19:21:29
1	K 766.490 Radial†	28948.3	27451.3	4994.6	ug/L	4994.6	ppb	19:21:09
1	Mg 279.077 IEC†	112.6	114.3	5118.6	ug/L	5118.6	ppb	19:21:29
1	Na 589.592 Radial†	32433.3	34914.9	9793.6	ug/L	9793.6	ppb	19:21:09
1	Sr 421.552†	92081.5	95500.4	500.99	ug/L	500.99	ppb	19:21:09
1	Sc 361.383	1033401.4	1033401.4	99.415	%			19:22:28
1	Y 371.029	865851.8	865851.8	97.895	%			19:22:28
1	Ag 328.068†	127285.7	127560.8	508.74	ug/L	508.74	ppb	19:22:28
1	As 188.979†	1572.9	1618.7	508.81	ug/L	508.81	ppb	19:22:48
1	B 249.677†	26054.4	26673.9	502.15	ug/L	502.15	ppb	19:22:28
1	Ba 233.527†	79037.3	79502.5	512.07	ug/L	512.07	ppb	19:22:28
1	Be 313.107†	1617567.7	1631961.8	509.83	ug/L	509.83	ppb	19:22:28
1	Cd 226.502†	58065.0	58642.4	511.22	ug/L	511.22	ppb	19:22:28
1	Co 228.616†	30149.0	30412.8	501.11	ug/L	501.11	ppb	19:22:48
1	Cr 267.716†	56148.9	56391.5	507.44	ug/L	507.44	ppb	19:22:28
1	Cu 324.752†	198503.5	190734.3	509.62	ug/L	509.62	ppb	19:22:28
1	Mn 257.610†	537564.0	540151.2	511.91	ug/L	511.91	ppb	19:22:28
1	Mo 202.031†	9476.2	9502.7	504.65	ug/L	504.65	ppb	19:22:48
1	Ni 231.604†	25566.4	25584.9	500.98	ug/L	500.98	ppb	19:22:48
1	P 214.914†	5881.3	5650.8	2450.5	ug/L	2450.5	ppb	19:22:48
1	Pb 220.353†	5299.7	5406.5	509.10	ug/L	509.10	ppb	19:22:48
1	S 181.975 Axial†	975.7	921.3	991.62	ug/L	991.62	ppb	19:22:48
1	Sb 206.836†	1937.8	1914.6	511.96	ug/L	511.96	ppb	19:22:48
1	Se 196.026†	1106.3	1134.2	522.52	ug/L	522.52	ppb	19:22:48
1	Si 251.611†	99946.8	99977.3	2527.1	ug/L	2527.1	ppb	19:22:28
1	Sn 189.927†	3766.0	3792.5	502.20	ug/L	502.20	ppb	19:22:48
1	Ti 334.940†	364631.3	368037.8	507.50	ug/L	507.50	ppb	19:22:28
1	Tl 190.801†	2033.0	2089.2	508.54	ug/L	508.54	ppb	19:22:48
1	U 409.014†	16208.7	19078.1	491.63	ug/L	491.63	ppb	19:22:28
1	V 292.402†	86101.1	88216.4	511.75	ug/L	511.75	ppb	19:22:28
1	Zn 213.857†	69834.6	69360.0	505.20	ug/L	505.20	ppb	19:22:28
1	SiO2†	99520.5	99507.2	5382.1	ug/L	5382.1	ppb	19:23:48
2	Sc Radial	4785.5	4785.5	97.5	%			19:21:34
2	Y RADIAL	5470.8	5470.8	96.88	%			19:21:34
2	Al 396.153Radial†	7596.8	7837.7	5153.6	ug/L	5153.6	ppb	19:21:34
2	Ca 317.933Radial†	2796.5	2851.2	5048.2	ug/L	5048.2	ppb	19:21:54
2	Fe 238.204 Radial†	417.0	416.8	5055.5	ug/L	5055.5	ppb	19:21:54
2	K 766.490 Radial†	29186.6	27374.5	4980.7	ug/L	4980.7	ppb	19:21:34
2	Mg 279.077 IEC†	113.5	114.0	5106.5	ug/L	5106.5	ppb	19:21:54
2	Na 589.592 Radial†	32666.5	34794.2	9759.8	ug/L	9759.8	ppb	19:21:34
2	Sr 421.552†	93027.7	95449.3	500.72	ug/L	500.72	ppb	19:21:34
2	Sc 361.383	1026012.3	1026012.3	98.704	%			19:22:55
2	Y 371.029	860635.0	860635.0	97.305	%			19:22:55
2	Ag 328.068†	126120.5	127302.4	507.70	ug/L	507.70	ppb	19:22:55
2	As 188.979†	1582.1	1639.5	515.25	ug/L	515.25	ppb	19:23:15
2	B 249.677†	25839.3	26644.7	501.60	ug/L	501.60	ppb	19:22:55
2	Ba 233.527†	77930.9	78954.2	508.54	ug/L	508.54	ppb	19:22:55
2	Be 313.107†	1600999.0	1626893.3	508.25	ug/L	508.25	ppb	19:22:55
2	Cd 226.502†	57183.2	58169.6	507.10	ug/L	507.10	ppb	19:22:55
2	Co 228.616†	30107.6	30589.2	504.04	ug/L	504.04	ppb	19:23:15
2	Cr 267.716†	55469.2	56109.7	504.91	ug/L	504.91	ppb	19:22:55
2	Cu 324.752†	196925.1	190573.2	509.19	ug/L	509.19	ppb	19:22:55
2	Mn 257.610†	531288.3	537687.2	509.57	ug/L	509.57	ppb	19:22:55
2	Mo 202.031†	9505.9	9601.4	509.88	ug/L	509.88	ppb	19:23:15
2	Ni 231.604†	25542.1	25745.5	504.13	ug/L	504.13	ppb	19:23:15

2	P 214.914†	5874.3	5686.3	2466.5	ug/L	2466.5 ppb	19:23:15
2	Pb 220.353†	5291.5	5436.6	511.94	ug/L	511.94 ppb	19:23:15
2	S 181.975 Axial†	980.6	933.4	1004.6	ug/L	1004.6 ppb	19:23:15
2	Sb 206.836†	1940.2	1931.0	516.49	ug/L	516.49 ppb	19:23:15
2	Se 196.026†	1107.9	1143.8	526.56	ug/L	526.56 ppb	19:23:15
2	Si 251.611†	98767.5	99506.6	2515.0	ug/L	2515.0 ppb	19:22:55
2	Sn 189.927†	3748.6	3802.2	503.46	ug/L	503.46 ppb	19:23:15
2	Ti 334.940†	361053.9	367054.8	506.14	ug/L	506.14 ppb	19:22:55
2	Tl 190.801†	2027.9	2098.8	510.82	ug/L	510.82 ppb	19:23:15
2	U 409.014†	16079.4	19064.5	491.29	ug/L	491.29 ppb	19:22:55
2	V 292.402†	85328.7	88057.5	510.93	ug/L	510.93 ppb	19:22:55
2	Zn 213.857†	69041.3	69062.2	503.00	ug/L	503.00 ppb	19:22:55
2	SiO2†	99115.1	99817.4	5398.7	ug/L	5398.7 ppb	19:23:53
3	Sc Radial	4799.7	4799.7	97.8	%		19:21:59
3	Y RADIAL	5465.7	5465.7	96.79	%		19:21:59
3	Al 396.153Radial†	7583.0	7800.6	5129.2	ug/L	5129.2 ppb	19:21:59
3	Ca 317.933Radial†	2825.1	2872.0	5084.9	ug/L	5084.9 ppb	19:22:19
3	Fe 238.204 Radial†	417.4	415.9	5044.6	ug/L	5044.6 ppb	19:22:19
3	K 766.490 Radial†	29293.9	27395.8	4984.4	ug/L	4984.4 ppb	19:21:59
3	Mg 279.077 IEC†	115.6	115.8	5186.8	ug/L	5186.8 ppb	19:22:19
3	Na 589.592 Radial†	32936.4	34971.3	9809.4	ug/L	9809.4 ppb	19:21:59
3	Sr 421.552†	93348.6	95495.6	500.96	ug/L	500.96 ppb	19:21:59
3	Sc 361.383	1029039.8	1029039.8	98.995	%		19:23:23
3	Y 371.029	861082.3	861082.3	97.356	%		19:23:23
3	Ag 328.068†	127149.9	127966.3	510.33	ug/L	510.33 ppb	19:23:23
3	As 188.979†	1573.5	1626.0	511.09	ug/L	511.09 ppb	19:23:43
3	B 249.677†	26080.1	26810.8	504.74	ug/L	504.74 ppb	19:23:23
3	Ba 233.527†	78942.9	79744.1	513.62	ug/L	513.62 ppb	19:23:23
3	Be 313.107†	1613383.4	1634631.2	510.67	ug/L	510.67 ppb	19:23:23
3	Cd 226.502†	57882.5	58705.6	511.78	ug/L	511.78 ppb	19:23:23
3	Co 228.616†	30053.5	30444.9	501.64	ug/L	501.64 ppb	19:23:43
3	Cr 267.716†	56141.1	56623.1	509.52	ug/L	509.52 ppb	19:23:23
3	Cu 324.752†	198524.5	191601.8	511.93	ug/L	511.93 ppb	19:23:23
3	Mn 257.610†	537675.2	542555.3	514.18	ug/L	514.18 ppb	19:23:23
3	Mo 202.031†	9456.1	9522.9	505.71	ug/L	505.71 ppb	19:23:43
3	Ni 231.604†	25447.2	25573.5	500.76	ug/L	500.76 ppb	19:23:43
3	P 214.914†	5869.1	5663.6	2455.9	ug/L	2455.9 ppb	19:23:43
3	Pb 220.353†	5261.2	5390.2	507.57	ug/L	507.57 ppb	19:23:43
3	S 181.975 Axial†	980.3	930.1	1001.1	ug/L	1001.1 ppb	19:23:43
3	Sb 206.836†	1917.3	1902.2	508.63	ug/L	508.63 ppb	19:23:43
3	Se 196.026†	1106.5	1139.1	524.44	ug/L	524.44 ppb	19:23:43
3	Si 251.611†	99912.6	100369.0	2537.0	ug/L	2537.0 ppb	19:23:23
3	Sn 189.927†	3745.3	3787.6	501.55	ug/L	501.55 ppb	19:23:43
3	Ti 334.940†	364672.1	369633.5	509.69	ug/L	509.69 ppb	19:23:23
3	Tl 190.801†	2011.5	2076.2	505.42	ug/L	505.42 ppb	19:23:43
3	U 409.014†	16224.5	19163.1	493.83	ug/L	493.83 ppb	19:23:23
3	V 292.402†	85974.8	88455.8	513.15	ug/L	513.15 ppb	19:23:23
3	Zn 213.857†	69723.6	69545.6	506.57	ug/L	506.57 ppb	19:23:23
3	SiO2†	99840.5	100254.7	5422.7	ug/L	5422.7 ppb	19:23:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1029484.5	99.038	%	0.3573				0.36%
Sc Radial	4773.2	97.2	%	0.70				0.72%
Y 371.029	862523.0	97.519	%	0.3269				0.34%
Y RADIAL	5447.5	96.46	%	0.638				0.66%
Ag 328.068†	127609.8	508.92	ug/L	1.327	508.92	ppb	1.327	0.26%
QC value within limits for Ag 328.068 Recovery = 101.78%								
Al 396.153Radial†	7826.9	5146.5	ug/L	15.11	5146.5	ppb	15.11	0.29%
QC value within limits for Al 396.153Radial Recovery = 102.93%								
As 188.979†	1628.1	511.72	ug/L	3.263	511.72	ppb	3.263	0.64%
QC value within limits for As 188.979 Recovery = 102.34%								
B 249.677†	26709.8	502.83	ug/L	1.681	502.83	ppb	1.681	0.33%
QC value within limits for B 249.677 Recovery = 100.57%								
Ba 233.527†	79400.2	511.41	ug/L	2.603	511.41	ppb	2.603	0.51%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1631162.1	509.58	ug/L	1.229	509.58	ppb	1.229	0.24%
QC value within limits for Be 313.107 Recovery = 101.92%								
Ca 317.933Radial†	2878.1	5095.7	ug/L	53.75	5095.7	ppb	53.75	1.05%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.91%
Cd 226.502†            58505.9      510.03 ug/L         2.552      510.03 ppb          2.552   0.50%
   QC value within limits for Cd 226.502  Recovery = 102.01%
Co 228.616†            30482.3      502.26 ug/L         1.557      502.26 ppb          1.557   0.31%
   QC value within limits for Co 228.616  Recovery = 100.45%
Cr 267.716†            56374.8      507.29 ug/L         2.312      507.29 ppb          2.312   0.46%
   QC value within limits for Cr 267.716  Recovery = 101.46%
Cu 324.752†           190969.7      510.25 ug/L         1.476      510.25 ppb          1.476   0.29%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5072.9 ug/L        39.96      5072.9 ppb          39.96   0.79%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27407.2      4986.6 ug/L         7.20      4986.6 ppb           7.20   0.14%
   QC value within limits for K 766.490 Radial  Recovery = 99.73%
Mg 279.077 IEC†          114.7      5137.3 ug/L        43.26      5137.3 ppb          43.26   0.84%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.75%
Mn 257.610†           540131.2      511.88 ug/L         2.304      511.88 ppb          2.304   0.45%
   QC value within limits for Mn 257.610  Recovery = 102.38%
Mo 202.031†             9542.3      506.74 ug/L         2.766      506.74 ppb          2.766   0.55%
   QC value within limits for Mo 202.031  Recovery = 101.35%
Na 589.592 Radial†     34893.5      9787.6 ug/L        25.38      9787.6 ppb          25.38   0.26%
   QC value within limits for Na 589.592 Radial  Recovery = 97.88%
Ni 231.604†            25634.6      501.95 ug/L         1.883      501.95 ppb          1.883   0.38%
   QC value within limits for Ni 231.604  Recovery = 100.39%
P 214.914†              5666.9      2457.7 ug/L         8.16      2457.7 ppb           8.16   0.33%
   QC value within limits for P 214.914  Recovery = 98.31%
Pb 220.353†             5411.1      509.54 ug/L         2.216      509.54 ppb          2.216   0.43%
   QC value within limits for Pb 220.353  Recovery = 101.91%
S 181.975 Axial†         928.3      999.11 ug/L         6.718      999.11 ppb          6.718   0.67%
   QC value within limits for S 181.975 Axial  Recovery = 99.91%
Sb 206.836†             1915.9      512.36 ug/L         3.943      512.36 ppb          3.943   0.77%
   QC value within limits for Sb 206.836  Recovery = 102.47%
Se 196.026†             1139.0      524.51 ug/L         2.021      524.51 ppb          2.021   0.39%
   QC value within limits for Se 196.026  Recovery = 104.90%
Si 251.611†            99951.0      2526.4 ug/L        11.01      2526.4 ppb          11.01   0.44%
   QC value within limits for Si 251.611  Recovery = 101.05%
Sn 189.927†             3794.1      502.40 ug/L         0.975      502.40 ppb          0.975   0.19%
   QC value within limits for Sn 189.927  Recovery = 100.48%
Sr 421.552†            95481.8      500.89 ug/L         0.147      500.89 ppb          0.147   0.03%
   QC value within limits for Sr 421.552  Recovery = 100.18%
Ti 334.940†           368242.1      507.78 ug/L         1.794      507.78 ppb          1.794   0.35%
   QC value within limits for Ti 334.940  Recovery = 101.56%
Tl 190.801†             2088.1      508.26 ug/L         2.710      508.26 ppb          2.710   0.53%
   QC value within limits for Tl 190.801  Recovery = 101.65%
U 409.014†             19101.9      492.25 ug/L         1.381      492.25 ppb          1.381   0.28%
   QC value within limits for U 409.014  Recovery = 98.45%
V 292.402†             88243.3      511.95 ug/L         1.124      511.95 ppb          1.124   0.22%
   QC value within limits for V 292.402  Recovery = 102.39%
Zn 213.857†            69322.6      504.92 ug/L         1.801      504.92 ppb          1.801   0.36%
   QC value within limits for Zn 213.857  Recovery = 100.98%
SiO2†                  99859.8      5401.2 ug/L        20.41      5401.2 ppb          20.41   0.38%
   QC value within limits for SiO2  Recovery = 101.00%
All analyte(s) passed QC.
```

Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 19:26:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4859.6	4859.6	99.0	%			19:28:00
1	Y RADIAL	5593.3	5593.3	99.05	%			19:28:00
1	Al 396.153Radial†	-40.8	2.6	1.7303	ug/L	1.7303	ppb	19:28:00
1	Ca 317.933Radial†	22.6	5.0	8.9356	ug/L	8.9356	ppb	19:28:20
1	Fe 238.204 Radial†	9.0	-1.9	-22.856	ug/L	-22.856	ppb	19:28:20
1	K 766.490 Radial†	2744.6	203.5	37.066	ug/L	37.066	ppb	19:28:00
1	Mg 279.077 IEC†	3.4	0.9	40.419	ug/L	40.419	ppb	19:28:20
1	Na 589.592 Radial†	-1155.6	112.5	31.546	ug/L	31.546	ppb	19:28:00
1	Sr 421.552†	-48.7	-41.8	-0.2194	ug/L	-0.2194	ppb	19:28:00
1	Sc 361.383	1021125.3	1021125.3	98.234	%			19:29:17
1	Y 371.029	867915.2	867915.2	98.129	%			19:29:17
1	Ag 328.068†	462.9	-2.9	-0.0206	ug/L	-0.0206	ppb	19:29:22
1	As 188.979†	-36.9	-1.0	-0.3161	ug/L	-0.3161	ppb	19:29:42
1	B 249.677†	-320.6	139.7	2.6438	ug/L	2.6438	ppb	19:29:42
1	Ba 233.527†	5.5	5.6	0.0351	ug/L	0.0351	ppb	19:29:42
1	Be 313.107†	-4888.0	-101.9	-0.0321	ug/L	-0.0321	ppb	19:29:22
1	Cd 226.502†	-223.3	8.3	0.0746	ug/L	0.0746	ppb	19:29:42
1	Co 228.616†	-87.7	-3.0	-0.0486	ug/L	-0.0486	ppb	19:29:42
1	Cr 267.716†	99.2	13.2	0.1175	ug/L	0.1175	ppb	19:29:42
1	Cu 324.752†	8965.9	189.6	0.5051	ug/L	0.5051	ppb	19:29:22
1	Mn 257.610†	613.2	47.6	0.0420	ug/L	0.0420	ppb	19:29:42
1	Mo 202.031†	25.5	-3.3	-0.1741	ug/L	-0.1741	ppb	19:29:42
1	Ni 231.604†	116.0	-13.9	-0.2714	ug/L	-0.2714	ppb	19:29:42
1	P 214.914†	270.6	10.3	4.5763	ug/L	4.5763	ppb	19:29:42
1	Pb 220.353†	-67.8	6.5	0.6136	ug/L	0.6136	ppb	19:29:42
1	S 181.975 Axial†	58.0	-1.1	-1.1385	ug/L	-1.1385	ppb	19:29:42
1	Sb 206.836†	45.4	11.6	3.0650	ug/L	3.0650	ppb	19:29:42
1	Se 196.026†	-20.7	0.3	0.0561	ug/L	0.0561	ppb	19:29:42
1	Si 251.611†	693.1	147.9	3.7429	ug/L	3.7429	ppb	19:29:42
1	Sn 189.927†	4.9	9.3	1.2360	ug/L	1.2360	ppb	19:29:42
1	Ti 334.940†	-1354.4	-118.3	-0.1636	ug/L	-0.1636	ppb	19:29:22
1	Tl 190.801†	-38.9	4.6	1.1230	ug/L	1.1230	ppb	19:29:42
1	U 409.014†	-2649.8	76.5	1.9812	ug/L	1.9812	ppb	19:29:17
1	V 292.402†	-1586.9	-6.9	-0.0336	ug/L	-0.0336	ppb	19:29:22
1	Zn 213.857†	891.7	22.2	0.1648	ug/L	0.1648	ppb	19:29:42
1	SiO2†	691.8	105.2	5.6857	ug/L	5.6857	ppb	19:30:48
2	Sc Radial	4973.2	4973.2	101	%			19:28:25
2	Y RADIAL	5719.4	5719.4	101.3	%			19:28:25
2	Al 396.153Radial†	-19.7	24.3	16.050	ug/L	16.050	ppb	19:28:25
2	Ca 317.933Radial†	18.3	0.2	0.4419	ug/L	0.4419	ppb	19:28:45
2	Fe 238.204 Radial†	9.5	-1.6	-19.945	ug/L	-19.945	ppb	19:28:45
2	K 766.490 Radial†	2626.7	23.6	4.2865	ug/L	4.2865	ppb	19:28:25
2	Mg 279.077 IEC†	1.9	-0.6	-28.589	ug/L	-28.589	ppb	19:28:45
2	Na 589.592 Radial†	-1152.3	142.3	39.923	ug/L	39.923	ppb	19:28:25
2	Sr 421.552†	-30.3	-22.5	-0.1180	ug/L	-0.1180	ppb	19:28:25
2	Sc 361.383	1022927.5	1022927.5	98.407	%			19:29:47
2	Y 371.029	869879.4	869879.4	98.351	%			19:29:47
2	Ag 328.068†	404.4	-63.1	-0.2583	ug/L	-0.2583	ppb	19:29:52
2	As 188.979†	-30.4	5.7	1.7705	ug/L	1.7705	ppb	19:30:12
2	B 249.677†	-344.7	115.9	2.1918	ug/L	2.1918	ppb	19:30:12
2	Ba 233.527†	-1.2	-1.2	-0.0093	ug/L	-0.0093	ppb	19:30:12
2	Be 313.107†	-4878.6	-83.7	-0.0263	ug/L	-0.0263	ppb	19:29:52
2	Cd 226.502†	-258.3	-26.8	-0.2320	ug/L	-0.2320	ppb	19:30:12
2	Co 228.616†	-78.4	6.6	0.1096	ug/L	0.1096	ppb	19:30:12
2	Cr 267.716†	110.6	24.6	0.2201	ug/L	0.2201	ppb	19:30:12
2	Cu 324.752†	8839.3	44.9	0.1188	ug/L	0.1188	ppb	19:29:52
2	Mn 257.610†	617.9	51.2	0.0470	ug/L	0.0470	ppb	19:30:12
2	Mo 202.031†	27.5	-1.3	-0.0686	ug/L	-0.0686	ppb	19:30:12
2	Ni 231.604†	127.6	-2.3	-0.0455	ug/L	-0.0455	ppb	19:30:12

2	P 214.914†	262.7	1.9	0.8608	ug/L	0.8608 ppb	19:30:12
2	Pb 220.353†	-89.8	-15.7	-1.4658	ug/L	-1.4658 ppb	19:30:12
2	S 181.975 Axial†	60.3	1.2	1.3132	ug/L	1.3132 ppb	19:30:12
2	Sb 206.836†	51.4	17.6	4.6687	ug/L	4.6687 ppb	19:30:12
2	Se 196.026†	-24.0	-3.0	-1.3881	ug/L	-1.3881 ppb	19:30:12
2	Si 251.611†	694.1	147.7	3.7462	ug/L	3.7462 ppb	19:30:12
2	Sn 189.927†	8.2	12.7	1.6790	ug/L	1.6790 ppb	19:30:12
2	Ti 334.940†	-1312.1	-72.9	-0.1008	ug/L	-0.1008 ppb	19:29:52
2	Tl 190.801†	-38.6	5.0	1.2170	ug/L	1.2170 ppb	19:30:12
2	U 409.014†	-2709.4	20.7	0.5367	ug/L	0.5367 ppb	19:29:47
2	V 292.402†	-1645.6	-63.8	-0.3625	ug/L	-0.3625 ppb	19:29:52
2	Zn 213.857†	909.3	38.5	0.2858	ug/L	0.2858 ppb	19:30:12
2	SiO2†	681.2	93.2	5.0540	ug/L	5.0540 ppb	19:30:53
3	Sc Radial	4734.5	4734.5	96.4	%		19:28:50
3	Y RADIAL	5469.4	5469.4	96.85	%		19:28:50
3	Al 396.153Radial†	-57.9	-16.2	-10.705	ug/L	-10.705 ppb	19:28:50
3	Ca 317.933Radial†	19.2	2.0	3.6020	ug/L	3.6020 ppb	19:29:10
3	Fe 238.204 Radial†	12.9	2.4	28.804	ug/L	28.804 ppb	19:29:10
3	K 766.490 Radial†	2588.2	114.5	20.867	ug/L	20.867 ppb	19:28:50
3	Mg 279.077 IEC†	2.7	0.3	12.846	ug/L	12.846 ppb	19:29:10
3	Na 589.592 Radial†	-1173.4	63.2	17.714	ug/L	17.714 ppb	19:28:50
3	Sr 421.552†	-25.4	-18.9	-0.0992	ug/L	-0.0992 ppb	19:28:50
3	Sc 361.383	1032249.4	1032249.4	99.304	%		19:30:17
3	Y 371.029	877796.3	877796.3	99.246	%		19:30:17
3	Ag 328.068†	478.9	8.2	0.0429	ug/L	0.0429 ppb	19:30:22
3	As 188.979†	-33.0	3.3	1.0373	ug/L	1.0373 ppb	19:30:42
3	B 249.677†	-362.9	100.7	1.8983	ug/L	1.8983 ppb	19:30:42
3	Ba 233.527†	-11.7	-11.8	-0.0748	ug/L	-0.0748 ppb	19:30:42
3	Be 313.107†	-4885.3	-45.6	-0.0143	ug/L	-0.0143 ppb	19:30:22
3	Cd 226.502†	-235.2	-1.2	-0.0134	ug/L	-0.0134 ppb	19:30:42
3	Co 228.616†	-70.9	14.9	0.2453	ug/L	0.2453 ppb	19:30:42
3	Cr 267.716†	101.8	14.7	0.1334	ug/L	0.1334 ppb	19:30:42
3	Cu 324.752†	8905.9	30.8	0.0836	ug/L	0.0836 ppb	19:30:22
3	Mn 257.610†	593.8	21.3	0.0228	ug/L	0.0228 ppb	19:30:42
3	Mo 202.031†	28.5	-0.6	-0.0281	ug/L	-0.0281 ppb	19:30:42
3	Ni 231.604†	124.5	-6.6	-0.1289	ug/L	-0.1289 ppb	19:30:42
3	P 214.914†	276.2	13.0	5.7884	ug/L	5.7884 ppb	19:30:42
3	Pb 220.353†	-85.6	-10.6	-1.0028	ug/L	-1.0028 ppb	19:30:42
3	S 181.975 Axial†	60.9	1.2	1.2949	ug/L	1.2949 ppb	19:30:42
3	Sb 206.836†	42.7	8.3	2.1980	ug/L	2.1980 ppb	19:30:42
3	Se 196.026†	-29.7	-8.5	-3.6795	ug/L	-3.6795 ppb	19:30:42
3	Si 251.611†	830.1	278.2	7.0587	ug/L	7.0587 ppb	19:30:42
3	Sn 189.927†	-1.8	2.5	0.3286	ug/L	0.3286 ppb	19:30:42
3	Ti 334.940†	-1281.0	-29.6	-0.0398	ug/L	-0.0398 ppb	19:30:22
3	Tl 190.801†	-33.4	10.7	2.5775	ug/L	2.5775 ppb	19:30:42
3	U 409.014†	-2829.9	-75.8	-1.9637	ug/L	-1.9637 ppb	19:30:17
3	V 292.402†	-1608.9	-11.6	-0.0750	ug/L	-0.0750 ppb	19:30:22
3	Zn 213.857†	917.9	38.8	0.2827	ug/L	0.2827 ppb	19:30:42
3	SiO2†	710.3	116.2	6.3012	ug/L	6.3012 ppb	19:30:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025434.0	98.648	%	0.5744				0.58%
Sc Radial	4855.8	98.9	%	2.43				2.46%
Y 371.029	871863.7	98.575	%	0.5914				0.60%
Y RADIAL	5594.0	99.06	%	2.214				2.23%
Ag 328.068†	-19.3	-0.0786	ug/L	0.15877	-0.0786	ppb	0.15877	201.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.6	2.3583	ug/L	13.38841	2.3583	ppb	13.38841	567.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.7	0.8305	ug/L	1.05856	0.8305	ppb	1.05856	127.45%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	118.8	2.2446	ug/L	0.37555	2.2446	ppb	0.37555	16.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.5	-0.0163	ug/L	0.05531	-0.0163	ppb	0.05531	339.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-77.1	-0.0242	ug/L	0.00907	-0.0242	ppb	0.00907	37.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.4	4.3265	ug/L	4.29295	4.3265	ppb	4.29295	99.22%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -6.6     -0.0569 ug/L       0.15788     -0.0569 ppb        0.15788 277.35%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.2      0.1021 ug/L       0.14708      0.1021 ppb        0.14708 144.04%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.5      0.1570 ug/L       0.05521      0.1570 ppb        0.05521  35.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                88.4      0.2359 ug/L       0.23386      0.2359 ppb        0.23386  99.15%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.4     -4.6659 ug/L      29.02191     -4.6659 ppb       29.02191 622.01%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         113.9      20.740 ug/L       16.3900      20.740 ppb        16.3900  79.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      8.2252 ug/L      34.73562      8.2252 ppb       34.73562 422.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.0      0.0373 ug/L       0.01278      0.0373 ppb        0.01278  34.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.7     -0.0903 ug/L       0.07539     -0.0903 ppb        0.07539  83.53%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        106.0      29.728 ug/L       11.2159      29.728 ppb        11.2159  37.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.6     -0.1486 ug/L       0.11427     -0.1486 ppb        0.11427  76.90%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.4      3.7418 ug/L       2.56760      3.7418 ppb        2.56760  68.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.6     -0.6183 ug/L       1.09168     -0.6183 ppb        1.09168 176.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.4899 ug/L       1.41023      0.4899 ppb        1.41023 287.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.5      3.3106 ug/L       1.25350      3.3106 ppb        1.25350  37.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.7     -1.6705 ug/L       1.88373     -1.6705 ppb        1.88373 112.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               191.3      4.8493 ug/L       1.91339      4.8493 ppb        1.91339  39.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.2      1.0812 ug/L       0.68841      1.0812 ppb        0.68841  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -27.7     -0.1455 ug/L       0.06465     -0.1455 ppb        0.06465  44.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -73.6     -0.1014 ug/L       0.06191     -0.1014 ppb        0.06191  61.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.8      1.6392 ug/L       0.81398      1.6392 ppb        0.81398  49.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  7.1      0.1847 ug/L       1.99587      0.1847 ppb        1.99587 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -27.4     -0.1570 ug/L       0.17915     -0.1570 ppb        0.17915 114.08%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                33.2      0.2444 ug/L       0.06898      0.2444 ppb        0.06898  28.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     104.9      5.6803 ug/L       0.62364      5.6803 ppb        0.62364  10.98%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 67
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 20:30:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4702.0	4702.0	95.8	%			20:31:55
1	Y RADIAL	5377.3	5377.3	95.22	%			20:31:55
1	Al 396.153Radial†	7431.8	7803.8	5131.4	ug/L	5131.4	ppb	20:31:55
1	Ca 317.933Radial†	2829.4	2936.5	5199.2	ug/L	5199.2	ppb	20:32:15
1	Fe 238.204 Radial†	424.4	432.2	5240.9	ug/L	5240.9	ppb	20:32:15
1	K 766.490 Radial†	28853.9	27558.8	5014.1	ug/L	5014.1	ppb	20:31:55
1	Mg 279.077 IEC†	115.4	118.0	5286.1	ug/L	5286.1	ppb	20:32:15
1	Na 589.592 Radial†	32504.2	35219.8	9879.1	ug/L	9879.1	ppb	20:31:55
1	Sr 421.552†	91622.1	95676.2	501.91	ug/L	501.91	ppb	20:31:55
1	Sc 361.383	1027536.7	1027536.7	98.851	%			20:33:14
1	Y 371.029	860937.1	860937.1	97.340	%			20:33:14
1	Ag 328.068†	126985.9	127988.2	510.48	ug/L	510.48	ppb	20:33:14
1	As 188.979†	1559.9	1614.7	507.59	ug/L	507.59	ppb	20:33:34
1	B 249.677†	25901.3	26668.5	502.03	ug/L	502.03	ppb	20:33:14
1	Ba 233.527†	78653.3	79567.8	512.50	ug/L	512.50	ppb	20:33:14
1	Be 313.107†	1610870.8	1634473.5	510.62	ug/L	510.62	ppb	20:33:14
1	Cd 226.502†	57778.0	58685.4	511.58	ug/L	511.58	ppb	20:33:14
1	Co 228.616†	30035.1	30470.6	502.06	ug/L	502.06	ppb	20:33:34
1	Cr 267.716†	55939.4	56502.0	508.44	ug/L	508.44	ppb	20:33:14
1	Cu 324.752†	198760.0	192133.4	513.36	ug/L	513.36	ppb	20:33:14
1	Mn 257.610†	537058.6	542726.0	514.36	ug/L	514.36	ppb	20:33:14
1	Mo 202.031†	9428.1	9508.5	504.96	ug/L	504.96	ppb	20:33:34
1	Ni 231.604†	25429.0	25592.7	501.13	ug/L	501.13	ppb	20:33:34
1	P 214.914†	5864.0	5667.0	2457.0	ug/L	2457.0	ppb	20:33:34
1	Pb 220.353†	5274.2	5411.0	509.51	ug/L	509.51	ppb	20:33:34
1	S 181.975 Axial†	964.8	915.9	985.74	ug/L	985.74	ppb	20:33:34
1	Sb 206.836†	1912.4	1900.0	508.03	ug/L	508.03	ppb	20:33:34
1	Se 196.026†	1108.8	1143.1	526.92	ug/L	526.92	ppb	20:33:34
1	Si 251.611†	99572.9	100172.9	2532.0	ug/L	2532.0	ppb	20:33:14
1	Sn 189.927†	3725.2	3772.9	499.61	ug/L	499.61	ppb	20:33:34
1	Ti 334.940†	364552.3	370051.2	510.28	ug/L	510.28	ppb	20:33:14
1	Tl 190.801†	2006.9	2074.5	505.00	ug/L	505.00	ppb	20:33:34
1	U 409.014†	16191.2	19153.4	493.56	ug/L	493.56	ppb	20:33:14
1	V 292.402†	86005.3	88613.8	514.02	ug/L	514.02	ppb	20:33:14
1	Zn 213.857†	69770.4	69696.0	507.65	ug/L	507.65	ppb	20:33:14
1	SiO2†	98276.4	98819.9	5344.7	ug/L	5344.7	ppb	20:34:35
2	Sc Radial	4785.6	4785.6	97.5	%			20:32:20
2	Y RADIAL	5467.4	5467.4	96.82	%			20:32:20
2	Al 396.153Radial†	7580.1	7820.5	5142.2	ug/L	5142.2	ppb	20:32:20
2	Ca 317.933Radial†	2839.7	2895.5	5126.5	ug/L	5126.5	ppb	20:32:40
2	Fe 238.204 Radial†	427.8	427.9	5189.6	ug/L	5189.6	ppb	20:32:40
2	K 766.490 Radial†	29213.9	27402.2	4985.6	ug/L	4985.6	ppb	20:32:20
2	Mg 279.077 IEC†	113.7	114.1	5112.2	ug/L	5112.2	ppb	20:32:40
2	Na 589.592 Radial†	32954.8	35089.6	9842.6	ug/L	9842.6	ppb	20:32:20
2	Sr 421.552†	93125.5	95548.5	501.24	ug/L	501.24	ppb	20:32:20
2	Sc 361.383	1026644.8	1026644.8	98.765	%			20:33:42
2	Y 371.029	859634.7	859634.7	97.192	%			20:33:42
2	Ag 328.068†	126641.1	127750.7	509.52	ug/L	509.52	ppb	20:33:42
2	As 188.979†	1566.1	1622.3	509.93	ug/L	509.93	ppb	20:34:02
2	B 249.677†	25929.8	26720.2	503.00	ug/L	503.00	ppb	20:33:42
2	Ba 233.527†	78497.2	79478.9	511.92	ug/L	511.92	ppb	20:33:42
2	Be 313.107†	1606450.2	1631413.4	509.66	ug/L	509.66	ppb	20:33:42
2	Cd 226.502†	57791.5	58749.8	512.15	ug/L	512.15	ppb	20:33:42
2	Co 228.616†	30272.6	30737.5	506.47	ug/L	506.47	ppb	20:34:02
2	Cr 267.716†	55859.6	56470.3	508.15	ug/L	508.15	ppb	20:33:42
2	Cu 324.752†	197635.0	191169.0	510.78	ug/L	510.78	ppb	20:33:42
2	Mn 257.610†	535808.2	541932.0	513.60	ug/L	513.60	ppb	20:33:42
2	Mo 202.031†	9531.1	9621.0	510.93	ug/L	510.93	ppb	20:34:02
2	Ni 231.604†	25651.1	25840.0	505.97	ug/L	505.97	ppb	20:34:02

2	P 214.914†	5929.5	5738.6	2489.6	ug/L	2489.6 ppb	20:34:02
2	Pb 220.353†	5318.5	5460.6	514.18	ug/L	514.18 ppb	20:34:02
2	S 181.975 Axial†	981.4	933.5	1004.8	ug/L	1004.8 ppb	20:34:02
2	Sb 206.836†	1941.8	1931.5	516.59	ug/L	516.59 ppb	20:34:02
2	Se 196.026†	1121.2	1156.6	532.71	ug/L	532.71 ppb	20:34:02
2	Si 251.611†	99220.3	99903.5	2525.1	ug/L	2525.1 ppb	20:33:42
2	Sn 189.927†	3770.5	3822.0	506.10	ug/L	506.10 ppb	20:34:02
2	Ti 334.940†	363645.0	369453.0	509.45	ug/L	509.45 ppb	20:33:42
2	Tl 190.801†	2036.5	2106.2	512.65	ug/L	512.65 ppb	20:34:02
2	U 409.014†	16111.0	19086.4	491.83	ug/L	491.83 ppb	20:33:42
2	V 292.402†	85677.7	88357.7	512.64	ug/L	512.64 ppb	20:33:42
2	Zn 213.857†	69552.8	69537.0	506.46	ug/L	506.46 ppb	20:33:42
2	SiO2†	98637.1	99271.6	5369.0	ug/L	5369.0 ppb	20:34:40
3	Sc Radial	4803.0	4803.0	97.8	%		20:32:45
3	Y RADIAL	5492.6	5492.6	97.26	%		20:32:45
3	Al 396.153Radial†	7555.9	7767.6	5107.2	ug/L	5107.2 ppb	20:32:45
3	Ca 317.933Radial†	2839.4	2884.6	5107.4	ug/L	5107.4 ppb	20:33:05
3	Fe 238.204 Radial†	421.7	420.1	5095.0	ug/L	5095.0 ppb	20:33:05
3	K 766.490 Radial†	29167.5	27246.0	4957.2	ug/L	4957.2 ppb	20:32:45
3	Mg 279.077 IEC†	115.1	115.1	5157.4	ug/L	5157.4 ppb	20:33:05
3	Na 589.592 Radial†	32894.9	34905.7	9791.0	ug/L	9791.0 ppb	20:32:45
3	Sr 421.552†	93186.1	95263.8	499.75	ug/L	499.75 ppb	20:32:45
3	Sc 361.383	1019479.4	1019479.4	98.076	%		20:34:09
3	Y 371.029	854951.8	854951.8	96.663	%		20:34:09
3	Ag 328.068†	125810.9	127805.5	509.71	ug/L	509.71 ppb	20:34:09
3	As 188.979†	1564.7	1632.0	512.94	ug/L	512.94 ppb	20:34:29
3	B 249.677†	25680.2	26650.2	501.69	ug/L	501.69 ppb	20:34:09
3	Ba 233.527†	77943.4	79472.8	511.88	ug/L	511.88 ppb	20:34:09
3	Be 313.107†	1597867.7	1634094.7	510.50	ug/L	510.50 ppb	20:34:09
3	Cd 226.502†	57340.4	58701.2	511.74	ug/L	511.74 ppb	20:34:09
3	Co 228.616†	30063.8	30740.1	506.51	ug/L	506.51 ppb	20:34:29
3	Cr 267.716†	55561.3	56563.7	508.99	ug/L	508.99 ppb	20:34:09
3	Cu 324.752†	196076.0	190985.9	510.29	ug/L	510.29 ppb	20:34:09
3	Mn 257.610†	531811.3	541669.7	513.34	ug/L	513.34 ppb	20:34:09
3	Mo 202.031†	9455.5	9611.8	510.43	ug/L	510.43 ppb	20:34:29
3	Ni 231.604†	25501.1	25869.5	506.55	ug/L	506.55 ppb	20:34:29
3	P 214.914†	5870.0	5720.0	2481.4	ug/L	2481.4 ppb	20:34:29
3	Pb 220.353†	5276.6	5455.7	513.72	ug/L	513.72 ppb	20:34:29
3	S 181.975 Axial†	963.3	922.1	992.48	ug/L	992.48 ppb	20:34:29
3	Sb 206.836†	1929.1	1932.3	516.76	ug/L	516.76 ppb	20:34:29
3	Se 196.026†	1093.6	1136.4	523.45	ug/L	523.45 ppb	20:34:29
3	Si 251.611†	98515.1	99890.5	2524.8	ug/L	2524.8 ppb	20:34:09
3	Sn 189.927†	3733.3	3810.9	504.63	ug/L	504.63 ppb	20:34:29
3	Ti 334.940†	360954.1	369297.1	509.23	ug/L	509.23 ppb	20:34:09
3	Tl 190.801†	2032.2	2116.3	515.09	ug/L	515.09 ppb	20:34:29
3	U 409.014†	16100.6	19190.5	494.53	ug/L	494.53 ppb	20:34:09
3	V 292.402†	85203.8	88484.2	513.38	ug/L	513.38 ppb	20:34:09
3	Zn 213.857†	68958.9	69426.4	505.65	ug/L	505.65 ppb	20:34:09
3	SiO2†	99215.7	100563.5	5439.3	ug/L	5439.3 ppb	20:34:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1024553.6	98.564	%	0.4249				0.43%
Sc Radial	4763.5	97.0	%	1.10				1.13%
Y 371.029	858507.8	97.065	%	0.3559				0.37%
Y RADIAL	5445.8	96.43	%	1.074				1.11%
Ag 328.068†	127848.1	509.91	ug/L	0.509	509.91	ppb	0.509	0.10%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 396.153Radial†	7797.3	5126.9	ug/L	17.89	5126.9	ppb	17.89	0.35%
QC value within limits for Al 396.153Radial Recovery = 102.54%								
As 188.979†	1623.0	510.16	ug/L	2.681	510.16	ppb	2.681	0.53%
QC value within limits for As 188.979 Recovery = 102.03%								
B 249.677†	26679.6	502.24	ug/L	0.680	502.24	ppb	0.680	0.14%
QC value within limits for B 249.677 Recovery = 100.45%								
Ba 233.527†	79506.5	512.10	ug/L	0.345	512.10	ppb	0.345	0.07%
QC value within limits for Ba 233.527 Recovery = 102.42%								
Be 313.107†	1633327.2	510.26	ug/L	0.521	510.26	ppb	0.521	0.10%
QC value within limits for Be 313.107 Recovery = 102.05%								
Ca 317.933Radial†	2905.5	5144.4	ug/L	48.43	5144.4	ppb	48.43	0.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.89%
Cd 226.502†            58712.1      511.82 ug/L         0.295      511.82 ppb          0.295   0.06%
   QC value within limits for Cd 226.502  Recovery = 102.36%
Co 228.616†            30649.4      505.02 ug/L         2.561      505.02 ppb          2.561   0.51%
   QC value within limits for Co 228.616  Recovery = 101.00%
Cr 267.716†            56512.0      508.53 ug/L         0.426      508.53 ppb          0.426   0.08%
   QC value within limits for Cr 267.716  Recovery = 101.71%
Cu 324.752†           191429.4      511.48 ug/L         1.650      511.48 ppb          1.650   0.32%
   QC value within limits for Cu 324.752  Recovery = 102.30%
Fe 238.204 Radial†       426.7      5175.2 ug/L         74.03      5175.2 ppb          74.03   1.43%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.50%
K 766.490 Radial†      27402.3      4985.6 ug/L         28.46      4985.6 ppb          28.46   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 99.71%
Mg 279.077 IEC†          115.8      5185.2 ug/L         90.21      5185.2 ppb          90.21   1.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.70%
Mn 257.610†           542109.3      513.77 ug/L         0.526      513.77 ppb          0.526   0.10%
   QC value within limits for Mn 257.610  Recovery = 102.75%
Mo 202.031†             9580.4      508.77 ug/L         3.312      508.77 ppb          3.312   0.65%
   QC value within limits for Mo 202.031  Recovery = 101.75%
Na 589.592 Radial†     35071.7      9837.6 ug/L         44.26      9837.6 ppb          44.26   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 98.38%
Ni 231.604†            25767.4      504.55 ug/L         2.976      504.55 ppb          2.976   0.59%
   QC value within limits for Ni 231.604  Recovery = 100.91%
P 214.914†              5708.5      2476.0 ug/L         16.93      2476.0 ppb          16.93   0.68%
   QC value within limits for P 214.914  Recovery = 99.04%
Pb 220.353†             5442.4      512.47 ug/L         2.575      512.47 ppb          2.575   0.50%
   QC value within limits for Pb 220.353  Recovery = 102.49%
S 181.975 Axial†         923.8      994.32 ug/L         9.641      994.32 ppb          9.641   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 99.43%
Sb 206.836†             1921.3      513.79 ug/L         4.990      513.79 ppb          4.990   0.97%
   QC value within limits for Sb 206.836  Recovery = 102.76%
Se 196.026†             1145.4      527.69 ug/L         4.679      527.69 ppb          4.679   0.89%
   QC value within limits for Se 196.026  Recovery = 105.54%
Si 251.611†            99989.0      2527.3 ug/L          4.11      2527.3 ppb           4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.09%
Sn 189.927†             3801.9      503.45 ug/L         3.403      503.45 ppb          3.403   0.68%
   QC value within limits for Sn 189.927  Recovery = 100.69%
Sr 421.552†            95496.2      500.97 ug/L         1.107      500.97 ppb          1.107   0.22%
   QC value within limits for Sr 421.552  Recovery = 100.19%
Ti 334.940†           369600.4      509.65 ug/L         0.552      509.65 ppb          0.552   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.93%
Tl 190.801†             2099.0      510.91 ug/L         5.263      510.91 ppb          5.263   1.03%
   QC value within limits for Tl 190.801  Recovery = 102.18%
U 409.014†             19143.5      493.31 ug/L         1.368      493.31 ppb          1.368   0.28%
   QC value within limits for U 409.014  Recovery = 98.66%
V 292.402†             88485.2      513.34 ug/L         0.690      513.34 ppb          0.690   0.13%
   QC value within limits for V 292.402  Recovery = 102.67%
Zn 213.857†            69553.1      506.59 ug/L         1.003      506.59 ppb          1.003   0.20%
   QC value within limits for Zn 213.857  Recovery = 101.32%
SiO2†                  99551.7      5384.3 ug/L         49.11      5384.3 ppb          49.11   0.91%
   QC value within limits for SiO2  Recovery = 100.69%
All analyte(s) passed QC.
```

Sequence No.: 68
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 20:36:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4812.6	4812.6	98.0	%			20:38:46
1	Y RADIAL	5523.3	5523.3	97.81	%			20:38:46
1	Al 396.153Radial†	-20.7	22.6	14.921	ug/L	14.921	ppb	20:38:46
1	Ca 317.933Radial†	20.2	2.8	4.9844	ug/L	4.9844	ppb	20:39:06
1	Fe 238.204 Radial†	10.6	-0.2	-2.6844	ug/L	-2.6844	ppb	20:39:06
1	K 766.490 Radial†	2567.1	49.4	8.9866	ug/L	8.9866	ppb	20:38:46
1	Mg 279.077 IEC†	5.1	2.7	121.07	ug/L	121.07	ppb	20:39:06
1	Na 589.592 Radial†	-1148.9	107.9	30.257	ug/L	30.257	ppb	20:38:46
1	Sr 421.552†	-2.9	4.5	0.0234	ug/L	0.0234	ppb	20:38:46
1	Sc 361.383	1040681.4	1040681.4	100.12	%			20:40:03
1	Y 371.029	885157.6	885157.6	100.08	%			20:40:03
1	Ag 328.068†	490.2	15.5	0.0601	ug/L	0.0601	ppb	20:40:08
1	As 188.979†	-47.5	-10.8	-3.3792	ug/L	-3.3792	ppb	20:40:28
1	B 249.677†	-388.8	77.8	1.4702	ug/L	1.4702	ppb	20:40:28
1	Ba 233.527†	-1.4	-1.4	-0.0090	ug/L	-0.0090	ppb	20:40:28
1	Be 313.107†	-4852.4	27.1	0.0086	ug/L	0.0086	ppb	20:40:08
1	Cd 226.502†	-231.1	4.8	0.0417	ug/L	0.0417	ppb	20:40:28
1	Co 228.616†	-85.6	0.8	0.0147	ug/L	0.0147	ppb	20:40:28
1	Cr 267.716†	85.6	-2.3	-0.0210	ug/L	-0.0210	ppb	20:40:28
1	Cu 324.752†	9023.5	75.6	0.2018	ug/L	0.2018	ppb	20:40:08
1	Mn 257.610†	623.8	46.4	0.0414	ug/L	0.0414	ppb	20:40:28
1	Mo 202.031†	40.9	11.6	0.6171	ug/L	0.6171	ppb	20:40:28
1	Ni 231.604†	114.0	-18.1	-0.3537	ug/L	-0.3537	ppb	20:40:28
1	P 214.914†	268.4	3.0	1.3352	ug/L	1.3352	ppb	20:40:28
1	Pb 220.353†	-75.6	0.1	0.0122	ug/L	0.0122	ppb	20:40:28
1	S 181.975 Axial†	52.7	-7.5	-8.0489	ug/L	-8.0489	ppb	20:40:28
1	Sb 206.836†	47.9	13.2	3.5146	ug/L	3.5146	ppb	20:40:28
1	Se 196.026†	-22.8	-1.4	-0.6463	ug/L	-0.6463	ppb	20:40:28
1	Si 251.611†	636.7	78.4	1.9742	ug/L	1.9742	ppb	20:40:28
1	Sn 189.927†	1.2	5.5	0.7321	ug/L	0.7321	ppb	20:40:28
1	Ti 334.940†	-1223.5	38.3	0.0529	ug/L	0.0529	ppb	20:40:08
1	Tl 190.801†	-49.2	-4.9	-1.1792	ug/L	-1.1792	ppb	20:40:28
1	U 409.014†	-2752.4	24.7	0.6391	ug/L	0.6391	ppb	20:40:03
1	V 292.402†	-1612.2	-1.8	0.0029	ug/L	0.0029	ppb	20:40:08
1	Zn 213.857†	878.7	-7.9	-0.0601	ug/L	-0.0601	ppb	20:40:28
1	SiO2†	640.5	40.7	2.1761	ug/L	2.1761	ppb	20:41:34
2	Sc Radial	4826.9	4826.9	98.3	%			20:39:11
2	Y RADIAL	5564.4	5564.4	98.53	%			20:39:11
2	Al 396.153Radial†	-23.3	20.1	13.261	ug/L	13.261	ppb	20:39:11
2	Ca 317.933Radial†	14.8	-2.8	-4.9687	ug/L	-4.9687	ppb	20:39:31
2	Fe 238.204 Radial†	10.1	-0.8	-9.2048	ug/L	-9.2048	ppb	20:39:31
2	K 766.490 Radial†	2555.3	29.6	5.3974	ug/L	5.3974	ppb	20:39:11
2	Mg 279.077 IEC†	1.6	-0.8	-37.045	ug/L	-37.045	ppb	20:39:31
2	Na 589.592 Radial†	-1190.6	68.9	19.327	ug/L	19.327	ppb	20:39:11
2	Sr 421.552†	-10.4	-3.1	-0.0165	ug/L	-0.0165	ppb	20:39:11
2	Sc 361.383	1027744.7	1027744.7	98.871	%			20:40:33
2	Y 371.029	873701.1	873701.1	98.783	%			20:40:33
2	Ag 328.068†	474.1	5.4	0.0186	ug/L	0.0186	ppb	20:40:38
2	As 188.979†	-34.2	2.0	0.6224	ug/L	0.6224	ppb	20:40:58
2	B 249.677†	-406.4	55.0	1.0412	ug/L	1.0412	ppb	20:40:58
2	Ba 233.527†	-8.3	-8.3	-0.0545	ug/L	-0.0545	ppb	20:40:58
2	Be 313.107†	-4885.4	-67.2	-0.0213	ug/L	-0.0213	ppb	20:40:38
2	Cd 226.502†	-238.0	-5.0	-0.0430	ug/L	-0.0430	ppb	20:40:58
2	Co 228.616†	-84.6	0.8	0.0139	ug/L	0.0139	ppb	20:40:58
2	Cr 267.716†	97.8	11.1	0.0997	ug/L	0.0997	ppb	20:40:58
2	Cu 324.752†	8932.2	96.7	0.2577	ug/L	0.2577	ppb	20:40:38
2	Mn 257.610†	614.8	45.1	0.0425	ug/L	0.0425	ppb	20:40:58
2	Mo 202.031†	36.7	7.8	0.4150	ug/L	0.4150	ppb	20:40:58
2	Ni 231.604†	129.9	-0.5	-0.0106	ug/L	-0.0106	ppb	20:40:58

2	P 214.914†	298.1	36.4	16.259	ug/L	16.259 ppb	20:40:58
2	Pb 220.353†	-83.9	-9.3	-0.8664	ug/L	-0.8664 ppb	20:40:58
2	S 181.975 Axial†	50.6	-9.0	-9.6579	ug/L	-9.6579 ppb	20:40:58
2	Sb 206.836†	35.5	1.2	0.3502	ug/L	0.3502 ppb	20:40:58
2	Se 196.026†	-35.8	-14.8	-6.6064	ug/L	-6.6064 ppb	20:40:58
2	Si 251.611†	629.3	78.9	1.9907	ug/L	1.9907 ppb	20:40:58
2	Sn 189.927†	4.1	8.5	1.1255	ug/L	1.1255 ppb	20:40:58
2	Ti 334.940†	-1360.7	-115.8	-0.1595	ug/L	-0.1595 ppb	20:40:38
2	Tl 190.801†	-47.7	-4.0	-0.9589	ug/L	-0.9589 ppb	20:40:58
2	U 409.014†	-2795.5	-53.4	-1.3802	ug/L	-1.3802 ppb	20:40:33
2	V 292.402†	-1640.2	-50.5	-0.2849	ug/L	-0.2849 ppb	20:40:38
2	Zn 213.857†	880.9	5.4	0.0419	ug/L	0.0419 ppb	20:40:58
2	SiO2†	642.6	50.9	2.7392	ug/L	2.7392 ppb	20:41:39
3	Sc Radial	4828.7	4828.7	98.4	%		20:39:36
3	Y RADIAL	5560.2	5560.2	98.46	%		20:39:36
3	Al 396.153Radial†	-29.5	13.8	9.0944	ug/L	9.0944 ppb	20:39:36
3	Ca 317.933Radial†	20.4	3.0	5.2305	ug/L	5.2305 ppb	20:39:56
3	Fe 238.204 Radial†	10.4	-0.4	-4.9292	ug/L	-4.9292 ppb	20:39:56
3	K 766.490 Radial†	2650.6	125.6	22.878	ug/L	22.878 ppb	20:39:36
3	Mg 279.077 IEC†	3.7	1.3	58.592	ug/L	58.592 ppb	20:39:56
3	Na 589.592 Radial†	-1156.4	104.1	29.209	ug/L	29.209 ppb	20:39:36
3	Sr 421.552†	11.2	18.8	0.0987	ug/L	0.0987 ppb	20:39:36
3	Sc 361.383	1029854.8	1029854.8	99.074	%		20:41:03
3	Y 371.029	874784.5	874784.5	98.905	%		20:41:03
3	Ag 328.068†	442.4	-27.5	-0.1088	ug/L	-0.1088 ppb	20:41:09
3	As 188.979†	-42.0	-5.8	-1.7955	ug/L	-1.7955 ppb	20:41:29
3	B 249.677†	-424.6	37.5	0.7097	ug/L	0.7097 ppb	20:41:29
3	Ba 233.527†	-5.0	-5.1	-0.0322	ug/L	-0.0322 ppb	20:41:29
3	Be 313.107†	-4858.6	-30.1	-0.0093	ug/L	-0.0093 ppb	20:41:09
3	Cd 226.502†	-233.7	-0.3	-0.0018	ug/L	-0.0018 ppb	20:41:29
3	Co 228.616†	-93.7	-8.2	-0.1348	ug/L	-0.1348 ppb	20:41:29
3	Cr 267.716†	124.9	38.3	0.3450	ug/L	0.3450 ppb	20:41:29
3	Cu 324.752†	8892.5	38.2	0.1017	ug/L	0.1017 ppb	20:41:09
3	Mn 257.610†	601.3	30.2	0.0270	ug/L	0.0270 ppb	20:41:29
3	Mo 202.031†	37.6	8.7	0.4599	ug/L	0.4599 ppb	20:41:29
3	Ni 231.604†	146.3	15.7	0.3079	ug/L	0.3079 ppb	20:41:29
3	P 214.914†	290.5	28.1	12.563	ug/L	12.563 ppb	20:41:29
3	Pb 220.353†	-61.3	13.7	1.2877	ug/L	1.2877 ppb	20:41:29
3	S 181.975 Axial†	57.8	-1.7	-1.8852	ug/L	-1.8852 ppb	20:41:29
3	Sb 206.836†	40.5	6.2	1.6719	ug/L	1.6719 ppb	20:41:29
3	Se 196.026†	-21.1	0.1	0.0088	ug/L	0.0088 ppb	20:41:29
3	Si 251.611†	621.1	69.3	1.7388	ug/L	1.7388 ppb	20:41:29
3	Sn 189.927†	8.5	12.9	1.7113	ug/L	1.7113 ppb	20:41:29
3	Ti 334.940†	-1217.0	32.0	0.0449	ug/L	0.0449 ppb	20:41:09
3	Tl 190.801†	-54.6	-10.9	-2.6257	ug/L	-2.6257 ppb	20:41:29
3	U 409.014†	-2796.2	-48.3	-1.2499	ug/L	-1.2499 ppb	20:41:03
3	V 292.402†	-1562.1	31.8	0.1879	ug/L	0.1879 ppb	20:41:09
3	Zn 213.857†	895.5	18.4	0.1312	ug/L	0.1312 ppb	20:41:29
3	SiO2†	678.0	85.3	4.5910	ug/L	4.5910 ppb	20:41:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1032760.3	99.353	%	0.6677				0.67%
Sc Radial	4822.8	98.2	%	0.18				0.18%
Y 371.029	877881.1	99.255	%	0.7151				0.72%
Y RADIAL	5549.3	98.27	%	0.401				0.41%
Ag 328.068†	-2.2	-0.0100	ug/L	0.08805	-0.0100	ppb	0.08805	877.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.8	12.426	ug/L	3.0019	12.426	ppb	3.0019	24.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.9	-1.5174	ug/L	2.01527	-1.5174	ppb	2.01527	132.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.8	1.0737	ug/L	0.38131	1.0737	ppb	0.38131	35.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.9	-0.0319	ug/L	0.02279	-0.0319	ppb	0.02279	71.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-23.4	-0.0073	ug/L	0.01501	-0.0073	ppb	0.01501	204.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	1.7487	ug/L	5.81876	1.7487	ppb	5.81876	332.75%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -0.2     -0.0010 ug/L       0.04236     -0.0010 ppb        0.04236 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -2.2     -0.0354 ug/L       0.08607     -0.0354 ppb        0.08607 243.13%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              15.7      0.1412 ug/L       0.18654      0.1412 ppb        0.18654 132.08%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              70.2      0.1871 ug/L       0.07906      0.1871 ppb        0.07906  42.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.5     -5.6061 ug/L       3.31252     -5.6061 ppb        3.31252  59.09%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        68.2      12.421 ug/L        9.2325      12.421 ppb         9.2325  74.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.1      47.540 ug/L       79.6362      47.540 ppb        79.6362 167.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              40.6      0.0370 ug/L       0.00864      0.0370 ppb        0.00864  23.36%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               9.4      0.4973 ug/L       0.10610      0.4973 ppb        0.10610  21.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       93.6      26.264 ug/L        6.0309      26.264 ppb         6.0309  22.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.0     -0.0188 ug/L       0.33087     -0.0188 ppb        0.33087 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               22.5      10.052 ug/L        7.7722      10.052 ppb         7.7722  77.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               1.5      0.1445 ug/L       1.08312      0.1445 ppb        1.08312 749.59%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.1     -6.5307 ug/L       4.10270     -6.5307 ppb        4.10270  62.82%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.9      1.8456 ug/L       1.58934      1.8456 ppb        1.58934  86.12%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.4     -2.4146 ug/L       3.64495     -2.4146 ppb        3.64495 150.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              75.5      1.9012 ug/L       0.14094      1.9012 ppb        0.14094   7.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               9.0      1.1896 ug/L       0.49272      1.1896 ppb        0.49272  41.42%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               6.7      0.0352 ug/L       0.05850      0.0352 ppb        0.05850 166.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -15.2     -0.0206 ug/L       0.12036     -0.0206 ppb        0.12036 585.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -6.6     -1.5879 ug/L       0.90543     -1.5879 ppb        0.90543  57.02%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -25.7     -0.6637 ug/L       1.13010     -0.6637 ppb        1.13010 170.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -6.8     -0.0314 ug/L       0.23824     -0.0314 ppb        0.23824 759.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               5.3      0.0377 ug/L       0.09572      0.0377 ppb        0.09572 254.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    59.0      3.1688 ug/L       1.26346      3.1688 ppb        1.26346  39.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 77
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 21:40:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4890.1	4890.1	99.6	%			21:42:34
1	Y RADIAL	5623.9	5623.9	99.59	%			21:42:34
1	Al 396.153Radial†	7665.8	7740.4	5089.3	ug/L	5089.3	ppb	21:42:34
1	Ca 317.933Radial†	2790.7	2784.1	4929.3	ug/L	4929.3	ppb	21:42:54
1	Fe 238.204 Radial†	419.1	409.8	4970.8	ug/L	4970.8	ppb	21:42:54
1	K 766.490 Radial†	29440.3	26988.8	4910.3	ug/L	4910.3	ppb	21:42:34
1	Mg 279.077 IEC†	112.4	110.3	4943.1	ug/L	4943.1	ppb	21:42:54
1	Na 589.592 Radial†	33401.2	34815.1	9765.6	ug/L	9765.6	ppb	21:42:34
1	Sr 421.552†	94490.9	94877.2	497.72	ug/L	497.72	ppb	21:42:34
1	Sc 361.383	1022148.7	1022148.7	98.332	%			21:43:54
1	Y 371.029	857288.2	857288.2	96.927	%			21:43:54
1	Ag 328.068†	126449.9	128120.3	510.92	ug/L	510.92	ppb	21:43:54
1	As 188.979†	1554.7	1617.7	508.48	ug/L	508.48	ppb	21:44:14
1	B 249.677†	25682.4	26584.0	500.46	ug/L	500.46	ppb	21:43:54
1	Ba 233.527†	78064.2	79388.1	511.33	ug/L	511.33	ppb	21:43:54
1	Be 313.107†	1605119.3	1637214.5	511.47	ug/L	511.47	ppb	21:43:54
1	Cd 226.502†	57460.6	58670.7	511.48	ug/L	511.48	ppb	21:43:54
1	Co 228.616†	29953.6	30547.9	503.35	ug/L	503.35	ppb	21:44:14
1	Cr 267.716†	55656.2	56512.3	508.53	ug/L	508.53	ppb	21:43:54
1	Cu 324.752†	197442.3	191853.2	512.60	ug/L	512.60	ppb	21:43:54
1	Mn 257.610†	532950.9	541412.6	513.09	ug/L	513.09	ppb	21:43:54
1	Mo 202.031†	9454.1	9585.2	509.01	ug/L	509.01	ppb	21:44:14
1	Ni 231.604†	25461.0	25760.9	504.43	ug/L	504.43	ppb	21:44:14
1	P 214.914†	5871.1	5705.5	2474.6	ug/L	2474.6	ppb	21:44:14
1	Pb 220.353†	5273.3	5438.3	512.09	ug/L	512.09	ppb	21:44:14
1	S 181.975 Axial†	963.6	919.9	990.04	ug/L	990.04	ppb	21:44:14
1	Sb 206.836†	1918.1	1916.0	512.42	ug/L	512.42	ppb	21:44:14
1	Se 196.026†	1085.7	1125.5	518.17	ug/L	518.17	ppb	21:44:14
1	Si 251.611†	99190.9	100315.4	2535.6	ug/L	2535.6	ppb	21:43:54
1	Sn 189.927†	3737.8	3805.5	503.90	ug/L	503.90	ppb	21:44:14
1	Ti 334.940†	361901.3	369299.2	509.22	ug/L	509.22	ppb	21:43:54
1	Tl 190.801†	2002.0	2080.2	506.36	ug/L	506.36	ppb	21:44:14
1	U 409.014†	16098.1	19145.1	493.38	ug/L	493.38	ppb	21:43:54
1	V 292.402†	85422.5	88479.7	513.34	ug/L	513.34	ppb	21:43:54
1	Zn 213.857†	69272.5	69561.7	506.68	ug/L	506.68	ppb	21:43:54
1	SiO2†	99897.5	100992.6	5462.7	ug/L	5462.7	ppb	21:45:14
2	Sc Radial	4765.6	4765.6	97.1	%			21:43:00
2	Y RADIAL	5427.4	5427.4	96.11	%			21:43:00
2	Al 396.153Radial†	7485.7	7755.9	5099.5	ug/L	5099.5	ppb	21:43:00
2	Ca 317.933Radial†	2824.8	2892.4	5121.1	ug/L	5121.1	ppb	21:43:20
2	Fe 238.204 Radial†	425.1	427.0	5178.2	ug/L	5178.2	ppb	21:43:20
2	K 766.490 Radial†	28845.6	27148.6	4939.4	ug/L	4939.4	ppb	21:43:00
2	Mg 279.077 IEC†	119.3	120.4	5392.1	ug/L	5392.1	ppb	21:43:20
2	Na 589.592 Radial†	32528.1	34792.0	9759.1	ug/L	9759.1	ppb	21:43:00
2	Sr 421.552†	91997.4	94787.7	497.25	ug/L	497.25	ppb	21:43:00
2	Sc 361.383	1020467.1	1020467.1	98.171	%			21:44:21
2	Y 371.029	857323.5	857323.5	96.931	%			21:44:21
2	Ag 328.068†	126179.2	128056.4	510.74	ug/L	510.74	ppb	21:44:21
2	As 188.979†	1571.5	1637.4	514.66	ug/L	514.66	ppb	21:44:41
2	B 249.677†	25622.6	26566.2	500.09	ug/L	500.09	ppb	21:44:21
2	Ba 233.527†	77898.1	79349.7	511.09	ug/L	511.09	ppb	21:44:21
2	Be 313.107†	1603707.5	1638466.3	511.86	ug/L	511.86	ppb	21:44:21
2	Cd 226.502†	57368.7	58673.4	511.49	ug/L	511.49	ppb	21:44:21
2	Co 228.616†	30031.3	30677.3	505.48	ug/L	505.48	ppb	21:44:41
2	Cr 267.716†	55637.5	56586.5	509.20	ug/L	509.20	ppb	21:44:21
2	Cu 324.752†	196554.4	191279.7	511.08	ug/L	511.08	ppb	21:44:21
2	Mn 257.610†	531554.1	540882.9	512.60	ug/L	512.60	ppb	21:44:21
2	Mo 202.031†	9476.6	9624.0	511.09	ug/L	511.09	ppb	21:44:41
2	Ni 231.604†	25515.7	25859.2	506.35	ug/L	506.35	ppb	21:44:41

2	P 214.914†	5884.1	5728.6	2485.0 ug/L	2485.0 ppb	21:44:41
2	Pb 220.353†	5312.4	5486.9	516.65 ug/L	516.65 ppb	21:44:41
2	S 181.975 Axial†	972.0	930.0	1000.9 ug/L	1000.9 ppb	21:44:41
2	Sb 206.836†	1912.0	1913.0	511.65 ug/L	511.65 ppb	21:44:41
2	Se 196.026†	1112.6	1154.7	531.83 ug/L	531.83 ppb	21:44:41
2	Si 251.611†	98859.6	100144.2	2531.2 ug/L	2531.2 ppb	21:44:21
2	Sn 189.927†	3730.3	3804.2	503.74 ug/L	503.74 ppb	21:44:41
2	Ti 334.940†	361448.2	369444.2	509.44 ug/L	509.44 ppb	21:44:21
2	Tl 190.801†	2029.1	2111.1	513.84 ug/L	513.84 ppb	21:44:41
2	U 409.014†	15945.8	19016.9	490.03 ug/L	490.03 ppb	21:44:21
2	V 292.402†	85399.1	88599.0	514.03 ug/L	514.03 ppb	21:44:21
2	Zn 213.857†	69184.0	69587.6	506.82 ug/L	506.82 ppb	21:44:21
2	SiO2†	98500.4	99736.9	5394.3 ug/L	5394.3 ppb	21:45:19
3	Sc Radial	4812.4	4812.4	98.0 %		21:43:25
3	Y RADIAL	5504.8	5504.8	97.48 %		21:43:25
3	Al 396.153Radial†	7617.7	7815.5	5138.9 ug/L	5138.9 ppb	21:43:25
3	Ca 317.933Radial†	2787.1	2825.7	5002.9 ug/L	5002.9 ppb	21:43:45
3	Fe 238.204 Radial†	414.7	412.1	4998.8 ug/L	4998.8 ppb	21:43:45
3	K 766.490 Radial†	29333.1	27356.9	4977.3 ug/L	4977.3 ppb	21:43:25
3	Mg 279.077 IEC†	111.3	111.1	4976.6 ug/L	4976.6 ppb	21:43:45
3	Na 589.592 Radial†	33369.1	35324.0	9908.4 ug/L	9908.4 ppb	21:43:25
3	Sr 421.552†	94268.0	96182.1	504.57 ug/L	504.57 ppb	21:43:25
3	Sc 361.383	1021109.7	1021109.7	98.232 %		21:44:48
3	Y 371.029	856254.7	856254.7	96.810 %		21:44:48
3	Ag 328.068†	126137.4	127933.0	510.19 ug/L	510.19 ppb	21:44:48
3	As 188.979†	1558.4	1623.0	510.15 ug/L	510.15 ppb	21:45:09
3	B 249.677†	25675.0	26603.0	500.82 ug/L	500.82 ppb	21:44:48
3	Ba 233.527†	78080.4	79485.3	511.96 ug/L	511.96 ppb	21:44:48
3	Be 313.107†	1599607.4	1633264.3	510.24 ug/L	510.24 ppb	21:44:48
3	Cd 226.502†	57353.5	58621.2	511.05 ug/L	511.05 ppb	21:44:48
3	Co 228.616†	30025.6	30652.1	505.07 ug/L	505.07 ppb	21:45:09
3	Cr 267.716†	55545.8	56457.5	508.03 ug/L	508.03 ppb	21:44:48
3	Cu 324.752†	197040.1	191648.1	512.05 ug/L	512.05 ppb	21:44:48
3	Mn 257.610†	532363.3	541365.8	513.05 ug/L	513.05 ppb	21:44:48
3	Mo 202.031†	9466.7	9607.8	510.21 ug/L	510.21 ppb	21:45:09
3	Ni 231.604†	25449.1	25775.1	504.70 ug/L	504.70 ppb	21:45:09
3	P 214.914†	5864.4	5704.8	2474.4 ug/L	2474.4 ppb	21:45:09
3	Pb 220.353†	5291.7	5462.5	514.37 ug/L	514.37 ppb	21:45:09
3	S 181.975 Axial†	975.2	932.6	1003.8 ug/L	1003.8 ppb	21:45:09
3	Sb 206.836†	1921.5	1921.5	513.90 ug/L	513.90 ppb	21:45:09
3	Se 196.026†	1089.8	1130.8	520.59 ug/L	520.59 ppb	21:45:09
3	Si 251.611†	99112.5	100338.3	2536.1 ug/L	2536.1 ppb	21:44:48
3	Sn 189.927†	3733.7	3805.2	503.86 ug/L	503.86 ppb	21:45:09
3	Ti 334.940†	361617.6	369385.0	509.35 ug/L	509.35 ppb	21:44:48
3	Tl 190.801†	2021.6	2102.3	511.70 ug/L	511.70 ppb	21:45:09
3	U 409.014†	16093.5	19157.0	493.68 ug/L	493.68 ppb	21:44:48
3	V 292.402†	85298.0	88441.4	513.14 ug/L	513.14 ppb	21:44:48
3	Zn 213.857†	69230.4	69590.6	506.89 ug/L	506.89 ppb	21:44:48
3	SiO2†	98371.3	99542.4	5383.8 ug/L	5383.8 ppb	21:45:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021241.9	98.245	%	0.0816				0.08%
Sc Radial	4822.7	98.2	%	1.28				1.30%
Y 371.029	856955.5	96.889	%	0.0686				0.07%
Y RADIAL	5518.7	97.73	%	1.752				1.79%
Ag 328.068†	128036.6	510.62	ug/L	0.383	510.62	ppb	0.383	0.07%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7770.6	5109.2	ug/L	26.19	5109.2	ppb	26.19	0.51%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	1626.1	511.10	ug/L	3.194	511.10	ppb	3.194	0.62%
QC value within limits for As 188.979 Recovery = 102.22%								
B 249.677†	26584.4	500.46	ug/L	0.361	500.46	ppb	0.361	0.07%
QC value within limits for B 249.677 Recovery = 100.09%								
Ba 233.527†	79407.7	511.46	ug/L	0.446	511.46	ppb	0.446	0.09%
QC value within limits for Ba 233.527 Recovery = 102.29%								
Be 313.107†	1636315.1	511.19	ug/L	0.847	511.19	ppb	0.847	0.17%
QC value within limits for Be 313.107 Recovery = 102.24%								
Ca 317.933Radial†	2834.1	5017.8	ug/L	96.77	5017.8	ppb	96.77	1.93%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.36%
Cd 226.502†            58655.1      511.34 ug/L         0.252      511.34 ppb          0.252   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.27%
Co 228.616†            30625.8      504.63 ug/L         1.131      504.63 ppb          1.131   0.22%
   QC value within limits for Co 228.616  Recovery = 100.93%
Cr 267.716†            56518.8      508.59 ug/L         0.585      508.59 ppb          0.585   0.11%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191593.7      511.91 ug/L         0.770      511.91 ppb          0.770   0.15%
   QC value within limits for Cu 324.752  Recovery = 102.38%
Fe 238.204 Radial†       416.3      5049.2 ug/L        112.52      5049.2 ppb         112.52   2.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.98%
K 766.490 Radial†      27164.8      4942.4 ug/L         33.60      4942.4 ppb          33.60   0.68%
   QC value within limits for K 766.490 Radial  Recovery = 98.85%
Mg 279.077 IEC†          113.9      5103.9 ug/L        250.10      5103.9 ppb         250.10   4.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.08%
Mn 257.610†           541220.4      512.91 ug/L         0.271      512.91 ppb          0.271   0.05%
   QC value within limits for Mn 257.610  Recovery = 102.58%
Mo 202.031†             9605.7      510.10 ug/L         1.040      510.10 ppb          1.040   0.20%
   QC value within limits for Mo 202.031  Recovery = 102.02%
Na 589.592 Radial†     34977.0      9811.0 ug/L         84.35      9811.0 ppb          84.35   0.86%
   QC value within limits for Na 589.592 Radial  Recovery = 98.11%
Ni 231.604†            25798.4      505.16 ug/L         1.041      505.16 ppb          1.041   0.21%
   QC value within limits for Ni 231.604  Recovery = 101.03%
P 214.914†              5713.0      2478.0 ug/L          6.08      2478.0 ppb           6.08   0.25%
   QC value within limits for P 214.914  Recovery = 99.12%
Pb 220.353†             5462.6      514.37 ug/L         2.277      514.37 ppb          2.277   0.44%
   QC value within limits for Pb 220.353  Recovery = 102.87%
S 181.975 Axial†         927.5      998.25 ug/L         7.249      998.25 ppb          7.249   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 99.82%
Sb 206.836†             1916.8      512.66 ug/L         1.139      512.66 ppb          1.139   0.22%
   QC value within limits for Sb 206.836  Recovery = 102.53%
Se 196.026†             1137.0      523.53 ug/L         7.291      523.53 ppb          7.291   1.39%
   QC value within limits for Se 196.026  Recovery = 104.71%
Si 251.611†           100266.0      2534.3 ug/L          2.71      2534.3 ppb           2.71   0.11%
   QC value within limits for Si 251.611  Recovery = 101.37%
Sn 189.927†             3805.0      503.83 ug/L         0.082      503.83 ppb          0.082   0.02%
   QC value within limits for Sn 189.927  Recovery = 100.77%
Sr 421.552†            95282.3      499.85 ug/L         4.095      499.85 ppb          4.095   0.82%
   QC value within limits for Sr 421.552  Recovery = 99.97%
Ti 334.940†           369376.1      509.34 ug/L         0.106      509.34 ppb          0.106   0.02%
   QC value within limits for Ti 334.940  Recovery = 101.87%
Tl 190.801†             2097.9      510.63 ug/L         3.852      510.63 ppb          3.852   0.75%
   QC value within limits for Tl 190.801  Recovery = 102.13%
U 409.014†             19106.3      492.36 ug/L         2.023      492.36 ppb          2.023   0.41%
   QC value within limits for U 409.014  Recovery = 98.47%
V 292.402†             88506.7      513.50 ug/L         0.466      513.50 ppb          0.466   0.09%
   QC value within limits for V 292.402  Recovery = 102.70%
Zn 213.857†            69580.0      506.80 ug/L         0.106      506.80 ppb          0.106   0.02%
   QC value within limits for Zn 213.857  Recovery = 101.36%
SiO2†                 100090.6      5413.6 ug/L         42.84      5413.6 ppb          42.84   0.79%
   QC value within limits for SiO2  Recovery = 101.24%
All analyte(s) passed QC.
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Sequence No.: 78
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 21:47:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5040.1	5040.1	103	%			21:49:26
1	Y RADIAL	5787.6	5787.6	102.5	%			21:49:26
1	Al 396.153Radial†	-21.8	22.6	14.879	ug/L	14.879	ppb	21:49:26
1	Ca 317.933Radial†	19.4	1.1	1.9413	ug/L	1.9413	ppb	21:49:46
1	Fe 238.204 Radial†	9.2	-2.1	-25.139	ug/L	-25.139	ppb	21:49:46
1	K 766.490 Radial†	2572.3	-63.7	-11.628	ug/L	-11.628	ppb	21:49:26
1	Mg 279.077 IEC†	5.2	2.5	113.89	ug/L	113.89	ppb	21:49:46
1	Na 589.592 Radial†	-1229.6	82.2	23.052	ug/L	23.052	ppb	21:49:26
1	Sr 421.552†	6.3	13.6	0.0713	ug/L	0.0713	ppb	21:49:26
1	Sc 361.383	1022554.3	1022554.3	98.371	%			21:50:43
1	Y 371.029	869982.1	869982.1	98.362	%			21:50:43
1	Ag 328.068†	423.0	-44.0	-0.1825	ug/L	-0.1825	ppb	21:50:48
1	As 188.979†	-36.4	-0.4	-0.1243	ug/L	-0.1243	ppb	21:51:08
1	B 249.677†	-421.5	37.7	0.7157	ug/L	0.7157	ppb	21:51:08
1	Ba 233.527†	3.9	3.9	0.0243	ug/L	0.0243	ppb	21:51:08
1	Be 313.107†	-4890.7	-97.8	-0.0306	ug/L	-0.0306	ppb	21:50:48
1	Cd 226.502†	-227.2	4.7	0.0433	ug/L	0.0433	ppb	21:51:08
1	Co 228.616†	-103.0	-18.4	-0.3017	ug/L	-0.3017	ppb	21:51:08
1	Cr 267.716†	110.5	24.6	0.2202	ug/L	0.2202	ppb	21:51:08
1	Cu 324.752†	8928.6	138.9	0.3698	ug/L	0.3698	ppb	21:50:48
1	Mn 257.610†	606.5	39.9	0.0331	ug/L	0.0331	ppb	21:51:08
1	Mo 202.031†	37.4	8.7	0.4619	ug/L	0.4619	ppb	21:51:08
1	Ni 231.604†	107.3	-22.8	-0.4470	ug/L	-0.4470	ppb	21:51:08
1	P 214.914†	274.6	14.0	6.2571	ug/L	6.2571	ppb	21:51:08
1	Pb 220.353†	-80.1	-5.9	-0.5461	ug/L	-0.5461	ppb	21:51:08
1	S 181.975 Axial†	61.4	2.3	2.5171	ug/L	2.5171	ppb	21:51:08
1	Sb 206.836†	39.3	5.3	1.4134	ug/L	1.4134	ppb	21:51:08
1	Se 196.026†	-24.6	-3.7	-1.7129	ug/L	-1.7129	ppb	21:51:08
1	Si 251.611†	646.6	99.6	2.5235	ug/L	2.5235	ppb	21:51:08
1	Sn 189.927†	2.5	6.9	0.9141	ug/L	0.9141	ppb	21:51:08
1	Ti 334.940†	-1285.7	-46.6	-0.0640	ug/L	-0.0640	ppb	21:50:48
1	Tl 190.801†	-49.4	-6.0	-1.4524	ug/L	-1.4524	ppb	21:51:08
1	U 409.014†	-2742.7	-14.1	-0.3621	ug/L	-0.3621	ppb	21:50:43
1	V 292.402†	-1590.1	-7.9	-0.0330	ug/L	-0.0330	ppb	21:50:48
1	Zn 213.857†	912.1	41.6	0.3066	ug/L	0.3066	ppb	21:51:08
1	SiO2†	713.3	126.1	6.8394	ug/L	6.8394	ppb	21:52:14
2	Sc Radial	4780.7	4780.7	97.4	%			21:49:51
2	Y RADIAL	5465.2	5465.2	96.78	%			21:49:51
2	Al 396.153Radial†	-65.1	-23.1	-15.291	ug/L	-15.291	ppb	21:49:51
2	Ca 317.933Radial†	18.3	0.9	1.6184	ug/L	1.6184	ppb	21:50:11
2	Fe 238.204 Radial†	12.2	1.5	18.657	ug/L	18.657	ppb	21:50:11
2	K 766.490 Radial†	2589.3	89.6	16.327	ug/L	16.327	ppb	21:49:51
2	Mg 279.077 IEC†	1.6	-0.9	-40.434	ug/L	-40.434	ppb	21:50:11
2	Na 589.592 Radial†	-1197.6	50.1	14.044	ug/L	14.044	ppb	21:49:51
2	Sr 421.552†	-31.6	-25.1	-0.1315	ug/L	-0.1315	ppb	21:49:51
2	Sc 361.383	1030244.0	1030244.0	99.111	%			21:51:13
2	Y 371.029	876739.0	876739.0	99.126	%			21:51:13
2	Ag 328.068†	344.0	-127.0	-0.5001	ug/L	-0.5001	ppb	21:51:18
2	As 188.979†	-28.7	7.7	2.3958	ug/L	2.3958	ppb	21:51:38
2	B 249.677†	-466.9	-5.0	-0.0974	ug/L	-0.0974	ppb	21:51:38
2	Ba 233.527†	-1.3	-1.3	-0.0087	ug/L	-0.0087	ppb	21:51:38
2	Be 313.107†	-4823.4	7.3	0.0023	ug/L	0.0023	ppb	21:51:18
2	Cd 226.502†	-241.9	-8.4	-0.0746	ug/L	-0.0746	ppb	21:51:38
2	Co 228.616†	-74.4	11.2	0.1861	ug/L	0.1861	ppb	21:51:38
2	Cr 267.716†	92.2	5.3	0.0466	ug/L	0.0466	ppb	21:51:38
2	Cu 324.752†	8841.2	-17.0	-0.0446	ug/L	-0.0446	ppb	21:51:18
2	Mn 257.610†	621.8	50.7	0.0507	ug/L	0.0507	ppb	21:51:38
2	Mo 202.031†	41.4	12.5	0.6650	ug/L	0.6650	ppb	21:51:38
2	Ni 231.604†	151.6	21.1	0.4123	ug/L	0.4123	ppb	21:51:38

2	P 214.914†	285.1	22.5	10.085	ug/L	10.085 ppb	21:51:38
2	Pb 220.353†	-78.4	-3.6	-0.3399	ug/L	-0.3399 ppb	21:51:38
2	S 181.975 Axial†	60.3	0.7	0.7490	ug/L	0.7490 ppb	21:51:38
2	Sb 206.836†	49.6	15.4	4.0872	ug/L	4.0872 ppb	21:51:38
2	Se 196.026†	-27.2	-6.0	-2.6014	ug/L	-2.6014 ppb	21:51:38
2	Si 251.611†	664.9	113.2	2.8554	ug/L	2.8554 ppb	21:51:38
2	Sn 189.927†	4.5	8.9	1.1761	ug/L	1.1761 ppb	21:51:38
2	Ti 334.940†	-1220.8	28.7	0.0395	ug/L	0.0395 ppb	21:51:18
2	Tl 190.801†	-50.5	-6.6	-1.6073	ug/L	-1.6073 ppb	21:51:38
2	U 409.014†	-2733.6	15.9	0.4089	ug/L	0.4089 ppb	21:51:13
2	V 292.402†	-1696.8	-103.5	-0.5860	ug/L	-0.5860 ppb	21:51:18
2	Zn 213.857†	905.4	27.9	0.2022	ug/L	0.2022 ppb	21:51:38
2	SiO2†	685.1	92.2	4.9640	ug/L	4.9640 ppb	21:52:19
3	Sc Radial	4788.6	4788.6	97.5	%		21:50:16
3	Y RADIAL	5467.5	5467.5	96.82	%		21:50:16
3	Al 396.153Radial†	-36.4	6.4	4.2310	ug/L	4.2310 ppb	21:50:16
3	Ca 317.933Radial†	17.4	-0.0	-0.0388	ug/L	-0.0388 ppb	21:50:36
3	Fe 238.204 Radial†	11.4	0.7	8.1139	ug/L	8.1139 ppb	21:50:36
3	K 766.490 Radial†	2680.4	178.8	32.565	ug/L	32.565 ppb	21:50:16
3	Mg 279.077 IEC†	5.7	3.4	150.15	ug/L	150.15 ppb	21:50:36
3	Na 589.592 Radial†	-1132.3	119.0	33.377	ug/L	33.377 ppb	21:50:16
3	Sr 421.552†	1.2	8.7	0.0455	ug/L	0.0455 ppb	21:50:16
3	Sc 361.383	1026701.1	1026701.1	98.770	%		21:51:43
3	Y 371.029	872343.9	872343.9	98.629	%		21:51:43
3	Ag 328.068†	397.4	-71.7	-0.2845	ug/L	-0.2845 ppb	21:51:48
3	As 188.979†	-39.7	-3.6	-1.1085	ug/L	-1.1085 ppb	21:52:08
3	B 249.677†	-435.9	24.8	0.4672	ug/L	0.4672 ppb	21:52:08
3	Ba 233.527†	-8.3	-8.4	-0.0542	ug/L	-0.0542 ppb	21:52:08
3	Be 313.107†	-4848.9	-35.3	-0.0111	ug/L	-0.0111 ppb	21:51:48
3	Cd 226.502†	-222.3	10.6	0.0913	ug/L	0.0913 ppb	21:52:08
3	Co 228.616†	-93.9	-8.8	-0.1438	ug/L	-0.1438 ppb	21:52:08
3	Cr 267.716†	102.3	15.8	0.1406	ug/L	0.1406 ppb	21:52:08
3	Cu 324.752†	8943.6	117.5	0.3142	ug/L	0.3142 ppb	21:51:48
3	Mn 257.610†	596.0	26.8	0.0234	ug/L	0.0234 ppb	21:52:08
3	Mo 202.031†	36.7	7.9	0.4215	ug/L	0.4215 ppb	21:52:08
3	Ni 231.604†	105.8	-24.8	-0.4865	ug/L	-0.4865 ppb	21:52:08
3	P 214.914†	272.3	10.6	4.7081	ug/L	4.7081 ppb	21:52:08
3	Pb 220.353†	-82.0	-7.5	-0.7002	ug/L	-0.7002 ppb	21:52:08
3	S 181.975 Axial†	56.1	-3.3	-3.5446	ug/L	-3.5446 ppb	21:52:08
3	Sb 206.836†	43.6	9.6	2.5399	ug/L	2.5399 ppb	21:52:08
3	Se 196.026†	-33.2	-12.2	-5.3898	ug/L	-5.3898 ppb	21:52:08
3	Si 251.611†	651.9	102.4	2.5795	ug/L	2.5795 ppb	21:52:08
3	Sn 189.927†	3.0	7.3	0.9696	ug/L	0.9696 ppb	21:52:08
3	Ti 334.940†	-1272.6	-28.0	-0.0394	ug/L	-0.0394 ppb	21:51:48
3	Tl 190.801†	-53.0	-9.4	-2.2674	ug/L	-2.2674 ppb	21:52:08
3	U 409.014†	-2674.4	66.3	1.7135	ug/L	1.7135 ppb	21:51:43
3	V 292.402†	-1650.3	-62.3	-0.3451	ug/L	-0.3451 ppb	21:51:48
3	Zn 213.857†	906.9	32.6	0.2365	ug/L	0.2365 ppb	21:52:08
3	SiO2†	687.8	97.4	5.2451	ug/L	5.2451 ppb	21:52:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1026499.8	98.751	%	0.3703				0.37%
Sc Radial	4869.8	99.2	%	3.00				3.03%
Y 371.029	873021.7	98.706	%	0.3877				0.39%
Y RADIAL	5573.4	98.69	%	3.284				3.33%
Ag 328.068†	-80.9	-0.3224	ug/L	0.16218	-0.3224	ppb	0.16218	50.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.0	1.2729	ug/L	15.30100	1.2729	ppb	15.30100	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	0.3877	ug/L	1.80737	0.3877	ppb	1.80737	466.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.1	0.3618	ug/L	0.41666	0.3618	ppb	0.41666	115.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0129	ug/L	0.03943	-0.0129	ppb	0.03943	306.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-41.9	-0.0131	ug/L	0.01657	-0.0131	ppb	0.01657	126.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.7	1.1736	ug/L	1.06233	1.1736	ppb	1.06233	90.52%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 2.3      0.0200 ug/L       0.08538      0.0200 ppb        0.08538 427.65%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.0865 ug/L       0.24890     -0.0865 ppb        0.24890 287.89%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                15.2      0.1358 ug/L       0.08694      0.1358 ppb        0.08694  64.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                79.8      0.2131 ug/L       0.22489      0.2131 ppb        0.22489 105.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.5441 ug/L      22.85815      0.5441 ppb       22.85815 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          68.2      12.422 ug/L       22.3536      12.422 ppb        22.3536 179.96%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.7      74.535 ug/L      101.2033      74.535 ppb       101.2033 135.78%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                39.1      0.0357 ug/L       0.01383      0.0357 ppb        0.01383  38.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.7      0.5162 ug/L       0.13051      0.5162 ppb        0.13051  25.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         83.7      23.491 ug/L        9.6740      23.491 ppb         9.6740  41.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -8.9     -0.1737 ug/L       0.50791     -0.1737 ppb        0.50791 292.40%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.7      7.0166 ug/L       2.76756      7.0166 ppb        2.76756  39.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -5.6     -0.5287 ug/L       0.18076     -0.5287 ppb        0.18076  34.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.1     -0.0928 ug/L       3.11728     -0.0928 ppb        3.11728 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                10.1      2.6802 ug/L       1.34240      2.6802 ppb        1.34240  50.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.3     -3.2347 ug/L       1.91851     -3.2347 ppb        1.91851  59.31%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.1      2.6528 ug/L       0.17767      2.6528 ppb        0.17767   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.7      1.0199 ug/L       0.13804      1.0199 ppb        0.13804  13.53%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.9     -0.0049 ug/L       0.11036     -0.0049 ppb        0.11036 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.3     -0.0213 ug/L       0.05410     -0.0213 ppb        0.05410 254.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -7.3     -1.7757 ug/L       0.43279     -1.7757 ppb        0.43279  24.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 22.7      0.5867 ug/L       1.04917      0.5867 ppb        1.04917 178.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -57.9     -0.3214 ug/L       0.27724     -0.3214 ppb        0.27724  86.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                34.0      0.2484 ug/L       0.05318      0.2484 ppb        0.05318  21.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     105.2      5.6828 ug/L       1.01143      5.6828 ppb        1.01143  17.80%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2009 23:14:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4714.7	4714.7	96.0	%			23:15:56
1	Y RADIAL	5400.3	5400.3	95.63	%			23:15:56
1	Al 396.153Radial†	7509.6	7863.9	5171.0	ug/L	5171.0	ppb	23:15:56
1	Ca 317.933Radial†	2790.4	2887.9	5113.2	ug/L	5113.2	ppb	23:16:16
1	Fe 238.204 Radial†	410.7	416.7	5053.8	ug/L	5053.8	ppb	23:16:16
1	K 766.490 Radial†	28936.2	27563.4	5015.0	ug/L	5015.0	ppb	23:15:56
1	Mg 279.077 IEC†	112.0	114.1	5112.4	ug/L	5112.4	ppb	23:16:16
1	Na 589.592 Radial†	32821.6	35458.9	9946.2	ug/L	9946.2	ppb	23:15:56
1	Sr 421.552†	92586.5	96423.0	505.83	ug/L	505.83	ppb	23:15:56
1	Sc 361.383	1017505.4	1017505.4	97.886	%			23:17:16
1	Y 371.029	854009.4	854009.4	96.556	%			23:17:16
1	Ag 328.068†	125397.8	127632.4	509.01	ug/L	509.01	ppb	23:17:16
1	As 188.979†	1550.0	1620.1	509.24	ug/L	509.24	ppb	23:17:36
1	B 249.677†	25388.6	26403.1	497.03	ug/L	497.03	ppb	23:17:16
1	Ba 233.527†	77356.9	79027.9	509.02	ug/L	509.02	ppb	23:17:16
1	Be 313.107†	1585415.9	1624534.7	507.52	ug/L	507.52	ppb	23:17:16
1	Cd 226.502†	56729.9	58190.9	507.29	ug/L	507.29	ppb	23:17:16
1	Co 228.616†	29804.8	30534.9	503.13	ug/L	503.13	ppb	23:17:36
1	Cr 267.716†	55236.9	56342.3	507.00	ug/L	507.00	ppb	23:17:16
1	Cu 324.752†	195572.8	190859.6	509.95	ug/L	509.95	ppb	23:17:16
1	Mn 257.610†	528787.2	539632.3	511.41	ug/L	511.41	ppb	23:17:16
1	Mo 202.031†	9376.8	9550.1	507.15	ug/L	507.15	ppb	23:17:36
1	Ni 231.604†	25212.9	25625.6	501.78	ug/L	501.78	ppb	23:17:36
1	P 214.914†	5821.7	5682.3	2464.6	ug/L	2464.6	ppb	23:17:36
1	Pb 220.353†	5232.7	5421.3	510.50	ug/L	510.50	ppb	23:17:36
1	S 181.975 Axial†	966.0	926.8	997.47	ug/L	997.47	ppb	23:17:36
1	Sb 206.836†	1917.3	1924.1	514.51	ug/L	514.51	ppb	23:17:36
1	Se 196.026†	1094.7	1139.7	524.74	ug/L	524.74	ppb	23:17:36
1	Si 251.611†	98033.7	99593.5	2517.3	ug/L	2517.3	ppb	23:17:16
1	Sn 189.927†	3704.6	3788.9	501.72	ug/L	501.72	ppb	23:17:36
1	Ti 334.940†	359437.1	368461.3	508.08	ug/L	508.08	ppb	23:17:16
1	Tl 190.801†	1999.1	2086.6	507.89	ug/L	507.89	ppb	23:17:36
1	U 409.014†	16020.8	19140.8	493.26	ug/L	493.26	ppb	23:17:16
1	V 292.402†	84856.9	88298.3	512.27	ug/L	512.27	ppb	23:17:16
1	Zn 213.857†	68408.6	69000.6	502.56	ug/L	502.56	ppb	23:17:16
1	SiO2†	97937.3	99453.7	5379.1	ug/L	5379.1	ppb	23:18:36
2	Sc Radial	4693.4	4693.4	95.6	%			23:16:22
2	Y RADIAL	5372.6	5372.6	95.14	%			23:16:22
2	Al 396.153Radial†	7426.4	7812.5	5137.0	ug/L	5137.0	ppb	23:16:22
2	Ca 317.933Radial†	2765.6	2875.2	5090.7	ug/L	5090.7	ppb	23:16:42
2	Fe 238.204 Radial†	408.7	416.5	5051.8	ug/L	5051.8	ppb	23:16:42
2	K 766.490 Radial†	28682.5	27434.9	4991.6	ug/L	4991.6	ppb	23:16:22
2	Mg 279.077 IEC†	110.2	112.8	5053.5	ug/L	5053.5	ppb	23:16:42
2	Na 589.592 Radial†	32168.8	34931.3	9798.2	ug/L	9798.2	ppb	23:16:22
2	Sr 421.552†	91350.1	95567.6	501.34	ug/L	501.34	ppb	23:16:22
2	Sc 361.383	1017546.5	1017546.5	97.890	%			23:17:43
2	Y 371.029	853335.7	853335.7	96.480	%			23:17:43
2	Ag 328.068†	125443.7	127674.0	509.17	ug/L	509.17	ppb	23:17:43
2	As 188.979†	1549.8	1619.8	509.14	ug/L	509.14	ppb	23:18:03
2	B 249.677†	25451.0	26465.8	498.22	ug/L	498.22	ppb	23:17:43
2	Ba 233.527†	77553.5	79225.5	510.29	ug/L	510.29	ppb	23:17:43
2	Be 313.107†	1585661.2	1624719.8	507.58	ug/L	507.58	ppb	23:17:43
2	Cd 226.502†	56912.5	58375.1	508.90	ug/L	508.90	ppb	23:17:43
2	Co 228.616†	29868.0	30598.2	504.17	ug/L	504.17	ppb	23:18:03
2	Cr 267.716†	55200.9	56303.2	506.64	ug/L	506.64	ppb	23:17:43
2	Cu 324.752†	195984.2	191271.9	511.05	ug/L	511.05	ppb	23:17:43
2	Mn 257.610†	529531.6	540370.9	512.11	ug/L	512.11	ppb	23:17:43
2	Mo 202.031†	9388.3	9561.5	507.76	ug/L	507.76	ppb	23:18:03
2	Ni 231.604†	25250.9	25663.4	502.52	ug/L	502.52	ppb	23:18:03

2	P 214.914†	5824.6	5685.0	2465.7 ug/L	2465.7 ppb	23:18:03
2	Pb 220.353†	5245.7	5434.3	511.72 ug/L	511.72 ppb	23:18:03
2	S 181.975 Axial†	973.1	933.9	1005.2 ug/L	1005.2 ppb	23:18:03
2	Sb 206.836†	1933.9	1941.0	519.07 ug/L	519.07 ppb	23:18:03
2	Se 196.026†	1094.7	1139.7	524.72 ug/L	524.72 ppb	23:18:03
2	Si 251.611†	98139.4	99697.5	2519.9 ug/L	2519.9 ppb	23:17:43
2	Sn 189.927†	3740.9	3825.9	506.60 ug/L	506.60 ppb	23:18:03
2	Ti 334.940†	360172.5	369197.8	509.09 ug/L	509.09 ppb	23:17:43
2	Tl 190.801†	1998.4	2085.7	507.70 ug/L	507.70 ppb	23:18:03
2	U 409.014†	16275.1	19400.0	499.96 ug/L	499.96 ppb	23:17:43
2	V 292.402†	84923.8	88363.1	512.66 ug/L	512.66 ppb	23:17:43
2	Zn 213.857†	68522.3	69114.0	503.39 ug/L	503.39 ppb	23:17:43
2	SiO2†	98851.1	100383.1	5429.5 ug/L	5429.5 ppb	23:18:41
3	Sc Radial	4677.3	4677.3	95.3 %		23:16:47
3	Y RADIAL	5333.1	5333.1	94.44 %		23:16:47
3	Al 396.153Radial†	7346.1	7754.9	5099.0 ug/L	5099.0 ppb	23:16:47
3	Ca 317.933Radial†	2770.2	2890.0	5116.9 ug/L	5116.9 ppb	23:17:07
3	Fe 238.204 Radial†	412.2	421.7	5113.9 ug/L	5113.9 ppb	23:17:07
3	K 766.490 Radial†	28487.4	27333.3	4973.1 ug/L	4973.1 ppb	23:16:47
3	Mg 279.077 IEC†	114.7	117.9	5283.2 ug/L	5283.2 ppb	23:17:07
3	Na 589.592 Radial†	32021.9	34893.0	9787.5 ug/L	9787.5 ppb	23:16:47
3	Sr 421.552†	90635.2	95146.1	499.13 ug/L	499.13 ppb	23:16:47
3	Sc 361.383	1017820.0	1017820.0	97.916 %		23:18:10
3	Y 371.029	852862.6	852862.6	96.427 %		23:18:10
3	Ag 328.068†	125601.8	127801.1	509.70 ug/L	509.70 ppb	23:18:10
3	As 188.979†	1539.9	1609.3	505.87 ug/L	505.87 ppb	23:18:31
3	B 249.677†	25599.7	26610.6	500.95 ug/L	500.95 ppb	23:18:10
3	Ba 233.527†	77742.2	79397.0	511.39 ug/L	511.39 ppb	23:18:10
3	Be 313.107†	1585449.3	1624068.1	507.37 ug/L	507.37 ppb	23:18:10
3	Cd 226.502†	57090.7	58541.4	510.34 ug/L	510.34 ppb	23:18:10
3	Co 228.616†	29866.0	30588.0	504.00 ug/L	504.00 ppb	23:18:31
3	Cr 267.716†	55247.6	56335.8	506.94 ug/L	506.94 ppb	23:18:10
3	Cu 324.752†	195576.6	190801.8	509.80 ug/L	509.80 ppb	23:18:10
3	Mn 257.610†	530410.5	541123.1	512.83 ug/L	512.83 ppb	23:18:10
3	Mo 202.031†	9367.5	9537.7	506.50 ug/L	506.50 ppb	23:18:31
3	Ni 231.604†	25262.4	25668.1	502.61 ug/L	502.61 ppb	23:18:31
3	P 214.914†	5819.9	5678.7	2463.0 ug/L	2463.0 ppb	23:18:31
3	Pb 220.353†	5224.5	5411.2	509.53 ug/L	509.53 ppb	23:18:31
3	S 181.975 Axial†	979.3	940.1	1011.8 ug/L	1011.8 ppb	23:18:31
3	Sb 206.836†	1916.7	1922.8	514.22 ug/L	514.22 ppb	23:18:31
3	Se 196.026†	1092.7	1137.4	523.93 ug/L	523.93 ppb	23:18:31
3	Si 251.611†	98151.4	99682.8	2519.6 ug/L	2519.6 ppb	23:18:10
3	Sn 189.927†	3724.7	3808.3	504.29 ug/L	504.29 ppb	23:18:31
3	Ti 334.940†	360231.9	369159.5	509.04 ug/L	509.04 ppb	23:18:10
3	Tl 190.801†	2003.3	2090.2	508.78 ug/L	508.78 ppb	23:18:31
3	U 409.014†	15900.2	19012.6	489.94 ug/L	489.94 ppb	23:18:10
3	V 292.402†	84932.2	88348.5	512.54 ug/L	512.54 ppb	23:18:10
3	Zn 213.857†	68684.2	69260.5	504.46 ug/L	504.46 ppb	23:18:10
3	SiO2†	97977.4	99463.8	5379.6 ug/L	5379.6 ppb	23:18:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1017624.0	97.897	%	0.0165				0.02%
Sc Radial	4695.1	95.6	%	0.38				0.40%
Y 371.029	853402.5	96.488	%	0.0652				0.07%
Y RADIAL	5368.7	95.07	%	0.598				0.63%
Ag 328.068†	127702.5	509.29	ug/L	0.362	509.29	ppb	0.362	0.07%
QC value within limits for Ag 328.068 Recovery = 101.86%								
Al 396.153Radial†	7810.4	5135.7	ug/L	35.99	5135.7	ppb	35.99	0.70%
QC value within limits for Al 396.153Radial Recovery = 102.71%								
As 188.979†	1616.4	508.08	ug/L	1.916	508.08	ppb	1.916	0.38%
QC value within limits for As 188.979 Recovery = 101.62%								
B 249.677†	26493.2	498.73	ug/L	2.007	498.73	ppb	2.007	0.40%
QC value within limits for B 249.677 Recovery = 99.75%								
Ba 233.527†	79216.8	510.23	ug/L	1.188	510.23	ppb	1.188	0.23%
QC value within limits for Ba 233.527 Recovery = 102.05%								
Be 313.107†	1624440.9	507.49	ug/L	0.104	507.49	ppb	0.104	0.02%
QC value within limits for Be 313.107 Recovery = 101.50%								
Ca 317.933Radial†	2884.4	5106.9	ug/L	14.16	5106.9	ppb	14.16	0.28%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.14%
Cd 226.502†            58369.2      508.84 ug/L         1.526      508.84 ppb          1.526   0.30%
   QC value within limits for Cd 226.502  Recovery = 101.77%
Co 228.616†            30573.7      503.77 ug/L         0.559      503.77 ppb          0.559   0.11%
   QC value within limits for Co 228.616  Recovery = 100.75%
Cr 267.716†            56327.1      506.86 ug/L         0.190      506.86 ppb          0.190   0.04%
   QC value within limits for Cr 267.716  Recovery = 101.37%
Cu 324.752†           190977.8      510.27 ug/L         0.684      510.27 ppb          0.684   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.05%
Fe 238.204 Radial†       418.3      5073.2 ug/L        35.32      5073.2 ppb         35.32   0.70%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.46%
K 766.490 Radial†      27443.9      4993.2 ug/L        20.99      4993.2 ppb         20.99   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 99.86%
Mg 279.077 IEC†          115.0      5149.7 ug/L       119.29      5149.7 ppb        119.29   2.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.99%
Mn 257.610†           540375.4      512.12 ug/L         0.707      512.12 ppb          0.707   0.14%
   QC value within limits for Mn 257.610  Recovery = 102.42%
Mo 202.031†             9549.7      507.14 ug/L         0.630      507.14 ppb          0.630   0.12%
   QC value within limits for Mo 202.031  Recovery = 101.43%
Na 589.592 Radial†     35094.4      9844.0 ug/L        88.71      9844.0 ppb         88.71   0.90%
   QC value within limits for Na 589.592 Radial  Recovery = 98.44%
Ni 231.604†            25652.4      502.30 ug/L         0.456      502.30 ppb          0.456   0.09%
   QC value within limits for Ni 231.604  Recovery = 100.46%
P 214.914†              5682.0      2464.4 ug/L         1.38      2464.4 ppb          1.38   0.06%
   QC value within limits for P 214.914  Recovery = 98.58%
Pb 220.353†             5422.3      510.58 ug/L         1.096      510.58 ppb          1.096   0.21%
   QC value within limits for Pb 220.353  Recovery = 102.12%
S 181.975 Axial†         933.6      1004.8 ug/L         7.18      1004.8 ppb          7.18   0.71%
   QC value within limits for S 181.975 Axial  Recovery = 100.48%
Sb 206.836†             1929.3      515.93 ug/L         2.720      515.93 ppb          2.720   0.53%
   QC value within limits for Sb 206.836  Recovery = 103.19%
Se 196.026†             1138.9      524.46 ug/L         0.464      524.46 ppb          0.464   0.09%
   QC value within limits for Se 196.026  Recovery = 104.89%
Si 251.611†            99657.9      2518.9 ug/L         1.43      2518.9 ppb          1.43   0.06%
   QC value within limits for Si 251.611  Recovery = 100.76%
Sn 189.927†             3807.7      504.21 ug/L         2.441      504.21 ppb          2.441   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.84%
Sr 421.552†            95712.2      502.10 ug/L         3.413      502.10 ppb          3.413   0.68%
   QC value within limits for Sr 421.552  Recovery = 100.42%
Ti 334.940†           368939.6      508.74 ug/L         0.571      508.74 ppb          0.571   0.11%
   QC value within limits for Ti 334.940  Recovery = 101.75%
Tl 190.801†             2087.5      508.12 ug/L         0.578      508.12 ppb          0.578   0.11%
   QC value within limits for Tl 190.801  Recovery = 101.62%
U 409.014†             19184.5      494.38 ug/L         5.106      494.38 ppb          5.106   1.03%
   QC value within limits for U 409.014  Recovery = 98.88%
V 292.402†             88336.6      512.49 ug/L         0.199      512.49 ppb          0.199   0.04%
   QC value within limits for V 292.402  Recovery = 102.50%
Zn 213.857†            69125.0      503.47 ug/L         0.949      503.47 ppb          0.949   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.69%
SiO2†                  99766.9      5396.1 ug/L        28.97      5396.1 ppb         28.97   0.54%
   QC value within limits for SiO2  Recovery = 100.91%
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: PQL
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 12/4/2009 23:20:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4801.8	4801.8	97.8	%			23:22:48
1	Y RADIAL	5499.8	5499.8	97.39	%			23:22:48
1	Al 396.153Radial†	270.5	320.3	211.10	ug/L	211.10	ppb	23:22:48
1	Ca 317.933Radial†	131.3	116.4	206.03	ug/L	206.03	ppb	23:23:08
1	Fe 238.204 Radial†	20.1	9.5	115.14	ug/L	115.14	ppb	23:23:08
1	K 766.490 Radial†	3379.3	885.8	161.20	ug/L	161.20	ppb	23:22:48
1	Mg 279.077 IEC†	5.2	2.8	124.00	ug/L	124.00	ppb	23:23:08
1	Na 589.592 Radial†	-68.3	1210.1	339.44	ug/L	339.44	ppb	23:22:48
1	Sr 421.552†	928.6	956.8	5.0181	ug/L	5.0181	ppb	23:22:48
1	Sc 361.383	1023931.8	1023931.8	98.504	%			23:24:05
1	Y 371.029	871465.8	871465.8	98.530	%			23:24:05
1	Ag 328.068†	1661.9	1213.1	4.8160	ug/L	4.8160	ppb	23:24:10
1	As 188.979†	52.0	89.4	27.879	ug/L	27.879	ppb	23:24:30
1	B 249.677†	2129.5	2628.0	49.637	ug/L	49.637	ppb	23:24:10
1	Ba 233.527†	781.8	793.7	5.1145	ug/L	5.1145	ppb	23:24:30
1	Be 313.107†	10804.8	15842.9	4.9496	ug/L	4.9496	ppb	23:24:10
1	Cd 226.502†	336.6	577.4	5.0270	ug/L	5.0270	ppb	23:24:30
1	Co 228.616†	207.2	296.7	4.9008	ug/L	4.9008	ppb	23:24:30
1	Cr 267.716†	658.1	580.4	5.2076	ug/L	5.2076	ppb	23:24:30
1	Cu 324.752†	12741.3	3997.3	10.681	ug/L	10.681	ppb	23:24:10
1	Mn 257.610†	11629.9	11229.9	10.643	ug/L	10.643	ppb	23:24:10
1	Mo 202.031†	216.8	190.8	10.135	ug/L	10.135	ppb	23:24:30
1	Ni 231.604†	402.3	276.4	5.4134	ug/L	5.4134	ppb	23:24:30
1	P 214.914†	605.9	349.9	154.96	ug/L	154.96	ppb	23:24:30
1	Pb 220.353†	32.3	108.3	10.223	ug/L	10.223	ppb	23:24:30
1	S 181.975 Axial†	151.9	94.2	101.40	ug/L	101.40	ppb	23:24:30
1	Sb 206.836†	84.6	51.2	13.806	ug/L	13.806	ppb	23:24:30
1	Se 196.026†	39.0	61.0	27.463	ug/L	27.463	ppb	23:24:30
1	Si 251.611†	4564.1	4075.8	103.24	ug/L	103.24	ppb	23:24:10
1	Sn 189.927†	85.6	91.2	12.083	ug/L	12.083	ppb	23:24:30
1	Ti 334.940†	2376.2	3672.8	5.0511	ug/L	5.0511	ppb	23:24:10
1	Tl 190.801†	32.2	76.9	18.678	ug/L	18.678	ppb	23:24:30
1	U 409.014†	-698.3	2065.1	53.367	ug/L	53.367	ppb	23:24:05
1	V 292.402†	-731.4	866.0	5.1837	ug/L	5.1837	ppb	23:24:10
1	Zn 213.857†	2234.6	1383.0	10.100	ug/L	10.100	ppb	23:24:30
1	SiO2†	4486.3	3955.4	214.39	ug/L	214.39	ppb	23:25:36
2	Sc Radial	4744.2	4744.2	96.6	%			23:23:14
2	Y RADIAL	5463.2	5463.2	96.74	%			23:23:14
2	Al 396.153Radial†	267.8	321.0	211.52	ug/L	211.52	ppb	23:23:14
2	Ca 317.933Radial†	129.5	116.1	205.64	ug/L	205.64	ppb	23:23:34
2	Fe 238.204 Radial†	17.0	6.6	80.295	ug/L	80.295	ppb	23:23:34
2	K 766.490 Radial†	3455.4	1006.4	183.19	ug/L	183.19	ppb	23:23:14
2	Mg 279.077 IEC†	7.5	5.3	235.23	ug/L	235.23	ppb	23:23:34
2	Na 589.592 Radial†	-62.1	1215.7	340.99	ug/L	340.99	ppb	23:23:14
2	Sr 421.552†	907.6	946.7	4.9647	ug/L	4.9647	ppb	23:23:14
2	Sc 361.383	1030987.4	1030987.4	99.183	%			23:24:36
2	Y 371.029	877089.0	877089.0	99.166	%			23:24:36
2	Ag 328.068†	1678.5	1218.3	4.8247	ug/L	4.8247	ppb	23:24:41
2	As 188.979†	58.8	95.9	29.900	ug/L	29.900	ppb	23:25:01
2	B 249.677†	2110.4	2593.8	48.997	ug/L	48.997	ppb	23:24:41
2	Ba 233.527†	784.1	790.5	5.0923	ug/L	5.0923	ppb	23:25:01
2	Be 313.107†	10954.8	15919.0	4.9732	ug/L	4.9732	ppb	23:24:41
2	Cd 226.502†	356.1	594.7	5.1813	ug/L	5.1813	ppb	23:25:01
2	Co 228.616†	196.6	284.6	4.7014	ug/L	4.7014	ppb	23:25:01
2	Cr 267.716†	644.4	561.9	5.0411	ug/L	5.0411	ppb	23:25:01
2	Cu 324.752†	12830.8	3999.1	10.684	ug/L	10.684	ppb	23:24:41
2	Mn 257.610†	11652.0	11171.4	10.582	ug/L	10.582	ppb	23:24:41
2	Mo 202.031†	213.6	186.1	9.8810	ug/L	9.8810	ppb	23:25:01
2	Ni 231.604†	392.4	263.7	5.1633	ug/L	5.1633	ppb	23:25:01

2	P 214.914†	594.8	334.6	148.10 ug/L	148.10 ppb	23:25:01
2	Pb 220.353†	50.6	126.5	11.935 ug/L	11.935 ppb	23:25:01
2	S 181.975 Axial†	148.5	89.6	96.533 ug/L	96.533 ppb	23:25:01
2	Sb 206.836†	88.4	54.5	14.620 ug/L	14.620 ppb	23:25:01
2	Se 196.026†	36.5	58.2	26.109 ug/L	26.109 ppb	23:25:01
2	Si 251.611†	4523.6	4003.2	101.40 ug/L	101.40 ppb	23:24:41
2	Sn 189.927†	68.8	73.7	9.7759 ug/L	9.7759 ppb	23:25:01
2	Ti 334.940†	2335.4	3615.1	4.9717 ug/L	4.9717 ppb	23:24:41
2	Tl 190.801†	36.6	81.1	19.693 ug/L	19.693 ppb	23:25:01
2	U 409.014†	-709.8	2058.3	53.196 ug/L	53.196 ppb	23:24:36
2	V 292.402†	-772.1	830.1	4.9819 ug/L	4.9819 ppb	23:24:41
2	Zn 213.857†	2255.4	1388.4	10.141 ug/L	10.141 ppb	23:25:01
2	SiO2†	4532.3	3970.6	215.23 ug/L	215.23 ppb	23:25:41
3	Sc Radial	4849.7	4849.7	98.8 %		23:23:39
3	Y RADIAL	5571.3	5571.3	98.66 %		23:23:39
3	Al 396.153Radial†	281.1	328.3	216.34 ug/L	216.34 ppb	23:23:39
3	Ca 317.933Radial†	134.9	118.7	210.17 ug/L	210.17 ppb	23:23:59
3	Fe 238.204 Radial†	21.1	10.3	125.08 ug/L	125.08 ppb	23:23:59
3	K 766.490 Radial†	3411.6	884.4	160.94 ug/L	160.94 ppb	23:23:39
3	Mg 279.077 IEC†	9.9	7.5	335.60 ug/L	335.60 ppb	23:23:59
3	Na 589.592 Radial†	-36.1	1243.4	348.78 ug/L	348.78 ppb	23:23:39
3	Sr 421.552†	917.9	936.7	4.9123 ug/L	4.9123 ppb	23:23:39
3	Sc 361.383	1021503.5	1021503.5	98.270 %		23:25:06
3	Y 371.029	868276.8	868276.8	98.169 %		23:25:06
3	Ag 328.068†	1705.9	1261.9	5.0129 ug/L	5.0129 ppb	23:25:11
3	As 188.979†	38.9	76.2	23.756 ug/L	23.756 ppb	23:25:31
3	B 249.677†	2201.6	2706.4	51.117 ug/L	51.117 ppb	23:25:11
3	Ba 233.527†	766.6	780.1	5.0267 ug/L	5.0267 ppb	23:25:31
3	Be 313.107†	10958.3	16025.2	5.0064 ug/L	5.0064 ppb	23:25:11
3	Cd 226.502†	335.2	576.7	5.0206 ug/L	5.0206 ppb	23:25:31
3	Co 228.616†	223.3	313.6	5.1806 ug/L	5.1806 ppb	23:25:31
3	Cr 267.716†	653.0	576.7	5.1751 ug/L	5.1751 ppb	23:25:31
3	Cu 324.752†	12833.0	4121.4	11.013 ug/L	11.013 ppb	23:25:11
3	Mn 257.610†	11731.4	11361.2	10.765 ug/L	10.765 ppb	23:25:11
3	Mo 202.031†	224.0	198.7	10.554 ug/L	10.554 ppb	23:25:31
3	Ni 231.604†	399.0	274.0	5.3662 ug/L	5.3662 ppb	23:25:31
3	P 214.914†	595.7	341.1	150.91 ug/L	150.91 ppb	23:25:31
3	Pb 220.353†	7.8	83.5	7.8955 ug/L	7.8955 ppb	23:25:31
3	S 181.975 Axial†	145.6	88.1	94.834 ug/L	94.834 ppb	23:25:31
3	Sb 206.836†	93.6	60.6	16.266 ug/L	16.266 ppb	23:25:31
3	Se 196.026†	42.8	64.9	29.231 ug/L	29.231 ppb	23:25:31
3	Si 251.611†	4592.6	4115.8	104.26 ug/L	104.26 ppb	23:25:11
3	Sn 189.927†	77.3	83.0	11.003 ug/L	11.003 ppb	23:25:31
3	Ti 334.940†	2339.1	3640.7	5.0081 ug/L	5.0081 ppb	23:25:11
3	Tl 190.801†	44.6	89.7	21.755 ug/L	21.755 ppb	23:25:31
3	U 409.014†	-784.6	1975.6	51.051 ug/L	51.051 ppb	23:25:06
3	V 292.402†	-802.4	791.9	4.7645 ug/L	4.7645 ppb	23:25:11
3	Zn 213.857†	2251.2	1405.2	10.255 ug/L	10.255 ppb	23:25:31
3	SiO2†	4519.1	3999.6	216.79 ug/L	216.79 ppb	23:25:46

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025474.2	98.652	%	0.4739				0.48%
Sc Radial	4798.6	97.7	%	1.08				1.10%
Y 371.029	872277.2	98.622	%	0.5045				0.51%
Y RADIAL	5511.4	97.60	%	0.974				1.00%
Ag 328.068†	1231.1	4.8845	ug/L	0.11126	4.8845	ppb	0.11126	2.28%
QC value within limits for Ag 328.068 Recovery = 97.69%								
Al 396.153Radial†	323.2	212.99	ug/L	2.915	212.99	ppb	2.915	1.37%
QC value within limits for Al 396.153Radial Recovery = 106.49%								
As 188.979†	87.2	27.178	ug/L	3.1313	27.178	ppb	3.1313	11.52%
QC value within limits for As 188.979 Recovery = 90.59%								
B 249.677†	2642.7	49.917	ug/L	1.0875	49.917	ppb	1.0875	2.18%
QC value within limits for B 249.677 Recovery = 99.83%								
Ba 233.527†	788.1	5.0778	ug/L	0.04568	5.0778	ppb	0.04568	0.90%
QC value within limits for Ba 233.527 Recovery = 101.56%								
Be 313.107†	15929.0	4.9764	ug/L	0.02851	4.9764	ppb	0.02851	0.57%
QC value within limits for Be 313.107 Recovery = 99.53%								
Ca 317.933Radial†	117.1	207.28	ug/L	2.511	207.28	ppb	2.511	1.21%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.64%
Cd 226.502†              582.9      5.0763 ug/L       0.09099      5.0763 ppb        0.09099   1.79%
   QC value within limits for Cd 226.502  Recovery = 101.53%
Co 228.616†              298.3      4.9276 ug/L       0.24071      4.9276 ppb        0.24071   4.88%
   QC value within limits for Co 228.616  Recovery = 98.55%
Cr 267.716†              573.0      5.1413 ug/L       0.08828      5.1413 ppb        0.08828   1.72%
   QC value within limits for Cr 267.716  Recovery = 102.83%
Cu 324.752†             4039.3      10.792 ug/L        0.1908      10.792 ppb         0.1908   1.77%
   QC value within limits for Cu 324.752  Recovery = 107.92%
Fe 238.204 Radial†         8.8      106.84 ug/L        23.519      106.84 ppb         23.519  22.01%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.84%
K 766.490 Radial†        925.5      168.44 ug/L        12.773      168.44 ppb         12.773   7.58%
   QC value within limits for K 766.490 Radial  Recovery = 112.29%
Mg 279.077 IEC†            5.2      231.61 ug/L       105.846      231.61 ppb        105.846  45.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 77.20%
Mn 257.610†            11254.1      10.663 ug/L        0.0928      10.663 ppb         0.0928   0.87%
   QC value within limits for Mn 257.610  Recovery = 106.63%
Mo 202.031†              191.9      10.190 ug/L        0.3397      10.190 ppb         0.3397   3.33%
   QC value within limits for Mo 202.031  Recovery = 101.90%
Na 589.592 Radial†      1223.1      343.07 ug/L         5.006      343.07 ppb          5.006   1.46%
   QC value within limits for Na 589.592 Radial  Recovery = 114.36%
Ni 231.604†              271.4      5.3143 ug/L       0.13286      5.3143 ppb        0.13286   2.50%
   QC value within limits for Ni 231.604  Recovery = 106.29%
P 214.914†               341.9      151.33 ug/L         3.451      151.33 ppb          3.451   2.28%
   QC value within limits for P 214.914  Recovery = 100.88%
Pb 220.353†              106.1      10.018 ug/L        2.0275      10.018 ppb         2.0275  20.24%
   QC value within limits for Pb 220.353  Recovery = 100.18%
S 181.975 Axial†          90.6      97.588 ug/L        3.4066      97.588 ppb         3.4066   3.49%
   QC value within limits for S 181.975 Axial  Recovery = 97.59%
Sb 206.836†               55.4      14.897 ug/L        1.2535      14.897 ppb         1.2535   8.41%
   QC value greater than the upper limit for Sb 206.836  Recovery = 148.97%
Se 196.026†               61.4      27.601 ug/L        1.5654      27.601 ppb         1.5654   5.67%
   QC value within limits for Se 196.026  Recovery = 92.00%
Si 251.611†             4064.9      102.97 ug/L         1.446      102.97 ppb          1.446   1.40%
   QC value within limits for Si 251.611  Recovery = 102.97%
Sn 189.927†               82.6      10.954 ug/L        1.1545      10.954 ppb         1.1545  10.54%
   QC value within limits for Sn 189.927  Recovery = 109.54%
Sr 421.552†              946.7      4.9650 ug/L       0.05292      4.9650 ppb        0.05292   1.07%
   QC value within limits for Sr 421.552  Recovery = 99.30%
Ti 334.940†             3642.8      5.0103 ug/L       0.03975      5.0103 ppb        0.03975   0.79%
   QC value within limits for Ti 334.940  Recovery = 100.21%
Tl 190.801†               82.6      20.042 ug/L        1.5683      20.042 ppb         1.5683   7.83%
   QC value within limits for Tl 190.801  Recovery = 100.21%
U 409.014†              2033.0      52.538 ug/L        1.2906      52.538 ppb         1.2906   2.46%
   QC value within limits for U 409.014  Recovery = 105.08%
V 292.402†               829.3      4.9767 ug/L       0.20963      4.9767 ppb        0.20963   4.21%
   QC value within limits for V 292.402  Recovery = 99.53%
Zn 213.857†             1392.2      10.165 ug/L        0.0804      10.165 ppb         0.0804   0.79%
   QC value within limits for Zn 213.857  Recovery = 101.65%
SiO2†                   3975.2      215.47 ug/L         1.216      215.47 ppb          1.216   0.56%
   QC value within limits for SiO2  Recovery = 101.16%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2009 23:27:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4871.5	4871.5	99.2	%			23:29:49
1	Y RADIAL	5607.3	5607.3	99.29	%			23:29:49
1	Al 396.153Radial†	-52.1	-8.7	-5.7846	ug/L	-5.7846	ppb	23:29:49
1	Ca 317.933Radial†	22.9	5.2	9.2806	ug/L	9.2806	ppb	23:30:09
1	Fe 238.204 Radial†	9.8	-1.2	-13.977	ug/L	-13.977	ppb	23:30:09
1	K 766.490 Radial†	2510.6	-39.2	-7.1844	ug/L	-7.1844	ppb	23:29:49
1	Mg 279.077 IEC†	5.7	3.3	146.35	ug/L	146.35	ppb	23:30:09
1	Na 589.592 Radial†	-1046.6	225.2	63.160	ug/L	63.160	ppb	23:29:49
1	Sr 421.552†	2.2	9.7	0.0506	ug/L	0.0506	ppb	23:29:49
1	Sc 361.383	1013672.5	1013672.5	97.517	%			23:31:05
1	Y 371.029	862264.0	862264.0	97.490	%			23:31:05
1	Ag 328.068†	396.0	-68.0	-0.2713	ug/L	-0.2713	ppb	23:31:10
1	As 188.979†	-44.3	-8.8	-2.7519	ug/L	-2.7519	ppb	23:31:30
1	B 249.677†	-513.5	-60.5	-1.1410	ug/L	-1.1410	ppb	23:31:30
1	Ba 233.527†	-16.6	-17.0	-0.1105	ug/L	-0.1105	ppb	23:31:30
1	Be 313.107†	-4862.2	-112.1	-0.0351	ug/L	-0.0351	ppb	23:31:10
1	Cd 226.502†	-218.8	11.3	0.0998	ug/L	0.0998	ppb	23:31:30
1	Co 228.616†	-93.2	-9.3	-0.1511	ug/L	-0.1511	ppb	23:31:30
1	Cr 267.716†	105.4	20.3	0.1833	ug/L	0.1833	ppb	23:31:30
1	Cu 324.752†	8978.5	269.7	0.7194	ug/L	0.7194	ppb	23:31:10
1	Mn 257.610†	691.6	132.5	0.1213	ug/L	0.1213	ppb	23:31:30
1	Mo 202.031†	35.8	7.5	0.3978	ug/L	0.3978	ppb	23:31:30
1	Ni 231.604†	131.4	2.8	0.0542	ug/L	0.0542	ppb	23:31:30
1	P 214.914†	284.5	26.6	11.832	ug/L	11.832	ppb	23:31:30
1	Pb 220.353†	-90.8	-17.5	-1.6454	ug/L	-1.6454	ppb	23:31:30
1	S 181.975 Axial†	59.1	0.5	0.5268	ug/L	0.5268	ppb	23:31:30
1	Sb 206.836†	41.8	8.2	2.2020	ug/L	2.2020	ppb	23:31:30
1	Se 196.026†	-27.4	-6.8	-3.0462	ug/L	-3.0462	ppb	23:31:30
1	Si 251.611†	580.1	37.2	0.9342	ug/L	0.9342	ppb	23:31:30
1	Sn 189.927†	10.6	15.2	2.0176	ug/L	2.0176	ppb	23:31:30
1	Ti 334.940†	-1290.1	-62.5	-0.0839	ug/L	-0.0839	ppb	23:31:10
1	Tl 190.801†	-46.0	-2.9	-0.6933	ug/L	-0.6933	ppb	23:31:30
1	U 409.014†	-2869.4	-168.4	-4.3534	ug/L	-4.3534	ppb	23:31:05
1	V 292.402†	-1604.7	-37.0	-0.2094	ug/L	-0.2094	ppb	23:31:10
1	Zn 213.857†	935.4	73.7	0.5363	ug/L	0.5363	ppb	23:31:30
1	SiO2†	628.3	45.3	2.4370	ug/L	2.4370	ppb	23:32:36
2	Sc Radial	4835.2	4835.2	98.5	%			23:30:14
2	Y RADIAL	5566.2	5566.2	98.57	%			23:30:14
2	Al 396.153Radial†	-22.1	21.3	14.087	ug/L	14.087	ppb	23:30:14
2	Ca 317.933Radial†	27.4	9.9	17.604	ug/L	17.604	ppb	23:30:34
2	Fe 238.204 Radial†	10.0	-0.8	-9.9083	ug/L	-9.9083	ppb	23:30:34
2	K 766.490 Radial†	2641.1	112.3	20.436	ug/L	20.436	ppb	23:30:14
2	Mg 279.077 IEC†	-0.8	-3.4	-150.32	ug/L	-150.32	ppb	23:30:34
2	Na 589.592 Radial†	-1027.3	236.8	66.427	ug/L	66.427	ppb	23:30:14
2	Sr 421.552†	-33.9	-27.0	-0.1421	ug/L	-0.1421	ppb	23:30:14
2	Sc 361.383	1020698.7	1020698.7	98.193	%			23:31:36
2	Y 371.029	869465.6	869465.6	98.304	%			23:31:36
2	Ag 328.068†	360.6	-106.8	-0.4282	ug/L	-0.4282	ppb	23:31:41
2	As 188.979†	-42.0	-6.2	-1.9339	ug/L	-1.9339	ppb	23:32:01
2	B 249.677†	-513.0	-56.4	-1.0641	ug/L	-1.0641	ppb	23:32:01
2	Ba 233.527†	-2.7	-2.7	-0.0180	ug/L	-0.0180	ppb	23:32:01
2	Be 313.107†	-4926.8	-143.5	-0.0448	ug/L	-0.0448	ppb	23:31:41
2	Cd 226.502†	-240.7	-9.5	-0.0820	ug/L	-0.0820	ppb	23:32:01
2	Co 228.616†	-86.0	-1.3	-0.0218	ug/L	-0.0218	ppb	23:32:01
2	Cr 267.716†	106.7	20.9	0.1868	ug/L	0.1868	ppb	23:32:01
2	Cu 324.752†	9044.3	273.3	0.7293	ug/L	0.7293	ppb	23:31:41
2	Mn 257.610†	677.5	113.3	0.1091	ug/L	0.1091	ppb	23:32:01
2	Mo 202.031†	20.0	-8.9	-0.4705	ug/L	-0.4705	ppb	23:32:01
2	Ni 231.604†	131.2	1.7	0.0338	ug/L	0.0338	ppb	23:32:01

2	P 214.914†	283.0	23.1	10.248 ug/L	10.248 ppb	23:32:01
2	Pb 220.353†	-91.0	-17.1	-1.6020 ug/L	-1.6020 ppb	23:32:01
2	S 181.975 Axial†	57.0	-2.1	-2.2662 ug/L	-2.2662 ppb	23:32:01
2	Sb 206.836†	48.1	14.3	3.7867 ug/L	3.7867 ppb	23:32:01
2	Se 196.026†	-24.6	-3.7	-1.6569 ug/L	-1.6569 ppb	23:32:01
2	Si 251.611†	614.5	68.2	1.7289 ug/L	1.7289 ppb	23:32:01
2	Sn 189.927†	7.5	12.0	1.5919 ug/L	1.5919 ppb	23:32:01
2	Ti 334.940†	-1245.4	-7.9	-0.0103 ug/L	-0.0103 ppb	23:31:41
2	Tl 190.801†	-55.4	-12.1	-2.9308 ug/L	-2.9308 ppb	23:32:01
2	U 409.014†	-2693.7	30.7	0.7943 ug/L	0.7943 ppb	23:31:36
2	V 292.402†	-1612.5	-33.7	-0.1999 ug/L	-0.1999 ppb	23:31:41
2	Zn 213.857†	922.1	53.5	0.3982 ug/L	0.3982 ppb	23:32:01
2	SiO2†	669.2	82.5	4.4753 ug/L	4.4753 ppb	23:32:41
3	Sc Radial	4748.4	4748.4	96.7 %		23:30:39
3	Y RADIAL	5479.6	5479.6	97.03 %		23:30:39
3	Al 396.153Radial†	-33.9	8.7	5.7621 ug/L	5.7621 ppb	23:30:39
3	Ca 317.933Radial†	28.1	11.2	19.840 ug/L	19.840 ppb	23:30:59
3	Fe 238.204 Radial†	8.8	-1.9	-23.358 ug/L	-23.358 ppb	23:30:59
3	K 766.490 Radial†	2558.4	75.8	13.787 ug/L	13.787 ppb	23:30:39
3	Mg 279.077 IEC†	3.9	1.6	70.670 ug/L	70.670 ppb	23:30:59
3	Na 589.592 Radial†	-1075.4	168.0	47.119 ug/L	47.119 ppb	23:30:39
3	Sr 421.552†	14.0	21.9	0.1146 ug/L	0.1146 ppb	23:30:39
3	Sc 361.383	1015576.5	1015576.5	97.700 %		23:32:06
3	Y 371.029	863771.4	863771.4	97.660 %		23:32:06
3	Ag 328.068†	380.9	-84.2	-0.3412 ug/L	-0.3412 ppb	23:32:11
3	As 188.979†	-32.5	3.3	1.0392 ug/L	1.0392 ppb	23:32:31
3	B 249.677†	-537.6	-84.2	-1.5884 ug/L	-1.5884 ppb	23:32:31
3	Ba 233.527†	4.0	4.1	0.0246 ug/L	0.0246 ppb	23:32:31
3	Be 313.107†	-4876.0	-116.8	-0.0365 ug/L	-0.0365 ppb	23:32:11
3	Cd 226.502†	-224.9	5.4	0.0498 ug/L	0.0498 ppb	23:32:31
3	Co 228.616†	-81.1	3.3	0.0540 ug/L	0.0540 ppb	23:32:31
3	Cr 267.716†	76.1	-9.9	-0.0895 ug/L	-0.0895 ppb	23:32:31
3	Cu 324.752†	8939.7	212.7	0.5668 ug/L	0.5668 ppb	23:32:11
3	Mn 257.610†	692.6	132.2	0.1215 ug/L	0.1215 ppb	23:32:31
3	Mo 202.031†	25.7	-2.9	-0.1571 ug/L	-0.1571 ppb	23:32:31
3	Ni 231.604†	129.4	0.5	0.0103 ug/L	0.0103 ppb	23:32:31
3	P 214.914†	279.4	20.8	9.2607 ug/L	9.2607 ppb	23:32:31
3	Pb 220.353†	-94.3	-21.0	-1.9687 ug/L	-1.9687 ppb	23:32:31
3	S 181.975 Axial†	60.9	2.2	2.3676 ug/L	2.3676 ppb	23:32:31
3	Sb 206.836†	47.9	14.4	3.7978 ug/L	3.7978 ppb	23:32:31
3	Se 196.026†	-31.5	-10.8	-4.8785 ug/L	-4.8785 ppb	23:32:31
3	Si 251.611†	605.5	62.1	1.5733 ug/L	1.5733 ppb	23:32:31
3	Sn 189.927†	2.5	6.9	0.9119 ug/L	0.9119 ppb	23:32:31
3	Ti 334.940†	-1255.0	-24.1	-0.0314 ug/L	-0.0314 ppb	23:32:11
3	Tl 190.801†	-58.6	-15.8	-3.8131 ug/L	-3.8131 ppb	23:32:31
3	U 409.014†	-2781.8	-73.3	-1.8919 ug/L	-1.8919 ppb	23:32:06
3	V 292.402†	-1624.8	-54.5	-0.3128 ug/L	-0.3128 ppb	23:32:11
3	Zn 213.857†	931.6	68.0	0.4988 ug/L	0.4988 ppb	23:32:31
3	SiO2†	633.2	49.1	2.6561 ug/L	2.6561 ppb	23:32:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1016649.2	97.803	%	0.3496				0.36%
Sc Radial	4818.3	98.1	%	1.29				1.31%
Y 371.029	865167.0	97.818	%	0.4294				0.44%
Y RADIAL	5551.0	98.30	%	1.154				1.17%
Ag 328.068†	-86.3	-0.3469	ug/L	0.07860	-0.3469	ppb	0.07860	22.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.1	4.6881	ug/L	9.97909	4.6881	ppb	9.97909	212.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.9	-1.2155	ug/L	1.99504	-1.2155	ppb	1.99504	164.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-67.0	-1.2645	ug/L	0.28313	-1.2645	ppb	0.28313	22.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0346	ug/L	0.06907	-0.0346	ppb	0.06907	199.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-124.1	-0.0388	ug/L	0.00523	-0.0388	ppb	0.00523	13.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.8	15.575	ug/L	5.5643	15.575	ppb	5.5643	35.73%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                2.4      0.0225 ug/L       0.09392      0.0225 ppb        0.09392 417.46%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -2.4     -0.0396 ug/L       0.10367     -0.0396 ppb        0.10367 261.60%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               10.4      0.0935 ug/L       0.15853      0.0935 ppb        0.15853 169.54%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              251.9      0.6718 ug/L       0.09112      0.6718 ppb        0.09112  13.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.3     -15.748 ug/L        6.8974     -15.748 ppb         6.8974  43.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         49.6      9.0129 ug/L      14.41589      9.0129 ppb       14.41589 159.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.5      22.236 ug/L      154.1510      22.236 ppb       154.1510 693.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              126.0      0.1173 ug/L       0.00712      0.1173 ppb        0.00712   6.06%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.4     -0.0766 ug/L       0.43970     -0.0766 ppb        0.43970 574.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       210.0      58.902 ug/L       10.3344      58.902 ppb        10.3344  17.55%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                1.7      0.0328 ug/L       0.02200      0.0328 ppb        0.02200  67.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                23.5      10.447 ug/L        1.2973      10.447 ppb         1.2973  12.42%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -18.5     -1.7387 ug/L       0.20035     -1.7387 ppb        0.20035  11.52%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.2094 ug/L       2.33316      0.2094 ppb        2.33316 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               12.3      3.2622 ug/L       0.91815      3.2622 ppb        0.91815  28.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -7.1     -3.1939 ug/L       1.61586     -3.1939 ppb        1.61586  50.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.9      1.4121 ug/L       0.42116      1.4121 ppb        0.42116  29.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.4      1.5071 ug/L       0.55775      1.5071 ppb        0.55775  37.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                1.5      0.0077 ug/L       0.13358      0.0077 ppb        0.13358 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -31.5     -0.0419 ug/L       0.03787     -0.0419 ppb        0.03787  90.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -10.3     -2.4791 ug/L       1.60823     -2.4791 ppb        1.60823  64.87%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -70.3     -1.8170 ug/L       2.57465     -1.8170 ppb        2.57465 141.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -41.7     -0.2407 ug/L       0.06263     -0.2407 ppb        0.06263  26.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               65.1      0.4778 ug/L       0.07141      0.4778 ppb        0.07141  14.95%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     58.9      3.1895 ug/L       1.11895      3.1895 ppb        1.11895  35.08%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 00:36:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4724.2	4724.2	96.2	%			00:38:27
1	Y RADIAL	5387.3	5387.3	95.40	%			00:38:27
1	Al 396.153Radial†	7249.2	7577.7	4982.0	ug/L	4982.0	ppb	00:38:27
1	Ca 317.933Radial†	2821.6	2914.5	5160.3	ug/L	5160.3	ppb	00:38:47
1	Fe 238.204 Radial†	426.6	432.4	5243.1	ug/L	5243.1	ppb	00:38:47
1	K 766.490 Radial†	29528.4	28118.4	5115.8	ug/L	5115.8	ppb	00:38:27
1	Mg 279.077 IEC†	112.5	114.5	5127.0	ug/L	5127.0	ppb	00:38:47
1	Na 589.592 Radial†	34706.3	37349.1	10476	ug/L	10476	ppb	00:38:27
1	Sr 421.552†	92671.3	96317.7	505.28	ug/L	505.28	ppb	00:38:27
1	Sc 361.383	1022442.0	1022442.0	98.361	%			00:39:46
1	Y 371.029	856449.7	856449.7	96.832	%			00:39:46
1	Ag 328.068†	126514.0	128148.6	511.11	ug/L	511.11	ppb	00:39:46
1	As 188.979†	1537.9	1600.1	503.06	ug/L	503.06	ppb	00:40:06
1	B 249.677†	26015.4	26915.1	506.69	ug/L	506.69	ppb	00:39:46
1	Ba 233.527†	78278.0	79582.7	512.59	ug/L	512.59	ppb	00:39:46
1	Be 313.107†	1597600.9	1629102.6	508.95	ug/L	508.95	ppb	00:39:46
1	Cd 226.502†	57507.6	58701.7	511.73	ug/L	511.73	ppb	00:39:46
1	Co 228.616†	29880.2	30464.6	501.96	ug/L	501.96	ppb	00:40:06
1	Cr 267.716†	55698.3	56538.9	508.77	ug/L	508.77	ppb	00:39:46
1	Cu 324.752†	197695.8	192053.4	513.15	ug/L	513.15	ppb	00:39:46
1	Mn 257.610†	533851.9	542173.1	513.84	ug/L	513.84	ppb	00:39:46
1	Mo 202.031†	9394.8	9522.1	505.68	ug/L	505.68	ppb	00:40:06
1	Ni 231.604†	25313.7	25603.7	501.35	ug/L	501.35	ppb	00:40:06
1	P 214.914†	5844.6	5676.9	2461.5	ug/L	2461.5	ppb	00:40:06
1	Pb 220.353†	5250.1	5413.2	509.68	ug/L	509.68	ppb	00:40:06
1	S 181.975 Axial†	982.4	938.7	1010.3	ug/L	1010.3	ppb	00:40:06
1	Sb 206.836†	1921.6	1919.0	513.10	ug/L	513.10	ppb	00:40:06
1	Se 196.026†	1112.7	1152.7	531.17	ug/L	531.17	ppb	00:40:06
1	Si 251.611†	99140.4	100235.2	2533.6	ug/L	2533.6	ppb	00:39:46
1	Sn 189.927†	3723.6	3790.0	501.86	ug/L	501.86	ppb	00:40:06
1	Ti 334.940†	362915.1	370224.4	510.51	ug/L	510.51	ppb	00:39:46
1	Tl 190.801†	2016.8	2094.6	509.88	ug/L	509.88	ppb	00:40:06
1	U 409.014†	16241.7	19286.4	496.99	ug/L	496.99	ppb	00:39:46
1	V 292.402†	85409.3	88441.4	513.04	ug/L	513.04	ppb	00:39:46
1	Zn 213.857†	69340.0	69610.2	507.02	ug/L	507.02	ppb	00:39:46
1	SiO2†	97449.4	98474.6	5325.8	ug/L	5325.8	ppb	00:41:06
2	Sc Radial	4697.0	4697.0	95.7	%			00:38:52
2	Y RADIAL	5379.3	5379.3	95.26	%			00:38:52
2	Al 396.153Radial†	7258.8	7631.3	5017.4	ug/L	5017.4	ppb	00:38:52
2	Ca 317.933Radial†	2830.0	2940.3	5205.9	ug/L	5205.9	ppb	00:39:12
2	Fe 238.204 Radial†	431.9	440.5	5341.7	ug/L	5341.7	ppb	00:39:12
2	K 766.490 Radial†	29376.2	28136.9	5119.2	ug/L	5119.2	ppb	00:38:52
2	Mg 279.077 IEC†	112.0	114.6	5133.9	ug/L	5133.9	ppb	00:39:12
2	Na 589.592 Radial†	34567.4	37412.6	10494	ug/L	10494	ppb	00:38:52
2	Sr 421.552†	92372.6	96562.9	506.56	ug/L	506.56	ppb	00:38:52
2	Sc 361.383	1018914.9	1018914.9	98.021	%			00:40:13
2	Y 371.029	853792.7	853792.7	96.532	%			00:40:13
2	Ag 328.068†	126054.5	128125.0	511.06	ug/L	511.06	ppb	00:40:13
2	As 188.979†	1550.5	1618.4	508.75	ug/L	508.75	ppb	00:40:33
2	B 249.677†	26055.6	27047.7	509.17	ug/L	509.17	ppb	00:40:13
2	Ba 233.527†	77935.8	79509.1	512.13	ug/L	512.13	ppb	00:40:13
2	Be 313.107†	1592539.8	1629561.7	509.09	ug/L	509.09	ppb	00:40:13
2	Cd 226.502†	57262.3	58653.8	511.30	ug/L	511.30	ppb	00:40:13
2	Co 228.616†	29949.4	30640.3	504.86	ug/L	504.86	ppb	00:40:33
2	Cr 267.716†	55485.9	56518.2	508.58	ug/L	508.58	ppb	00:40:13
2	Cu 324.752†	197135.2	192177.2	513.48	ug/L	513.48	ppb	00:40:13
2	Mn 257.610†	531491.5	541643.9	513.34	ug/L	513.34	ppb	00:40:13
2	Mo 202.031†	9394.4	9554.8	507.43	ug/L	507.43	ppb	00:40:33
2	Ni 231.604†	25328.0	25707.4	503.38	ug/L	503.38	ppb	00:40:33

2	P 214.914†	5849.1	5702.0	2472.6 ug/L	2472.6 ppb	00:40:33
2	Pb 220.353†	5248.9	5430.4	511.30 ug/L	511.30 ppb	00:40:33
2	S 181.975 Axial†	985.1	944.9	1017.0 ug/L	1017.0 ppb	00:40:33
2	Sb 206.836†	1931.0	1935.4	517.52 ug/L	517.52 ppb	00:40:33
2	Se 196.026†	1113.2	1157.1	533.49 ug/L	533.49 ppb	00:40:33
2	Si 251.611†	98867.7	100305.8	2535.3 ug/L	2535.3 ppb	00:40:13
2	Sn 189.927†	3735.6	3815.3	505.22 ug/L	505.22 ppb	00:40:33
2	Ti 334.940†	361572.2	370131.5	510.39 ug/L	510.39 ppb	00:40:13
2	Tl 190.801†	2006.8	2091.5	509.11 ug/L	509.11 ppb	00:40:33
2	U 409.014†	16168.5	19268.8	496.53 ug/L	496.53 ppb	00:40:13
2	V 292.402†	85315.0	88645.7	514.22 ug/L	514.22 ppb	00:40:13
2	Zn 213.857†	69007.1	69514.6	506.30 ug/L	506.30 ppb	00:40:13
2	SiO2†	98365.7	99752.3	5395.2 ug/L	5395.2 ppb	00:41:11
3	Sc Radial	4739.6	4739.6	96.5 %		00:39:17
3	Y RADIAL	5396.1	5396.1	95.55 %		00:39:17
3	Al 396.153Radial†	7294.9	7600.5	4996.8 ug/L	4996.8 ppb	00:39:17
3	Ca 317.933Radial†	2856.0	2940.6	5206.5 ug/L	5206.5 ppb	00:39:37
3	Fe 238.204 Radial†	433.9	438.5	5317.8 ug/L	5317.8 ppb	00:39:37
3	K 766.490 Radial†	29539.7	28030.4	5099.8 ug/L	5099.8 ppb	00:39:17
3	Mg 279.077 IEC†	116.7	118.4	5304.7 ug/L	5304.7 ppb	00:39:37
3	Na 589.592 Radial†	34691.3	37216.3	10439 ug/L	10439 ppb	00:39:17
3	Sr 421.552†	92705.4	96039.9	503.82 ug/L	503.82 ppb	00:39:17
3	Sc 361.383	1014054.8	1014054.8	97.554 %		00:40:41
3	Y 371.029	850716.7	850716.7	96.184 %		00:40:41
3	Ag 328.068†	125109.0	127772.2	509.65 ug/L	509.65 ppb	00:40:41
3	As 188.979†	1565.7	1641.6	515.95 ug/L	515.95 ppb	00:41:01
3	B 249.677†	25823.6	26937.3	507.08 ug/L	507.08 ppb	00:40:41
3	Ba 233.527†	77508.1	79451.7	511.76 ug/L	511.76 ppb	00:40:41
3	Be 313.107†	1583424.5	1628004.6	508.60 ug/L	508.60 ppb	00:40:41
3	Cd 226.502†	57046.4	58712.6	511.82 ug/L	511.82 ppb	00:40:41
3	Co 228.616†	30057.3	30897.3	509.11 ug/L	509.11 ppb	00:41:01
3	Cr 267.716†	55205.2	56501.8	508.44 ug/L	508.44 ppb	00:40:41
3	Cu 324.752†	195462.7	191426.6	511.48 ug/L	511.48 ppb	00:40:41
3	Mn 257.610†	528161.9	540829.5	512.57 ug/L	512.57 ppb	00:40:41
3	Mo 202.031†	9437.8	9645.2	512.22 ug/L	512.22 ppb	00:41:01
3	Ni 231.604†	25432.0	25937.8	507.89 ug/L	507.89 ppb	00:41:01
3	P 214.914†	5888.8	5771.3	2504.0 ug/L	2504.0 ppb	00:41:01
3	Pb 220.353†	5299.8	5508.3	518.62 ug/L	518.62 ppb	00:41:01
3	S 181.975 Axial†	987.2	951.9	1024.6 ug/L	1024.6 ppb	00:41:01
3	Sb 206.836†	1940.8	1954.9	522.86 ug/L	522.86 ppb	00:41:01
3	Se 196.026†	1100.8	1149.8	530.20 ug/L	530.20 ppb	00:41:01
3	Si 251.611†	98099.0	100001.3	2527.5 ug/L	2527.5 ppb	00:40:41
3	Sn 189.927†	3752.1	3850.5	509.88 ug/L	509.88 ppb	00:41:01
3	Ti 334.940†	358864.3	369123.7	509.00 ug/L	509.00 ppb	00:40:41
3	Tl 190.801†	2019.8	2114.7	514.68 ug/L	514.68 ppb	00:41:01
3	U 409.014†	15957.1	19131.2	492.97 ug/L	492.97 ppb	00:40:41
3	V 292.402†	84864.2	88600.8	514.04 ug/L	514.04 ppb	00:40:41
3	Zn 213.857†	68662.3	69498.5	506.15 ug/L	506.15 ppb	00:40:41
3	SiO2†	97968.1	99825.7	5399.0 ug/L	5399.0 ppb	00:41:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1018470.6	97.979	%	0.4051				0.41%
Sc Radial	4720.3	96.1	%	0.44				0.46%
Y 371.029	853653.0	96.516	%	0.3244				0.34%
Y RADIAL	5387.6	95.40	%	0.149				0.16%
Ag 328.068†	128015.3	510.61	ug/L	0.828	510.61	ppb	0.828	0.16%
QC value within limits for Ag 328.068 Recovery = 102.12%								
Al 396.153Radial†	7603.2	4998.7	ug/L	17.74	4998.7	ppb	17.74	0.35%
QC value within limits for Al 396.153Radial Recovery = 99.97%								
As 188.979†	1620.0	509.25	ug/L	6.463	509.25	ppb	6.463	1.27%
QC value within limits for As 188.979 Recovery = 101.85%								
B 249.677†	26966.7	507.65	ug/L	1.336	507.65	ppb	1.336	0.26%
QC value within limits for B 249.677 Recovery = 101.53%								
Ba 233.527†	79514.5	512.16	ug/L	0.419	512.16	ppb	0.419	0.08%
QC value within limits for Ba 233.527 Recovery = 102.43%								
Be 313.107†	1628889.7	508.88	ug/L	0.251	508.88	ppb	0.251	0.05%
QC value within limits for Be 313.107 Recovery = 101.78%								
Ca 317.933Radial†	2931.8	5190.9	ug/L	26.50	5190.9	ppb	26.50	0.51%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.82%
Cd 226.502†            58689.4      511.61 ug/L         0.276      511.61 ppb          0.276   0.05%
   QC value within limits for Cd 226.502  Recovery = 102.32%
Co 228.616†            30667.4      505.31 ug/L         3.595      505.31 ppb          3.595   0.71%
   QC value within limits for Co 228.616  Recovery = 101.06%
Cr 267.716†            56519.6      508.60 ug/L         0.165      508.60 ppb          0.165   0.03%
   QC value within limits for Cr 267.716  Recovery = 101.72%
Cu 324.752†           191885.7      512.70 ug/L         1.074      512.70 ppb          1.074   0.21%
   QC value within limits for Cu 324.752  Recovery = 102.54%
Fe 238.204 Radial†       437.1      5300.9 ug/L        51.45      5300.9 ppb         51.45   0.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.02%
K 766.490 Radial†      28095.2      5111.6 ug/L        10.35      5111.6 ppb         10.35   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 102.23%
Mg 279.077 IEC†          115.8      5188.5 ug/L       100.69      5188.5 ppb        100.69   1.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.77%
Mn 257.610†           541548.8      513.25 ug/L         0.639      513.25 ppb          0.639   0.12%
   QC value within limits for Mn 257.610  Recovery = 102.65%
Mo 202.031†             9574.1      508.44 ug/L         3.386      508.44 ppb          3.386   0.67%
   QC value within limits for Mo 202.031  Recovery = 101.69%
Na 589.592 Radial†     37326.0       10470 ug/L          28.1       10470 ppb           28.1   0.27%
   QC value within limits for Na 589.592 Radial  Recovery = 104.70%
Ni 231.604†            25749.6      504.21 ug/L         3.349      504.21 ppb          3.349   0.66%
   QC value within limits for Ni 231.604  Recovery = 100.84%
P 214.914†              5716.8      2479.4 ug/L        22.07      2479.4 ppb         22.07   0.89%
   QC value within limits for P 214.914  Recovery = 99.18%
Pb 220.353†             5450.6      513.20 ug/L         4.761      513.20 ppb          4.761   0.93%
   QC value within limits for Pb 220.353  Recovery = 102.64%
S 181.975 Axial†         945.1      1017.3 ug/L         7.12      1017.3 ppb          7.12   0.70%
   QC value within limits for S 181.975 Axial  Recovery = 101.73%
Sb 206.836†             1936.4      517.83 ug/L         4.883      517.83 ppb          4.883   0.94%
   QC value within limits for Sb 206.836  Recovery = 103.57%
Se 196.026†             1153.2      531.62 ug/L         1.691      531.62 ppb          1.691   0.32%
   QC value within limits for Se 196.026  Recovery = 106.32%
Si 251.611†           100180.8      2532.1 ug/L          4.11      2532.1 ppb          4.11   0.16%
   QC value within limits for Si 251.611  Recovery = 101.28%
Sn 189.927†             3818.6      505.65 ug/L         4.024      505.65 ppb          4.024   0.80%
   QC value within limits for Sn 189.927  Recovery = 101.13%
Sr 421.552†            96306.8      505.22 ug/L         1.373      505.22 ppb          1.373   0.27%
   QC value within limits for Sr 421.552  Recovery = 101.04%
Ti 334.940†           369826.6      509.96 ug/L         0.840      509.96 ppb          0.840   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.99%
Tl 190.801†             2100.3      511.22 ug/L         3.017      511.22 ppb          3.017   0.59%
   QC value within limits for Tl 190.801  Recovery = 102.24%
U 409.014†             19228.8      495.50 ug/L         2.199      495.50 ppb          2.199   0.44%
   QC value within limits for U 409.014  Recovery = 99.10%
V 292.402†             88562.6      513.77 ug/L         0.634      513.77 ppb          0.634   0.12%
   QC value within limits for V 292.402  Recovery = 102.75%
Zn 213.857†            69541.1      506.49 ug/L         0.468      506.49 ppb          0.468   0.09%
   QC value within limits for Zn 213.857  Recovery = 101.30%
SiO2†                  99350.9      5373.3 ug/L        41.18      5373.3 ppb         41.18   0.77%
   QC value within limits for SiO2  Recovery = 100.48%
All analyte(s) passed QC.
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Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 00:43:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4521.7	4521.7	92.1	%			00:45:18
1	Y RADIAL	5191.1	5191.1	91.92	%			00:45:18
1	Al 396.153Radial†	-5.4	37.9	25.009	ug/L	25.009	ppb	00:45:18
1	Ca 317.933Radial†	54.7	41.5	73.564	ug/L	73.564	ppb	00:45:38
1	Fe 238.204 Radial†	11.0	0.9	11.351	ug/L	11.351	ppb	00:45:38
1	K 766.490 Radial†	3177.9	881.1	160.57	ug/L	160.57	ppb	00:45:18
1	Mg 279.077 IEC†	3.2	1.0	43.808	ug/L	43.808	ppb	00:45:38
1	Na 589.592 Radial†	-1030.4	161.2	45.214	ug/L	45.214	ppb	00:45:18
1	Sr 421.552†	2.1	9.7	0.0501	ug/L	0.0501	ppb	00:45:18
1	Sc 361.383	1050972.6	1050972.6	101.11	%			00:46:35
1	Y 371.029	892918.2	892918.2	100.96	%			00:46:35
1	Ag 328.068†	361.4	-116.6	-0.4594	ug/L	-0.4594	ppb	00:46:40
1	As 188.979†	-31.6	5.4	1.6699	ug/L	1.6699	ppb	00:47:00
1	B 249.677†	-219.7	248.8	4.7003	ug/L	4.7003	ppb	00:47:00
1	Ba 233.527†	52.6	52.0	0.3350	ug/L	0.3350	ppb	00:47:00
1	Be 313.107†	-4864.3	62.8	0.0199	ug/L	0.0199	ppb	00:46:40
1	Cd 226.502†	-217.5	20.5	0.1775	ug/L	0.1775	ppb	00:47:00
1	Co 228.616†	-90.2	-2.9	-0.0477	ug/L	-0.0477	ppb	00:47:00
1	Cr 267.716†	132.7	43.5	0.3910	ug/L	0.3910	ppb	00:47:00
1	Cu 324.752†	9084.0	47.2	0.1265	ug/L	0.1265	ppb	00:46:40
1	Mn 257.610†	753.9	168.9	0.1603	ug/L	0.1603	ppb	00:47:00
1	Mo 202.031†	34.3	4.6	0.2472	ug/L	0.2472	ppb	00:47:00
1	Ni 231.604†	134.4	1.0	0.0198	ug/L	0.0198	ppb	00:47:00
1	P 214.914†	285.8	17.6	7.8873	ug/L	7.8873	ppb	00:47:00
1	Pb 220.353†	-78.9	-2.4	-0.2247	ug/L	-0.2247	ppb	00:47:00
1	S 181.975 Axial†	65.8	5.0	5.3960	ug/L	5.3960	ppb	00:47:00
1	Sb 206.836†	44.0	8.9	2.3854	ug/L	2.3854	ppb	00:47:00
1	Se 196.026†	-23.7	-2.1	-0.8829	ug/L	-0.8829	ppb	00:47:00
1	Si 251.611†	659.4	94.5	2.3346	ug/L	2.3346	ppb	00:47:00
1	Sn 189.927†	16.6	20.8	2.7581	ug/L	2.7581	ppb	00:47:00
1	Ti 334.940†	-1162.7	110.4	0.1558	ug/L	0.1558	ppb	00:46:40
1	Tl 190.801†	-49.4	-4.6	-1.0998	ug/L	-1.0998	ppb	00:47:00
1	U 409.014†	-2785.1	19.3	0.4972	ug/L	0.4972	ppb	00:46:35
1	V 292.402†	-1602.5	23.6	0.1383	ug/L	0.1383	ppb	00:46:40
1	Zn 213.857†	1007.1	110.6	0.8096	ug/L	0.8096	ppb	00:47:00
1	SiO2†	683.6	77.1	4.0425	ug/L	4.0425	ppb	00:48:06
2	Sc Radial	4647.0	4647.0	94.6	%			00:45:43
2	Y RADIAL	5327.0	5327.0	94.33	%			00:45:43
2	Al 396.153Radial†	-18.8	24.0	15.793	ug/L	15.793	ppb	00:45:43
2	Ca 317.933Radial†	53.0	38.1	67.531	ug/L	67.531	ppb	00:46:03
2	Fe 238.204 Radial†	9.4	-1.0	-12.306	ug/L	-12.306	ppb	00:46:03
2	K 766.490 Radial†	3194.5	805.6	146.80	ug/L	146.80	ppb	00:45:43
2	Mg 279.077 IEC†	2.7	0.3	14.785	ug/L	14.785	ppb	00:46:03
2	Na 589.592 Radial†	-1082.3	136.4	38.274	ug/L	38.274	ppb	00:45:43
2	Sr 421.552†	21.5	30.1	0.1573	ug/L	0.1573	ppb	00:45:43
2	Sc 361.383	1018433.6	1018433.6	97.975	%			00:47:05
2	Y 371.029	866004.9	866004.9	97.913	%			00:47:05
2	Ag 328.068†	386.3	-79.7	-0.3217	ug/L	-0.3217	ppb	00:47:10
2	As 188.979†	-29.6	6.4	1.9970	ug/L	1.9970	ppb	00:47:30
2	B 249.677†	-226.3	235.1	4.4446	ug/L	4.4446	ppb	00:47:30
2	Ba 233.527†	63.7	65.0	0.4175	ug/L	0.4175	ppb	00:47:30
2	Be 313.107†	-4837.8	-63.9	-0.0198	ug/L	-0.0198	ppb	00:47:10
2	Cd 226.502†	-220.8	10.3	0.0907	ug/L	0.0907	ppb	00:47:30
2	Co 228.616†	-94.2	-9.8	-0.1603	ug/L	-0.1603	ppb	00:47:30
2	Cr 267.716†	111.1	25.6	0.2293	ug/L	0.2293	ppb	00:47:30
2	Cu 324.752†	8998.6	247.1	0.6594	ug/L	0.6594	ppb	00:47:10
2	Mn 257.610†	772.9	212.2	0.1994	ug/L	0.1994	ppb	00:47:30
2	Mo 202.031†	40.5	12.1	0.6427	ug/L	0.6427	ppb	00:47:30
2	Ni 231.604†	129.9	0.7	0.0129	ug/L	0.0129	ppb	00:47:30

2	P 214.914†	279.2	19.8	8.7896 ug/L	8.7896 ppb	00:47:30
2	Pb 220.353†	-67.9	6.2	0.5917 ug/L	0.5917 ppb	00:47:30
2	S 181.975 Axial†	68.7	10.0	10.778 ug/L	10.778 ppb	00:47:30
2	Sb 206.836†	41.1	7.3	1.9597 ug/L	1.9597 ppb	00:47:30
2	Se 196.026†	-17.8	3.2	1.3932 ug/L	1.3932 ppb	00:47:30
2	Si 251.611†	653.7	109.5	2.7176 ug/L	2.7176 ppb	00:47:30
2	Sn 189.927†	5.7	10.1	1.3438 ug/L	1.3438 ppb	00:47:30
2	Ti 334.940†	-1180.8	55.2	0.0792 ug/L	0.0792 ppb	00:47:10
2	Tl 190.801†	-40.3	3.1	0.7634 ug/L	0.7634 ppb	00:47:30
2	U 409.014†	-2681.6	36.9	0.9562 ug/L	0.9562 ppb	00:47:05
2	V 292.402†	-1569.4	6.7	0.0514 ug/L	0.0514 ppb	00:47:10
2	Zn 213.857†	1024.5	160.1	1.1763 ug/L	1.1763 ppb	00:47:30
2	SiO2†	683.9	99.0	5.2392 ug/L	5.2392 ppb	00:48:11
3	Sc Radial	4821.8	4821.8	98.2 %		00:46:08
3	Y RADIAL	5518.4	5518.4	97.72 %		00:46:08
3	Al 396.153Radial†	-23.3	20.0	13.226 ug/L	13.226 ppb	00:46:08
3	Ca 317.933Radial†	57.3	40.5	71.703 ug/L	71.703 ppb	00:46:28
3	Fe 238.204 Radial†	10.5	-0.3	-3.7245 ug/L	-3.7245 ppb	00:46:28
3	K 766.490 Radial†	3087.2	573.9	104.56 ug/L	104.56 ppb	00:46:08
3	Mg 279.077 IEC†	2.0	-0.5	-20.834 ug/L	-20.834 ppb	00:46:28
3	Na 589.592 Radial†	-956.0	306.5	85.983 ug/L	85.983 ppb	00:46:08
3	Sr 421.552†	35.6	43.6	0.2282 ug/L	0.2282 ppb	00:46:08
3	Sc 361.383	995395.5	995395.5	95.759 %		00:47:35
3	Y 371.029	847159.0	847159.0	95.782 %		00:47:35
3	Ag 328.068†	467.6	14.2	0.0541 ug/L	0.0541 ppb	00:47:40
3	As 188.979†	-42.5	-7.7	-2.4165 ug/L	-2.4165 ppb	00:48:00
3	B 249.677†	-206.8	250.1	4.7272 ug/L	4.7272 ppb	00:48:00
3	Ba 233.527†	67.0	70.0	0.4475 ug/L	0.4475 ppb	00:48:00
3	Be 313.107†	-4854.6	-195.7	-0.0612 ug/L	-0.0612 ppb	00:47:40
3	Cd 226.502†	-214.8	11.4	0.0996 ug/L	0.0996 ppb	00:48:00
3	Co 228.616†	-85.5	-3.0	-0.0490 ug/L	-0.0490 ppb	00:48:00
3	Cr 267.716†	124.6	42.3	0.3799 ug/L	0.3799 ppb	00:48:00
3	Cu 324.752†	9014.1	475.9	1.2706 ug/L	1.2706 ppb	00:47:40
3	Mn 257.610†	774.6	232.2	0.2199 ug/L	0.2199 ppb	00:48:00
3	Mo 202.031†	29.3	1.4	0.0742 ug/L	0.0742 ppb	00:48:00
3	Ni 231.604†	130.9	4.8	0.0934 ug/L	0.0934 ppb	00:48:00
3	P 214.914†	294.4	42.4	18.763 ug/L	18.763 ppb	00:48:00
3	Pb 220.353†	-84.5	-12.7	-1.1900 ug/L	-1.1900 ppb	00:48:00
3	S 181.975 Axial†	68.1	11.0	11.882 ug/L	11.882 ppb	00:48:00
3	Sb 206.836†	42.7	10.0	2.6294 ug/L	2.6294 ppb	00:48:00
3	Se 196.026†	-21.3	-0.9	-0.4117 ug/L	-0.4117 ppb	00:48:00
3	Si 251.611†	666.8	138.7	3.4851 ug/L	3.4851 ppb	00:48:00
3	Sn 189.927†	1.0	5.4	0.7209 ug/L	0.7209 ppb	00:48:00
3	Ti 334.940†	-1270.4	-66.2	-0.0861 ug/L	-0.0861 ppb	00:47:40
3	Tl 190.801†	-40.7	1.7	0.4199 ug/L	0.4199 ppb	00:48:00
3	U 409.014†	-2795.2	-145.1	-3.7507 ug/L	-3.7507 ppb	00:47:35
3	V 292.402†	-1677.5	-143.3	-0.8267 ug/L	-0.8267 ppb	00:47:40
3	Zn 213.857†	1013.0	172.3	1.2652 ug/L	1.2652 ppb	00:48:00
3	SiO2†	700.2	132.2	7.0999 ug/L	7.0999 ppb	00:48:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021600.6	98.280	%	2.6863				2.73%
Sc Radial	4663.5	95.0	%	3.07				3.23%
Y 371.029	868694.0	98.217	%	2.6002				2.65%
Y RADIAL	5345.5	94.66	%	2.911				3.08%
Ag 328.068†	-60.7	-0.2423	ug/L	0.26579	-0.2423	ppb	0.26579	109.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.3	18.009	ug/L	6.1963	18.009	ppb	6.1963	34.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4168	ug/L	2.45921	0.4168	ppb	2.45921	590.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	244.7	4.6240	ug/L	0.15595	4.6240	ppb	0.15595	3.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	62.3	0.4000	ug/L	0.05826	0.4000	ppb	0.05826	14.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-65.6	-0.0204	ug/L	0.04054	-0.0204	ppb	0.04054	199.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	40.1	70.932	ug/L	3.0895	70.932	ppb	3.0895	4.36%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.0      0.1226 ug/L       0.04776      0.1226 ppb        0.04776  38.95%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.0857 ug/L       0.06462     -0.0857 ppb        0.06462  75.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                37.1      0.3334 ug/L       0.09031      0.3334 ppb        0.09031  27.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               256.7      0.6855 ug/L       0.57248      0.6855 ppb        0.57248  83.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.1     -1.5600 ug/L      11.97601     -1.5600 ppb       11.97601 767.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         753.6      137.31 ug/L        29.186      137.31 ppb         29.186  21.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.3      12.587 ug/L       32.3769      12.587 ppb        32.3769 257.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               204.4      0.1932 ug/L       0.03029      0.1932 ppb        0.03029  15.68%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.1      0.3214 ug/L       0.29141      0.3214 ppb        0.29141  90.68%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        201.4      56.490 ug/L       25.7761      56.490 ppb        25.7761  45.63%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                2.1      0.0420 ug/L       0.04461      0.0420 ppb        0.04461 106.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                26.6      11.813 ug/L        6.0357      11.813 ppb         6.0357  51.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -3.0     -0.2743 ug/L       0.89188     -0.2743 ppb        0.89188 325.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.7      9.3521 ug/L       3.47029      9.3521 ppb        3.47029  37.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                8.7      2.3248 ug/L       0.33890      2.3248 ppb        0.33890  14.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.1      0.0329 ug/L       1.20138      0.0329 ppb        1.20138 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               114.3      2.8458 ug/L       0.58587      2.8458 ppb        0.58587  20.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               12.1      1.6076 ug/L       1.04389      1.6076 ppb        1.04389  64.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               27.8      0.1452 ug/L       0.08967      0.1452 ppb        0.08967  61.75%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               33.1      0.0496 ug/L       0.12363      0.0496 ppb        0.12363 249.14%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.1      0.0278 ug/L       0.99153      0.0278 ppb        0.99153 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -29.6     -0.7657 ug/L       2.59518     -0.7657 ppb        2.59518 338.91%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -37.7     -0.2123 ug/L       0.53382     -0.2123 ppb        0.53382 251.43%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              147.7      1.0837 ug/L       0.24149      1.0837 ppb        0.24149  22.28%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    102.8      5.4605 ug/L       1.54071      5.4605 ppb        1.54071  28.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 01:47:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4299.3	4299.3	87.6	%			01:49:11
1	Y RADIAL	4894.4	4894.4	86.67	%			01:49:11
1	Al 396.153Radial†	7477.1	8582.5	5645.2	ug/L	5645.2	ppb	01:49:11
1	Ca 317.933Radial†	2804.8	3185.2	5639.4	ug/L	5639.4	ppb	01:49:31
1	Fe 238.204 Radial†	423.4	472.6	5729.4	ug/L	5729.4	ppb	01:49:31
1	K 766.490 Radial†	29126.4	30692.4	5584.7	ug/L	5584.7	ppb	01:49:11
1	Mg 279.077 IEC†	116.5	130.6	5847.8	ug/L	5847.8	ppb	01:49:31
1	Na 589.592 Radial†	34383.3	40545.3	11373	ug/L	11373	ppb	01:49:11
1	Sr 421.552†	93422.8	106695.0	559.72	ug/L	559.72	ppb	01:49:11
1	Sc 361.383	1012171.3	1012171.3	97.373	%			01:50:30
1	Y 371.029	849502.2	849502.2	96.047	%			01:50:30
1	Ag 328.068†	125286.8	128193.4	511.44	ug/L	511.44	ppb	01:50:30
1	As 188.979†	1554.8	1633.4	513.48	ug/L	513.48	ppb	01:50:50
1	B 249.677†	25408.1	26559.8	499.89	ug/L	499.89	ppb	01:50:30
1	Ba 233.527†	77302.3	79388.3	511.36	ug/L	511.36	ppb	01:50:30
1	Be 313.107†	1582466.1	1630040.8	509.24	ug/L	509.24	ppb	01:50:30
1	Cd 226.502†	56989.2	58762.6	512.21	ug/L	512.21	ppb	01:50:30
1	Co 228.616†	30027.3	30923.9	509.54	ug/L	509.54	ppb	01:50:50
1	Cr 267.716†	55013.9	56410.6	507.62	ug/L	507.62	ppb	01:50:30
1	Cu 324.752†	195092.1	191418.9	511.48	ug/L	511.48	ppb	01:50:30
1	Mn 257.610†	527540.9	541199.2	512.95	ug/L	512.95	ppb	01:50:30
1	Mo 202.031†	9434.7	9660.1	513.04	ug/L	513.04	ppb	01:50:50
1	Ni 231.604†	25403.3	25956.9	508.26	ug/L	508.26	ppb	01:50:50
1	P 214.914†	5894.0	5787.9	2511.3	ug/L	2511.3	ppb	01:50:50
1	Pb 220.353†	5261.6	5479.2	516.00	ug/L	516.00	ppb	01:50:50
1	S 181.975 Axial†	977.0	943.3	1015.2	ug/L	1015.2	ppb	01:50:50
1	Sb 206.836†	1924.8	1942.1	519.44	ug/L	519.44	ppb	01:50:50
1	Se 196.026†	1115.1	1166.6	539.11	ug/L	539.11	ppb	01:50:50
1	Si 251.611†	98040.2	100128.0	2530.5	ug/L	2530.5	ppb	01:50:30
1	Sn 189.927†	3720.3	3825.0	506.56	ug/L	506.56	ppb	01:50:50
1	Ti 334.940†	358657.4	369595.8	509.67	ug/L	509.67	ppb	01:50:30
1	Tl 190.801†	2010.5	2109.0	513.33	ug/L	513.33	ppb	01:50:50
1	U 409.014†	16019.7	19225.9	495.37	ug/L	495.37	ppb	01:50:30
1	V 292.402†	84695.3	88589.2	513.94	ug/L	513.94	ppb	01:50:30
1	Zn 213.857†	68453.4	69414.9	505.47	ug/L	505.47	ppb	01:50:30
1	SiO2†	97533.4	99566.2	5384.5	ug/L	5384.5	ppb	01:51:50
2	Sc Radial	4803.9	4803.9	97.8	%			01:49:36
2	Y RADIAL	5500.3	5500.3	97.40	%			01:49:36
2	Al 396.153Radial†	7416.3	7623.5	5012.1	ug/L	5012.1	ppb	01:49:36
2	Ca 317.933Radial†	2803.4	2847.3	5041.2	ug/L	5041.2	ppb	01:49:56
2	Fe 238.204 Radial†	421.7	420.0	5093.8	ug/L	5093.8	ppb	01:49:56
2	K 766.490 Radial†	29115.7	27187.7	4946.4	ug/L	4946.4	ppb	01:49:36
2	Mg 279.077 IEC†	115.7	115.8	5187.2	ug/L	5187.2	ppb	01:49:56
2	Na 589.592 Radial†	34198.5	36232.0	10163	ug/L	10163	ppb	01:49:36
2	Sr 421.552†	92976.3	95032.4	498.54	ug/L	498.54	ppb	01:49:36
2	Sc 361.383	1019716.1	1019716.1	98.098	%			01:50:57
2	Y 371.029	854661.7	854661.7	96.630	%			01:50:57
2	Ag 328.068†	125935.2	127902.4	510.09	ug/L	510.09	ppb	01:50:57
2	As 188.979†	1566.4	1633.3	513.37	ug/L	513.37	ppb	01:51:18
2	B 249.677†	25543.0	26504.3	498.93	ug/L	498.93	ppb	01:50:57
2	Ba 233.527†	77916.8	79427.3	511.59	ug/L	511.59	ppb	01:50:57
2	Be 313.107†	1591692.7	1627421.7	508.42	ug/L	508.42	ppb	01:50:57
2	Cd 226.502†	57336.1	58683.2	511.58	ug/L	511.58	ppb	01:50:57
2	Co 228.616†	30081.1	30750.6	506.69	ug/L	506.69	ppb	01:51:18
2	Cr 267.716†	55495.7	56483.7	508.27	ug/L	508.27	ppb	01:50:57
2	Cu 324.752†	196283.9	191151.4	510.73	ug/L	510.73	ppb	01:50:57
2	Mn 257.610†	531306.5	541029.2	512.74	ug/L	512.74	ppb	01:50:57
2	Mo 202.031†	9441.1	9594.9	509.54	ug/L	509.54	ppb	01:51:18
2	Ni 231.604†	25470.5	25832.3	505.83	ug/L	505.83	ppb	01:51:18

2	P 214.914†	5875.2	5723.9	2483.1 ug/L	2483.1 ppb	01:51:18
2	Pb 220.353†	5305.6	5484.0	516.35 ug/L	516.35 ppb	01:51:18
2	S 181.975 Axial†	979.0	937.9	1009.5 ug/L	1009.5 ppb	01:51:18
2	Sb 206.836†	1941.0	1944.0	519.89 ug/L	519.89 ppb	01:51:18
2	Se 196.026†	1112.7	1155.6	531.94 ug/L	531.94 ppb	01:51:18
2	Si 251.611†	98770.7	100127.8	2530.8 ug/L	2530.8 ppb	01:50:57
2	Sn 189.927†	3759.7	3836.9	508.06 ug/L	508.06 ppb	01:51:18
2	Ti 334.940†	360907.6	369164.3	509.04 ug/L	509.04 ppb	01:50:57
2	Tl 190.801†	2030.8	2114.4	514.63 ug/L	514.63 ppb	01:51:18
2	U 409.014†	16204.4	19292.5	497.17 ug/L	497.17 ppb	01:50:57
2	V 292.402†	85148.9	88408.0	512.93 ug/L	512.93 ppb	01:50:57
2	Zn 213.857†	69026.4	69478.9	506.04 ug/L	506.04 ppb	01:50:57
2	SiO2†	98416.0	99724.8	5393.7 ug/L	5393.7 ppb	01:51:56
3	Sc Radial	4653.9	4653.9	94.8 %		01:50:01
3	Y RADIAL	5285.5	5285.5	93.60 %		01:50:01
3	Al 396.153Radial†	7374.8	7824.0	5144.9 ug/L	5144.9 ppb	01:50:01
3	Ca 317.933Radial†	2775.7	2910.5	5153.0 ug/L	5153.0 ppb	01:50:21
3	Fe 238.204 Radial†	420.1	432.2	5240.5 ug/L	5240.5 ppb	01:50:21
3	K 766.490 Radial†	28686.0	27693.4	5038.5 ug/L	5038.5 ppb	01:50:01
3	Mg 279.077 IEC†	113.3	117.0	5241.8 ug/L	5241.8 ppb	01:50:21
3	Na 589.592 Radial†	33614.3	36742.0	10306 ug/L	10306 ppb	01:50:01
3	Sr 421.552†	91948.8	97010.7	508.91 ug/L	508.91 ppb	01:50:01
3	Sc 361.383	1026292.2	1026292.2	98.731 %		01:51:25
3	Y 371.029	859974.2	859974.2	97.231 %		01:51:25
3	Ag 328.068†	126896.0	128053.0	510.73 ug/L	510.73 ppb	01:51:25
3	As 188.979†	1550.3	1606.9	505.15 ug/L	505.15 ppb	01:51:45
3	B 249.677†	25960.1	26759.9	503.77 ug/L	503.77 ppb	01:51:25
3	Ba 233.527†	78365.6	79372.9	511.24 ug/L	511.24 ppb	01:51:25
3	Be 313.107†	1601191.8	1626646.3	508.18 ug/L	508.18 ppb	01:51:25
3	Cd 226.502†	57747.8	58725.7	511.93 ug/L	511.93 ppb	01:51:25
3	Co 228.616†	29723.5	30191.9	497.46 ug/L	497.46 ppb	01:51:45
3	Cr 267.716†	55821.4	56451.1	507.98 ug/L	507.98 ppb	01:51:25
3	Cu 324.752†	198006.8	191614.3	511.98 ug/L	511.98 ppb	01:51:25
3	Mn 257.610†	534643.9	540939.1	512.66 ug/L	512.66 ppb	01:51:25
3	Mo 202.031†	9319.7	9410.2	499.75 ug/L	499.75 ppb	01:51:45
3	Ni 231.604†	25146.3	25337.5	496.14 ug/L	496.14 ppb	01:51:45
3	P 214.914†	5813.5	5623.1	2437.6 ug/L	2437.6 ppb	01:51:45
3	Pb 220.353†	5214.3	5356.9	504.41 ug/L	504.41 ppb	01:51:45
3	S 181.975 Axial†	962.4	914.7	984.49 ug/L	984.49 ppb	01:51:45
3	Sb 206.836†	1911.6	1901.6	508.30 ug/L	508.30 ppb	01:51:45
3	Se 196.026†	1101.0	1136.5	523.98 ug/L	523.98 ppb	01:51:45
3	Si 251.611†	99331.7	100050.8	2529.0 ug/L	2529.0 ppb	01:51:25
3	Sn 189.927†	3699.0	3750.9	496.69 ug/L	496.69 ppb	01:51:45
3	Ti 334.940†	363362.3	369293.1	509.23 ug/L	509.23 ppb	01:51:25
3	Tl 190.801†	1992.9	2062.8	502.19 ug/L	502.19 ppb	01:51:45
3	U 409.014†	16432.7	19417.9	500.39 ug/L	500.39 ppb	01:51:25
3	V 292.402†	85649.8	88359.2	512.50 ug/L	512.50 ppb	01:51:25
3	Zn 213.857†	69536.9	69545.1	506.57 ug/L	506.57 ppb	01:51:25
3	SiO2†	99250.6	99927.3	5405.1 ug/L	5405.1 ppb	01:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1019393.2	98.067	%	0.6798				0.69%
Sc Radial	4585.7	93.4	%	5.28				5.65%
Y 371.029	854712.7	96.636	%	0.5920				0.61%
Y RADIAL	5226.7	92.55	%	5.439				5.88%
Ag 328.068†	128049.6	510.76	ug/L	0.677	510.76	ppb	0.677	0.13%
QC value within limits for Ag 328.068 Recovery = 102.15%								
Al 396.153Radial†	8010.0	5267.4	ug/L	333.86	5267.4	ppb	333.86	6.34%
QC value within limits for Al 396.153Radial Recovery = 105.35%								
As 188.979†	1624.5	510.67	ug/L	4.776	510.67	ppb	4.776	0.94%
QC value within limits for As 188.979 Recovery = 102.13%								
B 249.677†	26608.0	500.86	ug/L	2.560	500.86	ppb	2.560	0.51%
QC value within limits for B 249.677 Recovery = 100.17%								
Ba 233.527†	79396.2	511.40	ug/L	0.175	511.40	ppb	0.175	0.03%
QC value within limits for Ba 233.527 Recovery = 102.28%								
Be 313.107†	1628036.3	508.61	ug/L	0.555	508.61	ppb	0.555	0.11%
QC value within limits for Be 313.107 Recovery = 101.72%								
Ca 317.933Radial†	2981.0	5277.9	ug/L	318.04	5277.9	ppb	318.04	6.03%

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   QC value within limits for Ca 317.933Radial  Recovery = 105.56%
Cd 226.502†            58723.8      511.91 ug/L         0.316      511.91 ppb          0.316   0.06%
   QC value within limits for Cd 226.502  Recovery = 102.38%
Co 228.616†            30622.1      504.56 ug/L         6.316      504.56 ppb          6.316   1.25%
   QC value within limits for Co 228.616  Recovery = 100.91%
Cr 267.716†            56448.5      507.96 ug/L         0.322      507.96 ppb          0.322   0.06%
   QC value within limits for Cr 267.716  Recovery = 101.59%
Cu 324.752†           191394.9      511.40 ug/L         0.626      511.40 ppb          0.626   0.12%
   QC value within limits for Cu 324.752  Recovery = 102.28%
Fe 238.204 Radial†       441.6      5354.6 ug/L        332.82      5354.6 ppb         332.82   6.22%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.09%
K 766.490 Radial†      28524.5      5189.8 ug/L        345.01      5189.8 ppb         345.01   6.65%
   QC value within limits for K 766.490 Radial  Recovery = 103.80%
Mg 279.077 IEC†          121.1      5425.6 ug/L        366.67      5425.6 ppb         366.67   6.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.51%
Mn 257.610†           541055.9      512.78 ug/L         0.148      512.78 ppb          0.148   0.03%
   QC value within limits for Mn 257.610  Recovery = 102.56%
Mo 202.031†            9555.1      507.44 ug/L         6.890      507.44 ppb          6.890   1.36%
   QC value within limits for Mo 202.031  Recovery = 101.49%
Na 589.592 Radial†     37839.8       10614 ug/L         661.1       10614 ppb          661.1   6.23%
   QC value within limits for Na 589.592 Radial  Recovery = 106.14%
Ni 231.604†            25708.9      503.41 ug/L         6.415      503.41 ppb          6.415   1.27%
   QC value within limits for Ni 231.604  Recovery = 100.68%
P 214.914†              5711.6      2477.3 ug/L        37.20      2477.3 ppb         37.20   1.50%
   QC value within limits for P 214.914  Recovery = 99.09%
Pb 220.353†             5440.0      512.26 ug/L         6.794      512.26 ppb          6.794   1.33%
   QC value within limits for Pb 220.353  Recovery = 102.45%
S 181.975 Axial†         932.0      1003.1 ug/L        16.32      1003.1 ppb         16.32   1.63%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1929.2      515.88 ug/L         6.569      515.88 ppb          6.569   1.27%
   QC value within limits for Sb 206.836  Recovery = 103.18%
Se 196.026†             1152.9      531.67 ug/L         7.571      531.67 ppb          7.571   1.42%
   QC value within limits for Se 196.026  Recovery = 106.33%
Si 251.611†           100102.2      2530.1 ug/L          0.96      2530.1 ppb           0.96   0.04%
   QC value within limits for Si 251.611  Recovery = 101.20%
Sn 189.927†             3804.3      503.77 ug/L         6.174      503.77 ppb          6.174   1.23%
   QC value within limits for Sn 189.927  Recovery = 100.75%
Sr 421.552†            99579.4      522.39 ug/L        32.741      522.39 ppb         32.741   6.27%
   QC value within limits for Sr 421.552  Recovery = 104.48%
Ti 334.940†           369351.0      509.31 ug/L         0.323      509.31 ppb          0.323   0.06%
   QC value within limits for Ti 334.940  Recovery = 101.86%
Tl 190.801†             2095.4      510.05 ug/L         6.834      510.05 ppb          6.834   1.34%
   QC value within limits for Tl 190.801  Recovery = 102.01%
U 409.014†             19312.1      497.65 ug/L         2.545      497.65 ppb          2.545   0.51%
   QC value within limits for U 409.014  Recovery = 99.53%
V 292.402†             88452.2      513.12 ug/L         0.736      513.12 ppb          0.736   0.14%
   QC value within limits for V 292.402  Recovery = 102.62%
Zn 213.857†            69479.6      506.03 ug/L         0.550      506.03 ppb          0.550   0.11%
   QC value within limits for Zn 213.857  Recovery = 101.21%
SiO2†                  99739.4      5394.4 ug/L        10.32      5394.4 ppb         10.32   0.19%
   QC value within limits for SiO2  Recovery = 100.88%
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 01:54:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4684.7	4684.7	95.4	%			01:56:02
1	Y RADIAL	5376.2	5376.2	95.20	%			01:56:02
1	Al 396.153Radial†	-33.0	9.2	6.0923	ug/L	6.0923	ppb	01:56:02
1	Ca 317.933Radial†	27.5	10.9	19.356	ug/L	19.356	ppb	01:56:22
1	Fe 238.204 Radial†	9.3	-1.2	-15.086	ug/L	-15.086	ppb	01:56:22
1	K 766.490 Radial†	2611.2	167.1	30.437	ug/L	30.437	ppb	01:56:02
1	Mg 279.077 IEC†	3.0	0.7	30.807	ug/L	30.807	ppb	01:56:22
1	Na 589.592 Radial†	-1139.2	86.0	24.124	ug/L	24.124	ppb	01:56:02
1	Sr 421.552†	-24.6	-18.4	-0.0967	ug/L	-0.0967	ppb	01:56:02
1	Sc 361.383	1013939.4	1013939.4	97.543	%			01:57:19
1	Y 371.029	863202.3	863202.3	97.596	%			01:57:19
1	Ag 328.068†	488.6	26.9	0.1039	ug/L	0.1039	ppb	01:57:24
1	As 188.979†	-31.8	4.0	1.2379	ug/L	1.2379	ppb	01:57:44
1	B 249.677†	-365.6	91.3	1.7277	ug/L	1.7277	ppb	01:57:24
1	Ba 233.527†	8.8	9.1	0.0584	ug/L	0.0584	ppb	01:57:44
1	Be 313.107†	-4811.4	-58.7	-0.0184	ug/L	-0.0184	ppb	01:57:24
1	Cd 226.502†	-233.7	-3.9	-0.0328	ug/L	-0.0328	ppb	01:57:44
1	Co 228.616†	-104.6	-20.9	-0.3443	ug/L	-0.3443	ppb	01:57:44
1	Cr 267.716†	86.2	0.5	0.0056	ug/L	0.0056	ppb	01:57:44
1	Cu 324.752†	9039.6	329.9	0.8802	ug/L	0.8802	ppb	01:57:24
1	Mn 257.610†	676.1	116.5	0.1082	ug/L	0.1082	ppb	01:57:44
1	Mo 202.031†	28.7	0.2	0.0084	ug/L	0.0084	ppb	01:57:44
1	Ni 231.604†	126.0	-2.8	-0.0537	ug/L	-0.0537	ppb	01:57:44
1	P 214.914†	276.9	18.8	8.2734	ug/L	8.2734	ppb	01:57:44
1	Pb 220.353†	-52.2	22.0	2.0705	ug/L	2.0705	ppb	01:57:44
1	S 181.975 Axial†	58.5	-0.1	-0.1531	ug/L	-0.1531	ppb	01:57:44
1	Sb 206.836†	44.0	10.5	2.7760	ug/L	2.7760	ppb	01:57:44
1	Se 196.026†	-32.5	-11.9	-5.3425	ug/L	-5.3425	ppb	01:57:44
1	Si 251.611†	648.3	107.0	2.7074	ug/L	2.7074	ppb	01:57:44
1	Sn 189.927†	-3.4	0.9	0.1154	ug/L	0.1154	ppb	01:57:44
1	Ti 334.940†	-1263.1	-34.5	-0.0459	ug/L	-0.0459	ppb	01:57:24
1	Tl 190.801†	-55.5	-12.6	-3.0554	ug/L	-3.0554	ppb	01:57:44
1	U 409.014†	-2764.2	-59.9	-1.5458	ug/L	-1.5458	ppb	01:57:19
1	V 292.402†	-1522.6	47.6	0.2726	ug/L	0.2726	ppb	01:57:24
1	Zn 213.857†	958.3	96.9	0.7119	ug/L	0.7119	ppb	01:57:44
1	SiO2†	660.0	77.6	4.1938	ug/L	4.1938	ppb	01:58:50
2	Sc Radial	4711.8	4711.8	96.0	%			01:56:27
2	Y RADIAL	5341.3	5341.3	94.58	%			01:56:27
2	Al 396.153Radial†	-50.5	-8.8	-5.8553	ug/L	-5.8553	ppb	01:56:27
2	Ca 317.933Radial†	35.7	19.3	34.231	ug/L	34.231	ppb	01:56:47
2	Fe 238.204 Radial†	12.8	2.4	28.467	ug/L	28.467	ppb	01:56:47
2	K 766.490 Radial†	2724.4	269.3	49.073	ug/L	49.073	ppb	01:56:27
2	Mg 279.077 IEC†	1.2	-1.3	-57.256	ug/L	-57.256	ppb	01:56:47
2	Na 589.592 Radial†	-1160.9	70.3	19.712	ug/L	19.712	ppb	01:56:27
2	Sr 421.552†	-45.9	-40.4	-0.2123	ug/L	-0.2123	ppb	01:56:27
2	Sc 361.383	1035025.5	1035025.5	99.571	%			01:57:49
2	Y 371.029	879839.7	879839.7	99.477	%			01:57:49
2	Ag 328.068†	348.9	-123.6	-0.4830	ug/L	-0.4830	ppb	01:57:54
2	As 188.979†	-35.8	0.7	0.2088	ug/L	0.2088	ppb	01:58:14
2	B 249.677†	-347.3	117.3	2.2117	ug/L	2.2117	ppb	01:57:54
2	Ba 233.527†	26.1	26.2	0.1691	ug/L	0.1691	ppb	01:58:14
2	Be 313.107†	-4859.6	-6.6	-0.0020	ug/L	-0.0020	ppb	01:57:54
2	Cd 226.502†	-242.4	-7.8	-0.0707	ug/L	-0.0707	ppb	01:58:14
2	Co 228.616†	-74.7	11.3	0.1871	ug/L	0.1871	ppb	01:58:14
2	Cr 267.716†	112.9	25.6	0.2302	ug/L	0.2302	ppb	01:58:14
2	Cu 324.752†	8971.2	72.3	0.1946	ug/L	0.1946	ppb	01:57:54
2	Mn 257.610†	700.1	126.5	0.1236	ug/L	0.1236	ppb	01:58:14
2	Mo 202.031†	34.8	5.7	0.3045	ug/L	0.3045	ppb	01:58:14
2	Ni 231.604†	128.8	-2.6	-0.0513	ug/L	-0.0513	ppb	01:58:14

2	P 214.914†	276.7	12.8	5.6620	ug/L	5.6620 ppb	01:58:14
2	Pb 220.353†	-76.9	-1.7	-0.1641	ug/L	-0.1641 ppb	01:58:14
2	S 181.975 Axial†	54.3	-5.5	-5.9676	ug/L	-5.9676 ppb	01:58:14
2	Sb 206.836†	49.6	15.2	4.0138	ug/L	4.0138 ppb	01:58:14
2	Se 196.026†	-23.0	-1.7	-0.6625	ug/L	-0.6625 ppb	01:58:14
2	Si 251.611†	625.9	71.0	1.7803	ug/L	1.7803 ppb	01:58:14
2	Sn 189.927†	-2.0	2.3	0.3133	ug/L	0.3133 ppb	01:58:14
2	Ti 334.940†	-1240.2	14.9	0.0219	ug/L	0.0219 ppb	01:57:54
2	Tl 190.801†	-48.5	-4.4	-1.0752	ug/L	-1.0752 ppb	01:58:14
2	U 409.014†	-2735.4	26.8	0.6878	ug/L	0.6878 ppb	01:57:49
2	V 292.402†	-1644.0	-42.6	-0.2439	ug/L	-0.2439 ppb	01:57:54
2	Zn 213.857†	954.7	73.3	0.5378	ug/L	0.5378 ppb	01:58:14
2	SiO2†	633.2	36.9	1.9538	ug/L	1.9538 ppb	01:58:55
3	Sc Radial	4760.6	4760.6	97.0	%		01:56:52
3	Y RADIAL	5428.0	5428.0	96.12	%		01:56:52
3	Al 396.153Radial†	-11.5	31.9	21.063	ug/L	21.063 ppb	01:56:52
3	Ca 317.933Radial†	26.6	9.6	17.052	ug/L	17.052 ppb	01:57:12
3	Fe 238.204 Radial†	11.9	1.3	15.259	ug/L	15.259 ppb	01:57:12
3	K 766.490 Radial†	2736.4	252.6	46.017	ug/L	46.017 ppb	01:56:52
3	Mg 279.077 IEC†	1.9	-0.5	-24.024	ug/L	-24.024 ppb	01:57:12
3	Na 589.592 Radial†	-1099.6	145.9	40.924	ug/L	40.924 ppb	01:56:52
3	Sr 421.552†	11.9	19.6	0.1029	ug/L	0.1029 ppb	01:56:52
3	Sc 361.383	1016726.7	1016726.7	97.811	%		01:58:19
3	Y 371.029	863841.9	863841.9	97.668	%		01:58:19
3	Ag 328.068†	512.1	49.5	0.2013	ug/L	0.2013 ppb	01:58:25
3	As 188.979†	-40.7	-5.0	-1.5457	ug/L	-1.5457 ppb	01:58:45
3	B 249.677†	-398.0	59.2	1.1169	ug/L	1.1169 ppb	01:58:25
3	Ba 233.527†	31.6	32.3	0.2081	ug/L	0.2081 ppb	01:58:45
3	Be 313.107†	-4826.9	-61.0	-0.0189	ug/L	-0.0189 ppb	01:58:25
3	Cd 226.502†	-219.6	11.1	0.0952	ug/L	0.0952 ppb	01:58:45
3	Co 228.616†	-93.4	-9.2	-0.1519	ug/L	-0.1519 ppb	01:58:45
3	Cr 267.716†	108.1	22.7	0.2046	ug/L	0.2046 ppb	01:58:45
3	Cu 324.752†	8950.2	213.0	0.5697	ug/L	0.5697 ppb	01:58:25
3	Mn 257.610†	675.2	113.6	0.1095	ug/L	0.1095 ppb	01:58:45
3	Mo 202.031†	24.0	-4.8	-0.2510	ug/L	-0.2510 ppb	01:58:45
3	Ni 231.604†	120.5	-8.7	-0.1708	ug/L	-0.1708 ppb	01:58:45
3	P 214.914†	283.8	25.0	11.102	ug/L	11.102 ppb	01:58:45
3	Pb 220.353†	-58.8	15.5	1.4561	ug/L	1.4561 ppb	01:58:45
3	S 181.975 Axial†	63.9	5.2	5.5995	ug/L	5.5995 ppb	01:58:45
3	Sb 206.836†	42.3	8.6	2.2753	ug/L	2.2753 ppb	01:58:45
3	Se 196.026†	-29.2	-8.5	-3.7225	ug/L	-3.7225 ppb	01:58:45
3	Si 251.611†	646.3	103.2	2.6076	ug/L	2.6076 ppb	01:58:45
3	Sn 189.927†	-0.4	3.9	0.5167	ug/L	0.5167 ppb	01:58:45
3	Ti 334.940†	-1206.0	27.4	0.0389	ug/L	0.0389 ppb	01:58:25
3	Tl 190.801†	-37.9	5.5	1.3441	ug/L	1.3441 ppb	01:58:45
3	U 409.014†	-2736.9	-24.2	-0.6275	ug/L	-0.6275 ppb	01:58:19
3	V 292.402†	-1578.7	-5.6	-0.0396	ug/L	-0.0396 ppb	01:58:25
3	Zn 213.857†	960.4	96.4	0.7080	ug/L	0.7080 ppb	01:58:45
3	SiO2†	663.0	78.8	4.2533	ug/L	4.2533 ppb	01:59:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021897.2	98.308	%	1.1019				1.12%
Sc Radial	4719.0	96.1	%	0.78				0.81%
Y 371.029	868961.3	98.247	%	1.0658				1.08%
Y RADIAL	5381.9	95.30	%	0.772				0.81%
Ag 328.068†	-15.7	-0.0593	ug/L	0.37021	-0.0593	ppb	0.37021	624.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.8	7.1000	ug/L	13.48742	7.1000	ppb	13.48742	189.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0330	ug/L	1.40746	-0.0330	ppb	1.40746	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	89.2	1.6855	ug/L	0.54862	1.6855	ppb	0.54862	32.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.5	0.1452	ug/L	0.07767	0.1452	ppb	0.07767	53.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-42.1	-0.0131	ug/L	0.00961	-0.0131	ppb	0.00961	73.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.3	23.546	ug/L	9.3245	23.546	ppb	9.3245	39.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -0.2     -0.0028 ug/L       0.08689     -0.0028 ppb        0.08689 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -6.3     -0.1030 ug/L       0.26902     -0.1030 ppb        0.26902 261.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              16.3      0.1468 ug/L       0.12293      0.1468 ppb        0.12293  83.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             205.1      0.5481 ug/L       0.34331      0.5481 ppb        0.34331  62.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.8      9.5465 ug/L      22.33121      9.5465 ppb       22.33121 233.92%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       229.7     41.843 ug/L        9.9945     41.843 ppb         9.9945  23.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4    -16.824 ug/L       44.4707    -16.824 ppb        44.4707 264.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             118.8      0.1138 ug/L       0.00855      0.1138 ppb        0.00855   7.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.4      0.0206 ug/L       0.27798      0.0206 ppb        0.27798 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      100.7     28.254 ug/L       11.1925     28.254 ppb        11.1925  39.61%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -4.7     -0.0919 ug/L       0.06830     -0.0919 ppb        0.06830  74.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               18.9      8.3457 ug/L       2.72050      8.3457 ppb        2.72050  32.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              11.9      1.1208 ug/L       1.15443      1.1208 ppb        1.15443 103.00%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.2     -0.1738 ug/L       5.78356     -0.1738 ppb        5.78356 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              11.5      3.0217 ug/L       0.89490      3.0217 ppb        0.89490  29.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -7.4     -3.2425 ug/L       2.37661     -3.2425 ppb        2.37661  73.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              93.7      2.3651 ug/L       0.50890      2.3651 ppb        0.50890  21.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.4      0.3151 ug/L       0.20064      0.3151 ppb        0.20064  63.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -13.1     -0.0687 ug/L       0.15945     -0.0687 ppb        0.15945 232.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               2.6      0.0050 ug/L       0.04488      0.0050 ppb        0.04488 901.20%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.8     -0.9288 ug/L       2.20340     -0.9288 ppb        2.20340 237.22%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -19.1     -0.4952 ug/L       1.12265     -0.4952 ppb        1.12265 226.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -0.2     -0.0036 ug/L       0.26014     -0.0036 ppb        0.26014 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              88.9      0.6526 ug/L       0.09938      0.6526 ppb        0.09938  15.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    64.4      3.4669 ug/L       1.31078      3.4669 ppb        1.31078  37.81%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 41
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/5/2009 02:42:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4720.2	4720.2	96.1	%			02:44:26
1	Y RADIAL	5371.6	5371.6	95.12	%			02:44:26
1	Al 396.153Radial†	7236.1	7570.4	4977.0	ug/L	4977.0	ppb	02:44:26
1	Ca 317.933Radial†	2799.2	2893.7	5123.5	ug/L	5123.5	ppb	02:44:46
1	Fe 238.204 Radial†	423.2	429.2	5205.3	ug/L	5205.3	ppb	02:44:46
1	K 766.490 Radial†	28450.8	27023.5	4916.4	ug/L	4916.4	ppb	02:44:26
1	Mg 279.077 IEC†	116.3	118.4	5305.4	ug/L	5305.4	ppb	02:44:46
1	Na 589.592 Radial†	33648.1	36278.9	10176	ug/L	10176	ppb	02:44:26
1	Sr 421.552†	91061.6	94724.6	496.92	ug/L	496.92	ppb	02:44:26
1	Sc 361.383	1007803.1	1007803.1	96.952	%			02:45:45
1	Y 371.029	844856.8	844856.8	95.521	%			02:45:45
1	Ag 328.068†	125232.7	128695.3	513.27	ug/L	513.27	ppb	02:45:45
1	As 188.979†	1543.2	1628.3	511.84	ug/L	511.84	ppb	02:46:05
1	B 249.677†	25407.7	26672.5	502.09	ug/L	502.09	ppb	02:45:45
1	Ba 233.527†	77257.8	79686.5	513.26	ug/L	513.26	ppb	02:45:45
1	Be 313.107†	1580507.5	1635064.6	510.81	ug/L	510.81	ppb	02:45:45
1	Cd 226.502†	56774.3	58794.6	512.54	ug/L	512.54	ppb	02:45:45
1	Co 228.616†	29811.8	30835.3	508.08	ug/L	508.08	ppb	02:46:05
1	Cr 267.716†	54963.2	56603.1	509.34	ug/L	509.34	ppb	02:45:45
1	Cu 324.752†	195519.8	192728.4	514.95	ug/L	514.95	ppb	02:45:45
1	Mn 257.610†	527336.6	543336.7	514.93	ug/L	514.93	ppb	02:45:45
1	Mo 202.031†	9364.8	9629.9	511.40	ug/L	511.40	ppb	02:46:05
1	Ni 231.604†	25295.6	25958.8	508.30	ug/L	508.30	ppb	02:46:05
1	P 214.914†	5845.6	5764.2	2500.4	ug/L	2500.4	ppb	02:46:05
1	Pb 220.353†	5240.3	5480.6	516.02	ug/L	516.02	ppb	02:46:05
1	S 181.975 Axial†	964.8	935.0	1006.4	ug/L	1006.4	ppb	02:46:05
1	Sb 206.836†	1924.7	1950.6	521.69	ug/L	521.69	ppb	02:46:05
1	Se 196.026†	1102.6	1158.6	533.67	ug/L	533.67	ppb	02:46:05
1	Si 251.611†	98022.8	100546.5	2541.4	ug/L	2541.4	ppb	02:45:45
1	Sn 189.927†	3730.8	3852.4	510.11	ug/L	510.11	ppb	02:46:05
1	Ti 334.940†	358528.1	371058.8	511.66	ug/L	511.66	ppb	02:45:45
1	Tl 190.801†	1990.7	2097.6	510.57	ug/L	510.57	ppb	02:46:05
1	U 409.014†	16327.4	19614.7	505.48	ug/L	505.48	ppb	02:45:45
1	V 292.402†	84560.3	88827.0	515.36	ug/L	515.36	ppb	02:45:45
1	Zn 213.857†	68483.5	69750.7	508.01	ug/L	508.01	ppb	02:45:45
1	SiO2†	97177.9	99633.6	5388.7	ug/L	5388.7	ppb	02:47:06
2	Sc Radial	4739.2	4739.2	96.5	%			02:44:51
2	Y RADIAL	5336.0	5336.0	94.49	%			02:44:51
2	Al 396.153Radial†	7393.8	7703.7	5065.0	ug/L	5065.0	ppb	02:44:51
2	Ca 317.933Radial†	2794.4	2877.1	5094.0	ug/L	5094.0	ppb	02:45:11
2	Fe 238.204 Radial†	423.9	428.2	5192.7	ug/L	5192.7	ppb	02:45:11
2	K 766.490 Radial†	28934.8	27406.6	4986.2	ug/L	4986.2	ppb	02:44:51
2	Mg 279.077 IEC†	114.7	116.4	5212.0	ug/L	5212.0	ppb	02:45:11
2	Na 589.592 Radial†	34193.1	36703.6	10295	ug/L	10295	ppb	02:44:51
2	Sr 421.552†	92905.9	96256.6	504.96	ug/L	504.96	ppb	02:44:51
2	Sc 361.383	1005245.5	1005245.5	96.706	%			02:46:13
2	Y 371.029	843518.7	843518.7	95.370	%			02:46:13
2	Ag 328.068†	124595.3	128364.8	511.97	ug/L	511.97	ppb	02:46:13
2	As 188.979†	1536.3	1625.2	510.86	ug/L	510.86	ppb	02:46:33
2	B 249.677†	25383.4	26714.1	502.88	ug/L	502.88	ppb	02:46:13
2	Ba 233.527†	77192.8	79822.0	514.13	ug/L	514.13	ppb	02:46:13
2	Be 313.107†	1579923.8	1638608.7	511.91	ug/L	511.91	ppb	02:46:13
2	Cd 226.502†	56856.6	59028.8	514.59	ug/L	514.59	ppb	02:46:13
2	Co 228.616†	29718.2	30816.7	507.78	ug/L	507.78	ppb	02:46:33
2	Cr 267.716†	55072.6	56860.5	511.66	ug/L	511.66	ppb	02:46:13
2	Cu 324.752†	193978.0	191647.3	512.06	ug/L	512.06	ppb	02:46:13
2	Mn 257.610†	526055.9	543396.2	514.99	ug/L	514.99	ppb	02:46:13
2	Mo 202.031†	9349.3	9638.5	511.86	ug/L	511.86	ppb	02:46:33
2	Ni 231.604†	25202.2	25928.6	507.71	ug/L	507.71	ppb	02:46:33

2	P 214.914†	5803.8	5736.3	2488.4	ug/L	2488.4 ppb	02:46:33
2	Pb 220.353†	5214.2	5467.3	514.80	ug/L	514.80 ppb	02:46:33
2	S 181.975 Axial†	965.6	938.4	1010.0	ug/L	1010.0 ppb	02:46:33
2	Sb 206.836†	1917.2	1947.9	520.91	ug/L	520.91 ppb	02:46:33
2	Se 196.026†	1095.8	1154.4	531.79	ug/L	531.79 ppb	02:46:33
2	Si 251.611†	97663.5	100432.2	2538.5	ug/L	2538.5 ppb	02:46:13
2	Sn 189.927†	3718.8	3849.7	509.76	ug/L	509.76 ppb	02:46:33
2	Ti 334.940†	357380.3	370812.8	511.32	ug/L	511.32 ppb	02:46:13
2	Tl 190.801†	1981.6	2093.4	509.55	ug/L	509.55 ppb	02:46:33
2	U 409.014†	16034.2	19354.3	498.75	ug/L	498.75 ppb	02:46:13
2	V 292.402†	84448.6	88933.4	515.96	ug/L	515.96 ppb	02:46:13
2	Zn 213.857†	68267.9	69707.5	507.70	ug/L	507.70 ppb	02:46:13
2	SiO2†	97730.2	100459.8	5433.5	ug/L	5433.5 ppb	02:47:11
3	Sc Radial	4607.2	4607.2	93.8	%		02:45:16
3	Y RADIAL	5215.2	5215.2	92.35	%		02:45:16
3	Al 396.153Radial†	7181.0	7696.3	5059.9	ug/L	5059.9 ppb	02:45:16
3	Ca 317.933Radial†	2766.3	2930.2	5187.9	ug/L	5187.9 ppb	02:45:36
3	Fe 238.204 Radial†	419.2	435.7	5284.0	ug/L	5284.0 ppb	02:45:36
3	K 766.490 Radial†	28235.7	27520.3	5007.0	ug/L	5007.0 ppb	02:45:16
3	Mg 279.077 IEC†	114.2	119.2	5338.8	ug/L	5338.8 ppb	02:45:36
3	Na 589.592 Radial†	33080.0	36532.3	10247	ug/L	10247 ppb	02:45:16
3	Sr 421.552†	89564.2	95453.0	500.74	ug/L	500.74 ppb	02:45:16
3	Sc 361.383	1004884.5	1004884.5	96.672	%		02:46:40
3	Y 371.029	844040.6	844040.6	95.429	%		02:46:40
3	Ag 328.068†	124839.7	128664.0	513.18	ug/L	513.18 ppb	02:46:40
3	As 188.979†	1549.4	1639.3	515.27	ug/L	515.27 ppb	02:47:00
3	B 249.677†	25417.2	26758.4	503.69	ug/L	503.69 ppb	02:46:40
3	Ba 233.527†	77137.8	79793.7	513.96	ug/L	513.96 ppb	02:46:40
3	Be 313.107†	1580116.2	1639394.7	512.16	ug/L	512.16 ppb	02:46:40
3	Cd 226.502†	56733.2	58922.2	513.65	ug/L	513.65 ppb	02:46:40
3	Co 228.616†	29992.5	31111.5	512.64	ug/L	512.64 ppb	02:47:00
3	Cr 267.716†	55029.0	56835.9	511.44	ug/L	511.44 ppb	02:46:40
3	Cu 324.752†	194241.1	191991.5	512.99	ug/L	512.99 ppb	02:46:40
3	Mn 257.610†	525312.0	542822.2	514.45	ug/L	514.45 ppb	02:46:40
3	Mo 202.031†	9410.2	9704.9	515.39	ug/L	515.39 ppb	02:47:00
3	Ni 231.604†	25402.6	26145.3	511.95	ug/L	511.95 ppb	02:47:00
3	P 214.914†	5868.5	5805.5	2519.2	ug/L	2519.2 ppb	02:47:00
3	Pb 220.353†	5255.7	5512.2	519.01	ug/L	519.01 ppb	02:47:00
3	S 181.975 Axial†	974.2	947.6	1020.0	ug/L	1020.0 ppb	02:47:00
3	Sb 206.836†	1930.9	1962.8	525.01	ug/L	525.01 ppb	02:47:00
3	Se 196.026†	1103.8	1163.2	536.01	ug/L	536.01 ppb	02:47:00
3	Si 251.611†	97549.0	100350.1	2536.3	ug/L	2536.3 ppb	02:46:40
3	Sn 189.927†	3751.3	3884.8	514.41	ug/L	514.41 ppb	02:47:00
3	Ti 334.940†	357018.5	370571.4	510.99	ug/L	510.99 ppb	02:46:40
3	Tl 190.801†	2004.9	2118.1	515.51	ug/L	515.51 ppb	02:47:00
3	U 409.014†	15981.3	19305.5	497.48	ug/L	497.48 ppb	02:46:40
3	V 292.402†	84540.8	89060.1	516.72	ug/L	516.72 ppb	02:46:40
3	Zn 213.857†	68311.1	69777.6	508.17	ug/L	508.17 ppb	02:46:40
3	SiO2†	97561.3	100321.4	5425.8	ug/L	5425.8 ppb	02:47:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1005977.7	96.777	%	0.1531				0.16%
Sc Radial	4688.9	95.5	%	1.45				1.52%
Y 371.029	844138.7	95.440	%	0.0763				0.08%
Y RADIAL	5307.6	93.99	%	1.451				1.54%
Ag 328.068†	128574.7	512.81	ug/L	0.730	512.81	ppb	0.730	0.14%
QC value within limits for Ag 328.068 Recovery = 102.56%								
Al 396.153Radial†	7656.8	5034.0	ug/L	49.43	5034.0	ppb	49.43	0.98%
QC value within limits for Al 396.153Radial Recovery = 100.68%								
As 188.979†	1630.9	512.66	ug/L	2.319	512.66	ppb	2.319	0.45%
QC value within limits for As 188.979 Recovery = 102.53%								
B 249.677†	26715.0	502.89	ug/L	0.800	502.89	ppb	0.800	0.16%
QC value within limits for B 249.677 Recovery = 100.58%								
Ba 233.527†	79767.4	513.78	ug/L	0.461	513.78	ppb	0.461	0.09%
QC value within limits for Ba 233.527 Recovery = 102.76%								
Be 313.107†	1637689.3	511.62	ug/L	0.719	511.62	ppb	0.719	0.14%
QC value within limits for Be 313.107 Recovery = 102.32%								
Ca 317.933Radial†	2900.3	5135.1	ug/L	48.05	5135.1	ppb	48.05	0.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.70%
Cd 226.502†            58915.2      513.59 ug/L         1.023      513.59 ppb          1.023   0.20%
   QC value within limits for Cd 226.502  Recovery = 102.72%
Co 228.616†            30921.2      509.50 ug/L         2.724      509.50 ppb          2.724   0.53%
   QC value within limits for Co 228.616  Recovery = 101.90%
Cr 267.716†            56766.5      510.82 ug/L         1.278      510.82 ppb          1.278   0.25%
   QC value within limits for Cr 267.716  Recovery = 102.16%
Cu 324.752†           192122.4      513.33 ug/L         1.475      513.33 ppb          1.475   0.29%
   QC value within limits for Cu 324.752  Recovery = 102.67%
Fe 238.204 Radial†       431.0      5227.3 ug/L        49.45      5227.3 ppb         49.45   0.95%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.55%
K 766.490 Radial†      27316.8      4969.9 ug/L        47.44      4969.9 ppb         47.44   0.95%
   QC value within limits for K 766.490 Radial  Recovery = 99.40%
Mg 279.077 IEC†          118.0      5285.4 ug/L        65.73      5285.4 ppb         65.73   1.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.71%
Mn 257.610†           543185.1      514.79 ug/L         0.295      514.79 ppb          0.295   0.06%
   QC value within limits for Mn 257.610  Recovery = 102.96%
Mo 202.031†             9657.8      512.88 ug/L         2.183      512.88 ppb          2.183   0.43%
   QC value within limits for Mo 202.031  Recovery = 102.58%
Na 589.592 Radial†     36504.9       10240 ug/L          59.9       10240 ppb          59.9   0.59%
   QC value within limits for Na 589.592 Radial  Recovery = 102.40%
Ni 231.604†            26010.9      509.32 ug/L         2.298      509.32 ppb          2.298   0.45%
   QC value within limits for Ni 231.604  Recovery = 101.86%
P 214.914†              5768.7      2502.6 ug/L        15.51      2502.6 ppb         15.51   0.62%
   QC value within limits for P 214.914  Recovery = 100.11%
Pb 220.353†             5486.7      516.61 ug/L         2.166      516.61 ppb          2.166   0.42%
   QC value within limits for Pb 220.353  Recovery = 103.32%
S 181.975 Axial†         940.4      1012.1 ug/L         7.01      1012.1 ppb          7.01   0.69%
   QC value within limits for S 181.975 Axial  Recovery = 101.21%
Sb 206.836†             1953.7      522.54 ug/L         2.176      522.54 ppb          2.176   0.42%
   QC value within limits for Sb 206.836  Recovery = 104.51%
Se 196.026†             1158.7      533.83 ug/L         2.115      533.83 ppb          2.115   0.40%
   QC value within limits for Se 196.026  Recovery = 106.77%
Si 251.611†           100442.9      2538.7 ug/L         2.56      2538.7 ppb          2.56   0.10%
   QC value within limits for Si 251.611  Recovery = 101.55%
Sn 189.927†             3862.3      511.43 ug/L         2.585      511.43 ppb          2.585   0.51%
   QC value within limits for Sn 189.927  Recovery = 102.29%
Sr 421.552†            95478.1      500.87 ug/L         4.021      500.87 ppb          4.021   0.80%
   QC value within limits for Sr 421.552  Recovery = 100.17%
Ti 334.940†           370814.3      511.32 ug/L         0.333      511.32 ppb          0.333   0.07%
   QC value within limits for Ti 334.940  Recovery = 102.26%
Tl 190.801†             2103.0      511.87 ug/L         3.188      511.87 ppb          3.188   0.62%
   QC value within limits for Tl 190.801  Recovery = 102.37%
U 409.014†             19424.8      500.57 ug/L         4.303      500.57 ppb          4.303   0.86%
   QC value within limits for U 409.014  Recovery = 100.11%
V 292.402†             88940.2      516.01 ug/L         0.684      516.01 ppb          0.684   0.13%
   QC value within limits for V 292.402  Recovery = 103.20%
Zn 213.857†            69745.3      507.96 ug/L         0.240      507.96 ppb          0.240   0.05%
   QC value within limits for Zn 213.857  Recovery = 101.59%
SiO2†                 100138.3      5416.0 ug/L        23.97      5416.0 ppb         23.97   0.44%
   QC value within limits for SiO2  Recovery = 101.28%
All analyte(s) passed QC.
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Sequence No.: 42
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2009 02:49:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4758.0	4758.0	96.9	%			02:51:17
1	Y RADIAL	5448.8	5448.8	96.49	%			02:51:17
1	Al 396.153Radial†	-30.7	12.1	7.9921	ug/L	7.9921	ppb	02:51:17
1	Ca 317.933Radial†	27.6	10.7	18.924	ug/L	18.924	ppb	02:51:37
1	Fe 238.204 Radial†	11.3	0.7	8.2934	ug/L	8.2934	ppb	02:51:37
1	K 766.490 Radial†	2622.7	136.8	24.916	ug/L	24.916	ppb	02:51:17
1	Mg 279.077 IEC†	1.3	-1.2	-52.148	ug/L	-52.148	ppb	02:51:37
1	Na 589.592 Radial†	-1101.8	143.0	40.120	ug/L	40.120	ppb	02:51:17
1	Sr 421.552†	37.3	45.9	0.2404	ug/L	0.2404	ppb	02:51:17
1	Sc 361.383	1031146.6	1031146.6	99.198	%			02:52:34
1	Y 371.029	876939.5	876939.5	99.149	%			02:52:34
1	Ag 328.068†	421.9	-48.7	-0.1920	ug/L	-0.1920	ppb	02:52:39
1	As 188.979†	-42.2	-6.0	-1.8566	ug/L	-1.8566	ppb	02:52:59
1	B 249.677†	-344.3	119.0	2.2473	ug/L	2.2473	ppb	02:52:59
1	Ba 233.527†	16.0	16.2	0.1036	ug/L	0.1036	ppb	02:52:59
1	Be 313.107†	-4930.5	-96.4	-0.0300	ug/L	-0.0300	ppb	02:52:39
1	Cd 226.502†	-231.5	2.3	0.0192	ug/L	0.0192	ppb	02:52:59
1	Co 228.616†	-88.3	-2.7	-0.0444	ug/L	-0.0444	ppb	02:52:59
1	Cr 267.716†	98.5	11.5	0.1027	ug/L	0.1027	ppb	02:52:59
1	Cu 324.752†	9074.0	209.9	0.5610	ug/L	0.5610	ppb	02:52:39
1	Mn 257.610†	628.5	56.9	0.0557	ug/L	0.0557	ppb	02:52:59
1	Mo 202.031†	33.3	4.3	0.2280	ug/L	0.2280	ppb	02:52:59
1	Ni 231.604†	132.6	1.7	0.0331	ug/L	0.0331	ppb	02:52:59
1	P 214.914†	278.2	15.3	6.7593	ug/L	6.7593	ppb	02:52:59
1	Pb 220.353†	-84.3	-9.5	-0.8859	ug/L	-0.8859	ppb	02:52:59
1	S 181.975 Axial†	63.3	3.7	4.0191	ug/L	4.0191	ppb	02:52:59
1	Sb 206.836†	45.3	11.0	2.9007	ug/L	2.9007	ppb	02:52:59
1	Se 196.026†	-25.6	-4.4	-1.9118	ug/L	-1.9118	ppb	02:52:59
1	Si 251.611†	635.9	83.4	2.1064	ug/L	2.1064	ppb	02:52:59
1	Sn 189.927†	-3.6	0.7	0.0996	ug/L	0.0996	ppb	02:52:59
1	Ti 334.940†	-1223.0	27.6	0.0388	ug/L	0.0388	ppb	02:52:39
1	Tl 190.801†	-57.9	-14.1	-3.4124	ug/L	-3.4124	ppb	02:52:59
1	U 409.014†	-2734.1	17.8	0.4587	ug/L	0.4587	ppb	02:52:34
1	V 292.402†	-1631.1	-35.8	-0.2033	ug/L	-0.2033	ppb	02:52:39
1	Zn 213.857†	937.2	59.2	0.4351	ug/L	0.4351	ppb	02:52:59
1	SiO2†	684.4	90.9	4.9121	ug/L	4.9121	ppb	02:54:05
2	Sc Radial	4766.9	4766.9	97.1	%			02:51:42
2	Y RADIAL	5455.1	5455.1	96.60	%			02:51:42
2	Al 396.153Radial†	-32.7	10.1	6.6831	ug/L	6.6831	ppb	02:51:42
2	Ca 317.933Radial†	24.9	7.8	13.798	ug/L	13.798	ppb	02:52:02
2	Fe 238.204 Radial†	8.3	-2.4	-29.305	ug/L	-29.305	ppb	02:52:02
2	K 766.490 Radial†	2735.1	247.5	45.085	ug/L	45.085	ppb	02:51:42
2	Mg 279.077 IEC†	1.4	-1.1	-47.238	ug/L	-47.238	ppb	02:52:02
2	Na 589.592 Radial†	-1043.3	205.4	57.623	ug/L	57.623	ppb	02:51:42
2	Sr 421.552†	22.1	30.2	0.1581	ug/L	0.1581	ppb	02:51:42
2	Sc 361.383	1026306.6	1026306.6	98.732	%			02:53:04
2	Y 371.029	873162.8	873162.8	98.722	%			02:53:04
2	Ag 328.068†	474.4	6.4	0.0134	ug/L	0.0134	ppb	02:53:09
2	As 188.979†	-40.6	-4.5	-1.4149	ug/L	-1.4149	ppb	02:53:29
2	B 249.677†	-360.9	100.6	1.9058	ug/L	1.9058	ppb	02:53:29
2	Ba 233.527†	24.1	24.5	0.1559	ug/L	0.1559	ppb	02:53:29
2	Be 313.107†	-4854.3	-42.7	-0.0135	ug/L	-0.0135	ppb	02:53:09
2	Cd 226.502†	-247.7	-15.3	-0.1301	ug/L	-0.1301	ppb	02:53:29
2	Co 228.616†	-103.1	-18.1	-0.2970	ug/L	-0.2970	ppb	02:53:29
2	Cr 267.716†	100.0	13.5	0.1196	ug/L	0.1196	ppb	02:53:29
2	Cu 324.752†	9027.9	206.3	0.5495	ug/L	0.5495	ppb	02:53:09
2	Mn 257.610†	616.4	47.6	0.0431	ug/L	0.0431	ppb	02:53:29
2	Mo 202.031†	36.1	7.3	0.3874	ug/L	0.3874	ppb	02:53:29
2	Ni 231.604†	127.6	-2.7	-0.0526	ug/L	-0.0526	ppb	02:53:29

2	P 214.914†	273.3	11.7	5.1954 ug/L	5.1954 ppb	02:53:29
2	Pb 220.353†	-71.7	2.9	0.2801 ug/L	0.2801 ppb	02:53:29
2	S 181.975 Axial†	54.5	-4.9	-5.2613 ug/L	-5.2613 ppb	02:53:29
2	Sb 206.836†	46.9	12.9	3.4198 ug/L	3.4198 ppb	02:53:29
2	Se 196.026†	-24.1	-3.1	-1.4613 ug/L	-1.4613 ppb	02:53:29
2	Si 251.611†	643.1	93.7	2.3564 ug/L	2.3564 ppb	02:53:29
2	Sn 189.927†	1.9	6.2	0.8270 ug/L	0.8270 ppb	02:53:29
2	Ti 334.940†	-1303.8	-60.1	-0.0833 ug/L	-0.0833 ppb	02:53:09
2	Tl 190.801†	-49.9	-6.2	-1.5084 ug/L	-1.5084 ppb	02:53:29
2	U 409.014†	-2642.8	97.2	2.5165 ug/L	2.5165 ppb	02:53:04
2	V 292.402†	-1600.6	-12.6	-0.0584 ug/L	-0.0584 ppb	02:53:09
2	Zn 213.857†	930.6	56.9	0.4225 ug/L	0.4225 ppb	02:53:29
2	SiO2†	667.0	76.5	4.1061 ug/L	4.1061 ppb	02:54:10
3	Sc Radial	4695.8	4695.8	95.6 %		02:52:07
3	Y RADIAL	5383.5	5383.5	95.33 %		02:52:07
3	Al 396.153Radial†	-18.8	24.1	15.896 ug/L	15.896 ppb	02:52:07
3	Ca 317.933Radial†	26.7	10.1	17.937 ug/L	17.937 ppb	02:52:27
3	Fe 238.204 Radial†	8.1	-2.5	-30.645 ug/L	-30.645 ppb	02:52:27
3	K 766.490 Radial†	2791.8	349.5	63.686 ug/L	63.686 ppb	02:52:07
3	Mg 279.077 IEC†	5.5	3.2	143.88 ug/L	143.88 ppb	02:52:27
3	Na 589.592 Radial†	-1123.7	105.1	29.467 ug/L	29.467 ppb	02:52:07
3	Sr 421.552†	-29.8	-23.8	-0.1249 ug/L	-0.1249 ppb	02:52:07
3	Sc 361.383	1026880.5	1026880.5	98.788 %		02:53:34
3	Y 371.029	874820.6	874820.6	98.909 %		02:53:34
3	Ag 328.068†	589.1	122.2	0.4735 ug/L	0.4735 ppb	02:53:39
3	As 188.979†	-35.5	0.6	0.1923 ug/L	0.1923 ppb	02:53:59
3	B 249.677†	-345.8	116.0	2.1968 ug/L	2.1968 ppb	02:53:59
3	Ba 233.527†	17.0	17.2	0.1075 ug/L	0.1075 ppb	02:53:59
3	Be 313.107†	-4889.6	-75.7	-0.0237 ug/L	-0.0237 ppb	02:53:39
3	Cd 226.502†	-230.9	1.9	0.0195 ug/L	0.0195 ppb	02:53:59
3	Co 228.616†	-86.5	-1.2	-0.0183 ug/L	-0.0183 ppb	02:53:59
3	Cr 267.716†	107.4	21.0	0.1871 ug/L	0.1871 ppb	02:53:59
3	Cu 324.752†	8987.7	160.6	0.4272 ug/L	0.4272 ppb	02:53:39
3	Mn 257.610†	647.3	78.5	0.0686 ug/L	0.0686 ppb	02:53:59
3	Mo 202.031†	37.2	8.4	0.4461 ug/L	0.4461 ppb	02:53:59
3	Ni 231.604†	125.9	-4.5	-0.0883 ug/L	-0.0883 ppb	02:53:59
3	P 214.914†	278.7	17.0	7.5735 ug/L	7.5735 ppb	02:53:59
3	Pb 220.353†	-86.0	-11.5	-1.0735 ug/L	-1.0735 ppb	02:53:59
3	S 181.975 Axial†	59.6	0.2	0.2217 ug/L	0.2217 ppb	02:53:59
3	Sb 206.836†	44.3	10.2	2.6878 ug/L	2.6878 ppb	02:53:59
3	Se 196.026†	-30.4	-9.4	-4.2943 ug/L	-4.2943 ppb	02:53:59
3	Si 251.611†	646.2	96.4	2.4192 ug/L	2.4192 ppb	02:53:59
3	Sn 189.927†	-1.6	2.7	0.3641 ug/L	0.3641 ppb	02:53:59
3	Ti 334.940†	-1288.7	-44.0	-0.0588 ug/L	-0.0588 ppb	02:53:39
3	Tl 190.801†	-39.1	4.6	1.1253 ug/L	1.1253 ppb	02:53:59
3	U 409.014†	-2835.5	-96.3	-2.4872 ug/L	-2.4872 ppb	02:53:34
3	V 292.402†	-1723.1	-135.7	-0.7675 ug/L	-0.7675 ppb	02:53:39
3	Zn 213.857†	930.8	56.7	0.4147 ug/L	0.4147 ppb	02:53:59
3	SiO2†	642.4	51.2	2.7179 ug/L	2.7179 ppb	02:54:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1028111.2	98.906	%	0.2544				0.26%
Sc Radial	4740.2	96.5	%	0.79				0.82%
Y 371.029	874974.3	98.927	%	0.2140				0.22%
Y RADIAL	5429.1	96.14	%	0.702				0.73%
Ag 328.068†	26.6	0.0983	ug/L	0.34079	0.0983	ppb	0.34079	346.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.5	10.191	ug/L	4.9845	10.191	ppb	4.9845	48.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.3	-1.0264	ug/L	1.07832	-1.0264	ppb	1.07832	105.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	111.9	2.1166	ug/L	0.18430	2.1166	ppb	0.18430	8.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.3	0.1223	ug/L	0.02909	0.1223	ppb	0.02909	23.78%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-71.6	-0.0224	ug/L	0.00834	-0.0224	ppb	0.00834	37.21%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.5	16.886	ug/L	2.7199	16.886	ppb	2.7199	16.11%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -3.7     -0.0305 ug/L      0.08631     -0.0305 ppb       0.08631 283.22%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -7.4     -0.1199 ug/L      0.15392     -0.1199 ppb       0.15392 128.41%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              15.3      0.1365 ug/L      0.04466      0.1365 ppb       0.04466  32.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             192.3      0.5126 ug/L      0.07414      0.5126 ppb       0.07414  14.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.4     -17.219 ug/L     22.1046     -17.219 ppb      22.1046 128.37%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       244.6      44.562 ug/L     19.3900      44.562 ppb      19.3900  43.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.3      14.830 ug/L    111.7847      14.830 ppb     111.7847 753.77%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              61.0       0.0558 ug/L      0.01278      0.0558 ppb       0.01278  22.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.7       0.3539 ug/L      0.11285      0.3539 ppb       0.11285  31.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      151.2      42.403 ug/L     14.2160      42.403 ppb      14.2160  33.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.8      -0.0360 ug/L      0.06239     -0.0360 ppb       0.06239 173.55%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               14.7       6.5094 ug/L      1.20856      6.5094 ppb       1.20856  18.57%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -6.0      -0.5598 ug/L      0.73335     -0.5598 ppb       0.73335 131.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.3      -0.3402 ug/L      4.66562     -0.3402 ppb       4.66562 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              11.3       3.0028 ug/L      0.37654      3.0028 ppb       0.37654  12.54%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.6      -2.5558 ug/L      1.52234     -2.5558 ppb       1.52234  59.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              91.2       2.2940 ug/L      0.16548      2.2940 ppb       0.16548   7.21%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.2       0.4303 ug/L      0.36814      0.4303 ppb       0.36814  85.56%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              17.4       0.0912 ug/L      0.19161      0.0912 ppb       0.19161 210.11%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -25.5      -0.0344 ug/L      0.06458     -0.0344 ppb       0.06458 187.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -5.2      -1.2652 ug/L      2.27863     -1.2652 ppb       2.27863 180.11%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                6.2       0.1627 ug/L      2.51498      0.1627 ppb       2.51498 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -61.4      -0.3431 ug/L      0.37462     -0.3431 ppb       0.37462 109.19%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              57.6       0.4241 ug/L      0.01031      0.4241 ppb       0.01031   2.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    72.9       3.9120 ug/L      1.10988      3.9120 ppb       1.10988  28.37%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 48
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 03:30:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4791.1	4791.1	97.6	%			03:32:32
1	Y RADIAL	5443.1	5443.1	96.39	%			03:32:32
1	Al 396.153Radial†	7505.1	7734.7	5085.2	ug/L	5085.2	ppb	03:32:32
1	Ca 317.933Radial†	2723.9	2773.5	4910.6	ug/L	4910.6	ppb	03:32:52
1	Fe 238.204 Radial†	412.0	411.2	4987.8	ug/L	4987.8	ppb	03:32:52
1	K 766.490 Radial†	29532.3	27694.1	5038.4	ug/L	5038.4	ppb	03:32:32
1	Mg 279.077 IEC†	112.4	112.7	5049.3	ug/L	5049.3	ppb	03:32:52
1	Na 589.592 Radial†	35571.7	37732.5	10584	ug/L	10584	ppb	03:32:32
1	Sr 421.552†	95134.4	97497.6	511.47	ug/L	511.47	ppb	03:32:32
1	Sc 361.383	1011685.0	1011685.0	97.326	%			03:33:51
1	Y 371.029	848446.6	848446.6	95.927	%			03:33:51
1	Ag 328.068†	127059.5	130076.7	518.72	ug/L	518.72	ppb	03:33:51
1	As 188.979†	1572.3	1652.1	519.26	ug/L	519.26	ppb	03:34:11
1	B 249.677†	25804.9	26980.1	507.92	ug/L	507.92	ppb	03:33:51
1	Ba 233.527†	78634.7	80795.4	520.40	ug/L	520.40	ppb	03:33:51
1	Be 313.107†	1608700.1	1657776.8	517.90	ug/L	517.90	ppb	03:33:51
1	Cd 226.502†	58056.0	59886.9	522.09	ug/L	522.09	ppb	03:33:51
1	Co 228.616†	30303.5	31222.5	514.46	ug/L	514.46	ppb	03:34:11
1	Cr 267.716†	56153.3	57608.5	518.39	ug/L	518.39	ppb	03:33:51
1	Cu 324.752†	197844.6	194343.4	519.25	ug/L	519.25	ppb	03:33:51
1	Mn 257.610†	536780.2	550952.8	522.13	ug/L	522.13	ppb	03:33:51
1	Mo 202.031†	9513.5	9745.7	517.53	ug/L	517.53	ppb	03:34:11
1	Ni 231.604†	25684.3	26258.1	514.16	ug/L	514.16	ppb	03:34:11
1	P 214.914†	5938.9	5836.9	2532.5	ug/L	2532.5	ppb	03:34:11
1	Pb 220.353†	5350.0	5572.5	524.70	ug/L	524.70	ppb	03:34:11
1	S 181.975 Axial†	980.2	947.1	1019.4	ug/L	1019.4	ppb	03:34:11
1	Sb 206.836†	1961.6	1980.9	529.71	ug/L	529.71	ppb	03:34:11
1	Se 196.026†	1115.8	1167.8	536.97	ug/L	536.97	ppb	03:34:11
1	Si 251.611†	99627.4	101807.2	2573.3	ug/L	2573.3	ppb	03:33:51
1	Sn 189.927†	3800.4	3909.2	517.61	ug/L	517.61	ppb	03:34:11
1	Ti 334.940†	364387.9	375660.7	517.99	ug/L	517.99	ppb	03:33:51
1	Tl 190.801†	2030.8	2130.8	518.65	ug/L	518.65	ppb	03:34:11
1	U 409.014†	16258.7	19479.4	502.00	ug/L	502.00	ppb	03:33:51
1	V 292.402†	86271.3	90250.3	523.60	ug/L	523.60	ppb	03:33:51
1	Zn 213.857†	69738.5	70769.2	515.48	ug/L	515.48	ppb	03:33:51
1	SiO2†	100104.5	102256.1	5530.8	ug/L	5530.8	ppb	03:35:12
2	Sc Radial	4673.5	4673.5	95.2	%			03:32:57
2	Y RADIAL	5314.3	5314.3	94.11	%			03:32:57
2	Al 396.153Radial†	7385.6	7802.6	5129.9	ug/L	5129.9	ppb	03:32:57
2	Ca 317.933Radial†	2822.0	2946.8	5217.4	ug/L	5217.4	ppb	03:33:17
2	Fe 238.204 Radial†	423.5	433.9	5262.3	ug/L	5262.3	ppb	03:33:17
2	K 766.490 Radial†	28953.3	27847.0	5066.3	ug/L	5066.3	ppb	03:32:57
2	Mg 279.077 IEC†	117.1	120.5	5399.1	ug/L	5399.1	ppb	03:33:17
2	Na 589.592 Radial†	34715.6	37749.9	10589	ug/L	10589	ppb	03:32:57
2	Sr 421.552†	93223.8	97942.2	513.80	ug/L	513.80	ppb	03:32:57
2	Sc 361.383	1001457.7	1001457.7	96.342	%			03:34:19
2	Y 371.029	839538.7	839538.7	94.920	%			03:34:19
2	Ag 328.068†	125940.1	130248.0	519.47	ug/L	519.47	ppb	03:34:19
2	As 188.979†	1568.6	1664.7	523.23	ug/L	523.23	ppb	03:34:39
2	B 249.677†	25550.1	26986.3	507.99	ug/L	507.99	ppb	03:34:19
2	Ba 233.527†	77847.7	80803.6	520.46	ug/L	520.46	ppb	03:34:19
2	Be 313.107†	1589789.6	1655028.3	517.04	ug/L	517.04	ppb	03:34:19
2	Cd 226.502†	57266.7	59676.7	520.24	ug/L	520.24	ppb	03:34:19
2	Co 228.616†	30303.4	31540.3	519.71	ug/L	519.71	ppb	03:34:39
2	Cr 267.716†	55467.3	57485.7	517.29	ug/L	517.29	ppb	03:34:19
2	Cu 324.752†	195973.7	194477.4	519.62	ug/L	519.62	ppb	03:34:19
2	Mn 257.610†	531182.3	550774.8	521.98	ug/L	521.98	ppb	03:34:19
2	Mo 202.031†	9494.2	9825.5	521.78	ug/L	521.78	ppb	03:34:39
2	Ni 231.604†	25660.9	26503.3	518.96	ug/L	518.96	ppb	03:34:39

2	P 214.914†	5946.8	5907.5	2563.9	ug/L	2563.9 ppb	03:34:39
2	Pb 220.353†	5335.9	5614.1	528.60	ug/L	528.60 ppb	03:34:39
2	S 181.975 Axial†	981.8	959.0	1032.2	ug/L	1032.2 ppb	03:34:39
2	Sb 206.836†	1957.0	1996.6	534.06	ug/L	534.06 ppb	03:34:39
2	Se 196.026†	1114.3	1178.0	542.50	ug/L	542.50 ppb	03:34:39
2	Si 251.611†	98465.4	101646.6	2569.1	ug/L	2569.1 ppb	03:34:19
2	Sn 189.927†	3789.7	3937.9	521.44	ug/L	521.44 ppb	03:34:39
2	Ti 334.940†	360406.2	375351.3	517.58	ug/L	517.58 ppb	03:34:19
2	Tl 190.801†	2041.6	2163.4	526.50	ug/L	526.50 ppb	03:34:39
2	U 409.014†	16130.9	19517.4	502.95	ug/L	502.95 ppb	03:34:19
2	V 292.402†	85243.6	90088.9	522.71	ug/L	522.71 ppb	03:34:19
2	Zn 213.857†	68988.2	70722.1	515.06	ug/L	515.06 ppb	03:34:19
2	SiO2†	98896.7	102052.8	5519.6	ug/L	5519.6 ppb	03:35:17
3	Sc Radial	4638.7	4638.7	94.5	%		03:33:22
3	Y RADIAL	5265.0	5265.0	93.23	%		03:33:22
3	Al 396.153Radial†	7317.5	7788.8	5121.1	ug/L	5121.1 ppb	03:33:22
3	Ca 317.933Radial†	2800.1	2945.9	5215.7	ug/L	5215.7 ppb	03:33:42
3	Fe 238.204 Radial†	424.4	438.2	5314.4	ug/L	5314.4 ppb	03:33:42
3	K 766.490 Radial†	28790.6	27903.2	5076.5	ug/L	5076.5 ppb	03:33:22
3	Mg 279.077 IEC†	117.4	121.8	5455.5	ug/L	5455.5 ppb	03:33:42
3	Na 589.592 Radial†	34247.0	37527.9	10527	ug/L	10527 ppb	03:33:22
3	Sr 421.552†	92385.6	97790.6	513.00	ug/L	513.00 ppb	03:33:22
3	Sc 361.383	1015792.9	1015792.9	97.721	%		03:34:46
3	Y 371.029	852110.6	852110.6	96.342	%		03:34:46
3	Ag 328.068†	127392.9	129889.9	518.06	ug/L	518.06 ppb	03:34:46
3	As 188.979†	1556.9	1629.9	512.38	ug/L	512.38 ppb	03:35:06
3	B 249.677†	25886.5	26956.4	507.44	ug/L	507.44 ppb	03:34:46
3	Ba 233.527†	78667.2	80501.9	518.52	ug/L	518.52 ppb	03:34:46
3	Be 313.107†	1609328.0	1651734.9	516.02	ug/L	516.02 ppb	03:34:46
3	Cd 226.502†	57942.9	59529.9	518.94	ug/L	518.94 ppb	03:34:46
3	Co 228.616†	30186.2	30976.6	510.40	ug/L	510.40 ppb	03:35:06
3	Cr 267.716†	56056.0	57275.5	515.40	ug/L	515.40 ppb	03:34:46
3	Cu 324.752†	198759.4	194457.4	519.57	ug/L	519.57 ppb	03:34:46
3	Mn 257.610†	537324.2	549279.0	520.57	ug/L	520.57 ppb	03:34:46
3	Mo 202.031†	9493.6	9685.7	514.37	ug/L	514.37 ppb	03:35:06
3	Ni 231.604†	25548.4	26012.3	509.35	ug/L	509.35 ppb	03:35:06
3	P 214.914†	5910.7	5783.4	2508.2	ug/L	2508.2 ppb	03:35:06
3	Pb 220.353†	5310.6	5510.1	518.81	ug/L	518.81 ppb	03:35:06
3	S 181.975 Axial†	984.1	947.0	1019.3	ug/L	1019.3 ppb	03:35:06
3	Sb 206.836†	1942.4	1953.1	522.31	ug/L	522.31 ppb	03:35:06
3	Se 196.026†	1092.8	1139.7	525.70	ug/L	525.70 ppb	03:35:06
3	Si 251.611†	99738.9	101507.4	2565.7	ug/L	2565.7 ppb	03:34:46
3	Sn 189.927†	3778.2	3870.6	512.54	ug/L	512.54 ppb	03:35:06
3	Ti 334.940†	365307.9	375088.1	517.22	ug/L	517.22 ppb	03:34:46
3	Tl 190.801†	2025.5	2117.0	515.32	ug/L	515.32 ppb	03:35:06
3	U 409.014†	16456.9	19614.7	505.46	ug/L	505.46 ppb	03:34:46
3	V 292.402†	86238.5	89858.3	521.28	ug/L	521.28 ppb	03:34:46
3	Zn 213.857†	69650.3	70389.1	512.67	ug/L	512.67 ppb	03:34:46
3	SiO2†	100500.7	102245.6	5530.4	ug/L	5530.4 ppb	03:35:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1009645.2	97.130	%	0.7102				0.73%
Sc Radial	4701.1	95.8	%	1.63				1.70%
Y 371.029	846698.6	95.730	%	0.7310				0.76%
Y RADIAL	5340.8	94.57	%	1.629				1.72%
Ag 328.068†	130071.5	518.75	ug/L	0.706	518.75	ppb	0.706	0.14%
QC value within limits for Ag 328.068 Recovery = 103.75%								
Al 396.153Radial†	7775.4	5112.1	ug/L	23.64	5112.1	ppb	23.64	0.46%
QC value within limits for Al 396.153Radial Recovery = 102.24%								
As 188.979†	1648.9	518.29	ug/L	5.491	518.29	ppb	5.491	1.06%
QC value within limits for As 188.979 Recovery = 103.66%								
B 249.677†	26974.3	507.78	ug/L	0.300	507.78	ppb	0.300	0.06%
QC value within limits for B 249.677 Recovery = 101.56%								
Ba 233.527†	80700.3	519.79	ug/L	1.102	519.79	ppb	1.102	0.21%
QC value within limits for Ba 233.527 Recovery = 103.96%								
Be 313.107†	1654846.7	516.99	ug/L	0.944	516.99	ppb	0.944	0.18%
QC value within limits for Be 313.107 Recovery = 103.40%								
Ca 317.933Radial†	2888.7	5114.6	ug/L	176.67	5114.6	ppb	176.67	3.45%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.29%
Cd 226.502†            59697.8      520.43 ug/L         1.583      520.43 ppb          1.583   0.30%
   QC value within limits for Cd 226.502  Recovery = 104.09%
Co 228.616†            31246.5      514.86 ug/L         4.665      514.86 ppb          4.665   0.91%
   QC value within limits for Co 228.616  Recovery = 102.97%
Cr 267.716†            57456.5      517.02 ug/L         1.512      517.02 ppb          1.512   0.29%
   QC value within limits for Cr 267.716  Recovery = 103.40%
Cu 324.752†           194426.0      519.48 ug/L         0.202      519.48 ppb          0.202   0.04%
   QC value within limits for Cu 324.752  Recovery = 103.90%
Fe 238.204 Radial†       427.8      5188.2 ug/L        175.49      5188.2 ppb         175.49   3.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.76%
K 766.490 Radial†      27814.7      5060.4 ug/L         19.73      5060.4 ppb          19.73   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 101.21%
Mg 279.077 IEC†          118.3      5301.3 ug/L        220.06      5301.3 ppb         220.06   4.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.03%
Mn 257.610†           550335.6      521.56 ug/L         0.861      521.56 ppb          0.861   0.17%
   QC value within limits for Mn 257.610  Recovery = 104.31%
Mo 202.031†             9752.3      517.89 ug/L         3.719      517.89 ppb          3.719   0.72%
   QC value within limits for Mo 202.031  Recovery = 103.58%
Na 589.592 Radial†     37670.1       10566 ug/L          34.6       10566 ppb           34.6   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 105.66%
Ni 231.604†            26257.9      514.16 ug/L         4.807      514.16 ppb          4.807   0.93%
   QC value within limits for Ni 231.604  Recovery = 102.83%
P 214.914†              5842.6      2534.9 ug/L         27.90      2534.9 ppb          27.90   1.10%
   QC value within limits for P 214.914  Recovery = 101.39%
Pb 220.353†             5565.6      524.04 ug/L         4.928      524.04 ppb          4.928   0.94%
   QC value within limits for Pb 220.353  Recovery = 104.81%
S 181.975 Axial†         951.0      1023.6 ug/L          7.42      1023.6 ppb           7.42   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 102.36%
Sb 206.836†             1976.9      528.69 ug/L         5.941      528.69 ppb          5.941   1.12%
   QC value within limits for Sb 206.836  Recovery = 105.74%
Se 196.026†             1161.8      535.06 ug/L         8.566      535.06 ppb          8.566   1.60%
   QC value within limits for Se 196.026  Recovery = 107.01%
Si 251.611†           101653.7      2569.3 ug/L          3.79      2569.3 ppb           3.79   0.15%
   QC value within limits for Si 251.611  Recovery = 102.77%
Sn 189.927†             3905.9      517.20 ug/L         4.466      517.20 ppb          4.466   0.86%
   QC value within limits for Sn 189.927  Recovery = 103.44%
Sr 421.552†            97743.5      512.76 ug/L         1.184      512.76 ppb          1.184   0.23%
   QC value within limits for Sr 421.552  Recovery = 102.55%
Ti 334.940†           375366.7      517.60 ug/L         0.387      517.60 ppb          0.387   0.07%
   QC value within limits for Ti 334.940  Recovery = 103.52%
Tl 190.801†             2137.1      520.16 ug/L         5.739      520.16 ppb          5.739   1.10%
   QC value within limits for Tl 190.801  Recovery = 104.03%
U 409.014†             19537.2      503.47 ug/L         1.789      503.47 ppb          1.789   0.36%
   QC value within limits for U 409.014  Recovery = 100.69%
V 292.402†             90065.8      522.53 ug/L         1.171      522.53 ppb          1.171   0.22%
   QC value within limits for V 292.402  Recovery = 104.51%
Zn 213.857†            70626.8      514.40 ug/L         1.515      514.40 ppb          1.515   0.29%
   QC value within limits for Zn 213.857  Recovery = 102.88%
SiO2†                 102184.8      5526.9 ug/L          6.38      5526.9 ppb           6.38   0.12%
   QC value within limits for SiO2  Recovery = 103.36%
All analyte(s) passed QC.
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Sequence No.: 49
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 03:37:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4722.4	4722.4	96.2	%			03:39:24
1	Y RADIAL	5401.1	5401.1	95.64	%			03:39:24
1	Al 396.153Radial†	-22.5	20.4	13.474	ug/L	13.474	ppb	03:39:24
1	Ca 317.933Radial†	32.1	15.5	27.514	ug/L	27.514	ppb	03:39:44
1	Fe 238.204 Radial†	12.2	1.7	20.576	ug/L	20.576	ppb	03:39:44
1	K 766.490 Radial†	2801.1	342.7	62.426	ug/L	62.426	ppb	03:39:24
1	Mg 279.077 IEC†	0.8	-1.7	-74.493	ug/L	-74.493	ppb	03:39:44
1	Na 589.592 Radial†	-979.1	262.0	73.485	ug/L	73.485	ppb	03:39:24
1	Sr 421.552†	29.6	38.1	0.1999	ug/L	0.1999	ppb	03:39:24
1	Sc 361.383	1018156.6	1018156.6	97.948	%			03:40:41
1	Y 371.029	866128.0	866128.0	97.926	%			03:40:41
1	Ag 328.068†	412.6	-52.8	-0.2044	ug/L	-0.2044	ppb	03:40:46
1	As 188.979†	-34.3	1.6	0.5098	ug/L	0.5098	ppb	03:41:06
1	B 249.677†	-417.3	40.1	0.7554	ug/L	0.7554	ppb	03:41:06
1	Ba 233.527†	-3.7	-3.7	-0.0234	ug/L	-0.0234	ppb	03:41:06
1	Be 313.107†	-4859.4	-87.3	-0.0273	ug/L	-0.0273	ppb	03:40:46
1	Cd 226.502†	-229.2	1.6	0.0121	ug/L	0.0121	ppb	03:41:06
1	Co 228.616†	-106.2	-22.1	-0.3630	ug/L	-0.3630	ppb	03:41:06
1	Cr 267.716†	97.2	11.5	0.1027	ug/L	0.1027	ppb	03:41:06
1	Cu 324.752†	8894.7	143.5	0.3842	ug/L	0.3842	ppb	03:40:46
1	Mn 257.610†	621.8	58.2	0.0585	ug/L	0.0585	ppb	03:41:06
1	Mo 202.031†	36.1	7.6	0.4059	ug/L	0.4059	ppb	03:41:06
1	Ni 231.604†	125.7	-3.6	-0.0699	ug/L	-0.0699	ppb	03:41:06
1	P 214.914†	281.9	22.6	10.074	ug/L	10.074	ppb	03:41:06
1	Pb 220.353†	-73.0	1.0	0.0959	ug/L	0.0959	ppb	03:41:06
1	S 181.975 Axial†	64.3	5.5	5.9664	ug/L	5.9664	ppb	03:41:06
1	Sb 206.836†	40.9	7.2	1.9150	ug/L	1.9150	ppb	03:41:06
1	Se 196.026†	-37.4	-16.8	-7.3481	ug/L	-7.3481	ppb	03:41:06
1	Si 251.611†	667.0	123.3	3.1011	ug/L	3.1011	ppb	03:41:06
1	Sn 189.927†	4.8	9.2	1.2250	ug/L	1.2250	ppb	03:41:06
1	Ti 334.940†	-1254.4	-20.2	-0.0270	ug/L	-0.0270	ppb	03:40:46
1	Tl 190.801†	-46.5	-3.3	-0.7874	ug/L	-0.7874	ppb	03:41:06
1	U 409.014†	-2670.9	47.1	1.2148	ug/L	1.2148	ppb	03:40:41
1	V 292.402†	-1590.5	-15.3	-0.0845	ug/L	-0.0845	ppb	03:40:46
1	Zn 213.857†	938.2	72.3	0.5316	ug/L	0.5316	ppb	03:41:06
1	SiO2†	662.0	76.9	4.1070	ug/L	4.1070	ppb	03:42:12
2	Sc Radial	4912.8	4912.8	100	%			03:39:49
2	Y RADIAL	5625.0	5625.0	99.61	%			03:39:49
2	Al 396.153Radial†	-32.8	11.0	7.2225	ug/L	7.2225	ppb	03:39:49
2	Ca 317.933Radial†	32.8	14.9	26.452	ug/L	26.452	ppb	03:40:09
2	Fe 238.204 Radial†	10.1	-0.8	-10.272	ug/L	-10.272	ppb	03:40:09
2	K 766.490 Radial†	2739.7	168.5	30.672	ug/L	30.672	ppb	03:39:49
2	Mg 279.077 IEC†	1.0	-1.5	-64.967	ug/L	-64.967	ppb	03:40:09
2	Na 589.592 Radial†	-990.5	290.0	81.359	ug/L	81.359	ppb	03:39:49
2	Sr 421.552†	-7.0	0.5	0.0021	ug/L	0.0021	ppb	03:39:49
2	Sc 361.383	1027840.9	1027840.9	98.880	%			03:41:11
2	Y 371.029	873341.0	873341.0	98.742	%			03:41:11
2	Ag 328.068†	410.6	-58.8	-0.2372	ug/L	-0.2372	ppb	03:41:16
2	As 188.979†	-33.8	2.4	0.7469	ug/L	0.7469	ppb	03:41:36
2	B 249.677†	-380.9	80.9	1.5308	ug/L	1.5308	ppb	03:41:36
2	Ba 233.527†	10.6	10.8	0.0682	ug/L	0.0682	ppb	03:41:36
2	Be 313.107†	-4882.2	-63.6	-0.0200	ug/L	-0.0200	ppb	03:41:16
2	Cd 226.502†	-234.8	-1.8	-0.0149	ug/L	-0.0149	ppb	03:41:36
2	Co 228.616†	-90.2	-4.9	-0.0784	ug/L	-0.0784	ppb	03:41:36
2	Cr 267.716†	113.9	27.4	0.2458	ug/L	0.2458	ppb	03:41:36
2	Cu 324.752†	9014.4	179.0	0.4774	ug/L	0.4774	ppb	03:41:16
2	Mn 257.610†	654.4	85.1	0.0808	ug/L	0.0808	ppb	03:41:36
2	Mo 202.031†	39.0	10.2	0.5405	ug/L	0.5405	ppb	03:41:36
2	Ni 231.604†	117.0	-13.6	-0.2663	ug/L	-0.2663	ppb	03:41:36

2	P 214.914†	277.2	15.3	6.7768	ug/L	6.7768 ppb	03:41:36
2	Pb 220.353†	-75.2	-0.5	-0.0424	ug/L	-0.0424 ppb	03:41:36
2	S 181.975 Axial†	63.4	4.0	4.3255	ug/L	4.3255 ppb	03:41:36
2	Sb 206.836†	51.5	17.4	4.6182	ug/L	4.6182 ppb	03:41:36
2	Se 196.026†	-20.0	1.2	0.4908	ug/L	0.4908 ppb	03:41:36
2	Si 251.611†	640.9	90.5	2.2767	ug/L	2.2767 ppb	03:41:36
2	Sn 189.927†	1.8	6.1	0.8147	ug/L	0.8147 ppb	03:41:36
2	Ti 334.940†	-1310.9	-65.3	-0.0886	ug/L	-0.0886 ppb	03:41:16
2	Tl 190.801†	-44.2	-0.4	-0.1050	ug/L	-0.1050 ppb	03:41:36
2	U 409.014†	-2763.1	-20.5	-0.5282	ug/L	-0.5282 ppb	03:41:11
2	V 292.402†	-1636.7	-46.7	-0.2606	ug/L	-0.2606 ppb	03:41:16
2	Zn 213.857†	957.4	82.7	0.6118	ug/L	0.6118 ppb	03:41:36
2	SiO2†	694.3	103.1	5.5550	ug/L	5.5550 ppb	03:42:17
3	Sc Radial	4786.7	4786.7	97.5	%		03:40:14
3	Y RADIAL	5462.5	5462.5	96.73	%		03:40:14
3	Al 396.153Radial†	-17.2	26.1	17.250	ug/L	17.250 ppb	03:40:14
3	Ca 317.933Radial†	29.9	12.8	22.699	ug/L	22.699 ppb	03:40:34
3	Fe 238.204 Radial†	10.9	0.2	1.8749	ug/L	1.8749 ppb	03:40:34
3	K 766.490 Radial†	2628.9	127.0	23.120	ug/L	23.120 ppb	03:40:14
3	Mg 279.077 IEC†	0.9	-1.6	-71.125	ug/L	-71.125 ppb	03:40:34
3	Na 589.592 Radial†	-1068.0	184.5	51.755	ug/L	51.755 ppb	03:40:14
3	Sr 421.552†	-6.7	0.6	0.0028	ug/L	0.0028 ppb	03:40:14
3	Sc 361.383	1017748.2	1017748.2	97.909	%		03:41:41
3	Y 371.029	865276.6	865276.6	97.830	%		03:41:41
3	Ag 328.068†	336.9	-130.0	-0.5131	ug/L	-0.5131 ppb	03:41:46
3	As 188.979†	-39.6	-3.8	-1.1839	ug/L	-1.1839 ppb	03:42:06
3	B 249.677†	-415.7	41.5	0.7840	ug/L	0.7840 ppb	03:42:06
3	Ba 233.527†	-13.6	-13.9	-0.0897	ug/L	-0.0897 ppb	03:42:06
3	Be 313.107†	-4785.3	-13.6	-0.0043	ug/L	-0.0043 ppb	03:41:46
3	Cd 226.502†	-234.5	-3.9	-0.0338	ug/L	-0.0338 ppb	03:42:06
3	Co 228.616†	-96.1	-11.8	-0.1941	ug/L	-0.1941 ppb	03:42:06
3	Cr 267.716†	115.7	30.4	0.2741	ug/L	0.2741 ppb	03:42:06
3	Cu 324.752†	8913.6	166.5	0.4446	ug/L	0.4446 ppb	03:41:46
3	Mn 257.610†	642.9	79.9	0.0772	ug/L	0.0772 ppb	03:42:06
3	Mo 202.031†	32.1	3.5	0.1882	ug/L	0.1882 ppb	03:42:06
3	Ni 231.604†	135.7	6.7	0.1308	ug/L	0.1308 ppb	03:42:06
3	P 214.914†	292.2	33.4	14.865	ug/L	14.865 ppb	03:42:06
3	Pb 220.353†	-67.5	6.6	0.6219	ug/L	0.6219 ppb	03:42:06
3	S 181.975 Axial†	60.7	1.9	2.0199	ug/L	2.0199 ppb	03:42:06
3	Sb 206.836†	50.1	16.5	4.3616	ug/L	4.3616 ppb	03:42:06
3	Se 196.026†	-26.5	-5.7	-2.5189	ug/L	-2.5189 ppb	03:42:06
3	Si 251.611†	641.5	97.6	2.4646	ug/L	2.4646 ppb	03:42:06
3	Sn 189.927†	1.1	5.4	0.7228	ug/L	0.7228 ppb	03:42:06
3	Ti 334.940†	-1250.3	-16.6	-0.0203	ug/L	-0.0203 ppb	03:41:46
3	Tl 190.801†	-47.6	-4.3	-1.0464	ug/L	-1.0464 ppb	03:42:06
3	U 409.014†	-2844.0	-130.7	-3.3803	ug/L	-3.3803 ppb	03:41:41
3	V 292.402†	-1616.2	-42.2	-0.2472	ug/L	-0.2472 ppb	03:41:46
3	Zn 213.857†	944.8	79.5	0.5848	ug/L	0.5848 ppb	03:42:06
3	SiO2†	676.9	92.3	4.9873	ug/L	4.9873 ppb	03:42:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021248.5	98.246	%	0.5496				0.56%
Sc Radial	4807.3	97.9	%	1.97				2.02%
Y 371.029	868248.5	98.166	%	0.5009				0.51%
Y RADIAL	5496.2	97.33	%	2.049				2.11%
Ag 328.068†	-80.5	-0.3182	ug/L	0.16955	-0.3182	ppb	0.16955	53.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	19.2	12.649	ug/L	5.0642	12.649	ppb	5.0642	40.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.1	0.0242	ug/L	1.05295	0.0242	ppb	1.05295	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	54.2	1.0234	ug/L	0.43965	1.0234	ppb	0.43965	42.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.3	-0.0150	ug/L	0.07930	-0.0150	ppb	0.07930	529.37%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-54.8	-0.0172	ug/L	0.01175	-0.0172	ppb	0.01175	68.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	14.4	25.555	ug/L	2.5294	25.555	ppb	2.5294	9.90%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -1.3     -0.0122 ug/L       0.02305     -0.0122 ppb        0.02305 188.64%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -12.9     -0.2118 ug/L       0.14315     -0.2118 ppb        0.14315  67.58%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              23.1      0.2075 ug/L       0.09187      0.2075 ppb        0.09187  44.27%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             163.0      0.4354 ug/L       0.04728      0.4354 ppb        0.04728  10.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.3      4.0593 ug/L      15.53958      4.0593 ppb       15.53958 382.81%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       212.7     38.739 ug/L       20.8576     38.739 ppb        20.8576  53.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.6    -70.195 ug/L        4.8310    -70.195 ppb         4.8310   6.88%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              74.4      0.0722 ug/L       0.01197      0.0722 ppb        0.01197  16.58%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               7.1      0.3782 ug/L       0.17782      0.3782 ppb        0.17782  47.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      245.5     68.866 ug/L       15.3326     68.866 ppb        15.3326  22.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -3.5     -0.0685 ug/L       0.19852     -0.0685 ppb        0.19852 289.94%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               23.8     10.572 ug/L        4.0671     10.572 ppb         4.0671  38.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               2.4      0.2251 ug/L       0.35048      0.2251 ppb        0.35048 155.68%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.8      4.1039 ug/L       1.98255      4.1039 ppb        1.98255  48.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              13.7      3.6316 ug/L       1.49217      3.6316 ppb        1.49217  41.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -7.1     -3.1254 ug/L       3.95449     -3.1254 ppb        3.95449 126.53%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             103.8      2.6141 ug/L       0.43206      2.6141 ppb        0.43206  16.53%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               6.9      0.9208 ug/L       0.26740      0.9208 ppb        0.26740  29.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              13.1      0.0683 ug/L       0.11399      0.0683 ppb        0.11399 166.98%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -34.0     -0.0453 ug/L       0.03765     -0.0453 ppb        0.03765  83.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.7     -0.6463 ug/L       0.48628     -0.6463 ppb        0.48628  75.24%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -34.7     -0.8979 ug/L       2.31974     -0.8979 ppb        2.31974 258.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -34.7     -0.1974 ug/L       0.09801     -0.1974 ppb        0.09801  49.64%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              78.1      0.5761 ug/L       0.04078      0.5761 ppb        0.04078   7.08%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    90.8      4.8831 ug/L       0.72959      4.8831 ppb        0.72959  14.94%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 59
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 04:48:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4672.7	4672.7	95.2	%			04:49:59
1	Y RADIAL	5289.6	5289.6	93.67	%			04:49:59
1	Al 396.153Radial†	7513.9	7938.8	5219.8	ug/L	5219.8	ppb	04:49:59
1	Ca 317.933Radial†	2774.5	2897.4	5130.0	ug/L	5130.0	ppb	04:50:19
1	Fe 238.204 Radial†	410.1	419.9	5093.0	ug/L	5093.0	ppb	04:50:19
1	K 766.490 Radial†	29043.0	27946.4	5084.5	ug/L	5084.5	ppb	04:49:59
1	Mg 279.077 IEC†	112.0	115.2	5161.4	ug/L	5161.4	ppb	04:50:19
1	Na 589.592 Radial†	33905.9	36905.5	10352	ug/L	10352	ppb	04:49:59
1	Sr 421.552†	93124.6	97855.0	513.34	ug/L	513.34	ppb	04:49:59
1	Sc 361.383	1007690.0	1007690.0	96.941	%			04:51:18
1	Y 371.029	844367.2	844367.2	95.466	%			04:51:18
1	Ag 328.068†	127375.6	130920.4	522.09	ug/L	522.09	ppb	04:51:18
1	As 188.979†	1578.8	1665.3	523.40	ug/L	523.40	ppb	04:51:38
1	B 249.677†	25958.7	27243.8	512.88	ug/L	512.88	ppb	04:51:18
1	Ba 233.527†	79002.9	81495.5	524.90	ug/L	524.90	ppb	04:51:18
1	Be 313.107†	1610745.0	1666439.2	520.61	ug/L	520.61	ppb	04:51:18
1	Cd 226.502†	58180.1	60251.4	525.27	ug/L	525.27	ppb	04:51:18
1	Co 228.616†	30475.0	31522.9	519.41	ug/L	519.41	ppb	04:51:38
1	Cr 267.716†	56349.3	58039.4	522.26	ug/L	522.26	ppb	04:51:18
1	Cu 324.752†	198418.5	195741.2	522.99	ug/L	522.99	ppb	04:51:18
1	Mn 257.610†	538389.1	554799.0	525.78	ug/L	525.78	ppb	04:51:18
1	Mo 202.031†	9538.2	9809.9	520.94	ug/L	520.94	ppb	04:51:38
1	Ni 231.604†	25829.5	26512.5	519.15	ug/L	519.15	ppb	04:51:38
1	P 214.914†	5969.4	5892.6	2556.8	ug/L	2556.8	ppb	04:51:38
1	Pb 220.353†	5353.7	5598.1	527.14	ug/L	527.14	ppb	04:51:38
1	S 181.975 Axial†	988.1	959.2	1032.4	ug/L	1032.4	ppb	04:51:38
1	Sb 206.836†	1957.4	1984.5	530.73	ug/L	530.73	ppb	04:51:38
1	Se 196.026†	1130.0	1187.1	545.90	ug/L	545.90	ppb	04:51:38
1	Si 251.611†	100123.8	102725.2	2596.5	ug/L	2596.5	ppb	04:51:18
1	Sn 189.927†	3817.2	3941.9	521.96	ug/L	521.96	ppb	04:51:38
1	Ti 334.940†	365411.8	378201.3	521.50	ug/L	521.50	ppb	04:51:18
1	Tl 190.801†	2035.8	2144.3	521.94	ug/L	521.94	ppb	04:51:38
1	U 409.014†	16408.2	19699.8	507.68	ug/L	507.68	ppb	04:51:18
1	V 292.402†	86331.4	90663.7	526.01	ug/L	526.01	ppb	04:51:18
1	Zn 213.857†	69861.2	71179.8	518.44	ug/L	518.44	ppb	04:51:18
1	SiO2†	101552.6	104157.6	5634.0	ug/L	5634.0	ppb	04:52:38
2	Sc Radial	4614.0	4614.0	94.0	%			04:50:24
2	Y RADIAL	5284.1	5284.1	93.57	%			04:50:24
2	Al 396.153Radial†	7441.5	7962.2	5234.9	ug/L	5234.9	ppb	04:50:24
2	Ca 317.933Radial†	2770.7	2930.4	5188.4	ug/L	5188.4	ppb	04:50:44
2	Fe 238.204 Radial†	410.7	426.0	5167.6	ug/L	5167.6	ppb	04:50:44
2	K 766.490 Radial†	28816.4	28093.7	5111.4	ug/L	5111.4	ppb	04:50:24
2	Mg 279.077 IEC†	112.6	117.3	5256.9	ug/L	5256.9	ppb	04:50:44
2	Na 589.592 Radial†	33532.6	36961.7	10368	ug/L	10368	ppb	04:50:24
2	Sr 421.552†	92058.7	97966.1	513.93	ug/L	513.93	ppb	04:50:24
2	Sc 361.383	1001489.5	1001489.5	96.345	%			04:51:45
2	Y 371.029	841171.0	841171.0	95.105	%			04:51:45
2	Ag 328.068†	126798.9	131135.2	522.98	ug/L	522.98	ppb	04:51:45
2	As 188.979†	1588.5	1685.4	529.68	ug/L	529.68	ppb	04:52:05
2	B 249.677†	25806.0	27251.2	512.99	ug/L	512.99	ppb	04:51:45
2	Ba 233.527†	78268.7	81238.0	523.25	ug/L	523.25	ppb	04:51:45
2	Be 313.107†	1602207.9	1667865.5	521.05	ug/L	521.05	ppb	04:51:45
2	Cd 226.502†	57610.9	60032.1	523.35	ug/L	523.35	ppb	04:51:45
2	Co 228.616†	30708.7	31960.0	526.63	ug/L	526.63	ppb	04:52:05
2	Cr 267.716†	55915.4	57948.9	521.46	ug/L	521.46	ppb	04:51:45
2	Cu 324.752†	197297.7	195845.2	523.27	ug/L	523.27	ppb	04:51:45
2	Mn 257.610†	534139.5	553826.6	524.86	ug/L	524.86	ppb	04:51:45
2	Mo 202.031†	9632.1	9968.3	529.35	ug/L	529.35	ppb	04:52:05
2	Ni 231.604†	25965.8	26819.0	525.14	ug/L	525.14	ppb	04:52:05

2	P 214.914†	6030.9	5994.6	2602.5 ug/L	2602.5 ppb	04:52:05
2	Pb 220.353†	5395.7	5676.0	534.46 ug/L	534.46 ppb	04:52:05
2	S 181.975 Axial†	1007.3	985.4	1060.7 ug/L	1060.7 ppb	04:52:05
2	Sb 206.836†	1982.6	2023.2	541.22 ug/L	541.22 ppb	04:52:05
2	Se 196.026†	1131.0	1195.2	549.83 ug/L	549.83 ppb	04:52:05
2	Si 251.611†	99171.2	102375.9	2587.4 ug/L	2587.4 ppb	04:51:45
2	Sn 189.927†	3833.6	3983.3	527.44 ug/L	527.44 ppb	04:52:05
2	Ti 334.940†	362746.9	377769.0	520.91 ug/L	520.91 ppb	04:51:45
2	Tl 190.801†	2058.2	2180.5	530.64 ug/L	530.64 ppb	04:52:05
2	U 409.014†	16159.1	19546.2	503.70 ug/L	503.70 ppb	04:51:45
2	V 292.402†	86001.8	90873.0	527.31 ug/L	527.31 ppb	04:51:45
2	Zn 213.857†	69386.4	71133.1	518.05 ug/L	518.05 ppb	04:51:45
2	SiO2†	100945.1	104175.6	5634.6 ug/L	5634.6 ppb	04:52:43
3	Sc Radial	4553.7	4553.7	92.7 %		04:50:49
3	Y RADIAL	5202.7	5202.7	92.13 %		04:50:49
3	Al 396.153Radial†	7345.4	7963.4	5236.2 ug/L	5236.2 ppb	04:50:49
3	Ca 317.933Radial†	2782.2	2981.8	5279.4 ug/L	5279.4 ppb	04:51:09
3	Fe 238.204 Radial†	408.9	429.9	5214.1 ug/L	5214.1 ppb	04:51:09
3	K 766.490 Radial†	28427.4	28080.0	5108.8 ug/L	5108.8 ppb	04:50:49
3	Mg 279.077 IEC†	114.3	120.8	5409.7 ug/L	5409.7 ppb	04:51:09
3	Na 589.592 Radial†	33396.6	37287.1	10459 ug/L	10459 ppb	04:50:49
3	Sr 421.552†	91164.7	98298.5	515.67 ug/L	515.67 ppb	04:50:49
3	Sc 361.383	1010836.8	1010836.8	97.244 %		04:52:13
3	Y 371.029	848349.8	848349.8	95.916 %		04:52:13
3	Ag 328.068†	127942.6	131094.3	522.82 ug/L	522.82 ppb	04:52:13
3	As 188.979†	1570.5	1651.6	519.16 ug/L	519.16 ppb	04:52:33
3	B 249.677†	26104.0	27309.9	514.12 ug/L	514.12 ppb	04:52:13
3	Ba 233.527†	79124.6	81367.0	524.08 ug/L	524.08 ppb	04:52:13
3	Be 313.107†	1619685.4	1670460.4	521.86 ug/L	521.86 ppb	04:52:13
3	Cd 226.502†	58361.9	60251.5	525.25 ug/L	525.25 ppb	04:52:13
3	Co 228.616†	30318.6	31264.1	515.14 ug/L	515.14 ppb	04:52:33
3	Cr 267.716†	56483.6	57996.6	521.88 ug/L	521.88 ppb	04:52:13
3	Cu 324.752†	199411.0	196124.7	524.02 ug/L	524.02 ppb	04:52:13
3	Mn 257.610†	540036.0	554763.7	525.75 ug/L	525.75 ppb	04:52:13
3	Mo 202.031†	9513.0	9753.3	517.95 ug/L	517.95 ppb	04:52:33
3	Ni 231.604†	25706.0	26302.5	515.03 ug/L	515.03 ppb	04:52:33
3	P 214.914†	5944.2	5847.6	2536.4 ug/L	2536.4 ppb	04:52:33
3	Pb 220.353†	5343.0	5570.0	524.48 ug/L	524.48 ppb	04:52:33
3	S 181.975 Axial†	991.2	959.2	1032.4 ug/L	1032.4 ppb	04:52:33
3	Sb 206.836†	1948.5	1969.1	526.52 ug/L	526.52 ppb	04:52:33
3	Se 196.026†	1117.9	1170.9	539.19 ug/L	539.19 ppb	04:52:33
3	Si 251.611†	100311.2	102596.3	2593.3 ug/L	2593.3 ppb	04:52:13
3	Sn 189.927†	3798.7	3910.7	517.85 ug/L	517.85 ppb	04:52:33
3	Ti 334.940†	366784.5	378439.4	521.84 ug/L	521.84 ppb	04:52:13
3	Tl 190.801†	2031.3	2133.2	519.26 ug/L	519.26 ppb	04:52:33
3	U 409.014†	16372.1	19610.1	505.34 ug/L	505.34 ppb	04:52:13
3	V 292.402†	86613.2	90676.3	526.02 ug/L	526.02 ppb	04:52:13
3	Zn 213.857†	70305.9	71412.8	520.16 ug/L	520.16 ppb	04:52:13
3	SiO2†	101094.3	103360.2	5590.8 ug/L	5590.8 ppb	04:52:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1006672.1	96.843	%	0.4575				0.47%
Sc Radial	4613.5	94.0	%	1.21				1.29%
Y 371.029	844629.3	95.496	%	0.4066				0.43%
Y RADIAL	5258.8	93.12	%	0.862				0.93%
Ag 328.068†	131050.0	522.63	ug/L	0.471	522.63	ppb	0.471	0.09%
QC value within limits for Ag 328.068 Recovery = 104.53%								
Al 396.153Radial†	7954.8	5230.3	ug/L	9.11	5230.3	ppb	9.11	0.17%
QC value within limits for Al 396.153Radial Recovery = 104.61%								
As 188.979†	1667.4	524.08	ug/L	5.292	524.08	ppb	5.292	1.01%
QC value within limits for As 188.979 Recovery = 104.82%								
B 249.677†	27268.3	513.33	ug/L	0.688	513.33	ppb	0.688	0.13%
QC value within limits for B 249.677 Recovery = 102.67%								
Ba 233.527†	81366.8	524.08	ug/L	0.824	524.08	ppb	0.824	0.16%
QC value within limits for Ba 233.527 Recovery = 104.82%								
Be 313.107†	1668255.0	521.17	ug/L	0.636	521.17	ppb	0.636	0.12%
QC value within limits for Be 313.107 Recovery = 104.23%								
Ca 317.933Radial†	2936.6	5199.3	ug/L	75.33	5199.3	ppb	75.33	1.45%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.99%
Cd 226.502†            60178.4      524.62 ug/L         1.102      524.62 ppb          1.102   0.21%
   QC value within limits for Cd 226.502  Recovery = 104.92%
Co 228.616†            31582.3      520.39 ug/L         5.810      520.39 ppb          5.810   1.12%
   QC value within limits for Co 228.616  Recovery = 104.08%
Cr 267.716†            57995.0      521.87 ug/L         0.404      521.87 ppb          0.404   0.08%
   QC value within limits for Cr 267.716  Recovery = 104.37%
Cu 324.752†           195903.7      523.43 ug/L         0.533      523.43 ppb          0.533   0.10%
   QC value within limits for Cu 324.752  Recovery = 104.69%
Fe 238.204 Radial†       425.3      5158.2 ug/L        61.05      5158.2 ppb          61.05   1.18%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.16%
K 766.490 Radial†      28040.1      5101.5 ug/L        14.82      5101.5 ppb          14.82   0.29%
   QC value within limits for K 766.490 Radial  Recovery = 102.03%
Mg 279.077 IEC†          117.8      5276.0 ug/L       125.25      5276.0 ppb         125.25   2.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.52%
Mn 257.610†           554463.1      525.46 ug/L         0.521      525.46 ppb          0.521   0.10%
   QC value within limits for Mn 257.610  Recovery = 105.09%
Mo 202.031†             9843.8      522.75 ug/L         5.912      522.75 ppb          5.912   1.13%
   QC value within limits for Mo 202.031  Recovery = 104.55%
Na 589.592 Radial†     37051.4       10393 ug/L          57.8       10393 ppb           57.8   0.56%
   QC value within limits for Na 589.592 Radial  Recovery = 103.93%
Ni 231.604†            26544.7      519.77 ug/L         5.085      519.77 ppb          5.085   0.98%
   QC value within limits for Ni 231.604  Recovery = 103.95%
P 214.914†              5911.6      2565.2 ug/L        33.82      2565.2 ppb          33.82   1.32%
   QC value within limits for P 214.914  Recovery = 102.61%
Pb 220.353†             5614.7      528.69 ug/L         5.169      528.69 ppb          5.169   0.98%
   QC value within limits for Pb 220.353  Recovery = 105.74%
S 181.975 Axial†         967.9      1041.8 ug/L        16.32      1041.8 ppb          16.32   1.57%
   QC value within limits for S 181.975 Axial  Recovery = 104.18%
Sb 206.836†             1992.3      532.82 ug/L         7.567      532.82 ppb          7.567   1.42%
   QC value within limits for Sb 206.836  Recovery = 106.56%
Se 196.026†             1184.4      544.97 ug/L         5.379      544.97 ppb          5.379   0.99%
   QC value within limits for Se 196.026  Recovery = 108.99%
Si 251.611†           102565.8      2592.4 ug/L          4.58      2592.4 ppb           4.58   0.18%
   QC value within limits for Si 251.611  Recovery = 103.70%
Sn 189.927†             3945.3      522.42 ug/L         4.813      522.42 ppb          4.813   0.92%
   QC value within limits for Sn 189.927  Recovery = 104.48%
Sr 421.552†            98039.9      514.31 ug/L         1.210      514.31 ppb          1.210   0.24%
   QC value within limits for Sr 421.552  Recovery = 102.86%
Ti 334.940†           378136.6      521.42 ug/L         0.470      521.42 ppb          0.470   0.09%
   QC value within limits for Ti 334.940  Recovery = 104.28%
Tl 190.801†             2152.7      523.95 ug/L         5.949      523.95 ppb          5.949   1.14%
   QC value within limits for Tl 190.801  Recovery = 104.79%
U 409.014†             19618.7      505.57 ug/L         2.000      505.57 ppb          2.000   0.40%
   QC value within limits for U 409.014  Recovery = 101.11%
V 292.402†             90737.7      526.45 ug/L         0.749      526.45 ppb          0.749   0.14%
   QC value within limits for V 292.402  Recovery = 105.29%
Zn 213.857†            71241.9      518.89 ug/L         1.122      518.89 ppb          1.122   0.22%
   QC value within limits for Zn 213.857  Recovery = 103.78%
SiO2†                 103897.8      5619.8 ug/L        25.13      5619.8 ppb          25.13   0.45%
   QC value within limits for SiO2  Recovery = 105.09%
All analyte(s) passed QC.
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Sequence No.: 60
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 04:54:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4520.6	4520.6	92.1	%			04:56:51
1	Y RADIAL	5179.1	5179.1	91.71	%			04:56:51
1	Al 396.153Radial†	-26.7	14.7	9.7431	ug/L	9.7431	ppb	04:56:51
1	Ca 317.933Radial†	26.4	10.8	19.198	ug/L	19.198	ppb	04:57:11
1	Fe 238.204 Radial†	12.0	2.0	24.206	ug/L	24.206	ppb	04:57:11
1	K 766.490 Radial†	2663.1	322.8	58.819	ug/L	58.819	ppb	04:56:51
1	Mg 279.077 IEC†	-0.0	-2.5	-113.66	ug/L	-113.66	ppb	04:57:11
1	Na 589.592 Radial†	-1067.5	120.6	33.821	ug/L	33.821	ppb	04:56:51
1	Sr 421.552†	-35.9	-31.6	-0.1660	ug/L	-0.1660	ppb	04:56:51
1	Sc 361.383	1021283.2	1021283.2	98.249	%			04:58:08
1	Y 371.029	867839.3	867839.3	98.120	%			04:58:08
1	Ag 328.068†	365.5	-102.1	-0.3995	ug/L	-0.3995	ppb	04:58:13
1	As 188.979†	-41.2	-5.3	-1.6433	ug/L	-1.6433	ppb	04:58:33
1	B 249.677†	-323.5	136.8	2.5833	ug/L	2.5833	ppb	04:58:33
1	Ba 233.527†	7.6	7.7	0.0498	ug/L	0.0498	ppb	04:58:33
1	Be 313.107†	-4931.2	-145.1	-0.0451	ug/L	-0.0451	ppb	04:58:13
1	Cd 226.502†	-210.6	21.3	0.1828	ug/L	0.1828	ppb	04:58:33
1	Co 228.616†	-98.2	-13.6	-0.2256	ug/L	-0.2256	ppb	04:58:33
1	Cr 267.716†	93.7	7.6	0.0681	ug/L	0.0681	ppb	04:58:33
1	Cu 324.752†	9044.5	268.2	0.7175	ug/L	0.7175	ppb	04:58:13
1	Mn 257.610†	660.0	95.1	0.0945	ug/L	0.0945	ppb	04:58:33
1	Mo 202.031†	25.6	-3.2	-0.1674	ug/L	-0.1674	ppb	04:58:33
1	Ni 231.604†	119.9	-9.9	-0.1937	ug/L	-0.1937	ppb	04:58:33
1	P 214.914†	286.4	26.4	11.710	ug/L	11.710	ppb	04:58:33
1	Pb 220.353†	-76.6	-2.4	-0.2293	ug/L	-0.2293	ppb	04:58:33
1	S 181.975 Axial†	51.3	-7.8	-8.4489	ug/L	-8.4489	ppb	04:58:33
1	Sb 206.836†	38.0	4.0	1.0804	ug/L	1.0804	ppb	04:58:33
1	Se 196.026†	-18.8	2.3	1.0889	ug/L	1.0889	ppb	04:58:33
1	Si 251.611†	699.8	154.6	3.9047	ug/L	3.9047	ppb	04:58:33
1	Sn 189.927†	8.9	13.4	1.7715	ug/L	1.7715	ppb	04:58:33
1	Ti 334.940†	-1177.8	61.7	0.0857	ug/L	0.0857	ppb	04:58:13
1	Tl 190.801†	-47.1	-3.7	-0.8959	ug/L	-0.8959	ppb	04:58:33
1	U 409.014†	-2688.8	37.3	0.9604	ug/L	0.9604	ppb	04:58:08
1	V 292.402†	-1644.3	-65.1	-0.3797	ug/L	-0.3797	ppb	04:58:13
1	Zn 213.857†	959.8	91.3	0.6732	ug/L	0.6732	ppb	04:58:33
1	SiO2†	722.8	136.6	7.3772	ug/L	7.3772	ppb	04:59:39
2	Sc Radial	4834.5	4834.5	98.5	%			04:57:17
2	Y RADIAL	5522.0	5522.0	97.78	%			04:57:17
2	Al 396.153Radial†	-44.1	-1.0	-0.6448	ug/L	-0.6448	ppb	04:57:17
2	Ca 317.933Radial†	25.9	8.5	15.077	ug/L	15.077	ppb	04:57:37
2	Fe 238.204 Radial†	7.8	-3.1	-37.367	ug/L	-37.367	ppb	04:57:37
2	K 766.490 Radial†	2703.4	176.0	32.049	ug/L	32.049	ppb	04:57:17
2	Mg 279.077 IEC†	5.0	2.6	116.86	ug/L	116.86	ppb	04:57:37
2	Na 589.592 Radial†	-1081.8	181.3	50.853	ug/L	50.853	ppb	04:57:17
2	Sr 421.552†	24.7	32.5	0.1706	ug/L	0.1706	ppb	04:57:17
2	Sc 361.383	1017865.2	1017865.2	97.920	%			04:58:39
2	Y 371.029	866285.8	866285.8	97.944	%			04:58:39
2	Ag 328.068†	461.0	-3.3	-0.0243	ug/L	-0.0243	ppb	04:58:44
2	As 188.979†	-35.0	0.9	0.2595	ug/L	0.2595	ppb	04:59:04
2	B 249.677†	-364.5	93.8	1.7783	ug/L	1.7783	ppb	04:59:04
2	Ba 233.527†	2.7	2.8	0.0160	ug/L	0.0160	ppb	04:59:04
2	Be 313.107†	-4794.3	-22.2	-0.0070	ug/L	-0.0070	ppb	04:58:44
2	Cd 226.502†	-245.7	-15.2	-0.1292	ug/L	-0.1292	ppb	04:59:04
2	Co 228.616†	-92.6	-8.3	-0.1360	ug/L	-0.1360	ppb	04:59:04
2	Cr 267.716†	123.7	38.6	0.3464	ug/L	0.3464	ppb	04:59:04
2	Cu 324.752†	8805.4	54.9	0.1448	ug/L	0.1448	ppb	04:58:44
2	Mn 257.610†	642.1	79.1	0.0690	ug/L	0.0690	ppb	04:59:04
2	Mo 202.031†	28.7	0.1	0.0028	ug/L	0.0028	ppb	04:59:04
2	Ni 231.604†	126.5	-2.8	-0.0545	ug/L	-0.0545	ppb	04:59:04

2	P 214.914†	286.9	27.9	12.507 ug/L	12.507 ppb	04:59:04
2	Pb 220.353†	-69.3	4.8	0.4527 ug/L	0.4527 ppb	04:59:04
2	S 181.975 Axial†	60.3	1.5	1.5693 ug/L	1.5693 ppb	04:59:04
2	Sb 206.836†	39.9	6.1	1.6321 ug/L	1.6321 ppb	04:59:04
2	Se 196.026†	-22.3	-1.4	-0.7363 ug/L	-0.7363 ppb	04:59:04
2	Si 251.611†	667.7	124.3	3.1404 ug/L	3.1404 ppb	04:59:04
2	Sn 189.927†	7.9	12.4	1.6452 ug/L	1.6452 ppb	04:59:04
2	Ti 334.940†	-1263.9	-30.3	-0.0403 ug/L	-0.0403 ppb	04:58:44
2	Tl 190.801†	-50.5	-7.3	-1.7607 ug/L	-1.7607 ppb	04:59:04
2	U 409.014†	-2787.9	-73.1	-1.8868 ug/L	-1.8868 ppb	04:58:39
2	V 292.402†	-1604.2	-29.8	-0.1658 ug/L	-0.1658 ppb	04:58:44
2	Zn 213.857†	953.4	88.1	0.6473 ug/L	0.6473 ppb	04:59:04
2	SiO2†	695.3	111.0	5.9979 ug/L	5.9979 ppb	04:59:44
3	Sc Radial	4712.5	4712.5	96.0 %		04:57:42
3	Y RADIAL	5384.6	5384.6	95.35 %		04:57:42
3	Al 396.153Radial†	-8.9	34.5	22.772 ug/L	22.772 ppb	04:57:42
3	Ca 317.933Radial†	29.9	13.3	23.595 ug/L	23.595 ppb	04:58:02
3	Fe 238.204 Radial†	12.0	1.5	18.616 ug/L	18.616 ppb	04:58:02
3	K 766.490 Radial†	2725.7	270.3	49.252 ug/L	49.252 ppb	04:57:42
3	Mg 279.077 IEC†	0.1	-2.4	-108.21 ug/L	-108.21 ppb	04:58:02
3	Na 589.592 Radial†	-1086.2	148.2	41.582 ug/L	41.582 ppb	04:57:42
3	Sr 421.552†	15.0	23.1	0.1208 ug/L	0.1208 ppb	04:57:42
3	Sc 361.383	962362.8	962362.8	92.581 %		04:59:09
3	Y 371.029	818697.4	818697.4	92.564 %		04:59:09
3	Ag 328.068†	428.8	-10.9	-0.0351 ug/L	-0.0351 ppb	04:59:14
3	As 188.979†	-47.0	-14.1	-4.4063 ug/L	-4.4063 ppb	04:59:34
3	B 249.677†	-358.2	79.1	1.4939 ug/L	1.4939 ppb	04:59:34
3	Ba 233.527†	12.1	13.1	0.0830 ug/L	0.0830 ppb	04:59:34
3	Be 313.107†	-4899.6	-418.3	-0.1308 ug/L	-0.1308 ppb	04:59:14
3	Cd 226.502†	-243.3	-27.2	-0.2389 ug/L	-0.2389 ppb	04:59:34
3	Co 228.616†	-95.8	-17.1	-0.2827 ug/L	-0.2827 ppb	04:59:34
3	Cr 267.716†	98.7	18.9	0.1704 ug/L	0.1704 ppb	04:59:34
3	Cu 324.752†	8998.0	781.6	2.0883 ug/L	2.0883 ppb	04:59:14
3	Mn 257.610†	646.8	122.0	0.1194 ug/L	0.1194 ppb	04:59:34
3	Mo 202.031†	23.4	-3.9	-0.2080 ug/L	-0.2080 ppb	04:59:34
3	Ni 231.604†	128.4	6.8	0.1334 ug/L	0.1334 ppb	04:59:34
3	P 214.914†	279.8	37.1	16.276 ug/L	16.276 ppb	04:59:34
3	Pb 220.353†	-80.9	-11.8	-1.1052 ug/L	-1.1052 ppb	04:59:34
3	S 181.975 Axial†	61.5	6.4	6.8648 ug/L	6.8648 ppb	04:59:34
3	Sb 206.836†	45.1	14.1	3.7416 ug/L	3.7416 ppb	04:59:34
3	Se 196.026†	-27.7	-8.5	-3.6979 ug/L	-3.6979 ppb	04:59:34
3	Si 251.611†	668.9	164.9	4.1691 ug/L	4.1691 ppb	04:59:34
3	Sn 189.927†	7.8	12.8	1.6941 ug/L	1.6941 ppb	04:59:34
3	Ti 334.940†	-1300.0	-143.8	-0.1941 ug/L	-0.1941 ppb	04:59:14
3	Tl 190.801†	-45.5	-4.9	-1.1897 ug/L	-1.1897 ppb	04:59:34
3	U 409.014†	-2811.9	-263.3	-6.8088 ug/L	-6.8088 ppb	04:59:09
3	V 292.402†	-1632.5	-154.8	-0.9073 ug/L	-0.9073 ppb	04:59:14
3	Zn 213.857†	959.4	150.8	1.1064 ug/L	1.1064 ppb	04:59:34
3	SiO2†	690.1	146.4	7.9147 ug/L	7.9147 ppb	04:59:49

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1000503.7	96.250	%	3.1819				3.31%
Sc Radial	4689.2	95.5	%	3.22				3.37%
Y 371.029	850940.8	96.209	%	3.1583				3.28%
Y RADIAL	5361.9	94.95	%	3.056				3.22%
Ag 328.068†	-38.7	-0.1530	ug/L	0.21356	-0.1530	ppb	0.21356	139.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.1	10.624	ug/L	11.7334	10.624	ppb	11.7334	110.45%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-6.2	-1.9300	ug/L	2.34606	-1.9300	ppb	2.34606	121.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	103.3	1.9518	ug/L	0.56508	1.9518	ppb	0.56508	28.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.9	0.0496	ug/L	0.03350	0.0496	ppb	0.03350	67.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-195.2	-0.0610	ug/L	0.06342	-0.0610	ppb	0.06342	104.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.9	19.290	ug/L	4.2602	19.290	ppb	4.2602	22.09%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -7.1     -0.0617 ug/L       0.21875     -0.0617 ppb        0.21875 354.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -13.0     -0.2148 ug/L       0.07393     -0.2148 ppb        0.07393  34.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              21.7      0.1950 ug/L       0.14078      0.1950 ppb        0.14078  72.20%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             368.3      0.9835 ug/L       0.99867      0.9835 ppb        0.99867 101.54%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       0.2      1.8182 ug/L      34.05071      1.8182 ppb       34.05071 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       256.4     46.707 ug/L       13.5656     46.707 ppb        13.5656  29.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.8    -35.006 ug/L      131.5455    -35.006 ppb       131.5455 375.78%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              98.7      0.0943 ug/L       0.02521      0.0943 ppb        0.02521  26.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -2.3     -0.1242 ug/L       0.11183     -0.1242 ppb        0.11183  90.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      150.0     42.085 ug/L        8.5271     42.085 ppb         8.5271  20.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -2.0     -0.0383 ug/L       0.16413     -0.0383 ppb        0.16413 428.67%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               30.5     13.498 ug/L        2.4387     13.498 ppb         2.4387  18.07%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -3.1     -0.2939 ug/L       0.78096     -0.2939 ppb        0.78096 265.69%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.0     -0.0050 ug/L       7.77729     -0.0050 ppb        7.77729 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.1      2.1514 ug/L       1.40454      2.1514 ppb        1.40454  65.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -2.5     -1.1151 ug/L       2.41580     -1.1151 ppb        2.41580 216.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             147.9      3.7381 ug/L       0.53422      3.7381 ppb        0.53422  14.29%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              12.9      1.7036 ug/L       0.06369      1.7036 ppb        0.06369   3.74%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               8.0      0.0418 ug/L       0.18170      0.0418 ppb        0.18170 434.60%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -37.4     -0.0496 ug/L       0.14012     -0.0496 ppb        0.14012 282.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -5.3     -1.2821 ug/L       0.43976     -1.2821 ppb        0.43976  34.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -99.7     -2.5784 ug/L       3.93049     -2.5784 ppb        3.93049 152.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -83.2     -0.4842 ug/L       0.38166     -0.4842 ppb        0.38166  78.82%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             110.1      0.8090 ug/L       0.25789      0.8090 ppb        0.25789  31.88%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   131.3      7.0966 ug/L       0.98875      7.0966 ppb        0.98875  13.93%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 70
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 06:05:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4567.7	4567.7	93.0	%			06:07:21
1	Y RADIAL	5179.7	5179.7	91.72	%			06:07:21
1	Al 396.153Radial†	7377.7	7973.9	5242.7	ug/L	5242.7	ppb	06:07:21
1	Ca 317.933Radial†	2752.3	2940.5	5206.3	ug/L	5206.3	ppb	06:07:41
1	Fe 238.204 Radial†	407.0	426.5	5172.8	ug/L	5172.8	ppb	06:07:41
1	K 766.490 Radial†	28460.2	28021.6	5098.3	ug/L	5098.3	ppb	06:07:21
1	Mg 279.077 IEC†	113.3	119.3	5344.9	ug/L	5344.9	ppb	06:07:41
1	Na 589.592 Radial†	32876.8	36618.4	10271	ug/L	10271	ppb	06:07:21
1	Sr 421.552†	90692.7	97490.8	511.43	ug/L	511.43	ppb	06:07:21
1	Sc 361.383	1000705.2	1000705.2	96.269	%			06:08:41
1	Y 371.029	839102.2	839102.2	94.871	%			06:08:41
1	Ag 328.068†	126477.8	130904.9	522.05	ug/L	522.05	ppb	06:08:41
1	As 188.979†	1579.2	1677.0	527.06	ug/L	527.06	ppb	06:09:01
1	B 249.677†	25576.7	27034.0	508.88	ug/L	508.88	ppb	06:08:41
1	Ba 233.527†	78050.3	81074.8	522.20	ug/L	522.20	ppb	06:08:41
1	Be 313.107†	1595808.2	1662521.2	519.38	ug/L	519.38	ppb	06:08:41
1	Cd 226.502†	57543.4	60008.9	523.15	ug/L	523.15	ppb	06:08:41
1	Co 228.616†	30592.5	31864.3	525.05	ug/L	525.05	ppb	06:09:01
1	Cr 267.716†	55678.7	57748.6	519.65	ug/L	519.65	ppb	06:08:41
1	Cu 324.752†	196864.6	195555.8	522.50	ug/L	522.50	ppb	06:08:41
1	Mn 257.610†	532930.8	553005.7	524.08	ug/L	524.08	ppb	06:08:41
1	Mo 202.031†	9606.9	9949.9	528.38	ug/L	528.38	ppb	06:09:01
1	Ni 231.604†	25906.9	26778.8	524.36	ug/L	524.36	ppb	06:09:01
1	P 214.914†	6012.4	5980.3	2596.1	ug/L	2596.1	ppb	06:09:01
1	Pb 220.353†	5377.7	5661.6	533.11	ug/L	533.11	ppb	06:09:01
1	S 181.975 Axial†	987.5	965.7	1039.4	ug/L	1039.4	ppb	06:09:01
1	Sb 206.836†	1958.0	1999.2	534.86	ug/L	534.86	ppb	06:09:01
1	Se 196.026†	1125.0	1189.9	547.48	ug/L	547.48	ppb	06:09:01
1	Si 251.611†	99156.5	102441.3	2589.1	ug/L	2589.1	ppb	06:08:41
1	Sn 189.927†	3804.2	3956.0	523.83	ug/L	523.83	ppb	06:09:01
1	Ti 334.940†	362193.1	377488.8	520.53	ug/L	520.53	ppb	06:08:41
1	Tl 190.801†	2060.3	2184.4	531.58	ug/L	531.58	ppb	06:09:01
1	U 409.014†	16212.7	19614.9	505.48	ug/L	505.48	ppb	06:08:41
1	V 292.402†	85546.2	90469.7	525.00	ug/L	525.00	ppb	06:08:41
1	Zn 213.857†	69216.9	71013.5	517.18	ug/L	517.18	ppb	06:08:41
1	SiO2†	99036.3	102275.0	5531.4	ug/L	5531.4	ppb	06:10:01
2	Sc Radial	4592.3	4592.3	93.5	%			06:07:47
2	Y RADIAL	5265.0	5265.0	93.23	%			06:07:47
2	Al 396.153Radial†	7274.4	7821.0	5142.0	ug/L	5142.0	ppb	06:07:47
2	Ca 317.933Radial†	2802.5	2978.3	5273.3	ug/L	5273.3	ppb	06:08:07
2	Fe 238.204 Radial†	408.6	425.9	5165.4	ug/L	5165.4	ppb	06:08:07
2	K 766.490 Radial†	27982.8	27347.4	4975.5	ug/L	4975.5	ppb	06:07:47
2	Mg 279.077 IEC†	113.3	118.6	5313.5	ug/L	5313.5	ppb	06:08:07
2	Na 589.592 Radial†	32081.0	35578.4	9979.7	ug/L	9979.7	ppb	06:07:47
2	Sr 421.552†	88787.1	94931.5	498.00	ug/L	498.00	ppb	06:07:47
2	Sc 361.383	1012628.0	1012628.0	97.416	%			06:09:08
2	Y 371.029	849172.2	849172.2	96.009	%			06:09:08
2	Ag 328.068†	127611.3	130521.6	520.53	ug/L	520.53	ppb	06:09:08
2	As 188.979†	1589.6	1668.4	524.38	ug/L	524.38	ppb	06:09:28
2	B 249.677†	26013.1	27169.1	511.46	ug/L	511.46	ppb	06:09:08
2	Ba 233.527†	78881.4	80973.4	521.55	ug/L	521.55	ppb	06:09:08
2	Be 313.107†	1615140.9	1662849.1	519.49	ug/L	519.49	ppb	06:09:08
2	Cd 226.502†	58161.9	59940.0	522.54	ug/L	522.54	ppb	06:09:08
2	Co 228.616†	30597.6	31495.4	518.96	ug/L	518.96	ppb	06:09:28
2	Cr 267.716†	56265.1	57669.5	518.94	ug/L	518.94	ppb	06:09:08
2	Cu 324.752†	198993.4	195333.3	521.90	ug/L	521.90	ppb	06:09:08
2	Mn 257.610†	538631.2	552339.2	523.45	ug/L	523.45	ppb	06:09:08
2	Mo 202.031†	9606.9	9832.5	522.15	ug/L	522.15	ppb	06:09:28
2	Ni 231.604†	25911.4	26466.6	518.25	ug/L	518.25	ppb	06:09:28

2	P 214.914†	5992.6	5886.4	2554.1 ug/L	2554.1 ppb	06:09:28
2	Pb 220.353†	5357.5	5575.1	524.96 ug/L	524.96 ppb	06:09:28
2	S 181.975 Axial†	989.1	955.2	1028.1 ug/L	1028.1 ppb	06:09:28
2	Sb 206.836†	1966.7	1984.2	530.71 ug/L	530.71 ppb	06:09:28
2	Se 196.026†	1142.0	1193.7	549.11 ug/L	549.11 ppb	06:09:28
2	Si 251.611†	100213.6	102313.7	2586.1 ug/L	2586.1 ppb	06:09:08
2	Sn 189.927†	3817.9	3923.5	519.54 ug/L	519.54 ppb	06:09:28
2	Ti 334.940†	366047.3	377015.5	519.88 ug/L	519.88 ppb	06:09:08
2	Tl 190.801†	2055.5	2154.2	524.31 ug/L	524.31 ppb	06:09:28
2	U 409.014†	16422.9	19632.4	505.93 ug/L	505.93 ppb	06:09:08
2	V 292.402†	86544.8	90448.5	524.79 ug/L	524.79 ppb	06:09:08
2	Zn 213.857†	69924.6	70893.5	516.33 ug/L	516.33 ppb	06:09:08
2	SiO2†	99590.8	101633.0	5496.8 ug/L	5496.8 ppb	06:10:06
3	Sc Radial	4509.2	4509.2	91.8 %		06:08:12
3	Y RADIAL	5165.2	5165.2	91.47 %		06:08:12
3	Al 396.153Radial†	7368.2	8066.5	5304.3 ug/L	5304.3 ppb	06:08:12
3	Ca 317.933Radial†	2780.9	3010.1	5329.5 ug/L	5329.5 ppb	06:08:32
3	Fe 238.204 Radial†	406.8	432.0	5238.6 ug/L	5238.6 ppb	06:08:32
3	K 766.490 Radial†	28334.7	28281.8	5145.6 ug/L	5145.6 ppb	06:08:12
3	Mg 279.077 IEC†	116.7	124.6	5581.4 ug/L	5581.4 ppb	06:08:32
3	Na 589.592 Radial†	32429.5	36589.8	10263 ug/L	10263 ppb	06:08:12
3	Sr 421.552†	90118.3	98129.8	514.78 ug/L	514.78 ppb	06:08:12
3	Sc 361.383	1010855.5	1010855.5	97.246 %		06:09:35
3	Y 371.029	848028.8	848028.8	95.880 %		06:09:35
3	Ag 328.068†	127589.4	130728.8	521.38 ug/L	521.38 ppb	06:09:35
3	As 188.979†	1573.7	1654.9	520.19 ug/L	520.19 ppb	06:09:56
3	B 249.677†	25970.4	27172.0	511.51 ug/L	511.51 ppb	06:09:35
3	Ba 233.527†	78988.0	81225.0	523.17 ug/L	523.17 ppb	06:09:35
3	Be 313.107†	1616001.9	1666641.7	520.67 ug/L	520.67 ppb	06:09:35
3	Cd 226.502†	58278.4	60164.5	524.49 ug/L	524.49 ppb	06:09:35
3	Co 228.616†	30267.5	31211.0	514.26 ug/L	514.26 ppb	06:09:56
3	Cr 267.716†	56260.1	57765.7	519.81 ug/L	519.81 ppb	06:09:35
3	Cu 324.752†	198628.5	195316.2	521.86 ug/L	521.86 ppb	06:09:35
3	Mn 257.610†	538745.1	553425.9	524.48 ug/L	524.48 ppb	06:09:35
3	Mo 202.031†	9501.8	9741.6	517.33 ug/L	517.33 ppb	06:09:56
3	Ni 231.604†	25619.6	26213.2	513.28 ug/L	513.28 ppb	06:09:56
3	P 214.914†	5926.4	5829.1	2528.4 ug/L	2528.4 ppb	06:09:56
3	Pb 220.353†	5316.8	5542.9	521.95 ug/L	521.95 ppb	06:09:56
3	S 181.975 Axial†	983.7	951.4	1024.0 ug/L	1024.0 ppb	06:09:56
3	Sb 206.836†	1942.3	1962.7	524.82 ug/L	524.82 ppb	06:09:56
3	Se 196.026†	1112.9	1165.8	536.99 ug/L	536.99 ppb	06:09:56
3	Si 251.611†	100019.8	102294.7	2585.6 ug/L	2585.6 ppb	06:09:35
3	Sn 189.927†	3777.5	3888.8	514.96 ug/L	514.96 ppb	06:09:56
3	Ti 334.940†	366015.4	377641.6	520.74 ug/L	520.74 ppb	06:09:35
3	Tl 190.801†	2010.4	2111.6	514.05 ug/L	514.05 ppb	06:09:56
3	U 409.014†	16324.6	19560.9	504.07 ug/L	504.07 ppb	06:09:35
3	V 292.402†	86558.8	90618.7	525.68 ug/L	525.68 ppb	06:09:35
3	Zn 213.857†	69930.1	71025.0	517.32 ug/L	517.32 ppb	06:09:35
3	SiO2†	100602.5	102852.6	5563.2 ug/L	5563.2 ppb	06:10:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1008062.9	96.977	%	0.6189				0.64%
Sc Radial	4556.4	92.8	%	0.87				0.94%
Y 371.029	845434.4	95.587	%	0.6234				0.65%
Y RADIAL	5203.3	92.14	%	0.955				1.04%
Ag 328.068†	130718.4	521.32	ug/L	0.763	521.32	ppb	0.763	0.15%
QC value within limits for Ag 328.068 Recovery = 104.26%								
Al 396.153Radial†	7953.8	5229.7	ug/L	81.92	5229.7	ppb	81.92	1.57%
QC value within limits for Al 396.153Radial Recovery = 104.59%								
As 188.979†	1666.8	523.87	ug/L	3.465	523.87	ppb	3.465	0.66%
QC value within limits for As 188.979 Recovery = 104.77%								
B 249.677†	27125.0	510.62	ug/L	1.501	510.62	ppb	1.501	0.29%
QC value within limits for B 249.677 Recovery = 102.12%								
Ba 233.527†	81091.1	522.31	ug/L	0.816	522.31	ppb	0.816	0.16%
QC value within limits for Ba 233.527 Recovery = 104.46%								
Be 313.107†	1664004.0	519.85	ug/L	0.715	519.85	ppb	0.715	0.14%
QC value within limits for Be 313.107 Recovery = 103.97%								
Ca 317.933Radial†	2976.3	5269.7	ug/L	61.66	5269.7	ppb	61.66	1.17%

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   QC value within limits for Ca 317.933Radial  Recovery = 105.39%
Cd 226.502†            60037.8      523.39 ug/L         0.997      523.39 ppb          0.997   0.19%
   QC value within limits for Cd 226.502  Recovery = 104.68%
Co 228.616†            31523.6      519.43 ug/L         5.410      519.43 ppb          5.410   1.04%
   QC value within limits for Co 228.616  Recovery = 103.89%
Cr 267.716†            57727.9      519.47 ug/L         0.463      519.47 ppb          0.463   0.09%
   QC value within limits for Cr 267.716  Recovery = 103.89%
Cu 324.752†           195401.8      522.09 ug/L         0.356      522.09 ppb          0.356   0.07%
   QC value within limits for Cu 324.752  Recovery = 104.42%
Fe 238.204 Radial†       428.1      5192.3 ug/L        40.29      5192.3 ppb         40.29   0.78%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.85%
K 766.490 Radial†      27883.6      5073.1 ug/L        87.82      5073.1 ppb         87.82   1.73%
   QC value within limits for K 766.490 Radial  Recovery = 101.46%
Mg 279.077 IEC†          120.8      5413.3 ug/L       146.46      5413.3 ppb        146.46   2.71%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.27%
Mn 257.610†           552923.6      524.01 ug/L         0.520      524.01 ppb          0.520   0.10%
   QC value within limits for Mn 257.610  Recovery = 104.80%
Mo 202.031†            9841.3      522.62 ug/L         5.540      522.62 ppb          5.540   1.06%
   QC value within limits for Mo 202.031  Recovery = 104.52%
Na 589.592 Radial†     36262.2       10172 ug/L       166.2        10172 ppb        166.2   1.63%
   QC value within limits for Na 589.592 Radial  Recovery = 101.72%
Ni 231.604†            26486.2      518.63 ug/L         5.548      518.63 ppb          5.548   1.07%
   QC value within limits for Ni 231.604  Recovery = 103.73%
P 214.914†              5898.6      2559.6 ug/L        34.18      2559.6 ppb         34.18   1.34%
   QC value within limits for P 214.914  Recovery = 102.38%
Pb 220.353†             5593.2      526.67 ug/L         5.776      526.67 ppb          5.776   1.10%
   QC value within limits for Pb 220.353  Recovery = 105.33%
S 181.975 Axial†         957.4      1030.5 ug/L         7.97      1030.5 ppb          7.97   0.77%
   QC value within limits for S 181.975 Axial  Recovery = 103.05%
Sb 206.836†             1982.0      530.13 ug/L         5.043      530.13 ppb          5.043   0.95%
   QC value within limits for Sb 206.836  Recovery = 106.03%
Se 196.026†             1183.1      544.53 ug/L         6.582      544.53 ppb          6.582   1.21%
   QC value within limits for Se 196.026  Recovery = 108.91%
Si 251.611†           102349.9      2586.9 ug/L         1.92      2586.9 ppb          1.92   0.07%
   QC value within limits for Si 251.611  Recovery = 103.48%
Sn 189.927†             3922.8      519.44 ug/L         4.434      519.44 ppb          4.434   0.85%
   QC value within limits for Sn 189.927  Recovery = 103.89%
Sr 421.552†            96850.7      508.07 ug/L         8.880      508.07 ppb          8.880   1.75%
   QC value within limits for Sr 421.552  Recovery = 101.61%
Ti 334.940†           377382.0      520.38 ug/L         0.451      520.38 ppb          0.451   0.09%
   QC value within limits for Ti 334.940  Recovery = 104.08%
Tl 190.801†             2150.1      523.31 ug/L         8.809      523.31 ppb          8.809   1.68%
   QC value within limits for Tl 190.801  Recovery = 104.66%
U 409.014†             19602.7      505.16 ug/L         0.969      505.16 ppb          0.969   0.19%
   QC value within limits for U 409.014  Recovery = 101.03%
V 292.402†             90512.3      525.16 ug/L         0.469      525.16 ppb          0.469   0.09%
   QC value within limits for V 292.402  Recovery = 105.03%
Zn 213.857†            70977.3      516.94 ug/L         0.531      516.94 ppb          0.531   0.10%
   QC value within limits for Zn 213.857  Recovery = 103.39%
SiO2†                 102253.5      5530.5 ug/L        33.19      5530.5 ppb         33.19   0.60%
   QC value within limits for SiO2  Recovery = 103.42%
All analyte(s) passed QC.
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Sequence No.: 71
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 06:12:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4812.0	4812.0	98.0	%			06:14:14
1	Y RADIAL	5530.6	5530.6	97.94	%			06:14:14
1	Al 396.153Radial†	-39.8	3.2	2.1360	ug/L	2.1360	ppb	06:14:14
1	Ca 317.933Radial†	24.7	7.4	13.029	ug/L	13.029	ppb	06:14:34
1	Fe 238.204 Radial†	8.3	-2.5	-30.025	ug/L	-30.025	ppb	06:14:34
1	K 766.490 Radial†	2655.3	139.7	25.424	ug/L	25.424	ppb	06:14:14
1	Mg 279.077 IEC†	3.5	1.1	47.742	ug/L	47.742	ppb	06:14:34
1	Na 589.592 Radial†	-1025.6	233.5	65.508	ug/L	65.508	ppb	06:14:14
1	Sr 421.552†	-21.7	-14.7	-0.0774	ug/L	-0.0774	ppb	06:14:14
1	Sc 361.383	1011287.7	1011287.7	97.288	%			06:15:31
1	Y 371.029	859837.8	859837.8	97.215	%			06:15:31
1	Ag 328.068†	420.9	-41.4	-0.1753	ug/L	-0.1753	ppb	06:15:36
1	As 188.979†	-45.3	-9.9	-3.0954	ug/L	-3.0954	ppb	06:15:56
1	B 249.677†	-411.3	43.4	0.8238	ug/L	0.8238	ppb	06:15:56
1	Ba 233.527†	13.2	13.6	0.0859	ug/L	0.0859	ppb	06:15:56
1	Be 313.107†	-4842.3	-103.4	-0.0321	ug/L	-0.0321	ppb	06:15:36
1	Cd 226.502†	-231.9	-2.8	-0.0211	ug/L	-0.0211	ppb	06:15:56
1	Co 228.616†	-88.2	-4.3	-0.0708	ug/L	-0.0708	ppb	06:15:56
1	Cr 267.716†	119.7	35.2	0.3155	ug/L	0.3155	ppb	06:15:56
1	Cu 324.752†	9003.7	317.3	0.8457	ug/L	0.8457	ppb	06:15:36
1	Mn 257.610†	625.7	66.4	0.0590	ug/L	0.0590	ppb	06:15:56
1	Mo 202.031†	25.8	-2.7	-0.1447	ug/L	-0.1447	ppb	06:15:56
1	Ni 231.604†	127.9	-0.4	-0.0087	ug/L	-0.0087	ppb	06:15:56
1	P 214.914†	275.1	17.7	7.8196	ug/L	7.8196	ppb	06:15:56
1	Pb 220.353†	-76.7	-3.2	-0.3012	ug/L	-0.3012	ppb	06:15:56
1	S 181.975 Axial†	60.6	2.1	2.2992	ug/L	2.2992	ppb	06:15:56
1	Sb 206.836†	49.3	16.1	4.2468	ug/L	4.2468	ppb	06:15:56
1	Se 196.026†	-33.4	-13.0	-5.8633	ug/L	-5.8633	ppb	06:15:56
1	Si 251.611†	644.0	104.3	2.6399	ug/L	2.6399	ppb	06:15:56
1	Sn 189.927†	2.9	7.3	0.9671	ug/L	0.9671	ppb	06:15:56
1	Ti 334.940†	-1185.9	41.5	0.0576	ug/L	0.0576	ppb	06:15:36
1	Tl 190.801†	-42.1	1.0	0.2361	ug/L	0.2361	ppb	06:15:56
1	U 409.014†	-2677.1	22.2	0.5768	ug/L	0.5768	ppb	06:15:31
1	V 292.402†	-1606.6	-42.9	-0.2411	ug/L	-0.2411	ppb	06:15:36
1	Zn 213.857†	958.6	99.7	0.7330	ug/L	0.7330	ppb	06:15:56
1	SiO2†	637.0	55.7	3.0072	ug/L	3.0072	ppb	06:17:02
2	Sc Radial	4675.0	4675.0	95.2	%			06:14:39
2	Y RADIAL	5375.1	5375.1	95.18	%			06:14:39
2	Al 396.153Radial†	-46.3	-4.9	-3.2271	ug/L	-3.2271	ppb	06:14:39
2	Ca 317.933Radial†	29.0	12.6	22.275	ug/L	22.275	ppb	06:14:59
2	Fe 238.204 Radial†	6.7	-4.0	-48.380	ug/L	-48.380	ppb	06:14:59
2	K 766.490 Radial†	2515.0	71.8	13.055	ug/L	13.055	ppb	06:14:39
2	Mg 279.077 IEC†	1.8	-0.7	-29.422	ug/L	-29.422	ppb	06:14:59
2	Na 589.592 Radial†	-1067.8	158.5	44.469	ug/L	44.469	ppb	06:14:39
2	Sr 421.552†	3.7	11.3	0.0593	ug/L	0.0593	ppb	06:14:39
2	Sc 361.383	1004408.3	1004408.3	96.626	%			06:16:01
2	Y 371.029	853307.0	853307.0	96.477	%			06:16:01
2	Ag 328.068†	451.9	-6.3	-0.0405	ug/L	-0.0405	ppb	06:16:07
2	As 188.979†	-43.4	-8.3	-2.6020	ug/L	-2.6020	ppb	06:16:27
2	B 249.677†	-395.5	56.8	1.0804	ug/L	1.0804	ppb	06:16:27
2	Ba 233.527†	0.2	0.3	-0.0016	ug/L	-0.0016	ppb	06:16:27
2	Be 313.107†	-4994.6	-295.0	-0.0921	ug/L	-0.0921	ppb	06:16:07
2	Cd 226.502†	-231.1	-3.5	-0.0254	ug/L	-0.0254	ppb	06:16:27
2	Co 228.616†	-88.8	-5.5	-0.0898	ug/L	-0.0898	ppb	06:16:27
2	Cr 267.716†	107.3	23.3	0.2082	ug/L	0.2082	ppb	06:16:27
2	Cu 324.752†	9097.9	478.2	1.2745	ug/L	1.2745	ppb	06:16:07
2	Mn 257.610†	624.4	69.5	0.0615	ug/L	0.0615	ppb	06:16:27
2	Mo 202.031†	33.8	5.8	0.3030	ug/L	0.3030	ppb	06:16:27
2	Ni 231.604†	134.5	7.3	0.1429	ug/L	0.1429	ppb	06:16:27

2	P 214.914†	278.4	23.0	10.133 ug/L	10.133 ppb	06:16:27
2	Pb 220.353†	-71.3	1.8	0.1732 ug/L	0.1732 ppb	06:16:27
2	S 181.975 Axial†	58.3	0.2	0.2677 ug/L	0.2677 ppb	06:16:27
2	Sb 206.836†	47.5	14.5	3.8440 ug/L	3.8440 ppb	06:16:27
2	Se 196.026†	-22.7	-2.1	-1.1116 ug/L	-1.1116 ppb	06:16:27
2	Si 251.611†	647.1	112.1	2.8338 ug/L	2.8338 ppb	06:16:27
2	Sn 189.927†	3.9	8.4	1.1061 ug/L	1.1061 ppb	06:16:27
2	Ti 334.940†	-1259.3	-42.8	-0.0565 ug/L	-0.0565 ppb	06:16:07
2	Tl 190.801†	-48.7	-6.2	-1.4939 ug/L	-1.4939 ppb	06:16:27
2	U 409.014†	-2807.5	-131.6	-3.3967 ug/L	-3.3967 ppb	06:16:01
2	V 292.402†	-1663.4	-113.0	-0.6423 ug/L	-0.6423 ppb	06:16:07
2	Zn 213.857†	958.6	106.5	0.7860 ug/L	0.7860 ppb	06:16:27
2	SiO2†	671.4	95.8	5.1761 ug/L	5.1761 ppb	06:17:07
3	Sc Radial	4661.6	4661.6	94.9 %		06:15:05
3	Y RADIAL	5342.3	5342.3	94.60 %		06:15:05
3	Al 396.153Radial†	-39.9	1.8	1.1455 ug/L	1.1455 ppb	06:15:05
3	Ca 317.933Radial†	28.8	12.5	22.089 ug/L	22.089 ppb	06:15:25
3	Fe 238.204 Radial†	8.1	-2.5	-29.632 ug/L	-29.632 ppb	06:15:25
3	K 766.490 Radial†	2660.8	232.9	42.430 ug/L	42.430 ppb	06:15:05
3	Mg 279.077 IEC†	0.9	-1.6	-69.835 ug/L	-69.835 ppb	06:15:25
3	Na 589.592 Radial†	-1102.7	118.6	33.259 ug/L	33.259 ppb	06:15:05
3	Sr 421.552†	25.2	34.0	0.1781 ug/L	0.1781 ppb	06:15:05
3	Sc 361.383	1020354.8	1020354.8	98.160 %		06:16:32
3	Y 371.029	868222.5	868222.5	98.163 %		06:16:32
3	Ag 328.068†	378.9	-88.0	-0.3563 ug/L	-0.3563 ppb	06:16:37
3	As 188.979†	-39.7	-3.8	-1.1900 ug/L	-1.1900 ppb	06:16:57
3	B 249.677†	-407.5	51.0	0.9674 ug/L	0.9674 ppb	06:16:57
3	Ba 233.527†	11.3	11.6	0.0729 ug/L	0.0729 ppb	06:16:57
3	Be 313.107†	-4842.0	-58.8	-0.0185 ug/L	-0.0185 ppb	06:16:37
3	Cd 226.502†	-228.1	3.2	0.0313 ug/L	0.0313 ppb	06:16:57
3	Co 228.616†	-81.7	3.1	0.0531 ug/L	0.0531 ppb	06:16:57
3	Cr 267.716†	95.3	9.3	0.0837 ug/L	0.0837 ppb	06:16:57
3	Cu 324.752†	8919.0	148.7	0.3956 ug/L	0.3956 ppb	06:16:37
3	Mn 257.610†	636.5	71.7	0.0662 ug/L	0.0662 ppb	06:16:57
3	Mo 202.031†	36.4	7.8	0.4144 ug/L	0.4144 ppb	06:16:57
3	Ni 231.604†	135.5	6.1	0.1201 ug/L	0.1201 ppb	06:16:57
3	P 214.914†	275.6	15.6	6.9614 ug/L	6.9614 ppb	06:16:57
3	Pb 220.353†	-72.7	1.5	0.1442 ug/L	0.1442 ppb	06:16:57
3	S 181.975 Axial†	50.7	-8.4	-9.0557 ug/L	-9.0557 ppb	06:16:57
3	Sb 206.836†	47.1	13.4	3.5376 ug/L	3.5376 ppb	06:16:57
3	Se 196.026†	-22.9	-2.0	-0.9840 ug/L	-0.9840 ppb	06:16:57
3	Si 251.611†	623.1	77.2	1.9367 ug/L	1.9367 ppb	06:16:57
3	Sn 189.927†	0.6	5.0	0.6630 ug/L	0.6630 ppb	06:16:57
3	Ti 334.940†	-1301.1	-65.1	-0.0871 ug/L	-0.0871 ppb	06:16:37
3	Tl 190.801†	-49.7	-6.4	-1.5540 ug/L	-1.5540 ppb	06:16:57
3	U 409.014†	-2859.0	-138.6	-3.5801 ug/L	-3.5801 ppb	06:16:32
3	V 292.402†	-1608.1	-29.7	-0.1681 ug/L	-0.1681 ppb	06:16:37
3	Zn 213.857†	964.9	97.5	0.7201 ug/L	0.7201 ppb	06:16:57
3	SiO2†	686.3	100.1	5.3895 ug/L	5.3895 ppb	06:17:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1012016.9	97.358	%	0.7694				0.79%
Sc Radial	4716.2	96.1	%	1.70				1.77%
Y 371.029	860455.8	97.285	%	0.8454				0.87%
Y RADIAL	5416.0	95.91	%	1.781				1.86%
Ag 328.068†	-45.3	-0.1907	ug/L	0.15846	-0.1907	ppb	0.15846	83.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.0	0.0181	ug/L	2.85376	0.0181	ppb	2.85376	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-7.3	-2.2958	ug/L	0.98896	-2.2958	ppb	0.98896	43.08%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	50.4	0.9572	ug/L	0.12857	0.9572	ppb	0.12857	13.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.5	0.0524	ug/L	0.04721	0.0524	ppb	0.04721	90.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-152.4	-0.0476	ug/L	0.03916	-0.0476	ppb	0.03916	82.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.8	19.131	ug/L	5.2856	19.131	ppb	5.2856	27.63%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -1.0     -0.0051 ug/L       0.03154     -0.0051 ppb        0.03154 620.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -2.2     -0.0358 ug/L       0.07759     -0.0358 ppb        0.07759 216.51%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              22.6      0.2024 ug/L       0.11603      0.2024 ppb        0.11603  57.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             314.7      0.8386 ug/L       0.43946      0.8386 ppb        0.43946  52.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -3.0     -36.012 ug/L       10.7127     -36.012 ppb        10.7127  29.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       148.1      26.969 ug/L       14.7483      26.969 ppb        14.7483  54.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4     -17.172 ug/L       59.7377     -17.172 ppb        59.7377 347.88%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              69.2      0.0623 ug/L       0.00367      0.0623 ppb        0.00367   5.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               3.6      0.1909 ug/L       0.29593      0.1909 ppb        0.29593 155.00%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      170.2      47.746 ug/L       16.3719      47.746 ppb        16.3719  34.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               4.3      0.0848 ug/L       0.08174      0.0848 ppb        0.08174  96.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               18.8      8.3048 ug/L       1.64072      8.3048 ppb        1.64072  19.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               0.0      0.0054 ug/L       0.26590      0.0054 ppb        0.26590 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.0     -2.1629 ug/L       6.05516     -2.1629 ppb        6.05516 279.95%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              14.7      3.8761 ug/L       0.35571      3.8761 ppb        0.35571   9.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.7     -2.6530 ug/L       2.78099     -2.6530 ppb        2.78099 104.83%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              97.9      2.4702 ug/L       0.47204      2.4702 ppb        0.47204  19.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               6.9      0.9121 ug/L       0.22660      0.9121 ppb        0.22660  24.84%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              10.2      0.0533 ug/L       0.12783      0.0533 ppb        0.12783 239.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -22.1     -0.0287 ug/L       0.07622     -0.0287 ppb        0.07622 265.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.9     -0.9373 ug/L       1.01660     -0.9373 ppb        1.01660 108.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -82.7     -2.1333 ug/L       2.34883     -2.1333 ppb        2.34883 110.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -61.9     -0.3505 ug/L       0.25532     -0.3505 ppb        0.25532  72.85%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             101.2      0.7464 ug/L       0.03494      0.7464 ppb        0.03494   4.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    83.9      4.5243 ug/L       1.31815      4.5243 ppb        1.31815  29.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 82
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 07:30:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4619.5	4619.5	94.1	%			07:32:33
1	Y RADIAL	5202.6	5202.6	92.13	%			07:32:33
1	Al 396.153Radial†	7433.8	7944.7	5225.2	ug/L	5225.2	ppb	07:32:33
1	Ca 317.933Radial†	2809.1	2967.8	5254.6	ug/L	5254.6	ppb	07:32:53
1	Fe 238.204 Radial†	415.1	430.2	5216.9	ug/L	5216.9	ppb	07:32:53
1	K 766.490 Radial†	29615.9	28907.3	5259.6	ug/L	5259.6	ppb	07:32:33
1	Mg 279.077 IEC†	112.8	117.3	5255.9	ug/L	5255.9	ppb	07:32:53
1	Na 589.592 Radial†	35886.8	39421.7	11058	ug/L	11058	ppb	07:32:33
1	Sr 421.552†	93781.7	99681.9	522.93	ug/L	522.93	ppb	07:32:33
1	Sc 361.383	1070188.2	1070188.2	102.95	%			07:33:52
1	Y 371.029	897790.6	897790.6	101.51	%			07:33:52
1	Ag 328.068†	126411.1	122310.1	487.89	ug/L	487.89	ppb	07:33:52
1	As 188.979†	1565.1	1556.8	489.38	ug/L	489.38	ppb	07:34:12
1	B 249.677†	25816.1	25541.5	480.77	ug/L	480.77	ppb	07:33:52
1	Ba 233.527†	77977.5	75740.2	487.85	ug/L	487.85	ppb	07:33:52
1	Be 313.107†	1594194.1	1553328.9	485.27	ug/L	485.27	ppb	07:33:52
1	Cd 226.502†	57629.4	56211.6	490.00	ug/L	490.00	ppb	07:33:52
1	Co 228.616†	30250.1	29468.6	485.56	ug/L	485.56	ppb	07:34:12
1	Cr 267.716†	55522.5	53841.8	484.50	ug/L	484.50	ppb	07:33:52
1	Cu 324.752†	196636.9	182057.7	486.45	ug/L	486.45	ppb	07:33:52
1	Mn 257.610†	532772.1	516909.7	489.91	ug/L	489.91	ppb	07:33:52
1	Mo 202.031†	9480.8	9179.5	487.50	ug/L	487.50	ppb	07:34:12
1	Ni 231.604†	25611.8	24745.0	484.53	ug/L	484.53	ppb	07:34:12
1	P 214.914†	5940.6	5505.1	2388.7	ug/L	2388.7	ppb	07:34:12
1	Pb 220.353†	5309.6	5232.8	492.78	ug/L	492.78	ppb	07:34:12
1	S 181.975 Axial†	992.2	903.6	972.51	ug/L	972.51	ppb	07:34:12
1	Sb 206.836†	1936.4	1846.2	493.76	ug/L	493.76	ppb	07:34:12
1	Se 196.026†	1122.4	1111.6	512.82	ug/L	512.82	ppb	07:34:12
1	Si 251.611†	98980.2	95582.7	2415.7	ug/L	2415.7	ppb	07:33:52
1	Sn 189.927†	3737.9	3635.0	481.37	ug/L	481.37	ppb	07:34:12
1	Ti 334.940†	361475.1	352364.5	485.90	ug/L	485.90	ppb	07:33:52
1	Tl 190.801†	2024.0	2010.2	489.28	ug/L	489.28	ppb	07:34:12
1	U 409.014†	16220.5	18529.1	477.46	ug/L	477.46	ppb	07:33:52
1	V 292.402†	85288.1	84449.6	489.94	ug/L	489.94	ppb	07:33:52
1	Zn 213.857†	69125.1	66256.3	482.51	ug/L	482.51	ppb	07:33:52
1	SiO2†	100009.9	96541.4	5221.5	ug/L	5221.5	ppb	07:35:13
2	Sc Radial	4512.4	4512.4	91.9	%			07:32:58
2	Y RADIAL	5127.8	5127.8	90.80	%			07:32:58
2	Al 396.153Radial†	7161.5	7835.9	5154.0	ug/L	5154.0	ppb	07:32:58
2	Ca 317.933Radial†	2779.0	3005.8	5321.9	ug/L	5321.9	ppb	07:33:18
2	Fe 238.204 Radial†	410.4	435.5	5280.0	ug/L	5280.0	ppb	07:33:18
2	K 766.490 Radial†	28770.4	28734.4	5228.4	ug/L	5228.4	ppb	07:32:58
2	Mg 279.077 IEC†	113.8	121.3	5433.4	ug/L	5433.4	ppb	07:33:18
2	Na 589.592 Radial†	34275.3	38573.4	10820	ug/L	10820	ppb	07:32:58
2	Sr 421.552†	89589.0	97485.5	511.40	ug/L	511.40	ppb	07:32:58
2	Sc 361.383	1108492.8	1108492.8	106.64	%			07:34:20
2	Y 371.029	929317.9	929317.9	105.07	%			07:34:20
2	Ag 328.068†	125050.2	116791.1	465.95	ug/L	465.95	ppb	07:34:20
2	As 188.979†	1559.3	1498.8	471.14	ug/L	471.14	ppb	07:34:40
2	B 249.677†	25445.0	24327.0	457.85	ug/L	457.85	ppb	07:34:20
2	Ba 233.527†	76871.9	72086.3	464.33	ug/L	464.33	ppb	07:34:20
2	Be 313.107†	1568964.3	1476162.0	461.16	ug/L	461.16	ppb	07:34:20
2	Cd 226.502†	56630.1	53340.2	464.94	ug/L	464.94	ppb	07:34:20
2	Co 228.616†	30321.0	28519.7	469.94	ug/L	469.94	ppb	07:34:40
2	Cr 267.716†	54503.5	51022.6	459.14	ug/L	459.14	ppb	07:34:20
2	Cu 324.752†	194092.4	173071.7	462.46	ug/L	462.46	ppb	07:34:20
2	Mn 257.610†	524353.7	491133.3	465.50	ug/L	465.50	ppb	07:34:20
2	Mo 202.031†	9516.5	8894.8	472.39	ug/L	472.39	ppb	07:34:40
2	Ni 231.604†	25654.4	23925.3	468.48	ug/L	468.48	ppb	07:34:40

2	P 214.914†	5941.6	5306.6	2303.5	ug/L	2303.5 ppb	07:34:40
2	Pb 220.353†	5348.2	5090.9	479.41	ug/L	479.41 ppb	07:34:40
2	S 181.975 Axial†	976.8	855.9	921.13	ug/L	921.13 ppb	07:34:40
2	Sb 206.836†	1953.4	1797.1	480.87	ug/L	480.87 ppb	07:34:40
2	Se 196.026†	1107.3	1059.7	490.03	ug/L	490.03 ppb	07:34:40
2	Si 251.611†	97602.7	90968.7	2298.9	ug/L	2298.9 ppb	07:34:20
2	Sn 189.927†	3757.6	3528.0	467.24	ug/L	467.24 ppb	07:34:40
2	Ti 334.940†	356013.3	335110.1	462.12	ug/L	462.12 ppb	07:34:20
2	Tl 190.801†	2027.8	1945.8	473.50	ug/L	473.50 ppb	07:34:40
2	U 409.014†	15960.0	17740.4	457.11	ug/L	457.11 ppb	07:34:20
2	V 292.402†	83860.7	80248.4	465.66	ug/L	465.66 ppb	07:34:20
2	Zn 213.857†	68115.4	62989.3	458.63	ug/L	458.63 ppb	07:34:20
2	SiO2†	100864.6	93986.2	5083.3	ug/L	5083.3 ppb	07:35:18
3	Sc Radial	4537.6	4537.6	92.4	%		07:33:23
3	Y RADIAL	5141.3	5141.3	91.04	%		07:33:23
3	Al 396.153Radial†	7315.8	7959.7	5233.6	ug/L	5233.6 ppb	07:33:23
3	Ca 317.933Radial†	2826.5	3040.5	5383.2	ug/L	5383.2 ppb	07:33:43
3	Fe 238.204 Radial†	425.6	449.5	5450.4	ug/L	5450.4 ppb	07:33:43
3	K 766.490 Radial†	29396.7	29238.2	5319.7	ug/L	5319.7 ppb	07:33:23
3	Mg 279.077 IEC†	113.2	119.9	5372.8	ug/L	5372.8 ppb	07:33:43
3	Na 589.592 Radial†	34873.1	39013.2	10943	ug/L	10943 ppb	07:33:23
3	Sr 421.552†	91725.6	99256.0	520.69	ug/L	520.69 ppb	07:33:23
3	Sc 361.383	1009607.2	1009607.2	97.126	%		07:34:47
3	Y 371.029	847128.1	847128.1	95.778	%		07:34:47
3	Ag 328.068†	127595.4	130897.2	522.11	ug/L	522.11 ppb	07:34:47
3	As 188.979†	1570.5	1653.5	519.80	ug/L	519.80 ppb	07:35:07
3	B 249.677†	26016.6	27252.6	513.00	ug/L	513.00 ppb	07:34:47
3	Ba 233.527†	78723.7	81053.3	522.07	ug/L	522.07 ppb	07:34:47
3	Be 313.107†	1613576.7	1666199.5	520.53	ug/L	520.53 ppb	07:34:47
3	Cd 226.502†	58103.0	60058.0	523.54	ug/L	523.54 ppb	07:34:47
3	Co 228.616†	30403.8	31389.8	517.21	ug/L	517.21 ppb	07:35:07
3	Cr 267.716†	56183.9	57758.8	519.75	ug/L	519.75 ppb	07:34:47
3	Cu 324.752†	198777.2	195721.9	522.96	ug/L	522.96 ppb	07:34:47
3	Mn 257.610†	537637.0	552970.1	524.08	ug/L	524.08 ppb	07:34:47
3	Mo 202.031†	9548.1	9801.5	520.52	ug/L	520.52 ppb	07:35:07
3	Ni 231.604†	25705.9	26334.7	515.66	ug/L	515.66 ppb	07:35:07
3	P 214.914†	5940.3	5851.0	2537.9	ug/L	2537.9 ppb	07:35:07
3	Pb 220.353†	5346.1	5579.8	525.39	ug/L	525.39 ppb	07:35:07
3	S 181.975 Axial†	981.8	950.8	1023.3	ug/L	1023.3 ppb	07:35:07
3	Sb 206.836†	1972.7	1996.5	533.80	ug/L	533.80 ppb	07:35:07
3	Se 196.026†	1120.2	1174.7	541.73	ug/L	541.73 ppb	07:35:07
3	Si 251.611†	99868.6	102266.2	2584.8	ug/L	2584.8 ppb	07:34:47
3	Sn 189.927†	3770.2	3886.1	514.60	ug/L	514.60 ppb	07:35:07
3	Ti 334.940†	365504.2	377580.6	520.66	ug/L	520.66 ppb	07:34:47
3	Tl 190.801†	2028.5	2132.7	519.13	ug/L	519.13 ppb	07:35:07
3	U 409.014†	16321.7	19578.6	504.50	ug/L	504.50 ppb	07:34:47
3	V 292.402†	86379.0	90543.7	525.26	ug/L	525.26 ppb	07:34:47
3	Zn 213.857†	69862.9	71044.8	517.43	ug/L	517.43 ppb	07:34:47
3	SiO2†	98565.0	100882.7	5455.9	ug/L	5455.9 ppb	07:35:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1062762.7	102.24	%	4.797				4.69%
Sc Radial	4556.5	92.8	%	1.14				1.23%
Y 371.029	891412.2	100.79	%	4.688				4.65%
Y RADIAL	5157.2	91.32	%	0.706				0.77%
Ag 328.068†	123332.8	491.98	ug/L	28.302	491.98	ppb	28.302	5.75%
QC value within limits for Ag 328.068 Recovery = 98.40%								
Al 396.153Radial†	7913.4	5204.3	ug/L	43.75	5204.3	ppb	43.75	0.84%
QC value within limits for Al 396.153Radial Recovery = 104.09%								
As 188.979†	1569.7	493.44	ug/L	24.583	493.44	ppb	24.583	4.98%
QC value within limits for As 188.979 Recovery = 98.69%								
B 249.677†	25707.0	483.88	ug/L	27.704	483.88	ppb	27.704	5.73%
QC value within limits for B 249.677 Recovery = 96.78%								
Ba 233.527†	76293.3	491.42	ug/L	29.037	491.42	ppb	29.037	5.91%
QC value within limits for Ba 233.527 Recovery = 98.28%								
Be 313.107†	1565230.1	488.99	ug/L	29.858	488.99	ppb	29.858	6.11%
QC value within limits for Be 313.107 Recovery = 97.80%								
Ca 317.933Radial†	3004.7	5319.9	ug/L	64.33	5319.9	ppb	64.33	1.21%

```
   QC value within limits for Ca 317.933Radial  Recovery = 106.40%
Cd 226.502†            56536.6      492.83 ug/L        29.401      492.83 ppb        29.401   5.97%
   QC value within limits for Cd 226.502  Recovery = 98.57%
Co 228.616†            29792.7      490.90 ug/L        24.086      490.90 ppb        24.086   4.91%
   QC value within limits for Co 228.616  Recovery = 98.18%
Cr 267.716†            54207.7      487.80 ug/L        30.438      487.80 ppb        30.438   6.24%
   QC value within limits for Cr 267.716  Recovery = 97.56%
Cu 324.752†           183617.1      490.62 ug/L        30.463      490.62 ppb        30.463   6.21%
   QC value within limits for Cu 324.752  Recovery = 98.12%
Fe 238.204 Radial†       438.4      5315.8 ug/L        120.80      5315.8 ppb        120.80   2.27%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.32%
K 766.490 Radial†      28960.0      5269.2 ug/L         46.37      5269.2 ppb         46.37   0.88%
   QC value within limits for K 766.490 Radial  Recovery = 105.38%
Mg 279.077 IEC†          119.5      5354.0 ug/L         90.20      5354.0 ppb         90.20   1.68%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.08%
Mn 257.610†           520337.7      493.16 ug/L        29.422      493.16 ppb        29.422   5.97%
   QC value within limits for Mn 257.610  Recovery = 98.63%
Mo 202.031†             9291.9      493.47 ug/L        24.613      493.47 ppb        24.613   4.99%
   QC value within limits for Mo 202.031  Recovery = 98.69%
Na 589.592 Radial†     39002.8       10940 ug/L         119.0       10940 ppb         119.0   1.09%
   QC value within limits for Na 589.592 Radial  Recovery = 109.40%
Ni 231.604†            25001.7      489.56 ug/L        23.987      489.56 ppb        23.987   4.90%
   QC value within limits for Ni 231.604  Recovery = 97.91%
P 214.914†              5554.2      2410.0 ug/L        118.62      2410.0 ppb        118.62   4.92%
   QC value within limits for P 214.914  Recovery = 96.40%
Pb 220.353†             5301.2      499.19 ug/L        23.651      499.19 ppb        23.651   4.74%
   QC value within limits for Pb 220.353  Recovery = 99.84%
S 181.975 Axial†         903.4      972.32 ug/L        51.090      972.32 ppb        51.090   5.25%
   QC value within limits for S 181.975 Axial  Recovery = 97.23%
Sb 206.836†             1879.9      502.81 ug/L        27.599      502.81 ppb        27.599   5.49%
   QC value within limits for Sb 206.836  Recovery = 100.56%
Se 196.026†             1115.3      514.86 ug/L        25.910      514.86 ppb        25.910   5.03%
   QC value within limits for Se 196.026  Recovery = 102.97%
Si 251.611†            96272.6      2433.1 ug/L        143.74      2433.1 ppb        143.74   5.91%
   QC value within limits for Si 251.611  Recovery = 97.33%
Sn 189.927†             3683.0      487.74 ug/L        24.316      487.74 ppb        24.316   4.99%
   QC value within limits for Sn 189.927  Recovery = 97.55%
Sr 421.552†            98807.8      518.34 ug/L         6.111      518.34 ppb         6.111   1.18%
   QC value within limits for Sr 421.552  Recovery = 103.67%
Ti 334.940†           355018.4      489.56 ug/L        29.441      489.56 ppb        29.441   6.01%
   QC value within limits for Ti 334.940  Recovery = 97.91%
Tl 190.801†             2029.6      493.97 ug/L        23.173      493.97 ppb        23.173   4.69%
   QC value within limits for Tl 190.801  Recovery = 98.79%
U 409.014†             18616.0      479.69 ug/L        23.773      479.69 ppb        23.773   4.96%
   QC value within limits for U 409.014  Recovery = 95.94%
V 292.402†             85080.6      493.62 ug/L        29.971      493.62 ppb        29.971   6.07%
   QC value within limits for V 292.402  Recovery = 98.72%
Zn 213.857†            66763.4      486.19 ug/L        29.575      486.19 ppb        29.575   6.08%
   QC value within limits for Zn 213.857  Recovery = 97.24%
SiO2†                  97136.8      5253.6 ug/L        188.37      5253.6 ppb        188.37   3.59%
   QC value within limits for SiO2  Recovery = 98.24%
All analyte(s) passed QC.
```

Sequence No.: 83
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 07:37:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4465.3	4465.3	90.9	%			07:39:25
1	Y RADIAL	5097.5	5097.5	90.27	%			07:39:25
1	Al 396.153Radial†	-30.3	10.5	6.9222	ug/L	6.9222	ppb	07:39:25
1	Ca 317.933Radial†	39.2	25.2	44.646	ug/L	44.646	ppb	07:39:45
1	Fe 238.204 Radial†	13.4	3.7	45.295	ug/L	45.295	ppb	07:39:45
1	K 766.490 Radial†	2863.2	578.6	105.43	ug/L	105.43	ppb	07:39:25
1	Mg 279.077 IEC†	3.4	1.2	53.307	ug/L	53.307	ppb	07:39:45
1	Na 589.592 Radial†	-1023.6	154.5	43.326	ug/L	43.326	ppb	07:39:25
1	Sr 421.552†	38.0	49.2	0.2576	ug/L	0.2576	ppb	07:39:25
1	Sc 361.383	1022833.3	1022833.3	98.398	%			07:40:42
1	Y 371.029	869180.0	869180.0	98.272	%			07:40:42
1	Ag 328.068†	469.0	2.5	0.0216	ug/L	0.0216	ppb	07:40:47
1	As 188.979†	-37.7	-1.7	-0.5217	ug/L	-0.5217	ppb	07:41:07
1	B 249.677†	-360.2	100.1	1.8849	ug/L	1.8849	ppb	07:41:07
1	Ba 233.527†	21.9	22.3	0.1446	ug/L	0.1446	ppb	07:41:07
1	Be 313.107†	-4824.0	-28.6	-0.0090	ug/L	-0.0090	ppb	07:40:47
1	Cd 226.502†	-210.7	21.5	0.1827	ug/L	0.1827	ppb	07:41:07
1	Co 228.616†	-84.9	-0.0	-0.0013	ug/L	-0.0013	ppb	07:41:07
1	Cr 267.716†	103.5	17.4	0.1559	ug/L	0.1559	ppb	07:41:07
1	Cu 324.752†	8955.8	164.1	0.4405	ug/L	0.4405	ppb	07:40:47
1	Mn 257.610†	852.4	289.6	0.2778	ug/L	0.2778	ppb	07:41:07
1	Mo 202.031†	25.0	-3.9	-0.2028	ug/L	-0.2028	ppb	07:41:07
1	Ni 231.604†	119.3	-10.7	-0.2093	ug/L	-0.2093	ppb	07:41:07
1	P 214.914†	292.6	32.2	14.316	ug/L	14.316	ppb	07:41:07
1	Pb 220.353†	-79.5	-5.3	-0.4988	ug/L	-0.4988	ppb	07:41:07
1	S 181.975 Axial†	56.6	-2.5	-2.7486	ug/L	-2.7486	ppb	07:41:07
1	Sb 206.836†	57.4	23.7	6.2527	ug/L	6.2527	ppb	07:41:07
1	Se 196.026†	-23.7	-2.7	-1.0259	ug/L	-1.0259	ppb	07:41:07
1	Si 251.611†	709.4	163.3	4.1118	ug/L	4.1118	ppb	07:41:07
1	Sn 189.927†	4.8	9.2	1.2283	ug/L	1.2283	ppb	07:41:07
1	Ti 334.940†	-1272.6	-32.9	-0.0438	ug/L	-0.0438	ppb	07:40:47
1	Tl 190.801†	-48.1	-4.6	-1.1062	ug/L	-1.1062	ppb	07:41:07
1	U 409.014†	-2666.2	64.4	1.6583	ug/L	1.6583	ppb	07:40:42
1	V 292.402†	-1616.0	-33.8	-0.1988	ug/L	-0.1988	ppb	07:40:47
1	Zn 213.857†	985.8	116.3	0.8493	ug/L	0.8493	ppb	07:41:07
1	SiO2†	743.0	156.0	8.4012	ug/L	8.4012	ppb	07:42:13
2	Sc Radial	4582.7	4582.7	93.3	%			07:39:50
2	Y RADIAL	5163.6	5163.6	91.44	%			07:39:50
2	Al 396.153Radial†	-30.4	11.3	7.4228	ug/L	7.4228	ppb	07:39:50
2	Ca 317.933Radial†	41.5	26.6	47.116	ug/L	47.116	ppb	07:40:10
2	Fe 238.204 Radial†	11.3	1.1	13.327	ug/L	13.327	ppb	07:40:10
2	K 766.490 Radial†	2981.3	624.5	113.80	ug/L	113.80	ppb	07:39:50
2	Mg 279.077 IEC†	2.2	-0.2	-7.4482	ug/L	-7.4482	ppb	07:40:10
2	Na 589.592 Radial†	-1044.7	160.7	45.076	ug/L	45.076	ppb	07:39:50
2	Sr 421.552†	13.5	21.9	0.1143	ug/L	0.1143	ppb	07:39:50
2	Sc 361.383	1014203.3	1014203.3	97.568	%			07:41:12
2	Y 371.029	861814.6	861814.6	97.439	%			07:41:12
2	Ag 328.068†	471.8	9.5	0.0394	ug/L	0.0394	ppb	07:41:17
2	As 188.979†	-29.0	6.9	2.1397	ug/L	2.1397	ppb	07:41:37
2	B 249.677†	-394.7	61.6	1.1618	ug/L	1.1618	ppb	07:41:37
2	Ba 233.527†	-4.5	-4.5	-0.0292	ug/L	-0.0292	ppb	07:41:37
2	Be 313.107†	-4916.6	-165.2	-0.0515	ug/L	-0.0515	ppb	07:41:17
2	Cd 226.502†	-222.1	8.0	0.0686	ug/L	0.0686	ppb	07:41:37
2	Co 228.616†	-84.8	-0.6	-0.0103	ug/L	-0.0103	ppb	07:41:37
2	Cr 267.716†	117.4	32.5	0.2918	ug/L	0.2918	ppb	07:41:37
2	Cu 324.752†	9017.7	304.9	0.8150	ug/L	0.8150	ppb	07:41:17
2	Mn 257.610†	858.7	303.4	0.2888	ug/L	0.2888	ppb	07:41:37
2	Mo 202.031†	32.1	3.7	0.1957	ug/L	0.1957	ppb	07:41:37
2	Ni 231.604†	137.3	8.7	0.1713	ug/L	0.1713	ppb	07:41:37

2	P 214.914†	272.7	14.4	6.3139	ug/L	6.3139 ppb	07:41:37
2	Pb 220.353†	-79.0	-5.4	-0.5074	ug/L	-0.5074 ppb	07:41:37
2	S 181.975 Axial†	65.0	6.5	7.0197	ug/L	7.0197 ppb	07:41:37
2	Sb 206.836†	48.9	15.5	4.1096	ug/L	4.1096 ppb	07:41:37
2	Se 196.026†	-23.6	-2.8	-1.1848	ug/L	-1.1848 ppb	07:41:37
2	Si 251.611†	701.8	161.7	4.0618	ug/L	4.0618 ppb	07:41:37
2	Sn 189.927†	4.0	8.4	1.1164	ug/L	1.1164 ppb	07:41:37
2	Ti 334.940†	-1219.7	10.4	0.0162	ug/L	0.0162 ppb	07:41:17
2	Tl 190.801†	-42.3	0.9	0.2169	ug/L	0.2169 ppb	07:41:37
2	U 409.014†	-2663.5	44.1	1.1381	ug/L	1.1381 ppb	07:41:12
2	V 292.402†	-1609.5	-41.1	-0.2324	ug/L	-0.2324 ppb	07:41:17
2	Zn 213.857†	976.5	115.3	0.8441	ug/L	0.8441 ppb	07:41:37
2	SiO2†	713.4	132.2	7.0851	ug/L	7.0851 ppb	07:42:18
3	Sc Radial	4704.3	4704.3	95.8	%		07:40:15
3	Y RADIAL	5377.9	5377.9	95.23	%		07:40:15
3	Al 396.153Radial†	-18.4	24.6	16.227	ug/L	16.227 ppb	07:40:15
3	Ca 317.933Radial†	41.7	25.7	45.533	ug/L	45.533 ppb	07:40:35
3	Fe 238.204 Radial†	9.4	-1.1	-13.696	ug/L	-13.696 ppb	07:40:35
3	K 766.490 Radial†	2805.5	358.5	65.306	ug/L	65.306 ppb	07:40:15
3	Mg 279.077 IEC†	2.1	-0.4	-15.706	ug/L	-15.706 ppb	07:40:35
3	Na 589.592 Radial†	-1018.3	217.2	60.931	ug/L	60.931 ppb	07:40:15
3	Sr 421.552†	15.9	24.0	0.1255	ug/L	0.1255 ppb	07:40:15
3	Sc 361.383	1020693.9	1020693.9	98.192	%		07:41:43
3	Y 371.029	868014.3	868014.3	98.140	%		07:41:43
3	Ag 328.068†	528.9	64.5	0.2474	ug/L	0.2474 ppb	07:41:48
3	As 188.979†	-46.2	-10.4	-3.2603	ug/L	-3.2603 ppb	07:42:08
3	B 249.677†	-390.2	68.7	1.2991	ug/L	1.2991 ppb	07:42:08
3	Ba 233.527†	-8.8	-8.9	-0.0598	ug/L	-0.0598 ppb	07:42:08
3	Be 313.107†	-4830.4	-45.4	-0.0143	ug/L	-0.0143 ppb	07:41:48
3	Cd 226.502†	-205.0	26.9	0.2360	ug/L	0.2360 ppb	07:42:08
3	Co 228.616†	-69.6	15.4	0.2558	ug/L	0.2558 ppb	07:42:08
3	Cr 267.716†	99.2	13.2	0.1169	ug/L	0.1169 ppb	07:42:08
3	Cu 324.752†	8994.1	222.2	0.5927	ug/L	0.5927 ppb	07:41:48
3	Mn 257.610†	861.9	301.1	0.2841	ug/L	0.2841 ppb	07:42:08
3	Mo 202.031†	41.0	12.5	0.6609	ug/L	0.6609 ppb	07:42:08
3	Ni 231.604†	117.5	-12.3	-0.2412	ug/L	-0.2412 ppb	07:42:08
3	P 214.914†	280.3	20.3	9.0396	ug/L	9.0396 ppb	07:42:08
3	Pb 220.353†	-70.2	4.1	0.3891	ug/L	0.3891 ppb	07:42:08
3	S 181.975 Axial†	65.5	6.6	7.0811	ug/L	7.0811 ppb	07:42:08
3	Sb 206.836†	49.4	15.7	4.1839	ug/L	4.1839 ppb	07:42:08
3	Se 196.026†	-23.0	-2.0	-0.9454	ug/L	-0.9454 ppb	07:42:08
3	Si 251.611†	703.3	158.6	3.9848	ug/L	3.9848 ppb	07:42:08
3	Sn 189.927†	16.5	21.1	2.7979	ug/L	2.7979 ppb	07:42:08
3	Ti 334.940†	-1296.6	-60.0	-0.0803	ug/L	-0.0803 ppb	07:41:48
3	Tl 190.801†	-53.0	-9.7	-2.3405	ug/L	-2.3405 ppb	07:42:08
3	U 409.014†	-2729.6	-5.9	-0.1513	ug/L	-0.1513 ppb	07:41:43
3	V 292.402†	-1735.7	-159.1	-0.9000	ug/L	-0.9000 ppb	07:41:48
3	Zn 213.857†	972.0	104.3	0.7691	ug/L	0.7691 ppb	07:42:08
3	SiO2†	708.9	123.0	6.5906	ug/L	6.5906 ppb	07:42:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1019243.5	98.053	%	0.4323				0.44%
Sc Radial	4584.1	93.4	%	2.43				2.61%
Y 371.029	866336.3	97.950	%	0.4476				0.46%
Y RADIAL	5213.0	92.31	%	2.596				2.81%
Ag 328.068†	25.5	0.1028	ug/L	0.12552	0.1028	ppb	0.12552	122.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.4	10.191	ug/L	5.2334	10.191	ppb	5.2334	51.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.8	-0.5474	ug/L	2.70012	-0.5474	ppb	2.70012	493.23%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	76.8	1.4486	ug/L	0.38402	1.4486	ppb	0.38402	26.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.0	0.0186	ug/L	0.11025	0.0186	ppb	0.11025	594.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-79.8	-0.0249	ug/L	0.02314	-0.0249	ppb	0.02314	92.76%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	25.8	45.765	ug/L	1.2513	45.765	ppb	1.2513	2.73%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.8      0.1624 ug/L       0.08551      0.1624 ppb        0.08551  52.64%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               4.9      0.0814 ug/L       0.15107      0.0814 ppb        0.15107 185.57%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              21.0      0.1882 ug/L       0.09184      0.1882 ppb        0.09184  48.80%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             230.4      0.6161 ug/L       0.18837      0.6161 ppb        0.18837  30.58%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.2      14.975 ug/L       29.5300      14.975 ppb        29.5300 197.19%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       520.5      94.845 ug/L       25.9215      94.845 ppb        25.9215  27.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.2      10.051 ug/L       37.6879      10.051 ppb        37.6879 374.97%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             298.0      0.2835 ug/L       0.00553      0.2835 ppb        0.00553   1.95%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.1      0.2179 ug/L       0.43227      0.2179 ppb        0.43227 198.35%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      177.5      49.777 ug/L        9.6984      49.777 ppb         9.6984  19.48%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -4.7     -0.0931 ug/L       0.22952     -0.0931 ppb        0.22952 246.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               22.3      9.8899 ug/L       4.06823      9.8899 ppb        4.06823  41.14%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -2.2     -0.2057 ug/L       0.51515     -0.2057 ppb        0.51515 250.47%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.5      3.7841 ug/L       5.65752      3.7841 ppb        5.65752 149.51%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              18.3      4.8487 ug/L       1.21646      4.8487 ppb        1.21646  25.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -2.5     -1.0520 ug/L       0.12181     -1.0520 ppb        0.12181  11.58%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             161.2      4.0528 ug/L       0.06398      4.0528 ppb        0.06398   1.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              12.9      1.7142 ug/L       0.94017      1.7142 ppb        0.94017  54.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              31.7      0.1658 ug/L       0.07971      0.1658 ppb        0.07971  48.08%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -27.5     -0.0360 ug/L       0.04873     -0.0360 ppb        0.04873 135.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -4.5     -1.0766 ug/L       1.27899     -1.0766 ppb        1.27899 118.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               34.2      0.8817 ug/L       0.93165      0.8817 ppb        0.93165 105.67%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -78.0     -0.4437 ug/L       0.39554     -0.4437 ppb        0.39554  89.14%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             112.0      0.8209 ug/L       0.04486      0.8209 ppb        0.04486   5.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   137.1      7.3589 ug/L       0.93587      7.3589 ppb        0.93587  12.72%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

User canceled analysis.

==========

Analysis Begun

Start Time: 12/5/2009 07:45:37 **Plasma On Time: 11/30/2009 06:07:59**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120409.sif
Batch ID:
Results Data Set: 120409A
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 105 **Autosampler Location: 150**
Sample ID: 1201978631|925490|1 **Date Collected: 12/5/2009 07:45:38**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201978631|925490|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4666.0	4666.0	95.0	%			07:47:33
1	Y RADIAL	5292.3	5292.3	93.72	%			07:47:33
1	Al 396.153Radial†	-33.6	8.5	5.5744	ug/L	5.5744	ppb	07:47:33
1	Ca 317.933Radial†	48.9	33.7	59.606	ug/L	59.606	ppb	07:47:53
1	Fe 238.204 Radial†	16.3	6.1	74.276	ug/L	74.276	ppb	07:47:53
1	K 766.490 Radial†	2750.3	324.4	59.081	ug/L	59.081	ppb	07:47:33
1	Mg 279.077 IEC†	2.7	0.3	14.745	ug/L	14.745	ppb	07:47:53
1	Na 589.592 Radial†	-1039.3	186.4	52.292	ug/L	52.292	ppb	07:47:33
1	Sr 421.552†	-4.4	2.8	0.0142	ug/L	0.0142	ppb	07:47:33
1	Sc 361.383	1009965.3	1009965.3	97.160	%			07:48:49
1	Y 371.029	857431.5	857431.5	96.943	%			07:48:49
1	Ag 328.068†	413.9	-48.0	-0.1733	ug/L	-0.1733	ppb	07:48:54
1	As 188.979†	-41.3	-5.9	-1.8406	ug/L	-1.8406	ppb	07:49:14
1	B 249.677†	-416.1	37.8	0.7049	ug/L	0.7049	ppb	07:49:14
1	Ba 233.527†	16.7	17.2	0.1127	ug/L	0.1127	ppb	07:49:14
1	Be 313.107†	-4739.1	-3.6	-0.0006	ug/L	-0.0006	ppb	07:48:54
1	Cd 226.502†	-225.4	3.7	0.0246	ug/L	0.0246	ppb	07:49:14
1	Co 228.616†	-85.3	-1.5	-0.0249	ug/L	-0.0249	ppb	07:49:14
1	Cr 267.716†	127.5	43.4	0.3892	ug/L	0.3892	ppb	07:49:14
1	Cu 324.752†	8766.8	85.5	0.2322	ug/L	0.2322	ppb	07:48:54
1	Mn 257.610†	2769.0	2273.2	2.1597	ug/L	2.1597	ppb	07:48:54
1	Mo 202.031†	37.2	9.1	0.4857	ug/L	0.4857	ppb	07:49:14
1	Ni 231.604†	137.2	9.3	0.1822	ug/L	0.1822	ppb	07:49:14
1	P 214.914†	289.2	32.5	14.488	ug/L	14.488	ppb	07:49:14
1	Pb 220.353†	-68.2	5.4	0.4992	ug/L	0.4992	ppb	07:49:14
1	S 181.975 Axial†	55.9	-2.6	-2.7821	ug/L	-2.7821	ppb	07:49:14
1	Sb 206.836†	47.3	14.0	3.7301	ug/L	3.7301	ppb	07:49:14
1	Se 196.026†	-19.8	1.0	0.7253	ug/L	0.7253	ppb	07:49:14
1	Si 251.611†	871.2	339.0	8.5767	ug/L	8.5767	ppb	07:49:14
1	Sn 189.927†	8.7	13.3	1.7687	ug/L	1.7687	ppb	07:49:14
1	Ti 334.940†	-1039.8	190.3	0.2630	ug/L	0.2630	ppb	07:48:54
1	Tl 190.801†	-43.9	-0.9	-0.1969	ug/L	-0.1969	ppb	07:49:14
1	U 409.014†	-2492.9	208.2	5.3739	ug/L	5.3739	ppb	07:48:49
1	V 292.402†	-1608.7	-47.2	-0.2645	ug/L	-0.2645	ppb	07:48:54
1	Zn 213.857†	1076.3	222.2	1.6237	ug/L	1.6237	ppb	07:49:14
1	SiO2†	889.7	316.6	17.135	ug/L	17.135	ppb	07:50:20
2	Sc Radial	4563.3	4563.3	92.9	%			07:47:58
2	Y RADIAL	5190.4	5190.4	91.91	%			07:47:58
2	Al 396.153Radial†	-9.9	33.1	21.847	ug/L	21.847	ppb	07:47:58
2	Ca 317.933Radial†	45.0	30.6	54.102	ug/L	54.102	ppb	07:48:18
2	Fe 238.204 Radial†	16.5	6.8	82.010	ug/L	82.010	ppb	07:48:18
2	K 766.490 Radial†	2854.6	501.8	91.398	ug/L	91.398	ppb	07:47:58
2	Mg 279.077 IEC†	0.5	-2.0	-88.847	ug/L	-88.847	ppb	07:48:18
2	Na 589.592 Radial†	-1002.8	201.1	56.398	ug/L	56.398	ppb	07:47:58
2	Sr 421.552†	17.4	26.1	0.1365	ug/L	0.1365	ppb	07:47:58
2	Sc 361.383	999271.3	999271.3	96.132	%			07:49:20

2	Y 371.029	848372.5	848372.5	95.919	%		07:49:20
2	Ag 328.068†	434.1	-22.5	-0.0690	ug/L	-0.0690 ppb	07:49:25
2	As 188.979†	-43.2	-8.4	-2.5897	ug/L	-2.5897 ppb	07:49:45
2	B 249.677†	-442.6	5.7	0.0977	ug/L	0.0977 ppb	07:49:45
2	Ba 233.527†	17.0	17.7	0.1151	ug/L	0.1151 ppb	07:49:45
2	Be 313.107†	-4776.5	-94.8	-0.0289	ug/L	-0.0289 ppb	07:49:25
2	Cd 226.502†	-232.5	-6.3	-0.0628	ug/L	-0.0628 ppb	07:49:45
2	Co 228.616†	-87.4	-4.6	-0.0772	ug/L	-0.0772 ppb	07:49:45
2	Cr 267.716†	128.0	45.4	0.4074	ug/L	0.4074 ppb	07:49:45
2	Cu 324.752†	8823.1	240.6	0.6467	ug/L	0.6467 ppb	07:49:25
2	Mn 257.610†	2970.5	2513.3	2.3898	ug/L	2.3898 ppb	07:49:25
2	Mo 202.031†	30.5	2.5	0.1386	ug/L	0.1386 ppb	07:49:45
2	Ni 231.604†	125.5	-1.4	-0.0269	ug/L	-0.0269 ppb	07:49:45
2	P 214.914†	302.0	49.0	21.785	ug/L	21.785 ppb	07:49:45
2	Pb 220.353†	-62.0	11.1	1.0392	ug/L	1.0392 ppb	07:49:45
2	S 181.975 Axial†	63.4	5.8	6.2797	ug/L	6.2797 ppb	07:49:45
2	Sb 206.836†	40.7	7.8	2.0467	ug/L	2.0467 ppb	07:49:45
2	Se 196.026†	-29.3	-9.1	-3.7542	ug/L	-3.7542 ppb	07:49:45
2	Si 251.611†	861.9	338.9	8.5730	ug/L	8.5730 ppb	07:49:45
2	Sn 189.927†	0.9	5.3	0.7056	ug/L	0.7056 ppb	07:49:45
2	Ti 334.940†	-979.3	241.7	0.3348	ug/L	0.3348 ppb	07:49:25
2	Tl 190.801†	-47.7	-5.4	-1.2888	ug/L	-1.2888 ppb	07:49:45
2	U 409.014†	-2555.6	115.6	2.9765	ug/L	2.9765 ppb	07:49:20
2	V 292.402†	-1654.0	-112.0	-0.6487	ug/L	-0.6487 ppb	07:49:25
2	Zn 213.857†	1067.0	224.4	1.6436	ug/L	1.6436 ppb	07:49:45
2	SiO2†	897.4	334.5	18.104	ug/L	18.104 ppb	07:50:25
3	Sc Radial	4632.1	4632.1	94.3	%		07:48:23
3	Y RADIAL	5290.8	5290.8	93.69	%		07:48:23
3	Al 396.153Radial†	-28.4	13.6	8.9825	ug/L	8.9825 ppb	07:48:23
3	Ca 317.933Radial†	49.7	34.9	61.707	ug/L	61.707 ppb	07:48:43
3	Fe 238.204 Radial†	17.3	7.3	88.146	ug/L	88.146 ppb	07:48:43
3	K 766.490 Radial†	2777.0	373.9	68.090	ug/L	68.090 ppb	07:48:23
3	Mg 279.077 IEC†	4.8	2.6	118.06	ug/L	118.06 ppb	07:48:43
3	Na 589.592 Radial†	-1006.7	212.9	59.722	ug/L	59.722 ppb	07:48:23
3	Sr 421.552†	0.0	7.4	0.0384	ug/L	0.0384 ppb	07:48:23
3	Sc 361.383	985373.1	985373.1	94.794	%		07:49:50
3	Y 371.029	837561.7	837561.7	94.697	%		07:49:50
3	Ag 328.068†	398.4	-53.7	-0.1875	ug/L	-0.1875 ppb	07:49:55
3	As 188.979†	-32.3	2.5	0.7868	ug/L	0.7868 ppb	07:50:15
3	B 249.677†	-423.6	19.2	0.3528	ug/L	0.3528 ppb	07:50:15
3	Ba 233.527†	17.2	18.2	0.1197	ug/L	0.1197 ppb	07:50:15
3	Be 313.107†	-4768.6	-156.5	-0.0485	ug/L	-0.0485 ppb	07:49:55
3	Cd 226.502†	-213.1	10.9	0.0863	ug/L	0.0863 ppb	07:50:15
3	Co 228.616†	-107.3	-26.9	-0.4438	ug/L	-0.4438 ppb	07:50:15
3	Cr 267.716†	132.1	51.6	0.4645	ug/L	0.4645 ppb	07:50:15
3	Cu 324.752†	8775.8	320.2	0.8596	ug/L	0.8596 ppb	07:49:55
3	Mn 257.610†	2885.3	2467.1	2.3428	ug/L	2.3428 ppb	07:49:55
3	Mo 202.031†	37.1	9.9	0.5311	ug/L	0.5311 ppb	07:50:15
3	Ni 231.604†	129.8	5.0	0.0977	ug/L	0.0977 ppb	07:50:15
3	P 214.914†	292.1	43.0	19.044	ug/L	19.044 ppb	07:50:15
3	Pb 220.353†	-52.4	20.3	1.8976	ug/L	1.8976 ppb	07:50:15
3	S 181.975 Axial†	64.9	8.4	9.0581	ug/L	9.0581 ppb	07:50:15
3	Sb 206.836†	52.8	21.1	5.5883	ug/L	5.5883 ppb	07:50:15
3	Se 196.026†	-30.5	-10.8	-4.4651	ug/L	-4.4651 ppb	07:50:15
3	Si 251.611†	851.6	340.7	8.6158	ug/L	8.6158 ppb	07:50:15
3	Sn 189.927†	9.1	13.9	1.8517	ug/L	1.8517 ppb	07:50:15
3	Ti 334.940†	-1080.1	121.0	0.1693	ug/L	0.1693 ppb	07:49:55
3	Tl 190.801†	-53.6	-12.3	-2.9474	ug/L	-2.9474 ppb	07:50:15
3	U 409.014†	-2577.8	54.6	1.3990	ug/L	1.3990 ppb	07:49:50
3	V 292.402†	-1543.8	-20.0	-0.1155	ug/L	-0.1155 ppb	07:49:55
3	Zn 213.857†	1081.6	255.4	1.8630	ug/L	1.8630 ppb	07:50:15
3	SiO2†	933.3	385.5	20.870	ug/L	20.870 ppb	07:50:30

Mean Data: 1201978631|925490|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	998203.2	96.029	%	1.1862				1.24%
Sc Radial	4620.5	94.1	%	1.07				1.13%
Y 371.029	847788.6	95.853	%	1.1247				1.17%
Y RADIAL	5257.8	93.11	%	1.034				1.11%

Ag 328.068†	-41.4	-0.1433	ug/L	0.06473	-0.1433	ppb	0.06473 45.18%
Al 396.153Radial†	18.4	12.135	ug/L	8.5822	12.135	ppb	8.5822 70.72%
As 188.979†	-3.9	-1.2145	ug/L	1.77320	-1.2145	ppb	1.77320 146.00%
B 249.677†	20.9	0.3852	ug/L	0.30487	0.3852	ppb	0.30487 79.15%
Ba 233.527†	17.7	0.1158	ug/L	0.00357	0.1158	ppb	0.00357 3.09%
Be 313.107†	-85.0	-0.0260	ug/L	0.02406	-0.0260	ppb	0.02406 92.53%
Ca 317.933Radial†	33.0	58.472	ug/L	3.9275	58.472	ppb	3.9275 6.72%
Cd 226.502†	2.8	0.0160	ug/L	0.07492	0.0160	ppb	0.07492 468.11%
Co 228.616†	-11.0	-0.1820	ug/L	0.22827	-0.1820	ppb	0.22827 125.45%
Cr 267.716†	46.8	0.4204	ug/L	0.03930	0.4204	ppb	0.03930 9.35%
Cu 324.752†	215.5	0.5795	ug/L	0.31903	0.5795	ppb	0.31903 55.05%
Fe 238.204 Radial†	6.7	81.477	ug/L	6.9507	81.477	ppb	6.9507 8.53%
K 766.490 Radial†	400.0	72.857	ug/L	16.6773	72.857	ppb	16.6773 22.89%
Mg 279.077 IEC†	0.3	14.654	ug/L	103.4547	14.654	ppb	103.4547 706.00%
Mn 257.610†	2417.9	2.2975	ug/L	0.12157	2.2975	ppb	0.12157 5.29%
Mo 202.031†	7.1	0.3851	ug/L	0.21470	0.3851	ppb	0.21470 55.75%
Na 589.592 Radial†	200.1	56.137	ug/L	3.7218	56.137	ppb	3.7218 6.63%
Ni 231.604†	4.3	0.0843	ug/L	0.10519	0.0843	ppb	0.10519 124.75%
P 214.914†	41.5	18.439	ug/L	3.6858	18.439	ppb	3.6858 19.99%
Pb 220.353†	12.2	1.1453	ug/L	0.70522	1.1453	ppb	0.70522 61.57%
S 181.975 Axial†	3.9	4.1853	ug/L	6.19173	4.1853	ppb	6.19173 147.94%
Sb 206.836†	14.3	3.7884	ug/L	1.77149	3.7884	ppb	1.77149 46.76%
Se 196.026†	-6.3	-2.4980	ug/L	2.81400	-2.4980	ppb	2.81400 112.65%
Si 251.611†	339.6	8.5885	ug/L	0.02375	8.5885	ppb	0.02375 0.28%
Sn 189.927†	10.8	1.4420	ug/L	0.63907	1.4420	ppb	0.63907 44.32%
Sr 421.552†	12.1	0.0630	ug/L	0.06474	0.0630	ppb	0.06474 102.68%
Ti 334.940†	184.3	0.2557	ug/L	0.08298	0.2557	ppb	0.08298 32.45%
Tl 190.801†	-6.2	-1.4777	ug/L	1.38497	-1.4777	ppb	1.38497 93.73%
U 409.014†	126.1	3.2498	ug/L	2.00151	3.2498	ppb	2.00151 61.59%
V 292.402†	-59.8	-0.3429	ug/L	0.27509	-0.3429	ppb	0.27509 80.22%
Zn 213.857†	234.0	1.7101	ug/L	0.13280	1.7101	ppb	0.13280 7.77%
SiO2†	345.6	18.703	ug/L	1.9379	18.703	ppb	1.9379 10.36%

Sequence No.: 106
Sample ID: 1201978636|925490|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 151
Date Collected: 12/5/2009 07:52:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978636|925490|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4624.1	4624.1	94.2	%			07:54:57
1	Y RADIAL	5520.6	5520.6	97.76	%			07:54:57
1	Al 396.153Radial†	49686.9	52799.2	34846	ug/L	34846	ppb	07:54:37
1	Ca 317.933Radial†	9707.4	10289.1	18217	ug/L	18217	ppb	07:54:37
1	Fe 238.204 Radial†	7054.4	7479.0	90436	ug/L	90436	ppb	07:54:57
1	K 766.490 Radial†	60931.3	62124.7	11305	ug/L	11305	ppb	07:54:37
1	Mg 279.077 IEC†	319.7	337.0	15009	ug/L	15009	ppb	07:54:57
1	Na 589.592 Radial†	8935.3	10767.0	3020.1	ug/L	3020.1	ppb	07:54:37
1	Sr 421.552†	145420.1	154408.2	809.92	ug/L	809.92	ppb	07:54:37
1	Sc 361.383	1023475.2	1023475.2	98.460	%			07:55:56
1	Y 371.029	913474.8	913474.8	103.28	%			07:55:56
1	Ag 328.068†	158997.0	161009.8	669.88	ug/L	669.88	ppb	07:55:56
1	As 188.979†	3964.4	4063.0	1294.1	ug/L	1294.1	ppb	07:56:16
1	B 249.677†	36633.6	37672.6	698.91	ug/L	698.91	ppb	07:55:56
1	Ba 233.527†	366687.1	372422.4	2397.6	ug/L	2397.6	ppb	07:55:56
1	Be 313.107†	1427366.9	1454566.3	457.01	ug/L	457.01	ppb	07:55:56
1	Cd 226.502†	65868.1	67134.0	576.75	ug/L	576.75	ppb	07:55:56
1	Co 228.616†	24765.8	25239.5	412.66	ug/L	412.66	ppb	07:56:16
1	Cr 267.716†	41935.6	42503.8	384.87	ug/L	384.87	ppb	07:55:56
1	Cu 324.752†	199025.5	193200.9	520.56	ug/L	520.56	ppb	07:55:56
1	Mn 257.610†	1937666.7	1967397.0	1871.8	ug/L	1871.8	ppb	07:55:56
1	Mo 202.031†	7725.4	7817.0	421.24	ug/L	421.24	ppb	07:56:16
1	Ni 231.604†	25478.4	25745.0	504.17	ug/L	504.17	ppb	07:56:16
1	P 214.914†	8347.8	8213.3	3537.4	ug/L	3537.4	ppb	07:56:16
1	Pb 220.353†	8641.7	8852.5	832.01	ug/L	832.01	ppb	07:56:16
1	S 181.975 Axial†	975.1	930.3	995.43	ug/L	995.43	ppb	07:56:16
1	Sb 206.836†	2026.9	2024.0	540.20	ug/L	540.20	ppb	07:56:16
1	Se 196.026†	1507.3	1552.2	1017.1	ug/L	1017.1	ppb	07:56:16
1	Si 251.611†	528391.6	536098.5	13602	ug/L	13602	ppb	07:55:56
1	Sn 189.927†	3985.7	4052.3	539.08	ug/L	539.08	ppb	07:56:16
1	Ti 334.940†	1264264.3	1285299.1	1773.7	ug/L	1773.7	ppb	07:55:56
1	Tl 190.801†	3824.9	3929.0	971.77	ug/L	971.77	ppb	07:56:16
1	U 409.014†	-8185.4	-5539.5	-155.33	ug/L	-155.33	ppb	07:55:56
1	V 292.402†	130896.1	134552.0	760.40	ug/L	760.40	ppb	07:55:56
1	Zn 213.857†	135675.8	136912.4	993.08	ug/L	993.08	ppb	07:55:56
1	SiO2†	526890.5	534532.5	29024	ug/L	29024	ppb	07:57:17
2	Sc Radial	4668.0	4668.0	95.1	%			07:55:22
2	Y RADIAL	5569.9	5569.9	98.63	%			07:55:22
2	Al 396.153Radial†	49807.2	52429.6	34602	ug/L	34602	ppb	07:55:02
2	Ca 317.933Radial†	9734.7	10220.8	18096	ug/L	18096	ppb	07:55:02
2	Fe 238.204 Radial†	7051.9	7405.9	89552	ug/L	89552	ppb	07:55:22
2	K 766.490 Radial†	61003.6	61592.3	11208	ug/L	11208	ppb	07:55:02
2	Mg 279.077 IEC†	319.5	333.6	14856	ug/L	14856	ppb	07:55:22
2	Na 589.592 Radial†	8891.3	10631.5	2982.1	ug/L	2982.1	ppb	07:55:02
2	Sr 421.552†	145338.6	152870.3	801.86	ug/L	801.86	ppb	07:55:02
2	Sc 361.383	1028700.9	1028700.9	98.963	%			07:56:23
2	Y 371.029	916745.1	916745.1	103.65	%			07:56:23
2	Ag 328.068†	159850.3	161051.8	669.77	ug/L	669.77	ppb	07:56:23
2	As 188.979†	3985.2	4063.5	1294.1	ug/L	1294.1	ppb	07:56:43
2	B 249.677†	36972.4	37826.0	701.92	ug/L	701.92	ppb	07:56:23
2	Ba 233.527†	369188.8	373058.6	2401.7	ug/L	2401.7	ppb	07:56:23
2	Be 313.107†	1432277.3	1452163.8	456.26	ug/L	456.26	ppb	07:56:23
2	Cd 226.502†	66036.5	66964.3	575.35	ug/L	575.35	ppb	07:56:23
2	Co 228.616†	24930.5	25278.1	413.31	ug/L	413.31	ppb	07:56:43
2	Cr 267.716†	42111.6	42465.2	384.51	ug/L	384.51	ppb	07:56:23
2	Cu 324.752†	200023.6	193182.7	520.47	ug/L	520.47	ppb	07:56:23
2	Mn 257.610†	1949280.4	1969135.4	1873.3	ug/L	1873.3	ppb	07:56:23
2	Mo 202.031†	7782.7	7835.1	422.14	ug/L	422.14	ppb	07:56:43
2	Ni 231.604†	25578.7	25714.8	503.58	ug/L	503.58	ppb	07:56:43

2	P 214.914†	8381.9	8204.6	3534.1 ug/L	3534.1 ppb	07:56:43
2	Pb 220.353†	8696.3	8863.1	833.03 ug/L	833.03 ppb	07:56:43
2	S 181.975 Axial†	978.4	928.6	993.62 ug/L	993.62 ppb	07:56:43
2	Sb 206.836†	2032.2	2018.9	538.85 ug/L	538.85 ppb	07:56:43
2	Se 196.026†	1512.0	1549.2	1012.6 ug/L	1012.6 ppb	07:56:43
2	Si 251.611†	531667.6	536682.7	13617 ug/L	13617 ppb	07:56:23
2	Sn 189.927†	3991.0	4037.2	537.05 ug/L	537.05 ppb	07:56:43
2	Ti 334.940†	1270644.3	1285223.2	1773.5 ug/L	1773.5 ppb	07:56:23
2	Tl 190.801†	3840.7	3925.2	970.84 ug/L	970.84 ppb	07:56:43
2	U 409.014†	-8157.8	-5469.4	-153.41 ug/L	-153.41 ppb	07:56:23
2	V 292.402†	131662.2	134650.8	761.11 ug/L	761.11 ppb	07:56:23
2	Zn 213.857†	136317.9	136861.2	992.80 ug/L	992.80 ppb	07:56:23
2	SiO2†	526956.9	531881.3	28880 ug/L	28880 ppb	07:57:22
3	Sc Radial	4668.2	4668.2	95.1 %		07:55:47
3	Y RADIAL	5584.9	5584.9	98.90 %		07:55:47
3	Al 396.153Radial†	50374.0	53024.3	34995 ug/L	34995 ppb	07:55:27
3	Ca 317.933Radial†	9779.7	10267.9	18180 ug/L	18180 ppb	07:55:27
3	Fe 238.204 Radial†	7051.4	7405.2	89544 ug/L	89544 ppb	07:55:47
3	K 766.490 Radial†	61356.9	61962.2	11275 ug/L	11275 ppb	07:55:27
3	Mg 279.077 IEC†	317.5	331.5	14763 ug/L	14763 ppb	07:55:47
3	Na 589.592 Radial†	8927.1	10669.0	2992.7 ug/L	2992.7 ppb	07:55:27
3	Sr 421.552†	146813.7	154417.7	809.97 ug/L	809.97 ppb	07:55:27
3	Sc 361.383	1016505.4	1016505.4	97.789 %		07:56:51
3	Y 371.029	907004.0	907004.0	102.55 %		07:56:51
3	Ag 328.068†	158371.6	161477.5	671.45 ug/L	671.45 ppb	07:56:51
3	As 188.979†	4027.3	4154.9	1322.6 ug/L	1322.6 ppb	07:57:11
3	B 249.677†	36457.1	37747.3	700.42 ug/L	700.42 ppb	07:56:51
3	Ba 233.527†	365537.0	373799.9	2406.4 ug/L	2406.4 ppb	07:56:51
3	Be 313.107†	1420134.0	1457109.9	457.80 ug/L	457.80 ppb	07:56:51
3	Cd 226.502†	65480.7	67196.6	577.38 ug/L	577.38 ppb	07:56:51
3	Co 228.616†	24958.5	25609.0	418.77 ug/L	418.77 ppb	07:57:11
3	Cr 267.716†	41732.4	42588.0	385.61 ug/L	385.61 ppb	07:56:51
3	Cu 324.752†	197795.7	193329.4	520.86 ug/L	520.86 ppb	07:56:51
3	Mn 257.610†	1929430.4	1972468.3	1876.5 ug/L	1876.5 ppb	07:56:51
3	Mo 202.031†	7792.7	7939.6	427.69 ug/L	427.69 ppb	07:57:11
3	Ni 231.604†	25668.5	26116.8	511.45 ug/L	511.45 ppb	07:57:11
3	P 214.914†	8423.6	8348.9	3598.9 ug/L	3598.9 ppb	07:57:11
3	Pb 220.353†	8724.0	8996.7	845.68 ug/L	845.68 ppb	07:57:11
3	S 181.975 Axial†	983.0	945.1	1011.4 ug/L	1011.4 ppb	07:57:11
3	Sb 206.836†	2056.3	2068.1	552.05 ug/L	552.05 ppb	07:57:11
3	Se 196.026†	1521.2	1576.9	1024.8 ug/L	1024.8 ppb	07:57:11
3	Si 251.611†	525917.0	537247.6	13631 ug/L	13631 ppb	07:56:51
3	Sn 189.927†	4005.4	4100.3	545.41 ug/L	545.41 ppb	07:57:11
3	Ti 334.940†	1257300.1	1286981.6	1776.0 ug/L	1776.0 ppb	07:56:51
3	Tl 190.801†	3861.9	3993.5	987.38 ug/L	987.38 ppb	07:57:11
3	U 409.014†	-8160.4	-5570.9	-156.03 ug/L	-156.03 ppb	07:56:51
3	V 292.402†	130187.4	134738.8	761.68 ug/L	761.68 ppb	07:56:51
3	Zn 213.857†	135118.7	137287.5	995.88 ug/L	995.88 ppb	07:56:51
3	SiO2†	527827.9	539160.3	29275 ug/L	29275 ppb	07:57:28

Mean Data: 1201978636|925490|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1022893.9	98.404	%	0.5886				0.60%
Sc Radial	4653.5	94.8	%	0.52				0.55%
Y 371.029	912408.0	103.16	%	0.560				0.54%
Y RADIAL	5558.5	98.43	%	0.596				0.61%
Ag 328.068†	161179.7	670.37	ug/L	0.944	670.37	ppb	0.944	0.14%
Al 396.153Radial†	52751.0	34815	ug/L	198.2	34815	ppb	198.2	0.57%
As 188.979†	4093.8	1303.6	ug/L	16.46	1303.6	ppb	16.46	1.26%
B 249.677†	37748.6	700.42	ug/L	1.507	700.42	ppb	1.507	0.22%
Ba 233.527†	373093.6	2401.9	ug/L	4.41	2401.9	ppb	4.41	0.18%
Be 313.107†	1454613.3	457.02	ug/L	0.774	457.02	ppb	0.774	0.17%
Ca 317.933Radial†	10259.3	18164	ug/L	61.9	18164	ppb	61.9	0.34%
Cd 226.502†	67098.3	576.49	ug/L	1.039	576.49	ppb	1.039	0.18%
Co 228.616†	25375.5	414.92	ug/L	3.357	414.92	ppb	3.357	0.81%
Cr 267.716†	42519.0	385.00	ug/L	0.563	385.00	ppb	0.563	0.15%
Cu 324.752†	193237.7	520.63	ug/L	0.204	520.63	ppb	0.204	0.04%
Fe 238.204 Radial†	7430.1	89844	ug/L	512.6	89844	ppb	512.6	0.57%
K 766.490 Radial†	61893.1	11263	ug/L	49.8	11263	ppb	49.8	0.44%

Mg 279.077 IEC†	334.0	14876	ug/L	124.0	14876	ppb	124.0	0.83%
Mn 257.610†	1969666.9	1873.9	ug/L	2.40	1873.9	ppb	2.40	0.13%
Mo 202.031†	7863.9	423.69	ug/L	3.491	423.69	ppb	3.491	0.82%
Na 589.592 Radial†	10689.2	2998.3	ug/L	19.62	2998.3	ppb	19.62	0.65%
Ni 231.604†	25858.9	506.40	ug/L	4.385	506.40	ppb	4.385	0.87%
P 214.914†	8255.6	3556.8	ug/L	36.46	3556.8	ppb	36.46	1.03%
Pb 220.353†	8904.1	836.91	ug/L	7.614	836.91	ppb	7.614	0.91%
S 181.975 Axial†	934.7	1000.1	ug/L	9.76	1000.1	ppb	9.76	0.98%
Sb 206.836†	2037.0	543.70	ug/L	7.264	543.70	ppb	7.264	1.34%
Se 196.026†	1559.5	1018.2	ug/L	6.20	1018.2	ppb	6.20	0.61%
Si 251.611†	536676.3	13617	ug/L	14.5	13617	ppb	14.5	0.11%
Sn 189.927†	4063.3	540.51	ug/L	4.357	540.51	ppb	4.357	0.81%
Sr 421.552†	153898.7	807.25	ug/L	4.672	807.25	ppb	4.672	0.58%
Ti 334.940†	1285834.6	1774.4	ug/L	1.37	1774.4	ppb	1.37	0.08%
Tl 190.801†	3949.2	976.66	ug/L	9.292	976.66	ppb	9.292	0.95%
U 409.014†	-5526.6	-154.92	ug/L	1.359	-154.92	ppb	1.359	0.88%
V 292.402†	134647.2	761.06	ug/L	0.645	761.06	ppb	0.645	0.08%
Zn 213.857†	137020.4	993.92	ug/L	1.706	993.92	ppb	1.706	0.17%
SiO2†	535191.4	29060	ug/L	200.1	29060	ppb	200.1	0.69%

Sequence No.: 107
Sample ID: 241559001|925490|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 152
Date Collected: 12/5/2009 07:59:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241559001|925490|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4790.3	4790.3	97.6	%			08:01:54
1	Y RADIAL	6070.3	6070.3	107.5	%			08:01:54
1	Al 396.153Radial†	128387.0	131630.5	86918	ug/L	86918	ppb	08:01:34
1	Ca 317.933Radial†	9220.9	9432.9	16701	ug/L	16701	ppb	08:01:34
1	Fe 238.204 Radial†	10581.7	10834.4	130990	ug/L	130990	ppb	08:01:34
1	K 766.490 Radial†	60901.2	59849.4	10864	ug/L	10864	ppb	08:01:34
1	Mg 279.077 IEC†	380.7	387.7	17233	ug/L	17233	ppb	08:01:54
1	Na 589.592 Radial†	17116.4	18823.0	5279.8	ug/L	5279.8	ppb	08:01:34
1	Sr 421.552†	40485.0	41501.3	217.58	ug/L	217.58	ppb	08:01:34
1	Sc 361.383	1027775.1	1027775.1	98.874	%			08:02:52
1	Y 371.029	971926.4	971926.4	109.89	%			08:02:52
1	Ag 328.068†	-9503.7	-10086.0	2.8700	ug/L	2.8700	ppb	08:02:58
1	As 188.979†	-26.1	10.2	56.060	ug/L	56.060	ppb	08:03:18
1	B 249.677†	1692.8	2178.2	23.580	ug/L	23.580	ppb	08:02:58
1	Ba 233.527†	170138.4	172076.7	1111.0	ug/L	1111.0	ppb	08:02:58
1	Be 313.107†	-6434.6	-1634.0	7.1355	ug/L	7.1355	ppb	08:02:58
1	Cd 226.502†	1276.5	1526.7	0.2612	ug/L	0.2612	ppb	08:03:18
1	Co 228.616†	4837.5	4978.9	72.317	ug/L	72.317	ppb	08:03:18
1	Cr 267.716†	10078.9	10106.0	93.753	ug/L	93.753	ppb	08:03:18
1	Cu 324.752†	30417.4	21826.4	64.970	ug/L	64.970	ppb	08:02:58
1	Mn 257.610†	4682916.7	4735687.4	4497.2	ug/L	4497.2	ppb	08:02:52
1	Mo 202.031†	-42.3	-72.0	5.4684	ug/L	5.4684	ppb	08:03:18
1	Ni 231.604†	3487.0	3394.8	66.463	ug/L	66.463	ppb	08:03:18
1	P 214.914†	3208.0	2979.5	1247.0	ug/L	1247.0	ppb	08:03:18
1	Pb 220.353†	1518.3	1611.1	159.94	ug/L	159.94	ppb	08:03:18
1	S 181.975 Axial†	871.4	821.3	867.72	ug/L	867.72	ppb	08:03:18
1	Sb 206.836†	89.9	56.3	2.1832	ug/L	2.1832	ppb	08:03:18
1	Se 196.026†	-793.9	-781.6	128.73	ug/L	128.73	ppb	08:03:18
1	Si 251.611†	984165.1	994819.0	25262	ug/L	25262	ppb	08:02:52
1	Sn 189.927†	-99.5	-96.3	-9.2011	ug/L	-9.2011	ppb	08:03:18
1	Ti 334.940†	2786962.2	2819971.6	3890.4	ug/L	3890.4	ppb	08:02:52
1	Tl 190.801†	-276.7	-235.5	0.4255	ug/L	0.4255	ppb	08:03:18
1	U 409.014†	-10356.5	-7700.5	-215.75	ug/L	-215.75	ppb	08:02:58
1	V 292.402†	52793.5	55003.4	290.58	ug/L	290.58	ppb	08:02:58
1	Zn 213.857†	36038.2	35563.2	247.73	ug/L	247.73	ppb	08:02:58
1	SiO2†	972313.8	982791.3	53407	ug/L	53407	ppb	08:04:28
2	Sc Radial	4762.3	4762.3	97.0	%			08:02:19
2	Y RADIAL	6020.7	6020.7	106.6	%			08:02:19
2	Al 396.153Radial†	127322.7	131306.9	86704	ug/L	86704	ppb	08:01:59
2	Ca 317.933Radial†	9110.8	9374.9	16599	ug/L	16599	ppb	08:01:59
2	Fe 238.204 Radial†	10431.5	10743.3	129890	ug/L	129890	ppb	08:01:59
2	K 766.490 Radial†	60125.3	59416.6	10786	ug/L	10786	ppb	08:01:59
2	Mg 279.077 IEC†	382.5	391.8	17420	ug/L	17420	ppb	08:02:19
2	Na 589.592 Radial†	16762.8	18561.5	5206.5	ug/L	5206.5	ppb	08:01:59
2	Sr 421.552†	39996.3	41241.6	216.22	ug/L	216.22	ppb	08:01:59
2	Sc 361.383	1039021.5	1039021.5	99.956	%			08:03:24
2	Y 371.029	981258.9	981258.9	110.94	%			08:03:24
2	Ag 328.068†	-9483.2	-9961.5	3.0033	ug/L	3.0033	ppb	08:03:30
2	As 188.979†	-40.8	-4.2	50.897	ug/L	50.897	ppb	08:03:50
2	B 249.677†	1628.5	2095.3	22.162	ug/L	22.162	ppb	08:03:30
2	Ba 233.527†	170615.5	170691.4	1102.1	ug/L	1102.1	ppb	08:03:30
2	Be 313.107†	-6750.0	-1879.1	6.9368	ug/L	6.9368	ppb	08:03:30
2	Cd 226.502†	1270.9	1507.2	0.1998	ug/L	0.1998	ppb	08:03:50
2	Co 228.616†	4844.2	4932.7	71.701	ug/L	71.701	ppb	08:03:50
2	Cr 267.716†	10052.8	9969.5	92.502	ug/L	92.502	ppb	08:03:50
2	Cu 324.752†	30606.3	21682.4	64.529	ug/L	64.529	ppb	08:03:30
2	Mn 257.610†	4652351.9	4653843.5	4419.6	ug/L	4419.6	ppb	08:03:24
2	Mo 202.031†	-43.5	-72.8	5.3509	ug/L	5.3509	ppb	08:03:50
2	Ni 231.604†	3453.1	3322.7	65.052	ug/L	65.052	ppb	08:03:50

2	P 214.914†	3173.6	2909.9	1216.8	ug/L	1216.8 ppb	08:03:50
2	Pb 220.353†	1482.2	1558.4	155.03	ug/L	155.03 ppb	08:03:50
2	S 181.975 Axial†	868.7	808.9	854.50	ug/L	854.50 ppb	08:03:50
2	Sb 206.836†	94.4	59.8	3.2982	ug/L	3.2982 ppb	08:03:50
2	Se 196.026†	-792.6	-771.6	129.15	ug/L	129.15 ppb	08:03:50
2	Si 251.611†	979206.3	979084.0	24862	ug/L	24862 ppb	08:03:24
2	Sn 189.927†	-96.6	-92.3	-8.6977	ug/L	-8.6977 ppb	08:03:50
2	Ti 334.940†	2772364.3	2774857.2	3828.2	ug/L	3828.2 ppb	08:03:24
2	Tl 190.801†	-266.3	-222.1	2.7424	ug/L	2.7424 ppb	08:03:50
2	U 409.014†	-10443.5	-7674.1	-214.92	ug/L	-214.92 ppb	08:03:30
2	V 292.402†	52891.0	54523.0	288.07	ug/L	288.07 ppb	08:03:30
2	Zn 213.857†	36116.7	35247.2	245.52	ug/L	245.52 ppb	08:03:30
2	SiO2†	976718.6	976553.8	53068	ug/L	53068 ppb	08:04:34
3	Sc Radial	4806.1	4806.1	97.9	%		08:02:44
3	Y RADIAL	6080.5	6080.5	107.7	%		08:02:44
3	Al 396.153Radial†	129374.5	132207.2	87299	ug/L	87299 ppb	08:02:24
3	Ca 317.933Radial†	9265.9	9447.8	16728	ug/L	16728 ppb	08:02:24
3	Fe 238.204 Radial†	10589.2	10806.4	130650	ug/L	130650 ppb	08:02:24
3	K 766.490 Radial†	61267.6	60018.7	10895	ug/L	10895 ppb	08:02:24
3	Mg 279.077 IEC†	383.5	389.3	17305	ug/L	17305 ppb	08:02:44
3	Na 589.592 Radial†	17064.8	18712.6	5248.9	ug/L	5248.9 ppb	08:02:24
3	Sr 421.552†	40716.2	41601.3	218.10	ug/L	218.10 ppb	08:02:24
3	Sc 361.383	1017040.1	1017040.1	97.841	%		08:03:57
3	Y 371.029	964928.6	964928.6	109.10	%		08:03:57
3	Ag 328.068†	-9396.8	-10078.2	2.8103	ug/L	2.8103 ppb	08:04:02
3	As 188.979†	-41.0	-5.3	51.214	ug/L	51.214 ppb	08:04:22
3	B 249.677†	1642.5	2144.8	22.991	ug/L	22.991 ppb	08:04:02
3	Ba 233.527†	169610.4	173353.3	1119.2	ug/L	1119.2 ppb	08:04:02
3	Be 313.107†	-6791.7	-2067.7	7.0068	ug/L	7.0068 ppb	08:04:02
3	Cd 226.502†	1273.0	1536.8	0.3828	ug/L	0.3828 ppb	08:04:22
3	Co 228.616†	4853.2	5046.7	73.433	ug/L	73.433 ppb	08:04:22
3	Cr 267.716†	10094.4	10229.4	94.863	ug/L	94.863 ppb	08:04:22
3	Cu 324.752†	30379.8	22112.7	65.717	ug/L	65.717 ppb	08:04:02
3	Mn 257.610†	4629646.8	4731233.7	4492.9	ug/L	4492.9 ppb	08:03:57
3	Mo 202.031†	-50.7	-81.1	4.9662	ug/L	4.9662 ppb	08:04:22
3	Ni 231.604†	3463.9	3408.4	66.730	ug/L	66.730 ppb	08:04:22
3	P 214.914†	3227.3	3033.4	1271.4	ug/L	1271.4 ppb	08:04:22
3	Pb 220.353†	1490.9	1599.4	158.95	ug/L	158.95 ppb	08:04:22
3	S 181.975 Axial†	880.2	839.5	887.33	ug/L	887.33 ppb	08:04:22
3	Sb 206.836†	87.3	54.6	1.6735	ug/L	1.6735 ppb	08:04:22
3	Se 196.026†	-808.2	-804.6	117.29	ug/L	117.29 ppb	08:04:22
3	Si 251.611†	972480.8	993383.1	25225	ug/L	25225 ppb	08:03:57
3	Sn 189.927†	-101.2	-99.1	-9.5803	ug/L	-9.5803 ppb	08:04:22
3	Ti 334.940†	2760172.9	2822342.9	3893.7	ug/L	3893.7 ppb	08:03:57
3	Tl 190.801†	-270.5	-232.2	1.2379	ug/L	1.2379 ppb	08:04:22
3	U 409.014†	-10557.2	-8016.1	-223.87	ug/L	-223.87 ppb	08:04:02
3	V 292.402†	52705.6	55477.2	293.32	ug/L	293.32 ppb	08:04:02
3	Zn 213.857†	35919.5	35826.6	249.70	ug/L	249.70 ppb	08:04:02
3	SiO2†	966990.9	987730.7	53675	ug/L	53675 ppb	08:04:40

Mean Data: 241559001|925490|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1027945.5	98.890	%	1.0574				1.07%
Sc Radial	4786.3	97.5	%	0.45				0.46%
Y 371.029	972704.6	109.98	%	0.926				0.84%
Y RADIAL	6057.2	107.3	%	0.57				0.53%
Ag 328.068†	-10041.9	2.8945	ug/L	0.09878	2.8945	ppb	0.09878	3.41%
Al 396.153Radial†	131714.8	86974	ug/L	301.1	86974	ppb	301.1	0.35%
As 188.979†	0.2	52.723	ug/L	2.8937	52.723	ppb	2.8937	5.49%
B 249.677†	2139.5	22.911	ug/L	0.7125	22.911	ppb	0.7125	3.11%
Ba 233.527†	172040.4	1110.8	ug/L	8.57	1110.8	ppb	8.57	0.77%
Be 313.107†	-1860.3	7.0264	ug/L	0.10080	7.0264	ppb	0.10080	1.43%
Ca 317.933Radial†	9418.5	16676	ug/L	68.1	16676	ppb	68.1	0.41%
Cd 226.502†	1523.5	0.2813	ug/L	0.09316	0.2813	ppb	0.09316	33.12%
Co 228.616†	4986.1	72.484	ug/L	0.8780	72.484	ppb	0.8780	1.21%
Cr 267.716†	10101.6	93.706	ug/L	1.1813	93.706	ppb	1.1813	1.26%
Cu 324.752†	21873.8	65.072	ug/L	0.6006	65.072	ppb	0.6006	0.92%
Fe 238.204 Radial†	10794.7	130510	ug/L	564.2	130510	ppb	564.2	0.43%
K 766.490 Radial†	59761.6	10848	ug/L	56.1	10848	ppb	56.1	0.52%

Mg 279.077 IEC†	389.6	17319	ug/L	93.9	17319	ppb	93.9	0.54%
Mn 257.610†	4706921.6	4469.9	ug/L	43.64	4469.9	ppb	43.64	0.98%
Mo 202.031†	-75.3	5.2619	ug/L	0.26266	5.2619	ppb	0.26266	4.99%
Na 589.592 Radial†	18699.0	5245.1	ug/L	36.82	5245.1	ppb	36.82	0.70%
Ni 231.604†	3375.3	66.082	ug/L	0.9018	66.082	ppb	0.9018	1.36%
P 214.914†	2974.3	1245.1	ug/L	27.36	1245.1	ppb	27.36	2.20%
Pb 220.353†	1589.6	157.97	ug/L	2.592	157.97	ppb	2.592	1.64%
S 181.975 Axial†	823.2	869.85	ug/L	16.516	869.85	ppb	16.516	1.90%
Sb 206.836†	56.9	2.3849	ug/L	0.83094	2.3849	ppb	0.83094	34.84%
Se 196.026†	-785.9	125.06	ug/L	6.732	125.06	ppb	6.732	5.38%
Si 251.611†	989095.4	25116	ug/L	220.9	25116	ppb	220.9	0.88%
Sn 189.927†	-95.9	-9.1597	ug/L	0.44277	-9.1597	ppb	0.44277	4.83%
Sr 421.552†	41448.1	217.30	ug/L	0.973	217.30	ppb	0.973	0.45%
Ti 334.940†	2805723.9	3870.8	ug/L	36.91	3870.8	ppb	36.91	0.95%
Tl 190.801†	-230.0	1.4686	ug/L	1.17551	1.4686	ppb	1.17551	80.04%
U 409.014†	-7796.9	-218.18	ug/L	4.943	-218.18	ppb	4.943	2.27%
V 292.402†	55001.2	290.66	ug/L	2.624	290.66	ppb	2.624	0.90%
Zn 213.857†	35545.6	247.65	ug/L	2.090	247.65	ppb	2.090	0.84%
SiO2†	982358.6	53383	ug/L	304.4	53383	ppb	304.4	0.57%

Sequence No.: 108
Sample ID: 1201978632|925490|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 153
Date Collected: 12/5/2009 08:06:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978632|925490|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4711.9	4711.9	96.0	%			08:09:06
1	Y RADIAL	5946.0	5946.0	105.3	%			08:09:06
1	Al 396.153Radial†	114133.2	118967.8	78557	ug/L	78557	ppb	08:08:46
1	Ca 317.933Radial†	8607.5	8951.0	15848	ug/L	15848	ppb	08:08:46
1	Fe 238.204 Radial†	9359.2	9741.1	117770	ug/L	117770	ppb	08:08:46
1	K 766.490 Radial†	55378.7	55133.7	10017	ug/L	10017	ppb	08:08:46
1	Mg 279.077 IEC†	354.9	367.3	16332	ug/L	16332	ppb	08:09:06
1	Na 589.592 Radial†	15355.1	17279.6	4846.9	ug/L	4846.9	ppb	08:08:46
1	Sr 421.552†	38268.7	39882.5	209.09	ug/L	209.09	ppb	08:08:46
1	Sc 361.383	1021077.3	1021077.3	98.229	%			08:10:05
1	Y 371.029	964447.5	964447.5	109.04	%			08:10:05
1	Ag 328.068†	-8572.6	-9201.2	2.0605	ug/L	2.0605	ppb	08:10:10
1	As 188.979†	-48.8	-13.1	45.557	ug/L	45.557	ppb	08:10:30
1	B 249.677†	1477.1	1969.8	21.442	ug/L	21.442	ppb	08:10:10
1	Ba 233.527†	154455.0	157239.3	1015.2	ug/L	1015.2	ppb	08:10:10
1	Be 313.107†	-7776.3	-3042.5	6.4149	ug/L	6.4149	ppb	08:10:10
1	Cd 226.502†	1127.4	1383.3	0.3299	ug/L	0.3299	ppb	08:10:30
1	Co 228.616†	3719.2	3872.5	54.548	ug/L	54.548	ppb	08:10:30
1	Cr 267.716†	9430.7	9512.9	88.134	ug/L	88.134	ppb	08:10:30
1	Cu 324.752†	29361.5	20953.2	61.964	ug/L	61.964	ppb	08:10:10
1	Mn 257.610†	3481893.2	3544081.6	3367.5	ug/L	3367.5	ppb	08:10:05
1	Mo 202.031†	-39.2	-69.1	4.6871	ug/L	4.6871	ppb	08:10:30
1	Ni 231.604†	3265.2	3192.1	62.504	ug/L	62.504	ppb	08:10:30
1	P 214.914†	2921.9	2709.5	1134.4	ug/L	1134.4	ppb	08:10:30
1	Pb 220.353†	1178.4	1275.2	127.62	ug/L	127.62	ppb	08:10:30
1	S 181.975 Axial†	823.0	777.7	822.49	ug/L	822.49	ppb	08:10:30
1	Sb 206.836†	94.9	61.9	4.1115	ug/L	4.1115	ppb	08:10:30
1	Se 196.026†	-708.3	-699.7	117.05	ug/L	117.05	ppb	08:10:30
1	Si 251.611†	1087814.6	1106866.1	28107	ug/L	28107	ppb	08:10:05
1	Sn 189.927†	-109.4	-107.0	-10.889	ug/L	-10.889	ppb	08:10:30
1	Ti 334.940†	2666815.6	2716148.4	3747.2	ug/L	3747.2	ppb	08:10:05
1	Tl 190.801†	-238.0	-198.0	1.7182	ug/L	1.7182	ppb	08:10:30
1	U 409.014†	-9750.0	-7151.7	-199.88	ug/L	-199.88	ppb	08:10:10
1	V 292.402†	47635.3	50102.5	264.70	ug/L	264.70	ppb	08:10:10
1	Zn 213.857†	30604.0	30270.1	210.16	ug/L	210.16	ppb	08:10:30
1	SiO2†	1089861.1	1108908.1	60262	ug/L	60262	ppb	08:11:40
2	Sc Radial	4706.4	4706.4	95.9	%			08:09:31
2	Y RADIAL	5945.6	5945.6	105.3	%			08:09:31
2	Al 396.153Radial†	115341.2	120367.5	79481	ug/L	79481	ppb	08:09:11
2	Ca 317.933Radial†	8648.1	9003.8	15942	ug/L	15942	ppb	08:09:11
2	Fe 238.204 Radial†	9486.8	9885.7	119520	ug/L	119520	ppb	08:09:11
2	K 766.490 Radial†	55852.1	55695.3	10120	ug/L	10120	ppb	08:09:11
2	Mg 279.077 IEC†	351.0	363.6	16168	ug/L	16168	ppb	08:09:31
2	Na 589.592 Radial†	15462.9	17410.9	4883.7	ug/L	4883.7	ppb	08:09:11
2	Sr 421.552†	38550.3	40223.0	210.88	ug/L	210.88	ppb	08:09:11
2	Sc 361.383	1021818.9	1021818.9	98.301	%			08:10:37
2	Y 371.029	967284.8	967284.8	109.36	%			08:10:37
2	Ag 328.068†	-8445.4	-9065.4	3.1485	ug/L	3.1485	ppb	08:10:42
2	As 188.979†	-41.6	-5.7	48.222	ug/L	48.222	ppb	08:11:02
2	B 249.677†	1343.9	1833.2	18.627	ug/L	18.627	ppb	08:10:42
2	Ba 233.527†	153549.4	156203.8	1008.6	ug/L	1008.6	ppb	08:10:42
2	Be 313.107†	-7846.4	-3108.1	6.4138	ug/L	6.4138	ppb	08:10:42
2	Cd 226.502†	1117.9	1372.8	0.0639	ug/L	0.0639	ppb	08:11:02
2	Co 228.616†	3766.9	3918.3	55.254	ug/L	55.254	ppb	08:11:02
2	Cr 267.716†	9475.0	9551.1	88.506	ug/L	88.506	ppb	08:11:02
2	Cu 324.752†	29173.9	20740.8	61.485	ug/L	61.485	ppb	08:10:42
2	Mn 257.610†	3490359.9	3550122.1	3373.4	ug/L	3373.4	ppb	08:10:37
2	Mo 202.031†	-31.6	-61.4	5.2192	ug/L	5.2192	ppb	08:11:02
2	Ni 231.604†	3296.3	3221.3	63.077	ug/L	63.077	ppb	08:11:02

2	P 214.914†	2975.2	2761.5	1156.7	ug/L	1156.7 ppb	08:11:02
2	Pb 220.353†	1178.7	1274.6	127.63	ug/L	127.63 ppb	08:11:02
2	S 181.975 Axial†	833.6	787.9	833.29	ug/L	833.29 ppb	08:11:02
2	Sb 206.836†	80.6	47.4	0.2591	ug/L	0.2591 ppb	08:11:02
2	Se 196.026†	-730.1	-721.3	113.83	ug/L	113.83 ppb	08:11:02
2	Si 251.611†	1088890.9	1107157.2	28115	ug/L	28115 ppb	08:10:37
2	Sn 189.927†	-105.3	-102.8	-10.299	ug/L	-10.299 ppb	08:11:02
2	Ti 334.940†	2675751.1	2723268.1	3757.0	ug/L	3757.0 ppb	08:10:37
2	Tl 190.801†	-247.2	-207.2	-0.3737	ug/L	-0.3737 ppb	08:11:02
2	U 409.014†	-9781.3	-7176.4	-200.74	ug/L	-200.74 ppb	08:10:42
2	V 292.402†	47425.6	49854.0	263.01	ug/L	263.01 ppb	08:10:42
2	Zn 213.857†	30730.1	30375.8	210.77	ug/L	210.77 ppb	08:11:02
2	SiO2†	1091788.8	1110063.8	60325	ug/L	60325 ppb	08:11:46
3	Sc Radial	4703.0	4703.0	95.8	%		08:09:56
3	Y RADIAL	5948.8	5948.8	105.3	%		08:09:56
3	Al 396.153Radial†	115188.2	120295.8	79434	ug/L	79434 ppb	08:09:36
3	Ca 317.933Radial†	8648.0	9010.3	15953	ug/L	15953 ppb	08:09:36
3	Fe 238.204 Radial†	9455.2	9859.8	119210	ug/L	119210 ppb	08:09:36
3	K 766.490 Radial†	55884.2	55771.5	10134	ug/L	10134 ppb	08:09:36
3	Mg 279.077 IEC†	356.8	370.0	16452	ug/L	16452 ppb	08:09:56
3	Na 589.592 Radial†	15458.4	17417.9	4885.7	ug/L	4885.7 ppb	08:09:36
3	Sr 421.552†	38526.2	40227.3	210.90	ug/L	210.90 ppb	08:09:36
3	Sc 361.383	1026402.4	1026402.4	98.742	%		08:11:09
3	Y 371.029	970866.5	970866.5	109.77	%		08:11:09
3	Ag 328.068†	-8585.0	-9168.5	2.6424	ug/L	2.6424 ppb	08:11:14
3	As 188.979†	-43.9	-7.9	47.401	ug/L	47.401 ppb	08:11:34
3	B 249.677†	1315.5	1798.3	18.010	ug/L	18.010 ppb	08:11:14
3	Ba 233.527†	154056.4	156019.9	1007.4	ug/L	1007.4 ppb	08:11:14
3	Be 313.107†	-7958.6	-3186.1	6.3660	ug/L	6.3660 ppb	08:11:14
3	Cd 226.502†	1104.5	1354.3	-0.0672	ug/L	-0.0672 ppb	08:11:34
3	Co 228.616†	3748.0	3882.0	54.684	ug/L	54.684 ppb	08:11:34
3	Cr 267.716†	9438.9	9471.5	87.786	ug/L	87.786 ppb	08:11:34
3	Cu 324.752†	29186.1	20620.5	61.148	ug/L	61.148 ppb	08:11:14
3	Mn 257.610†	3495668.2	3539642.1	3363.4	ug/L	3363.4 ppb	08:11:09
3	Mo 202.031†	-47.2	-77.1	4.3661	ug/L	4.3661 ppb	08:11:34
3	Ni 231.604†	3288.4	3198.3	62.626	ug/L	62.626 ppb	08:11:34
3	P 214.914†	2951.8	2724.3	1140.4	ug/L	1140.4 ppb	08:11:34
3	Pb 220.353†	1195.2	1286.0	128.71	ug/L	128.71 ppb	08:11:34
3	S 181.975 Axial†	834.7	785.2	830.39	ug/L	830.39 ppb	08:11:34
3	Sb 206.836†	84.1	50.6	1.1353	ug/L	1.1353 ppb	08:11:34
3	Se 196.026†	-711.2	-698.9	122.61	ug/L	122.61 ppb	08:11:34
3	Si 251.611†	1093194.4	1106569.0	28100	ug/L	28100 ppb	08:11:09
3	Sn 189.927†	-101.4	-98.4	-9.7183	ug/L	-9.7183 ppb	08:11:34
3	Ti 334.940†	2679209.1	2714614.8	3745.1	ug/L	3745.1 ppb	08:11:09
3	Tl 190.801†	-249.7	-208.6	-0.8657	ug/L	-0.8657 ppb	08:11:34
3	U 409.014†	-9808.9	-7159.9	-200.28	ug/L	-200.28 ppb	08:11:14
3	V 292.402†	47740.6	49957.6	263.65	ug/L	263.65 ppb	08:11:14
3	Zn 213.857†	30715.1	30221.0	209.66	ug/L	209.66 ppb	08:11:34
3	SiO2†	1082276.9	1095471.0	59532	ug/L	59532 ppb	08:11:52

Mean Data: 1201978632|925490|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1023099.5	98.424	%	0.2775				0.28%
Sc Radial	4707.1	95.9	%	0.09				0.10%
Y 371.029	967532.9	109.39	%	0.364				0.33%
Y RADIAL	5946.8	105.3	%	0.03				0.03%
Ag 328.068†	-9145.1	2.6171	ug/L	0.54447	2.6171	ppb	0.54447	20.80%
Al 396.153Radial†	119877.1	79157	ug/L	520.5	79157	ppb	520.5	0.66%
As 188.979†	-8.9	47.060	ug/L	1.3648	47.060	ppb	1.3648	2.90%
B 249.677†	1867.1	19.359	ug/L	1.8295	19.359	ppb	1.8295	9.45%
Ba 233.527†	156487.7	1010.4	ug/L	4.19	1010.4	ppb	4.19	0.41%
Be 313.107†	-3112.2	6.3982	ug/L	0.02791	6.3982	ppb	0.02791	0.44%
Ca 317.933Radial†	8988.4	15914	ug/L	57.6	15914	ppb	57.6	0.36%
Cd 226.502†	1370.2	0.1089	ug/L	0.20233	0.1089	ppb	0.20233	185.82%
Co 228.616†	3891.0	54.828	ug/L	0.3747	54.828	ppb	0.3747	0.68%
Cr 267.716†	9511.8	88.142	ug/L	0.3600	88.142	ppb	0.3600	0.41%
Cu 324.752†	20771.5	61.532	ug/L	0.4097	61.532	ppb	0.4097	0.67%
Fe 238.204 Radial†	9828.8	118830	ug/L	932.3	118830	ppb	932.3	0.78%
K 766.490 Radial†	55533.5	10090	ug/L	63.6	10090	ppb	63.6	0.63%

Mg 279.077 IEC†	367.0	16317	ug/L	142.5	16317	ppb	142.5	0.87%
Mn 257.610†	3544615.3	3368.1	ug/L	5.01	3368.1	ppb	5.01	0.15%
Mo 202.031†	-69.2	4.7575	ug/L	0.43087	4.7575	ppb	0.43087	9.06%
Na 589.592 Radial†	17369.4	4872.1	ug/L	21.85	4872.1	ppb	21.85	0.45%
Ni 231.604†	3203.9	62.736	ug/L	0.3016	62.736	ppb	0.3016	0.48%
P 214.914†	2731.8	1143.8	ug/L	11.54	1143.8	ppb	11.54	1.01%
Pb 220.353†	1278.6	127.98	ug/L	0.625	127.98	ppb	0.625	0.49%
S 181.975 Axial†	783.6	828.72	ug/L	5.590	828.72	ppb	5.590	0.67%
Sb 206.836†	53.3	1.8353	ug/L	2.01935	1.8353	ppb	2.01935	110.03%
Se 196.026†	-706.7	117.83	ug/L	4.441	117.83	ppb	4.441	3.77%
Si 251.611†	1106864.1	28107	ug/L	7.5	28107	ppb	7.5	0.03%
Sn 189.927†	-102.7	-10.302	ug/L	0.5852	-10.302	ppb	0.5852	5.68%
Sr 421.552†	40110.9	210.29	ug/L	1.038	210.29	ppb	1.038	0.49%
Ti 334.940†	2718010.5	3749.8	ug/L	6.37	3749.8	ppb	6.37	0.17%
Tl 190.801†	-204.6	0.1596	ug/L	1.37203	0.1596	ppb	1.37203	859.71%
U 409.014†	-7162.7	-200.30	ug/L	0.430	-200.30	ppb	0.430	0.21%
V 292.402†	49971.4	263.79	ug/L	0.857	263.79	ppb	0.857	0.32%
Zn 213.857†	30289.0	210.20	ug/L	0.558	210.20	ppb	0.558	0.27%
SiO2†	1104814.3	60039	ug/L	440.9	60039	ppb	440.9	0.73%

Sequence No.: 109
Sample ID: 1201978634|925490|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 154
Date Collected: 12/5/2009 08:14:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978634|925490|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4686.5	4686.5	95.5	%			08:16:19
1	Y RADIAL	5923.9	5923.9	104.9	%			08:16:19
1	Al 396.153Radial†	204312.8	214088.9	141350	ug/L	141350	ppb	08:15:59
1	Ca 317.933Radial†	12524.6	13103.4	23200	ug/L	23200	ppb	08:15:59
1	Fe 238.204 Radial†	11909.2	12465.5	150730	ug/L	150730	ppb	08:15:59
1	K 766.490 Radial†	104637.1	107051.8	19441	ug/L	19441	ppb	08:15:59
1	Mg 279.077 IEC†	567.8	592.3	26383	ug/L	26383	ppb	08:16:19
1	Na 589.592 Radial†	35635.4	38612.8	10831	ug/L	10831	ppb	08:15:59
1	Sr 421.552†	140842.8	147559.1	773.94	ug/L	773.94	ppb	08:15:59
1	Sc 361.383	1006364.0	1006364.0	96.814	%			08:17:25
1	Y 371.029	950523.1	950523.1	107.47	%			08:17:25
1	Ag 328.068†	120429.9	123919.2	542.01	ug/L	542.01	ppb	08:17:25
1	As 188.979†	1591.3	1680.3	588.23	ug/L	588.23	ppb	08:17:30
1	B 249.677†	28711.0	30122.0	547.63	ug/L	547.63	ppb	08:17:25
1	Ba 233.527†	288265.2	297752.1	1920.4	ug/L	1920.4	ppb	08:17:25
1	Be 313.107†	1701430.3	1762298.3	559.31	ug/L	559.31	ppb	08:17:25
1	Cd 226.502†	58053.8	60199.9	510.30	ug/L	510.30	ppb	08:17:30
1	Co 228.616†	37888.1	39221.3	635.11	ug/L	635.11	ppb	08:17:30
1	Cr 267.716†	66595.8	68699.7	621.34	ug/L	621.34	ppb	08:17:25
1	Cu 324.752†	233596.9	232347.0	628.17	ug/L	628.17	ppb	08:17:25
1	Mn 257.610†	7238897.3	7476552.5	7094.4	ug/L	7094.4	ppb	08:17:18
1	Mo 202.031†	8970.2	9236.2	500.83	ug/L	500.83	ppb	08:17:30
1	Ni 231.604†	28756.9	29571.4	579.00	ug/L	579.00	ppb	08:17:30
1	P 214.914†	4934.1	4831.4	1994.9	ug/L	1994.9	ppb	08:17:30
1	Pb 220.353†	7102.6	7411.9	715.84	ug/L	715.84	ppb	08:17:30
1	S 181.975 Axial†	5602.8	5727.1	6142.5	ug/L	6142.5	ppb	08:17:30
1	Sb 206.836†	1818.1	1843.3	477.36	ug/L	477.36	ppb	08:17:30
1	Se 196.026†	204.3	232.4	650.54	ug/L	650.54	ppb	08:17:30
1	Si 251.611†	1260414.5	1301337.1	33033	ug/L	33033	ppb	08:17:25
1	Sn 189.927†	3669.7	3794.8	506.40	ug/L	506.40	ppb	08:17:30
1	Ti 334.940†	3510814.7	3627615.9	5004.3	ug/L	5004.3	ppb	08:17:18
1	Tl 190.801†	1668.1	1767.2	505.84	ug/L	505.84	ppb	08:17:30
1	U 409.014†	8399.7	11450.1	275.88	ug/L	275.88	ppb	08:17:25
1	V 292.402†	146389.0	152815.2	854.31	ug/L	854.31	ppb	08:17:25
1	Zn 213.857†	104696.5	107256.5	768.41	ug/L	768.41	ppb	08:17:25
1	SiO2†	1267289.3	1308396.7	71075	ug/L	71075	ppb	08:18:14
2	Sc Radial	4640.3	4640.3	94.5	%			08:16:44
2	Y RADIAL	5873.8	5873.8	104.0	%			08:16:44
2	Al 396.153Radial†	204481.6	216395.4	142870	ug/L	142870	ppb	08:16:24
2	Ca 317.933Radial†	12433.7	13137.6	23261	ug/L	23261	ppb	08:16:24
2	Fe 238.204 Radial†	11873.0	12551.3	151770	ug/L	151770	ppb	08:16:24
2	K 766.490 Radial†	104682.8	108190.1	19649	ug/L	19649	ppb	08:16:24
2	Mg 279.077 IEC†	573.3	604.1	26908	ug/L	26908	ppb	08:16:44
2	Na 589.592 Radial†	35487.1	38827.0	10891	ug/L	10891	ppb	08:16:24
2	Sr 421.552†	140324.5	148477.7	778.76	ug/L	778.76	ppb	08:16:24
2	Sc 361.383	1011404.5	1011404.5	97.299	%			08:17:44
2	Y 371.029	955415.4	955415.4	108.02	%			08:17:44
2	Ag 328.068†	120908.4	123791.0	541.82	ug/L	541.82	ppb	08:17:44
2	As 188.979†	1551.9	1631.6	572.87	ug/L	572.87	ppb	08:17:49
2	B 249.677†	28892.4	30160.6	548.24	ug/L	548.24	ppb	08:17:44
2	Ba 233.527†	289982.0	298032.6	1922.2	ug/L	1922.2	ppb	08:17:44
2	Be 313.107†	1711940.1	1764341.4	559.85	ug/L	559.85	ppb	08:17:44
2	Cd 226.502†	57406.7	59236.1	501.78	ug/L	501.78	ppb	08:17:49
2	Co 228.616†	37637.6	38768.8	627.71	ug/L	627.71	ppb	08:17:49
2	Cr 267.716†	67071.7	68846.0	622.67	ug/L	622.67	ppb	08:17:44
2	Cu 324.752†	234688.7	232266.7	628.01	ug/L	628.01	ppb	08:17:44
2	Mn 257.610†	7217833.8	7417640.7	7038.7	ug/L	7038.7	ppb	08:17:37
2	Mo 202.031†	8849.4	9065.9	491.87	ug/L	491.87	ppb	08:17:49
2	Ni 231.604†	28505.9	29165.4	571.05	ug/L	571.05	ppb	08:17:49

2	P 214.914†	4913.5	4784.8	1973.7	ug/L	1973.7 ppb	08:17:49
2	Pb 220.353†	7055.1	7326.5	708.06	ug/L	708.06 ppb	08:17:49
2	S 181.975 Axial†	5537.7	5631.3	6039.0	ug/L	6039.0 ppb	08:17:49
2	Sb 206.836†	1805.0	1820.5	471.12	ug/L	471.12 ppb	08:17:49
2	Se 196.026†	176.4	202.7	641.10	ug/L	641.10 ppb	08:17:49
2	Si 251.611†	1266344.0	1300943.0	33023	ug/L	33023 ppb	08:17:44
2	Sn 189.927†	3646.1	3751.7	500.72	ug/L	500.72 ppb	08:17:49
2	Ti 334.940†	3496784.2	3595123.4	4959.5	ug/L	4959.5 ppb	08:17:37
2	Tl 190.801†	1673.8	1764.6	504.60	ug/L	504.60 ppb	08:17:49
2	U 409.014†	8592.4	11604.9	279.75	ug/L	279.75 ppb	08:17:44
2	V 292.402†	147155.7	152849.6	854.29	ug/L	854.29 ppb	08:17:44
2	Zn 213.857†	105110.4	107143.0	767.51	ug/L	767.51 ppb	08:17:44
2	SiO2†	1276316.5	1311151.0	71225	ug/L	71225 ppb	08:18:20
3	Sc Radial	4687.7	4687.7	95.5	%		08:17:09
3	Y RADIAL	5942.8	5942.8	105.2	%		08:17:09
3	Al 396.153Radial†	206284.9	216098.5	142670	ug/L	142670 ppb	08:16:49
3	Ca 317.933Radial†	12549.7	13126.2	23240	ug/L	23240 ppb	08:16:49
3	Fe 238.204 Radial†	11980.6	12537.1	151590	ug/L	151590 ppb	08:16:49
3	K 766.490 Radial†	105100.9	107509.0	19525	ug/L	19525 ppb	08:16:49
3	Mg 279.077 IEC†	575.3	600.1	26730	ug/L	26730 ppb	08:17:09
3	Na 589.592 Radial†	35804.3	38780.0	10878	ug/L	10878 ppb	08:16:49
3	Sr 421.552†	141610.9	148325.0	777.96	ug/L	777.96 ppb	08:16:49
3	Sc 361.383	1011557.5	1011557.5	97.313	%		08:18:03
3	Y 371.029	955564.3	955564.3	108.04	%		08:18:03
3	Ag 328.068†	121218.6	124091.0	542.96	ug/L	542.96 ppb	08:18:03
3	As 188.979†	1572.1	1652.1	579.39	ug/L	579.39 ppb	08:18:08
3	B 249.677†	29168.5	30439.8	553.53	ug/L	553.53 ppb	08:18:03
3	Ba 233.527†	290100.7	298109.4	1922.7	ug/L	1922.7 ppb	08:18:03
3	Be 313.107†	1712662.8	1764817.9	560.04	ug/L	560.04 ppb	08:18:03
3	Cd 226.502†	57829.2	59661.3	505.51	ug/L	505.51 ppb	08:18:08
3	Co 228.616†	37891.2	39023.6	631.88	ug/L	631.88 ppb	08:18:08
3	Cr 267.716†	67065.0	68828.7	622.51	ug/L	622.51 ppb	08:18:03
3	Cu 324.752†	235064.0	232615.8	628.94	ug/L	628.94 ppb	08:18:03
3	Mn 257.610†	7243988.5	7443395.1	7063.1	ug/L	7063.1 ppb	08:17:56
3	Mo 202.031†	8926.9	9144.1	496.00	ug/L	496.00 ppb	08:18:08
3	Ni 231.604†	28739.9	29401.4	575.67	ug/L	575.67 ppb	08:18:08
3	P 214.914†	4899.3	4769.4	1966.8	ug/L	1966.8 ppb	08:18:08
3	Pb 220.353†	7091.6	7363.0	711.46	ug/L	711.46 ppb	08:18:08
3	S 181.975 Axial†	5624.5	5719.6	6134.2	ug/L	6134.2 ppb	08:18:08
3	Sb 206.836†	1803.0	1818.2	470.57	ug/L	470.57 ppb	08:18:08
3	Se 196.026†	225.3	252.9	662.75	ug/L	662.75 ppb	08:18:08
3	Si 251.611†	1267887.6	1302332.2	33058	ug/L	33058 ppb	08:18:03
3	Sn 189.927†	3656.0	3761.2	501.98	ug/L	501.98 ppb	08:18:08
3	Ti 334.940†	3511579.2	3609783.1	4979.7	ug/L	4979.7 ppb	08:17:56
3	Tl 190.801†	1684.1	1774.9	507.35	ug/L	507.35 ppb	08:18:08
3	U 409.014†	8577.0	11587.8	279.33	ug/L	279.33 ppb	08:18:03
3	V 292.402†	147306.3	152981.4	855.10	ug/L	855.10 ppb	08:18:03
3	Zn 213.857†	105310.6	107332.3	768.89	ug/L	768.89 ppb	08:18:03
3	SiO2†	1259265.0	1293430.2	70262	ug/L	70262 ppb	08:18:26

Mean Data: 1201978634|925490|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1009775.3	97.142	%	0.2843				0.29%
Sc Radial	4671.5	95.1	%	0.55				0.58%
Y 371.029	953834.2	107.84	%	0.324				0.30%
Y RADIAL	5913.5	104.7	%	0.63				0.60%
Ag 328.068†	123933.7	542.26	ug/L	0.611	542.26	ppb	0.611	0.11%
Al 396.153Radial†	215527.6	142300	ug/L	828.7	142300	ppb	828.7	0.58%
As 188.979†	1654.7	580.17	ug/L	7.707	580.17	ppb	7.707	1.33%
B 249.677†	30240.8	549.80	ug/L	3.244	549.80	ppb	3.244	0.59%
Ba 233.527†	297964.7	1921.8	ug/L	1.23	1921.8	ppb	1.23	0.06%
Be 313.107†	1763819.2	559.73	ug/L	0.383	559.73	ppb	0.383	0.07%
Ca 317.933Radial†	13122.4	23234	ug/L	30.9	23234	ppb	30.9	0.13%
Cd 226.502†	59699.1	505.86	ug/L	4.268	505.86	ppb	4.268	0.84%
Co 228.616†	39004.6	631.56	ug/L	3.708	631.56	ppb	3.708	0.59%
Cr 267.716†	68791.4	622.17	ug/L	0.728	622.17	ppb	0.728	0.12%
Cu 324.752†	232409.9	628.37	ug/L	0.493	628.37	ppb	0.493	0.08%
Fe 238.204 Radial†	12518.0	151360	ug/L	555.5	151360	ppb	555.5	0.37%
K 766.490 Radial†	107583.6	19539	ug/L	104.8	19539	ppb	104.8	0.54%

Mg 279.077 IEC†	598.8	26674	ug/L	266.8	26674	ppb	266.8	1.00%
Mn 257.610†	7445862.8	7065.4	ug/L	27.92	7065.4	ppb	27.92	0.40%
Mo 202.031†	9148.7	496.23	ug/L	4.486	496.23	ppb	4.486	0.90%
Na 589.592 Radial†	38739.9	10867	ug/L	31.6	10867	ppb	31.6	0.29%
Ni 231.604†	29379.4	575.24	ug/L	3.993	575.24	ppb	3.993	0.69%
P 214.914†	4795.2	1978.5	ug/L	14.67	1978.5	ppb	14.67	0.74%
Pb 220.353†	7367.1	711.79	ug/L	3.902	711.79	ppb	3.902	0.55%
S 181.975 Axial†	5692.7	6105.3	ug/L	57.51	6105.3	ppb	57.51	0.94%
Sb 206.836†	1827.3	473.02	ug/L	3.775	473.02	ppb	3.775	0.80%
Se 196.026†	229.3	651.46	ug/L	10.856	651.46	ppb	10.856	1.67%
Si 251.611†	1301537.4	33038	ug/L	18.2	33038	ppb	18.2	0.06%
Sn 189.927†	3769.2	503.03	ug/L	2.982	503.03	ppb	2.982	0.59%
Sr 421.552†	148120.6	776.89	ug/L	2.582	776.89	ppb	2.582	0.33%
Ti 334.940†	3610840.8	4981.2	ug/L	22.44	4981.2	ppb	22.44	0.45%
Tl 190.801†	1768.9	505.93	ug/L	1.381	505.93	ppb	1.381	0.27%
U 409.014†	11547.6	278.32	ug/L	2.123	278.32	ppb	2.123	0.76%
V 292.402†	152882.1	854.57	ug/L	0.463	854.57	ppb	0.463	0.05%
Zn 213.857†	107243.9	768.27	ug/L	0.702	768.27	ppb	0.702	0.09%
SiO2†	1304326.0	70854	ug/L	518.3	70854	ppb	518.3	0.73%

Sequence No.: 110
Sample ID: 1201978635|925490|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 155
Date Collected: 12/5/2009 08:20:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978635|925490|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4688.5	4688.5	95.5	%			08:22:52
1	Y RADIAL	5978.3	5978.3	105.9	%			08:22:52
1	Al 396.153Radial†	231501.7	242468.2	160080	ug/L	160080	ppb	08:22:32
1	Ca 317.933Radial†	13958.3	14599.0	25848	ug/L	25848	ppb	08:22:32
1	Fe 238.204 Radial†	12287.8	12856.6	155460	ug/L	155460	ppb	08:22:32
1	K 766.490 Radial†	112016.7	114732.3	20875	ug/L	20875	ppb	08:22:32
1	Mg 279.077 IEC†	625.6	652.6	29077	ug/L	29077	ppb	08:22:52
1	Na 589.592 Radial†	38283.9	41370.2	11604	ug/L	11604	ppb	08:22:32
1	Sr 421.552†	146301.8	153211.9	803.58	ug/L	803.58	ppb	08:22:32
1	Sc 361.383	1008043.0	1008043.0	96.975	%			08:23:53
1	Y 371.029	957353.8	957353.8	108.24	%			08:23:53
1	Ag 328.068†	121135.0	124439.1	545.53	ug/L	545.53	ppb	08:23:53
1	As 188.979†	1610.0	1696.8	596.06	ug/L	596.06	ppb	08:23:58
1	B 249.677†	29017.5	30388.6	552.15	ug/L	552.15	ppb	08:23:53
1	Ba 233.527†	278535.9	287223.3	1852.9	ug/L	1852.9	ppb	08:23:53
1	Be 313.107†	1720505.2	1779040.9	564.98	ug/L	564.98	ppb	08:23:53
1	Cd 226.502†	58724.5	60791.7	514.99	ug/L	514.99	ppb	08:23:58
1	Co 228.616†	35338.1	36526.6	590.12	ug/L	590.12	ppb	08:23:58
1	Cr 267.716†	68211.0	70250.7	635.36	ug/L	635.36	ppb	08:23:53
1	Cu 324.752†	238277.4	236771.7	640.23	ug/L	640.23	ppb	08:23:53
1	Mn 257.610†	4591597.2	4734230.1	4498.0	ug/L	4498.0	ppb	08:23:53
1	Mo 202.031†	8976.5	9227.2	500.69	ug/L	500.69	ppb	08:23:58
1	Ni 231.604†	29297.1	30078.9	588.97	ug/L	588.97	ppb	08:23:58
1	P 214.914†	4855.4	4741.7	1955.6	ug/L	1955.6	ppb	08:23:58
1	Pb 220.353†	6780.4	7067.4	687.31	ug/L	687.31	ppb	08:23:58
1	S 181.975 Axial†	5723.4	5841.8	6262.4	ug/L	6262.4	ppb	08:23:58
1	Sb 206.836†	1827.6	1850.0	477.87	ug/L	477.87	ppb	08:23:58
1	Se 196.026†	187.2	214.4	659.56	ug/L	659.56	ppb	08:23:58
1	Si 251.611†	1052348.5	1084613.1	27528	ug/L	27528	ppb	08:23:53
1	Sn 189.927†	3738.4	3859.4	515.29	ug/L	515.29	ppb	08:23:58
1	Ti 334.940†	3680073.5	3796113.6	5236.9	ug/L	5236.9	ppb	08:23:53
1	Tl 190.801†	1751.0	1849.8	513.11	ug/L	513.11	ppb	08:23:58
1	U 409.014†	9022.1	12077.5	291.48	ug/L	291.48	ppb	08:23:53
1	V 292.402†	147301.8	153504.6	857.36	ug/L	857.36	ppb	08:23:53
1	Zn 213.857†	110476.5	113036.6	810.26	ug/L	810.26	ppb	08:23:53
1	SiO2†	1061236.3	1093736.7	59407	ug/L	59407	ppb	08:24:33
2	Sc Radial	4676.7	4676.7	95.3	%			08:23:17
2	Y RADIAL	5941.6	5941.6	105.2	%			08:23:17
2	Al 396.153Radial†	234230.2	245943.4	162380	ug/L	162380	ppb	08:22:57
2	Ca 317.933Radial†	14122.8	14808.6	26219	ug/L	26219	ppb	08:22:57
2	Fe 238.204 Radial†	12420.7	13028.5	157530	ug/L	157530	ppb	08:22:57
2	K 766.490 Radial†	113261.6	116334.9	21168	ug/L	21168	ppb	08:22:57
2	Mg 279.077 IEC†	632.5	661.6	29476	ug/L	29476	ppb	08:23:17
2	Na 589.592 Radial†	38603.7	41807.0	11727	ug/L	11727	ppb	08:22:57
2	Sr 421.552†	147699.4	155065.2	813.30	ug/L	813.30	ppb	08:22:57
2	Sc 361.383	1027980.5	1027980.5	98.893	%			08:24:07
2	Y 371.029	973755.1	973755.1	110.09	%			08:24:07
2	Ag 328.068†	122564.3	123461.7	542.27	ug/L	542.27	ppb	08:24:07
2	As 188.979†	1568.8	1622.9	572.84	ug/L	572.84	ppb	08:24:12
2	B 249.677†	29282.8	30076.6	546.01	ug/L	546.01	ppb	08:24:07
2	Ba 233.527†	280416.9	283554.8	1829.4	ug/L	1829.4	ppb	08:24:07
2	Be 313.107†	1732525.9	1756786.5	557.92	ug/L	557.92	ppb	08:24:07
2	Cd 226.502†	58894.7	59789.4	506.03	ug/L	506.03	ppb	08:24:12
2	Co 228.616†	35354.2	35836.1	578.84	ug/L	578.84	ppb	08:24:12
2	Cr 267.716†	68558.3	69237.7	626.27	ug/L	626.27	ppb	08:24:07
2	Cu 324.752†	240639.1	234394.3	633.99	ug/L	633.99	ppb	08:24:07
2	Mn 257.610†	4622513.7	4673662.1	4440.9	ug/L	4440.9	ppb	08:24:07
2	Mo 202.031†	9025.0	9096.8	493.91	ug/L	493.91	ppb	08:24:12
2	Ni 231.604†	29359.6	29556.2	578.73	ug/L	578.73	ppb	08:24:12

2	P 214.914†	4852.0	4641.2	1910.5 ug/L	1910.5 ppb	08:24:12
2	Pb 220.353†	6862.3	7014.6	682.69 ug/L	682.69 ppb	08:24:12
2	S 181.975 Axial†	5739.9	5744.0	6156.6 ug/L	6156.6 ppb	08:24:12
2	Sb 206.836†	1793.3	1778.8	459.02 ug/L	459.02 ppb	08:24:12
2	Se 196.026†	184.9	208.3	664.37 ug/L	664.37 ppb	08:24:12
2	Si 251.611†	1061391.4	1072710.5	27226 ug/L	27226 ppb	08:24:07
2	Sn 189.927†	3705.7	3751.5	501.09 ug/L	501.09 ppb	08:24:12
2	Ti 334.940†	3706375.7	3749109.8	5172.1 ug/L	5172.1 ppb	08:24:07
2	Tl 190.801†	1814.1	1878.6	519.39 ug/L	519.39 ppb	08:24:12
2	U 409.014†	9255.3	12132.9	292.67 ug/L	292.67 ppb	08:24:07
2	V 292.402†	148178.6	151445.2	845.25 ug/L	845.25 ppb	08:24:07
2	Zn 213.857†	111296.7	111656.5	799.98 ug/L	799.98 ppb	08:24:07
2	SiO2†	1059471.6	1070727.9	58157 ug/L	58157 ppb	08:24:39
3	Sc Radial	4685.3	4685.3	95.4 %		08:23:42
3	Y RADIAL	5957.2	5957.2	105.5 %		08:23:42
3	Al 396.153Radial†	232214.3	243379.1	160690 ug/L	160690 ppb	08:23:22
3	Ca 317.933Radial†	13998.4	14650.9	25940 ug/L	25940 ppb	08:23:22
3	Fe 238.204 Radial†	12332.4	12912.0	156130 ug/L	156130 ppb	08:23:22
3	K 766.490 Radial†	112373.2	115185.4	20958 ug/L	20958 ppb	08:23:22
3	Mg 279.077 IEC†	628.3	655.9	29225 ug/L	29225 ppb	08:23:42
3	Na 589.592 Radial†	38278.6	41391.8	11610 ug/L	11610 ppb	08:23:22
3	Sr 421.552†	146365.1	153382.2	804.47 ug/L	804.47 ppb	08:23:22
3	Sc 361.383	1028387.8	1028387.8	98.933 %		08:24:21
3	Y 371.029	976779.1	976779.1	110.44 %		08:24:21
3	Ag 328.068†	123319.7	124176.2	544.69 ug/L	544.69 ppb	08:24:21
3	As 188.979†	1556.4	1609.8	568.89 ug/L	568.89 ppb	08:24:27
3	B 249.677†	29705.3	30491.9	554.04 ug/L	554.04 ppb	08:24:21
3	Ba 233.527†	282541.6	285590.0	1842.5 ug/L	1842.5 ppb	08:24:21
3	Be 313.107†	1748473.2	1772212.0	562.81 ug/L	562.81 ppb	08:24:21
3	Cd 226.502†	58765.2	59634.9	504.83 ug/L	504.83 ppb	08:24:27
3	Co 228.616†	35410.3	35878.7	579.46 ug/L	579.46 ppb	08:24:27
3	Cr 267.716†	69118.8	69776.7	631.10 ug/L	631.10 ppb	08:24:21
3	Cu 324.752†	243018.7	236703.2	640.08 ug/L	640.08 ppb	08:24:21
3	Mn 257.610†	4656290.2	4705951.9	4471.3 ug/L	4471.3 ppb	08:24:21
3	Mo 202.031†	8969.7	9037.2	490.66 ug/L	490.66 ppb	08:24:27
3	Ni 231.604†	29322.6	29507.0	577.77 ug/L	577.77 ppb	08:24:27
3	P 214.914†	4873.3	4660.7	1918.9 ug/L	1918.9 ppb	08:24:27
3	Pb 220.353†	6847.8	6997.2	680.77 ug/L	680.77 ppb	08:24:27
3	S 181.975 Axial†	5705.7	5707.2	6117.3 ug/L	6117.3 ppb	08:24:27
3	Sb 206.836†	1798.1	1782.9	459.89 ug/L	459.89 ppb	08:24:27
3	Se 196.026†	176.5	199.8	655.48 ug/L	655.48 ppb	08:24:27
3	Si 251.611†	1068979.1	1079955.0	27410 ug/L	27410 ppb	08:24:21
3	Sn 189.927†	3725.2	3769.7	503.45 ug/L	503.45 ppb	08:24:27
3	Ti 334.940†	3737993.8	3779584.8	5214.1 ug/L	5214.1 ppb	08:24:21
3	Tl 190.801†	1756.9	1820.1	505.67 ug/L	505.67 ppb	08:24:27
3	U 409.014†	8986.3	11857.3	285.71 ug/L	285.71 ppb	08:24:21
3	V 292.402†	149568.8	152791.1	853.05 ug/L	853.05 ppb	08:24:21
3	Zn 213.857†	112213.2	112538.3	806.60 ug/L	806.60 ppb	08:24:21
3	SiO2†	1064990.8	1075882.3	58437 ug/L	58437 ppb	08:24:45

Mean Data: 1201978635|925490|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1021470.4	98.267	%	1.1188				1.14%
Sc Radial	4683.5	95.4	%	0.12				0.13%
Y 371.029	969296.0	109.59	%	1.182				1.08%
Y RADIAL	5959.0	105.5	%	0.33				0.31%
Ag 328.068†	124025.7	544.16	ug/L	1.696	544.16	ppb	1.696	0.31%
Al 396.153Radial†	243930.2	161050	ug/L	1190.0	161050	ppb	1190.0	0.74%
As 188.979†	1643.2	579.26	ug/L	14.678	579.26	ppb	14.678	2.53%
B 249.677†	30319.0	550.73	ug/L	4.201	550.73	ppb	4.201	0.76%
Ba 233.527†	285456.1	1841.6	ug/L	11.78	1841.6	ppb	11.78	0.64%
Be 313.107†	1769346.5	561.90	ug/L	3.619	561.90	ppb	3.619	0.64%
Ca 317.933Radial†	14686.2	26002	ug/L	193.3	26002	ppb	193.3	0.74%
Cd 226.502†	60072.0	508.62	ug/L	5.552	508.62	ppb	5.552	1.09%
Co 228.616†	36080.4	582.81	ug/L	6.344	582.81	ppb	6.344	1.09%
Cr 267.716†	69755.0	630.91	ug/L	4.545	630.91	ppb	4.545	0.72%
Cu 324.752†	235956.4	638.10	ug/L	3.562	638.10	ppb	3.562	0.56%
Fe 238.204 Radial†	12932.4	156370	ug/L	1061.1	156370	ppb	1061.1	0.68%
K 766.490 Radial†	115417.5	21001	ug/L	151.0	21001	ppb	151.0	0.72%

Mg 279.077 IEC†	656.7	29260	ug/L	201.5	29260	ppb	201.5	0.69%
Mn 257.610†	4704614.7	4470.1	ug/L	28.60	4470.1	ppb	28.60	0.64%
Mo 202.031†	9120.4	495.09	ug/L	5.119	495.09	ppb	5.119	1.03%
Na 589.592 Radial†	41523.0	11647	ug/L	69.1	11647	ppb	69.1	0.59%
Ni 231.604†	29714.0	581.83	ug/L	6.207	581.83	ppb	6.207	1.07%
P 214.914†	4681.2	1928.3	ug/L	23.97	1928.3	ppb	23.97	1.24%
Pb 220.353†	7026.4	683.59	ug/L	3.360	683.59	ppb	3.360	0.49%
S 181.975 Axial†	5764.3	6178.8	ug/L	75.07	6178.8	ppb	75.07	1.22%
Sb 206.836†	1803.9	465.60	ug/L	10.637	465.60	ppb	10.637	2.28%
Se 196.026†	207.5	659.80	ug/L	4.447	659.80	ppb	4.447	0.67%
Si 251.611†	1079092.9	27388	ug/L	152.3	27388	ppb	152.3	0.56%
Sn 189.927†	3793.5	506.61	ug/L	7.609	506.61	ppb	7.609	1.50%
Sr 421.552†	153886.4	807.12	ug/L	5.373	807.12	ppb	5.373	0.67%
Ti 334.940†	3774936.1	5207.7	ug/L	32.88	5207.7	ppb	32.88	0.63%
Tl 190.801†	1849.5	512.72	ug/L	6.868	512.72	ppb	6.868	1.34%
U 409.014†	12022.5	289.95	ug/L	3.722	289.95	ppb	3.722	1.28%
V 292.402†	152580.3	851.89	ug/L	6.142	851.89	ppb	6.142	0.72%
Zn 213.857†	112410.5	805.62	ug/L	5.211	805.62	ppb	5.211	0.65%
SiO2†	1080115.7	58667	ug/L	656.1	58667	ppb	656.1	1.12%

Sequence No.: 111
Sample ID: 1201978633|925490|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 156
Date Collected: 12/5/2009 08:26:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978633|925490|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4739.6	4739.6	96.5	%			08:28:52
1	Y RADIAL	5468.2	5468.2	96.83	%			08:28:52
1	Al 396.153Radial†	25334.1	26287.5	17358	ug/L	17358	ppb	08:28:52
1	Ca 317.933Radial†	1857.1	1905.9	3374.5	ug/L	3374.5	ppb	08:29:12
1	Fe 238.204 Radial†	2101.0	2165.4	26181	ug/L	26181	ppb	08:29:12
1	K 766.490 Radial†	14048.9	11983.8	2174.8	ug/L	2174.8	ppb	08:28:52
1	Mg 279.077 IEC†	78.3	78.6	3496.1	ug/L	3496.1	ppb	08:29:12
1	Na 589.592 Radial†	2428.8	3796.0	1064.8	ug/L	1064.8	ppb	08:28:52
1	Sr 421.552†	7868.9	8158.8	42.774	ug/L	42.774	ppb	08:28:52
1	Sc 361.383	1008656.6	1008656.6	97.034	%			08:30:09
1	Y 371.029	872463.2	872463.2	98.643	%			08:30:09
1	Ag 328.068†	-1614.0	-2137.3	0.0934	ug/L	0.0934	ppb	08:30:09
1	As 188.979†	-37.2	-1.7	10.106	ug/L	10.106	ppb	08:30:29
1	B 249.677†	18.9	485.6	5.6601	ug/L	5.6601	ppb	08:30:09
1	Ba 233.527†	34209.5	35255.0	227.60	ug/L	227.60	ppb	08:30:09
1	Be 313.107†	-5369.4	-659.5	1.3405	ug/L	1.3405	ppb	08:30:09
1	Cd 226.502†	82.6	320.8	0.1887	ug/L	0.1887	ppb	08:30:29
1	Co 228.616†	928.0	1042.6	15.218	ug/L	15.218	ppb	08:30:29
1	Cr 267.716†	2124.7	2101.9	19.476	ug/L	19.476	ppb	08:30:29
1	Cu 324.752†	12778.4	4231.5	12.636	ug/L	12.636	ppb	08:30:09
1	Mn 257.610†	957464.5	986150.0	936.38	ug/L	936.38	ppb	08:30:09
1	Mo 202.031†	8.9	-20.1	0.7898	ug/L	0.7898	ppb	08:30:29
1	Ni 231.604†	806.4	699.1	13.687	ug/L	13.687	ppb	08:30:29
1	P 214.914†	875.5	637.2	267.91	ug/L	267.91	ppb	08:30:29
1	Pb 220.353†	247.2	330.3	32.740	ug/L	32.740	ppb	08:30:29
1	S 181.975 Axial†	221.8	168.5	178.14	ug/L	178.14	ppb	08:30:29
1	Sb 206.836†	53.9	21.0	2.9130	ug/L	2.9130	ppb	08:30:29
1	Se 196.026†	-171.5	-155.4	26.105	ug/L	26.105	ppb	08:30:29
1	Si 251.611†	195770.8	201196.3	5109.0	ug/L	5109.0	ppb	08:30:09
1	Sn 189.927†	-36.3	-33.1	-3.6669	ug/L	-3.6669	ppb	08:30:29
1	Ti 334.940†	552167.5	570303.4	786.79	ug/L	786.79	ppb	08:30:09
1	Tl 190.801†	-80.8	-39.0	2.3308	ug/L	2.3308	ppb	08:30:29
1	U 409.014†	-4189.1	-1543.1	-43.227	ug/L	-43.227	ppb	08:30:09
1	V 292.402†	9186.9	11076.2	58.538	ug/L	58.538	ppb	08:30:09
1	Zn 213.857†	8009.3	7368.5	51.425	ug/L	51.425	ppb	08:30:29
1	SiO2†	198411.4	203876.2	11079	ug/L	11079	ppb	08:31:26
2	Sc Radial	4703.6	4703.6	95.8	%			08:29:17
2	Y RADIAL	5423.5	5423.5	96.04	%			08:29:17
2	Al 396.153Radial†	25401.8	26558.7	17537	ug/L	17537	ppb	08:29:17
2	Ca 317.933Radial†	1866.0	1929.9	3416.9	ug/L	3416.9	ppb	08:29:37
2	Fe 238.204 Radial†	2110.1	2191.6	26497	ug/L	26497	ppb	08:29:37
2	K 766.490 Radial†	14003.3	12047.5	2186.4	ug/L	2186.4	ppb	08:29:17
2	Mg 279.077 IEC†	80.6	81.6	3629.8	ug/L	3629.8	ppb	08:29:37
2	Na 589.592 Radial†	2397.7	3782.7	1061.0	ug/L	1061.0	ppb	08:29:17
2	Sr 421.552†	7843.5	8194.6	42.961	ug/L	42.961	ppb	08:29:17
2	Sc 361.383	1010796.2	1010796.2	97.240	%			08:30:35
2	Y 371.029	871995.2	871995.2	98.590	%			08:30:35
2	Ag 328.068†	-1641.3	-2162.0	0.0958	ug/L	0.0958	ppb	08:30:35
2	As 188.979†	-30.2	5.5	12.444	ug/L	12.444	ppb	08:30:55
2	B 249.677†	-3.2	462.8	5.1871	ug/L	5.1871	ppb	08:30:35
2	Ba 233.527†	34396.0	35372.2	228.37	ug/L	228.37	ppb	08:30:35
2	Be 313.107†	-5441.7	-722.2	1.3286	ug/L	1.3286	ppb	08:30:35
2	Cd 226.502†	59.3	296.6	-0.0533	ug/L	-0.0533	ppb	08:30:55
2	Co 228.616†	924.3	1036.9	15.112	ug/L	15.112	ppb	08:30:55
2	Cr 267.716†	2114.8	2087.0	19.348	ug/L	19.348	ppb	08:30:55
2	Cu 324.752†	12895.3	4323.8	12.898	ug/L	12.898	ppb	08:30:35
2	Mn 257.610†	964789.2	991594.0	941.56	ug/L	941.56	ppb	08:30:35
2	Mo 202.031†	18.8	-10.0	1.3513	ug/L	1.3513	ppb	08:30:55
2	Ni 231.604†	822.2	713.6	13.971	ug/L	13.971	ppb	08:30:55

2	P 214.914†	870.0	629.5	264.27	ug/L	264.27 ppb	08:30:55
2	Pb 220.353†	231.2	313.3	31.160	ug/L	31.160 ppb	08:30:55
2	S 181.975 Axial†	221.1	167.3	176.75	ug/L	176.75 ppb	08:30:55
2	Sb 206.836†	41.6	8.2	-0.4412	ug/L	-0.4412 ppb	08:30:55
2	Se 196.026†	-186.5	-170.4	20.572	ug/L	20.572 ppb	08:30:55
2	Si 251.611†	197098.7	202134.9	5132.8	ug/L	5132.8 ppb	08:30:35
2	Sn 189.927†	-33.2	-29.8	-3.2196	ug/L	-3.2196 ppb	08:30:55
2	Ti 334.940†	556100.8	573143.9	790.71	ug/L	790.71 ppb	08:30:35
2	Tl 190.801†	-85.0	-43.1	1.3959	ug/L	1.3959 ppb	08:30:55
2	U 409.014†	-4171.3	-1515.7	-42.558	ug/L	-42.558 ppb	08:30:35
2	V 292.402†	9234.6	11105.2	58.664	ug/L	58.664 ppb	08:30:35
2	Zn 213.857†	7953.1	7293.2	50.835	ug/L	50.835 ppb	08:30:55
2	SiO2†	196470.2	201447.2	10947	ug/L	10947 ppb	08:31:32
3	Sc Radial	4685.3	4685.3	95.4	%		08:29:42
3	Y RADIAL	5446.9	5446.9	96.45	%		08:29:42
3	Al 396.153Radial†	25436.1	26698.4	17629	ug/L	17629 ppb	08:29:42
3	Ca 317.933Radial†	1870.1	1941.8	3438.0	ug/L	3438.0 ppb	08:30:02
3	Fe 238.204 Radial†	2106.3	2196.2	26553	ug/L	26553 ppb	08:30:02
3	K 766.490 Radial†	14060.7	12164.8	2207.9	ug/L	2207.9 ppb	08:29:42
3	Mg 279.077 IEC†	77.0	78.2	3478.2	ug/L	3478.2 ppb	08:30:02
3	Na 589.592 Radial†	2364.6	3757.8	1054.1	ug/L	1054.1 ppb	08:29:42
3	Sr 421.552†	7796.5	8177.4	42.870	ug/L	42.870 ppb	08:29:42
3	Sc 361.383	1007814.4	1007814.4	96.953	%		08:31:01
3	Y 371.029	870678.4	870678.4	98.441	%		08:31:01
3	Ag 328.068†	-1580.5	-2104.2	0.3389	ug/L	0.3389 ppb	08:31:01
3	As 188.979†	-33.8	1.7	11.245	ug/L	11.245 ppb	08:31:21
3	B 249.677†	-23.3	442.1	4.7897	ug/L	4.7897 ppb	08:31:01
3	Ba 233.527†	34259.4	35336.0	228.14	ug/L	228.14 ppb	08:31:01
3	Be 313.107†	-5326.7	-620.2	1.3555	ug/L	1.3555 ppb	08:31:01
3	Cd 226.502†	82.4	320.6	0.1502	ug/L	0.1502 ppb	08:31:21
3	Co 228.616†	918.2	1033.4	15.058	ug/L	15.058 ppb	08:31:21
3	Cr 267.716†	2133.4	2112.7	19.578	ug/L	19.578 ppb	08:31:21
3	Cu 324.752†	12866.9	4333.7	12.928	ug/L	12.928 ppb	08:31:01
3	Mn 257.610†	958440.3	987981.0	938.15	ug/L	938.15 ppb	08:31:01
3	Mo 202.031†	10.3	-18.6	0.8962	ug/L	0.8962 ppb	08:31:21
3	Ni 231.604†	811.5	705.1	13.804	ug/L	13.804 ppb	08:31:21
3	P 214.914†	866.6	628.7	263.87	ug/L	263.87 ppb	08:31:21
3	Pb 220.353†	259.1	342.8	33.945	ug/L	33.945 ppb	08:31:21
3	S 181.975 Axial†	218.8	165.5	174.89	ug/L	174.89 ppb	08:31:21
3	Sb 206.836†	58.0	25.2	4.0440	ug/L	4.0440 ppb	08:31:21
3	Se 196.026†	-187.5	-172.1	20.052	ug/L	20.052 ppb	08:31:21
3	Si 251.611†	195668.2	201259.1	5110.6	ug/L	5110.6 ppb	08:31:01
3	Sn 189.927†	-28.7	-25.3	-2.6190	ug/L	-2.6190 ppb	08:31:21
3	Ti 334.940†	552699.2	571327.3	788.20	ug/L	788.20 ppb	08:31:01
3	Tl 190.801†	-96.6	-55.4	-1.6188	ug/L	-1.6188 ppb	08:31:21
3	U 409.014†	-4011.7	-1363.8	-38.637	ug/L	-38.637 ppb	08:31:01
3	V 292.402†	9213.7	11111.8	58.693	ug/L	58.693 ppb	08:31:01
3	Zn 213.857†	7945.9	7310.1	50.959	ug/L	50.959 ppb	08:31:21
3	SiO2†	197631.7	203242.9	11045	ug/L	11045 ppb	08:31:37

Mean Data: 1201978633|925490|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1009089.1	97.076	%	0.1479				0.15%
Sc Radial	4709.5	95.9	%	0.56				0.59%
Y 371.029	871712.3	98.558	%	0.1046				0.11%
Y RADIAL	5446.2	96.44	%	0.396				0.41%
Ag 328.068†	-2134.5	0.1760	ug/L	0.14107	0.1760	ppb	0.14107	80.14%
Al 396.153Radial†	26514.9	17508	ug/L	138.0	17508	ppb	138.0	0.79%
As 188.979†	1.8	11.265	ug/L	1.1694	11.265	ppb	1.1694	10.38%
B 249.677†	463.5	5.2123	ug/L	0.43574	5.2123	ppb	0.43574	8.36%
Ba 233.527†	35321.1	228.03	ug/L	0.392	228.03	ppb	0.392	0.17%
Be 313.107†	-667.3	1.3415	ug/L	0.01347	1.3415	ppb	0.01347	1.00%
Ca 317.933Radial†	1925.9	3409.8	ug/L	32.36	3409.8	ppb	32.36	0.95%
Cd 226.502†	312.7	0.0952	ug/L	0.13007	0.0952	ppb	0.13007	136.63%
Co 228.616†	1037.6	15.129	ug/L	0.0815	15.129	ppb	0.0815	0.54%
Cr 267.716†	2100.5	19.467	ug/L	0.1153	19.467	ppb	0.1153	0.59%
Cu 324.752†	4296.3	12.821	ug/L	0.1608	12.821	ppb	0.1608	1.25%
Fe 238.204 Radial†	2184.4	26410	ug/L	200.6	26410	ppb	200.6	0.76%
K 766.490 Radial†	12065.4	2189.7	ug/L	16.75	2189.7	ppb	16.75	0.77%

Mg 279.077 IEC†	79.5	3534.7	ug/L	82.84	3534.7	ppb	82.84	2.34%
Mn 257.610†	988575.0	938.70	ug/L	2.635	938.70	ppb	2.635	0.28%
Mo 202.031†	-16.2	1.0124	ug/L	0.29823	1.0124	ppb	0.29823	29.46%
Na 589.592 Radial†	3778.8	1060.0	ug/L	5.44	1060.0	ppb	5.44	0.51%
Ni 231.604†	705.9	13.821	ug/L	0.1431	13.821	ppb	0.1431	1.04%
P 214.914†	631.8	265.35	ug/L	2.227	265.35	ppb	2.227	0.84%
Pb 220.353†	328.8	32.615	ug/L	1.3966	32.615	ppb	1.3966	4.28%
S 181.975 Axial†	167.1	176.59	ug/L	1.630	176.59	ppb	1.630	0.92%
Sb 206.836†	18.1	2.1719	ug/L	2.33263	2.1719	ppb	2.33263	107.40%
Se 196.026†	-166.0	22.243	ug/L	3.3546	22.243	ppb	3.3546	15.08%
Si 251.611†	201530.1	5117.5	ug/L	13.32	5117.5	ppb	13.32	0.26%
Sn 189.927†	-29.4	-3.1685	ug/L	0.52581	-3.1685	ppb	0.52581	16.59%
Sr 421.552†	8176.9	42.868	ug/L	0.0937	42.868	ppb	0.0937	0.22%
Ti 334.940†	571591.5	788.57	ug/L	1.985	788.57	ppb	1.985	0.25%
Tl 190.801†	-45.8	0.7026	ug/L	2.06407	0.7026	ppb	2.06407	293.77%
U 409.014†	-1474.2	-41.474	ug/L	2.4798	-41.474	ppb	2.4798	5.98%
V 292.402†	11097.7	58.631	ug/L	0.0823	58.631	ppb	0.0823	0.14%
Zn 213.857†	7323.9	51.073	ug/L	0.3111	51.073	ppb	0.3111	0.61%
SiO2†	202855.5	11024	ug/L	68.5	11024	ppb	68.5	0.62%

Sequence No.: 112
Sample ID: 241559002|925490|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/5/2009 08:33:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241559002|925490|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4664.8	4664.8	95.0	%			08:36:04
1	Y RADIAL	6021.5	6021.5	106.6	%			08:36:04
1	Al 396.153Radial†	106956.3	112615.2	74362	ug/L	74362	ppb	08:35:44
1	Ca 317.933Radial†	19619.5	20631.6	36529	ug/L	36529	ppb	08:35:44
1	Fe 238.204 Radial†	10259.9	10787.6	130420	ug/L	130420	ppb	08:35:44
1	K 766.490 Radial†	50766.9	50862.6	9252.3	ug/L	9252.3	ppb	08:35:44
1	Mg 279.077 IEC†	331.6	346.5	15391	ug/L	15391	ppb	08:36:04
1	Na 589.592 Radial†	12227.8	14149.7	3969.0	ug/L	3969.0	ppb	08:35:44
1	Sr 421.552†	46253.6	48689.2	255.11	ug/L	255.11	ppb	08:35:44
1	Sc 361.383	1009702.7	1009702.7	97.135	%			08:37:02
1	Y 371.029	977035.6	977035.6	110.47	%			08:37:02
1	Ag 328.068†	-8995.8	-9735.2	3.3427	ug/L	3.3427	ppb	08:37:02
1	As 188.979†	-74.1	-39.7	36.203	ug/L	36.203	ppb	08:37:23
1	B 249.677†	1605.3	2118.8	22.652	ug/L	22.652	ppb	08:37:02
1	Ba 233.527†	386839.3	398249.0	2563.7	ug/L	2563.7	ppb	08:37:02
1	Be 313.107†	-9337.2	-4738.6	5.1799	ug/L	5.1799	ppb	08:37:02
1	Cd 226.502†	1248.4	1520.9	0.2561	ug/L	0.2561	ppb	08:37:23
1	Co 228.616†	1954.4	2098.4	26.632	ug/L	26.632	ppb	08:37:23
1	Cr 267.716†	7057.8	7178.2	67.235	ug/L	67.235	ppb	08:37:23
1	Cu 324.752†	25374.2	17185.1	52.546	ug/L	52.546	ppb	08:37:02
1	Mn 257.610†	2159403.2	2222517.2	2117.3	ug/L	2117.3	ppb	08:37:02
1	Mo 202.031†	84.3	57.5	12.304	ug/L	12.304	ppb	08:37:23
1	Ni 231.604†	2571.9	2515.8	49.272	ug/L	49.272	ppb	08:37:23
1	P 214.914†	3882.9	3732.3	1581.9	ug/L	1581.9	ppb	08:37:23
1	Pb 220.353†	2200.3	2340.7	225.68	ug/L	225.68	ppb	08:37:23
1	S 181.975 Axial†	1295.9	1274.0	1358.0	ug/L	1358.0	ppb	08:37:23
1	Sb 206.836†	103.5	71.9	8.4093	ug/L	8.4093	ppb	08:37:23
1	Se 196.026†	-786.7	-788.6	123.73	ug/L	123.73	ppb	08:37:23
1	Si 251.611†	942536.0	969778.1	24626	ug/L	24626	ppb	08:37:02
1	Sn 189.927†	-133.4	-133.0	-12.009	ug/L	-12.009	ppb	08:37:23
1	Ti 334.940†	2384081.1	2455658.9	3389.0	ug/L	3389.0	ppb	08:37:02
1	Tl 190.801†	-224.5	-186.9	-5.4205	ug/L	-5.4205	ppb	08:37:23
1	U 409.014†	-12980.3	-10589.1	-290.31	ug/L	-290.31	ppb	08:37:02
1	V 292.402†	29808.6	32296.4	161.15	ug/L	161.15	ppb	08:37:02
1	Zn 213.857†	62273.6	63224.8	451.24	ug/L	451.24	ppb	08:37:02
1	SiO2†	943527.0	970756.9	52754	ug/L	52754	ppb	08:38:23
2	Sc Radial	4662.8	4662.8	95.0	%			08:36:29
2	Y RADIAL	6034.0	6034.0	106.9	%			08:36:29
2	Al 396.153Radial†	105081.3	110689.5	73090	ug/L	73090	ppb	08:36:09
2	Ca 317.933Radial†	19338.9	20345.1	36022	ug/L	36022	ppb	08:36:09
2	Fe 238.204 Radial†	10098.2	10622.0	128420	ug/L	128420	ppb	08:36:09
2	K 766.490 Radial†	50203.2	50292.1	9148.1	ug/L	9148.1	ppb	08:36:09
2	Mg 279.077 IEC†	328.8	343.7	15271	ug/L	15271	ppb	08:36:29
2	Na 589.592 Radial†	11904.8	13815.2	3875.2	ug/L	3875.2	ppb	08:36:09
2	Sr 421.552†	45454.7	47869.1	250.81	ug/L	250.81	ppb	08:36:09
2	Sc 361.383	1010359.1	1010359.1	97.198	%			08:37:29
2	Y 371.029	976620.4	976620.4	110.42	%			08:37:29
2	Ag 328.068†	-9083.0	-9818.9	2.3804	ug/L	2.3804	ppb	08:37:29
2	As 188.979†	-63.0	-28.2	39.490	ug/L	39.490	ppb	08:37:50
2	B 249.677†	1600.9	2113.1	22.809	ug/L	22.809	ppb	08:37:29
2	Ba 233.527†	387922.8	399105.0	2569.1	ug/L	2569.1	ppb	08:37:29
2	Be 313.107†	-9005.5	-4391.2	5.2971	ug/L	5.2971	ppb	08:37:29
2	Cd 226.502†	1257.6	1529.5	0.5308	ug/L	0.5308	ppb	08:37:50
2	Co 228.616†	1993.8	2137.6	27.299	ug/L	27.299	ppb	08:37:50
2	Cr 267.716†	7021.7	7136.3	66.823	ug/L	66.823	ppb	08:37:50
2	Cu 324.752†	25395.5	17190.0	52.457	ug/L	52.457	ppb	08:37:29
2	Mn 257.610†	2164987.0	2226817.6	2121.2	ug/L	2121.2	ppb	08:37:29
2	Mo 202.031†	84.6	57.8	12.177	ug/L	12.177	ppb	08:37:50
2	Ni 231.604†	2530.3	2471.3	48.399	ug/L	48.399	ppb	08:37:50

2	P 214.914†	3846.7	3692.5	1565.2 ug/L	1565.2 ppb	08:37:50
2	Pb 220.353†	2219.1	2358.7	227.25 ug/L	227.25 ppb	08:37:50
2	S 181.975 Axial†	1290.4	1267.5	1351.2 ug/L	1351.2 ppb	08:37:50
2	Sb 206.836†	109.9	78.4	10.104 ug/L	10.104 ppb	08:37:50
2	Se 196.026†	-796.4	-798.0	112.28 ug/L	112.28 ppb	08:37:50
2	Si 251.611†	945471.9	972168.2	24687 ug/L	24687 ppb	08:37:29
2	Sn 189.927†	-141.9	-141.7	-13.239 ug/L	-13.239 ppb	08:37:50
2	Ti 334.940†	2388804.1	2458923.5	3393.5 ug/L	3393.5 ppb	08:37:29
2	Tl 190.801†	-227.4	-189.7	-6.0728 ug/L	-6.0728 ppb	08:37:50
2	U 409.014†	-12865.9	-10462.8	-286.79 ug/L	-286.79 ppb	08:37:29
2	V 292.402†	29909.7	32380.4	161.94 ug/L	161.94 ppb	08:37:29
2	Zn 213.857†	62461.1	63376.1	452.55 ug/L	452.55 ppb	08:37:29
2	SiO2†	953699.3	980591.3	53288 ug/L	53288 ppb	08:38:29
3	Sc Radial	4671.3	4671.3	95.1 %		08:36:54
3	Y RADIAL	6032.6	6032.6	106.8 %		08:36:54
3	Al 396.153Radial†	105754.3	111195.8	73424 ug/L	73424 ppb	08:36:34
3	Ca 317.933Radial†	19407.5	20380.2	36084 ug/L	36084 ppb	08:36:34
3	Fe 238.204 Radial†	10092.0	10596.1	128110 ug/L	128110 ppb	08:36:34
3	K 766.490 Radial†	50187.3	50179.4	9127.7 ug/L	9127.7 ppb	08:36:34
3	Mg 279.077 IEC†	323.1	337.1	14972 ug/L	14972 ppb	08:36:54
3	Na 589.592 Radial†	11889.2	13776.0	3864.2 ug/L	3864.2 ppb	08:36:34
3	Sr 421.552†	45568.2	47901.4	250.98 ug/L	250.98 ppb	08:36:34
3	Sc 361.383	1015594.8	1015594.8	97.702 %		08:37:57
3	Y 371.029	981557.3	981557.3	110.98 %		08:37:57
3	Ag 328.068†	-9186.7	-9876.9	2.0547 ug/L	2.0547 ppb	08:37:57
3	As 188.979†	-53.5	-18.1	42.543 ug/L	42.543 ppb	08:38:17
3	B 249.677†	1605.3	2109.2	22.780 ug/L	22.780 ppb	08:37:57
3	Ba 233.527†	388730.4	397874.0	2561.2 ug/L	2561.2 ppb	08:37:57
3	Be 313.107†	-9073.7	-4413.2	5.2795 ug/L	5.2795 ppb	08:37:57
3	Cd 226.502†	1214.9	1479.1	0.1219 ug/L	0.1219 ppb	08:38:17
3	Co 228.616†	1940.4	2072.4	26.237 ug/L	26.237 ppb	08:38:17
3	Cr 267.716†	7092.6	7171.6	67.136 ug/L	67.136 ppb	08:38:17
3	Cu 324.752†	25444.4	17105.4	52.215 ug/L	52.215 ppb	08:37:57
3	Mn 257.610†	2170440.8	2220916.6	2115.6 ug/L	2115.6 ppb	08:37:57
3	Mo 202.031†	69.3	41.7	11.301 ug/L	11.301 ppb	08:38:17
3	Ni 231.604†	2527.3	2454.8	48.076 ug/L	48.076 ppb	08:38:17
3	P 214.914†	3871.0	3697.0	1567.6 ug/L	1567.6 ppb	08:38:17
3	Pb 220.353†	2208.9	2336.4	225.25 ug/L	225.25 ppb	08:38:17
3	S 181.975 Axial†	1283.6	1253.7	1336.3 ug/L	1336.3 ppb	08:38:17
3	Sb 206.836†	100.8	68.5	7.4506 ug/L	7.4506 ppb	08:38:17
3	Se 196.026†	-803.5	-801.0	109.80 ug/L	109.80 ppb	08:38:17
3	Si 251.611†	947245.9	968969.1	24606 ug/L	24606 ppb	08:37:57
3	Sn 189.927†	-151.1	-150.4	-14.387 ug/L	-14.387 ppb	08:38:17
3	Ti 334.940†	2397333.2	2454983.1	3388.1 ug/L	3388.1 ppb	08:37:57
3	Tl 190.801†	-206.5	-167.1	-0.6815 ug/L	-0.6815 ppb	08:38:17
3	U 409.014†	-13113.5	-10648.0	-291.54 ug/L	-291.54 ppb	08:37:57
3	V 292.402†	30080.3	32396.3	162.05 ug/L	162.05 ppb	08:37:57
3	Zn 213.857†	62391.9	62973.9	449.64 ug/L	449.64 ppb	08:37:57
3	SiO2†	931861.8	953181.8	51799 ug/L	51799 ppb	08:38:35

Mean Data: 241559002|925490|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1011885.5	97.345	%	0.3106				0.32%
Sc Radial	4666.3	95.0	%	0.09				0.10%
Y 371.029	978404.4	110.62	%	0.310				0.28%
Y RADIAL	6029.4	106.8	%	0.12				0.11%
Ag 328.068†	-9810.3	2.5926	ug/L	0.66973	2.5926	ppb	0.66973	25.83%
Al 396.153Radial†	111500.2	73625	ug/L	659.2	73625	ppb	659.2	0.90%
As 188.979†	-28.7	39.412	ug/L	3.1708	39.412	ppb	3.1708	8.05%
B 249.677†	2113.7	22.747	ug/L	0.0835	22.747	ppb	0.0835	0.37%
Ba 233.527†	398409.3	2564.7	ug/L	4.05	2564.7	ppb	4.05	0.16%
Be 313.107†	-4514.3	5.2522	ug/L	0.06320	5.2522	ppb	0.06320	1.20%
Ca 317.933Radial†	20452.3	36211	ug/L	276.7	36211	ppb	276.7	0.76%
Cd 226.502†	1509.8	0.3029	ug/L	0.20843	0.3029	ppb	0.20843	68.80%
Co 228.616†	2102.8	26.723	ug/L	0.5372	26.723	ppb	0.5372	2.01%
Cr 267.716†	7162.0	67.064	ug/L	0.2150	67.064	ppb	0.2150	0.32%
Cu 324.752†	17160.2	52.406	ug/L	0.1712	52.406	ppb	0.1712	0.33%
Fe 238.204 Radial†	10668.5	128980	ug/L	1255.8	128980	ppb	1255.8	0.97%
K 766.490 Radial†	50444.7	9176.0	ug/L	66.83	9176.0	ppb	66.83	0.73%

Mg 279.077 IEC†	342.4	15211	ug/L	215.8	15211	ppb	215.8	1.42%
Mn 257.610†	2223417.1	2118.0	ug/L	2.87	2118.0	ppb	2.87	0.14%
Mo 202.031†	52.3	11.927	ug/L	0.5460	11.927	ppb	0.5460	4.58%
Na 589.592 Radial†	13913.6	3902.8	ug/L	57.61	3902.8	ppb	57.61	1.48%
Ni 231.604†	2480.6	48.582	ug/L	0.6184	48.582	ppb	0.6184	1.27%
P 214.914†	3707.2	1571.6	ug/L	9.01	1571.6	ppb	9.01	0.57%
Pb 220.353†	2345.3	226.06	ug/L	1.049	226.06	ppb	1.049	0.46%
S 181.975 Axial†	1265.1	1348.5	ug/L	11.11	1348.5	ppb	11.11	0.82%
Sb 206.836†	72.9	8.6545	ug/L	1.34335	8.6545	ppb	1.34335	15.52%
Se 196.026†	-795.9	115.27	ug/L	7.427	115.27	ppb	7.427	6.44%
Si 251.611†	970305.1	24639	ug/L	42.2	24639	ppb	42.2	0.17%
Sn 189.927†	-141.7	-13.211	ug/L	1.1890	-13.211	ppb	1.1890	9.00%
Sr 421.552†	48153.2	252.30	ug/L	2.434	252.30	ppb	2.434	0.96%
Ti 334.940†	2456521.8	3390.2	ug/L	2.90	3390.2	ppb	2.90	0.09%
Tl 190.801†	-181.2	-4.0583	ug/L	2.94254	-4.0583	ppb	2.94254	72.51%
U 409.014†	-10566.7	-289.54	ug/L	2.464	-289.54	ppb	2.464	0.85%
V 292.402†	32357.7	161.71	ug/L	0.490	161.71	ppb	0.490	0.30%
Zn 213.857†	63191.6	451.14	ug/L	1.459	451.14	ppb	1.459	0.32%
SiO2†	968176.7	52614	ug/L	754.7	52614	ppb	754.7	1.43%

Sequence No.: 113
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2009 08:40:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4475.6	4475.6	91.2	%			08:42:39
1	Y RADIAL	5066.7	5066.7	89.72	%			08:42:39
1	Al 396.153Radial†	6905.3	7618.8	5008.3	ug/L	5008.3	ppb	08:42:39
1	Ca 317.933Radial†	2849.1	3107.6	5502.0	ug/L	5502.0	ppb	08:42:59
1	Fe 238.204 Radial†	428.8	459.4	5571.2	ug/L	5571.2	ppb	08:42:59
1	K 766.490 Radial†	27809.3	27936.9	5082.4	ug/L	5082.4	ppb	08:42:39
1	Mg 279.077 IEC†	117.9	126.9	5682.2	ug/L	5682.2	ppb	08:42:59
1	Na 589.592 Radial†	35025.7	39702.6	11137	ug/L	11137	ppb	08:42:39
1	Sr 421.552†	88636.5	97240.4	510.12	ug/L	510.12	ppb	08:42:39
1	Sc 361.383	1007621.2	1007621.2	96.935	%			08:43:58
1	Y 371.029	845381.0	845381.0	95.581	%			08:43:58
1	Ag 328.068†	127529.3	131087.9	522.90	ug/L	522.90	ppb	08:43:58
1	As 188.979†	1590.6	1677.5	527.29	ug/L	527.29	ppb	08:44:18
1	B 249.677†	26013.9	27302.6	513.91	ug/L	513.91	ppb	08:43:58
1	Ba 233.527†	78721.9	81211.2	523.09	ug/L	523.09	ppb	08:43:58
1	Be 313.107†	1610056.1	1665842.0	520.42	ug/L	520.42	ppb	08:43:58
1	Cd 226.502†	57872.8	59938.4	522.49	ug/L	522.49	ppb	08:43:58
1	Co 228.616†	30703.4	31760.6	523.33	ug/L	523.33	ppb	08:44:18
1	Cr 267.716†	56080.8	57766.4	519.82	ug/L	519.82	ppb	08:43:58
1	Cu 324.752†	199298.0	196662.5	525.47	ug/L	525.47	ppb	08:43:58
1	Mn 257.610†	537392.2	553808.6	524.88	ug/L	524.88	ppb	08:43:58
1	Mo 202.031†	9609.6	9884.2	524.92	ug/L	524.92	ppb	08:44:18
1	Ni 231.604†	25940.8	26629.2	521.43	ug/L	521.43	ppb	08:44:18
1	P 214.914†	6003.9	5928.6	2572.1	ug/L	2572.1	ppb	08:44:18
1	Pb 220.353†	5375.0	5620.5	529.15	ug/L	529.15	ppb	08:44:18
1	S 181.975 Axial†	1001.0	972.6	1046.9	ug/L	1046.9	ppb	08:44:18
1	Sb 206.836†	1968.4	1996.0	533.86	ug/L	533.86	ppb	08:44:18
1	Se 196.026†	1117.8	1174.5	542.10	ug/L	542.10	ppb	08:44:18
1	Si 251.611†	100700.9	103327.6	2611.7	ug/L	2611.7	ppb	08:43:58
1	Sn 189.927†	3797.0	3921.4	519.29	ug/L	519.29	ppb	08:44:18
1	Ti 334.940†	365717.9	378542.8	521.99	ug/L	521.99	ppb	08:43:58
1	Tl 190.801†	2063.1	2172.6	528.74	ug/L	528.74	ppb	08:44:18
1	U 409.014†	16442.1	19736.0	508.56	ug/L	508.56	ppb	08:43:58
1	V 292.402†	86227.2	90562.3	525.43	ug/L	525.43	ppb	08:43:58
1	Zn 213.857†	69675.6	70993.3	516.99	ug/L	516.99	ppb	08:43:58
1	SiO2†	100119.0	102685.9	5553.9	ug/L	5553.9	ppb	08:45:18
2	Sc Radial	4897.0	4897.0	99.7	%			08:43:04
2	Y RADIAL	5490.4	5490.4	97.22	%			08:43:04
2	Al 396.153Radial†	7203.5	7266.0	4775.5	ug/L	4775.5	ppb	08:43:04
2	Ca 317.933Radial†	2865.8	2855.4	5055.5	ug/L	5055.5	ppb	08:43:24
2	Fe 238.204 Radial†	436.1	426.3	5169.9	ug/L	5169.9	ppb	08:43:24
2	K 766.490 Radial†	29016.1	26521.9	4824.6	ug/L	4824.6	ppb	08:43:04
2	Mg 279.077 IEC†	119.4	117.2	5248.8	ug/L	5248.8	ppb	08:43:24
2	Na 589.592 Radial†	36425.6	37800.1	10603	ug/L	10603	ppb	08:43:04
2	Sr 421.552†	92456.4	92703.8	486.32	ug/L	486.32	ppb	08:43:04
2	Sc 361.383	1001168.4	1001168.4	96.314	%			08:44:25
2	Y 371.029	839251.4	839251.4	94.888	%			08:44:25
2	Ag 328.068†	127338.2	131737.4	525.37	ug/L	525.37	ppb	08:44:25
2	As 188.979†	1566.2	1662.7	522.66	ug/L	522.66	ppb	08:44:45
2	B 249.677†	26055.9	27519.2	518.07	ug/L	518.07	ppb	08:44:25
2	Ba 233.527†	78964.8	81986.9	528.07	ug/L	528.07	ppb	08:44:25
2	Be 313.107†	1611051.5	1677580.8	524.09	ug/L	524.09	ppb	08:44:25
2	Cd 226.502†	58058.7	60516.3	527.57	ug/L	527.57	ppb	08:44:25
2	Co 228.616†	30337.6	31584.9	520.43	ug/L	520.43	ppb	08:44:45
2	Cr 267.716†	56320.0	58387.6	525.40	ug/L	525.40	ppb	08:44:25
2	Cu 324.752†	198854.5	197527.2	527.76	ug/L	527.76	ppb	08:44:25
2	Mn 257.610†	539018.7	559070.4	529.83	ug/L	529.83	ppb	08:44:25
2	Mo 202.031†	9527.2	9862.5	523.74	ug/L	523.74	ppb	08:44:45
2	Ni 231.604†	25652.2	26502.0	518.94	ug/L	518.94	ppb	08:44:45

2	P 214.914†	5949.2	5911.7	2564.4 ug/L	2564.4 ppb	08:44:45
2	Pb 220.353†	5327.1	5606.5	527.81 ug/L	527.81 ppb	08:44:45
2	S 181.975 Axial†	976.5	953.8	1026.6 ug/L	1026.6 ppb	08:44:45
2	Sb 206.836†	1944.8	1984.6	530.67 ug/L	530.67 ppb	08:44:45
2	Se 196.026†	1113.9	1177.9	542.15 ug/L	542.15 ppb	08:44:45
2	Si 251.611†	100072.9	103345.1	2612.3 ug/L	2612.3 ppb	08:44:25
2	Sn 189.927†	3765.9	3914.4	518.31 ug/L	518.31 ppb	08:44:45
2	Ti 334.940†	366363.2	381644.4	526.25 ug/L	526.25 ppb	08:44:25
2	Tl 190.801†	2032.7	2154.8	524.49 ug/L	524.49 ppb	08:44:45
2	U 409.014†	16359.0	19759.0	509.19 ug/L	509.19 ppb	08:44:25
2	V 292.402†	86487.5	91405.9	530.29 ug/L	530.29 ppb	08:44:25
2	Zn 213.857†	69697.2	71479.0	520.63 ug/L	520.63 ppb	08:44:25
2	SiO2†	100135.7	103368.9	5591.2 ug/L	5591.2 ppb	08:45:23
3	Sc Radial	4626.0	4626.0	94.2 %		08:43:29
3	Y RADIAL	5239.5	5239.5	92.78 %		08:43:29
3	Al 396.153Radial†	7182.1	7666.4	5040.0 ug/L	5040.0 ppb	08:43:29
3	Ca 317.933Radial†	2875.5	3034.0	5371.8 ug/L	5371.8 ppb	08:43:49
3	Fe 238.204 Radial†	434.3	450.0	5456.5 ug/L	5456.5 ppb	08:43:49
3	K 766.490 Radial†	28893.8	28096.2	5111.4 ug/L	5111.4 ppb	08:43:29
3	Mg 279.077 IEC†	114.6	119.2	5338.6 ug/L	5338.6 ppb	08:43:49
3	Na 589.592 Radial†	36152.8	39649.8	11122 ug/L	11122 ppb	08:43:29
3	Sr 421.552†	91671.0	97300.1	510.43 ug/L	510.43 ppb	08:43:29
3	Sc 361.383	1014737.7	1014737.7	97.619 %		08:44:53
3	Y 371.029	850396.6	850396.6	96.148 %		08:44:53
3	Ag 328.068†	127621.8	130259.9	519.58 ug/L	519.58 ppb	08:44:53
3	As 188.979†	1583.3	1658.5	521.33 ug/L	521.33 ppb	08:45:13
3	B 249.677†	26054.8	27156.3	511.18 ug/L	511.18 ppb	08:44:53
3	Ba 233.527†	78867.6	80790.9	520.38 ug/L	520.38 ppb	08:44:53
3	Be 313.107†	1609654.0	1653781.5	516.66 ug/L	516.66 ppb	08:44:53
3	Cd 226.502†	57961.7	59610.8	519.64 ug/L	519.64 ppb	08:44:53
3	Co 228.616†	30499.5	31329.5	516.22 ug/L	516.22 ppb	08:45:13
3	Cr 267.716†	56132.6	57413.7	516.64 ug/L	516.64 ppb	08:44:53
3	Cu 324.752†	198989.3	194904.4	520.77 ug/L	520.77 ppb	08:44:53
3	Mn 257.610†	537831.8	550370.8	521.62 ug/L	521.62 ppb	08:44:53
3	Mo 202.031†	9567.8	9771.9	518.95 ug/L	518.95 ppb	08:45:13
3	Ni 231.604†	25823.6	26321.4	515.40 ug/L	515.40 ppb	08:45:13
3	P 214.914†	5978.1	5858.8	2541.6 ug/L	2541.6 ppb	08:45:13
3	Pb 220.353†	5345.1	5551.0	522.64 ug/L	522.64 ppb	08:45:13
3	S 181.975 Axial†	991.3	955.4	1028.3 ug/L	1028.3 ppb	08:45:13
3	Sb 206.836†	1966.2	1979.5	529.37 ug/L	529.37 ppb	08:45:13
3	Se 196.026†	1130.8	1179.8	544.00 ug/L	544.00 ppb	08:45:13
3	Si 251.611†	99894.5	101772.9	2572.3 ug/L	2572.3 ppb	08:44:53
3	Sn 189.927†	3787.3	3884.0	514.33 ug/L	514.33 ppb	08:45:13
3	Ti 334.940†	365613.8	375790.2	518.19 ug/L	518.19 ppb	08:44:53
3	Tl 190.801†	2041.8	2135.9	519.87 ug/L	519.87 ppb	08:45:13
3	U 409.014†	16379.2	19552.6	503.84 ug/L	503.84 ppb	08:44:53
3	V 292.402†	86297.9	90011.0	522.19 ug/L	522.19 ppb	08:44:53
3	Zn 213.857†	69666.3	70479.7	513.28 ug/L	513.28 ppb	08:44:53
3	SiO2†	100337.6	102185.5	5526.9 ug/L	5526.9 ppb	08:45:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1007842.4	96.956	%	0.6530				0.67%
Sc Radial	4666.2	95.0	%	4.35				4.58%
Y 371.029	845009.7	95.539	%	0.6311				0.66%
Y RADIAL	5265.5	93.24	%	3.773				4.05%
Ag 328.068†	131028.4	522.62	ug/L	2.909	522.62	ppb	2.909	0.56%
QC value within limits for Ag 328.068 Recovery = 104.52%								
Al 396.153Radial†	7517.0	4941.3	ug/L	144.47	4941.3	ppb	144.47	2.92%
QC value within limits for Al 396.153Radial Recovery = 98.83%								
As 188.979†	1666.2	523.76	ug/L	3.127	523.76	ppb	3.127	0.60%
QC value within limits for As 188.979 Recovery = 104.75%								
B 249.677†	27326.0	514.39	ug/L	3.467	514.39	ppb	3.467	0.67%
QC value within limits for B 249.677 Recovery = 102.88%								
Ba 233.527†	81329.7	523.85	ug/L	3.901	523.85	ppb	3.901	0.74%
QC value within limits for Ba 233.527 Recovery = 104.77%								
Be 313.107†	1665734.8	520.39	ug/L	3.718	520.39	ppb	3.718	0.71%
QC value within limits for Be 313.107 Recovery = 104.08%								
Ca 317.933Radial†	2999.0	5309.8	ug/L	229.63	5309.8	ppb	229.63	4.32%

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   QC value within limits for Ca 317.933Radial  Recovery = 106.20%
Cd 226.502†            60021.9      523.23 ug/L        4.015      523.23 ppb        4.015   0.77%
   QC value within limits for Cd 226.502  Recovery = 104.65%
Co 228.616†            31558.4      519.99 ug/L        3.573      519.99 ppb        3.573   0.69%
   QC value within limits for Co 228.616  Recovery = 104.00%
Cr 267.716†            57855.9      520.62 ug/L        4.433      520.62 ppb        4.433   0.85%
   QC value within limits for Cr 267.716  Recovery = 104.12%
Cu 324.752†           196364.7      524.67 ug/L        3.564      524.67 ppb        3.564   0.68%
   QC value within limits for Cu 324.752  Recovery = 104.93%
Fe 238.204 Radial†       445.2      5399.2 ug/L       206.70      5399.2 ppb       206.70   3.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.98%
K 766.490 Radial†      27518.3      5006.1 ug/L       157.86      5006.1 ppb       157.86   3.15%
   QC value within limits for K 766.490 Radial  Recovery = 100.12%
Mg 279.077 IEC†          121.1      5423.2 ug/L       228.73      5423.2 ppb       228.73   4.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.46%
Mn 257.610†           554416.6      525.44 ug/L        4.134      525.44 ppb        4.134   0.79%
   QC value within limits for Mn 257.610  Recovery = 105.09%
Mo 202.031†             9839.5      522.54 ug/L        3.162      522.54 ppb        3.162   0.61%
   QC value within limits for Mo 202.031  Recovery = 104.51%
Na 589.592 Radial†     39050.8       10954 ug/L        303.9       10954 ppb        303.9   2.77%
   QC value within limits for Na 589.592 Radial  Recovery = 109.54%
Ni 231.604†            26484.2      518.59 ug/L        3.028      518.59 ppb        3.028   0.58%
   QC value within limits for Ni 231.604  Recovery = 103.72%
P 214.914†              5899.7      2559.4 ug/L       15.83      2559.4 ppb       15.83   0.62%
   QC value within limits for P 214.914  Recovery = 102.37%
Pb 220.353†             5592.7      526.54 ug/L        3.439      526.54 ppb        3.439   0.65%
   QC value within limits for Pb 220.353  Recovery = 105.31%
S 181.975 Axial†         960.6      1033.9 ug/L       11.22      1033.9 ppb       11.22   1.09%
   QC value within limits for S 181.975 Axial  Recovery = 103.39%
Sb 206.836†             1986.7      531.30 ug/L        2.311      531.30 ppb        2.311   0.44%
   QC value within limits for Sb 206.836  Recovery = 106.26%
Se 196.026†             1177.4      542.75 ug/L        1.083      542.75 ppb        1.083   0.20%
   QC value within limits for Se 196.026  Recovery = 108.55%
Si 251.611†           102815.2      2598.8 ug/L       22.89      2598.8 ppb       22.89   0.88%
   QC value within limits for Si 251.611  Recovery = 103.95%
Sn 189.927†             3906.6      517.31 ug/L        2.626      517.31 ppb        2.626   0.51%
   QC value within limits for Sn 189.927  Recovery = 103.46%
Sr 421.552†            95748.1      502.29 ug/L       13.831      502.29 ppb       13.831   2.75%
   QC value within limits for Sr 421.552  Recovery = 100.46%
Ti 334.940†           378659.1      522.14 ug/L        4.028      522.14 ppb        4.028   0.77%
   QC value within limits for Ti 334.940  Recovery = 104.43%
Tl 190.801†             2154.4      524.37 ug/L        4.439      524.37 ppb        4.439   0.85%
   QC value within limits for Tl 190.801  Recovery = 104.87%
U 409.014†             19682.6      507.19 ug/L        2.926      507.19 ppb        2.926   0.58%
   QC value within limits for U 409.014  Recovery = 101.44%
V 292.402†             90659.7      525.97 ug/L        4.074      525.97 ppb        4.074   0.77%
   QC value within limits for V 292.402  Recovery = 105.19%
Zn 213.857†            70984.0      516.97 ug/L        3.671      516.97 ppb        3.671   0.71%
   QC value within limits for Zn 213.857  Recovery = 103.39%
SiO2†                 102746.8      5557.4 ug/L       32.30      5557.4 ppb       32.30   0.58%
   QC value within limits for SiO2  Recovery = 103.92%
All analyte(s) passed QC.
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Sequence No.: 114
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2009 08:47:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4701.7	4701.7	95.8	%			08:49:31
1	Y RADIAL	5363.2	5363.2	94.97	%			08:49:31
1	Al 396.153Radial†	-10.4	32.9	21.696	ug/L	21.696	ppb	08:49:31
1	Ca 317.933Radial†	36.9	20.7	36.606	ug/L	36.606	ppb	08:49:52
1	Fe 238.204 Radial†	8.7	-1.9	-22.879	ug/L	-22.879	ppb	08:49:52
1	K 766.490 Radial†	2710.7	261.1	47.558	ug/L	47.558	ppb	08:49:31
1	Mg 279.077 IEC†	2.8	0.4	17.391	ug/L	17.391	ppb	08:49:52
1	Na 589.592 Radial†	-999.0	236.7	66.404	ug/L	66.404	ppb	08:49:31
1	Sr 421.552†	-0.9	6.4	0.0334	ug/L	0.0334	ppb	08:49:31
1	Sc 361.383	920270.2	920270.2	88.531	%			08:50:48
1	Y 371.029	844753.3	844753.3	95.510	%			08:50:48
1	Ag 328.068†	452.4	37.0	0.1380	ug/L	0.1380	ppb	08:50:48
1	As 188.979†	-37.2	-5.4	-1.7052	ug/L	-1.7052	ppb	08:51:08
1	B 249.677†	-325.8	98.1	1.8575	ug/L	1.8575	ppb	08:51:08
1	Ba 233.527†	5.6	6.4	0.0368	ug/L	0.0368	ppb	08:51:08
1	Be 313.107†	-4856.4	-611.6	-0.1911	ug/L	-0.1911	ppb	08:50:48
1	Cd 226.502†	-232.3	-26.8	-0.2311	ug/L	-0.2311	ppb	08:51:08
1	Co 228.616†	-86.8	-11.7	-0.1893	ug/L	-0.1893	ppb	08:51:08
1	Cr 267.716†	106.5	32.5	0.2909	ug/L	0.2909	ppb	08:51:08
1	Cu 324.752†	9053.1	1288.4	3.4395	ug/L	3.4395	ppb	08:50:48
1	Mn 257.610†	773.7	297.2	0.2789	ug/L	0.2789	ppb	08:51:08
1	Mo 202.031†	41.3	17.4	0.9244	ug/L	0.9244	ppb	08:51:08
1	Ni 231.604†	114.4	-2.7	-0.0522	ug/L	-0.0522	ppb	08:51:08
1	P 214.914†	278.5	49.4	21.611	ug/L	21.611	ppb	08:51:08
1	Pb 220.353†	-58.8	9.2	0.8660	ug/L	0.8660	ppb	08:51:08
1	S 181.975 Axial†	57.3	4.7	5.0247	ug/L	5.0247	ppb	08:51:08
1	Sb 206.836†	57.4	30.2	8.0095	ug/L	8.0095	ppb	08:51:08
1	Se 196.026†	-18.2	0.8	0.2852	ug/L	0.2852	ppb	08:51:08
1	Si 251.611†	723.0	259.0	6.5395	ug/L	6.5395	ppb	08:51:08
1	Sn 189.927†	11.5	17.3	2.2912	ug/L	2.2912	ppb	08:51:08
1	Ti 334.940†	-1257.7	-160.1	-0.2164	ug/L	-0.2164	ppb	08:50:48
1	Tl 190.801†	-47.3	-9.2	-2.2245	ug/L	-2.2245	ppb	08:51:08
1	U 409.014†	-2663.0	-234.0	-6.0473	ug/L	-6.0473	ppb	08:50:48
1	V 292.402†	-1655.9	-261.9	-1.4940	ug/L	-1.4940	ppb	08:50:48
1	Zn 213.857†	982.9	224.7	1.6490	ug/L	1.6490	ppb	08:51:08
1	SiO2†	726.5	221.6	11.959	ug/L	11.959	ppb	08:52:04
2	Sc Radial	4711.2	4711.2	96.0	%			08:49:57
2	Y RADIAL	5390.2	5390.2	95.45	%			08:49:57
2	Al 396.153Radial†	-26.0	16.7	10.974	ug/L	10.974	ppb	08:49:57
2	Ca 317.933Radial†	31.2	14.7	25.982	ug/L	25.982	ppb	08:50:17
2	Fe 238.204 Radial†	10.1	-0.5	-6.0140	ug/L	-6.0140	ppb	08:50:17
2	K 766.490 Radial†	2689.2	233.0	42.446	ug/L	42.446	ppb	08:49:57
2	Mg 279.077 IEC†	1.2	-1.3	-58.068	ug/L	-58.068	ppb	08:50:17
2	Na 589.592 Radial†	-1032.8	203.6	57.116	ug/L	57.116	ppb	08:49:57
2	Sr 421.552†	29.8	38.5	0.2018	ug/L	0.2018	ppb	08:49:57
2	Sc 361.383	921226.2	921226.2	88.623	%			08:51:14
2	Y 371.029	848759.6	848759.6	95.963	%			08:51:14
2	Ag 328.068†	379.9	-45.4	-0.1744	ug/L	-0.1744	ppb	08:51:14
2	As 188.979†	-33.6	-1.3	-0.4015	ug/L	-0.4015	ppb	08:51:34
2	B 249.677†	-363.9	55.5	1.0509	ug/L	1.0509	ppb	08:51:34
2	Ba 233.527†	-7.5	-8.4	-0.0573	ug/L	-0.0573	ppb	08:51:34
2	Be 313.107†	-4826.5	-572.1	-0.1787	ug/L	-0.1787	ppb	08:51:14
2	Cd 226.502†	-218.3	-10.7	-0.0925	ug/L	-0.0925	ppb	08:51:34
2	Co 228.616†	-89.4	-14.6	-0.2367	ug/L	-0.2367	ppb	08:51:34
2	Cr 267.716†	123.4	51.5	0.4651	ug/L	0.4651	ppb	08:51:34
2	Cu 324.752†	8895.4	1099.8	2.9366	ug/L	2.9366	ppb	08:51:14
2	Mn 257.610†	718.9	234.5	0.2226	ug/L	0.2226	ppb	08:51:34
2	Mo 202.031†	48.9	25.9	1.3734	ug/L	1.3734	ppb	08:51:34
2	Ni 231.604†	129.9	14.7	0.2881	ug/L	0.2881	ppb	08:51:34

2	P 214.914†	284.9	56.3	24.755	ug/L	24.755 ppb	08:51:34
2	Pb 220.353†	-106.1	-44.2	-4.1411	ug/L	-4.1411 ppb	08:51:34
2	S 181.975 Axial†	67.0	15.5	16.703	ug/L	16.703 ppb	08:51:34
2	Sb 206.836†	45.9	17.2	4.5705	ug/L	4.5705 ppb	08:51:34
2	Se 196.026†	-25.4	-7.2	-3.2288	ug/L	-3.2288 ppb	08:51:34
2	Si 251.611†	736.7	273.7	6.9064	ug/L	6.9064 ppb	08:51:34
2	Sn 189.927†	8.5	13.9	1.8467	ug/L	1.8467 ppb	08:51:34
2	Ti 334.940†	-1233.1	-130.9	-0.1727	ug/L	-0.1727 ppb	08:51:14
2	Tl 190.801†	-52.4	-14.9	-3.5935	ug/L	-3.5935 ppb	08:51:34
2	U 409.014†	-2977.3	-585.5	-15.139	ug/L	-15.139 ppb	08:51:14
2	V 292.402†	-1623.6	-223.5	-1.2898	ug/L	-1.2898 ppb	08:51:14
2	Zn 213.857†	962.6	200.7	1.4716	ug/L	1.4716 ppb	08:51:34
2	SiO2†	737.1	232.7	12.549	ug/L	12.549 ppb	08:52:09
3	Sc Radial	4666.4	4666.4	95.0	%		08:50:22
3	Y RADIAL	5308.8	5308.8	94.01	%		08:50:22
3	Al 396.153Radial†	-35.4	6.6	4.2818	ug/L	4.2818 ppb	08:50:22
3	Ca 317.933Radial†	34.5	18.4	32.618	ug/L	32.618 ppb	08:50:42
3	Fe 238.204 Radial†	7.5	-3.1	-37.357	ug/L	-37.357 ppb	08:50:42
3	K 766.490 Radial†	2653.1	222.0	40.434	ug/L	40.434 ppb	08:50:22
3	Mg 279.077 IEC†	3.8	1.5	65.829	ug/L	65.829 ppb	08:50:42
3	Na 589.592 Radial†	-1073.4	150.6	42.246	ug/L	42.246 ppb	08:50:22
3	Sr 421.552†	-18.8	-12.4	-0.0654	ug/L	-0.0654 ppb	08:50:22
3	Sc 361.383	922144.5	922144.5	88.712	%		08:51:39
3	Y 371.029	848778.6	848778.6	95.965	%		08:51:39
3	Ag 328.068†	425.4	5.4	0.0168	ug/L	0.0168 ppb	08:51:39
3	As 188.979†	-36.1	-4.1	-1.2923	ug/L	-1.2923 ppb	08:51:59
3	B 249.677†	-337.4	85.7	1.6261	ug/L	1.6261 ppb	08:51:59
3	Ba 233.527†	4.0	4.6	0.0260	ug/L	0.0260 ppb	08:51:59
3	Be 313.107†	-4915.5	-667.0	-0.2083	ug/L	-0.2083 ppb	08:51:39
3	Cd 226.502†	-231.0	-24.7	-0.2119	ug/L	-0.2119 ppb	08:51:59
3	Co 228.616†	-89.2	-14.3	-0.2314	ug/L	-0.2314 ppb	08:51:59
3	Cr 267.716†	113.9	40.7	0.3673	ug/L	0.3673 ppb	08:51:59
3	Cu 324.752†	8992.4	1199.2	3.2006	ug/L	3.2006 ppb	08:51:39
3	Mn 257.610†	730.6	246.8	0.2288	ug/L	0.2288 ppb	08:51:59
3	Mo 202.031†	44.9	21.4	1.1306	ug/L	1.1306 ppb	08:51:59
3	Ni 231.604†	122.0	5.6	0.1106	ug/L	0.1106 ppb	08:51:59
3	P 214.914†	288.5	60.1	26.431	ug/L	26.431 ppb	08:51:59
3	Pb 220.353†	-69.2	-2.5	-0.2257	ug/L	-0.2257 ppb	08:51:59
3	S 181.975 Axial†	58.9	6.3	6.7791	ug/L	6.7791 ppb	08:51:59
3	Sb 206.836†	45.8	17.0	4.5258	ug/L	4.5258 ppb	08:51:59
3	Se 196.026†	-24.4	-6.1	-2.8227	ug/L	-2.8227 ppb	08:51:59
3	Si 251.611†	721.3	255.4	6.4478	ug/L	6.4478 ppb	08:51:59
3	Sn 189.927†	7.5	12.8	1.6966	ug/L	1.6966 ppb	08:51:59
3	Ti 334.940†	-1222.8	-118.0	-0.1554	ug/L	-0.1554 ppb	08:51:39
3	Tl 190.801†	-38.7	0.6	0.1589	ug/L	0.1589 ppb	08:51:59
3	U 409.014†	-2905.3	-501.1	-12.950	ug/L	-12.950 ppb	08:51:39
3	V 292.402†	-1560.2	-150.2	-0.8617	ug/L	-0.8617 ppb	08:51:39
3	Zn 213.857†	962.3	199.2	1.4605	ug/L	1.4605 ppb	08:51:59
3	SiO2†	752.0	248.6	13.427	ug/L	13.427 ppb	08:52:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	921213.6	88.622	%	0.0902				0.10%
Sc Radial	4693.1	95.6	%	0.48				0.50%
Y 371.029	847430.5	95.812	%	0.2621				0.27%
Y RADIAL	5354.1	94.81	%	0.734				0.77%
Ag 328.068†	-1.0	-0.0065	ug/L	0.15748	-0.0065	ppb	0.15748	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.7	12.317	ug/L	8.7848	12.317	ppb	8.7848	71.32%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-1.1330	ug/L	0.66630	-1.1330	ppb	0.66630	58.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	79.8	1.5115	ug/L	0.41532	1.5115	ppb	0.41532	27.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0018	ug/L	0.05148	0.0018	ppb	0.05148	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-616.9	-0.1927	ug/L	0.01485	-0.1927	ppb	0.01485	7.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	17.9	31.735	ug/L	5.3665	31.735	ppb	5.3665	16.91%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -20.7     -0.1785 ug/L       0.07510     -0.1785 ppb        0.07510  42.08%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -13.5     -0.2191 ug/L       0.02596     -0.2191 ppb        0.02596  11.85%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               41.6      0.3744 ug/L       0.08732      0.3744 ppb        0.08732  23.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             1195.8      3.1922 ug/L       0.25157      3.1922 ppb        0.25157   7.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.8    -22.083 ug/L       15.6868    -22.083 ppb        15.6868  71.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        238.7     43.480 ug/L        3.6727     43.480 ppb         3.6727   8.45%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.2      8.3841 ug/L      62.43786      8.3841 ppb       62.43786 744.72%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              259.5      0.2434 ug/L       0.03086      0.2434 ppb        0.03086  12.68%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               21.6      1.1428 ug/L       0.22478      1.1428 ppb        0.22478  19.67%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       197.0     55.255 ug/L       12.1859     55.255 ppb        12.1859  22.05%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.9      0.1155 ug/L       0.17016      0.1155 ppb        0.17016 147.31%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                55.3     24.266 ug/L        2.4469     24.266 ppb         2.4469  10.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -12.5     -1.1670 ug/L       2.63292     -1.1670 ppb        2.63292 225.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           8.8      9.5024 ug/L       6.29763      9.5024 ppb        6.29763  66.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               21.5      5.7019 ug/L       1.99853      5.7019 ppb        1.99853  35.05%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.2     -1.9221 ug/L       1.92234     -1.9221 ppb        1.92234 100.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              262.7      6.6312 ug/L       0.24266      6.6312 ppb        0.24266   3.66%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               14.7      1.9448 ug/L       0.30919      1.9448 ppb        0.30919  15.90%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.8      0.0566 ug/L       0.13506      0.0566 ppb        0.13506 238.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -136.3     -0.1815 ug/L       0.03141     -0.1815 ppb        0.03141  17.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -7.8     -1.8864 ug/L       1.89890     -1.8864 ppb        1.89890 100.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -440.2     -11.379 ug/L        4.7452     -11.379 ppb         4.7452  41.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -211.9     -1.2152 ug/L       0.32265     -1.2152 ppb        0.32265  26.55%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              208.2      1.5271 ug/L       0.10578      1.5271 ppb        0.10578   6.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    234.3     12.645 ug/L        0.7386     12.645 ppb         0.7386   5.84%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, November 28, 2009 15:05:37
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1342
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	6725.0	6724.983	154.209	2.3
	Mg	24.0	60914.6	60914.625	1054.668	1.7
	Co	58.9	110207.5	110207.513	1309.892	1.2
	Rh	102.9	197342.4	197342.435	2290.007	1.2
	In	114.9	269729.2	269729.189	837.475	0.3
	Pb	208.0	194258.5	194258.476	920.561	0.5
⌈>	Ba	137.9	248522.0	248522.038	1503.328	0.6
⌊	Ba++	69.0	4293.2	0.017	0.000	0.7
⌈>	Ce	139.9	300045.9	300045.870	1391.148	0.5
⌊	CeO	155.9	8420.6	0.028	0.001	2.3
	Bkgd	220.0	14.1	14.100	2.133	15.1

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1656.25	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	5.0	6871.0
Co	59	11	5.3	104858.1
In	115	11	5.5	266951.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	611	2060	0.627
Be	9.0	9.0	2046	2075	0.637
Mg	24.0	24.0	5689	2065	0.636
Mg	25.0	25.0	5953	2080	0.634
Mg	26.0	26.0	6172	2070	0.641
Co	58.9	59.0	14192	2100	0.626
Rh	102.9	102.9	24881	2155	0.635
In	114.9	114.9	27795	2180	0.618
Ce	139.9	139.9	33867	2200	0.626
Pb	206.0	206.0	49948	2285	0.612
Pb	207.0	207.0	50171	2255	0.642
Pb	208.0	208.0	50439	2275	0.661
U	238.1	238.0	57726	2280	0.701

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, November 29, 2009 06:13:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\Blank.235

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		418850	
⌊	U	238		ug/L		945	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, November 29, 2009 06:15:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\Standard 1.236

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		418530	418529.608
⌊	U	238	10.000	ug/L	0.213	340792	0.812

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, November 29, 2009 06:17:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\Standard 2.237

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		426972	426971.591
	U	238	99.835	ug/L	0.473	2970801	6.956

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, November 29, 2009 06:19:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 1.238

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		414284	414284.035
⌊	U	238	53.361	ug/L	0.148	1541123	3.718

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.9			
⌊	U	238	106.722				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, November 29, 2009 06:20:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 2.239

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418559	418558.653
	U	238	0.060	ug/L	2.289	2687	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.9			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, November 29, 2009 06:22:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 3.240

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418886	418885.941
	U	238	0.248	ug/L	2.016	8190	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.0			
	U	238	124.138				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, November 29, 2009 06:24:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 4.241

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		342434	342433.915
⌊	U	238	-0.012	ug/L	7.771	493	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Lu	175		81.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, November 29, 2009 06:25:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 5.242

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		423606	423605.757
	U	238	22.765	ug/L	2.397	672735	1.586

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		101.1			
	U	238	113.826				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, November 29, 2009 06:27:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.243

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		418965	418965.261
	U	238	52.306	ug/L	0.668	1527721	3.644

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.0			
	U	238	104.611				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, November 29, 2009 06:29:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.244

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		424690	424690.396
	U	238	0.045	ug/L	3.022	2303	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		101.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Sunday, November 29, 2009 06:44:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 8.253

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		416777	416776.695
	U	238	53.443	ug/L	0.723	1552763	3.723

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.5			
	U	238	106.885				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Sunday, November 29, 2009 06:46:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 9.254

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		429023	429023.066
	U	238	0.040	ug/L	4.437	2175	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		102.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, November 29, 2009 06:53:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.258

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		421200	421200.320
	U	238	**53.453**	ug/L	0.623	1569533	3.724

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.6			
	U	238	106.905				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, November 29, 2009 06:55:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.259

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		426693	426693.213
⌊	U	238	0.043	ug/L	3.542	2231	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		101.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978637
Sample Date/Time: Sunday, November 29, 2009 06:58:20
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925492|2|ba|
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978637.260

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		425598	425598.009
	U	238	-0.023	ug/L	3.793	291	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		101.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978642
Sample Date/Time: Sunday, November 29, 2009 07:01:38
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925492|40|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978642.262

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		427599	427599.470
⌊	U	238	0.424	ug/L	1.397	13601	0.030

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		102.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241559001
Sample Date/Time: Sunday, November 29, 2009 07:03:18
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\241559001.263

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		400823	400823.353
	U	238	6.213	ug/L	0.875	174412	0.433

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		95.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978638
Sample Date/Time: Sunday, November 29, 2009 07:04:59
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978638.264

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		402793	402793.058
⌊	U	238	5.389	ug/L	0.933	152133	0.375

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		96.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978640
Sample Date/Time: Sunday, November 29, 2009 07:06:40
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978640.265

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		389615	389615.242
⌊	U	238	35.220	ug/L	0.557	956944	2.454

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		93.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978641
Sample Date/Time: Sunday, November 29, 2009 07:08:21
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978641.266

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		393701	393701.219
⌊	U	238	32.494	ug/L	0.876	892205	2.264

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		94.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978639
Sample Date/Time: Sunday, November 29, 2009 07:10:02
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925492|10|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\1201978639.267

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		412073	412072.713
⌊	U	238	1.273	ug/L	1.525	37470	0.089

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		98.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241559002
Sample Date/Time: Sunday, November 29, 2009 07:11:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\241559002.268

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		402749	402748.831
⌊	U	238	3.333	ug/L	1.927	94416	0.232

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		96.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, November 29, 2009 07:13:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.269

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		416012	416012.018
	U	238	52.791	ug/L	0.661	1530942	3.678

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.3			
	U	238	105.582				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, November 29, 2009 07:15:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.270

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		420270	420270.383
⌊	U	238	0.044	ug/L	1.749	2229	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.3			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, November 29, 2009 07:17:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\Blank.271

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		213	
	Be	9		ug/L		11	
	B	11		ug/L		1491	
	Na	23		ug/L		36714	
	Mg	24		ug/L		8336	
	Al	27		ug/L		21016	
	P	31		ug/L		10900	
	K	39		ug/L		561154	
	Ca	43		ug/L		223	
>	Sc	45		ug/L		2349919	
	Ti	47		ug/L		737	
	V	51		ug/L		-905	
	Cr	52		ug/L		1089	
	Cr	53		ug/L		66372	
	Mn	55		ug/L		2642	
	Fe	57		ug/L		5873	
	Co	59		ug/L		214	
	Ni	60		ug/L		92	
	Cu	63		ug/L		305	
	Cu	65		ug/L		107	
	Zn	66		ug/L		194	
	Zn	67		ug/L		9644	
	Zn	68		ug/L		1287	
>	Ge	74		ug/L		438184	
	As	75		ug/L		-346	
	Se	77		ug/L		3337	
	Se	82		ug/L		-35	
	Kr	83		ug/L		121	
	Sr	88		ug/L		429	
	Y	89		ug/L		129	
	Mo	98		ug/L		258	
	Ag	107		ug/L		117	
	Cd	111		ug/L		57	
	Cd	114		ug/L		83	
>	In	115		ug/L		289081	
	Sn	120		ug/L		1195	
	Sb	121		ug/L		2664	
	Sb	123		ug/L		2092	
	Ba	135		ug/L		67	
	Ba	137		ug/L		115	
	Ho	165		ug/L		44	
>	Lu	175		ug/L		427044	
	Tl	205		ug/L		1192	
	Pb	208		ug/L		1415	
	Bi	209		ug/L		295	
	Th	232		ug/L		6440	
	U	238		ug/L		1237	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Simple Linear	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, November 29, 2009 07:23:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\Standard 1.272

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.767	26945	0.011
	Be	9	10.000	ug/L	2.316	5023	0.002
	B	11	20.000	ug/L	5.380	10729	0.004
	Na	23	1000.000	ug/L	3.530	5125972	2.177
	Mg	24	1000.000	ug/L	1.612	3278924	1.400
	Al	27	1000.000	ug/L	3.983	4357886	1.855
	P	31	1000.000	ug/L	2.039	266771	0.110
	K	39	1000.000	ug/L	5.353	6701492	2.629
	Ca	43	1000.000	ug/L	1.882	15245	0.006
>	Sc	45		ug/L		2337058	2337057.582
	Ti	47	10.000	ug/L	2.260	7775	0.003
	V	51	10.000	ug/L	10.948	75453	0.033
	Cr	52	10.000	ug/L	3.373	58149	0.024
	Cr	53		ug/L		75922	0.004
	Mn	55	10.000	ug/L	0.764	100807	0.042
	Fe	57	1000.000	ug/L	0.749	207518	0.086
	Co	59	10.000	ug/L	2.338	76797	0.033
	Ni	60	10.000	ug/L	1.433	16273	0.007
	Cu	63		ug/L		38791	0.016
	Cu	65	10.000	ug/L	1.632	18657	0.008
	Zn	66	10.000	ug/L	1.948	12961	0.029
	Zn	67		ug/L		12160	0.006
	Zn	68		ug/L		10039	0.020
>	Ge	74		ug/L		434429	434428.872
	As	75	10.000	ug/L	3.394	12237	0.029
	Se	77		ug/L		4491	0.003
	Se	82	10.000	ug/L	1.809	1399	0.003
	Kr	83		ug/L		105	-0.000
	Sr	88	10.000	ug/L	1.416	159152	0.547
	Y	89		ug/L		116	-0.000
	Mo	98	10.000	ug/L	3.387	34679	0.119
	Ag	107	10.000	ug/L	2.537	62737	0.216
	Cd	111	10.000	ug/L	1.754	15502	0.053
	Cd	114		ug/L		36888	0.127
>	In	115		ug/L		290235	290234.715
	Sn	120	10.000	ug/L	3.921	63323	0.214
	Sb	121	10.000	ug/L	9.513	45612	0.148
	Sb	123		ug/L		35061	0.114
	Ba	135		ug/L		14837	0.034
	Ba	137	10.000	ug/L	0.545	26161	0.060
	Ho	165		ug/L		41	-0.000
>	Lu	175		ug/L		433052	433052.475
	Tl	205	10.000	ug/L	1.123	179902	0.413
	Pb	208	10.000	ug/L	0.866	269716	0.620
	Bi	209		ug/L		297	-0.000
	Th	232	10.000	ug/L	3.060	311249	0.704
	U	238	10.000	ug/L	1.124	339784	0.782

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, November 29, 2009 07:29:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\Standard 2.273

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.005**	ug/L	1.058	274113	0.115
	Be	9	**99.999**	ug/L	2.345	51068	0.021
	B	11	**200.104**	ug/L	3.212	101047	0.042
	Na	23	**9997.732**	ug/L	10.939	50766053	21.283
	Mg	24	**10002.758**	ug/L	1.434	34326978	14.398
	Al	27	**10008.380**	ug/L	4.986	48295186	20.267
	P	31	**9993.933**	ug/L	2.026	2470530	1.032
	K	39	**9999.036**	ug/L	2.778	62606047	26.038
	Ca	43	**9998.097**	ug/L	1.910	150497	0.063
>	Sc	45		ug/L		2383272	2383271.823
	Ti	47	**100.009**	ug/L	2.040	73210	0.030
	V	51	**99.917**	ug/L	3.097	718238	0.302
	Cr	52	**99.955**	ug/L	2.782	557854	0.234
	Cr	53		ug/L		137884	0.030
	Mn	55	**99.935**	ug/L	2.548	942256	0.394
	Fe	57	**9985.542**	ug/L	2.324	1799858	0.753
	Co	59	**99.917**	ug/L	2.756	720369	0.302
	Ni	60	**99.951**	ug/L	1.072	157232	0.066
	Cu	63		ug/L		370432	0.155
	Cu	65	**99.961**	ug/L	1.712	182156	0.076
	Zn	66	**99.995**	ug/L	2.049	125922	0.292
	Zn	67		ug/L		30572	0.049
	Zn	68		ug/L		88009	0.202
>	Ge	74		ug/L		430036	430036.082
	As	75	**99.985**	ug/L	1.779	122284	0.285
	Se	77		ug/L		13539	0.024
	Se	82	**99.944**	ug/L	2.047	13398	0.031
	Kr	83		ug/L		162	0.000
	Sr	88	**99.929**	ug/L	1.042	1444215	5.105
	Y	89		ug/L		242	0.000
	Mo	98	**100.012**	ug/L	1.130	339858	1.201
	Ag	107	**99.951**	ug/L	1.352	582017	2.057
	Cd	111	**100.010**	ug/L	1.493	152128	0.538
	Cd	114		ug/L		353841	1.251
>	In	115		ug/L		282848	282847.992
	Sn	120	**99.992**	ug/L	1.813	601738	2.124
	Sb	121	**100.082**	ug/L	7.755	458941	1.613
	Sb	123		ug/L		353464	1.242
	Ba	135		ug/L		144239	0.351
	Ba	137	**100.017**	ug/L	1.254	251736	0.612
	Ho	165		ug/L		50	0.000
>	Lu	175		ug/L		411302	411301.910
	Tl	205	**99.869**	ug/L	0.848	1500381	3.645
	Pb	208	**99.934**	ug/L	0.286	2390928	5.810
	Bi	209		ug/L		484	0.000
	Th	232	**99.909**	ug/L	1.180	2655771	6.442
	U	238	**99.856**	ug/L	1.328	2808262	6.825

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, November 29, 2009 07:35:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 1.274

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.497**	ug/L	0.706	143474	0.060
	Be	9	**53.749**	ug/L	1.261	27358	0.012
	B	11	**109.323**	ug/L	1.562	55696	0.023
	Na	23	**4999.017**	ug/L	1.387	25306341	10.642
	Mg	24	**5585.950**	ug/L	6.606	19097552	8.040
	Al	27	**4699.796**	ug/L	5.047	22616808	9.517
	P	31	**5104.530**	ug/L	0.954	1262620	0.527
	K	39	**5297.739**	ug/L	8.000	33331107	13.796
	Ca	43	**5126.370**	ug/L	1.406	77000	0.032
>	Sc	45		ug/L		2374483	2374482.543
	Ti	47	**51.264**	ug/L	2.079	37757	0.016
	V	51	**53.078**	ug/L	0.875	379841	0.160
	Cr	52	**53.455**	ug/L	0.266	297820	0.125
	Cr	53		ug/L		107414	0.017
	Mn	55	**54.298**	ug/L	1.455	511423	0.214
	Fe	57	**5442.938**	ug/L	0.681	980394	0.410
	Co	59	**51.737**	ug/L	1.105	371844	0.157
	Ni	60	**52.178**	ug/L	0.912	81830	0.034
	Cu	63		ug/L		199479	0.084
	Cu	65	**53.552**	ug/L	0.750	97293	0.041
	Zn	66	**52.049**	ug/L	0.627	65938	0.152
	Zn	67		ug/L		20815	0.026
	Zn	68		ug/L		46602	0.105
>	Ge	74		ug/L		431947	431947.307
	As	75	**49.283**	ug/L	0.621	60370	0.141
	Se	77		ug/L		8863	0.013
	Se	82	**52.206**	ug/L	3.384	7013	0.016
	Kr	83		ug/L		118	-0.000
	Sr	88	**53.034**	ug/L	2.196	769431	2.709
	Y	89		ug/L		266	0.000
	Mo	98	**51.037**	ug/L	3.822	174140	0.613
	Ag	107	**53.356**	ug/L	2.164	311920	1.098
	Cd	111	**50.799**	ug/L	1.411	77587	0.273
	Cd	114		ug/L		182893	0.644
>	In	115		ug/L		283943	283942.817
	Sn	120	**52.510**	ug/L	3.749	317646	1.115
	Sb	121	**51.347**	ug/L	9.936	237321	0.828
	Sb	123		ug/L		183505	0.640
	Ba	135		ug/L		74630	0.182
	Ba	137	**51.942**	ug/L	1.064	130479	0.318
	Ho	165		ug/L		91	0.000
>	Lu	175		ug/L		410300	410300.421
	Tl	205	**53.664**	ug/L	0.927	804819	1.959
	Pb	208	**54.632**	ug/L	0.332	1304536	3.176
	Bi	209		ug/L		354	0.000
	Th	232	**54.075**	ug/L	1.168	1436799	3.487
	U	238	**54.608**	ug/L	1.492	1532564	3.732

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.993				
	Be	9	107.498				
	B	11	109.323				
	Na	23	99.980				
	Mg	24	111.719				
	Al	27	93.065				
	P	31	102.091				
	K	39	105.955				
	Ca	43	102.527				
>	Sc	45		101.0			
	Ti	47	102.528				
	V	51	106.156				
	Cr	52	106.909				
	Cr	53					
	Mn	55	108.597				
	Fe	57	108.859				
	Co	59	103.474				
	Ni	60	104.356				
	Cu	63					
	Cu	65	107.104				
	Zn	66	104.099				
	Zn	67					
	Zn	68					
>	Ge	74		98.6			
	As	75	98.566				
	Se	77					
	Se	82	104.413				
	Kr	83					
	Sr	88	106.067				
	Y	89					
	Mo	98	102.075				
	Ag	107	106.712				
	Cd	111	101.597				
	Cd	114					
>	In	115		98.2			
	Sn	120	105.021				
	Sb	121	102.694				
	Sb	123					
	Ba	135					
	Ba	137	103.884				
	Ho	165					
>	Lu	175		96.1			
	Tl	205	107.327				
	Pb	208	109.265				
	Bi	209					
	Th	232	108.150				
	U	238	109.217				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Mg	24	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, November 29, 2009 07:41:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 2.275

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.005	ug/L	83.421	205	-0.000
	Be	9	0.014	ug/L	70.279	18	0.000
	B	11	3.346	ug/L	24.269	3203	0.001
	Na	23	-0.917	ug/L	291.575	32708	-0.002
	Mg	24	0.129	ug/L	569.430	9003	0.000
	Al	27	-1.678	ug/L	46.042	13340	-0.003
	P	31	-3.106	ug/L	79.427	10379	-0.000
	K	39	-2.918	ug/L	112.195	556312	-0.008
	Ca	43	-1.581	ug/L	34.107	205	-0.000
>	Sc	45		ug/L		2405154	2405154.254
	Ti	47	-0.327	ug/L	20.731	515	-0.000
	V	51	-0.125	ug/L	328.957	-1871	-0.000
	Cr	52	-0.038	ug/L	119.225	895	-0.000
	Cr	53		ug/L		72450	0.002
	Mn	55	-0.121	ug/L	6.939	1559	-0.000
	Fe	57	-3.232	ug/L	21.085	5423	-0.000
	Co	59	0.002	ug/L	102.482	231	0.000
	Ni	60	0.004	ug/L	30.834	100	0.000
	Cu	63		ug/L		273	-0.000
	Cu	65	0.005	ug/L	94.031	120	0.000
	Zn	66	0.018	ug/L	62.557	216	0.000
	Zn	67		ug/L		10690	0.003
	Zn	68		ug/L		1401	0.000
>	Ge	74		ug/L		435079	435079.214
	As	75	0.130	ug/L	36.157	-182	0.000
	Se	77		ug/L		3876	0.001
	Se	82	0.180	ug/L	70.506	-11	0.000
	Kr	83		ug/L		101	-0.000
	Sr	88	-0.000	ug/L	462.088	423	-0.000
	Y	89		ug/L		86	-0.000
	Mo	98	0.054	ug/L	44.704	441	0.001
	Ag	107	0.005	ug/L	14.363	148	0.000
	Cd	111	-0.009	ug/L	43.766	42	-0.000
	Cd	114		ug/L		93	0.000
>	In	115		ug/L		287269	287269.275
	Sn	120	0.250	ug/L	20.094	2712	0.005
	Sb	121	1.019	ug/L	32.262	7355	0.016
	Sb	123		ug/L		5699	0.013
	Ba	135		ug/L		62	-0.000
	Ba	137	-0.004	ug/L	75.988	103	-0.000
	Ho	165		ug/L		39	-0.000
>	Lu	175		ug/L		421432	421431.659
	Tl	205	0.063	ug/L	32.984	2141	0.002
	Pb	208	0.001	ug/L	737.525	1408	0.000
	Bi	209		ug/L		267	-0.000
	Th	232	0.222	ug/L	37.802	12385	0.014
	U	238	0.012	ug/L	27.748	1565	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, November 29, 2009 07:47:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 3.276

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.025**	ug/L	1.168	30315	0.013
	Be	9	**0.586**	ug/L	1.156	309	0.000
	B	11	**16.500**	ug/L	2.369	9688	0.003
	Na	23	**273.906**	ug/L	12.816	1422855	0.583
	Mg	24	**15.518**	ug/L	16.736	61467	0.022
	Al	27	**28.273**	ug/L	16.041	157204	0.057
	P	31	**52.240**	ug/L	6.643	23830	0.005
	K	39	**267.787**	ug/L	3.970	2223727	0.697
	Ca	43	**214.826**	ug/L	0.490	3444	0.001
>	Sc	45		ug/L		2375488	2375487.990
	Ti	47	**8.048**	ug/L	3.370	6559	0.002
	V	51	**11.339**	ug/L	0.554	80458	0.034
	Cr	52	**10.959**	ug/L	0.910	61955	0.026
	Cr	53		ug/L		80432	0.006
	Mn	55	**5.704**	ug/L	0.731	56136	0.023
	Fe	57	**113.899**	ug/L	2.301	26338	0.009
	Co	59	**1.104**	ug/L	1.056	8146	0.003
	Ni	60	**2.173**	ug/L	2.308	3497	0.001
	Cu	63		ug/L		4573	0.002
	Cu	65	**1.141**	ug/L	2.809	2179	0.001
	Zn	66	**11.430**	ug/L	1.859	14723	0.033
	Zn	67		ug/L		13110	0.008
	Zn	68		ug/L		11196	0.023
>	Ge	74		ug/L		434735	434734.663
	As	75	**5.242**	ug/L	4.909	6156	0.015
	Se	77		ug/L		4317	0.002
	Se	82	**5.498**	ug/L	5.167	712	0.002
	Kr	83		ug/L		94	-0.000
	Sr	88	**11.742**	ug/L	3.422	174232	0.600
	Y	89		ug/L		85	-0.000
	Mo	98	**0.489**	ug/L	1.700	1961	0.006
	Ag	107	**1.086**	ug/L	3.149	6596	0.022
	Cd	111	**1.100**	ug/L	3.896	1770	0.006
	Cd	114		ug/L		4015	0.014
>	In	115		ug/L		289860	289859.809
	Sn	120	**5.376**	ug/L	1.572	34290	0.114
	Sb	121	**2.989**	ug/L	6.956	16643	0.048
	Sb	123		ug/L		12886	0.037
	Ba	135		ug/L		3147	0.007
	Ba	137	**2.076**	ug/L	2.133	5513	0.013
	Ho	165		ug/L		36	-0.000
>	Lu	175		ug/L		425257	425256.781
	Tl	205	**1.177**	ug/L	0.549	19458	0.043
	Pb	208	**2.257**	ug/L	1.833	57194	0.131
	Bi	209		ug/L		287	-0.000
	Th	232	**1.120**	ug/L	2.240	37115	0.072
	U	238	**0.225**	ug/L	1.494	7778	0.015

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.253				
	Be	9	117.171				
	B	11	109.997				
	Na	23	109.562				
	Mg	24	103.456				
	Al	27	94.245				
	P	31	104.481				
	K	39	89.262				
	Ca	43	107.413				
>	Sc	45		101.1			
	Ti	47	80.476				
	V	51	113.392				
	Cr	52	109.586				
	Cr	53					
	Mn	55	114.071				
	Fe	57	113.899				
	Co	59	110.363				
	Ni	60	108.635				
	Cu	63					
	Cu	65	114.061				
	Zn	66	114.295				
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75	104.842				
	Se	77					
	Se	82	109.968				
	Kr	83					
	Sr	88	117.423				
	Y	89					
	Mo	98	97.840				
	Ag	107	108.611				
	Cd	111	109.971				
	Cd	114					
>	In	115		100.3			
	Sn	120	107.522				
	Sb	121	99.642				
	Sb	123					
	Ba	135					
	Ba	137	103.788				
	Ho	165					
>	Lu	175		99.6			
	Tl	205	117.713				
	Pb	208	112.830				
	Bi	209					
	Th	232	111.955				
	U	238	112.618				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, November 29, 2009 07:53:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 4.277

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.091**	**ug/L**	27.568	428	0.000
	Be	9	**0.070**	**ug/L**	7.370	43	0.000
	B	11	**0.447**	**ug/L**	66.630	1599	0.000
	Na	23	**101397.735**	**ug/L**	3.490	474072113	215.851
	Mg	24	**105715.840**	**ug/L**	4.343	334138467	152.164
	Al	27	**95163.193**	**ug/L**	3.805	423272805	192.705
	P	31	**95501.215**	**ug/L**	0.813	21670762	9.862
	K	39	**96217.787**	**ug/L**	3.659	550756862	250.555
	Ca	43	**94121.927**	**ug/L**	0.505	1304162	0.594
>	Sc	45		**ug/L**		2196532	2196532.437
	Ti	47	**1430.085**	**ug/L**	1.809	955779	0.435
	V	51	**0.432**	**ug/L**	37.587	2018	0.001
	Cr	52	**2.308**	**ug/L**	2.429	12866	0.005
	Cr	53		**ug/L**		62802	0.000
	Mn	55	**5.951**	**ug/L**	1.332	54049	0.023
	Fe	57	**109934.389**	**ug/L**	0.963	18211918	8.289
	Co	59	**0.399**	**ug/L**	2.853	2849	0.001
	Ni	60	**3.421**	**ug/L**	1.350	5044	0.002
	Cu	63		**ug/L**		14050	0.006
	Cu	65	**5.459**	**ug/L**	2.152	9264	0.004
	Zn	66	**4.190**	**ug/L**	1.092	4923	0.012
	Zn	67		**ug/L**		10061	0.004
	Zn	68		**ug/L**		1969	0.002
>	Ge	74		**ug/L**		387773	387772.665
	As	75	**0.366**	**ug/L**	133.260	98	0.001
	Se	77		**ug/L**		6105	0.008
	Se	82	**-1.434**	**ug/L**	35.043	-205	-0.000
	Kr	83		**ug/L**		385	0.001
	Sr	88	**1.328**	**ug/L**	0.668	17720	0.068
	Y	89		**ug/L**		599	0.002
	Mo	98	**1986.494**	**ug/L**	1.636	6095107	23.849
	Ag	107	**0.068**	**ug/L**	15.164	459	0.001
	Cd	111	**0.523**	**ug/L**	8.649	768	0.003
	Cd	114		**ug/L**		10417	0.040
>	In	115		**ug/L**		255582	255582.399
	Sn	120	**0.171**	**ug/L**	10.087	1983	0.004
	Sb	121	**-0.011**	**ug/L**	728.913	2311	-0.000
	Sb	123		**ug/L**		1748	-0.000
	Ba	135		**ug/L**		910	0.002
	Ba	137	**0.720**	**ug/L**	1.942	1617	0.004
	Ho	165		**ug/L**		909	0.003
>	Lu	175		**ug/L**		345794	345793.789
	Tl	205	**-0.013**	**ug/L**	30.444	801	-0.000
	Pb	208	**0.166**	**ug/L**	1.432	4483	0.010
	Bi	209		**ug/L**		968	0.002
	Th	232	**0.337**	**ug/L**	45.191	12712	0.022
	U	238	**-0.028**	**ug/L**	1.926	329	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	101.398				
	Mg	24	105.716				
	Al	27	95.163				
	P	31	95.501				
	K	39	96.218				
	Ca	43	94.122				
>	Sc	45		93.5			
	Ti	47	71.504				
	V	51					
	Cr	52	62.372				
	Cr	53					
	Mn	55	102.607				
	Fe	57	109.934				
	Co	59	159.436				
	Ni	60	126.718				
	Cu	63					
	Cu	65	188.229				
	Zn	66	116.396				
	Zn	67					
	Zn	68					
>	Ge	74		88.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	110.678				
	Y	89					
	Mo	98	99.325				
	Ag	107					
	Cd	111	130.685				
	Cd	114					
>	In	115		88.4			
	Sn	120					
	Sb	121	-10.743				
	Sb	123					
	Ba	135					
	Ba	137	107.528				
	Ho	165					
>	Lu	175		81.0			
	Tl	205					
	Pb	208	83.005				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, November 29, 2009 07:59:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 5.278

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.398**	ug/L	0.500	51276	0.023
	Be	9	**19.357**	ug/L	1.292	9047	0.004
	B	11	**18.657**	ug/L	0.735	9868	0.004
	Na	23	**100218.540**	ug/L	3.625	464716436	213.340
	Mg	24	**98679.322**	ug/L	2.892	309450098	142.036
	Al	27	**94596.948**	ug/L	5.074	417408390	191.559
	P	31	**94715.600**	ug/L	1.672	21317547	9.781
	K	39	**96833.240**	ug/L	3.448	550051442	252.158
	Ca	43	**93362.110**	ug/L	0.877	1283105	0.589
>	Sc	45		ug/L		2178806	2178805.852
	Ti	47	**1415.127**	ug/L	1.303	938168	0.430
	V	51	**22.175**	ug/L	2.690	145093	0.067
	Cr	52	**23.374**	ug/L	1.914	120047	0.055
	Cr	53		ug/L		73150	0.005
	Mn	55	**27.220**	ug/L	1.581	236448	0.107
	Fe	57	**111202.215**	ug/L	2.012	18271762	8.385
	Co	59	**20.223**	ug/L	1.633	133473	0.061
	Ni	60	**22.228**	ug/L	2.251	32030	0.015
	Cu	63		ug/L		77873	0.036
	Cu	65	**24.326**	ug/L	0.480	40606	0.019
	Zn	66	**23.659**	ug/L	2.297	26945	0.069
	Zn	67		ug/L		13262	0.012
	Zn	68		ug/L		16856	0.041
>	Ge	74		ug/L		387008	387007.790
	As	75	**20.739**	ug/L	0.813	22584	0.059
	Se	77		ug/L		7593	0.012
	Se	82	**19.337**	ug/L	4.071	2308	0.006
	Kr	83		ug/L		338	0.001
	Sr	88	**25.559**	ug/L	1.513	330170	1.306
	Y	89		ug/L		576	0.002
	Mo	98	**2007.817**	ug/L	1.238	6089041	24.105
	Ag	107	**19.385**	ug/L	2.455	100892	0.399
	Cd	111	**20.376**	ug/L	1.352	27721	0.110
	Cd	114		ug/L		73502	0.291
>	In	115		ug/L		252613	252613.005
	Sn	120	**20.836**	ug/L	1.252	112821	0.442
	Sb	121	**23.151**	ug/L	1.104	96581	0.373
	Sb	123		ug/L		74609	0.288
	Ba	135		ug/L		27750	0.079
	Ba	137	**22.520**	ug/L	1.200	48178	0.138
	Ho	165		ug/L		896	0.002
>	Lu	175		ug/L		349077	349077.003
	Tl	205	**22.294**	ug/L	0.794	285047	0.814
	Pb	208	**21.798**	ug/L	1.343	443478	1.267
	Bi	209		ug/L		1293	0.003
	Th	232	**23.363**	ug/L	0.633	531156	1.506
	U	238	**23.873**	ug/L	0.598	570575	1.632

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	101.991				
	Be	9	96.787				
	B	11	93.284				
	Na	23	100.219				
	Mg	24	98.679				
	Al	27	94.597				
	P	31	94.716				
	K	39	96.833				
	Ca	43	93.362				
>	Sc	45		92.7			
	Ti	47	70.756				
	V	51	110.877				
	Cr	52	98.626				
	Cr	53					
	Mn	55	105.504				
	Fe	57	111.202				
	Co	59	99.869				
	Ni	60	97.920				
	Cu	63					
	Cu	65	106.226				
	Zn	66	100.251				
	Zn	67					
	Zn	68					
>	Ge	74		88.3			
	As	75	103.693				
	Se	77					
	Se	82	96.687				
	Kr	83					
	Sr	88	120.561				
	Y	89					
	Mo	98	100.391				
	Ag	107	96.925				
	Cd	111	99.882				
	Cd	114					
>	In	115		87.4			
	Sn	120	104.178				
	Sb	121	115.180				
	Sb	123					
	Ba	135					
	Ba	137	108.950				
	Ho	165					
>	Lu	175		81.7			
	Tl	205	111.468				
	Pb	208	107.910				
	Bi	209					
	Th	232	116.815				
	U	238	119.366				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	Sr	88	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, November 29, 2009 08:05:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.279

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.577**	ug/L	1.232	137913	0.056
	Be	9	**49.519**	ug/L	1.899	26182	0.011
	B	11	**95.096**	ug/L	0.883	50524	0.020
	Na	23	**4726.641**	ug/L	5.973	24846225	10.062
	Mg	24	**4835.110**	ug/L	2.662	17171416	6.960
	Al	27	**4894.647**	ug/L	11.703	24492558	9.912
	P	31	**4818.029**	ug/L	0.524	1238591	0.498
	K	39	**4603.159**	ug/L	4.436	30156716	11.987
	Ca	43	**4792.956**	ug/L	1.044	74793	0.030
>	Sc	45		ug/L		2466579	2466578.671
	Ti	47	**51.480**	ug/L	2.031	39385	0.016
	V	51	**49.279**	ug/L	2.077	366261	0.149
	Cr	52	**50.439**	ug/L	1.790	291958	0.118
	Cr	53		ug/L		106434	0.015
	Mn	55	**50.902**	ug/L	2.723	498118	0.201
	Fe	57	**5150.211**	ug/L	0.817	963937	0.388
	Co	59	**49.543**	ug/L	0.414	369883	0.150
	Ni	60	**49.490**	ug/L	1.539	80625	0.033
	Cu	63		ug/L		195423	0.079
	Cu	65	**50.324**	ug/L	1.207	94976	0.038
	Zn	66	**50.039**	ug/L	0.523	64217	0.146
	Zn	67		ug/L		20482	0.025
	Zn	68		ug/L		45194	0.100
>	Ge	74		ug/L		437513	437513.120
	As	75	**47.093**	ug/L	1.958	58409	0.134
	Se	77		ug/L		8872	0.013
	Se	82	**50.180**	ug/L	2.184	6826	0.016
	Kr	83		ug/L		93	-0.000
	Sr	88	**51.071**	ug/L	0.971	756305	2.609
	Y	89		ug/L		154	0.000
	Mo	98	**49.767**	ug/L	0.854	173361	0.597
	Ag	107	**51.164**	ug/L	1.254	305275	1.053
	Cd	111	**49.199**	ug/L	0.784	76690	0.265
	Cd	114		ug/L		179826	0.620
>	In	115		ug/L		289732	289731.818
	Sn	120	**50.228**	ug/L	1.477	310228	1.067
	Sb	121	**46.093**	ug/L	11.460	218038	0.743
	Sb	123		ug/L		169261	0.577
	Ba	135		ug/L		73159	0.175
	Ba	137	**50.398**	ug/L	0.820	129103	0.308
	Ho	165		ug/L		86	0.000
>	Lu	175		ug/L		418424	418424.225
	Tl	205	**52.246**	ug/L	1.436	799019	1.907
	Pb	208	**52.196**	ug/L	0.965	1271030	3.034
	Bi	209		ug/L		332	0.000
	Th	232	**52.048**	ug/L	4.488	1410123	3.356
	U	238	**52.479**	ug/L	1.854	1501802	3.587

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	97.154				
	Be	9	99.037				
	B	11	95.096				
	Na	23	94.533				
	Mg	24	96.702				
	Al	27	96.924				
	P	31	96.361				
	K	39	92.063				
	Ca	43	95.859				
>	Sc	45		105.0			
	Ti	47	102.961				
	V	51	98.559				
	Cr	52	100.879				
	Cr	53					
	Mn	55	101.805				
	Fe	57	103.004				
	Co	59	99.086				
	Ni	60	98.980				
	Cu	63					
	Cu	65	100.648				
	Zn	66	100.077				
	Zn	67					
	Zn	68					
>	Ge	74		99.8			
	As	75	94.185				
	Se	77					
	Se	82	100.360				
	Kr	83					
	Sr	88	102.141				
	Y	89					
	Mo	98	99.535				
	Ag	107	102.328				
	Cd	111	98.398				
	Cd	114					
>	In	115		100.2			
	Sn	120	100.455				
	Sb	121	92.185				
	Sb	123					
	Ba	135					
	Ba	137	100.795				
	Ho	165					
>	Lu	175		98.0			
	Tl	205	104.491				
	Pb	208	104.392				
	Bi	209					
	Th	232	104.097				
	U	238	104.957				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, November 29, 2009 08:12:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 7.280

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.030	ug/L	8.609	305	0.000
	Be	9	0.013	ug/L	29.722	18	0.000
	B	11	1.179	ug/L	39.513	2146	0.000
	Na	23	-0.336	ug/L	284.279	36380	-0.001
	Mg	24	0.873	ug/L	106.989	11672	0.001
	Al	27	0.318	ug/L	139.183	23353	0.001
	P	31	-4.788	ug/L	49.668	10092	-0.000
	K	39	-6.589	ug/L	120.075	540077	-0.017
	Ca	43	-0.533	ug/L	109.775	223	-0.000
>	Sc	45		ug/L		2436935	2436934.750
	Ti	47	0.415	ug/L	21.548	1071	0.000
	V	51	-0.256	ug/L	310.066	-2879	-0.001
	Cr	52	-0.081	ug/L	28.032	669	-0.000
	Cr	53		ug/L		71628	0.001
	Mn	55	-0.151	ug/L	2.091	1283	-0.001
	Fe	57	-1.667	ug/L	14.912	5783	-0.000
	Co	59	-0.003	ug/L	40.073	199	-0.000
	Ni	60	-0.004	ug/L	252.641	88	-0.000
	Cu	63		ug/L		289	-0.000
	Cu	65	0.003	ug/L	230.649	117	0.000
	Zn	66	0.028	ug/L	49.010	227	0.000
	Zn	67		ug/L		10431	0.002
	Zn	68		ug/L		1261	-0.000
>	Ge	74		ug/L		432550	432550.243
	As	75	0.189	ug/L	97.954	-106	0.001
	Se	77		ug/L		3988	0.002
	Se	82	0.397	ug/L	6.176	19	0.000
	Kr	83		ug/L		72	-0.000
	Sr	88	0.001	ug/L	217.693	441	0.000
	Y	89		ug/L		86	-0.000
	Mo	98	0.181	ug/L	16.334	877	0.002
	Ag	107	0.005	ug/L	19.233	148	0.000
	Cd	111	-0.005	ug/L	20.439	48	-0.000
	Cd	114		ug/L		98	0.000
>	In	115		ug/L		285909	285908.553
	Sn	120	0.188	ug/L	21.695	2320	0.004
	Sb	121	0.832	ug/L	40.140	6462	0.013
	Sb	123		ug/L		4938	0.010
	Ba	135		ug/L		65	-0.000
	Ba	137	-0.010	ug/L	67.121	89	-0.000
	Ho	165		ug/L		44	0.000
>	Lu	175		ug/L		425569	425569.394
	Tl	205	0.035	ug/L	44.576	1729	0.001
	Pb	208	-0.001	ug/L	454.892	1393	-0.000
	Bi	209		ug/L		251	-0.000
	Th	232	0.121	ug/L	38.041	9717	0.008
	U	238	0.009	ug/L	42.135	1503	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Sunday, November 29, 2009 08:18:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 10.281

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**986.173**	ug/L	0.573	2558052	1.133
	Be	9	**943.891**	ug/L	1.070	456443	0.202
	B	11	**-0.399**	ug/L	52.777	1243	-0.000
	Na	23	**49257.216**	ug/L	1.955	236652627	104.856
	Mg	24	**51377.972**	ug/L	1.535	166900135	73.952
	Al	27	**45911.350**	ug/L	4.870	209911575	92.970
	P	31	**24335.655**	ug/L	0.768	5681357	2.513
	K	39	**50889.370**	ug/L	7.328	299803607	132.518
	Ca	43	**49127.751**	ug/L	0.598	699461	0.310
>	Sc	45		ug/L		2256789	2256789.418
	Ti	47	**49.986**	ug/L	1.382	35007	0.015
	V	51	**938.293**	ug/L	1.274	6395974	2.835
	Cr	52	**930.609**	ug/L	0.647	4910549	2.176
	Cr	53		ug/L		686997	0.276
	Mn	55	**975.430**	ug/L	1.545	8688874	3.849
	Fe	57	**57280.054**	ug/L	1.177	9752811	4.319
	Co	59	**857.259**	ug/L	0.687	5852644	2.593
	Ni	60	**855.036**	ug/L	1.226	1273013	0.564
	Cu	63		ug/L		3135020	1.389
	Cu	65	**842.838**	ug/L	1.578	1453675	0.644
	Zn	66	**2482.477**	ug/L	0.672	2888538	7.260
	Zn	67		ug/L		433914	1.069
	Zn	68		ug/L		1699217	4.268
>	Ge	74		ug/L		397855	397854.595
	As	75	**887.625**	ug/L	1.233	1006749	2.531
	Se	77		ug/L		48588	0.115
	Se	82	**489.071**	ug/L	1.272	60777	0.153
	Kr	83		ug/L		230	0.000
	Sr	88	**1120.097**	ug/L	2.865	14220802	57.219
	Y	89		ug/L		510	0.002
	Mo	98	**1110.199**	ug/L	0.976	3313213	13.329
	Ag	107	**250.027**	ug/L	1.356	1279325	5.147
	Cd	111	**916.875**	ug/L	0.109	1225395	4.929
	Cd	114		ug/L		3032022	12.199
>	In	115		ug/L		248580	248580.318
	Sn	120	**1010.455**	ug/L	2.591	5334351	21.459
	Sb	121	**251.473**	ug/L	9.365	1009082	4.053
	Sb	123		ug/L		797534	3.204
	Ba	135		ug/L		1233891	3.380
	Ba	137	**928.397**	ug/L	9.223	2073224	5.679
	Ho	165		ug/L		289	0.001
>	Lu	175		ug/L		365053	365053.105
	Tl	205	**514.137**	ug/L	0.905	6851624	18.766
	Pb	208	**4840.693**	ug/L	0.920	102731913	281.422
	Bi	209		ug/L		2896	0.007
	Th	232	**2558.384**	ug/L	1.239	60224974	164.964
	U	238	**5155.209**	ug/L	0.554	128622761	352.343

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.617				
	Be	9	94.389				
	B	11					
	Na	23	98.514				
	Mg	24	102.756				
	Al	27	91.823				
	P	31	97.343				
	K	39	101.779				
	Ca	43	98.256				
>	Sc	45		96.0			
	Ti	47					
	V	51	93.829				
	Cr	52	93.061				
	Cr	53					
	Mn	55	97.543				
	Fe	57	114.560				
	Co	59	85.726				
	Ni	60	85.504				
	Cu	63					
	Cu	65	84.284				
	Zn	66	99.299				
	Zn	67					
	Zn	68					
>	Ge	74		90.8			
	As	75	88.763				
	Se	77					
	Se	82	97.814				
	Kr	83					
	Sr	88	112.010				
	Y	89					
	Mo	98	111.020				
	Ag	107	100.011				
	Cd	111	91.688				
	Cd	114					
>	In	115		86.0			
	Sn	120	101.045				
	Sb	121	100.589				
	Sb	123					
	Ba	135					
	Ba	137	92.840				
	Ho	165					
>	Lu	175		85.5			
	Tl	205	102.827				
	Pb	208	96.814				
	Bi	209					
	Th	232	102.335				
	U	238	103.104				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Sr	88	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Sunday, November 29, 2009 08:24:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 11.282

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.963**	**ug/L**	0.606	138069	0.055
	Be	9	**48.407**	**ug/L**	2.316	25949	0.010
	B	11	**96.192**	**ug/L**	4.656	51785	0.020
	Na	23	**4690.851**	**ug/L**	6.955	24999597	9.986
	Mg	24	**5027.715**	**ug/L**	9.504	18098815	7.237
	Al	27	**4594.923**	**ug/L**	3.523	23285179	9.305
	P	31	**4690.466**	**ug/L**	2.728	1222682	0.484
	K	39	**4919.950**	**ug/L**	7.028	32625687	12.812
	Ca	43	**4723.573**	**ug/L**	0.827	74740	0.030
>	Sc	45		**ug/L**		2500904	2500903.505
	Ti	47	**47.251**	**ug/L**	1.995	36714	0.014
	V	51	**48.222**	**ug/L**	3.181	363262	0.146
	Cr	52	**48.749**	**ug/L**	2.966	286087	0.114
	Cr	53		**ug/L**		104456	0.014
	Mn	55	**49.319**	**ug/L**	1.838	489445	0.195
	Fe	57	**5034.926**	**ug/L**	1.962	955554	0.380
	Co	59	**47.870**	**ug/L**	1.909	362320	0.145
	Ni	60	**47.042**	**ug/L**	2.497	77697	0.031
	Cu	63		**ug/L**		192207	0.077
	Cu	65	**48.956**	**ug/L**	1.546	93680	0.037
	Zn	66	**49.940**	**ug/L**	2.173	63511	0.146
	Zn	67		**ug/L**		20507	0.025
	Zn	68		**ug/L**		44218	0.099
>	Ge	74		**ug/L**		433673	433673.430
	As	75	**46.762**	**ug/L**	2.448	57479	0.133
	Se	77		**ug/L**		8609	0.012
	Se	82	**50.043**	**ug/L**	1.593	6746	0.016
	Kr	83		**ug/L**		102	-0.000
	Sr	88	**50.548**	**ug/L**	2.068	737673	2.582
	Y	89		**ug/L**		127	0.000
	Mo	98	**49.505**	**ug/L**	1.637	169956	0.594
	Ag	107	**50.806**	**ug/L**	2.437	298695	1.046
	Cd	111	**48.926**	**ug/L**	2.332	75157	0.263
	Cd	114		**ug/L**		177205	0.620
>	In	115		**ug/L**		285556	285556.081
	Sn	120	**54.813**	**ug/L**	3.335	333508	1.164
	Sb	121	**50.581**	**ug/L**	8.429	235549	0.815
	Sb	123		**ug/L**		182327	0.631
	Ba	135		**ug/L**		71371	0.172
	Ba	137	**48.971**	**ug/L**	1.096	124282	0.300
	Ho	165		**ug/L**		80	0.000
>	Lu	175		**ug/L**		414505	414504.866
	Tl	205	**51.149**	**ug/L**	0.374	775026	1.867
	Pb	208	**51.653**	**ug/L**	1.128	1246033	3.003
	Bi	209		**ug/L**		343	0.000
	Th	232	**54.617**	**ug/L**	1.389	1465905	3.522
	U	238	**52.632**	**ug/L**	2.100	1492104	3.597

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	95.925				
	Be	9	96.815				
	B	11	96.192				
	Na	23	93.817				
	Mg	24	100.554				
	Al	27	90.989				
	P	31	93.809				
	K	39	98.399				
	Ca	43	94.471				
>	Sc	45		106.4			
	Ti	47	94.503				
	V	51	96.444				
	Cr	52	97.497				
	Cr	53					
	Mn	55	98.637				
	Fe	57	100.699				
	Co	59	95.740				
	Ni	60	94.084				
	Cu	63					
	Cu	65	97.912				
	Zn	66	99.879				
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75	93.523				
	Se	77					
	Se	82	100.085				
	Kr	83					
	Sr	88	101.095				
	Y	89					
	Mo	98	99.011				
	Ag	107	101.612				
	Cd	111	97.852				
	Cd	114					
>	In	115		98.8			
	Sn	120	109.626				
	Sb	121	101.162				
	Sb	123					
	Ba	135					
	Ba	137	97.943				
	Ho	165					
>	Lu	175		97.1			
	Tl	205	102.298				
	Pb	208	103.306				
	Bi	209					
	Th	232	109.235				
	U	238	105.264				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Sunday, November 29, 2009 08:30:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 12.283

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.078	ug/L	10.899	451	0.000
	Be	9	0.034	ug/L	28.319	29	0.000
	B	11	1.205	ug/L	37.150	2218	0.000
	Na	23	0.997	ug/L	30.420	44402	0.002
	Mg	24	0.597	ug/L	262.405	11005	0.001
	Al	27	-0.072	ug/L	979.266	22017	-0.000
	P	31	-5.508	ug/L	58.745	10185	-0.001
	K	39	-7.825	ug/L	47.030	546610	-0.020
	Ca	43	-0.376	ug/L	567.693	232	-0.000
>	Sc	45		ug/L		2502191	2502191.035
	Ti	47	-0.292	ug/L	4.978	562	-0.000
	V	51	0.024	ug/L	1800.806	-789	0.000
	Cr	52	-0.080	ug/L	37.605	690	-0.000
	Cr	53		ug/L		72827	0.001
	Mn	55	-0.137	ug/L	2.957	1457	-0.001
	Fe	57	-2.601	ug/L	52.253	5763	-0.000
	Co	59	0.023	ug/L	12.617	404	0.000
	Ni	60	0.019	ug/L	38.840	129	0.000
	Cu	63		ug/L		316	-0.000
	Cu	65	0.016	ug/L	41.333	145	0.000
	Zn	66	0.042	ug/L	23.759	250	0.000
	Zn	67		ug/L		10700	0.002
	Zn	68		ug/L		1303	0.000
>	Ge	74		ug/L		440386	440385.588
	As	75	0.346	ug/L	74.631	86	0.001
	Se	77		ug/L		3835	0.001
	Se	82	0.216	ug/L	57.425	-6	0.000
	Kr	83		ug/L		96	-0.000
	Sr	88	0.006	ug/L	41.576	517	0.000
	Y	89		ug/L		74	-0.000
	Mo	98	0.232	ug/L	19.601	1059	0.003
	Ag	107	0.005	ug/L	14.804	147	0.000
	Cd	111	0.003	ug/L	221.984	61	0.000
	Cd	114		ug/L		100	0.000
>	In	115		ug/L		288253	288252.727
	Sn	120	1.658	ug/L	11.733	11329	0.035
	Sb	121	2.170	ug/L	23.783	12716	0.035
	Sb	123		ug/L		9856	0.027
	Ba	135		ug/L		69	0.000
	Ba	137	0.009	ug/L	49.924	138	0.000
	Ho	165		ug/L		37	-0.000
>	Lu	175		ug/L		422332	422332.012
	Tl	205	0.100	ug/L	20.829	2727	0.004
	Pb	208	0.042	ug/L	7.730	2429	0.002
	Bi	209		ug/L		254	-0.000
	Th	232	0.676	ug/L	14.494	24777	0.044
	U	238	0.120	ug/L	12.081	4677	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978637
Sample Date/Time: Sunday, November 29, 2009 08:36:30
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978637.284

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.012**	ug/L	18.775	259	0.000
	Be	9	**0.011**	ug/L	70.394	17	0.000
	B	11	**-0.433**	ug/L	19.980	1345	-0.000
	Na	23	**3.258**	ug/L	58.305	55778	0.007
	Mg	24	**-0.590**	ug/L	28.067	6668	-0.001
	Al	27	**-1.218**	ug/L	43.988	16009	-0.002
	P	31	**20.760**	ug/L	4.595	16768	0.002
	K	39	**-11.245**	ug/L	41.888	517905	-0.029
	Ca	43	**7.251**	ug/L	36.025	348	0.000
>	Sc	45		ug/L		2472343	2472343.232
	Ti	47	**-0.055**	ug/L	92.432	734	-0.000
	V	51	**0.014**	ug/L	1775.333	-850	0.000
	Cr	52	**0.368**	ug/L	6.664	3271	0.001
	Cr	53		ug/L		56403	-0.005
	Mn	55	**-0.008**	ug/L	81.828	2704	-0.000
	Fe	57	**4.856**	ug/L	17.746	7083	0.000
	Co	59	**0.003**	ug/L	22.087	247	0.000
	Ni	60	**0.073**	ug/L	13.395	216	0.000
	Cu	63		ug/L		602	0.000
	Cu	65	**0.083**	ug/L	6.751	270	0.000
	Zn	66	**1.311**	ug/L	3.687	1813	0.004
	Zn	67		ug/L		8525	-0.002
	Zn	68		ug/L		2251	0.002
>	Ge	74		ug/L		424012	424012.300
	As	75	**0.020**	ug/L	373.835	-310	0.000
	Se	77		ug/L		2752	-0.001
	Se	82	**0.257**	ug/L	80.402	-0	0.000
	Kr	83		ug/L		88	-0.000
	Sr	88	**0.004**	ug/L	50.916	484	0.000
	Y	89		ug/L		84	-0.000
	Mo	98	**0.074**	ug/L	17.309	517	0.001
	Ag	107	**-0.007**	ug/L	20.698	78	-0.000
	Cd	111	**-0.000**	ug/L	2077.710	56	-0.000
	Cd	114		ug/L		60	-0.000
>	In	115		ug/L		289476	289476.394
	Sn	120	**0.578**	ug/L	4.161	4750	0.012
	Sb	121	**0.628**	ug/L	28.606	5588	0.010
	Sb	123		ug/L		4299	0.008
	Ba	135		ug/L		101	0.000
	Ba	137	**0.020**	ug/L	1.240	164	0.000
	Ho	165		ug/L		36	-0.000
>	Lu	175		ug/L		421117	421116.862
	Tl	205	**0.007**	ug/L	27.025	1286	0.000
	Pb	208	**0.011**	ug/L	7.633	1661	0.001
	Bi	209		ug/L		292	0.000
	Th	232	**0.471**	ug/L	20.064	19119	0.030
	U	238	**0.033**	ug/L	30.364	2180	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978642
Sample Date/Time: Sunday, November 29, 2009 08:42:36
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925492|20|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978642.285

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.790**	ug/L	1.856	11089	0.004
	Be	9	**43.393**	ug/L	2.209	23201	0.009
	B	11	**66.255**	ug/L	4.380	36062	0.014
	Na	23	**277.378**	ug/L	11.505	1509876	0.590
	Mg	24	**1625.322**	ug/L	4.632	5841822	2.339
	Al	27	**4417.725**	ug/L	16.375	22296098	8.946
	P	31	**361.663**	ug/L	2.458	104703	0.037
	K	39	**1177.702**	ug/L	5.554	8241844	3.067
	Ca	43	**1769.205**	ug/L	1.326	28068	0.011
>	Sc	45		ug/L		2494351	2494351.344
	Ti	47	**109.593**	ug/L	0.601	83903	0.033
	V	51	**61.432**	ug/L	2.411	461876	0.186
	Cr	52	**33.719**	ug/L	2.258	197728	0.079
	Cr	53		ug/L		90581	0.008
	Mn	55	**164.922**	ug/L	1.405	1625848	0.651
	Fe	57	**5323.171**	ug/L	1.772	1007216	0.401
	Co	59	**41.231**	ug/L	2.334	311272	0.125
	Ni	60	**49.670**	ug/L	1.290	81824	0.033
	Cu	63		ug/L		187412	0.075
	Cu	65	**48.006**	ug/L	1.634	91617	0.037
	Zn	66	**98.757**	ug/L	0.331	126140	0.289
	Zn	67		ug/L		30303	0.047
	Zn	68		ug/L		90752	0.205
>	Ge	74		ug/L		436111	436110.727
	As	75	**120.849**	ug/L	0.715	149959	0.345
	Se	77		ug/L		12044	0.020
	Se	82	**88.111**	ug/L	0.669	11975	0.028
	Kr	83		ug/L		112	-0.000
	Sr	88	**82.315**	ug/L	1.014	1218486	4.205
	Y	89		ug/L		105498	0.364
	Mo	98	**39.649**	ug/L	1.185	138133	0.476
	Ag	107	**11.781**	ug/L	0.141	70361	0.243
	Cd	111	**57.676**	ug/L	1.363	89872	0.310
	Cd	114		ug/L		212887	0.735
>	In	115		ug/L		289662	289661.861
	Sn	120	**22.464**	ug/L	2.432	139381	0.477
	Sb	121	**14.093**	ug/L	1.109	68463	0.227
	Sb	123		ug/L		53039	0.176
	Ba	135		ug/L		343162	0.806
	Ba	137	**227.009**	ug/L	1.416	591621	1.389
	Ho	165		ug/L		6385	0.015
>	Lu	175		ug/L		425995	425995.470
	Tl	205	**98.399**	ug/L	1.433	1531001	3.592
	Pb	208	**83.205**	ug/L	1.106	2061856	4.837
	Bi	209		ug/L		3902	0.008
	Th	232	**6.227**	ug/L	5.493	177396	0.402
	U	238	**0.907**	ug/L	1.104	27644	0.062

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978642
Sample Date/Time: Sunday, November 29, 2009 08:48:42
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925492|40|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978642.286

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1.911**	ug/L	1.535	5604	0.002
	Be	9	**21.916**	ug/L	1.360	11523	0.005
	B	11	**34.927**	ug/L	2.114	19425	0.007
	Na	23	**143.365**	ug/L	8.713	786130	0.305
	Mg	24	**813.237**	ug/L	7.860	2877315	1.171
	Al	27	**2144.554**	ug/L	5.842	10669679	4.343
	P	31	**179.667**	ug/L	3.532	56840	0.019
	K	39	**621.568**	ug/L	6.468	4552165	1.619
	Ca	43	**886.134**	ug/L	2.059	13931	0.006
>	Sc	45		ug/L		2451226	2451226.058
	Ti	47	**54.196**	ug/L	1.332	41167	0.016
	V	51	**31.163**	ug/L	0.323	229823	0.094
	Cr	52	**16.988**	ug/L	2.514	98471	0.040
	Cr	53		ug/L		79961	0.004
	Mn	55	**87.546**	ug/L	1.899	849507	0.345
	Fe	57	**2757.584**	ug/L	2.266	515781	0.208
	Co	59	**20.931**	ug/L	0.514	155429	0.063
	Ni	60	**25.433**	ug/L	2.483	41220	0.017
	Cu	63		ug/L		93611	0.038
	Cu	65	**24.034**	ug/L	0.962	45141	0.018
	Zn	66	**48.902**	ug/L	1.147	62470	0.143
	Zn	67		ug/L		19956	0.024
	Zn	68		ug/L		46118	0.103
>	Ge	74		ug/L		435481	435481.373
	As	75	**60.554**	ug/L	0.803	74859	0.173
	Se	77		ug/L		7890	0.011
	Se	82	**43.357**	ug/L	2.486	5865	0.014
	Kr	83		ug/L		95	-0.000
	Sr	88	**42.704**	ug/L	0.353	623961	2.182
	Y	89		ug/L		51777	0.181
	Mo	98	**19.867**	ug/L	2.987	68418	0.239
	Ag	107	**5.844**	ug/L	0.889	34499	0.120
	Cd	111	**28.691**	ug/L	2.594	44138	0.154
	Cd	114		ug/L		105673	0.369
>	In	115		ug/L		285834	285834.416
	Sn	120	**11.446**	ug/L	2.488	70648	0.243
	Sb	121	**6.907**	ug/L	3.226	34446	0.111
	Sb	123		ug/L		26526	0.086
	Ba	135		ug/L		170364	0.405
	Ba	137	**114.961**	ug/L	1.339	295883	0.703
	Ho	165		ug/L		3105	0.007
>	Lu	175		ug/L		420628	420628.037
	Tl	205	**53.464**	ug/L	1.993	821880	1.951
	Pb	208	**43.580**	ug/L	2.030	1066925	2.534
	Bi	209		ug/L		2044	0.004
	Th	232	**3.083**	ug/L	4.343	89932	0.199
	U	238	**0.438**	ug/L	1.705	13798	0.030

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241559001
Sample Date/Time: Sunday, November 29, 2009 08:54:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925492|2|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\241559001.287

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.241**	ug/L	1.745	147051	0.061
	Be	9	**4.190**	ug/L	1.610	2166	0.001
	B	11	**16.328**	ug/L	1.784	9703	0.003
	Na	23	**2469.827**	ug/L	3.707	12653170	5.258
	Mg	24	**11010.591**	ug/L	1.743	38047143	15.848
	Al	27	**64453.868**	ug/L	3.382	313228775	130.519
	P	31	**721.990**	ug/L	2.207	190044	0.075
	K	39	**8063.018**	ug/L	8.810	50966613	20.996
	Ca	43	**8532.467**	ug/L	2.629	129366	0.054
>	Sc	45		ug/L		2400091	2400090.713
	Ti	47	**1043.302**	ug/L	1.694	762123	0.317
	V	51	**141.087**	ug/L	1.461	1022011	0.426
	Cr	52	**54.497**	ug/L	0.827	306864	0.127
	Cr	53		ug/L		84453	0.007
	Mn	55	**2472.805**	ug/L	0.562	23421778	9.758
	Fe	57	**77458.500**	ug/L	1.379	14023232	5.840
	Co	59	**38.043**	ug/L	1.076	276418	0.115
	Ni	60	**37.990**	ug/L	2.001	60240	0.025
	Cu	63		ug/L		117151	0.049
	Cu	65	**32.432**	ug/L	2.438	59601	0.025
	Zn	66	**133.967**	ug/L	0.138	157954	0.392
	Zn	67		ug/L		35781	0.067
	Zn	68		ug/L		117538	0.289
>	Ge	74		ug/L		402724	402724.307
	As	75	**15.183**	ug/L	0.747	17120	0.043
	Se	77		ug/L		2594	-0.001
	Se	82	**-0.811**	ug/L	22.884	-135	-0.000
	Kr	83		ug/L		423	0.001
	Sr	88	**121.494**	ug/L	1.281	1687002	6.206
	Y	89		ug/L		931279	3.427
	Mo	98	**2.206**	ug/L	3.525	7438	0.026
	Ag	107	**0.436**	ug/L	2.432	2552	0.009
	Cd	111	**1.571**	ug/L	3.682	2347	0.008
	Cd	114		ug/L		1402	0.005
>	In	115		ug/L		271775	271775.068
	Sn	120	**1.062**	ug/L	3.638	7250	0.023
	Sb	121	**0.128**	ug/L	38.462	3063	0.002
	Sb	123		ug/L		2374	0.002
	Ba	135		ug/L		806511	2.060
	Ba	137	**562.317**	ug/L	2.350	1346709	3.440
	Ho	165		ug/L		56098	0.143
>	Lu	175		ug/L		391543	391542.776
	Tl	205	**1.243**	ug/L	1.308	18860	0.045
	Pb	208	**90.166**	ug/L	0.611	2053666	5.242
	Bi	209		ug/L		20069	0.051
	Th	232	**38.731**	ug/L	1.394	983826	2.497
	U	238	**6.380**	ug/L	1.300	171845	0.436

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978638
Sample Date/Time: Sunday, November 29, 2009 09:00:58
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978638.288

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.803**	ug/L	1.801	149906	0.062
	Be	9	**4.926**	ug/L	0.828	2567	0.001
	B	11	**13.603**	ug/L	2.606	8409	0.003
	Na	23	**2152.999**	ug/L	0.440	11133831	4.583
	Mg	24	**10477.184**	ug/L	2.635	36525257	15.081
	Al	27	**59384.807**	ug/L	4.907	291150976	120.254
	P	31	**806.514**	ug/L	1.804	212843	0.083
	K	39	**7182.028**	ug/L	2.714	45852316	18.702
	Ca	43	**7558.211**	ug/L	0.857	115635	0.048
>	Sc	45		ug/L		2420996	2420995.626
	Ti	47	**1098.845**	ug/L	1.428	809644	0.334
	V	51	**206.734**	ug/L	1.592	1510915	0.625
	Cr	52	**52.504**	ug/L	0.901	298273	0.123
	Cr	53		ug/L		81770	0.006
	Mn	55	**3032.655**	ug/L	1.804	28971450	11.967
	Fe	57	**104218.565**	ug/L	2.299	19027302	7.858
	Co	59	**38.549**	ug/L	1.863	282528	0.117
	Ni	60	**35.610**	ug/L	0.882	56974	0.023
	Cu	63		ug/L		106404	0.044
	Cu	65	**29.313**	ug/L	1.048	54350	0.022
	Zn	66	**121.980**	ug/L	0.824	143827	0.357
	Zn	67		ug/L		34199	0.063
	Zn	68		ug/L		105328	0.259
>	Ge	74		ug/L		402705	402704.502
	As	75	**26.043**	ug/L	0.301	29591	0.074
	Se	77		ug/L		2448	-0.002
	Se	82	**-0.028**	ug/L	1120.858	-36	-0.000
	Kr	83		ug/L		383	0.001
	Sr	88	**111.048**	ug/L	0.394	1542990	5.673
	Y	89		ug/L		1011735	3.720
	Mo	98	**3.293**	ug/L	2.543	10993	0.040
	Ag	107	**0.498**	ug/L	1.405	2900	0.010
	Cd	111	**1.583**	ug/L	5.320	2367	0.009
	Cd	114		ug/L		1025	0.003
>	In	115		ug/L		271925	271925.274
	Sn	120	**1.202**	ug/L	1.613	8063	0.026
	Sb	121	**-0.031**	ug/L	49.458	2369	-0.001
	Sb	123		ug/L		1764	-0.001
	Ba	135		ug/L		713413	1.824
	Ba	137	**501.658**	ug/L	0.290	1200528	3.069
	Ho	165		ug/L		61272	0.157
>	Lu	175		ug/L		391185	391184.627
	Tl	205	**1.071**	ug/L	1.374	16384	0.039
	Pb	208	**93.244**	ug/L	0.926	2121755	5.421
	Bi	209		ug/L		17502	0.044
	Th	232	**37.185**	ug/L	1.367	943846	2.398
	U	238	**5.511**	ug/L	2.442	148466	0.377

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978640
Sample Date/Time: Sunday, November 29, 2009 09:07:06
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978640.289

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**86.196**	ug/L	0.707	241581	0.099
	Be	9	**28.467**	ug/L	1.482	14873	0.006
	B	11	**65.365**	ug/L	1.644	34789	0.014
	Na	23	**3513.833**	ug/L	7.140	18251240	7.480
	Mg	24	**13114.581**	ug/L	1.985	45994769	18.877
	Al	27	**78363.284**	ug/L	5.854	386533968	158.686
	P	31	**1689.564**	ug/L	1.100	436371	0.174
	K	39	**10303.823**	ug/L	3.811	65956794	26.832
	Ca	43	**9701.337**	ug/L	1.260	149298	0.061
>	Sc	45		ug/L		2436496	2436496.263
	Ti	47	**1335.128**	ug/L	1.709	989965	0.406
	V	51	**206.321**	ug/L	2.549	1517488	0.623
	Cr	52	**86.194**	ug/L	1.935	492010	0.201
	Cr	53		ug/L		105061	0.015
	Mn	55	**4708.237**	ug/L	1.169	45266906	18.579
	Fe	57	**95570.347**	ug/L	1.862	17561080	7.206
	Co	59	**84.420**	ug/L	1.187	622417	0.255
	Ni	60	**64.626**	ug/L	1.432	103966	0.043
	Cu	63		ug/L		207477	0.085
	Cu	65	**56.256**	ug/L	0.984	104877	0.043
	Zn	66	**160.920**	ug/L	0.984	188492	0.471
	Zn	67		ug/L		42006	0.083
	Zn	68		ug/L		139843	0.347
>	Ge	74		ug/L		400175	400175.128
	As	75	**58.045**	ug/L	0.582	65926	0.166
	Se	77		ug/L		3214	0.000
	Se	82	**6.514**	ug/L	4.311	782	0.002
	Kr	83		ug/L		483	0.001
	Sr	88	**168.821**	ug/L	0.460	2316151	8.624
	Y	89		ug/L		954128	3.553
	Mo	98	**23.997**	ug/L	1.381	77603	0.288
	Ag	107	**25.662**	ug/L	0.515	141949	0.528
	Cd	111	**7.292**	ug/L	2.042	10581	0.039
	Cd	114		ug/L		18937	0.070
>	In	115		ug/L		268527	268527.043
	Sn	120	**9.989**	ug/L	2.326	58074	0.212
	Sb	121	**19.531**	ug/L	0.852	86998	0.315
	Sb	123		ug/L		66930	0.242
	Ba	135		ug/L		1051390	2.777
	Ba	137	**739.361**	ug/L	2.034	1712112	4.523
	Ho	165		ug/L		57345	0.151
>	Lu	175		ug/L		378583	378583.285
	Tl	205	**56.279**	ug/L	0.810	778773	2.054
	Pb	208	**220.846**	ug/L	1.957	4861263	12.839
	Bi	209		ug/L		20601	0.054
	Th	232	**65.028**	ug/L	1.045	1593020	4.193
	U	238	**36.165**	ug/L	2.260	936723	2.472

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		88.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978641
Sample Date/Time: Sunday, November 29, 2009 09:13:14
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978641.290

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**83.362**	ug/L	0.734	230497	0.096
	Be	9	**26.547**	ug/L	3.171	13683	0.006
	B	11	**64.438**	ug/L	2.898	33858	0.013
	Na	23	**3312.366**	ug/L	6.628	16988319	7.051
	Mg	24	**12318.137**	ug/L	4.442	42612800	17.730
	Al	27	**75326.429**	ug/L	5.032	366525962	152.536
	P	31	**1536.556**	ug/L	2.817	392479	0.159
	K	39	**9593.969**	ug/L	6.549	60666142	24.983
	Ca	43	**9067.617**	ug/L	0.795	137699	0.057
>	Sc	45		ug/L		2403856	2403855.552
	Ti	47	**1246.998**	ug/L	1.128	912234	0.379
	V	51	**163.049**	ug/L	2.861	1182857	0.493
	Cr	52	**80.691**	ug/L	0.923	454527	0.189
	Cr	53		ug/L		100982	0.014
	Mn	55	**1824.838**	ug/L	1.452	17311705	7.201
	Fe	57	**72474.742**	ug/L	7.366	13133181	5.465
	Co	59	**53.913**	ug/L	1.454	392221	0.163
	Ni	60	**60.016**	ug/L	1.156	95266	0.040
	Cu	63		ug/L		197695	0.082
	Cu	65	**53.786**	ug/L	2.166	98910	0.041
	Zn	66	**151.761**	ug/L	2.707	177299	0.444
	Zn	67		ug/L		38199	0.074
	Zn	68		ug/L		129510	0.322
>	Ge	74		ug/L		399184	399184.157
	As	75	**47.499**	ug/L	1.933	53751	0.135
	Se	77		ug/L		3080	0.000
	Se	82	**6.148**	ug/L	8.957	734	0.002
	Kr	83		ug/L		488	0.001
	Sr	88	**154.581**	ug/L	3.986	2113603	7.897
	Y	89		ug/L		870854	3.255
	Mo	98	**22.093**	ug/L	2.295	71183	0.265
	Ag	107	**24.535**	ug/L	1.630	135211	0.505
	Cd	111	**6.725**	ug/L	0.740	9724	0.036
	Cd	114		ug/L		17582	0.065
>	In	115		ug/L		267526	267525.690
	Sn	120	**10.236**	ug/L	0.972	59256	0.217
	Sb	121	**17.688**	ug/L	0.793	78725	0.285
	Sb	123		ug/L		61227	0.222
	Ba	135		ug/L		780317	2.071
	Ba	137	**561.574**	ug/L	1.201	1294107	3.435
	Ho	165		ug/L		51160	0.136
>	Lu	175		ug/L		376698	376697.692
	Tl	205	**53.879**	ug/L	0.745	741856	1.967
	Pb	208	**160.463**	ug/L	0.399	3515347	9.329
	Bi	209		ug/L		18723	0.049
	Th	232	**60.083**	ug/L	0.852	1465035	3.874
	U	238	**33.646**	ug/L	0.619	867339	2.300

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		88.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201978639
Sample Date/Time: Sunday, November 29, 2009 09:19:21
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925492|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\1201978639.291

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.887**	ug/L	2.355	30683	0.013
	Be	9	**0.904**	ug/L	3.067	483	0.000
	B	11	**4.077**	ug/L	7.210	3618	0.001
	Na	23	**533.921**	ug/L	12.978	2803828	1.137
	Mg	24	**2309.001**	ug/L	7.416	8098229	3.324
	Al	27	**12554.327**	ug/L	2.341	61921327	25.423
	P	31	**153.967**	ug/L	1.413	50013	0.016
	K	39	**1600.222**	ug/L	7.411	10724592	4.167
	Ca	43	**1716.699**	ug/L	0.684	26599	0.011
>	Sc	45		ug/L		2435239	2435239.455
	Ti	47	**220.606**	ug/L	1.390	164123	0.067
	V	51	**30.272**	ug/L	1.212	221753	0.091
	Cr	52	**11.185**	ug/L	1.558	64797	0.026
	Cr	53		ug/L		65541	-0.001
	Mn	55	**503.504**	ug/L	0.572	4841082	1.987
	Fe	57	**15866.135**	ug/L	0.608	2919320	1.196
	Co	59	**7.975**	ug/L	0.971	58969	0.024
	Ni	60	**7.972**	ug/L	1.097	12902	0.005
	Cu	63		ug/L		25927	0.011
	Cu	65	**6.887**	ug/L	1.180	12929	0.005
	Zn	66	**28.200**	ug/L	1.095	34884	0.082
	Zn	67		ug/L		15004	0.014
	Zn	68		ug/L		26605	0.060
>	Ge	74		ug/L		420754	420754.197
	As	75	**3.276**	ug/L	6.089	3599	0.009
	Se	77		ug/L		2991	-0.001
	Se	82	**-0.140**	ug/L	128.912	-52	-0.000
	Kr	83		ug/L		185	0.000
	Sr	88	**26.865**	ug/L	1.445	384914	1.372
	Y	89		ug/L		202968	0.724
	Mo	98	**0.450**	ug/L	4.611	1762	0.005
	Ag	107	**0.077**	ug/L	2.257	560	0.002
	Cd	111	**0.326**	ug/L	5.115	545	0.002
	Cd	114		ug/L		304	0.001
>	In	115		ug/L		280189	280188.914
	Sn	120	**0.182**	ug/L	3.994	2238	0.004
	Sb	121	**-0.221**	ug/L	15.048	1581	-0.004
	Sb	123		ug/L		1217	-0.003
	Ba	135		ug/L		175983	0.437
	Ba	137	**125.109**	ug/L	1.701	308527	0.765
	Ho	165		ug/L		12055	0.030
>	Lu	175		ug/L		402986	402986.195
	Tl	205	**0.297**	ug/L	5.986	5489	0.011
	Pb	208	**19.410**	ug/L	0.627	456072	1.128
	Bi	209		ug/L		4447	0.010
	Th	232	**8.138**	ug/L	3.023	217542	0.525
	U	238	**1.263**	ug/L	2.537	35951	0.086

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241559002
Sample Date/Time: Sunday, November 29, 2009 09:25:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925492|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\241559002.292

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**73.706**	ug/L	1.034	205579	0.085
	Be	9	**3.082**	ug/L	3.285	1612	0.001
	B	11	**17.243**	ug/L	1.606	10265	0.004
	Na	23	**2042.521**	ug/L	4.233	10575462	4.348
	Mg	24	**10854.023**	ug/L	4.597	37878045	15.623
	Al	27	**56388.644**	ug/L	1.856	276834903	114.187
	P	31	**771.468**	ug/L	1.605	204374	0.080
	K	39	**6726.538**	ug/L	5.014	43030635	17.516
	Ca	43	**16604.133**	ug/L	1.332	254107	0.105
>	Sc	45		ug/L		2424456	2424456.038
	Ti	47	**863.807**	ug/L	0.894	637551	0.263
	V	51	**77.960**	ug/L	2.341	569945	0.236
	Cr	52	**41.563**	ug/L	3.760	236633	0.097
	Cr	53		ug/L		75178	0.003
	Mn	55	**934.867**	ug/L	1.483	8945536	3.689
	Fe	57	**58523.870**	ug/L	1.923	10702578	4.413
	Co	59	**15.975**	ug/L	2.077	117362	0.048
	Ni	60	**27.131**	ug/L	1.149	43487	0.018
	Cu	63		ug/L		98827	0.041
	Cu	65	**26.704**	ug/L	1.758	49586	0.020
	Zn	66	**196.474**	ug/L	1.688	229605	0.575
	Zn	67		ug/L		44203	0.089
	Zn	68		ug/L		161695	0.402
>	Ge	74		ug/L		399357	399357.468
	As	75	**9.349**	ug/L	2.130	10332	0.027
	Se	77		ug/L		2629	-0.001
	Se	82	**-0.583**	ug/L	59.934	-105	-0.000
	Kr	83		ug/L		378	0.001
	Sr	88	**117.686**	ug/L	2.260	1642445	6.012
	Y	89		ug/L		982740	3.597
	Mo	98	**4.215**	ug/L	0.879	14069	0.051
	Ag	107	**0.497**	ug/L	1.109	2905	0.010
	Cd	111	**1.669**	ug/L	2.917	2505	0.009
	Cd	114		ug/L		1286	0.004
>	In	115		ug/L		273198	273198.055
	Sn	120	**2.035**	ug/L	0.622	12936	0.043
	Sb	121	**0.457**	ug/L	3.335	4529	0.007
	Sb	123		ug/L		3501	0.006
	Ba	135		ug/L		551410	1.446
	Ba	137	**399.981**	ug/L	1.050	933227	2.447
	Ho	165		ug/L		59362	0.156
>	Lu	175		ug/L		381370	381370.281
	Tl	205	**1.382**	ug/L	1.319	20304	0.050
	Pb	208	**115.323**	ug/L	1.573	2558058	6.705
	Bi	209		ug/L		32430	0.084
	Th	232	**27.631**	ug/L	1.670	685241	1.782
	U	238	**3.383**	ug/L	1.982	89287	0.231

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, November 29, 2009 09:31:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091128\QC Std 6.293

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.671**	**ug/L**	1.432	140962	0.057
	Be	9	**50.047**	**ug/L**	0.673	26454	0.011
	B	11	**100.145**	**ug/L**	0.555	53106	0.021
	Na	23	**5077.384**	**ug/L**	2.129	26686686	10.808
	Mg	24	**5113.989**	**ug/L**	3.931	18159584	7.361
	Al	27	**4731.879**	**ug/L**	3.907	23651705	9.582
	P	31	**4920.212**	**ug/L**	0.520	1264195	0.508
	K	39	**5018.312**	**ug/L**	6.239	32802042	13.068
	Ca	43	**4974.327**	**ug/L**	1.486	77589	0.031
>	Sc	45		**ug/L**		2465646	2465645.839
	Ti	47	**49.812**	**ug/L**	3.352	38117	0.015
	V	51	**50.217**	**ug/L**	1.794	373122	0.152
	Cr	52	**50.575**	**ug/L**	0.587	292655	0.118
	Cr	53		**ug/L**		100637	0.013
	Mn	55	**51.157**	**ug/L**	0.771	500508	0.202
	Fe	57	**5153.954**	**ug/L**	0.217	964325	0.389
	Co	59	**49.004**	**ug/L**	0.791	365723	0.148
	Ni	60	**49.502**	**ug/L**	0.171	80620	0.033
	Cu	63		**ug/L**		194681	0.079
	Cu	65	**50.428**	**ug/L**	2.167	95136	0.039
	Zn	66	**50.022**	**ug/L**	1.000	62845	0.146
	Zn	67		**ug/L**		19682	0.024
	Zn	68		**ug/L**		44145	0.100
>	Ge	74		**ug/L**		428338	428337.942
	As	75	**47.379**	**ug/L**	1.523	57534	0.135
	Se	77		**ug/L**		8242	0.012
	Se	82	**50.615**	**ug/L**	1.197	6741	0.016
	Kr	83		**ug/L**		132	0.000
	Sr	88	**52.224**	**ug/L**	0.214	742289	2.668
	Y	89		**ug/L**		249	0.000
	Mo	98	**50.016**	**ug/L**	1.351	167219	0.600
	Ag	107	**51.915**	**ug/L**	1.648	297320	1.069
	Cd	111	**49.788**	**ug/L**	1.234	74487	0.268
	Cd	114		**ug/L**		176849	0.636
>	In	115		**ug/L**		278085	278084.960
	Sn	120	**51.352**	**ug/L**	2.559	304364	1.091
	Sb	121	**47.055**	**ug/L**	13.194	213578	0.758
	Sb	123		**ug/L**		164147	0.583
	Ba	135		**ug/L**		70712	0.178
	Ba	137	**51.808**	**ug/L**	1.433	125785	0.317
	Ho	165		**ug/L**		83	0.000
>	Lu	175		**ug/L**		396589	396588.923
	Tl	205	**52.497**	**ug/L**	1.149	761068	1.916
	Pb	208	**53.026**	**ug/L**	1.027	1223841	3.083
	Bi	209		**ug/L**		334	0.000
	Th	232	**52.236**	**ug/L**	1.855	1341825	3.368
	U	238	**52.661**	**ug/L**	1.590	1428464	3.599

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	99.342				
	Be	9	100.094				
	B	11	100.145				
	Na	23	101.548				
	Mg	24	102.280				
	Al	27	93.701				
	P	31	98.404				
	K	39	100.366				
	Ca	43	99.487				
>	Sc	45		104.9			
	Ti	47	99.624				
	V	51	100.433				
	Cr	52	101.149				
	Cr	53					
	Mn	55	102.314				
	Fe	57	103.079				
	Co	59	98.008				
	Ni	60	99.003				
	Cu	63					
	Cu	65	100.856				
	Zn	66	100.043				
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75	94.757				
	Se	77					
	Se	82	101.229				
	Kr	83					
	Sr	88	104.449				
	Y	89					
	Mo	98	100.032				
	Ag	107	103.830				
	Cd	111	99.577				
	Cd	114					
>	In	115		96.2			
	Sn	120	102.703				
	Sb	121	94.111				
	Sb	123					
	Ba	135					
	Ba	137	103.615				
	Ho	165					
>	Lu	175		92.9			
	Tl	205	104.993				
	Pb	208	106.051				
	Bi	209					
	Th	232	104.471				
	U	238	105.322				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, November 29, 2009 09:37:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091126\QC Std 7.294

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.020**	ug/L	7.103	274	0.000
	Be	9	**0.015**	ug/L	77.625	19	0.000
	B	11	**1.460**	ug/L	36.673	2268	0.000
	Na	23	**-0.263**	ug/L	326.666	36380	-0.001
	Mg	24	**0.029**	ug/L	1459.296	8669	0.000
	Al	27	**-0.116**	ug/L	777.389	21016	-0.000
	P	31	**-3.386**	ug/L	24.778	10354	-0.000
	K	39	**0.403**	ug/L	1094.331	578840	0.001
	Ca	43	**-1.236**	ug/L	72.014	211	-0.000
>	Sc	45		ug/L		2413907	2413907.227
	Ti	47	**-0.223**	ug/L	28.141	593	-0.000
	V	51	**0.234**	ug/L	348.489	784	0.001
	Cr	52	**-0.012**	ug/L	439.810	1050	-0.000
	Cr	53		ug/L		67530	-0.000
	Mn	55	**0.039**	ug/L	25.541	3082	0.000
	Fe	57	**-0.932**	ug/L	127.730	5862	-0.000
	Co	59	**0.007**	ug/L	25.458	273	0.000
	Ni	60	**0.005**	ug/L	33.244	102	0.000
	Cu	63		ug/L		226	-0.000
	Cu	65	**-0.002**	ug/L	162.749	107	-0.000
	Zn	66	**0.003**	ug/L	255.359	191	0.000
	Zn	67		ug/L		10115	0.002
	Zn	68		ug/L		1229	-0.000
>	Ge	74		ug/L		424323	424323.061
	As	75	**-0.012**	ug/L	910.494	-348	-0.000
	Se	77		ug/L		3580	0.001
	Se	82	**0.151**	ug/L	97.950	-14	0.000
	Kr	83		ug/L		105	-0.000
	Sr	88	**0.005**	ug/L	15.503	489	0.000
	Y	89		ug/L		103	-0.000
	Mo	98	**0.046**	ug/L	52.993	405	0.001
	Ag	107	**0.007**	ug/L	16.516	156	0.000
	Cd	111	**0.002**	ug/L	29.005	59	0.000
	Cd	114		ug/L		95	0.000
>	In	115		ug/L		280611	280611.081
	Sn	120	**0.214**	ug/L	22.856	2434	0.005
	Sb	121	**0.867**	ug/L	40.709	6502	0.014
	Sb	123		ug/L		4912	0.010
	Ba	135		ug/L		72	0.000
	Ba	137	**0.008**	ug/L	51.727	131	0.000
	Ho	165		ug/L		38	-0.000
>	Lu	175		ug/L		410518	410518.343
	Tl	205	**0.023**	ug/L	55.684	1491	0.001
	Pb	208	**0.007**	ug/L	55.345	1531	0.000
	Bi	209		ug/L		260	-0.000
	Th	232	**0.118**	ug/L	48.431	9309	0.008
	U	238	**0.015**	ug/L	31.574	1605	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/07/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120709S1.SIF Results Data Set Name: 120709S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/07/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0043	09:54:40	No
2			0.0044	0.0044	09:55:15	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.5786			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/07/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0056	09:56:37	No
2			0.0017	0.0060	09:57:13	No
Mean:			0.0014			
SD :			0.0003			
%RSD:			21.7220			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00720
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/07/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0041	0.0085	09:58:35	No
2			0.0040	0.0084	09:59:11	No
Mean:			0.0041			
SD :			0.0001			
%RSD:			1.6133			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99849 Slope: 0.00824
Intercept : -0.00008

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/07/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0165	0.0209	10:00:35	No
2			0.0168	0.0211	10:01:10	No
Mean:			0.0166			
SD :			0.0002			
%RSD:			1.1765			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99992 Slope: 0.00837
Intercept : -0.00010

==========
Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/07/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0406	0.0449	10:02:36	No
2			0.0407	0.0451	10:03:10	No
Mean:			0.0406			
SD :			0.0001			
%RSD:			0.2535			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99993 Slope: 0.00815
Intercept : 0.00001

==========
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/07/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0801	0.0845	10:04:36	No
2			0.0817	0.0860	10:05:11	No
Mean:			0.0809			
SD :			0.0011			
%RSD:			1.3799			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00809
Intercept : 0.00008

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0014	0.200	0.168	0.0003	21.7
S0.5	0.0041	0.500	0.497	0.0001	1.6
S2.0	0.0166	2.000	2.047	0.0002	1.2
S5.0	0.0406	5.000	5.011	0.0001	0.3
S10	0.0809	10.000	9.986	0.0011	1.4
Calib Blank	0.0044	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00809 Intercept: 0.0001

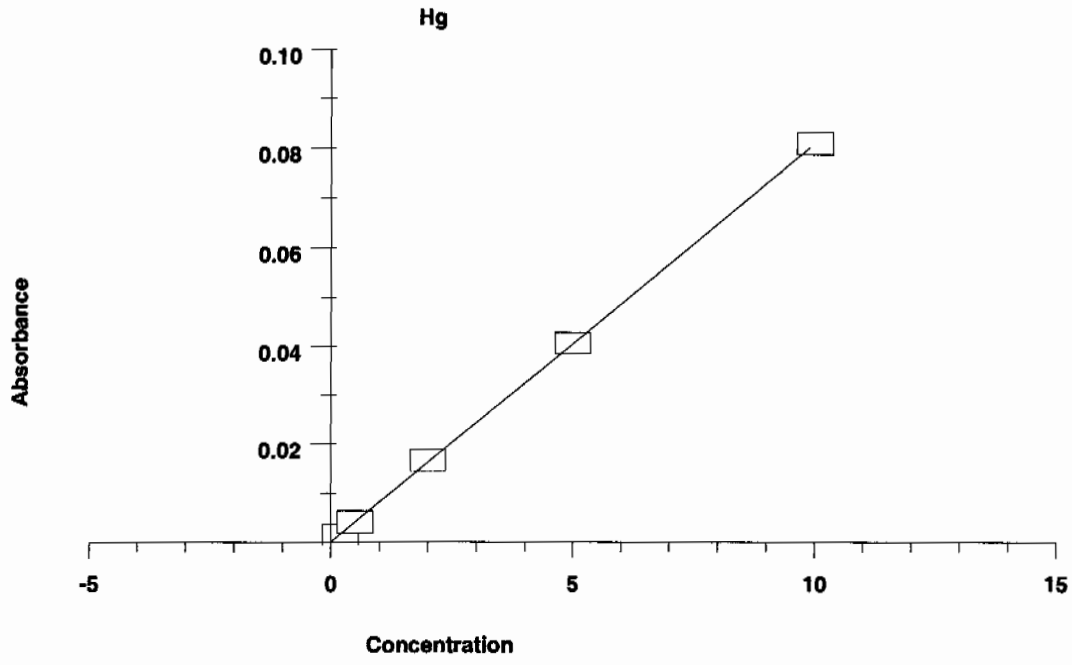

==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/07/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0421	0.0465	10:06:40	No
2	5.181	5.181	0.0420	0.0464	10:07:15	No
Mean:	5.188	5.188	0.0421			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.2	0.2	0.2028			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/07/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:08:38	No
2	-0.104	-0.104	-0.0008	0.0036	10:09:13	No
Mean:	-0.096	-0.096	-0.0007			
SD :	0.0124	0.0124	0.0001			
%RSD:	13.0	13.0	14.4602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/07/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0014	0.0057	10:10:35	No
2	0.148	0.148	0.0013	0.0056	10:11:10	No
Mean:	0.155	0.155	0.0013			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.9	5.9	5.5112			

QC value within specified limits.

==========
Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0420	0.0463	10:12:35	No
2	5.181	5.181	0.0420	0.0464	10:13:09	No
Mean:	5.178	5.178	0.0420			
SD :	0.0040	0.0040	0.0000			
%RSD:						

QC value within specified limits.

==========
Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0006	0.0037	10:14:37	No
2	-0.106	-0.106	-0.0008	0.0036	10:15:12	No
Mean:	-0.098	-0.098	-0.0007			
SD :	0.0123	0.0123	0.0001			
%RSD:	12.5	12.5	13.8998			

QC value within specified limits.

==========
Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978905|i||925609|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0039	10:16:38	No
2	-0.093	-0.093	-0.0007	0.0037	10:17:13	No
Mean:	-0.077	-0.077	-0.0005			
SD :	0.0218	0.0218	0.0002			
%RSD:	28.2	28.2	32.1293			

==========
Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978906|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.940	3.940	0.0320	0.0363	10:18:37	No
2	3.939	3.939	0.0319	0.0363	10:19:12	No
Mean:	3.939	3.939	0.0320			
SD :	0.0008	0.0008	0.0000			
%RSD:						

==========
Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241604001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0057	10:20:38	No
2	0.157	0.157	0.0014	0.0057	10:21:14	No
Mean:	0.158	0.158	0.0014			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.5109			

==========
Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241604002|i|||

%RSD: 7.6 7.6 8.0893

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/07/2009
Sample ID: 241608002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0013	0.0057	10:34:28	No
2	0.136	0.136	0.0012	0.0055	10:35:03	No
Mean:	0.143	0.143	0.0012			
SD :	0.0106	0.0106	0.0001			
%RSD:	7.4	7.4	6.9743			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.376	5.376	0.0436	0.0479	10:36:28	No
2	5.389	5.389	0.0437	0.0481	10:37:02	No
Mean:	5.383	5.383	0.0436			
SD :	0.0096	0.0096	0.0001			
%RSD:	0.2	0.2	0.1786			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:38:30	No
2	-0.095	-0.095	-0.0007	0.0037	10:39:04	No
Mean:	-0.091	-0.091	-0.0007			
SD :	0.0058	0.0058	0.0000			
%RSD:	6.4	6.4	7.1360			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201977155|i||924862|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0038	10:40:29	No
2	-0.083	-0.083	-0.0006	0.0038	10:41:04	No
Mean:	-0.083	-0.083	-0.0006			
SD :	0.0010	0.0010	0.0000			
%RSD:	1.2	1.2	1.4027			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201977156|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.825	3.825	0.0310	0.0354	10:42:28	No
2	3.817	3.817	0.0310	0.0353	10:43:02	No
Mean:	3.821	3.821	0.0310			
SD :	0.0054	0.0054	0.0000			
%RSD:	0.1	0.1	0.1420			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/07/2009
Sample ID: 241417001|i|||

%RSD:	1.9	1.9	1.8136

==========

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 12/07/2009
Sample ID: 241419005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.410	0.410	0.0034	0.0078	10:56:30	No
2	0.392	0.392	0.0033	0.0076	10:57:05	No
Mean:	0.401	0.401	0.0033			
SD :	0.0126	0.0126	0.0001			
%RSD:	3.1	3.1	3.0692			

==========

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 12/07/2009
Sample ID: 241419006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.446	0.446	0.0037	0.0080	10:58:33	No
2	0.430	0.430	0.0036	0.0079	10:59:07	No
Mean:	0.438	0.438	0.0036			
SD :	0.0109	0.0109	0.0001			
%RSD:	2.5	2.5	2.4393			

==========

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.212	5.212	0.0423	0.0466	11:00:33	No
2	5.240	5.240	0.0425	0.0468	11:01:08	No
Mean:	5.226	5.226	0.0424			
SD :	0.0193	0.0193	0.0002			
%RSD:	0.4	0.4	0.3682			

QC value within specified limits.

==========

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.122	-0.122	-0.0009	0.0035	11:02:36	No
2	-0.111	-0.111	-0.0008	0.0035	11:03:10	No
Mean:	-0.116	-0.116	-0.0009			
SD :	0.0079	0.0079	0.0001			
%RSD:	6.8	6.8	7.3534			

QC value within specified limits.

==========

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 12/07/2009
Sample ID: 241419007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.387	0.387	0.0032	0.0076	11:04:34	No
2	0.368	0.368	0.0031	0.0074	11:05:09	No
Mean:	0.377	0.377	0.0031			
SD :	0.0133	0.0133	0.0001			
%RSD:	3.5	3.5	3.4418			

==========

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 12/07/2009
Sample ID: 241419008|i|||

%RSD: 1.8 1.8 1.7307

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/07/2009
Sample ID: 241419014|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0000	0.0043	11:18:08	No
2	-0.016	-0.016	-0.0001	0.0043	11:18:43	No
Mean:	-0.015	-0.015	0.0000			
SD :	0.0014	0.0014	0.0000			
%RSD:	9.3	9.3	24.9239			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/07/2009
Sample ID: 241419015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.432	0.432	0.0036	0.0079	11:20:06	No
2	0.415	0.415	0.0034	0.0078	11:20:41	No
Mean:	0.423	0.423	0.0035			
SD :	0.0118	0.0118	0.0001			
%RSD:	2.8	2.8	2.7227			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/07/2009
Sample ID: 241419016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0045	11:22:05	No
2	0.006	0.006	0.0001	0.0045	11:22:40	No
Mean:	0.004	0.004	0.0001			
SD :	0.0027	0.0027	0.0000			
%RSD:	70.3	70.3	20.4054			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.803	5.803	0.0470	0.0514	11:24:05	No
2	5.786	5.786	0.0469	0.0513	11:24:40	No
Mean:	5.795	5.795	0.0470			
SD :	0.0123	0.0123	0.0001			
%RSD:	0.2	0.2	0.2123			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0009	0.0034	11:26:08	No
2	-0.150	-0.150	-0.0011	0.0032	11:26:43	No
Mean:	-0.136	-0.136	-0.0010			
SD :	0.0186	0.0186	0.0002			
%RSD:	13.6	13.6	14.6683			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/07/2009
Sample ID: 241425001|i|||

%RSD: 0.9 0.9 0.9205

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/07/2009
Sample ID: 1201978947|i||925629|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0007	0.0036	11:40:13	No
2	-0.115	-0.115	-0.0009	0.0035	11:40:47	No
Mean:	-0.107	-0.107	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	10.2	10.2	11.2501			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/07/2009
Sample ID: 1201978948|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.055	4.055	0.0329	0.0373	11:42:08	No
2	4.065	4.065	0.0330	0.0373	11:42:43	No
Mean:	4.060	4.060	0.0329			
SD :	0.0066	0.0066	0.0001			
%RSD:	0.2	0.2	0.1622			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/07/2009
Sample ID: 241539001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.375	0.375	0.0031	0.0075	11:44:03	No
2	0.392	0.392	0.0032	0.0076	11:44:38	No
Mean:	0.383	0.383	0.0032			
SD :	0.0119	0.0119	0.0001			
%RSD:	3.1	3.1	3.0346			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/07/2009
Sample ID: 241539002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0012	0.0056	11:45:59	No
2	0.120	0.120	0.0010	0.0054	11:46:34	No
Mean:	0.132	0.132	0.0011			
SD :	0.0167	0.0167	0.0001			
%RSD:	12.7	12.7	11.8118			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.520	5.520	0.0447	0.0491	11:47:58	No
2	5.454	5.454	0.0442	0.0486	11:48:33	No
Mean:	5.487	5.487	0.0445			
SD :	0.0470	0.0470	0.0004			
%RSD:	0.9	0.9	0.8544			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0043	11:50:01	No
2	-0.023	-0.023	-0.0001	0.0042	11:50:36	No
Mean:	-0.022	-0.022	-0.0001			
SD :	0.0019	0.0019	0.0000			
%RSD:	8.7	8.7	15.3097			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/07/2009
Sample ID: 241539003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.086	0.086	0.0008	0.0051	11:52:01	No
2	0.084	0.084	0.0008	0.0051	11:52:37	No
Mean:	0.085	0.085	0.0008			
SD :	0.0009	0.0009	0.0000			
%RSD:	1.1	1.1	0.9509			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/07/2009
Sample ID: 241539004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.221	0.221	0.0019	0.0062	11:53:59	No
2	0.209	0.209	0.0018	0.0061	11:54:34	No
Mean:	0.215	0.215	0.0018			
SD :	0.0083	0.0083	0.0001			
%RSD:	3.8	3.8	3.6864			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/07/2009
Sample ID: 241541001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.546	0.546	0.0045	0.0089	11:55:56	No
2	0.545	0.545	0.0045	0.0089	11:56:31	No
Mean:	0.546	0.546	0.0045			
SD :	0.0002	0.0002	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/07/2009
Sample ID: 1201978949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.487	0.487	0.0040	0.0084	11:57:54	No
2	0.483	0.483	0.0040	0.0083	11:58:29	No
Mean:	0.485	0.485	0.0040			
SD :	0.0026	0.0026	0.0000			
%RSD:	0.5	0.5	0.5236			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/07/2009
Sample ID: 1201978950|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	11:59:52	No
2	3.254	3.254	0.0264	0.0308	12:00:27	No
Mean:	3.240	3.240	0.0263			
SD :	0.0199	0.0199	0.0002			

```
%RSD:        0.6        0.6    0.6129

==========================================================================================
Element: Hg    Seq. No.: 65       AS Loc.: 57   Date: 12/07/2009
Sample ID: 1201978952|i|||MSD
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        3.158     3.158    0.0256     0.0300   12:01:51  No
 2        3.162     3.162    0.0257     0.0300   12:02:27  No
Mean:     3.160     3.160    0.0256
SD  :    0.0032    0.0032    0.0000
%RSD:       0.1        0.1    0.1021

==========================================================================================
Element: Hg    Seq. No.: 66       AS Loc.: 58   Date: 12/07/2009
Sample ID: 1201978951|i|5||SDILT
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.048    -0.048   -0.0003     0.0040   12:03:50  No
 2       -0.044    -0.044   -0.0003     0.0041   12:04:26  No
Mean:    -0.046    -0.046   -0.0003
SD  :    0.0026    0.0026    0.0000
%RSD:       5.6        5.6    7.1103

==========================================================================================
Element: Hg    Seq. No.: 67       AS Loc.: 59   Date: 12/07/2009
Sample ID: 241541002|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.289     0.289    0.0024     0.0068   12:05:49  No
 2        0.275     0.275    0.0023     0.0067   12:06:24  No
Mean:     0.282     0.282    0.0024
SD  :    0.0100    0.0100    0.0001
%RSD:       3.6        3.6    3.4438

==========================================================================================
Element: Hg    Seq. No.: 68       AS Loc.: 60   Date: 12/07/2009
Sample ID: 241541003|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.449     0.449    0.0037     0.0081   12:07:49  No
 2        0.441     0.441    0.0036     0.0080   12:08:24  No
Mean:     0.445     0.445    0.0037
SD  :    0.0062    0.0062    0.0001
%RSD:       1.4        1.4    1.3659

==========================================================================================
Element: Hg    Seq. No.: 69       AS Loc.: 61   Date: 12/07/2009
Sample ID: 241541004|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.301     0.301    0.0025     0.0069   12:09:50  No
 2        0.274     0.274    0.0023     0.0067   12:10:25  No
Mean:     0.287     0.287    0.0024
SD  :    0.0190    0.0190    0.0002
%RSD:       6.6        6.6    6.4003

==========================================================================================
Element: Hg    Seq. No.: 70       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
```

#	µg/L	µg/L	Signal	Height		Stored
1	5.542	5.542	0.0449	0.0493	12:11:51	No
2	5.592	5.592	0.0453	0.0497	12:12:25	No
Mean:	5.567	5.567	0.0451			
SD :	0.0353	0.0353	0.0003			
%RSD:	0.6	0.6	0.6332			

QC value within specified limits.

==========

Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0045	12:13:53	No
2	-0.005	-0.005	0.0000	0.0044	12:14:27	No
Mean:	-0.001	-0.001	0.0001			
SD :	0.0060	0.0060	0.0000			
%RSD:	918.9	918.9	67.3940			

QC value within specified limits.

==========

Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 12/07/2009
Sample ID: 241541005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0046	12:15:55	No
2	0.006	0.006	0.0001	0.0045	12:16:29	No
Mean:	0.010	0.010	0.0002			
SD :	0.0064	0.0064	0.0001			
%RSD:	63.0	63.0	32.5458			

==========

Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 12/07/2009
Sample ID: 241541006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.373	2.373	0.0193	0.0236	12:17:52	No
2	2.365	2.365	0.0192	0.0236	12:18:27	No
Mean:	2.369	2.369	0.0192			
SD :	0.0056	0.0056	0.0000			
%RSD:	0.2	0.2	0.2355			

==========

Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 12/07/2009
Sample ID: 241541007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.314	0.314	0.0026	0.0070	12:19:46	No
2	0.309	0.309	0.0026	0.0069	12:20:21	No
Mean:	0.312	0.312	0.0026			
SD :	0.0032	0.0032	0.0000			
%RSD:	1.0	1.0	0.9999			

==========

Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 12/07/2009
Sample ID: 241541008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.619	0.619	0.0051	0.0094	12:21:41	No
2	0.621	0.621	0.0051	0.0095	12:22:16	No
Mean:	0.620	0.620	0.0051			
SD :	0.0014	0.0014	0.0000			

#	µg/L	µg/L	Signal	Height		Stored
1	0.416	0.416	0.0034	0.0078	12:33:22	No
2	0.409	0.409	0.0034	0.0077	12:33:57	No
Mean:	0.412	0.412	0.0034			
SD :	0.0047	0.0047	0.0000			
%RSD:	1.1	1.1	1.1031			

==========

Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.554	5.554	0.0450	0.0494	12:35:22	No
2	5.529	5.529	0.0448	0.0492	12:35:57	No
Mean:	5.541	5.541	0.0449			
SD :	0.0183	0.0183	0.0001			
%RSD:	0.3	0.3	0.3293			

QC value within specified limits.

==========

Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0002	0.0042	12:37:25	No
2	-0.042	-0.042	-0.0003	0.0041	12:38:00	No
Mean:	-0.036	-0.036	-0.0002			
SD :	0.0078	0.0078	0.0001			
%RSD:	21.5	21.5	29.1602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 12/07/2009
Sample ID: 241541015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.317	0.317	0.0026	0.0070	12:39:26	No
2	0.302	0.302	0.0025	0.0069	12:40:01	No
Mean:	0.309	0.309	0.0026			
SD :	0.0107	0.0107	0.0001			
%RSD:	3.4	3.4	3.3438			

==========

Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 12/07/2009
Sample ID: 241541016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0036	0.0080	12:41:25	No
2	0.437	0.437	0.0036	0.0080	12:41:59	No
Mean:	0.438	0.438	0.0036			
SD :	0.0022	0.0022	0.0000			
%RSD:	0.5	0.5	0.4829			

==========

Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 12/07/2009
Sample ID: 1201978959|i||925634|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.055	-0.055	-0.0004	0.0040	12:43:23	No
2	-0.103	-0.103	-0.0008	0.0036	12:43:58	No
Mean:	-0.079	-0.079	-0.0006			
SD :	0.0336	0.0336	0.0003			

%RSD: 42.5 42.5 48.3458

==========

Element: Hg Seq. No.: 87 AS Loc.: 75 Date: 12/07/2009
Sample ID: 1201978960|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.362	4.362	0.0354	0.0397	12:45:23	No
2	4.364	4.364	0.0354	0.0398	12:45:58	No
Mean:	4.363	4.363	0.0354			
SD :	0.0016	0.0016	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 88 AS Loc.: 76 Date: 12/07/2009
Sample ID: 241559001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.378	0.378	0.0031	0.0075	12:47:23	No
2	0.381	0.381	0.0032	0.0075	12:47:57	No
Mean:	0.379	0.379	0.0031			
SD :	0.0023	0.0023	0.0000			
%RSD:	0.6	0.6	0.5805			

==========

Element: Hg Seq. No.: 89 AS Loc.: 77 Date: 12/07/2009
Sample ID: 241559002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.289	0.289	0.0024	0.0068	12:49:23	No
2	0.282	0.282	0.0024	0.0067	12:49:59	No
Mean:	0.286	0.286	0.0024			
SD :	0.0050	0.0050	0.0000			
%RSD:	1.8	1.8	1.7087			

==========

Element: Hg Seq. No.: 90 AS Loc.: 78 Date: 12/07/2009
Sample ID: 241611001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.081	-0.081	-0.0006	0.0038	12:51:21	No
2	-0.080	-0.080	-0.0006	0.0038	12:51:56	No
Mean:	-0.081	-0.081	-0.0006			
SD :	0.0005	0.0005	0.0000			
%RSD:	0.6	0.6	0.6664			

==========

Element: Hg Seq. No.: 91 AS Loc.: 79 Date: 12/07/2009
Sample ID: 1201978961|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.060	-0.060	-0.0004	0.0040	12:53:16	No
2	-0.066	-0.066	-0.0005	0.0039	12:53:51	No
Mean:	-0.063	-0.063	-0.0004			
SD :	0.0043	0.0043	0.0000			
%RSD:	6.8	6.8	8.0295			

==========

Element: Hg Seq. No.: 92 AS Loc.: 80 Date: 12/07/2009
Sample ID: 1201978962|i|||MS

Repl	SampleConc	StndConc	BlnkCorr	Peak	Time	Peak

#	µg/L	µg/L	Signal	Height		Stored
1	2.691	2.691	0.0219	0.0262	12:55:11	No
2	2.692	2.692	0.0219	0.0262	12:55:46	No
Mean:	2.692	2.692	0.0219			
SD :	0.0005	0.0005	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 93 AS Loc.: 81 Date: 12/07/2009
Sample ID: 1201978964|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.666	2.666	0.0217	0.0260	12:57:06	No
2	2.667	2.667	0.0217	0.0260	12:57:40	No
Mean:	2.667	2.667	0.0217			
SD :	0.0007	0.0007	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 94 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.672	5.672	0.0460	0.0503	12:59:04	No
2	5.684	5.684	0.0461	0.0504	12:59:39	No
Mean:	5.678	5.678	0.0460			
SD :	0.0086	0.0086	0.0001			
%RSD:	0.2	0.2	0.1509			

QC value within specified limits.

==========

Element: Hg Seq. No.: 95 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.077	-0.077	-0.0005	0.0038	13:01:07	No
2	-0.085	-0.085	-0.0006	0.0037	13:01:41	No
Mean:	-0.081	-0.081	-0.0006			
SD :	0.0061	0.0061	0.0000			
%RSD:	7.6	7.6	8.5833			

QC value within specified limits.

==========

Element: Hg Seq. No.: 96 AS Loc.: 82 Date: 12/07/2009
Sample ID: 1201978963|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.196	-0.196	-0.0015	0.0029	13:03:06	No
2	-0.201	-0.201	-0.0015	0.0028	13:03:41	No
Mean:	-0.198	-0.198	-0.0015			
SD :	0.0033	0.0033	0.0000			
%RSD:	1.7	1.7	1.7580			

==========

Element: Hg Seq. No.: 97 AS Loc.: 83 Date: 12/07/2009
Sample ID: 241611002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.059	0.059	0.0006	0.0049	13:05:02	No
2	0.043	0.043	0.0004	0.0048	13:05:37	No
Mean:	0.051	0.051	0.0005			
SD :	0.0118	0.0118	0.0001			

#	µg/L	µg/L	Signal	Height		Stored
1	0.283	0.283	0.0024	0.0067	13:16:50	No
2	0.301	0.301	0.0025	0.0069	13:17:25	No
Mean:	0.292	0.292	0.0024			
SD :	0.0125	0.0125	0.0001			
%RSD:	4.3	4.3	4.1354			

==========

Element: Hg Seq. No.: 104 AS Loc.: 90 Date: 12/07/2009
Sample ID: 241611009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.275	0.275	0.0023	0.0067	13:18:50	No
2	0.287	0.287	0.0024	0.0068	13:19:25	No
Mean:	0.281	0.281	0.0023			
SD :	0.0084	0.0084	0.0001			
%RSD:	3.0	3.0	2.8894			

==========

Element: Hg Seq. No.: 105 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.484	5.484	0.0445	0.0488	13:20:51	No
2	5.468	5.468	0.0443	0.0487	13:21:26	No
Mean:	5.476	5.476	0.0444			
SD :	0.0108	0.0108	0.0001			
%RSD:	0.2	0.2	0.1963			

QC value within specified limits.

==========

Element: Hg Seq. No.: 106 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.070	-0.070	-0.0005	0.0039	13:22:54	No
2	-0.072	-0.072	-0.0005	0.0039	13:23:30	No
Mean:	-0.071	-0.071	-0.0005			
SD :	0.0013	0.0013	0.0000			
%RSD:	1.8	1.8	2.0491			

QC value within specified limits.

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925491

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978642	UI647733-01	.5	g
MS	1201978640	UI090611-A	.5	mL
MS	1201978640	UI090611-B	.5	mL
MSD	1201978641	UI090611-A	.5	mL
MSD	1201978641	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978637		SW846 3050B	24-NOV-2009 18:56	0.516 g	50 mL	96.89922	SOIL
LCS	1201978642		SW846 3050B	24-NOV-2009 18:56	0.5 g	50 mL	100	SOIL
SAMPLE	241559001		SW846 3050B	24-NOV-2009 18:56	0.541 g	50 mL	92.42144	SOIL
DUP	1201978638	241559001	SW846 3050B	24-NOV-2009 18:56	0.512 g	50 mL	97.65625	SOIL
SDILT	1201978639	241559001	SW846 3050B	24-NOV-2009 18:56	0.541 g	50 mL	92.42144	SOIL
MS	1201978640	241559001	SW846 3050B	24-NOV-2009 18:56	0.538 g	50 mL	92.9368	SOIL
MSD	1201978641	241559001	SW846 3050B	24-NOV-2009 18:56	0.526 g	50 mL	95.05703	SOIL
SAMPLE	241559002		SW846 3050B	24-NOV-2009 18:56	0.544 g	50 mL	91.91176	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: sample#241559001 is a clumpy, brown soil.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 925489

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978636	UI652380	.508	g
MS	1201978634	UI091119-01	.25	mL
MS	1201978634	UI091119-06	.25	mL
MSD	1201978635	UI091119-01	.25	mL
MSD	1201978635	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978631		SW846 3050B	24-NOV-2009 19:09	0.538 g	50 mL	92.9368	SOIL
LCS	1201978636		SW846 3050B	24-NOV-2009 19:09	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241559001		SW846 3050B	24-NOV-2009 19:09	0.524 g	50 mL	95.41985	SOIL
DUP	1201978632	241559001	SW846 3050B	24-NOV-2009 19:09	0.512 g	50 mL	97.65625	SOIL
SDILT	1201978633	241559001	SW846 3050B	24-NOV-2009 19:09	0.524 g	50 mL	95.41985	SOIL
MS	1201978634	241559001	SW846 3050B	24-NOV-2009 19:09	0.533 g	50 mL	93.80863	SOIL
MSD	1201978635	241559001	SW846 3050B	24-NOV-2009 19:09	0.575 g	50 mL	86.95652	SOIL
SAMPLE	241559002		SW846 3050B	24-NOV-2009 19:09	0.509 g	50 mL	98.23183	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1100721TCLP	1.25 mL	Nitric Acid CONC.

Comments: sample#241559001 is a clumpy, brown soil.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 932715

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201995271	UI062540-I	.525	g
MS	1201978634	UI091124-01	.25	mL
MS	1201978634	UI091124-06	.25	mL
MSD	1201978635	UI091124-01	.25	mL
MSD	1201978635	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201995270		SW846 3050B	14-DEC-2009 22:00	0.567 g	50 mL	88.18342	SOIL
LCS	1201995271		SW846 3050B	14-DEC-2009 22:00	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241559001		SW846 3050B	14-DEC-2009 22:00	0.506 g	50 mL	98.81423	SOIL
DUP	1201978632	241559001	SW846 3050B	14-DEC-2009 22:00	0.521 g	50 mL	95.96929	SOIL
SDILT	1201978633	241559001	SW846 3050B	14-DEC-2009 22:00	0.506 g	50 mL	98.81423	SOIL
MS	1201978634	241559001	SW846 3050B	14-DEC-2009 22:00	0.525 g	50 mL	95.2381	SOIL
MSD	1201978635	241559001	SW846 3050B	14-DEC-2009 22:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241559002		SW846 3050B	14-DEC-2009 22:00	0.521 g	50 mL	95.96929	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238341	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: Brown,clumpy soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925633

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978960	UI031809A	.2	g
MS	1201978962	WHG091204-14	.3	mL
MSD	1201978964	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978959		SW846 7471A Prep	04-DEC-2009 10:35	0.532 g	30 mL	56.39098	SOIL
LCS	1201978960		SW846 7471A Prep	04-DEC-2009 10:35	0.2 g	30 mL	150	SOIL
SAMPLE	241559001		SW846 7471A Prep	04-DEC-2009 10:35	0.573 g	30 mL	52.35602	SOIL
SAMPLE	241559002		SW846 7471A Prep	04-DEC-2009 10:35	0.5 g	30 mL	60	SOIL
SAMPLE	241611001		SW846 7471A Prep	04-DEC-2009 10:35	0.529 g	30 mL	56.71078	SOIL
DUP	1201978961	241611001	SW846 7471A Prep	04-DEC-2009 10:35	0.511 g	30 mL	58.70841	SOIL
MS	1201978962	241611001	SW846 7471A Prep	04-DEC-2009 10:35	0.547 g	30 mL	54.84461	SOIL
MSD	1201978964	241611001	SW846 7471A Prep	04-DEC-2009 10:35	0.505 g	30 mL	59.40594	SOIL
SDILT	1201978963	241611001	SW846 7471A Prep	04-DEC-2009 10:35	0.529 g	30 mL	56.71078	SOIL
SAMPLE	241611002		SW846 7471A Prep	04-DEC-2009 10:35	0.501 g	30 mL	59.88024	SOIL
SAMPLE	241611003		SW846 7471A Prep	04-DEC-2009 10:35	0.504 g	30 mL	59.52381	SOIL
SAMPLE	241611004		SW846 7471A Prep	04-DEC-2009 10:35	0.539 g	30 mL	55.65863	SOIL
SAMPLE	241611005		SW846 7471A Prep	04-DEC-2009 10:35	0.567 g	30 mL	52.91005	SOIL
SAMPLE	241611006		SW846 7471A Prep	04-DEC-2009 10:35	0.56 g	30 mL	53.57143	SOIL
SAMPLE	241611007		SW846 7471A Prep	04-DEC-2009 10:35	0.567 g	30 mL	52.91005	SOIL
SAMPLE	241611008		SW846 7471A Prep	04-DEC-2009 10:35	0.501 g	30 mL	59.88024	SOIL
SAMPLE	241611009		SW846 7471A Prep	04-DEC-2009 10:35	0.51 g	30 mL	58.82353	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments: Sample 241611001 is a gray clumpy soil.
Digestion Start Date: 04-DEC-09 10:35
Digestion End Date: 04-DEC-09 11:05

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-NOV-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925492	See Below		

Potentially affected work order(s)(SDG): 241559(10-608-1)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978640MS 2. Failed RPD for DUP: QC 1201978638DUP 3. Failed Recovery for MSD/PSD: QC 1201978641MSD	The sample and sample duplicate % RPD failed outside the control limits for As and Be due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. The matrix spike recovery failed outside of the control limits for Li and Se due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. The matrix spike duplicate recovery failed outside of the control limits for Li and Se due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Elizabeth Janssen 03-DEC-09

Data Validator/Group Leader:

Paul Boyd 04-DEC-09

NCR Report No.: 766722
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7471A	Solid	LANL
Batch ID:	**Sample Numbers:**		
925634	See Below		

Potentially affected work order(s)(SDG): 241559(10-608-1),241611(10-642)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978962MS 2. Failed Recovery for MSD/PSD: QC 1201978964MSD	1. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Sample is a gray clumpy soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike dup recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. . Sample is a gray clumpy soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jason Loy 07-DEC-09

Data Validator/Group Leader:

Eric Lawson 08-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
12-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925490	See Below		

Potentially affected work order(s)(SDG): 241559(10-608-1)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978634MS 2. Failed RPD for DUP: QC 1201978632DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1201978635MSD 4. Failed Recovery for MSD/PSD: QC 1201978635MSD	1. The matrix spike recovery failed outside of the control limits for barium,magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for cobalt and manganese due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 4. The matrix spike duplicate recovery failed outside of the control limits for calcium,magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 15-DEC-09

Data Validator/Group Leader:
Louise Smith 15-DEC-09

NCR Report No.: 770295
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
932716	See Below		

Potentially affected work order(s)(SDG): 241559(10-608-1)

Application Issues:

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MSD/PSD: QC 1201978635MSD	1. The matrix spike duplicate recovery failed outside of the control limits for silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 15-DEC-09

Data Validator/Group Leader:

Louise Smith 16-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Standard Logbook

Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Serial ID: UMS090929-01 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 29-SEP-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-31CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090929-02 **Opened:** 29-SEP-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 29-SEP-09 **Lot Number :** 19-174JB
Type: Source Material **Expires:** 29-SEP-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090929-03 **Opened:** 29-SEP-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 29-SEP-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 2-30CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Standard Logbook

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Standard Logbook

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091204-42 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091204-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091204-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091204-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091204-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091204-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091204-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091204-43 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091204-44 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1235212
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091204-45 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1235212
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091204-46 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1235212
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091204-47 **Opened:** 04-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 05-DEC-09 **Solvent :** 3%HCL &1%HNO3-1235212
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091128-04 **Opened:** 28-NOV-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 28-NOV-09 **Balance Id :** 4025216
Type: Working **Expires:** 29-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1232660
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090929-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090929-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090929-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090929-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090929-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091128-04A **Opened:** 28-NOV-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 28-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091128-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091128-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091128-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091128-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091128-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091128-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091128-05 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 28-NOV-09 **Pipet Id :** 3541598
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091128-06 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 28-NOV-09 **Pipet Id :** 3820544
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091128-07 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 28-NOV-09 **Lot Number :** 1010773
Type: Working **Expires:** 29-NOV-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1232660
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091128-08 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 28-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091128-70 **Opened:** 28-NOV-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 28-NOV-09 **Pipet Id :** 1758088
Type: Working **Expires:** 29-NOV-09 **Solvent :** 2%HNO3/1%HCl - 1232660
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate

Standard Logbook

Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker

Standard Logbook

Description: NITRIC ACID
Comments: None

Serial ID: 1215798 **Opened:** 06-NOV-09 **Lot Number :** H14024 L
Name: I-HNO3 **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1232660 **Opened:** 23-NOV-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 23-NOV-09
Type: Reagent/Solvent **Expires:** 30-NOV-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A
1215798	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Standard Logbook

Serial ID: 1235212 **Opened:** 30-NOV-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 30-NOV-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 06-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238341 **Opened:** 04-DEC-09 **Lot Number :** H44032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-608-1

Method/Analysis Information

Procedure:	**Dry Weight-Percent Moisture**
Analytical Method:	
Analytical Batch Number:	925839

Sample ID	**Client ID**
241559001	RE03-10-6903
241559002	RE03-10-6902
1201979470	241512001(CALA-10-4848) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 9.

Calibration Information:

Quality Control (QC) Information:

Designated QC
The following sample was used for QC: 241512001 (CALA-10-4848). The QC was from LANL work order 241512.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU. Not Applicable.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
The data for this batch was transferred from batch 925822.

Blank Decision Level
Not Applicable. The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**AM241**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928304
Prep Batch Number:	925822

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201984982	Method Blank (MB)
1201984983	241610009(RE03-10-7033) Sample Duplicate (DUP)
1201984984	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201984982 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241610009 (RE03-10-7033). The QC was from LANL work order 241610.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Sample 241559001 (RE03-10-6903) was recounted due to a negative result greater than three times the error. Second count being reported.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOPU**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928305
Prep Batch Number:	925822

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201984985	Method Blank (MB)
1201984986	241610009(RE03-10-7033) Sample Duplicate (DUP)
1201984987	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201984985 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241610009 (RE03-10-7033). The QC was from LANL work order 241610.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOU**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	931796
Prep Batch Number:	925822

Sample ID	Client ID
241559001	RE03-10-6903
241559002	RE03-10-6902
1201993214	Method Blank (MB)
1201993215	241610009(RE03-10-7033) Sample Duplicate (DUP)
1201993216	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201993214 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241610009 (RE03-10-7033). The QC was from LANL work order 241610.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The U235 blank result is greater than 1.65 times the CSU but less than the MDC.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Samples were reprepped due to high carrier/tracer yield.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: 12/15/09

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-608-1 GEL Work Order: 241559

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____ 12/15/09

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID:	RE03-10-6903	Project:	LANL01004
Sample ID:	241559001	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	6.47%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00182	0.0215	+/-0.00189	0.050	pCi/g		MXE1	12/11/09	1133	928304	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.0154	0.0312	+/-0.0102	0.050	pCi/g		MXE1	12/11/09	1157	928305	4
Plutonium-239/240	U	0.00767	0.0351	+/-0.00608	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.929	0.113	+/-0.0876	0.100	pCi/g		MXE1	12/14/09	1208	931796	5
Uranium-235/236	U	0.0646	0.0689	+/-0.0178	0.100	pCi/g						
Uranium-238		1.07	0.0626	+/-0.0979	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Am-05-RC Modified
4	DOE EML HASL-300, Pu-11-RC Modified
5	DOE EML HASL-300, U-02-RC Modified
6	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	90.6	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	58.1	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	96.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID: RE03-10-6903
Sample ID: 241559001
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID:	RE03-10-6902	Project:	LANL01004
Sample ID:	241559002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	14.7%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.000991	0.0278	+/-0.00141	0.050	pCi/g		MXE1	12/10/09	1239	928304	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-2.84E-10	0.0194	+/-0.00239	0.050	pCi/g		MXE1	12/11/09	1157	928305	3
Plutonium-239/240	U	0.00835	0.0218	+/-0.00432	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.610	0.0755	+/-0.0569	0.100	pCi/g		MXE1	12/14/09	1220	931796	4
Uranium-235/236		0.0615	0.0459	+/-0.0144	0.100	pCi/g						
Uranium-238		0.629	0.0417	+/-0.0584	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, U-02-RC Modified
5	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	78.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.6	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	98.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 15, 2009

Client Sample ID: RE03-10-6902 Project: LANL01004
Sample ID: 241559002 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 15, 2009

Client : Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241559

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 928304										
QC1201984983 241610009 DUP										
Americium-241	U	-0.00979	U	3.39E-05	pCi/g	0.799		(0-1)	MXE1	12/10/0912:39
	TPU:	+/-0.00351		+/-0.00264						
	Yield:	73.7		54.4						
QC1201984984 LCS										
Americium-241	33.2			29.8	pCi/g		89.7	(75%-125%)		
	TPU:			+/-2.12						
	Yield:			83.8						
QC1201984982 MB										
Americium-241			U	-0.00361	pCi/g					
	TPU:			+/-0.00266						
	Yield:			101						
Batch 928305										
QC1201984986 241610009 DUP										
Plutonium-238	U	-0.00213	U	-0.00331	pCi/g	0.0308		(0-1)	MXE1	12/11/0909:39
	TPU:	+/-0.0133		+/-0.00573						
	Yield:	46.9		66.4						
Plutonium-239/240	U	-0.0107	U	0.00496	pCi/g	0.725		(0-1)		
	TPU:	+/-0.00708		+/-0.0037						
	Yield:	46.9		66.4						
QC1201984987 LCS										
Plutonium-238				6.73	pCi/g			(75%-125%)		
	TPU:			+/-0.500						
	Yield:			93.4						
Plutonium-239/240	41.8			37.6	pCi/g		90	(75%-125%)		
	TPU:			+/-2.30						
	Yield:			93.4						
QC1201984985 MB										
Plutonium-238			U	-0.00885	pCi/g					
	TPU:			+/-0.0039						
	Yield:			93.6						
Plutonium-239/240			U	-0.00295	pCi/g					
	TPU:			+/-0.00256						
	Yield:			93.6						
Batch 931796										
QC1201993215 241610009 DUP										
Uranium-233/234		1.02		1.13	pCi/g	0.308		(0-1)	MXE1	12/14/0912:21
	TPU:	+/-0.0845		+/-0.0925						
	Yield:	103		95.9						
Uranium-235/236		0.0822		0.121	pCi/g	0.516		(0-1)		
	TPU:	+/-0.017		+/-0.0208						
	Yield:	103		95.9						
Uranium-238		1.03		1.13	pCi/g	0.266		(0-1)		
	TPU:	+/-0.0856		+/-0.0928						

QC Summary

Workorder: 241559

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 931796										
	Yield:	103		95.9						
QC1201993216 LCS										
Uranium-233/234				6.06	pCi/g			(75%-125%)		12/14/0912:07
	TPU:			+/-0.560						
	Yield:			97.5						
Uranium-235/236				0.404	pCi/g			(75%-125%)		
	TPU:			+/-0.0975						
	Yield:			97.5						
Uranium-238	5.75			6.10	pCi/g		106	(75%-125%)		
	TPU:			+/-0.563						
	Yield:			97.5						
QC1201993214 MB										
Uranium-233/234			U	0.00466	pCi/g					12/14/0912:21
	TPU:			+/-0.00499						
	Yield:			100						
Uranium-235/236			U	0.00871	pCi/g					
	TPU:			+/-0.00463						
	Yield:			100						
Uranium-238			U	0.00235	pCi/g					
	TPU:			+/-0.0047						
	Yield:			100						

Notes:
The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: 241559

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time

P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 9

Batch# 928304 Product: AM Date: 12/14/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less If below the MDA/ MDC, error is okay	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples. < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature] 12/14/09

Secondary Review Performed By: [signature] 12/14/09

12/7 12/8

Am/Cm Que Sheet

04-DEC-09

PJ

Batch #: 928304 | Analyst: MXE1 | First Client Due Date: 18-DEC-09 | Internal Due Date 07-DEC-09 | Comments:

Tracer(s): Am243/Cm244 | Tracer Code: 445-96-2-55 | Expiration Date: 5/11/10 | Vol: 0.1

LCS Isotope(s): Am241/Cm244 | LCS Code(s): — / — | Expiration Date: — / — | Vol(s): — / —

Spike Isotope(s): Am241/Cm244 | Spike Code(s): — / — | Expiration Date: — / — | Vol(s): — / —

Prep Date: 12/4/9 | Initials: ME | Pipet ID: 4491063 | Balance ID: 50410272 | Witness: 12/4/09 cmm

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/f)	Am/Cm Det #
241518001-1	CALA-10-4848	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	1	1	1.300	93
241518002-1	CABG-10-4888	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	2	2	1.253	94
241518003-1	CABG-10-4889	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	3	3	1.256	95
241518004-1	CABG-10-4886	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	4	4	1.252	96
241518005-1	CABG-10-4890	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	5	5	1.252	97
241518006-1	CABG-10-4887	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	6	6	1.242	98
241524002-1	WST03-10-2132	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	7	7	1.250	99
241559001-1	RE03-10-6903	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	8	8	1.254	~~100~~ 209
241559002-1	RE03-10-6902	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	9	9	1.249	101
241610001-1	RE03-09-13919	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	10	10	1.247	102
241610002-1	RE03-09-13916	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	11	11	1.242	103
241610003-1	RE03-09-13920	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	12	12	1.25	104
241610004-1	RE03-09-13914	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	13	13	1.254	105
241610005-1	RE03-09-13915	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	14	14	1.250	107
241610006-1	RE03-09-13918	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	15	15	1.256	112
241610007-1	RE03-09-13921	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	16	16	1.246	221
241610008-1	RE03-09-13917	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	17	17	1.253	222
241610009-1	RE03-10-7033	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	18	18	1.246	223
1201984982-1	MB for batch 928304	MB		.05 pCi/g	SOIL	QC ACCOUNT		19	19	~~1.300~~	108
1201984983-1	RE03-10-7033(241610009DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	19-NOV-09	20	20	1.253	109
1201984984-1	LCS for batch 928304	LCS		.05 pCi/g	SOIL	QC ACCOUNT		21	21	0.103	111

12/11/09

12/4/09

SRM 0244-B Exp 4/30/20 0.103g

Choose SOP Used: GL-RAD-A-011
GL-RAD-A-036
GL-RAD-A-045

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: JPL 12/14/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 928304

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201984983	DUP	Americium-241	1.25 g	3.39E-05	0.00264	0.0366	-.002888	pCi/g	NO
1201984984	LCS	Americium-241	0.103 g	29.8	2.12	0.290	-.03504854	pCi/g	NO
1201984982	MB	Americium-241	1.00 g	-0.00361	0.00266	0.0263	-.00361	pCi/g	NO
241518001	CALA-10-4848	Americium-241	1.30 g	0.00505	0.00242	0.0224	-.00277692	pCi/g	NO
241518002	CABG-10-4888	Americium-241	1.25 g	0.00491	0.00375	0.0332	-.002888	pCi/g	NO
241518003	CABG-10-4889	Americium-241	1.26 g	0.00479	0.00893	0.0261	-.00286508	pCi/g	NO
241518004	CABG-10-4886	Americium-241	1.25 g	0.00512	0.00551	0.0274	-.002888	pCi/g	NO
241518005	CABG-10-4890	Americium-241	1.25 g	-0.0053	0.00715	0.0343	-.002888	pCi/g	NO
241518006	CABG-10-4887	Americium-241	1.24 g	0.000839	0.00476	0.0264	-.00291129	pCi/g	NO
241524002	WST03-10-2132	Americium-241	1.25 g	-0.000502	0.00252	0.0261	-.002888	pCi/g	NO
241559001	RE03-10-6903	Americium-241	1.25 g	-0.00182	0.00189	0.0215	-.002888	pCi/g	NO
241559002	RE03-10-6902	Americium-241	1.25 g	0.000991	0.00141	0.0278	-.002888	pCi/g	NO
241610001	RE03-09-13919	Americium-241	1.25 g	0.000993	0.00306	0.0278	-.002888	pCi/g	NO
241610002	RE03-09-13916	Americium-241	1.24 g	0.000815	0.00285	0.0262	-.00291129	pCi/g	NO
241610003	RE03-09-13920	Americium-241	1.25 g	0.00136	0.0016	0.0315	-.002888	pCi/g	NO
241610004	RE03-09-13914	Americium-241	1.25 g	0.00218	0.00317	0.0263	-.002888	pCi/g	NO
241610005	RE03-09-13915	Americium-241	1.25 g	0.00572	0.00296	0.0298	-.002888	pCi/g	NO
241610006	RE03-09-13918	Americium-241	1.26 g	-0.00182	0.00244	0.0278	-.00286508	pCi/g	NO
241610007	RE03-09-13921	Americium-241	1.25 g	0.00183	0.00229	0.0241	-.002888	pCi/g	NO
241610008	RE03-09-13917	Americium-241	1.25 g	-0.00182	0.0024	0.0225	-.002888	pCi/g	NO
241610009	RE03-10-7033	Americium-241	1.25 g	-0.00979	0.00351	0.0261	-.002888	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241559001_AM SAMPLE QTY: 1.254 G
DETECTOR NUMBER :79188 AVERAGE %EFFICIENCY :36.4104 % YIELD : 90.599	COUNT DATE:11-DEC-2009 11:33:28 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.64243 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B209.CNF;59 BKG DATE : 6-DEC-2009 EFF FILE : W209.CNF;25 CAL DATE : 1-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	1.000	1.000	0.000	4.8778	100.0000	1.09E-03	1.09E-03	1.24E-02	2.77E-02	1.09E-03
CM-5/6	5386.000	10.000	10.000	0.000	19.8796	86.09000	1.26E-02	4.07E-03	5.85E-02	1.20E-01	4.00E-03
AM-241	5479.150	2.000	-1.671	2.000	3.6563	99.94000	-1.82E-03	1.89E-03	9.27E-03	2.15E-02	1.89E-03
CM-242	6102.000	2.000	2.000	0.000	3.7846	100.0000	2.41E-03	1.71E-03	9.59E-03	2.21E-02	1.70E-03
AM243	5270.000	962.000	960.000	2.000	1.4142	99.78000	1.05E+00	7.04E-02	3.59E-03	1.01E-02	3.39E-02
CM-247	4946.000	16.000	14.000	2.000	18.5713	79.30000	1.92E-02	5.93E-03	5.93E-02	1.22E-01	5.83E-03
CM-248	5078.600	32.000	32.000	0.000	26.3889	91.00000	3.83E-02	7.13E-03	7.35E-02	1.50E-01	6.77E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

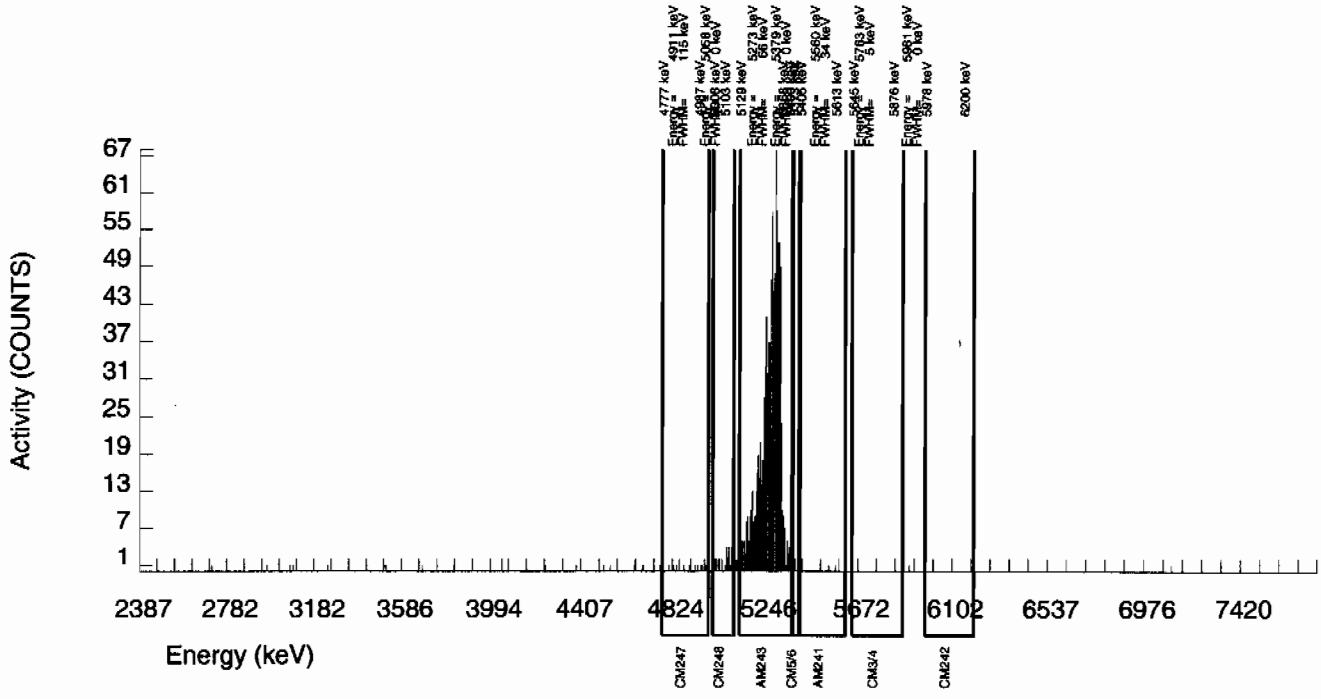

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241559002_AM SAMPLE QTY: 1.249 G
DETECTOR NUMBER :64253 AVERAGE %EFFICIENCY :32.8321 % YIELD : 77.972	COUNT DATE:10-DEC-2009 12:39:02 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B101.CNF;658
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.27414 dpm	EFF FILE : W101.CNF;174
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	4.000	0.000	4.8778	100.0000	5.65E-03	2.85E-03	1.60E-02	3.58E-02	2.82E-03
CM-5/6	5386.000	11.000	11.000	0.000	19.8796	86.09000	1.80E-02	5.54E-03	7.57E-02	1.56E-01	5.43E-03
AM-241	5479.150	2.000	0.703	0.000	3.6563	99.94000	9.91E-04	1.41E-03	1.20E-02	2.78E-02	1.41E-03
CM-242	6102.000	2.000	1.000	1.000	3.7846	100.0000	1.55E-03	2.69E-03	1.24E-02	2.86E-02	2.69E-03
AM243	5270.000	748.000	745.000	3.000	1.7321	99.78000	1.05E+00	7.54E-02	5.69E-03	1.52E-02	3.87E-02
CM-247	4946.000	25.000	8.000	17.000	18.5713	79.30000	1.42E-02	1.15E-02	7.68E-02	1.58E-01	1.15E-02
CM-248	5078.600	43.000	40.000	3.000	26.3889	91.00000	6.19E-02	1.12E-02	9.50E-02	1.94E-01	1.05E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

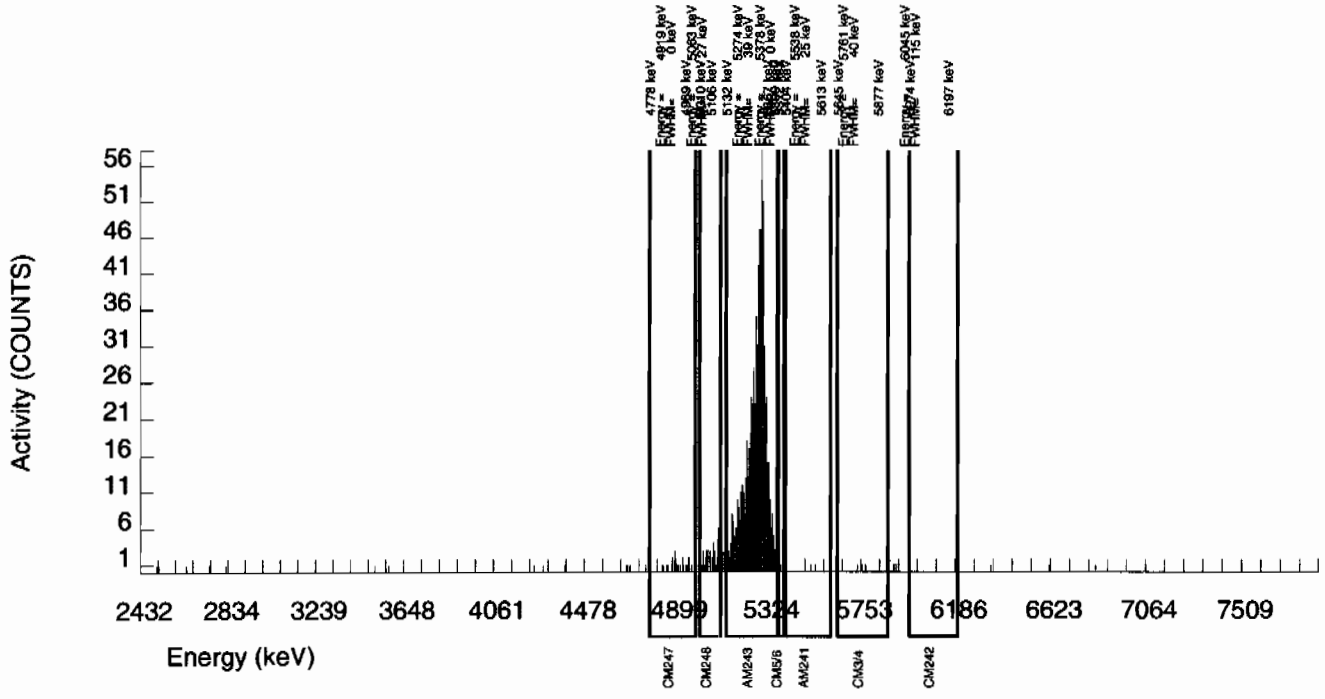

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S0241610009_AM SAMPLE QTY: 1.246 G
DETECTOR NUMBER :79416 AVERAGE %EFFICIENCY :37.0420 % YIELD : 73.655	COUNT DATE:10-DEC-2009 12:42:06 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.14825 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B223.CNF;60 BKG DATE : 6-DEC-2009 EFF FILE : W223.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	-4.000	6.000	4.8778	100.0000	-5.31E-03	3.76E-03	1.50E-02	3.37E-02	3.76E-03
CM-5/6	5386.000	11.000	11.000	0.000	19.8796	86.09000	1.69E-02	5.21E-03	7.12E-02	1.47E-01	5.10E-03
AM-241	5479.150	0.000	-7.382	6.000	3.6563	99.94000	-9.79E-03	3.51E-03	1.13E-02	2.61E-02	3.51E-03
CM-242	6102.000	2.000	2.000	0.000	3.7846	100.0000	2.91E-03	2.06E-03	1.17E-02	2.69E-02	2.06E-03
AM243	5270.000	797.000	794.000	3.000	1.7321	99.78000	1.05E+00	7.42E-02	5.35E-03	1.43E-02	3.76E-02
CM-247	4946.000	14.000	12.000	2.000	18.5713	79.30000	2.01E-02	6.79E-03	7.22E-02	1.49E-01	6.68E-03
CM-248	5078.600	19.000	19.000	0.000	26.3889	91.00000	2.77E-02	6.57E-03	8.94E-02	1.83E-01	6.35E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

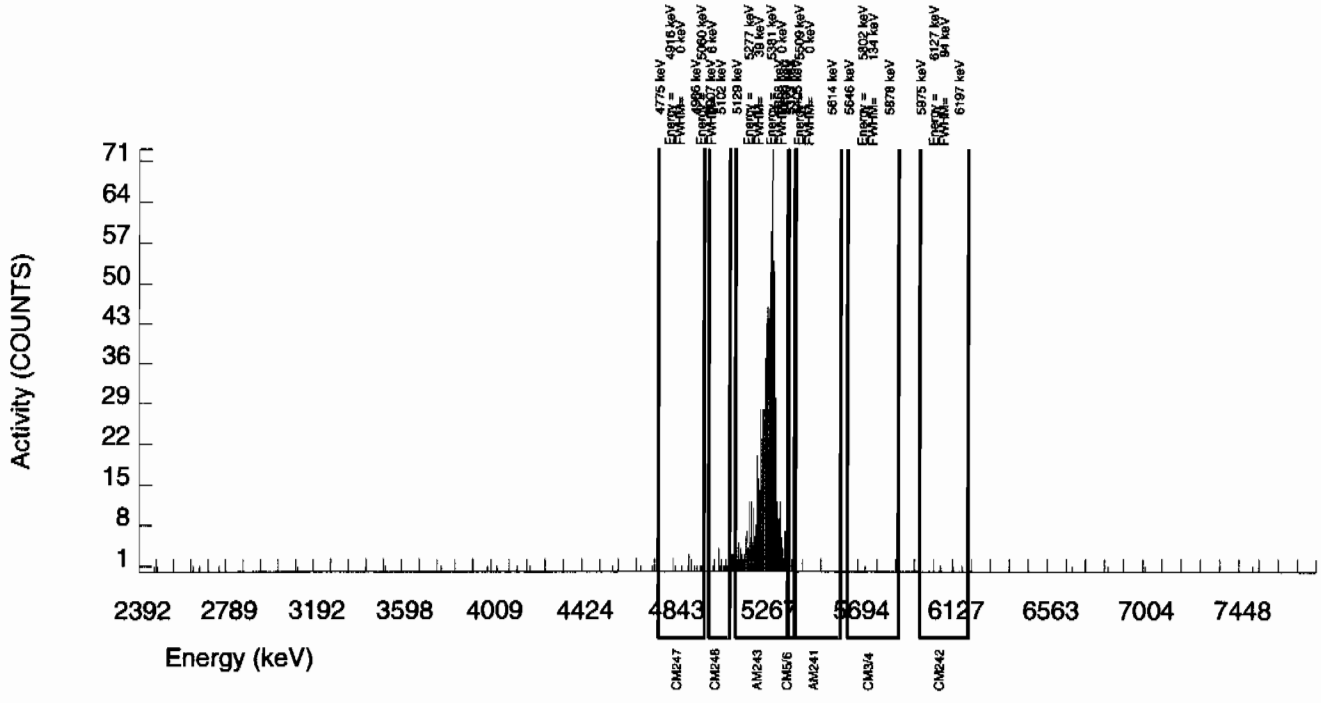

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984982_AM SAMPLE QTY: 1.000 G
DETECTOR NUMBER :78778 AVERAGE %EFFICIENCY :33.5822 % YIELD : 100.787	COUNT DATE:10-DEC-2009 12:39:03 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91661 dpm RESULTS : 2.93957 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B108.CNF;660 BKG DATE : 6-DEC-2009 EFF FILE : W108.CNF;209 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	2.000	0.000	4.8778	100.0000	2.66E-03	1.89E-03	1.51E-02	3.38E-02	1.88E-03
CM-5/6	5386.000	8.000	8.000	0.000	19.8796	86.09000	1.24E-02	4.43E-03	7.15E-02	1.47E-01	4.37E-03
AM-241	5479.150	2.000	-2.715	3.000	3.6563	99.94000	-3.61E-03	2.66E-03	1.13E-02	2.63E-02	2.66E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	6.85E-03	3.09E-03	1.17E-02	2.70E-02	3.06E-03
AM243	5270.000	988.000	985.000	3.000	1.7321	99.78000	1.31E+00	8.79E-02	5.37E-03	1.44E-02	4.20E-02
CM-247	4946.000	7.000	5.000	2.000	18.5713	79.30000	8.39E-03	5.06E-03	7.25E-02	1.50E-01	5.03E-03
CM-248	5078.600	16.000	16.000	0.000	26.3889	91.00000	2.34E-02	6.01E-03	8.98E-02	1.84E-01	5.85E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

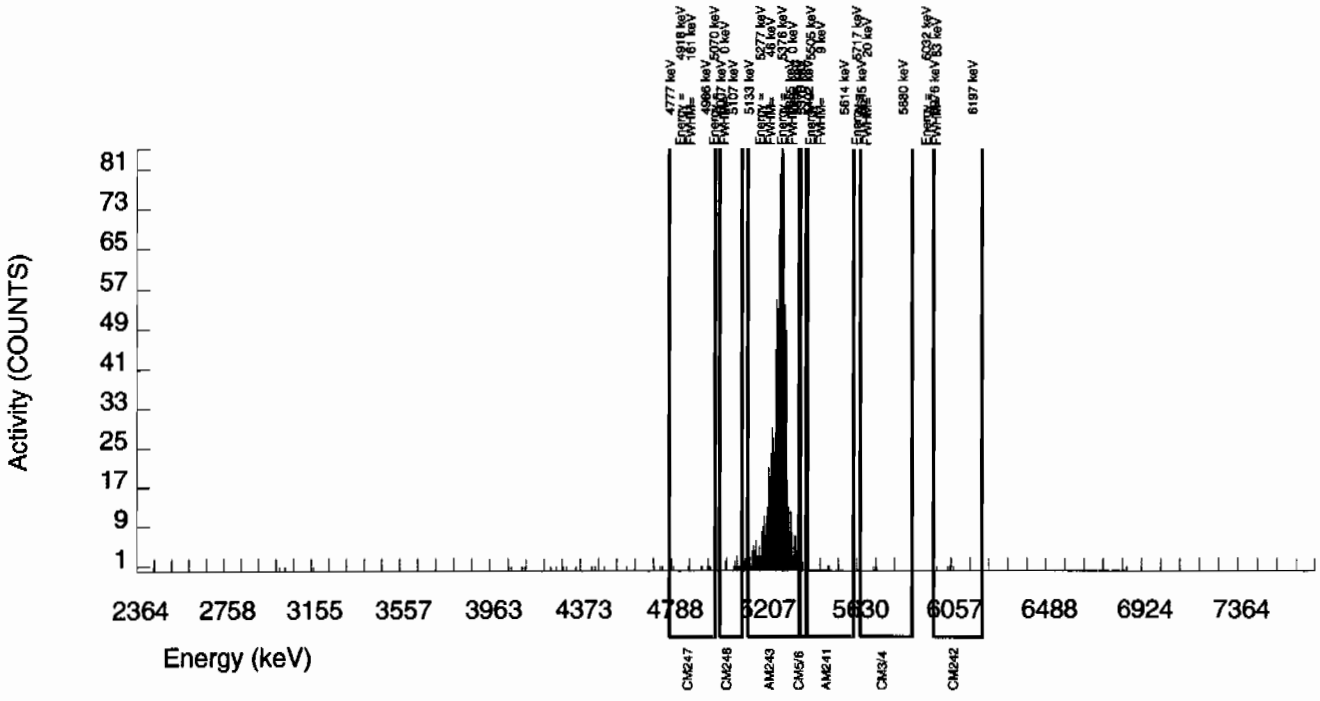

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S1201984983_AM SAMPLE QTY: 1.253 G
DETECTOR NUMBER :79463 AVERAGE %EFFICIENCY :35.6057 % YIELD : 54.430	COUNT DATE:10-DEC-2009 12:39:03 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 1.58752 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B109.CNF;658 BKG DATE : 6-DEC-2009 EFF FILE : W109.CNF;190 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	1.000	1.000	4.8778	100.0000	1.86E-03	3.22E-03	2.10E-02	4.71E-02	3.22E-03
CM-5/6	5386.000	6.000	6.000	0.000	19.8796	86.09000	1.29E-02	5.34E-03	9.96E-02	2.05E-01	5.28E-03
AM-241	5479.150	2.000	0.018	1.000	3.6563	99.94000	3.39E-05	2.64E-03	1.58E-02	3.66E-02	2.64E-03
CM-242	6102.000	5.000	4.000	1.000	3.7846	100.0000	8.14E-03	5.01E-03	1.63E-02	3.77E-02	4.99E-03
AM243	5270.000	568.000	564.000	4.000	2.0000	99.78000	1.05E+00	8.14E-02	8.65E-03	2.23E-02	4.45E-02
CM-247	4946.000	4.000	-3.000	7.000	18.5713	79.30000	-7.02E-03	7.76E-03	1.01E-01	2.08E-01	7.76E-03
CM-248	5078.600	7.000	7.000	0.000	26.3889	91.00000	1.43E-02	5.47E-03	1.25E-01	2.56E-01	5.39E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

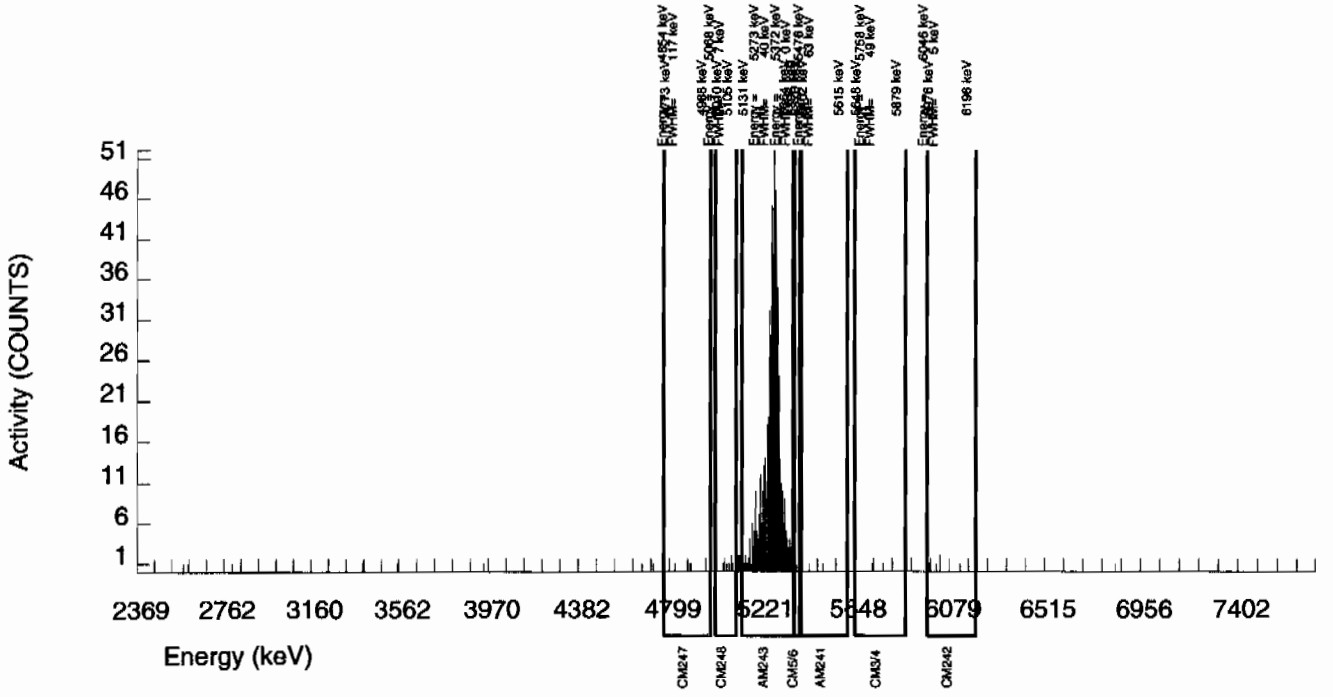

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928304 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984984_AM SAMPLE QTY: 0.103 G
DETECTOR NUMBER :79462 AVERAGE %EFFICIENCY :35.5462 % YIELD : 83.812	COUNT DATE:10-DEC-2009 12:39:03 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91661 dpm RESULTS : 2.44446 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B111.CNF;657 BKG DATE : 6-DEC-2009 EFF FILE : W111.CNF;205 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	3.000	1.000	4.8778	100.0000	4.41E-02	3.30E-02	1.67E-01	3.73E-01	3.28E-02
CM-5/6	5386.000	65.000	65.000	0.000	19.8796	86.09000	1.11E+00	1.57E-01	7.89E-01	1.62E+00	1.37E-01
AM-241	5479.150	2028.000	2025.491	1.000	3.6563	99.94000	2.98E+01	2.12E+00	1.25E-01	2.90E-01	6.61E-01
CM-242	6102.000	2.000	2.000	0.000	3.7846	100.0000	3.02E-02	2.15E-02	1.29E-01	2.98E-01	2.14E-02
AM243	5270.000	873.000	867.000	6.000	2.4495	99.78000	1.28E+01	9.67E-01	8.38E-02	2.08E-01	4.36E-01
CM-247	4946.000	10.000	4.000	6.000	18.5713	79.30000	7.40E-02	7.42E-02	8.00E-01	1.65E+00	7.40E-02
CM-248	5078.600	19.000	19.000	0.000	26.3889	91.00000	3.06E-01	7.33E-02	9.90E-01	2.02E+00	7.03E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

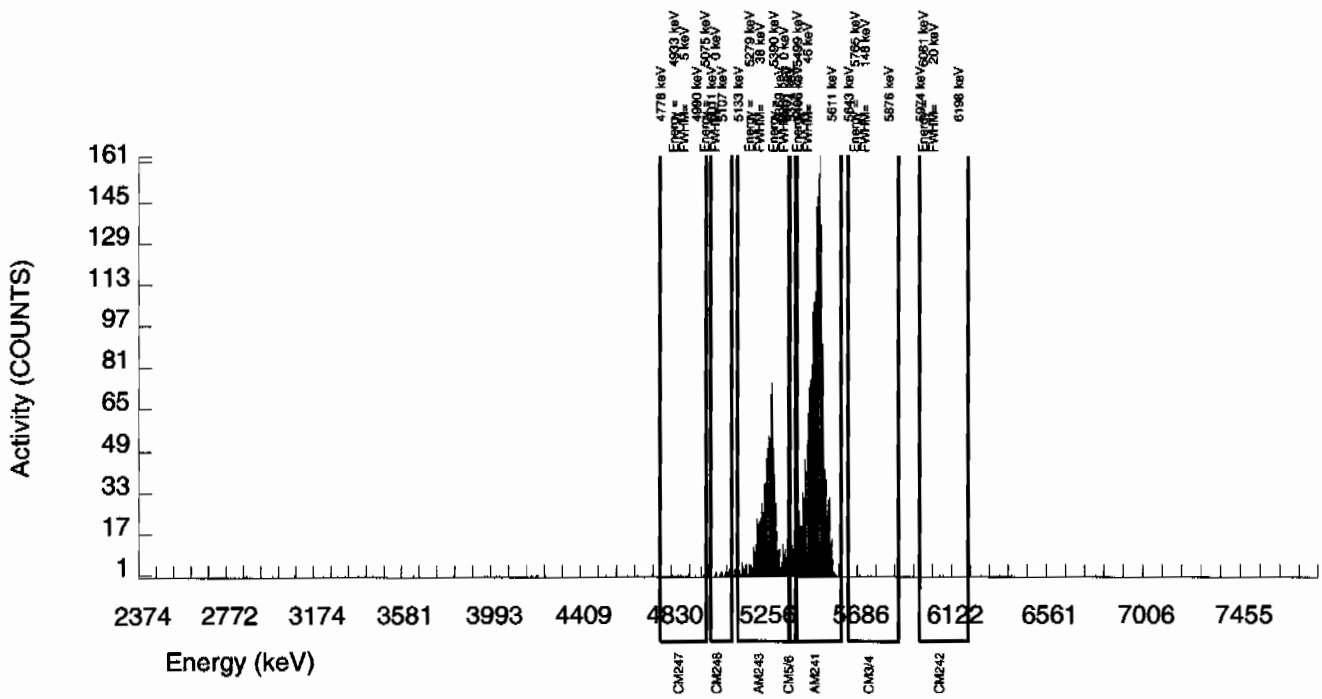

Radiochemistry Batch Checklist, Rev 9

Batch# 928305 Product: Pu Date: 12/12/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125%. Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		Case narrative
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [illegible] 12/12/09

Secondary Review Performed By: [illegible] 12/14/09

LANL

12/7/12

p1

Plutonium Que Sheet

02-DEC-09

Batch #: 928305 Analyst: MXE1 First Client Due Date:18-DEC-09 Internal Due Date:07-DEC-09

Tracer Isotope(s): Pu-242/Pu-238 Tracer Code: 1373-A Expiration Date: 10/27/10 Vol: 0.1

LCS Isotope(s): Pu-239/Pu-238 LCS Code: — Expiration Date: — Vol: —

Spike Isotope(s): Pu-239/Pu-238 Spike Code: — Expiration Date: — Vol: —

Prep Date: 12/4/9 Initials: MO Pipet ID: 4497063 Balance ID: 50410272 Witness: 12/4/09 CMM

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/f)	Pu Det #
~~241518001-1~~	~~CABA-10-4848~~	~~SAMPLE~~		~~.05 pCi/g~~	~~SOIL~~	~~LANL010~~	~~18-NOV-09~~	~~1~~	1	1.300	43
241518002-1	CABG-10-4888	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	2	2	1.253	44
241518003-1	CABG-10-4889	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	3	3	1.256	45
241518004-1	CABG-10-4886	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	4	4	1.252	46
241518005-1	CABG-10-4890	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	5	5	1.252	47
241518006-1	CABG-10-4887	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	6	6	1.242	48
241524002-1	WST03-10-2132	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	7	7	1.250	71
241559001-1	RE03-10-6903	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	8	8	1.254	72
241559002-1	RE03-10-6902	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	9	9	1.249	73
241610001-1	RE03-09-13919	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	10	10	1.247	74
241610002-1	RE03-09-13916	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	11	11	1.242	76
241610003-1	RE03-09-13920	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	12	12	1.252	31
241610004-1	RE03-09-13914	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	13	13	1.254	33
241610005-1	RE03-09-13915	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	14	14	1.250	35
241610006-1	RE03-09-13918	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	15	15	1.256	36
241610007-1	RE03-09-13921	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	16	16	1.246	37
241610008-1	RE03-09-13917	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	17	17	1.253	38
241610009-1	RE03-10-7033	SAMPLE		.05 pCi/g	SOIL	LANL010	19-NOV-09	18	18	1.246	39
1201984985-1	MB for batch 928305	MB		.05 pCi/g	SOIL	QC ACCOUNT		19	19	1.300	40
1201984986-1	RE03-10-7033(241610009DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	19-NOV-09	20	20	1.253	41
1201984987-1	LCS for batch 928305	LCS		.05 pCi/g	SOIL	QC ACCOUNT		21	21	0.103	42

SRM 0244-B exp 4/30/20 0.103 g

Choose SOP Used: GL-RAD-A-011 / ~~GL-RAD-A-045~~ / GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: 12/12/09

Blank Correction Report

Batch ID 928305

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201984986	DUP	Plutonium-238	1.25 g	-0.00331	0.00573	0.0268	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00496	0.0037	0.0302	-.00236	pCi/g	NO
1201984987	LCS	Plutonium-238	0.103 g	6.73	0.500	0.234	-.08592233	pCi/g	NO
		Plutonium-239/240	0.103 g	37.6	2.30	0.263	-.02864078	pCi/g	NO
1201984985	MB	Plutonium-238	1.00 g	-0.00885	0.0039	0.024	-.00885	pCi/g	NO
		Plutonium-239/240	1.00 g	-0.00295	0.00256	0.027	-.00295	pCi/g	NO
241518002	CABG-10-4888	Plutonium-238	1.25 g	-0.00242	0.0042	0.0197	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00121	0.00363	0.0222	-.00236	pCi/g	NO
241518003	CABG-10-4889	Plutonium-238	1.26 g	-0.00468	0.00287	0.019	-.00702381	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00	0.00287	0.0214	-.00234127	pCi/g	NO
241518004	CABG-10-4886	Plutonium-238	1.25 g	0.00477	0.00293	0.0194	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00119	0.00358	0.0218	-.00236	pCi/g	NO
241518005	CABG-10-4890	Plutonium-238	1.25 g	-0.0116	0.00725	0.027	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00332	0.00526	0.0304	-.00236	pCi/g	NO
241518006	CABG-10-4887	Plutonium-238	1.24 g	0.00184	0.00883	0.0299	-.00713710	pCi/g	NO
		Plutonium-239/240	1.24 g	0.0147	0.00693	0.0336	-.00237903	pCi/g	NO
241524002	WST03-10-2132	Plutonium-238	1.25 g	0.00788	0.00492	0.0183	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-1.07E-09	0.00477	0.0206	-.00236	pCi/g	NO
241559001	RE03-10-6903	Plutonium-238	1.25 g	-0.0154	0.0102	0.0312	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00767	0.00608	0.0351	-.00236	pCi/g	NO
241559002	RE03-10-6902	Plutonium-238	1.25 g	-2.84E-10	0.00239	0.0194	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00835	0.00432	0.0218	-.00236	pCi/g	NO
241610001	RE03-09-13919	Plutonium-238	1.25 g	-0.00238	0.00584	0.0193	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00357	0.00315	0.0218	-.00236	pCi/g	NO
241610002	RE03-09-13916	Plutonium-238	1.24 g	-0.00256	0.00221	0.0207	-.00713710	pCi/g	NO
		Plutonium-239/240	1.24 g	-0.00128	0.00424	0.0234	-.00237903	pCi/g	NO
241610003	RE03-09-13920	Plutonium-238	1.25 g	-4.35E-10	0.00365	0.0296	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00547	0.00605	0.0333	-.00236	pCi/g	NO
241610004	RE03-09-13914	Plutonium-238	1.25 g	-0.00123	0.00326	0.020	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00493	0.00303	0.0225	-.00236	pCi/g	NO
241610005	RE03-09-13915	Plutonium-238	1.25 g	-0.00255	0.00403	0.0207	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-1.22E-09	0.0057	0.0233	-.00236	pCi/g	NO
241610006	RE03-09-13918	Plutonium-238	1.26 g	0.00262	0.00586	0.0213	-.00702381	pCi/g	NO
		Plutonium-239/240	1.26 g	-0.00131	0.00472	0.024	-.00234127	pCi/g	NO
241610007	RE03-09-13921	Plutonium-238	1.25 g	-0.00615	0.00825	0.020	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0086	0.00478	0.0225	-.00236	pCi/g	NO
241610008	RE03-09-13917	Plutonium-238	1.25 g	0.00737	0.00627	0.0199	-.00708	pCi/g	NO
		Plutonium-239/240	1.25 g	-5.86E-10	0.00301	0.0225	-.00236	pCi/g	NO
241610009	RE03-10-7033	Plutonium-238	1.25 g	-0.00213	0.0133	0.0346	-.00708	pCi/g	NO

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241610009	RE03-10-7033	Plutonium-239/240	1.25 g	-0.0107	0.00708	0.039	-.00236	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241559001_PU SAMPLE QTY: 1.254 G
DETECTOR NUMBER :45-149AA3 AVERAGE %EFFICIENCY :32.2571 % YIELD : 58.097	COUNT DATE:11-DEC-2009 11:57:38 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 2.45217 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B072.CNF;1077 BKG DATE : 6-DEC-2009 EFF FILE : W072.CNF;273 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	7.000	4.000	3.000	3.3488	99.90000	7.67E-03	6.08E-03	1.49E-02	3.51E-02	6.07E-03
PU-236	5749.000	11.000	-6.000	17.000	2.0294	100.0000	-1.17E-02	1.03E-02	9.05E-03	2.33E-02	1.03E-02
PU-238	5499.000	10.000	-8.000	18.000	2.9082	99.90000	-1.54E-02	1.02E-02	1.30E-02	3.12E-02	1.02E-02
PU242	4890.000	802.000	791.000	11.000	3.3166	100.0000	1.52E+00	9.80E-02	1.48E-02	3.48E-02	5.47E-02
PU-244	4589.000	6.000	5.000	1.000	6.8218	99.90000	9.59E-03	5.10E-03	3.04E-02	6.61E-02	5.08E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

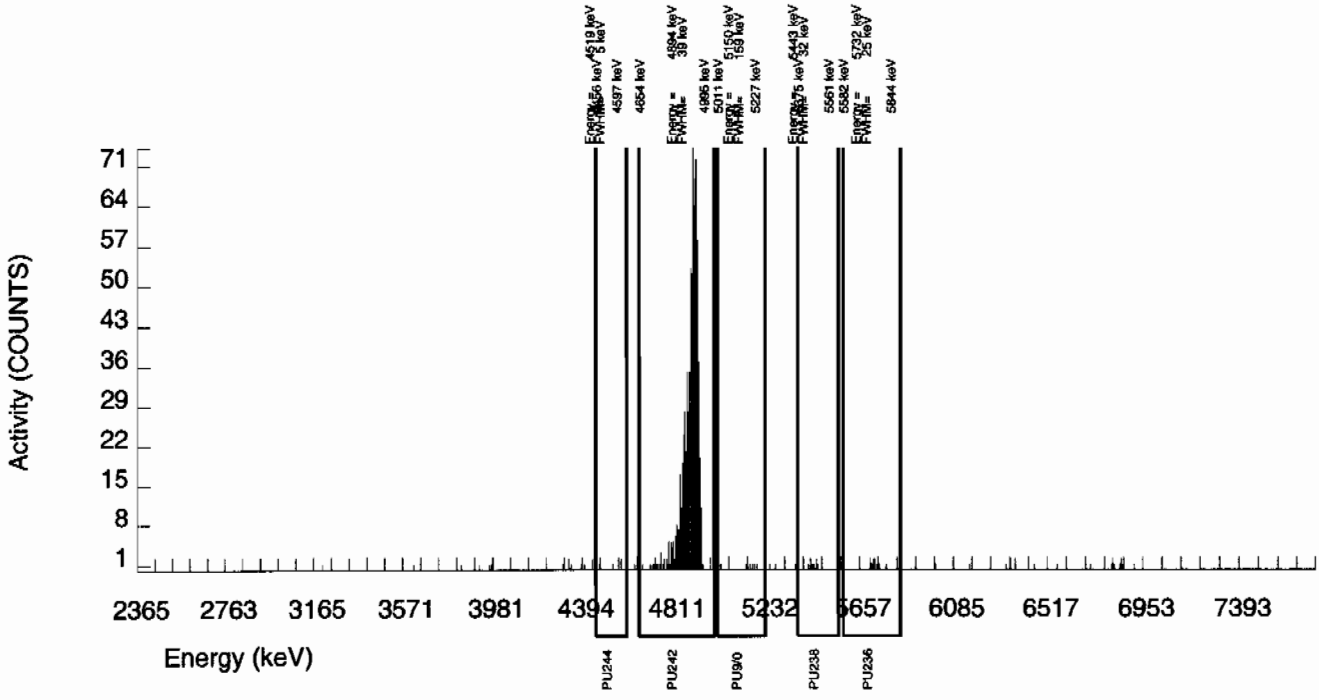

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241559002_PU SAMPLE QTY: 1.249 G
DETECTOR NUMBER :78775 AVERAGE %EFFICIENCY :33.0537 % YIELD : 91.604	COUNT DATE:11-DEC-2009 11:57:38 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B073.CNF;1079
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 3.86643 dpm	EFF FILE : W073.CNF;281
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	10.000	7.000	3.000	3.3488	99.90000	8.35E-03	4.32E-03	9.29E-03	2.18E-02	4.30E-03
PU-236	5749.000	1.000	-1.000	2.000	2.0294	100.0000	-1.21E-03	2.10E-03	5.62E-03	1.45E-02	2.10E-03
PU-238	5499.000	2.000	0.000	2.000	2.9082	99.90000	-2.84E-10	2.39E-03	8.07E-03	1.94E-02	2.39E-03
PU242	4890.000	1284.000	1278.000	6.000	2.4495	100.0000	1.52E+00	8.55E-02	6.79E-03	1.68E-02	4.28E-02
PU-244	4589.000	7.000	6.000	1.000	6.8218	99.90000	7.15E-03	3.39E-03	1.89E-02	4.11E-02	3.37E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

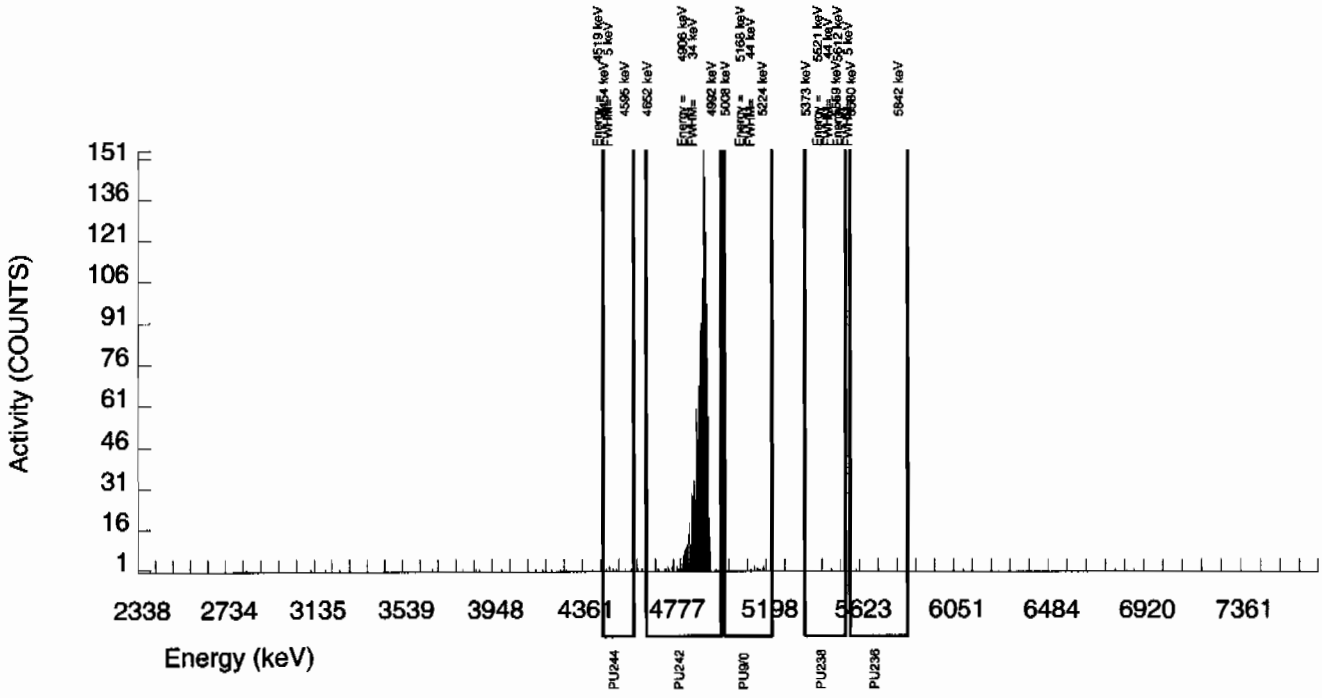

Alpha Spectroscopy Software Version 2.0
effective date: 08-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S0241610009_PU SAMPLE QTY: 1.246 G
DETECTOR NUMBER :45-149BB2 AVERAGE %EFFICIENCY :36.2064 % YIELD : 46.852	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B039.CNF;1091
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 1.97755 dpm	EFF FILE : W039.CNF;294
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	-5.000	8.000	3.3488	99.90000	-1.07E-02	7.08E-03	1.66E-02	3.90E-02	7.08E-03
PU-236	5749.000	59.000	12.000	47.000	2.0294	100.0000	2.60E-02	2.23E-02	1.01E-02	2.59E-02	2.23E-02
PU-238	5499.000	19.000	-1.000	20.000	2.9082	99.90000	-2.13E-03	1.33E-02	1.44E-02	3.46E-02	1.33E-02
PU242	4890.000	725.000	716.000	9.000	3.0000	100.0000	1.53E+00	1.02E-01	1.49E-02	3.55E-02	5.77E-02
PU-244	4589.000	11.000	7.000	4.000	6.8218	99.90000	1.49E-02	8.30E-03	3.39E-02	7.35E-02	8.26E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

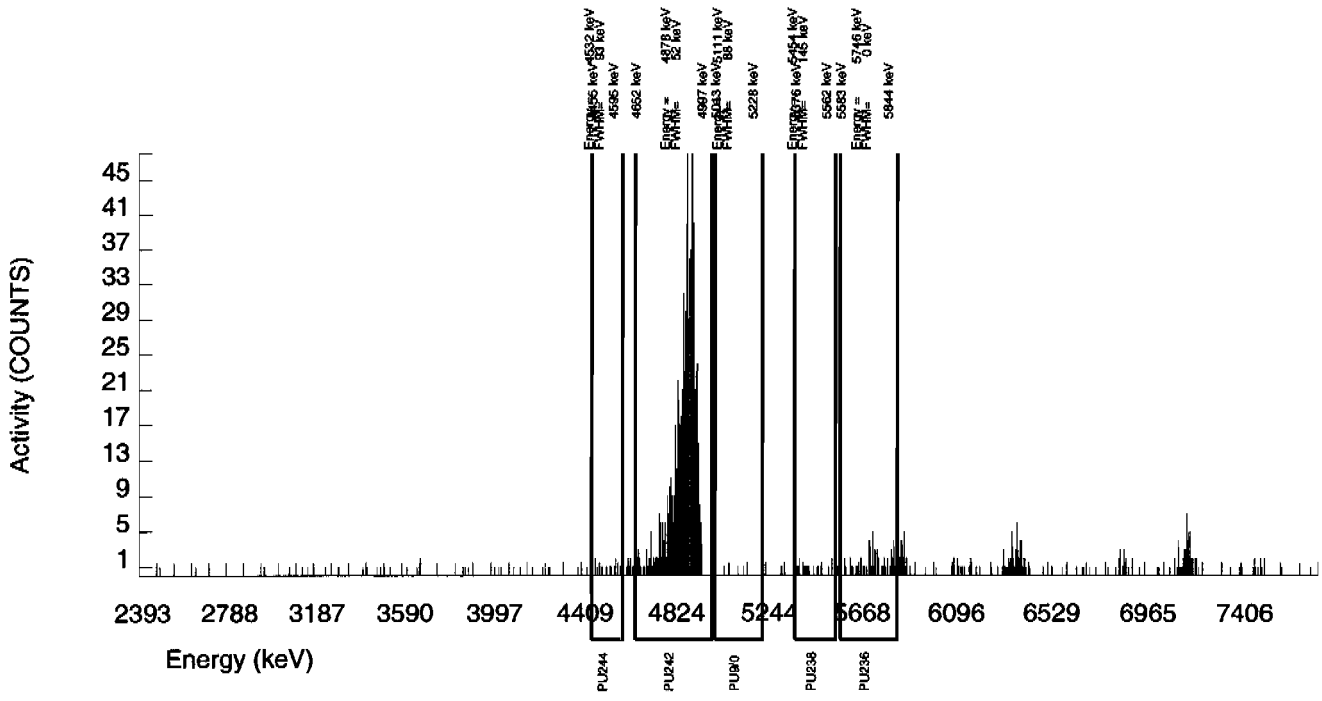

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984985_PU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :78773 AVERAGE %EFFICIENCY :32.6597 % YIELD : 93.580	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.94982 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B040.CNF;1094 BKG DATE : 9-DEC-2009 EFF FILE : W040.CNF;313 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	0.000	-2.000	2.000	3.3488	99.90000	-2.95E-03	2.56E-03	1.15E-02	2.70E-02	2.56E-03
PU-236	5749.000	33.000	-4.000	37.000	2.0294	100.0000	-5.93E-03	1.24E-02	6.96E-03	1.79E-02	1.24E-02
PU-238	5499.000	0.000	-6.000	6.000	2.9082	99.90000	-8.85E-03	3.90E-03	9.98E-03	2.40E-02	3.90E-03
PU242	4890.000	1298.000	1290.000	8.000	2.8284	100.0000	1.90E+00	1.07E-01	9.70E-03	2.34E-02	5.33E-02
PU-244	4589.000	1.000	1.000	0.000	6.8218	99.90000	1.48E-03	1.48E-03	2.34E-02	5.08E-02	1.48E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

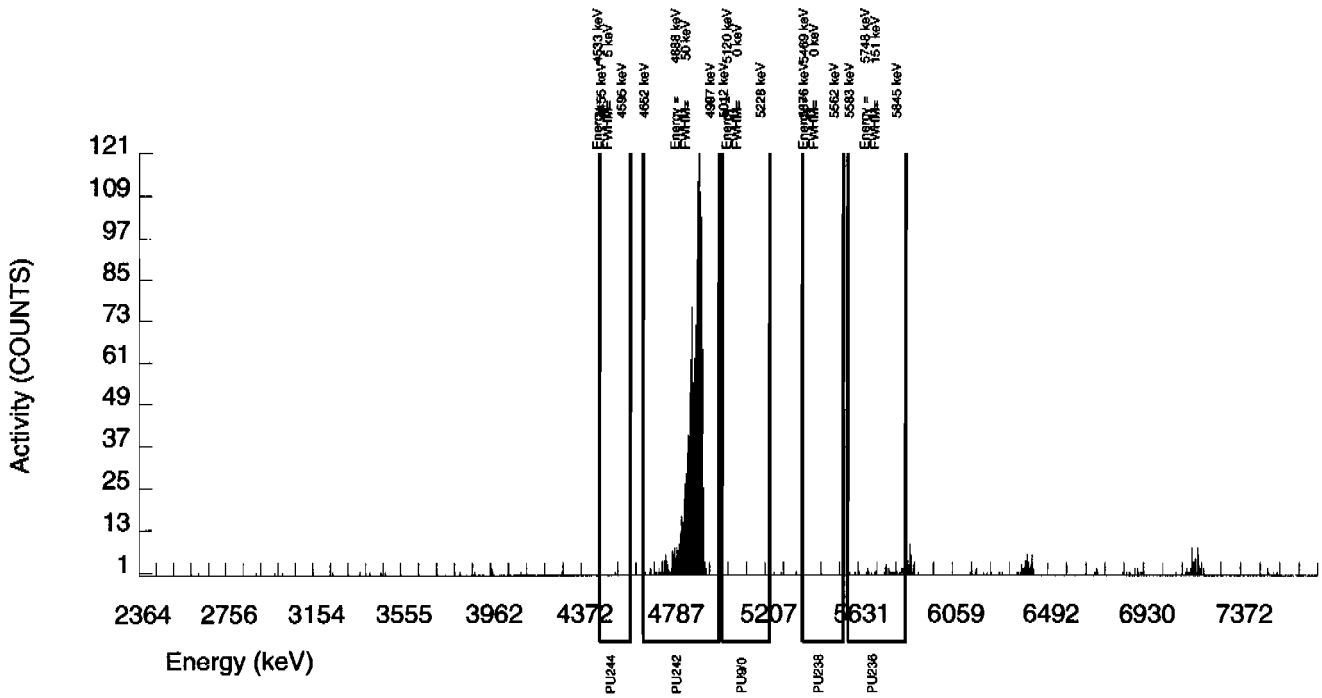

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S1201984986_PU SAMPLE QTY: 1.253 G
DETECTOR NUMBER :78205 AVERAGE %EFFICIENCY :32.7900 % YIELD : 66.401	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 2.80268 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B041.CNF;1087 BKG DATE : 9-DEC-2009 EFF FILE : W041.CNF;317 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	4.000	3.000	1.000	3.3488	99.90000	4.96E-03	3.70E-03	1.29E-02	3.02E-02	3.70E-03
PU-236	5749.000	36.000	-3.000	39.000	2.0294	100.0000	-5.03E-03	1.45E-02	7.80E-03	2.01E-02	1.45E-02
PU-238	5499.000	5.000	-2.000	7.000	2.9082	99.90000	-3.31E-03	5.73E-03	1.12E-02	2.68E-02	5.73E-03
PU242	4890.000	926.000	919.000	7.000	2.6458	100.0000	1.52E+00	9.34E-02	1.02E-02	2.48E-02	5.04E-02
PU-244	4589.000	9.000	8.000	1.000	6.8218	99.90000	1.32E-02	5.27E-03	2.62E-02	5.69E-02	5.23E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

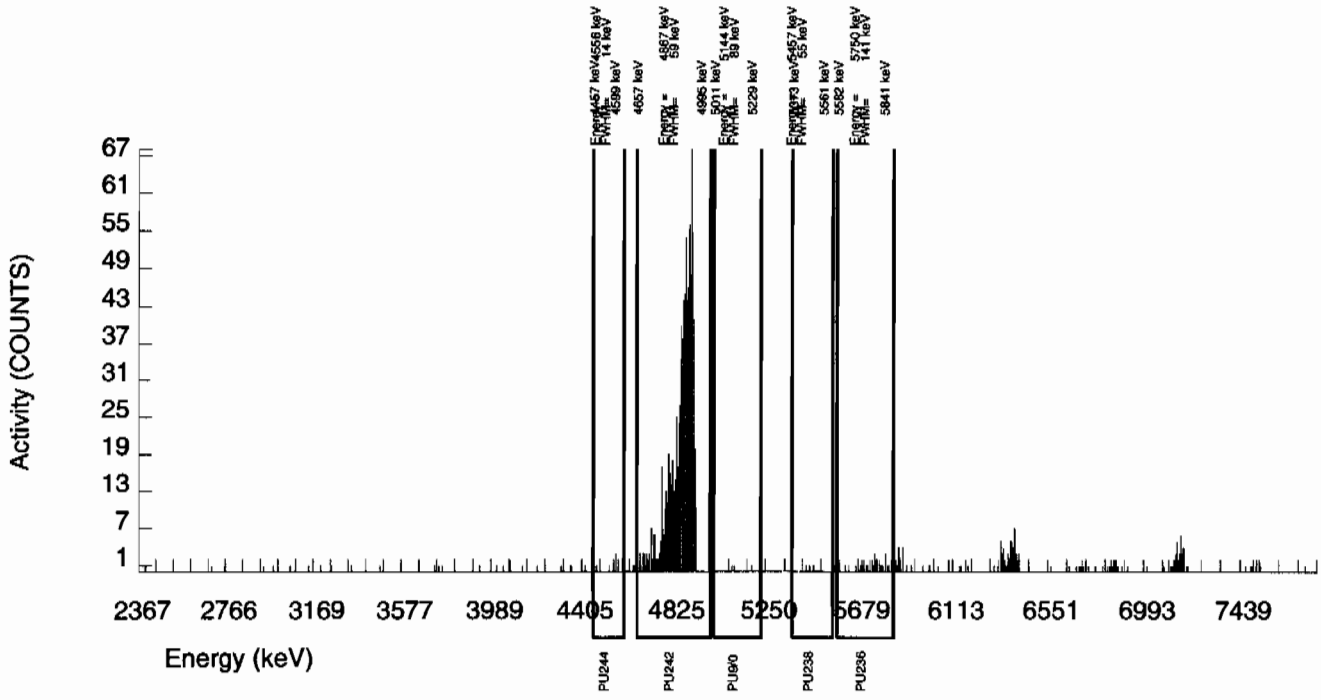

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928305 SAMPLE DATE : 4-DEC-2009 00:00:00.	SAMPLE ID : S1201984987_PU SAMPLE QTY: 0.103 G
DETECTOR NUMBER :78793 AVERAGE %EFFICIENCY :32.5347 % YIELD : 93.429	COUNT DATE:11-DEC-2009 09:39:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.94348 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B042.CNF;1086 BKG DATE : 9-DEC-2009 EFF FILE : W042.CNF;290 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2615.000	2612.000	3.000	3.3488	99.90000	3.76E+01	2.30E+00	1.12E-01	2.63E-01	7.37E-01
PU-236	5749.000	27.000	-5.000	32.000	2.0294	100.0000	-7.23E-02	1.11E-01	6.79E-02	1.75E-01	1.11E-01
PU-238	5499.000	471.000	467.000	4.000	2.9082	99.90000	6.73E+00	5.00E-01	9.74E-02	2.34E-01	3.14E-01
PU242	4890.000	1292.000	1283.000	9.000	3.0000	100.0000	1.85E+01	1.19E+00	1.00E-01	2.40E-01	5.19E-01
PU-244	4589.000	13.000	11.000	2.000	6.8218	99.90000	1.58E-01	5.65E-02	2.29E-01	4.96E-01	5.58E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

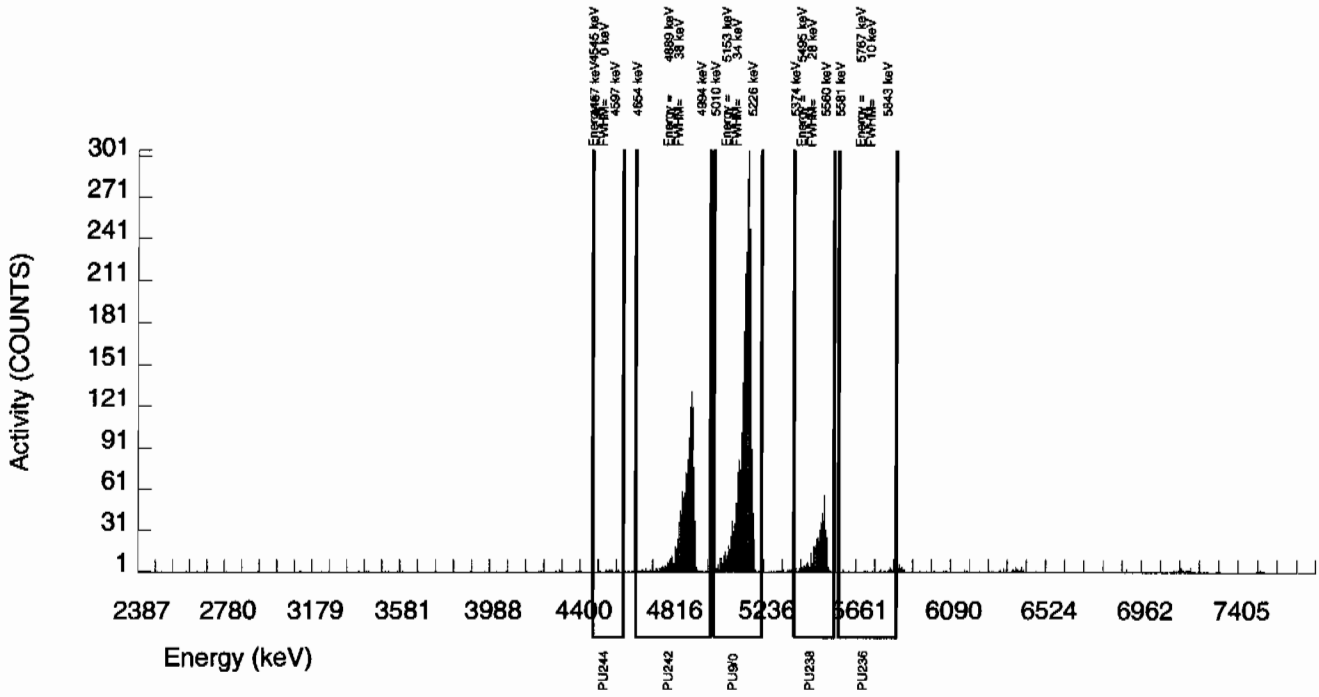

Radiochemistry Batch Checklist, Rev 9

Batch# 931796 Product: U Date: 12/15/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		~~N/A~~ 12/15/09
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125%. Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		Case narrative
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [illegible] 12/15/09

Secondary Review Performed By: [illegible] 12/15/09

12/12 12/18

Uranium Que Sheet

11-DEC-09

Batch #: 931796 Analyst: MXE1 First Client Due Date:18-DEC-09 Internal Due Date:12-DEC-09

Tracer Isotope: U-232/U-236 Tracer Code: 1283-E Expiration Date: 01/15/10 Vol: 0.1

LCS Isotope: U-238 LCS Code: 0244-A Expiration Date: 10/31/10 Vol: * SRM

Spike Isotope: U-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/11/09 Initials: gmo Pipet ID: 4497063 Balance ID: 19350208 Witness: gf 12-11-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/ml/l)	U Det #
241518001-2	CALA-10-4848	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	1	1	0.508	153
241518002-3	CABG-10-4888	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	2	2	0.508	154
241518003-2	CABG-10-4889	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	3	3	0.502	155
241518004-2	CABG-10-4886	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	4	4	0.509	156
241518005-2	CABG-10-4890	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	5	5	0.509	157
241518006-2	CABG-10-4887	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	6	6	0.508	158
241524002-2	WST03-10-2132	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	7	7	0.502	159
241559001-2	RE03-10-6903	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	8	8	0.506	160
241559002-2	RE03-10-6902	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	9	9	0.501	161
241610001-2	RE03-09-13919	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	10	10	0.502	162
241610002-2	RE03-09-13916	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	11	11	0.509	163
241610003-2	RE03-09-13920	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	12	12	0.509	164
241610004-2	RE03-09-13914	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	13	13	0.505	165
241610005-2	RE03-09-13915	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	14	14	0.503	166
241610006-2	RE03-09-13918	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	15	15	0.504	167
241610007-3	RE03-09-13921	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	16	16	0.507	168
241610008-2	RE03-09-13917	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	17	17	0.503	169
241610009-2	RE03-10-7033	SAMPLE		.1 pCi/g	SOIL	LANL010	19-NOV-09	18	18	0.502	170
1201993214-1	MB for batch 931796	MB		UCF pCi/g to pCi/	SOIL	QC ACCOUNT		19	19	1.00	171
1201993215-2	RE03-10-7033(241610009DUP)	DUP		.1 pCi/g	SOIL	QC ACCOUNT	19-NOV-09	20	20	0.504	172
1201993216-1	LCS for batch 931796	LCS		UCF pCi/g to pCi/	SOIL	QC ACCOUNT		21	~~20~~ 21	0.110	152

*SRM: 0244-A exp: 10/31/20 0.110 g

gmo 12-14-09

Choose SOP used: GL-RAD-A-011
GL-RAD-A-038
GL-RAD-A-045
GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: J. L. 12/15/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 931796

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201993215	DUP	Uranium-233/234	0.504 g	1.13	0.0925	0.0744	.009246032	pCi/g	NO
		Uranium-235/236	0.504 g	0.121	0.0208	0.0452	.017281746	pCi/g	NO
		Uranium-238	0.504 g	1.13	0.0928	0.0411	.004662698	pCi/g	NO
1201993216	LCS	Uranium-233/234	0.110 g	6.06	0.560	0.522	.042363636	pCi/g	NO
		Uranium-235/236	0.110 g	0.404	0.0975	0.317	.079181818	pCi/g	NO
		Uranium-238	0.110 g	6.10	0.563	0.288	.021363636	pCi/g	NO
1201993214	MB	Uranium-233/234	1.00 g	0.00466	0.00499	0.0356	.00466	pCi/g	YES
		Uranium-235/236	1.00 g	0.00871	0.00463	0.0217	.00871	pCi/g	YES
		Uranium-238	1.00 g	0.00235	0.0047	0.0197	.00235	pCi/g	YES
241518001	CALA-10-4848	Uranium-233/234	0.508 g	0.573	0.0656	0.138	.009173228	pCi/g	NO
		Uranium-235/236	0.508 g	0.0506	0.0172	0.0839	.017145669	pCi/g	YES
		Uranium-238	0.508 g	0.541	0.0631	0.0762	.004625984	pCi/g	NO
241518002	CABG-10-4888	Uranium-233/234	0.508 g	0.838	0.0813	0.113	.009173228	pCi/g	NO
		Uranium-235/236	0.508 g	0.0645	0.0178	0.0688	.017145669	pCi/g	YES
		Uranium-238	0.508 g	0.865	0.0831	0.0625	.004625984	pCi/g	NO
241518003	CABG-10-4889	Uranium-233/234	0.502 g	0.806	0.0783	0.111	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0635	0.0197	0.0676	.017350598	pCi/g	YES
		Uranium-238	0.502 g	0.697	0.0701	0.0615	.004681275	pCi/g	NO
241518004	CABG-10-4886	Uranium-233/234	0.509 g	0.856	0.0818	0.110	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.0583	0.0178	0.067	.017111984	pCi/g	YES
		Uranium-238	0.509 g	0.791	0.0771	0.0609	.004616896	pCi/g	NO
241518005	CABG-10-4890	Uranium-233/234	0.509 g	0.982	0.0906	0.109	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.089	0.0208	0.0664	.017111984	pCi/g	NO
		Uranium-238	0.509 g	1.08	0.0979	0.0603	.004616896	pCi/g	NO
241518006	CABG-10-4887	Uranium-233/234	0.508 g	1.56	0.133	0.112	.009173228	pCi/g	NO
		Uranium-235/236	0.508 g	0.0913	0.0214	0.0681	.017145669	pCi/g	NO
		Uranium-238	0.508 g	1.58	0.134	0.0619	.004625984	pCi/g	NO
241524002	WST03-10-2132	Uranium-233/234	0.502 g	0.821	0.0776	0.103	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0588	0.0162	0.0627	.017350598	pCi/g	YES
		Uranium-238	0.502 g	0.775	0.0744	0.057	.004681275	pCi/g	NO
241559001	RE03-10-6903	Uranium-233/234	0.506 g	0.929	0.0876	0.113	.009209486	pCi/g	NO
		Uranium-235/236	0.506 g	0.0646	0.0178	0.0689	.017213439	pCi/g	YES
		Uranium-238	0.506 g	1.07	0.0979	0.0626	.004644269	pCi/g	NO
241559002	RE03-10-6902	Uranium-233/234	0.501 g	0.610	0.0569	0.0755	.009301397	pCi/g	NO
		Uranium-235/236	0.501 g	0.0615	0.0144	0.0459	.017385230	pCi/g	YES
		Uranium-238	0.501 g	0.629	0.0584	0.0417	.004690619	pCi/g	NO
241610001	RE03-09-13919	Uranium-233/234	0.502 g	1.03	0.086	0.0739	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0663	0.0148	0.0449	.017350598	pCi/g	YES
		Uranium-238	0.502 g	0.987	0.0828	0.0408	.004681275	pCi/g	NO
241610002	RE03-09-13916	Uranium-233/234	0.509 g	0.782	0.0686	0.0736	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.042	0.0123	0.0448	.017111984	pCi/g	YES

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241610002	RE03-09-13916	Uranium-238	0.509 g	0.786	0.069	0.0407	.004616896	pCi/g	NO
241610003	RE03-09-13920	Uranium-233/234	0.509 g	1.08	0.0891	0.0741	.009155206	pCi/g	NO
		Uranium-235/236	0.509 g	0.0936	0.019	0.0451	.017111984	pCi/g	NO
		Uranium-238	0.509 g	1.04	0.0869	0.041	.004616896	pCi/g	NO
241610004	RE03-09-13914	Uranium-233/234	0.505 g	0.842	0.0722	0.0714	.009227723	pCi/g	NO
		Uranium-235/236	0.505 g	0.0989	0.0182	0.0434	.017247525	pCi/g	NO
		Uranium-238	0.505 g	0.967	0.0809	0.0394	.004653465	pCi/g	NO
241610005	RE03-09-13915	Uranium-233/234	0.503 g	1.04	0.0857	0.0713	.009264414	pCi/g	NO
		Uranium-235/236	0.503 g	0.108	0.0191	0.0434	.017316103	pCi/g	NO
		Uranium-238	0.503 g	0.969	0.0809	0.0394	.004671968	pCi/g	NO
241610006	RE03-09-13918	Uranium-233/234	0.504 g	0.987	0.0833	0.0762	.009246032	pCi/g	NO
		Uranium-235/236	0.504 g	0.0434	0.0128	0.0463	.017281746	pCi/g	YES
		Uranium-238	0.504 g	0.946	0.0805	0.0421	.004662698	pCi/g	NO
241610007	RE03-09-13921	Uranium-233/234	0.507 g	1.00	0.0836	0.0734	.009191321	pCi/g	NO
		Uranium-235/236	0.507 g	0.0896	0.0175	0.0446	.017179487	pCi/g	NO
		Uranium-238	0.507 g	1.02	0.0856	0.0405	.004635108	pCi/g	NO
241610008	RE03-09-13917	Uranium-233/234	0.503 g	1.09	0.0894	0.0712	.009264414	pCi/g	NO
		Uranium-235/236	0.503 g	0.0667	0.0146	0.0433	.017316103	pCi/g	YES
		Uranium-238	0.503 g	1.21	0.0976	0.0393	.004671968	pCi/g	NO
241610009	RE03-10-7033	Uranium-233/234	0.502 g	1.02	0.0845	0.072	.009282869	pCi/g	NO
		Uranium-235/236	0.502 g	0.0822	0.017	0.0438	.017350598	pCi/g	YES
		Uranium-238	0.502 g	1.03	0.0856	0.0398	.004681275	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241559001_UU SAMPLE QTY: 0.506 G
DETECTOR NUMBER :79994 AVERAGE %EFFICIENCY :24.6099 % YIELD : 96.882	COUNT DATE:14-DEC-2009 12:08:02 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 5.08301 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B160.CNF;354 BKG DATE : 13-DEC-2009 EFF FILE : W160.CNF;112 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	250.000	248.737	0.000	5.9398	100.0000	9.29E-01	8.76E-02	5.16E-02	1.13E-01	5.89E-02
U232	5302.100	1250.000	1250.000	0.000	0.0000	100.0000	4.67E+00	3.52E-01	0.00E+00	1.01E-02	1.32E-01
U-235	4391.000	14.000	14.000	0.000	2.6249	80.90000	6.46E-02	1.78E-02	2.82E-02	6.89E-02	1.73E-02
U-238	4184.730	287.000	287.000	0.000	3.0201	100.0000	1.07E+00	9.79E-02	2.62E-02	6.26E-02	6.33E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

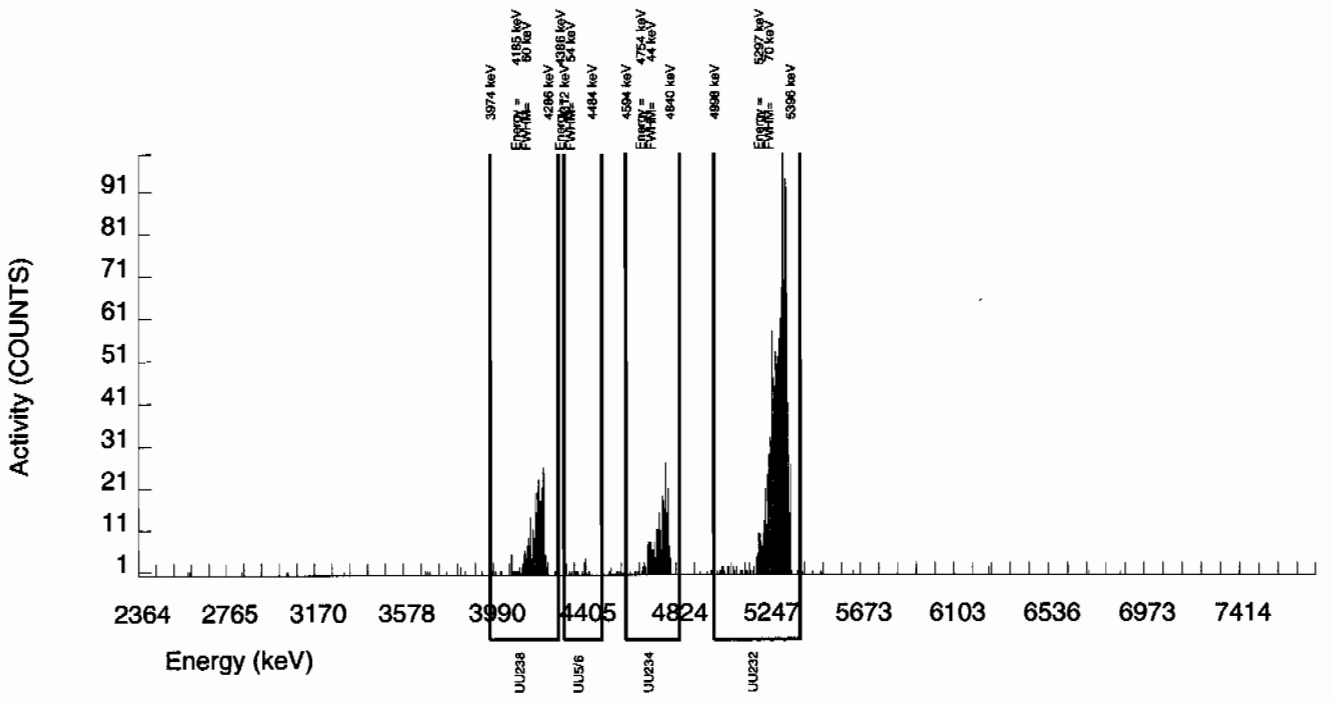

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241559002_UU SAMPLE QTY: 0.501 G
DETECTOR NUMBER :SAMPLE AVERAGE %EFFICIENCY :36.7291 % YIELD : 98.411	COUNT DATE:14-DEC-2009 12:20:48 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 5.16321 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B161.CNF;150 BKG DATE : 13-DEC-2009 EFF FILE : W161.CNF;51 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	248.000	245.086	1.000	5.9398	100.0000	6.10E-01	5.69E-02	3.44E-02	7.55E-02	3.91E-02
U232	5302.100	1902.000	1895.000	7.000	2.6458	100.0000	4.72E+00	3.37E-01	1.53E-02	3.74E-02	1.09E-01
U-235	4391.000	20.000	20.000	0.000	2.6249	80.90000	6.15E-02	1.44E-02	1.88E-02	4.59E-02	1.38E-02
U-238	4184.730	255.000	253.000	2.000	3.0201	100.0000	6.29E-01	5.84E-02	1.75E-02	4.17E-02	3.99E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

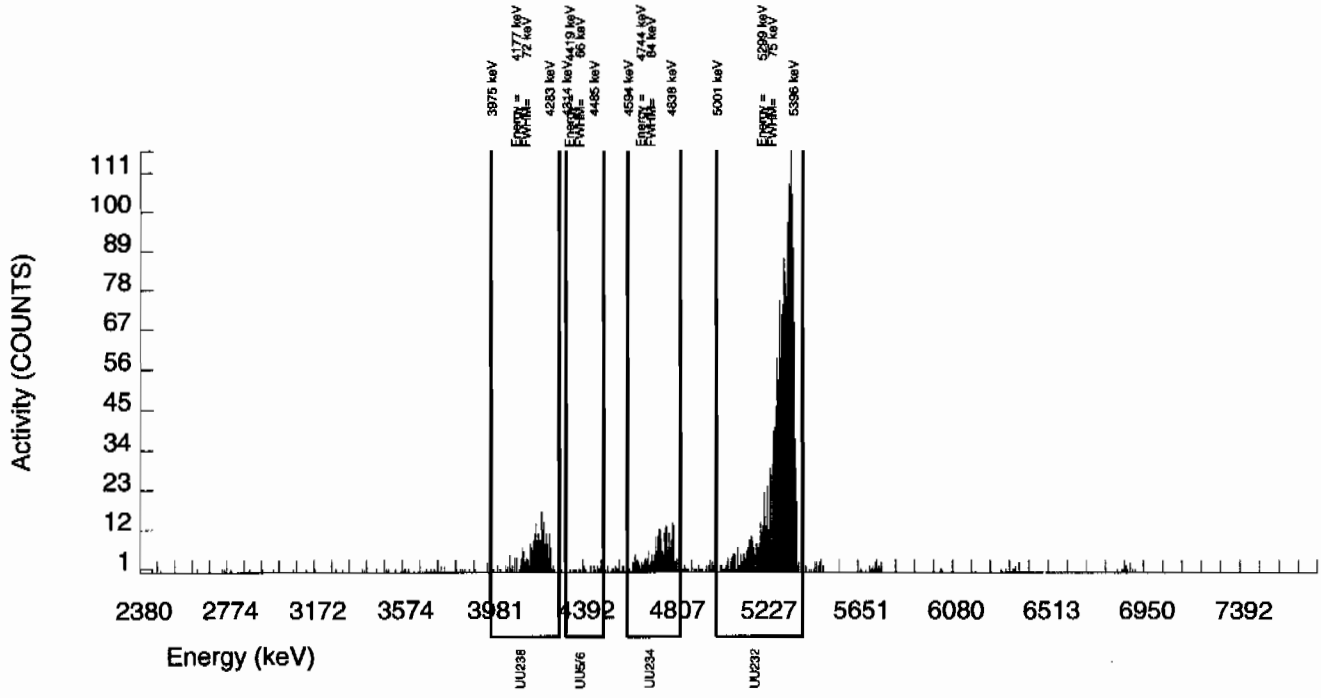

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S0241610009_UU SAMPLE QTY: 0.502 G
DETECTOR NUMBER :72549 AVERAGE %EFFICIENCY :36.8583 % YIELD : 102.568	COUNT DATE:14-DEC-2009 12:21:09 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24647 dpm RESULTS : 5.38118 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B170.CNF;151 BKG DATE : 13-DEC-2009 EFF FILE : W170.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	433.000	427.998	3.000	5.9398	100.0000	1.02E+00	8.45E-02	3.28E-02	7.20E-02	4.94E-02
U232	5302.100	1988.000	1982.000	6.000	2.4495	100.0000	4.71E+00	3.35E-01	1.35E-02	3.35E-02	1.06E-01
U-235	4391.000	29.000	28.000	1.000	2.6249	80.90000	8.21E-02	1.70E-02	1.79E-02	4.38E-02	1.61E-02
U-238	4184.730	436.000	436.000	0.000	3.0201	100.0000	1.03E+00	8.56E-02	1.67E-02	3.98E-02	4.96E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

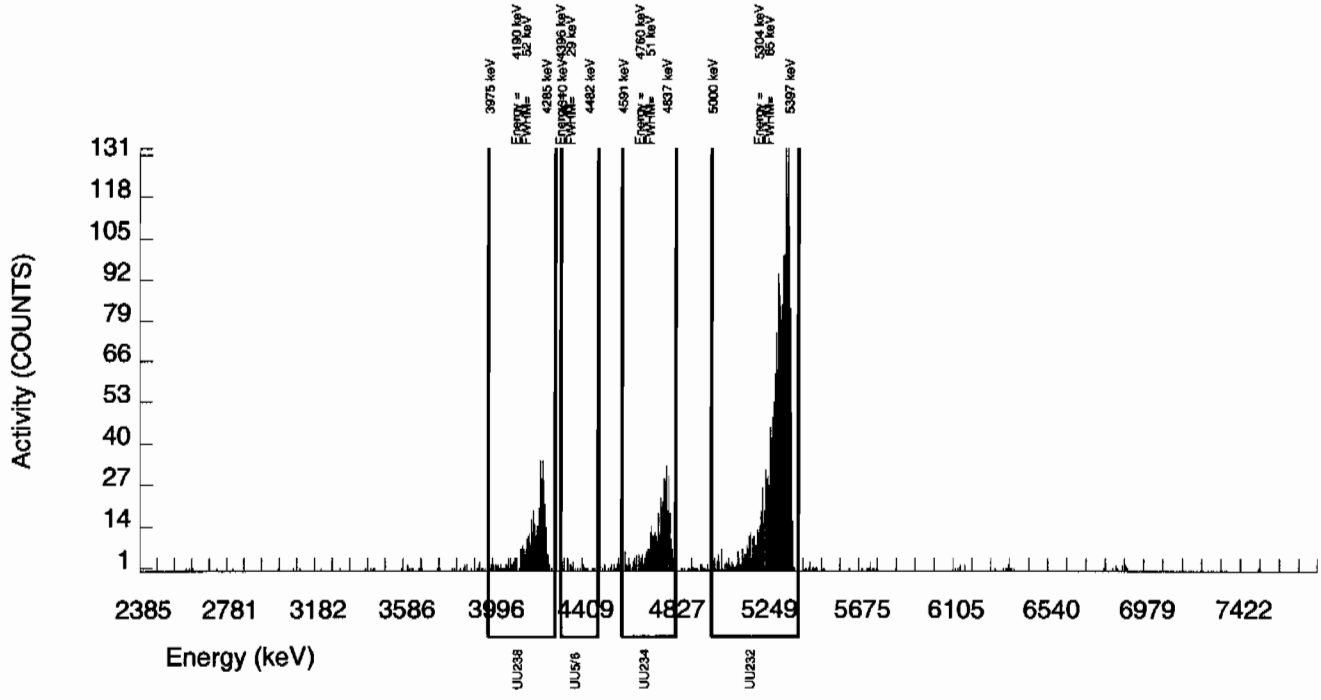

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 11-DEC-2009 00:00:00	SAMPLE ID : S1201993214_UU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :78260 AVERAGE %EFFICIENCY :38.3924 % YIELD : 99.960	COUNT DATE:14-DEC-2009 12:21:11 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24329 dpm RESULTS : 5.24117 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B171.CNF;157 BKG DATE : 13-DEC-2009 EFF FILE : W171.CNF;65 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	13.000	3.967	7.000	5.9398	100.0000	4.66E-03	4.99E-03	1.62E-02	3.56E-02	4.98E-03
U232	5302.100	2021.000	2012.000	9.000	3.0000	100.0000	2.36E+00	1.67E-01	8.19E-03	1.96E-02	5.29E-02
U-235	4391.000	8.000	6.000	2.000	2.6249	80.90000	8.71E-03	4.63E-03	8.86E-03	2.17E-02	4.59E-03
U-238	4184.730	9.000	2.000	7.000	3.0201	100.0000	2.35E-03	4.70E-03	8.25E-03	1.97E-02	4.70E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

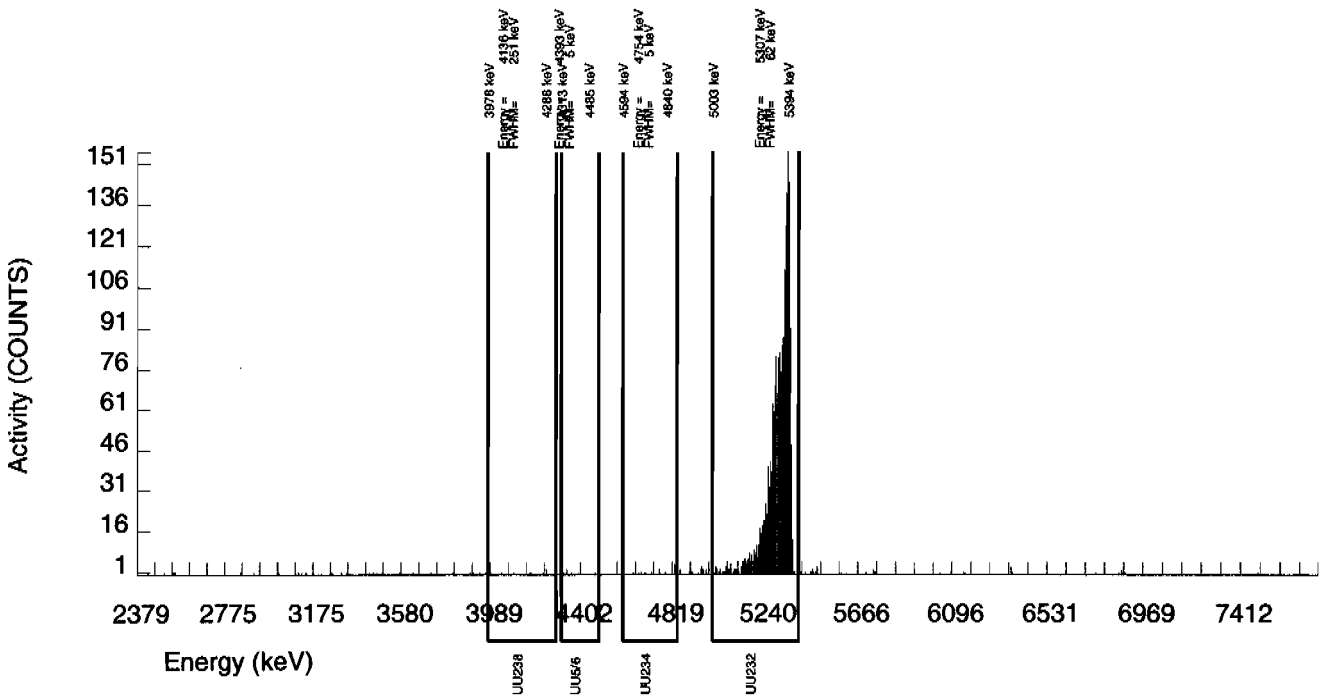

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 19-NOV-2009 00:00:00	SAMPLE ID : S1201993215_UU SAMPLE QTY: 0.504 G
DETECTOR NUMBER :78772 AVERAGE %EFFICIENCY :38.0111 % YIELD : 95.944	COUNT DATE:14-DEC-2009 12:21:13 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24647 dpm RESULTS : 5.03368 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B172.CNF;155 BKG DATE : 13-DEC-2009 EFF FILE : W172.CNF;58 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	462.000	459.068	1.000	5.9398	100.0000	1.13E+00	9.25E-02	3.39E-02	7.44E-02	5.26E-02
U232	5302.100	1915.000	1912.000	3.000	1.7321	100.0000	4.69E+00	3.35E-01	9.87E-03	2.64E-02	1.07E-01
U-235	4391.000	40.000	40.000	0.000	2.6249	80.90000	1.21E-01	2.08E-02	1.85E-02	4.52E-02	1.92E-02
U-238	4184.730	462.000	461.000	1.000	3.0201	100.0000	1.13E+00	9.28E-02	1.72E-02	4.11E-02	5.27E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

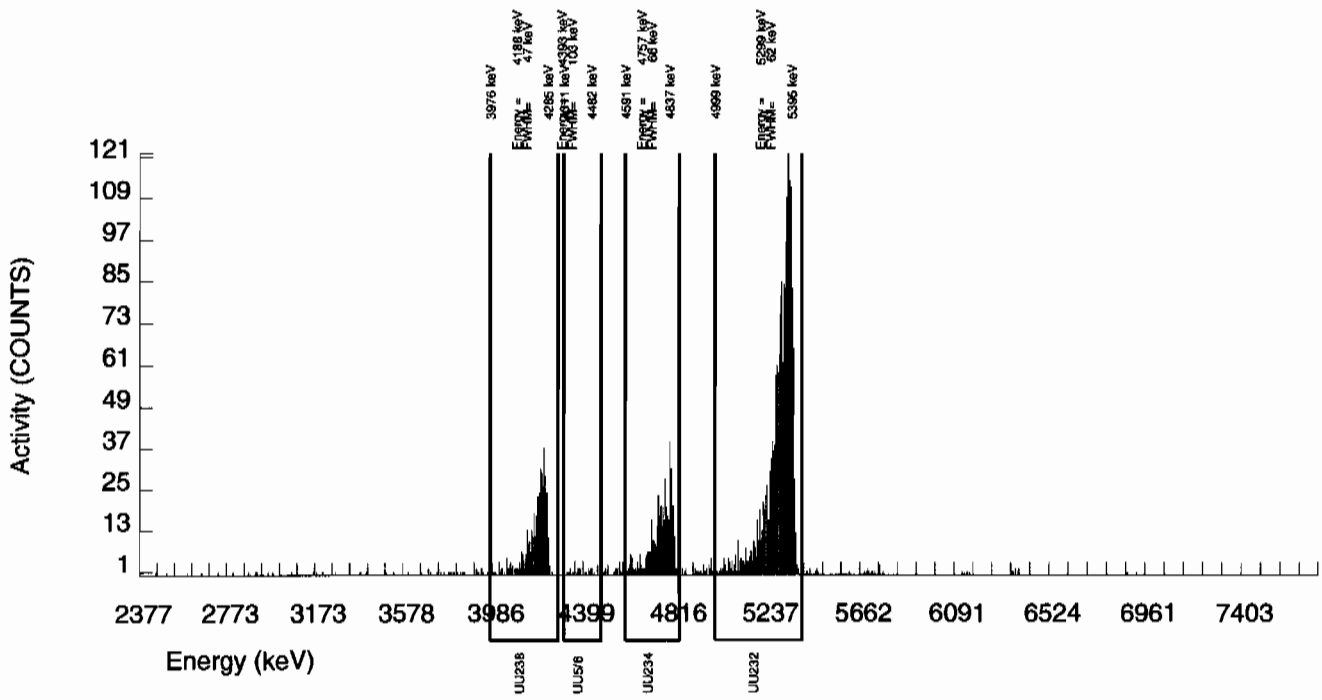

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 931796 SAMPLE DATE : 11-DEC-2009 00:00:00	SAMPLE ID : S1201993216_UU SAMPLE QTY: 0.110 G
DETECTOR NUMBER :76222 AVERAGE %EFFICIENCY :24.4246 % YIELD : 97.539	COUNT DATE:14-DEC-2009 12:07:42 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B152.CNF;373
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24329 dpm	BKG DATE : 13-DEC-2009
		RESULTS : 5.11424 dpm	EFF FILE : W152.CNF;101
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	354.000	352.738	0.000	5.9398	100.0000	6.06E+00	5.60E-01	2.38E-01	5.22E-01	3.23E-01
U232	5302.100	1251.000	1249.000	2.000	1.4142	100.0000	2.15E+01	1.73E+00	5.66E-02	1.60E-01	6.09E-01
U-235	4391.000	19.000	19.000	0.000	2.6249	80.90000	4.04E-01	9.75E-02	1.30E-01	3.17E-01	9.26E-02
U-238	4184.730	355.000	355.000	0.000	3.0201	100.0000	6.10E+00	5.63E-01	1.21E-01	2.88E-01	3.24E-01

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

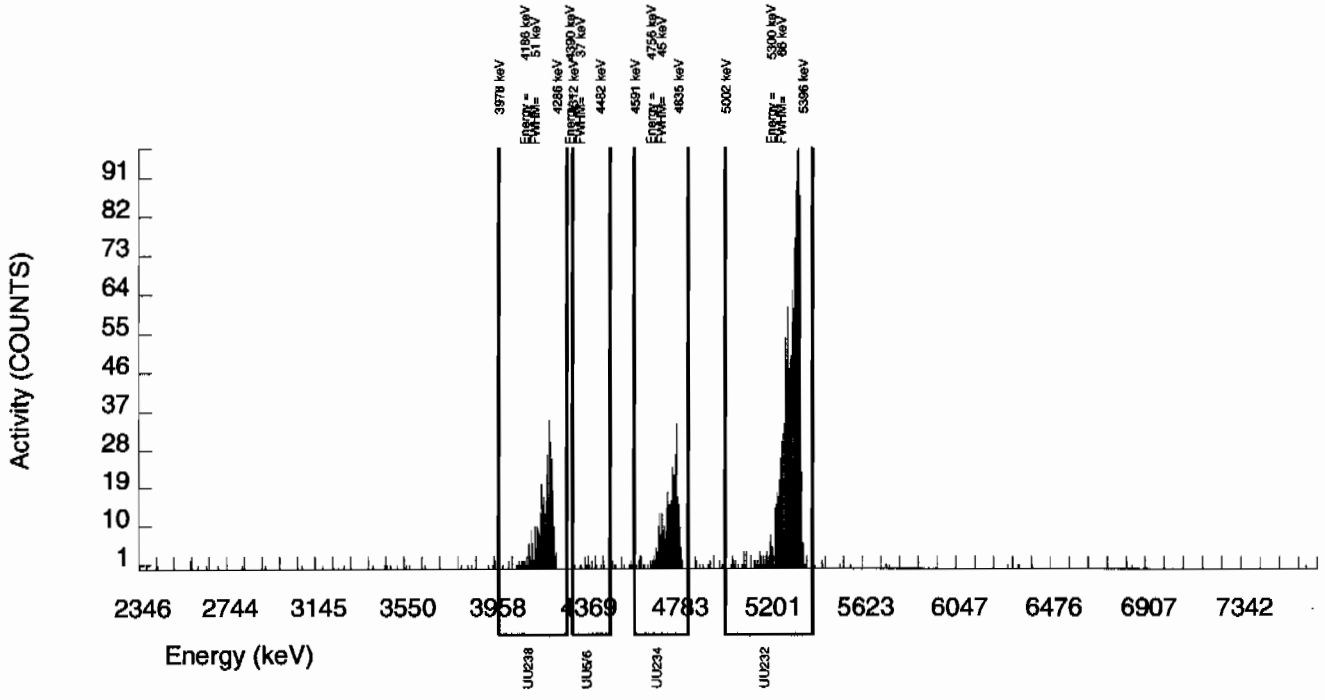

BACKGROUND AND EFFICIENCY DATA

QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

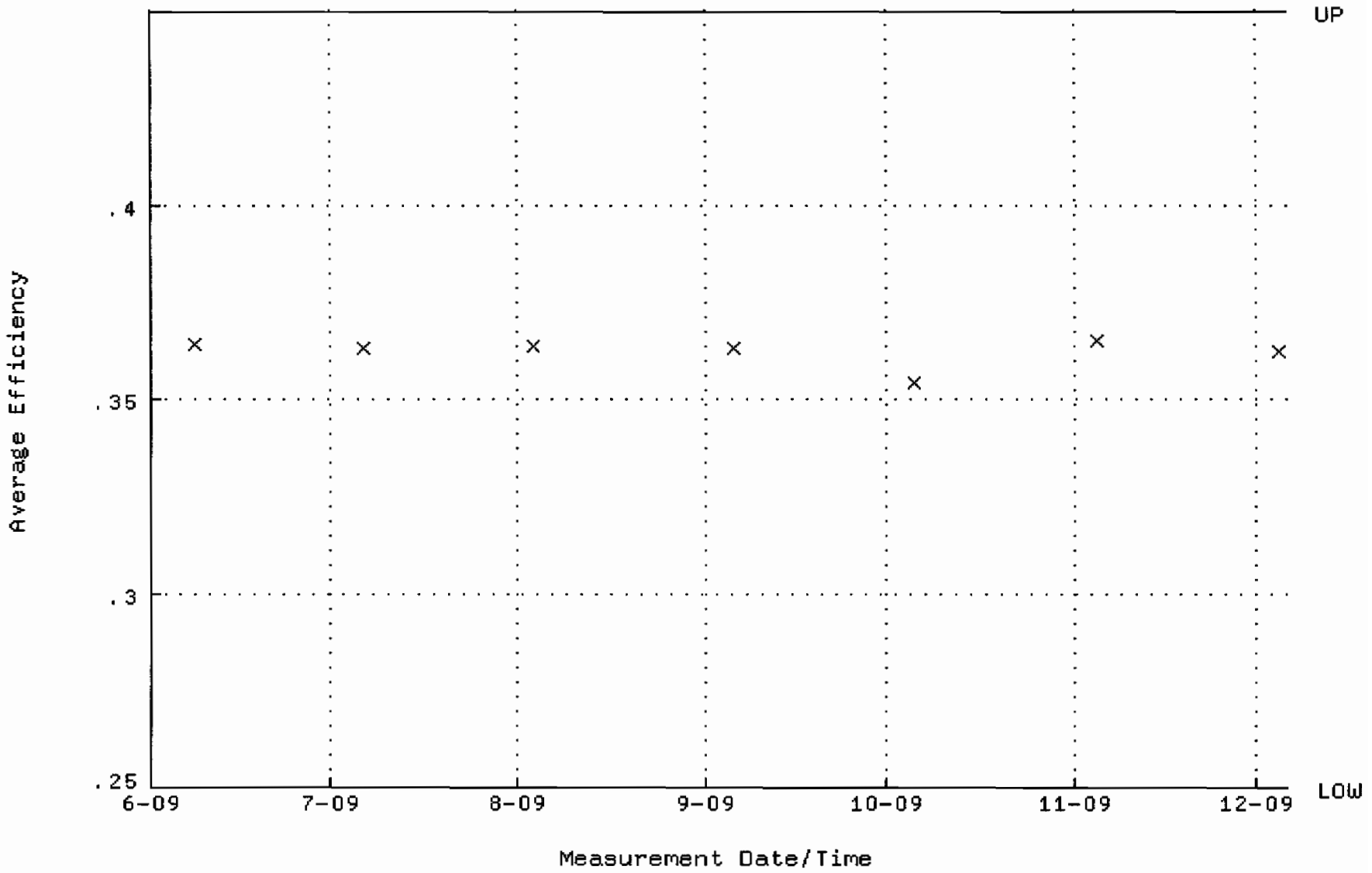

QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

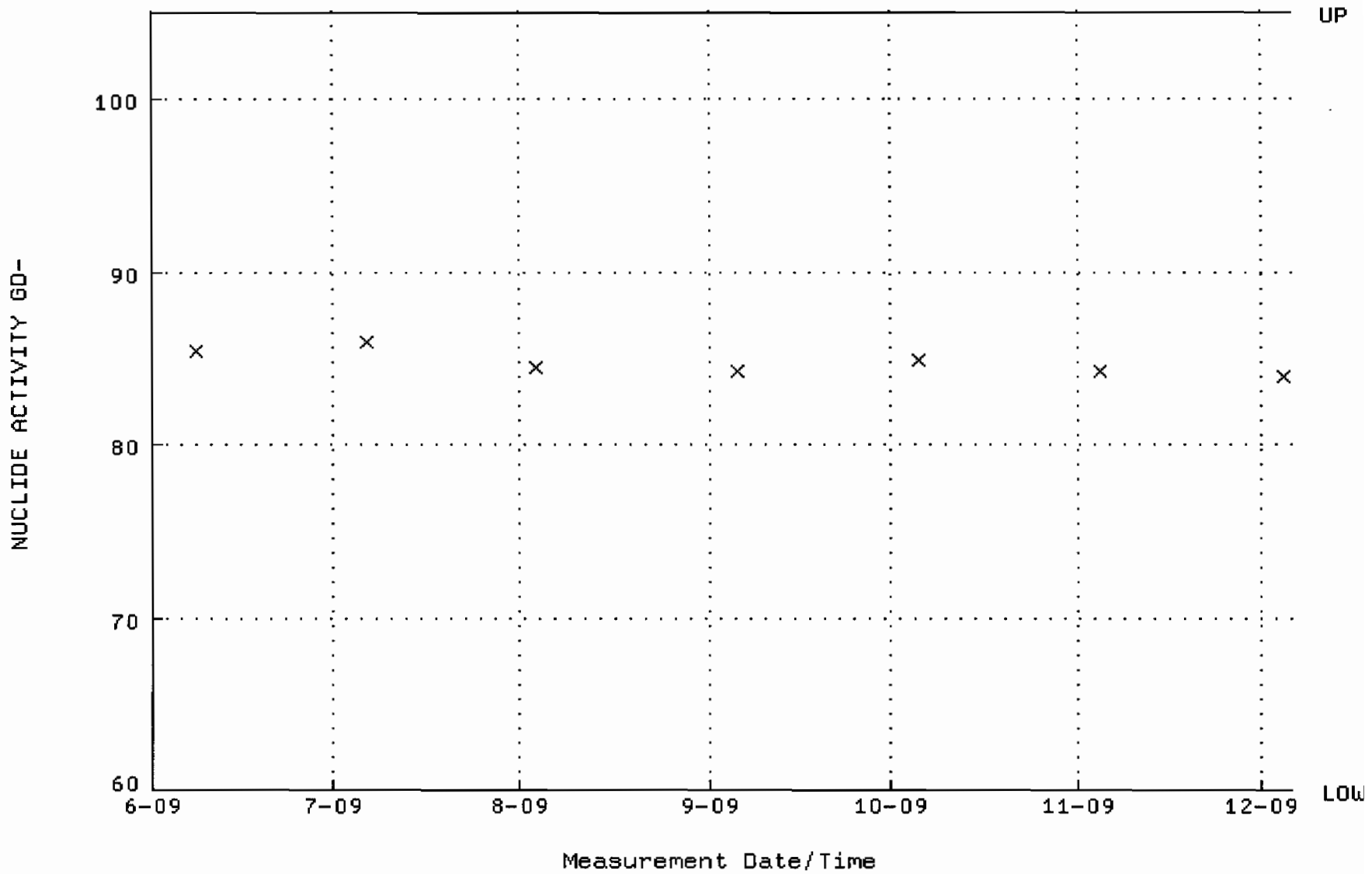

QA filename : DKA100:[ENV_ALPHA.QA.B]B039.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

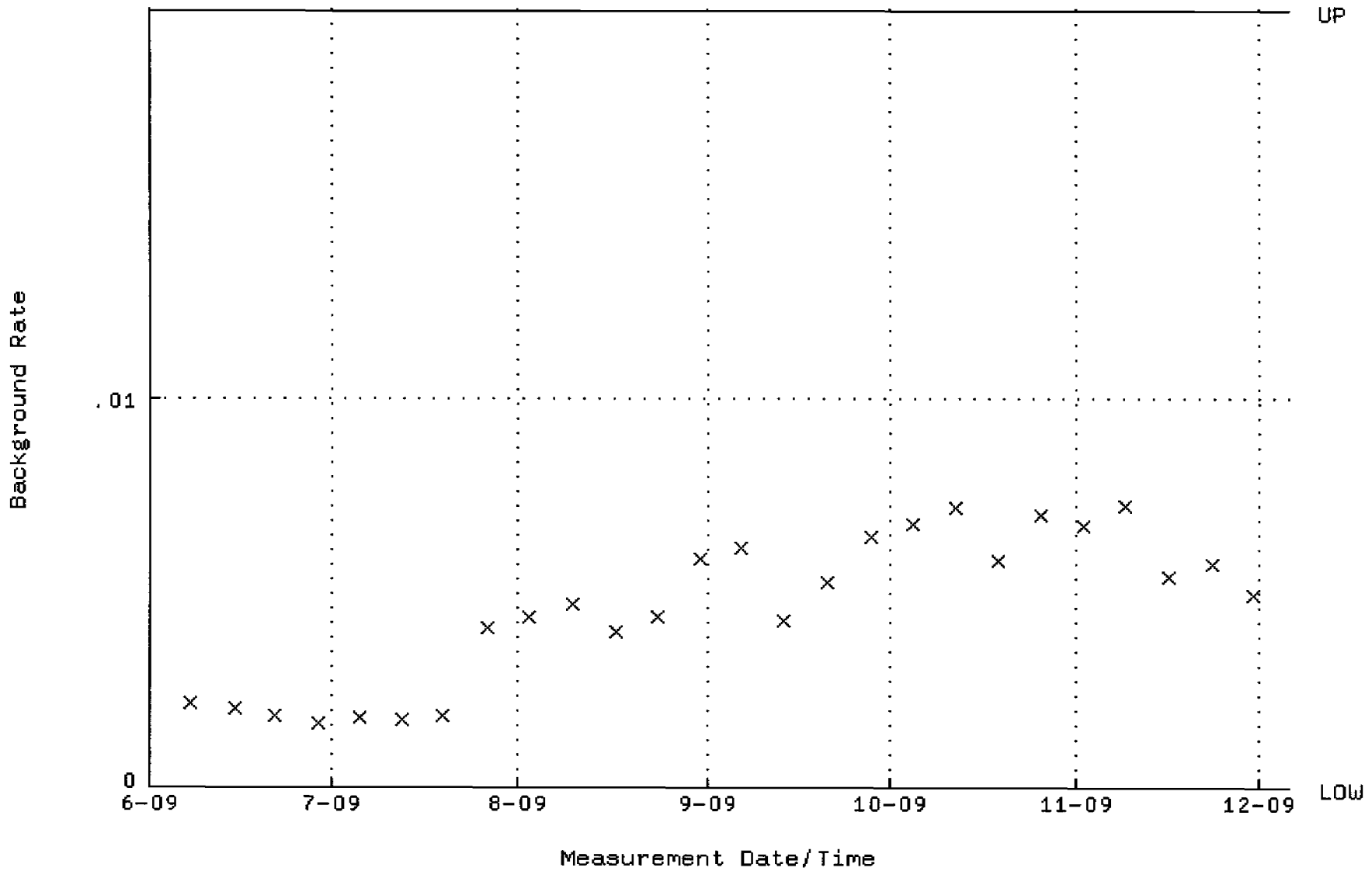

QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.313016 through 0.333016

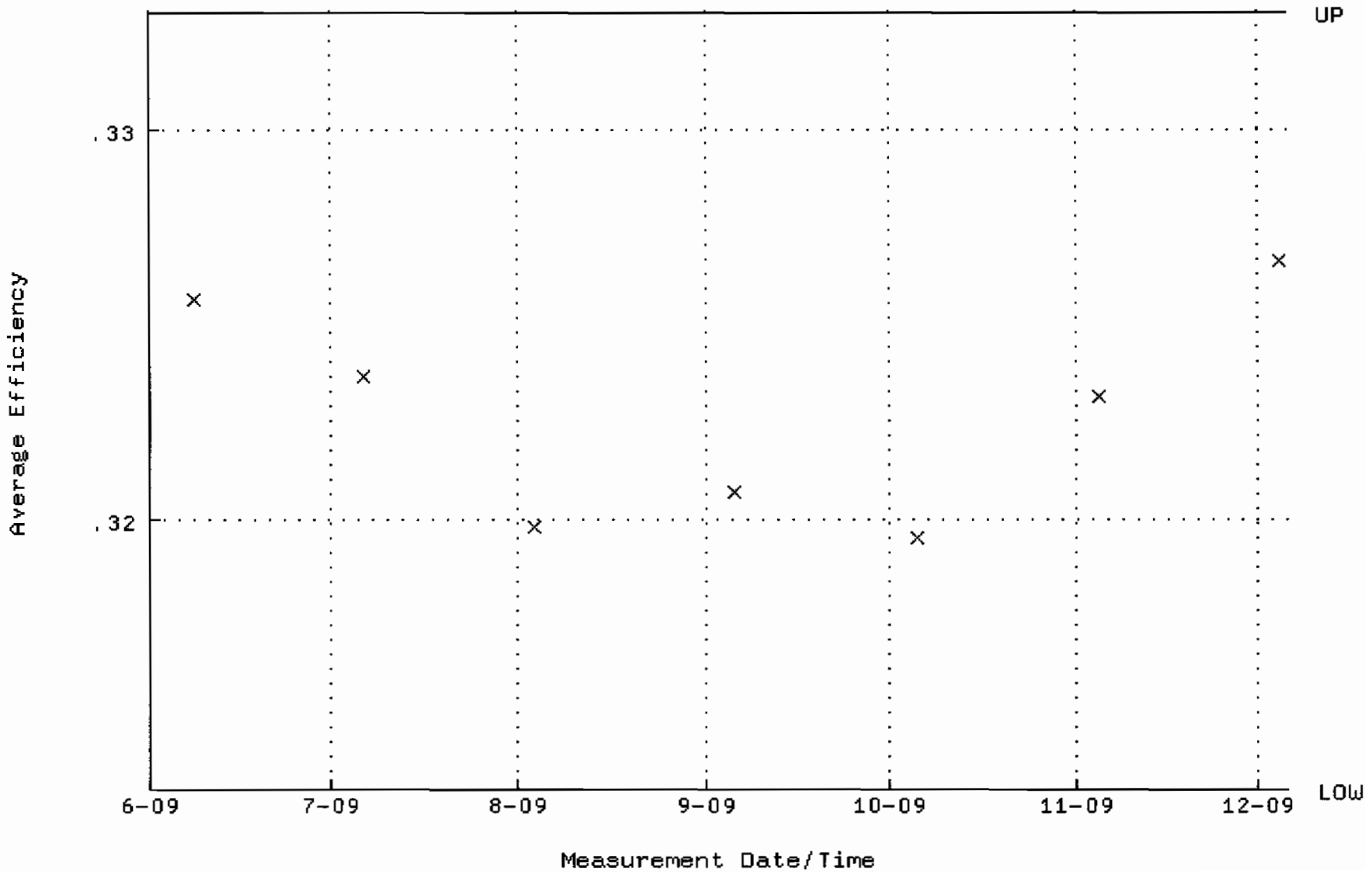

QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 82.8065 through 91.5229

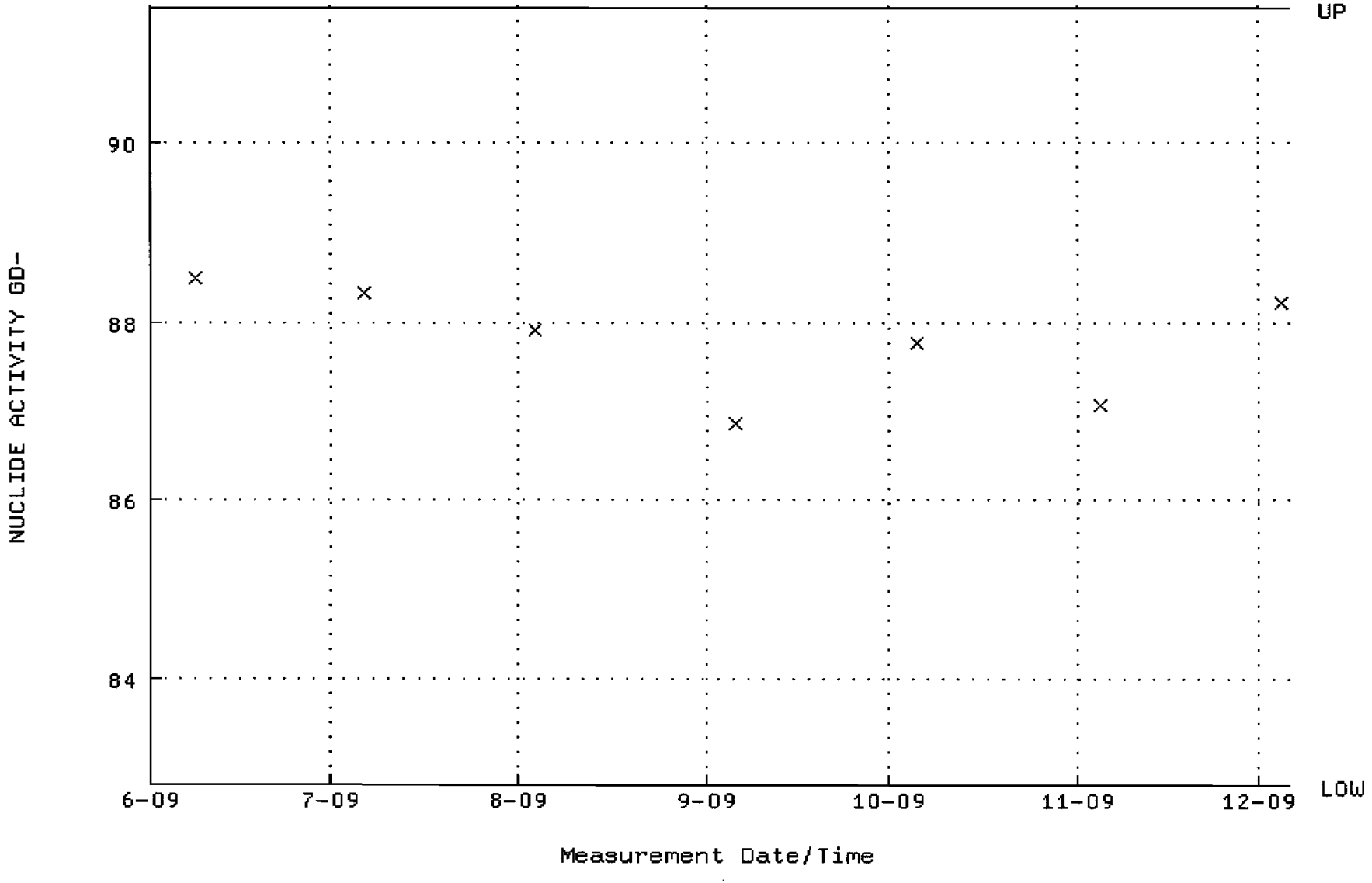

QA filename : DKA100:[ENV_ALPHA.QA.B]B040.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

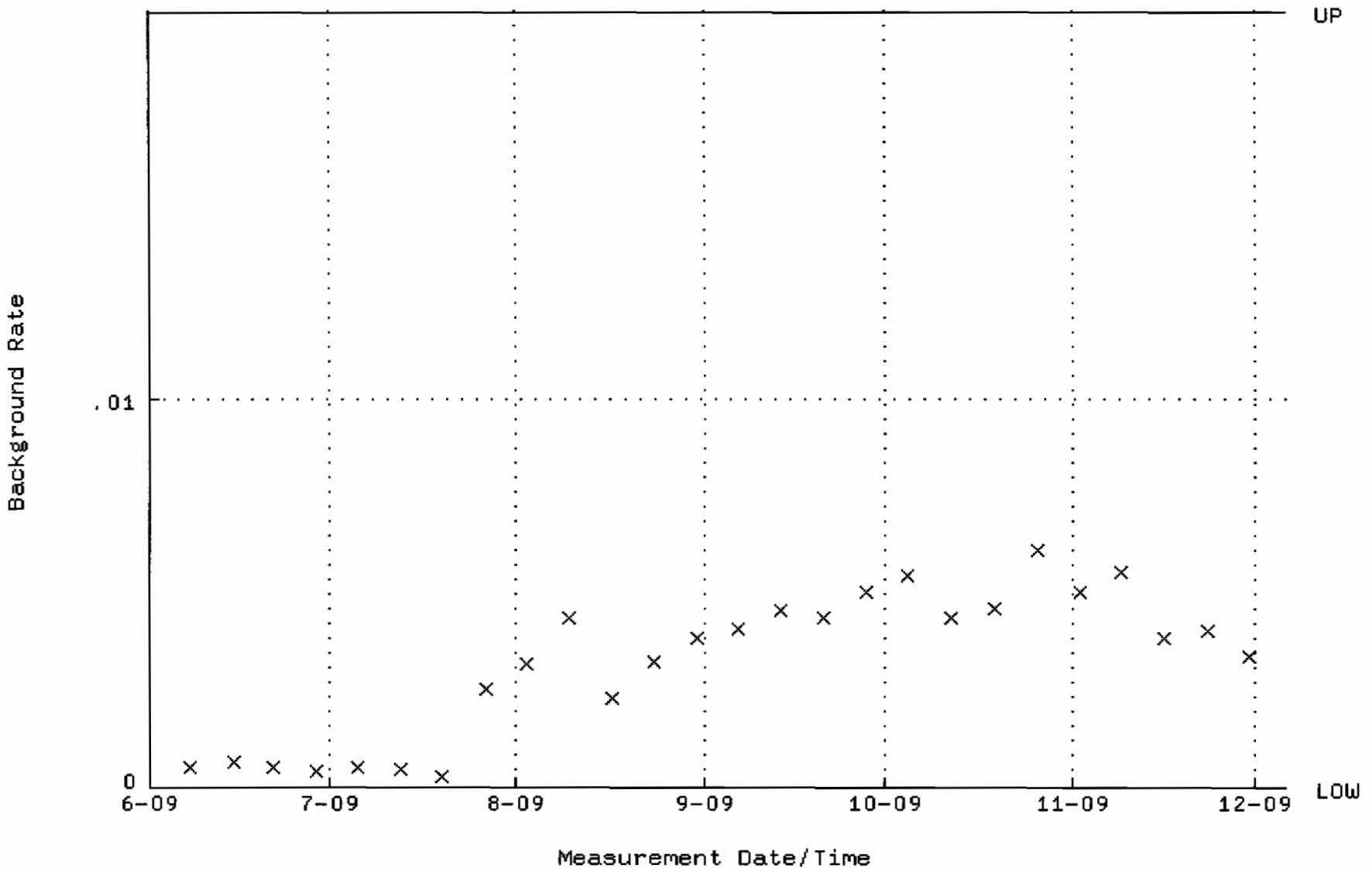

QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.320943 through 0.340943

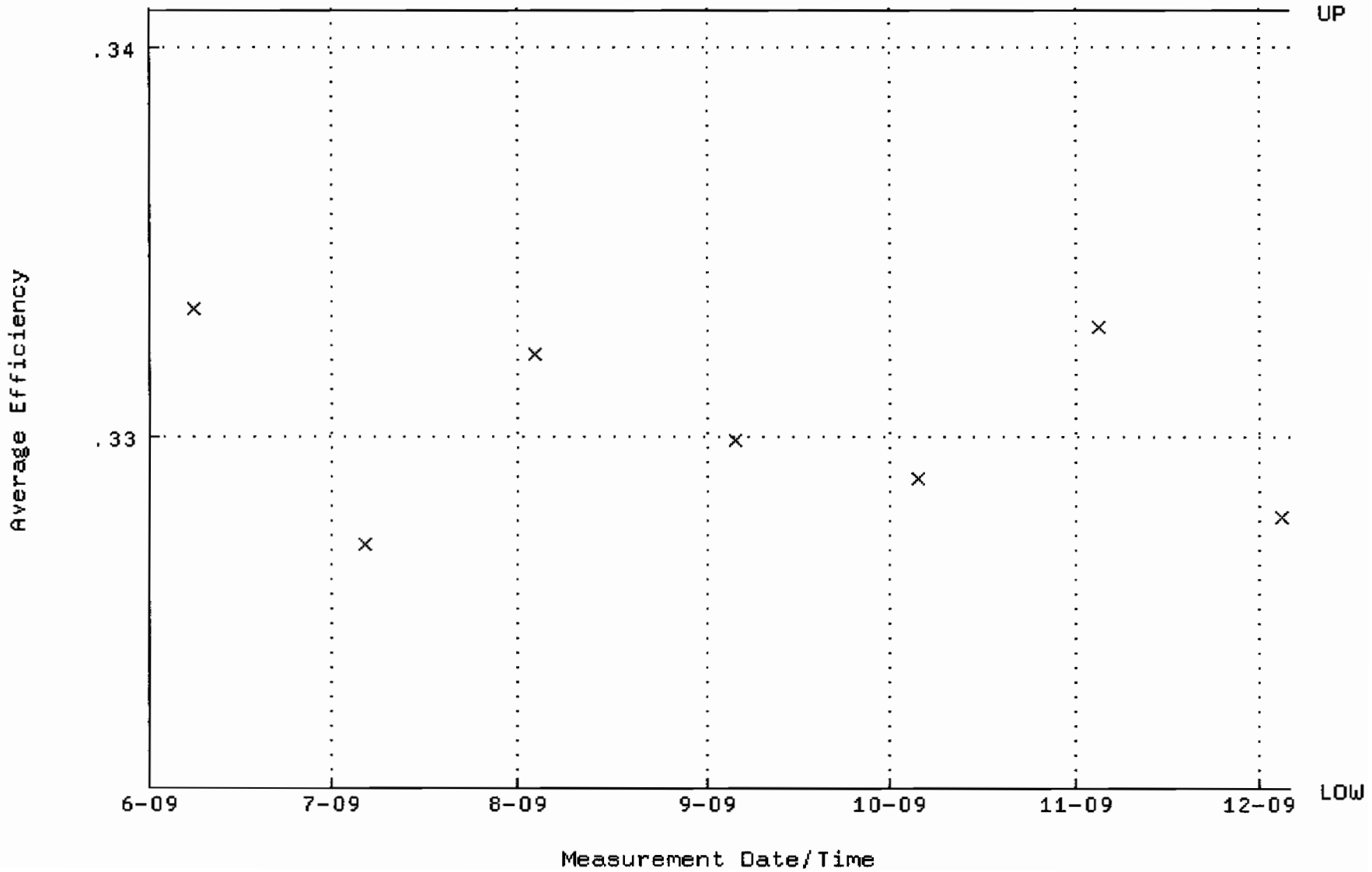

QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 86.6435 through 95.7639

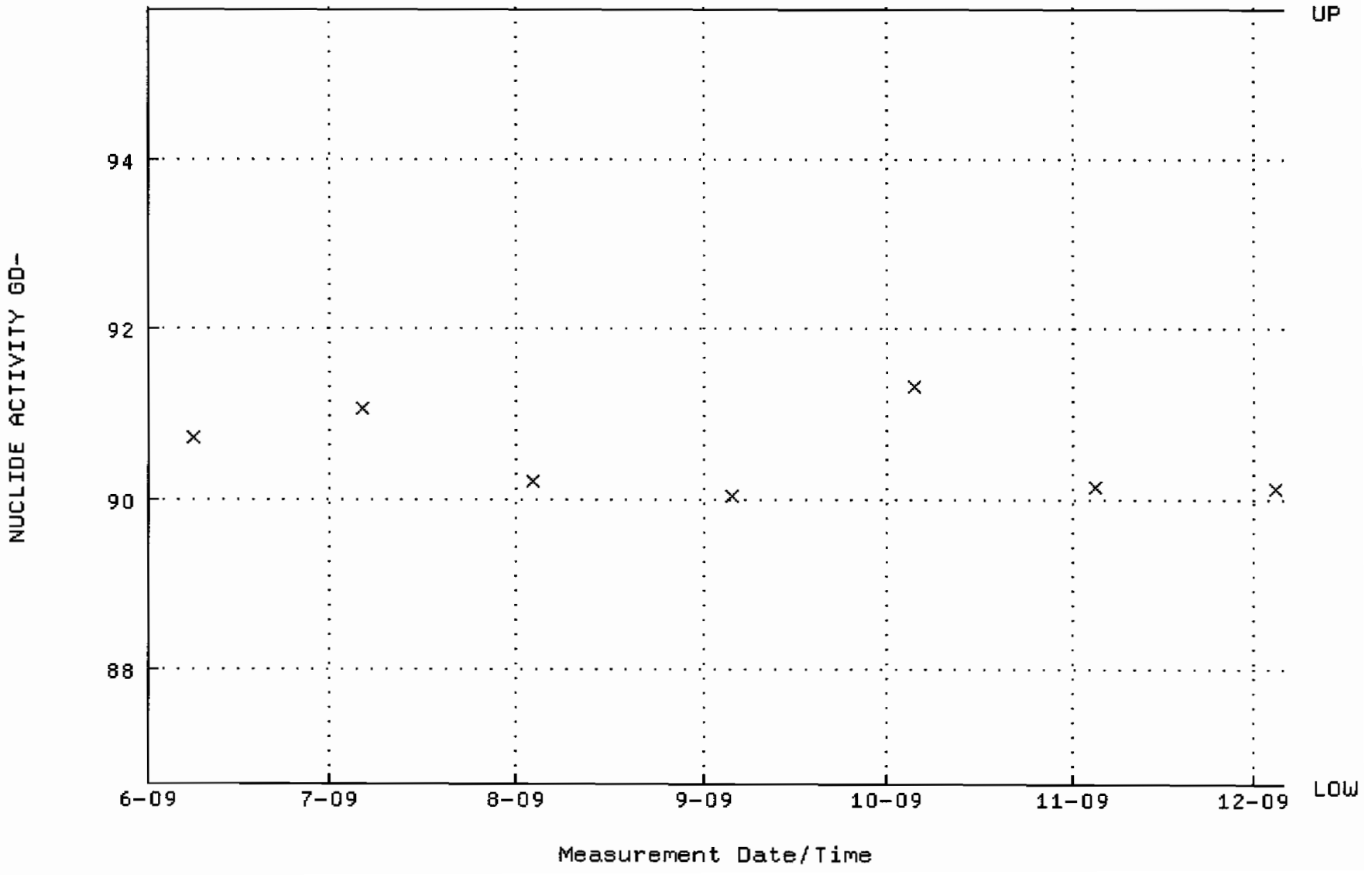

QA filename : DKA100:[ENV_ALPHA.QA.B]B041.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

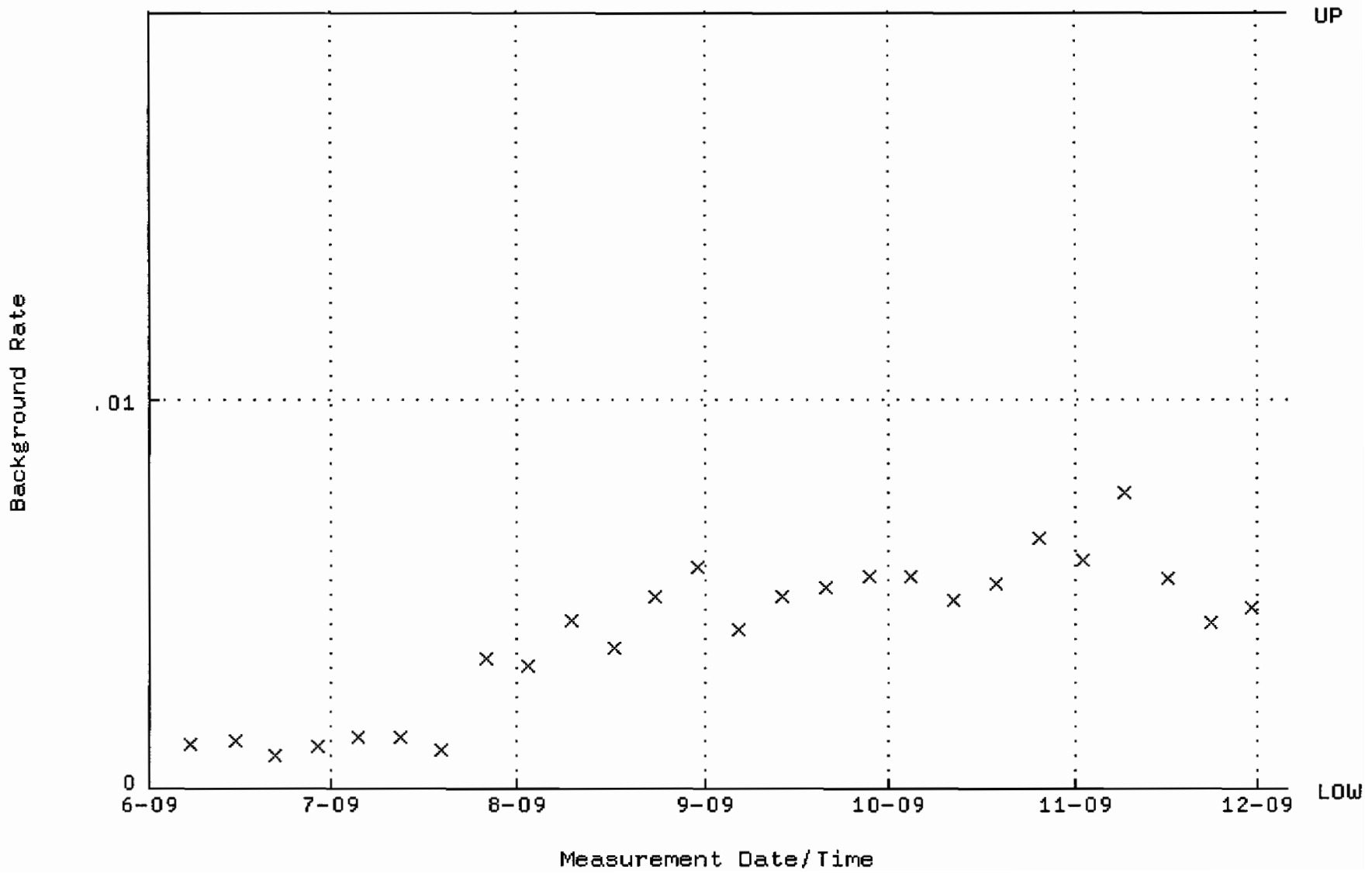

QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.322243 through 0.342243

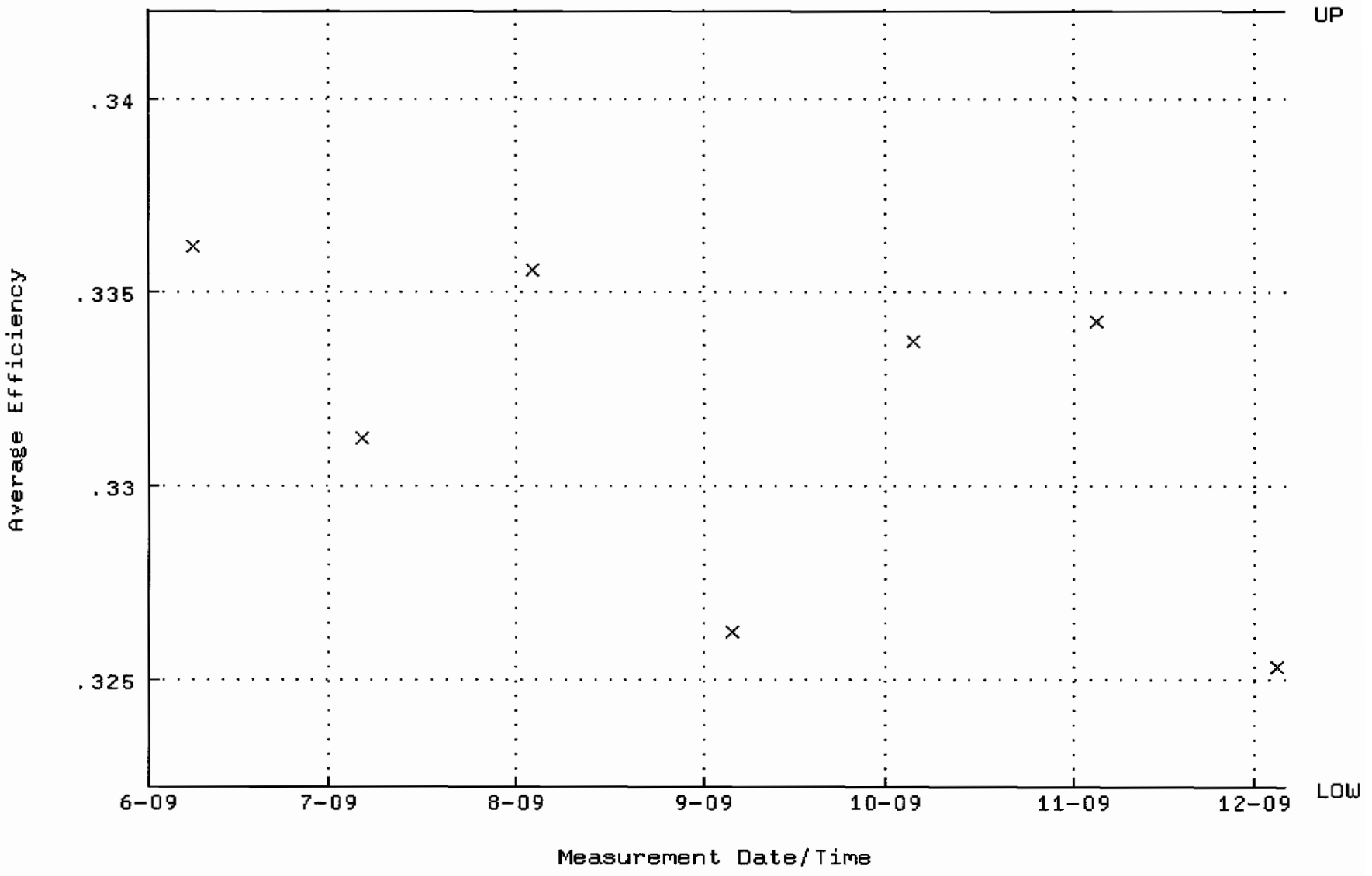

QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 80.6389 through 89.1273

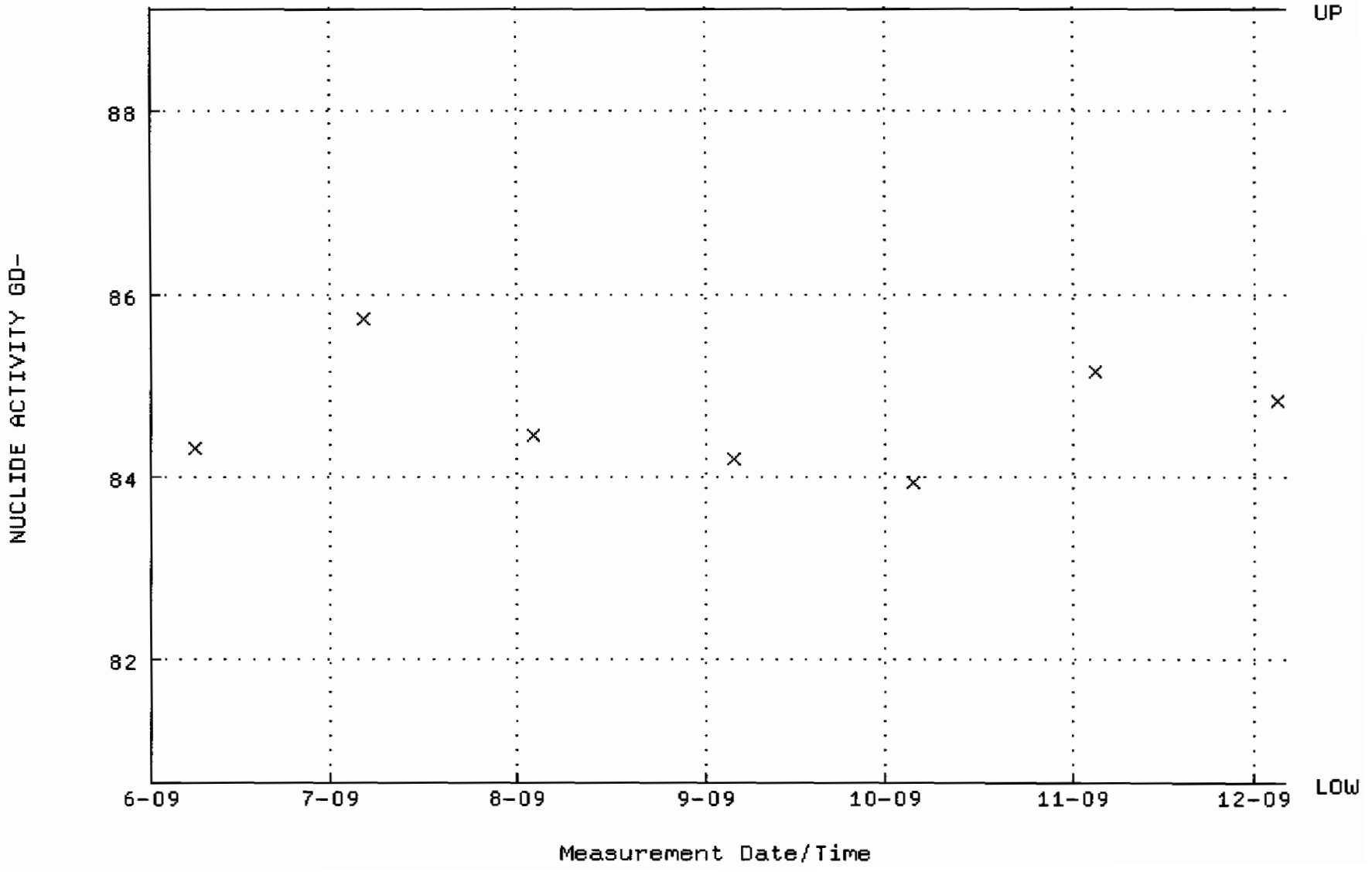

QA filename : DKA100:[ENV_ALPHA.QA.B]B042.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

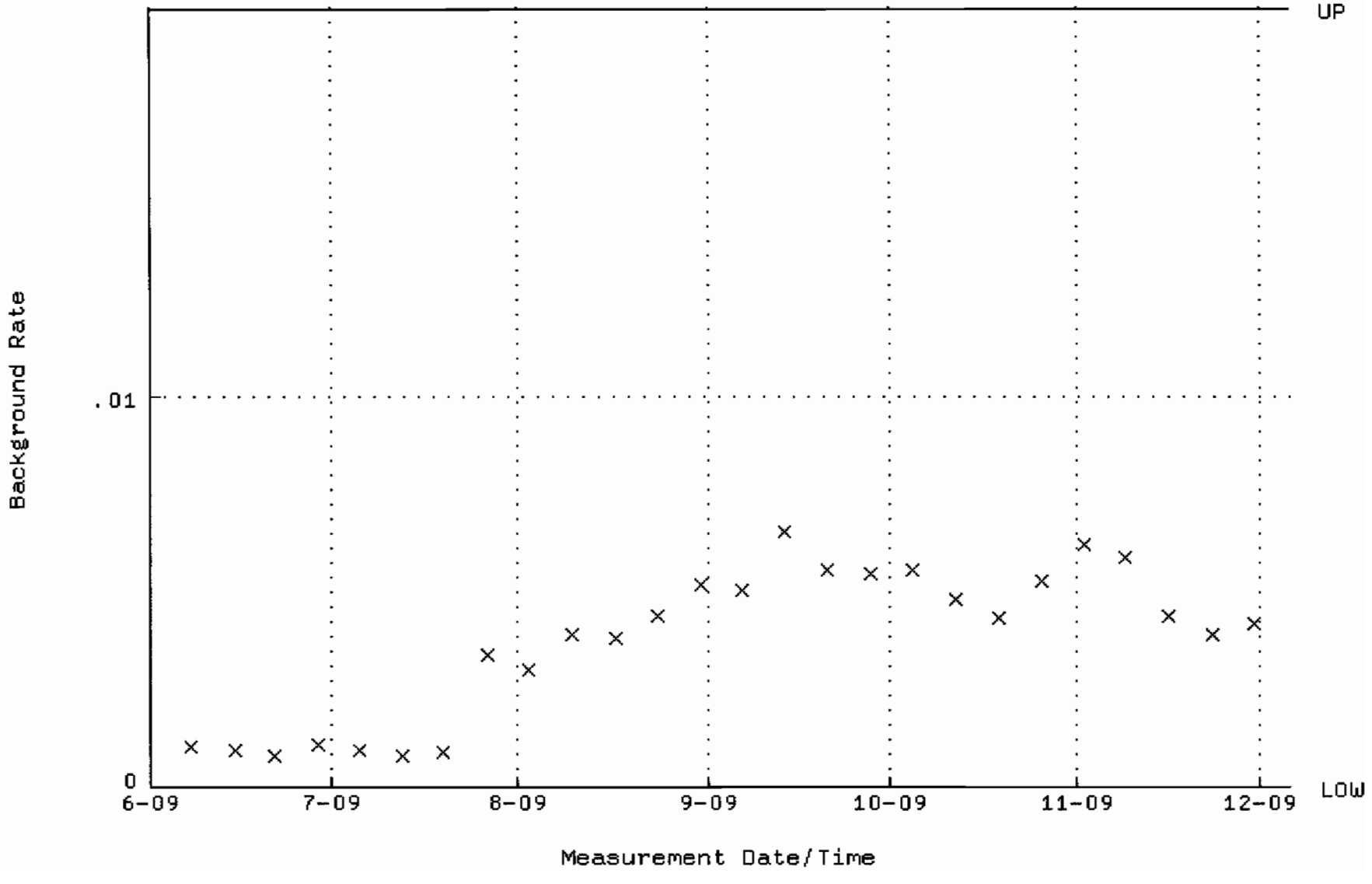

QA filename : DKA100:[ENV_ALPHA.QA.W]W072.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.313761 through 0.333761

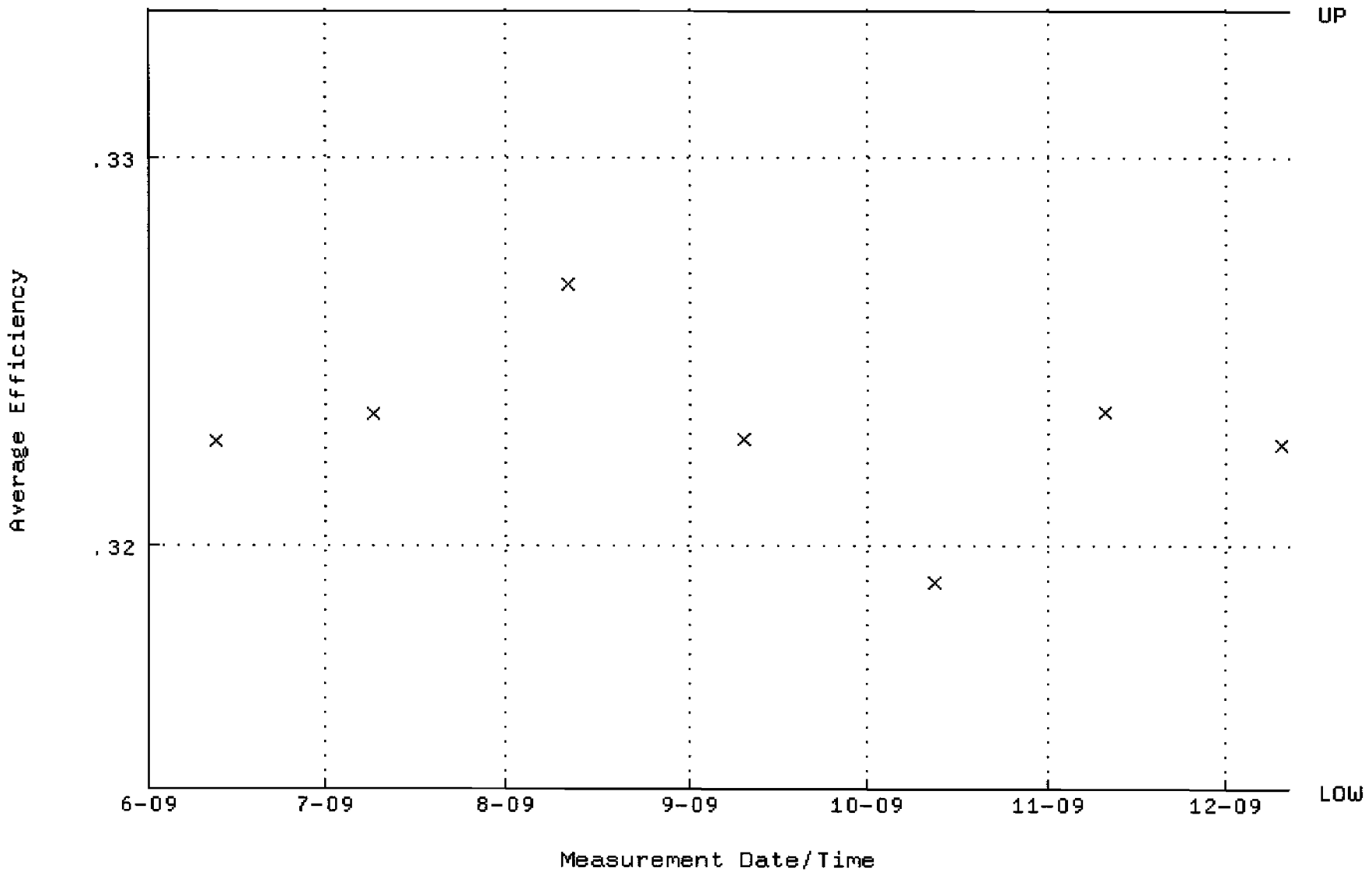

QA filename : DKA100:[ENV_ALPHA.QA.W]W072.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.3348 through 96.5280

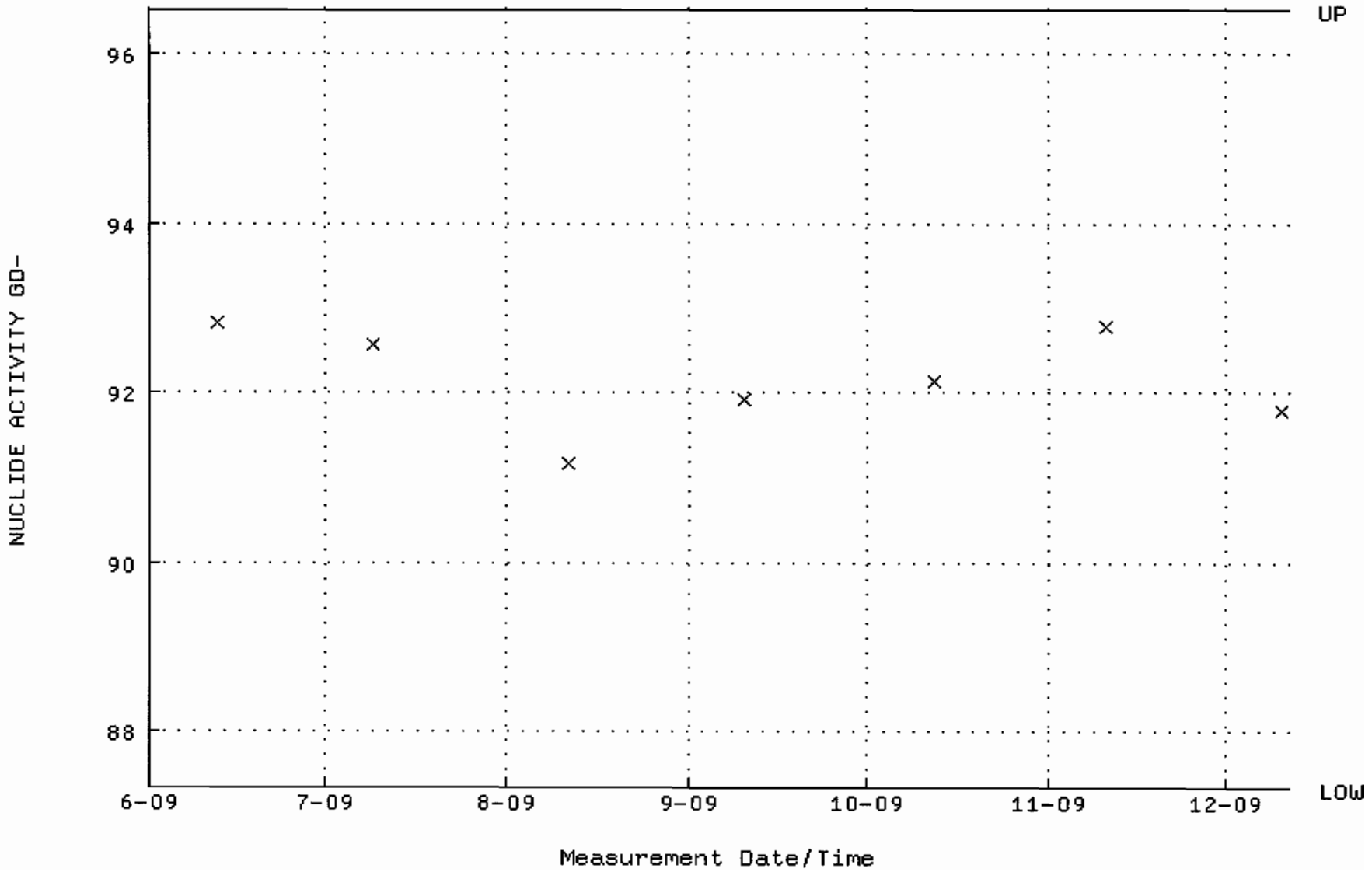

QA filename : DKA100:[ENV_ALPHA.QA.B]B072.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

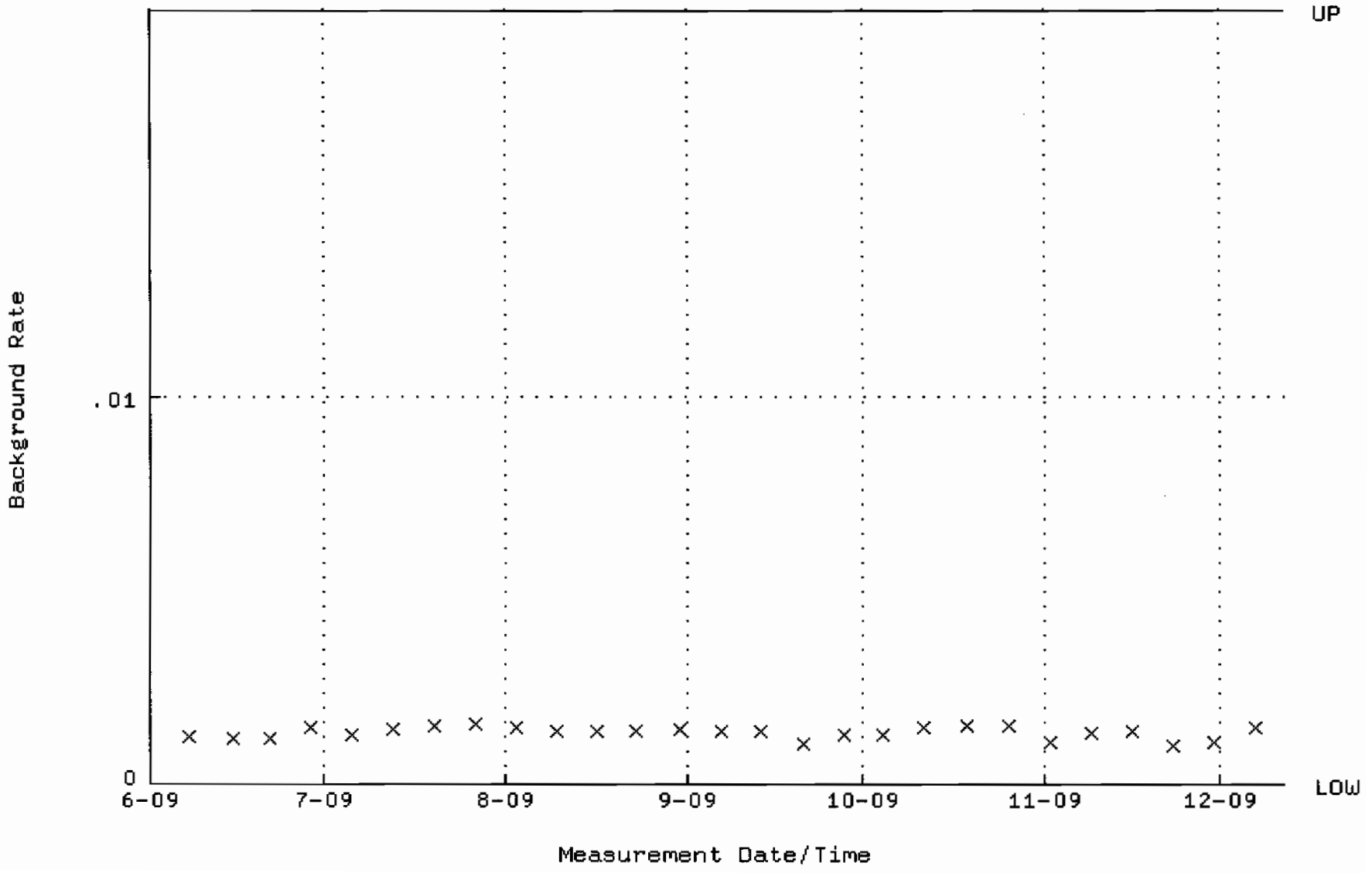

QA filename : DKA100:[ENV_ALPHA.QA.W]W073.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.323184 through 0.343184

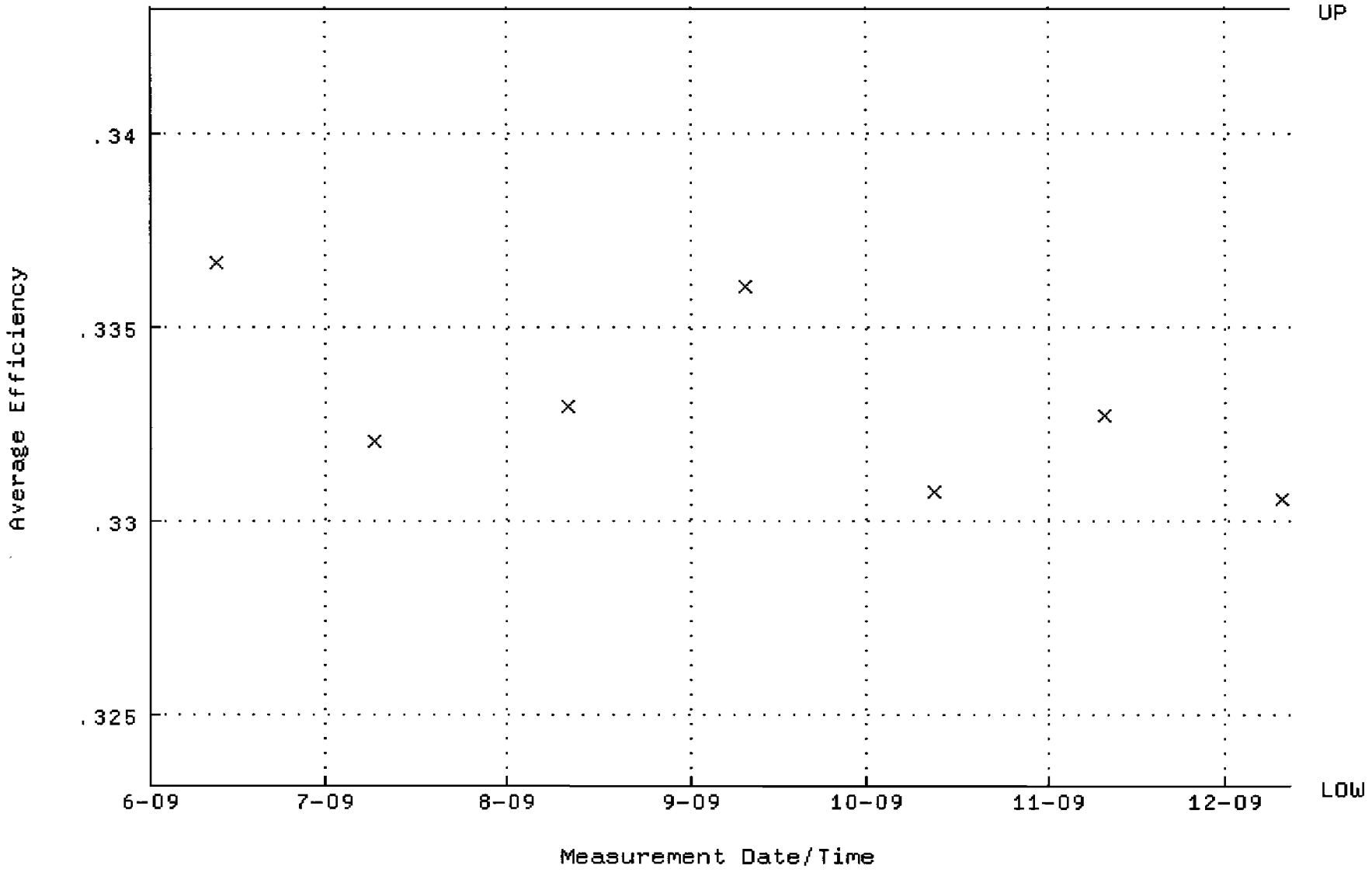

QA filename : DKA100:[ENV_ALPHA.QA.W]W073.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.6734 through 95.7970

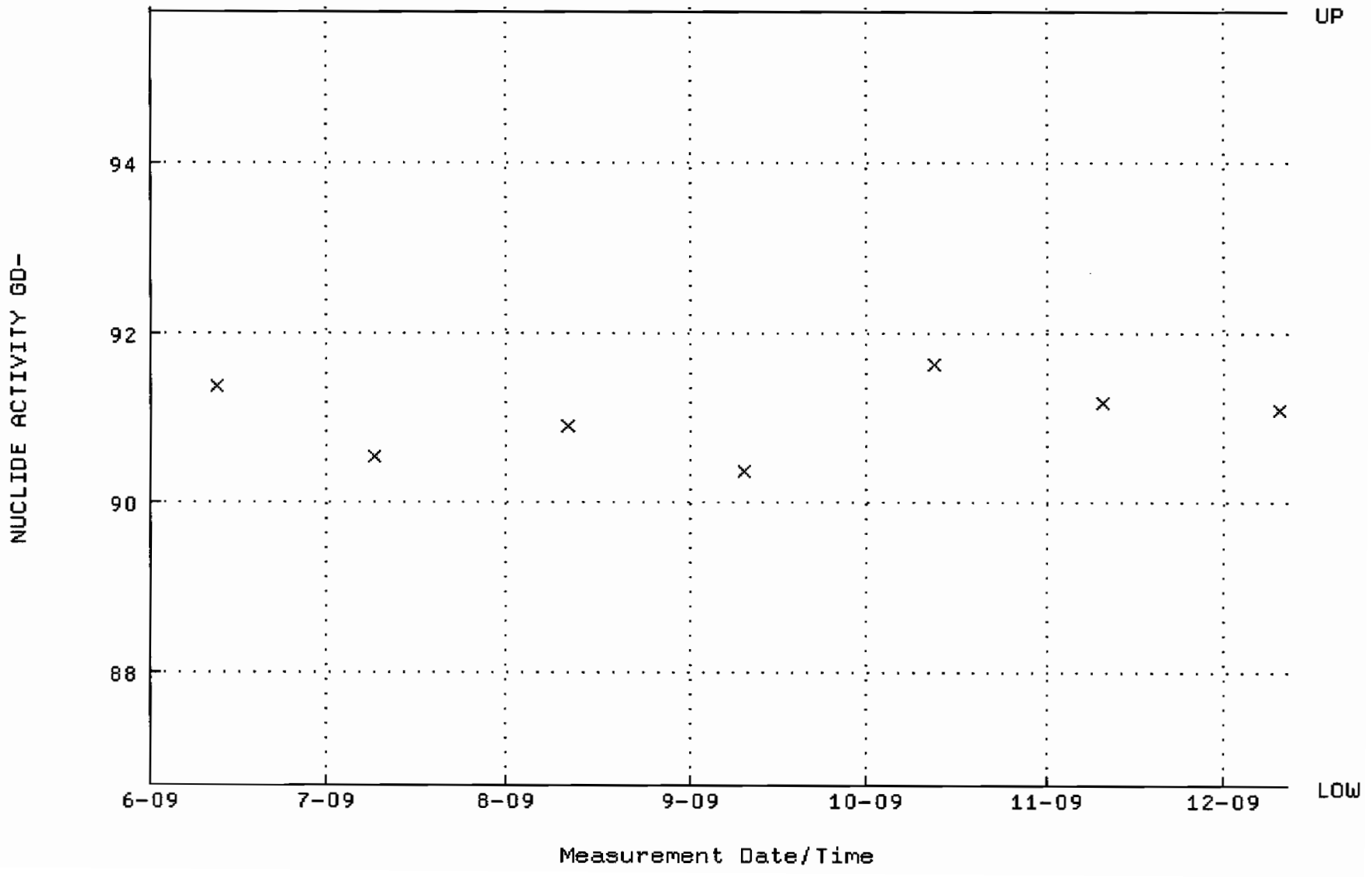

QA filename : DKA100:[ENV_ALPHA.QA.B]B073.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:36 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

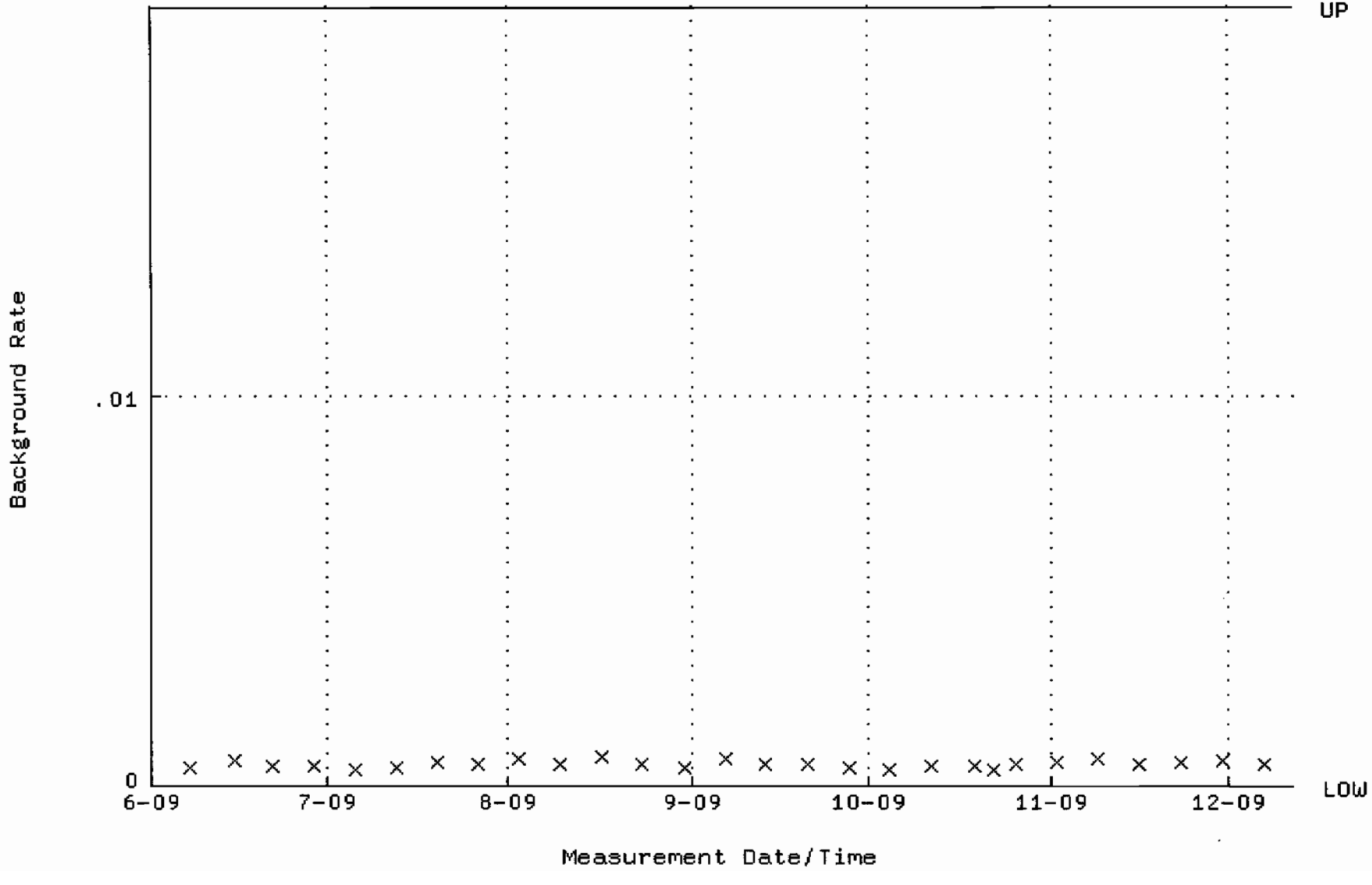

QA filename : DKA100:[ENV_ALPHA.QA.W]W101.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

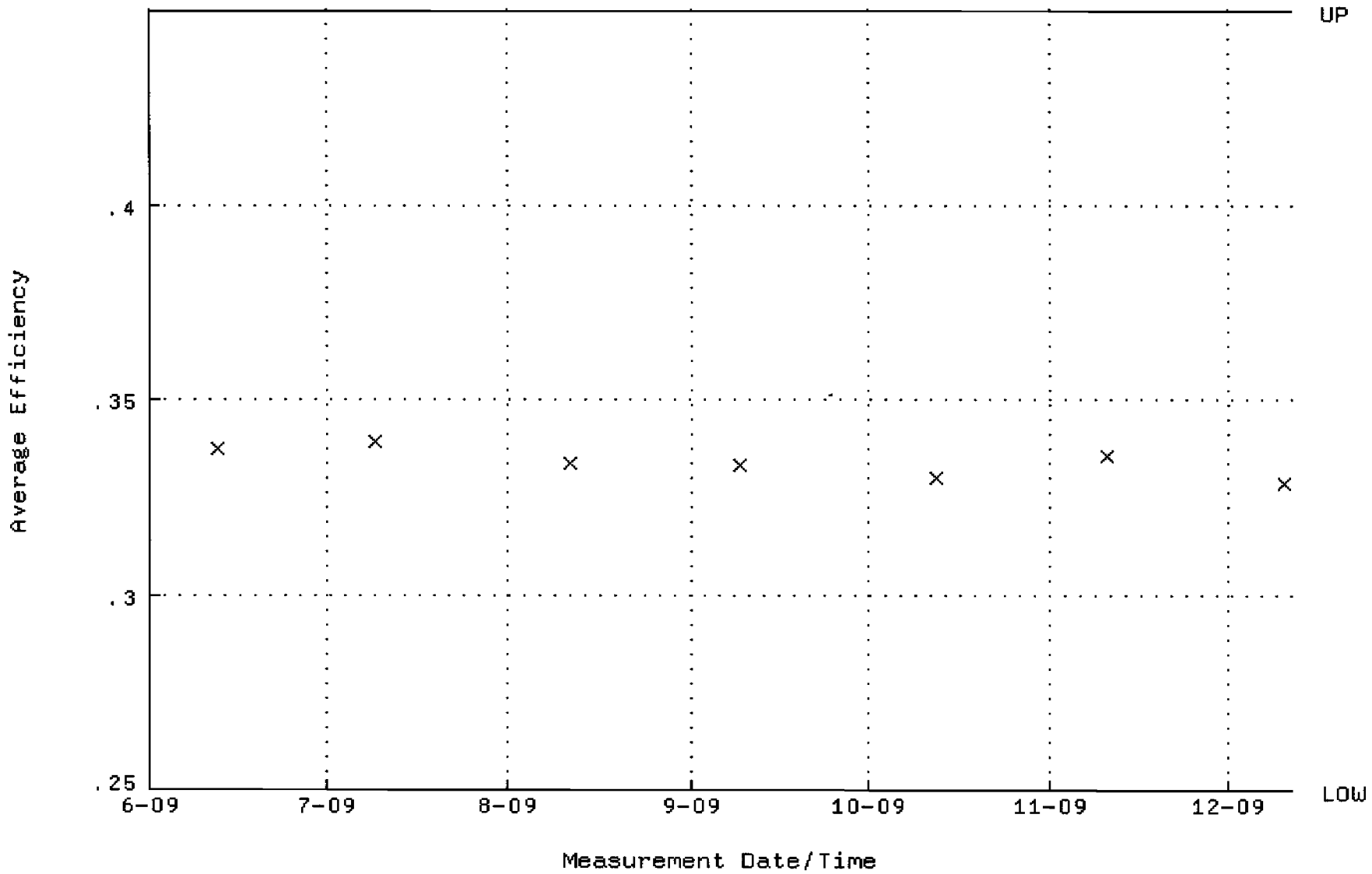

QA filename : DKA100:[ENV_ALPHA.QA.W]W101.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

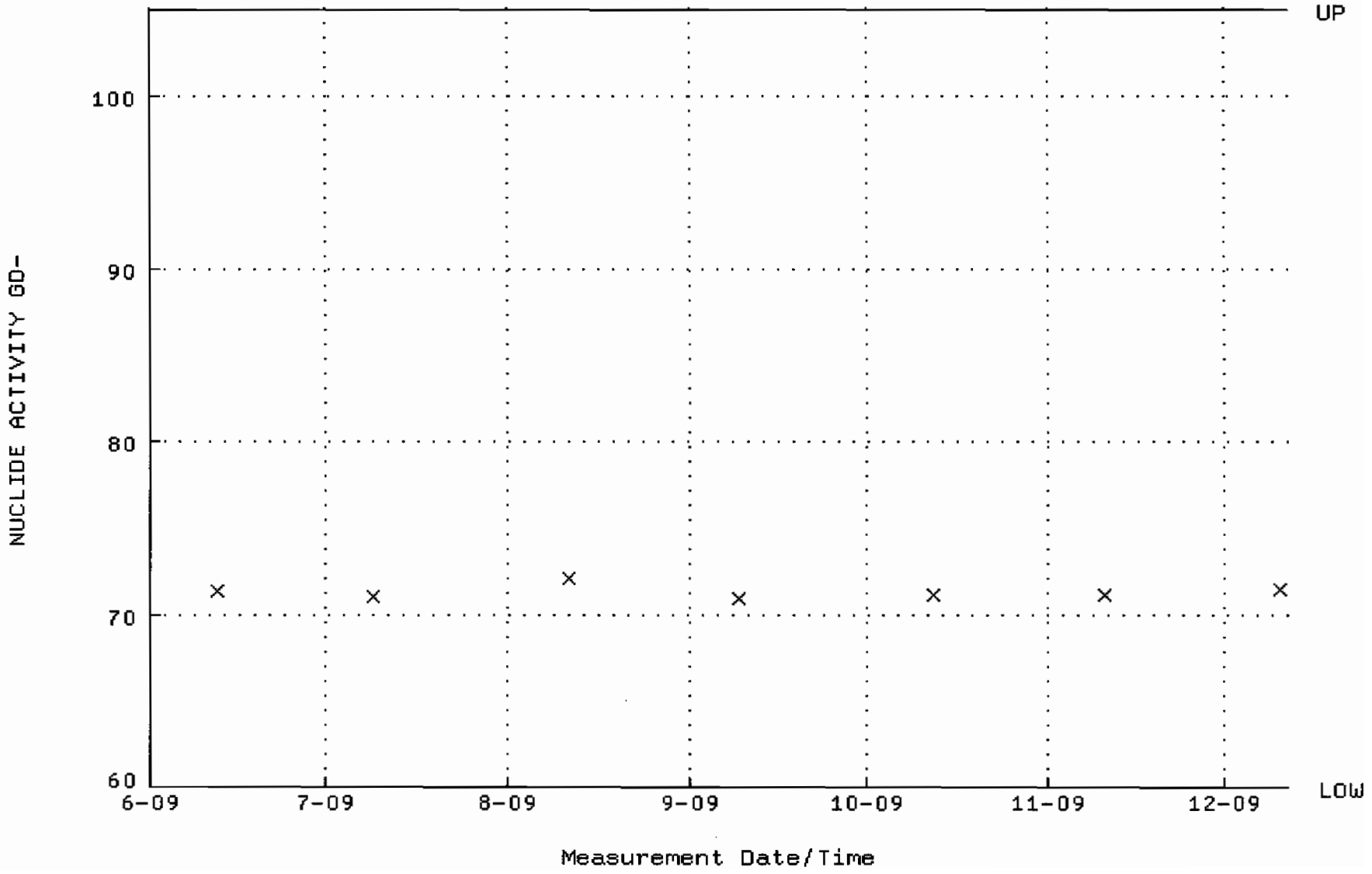

QA filename : DKA100:[ENV_ALPHA.QA.B]B101.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:46 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

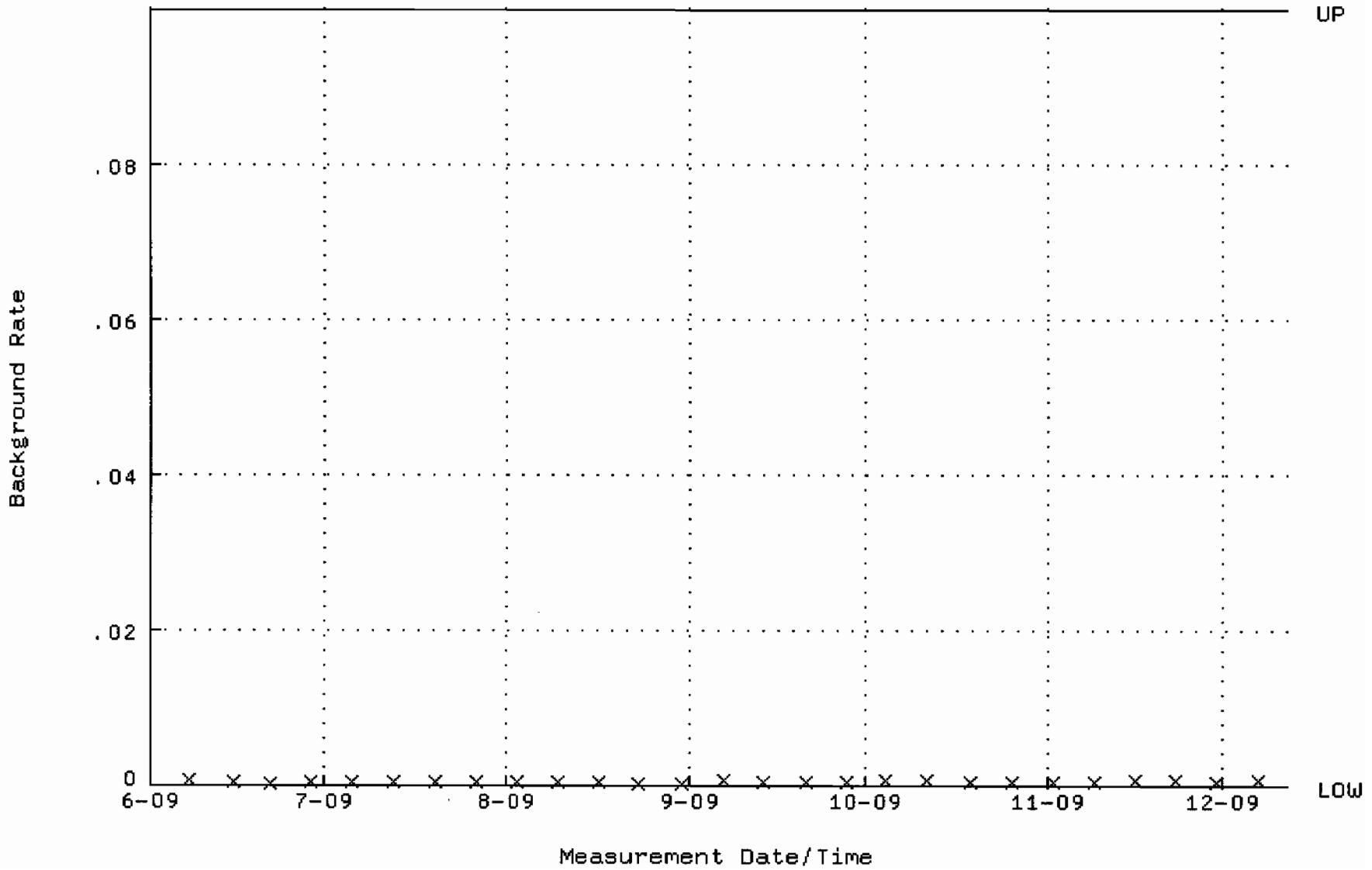

QA filename : DKA100:[ENV_ALPHA.QA.W]W108.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.330641 through 0.360561

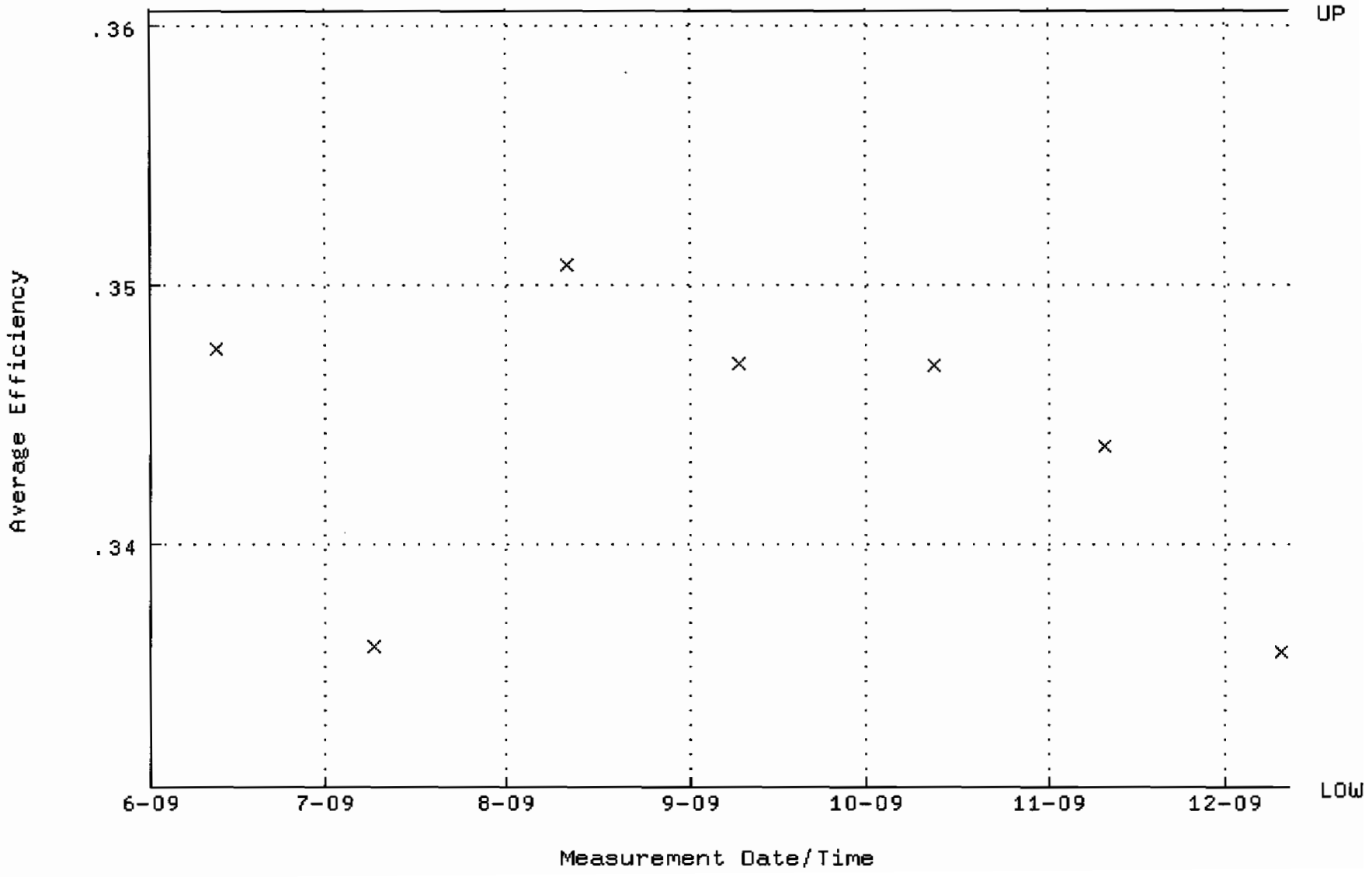

QA filename : DKA100:[ENV_ALPHA.QA.W]W108.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 68.0460 through 72.0402

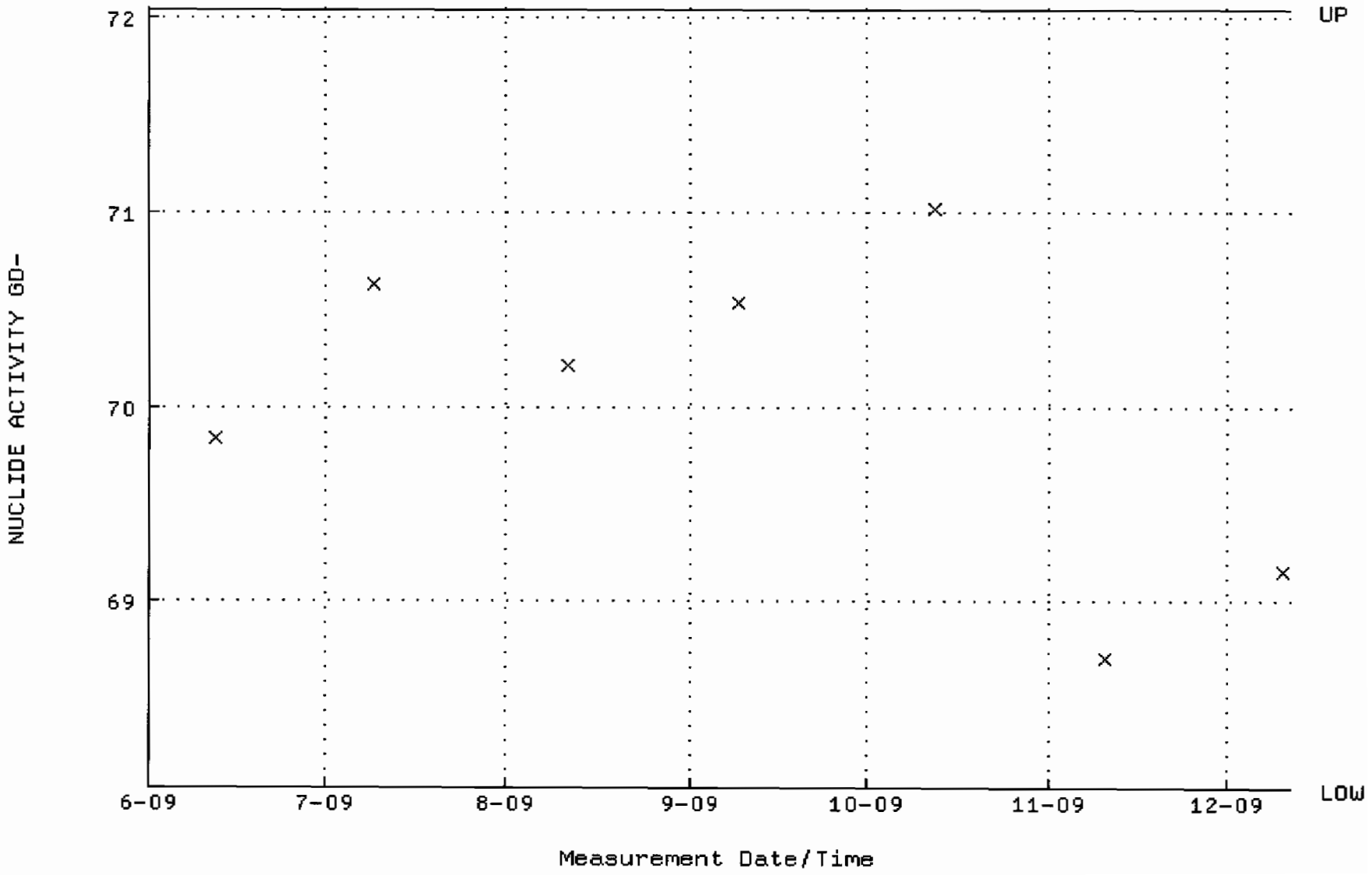

QA filename : DKA100:[ENV_ALPHA.QA.B]B108.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:47 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

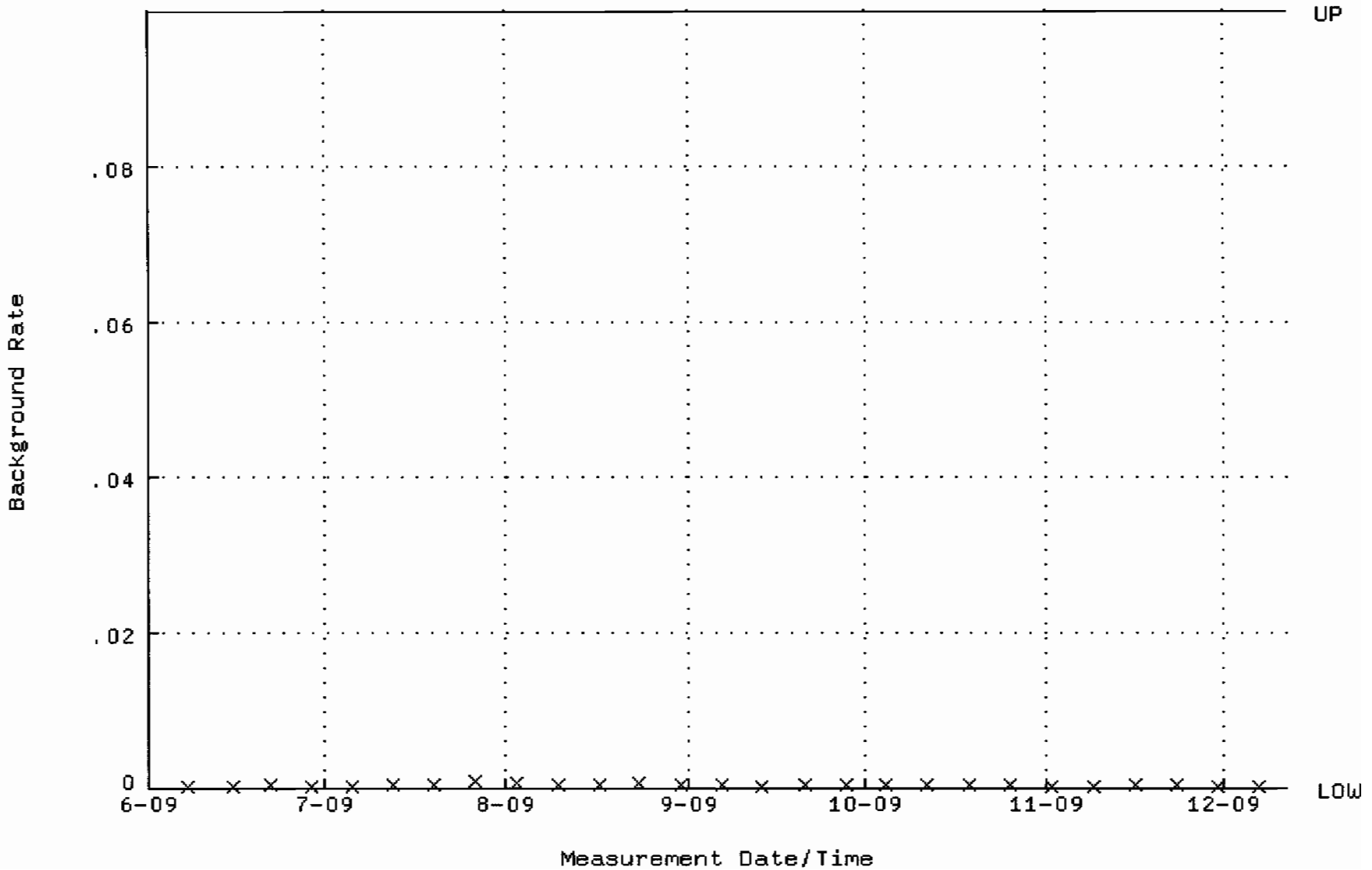

QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 30-JUN-2009 15:19:17 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.344397 through 0.364397

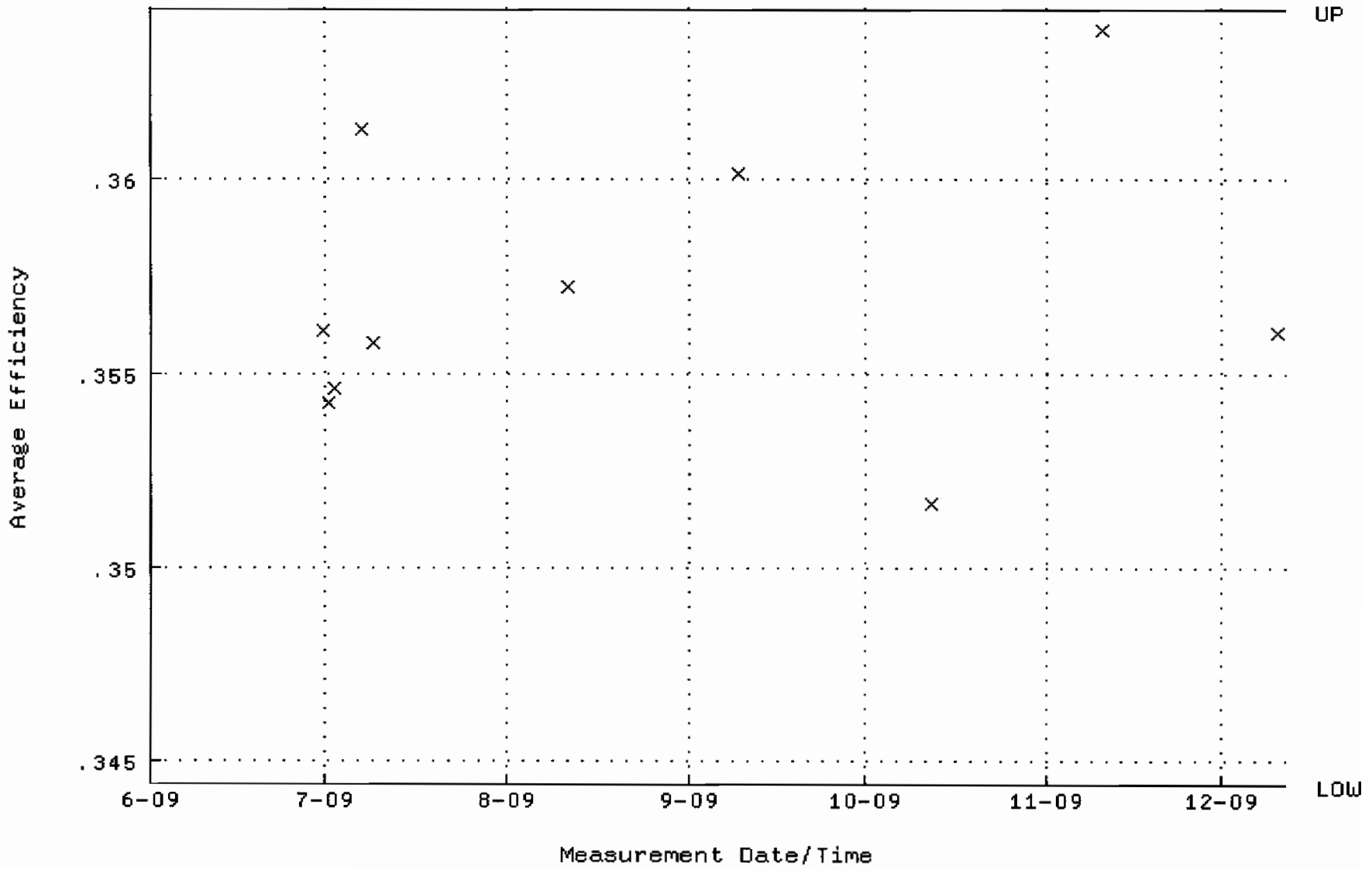

QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 30-JUN-2009 15:19:17 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 63.4194 through 70.0952

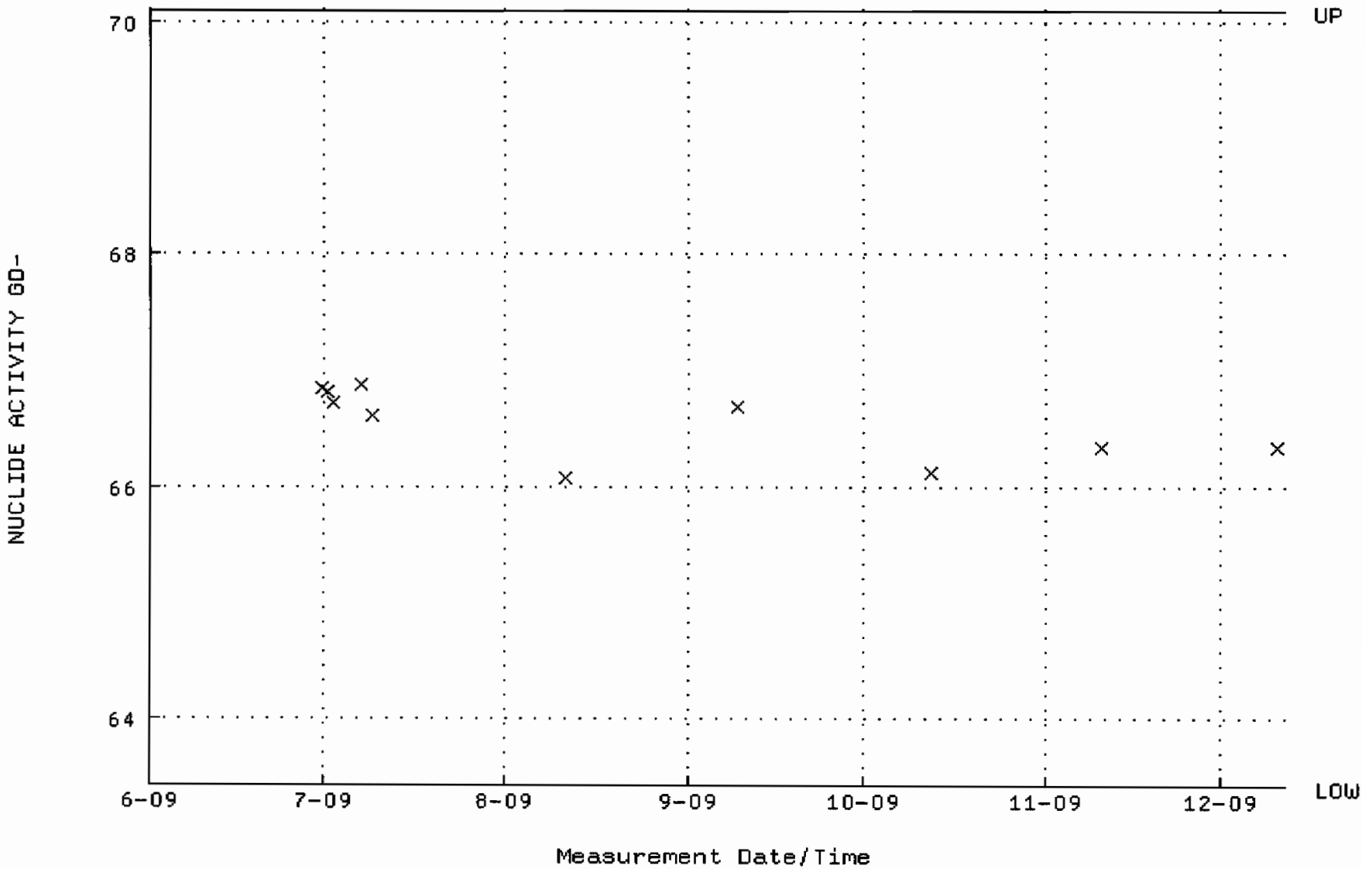

QA filename : DKA100:[ENV_ALPHA.QA.B]B109.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:47 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

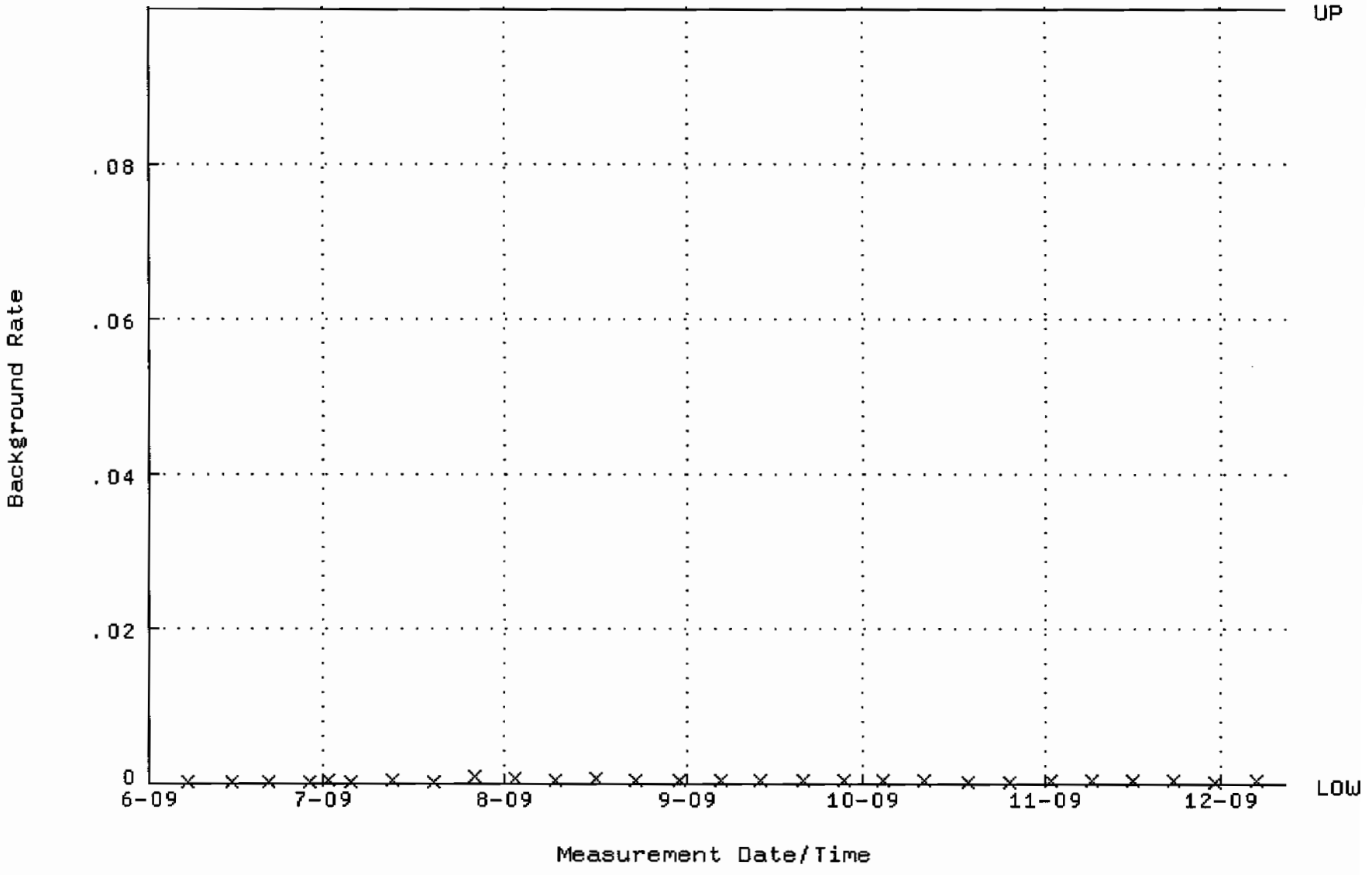

QA filename : DKA100:[ENV_ALPHA.QA.W]W111.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.321662 through 0.358794

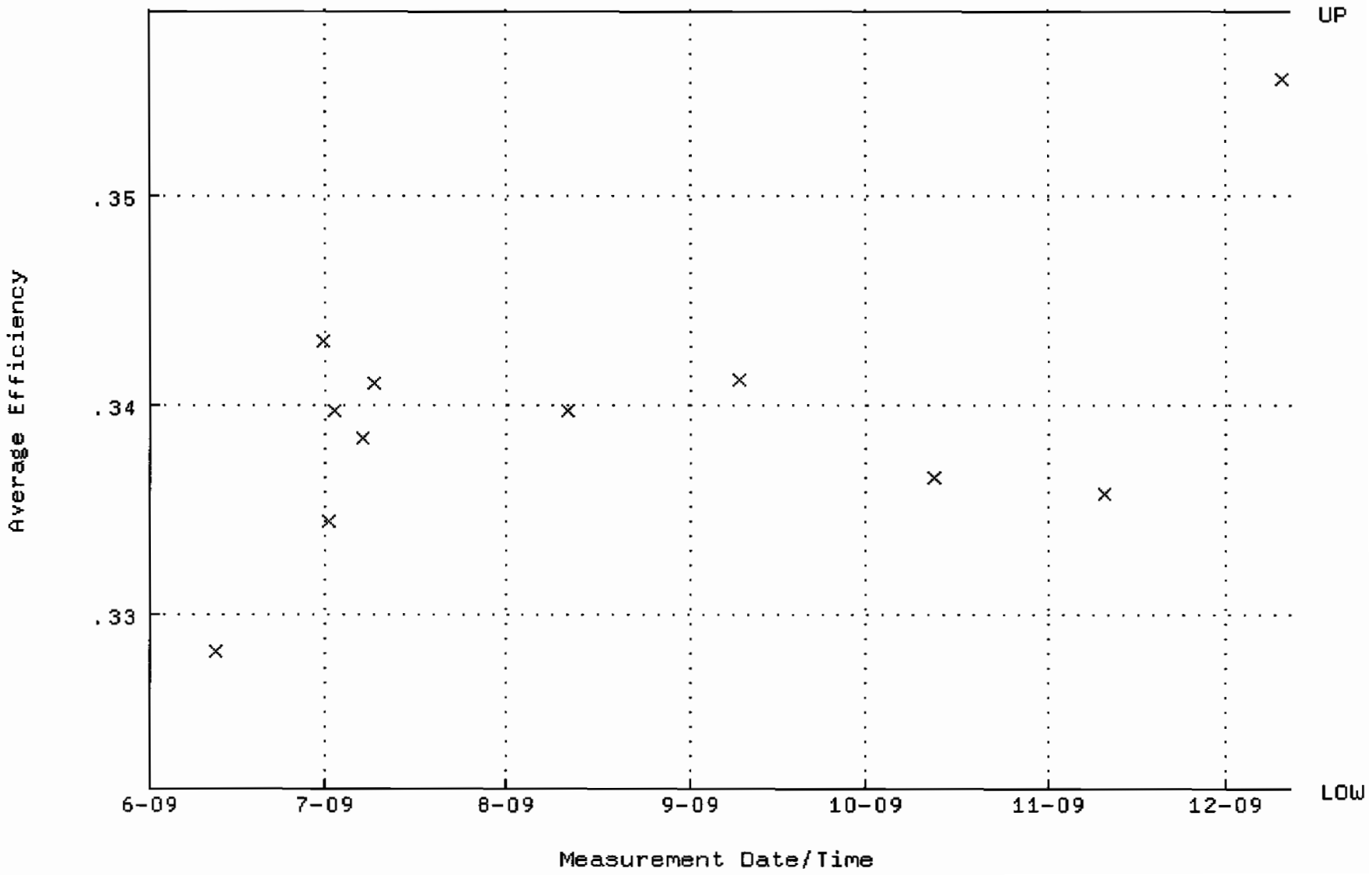

QA filename : DKA100:[ENV_ALPHA.QA.W]W111.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 69.0200 through 71.9448

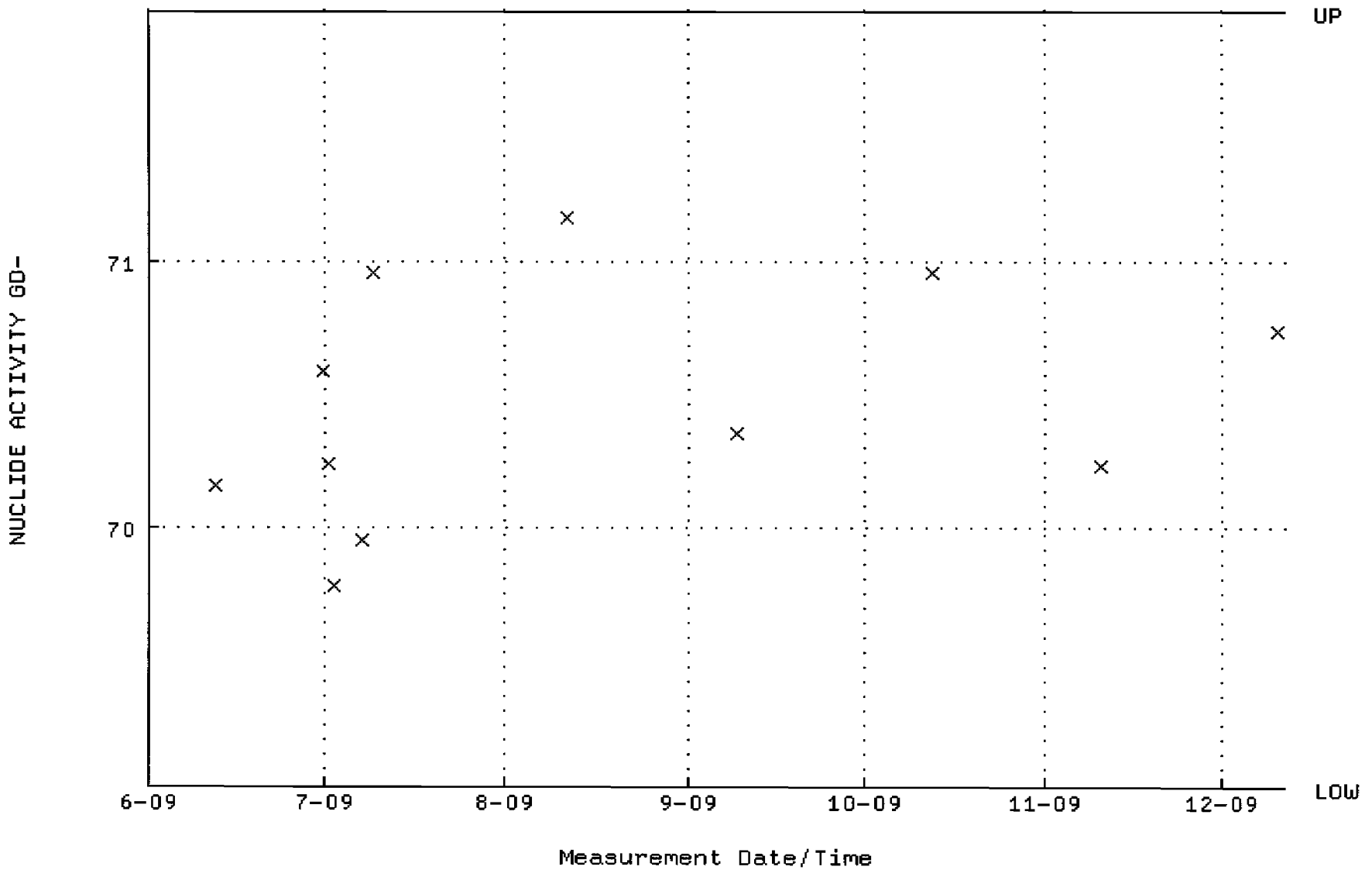

QA filename : DKA100:[ENV_ALPHA.QA.B]B111.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:47 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

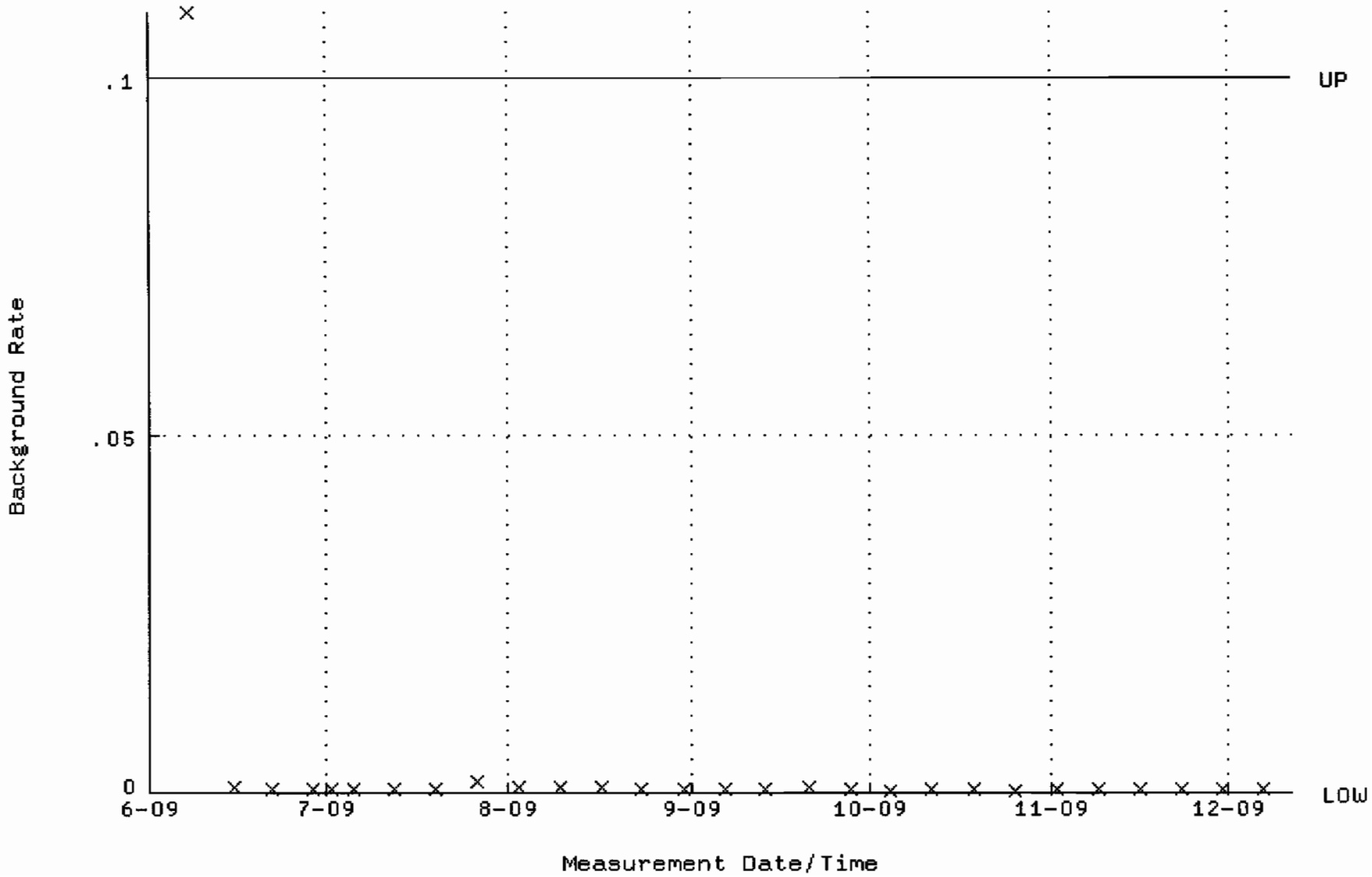

QA filename : DKA100:[ENV_ALPHA.QA.W]W152.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:47:48 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.238479 through 0.258479

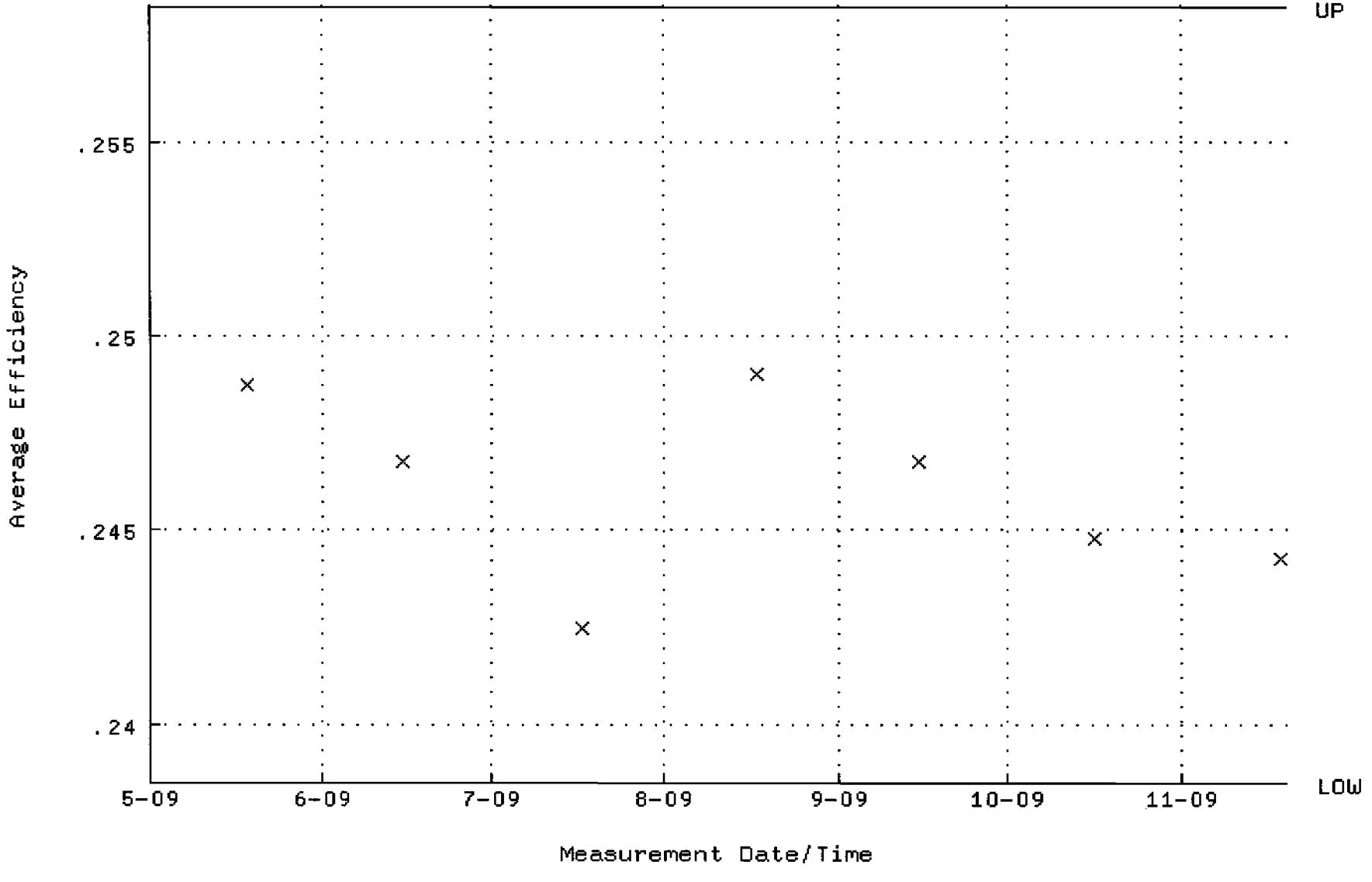

QA filename : DKA100:[ENV_ALPHA.QA.W]W152.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:47:48 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 83.7180 through 92.5304

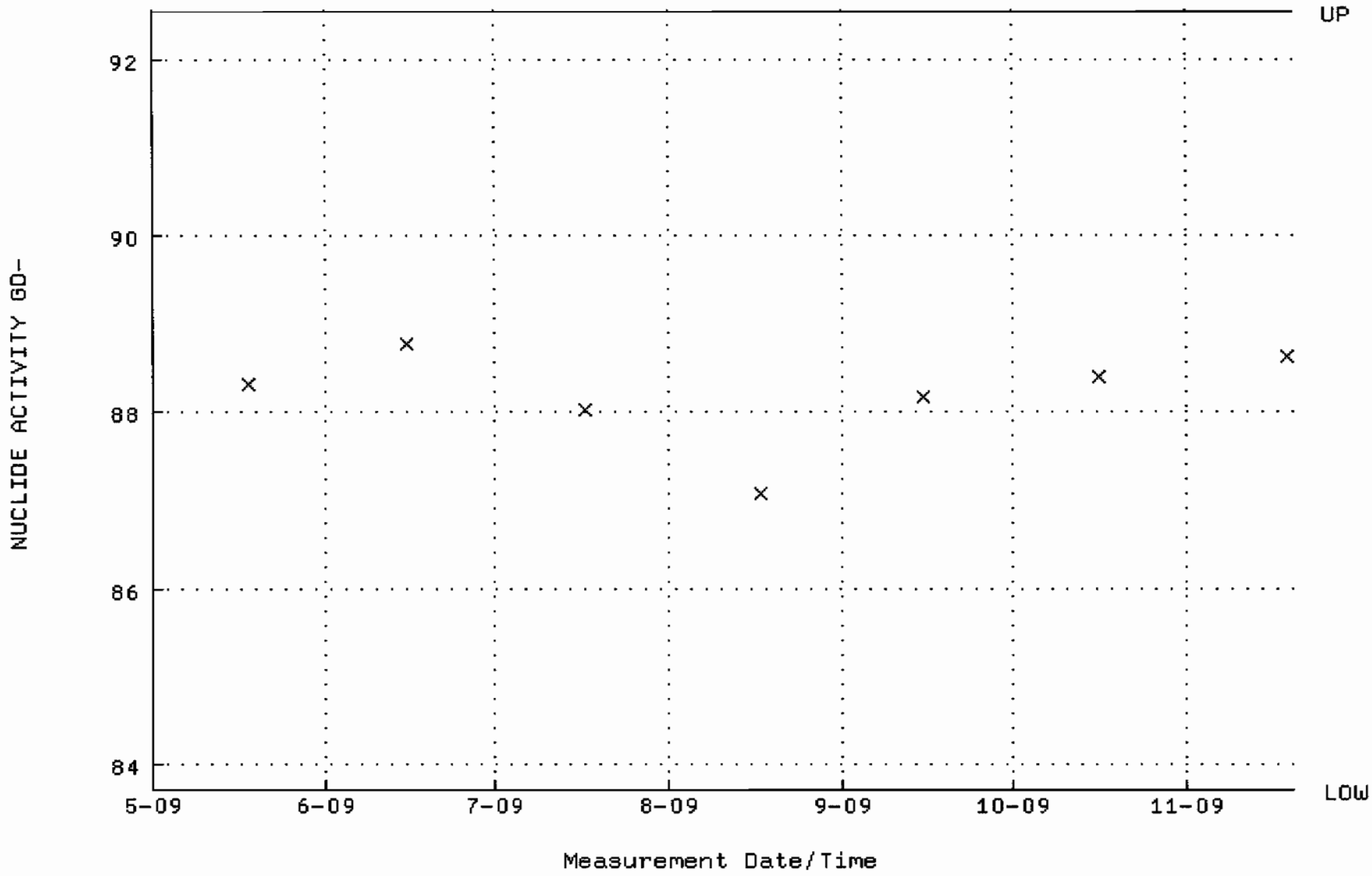

QA filename : DKA100:[ENV_ALPHA.QA.B]B152.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:52:43 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

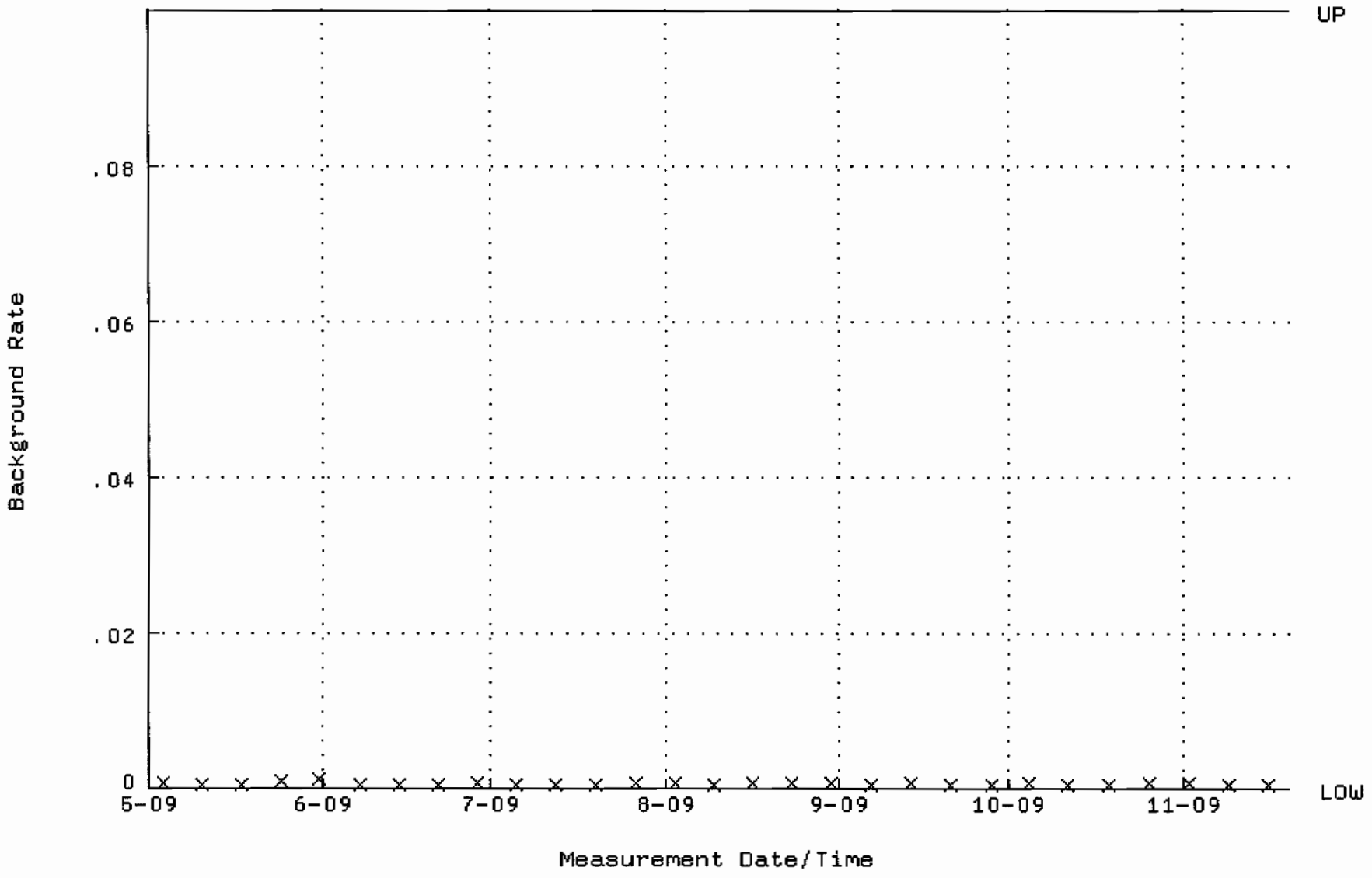

QA filename : DKA100:[ENV_ALPHA.QA.W]W160.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:48:24 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.234941 through 0.254941

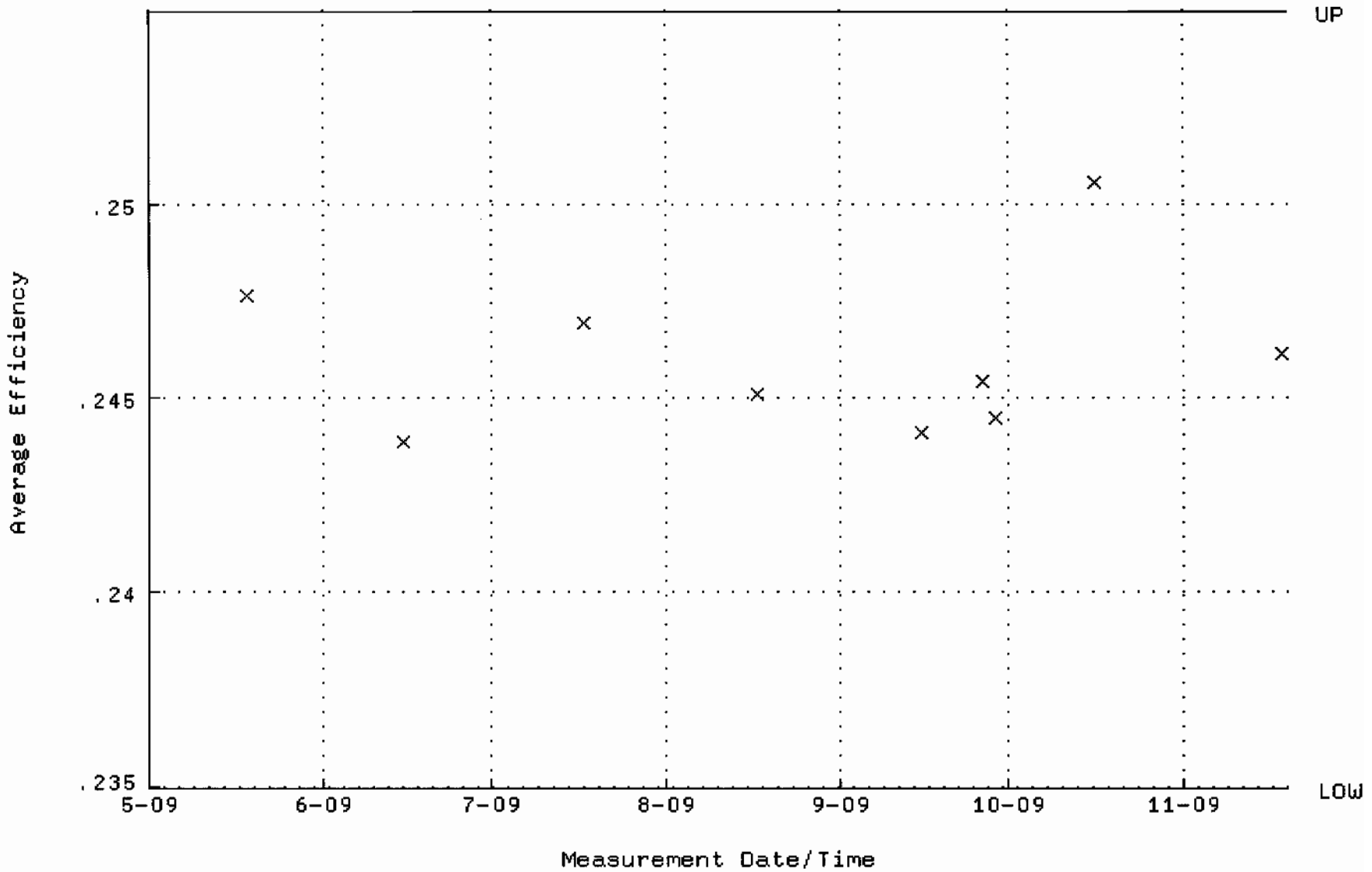

QA filename : DKA100:[ENV_ALPHA.QA.W]W160.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:48:24 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 82.0594 through 90.6972

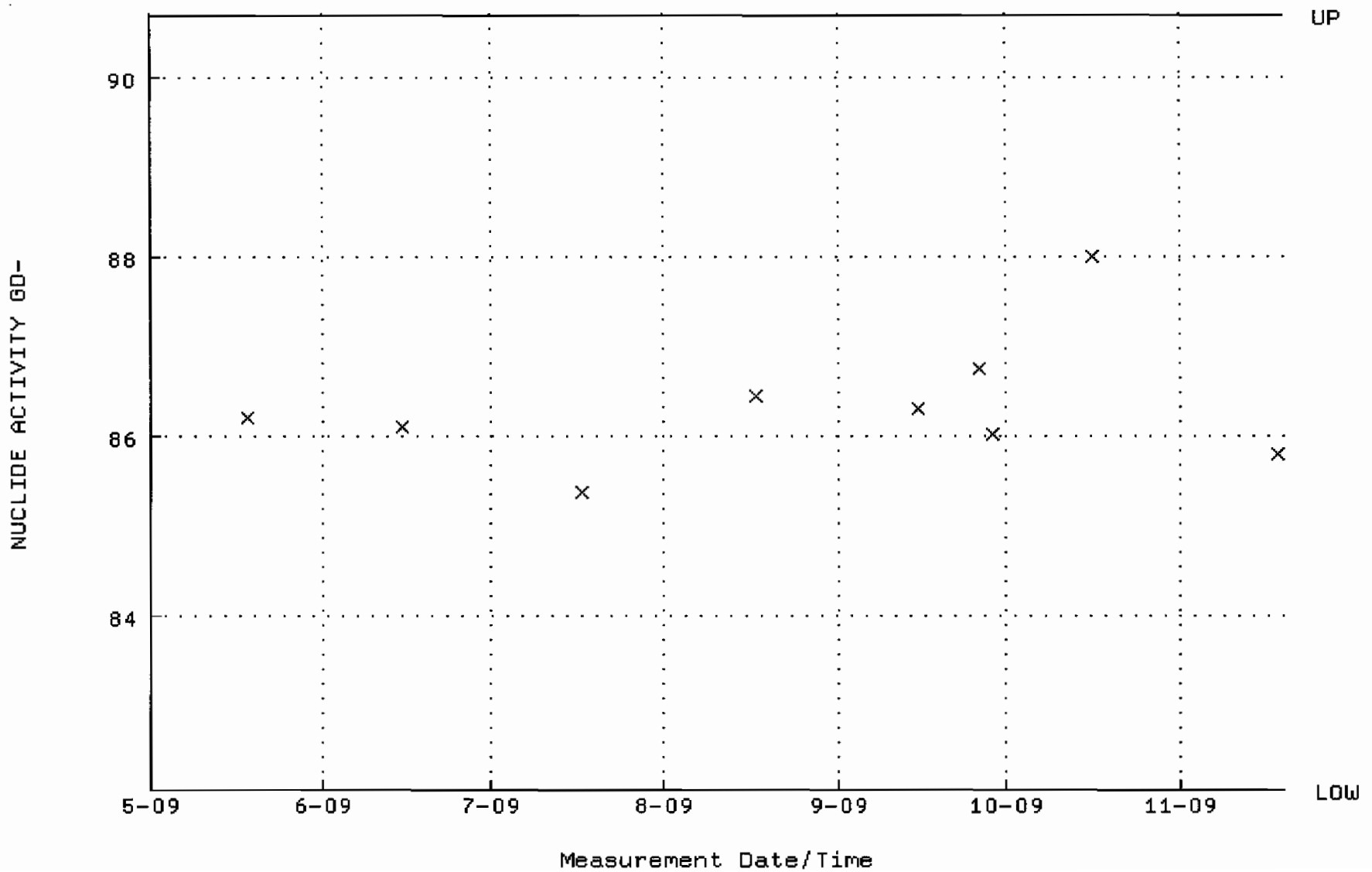

QA filename : DKA100:[ENV_ALPHA.QA.B]B160.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:14 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

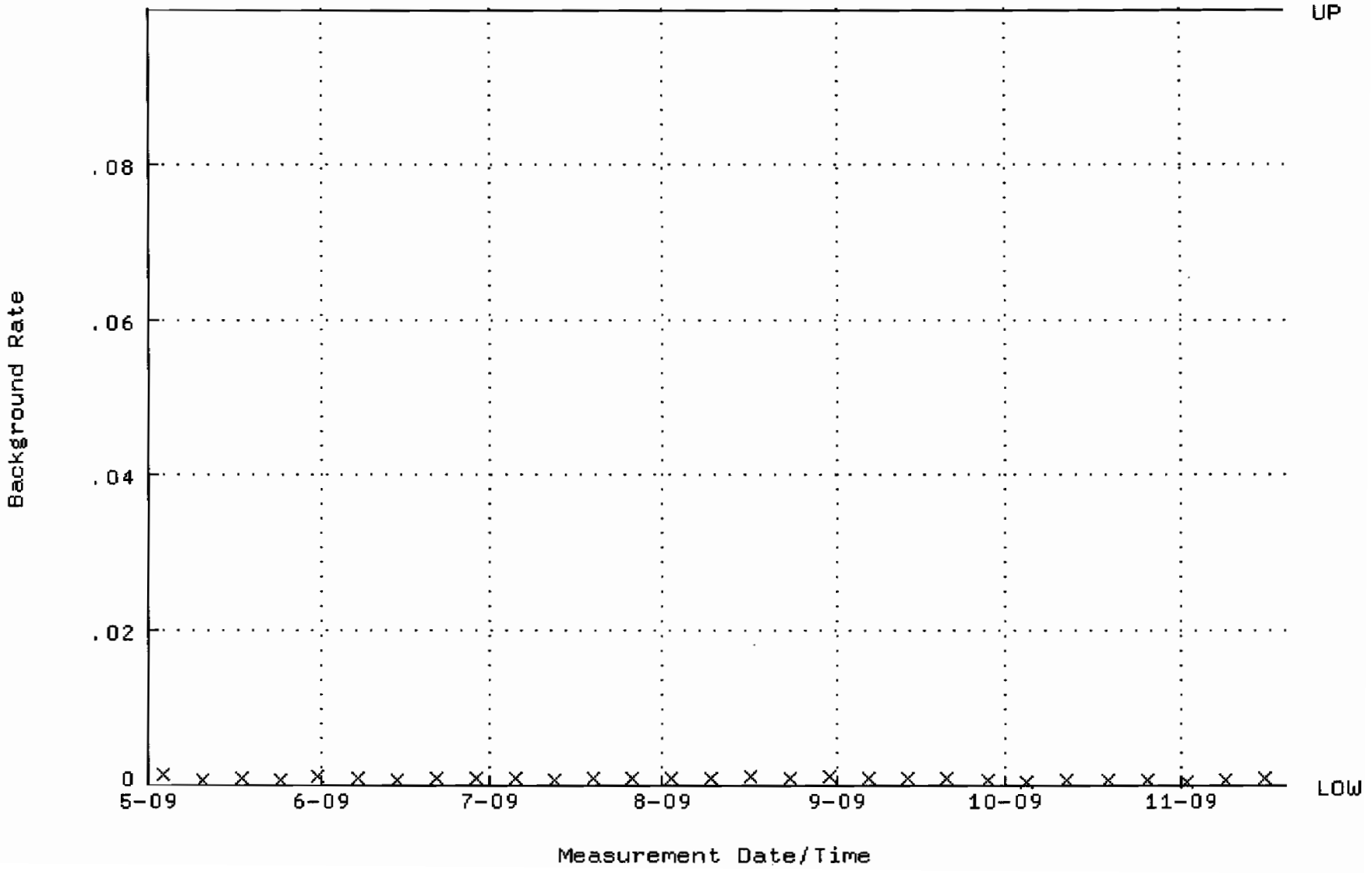

QA filename : DKA100:[ENV_ALPHA.QA.W]W161.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:31 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.361044 through 0.388070

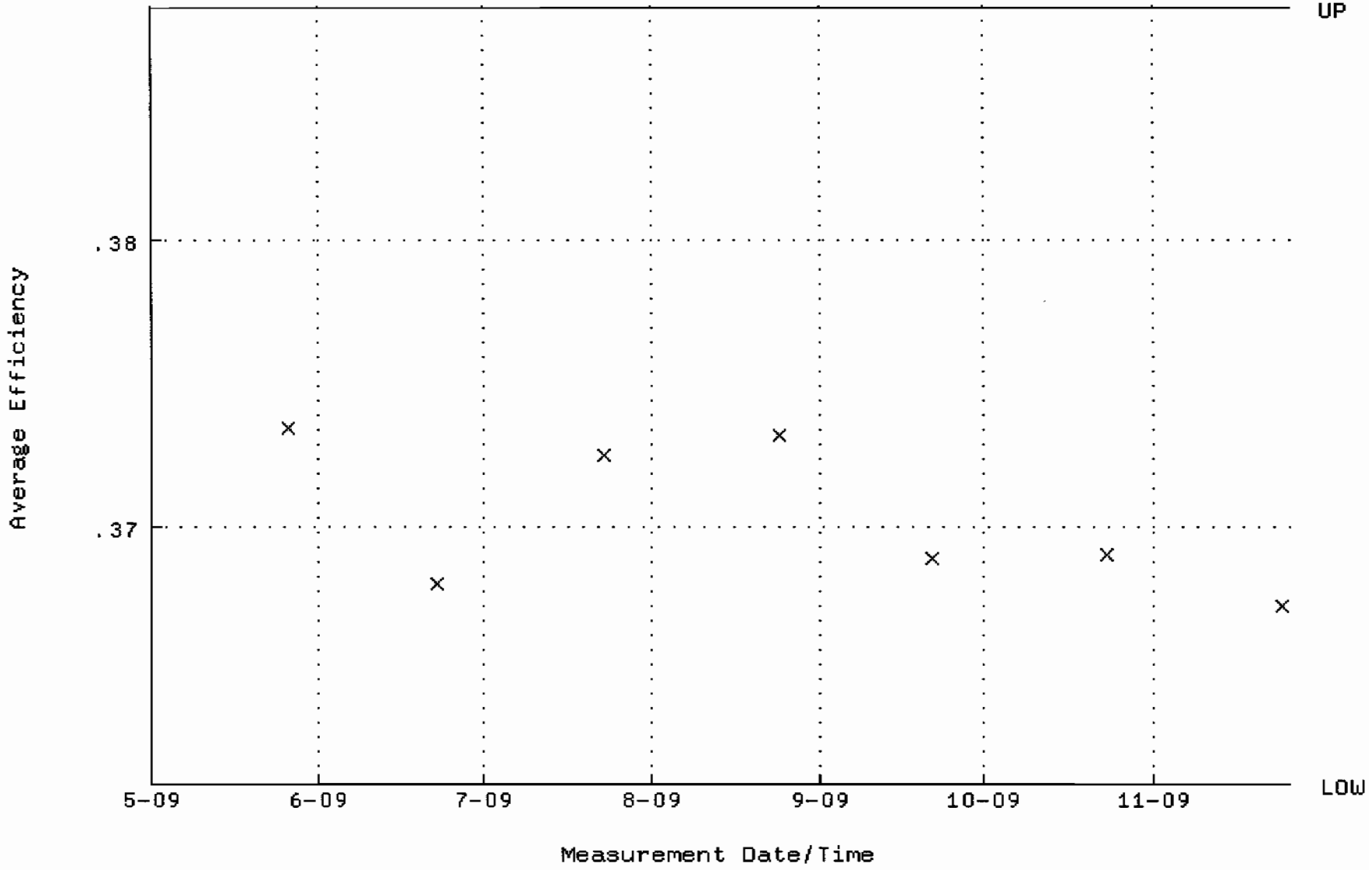

QA filename : DKA100:[ENV_ALPHA.QA.W]W161.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:31 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 89.2795 through 91.5025

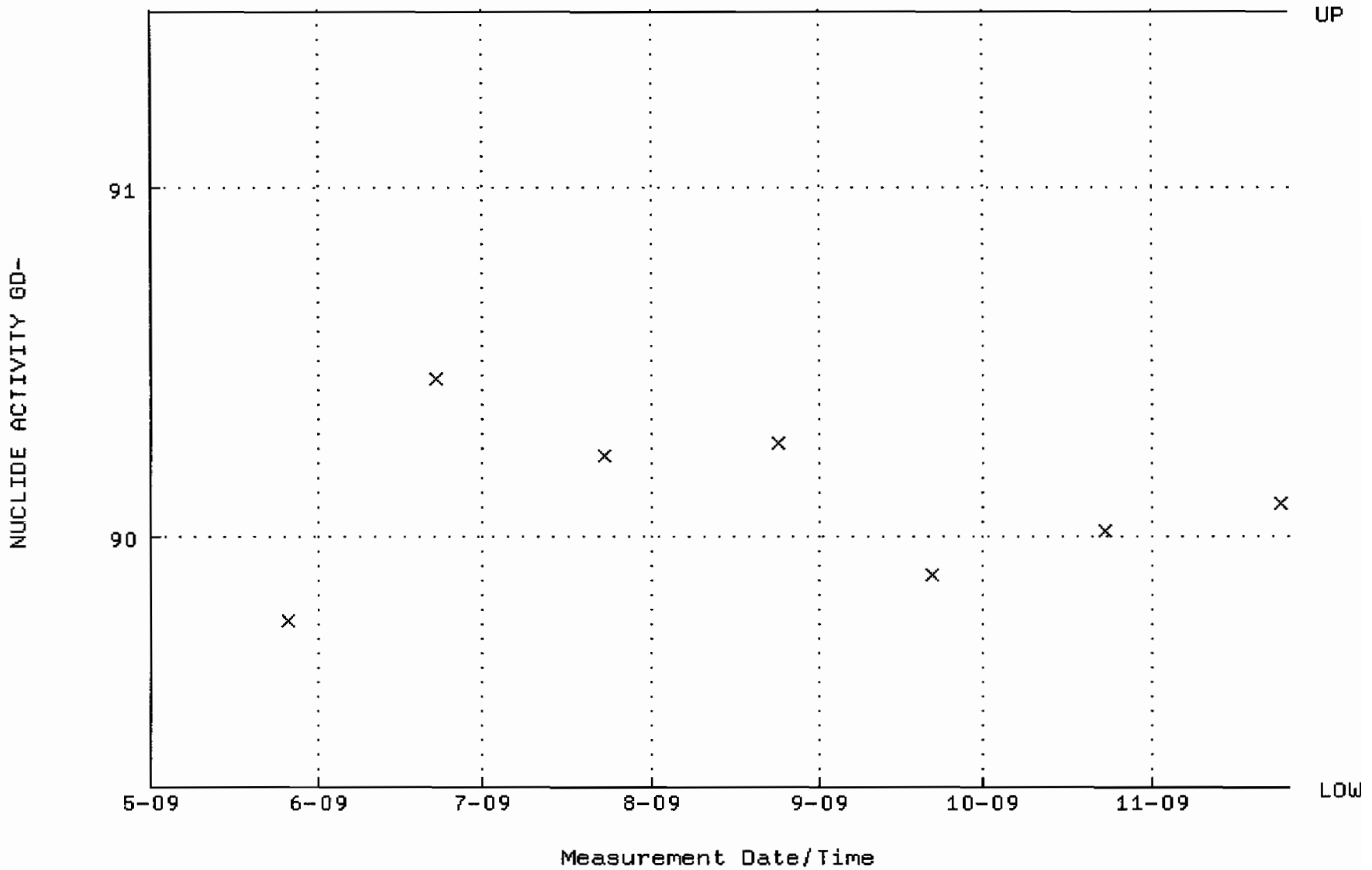

QA filename : DKA100:[ENV_ALPHA.QA.B]B161.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

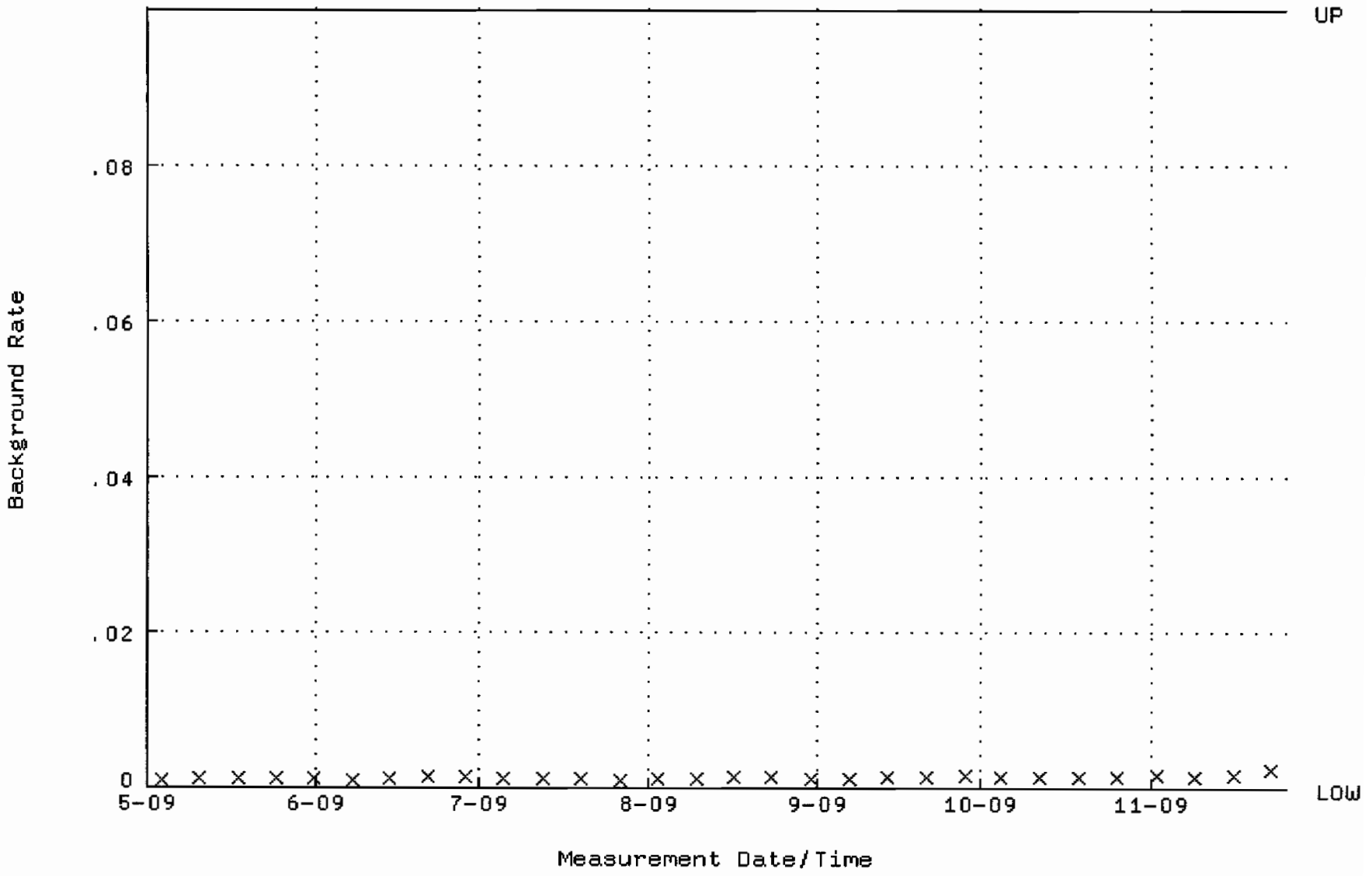

QA filename : DKA100:[ENV_ALPHA.QA.W]W170.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:08 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.360563 through 0.380563

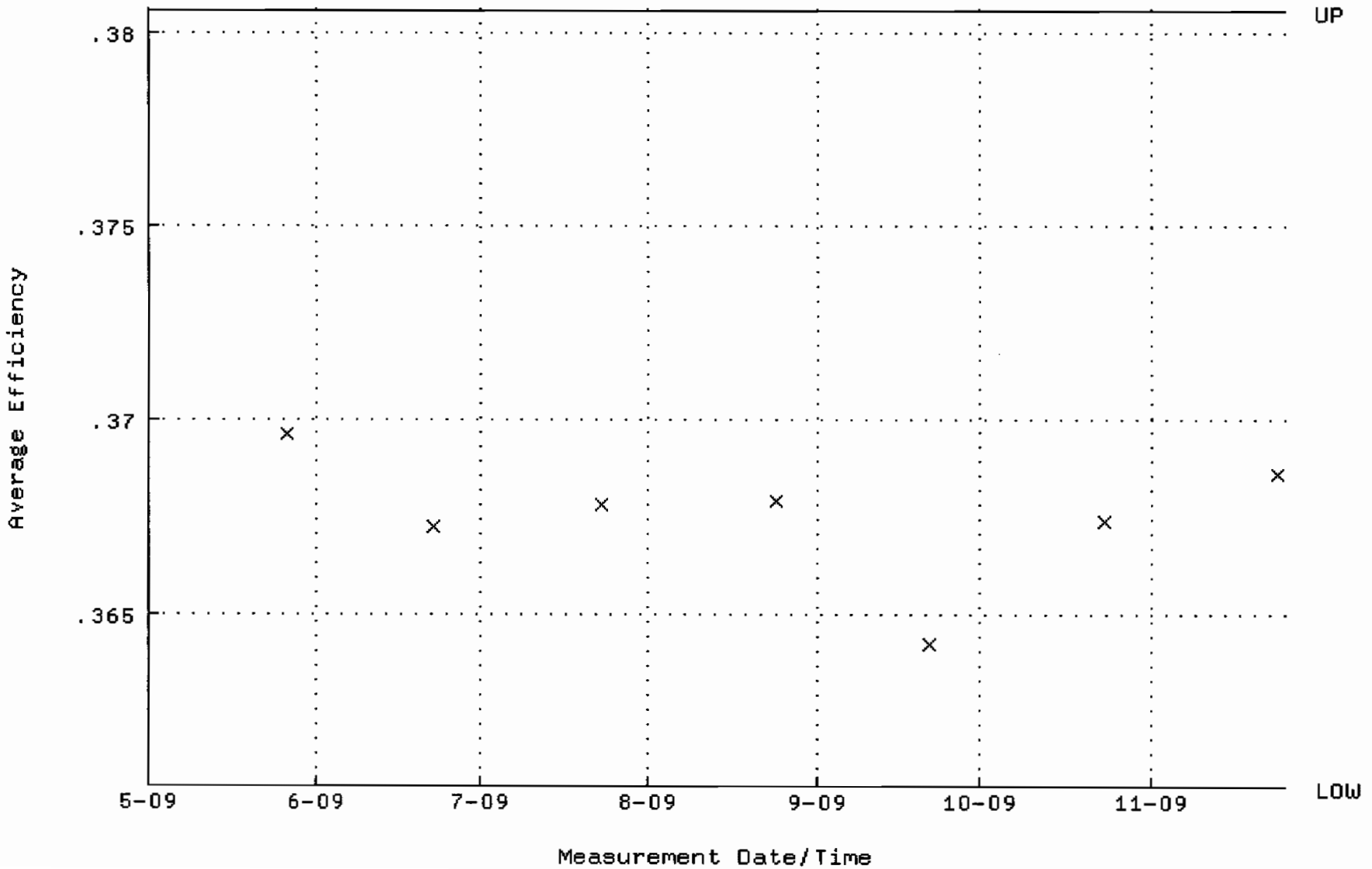

QA filename : DKA100:[ENV_ALPHA.QA.W]W170.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:08 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 89.5841 through 99.0139

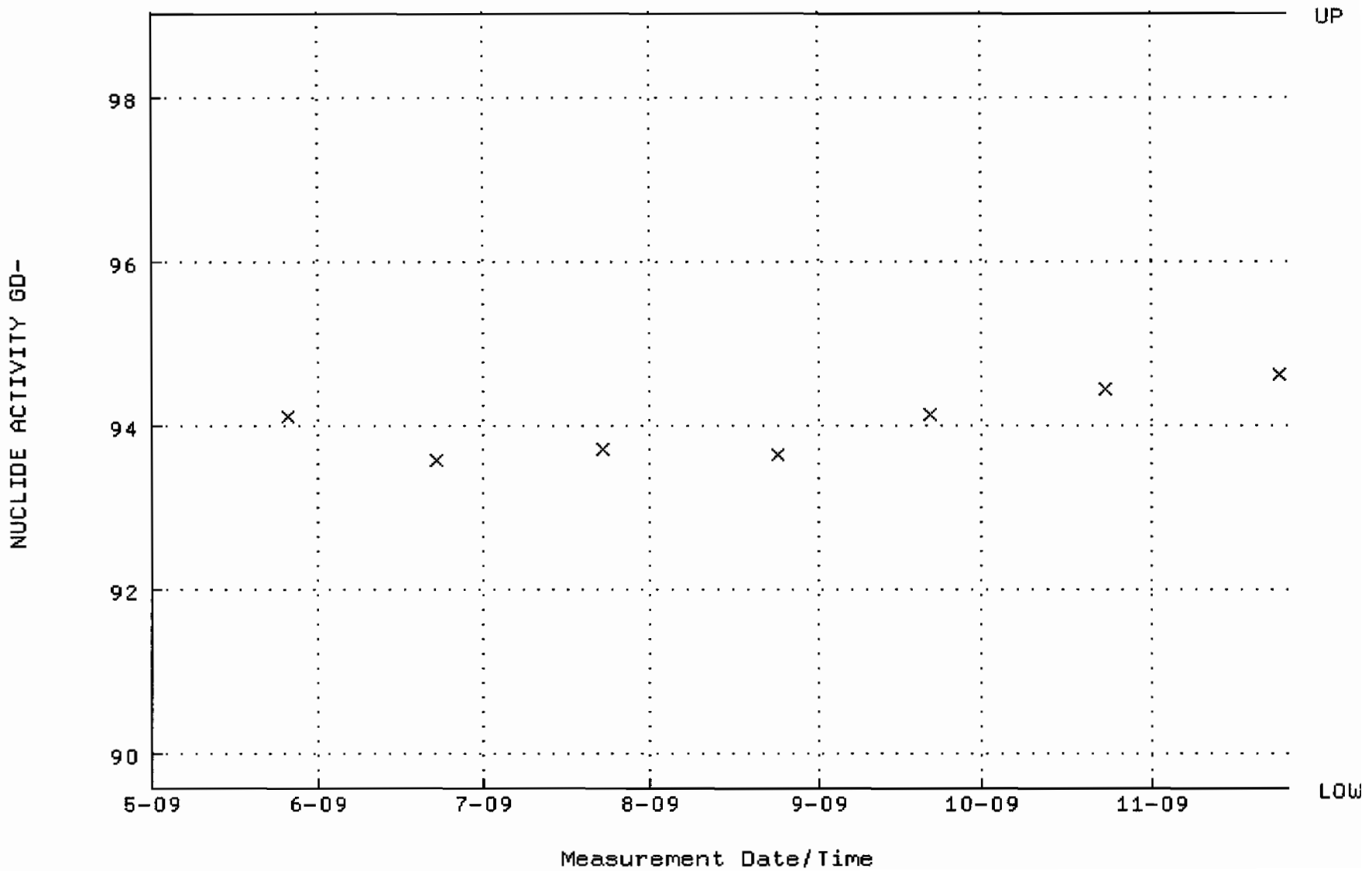

QA filename : DKA100:[ENV_ALPHA.QA.B]B170.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:50 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

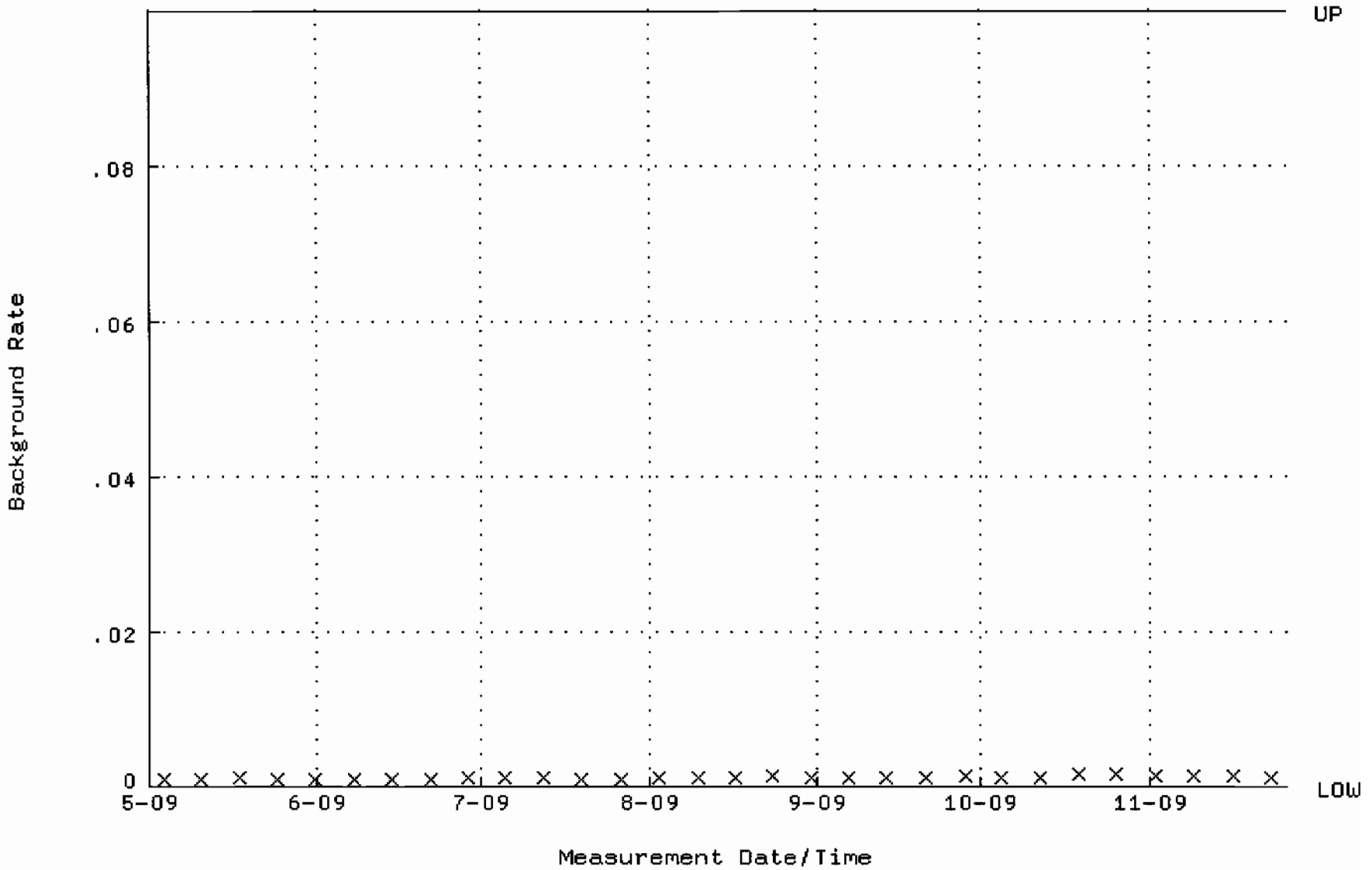

QA filename : DKA100:[ENV_ALPHA.QA.W]W171.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:13 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.375364 through 0.395364

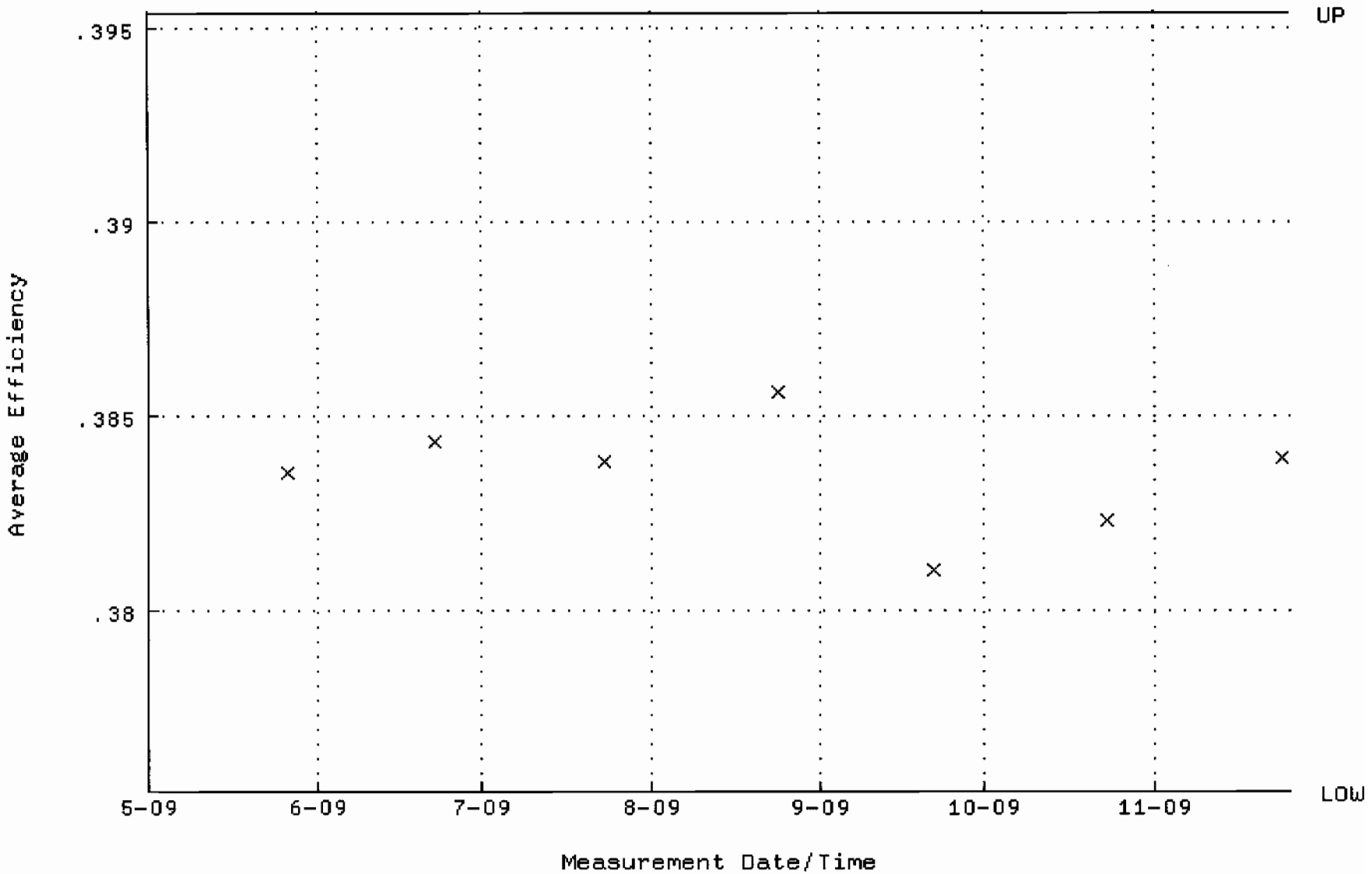

QA filename : DKA100:[ENV_ALPHA.QA.W]W171.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:13 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 84.7539 through 93.6753

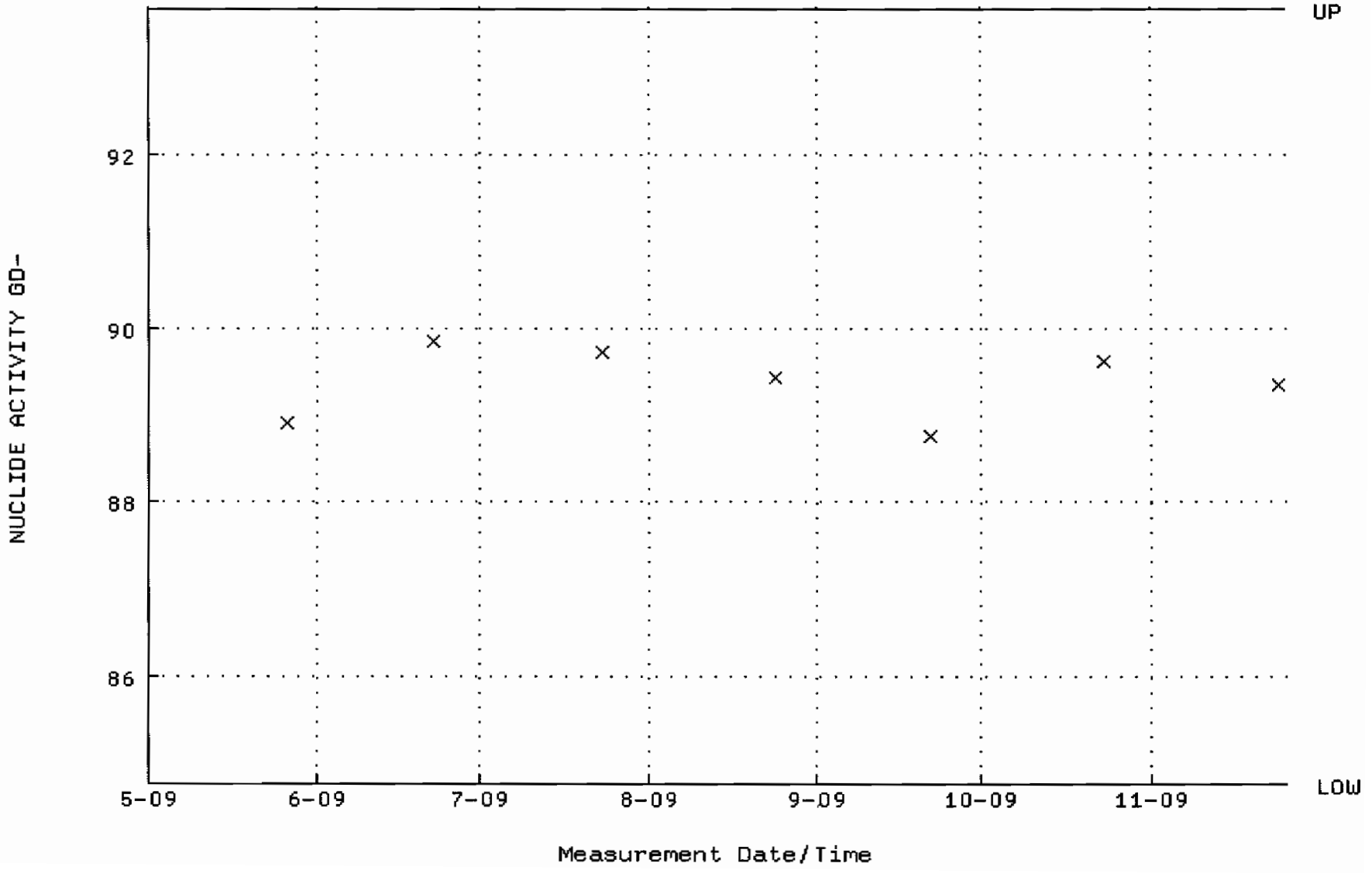

QA filename : DKA100:[ENV_ALPHA.QA.B]B171.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:54 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

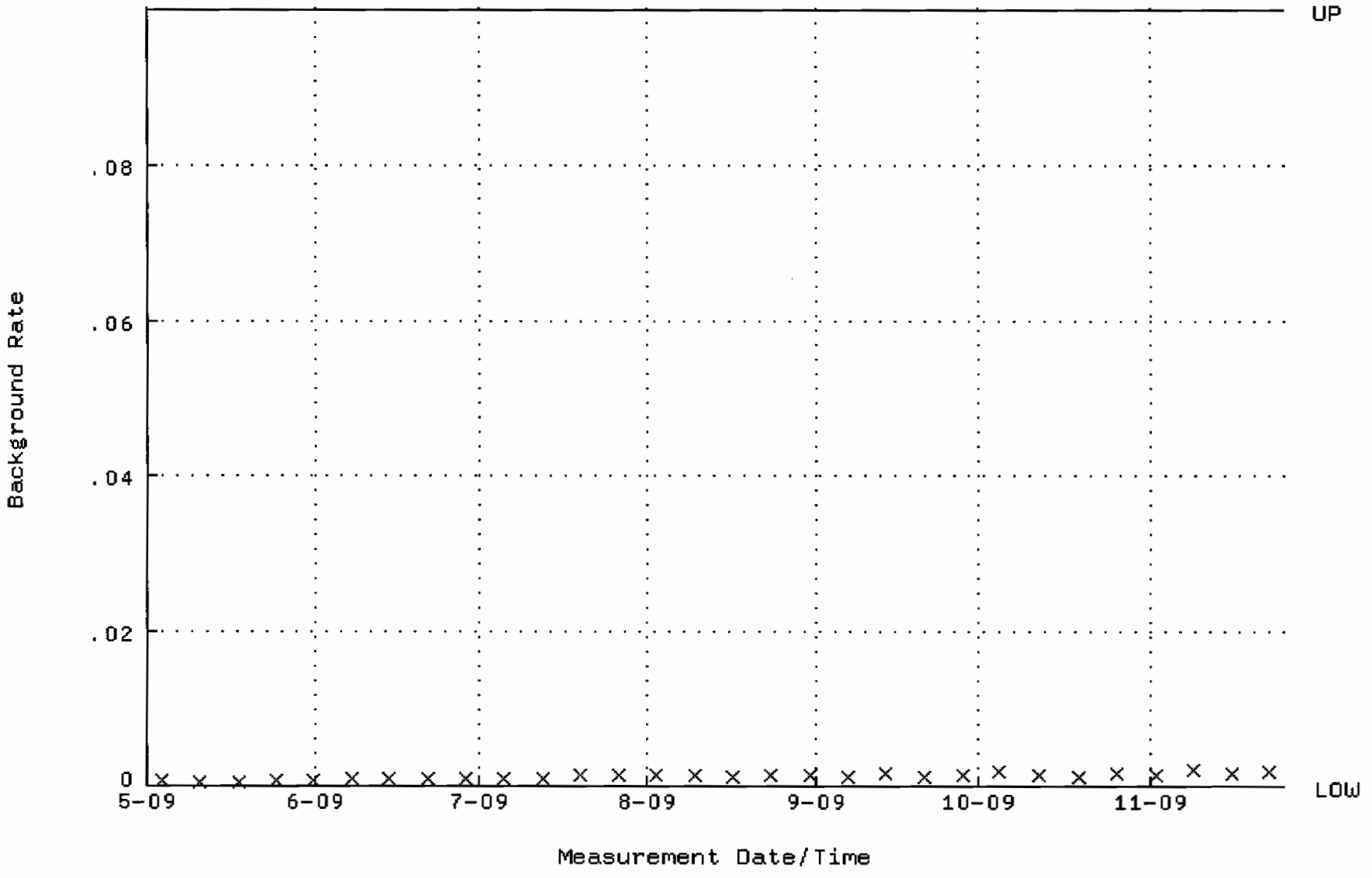

QA filename : DKA100:[ENV_ALPHA.QA.W]W172.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.373575 through 0.393575

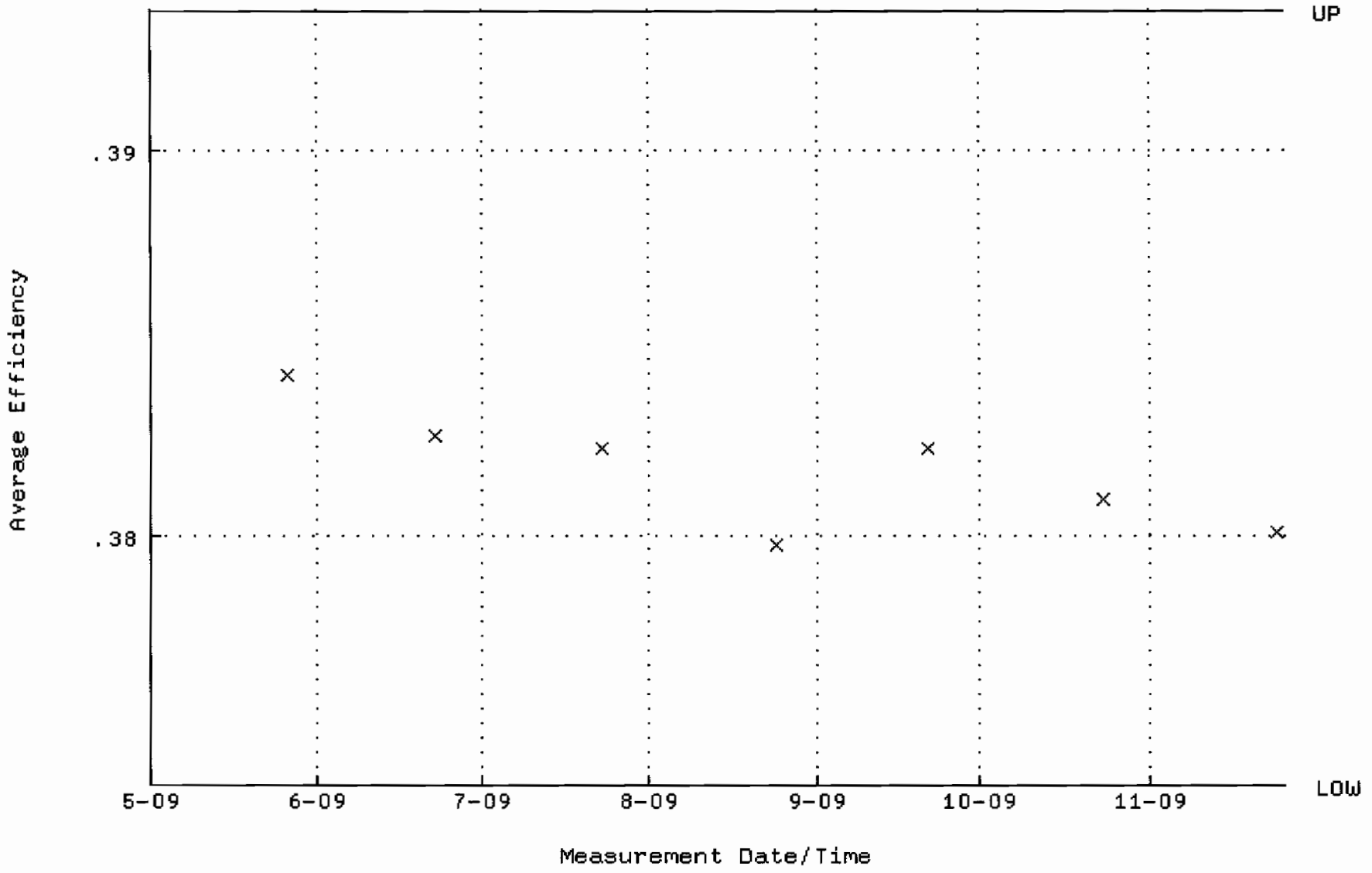

QA filename : DKA100:[ENV_ALPHA.QA.W]W172.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 86.5089 through 95.6151

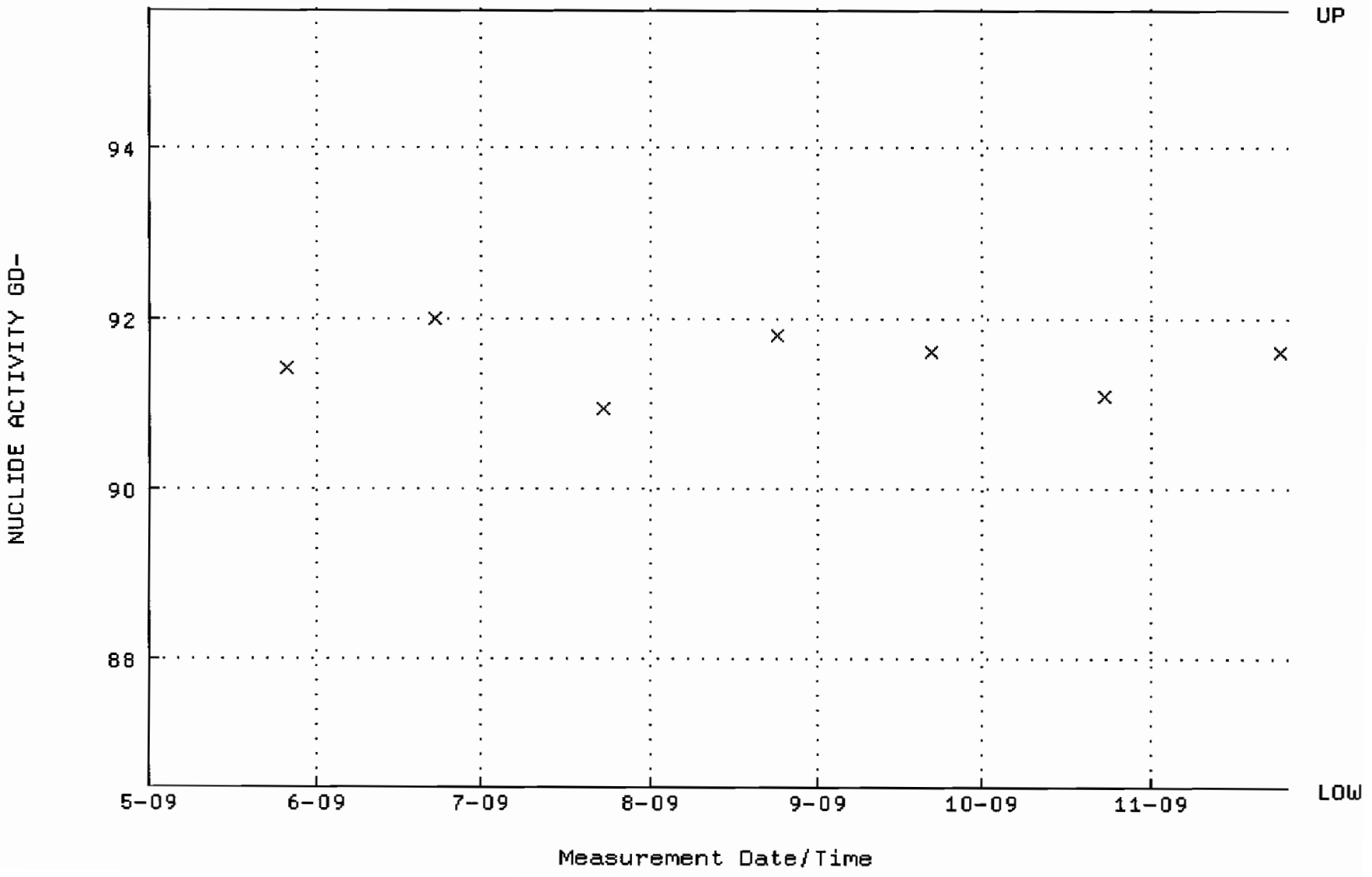

QA filename : DKA100:[ENV_ALPHA.QA.B]B172.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:57 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

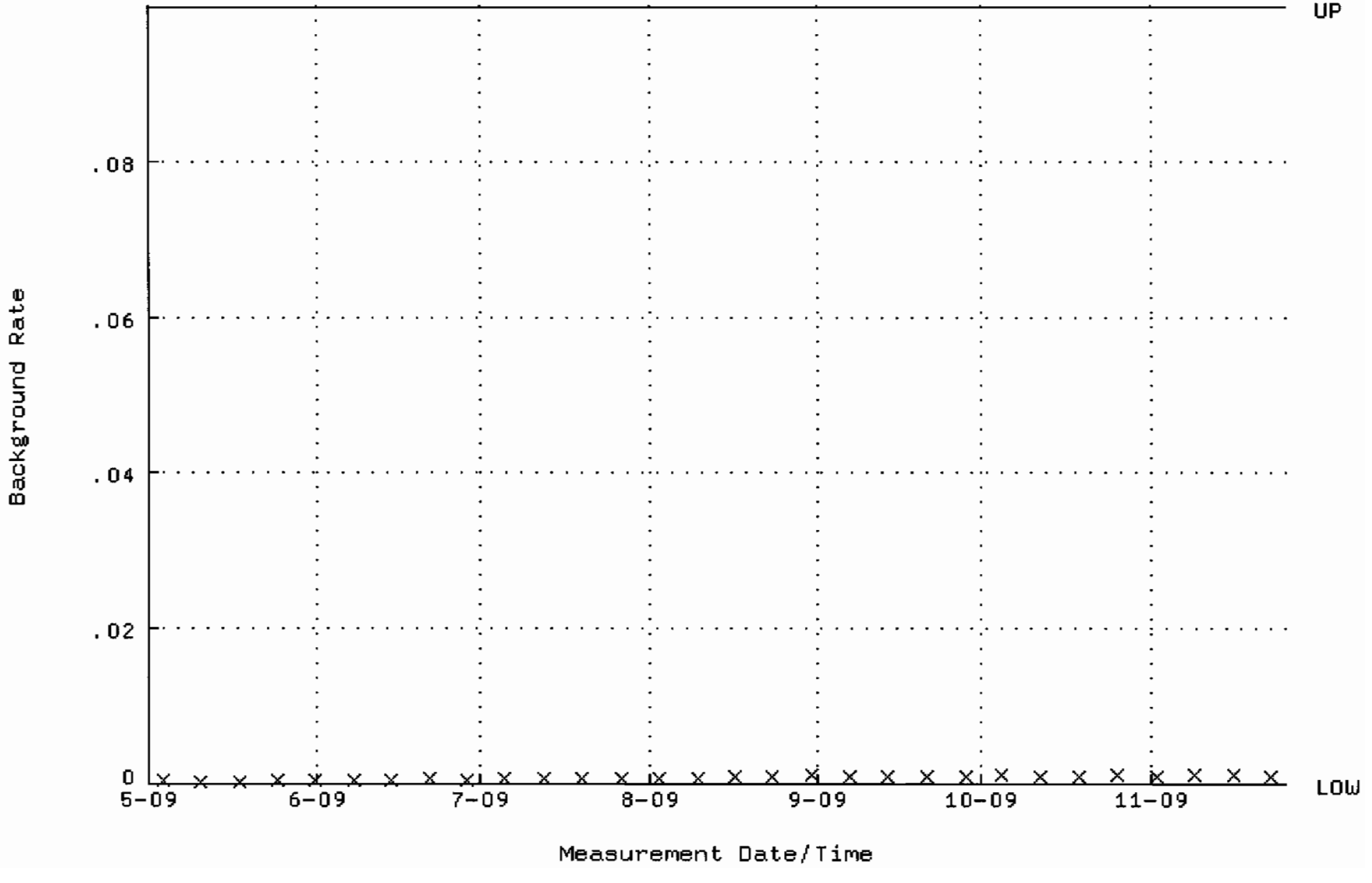

QA filename : DKA100:[ENV_ALPHA.QA.W]W209.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:30:29 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.363151 through 0.377133

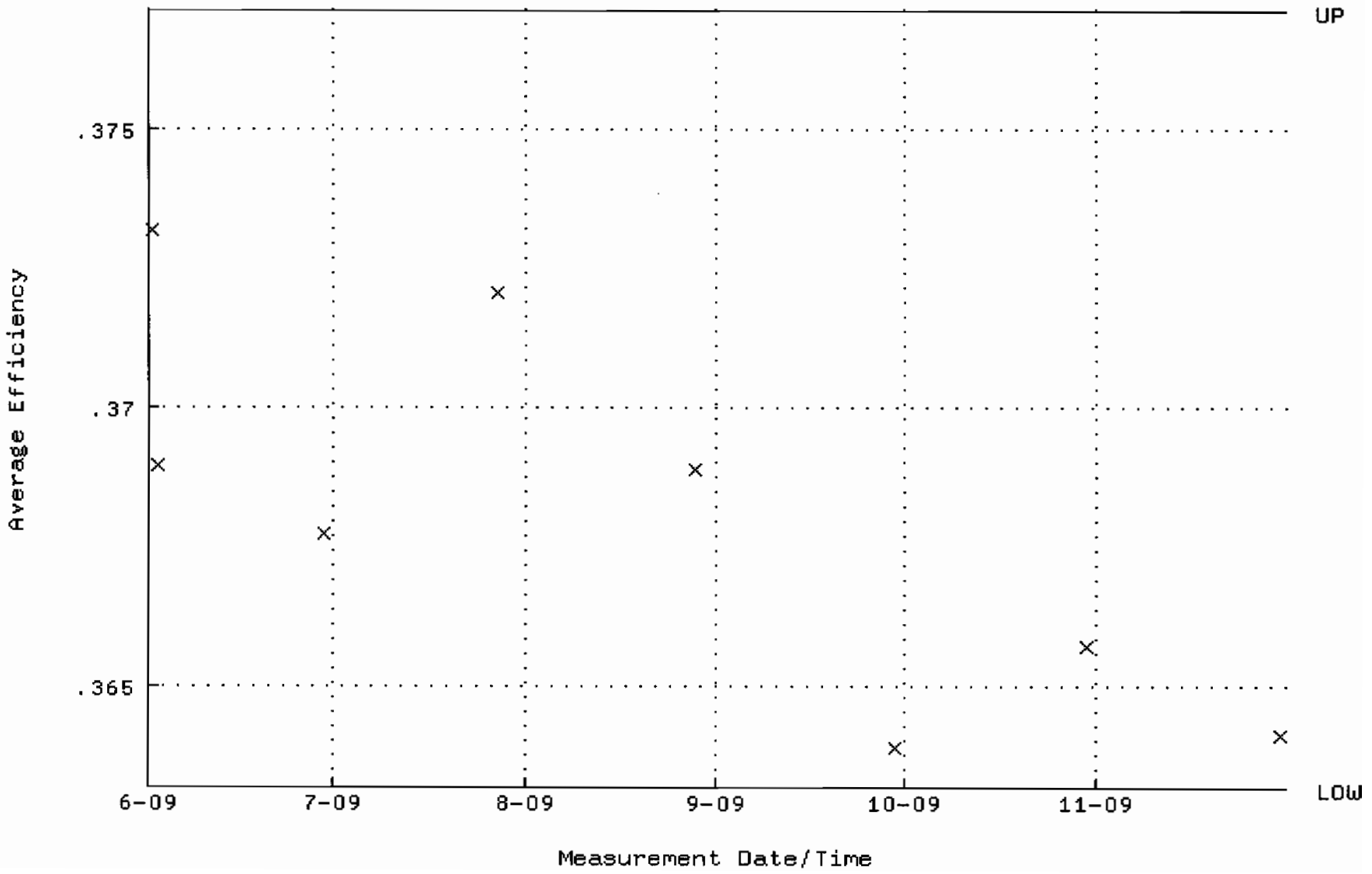

QA filename : DKA100:[ENV_ALPHA.QA.W]W209.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:30:29 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 88.8827 through 92.2979

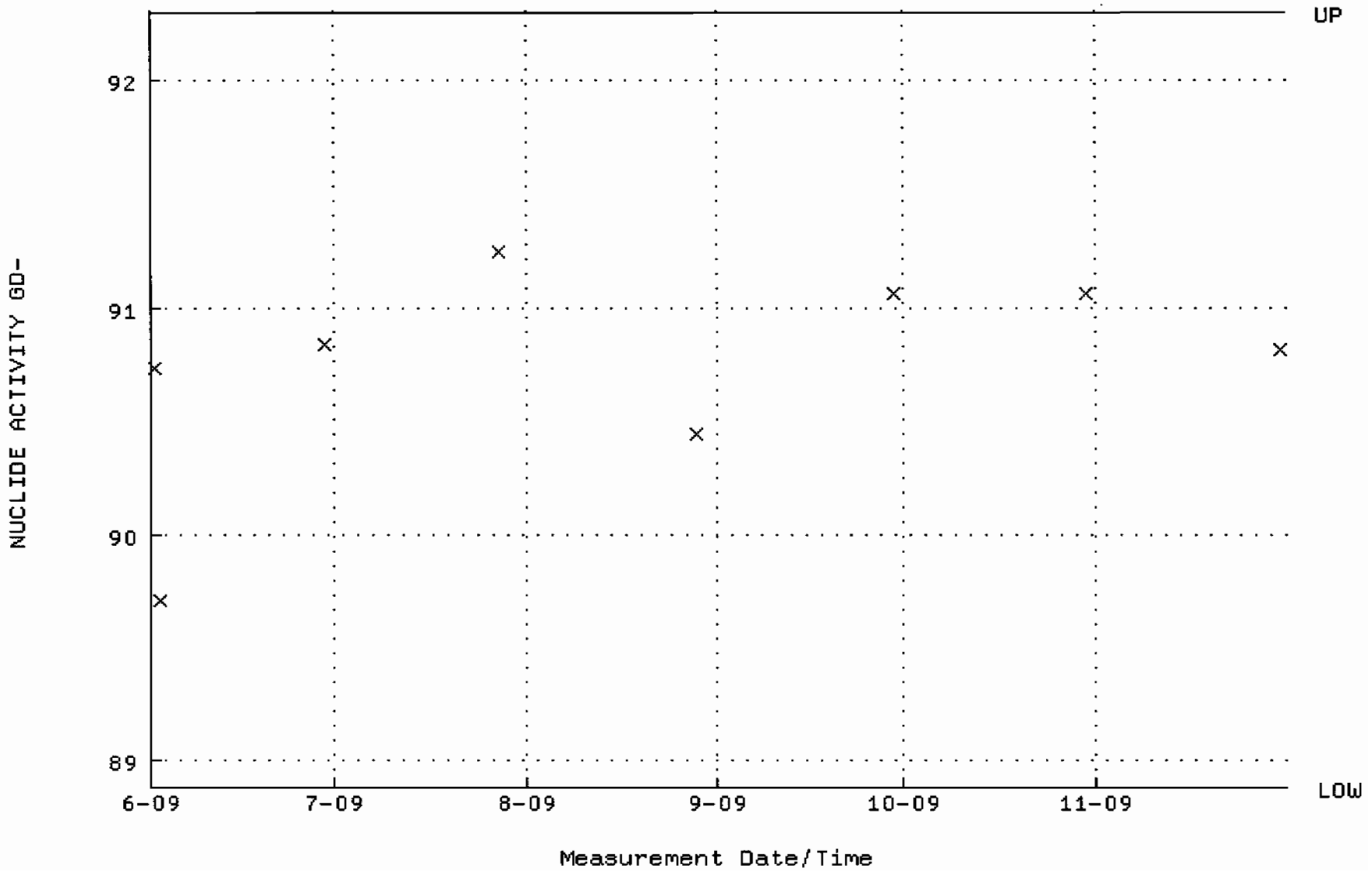

QA filename : DKA100:[ENV_ALPHA.QA.B]B209.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:43:30 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

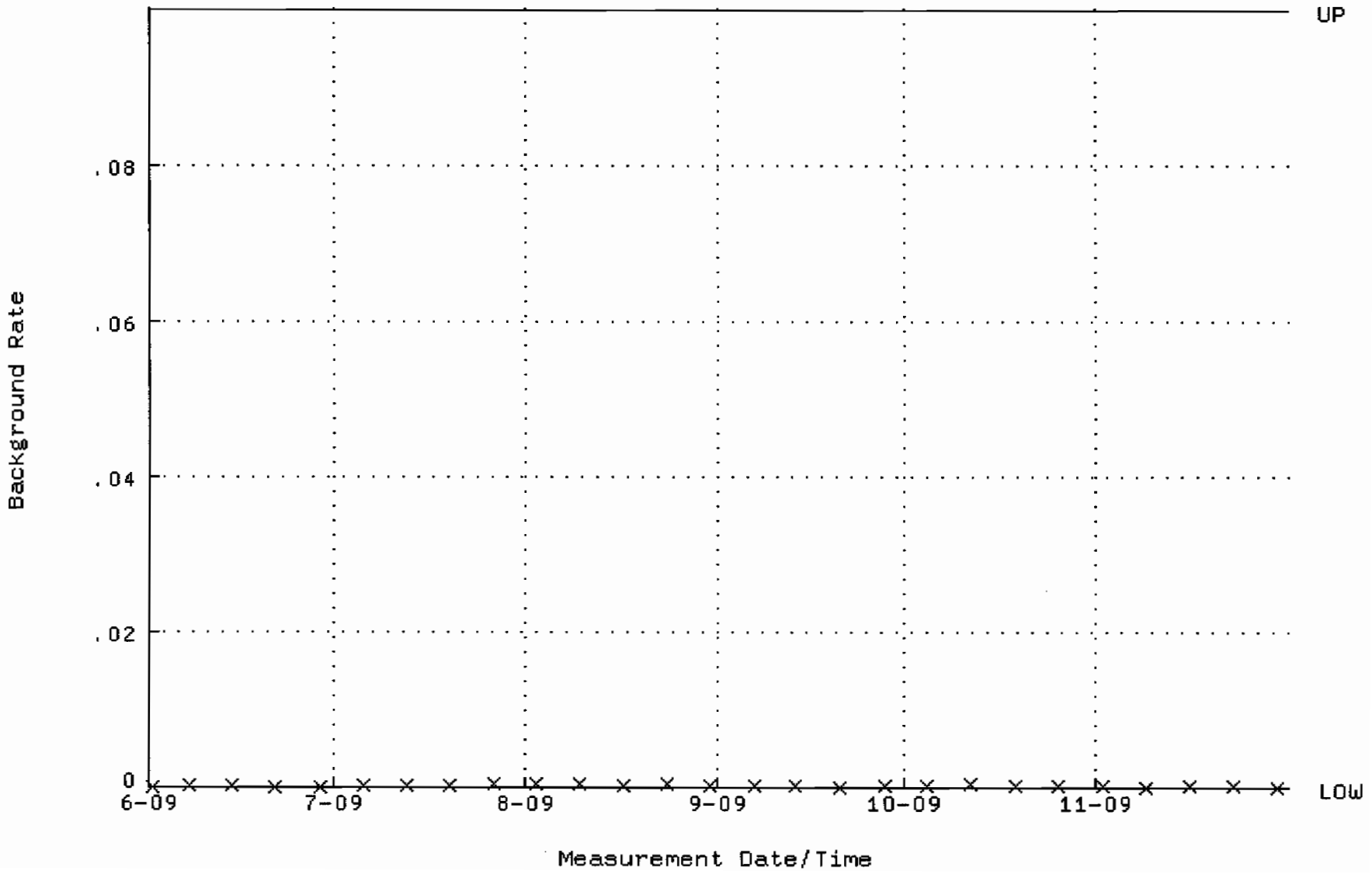

QA filename : DKA100:[ENV_ALPHA.QA.W]W223.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:49 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.359804 through 0.379804

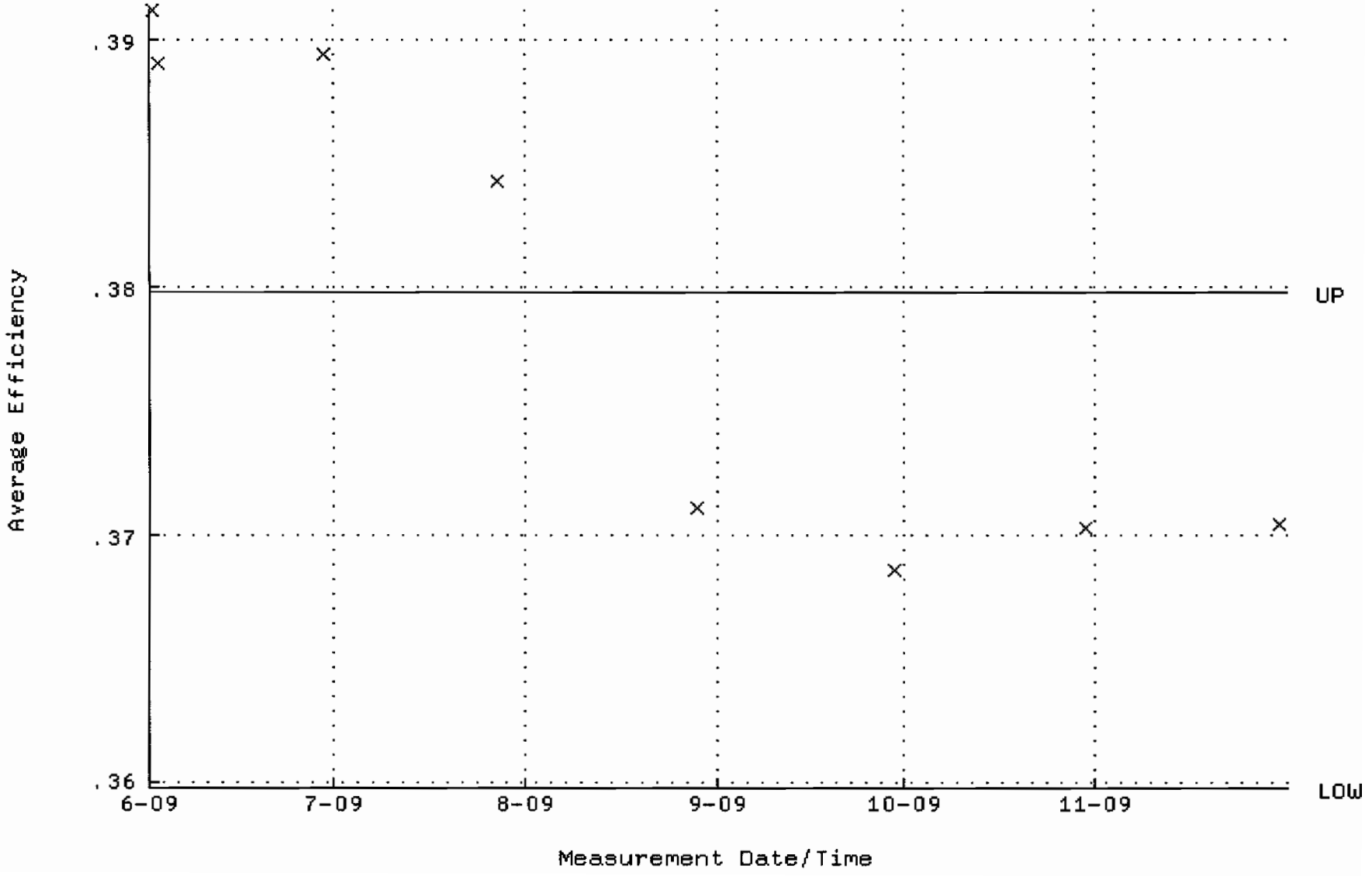

QA filename : DKA100:[ENV_ALPHA.QA.W]W223.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:49 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 89.5441 through 98.9697

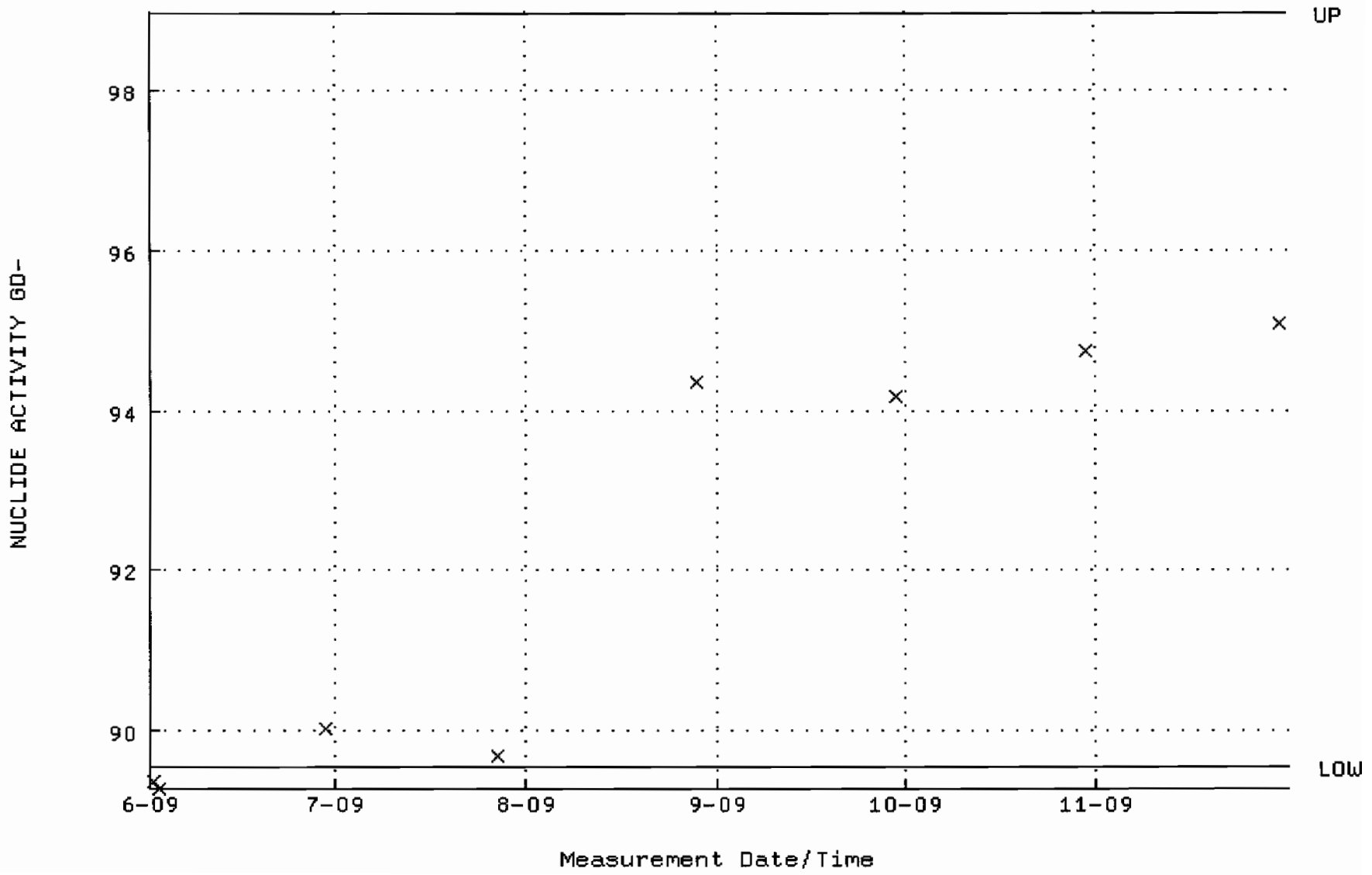

QA filename : DKA100:[ENV_ALPHA.QA.B]B223.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:34 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

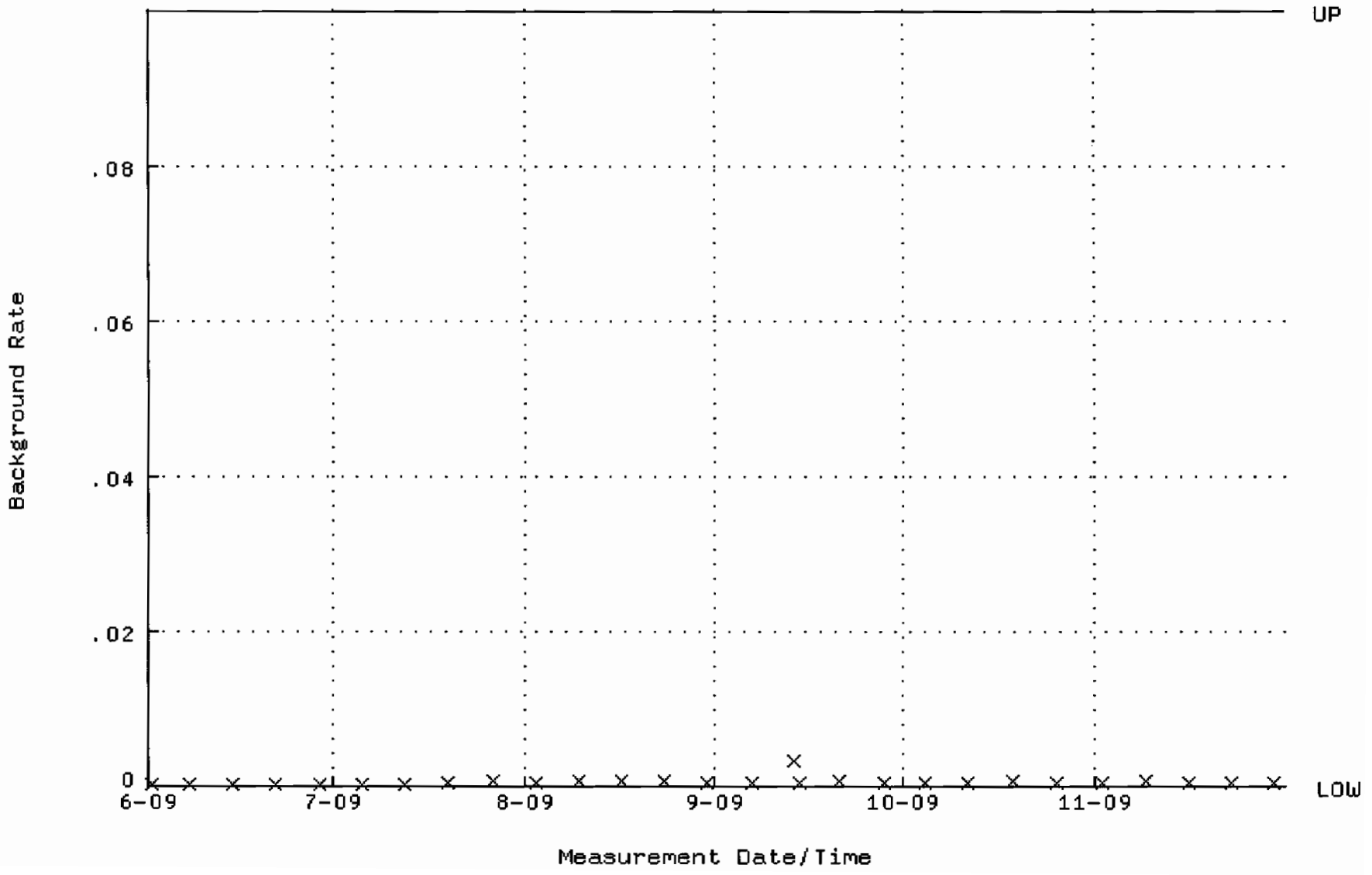

STANDARDS DATA

0244-A Characterization

Sample #	Uranium-233/234 Result (pCi/g)	Uranium-238 Result (pCi/g)	Thorium-230 Result (pCi/g)
0244-A 1	6.59	6.12	25.3
0244-A 2	6.36	6.07	28.5
0244-A 3	5.78	5.53	26.5
0244-A 4	6.48	5.97	25.5
0244-A 5	5.65	5.59	26.2
0244-A 6	6.96	5.78	27.0
0244-A 7	5.95	5.75	24.2
0244-A 8	5.29	5.67	27.2
0244-A 9	5.51	6.05	24.3
0244-A 10	6.37	5.57	25.6
0244-A 11	6.50	5.80	25.8
0244-A 12	6.13	5.42	22.4
0244-A 13	5.49	5.24	24.7
0244-A 14	6.19	5.21	26.9
0244-A 15	6.50	6.27	27.6
0244-A 16	6.50	5.24	24.9
0244-A 17	6.25	6.05	24.7
0244-A 18	6.14	6.00	25.4
0244-A 19	6.19	6.14	26.4
0244-A 20	5.67	5.61	23.2
Mean Value	6.13	5.75	25.62
1 sigma	0.439	0.325	1.493
2 sigma	0.878	0.650	2.986
75% Limit	4.60	4.31	19.22
125% Limit	7.66	7.19	32.03
Expected Result	6.2 +/- 4.0	6.0 +/- 4.0	24.5 +/- 0.6
Achieved Results	6.13 +/- 0.439	5.75 +/- 0.325	25.62 +/- 1.493

REFERENCE DATA 4/14/2000 Jeff C Neff 12/1/04

Angela L. Johnson 12/3/04

TRM

Invoice:

5 boxes of TRM-1
10 " " TRM-2 and 3
5 " each of NRM-1 through 6
7 " baghouse dirt

Use 1/4 gm x 10 Samples WITH Together for TRM-2

Table 7. Recommended Concentrations of Tailings Reference Materials (pCi/g)

	TRM–1	TRM–2	TRM–3	TRM–4
U–238	99 ± 6	6.0 ± 4.0	19.6 ± 1.4	44.9 ± 1.6
U–234	105 ± 6	6.2 ± 4.0	19.6 ± 1.9	44.6 ± 1.2
Th–230	471 ± 11	24.5 ± 0.6	58.5 ± 2.1	44.0 ± 1.6
Ra–226	489 ± 17	25.4 ± 0.9	60.3 ± 2.3	42.9 ± 1.2
Pb–210	425 ± 24	22.1 ± 1.2	56.0 ± 2.1	38.9 ± 2.0

Attention Nancy Slater At GEL
Not For Log In

9911627-01 -> 0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 SMO USE
Carrier/Waybill No.: 2 2 6 4 4 4
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Reference LOV (available at SMO)

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	LAB USE Lab Sample ID
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Instructions	
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Below	
-												
-												
-												
-												
-												
-												
-												

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking — SMO USE
Data Entered (mm/dd/yy)
Entered by

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well characterized rock materials being sent to GEL on behalf of Hank Mistaer
Please list as separate report.

Abnormal Conditions on Receipt LAB USE

Turnaround Time ☒Normal ☐Rush Required Report Date

QC Initials

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry		DP	Weston / 7577 / 845-0867

1. Relinquished by	Douglas E. Perry	Org. 7577	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

0244-B Characterization

Sample #	Plutonium-239 Result (pCi/g)	Plutonium-238 Result (pCi/g)	Americium-241 Result (pCi/g)
0244-B 1	39.9	7.88	38.4
0244-B 2	44.1	7.97	40.6
0244-B 3	45.8	6.56	31.8
0244-B 4	43.6	7.69	31.5
0244-B 5	43	7.9	40.2
0244-B 6	43.5	7.84	29.4
0244-B 7	41.3	7.67	36
0244-B 8	44.3	6.95	33.2
0244-B 9	42.7	7.2	29.2
0244-B 10	44.9	7.69	30
0244-B 11	41.4	7.22	30.2
0244-B 12	41.3	7.74	36
0244-B 13	39.2	6.65	33.8
0244-B 14	39.6	7.78	31.1
0244-B 15	45.3	8.41	37.3
0244-B 16	38.1	6.74	33.6
0244-B 17	48.5	8.51	30.5
0244-B 18	36.5	7.23	38.6
0244-B 19	35.3	6.98	30.9
0244-B 20	37.4	8.55	31.3
Mean Value	41.79	7.56	33.68
1 sigma	3.418	0.596	3.724
2 sigma	6.835	1.193	7.448
75% Limit	30.75	6.02	24.38
125% Limit	51.25	10.04	40.63
Expected Result	41.0 +/- 3.0	8.03 +/- 0.37	32.5 +/- 1.1
Achieved Results	41.79 +/- 3.418	7.56 +/- .596	33.68 +/- 3.724

REFERENCE DATA 4/14/2000

Amanda L. Fehr 4/30/04
Matt L. Stokel 5/1/04

PEM-1

PREPARATION AND CHARACTERIZATION OF THE PERFORMANCE EVALUATION SOIL SAMPLE PEM-1

INTRODUCTION

Rust Geotech (Rust) was contracted by Los Alamos National Laboratory (LANL) to prepare and characterize a soil performance evaluation sample designated PEM-1. This report describes sample preparation, homogeneity assessment, and determination of the concentrations of 28 elements and radioactive isotopes in the sample.

SAMPLE PREPARATION

Rust received nine five-gallon buckets of soil from LANL. The soils were dried overnight in ovens at 103 °C. The large pieces of leaves and sticks were removed and the soils were ground with ceramic-plate grinders to a particle size that passed through a 325 mesh screen. The samples were blended at the proportions specified by LANL for 48 hours in a 3-cubic-foot cross-flow blender. The sample identifications and the amounts used are listed in Table 1.

Table 1. Sample Identifications and Amounts Used to Prepare PEM-1

LANL Sample ID	Amount Used (kg)
AAA 1592	1.7
AAA 2505-1	10.9
AAA 2505-2	12.8
AAA 2750-1	8.4
AAA 2750-2	8.4
AAA 3205	12.6
AAA 8581	4.2
AAB 3417	12.8
AAB 3475	12.6

The blended sample was transferred to three five-gallon plastic containers. While the sample was being transferred, 10 samples were taken at pre-determined time intervals to be used for homogeneity assessment and sample characterization. These samples are believed to be representative of the bulk material.

Attention Nancy Slater At GEL
Not For Log In

9911627-01 -> 07

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for Instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 SMO USE
Carrier/Waybill No.: 1726409
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	LAB USE Lab Sample ID
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special Instructions Below	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
-												
-												
-												
-												
-												
-												
-												

Reference LOV (available at SMO)

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking SMO USE
Date Entered (mm/dd/yy)
Entered by

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well characterized and materials being sent to GEL on behalf of Hank Mistaer
Please list as separate report.

Abnormal Conditions on Receipt LAB USE

Turnaround Time ☒Normal ☐Rush Required Report Date
QC Limits

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	Douglas E. Perry	DEP	Weston / 7577 / 845-0867

1. Relinquished by	Douglas E. Perry	Org. 7577	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution: 5.3739 g (in a 5 ml Flame Sealed Ampoule)

b. Chemical form: Am(NO3)3 in 2N HNO3

c. Carrier content: None added

d. Density: 1.0651 g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under: 228, 278 keV.

Branching ratio(s) used: 0.108, 0.1420 gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration: ±3.0%

b. Random uncertainty in assay: ±0.4%

c. Random uncertainty in weighing(s): ±0.0%

d. Total uncertainty at the 99% confidence level: ±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Carmen U. Pham
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ **1. STANDARD WIPE TEST**

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **2. SOAK TEST**

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **3. SOAK TEST – BERYLLIUM WINDOW**

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **4. GAS SOURCE TEST (Radioactive Gas)**

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ **5. OTHER LEAK TEST**

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **6. LEAK TEST NOT APPLICABLE**

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Angela Johnson
Prep Date:	01/05/1994
Verification Date:	05/11/2009
Expiration Date:	05/11/2010
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2005	09/10/2006
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/16/2005	Brenda Burke	.001224	500	445-96-2-DD	5.07144 dpm/mL	08/18/2007	08/18/2008
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
10/13/2005	Brenda Burke	.0017	500	445-96-2-EE	7.0435 dpm/mL	11/15/2005	11/15/2006
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
10/14/2005	Mary Aders	.0141	500	445-96-2-FF	58.4196 dpm/mL	10/14/2005	10/14/2006
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
05/10/2006	Mary Aders	2.0753	1000	445-96-2-GG	4299.227 dpm/mL	09/30/2008	09/30/2009
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
06/07/2006	Mary Aders	.0365	1000	445-96-2-HH	75.614 dpm/mL	06/19/2006	06/19/2007
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
05/11/2006	Brenda Burke	.000009739	100	445-96-2-II	.201761 dpm/mL	07/26/2006	07/26/2007
07/20/1995	Theresa Austin	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
05/01/2007	Daniel Roy	.0352	1000	445-96-2-JJ	72.9209 dpm/ml	04/30/2008	04/30/2009
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
06/12/2007	Julie Strock	.01038	250	445-96-2-KK	22.1496 dpm/mL	05/28/2008	05/28/2009

09/11/1995	Theresa Austin	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Austin	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
11/01/2007	Eric Williamson	.001274	500	445-96-2-MM	5.27945 dpm/mL	04/06/2008	04/06/2010
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/19/2008	Daniel Roy	.0424	1000	445-96-2-NN	87.8366 dpm/ml	04/16/2009	04/16/2010
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/04/2008	Julie Strock	.00001005	100	445-96-2-PP	.20819 dpm/mL	12/29/2008	12/29/2009
01/28/2000	Angela Johnson	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
09/29/2008	Julie Strock	.0025219	250	445-96-2-QQ	20.8977 dpm/mL	09/30/2008	09/29/2009
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/23/2009	Tina Schoneman	.001251	500	445-96-2-RR	4.8075 dpm/mL	04/23/2009	04/23/2010
04/13/2001	Angela Johnson	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
05/08/2009	Mary Aders	.0141	1000	445-96-2-SS	29.2098 dpm/ml	05/11/2009	05/11/2010
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003

07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
06/03/2009	Julie Strock	.00000927	100	445-96-2-TT	.1923 dpm/mL	06/05/2009	06/03/2010
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
06/02/2009	Mary Aders	2.1177	1000	445-96-2-UU	4385.1449 dpm/ml	06/04/2009	06/04/2010
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Johnson	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2006	03/14/2007
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Eric Williamson	.011	1000	445-96-2-Z	22.7877 dpm/mL	04/03/2007	04/03/2008

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Am-243 Standard *445-96-2-SS*

M. Aders	Isotope	Value	Uncertainty
5/15/2009	445-96-2-SS #1	1.360	0.1690
	445-96-2-SS #2	1.370	0.1690
	445-96-2-SS #3	1.290	0.1590

Mean Value (Counting) =	1.340	101.99	**Pass**
Stdev =	0.043588989		**Rule 3 (Pass/Fail)**

Target =	1.314
Lower Limit =	1.252822021
Upper Limit =	1.427177979
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.087177979
10 % of Mean =	0.134
Rule 2 (Pass/Fail)	**Pass**

The analyst prepared three standard verification sources for standard ***445-96-2-SS*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Cm-244*** standard ***0533-O*** and 50 micrograms of neodymium carrier in a disposable centrifuge tube. Each standard was diluted with 4 mL of 2 M HCl and 6 mL of DI Water. Two mL of 48% HF was added to precipitate Nd(and Americium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Am-243 were calculated by comparison to Am-241certified values.

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

Mary Fridrich 5/15/09
Robert Bin 0075/09

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

1283

78747-278

U-232 5 mL Liquid in Flame Sealed Vial

Customer: GEL Laboratories, LLC
P.O. No.: 7319 RD, Item 1

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated using a germanium gamma spectrometer system.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Isotope:	U-232
Activity (Bq):	3.754 E3
Half-Life:	68.9 years
Calibration Date:	December 9, 2008 12:00 EST
Relative Expanded Uncertainty (k=2):	5.0%

Comments:
Impurities: U-233 <0.3%, Am-241 <0.15%
5.20453 grams 1M HNO_3 solution.

Source Prepared By: W. Mao
W. Mao, Radiochemist

QA Approved: D M Mont
D. M. Montgomery, QA Manager

Date: 12-11-08

End of Certificate

RECEIVED 12/15/08
RC-S-OE

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1283
Prepared By:	Daniel Roy
Carrier Conc:	1M HNO3
Reference Date:	12/09/2008
Ampoule Mass (g):	5.20453 g
Uncertainty:	+/- 5 %
LogBook No:	RC-S-051-002

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Daniel Roy
Prep Date:	12/16/2008
Verification Date:	12/30/2008
Expiration Date:	12/30/2009
Primary Code:	1283-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.0245 g
Density(g/mL):	1.0285
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (5.20453 g * 100 mL) = 2174.4872 dpm/mL
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (1.0285 g/mL)/ (5.20453 g * 100 mL) = 2114.1700 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/16/2008	Daniel Roy	25.1813	1000	1283-B	53.2375 dpm/ml	12/16/2008	12/16/2009
12/30/2008	Tina Schoneman	2.05	250	1283-C	17.336 dpm/mL	12/30/2008	12/30/2009
12/30/2008	Tina Schoneman	.49	250	1283-D	4.1438 dpm/mL	01/09/2009	01/09/2010
01/14/2009	Mary Aders	25.0528	1000	1283-E	52.9659 dpm/ml	01/15/2009	01/15/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Uranium-232 Standard *1283-E*

Analyst: M. Aders	Serial #	Value		Uncertainty	
Date: 1/14/09	1283-E N1	2.540	pCi/L	0.288	pCi/L
	1283-E N2	2.390	pCi/L	0.272	pCi/L
	1283-E N3	2.450	pCi/L	0.274	pCi/L

Mean Value (Counting) =	2.460	pCi/L	**103.20801**	**Pass**
Stdev =	0.075498344	pCi/L		**Rule 3 (Pass/Fail)**

Target =	2.384	pCi/L
Lower Limit =	2.309003311	pCi/L
Upper Limit =	2.610996689	pCi/L
Rule 1 Pass/Fail	**Pass**	
Two sigma =	0.150996689	
10 % of Mean =	0.246	
Rule 2 (Pass/Fail)	**Pass**	

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for standard **1283-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **1163-E** and was diluted to 10 mL with DI water. 50 micrograms of neodymium carrier and 1ml of Titanium Chloride were added. The solution was allowed to sit for 30 seconds. One mL of 48% HF was then added to precipitate neodymium (and uranium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for U-238 were calculated by comparison to U-232 certified values.

Mary Fridenau 1/19/09
Amanda L. Fuhr 2/9/09

1373

National Institute of Standards & Technology
Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

RECEIVED

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 to 7.

12C-S-051-0012

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994 [b]***
Massic activity of the solution [c]	**26.31 $Bq \cdot g^{-1}$**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**
Solution density	**(1.105 ± 0.002) $g \cdot mL^{-1}$ at 20 °C [f]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration ($mol \cdot L^{-1}$)	Mass Fraction ($g \cdot g^{-1}$)
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) $Bq \cdot g^{-1}$ [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three $4\pi\alpha$ liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	^{239}Pu + ^{240}Pu <0.000 001 [u]	^{239}Pu + ^{240}Pu 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	^{238}Pu + ^{241}Am <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One µSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (µSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 $s^{-1} \cdot g^{-1}$ for energies less than 3.1 MeV,
0.03 $s^{-1} \cdot g^{-1}$ for energies between 3.1 and 4.4 MeV, and
0.003 $s^{-1} \cdot g^{-1}$ for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 19 and 39 keV,
7×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 49 and 92 keV,
2×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 106 and 507 keV,
1×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 515 and 1456 keV, and
5×10^{-6} $s^{-1} \cdot g^{-1}$ for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}·{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1373
Prepared By:	Mary Aders
Carrier Conc:	0.5M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC-S-051-092

A Solution Material Info	
Isotope:	Plutonium-242
Prepared By:	Mary Aders
Prep Date:	10/23/2009
Verification Date:	10/27/2009
Expiration Date:	10/27/2010
Primary Code:	1373-A
Dilution(mL):	200 mL
Mass of Parent(g):	5.3477 g
Density(g/mL):	1.0145
Balance ID:	38110047

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / (Dilution Vol) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (200 mL) = 42.2094 dpm/mL

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (1.0145 g/mL) / (200 mL) = 41.6041 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Pu-242 Standard 1373-*A*

M. Aders	Isotope	Value	Uncertainty
10/27/2009	1373-A	1.970	0.3050
	1373-A	1.900	0.2980
	1373-A	1.950	0.3000

Mean Value (Counting) =	1.940	102.04	**Pass**
Stdev =	0.036055513		**Rule 3 (Pass/Fail)**

Target =	1.90
Lower Limit =	1.867888974
Upper Limit =	2.012111026
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.072111026
10 % of Mean =	0.194
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for standard 1373-A using 0.1 mL for each source. Each standard was combined with 0.1 mL of Pu239 standard 0338-BB and 50 micrograms of neodymium carrier in a disposable centrifuge tube containing 4 mL of 2 M HCl and 6 mL of DI water. Four drops of 25% Hydrazine dihydrochloride were added to each centrifuge tube and swirled. Two mL of 48% HF was added to precipitate neodymium(and plutonium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Pu-242 were calculated by comparison to Pu-239 certified values.

10/28/09

11/02/09

RUNLOGS

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928304**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241518001	SAMPLE	MXE1	1093	10-DEC-09 12:38	DONE		
241518002	SAMPLE	MXE1	1094	10-DEC-09 12:38	DONE		
241518003	SAMPLE	MXE1	1095	10-DEC-09 12:39	DONE		
241518004	SAMPLE	MXE1	1096	10-DEC-09 12:39	DONE		
241518005	SAMPLE	MXE1	1097	10-DEC-09 12:39	DONE		
241518006	SAMPLE	MXE1	1098	10-DEC-09 12:39	DONE		
241524002	SAMPLE	MXE1	1099	10-DEC-09 12:39	DONE		
241559001	SAMPLE	MXE1	1100	10-DEC-09 12:39	DUSE		
241559002	SAMPLE	MXE1	1101	10-DEC-09 12:39	DONE		
241610001	SAMPLE	MXE1	1102	10-DEC-09 12:39	DONE		
241610002	SAMPLE	MXE1	1103	10-DEC-09 12:39	DONE		
241610003	SAMPLE	MXE1	1104	10-DEC-09 12:39	DONE		
241610004	SAMPLE	MXE1	1105	10-DEC-09 12:39	DONE		
241610005	SAMPLE	MXE1	1107	10-DEC-09 12:39	DONE		
1201984982	MB	MXE1	1108	10-DEC-09 12:39	DONE		
1201984983	DUP	MXE1	1109	10-DEC-09 12:39	DONE		
1201984984	LCS	MXE1	1111	10-DEC-09 12:39	DONE		
241610006	SAMPLE	MXE1	1112	10-DEC-09 12:39	DONE		
241610007	SAMPLE	MXE1	1221	10-DEC-09 12:42	DONE		
241610008	SAMPLE	MXE1	1222	10-DEC-09 12:42	DONE		
241610009	SAMPLE	MXE1	1223	10-DEC-09 12:42	DONE		
241559001	SAMPLE	MXE1	1209	11-DEC-09 11:33	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928305**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241610003	SAMPLE	MXE1	1031	11-DEC-09 09:39	DONE		
241610004	SAMPLE	MXE1	1033	11-DEC-09 09:39	DONE		
241610005	SAMPLE	MXE1	1035	11-DEC-09 09:39	DONE		
241610006	SAMPLE	MXE1	1036	11-DEC-09 09:39	DONE		
241610007	SAMPLE	MXE1	1037	11-DEC-09 09:39	DONE		
241610008	SAMPLE	MXE1	1038	11-DEC-09 09:39	DONE		
241610009	SAMPLE	MXE1	1039	11-DEC-09 09:39	DONE		
1201984985	MB	MXE1	1040	11-DEC-09 09:39	DONE		
1201984986	DUP	MXE1	1041	11-DEC-09 09:39	DONE		
1201984987	LCS	MXE1	1042	11-DEC-09 09:39	DONE		
241518001	SAMPLE	MXE1	1043	11-DEC-09 11:57	DUSE		
241518002	SAMPLE	MXE1	1044	11-DEC-09 11:57	DONE		
241518003	SAMPLE	MXE1	1045	11-DEC-09 11:57	DONE		
241518004	SAMPLE	MXE1	1046	11-DEC-09 11:57	DONE		
241518005	SAMPLE	MXE1	1047	11-DEC-09 11:57	DONE		
241518006	SAMPLE	MXE1	1048	11-DEC-09 11:57	DONE		
241524002	SAMPLE	MXE1	1071	11-DEC-09 11:57	DONE		
241559001	SAMPLE	MXE1	1072	11-DEC-09 11:57	DONE		
241559002	SAMPLE	MXE1	1073	11-DEC-09 11:57	DONE		
241610001	SAMPLE	MXE1	1074	11-DEC-09 11:57	DONE		
241610002	SAMPLE	MXE1	1076	11-DEC-09 11:57	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 931796**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
1201993216	LCS	MXE1	1152	14-DEC-09 12:07	DONE		
241518001	SAMPLE	MXE1	1153	14-DEC-09 12:07	DONE		
241518002	SAMPLE	MXE1	1154	14-DEC-09 12:07	DONE		
241518003	SAMPLE	MXE1	1155	14-DEC-09 12:07	DONE		
241518004	SAMPLE	MXE1	1156	14-DEC-09 12:07	DONE		
241518005	SAMPLE	MXE1	1157	14-DEC-09 12:07	DONE		
241518006	SAMPLE	MXE1	1158	14-DEC-09 12:07	DONE		
241524002	SAMPLE	MXE1	1159	14-DEC-09 12:08	DONE		
241559001	SAMPLE	MXE1	1160	14-DEC-09 12:08	DONE		
241559002	SAMPLE	MXE1	1161	14-DEC-09 12:20	DONE		
241610001	SAMPLE	MXE1	1162	14-DEC-09 12:20	DONE		
241610002	SAMPLE	MXE1	1163	14-DEC-09 12:20	DONE		
241610003	SAMPLE	MXE1	1164	14-DEC-09 12:20	DONE		
241610004	SAMPLE	MXE1	1165	14-DEC-09 12:20	DONE		
241610005	SAMPLE	MXE1	1166	14-DEC-09 12:20	DONE		
241610006	SAMPLE	MXE1	1167	14-DEC-09 12:21	DONE		
241610007	SAMPLE	MXE1	1168	14-DEC-09 12:21	DONE		
241610008	SAMPLE	MXE1	1169	14-DEC-09 12:21	DONE		
241610009	SAMPLE	MXE1	1170	14-DEC-09 12:21	DONE		
1201993214	MB	MXE1	1171	14-DEC-09 12:21	DONE		
1201993215	DUP	MXE1	1172	14-DEC-09 12:21	DONE		

Thursday, November 19, 2009

REQUEST NUMBER: 10-606

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-606

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-606

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	HASL-300:ISOU	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Final Page of REQUEST NUMBER 10-606

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-606

REQUEST NUMBER: 10-606

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13865	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13868	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13867	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13864	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13871	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13877	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13869	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13870	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13873	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13863	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13874	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13866	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13862	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13876	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13872	1	POLY	AM-241+ISOPU+ISOU	None	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/19/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13862 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608289	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Clay Sand with Tuff Qbt-3 Reddish brown (5YR 5/3)

SAMPLE COMMENTS: Encountered Tuff 6" inches

LOCATION DESC: 03-015-6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 19.4 ppm
Background α = 16 dpm
Screen! β = 1352 dpm

COLLECTED BY (PRINT) M. Nacek REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13863 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1007	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608289		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay fill light Reddish brown (5YR 6/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-015-6

FIELD SCREENING/MEASUREMENT RESULTS: PID = 44.6 ppm
Background: α = 16 dpm
Screening: β = 1532 dpm

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13864 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608290	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay Dark Reddish brown (5YR 3/2)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-015-7

FIELD SCREENING/MEASUREMENT RESULTS: PID = 27.2 ppm
Background: α = 16 dpm
Screening: β = 1350 dpm

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) S. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) S. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13865 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1010	SUB-MEDIA:	OTHER	Wet
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608290		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay Dark Reddish brown (5 YR 3/3)

SAMPLE COMMENTS:

LOCATION DESC: 03-15-7

FIELD SCREENING/MEASUREMENT RESULTS: PID = 4.7 ppm
Background Screening: α = 16 dpm
β = ~~18~~ 1352
JJ 11-18-09

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13866 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1033	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608291		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay sand fill Reddish brown (5YR 4/4)

SAMPLE COMMENTS: Identified plant Roots in sample

LOCATION DESC: 03-15-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background Screening: α = 16 dpm
β = 1350

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jerome Jordan (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13867 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1040	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608291	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay Sand Fill dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background Screen: α = 16 dpm
β = 1350 d

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature) Jordan	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13868 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1038	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	Ok
LOCATION ID:	03-608292	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay Sand Fill dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: plant Roots in Sample

LOCATION DESC: 03-15-4

FIELD SCREENING/MEASUREMENT RESULTS: FID = 1.4 ppm
Background. α = 16 dpm
Screening: β = 1352 ↓

COLLECTED BY (PRINT) D. Thomas

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13869 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1042	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608292		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay Sand Fill Reddish brown (5YR 4/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-4

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background screening: α = 16 dpm
β = 1352 ↓

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13870 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1118	SUB-MEDIA:	OTHER	NH
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608293	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NH
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand with clay. dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: Plant Roots Identified in Sample

LOCATION DESC: 03-15-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 5.5 ppm
Background Screening: α = 16 dpm
β = 1350 ↓

COLLECTED BY (PRINT) L. Horne **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) L. Horne	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13871 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608293	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / ~~NA~~		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / ~~NA~~

BOREHOLE: YES / NO / ~~NA~~ BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay with silt. Reddish brown (5YR 4/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 2.1 ppm
Background screening: α = 16 dpm
β = 1352 dpm

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13872 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1202	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	Ok
LOCATION ID:	03-608294	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand, ~~reddish brown (5YR 4/3)~~ dark Reddish gray (5YR 4/2) MS 11/18/09

SAMPLE COMMENTS: Plant Roots Identified

LOCATION DESC: 03-015-8

FIELD SCREENING/MEASUREMENT RESULTS: PID = 90.2 ppm
Background α = 16 dpm
Screening β = 1350 dpm

COLLECTED BY (PRINT) M. Nowek REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13873 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AUH
TIME COLLECTED (HH:MM)		1210	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608294	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / ~~NO~~ / ~~NA~~		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / ~~NA~~

BOREHOLE: YES / NO / ~~NA~~ BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, dark Reddish gray (5YR 4/2)

SAMPLE COMMENTS: Plant Roots Identified

LOCATION DESC: 03-015-8

FIELD SCREENING/MEASUREMENT RESULTS: PID = 6.1 ppm
Background α = 16 dpm
Screening β = 1352 dpm

COLLECTED BY (PRINT) M. Nauck REVIEWED BY (PRINT) J. Jost

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jost	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13874 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1240	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608295	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: silty Sand Fill, Reddish yellow (7.5YR 6/6)

SAMPLE COMMENTS: Plant Root in Sample

LOCATION DESC: 03-15-10

FIELD SCREENING/MEASUREMENT RESULTS: PID = 125 ppm
Background, α = 16 dpm
Screening: β = 1352 dpm

Samples: MDA

COLLECTED BY (PRINT) L. Horne, M. Nauck

REVIEWED BY (PRINT) J. Ford

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09	(Printed Name) Sherri Sherwood	11/18/09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13875 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1242	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608295	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Clay Sand Fill, light Brown (7.5 YR 6/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-10

FIELD SCREENING/MEASUREMENT RESULTS: PID = 7.0 ppm Samples: 4MDA
Background screening: α = 16 dpm, β = 1352 dpm

COLLECTED BY (PRINT) L. Horne, M. Nauck REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13876 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1314	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608296	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, Dark brown (7.5YR 3/2)

SAMPLE COMMENTS: Plant Roots Identified in Sample

LOCATION DESC: 03-15-9

FIELD SCREENING/MEASUREMENT RESULTS: PID = 6.3ppm
Background, α = 16 dpm
Screening β = 1352 dpm

Samples: 4MDA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Nowak

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nowak (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13877 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1317	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608296	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand with clay. Dark brown (7.5 YR 3/2)

SAMPLE COMMENTS: Plant Roots Identified in Sample.

LOCATION DESC: 03-15-9

FIELD SCREENING/MEASUREMENT RESULTS: PID = 9.7 ppm Samples: <MDA

Background screening: α = 16 dpm, β = 1352 dpm

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) M. Nauck

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

COLLECTION LOG/FIELD CHAIN OF CUSTODY

EV EVENT NAME: Soil Sampling at CU 03-015-00, Part 1

SAMP RE03-09-13930 WORK ORDER:

	NNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLE):		11-18-09	MEDIA:	~~NA~~	All H
TIME COLLE		1033	SUB-MEDIA:	OTHER	NA
PRS ID:		03-015	SAMPLE TECH CODE:	HA	ok
LOCATION ID		03-608291	FIELD QC TYPE:	FTB	
LOCATION TY		ok	FIELD PREP:	NA	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DEP			SCREEN/PORT DESC:	NA	
FIELD MATR	S		EXCAVATED: YES / NO / NA		

COMPOSITE COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRE	DER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	1/2 MW 11-18-09	82608 Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DI of QC sample of RE03-09-13866

SAMPLE C NA

LOCATION NA

FIELD SC REMENT RESULTS: NA

COLLECT M. Nauck REVIEWED BY (PRINT) M. Rains

RELINQUI		Date/Time	RECEIVED BY	Date/Time
(Printed Na	M. Nauck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)		1630	(Signature) Sherri Sherwood	1630
RELINQU		Date/Time	RECEIVED BY	Date/Time
(Printed Na			(Printed Name)	
(Signature)			(Signature)	

COLLECTION LOG/FIELD CHAIN OF CUSTODY

EV EVENT NAME: Soil Sampling at CU 03-015-00, Part 1

SAMP RE03-09-13931 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLL):		11-18-09	MEDIA:	NA	AIR
TIME COLL		1240	SUB-MEDIA:	OTHER	NA
PRS ID:		03-015	SAMPLE TECH CODE:	HA	OK
LOCATION I		03-608295	FIELD QC TYPE:	FTB	
LOCATION		OK	FIELD PREP:	NA	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DE			SCREEN/PORT DESC:		NA
FIELD MATR	S		EXCAVATED: YES / NO (NA)		

COMPOSITE COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	TE	DER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 AIR 11-18-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE of QC Sample of RE03-09-13874

SAMPLE NA

LOCATION NA

FIELD SCR REMENT RESULTS: NA

COLLECT M. Mack REVIEWED BY (PRINT) M. Rains

RELIN	Date/Time	RECEIVED BY	Date/Time
(Printed N M. Mack	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELIN	Date/Time	RECEIVED BY	Date/Time
(Printed N		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-606 VALIDATION DATE: 01/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: John A. Bailey ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☒ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None

Reviewed by: ETM Level: 1 Date: 1/27/10

VALIDATOR'S SIGNATURE: John Bailey DATE: 01/26/10

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☐	☒	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☒	☐	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☐	☒	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☒	☐	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☒	☐	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☒	☐	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☐	☒	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☐	☐	☒	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13875
Sample ID: 241546001
Matrix: S
Collect Date: 18-NOV-09
Receive Date: 20-NOV-09
Collector: Client
Moisture: 10.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00124	0.0201	+/-0.00112	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00135	0.022	+/-0.00449	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00135	0.0248	+/-0.0059	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.926	0.0739	+/-0.0791	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0331	0.0449	+/-0.0102	0.100	pCi/g						
Uranium-238		0.836	0.0408	+/-0.0727	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	92.6	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	87.8	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	99.7	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low

JAB
01/26/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13865	Project:	LANL01004
Sample ID:	241546002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	13.5%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00266	0.0221	+/-0.00235	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00239	0.0194	+/-0.00478	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00119	0.0218	+/-0.00463	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.825	0.0727	+/-0.072	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236		0.0711	0.0442	+/-0.0164	0.100	pCi/g						
Uranium-238		0.817	0.0402	+/-0.0713	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	84.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	93.5	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	99.2	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

JAB
01/26/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13868	Project:	LANL01004
Sample ID:	241546003	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	11.4%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00565	0.0245	+/-0.0032	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.0129	0.0191	+/-0.00733	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00822	0.0215	+/-0.00456	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.06	0.0732	+/-0.0883	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236		0.0865	0.0445	+/-0.0176	0.100	pCi/g						
Uranium-238		1.28	0.0404	+/-0.103	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	77.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	85.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	97.7	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13867	Project:	LANL01004
Sample ID:	241546004	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	12.3%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00272	0.0224	+/-0.00288	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00232	0.0188	+/-0.00491	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-5.52E-10	0.0212	+/-0.00284	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.729	0.0818	+/-0.0671	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.030	0.0497	+/-0.0139	0.100	pCi/g						
Uranium-238		0.817	0.0452	+/-0.0732	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	82.7	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.6	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	84.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13864	Project:	LANL01004
Sample ID:	241546005	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.94%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00182	0.037	+/-0.00266	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00354	0.0191	+/-0.00717	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00118	0.0216	+/-0.00456	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.704	0.0861	+/-0.067	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.0386	0.0523	+/-0.0155	0.100	pCi/g						
Uranium-238		0.766	0.0475	+/-0.0709	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	51.1	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	84.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	83.8	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13871	Project:	LANL01004
Sample ID:	241546006	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.2%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00602	0.0207	+/-0.00422	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00188	0.0305	+/-0.00678	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00752	0.0344	+/-0.00533	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.46	0.0701	+/-0.115	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236		0.0514	0.0426	+/-0.016	0.100	pCi/g						
Uranium-238		1.29	0.0387	+/-0.104	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	89.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	58.7	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	99.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13877
Sample ID: 241546007
Matrix: S
Collect Date: 18-NOV-09
Receive Date: 20-NOV-09
Collector: Client
Moisture: 10.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00282	0.0229	+/-0.00181	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00254	0.0206	+/-0.00439	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00507	0.0232	+/-0.00312	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.05	0.0835	+/-0.0894	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0272	0.0507	+/-0.0119	0.100	pCi/g						
Uranium-238		0.949	0.0461	+/-0.0826	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	84.8	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	86.4	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	87.5	(50%-105%)

Notes:
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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13869	Project:	LANL01004
Sample ID:	241546008	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.8%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000696	0.0223	+/-0.00347	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-6.07E-10	0.0207	+/-0.0036	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00127	0.0233	+/-0.00284	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.829	0.0765	+/-0.0737	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0374	0.0465	+/-0.0142	0.100	pCi/g						
Uranium-238		0.842	0.0422	+/-0.0744	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	85.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	87.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13870	Project:	LANL01004
Sample ID:	241546009	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	13.7%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00667	0.0209	+/-0.00308	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00127	0.0206	+/-0.00335	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.0215	0.0232	+/-0.00642	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		2.57	0.0797	+/-0.193	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236		0.195	0.0484	+/-0.0288	0.100	pCi/g						
Uranium-238		2.36	0.044	+/-0.178	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	91.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	83.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	86.7	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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- C Analyte has been confirmed by GC/MS analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13873	Project:	LANL01004
Sample ID:	241546010	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.89%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00903	0.0214	+/-0.00317	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00586	0.019	+/-0.00352	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00117	0.0214	+/-0.00352	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.05	0.0907	+/-0.092	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.048	0.0551	+/-0.0156	0.100	pCi/g						
Uranium-238		1.02	0.0501	+/-0.0899	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	87.4	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	89.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	75.1	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13863
Sample ID: 241546011
Matrix: S
Collect Date: 18-NOV-09
Receive Date: 20-NOV-09
Collector: Client
Moisture: 8.62%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00131	0.0206	+/-0.00117	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00382	0.0207	+/-0.00337	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00382	0.0233	+/-0.00382	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.625	0.0714	+/-0.058	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.0349	0.0434	+/-0.0111	0.100	pCi/g						
Uranium-238		0.609	0.0394	+/-0.0566	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	87.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	81.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	103	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
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- C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13874	Project:	LANL01004
Sample ID:	241546012	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	7.16%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.000435	0.0222	+/-0.00113	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00346	0.0187	+/-0.00259	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00346	0.0211	+/-0.00416	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.957	0.076	+/-0.0821	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.0434	0.0462	+/-0.0127	0.100	pCi/g						
Uranium-238		1.05	0.042	+/-0.0878	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	85.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.7	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.5	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

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- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

JAB
01/26/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13866	Project:	LANL01004
Sample ID:	241546013	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	14%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00134	0.0208	+/-0.00191	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00919	0.0213	+/-0.00572	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00394	0.024	+/-0.00436	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.631	0.112	+/-0.0658	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236		0.073	0.0681	+/-0.020	0.100	pCi/g						
Uranium-238		0.646	0.0619	+/-0.0678	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	89.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	79.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.5	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

JAB
01/26/10

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13862
Sample ID: 241546014
Matrix: S
Collect Date: 18-NOV-09
Receive Date: 20-NOV-09
Collector: Client
Moisture: 13.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00346	0.0208	+/-0.00285	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00523	0.0212	+/-0.00555	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00785	0.0239	+/-0.00455	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.788	0.155	+/-0.0873	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0695	0.0944	+/-0.0216	0.100	pCi/g						
Uranium-238		0.798	0.0857	+/-0.0868	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	91.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	87.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	68.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

JAB
01/26/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13876	Project:	LANL01004
Sample ID:	241546015	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	10.2%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000757	0.0211	+/-0.00194	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.013	0.0211	+/-0.00586	0.050	pCi/g		HAKB	12/10/09	1238	928308	2
Plutonium-239/240	U	0.0013	0.0238	+/-0.00432	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.985	0.112	+/-0.0925	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0183	0.0681	+/-0.0159	0.100	pCi/g						
Uranium-238		1.05	0.0619	+/-0.0965	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	90.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	90.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.8	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

JAB
01/26/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13872	Project:	LANL01004
Sample ID:	241546016	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	9.43%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00231	0.0204	+/-0.00259	0.050	pCi/g		HAKB	12/10/09	1335	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00131	0.0213	+/-0.008	0.050	pCi/g		HAKB	12/10/09	1238	928308	2
Plutonium-239/240	U	0.0118	0.024	+/-0.00545	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.07	0.112	+/-0.0985	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236		0.082	0.068	+/-0.0212	0.100	pCi/g						
Uranium-238		1.06	0.0618	+/-0.0974	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	95.5	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	86.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	97.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

JAB
01/26/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-606

REQUEST NUMBER: 10-606

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241546%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13865	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13868	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13867	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13864	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13871	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13877	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13869	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13870	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13873	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13863	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13874	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13866	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13862	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13876	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13872	1	POLY	AM-241+ISOPU+ISOU	None	S

Relinquished By:	Date	Time	Received By:	Date	Time
[illegible]	11/19/09	1400	Patricia Dover-Dent P.D.-Dent	11-20-09	08:50
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By:	Date	Time	Remarks:
Printed Name / Signature			

Thursday, November 19, 2009

REQUEST NUMBER: 10-606

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-606
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-606

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	HASL-300:ISOU	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Final Page of REQUEST NUMBER 10-606

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241546
SDG: 10-606

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for Francis

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-606
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241546
SDG: 10-606

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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241546
SDG # : 10-606

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. The containers for radiochemistry were received at 15C temperature. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241546001	RE03-09-13875
241546002	RE03-09-13865
241546003	RE03-09-13868
241546004	RE03-09-13867
241546005	RE03-09-13864
241546006	RE03-09-13871
241546007	RE03-09-13877
241546008	RE03-09-13869
241546009	RE03-09-13870
241546010	RE03-09-13873
241546011	RE03-09-13863
241546012	RE03-09-13874
241546013	RE03-09-13866
241546014	RE03-09-13862
241546015	RE03-09-13876
241546016	RE03-09-13872

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis

Project Manager

GEL Laboratories LLC PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843.556.8171 F 843.766.1178 www.gel.com

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-606

REQUEST NUMBER: 10-606

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241546°/

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13865	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13868	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13867	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13864	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13871	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13877	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13869	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13870	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13873	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13863	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13874	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13866	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13862	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13876	1	POLY	AM-241+ISOPU+ISOU	None	S
RE03-09-13872	1	POLY	AM-241+ISOPU+ISOU	None	S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/19/09	1400	Patricia Dover-Dent	P. D-Dent	11-20-09	08:50
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, November 19, 2009

REQUEST NUMBER: 10-606

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-606
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	

Thursday, November 19, 2009

REQUEST NUMBER: 10-606

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	HASL-300:ISOPU	1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	
	HASL-300:ISOU	1	RE03-09-13862	S	11/18/2009	
		1	RE03-09-13863	S	11/18/2009	
		1	RE03-09-13864	S	11/18/2009	
		1	RE03-09-13865	S	11/18/2009	
		1	RE03-09-13866	S	11/18/2009	
		1	RE03-09-13867	S	11/18/2009	
		1	RE03-09-13868	S	11/18/2009	
		1	RE03-09-13869	S	11/18/2009	
		1	RE03-09-13870	S	11/18/2009	
		1	RE03-09-13871	S	11/18/2009	
		1	RE03-09-13872	S	11/18/2009	
		1	RE03-09-13873	S	11/18/2009	
		1	RE03-09-13874	S	11/18/2009	
		1	RE03-09-13875	S	11/18/2009	
		1	RE03-09-13876	S	11/18/2009	
		1	RE03-09-13877	S	11/18/2009	

Final Page of REQUEST NUMBER 10-606

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-606**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:**40 CPM**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **1-5,15**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 2C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PMA) review: Initials _____ Date 11/23/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

FedEx Express

2 of 2
MPS# 0263 7209 7848 9855
Mstr# 7209 7848 9844 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 3
TRK# 0201 7209 7848 9796
MASTER

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9844
*** MASTER ***

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AWEPR1315W200

2c

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RADIOACTIVE SAMPLES

TRK# 0201 7209 7848 9877

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

3c

FedEx Express

1 of 2
TRK# 0201 7209 7848 9822
*** MASTER ***

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4c

FedEx Express

TRK# 0201 7209 7848 9752

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

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3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156146-434 NRIT V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

5c

FedEx Express

TRK# 0201 7209 7848 9866

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156146-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

15c

FedEx Express

3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-606

Method/Analysis Information

Product:	**AM241**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928307
Prep Batch Number:	925821

Sample ID	Client ID
241546001	RE03-09-13875
241546002	RE03-09-13865
241546003	RE03-09-13868
241546004	RE03-09-13867
241546005	RE03-09-13864
241546006	RE03-09-13871
241546007	RE03-09-13877
241546008	RE03-09-13869
241546009	RE03-09-13870
241546010	RE03-09-13873
241546011	RE03-09-13863
241546012	RE03-09-13874
241546013	RE03-09-13866
241546014	RE03-09-13862
241546015	RE03-09-13876
241546016	RE03-09-13872
1201984991	Method Blank (MB)
1201984992	241546016(RE03-09-13872) Sample Duplicate (DUP)
1201984993	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201984991 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241546016 (RE03-09-13872). The QC was from LANL work order 241546.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Sample 1201984991 (MB) was recounted due to a negative result greater than three times the error. Second count being reported.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOPU**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928308
Prep Batch Number:	925821

Sample ID	Client ID
241546001	RE03-09-13875
241546002	RE03-09-13865
241546003	RE03-09-13868
241546004	RE03-09-13867
241546005	RE03-09-13864
241546006	RE03-09-13871
241546007	RE03-09-13877
241546008	RE03-09-13869
241546009	RE03-09-13870
241546010	RE03-09-13873
241546011	RE03-09-13863
241546012	RE03-09-13874
241546013	RE03-09-13866
241546014	RE03-09-13862
241546015	RE03-09-13876
241546016	RE03-09-13872
1201984994	Method Blank (MB)
1201984995	241546016(RE03-09-13872) Sample Duplicate (DUP)
1201984996	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201984994 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241546016 (RE03-09-13872). The QC was from LANL work order 241546.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOU**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928309
Prep Batch Number:	925821

Sample ID	Client ID
241546001	RE03-09-13875
241546002	RE03-09-13865
241546003	RE03-09-13868
241546004	RE03-09-13867
241546005	RE03-09-13864
241546006	RE03-09-13871
241546007	RE03-09-13877
241546008	RE03-09-13869
241546009	RE03-09-13870
241546010	RE03-09-13873
241546011	RE03-09-13863
241546012	RE03-09-13874
241546013	RE03-09-13866
241546014	RE03-09-13862
241546015	RE03-09-13876
241546016	RE03-09-13872
1201984997	Method Blank (MB)
1201984998	241546016(RE03-09-13872) Sample Duplicate (DUP)
1201984999	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201984997 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241546016 (RE03-09-13872). The QC was from LANL work order 241546.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: 12/14/09

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-606 GEL Work Order: 241546

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____ 12/14/09

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13875	Project:	LANL01004
Sample ID:	241546001	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00124	0.0201	+/-0.00112	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00135	0.022	+/-0.00449	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00135	0.0248	+/-0.0059	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.926	0.0739	+/-0.0791	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0331	0.0449	+/-0.0102	0.100	pCi/g						
Uranium-238		0.836	0.0408	+/-0.0727	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	92.6	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	87.8	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	99.7	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13875 Project: LANL01004
Sample ID: 241546001 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13865	Project:	LANL01004
Sample ID:	241546002	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	13.5%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00266	0.0221	+/-0.00235	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00239	0.0194	+/-0.00478	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00119	0.0218	+/-0.00463	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.825	0.0727	+/-0.072	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236		0.0711	0.0442	+/-0.0164	0.100	pCi/g						
Uranium-238		0.817	0.0402	+/-0.0713	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	84.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	93.5	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	99.2	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13865
Sample ID: 241546002
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13868	Project:	LANL01004
Sample ID:	241546003	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	11.4%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00565	0.0245	+/-0.0032	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.0129	0.0191	+/-0.00733	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00822	0.0215	+/-0.00456	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.06	0.0732	+/-0.0883	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236		0.0865	0.0445	+/-0.0176	0.100	pCi/g						
Uranium-238		1.28	0.0404	+/-0.103	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	77.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	85.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	97.7	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13868 Project: LANL01004
Sample ID: 241546003 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13867
Sample ID: 241546004
Matrix: S
Collect Date: 18-NOV-09
Receive Date: 20-NOV-09
Collector: Client
Moisture: 12.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00272	0.0224	+/-0.00288	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00232	0.0188	+/-0.00491	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-5.52E-10	0.0212	+/-0.00284	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.729	0.0818	+/-0.0671	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.030	0.0497	+/-0.0139	0.100	pCi/g						
Uranium-238		0.817	0.0452	+/-0.0732	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	82.7	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.6	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	84.4	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13867 Project: LANL01004
Sample ID: 241546004 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13864	Project:	LANL01004
Sample ID:	241546005	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.94%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00182	0.037	+/-0.00266	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00354	0.0191	+/-0.00717	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00118	0.0216	+/-0.00456	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.704	0.0861	+/-0.067	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.0386	0.0523	+/-0.0155	0.100	pCi/g						
Uranium-238		0.766	0.0475	+/-0.0709	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	51.1	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	84.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	83.8	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13864
Sample ID: 241546005
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13871	Project:	LANL01004
Sample ID:	241546006	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.2%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.00602	0.0207	+/-0.00422	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00188	0.0305	+/-0.00678	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00752	0.0344	+/-0.00533	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.46	0.0701	+/-0.115	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236		0.0514	0.0426	+/-0.016	0.100	pCi/g						
Uranium-238		1.29	0.0387	+/-0.104	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	89.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	58.7	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	99.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13871 Project: LANL01004
Sample ID: 241546006 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13877	Project:	LANL01004
Sample ID:	241546007	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00282	0.0229	+/-0.00181	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00254	0.0206	+/-0.00439	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00507	0.0232	+/-0.00312	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.05	0.0835	+/-0.0894	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0272	0.0507	+/-0.0119	0.100	pCi/g						
Uranium-238		0.949	0.0461	+/-0.0826	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	84.8	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	86.4	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	87.5	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13877
Sample ID: 241546007
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13869	Project:	LANL01004
Sample ID:	241546008	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	16.8%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000696	0.0223	+/-0.00347	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-6.07E-10	0.0207	+/-0.0036	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00127	0.0233	+/-0.00284	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.829	0.0765	+/-0.0737	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0374	0.0465	+/-0.0142	0.100	pCi/g						
Uranium-238		0.842	0.0422	+/-0.0744	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	85.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	87.2	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13869 Project: LANL01004
Sample ID: 241546008 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13870	Project:	LANL01004
Sample ID:	241546009	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	13.7%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00667	0.0209	+/-0.00308	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00127	0.0206	+/-0.00335	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.0215	0.0232	+/-0.00642	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		2.57	0.0797	+/-0.193	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236		0.195	0.0484	+/-0.0288	0.100	pCi/g						
Uranium-238		2.36	0.044	+/-0.178	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	91.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	83.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	86.7	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13870 Project: LANL01004
Sample ID: 241546009 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13873	Project:	LANL01004
Sample ID:	241546010	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.89%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00903	0.0214	+/-0.00317	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00586	0.019	+/-0.00352	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	-0.00117	0.0214	+/-0.00352	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.05	0.0907	+/-0.092	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.048	0.0551	+/-0.0156	0.100	pCi/g						
Uranium-238		1.02	0.0501	+/-0.0899	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	87.4	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	89.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	75.1	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13873 Project: LANL01004
Sample ID: 241546010 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13863	Project:	LANL01004
Sample ID:	241546011	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	8.62%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00131	0.0206	+/-0.00117	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00382	0.0207	+/-0.00337	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00382	0.0233	+/-0.00382	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.625	0.0714	+/-0.058	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.0349	0.0434	+/-0.0111	0.100	pCi/g						
Uranium-238		0.609	0.0394	+/-0.0566	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	87.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	81.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	103	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13863
Sample ID: 241546011
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13874	Project:	LANL01004
Sample ID:	241546012	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	7.16%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.000435	0.0222	+/-0.00113	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00346	0.0187	+/-0.00259	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00346	0.0211	+/-0.00416	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.957	0.076	+/-0.0821	0.100	pCi/g		HAKB	12/09/09	0845	928309	3
Uranium-235/236	U	0.0434	0.0462	+/-0.0127	0.100	pCi/g						
Uranium-238		1.05	0.042	+/-0.0878	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	85.0	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	91.7	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.5	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

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> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13874
Sample ID: 241546012
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13866	Project:	LANL01004
Sample ID:	241546013	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	14%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00134	0.0208	+/-0.00191	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00919	0.0213	+/-0.00572	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00394	0.024	+/-0.00436	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.631	0.112	+/-0.0658	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236		0.073	0.0681	+/-0.020	0.100	pCi/g						
Uranium-238		0.646	0.0619	+/-0.0678	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	89.3	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	79.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.5	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
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- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13866
Sample ID: 241546013
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13862	Project:	LANL01004
Sample ID:	241546014	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	13.1%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00346	0.0208	+/-0.00285	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00523	0.0212	+/-0.00555	0.050	pCi/g		HAKB	12/10/09	1031	928308	2
Plutonium-239/240	U	0.00785	0.0239	+/-0.00455	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.788	0.155	+/-0.0873	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0695	0.0944	+/-0.0216	0.100	pCi/g						
Uranium-238		0.798	0.0857	+/-0.0868	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	91.9	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	87.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	68.0	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

Certificate of Analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13862 Project: LANL01004
Sample ID: 241546014 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13876	Project:	LANL01004
Sample ID:	241546015	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	10.2%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	-0.000757	0.0211	+/-0.00194	0.050	pCi/g		HAKB	12/10/09	1957	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.013	0.0211	+/-0.00586	0.050	pCi/g		HAKB	12/10/09	1238	928308	2
Plutonium-239/240	U	0.0013	0.0238	+/-0.00432	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.985	0.112	+/-0.0925	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236	U	0.0183	0.0681	+/-0.0159	0.100	pCi/g						
Uranium-238		1.05	0.0619	+/-0.0965	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	90.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	90.3	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	93.8	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13876
Sample ID: 241546015
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID:	RE03-09-13872	Project:	LANL01004
Sample ID:	241546016	Client ID:	LANL010
Matrix:	S		
Collect Date:	18-NOV-09		
Receive Date:	20-NOV-09		
Collector:	Client		
Moisture:	9.43%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.00231	0.0204	+/-0.00259	0.050	pCi/g		HAKB	12/10/09	1335	928307	1
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	0.00131	0.0213	+/-0.008	0.050	pCi/g		HAKB	12/10/09	1238	928308	2
Plutonium-239/240	U	0.0118	0.024	+/-0.00545	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		1.07	0.112	+/-0.0985	0.100	pCi/g		HAKB	12/09/09	0844	928309	3
Uranium-235/236		0.082	0.068	+/-0.0212	0.100	pCi/g						
Uranium-238		1.06	0.0618	+/-0.0974	0.100	pCi/g						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	95.5	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	86.9	(50%-105%)
Uranium-232 Tracer	ISOU "Dry Weight Corrected"	97.9	(50%-105%)

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 14, 2009

Client Sample ID: RE03-09-13872
Sample ID: 241546016
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.

D Results are reported from a diluted aliquot of the sample
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

QC Summary

Report Date: December 14, 2009
Page 1 of 3

Client : **Los Alamos National Laboratory**
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico
Contact: **Ms. Joylene Valdez**

Workorder: **241546**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 928307										
QC1201984992 241546016 DUP										
Americium-241	U	0.00231	U	0.00436	pCi/g	0.198		(0-1)	HAKB	12/10/0919:57
	TPU:	+/-0.00259		+/-0.00258						
	Yield:	95.5		92.3						
QC1201984993 LCS										
Americium-241	33.2			29.7	pCi/g		89.5	(75%-125%)		12/10/0919:57
	TPU:			+/-1.99						
	Yield:			105						
QC1201984991 MB										
Americium-241			U	0.000232	pCi/g					12/11/0919:28
	TPU:			+/-0.00313						
	Yield:			92.5						
Batch 928308										
QC1201984995 241546016 DUP										
Plutonium-238	U	0.00131	U	0.00	pCi/g	0.055		(0-1)	HAKB	12/10/0912:38
	TPU:	+/-0.008		+/-0.00395						
	Yield:	86.9		86.4						
Plutonium-239/240	U	0.0118	U	0.0195	pCi/g	0.357		(0-1)		
	TPU:	+/-0.00545		+/-0.00531						
	Yield:	86.9		86.4						
QC1201984996 LCS										
Plutonium-238				7.58	pCi/g			(75%-125%)		
	TPU:			+/-0.557						
	Yield:			84.3						
Plutonium-239/240	41.8			40.0	pCi/g		95.7	(75%-125%)		
	TPU:			+/-2.45						
	Yield:			84.3						
QC1201984994 MB										
Plutonium-238			U	-0.00735	pCi/g					
	TPU:			+/-0.00636						
	Yield:			76.5						
Plutonium-239/240			U	-0.00551	pCi/g					
	TPU:			+/-0.00486						
	Yield:			76.5						
Batch 928309										
QC1201984998 241546016 DUP										
Uranium-233/234		1.07		0.946	pCi/g	0.326		(0-1)	HAKB	12/09/0908:44
	TPU:	+/-0.0985		+/-0.0919						
	Yield:	97.9		88.8						
Uranium-235/236		0.082	U	0.0605	pCi/g	0.265		(0-1)		
	TPU:	+/-0.0212		+/-0.0193						
	Yield:	97.9		88.8						
Uranium-238		1.06		1.02	pCi/g	0.0975		(0-1)		
	TPU:	+/-0.0974		+/-0.0969						

QC Summary

Workorder: 241546

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 928309										
	Yield:	97.9		88.8						
QC1201984999 LCS										
Uranium-233/234				6.63	pCi/g			(75%-125%)		12/09/0908:44
	TPU:			+/-0.614						
	Yield:			98.9						
Uranium-235/236			U	0.197	pCi/g			(75%-125%)		
	TPU:			+/-0.0968						
	Yield:			98.9						
Uranium-238	5.75			5.96	pCi/g		104	(75%-125%)		
	TPU:			+/-0.561						
	Yield:			98.9						
QC1201984997 MB										
Uranium-233/234			U	-0.00941	pCi/g					12/09/0908:44
	TPU:			+/-0.0043						
	Yield:			104						
Uranium-235/236			U	-0.00217	pCi/g					
	TPU:			+/-0.00575						
	Yield:			104						
Uranium-238			U	-0.0123	pCi/g					
	TPU:			+/-0.0068						
	Yield:			104						

Notes:
The Qualifiers in this report are defined as follows:

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>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: **241546**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time

Y QC Samples were not spiked with this compound

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 9

Batch# 928307 Product: Am Date: 12/14/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Denise Green 12/14/09

Secondary Review Performed By: [illegible] 12/14/09

12/18

Am/Cm Que Sheet

02-DEC-09

Batch #: 928307 | Analyst: HAKB | First Client Due Date: 18-DEC-09 | Internal Due Date07-DEC-09 | Comments:

Tracer(s): Am243/Cm244 | Tracer Code: 445-96-2-SS | Expiration Date: 5/11/10 | Vol: Ø.1

LCS Isotope(s): Am241/Cm244 | LCS Code(s): SPM 0244-B1 / NA | Expiration Date: 4/30/201 / NA | Vol(s): 0.108g / NA

Spike Isotope(s): Am241/Cm244 | Spike Code(s): NA / NA | Expiration Date: NA / NA | Vol(s): NA / NA

Prep Date: 12/7/09 | Initials: HAKB | Pipet ID: 4497063 | Balance ID: 19350208 | Witness: KM 12-7-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/f)	Am/Cm Det #
241546001-1	RE03-09-13875	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	1	1	1.256	211
241546002-1	RE03-09-13865	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	2	2	1.255	212
241546003-1	RE03-09-13868	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	3	3	1.259	213
241546004-1	RE03-09-13867	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	4	4	1.255	214
241546005-1	RE03-09-13864	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	5	5	1.255	215
241546006-1	RE03-09-13871	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	6	6	1.251	216
241546007-1	RE03-09-13877	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	7	7	1.255	217
241546008-1	RE03-09-13869	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	8	8	1.250	218
241546009-1	RE03-09-13870	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	9	9	1.254	219 232
241546010-1	RE03-09-13873	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	10	10	1.253	220 233
241546011-1	RE03-09-13863	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	11	11	1.256	225
241546012-1	RE03-09-13874	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	12	12	1.256	226
241546013-1	RE03-09-13866	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	13	13	1.250	227
241546014-1	RE03-09-13862	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	14	14	1.258	228
241546015-1	RE03-09-13876	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	15	15	1.251	229
241546016-1	RE03-09-13872	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	16	16	1.254	209
1201984991-1	MB for batch 928307	MB		.05 pCi/g	SOIL	QC ACCOUNT		17	17	1.0	229
1201984992-1	RE03-09-13872(241546016DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	18-NOV-09	18	18	1.256	230
1201984993-1	LCS for batch 928307	LCS		.05 pCi/g	SOIL	QC ACCOUNT		19	19	0.108	231

Choose SOP Used: GL-RAD-A-011 / GL-RAD-A-036 / GL-RAD-A-045

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: 12/14/09

Blank Correction Report

Batch ID 928307

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201984992	DUP	Americium-241	1.26 g	0.00436	0.00258	0.0203	.000184127	pCi/g	NO
1201984993	LCS	Americium-241	0.108 g	29.7	1.99	0.202	.002148148	pCi/g	NO
1201984991	MB	Americium-241	1.00 g	0.000232	0.00313	0.0248	.000232	pCi/g	YES
241546001	RE03-09-13875	Americium-241	1.26 g	0.00124	0.00112	0.0201	.000184127	pCi/g	NO
241546002	RE03-09-13865	Americium-241	1.26 g	0.00266	0.00235	0.0221	.000184127	pCi/g	NO
241546003	RE03-09-13868	Americium-241	1.26 g	0.00565	0.0032	0.0245	.000184127	pCi/g	NO
241546004	RE03-09-13867	Americium-241	1.26 g	0.00272	0.00288	0.0224	.000184127	pCi/g	NO
241546005	RE03-09-13864	Americium-241	1.26 g	-0.00182	0.00266	0.037	.000184127	pCi/g	YES
241546006	RE03-09-13871	Americium-241	1.25 g	-0.00602	0.00422	0.0207	.0001856	pCi/g	YES
241546007	RE03-09-13877	Americium-241	1.26 g	0.00282	0.00181	0.0229	.000184127	pCi/g	NO
241546008	RE03-09-13869	Americium-241	1.25 g	-0.000696	0.00347	0.0223	.0001856	pCi/g	YES
241546009	RE03-09-13870	Americium-241	1.25 g	0.00667	0.00308	0.0209	.0001856	pCi/g	NO
241546010	RE03-09-13873	Americium-241	1.25 g	0.00903	0.00317	0.0214	.0001856	pCi/g	NO
241546011	RE03-09-13863	Americium-241	1.26 g	0.00131	0.00117	0.0206	.000184127	pCi/g	NO
241546012	RE03-09-13874	Americium-241	1.26 g	0.000435	0.00113	0.0222	.000184127	pCi/g	YES
241546013	RE03-09-13866	Americium-241	1.25 g	0.00134	0.00191	0.0208	.0001856	pCi/g	NO
241546014	RE03-09-13862	Americium-241	1.26 g	0.00346	0.00285	0.0208	.000184127	pCi/g	NO
241546015	RE03-09-13876	Americium-241	1.25 g	-0.000757	0.00194	0.0211	.0001856	pCi/g	YES
241546016	RE03-09-13872	Americium-241	1.25 g	0.00231	0.00259	0.0204	.0001856	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546001_AM SAMPLE QTY: 1.256 G
DETECTOR NUMBER :79190 AVERAGE %EFFICIENCY :38.0672 % YIELD : 92.614	COUNT DATE:10-DEC-2009 19:57:02 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.70119 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B211.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W211.CNF;23 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	6.000	5.000	1.000	4.8778	100.0000	5.10E-03	2.71E-03	1.15E-02	2.58E-02	2.70E-03
CM-5/6	5386.000	8.000	8.000	0.000	19.8796	86.09000	9.45E-03	3.39E-03	5.46E-02	1.12E-01	3.34E-03
AM-241	5479.150	3.000	1.214	0.000	3.6563	99.94000	1.24E-03	1.12E-03	8.66E-03	2.01E-02	1.12E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	5.61E-03	2.53E-03	8.96E-03	2.07E-02	2.51E-03
AM243	5270.000	1027.000	1026.000	1.000	1.0000	99.78000	1.05E+00	6.91E-02	2.37E-03	7.51E-03	3.27E-02
CM-247	4946.000	15.000	13.000	2.000	18.5713	79.30000	1.67E-02	5.38E-03	5.54E-02	1.14E-01	5.29E-03
CM-248	5078.600	19.000	19.000	0.000	26.3889	91.00000	2.12E-02	5.03E-03	6.86E-02	1.40E-01	4.87E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

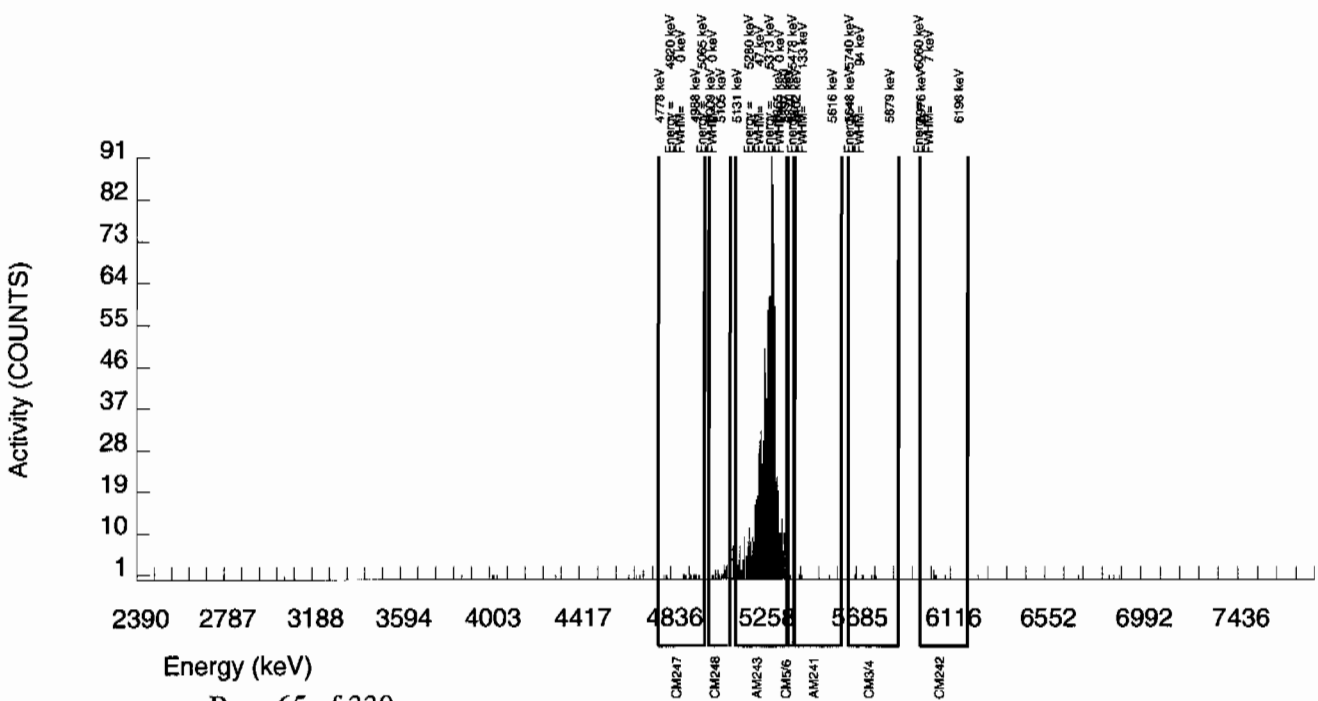

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546002_AM
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :79191
AVERAGE %EFFICIENCY :37.7963
% YIELD : 84.913

COUNT DATE:10-DEC-2009 19:57:04
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B212.CNF;58
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.47660 dpm	EFF FILE : W212.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	7.000	7.000	0.000	4.8778	100.0000	7.85E-03	3.00E-03	1.27E-02	2.84E-02	2.97E-03
CM-5/6	5386.000	8.000	8.000	0.000	19.8796	86.09000	1.04E-02	3.73E-03	6.01E-02	1.24E-01	3.67E-03
AM-241	5479.150	5.000	2.374	1.000	3.6563	99.94000	2.66E-03	2.35E-03	9.52E-03	2.21E-02	2.34E-03
CM-242	6102.000	4.000	4.000	0.000	3.7846	100.0000	4.94E-03	2.49E-03	9.85E-03	2.27E-02	2.47E-03
AM243	5270.000	938.000	934.000	4.000	2.0000	99.78000	1.05E+00	7.08E-02	5.21E-03	1.35E-02	3.44E-02
CM-247	4946.000	3.000	0.000	3.000	18.5713	79.30000	0.00E+00	3.46E-03	6.09E-02	1.26E-01	3.45E-03
CM-248	5078.600	15.000	15.000	0.000	26.3889	91.00000	1.84E-02	4.88E-03	7.54E-02	1.54E-01	4.76E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

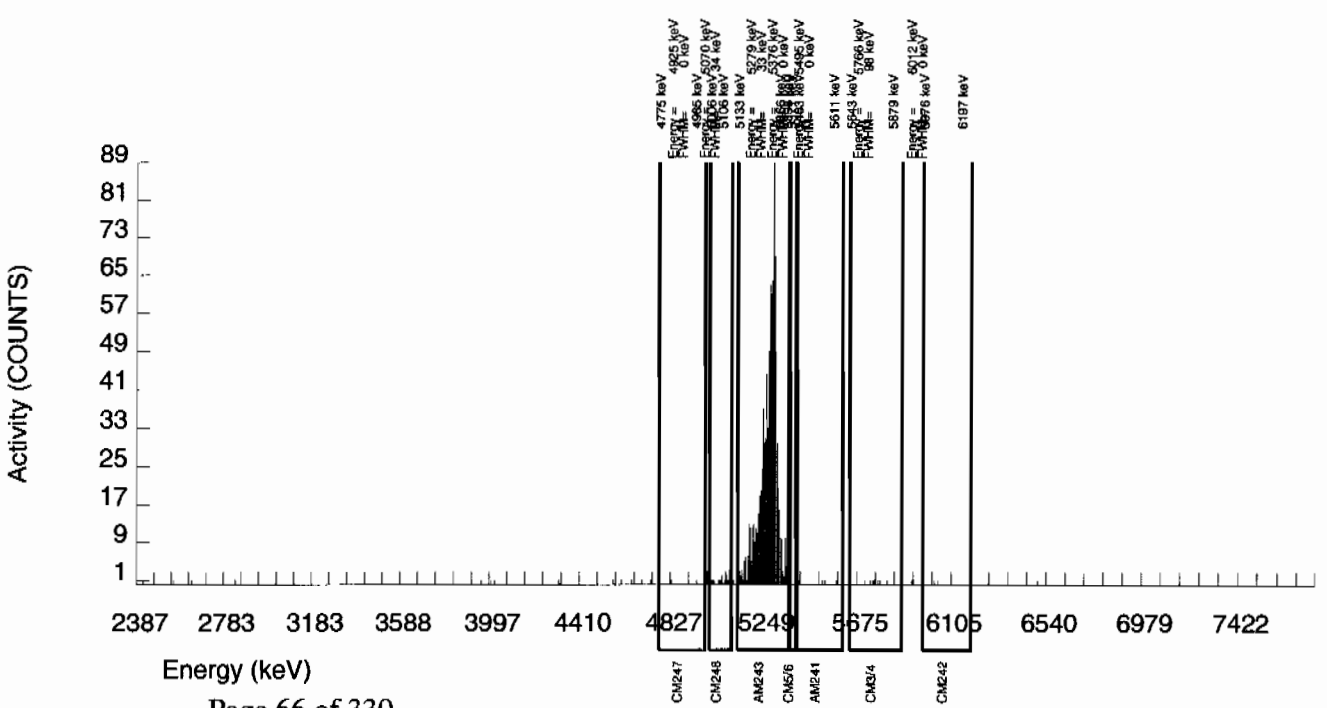

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546003_AM SAMPLE QTY: 1.259 G
DETECTOR NUMBER :79192 AVERAGE %EFFICIENCY :37.2467 % YIELD : 77.310	COUNT DATE:10-DEC-2009 19:57:06 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.25483 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B213.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W213.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	3.000	2.000	1.000	4.8778	100.0000	2.49E-03	2.50E-03	1.41E-02	3.16E-02	2.49E-03
CM-5/6	5386.000	26.000	26.000	0.000	19.8796	86.09000	3.75E-02	7.70E-03	6.67E-02	1.37E-01	7.36E-03
AM-241	5479.150	7.000	4.541	1.000	3.6563	99.94000	5.65E-03	3.20E-03	1.06E-02	2.45E-02	3.18E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	6.86E-03	3.09E-03	1.09E-02	2.52E-02	3.07E-03
AM243	5270.000	838.000	838.000	0.000	0.0000	99.78000	1.04E+00	7.23E-02	0.00E+00	3.37E-03	3.60E-02
CM-247	4946.000	6.000	5.000	1.000	18.5713	79.30000	7.83E-03	4.17E-03	6.77E-02	1.40E-01	4.15E-03
CM-248	5078.600	22.000	22.000	0.000	26.3889	91.00000	3.00E-02	6.65E-03	8.38E-02	1.71E-01	6.40E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

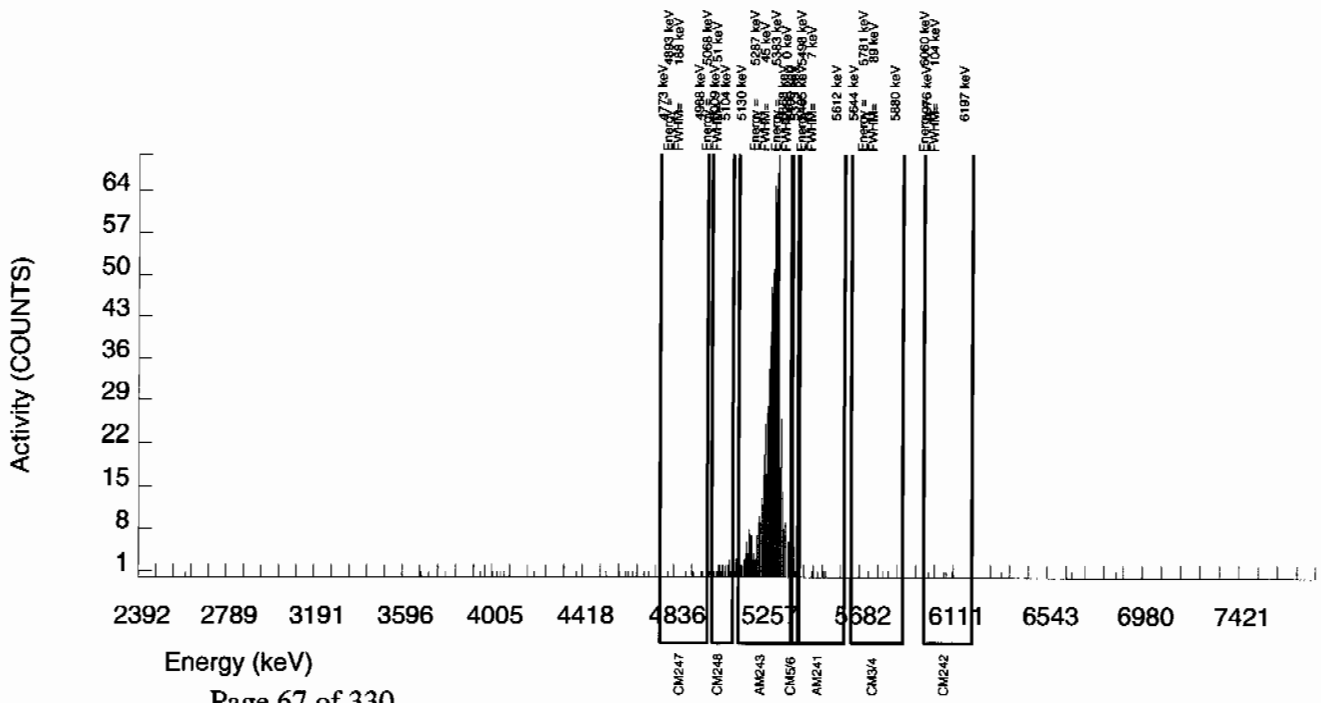

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546004_AM
SAMPLE QTY: 1.255 G

DETECTOR NUMBER :79193
AVERAGE %EFFICIENCY :38.2500
% YIELD : 82.738

COUNT DATE:10-DEC-2009 19:57:09
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B214.CNF;58
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.41316 dpm	EFF FILE : W214.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	4.000	0.000	4.8778	100.0000	4.55E-03	2.29E-03	1.29E-02	2.88E-02	2.27E-03
CM-5/6	5386.000	17.000	17.000	0.000	19.8796	86.09000	2.24E-02	5.59E-03	6.09E-02	1.25E-01	5.43E-03
AM-241	5479.150	6.000	2.397	2.000	3.6563	99.94000	2.72E-03	2.87E-03	9.65E-03	2.24E-02	2.87E-03
CM-242	6102.000	7.000	7.000	0.000	3.7846	100.0000	8.76E-03	3.35E-03	9.99E-03	2.30E-02	3.31E-03
AM243	5270.000	921.000	921.000	0.000	0.0000	99.78000	1.05E+00	7.09E-02	0.00E+00	3.08E-03	3.45E-02
CM-247	4946.000	5.000	5.000	0.000	18.5713	79.30000	7.15E-03	3.23E-03	6.18E-02	1.27E-01	3.20E-03
CM-248	5078.600	9.000	9.000	0.000	26.3889	91.00000	1.12E-02	3.80E-03	7.65E-02	1.56E-01	3.74E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

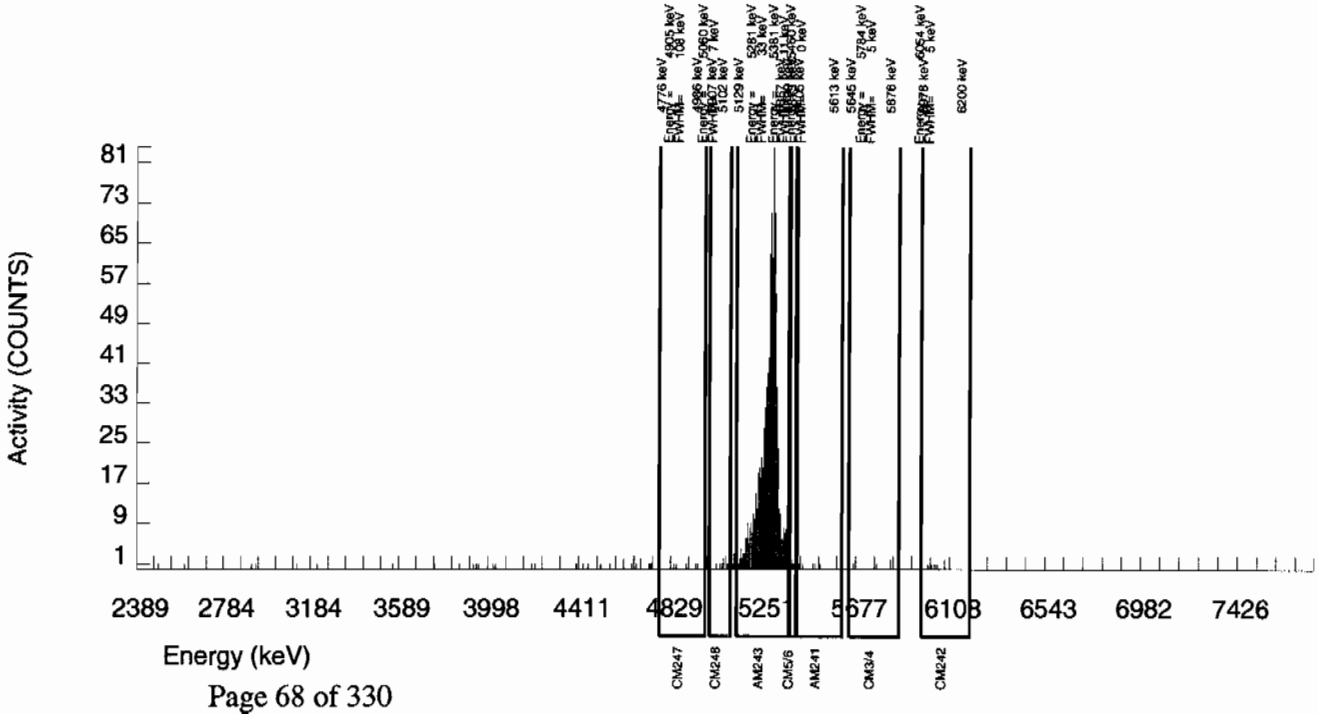

Alpha Spectroscopy Software Version 2.0
effective date: 08-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546005_AM SAMPLE QTY: 1.255 G
DETECTOR NUMBER :79468 AVERAGE %EFFICIENCY :37.4287 % YIELD : 51.136	COUNT DATE:10-DEC-2009 19:57:12 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 1.49145 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B215.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W215.CNF;27 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	2.000	0.000	4.8778	100.0000	3.76E-03	2.67E-03	2.13E-02	4.76E-02	2.66E-03
CM-5/6	5386.000	5.000	5.000	0.000	19.8796	86.09000	1.09E-02	4.92E-03	1.01E-01	2.07E-01	4.87E-03
AM-241	5479.150	1.000	-0.970	1.000	3.6563	99.94000	-1.82E-03	2.66E-03	1.60E-02	3.70E-02	2.65E-03
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	2.07E-03	2.07E-03	1.65E-02	3.81E-02	2.07E-03
AM243	5270.000	557.000	557.000	0.000	0.0000	99.78000	1.05E+00	8.11E-02	0.00E+00	5.09E-03	4.44E-02
CM-247	4946.000	5.000	5.000	0.000	18.5713	79.30000	1.18E-02	5.34E-03	1.02E-01	2.11E-01	5.29E-03
CM-248	5078.600	7.000	7.000	0.000	26.3889	91.00000	1.44E-02	5.53E-03	1.27E-01	2.59E-01	5.45E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

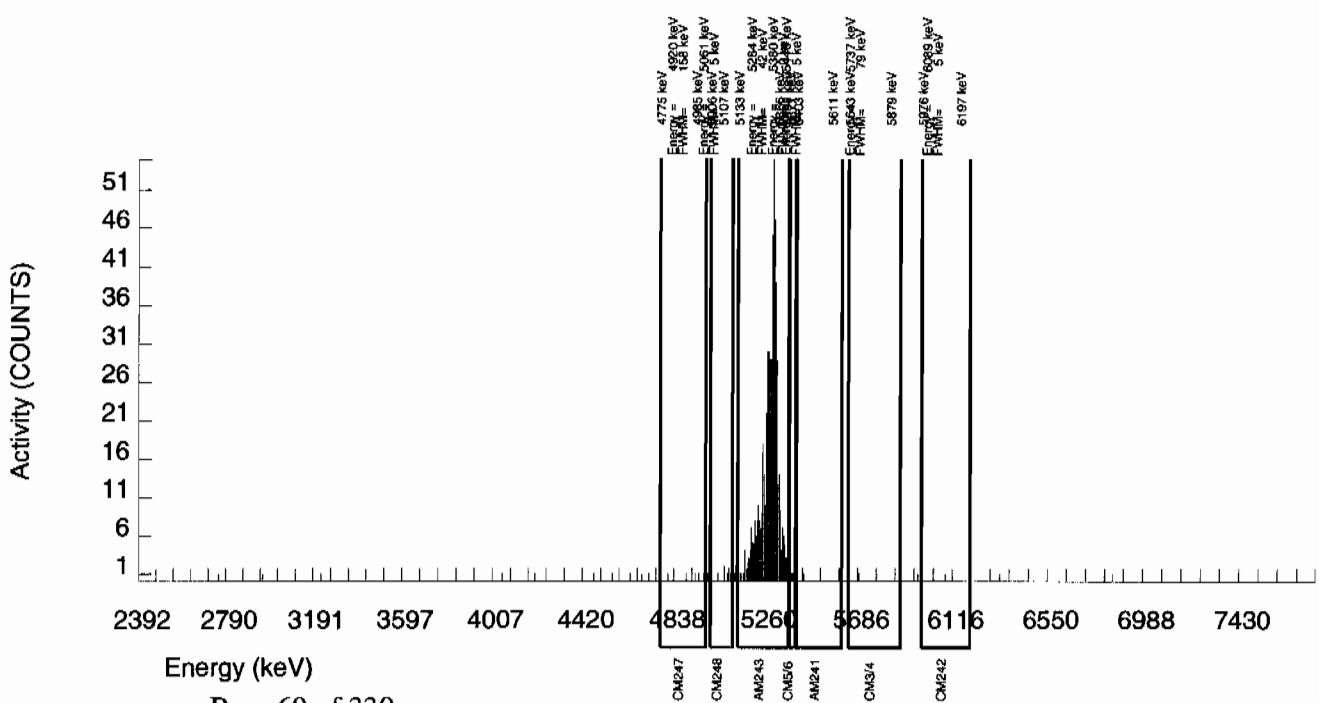

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546006_AM
SAMPLE QTY: 1.251 G

DETECTOR NUMBER :79195
AVERAGE %EFFICIENCY :38.5489
% YIELD : 89.228

COUNT DATE:10-DEC-2009 19:57:14
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B216.CNF;58
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.60244 dpm	EFF FILE : W216.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	3.000	3.000	0.000	4.8778	100.0000	3.15E-03	1.83E-03	1.19E-02	2.66E-02	1.82E-03
CM-5/6	5386.000	15.000	14.000	1.000	19.8796	86.09000	1.70E-02	4.96E-03	5.62E-02	1.16E-01	4.86E-03
AM-241	5479.150	7.000	-5.742	11.000	3.6563	99.94000	-6.02E-03	4.22E-03	8.91E-03	2.07E-02	4.22E-03
CM-242	6102.000	7.000	7.000	0.000	3.7846	100.0000	8.09E-03	3.09E-03	9.22E-03	2.13E-02	3.06E-03
AM243	5270.000	1004.000	1001.000	3.000	1.7321	99.78000	1.05E+00	6.98E-02	4.23E-03	1.13E-02	3.33E-02
CM-247	4946.000	13.000	13.000	0.000	18.5713	79.30000	1.72E-02	4.86E-03	5.70E-02	1.18E-01	4.76E-03
CM-248	5078.600	17.000	17.000	0.000	26.3889	91.00000	1.96E-02	4.88E-03	7.06E-02	1.44E-01	4.74E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

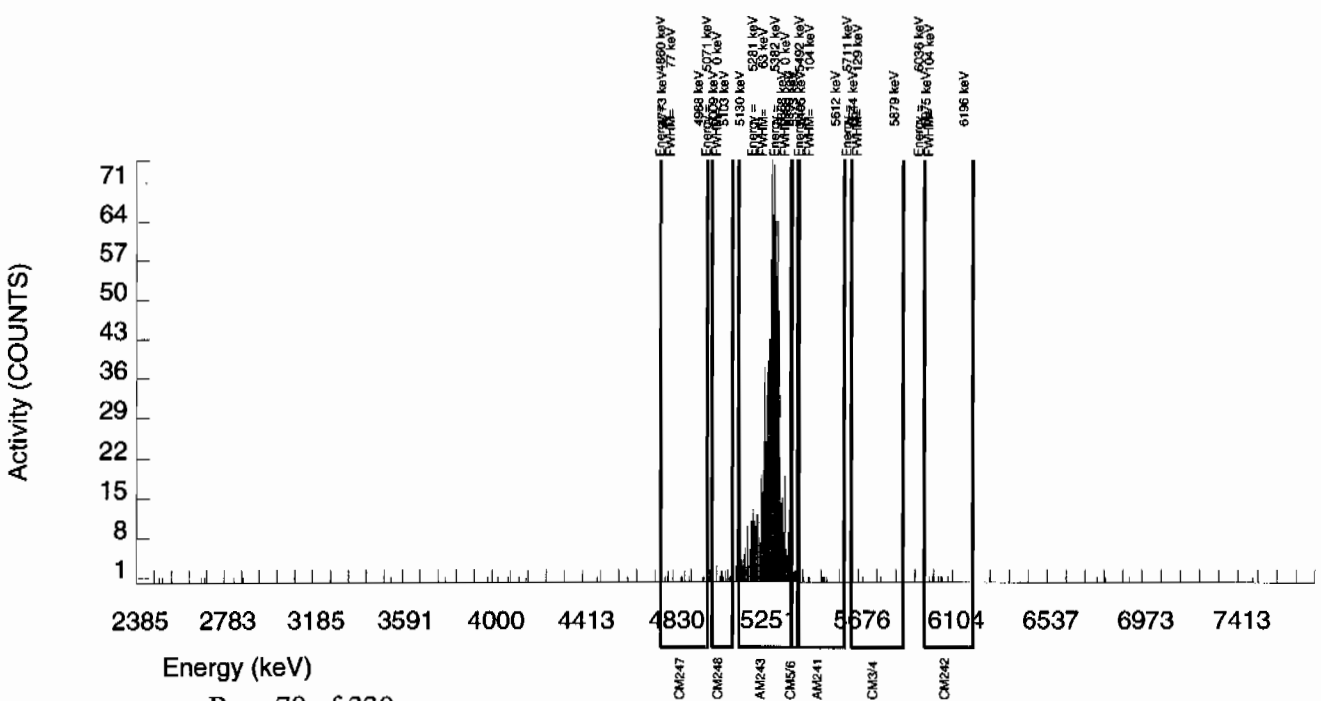

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546007_AM SAMPLE QTY: 1.255 G
DETECTOR NUMBER :79410 AVERAGE %EFFICIENCY :36.5384 % YIELD : 84.827	COUNT DATE:10-DEC-2009 19:57:16 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.47409 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B217.CNF;60 BKG DATE : 6-DEC-2009 EFF FILE : W217.CNF;24 CAL DATE : 1-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	6.000	6.000	0.000	4.8778	100.0000	6.97E-03	2.87E-03	1.31E-02	2.94E-02	2.84E-03
CM-5/6	5386.000	11.000	11.000	0.000	19.8796	86.09000	1.48E-02	4.55E-03	6.22E-02	1.28E-01	4.46E-03
AM-241	5479.150	4.000	2.430	0.000	3.6563	99.94000	2.82E-03	1.81E-03	9.86E-03	2.29E-02	1.81E-03
CM-242	6102.000	3.000	3.000	0.000	3.7846	100.0000	3.83E-03	2.23E-03	1.02E-02	2.35E-02	2.21E-03
AM243	5270.000	903.000	902.000	1.000	1.0000	99.78000	1.05E+00	7.13E-02	2.70E-03	8.55E-03	3.49E-02
CM-247	4946.000	3.000	3.000	0.000	18.5713	79.30000	4.38E-03	2.54E-03	6.31E-02	1.30E-01	2.53E-03
CM-248	5078.600	12.000	12.000	0.000	26.3889	91.00000	1.53E-02	4.50E-03	7.81E-02	1.60E-01	4.41E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

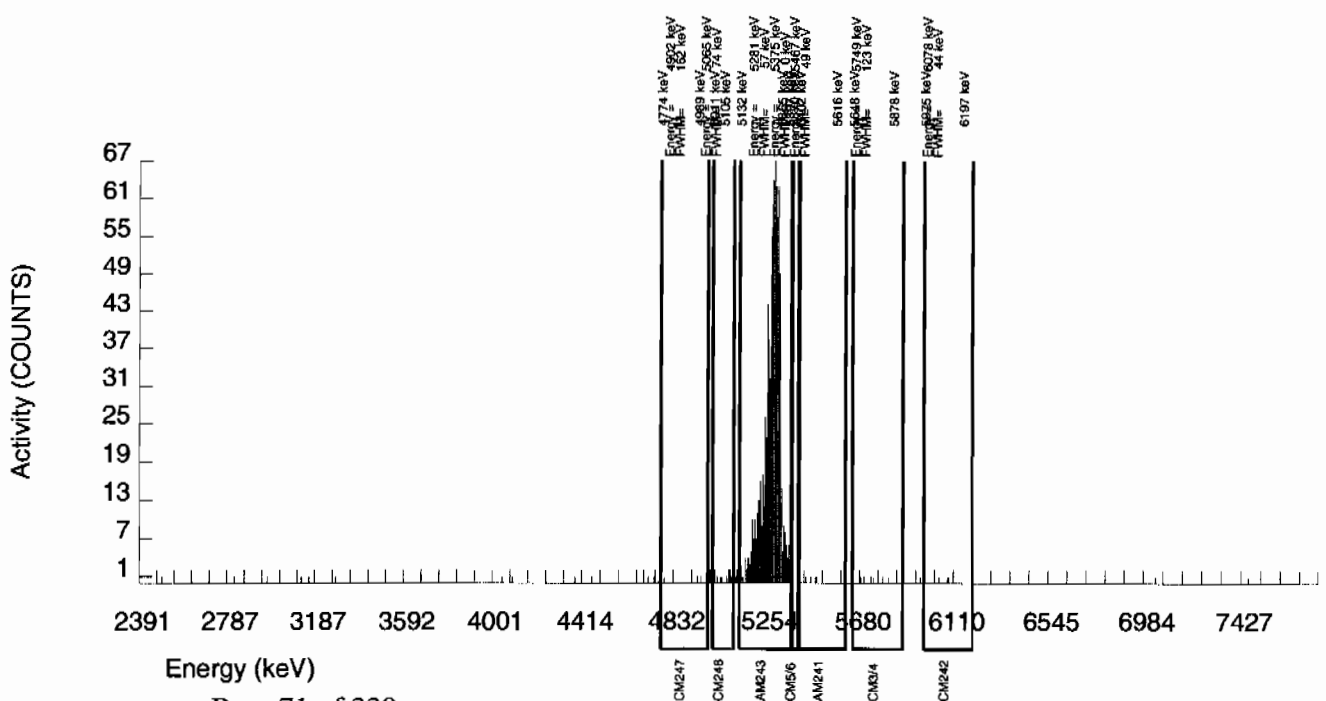

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546008_AM
SAMPLE QTY: 1.250 G

DETECTOR NUMBER :79411
AVERAGE %EFFICIENCY :37.4272
% YIELD : 85.200

COUNT DATE:10-DEC-2009 19:57:19
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B218.CNF;58
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.48496 dpm	EFF FILE : W218.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	5.000	0.000	5.000	4.8778	100.0000	0.00E+00	3.58E-03	1.28E-02	2.87E-02	3.58E-03
CM-5/6	5386.000	19.000	19.000	0.000	19.8796	86.09000	2.49E-02	5.91E-03	6.07E-02	1.25E-01	5.72E-03
AM-241	5479.150	6.000	-0.615	5.000	3.6563	99.94000	-6.96E-04	3.47E-03	9.62E-03	2.23E-02	3.46E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	6.24E-03	2.81E-03	9.95E-03	2.30E-02	2.79E-03
AM243	5270.000	935.000	928.000	7.000	2.6458	99.78000	1.05E+00	7.13E-02	6.97E-03	1.70E-02	3.48E-02
CM-247	4946.000	14.000	12.000	2.000	18.5713	79.30000	1.71E-02	5.79E-03	6.16E-02	1.27E-01	5.70E-03
CM-248	5078.600	15.000	13.000	2.000	26.3889	91.00000	1.61E-02	5.21E-03	7.62E-02	1.56E-01	5.12E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

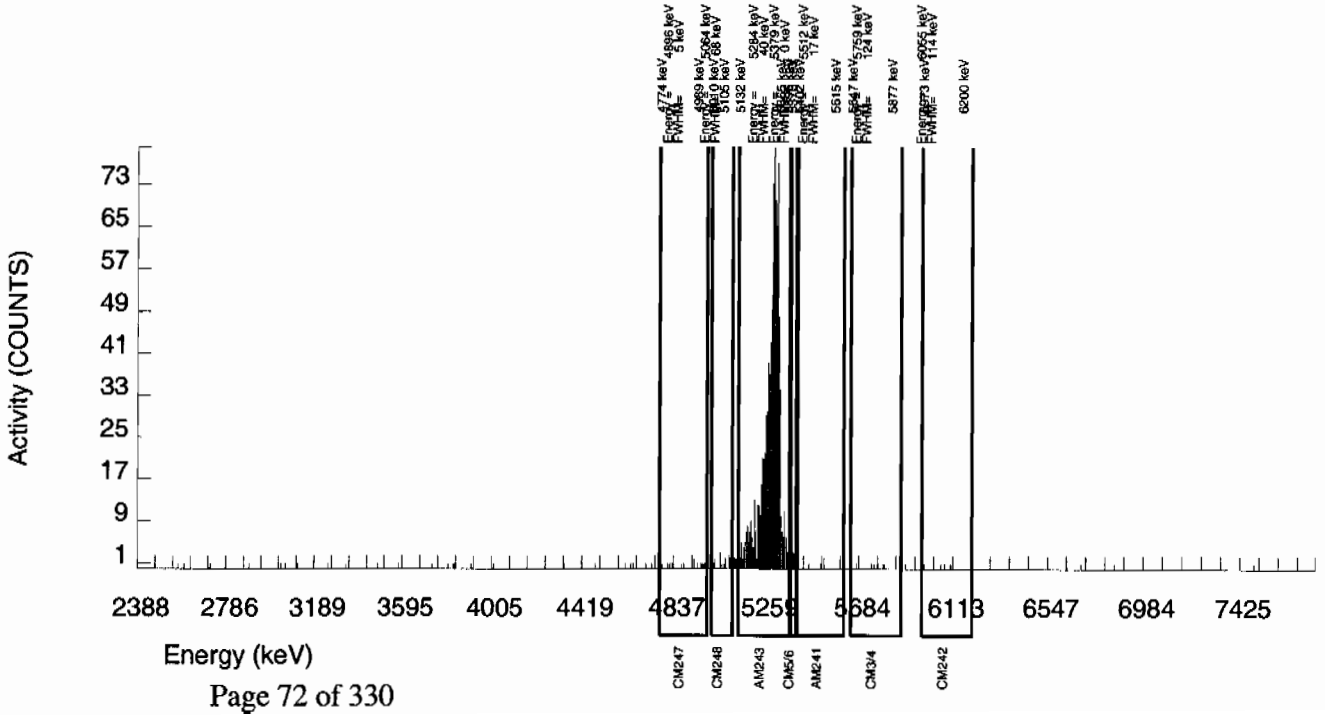

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546009_AM
SAMPLE QTY: 1.254 G

DETECTOR NUMBER :79425
AVERAGE %EFFICIENCY :37.1457
% YIELD : 91.211

COUNT DATE:10-DEC-2009 19:57:48
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B232.CNF;60
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.66028 dpm	EFF FILE : W232.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	1.000	1.000	0.000	4.8778	100.0000	1.06E-03	1.06E-03	1.20E-02	2.69E-02	1.06E-03
CM-5/6	5386.000	21.000	21.000	0.000	19.8796	86.09000	2.59E-02	5.84E-03	5.70E-02	1.17E-01	5.64E-03
AM-241	5479.150	9.000	6.284	1.000	3.6563	99.94000	6.67E-03	3.08E-03	9.02E-03	2.09E-02	3.05E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	5.85E-03	2.64E-03	9.33E-03	2.15E-02	2.62E-03
AM243	5270.000	990.000	986.000	4.000	2.0000	99.78000	1.05E+00	7.00E-02	4.94E-03	1.28E-02	3.35E-02
CM-247	4946.000	8.000	4.000	4.000	18.5713	79.30000	5.35E-03	4.64E-03	5.78E-02	1.19E-01	4.63E-03
CM-248	5078.600	12.000	12.000	0.000	26.3889	91.00000	1.40E-02	4.12E-03	7.15E-02	1.46E-01	4.04E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

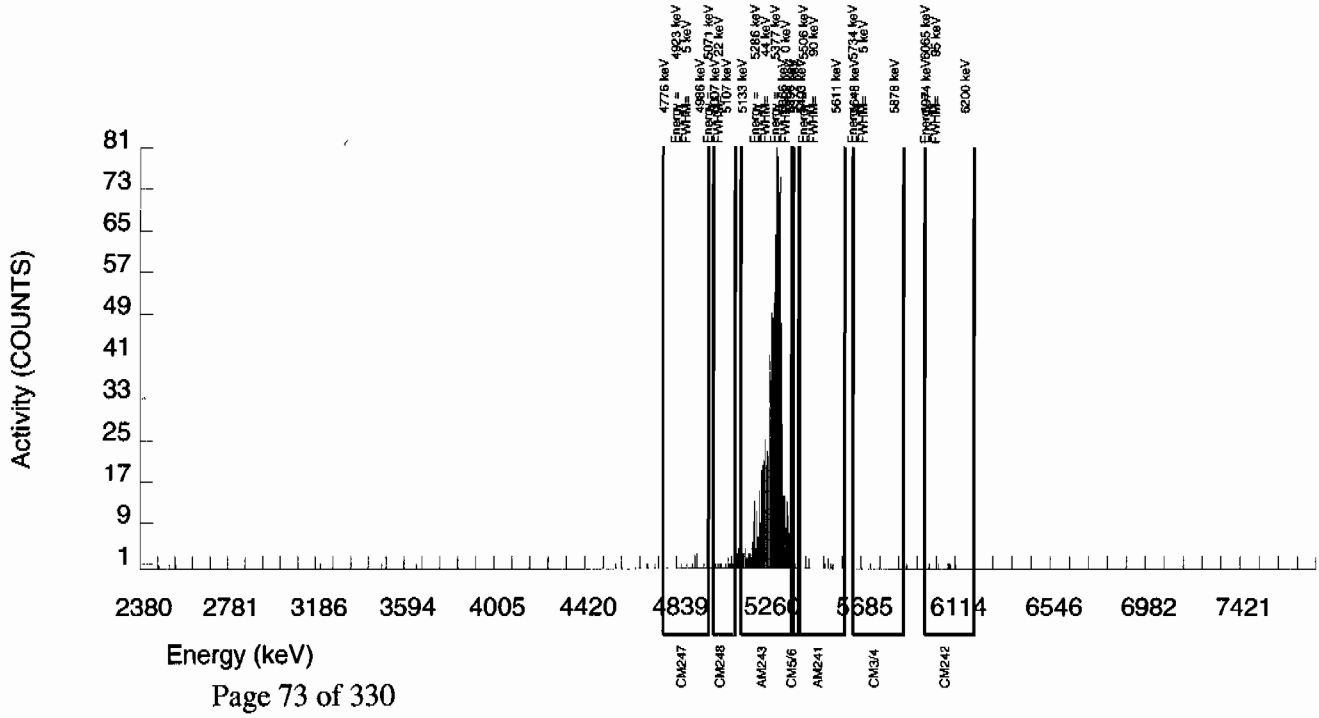

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546010_AM SAMPLE QTY: 1.253 G
DETECTOR NUMBER :79426 AVERAGE %EFFICIENCY :37.9184 % YIELD : 87.449	COUNT DATE:10-DEC-2009 19:57:50 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.55056 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B233.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W233.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	2.000	0.000	4.8778	100.0000	2.17E-03	1.54E-03	1.23E-02	2.75E-02	1.54E-03
CM-5/6	5386.000	14.000	14.000	0.000	19.8796	86.09000	1.76E-02	4.82E-03	5.82E-02	1.20E-01	4.71E-03
AM-241	5479.150	10.000	8.320	0.000	3.6563	99.94000	9.03E-03	3.17E-03	9.23E-03	2.14E-02	3.13E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	5.98E-03	2.70E-03	9.55E-03	2.20E-02	2.68E-03
AM243	5270.000	968.000	965.000	3.000	1.7321	99.78000	1.05E+00	7.03E-02	4.38E-03	1.17E-02	3.39E-02
CM-247	4946.000	6.000	5.000	1.000	18.5713	79.30000	6.84E-03	3.64E-03	5.91E-02	1.22E-01	3.62E-03
CM-248	5078.600	17.000	15.000	2.000	26.3889	91.00000	1.79E-02	5.30E-03	7.31E-02	1.50E-01	5.19E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

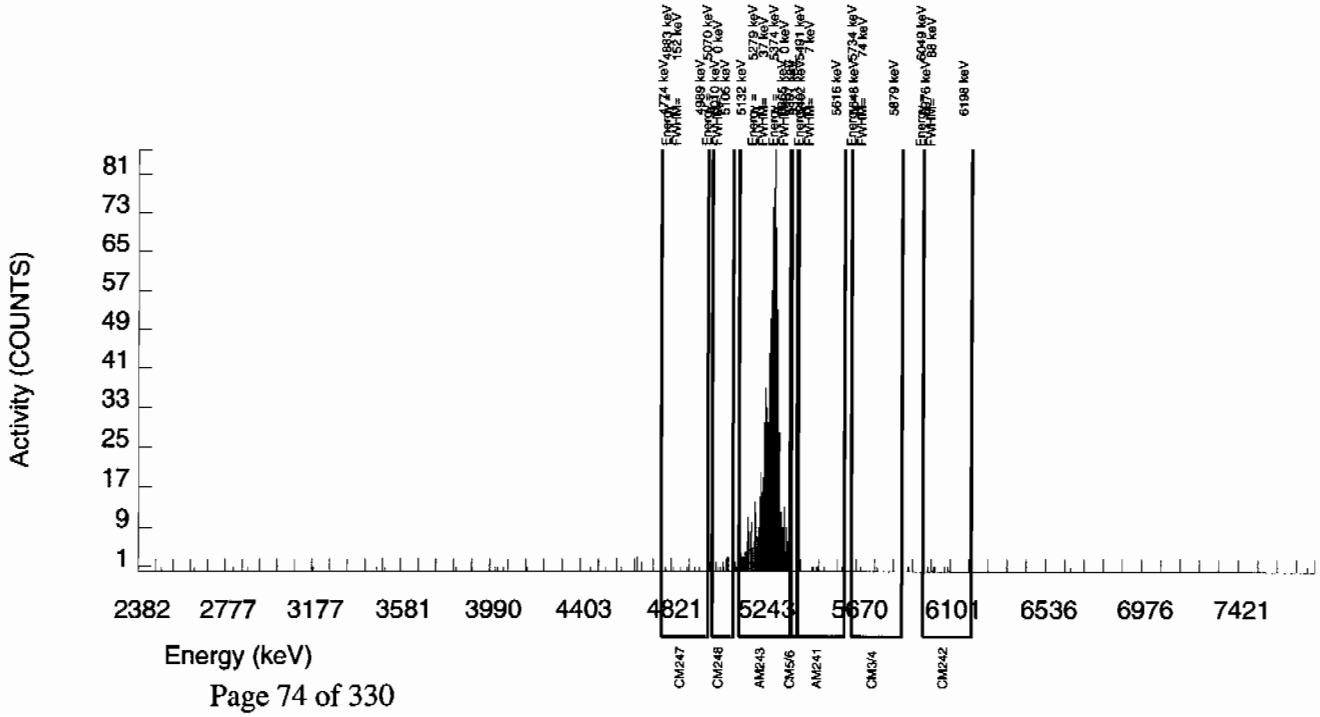

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546011_AM SAMPLE QTY: 1.256 G
DETECTOR NUMBER :79418 AVERAGE %EFFICIENCY :39.1121 % YIELD : 87.943	COUNT DATE:10-DEC-2009 19:57:28 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B225.CNF;58
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.56497 dpm	EFF FILE : W225.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	4.000	0.000	4.8778	100.0000	4.18E-03	2.10E-03	1.18E-02	2.65E-02	2.09E-03
CM-5/6	5386.000	14.000	14.000	0.000	19.8796	86.09000	1.70E-02	4.64E-03	5.60E-02	1.15E-01	4.53E-03
AM-241	5479.150	3.000	1.258	0.000	3.6563	99.94000	1.31E-03	1.17E-03	8.87E-03	2.06E-02	1.17E-03
CM-242	6102.000	3.000	2.000	1.000	3.7846	100.0000	2.30E-03	2.31E-03	9.18E-03	2.12E-02	2.30E-03
AM243	5270.000	1001.000	1001.000	0.000	0.0000	99.78000	1.05E+00	6.95E-02	0.00E+00	2.83E-03	3.31E-02
CM-247	4946.000	7.000	7.000	0.000	18.5713	79.30000	9.20E-03	3.52E-03	5.68E-02	1.17E-01	3.48E-03
CM-248	5078.600	29.000	29.000	0.000	26.3889	91.00000	3.32E-02	6.47E-03	7.03E-02	1.44E-01	6.17E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

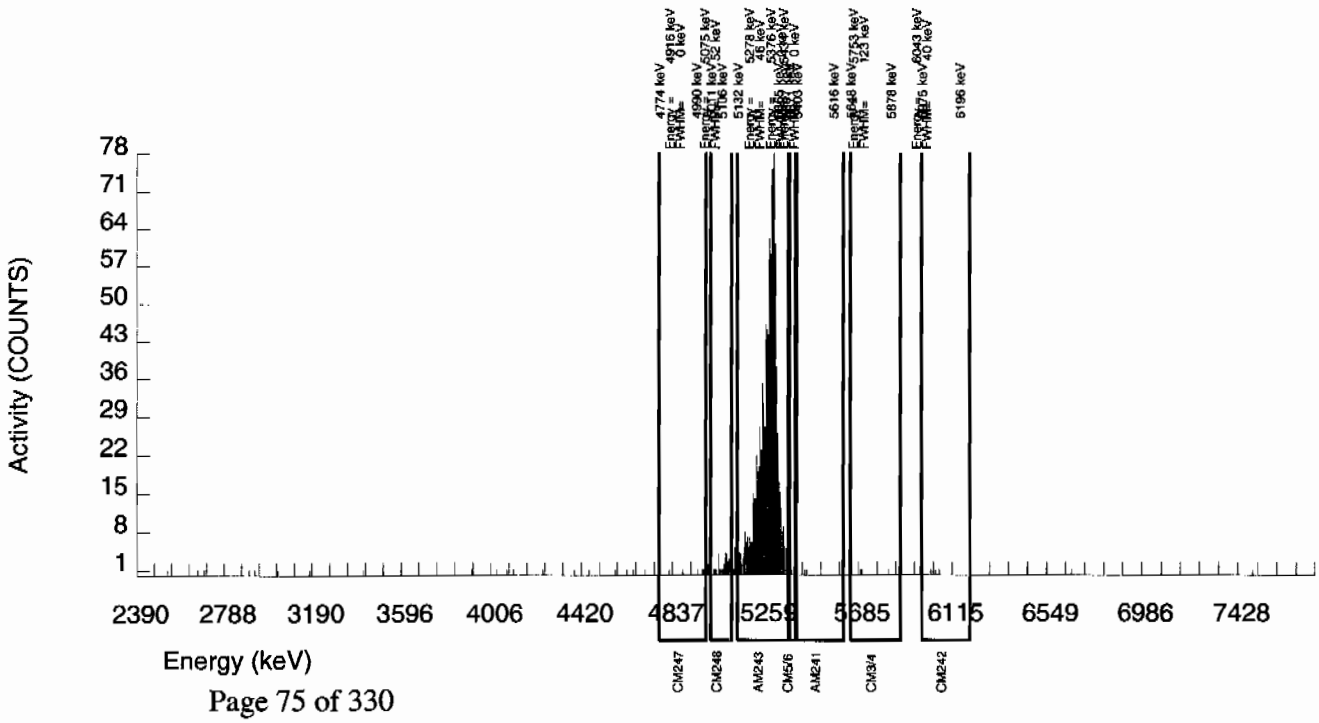

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546012_AM
SAMPLE QTY: 1.256 G

DETECTOR NUMBER :79419
AVERAGE %EFFICIENCY :37.4775
% YIELD : 84.994

COUNT DATE:10-DEC-2009 19:57:32
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B226.CNF;58
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.47895 dpm	EFF FILE : W226.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	6.000	6.000	0.000	4.8778	100.0000	6.77E-03	2.79E-03	1.28E-02	2.86E-02	2.76E-03
CM-5/6	5386.000	8.000	8.000	0.000	19.8796	86.09000	1.05E-02	3.75E-03	6.05E-02	1.25E-01	3.70E-03
AM-241	5479.150	2.000	0.386	0.000	3.6563	99.94000	4.35E-04	1.13E-03	9.58E-03	2.22E-02	1.13E-03
CM-242	6102.000	4.000	4.000	0.000	3.7846	100.0000	4.97E-03	2.50E-03	9.91E-03	2.29E-02	2.49E-03
AM243	5270.000	927.000	927.000	0.000	0.0000	99.78000	1.05E+00	7.07E-02	0.00E+00	3.06E-03	3.44E-02
CM-247	4946.000	10.000	9.000	1.000	18.5713	79.30000	1.28E-02	4.77E-03	6.13E-02	1.27E-01	4.71E-03
CM-248	5078.600	17.000	17.000	0.000	26.3889	91.00000	2.10E-02	5.25E-03	7.60E-02	1.55E-01	5.10E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

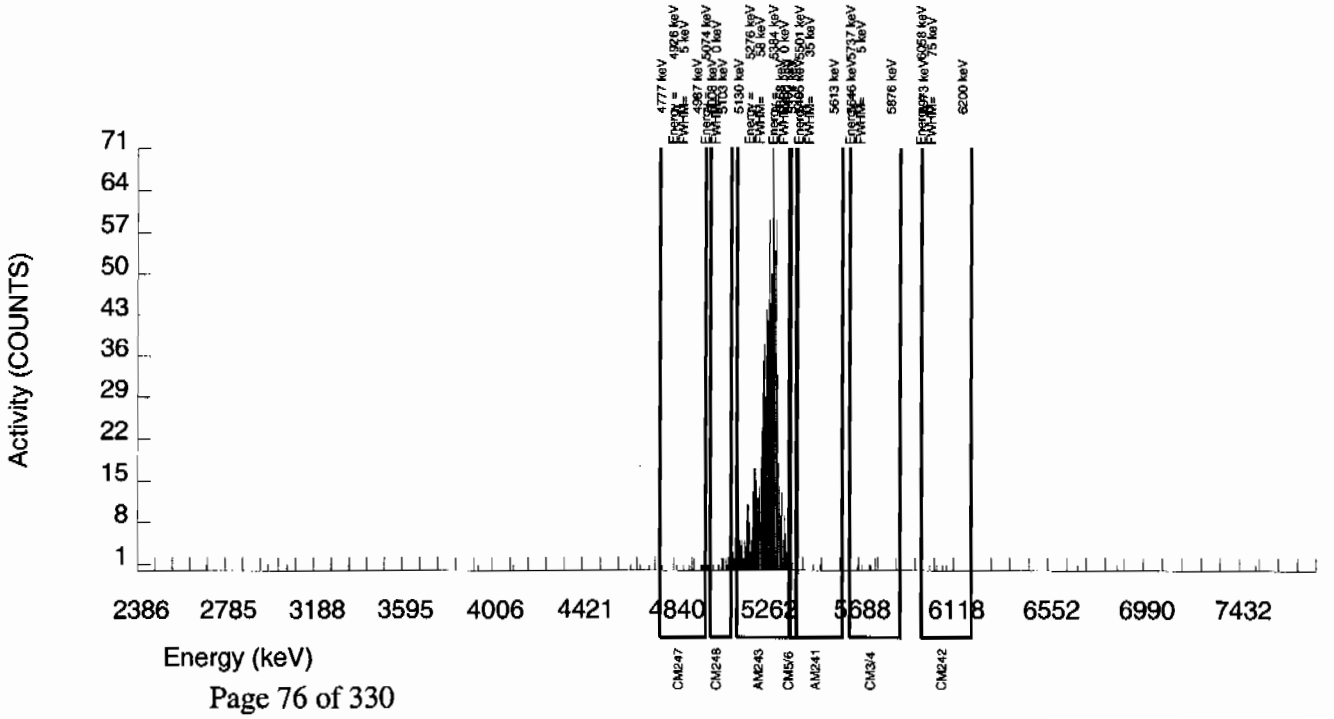

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546013_AM
SAMPLE QTY: 1.250 G

DETECTOR NUMBER :79420
AVERAGE %EFFICIENCY :38.2871
% YIELD : 89.299

COUNT DATE:10-DEC-2009 19:57:34
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B227.CNF;58
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.60453 dpm	EFF FILE : W227.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	9.000	8.000	1.000	4.8778	100.0000	8.45E-03	3.38E-03	1.20E-02	2.68E-02	3.34E-03
CM-5/6	5386.000	18.000	18.000	0.000	19.8796	86.09000	2.20E-02	5.35E-03	5.66E-02	1.17E-01	5.19E-03
AM-241	5479.150	4.000	1.268	1.000	3.6563	99.94000	1.34E-03	1.91E-03	8.97E-03	2.08E-02	1.91E-03
CM-242	6102.000	7.000	7.000	0.000	3.7846	100.0000	8.14E-03	3.11E-03	9.28E-03	2.14E-02	3.08E-03
AM243	5270.000	999.000	995.000	4.000	2.0000	99.78000	1.05E+00	7.00E-02	4.91E-03	1.27E-02	3.35E-02
CM-247	4946.000	16.000	14.000	2.000	18.5713	79.30000	1.86E-02	5.74E-03	5.74E-02	1.18E-01	5.64E-03
CM-248	5078.600	20.000	18.000	2.000	26.3889	91.00000	2.08E-02	5.57E-03	7.11E-02	1.45E-01	5.43E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

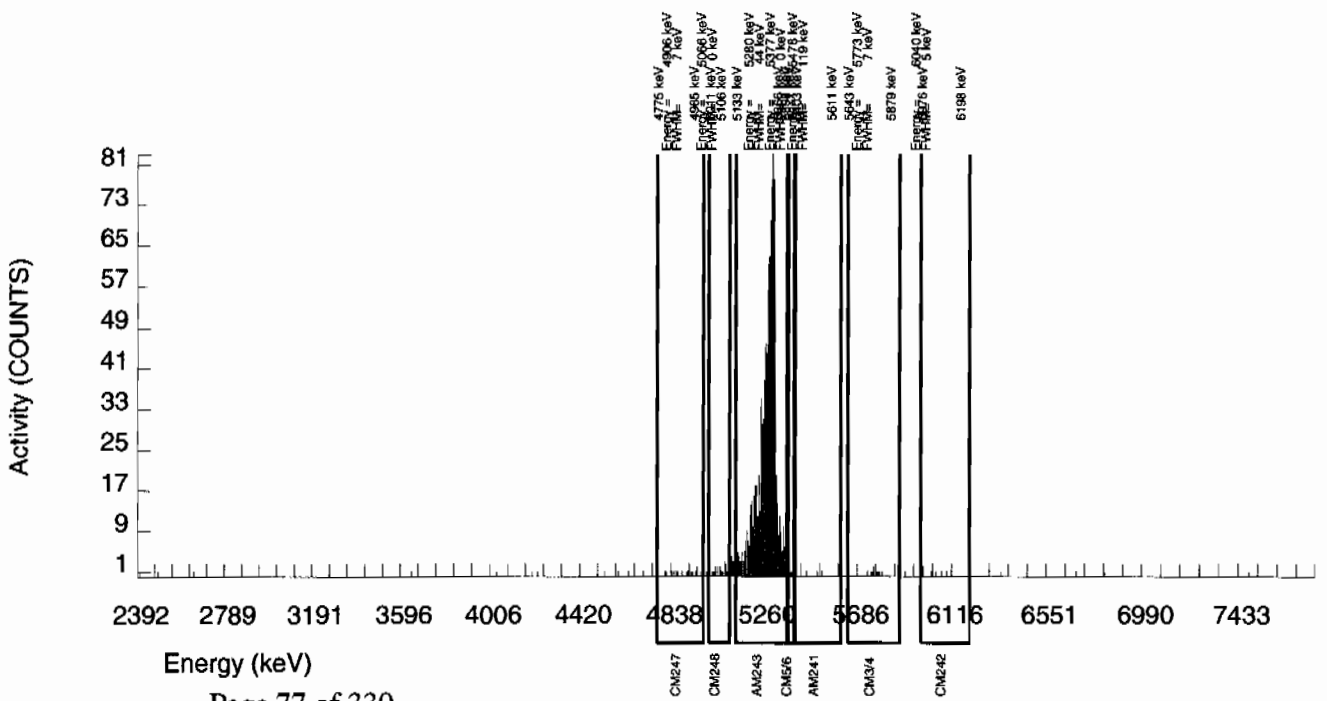

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546014_AM SAMPLE QTY: 1.258 G
DETECTOR NUMBER :79421 AVERAGE %EFFICIENCY :36.9895 % YIELD : 91.875	COUNT DATE:10-DEC-2009 19:57:36 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.67964 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B228.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W228.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	5.000	4.000	1.000	4.8778	100.0000	4.22E-03	2.60E-03	1.20E-02	2.68E-02	2.59E-03
CM-5/6	5386.000	11.000	11.000	0.000	19.8796	86.09000	1.35E-02	4.14E-03	5.66E-02	1.17E-01	4.06E-03
AM-241	5479.150	7.000	3.279	2.000	3.6563	99.94000	3.46E-03	2.85E-03	8.97E-03	2.08E-02	2.84E-03
CM-242	6102.000	7.000	7.000	0.000	3.7846	100.0000	8.14E-03	3.11E-03	9.28E-03	2.14E-02	3.08E-03
AM243	5270.000	994.000	989.000	5.000	2.2361	99.78000	1.04E+00	6.97E-02	5.49E-03	1.38E-02	3.34E-02
CM-247	4946.000	11.000	8.000	3.000	18.5713	79.30000	1.06E-02	5.01E-03	5.74E-02	1.18E-01	4.97E-03
CM-248	5078.600	22.000	20.000	2.000	26.3889	91.00000	2.32E-02	5.83E-03	7.11E-02	1.45E-01	5.67E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

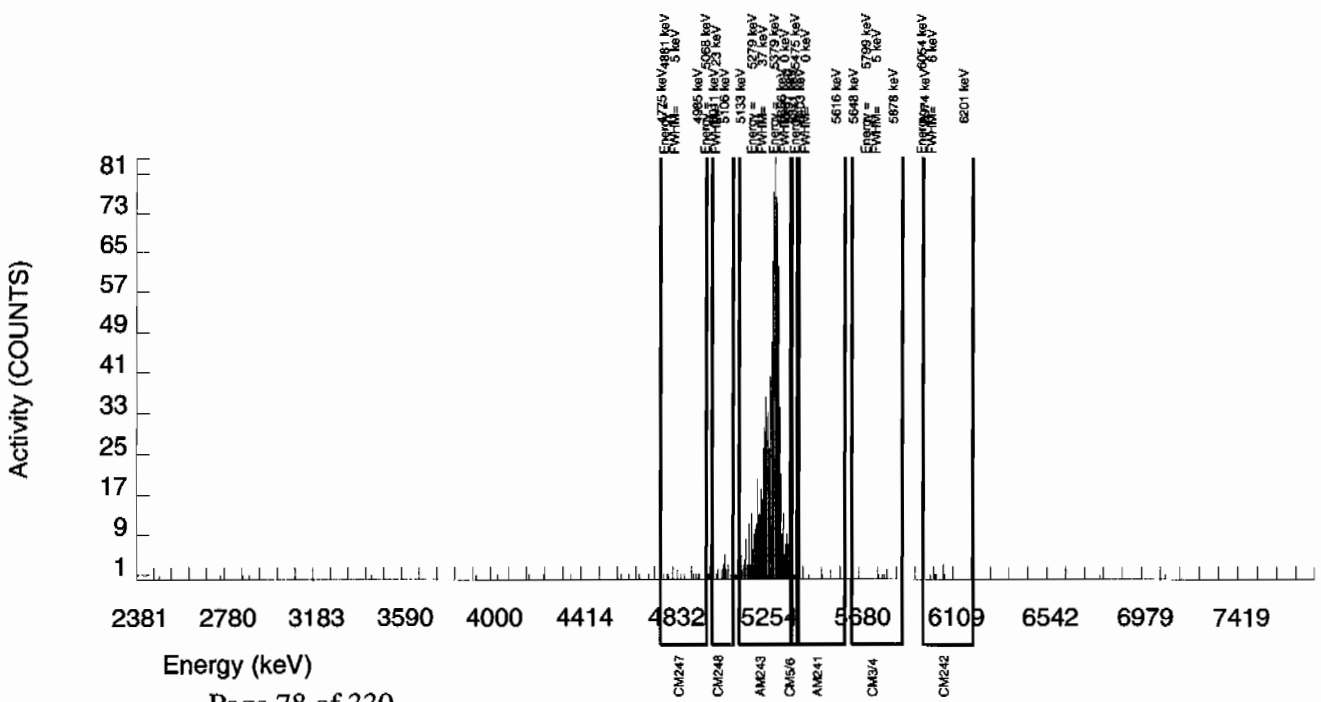

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546015_AM SAMPLE QTY: 1.251 G
DETECTOR NUMBER :79422 AVERAGE %EFFICIENCY :37.4233 % YIELD : 90.167	COUNT DATE:10-DEC-2009 19:57:39 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.62983 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B229.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W229.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	7.000	7.000	0.000	4.8778	100.0000	7.49E-03	2.86E-03	1.21E-02	2.71E-02	2.83E-03
CM-5/6	5386.000	14.000	14.000	0.000	19.8796	86.09000	1.74E-02	4.75E-03	5.73E-02	1.18E-01	4.64E-03
AM-241	5479.150	3.000	-0.709	2.000	3.6563	99.94000	-7.57E-04	1.94E-03	9.08E-03	2.11E-02	1.94E-03
CM-242	6102.000	3.000	3.000	0.000	3.7846	100.0000	3.53E-03	2.05E-03	9.40E-03	2.17E-02	2.04E-03
AM243	5270.000	987.000	982.000	5.000	2.2361	99.78000	1.05E+00	7.02E-02	5.56E-03	1.40E-02	3.37E-02
CM-247	4946.000	7.000	7.000	0.000	18.5713	79.30000	9.42E-03	3.60E-03	5.81E-02	1.20E-01	3.56E-03
CM-248	5078.600	12.000	12.000	0.000	26.3889	91.00000	1.41E-02	4.15E-03	7.20E-02	1.47E-01	4.06E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

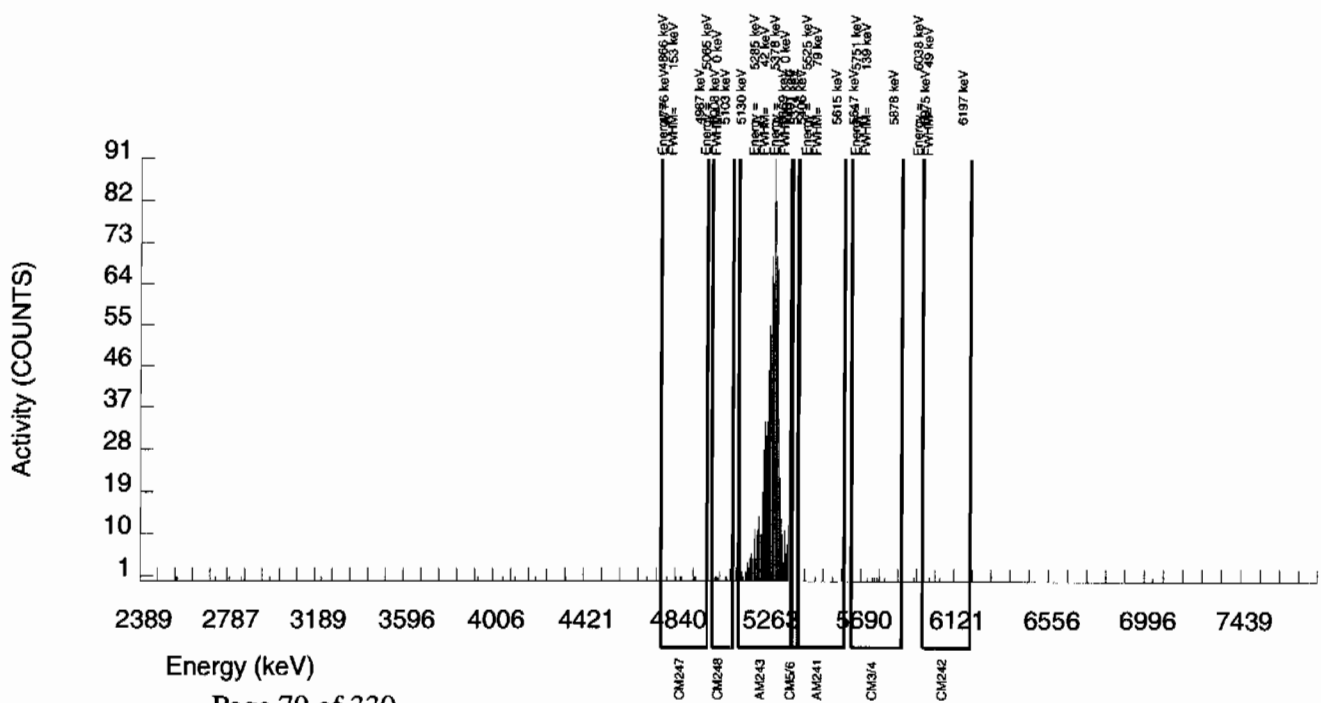

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546016_AM
SAMPLE QTY: 1.254 G

DETECTOR NUMBER :79188
AVERAGE %EFFICIENCY :36.4104
% YIELD : 95.507

COUNT DATE:10-DEC-2009 13:35:50
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B209.CNF;59
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.78556 dpm	EFF FILE : W209.CNF;25
			CAL DATE : 1-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	4.000	4.000	0.000	4.8778	100.0000	4.14E-03	2.08E-03	1.17E-02	2.62E-02	2.07E-03
CM-5/6	5386.000	15.000	15.000	0.000	19.8796	86.09000	1.80E-02	4.76E-03	5.55E-02	1.14E-01	4.65E-03
AM-241	5479.150	6.000	2.238	2.000	3.6563	99.94000	2.31E-03	2.59E-03	8.79E-03	2.04E-02	2.58E-03
CM-242	6102.000	5.000	5.000	0.000	3.7846	100.0000	5.69E-03	2.57E-03	9.09E-03	2.10E-02	2.55E-03
AM243	5270.000	1014.000	1012.000	2.000	1.4142	99.78000	1.05E+00	6.95E-02	3.41E-03	9.62E-03	3.30E-02
CM-247	4946.000	15.000	13.000	2.000	18.5713	79.30000	1.69E-02	5.46E-03	5.63E-02	1.16E-01	5.37E-03
CM-248	5078.600	19.000	19.000	0.000	26.3889	91.00000	2.16E-02	5.11E-03	6.97E-02	1.42E-01	4.95E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

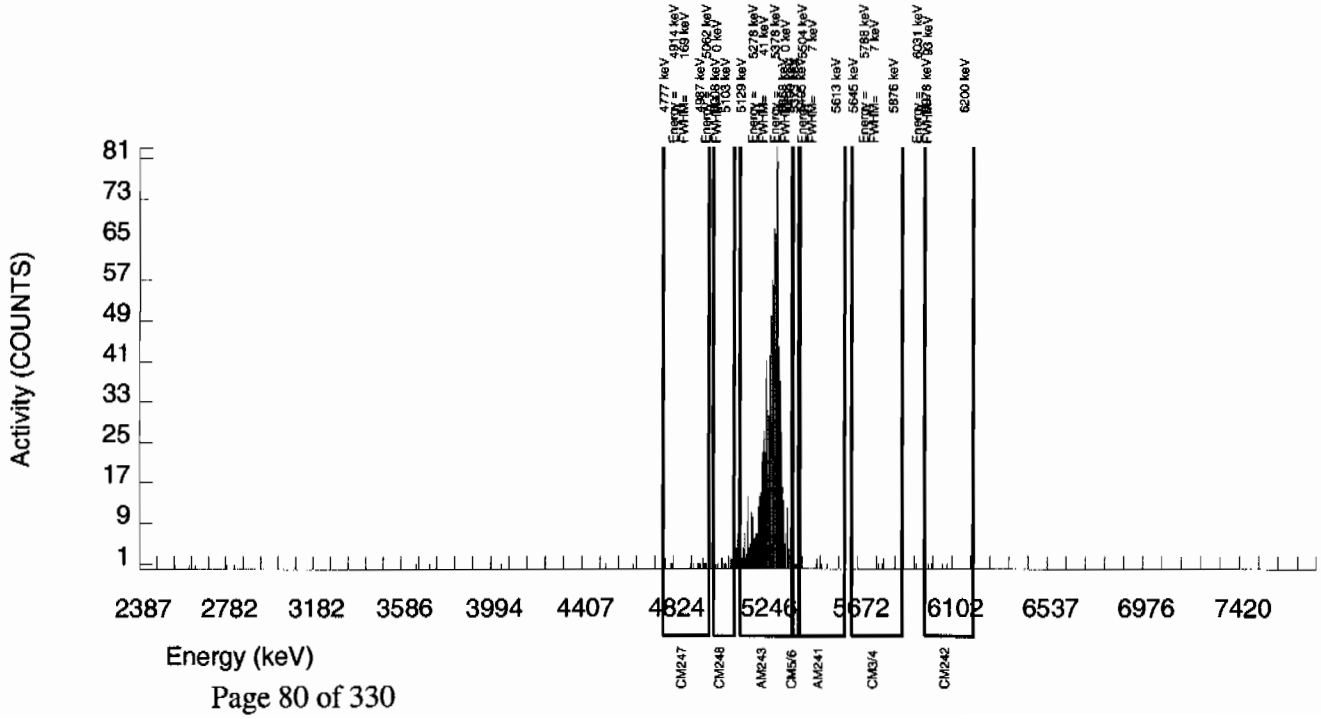

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201984991_AM SAMPLE QTY: 1.000 G
DETECTOR NUMBER :79412 AVERAGE %EFFICIENCY :38.7456 % YIELD : 92.500	COUNT DATE:11-DEC-2009 19:28:35 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B219.CNF;58
PCI/G : 3.316E+01	PCI/G : 3.316E+01	NOMINAL : 2.91660 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.69786 dpm	EFF FILE : W219.CNF;22
			CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	5.000	5.000	0.000	4.8778	100.0000	6.29E-03	2.84E-03	1.43E-02	3.19E-02	2.81E-03
CM-5/6	5386.000	21.000	21.000	0.000	19.8796	86.09000	3.07E-02	6.92E-03	6.75E-02	1.39E-01	6.69E-03
AM-241	5479.150	5.000	0.185	3.000	3.6563	99.94000	2.32E-04	3.13E-03	1.07E-02	2.48E-02	3.13E-03
CM-242	6102.000	4.000	4.000	0.000	3.7846	100.0000	5.14E-03	2.59E-03	1.11E-02	2.55E-02	2.57E-03
AM243	5270.000	1046.000	1043.000	3.000	1.7321	99.78000	1.31E+00	8.66E-02	5.08E-03	1.36E-02	4.08E-02
CM-247	4946.000	13.000	11.000	2.000	18.5713	79.30000	1.74E-02	6.22E-03	6.85E-02	1.41E-01	6.14E-03
CM-248	5078.600	25.000	24.000	1.000	26.3889	91.00000	3.31E-02	7.30E-03	8.48E-02	1.73E-01	7.04E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

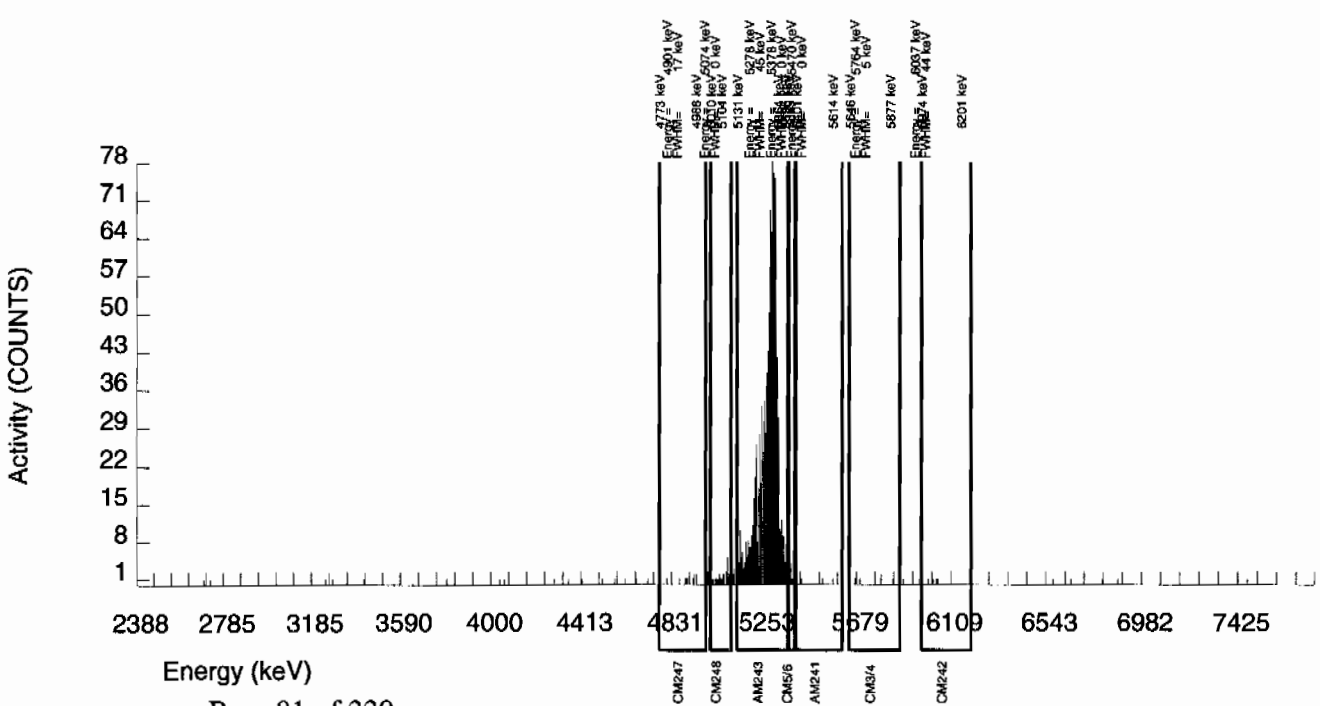

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S1201984992_AM SAMPLE QTY: 1.256 G
DETECTOR NUMBER :79423 AVERAGE %EFFICIENCY :37.7752 % YIELD : 92.329	COUNT DATE:10-DEC-2009 19:57:42 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.69289 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B230.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W230.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	5.000	4.000	1.000	4.8778	100.0000	4.12E-03	2.54E-03	1.17E-02	2.61E-02	2.52E-03
CM-5/6	5386.000	15.000	15.000	0.000	19.8796	86.09000	1.79E-02	4.74E-03	5.52E-02	1.14E-01	4.63E-03
AM-241	5479.150	7.000	4.233	1.000	3.6563	99.94000	4.36E-03	2.58E-03	8.75E-03	2.03E-02	2.57E-03
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	1.13E-03	1.14E-03	9.05E-03	2.09E-02	1.13E-03
AM243	5270.000	1017.000	1015.000	2.000	1.4142	99.78000	1.05E+00	6.93E-02	3.39E-03	9.57E-03	3.29E-02
CM-247	4946.000	7.000	6.000	1.000	18.5713	79.30000	7.78E-03	3.70E-03	5.60E-02	1.16E-01	3.67E-03
CM-248	5078.600	10.000	8.000	2.000	26.3889	91.00000	9.04E-03	3.95E-03	6.94E-02	1.42E-01	3.91E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

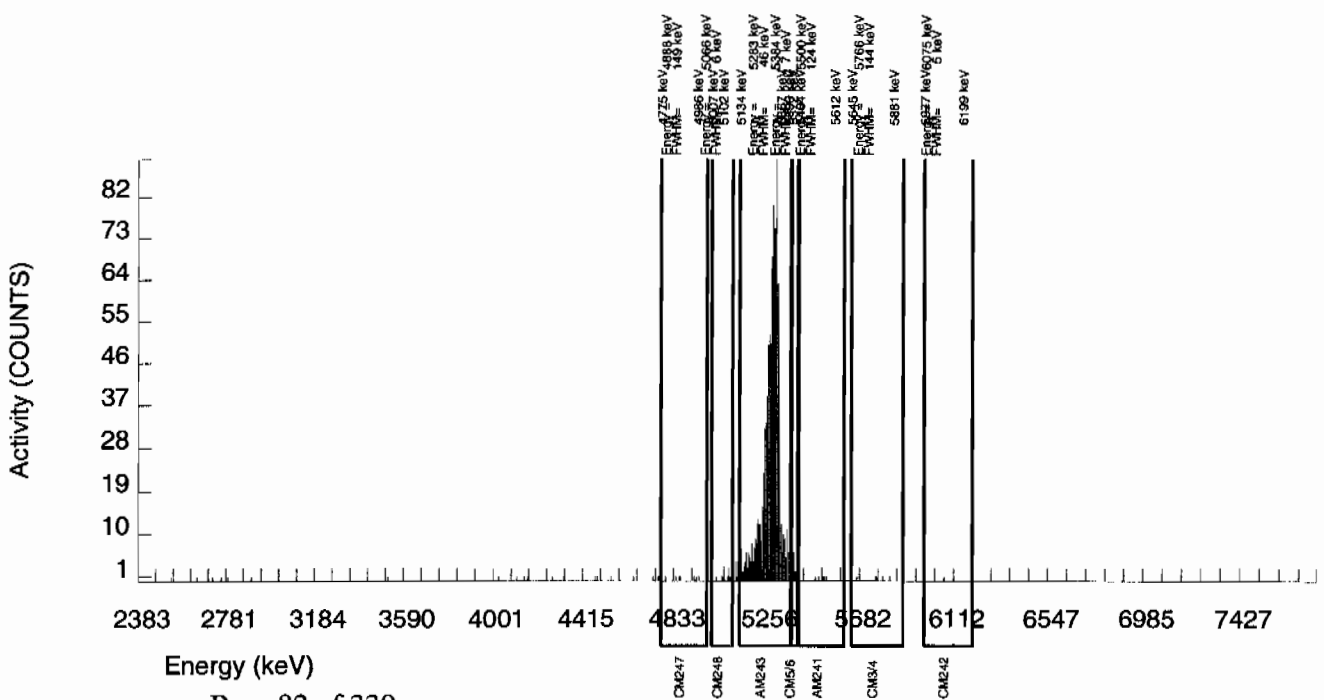

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928307 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201984993_AM SAMPLE QTY: 0.108 G
DETECTOR NUMBER :79424 AVERAGE %EFFICIENCY :38.7306 % YIELD : 105.045	COUNT DATE:10-DEC-2009 19:57:44 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91660 dpm RESULTS : 3.06376 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B231.CNF;58 BKG DATE : 6-DEC-2009 EFF FILE : W231.CNF;22 CAL DATE : 30-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	2.000	-2.000	4.000	4.8778	100.0000	-2.05E-02	2.51E-02	1.16E-01	2.60E-01	2.51E-02
CM-5/6	5386.000	86.000	86.000	0.000	19.8796	86.09000	1.02E+00	1.29E-01	5.51E-01	1.13E+00	1.10E-01
AM-241	5479.150	2914.000	2893.939	18.000	3.6563	99.94000	2.97E+01	1.99E+00	8.73E-02	2.02E-01	5.55E-01
CM-242	6102.000	1.000	1.000	0.000	3.7846	100.0000	1.04E-02	1.05E-02	9.03E-02	2.08E-01	1.04E-02
AM243	5270.000	1197.000	1184.000	13.000	3.6056	99.78000	1.22E+01	8.62E-01	8.62E-02	2.00E-01	3.57E-01
CM-247	4946.000	18.000	17.000	1.000	18.5713	79.30000	2.20E-01	5.81E-02	5.59E-01	1.15E+00	5.64E-02
CM-248	5078.600	21.000	19.000	2.000	26.3889	91.00000	2.14E-01	5.58E-02	6.92E-01	1.41E+00	5.40E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

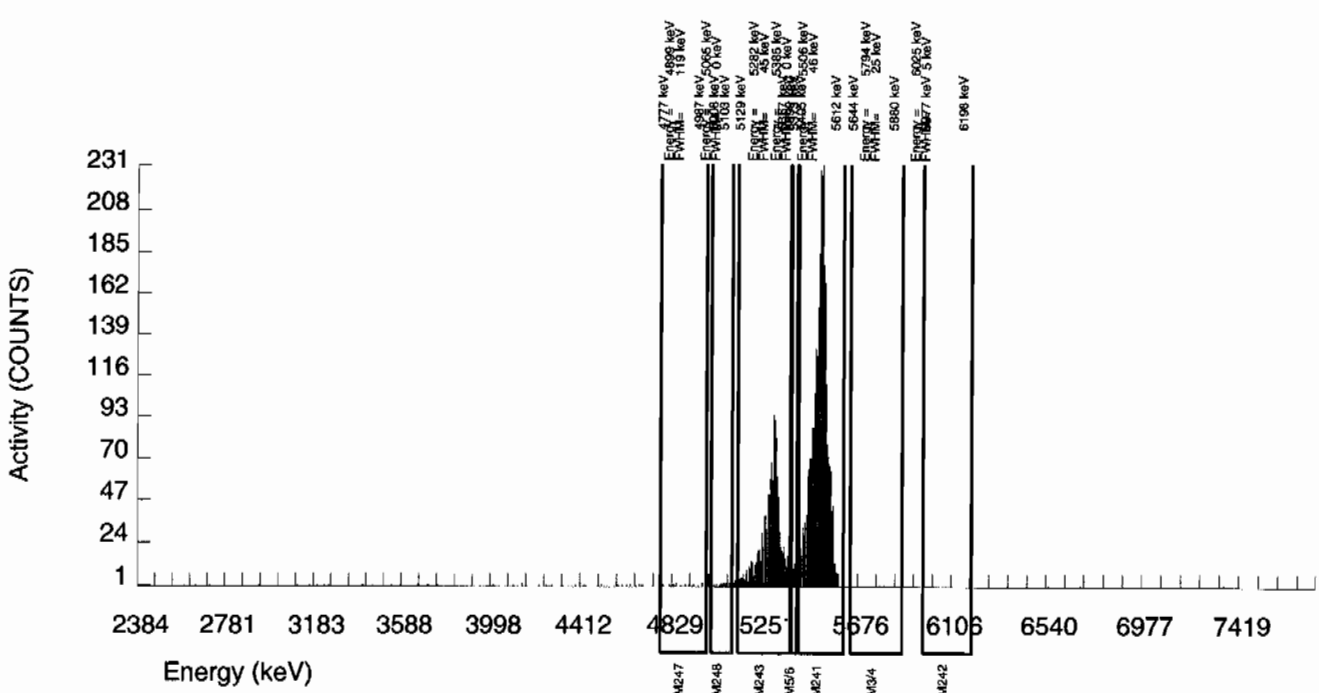

Radiochemistry Batch Checklist, Rev 9

Batch# 928308 Product: PU Date: 12/11/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analyses.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Denise Green 12/11/09

Secondary Review Performed By: [illegible] 12/11/09

12/18

/ 04 11

Plutonium Que Sheet

08-DEC-09

Batch #: 928308 Analyst: HAKB First Client Due Date: 18-DEC-09 Internal Due Date: 07-DEC-09

Tracer Isotope(s): Pu-242/Pu-238 Tracer Code: 1373-A Expiration Date: 10/27/10 Vol: 0.1

LCS Isotope(s): Pu-239/Pu-238 LCS Code: SRM 0244-B Expiration Date: 4/30/20 Vol: 0.108 g

Spike Isotope(s): Pu-239/Pu-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/7/09 Initials: HAKB Pipet ID: 4497063 Balance ID: 19350208 Witness: KM 12-7-09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/ Dry Aliquot (g l / f)	Pu Det #
241546001-1	RE03-09-13875	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	1	1	1.256	35
241546002-1	RE03-09-13865	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	2	2	1.255	36
241546003-1	RE03-09-13868	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	3	3	1.259	37
241546004-1	RE03-09-13867	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	4	4	1.255	38
241546005-1	RE03-09-13864	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	5	5	1.255	39
241546006-1	RE03-09-13871	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	6	6	1.251	40
241546007-1	RE03-09-13877	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	7	7	1.255	41
241546008-1	RE03-09-13869	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	8	8	1.250	42
241546009-1	RE03-09-13870	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	9	9	1.254	43
241546010-1	RE03-09-13873	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	10	10	1.253	44
241546011-1	RE03-09-13863	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	11	11	1.256	45
241546012-1	RE03-09-13874	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	12	12	1.256	46
241546013-1	RE03-09-13866	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	13	13	1.250	47
241546014-1	RE03-09-13862	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	14	14	1.258	48
241546015-1	RE03-09-13876	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	15	15	1.251	65
241546016-1	RE03-09-13872	SAMPLE		.05 pCi/g	SOIL	LANL010	18-NOV-09	16	16	1.254	66
1201984994-1	MB for batch 928308	MB		.05 pCi/g	SOIL	QC ACCOUNT		17	17	1.0	67
1201984995-1	RE03-09-13872(241546016DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	18-NOV-09	18	18	1.256	68
1201984996-1	LCS for batch 928308	LCS		.05 pCi/g	SOIL	QC ACCOUNT		19	19	0.108	69

Choose SOP Used: GL-RAD-A-011 GL-RAD-A-045 GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: 12/11/09

GEL Laboratories LLC, , Radiochemistry Division

Blank Correction Report

Batch ID 928308

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201984995	DUP	Plutonium-238	1.26 g	0.00	0.00395	0.0226	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	0.0195	0.00531	0.0255	-.00437302	pCi/g	NO
1201984996	LCS	Plutonium-238	0.108 g	7.58	0.557	0.251	-.06805556	pCi/g	NO
		Plutonium-239/240	0.108 g	40.0	2.45	0.283	-.05101852	pCi/g	NO
1201984994	MB	Plutonium-238	1.00 g	-0.00735	0.00636	0.0298	-.00735	pCi/g	NO
		Plutonium-239/240	1.00 g	-0.00551	0.00486	0.0336	-.00551	pCi/g	NO
241546001	RE03-09-13875	Plutonium-238	1.26 g	-0.00135	0.00449	0.022	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	-0.00135	0.0059	0.0248	-.00437302	pCi/g	NO
241546002	RE03-09-13865	Plutonium-238	1.26 g	-0.00239	0.00478	0.0194	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00119	0.00463	0.0218	-.00437302	pCi/g	NO
241546003	RE03-09-13868	Plutonium-238	1.26 g	-0.0129	0.00733	0.0191	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00822	0.00456	0.0215	-.00437302	pCi/g	NO
241546004	RE03-09-13867	Plutonium-238	1.26 g	-0.00232	0.00491	0.0188	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	-5.52E-10	0.00284	0.0212	-.00437302	pCi/g	NO
241546005	RE03-09-13864	Plutonium-238	1.26 g	-0.00354	0.00717	0.0191	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	-0.00118	0.00456	0.0216	-.00437302	pCi/g	NO
241546006	RE03-09-13871	Plutonium-238	1.25 g	0.00188	0.00678	0.0305	-.00588	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00752	0.00533	0.0344	-.004408	pCi/g	NO
241546007	RE03-09-13877	Plutonium-238	1.26 g	-0.00254	0.00439	0.0206	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00507	0.00312	0.0232	-.00437302	pCi/g	NO
241546008	RE03-09-13869	Plutonium-238	1.25 g	-6.07E-10	0.0036	0.0207	-.00588	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00127	0.00284	0.0233	-.004408	pCi/g	NO
241546009	RE03-09-13870	Plutonium-238	1.25 g	-0.00127	0.00335	0.0206	-.00588	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0215	0.00642	0.0232	-.004408	pCi/g	NO
241546010	RE03-09-13873	Plutonium-238	1.25 g	-0.00586	0.00352	0.019	-.00588	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00117	0.00352	0.0214	-.004408	pCi/g	NO
241546011	RE03-09-13863	Plutonium-238	1.26 g	-0.00382	0.00337	0.0207	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00382	0.00382	0.0233	-.00437302	pCi/g	NO
241546012	RE03-09-13874	Plutonium-238	1.26 g	0.00346	0.00259	0.0187	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00346	0.00416	0.0211	-.00437302	pCi/g	NO
241546013	RE03-09-13866	Plutonium-238	1.25 g	-0.00919	0.00572	0.0213	-.00588	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00394	0.00436	0.024	-.004408	pCi/g	NO
241546014	RE03-09-13862	Plutonium-238	1.26 g	-0.00523	0.00555	0.0212	-.00583333	pCi/g	NO
		Plutonium-239/240	1.26 g	0.00785	0.00455	0.0239	-.00437302	pCi/g	NO
241546015	RE03-09-13876	Plutonium-238	1.25 g	0.013	0.00586	0.0211	-.00588	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0013	0.00432	0.0238	-.004408	pCi/g	NO
241546016	RE03-09-13872	Plutonium-238	1.25 g	0.00131	0.008	0.0213	-.00588	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0118	0.00545	0.024	-.004408	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546001_PU SAMPLE QTY: 1.256 G
DETECTOR NUMBER :78202 AVERAGE %EFFICIENCY :30.1906 % YIELD : 87.813	COUNT DATE:10-DEC-2009 10:31:23 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.70645 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B035.CNF;1084 BKG DATE : 9-DEC-2009 EFF FILE : W035.CNF;315 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	-1.000	10.000	3.3488	99.90000	-1.35E-03	5.90E-03	1.05E-02	2.48E-02	5.90E-03
PU-236	5749.000	30.000	-8.000	38.000	2.0294	100.0000	-1.10E-02	1.13E-02	6.39E-03	1.64E-02	1.13E-02
PU-238	5499.000	5.000	-1.000	6.000	2.9082	99.90000	-1.35E-03	4.49E-03	9.16E-03	2.20E-02	4.49E-03
PU242	4890.000	1132.000	1119.000	13.000	3.6056	100.0000	1.51E+00	8.85E-02	1.13E-02	2.64E-02	4.58E-02
PU-244	4589.000	2.000	0.000	2.000	6.8218	99.90000	0.00E+00	2.71E-03	2.15E-02	4.66E-02	2.71E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

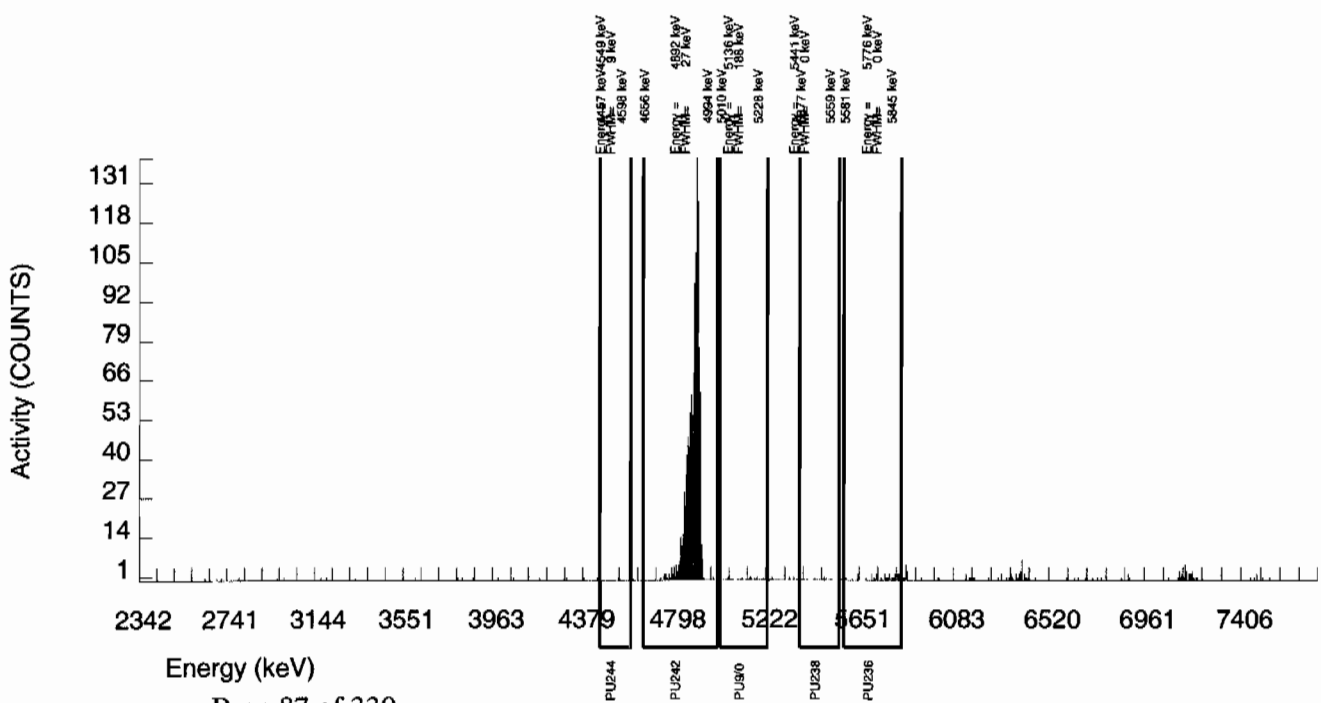

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546002_PU SAMPLE QTY: 1.255 G
DETECTOR NUMBER :78203 AVERAGE %EFFICIENCY :32.1748 % YIELD : 93.517	COUNT DATE:10-DEC-2009 10:31:23 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B036.CNF;1082
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.94719 dpm	EFF FILE : W036.CNF;327
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	8.000	1.000	7.000	3.3488	99.90000	1.19E-03	4.63E-03	9.30E-03	2.18E-02	4.62E-03
PU-236	5749.000	33.000	5.000	28.000	2.0294	100.0000	6.06E-03	9.46E-03	5.63E-03	1.45E-02	9.46E-03
PU-238	5499.000	7.000	-2.000	9.000	2.9082	99.90000	-2.39E-03	4.78E-03	8.08E-03	1.94E-02	4.78E-03
PU242	4890.000	1278.000	1270.000	8.000	2.8284	100.0000	1.51E+00	8.54E-02	7.85E-03	1.89E-02	4.28E-02
PU-244	4589.000	6.000	3.000	3.000	6.8218	99.90000	3.58E-03	3.59E-03	1.90E-02	4.11E-02	3.58E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

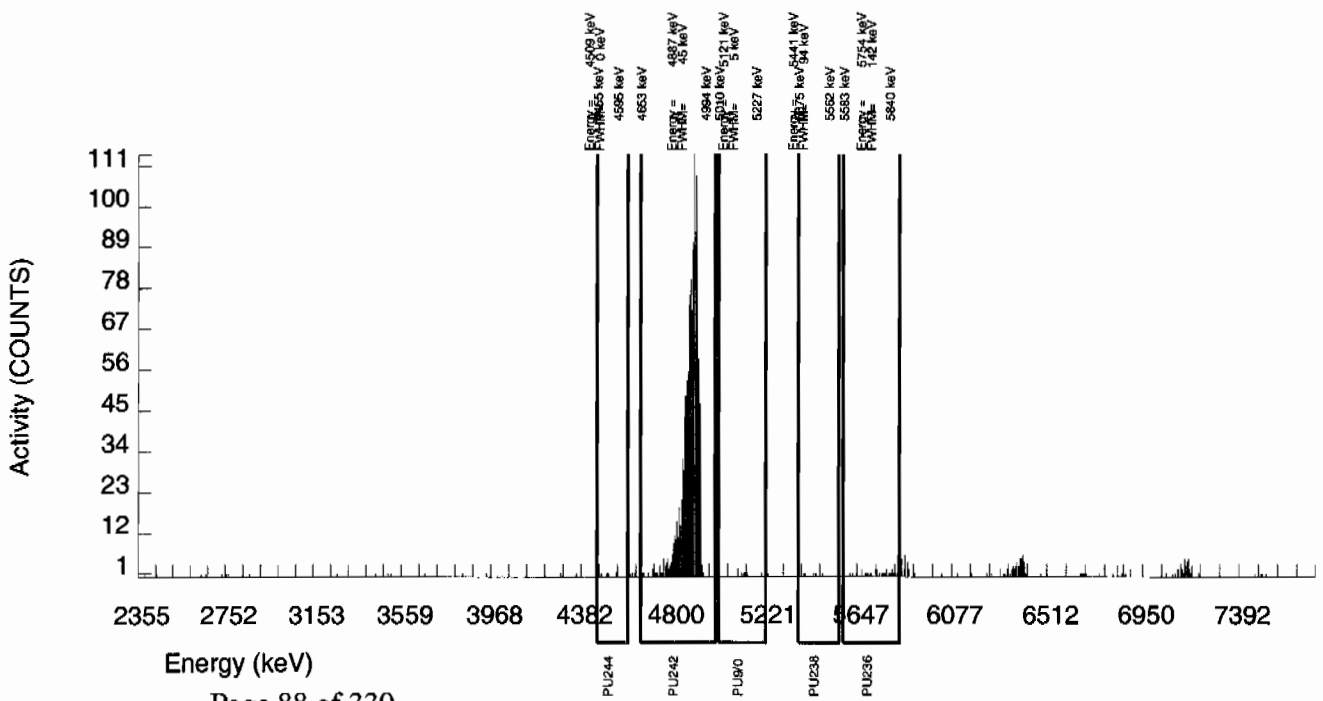

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546003_PU SAMPLE QTY: 1.259 G
DETECTOR NUMBER :45-149BB5 AVERAGE %EFFICIENCY :35.7693 % YIELD : 85.312	COUNT DATE:10-DEC-2009 10:31:24 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B037.CNF;1094
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.60085 dpm	EFF FILE : W037.CNF;303
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	11.000	7.000	4.000	3.3488	99.90000	8.22E-03	4.56E-03	9.14E-03	2.15E-02	4.55E-03
PU-236	5749.000	49.000	-6.000	55.000	2.0294	100.0000	-7.14E-03	1.21E-02	5.54E-03	1.42E-02	1.21E-02
PU-238	5499.000	14.000	-11.000	25.000	2.9082	99.90000	-1.29E-02	7.33E-03	7.94E-03	1.91E-02	7.33E-03
PU242	4890.000	1298.000	1288.000	10.000	3.1623	100.0000	1.51E+00	8.48E-02	8.63E-03	2.04E-02	4.24E-02
PU-244	4589.000	13.000	7.000	6.000	6.8218	99.90000	8.22E-03	5.13E-03	1.86E-02	4.04E-02	5.12E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

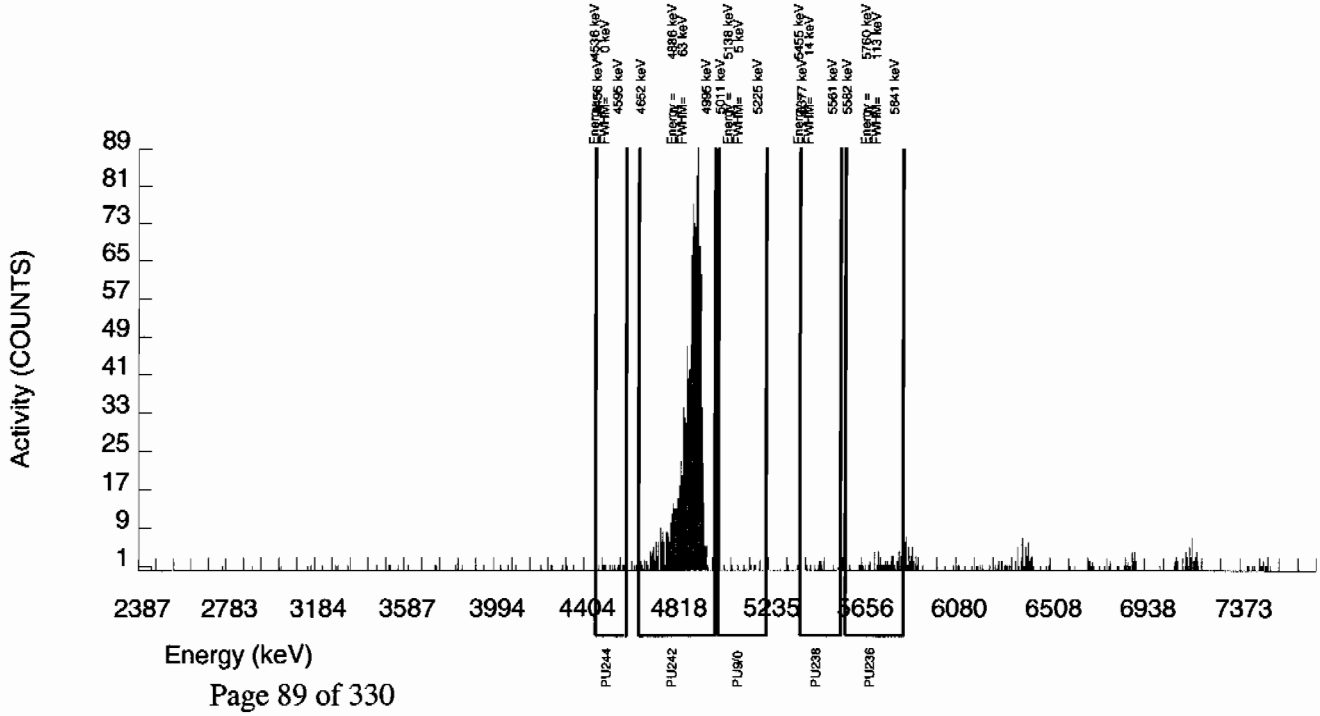

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546004_PU SAMPLE QTY: 1.255 G
DETECTOR NUMBER :72532 AVERAGE %EFFICIENCY :33.8651 % YIELD : 91.648	COUNT DATE:10-DEC-2009 10:31:24 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.86829 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B038.CNF;1091 BKG DATE : 9-DEC-2009 EFF FILE : W038.CNF;317 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	0.000	3.000	3.3488	99.90000	-5.52E-10	2.84E-03	9.02E-03	2.12E-02	2.84E-03
PU-236	5749.000	44.000	-4.000	48.000	2.0294	100.0000	-4.70E-03	1.13E-02	5.46E-03	1.41E-02	1.13E-02
PU-238	5499.000	8.000	-2.000	10.000	2.9082	99.90000	-2.32E-03	4.91E-03	7.83E-03	1.88E-02	4.91E-03
PU242	4890.000	1321.000	1310.000	11.000	3.3166	100.0000	1.51E+00	8.48E-02	8.92E-03	2.10E-02	4.22E-02
PU-244	4589.000	5.000	4.000	1.000	6.8218	99.90000	4.63E-03	2.84E-03	1.84E-02	3.99E-02	2.84E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

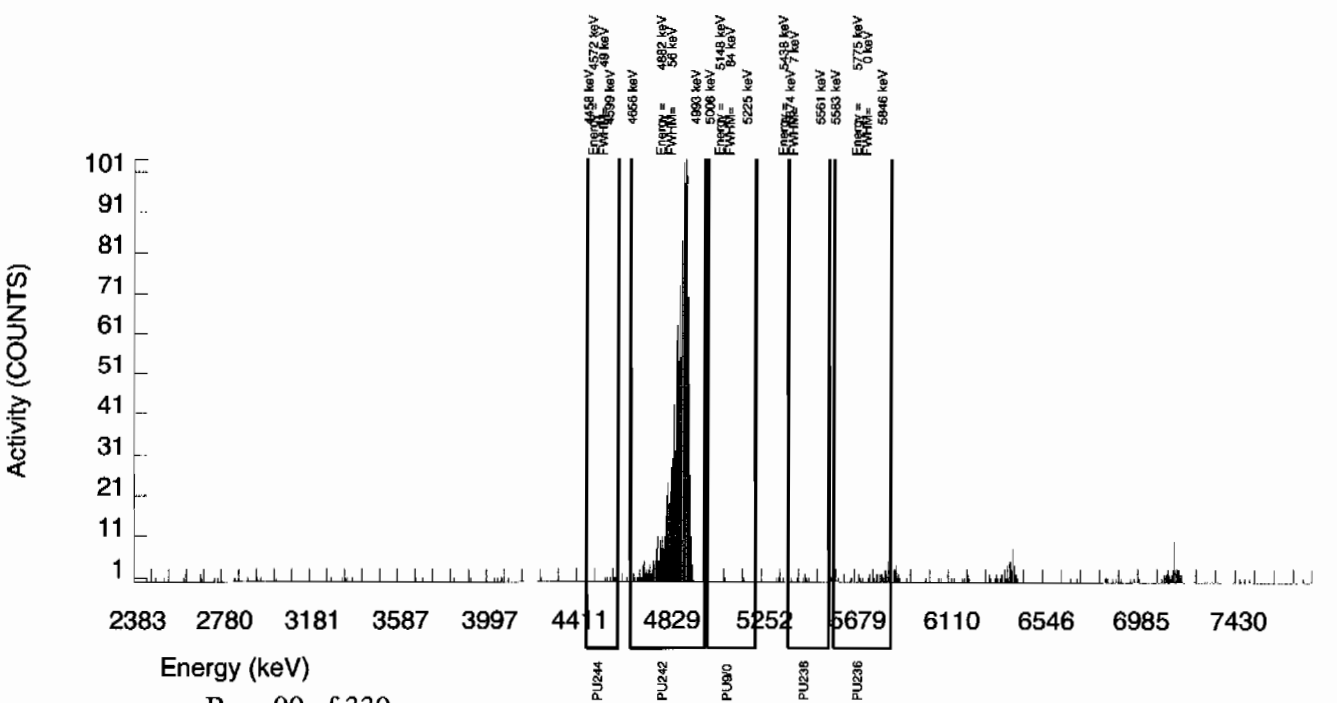

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546005_PU SAMPLE QTY: 1.255 G
DETECTOR NUMBER :45-149BB2 AVERAGE %EFFICIENCY :36.2064 % YIELD : 84.216	COUNT DATE:10-DEC-2009 10:31:24 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B039.CNF;1091
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.55461 dpm	EFF FILE : W039.CNF;294
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	7.000	-1.000	8.000	3.3488	99.90000	-1.18E-03	4.56E-03	9.18E-03	2.16E-02	4.56E-03
PU-236	5749.000	48.000	1.000	47.000	2.0294	100.0000	1.20E-03	1.16E-02	5.56E-03	1.43E-02	1.16E-02
PU-238	5499.000	17.000	-3.000	20.000	2.9082	99.90000	-3.54E-03	7.17E-03	7.97E-03	1.91E-02	7.17E-03
PU242	4890.000	1296.000	1287.000	9.000	3.0000	100.0000	1.51E+00	8.51E-02	8.22E-03	1.96E-02	4.25E-02
PU-244	4589.000	14.000	10.000	4.000	6.8218	99.90000	1.18E-02	5.03E-03	1.87E-02	4.06E-02	5.00E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

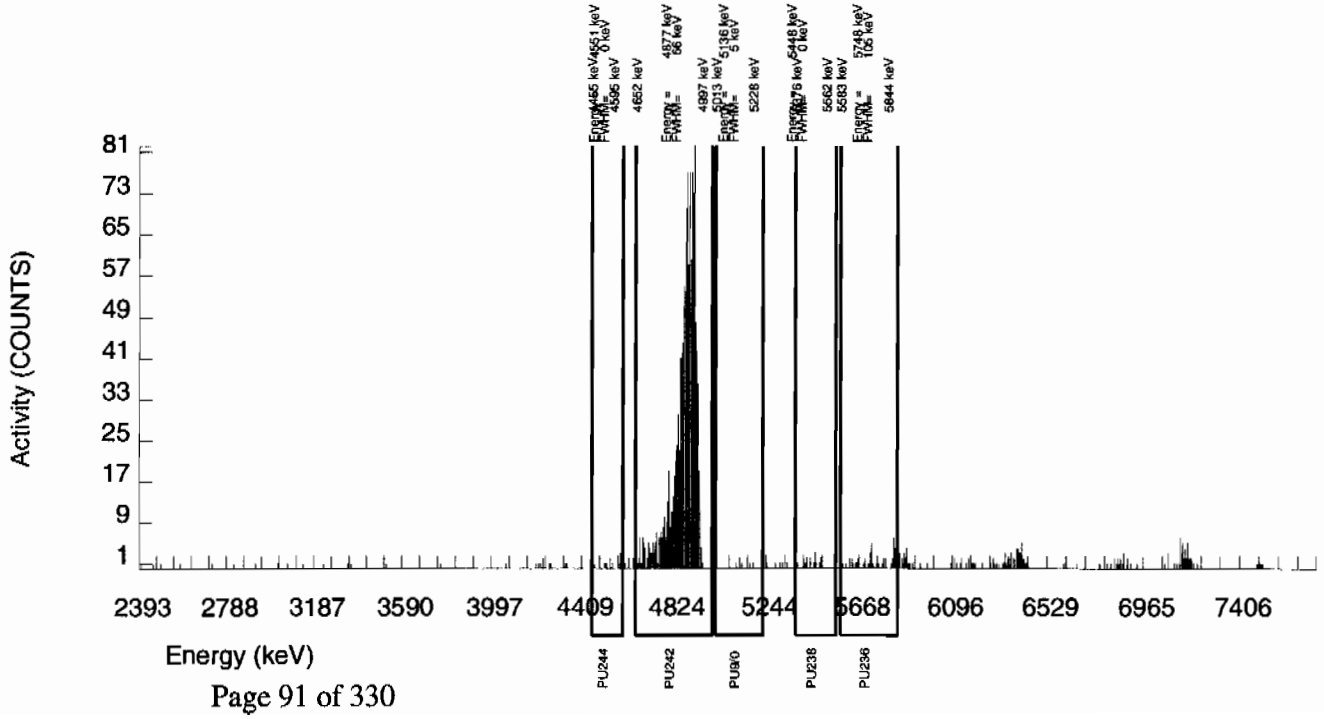

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546006_PU SAMPLE QTY: 1.251 G
DETECTOR NUMBER :78773 AVERAGE %EFFICIENCY :32.6597 % YIELD : 58.687	COUNT DATE:10-DEC-2009 10:31:24 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 2.47706 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B040.CNF;1094 BKG DATE : 9-DEC-2009 EFF FILE : W040.CNF;313 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	6.000	4.000	2.000	3.3488	99.90000	7.52E-03	5.33E-03	1.47E-02	3.44E-02	5.32E-03
PU-236	5749.000	42.000	5.000	37.000	2.0294	100.0000	9.54E-03	1.70E-02	8.87E-03	2.28E-02	1.70E-02
PU-238	5499.000	7.000	1.000	6.000	2.9082	99.90000	1.88E-03	6.78E-03	1.27E-02	3.05E-02	6.78E-03
PU242	4890.000	817.000	809.000	8.000	2.8284	100.0000	1.52E+00	9.74E-02	1.24E-02	2.98E-02	5.40E-02
PU-244	4589.000	3.000	3.000	0.000	6.8218	99.90000	5.64E-03	3.27E-03	2.98E-02	6.48E-02	3.26E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

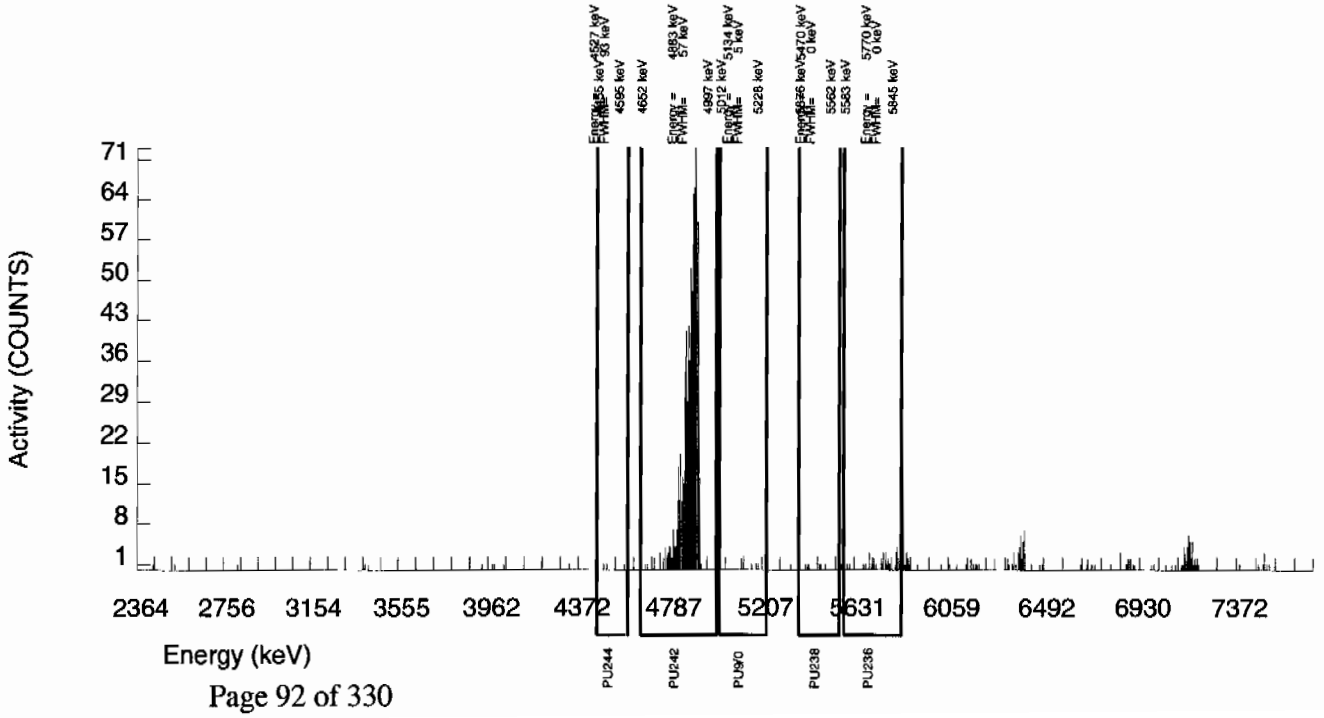

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546007_PU SAMPLE QTY: 1.255 G
DETECTOR NUMBER :78205 AVERAGE %EFFICIENCY :32.7900 % YIELD : 86.416	COUNT DATE:10-DEC-2009 10:31:24 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.64745 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B041.CNF;1087 BKG DATE : 9-DEC-2009 EFF FILE : W041.CNF;317 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	5.000	4.000	1.000	3.3488	99.90000	5.07E-03	3.12E-03	9.88E-03	2.32E-02	3.11E-03
PU-236	5749.000	33.000	-6.000	39.000	2.0294	100.0000	-7.72E-03	1.09E-02	5.98E-03	1.54E-02	1.09E-02
PU-238	5499.000	5.000	-2.000	7.000	2.9082	99.90000	-2.54E-03	4.39E-03	8.58E-03	2.06E-02	4.39E-03
PU242	4890.000	1203.000	1196.000	7.000	2.6458	100.0000	1.51E+00	8.67E-02	7.80E-03	1.90E-02	4.41E-02
PU-244	4589.000	2.000	1.000	1.000	6.8218	99.90000	1.27E-03	2.20E-03	2.01E-02	4.37E-02	2.20E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

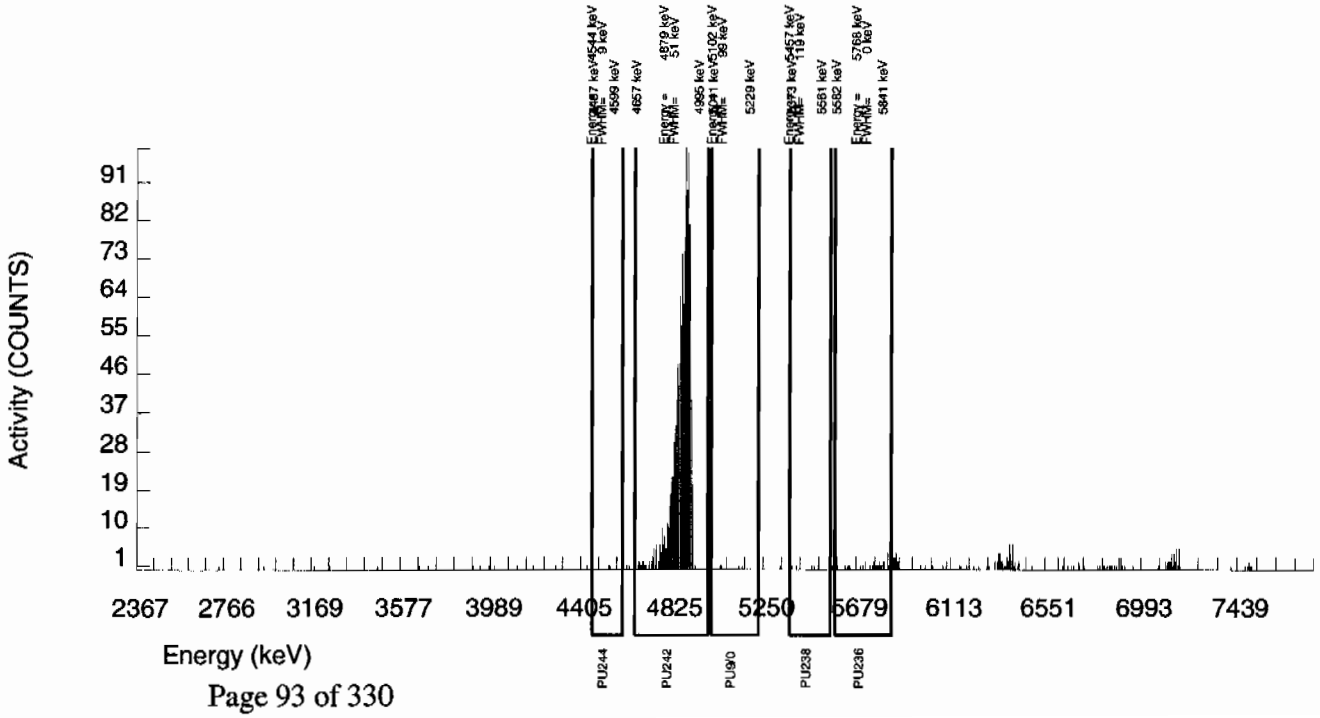

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546008_PU
SAMPLE QTY: 1.250 G

DETECTOR NUMBER :78793
AVERAGE %EFFICIENCY :32.5347
% YIELD : 87.167

COUNT DATE:10-DEC-2009 10:31:24
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B042.CNF;1086
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.67914 dpm	EFF FILE : W042.CNF;290
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2.000	-1.000	3.000	3.3488	99.90000	-1.27E-03	2.84E-03	9.91E-03	2.33E-02	2.84E-03
PU-236	5749.000	25.000	-7.000	32.000	2.0294	100.0000	-9.03E-03	9.74E-03	6.00E-03	1.54E-02	9.74E-03
PU-238	5499.000	4.000	0.000	4.000	2.9082	99.90000	-6.07E-10	3.60E-03	8.61E-03	2.07E-02	3.60E-03
PU242	4890.000	1206.000	1197.000	9.000	3.0000	100.0000	1.52E+00	8.71E-02	8.87E-03	2.12E-02	4.43E-02
PU-244	4589.000	2.000	0.000	2.000	6.8218	99.90000	-3.03E-10	2.54E-03	2.02E-02	4.38E-02	2.54E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

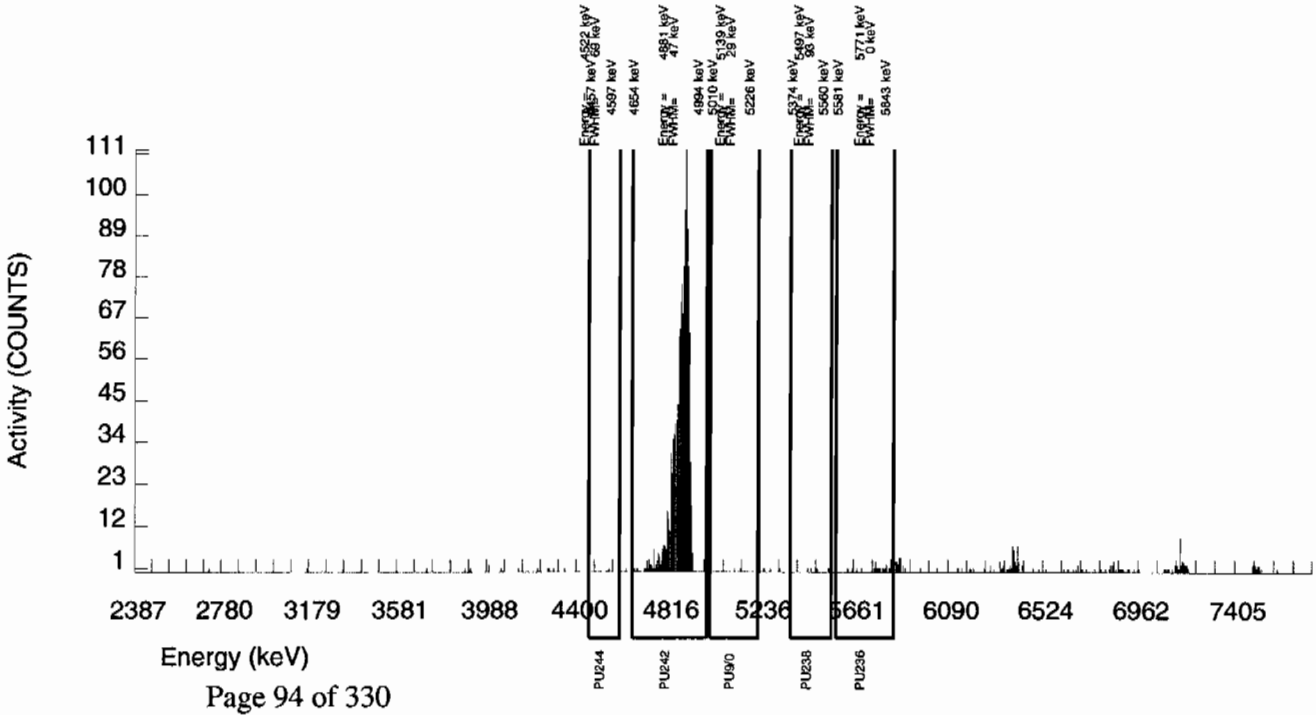

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546009_PU
SAMPLE QTY: 1.254 G

DETECTOR NUMBER :76543
AVERAGE %EFFICIENCY :33.8321
% YIELD : 83.894

COUNT DATE:10-DEC-2009 10:31:25
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B043.CNF;1084
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.54102 dpm	EFF FILE : W043.CNF;282
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	21.000	17.000	4.000	3.3488	99.90000	2.15E-02	6.42E-03	9.87E-03	2.32E-02	6.33E-03
PU-236	5749.000	31.000	3.000	28.000	2.0294	100.0000	3.85E-03	9.87E-03	5.98E-03	1.54E-02	9.87E-03
PU-238	5499.000	3.000	-1.000	4.000	2.9082	99.90000	-1.27E-03	3.35E-03	8.57E-03	2.06E-02	3.35E-03
PU242	4890.000	1204.000	1198.000	6.000	2.4495	100.0000	1.52E+00	8.67E-02	7.21E-03	1.79E-02	4.40E-02
PU-244	4589.000	5.000	5.000	0.000	6.8218	99.90000	6.33E-03	2.85E-03	2.01E-02	4.36E-02	2.83E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

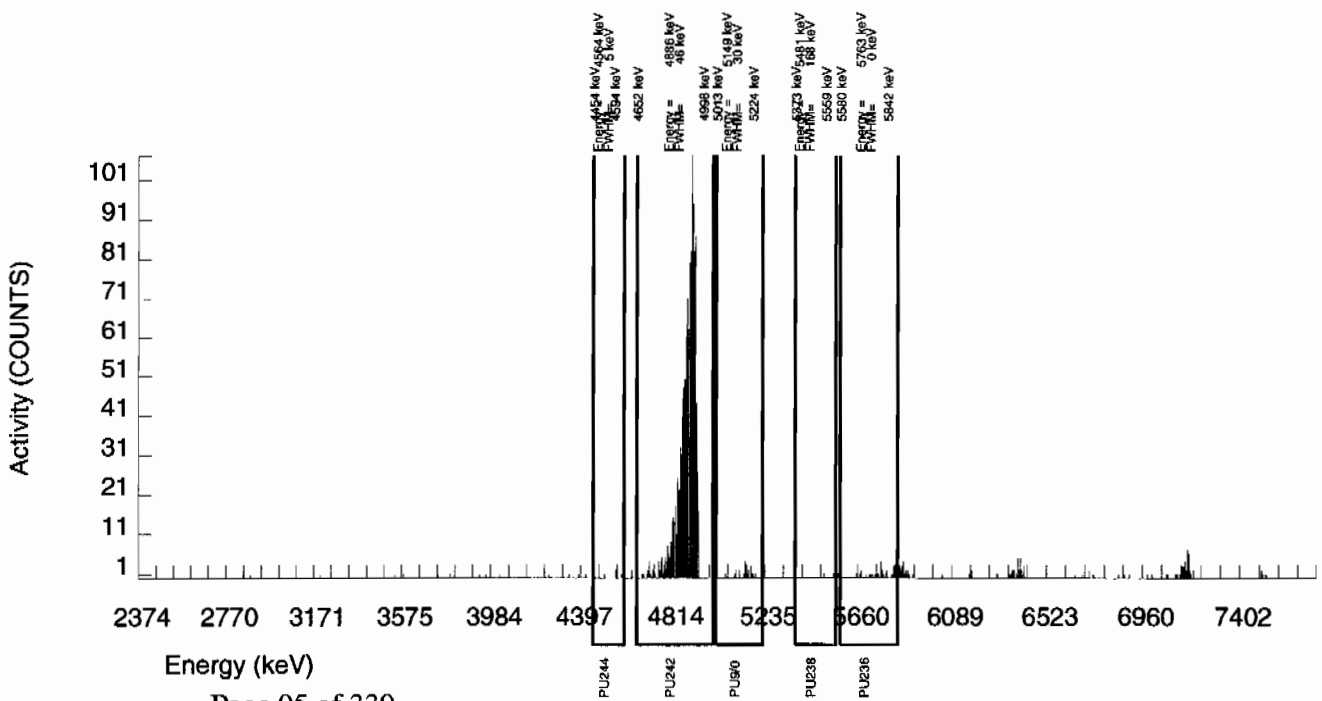

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546010_PU SAMPLE QTY: 1.253 G
DETECTOR NUMBER :79459 AVERAGE %EFFICIENCY :34.3935 % YIELD : 89.275	COUNT DATE:10-DEC-2009 10:31:25 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.76815 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B044.CNF;1094 BKG DATE : 9-DEC-2009 EFF FILE : W044.CNF;303 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	4.000	-1.000	5.000	3.3488	99.90000	-1.17E-03	3.52E-03	9.13E-03	2.14E-02	3.52E-03
PU-236	5749.000	33.000	-11.000	44.000	2.0294	100.0000	-1.31E-02	1.04E-02	5.53E-03	1.42E-02	1.04E-02
PU-238	5499.000	2.000	-5.000	7.000	2.9082	99.90000	-5.86E-03	3.52E-03	7.93E-03	1.90E-02	3.52E-03
PU242	4890.000	1307.000	1296.000	11.000	3.3166	100.0000	1.52E+00	8.52E-02	9.03E-03	2.12E-02	4.25E-02
PU-244	4589.000	4.000	2.000	2.000	6.8218	99.90000	2.34E-03	2.87E-03	1.86E-02	4.04E-02	2.87E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

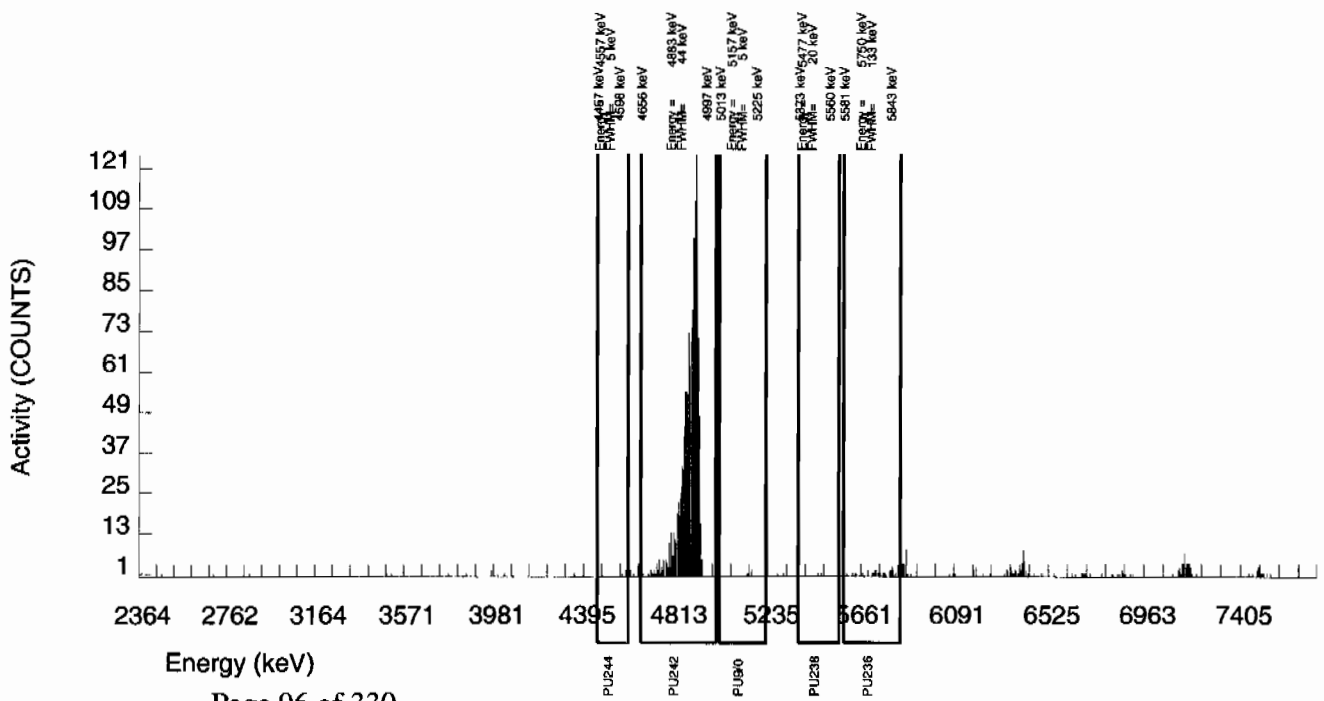

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546011_PU SAMPLE QTY: 1.256 G
DETECTOR NUMBER :78783 AVERAGE %EFFICIENCY :34.4272 % YIELD : 81.893	COUNT DATE:10-DEC-2009 10:31:25 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.45657 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B045.CNF;1083 BKG DATE : 9-DEC-2009 EFF FILE : W045.CNF;294 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	6.000	3.000	3.000	3.3488	99.90000	3.82E-03	3.82E-03	9.92E-03	2.33E-02	3.82E-03
PU-236	5749.000	40.000	-1.000	41.000	2.0294	100.0000	-1.29E-03	1.16E-02	6.01E-03	1.55E-02	1.16E-02
PU-238	5499.000	2.000	-3.000	5.000	2.9082	99.90000	-3.82E-03	3.37E-03	8.61E-03	2.07E-02	3.37E-03
PU242	4890.000	1195.000	1190.000	5.000	2.2361	100.0000	1.51E+00	8.67E-02	6.62E-03	1.67E-02	4.41E-02
PU-244	4589.000	4.000	2.000	2.000	6.8218	99.90000	2.55E-03	3.12E-03	2.02E-02	4.39E-02	3.12E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

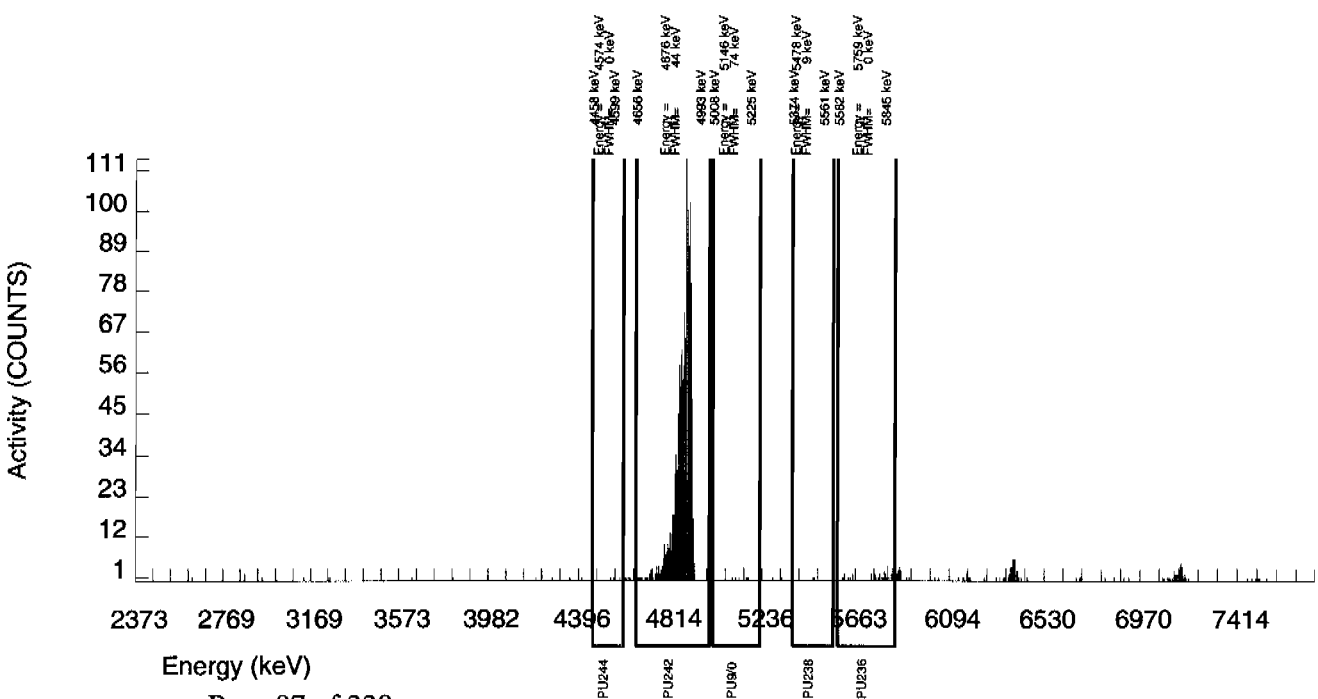

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546012_PU SAMPLE QTY: 1.256 G
DETECTOR NUMBER :76544 AVERAGE %EFFICIENCY :33.9596 % YIELD : 91.672	COUNT DATE:10-DEC-2009 10:31:25 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.86930 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B046.CNF;1094 BKG DATE : 9-DEC-2009 EFF FILE : W046.CNF;285 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	8.000	3.000	5.000	3.3488	99.90000	3.46E-03	4.16E-03	8.98E-03	2.11E-02	4.16E-03
PU-236	5749.000	38.000	12.000	26.000	2.0294	100.0000	1.40E-02	9.38E-03	5.44E-03	1.40E-02	9.36E-03
PU-238	5499.000	4.000	3.000	1.000	2.9082	99.90000	3.46E-03	2.59E-03	7.80E-03	1.87E-02	2.58E-03
PU242	4890.000	1321.000	1314.000	7.000	2.6458	100.0000	1.51E+00	8.46E-02	7.09E-03	1.73E-02	4.20E-02
PU-244	4589.000	7.000	3.000	4.000	6.8218	99.90000	3.46E-03	3.83E-03	1.83E-02	3.97E-02	3.82E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

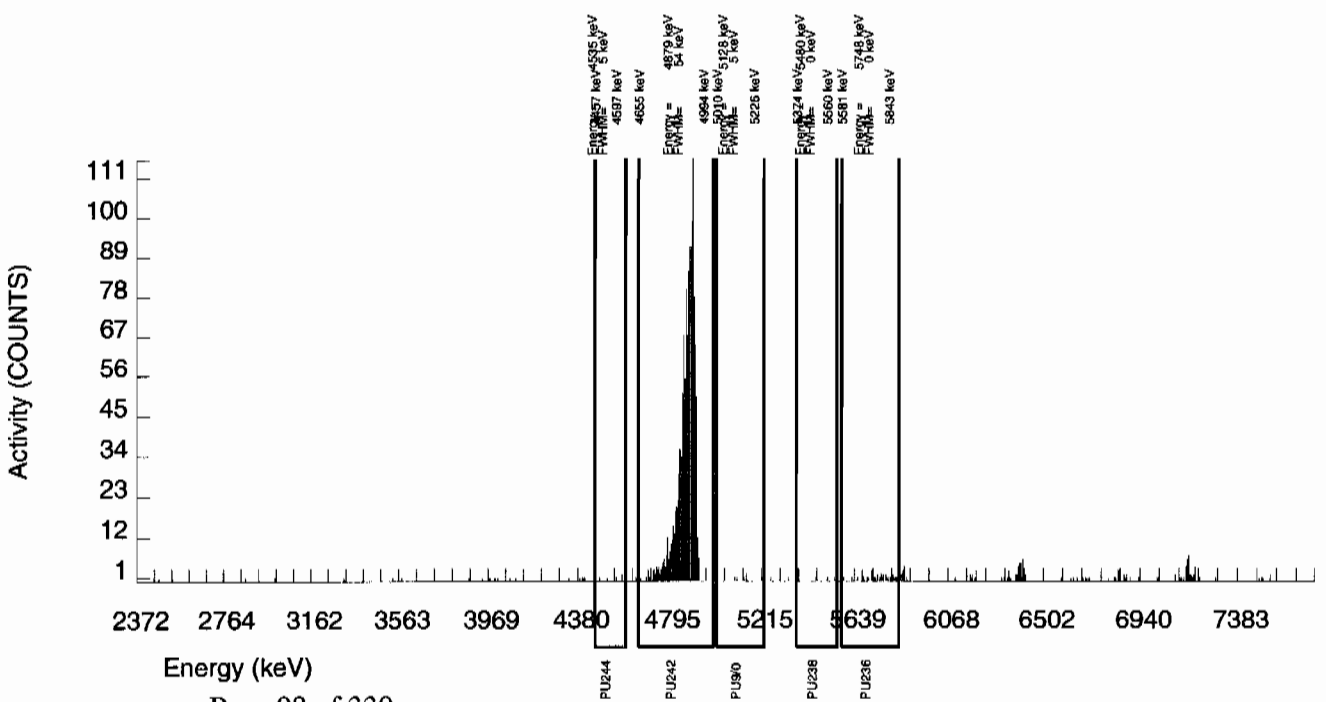

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546013_PU
SAMPLE QTY: 1.250 G

DETECTOR NUMBER :46-089B1
AVERAGE %EFFICIENCY :34.3756
% YIELD : 79.949

COUNT DATE:10-DEC-2009 10:31:25
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B047.CNF;1089
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.37448 dpm	EFF FILE : W047.CNF;299
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	7.000	3.000	4.000	3.3488	99.90000	3.94E-03	4.36E-03	1.02E-02	2.40E-02	4.35E-03
PU-236	5749.000	38.000	-2.000	40.000	2.0294	100.0000	-2.66E-03	1.18E-02	6.19E-03	1.59E-02	1.18E-02
PU-238	5499.000	6.000	-7.000	13.000	2.9082	99.90000	-9.19E-03	5.72E-03	8.88E-03	2.13E-02	5.72E-03
PU242	4890.000	1172.000	1160.000	12.000	3.4641	100.0000	1.52E+00	8.79E-02	1.06E-02	2.47E-02	4.51E-02
PU-244	4589.000	9.000	7.000	2.000	6.8218	99.90000	9.19E-03	4.38E-03	2.08E-02	4.52E-02	4.35E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

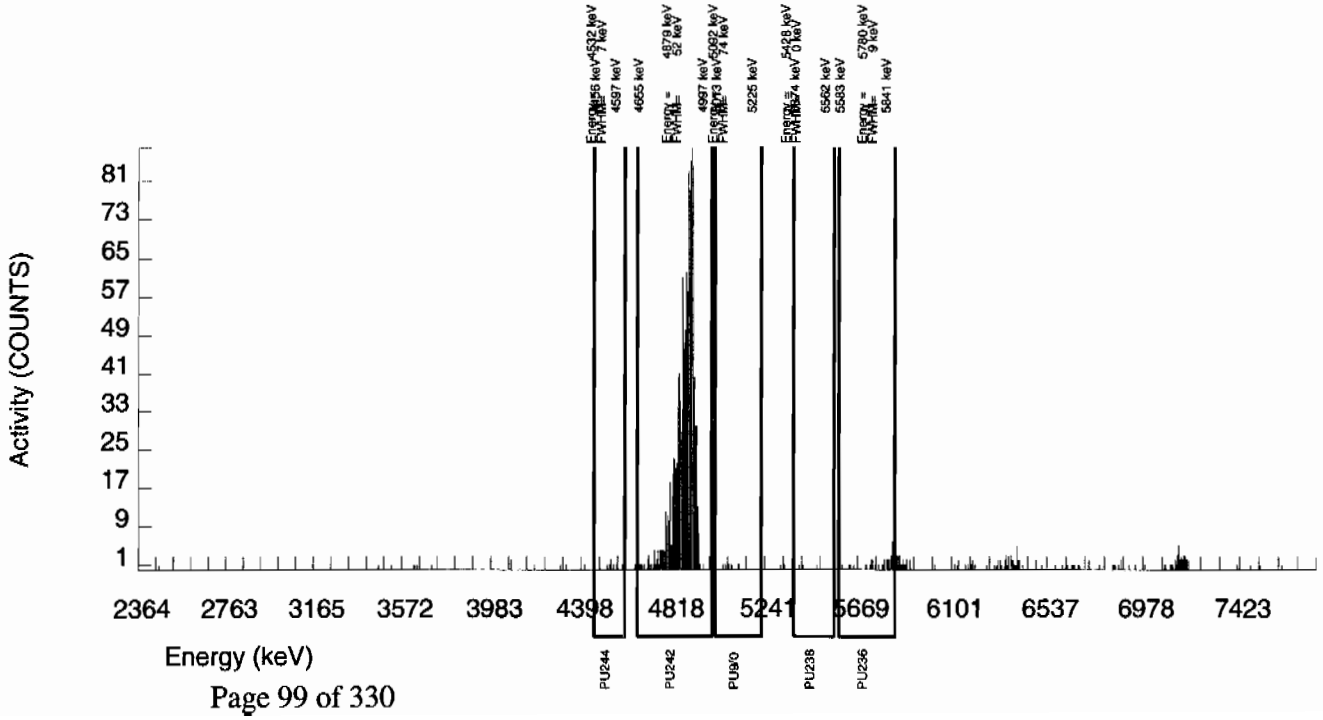

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546014_PU SAMPLE QTY: 1.258 G
DETECTOR NUMBER :42483 AVERAGE %EFFICIENCY :31.1977 % YIELD : 87.865	COUNT DATE:10-DEC-2009 10:31:25 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B048.CNF;1090
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 9-DEC-2009
		RESULTS : 3.70861 dpm	EFF FILE : W048.CNF;312
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	9.000	6.000	3.000	3.3488	99.90000	7.85E-03	4.55E-03	1.02E-02	2.39E-02	4.53E-03
PU-236	5749.000	51.000	9.000	42.000	2.0294	100.0000	1.19E-02	1.28E-02	6.17E-03	1.59E-02	1.28E-02
PU-238	5499.000	7.000	-4.000	11.000	2.9082	99.90000	-5.23E-03	5.55E-03	8.85E-03	2.12E-02	5.55E-03
PU242	4890.000	1164.000	1157.000	7.000	2.6458	100.0000	1.51E+00	8.73E-02	8.04E-03	1.96E-02	4.47E-02
PU-244	4589.000	4.000	0.000	4.000	6.8218	99.90000	0.00E+00	3.70E-03	2.08E-02	4.50E-02	3.70E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

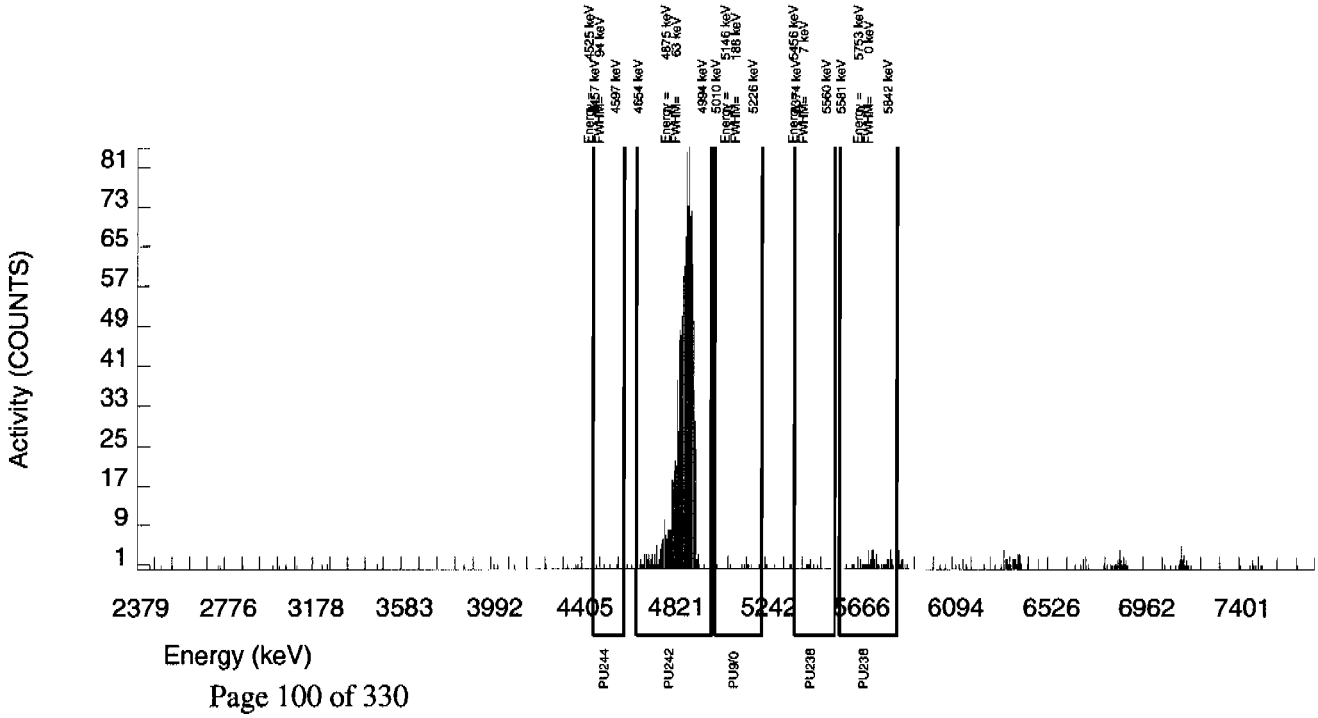

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546015_PU SAMPLE QTY: 1.251 G
DETECTOR NUMBER :68551 AVERAGE %EFFICIENCY :30.6638 % YIELD : 90.321	COUNT DATE:10-DEC-2009 12:38:55 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.81230 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B065.CNF;1922 BKG DATE : 6-DEC-2009 EFF FILE : W065.CNF;303 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	6.000	1.000	5.000	3.3488	99.90000	1.30E-03	4.32E-03	1.01E-02	2.38E-02	4.32E-03
PU-236	5749.000	18.000	9.000	9.000	2.0294	100.0000	1.19E-02	6.88E-03	6.14E-03	1.58E-02	6.86E-03
PU-238	5499.000	15.000	10.000	5.000	2.9082	99.90000	1.30E-02	5.86E-03	8.80E-03	2.11E-02	5.82E-03
PU242	4890.000	1178.000	1169.000	9.000	3.0000	100.0000	1.52E+00	8.76E-02	9.07E-03	2.17E-02	4.48E-02
PU-244	4589.000	4.000	3.000	1.000	6.8218	99.90000	3.90E-03	2.92E-03	2.07E-02	4.48E-02	2.91E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

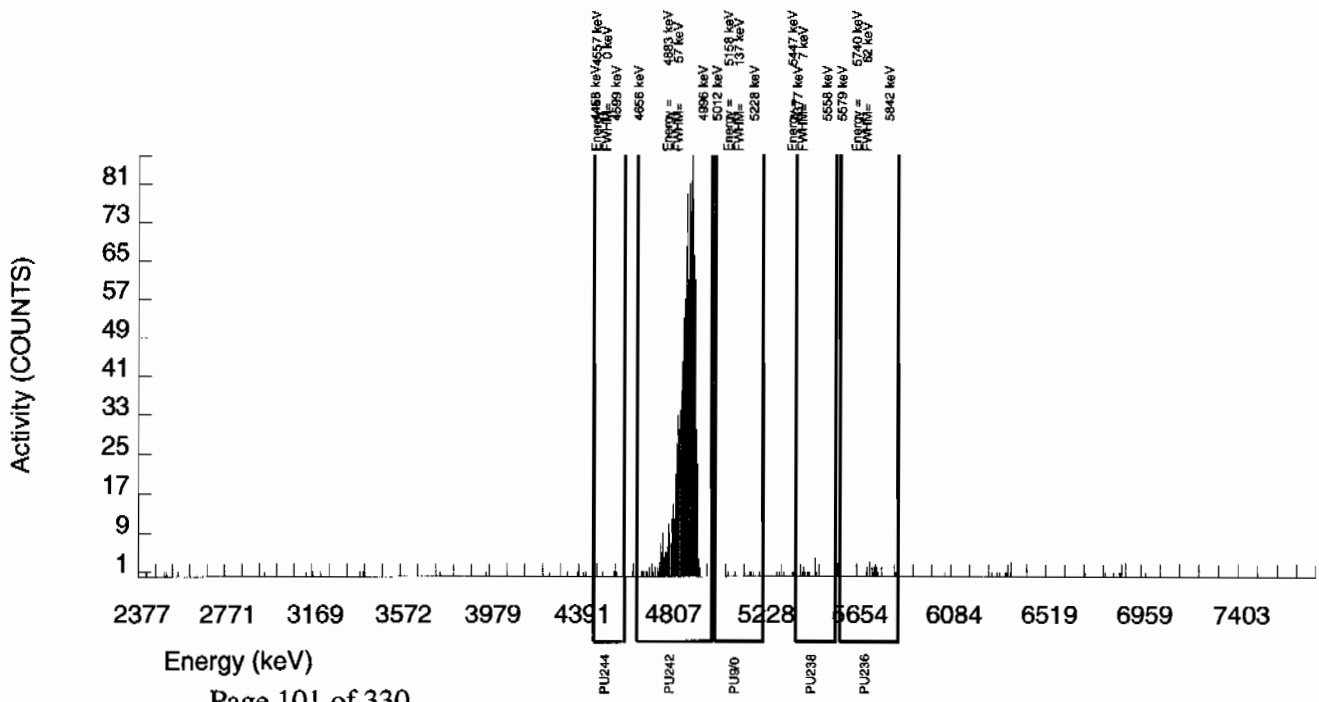

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546016_PU SAMPLE QTY: 1.254 G
DETECTOR NUMBER :46-089C1 AVERAGE %EFFICIENCY :31.4811 % YIELD : 86.923	COUNT DATE:10-DEC-2009 12:38:55 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B066.CNF;1083
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 3.66887 dpm	EFF FILE : W066.CNF;304
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	13.000	9.000	4.000	3.3488	99.90000	1.18E-02	5.45E-03	1.02E-02	2.40E-02	5.42E-03
PU-236	5749.000	8.000	-1.000	9.000	2.0294	100.0000	-1.33E-03	5.50E-03	6.20E-03	1.60E-02	5.50E-03
PU-238	5499.000	19.000	1.000	18.000	2.9082	99.90000	1.31E-03	8.00E-03	8.89E-03	2.13E-02	8.00E-03
PU242	4890.000	1162.000	1155.000	7.000	2.6458	100.0000	1.52E+00	8.75E-02	8.08E-03	1.97E-02	4.49E-02
PU-244	4589.000	4.000	3.000	1.000	6.8218	99.90000	3.94E-03	2.94E-03	2.09E-02	4.53E-02	2.94E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

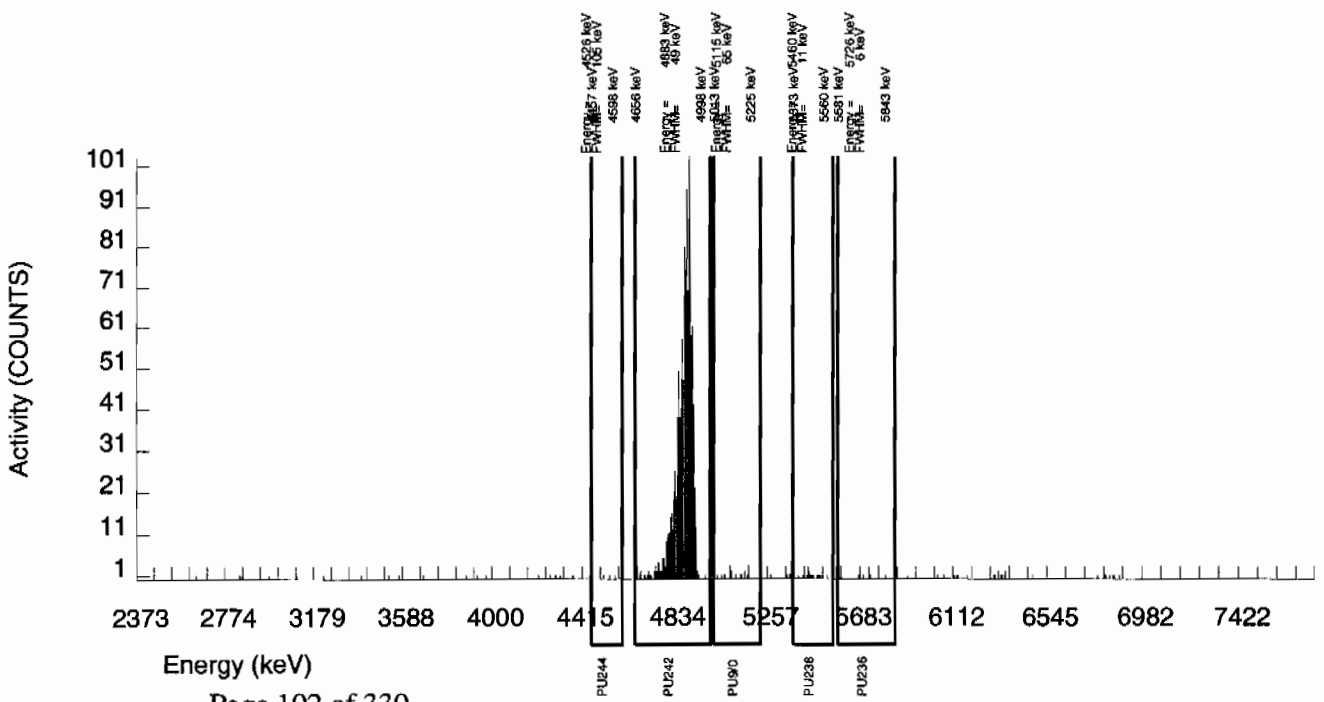

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308
SAMPLE DATE : 7-DEC-2009 00:00:00.

SAMPLE ID : S1201984994_PU
SAMPLE QTY: 1.000 G

DETECTOR NUMBER :46-089B4
AVERAGE %EFFICIENCY :32.0760
% YIELD : 76.521

COUNT DATE:10-DEC-2009 12:38:55
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B067.CNF;1081
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 3.22982 dpm	EFF FILE : W067.CNF;285
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2.000	-3.000	5.000	3.3488	99.90000	-5.51E-03	4.86E-03	1.43E-02	3.36E-02	4.86E-03
PU-236	5749.000	5.000	-5.000	10.000	2.0294	100.0000	-9.20E-03	7.13E-03	8.66E-03	2.23E-02	7.13E-03
PU-238	5499.000	4.000	-4.000	8.000	2.9082	99.90000	-7.35E-03	6.36E-03	1.24E-02	2.98E-02	6.36E-03
PU242	4890.000	1049.000	1036.000	13.000	3.6056	100.0000	1.90E+00	1.13E-01	1.54E-02	3.58E-02	5.98E-02
PU-244	4589.000	4.000	0.000	4.000	6.8218	99.90000	0.00E+00	5.20E-03	2.92E-02	6.33E-02	5.20E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

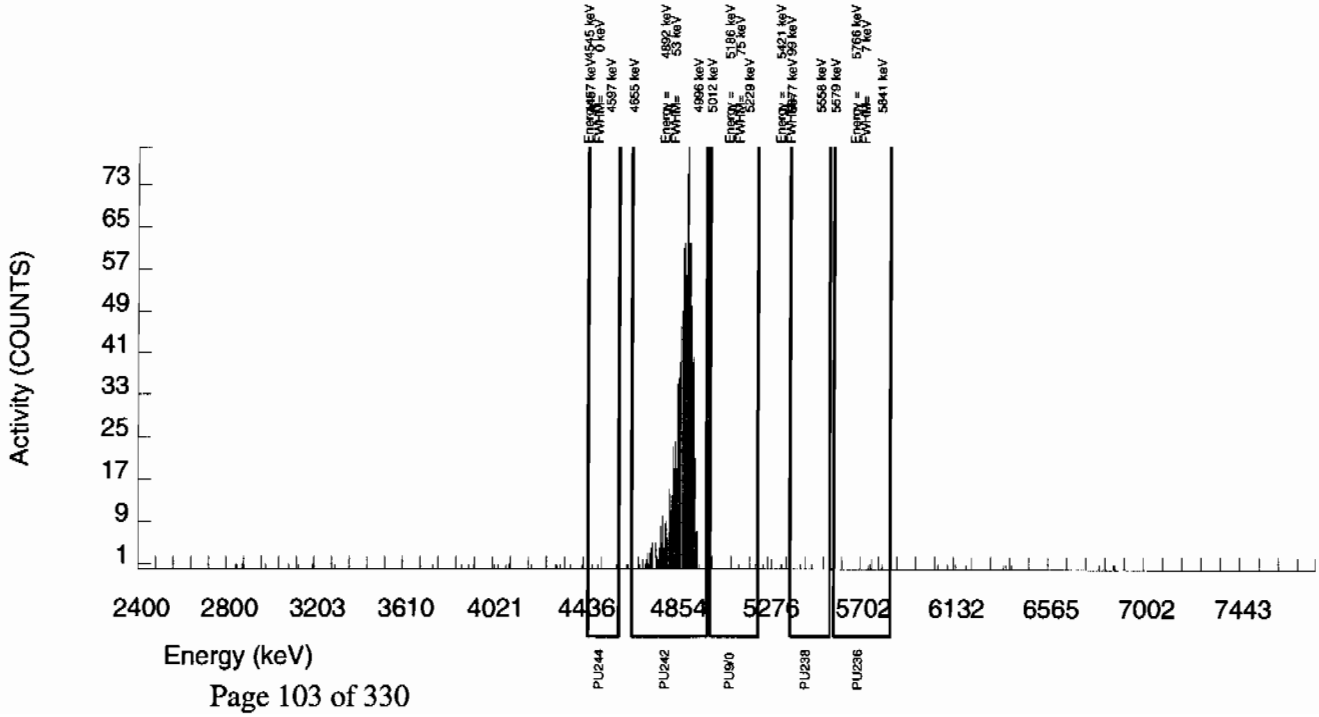

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S1201984995_PU SAMPLE QTY: 1.256 G
DETECTOR NUMBER :78794 AVERAGE %EFFICIENCY :29.8179 % YIELD : 86.368	COUNT DATE:10-DEC-2009 12:38:55 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.64546 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B068.CNF;1074 BKG DATE : 6-DEC-2009 EFF FILE : W068.CNF;276 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	14.000	14.000	0.000	3.3488	99.90000	1.95E-02	5.31E-03	1.09E-02	2.55E-02	5.22E-03
PU-236	5749.000	1.000	-3.000	4.000	2.0294	100.0000	-4.24E-03	3.16E-03	6.57E-03	1.69E-02	3.16E-03
PU-238	5499.000	4.000	0.000	4.000	2.9082	99.90000	0.00E+00	3.95E-03	9.43E-03	2.26E-02	3.94E-03
PU242	4890.000	1095.000	1087.000	8.000	2.8284	100.0000	1.51E+00	8.89E-02	9.16E-03	2.21E-02	4.63E-02
PU-244	4589.000	2.000	0.000	2.000	6.8218	99.90000	0.00E+00	2.79E-03	2.21E-02	4.80E-02	2.79E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

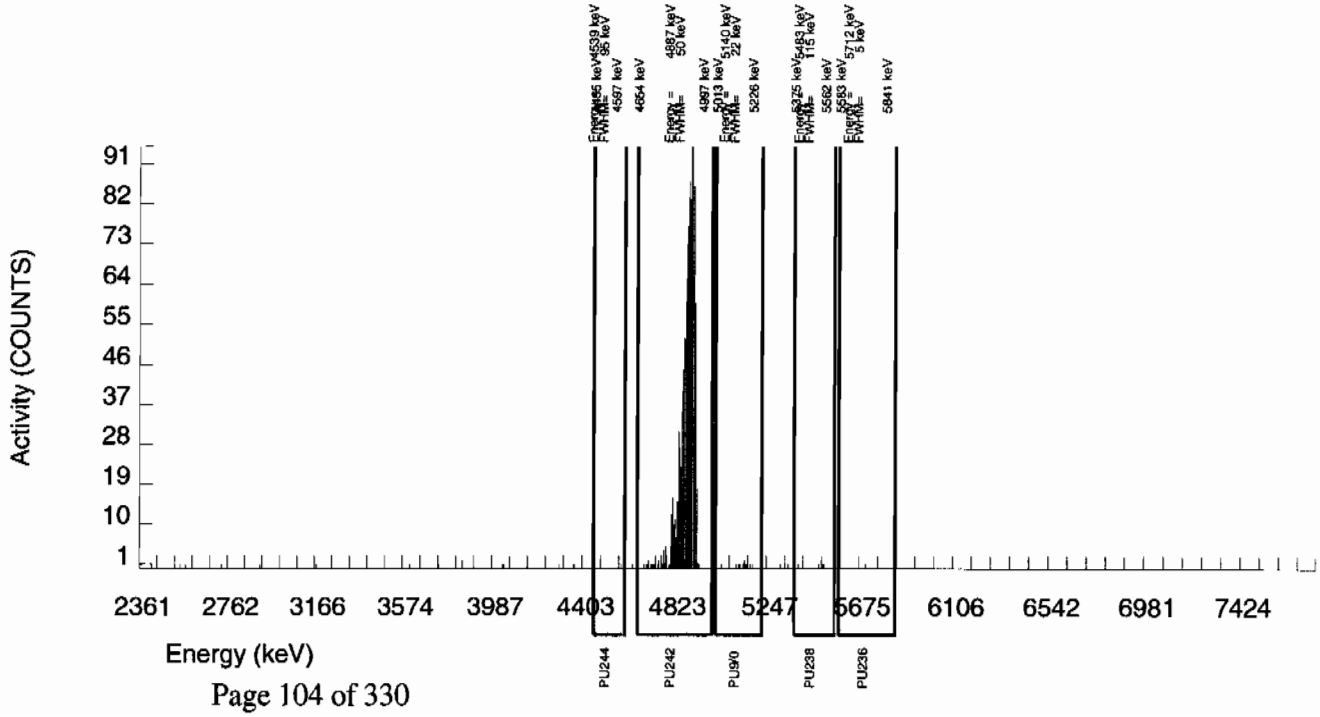

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928308 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201984996_PU SAMPLE QTY: 0.108 G
DETECTOR NUMBER :78795 AVERAGE %EFFICIENCY :32.0575 % YIELD : 84.252	COUNT DATE:10-DEC-2009 12:38:55 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.55611 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B069.CNF;1076 BKG DATE : 6-DEC-2009 EFF FILE : W069.CNF;283 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2587.000	2586.000	1.000	3.3488	99.90000	4.00E+01	2.45E+00	1.20E-01	2.83E-01	7.86E-01
PU-236	5749.000	4.000	1.000	3.000	2.0294	100.0000	1.55E-02	4.10E-02	7.29E-02	1.88E-01	4.10E-02
PU-238	5499.000	492.000	490.000	2.000	2.9082	99.90000	7.57E+00	5.57E-01	1.05E-01	2.51E-01	3.44E-01
PU242	4890.000	1151.000	1140.000	11.000	3.3166	100.0000	1.76E+01	1.15E+00	1.19E-01	2.80E-01	5.26E-01
PU-244	4589.000	8.000	7.000	1.000	6.8218	99.90000	1.08E-01	4.68E-02	2.45E-01	5.33E-01	4.64E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

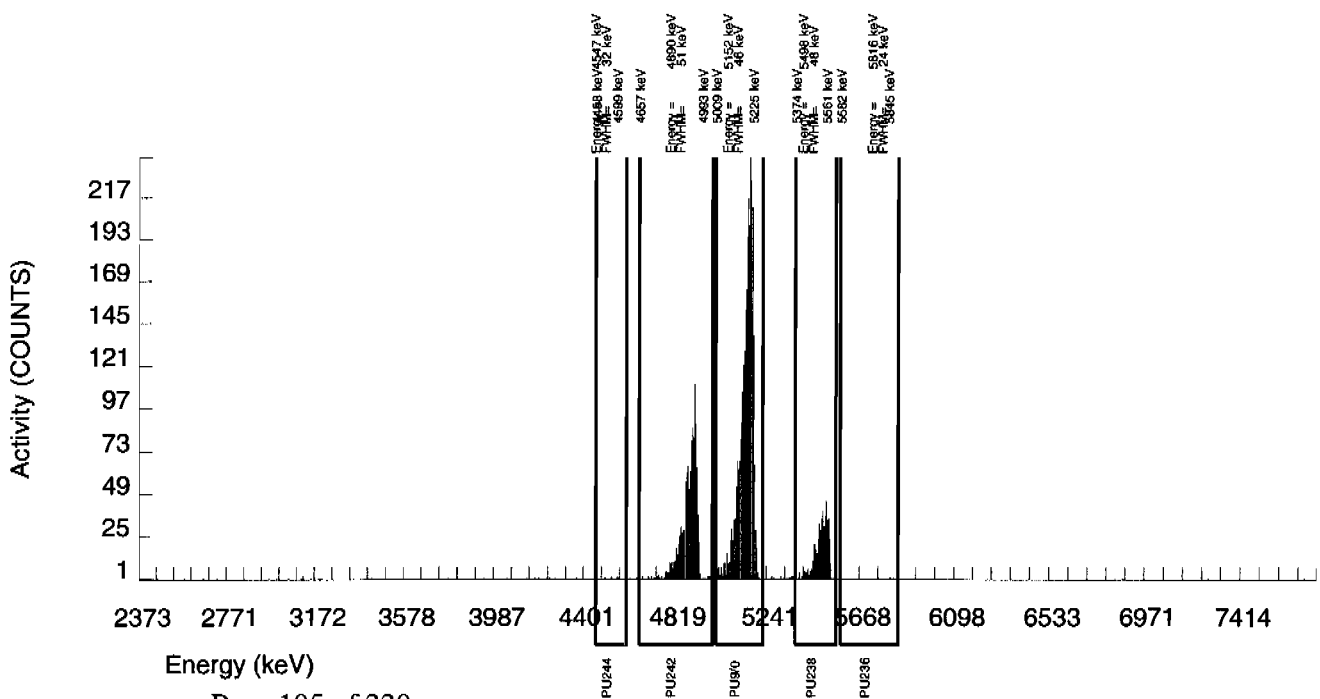

Radiochemistry Batch Checklist, Rev 9

Batch# 928309 Product: U Date: 12/10/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: JapLM-T — 12/10/09

Secondary Review Performed By: E. [illegible] 12/10/09

12/7 12/18

Uranium Que Sheet

02-DEC-09 ✓ P

Batch #: 928309 Analyst: HAKB First Client Due Date: 18-DEC-09 Internal Due Date: 07-DEC-09

Tracer Isotope: U-232/U-236 Tracer Code: 1283-E Expiration Date: 1/15/10 Vol: 0.1

LCS Isotope: U-238 LCS Code: SRM 0244-A Expiration Date: 10/31/20 Vol: 0.1019

Spike Isotope: U-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/7/09 Initials: HAKB Pipet ID: 4497063 Balance ID: 19350208 Witness: HAKB 12/7/09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/l)	U Det #
241546001-1	RE03-09-13875	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	1	1	0.505	161
241546002-1	RE03-09-13865	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	2	2	0.501	163
241546003-1	RE03-09-13868	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	3	3	0.502	165
241546004-1	RE03-09-13867	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	4	4	0.510	167
241546005-1	RE03-09-13864	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	5	5	0.505	169
241546006-1	RE03-09-13871	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	6	6	0.508	171
241546007-1	RE03-09-13877	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	7	7	0.503	162
241546008-1	RE03-09-13869	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	8	8	0.510	164
241546009-1	RE03-09-13870	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	9	9	0.503	166
241546010-1	RE03-09-13873	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	10	10	0.514	168
241546011-1	RE03-09-13863	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	11	11	~~0.506~~ HAKB 12/4/09	170 0.503
241546012-1	RE03-09-13874	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	12	12	~~0.517~~ HAKB 12/4/09	172 0.506
241546013-1	RE03-09-13866	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	13	13	0.517	153
241546014-1	RE03-09-13862	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	14	14	0.508	154
241546015-1	RE03-09-13876	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	15	15	0.503	155
241546016-1	RE03-09-13872	SAMPLE		.1 pCi/g	SOIL	LANL010	18-NOV-09	16	16	0.504	156
1201984997-1	MB for batch 928309	MB		.1 pCi/g	SOIL	QC ACCOUNT		17	17	1.0	157
1201984998-1	RE03-09-13872(241546016DUP)	DUP		.1 pCi/g	SOIL	QC ACCOUNT	18-NOV-09	18	18	0.503	158
1201984999-1	LCS for batch 928309	LCS * SRM 0244-A		.1 pCi/g	SOIL	QC ACCOUNT		19	19	0.101	159

Choose SOP used: GL-RAD-A-011
GL-RAD-A-038
GL-RAD-A-045
GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: [signature] 12/10/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 928309

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201984998	DUP	Uranium-233/234	0.503 g	0.946	0.0919	0.124	-.01870775	pCi/g	NO
		Uranium-235/236	0.503 g	0.0605	0.0193	0.0753	-.00431412	pCi/g	NO
		Uranium-238	0.503 g	1.02	0.0969	0.0684	-.02445328	pCi/g	NO
1201984999	LCS	Uranium-233/234	0.101 g	6.63	0.614	0.538	-.09316832	pCi/g	NO
		Uranium-235/236	0.101 g	0.197	0.0968	0.327	-.02148515	pCi/g	NO
		Uranium-238	0.101 g	5.96	0.561	0.297	-.12178218	pCi/g	NO
1201984997	MB	Uranium-233/234	1.00 g	-0.00941	0.0043	0.0533	-.00941	pCi/g	NO
		Uranium-235/236	1.00 g	-0.00217	0.00575	0.0324	-.00217	pCi/g	NO
		Uranium-238	1.00 g	-0.0123	0.0068	0.0294	-.0123	pCi/g	NO
241546001	RE03-09-13875	Uranium-233/234	0.505 g	0.926	0.0791	0.0739	-.01863366	pCi/g	NO
		Uranium-235/236	0.505 g	0.0331	0.0102	0.0449	-.00429703	pCi/g	NO
		Uranium-238	0.505 g	0.836	0.0727	0.0408	-.02435644	pCi/g	NO
241546002	RE03-09-13865	Uranium-233/234	0.501 g	0.825	0.072	0.0727	-.01878244	pCi/g	NO
		Uranium-235/236	0.501 g	0.0711	0.0164	0.0442	-.00433134	pCi/g	NO
		Uranium-238	0.501 g	0.817	0.0713	0.0402	-.02455090	pCi/g	NO
241546003	RE03-09-13868	Uranium-233/234	0.502 g	1.06	0.0883	0.0732	-.01874502	pCi/g	NO
		Uranium-235/236	0.502 g	0.0865	0.0176	0.0445	-.00432271	pCi/g	NO
		Uranium-238	0.502 g	1.28	0.103	0.0404	-.02450199	pCi/g	NO
241546004	RE03-09-13867	Uranium-233/234	0.510 g	0.729	0.0671	0.0818	-.01845098	pCi/g	NO
		Uranium-235/236	0.510 g	0.030	0.0139	0.0497	-.00425490	pCi/g	NO
		Uranium-238	0.510 g	0.817	0.0732	0.0452	-.02411765	pCi/g	NO
241546005	RE03-09-13864	Uranium-233/234	0.505 g	0.704	0.067	0.0861	-.01863366	pCi/g	NO
		Uranium-235/236	0.505 g	0.0386	0.0155	0.0523	-.00429703	pCi/g	NO
		Uranium-238	0.505 g	0.766	0.0709	0.0475	-.02435644	pCi/g	NO
241546006	RE03-09-13871	Uranium-233/234	0.508 g	1.46	0.115	0.0701	-.01852362	pCi/g	NO
		Uranium-235/236	0.508 g	0.0514	0.016	0.0426	-.00427165	pCi/g	NO
		Uranium-238	0.508 g	1.29	0.104	0.0387	-.02421260	pCi/g	NO
241546007	RE03-09-13877	Uranium-233/234	0.503 g	1.05	0.0894	0.0835	-.01870775	pCi/g	NO
		Uranium-235/236	0.503 g	0.0272	0.0119	0.0507	-.00431412	pCi/g	NO
		Uranium-238	0.503 g	0.949	0.0826	0.0461	-.02445328	pCi/g	NO
241546008	RE03-09-13869	Uranium-233/234	0.510 g	0.829	0.0737	0.0765	-.01845098	pCi/g	NO
		Uranium-235/236	0.510 g	0.0374	0.0142	0.0465	-.00425490	pCi/g	NO
		Uranium-238	0.510 g	0.842	0.0744	0.0422	-.02411765	pCi/g	NO
241546009	RE03-09-13870	Uranium-233/234	0.503 g	2.57	0.193	0.0797	-.01870775	pCi/g	NO
		Uranium-235/236	0.503 g	0.195	0.0288	0.0484	-.00431412	pCi/g	NO
		Uranium-238	0.503 g	2.36	0.178	0.044	-.02445328	pCi/g	NO
241546010	RE03-09-13873	Uranium-233/234	0.514 g	1.05	0.092	0.0907	-.01830739	pCi/g	NO
		Uranium-235/236	0.514 g	0.048	0.0156	0.0551	-.00422179	pCi/g	NO
		Uranium-238	0.514 g	1.02	0.0899	0.0501	-.02392996	pCi/g	NO
241546011	RE03-09-13863	Uranium-233/234	0.503 g	0.625	0.058	0.0714	-.01870775	pCi/g	NO
		Uranium-235/236	0.503 g	0.0349	0.0111	0.0434	-.00431412	pCi/g	NO

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241546011	RE03-09-13863	Uranium-238	0.503 g	0.609	0.0566	0.0394	-.02445328	pCi/g	NO
241546012	RE03-09-13874	Uranium-233/234	0.506 g	0.957	0.0821	0.076	-.01859684	pCi/g	NO
		Uranium-235/236	0.506 g	0.0434	0.0127	0.0462	-.00428854	pCi/g	NO
		Uranium-238	0.506 g	1.05	0.0878	0.042	-.02430830	pCi/g	NO
241546013	RE03-09-13866	Uranium-233/234	0.517 g	0.631	0.0658	0.112	-.01820116	pCi/g	NO
		Uranium-235/236	0.517 g	0.073	0.020	0.0681	-.00419729	pCi/g	NO
		Uranium-238	0.517 g	0.646	0.0678	0.0619	-.02379110	pCi/g	NO
241546014	RE03-09-13862	Uranium-233/234	0.508 g	0.788	0.0873	0.155	-.01852362	pCi/g	NO
		Uranium-235/236	0.508 g	0.0695	0.0216	0.0944	-.00427165	pCi/g	NO
		Uranium-238	0.508 g	0.798	0.0868	0.0857	-.02421260	pCi/g	NO
241546015	RE03-09-13876	Uranium-233/234	0.503 g	0.985	0.0925	0.112	-.01870775	pCi/g	NO
		Uranium-235/236	0.503 g	0.0183	0.0159	0.0681	-.00431412	pCi/g	NO
		Uranium-238	0.503 g	1.05	0.0965	0.0619	-.02445328	pCi/g	NO
241546016	RE03-09-13872	Uranium-233/234	0.504 g	1.07	0.0985	0.112	-.01867063	pCi/g	NO
		Uranium-235/236	0.504 g	0.082	0.0212	0.068	-.00430556	pCi/g	NO
		Uranium-238	0.504 g	1.06	0.0974	0.0618	-.02440476	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546001_UU SAMPLE QTY: 0.505 G
DETECTOR NUMBER :SAMPLE AVERAGE %EFFICIENCY :36.7291 % YIELD : 99.695	COUNT DATE: 9-DEC-2009 08:44:49 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 5.23059 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B161.CNF;148 BKG DATE : 6-DEC-2009 EFF FILE : W161.CNF;51 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	388.000	380.061	6.000	5.9398	100.0000	9.26E-01	7.91E-02	3.37E-02	7.39E-02	4.82E-02
U232	5302.100	1937.000	1920.000	17.000	4.1231	100.0000	4.68E+00	3.35E-01	2.34E-02	5.33E-02	1.08E-01
U-235	4391.000	11.000	11.000	0.000	2.6249	80.90000	3.31E-02	1.02E-02	1.84E-02	4.49E-02	9.99E-03
U-238	4184.730	347.000	343.000	4.000	3.0201	100.0000	8.36E-01	7.27E-02	1.71E-02	4.08E-02	4.56E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

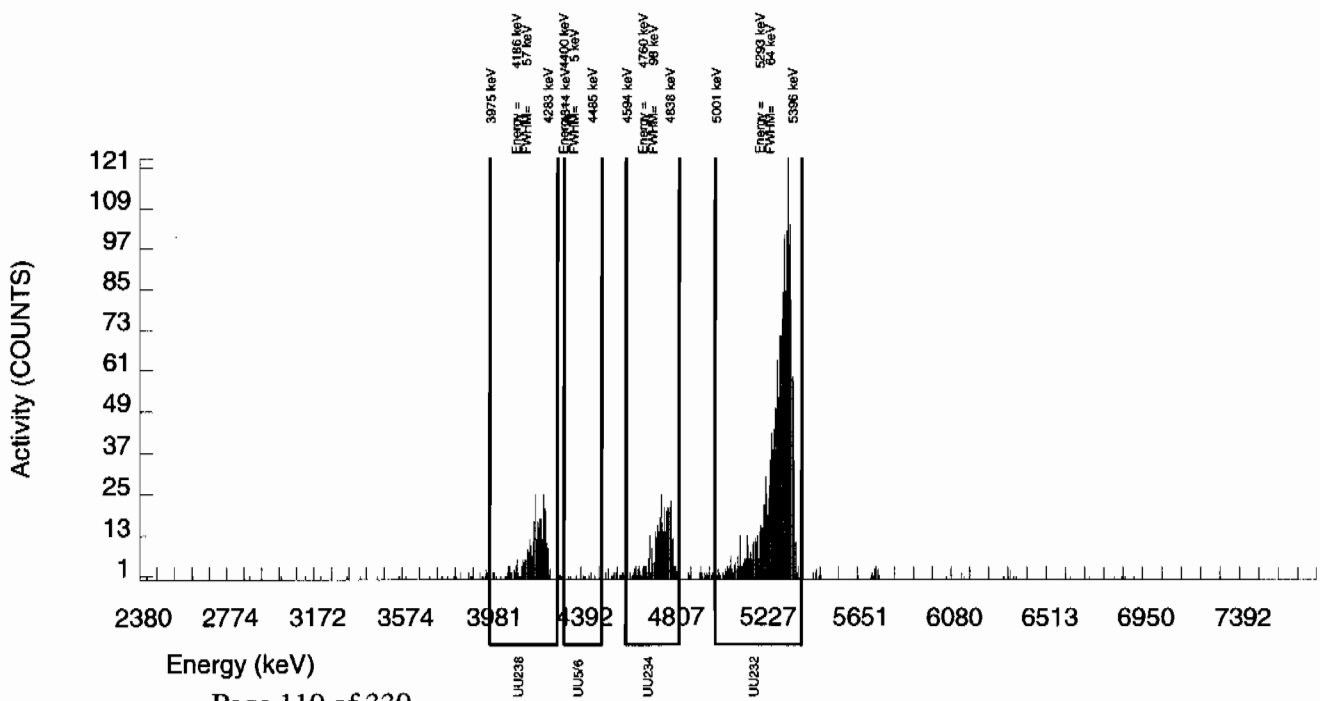

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546002_UU SAMPLE QTY: 0.501 G
DETECTOR NUMBER :70324 AVERAGE %EFFICIENCY :37.7975 % YIELD : 99.248	COUNT DATE: 9-DEC-2009 08:44:55 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 5.20716 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B163.CNF;151 BKG DATE : 6-DEC-2009 EFF FILE : W163.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	355.000	344.013	9.000	5.9398	100.0000	8.25E-01	7.20E-02	3.31E-02	7.27E-02	4.56E-02
U232	5302.100	2000.000	1967.000	33.000	5.7446	100.0000	4.72E+00	3.37E-01	3.20E-02	7.06E-02	1.08E-01
U-235	4391.000	26.000	24.000	2.000	2.6249	80.90000	7.11E-02	1.64E-02	1.81E-02	4.42E-02	1.57E-02
U-238	4184.730	347.000	341.000	6.000	3.0201	100.0000	8.17E-01	7.13E-02	1.68E-02	4.02E-02	4.50E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

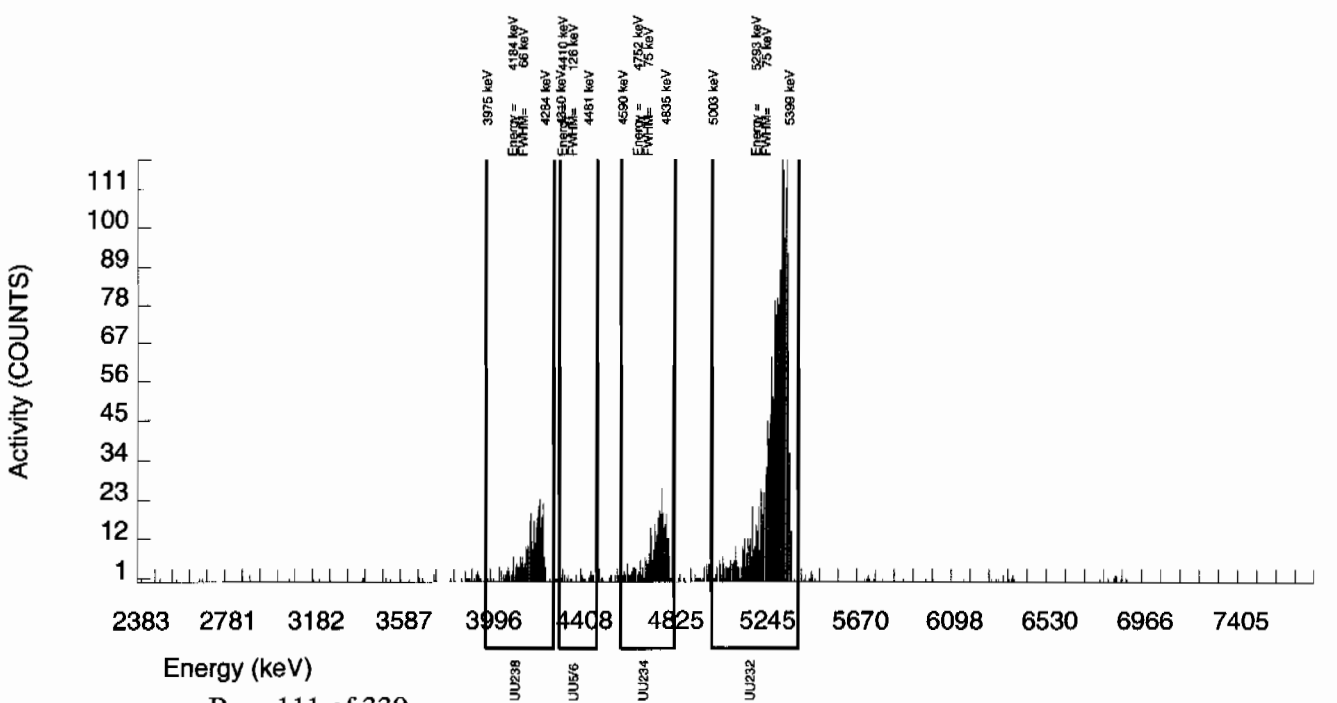

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546003_UU
SAMPLE QTY: 0.502 G

DETECTOR NUMBER :72544
AVERAGE %EFFICIENCY :38.0700
% YIELD : 97.686

COUNT DATE: 9-DEC-2009 08:45:00
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B165.CNF;148
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 5.12520 dpm	EFF FILE : W165.CNF;48
			CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	448.000	441.030	5.000	5.9398	100.0000	1.06E+00	8.83E-02	3.33E-02	7.32E-02	5.12E-02
U232	5302.100	1957.000	1950.000	7.000	2.6458	100.0000	4.71E+00	3.36E-01	1.49E-02	3.62E-02	1.07E-01
U-235	4391.000	30.000	29.000	1.000	2.6249	80.90000	8.65E-02	1.76E-02	1.82E-02	4.45E-02	1.66E-02
U-238	4184.730	531.000	531.000	0.000	3.0201	100.0000	1.28E+00	1.03E-01	1.70E-02	4.04E-02	5.56E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

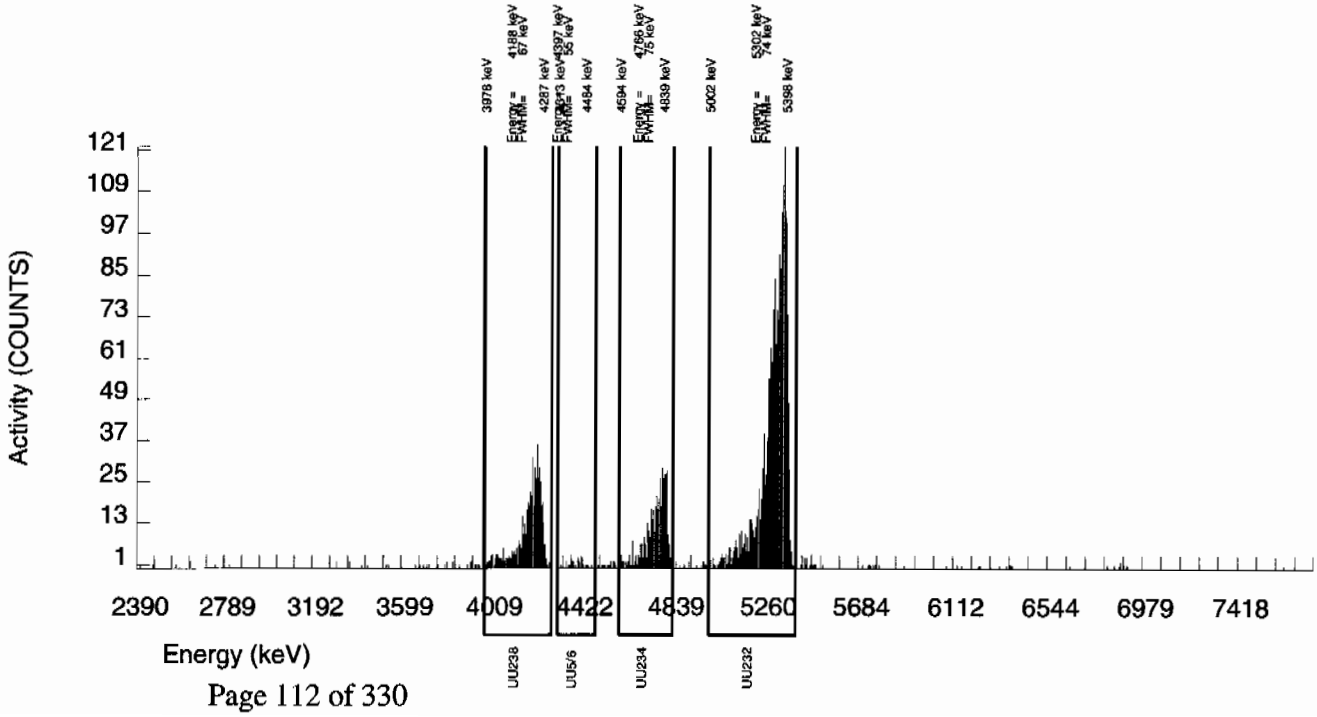

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546004_UU SAMPLE QTY: 0.510 G
DETECTOR NUMBER :72546 AVERAGE %EFFICIENCY :38.8274 % YIELD : 84.385	COUNT DATE: 9-DEC-2009 08:45:07 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 4.42737 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B167.CNF;149 BKG DATE : 6-DEC-2009 EFF FILE : W167.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	277.000	270.265	5.000	5.9398	100.0000	7.29E-01	6.71E-02	3.72E-02	8.18E-02	4.51E-02
U232	5302.100	1731.000	1718.000	13.000	3.6056	100.0000	4.63E+00	3.35E-01	2.26E-02	5.25E-02	1.13E-01
U-235	4391.000	13.000	9.000	4.000	2.6249	80.90000	3.00E-02	1.39E-02	2.03E-02	4.97E-02	1.37E-02
U-238	4184.730	307.000	303.000	4.000	3.0201	100.0000	8.17E-01	7.32E-02	1.89E-02	4.52E-02	4.75E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

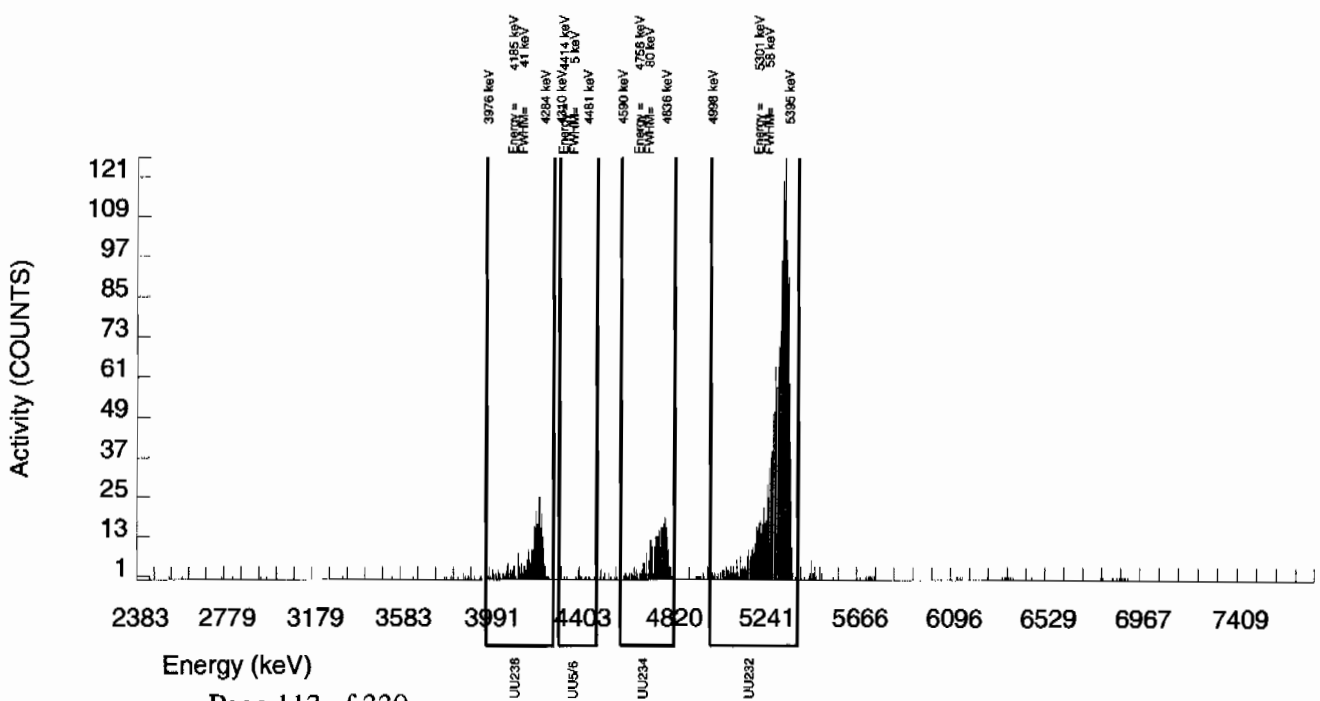

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546005_UU
SAMPLE QTY: 0.505 G

DETECTOR NUMBER :72548
AVERAGE %EFFICIENCY :37.5269
% YIELD : 83.803

COUNT DATE: 9-DEC-2009 08:45:12
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B169.CNF;151
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 4.39681 dpm	EFF FILE : W169.CNF;58
			CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	261.000	248.334	11.000	5.9398	100.0000	7.04E-01	6.70E-02	3.92E-02	8.61E-02	4.66E-02
U232	5302.100	1674.000	1649.000	25.000	5.0000	100.0000	4.68E+00	3.41E-01	3.30E-02	7.37E-02	1.17E-01
U-235	4391.000	15.000	11.000	4.000	2.6249	80.90000	3.86E-02	1.55E-02	2.14E-02	5.23E-02	1.53E-02
U-238	4184.730	277.000	270.000	7.000	3.0201	100.0000	7.66E-01	7.09E-02	1.99E-02	4.75E-02	4.78E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

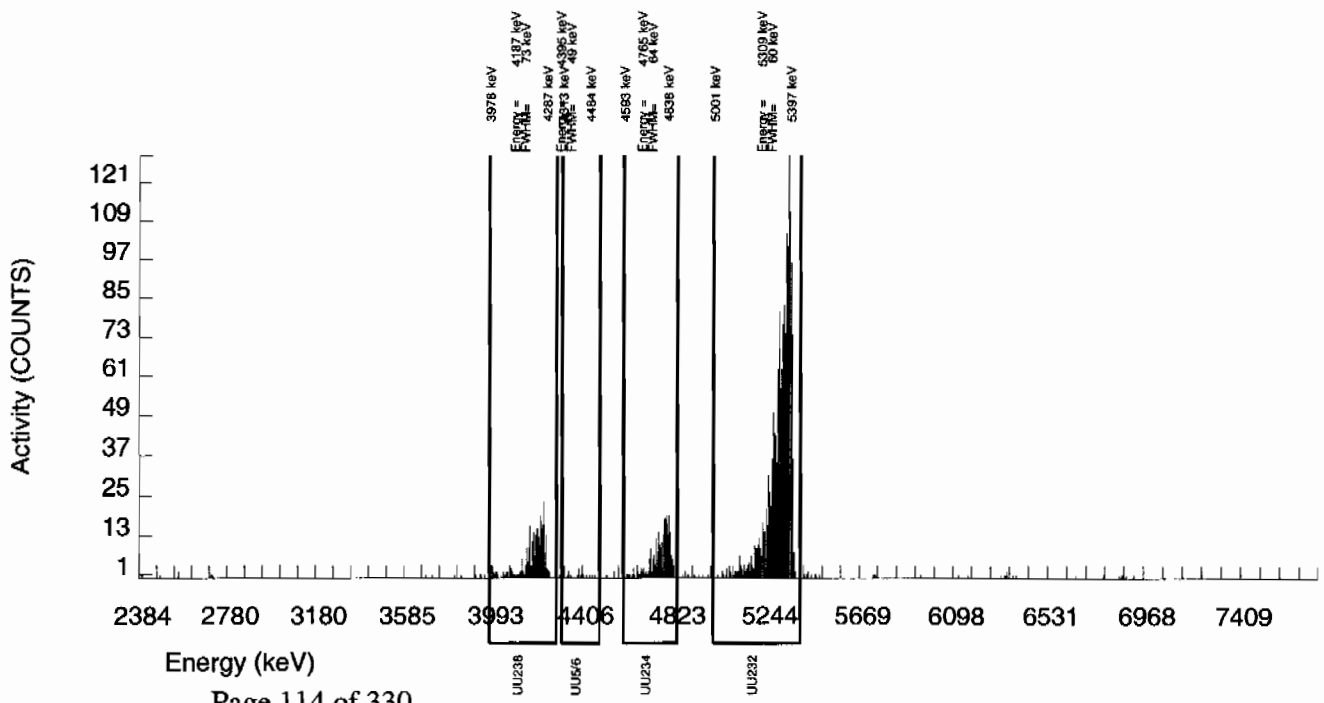

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546006_UU
SAMPLE QTY: 0.508 G

DETECTOR NUMBER :78260
AVERAGE %EFFICIENCY :38.3924
% YIELD : 99.946

COUNT DATE: 9-DEC-2009 08:45:19
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B171.CNF;155
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 5.24376 dpm	EFF FILE : W171.CNF;65
			CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	646.000	632.968	11.000	5.9398	100.0000	1.46E+00	1.15E-01	3.19E-02	7.01E-02	5.91E-02
U232	5302.100	2036.000	2012.000	24.000	4.8990	100.0000	4.65E+00	3.31E-01	2.63E-02	5.89E-02	1.05E-01
U-235	4391.000	24.000	18.000	6.000	2.6249	80.90000	5.14E-02	1.60E-02	1.74E-02	4.26E-02	1.56E-02
U-238	4184.730	585.000	558.000	27.000	3.0201	100.0000	1.29E+00	1.04E-01	1.62E-02	3.87E-02	5.72E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

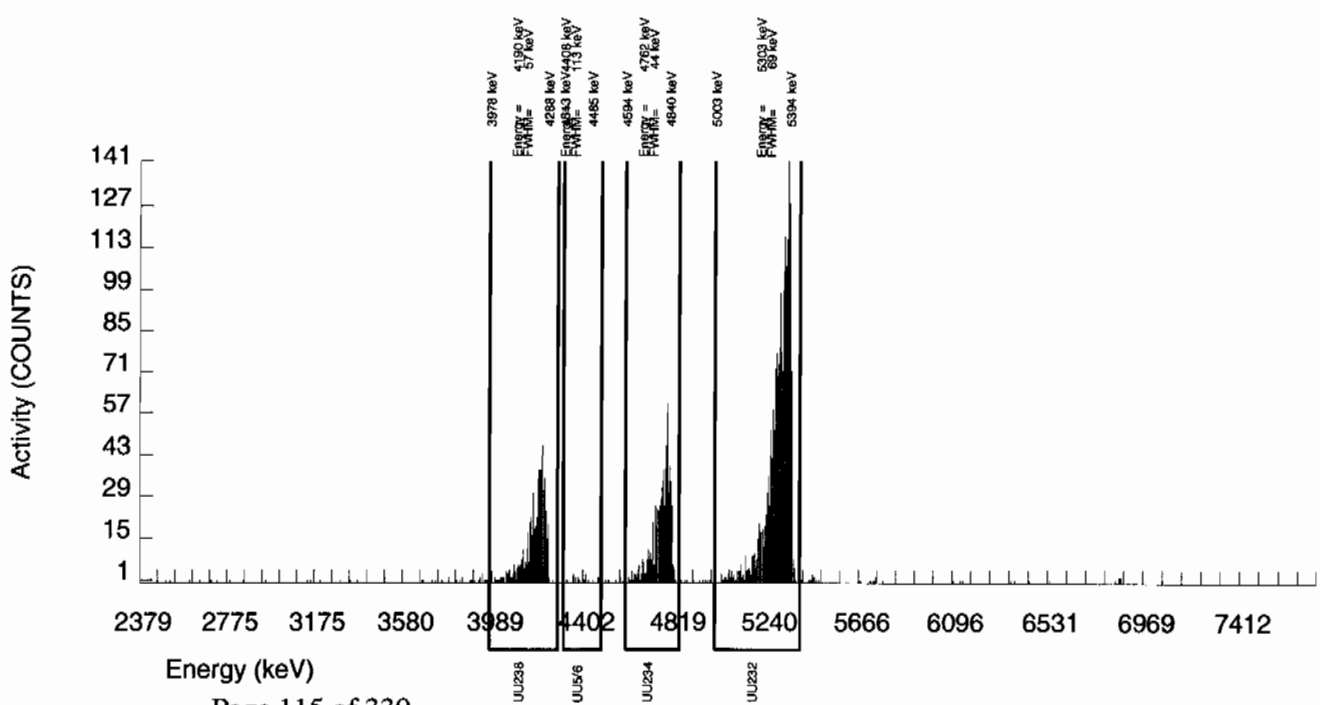

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546007_UU SAMPLE QTY: 0.503 G
DETECTOR NUMBER :70323 AVERAGE %EFFICIENCY :37.2016 % YIELD : 87.509	COUNT DATE: 9-DEC-2009 08:44:52 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 4.59126 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B162.CNF;150 BKG DATE : 6-DEC-2009 EFF FILE : W162.CNF;60 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	385.000	380.276	3.000	5.9398	100.0000	1.05E+00	8.94E-02	3.80E-02	8.35E-02	5.41E-02
U232	5302.100	1717.000	1707.000	10.000	3.1623	100.0000	4.70E+00	3.40E-01	2.02E-02	4.79E-02	1.14E-01
U-235	4391.000	10.000	8.000	2.000	2.6249	80.90000	2.72E-02	1.19E-02	2.08E-02	5.07E-02	1.18E-02
U-238	4184.730	347.000	345.000	2.000	3.0201	100.0000	9.49E-01	8.26E-02	1.93E-02	4.61E-02	5.14E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

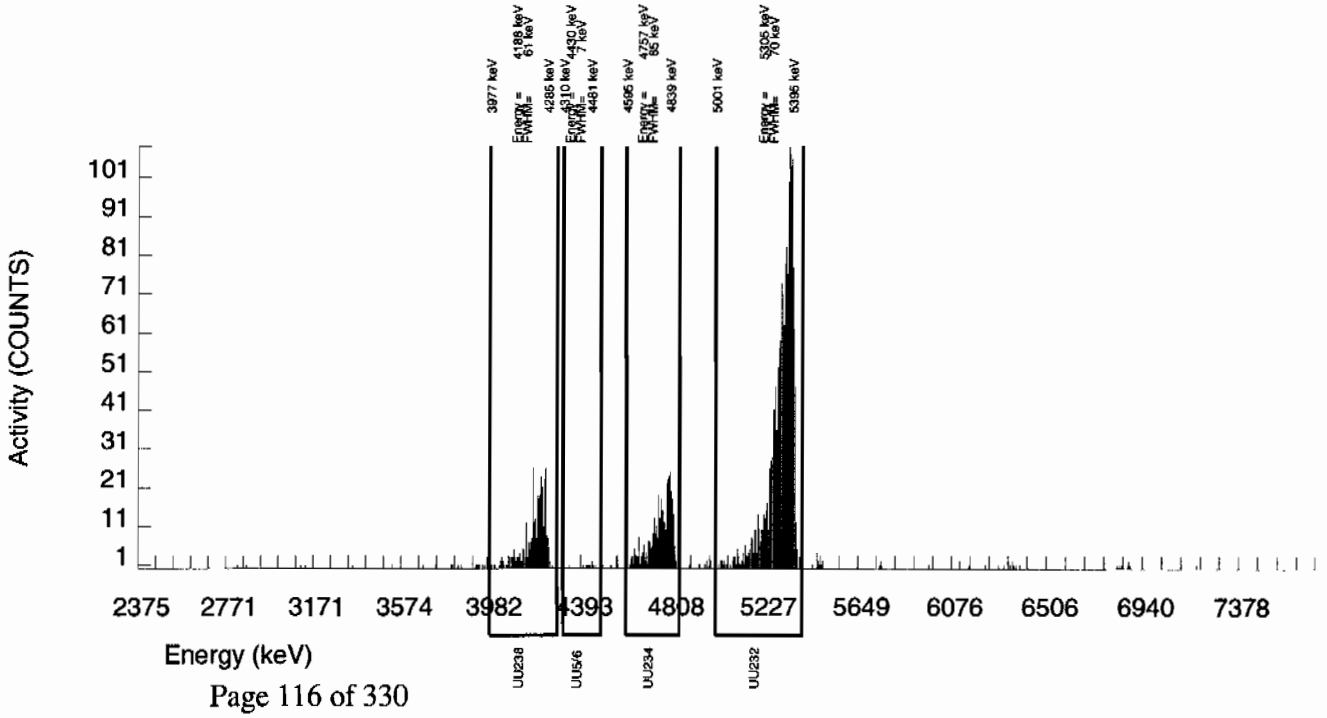

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546008_UU SAMPLE QTY: 0.510 G
DETECTOR NUMBER :70325 AVERAGE %EFFICIENCY :37.7014 % YIELD : 92.976	COUNT DATE: 9-DEC-2009 08:44:58 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 4.87807 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B164.CNF;148 BKG DATE : 6-DEC-2009 EFF FILE : W164.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	345.000	329.143	14.000	5.9398	100.0000	8.29E-01	7.37E-02	3.48E-02	7.65E-02	4.76E-02
U232	5302.100	1867.000	1838.000	29.000	5.3852	100.0000	4.63E+00	3.33E-01	3.16E-02	7.00E-02	1.10E-01
U-235	4391.000	16.000	12.000	4.000	2.6249	80.90000	3.74E-02	1.42E-02	1.90E-02	4.65E-02	1.39E-02
U-238	4184.730	346.000	334.000	12.000	3.0201	100.0000	8.42E-01	7.44E-02	1.77E-02	4.22E-02	4.77E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

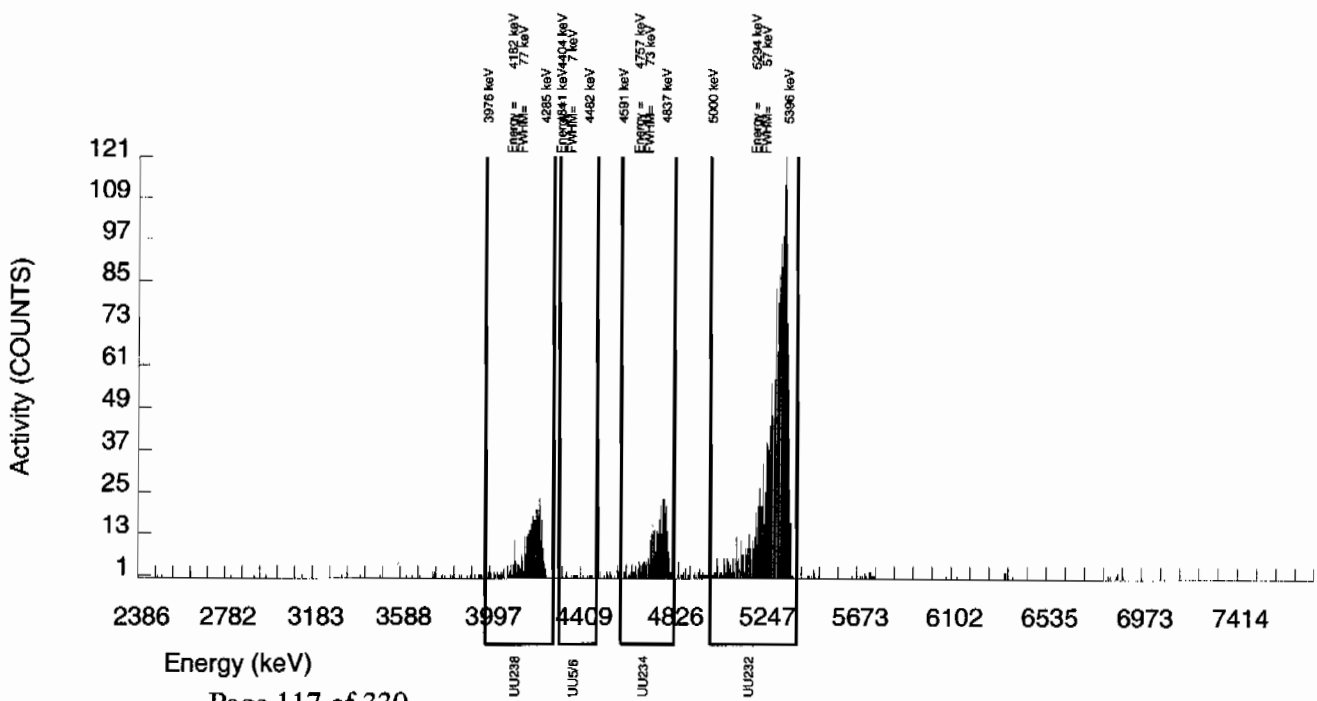

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546009_UU SAMPLE QTY: 0.503 G
DETECTOR NUMBER :74545 AVERAGE %EFFICIENCY :39.3115 % YIELD : 86.742	COUNT DATE: 9-DEC-2009 08:45:04 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 4.55101 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B166.CNF;149 BKG DATE : 6-DEC-2009 EFF FILE : W166.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	983.000	977.194	4.000	5.9398	100.0000	2.57E+00	1.93E-01	3.63E-02	7.97E-02	8.24E-02
U232	5302.100	1799.000	1788.000	11.000	3.3166	100.0000	4.70E+00	3.38E-01	2.03E-02	4.76E-02	1.12E-01
U-235	4391.000	61.000	60.000	1.000	2.6249	80.90000	1.95E-01	2.88E-02	1.98E-02	4.84E-02	2.56E-02
U-238	4184.730	899.000	898.000	1.000	3.0201	100.0000	2.36E+00	1.78E-01	1.85E-02	4.40E-02	7.88E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

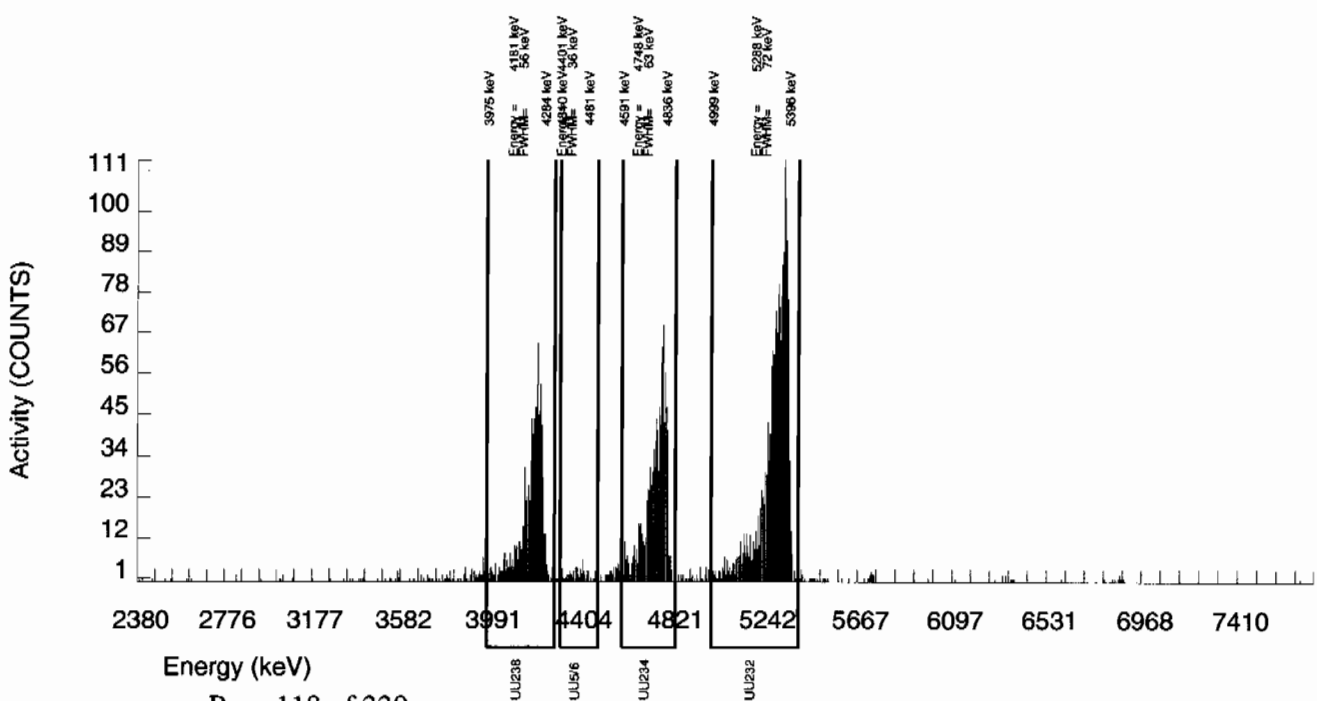

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546010_UU SAMPLE QTY: 0.514 G
DETECTOR NUMBER :72547 AVERAGE %EFFICIENCY :39.0493 % YIELD : 75.066	COUNT DATE: 9-DEC-2009 08:45:10 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 3.93841 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B168.CNF;149 BKG DATE : 6-DEC-2009 EFF FILE : W168.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	360.000	350.447	8.000	5.9398	100.0000	1.05E+00	9.20E-02	4.13E-02	9.07E-02	5.72E-02
U232	5302.100	1569.000	1537.000	32.000	5.6569	100.0000	4.60E+00	3.38E-01	3.93E-02	8.68E-02	1.20E-01
U-235	4391.000	15.000	13.000	2.000	2.6249	80.90000	4.80E-02	1.56E-02	2.26E-02	5.51E-02	1.52E-02
U-238	4184.730	349.000	340.000	9.000	3.0201	100.0000	1.02E+00	8.99E-02	2.10E-02	5.01E-02	5.66E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

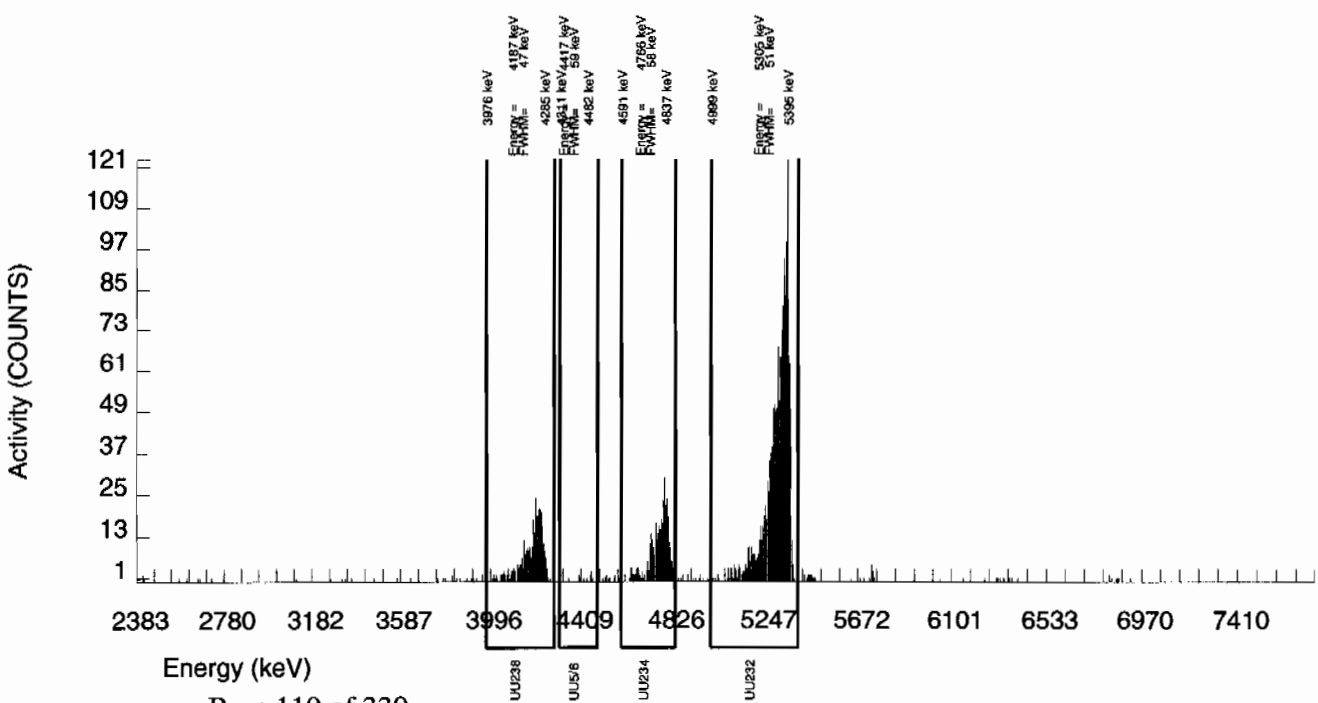

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546011_UU SAMPLE QTY: 0.503 G
DETECTOR NUMBER :72549 AVERAGE %EFFICIENCY :36.8583 % YIELD : 103.330	COUNT DATE: 9-DEC-2009 08:45:15 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 5.42129 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B170.CNF;149 BKG DATE : 6-DEC-2009 EFF FILE : W170.CNF;48 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	278.000	265.983	10.000	5.9398	100.0000	6.25E-01	5.80E-02	3.25E-02	7.14E-02	3.98E-02
U232	5302.100	2013.000	1997.000	16.000	4.0000	100.0000	4.70E+00	3.34E-01	2.19E-02	5.01E-02	1.06E-01
U-235	4391.000	13.000	12.000	1.000	2.6249	80.90000	3.49E-02	1.11E-02	1.77E-02	4.34E-02	1.09E-02
U-238	4184.730	266.000	259.000	7.000	3.0201	100.0000	6.09E-01	5.66E-02	1.65E-02	3.94E-02	3.89E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

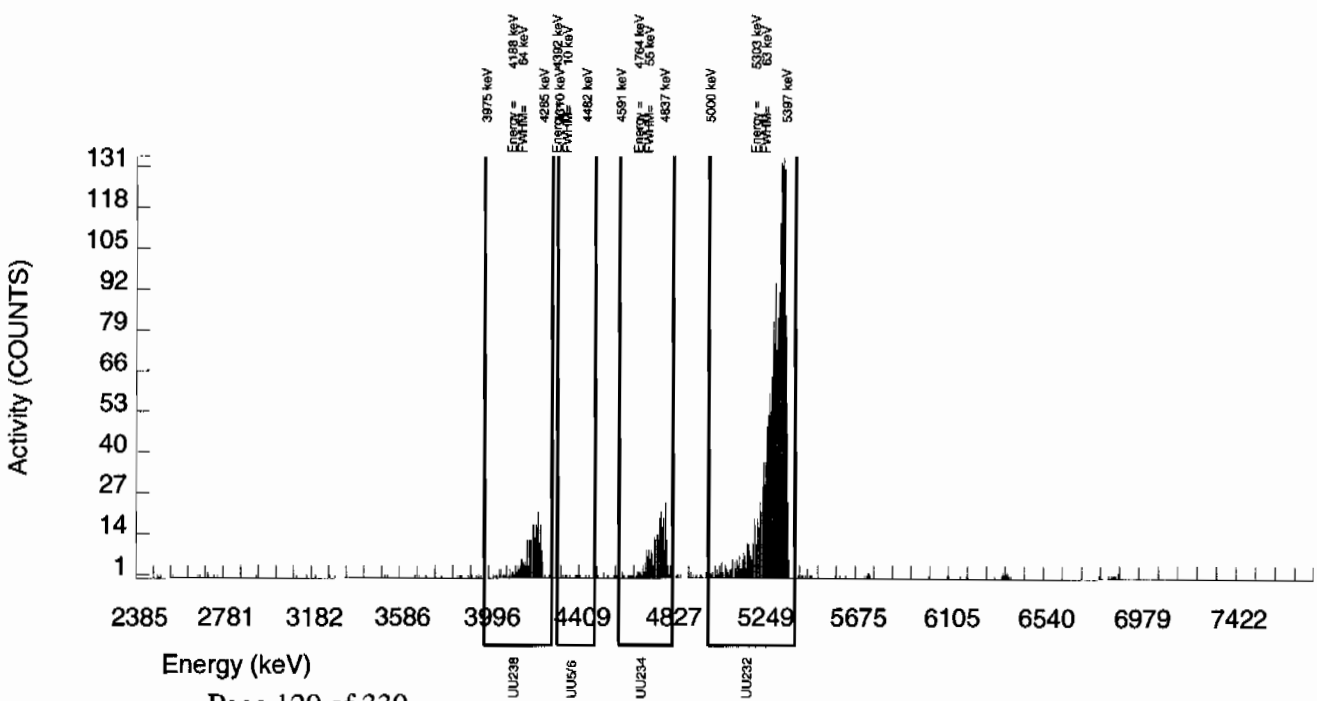

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546012_UU SAMPLE QTY: 0.506 G
DETECTOR NUMBER :78772 AVERAGE %EFFICIENCY :38.0111 % YIELD : 93.472	COUNT DATE: 9-DEC-2009 08:45:23 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 4.90413 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B172.CNF;153 BKG DATE : 6-DEC-2009 EFF FILE : W172.CNF;58 CAL DATE : 24-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	395.000	382.118	11.000	5.9398	100.0000	9.57E-01	8.21E-02	3.46E-02	7.60E-02	5.04E-02
U232	5302.100	1874.000	1863.000	11.000	3.3166	100.0000	4.67E+00	3.35E-01	1.93E-02	4.55E-02	1.09E-01
U-235	4391.000	15.000	14.000	1.000	2.6249	80.90000	4.34E-02	1.27E-02	1.89E-02	4.62E-02	1.24E-02
U-238	4184.730	422.000	418.000	4.000	3.0201	100.0000	1.05E+00	8.78E-02	1.76E-02	4.20E-02	5.17E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

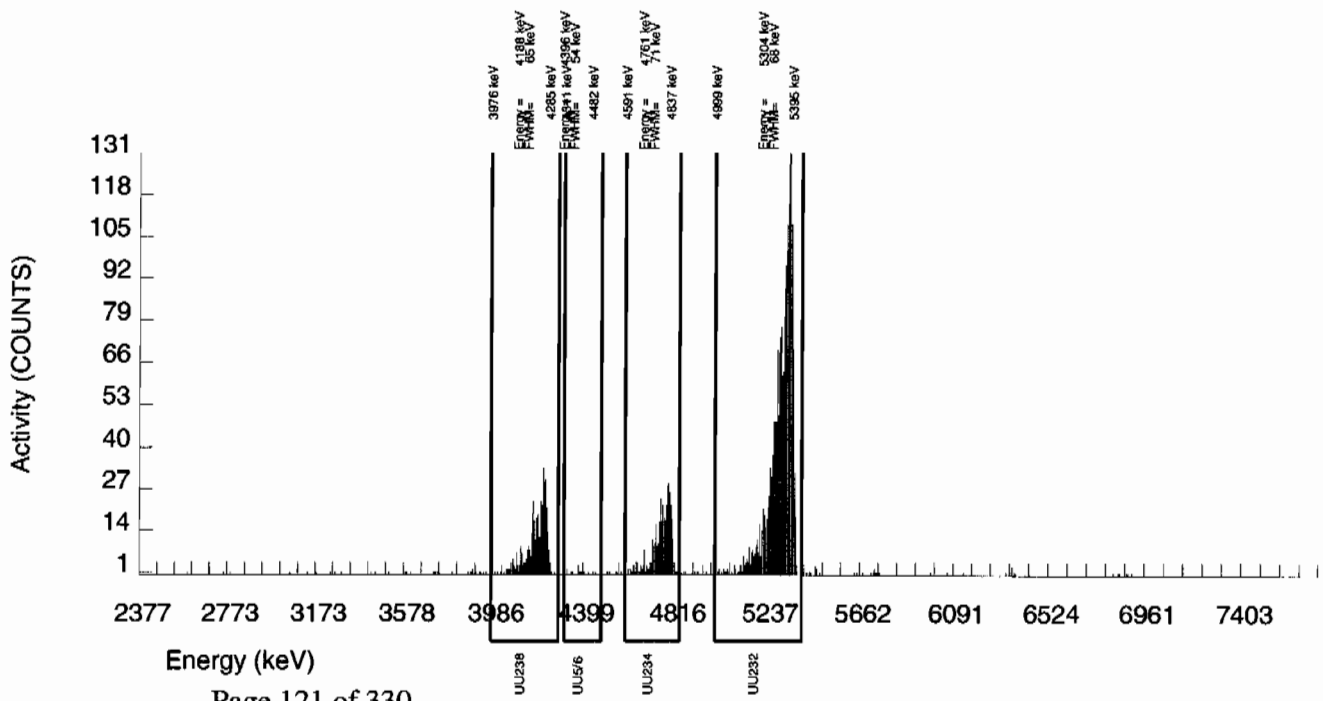

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546013_UU SAMPLE QTY: 0.517 G
DETECTOR NUMBER :76223 AVERAGE %EFFICIENCY :25.2320 % YIELD : 93.497	COUNT DATE: 9-DEC-2009 08:44:25 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 4.90544 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B153.CNF;366 BKG DATE : 6-DEC-2009 EFF FILE : W153.CNF;104 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	174.000	170.750	2.000	5.9398	100.0000	6.31E-01	6.58E-02	5.10E-02	1.12E-01	4.88E-02
U232	5302.100	1248.000	1237.000	11.000	3.3166	100.0000	4.57E+00	3.46E-01	2.85E-02	6.70E-02	1.31E-01
U-235	4391.000	17.000	16.000	1.000	2.6249	80.90000	7.30E-02	2.00E-02	2.79E-02	6.81E-02	1.94E-02
U-238	4184.730	181.000	175.000	6.000	3.0201	100.0000	6.46E-01	6.78E-02	2.59E-02	6.19E-02	5.05E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

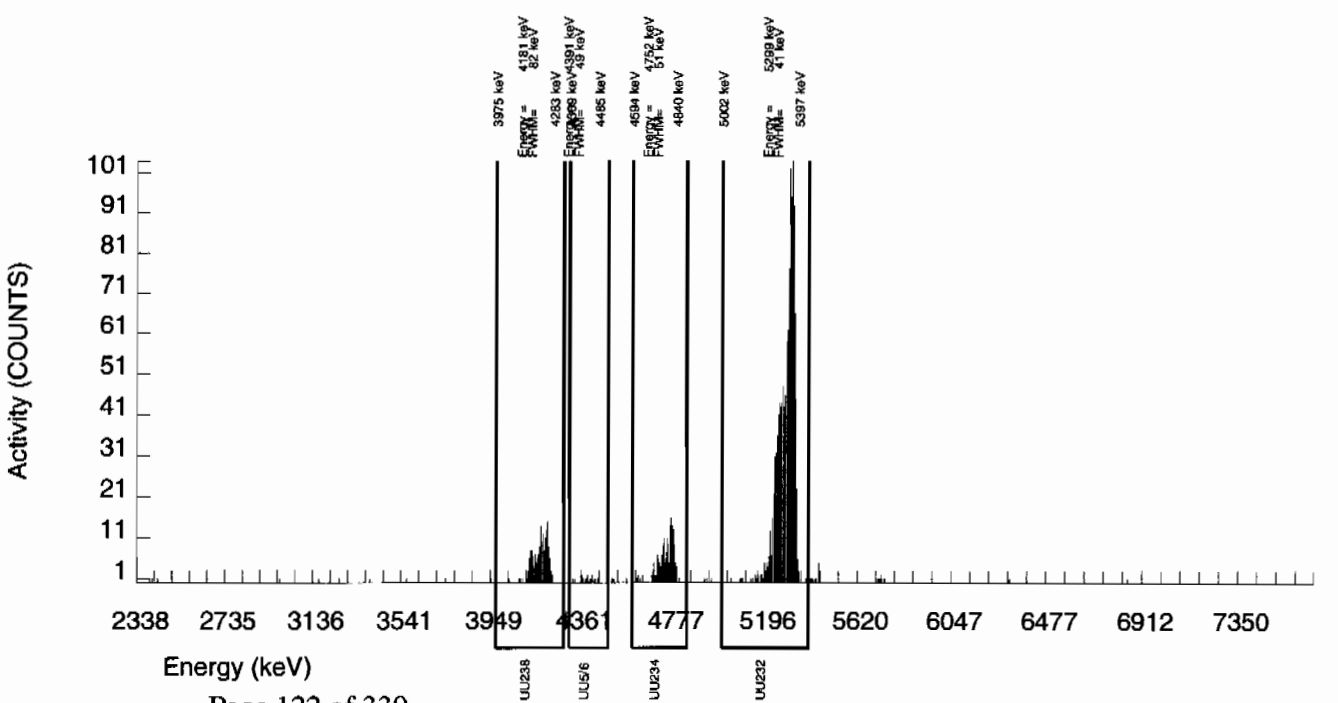

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546014_UU SAMPLE QTY: 0.508 G
DETECTOR NUMBER :76224 AVERAGE %EFFICIENCY :25.4981 % YIELD : 67.989	COUNT DATE: 9-DEC-2009 08:44:28 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24661 dpm RESULTS : 3.56711 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B154.CNF;368 BKG DATE : 6-DEC-2009 EFF FILE : W154.CNF;102 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	162.000	154.082	7.000	5.9398	100.0000	7.88E-01	8.73E-02	7.07E-02	1.55E-01	6.63E-02
U232	5302.100	915.000	909.000	6.000	2.4495	100.0000	4.65E+00	3.69E-01	2.91E-02	7.22E-02	1.55E-01
U-235	4391.000	11.000	11.000	0.000	2.6249	80.90000	6.95E-02	2.16E-02	3.86E-02	9.44E-02	2.10E-02
U-238	4184.730	159.000	156.000	3.000	3.0201	100.0000	7.98E-01	8.68E-02	3.59E-02	8.57E-02	6.51E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

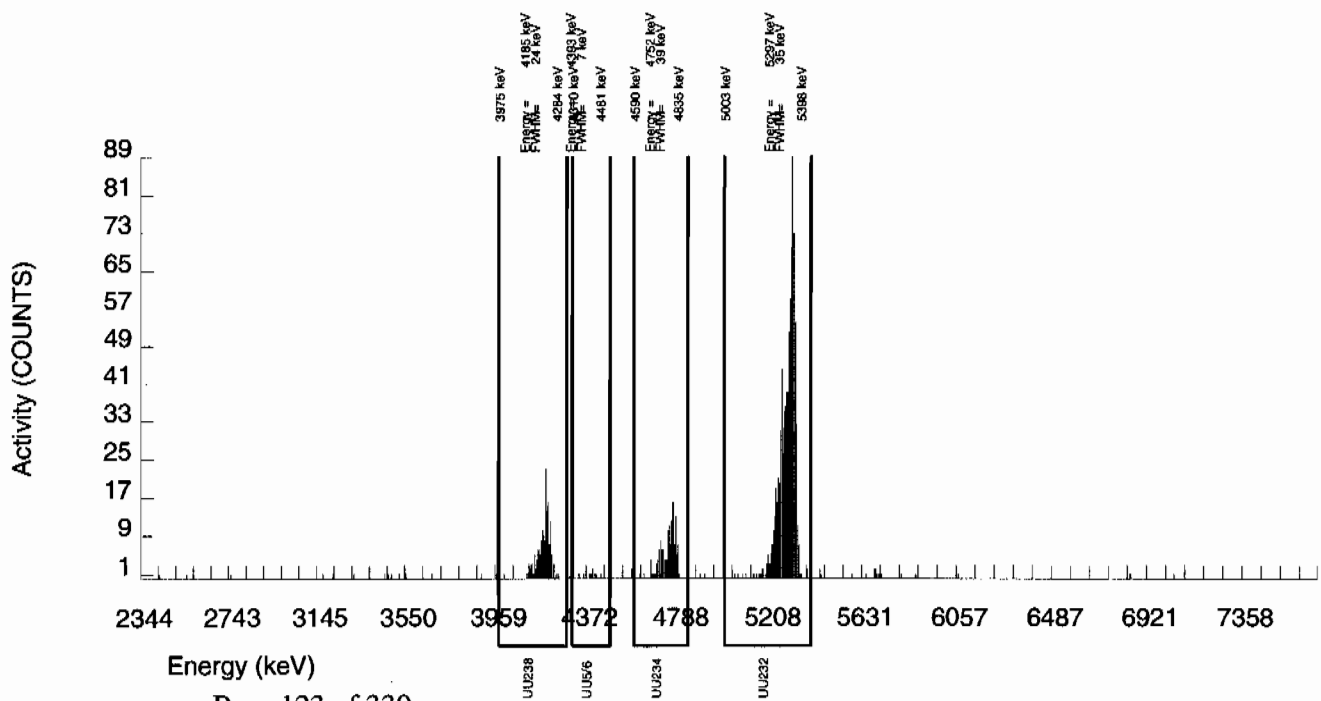

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S0241546015_UU SAMPLE QTY: 0.503 G
DETECTOR NUMBER :75553 AVERAGE %EFFICIENCY :25.8503 % YIELD : 93.843	COUNT DATE: 9-DEC-2009 08:44:31 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B155.CNF;375
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 4.92359 dpm	EFF FILE : W155.CNF;111
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	275.000	266.715	7.000	5.9398	100.0000	9.85E-01	9.25E-02	5.10E-02	1.12E-01	6.19E-02
U232	5302.100	1287.000	1272.000	15.000	3.8730	100.0000	4.70E+00	3.54E-01	3.33E-02	7.65E-02	1.33E-01
U-235	4391.000	8.000	4.000	4.000	2.6249	80.90000	1.83E-02	1.59E-02	2.79E-02	6.81E-02	1.58E-02
U-238	4184.730	287.000	284.000	3.000	3.0201	100.0000	1.05E+00	9.65E-02	2.59E-02	6.19E-02	6.29E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

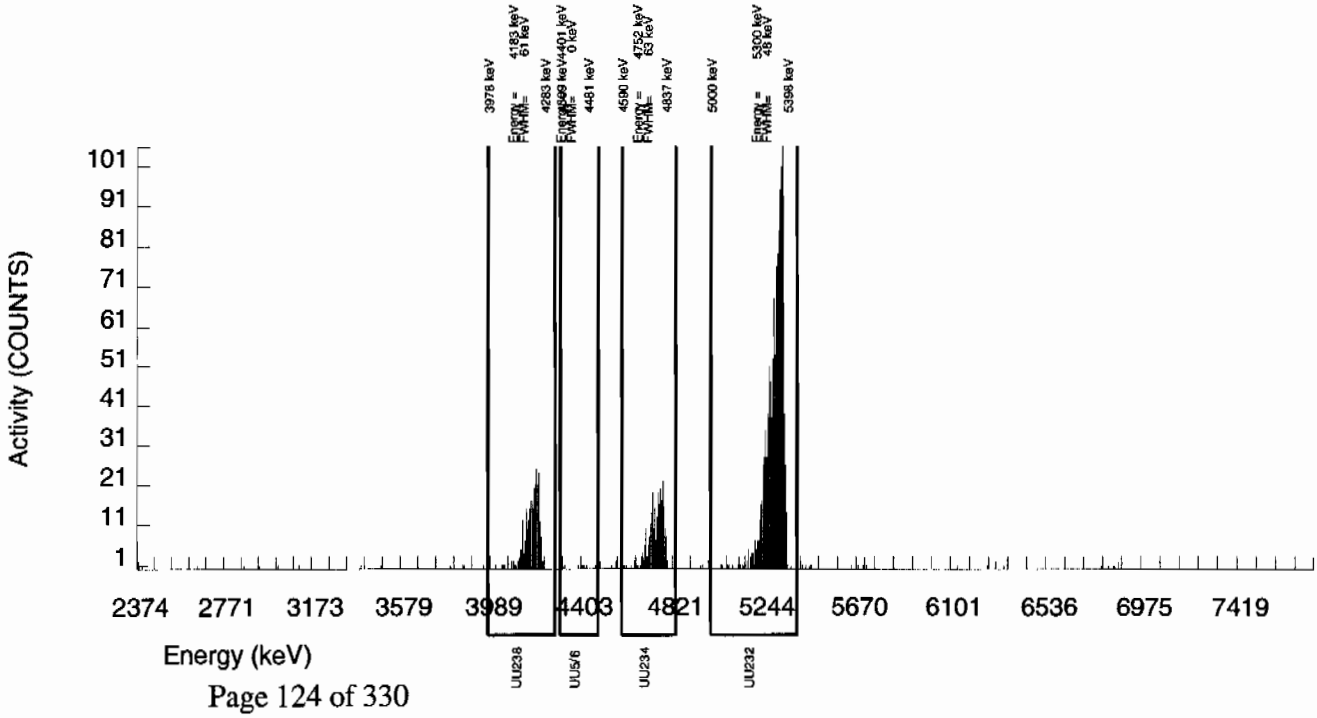

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309
SAMPLE DATE : 18-NOV-2009 00:00:00

SAMPLE ID : S0241546016_UU
SAMPLE QTY: 0.504 G

DETECTOR NUMBER :75554
AVERAGE %EFFICIENCY :24.7594
% YIELD : 97.901

COUNT DATE: 9-DEC-2009 08:44:33
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B156.CNF;376
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 5.13648 dpm	EFF FILE : W156.CNF;115
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	298.000	290.716	6.000	5.9398	100.0000	1.07E+00	9.85E-02	5.09E-02	1.12E-01	6.42E-02
U232	5302.100	1282.000	1271.000	11.000	3.3166	100.0000	4.69E+00	3.53E-01	2.84E-02	6.69E-02	1.33E-01
U-235	4391.000	19.000	18.000	1.000	2.6249	80.90000	8.20E-02	2.12E-02	2.78E-02	6.80E-02	2.04E-02
U-238	4184.730	291.000	288.000	3.000	3.0201	100.0000	1.06E+00	9.74E-02	2.59E-02	6.18E-02	6.32E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

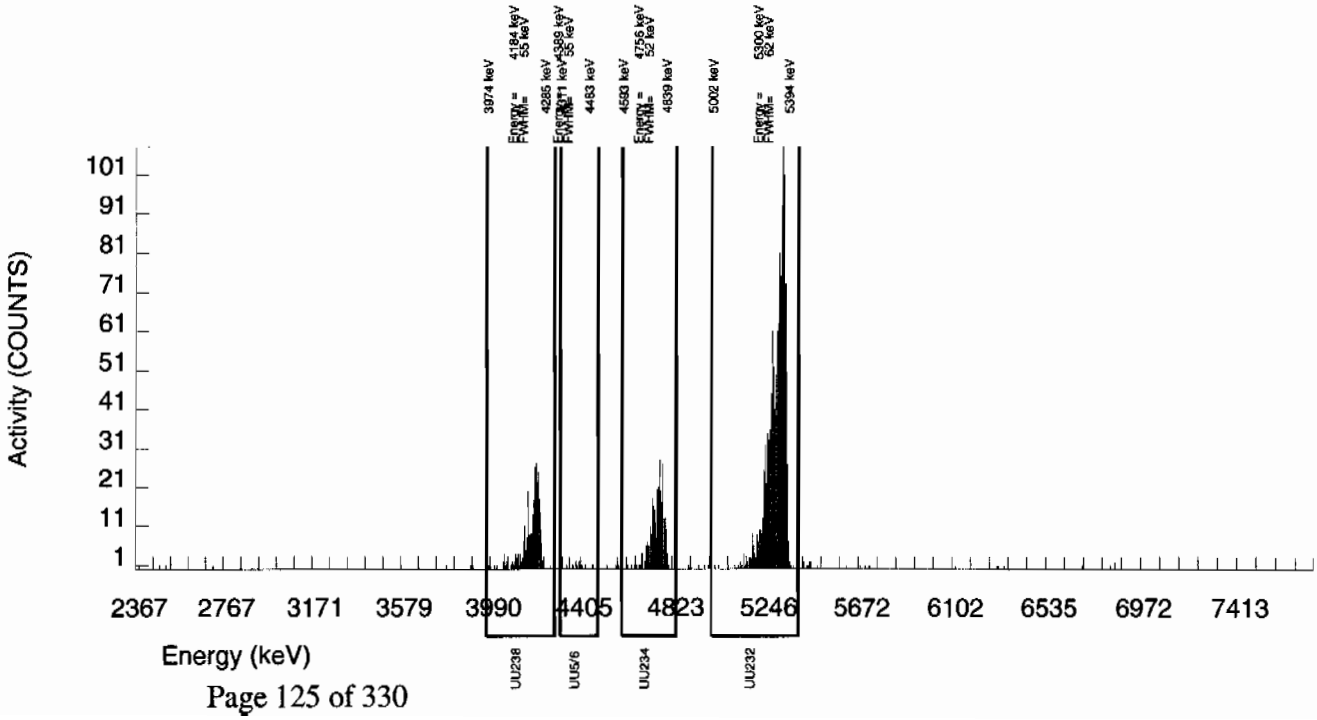

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201984997_UU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :75555 AVERAGE %EFFICIENCY :24.6971 % YIELD : 103.862	COUNT DATE: 9-DEC-2009 08:44:37 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24387 dpm RESULTS : 5.44638 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B157.CNF;376 BKG DATE : 6-DEC-2009 EFF FILE : W157.CNF;105 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	1.000	-5.359	5.000	5.9398	100.0000	-9.41E-03	4.30E-03	2.43E-02	5.33E-02	4.30E-03
U232	5302.100	1352.000	1345.000	7.000	2.6458	100.0000	2.36E+00	1.76E-01	1.08E-02	2.64E-02	6.47E-02
U-235	4391.000	3.000	-1.000	4.000	2.6249	80.90000	-2.17E-03	5.75E-03	1.33E-02	3.24E-02	5.74E-03
U-238	4184.730	4.000	-7.000	11.000	3.0201	100.0000	-1.23E-02	6.80E-03	1.23E-02	2.94E-02	6.80E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

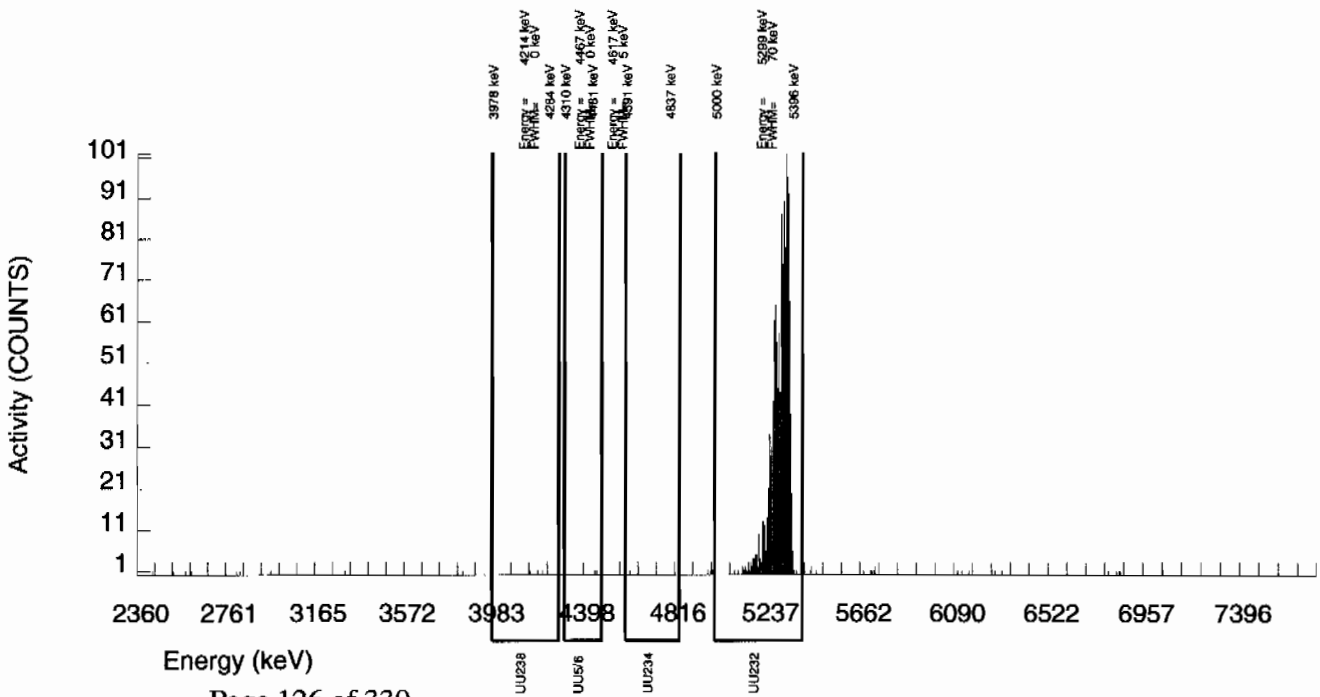

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 18-NOV-2009 00:00:00	SAMPLE ID : S1201984998_UU SAMPLE QTY: 0.503 G
DETECTOR NUMBER :33451 AVERAGE %EFFICIENCY :24.7080 % YIELD : 88.842	COUNT DATE: 9-DEC-2009 08:44:39 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B158.CNF;377
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24661 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 4.66120 dpm	EFF FILE : W158.CNF;108
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	238.000	231.837	5.000	5.9398	100.0000	9.46E-01	9.19E-02	5.64E-02	1.24E-01	6.34E-02
U232	5302.100	1156.000	1151.000	5.000	2.2361	100.0000	4.70E+00	3.58E-01	2.12E-02	5.35E-02	1.39E-01
U-235	4391.000	13.000	12.000	1.000	2.6249	80.90000	6.05E-02	1.93E-02	3.08E-02	7.53E-02	1.89E-02
U-238	4184.730	252.000	251.000	1.000	3.0201	100.0000	1.02E+00	9.69E-02	2.87E-02	6.84E-02	6.49E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

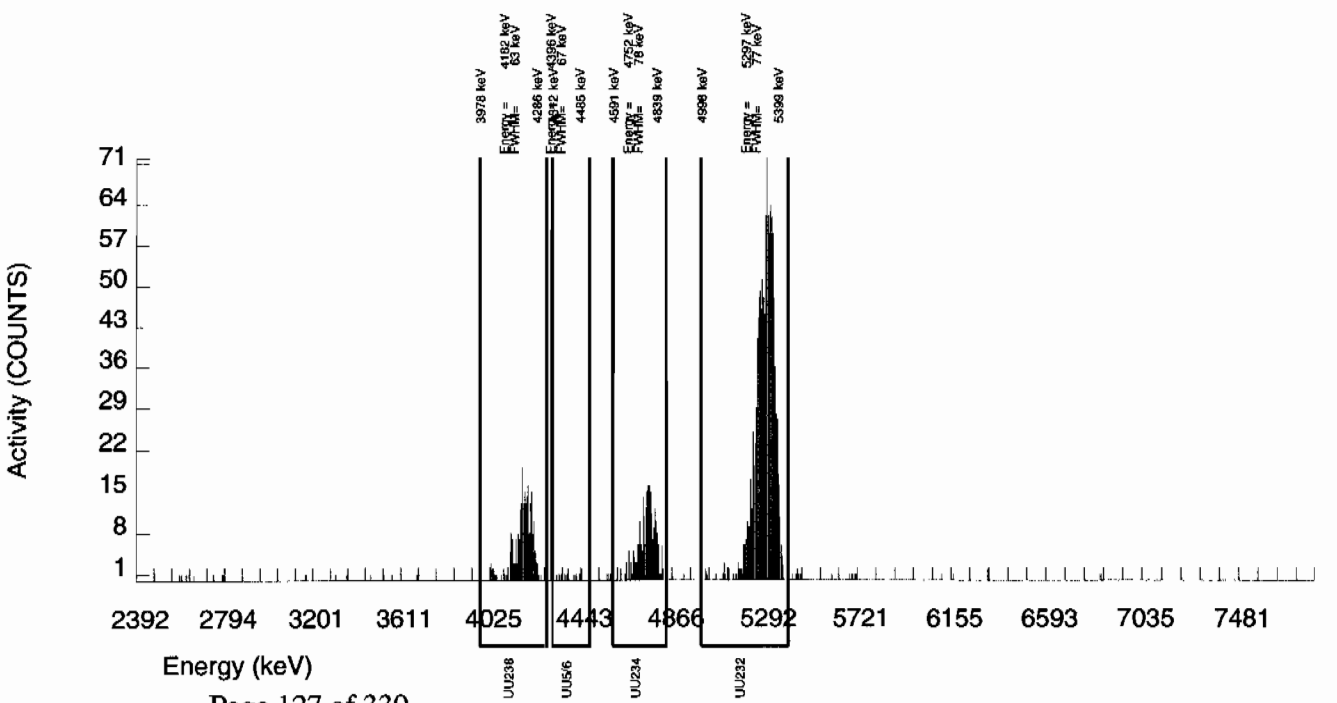

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928309 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201984999_UU SAMPLE QTY: 0.101 G
DETECTOR NUMBER :76225 AVERAGE %EFFICIENCY :25.4259 % YIELD : 98.860	COUNT DATE: 9-DEC-2009 08:44:43 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :HAKB

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B159.CNF;350
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24387 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 5.18406 dpm	EFF FILE : W159.CNF;100
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	380.000	373.669	5.000	5.9398	100.0000	6.63E+00	6.14E-01	2.45E-01	5.38E-01	3.48E-01
U232	5302.100	1331.000	1318.000	13.000	3.6056	100.0000	2.34E+01	1.90E+00	1.49E-01	3.46E-01	6.51E-01
U-235	4391.000	14.000	9.000	5.000	2.6249	80.90000	1.97E-01	9.68E-02	1.34E-01	3.27E-01	9.56E-02
U-238	4184.730	339.000	336.000	3.000	3.0201	100.0000	5.96E+00	5.61E-01	1.25E-01	2.97E-01	3.28E-01

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

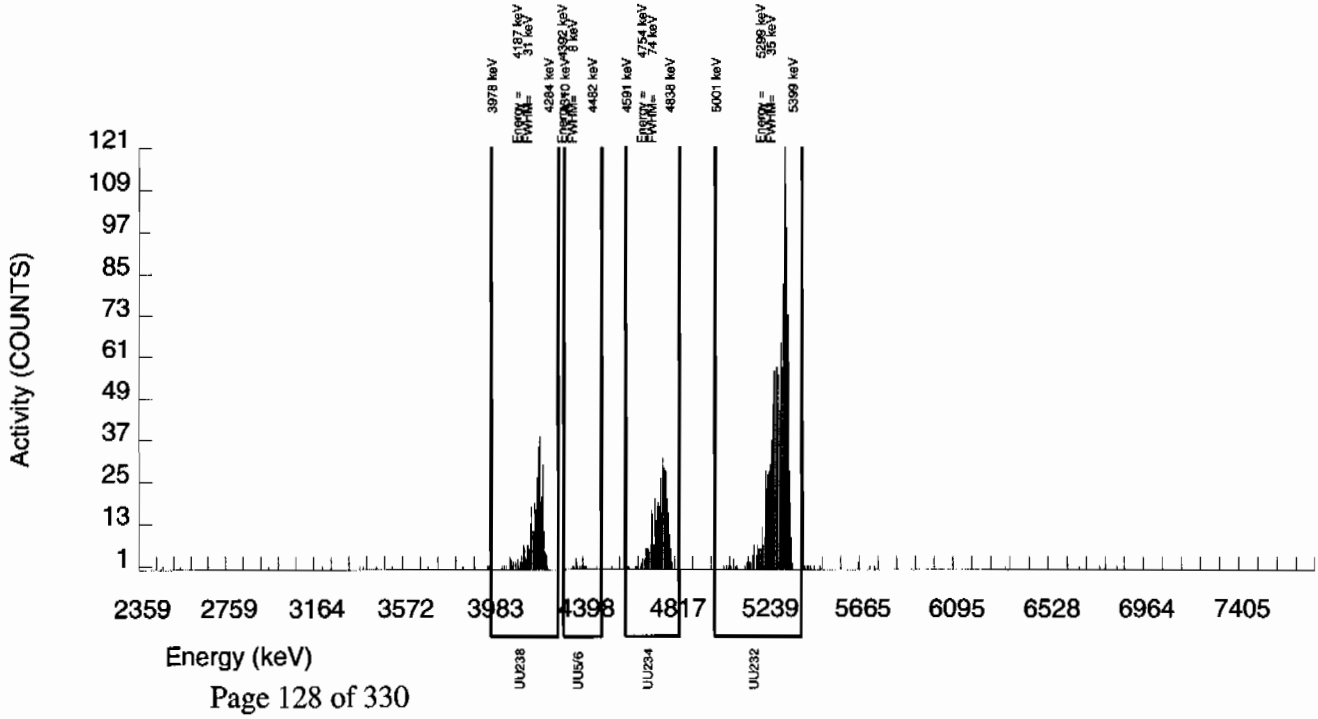

BACKGROUND AND EFFICIENCY DATA

QA filename : DKA100:[ENV_ALPHA.QA.W]W035.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.294859 through 0.314859

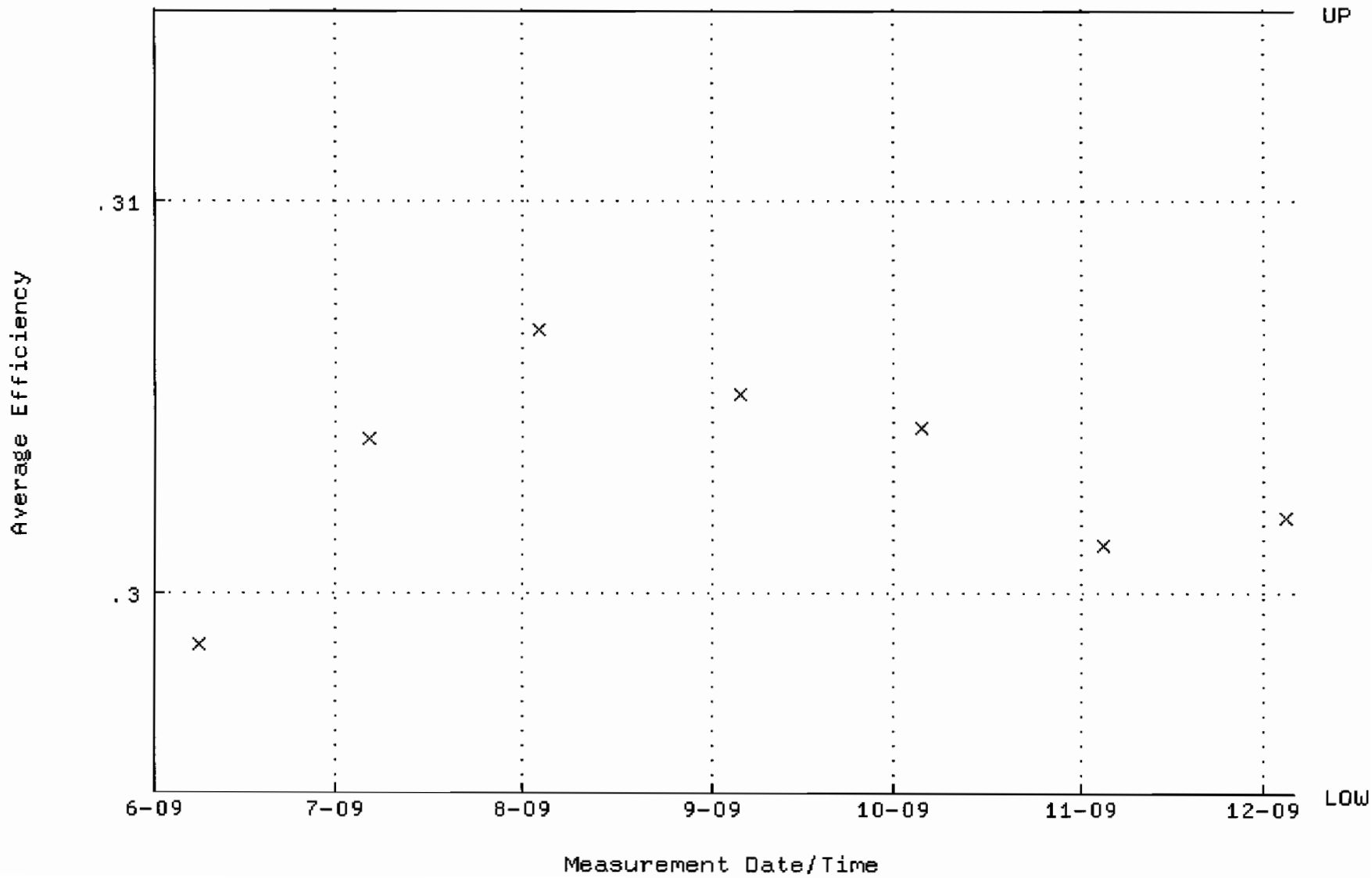

QA filename : DKA100:[ENV_ALPHA.QA.W]W035.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 85.3984 through 94.3878

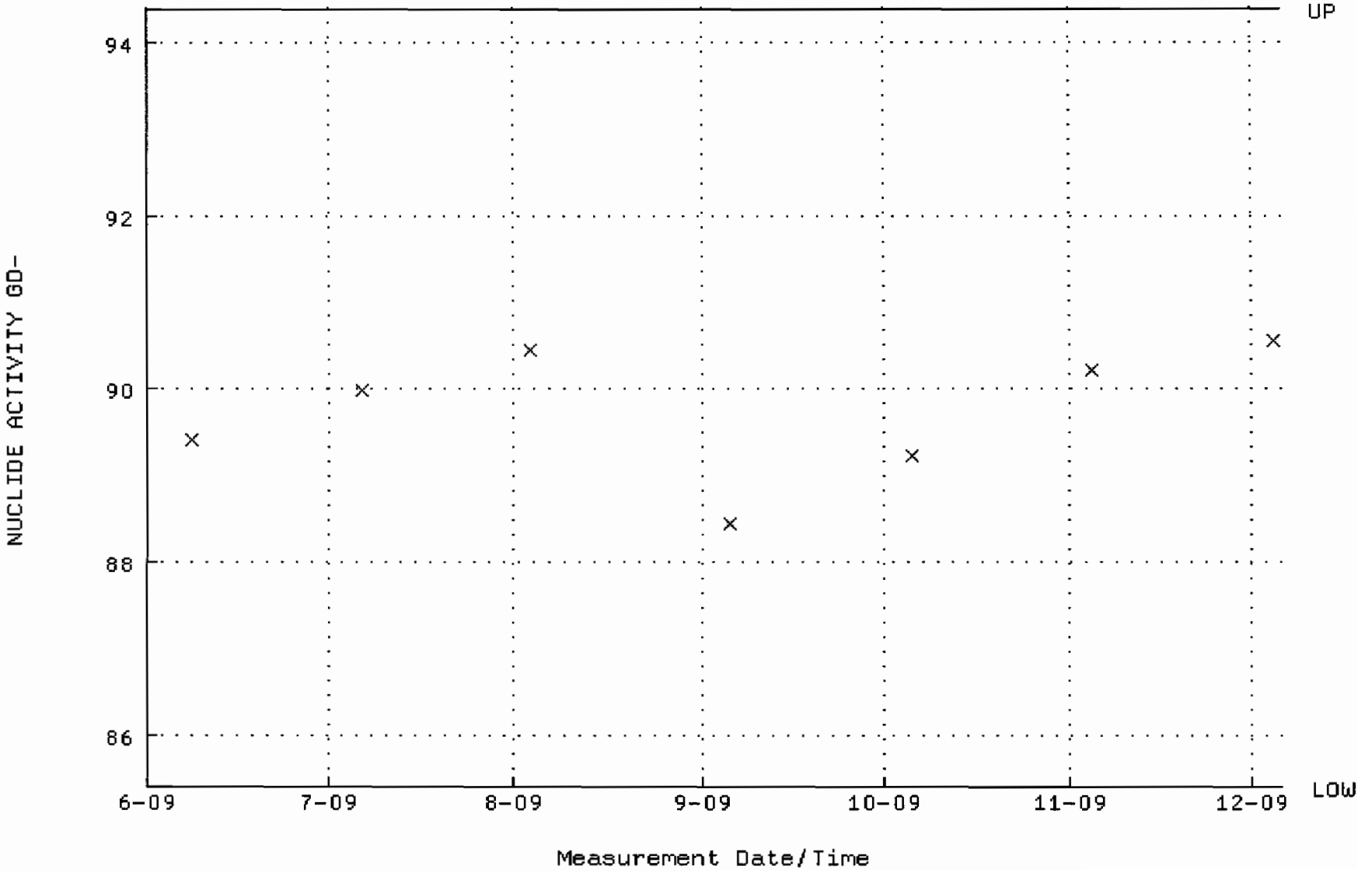

QA filename : DKA100:[ENV_ALPHA.QA.B]B035.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

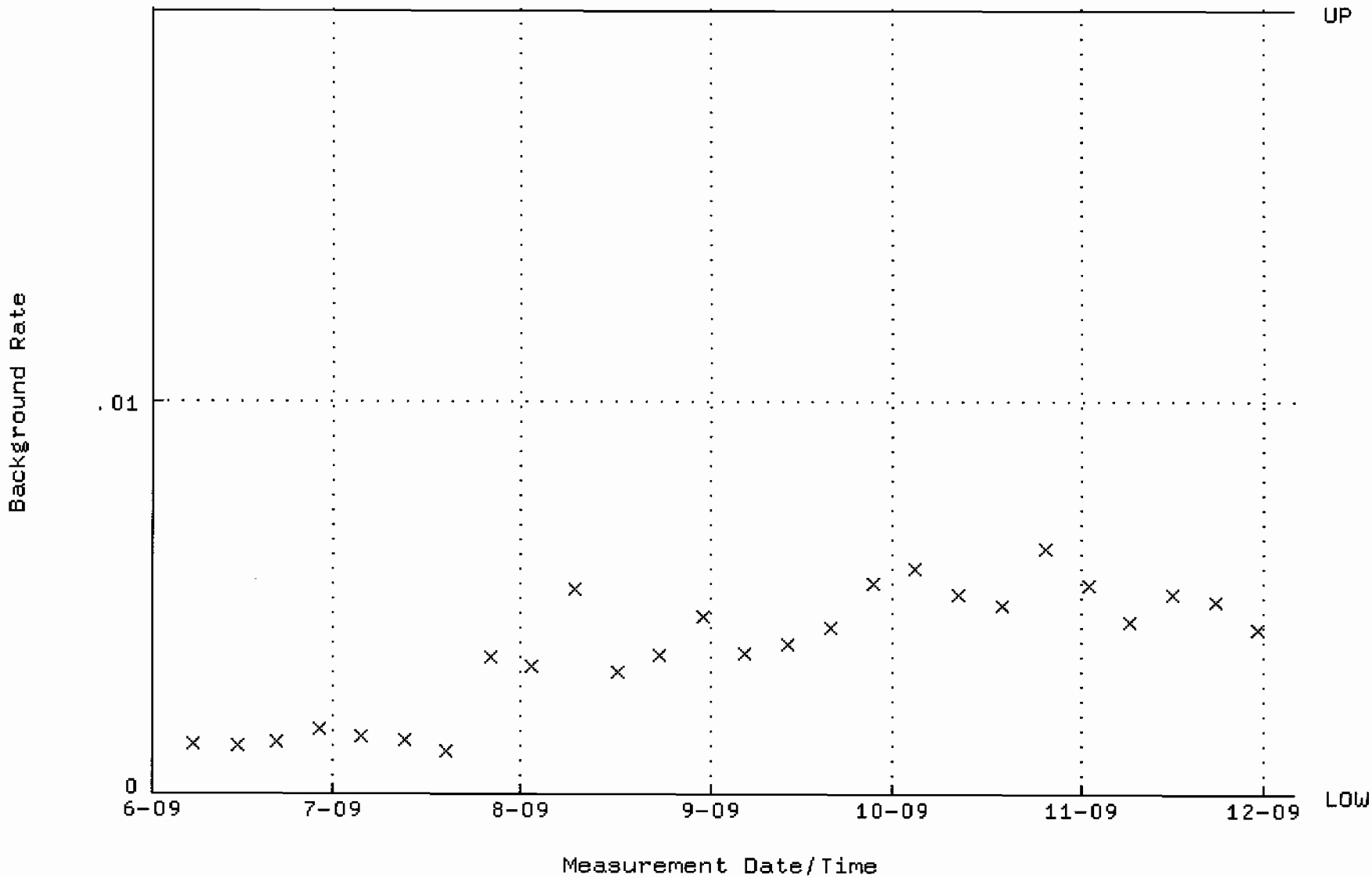

QA filename : DKA100:[ENV_ALPHA.QA.W]W036.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.318717 through 0.338717

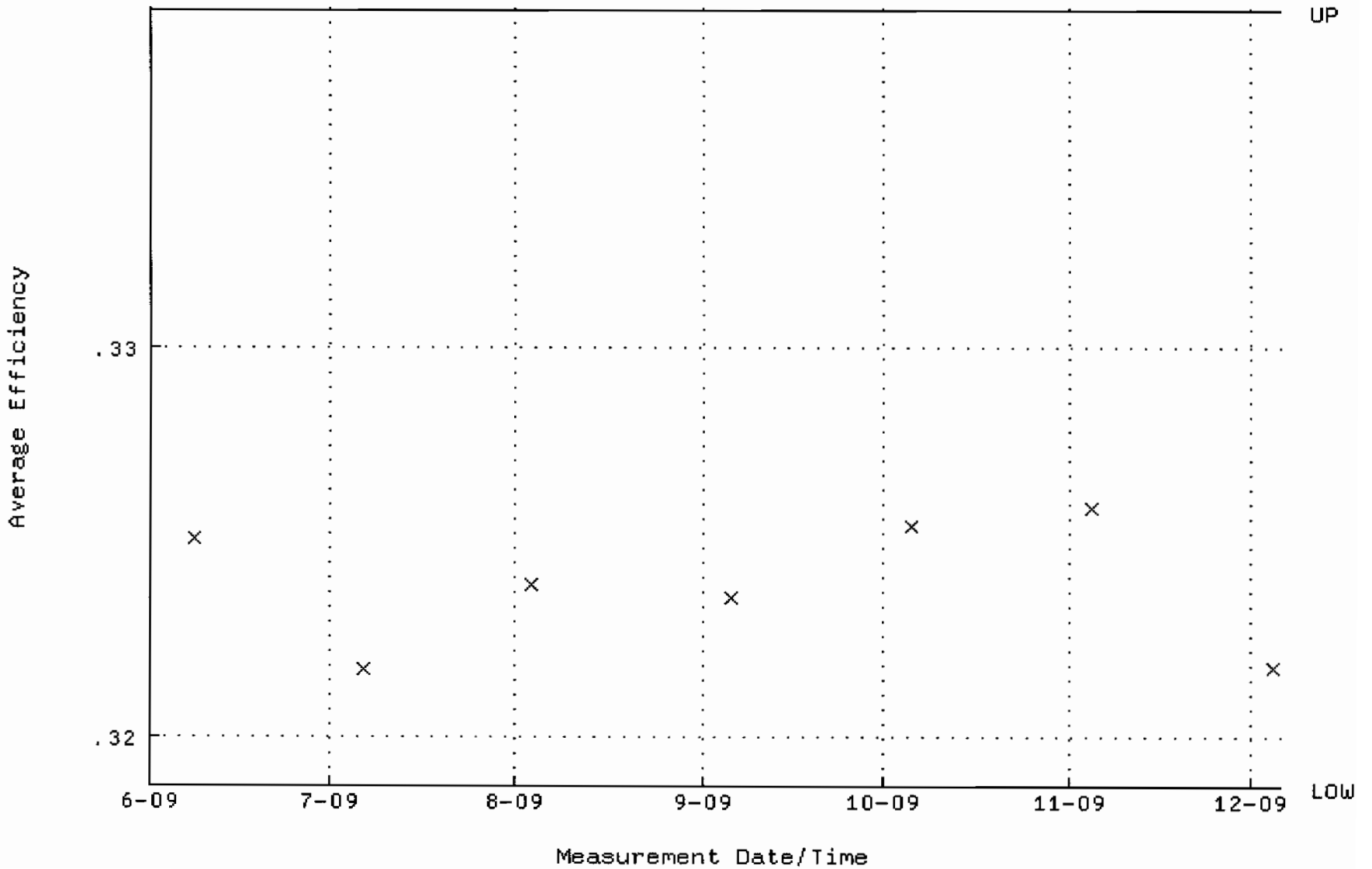

QA filename : DKA100:[ENV_ALPHA.QA.W]W036.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 84.6422 through 93.5518

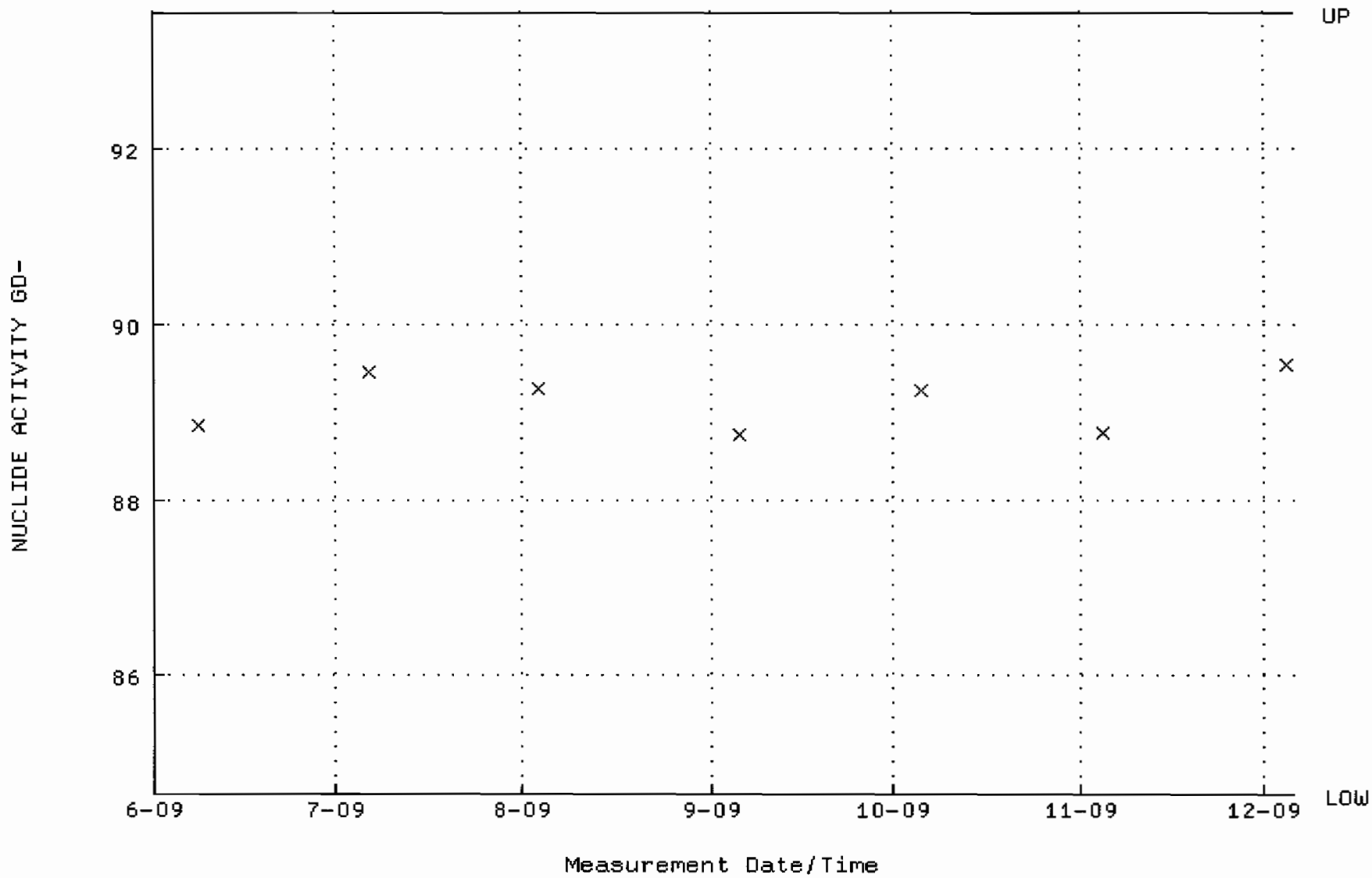

QA filename : DKA100:[ENV_ALPHA.QA.B]B036.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

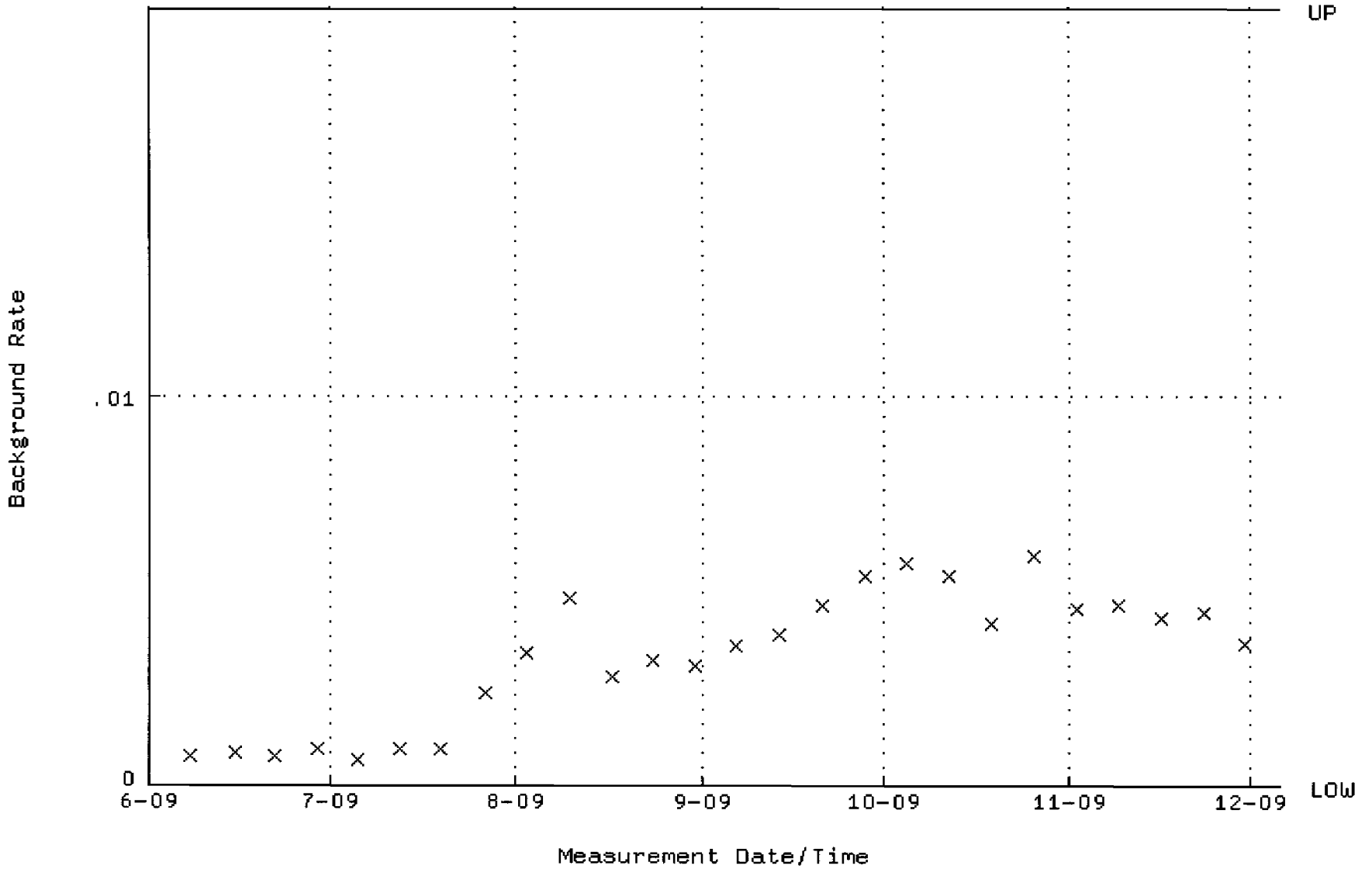

QA filename : DKA100:[ENV_ALPHA.QA.W]W037.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

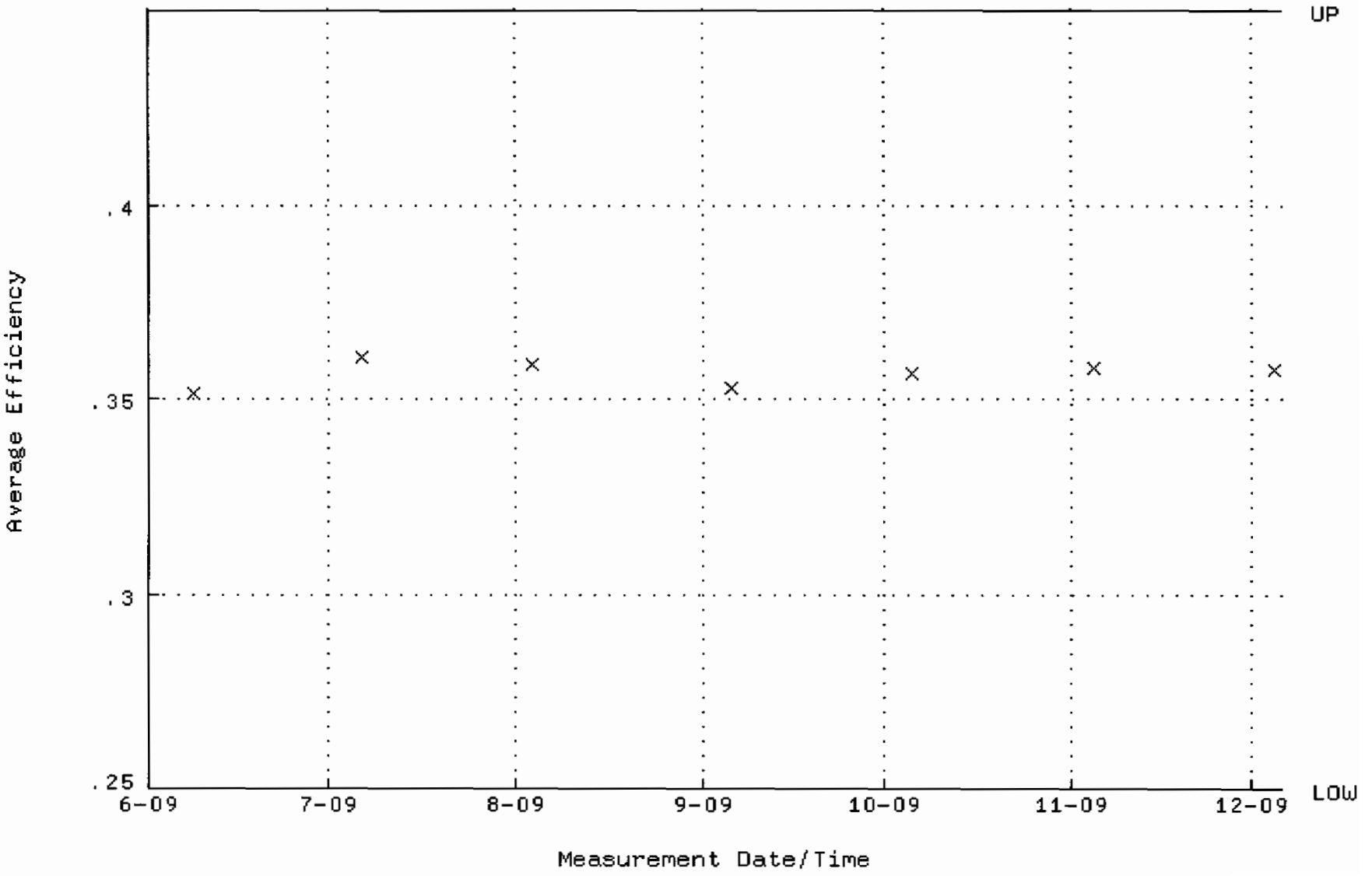

QA filename : DKA100:[ENV_ALPHA.QA.W]W037.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

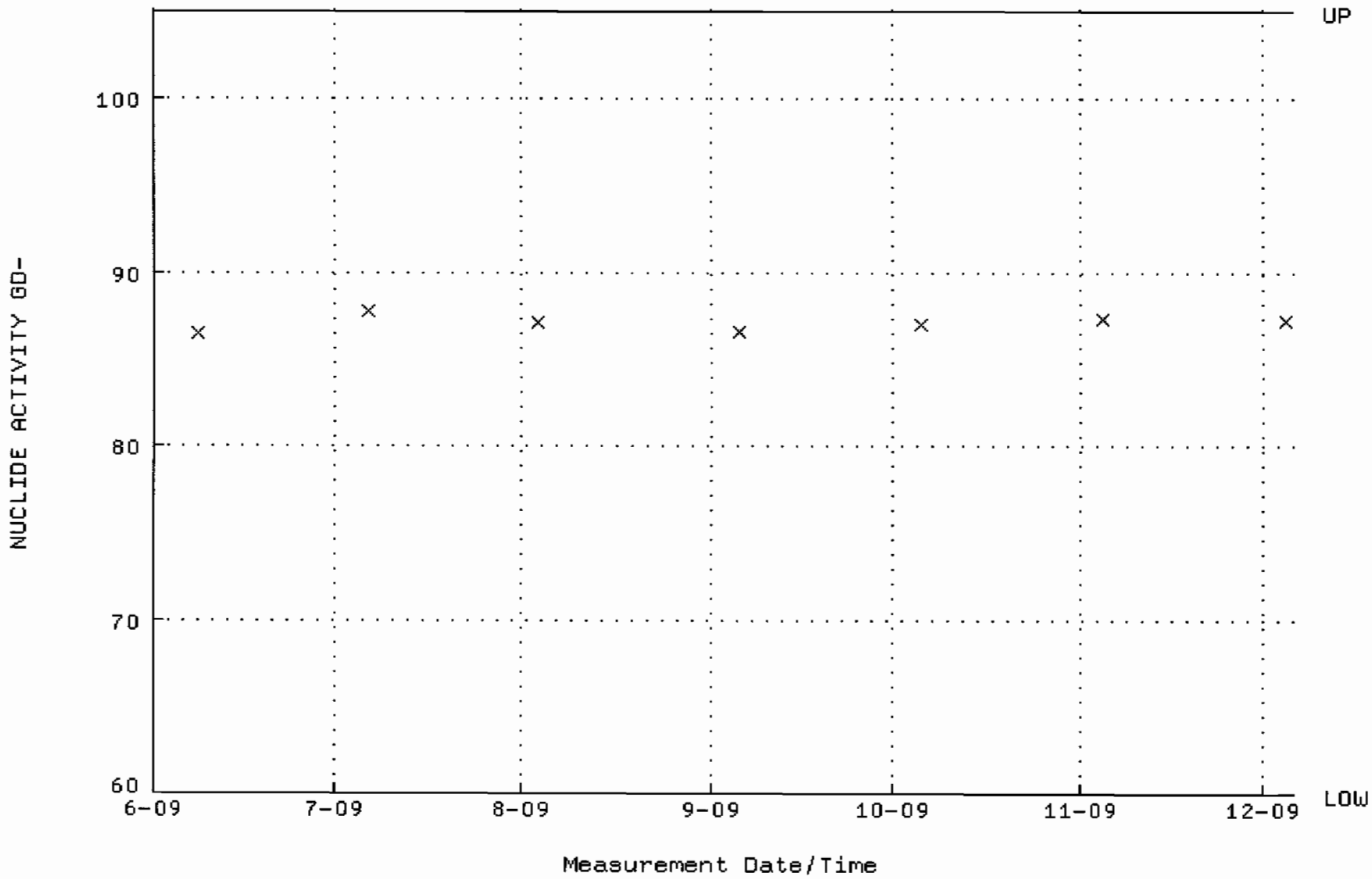

QA filename : DKA100:[ENV_ALPHA.QA.B]B037.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

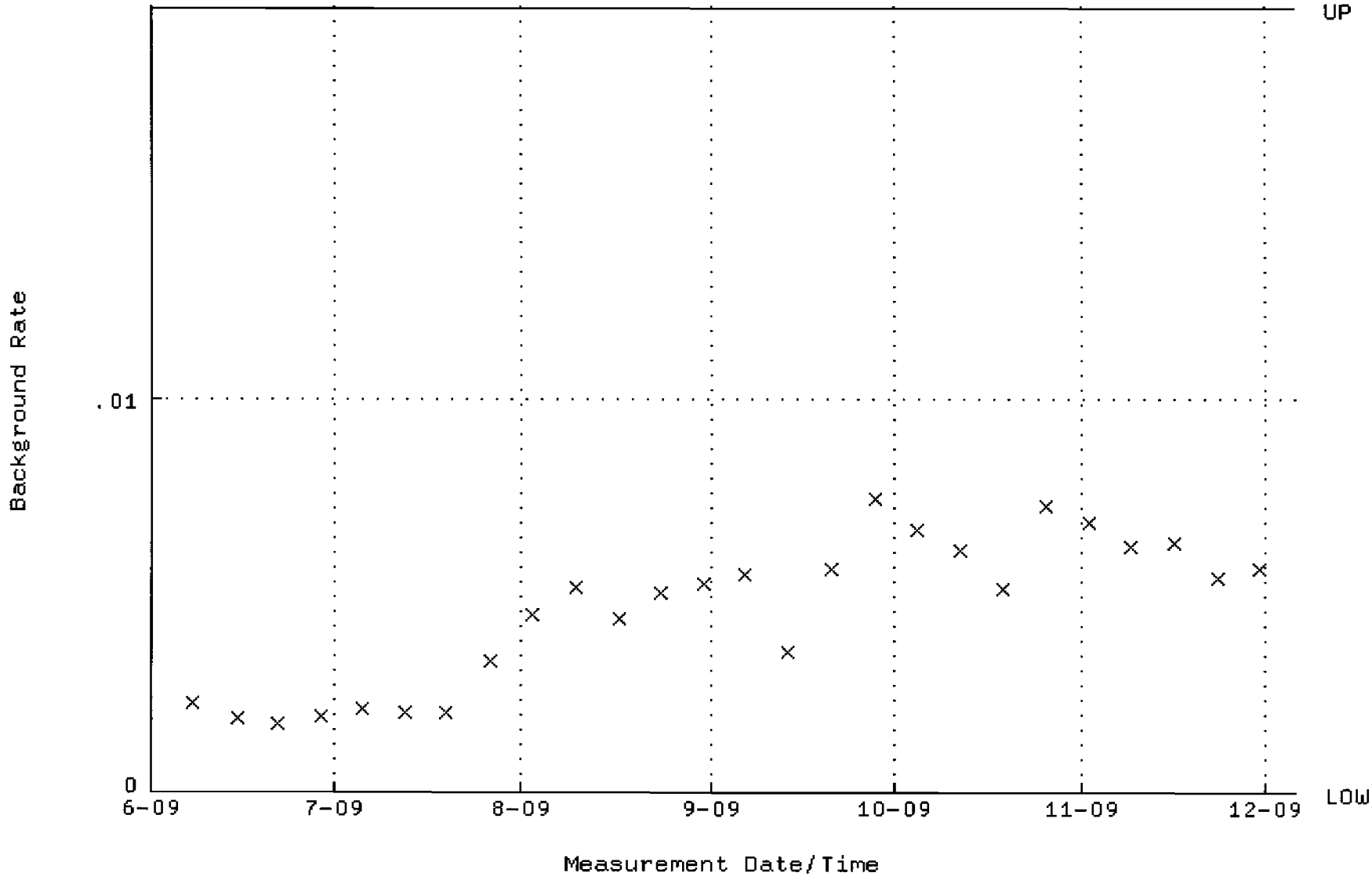

QA filename : DKA100:[ENV_ALPHA.QA.W]W038.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.327380 through 0.362086

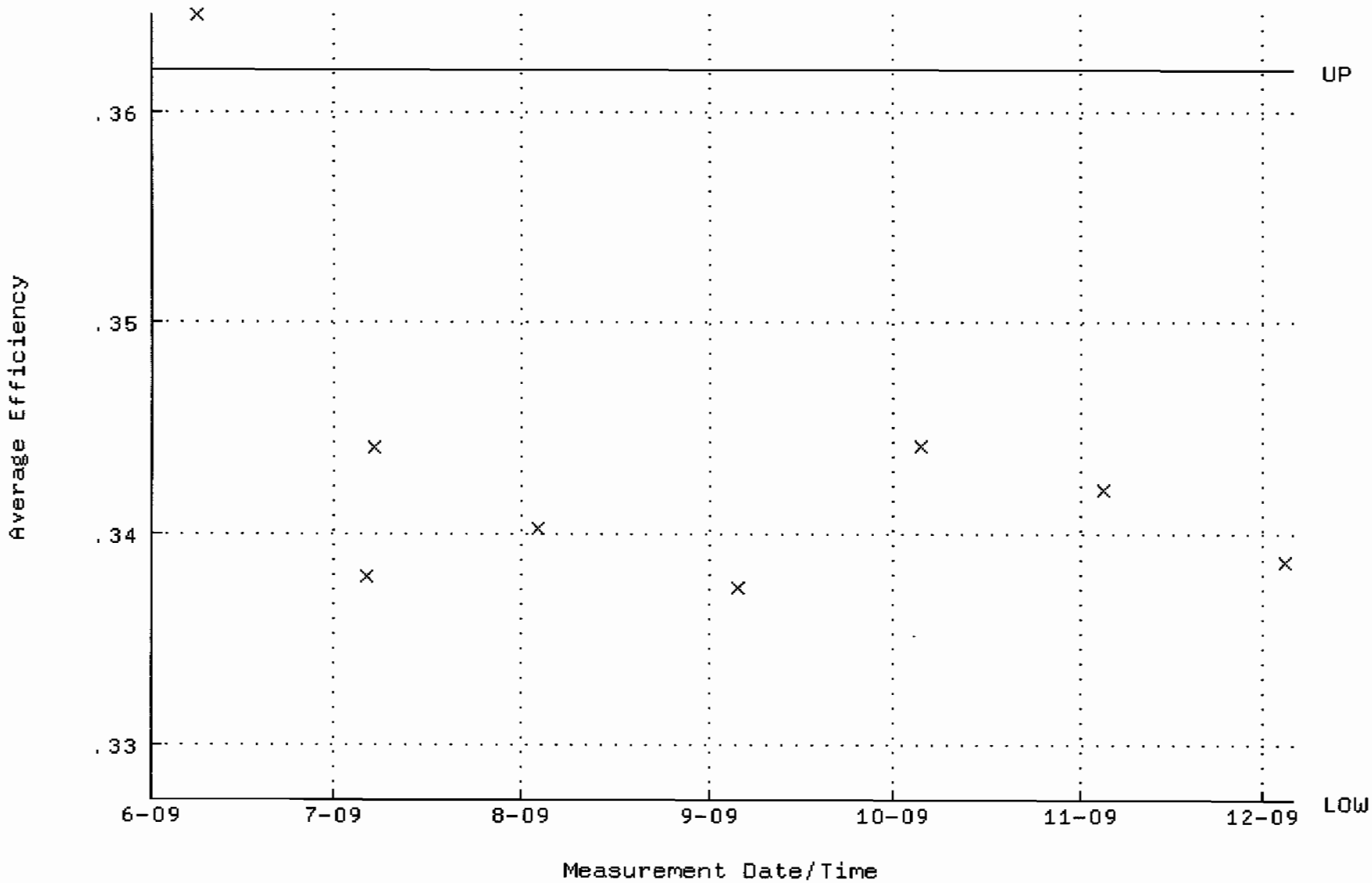

QA filename : DKA100:[ENV_ALPHA.QA.W]W038.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 87.5715 through 92.1899

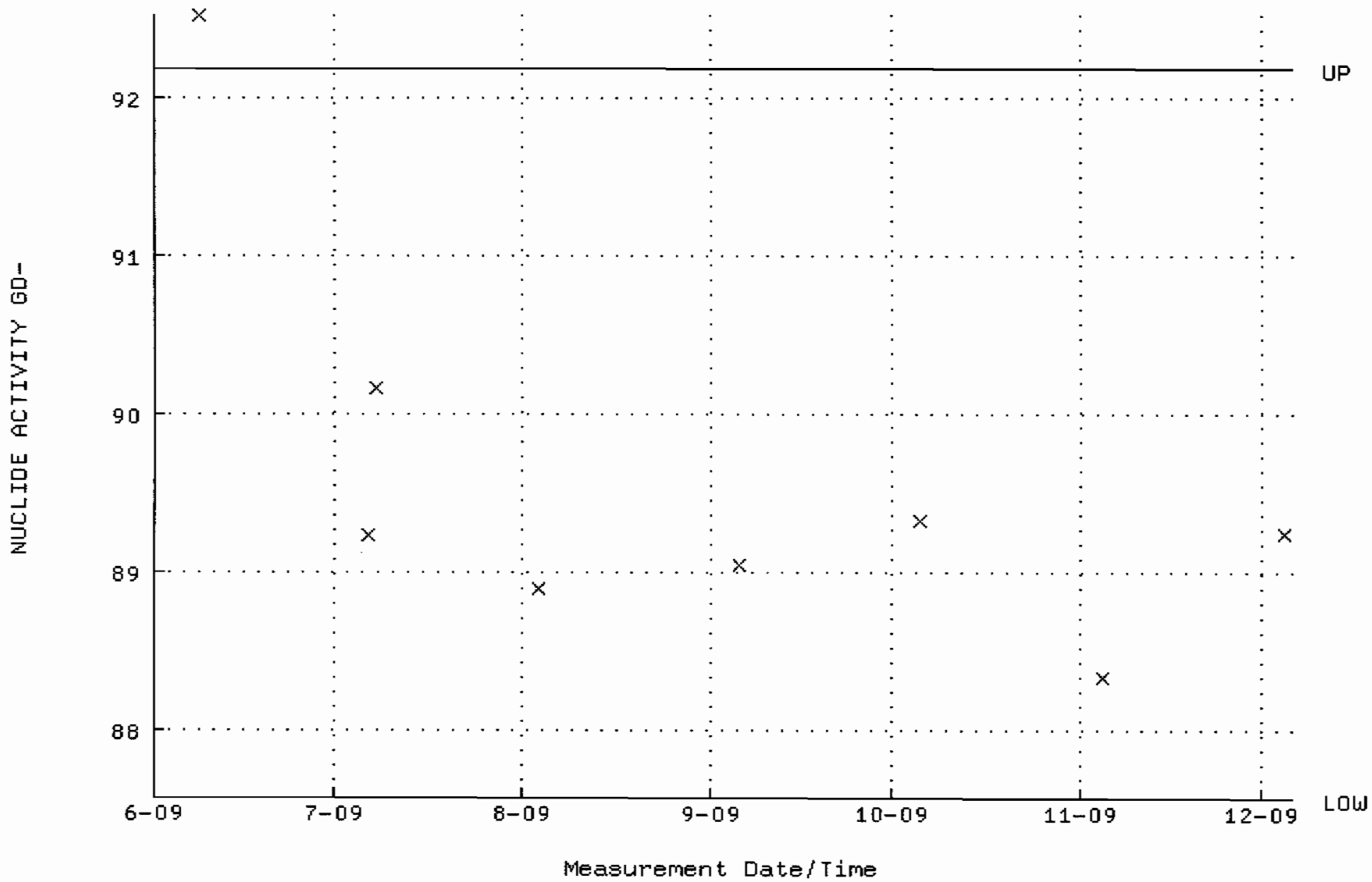

QA filename : DKA100:[ENV_ALPHA.QA.B]B038.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

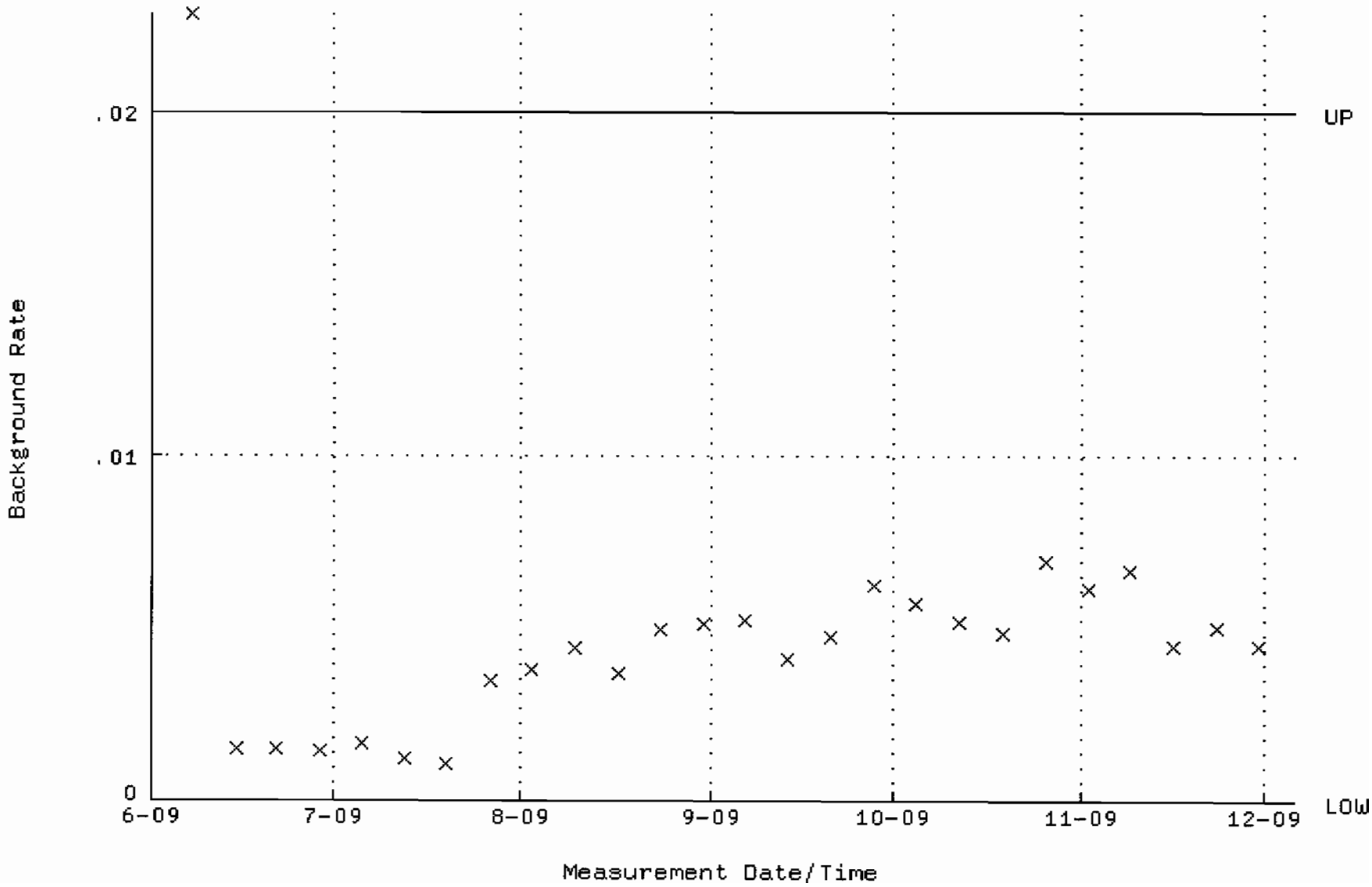

QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

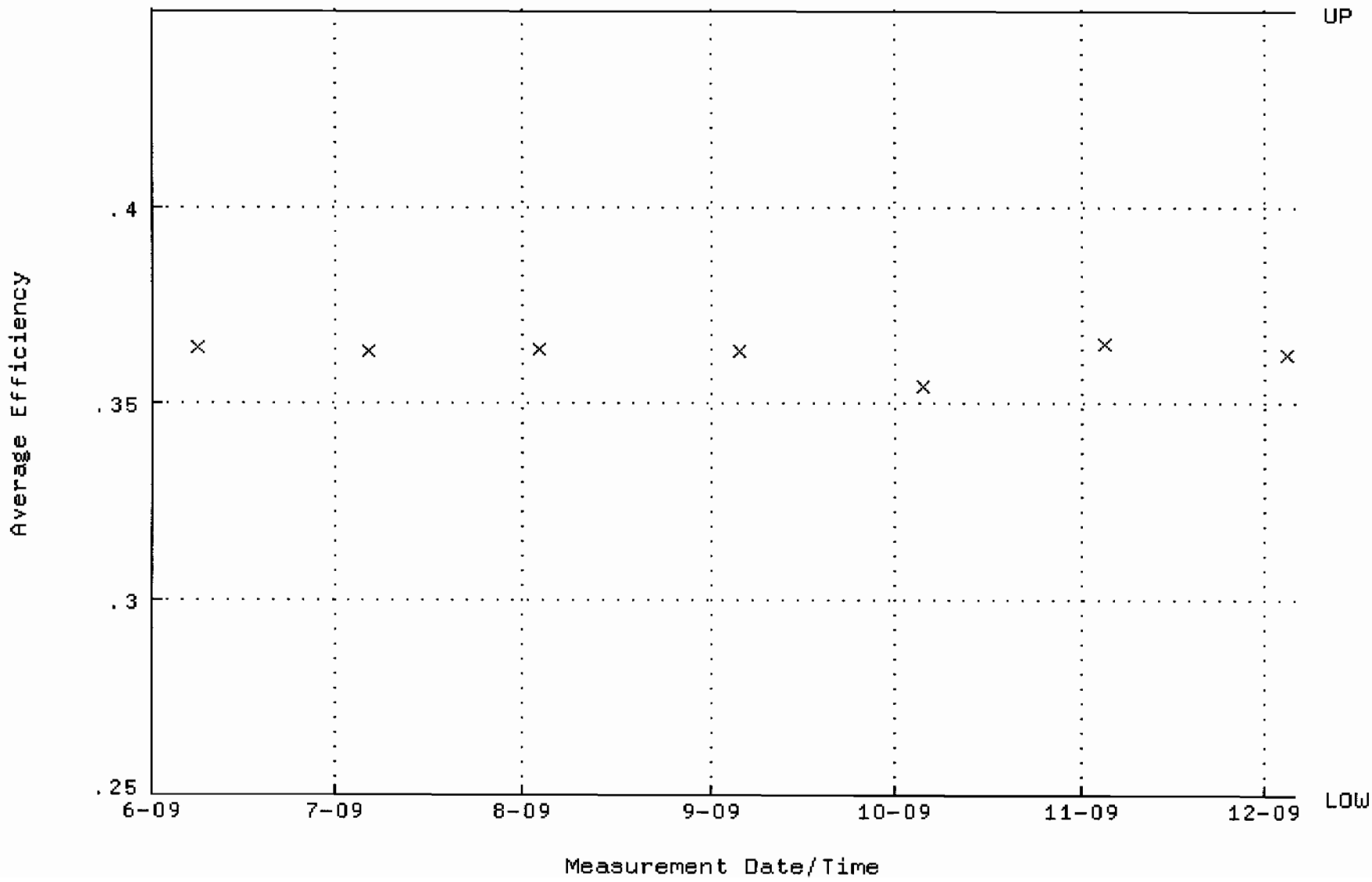

QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

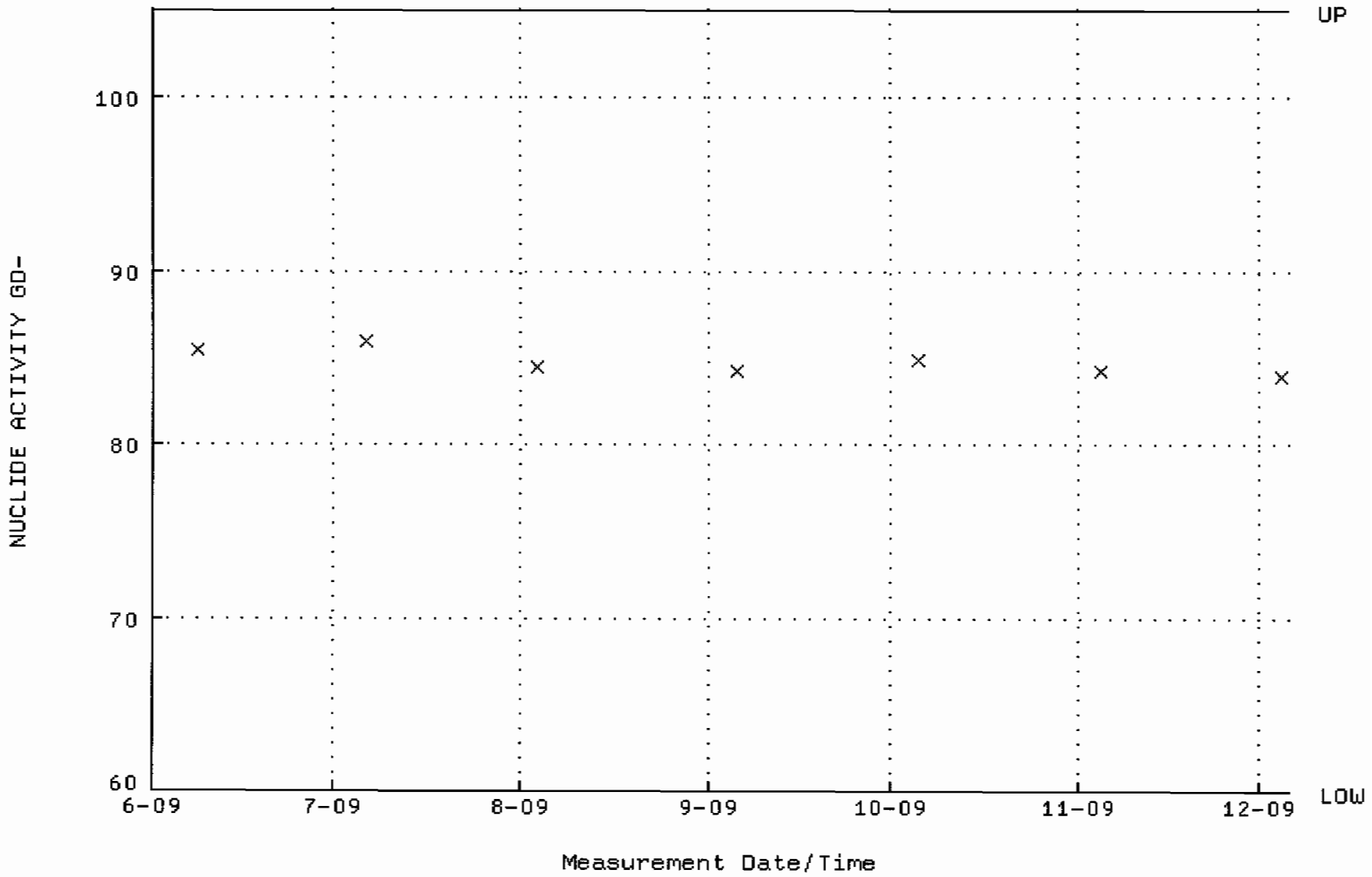

QA filename : DKA100:[ENV_ALPHA.QA.B]B039.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

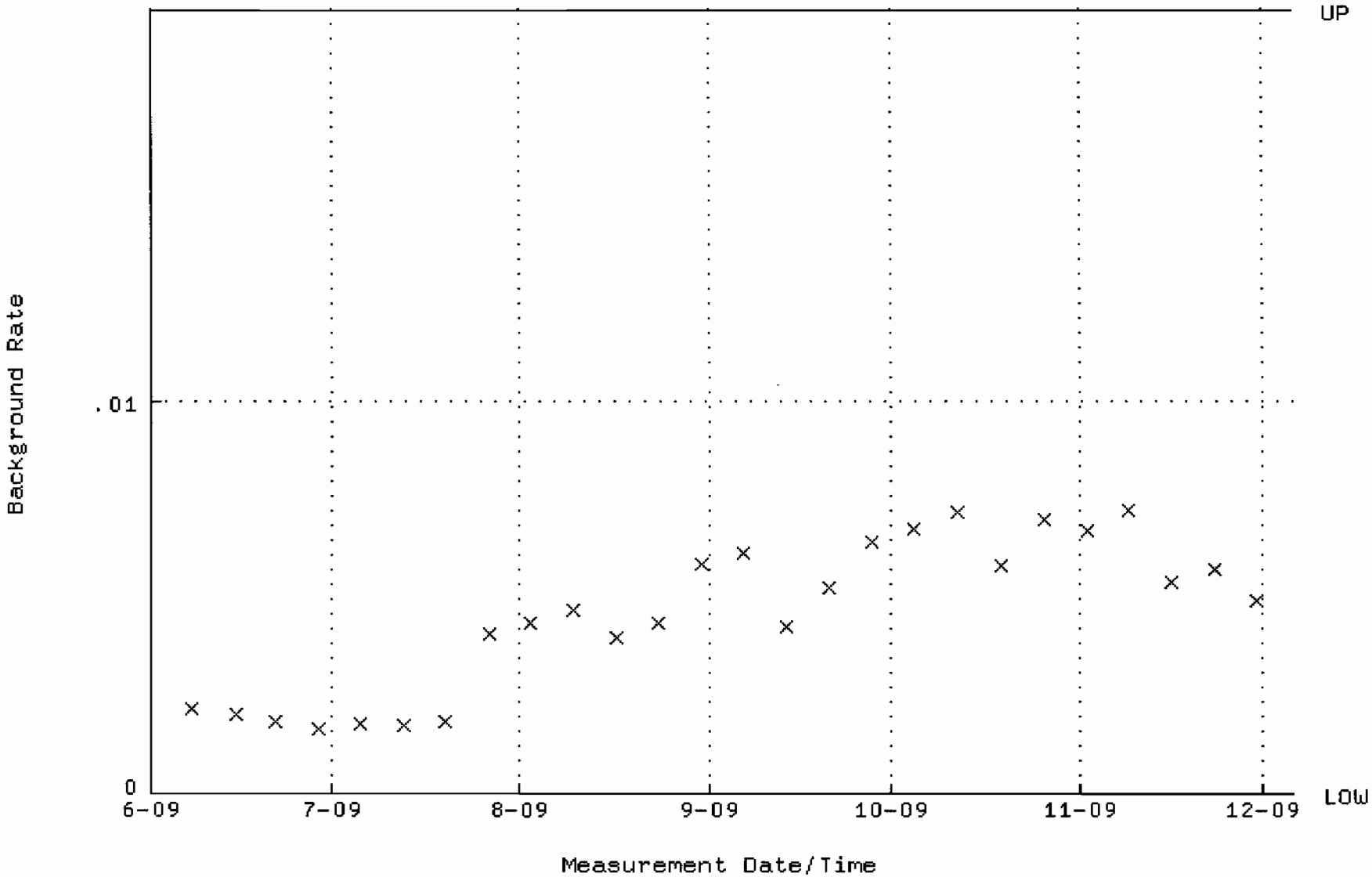

QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.313016 through 0.333016

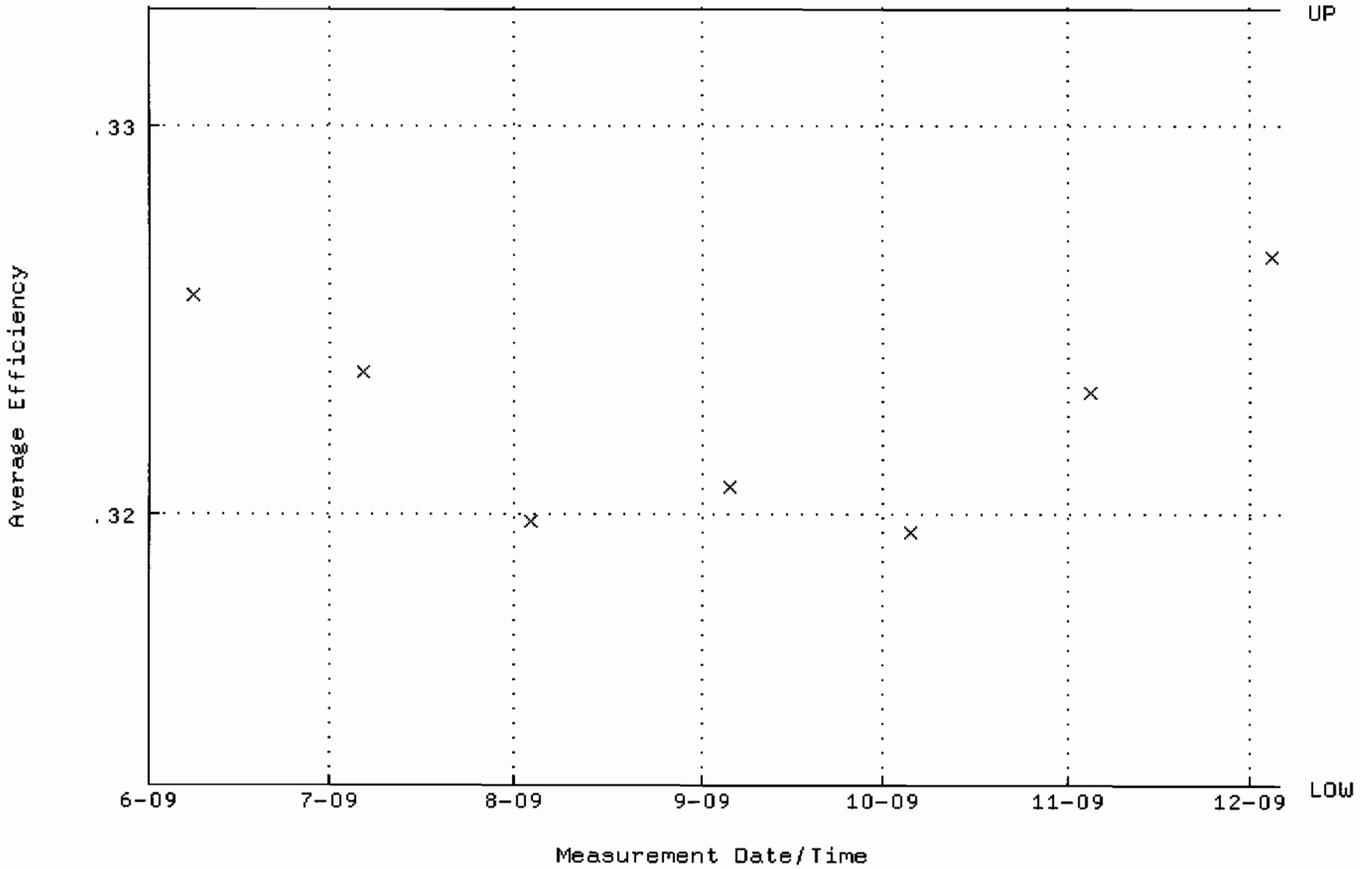

QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 82.8065 through 91.5229

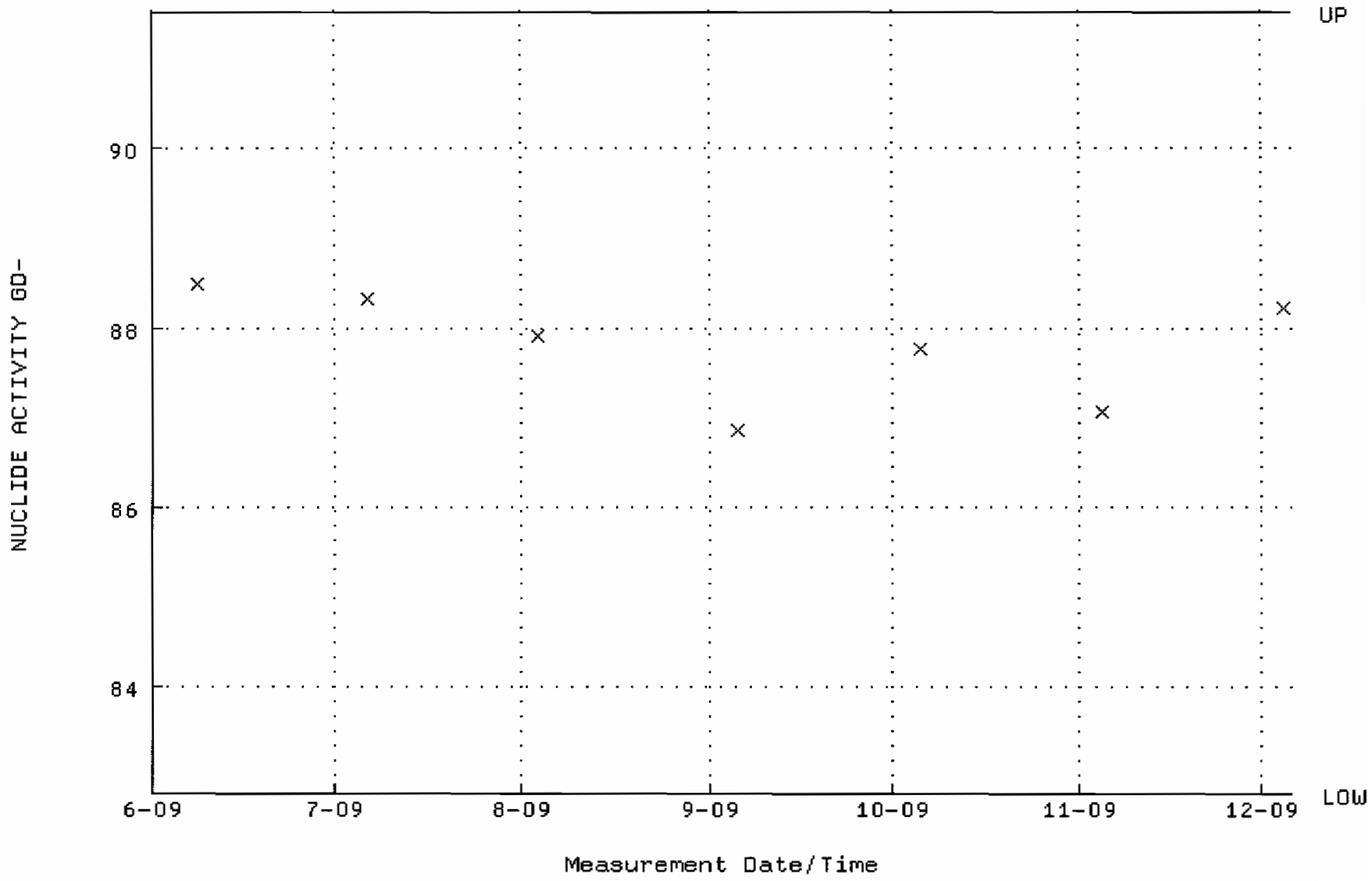

QA filename : DKA100:[ENV_ALPHA.QA.B]B040.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

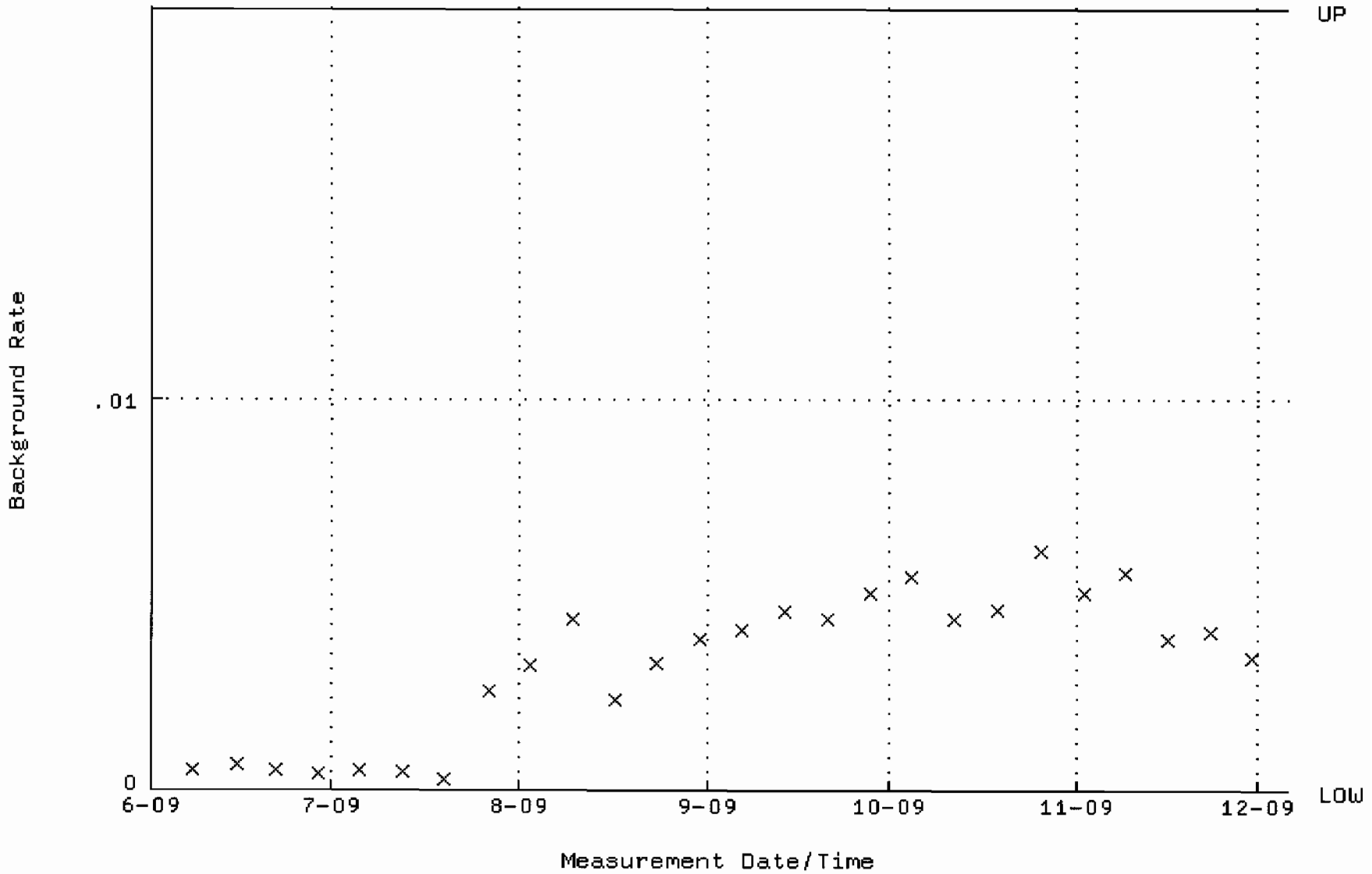

QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.320943 through 0.340943

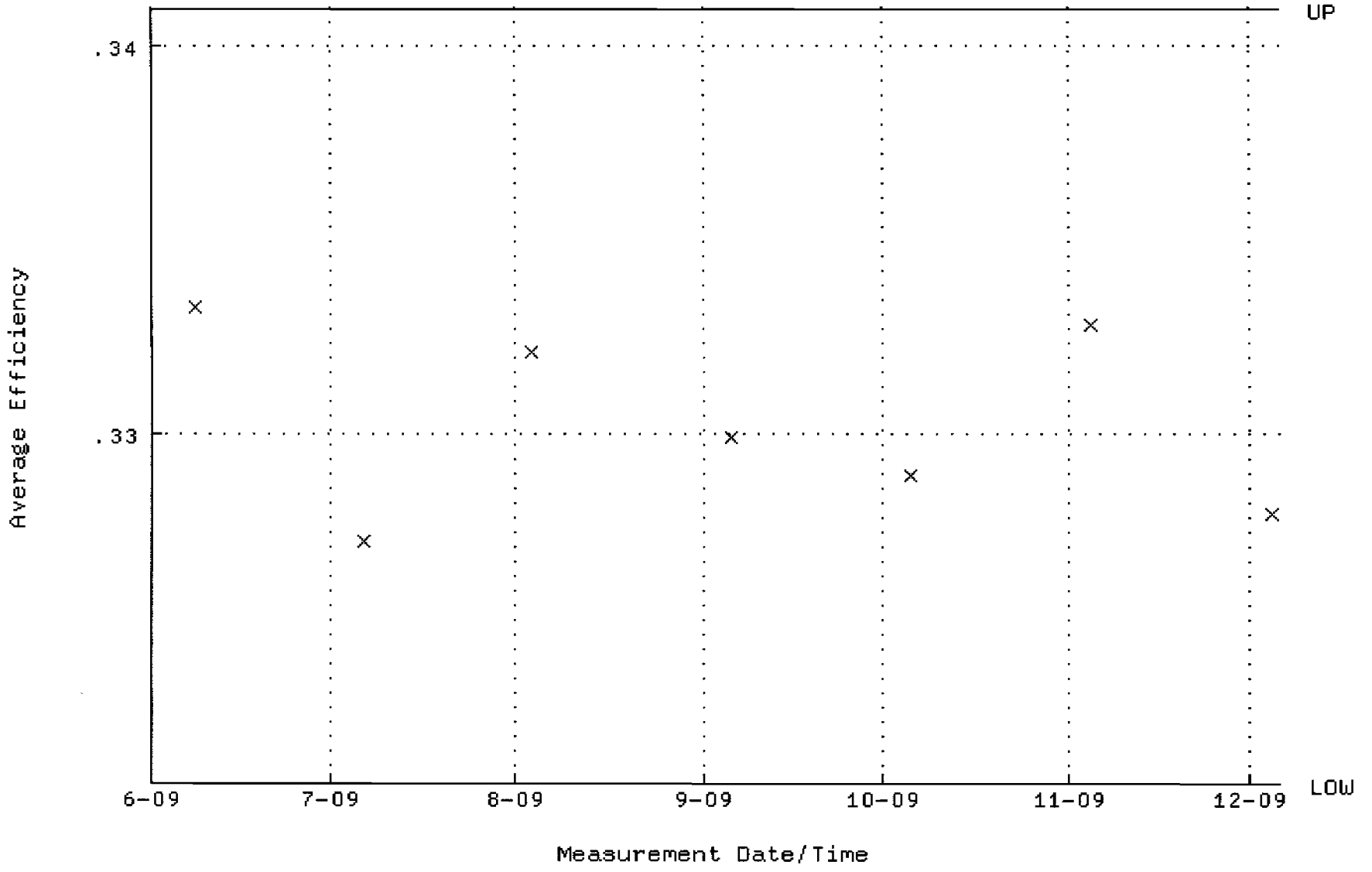

QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 86.6435 through 95.7639

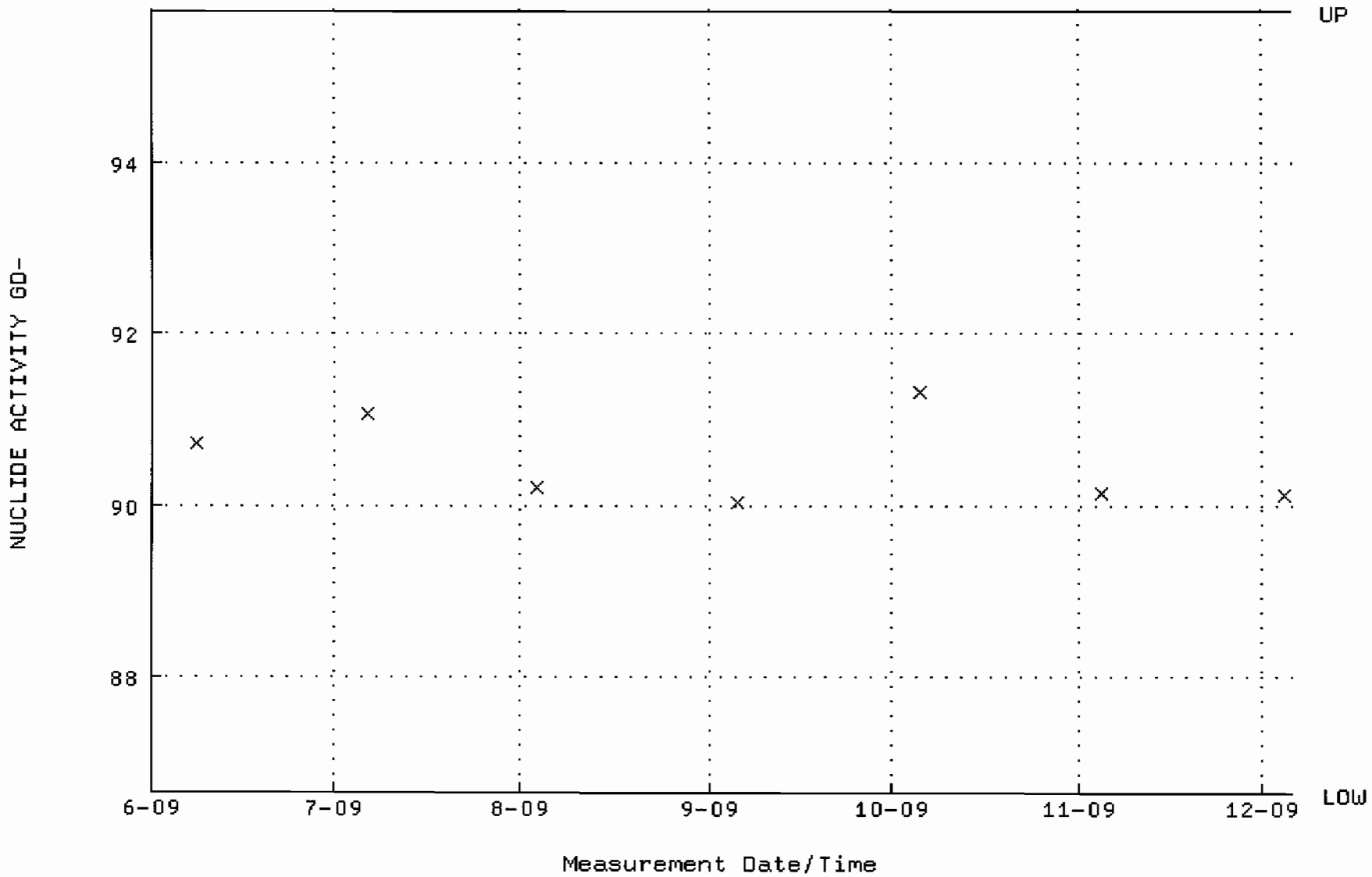

QA filename : DKA100:[ENV_ALPHA.QA.B]B041.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

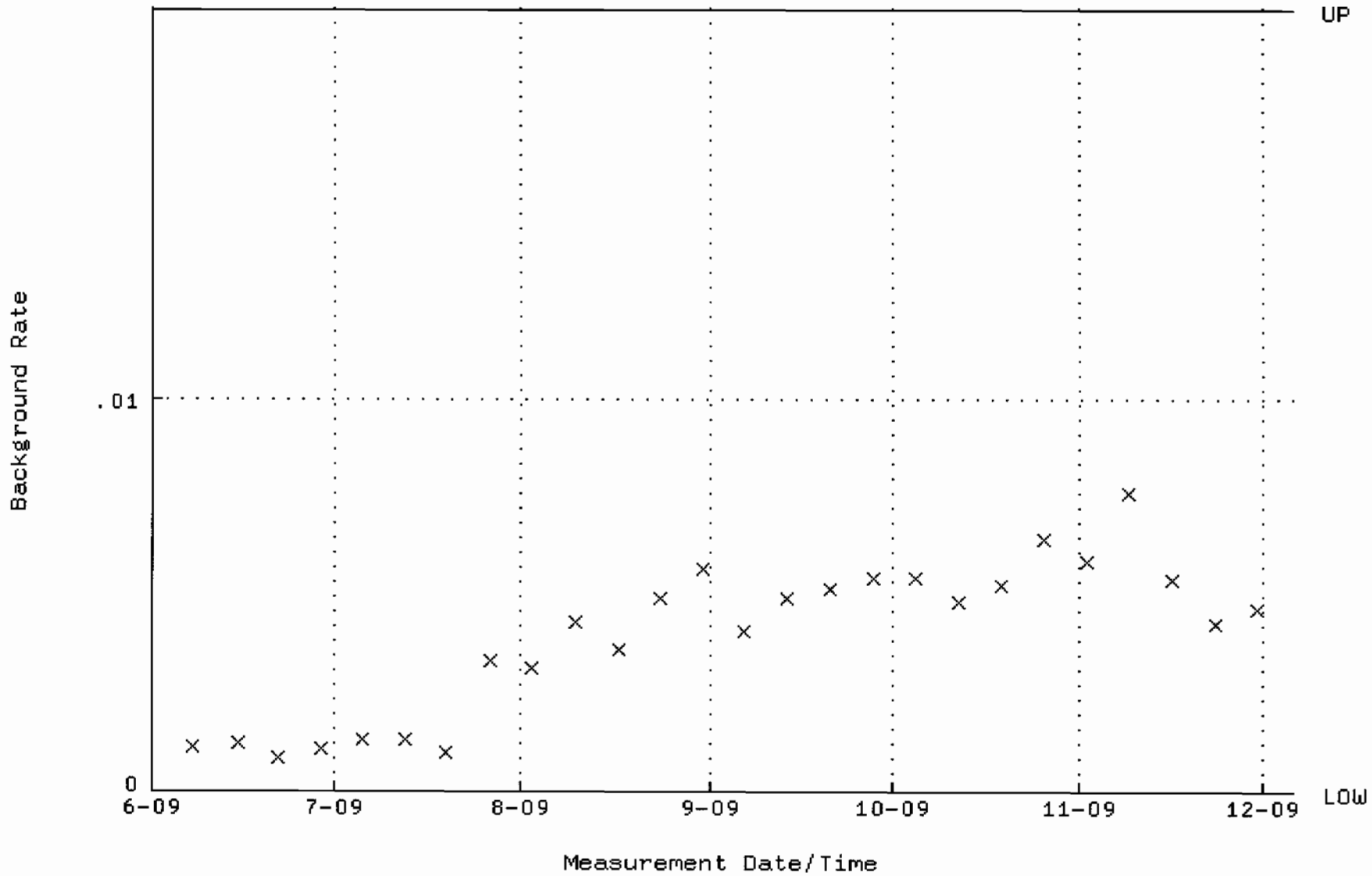

QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.322243 through 0.342243

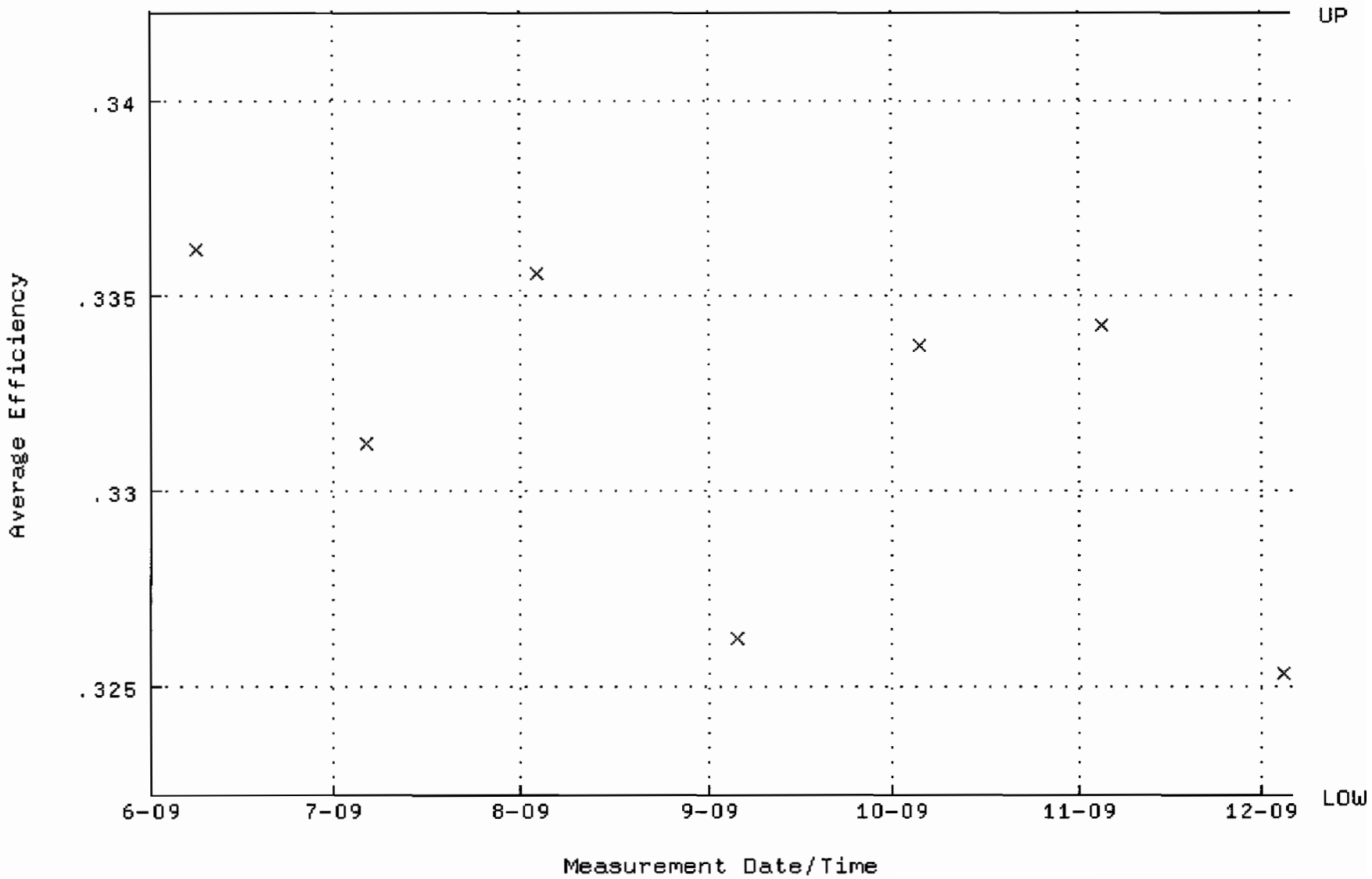

QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:39 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 80.6389 through 89.1273

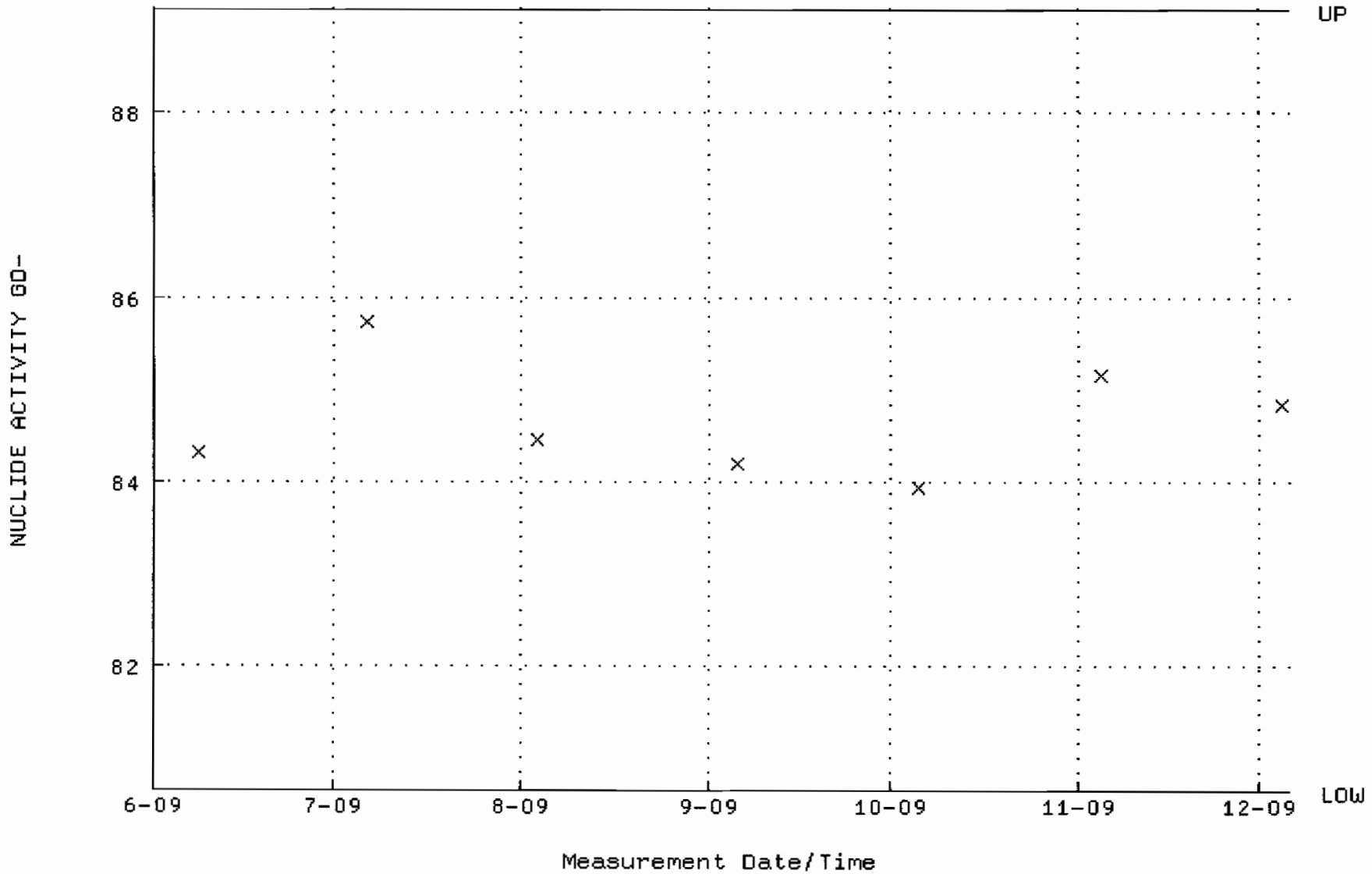

QA filename : DKA100:[ENV_ALPHA.QA.B]B042.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:30 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

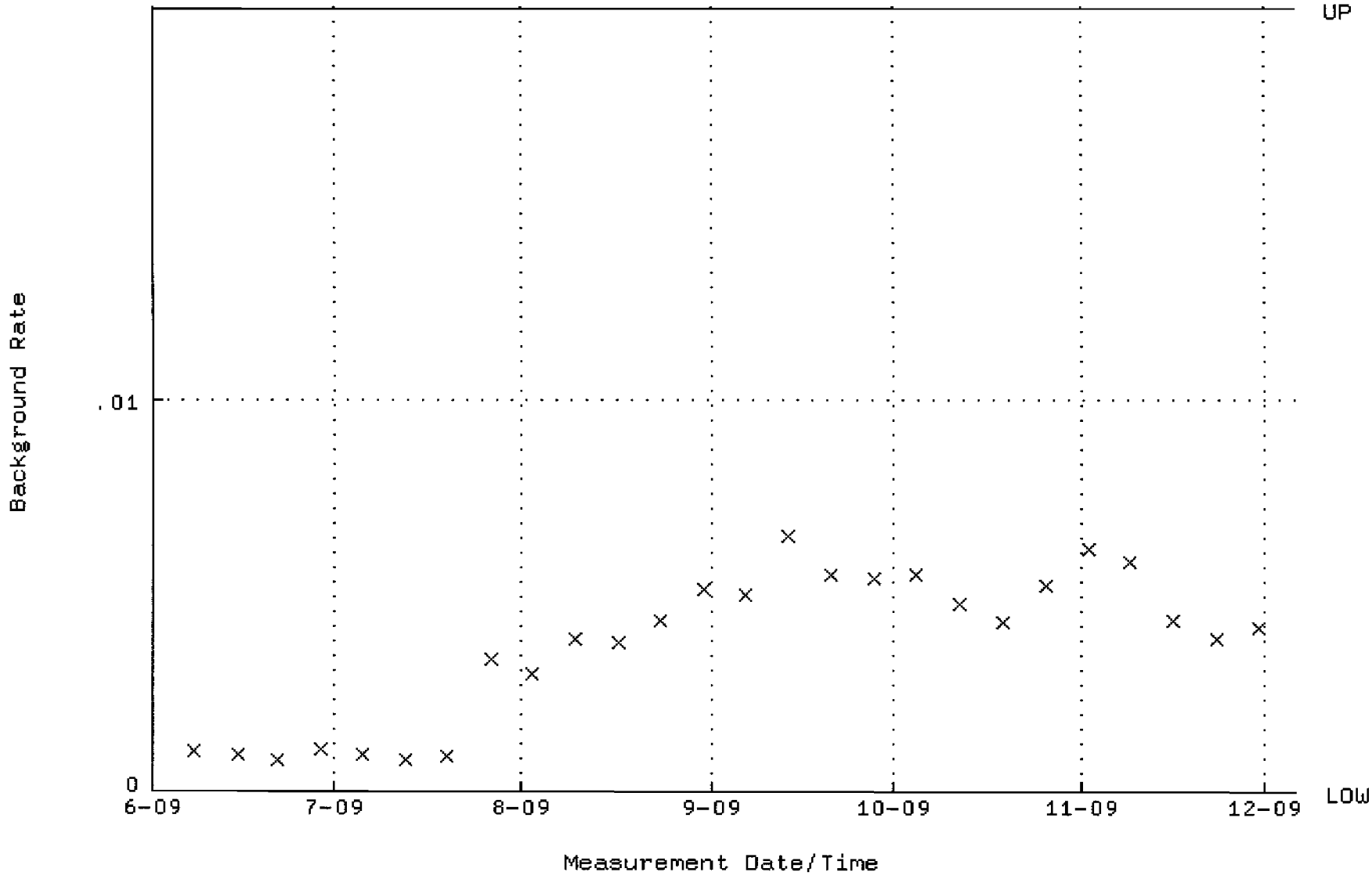

QA filename : DKA100:[ENV_ALPHA.QA.W]W043.QAF;102
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.335973 through 0.355973

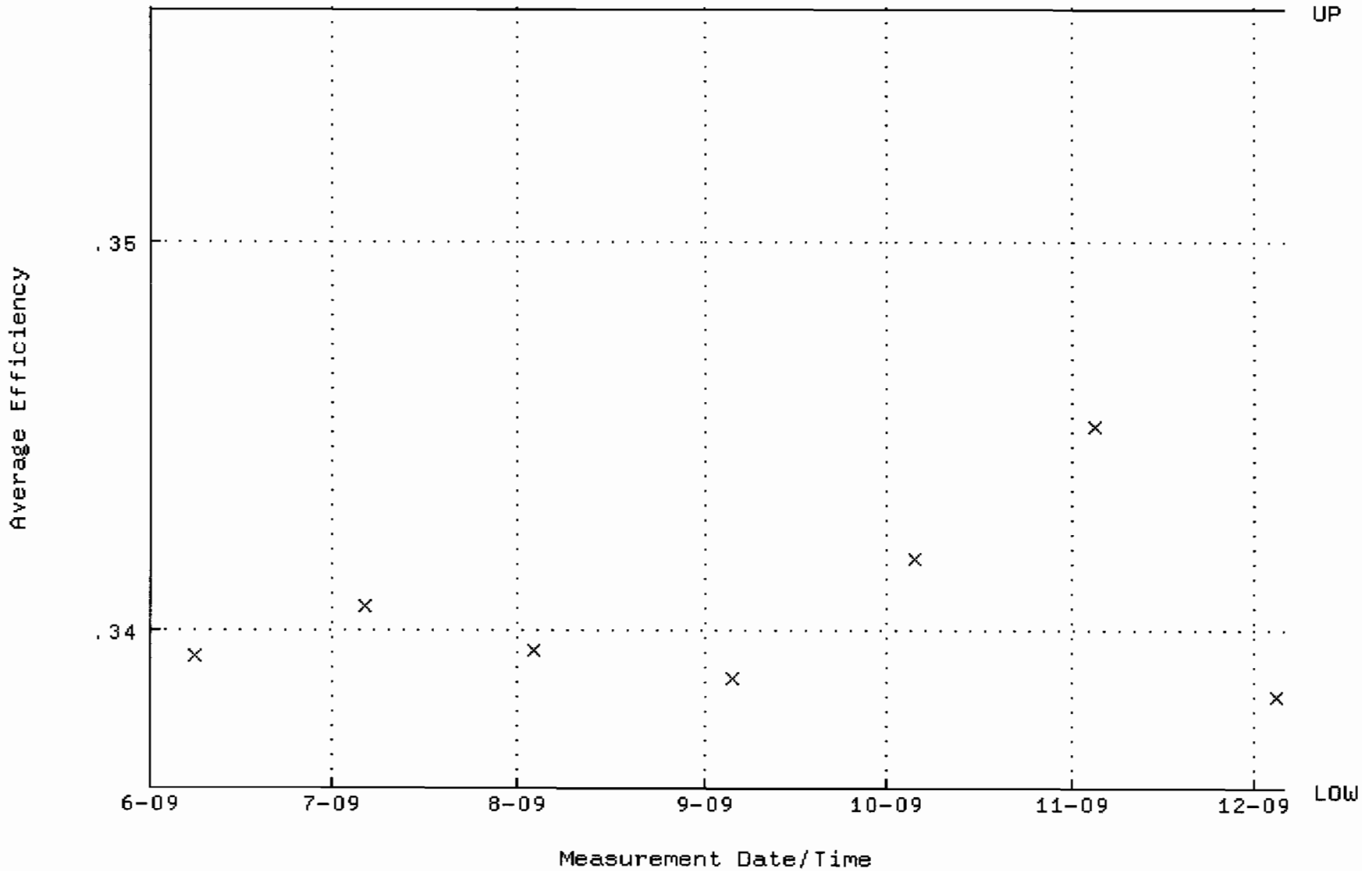

QA filename : DKA100:[ENV_ALPHA.QA.W]W043.QAF;102
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 84.2440 through 93.1118

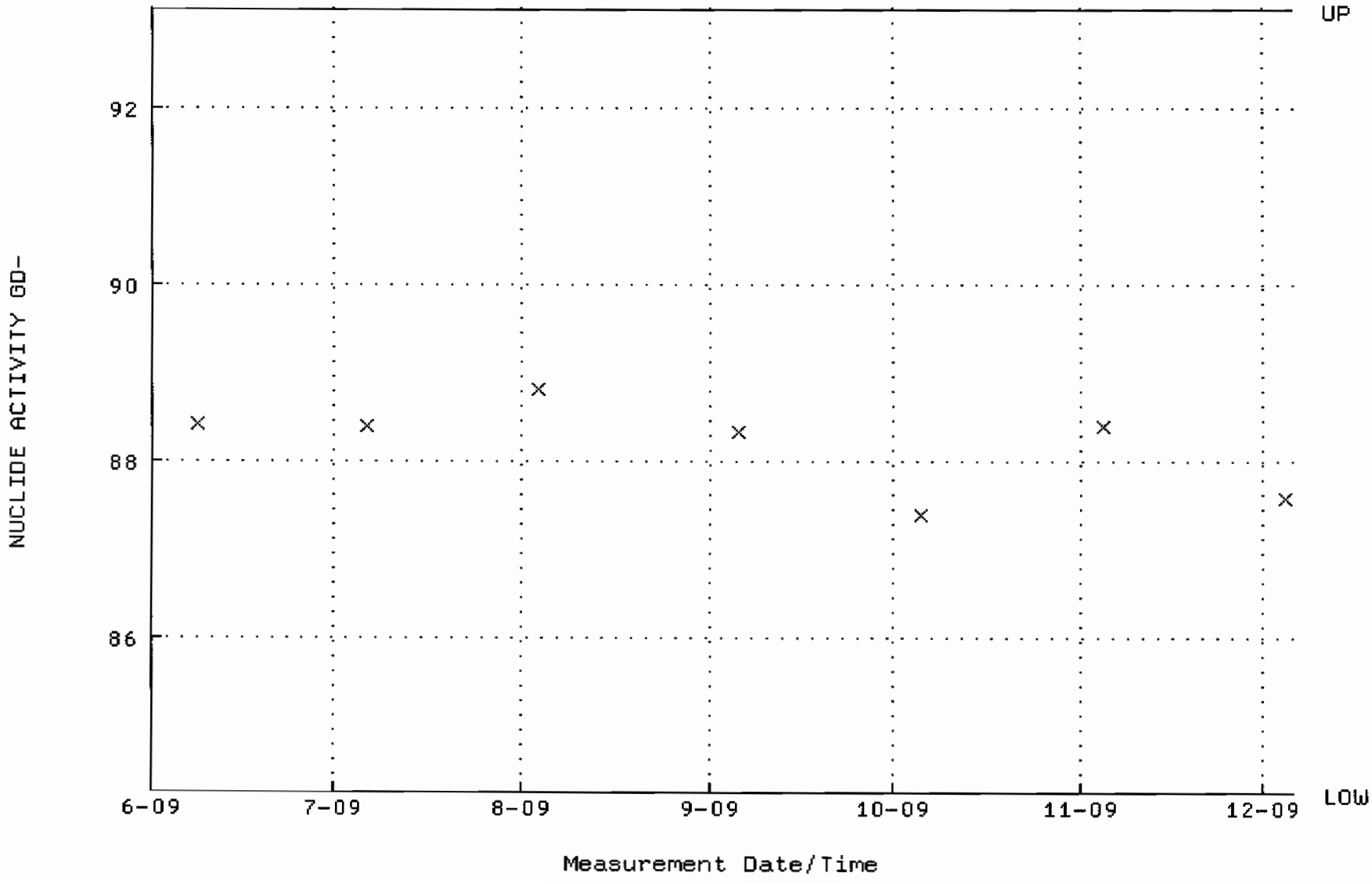

QA filename : DKA100:[ENV_ALPHA.QA.B]B043.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

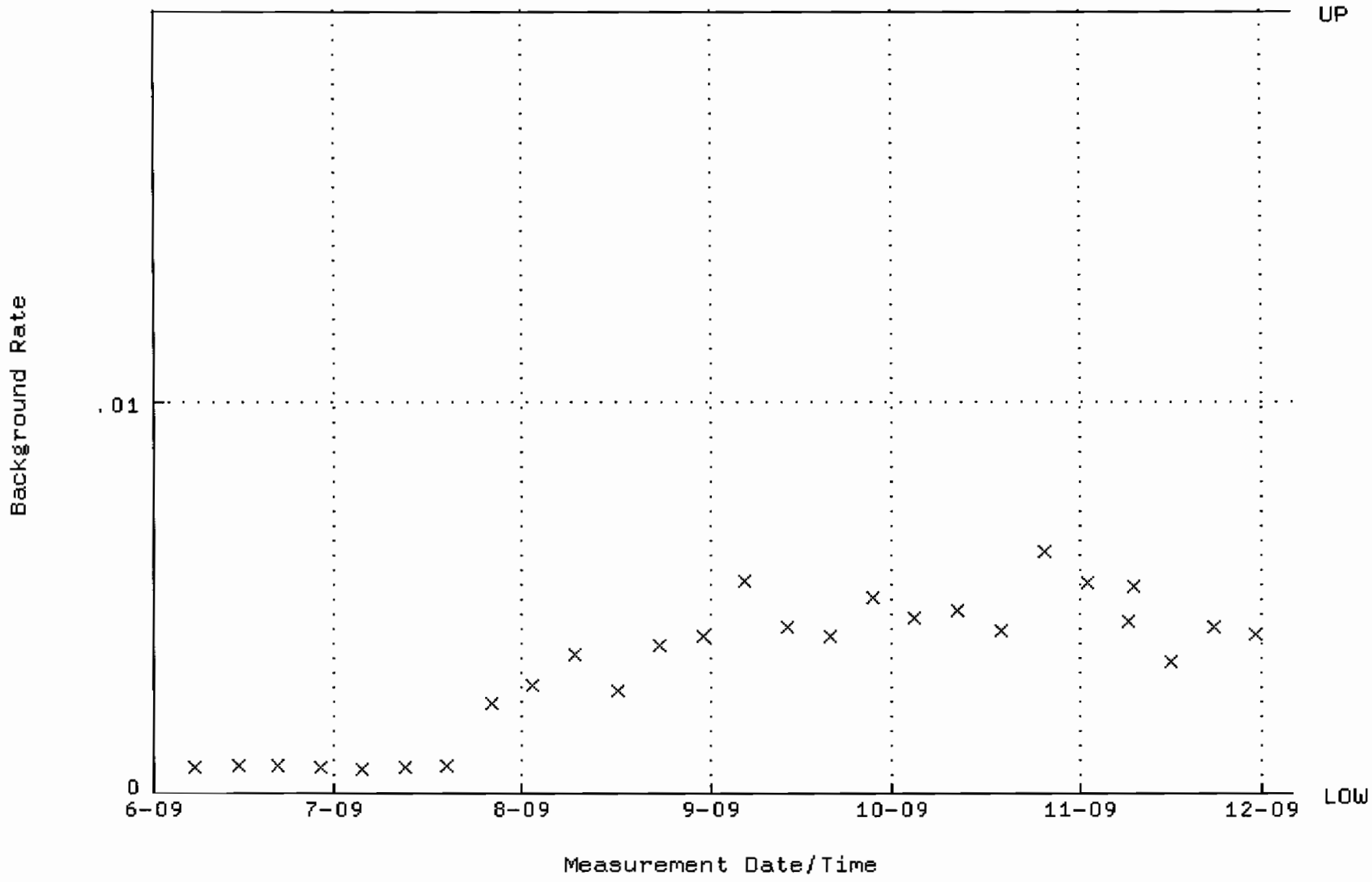

QA filename : DKA100:[ENV_ALPHA.QA.W]W044.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.336958 through 0.361648

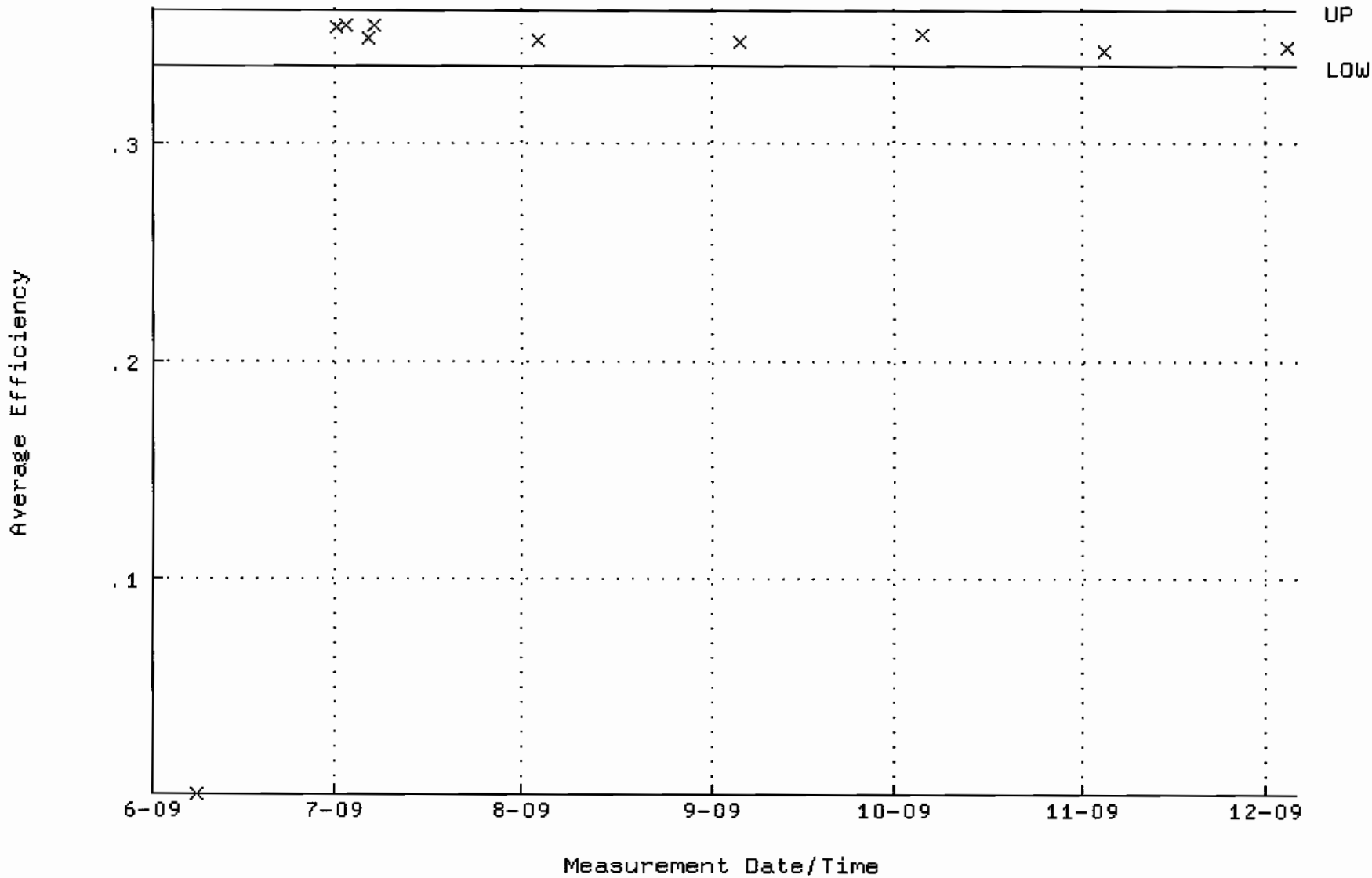

QA filename : DKA100:[ENV_ALPHA.QA.W]W044.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 86.0137 through 89.8023

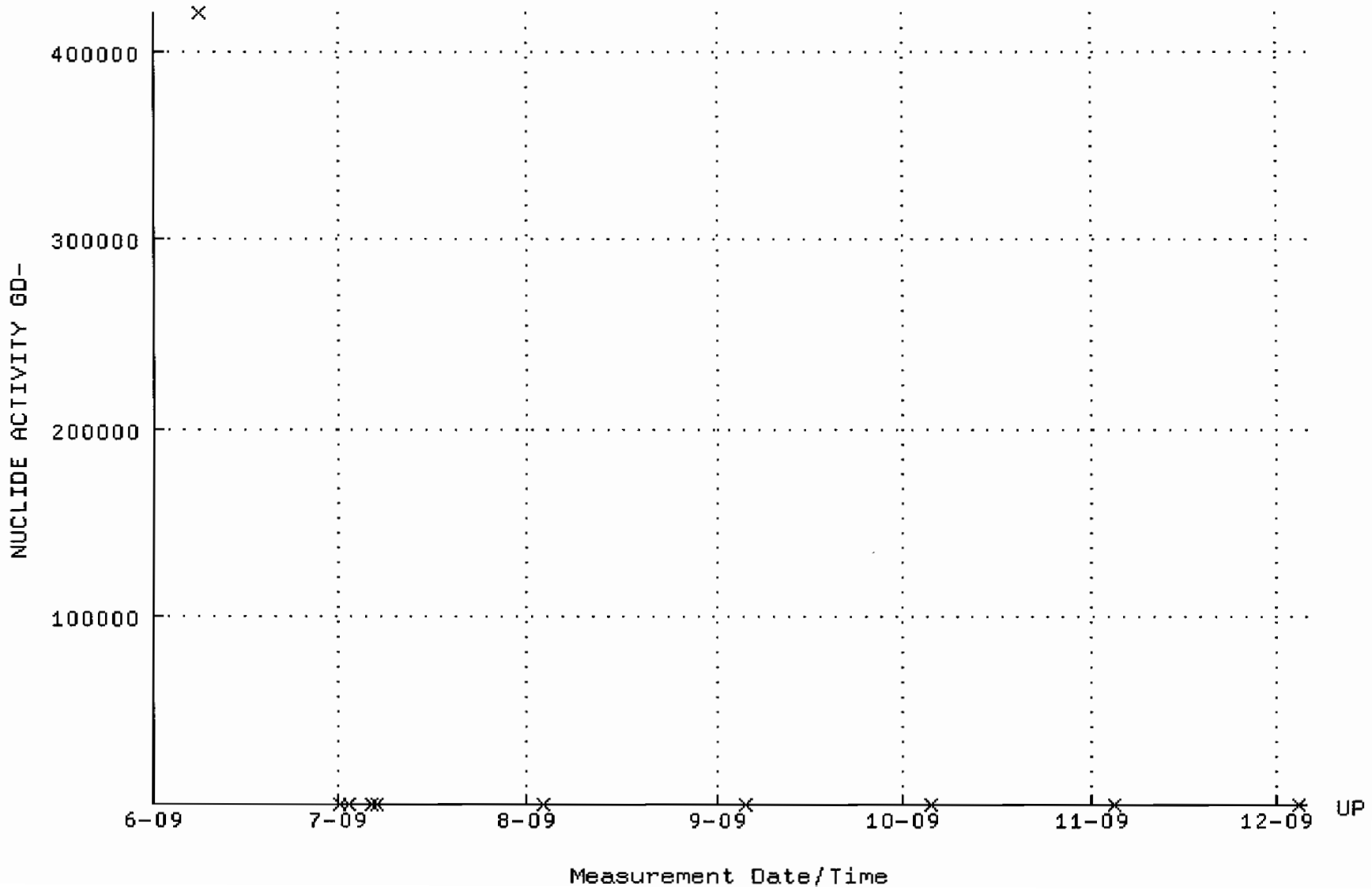

QA filename : DKA100:[ENV_ALPHA.QA.B]B044.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

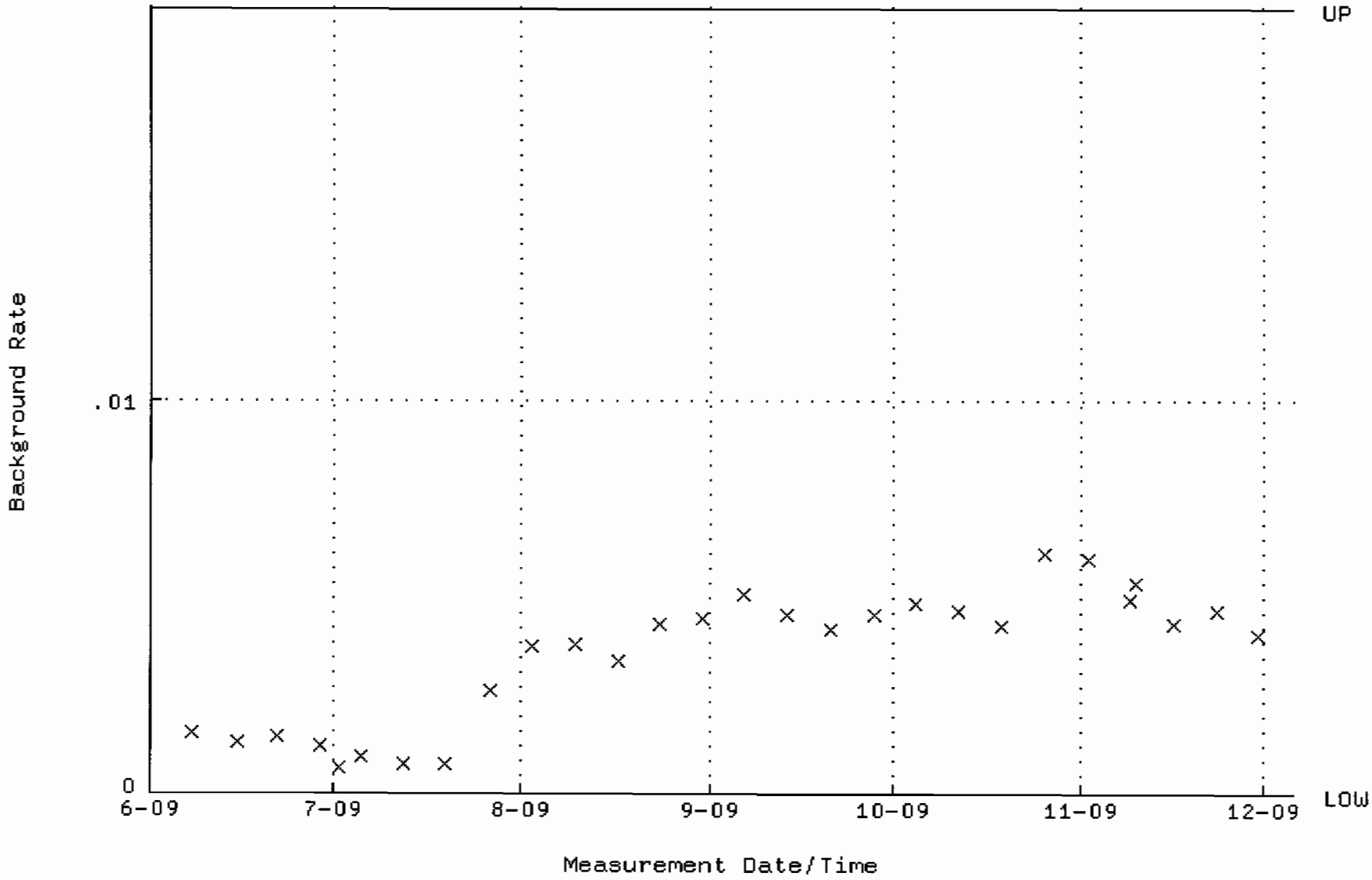

QA filename : DKA100:[ENV_ALPHA.QA.W]W045.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.332472 through 0.352472

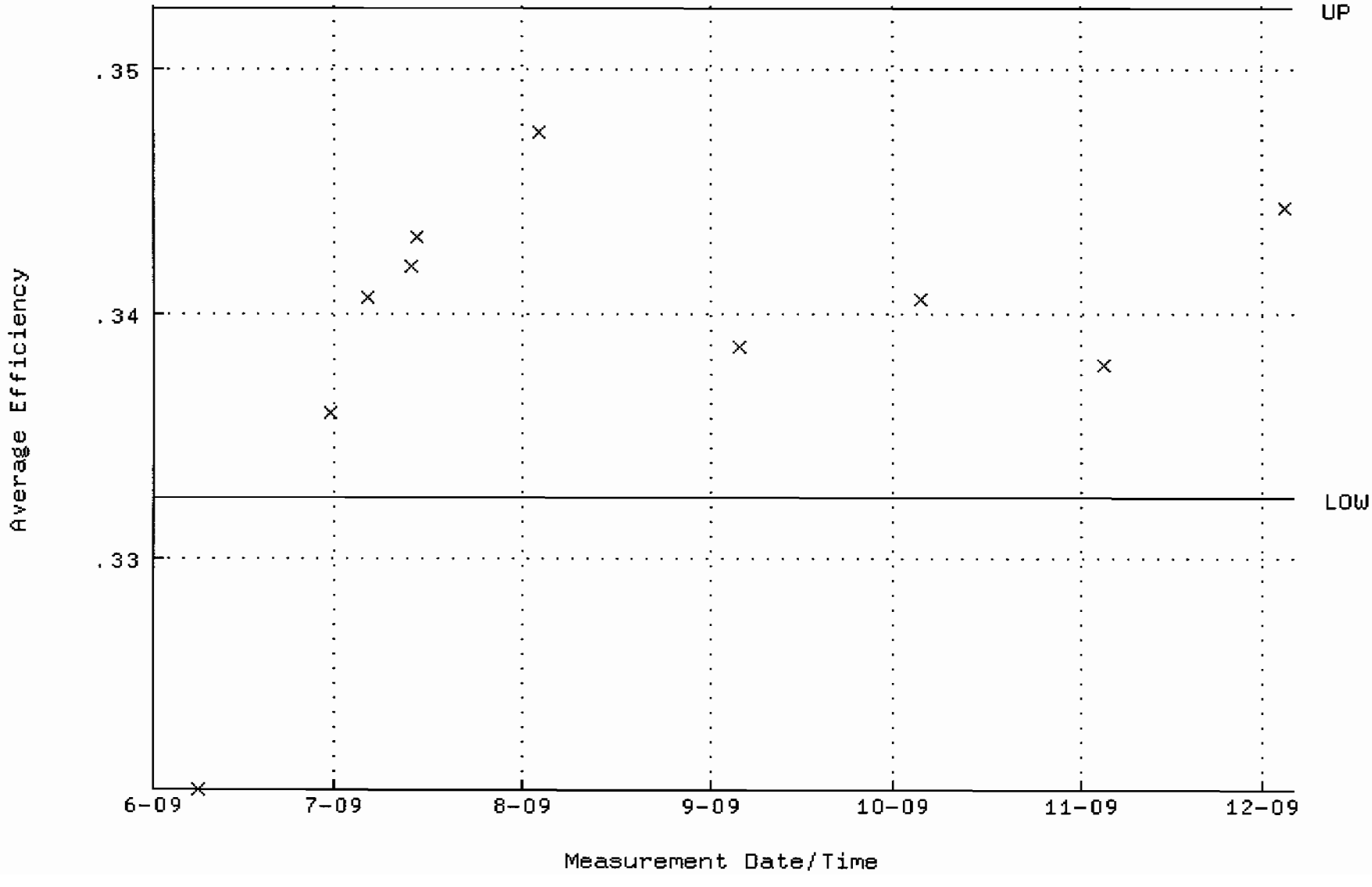

QA filename : DKA100:[ENV_ALPHA.QA.W]W045.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 80.4622 through 88.9320

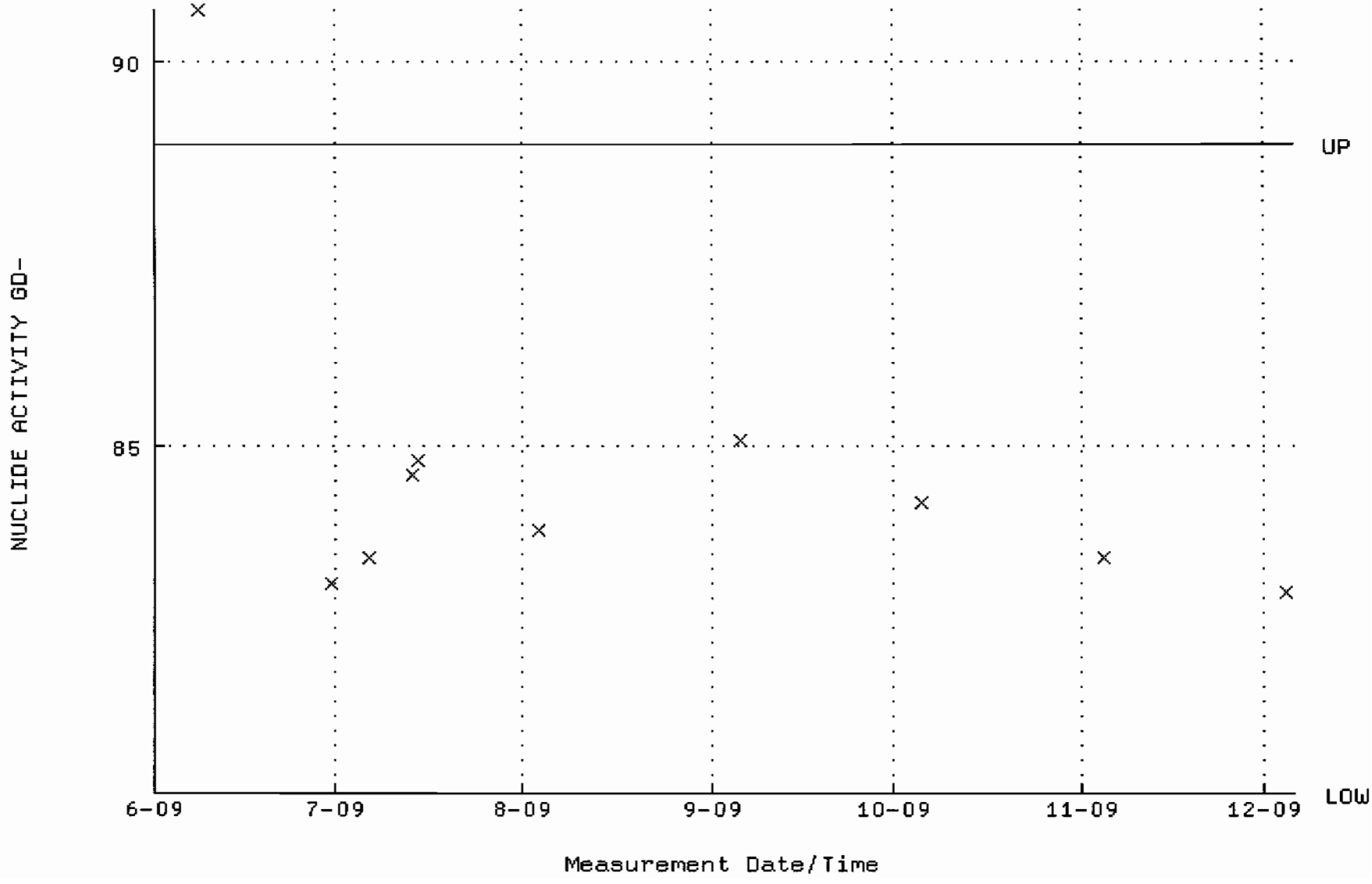

QA filename : DKA100:[ENV_ALPHA.QA.B]B045.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

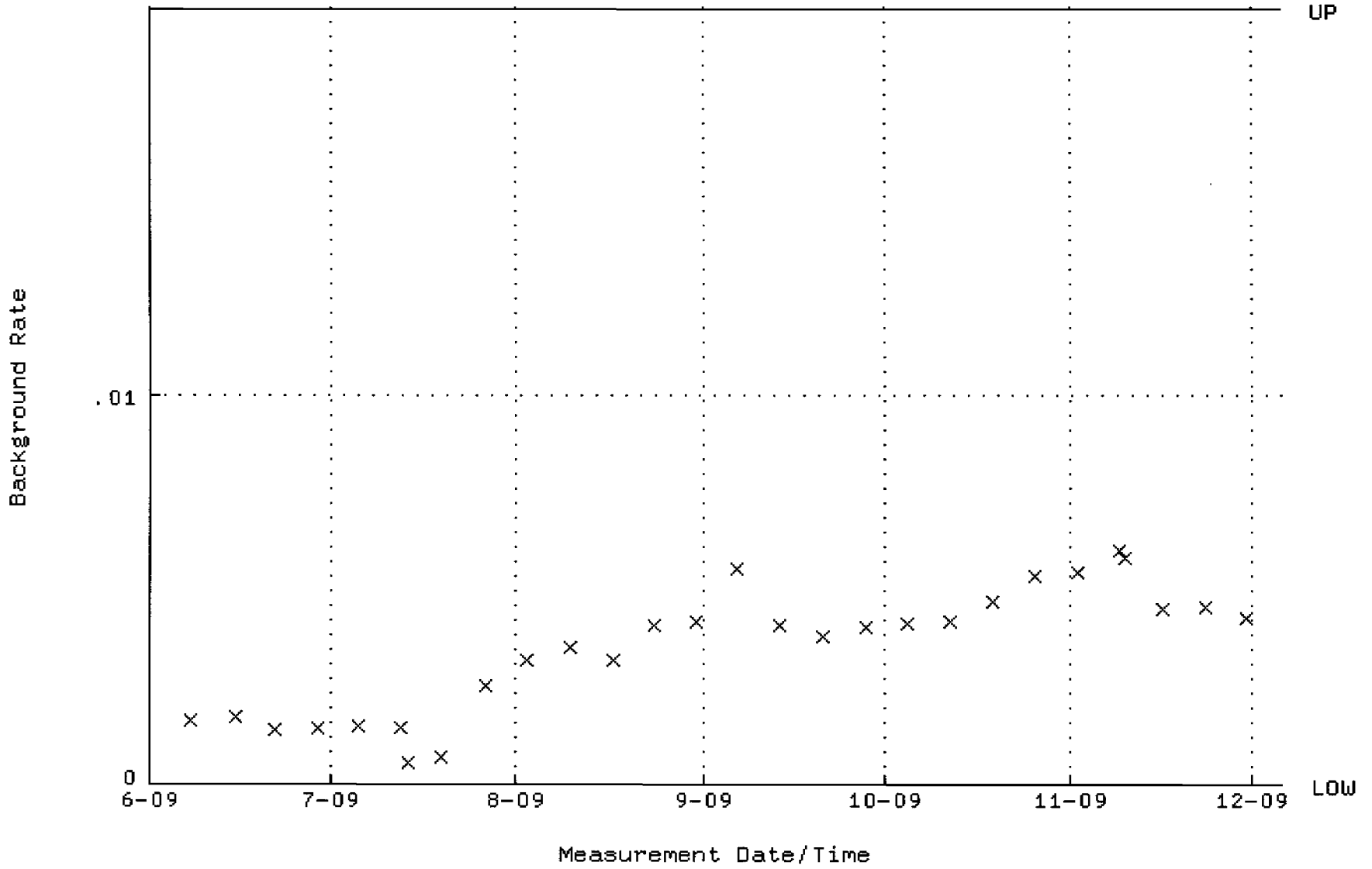

QA filename : DKA100:[ENV_ALPHA.QA.W]W046.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.333927 through 0.353927

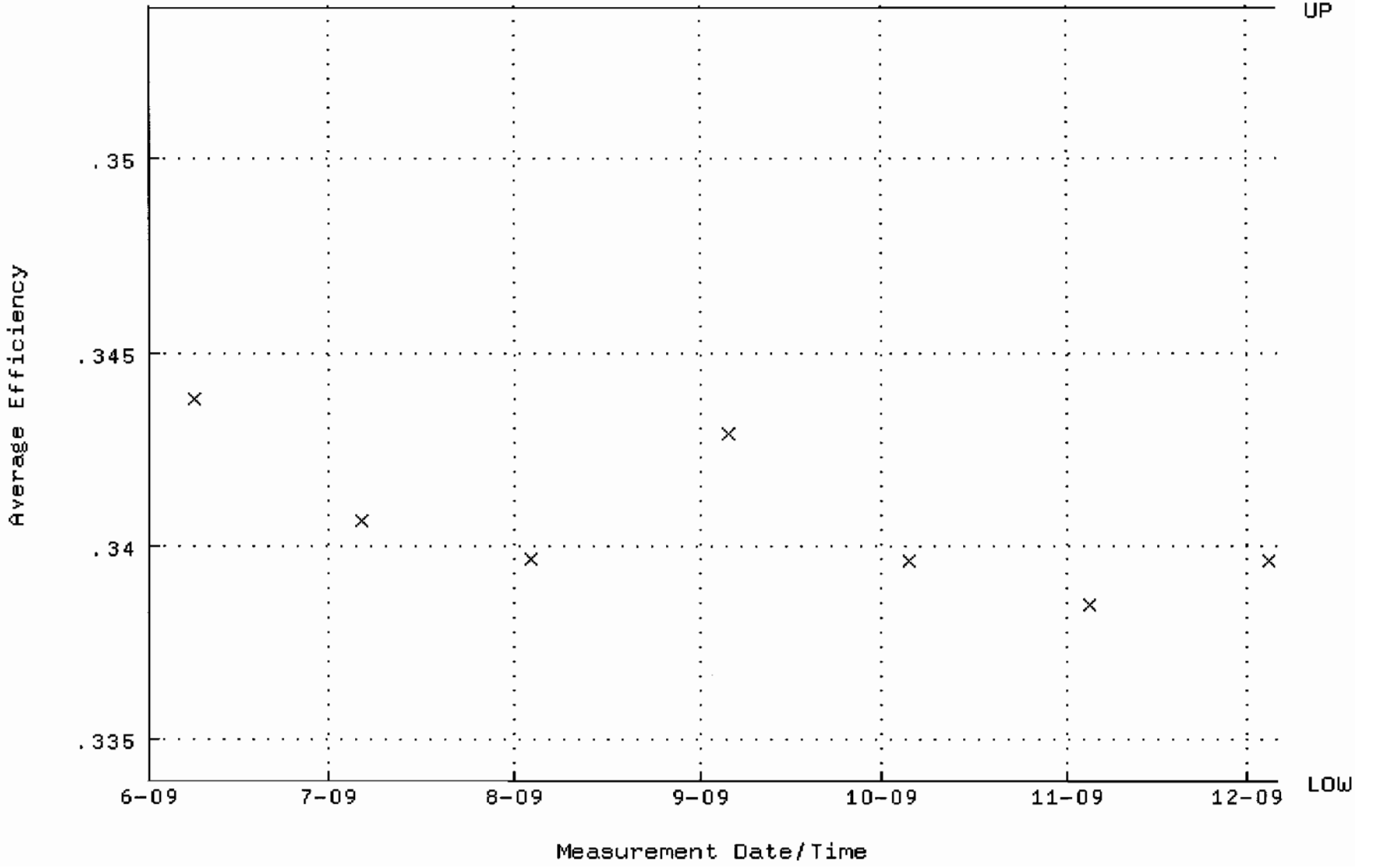

QA filename : DKA100:[ENV_ALPHA.QA.W]W046.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 81.7568 through 90.3628

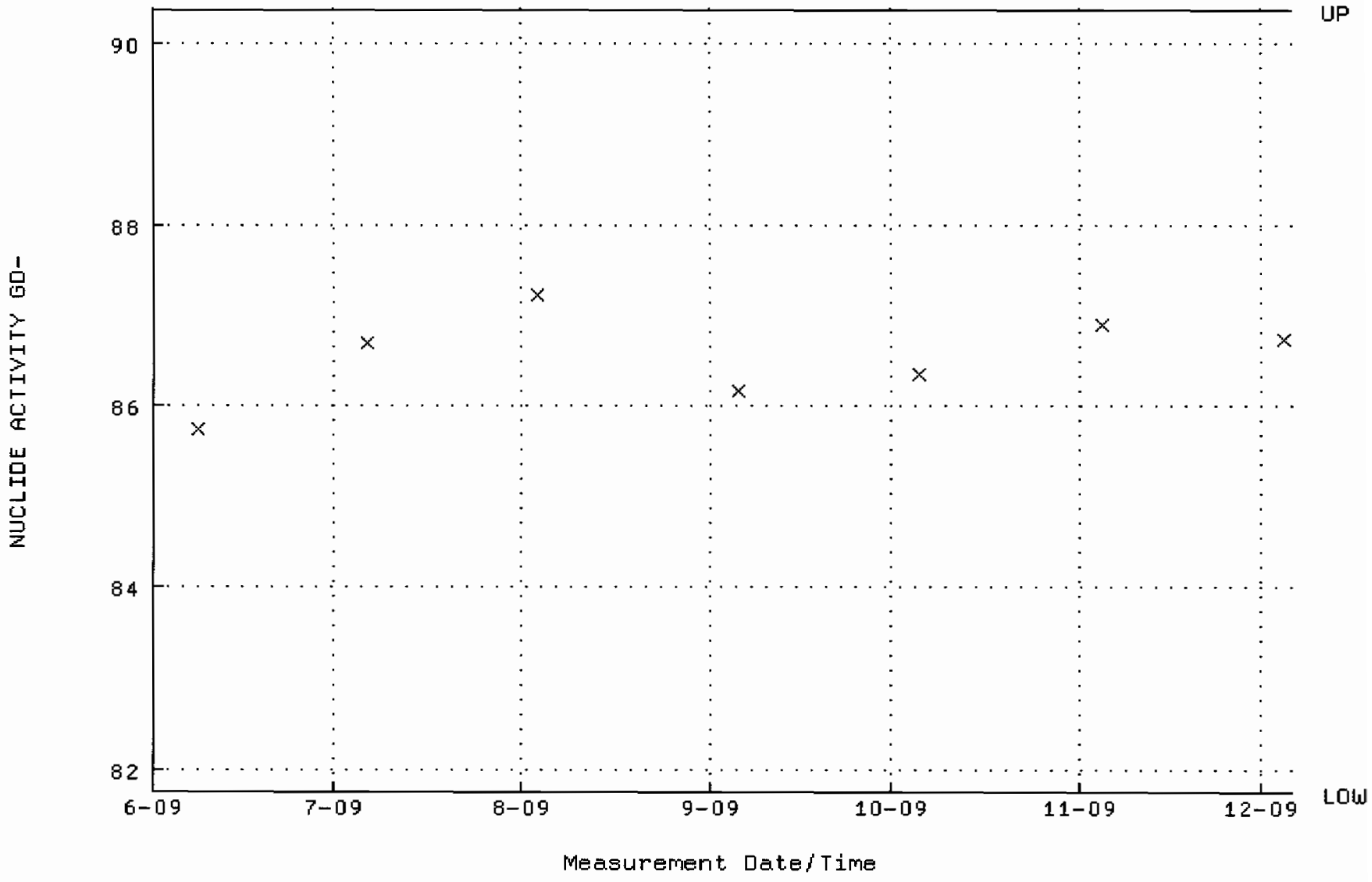

QA filename : DKA100:[ENV_ALPHA.QA.B]B046.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

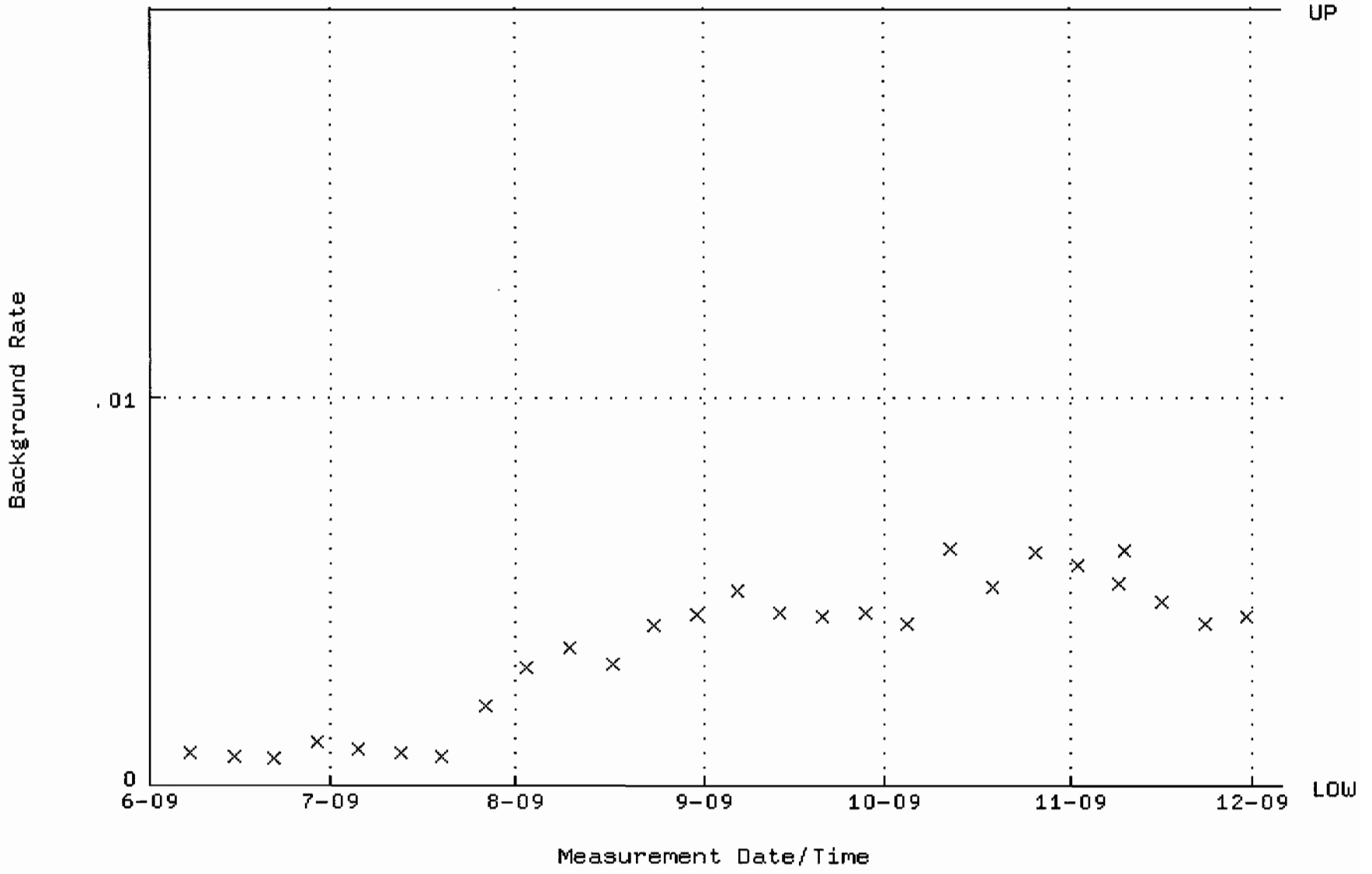

QA filename : DKA100:[ENV_ALPHA.QA.W]W047.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.336276 through 0.364038

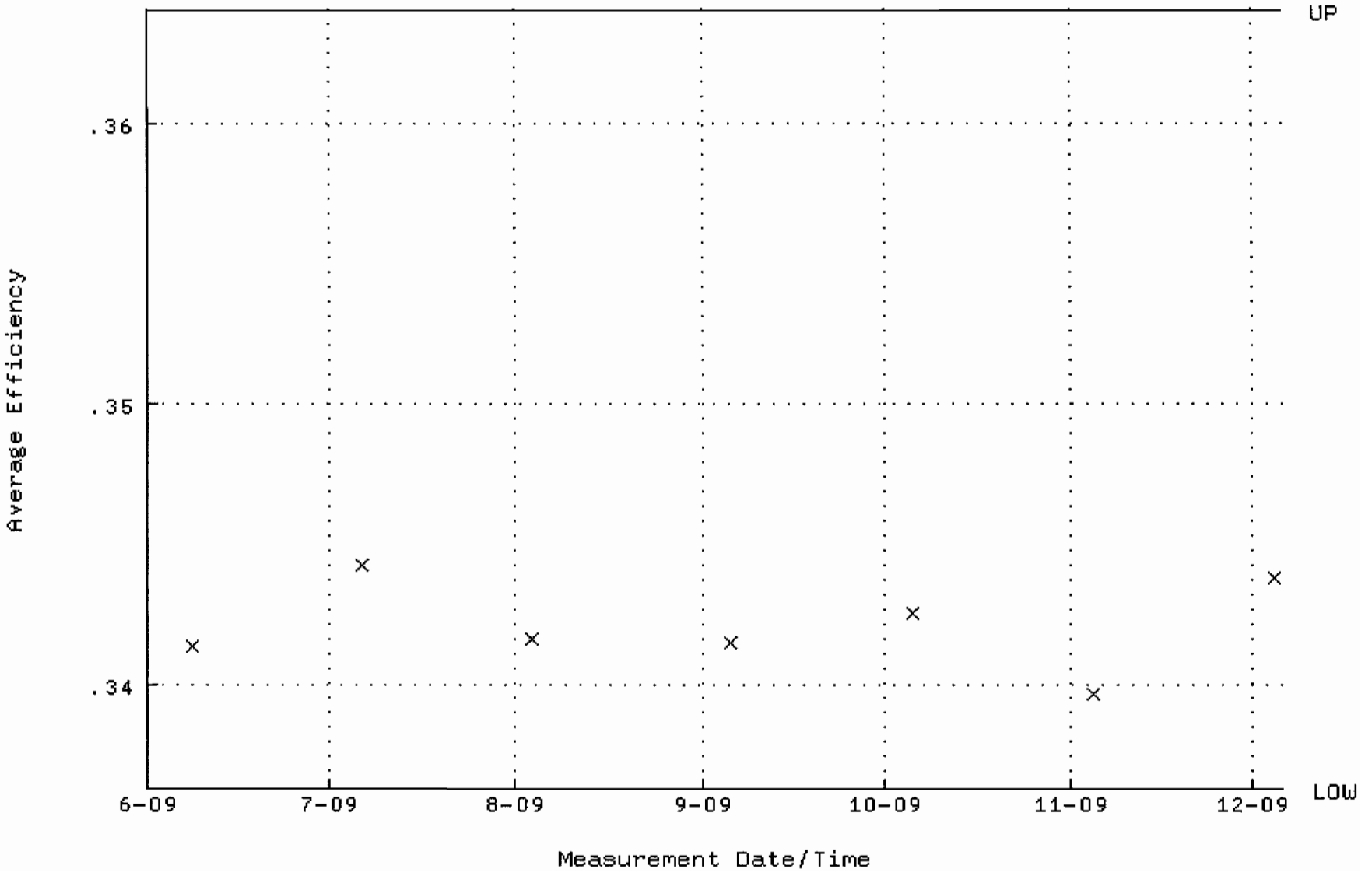

QA filename : DKA100:[ENV_ALPHA.QA.W]W047.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 87.1403 through 89.8631

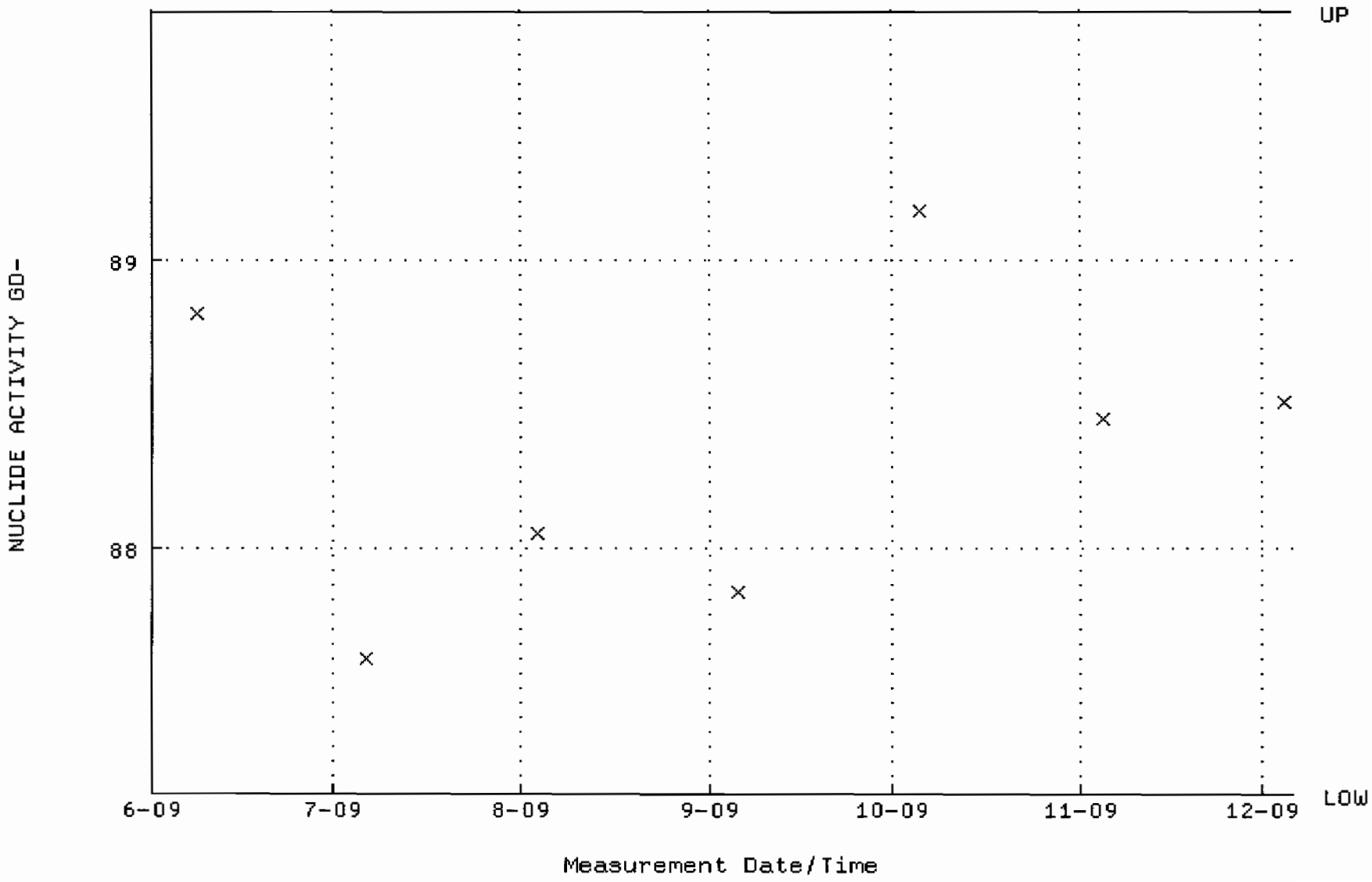

QA filename : DKA100:[ENV_ALPHA.QA.B]B047.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

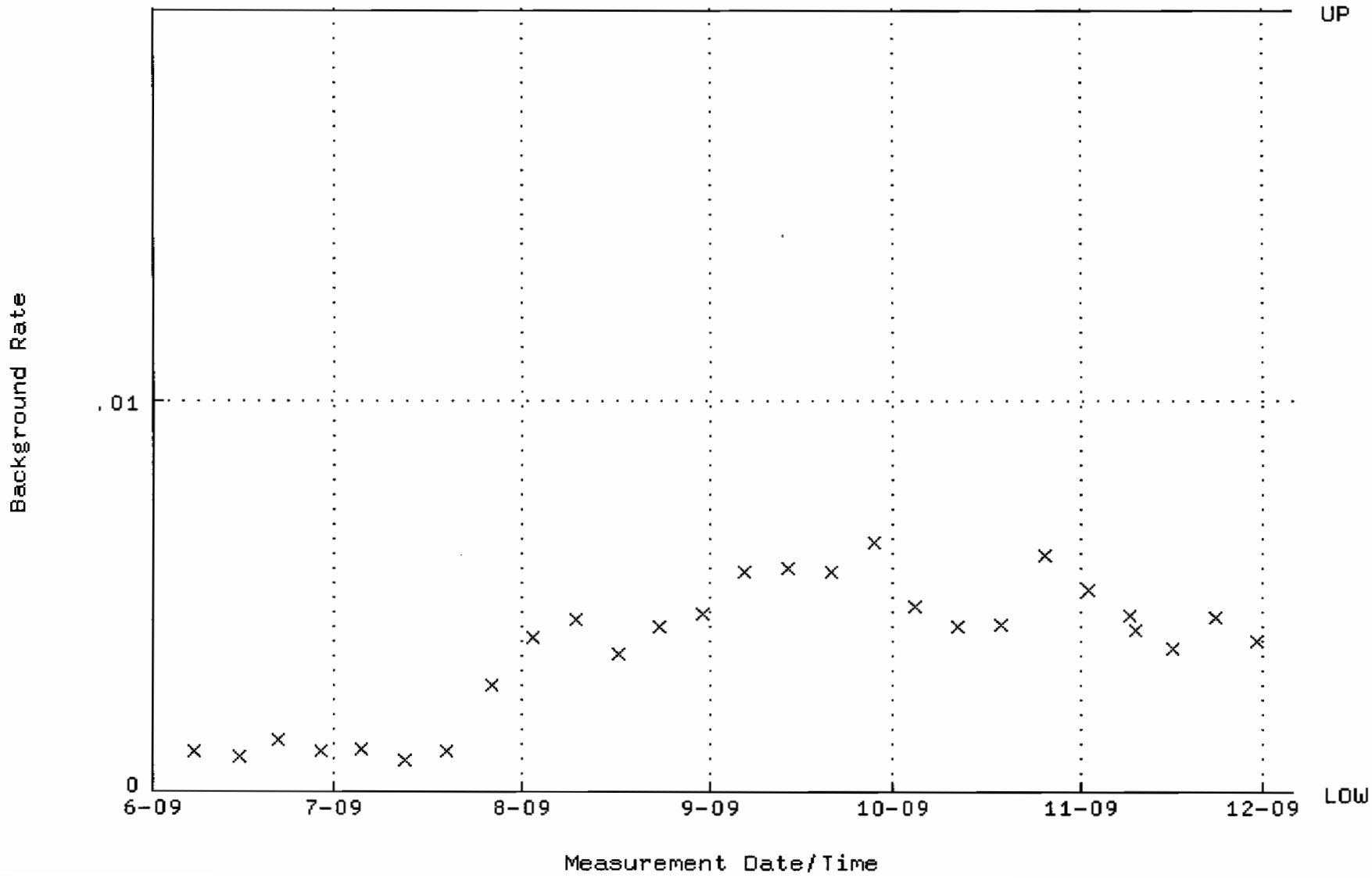

QA filename : DKA100:[ENV_ALPHA.QA.W]W048.QAF;6
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

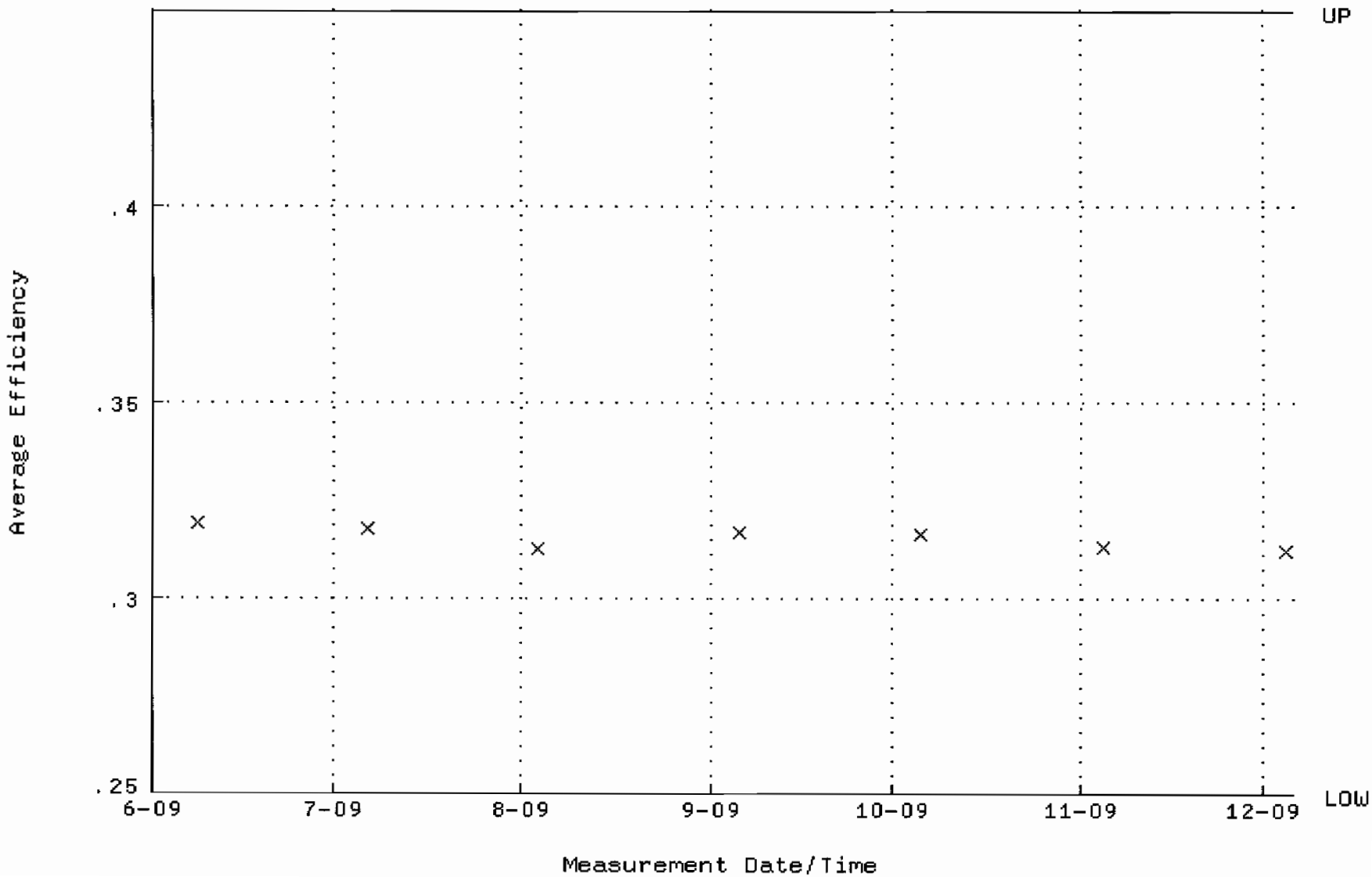

QA filename : DKA100:[ENV_ALPHA.QA.W]W048.QAF;6
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

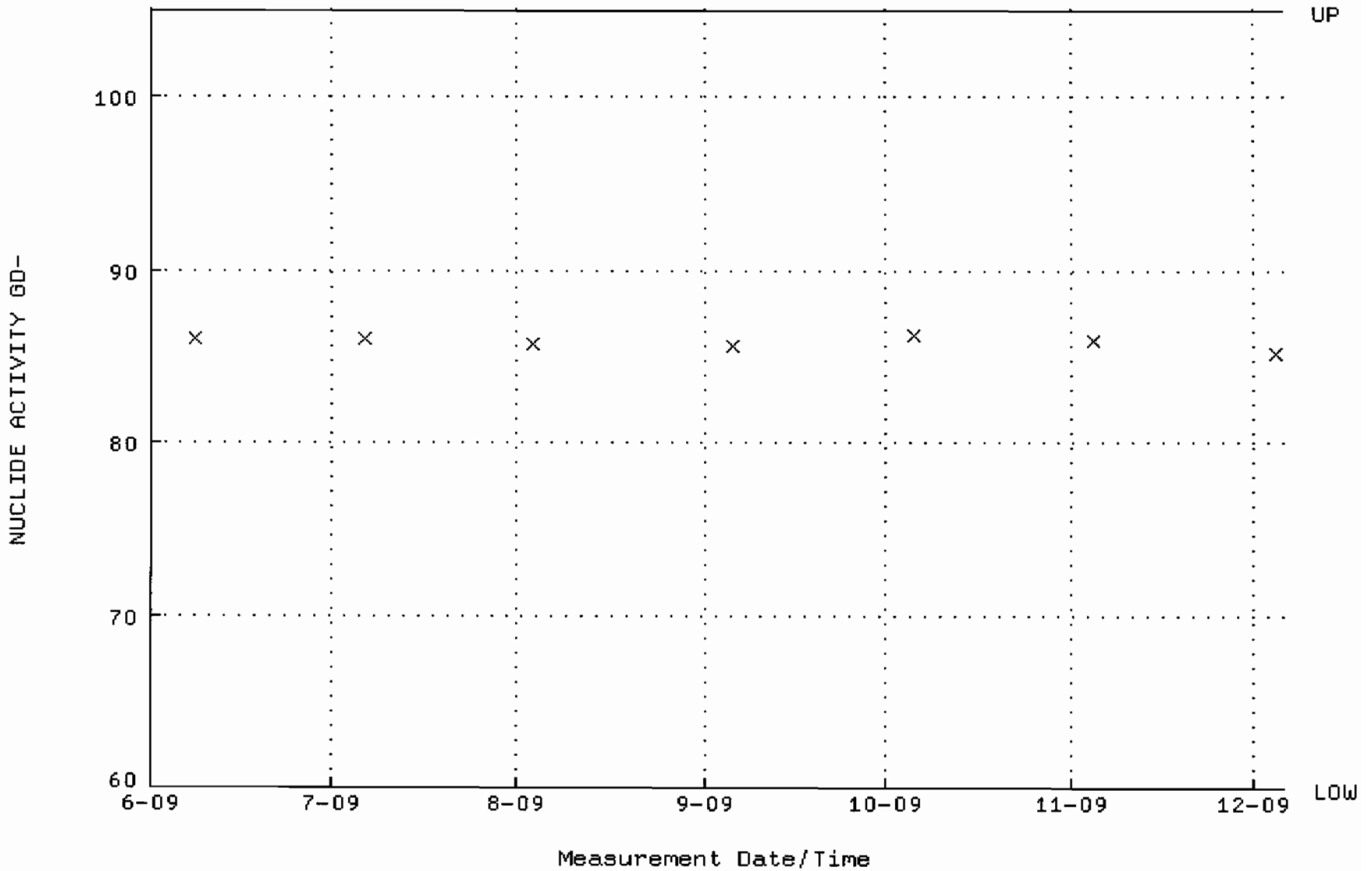

QA filename : DKA100:[ENV_ALPHA.QA.B]B048.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

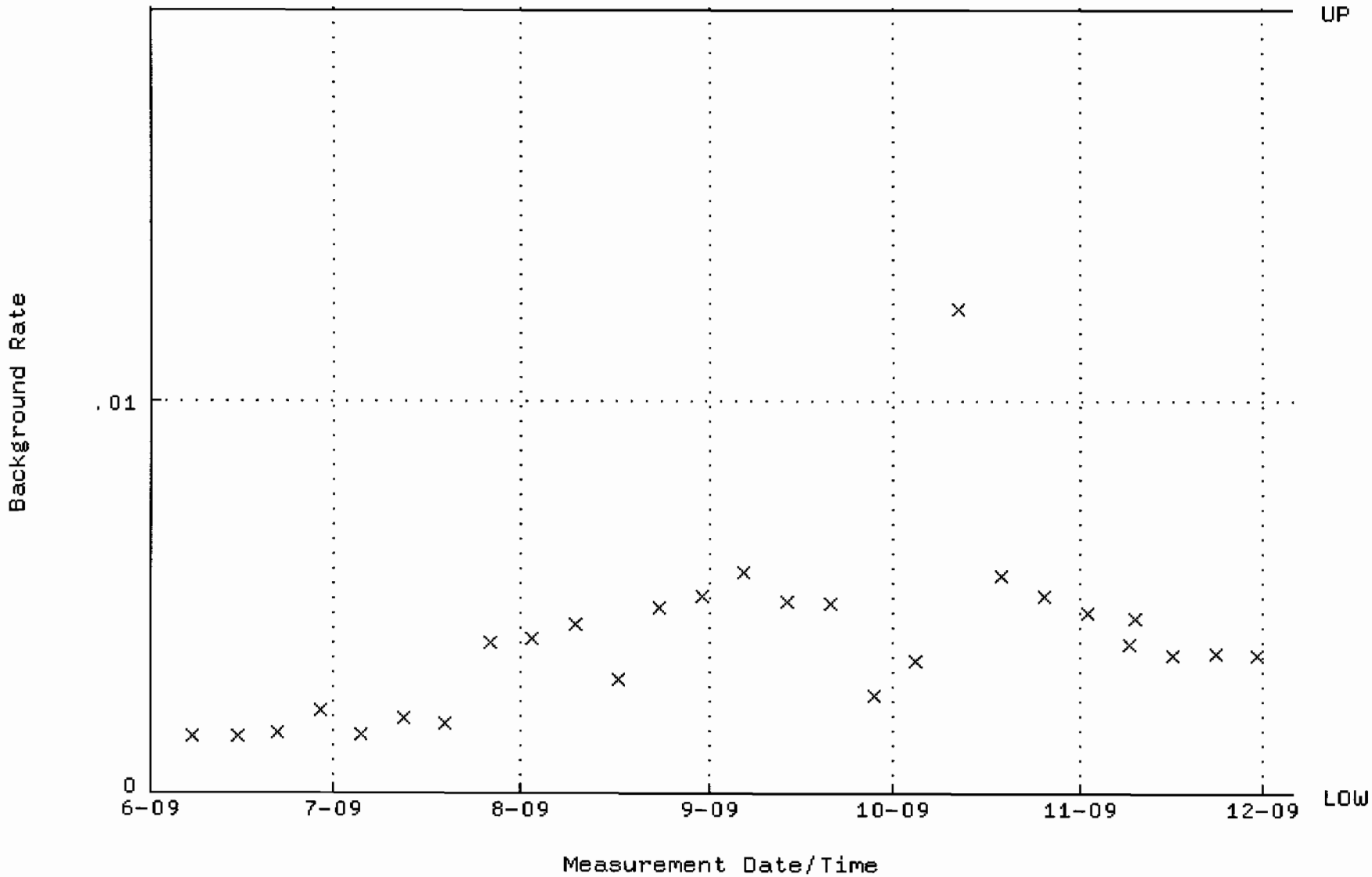

QA filename : DKA100:[ENV_ALPHA.QA.W]W065.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.302750 through 0.322750

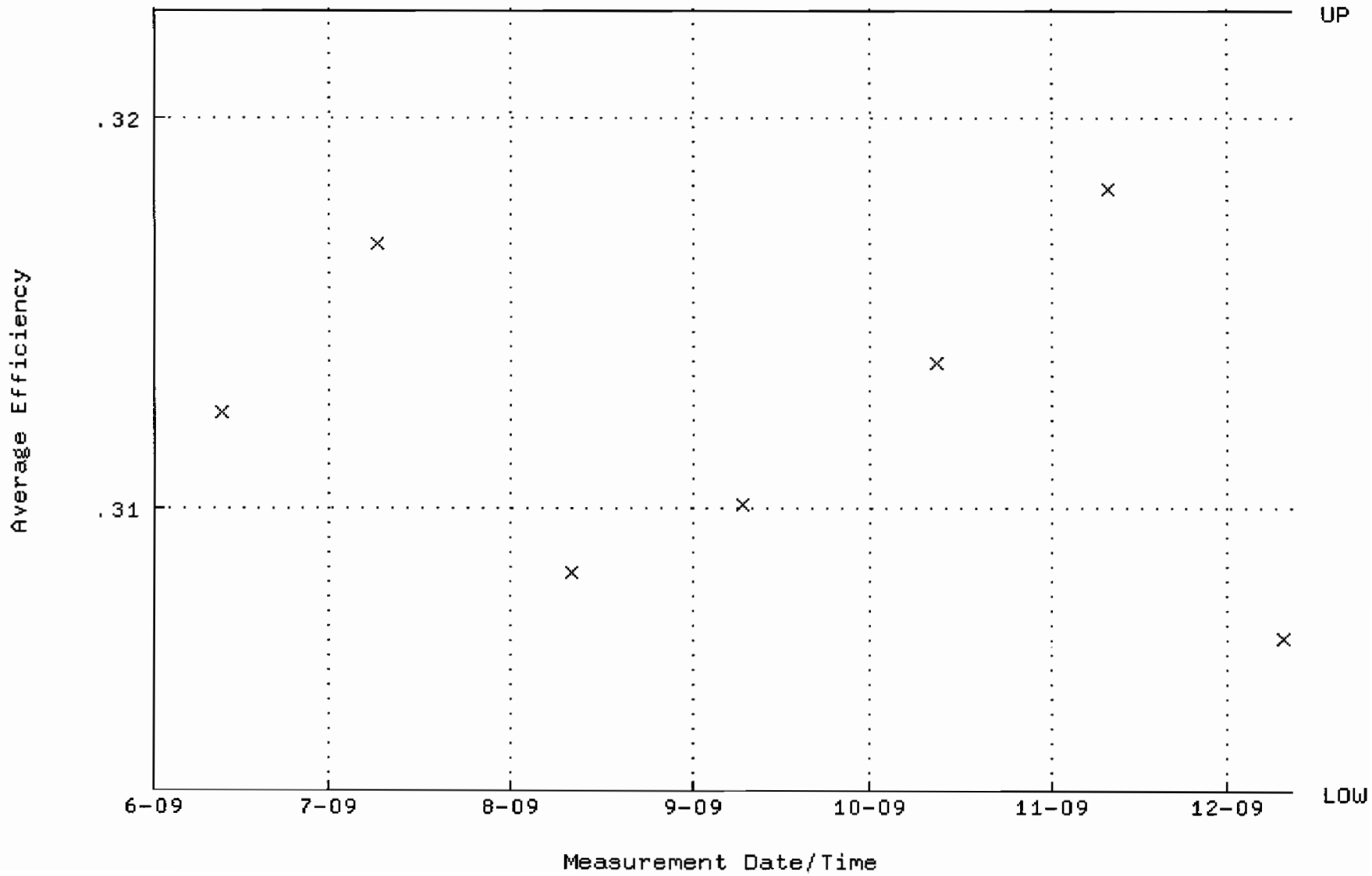

QA filename : DKA100:[ENV_ALPHA.QA.W]W065.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.8638 through 96.0074

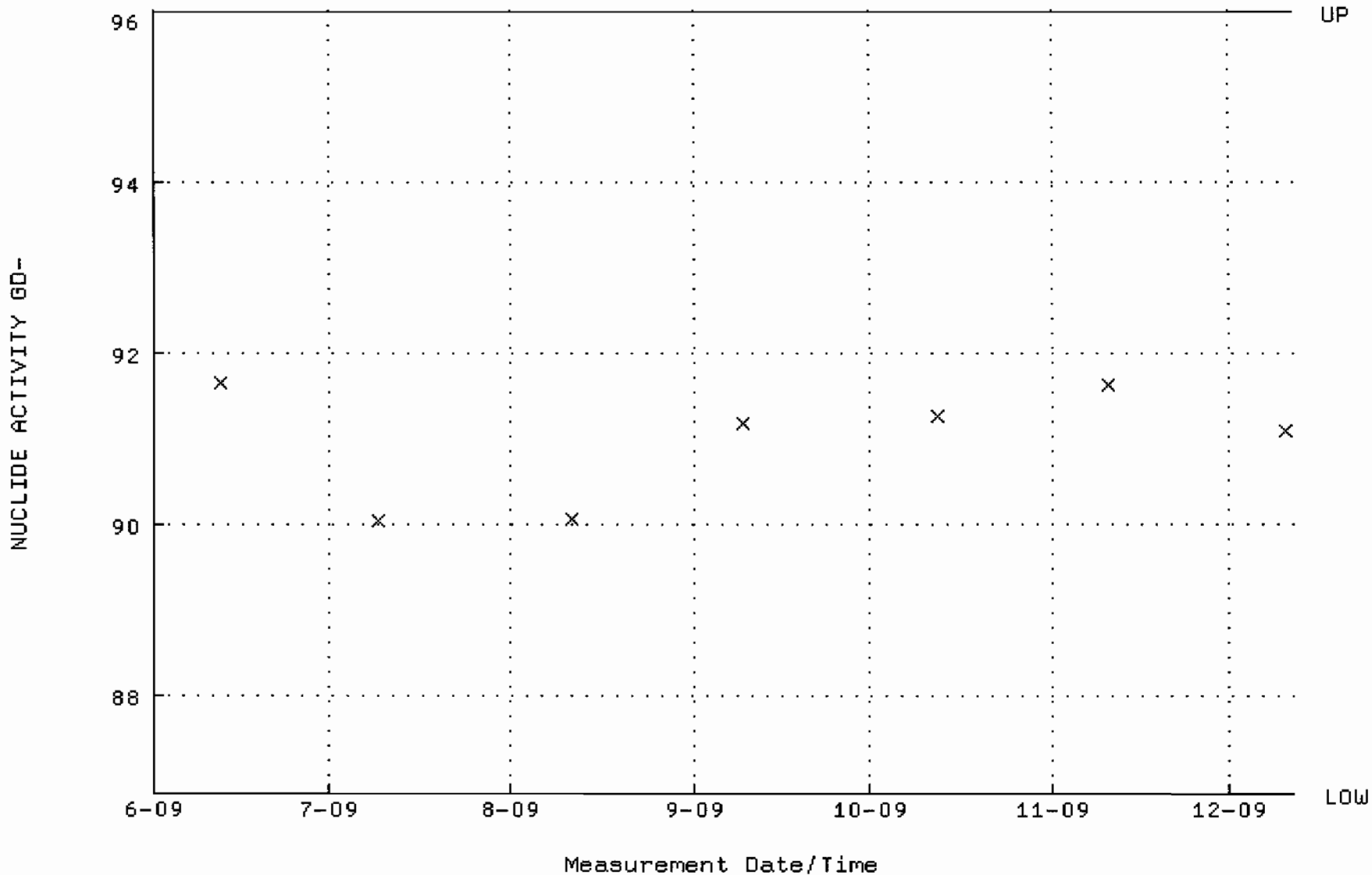

QA filename : DKA100:[ENV_ALPHA.QA.B]B065.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:33 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

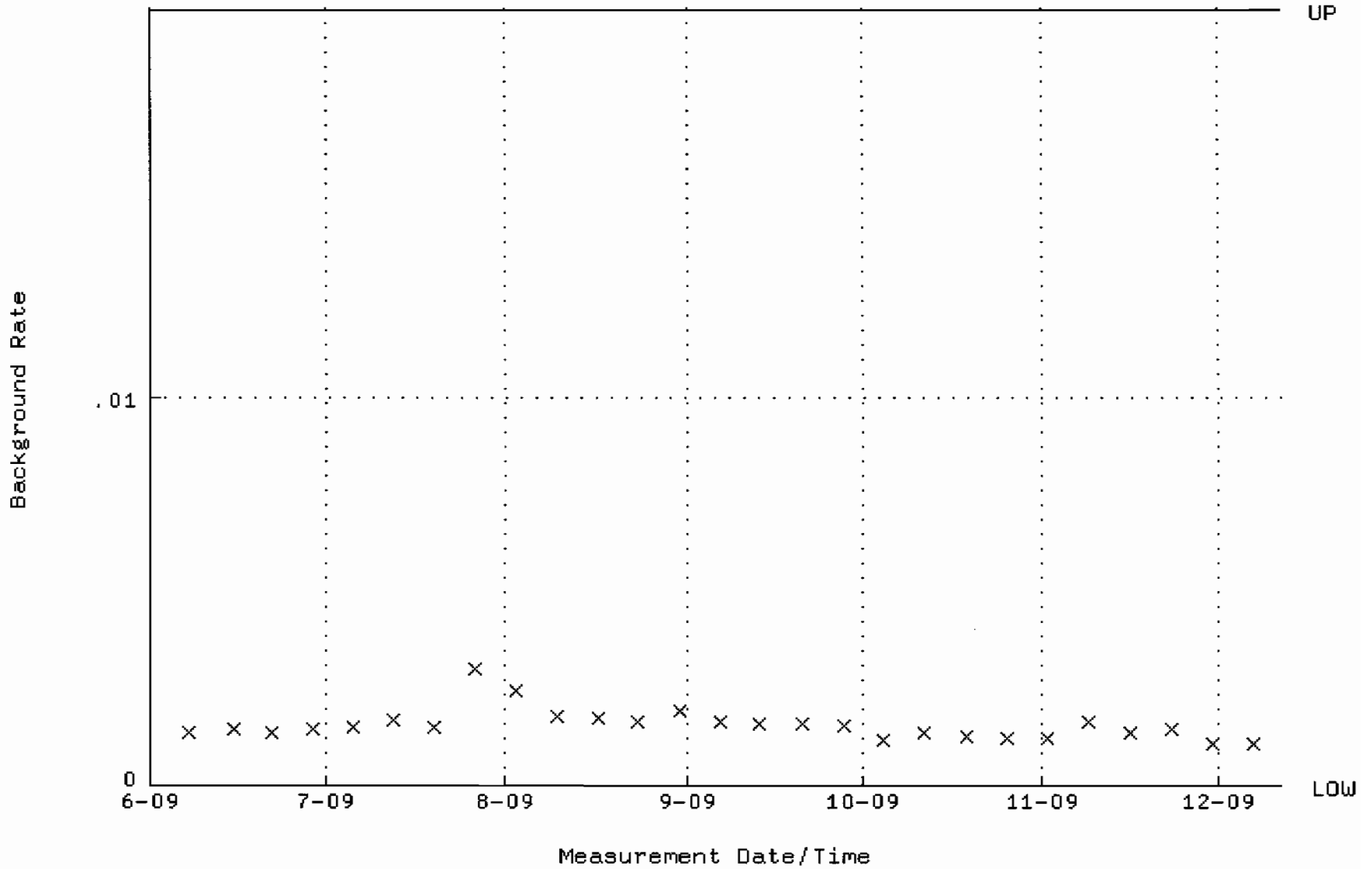

QA filename : DKA100:[ENV_ALPHA.QA.W]W066.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.300416 through 0.320416

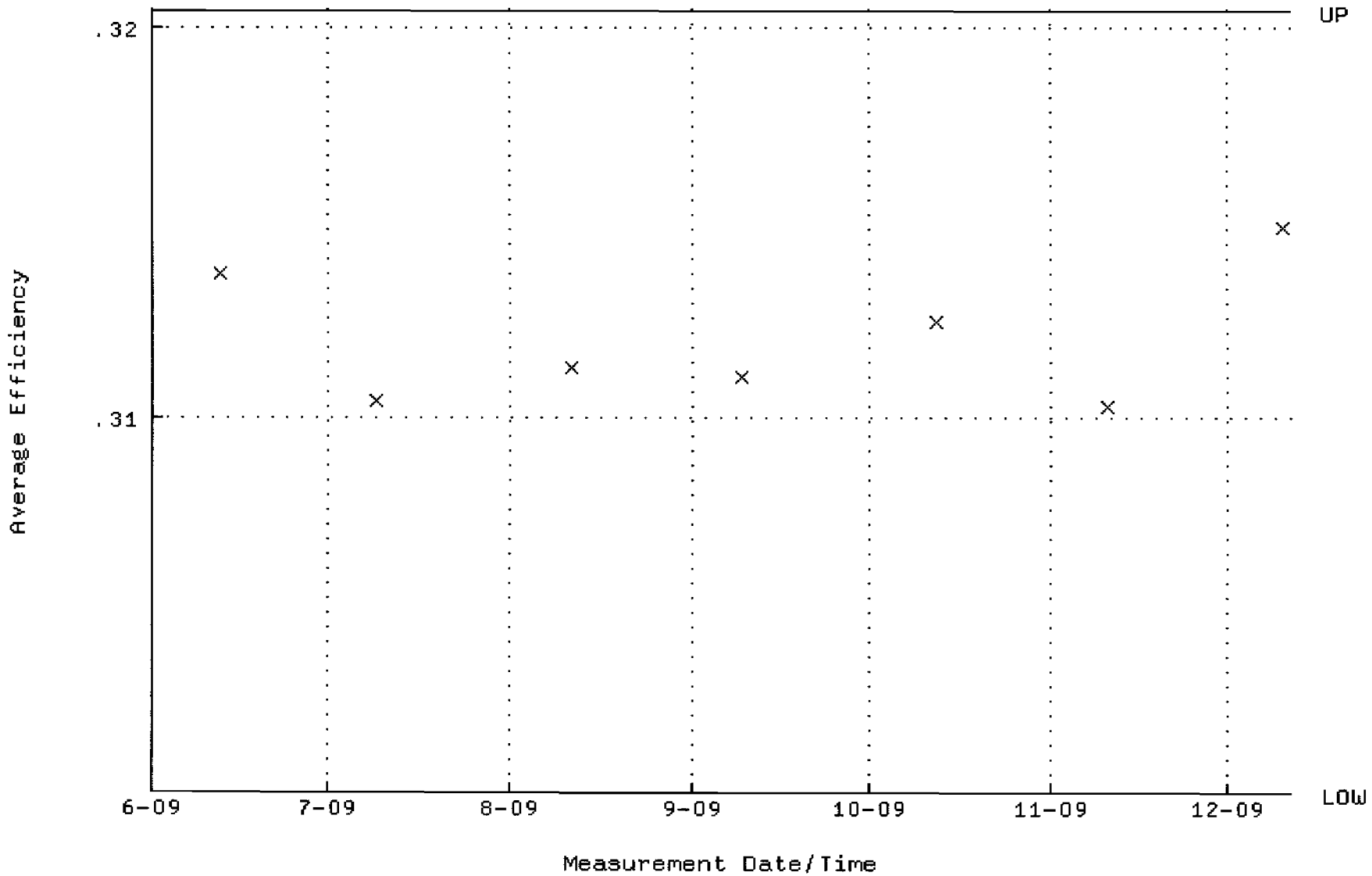

QA filename : DKA100:[ENV_ALPHA.QA.W]W066.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 85.0864 through 94.0428

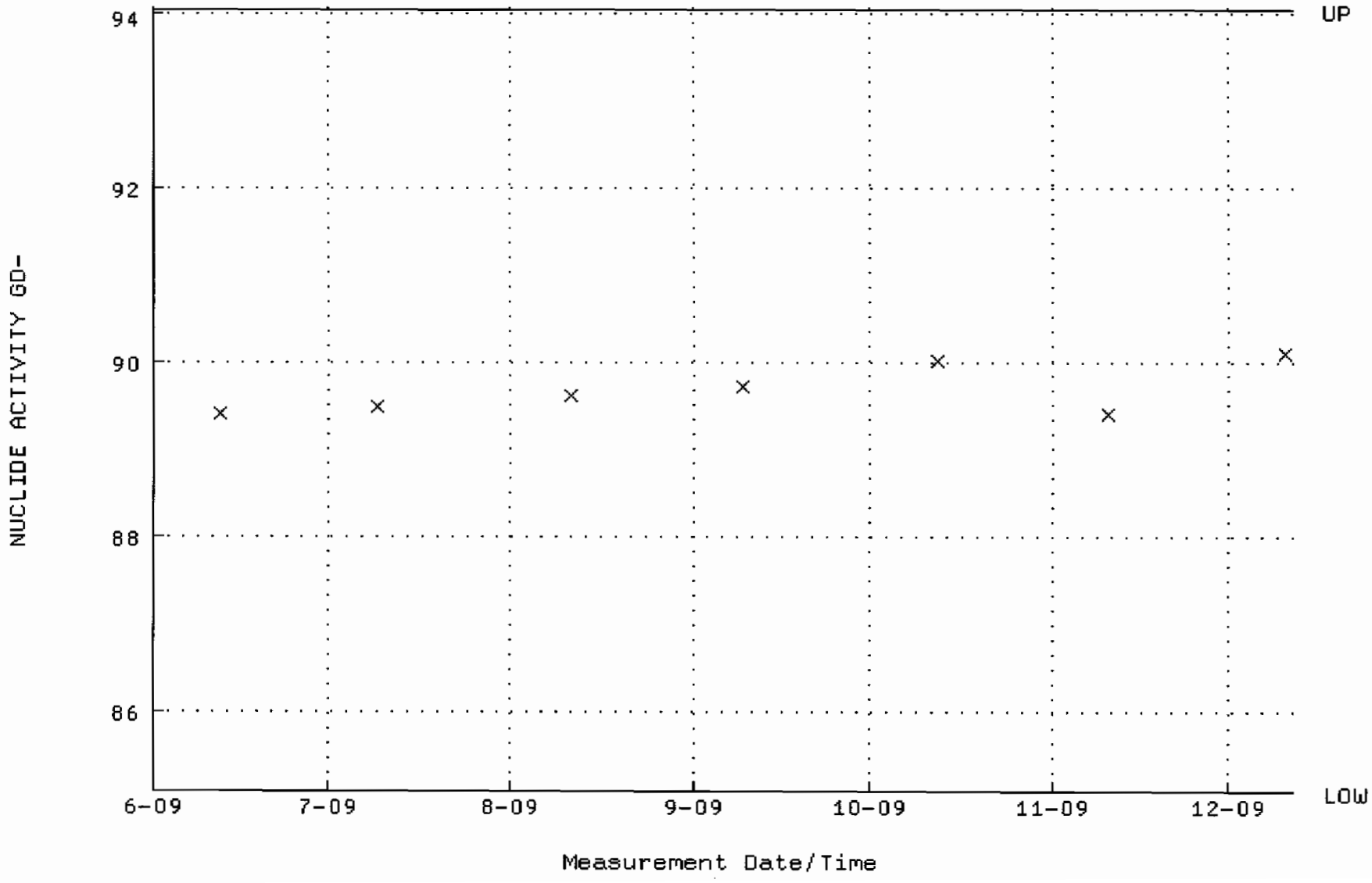

QA filename : DKA100:[ENV_ALPHA.QA.B]B066.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:33 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

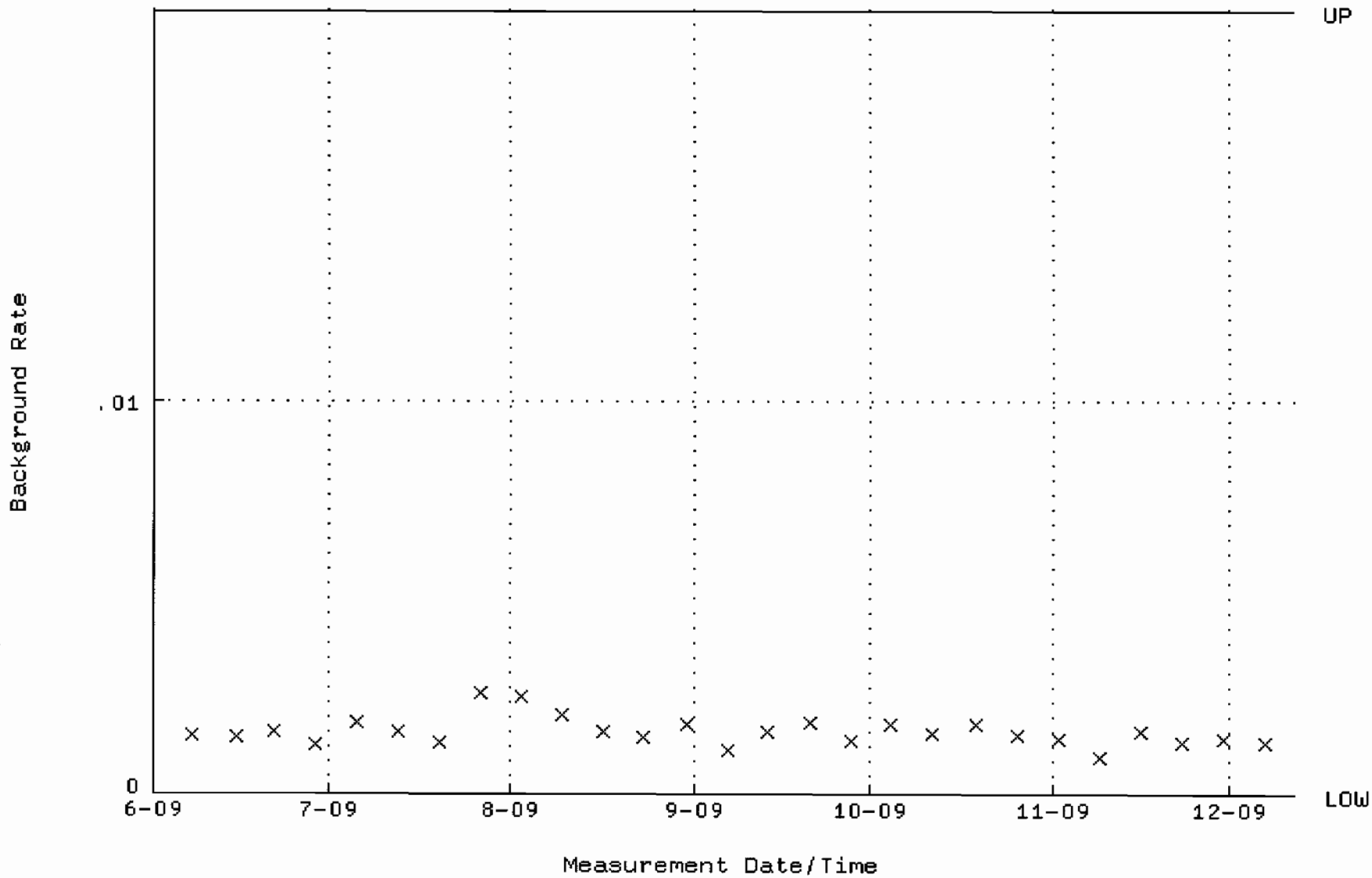

QA filename : DKA100:[ENV_ALPHA.QA.W]W067.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.316597 through 0.336597

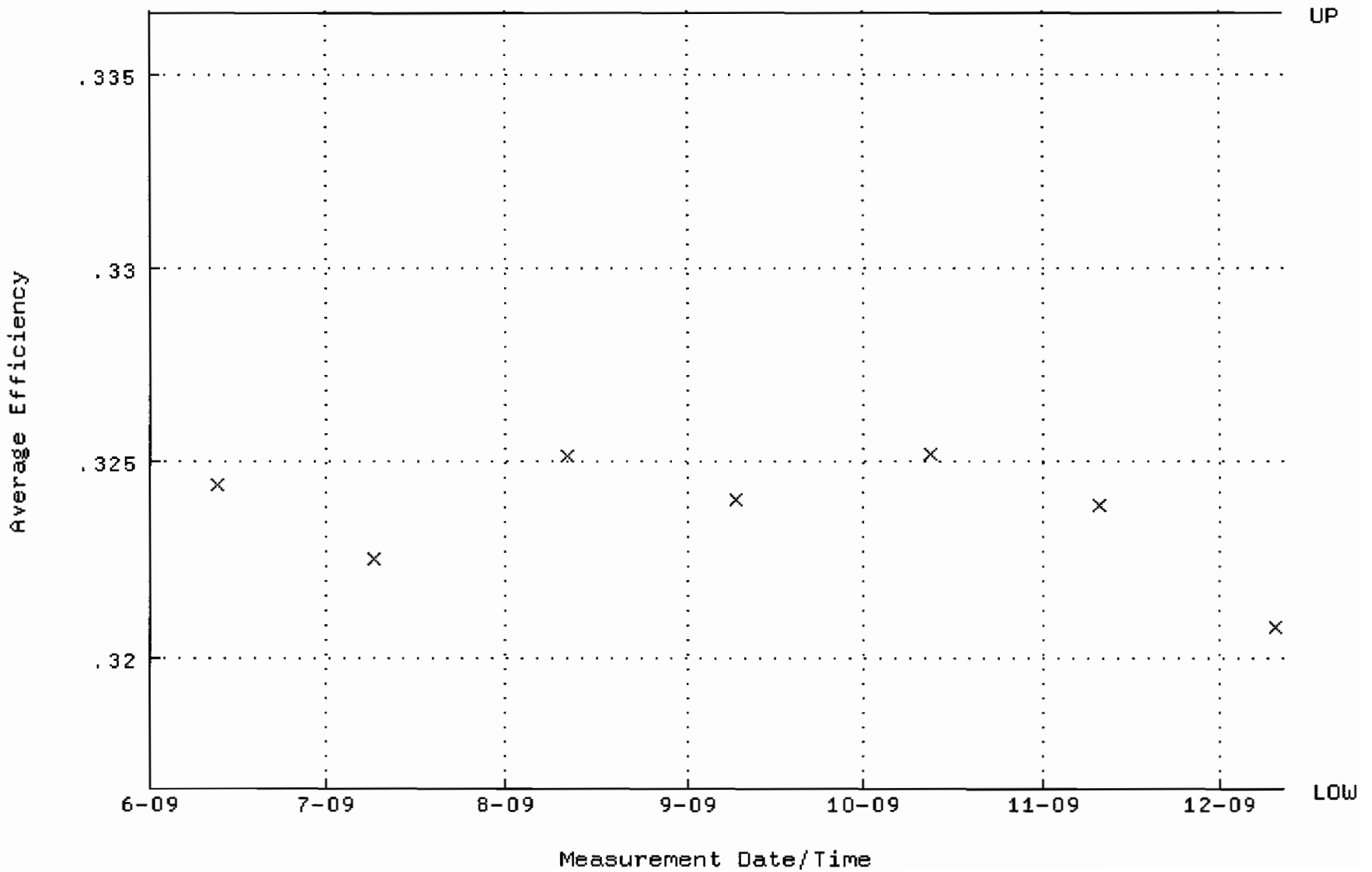

QA filename : DKA100:[ENV_ALPHA.QA.W]W067.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.2683 through 95.3491

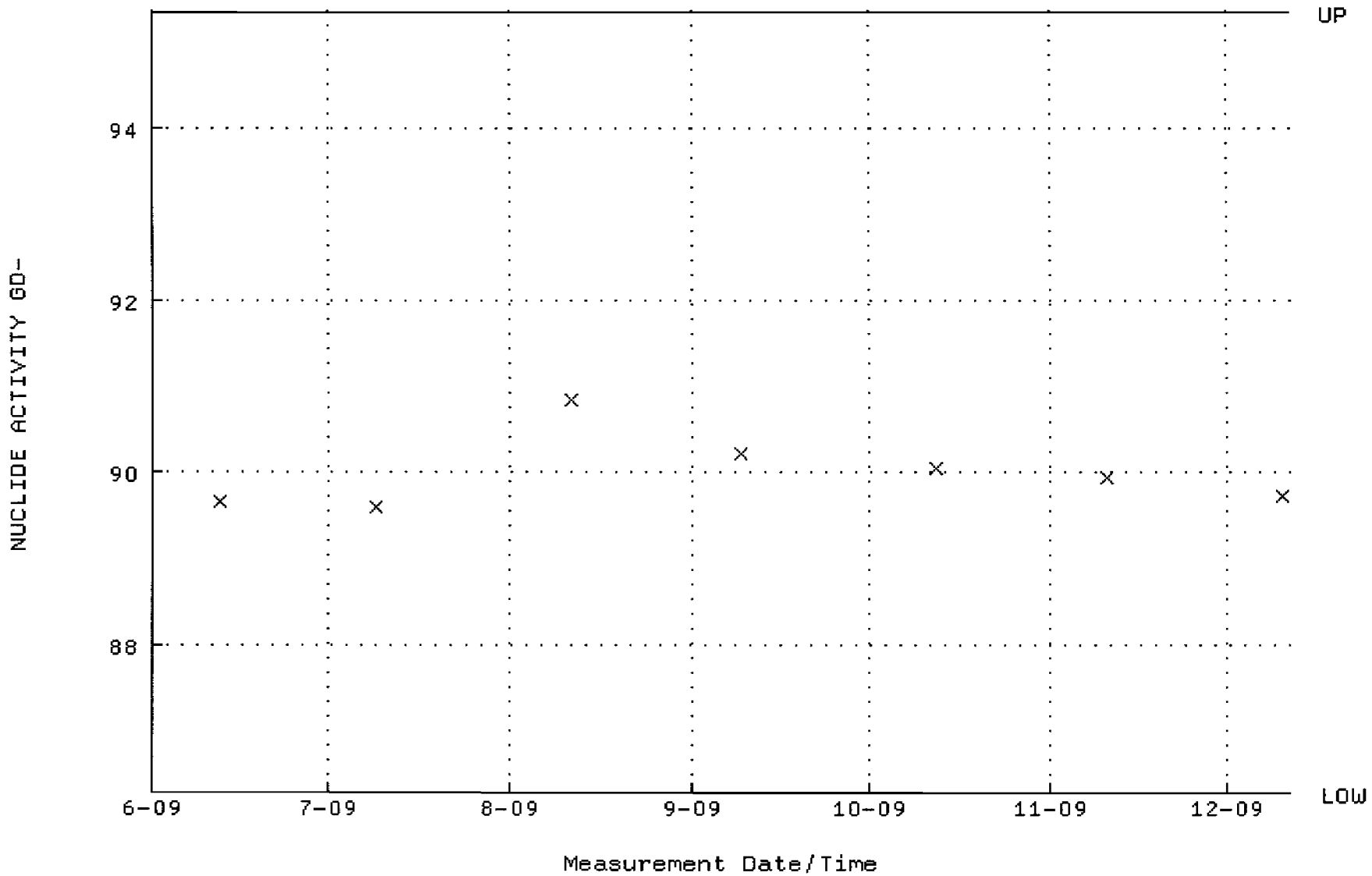

QA filename : DKA100:[ENV_ALPHA.QA.B]B067.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:33 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

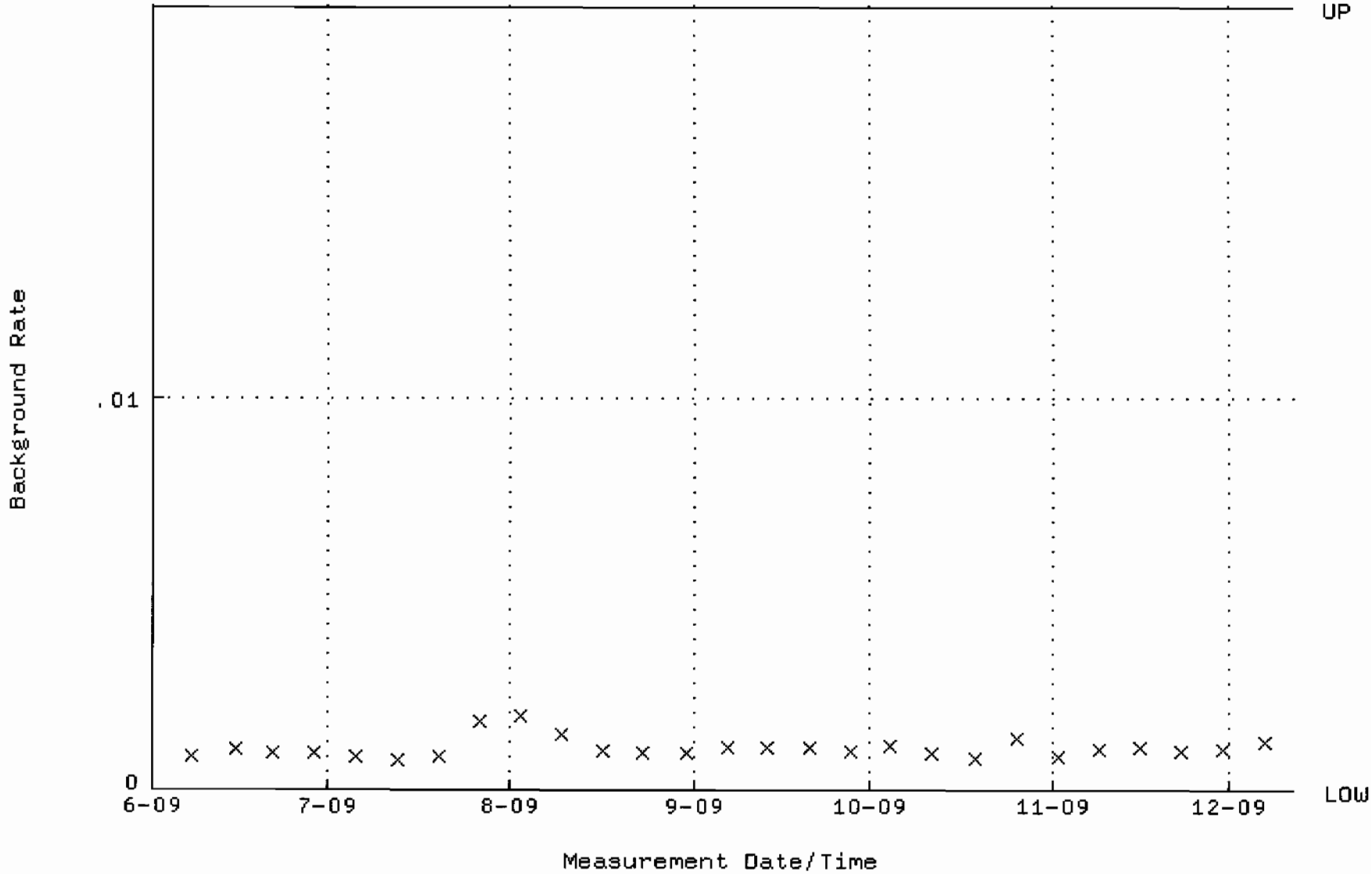

QA filename : DKA100:[ENV_ALPHA.QA.W]W068.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.289178 through 0.309178

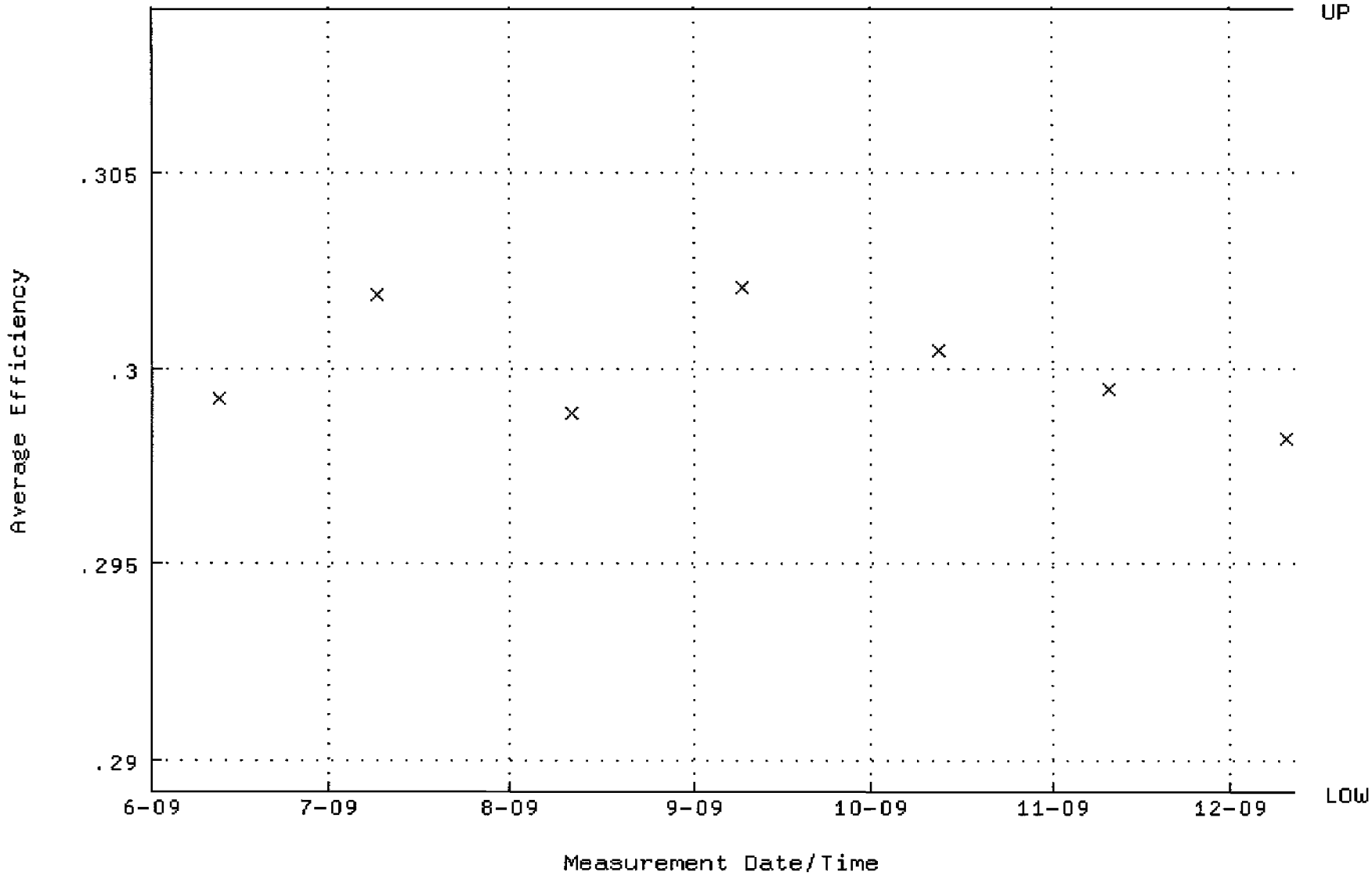

QA filename : DKA100:[ENV_ALPHA.QA.W]W068.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 87.4419 through 96.6463

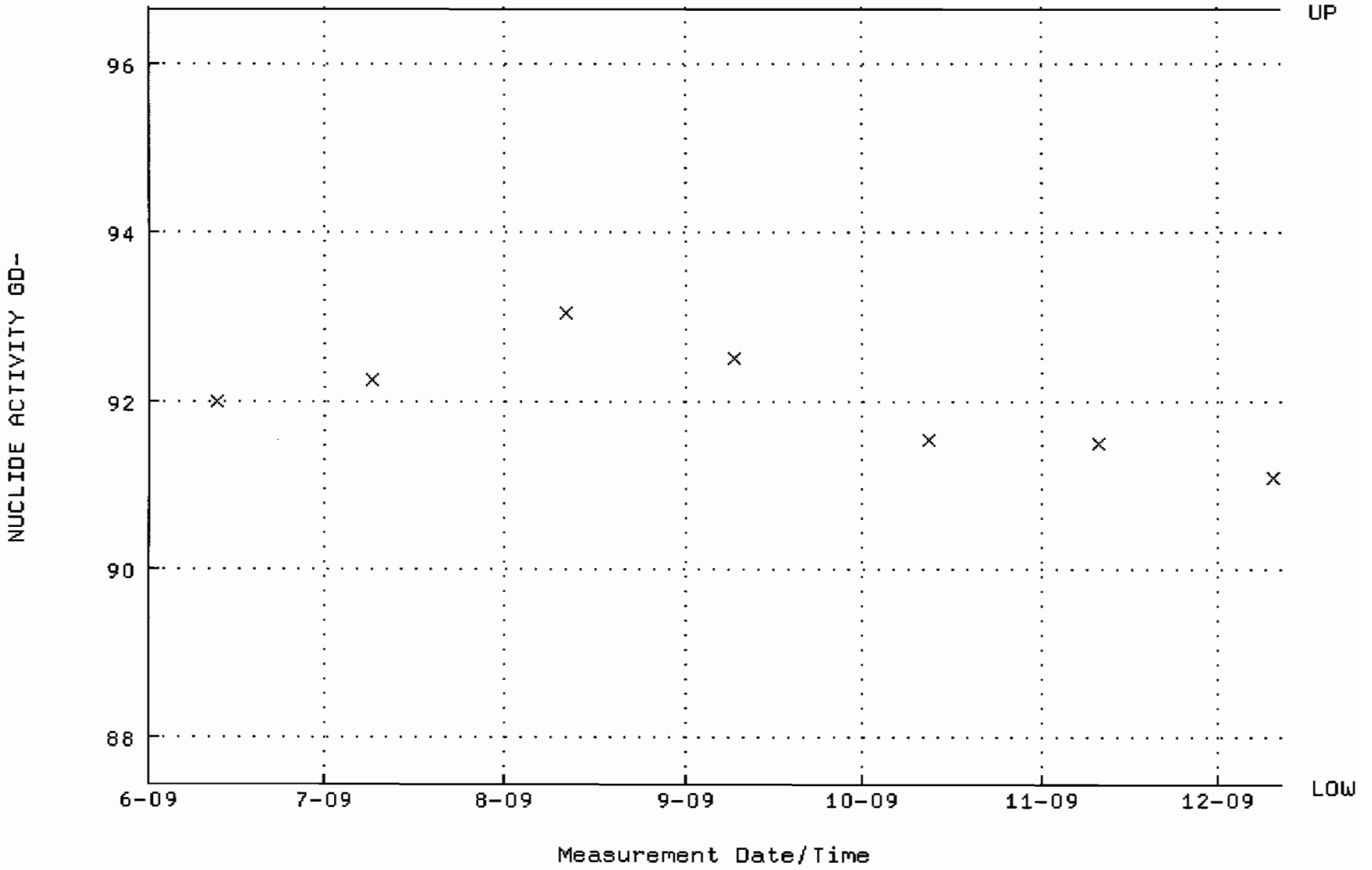

QA filename : DKA100:[ENV_ALPHA.QA.B]B068.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:33 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

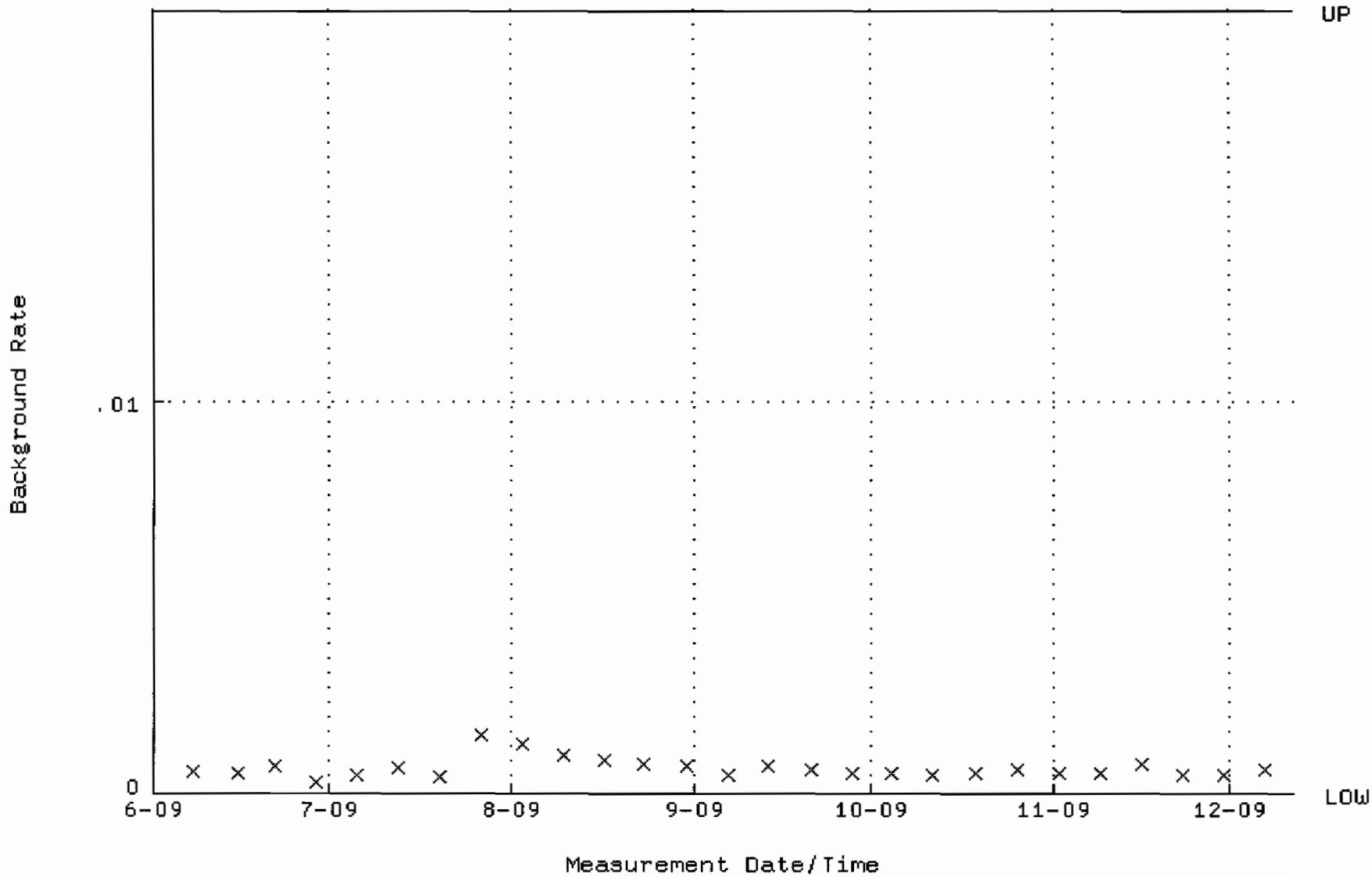

QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.306636 through 0.326636

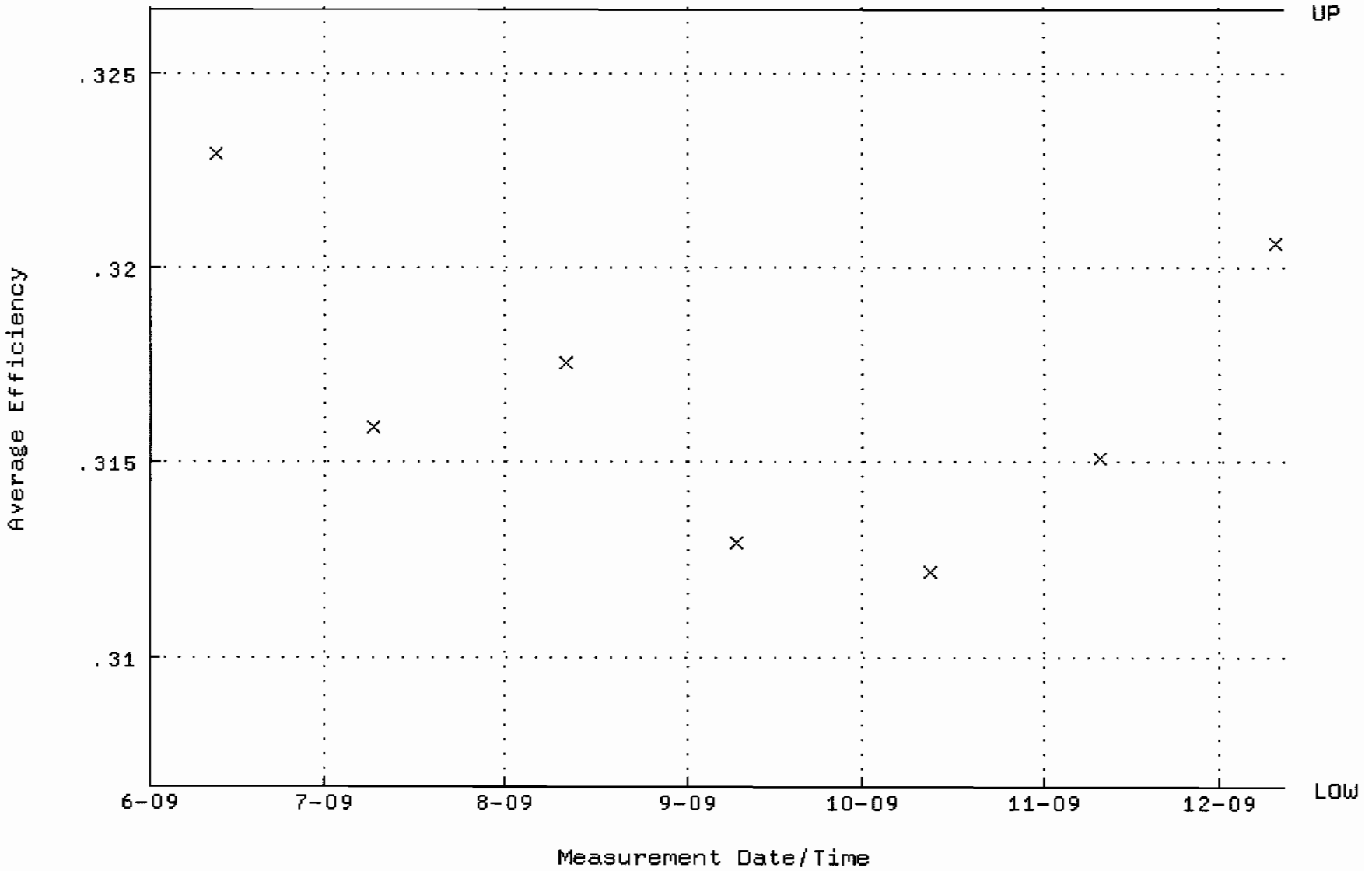

QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 89.6479 through 99.0845

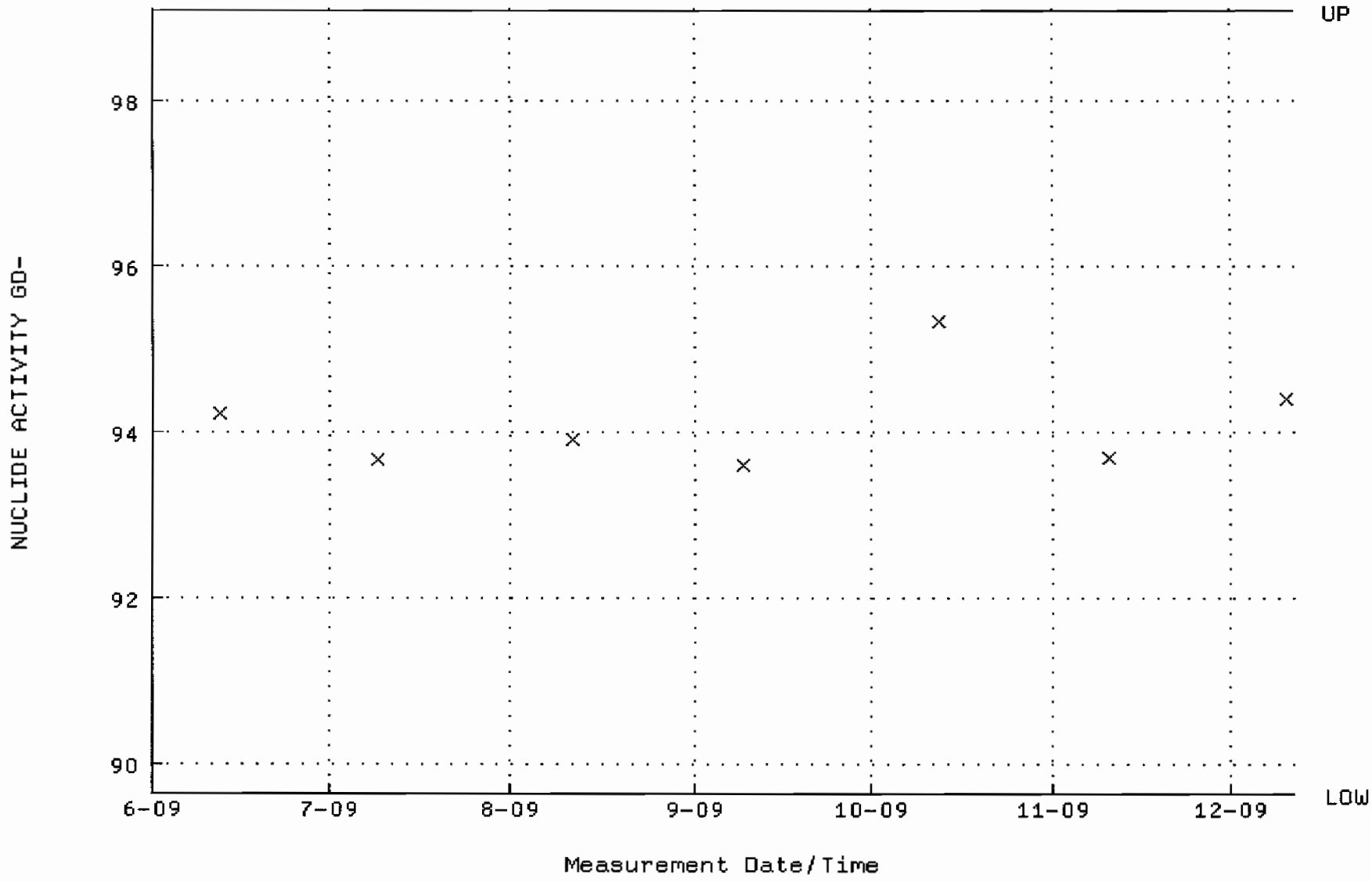

QA filename : DKA100:[ENV_ALPHA.QA.B]B069.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:33 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

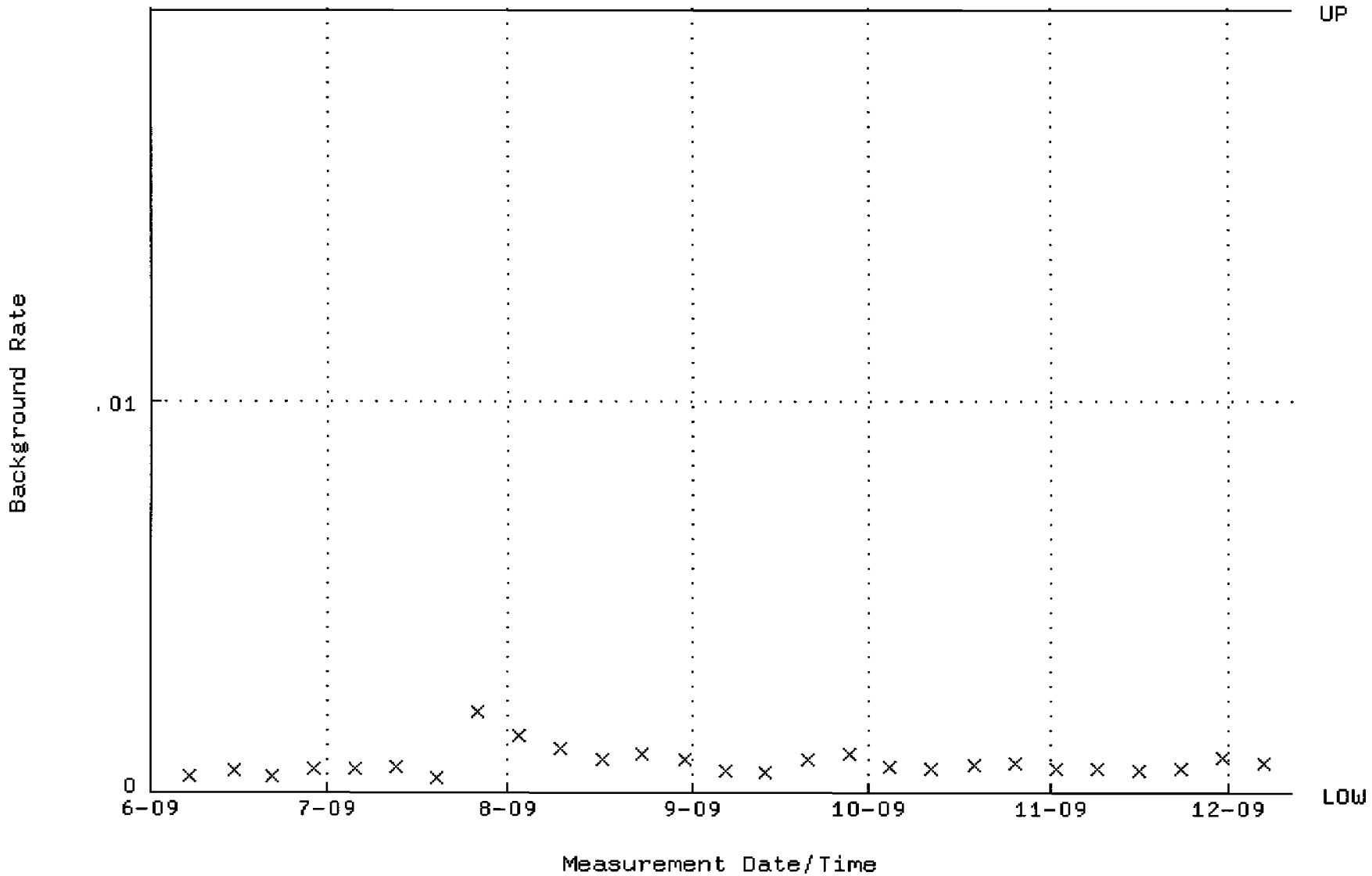

QA filename : DKA100:[ENV_ALPHA.QA.W]W153.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:47:52 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.244738 through 0.264738

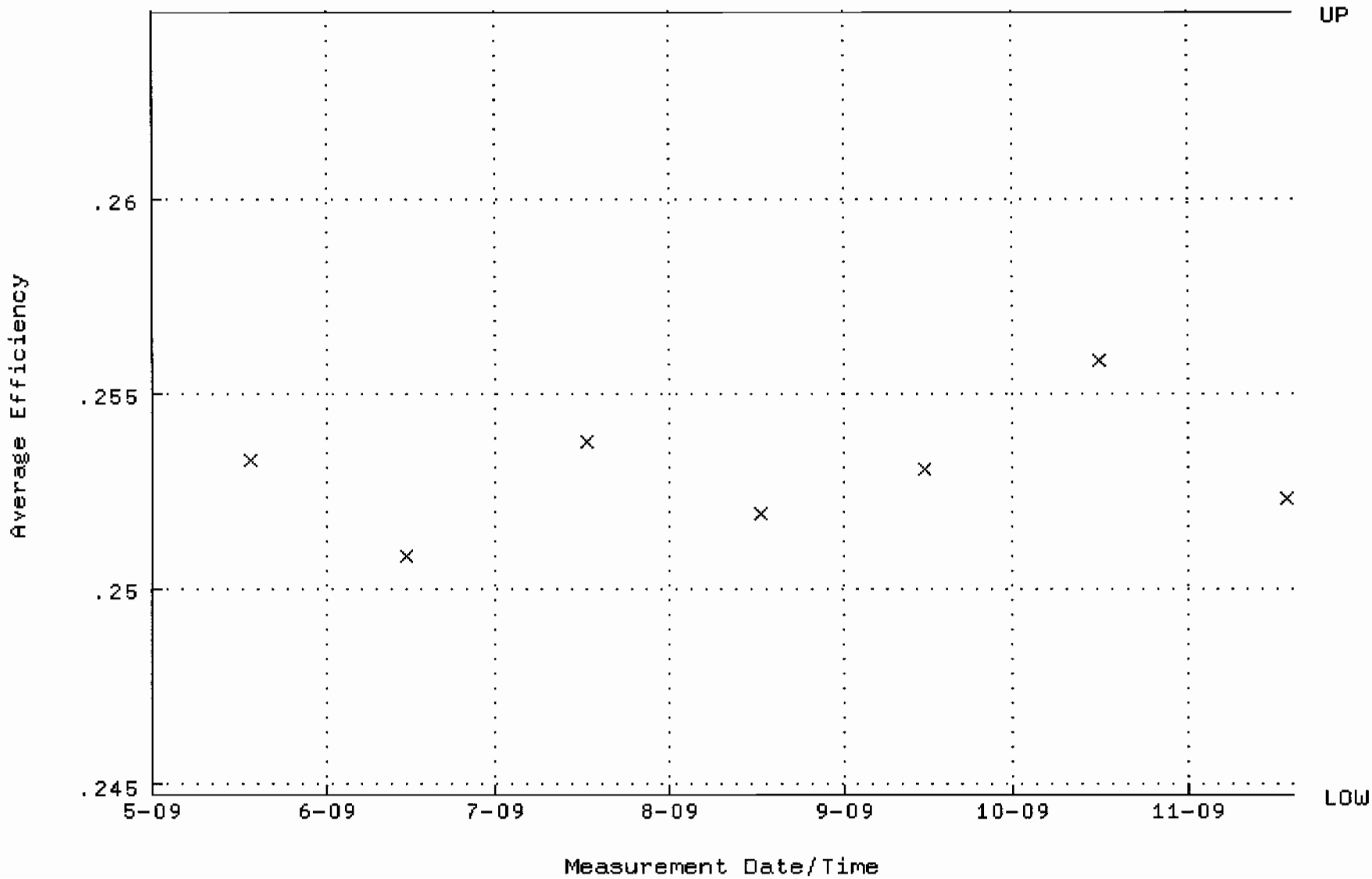

QA filename : DKA100:[ENV_ALPHA.QA.W]W153.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:47:52 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 81.3634 through 89.9280

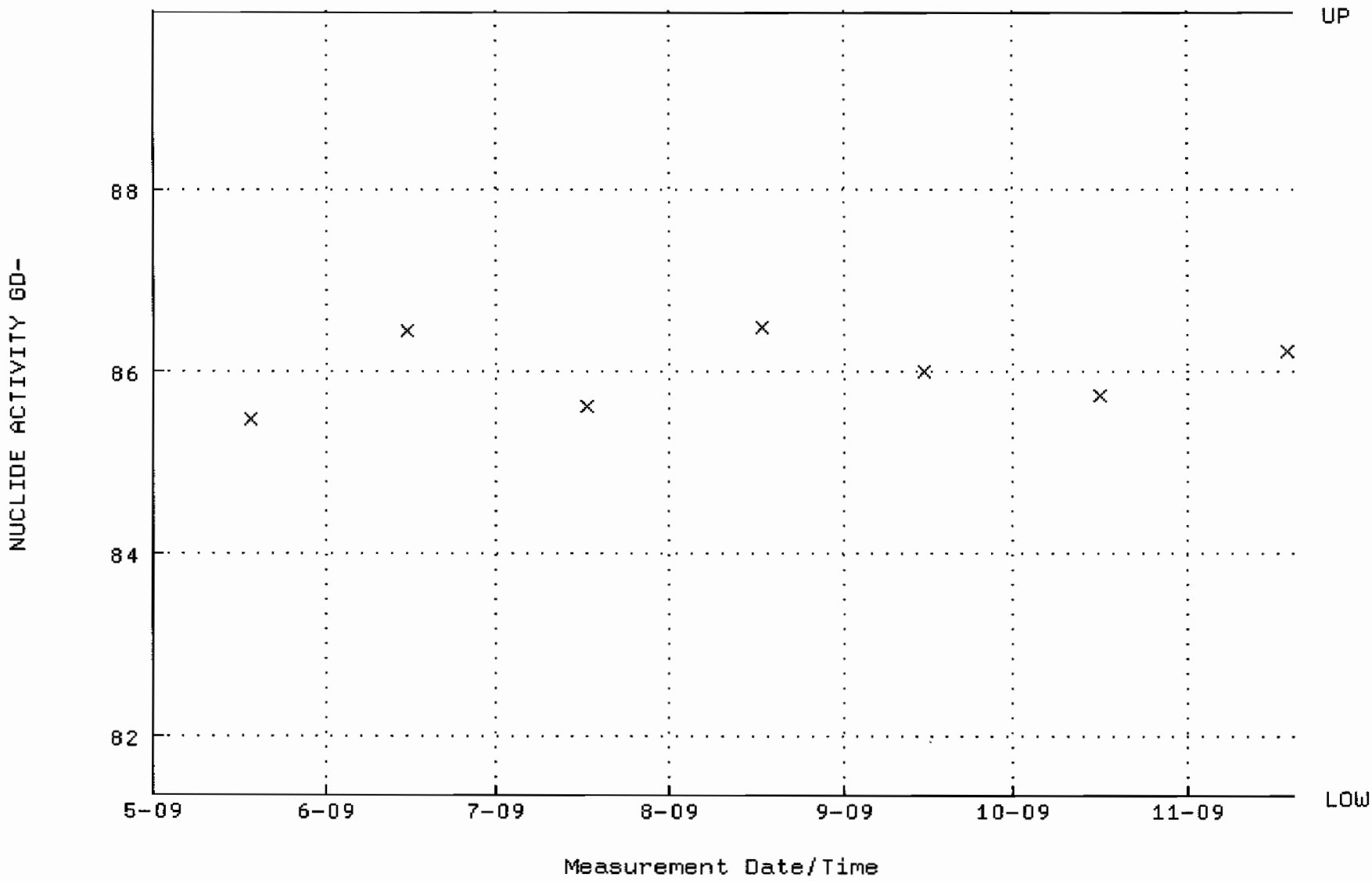

QA filename : DKA100:[ENV_ALPHA.QA.B]B153.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:52:47 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

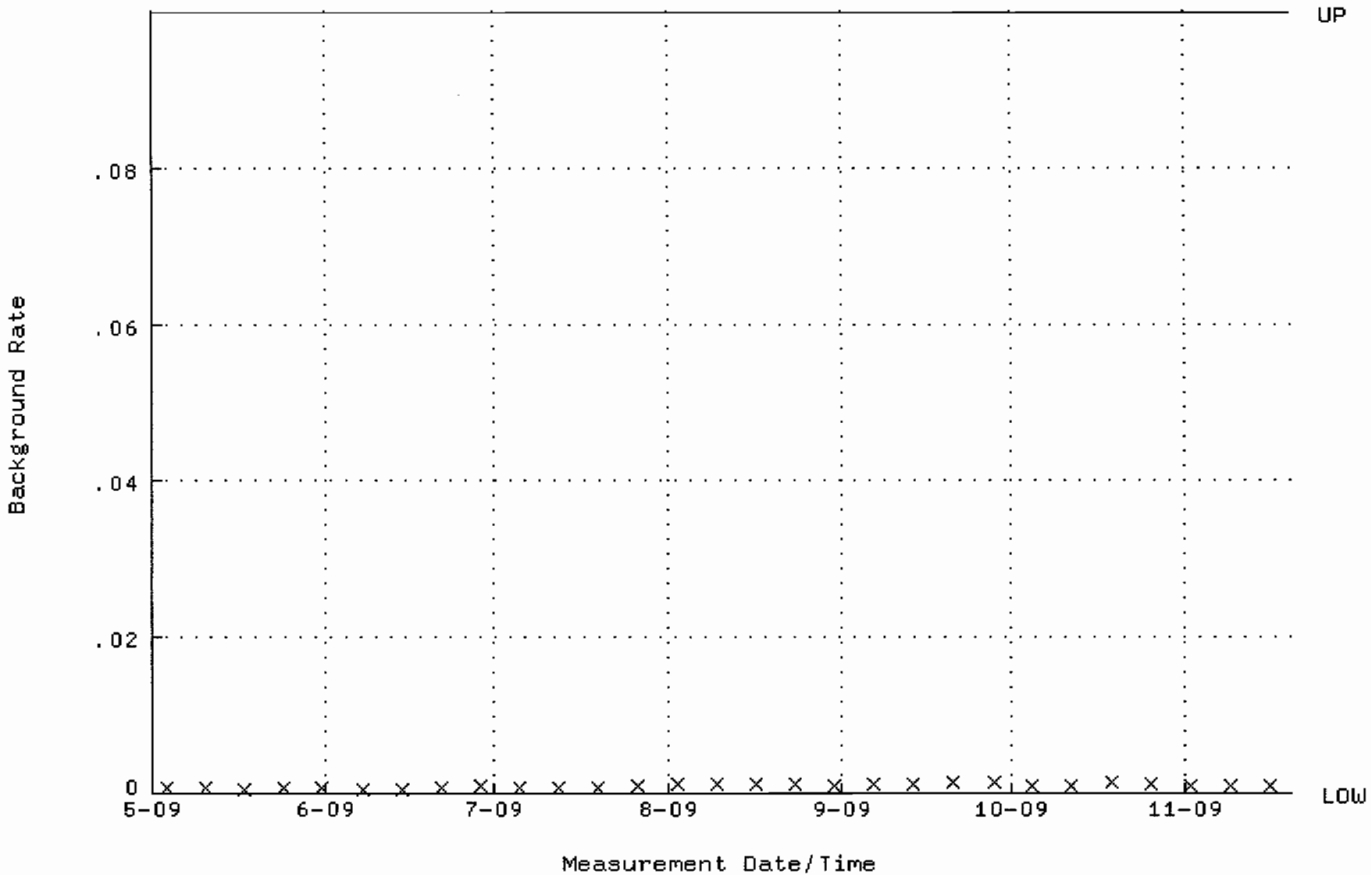

QA filename : DKA100:[ENV_ALPHA.QA.W]W154.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:47:57 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.251386 through 0.271386

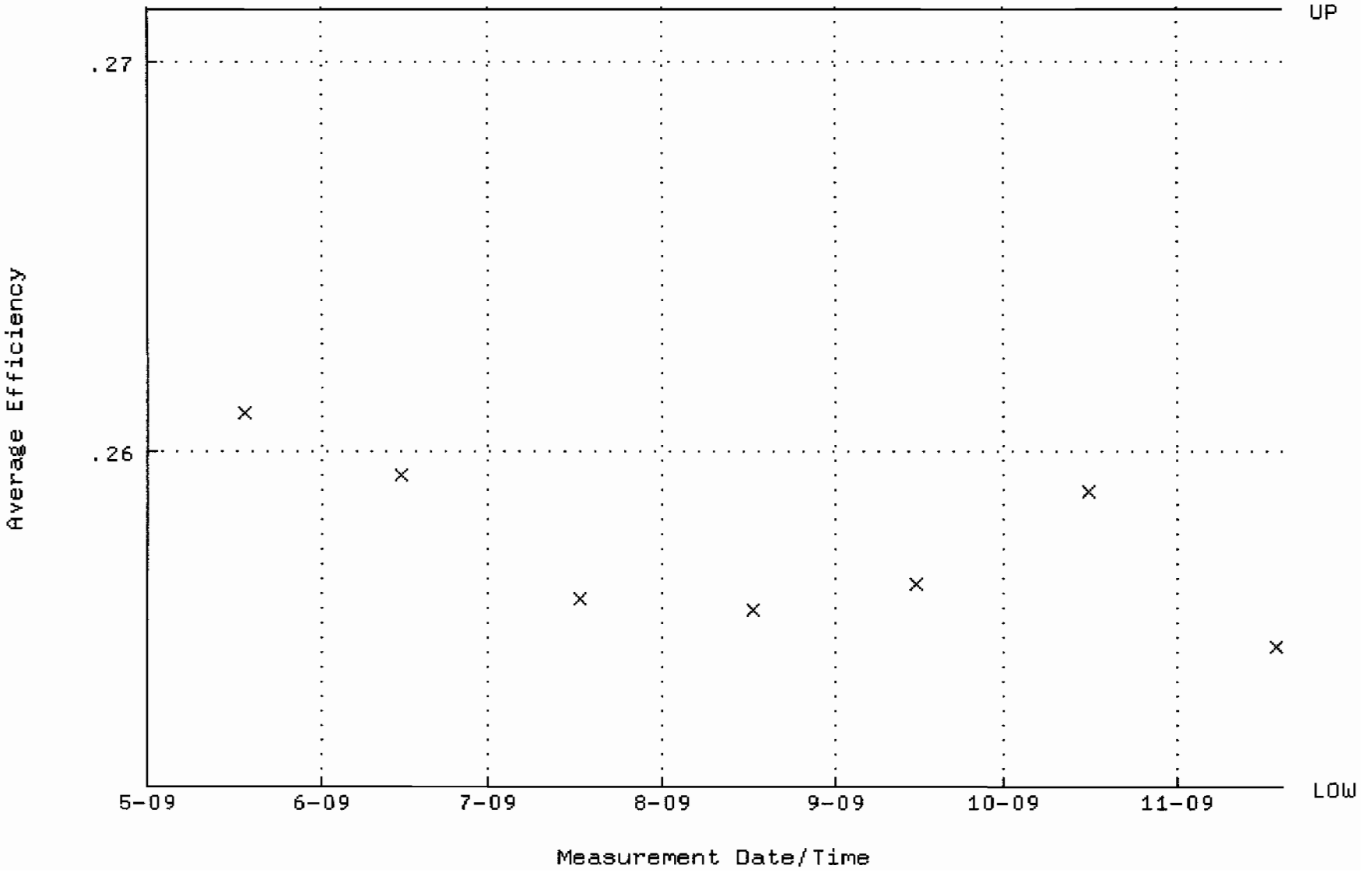

QA filename : DKA100:[ENV_ALPHA.QA.W]W154.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:47:57 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 79.9003 through 88.3109

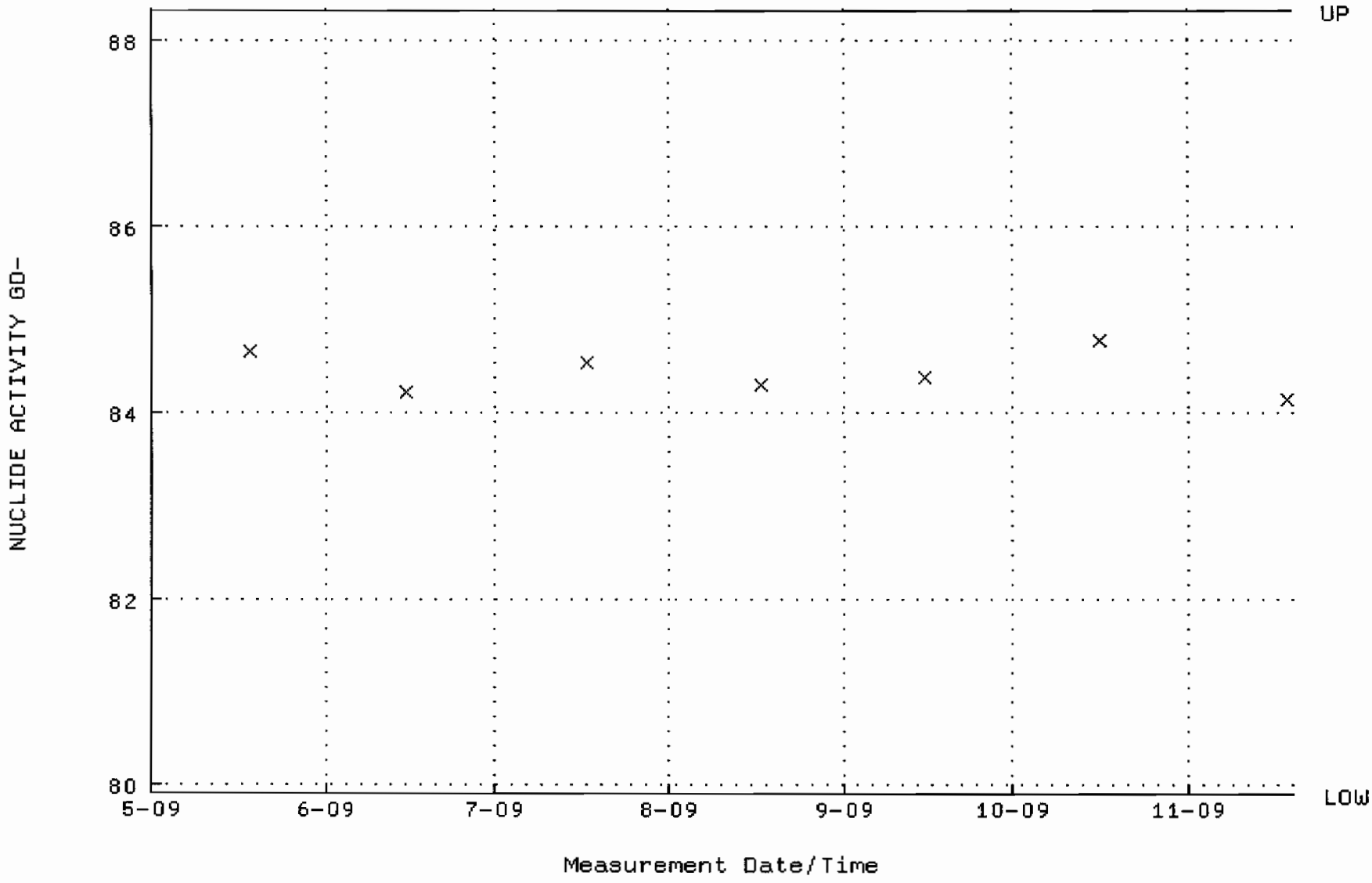

QA filename : DKA100:[ENV_ALPHA.QA.B]B154.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:52:51 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

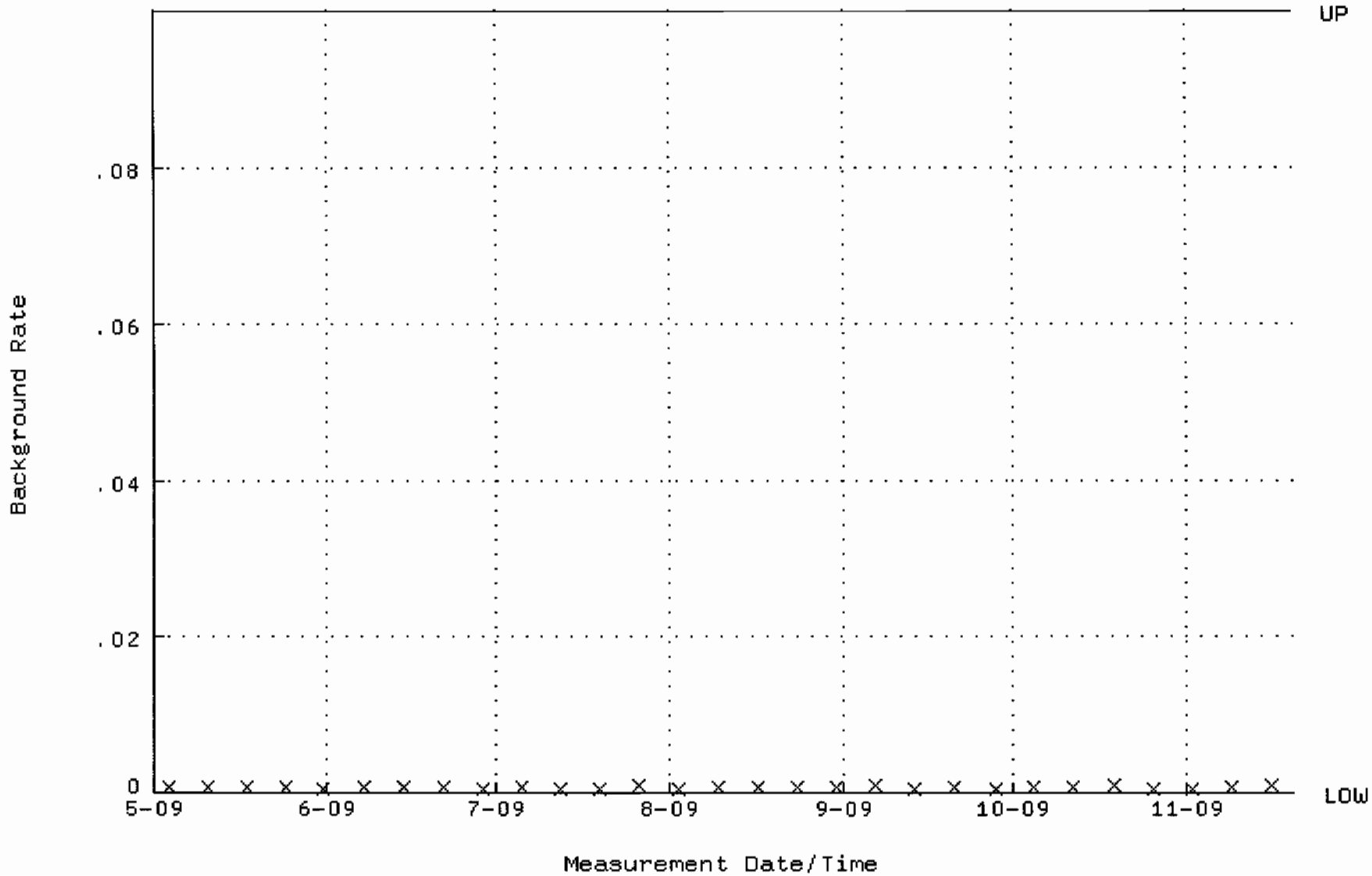

QA filename : DKA100:[ENV_ALPHA.QA.W]W155.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:48:01 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.247241 through 0.267241

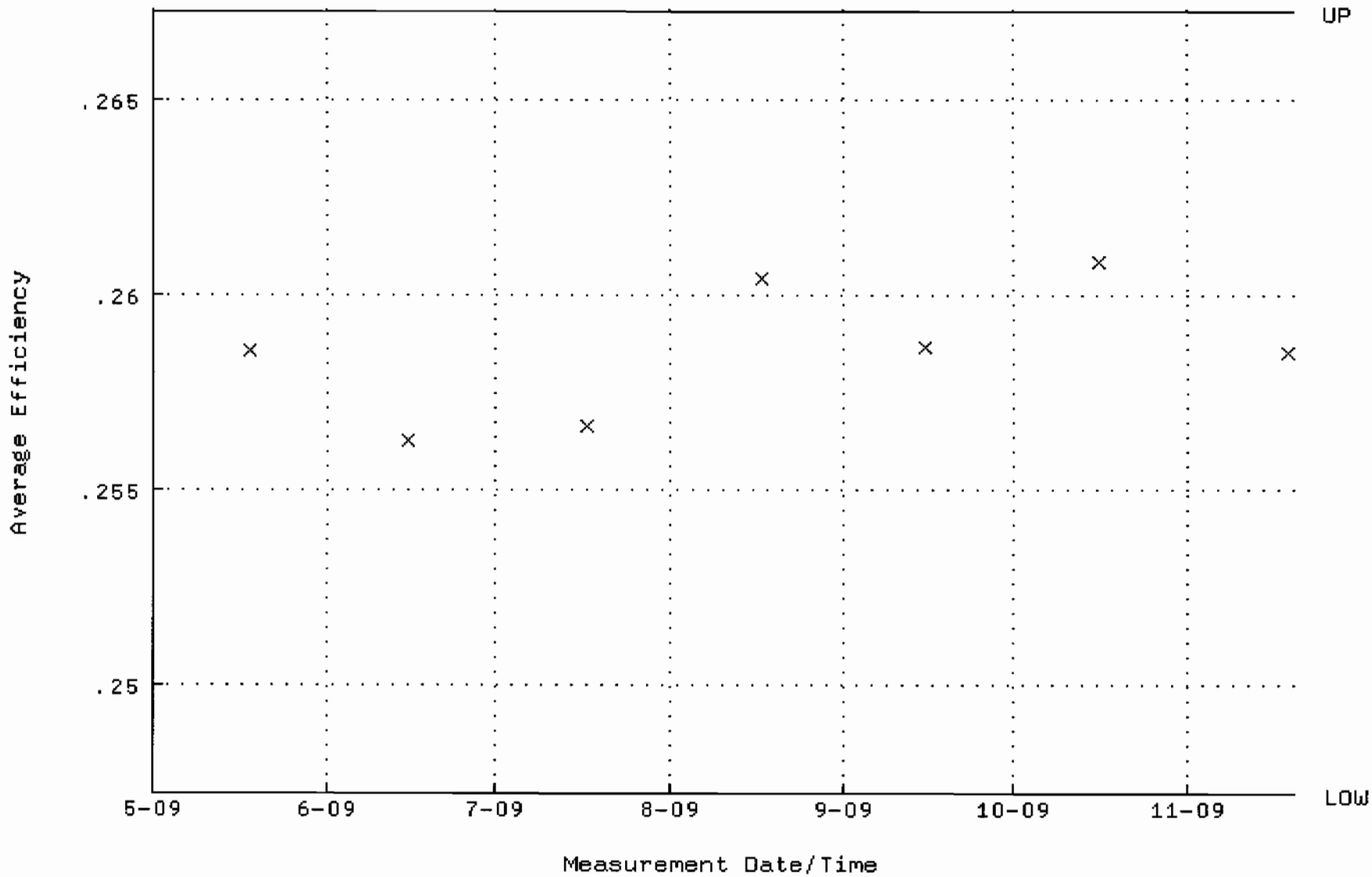

QA filename : DKA100:[ENV_ALPHA.QA.W]W155.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:48:01 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 83.6873 through 92.4965

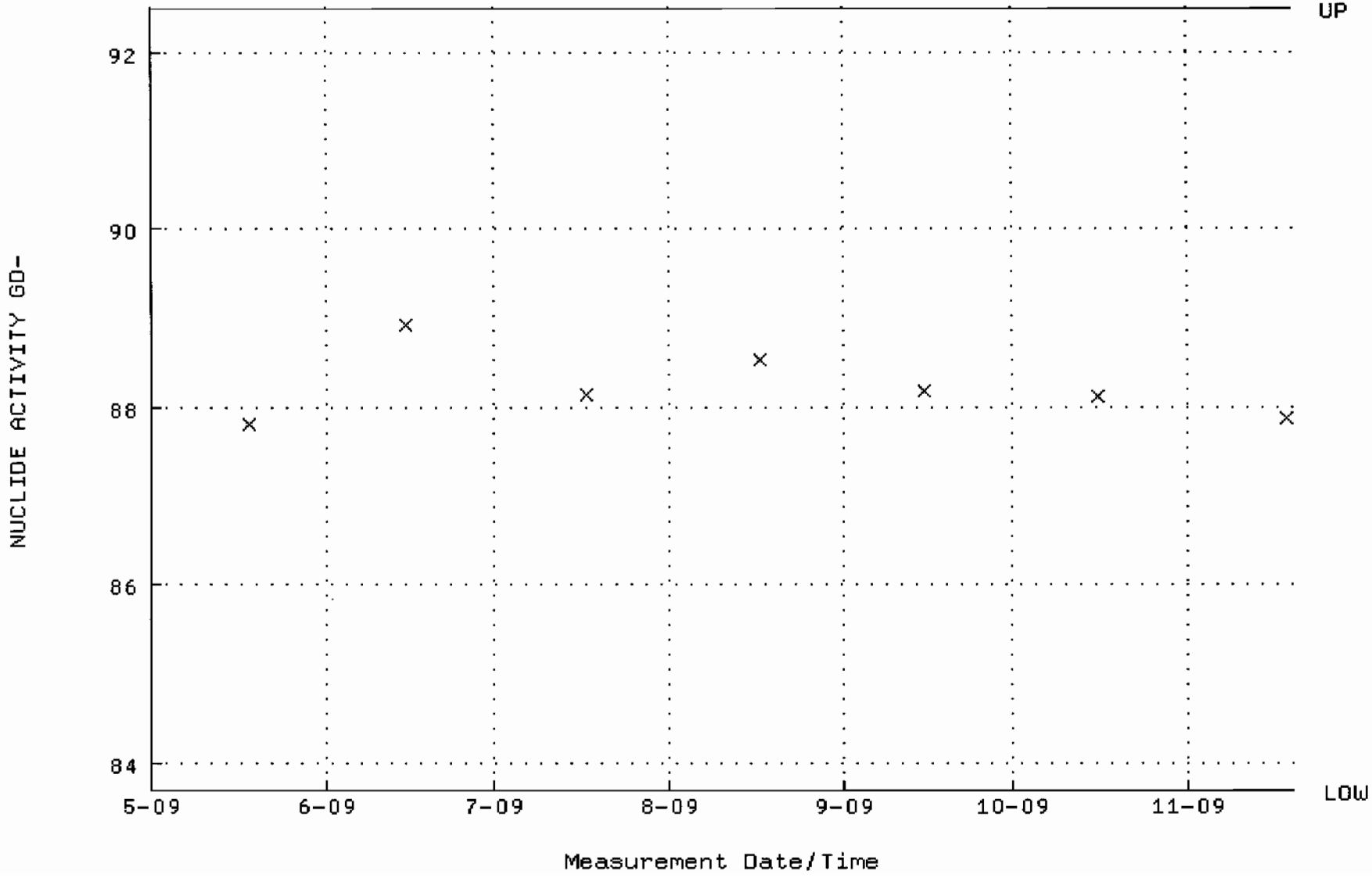

QA filename : DKA100:[ENV_ALPHA.QA.B]B155.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:52:54 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

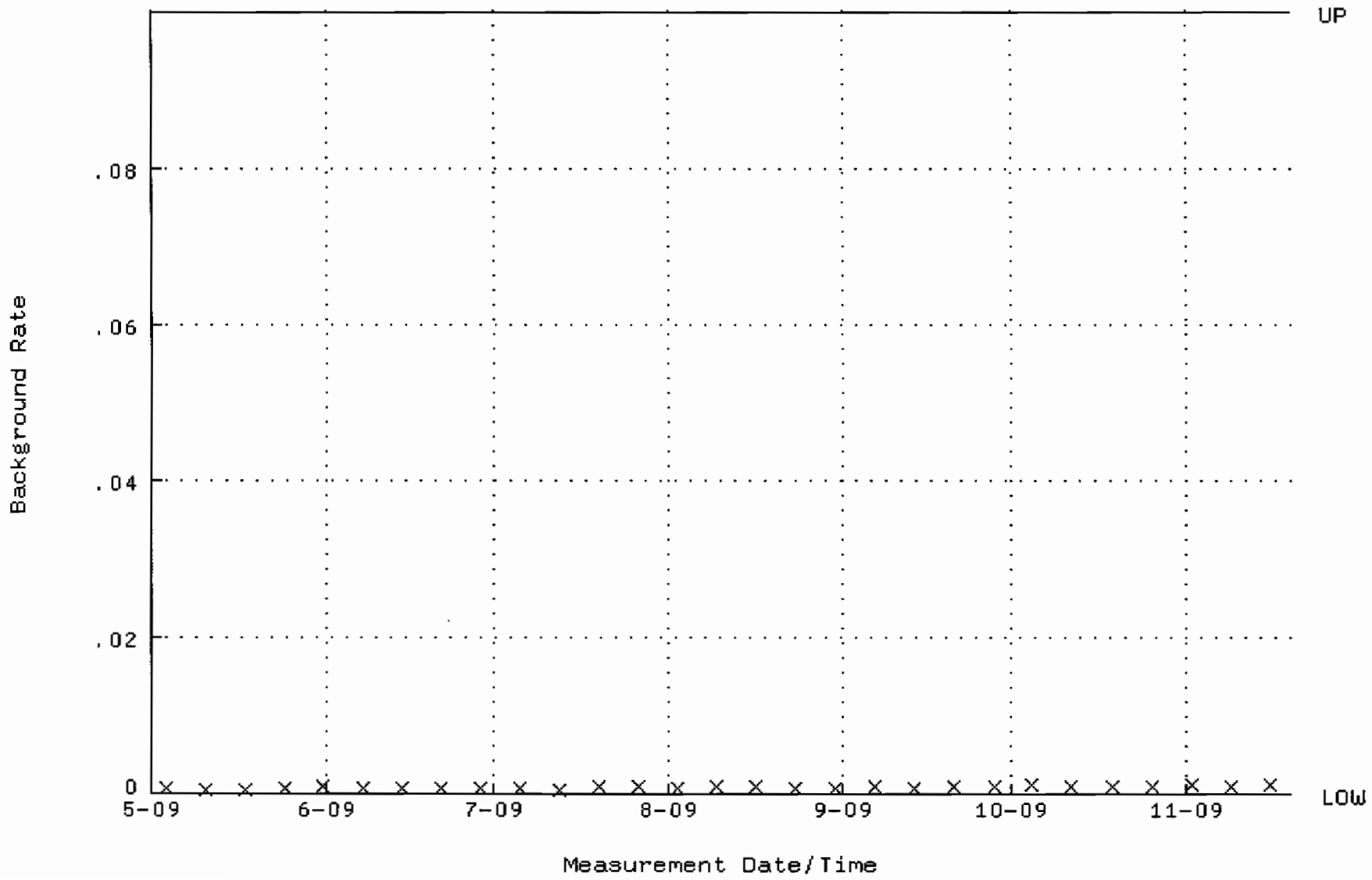

QA filename : DKA100:[ENV_ALPHA.QA.W]W156.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:48:06 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.241250 through 0.261250

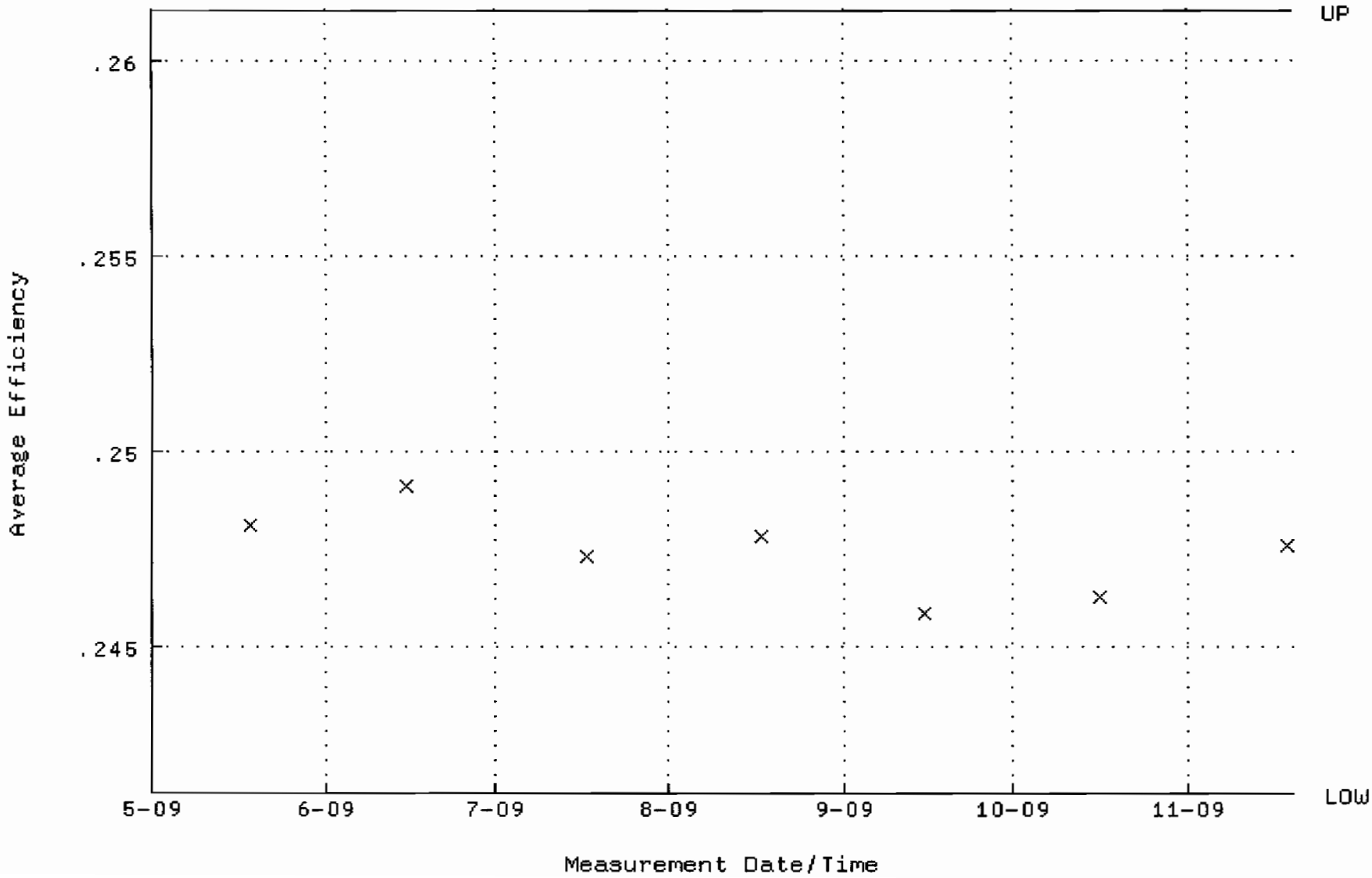

QA filename : DKA100:[ENV_ALPHA.QA.W]W156.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:48:06 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 82.7847 through 91.4989

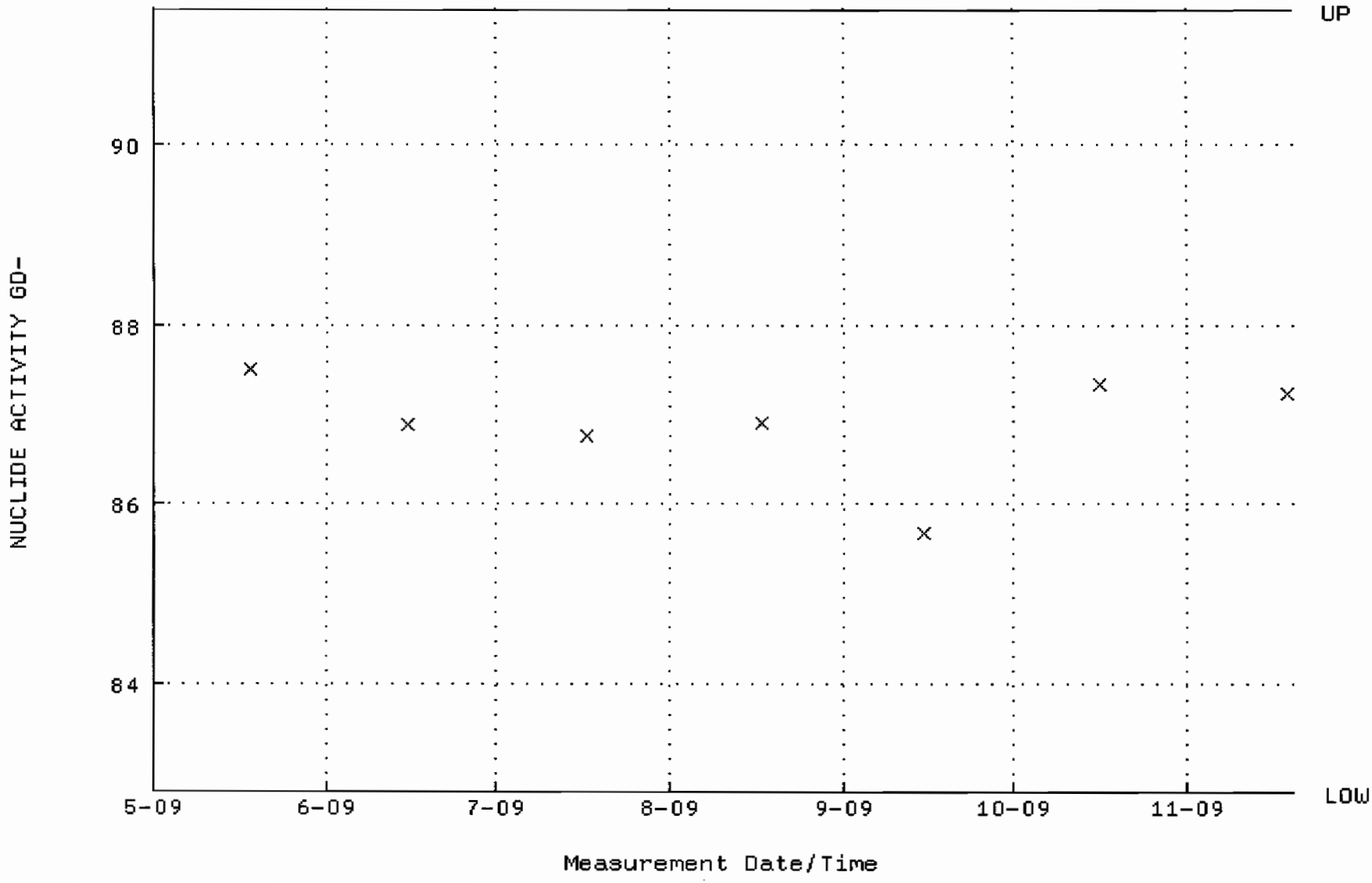

QA filename : DKA100:[ENV_ALPHA.QA.B]B156.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:52:58 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

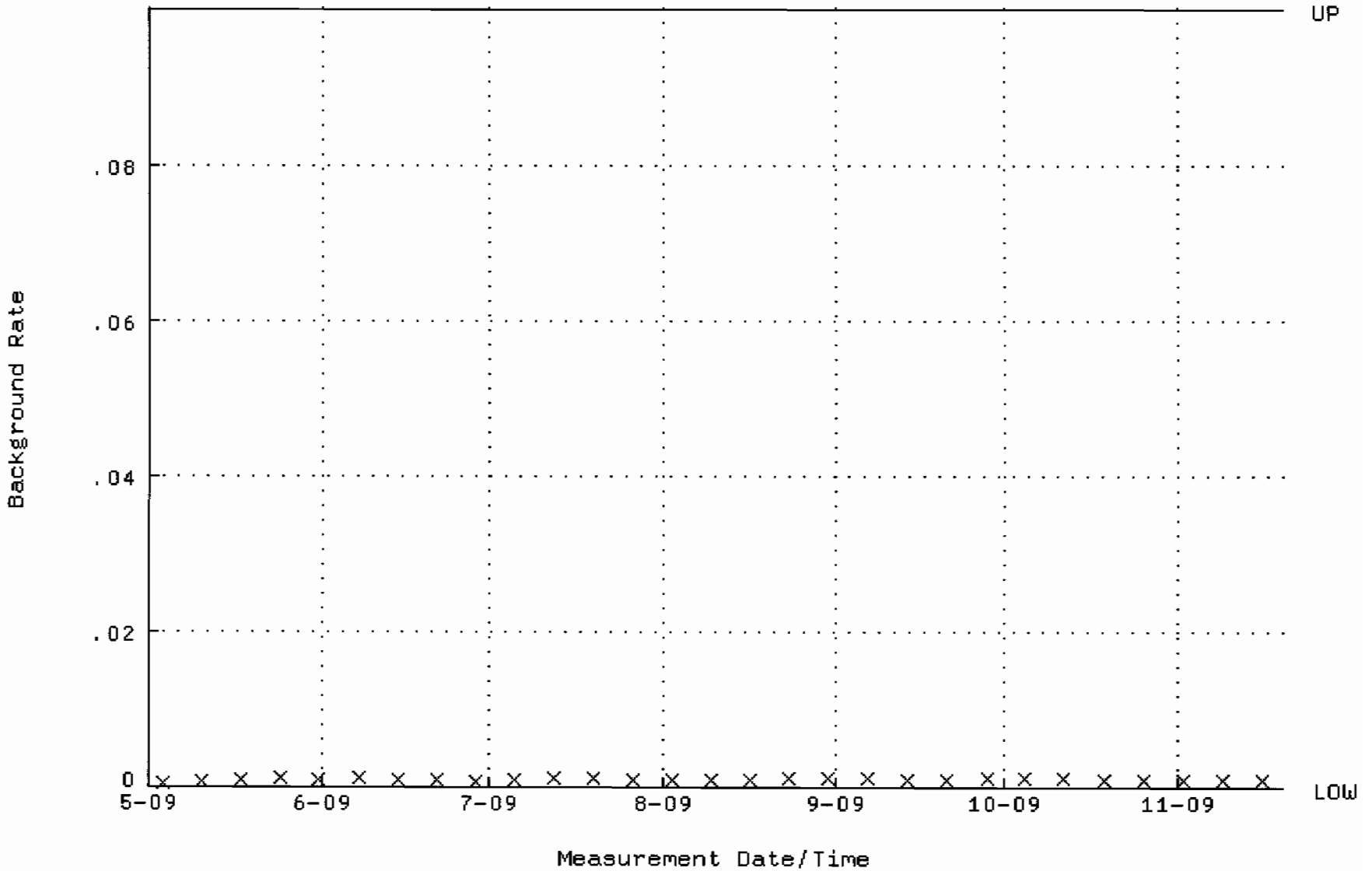

QA filename : DKA100:[ENV_ALPHA.QA.W]W157.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:48:11 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.237137 through 0.257137

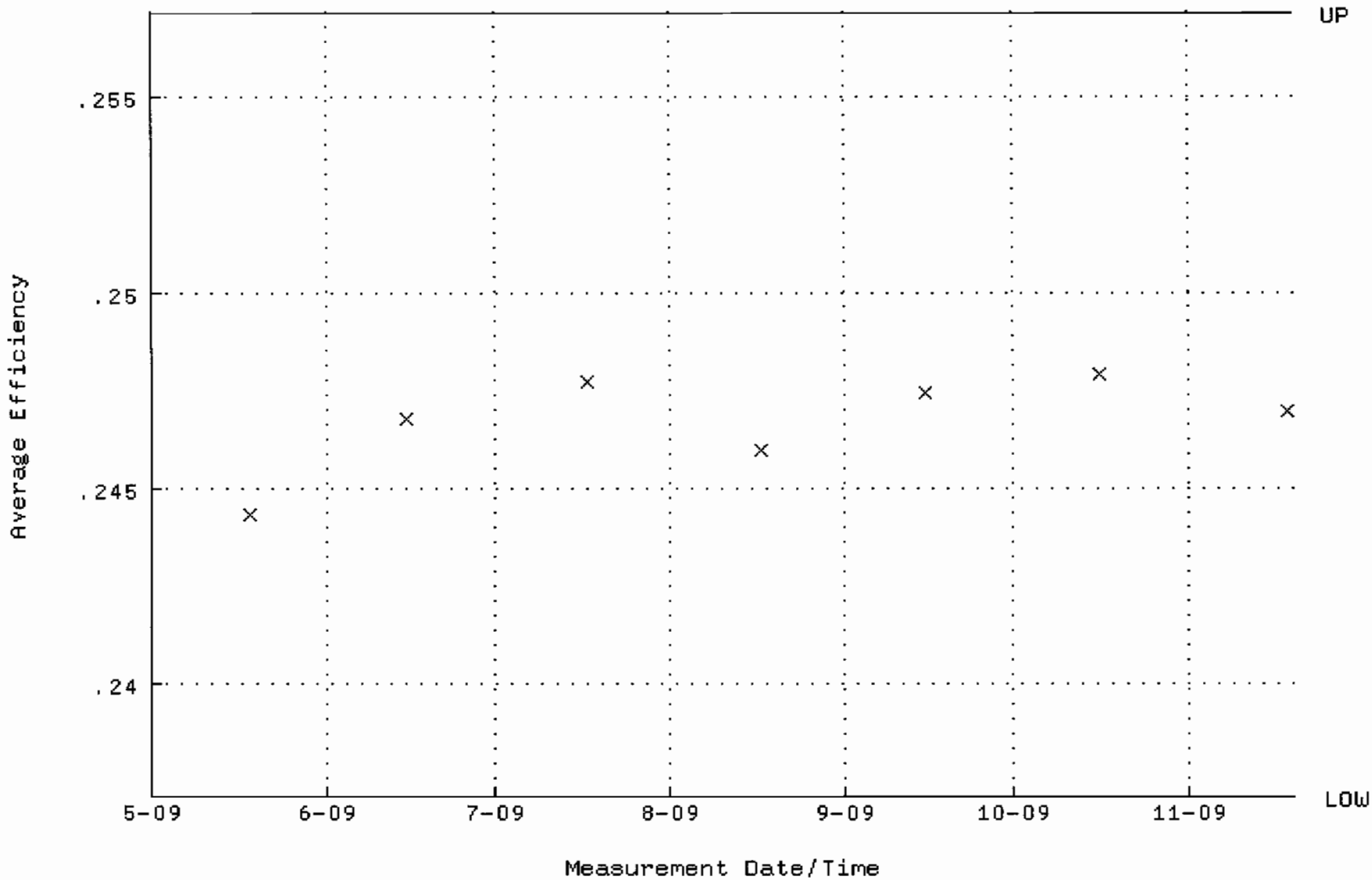

QA filename : DKA100:[ENV_ALPHA.QA.W]W157.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:48:11 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 85.9292 through 94.9744

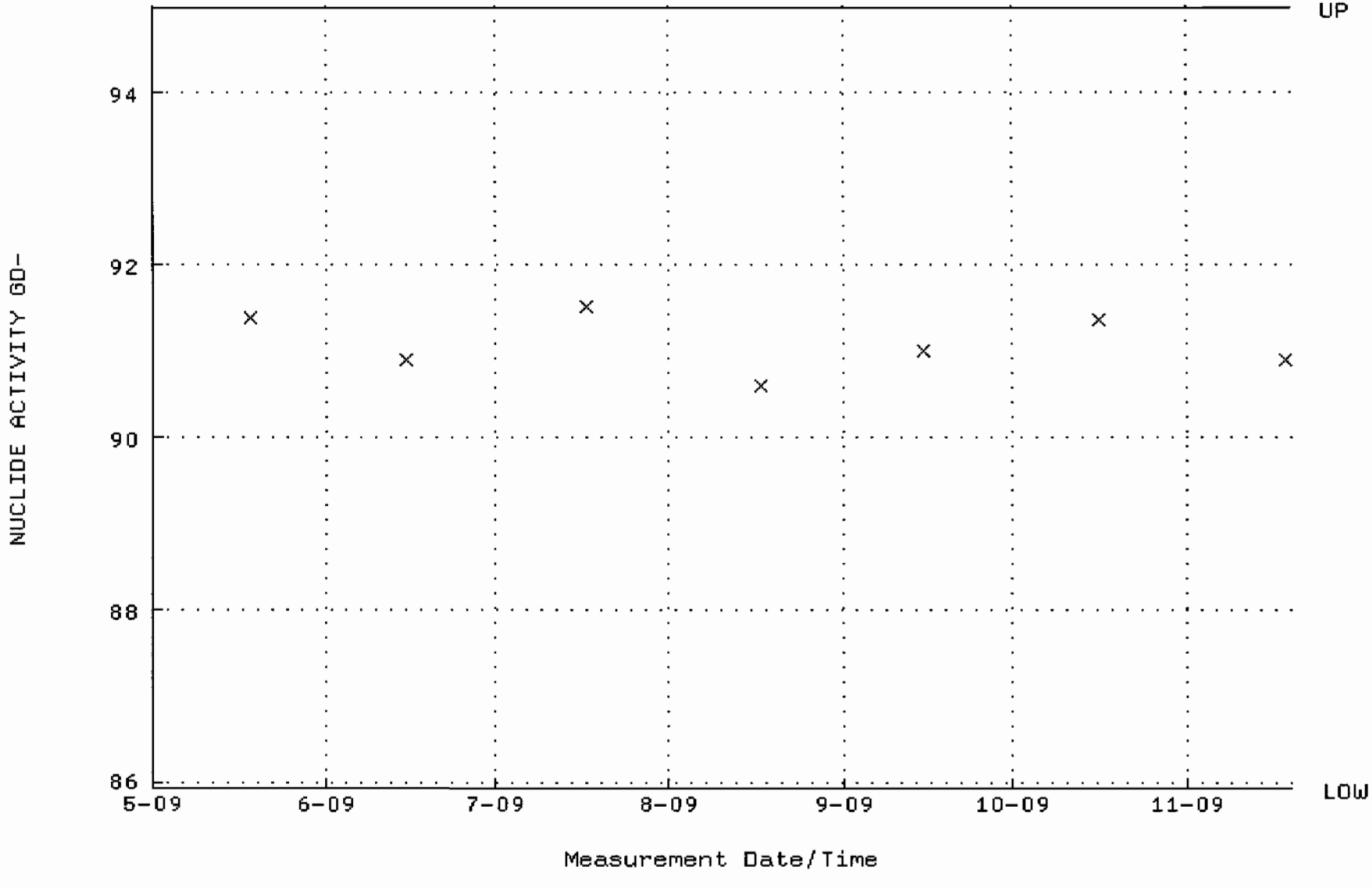

QA filename : DKA100:[ENV_ALPHA.QA.B]B157.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:02 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

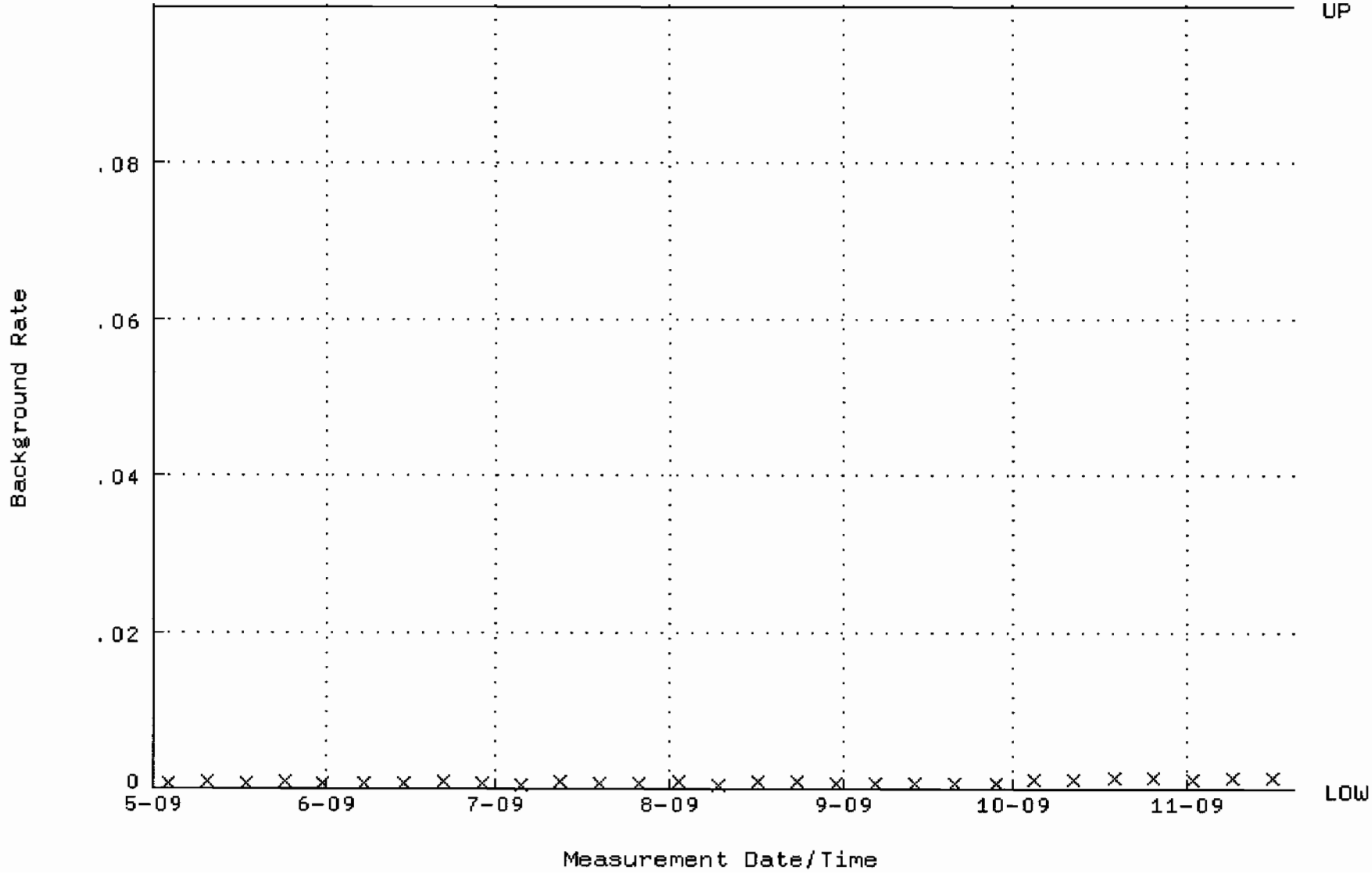

QA filename : DKA100:[ENV_ALPHA.QA.W]W158.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:48:15 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.241466 through 0.261466

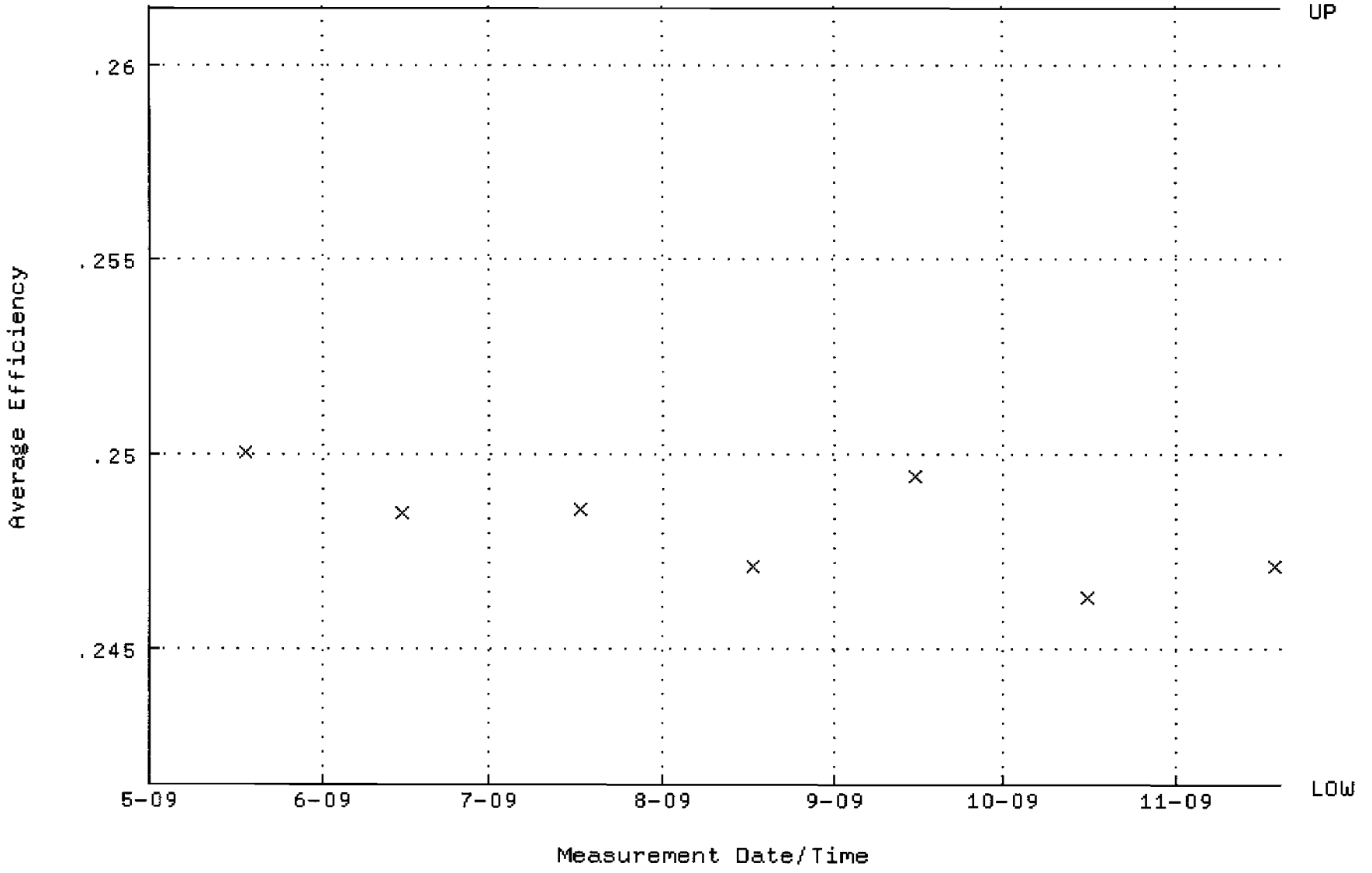

QA filename : DKA100:[ENV_ALPHA.QA.W]W158.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:48:15 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 84.6414 through 93.5510

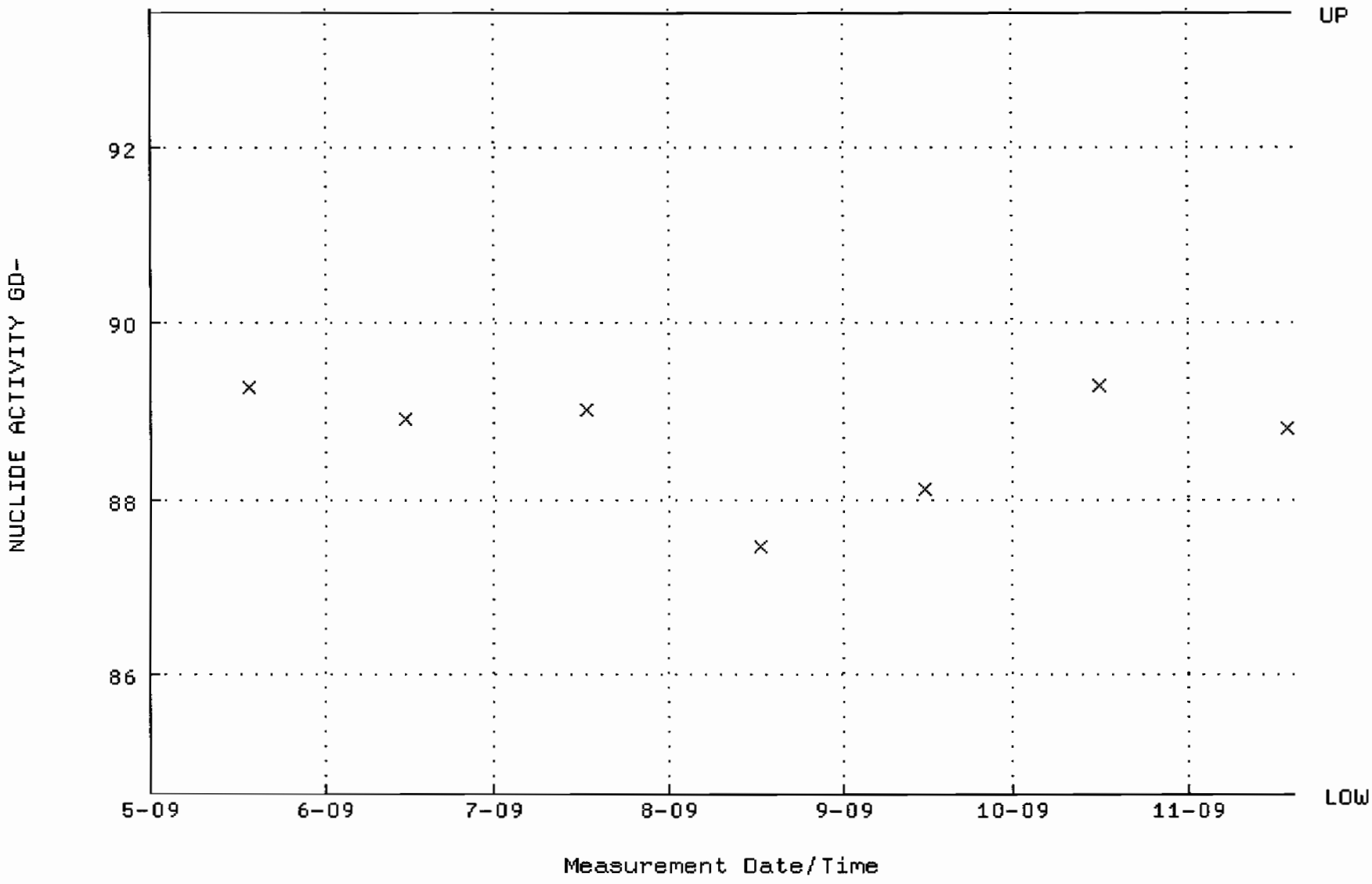

QA filename : DKA100:[ENV_ALPHA.QA.B]B158.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:05 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

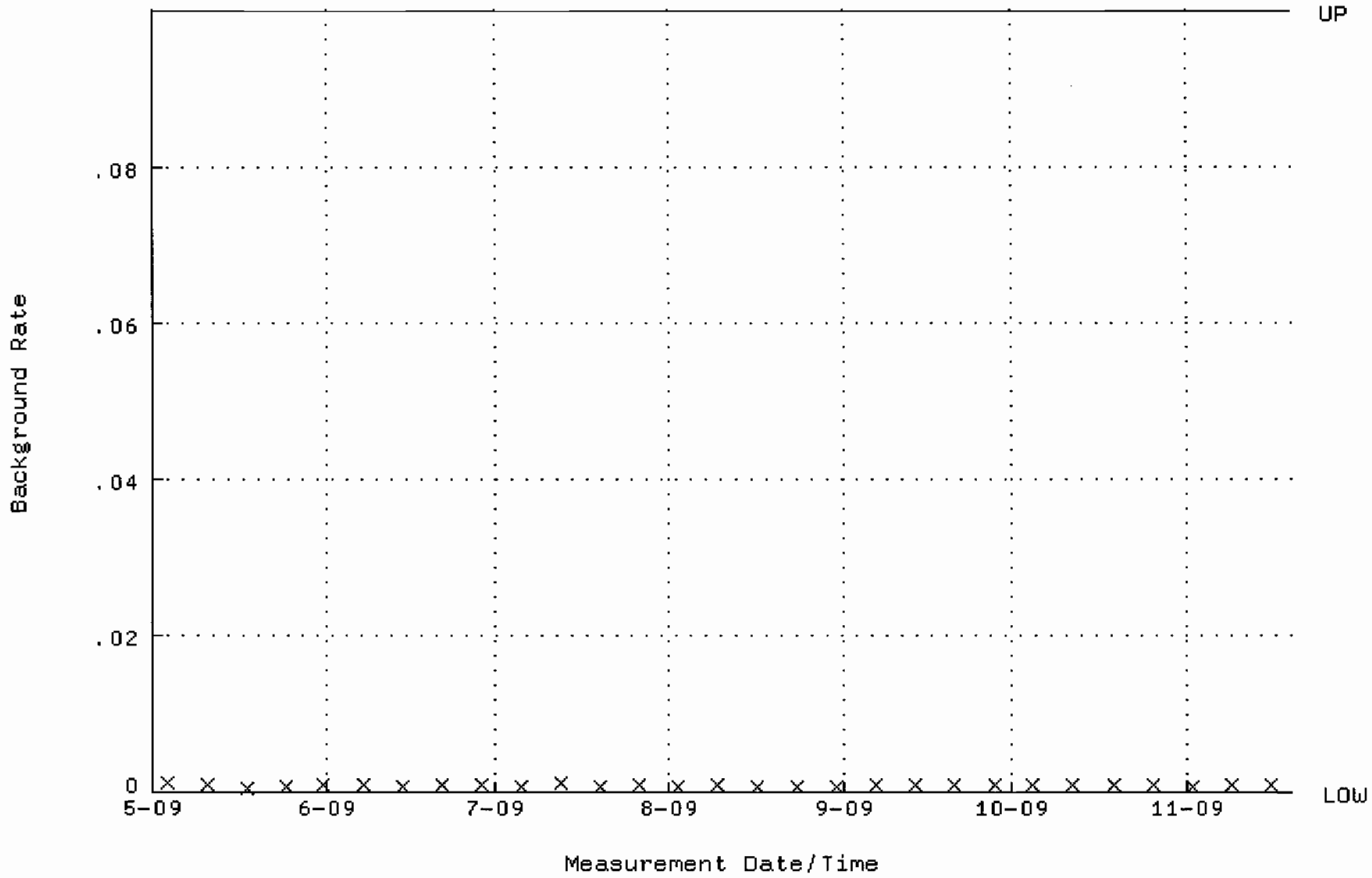

QA filename : DKA100:[ENV_ALPHA.QA.W]W159.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 18-MAY-2009 09:48:20 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.242851 through 0.262851

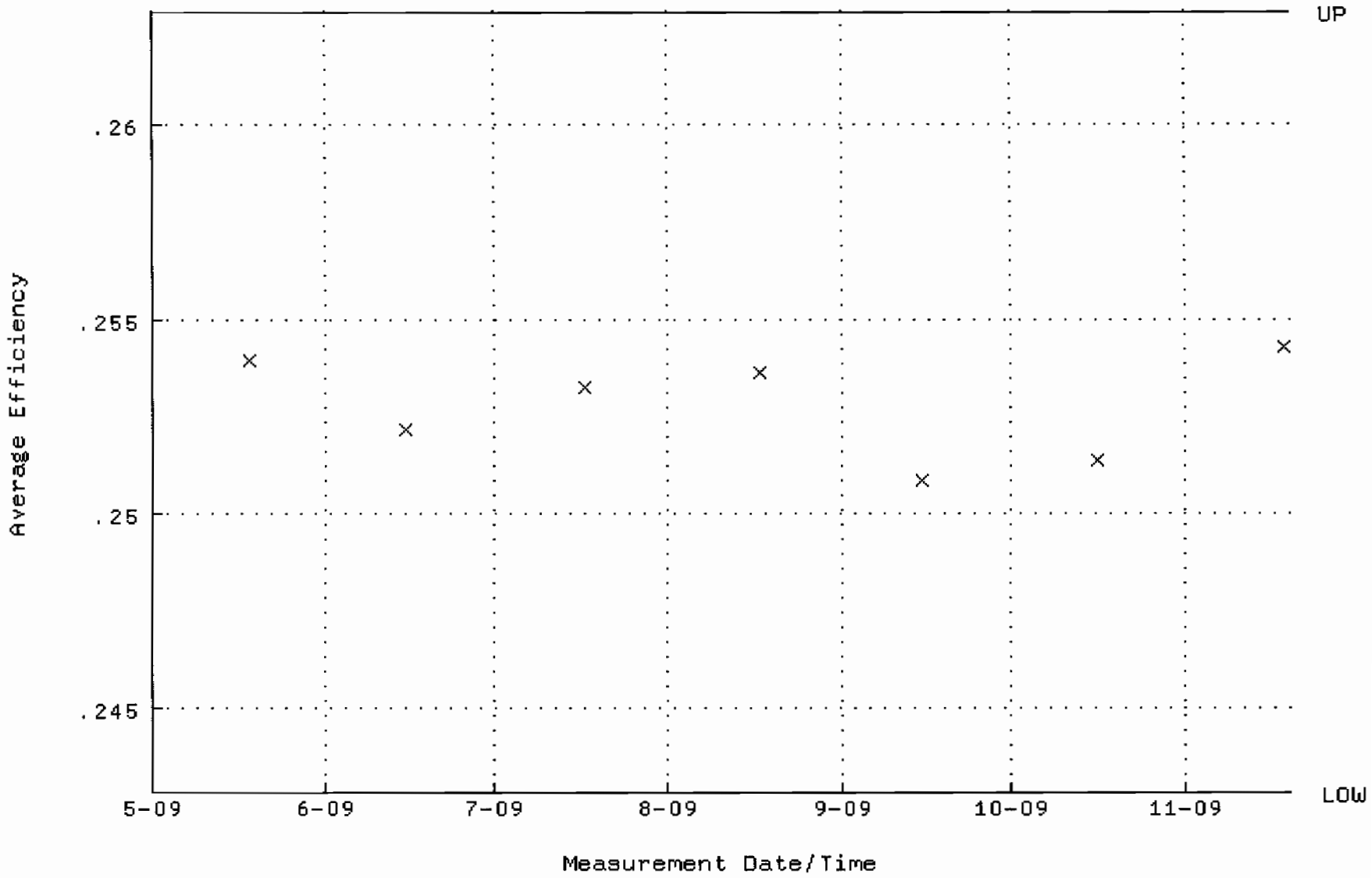

QA filename : DKA100:[ENV_ALPHA.QA.W]W159.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 18-MAY-2009 09:48:20 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 80.7870 through 89.2909

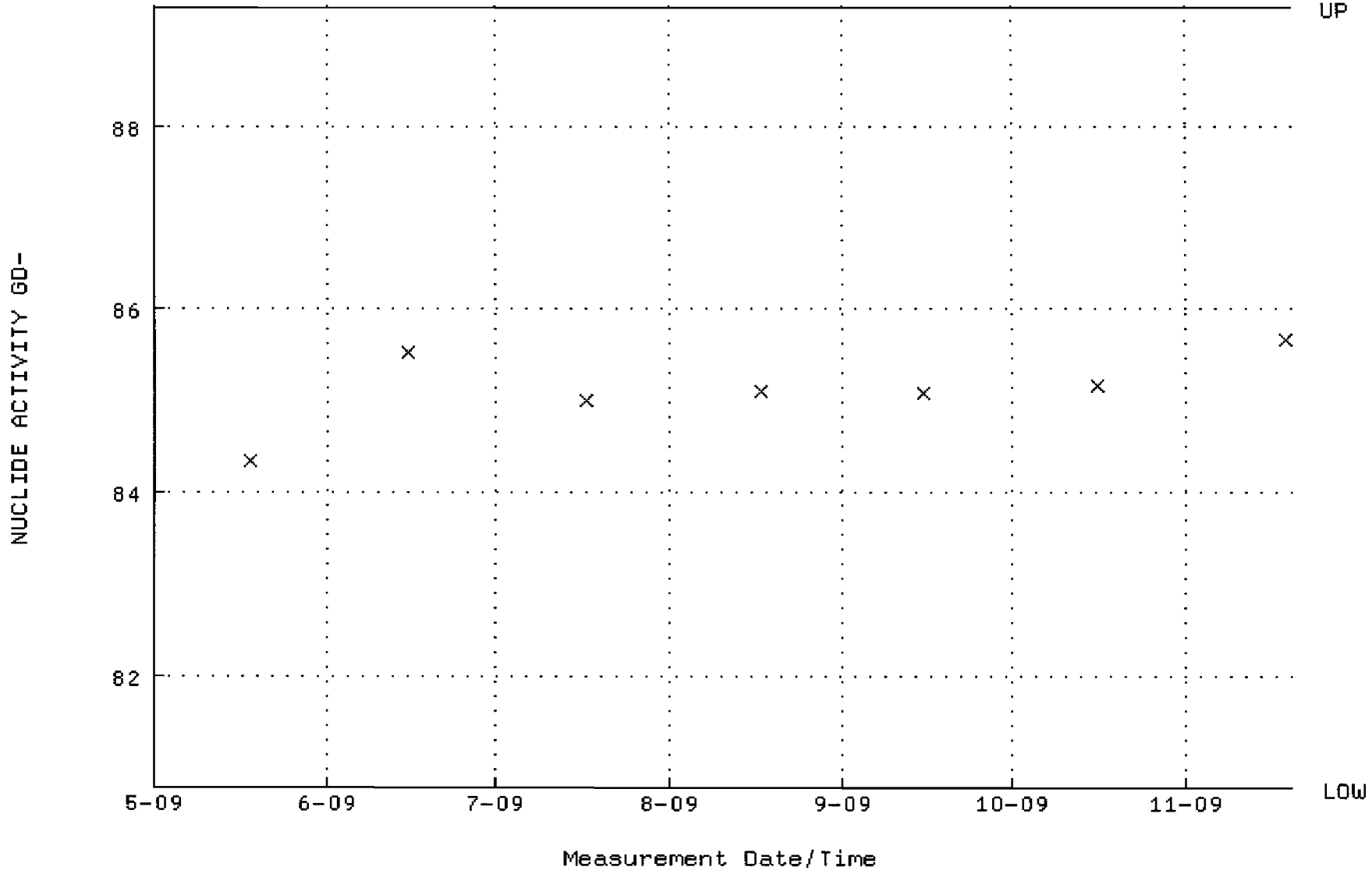

QA filename : DKA100:[ENV_ALPHA.QA.B]B159.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:10 through 19-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

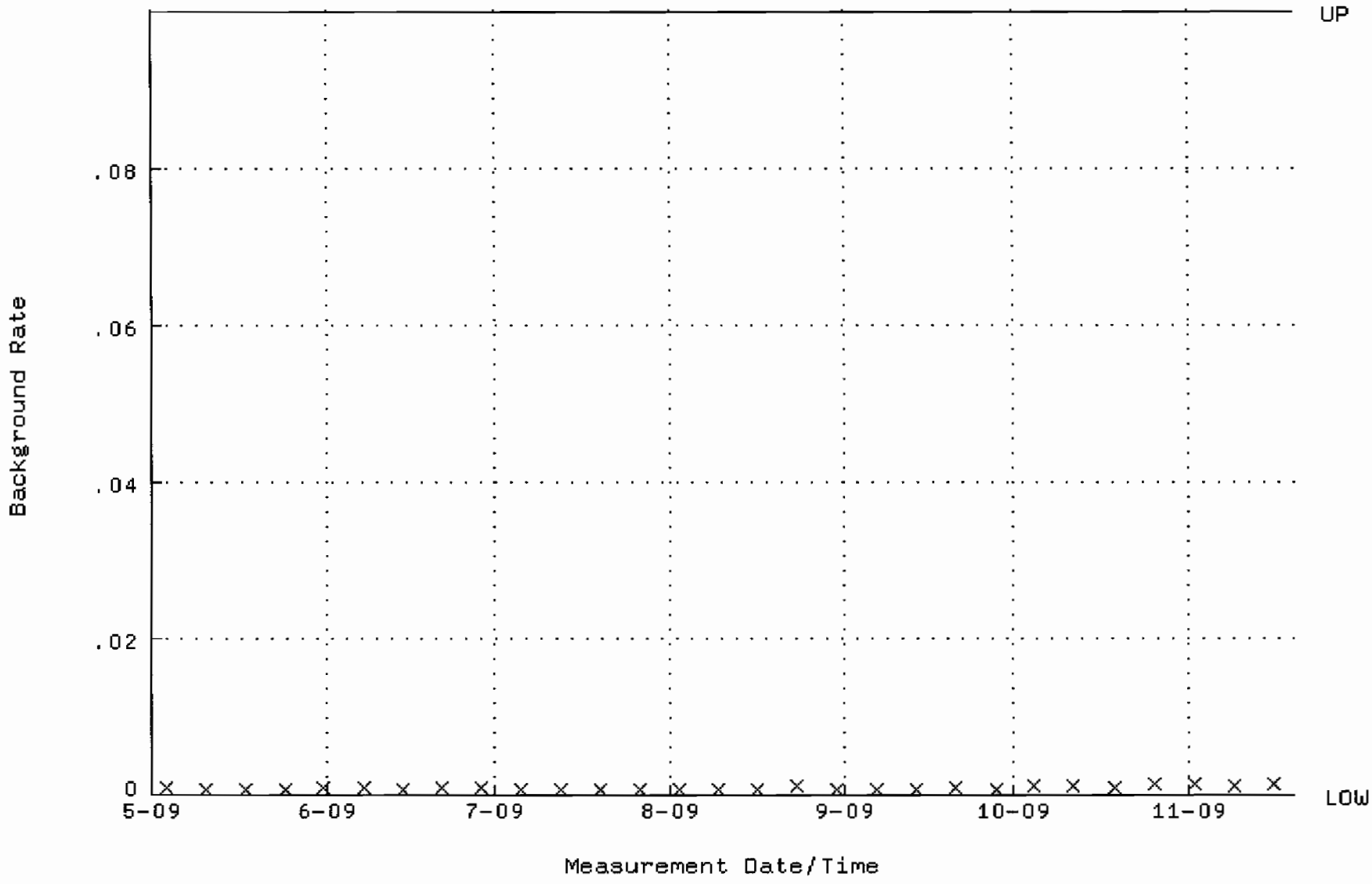

QA filename : DKA100:[ENV_ALPHA.QA.W]W161.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:31 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.361044 through 0.388070

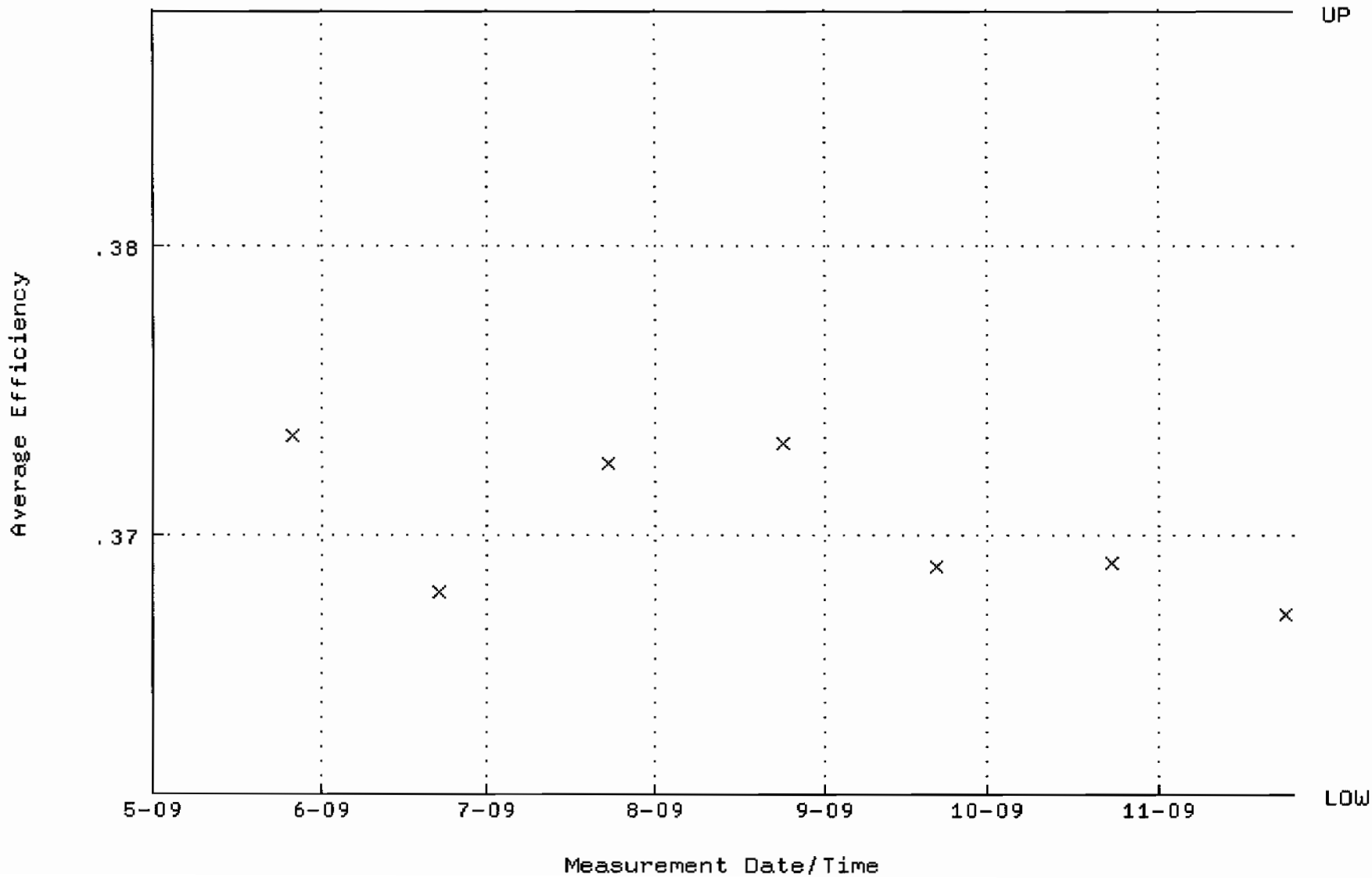

QA filename : DKA100:[ENV_ALPHA.QA.W]W161.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:31 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 89.2795 through 91.5025

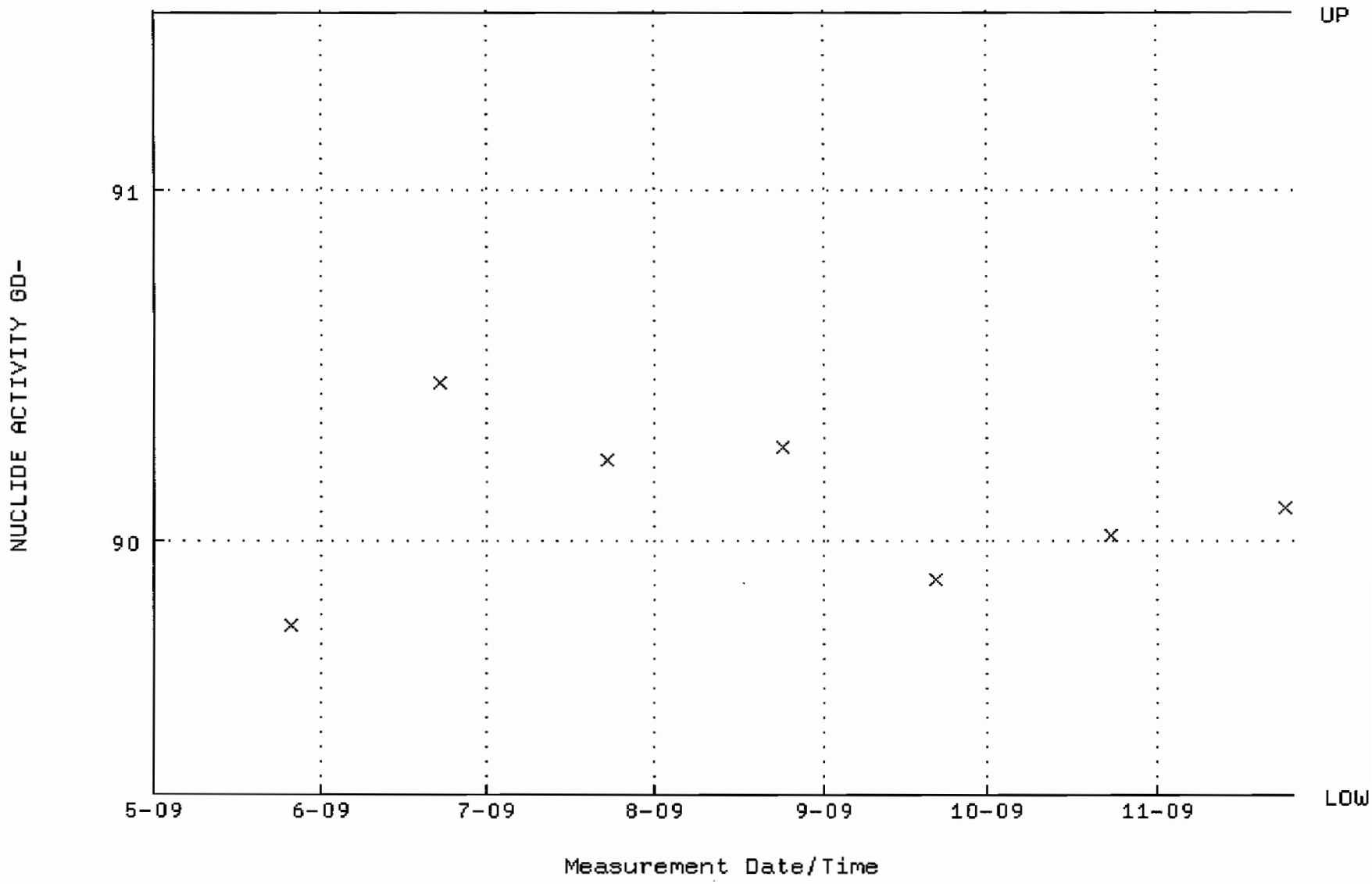

QA filename : DKA100:[ENV_ALPHA.QA.B]B161.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

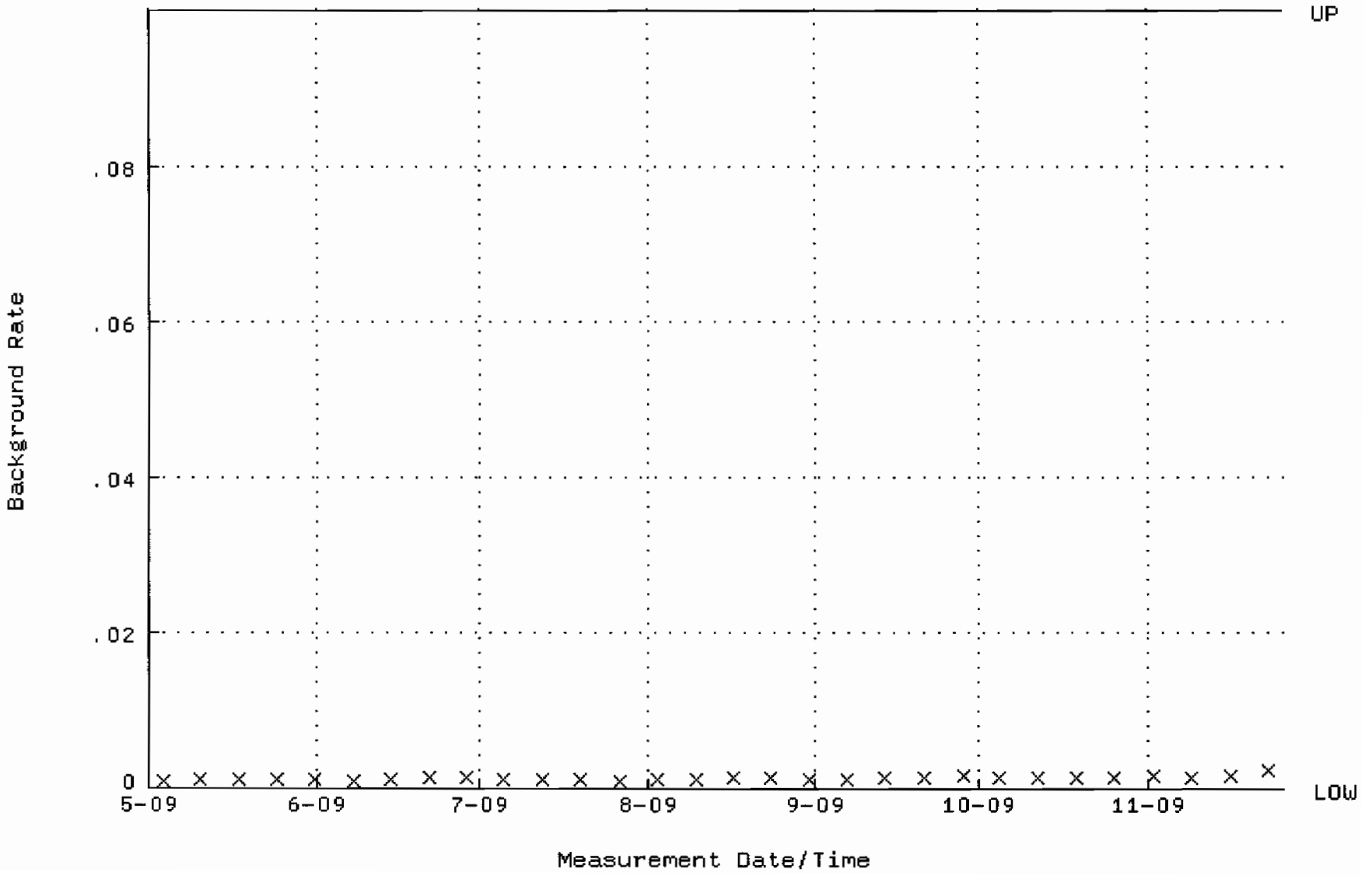

QA filename : DKA100:[ENV_ALPHA.QA.W]W162.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:36 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.363287 through 0.383287

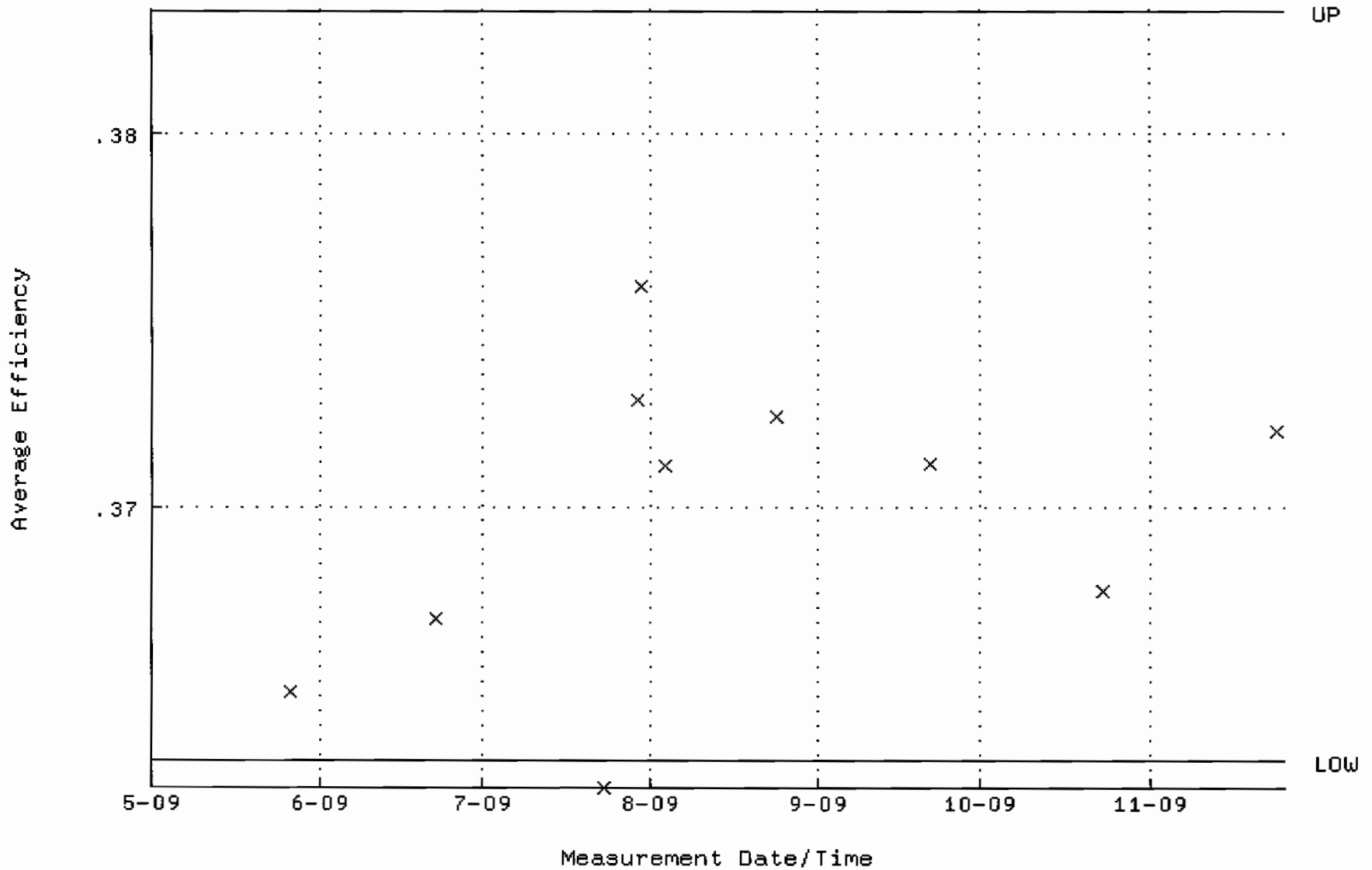

QA filename : DKA100:[ENV_ALPHA.QA.W]W162.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:36 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 85.8969 through 94.9387

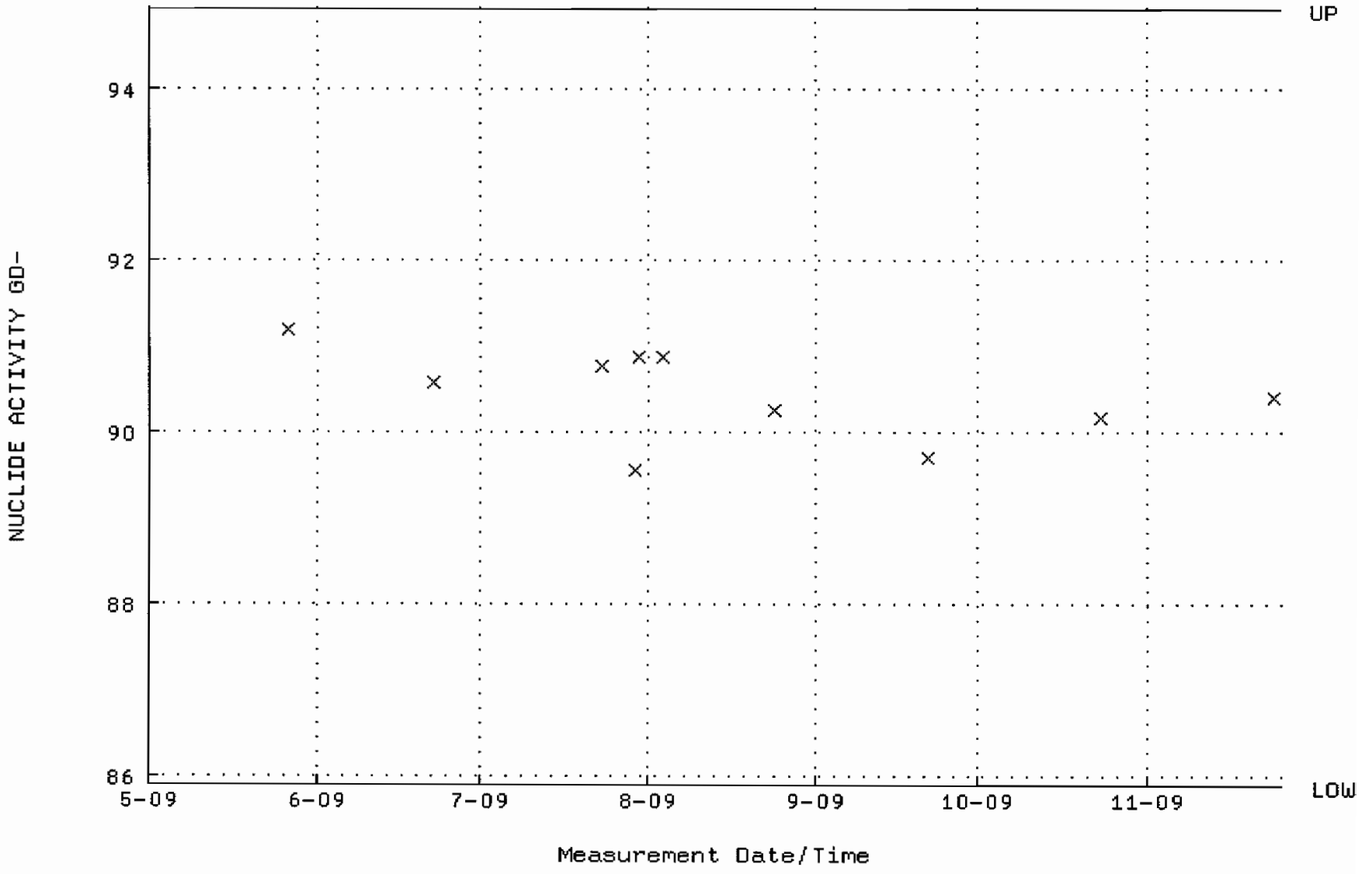

QA filename : DKA100:[ENV_ALPHA.QA.B]B162.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:21 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

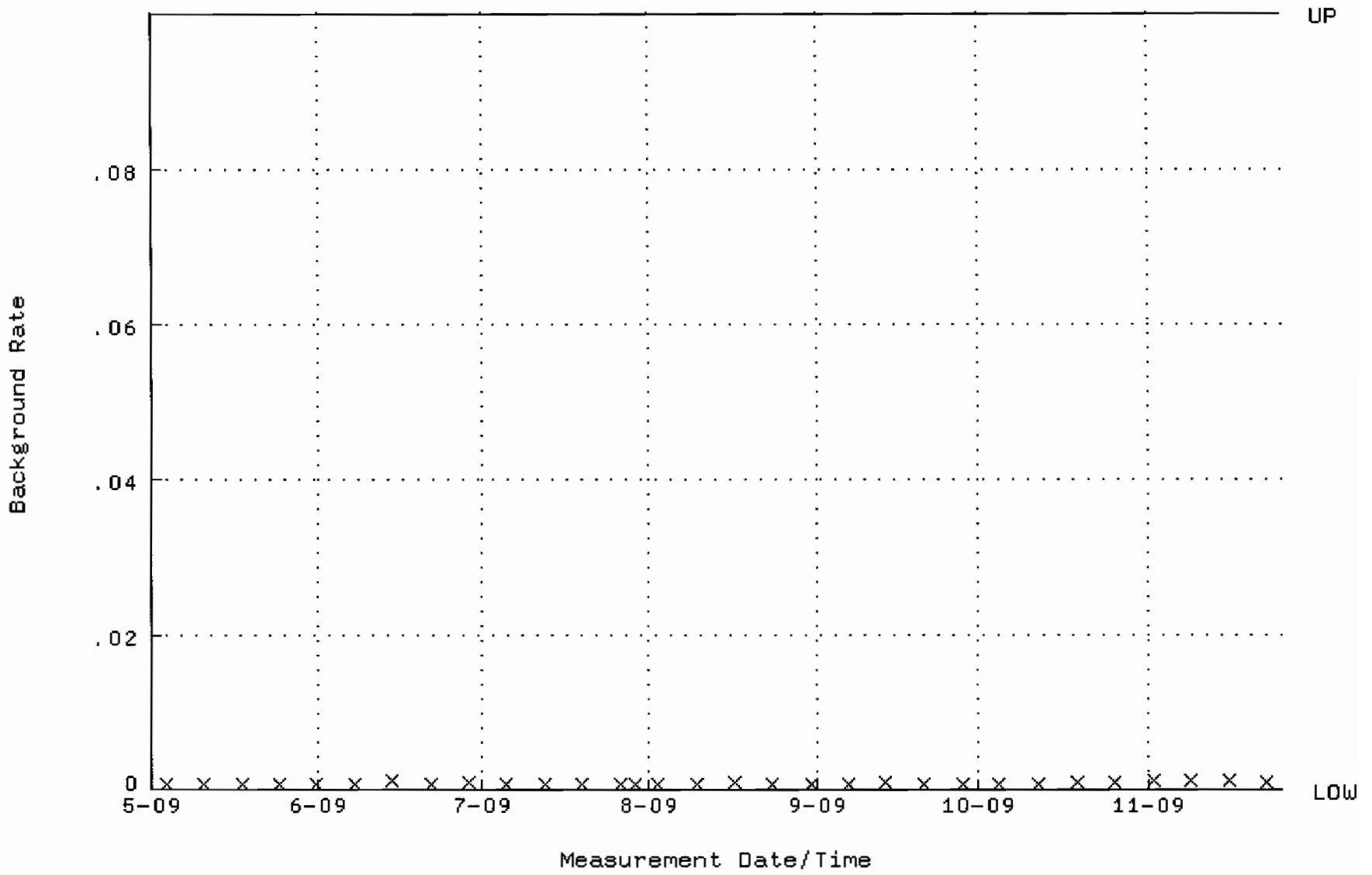

QA filename : DKA100:[ENV_ALPHA.QA.W]W163.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:40 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.375557 through 0.395557

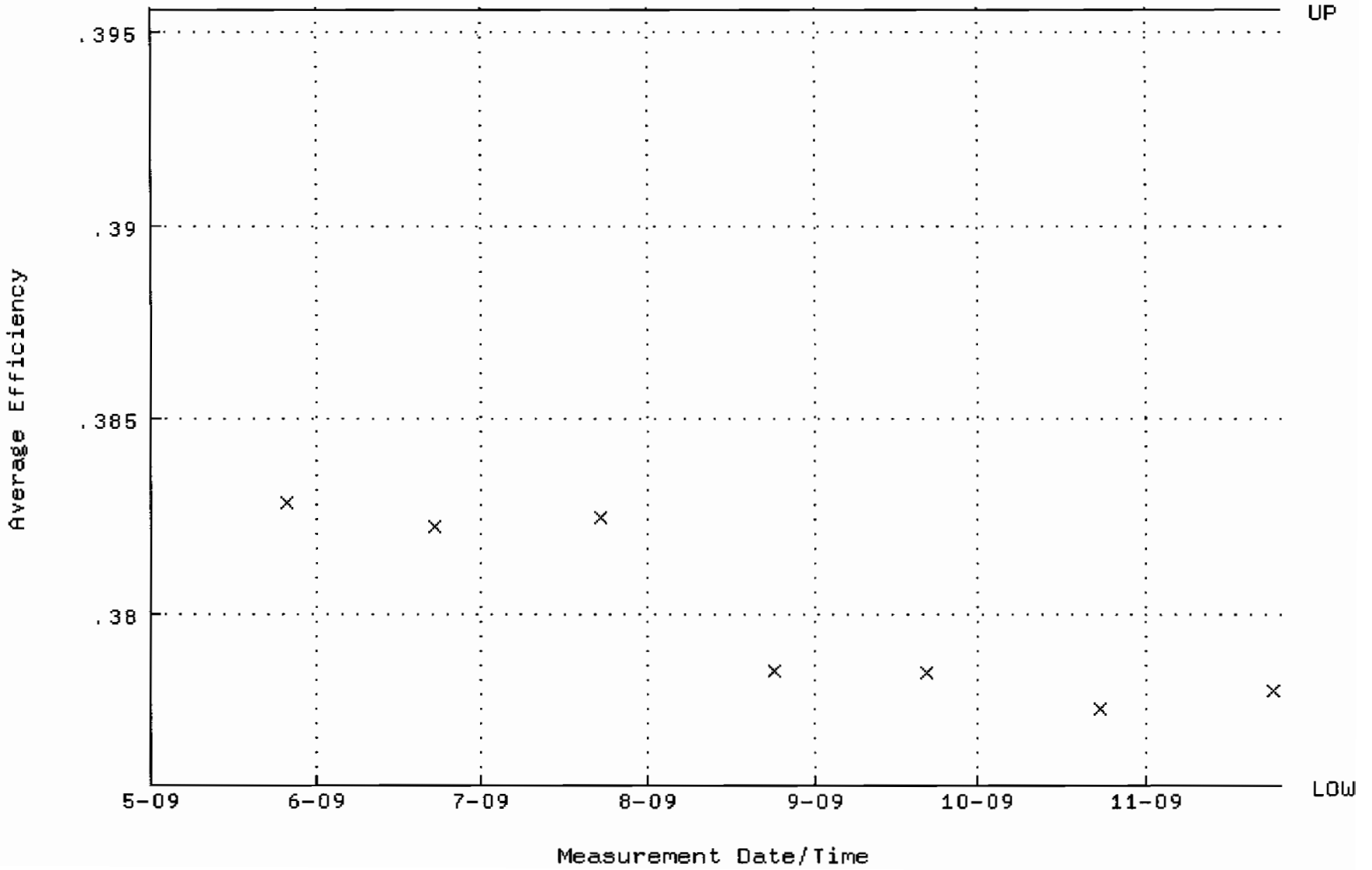

QA filename : DKA100:[ENV_ALPHA.QA.W]W163.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:40 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 84.0322 through 92.8777

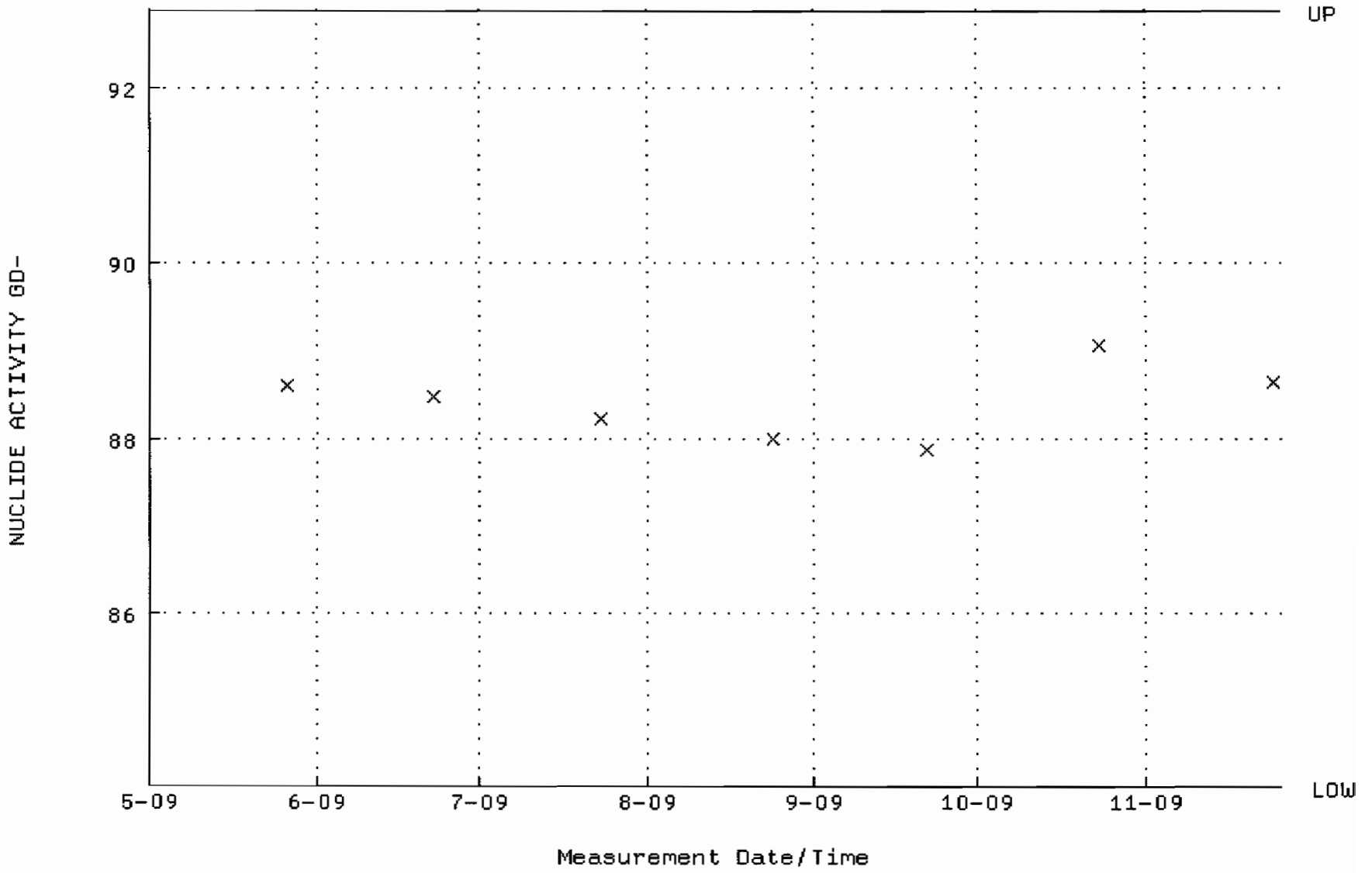

QA filename : DKA100:[ENV_ALPHA.QA.B]B163.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:25 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

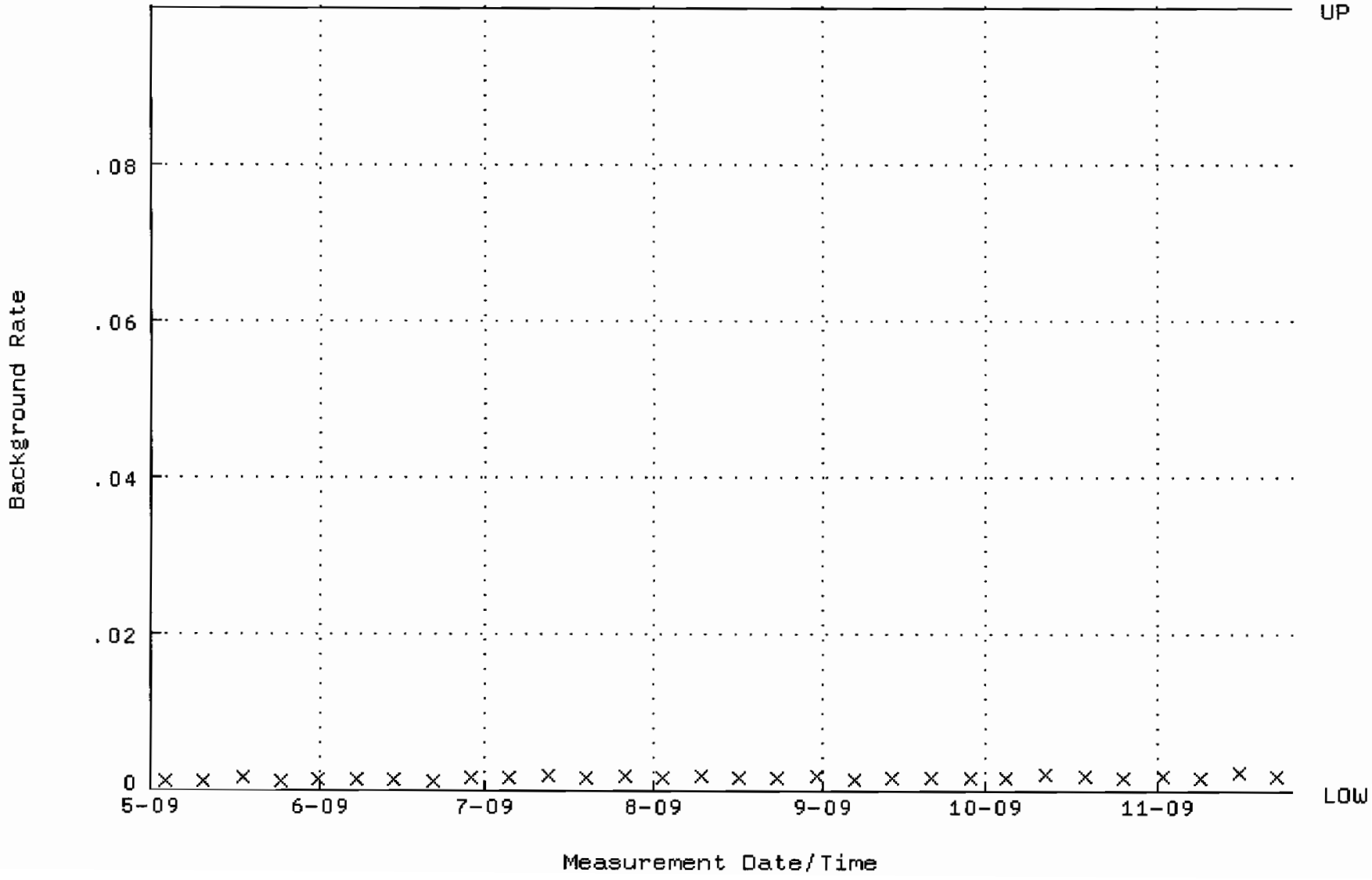

QA filename : DKA100:[ENV_ALPHA.QA.W]W164.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:45 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.369199 through 0.396555

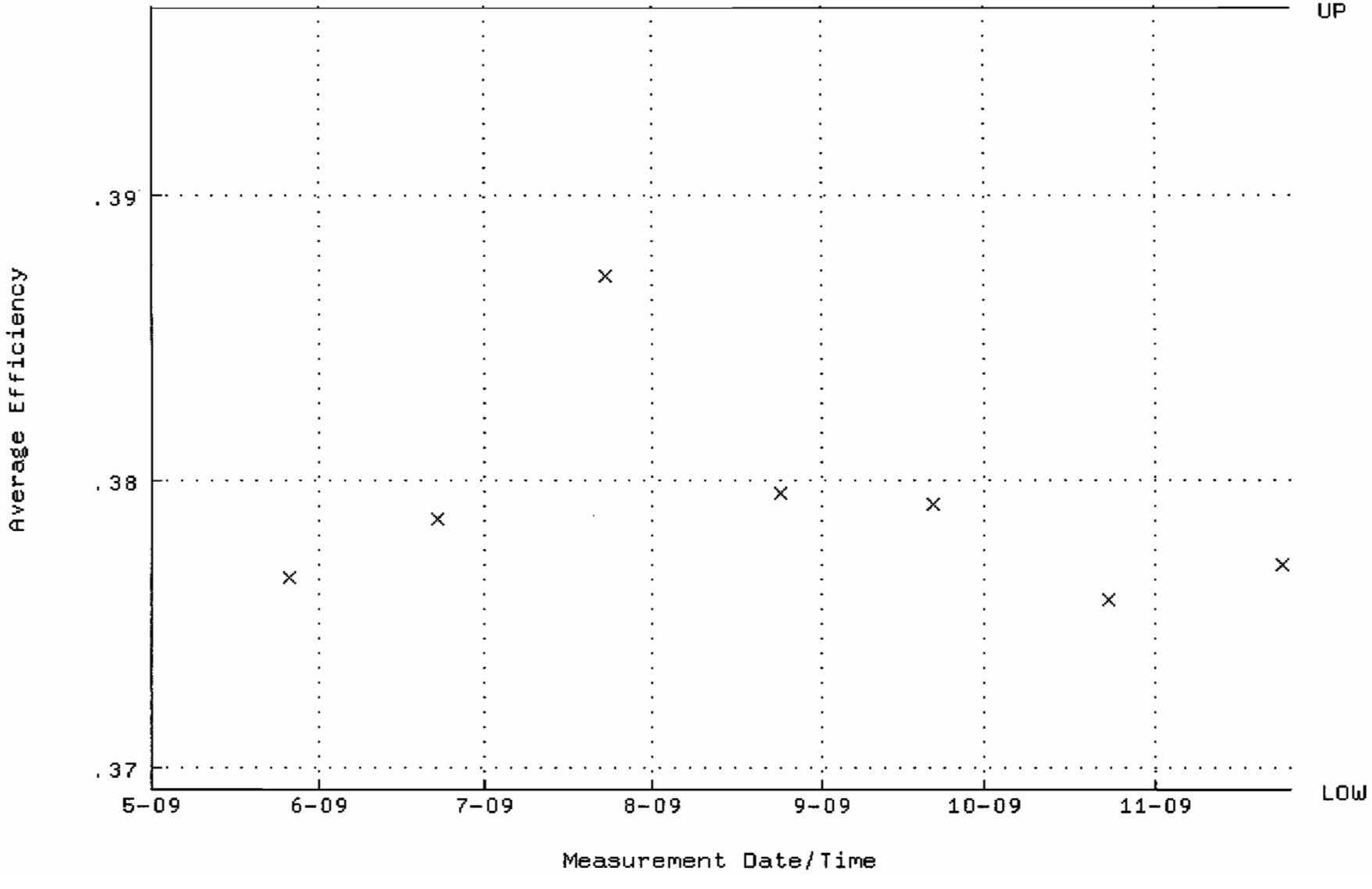

QA filename : DKA100:[ENV_ALPHA.QA.W]W164.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:45 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 89.2764 through 92.8786

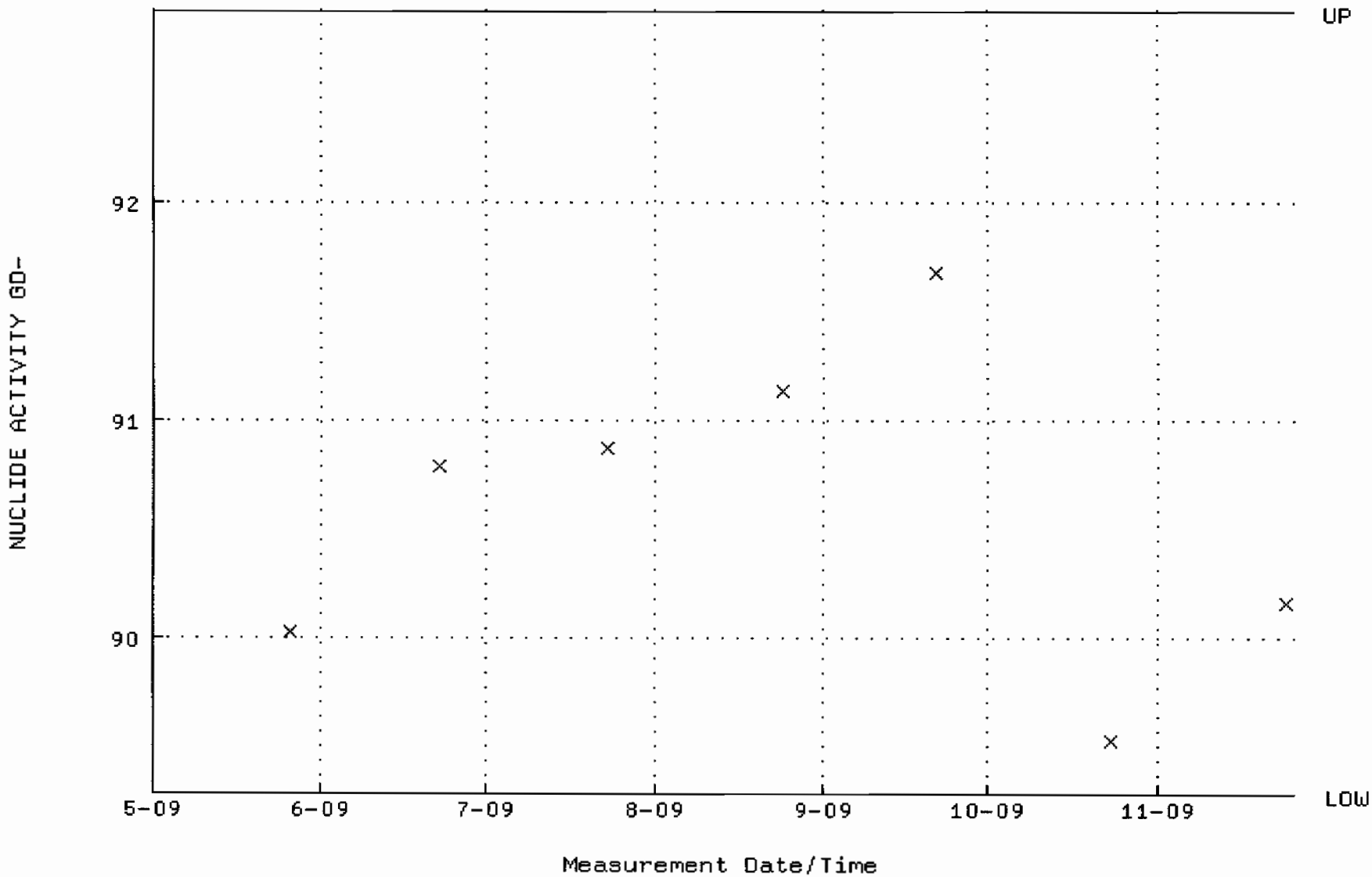

QA filename : DKA100:[ENV_ALPHA.QA.B]B164.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:28 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

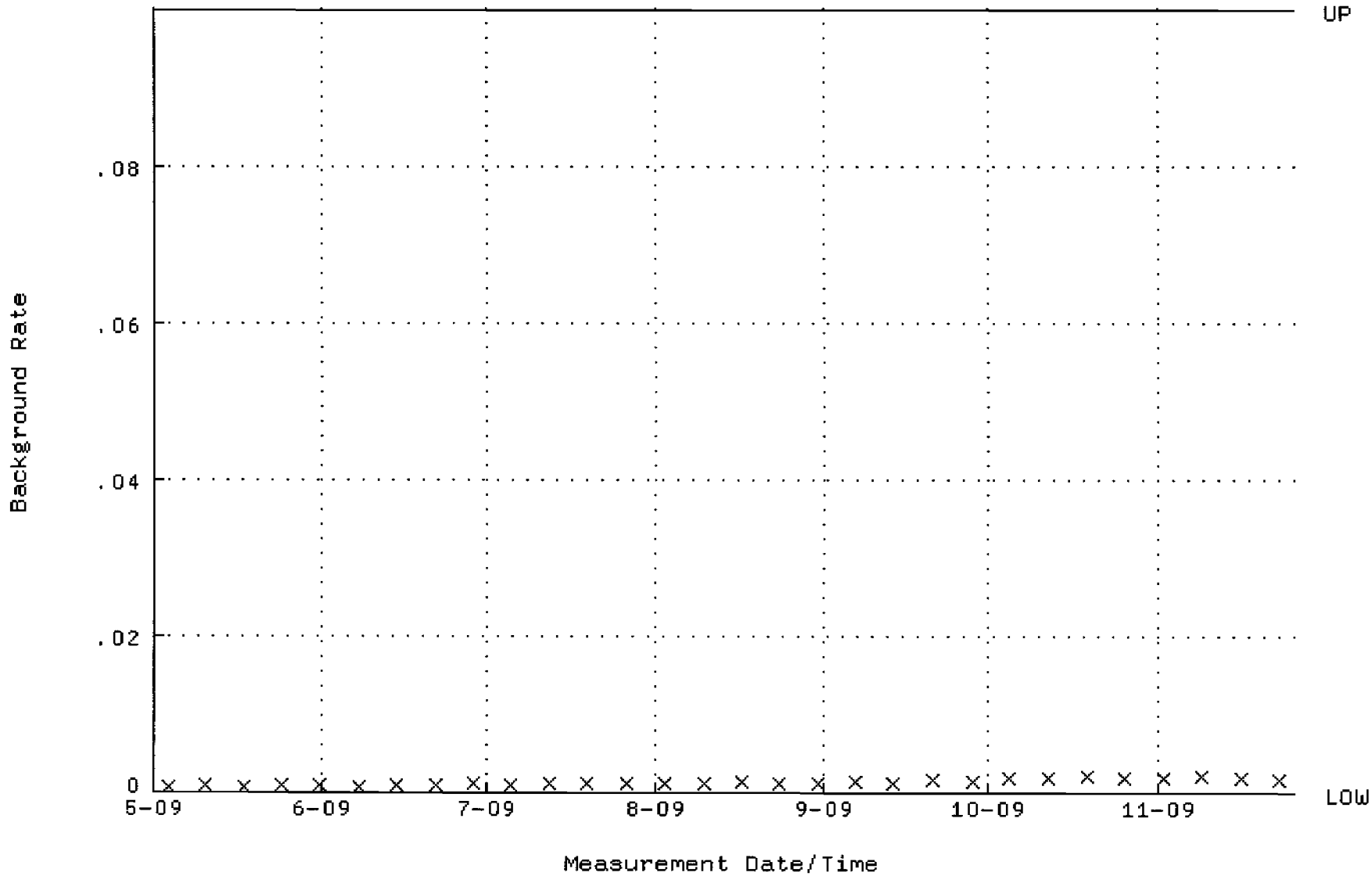

QA filename : DKA100:[ENV_ALPHA.QA.W]W165.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:48 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.374689 through 0.399127

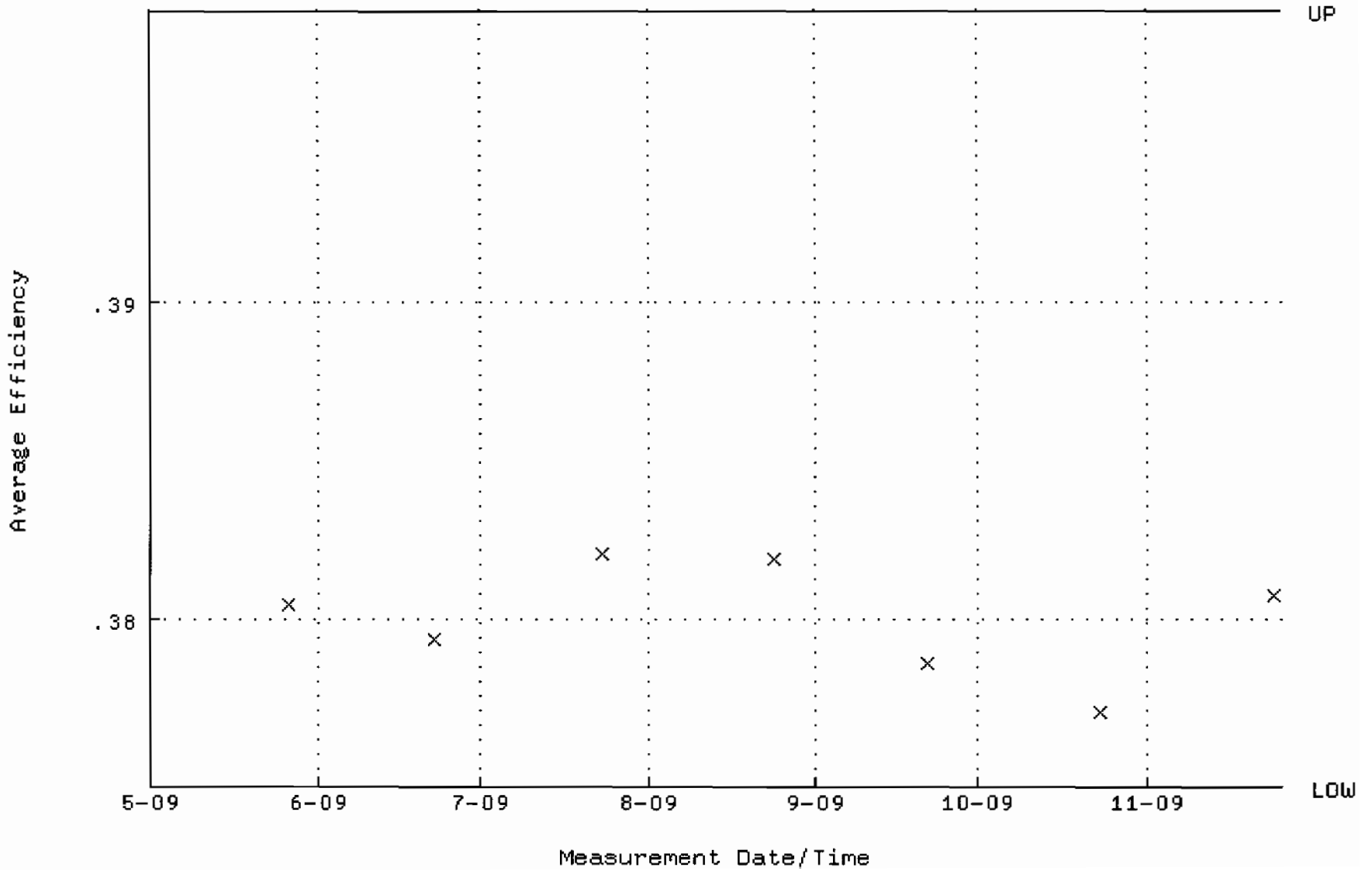

QA filename : DKA100:[ENV_ALPHA.QA.W]W165.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:48 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 87.9613 through 90.1269

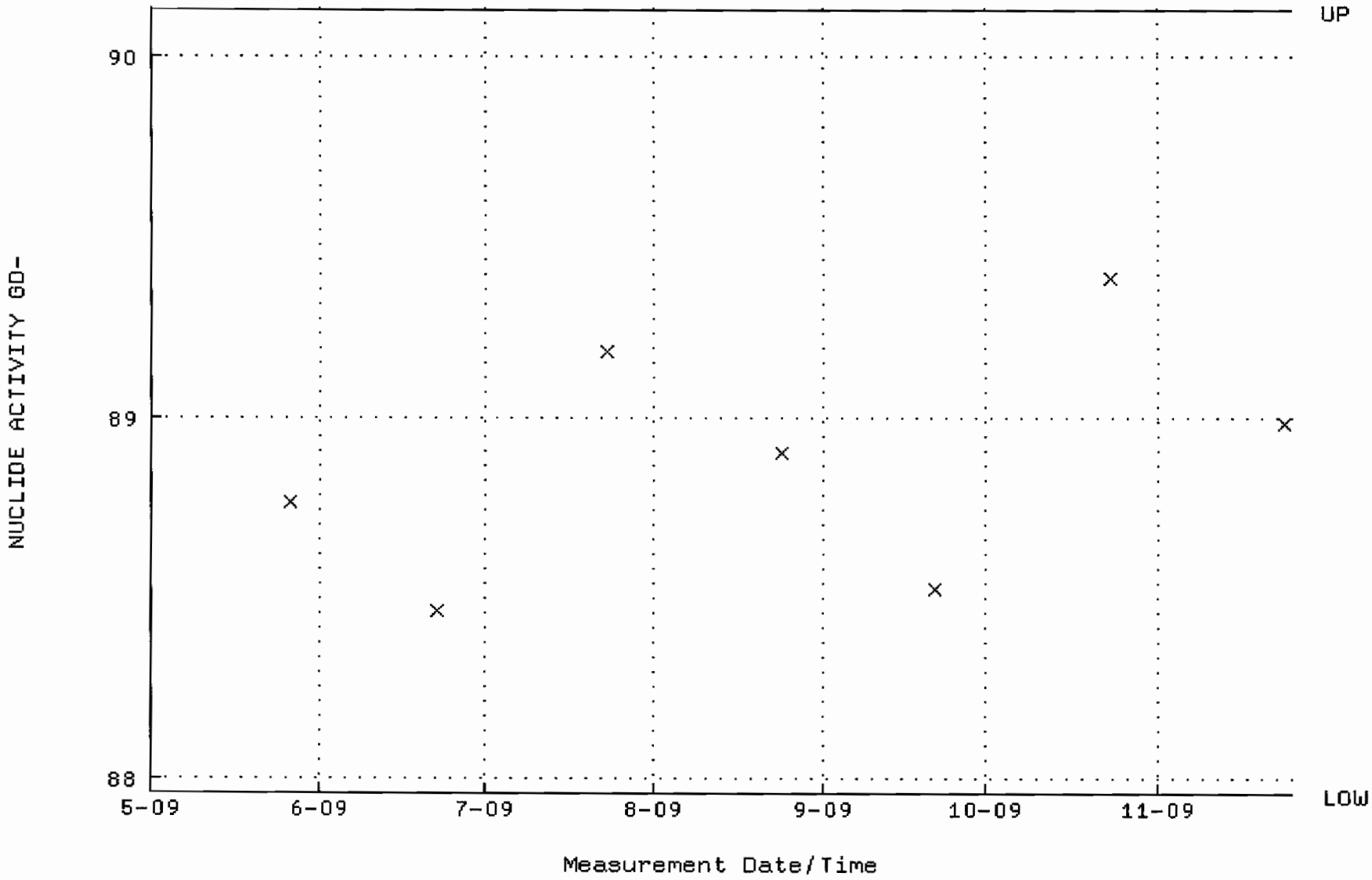

QA filename : DKA100:[ENV_ALPHA.QA.B]B165.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:32 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

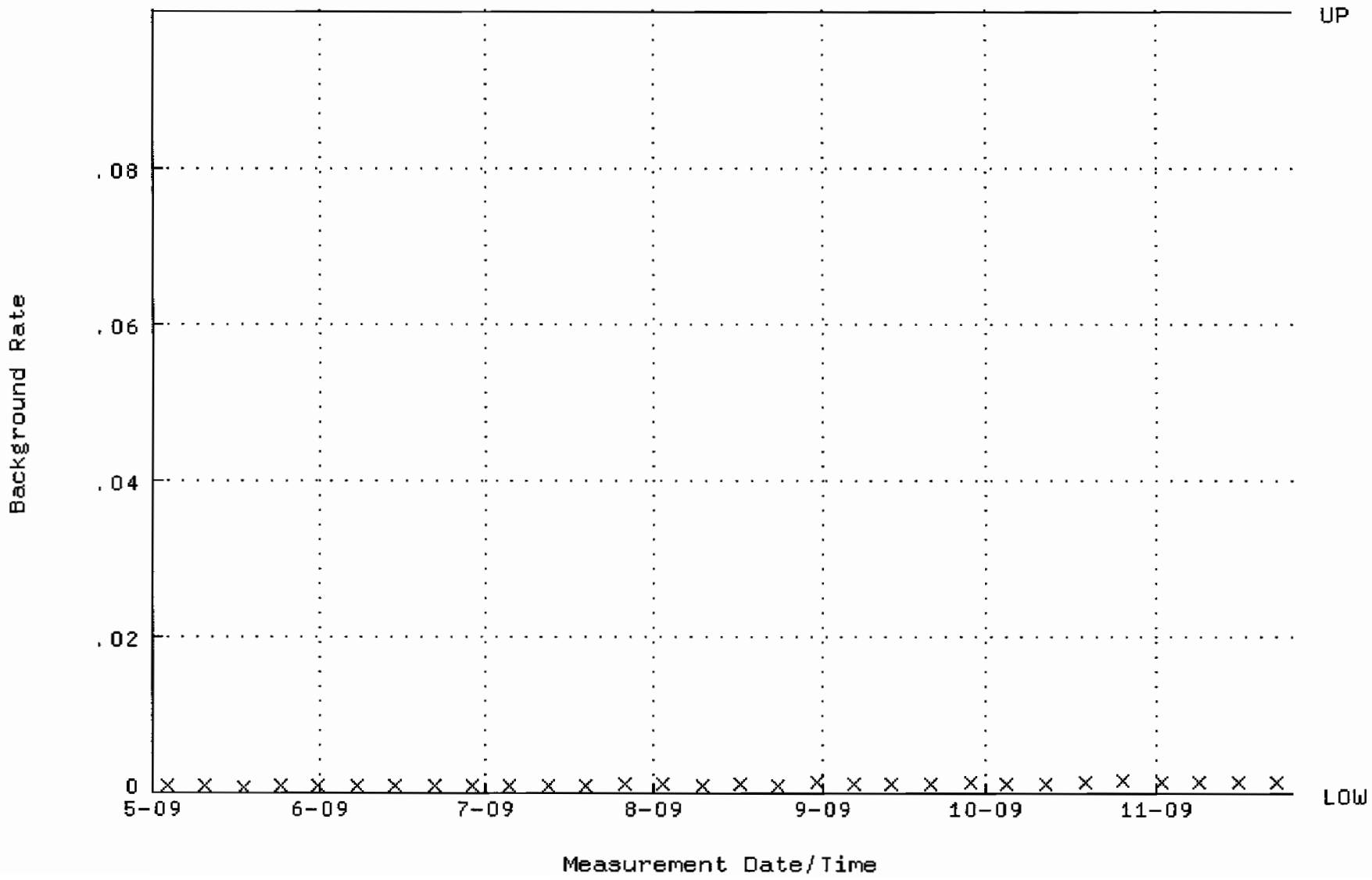

QA filename : DKA100:[ENV_ALPHA.QA.W]W166.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:52 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.385564 through 0.404504

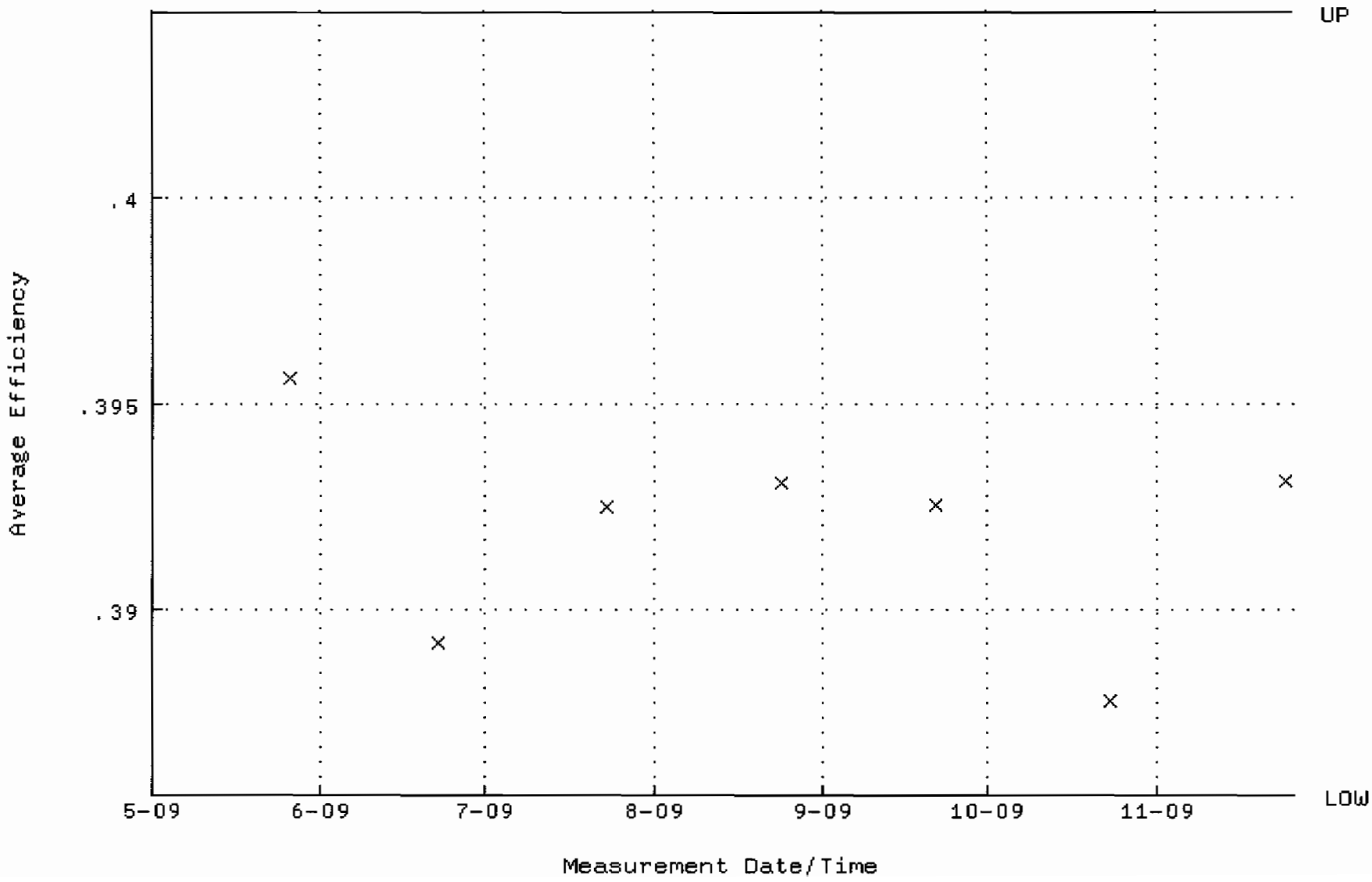

QA filename : DKA100:[ENV_ALPHA.QA.W]W166.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:52 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 88.1264 through 91.2442

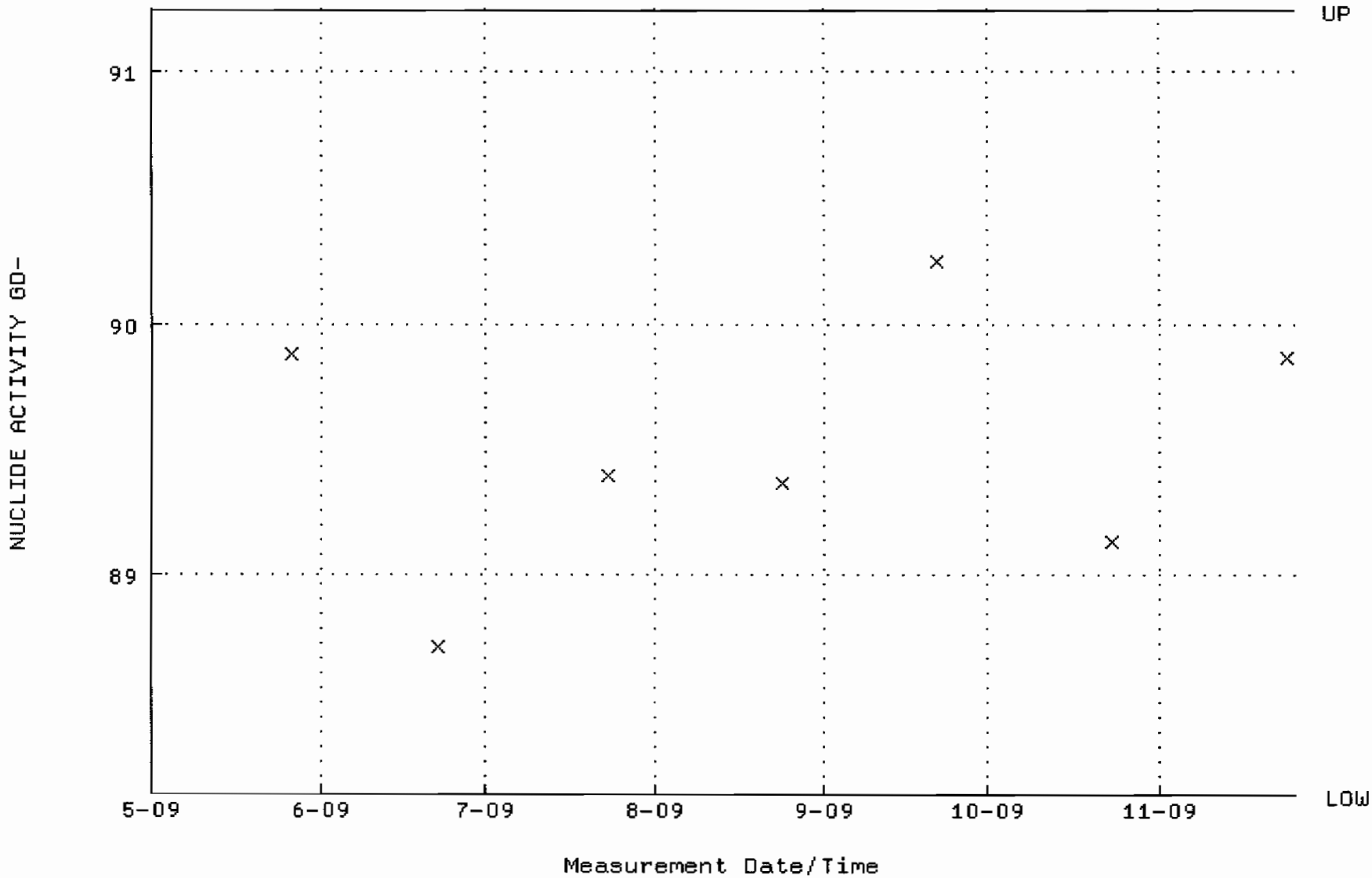

QA filename : DKA100:[ENV_ALPHA.QA.B]B166.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:36 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

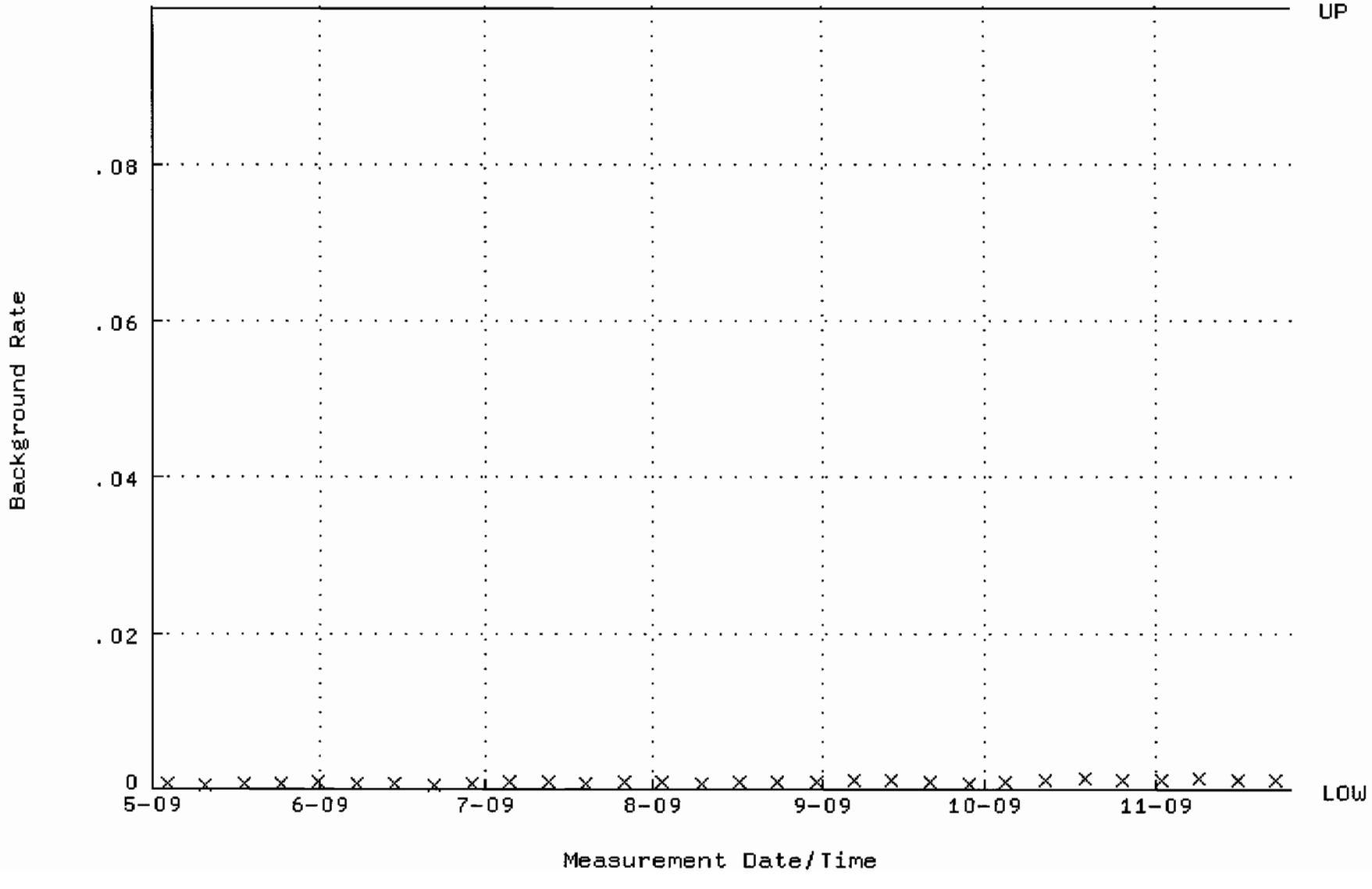

QA filename : DKA100:[ENV_ALPHA.QA.W]W167.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:04:56 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.384285 through 0.404285

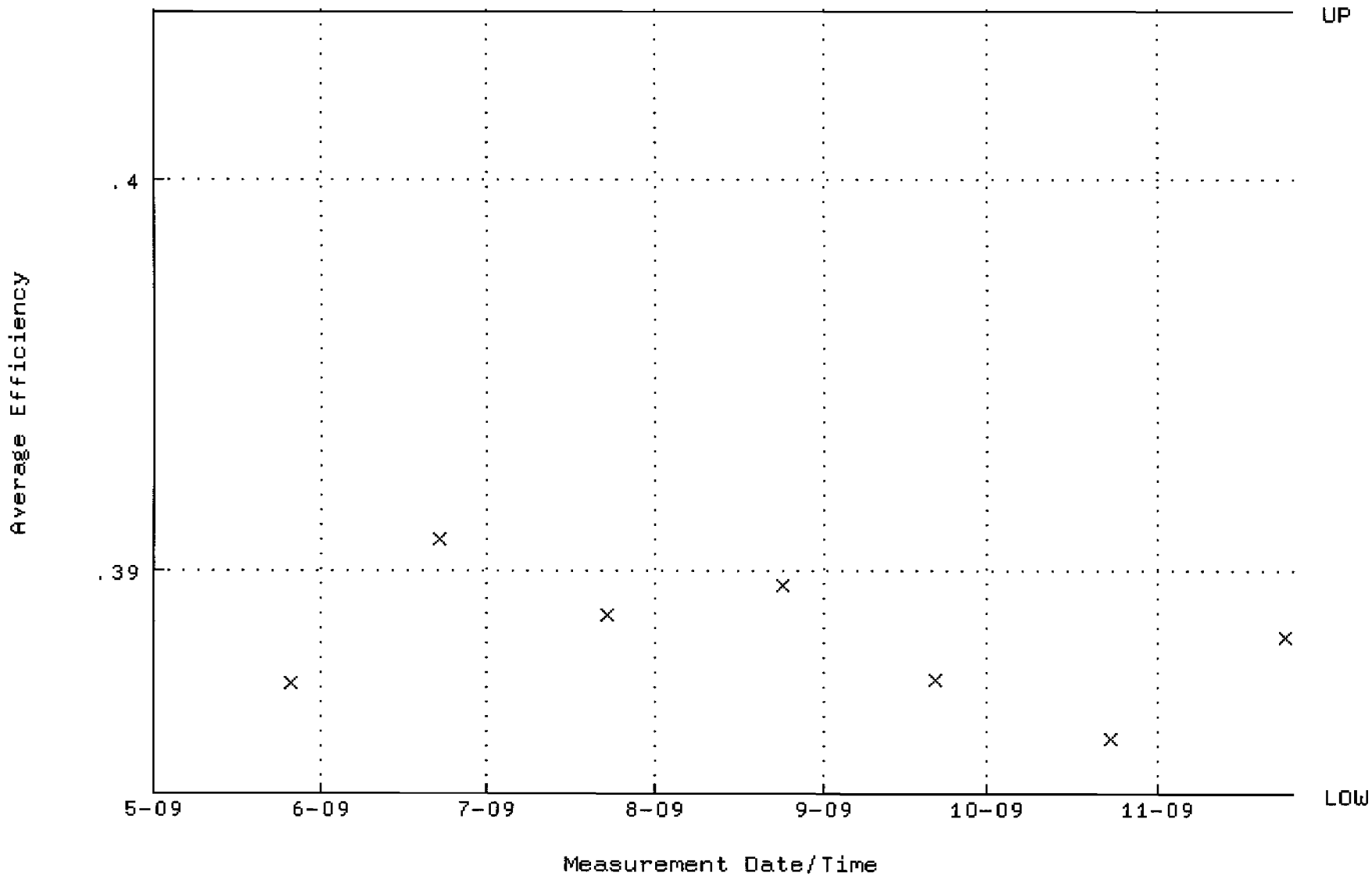

QA filename : DKA100:[ENV_ALPHA.QA.W]W167.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:04:56 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 86.7740 through 95.9082

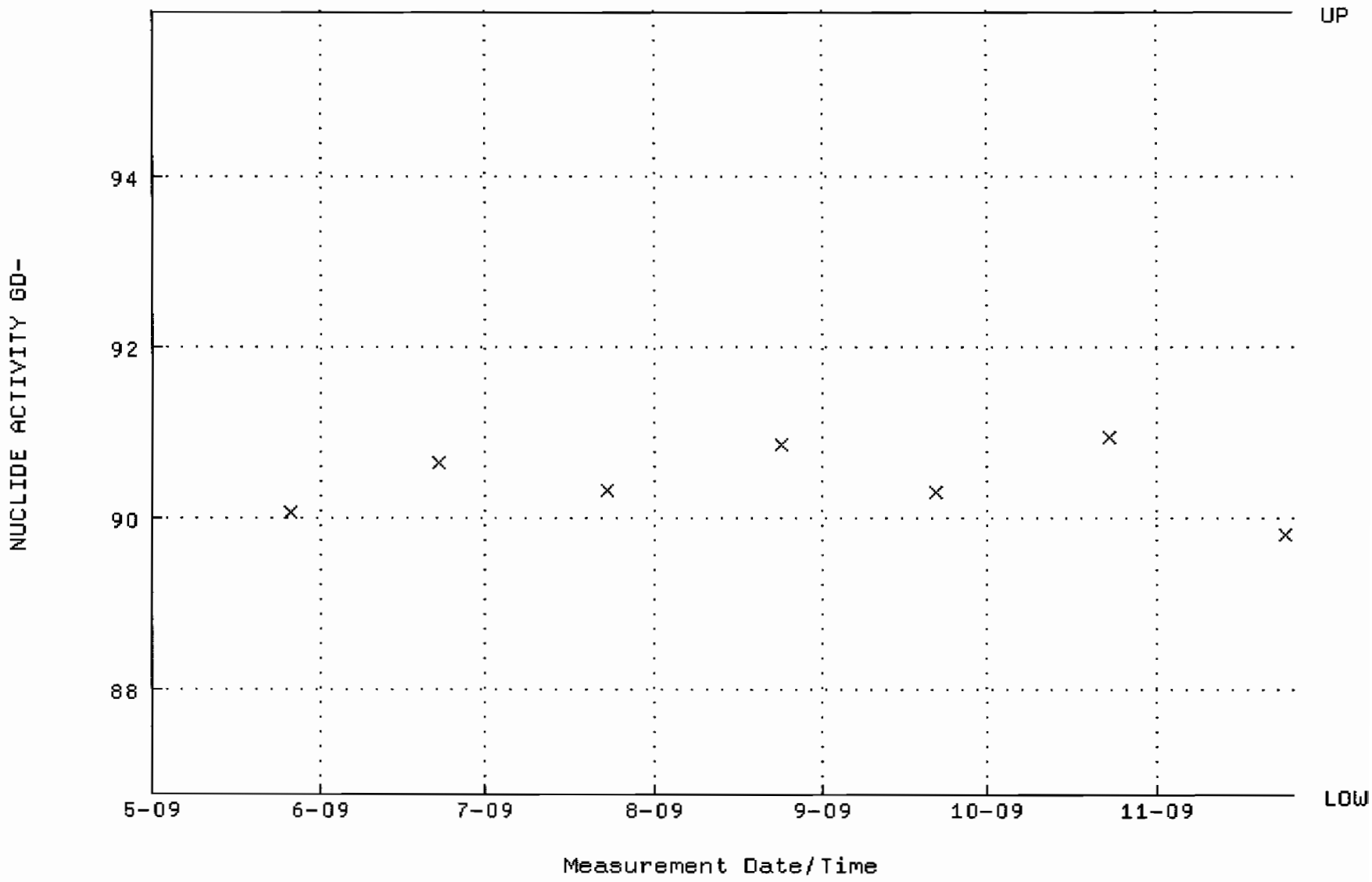

QA filename : DKA100:[ENV_ALPHA.QA.B]B167.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:39 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

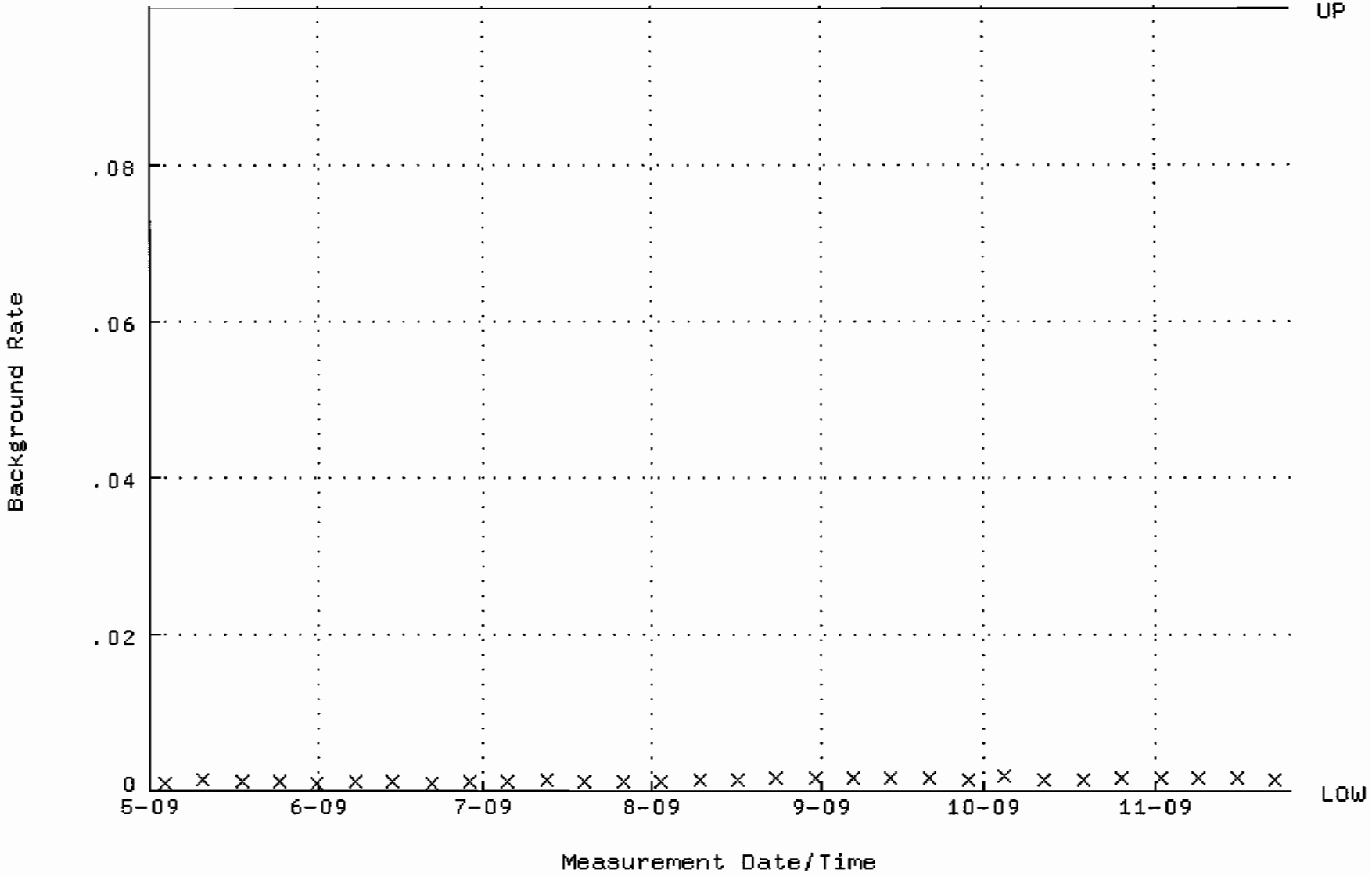

QA filename : DKA100:[ENV_ALPHA.QA.W]W168.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:00 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.381339 through 0.408495

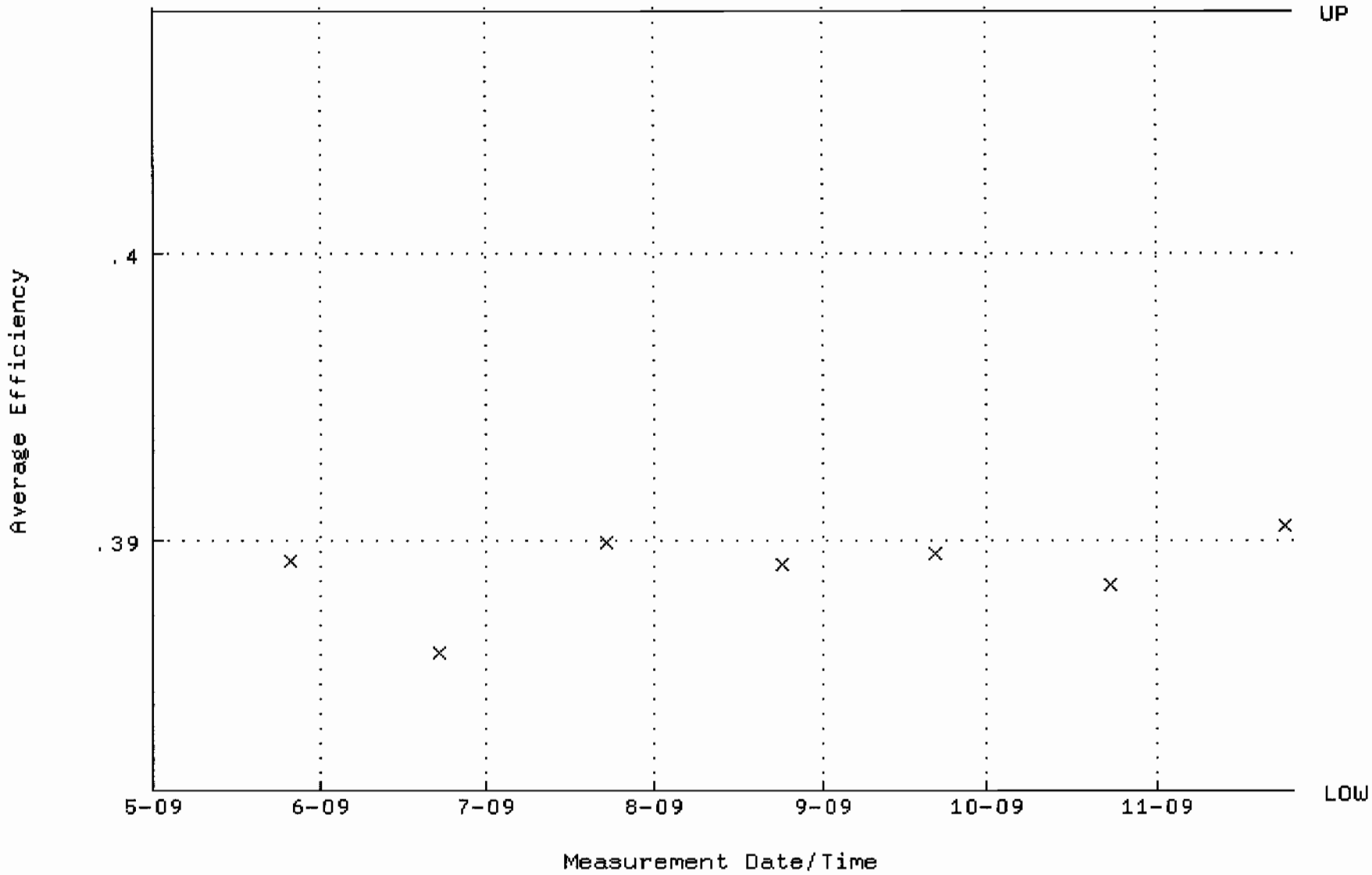

QA filename : DKA100:[ENV_ALPHA.QA.W]W168.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:00 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 86.8544 through 90.7976

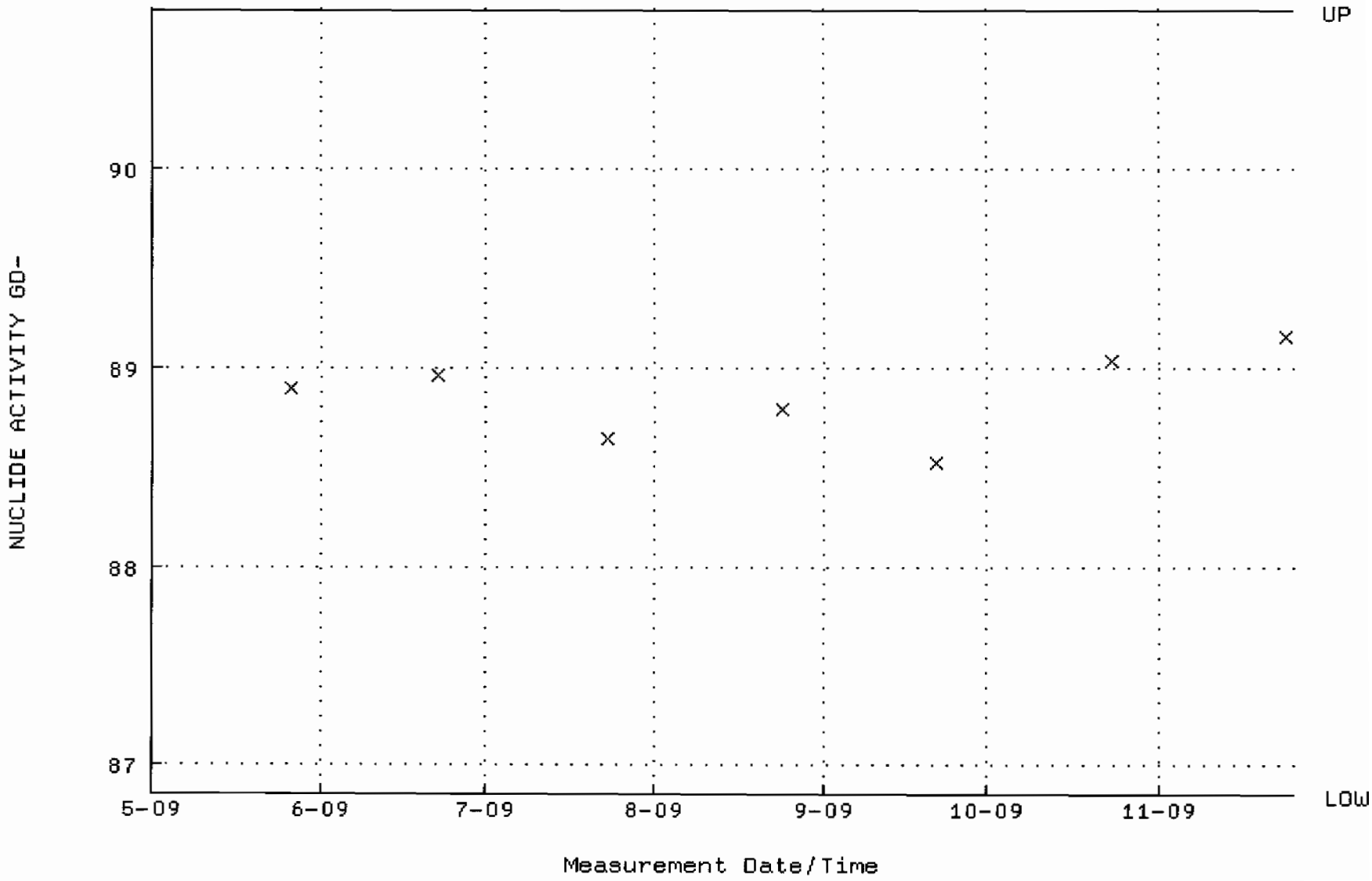

QA filename : DKA100:[ENV_ALPHA.QA.B]B168.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:43 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

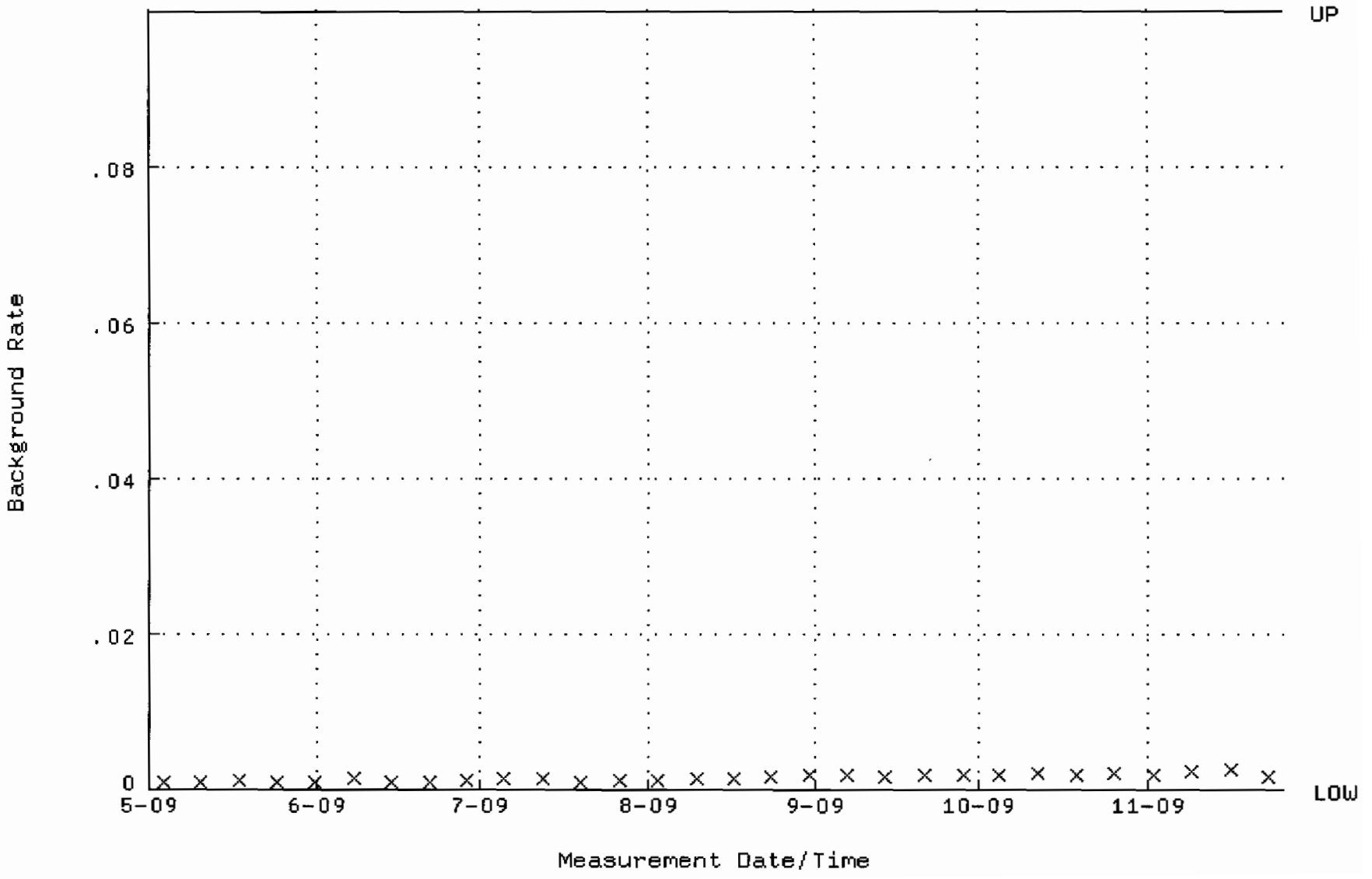

QA filename : DKA100:[ENV_ALPHA.QA.W]W169.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:04 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.368144 through 0.388144

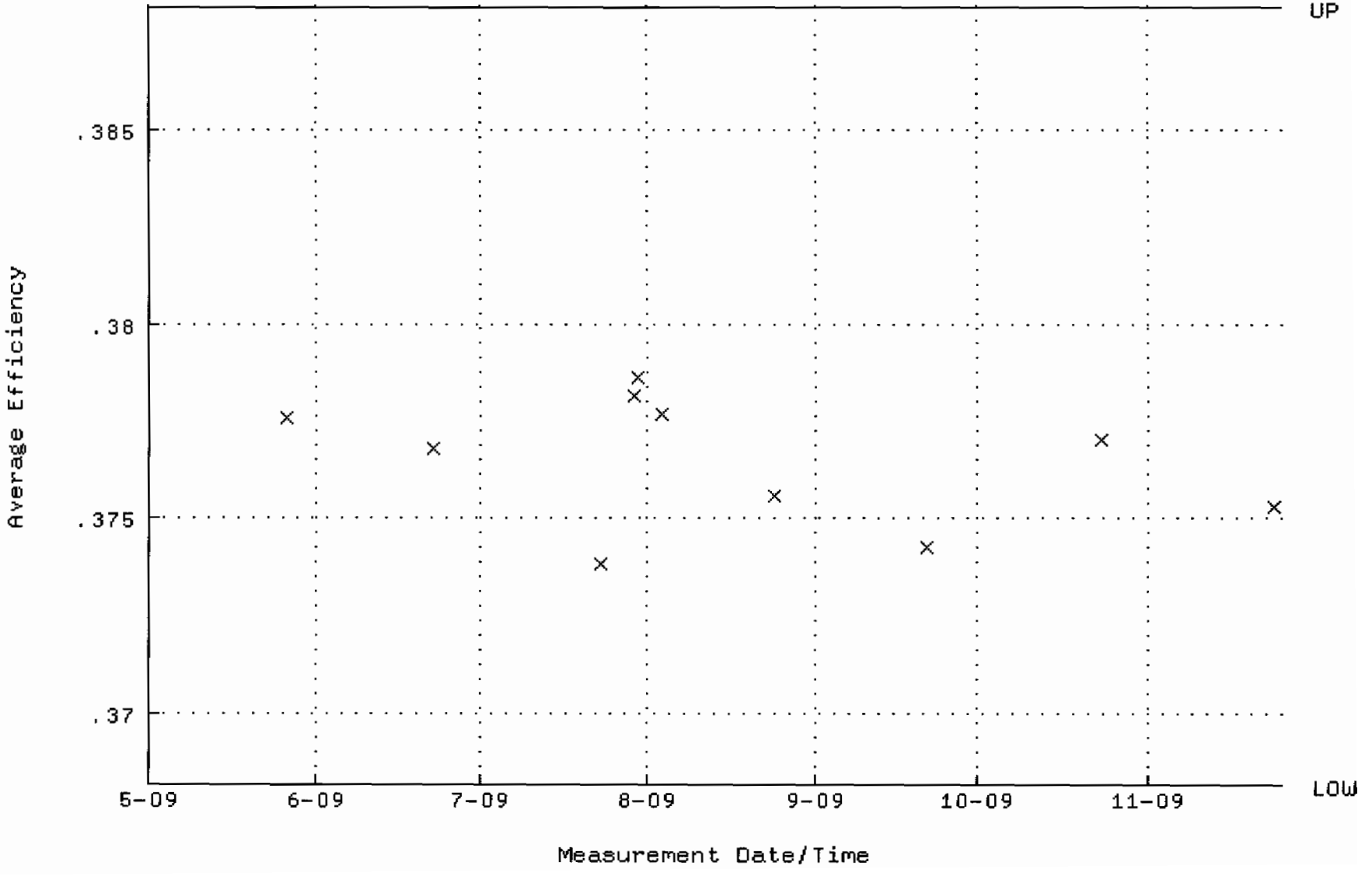

QA filename : DKA100:[ENV_ALPHA.QA.W]W169.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:04 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 87.7141 through 96.9471

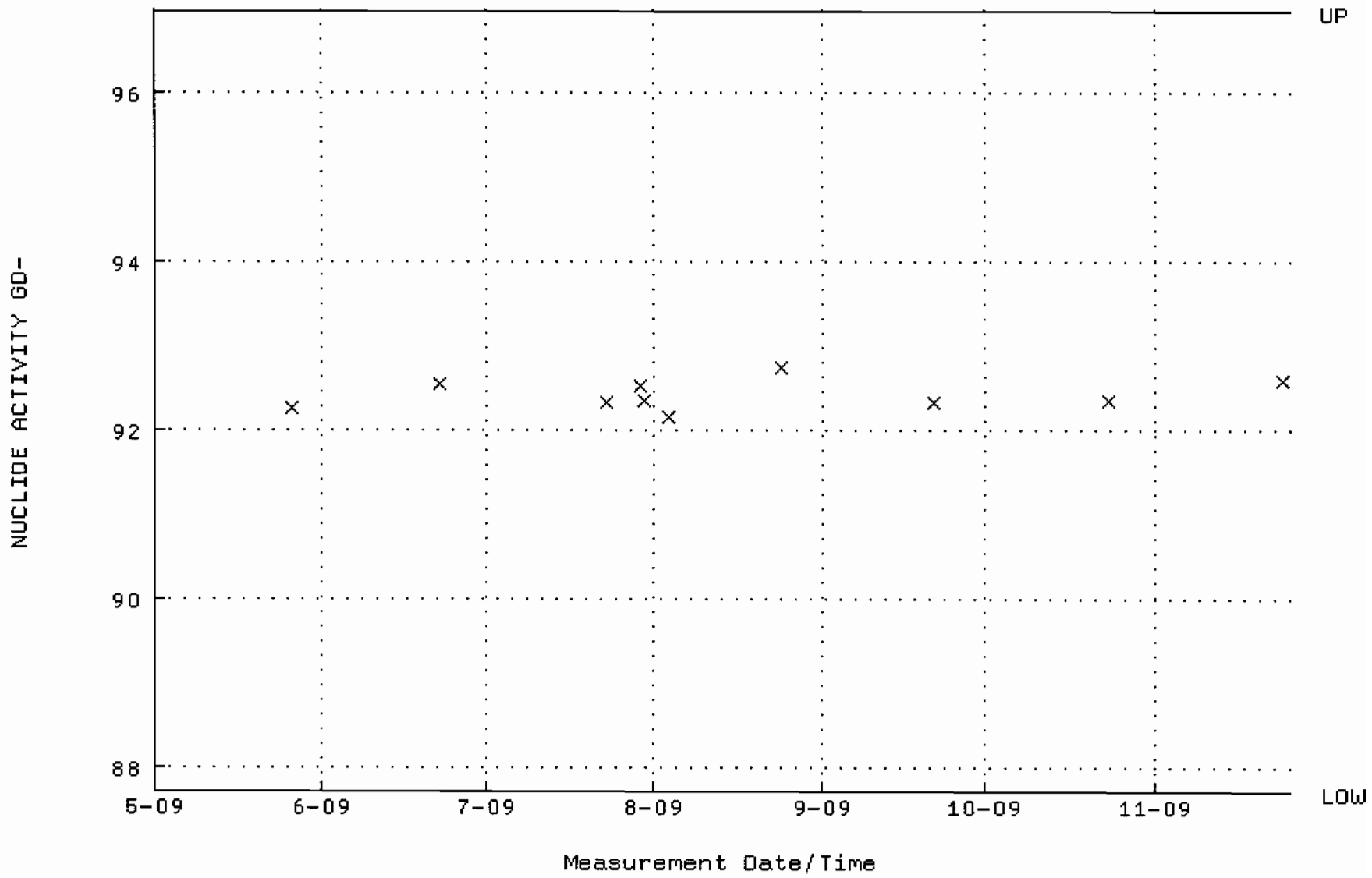

QA filename : DKA100:[ENV_ALPHA.QA.B]B169.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:46 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

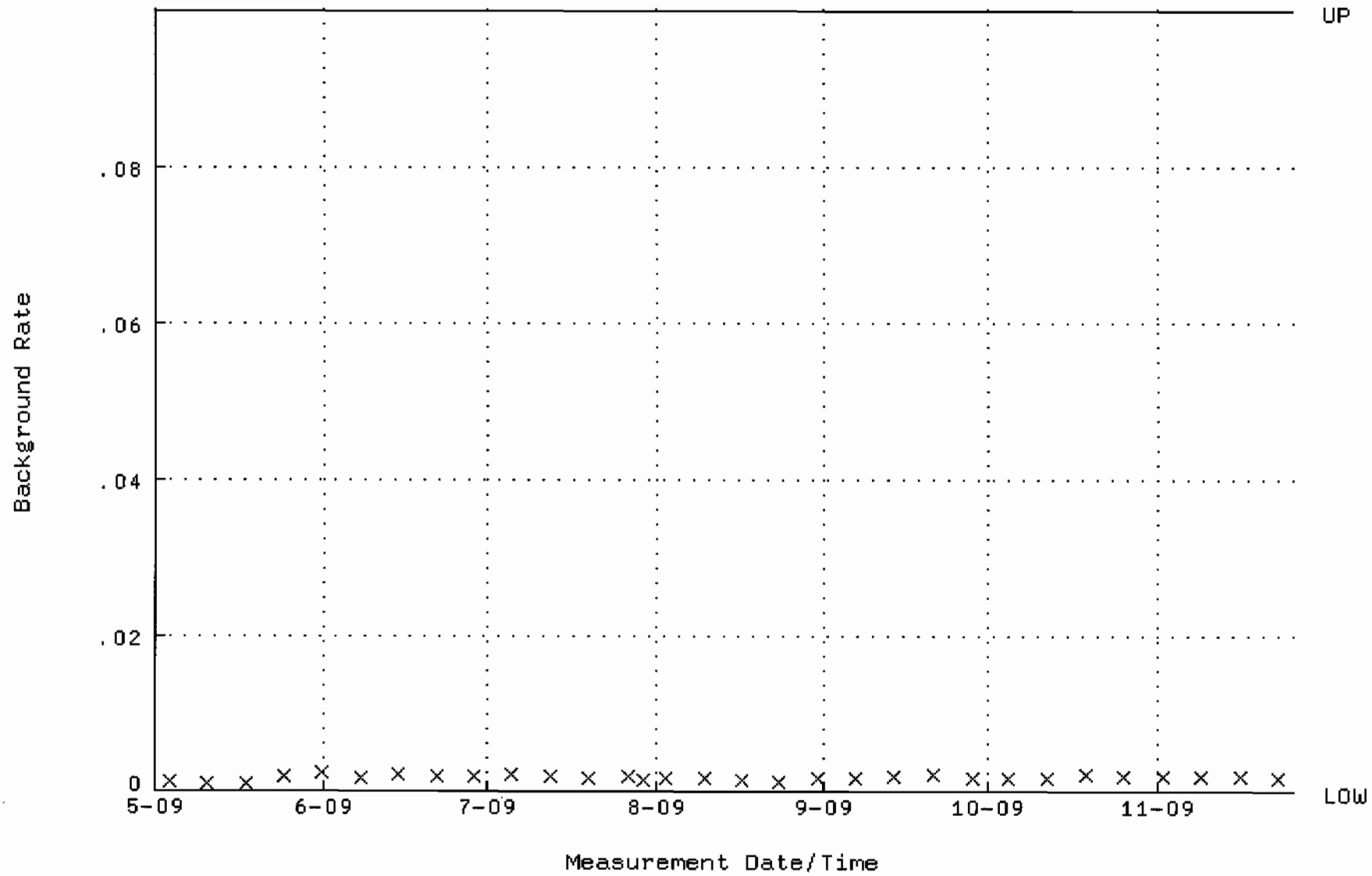

QA filename : DKA100:[ENV_ALPHA.QA.W]W170.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:08 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.360563 through 0.380563

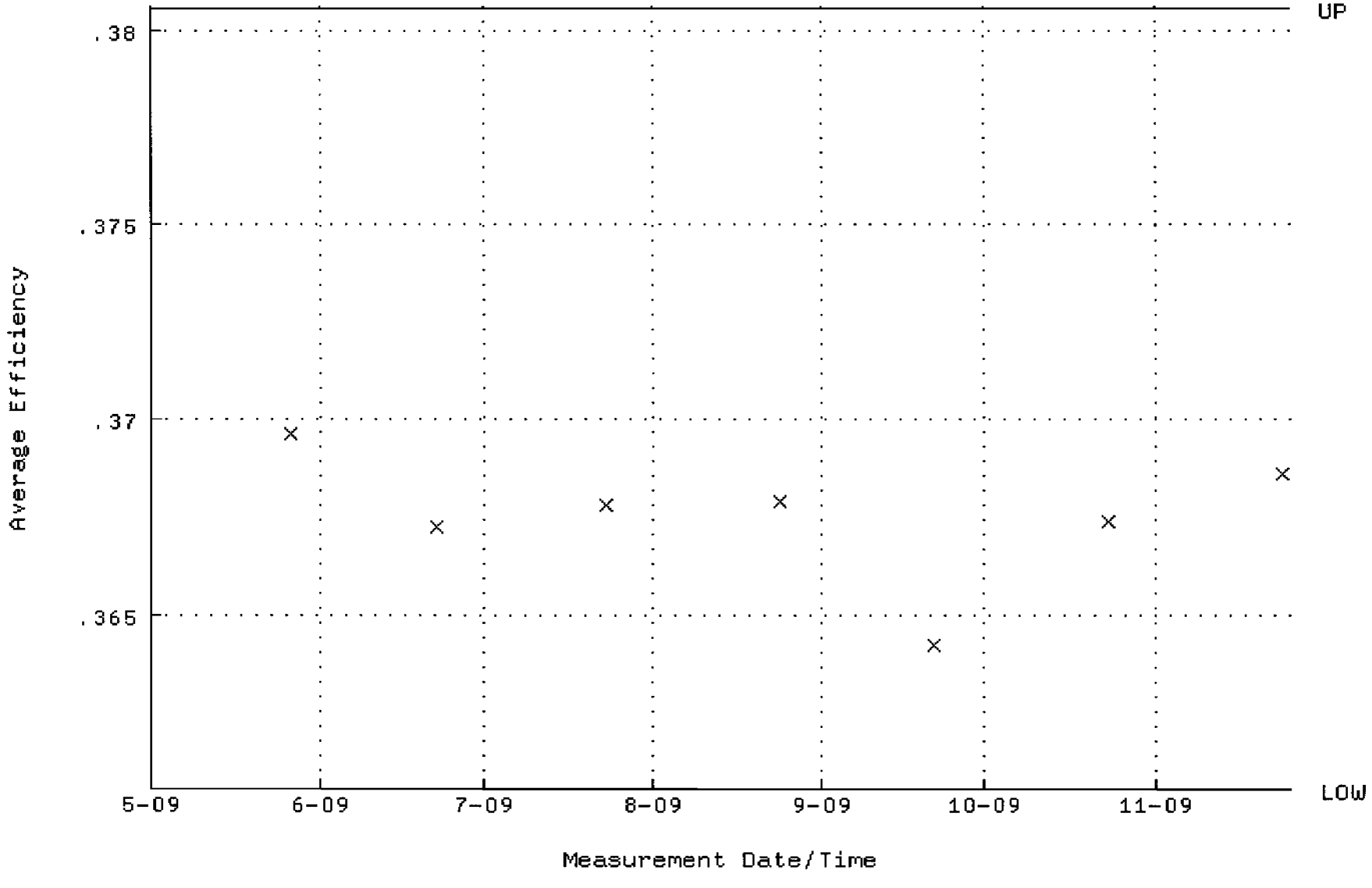

QA filename : DKA100:[ENV_ALPHA.QA.W]W170.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:08 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 89.5841 through 99.0139

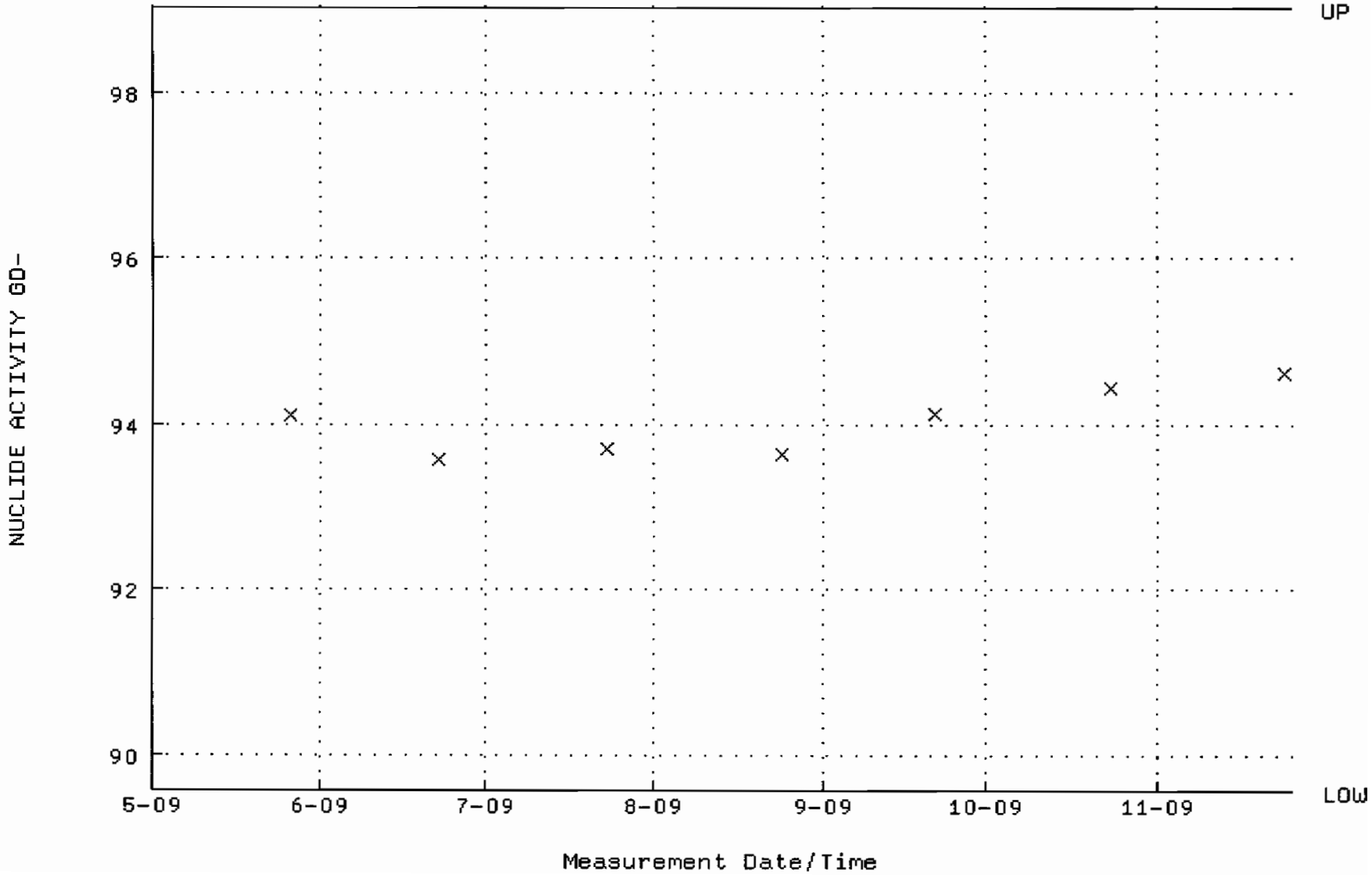

QA filename : DKA100:[ENV_ALPHA.QA.B]B170.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:50 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

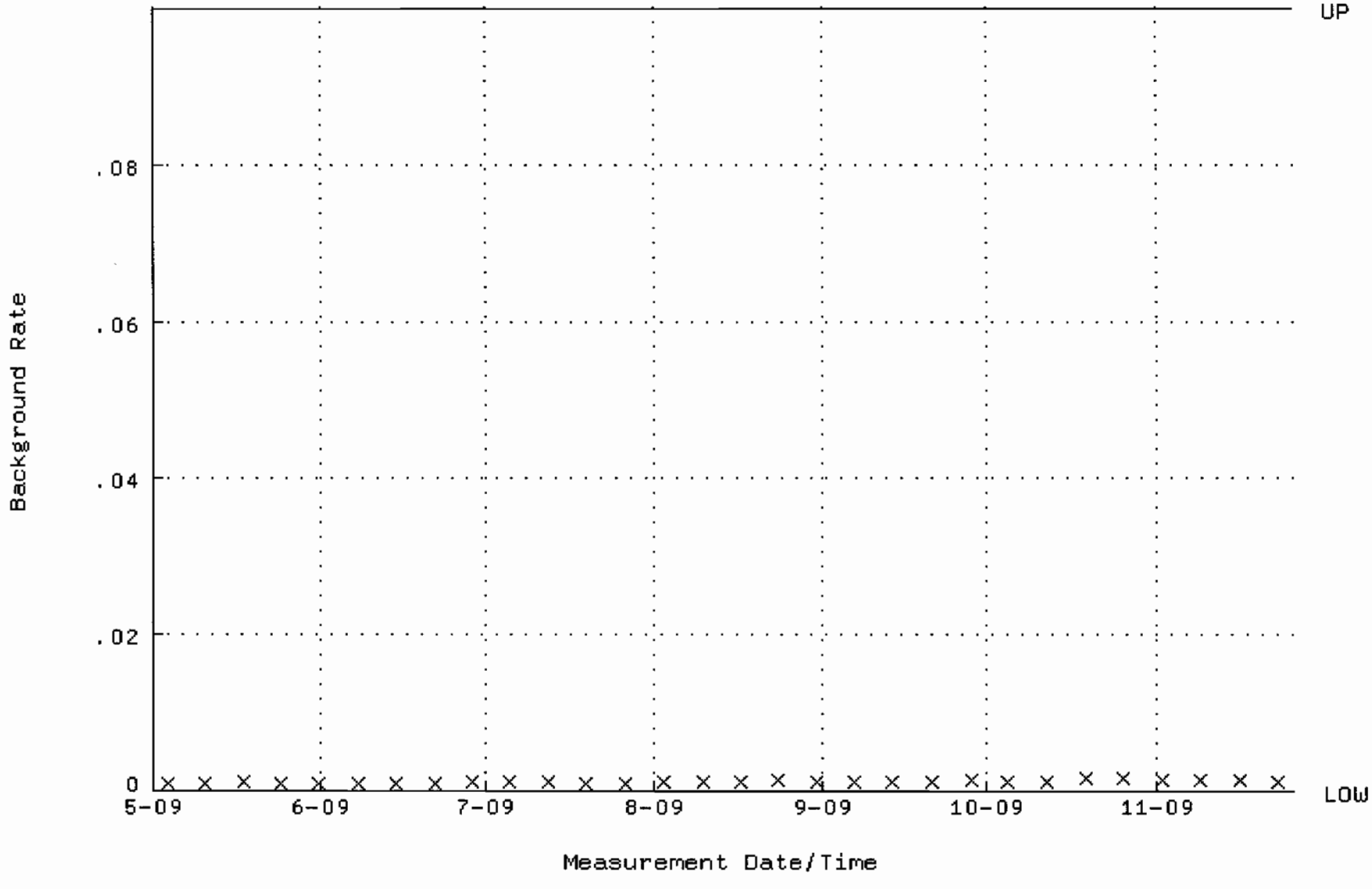

QA filename : DKA100:[ENV_ALPHA.QA.W]W171.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:13 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.375364 through 0.395364

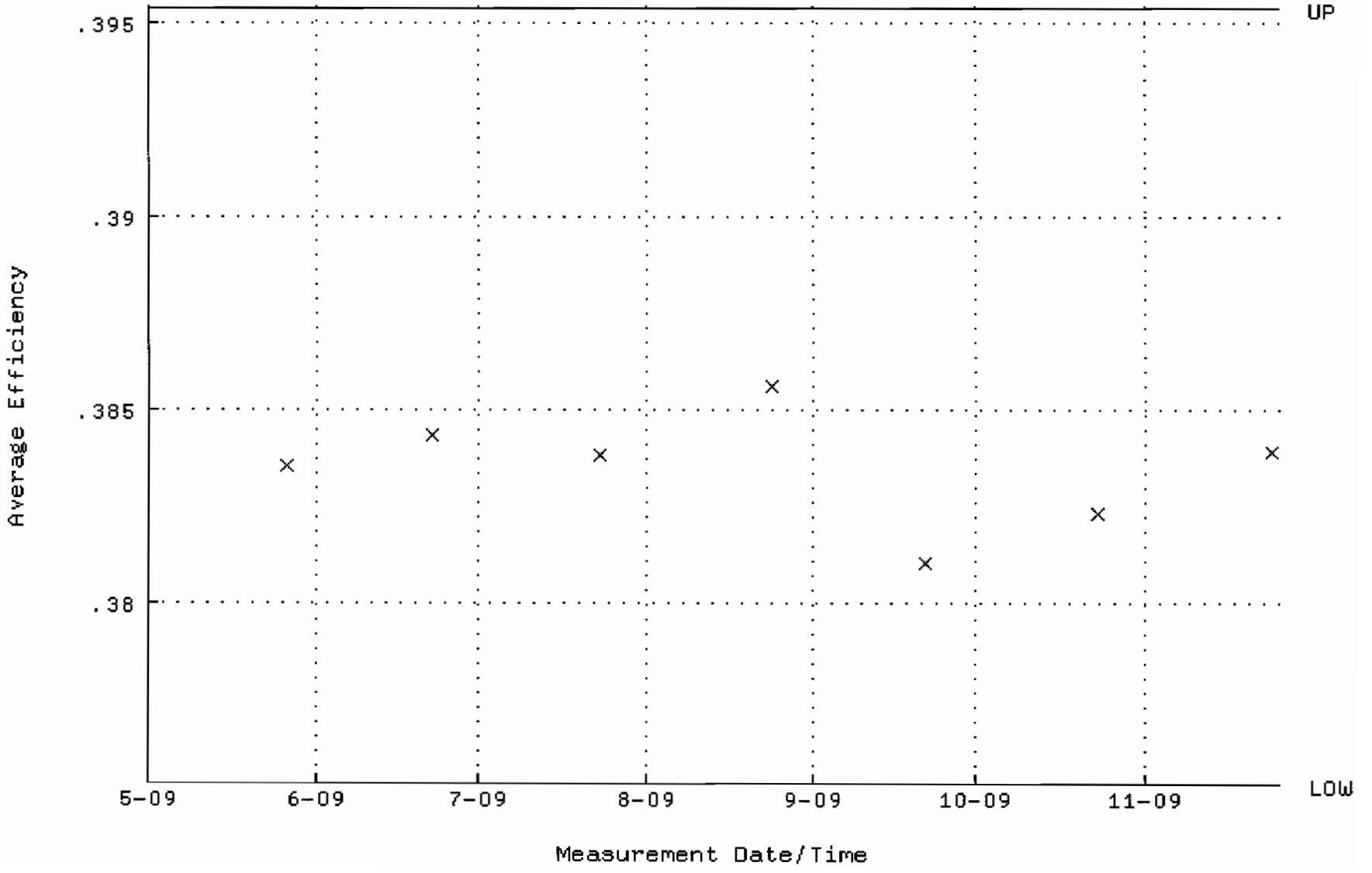

QA filename : DKA100:[ENV_ALPHA.QA.W]W171.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:13 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 84.7539 through 93.6753

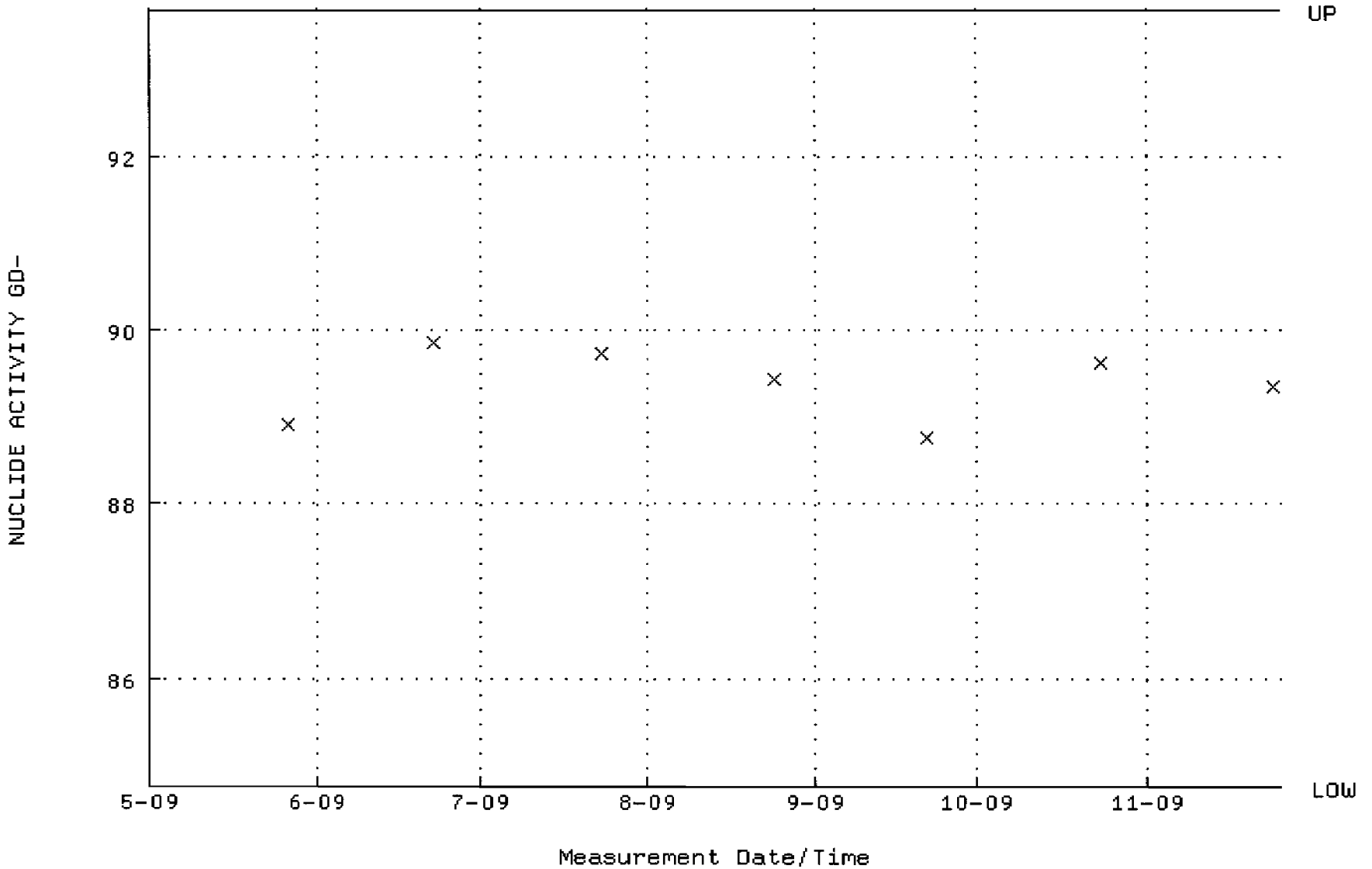

QA filename : DKA100:[ENV_ALPHA.QA.B]B171.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:54 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

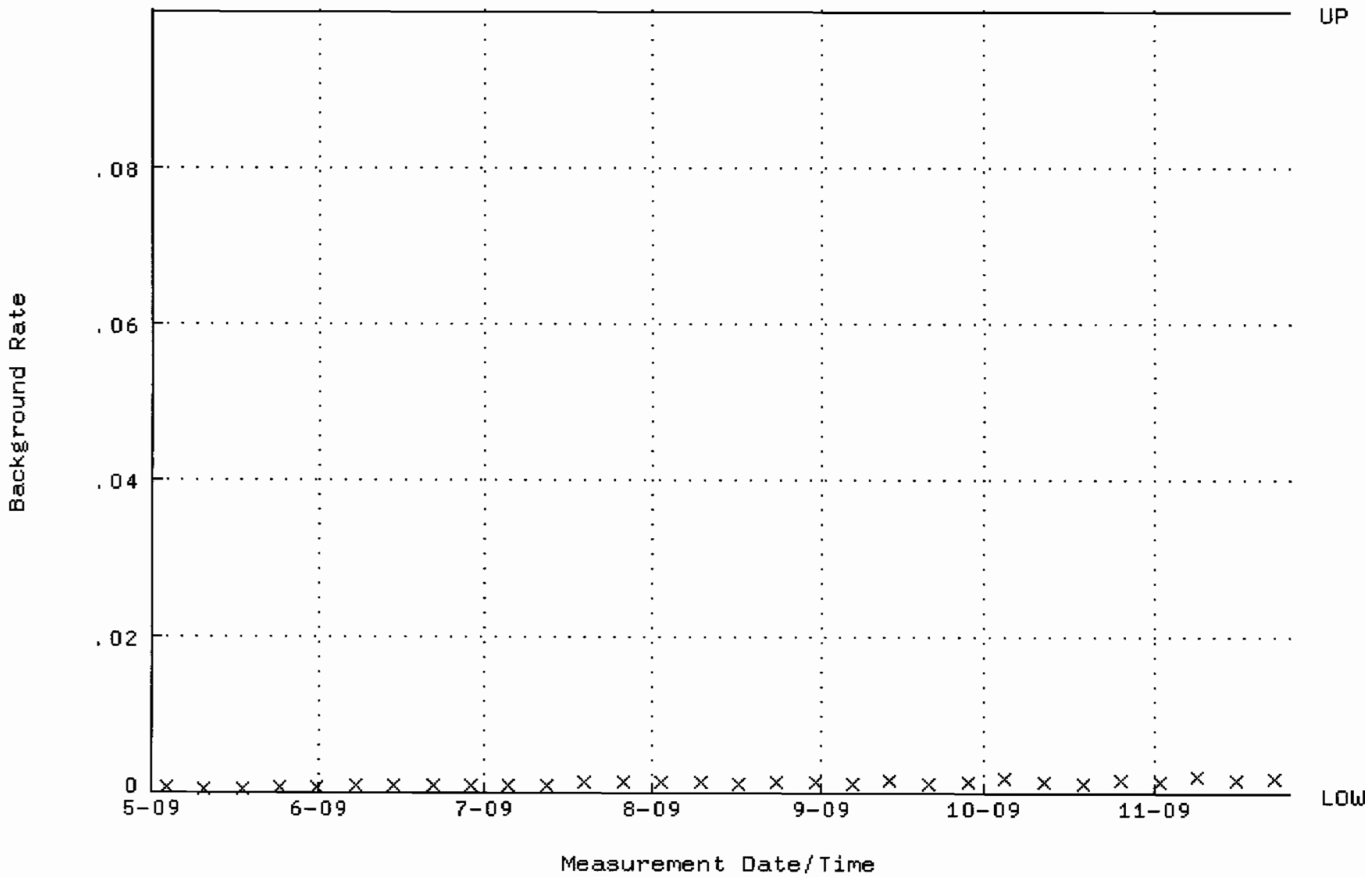

QA filename : DKA100:[ENV_ALPHA.QA.W]W172.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-MAY-2009 11:05:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.373575 through 0.393575

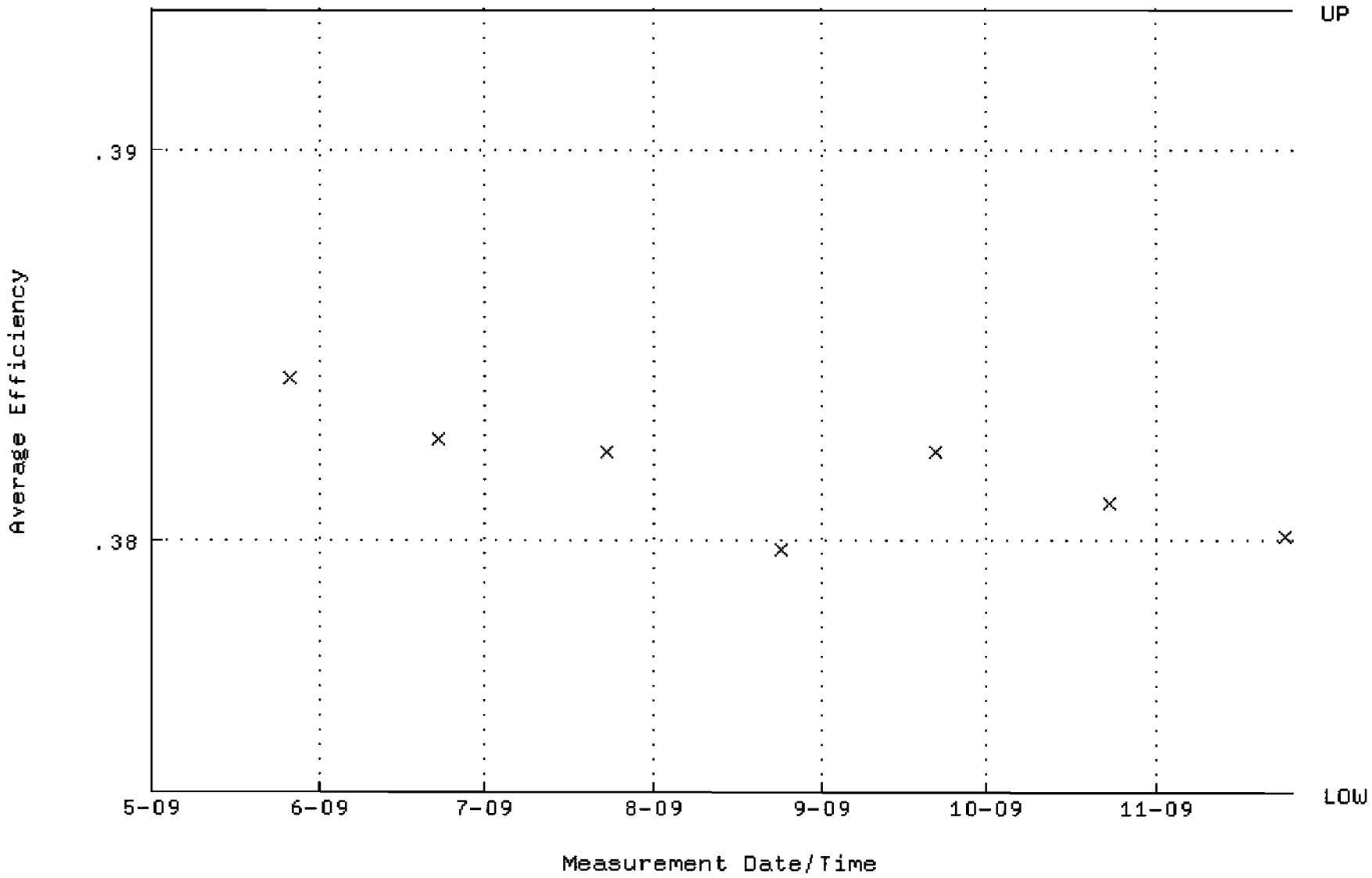

QA filename : DKA100:[ENV_ALPHA.QA.W]W172.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-MAY-2009 11:05:17 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 86.5089 through 95.6151

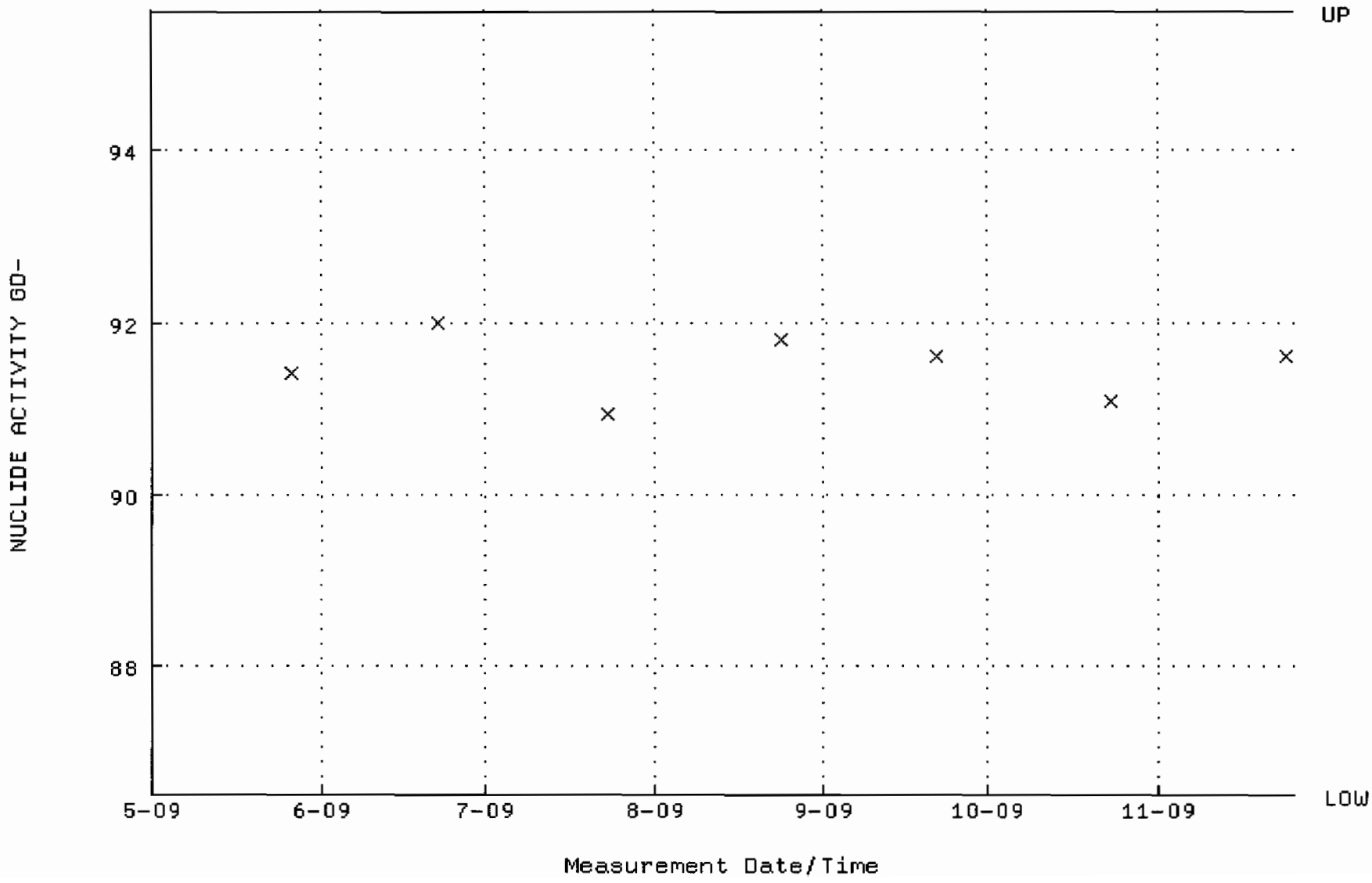

QA filename : DKA100:[ENV_ALPHA.QA.B]B172.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-MAY-2009 13:53:57 through 25-NOV-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

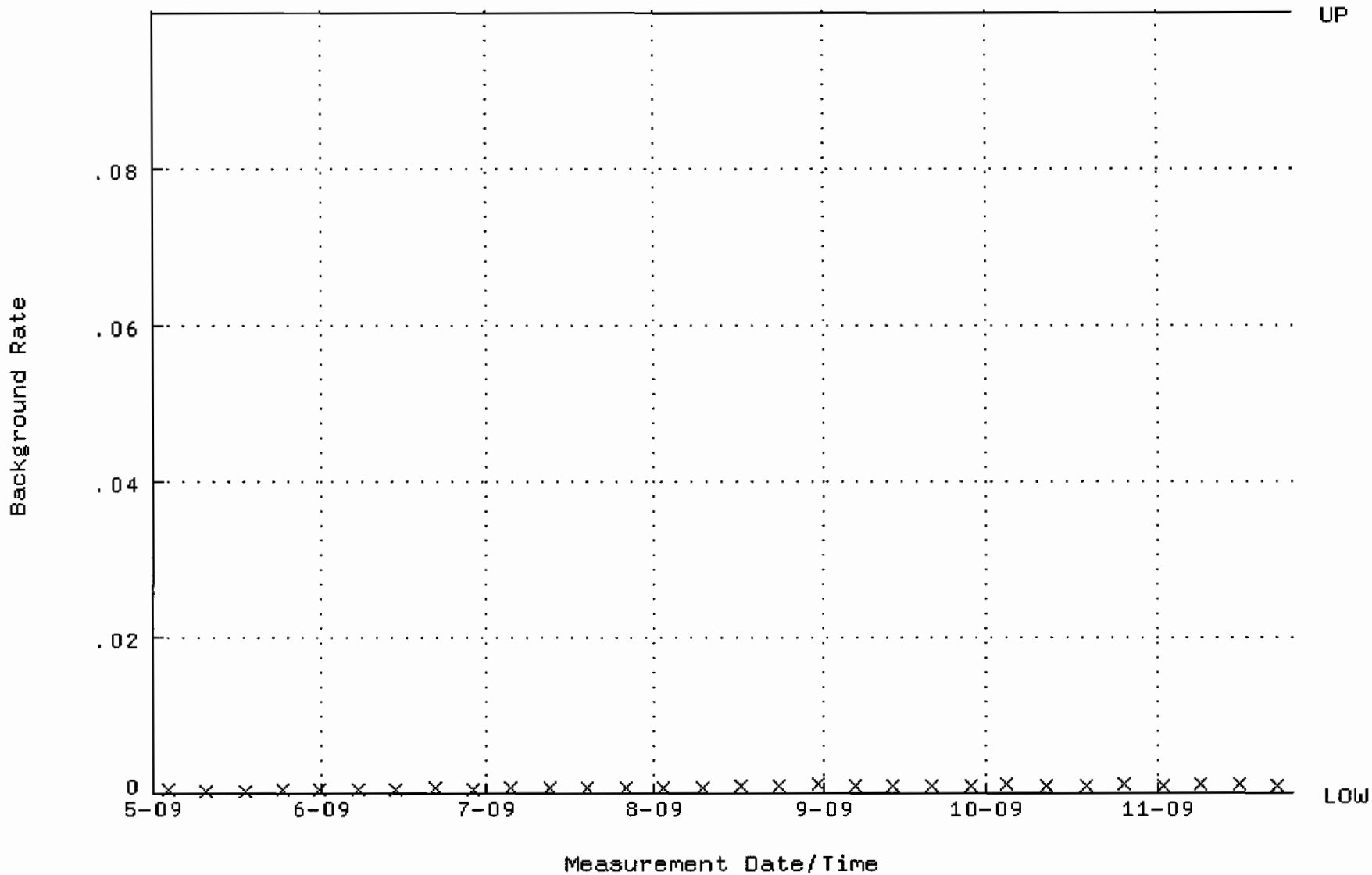

QA filename : DKA100:[ENV_ALPHA.QA.W]W209.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:30:29 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.363151 through 0.377133

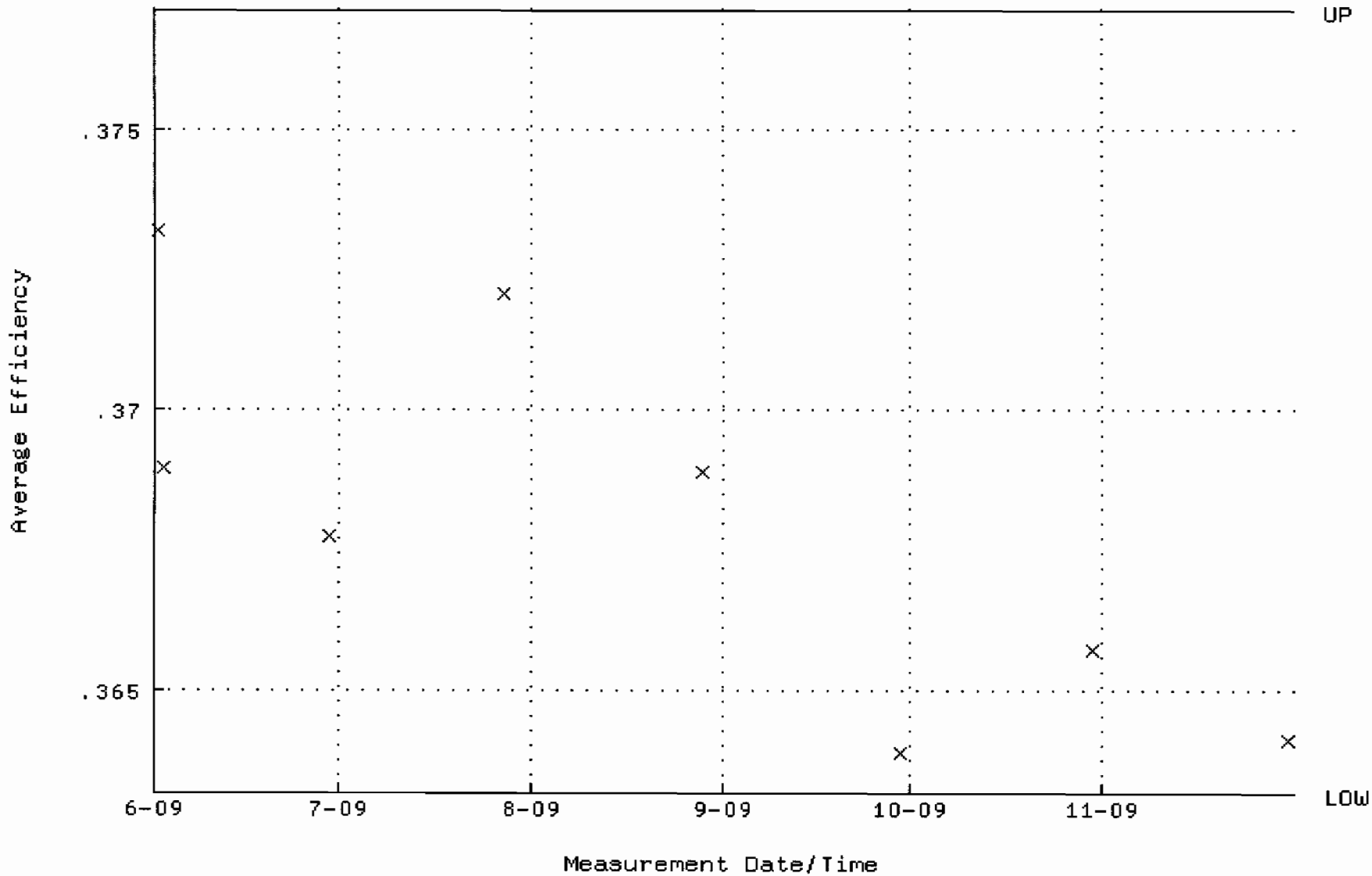

QA filename : DKA100:[ENV_ALPHA.QA.W]W209.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:30:29 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 88.8827 through 92.2979

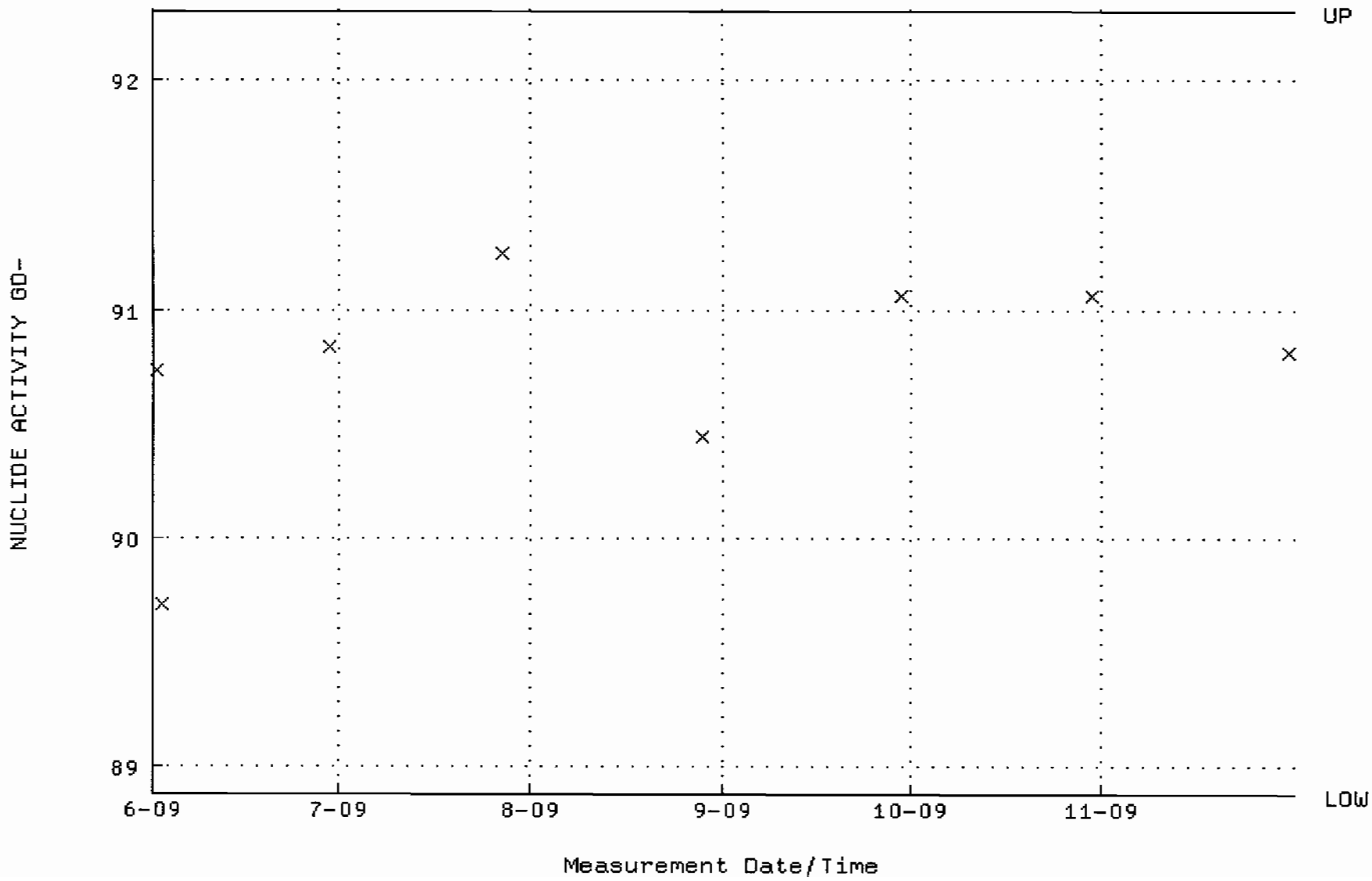

QA filename : DKA100:[ENV_ALPHA.QA.B]B209.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:43:30 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

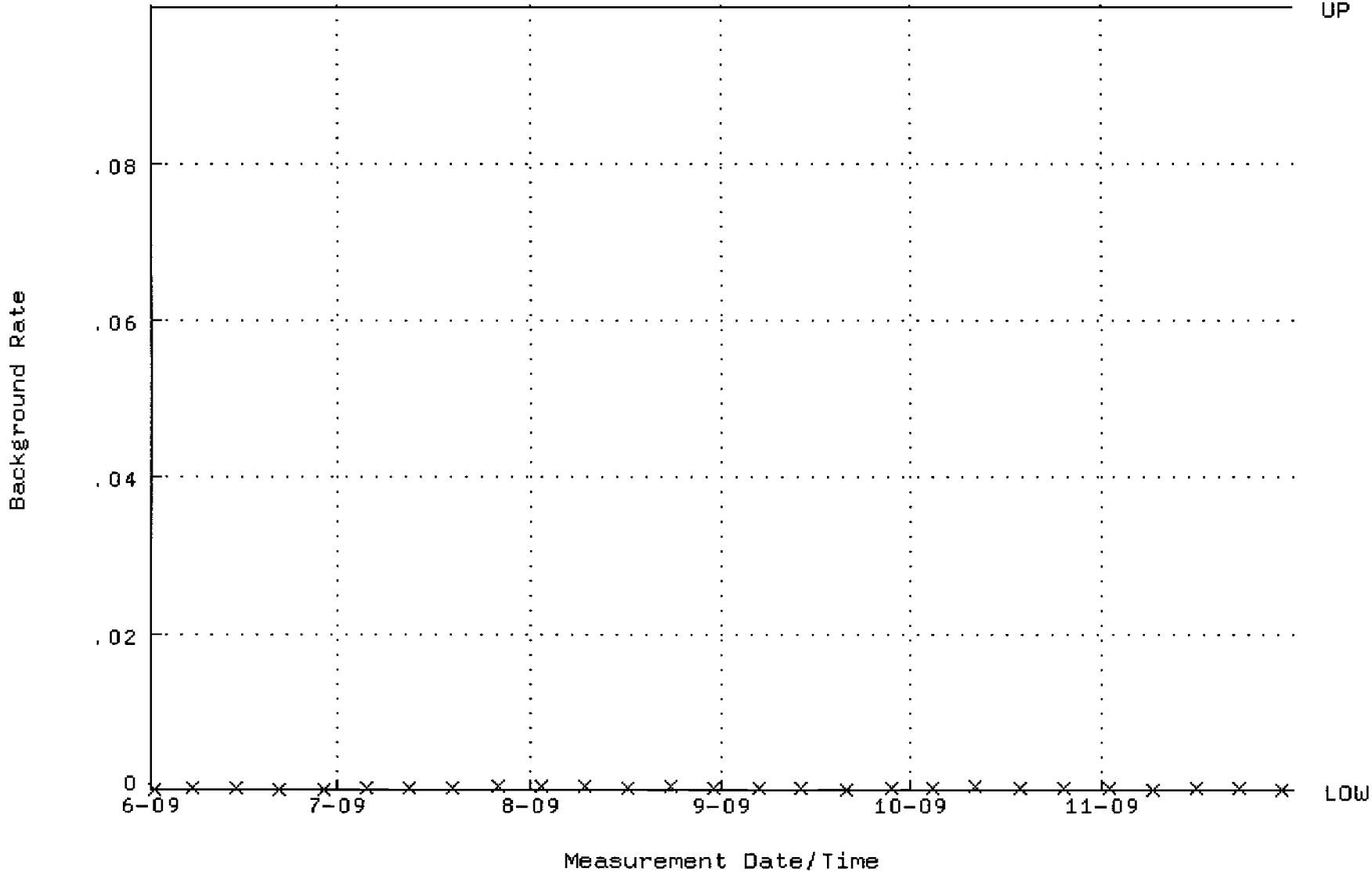

QA filename : DKA100:[ENV_ALPHA.QA.W]W211.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:30:41 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.373189 through 0.393189

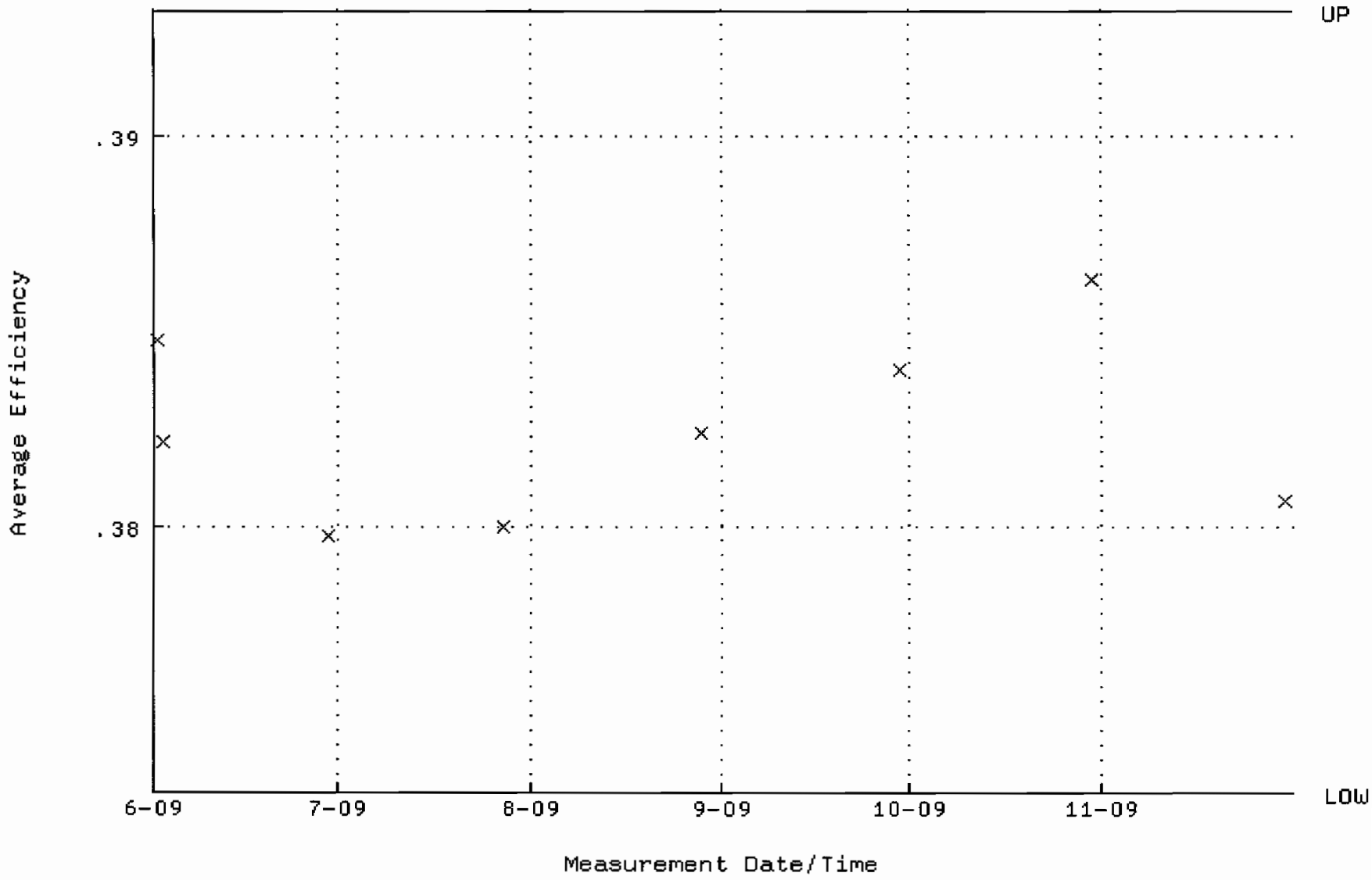

QA filename : DKA100:[ENV_ALPHA.QA.W]W211.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:30:41 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.1583 through 93.0171

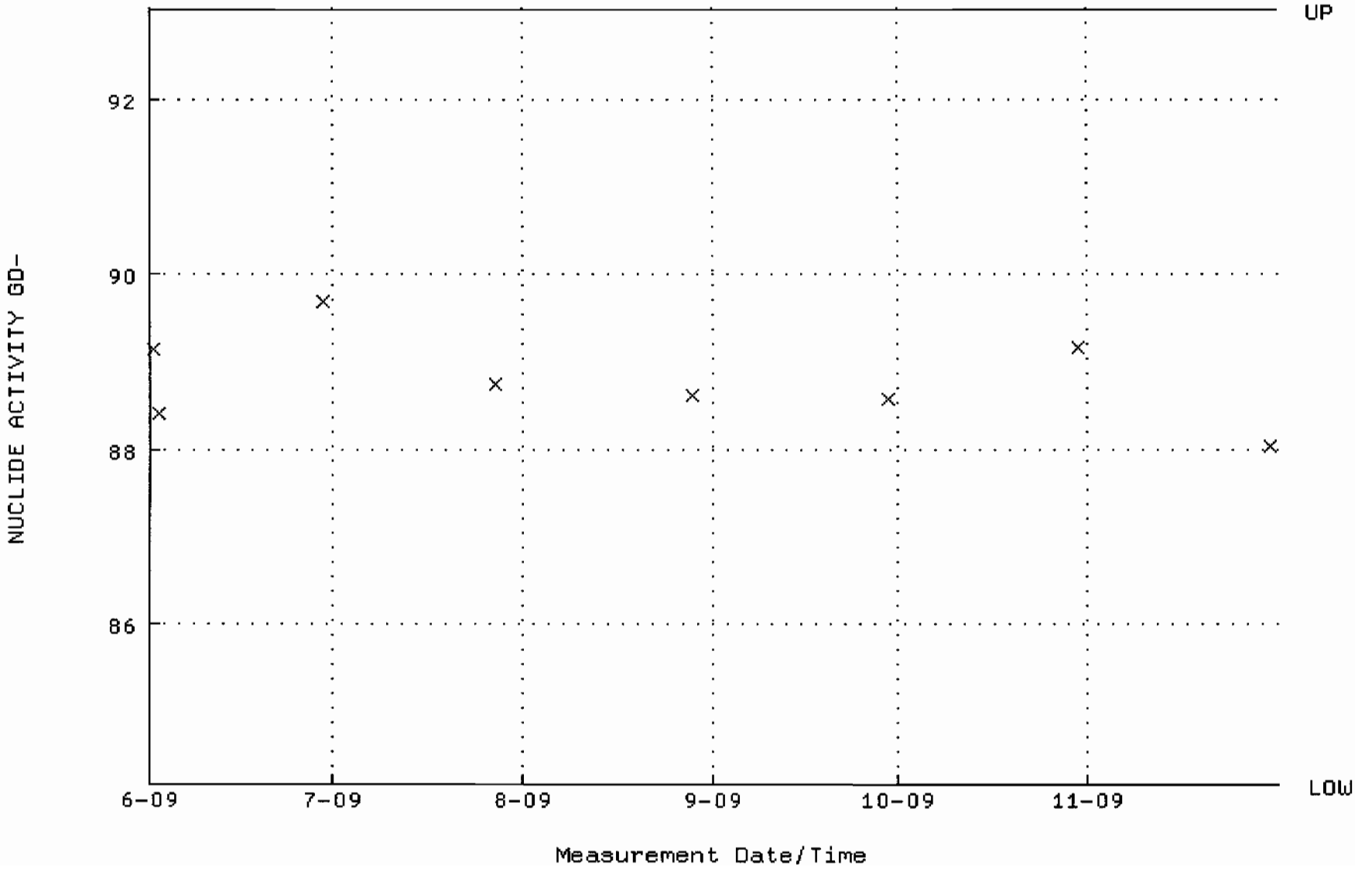

QA filename : DKA100:[ENV_ALPHA.QA.B]B211.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:43:40 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

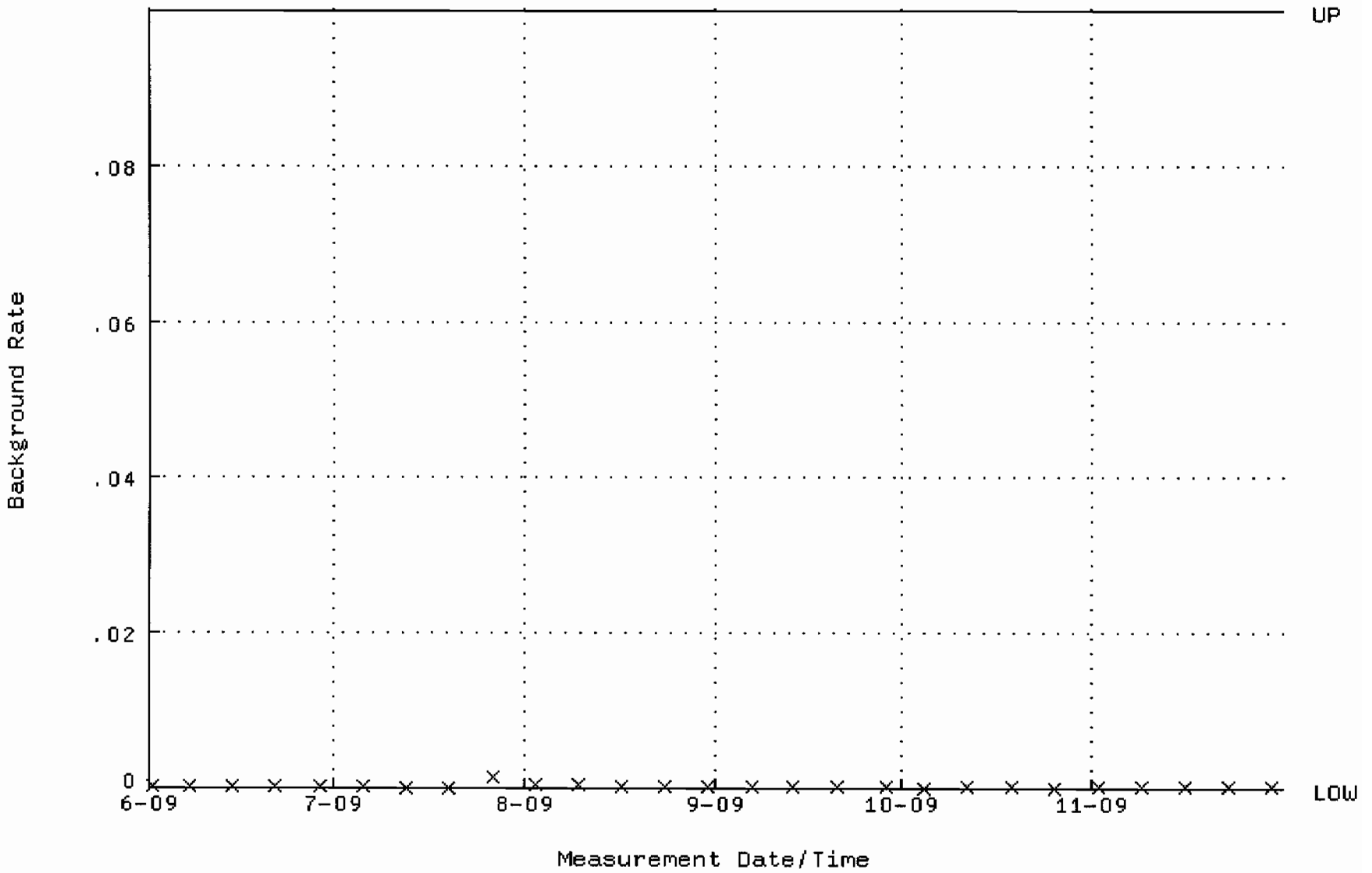

QA filename : DKA100:[ENV_ALPHA.QA.W]W212.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:30:46 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.368761 through 0.388761

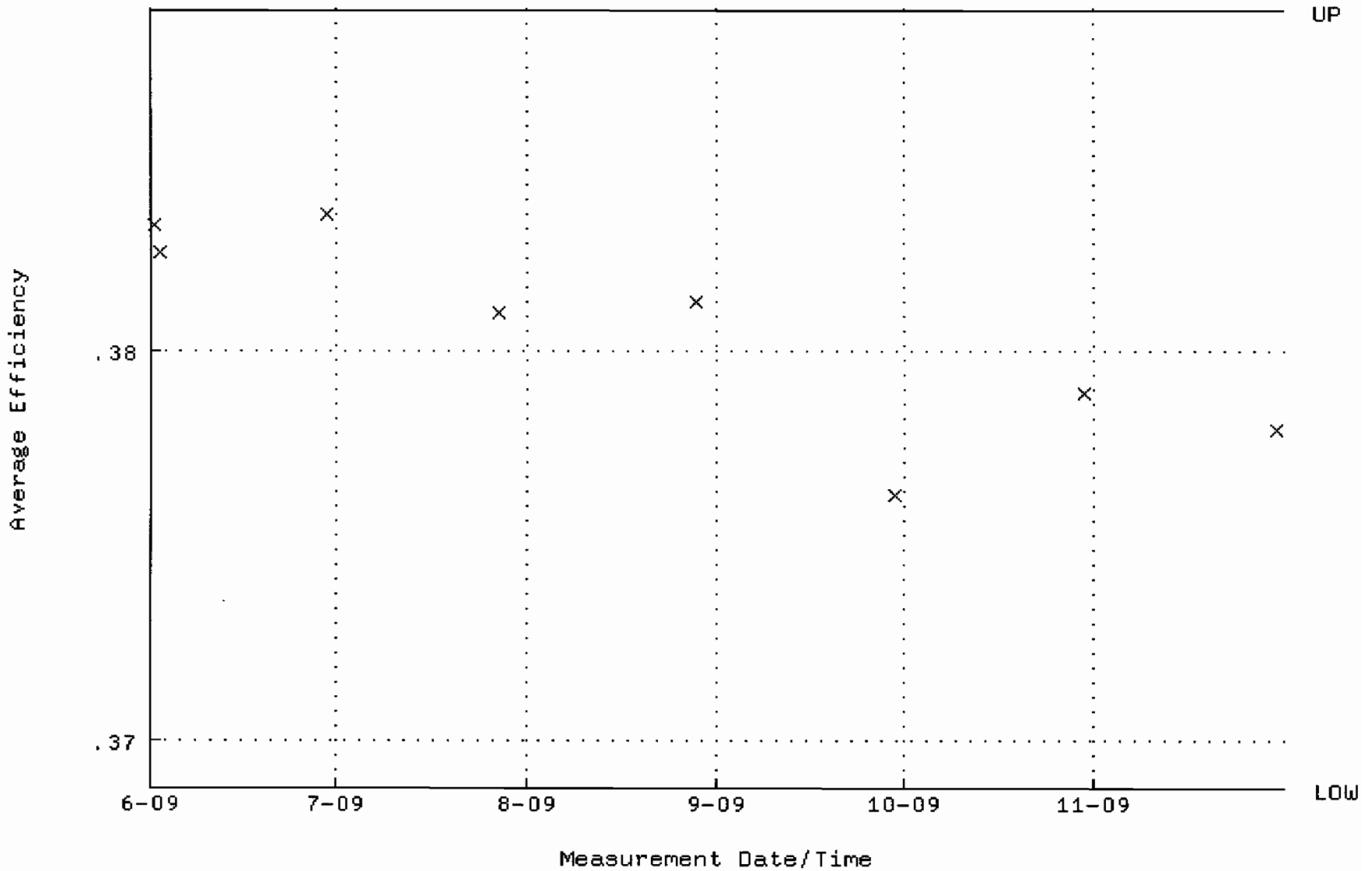

QA filename : DKA100:[ENV_ALPHA.QA.W]W212.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:30:46 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 86.3850 through 95.4782

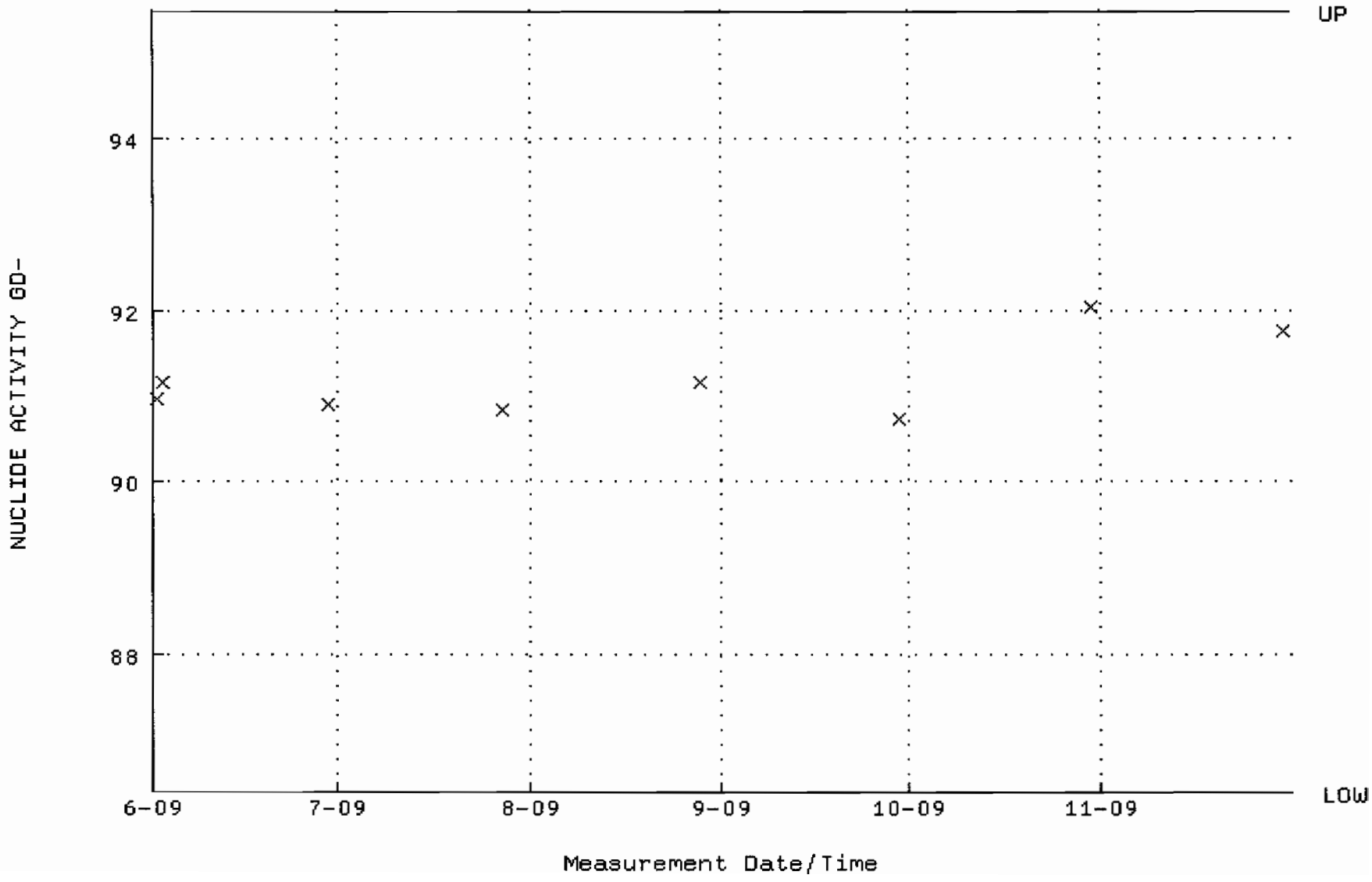

QA filename : DKA100:[ENV_ALPHA.QA.B]B212.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:43:45 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

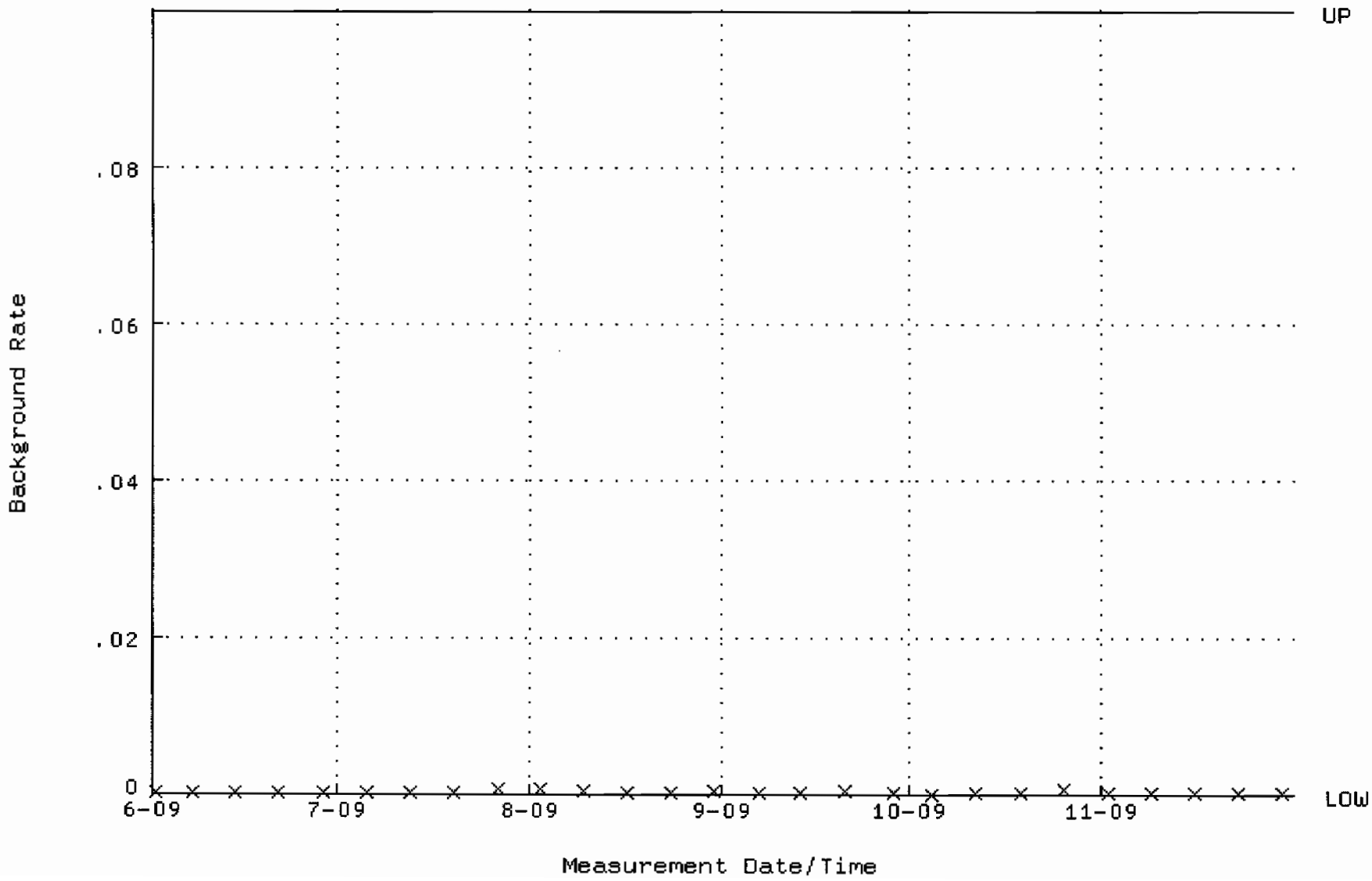

QA filename : DKA100:[ENV_ALPHA.QA.W]W213.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:30:53 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.363706 through 0.383706

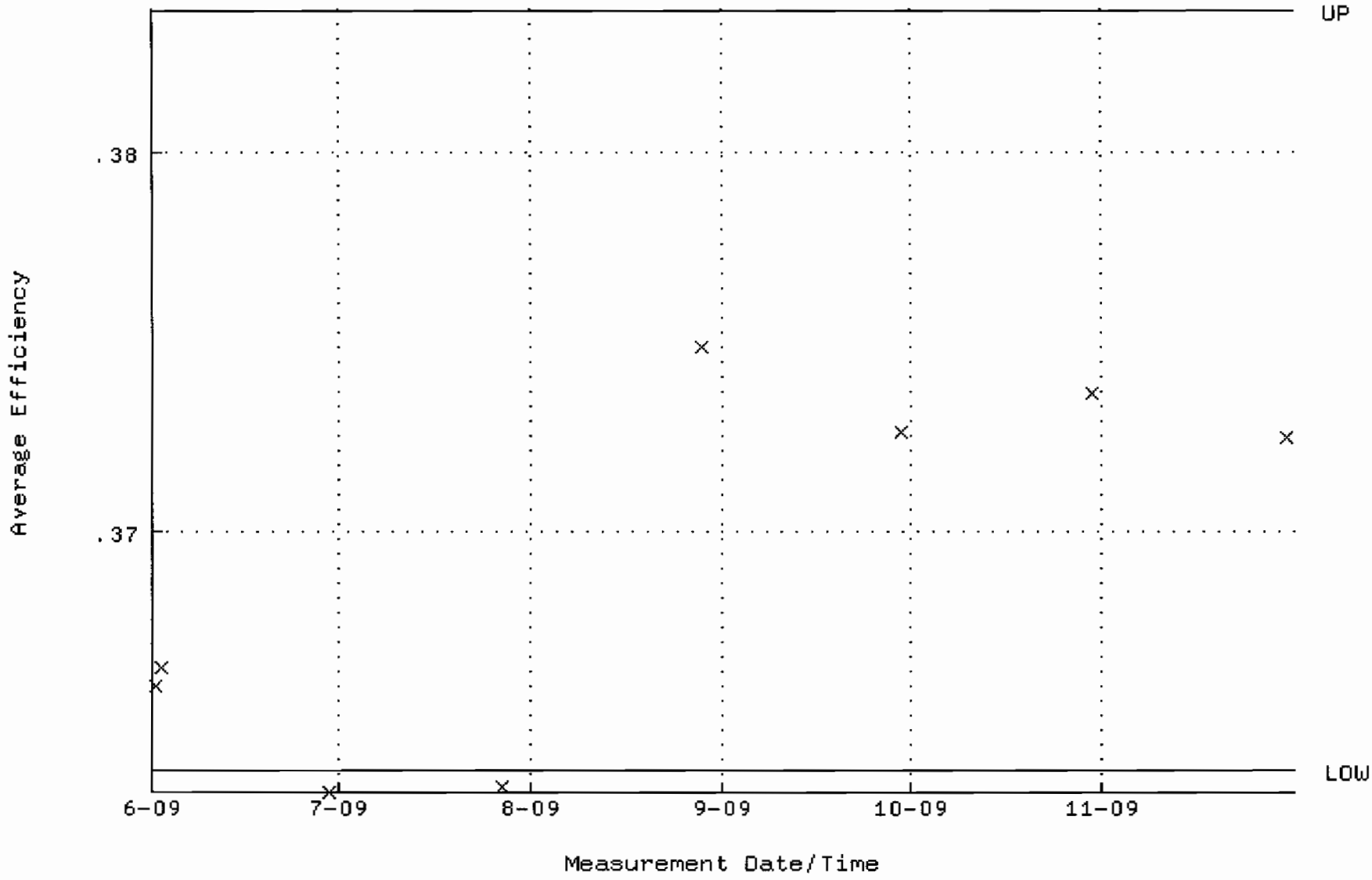

QA filename : DKA100:[ENV_ALPHA.QA.W]W213.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:30:53 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.8395 through 93.7699

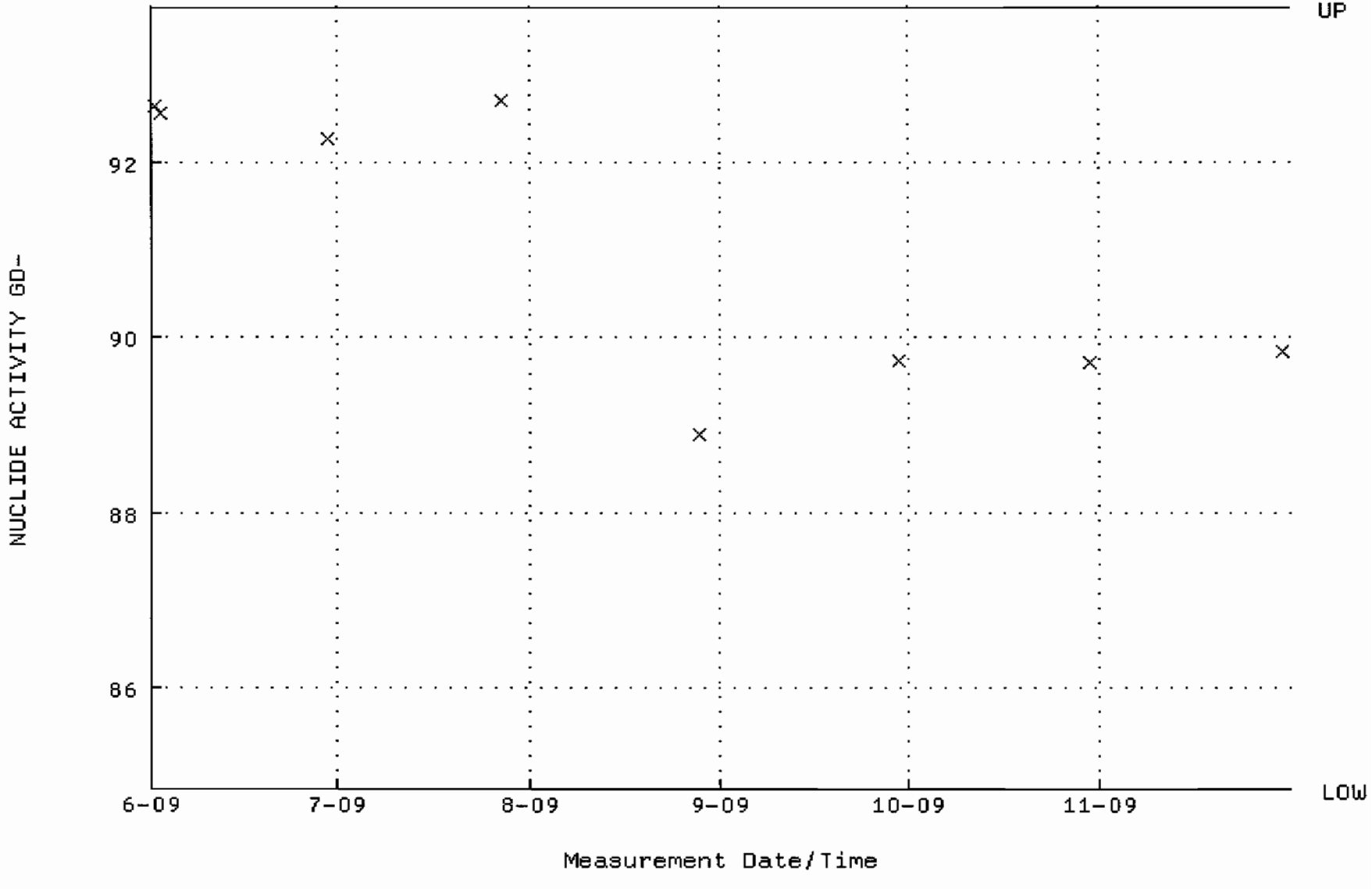

QA filename : DKA100:[ENV_ALPHA.QA.B]B213.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:43:49 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

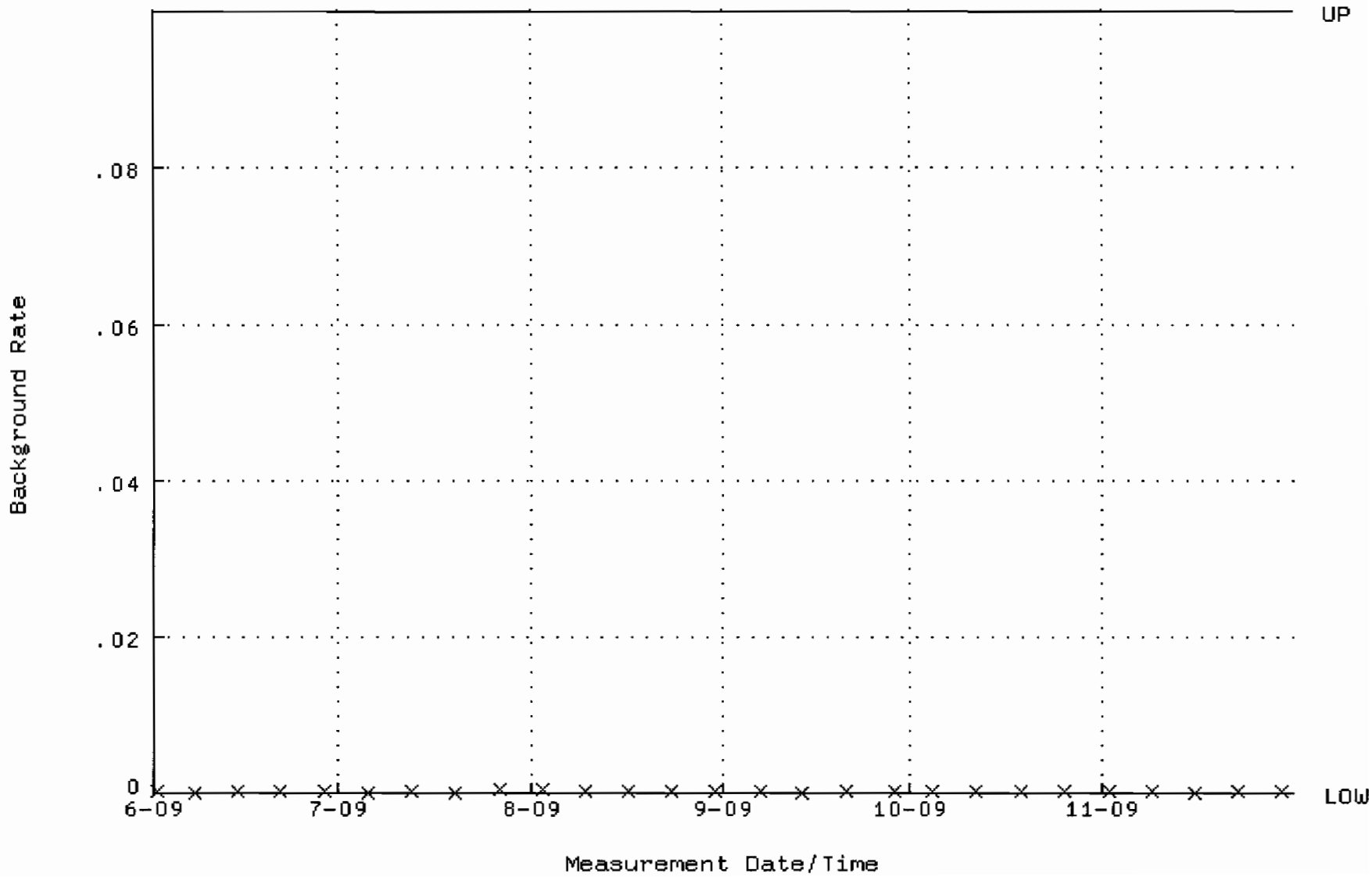

QA filename : DKA100:[ENV_ALPHA.QA.W]W214.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:00 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.373649 through 0.393649

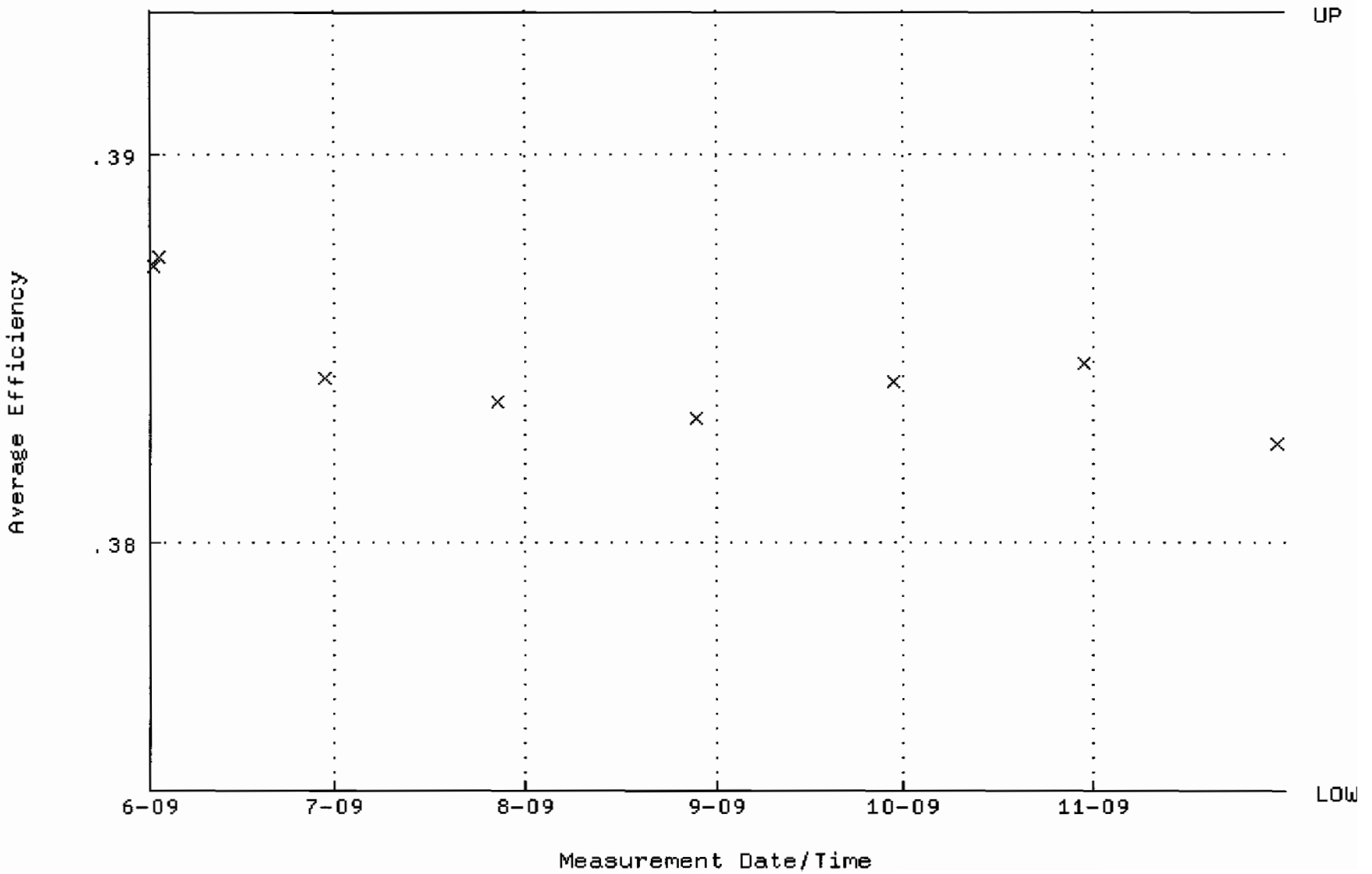

QA filename : DKA100:[ENV_ALPHA.QA.W]W214.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:00 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 85.6739 through 94.6921

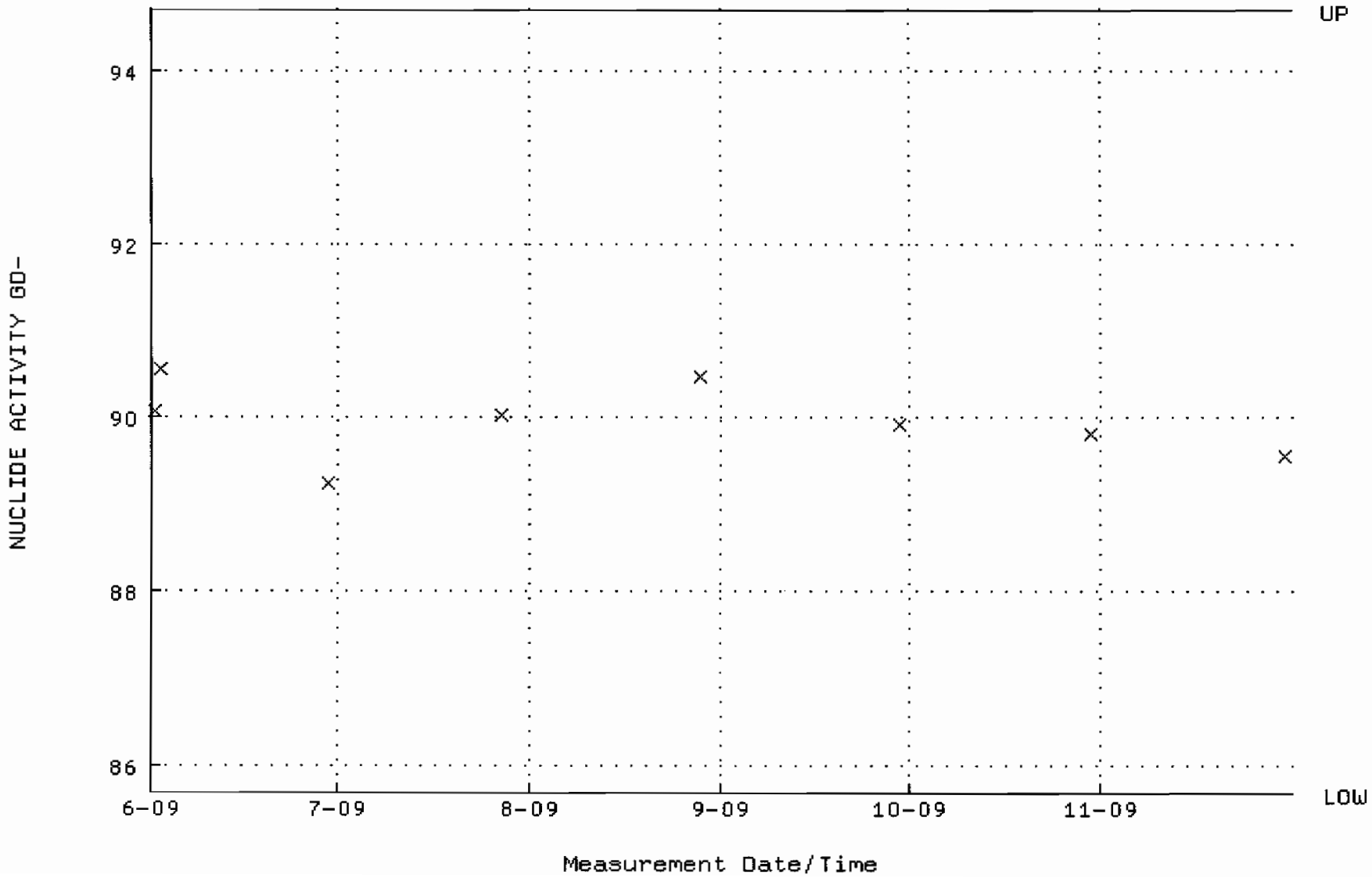

QA filename : DKA100:[ENV_ALPHA.QA.B]B214.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:43:53 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

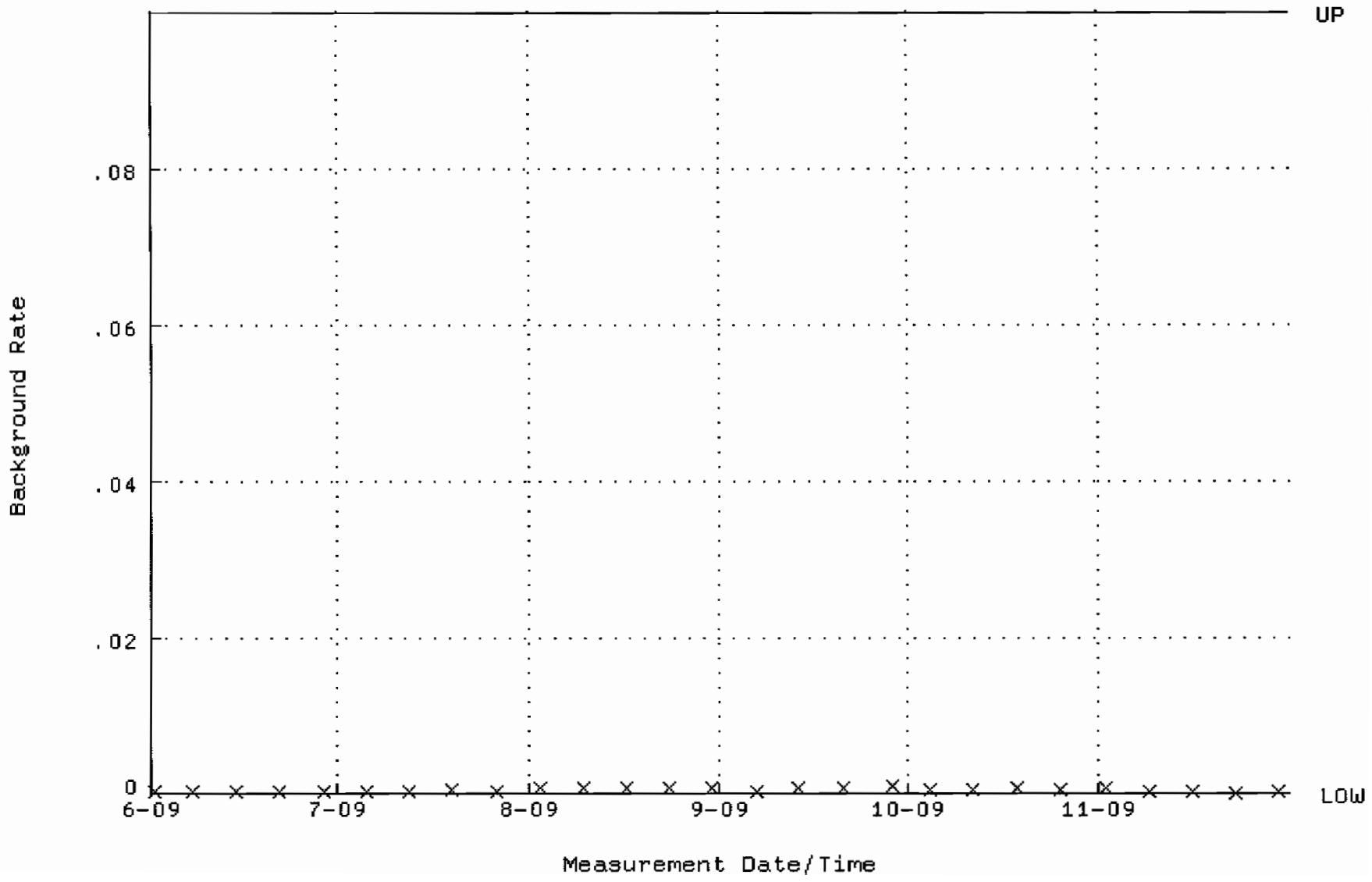

QA filename : DKA100:[ENV_ALPHA.QA.W]W215.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:06 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.366025 through 0.386025

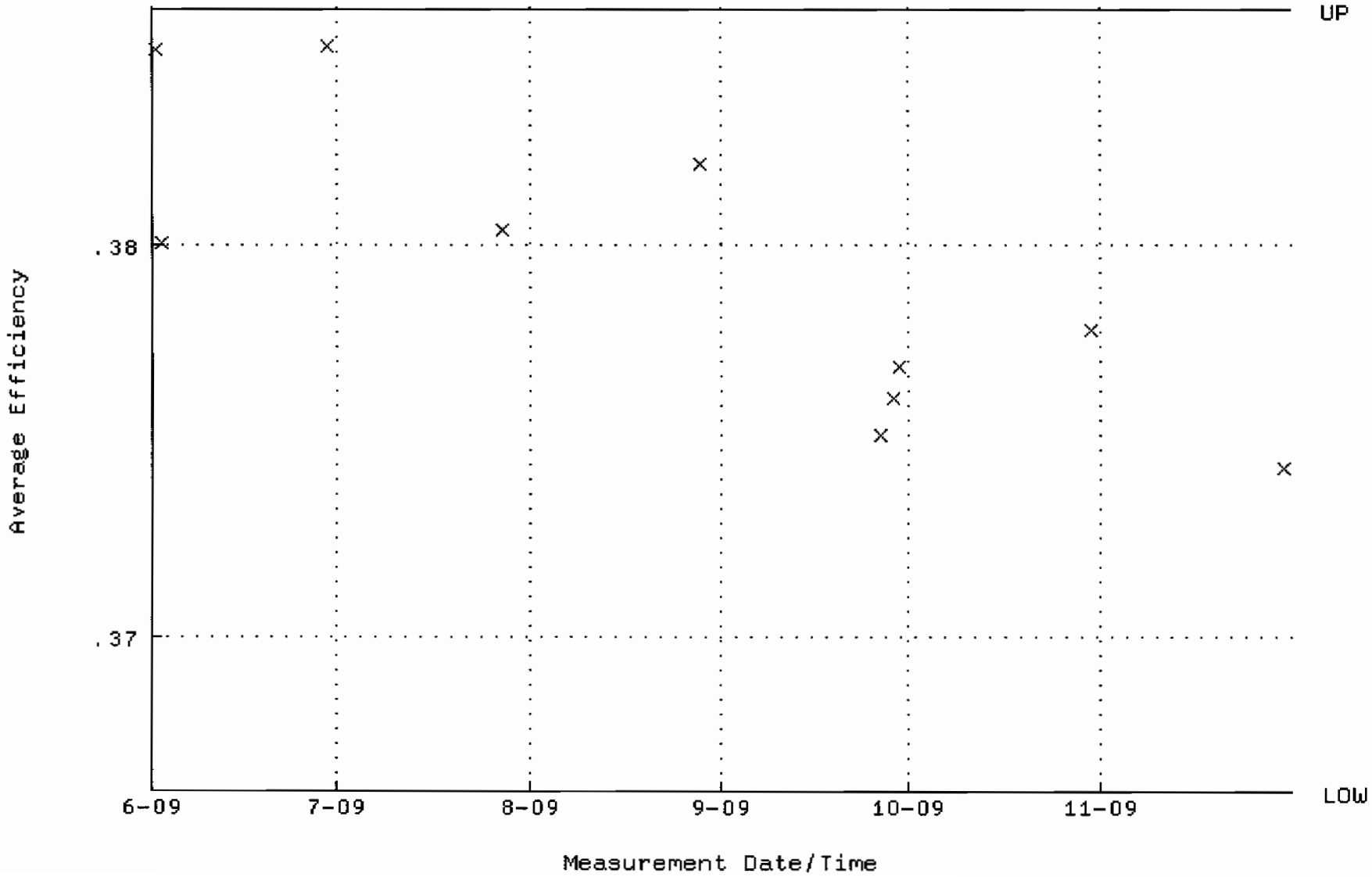

QA filename : DKA100:[ENV_ALPHA.QA.W]W215.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:06 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 86.2153 through 95.2905

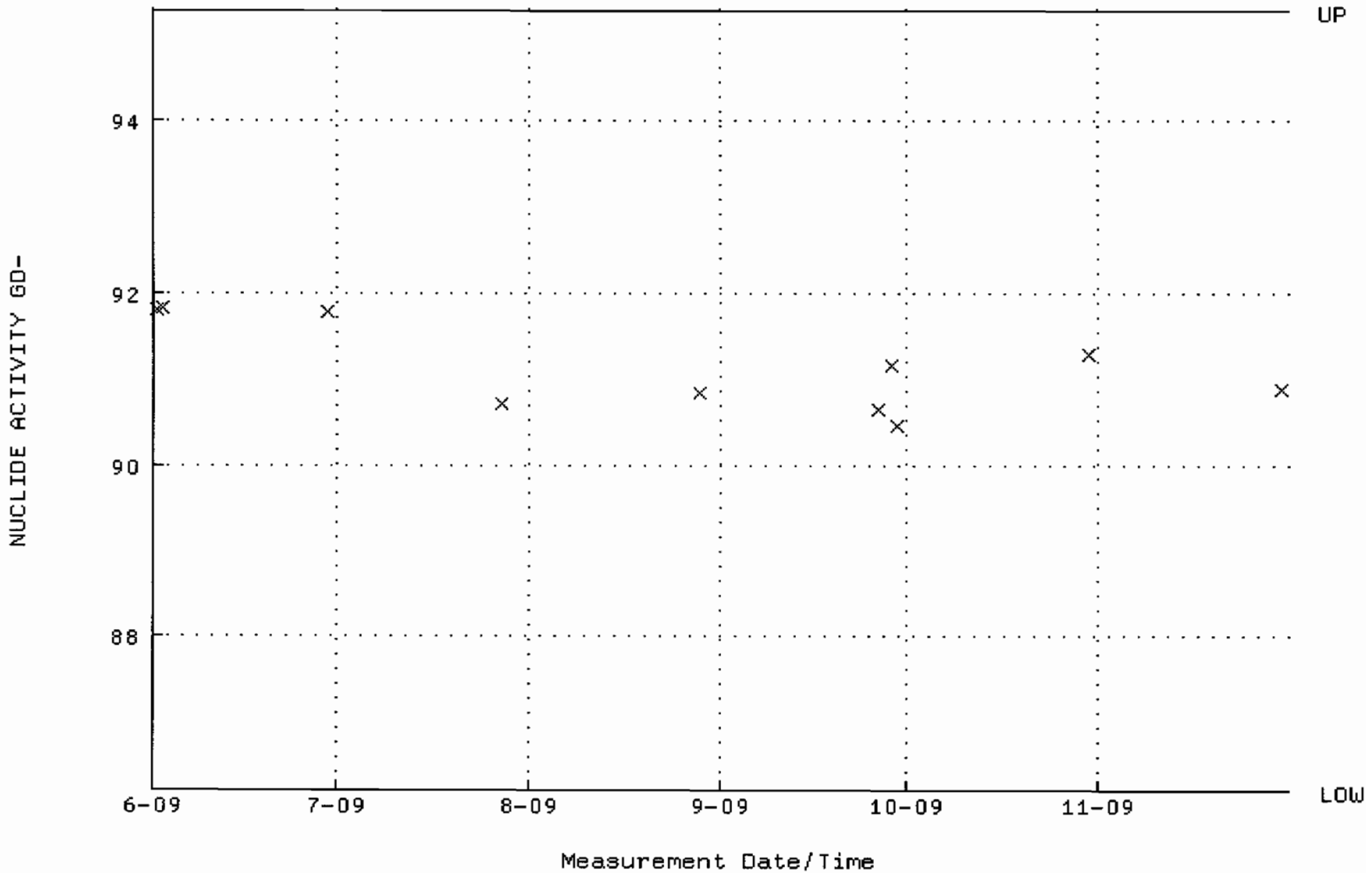

QA filename : DKA100:[ENV_ALPHA.QA.B]B215.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:43:58 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

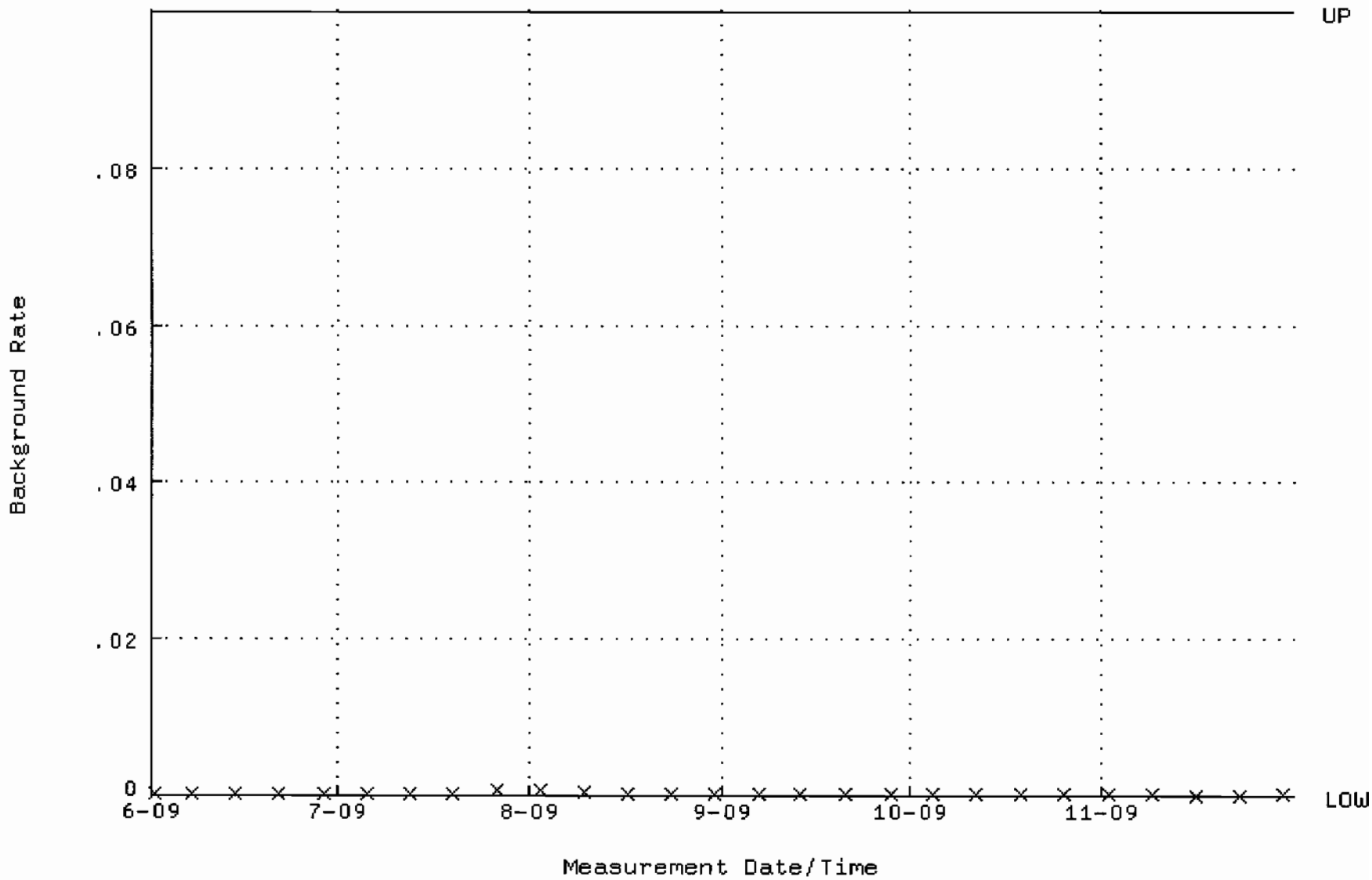

QA filename : DKA100:[ENV_ALPHA.QA.W]W216.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:11 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.372790 through 0.392790

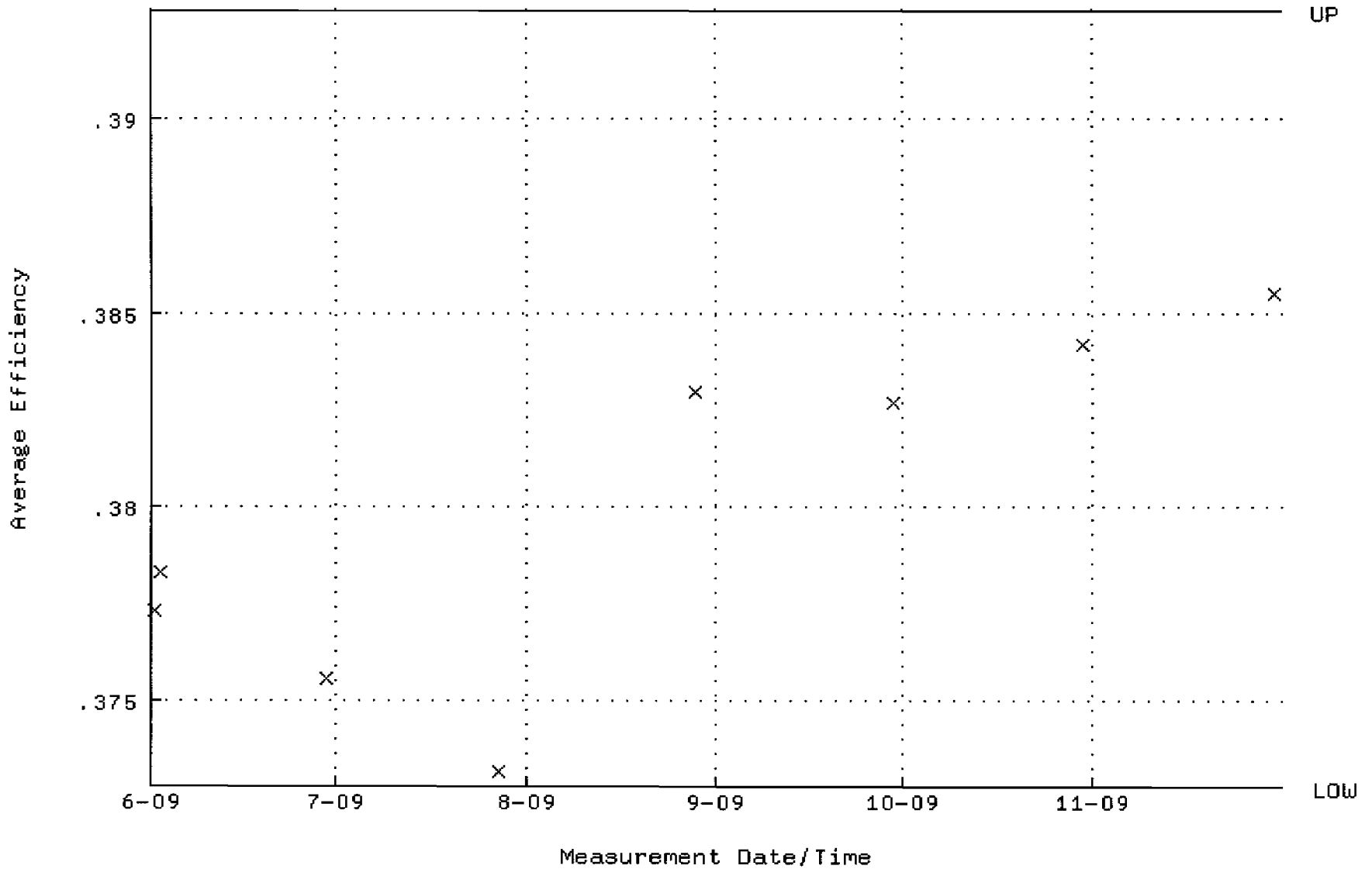

QA filename : DKA100:[ENV_ALPHA.QA.W]W216.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:11 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.7198 through 93.6376

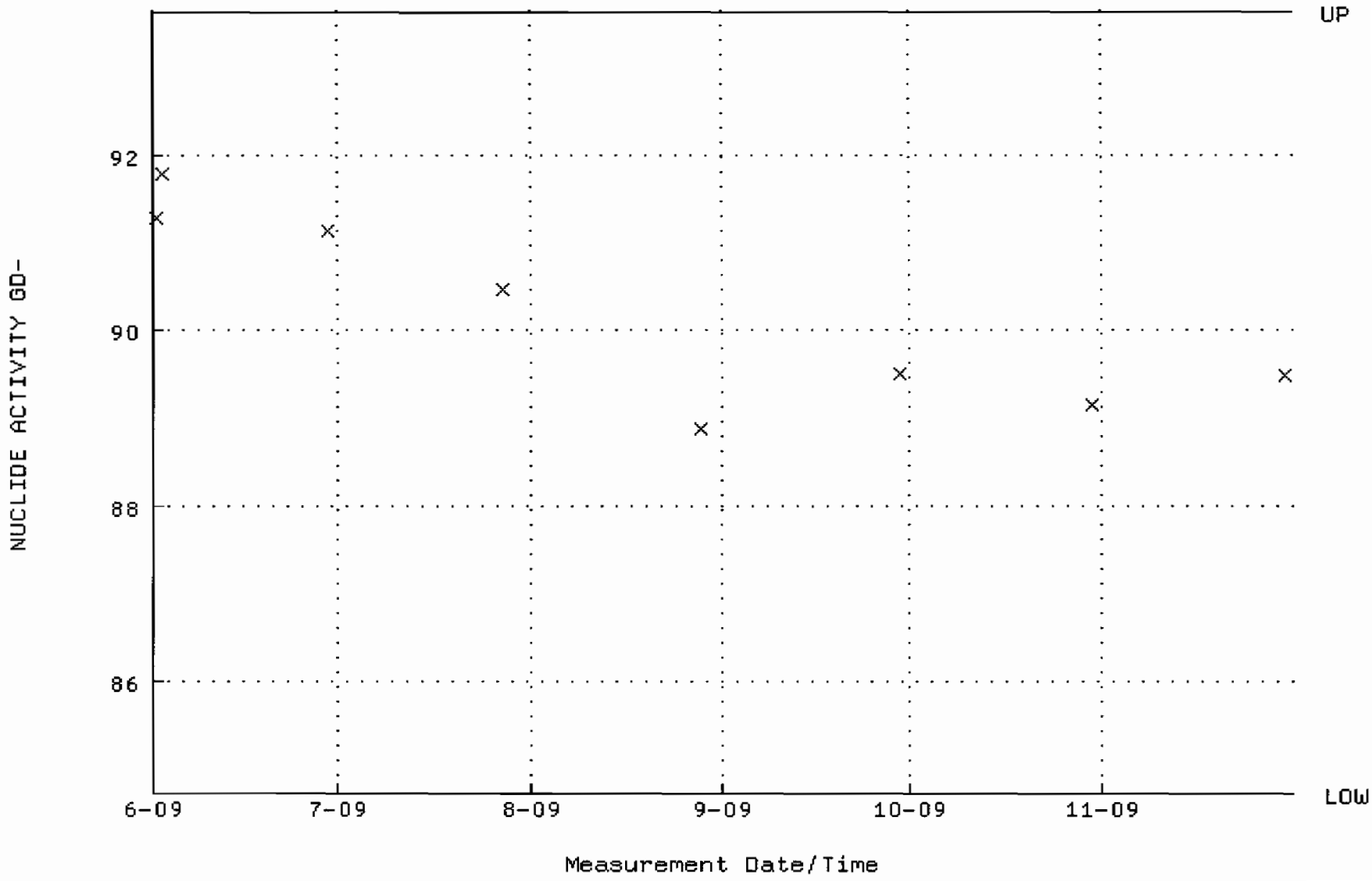

QA filename : DKA100:[ENV_ALPHA.QA.B]B216.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:02 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

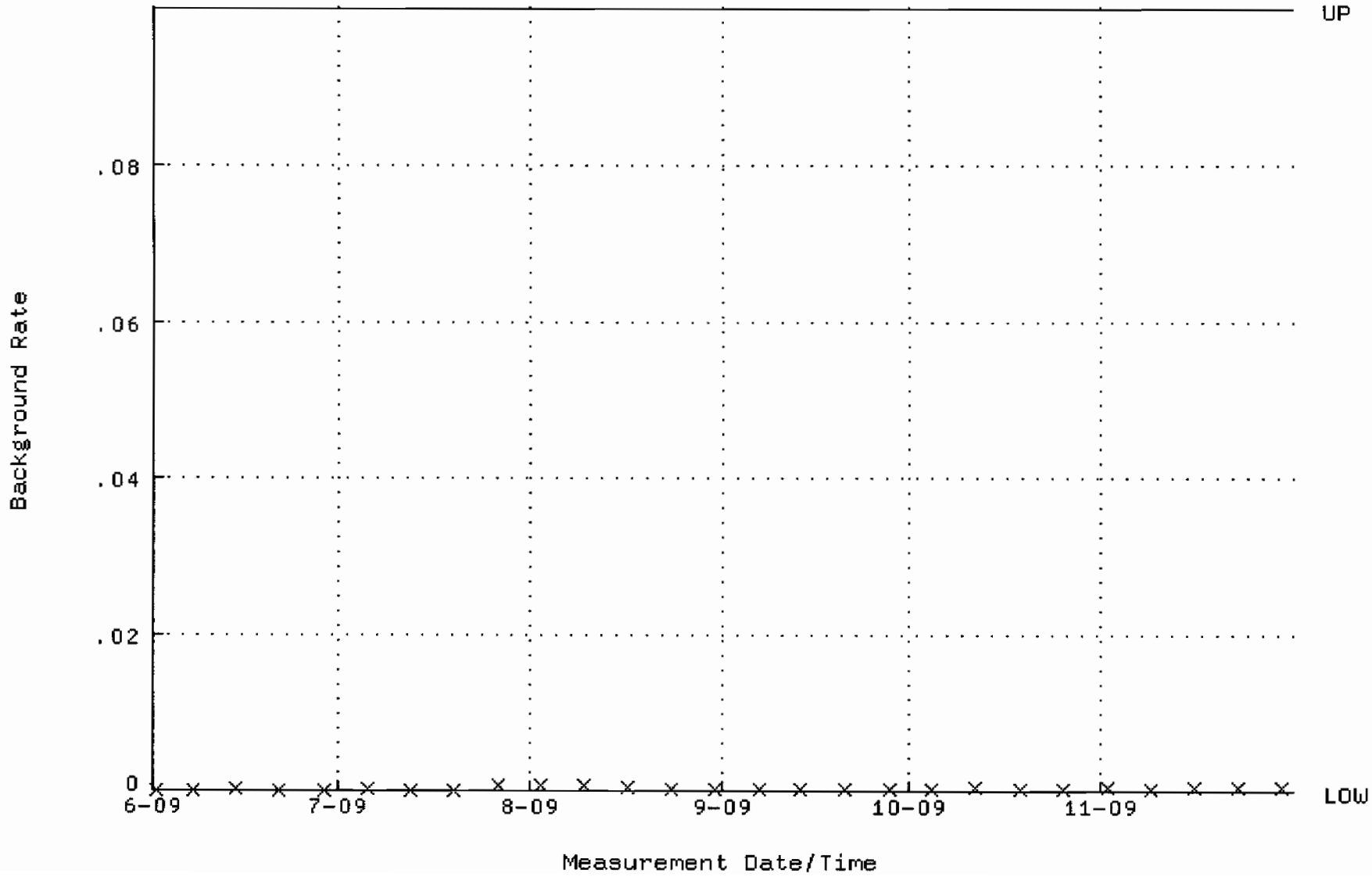

QA filename : DKA100:[ENV_ALPHA.QA.W]W217.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:20 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.354934 through 0.374934

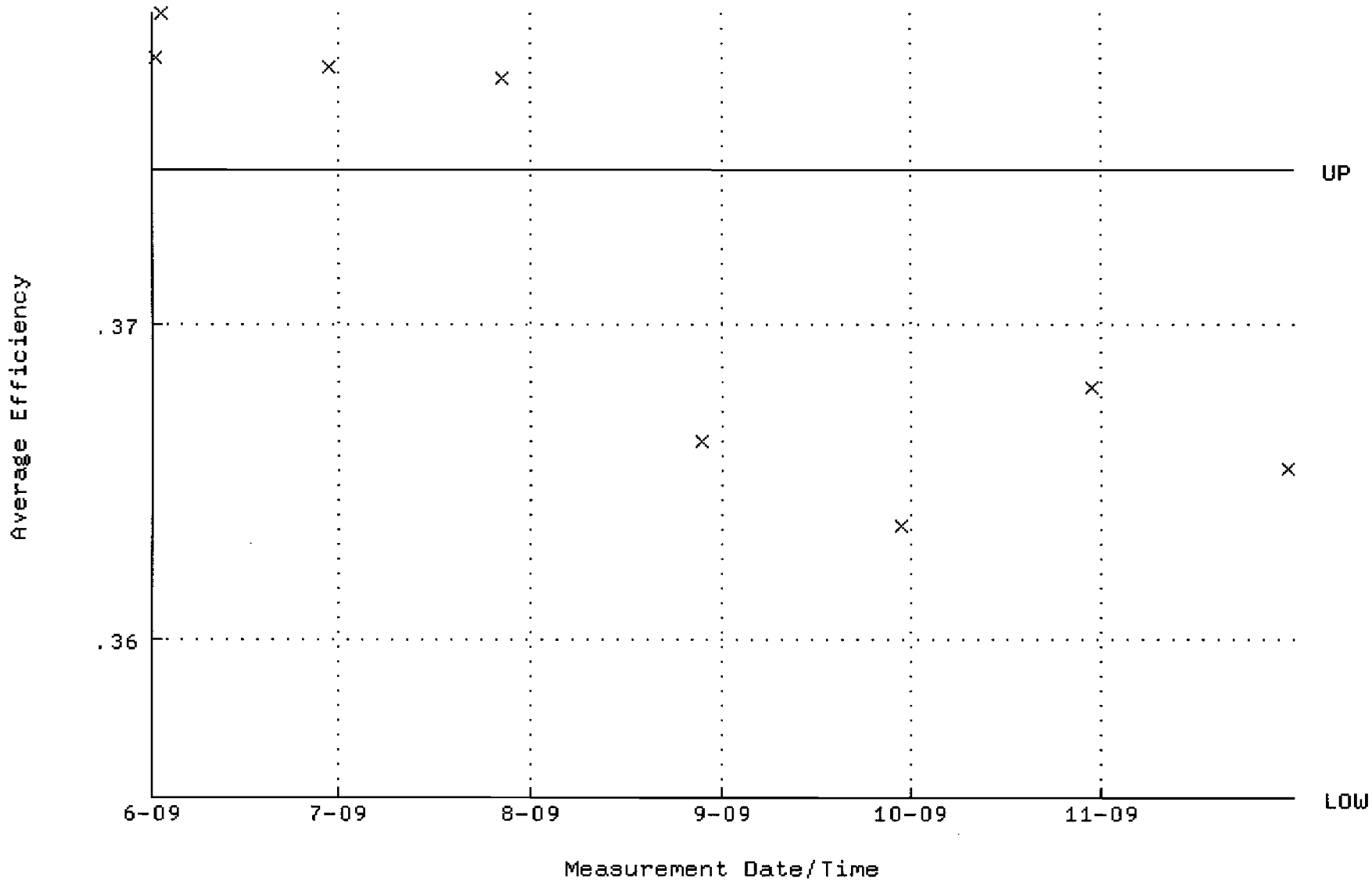

QA filename : DKA100:[ENV_ALPHA.QA.W]W217.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:20 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 88.3174 through 97.6140

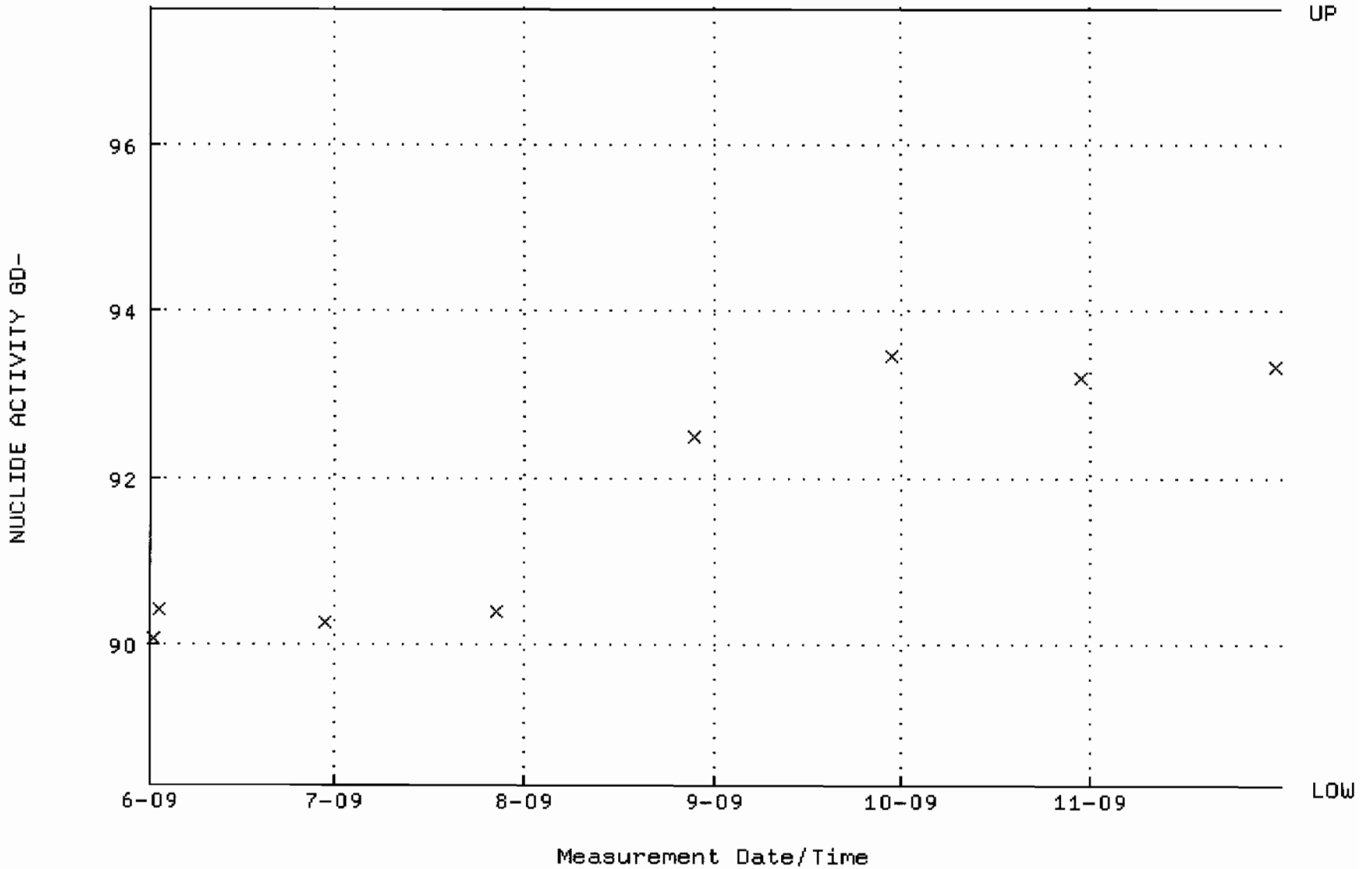

QA filename : DKA100:[ENV_ALPHA.QA.B]B217.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:07 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

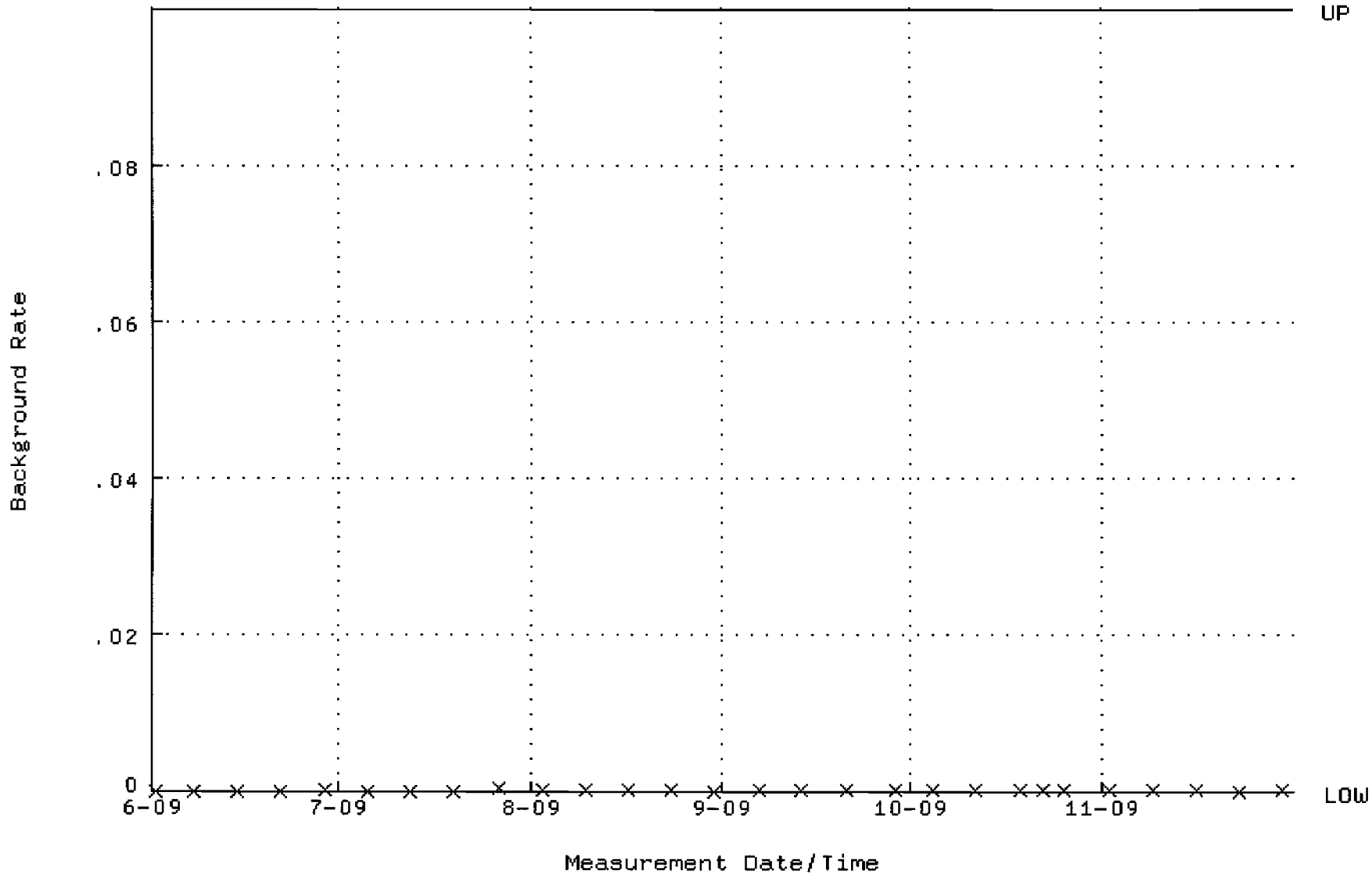

QA filename : DKA100:[ENV_ALPHA.QA.W]W218.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:24 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.362380 through 0.382380

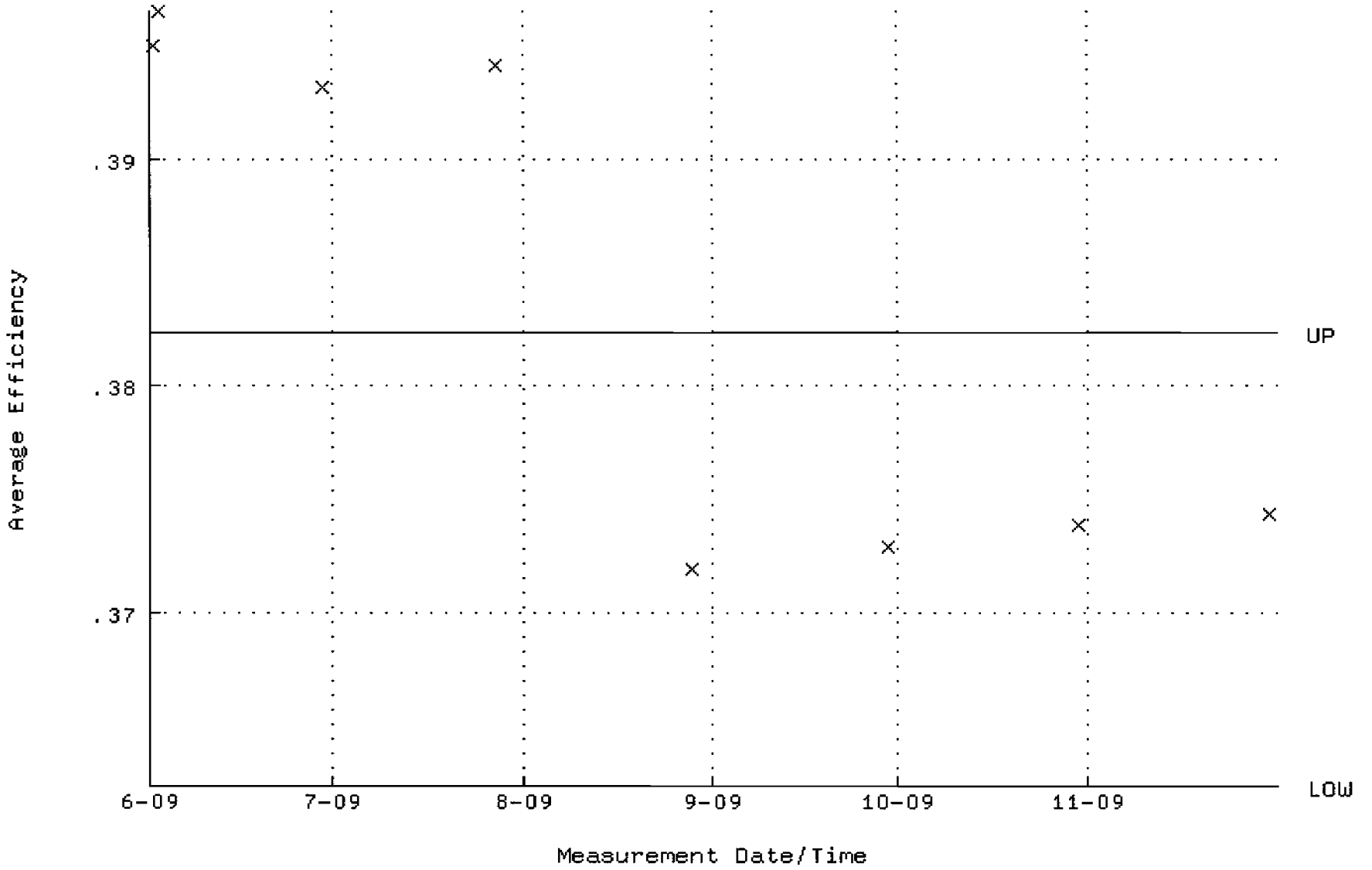

QA filename : DKA100:[ENV_ALPHA.QA.W]W218.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:24 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 89.3892 through 98.7986

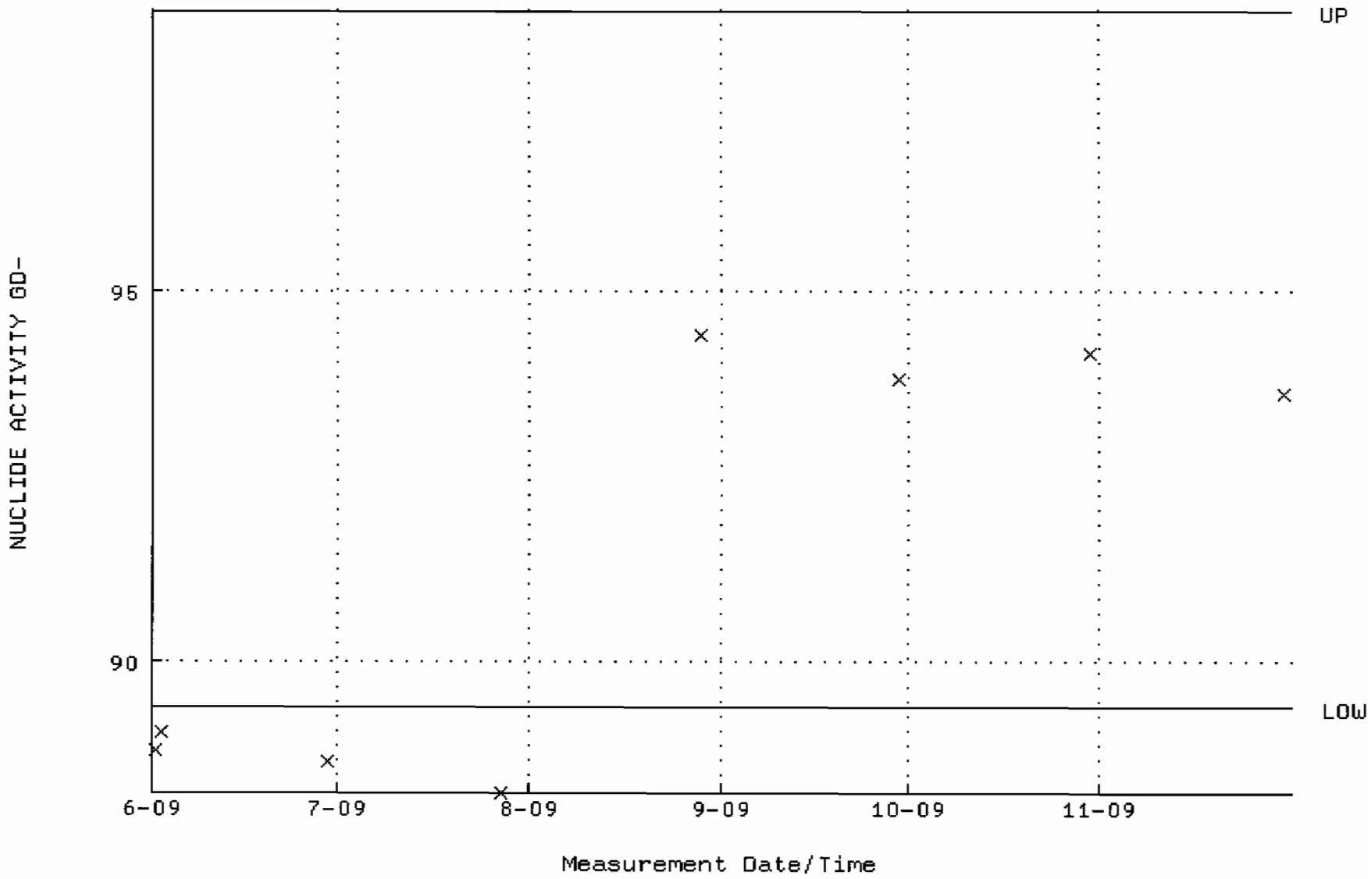

QA filename : DKA100:[ENV_ALPHA.QA.B]B218.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:11 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

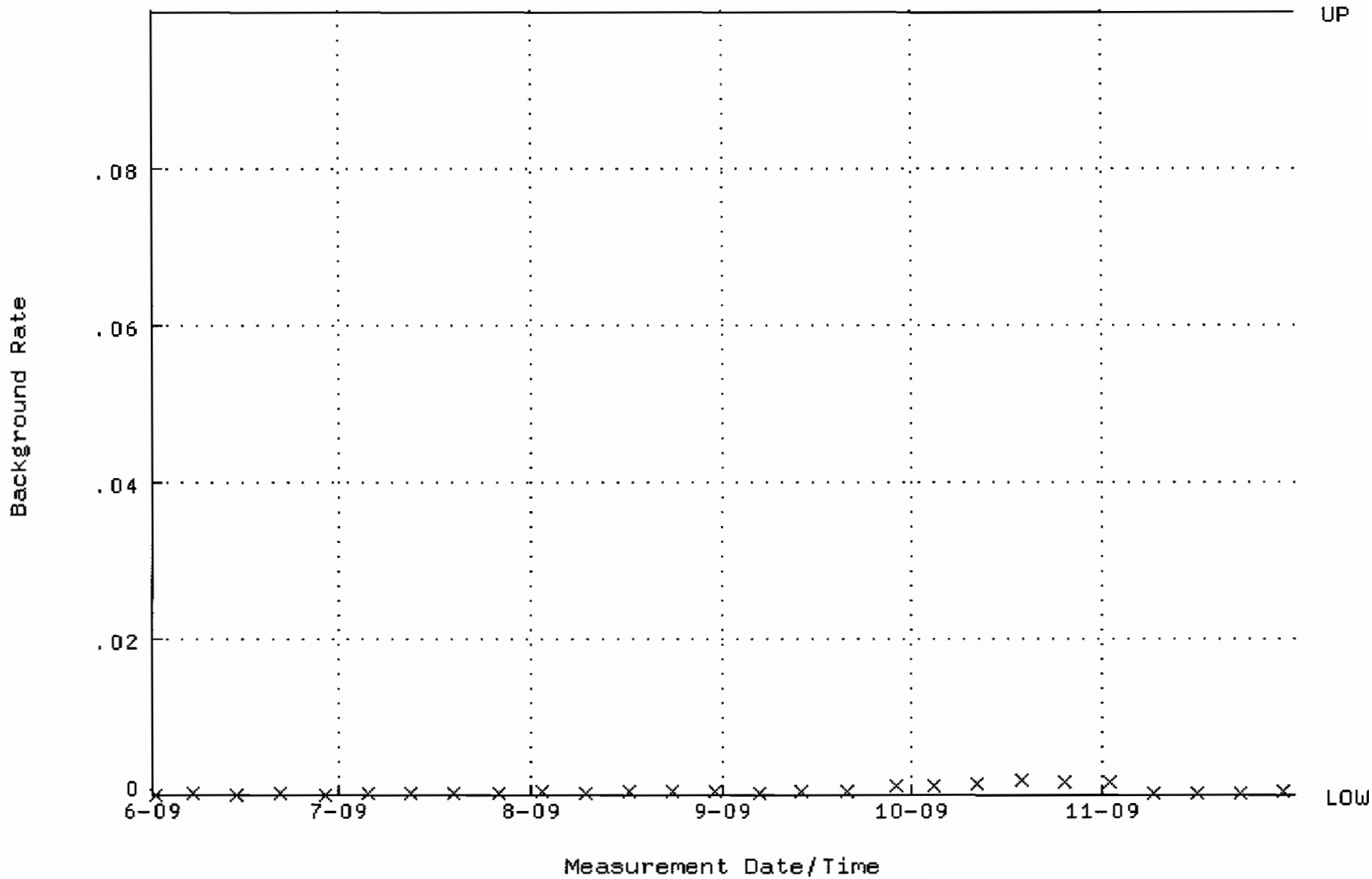

QA filename : DKA100:[ENV_ALPHA.QA.W]W219.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:30 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.375667 through 0.395667

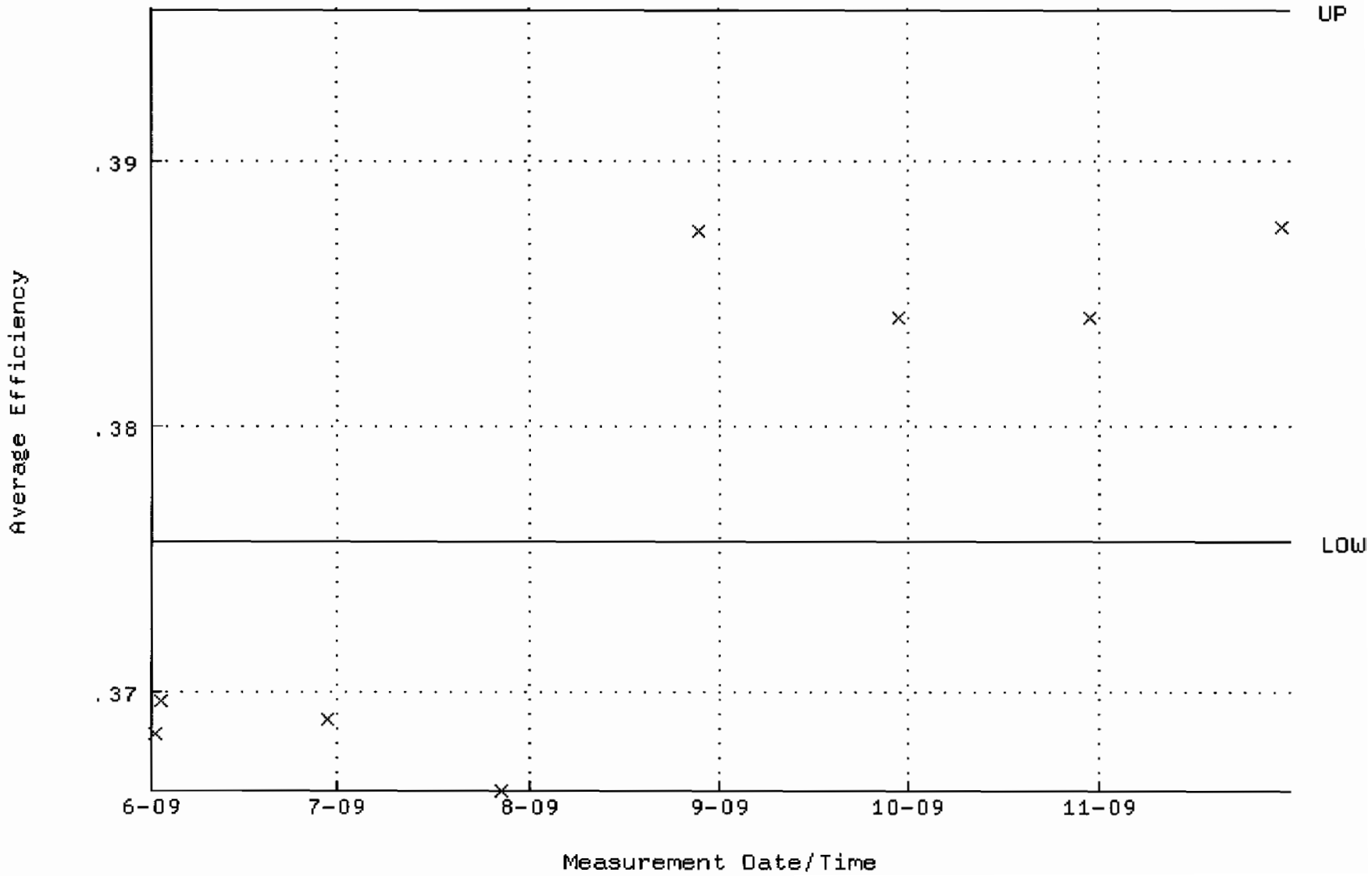

QA filename : DKA100:[ENV_ALPHA.QA.W]W219.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:30 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.5518 through 93.4520

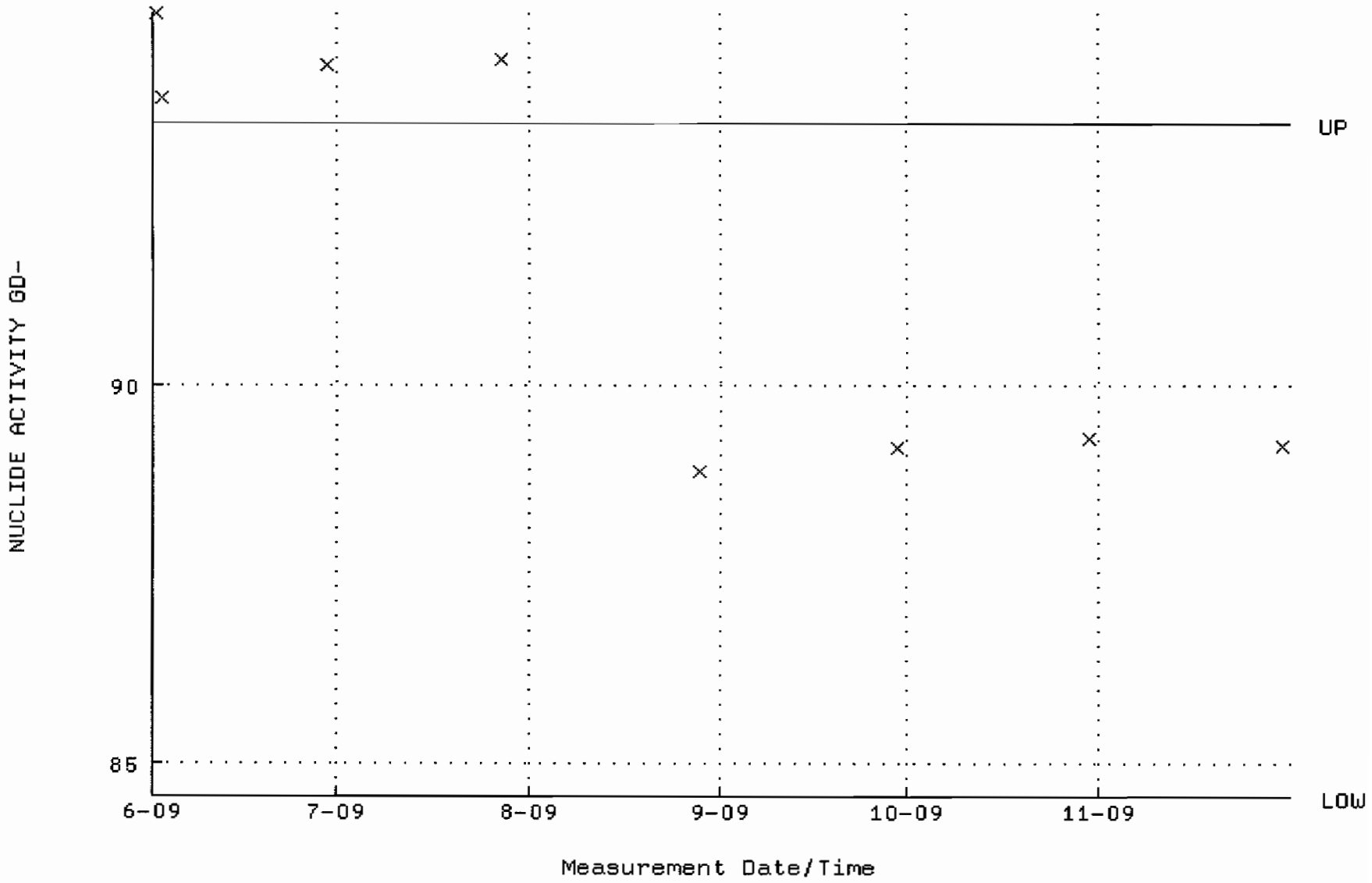

QA filename : DKA100:[ENV_ALPHA.QA.B]B219.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:16 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

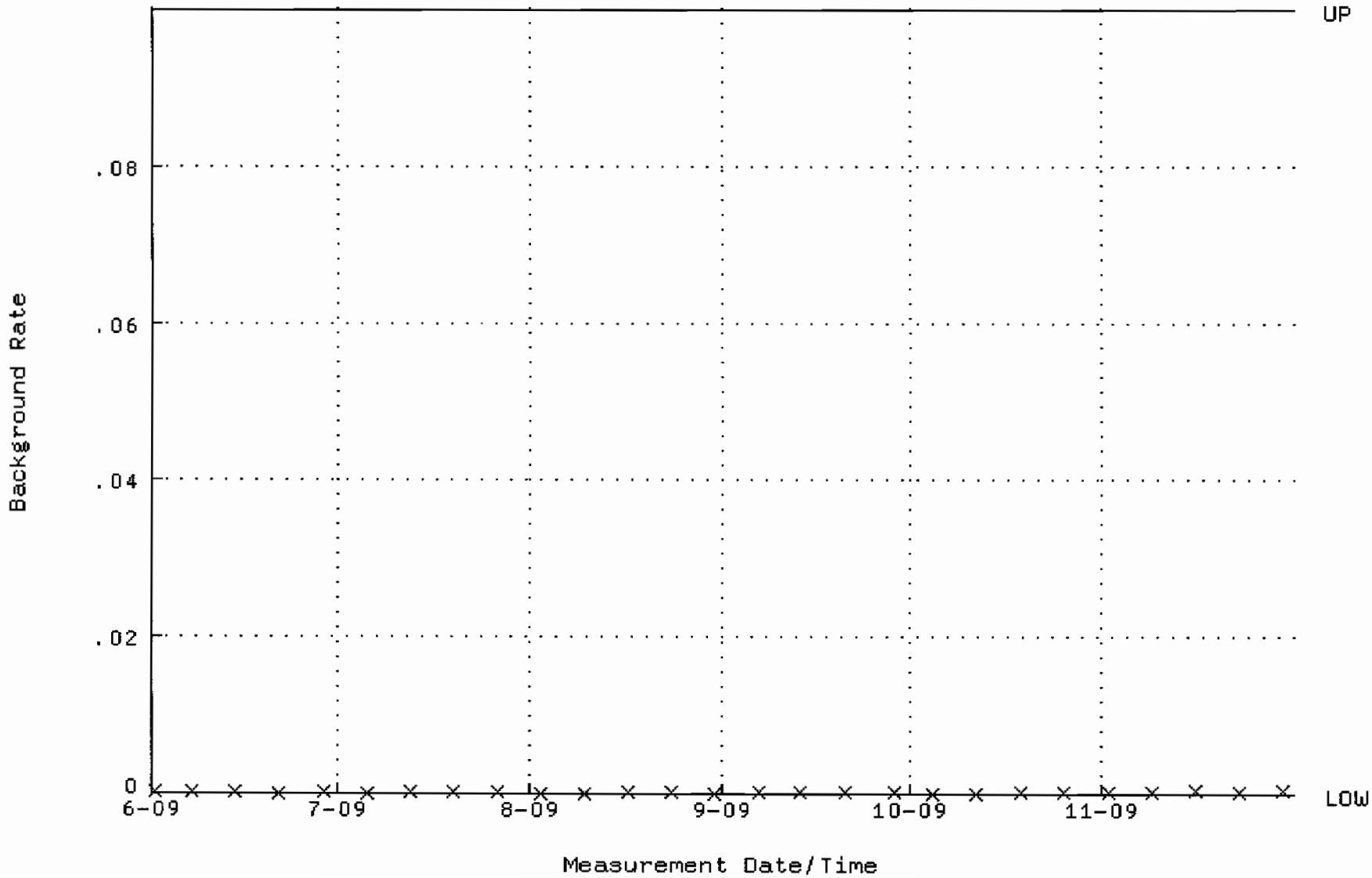

QA filename : DKA100:[ENV_ALPHA.QA.W]W225.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:31:59 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.381631 through 0.401631

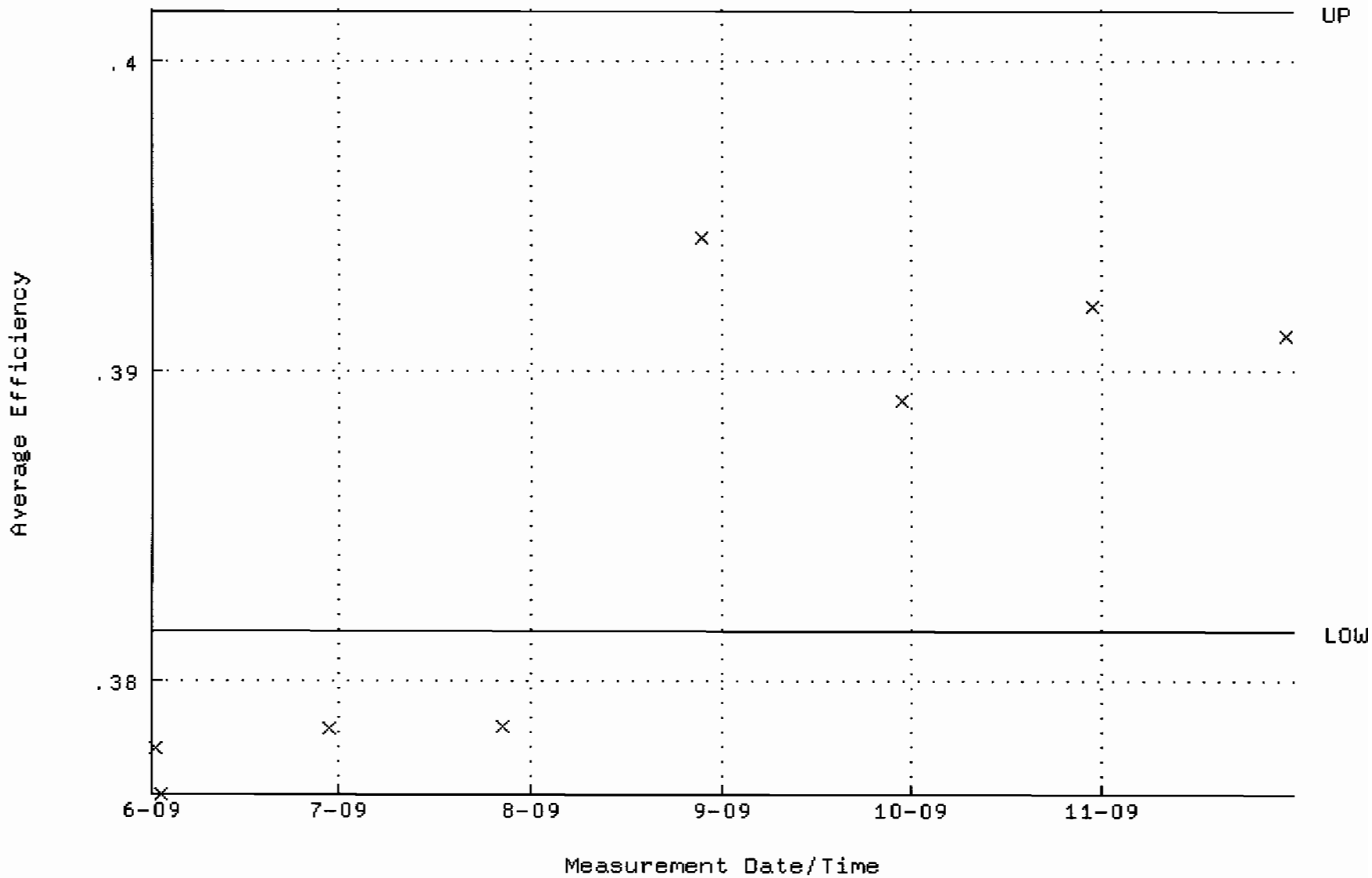

QA filename : DKA100:[ENV_ALPHA.QA.W]W225.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:31:59 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.7082 through 93.6248

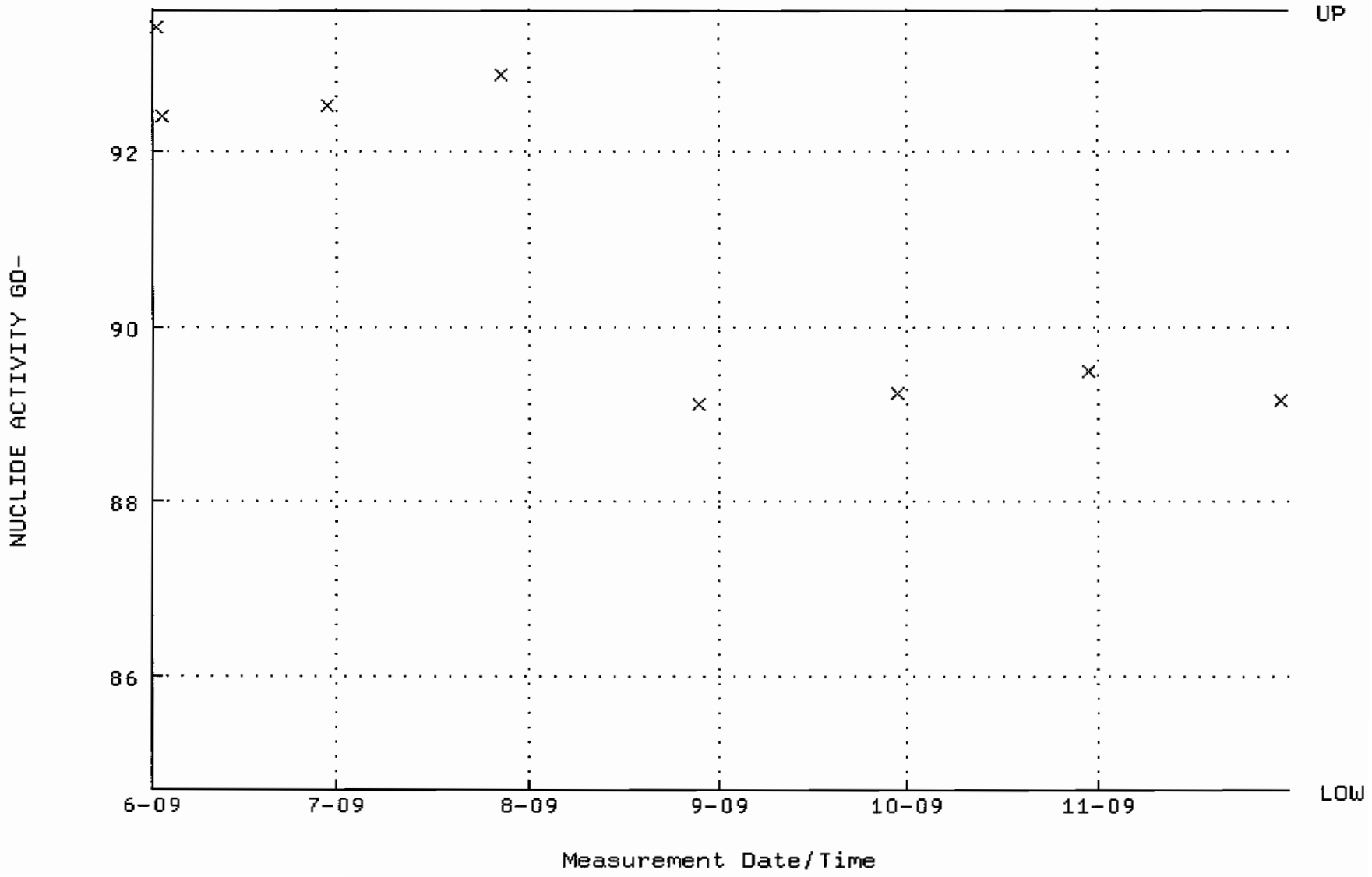

QA filename : DKA100:[ENV_ALPHA.QA.B]B225.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:43 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

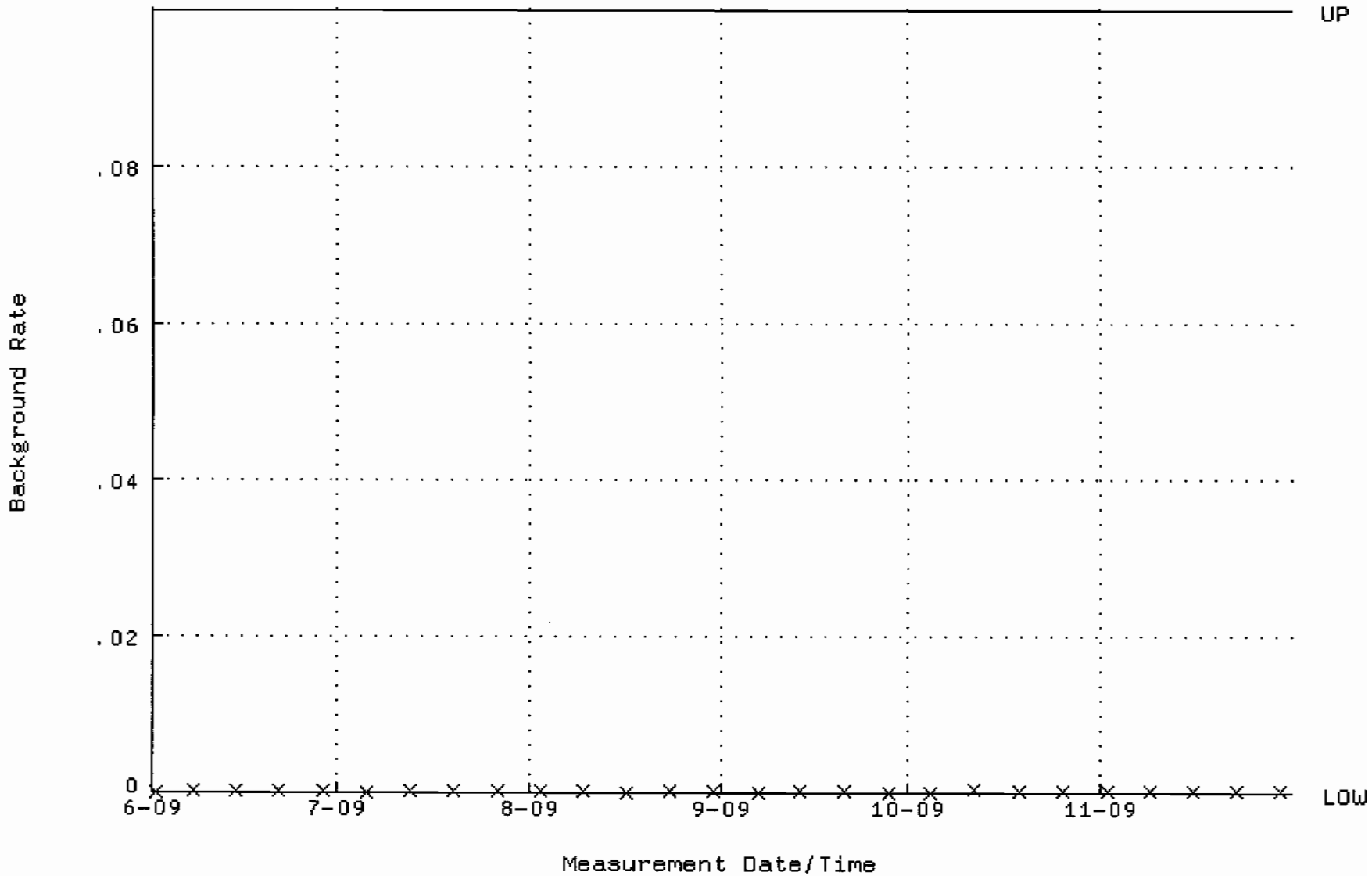

QA filename : DKA100:[ENV_ALPHA.QA.W]W226.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:03 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.363285 through 0.383285

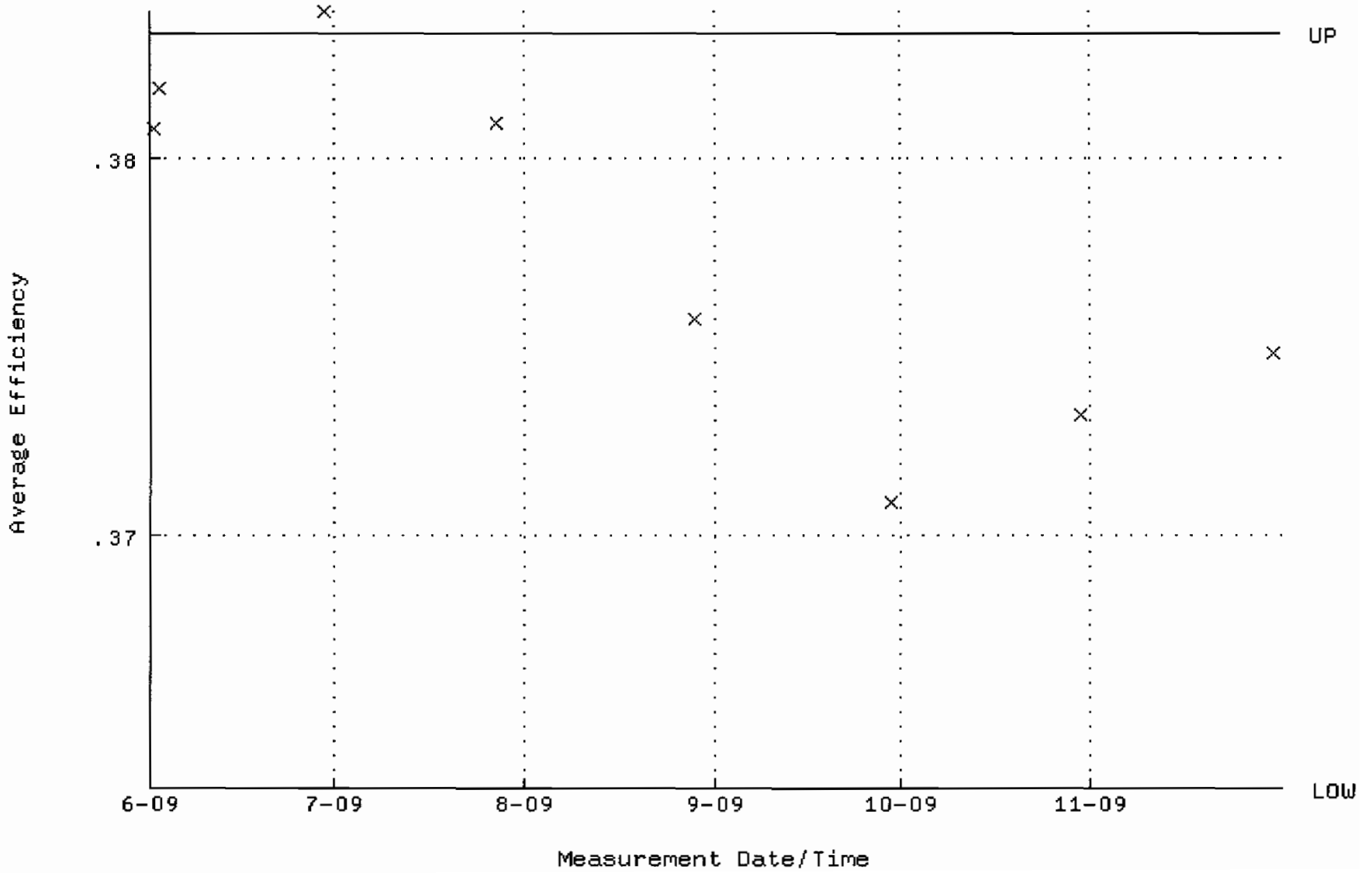

QA filename : DKA100:[ENV_ALPHA.QA.W]W226.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:03 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 86.4888 through 95.5928

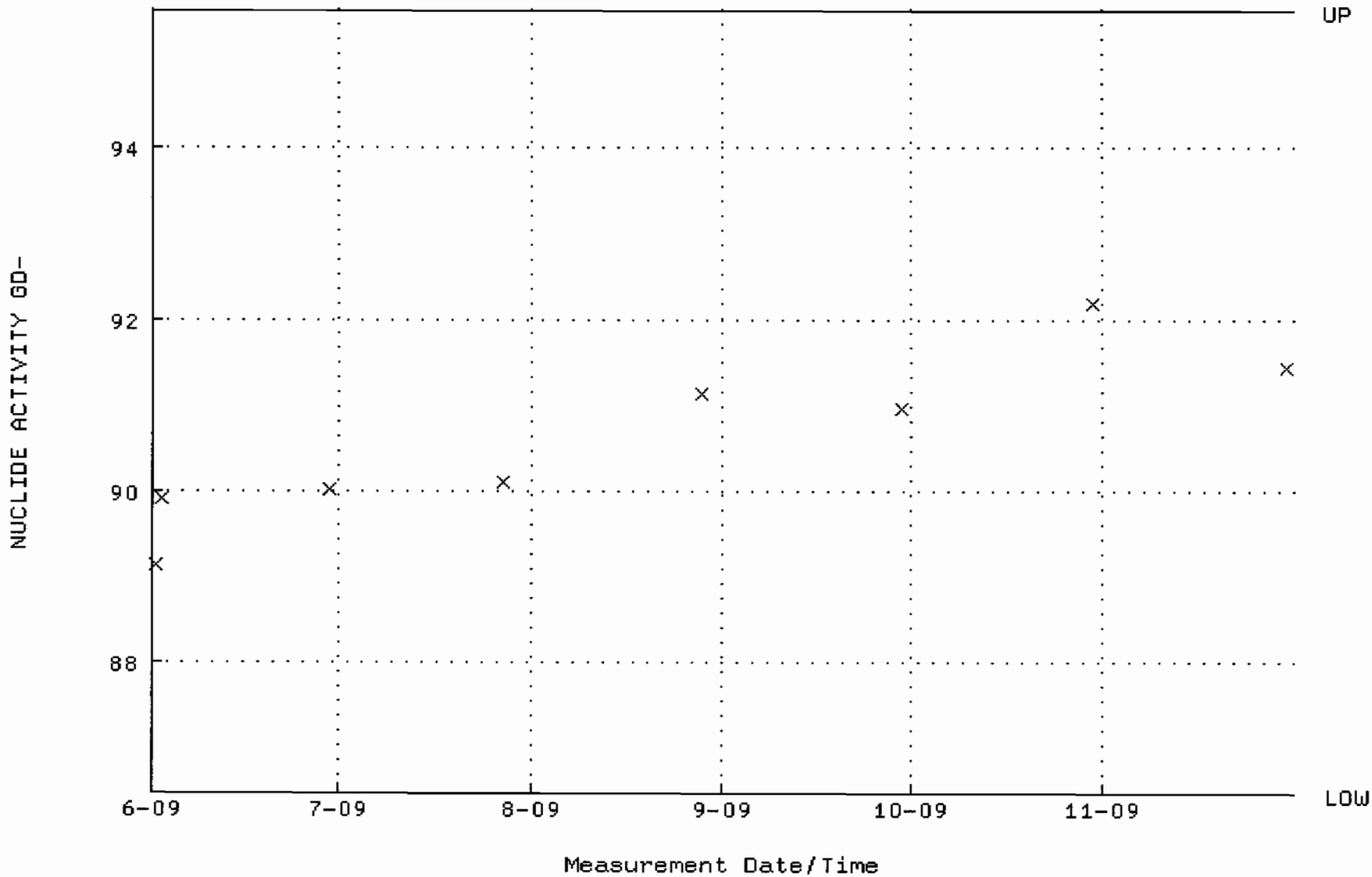

QA filename : DKA100:[ENV_ALPHA.QA.B]B226.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:47 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

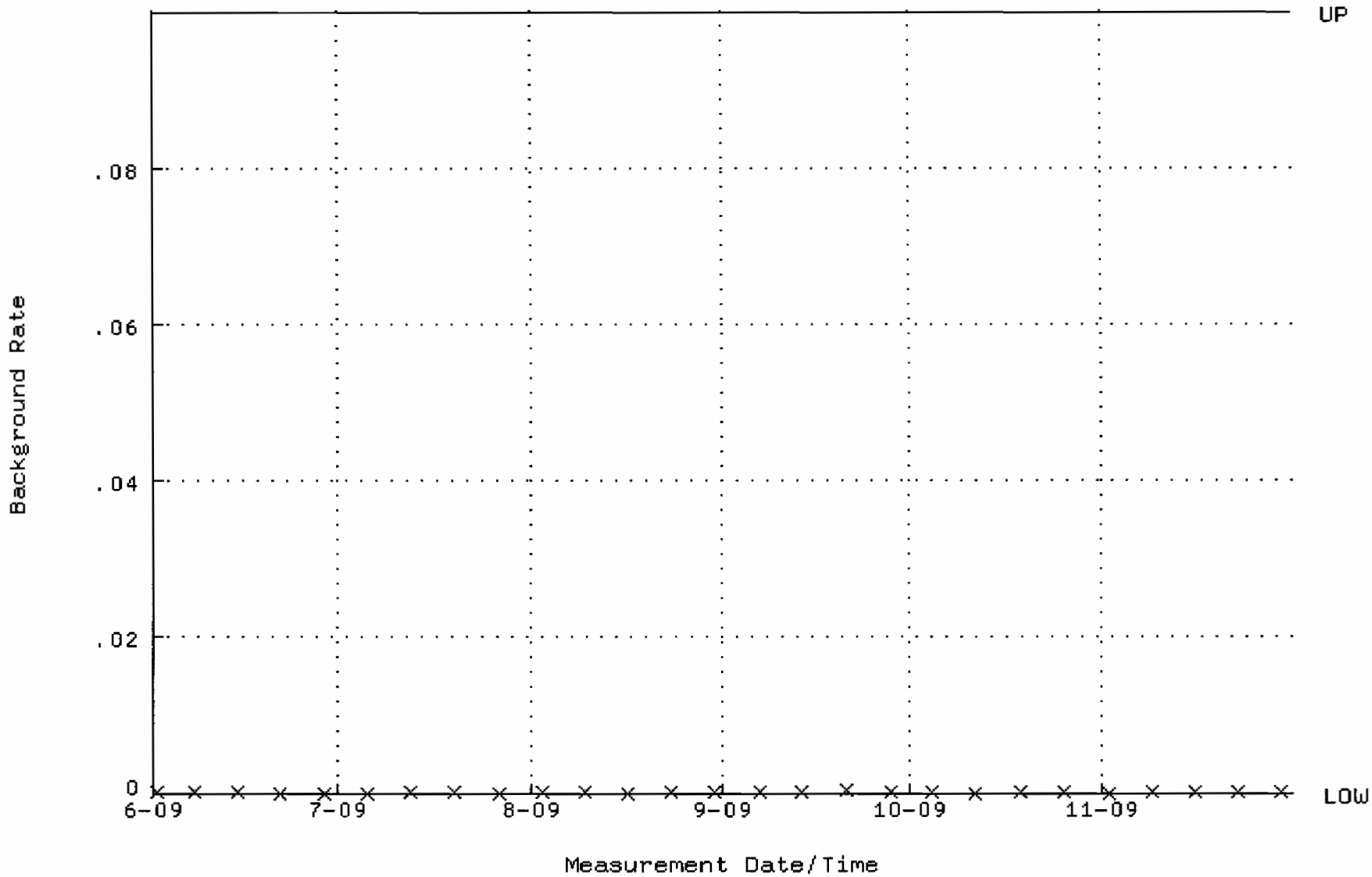

QA filename : DKA100:[ENV_ALPHA.QA.W]W227.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:08 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.375328 through 0.395328

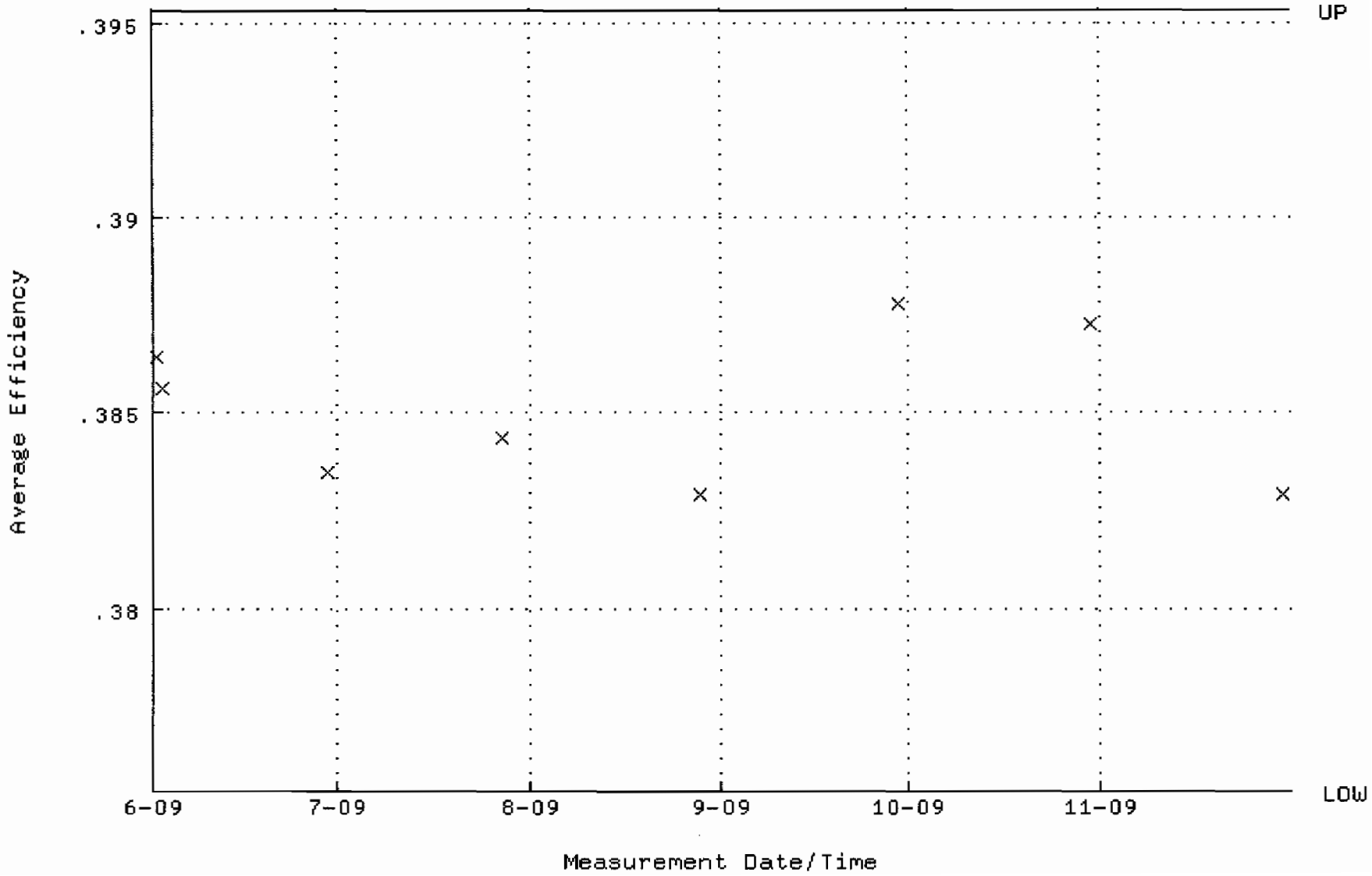

QA filename : DKA100:[ENV_ALPHA.QA.W]W227.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:08 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.8011 through 93.7275

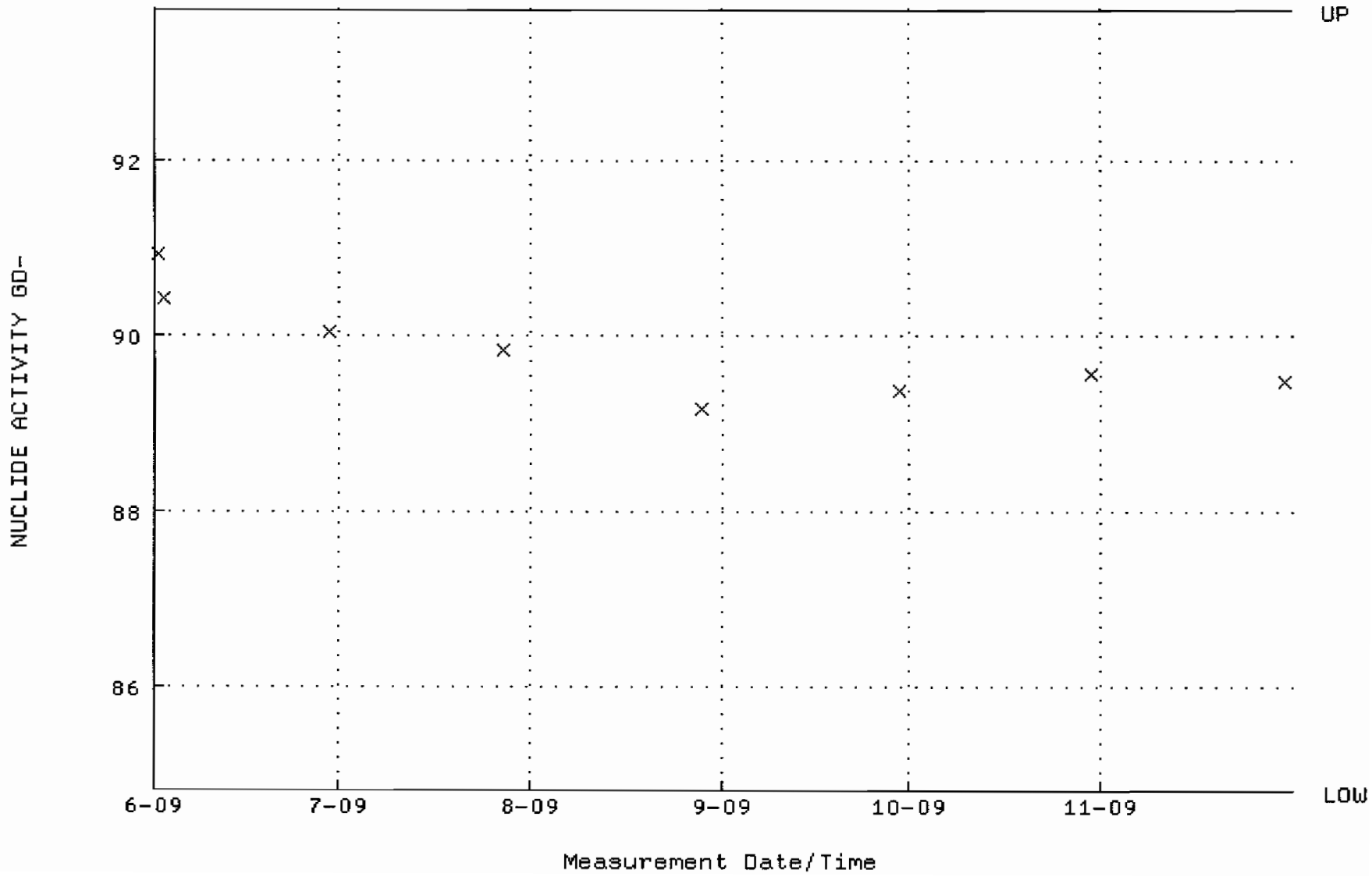

QA filename : DKA100:[ENV_ALPHA.QA.B]B227.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:52 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

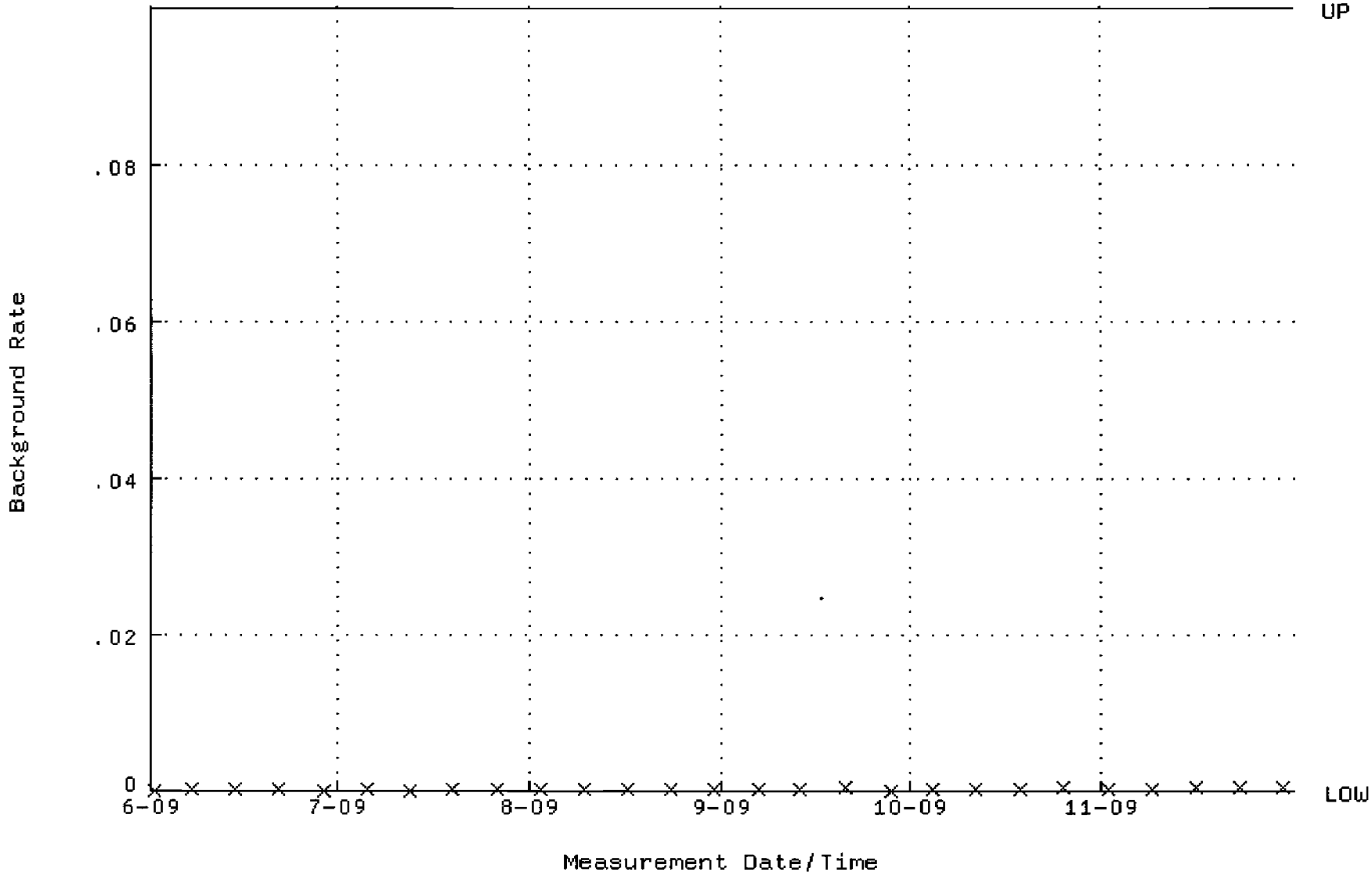

QA filename : DKA100:[ENV_ALPHA.QA.W]W228.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:12 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.362134 through 0.382134

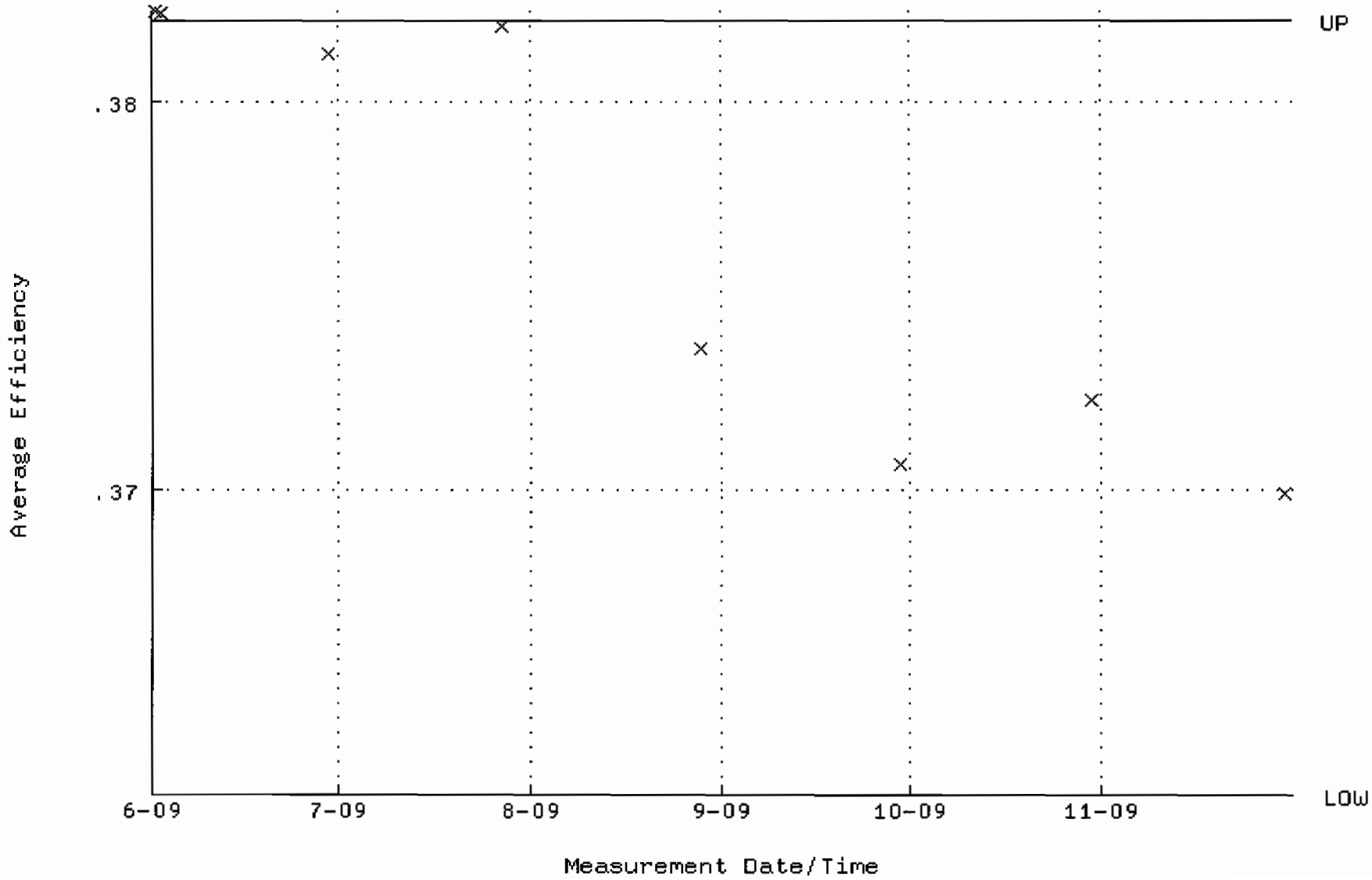

QA filename : DKA100:[ENV_ALPHA.QA.W]W228.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:12 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 87.0370 through 96.1988

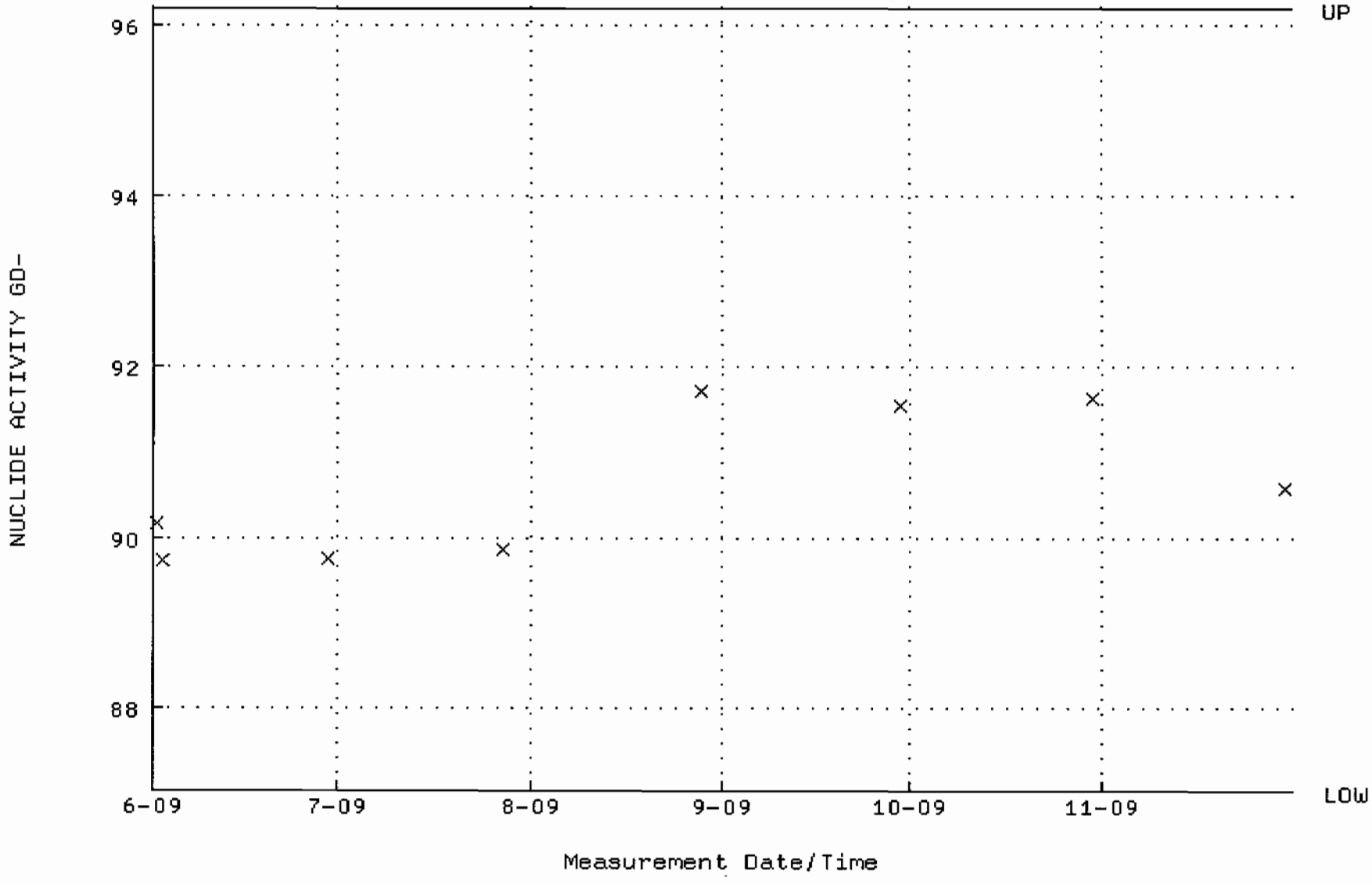

QA filename : DKA100:[ENV_ALPHA.QA.B]B228.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:44:57 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

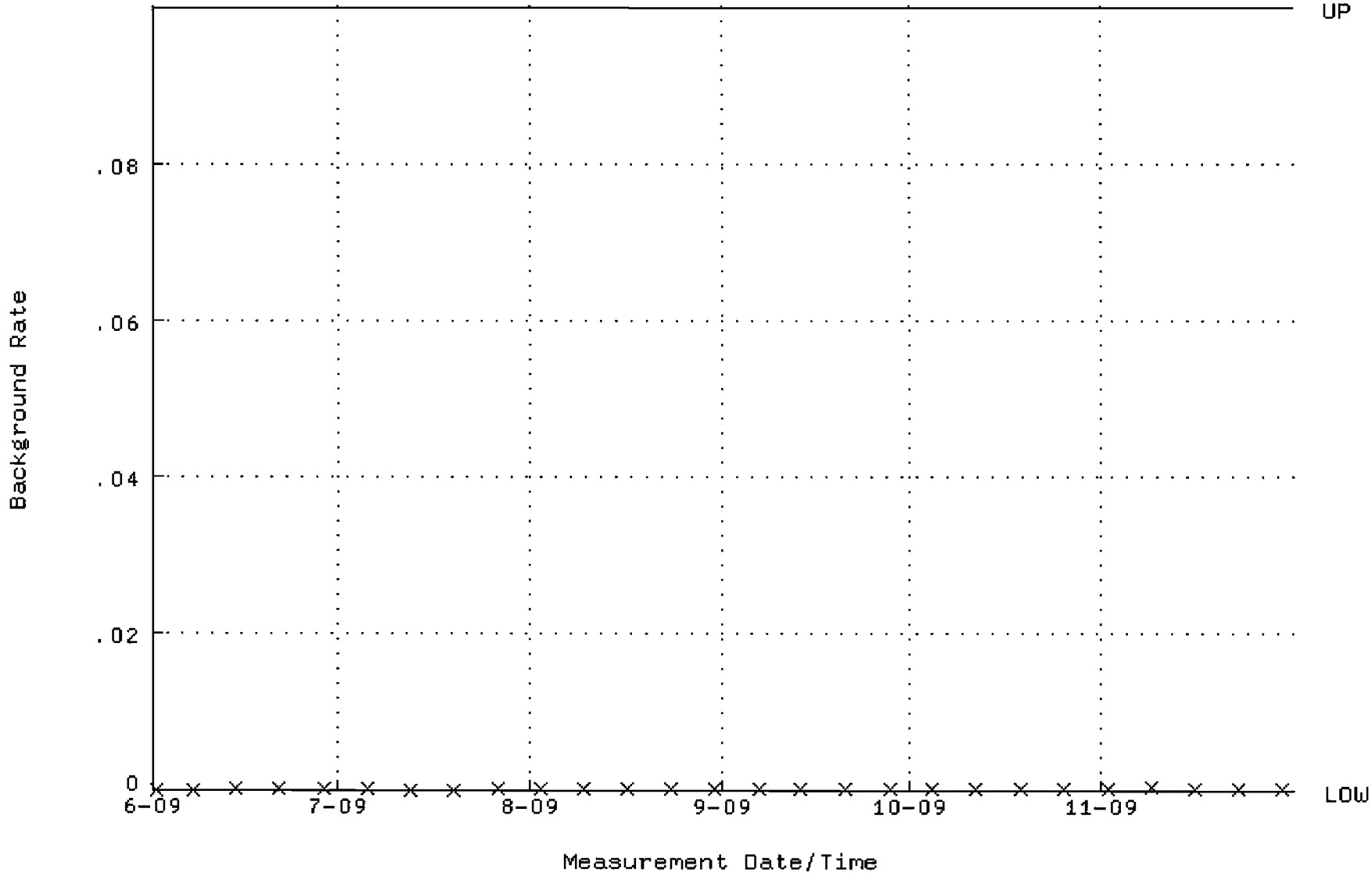

QA filename : DKA100:[ENV_ALPHA.QA.W]W229.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:17 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.364789 through 0.384789

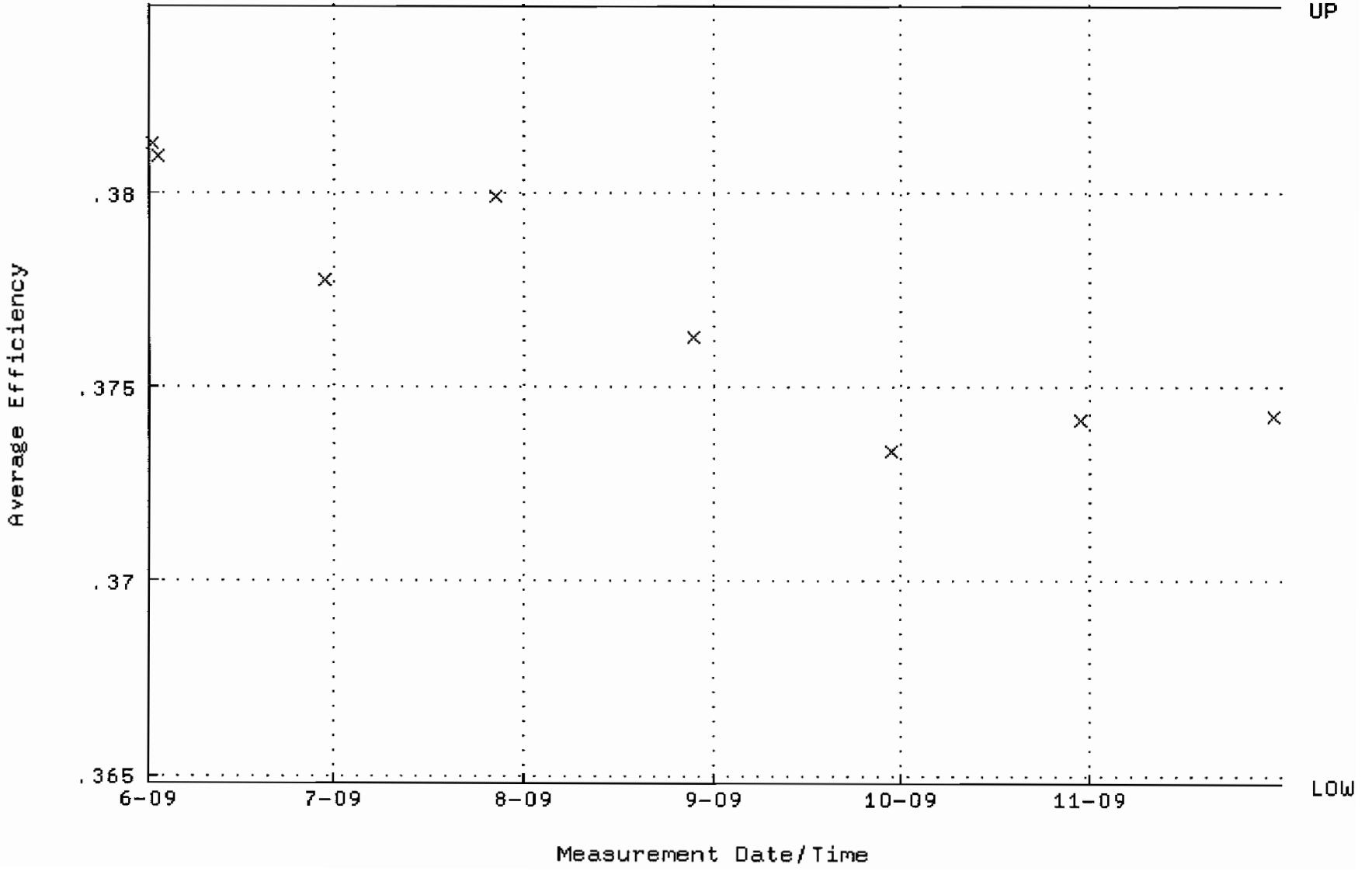

QA filename : DKA100:[ENV_ALPHA.QA.W]W229.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:17 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 88.2691 through 97.5605

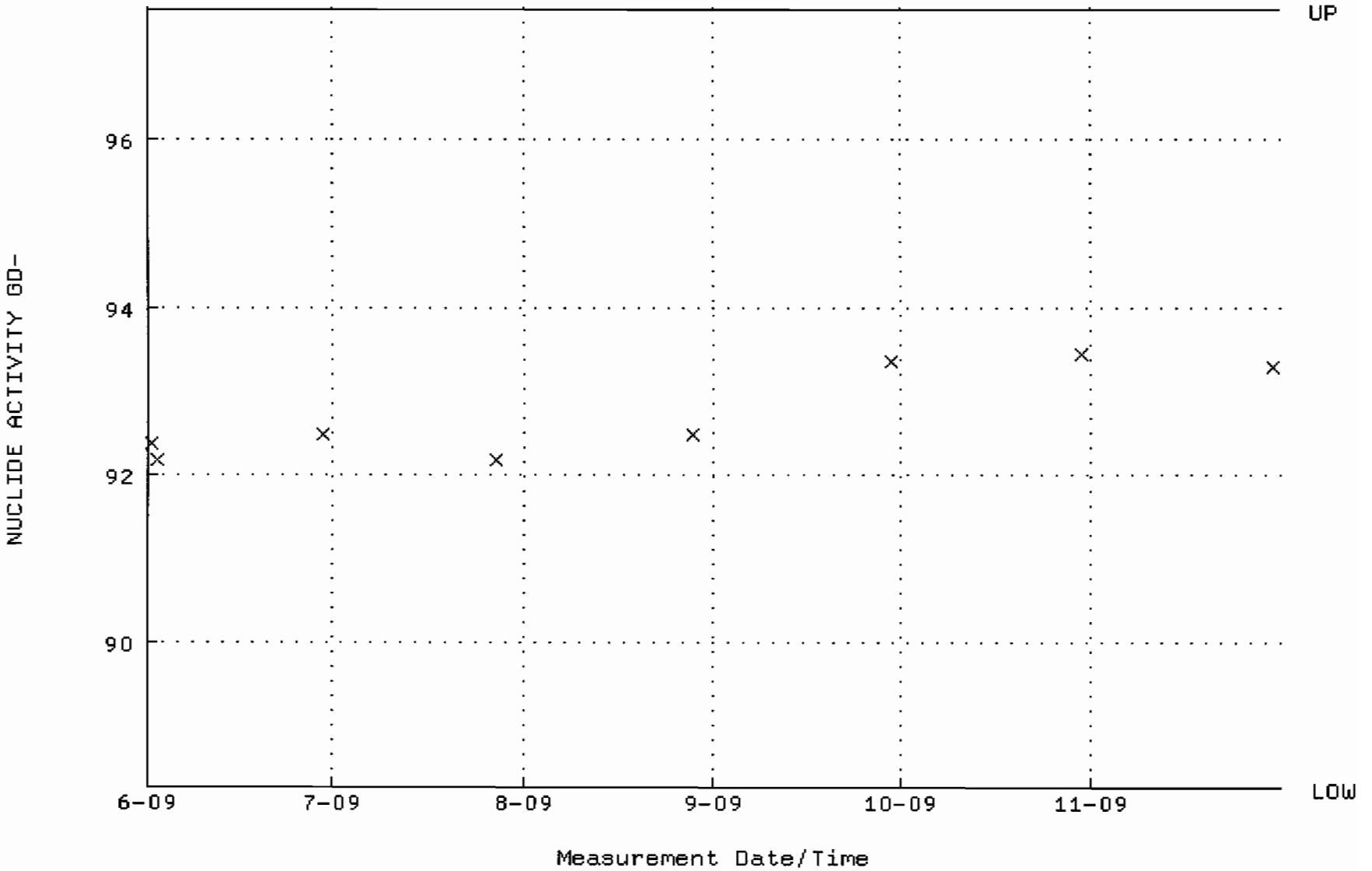

QA filename : DKA100:[ENV_ALPHA.QA.B]B229.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:45:01 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

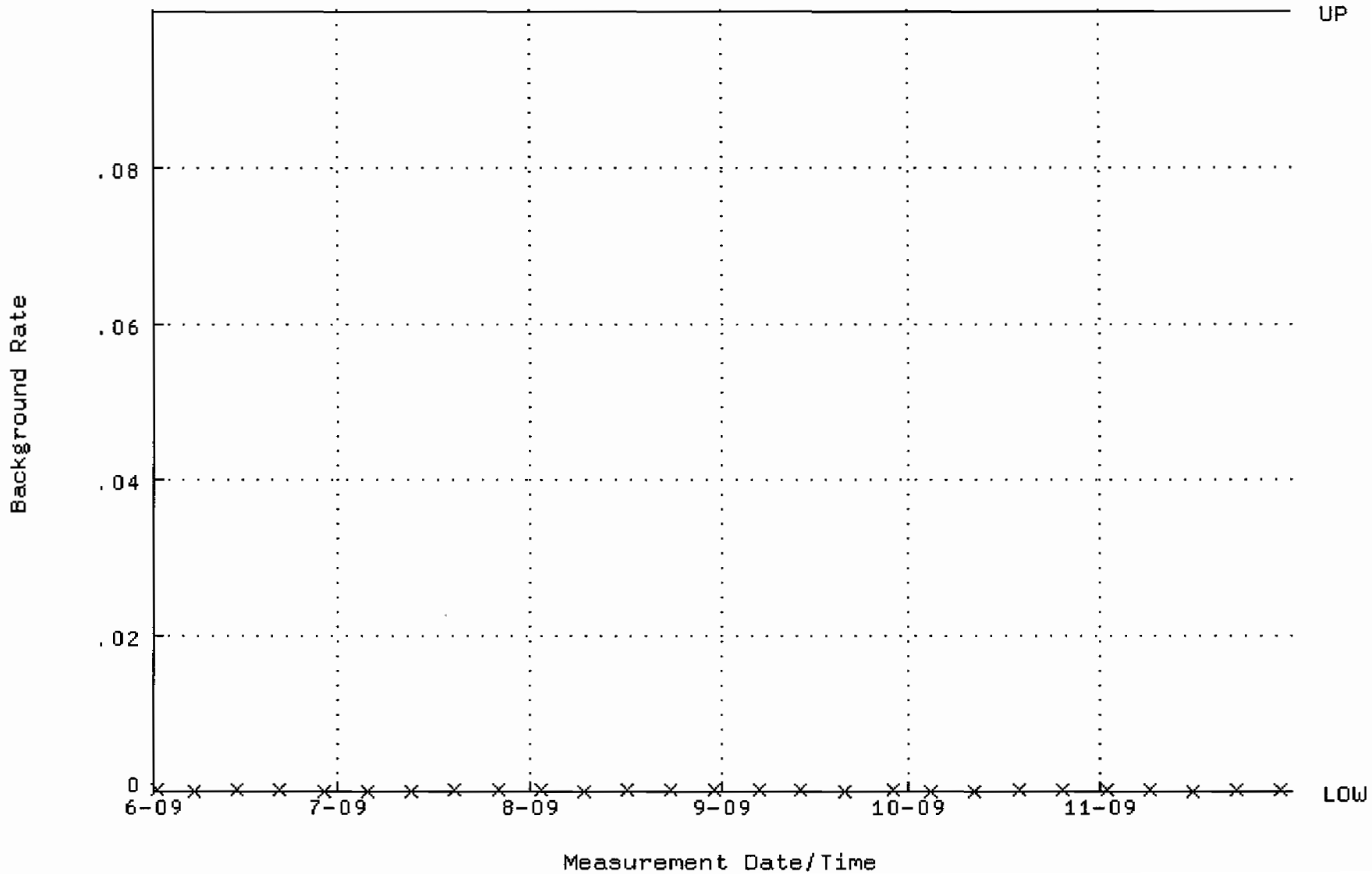

QA filename : DKA100:[ENV_ALPHA.QA.W]W230.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:22 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.366240 through 0.386240

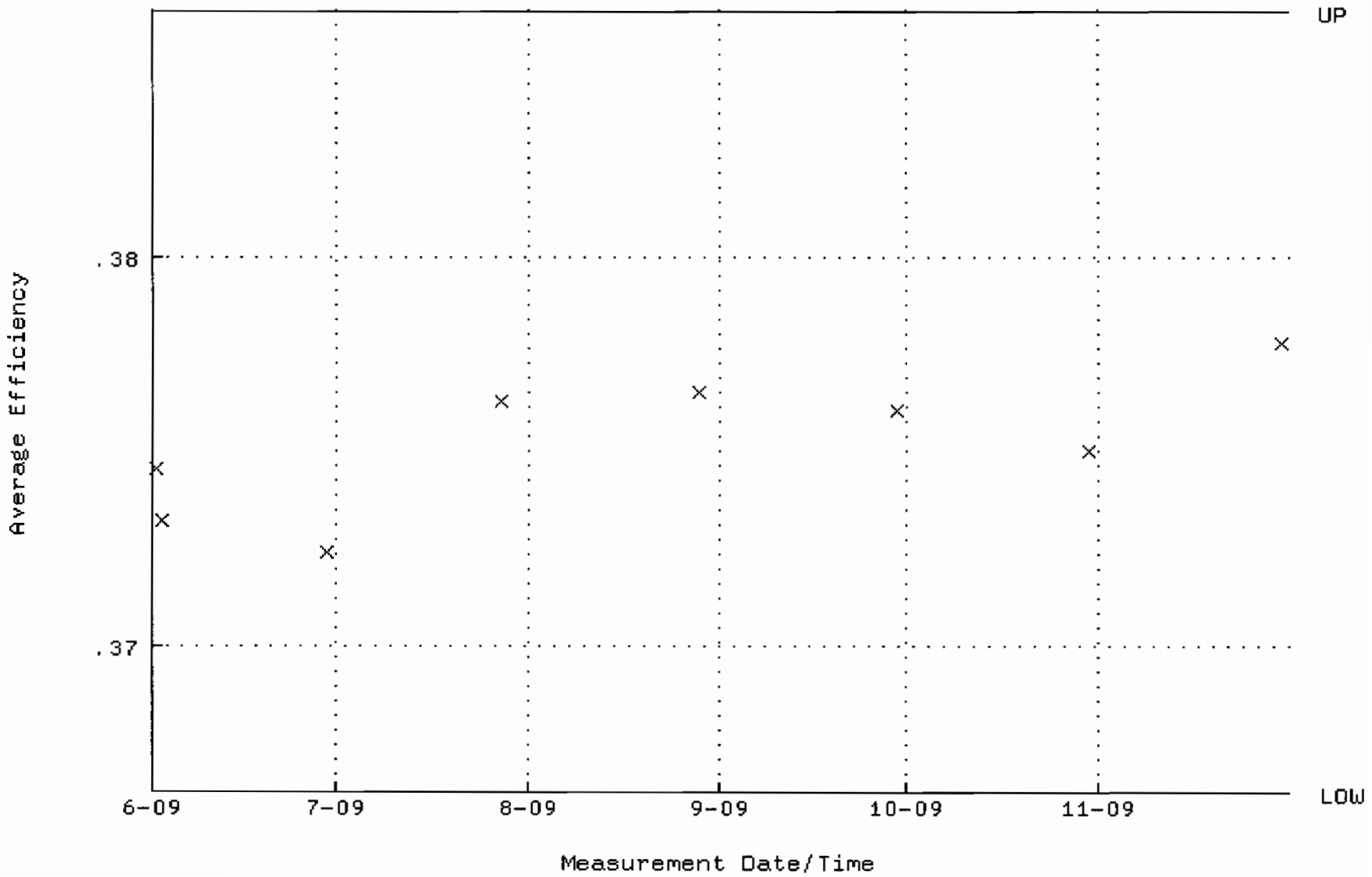

QA filename : DKA100:[ENV_ALPHA.QA.W]W230.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:22 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 85.7127 through 94.7351

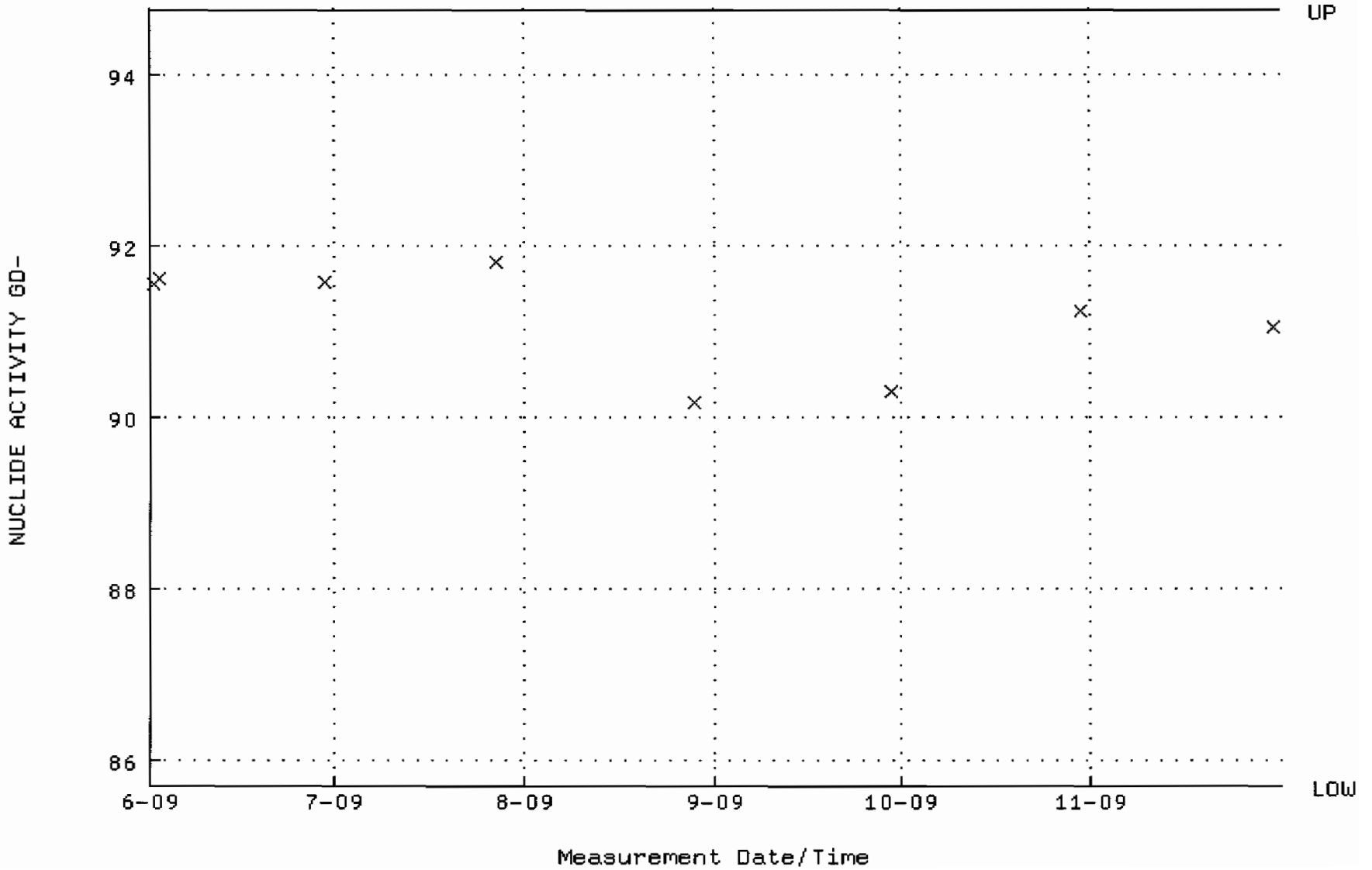

QA filename : DKA100:[ENV_ALPHA.QA.B]B230.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:45:05 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

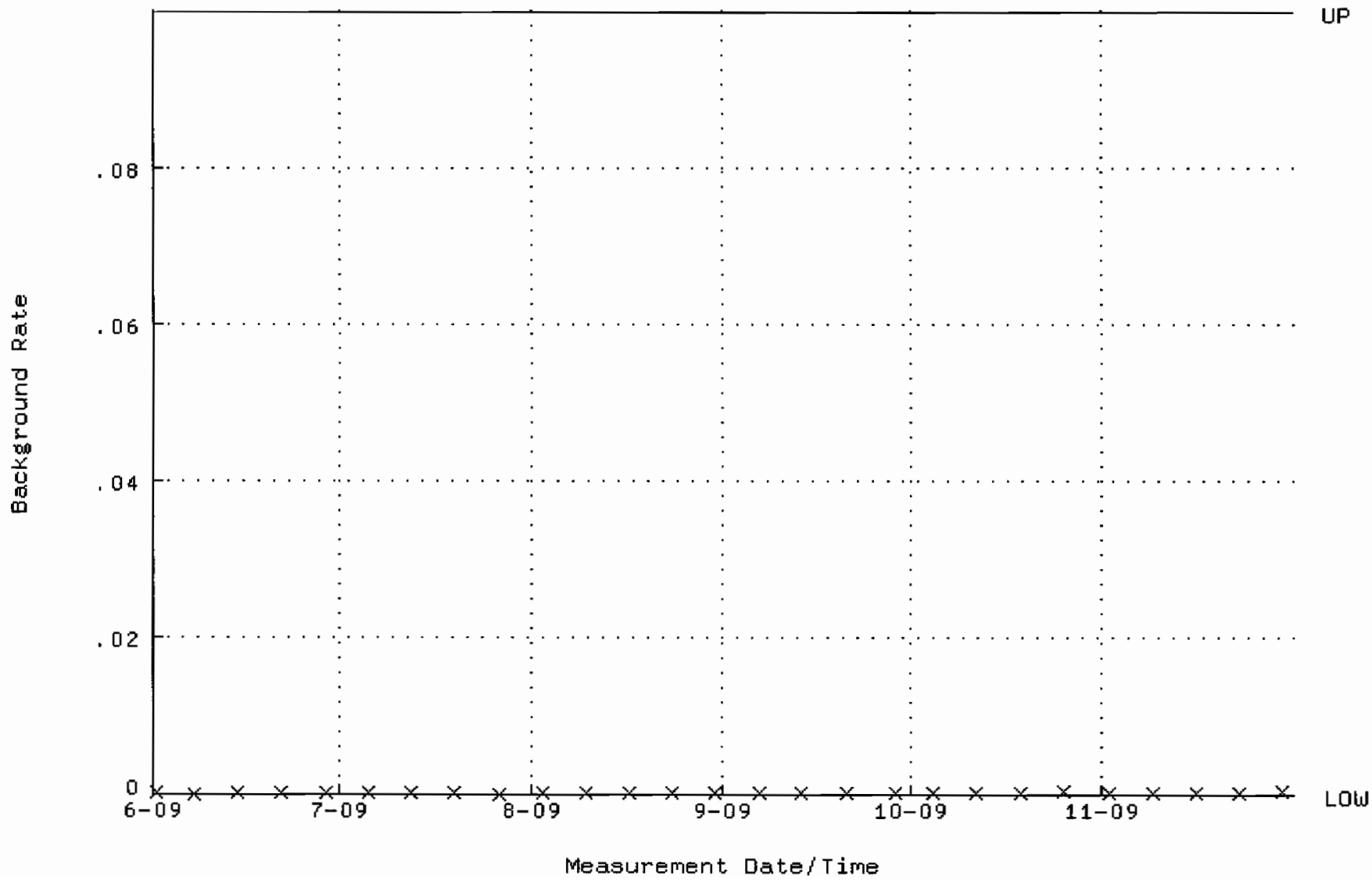

QA filename : DKA100:[ENV_ALPHA.QA.W]W231.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:27 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.378748 through 0.398748

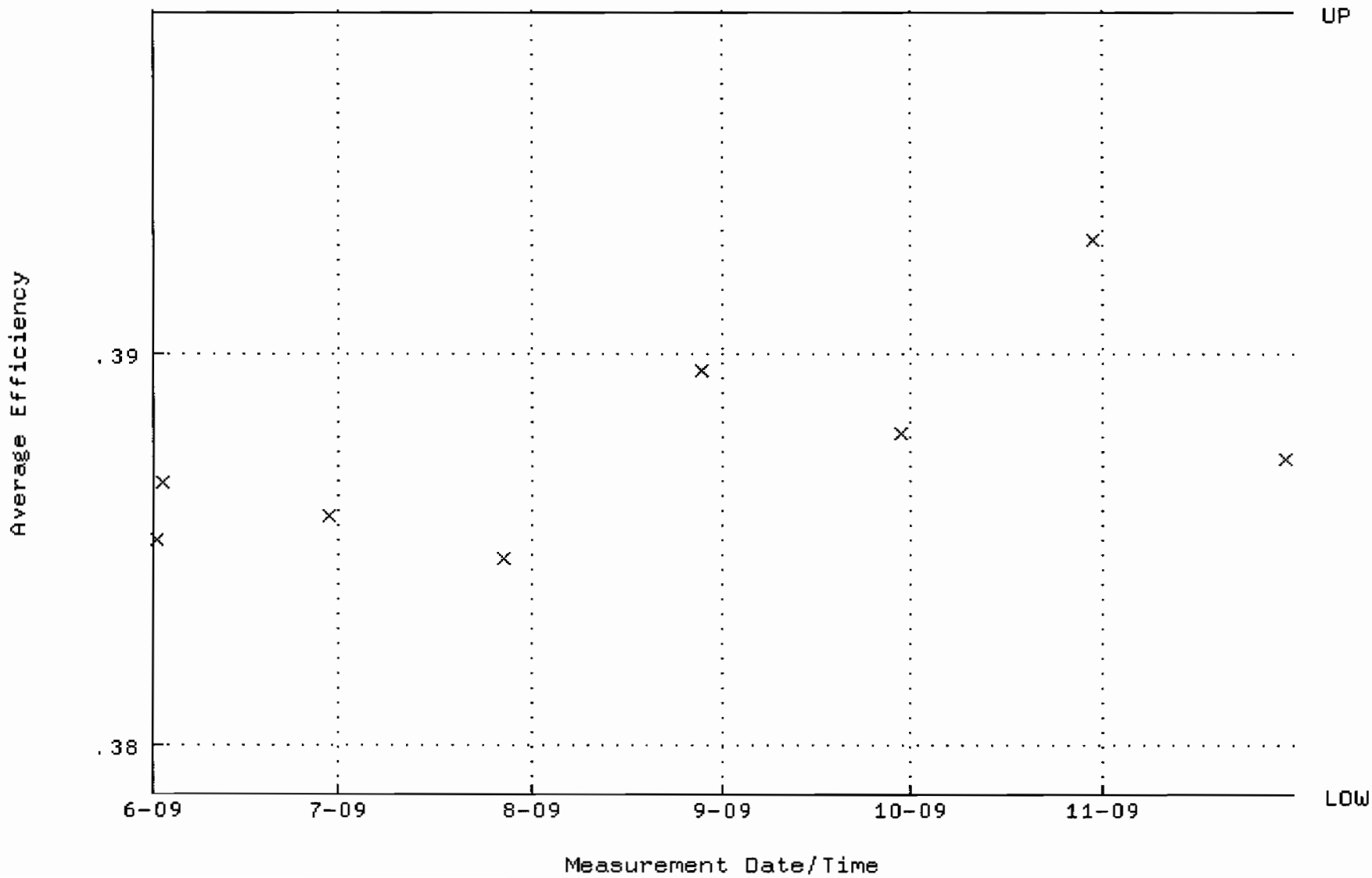

QA filename : DKA100:[ENV_ALPHA.QA.W]W231.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:27 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 85.6783 through 94.6971

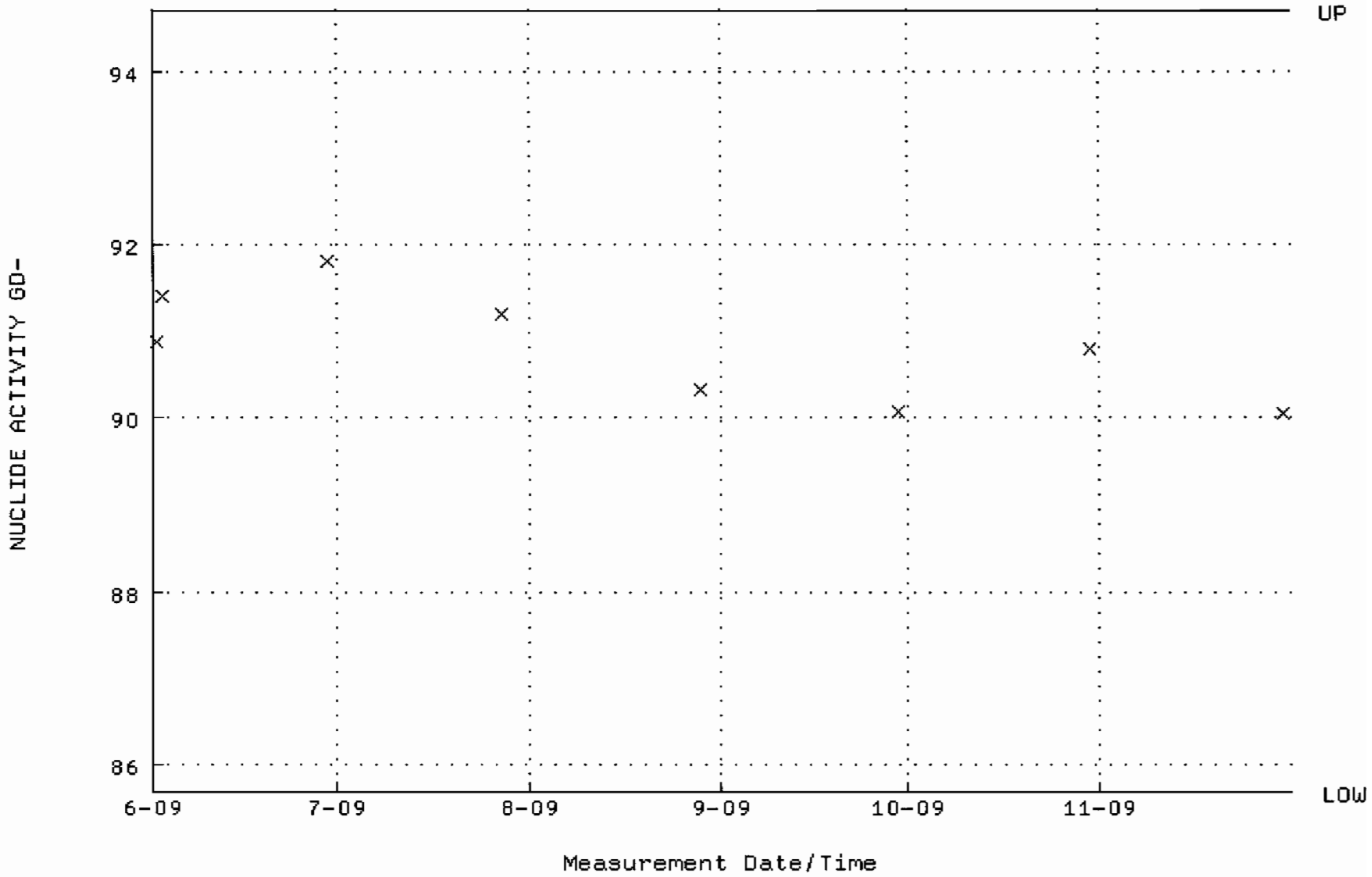

QA filename : DKA100:[ENV_ALPHA.QA.B]B231.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:45:10 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

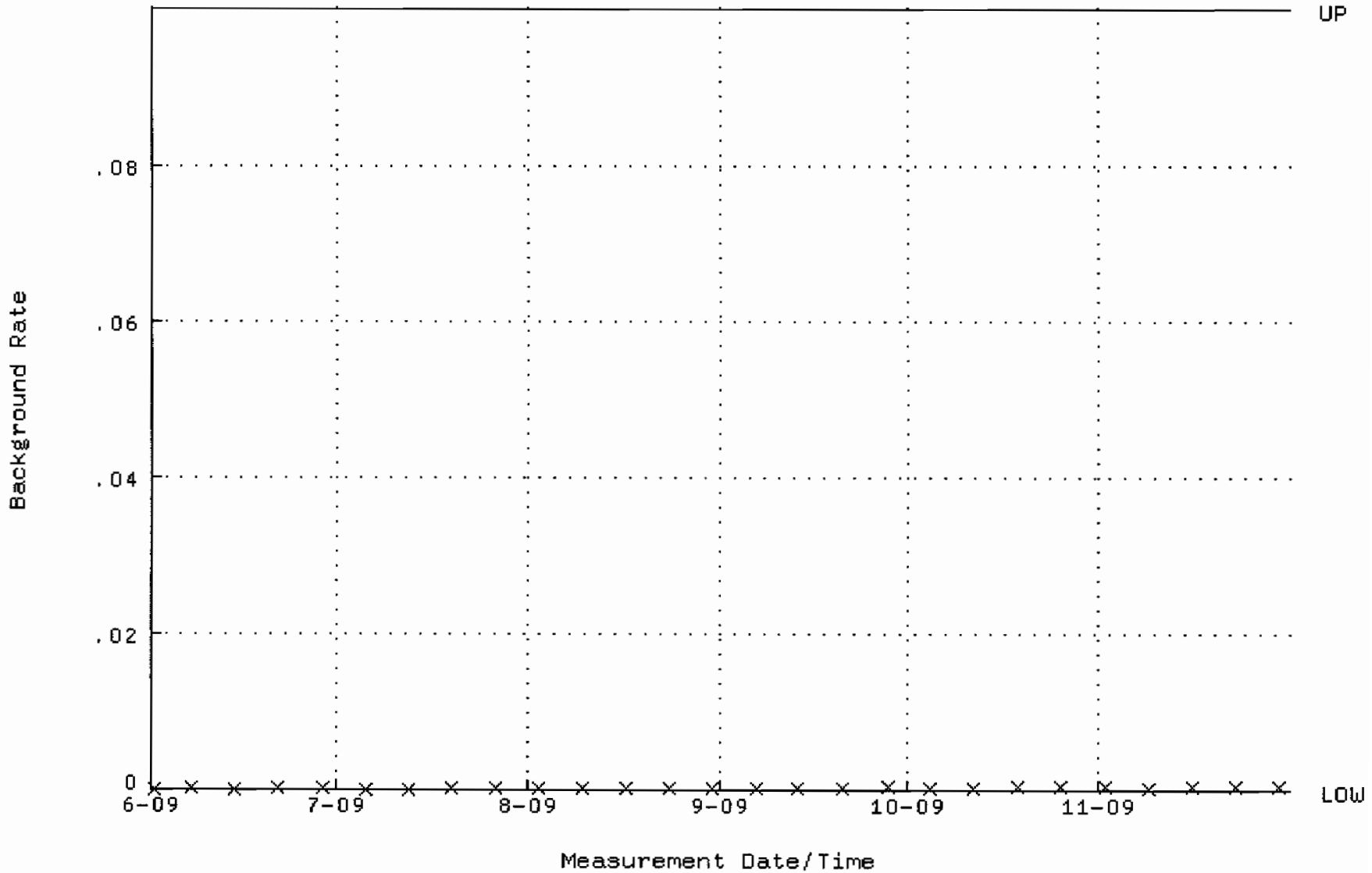

QA filename : DKA100:[ENV_ALPHA.QA.W]W232.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:32 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.364210 through 0.384210

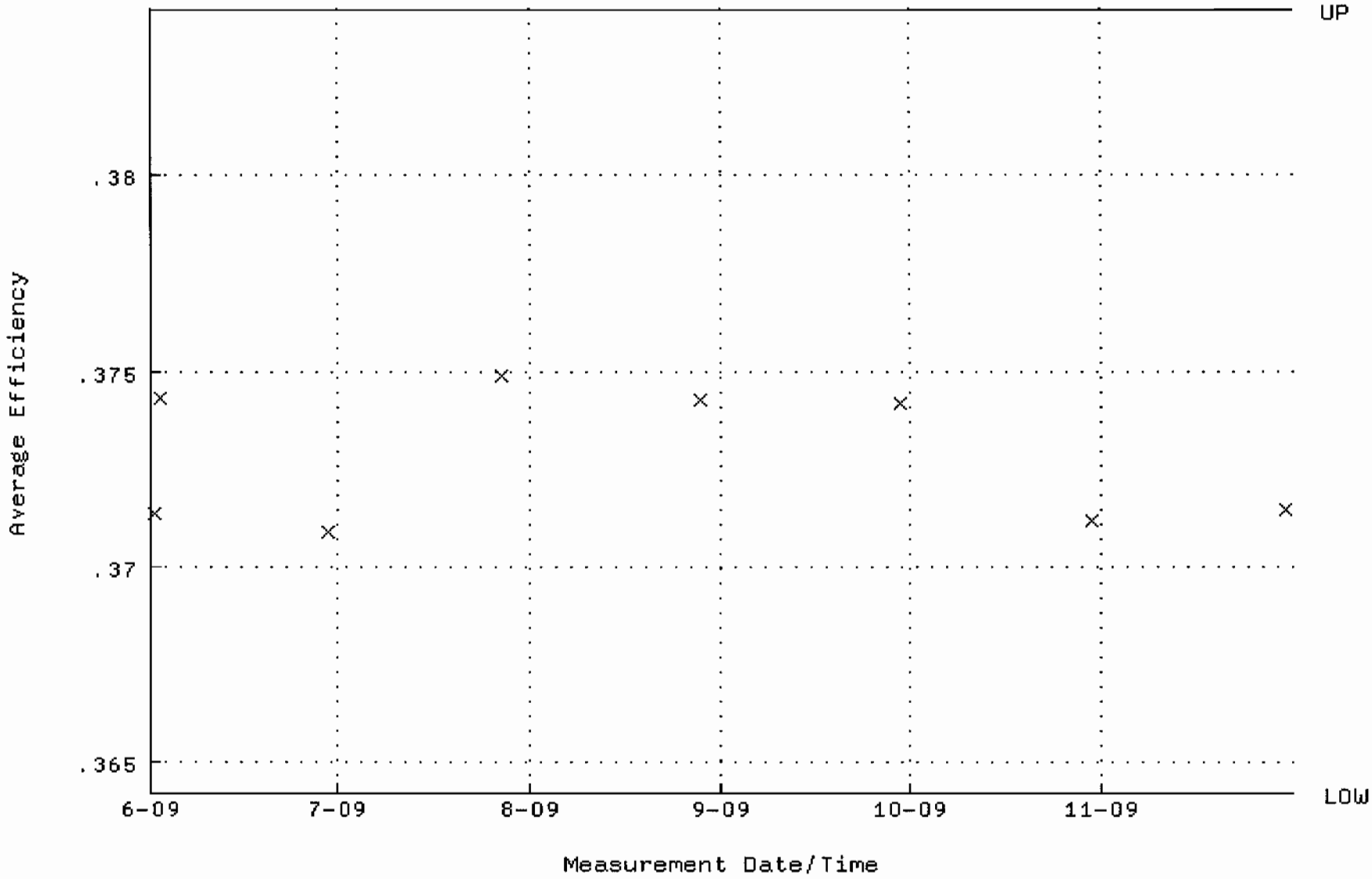

QA filename : DKA100:[ENV_ALPHA.QA.W]W232.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:32 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 84.1819 through 93.0431

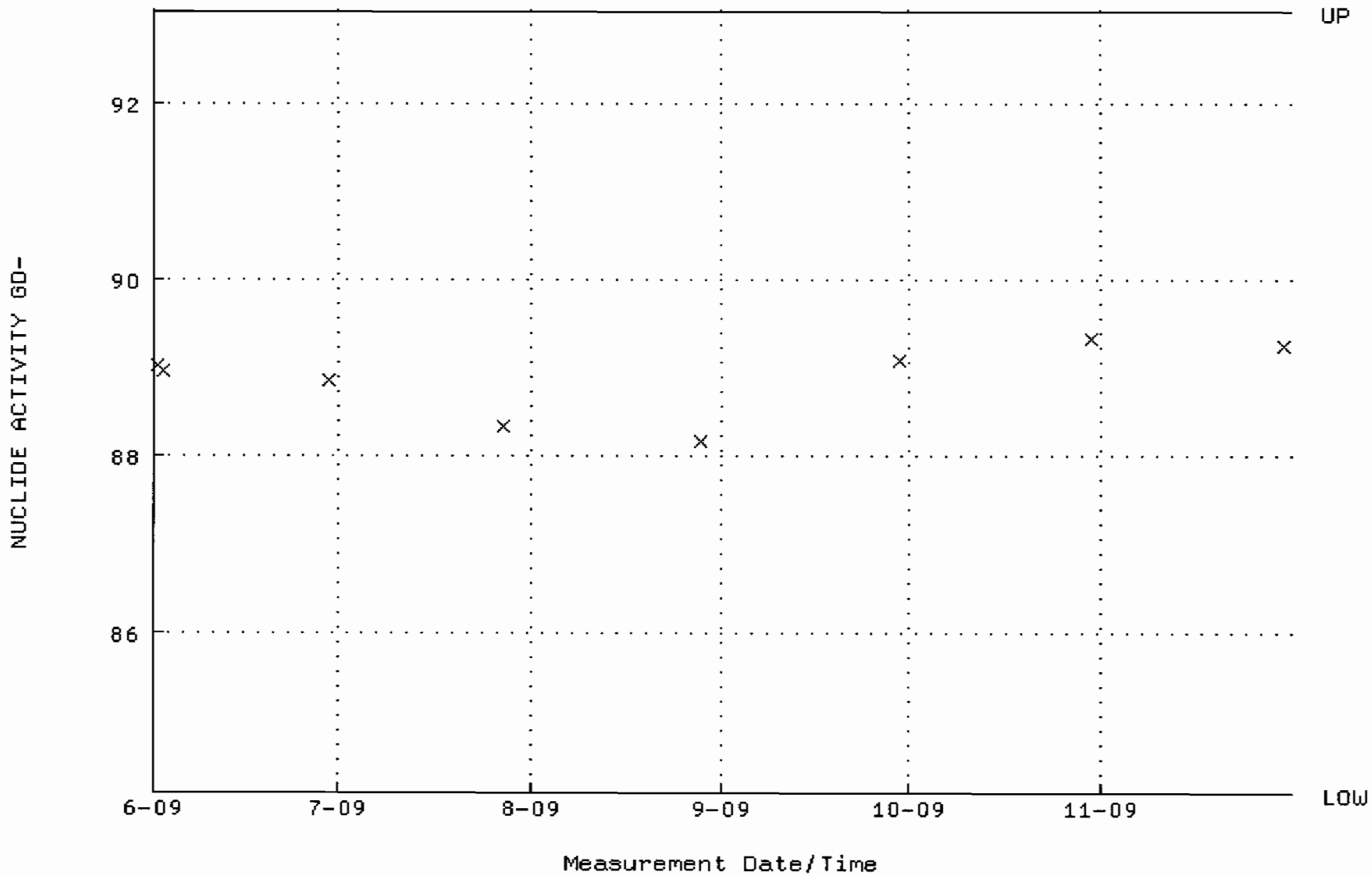

QA filename : DKA100:[ENV_ALPHA.QA.B]B232.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:45:14 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

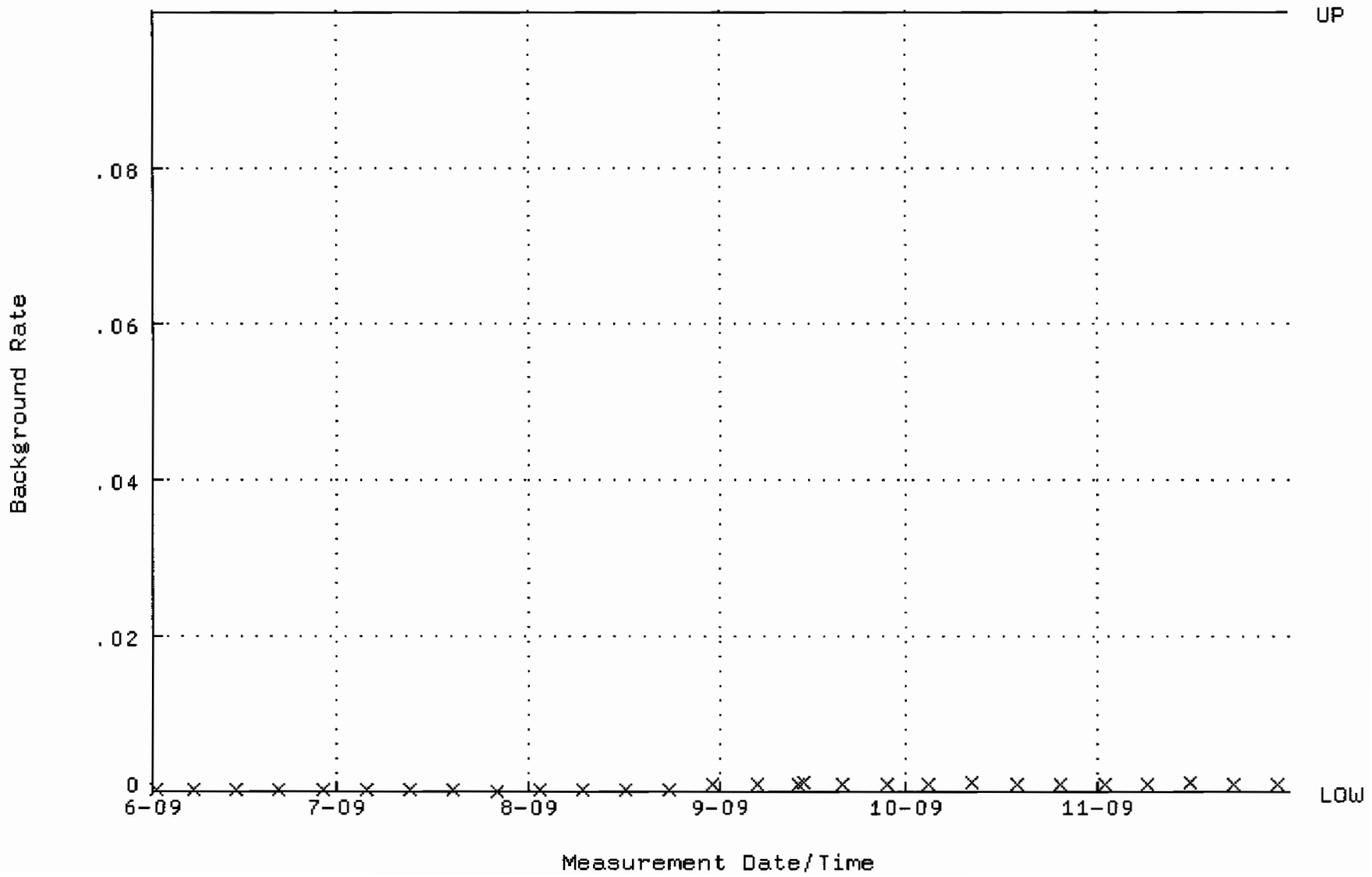

QA filename : DKA100:[ENV_ALPHA.QA.W]W233.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 1-JUN-2009 11:32:37 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.372001 through 0.392001

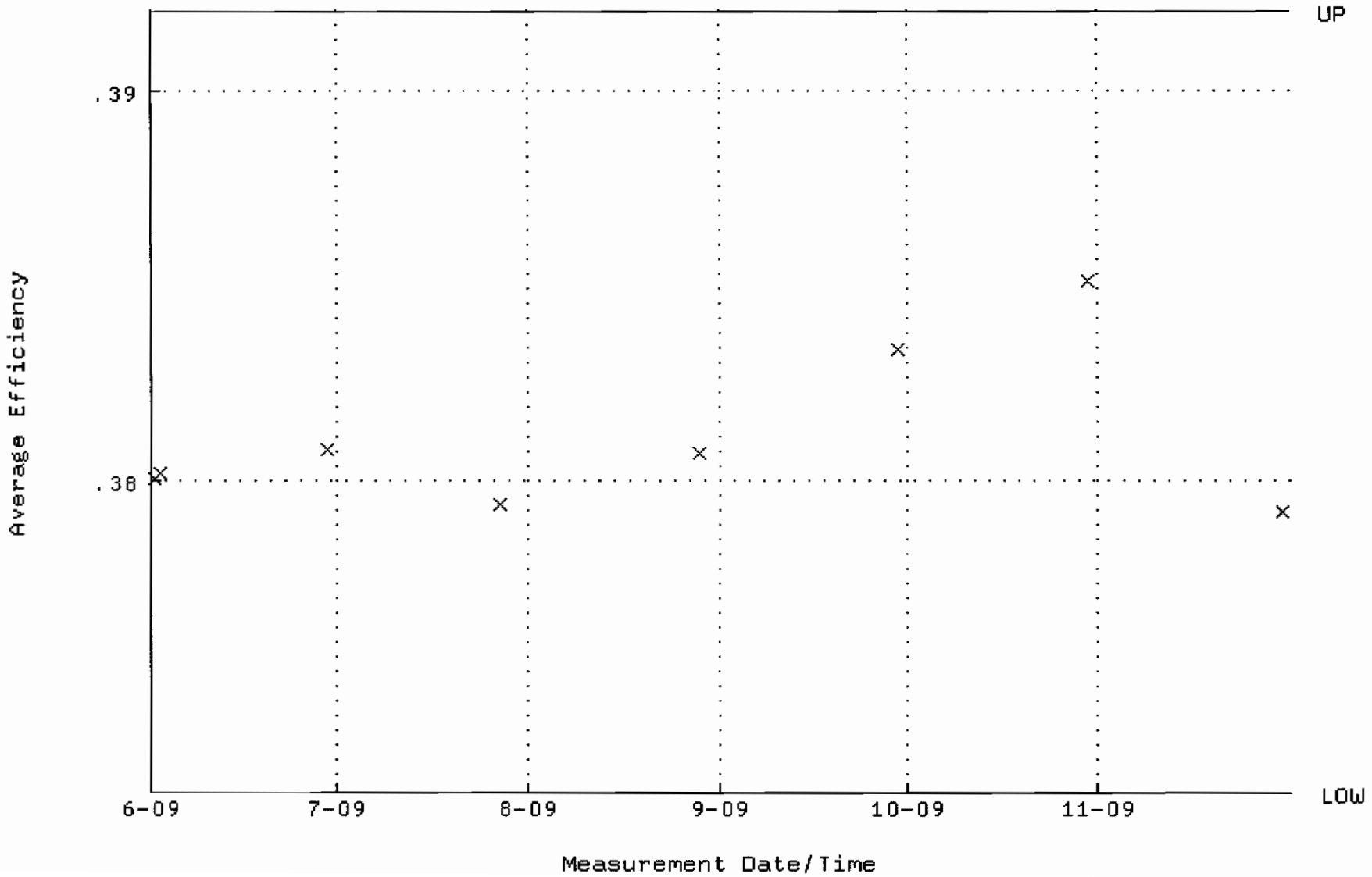

QA filename : DKA100:[ENV_ALPHA.QA.W]W233.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 1-JUN-2009 11:32:37 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 82.9652 through 91.6984

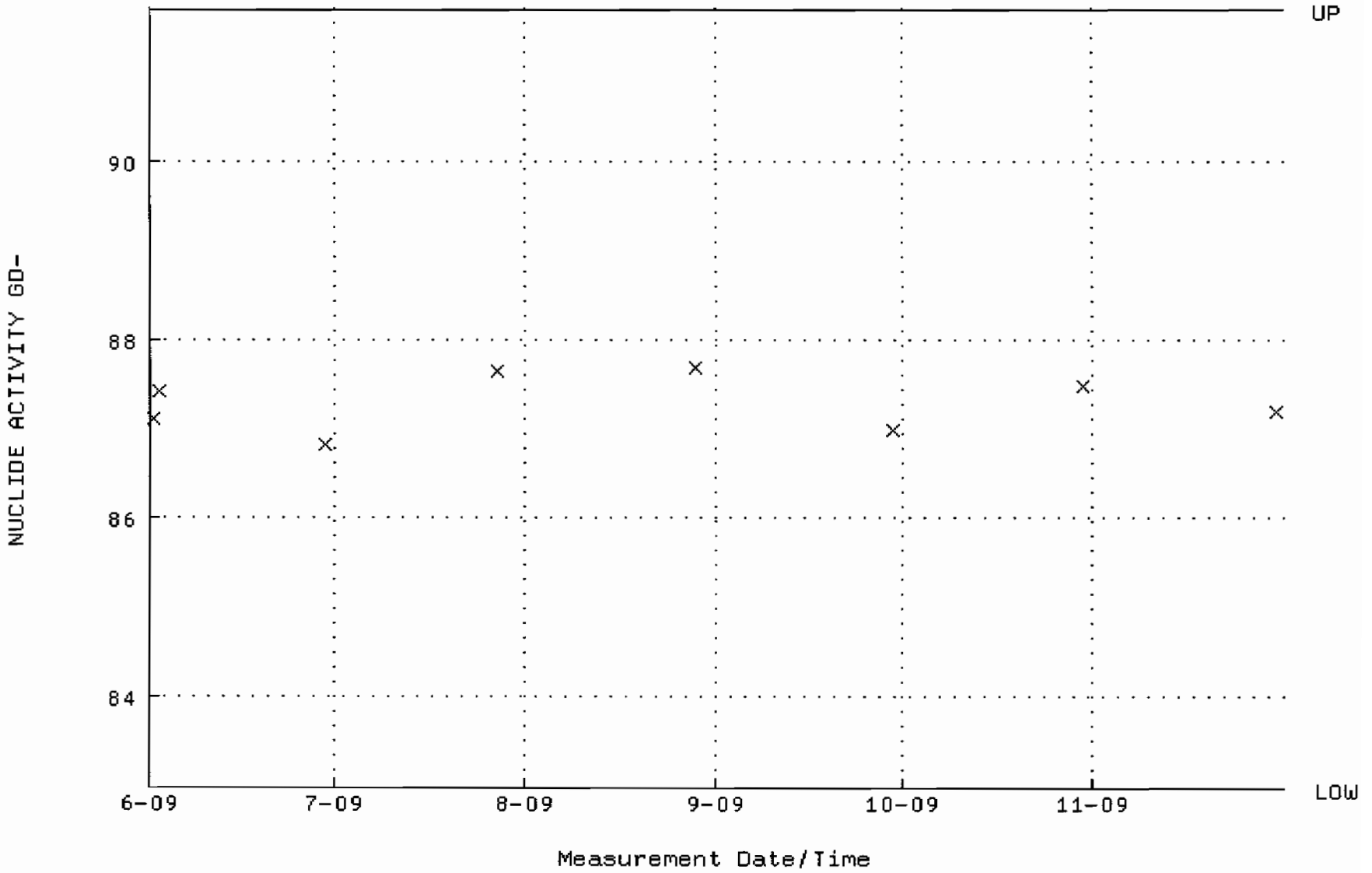

QA filename : DKA100:[ENV_ALPHA.QA.B]B233.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 1-JUN-2009 17:45:21 through 1-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

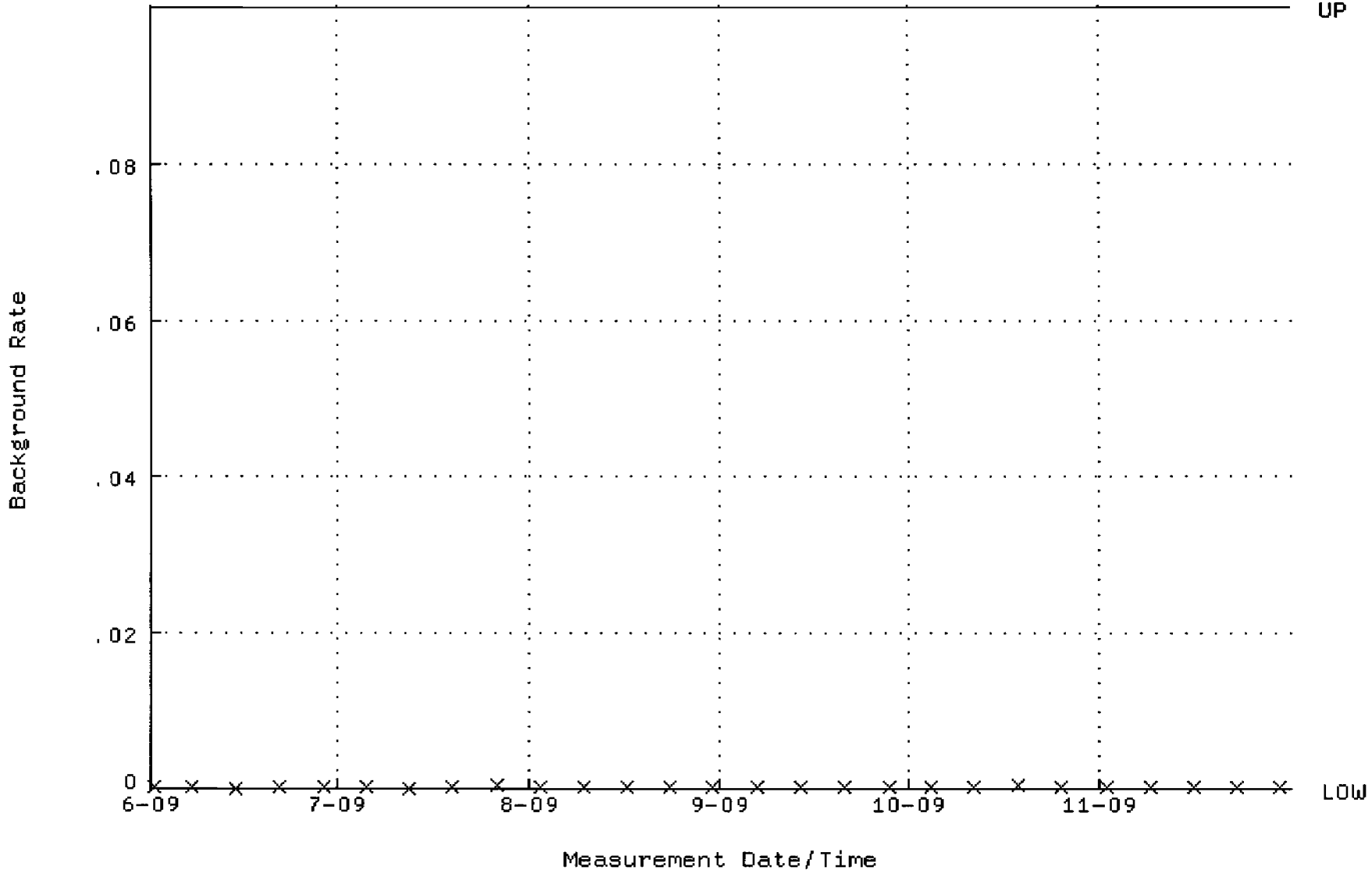

STANDARDS DATA

0244-A Characterization

Sample #	Uranium-233/234 Result (pCi/g)	Uranium-238 Result (pCi/g)	Thorium-230 Result (pCi/g)
0244-A 1	6.59	6.12	25.3
0244-A 2	6.36	6.07	28.5
0244-A 3	5.78	5.53	26.5
0244-A 4	6.48	5.97	25.5
0244-A 5	5.65	5.59	26.2
0244-A 6	6.96	5.78	27.0
0244-A 7	5.95	5.75	24.2
0244-A 8	5.29	5.67	27.2
0244-A 9	5.51	6.05	24.3
0244-A 10	6.37	5.57	25.6
0244-A 11	6.50	5.80	25.8
0244-A 12	6.13	5.42	22.4
0244-A 13	5.49	5.24	24.7
0244-A 14	6.19	5.21	26.9
0244-A 15	6.50	6.27	27.6
0244-A 16	6.50	5.24	24.9
0244-A 17	6.25	6.05	24.7
0244-A 18	6.14	6.00	25.4
0244-A 19	6.19	6.14	26.4
0244-A 20	5.67	5.61	23.2
Mean Value	6.13	5.75	25.62
1 sigma	0.439	0.325	1.493
2 sigma	0.878	0.650	2.986
75% Limit	4.60	4.31	19.22
125% Limit	7.66	7.19	32.03
Expected Result	6.2 +/- 4.0	6.0 +/- 4.0	24.5 +/- 0.6
Achieved Results	6.13 +/- 0.439	5.75 +/- 0.325	25.62 +/- 1.493

REFERENCE DATA 4/14/2000 Jeff C Neld 12/1/04

Angela L. Johnson 12/3/04

TRM

Invoice:

5 boxes of TRM-1
10 " " TRM-2 and 3
5 " each of NRM-1 through 6
7 " baghouse dirt

Use 1/4 gm x 10 Samples WITH Together for TRM-2

Table 7. Recommended Concentrations of Tailings Reference Materials (pCi/g)

	TRM–1	TRM–2	TRM–3	TRM–4
U–238	99 ± 6	6.0 ± 4.0	19.6 ± 1.4	44.9 ± 1.6
U–234	105 ± 6	6.2 ± 4.0	19.6 ± 1.9	44.6 ± 1.2
Th–230	471 ± 11	24.5 ± 0.6	58.5 ± 2.1	44.0 ± 1.6
Ra–226	489 ± 17	25.4 ± 0.9	60.3 ± 2.3	42.9 ± 1.2
Pb–210	425 ± 24	22.1 ± 1.2	56.0 ± 2.1	38.9 ± 2.0

Attention Nancy Slater At GEL
Not For Log-In

9911627-01 -> 07

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 (SMO USE)
Carrier/Waybill No.: 726794
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept. _____
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	Lab Sample ID (LAB USE)
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special Instructions Below	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA		
-												
-												
-												
-												
-												
-												
-												

Reference LOV (available at SMO)

RMMA ☐ Yes ☒ No Ref. No.
Sample Disposal ☐ Return to Client ☒ Disposal by lab

Sample Tracking (SMO USE): Date Entered (mm/dd/yy) / Entered by

Turnaround Time ☒ Normal ☐ Rush Required Report Date

QC Limits

Special Instructions/QC Requirements
EDD ☐ Yes ☒ No
Raw data package ☐ Yes ☒ No
These "samples" are well characterized and materials being sent to GEL on behalf of Hank Hinton.
Please list as separate report.

Abnormal Conditions on Receipt (LAB USE)

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	Douglas E. Perry	DEP	Weston / 7577 / 845-0867

1. Relinquished by	Douglas E. Perry	Org. WESTON	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

0244-B Characterization

Sample #	Plutonium-239 Result (pCi/g)	Plutonium-238 Result (pCi/g)	Americium-241 Result (pCi/g)
0244-B 1	39.9	7.88	38.4
0244-B 2	44.1	7.97	40.6
0244-B 3	45.8	6.56	31.8
0244-B 4	43.6	7.69	31.5
0244-B 5	43	7.9	40.2
0244-B 6	43.5	7.84	29.4
0244-B 7	41.3	7.67	36
0244-B 8	44.3	6.95	33.2
0244-B 9	42.7	7.2	29.2
0244-B 10	44.9	7.69	30
0244-B 11	41.4	7.22	30.2
0244-B 12	41.3	7.74	36
0244-B 13	39.2	6.65	33.8
0244-B 14	39.6	7.78	31.1
0244-B 15	45.3	8.41	37.3
0244-B 16	38.1	6.74	33.6
0244-B 17	48.5	8.51	30.5
0244-B 18	36.5	7.23	38.6
0244-B 19	35.3	6.98	30.9
0244-B 20	37.4	8.55	31.3
Mean Value	41.79	7.56	33.68
1 sigma	3.418	0.596	3.724
2 sigma	6.835	1.193	7.448
75% Limit	30.75	6.02	24.38
125% Limit	51.25	10.04	40.63
Expected Result	41.0 +/- 3.0	8.03 +/- 0.37	32.5 +/- 1.1
Achieved Results	41.79 +/- 3.418	7.56 +/- .596	33.68 +/- 3.724

REFERENCE DATA 4/14/2000

Amanda L. Fehr 4/30/04
[illegible] 5/1/04

PEM-1

PREPARATION AND CHARACTERIZATION OF THE PERFORMANCE EVALUATION SOIL SAMPLE PEM-1

INTRODUCTION

Rust Geotech (Rust) was contracted by Los Alamos National Laboratory (LANL) to prepare and characterize a soil performance evaluation sample designated PEM-1. This report describes sample preparation, homogeneity assessment, and determination of the concentrations of 28 elements and radioactive isotopes in the sample.

SAMPLE PREPARATION

Rust received nine five-gallon buckets of soil from LANL. The soils were dried overnight in ovens at 103 °C. The large pieces of leaves and sticks were removed and the soils were ground with ceramic-plate grinders to a particle size that passed through a 325 mesh screen. The samples were blended at the proportions specified by LANL for 48 hours in a 3-cubic-foot cross-flow blender. The sample identifications and the amounts used are listed in Table 1.

Table 1. Sample Identifications and Amounts Used to Prepare PEM-1

LANL Sample ID	Amount Used (kg)
AAA 1592	1.7
AAA 2505-1	10.9
AAA 2505-2	12.8
AAA 2750-1	8.4
AAA 2750-2	8.4
AAA 3205	12.6
AAA 8581	4.2
AAB 3417	12.8
AAB 3475	12.6

The blended sample was transferred to three five-gallon plastic containers. While the sample was being transferred, 10 samples were taken at pre-determined time intervals to be used for homogeneity assessment and sample characterization. These samples are believed to be representative of the bulk material.

Attention Nancy Slater At GEL
Not For Log-In

9911627-01-70

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped 11-16-99 SMO USE
Carrier/Waybill No. 7-2-6-7-9-4-1
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1/3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept. _____
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	Lab Sample ID
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Instructions	
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Below	
-												
-												
-												
-												
-												
-												
-												

Reference LOV (available at SMO)

LAB USE

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab
Turnaround Time ☒Normal ☐Rush Required Report Date

Sample Tracking SMO USE
Data Entered (mm/dd/yy)
Entered By
QC Initials

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well characterized and materials being sent to GEL on behalf of Hank Hinton
Please list as separate report.

Abnormal Conditions on Receipt LAB USE

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	Douglas E. Perry	DEP	Weston / 7577 / 845-0867

1. Relinquished by	Douglas E. Perry	Org. WESTON	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original To Accompany Samples, Laboratory Copy (White) — 1st Copy To Accompany Samples, Return to SMO (Blue) — 2nd Copy SMO Suspense Copy (Yellow) — 3rd Copy Field Copy (Pink)

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution: 5.3739 g (in a 5 ml Flame Sealed Ampoule)

b. Chemical form: Am(NO3)3 in 2N HNO3

c. Carrier content: None added

d. Density: 1.0651 g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under: 228, 278 keV.

Branching ratio(s) used: 0.108, 0.1420 gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration: ±3.0%

b. Random uncertainty in assay: ±0.4%

c. Random uncertainty in weighing(s): ±0.0%

d. Total uncertainty at the 99% confidence level: ±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Khan
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ **1. STANDARD WIPE TEST**

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **2. SOAK TEST**

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **3. SOAK TEST -- BERYLLIUM WINDOW**

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **4. GAS SOURCE TEST (Radioactive Gas)**

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ **5. OTHER LEAK TEST**

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **6. LEAK TEST NOT APPLICABLE**

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Angela Johnson
Prep Date:	01/05/1994
Verification Date:	05/11/2009
Expiration Date:	05/11/2010
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2005	09/10/2006
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/16/2005	Brenda Burke	.001224	500	445-96-2-DD	5.07144 dpm/mL	08/18/2007	08/18/2008
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
10/13/2005	Brenda Burke	.0017	500	445-96-2-EE	7.0435 dpm/mL	11/15/2005	11/15/2006
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
10/14/2005	Mary Aders	.0141	500	445-96-2-FF	58.4196 dpm/mL	10/14/2005	10/14/2006
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
05/10/2006	Mary Aders	2.0753	1000	445-96-2-GG	4299.227 dpm/mL	09/30/2008	09/30/2009
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
06/07/2006	Mary Aders	.0365	1000	445-96-2-HH	75.614 dpm/mL	06/19/2006	06/19/2007
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
05/11/2006	Brenda Burke	.000009739	100	445-96-2-II	.201761 dpm/mL	07/26/2006	07/26/2007
07/20/1995	Theresa Austin	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
05/01/2007	Daniel Roy	.0352	1000	445-96-2-JJ	72.9209 dpm/ml	04/30/2008	04/30/2009
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
06/12/2007	Julie Strock	.01038	250	445-96-2-KK	22.1496 dpm/mL	05/28/2008	05/28/2009

09/11/1995	Theresa Austin	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Austin	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
11/01/2007	Eric Williamson	.001274	500	445-96-2-MM	5.27945 dpm/mL	04/06/2008	04/06/2010
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/19/2008	Daniel Roy	.0424	1000	445-96-2-NN	87.8366 dpm/ml	04/16/2009	04/16/2010
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/04/2008	Julie Strock	.00001005	100	445-96-2-PP	.20819 dpm/mL	12/29/2008	12/29/2009
01/28/2000	Angela Johnson	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
09/29/2008	Julie Strock	.0025219	250	445-96-2-QQ	20.8977 dpm/mL	09/30/2008	09/29/2009
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/23/2009	Tina Schoneman	.001251	500	445-96-2-RR	4.8075 dpm/mL	04/23/2009	04/23/2010
04/13/2001	Angela Johnson	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
05/08/2009	Mary Aders	.0141	1000	445-96-2-SS	29.2098 dpm/ml	05/11/2009	05/11/2010
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003

07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
06/03/2009	Julie Strock	.00000927	100	445-96-2-TT	.1923 dpm/mL	06/05/2009	06/03/2010
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
06/02/2009	Mary Aders	2.1177	1000	445-96-2-UU	4385.1449 dpm/ml	06/04/2009	06/04/2010
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Johnson	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2006	03/14/2007
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Eric Williamson	.011	1000	445-96-2-Z	22.7877 dpm/mL	04/03/2007	04/03/2008

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Am-243 Standard *445-96-2-SS*

M. Aders	Isotope	Value	Uncertainty
5/15/2009	445-96-2-SS #1	1.360	0.1690
	445-96-2-SS #2	1.370	0.1690
	445-96-2-SS #3	1.290	0.1590

Mean Value (Counting) =	1.340	101.99	**Pass**
Stdev =	0.043588989		**Rule 3 (Pass/Fail)**

Target =	1.314
Lower Limit =	1.252822021
Upper Limit =	1.427177979
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.087177979
10 % of Mean =	0.134
Rule 2 (Pass/Fail)	**Pass**

The analyst prepared three standard verification sources for standard ***445-96-2-SS*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Cm-244*** standard ***0533-O*** and 50 micrograms of neodymium carrier in a disposable centrifuge tube. Each standard was diluted with 4 mL of 2 M HCl and 6 mL of DI Water. Two mL of 48% HF was added to precipitate Nd(and Americium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Am-243 were calculated by comparison to Am-241certified values.

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

Mary Fridean 5/15/09
Rob Robin 007509

1373

National Institute of Standards & Technology
Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

RECEIVED

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 to 7.

RC - S - 051 - 0912

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994 [b]***
Massic activity of the solution [c]	**26.31 $Bq \cdot g^{-1}$**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**
Solution density	**(1.105 ± 0.002) $g \cdot mL^{-1}$ at 20 °C [f]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration ($mol \cdot L^{-1}$)	Mass Fraction ($g \cdot g^{-1}$)
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) $Bq \cdot g^{-1}$ [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three $4\pi\alpha$ liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	$^{239}Pu + ^{240}Pu$ <0.000 001 [u]	$^{239}Pu + ^{240}Pu$ 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	$^{238}Pu + ^{241}Am$ <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One µSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (µSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 $s^{-1} \cdot g^{-1}$ for energies less than 3.1 MeV,
0.03 $s^{-1} \cdot g^{-1}$ for energies between 3.1 and 4.4 MeV, and
0.003 $s^{-1} \cdot g^{-1}$ for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 19 and 39 keV,
7×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 49 and 92 keV,
2×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 106 and 507 keV,
1×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 515 and 1456 keV, and
5×10^{-6} $s^{-1} \cdot g^{-1}$ for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}•{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1373
Prepared By:	Mary Aders
Carrier Conc:	0.5M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC-S-051-092

A Solution Material Info	
Isotope:	Plutonium-242
Prepared By:	Mary Aders
Prep Date:	10/23/2009
Verification Date:	10/27/2009
Expiration Date:	10/27/2010
Primary Code:	1373-A
Dilution(mL):	200 mL
Mass of Parent(g):	5.3477 g
Density(g/mL):	1.0145
Balance ID:	38110047

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / (Dilution Vol) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (200 mL) = 42.2094 dpm/mL

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (1.0145 g/mL) / (200 mL) = 41.6041 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Pu-242 Standard 1373-*A*

M. Aders	Isotope	Value	Uncertainty
10/27/2009	1373-A	1.970	0.3050
	1373-A	1.900	0.2980
	1373-A	1.950	0.3000

Mean Value (Counting) =	1.940	102.04	**Pass**
Stdev =	0.036055513		**Rule 3 (Pass/Fail)**

Target =	1.90
Lower Limit =	1.867888974
Upper Limit =	2.012111026
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.072111026
10 % of Mean =	0.194
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for standard 1373-A using 0.1 mL for each source. Each standard was combined with 0.1 mL of Pu239 standard 0338-BB and 50 micrograms of neodymium carrier in a disposable centrifuge tube containing 4 mL of 2 M HCl and 6 mL of DI water. Four drops of 25% Hydrazine dihydrochloride were added to each centrifuge tube and swirled. Two mL of 48% HF was added to precipitate neodymium(and plutonium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Pu-242 were calculated by comparison to Pu-239 certified values.

10/28/09

11/02/09

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

1283

78747-278

U-232 5 mL Liquid in Flame Sealed Vial

Customer: GEL Laboratories, LLC
P.O. No.: 7319 RD, Item 1

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated using a germanium gamma spectrometer system.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Isotope:	U-232
Activity (Bq):	3.754 E3
Half-Life:	68.9 years
Calibration Date:	December 9, 2008 12:00 EST
Relative Expanded Uncertainty (k=2):	5.0%

Comments:
Impurities: U-233 <0.3%, Am-241 <0.15%
5.20453 grams 1M HNO_3 solution.

Source Prepared By: _____
W. Mao, Radiochemist

QA Approved: _____ Date: 12-11-08
D. M. Montgomery, QA Manager

End of Certificate

RECEIVED 12/15/08
RC-S-OE

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1283
Prepared By:	Daniel Roy
Carrier Conc:	1M HNO3
Reference Date:	12/09/2008
Ampoule Mass (g):	5.20453 g
Uncertainty:	+/- 5 %
LogBook No:	RC-S-051-002

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Daniel Roy
Prep Date:	12/16/2008
Verification Date:	12/30/2008
Expiration Date:	12/30/2009
Primary Code:	1283-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.0245 g
Density(g/mL):	1.0285
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (5.20453 g * 100 mL) = 2174.4872 dpm/mL
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (1.0285 g/mL)/ (5.20453 g * 100 mL) = 2114.1700 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/16/2008	Daniel Roy	25.1813	1000	1283-B	53.2375 dpm/ml	12/16/2008	12/16/2009
12/30/2008	Tina Schoneman	2.05	250	1283-C	17.336 dpm/mL	12/30/2008	12/30/2009
12/30/2008	Tina Schoneman	.49	250	1283-D	4.1438 dpm/mL	01/09/2009	01/09/2010
01/14/2009	Mary Aders	25.0528	1000	1283-E	52.9659 dpm/ml	01/15/2009	01/15/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Uranium-232 Standard *1283-E*

Analyst: M. Aders	Serial #	Value		Uncertainty	
Date: 1/14/09	1283-E N1	2.540	pCi/L	0.288	pCi/L
	1283-E N2	2.390	pCi/L	0.272	pCi/L
	1283-E N3	2.450	pCi/L	0.274	pCi/L
Mean Value (Counting) =	2.460	pCi/L		**103.20801**	**Pass**
Stdev =	0.075498344	pCi/L			**Rule 3 (Pass/Fail)**
Target =	2.384	pCi/L			
Lower Limit =	2.309003311	pCi/L			
Upper Limit =	2.610996689	pCi/L			
Rule 1 Pass/Fail	**Pass**				
Two sigma =	0.150996689				
10 % of Mean =	0.246				
Rule 2 (Pass/Fail)	**Pass**				

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for standard **1283-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **1163-E** and was diluted to 10 mL with DI water. 50 micrograms of neodymium carrier and 1ml of Titanium Chloride were added. The solution was allowed to sit for 30 seconds. One mL of 48% HF was then added to precipitate neodymium (and uranium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for U-238 were calculated by comparison to U-232 certified values.

Mary L. Aders 1/19/09
Amanda L. Fahr 2/9/09

RUNLOGS

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928307**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
1201984991	MB	HAKB	1224	10-DEC-09 12:42	DUSE		
241546016	SAMPLE	HAKB	1209	10-DEC-09 13:35	DONE		
241546001	SAMPLE	HAKB	1211	10-DEC-09 19:57	DONE		
241546002	SAMPLE	HAKB	1212	10-DEC-09 19:57	DONE		
241546003	SAMPLE	HAKB	1213	10-DEC-09 19:57	DONE		
241546004	SAMPLE	HAKB	1214	10-DEC-09 19:57	DONE		
241546005	SAMPLE	HAKB	1215	10-DEC-09 19:57	DONE		
241546006	SAMPLE	HAKB	1216	10-DEC-09 19:57	DONE		
241546007	SAMPLE	HAKB	1217	10-DEC-09 19:57	DONE		
241546008	SAMPLE	HAKB	1218	10-DEC-09 19:57	DONE		
241546011	SAMPLE	HAKB	1225	10-DEC-09 19:57	DONE		
241546012	SAMPLE	HAKB	1226	10-DEC-09 19:57	DONE		
241546013	SAMPLE	HAKB	1227	10-DEC-09 19:57	DONE		
241546014	SAMPLE	HAKB	1228	10-DEC-09 19:57	DONE		
241546015	SAMPLE	HAKB	1229	10-DEC-09 19:57	DONE		
1201984992	DUP	HAKB	1230	10-DEC-09 19:57	DONE		
1201984993	LCS	HAKB	1231	10-DEC-09 19:57	DONE		
241546009	SAMPLE	HAKB	1232	10-DEC-09 19:57	DONE		
241546010	SAMPLE	HAKB	1233	10-DEC-09 19:57	DONE		
1201984991	MB	HAKB	1219	11-DEC-09 19:28	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928308**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241546001	SAMPLE	HAKB	1035	10-DEC-09 10:31	DONE		
241546002	SAMPLE	HAKB	1036	10-DEC-09 10:31	DONE		
241546003	SAMPLE	HAKB	1037	10-DEC-09 10:31	DONE		
241546004	SAMPLE	HAKB	1038	10-DEC-09 10:31	DONE		
241546005	SAMPLE	HAKB	1039	10-DEC-09 10:31	DONE		
241546006	SAMPLE	HAKB	1040	10-DEC-09 10:31	DONE		
241546007	SAMPLE	HAKB	1041	10-DEC-09 10:31	DONE		
241546008	SAMPLE	HAKB	1042	10-DEC-09 10:31	DONE		
241546009	SAMPLE	HAKB	1043	10-DEC-09 10:31	DONE		
241546010	SAMPLE	HAKB	1044	10-DEC-09 10:31	DONE		
241546011	SAMPLE	HAKB	1045	10-DEC-09 10:31	DONE		
241546012	SAMPLE	HAKB	1046	10-DEC-09 10:31	DONE		
241546013	SAMPLE	HAKB	1047	10-DEC-09 10:31	DONE		
241546014	SAMPLE	HAKB	1048	10-DEC-09 10:31	DONE		
241546015	SAMPLE	HAKB	1065	10-DEC-09 12:38	DONE		
241546016	SAMPLE	HAKB	1066	10-DEC-09 12:38	DONE		
1201984994	MB	HAKB	1067	10-DEC-09 12:38	DONE		
1201984995	DUP	HAKB	1068	10-DEC-09 12:38	DONE		
1201984996	LCS	HAKB	1069	10-DEC-09 12:38	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928309**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241546013	SAMPLE	HAKB	1153	09-DEC-09 08:44	DONE		
241546014	SAMPLE	HAKB	1154	09-DEC-09 08:44	DONE		
241546015	SAMPLE	HAKB	1155	09-DEC-09 08:44	DONE		
241546016	SAMPLE	HAKB	1156	09-DEC-09 08:44	DONE		
1201984997	MB	HAKB	1157	09-DEC-09 08:44	DONE		
1201984998	DUP	HAKB	1158	09-DEC-09 08:44	DONE		
1201984999	LCS	HAKB	1159	09-DEC-09 08:44	DONE		
241546001	SAMPLE	HAKB	1161	09-DEC-09 08:44	DONE		
241546007	SAMPLE	HAKB	1162	09-DEC-09 08:44	DONE		
241546002	SAMPLE	HAKB	1163	09-DEC-09 08:44	DONE		
241546008	SAMPLE	HAKB	1164	09-DEC-09 08:44	DONE		
241546003	SAMPLE	HAKB	1165	09-DEC-09 08:45	DONE		
241546009	SAMPLE	HAKB	1166	09-DEC-09 08:45	DONE		
241546004	SAMPLE	HAKB	1167	09-DEC-09 08:45	DONE		
241546010	SAMPLE	HAKB	1168	09-DEC-09 08:45	DONE		
241546005	SAMPLE	HAKB	1169	09-DEC-09 08:45	DONE		
241546011	SAMPLE	HAKB	1170	09-DEC-09 08:45	DONE		
241546006	SAMPLE	HAKB	1171	09-DEC-09 08:45	DONE		
241546012	SAMPLE	HAKB	1172	09-DEC-09 08:45	DONE		

Thursday, November 19, 2009

REQUEST NUMBER: 10-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-605
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13862	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13863	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13864	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13865	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13866	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13867	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13868	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13869	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13870	S	11/18/2009	Plus, B, Li, Si, Ti, U

Thursday, November 19, 2009

REQUEST NUMBER: 10-605

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13871	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13872	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13873	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13874	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13875	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13876	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13877	S	11/18/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-605

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-605

REQUEST NUMBER: 10-605

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	POLY	Metals +CLO4	Ice	S
RE03-09-13865	1	POLY	Metals +CLO4	Ice	S
RE03-09-13868	1	POLY	Metals +CLO4	Ice	S
RE03-09-13867	1	POLY	Metals +CLO4	Ice	S
RE03-09-13864	1	POLY	Metals +CLO4	Ice	S
RE03-09-13871	1	POLY	Metals +CLO4	Ice	S
RE03-09-13877	1	POLY	Metals +CLO4	Ice	S
RE03-09-13869	1	POLY	Metals +CLO4	Ice	S
RE03-09-13870	1	POLY	Metals +CLO4	Ice	S
RE03-09-13873	1	POLY	Metals +CLO4	Ice	S
RE03-09-13863	1	POLY	Metals +CLO4	Ice	S
RE03-09-13874	1	POLY	Metals +CLO4	Ice	S
RE03-09-13866	1	POLY	Metals +CLO4	Ice	S
RE03-09-13862	1	POLY	Metals +CLO4	Ice	S
RE03-09-13876	1	POLY	Metals +CLO4	Ice	S
RE03-09-13872	1	POLY	Metals +CLO4	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/19/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13862 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608289	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Clay Sand with Tuff Qbt-3 Reddish brown (5YR 5/3)

SAMPLE COMMENTS: Encountered Tuff 6" inches

LOCATION DESC: 03-015-6

FIELD SCREENING/MEASUREMENT RESULTS: PID: 19.4 ppm
Background α = 16 dpm
Screen: β = 1352 dpm

COLLECTED BY (PRINT) M. Naucle REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13863 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1007	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608289		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay fill light Reddish brown (5YR 6/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-015-6

FIELD SCREENING/MEASUREMENT RESULTS: PID = 44.6 ppm
Background: α = 16 dpm
Screening: β = 1532 dpm

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13864 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608290		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay Dark Reddish brown (5YR 3/2)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-015-7

FIELD SCREENING/MEASUREMENT RESULTS: PID = 27.2 ppm
Background: α = 16 dpm
Screening: β = 1350 dpm

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** S. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13865 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1010	SUB-MEDIA:	OTHER	N/A
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608290		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	N/A	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay Dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS:

LOCATION DESC: 03-15-7

FIELD SCREENING/MEASUREMENT RESULTS: PID = 4.7 ppm
Background Screening: α = 16 dpm
β = ~~18~~ 1352
JJ 11-18-09

COLLECTED BY (PRINT) D. Thomas **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-18-09 1630	(Printed Name) (Signature)	11-18-09 1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13866 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1033	SUB-MEDIA:	OTHER	NH
PRS ID:	03-015	Ok	SAMPLE TECH CODE:	HA	↓
LOCATION ID:	03-608291	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay sand fill Reddish brown (5YR 4/4)

SAMPLE COMMENTS: Identified plant Roots in sample

LOCATION DESC: 03-15-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background Screening: α = 16 dpm
β = 1350 ↓

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13867 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1040	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608291	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay sand fill dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-5

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background Screen: α = 16 dpm
β = 1350 ↓

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13868 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/04	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1038	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	Ok
LOCATION ID:	03-608292	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay sand fill dark reddish brown (5YR 3/3)

SAMPLE COMMENTS: plant roots in sample

LOCATION DESC: 03-15-4

FIELD SCREENING/MEASUREMENT RESULTS: FID = 1.4 ppm
Background. α = 16 dpm
Screening: β = 1352 ↓

COLLECTED BY (PRINT) D. Thomas REVIEWED BY (PRINT) J. Joder

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Joder	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13869 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1042	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608292		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: clay Sand Fill Reddish brown (5YR 4/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-4

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm
Background screening: α = 16 dpm
β = 1352 ↓

COLLECTED BY (PRINT) D. Thomas

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13870 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1118	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608293	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand with clay. dark Reddish brown (5YR 3/3)

SAMPLE COMMENTS: Plant Roots Identified in Sample

LOCATION DESC: 03-15-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 5.5 ppm
Background Screening: α = 16 dpm
β = 1350 ↓

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) L. Horne	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13871 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AU H
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608293	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Sandy clay with silt. Reddish brown (5YR 4/3)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 21 ppm
Background screening: α = 16 dpm
β = 1350 dpm

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature) [signature]	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13872 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1202	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	Ok
LOCATION ID:	03-608294	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty sand, ~~reddish brown (5YR 4/3)~~ dark Reddish gray (5YR 4/2) MS 11/18/09

SAMPLE COMMENTS: Plant Roots Identified

LOCATION DESC: 03-015-8

FIELD SCREENING/MEASUREMENT RESULTS: PID = 90.2 ppm
Background α = 16 dpm
Screening β = 1350 dpm

COLLECTED BY (PRINT) M. Nayek REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13873 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		1210	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608294	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / ~~NO~~ / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand. dark Reddish gray (5YR 4/2)

SAMPLE COMMENTS: Plant Roots Identified

LOCATION DESC: 03-015-8

FIELD SCREENING/MEASUREMENT RESULTS: PID = 6.1 ppm
Background Screening α = 16 dpm
β = 1352 dpm

COLLECTED BY (PRINT) M. Nauck REVIEWED BY (PRINT) J. Jost

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jost	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13874 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1240	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608295	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: silty Sand Fill, Reddish yellow (7.5YR 6/6)

SAMPLE COMMENTS: Plant Root in Sample

LOCATION DESC: 03-15-10

FIELD SCREENING/MEASUREMENT RESULTS: PID = 125 ppm
Background, α = 16 dpm
Screening: β = 1352 dpm

Samples: MDA

COLLECTED BY (PRINT) L. Horne, M. Nauck

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09	(Printed Name) Sherri Sherwood	11/18/09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13875 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1242	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608295	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Clay Sand Fill. light Brown (7.5YR 6/4)

SAMPLE COMMENTS: NA

LOCATION DESC: 03-15-10

FIELD SCREENING/MEASUREMENT RESULTS: PID = 7.0 ppm Samples: 4MDA

Background screening: α = 16 dpm, β = 1352 dpm

COLLECTED BY (PRINT) L. Horne, M. Nauck

REVIEWED BY (PRINT) M. Rains

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nauck	11-18-09	(Printed Name)	11-18-09
(Signature)	1630	(Signature)	1630
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13876 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1314	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	03-608296	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand, Dark brown (7.5YR 3/2)

SAMPLE COMMENTS: Plant Roots Identified in Sample

LOCATION DESC: 03-15-9

FIELD SCREENING/MEASUREMENT RESULTS: PID = 6.3ppm
Background Screening: α = 16 dpm, β = 1352 dpm

Samples: 4MDA

COLLECTED BY (PRINT) L. Horne

REVIEWED BY (PRINT) M. Nord

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Nord (Signature)	11-18-09 1630	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	11-18-09 1630
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2273 **EVENT NAME:** Soil Sampling at CU 03-015-00, Part 1

SAMPLE ID: RE03-09-13877 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/18/09	MEDIA:	NA	All H
TIME COLLECTED (HH:MM)		1317	SUB-MEDIA:	OTHER	NA
PRS ID:	03-015	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	03-608296	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1'	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		AM-241+ISOPU+ISOU	500 ML POLY	None	Y	
1		Metals +CLO4	250 ML POLY	Ice	Y	

SAMPLE DESC: Silty Sand with clay. Dark brown (7.5 YR 3/2)

SAMPLE COMMENTS: Plant Roots Identified in Sample.

LOCATION DESC: 03-15-9

FIELD SCREENING/MEASUREMENT RESULTS: PID = 9.7 ppm Samples: <MDA

Background screening: α = 16 dpm
β = 1352 dpm

COLLECTED BY (PRINT) L. Horne REVIEWED BY (PRINT) M. Vaack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M. Vaack	11-18-09 1630	(Printed Name)	11-18-09 1630
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

COLLECTION LOG/FIELD CHAIN OF CUSTODY

EV EVENT NAME: Soil Sampling at CU 03-015-00, Part 1

SAMP RE03-09-13930 WORK ORDER:

	NNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLE):		11-18-09	MEDIA:	~~NA~~	All H
TIME COLLE		1033	SUB-MEDIA:	OTHER	NA
PRS ID:		03-015	SAMPLE TECH CODE:	HA	ok
LOCATION ID		03-608291	FIELD QC TYPE:	FTB	
LOCATION TY		ok	FIELD PREP:	NA	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DEP			SCREEN/PORT DESC:	NA	
FIELD MATR	S		EXCAVATED: YES / NO / NA		

COMPOSITE COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRI	DER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 ~~2~~	MW 11-18-09	82608 Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DI of QC sample of RE03-09-13866

SAMPLE C NA

LOCATION NA

FIELD SCI REMENT RESULTS: NA

COLLECTI M. Nauck REVIEWED BY (PRINT) M. Rains

RELINQUI	Date/Time	RECEIVED BY	Date/Time
(Printed Na M. Nauck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)	1630	(Signature) Sherri Sherwood	1630
RELINQUI	Date/Time	RECEIVED BY	Date/Time
(Printed Na		(Printed Name)	
(Signature)		(Signature)	

COLLECTION LOG/FIELD CHAIN OF CUSTODY

E EVENT NAME: Soil Sampling at CU 03-015-00, Part 1

SAMI RE03-09-13931 WORK ORDER:

	ANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLL):		11-18-09	MEDIA:	NA	AIR
TIME COLL		1240	SUB-MEDIA:	OTHER	NA
PRS ID:		03-015	SAMPLE TECH CODE:	HA	OK
LOCATION I		03-608295	FIELD QC TYPE:	FTB	
LOCATION T		OK	FIELD PREP:	NA	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DEI			SCREEN/PORT DESC:		NA
FIELD MATR	S		EXCAVATED: YES / NO (NA)		

COMPOSITE COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO (NA)

BOREHOLE: (NA) BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	TI	DER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	2 AW 11-18-09	826087 p Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE I of QC Sample of RE0309-13874

SAMPLE NA

LOCATION NA

FIELD SCR REMENT RESULTS: NA

COLLECTED BY (PRINT) M. Lauck REVIEWED BY (PRINT) M. Rains

RELINQ		Date/Time	RECEIVED BY	Date/Time
(Printed N	M. Lauck	11-18-09	(Printed Name) Sherri Sherwood	11-18-09
(Signature)		1630	(Signature) Sherri Sherwood	1630
RELINQ		Date/Time	RECEIVED BY	Date/Time
(Printed N			(Printed Name)	
(Signature)			(Signature)	

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-605 VALIDATION DATE: 03/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☒ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None

Reviewed by: Monica Dymerski **Level I** **Date:** 03/05/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 03/05/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☒	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R. PERC7f
☐	☒	☐	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
☐	☒	☐	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
☐	☒	☐	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
☐	☒	☐	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
☐	☒	☐	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
☐	☒	☐	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
☐	☒	☐	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
☐	☒	☐	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
☐	☒	☐	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
☐	☒	☐	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
☐	☒	☐	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
☐	☐	☒	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
☐	☐	☒	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
☐	☐	☒	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
☐	☐	☒	31. The Interference Check Sample was not within ±20% of the known value.	UJ, PERC16a	J, PERC16a
☐	☐	☒	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
☐	☒	☐	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13875

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541001

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.665	ug/kg	J	1	08-DEC-09 18:42	per1208015a
	Perchlorate Isotope Ratio			3.21			1	08-DEC-09 18:42	per1208015a
14797-73-0	Perchlorate-101	.558	2.23	0.617	ug/kg	J	1	08-DEC-09 18:42	per1208015a
	Perchlorate-O(18)			5.72	ug/kg		1	08-DEC-09 18:42	per1208015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

P.S. 3/5/10

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13865

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541002

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	08-DEC-09 19:08	per1208018a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:08	per1208018a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	08-DEC-09 19:08	per1208018a
	Perchlorate-O(18)			6.70	ug/kg		1	08-DEC-09 19:08	per1208018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

P.S. 3/5/10

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13868

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541003

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	08-DEC-09 19:16	per1208019a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:16	per1208019a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	08-DEC-09 19:16	per1208019a
	Perchlorate-O(18)			5.57	ug/kg		1	08-DEC-09 19:16	per1208019a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

P.S. 3/5/10

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13867

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541004

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.57	2.28	0.570	ug/kg	U	1	08-DEC-09 19:25	per1208020a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:25	per1208020a
14797-73-0	Perchlorate-101	.57	2.28	0.570	ug/kg	U	1	08-DEC-09 19:25	per1208020a
	Perchlorate-O(18)			5.80	ug/kg		1	08-DEC-09 19:25	per1208020a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13864

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541005

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 19:33	per1208021a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:33	per1208021a
14797-73-0	Perchlorate-101	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 19:33	per1208021a
	Perchlorate-O(18)			5.57	ug/kg		1	08-DEC-09 19:33	per1208021a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13871

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541006

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	08-DEC-09 20:09	per1208025a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:09	per1208025a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	08-DEC-09 20:09	per1208025a
	Perchlorate-O(18)			6.27	ug/kg		1	08-DEC-09 20:09	per1208025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13877

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541007

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 20:18	per1208026a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:18	per1208026a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 20:18	per1208026a
	Perchlorate-O(18)			5.93	ug/kg		1	08-DEC-09 20:18	per1208026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13869

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541008

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.601	2.4	0.601	ug/kg	U	1	08-DEC-09 20:27	per1208027a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:27	per1208027a
14797-73-0	Perchlorate-101	.601	2.4	0.601	ug/kg	U	1	08-DEC-09 20:27	per1208027a
	Perchlorate-O(18)			6.32	ug/kg		1	08-DEC-09 20:27	per1208027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13870

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541009

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.58	2.32	0.709	ug/kg	J	1	08-DEC-09 20:36	per1208028a
	Perchlorate Isotope Ratio			3.02			1	08-DEC-09 20:36	per1208028a
14797-73-0	Perchlorate-101	.58	2.32	0.700	ug/kg	J	1	08-DEC-09 20:36	per1208028a
	Perchlorate-O(18)			5.99	ug/kg		1	08-DEC-09 20:36	per1208028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13873

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541010

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 20:45	per1208029a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:45	per1208029a
14797-73-0	Perchlorate-101	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 20:45	per1208029a
	Perchlorate-O(18)			5.82	ug/kg		1	08-DEC-09 20:45	per1208029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13863

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541011

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.547	2.19	0.547	ug/kg	U	1	08-DEC-09 20:54	per1208030a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:54	per1208030a
14797-73-0	Perchlorate-101	.547	2.19	0.547	ug/kg	U	1	08-DEC-09 20:54	per1208030a
	Perchlorate-O(18)			5.77	ug/kg		1	08-DEC-09 20:54	per1208030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13874

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541012

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 92.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.15	0.539	ug/kg	U	1	08-DEC-09 21:03	per1208031a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:03	per1208031a
14797-73-0	Perchlorate-101	.539	2.15	0.539	ug/kg	U	1	08-DEC-09 21:03	per1208031a
	Perchlorate-O(18)			5.67	ug/kg		1	08-DEC-09 21:03	per1208031a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13866

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541013

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.582	2.33	1.19	ug/kg	J	1	08-DEC-09 21:11	per1208032a
	Perchlorate Isotope Ratio			2.93			1	08-DEC-09 21:11	per1208032a
14797-73-0	Perchlorate-101	.582	2.33	1.21	ug/kg	J	1	08-DEC-09 21:11	per1208032a
	Perchlorate-O(18)			6.08	ug/kg		1	08-DEC-09 21:11	per1208032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13862

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541014

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.576	2.3	0.576	ug/kg	U	1	08-DEC-09 21:20	per1208033a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:20	per1208033a
14797-73-0	Perchlorate-101	.576	2.3	0.576	ug/kg	U	1	08-DEC-09 21:20	per1208033a
	Perchlorate-O(18)			5.99	ug/kg		1	08-DEC-09 21:20	per1208033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13876

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541015

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 21:28	per1208034a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:28	per1208034a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 21:28	per1208034a
	Perchlorate-O(18)			5.83	ug/kg		1	08-DEC-09 21:28	per1208034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13872

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541016

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.552	ug/kg	U	1	08-DEC-09 22:03	per1208038a
	Perchlorate Isotope Ratio						1	08-DEC-09 22:03	per1208038a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	08-DEC-09 22:03	per1208038a
	Perchlorate-O(18)			6.07	ug/kg		1	08-DEC-09 22:03	per1208038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-605 VALIDATION DATE: 03/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the MB, Na, Tl and Si were detected. The Tl results for all samples except RE03-09-13875 and -13865 were detects ≤5X the MB concentration and, thus, were qualified U,I4. The Tl results for samples -13875 and -13865 were qualified ND due to ICB/CCB contamination and, thus, were not further qualified. The Na results for all samples except -13865 and -13864 were detects >5X but ≤50X the MB concentration and, thus, was qualified J,I4a. The remaining associated results were detects >50X and, thus, were not qualified, based on professional judgment.

2. In the ICB/CCBs, Tl, Sb and Na were detected. All Tl results and the Sb result for sample -13871 were detects ≤5X the greatest associated blank concentration and, thus, were qualified U,I4b. The remaining associated sample results were either detects >5X the greatest associated blank concentration or were NDs and, thus, were not qualified.

3. The LCS %R was < the laboratory LAL but ≥10% for Sb. The associated result for sample -13870 was a detect and, thus, was qualified J-,I12a. The remaining Sb results were NDs or were qualified ND and, thus, were qualified UJ,I12a.

4. The MS %Rs were < the laboratory LAL but ≥10% for Sb, Si, Se and As. The As and Si results and the Sb result for sample -13870 were detects and, thus, were qualified J-,I6a. The Se results and the remaining Sb results were NDs or were qualified ND and, thus, were qualified UJ,I6a. The MS %Rs were > the laboratory UAL for K, Li and Hg. The Hg result for sample -13864 was an ND and thus, was qualified UJ,I6b. The remaining associated sample results were detects and, thus, were qualified J+,I6b. Also, the MS %Rs were > the laboratory UAL for Al, Mg, Ti and Fe and the MS %R was <10% for Mn. However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.

5. The RPD between the duplicate and its parent sample for Co was >35%, and the duplicate and parent sample results were ≥5X the RLs. The associated sample results were detects and, thus, were qualified J,I10a.

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

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Los Alamos NATIONAL LABORATORY EST. 1943

6. It should be noted that the field QC blanks from RN 10-607 associated with this RN were not available for review. No sample data were qualified as a result.

Reviewed by: Monica Dymerski **Level I** **Date:** 03/05/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/08/10

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☒	☐	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541001 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13875 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11100000	ug/Kg		7420	21800	21800	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-36-0	Antimony UJ,I12a	1090	ug/Kg	UN	360	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-38-2	Arsenic J-,I6a	3.69	mg/kg	N	0.222	1.11	1.11	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-39-3	Barium	93700	ug/Kg		109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-41-7	Beryllium	0.950	mg/kg		0.0222	0.111	0.111	2	MS	BAJ	12/08/09 17:58	091208-5	925480
7440-42-8	Boron	2800	ug/Kg	J	1090	5450	5450	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-43-9	Cadmium	545	ug/Kg	U	109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-70-2	Calcium	2160000	ug/Kg		8720	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-47-3	Chromium	10300	ug/Kg		164	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-48-4	Cobalt J,I10a	9620	ug/Kg	*	164	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-50-8	Copper	8200	ug/Kg		327	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-89-6	Iron	15800000	ug/Kg		8720	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-92-1	Lead	16500	ug/Kg	E	273	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-93-2	Lithium J+,I6b	10.8	mg/kg	N	0.445	2.22	2.22	2	MS	BAJ	12/08/09 17:58	091208-5	925480
7439-95-4	Magnesium	2430000	ug/Kg		9270	32700	32700	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-96-5	Manganese	444000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-97-6	Mercury J+,I6b	33.3	ug/kg	N	4.15	12.2	12.2	1	AV	JXL1	12/07/09 11:56	120709S1-8	925629
7440-02-0	Nickel	8.18	mg/kg		0.111	0.445	0.445	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-09-7	Potassium J+,I6b	1010000	ug/Kg	N	6980	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.11	mg/kg	UN	0.556	1.11	1.11	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-21-3	Silicon J-,I6a	1920000	ug/Kg	*N	1630	10900	10900	1	P	HSC	12/14/09 12:17	121409A-1	931895
7440-22-4	Silver	512	ug/Kg	J	109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-23-5	Sodium J,I4a	572000	ug/Kg	E	7630	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-28-0	Thallium U,I4b	0.428	mg/kg		0.0667	0.222	0.222	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-32-6	Titanium	336000	ug/Kg		109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-61-1	Uranium	0.821	mg/kg	*	0.0147	0.0445	0.0445	2	MS	PRB	12/08/09 14:41	091208-4	925480
7440-62-2	Vanadium	29000	ug/Kg		109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-66-6	Zinc	22100	ug/Kg		360	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.512	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.502	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.549	g	30	mL	12/04/09	TXB3

P.S. 3/5/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13865 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	19200000	ug/Kg		7400	21800	21800	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-36-0	Antimony UJ,I12a	1090	ug/Kg	UN	359	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.32	mg/kg	N	0.218	1.09	1.09	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-39-3	Barium	77000	ug/Kg		109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-41-7	Beryllium	1.15	mg/kg		0.0218	0.109	0.109	2	MS	BAJ	12/08/09 18:11	091208-5	925480
7440-42-8	Boron	3100	ug/Kg	J	1090	5440	5440	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-43-9	Cadmium	544	ug/Kg	U	109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-70-2	Calcium	3650000	ug/Kg		8700	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-47-3	Chromium	19400	ug/Kg		163	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-48-4	Cobalt J,I10a	3950	ug/Kg	*	163	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-50-8	Copper	10900	ug/Kg		326	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-89-6	Iron	17200000	ug/Kg		8700	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-92-1	Lead	15400	ug/Kg	E	272	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-93-2	Lithium J+,I6b	18.7	mg/kg	N	0.436	2.18	2.18	2	MS	BAJ	12/08/09 18:11	091208-5	925480
7439-95-4	Magnesium	2720000	ug/Kg		9250	32600	32600	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-96-5	Manganese	262000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-97-6	Mercury J+,I6b	19.5	ug/kg	N	4.7	13.8	13.8	1	AV	JXL1	12/07/09 12:06	120709S1-8	925629
7440-02-0	Nickel	11.6	mg/kg		0.109	0.436	0.436	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-09-7	Potassium J+,I6b	1380000	ug/Kg	N	6960	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.09	mg/kg	UN	0.545	1.09	1.09	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-21-3	Silicon J-,I6a	1050000	ug/Kg	*N	1600	10700	10700	1	P	HSC	12/14/09 12:39	121409A--1	931895
7440-22-4	Silver	398	ug/Kg	J	109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-23-5	Sodium	3260000	ug/Kg	E	7620	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-28-0	Thallium U,I4b	0.390	mg/kg		0.0654	0.218	0.218	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-32-6	Titanium	148000	ug/Kg		109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-61-1	Uranium	0.687	mg/kg	*	0.0144	0.0436	0.0436	2	MS	PRB	12/08/09 14:53	091208-4	925480
7440-62-2	Vanadium	29000	ug/Kg		109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-66-6	Zinc	29400	ug/Kg		359	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.531	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.53	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.502	g	30	mL	12/04/09	TXB3

P.S. 3/5/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541003 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13868 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6750000	ug/Kg		7000	20600	20600	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-36-0	Antimony UJ,I12a	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-38-2	Arsenic J-,I6a	1.89	mg/kg	N	0.204	1.02	1.02	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-39-3	Barium	78900	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-41-7	Beryllium	0.661	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	12/08/09 18:13	091208-5	925480
7440-42-8	Boron	2830	ug/Kg	J	1030	5150	5150	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-43-9	Cadmium	145	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-70-2	Calcium	3640000	ug/Kg		8230	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-47-3	Chromium	6060	ug/Kg		154	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-48-4	Cobalt J,I10a	2510	ug/Kg	*	154	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-50-8	Copper	5210	ug/Kg		309	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-89-6	Iron	12400000	ug/Kg		8230	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-92-1	Lead	23000	ug/Kg	E	257	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-93-2	Lithium J+,I6b	15.7	mg/kg	N	0.408	2.04	2.04	2	MS	BAJ	12/08/09 18:13	091208-5	925480
7439-95-4	Magnesium	1470000	ug/Kg		8750	30900	30900	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-96-5	Manganese	234000	ug/Kg	*	206	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-97-6	Mercury J+,I6b	25.7	ug/kg	N	3.93	11.6	11.6	1	AV	JXL1	12/07/09 12:08	120709S1-8	925629
7440-02-0	Nickel	5.96	mg/kg		0.102	0.408	0.408	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-09-7	Potassium J+,I6b	902000	ug/Kg	N	6590	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.02	mg/kg	UN	0.51	1.02	1.02	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-21-3	Silicon J-,I6a	1630000	ug/Kg	*N	1620	10800	10800	1	P	HSC	12/14/09 12:42	121409A-1	931895
7440-22-4	Silver	277	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-23-5	Sodium J,I4a	373000	ug/Kg	E	7210	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-28-0	Thallium U,I4	0.255	mg/kg		0.0612	0.204	0.204	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-32-6	Titanium	322000	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-61-1	Uranium	0.620	mg/kg	*	0.0135	0.0408	0.0408	2	MS	PRB	12/08/09 14:55	091208-4	925480
7440-62-2	Vanadium	15600	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-66-6	Zinc	41700	ug/Kg		340	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.548	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.553	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.586	g	30	mL	12/04/09	TXB3

P.S. 3/5/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541004 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13867 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7220000	ug/Kg		7390	21700	21700	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-36-0	Antimony UJ,I12a	1090	ug/Kg	UN	359	1090	1090	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.67	mg/kg	N	0.221	1.11	1.11	2	MS	PRB	12/08/09 00:04	091207-3	925480
7440-39-3	Barium	217000	ug/Kg		109	543	543	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-41-7	Beryllium	0.740	mg/kg		0.0221	0.111	0.111	2	MS	BAJ	12/08/09 18:15	091208-5	925480
7440-42-8	Boron	2350	ug/Kg	J	1090	5430	5430	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-43-9	Cadmium	166	ug/Kg	J	109	543	543	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-70-2	Calcium	2540000	ug/Kg		8690	27200	27200	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-47-3	Chromium	8180	ug/Kg		163	543	543	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-48-4	Cobalt J,I10a	26600	ug/Kg	*	163	543	543	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-50-8	Copper	5480	ug/Kg		326	1090	1090	1	P	HSC	12/09/09 01:37	120809-2	925478
7439-89-6	Iron	14400000	ug/Kg		8690	27200	27200	1	P	HSC	12/09/09 01:37	120809-2	925478
7439-92-1	Lead	36000	ug/Kg	E	272	1090	1090	1	P	HSC	12/09/09 01:37	120809-2	925478
7439-93-2	Lithium J+,I6b	15.2	mg/kg	N	0.442	2.21	2.21	2	MS	BAJ	12/08/09 18:15	091208-5	925480
7439-95-4	Magnesium	1470000	ug/Kg		9230	32600	32600	1	P	HSC	12/09/09 01:37	120809-2	925478
7439-96-5	Manganese	1220000	ug/Kg	*	217	1090	1090	1	P	HSC	12/09/09 01:37	120809-2	925478
7439-97-6	Mercury J+,I6b	18.7	ug/kg	N	4.42	13	13	1	AV	JXL1	12/07/09 12:10	120709S1-8	925629
7440-02-0	Nickel	6.43	mg/kg		0.111	0.442	0.442	2	MS	PRB	12/08/09 00:04	091207-3	925480
7440-09-7	Potassium J+,I6b	854000	ug/Kg	N	6950	27200	27200	1	P	HSC	12/09/09 01:37	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.11	mg/kg	UN	0.553	1.11	1.11	2	MS	PRB	12/08/09 00:04	091207-3	925480
7440-21-3	Silicon J-,I6a	1890000	ug/Kg	*N	1700	11300	11300	1	P	HSC	12/14/09 12:46	121409A-1	931895
7440-22-4	Silver	513	ug/Kg	J	109	543	543	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-23-5	Sodium J,I4a	423000	ug/Kg	E	7600	27200	27200	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-28-0	Thallium U,I4	0.233	mg/kg		0.0663	0.221	0.221	2	MS	PRB	12/08/09 00:04	091207-3	925480
7440-32-6	Titanium	370000	ug/Kg		109	543	543	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-61-1	Uranium	0.640	mg/kg	*	0.0146	0.0442	0.0442	2	MS	PRB	12/08/09 14:57	091208-4	925480
7440-62-2	Vanadium	28300	ug/Kg		109	543	543	1	P	HSC	12/09/09 01:37	120809-2	925478
7440-66-6	Zinc	33300	ug/Kg		359	1090	1090	1	P	HSC	12/09/09 01:37	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.525	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.516	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.526	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541005 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13864 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4760000	ug/Kg		7010	20600	20600	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-36-0	Antimony UJ,I12a	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-38-2	Arsenic J-,I6a	1.01	mg/kg	N	0.202	1.01	1.01	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-39-3	Barium	104000	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-41-7	Beryllium	0.362	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/08/09 18:17	091208-5	925480
7440-42-8	Boron	1380	ug/Kg	J	1030	5150	5150	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-43-9	Cadmium	105	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-70-2	Calcium	1760000	ug/Kg		8240	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-47-3	Chromium	9190	ug/Kg		155	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-48-4	Cobalt J,I10a	3750	ug/Kg	*	155	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-50-8	Copper	5980	ug/Kg		309	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-89-6	Iron	9180000	ug/Kg		8240	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-92-1	Lead	7850	ug/Kg	E	258	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-93-2	Lithium J+,I6b	8.62	mg/kg	N	0.404	2.02	2.02	2	MS	BAJ	12/08/09 18:17	091208-5	925480
7439-95-4	Magnesium	1360000	ug/Kg		8760	30900	30900	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-96-5	Manganese	248000	ug/Kg	*	206	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-97-6	Mercury UJ,I6b	11.8	ug/kg	UN	4.02	11.8	11.8	1	AV	JXL1	12/07/09 12:16	120709S1-8	925629
7440-02-0	Nickel	5.3	mg/kg		0.101	0.404	0.404	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-09-7	Potassium J+,I6b	1050000	ug/Kg	N	6590	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.01	mg/kg	UN	0.505	1.01	1.01	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-21-3	Silicon J-,I6a	1390000	ug/Kg	*N	1540	10300	10300	1	P	HSC	12/14/09 12:50	121409A-1	931895
7440-22-4	Silver	247	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-23-5	Sodium	1350000	ug/Kg	E	7210	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-28-0	Thallium U,I4	0.104	mg/kg	J	0.0606	0.202	0.202	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-32-6	Titanium	335000	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-61-1	Uranium	0.556	mg/kg	*	0.0133	0.0404	0.0404	2	MS	PRB	12/08/09 15:03	091208-4	925480
7440-62-2	Vanadium	22300	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-66-6	Zinc	19400	ug/Kg		340	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.533	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.544	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.557	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541006 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13871 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6740000	ug/Kg		7800	22900	22900	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-36-0	Antimony U,I4b	552	ug/Kg	JN	379	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.27	mg/kg	N	0.224	1.12	1.12	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-39-3	Barium	73400	ug/Kg		115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-41-7	Beryllium	0.485	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	12/08/09 18:18	091208-5	925480
7440-42-8	Boron	3250	ug/Kg	J	1150	5740	5740	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-43-9	Cadmium	350	ug/Kg	J	115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-70-2	Calcium	1820000	ug/Kg		9180	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-47-3	Chromium	8300	ug/Kg		172	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-48-4	Cobalt J,I10a	4710	ug/Kg	*	172	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-50-8	Copper	9780	ug/Kg		344	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-89-6	Iron	11700000	ug/Kg		9180	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-92-1	Lead	21400	ug/Kg	E	287	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-93-2	Lithium J+,I6b	14	mg/kg	N	0.448	2.24	2.24	2	MS	BAJ	12/08/09 18:18	091208-5	925480
7439-95-4	Magnesium	1280000	ug/Kg		9750	34400	34400	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-96-5	Manganese	173000	ug/Kg	*	229	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-97-6	Mercury J+,I6b	168	ug/kg	N	4.82	14.2	14.2	1	AV	JXL1	12/07/09 12:18	120709S1-8	925629
7440-02-0	Nickel	5.97	mg/kg		0.112	0.448	0.448	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-09-7	Potassium J+,I6b	878000	ug/Kg	N	7340	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-21-3	Silicon J-,I6a	1510000	ug/Kg	*N	1730	11600	11600	1	P	HSC	12/14/09 12:53	121409A-1	931895
7440-22-4	Silver	260	ug/Kg	J	115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-23-5	Sodium J,I4a	125000	ug/Kg	E	8030	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-28-0	Thallium U,I4	0.214	mg/kg	J	0.0672	0.224	0.224	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-32-6	Titanium	384000	ug/Kg		115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-61-1	Uranium	2.48	mg/kg	*	0.0148	0.0448	0.0448	2	MS	PRB	12/08/09 15:05	091208-4	925480
7440-62-2	Vanadium	22400	ug/Kg		115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-66-6	Zinc	57300	ug/Kg		379	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.52	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.533	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.505	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541007 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13877 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9280000	ug/Kg		7550	22200	22200	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-36-0	Antimony UJ,I12a	1110	ug/Kg	UN	366	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.51	mg/kg	N	0.202	1.01	1.01	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-39-3	Barium	184000	ug/Kg		111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-41-7	Beryllium	1	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/08/09 18:20	091208-5	925480
7440-42-8	Boron	2570	ug/Kg	J	1110	5550	5550	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-43-9	Cadmium	158	ug/Kg	J	111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-70-2	Calcium	2510000	ug/Kg		8880	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-47-3	Chromium	10200	ug/Kg		167	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-48-4	Cobalt J,I10a	7260	ug/Kg	*	167	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-50-8	Copper	8070	ug/Kg		333	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-89-6	Iron	14200000	ug/Kg		8880	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-92-1	Lead	18300	ug/Kg	E	278	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-93-2	Lithium J+,I6b	10.6	mg/kg	N	0.405	2.02	2.02	2	MS	BAJ	12/08/09 18:20	091208-5	925480
7439-95-4	Magnesium	1900000	ug/Kg		9440	33300	33300	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-96-5	Manganese	586000	ug/Kg	*	222	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-97-6	Mercury J+,I6b	19.3	ug/kg	N	4.21	12.4	12.4	1	AV	JXL1	12/07/09 12:20	120709S1-8	925629
7440-02-0	Nickel	9.96	mg/kg		0.101	0.405	0.405	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-09-7	Potassium J+,I6b	1450000	ug/Kg	N	7110	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.01	mg/kg	UN	0.506	1.01	1.01	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-21-3	Silicon J-,I6a	1710000	ug/Kg	*N	1670	11100	11100	1	P	HSC	12/14/09 12:57	121409A-1	931895
7440-22-4	Silver	478	ug/Kg	J	111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-23-5	Sodium J,I4a	259000	ug/Kg	E	7770	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-28-0	Thallium U,I4	0.282	mg/kg		0.0607	0.202	0.202	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-32-6	Titanium	366000	ug/Kg		111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-61-1	Uranium	1.2	mg/kg	*	0.0134	0.0405	0.0405	2	MS	PRB	12/08/09 15:07	091208-4	925480
7440-62-2	Vanadium	31500	ug/Kg		111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-66-6	Zinc	29900	ug/Kg		366	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.502	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.551	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.54	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541008 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13869 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16300000	ug/Kg		8120	23900	23900	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-36-0	Antimony UJ,I12a	1190	ug/Kg	UN	394	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-38-2	Arsenic J-,I6a	3.3	mg/kg	N	0.234	1.17	1.17	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-39-3	Barium	81800	ug/Kg		119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-41-7	Beryllium	0.992	mg/kg		0.0234	0.117	0.117	2	MS	BAJ	12/08/09 18:22	091208-5	925480
7440-42-8	Boron	2970	ug/Kg	J	1190	5970	5970	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-43-9	Cadmium	597	ug/Kg	U	119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-70-2	Calcium	3250000	ug/Kg		9550	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-47-3	Chromium	45200	ug/Kg		179	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-48-4	Cobalt J,I10a	6460	ug/Kg	*	179	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-50-8	Copper	10600	ug/Kg		358	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-89-6	Iron	17400000	ug/Kg		9550	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-92-1	Lead	16500	ug/Kg	E	299	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-93-2	Lithium J+,I6b	17	mg/kg	N	0.468	2.34	2.34	2	MS	BAJ	12/08/09 18:22	091208-5	925480
7439-95-4	Magnesium	2760000	ug/Kg		10100	35800	35800	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-96-5	Manganese	279000	ug/Kg	*	239	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-97-6	Mercury J+,I6b	42.4	ug/kg	N	4.65	13.7	13.7	1	AV	JXL1	12/07/09 12:22	120709S1-8	925629
7440-02-0	Nickel	12	mg/kg		0.117	0.468	0.468	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-09-7	Potassium J+,I6b	1320000	ug/Kg	N	7640	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.17	mg/kg	UN	0.585	1.17	1.17	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-21-3	Silicon J-,I6a	1930000	ug/Kg	*N	1680	11200	11200	1	P	HSC	12/14/09 13:00	121409A-1	931895
7440-22-4	Silver	360	ug/Kg	J	119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-23-5	Sodium J,I4a	371000	ug/Kg	E	8360	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-28-0	Thallium U,I4	0.255	mg/kg		0.0702	0.234	0.234	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-32-6	Titanium	341000	ug/Kg		119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-61-1	Uranium	0.789	mg/kg	*	0.0155	0.0468	0.0468	2	MS	PRB	12/08/09 15:09	091208-4	925480
7440-62-2	Vanadium	32300	ug/Kg		119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-66-6	Zinc	30000	ug/Kg		394	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.503	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.513	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.527	g	30	mL	12/04/09	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541009 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13870 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6380000	ug/Kg		7410	21800	21800	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-36-0	Antimony J-,I12a	4320	ug/Kg	N	360	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.13	mg/kg	N	0.212	1.06	1.06	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-39-3	Barium	81100	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-41-7	Beryllium	0.581	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 18:29	091208-5	925480
7440-42-8	Boron	6940	ug/Kg		1090	5450	5450	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-43-9	Cadmium	570	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-70-2	Calcium	2250000	ug/Kg		8720	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-47-3	Chromium	8680	ug/Kg		163	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-48-4	Cobalt J,I10a	4100	ug/Kg	*	163	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-50-8	Copper	18800	ug/Kg		327	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-89-6	Iron	14000000	ug/Kg		8720	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-92-1	Lead	35500	ug/Kg	E	272	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-93-2	Lithium J+,I6b	14.7	mg/kg	N	0.423	2.12	2.12	2	MS	BAJ	12/08/09 20:38	091208-7	925480
7439-95-4	Magnesium	1260000	ug/Kg		9260	32700	32700	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-96-5	Manganese	313000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-97-6	Mercury J+,I6b	211	ug/kg	N	4.44	13	13	1	AV	JXL1	12/07/09 12:24	120709S1-8	925629
7440-02-0	Nickel	6.67	mg/kg		0.106	0.423	0.423	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-09-7	Potassium J+,I6b	1040000	ug/Kg	N	6970	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.529	1.06	1.06	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-21-3	Silicon J-,I6a	1790000	ug/Kg	*N	1610	10700	10700	1	P	HSC	12/14/09 13:03	121409A-1	931895
7440-22-4	Silver	1360	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-23-5	Sodium J,I4a	111000	ug/Kg	E	7630	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-28-0	Thallium U,I4	0.234	mg/kg		0.0635	0.212	0.212	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-32-6	Titanium	388000	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-61-1	Uranium	8.3	mg/kg	*	0.014	0.0423	0.0423	2	MS	PRB	12/08/09 15:12	091208-4	925480
7440-62-2	Vanadium	18800	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-66-6	Zinc	129000	ug/Kg		360	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.532	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.548	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.533	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541010 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13873 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9220000	ug/Kg		7070	20800	20800	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-36-0	Antimony UJ,I12a	1040	ug/Kg	UN	343	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-38-2	Arsenic J-,I6a	1.93	mg/kg	N	0.202	1.01	1.01	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-39-3	Barium	175000	ug/Kg		104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-41-7	Beryllium	0.869	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/08/09 18:30	091208-5	925480
7440-42-8	Boron	2360	ug/Kg	J	1040	5200	5200	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-43-9	Cadmium	160	ug/Kg	J	104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-70-2	Calcium	2040000	ug/Kg		8310	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-47-3	Chromium	11600	ug/Kg		156	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-48-4	Cobalt J,I10a	7570	ug/Kg	*	156	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-50-8	Copper	8150	ug/Kg		312	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-89-6	Iron	14200000	ug/Kg		8310	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-92-1	Lead	15800	ug/Kg	E	260	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-93-2	Lithium J+,I6b	11.6	mg/kg	N	0.405	2.02	2.02	2	MS	BAJ	12/08/09 20:41	091208-7	925480
7439-95-4	Magnesium	1860000	ug/Kg		8830	31200	31200	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-96-5	Manganese	777000	ug/Kg	*	208	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-97-6	Mercury J+,I6b	16.5	ug/kg	N	4.22	12.4	12.4	1	AV	JXL1	12/07/09 12:26	120709S1-8	925629
7440-02-0	Nickel	8.75	mg/kg		0.101	0.405	0.405	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-09-7	Potassium J+,I6b	1440000	ug/Kg	N	6650	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.01	mg/kg	UN	0.506	1.01	1.01	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-21-3	Silicon J-,I6a	1870000	ug/Kg	*N	1640	11000	11000	1	P	HSC	12/14/09 13:14	121409A-1	931895
7440-22-4	Silver	459	ug/Kg	J	104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-23-5	Sodium J,I4a	304000	ug/Kg	E	7280	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-28-0	Thallium U,I4	0.281	mg/kg		0.0607	0.202	0.202	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-32-6	Titanium	393000	ug/Kg		104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-61-1	Uranium	1.15	mg/kg	*	0.0134	0.0405	0.0405	2	MS	PRB	12/08/09 15:14	091208-4	925480
7440-62-2	Vanadium	31000	ug/Kg		104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-66-6	Zinc	30100	ug/Kg		343	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.528	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.542	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.531	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541011 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13863 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7080000	ug/Kg		7370	21700	21700	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-36-0	Antimony UJ,I12a	1080	ug/Kg	UN	358	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-38-2	Arsenic J-,I6a	1.74	mg/kg	N	0.217	1.08	1.08	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-39-3	Barium	86800	ug/Kg		108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-41-7	Beryllium	0.718	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 18:32	091208-5	925480
7440-42-8	Boron	2390	ug/Kg	J	1080	5420	5420	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-70-2	Calcium	2210000	ug/Kg		8670	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-47-3	Chromium	6710	ug/Kg		163	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-48-4	Cobalt J,I10a	2980	ug/Kg	*	163	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-50-8	Copper	4890	ug/Kg		325	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-89-6	Iron	11800000	ug/Kg		8670	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-92-1	Lead	10300	ug/Kg	E	271	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-93-2	Lithium J+,I6b	13.8	mg/kg	N	0.433	2.17	2.17	2	MS	BAJ	12/08/09 20:43	091208-7	925480
7439-95-4	Magnesium	1480000	ug/Kg		9210	32500	32500	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-96-5	Manganese	240000	ug/Kg	*	217	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-97-6	Mercury J+,I6b	12.9	ug/kg	N	4.15	12.2	12.2	1	AV	JXL1	12/07/09 12:28	120709S1-8	925629
7440-02-0	Nickel	5.81	mg/kg		0.108	0.433	0.433	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-09-7	Potassium J+,I6b	953000	ug/Kg	N	6930	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-21-3	Silicon J-,I6a	1590000	ug/Kg	*N	1580	10500	10500	1	P	HSC	12/14/09 13:18	121409A-1	931895
7440-22-4	Silver	366	ug/Kg	J	108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-23-5	Sodium J,I4a	179000	ug/Kg	E	7580	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-28-0	Thallium U,I4	0.178	mg/kg	J	0.065	0.217	0.217	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-32-6	Titanium	305000	ug/Kg		108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-61-1	Uranium	0.479	mg/kg	*	0.0143	0.0433	0.0433	2	MS	PRB	12/08/09 15:19	091208-4	925480
7440-62-2	Vanadium	16500	ug/Kg		108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-66-6	Zinc	33100	ug/Kg		358	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.505	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.505	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.538	g	30	mL	12/04/09	TXB3

P.S. 3/5/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541012 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13874 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7370000	ug/Kg		7000	20600	20600	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-36-0	Antimony UJ,I12a	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.87	mg/kg	N	0.212	1.06	1.06	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-39-3	Barium	107000	ug/Kg		103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-41-7	Beryllium	0.786	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 18:34	091208-5	925480
7440-42-8	Boron	2340	ug/Kg	J	1030	5150	5150	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-43-9	Cadmium	141	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-70-2	Calcium	1630000	ug/Kg		8240	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-47-3	Chromium	8620	ug/Kg		154	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-48-4	Cobalt J,I10a	5490	ug/Kg	*	154	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-50-8	Copper	6450	ug/Kg		309	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-89-6	Iron	11900000	ug/Kg		8240	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-92-1	Lead	13200	ug/Kg	E	257	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-93-2	Lithium J+,I6b	10	mg/kg	N	0.425	2.12	2.12	2	MS	BAJ	12/08/09 20:46	091208-7	925480
7439-95-4	Magnesium	1570000	ug/Kg		8750	30900	30900	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-96-5	Manganese	353000	ug/Kg	*	206	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-97-6	Mercury J+,I6b	23.7	ug/kg	N	4.15	12.2	12.2	1	AV	JXL1	12/07/09 12:30	120709S1-8	925629
7440-02-0	Nickel	6.94	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-09-7	Potassium J+,I6b	1070000	ug/Kg	N	6590	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-21-3	Silicon J-,I6a	1580000	ug/Kg	*N	1560	10400	10400	1	P	HSC	12/14/09 13:21	121409A-1	931895
7440-22-4	Silver	332	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-23-5	Sodium J,I4a	519000	ug/Kg	E	7210	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-28-0	Thallium U,I4	0.192	mg/kg	J	0.0637	0.212	0.212	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-32-6	Titanium	374000	ug/Kg		103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-61-1	Uranium	1.01	mg/kg	*	0.014	0.0425	0.0425	2	MS	PRB	12/08/09 15:22	091208-4	925480
7440-62-2	Vanadium	26300	ug/Kg		103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-66-6	Zinc	22300	ug/Kg		340	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.523	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.507	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.529	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541013 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13866 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7290000	ug/Kg		7660	22500	22500	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-36-0	Antimony UJ,I12a	1130	ug/Kg	UN	372	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-38-2	Arsenic J-,I6a	3.04	mg/kg	N	0.232	1.16	1.16	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-39-3	Barium	96100	ug/Kg		113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-41-7	Beryllium	0.772	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	12/08/09 18:36	091208-5	925480
7440-42-8	Boron	2990	ug/Kg	J	1130	5640	5640	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-43-9	Cadmium	209	ug/Kg	J	113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-70-2	Calcium	2080000	ug/Kg		9020	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-47-3	Chromium	10500	ug/Kg		169	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-48-4	Cobalt J,I10a	6430	ug/Kg	*	169	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-50-8	Copper	8960	ug/Kg		338	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-89-6	Iron	12200000	ug/Kg		9020	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-92-1	Lead	16400	ug/Kg	E	282	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-93-2	Lithium J+,I6b	12.3	mg/kg	N	0.463	2.32	2.32	2	MS	BAJ	12/08/09 20:48	091208-7	925480
7439-95-4	Magnesium	1530000	ug/Kg		9580	33800	33800	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-96-5	Manganese	359000	ug/Kg	*	225	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-97-6	Mercury J+,I6b	26	ug/kg	N	4.31	12.7	12.7	1	AV	JXL1	12/07/09 12:31	120709S1-8	925629
7440-02-0	Nickel	7.49	mg/kg		0.116	0.463	0.463	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-09-7	Potassium J+,I6b	1140000	ug/Kg	N	7210	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.16	mg/kg	UN	0.579	1.16	1.16	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-21-3	Silicon J-,I6a	1710000	ug/Kg	*N	1620	10800	10800	1	P	HSC	12/14/09 13:25	121409A-1	931895
7440-22-4	Silver	267	ug/Kg	J	113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-23-5	Sodium J,I4a	124000	ug/Kg	E	7890	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-28-0	Thallium U,I4	0.194	mg/kg	J	0.0695	0.232	0.232	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-32-6	Titanium	339000	ug/Kg		113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-61-1	Uranium	1.23	mg/kg	*	0.0153	0.0463	0.0463	2	MS	PRB	12/08/09 15:24	091208-4	925480
7440-62-2	Vanadium	28900	ug/Kg		113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-66-6	Zinc	37400	ug/Kg		372	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.516	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.502	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.55	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541014 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13862 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11500000	ug/Kg		7500	22100	22100	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-36-0	Antimony UJ,I12a	1100	ug/Kg	UN	364	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.07	mg/kg	N	0.217	1.08	1.08	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-39-3	Barium	130000	ug/Kg		110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-41-7	Beryllium	0.932	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 18:38	091208-5	925480
7440-42-8	Boron	2800	ug/Kg	J	1100	5510	5510	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-70-2	Calcium	3070000	ug/Kg		8820	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-47-3	Chromium	10400	ug/Kg		165	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-48-4	Cobalt J,I10a	6720	ug/Kg	*	165	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-50-8	Copper	7980	ug/Kg		331	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-89-6	Iron	14200000	ug/Kg		8820	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-92-1	Lead	15600	ug/Kg	E	276	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-93-2	Lithium J+,I6b	14.4	mg/kg	N	0.434	2.17	2.17	2	MS	BAJ	12/08/09 20:50	091208-7	925480
7439-95-4	Magnesium	2240000	ug/Kg		9370	33100	33100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-96-5	Manganese	318000	ug/Kg	*	221	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-97-6	Mercury J+,I6b	25.3	ug/kg	N	4.16	12.2	12.2	1	AV	JXL1	12/07/09 12:33	120709S1-8	925629
7440-02-0	Nickel	28.7	mg/kg		0.108	0.434	0.434	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-09-7	Potassium J+,I6b	1230000	ug/Kg	N	7060	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-21-3	Silicon J-,I6a	1770000	ug/Kg	*N	1630	10800	10800	1	P	HSC	12/14/09 13:29	121409A-1	931895
7440-22-4	Silver	315	ug/Kg	J	110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-23-5	Sodium J,I4a	352000	ug/Kg	E	7720	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-28-0	Thallium U,I4	0.288	mg/kg		0.065	0.217	0.217	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-32-6	Titanium	280000	ug/Kg		110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-61-1	Uranium	0.628	mg/kg	*	0.0143	0.0434	0.0434	2	MS	PRB	12/08/09 15:26	091208-4	925480
7440-62-2	Vanadium	26200	ug/Kg		110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-66-6	Zinc	33400	ug/Kg		364	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.522	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.531	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.564	g	30	mL	12/04/09	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541015 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13876 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7670000	ug/Kg		7030	20700	20700	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-36-0	Antimony UJ,I12a	1030	ug/Kg	UN	341	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-38-2	Arsenic J-,I6a	2.59	mg/kg	N	0.213	1.06	1.06	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-39-3	Barium	164000	ug/Kg		103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-41-7	Beryllium	0.874	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	12/08/09 18:39	091208-5	925480
7440-42-8	Boron	3270	ug/Kg	J	1030	5170	5170	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-43-9	Cadmium	234	ug/Kg	J	103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-70-2	Calcium	2430000	ug/Kg		8270	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-47-3	Chromium	12100	ug/Kg		155	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-48-4	Cobalt J,I10a	7580	ug/Kg	*	155	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-50-8	Copper	8180	ug/Kg		310	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-89-6	Iron	20100000	ug/Kg		8270	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-92-1	Lead	24300	ug/Kg	E	258	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-93-2	Lithium J+,I6b	10.5	mg/kg	N	0.425	2.13	2.13	2	MS	BAJ	12/08/09 20:52	091208-7	925480
7439-95-4	Magnesium	1770000	ug/Kg		8780	31000	31000	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-96-5	Manganese	721000	ug/Kg	*	207	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-97-6	Mercury J+,I6b	18.5	ug/kg	N	4.06	12	12	1	AV	JXL1	12/07/09 12:40	120709S1-8	925629
7440-02-0	Nickel	8.77	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-09-7	Potassium J+,I6b	1760000	ug/Kg	N	6610	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-21-3	Silicon J-,I6a	1810000	ug/Kg	*N	1590	10600	10600	1	P	HSC	12/14/09 13:32	121409A-1	931895
7440-22-4	Silver	383	ug/Kg	J	103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-23-5	Sodium J,I4a	200000	ug/Kg	E	7230	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-28-0	Thallium U,I4	0.255	mg/kg		0.0638	0.213	0.213	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-32-6	Titanium	394000	ug/Kg		103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-61-1	Uranium	1.32	mg/kg	*	0.014	0.0425	0.0425	2	MS	PRB	12/08/09 15:28	091208-4	925480
7440-62-2	Vanadium	56600	ug/Kg		103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-66-6	Zinc	28700	ug/Kg		341	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.539	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.524	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.559	g	30	mL	12/04/09	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541016 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13872 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6820000	ug/Kg		7460	22000	22000	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-36-0	Antimony UJ,I12a	1100	ug/Kg	UN	362	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-38-2	Arsenic J-,I6a	1.98	mg/kg	N	0.217	1.08	1.08	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-39-3	Barium	120000	ug/Kg		110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-41-7	Beryllium	0.670	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 18:41	091208-5	925480
7440-42-8	Boron	2930	ug/Kg	J	1100	5490	5490	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-43-9	Cadmium	176	ug/Kg	J	110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-70-2	Calcium	2040000	ug/Kg		8780	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-47-3	Chromium	11100	ug/Kg		165	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-48-4	Cobalt J,I10a	5470	ug/Kg	*	165	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-50-8	Copper	7740	ug/Kg		329	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-89-6	Iron	10700000	ug/Kg		8780	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-92-1	Lead	15500	ug/Kg	E	274	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-93-2	Lithium J+,I6b	10.1	mg/kg	N	0.434	2.17	2.17	2	MS	BAJ	12/08/09 20:55	091208-7	925480
7439-95-4	Magnesium	1430000	ug/Kg		9330	32900	32900	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-96-5	Manganese	439000	ug/Kg	*	220	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-97-6	Mercury J+,I6b	28.9	ug/kg	N	4.48	13.2	13.2	1	AV	JXL1	12/07/09 12:41	120709S1-8	925629
7440-02-0	Nickel	7.32	mg/kg		0.108	0.434	0.434	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-09-7	Potassium J+,I6b	1410000	ug/Kg	N	7020	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7782-49-2	Selenium UJ,I6a	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-21-3	Silicon J-,I6a	1180000	ug/Kg	*N	1490	9930	9930	1	P	HSC	12/14/09 13:35	121409A-1	931895
7440-22-4	Silver	278	ug/Kg	J	110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-23-5	Sodium J,I4a	229000	ug/Kg	E	7680	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-28-0	Thallium U,I4	0.203	mg/kg	J	0.0651	0.217	0.217	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-32-6	Titanium	350000	ug/Kg		110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-61-1	Uranium	1.33	mg/kg	*	0.0143	0.0434	0.0434	2	MS	PRB	12/08/09 15:31	091208-4	925480
7440-62-2	Vanadium	24200	ug/Kg		110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-66-6	Zinc	30200	ug/Kg		362	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.503	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.509	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.503	g	30	mL	12/04/09	TXB3

P.S. 3/5/10

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-605

REQUEST NUMBER: 10-605

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241541 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-13875	1	POLY	Metals+CLO4	Ice	S
RE03-09-13865	1	POLY	Metals+CLO4	Ice	S
RE03-09-13868	1	POLY	Metals+CLO4	Ice	S
RE03-09-13867	1	POLY	Metals+CLO4	Ice	S
RE03-09-13864	1	POLY	Metals+CLO4	Ice	S
RE03-09-13871	1	POLY	Metals+CLO4	Ice	S
RE03-09-13877	1	POLY	Metals+CLO4	Ice	S
RE03-09-13869	1	POLY	Metals+CLO4	Ice	S
RE03-09-13870	1	POLY	Metals+CLO4	Ice	S
RE03-09-13873	1	POLY	Metals+CLO4	Ice	S
RE03-09-13863	1	POLY	Metals+CLO4	Ice	S
RE03-09-13874	1	POLY	Metals+CLO4	Ice	S
RE03-09-13866	1	POLY	Metals+CLO4	Ice	S
RE03-09-13862	1	POLY	Metals+CLO4	Ice	S
RE03-09-13876	1	POLY	Metals+CLO4	Ice	S
RE03-09-13872	1	POLY	Metals+CLO4	Ice	S

Relinquished By:	Date	Time	Received By:	Date	Time
Printed Name / Signature	11/19/09	1400	Patricia Dover-Dent P.D. Dent	11-20-09	08:50
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By: Date Time

Printed Name Signature

Remarks:

Thursday, November 19, 2009

REQUEST NUMBER: 10-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-605
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009
TURNAROUND/REPORT DUE: 12/19/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13862	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13863	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13864	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13865	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13866	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13867	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13868	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13869	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13870	S	11/18/2009	Plus, B, Li, Si, Ti, U

Thursday, November 19, 2009

REQUEST NUMBER: 10-605

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13871	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13872	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13873	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13874	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13875	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13876	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13877	S	11/18/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-605

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

November 25, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241541
SDG: 10-605

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 20, 2009, and analyzed for Metals and Perchlorates by LCMSMS. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-605
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241541
SDG: 10-605

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- Miscellaneous..... 931

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241541
SDG # : 10-605

November 25, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 20, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241541001	RE03-09-13875
241541002	RE03-09-13865
241541003	RE03-09-13868
241541004	RE03-09-13867
241541005	RE03-09-13864
241541006	RE03-09-13871
241541007	RE03-09-13877
241541008	RE03-09-13869
241541009	RE03-09-13870
241541010	RE03-09-13873
241541011	RE03-09-13863
241541012	RE03-09-13874
241541013	RE03-09-13866
241541014	RE03-09-13862
241541015	RE03-09-13876
241541016	RE03-09-13872

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Metals and Perchlorates by LCMSMS.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis

Project Manager

List of current GEL Certifications as of 25 November 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Thursday, November 19, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-605

REQUEST NUMBER: 10-605

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241541 %

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Relinquished By:	Date	Time	Received By:	Date	Time
[illegible]	11/19/09	1400	Patricia Dover-Dent P.D.	11-20-09	08:50
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By:	Date	Time	Remarks:
Printed Name / Signature			

Thursday, November 19, 2009

REQUEST NUMBER: 10-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-605

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/19/2009

TURNAROUND/REPORT DUE: 12/19/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13862	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13863	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13864	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13865	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13866	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13867	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13868	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13869	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13870	S	11/18/2009	Plus, B, Li, Si, Ti, U

Thursday, November 19, 2009

REQUEST NUMBER: 10-605

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-13871	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13872	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13873	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13874	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13875	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13876	S	11/18/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-13877	S	11/18/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-605

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-605**
Received By:Patricia Dover-Dent	**Date Received:November 20, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:40 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **1-5,15**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time On Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7848 9833 1C
7209 7848 9855 1C
7209 7848 9796 2C
7209 7848 9800 2C
7209 7848 9844 2C
7209 7848 9877 2C
7209 7848 9822 3C
7209 7848 9752 4C
7209 7848 9811 4C
7209 7848 9866 5C
7209 7848 9730 15C
7209 7848 9741 15C

PM (or PMA) review: Initials _____ Date 11/23/09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

1c

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MPS# 0263 7209 7848 9833
Mstr# 7209 7848 9822 0201

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XX CHSA

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

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MPS# 0263 7209 7848 9855
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Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

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2 of 3
MPS# 0263 7209 7848 9800
Mstr# 7209 7848 9796 0201

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

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Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2434

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMEPR1315W200

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RADIOACTIVE SAMPLES

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XX CHSA
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SC-US
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Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

3c

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1 of 2
TRK# 0201 7209 7848 9822
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PRIORITY OVERNIGHT
MM MASTER MM
XX CHSA
29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWK0

4c

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TRK# 0201 7209 7848 9752
FRI - 20NOV A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS

LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

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3 of 3
MPS# 0263 7209 7848 9811
Mstr# 7209 7848 9796 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A056AB800

5c

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TRK# 0201 7209 7848 9866

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
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LOS ALAMOS, NM 87545
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SHIP DATE: 19NOV09
ACTWGT: 59.0 LB MAN
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2040 SAVAGE RD

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REF: 6B010AMR1A015AGWK0

15c

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2 of 3
MPS# 0263 7209 7848 9730
Mstr# 7209 7848 9720 0201

FRI - 20NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
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ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19NOV09
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2040 SAVAGE RD

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3 of 3
MPS# 0263 7209 7848 9741
Mstr# 7209 7848 9720 0201

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PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-605

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	926522
Prep Batch Number:	926521

Sample Analysis

Sample ID	Client ID
241541001	RE03-09-13875
241541002	RE03-09-13865
241541003	RE03-09-13868
241541004	RE03-09-13867
241541005	RE03-09-13864
241541006	RE03-09-13871
241541007	RE03-09-13877
241541008	RE03-09-13869
241541009	RE03-09-13870
241541010	RE03-09-13873
241541011	RE03-09-13863
241541012	RE03-09-13874
241541013	RE03-09-13866
241541014	RE03-09-13862

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241541015	RE03-09-13876
241541016	RE03-09-13872
1201980961	Interference Check Sample (ICS)
1201980957	Method Blank (MB)
1201980958	Laboratory Control Sample (LCS)
1201980959	241541001(RE03-09-13875) Matrix Spike (MS)
1201980960	241541001(RE03-09-13875) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

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QC Sample Designation
Sample 241541001 (RE03-09-13875) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

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Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M. Maier **Date:** 12/15/09

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SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13875

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541001

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.665	ug/kg	J	1	08-DEC-09 18:42	per1208015a
	Perchlorate Isotope Ratio			3.21			1	08-DEC-09 18:42	per1208015a
14797-73-0	Perchlorate-101	.558	2.23	0.617	ug/kg	J	1	08-DEC-09 18:42	per1208015a
	Perchlorate-O(18)			5.72	ug/kg		1	08-DEC-09 18:42	per1208015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13865

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541002

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	08-DEC-09 19:08	per1208018a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:08	per1208018a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	08-DEC-09 19:08	per1208018a
	Perchlorate-O(18)			6.70	ug/kg		1	08-DEC-09 19:08	per1208018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13868

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541003

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	08-DEC-09 19:16	per1208019a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:16	per1208019a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	08-DEC-09 19:16	per1208019a
	Perchlorate-O(18)			5.57	ug/kg		1	08-DEC-09 19:16	per1208019a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13867

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541004

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.57	2.28	0.570	ug/kg	U	1	08-DEC-09 19:25	per1208020a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:25	per1208020a
14797-73-0	Perchlorate-101	.57	2.28	0.570	ug/kg	U	1	08-DEC-09 19:25	per1208020a
	Perchlorate-O(18)			5.80	ug/kg		1	08-DEC-09 19:25	per1208020a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13864

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541005

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 19:33	per1208021a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:33	per1208021a
14797-73-0	Perchlorate-101	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 19:33	per1208021a
	Perchlorate-O(18)			5.57	ug/kg		1	08-DEC-09 19:33	per1208021a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13871

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541006

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	08-DEC-09 20:09	per1208025a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:09	per1208025a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	08-DEC-09 20:09	per1208025a
	Perchlorate-O(18)			6.27	ug/kg		1	08-DEC-09 20:09	per1208025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13877

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541007

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 20:18	per1208026a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:18	per1208026a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 20:18	per1208026a
	Perchlorate-O(18)			5.93	ug/kg		1	08-DEC-09 20:18	per1208026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13869

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541008

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.601	2.4	0.601	ug/kg	U	1	08-DEC-09 20:27	per1208027a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:27	per1208027a
14797-73-0	Perchlorate-101	.601	2.4	0.601	ug/kg	U	1	08-DEC-09 20:27	per1208027a
	Perchlorate-O(18)			6.32	ug/kg		1	08-DEC-09 20:27	per1208027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13870

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541009

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.58	2.32	0.709	ug/kg	J	1	08-DEC-09 20:36	per1208028a
	Perchlorate Isotope Ratio			3.02			1	08-DEC-09 20:36	per1208028a
14797-73-0	Perchlorate-101	.58	2.32	0.700	ug/kg	J	1	08-DEC-09 20:36	per1208028a
	Perchlorate-O(18)			5.99	ug/kg		1	08-DEC-09 20:36	per1208028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13873

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541010

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 20:45	per1208029a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:45	per1208029a
14797-73-0	Perchlorate-101	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 20:45	per1208029a
	Perchlorate-O(18)			5.82	ug/kg		1	08-DEC-09 20:45	per1208029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13863

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541011

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.547	2.19	0.547	ug/kg	U	1	08-DEC-09 20:54	per1208030a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:54	per1208030a
14797-73-0	Perchlorate-101	.547	2.19	0.547	ug/kg	U	1	08-DEC-09 20:54	per1208030a
	Perchlorate-O(18)			5.77	ug/kg		1	08-DEC-09 20:54	per1208030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13874

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541012

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 92.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.15	0.539	ug/kg	U	1	08-DEC-09 21:03	per1208031a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:03	per1208031a
14797-73-0	Perchlorate-101	.539	2.15	0.539	ug/kg	U	1	08-DEC-09 21:03	per1208031a
	Perchlorate-O(18)			5.67	ug/kg		1	08-DEC-09 21:03	per1208031a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13866

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541013

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.582	2.33	1.19	ug/kg	J	1	08-DEC-09 21:11	per1208032a
	Perchlorate Isotope Ratio			2.93			1	08-DEC-09 21:11	per1208032a
14797-73-0	Perchlorate-101	.582	2.33	1.21	ug/kg	J	1	08-DEC-09 21:11	per1208032a
	Perchlorate-O(18)			6.08	ug/kg		1	08-DEC-09 21:11	per1208032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13862

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541014

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.576	2.3	0.576	ug/kg	U	1	08-DEC-09 21:20	per1208033a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:20	per1208033a
14797-73-0	Perchlorate-101	.576	2.3	0.576	ug/kg	U	1	08-DEC-09 21:20	per1208033a
	Perchlorate-O(18)			5.99	ug/kg		1	08-DEC-09 21:20	per1208033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13876

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541015

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 21:28	per1208034a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:28	per1208034a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 21:28	per1208034a
	Perchlorate-O(18)			5.83	ug/kg		1	08-DEC-09 21:28	per1208034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13872

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541016

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.552	ug/kg	U	1	08-DEC-09 22:03	per1208038a
	Perchlorate Isotope Ratio						1	08-DEC-09 22:03	per1208038a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	08-DEC-09 22:03	per1208038a
	Perchlorate-O(18)			6.07	ug/kg		1	08-DEC-09 22:03	per1208038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–605

Extract Batch Code: 926521

Date Filtered: 04–DEC–09

Matrix: SOIL

Sample ID: 1201980958

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.03	ug/kg	101		70 – 130
Perchlorate Isotope Ratio		2.99				–
Perchlorate–101	2.00	2.02	ug/kg	101		70 – 130
Perchlorate–O(18)		4.91	ug/kg			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Perchlorate Interference Check Sample

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Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–605

Extract Batch Code: 926521

Date Filtered: 04–DEC–09

Matrix: SOIL

Sample ID: 1201980961

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.19	ug/kg	109		70 – 130
Perchlorate Isotope Ratio		3.05				
Perchlorate–101	2.00	2.14	ug/kg	107		70 – 130
Perchlorate–O(18)		4.99	ug/kg			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıaset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208014a
e: 08-Dec-2009
e: 18:34:05
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|LAN|926522|5025|745|1|

GW 12-09-09

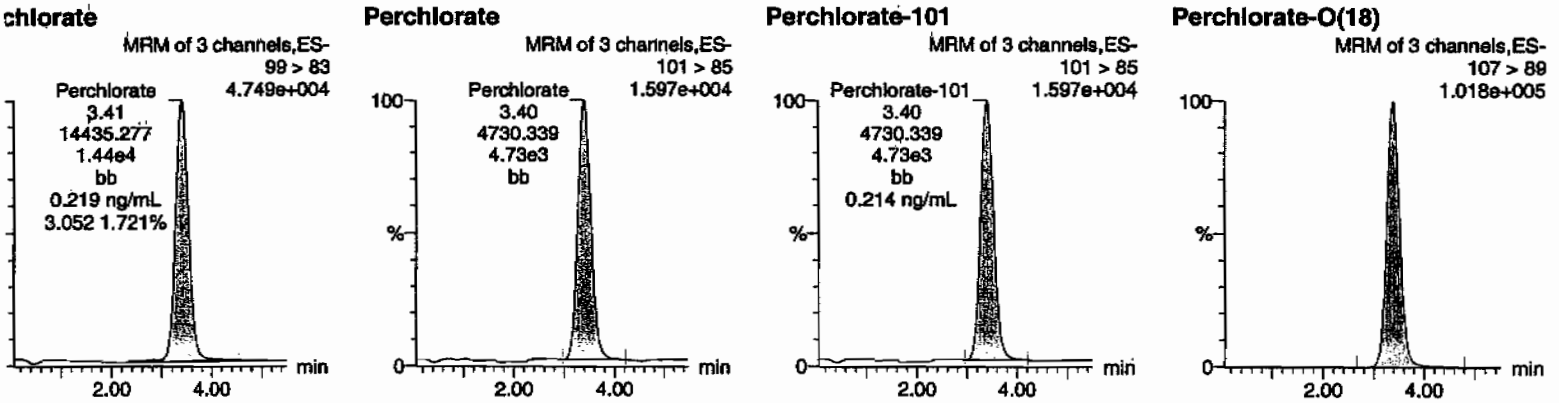

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
980961	Perchlorate	99 > 83	3.41	14435.277	14435.277	bb			0.2189	109.43	9.43	1298.4...	3.05
980961	Perchlorate-101	101 > 85	3.40	4730.339	4730.339	bb			0.2137	106.83	6.83	785.332	
980961	Perchlorate-O(18)	107 > 89	3.38	30511.693	30511.693	bb			0.4993	99.86	-0.14	15141....	

HMT 12/10/09

$$\frac{4730.339}{22139.3} = 0.2137$$

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–605

Extract Batch Code: 926521

Date Extracted: 04–DEC–09

GEL MS/PS ID: 1201980959

Client ID: RE03–09–13875

GEL MSD/PSD ID: 1201980960

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.23	0.665	ug/kg	2.92	101	2.94	102	.758	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		2.92		2.95		0		–
Perchlorate–101	2.23	0.617	ug/kg	2.97	106	2.96	105	.345	30	75 – 125
Perchlorate–O(18)	0	5.72	ug/kg	5.78		5.72		.976		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–605

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08–DEC–09	per1208001a	IPB001
Perchlorate–101	0.00	0	NA	08–DEC–09	per1208001a	IPB001
Perchlorate	0.00	0	NA	08–DEC–09	per1208002a	IPB001
Perchlorate–101	0.00	0	NA	08–DEC–09	per1208002a	IPB001

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ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ed: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıod: C:\MassLynx\Perchlorate.PRO\MethDB\per120809a.mdb 08 Dec 2009 18:29:27
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ıe: per1208001a
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CW 12-09-09

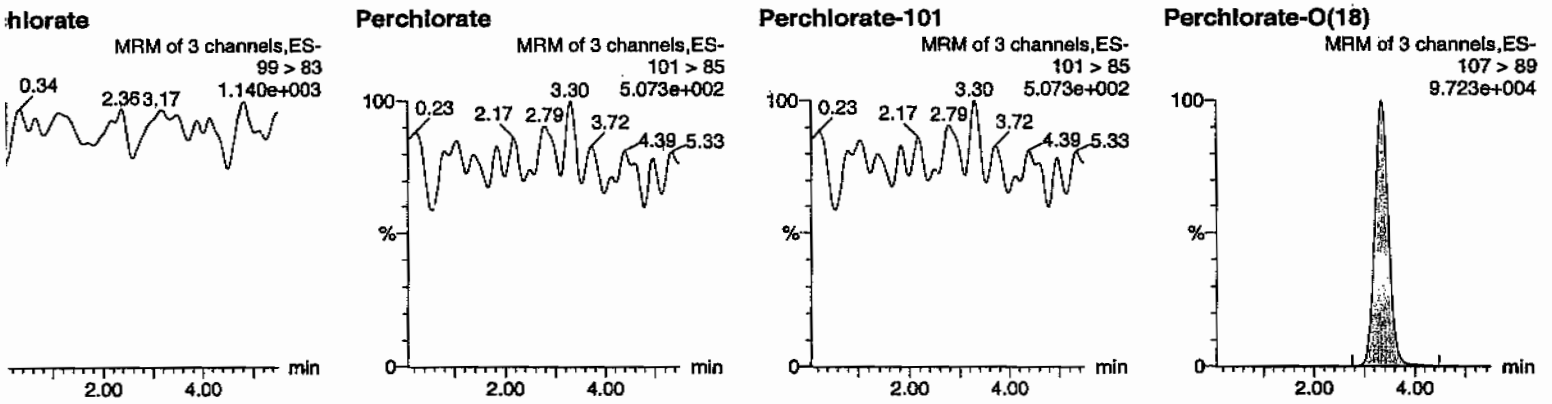

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
)1	Perchlorate	99 > 83											0.00
)1	Perchlorate-101	101 > 85											
)1	Perchlorate-O(18)	107 > 89	3.35	30987.637	30987.637	bb			0.5071	101.42 ✓	1.42	12659....	

MM 12/10/09

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ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

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ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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CWJ 12-09-09

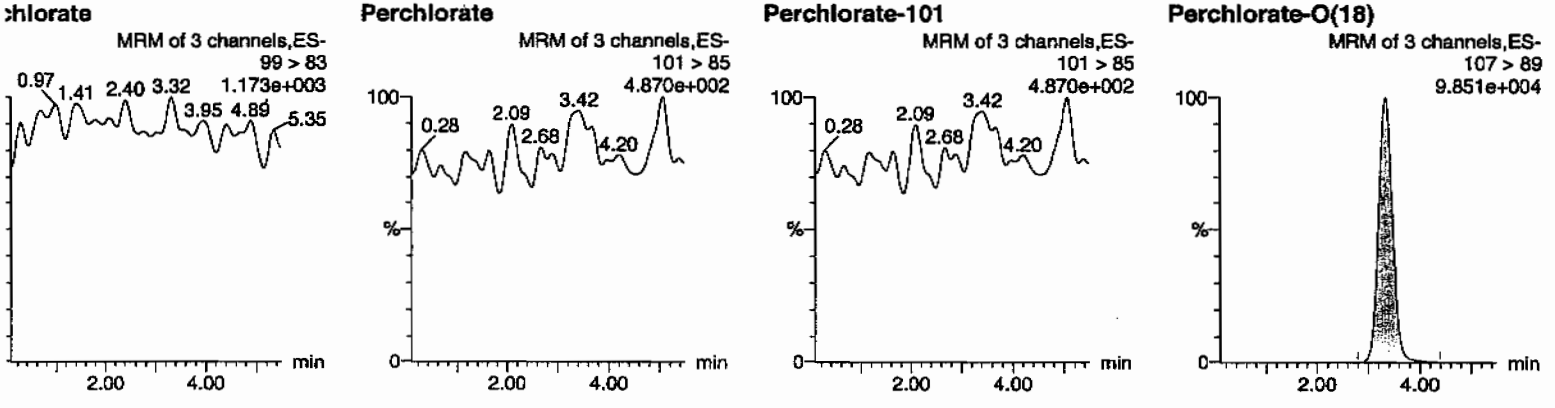

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
01	Perchlorate	99 > 83											0.00
01	Perchlorate-101	101 > 85											
01	Perchlorate-O(18)	107 > 89	3.33	30994.703	30994.703	bb			0.5072	101.44	1.44	9638.4...	

MAT 12/10/09

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-605

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-DEC-09	per1208008a	IPB002
Perchlorate-101	0.00	0	NA	08-DEC-09	per1208008a	IPB002
Perchlorate	0.00	0	NA	08-DEC-09	per1208010a	IPB003
Perchlorate-101	0.00	0	NA	08-DEC-09	per1208010a	IPB003
Perchlorate	0.00	0	NA	08-DEC-09	per1208023a	IPB004
Perchlorate-101	0.00	0	NA	08-DEC-09	per1208023a	IPB004
Perchlorate	0.00	0	NA	08-DEC-09	per1208036a	IPB005
Perchlorate-101	0.00	0	NA	08-DEC-09	per1208036a	IPB005
Perchlorate	0.00	0	NA	08-DEC-09	per1208039a	IPB006
Perchlorate-101	0.00	0	NA	08-DEC-09	per1208039a	IPB006
Perchlorate	0.00	0	NA	08-DEC-09	per1208048a	IPB007
Perchlorate-101	0.00	0	NA	08-DEC-09	per1208048a	IPB007

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GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

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12-09-09

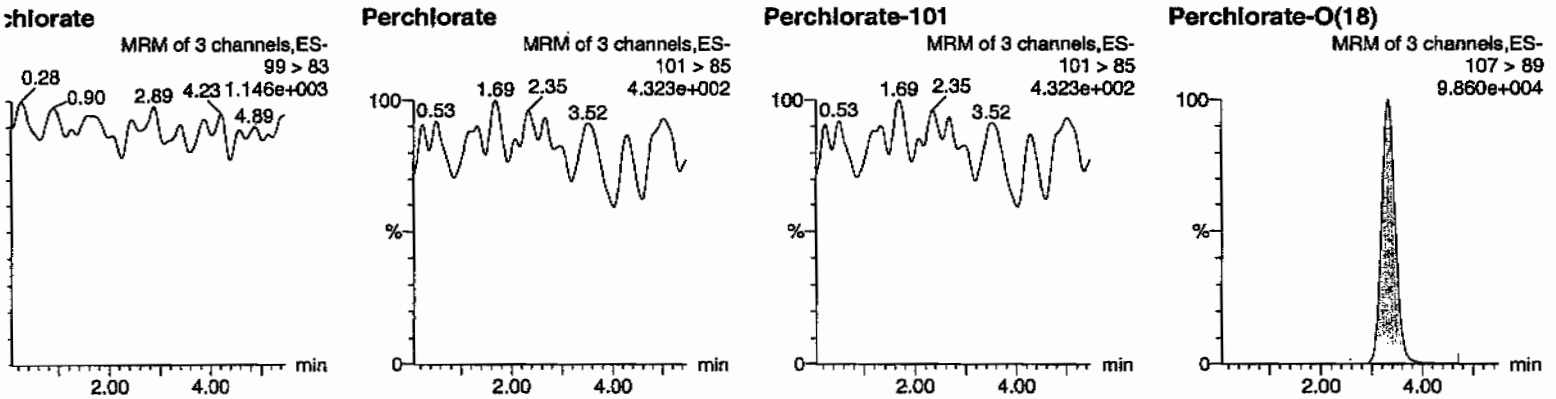

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02	Perchlorate-101	101 > 85											
02	Perchlorate-O(18)	107 > 89	3.33	31158.656	31158.656	bb			0.5099	101.97	1.97	5924.6...	

12/10/09

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ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

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ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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12-09-09

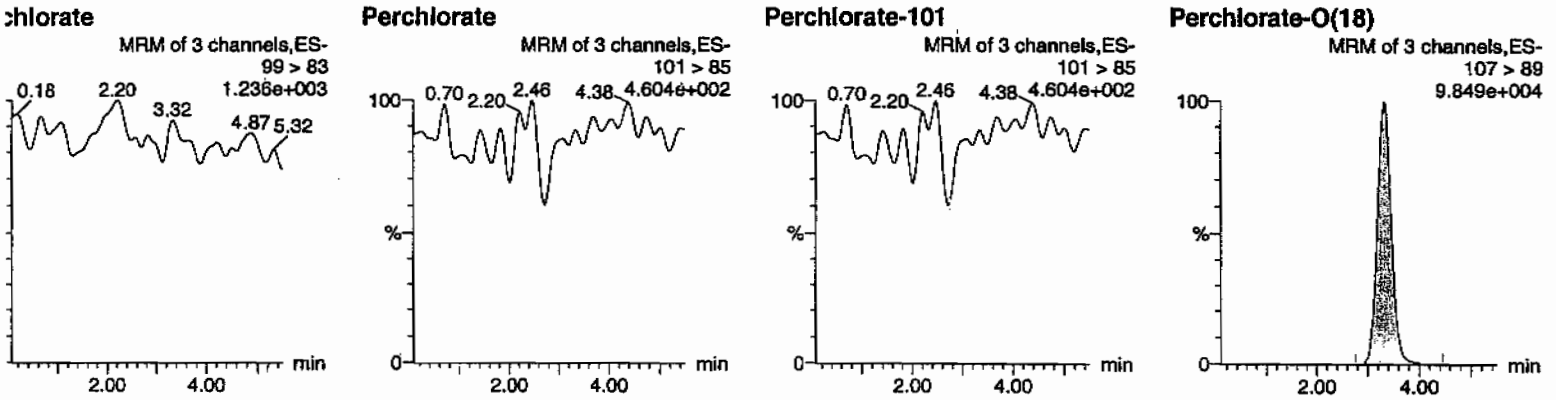

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
03	Perchlorate	99 > 83											0.00
03	Perchlorate-101	101 > 85											
03	Perchlorate-O(18)	107 > 89	3.32	30821.229	30821.229	bb			0.5044	100.87	0.87	8542.0...	

MM 12/10/09

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ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

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ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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e: 19:51:11
IPB004
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GW 12 09 09

chlorate

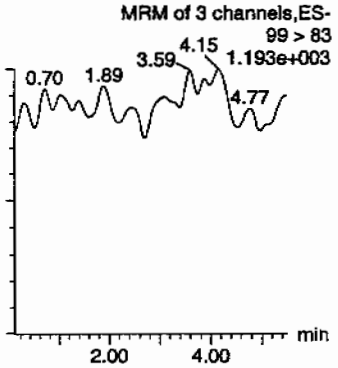

Perchlorate

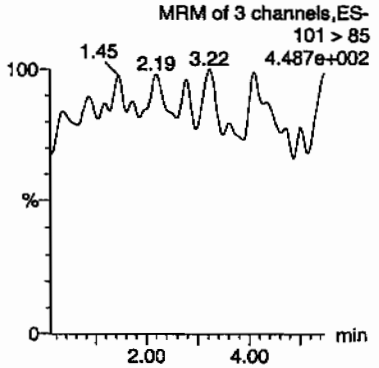

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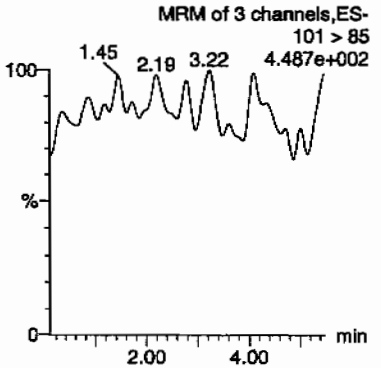

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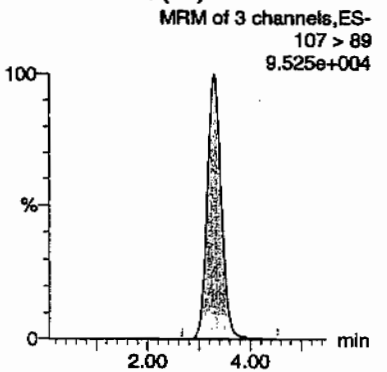

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)04	Perchlorate-101	101 > 85											
)04	Perchlorate-O(18)	107 > 89	3.30	30294.879	30294.879	bb			0.4957	99.15	-0.85	5785.5...	

MM 12/10/09

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ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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12-09-09

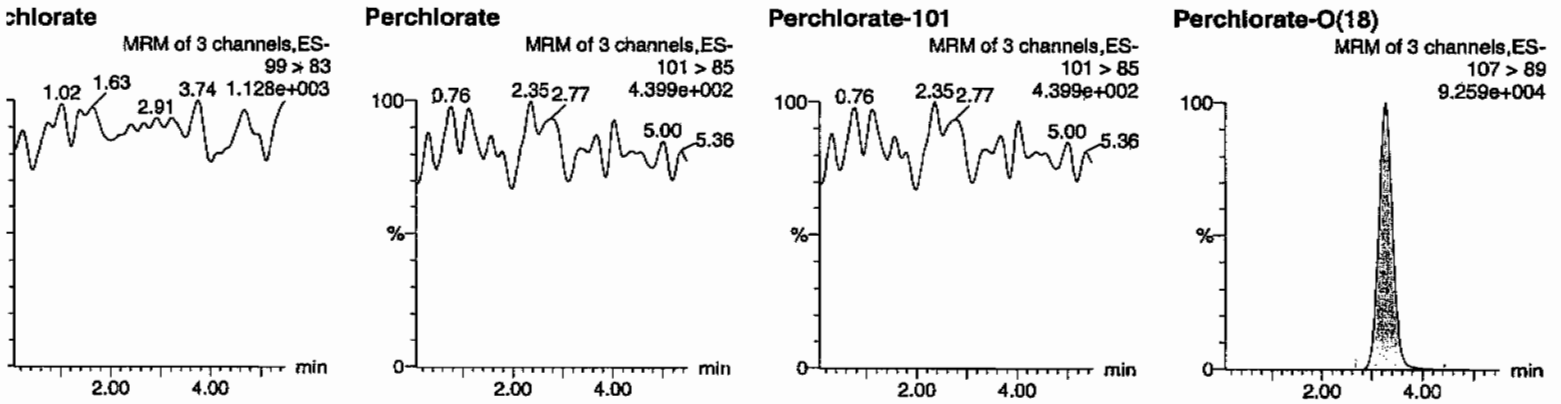

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
05	Perchlorate	99 > 83											0.00
05	Perchlorate-101	101 > 85											
05	Perchlorate-O(18)	107 > 89	3.27	29663.539	29663.539	bb			0.4854	97.08	-2.92	4293.0...	

MTT
12/10/09

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ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

: Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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PB006
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CWJ 12-09-09

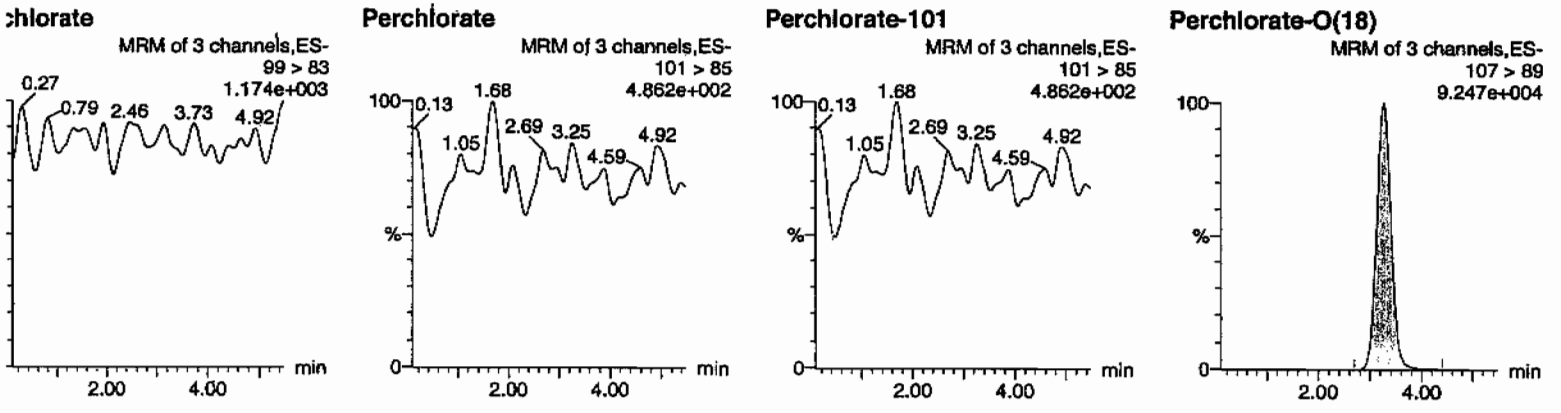

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
06	Perchlorate	99 > 83											0.00
06	Perchlorate-101	101 > 85											
06	Perchlorate-O(18)	107 > 89	3.27	29499.449	29499.449	bb			0.4827	96.54	-3.46	4521.3...	

MRT 12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

: Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208048a
ɜ: 08-Dec-2009
e: 23:29:49
IPB007
: 1:1,A

CWO 12-09-09

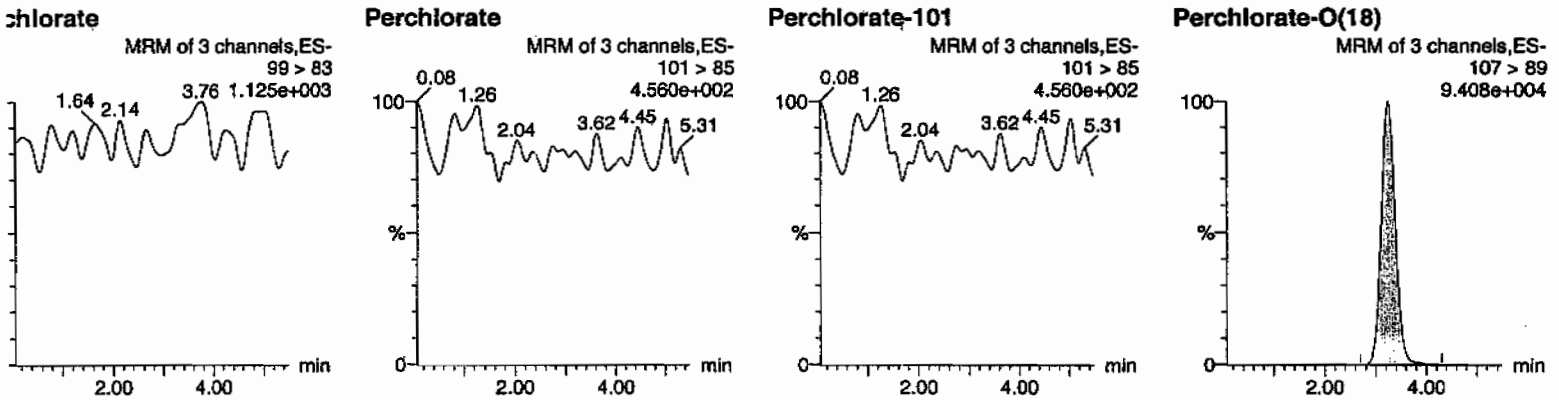

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
·07	Perchlorate	99 > 83											0.00
·07	Perchlorate-101	101 > 85											
·07	Perchlorate-O(18)	107 > 89	3.25	29938.469	29938.469	bb			0.4899	97.98	-2.02	9892.7...	

MAT 12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWJ 01-09-08

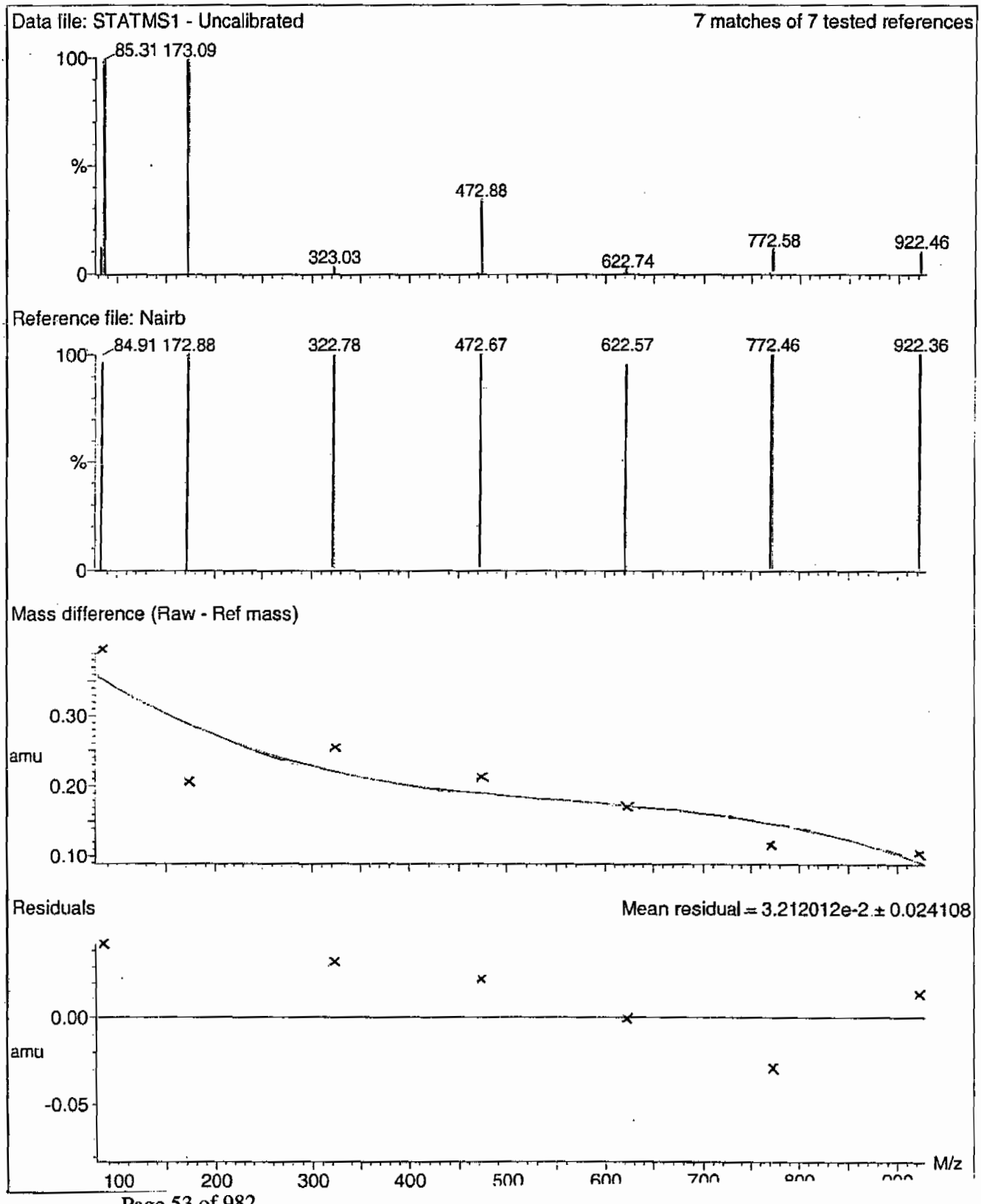

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Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

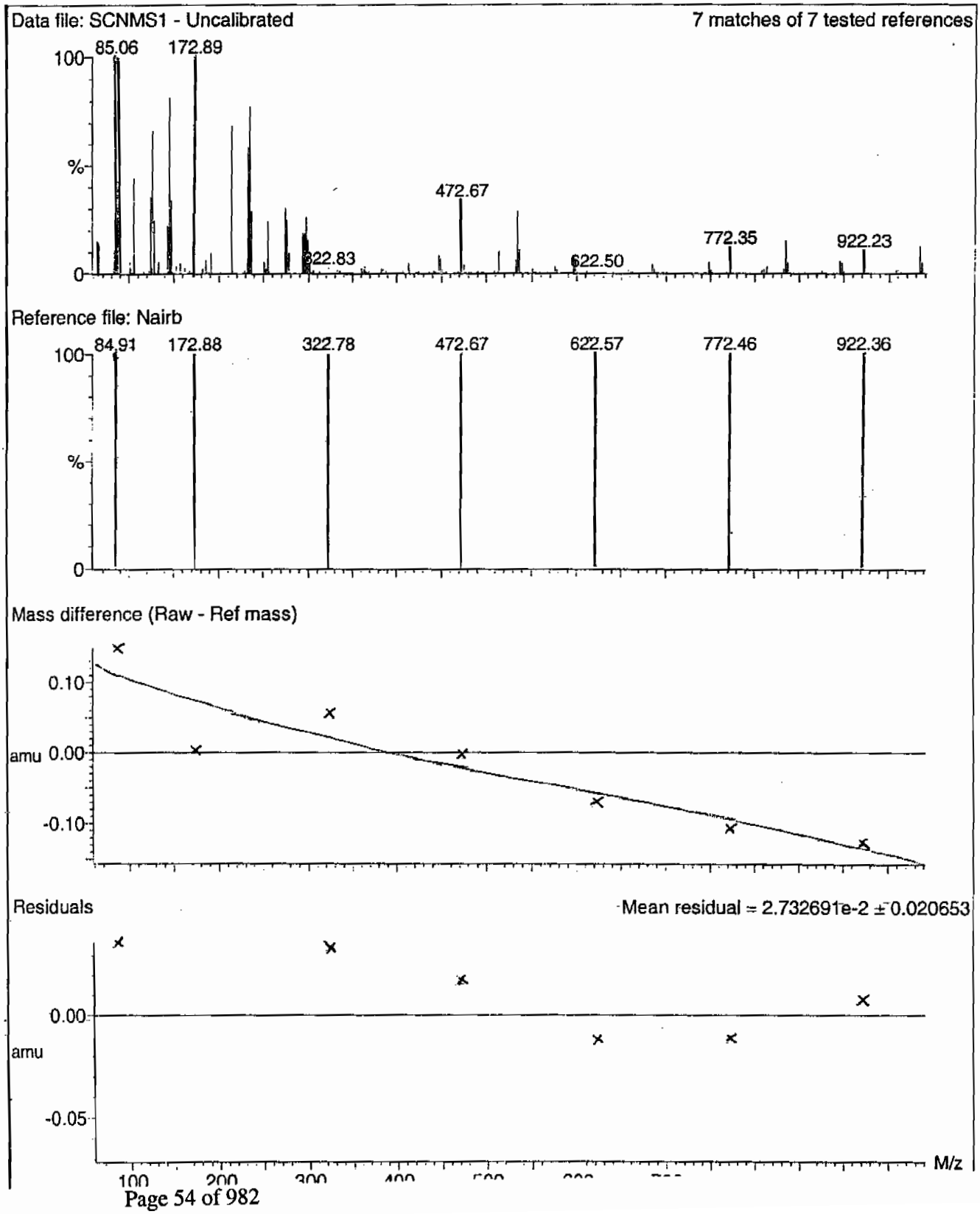

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Calibration Report - MS1 Scan Speed Compensation

Printed: Tue Jan 08 12:21:04 2008

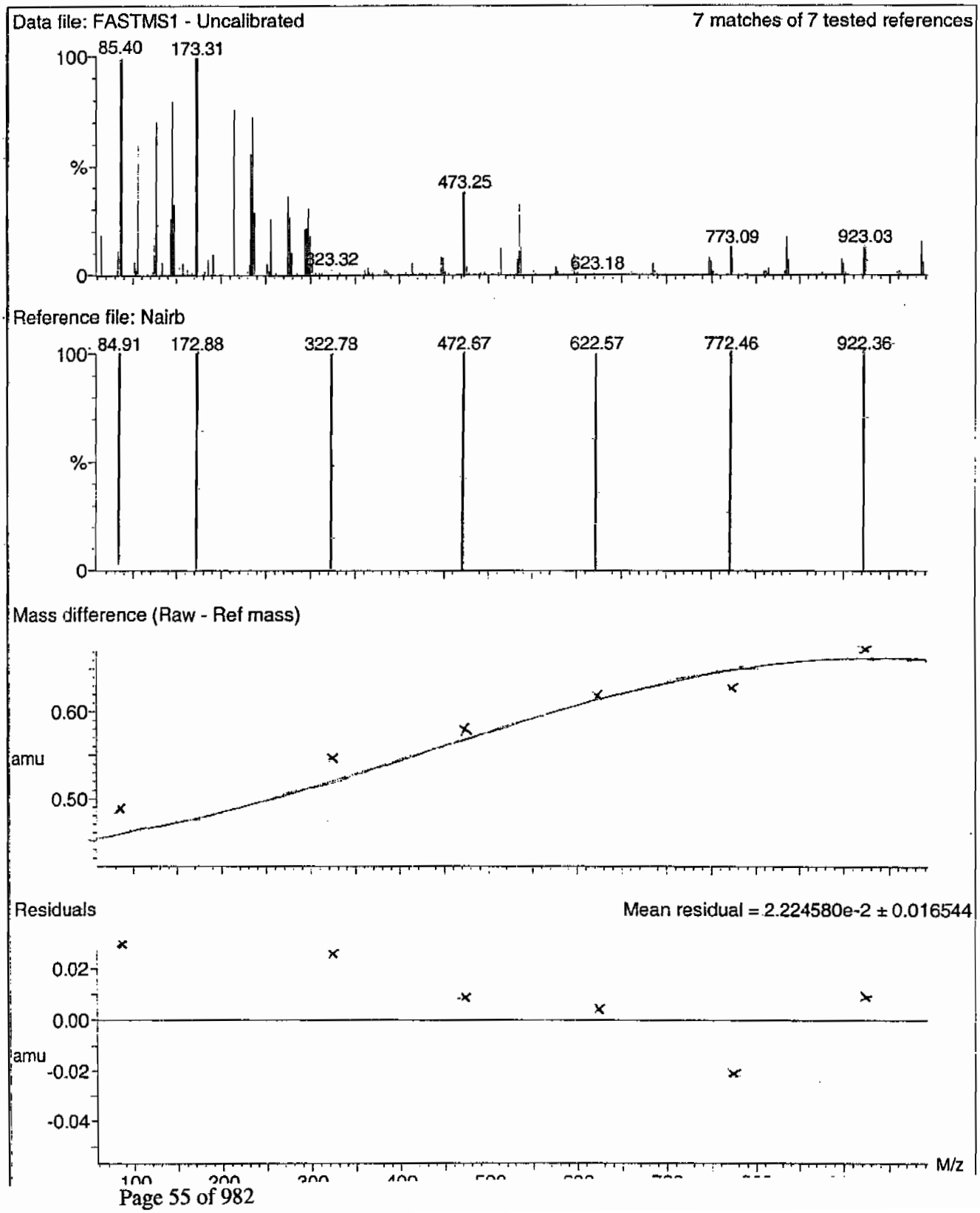

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Calibration Report - MS2 Static

Printed: Tue Jan 08 12:21:59 2008

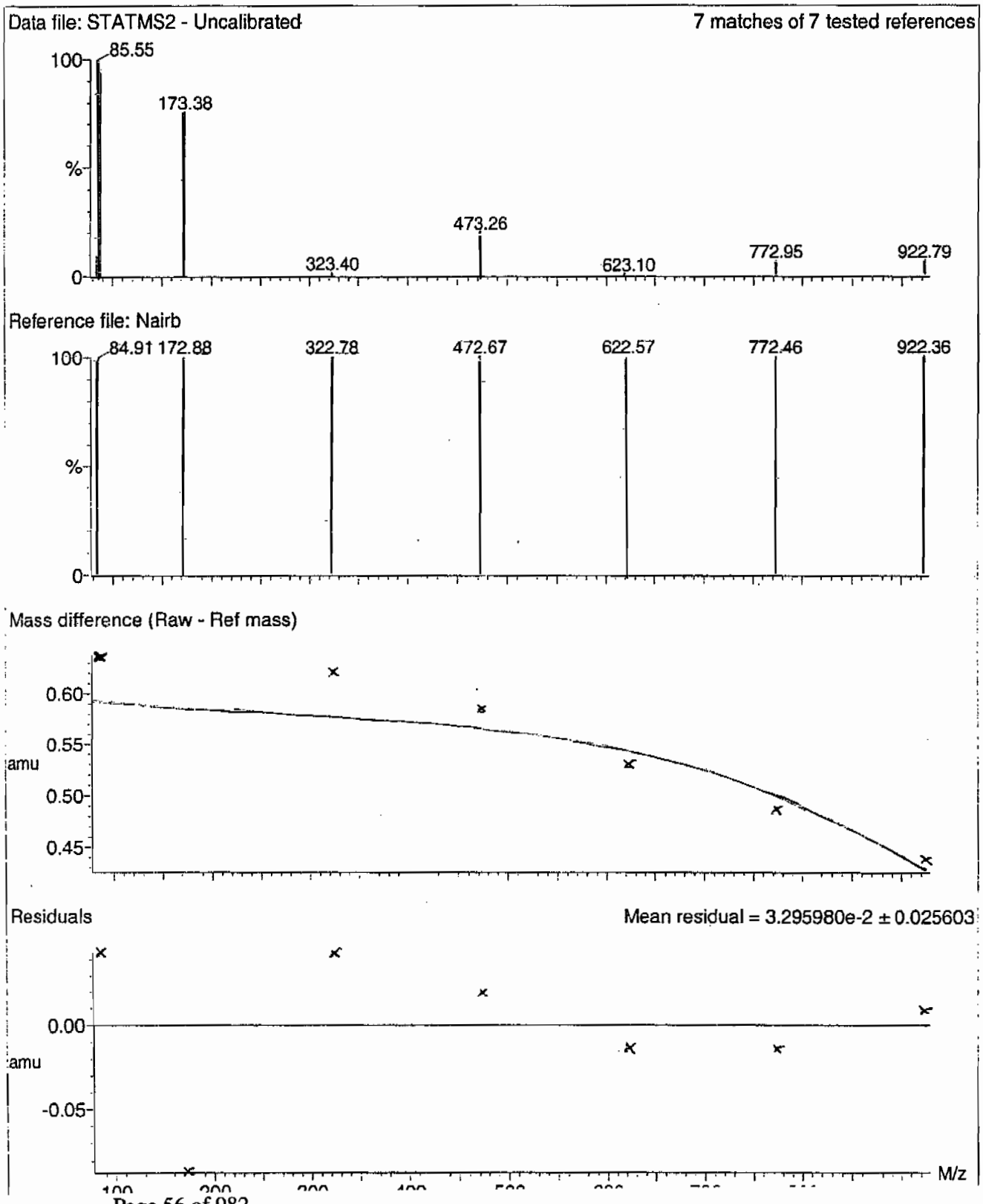

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scanning

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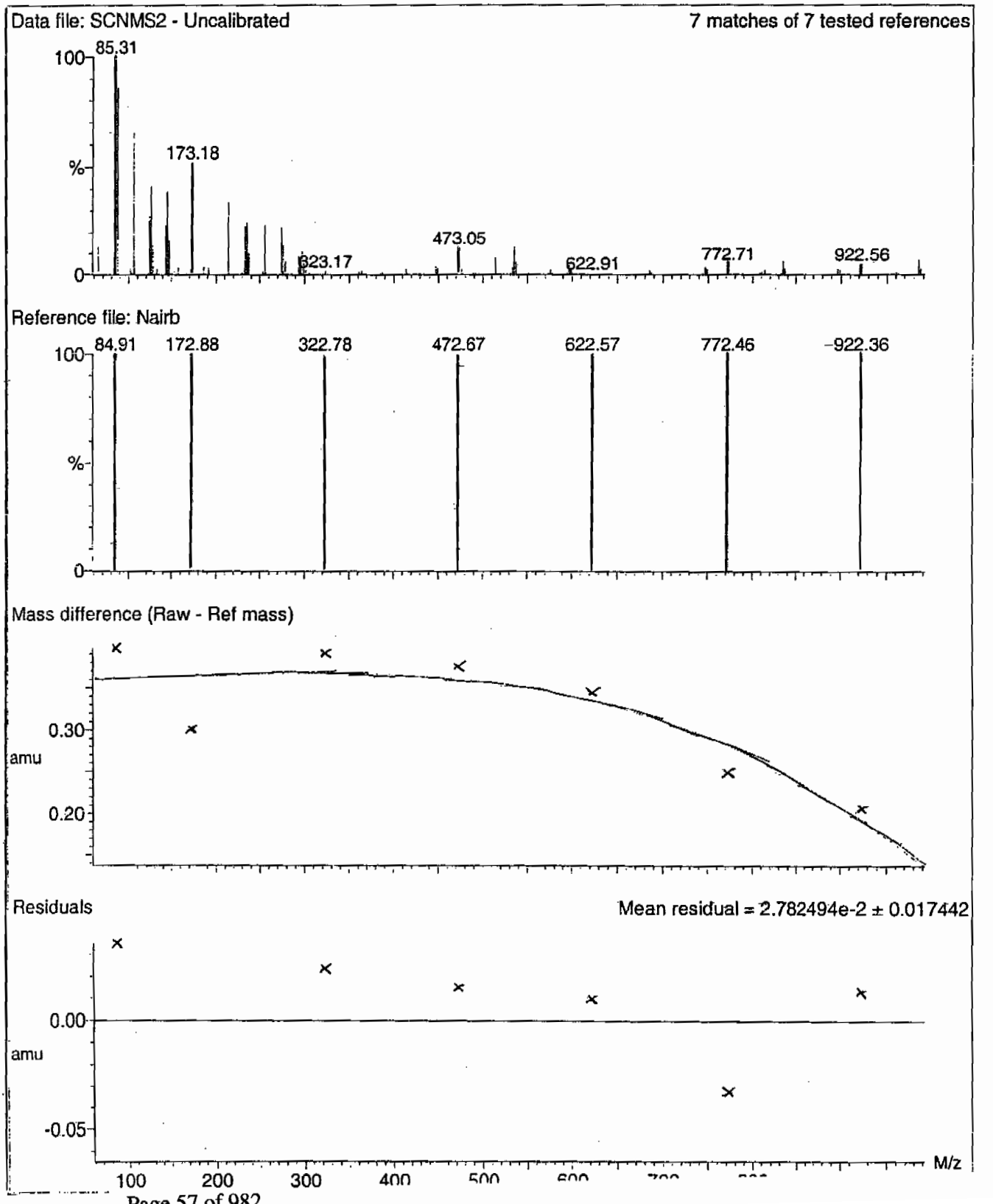

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:23:51 2008

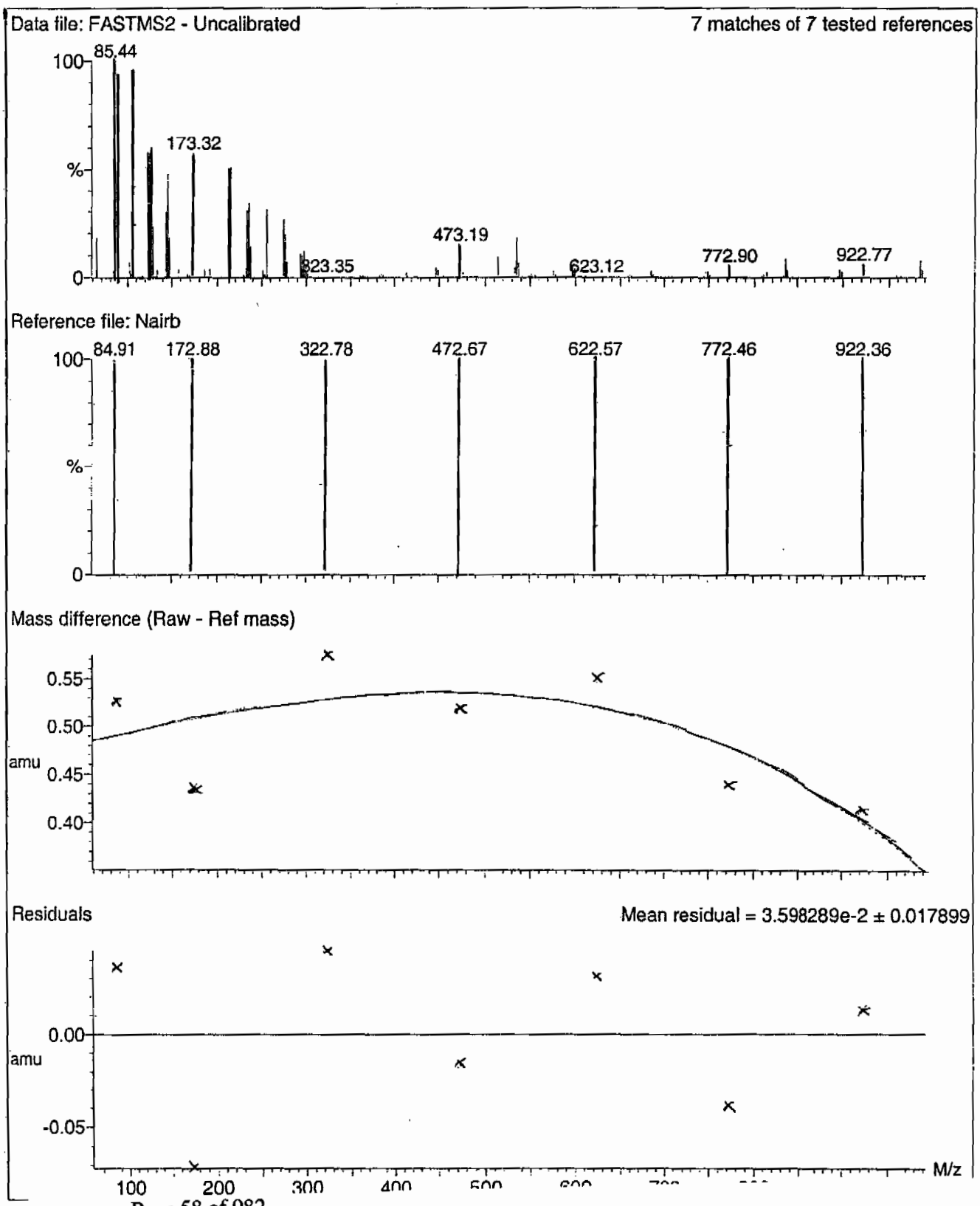

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File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Tuesday, December 08, 2009 09:26:15 Eastern Standard Time

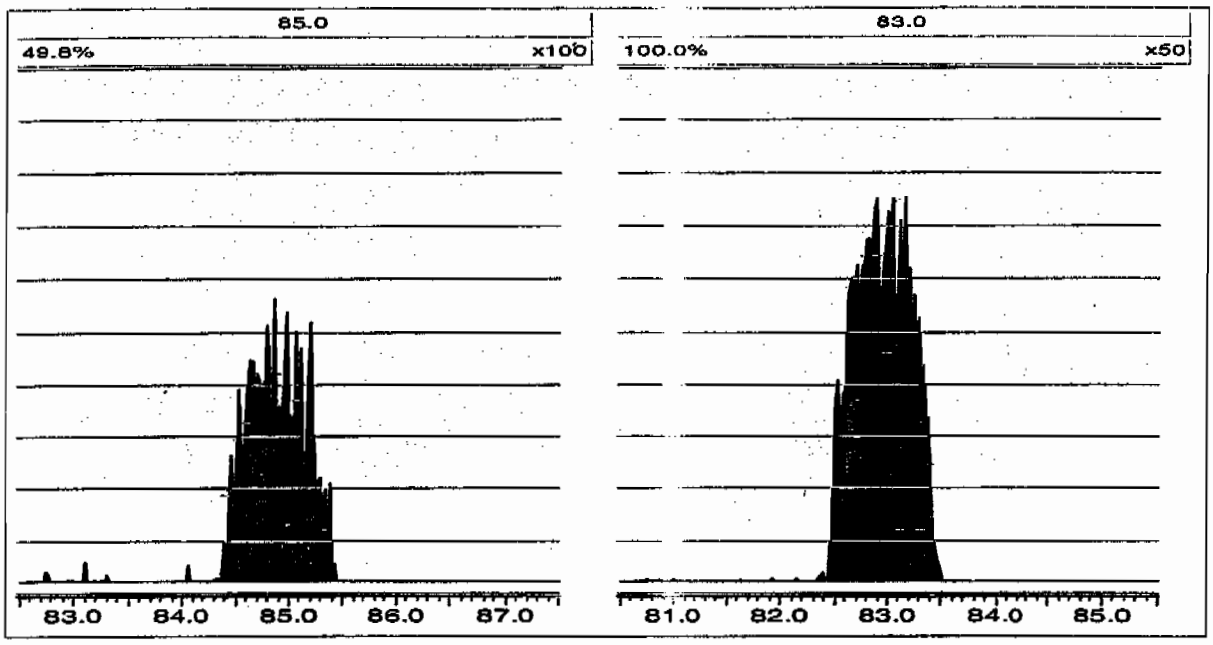

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–605

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1208006a**	**08–DEC–09**	**30228.5**				
Lower Area Limit			**15114.25**				
Upper Area Limit			**60457**				
1201980957	per1208012a	08–DEC–09 18:17	29962.1	3.32	3.35862	1.012	
1201980958	per1208013a	08–DEC–09 18:25	30016.8	3.32	3.34615	1.008	
1201980961	per1208014a	08–DEC–09 18:34	30511.7	3.38	3.4082	1.008	
241541001	per1208015a	08–DEC–09 18:42	31302.4	3.32	3.33367	1.004	
1201980959	per1208016a	08–DEC–09 18:51	31620.1	3.33	3.34618	1.005	
1201980960	per1208017a	08–DEC–09 18:59	31312.9	3.32	3.33367	1.004	
241541002	per1208018a	08–DEC–09 19:08	35411.4	3.32	3.34615	1.008	
241541003	per1208019a	08–DEC–09 19:16	30161.5	3.31	3.32133	1.003	

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Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–605

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1208006a**	**08–DEC–09**	**30228.5**				
Lower Area Limit			**15114.25**				
Upper Area Limit			**60457**				
241541004	per1208020a	08–DEC–09 19:25	31095.4	3.31	3.32135	1.003	
241541005	per1208021a	08–DEC–09 19:33	30996.5	3.31	3.29645	.996	
241541006	per1208025a	08–DEC–09 20:09	32135.1	3.3	3.30888	1.003	
241541007	per1208026a	08–DEC–09 20:18	32492	3.32	3.33368	1.004	
241541008	per1208027a	08–DEC–09 20:27	32146	3.3	3.32135	1.006	
241541009	per1208028a	08–DEC–09 20:36	31578.5	3.3	3.30888	1.003	
241541010	per1208029a	08–DEC–09 20:45	32382.9	3.3	3.32135	1.006	
241541011	per1208030a	08–DEC–09 20:54	32196	3.3	3.33367	1.01	

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Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–605

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per1208006a**	**08–DEC–09**	**30228.5**				
Lower Area Limit			**15114.25**				
Upper Area Limit			**60457**				
241541012	per1208031a	08–DEC–09 21:03	32156.8	3.3	3.3089	1.003	
241541013	per1208032a	08–DEC–09 21:11	31941.3	3.28	3.3089	1.009	
241541014	per1208033a	08–DEC–09 21:20	31769.2	3.28	3.29642	1.005	
241541015	per1208034a	08–DEC–09 21:28	31966.8	3.27	3.29642	1.008	
241541016	per1208038a	08–DEC–09 22:03	33622.1	3.26	3.2841	1.007	

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SAMPLE
DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13875

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541001

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.665	ug/kg	J	1	08-DEC-09 18:42	per1208015a
	Perchlorate Isotope Ratio			3.21			1	08-DEC-09 18:42	per1208015a
14797-73-0	Perchlorate-101	.558	2.23	0.617	ug/kg	J	1	08-DEC-09 18:42	per1208015a
	Perchlorate-O(18)			5.72	ug/kg		1	08-DEC-09 18:42	per1208015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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GEL Group, LLC Analyst: Charles Wilson

set: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ed: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

e: per1208015a
: 08-Dec-2009
: 18:42:38
41541001
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|LAN|926522|50L20|1|

12-09-09

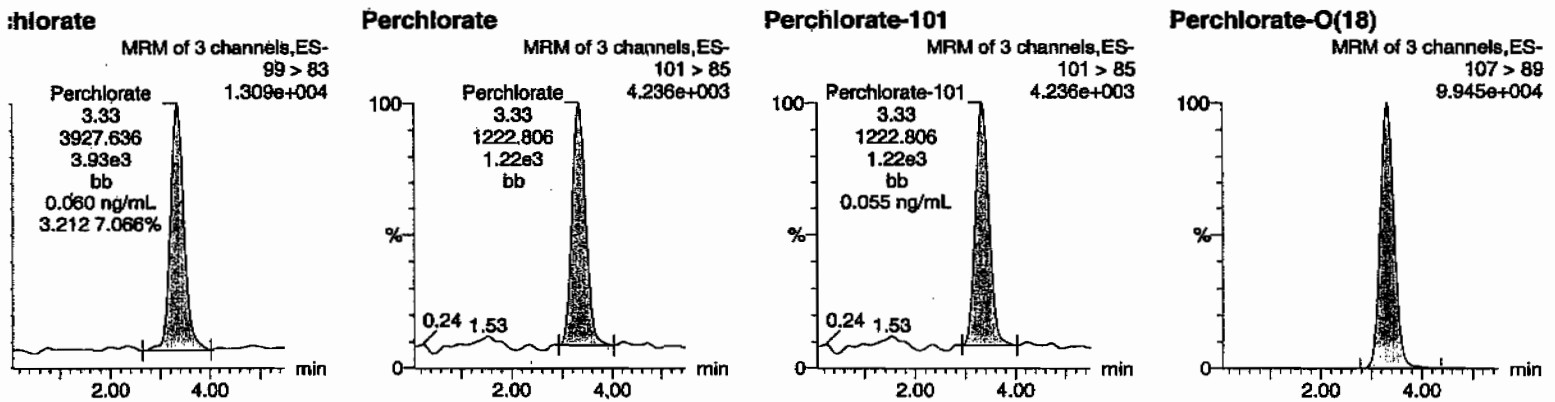

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41001	Perchlorate	99 > 83	3.33	3927.636	3927.636	bb			0.0595			144.243	3.21
41001	Perchlorate-101	101 > 85	3.33	1222.806	1222.806	bb			0.0552			147.164	
41001	Perchlorate-O(18)	107 > 89	3.32	31302.355	31302.355	bb			0.5122	102.45	2.45	7971.8...	

$$\frac{3927.636}{1222.806} = 3.2120$$

MAT 12/10/09

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13865

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541002

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	08-DEC-09 19:08	per1208018a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:08	per1208018a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	08-DEC-09 19:08	per1208018a
	Perchlorate-O(18)			6.70	ug/kg		1	08-DEC-09 19:08	per1208018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
:ed: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208018a
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|LANL|926522|50120|1|

CWJ 12-09-09

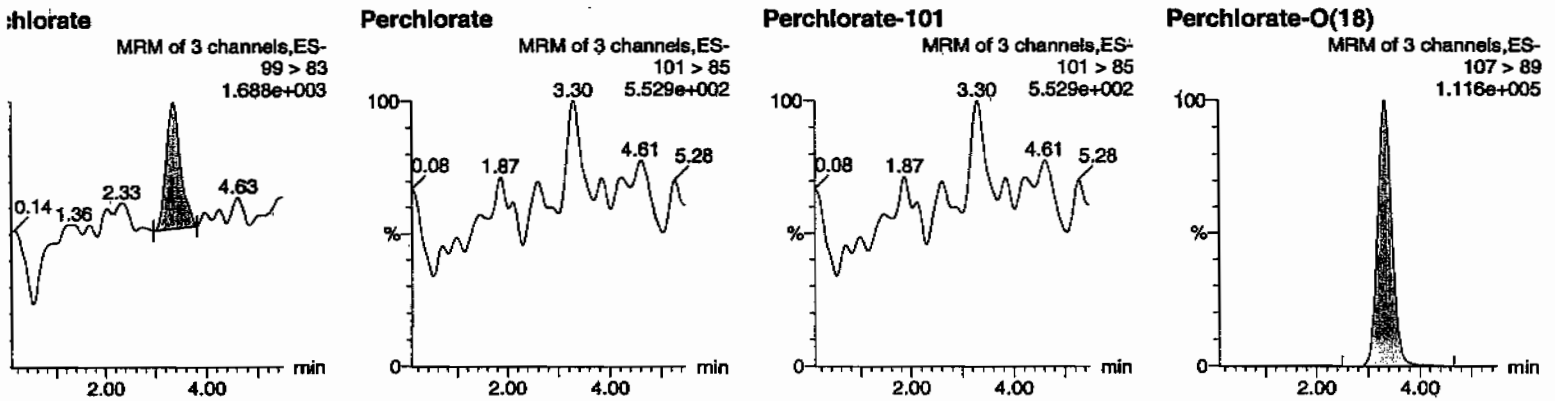

	Name	Trace	RT	%Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41002	Perchlorate	99 > 83	3.35	269.477	269.477	bb			0.0041			7.471	0.00
41002	Perchlorate-101	101 > 85											
41002	Perchlorate-O(18)	107 > 89	3.32	35411.387	35411.387	bb			0.5795	115.89	15.89	12606....	

MMT 12/10/09

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13868

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541003

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	08-DEC-09 19:16	per1208019a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:16	per1208019a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	08-DEC-09 19:16	per1208019a
	Perchlorate-O(18)			5.57	ug/kg		1	08-DEC-09 19:16	per1208019a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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set: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ed: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

e: per1208019a
: 08-Dec-2009
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41541003
1:4,B

|LANL|926522|50120|1|

12-09-09

hlorate

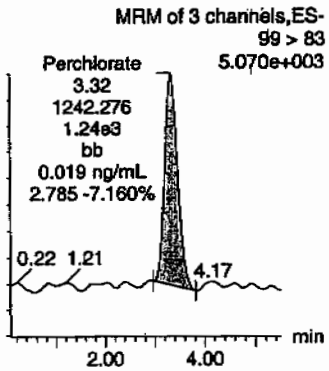

Perchlorate

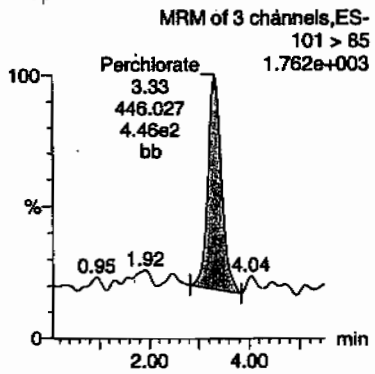

Perchlorate-101

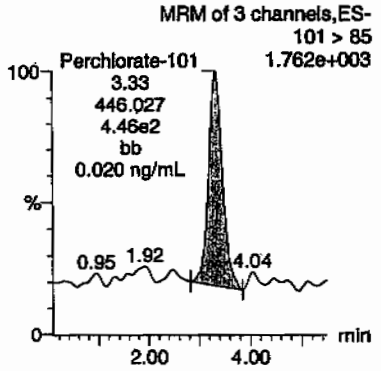

Perchlorate-O(18)

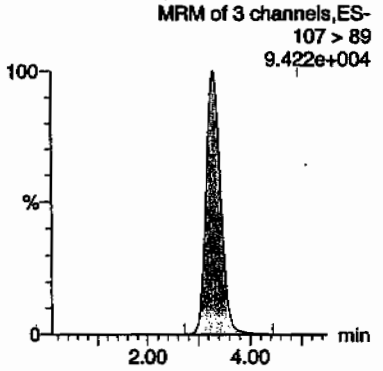

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41003	Perchlorate	99 > 83	3.32	1242.276	1242.276	bb			0.0188			91.864	2.79
41003	Perchlorate-101	101 > 85	3.33	446.027	446.027	bb			0.0201			24.792	
41003	Perchlorate-O(18)	107 > 89	3.31	30161.525	30161.525	bb			0.4936	98.71	-1.29	3222.4...	

12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13867

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541004

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.57	2.28	0.570	ug/kg	U	1	08-DEC-09 19:25	per1208020a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:25	per1208020a
14797-73-0	Perchlorate-101	.57	2.28	0.570	ug/kg	U	1	08-DEC-09 19:25	per1208020a
	Perchlorate-O(18)			5.80	ug/kg		1	08-DEC-09 19:25	per1208020a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

set: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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e: 19:25:18
241541004
: 1:4,C

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aw 12-09-09

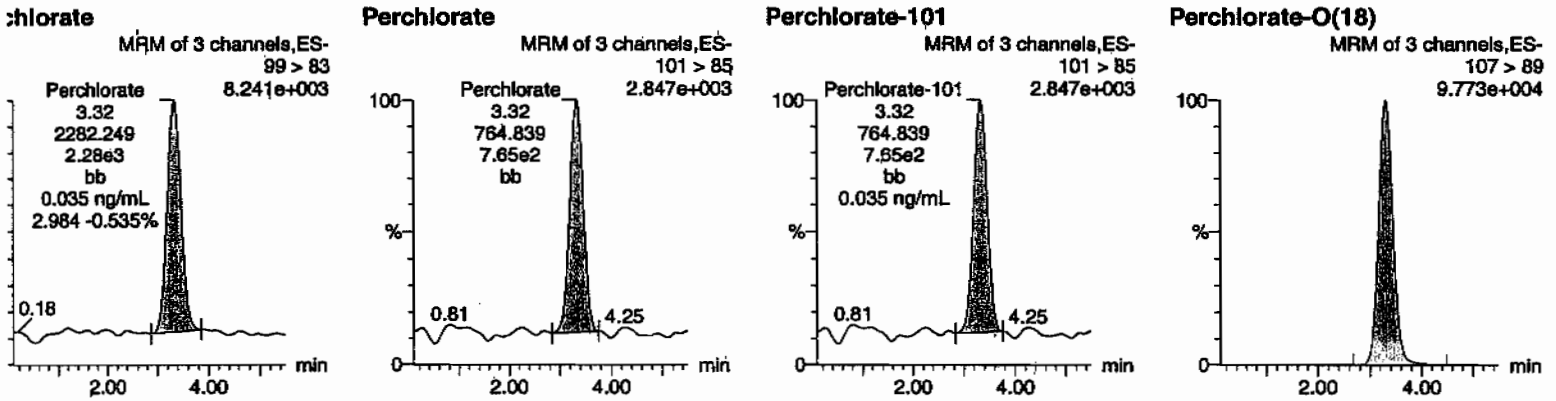

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41004	Perchlorate	99 > 83	3.32	2282.249	2282.249	bb			0.0346			95.844	2.98
41004	Perchlorate-101	101 > 85	3.32	764.839	764.839	bb			0.0345			56.460	
41004	Perchlorate-O(18)	107 > 89	3.31	31095.410	31095.410	bb			0.5088	101.77	1.77	877.126	

12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13864

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541005

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 19:33	per1208021a
	Perchlorate Isotope Ratio						1	08-DEC-09 19:33	per1208021a
14797-73-0	Perchlorate-101	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 19:33	per1208021a
	Perchlorate-O(18)			5.57	ug/kg		1	08-DEC-09 19:33	per1208021a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

: Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208021a
ɜ: 08-Dec-2009
e: 19:33:51
241541005
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CW 12-09-09

:hlorate

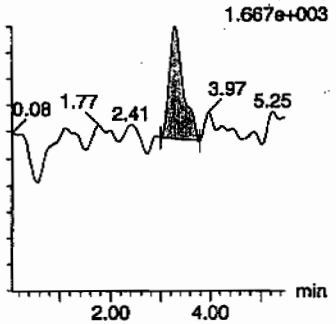

Perchlorate

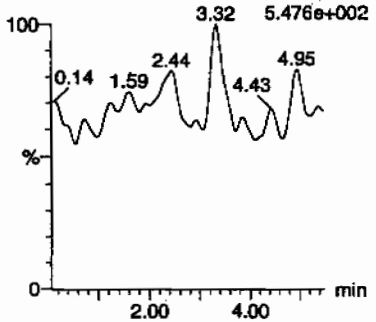

Perchlorate-101

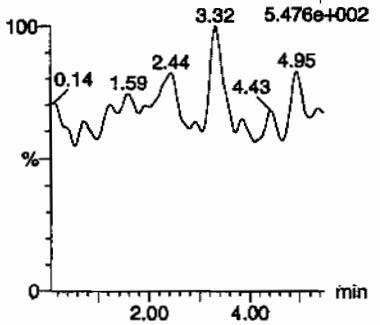

Perchlorate-O(18)

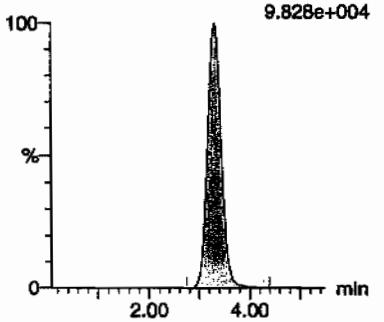

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	%Dev	S/N	Ion Ratio
41005	Perchlorate	99 > 83	3.30	235.211	235.211	bb			0.0036			8.936	0.00
41005	Perchlorate-101	101 > 85											
41005	Perchlorate-O(18)	107 > 89	3.31	30996.502	30996.502	bb			0.5072	101.44	1.44	6230.0...	

MT 12/10/09

SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13871

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541006

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	08-DEC-09 20:09	per1208025a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:09	per1208025a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	08-DEC-09 20:09	per1208025a
	Perchlorate-O(18)			6.27	ug/kg		1	08-DEC-09 20:09	per1208025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208025a
ɔ: 08-Dec-2009
e: 20:09:49
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|LANL|926522|SDZO|1|

12-09-09

:hlorate

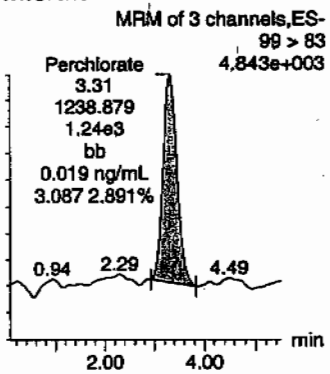

Perchlorate

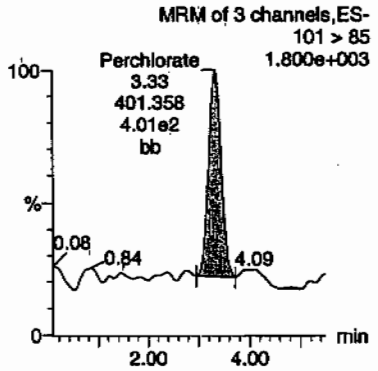

Perchlorate-101

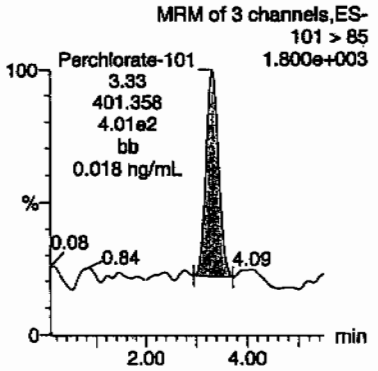

Perchlorate-O(18)

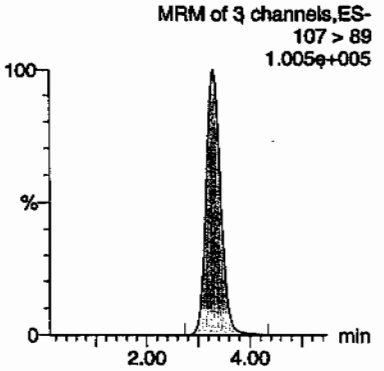

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41006	Perchlorate	99 > 83	3.31	1238.879	1238.879	bb			0.0188			66.690	3.09
41006	Perchlorate-101	101 > 85	3.33	401.358	401.358	bb			0.0181			47.176	
41006	Perchlorate-O(18)	107 > 89	3.30	32135.057	32135.057	bb			0.5259	105.17	5.17	6761.4...	

MMT 12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13877

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541007

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 20:18	per1208026a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:18	per1208026a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 20:18	per1208026a
	Perchlorate-O(18)			5.93	ug/kg		1	08-DEC-09 20:18	per1208026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

: Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208026a
ɜ: 08-Dec-2009
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12-09-09

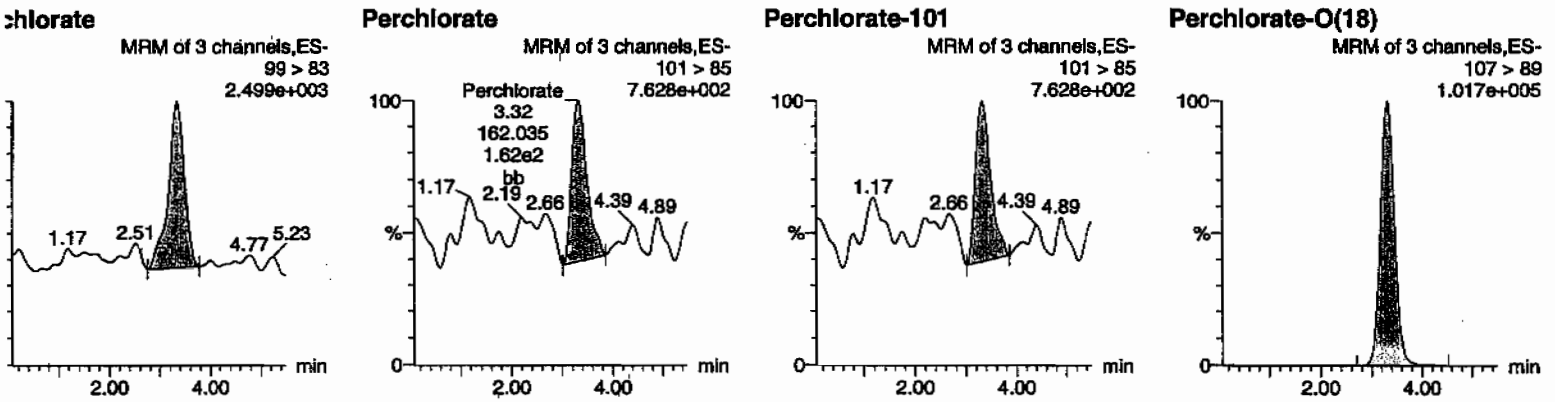

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41007	Perchlorate	99 > 83	3.33	583.294	583.294	bb			0.0088			35.394	3.60
41007	Perchlorate-101	101 > 85	3.32	162.035	162.035	bb			0.0073			12.050	
41007	Perchlorate-O(18)	107 > 89	3.32	32491.955	32491.955	bb			0.5317	106.34	6.34	10716....	

MMP
12/15/09

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13869

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541008

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.601	2.4	0.601	ug/kg	U	1	08-DEC-09 20:27	per1208027a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:27	per1208027a
14797-73-0	Perchlorate-101	.601	2.4	0.601	ug/kg	U	1	08-DEC-09 20:27	per1208027a
	Perchlorate-O(18)			6.32	ug/kg		1	08-DEC-09 20:27	per1208027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
:ed: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208027a
ı: 08-Dec-2009
e: 20:27:51
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12-09-09

:hlorate

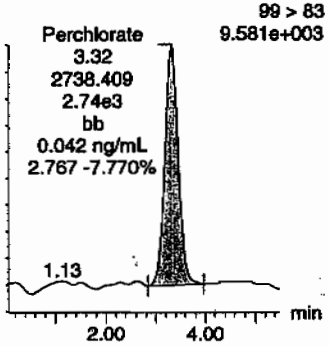

Perchlorate

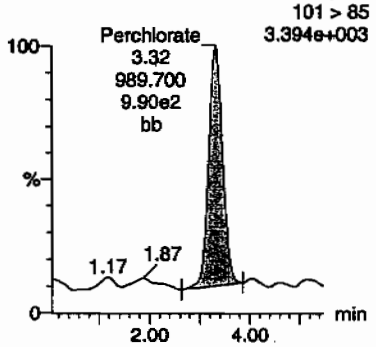

Perchlorate-101

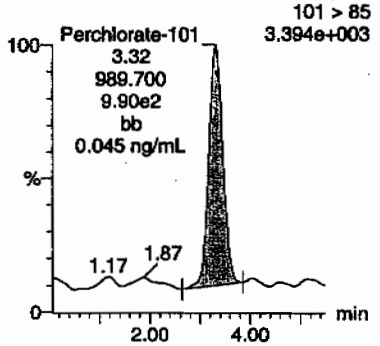

Perchlorate-O(18)

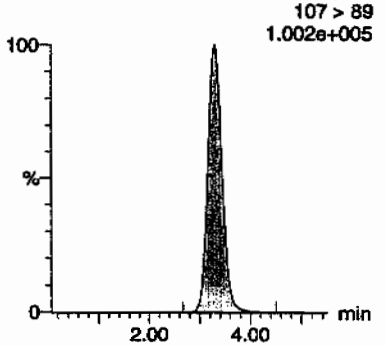

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41008	Perchlorate	99 > 83	3.32	2738.409	2738.409	bb			0.0415			146.757	2.77
41008	Perchlorate-101	101 > 85	3.32	989.700	989.700	bb			0.0447			90.163	
41008	Perchlorate-O(18)	107 > 89	3.30	32145.988	32145.988	bb			0.5260	105.21	5.21	11918....	

MJT 12/10/09

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13870

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541009

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.58	2.32	0.709	ug/kg	J	1	08-DEC-09 20:36	per1208028a
	Perchlorate Isotope Ratio			3.02			1	08-DEC-09 20:36	per1208028a
14797-73-0	Perchlorate-101	.58	2.32	0.700	ug/kg	J	1	08-DEC-09 20:36	per1208028a
	Perchlorate-O(18)			5.99	ug/kg		1	08-DEC-09 20:36	per1208028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ıntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

: Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208028a
ɜ: 08-Dec-2009
e: 20:36:53
241541009
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|LANL|926522|SOL20|11|

GWO 12-09-09

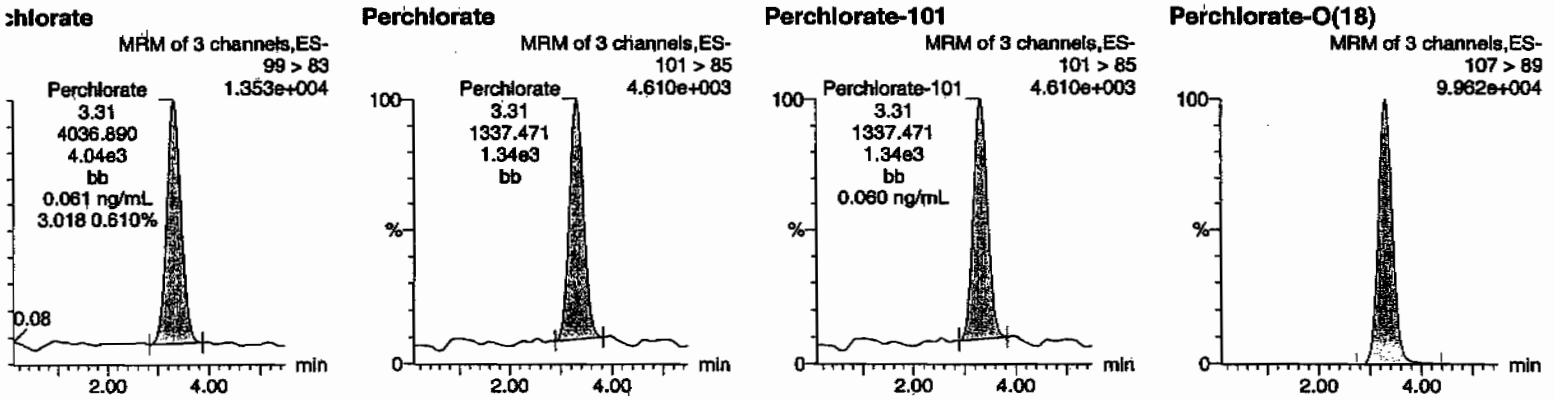

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec		% Dev	S/N	Ion Ratio
41009	Perchlorate	99 > 83	3.31	4036.890	4036.890	bb			0.0612				236.338	3.02
41009	Perchlorate-101	101 > 85	3.31	1337.471	1337.471	bb			0.0604				61.148	
41009	Perchlorate-O(18)	107 > 89	3.30	31578.494	31578.494	bb			0.5167	103.35	✓	3.35	17269....	

MAP 12/10/09

$$\frac{4036.890}{65959.3} = 0.0612$$

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13873

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541010

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 20:45	per1208029a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:45	per1208029a
14797-73-0	Perchlorate-101	.549	2.2	0.549	ug/kg	U	1	08-DEC-09 20:45	per1208029a
	Perchlorate-O(18)			5.82	ug/kg		1	08-DEC-09 20:45	per1208029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ıed: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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ı: 08-Dec-2009
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12-09-09

:hlorate

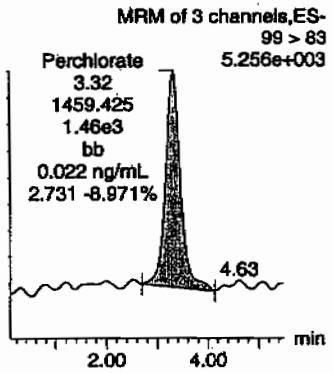

Perchlorate

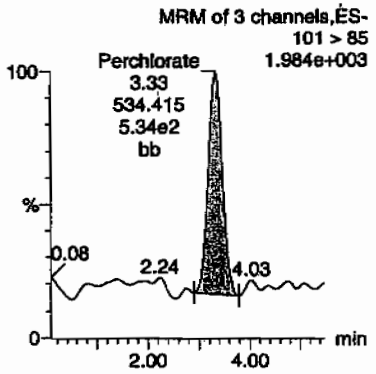

Perchlorate-101

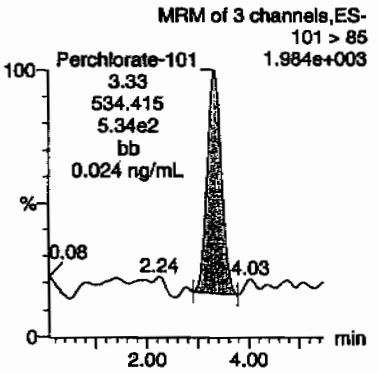

Perchlorate-O(18)

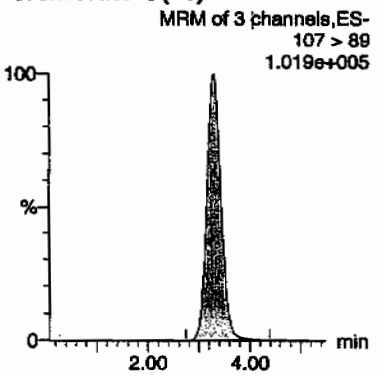

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	S/N	Ion Ratio
41010	Perchlorate	99 > 83	3.32	1459.425	1459.425	bb			0.0221			47.479	2.73
41010	Perchlorate-101	101 > 85	3.33	534.415	534.415	bb			0.0241			29.640	
41010	Perchlorate-O(18)	107 > 89	3.30	32382.879	32382.879	bb			0.5299	105.98	5.98	3720.1...	

12/10/09

SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13863

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541011

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 91.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.547	2.19	0.547	ug/kg	U	1	08-DEC-09 20:54	per1208030a
	Perchlorate Isotope Ratio						1	08-DEC-09 20:54	per1208030a
14797-73-0	Perchlorate-101	.547	2.19	0.547	ug/kg	U	1	08-DEC-09 20:54	per1208030a
	Perchlorate-O(18)			5.77	ug/kg		1	08-DEC-09 20:54	per1208030a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ıe: per1208030a
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GMO
12-09-09

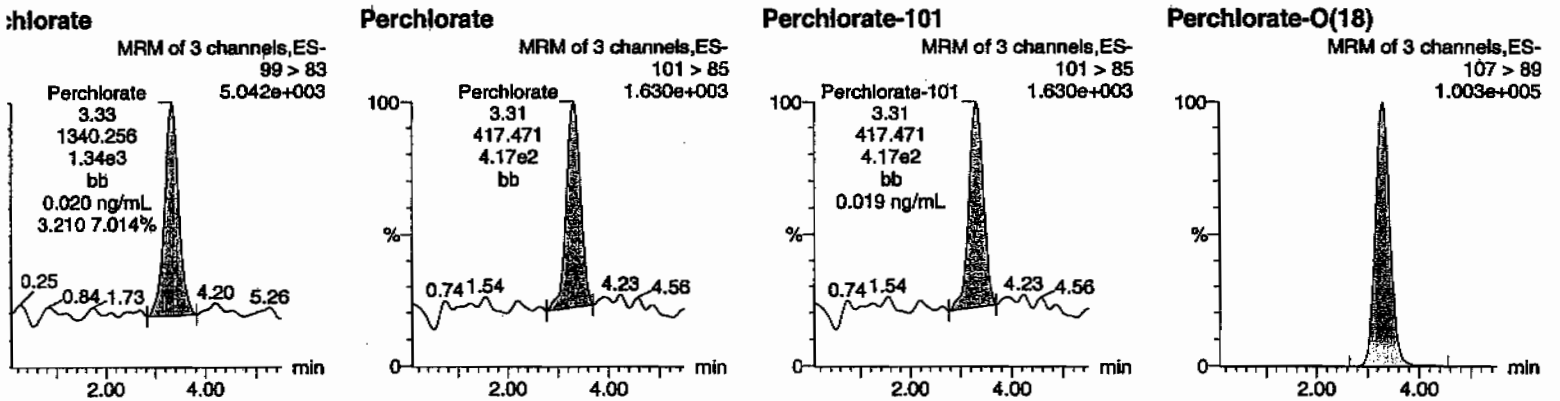

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41011	Perchlorate	99 > 83	3.33	1340.256	1340.256	bb			0.0203			94.548	3.21
41011	Perchlorate-101	101 > 85	3.31	417.471	417.471	bb			0.0189			28.363	
41011	Perchlorate-O(18)	107 > 89	3.30	32195.977	32195.977	bb			0.5268	105.37	5.37	1382.0...	

MTP
12/10/09

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13874

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541012

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 92.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.15	0.539	ug/kg	U	1	08-DEC-09 21:03	per1208031a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:03	per1208031a
14797-73-0	Perchlorate-101	.539	2.15	0.539	ug/kg	U	1	08-DEC-09 21:03	per1208031a
	Perchlorate-O(18)			5.67	ug/kg		1	08-DEC-09 21:03	per1208031a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ıntify Sample Report **MassLynx 4.0 SP4**
GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208031a
e: 08-Dec-2009
e: 21:03:16
241541012
: 1:5,E

|LANL|926522|3020|1|

12-09-09

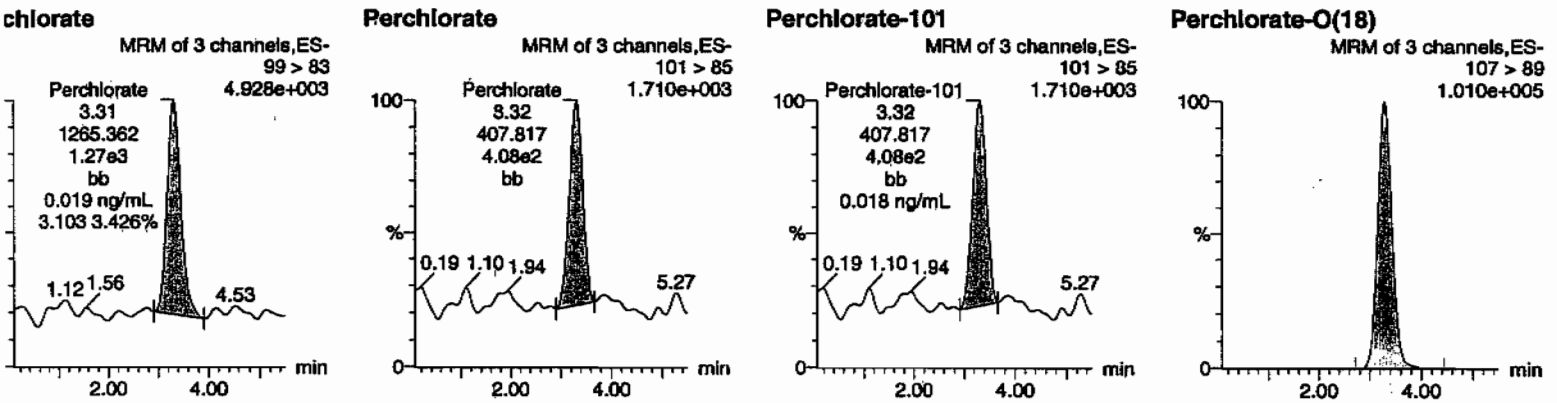

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	Rec	%Dev	S/N	Ion Ratio
541012	Perchlorate	99 > 83	3.31	1265.362	1265.362	bb			0.0192			38.541	3.10
541012	Perchlorate-101	101 > 85	3.32	407.817	407.817	bb			0.0184			27.726	
541012	Perchlorate-O(18)	107 > 89	3.30	32156.813	32156.813	bb			0.5262	105.24	5.24	657.223	

MATP 12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13866

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541013

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.582	2.33	1.19	ug/kg	J	1	08-DEC-09 21:11	per1208032a
	Perchlorate Isotope Ratio			2.93			1	08-DEC-09 21:11	per1208032a
14797-73-0	Perchlorate-101	.582	2.33	1.21	ug/kg	J	1	08-DEC-09 21:11	per1208032a
	Perchlorate-O(18)			6.08	ug/kg		1	08-DEC-09 21:11	per1208032a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

antify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
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12-09-09

chlorate

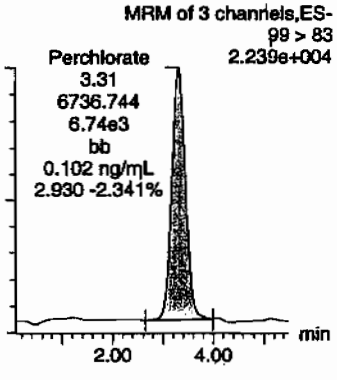

Perchlorate

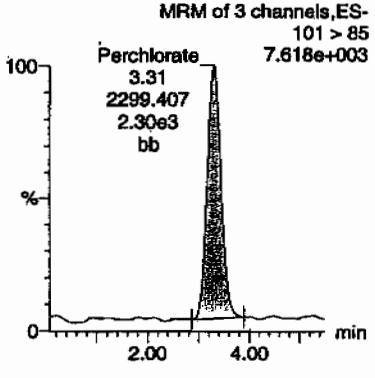

Perchlorate-101

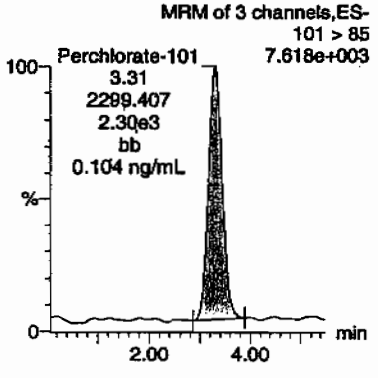

Perchlorate-O(18)

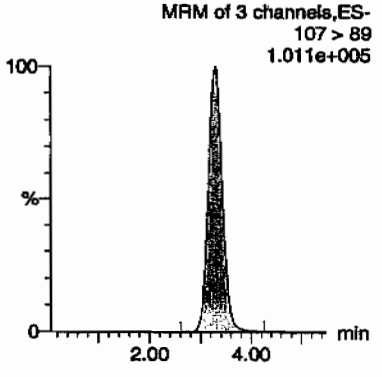

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	Dev	S/N	Ion Ratio
541013	Perchlorate	99 > 83	3.31	6736.744	6736.744	bb			0.1021			545.753	2.93
541013	Perchlorate-101	101 > 85	3.31	2299.407	2299.407	bb			0.1039			134.575	
541013	Perchlorate-O(18)	107 > 89	3.28	31941.283	31941.283	bb			0.5227	104.54	4.54	5534.1...	

MMT 12/10/09

$$\frac{2299.407}{22139.3} = 0.1039$$

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13862

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541014

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.576	2.3	0.576	ug/kg	U	1	08-DEC-09 21:20	per1208033a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:20	per1208033a
14797-73-0	Perchlorate-101	.576	2.3	0.576	ug/kg	U	1	08-DEC-09 21:20	per1208033a
	Perchlorate-O(18)			5.99	ug/kg		1	08-DEC-09 21:20	per1208033a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

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ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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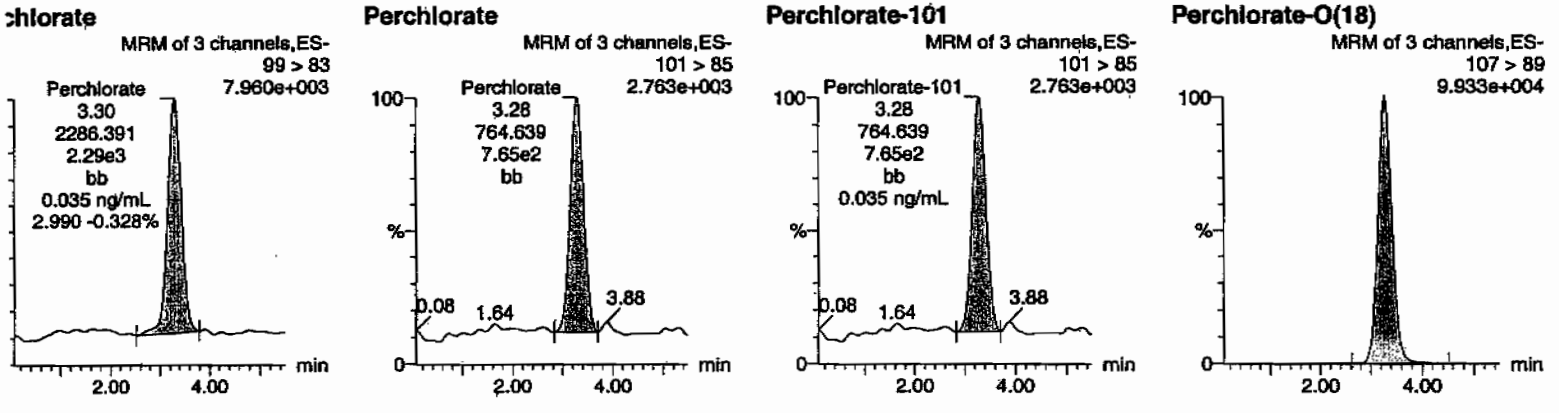

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	S/N	Ion Ratio
41014	Perchlorate	99 > 83	3.30	2286.391	2286.391	bb			0.0347			49.764	2.99
41014	Perchlorate-101	101 > 85	3.28	764.639	764.639	bb			0.0345			60.209	
41014	Perchlorate-O(18)	107 > 89	3.28	31769.162	31769.162	bb			0.5199	103.92	3.97	18859....	

MM 12/10/09

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13876

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541015

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 21:28	per1208034a
	Perchlorate Isotope Ratio						1	08-DEC-09 21:28	per1208034a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	08-DEC-09 21:28	per1208034a
	Perchlorate-O(18)			5.83	ug/kg		1	08-DEC-09 21:28	per1208034a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

GEL Group, LLC Analyst: Charles Wilson

iset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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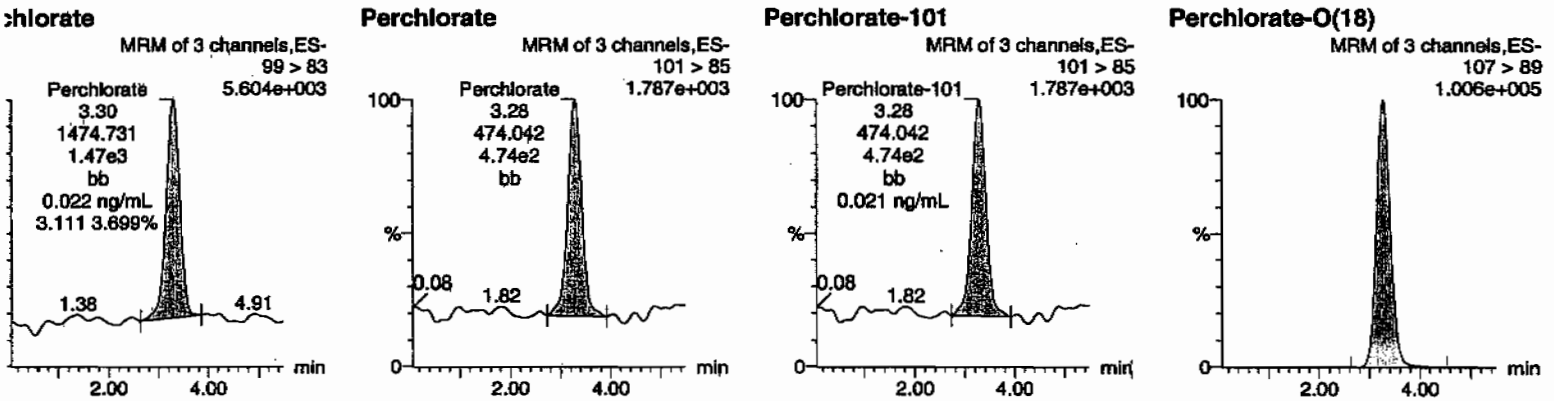

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
41015	Perchlorate	99 > 83	3.30	1474.731	1474.731	bb			0.0224		104.552		3.11
41015	Perchlorate-101	101 > 85	3.28	474.042	474.042	bb			0.0214		55.880		
41015	Perchlorate-O(18)	107 > 89	3.27	31966.848	31966.848	bb			0.5231	104.62	4.62 6125.9...		

MMP 12/10/09

SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13872

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 241541016

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.552	ug/kg	U	1	08-DEC-09 22:03	per1208038a
	Perchlorate Isotope Ratio						1	08-DEC-09 22:03	per1208038a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	08-DEC-09 22:03	per1208038a
	Perchlorate-O(18)			6.07	ug/kg		1	08-DEC-09 22:03	per1208038a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

antify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ated: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208038a
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241541016
: 1:6,C

1LANL | 926522 | 50120 | 11

CWW 12-09-09

chlorate

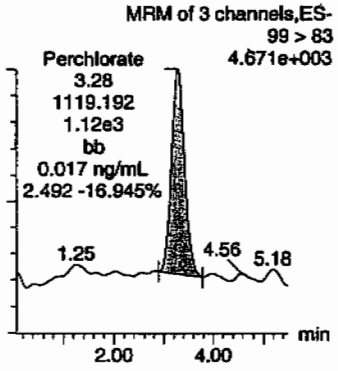

Perchlorate

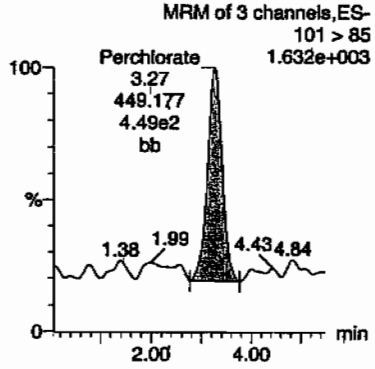

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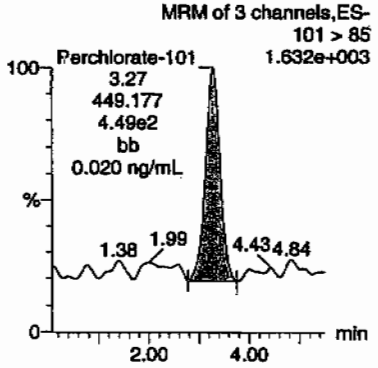

Perchlorate-O(18)

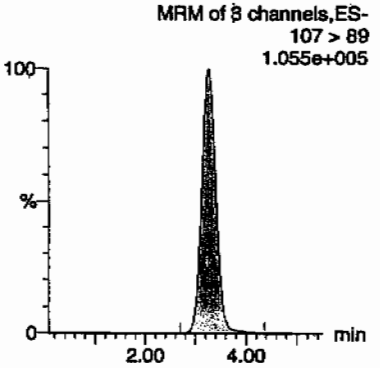

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
541016	Perchlorate	99 > 83	3.28	1119.192	1119.192	bb			0.0170			42.658	2.49
541016	Perchlorate-101	101 > 85	3.27	449.177	449.177	bb			0.0203			35.087	
541016	Perchlorate-O(18)	107 > 89	3.26	33622.070	33622.070	bb			0.5502	110.04	10.04	4719.8...	

MM 12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-605

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 08-DEC-09

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 65959.26

Response Type: External Standard

Curve Type: RF

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–605

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 08–DEC–09

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 22139.3

Response Type: External Standard

Curve Type: RF

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

ıntify Calibration Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

ıset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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ıpound name: Perchlorate
ɔonse Factor: 65959.3
SD: 1600.34, % Relative SD: 2.42626
ɔonse type: External Std, Area
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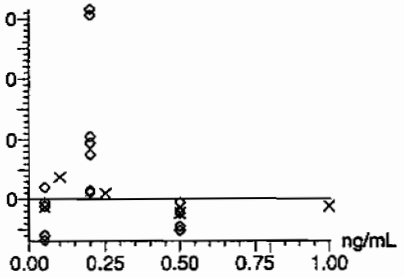

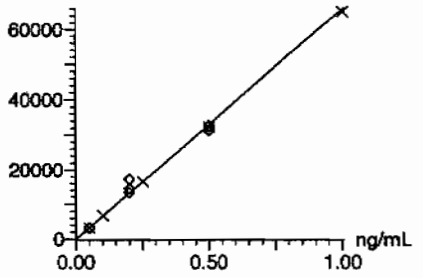

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12-09-09

pound name: Perchlorate-101
ɔonse Factor: 22139.3
SD: 728.637, % Relative SD: 3.29115
ɔonse type: External Std, Area
e type: RF

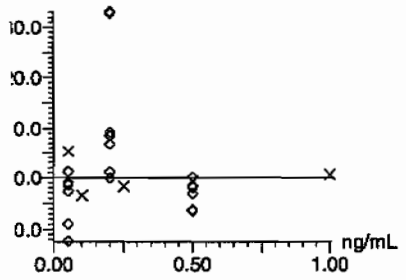

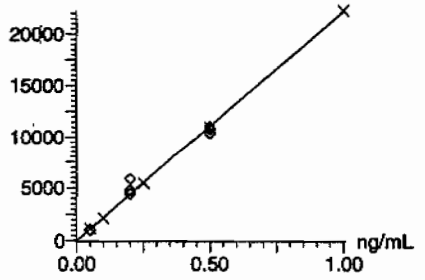

SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

MM
12/10/09

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ntify Calibration Report MassLynx 4.0 SP4

GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

npound name: Perchlorate-O(18)
ponse Factor: 61110.4
SD: 673.682, % Relative SD: 1.1024
ponse type: External Std, Area
ve type: RF

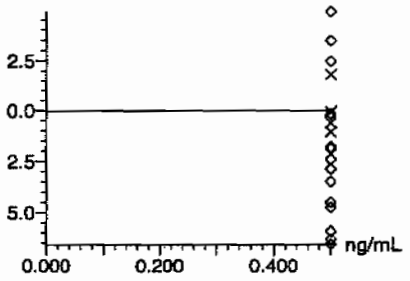

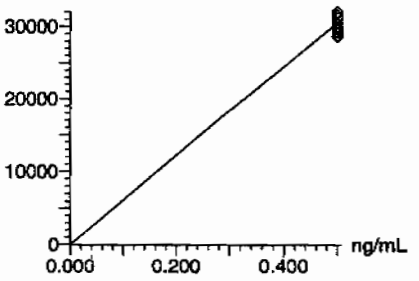

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Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–605

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.44	08–DEC–09 17:51	per1208009a
Perchlorate Isotope Ratio		3.02		08–DEC–09 17:51	per1208009a
Perchlorate–101	.5	.49	97.96	08–DEC–09 17:51	per1208009a

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aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208009a
e: 08-Dec-2009
e: 17:51:21
WCL091204-06ICV
l: 1:2,A

Pass
AW
120909

chlorate

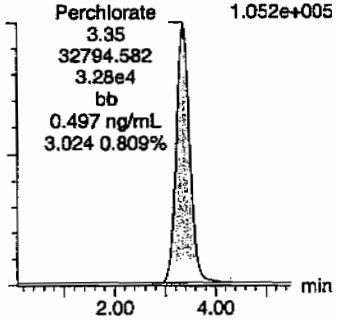

Perchlorate

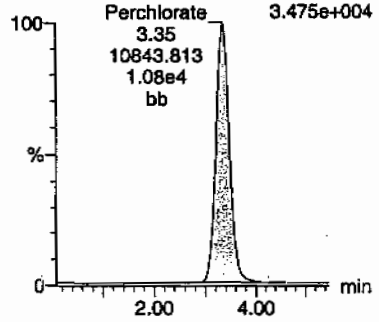

Perchlorate-101

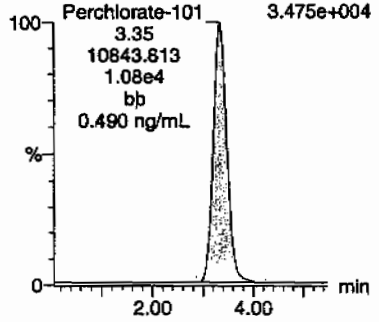

Perchlorate-O(18)

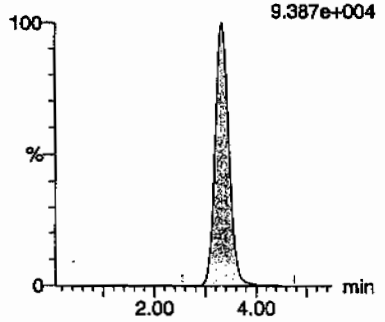

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
_091204-06ICV	Perchlorate	99 > 83	3.35	32794.582	32794.582	bb			0.4972	99.44	-0.56	1682.4...	3.02
_091204-06ICV	Perchlorate-101	101 > 85	3.35	10843.813	10843.813	bb			0.4898	97.96	-2.04	693.599	
_091204-06ICV	Perchlorate-O(18)	107 > 89	3.33	29684.174	29684.174	bb			0.4857	97.15	-2.85	11655....	

MM
12/10/09

$$\frac{32794.582}{65959.3} = 0.4972$$

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–605

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	97.96	08–DEC–09 19:42	per1208022a
Perchlorate Isotope Ratio		2.92		08–DEC–09 19:42	per1208022a
Perchlorate–101	.5	.5	100.08	08–DEC–09 19:42	per1208022a
Perchlorate	.5	.49	97.82	08–DEC–09 21:37	per1208035a
Perchlorate Isotope Ratio		3.01		08–DEC–09 21:37	per1208035a
Perchlorate–101	.5	.48	96.88	08–DEC–09 21:37	per1208035a
Perchlorate	.5	.48	95.52	08–DEC–09 23:21	per1208047a
Perchlorate Isotope Ratio		3.04		08–DEC–09 23:21	per1208047a
Perchlorate–101	.5	.47	93.47	08–DEC–09 23:21	per1208047a

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e GEL Group, LLC Analyst: Charles Wilson

taset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

st Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
nted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

me: per1208022a
le: 08-Dec-2009
ne: 19:42:23
WCL091204-06CCV
l: 1:2,A

Pass
12 09-09

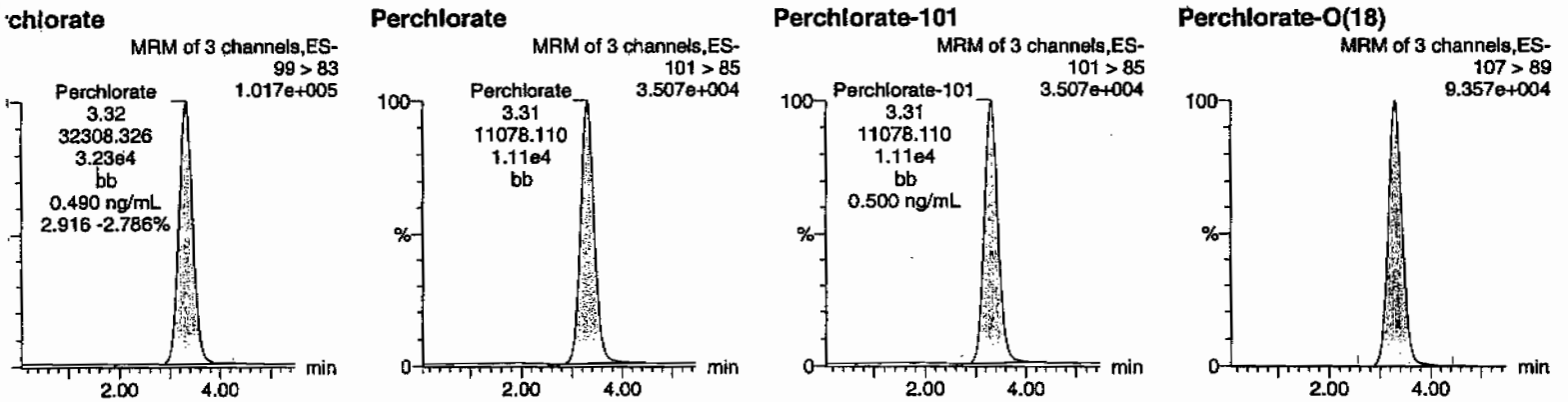

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	%S/N	Ion Ratio
L091204-06CCV	Perchlorate	99 > 83	3.32	32308.326	32308.326	bb			0.4898	97.96	-2.04	1374.8...	2.92
_091204-06CCV	Perchlorate-101	101 > 85	3.31	11078.110	11078.110	bb			0.5004	100.08	0.08	174.577	
_091204-06CCV	Perchlorate-O(18)	107 > 89	3.30	29976.887	29976.887	bb			0.4905	98.11	-1.89	2672.1...	

MATT
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$$\frac{32308.326}{11078.110} = 2.9164$$

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antify Sample Report MassLynx 4.0 SP4

ɜ GEL Group, LLC Analyst: Charles Wilson

laset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

ɜt Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ıted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208035a
te: 08-Dec-2009
ıe: 21:37:29
WCL091204-06CCV
l: 1:2,A

CWW
12-09-09

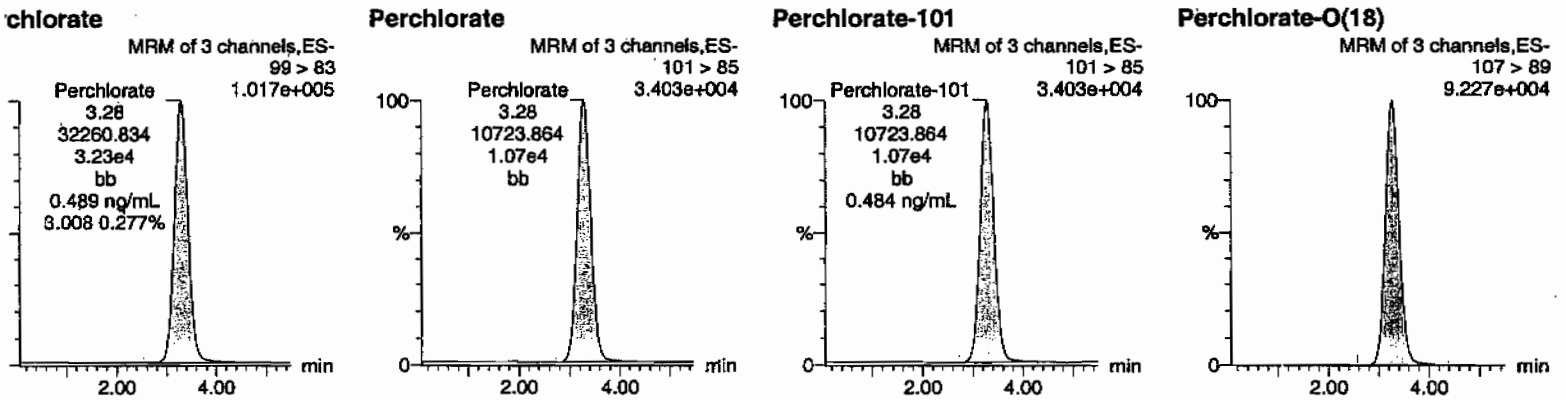

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
_091204-06CCV	Perchlorate	99 > 83	3.28	32260.834	32260.834	bb			0.4891	97.82	-2.18	578.747	3.01
_091204-06CCV	Perchlorate-101	101 > 85	3.28	10723.864	10723.864	bb			0.4844	96.88	-3.12	625.446	
_091204-06CCV	Perchlorate-O(18)	107 > 89	3.27	29184.441	29184.441	bb			0.4776	95.51	-4.49	2692.0...	

MJT
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antify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles Wilson

taset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

st Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
nted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

me: per1208047a
te: 08-Dec-2009
ne: 23:21:03
WCL091204-06CCV
l: 1:2,A

Pass
aw
12-09-09

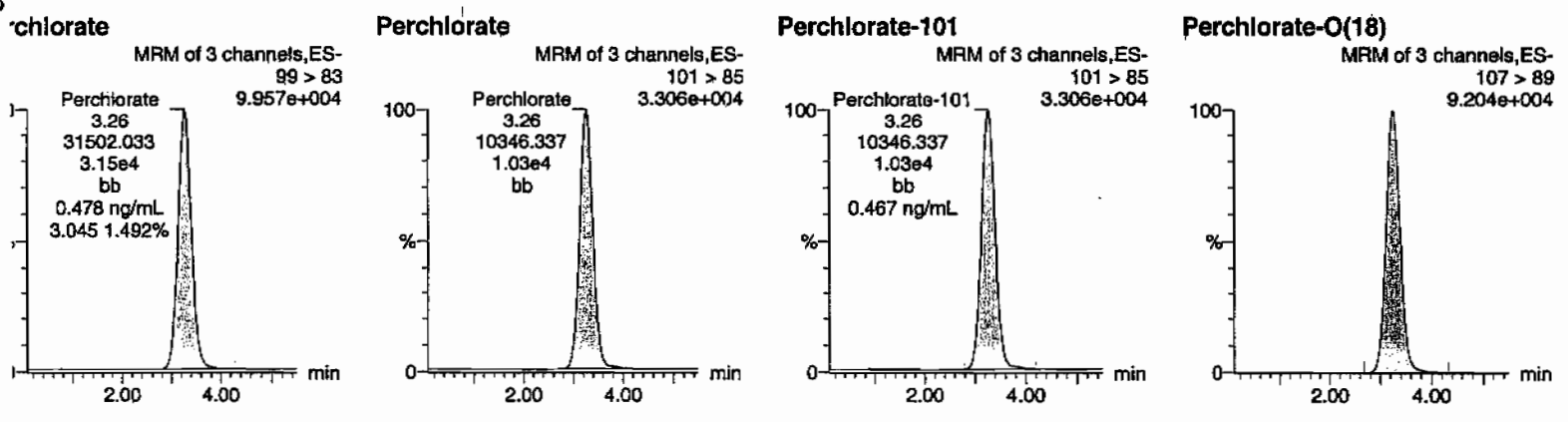

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L091204-06CCV	Perchlorate	99 > 83	3.26	31502.033	31502.033	bb			0.4776	95.52	-4.48	1649.1...	3.04
L091204-06CCV	Perchlorate-101	101 > 85	3.26	10346.337	10346.337	bb			0.4673	93.47	-6.53	732.684	
L091204-06CCV	Perchlorate-O(18)	107 > 89	3.25	29109.330	29109.330	bb			0.4763	95.27	-4.73	19704....	

MATT
12/10/09

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–605

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	98.87	08–DEC–09 18:08	per1208011a
Perchlorate Isotope Ratio		2.91		08–DEC–09 18:08	per1208011a
Perchlorate–101	.05	.05	101.23	08–DEC–09 18:08	per1208011a
Perchlorate	.05	.05	99.45	08–DEC–09 20:00	per1208024a
Perchlorate Isotope Ratio		2.99		08–DEC–09 20:00	per1208024a
Perchlorate–101	.05	.05	99.04	08–DEC–09 20:00	per1208024a
Perchlorate	.05	.05	102.03	08–DEC–09 21:54	per1208037a
Perchlorate Isotope Ratio		3.08		08–DEC–09 21:54	per1208037a
Perchlorate–101	.05	.05	98.57	08–DEC–09 21:54	per1208037a
Perchlorate	.05	.05	94.07	08–DEC–09 23:38	per1208049a
Perchlorate Isotope Ratio		3.08		08–DEC–09 23:38	per1208049a

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–605

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate–101	.05	.05	91.04	08–DEC–09 23:38	per1208049a

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ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles Wilson

taset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

st Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
nted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

me: per1208011a
te: 08-Dec-2009
ne: 18:08:26
WCL091204-07CRI
f: 1:2,B

Pass
ano
12/09/09

rchlorate

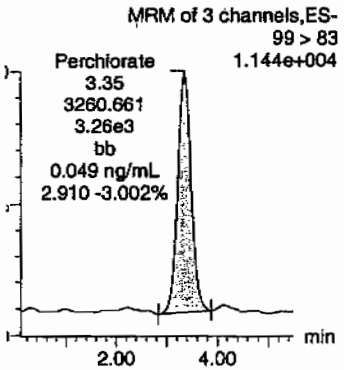

Perchlorate

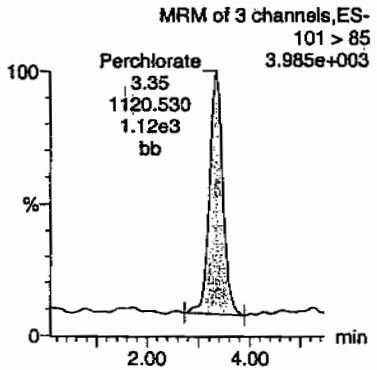

Perchlorate-101

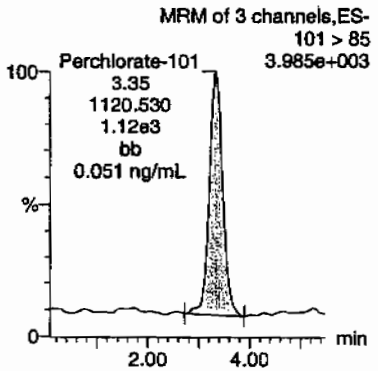

Perchlorate-O(18)

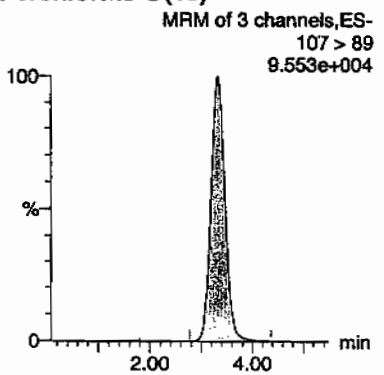

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev.	S/N	Ion Ratio
L091204-07CRI	Perchlorate	99 > 83	3.35	3260.661	3260.661	bb			0.0494	98.87	-1.13	347.034	2.91
L091204-07CRI	Perchlorate-101	101 > 85	3.35	1120.530	1120.530	bb			0.0506	101.23	1.23	99.408	
L091204-07CRI	Perchlorate-O(18)	107 > 89	3.32	29971.275	29971.275	bb			0.4904	98.09	-1.91	2635.4...	

MAT
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$$\frac{1120.530}{22139.3} = 0.0506$$

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antify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles Wilson

taset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

st Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
nted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

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te: 08-Dec-2009
ne: 20:00:25
WCL091204-07CRI
l: 1:2,B

Pass
aw 12-09-09

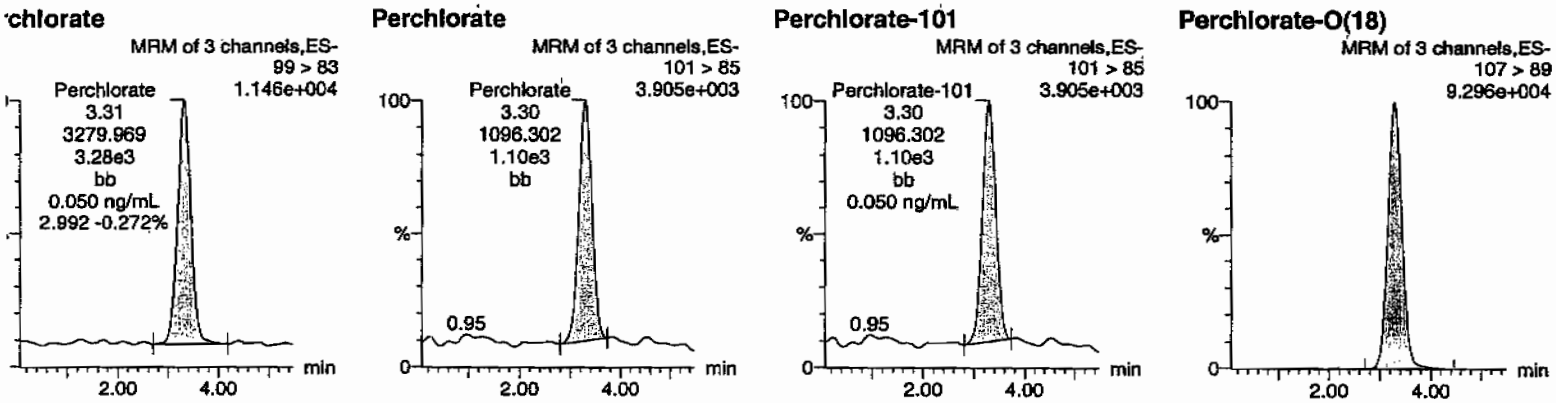

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L091204-07CRI	Perchlorate	99 > 83	3.31	3279.969	3279.969	bb			0.0497	99.45	-0.55	196.096	2.99
L091204-07CRI	Perchlorate-101	101 > 85	3.30	1096.302	1096.302	bb			0.0495	99.04	-0.96	75.520	
L091204-07CRI	Perchlorate-O(18)	107 > 89	3.30	29817.941	29817.941	bb			0.4879	97.59	-2.41	4934.4...	

MMT
12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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antify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles Wilson

taset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

st Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
nted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

me: per1208037a
te: 08-Dec-2009
ne: 21:54:42
WCL091204-07CRI
l: 1:2,B

Page
12-29-8

chlorate

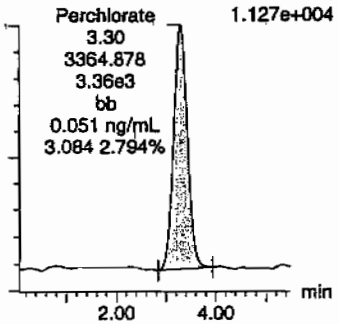

Perchlorate

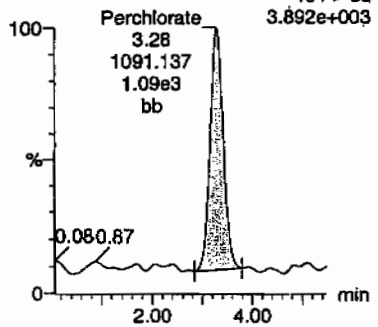

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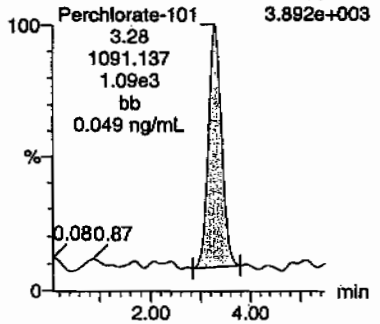

Perchlorate-O(18)

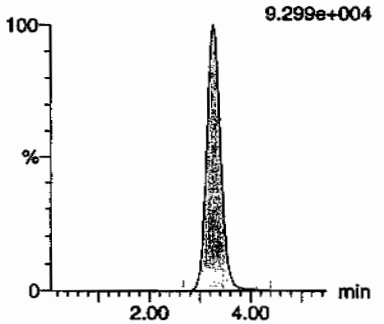

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L091204-07CRI	Perchlorate	99 > 83	3.30	3364.878	3364.878	bb			0.0510	102.03	2.03	149.692	3.08
_091204-07CRI	Perchlorate-101	101 > 85	3.28	1091.137	1091.137	bb			0.0493	98.57	-1.43	129.731	
_091204-07CRI	Perchlorate-O(18)	107 > 89	3.27	29491.951	29491.951	bb			0.4826	96.52	-3.48	10724....	

MDT
12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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antify Sample Report MassLynx 4.0 SP4
: GEL Group, LLC Analyst: Charles Wilson

:aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

:t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ıted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208049a
:e: 08-Dec-2009
ıe: 23:38:30
WCL091204-07CRI
l: 1:2,B

Pass
and
12-09-09

'chlorate

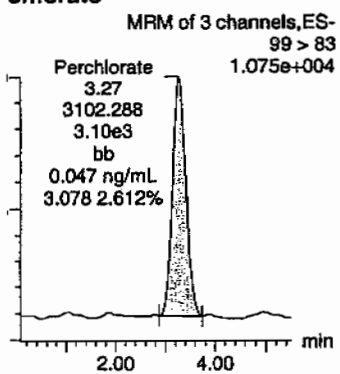

Perchlorate

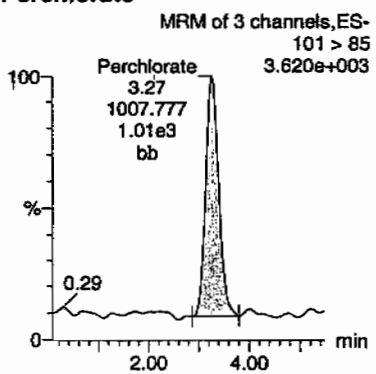

Perchlorate-101

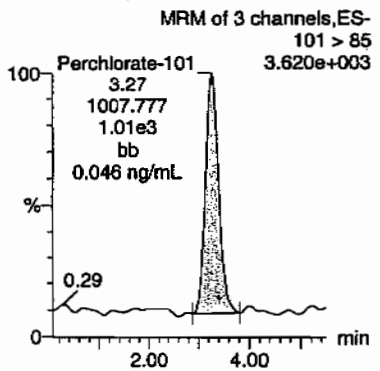

Perchlorate-O(18)

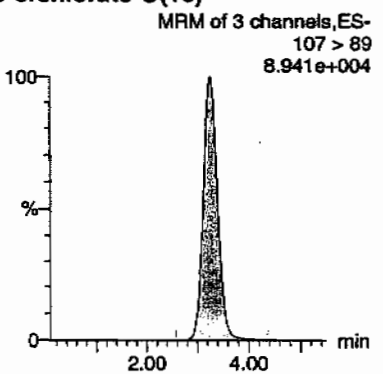

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L091204-07CRI	Perchlorate	99 > 83	3.27	3102.288	3102.288	bb			0.0470	94.07	-5.93	313.016	3.08
L091204-07CRI	Perchlorate-101	101 > 85	3.27	1007.777	1007.777	bb			0.0455	91.04	-8.96	109.068	
L091204-07CRI	Perchlorate-O(18)	107 > 89	3.26	28550.307	28550.307	bb			0.4672	93.44	-6.56	11945....	

MH
12/10/09

_ SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 04–DEC–09

GEL Job No (SDG): 10–605

GEL Sample ID: 1201980957

Date Filtered: 04–DEC–09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.5	2	0.500	ug/kg	U	1	08–DEC–09 18:17	per1208012a
	Perchlorate Isotope Ratio						1	08–DEC–09 18:17	per1208012a
14797–73–0	Perchlorate–101	.5	2	0.500	ug/kg	U	1	08–DEC–09 18:17	per1208012a
	Perchlorate–O(18)			4.90	ug/kg		1	08–DEC–09 18:17	per1208012a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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antify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208012a
e: 08-Dec-2009
ne: 18:17:00
1201980957
l: 1:3,A

|LANL|926522|SOLZD|MB|1|

GWJ 12-09-09

chlorate

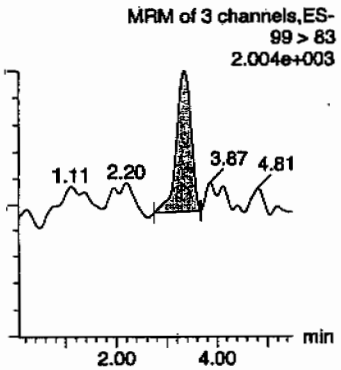

Perchlorate

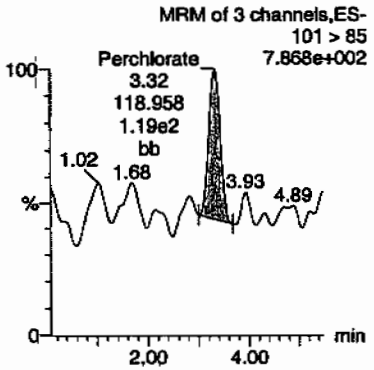

Perchlorate-101

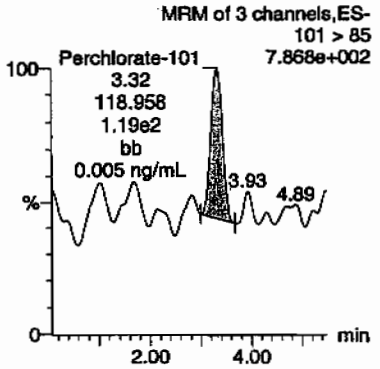

Perchlorate-O(18)

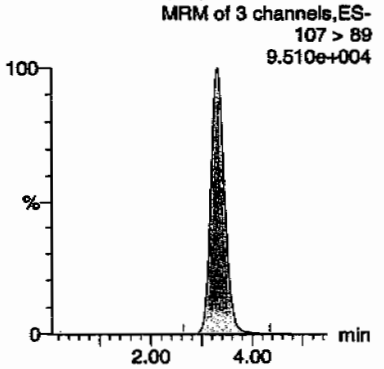

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1980957	Perchlorate	99 > 83	3.36	359.654	359.654	bb			0.0055			24.145	3.02
1980957	Perchlorate-101	101 > 85	3.32	118.958	118.958	bb			0.0054			10.878	
1980957	Perchlorate-O(18)	107 > 89	3.32	29962.143	29962.143	bb			0.4903	98.06	-1.94	4137.5...	

MM 12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 04-DEC-09

GEL Job No (SDG): 10-605

GEL Sample ID: 1201980958

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.03	ug/kg		1	08-DEC-09 18:25	per1208013a
	Perchlorate Isotope Ratio			2.99			1	08-DEC-09 18:25	per1208013a
14797-73-0	Perchlorate-101	.5	2	2.02	ug/kg		1	08-DEC-09 18:25	per1208013a
	Perchlorate-O(18)			4.91	ug/kg		1	08-DEC-09 18:25	per1208013a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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antify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles Wilson

taset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

st Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
nted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

me: per1208013a
te: 08-Dec-2009
ne: 18:25:32
1201980958 1LANL|926522|5020|LCS|1|
l: 1:3,B

GWO 12-09-09

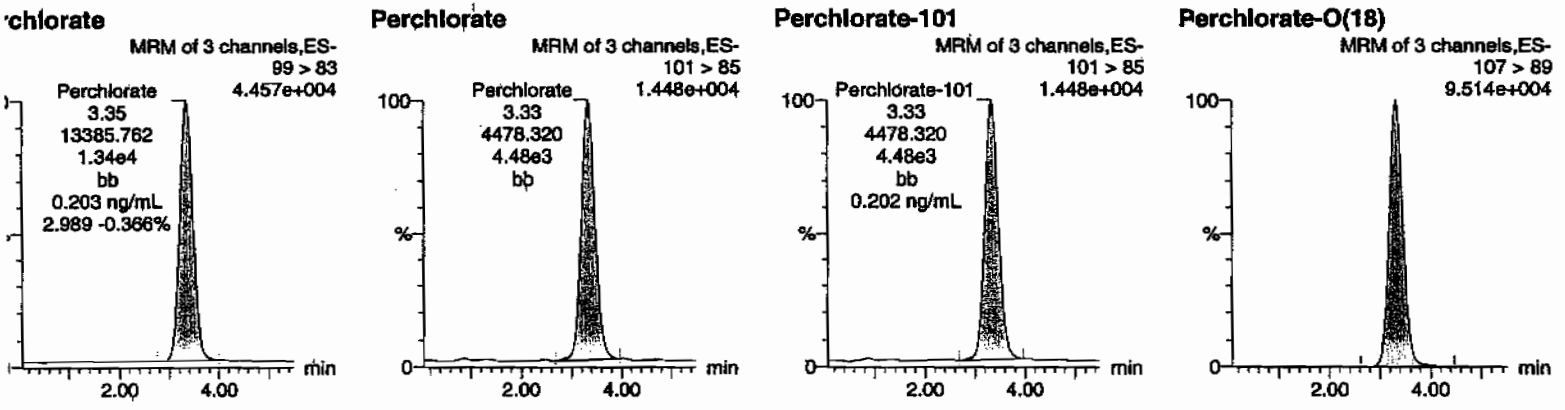

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1980958	Perchlorate	99 > 83	3.35	13385.762	13385.762	bb			0.2029	101.47	1.47	1645.3...	2.99
1980958	Perchlorate-101	101 > 85	3.33	4478.320	4478.320	bb			0.2023	101.14	1.14	179.999	
1980958	Perchlorate-O(18)	107 > 89	3.32	30016.828	30016.828	bb			0.4912	98.24	-1.76	5520.2...	

MATT 12/10/09

$$\frac{13385.762}{65959.3} = 0.2029$$

. SOP GL-QA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13875MS

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 1201980959

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	2.92	ug/kg		1	08-DEC-09 18:51	per1208016a
	Perchlorate Isotope Ratio			2.92			1	08-DEC-09 18:51	per1208016a
14797-73-0	Perchlorate-101	.558	2.23	2.97	ug/kg		1	08-DEC-09 18:51	per1208016a
	Perchlorate-O(18)			5.78	ug/kg		1	08-DEC-09 18:51	per1208016a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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antify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles Wilson

taset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

st Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
nted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

me: per1208016a
te: 08-Dec-2009
ne: 18:51:10
1201980959
l: 1:3,E

|LANL|926522|SOLID|MS|11|

CWO 12-09-09

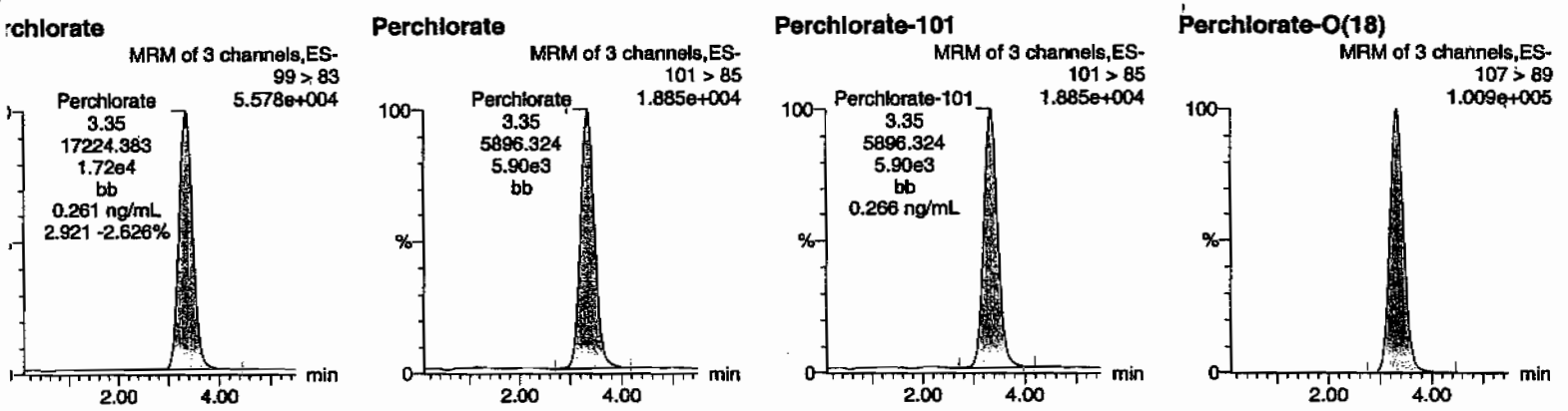

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1980959	Perchlorate	99 > 83	3.35	17224.383	17224.383	bb			0.2611	130.57	30.57	1366.4...	2.92
1980959	Perchlorate-101	101 > 85	3.35	5896.324	5896.324	bb			0.2663	133.16	33.16	236.325	
1980959	Perchlorate-O(18)	107 > 89	3.33	31620.070	31620.070	bb			0.5174	103.48	3.48	3633.3...	

MATT 12/10/09

. SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 926521

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE03-09-13875MSD

Date Received: 20-NOV-09

GEL Job No (SDG): 10-605

GEL Sample ID: 1201980960

Date Filtered: 04-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	2.94	ug/kg		1	08-DEC-09 18:59	per1208017a
	Perchlorate Isotope Ratio			2.95			1	08-DEC-09 18:59	per1208017a
14797-73-0	Perchlorate-101	.558	2.23	2.96	ug/kg		1	08-DEC-09 18:59	per1208017a
	Perchlorate-O(18)			5.72	ug/kg		1	08-DEC-09 18:59	per1208017a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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antify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles Wilson

aset: C:\MassLynx\Perchlorate.PRO\per120809a.qld

t Altered: Wednesday, December 09, 2009 7:45:31 AM Eastern Standard Time
ted: Wednesday, December 09, 2009 7:58:31 AM Eastern Standard Time

ne: per1208017a
e: 08-Dec-2009
ne: 18:59:41
1201980960
l: 1:3,F

LAM | 926522 | 5022D | MSD | 1

WO 1209-09

chlorate

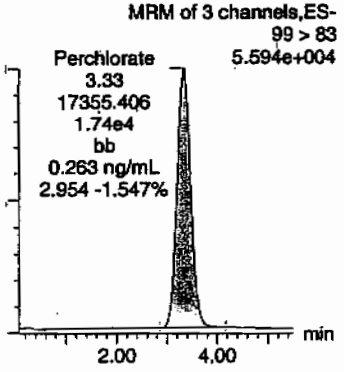

Perchlorate

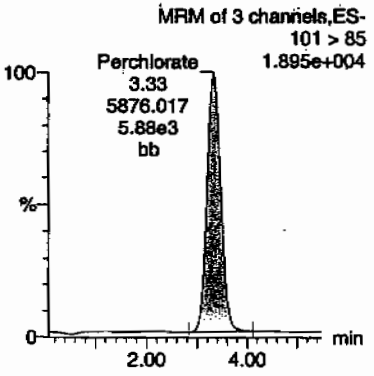

Perchlorate-101

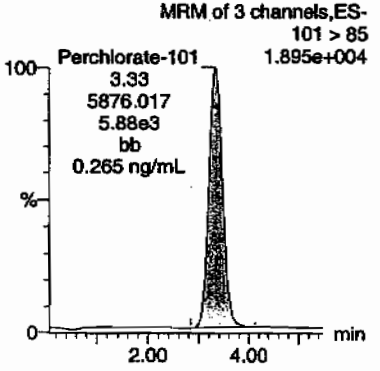

Perchlorate-O(18)

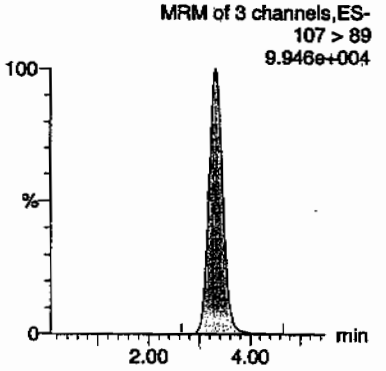

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1980960	Perchlorate	99 > 83	3.33	17355.406	17355.406	bb			0.2631	131.56	31.56	348.632	2.95
1980960	Perchlorate-101	101 > 85	3.33	5876.017	5876.017	bb			0.2654	132.71	32.71	736.669	
1980960	Perchlorate-O(18)	107 > 89	3.32	31312.857	31312.857	bb			0.5124	102.48	2.48	4881.9...	

LMT 12/10/09

SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 926521 **Verified by:** 12-04-09
Analyst: Jareth Shirley
Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6
Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201980957 MB	04-DEC-2009 11:34:12	2	20	10
1201980958 LCS	04-DEC-2009 11:34:12	2	20	10
241541001	04-DEC-2009 11:34:12	2	20	10
1201980959 MS (241541001)	04-DEC-2009 11:34:12	2	20	10
1201980960 MSD (241541001)	04-DEC-2009 11:34:12	2	20	10
241541002	04-DEC-2009 11:34:12	2	20	10
241541003	04-DEC-2009 11:34:12	2	20	10
241541004	04-DEC-2009 11:34:12	2	20	10
241541005	04-DEC-2009 11:34:12	2	20	10
241541006	04-DEC-2009 11:34:12	2	20	10
241541007	04-DEC-2009 11:34:12	2	20	10
241541008	04-DEC-2009 11:34:12	2	20	10
241541009	04-DEC-2009 11:34:12	2	20	10
241541010	04-DEC-2009 11:34:12	2	20	10
241541011	04-DEC-2009 11:34:12	2	20	10
241541012	04-DEC-2009 11:34:12	2	20	10
241541013	04-DEC-2009 11:34:12	2	20	10
241541014	04-DEC-2009 11:34:12	2	20	10
241541015	04-DEC-2009 11:34:12	2	20	10
241541016	04-DEC-2009 11:34:12	2	20	10
1201980961 ICS	04-DEC-2009 11:34:12	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201980961	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL
LCS	1201980958	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL
MS	1201980959	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL
MSD	1201980960	10 ug/L ICV/CCV Second Source	UCL091019-02.2	.4	mL

Comments:

Desalting cartridges used: 090415-1-Ba & 090902-1-H

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 12/08/09
Extr. Injection Volume: 20uL
Sequence Number: per120809a
Initial Calibration Date: 12/08/09

Method: EPA 6850-Modified
Int. Std.: UCL091019-03.1
Mobile Phase Lot#: 1233781, 1233976
Standard-Samp Reagent Lot#:: 1233976

Reviewed BY: MH
Date: 12/10/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091204-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1208001a	IPB001	CWW	12/8/2009 16:42			1		USE	B
per1208002a	IPB001	CWW	12/8/2009 16:51			1		USE	B
per1208003a	WCLICAL-01	CWW	12/8/2009 17:00			1		USE	I
per1208004a	WCLICAL-02	CWW	12/8/2009 17:08			1		USE	I
per1208005a	WCLICAL-03	CWW	12/8/2009 17:17			1		USE	I
per1208006a	WCLICAL-04	CWW	12/8/2009 17:25			1		USE	I
per1208007a	WCLICAL-05	CWW	12/8/2009 17:34			1		USE	I
per1208008a	IPB002	CWW	12/8/2009 17:42			1		USE	B
per1208009a	WCLICV	CWW	12/8/2009 17:51			1		USE	C
per1208010a	IPB003	CWW	12/8/2009 17:59			1		USE	B
per1208011a	WCLCRI	CWW	12/8/2009 18:08			1		USE	C
per1208012a	1201980957	CWW	12/8/2009 18:17	926522	10-605	1	LANL	USE	S
per1208013a	1201980958	CWW	12/8/2009 18:25	926522	10-605	1	LANL	USE	S
per1208014a	1201980961	CWW	12/8/2009 18:34	926522	10-605	1	LANL	USE	S
per1208015a	241541001	CWW	12/8/2009 18:42	926522	10-605	1	LANL	USE	S
per1208016a	1201980959	CWW	12/8/2009 18:51	926522	10-605	1	LANL	USE	S
per1208017a	1201980960	CWW	12/8/2009 18:59	926522	10-605	1	LANL	USE	S
per1208018a	241541002	CWW	12/8/2009 19:08	926522	10-605	1	LANL	USE	S
per1208019a	241541003	CWW	12/8/2009 19:16	926522	10-605	1	LANL	USE	S
per1208020a	241541004	CWW	12/8/2009 19:25	926522	10-605	1	LANL	USE	S
per1208021a	241541005	CWW	12/8/2009 19:33	926522	10-605	1	LANL	USE	S
per1208022a	WCLCCV	CWW	12/8/2009 19:42			1		USE	C
per1208023a	IPB004	CWW	12/8/2009 19:51			1		USE	B
per1208024a	WCLCRI	CWW	12/8/2009 20:00			1		USE	C
per1208025a	241541006	CWW	12/8/2009 20:09	926522	10-605	1	LANL	USE	S
per1208026a	241541007	CWW	12/8/2009 20:18	926522	10-605	1	LANL	USE	S
per1208027a	241541008	CWW	12/8/2009 20:27	926522	10-605	1	LANL	USE	S
per1208028a	241541009	CWW	12/8/2009 20:36	926522	10-605	1	LANL	USE	S
per1208029a	241541010	CWW	12/8/2009 20:45	926522	10-605	1	LANL	USE	S

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEI.

per1208030a	241541011	CWW	12/8/2009 20:54	926522	10-605	1	LANL	USE	S
per1208031a	241541012	CWW	12/8/2009 21:03	926522	10-605	1	LANL	USE	S
per1208032a	241541013	CWW	12/8/2009 21:11	926522	10-605	1	LANL	USE	S
per1208033a	241541014	CWW	12/8/2009 21:20	926522	10-605	1	LANL	USE	S
per1208034a	241541015	CWW	12/8/2009 21:28	926522	10-605	1	LANL	USE	S
per1208035a	WCLCCV	CWW	12/8/2009 21:37			1		USE	C
per1208036a	IPB005	CWW	12/8/2009 21:46			1		USE	B
per1208037a	WCLCRI	CWW	12/8/2009 21:54			1		USE	C
per1208038a	241541016	CWW	12/8/2009 22:03	926522	10-605	1	LANL	USE	S
per1208039a	IPB006	CWW	12/8/2009 22:12			1		USE	B
per1208040a	1201988401	CWW	12/8/2009 22:20	929770	VARIOUS	1	LANL	USE	S
per1208041a	1201988402	CWW	12/8/2009 22:29	929770	VARIOUS	1	LANL	USE	S
per1208042a	1201988405	CWW	12/8/2009 22:38	929770	VARIOUS	1	LANL	USE	S
per1208043a	241922001	CWW	12/8/2009 22:46	929770	10-704	1	LANL	USE	S
per1208044a	241922002	CWW	12/8/2009 22:55	929770	10-704	1	LANL	USE	S
per1208045a	1201988403	CWW	12/8/2009 23:03	929770	10-704	1	LANL	USE	S
per1208046a	1201988404	CWW	12/8/2009 23:12	929770	10-704	1	LANL	USE	S
per1208047a	WCLCCV	CWW	12/8/2009 23:21			1		USE	C
per1208048a	IPB007	CWW	12/8/2009 23:29			1		USE	B
per1208049a	WCLCRI	CWW	12/8/2009 23:38			1		USE	C
per1208050a	241922003	CWW	12/8/2009 23:47	929770	10-704	1	LANL	USE	S
per1208051a	241922004	CWW	12/8/2009 23:56	929770	10-704	1	LANL	USE	S
per1208052a	241922005	CWW	12/9/2009 0:05	929770	10-704	1	LANL	USE	S
per1208053a	241922006	CWW	12/9/2009 0:13	929770	10-704	1	LANL	USE	S
per1208054a	241922007	CWW	12/9/2009 0:22	929770	10-704	1	LANL	USE	S
per1208055a	242164001	CWW	12/9/2009 0:30	929770	10-752	1	LANL	USE	S
per1208056a	242164002	CWW	12/9/2009 0:39	929770	10-752	1	LANL	USE	S
per1208057a	242164003	CWW	12/9/2009 0:48	929770	10-752	1	LANL	USE	S
per1208058a	WCLCCV	CWW	12/9/2009 0:56			1		USE	C
per1208059a	IPB008	CWW	12/9/2009 1:05			1		USE	B
per1208060a	WCLCRI	CWW	12/9/2009 1:13			1		USE	C
per1208061a	242164004	CWW	12/9/2009 1:22	929770	10-752	1	LANL	USE	S
per1208062a	242164005	CWW	12/9/2009 1:31	929770	10-752	1	LANL	USE	S
per1208063a	242164006	CWW	12/9/2009 1:40	929770	10-752	1	LANL	USE	S
per1208064a	242164007	CWW	12/9/2009 1:48	929770	10-752	1	LANL	USE	S
per1208065a	242294001	CWW	12/9/2009 1:57	929770	10-784	1	LANL	USE	S
per1208066a	242294002	CWW	12/9/2009 2:05	929770	10-784	1	LANL	USE	S

per1208067a	242294003	CWW	12/9/2009 2:14	929770	10-784	1	LANL	USE	S
per1208068a	WCLCCV	CWW	12/9/2009 2:23			1		USE	C
per1208069a	IPB009	CWW	12/9/2009 2:32			1		USE	B
per1208070a	WCLCRI	CWW	12/9/2009 2:41			1		USE	C

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-605

Sample Analysis

Sample ID	Client ID
241541001	RE03-09-13875
241541002	RE03-09-13865
241541003	RE03-09-13868
241541004	RE03-09-13867
241541005	RE03-09-13864
241541006	RE03-09-13871
241541007	RE03-09-13877
241541008	RE03-09-13869
241541009	RE03-09-13870
241541010	RE03-09-13873
241541011	RE03-09-13863
241541012	RE03-09-13874
241541013	RE03-09-13866
241541014	RE03-09-13862
241541015	RE03-09-13876
241541016	RE03-09-13872
1201978595	Method Blank (MB) **ICP**
1201993442	Method Blank (MB) **ICP**
1201978600	Laboratory Control Sample (LCS)
1201993443	Laboratory Control Sample (LCS)
1201978597	241541001(RE03-09-13875L) Serial Dilution (SD)

1201978596	241541001(RE03-09-13875D) Sample Duplicate (DUP)
1201978598	241541001(RE03-09-13875S) Matrix Spike (MS)
1201978599	241541001(RE03-09-13875SD) Matrix Spike Duplicate (MSD)
1201978601	Method Blank (MB) **ICP-MS**
1201978606	Laboratory Control Sample (LCS)
1201978603	241541001(RE03-09-13875L) Serial Dilution (SD)
1201978602	241541001(RE03-09-13875D) Sample Duplicate (DUP)
1201978604	241541001(RE03-09-13875S) Matrix Spike (MS)
1201978605	241541001(RE03-09-13875SD) Matrix Spike Duplicate (MSD)
1201978947	Method Blank (MB) **CVAA**
1201978948	Laboratory Control Sample (LCS)
1201978951	241541001(RE03-09-13875L) Serial Dilution (SD)
1201978949	241541001(RE03-09-13875D) Sample Duplicate (DUP)
1201978950	241541001(RE03-09-13875S) Matrix Spike (MS)
1201978952	241541001(RE03-09-13875SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	925478, 931895, 925480 and 925629
Prep Batch :	925477, 931892, 925479 and 925628
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits with the exception of iron, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The laboratory control sample (LCS) met the recommended acceptance criteria for percent recovery (%R) for all elements of interest, with the exception of antimony. The LCS recoveries for the above noted analytes did not meet the acceptance criteria. Antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241541001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of antimony, potassium, silicon, lithium, selenium, arsenic and mercury, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of antimony, potassium, silicon, arsenic, lithium, selenium and mercury, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of manganese and silicon, as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of cobalt, manganese and uranium, as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D) with the exception of lead and sodium, as indicated by the "E" qualifiers.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 766705, 768392, 769139 and 769978. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson **Date:** 12/17/09

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541001 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13875 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11100000	ug/Kg		7420	21800	21800	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-36-0	Antimony	1090	ug/Kg	UN	360	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-38-2	Arsenic	3.69	mg/kg	N	0.222	1.11	1.11	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-39-3	Barium	93700	ug/Kg		109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-41-7	Beryllium	0.950	mg/kg		0.0222	0.111	0.111	2	MS	BAJ	12/08/09 17:58	091208-5	925480
7440-42-8	Boron	2800	ug/Kg	J	1090	5450	5450	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-43-9	Cadmium	545	ug/Kg	U	109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-70-2	Calcium	2160000	ug/Kg		8720	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-47-3	Chromium	10300	ug/Kg		164	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-48-4	Cobalt	9620	ug/Kg	*	164	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-50-8	Copper	8200	ug/Kg		327	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-89-6	Iron	15800000	ug/Kg		8720	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-92-1	Lead	16500	ug/Kg	E	273	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-93-2	Lithium	10.8	mg/kg	N	0.445	2.22	2.22	2	MS	BAJ	12/08/09 17:58	091208-5	925480
7439-95-4	Magnesium	2430000	ug/Kg		9270	32700	32700	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-96-5	Manganese	444000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478
7439-97-6	Mercury	33.3	ug/kg	N	4.15	12.2	12.2	1	AV	JXL1	12/07/09 11:56	120709S1-8	925629
7440-02-0	Nickel	8.18	mg/kg		0.111	0.445	0.445	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-09-7	Potassium	1010000	ug/Kg	N	6980	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7782-49-2	Selenium	1.11	mg/kg	UN	0.556	1.11	1.11	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-21-3	Silicon	1920000	ug/Kg	*N	1630	10900	10900	1	P	HSC	12/14/09 12:17	121409A-1	931895
7440-22-4	Silver	512	ug/Kg	J	109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-23-5	Sodium	572000	ug/Kg	E	7630	27300	27300	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-28-0	Thallium	0.428	mg/kg		0.0667	0.222	0.222	2	MS	PRB	12/07/09 23:07	091207-3	925480
7440-32-6	Titanium	336000	ug/Kg		109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-61-1	Uranium	0.821	mg/kg	*	0.0147	0.0445	0.0445	2	MS	PRB	12/08/09 14:41	091208-4	925480
7440-62-2	Vanadium	29000	ug/Kg		109	545	545	1	P	HSC	12/09/09 00:34	120809-2	925478
7440-66-6	Zinc	22100	ug/Kg		360	1090	1090	1	P	HSC	12/09/09 00:34	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.512	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.502	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.549	g	30	mL	12/04/09	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.513	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541002 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13865 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	19200000	ug/Kg		7400	21800	21800	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-36-0	Antimony	1090	ug/Kg	UN	359	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-38-2	Arsenic	2.32	mg/kg	N	0.218	1.09	1.09	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-39-3	Barium	77000	ug/Kg		109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-41-7	Beryllium	1.15	mg/kg		0.0218	0.109	0.109	2	MS	BAJ	12/08/09 18:11	091208-5	925480
7440-42-8	Boron	3100	ug/Kg	J	1090	5440	5440	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-43-9	Cadmium	544	ug/Kg	U	109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-70-2	Calcium	3650000	ug/Kg		8700	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-47-3	Chromium	19400	ug/Kg		163	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-48-4	Cobalt	3950	ug/Kg	*	163	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-50-8	Copper	10900	ug/Kg		326	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-89-6	Iron	17200000	ug/Kg		8700	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-92-1	Lead	15400	ug/Kg	E	272	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-93-2	Lithium	18.7	mg/kg	N	0.436	2.18	2.18	2	MS	BAJ	12/08/09 18:11	091208-5	925480
7439-95-4	Magnesium	2720000	ug/Kg		9250	32600	32600	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-96-5	Manganese	262000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478
7439-97-6	Mercury	19.5	ug/kg	N	4.7	13.8	13.8	1	AV	JXL1	12/07/09 12:06	120709S1-8	925629
7440-02-0	Nickel	11.6	mg/kg		0.109	0.436	0.436	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-09-7	Potassium	1380000	ug/Kg	N	6960	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7782-49-2	Selenium	1.09	mg/kg	UN	0.545	1.09	1.09	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-21-3	Silicon	1050000	ug/Kg	*N	1600	10700	10700	1	P	HSC	12/14/09 12:39	121409A-1	931895
7440-22-4	Silver	398	ug/Kg	J	109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-23-5	Sodium	3260000	ug/Kg	E	7620	27200	27200	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-28-0	Thallium	0.390	mg/kg		0.0654	0.218	0.218	2	MS	PRB	12/07/09 23:51	091207-3	925480
7440-32-6	Titanium	148000	ug/Kg		109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-61-1	Uranium	0.687	mg/kg	*	0.0144	0.0436	0.0436	2	MS	PRB	12/08/09 14:53	091208-4	925480
7440-62-2	Vanadium	29000	ug/Kg		109	544	544	1	P	HSC	12/09/09 01:09	120809-2	925478
7440-66-6	Zinc	29400	ug/Kg		359	1090	1090	1	P	HSC	12/09/09 01:09	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.531	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.53	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.502	g	30	mL	12/04/09	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.541	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541003 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13868 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6750000	ug/Kg		7000	20600	20600	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-36-0	Antimony	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-38-2	Arsenic	1.89	mg/kg	N	0.204	1.02	1.02	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-39-3	Barium	78900	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-41-7	Beryllium	0.661	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	12/08/09 18:13	091208-5	925480
7440-42-8	Boron	2830	ug/Kg	J	1030	5150	5150	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-43-9	Cadmium	145	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-70-2	Calcium	3640000	ug/Kg		8230	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-47-3	Chromium	6060	ug/Kg		154	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-48-4	Cobalt	2510	ug/Kg	*	154	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-50-8	Copper	5210	ug/Kg		309	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-89-6	Iron	12400000	ug/Kg		8230	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-92-1	Lead	23000	ug/Kg	E	257	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-93-2	Lithium	15.7	mg/kg	N	0.408	2.04	2.04	2	MS	BAJ	12/08/09 18:13	091208-5	925480
7439-95-4	Magnesium	1470000	ug/Kg		8750	30900	30900	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-96-5	Manganese	234000	ug/Kg	*	206	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478
7439-97-6	Mercury	25.7	ug/kg	N	3.93	11.6	11.6	1	AV	JXL1	12/07/09 12:08	120709S1-8	925629
7440-02-0	Nickel	5.96	mg/kg		0.102	0.408	0.408	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-09-7	Potassium	902000	ug/Kg	N	6590	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7782-49-2	Selenium	1.02	mg/kg	UN	0.51	1.02	1.02	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-21-3	Silicon	1630000	ug/Kg	*N	1620	10800	10800	1	P	HSC	12/14/09 12:42	121409A-1	931895
7440-22-4	Silver	277	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-23-5	Sodium	373000	ug/Kg	E	7210	25700	25700	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-28-0	Thallium	0.255	mg/kg		0.0612	0.204	0.204	2	MS	PRB	12/07/09 23:57	091207-3	925480
7440-32-6	Titanium	322000	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-61-1	Uranium	0.620	mg/kg	*	0.0135	0.0408	0.0408	2	MS	PRB	12/08/09 14:55	091208-4	925480
7440-62-2	Vanadium	15600	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:30	120809-2	925478
7440-66-6	Zinc	41700	ug/Kg		340	1030	1030	1	P	HSC	12/09/09 01:30	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.548	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.553	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.586	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.523	g	50	mL	12/12/09	BCD1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541004 **BASIS:** Dry Weight **DATE COLLECTED** 18–NOV–09

CLIENT ID: RE03–09–13867 **LEVEL:** Low **DATE RECEIVED** 20–NOV–09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	7220000	ug/Kg		7390	21700	21700	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–36–0	Antimony	1090	ug/Kg	UN	359	1090	1090	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–38–2	Arsenic	2.67	mg/kg	N	0.221	1.11	1.11	2	MS	PRB	12/08/09 00:04	091207–3	925480
7440–39–3	Barium	217000	ug/Kg		109	543	543	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–41–7	Beryllium	0.740	mg/kg		0.0221	0.111	0.111	2	MS	BAJ	12/08/09 18:15	091208–5	925480
7440–42–8	Boron	2350	ug/Kg	J	1090	5430	5430	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–43–9	Cadmium	166	ug/Kg	J	109	543	543	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–70–2	Calcium	2540000	ug/Kg		8690	27200	27200	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–47–3	Chromium	8180	ug/Kg		163	543	543	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–48–4	Cobalt	26600	ug/Kg	*	163	543	543	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–50–8	Copper	5480	ug/Kg		326	1090	1090	1	P	HSC	12/09/09 01:37	120809–2	925478
7439–89–6	Iron	14400000	ug/Kg		8690	27200	27200	1	P	HSC	12/09/09 01:37	120809–2	925478
7439–92–1	Lead	36000	ug/Kg	E	272	1090	1090	1	P	HSC	12/09/09 01:37	120809–2	925478
7439–93–2	Lithium	15.2	mg/kg	N	0.442	2.21	2.21	2	MS	BAJ	12/08/09 18:15	091208–5	925480
7439–95–4	Magnesium	1470000	ug/Kg		9230	32600	32600	1	P	HSC	12/09/09 01:37	120809–2	925478
7439–96–5	Manganese	1220000	ug/Kg	*	217	1090	1090	1	P	HSC	12/09/09 01:37	120809–2	925478
7439–97–6	Mercury	18.7	ug/kg	N	4.42	13	13	1	AV	JXL1	12/07/09 12:10	120709S1–8	925629
7440–02–0	Nickel	6.43	mg/kg		0.111	0.442	0.442	2	MS	PRB	12/08/09 00:04	091207–3	925480
7440–09–7	Potassium	854000	ug/Kg	N	6950	27200	27200	1	P	HSC	12/09/09 01:37	120809–2	925478
7782–49–2	Selenium	1.11	mg/kg	UN	0.553	1.11	1.11	2	MS	PRB	12/08/09 00:04	091207–3	925480
7440–21–3	Silicon	1890000	ug/Kg	*N	1700	11300	11300	1	P	HSC	12/14/09 12:46	121409A–1	931895
7440–22–4	Silver	513	ug/Kg	J	109	543	543	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–23–5	Sodium	423000	ug/Kg	E	7600	27200	27200	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–28–0	Thallium	0.233	mg/kg		0.0663	0.221	0.221	2	MS	PRB	12/08/09 00:04	091207–3	925480
7440–32–6	Titanium	370000	ug/Kg		109	543	543	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–61–1	Uranium	0.640	mg/kg	*	0.0146	0.0442	0.0442	2	MS	PRB	12/08/09 14:57	091208–4	925480
7440–62–2	Vanadium	28300	ug/Kg		109	543	543	1	P	HSC	12/09/09 01:37	120809–2	925478
7440–66–6	Zinc	33300	ug/Kg		359	1090	1090	1	P	HSC	12/09/09 01:37	120809–2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.525	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.516	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.526	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.503	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541005 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13864 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4760000	ug/Kg		7010	20600	20600	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-36-0	Antimony	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-38-2	Arsenic	1.01	mg/kg	N	0.202	1.01	1.01	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-39-3	Barium	104000	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-41-7	Beryllium	0.362	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/08/09 18:17	091208-5	925480
7440-42-8	Boron	1380	ug/Kg	J	1030	5150	5150	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-43-9	Cadmium	105	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-70-2	Calcium	1760000	ug/Kg		8240	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-47-3	Chromium	9190	ug/Kg		155	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-48-4	Cobalt	3750	ug/Kg	*	155	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-50-8	Copper	5980	ug/Kg		309	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-89-6	Iron	9180000	ug/Kg		8240	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-92-1	Lead	7850	ug/Kg	E	258	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-93-2	Lithium	8.62	mg/kg	N	0.404	2.02	2.02	2	MS	BAJ	12/08/09 18:17	091208-5	925480
7439-95-4	Magnesium	1360000	ug/Kg		8760	30900	30900	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-96-5	Manganese	248000	ug/Kg	*	206	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478
7439-97-6	Mercury	11.8	ug/kg	UN	4.02	11.8	11.8	1	AV	JXL1	12/07/09 12:16	120709S1-8	925629
7440-02-0	Nickel	5.3	mg/kg		0.101	0.404	0.404	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-09-7	Potassium	1050000	ug/Kg	N	6590	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7782-49-2	Selenium	1.01	mg/kg	UN	0.505	1.01	1.01	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-21-3	Silicon	1390000	ug/Kg	*N	1540	10300	10300	1	P	HSC	12/14/09 12:50	121409A-1	931895
7440-22-4	Silver	247	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-23-5	Sodium	1350000	ug/Kg	E	7210	25800	25800	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-28-0	Thallium	0.104	mg/kg	J	0.0606	0.202	0.202	2	MS	PRB	12/08/09 00:10	091207-3	925480
7440-32-6	Titanium	335000	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-61-1	Uranium	0.556	mg/kg	*	0.0133	0.0404	0.0404	2	MS	PRB	12/08/09 15:03	091208-4	925480
7440-62-2	Vanadium	22300	ug/Kg		103	515	515	1	P	HSC	12/09/09 01:44	120809-2	925478
7440-66-6	Zinc	19400	ug/Kg		340	1030	1030	1	P	HSC	12/09/09 01:44	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.533	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.544	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.557	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.534	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541006 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13871 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6740000	ug/Kg		7800	22900	22900	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-36-0	Antimony	552	ug/Kg	JN	379	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-38-2	Arsenic	2.27	mg/kg	N	0.224	1.12	1.12	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-39-3	Barium	73400	ug/Kg		115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-41-7	Beryllium	0.485	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	12/08/09 18:18	091208-5	925480
7440-42-8	Boron	3250	ug/Kg	J	1150	5740	5740	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-43-9	Cadmium	350	ug/Kg	J	115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-70-2	Calcium	1820000	ug/Kg		9180	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-47-3	Chromium	8300	ug/Kg		172	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-48-4	Cobalt	4710	ug/Kg	*	172	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-50-8	Copper	9780	ug/Kg		344	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-89-6	Iron	11700000	ug/Kg		9180	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-92-1	Lead	21400	ug/Kg	E	287	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-93-2	Lithium	14	mg/kg	N	0.448	2.24	2.24	2	MS	BAJ	12/08/09 18:18	091208-5	925480
7439-95-4	Magnesium	1280000	ug/Kg		9750	34400	34400	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-96-5	Manganese	173000	ug/Kg	*	229	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478
7439-97-6	Mercury	168	ug/kg	N	4.82	14.2	14.2	1	AV	JXL1	12/07/09 12:18	120709S1-8	925629
7440-02-0	Nickel	5.97	mg/kg		0.112	0.448	0.448	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-09-7	Potassium	878000	ug/Kg	N	7340	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7782-49-2	Selenium	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-21-3	Silicon	1510000	ug/Kg	*N	1730	11600	11600	1	P	HSC	12/14/09 12:53	121409A-1	931895
7440-22-4	Silver	260	ug/Kg	J	115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-23-5	Sodium	125000	ug/Kg	E	8030	28700	28700	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-28-0	Thallium	0.214	mg/kg	J	0.0672	0.224	0.224	2	MS	PRB	12/08/09 00:16	091207-3	925480
7440-32-6	Titanium	384000	ug/Kg		115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-61-1	Uranium	2.48	mg/kg	*	0.0148	0.0448	0.0448	2	MS	PRB	12/08/09 15:05	091208-4	925480
7440-62-2	Vanadium	22400	ug/Kg		115	574	574	1	P	HSC	12/09/09 01:51	120809-2	925478
7440-66-6	Zinc	57300	ug/Kg		379	1150	1150	1	P	HSC	12/09/09 01:51	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.52	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.533	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.505	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.516	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541007 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13877 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9280000	ug/Kg		7550	22200	22200	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-36-0	Antimony	1110	ug/Kg	UN	366	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-38-2	Arsenic	2.51	mg/kg	N	0.202	1.01	1.01	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-39-3	Barium	184000	ug/Kg		111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-41-7	Beryllium	1	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/08/09 18:20	091208-5	925480
7440-42-8	Boron	2570	ug/Kg	J	1110	5550	5550	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-43-9	Cadmium	158	ug/Kg	J	111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-70-2	Calcium	2510000	ug/Kg		8880	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-47-3	Chromium	10200	ug/Kg		167	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-48-4	Cobalt	7260	ug/Kg	*	167	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-50-8	Copper	8070	ug/Kg		333	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-89-6	Iron	14200000	ug/Kg		8880	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-92-1	Lead	18300	ug/Kg	E	278	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-93-2	Lithium	10.6	mg/kg	N	0.405	2.02	2.02	2	MS	BAJ	12/08/09 18:20	091208-5	925480
7439-95-4	Magnesium	1900000	ug/Kg		9440	33300	33300	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-96-5	Manganese	586000	ug/Kg	*	222	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478
7439-97-6	Mercury	19.3	ug/kg	N	4.21	12.4	12.4	1	AV	JXL1	12/07/09 12:20	120709S1-8	925629
7440-02-0	Nickel	9.96	mg/kg		0.101	0.405	0.405	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-09-7	Potassium	1450000	ug/Kg	N	7110	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7782-49-2	Selenium	1.01	mg/kg	UN	0.506	1.01	1.01	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-21-3	Silicon	1710000	ug/Kg	*N	1670	11100	11100	1	P	HSC	12/14/09 12:57	121409A-1	931895
7440-22-4	Silver	478	ug/Kg	J	111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-23-5	Sodium	259000	ug/Kg	E	7770	27800	27800	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-28-0	Thallium	0.282	mg/kg		0.0607	0.202	0.202	2	MS	PRB	12/08/09 00:22	091207-3	925480
7440-32-6	Titanium	366000	ug/Kg		111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-61-1	Uranium	1.2	mg/kg	*	0.0134	0.0405	0.0405	2	MS	PRB	12/08/09 15:07	091208-4	925480
7440-62-2	Vanadium	31500	ug/Kg		111	555	555	1	P	HSC	12/09/09 01:58	120809-2	925478
7440-66-6	Zinc	29900	ug/Kg		366	1110	1110	1	P	HSC	12/09/09 01:58	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.502	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.551	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.54	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.5	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541008 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13869 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16300000	ug/Kg		8120	23900	23900	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-36-0	Antimony	1190	ug/Kg	UN	394	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-38-2	Arsenic	3.3	mg/kg	N	0.234	1.17	1.17	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-39-3	Barium	81800	ug/Kg		119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-41-7	Beryllium	0.992	mg/kg		0.0234	0.117	0.117	2	MS	BAJ	12/08/09 18:22	091208-5	925480
7440-42-8	Boron	2970	ug/Kg	J	1190	5970	5970	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-43-9	Cadmium	597	ug/Kg	U	119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-70-2	Calcium	3250000	ug/Kg		9550	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-47-3	Chromium	45200	ug/Kg		179	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-48-4	Cobalt	6460	ug/Kg	*	179	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-50-8	Copper	10600	ug/Kg		358	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-89-6	Iron	17400000	ug/Kg		9550	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-92-1	Lead	16500	ug/Kg	E	299	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-93-2	Lithium	17	mg/kg	N	0.468	2.34	2.34	2	MS	BAJ	12/08/09 18:22	091208-5	925480
7439-95-4	Magnesium	2760000	ug/Kg		10100	35800	35800	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-96-5	Manganese	279000	ug/Kg	*	239	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478
7439-97-6	Mercury	42.4	ug/kg	N	4.65	13.7	13.7	1	AV	JXLI	12/07/09 12:22	120709S1-8	925629
7440-02-0	Nickel	12	mg/kg		0.117	0.468	0.468	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-09-7	Potassium	1320000	ug/Kg	N	7640	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7782-49-2	Selenium	1.17	mg/kg	UN	0.585	1.17	1.17	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-21-3	Silicon	1930000	ug/Kg	*N	1680	11200	11200	1	P	HSC	12/14/09 13:00	121409A-1	931895
7440-22-4	Silver	360	ug/Kg	J	119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-23-5	Sodium	371000	ug/Kg	E	8360	29900	29900	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-28-0	Thallium	0.255	mg/kg		0.0702	0.234	0.234	2	MS	PRB	12/08/09 00:29	091207-3	925480
7440-32-6	Titanium	341000	ug/Kg		119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-61-1	Uranium	0.789	mg/kg	*	0.0155	0.0468	0.0468	2	MS	PRB	12/08/09 15:09	091208-4	925480
7440-62-2	Vanadium	32300	ug/Kg		119	597	597	1	P	HSC	12/09/09 02:06	120809-2	925478
7440-66-6	Zinc	30000	ug/Kg		394	1190	1190	1	P	HSC	12/09/09 02:06	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.503	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.513	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.527	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.537	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541009 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13870 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6380000	ug/Kg		7410	21800	21800	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-36-0	Antimony	4320	ug/Kg	N	360	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-38-2	Arsenic	2.13	mg/kg	N	0.212	1.06	1.06	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-39-3	Barium	81100	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-41-7	Beryllium	0.581	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 18:29	091208-5	925480
7440-42-8	Boron	6940	ug/Kg		1090	5450	5450	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-43-9	Cadmium	570	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-70-2	Calcium	2250000	ug/Kg		8720	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-47-3	Chromium	8680	ug/Kg		163	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-48-4	Cobalt	4100	ug/Kg	*	163	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-50-8	Copper	18800	ug/Kg		327	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-89-6	Iron	14000000	ug/Kg		8720	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-92-1	Lead	35500	ug/Kg	E	272	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-93-2	Lithium	14.7	mg/kg	N	0.423	2.12	2.12	2	MS	BAJ	12/08/09 20:38	091208-7	925480
7439-95-4	Magnesium	1260000	ug/Kg		9260	32700	32700	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-96-5	Manganese	313000	ug/Kg	*	218	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478
7439-97-6	Mercury	211	ug/kg	N	4.44	13	13	1	AV	JXL1	12/07/09 12:24	120709S1-8	925629
7440-02-0	Nickel	6.67	mg/kg		0.106	0.423	0.423	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-09-7	Potassium	1040000	ug/Kg	N	6970	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7782-49-2	Selenium	1.06	mg/kg	UN	0.529	1.06	1.06	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-21-3	Silicon	1790000	ug/Kg	*N	1610	10700	10700	1	P	HSC	12/14/09 13:03	121409A-1	931895
7440-22-4	Silver	1360	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-23-5	Sodium	111000	ug/Kg	E	7630	27200	27200	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-28-0	Thallium	0.234	mg/kg		0.0635	0.212	0.212	2	MS	PRB	12/08/09 00:35	091207-3	925480
7440-32-6	Titanium	388000	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-61-1	Uranium	8.3	mg/kg	*	0.014	0.0423	0.0423	2	MS	PRB	12/08/09 15:12	091208-4	925480
7440-62-2	Vanadium	18800	ug/Kg		109	545	545	1	P	HSC	12/09/09 02:13	120809-2	925478
7440-66-6	Zinc	129000	ug/Kg		360	1090	1090	1	P	HSC	12/09/09 02:13	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.532	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.548	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.533	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.541	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541010 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13873 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9220000	ug/Kg		7070	20800	20800	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-36-0	Antimony	1040	ug/Kg	UN	343	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-38-2	Arsenic	1.93	mg/kg	N	0.202	1.01	1.01	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-39-3	Barium	175000	ug/Kg		104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-41-7	Beryllium	0.869	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	12/08/09 18:30	091208-5	925480
7440-42-8	Boron	2360	ug/Kg	J	1040	5200	5200	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-43-9	Cadmium	160	ug/Kg	J	104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-70-2	Calcium	2040000	ug/Kg		8310	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-47-3	Chromium	11600	ug/Kg		156	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-48-4	Cobalt	7570	ug/Kg	*	156	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-50-8	Copper	8150	ug/Kg		312	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-89-6	Iron	14200000	ug/Kg		8310	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-92-1	Lead	15800	ug/Kg	E	260	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-93-2	Lithium	11.6	mg/kg	N	0.405	2.02	2.02	2	MS	BAJ	12/08/09 20:41	091208-7	925480
7439-95-4	Magnesium	1860000	ug/Kg		8830	31200	31200	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-96-5	Manganese	777000	ug/Kg	*	208	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478
7439-97-6	Mercury	16.5	ug/kg	N	4.22	12.4	12.4	1	AV	JXL1	12/07/09 12:26	120709S1-8	925629
7440-02-0	Nickel	8.75	mg/kg		0.101	0.405	0.405	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-09-7	Potassium	1440000	ug/Kg	N	6650	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7782-49-2	Selenium	1.01	mg/kg	UN	0.506	1.01	1.01	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-21-3	Silicon	1870000	ug/Kg	*N	1640	11000	11000	1	P	HSC	12/14/09 13:14	121409A-1	931895
7440-22-4	Silver	459	ug/Kg	J	104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-23-5	Sodium	304000	ug/Kg	E	7280	26000	26000	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-28-0	Thallium	0.281	mg/kg		0.0607	0.202	0.202	2	MS	PRB	12/08/09 00:54	091207-3	925480
7440-32-6	Titanium	393000	ug/Kg		104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-61-1	Uranium	1.15	mg/kg	*	0.0134	0.0405	0.0405	2	MS	PRB	12/08/09 15:14	091208-4	925480
7440-62-2	Vanadium	31000	ug/Kg		104	520	520	1	P	HSC	12/09/09 02:34	120809-2	925478
7440-66-6	Zinc	30100	ug/Kg		343	1040	1040	1	P	HSC	12/09/09 02:34	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.528	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.542	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.531	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.501	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541011 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13863 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7080000	ug/Kg		7370	21700	21700	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-36-0	Antimony	1080	ug/Kg	UN	358	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-38-2	Arsenic	1.74	mg/kg	N	0.217	1.08	1.08	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-39-3	Barium	86800	ug/Kg		108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-41-7	Beryllium	0.718	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 18:32	091208-5	925480
7440-42-8	Boron	2390	ug/Kg	J	1080	5420	5420	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-70-2	Calcium	2210000	ug/Kg		8670	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-47-3	Chromium	6710	ug/Kg		163	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-48-4	Cobalt	2980	ug/Kg	*	163	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-50-8	Copper	4890	ug/Kg		325	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-89-6	Iron	11800000	ug/Kg		8670	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-92-1	Lead	10300	ug/Kg	E	271	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-93-2	Lithium	13.8	mg/kg	N	0.433	2.17	2.17	2	MS	BAJ	12/08/09 20:43	091208-7	925480
7439-95-4	Magnesium	1480000	ug/Kg		9210	32500	32500	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-96-5	Manganese	240000	ug/Kg	*	217	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478
7439-97-6	Mercury	12.9	ug/kg	N	4.15	12.2	12.2	1	AV	JXL1	12/07/09 12:28	120709S1-8	925629
7440-02-0	Nickel	5.81	mg/kg		0.108	0.433	0.433	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-09-7	Potassium	953000	ug/Kg	N	6930	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7782-49-2	Selenium	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-21-3	Silicon	1590000	ug/Kg	*N	1580	10500	10500	1	P	HSC	12/14/09 13:18	121409A-1	931895
7440-22-4	Silver	366	ug/Kg	J	108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-23-5	Sodium	179000	ug/Kg	E	7580	27100	27100	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-28-0	Thallium	0.178	mg/kg	J	0.065	0.217	0.217	2	MS	PRB	12/08/09 01:00	091207-3	925480
7440-32-6	Titanium	305000	ug/Kg		108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-61-1	Uranium	0.479	mg/kg	*	0.0143	0.0433	0.0433	2	MS	PRB	12/08/09 15:19	091208-4	925480
7440-62-2	Vanadium	16500	ug/Kg		108	542	542	1	P	HSC	12/09/09 02:41	120809-2	925478
7440-66-6	Zinc	33100	ug/Kg		358	1080	1080	1	P	HSC	12/09/09 02:41	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.505	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.505	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.538	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.521	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541012 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13874 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7370000	ug/Kg		7000	20600	20600	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-36-0	Antimony	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-38-2	Arsenic	2.87	mg/kg	N	0.212	1.06	1.06	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-39-3	Barium	107000	ug/Kg		103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-41-7	Beryllium	0.786	mg/kg		0.0212	0.106	0.106	2	MS	BAJ	12/08/09 18:34	091208-5	925480
7440-42-8	Boron	2340	ug/Kg	J	1030	5150	5150	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-43-9	Cadmium	141	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-70-2	Calcium	1630000	ug/Kg		8240	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-47-3	Chromium	8620	ug/Kg		154	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-48-4	Cobalt	5490	ug/Kg	*	154	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-50-8	Copper	6450	ug/Kg		309	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-89-6	Iron	11900000	ug/Kg		8240	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-92-1	Lead	13200	ug/Kg	E	257	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-93-2	Lithium	10	mg/kg	N	0.425	2.12	2.12	2	MS	BAJ	12/08/09 20:46	091208-7	925480
7439-95-4	Magnesium	1570000	ug/Kg		8750	30900	30900	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-96-5	Manganese	353000	ug/Kg	*	206	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478
7439-97-6	Mercury	23.7	ug/kg	N	4.15	12.2	12.2	1	AV	JXL1	12/07/09 12:30	120709S1-8	925629
7440-02-0	Nickel	6.94	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-09-7	Potassium	1070000	ug/Kg	N	6590	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7782-49-2	Selenium	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-21-3	Silicon	1580000	ug/Kg	*N	1560	10400	10400	1	P	HSC	12/14/09 13:21	121409A-1	931895
7440-22-4	Silver	332	ug/Kg	J	103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-23-5	Sodium	519000	ug/Kg	E	7210	25700	25700	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-28-0	Thallium	0.192	mg/kg	J	0.0637	0.212	0.212	2	MS	PRB	12/08/09 01:06	091207-3	925480
7440-32-6	Titanium	374000	ug/Kg		103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-61-1	Uranium	1.01	mg/kg	*	0.014	0.0425	0.0425	2	MS	PRB	12/08/09 15:22	091208-4	925480
7440-62-2	Vanadium	26300	ug/Kg		103	515	515	1	P	HSC	12/09/09 02:48	120809-2	925478
7440-66-6	Zinc	22300	ug/Kg		340	1030	1030	1	P	HSC	12/09/09 02:48	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.523	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.507	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.529	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.517	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541013 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13866 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7290000	ug/Kg		7660	22500	22500	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-36-0	Antimony	1130	ug/Kg	UN	372	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-38-2	Arsenic	3.04	mg/kg	N	0.232	1.16	1.16	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-39-3	Barium	96100	ug/Kg		113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-41-7	Beryllium	0.772	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	12/08/09 18:36	091208-5	925480
7440-42-8	Boron	2990	ug/Kg	J	1130	5640	5640	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-43-9	Cadmium	209	ug/Kg	J	113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-70-2	Calcium	2080000	ug/Kg		9020	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-47-3	Chromium	10500	ug/Kg		169	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-48-4	Cobalt	6430	ug/Kg	*	169	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-50-8	Copper	8960	ug/Kg		338	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-89-6	Iron	12200000	ug/Kg		9020	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-92-1	Lead	16400	ug/Kg	E	282	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-93-2	Lithium	12.3	mg/kg	N	0.463	2.32	2.32	2	MS	BAJ	12/08/09 20:48	091208-7	925480
7439-95-4	Magnesium	1530000	ug/Kg		9580	33800	33800	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-96-5	Manganese	359000	ug/Kg	*	225	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478
7439-97-6	Mercury	26	ug/kg	N	4.31	12.7	12.7	1	AV	JXL1	12/07/09 12:31	120709S1-8	925629
7440-02-0	Nickel	7.49	mg/kg		0.116	0.463	0.463	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-09-7	Potassium	1140000	ug/Kg	N	7210	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7782-49-2	Selenium	1.16	mg/kg	UN	0.579	1.16	1.16	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-21-3	Silicon	1710000	ug/Kg	*N	1620	10800	10800	1	P	HSC	12/14/09 13:25	121409A-1	931895
7440-22-4	Silver	267	ug/Kg	J	113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-23-5	Sodium	124000	ug/Kg	E	7890	28200	28200	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-28-0	Thallium	0.194	mg/kg	J	0.0695	0.232	0.232	2	MS	PRB	12/08/09 01:12	091207-3	925480
7440-32-6	Titanium	339000	ug/Kg		113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-61-1	Uranium	1.23	mg/kg	*	0.0153	0.0463	0.0463	2	MS	PRB	12/08/09 15:24	091208-4	925480
7440-62-2	Vanadium	28900	ug/Kg		113	564	564	1	P	HSC	12/09/09 02:55	120809-2	925478
7440-66-6	Zinc	37400	ug/Kg		372	1130	1130	1	P	HSC	12/09/09 02:55	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.516	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.502	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.55	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.539	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541014 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13862 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11500000	ug/Kg		7500	22100	22100	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-36-0	Antimony	1100	ug/Kg	UN	364	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-38-2	Arsenic	2.07	mg/kg	N	0.217	1.08	1.08	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-39-3	Barium	130000	ug/Kg		110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-41-7	Beryllium	0.932	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 18:38	091208-5	925480
7440-42-8	Boron	2800	ug/Kg	J	1100	5510	5510	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-70-2	Calcium	3070000	ug/Kg		8820	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-47-3	Chromium	10400	ug/Kg		165	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-48-4	Cobalt	6720	ug/Kg	*	165	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-50-8	Copper	7980	ug/Kg		331	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-89-6	Iron	14200000	ug/Kg		8820	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-92-1	Lead	15600	ug/Kg	E	276	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-93-2	Lithium	14.4	mg/kg	N	0.434	2.17	2.17	2	MS	BAJ	12/08/09 20:50	091208-7	925480
7439-95-4	Magnesium	2240000	ug/Kg		9370	33100	33100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-96-5	Manganese	318000	ug/Kg	*	221	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478
7439-97-6	Mercury	25.3	ug/kg	N	4.16	12.2	12.2	1	AV	JXL1	12/07/09 12:33	120709S1-8	925629
7440-02-0	Nickel	28.7	mg/kg		0.108	0.434	0.434	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-09-7	Potassium	1230000	ug/Kg	N	7060	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7782-49-2	Selenium	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-21-3	Silicon	1770000	ug/Kg	*N	1630	10800	10800	1	P	HSC	12/14/09 13:29	121409A-1	931895
7440-22-4	Silver	315	ug/Kg	J	110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-23-5	Sodium	352000	ug/Kg	E	7720	27600	27600	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-28-0	Thallium	0.288	mg/kg		0.065	0.217	0.217	2	MS	PRB	12/08/09 01:19	091207-3	925480
7440-32-6	Titanium	280000	ug/Kg		110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-61-1	Uranium	0.628	mg/kg	*	0.0143	0.0434	0.0434	2	MS	PRB	12/08/09 15:26	091208-4	925480
7440-62-2	Vanadium	26200	ug/Kg		110	551	551	1	P	HSC	12/09/09 03:02	120809-2	925478
7440-66-6	Zinc	33400	ug/Kg		364	1100	1100	1	P	HSC	12/09/09 03:02	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.522	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.531	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.564	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.531	g	50	mL	12/12/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541015 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13876 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7670000	ug/Kg		7030	20700	20700	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-36-0	Antimony	1030	ug/Kg	UN	341	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-38-2	Arsenic	2.59	mg/kg	N	0.213	1.06	1.06	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-39-3	Barium	164000	ug/Kg		103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-41-7	Beryllium	0.874	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	12/08/09 18:39	091208-5	925480
7440-42-8	Boron	3270	ug/Kg	J	1030	5170	5170	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-43-9	Cadmium	234	ug/Kg	J	103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-70-2	Calcium	2430000	ug/Kg		8270	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-47-3	Chromium	12100	ug/Kg		155	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-48-4	Cobalt	7580	ug/Kg	*	155	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-50-8	Copper	8180	ug/Kg		310	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-89-6	Iron	20100000	ug/Kg		8270	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-92-1	Lead	24300	ug/Kg	E	258	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-93-2	Lithium	10.5	mg/kg	N	0.425	2.13	2.13	2	MS	BAJ	12/08/09 20:52	091208-7	925480
7439-95-4	Magnesium	1770000	ug/Kg		8780	31000	31000	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-96-5	Manganese	721000	ug/Kg	*	207	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478
7439-97-6	Mercury	18.5	ug/kg	N	4.06	12	12	1	AV	JXL1	12/07/09 12:40	120709S1-8	925629
7440-02-0	Nickel	8.77	mg/kg		0.106	0.425	0.425	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-09-7	Potassium	1760000	ug/Kg	N	6610	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7782-49-2	Selenium	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-21-3	Silicon	1810000	ug/Kg	*N	1590	10600	10600	1	P	HSC	12/14/09 13:32	121409A-1	931895
7440-22-4	Silver	383	ug/Kg	J	103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-23-5	Sodium	200000	ug/Kg	E	7230	25800	25800	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-28-0	Thallium	0.255	mg/kg		0.0638	0.213	0.213	2	MS	PRB	12/08/09 01:25	091207-3	925480
7440-32-6	Titanium	394000	ug/Kg		103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-61-1	Uranium	1.32	mg/kg	*	0.014	0.0425	0.0425	2	MS	PRB	12/08/09 15:28	091208-4	925480
7440-62-2	Vanadium	56600	ug/Kg		103	517	517	1	P	HSC	12/09/09 03:09	120809-2	925478
7440-66-6	Zinc	28700	ug/Kg		341	1030	1030	1	P	HSC	12/09/09 03:09	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.539	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.524	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.559	g	30	mL	12/04/09	TXB3

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.525	g	50	mL	12/12/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-605 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241541016 **BASIS:** Dry Weight **DATE COLLECTED** 18-NOV-09

CLIENT ID: RE03-09-13872 **LEVEL:** Low **DATE RECEIVED** 20-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6820000	ug/Kg		7460	22000	22000	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-36-0	Antimony	1100	ug/Kg	UN	362	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-38-2	Arsenic	1.98	mg/kg	N	0.217	1.08	1.08	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-39-3	Barium	120000	ug/Kg		110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-41-7	Beryllium	0.670	mg/kg		0.0217	0.108	0.108	2	MS	BAJ	12/08/09 18:41	091208-5	925480
7440-42-8	Boron	2930	ug/Kg	J	1100	5490	5490	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-43-9	Cadmium	176	ug/Kg	J	110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-70-2	Calcium	2040000	ug/Kg		8780	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-47-3	Chromium	11100	ug/Kg		165	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-48-4	Cobalt	5470	ug/Kg	*	165	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-50-8	Copper	7740	ug/Kg		329	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-89-6	Iron	10700000	ug/Kg		8780	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-92-1	Lead	15500	ug/Kg	E	274	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-93-2	Lithium	10.1	mg/kg	N	0.434	2.17	2.17	2	MS	BAJ	12/08/09 20:55	091208-7	925480
7439-95-4	Magnesium	1430000	ug/Kg		9330	32900	32900	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-96-5	Manganese	439000	ug/Kg	*	220	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478
7439-97-6	Mercury	28.9	ug/kg	N	4.48	13.2	13.2	1	AV	JXL1	12/07/09 12:41	120709S1-8	925629
7440-02-0	Nickel	7.32	mg/kg		0.108	0.434	0.434	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-09-7	Potassium	1410000	ug/Kg	N	7020	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7782-49-2	Selenium	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-21-3	Silicon	1180000	ug/Kg	*N	1490	9930	9930	1	P	HSC	12/14/09 13:35	121409A-1	931895
7440-22-4	Silver	278	ug/Kg	J	110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-23-5	Sodium	229000	ug/Kg	E	7680	27400	27400	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-28-0	Thallium	0.203	mg/kg	J	0.0651	0.217	0.217	2	MS	PRB	12/08/09 01:31	091207-3	925480
7440-32-6	Titanium	350000	ug/Kg		110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-61-1	Uranium	1.33	mg/kg	*	0.0143	0.0434	0.0434	2	MS	PRB	12/08/09 15:31	091208-4	925480
7440-62-2	Vanadium	24200	ug/Kg		110	549	549	1	P	HSC	12/09/09 03:17	120809-2	925478
7440-66-6	Zinc	30200	ug/Kg		362	1100	1100	1	P	HSC	12/09/09 03:17	120809-2	925478

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
925478	925477	SW846 3050B	0.503	g	50	mL	11/25/09	FGA
925480	925479	SW846 3050B	0.509	g	50	mL	11/25/09	FGA
925629	925628	SW846 7471A Prep	0.503	g	30	mL	12/04/09	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

931895	931892	SW846 3050B	0.556	g	50	mL	12/12/09	BCD1

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.19	ug/L	5	ug/L	103.8	90.0 – 110.0	AV	07–DEC–09 10:07	120709S1–8
	Arsenic	48.2	ug/L	50	ug/L	96.4	90.0 – 110.0	MS	07–DEC–09 18:40	091207–3
	Nickel	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	07–DEC–09 18:40	091207–3
	Selenium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	07–DEC–09 18:40	091207–3
	Thallium	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	07–DEC–09 18:40	091207–3
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Antimony	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Boron	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Cadmium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Calcium	4840	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Chromium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Manganese	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Potassium	2440	ug/L	2500	ug/L	97.7	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Silver	258	ug/L	250	ug/L	103.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Sodium	2370	ug/L	2500	ug/L	94.8	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Zinc	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:01	120809–2
	Uranium	53.4	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	08–DEC–09 13:22	091208–4
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	08–DEC–09 17:41	091208–5
	Lithium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	08–DEC–09 17:41	091208–5
	Lithium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	08–DEC–09 19:50	091208–7
	Silicon	4800	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	14–DEC–09 09:44	121409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	07–DEC–09 10:13	120709S1–8
	Arsenic	48.6	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	07–DEC–09 19:11	091207–3
	Nickel	51.6	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	07–DEC–09 19:11	091207–3
	Selenium	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	07–DEC–09 19:11	091207–3
	Thallium	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	07–DEC–09 19:11	091207–3
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Boron	510	ug/L	500	ug/L	102	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Cadmium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Potassium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Sodium	9150	ug/L	10000	ug/L	91.5	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Titanium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Zinc	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 08:47	120809–2
	Uranium	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	08–DEC–09 13:30	091208–4
	Beryllium	54.3	ug/L	50	ug/L	108.6	90.0 – 110.0	MS	08–DEC–09 17:50	091208–5
	Lithium	52.5	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	08–DEC–09 17:50	091208–5
	Lithium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	08–DEC–09 20:01	091208–7
	Silicon	2610	ug/L	2500	ug/L	104.3	90.0 – 110.0	P	14–DEC–09 10:07	121409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Mercury	5.38	ug/L	5	ug/L	107.7	80.0 – 120.0	AV	07–DEC–09 10:37	120709S1–8
	Arsenic	48.6	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	07–DEC–09 19:30	091207–3
	Nickel	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	07–DEC–09 19:30	091207–3
	Selenium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	07–DEC–09 19:30	091207–3
	Thallium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	07–DEC–09 19:30	091207–3
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Antimony	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Barium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Boron	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Lead	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Silver	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Sodium	9430	ug/L	10000	ug/L	94.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Titanium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 09:11	120809–2
	Uranium	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	08–DEC–09 13:49	091208–4
	Beryllium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	08–DEC–09 18:07	091208–5
	Lithium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	08–DEC–09 18:07	091208–5
	Lithium	47.9	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	08–DEC–09 20:22	091208–7
	Silicon	2570	ug/L	2500	ug/L	103	90.0 – 110.0	P	14–DEC–09 10:27	121409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	07–DEC–09 11:01	120709S1–8
	Arsenic	47.4	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	07–DEC–09 20:26	091207–3
	Nickel	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	07–DEC–09 20:26	091207–3
	Selenium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	07–DEC–09 20:26	091207–3
	Thallium	49	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	07–DEC–09 20:26	091207–3
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Boron	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Cobalt	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Sodium	9300	ug/L	10000	ug/L	93	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Zinc	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	08–DEC–09 09:52	120809–2
	Uranium	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	08–DEC–09 14:12	091208–4
	Beryllium	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	08–DEC–09 18:24	091208–5
	Lithium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	08–DEC–09 18:24	091208–5
	Lithium	50.3	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	08–DEC–09 20:34	091208–7
	Silicon	2630	ug/L	2500	ug/L	105.2	90.0 – 110.0	P	14–DEC–09 10:56	121409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Mercury	5.79	ug/L	5	ug/L	115.9	80.0 – 120.0	AV	07–DEC–09 11:24	120709S1–8
	Arsenic	47.7	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	07–DEC–09 21:34	091207–3
	Nickel	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	07–DEC–09 21:34	091207–3
	Selenium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	07–DEC–09 21:34	091207–3
	Thallium	48.3	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	07–DEC–09 21:34	091207–3
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Boron	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Calcium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Iron	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Lead	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Manganese	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Potassium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Sodium	9450	ug/L	10000	ug/L	94.5	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Titanium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 10:55	120809–2
	Uranium	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	08–DEC–09 14:34	091208–4
	Beryllium	55	ug/L	50	ug/L	110	90.0 – 110.0	MS	08–DEC–09 18:43	091208–5
	Lithium	55.8	ug/L	50	ug/L	111.6	90.0 – 110.0	MS	08–DEC–09 18:43	091208–5
	Lithium	55.2	ug/L	50	ug/L	110.4	90.0 – 110.0	MS	08–DEC–09 20:57	091208–7
	Silicon	2630	ug/L	2500	ug/L	105.2	90.0 – 110.0	P	14–DEC–09 11:23	121409A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Mercury	5.49	ug/L	5	ug/L	109.7	80.0 – 120.0	AV	07–DEC–09 11:48	120709S1–8
	Arsenic	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	07–DEC–09 22:36	091207–3
	Nickel	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	07–DEC–09 22:36	091207–3
	Selenium	50.8	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	07–DEC–09 22:36	091207–3
	Thallium	48.5	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	07–DEC–09 22:36	091207–3
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Cadmium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Chromium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Lead	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Manganese	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Sodium	9490	ug/L	10000	ug/L	94.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Vanadium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	08–DEC–09 11:57	120809–2
	Uranium	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	08–DEC–09 14:59	091208–4
	Silicon	2620	ug/L	2500	ug/L	105	90.0 – 110.0	P	14–DEC–09 12:03	121409A–1
CCV06										
	Mercury	5.57	ug/L	5	ug/L	111.4	80.0 – 120.0	AV	07–DEC–09 12:12	120709S1–8
	Arsenic	47.2	ug/L	50	ug/L	94.4	90.0 – 110.0	MS	07–DEC–09 23:39	091207–3
	Nickel	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	07–DEC–09 23:39	091207–3

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Selenium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	07–DEC–09 23:39	091207–3
	Thallium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	07–DEC–09 23:39	091207–3
	Aluminum	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Antimony	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Boron	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Lead	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Manganese	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Sodium	9480	ug/L	10000	ug/L	94.8	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Titanium	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 12:54	120809–2
	Uranium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	08–DEC–09 15:16	091208–4
	Silicon	2610	ug/L	2500	ug/L	104.3	90.0 – 110.0	P	14–DEC–09 12:32	121409A–1
CCV07										
	Mercury	5.54	ug/L	5	ug/L	110.8	80.0 – 120.0	AV	07–DEC–09 12:35	120709S1–8
	Arsenic	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	08–DEC–09 00:41	091207–3
	Nickel	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	08–DEC–09 00:41	091207–3
	Selenium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	08–DEC–09 00:41	091207–3
	Thallium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	08–DEC–09 00:41	091207–3
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 14:10	120809–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Antimony	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Barium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Boron	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Cobalt	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Iron	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Lead	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Manganese	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08-DEC-09 14:10	120809-2
	Uranium	49	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	08-DEC-09 15:33	091208-4
	Silicon	2610	ug/L	2500	ug/L	104.4	90.0 – 110.0	P	14-DEC-09 13:07	121409A-1
CCV08										
	Mercury	5.68	ug/L	5	ug/L	113.6	80.0 – 120.0	AV	07-DEC-09 12:59	120709S1-8
	Arsenic	48.6	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	08-DEC-09 01:38	091207-3
	Nickel	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	08-DEC-09 01:38	091207-3
	Selenium	49.7	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	08-DEC-09 01:38	091207-3
	Thallium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	08-DEC-09 01:38	091207-3
	Aluminum	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Antimony	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Barium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Boron	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08-DEC-09 14:50	120809-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Calcium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Chromium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Copper	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Magnesium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Manganese	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Potassium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Zinc	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08-DEC-09 14:50	120809-2
	Silicon	2620	ug/L	2500	ug/L	104.8	90.0 – 110.0	P	14-DEC-09 13:39	121409A-1
CCV09										
	Aluminum	4790	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Antimony	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Barium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Boron	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Cadmium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Calcium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Chromium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Copper	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Iron	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Lead	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Magnesium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	08-DEC-09 16:07	120809-2
	Manganese	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	08-DEC-09 16:07	120809-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Sodium	9590	ug/L	10000	ug/L	95.9	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Titanium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Vanadium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
	Zinc	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	08–DEC–09 16:07	120809–2
CCV10										
	Aluminum	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Antimony	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Barium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Boron	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Calcium	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Chromium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Cobalt	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Copper	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Iron	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Lead	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Magnesium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Sodium	9780	ug/L	10000	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Vanadium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
	Zinc	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	08–DEC–09 17:18	120809–2
CCV11										
	Aluminum	4810	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Antimony	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Barium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 18:28	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	475	ug/L	500	ug/L	95	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Cadmium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Chromium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Copper	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Iron	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Potassium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Sodium	10300	ug/L	10000	ug/L	102.7	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Titanium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Vanadium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
	Zinc	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 18:28	120809–2
CCV12										
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Antimony	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Barium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Boron	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Cadmium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Calcium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Cobalt	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Copper	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Iron	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Lead	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Magnesium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	08–DEC–09 19:52	120809–2
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	08–DEC–09 19:52	120809–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	08-DEC-09 19:52	120809-2
	Silver	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	08-DEC-09 19:52	120809-2
	Sodium	9370	ug/L	10000	ug/L	93.7	90.0 - 110.0	P	08-DEC-09 19:52	120809-2
	Titanium	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	08-DEC-09 19:52	120809-2
	Vanadium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	08-DEC-09 19:52	120809-2
	Zinc	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	08-DEC-09 19:52	120809-2
CCV13										
	Aluminum	4630	ug/L	5000	ug/L	92.6	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Antimony	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Barium	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Boron	481	ug/L	500	ug/L	96.1	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Cadmium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Calcium	4770	ug/L	5000	ug/L	95.5	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Chromium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Iron	4950	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Lead	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Magnesium	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Manganese	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Silver	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Sodium	9900	ug/L	10000	ug/L	99	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Titanium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
	Zinc	490	ug/L	500	ug/L	98	90.0 - 110.0	P	08-DEC-09 21:17	120809-2
CCV14										
	Aluminum	4840	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	08-DEC-09 22:41	120809-2
	Antimony	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	08-DEC-09 22:41	120809-2
	Barium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	08-DEC-09 22:41	120809-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Cadmium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Copper	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Lead	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Magnesium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Manganese	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Potassium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Titanium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
	Zinc	490	ug/L	500	ug/L	98	90.0 – 110.0	P	08–DEC–09 22:41	120809–2
CCV15										
	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Antimony	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Iron	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Lead	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Manganese	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 00:06	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Titanium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Vanadium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
	Zinc	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 00:06	120809–2
CCV16										
	Aluminum	4800	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Barium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Boron	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Cadmium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Chromium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Copper	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Magnesium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Potassium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Titanium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	09–DEC–09 01:16	120809–2
CCV17										
	Aluminum	4780	ug/L	5000	ug/L	95.5	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Barium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 02:20	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Calcium	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Chromium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Cobalt	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Copper	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Magnesium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Potassium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Titanium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
	Zinc	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 02:20	120809–2
CCV18										
	Aluminum	4750	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Antimony	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Boron	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Calcium	4950	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Chromium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Cobalt	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Copper	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Iron	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Lead	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Manganese	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Silver	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Sodium	10300	ug/L	10000	ug/L	103.3	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Titanium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Vanadium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 03:24	120809–2
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 03:24	120809–2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-605

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.155	ug/L	.2	ug/L	77.4	70.0 – 130.0	AV	07-DEC-09 10:11	120709S1-8
	Nickel	2.18	ug/L	2	ug/L	109.1	70.0 – 130.0	MS	07-DEC-09 18:53	091207-3
	Thallium	1.08	ug/L	1	ug/L	107.9	70.0 – 130.0	MS	07-DEC-09 18:53	091207-3
	Arsenic	5.37	ug/L	5	ug/L	107.3	70.0 – 130.0	MS	07-DEC-09 18:53	091207-3
	Selenium	5.37	ug/L	5	ug/L	107.4	70.0 – 130.0	MS	07-DEC-09 18:53	091207-3
	Uranium	.236	ug/L	.2	ug/L	118	70.0 – 130.0	MS	08-DEC-09 13:25	091208-4
	Beryllium	.486	ug/L	.5	ug/L	97.2	70.0 – 130.0	MS	08-DEC-09 17:44	091208-5
	Lithium	10.8	ug/L	10	ug/L	108.4	70.0 – 130.0	MS	08-DEC-09 17:44	091208-5
	Lithium	10.3	ug/L	10	ug/L	103.3	70.0 – 130.0	MS	08-DEC-09 19:54	091208-7
PQL01										
	Aluminum	196	ug/L	200	ug/L	97.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Iron	132	ug/L	100	ug/L	131.6	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Lead	9.88	ug/L	10	ug/L	98.8	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Magnesium	317	ug/L	300	ug/L	105.7	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Manganese	10.3	ug/L	10	ug/L	102.8	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Potassium	161	ug/L	150	ug/L	107.2	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Silver	5.13	ug/L	5	ug/L	102.5	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Sodium	274	ug/L	300	ug/L	91.4	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Antimony	9.93	ug/L	10	ug/L	99.3	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Barium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Cadmium	4.96	ug/L	5	ug/L	99.2	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Chromium	4.82	ug/L	5	ug/L	96.4	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Cobalt	4.76	ug/L	5	ug/L	95.3	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Copper	9.87	ug/L	10	ug/L	98.7	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Vanadium	5.23	ug/L	5	ug/L	104.5	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Zinc	10.1	ug/L	10	ug/L	100.6	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Calcium	204	ug/L	200	ug/L	102.1	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Boron	49.5	ug/L	50	ug/L	98.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Titanium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	08-DEC-09 08:15	120809-2
	Silicon	101	ug/L	100	ug/L	101.5	70.0 – 130.0	P	14-DEC-09 09:51	121409A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	-0.096	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:09	120709S1-8
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	07-DEC-09 18:46	091207-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 18:46	091207-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 18:46	091207-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	07-DEC-09 18:46	091207-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 08:08	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 08:08	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 08:08	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 08:08	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 08:08	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 08:08	120809-2
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	08-DEC-09 13:23	091208-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	08-DEC-09 17:43	091208-5
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	08-DEC-09 17:43	091208-5
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	08-DEC-09 19:52	091208-7
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	14-DEC-09 09:48	121409A-1
CCB01										
	Mercury	-0.098	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 10:15	120709S1-8

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 19:17	091207–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 19:17	091207–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 19:17	091207–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	07–DEC–09 19:17	091207–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 08:54	120809–2
	Antimony	7.4	+/–10	J	3.3	10.0	SOL	P	08–DEC–09 08:54	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:54	120809–2
	Boron	16.85	+/–50	J	10.0	50.0	SOL	P	08–DEC–09 08:54	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:54	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 08:54	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 08:54	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 08:54	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 08:54	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 08:54	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 08:54	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 08:54	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 08:54	120809–2
	Potassium	138.07	+/–250	J	64.0	250	SOL	P	08–DEC–09 08:54	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:54	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 08:54	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:54	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 08:54	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 08:54	120809–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	08–DEC–09 13:32	091208–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 17:51	091208–5
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 17:51	091208–5
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 20:04	091208–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 10:11	121409A–1
CCB02										
	Mercury	–0.091	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 10:39	120709S1–8
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 19:36	091207–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 19:36	091207–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 19:36	091207–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	07–DEC–09 19:36	091207–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 09:18	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 09:18	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 09:18	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 09:18	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 09:18	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 09:18	120809–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	08–DEC–09 13:51	091208–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 18:09	091208–5
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 18:09	091208–5
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 20:25	091208–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 10:30	121409A–1
CCB03										
	Mercury	–0.117	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 11:03	120709S1–8
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 20:32	091207–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 20:32	091207–3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 20:32	091207-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	07-DEC-09 20:32	091207-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 09:59	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 09:59	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 09:59	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 09:59	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 09:59	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 09:59	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 09:59	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 09:59	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 09:59	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 09:59	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 09:59	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 09:59	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 09:59	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 09:59	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 09:59	120809-2
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	08-DEC-09 14:14	091208-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	08-DEC-09 18:26	091208-5
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	08-DEC-09 18:26	091208-5
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	08-DEC-09 20:36	091208-7
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	14-DEC-09 11:00	121409A-1
CCB04										
	Mercury	-0.136	+/-.2	J	0.068	0.2	SOL	AV	07-DEC-09 11:26	120709S1-8
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	07-DEC-09 21:40	091207-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 21:40	091207-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 21:40	091207-3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	07–DEC–09 21:40	091207–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 11:02	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 11:02	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 11:02	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 11:02	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 11:02	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 11:02	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 11:02	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 11:02	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 11:02	120809–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	08–DEC–09 14:35	091208–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	08–DEC–09 18:45	091208–5
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 18:45	091208–5
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	08–DEC–09 20:59	091208–7
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 11:26	121409A–1
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 11:50	120709S1–8
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 22:43	091207–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 22:43	091207–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 22:43	091207–3
	Thallium	0.48	+/–1	J	0.3	1.0	SOL	MS	07–DEC–09 22:43	091207–3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 12:04	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 12:04	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 12:04	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 12:04	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 12:04	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 12:04	120809–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	08–DEC–09 15:01	091208–4
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 12:06	121409A–1
CCB06										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	07–DEC–09 12:14	120709S1–8
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	07–DEC–09 23:45	091207–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 23:45	091207–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 23:45	091207–3
	Thallium	0.368	+/–1	J	0.3	1.0	SOL	MS	07–DEC–09 23:45	091207–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 13:01	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 13:01	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 13:01	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 13:01	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 13:01	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 13:01	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	08-DEC-09 13:01	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	08-DEC-09 13:01	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	08-DEC-09 13:01	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 13:01	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 13:01	120809-2
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	08-DEC-09 15:18	091208-4
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	14-DEC-09 12:36	121409A-1
CCB07										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	07-DEC-09 12:38	120709S1-8
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	08-DEC-09 00:47	091207-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-DEC-09 00:47	091207-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	08-DEC-09 00:47	091207-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	08-DEC-09 00:47	091207-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	08-DEC-09 14:17	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 14:17	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 14:17	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	08-DEC-09 14:17	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 14:17	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	08-DEC-09 14:17	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 14:17	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	08-DEC-09 14:17	120809-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 14:17	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 14:17	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 14:17	120809–2
	Magnesium	91.19	+/–300	J	85.0	300	SOL	P	08–DEC–09 14:17	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 14:17	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 14:17	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:17	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 14:17	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:17	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:17	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 14:17	120809–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	08–DEC–09 15:35	091208–4
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 13:10	121409A–1
CCB08										
	Mercury	–0.081	+/–.2	J	0.068	0.2	SOL	AV	07–DEC–09 13:01	120709S1–8
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	08–DEC–09 01:44	091207–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	08–DEC–09 01:44	091207–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	08–DEC–09 01:44	091207–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	08–DEC–09 01:44	091207–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 14:57	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 14:57	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 14:57	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 14:57	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 14:57	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 14:57	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 14:57	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 14:57	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 14:57	120809–2
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	14–DEC–09 13:43	121409A–1
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 16:14	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 16:14	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 16:14	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 16:14	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 16:14	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 16:14	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 16:14	120809–2
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 17:25	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 17:25	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 17:25	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 17:25	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 17:25	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 17:25	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 17:25	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 17:25	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 17:25	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 17:25	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 17:25	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 17:25	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 17:25	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 17:25	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 17:25	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 17:25	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 17:25	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 17:25	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 17:25	120809–2
CCB11										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 18:35	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 18:35	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 18:35	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 18:35	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 18:35	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 18:35	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 18:35	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 18:35	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 18:35	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 18:35	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	08–DEC–09 18:35	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 18:35	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 18:35	120809–2
CCB12										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 19:59	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 19:59	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 19:59	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 19:59	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Sodium	73.04	+/–250	J	70.0	250	SOL	P	08–DEC–09 19:59	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 19:59	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 19:59	120809–2
CCB13										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 21:24	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 21:24	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 21:24	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 21:24	120809–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 21:24	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 21:24	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 21:24	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 21:24	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 21:24	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 21:24	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 21:24	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 21:24	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 21:24	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 21:24	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 21:24	120809–2
	Sodium	94.18	+/–250	J	70.0	250	SOL	P	08–DEC–09 21:24	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 21:24	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 21:24	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 21:24	120809–2
CCB14										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	08–DEC–09 22:48	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	08–DEC–09 22:48	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 22:48	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	08–DEC–09 22:48	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 22:48	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 22:48	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 22:48	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	08–DEC–09 22:48	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	08–DEC–09 22:48	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	08–DEC–09 22:48	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	08–DEC–09 22:48	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	08–DEC–09 22:48	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	08–DEC–09 22:48	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	08–DEC–09 22:48	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	08–DEC–09 22:48	120809–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-605

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	120.49	+/-250	J	70.0	250	SOL	P	08-DEC-09 22:48	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	08-DEC-09 22:48	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	08-DEC-09 22:48	120809-2
CCB15										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 00:13	120809-2
	Antimony	3.87	+/-10	J	3.3	10.0	SOL	P	09-DEC-09 00:13	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 00:13	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	09-DEC-09 00:13	120809-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	09-DEC-09 00:13	120809-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	09-DEC-09 00:13	120809-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	09-DEC-09 00:13	120809-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Sodium	118.31	+/-250	J	70.0	250	SOL	P	09-DEC-09 00:13	120809-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 00:13	120809-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 00:13	120809-2
CCB16										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	09-DEC-09 01:23	120809-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	09-DEC-09 01:23	120809-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 01:23	120809-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	09-DEC-09 01:23	120809-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	09-DEC-09 01:23	120809-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	09-DEC-09 01:23	120809-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 01:23	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 01:23	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 01:23	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 01:23	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 01:23	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 01:23	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Sodium	154.13	+/–250	J	70.0	250	SOL	P	09–DEC–09 01:23	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 01:23	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 01:23	120809–2
CCB17										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 02:27	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 02:27	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 02:27	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 02:27	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 02:27	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 02:27	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 02:27	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Sodium	149.09	+/–250	J	70.0	250	SOL	P	09–DEC–09 02:27	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–605

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 02:27	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 02:27	120809–2
CCB18										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	09–DEC–09 03:31	120809–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 03:31	120809–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	09–DEC–09 03:31	120809–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	09–DEC–09 03:31	120809–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	09–DEC–09 03:31	120809–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	09–DEC–09 03:31	120809–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	09–DEC–09 03:31	120809–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Sodium	155.19	+/–250	J	70.0	250	SOL	P	09–DEC–09 03:31	120809–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	09–DEC–09 03:31	120809–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	09–DEC–09 03:31	120809–2

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–605

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201978595								
	Aluminum	6690	ug/Kg	+/–19685.039	U	P	6690	19700
	Antimony	325	ug/Kg	+/–984.252	U	P	325	984
	Barium	98.4	ug/Kg	+/–492.126	U	P	98.4	492
	Boron	984	ug/Kg	+/–4921.26	U	P	984	4920
	Cobalt	148	ug/Kg	+/–492.126	U	P	148	492
	Iron	7870	ug/Kg	+/–24606.299	U	P	7870	24600
	Magnesium	8370	ug/Kg	+/–29527.559	U	P	8370	29500
	Potassium	6300	ug/Kg	+/–24606.299	U	P	6300	24600
	Sodium	13800	ug/Kg	+/–24606.299	J	P	6890	24600
	Zinc	325	ug/Kg	+/–984.252	U	P	325	984
	Vanadium	98.4	ug/Kg	+/–492.126	U	P	98.4	492
	Titanium	98.4	ug/Kg	+/–492.126	U	P	98.4	492
	Silver	98.4	ug/Kg	+/–492.126	U	P	98.4	492
	Manganese	197	ug/Kg	+/–984.252	U	P	197	984
	Lead	246	ug/Kg	+/–984.252	U	P	246	984
	Copper	295	ug/Kg	+/–984.252	U	P	295	984
	Chromium	148	ug/Kg	+/–492.126	U	P	148	492
	Calcium	7870	ug/Kg	+/–24606.299	U	P	7870	24600
	Cadmium	98.4	ug/Kg	+/–492.126	U	P	98.4	492
1201978601								
	Beryllium	0.0183	mg/kg	+/–0.092	U	MS	0.0183	0.0916
	Arsenic	0.183	mg/kg	+/–0.916	U	MS	0.183	0.916
	Lithium	0.366	mg/kg	+/–1.832	U	MS	0.366	1.83
	Nickel	0.0916	mg/kg	+/–0.366	U	MS	0.0916	0.366
	Selenium	0.458	mg/kg	+/–0.916	U	MS	0.458	0.916
	Thallium	0.0593	mg/kg	+/–0.183	J	MS	0.055	0.183
	Uranium	0.0121	mg/kg	+/–0.037	U	MS	0.0121	0.0366
1201978947								
	Mercury	–6.34	ug/kg	+/–11.858	J	AV	4.03	11.9
1201993442								
	Silicon	2630	ug/Kg	+/–9980.04	J	P	1500	9980

METALS
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Interference Check Sample

SDG No: 10-605

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Silicon	19.3	ug/L					14-DEC-09 09:55	121409A-1
ICSAB01									
	Silicon	5270	ug/L	5000	ug/L	105	80.0 - 120.0	14-DEC-09 09:57	121409A-1

METALS
–4–
Interference Check Sample

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Antimony	2.47	ug/L					08–DEC–09 08:22	120809–2
	Barium	2.42	ug/L					08–DEC–09 08:22	120809–2
	Boron	–2.81	ug/L					08–DEC–09 08:22	120809–2
	Cadmium	2.22	ug/L					08–DEC–09 08:22	120809–2
	Calcium	481000	ug/L	500000	ug/L	96.1	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Chromium	1.17	ug/L					08–DEC–09 08:22	120809–2
	Cobalt	–1.69	ug/L					08–DEC–09 08:22	120809–2
	Copper	3.23	ug/L					08–DEC–09 08:22	120809–2
	Iron	183000	ug/L	200000	ug/L	91.5	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Lead	–0.012	ug/L					08–DEC–09 08:22	120809–2
	Magnesium	486000	ug/L	500000	ug/L	97.1	80.0 – 120.0	08–DEC–09 08:22	120809–2
	Manganese	8.2	ug/L					08–DEC–09 08:22	120809–2
	Potassium	36.8	ug/L					08–DEC–09 08:22	120809–2
	Silver	–2.89	ug/L					08–DEC–09 08:22	120809–2
	Sodium	12.2	ug/L					08–DEC–09 08:22	120809–2
	Titanium	–3.82	ug/L					08–DEC–09 08:22	120809–2
	Vanadium	–1.05	ug/L					08–DEC–09 08:22	120809–2
	Zinc	–4.58	ug/L					08–DEC–09 08:22	120809–2
ICSAB01									
	Aluminum	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Antimony	517	ug/L	500	ug/L	103	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Barium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Boron	497	ug/L	500	ug/L	99.4	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Cadmium	448	ug/L	500	ug/L	89.7	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Calcium	461000	ug/L	500000	ug/L	92.1	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Chromium	472	ug/L	500	ug/L	94.4	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Cobalt	433	ug/L	500	ug/L	86.5	80.0 – 120.0	08–DEC–09 08:28	120809–2
	Copper	544	ug/L	500	ug/L	109	80.0 – 120.0	08–DEC–09 08:28	120809–2

METALS
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Interference Check Sample

SDG No: 10-605

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Iron	180000	ug/L	200000	ug/L	90	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Lead	452	ug/L	500	ug/L	90.3	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Magnesium	475000	ug/L	500000	ug/L	95.1	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Manganese	479	ug/L	500	ug/L	95.8	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Potassium	5370	ug/L	5000	ug/L	107	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Silver	270	ug/L	250	ug/L	108	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Sodium	5100	ug/L	5000	ug/L	102	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Titanium	511	ug/L	500	ug/L	102	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Vanadium	496	ug/L	500	ug/L	99.2	80.0 - 120.0	08-DEC-09 08:28	120809-2
	Zinc	476	ug/L	500	ug/L	95.2	80.0 - 120.0	08-DEC-09 08:28	120809-2

METALS
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Interference Check Sample

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	–0.419	ug/L					07–DEC–09 18:59	091207–3
	Nickel	4.33	ug/L					07–DEC–09 18:59	091207–3
	Selenium	–0.165	ug/L					07–DEC–09 18:59	091207–3
	Thallium	0.022	ug/L					07–DEC–09 18:59	091207–3
ICSAB01									
	Arsenic	22.5	ug/L	20	ug/L	112	80.0 – 120.0	07–DEC–09 19:05	091207–3
	Nickel	24.0	ug/L	22.7	ug/L	106	80.0 – 120.0	07–DEC–09 19:05	091207–3
	Selenium	23.0	ug/L	20	ug/L	115	80.0 – 120.0	07–DEC–09 19:05	091207–3
	Thallium	18.9	ug/L	20	ug/L	94.7	80.0 – 120.0	07–DEC–09 19:05	091207–3

METALS
–4–
Interference Check Sample

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	0.011	ug/L					08–DEC–09 13:27	091208–4
ICSAB01									
	Uranium	22.8	ug/L	20	ug/L	114	80.0 – 120.0	08–DEC–09 13:28	091208–4

METALS
–4–
Interference Check Sample

SDG No: 10–605

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.041	ug/L					08–DEC–09 17:46	091208–5
	Lithium	0.065	ug/L					08–DEC–09 17:46	091208–5
ICSAB01									
	Beryllium	20.0	ug/L	20	ug/L	99.9	80.0 – 120.0	08–DEC–09 17:48	091208–5
	Lithium	20.5	ug/L	20	ug/L	103	80.0 – 120.0	08–DEC–09 17:48	091208–5

METALS
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Interference Check Sample

SDG No: 10-605

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Lithium	0.133	ug/L					08-DEC-09 19:57	091208-7
ICSAB01									
	Lithium	20.6	ug/L	20	ug/L	103	80.0 - 120.0	08-DEC-09 19:59	091208-7

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-605 **Client ID** RE03-09-13875S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978598

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		19100000		11100000		547000	1450	N/A	P
Antimony	ug/Kg	75-125	33100		360	U	54700	60.5	N	P
Barium	ug/Kg	75-125	149000		93700		54700	102		P
Boron	ug/Kg	75-125	50400		2800	J	54700	86.9		P
Cadmium	ug/Kg	75-125	50000		109	U	54700	91.3		P
Calcium	ug/Kg	75-125	2610000		2160000		547000	80.9		P
Chromium	ug/Kg	75-125	63700		10300		54700	97.5		P
Cobalt	ug/Kg	75-125	55100		9620		54700	83.1		P
Copper	ug/Kg	75-125	63800		8200		54700	102		P
Iron	ug/Kg		18900000		15800000		547000	579	N/A	P
Lead	ug/Kg	75-125	66300		16500		54700	91.1		P
Magnesium	ug/Kg		3580000		2430000		547000	212	N/A	P
Manganese	ug/Kg		406000		444000		54700	-70.1	N/A	P
Potassium	ug/Kg	75-125	2030000		1010000		547000	187	N	P
Silicon	ug/Kg	75-125	2160000		1920000		509000	46.9	N	P
Silver	ug/Kg	75-125	53500		512	J	54700	96.8		P
Sodium	ug/Kg	75-125	1090000		572000		547000	93.8		P
Titanium	ug/Kg		507000		336000		54700	313	N/A	P
Vanadium	ug/Kg	75-125	87700		29000		54700	107		P
Zinc	ug/Kg	75-125	79300		22100		54700	105		P

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-605 **Client ID** RE03-09-13875SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978599

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		18800000		11100000		556000	1380	N/A	P
Antimony	ug/Kg	75-125	34200		360	U	55600	61.4	N	P
Barium	ug/Kg	75-125	151000		93700		55600	104		P
Boron	ug/Kg	75-125	51600		2800	J	55600	87.7		P
Cadmium	ug/Kg	75-125	51200		109	U	55600	91.8		P
Calcium	ug/Kg	75-125	2630000		2160000		556000	84.3		P
Chromium	ug/Kg	75-125	64300		10300		55600	97.1		P
Cobalt	ug/Kg	75-125	54700		9620		55600	81.1		P
Copper	ug/Kg	75-125	65300		8200		55600	103		P
Iron	ug/Kg		18400000		15800000		556000	480	N/A	P
Lead	ug/Kg	75-125	64900		16500		55600	87		P
Magnesium	ug/Kg		3580000		2430000		556000	207	N/A	P
Manganese	ug/Kg		310000		444000		55600	-242	N/A	P
Potassium	ug/Kg	75-125	2010000		1010000		556000	180	N	P
Silicon	ug/Kg	75-125	1650000		1920000		537000	-50.5	N	P
Silver	ug/Kg	75-125	55000		512	J	55600	98		P
Sodium	ug/Kg	75-125	1130000		572000		556000	101		P
Titanium	ug/Kg		507000		336000		55600	308	N/A	P
Vanadium	ug/Kg	75-125	84800		29000		55600	100		P
Zinc	ug/Kg	75-125	79700		22100		55600	103		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–605 **Client ID** RE03–09–13875S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978604

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	mg/kg	75–125	5.24		0.95		5.36	80.1		MS
Lithium	mg/kg	75–125	18.7		10.8		5.36	147	N	MS
Nickel	mg/kg	75–125	12.9		8.18		5.36	87.9		MS
Selenium	mg/kg	75–125	1.7		0.556	U	2.14	66	N	MS
Thallium	mg/kg	75–125	9.84		0.428		10.7	87.8		MS
Uranium	mg/kg	75–125	6.05		0.821		5.36	97.6		MS
Arsenic	mg/kg	75–125	10		3.69		8.57	73.6	N	MS

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–605 **Client ID** RE03–09–13875SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978605

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	9.81		3.69		8.72	70.1	N	MS
Beryllium	mg/kg	75–125	5.17		0.95		5.45	77.4		MS
Lithium	mg/kg	75–125	18		10.8		5.45	132	N	MS
Nickel	mg/kg	75–125	12.7		8.18		5.45	82.3		MS
Selenium	mg/kg	75–125	1.66		0.556	U	2.18	62.7	N	MS
Thallium	mg/kg	75–125	9.67		0.428		10.9	84.7		MS
Uranium	mg/kg	75–125	5.93		0.821		5.45	93.8		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–605 **Client ID:** RE03–09–13875S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978950

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	203		33.3		125	135	N	AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–605 **Client ID** RE03–09–13875SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 241541001 **Spike ID:** 1201978952

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	196		33.3		124	131	N	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875D

Sample ID: 241541001 **Duplicate ID:** 1201978596 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	11100000		11800000		6.11		P
Antimony	ug/Kg		360	U	369	U			P
Barium	ug/Kg	+/–20%	93700		98900		5.37		P
Boron	ug/Kg	+/–5580	2800	J	2350	J	17.6		P
Cadmium	ug/Kg		109	U	112	U			P
Calcium	ug/Kg	+/–20%	2160000		2230000		3.23		P
Chromium	ug/Kg	+/–20%	10300		10800		4.89		P
Cobalt	ug/Kg	+/–20%	9620		6250		42.4	*	P
Copper	ug/Kg	+/–20%	8200		8450		2.98		P
Iron	ug/Kg	+/–20%	15800000		15800000		.141		P
Lead	ug/Kg	+/–20%	16500		14900		9.78		P
Magnesium	ug/Kg	+/–20%	2430000		2540000		4.48		P
Manganese	ug/Kg	+/–20%	444000		335000		28.1	*	P
Potassium	ug/Kg	+/–20%	1010000		1050000		4.23		P
Silicon	ug/Kg	+/–20%	1920000		1990000		3.79		P
Silver	ug/Kg	+/–558	512	J	612		17.8		P
Sodium	ug/Kg	+/–20%	572000		602000		4.97		P
Titanium	ug/Kg	+/–20%	336000		350000		4.27		P
Vanadium	ug/Kg	+/–20%	29000		28900		.164		P
Zinc	ug/Kg	+/–20%	22100		23800		7.11		P

Metals
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Duplicate Sample Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875SD

Sample ID: 1201978598 **Duplicate ID:** 1201978599 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	19100000		18800000		1.44		P
Antimony	ug/Kg	+/–20	33100		34200		3.17		P
Barium	ug/Kg	+/–20	149000		151000		1.36		P
Boron	ug/Kg	+/–20	50400		51600		2.36		P
Cadmium	ug/Kg	+/–20	50000		51200		2.21		P
Calcium	ug/Kg	+/–20	2610000		2630000		.995		P
Chromium	ug/Kg	+/–20	63700		64300		.993		P
Cobalt	ug/Kg	+/–20	55100		54700		.768		P
Copper	ug/Kg	+/–20	63800		65300		2.42		P
Iron	ug/Kg	+/–20	18900000		18400000		2.69		P
Lead	ug/Kg	+/–20	66300		64900		2.24		P
Magnesium	ug/Kg	+/–20	3580000		3580000		.2		P
Manganese	ug/Kg	+/–20	406000		310000		26.8	*	P
Potassium	ug/Kg	+/–20	2030000		2010000		.983		P
Silicon	ug/Kg	+/–20	2160000		1650000		26.8	*	P
Silver	ug/Kg	+/–20	53500		55000		2.72		P
Sodium	ug/Kg	+/–20	1090000		1130000		4.33		P
Titanium	ug/Kg	+/–20	507000		507000		.00874		P
Vanadium	ug/Kg	+/–20	87700		84800		3.38		P
Zinc	ug/Kg	+/–20	79300		79700		.425		P

Metals
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Duplicate Sample Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875D

Sample ID: 241541001 **Duplicate ID:** 1201978602 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.08	3.69		2.67		32.1		MS
Beryllium	mg/kg	+/–20%	0.95		0.81		15.9		MS
Lithium	mg/kg	+/–20%	10.8		11.9		9.31		MS
Nickel	mg/kg	+/–20%	8.18		7.9		3.52		MS
Selenium	mg/kg		0.556	U	0.538	U			MS
Thallium	mg/kg	+/–.215	0.428		0.308		32.7		MS
Uranium	mg/kg	+/–20%	0.821		0.661		21.5	*	MS

Metals
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Duplicate Sample Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875SD

Sample ID: 1201978604 **Duplicate ID:** 1201978605 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	10		9.81		1.97		MS
Beryllium	mg/kg	+/–20	5.24		5.17		1.36		MS
Lithium	mg/kg	+/–20	18.7		18		3.86		MS
Nickel	mg/kg	+/–20	12.9		12.7		1.75		MS
Selenium	mg/kg	+/–20	1.7		1.66		2.76		MS
Thallium	mg/kg	+/–20	9.84		9.67		1.7		MS
Uranium	mg/kg	+/–20	6.05		5.93		1.93		MS

Metals
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Duplicate Sample Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875D

Sample ID: 241541001 **Duplicate ID:** 1201978949 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–12	33.3		29.1		13.4		AV

Metals
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Duplicate Sample Summary

SDG No.: 10–605

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13875SD

Sample ID: 1201978950 **Duplicate ID:** 1201978952 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	203		196		3.07		AV

METALS
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Laboratory Control Sample Summary

SDG NO. 10-605

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978600								
	Aluminum	ug/Kg	7290000	6200000		85.1	56-144	P
	Antimony	ug/Kg	121000	82700		68.4	71-130	P
	Barium	ug/Kg	475000	442000		93	80-120	P
	Boron	ug/Kg	139000	123000		88.7	75-125	P
	Cadmium	ug/Kg	116000	110000		94.6	81-120	P
	Calcium	ug/Kg	3720000	3420000		91.9	83-117	P
	Chromium	ug/Kg	84000	72400		86.2	80-120	P
	Cobalt	ug/Kg	83000	76800		92.5	81-120	P
	Copper	ug/Kg	105000	95300		90.8	81-118	P
	Iron	ug/Kg	20000000	19200000		96	51-149	P
	Lead	ug/Kg	161000	155000		96.2	79-121	P
	Magnesium	ug/Kg	2980000	2800000		94	79-122	P
	Manganese	ug/Kg	398000	350000		87.9	81-119	P
	Potassium	ug/Kg	2390000	2230000		93.2	74-127	P
	Silver	ug/Kg	133000	126000		94.6	66-134	P
	Sodium	ug/Kg	614000	569000		92.7	74-127	P
	Titanium	ug/Kg	382000	348000		91.2	39-161	P
	Vanadium	ug/Kg	166000	141000		85	79-121	P
	Zinc	ug/Kg	195000	184000		94.4	80-121	P

METALS
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Laboratory Control Sample Summary

SDG NO. 10–605

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978606								
	Beryllium	mg/kg	86.4	95.5		111	81.2–126.8	MS
	Lithium	mg/kg	8.01	7.8	J	97.4	66.7–133.7	MS
	Nickel	mg/kg	101	111		110	83.3–121.4	MS
	Selenium	mg/kg	171	180		105	80.2–125.9	MS
	Thallium	mg/kg	203	190		93.6	78–123.2	MS
	Uranium	mg/kg	2.12	1.83		86.5	61.9–130.7	MS
	Arsenic	mg/kg	255	256		100	83–120	MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10–605

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201978948								
	Mercury	ug/kg	5150	6090		118	71.6–128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-605

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201993443								
	Silicon	ug/Kg	1210000	1730000		143	10--190	P

METALS
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Serial Dilution Sample Summary

SDG NO. 10-605 **Client ID** RE03-09-13875L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241541001 **Serial Dilution ID:** 1201978597

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	102000		101000		1.47		10	P
Antimony	3.3	U	16.5	U				P
Barium	859		900		4.77		10	P
Boron	25.7	J	50	U	100			P
Cadmium	1	U	5	U				P
Calcium	19800		19900		.505		10	P
Chromium	94.2		100		6.16		10	P
Cobalt	88.2		92		4.31		10	P
Copper	75.2		75.5		.399			P
Iron	145000		150000		3.45		10	P
Lead	151		167		10.3	E	10	P
Magnesium	22200		23000		3.6		10	P
Manganese	4070		4340		6.51		10	P
Potassium	9220		9150		.759		10	P
Silicon	17600		17600		.284		10	P
Silver	4.69	J	5	U	100			P
Sodium	5250		5850		11.4	E	10	P
Titanium	3080		3160		2.6		10	P
Vanadium	266		277		3.95		10	P
Zinc	203		215		5.67		10	P

METALS
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Serial Dilution Sample Summary

SDG NO. 10–605 **Client ID** RE03–09–13875L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241541001 **Serial Dilution ID:** 1201978603

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	16.6		18.1	J	8.73			MS
Beryllium	4.27		4.94		15.6			MS
Lithium	48.7		58.5		20.1			MS
Nickel	36.8		41.8		13.6			MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.93		3.31	J	71.5			MS
Uranium	3.69		3.87		4.74			MS

METALS
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Serial Dilution Sample Summary

SDG NO. 10–605 **Client ID** RE03–09–13875L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241541001 **Serial Dilution ID:** 1201978951

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.546		.34	U	100			AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–605 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 925477							
1201978595	MB for batch 925477	MB	S	25–NOV–09	.508g	50mL	
1201978600	LCS for batch 925477	LCS	S	25–NOV–09	.505g	50mL	
1201978598	RE03–09–13875S	MS	S	25–NOV–09	.51g	50mL	
1201978599	RE03–09–13875SD	MSD	S	25–NOV–09	.502g	50mL	
1201978596	RE03–09–13875D	DUP	S	25–NOV–09	.5g	50mL	
241541001	RE03–09–13875	SAMPLE	S	25–NOV–09	.512g	50mL	
241541002	RE03–09–13865	SAMPLE	S	25–NOV–09	.531g	50mL	
241541003	RE03–09–13868	SAMPLE	S	25–NOV–09	.548g	50mL	
241541004	RE03–09–13867	SAMPLE	S	25–NOV–09	.525g	50mL	
241541005	RE03–09–13864	SAMPLE	S	25–NOV–09	.533g	50mL	
241541006	RE03–09–13871	SAMPLE	S	25–NOV–09	.52g	50mL	
241541007	RE03–09–13877	SAMPLE	S	25–NOV–09	.502g	50mL	
241541008	RE03–09–13869	SAMPLE	S	25–NOV–09	.503g	50mL	
241541009	RE03–09–13870	SAMPLE	S	25–NOV–09	.532g	50mL	
241541010	RE03–09–13873	SAMPLE	S	25–NOV–09	.528g	50mL	
241541011	RE03–09–13863	SAMPLE	S	25–NOV–09	.505g	50mL	
241541012	RE03–09–13874	SAMPLE	S	25–NOV–09	.523g	50mL	
241541013	RE03–09–13866	SAMPLE	S	25–NOV–09	.516g	50mL	
241541014	RE03–09–13862	SAMPLE	S	25–NOV–09	.522g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–605 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241541015	RE03–09–13876	SAMPLE	S	25–NOV–09	.539g	50mL	
241541016	RE03–09–13872	SAMPLE	S	25–NOV–09	.503g	50mL	
Batch Number	931892						
1201993442	MB for batch 931892	MB	S	12–DEC–09	.501g	50mL	
1201993443	LCS for batch 931892	LCS	S	12–DEC–09	.506g	50mL	
1201978598	RE03–09–13875S	MS	S	12–DEC–09	.548g	50mL	
1201978599	RE03–09–13875SD	MSD	S	12–DEC–09	.52g	50mL	
1201978596	RE03–09–13875D	DUP	S	12–DEC–09	.5g	50mL	
241541001	RE03–09–13875	SAMPLE	S	12–DEC–09	.513g	50mL	
241541002	RE03–09–13865	SAMPLE	S	12–DEC–09	.541g	50mL	
241541003	RE03–09–13868	SAMPLE	S	12–DEC–09	.523g	50mL	
241541004	RE03–09–13867	SAMPLE	S	12–DEC–09	.503g	50mL	
241541005	RE03–09–13864	SAMPLE	S	12–DEC–09	.534g	50mL	
241541006	RE03–09–13871	SAMPLE	S	12–DEC–09	.516g	50mL	
241541007	RE03–09–13877	SAMPLE	S	12–DEC–09	.5g	50mL	
241541008	RE03–09–13869	SAMPLE	S	12–DEC–09	.537g	50mL	
241541009	RE03–09–13870	SAMPLE	S	12–DEC–09	.541g	50mL	
241541010	RE03–09–13873	SAMPLE	S	12–DEC–09	.501g	50mL	
241541011	RE03–09–13863	SAMPLE	S	12–DEC–09	.521g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-605 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241541012	RE03-09-13874	SAMPLE	S	12-DEC-09	.517g	50mL	
241541013	RE03-09-13866	SAMPLE	S	12-DEC-09	.539g	50mL	
241541014	RE03-09-13862	SAMPLE	S	12-DEC-09	.531g	50mL	
241541015	RE03-09-13876	SAMPLE	S	12-DEC-09	.525g	50mL	
241541016	RE03-09-13872	SAMPLE	S	12-DEC-09	.556g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-605 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925479						
1201978601	MB for batch 925479	MB	S	25-NOV-09	.546g	50mL	
1201978606	LCS for batch 925479	LCS	S	25-NOV-09	.503g	50mL	
1201978604	RE03-09-13875S	MS	S	25-NOV-09	.521g	50mL	
1201978605	RE03-09-13875SD	MSD	S	25-NOV-09	.512g	50mL	
1201978602	RE03-09-13875D	DUP	S	25-NOV-09	.519g	50mL	
241541001	RE03-09-13875	SAMPLE	S	25-NOV-09	.502g	50mL	
241541002	RE03-09-13865	SAMPLE	S	25-NOV-09	.53g	50mL	
241541003	RE03-09-13868	SAMPLE	S	25-NOV-09	.553g	50mL	
241541004	RE03-09-13867	SAMPLE	S	25-NOV-09	.516g	50mL	
241541005	RE03-09-13864	SAMPLE	S	25-NOV-09	.544g	50mL	
241541006	RE03-09-13871	SAMPLE	S	25-NOV-09	.533g	50mL	
241541007	RE03-09-13877	SAMPLE	S	25-NOV-09	.551g	50mL	
241541008	RE03-09-13869	SAMPLE	S	25-NOV-09	.513g	50mL	
241541009	RE03-09-13870	SAMPLE	S	25-NOV-09	.548g	50mL	
241541010	RE03-09-13873	SAMPLE	S	25-NOV-09	.542g	50mL	
241541011	RE03-09-13863	SAMPLE	S	25-NOV-09	.505g	50mL	
241541012	RE03-09-13874	SAMPLE	S	25-NOV-09	.507g	50mL	
241541013	RE03-09-13866	SAMPLE	S	25-NOV-09	.502g	50mL	
241541014	RE03-09-13862	SAMPLE	S	25-NOV-09	.531g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–605 **Method Type:** MS

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241541015	RE03–09–13876	SAMPLE	S	25–NOV–09	.524g	50mL	
241541016	RE03–09–13872	SAMPLE	S	25–NOV–09	.509g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-605 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	925628						
1201978947	MB for batch 925628	MB	S	04-DEC-09	.506g	30mL	
1201978948	LCS for batch 925628	LCS	S	04-DEC-09	.2g	30mL	
1201978950	RE03-09-13875S	MS	S	04-DEC-09	.536g	30mL	
1201978952	RE03-09-13875SD	MSD	S	04-DEC-09	.539g	30mL	
1201978949	RE03-09-13875D	DUP	S	04-DEC-09	.558g	30mL	
241541001	RE03-09-13875	SAMPLE	S	04-DEC-09	.549g	30mL	
241541002	RE03-09-13865	SAMPLE	S	04-DEC-09	.502g	30mL	
241541003	RE03-09-13868	SAMPLE	S	04-DEC-09	.586g	30mL	
241541004	RE03-09-13867	SAMPLE	S	04-DEC-09	.526g	30mL	
241541005	RE03-09-13864	SAMPLE	S	04-DEC-09	.557g	30mL	
241541006	RE03-09-13871	SAMPLE	S	04-DEC-09	.505g	30mL	
241541007	RE03-09-13877	SAMPLE	S	04-DEC-09	.54g	30mL	
241541008	RE03-09-13869	SAMPLE	S	04-DEC-09	.527g	30mL	
241541009	RE03-09-13870	SAMPLE	S	04-DEC-09	.533g	30mL	
241541010	RE03-09-13873	SAMPLE	S	04-DEC-09	.531g	30mL	
241541011	RE03-09-13863	SAMPLE	S	04-DEC-09	.538g	30mL	
241541012	RE03-09-13874	SAMPLE	S	04-DEC-09	.529g	30mL	
241541013	RE03-09-13866	SAMPLE	S	04-DEC-09	.55g	30mL	
241541014	RE03-09-13862	SAMPLE	S	04-DEC-09	.564g	30mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–605 **Method Type:** AV

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241541015	RE03–09–13876	SAMPLE	S	04–DEC–09	.559g	30mL	
241541016	RE03–09–13872	SAMPLE	S	04–DEC–09	.503g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–605
Method MS
Data File: 091208–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	17:36					X									X														
S10	1	17:37					X									X														
S100	1	17:39					X									X														
ICV01	1	17:41					X									X														
ICB01	1	17:43					X									X														
CRDL01	1	17:44					X									X														
ICSA01	1	17:46					X									X														
ICSAB01	1	17:48					X									X														
CCV01	1	17:50					X									X														
CCB01	1	17:51					X									X														
1201978601	2	17:53					X									X														
1201978606	20	17:55					X									X														
ZZZZZZ	40	17:57																												
241541001	2	17:58					X									X														
1201978602	2	18:00					X									X														
1201978604	2	18:02					X									X														
1201978605	2	18:04					X									X														
1201978603	10	18:06					X									X														
CCV02	1	18:07					X									X														
CCB02	1	18:09					X									X														
241541002	2	18:11					X									X														
241541003	2	18:13					X									X														
241541004	2	18:15					X									X														
241541005	2	18:17					X									X														
241541006	2	18:18					X									X														
241541007	2	18:20					X									X														
241541008	2	18:22					X									X														
CCV03	1	18:24					X									X														
CCB03	1	18:26					X									X														
241541009	2	18:29					X																							
241541010	2	18:30					X																							
241541011	2	18:32					X																							
241541012	2	18:34					X																							
241541013	2	18:36					X																							
241541014	2	18:38					X																							
241541015	2	18:39					X																							
241541016	2	18:41					X																							
CCV04	1	18:43					X									X														
CCB04	1	18:45					X									X														

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 08-DEC-09 **End Date:** 08-DEC-09

Client Sdg: 10-605
Method MS
Data File: 091208-7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	19:43														X														
S10	1	19:45														X														
S100	1	19:48														X														
ICV01	1	19:50														X														
ICB01	1	19:52														X														
CRDL01	1	19:54														X														
ICSA01	1	19:57														X														
ICSAB01	1	19:59														X														
CCV01	1	20:01														X														
CCB01	1	20:04														X														
ZZZZZZ	1	20:06																												
ZZZZZZ	1	20:08																												
ZZZZZZ	5	20:11																												
ZZZZZZ	5	20:13																												
ZZZZZZ	5	20:15																												
ZZZZZZ	5	20:18																												
ZZZZZZ	25	20:20																												
CCV02	1	20:22														X														
CCB02	1	20:25														X														
ZZZZZZ	5	20:27																												
ZZZZZZ	10	20:29																												
ZZZZZZ	10	20:32																												
CCV03	1	20:34														X														
CCB03	1	20:36														X														
241541009	2	20:38														X														
241541010	2	20:41														X														
241541011	2	20:43														X														
241541012	2	20:46														X														
241541013	2	20:48														X														
241541014	2	20:50														X														
241541015	2	20:52														X														
241541016	2	20:55														X														
CCV04	1	20:57														X														
CCB04	1	20:59														X														

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 08–DEC–09
End Date: 09–DEC–09
Client Sdg: 10–605
Method P
Data File: 120809–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S0.1	1	07:35		X		X		X	X		X	X	X		X			X			X			X			X		X	X
S0.5	1	07:41	X	X		X		X	X	X	X	X	X		X		X	X			X			X			X		X	X
SCAL	1	07:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
S10	1	07:55	X							X				X			X								X					
ICV01	1	08:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICB01	1	08:08	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
PQL01	1	08:15	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSA01	1	08:22	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ICSAB01	1	08:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR01	1	08:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR02	1	08:40	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV01	1	08:47	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB01	1	08:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
LR03	1	09:04	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV02	1	09:11	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB02	1	09:18	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	20	09:25																												
ZZZZZZ	20	09:32																												
ZZZZZZ	20	09:38																												
ZZZZZZ	20	09:45																												
CCV03	1	09:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB03	1	09:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	10:06																												
ZZZZZZ	2	10:13																												
ZZZZZZ	1	10:20																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:41																												
ZZZZZZ	5	10:48																												
CCV04	1	10:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB04	1	11:02	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:15																												
ZZZZZZ	1	11:23																												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:36																												
ZZZZZZ	1	11:43																												
ZZZZZZ	1	11:50																												
CCV05	1	11:57	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
CCB05	1	12:04	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	12:11																												
ZZZZZZ	1	12:18																												
ZZZZZZ	1	12:26																												
ZZZZZZ	1	12:33																												
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:47																												
CCV06	1	12:54	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB06	1	13:01	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	13:08																												
ZZZZZZ	1	13:15																												
ZZZZZZ	1	13:22																												
ZZZZZZ	1	13:28																												
ZZZZZZ	1	13:35																												
ZZZZZZ	1	13:42																												
ZZZZZZ	5	13:49																												
ZZZZZZ	1	13:56																												
ZZZZZZ	5	14:03																												
CCV07	1	14:10	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB07	1	14:17	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV08	1	14:50	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB08	1	14:57	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	15:05																												
ZZZZZZ	2	15:12																												
ZZZZZZ	1	15:19																												
ZZZZZZ	1	15:26																												
ZZZZZZ	1	15:33																												
ZZZZZZ	1	15:40																												
ZZZZZZ	5	15:46																												
ZZZZZZ	1	15:53																												
ZZZZZZ	1	16:00																												
CCV09	1	16:07	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB09	1	16:14	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	16:21																												
ZZZZZZ	1	16:28																												
ZZZZZZ	1	16:35																												
ZZZZZZ	1	16:42																												
ZZZZZZ	1	16:49																												
ZZZZZZ	1	16:56																												
ZZZZZZ	1	17:04																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	17:11																												
CCV10	1	17:18	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB10	1	17:25	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	17:32																												
ZZZZZZ	1	17:39																												
ZZZZZZ	1	17:46																												
ZZZZZZ	1	17:53																												
ZZZZZZ	1	18:00																												
ZZZZZZ	1	18:07																												
ZZZZZZ	1	18:14																												
ZZZZZZ	1	18:21																												
CCV11	1	18:28	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB11	1	18:35	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	18:42																												
ZZZZZZ	2	18:49																												
ZZZZZZ	1	18:56																												
ZZZZZZ	1	19:03																												
ZZZZZZ	1	19:10																												
ZZZZZZ	1	19:17																												
ZZZZZZ	5	19:24																												
ZZZZZZ	1	19:31																												
ZZZZZZ	1	19:38																												
ZZZZZZ	1	19:45																												
CCV12	1	19:52	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB12	1	19:59	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	20:06																												
ZZZZZZ	1	20:13																												
ZZZZZZ	1	20:21																												
ZZZZZZ	1	20:28																												
ZZZZZZ	1	20:35																												
ZZZZZZ	1	20:42																												
ZZZZZZ	1	20:49																												
ZZZZZZ	1	20:56																												
ZZZZZZ	1	21:03																												
ZZZZZZ	1	21:10																												
CCV13	1	21:17	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB13	1	21:24	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	21:31																												
ZZZZZZ	2	21:38																												
ZZZZZZ	1	21:45																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	21:52																											
ZZZZZZ	1	21:59																											
ZZZZZZ	1	22:06																											
ZZZZZZ	1	22:13																											
ZZZZZZ	1	22:20																											
ZZZZZZ	1	22:27																											
ZZZZZZ	1	22:34																											
CCV14	1	22:41	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB14	1	22:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
ZZZZZZ	1	22:55																											
ZZZZZZ	1	23:02																											
ZZZZZZ	1	23:10																											
ZZZZZZ	1	23:17																											
ZZZZZZ	1	23:24																											
ZZZZZZ	1	23:31																											
ZZZZZZ	1	23:38																											
ZZZZZZ	1	23:45																											
ZZZZZZ	5	23:52																											
ZZZZZZ	1	23:59																											
CCV15	1	00:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB15	1	00:13	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978595	1	00:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978600	2	00:27	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541001	1	00:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978596	1	00:41	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978598	1	00:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978599	1	00:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
1201978597	5	01:02	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541002	1	01:09	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV16	1	01:16	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB16	1	01:23	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541003	1	01:30	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541004	1	01:37	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541005	1	01:44	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541006	1	01:51	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541007	1	01:58	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541008	1	02:06	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541009	1	02:13	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV17	1	02:20	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB17	1	02:27	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
241541010	1	02:34	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541011	1	02:41	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541012	1	02:48	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541013	1	02:55	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541014	1	03:02	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541015	1	03:09	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
241541016	1	03:17	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCV18	1	03:24	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X
CCB18	1	03:31	X	X		X		X	X	X	X	X	X	X	X		X	X			X			X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–605
Method AV
Data File: 120709S1–8

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:55																	X											
S0.2	1	09:57																	X											
S0.5	1	09:59																	X											
S2.0	1	10:01																	X											
S5.0	1	10:03																	X											
S10	1	10:05																	X											
ICV01	1	10:07																	X											
ICB01	1	10:09																	X											
CRDL01	1	10:11																	X											
CCV01	1	10:13																	X											
CCB01	1	10:15																	X											
ZZZZZZ	1	10:17																												
ZZZZZZ	10	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	5	10:33																												
ZZZZZZ	1	10:35																												
CCV02	1	10:37																	X											
CCB02	1	10:39																	X											
ZZZZZZ	1	10:41																												
ZZZZZZ	10	10:43																												
ZZZZZZ	1	10:45																												
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	1	10:55																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	10:59																												
CCV03	1	11:01																	X											
CCB03	1	11:03																	X											
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:10																												
ZZZZZZ	1	11:12																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:14																											
ZZZZZZ	1	11:16																											
ZZZZZZ	1	11:18																											
ZZZZZZ	1	11:20																											
ZZZZZZ	1	11:22																											
CCV04	1	11:24															X												
CCB04	1	11:26															X												
ZZZZZZ	1	11:28																											
ZZZZZZ	1	11:30																											
ZZZZZZ	1	11:32																											
ZZZZZZ	1	11:34																											
ZZZZZZ	5	11:36																											
ZZZZZZ	1	11:38																											
1201978947	1	11:40															X												
1201978948	10	11:42															X												
ZZZZZZ	1	11:44																											
ZZZZZZ	1	11:46																											
CCV05	1	11:48															X												
CCB05	1	11:50															X												
ZZZZZZ	1	11:52																											
ZZZZZZ	1	11:54																											
241541001	1	11:56															X												
1201978949	1	11:58															X												
1201978950	1	12:00															X												
1201978952	1	12:02															X												
1201978951	5	12:04															X												
241541002	1	12:06															X												
241541003	1	12:08															X												
241541004	1	12:10															X												
CCV06	1	12:12															X												
CCB06	1	12:14															X												
241541005	1	12:16															X												
241541006	1	12:18															X												
241541007	1	12:20															X												
241541008	1	12:22															X												
241541009	1	12:24															X												
241541010	1	12:26															X												
241541011	1	12:28															X												
241541012	1	12:30															X												
241541013	1	12:31															X												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
241541014	1	12:33																	X											
CCV07	1	12:35																	X											
CCB07	1	12:38																	X											
241541015	1	12:40																	X											
241541016	1	12:41																	X											
ZZZZZZ	1	12:43																												
ZZZZZZ	10	12:45																												
ZZZZZZ	1	12:47																												
ZZZZZZ	1	12:49																												
ZZZZZZ	1	12:51																												
ZZZZZZ	1	12:53																												
ZZZZZZ	1	12:55																												
ZZZZZZ	1	12:57																												
CCV08	1	12:59																	X											
CCB08	1	13:01																	X											

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 07–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–605
Method MS
Data File: 091207–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	18:22			X															X		X				X				
S10	1	18:28			X															X		X				X				
S100	1	18:34			X															X		X				X				
ICV01	1	18:40			X															X		X				X				
ICB01	1	18:46			X															X		X				X				
CRDL01	1	18:53			X															X		X				X				
ICSA01	1	18:59			X															X		X				X				
ICSAB01	1	19:05			X															X		X				X				
CCV01	1	19:11			X															X		X				X				
CCB01	1	19:17			X															X		X				X				
LR01	1	19:24			X															X		X				X				
CCV02	1	19:30			X															X		X				X				
CCB02	1	19:36			X															X		X				X				
ZZZZZZ	2	19:42																												
ZZZZZZ	2	19:48																												
ZZZZZZ	2	19:55																												
ZZZZZZ	2	20:01																												
ZZZZZZ	2	20:07																												
ZZZZZZ	2	20:13																												
ZZZZZZ	10	20:19																												
CCV03	1	20:26			X															X		X				X				
CCB03	1	20:32			X															X		X				X				
ZZZZZZ	2	20:38																												
ZZZZZZ	2	20:44																												
ZZZZZZ	2	20:50																												
ZZZZZZ	2	20:57																												
ZZZZZZ	2	21:03																												
ZZZZZZ	2	21:09																												
ZZZZZZ	2	21:15																												
ZZZZZZ	2	21:22																												
ZZZZZZ	2	21:28																												
CCV04	1	21:34			X															X		X				X				
CCB04	1	21:40			X															X		X				X				
ZZZZZZ	1	21:46																												
ZZZZZZ	1	21:53																												
ZZZZZZ	1	21:59																												
ZZZZZZ	1	22:05																												
ZZZZZZ	1	22:11																												
ZZZZZZ	1	22:18																												
ZZZZZZ	5	22:24																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	22:30																											
CCV05	1	22:36			X														X		X				X				
CCB05	1	22:43			X														X		X				X				
1201978601	2	22:49			X														X		X				X				
1201978606	40	22:55			X														X		X				X				
ZZZZZZ	20	23:01																											
241541001	2	23:07			X														X		X				X				
1201978602	2	23:14			X														X		X				X				
1201978604	2	23:20			X														X		X				X				
1201978605	2	23:26			X														X		X				X				
1201978603	10	23:33			X														X		X				X				
CCV06	1	23:39			X														X		X				X				
CCB06	1	23:45			X														X		X				X				
241541002	2	23:51			X														X		X				X				
241541003	2	23:57			X														X		X				X				
241541004	2	00:04			X														X		X				X				
241541005	2	00:10			X														X		X				X				
241541006	2	00:16			X														X		X				X				
241541007	2	00:22			X														X		X				X				
241541008	2	00:29			X														X		X				X				
241541009	2	00:35			X														X		X				X				
CCV07	1	00:41			X														X		X				X				
CCB07	1	00:47			X														X		X				X				
241541010	2	00:54			X														X		X				X				
241541011	2	01:00			X														X		X				X				
241541012	2	01:06			X														X		X				X				
241541013	2	01:12			X														X		X				X				
241541014	2	01:19			X														X		X				X				
241541015	2	01:25			X														X		X				X				
241541016	2	01:31			X														X		X				X				
CCV08	1	01:38			X														X		X				X				
CCB08	1	01:44			X														X		X				X				

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 08-DEC-09 **End Date:** 08-DEC-09

Client Sdg: 10-605
Method MS
Data File: 091208-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	13:17																										X		
S10	1	13:18																										X		
S100	1	13:20																										X		
ICV01	1	13:22																										X		
ICB01	1	13:23																										X		
CRDL01	1	13:25																										X		
ICSA01	1	13:27																										X		
ICSAB01	1	13:28																										X		
CCV01	1	13:30																										X		
CCB01	1	13:32																										X		
ZZZZZZ	2	13:33																												
ZZZZZZ	2	13:36																												
ZZZZZZ	2	13:38																												
ZZZZZZ	2	13:40																												
ZZZZZZ	2	13:42																												
ZZZZZZ	2	13:44																												
ZZZZZZ	10	13:47																												
CCV02	1	13:49																										X		
CCB02	1	13:51																										X		
ZZZZZZ	2	13:52																												
ZZZZZZ	2	13:54																												
ZZZZZZ	2	13:57																												
ZZZZZZ	2	13:59																												
ZZZZZZ	2	14:01																												
ZZZZZZ	2	14:03																												
ZZZZZZ	2	14:05																												
ZZZZZZ	2	14:08																												
ZZZZZZ	2	14:10																												
CCV03	1	14:12																										X		
CCB03	1	14:14																										X		
ZZZZZZ	1	14:15																												
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:20																												
ZZZZZZ	1	14:22																												
ZZZZZZ	1	14:25																												
ZZZZZZ	1	14:27																												
ZZZZZZ	5	14:29																												
ZZZZZZ	1	14:31																												
CCV04	1	14:34																										X		
CCB04	1	14:35																										X		

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
1201978601	2	14:37																									X		
1201978606	40	14:39																									X		
241541001	2	14:41																									X		
1201978602	2	14:44																									X		
1201978604	2	14:46																									X		
1201978605	2	14:48																									X		
1201978603	10	14:50																									X		
241541002	2	14:53																									X		
241541003	2	14:55																									X		
241541004	2	14:57																									X		
CCV05	1	14:59																									X		
CCB05	1	15:01																									X		
241541005	2	15:03																									X		
241541006	2	15:05																									X		
241541007	2	15:07																									X		
241541008	2	15:09																									X		
241541009	2	15:12																									X		
241541010	2	15:14																									X		
CCV06	1	15:16																									X		
CCB06	1	15:18																									X		
241541011	2	15:19																									X		
241541012	2	15:22																									X		
241541013	2	15:24																									X		
241541014	2	15:26																									X		
241541015	2	15:28																									X		
241541016	2	15:31																									X		
CCV07	1	15:33																									X		
CCB07	1	15:35																									X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 14–DEC–09 **End Date:** 14–DEC–09

Client Sdg: 10–605
Method P
Data File: 121409A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:28																					X							
S0.1	1	09:32																					X							
S0.5	1	09:34																					X							
SCAL	1	09:38																					X							
S10	1	09:42																												
ICV01	1	09:44																					X							
ICB01	1	09:48																					X							
PQL01	1	09:51																					X							
ICSA01	1	09:55																					X							
ICSAB01	1	09:57																					X							
LR01	1	10:00																					X							
LR02	1	10:03																					X							
CCV01	1	10:07																					X							
CCB01	1	10:11																					X							
LR03	1	10:23																					X							
CCV02	1	10:27																					X							
CCB02	1	10:30																					X							
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:38																												
ZZZZZZ	1	10:41																												
ZZZZZZ	1	10:44																												
ZZZZZZ	1	10:46																												
ZZZZZZ	1	10:49																												
ZZZZZZ	5	10:52																												
CCV03	1	10:56																					X							
CCB03	1	11:00																					X							
ZZZZZZ	1	11:03																												
ZZZZZZ	1	11:06																												
ZZZZZZ	1	11:09																												
ZZZZZZ	1	11:12																												
ZZZZZZ	1	11:15																												
ZZZZZZ	1	11:19																												
CCV04	1	11:23																					X							
CCB04	1	11:26																					X							
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:33																												
ZZZZZZ	1	11:36																												
ZZZZZZ	1	11:40																												
ZZZZZZ	1	11:43																												
ZZZZZZ	1	11:46																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																												
ZZZZZZ	5	11:49																												
ZZZZZZ	1	11:52																												
ZZZZZZ	1	11:56																												
ZZZZZZ	1	12:00																												
CCV05	1	12:03																				X								
CCB05	1	12:06																				X								
1201993442	1	12:10																				X								
1201993443	1	12:14																				X								
241541001	1	12:17																				X								
1201978596	1	12:20																				X								
1201978598	1	12:23																				X								
1201978599	1	12:25																				X								
1201978597	5	12:28																				X								
CCV06	1	12:32																				X								
CCB06	1	12:36																				X								
241541002	1	12:39																				X								
241541003	1	12:42																				X								
241541004	1	12:46																				X								
241541005	1	12:50																				X								
241541006	1	12:53																				X								
241541007	1	12:57																				X								
241541008	1	13:00																				X								
241541009	1	13:03																				X								
CCV07	1	13:07																				X								
CCB07	1	13:10																				X								
241541010	1	13:14																				X								
241541011	1	13:18																				X								
241541012	1	13:21																				X								
241541013	1	13:25																				X								
241541014	1	13:29																				X								
241541015	1	13:32																				X								
241541016	1	13:35																				X								
CCV08	1	13:39																				X								
CCB08	1	13:43																				X								

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-605

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
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Instrument Detection Limits

SDG NO. 10-605

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–605

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-605
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-605
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-605
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-605
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-605
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL | GEL Job No: 10-605
Contract: LANL01004
Instrument: OPTIMA3 | Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-605
Contract: LANL01004
Instrument: OPTIMA1 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-605
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-605
Contract: LANL01004
Instrument: OPTIMA1 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-605
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-605
Contract: LANL01004
Instrument: OPTIMA1 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-605
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-605

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–605

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10--605

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Boron	1000	200	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Lithium	1000	1000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Titanium	1000	100	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–605

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09

Raw Data

Method: Hg_ReAlign
Result: 121709A

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

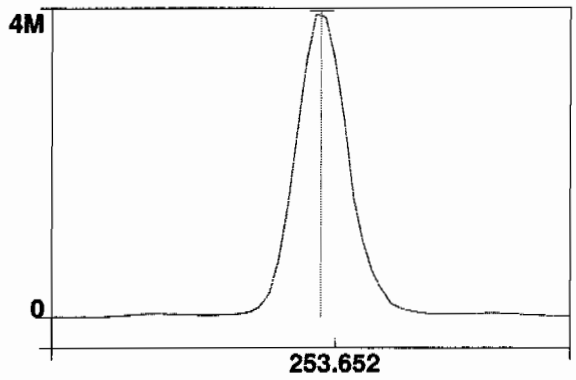

Intensity: 4060384.2 cps
Conc:

1

12/14/2009 09:28:02 Hg ReAlign... Actual peak offset (nm): 0.005
Drift (nm): 0.000 Slit adjustment: -3

Analysis Begun

Start Time: 12/14/2009 09:28:27 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409.SIF
Batch ID:
Results Data Set: 121409A
Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/14/2009 09:28:27**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	111545.1	111545.1	99.6	%	09:29:08
1	Al 396.153Radial†	170.6	171.3	[0.00]	µg/L	09:29:08
1	Ca 317.933Radial†	407.2	408.8	[0.00]	µg/L	09:29:28
1	Fe 238.204 Radial†	8.9	9.0	[0.00]	µg/L	09:29:28
1	K 766.490 Radial†	726.0	728.8	[0.00]	µg/L	09:29:08
1	Mg 279.077 IEC†	15.9	16.0	[0.00]	µg/L	09:29:28
1	Na 589.592 Radial†	-394.3	-395.8	[0.00]	µg/L	09:29:08
1	Sr 421.552†	-62.4	-62.7	[0.00]	µg/L	09:29:08
1	Sc 361.383	2008280.5	2008280.5	100.02	%	09:30:30
1	Y 371.029	1224064.9	1224064.9	100.06	%	09:30:30
1	Ag 328.068†	-20.7	-20.6	[0.00]	µg/L	09:30:36
1	As 188.979†	5.7	5.7	[0.00]	µg/L	09:30:56
1	B 249.677†	142.8	142.8	[0.00]	µg/L	09:30:36
1	Ba 233.527†	-72.7	-72.6	[0.00]	µg/L	09:30:56
1	Be 313.107†	3630.2	3629.4	[0.00]	µg/L	09:30:36
1	Cd 226.502†	-91.7	-91.7	[0.00]	µg/L	09:30:56
1	Co 228.616†	-71.2	-71.1	[0.00]	µg/L	09:30:56
1	Cr 267.716†	-100.1	-100.1	[0.00]	µg/L	09:30:36
1	Cu 324.752†	3303.4	3302.6	[0.00]	µg/L	09:30:36
1	Mn 257.610†	-250.3	-250.2	[0.00]	µg/L	09:30:56
1	Mo 202.031†	-3.0	-3.0	[0.00]	µg/L	09:30:56
1	Ni 231.604†	289.7	289.7	[0.00]	µg/L	09:30:56
1	P 214.914†	190.0	189.9	[0.00]	µg/L	09:30:56
1	Pb 220.353†	55.6	55.6	[0.00]	µg/L	09:30:56
1	S 181.975 Axial†	24.4	24.4	[0.00]	µg/L	09:30:56
1	Sb 206.836†	20.5	20.5	[0.00]	µg/L	09:30:56
1	Se 196.026†	10.0	10.0	[0.00]	µg/L	09:30:56
1	SiO2†	2068.0	2067.5	[0.00]	µg/L	09:30:36
1	Si 251.611†	374.9	374.8	[0.00]	µg/L	09:30:56
1	Sn 189.927†	24.1	24.1	[0.00]	µg/L	09:30:56
1	Ti 334.940†	790.6	790.4	[0.00]	µg/L	09:30:36
1	Tl 190.801†	-18.0	-18.0	[0.00]	µg/L	09:30:56
1	U 409.014†	707.6	707.4	[0.00]	µg/L	09:30:36
1	V 292.402†	-92.7	-92.7	[0.00]	µg/L	09:30:36
1	Zn 213.857†	530.0	529.8	[0.00]	µg/L	09:30:56
2	Sc RADIAL	111872.1	111872.1	99.9	%	09:29:34
2	Al 396.153Radial†	164.6	164.8	[0.00]	µg/L	09:29:34
2	Ca 317.933Radial†	414.7	415.1	[0.00]	µg/L	09:29:54
2	Fe 238.204 Radial†	9.0	9.0	[0.00]	µg/L	09:29:54
2	K 766.490 Radial†	751.5	752.2	[0.00]	µg/L	09:29:34
2	Mg 279.077 IEC†	17.2	17.3	[0.00]	µg/L	09:29:54
2	Na 589.592 Radial†	-412.4	-412.8	[0.00]	µg/L	09:29:34
2	Sr 421.552†	-105.5	-105.6	[0.00]	µg/L	09:29:34

2	Sc 361.383	2010268.9	2010268.9	100.12	%	09:31:02
2	Y 371.029	1224527.4	1224527.4	100.09	%	09:31:02
2	Ag 328.068†	-8.5	-8.5	[0.00]	µg/L	09:31:08
2	As 188.979†	2.1	2.1	[0.00]	µg/L	09:31:29
2	B 249.677†	153.3	153.1	[0.00]	µg/L	09:31:08
2	Ba 233.527†	-70.6	-70.5	[0.00]	µg/L	09:31:29
2	Be 313.107†	3625.4	3621.0	[0.00]	µg/L	09:31:08
2	Cd 226.502†	-105.2	-105.0	[0.00]	µg/L	09:31:29
2	Co 228.616†	-68.3	-68.2	[0.00]	µg/L	09:31:29
2	Cr 267.716†	-134.1	-133.9	[0.00]	µg/L	09:31:08
2	Cu 324.752†	3310.3	3306.3	[0.00]	µg/L	09:31:08
2	Mn 257.610†	-250.5	-250.2	[0.00]	µg/L	09:31:29
2	Mo 202.031†	-4.5	-4.5	[0.00]	µg/L	09:31:29
2	Ni 231.604†	287.0	286.7	[0.00]	µg/L	09:31:29
2	P 214.914†	188.0	187.8	[0.00]	µg/L	09:31:29
2	Pb 220.353†	43.8	43.8	[0.00]	µg/L	09:31:29
2	S 181.975 Axial†	29.2	29.2	[0.00]	µg/L	09:31:29
2	Sb 206.836†	30.6	30.5	[0.00]	µg/L	09:31:29
2	Se 196.026†	10.5	10.5	[0.00]	µg/L	09:31:29
2	SiO2†	2020.1	2017.6	[0.00]	µg/L	09:31:08
2	Si 251.611†	353.8	353.4	[0.00]	µg/L	09:31:29
2	Sn 189.927†	24.1	24.1	[0.00]	µg/L	09:31:29
2	Ti 334.940†	826.7	825.7	[0.00]	µg/L	09:31:08
2	Tl 190.801†	-19.7	-19.7	[0.00]	µg/L	09:31:29
2	U 409.014†	668.5	667.7	[0.00]	µg/L	09:31:08
2	V 292.402†	-62.2	-62.1	[0.00]	µg/L	09:31:08
2	Zn 213.857†	530.4	529.8	[0.00]	µg/L	09:31:29
3	Sc RADIAL	112522.8	112522.8	100	%	09:30:00
3	Al 396.153Radial†	158.0	157.2	[0.00]	µg/L	09:30:00
3	Ca 317.933Radial†	415.9	413.9	[0.00]	µg/L	09:30:20
3	Fe 238.204 Radial†	17.9	17.9	[0.00]	µg/L	09:30:20
3	K 766.490 Radial†	762.5	758.9	[0.00]	µg/L	09:30:00
3	Mg 279.077 IEC†	14.9	14.8	[0.00]	µg/L	09:30:20
3	Na 589.592 Radial†	-398.2	-396.3	[0.00]	µg/L	09:30:00
3	Sr 421.552†	-106.2	-105.7	[0.00]	µg/L	09:30:00
3	Sc 361.383	2004968.5	2004968.5	99.857	%	09:31:35
3	Y 371.029	1221511.7	1221511.7	99.848	%	09:31:35
3	Ag 328.068†	-19.6	-19.6	[0.00]	µg/L	09:31:40
3	As 188.979†	1.6	1.6	[0.00]	µg/L	09:32:01
3	B 249.677†	189.1	189.4	[0.00]	µg/L	09:31:40
3	Ba 233.527†	-74.1	-74.2	[0.00]	µg/L	09:32:01
3	Be 313.107†	3600.9	3606.1	[0.00]	µg/L	09:31:40
3	Cd 226.502†	-95.9	-96.0	[0.00]	µg/L	09:32:01
3	Co 228.616†	-70.0	-70.1	[0.00]	µg/L	09:32:01
3	Cr 267.716†	-138.5	-138.7	[0.00]	µg/L	09:31:40
3	Cu 324.752†	3313.1	3317.9	[0.00]	µg/L	09:31:40
3	Mn 257.610†	-242.8	-243.1	[0.00]	µg/L	09:32:01
3	Mo 202.031†	-6.8	-6.8	[0.00]	µg/L	09:32:01
3	Ni 231.604†	296.3	296.8	[0.00]	µg/L	09:32:01
3	P 214.914†	192.0	192.3	[0.00]	µg/L	09:32:01
3	Pb 220.353†	53.5	53.6	[0.00]	µg/L	09:32:01
3	S 181.975 Axial†	23.5	23.5	[0.00]	µg/L	09:32:01
3	Sb 206.836†	21.3	21.4	[0.00]	µg/L	09:32:01
3	Se 196.026†	11.8	11.8	[0.00]	µg/L	09:32:01
3	SiO2†	2012.8	2015.7	[0.00]	µg/L	09:31:40
3	Si 251.611†	341.7	342.1	[0.00]	µg/L	09:32:01
3	Sn 189.927†	18.9	18.9	[0.00]	µg/L	09:32:01
3	Ti 334.940†	778.4	779.5	[0.00]	µg/L	09:31:40
3	Tl 190.801†	-22.6	-22.6	[0.00]	µg/L	09:32:01
3	U 409.014†	728.7	729.7	[0.00]	µg/L	09:31:40
3	V 292.402†	-116.6	-116.8	[0.00]	µg/L	09:31:40
3	Zn 213.857†	523.1	523.9	[0.00]	µg/L	09:32:01

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2007839.3	2677.64	0.13%	100.00	%
Sc RADIAL	111980.0	497.72	0.44%	100	%
Y 371.029	1223368.0	1624.14	0.13%	100.000	%
Ag 328.068†	-16.3	6.73	41.37%	[0.00]	µg/L

Al 396.153Radial†	164.4	7.05	4.28%	[0.00] µg/L
As 188.979†	3.1	2.25	71.49%	[0.00] µg/L
B 249.677†	161.7	24.46	15.13%	[0.00] µg/L
Ba 233.527†	-72.4	1.87	2.57%	[0.00] µg/L
Be 313.107†	3618.8	11.81	0.33%	[0.00] µg/L
Ca 317.933Radial†	412.6	3.31	0.80%	[0.00] µg/L
Cd 226.502†	-97.6	6.80	6.97%	[0.00] µg/L
Co 228.616†	-69.8	1.50	2.15%	[0.00] µg/L
Cr 267.716†	-124.2	21.04	16.93%	[0.00] µg/L
Cu 324.752†	3308.9	7.95	0.24%	[0.00] µg/L
Fe 238.204 Radial†	12.0	5.11	42.73%	[0.00] µg/L
K 766.490 Radial†	746.6	15.77	2.11%	[0.00] µg/L
Mg 279.077 IEC†	16.0	1.21	7.54%	[0.00] µg/L
Mn 257.610†	-247.8	4.09	1.65%	[0.00] µg/L
Mo 202.031†	-4.8	1.93	40.56%	[0.00] µg/L
Na 589.592 Radial†	-401.6	9.66	2.41%	[0.00] µg/L
Ni 231.604†	291.0	5.19	1.78%	[0.00] µg/L
P 214.914†	190.0	2.25	1.19%	[0.00] µg/L
Pb 220.353†	51.0	6.32	12.39%	[0.00] µg/L
S 181.975 Axial†	25.7	3.07	11.93%	[0.00] µg/L
Sb 206.836†	24.2	5.54	22.94%	[0.00] µg/L
Se 196.026†	10.8	0.89	8.28%	[0.00] µg/L
SiO2†	2033.6	29.36	1.44%	[0.00] µg/L
Si 251.611†	356.8	16.61	4.65%	[0.00] µg/L
Sn 189.927†	22.4	2.98	13.34%	[0.00] µg/L
Sr 421.552†	-91.3	24.82	27.18%	[0.00] µg/L
Ti 334.940†	798.5	24.15	3.02%	[0.00] µg/L
Tl 190.801†	-20.1	2.33	11.62%	[0.00] µg/L
U 409.014†	701.6	31.40	4.47%	[0.00] µg/L
V 292.402†	-90.5	27.39	30.26%	[0.00] µg/L
Zn 213.857†	527.8	3.44	0.65%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/14/2009 09:32:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114674.2	114674.2	102	%	09:32:45
1	K 766.490 Radial†	2514.9	1709.2	[1000]	µg/L	09:32:45
1	Sr 421.552†	17626.6	17303.8	[100]	µg/L	09:32:45
1	Sc 361.383	1995045.9	1995045.9	99.363	%	09:33:07
1	Y 371.029	1215141.2	1215141.2	99.328	%	09:33:07
1	Ag 328.068†	10637.6	10722.1	[100]	µg/L	09:33:13
1	As 188.979†	53.2	50.4	[100]	µg/L	09:33:33
1	B 249.677†	2240.5	2093.1	[100]	µg/L	09:33:13
1	Ba 233.527†	3709.0	3805.3	[100]	µg/L	09:33:13
1	Be 313.107†	154634.4	152007.2	[100]	µg/L	09:33:07
1	Cd 226.502†	3536.8	3657.0	[100]	µg/L	09:33:13
1	Co 228.616†	1904.5	1986.5	[100]	µg/L	09:33:33
1	Cr 267.716†	4397.1	4549.5	[100]	µg/L	09:33:13
1	Cu 324.752†	17016.3	13816.5	[100]	µg/L	09:33:13
1	Mn 257.610†	29887.6	30327.1	[100]	µg/L	09:33:13
1	Mo 202.031†	838.5	848.6	[100]	µg/L	09:33:33
1	Ni 231.604†	2078.3	1800.6	[100]	µg/L	09:33:13
1	P 214.914†	423.3	236.0	[500]	µg/L	09:33:33
1	Pb 220.353†	438.8	390.6	[100]	µg/L	09:33:33
1	S 181.975 Axial†	63.6	38.3	[200]	µg/L	09:33:33
1	Sb 206.836†	117.0	93.6	[100]	µg/L	09:33:33
1	Se 196.026†	72.9	62.6	[100]	µg/L	09:33:33
1	SiO2†	7322.1	5335.5	[1069.5]	µg/L	09:33:13
1	Si 251.611†	6494.5	6179.3	[500]	µg/L	09:33:13
1	Sn 189.927†	211.6	190.5	[100]	µg/L	09:33:33
1	Ti 334.940†	42513.3	41987.4	[100]	µg/L	09:33:13
1	Tl 190.801†	44.1	64.5	[100]	µg/L	09:33:33
1	U 409.014†	1667.3	976.3	[100]	µg/L	09:33:13
1	V 292.402†	8210.0	8353.1	[100]	µg/L	09:33:13
1	Zn 213.857†	4128.6	3627.3	[100]	µg/L	09:33:13
2	Sc RADIAL	114272.6	114272.6	102	%	09:32:51
2	K 766.490 Radial†	2568.9	1770.7	[1000]	µg/L	09:32:51
2	Sr 421.552†	17703.8	17440.0	[100]	µg/L	09:32:51
2	Sc 361.383	1989026.5	1989026.5	99.063	%	09:33:40
2	Y 371.029	1211566.5	1211566.5	99.035	%	09:33:40
2	Ag 328.068†	10847.2	10966.0	[100]	µg/L	09:33:45
2	As 188.979†	50.0	47.4	[100]	µg/L	09:34:06
2	B 249.677†	2305.6	2165.6	[100]	µg/L	09:33:45
2	Ba 233.527†	3796.2	3904.6	[100]	µg/L	09:33:45
2	Be 313.107†	155823.8	153678.8	[100]	µg/L	09:33:40
2	Cd 226.502†	3657.2	3789.4	[100]	µg/L	09:33:45
2	Co 228.616†	1907.9	1995.8	[100]	µg/L	09:34:06
2	Cr 267.716†	4511.6	4678.5	[100]	µg/L	09:33:45
2	Cu 324.752†	17399.9	14255.5	[100]	µg/L	09:33:45
2	Mn 257.610†	30605.5	31142.8	[100]	µg/L	09:33:45
2	Mo 202.031†	837.1	849.7	[100]	µg/L	09:34:06
2	Ni 231.604†	2139.7	1868.9	[100]	µg/L	09:33:45
2	P 214.914†	412.2	226.1	[500]	µg/L	09:34:06
2	Pb 220.353†	431.8	384.9	[100]	µg/L	09:34:06
2	S 181.975 Axial†	61.0	35.9	[200]	µg/L	09:34:06
2	Sb 206.836†	116.8	93.7	[100]	µg/L	09:34:06
2	Se 196.026†	75.9	65.8	[100]	µg/L	09:34:06
2	SiO2†	7454.9	5491.8	[1069.5]	µg/L	09:33:45
2	Si 251.611†	6644.3	6350.4	[500]	µg/L	09:33:45
2	Sn 189.927†	218.1	197.8	[100]	µg/L	09:34:06
2	Ti 334.940†	43641.9	43256.1	[100]	µg/L	09:33:45
2	Tl 190.801†	45.4	66.0	[100]	µg/L	09:34:06
2	U 409.014†	1705.7	1020.2	[100]	µg/L	09:33:45
2	V 292.402†	8474.6	8645.3	[100]	µg/L	09:33:45

2	Zn 213.857†	4236.7	3749.0	[100]	µg/L	09:33:45
3	Sc RADIAL	114577.0	114577.0	102	%	09:32:56
3	K 766.490 Radial†	2538.9	1734.7	[1000]	µg/L	09:32:56
3	Sr 421.552†	17657.8	17348.8	[100]	µg/L	09:32:56
3	Sc 361.383	1996562.3	1996562.3	99.438	%	09:34:12
3	Y 371.029	1216394.8	1216394.8	99.430	%	09:34:12
3	Ag 328.068†	10776.4	10853.6	[100]	µg/L	09:34:18
3	As 188.979†	55.2	52.3	[100]	µg/L	09:34:38
3	B 249.677†	2313.4	2164.7	[100]	µg/L	09:34:18
3	Ba 233.527†	3723.9	3817.3	[100]	µg/L	09:34:18
3	Be 313.107†	154900.8	152156.9	[100]	µg/L	09:34:12
3	Cd 226.502†	3617.4	3735.4	[100]	µg/L	09:34:18
3	Co 228.616†	1910.9	1991.5	[100]	µg/L	09:34:38
3	Cr 267.716†	4513.9	4663.6	[100]	µg/L	09:34:18
3	Cu 324.752†	17389.0	14178.3	[100]	µg/L	09:34:18
3	Mn 257.610†	30427.4	30847.1	[100]	µg/L	09:34:18
3	Mo 202.031†	835.5	844.9	[100]	µg/L	09:34:38
3	Ni 231.604†	2099.1	1819.9	[100]	µg/L	09:34:18
3	P 214.914†	416.2	228.5	[500]	µg/L	09:34:38
3	Pb 220.353†	431.2	382.7	[100]	µg/L	09:34:38
3	S 181.975 Axial†	63.2	37.9	[200]	µg/L	09:34:38
3	Sb 206.836†	113.5	90.0	[100]	µg/L	09:34:38
3	Se 196.026†	77.9	67.5	[100]	µg/L	09:34:38
3	SiO2†	7396.9	5405.1	[1069.5]	µg/L	09:34:18
3	Si 251.611†	6597.2	6277.7	[500]	µg/L	09:34:18
3	Sn 189.927†	213.9	192.8	[100]	µg/L	09:34:38
3	Ti 334.940†	43333.9	42780.1	[100]	µg/L	09:34:18
3	Tl 190.801†	43.4	63.7	[100]	µg/L	09:34:38
3	U 409.014†	1710.7	1018.7	[100]	µg/L	09:34:18
3	V 292.402†	8365.7	8503.5	[100]	µg/L	09:34:18
3	Zn 213.857†	4227.6	3723.6	[100]	µg/L	09:34:18

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1993544.9	3985.84	0.20%	99.288	%
Sc RADIAL	114508.0	209.52	0.18%	102	%
Y 371.029	1214367.5	2505.44	0.21%	99.264	%
Ag 328.068†	10847.2	122.08	1.13%	[100]	µg/L
As 188.979†	50.0	2.51	5.01%	[100]	µg/L
B 249.677†	2141.2	41.61	1.94%	[100]	µg/L
Ba 233.527†	3842.4	54.20	1.41%	[100]	µg/L
Be 313.107†	152614.3	924.91	0.61%	[100]	µg/L
Cd 226.502†	3727.3	66.55	1.79%	[100]	µg/L
Co 228.616†	1991.2	4.64	0.23%	[100]	µg/L
Cr 267.716†	4630.6	70.57	1.52%	[100]	µg/L
Cu 324.752†	14083.4	234.38	1.66%	[100]	µg/L
K 766.490 Radial†	1738.2	30.93	1.78%	[1000]	µg/L
Mn 257.610†	30772.3	412.94	1.34%	[100]	µg/L
Mo 202.031†	847.8	2.51	0.30%	[100]	µg/L
Ni 231.604†	1829.8	35.22	1.92%	[100]	µg/L
P 214.914†	230.2	5.15	2.24%	[500]	µg/L
Pb 220.353†	386.0	4.10	1.06%	[100]	µg/L
S 181.975 Axial†	37.4	1.26	3.38%	[200]	µg/L
Sb 206.836†	92.4	2.10	2.27%	[100]	µg/L
Se 196.026†	65.3	2.53	3.87%	[100]	µg/L
SiO2†	5410.8	78.30	1.45%	[1069.5]	µg/L
Si 251.611†	6269.1	85.85	1.37%	[500]	µg/L
Sn 189.927†	193.7	3.70	1.91%	[100]	µg/L
Sr 421.552†	17364.2	69.39	0.40%	[100]	µg/L
Ti 334.940†	42674.5	640.91	1.50%	[100]	µg/L
Tl 190.801†	64.7	1.13	1.74%	[100]	µg/L
U 409.014†	1005.1	24.91	2.48%	[100]	µg/L
V 292.402†	8500.6	146.12	1.72%	[100]	µg/L
Zn 213.857†	3700.0	64.22	1.74%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/14/2009 09:34:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	112237.8	112237.8	100	%	09:35:20
1	Al 396.153Radial†	9918.7	9731.5	[5000]	µg/L	09:35:20
1	Ca 317.933Radial†	13180.5	12737.6	[5000]	µg/L	09:35:41
1	K 766.490 Radial†	9753.4	8984.3	[5000]	µg/L	09:35:20
1	Mg 279.077 IEC†	950.8	932.6	[5000]	µg/L	09:35:41
1	Sr 421.552†	87800.2	87689.9	[500]	µg/L	09:35:20
1	Sc 361.383	2013987.2	2013987.2	100.31	%	09:36:45
1	Y 371.029	1221278.2	1221278.2	99.829	%	09:36:45
1	Ag 328.068†	53873.3	53725.2	[500]	µg/L	09:36:50
1	As 188.979†	264.2	260.3	[500]	µg/L	09:37:11
1	B 249.677†	11068.1	10872.6	[500]	µg/L	09:36:50
1	Ba 233.527†	19052.4	19066.7	[500]	µg/L	09:36:50
1	Be 313.107†	765739.3	759783.0	[500]	µg/L	09:36:45
1	Cd 226.502†	18291.9	18333.6	[500]	µg/L	09:36:50
1	Co 228.616†	10032.7	10071.9	[500]	µg/L	09:36:50
1	Cr 267.716†	22860.2	22914.7	[500]	µg/L	09:36:50
1	Cu 324.752†	72237.4	68708.0	[500]	µg/L	09:36:50
1	Mn 257.610†	150528.0	150316.3	[500]	µg/L	09:36:45
1	Mo 202.031†	4228.4	4220.3	[500]	µg/L	09:37:11
1	Ni 231.604†	9231.6	8912.4	[500]	µg/L	09:36:50
1	P 214.914†	1326.7	1132.7	[2500]	µg/L	09:37:11
1	Pb 220.353†	1960.4	1903.4	[500]	µg/L	09:37:11
1	S 181.975 Axial†	210.5	184.2	[1000]	µg/L	09:37:11
1	Sb 206.836†	497.4	471.7	[500]	µg/L	09:37:11
1	Se 196.026†	361.5	349.6	[500]	µg/L	09:37:11
1	SiO2†	28747.2	26625.9	[5347.5]	µg/L	09:36:50
1	Si 251.611†	31541.2	31088.1	[2500]	µg/L	09:36:50
1	Sn 189.927†	1005.0	979.6	[500]	µg/L	09:37:11
1	Ti 334.940†	214795.4	213341.1	[500]	µg/L	09:36:45
1	Tl 190.801†	302.8	322.0	[500]	µg/L	09:37:11
1	U 409.014†	5753.3	5034.1	[500]	µg/L	09:36:50
1	V 292.402†	42380.2	42341.3	[500]	µg/L	09:36:50
1	Zn 213.857†	18873.4	18288.0	[500]	µg/L	09:36:50
2	Sc RADIAL	112643.0	112643.0	101	%	09:35:46
2	Al 396.153Radial†	9969.1	9746.0	[5000]	µg/L	09:35:46
2	Ca 317.933Radial†	13211.3	12720.9	[5000]	µg/L	09:36:07
2	K 766.490 Radial†	9847.3	9042.7	[5000]	µg/L	09:35:46
2	Mg 279.077 IEC†	944.4	922.8	[5000]	µg/L	09:36:07
2	Sr 421.552†	88009.3	87582.6	[500]	µg/L	09:35:46
2	Sc 361.383	2010361.0	2010361.0	100.13	%	09:37:18
2	Y 371.029	1218778.4	1218778.4	99.625	%	09:37:18
2	Ag 328.068†	53747.7	53696.5	[500]	µg/L	09:37:23
2	As 188.979†	256.0	252.5	[500]	µg/L	09:37:44
2	B 249.677†	11056.3	10880.7	[500]	µg/L	09:37:23
2	Ba 233.527†	18953.0	19001.7	[500]	µg/L	09:37:23
2	Be 313.107†	770076.7	765491.9	[500]	µg/L	09:37:18
2	Cd 226.502†	18210.0	18284.7	[500]	µg/L	09:37:23
2	Co 228.616†	10010.0	10067.2	[500]	µg/L	09:37:23
2	Cr 267.716†	22790.2	22885.8	[500]	µg/L	09:37:23
2	Cu 324.752†	72127.1	68727.7	[500]	µg/L	09:37:23
2	Mn 257.610†	151289.0	151347.1	[500]	µg/L	09:37:18
2	Mo 202.031†	4179.1	4178.6	[500]	µg/L	09:37:44
2	Ni 231.604†	9173.4	8870.8	[500]	µg/L	09:37:23
2	P 214.914†	1303.0	1111.4	[2500]	µg/L	09:37:44
2	Pb 220.353†	1929.5	1876.0	[500]	µg/L	09:37:44
2	S 181.975 Axial†	213.4	187.5	[1000]	µg/L	09:37:44
2	Sb 206.836†	499.0	474.2	[500]	µg/L	09:37:44
2	Se 196.026†	346.7	335.5	[500]	µg/L	09:37:44
2	SiO2†	28676.5	26606.9	[5347.5]	µg/L	09:37:23

2	Si 251.611†	31472.3	31076.1	[2500]	µg/L	09:37:23
2	Sn 189.927†	988.6	965.0	[500]	µg/L	09:37:44
2	Ti 334.940†	216332.4	215262.5	[500]	µg/L	09:37:18
2	Tl 190.801†	300.9	320.6	[500]	µg/L	09:37:44
2	U 409.014†	5810.1	5101.2	[500]	µg/L	09:37:23
2	V 292.402†	42213.0	42250.6	[500]	µg/L	09:37:23
2	Zn 213.857†	18811.6	18260.2	[500]	µg/L	09:37:23
3	Sc RADIAL	113546.1	113546.1	101	%	09:36:12
3	Al 396.153Radial†	9973.2	9671.2	[5000]	µg/L	09:36:12
3	Ca 317.933Radial†	13134.9	12541.2	[5000]	µg/L	09:36:33
3	K 766.490 Radial†	9807.1	8925.2	[5000]	µg/L	09:36:12
3	Mg 279.077 IEC†	948.2	919.1	[5000]	µg/L	09:36:33
3	Sr 421.552†	88049.0	86925.9	[500]	µg/L	09:36:12
3	Sc 361.383	1993495.2	1993495.2	99.286	%	09:37:51
3	Y 371.029	1208472.8	1208472.8	98.782	%	09:37:51
3	Ag 328.068†	53975.6	54380.3	[500]	µg/L	09:37:57
3	As 188.979†	264.7	263.5	[500]	µg/L	09:38:17
3	B 249.677†	11123.1	11041.4	[500]	µg/L	09:37:57
3	Ba 233.527†	19061.0	19270.6	[500]	µg/L	09:37:57
3	Be 313.107†	782131.8	784140.7	[500]	µg/L	09:37:51
3	Cd 226.502†	18270.0	18499.0	[500]	µg/L	09:37:57
3	Co 228.616†	10046.7	10188.8	[500]	µg/L	09:37:57
3	Cr 267.716†	22903.4	23192.4	[500]	µg/L	09:37:57
3	Cu 324.752†	72460.4	69672.9	[500]	µg/L	09:37:57
3	Mn 257.610†	153640.0	154993.3	[500]	µg/L	09:37:51
3	Mo 202.031†	4244.5	4279.8	[500]	µg/L	09:38:17
3	Ni 231.604†	9210.2	8985.4	[500]	µg/L	09:37:57
3	P 214.914†	1330.2	1149.7	[2500]	µg/L	09:38:17
3	Pb 220.353†	1971.8	1935.0	[500]	µg/L	09:38:17
3	S 181.975 Axial†	216.5	192.4	[1000]	µg/L	09:38:17
3	Sb 206.836†	503.4	482.9	[500]	µg/L	09:38:17
3	Se 196.026†	357.4	349.2	[500]	µg/L	09:38:17
3	SiO2†	28866.4	27040.5	[5347.5]	µg/L	09:37:57
3	Si 251.611†	31569.1	31439.4	[2500]	µg/L	09:37:57
3	Sn 189.927†	1006.0	990.9	[500]	µg/L	09:38:17
3	Ti 334.940†	219430.6	220210.9	[500]	µg/L	09:37:51
3	Tl 190.801†	301.2	323.5	[500]	µg/L	09:38:17
3	U 409.014†	5728.6	5068.2	[500]	µg/L	09:37:57
3	V 292.402†	42459.2	42855.2	[500]	µg/L	09:37:57
3	Zn 213.857†	18922.1	18530.4	[500]	µg/L	09:37:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2005947.8	10935.62	0.55%	99.906	%
Sc RADIAL	112809.0	669.75	0.59%	101	%
Y 371.029	1216176.5	6787.63	0.56%	99.412	%
Ag 328.068†	53934.0	386.75	0.72%	[500]	µg/L
Al 396.153Radial†	9716.2	39.63	0.41%	[5000]	µg/L
As 188.979†	258.7	5.64	2.18%	[500]	µg/L
B 249.677†	10931.6	95.20	0.87%	[500]	µg/L
Ba 233.527†	19113.0	140.31	0.73%	[500]	µg/L
Be 313.107†	769805.2	12738.86	1.65%	[500]	µg/L
Ca 317.933Radial†	12666.6	108.92	0.86%	[5000]	µg/L
Cd 226.502†	18372.5	112.32	0.61%	[500]	µg/L
Co 228.616†	10109.3	68.89	0.68%	[500]	µg/L
Cr 267.716†	22997.6	169.29	0.74%	[500]	µg/L
Cu 324.752†	69036.2	551.46	0.80%	[500]	µg/L
K 766.490 Radial†	8984.1	58.77	0.65%	[5000]	µg/L
Mg 279.077 IEC†	924.8	6.97	0.75%	[5000]	µg/L
Mn 257.610†	152218.9	2457.39	1.61%	[500]	µg/L
Mo 202.031†	4226.2	50.85	1.20%	[500]	µg/L
Ni 231.604†	8922.9	58.02	0.65%	[500]	µg/L
P 214.914†	1131.3	19.20	1.70%	[2500]	µg/L
Pb 220.353†	1904.8	29.50	1.55%	[500]	µg/L
S 181.975 Axial†	188.0	4.12	2.19%	[1000]	µg/L
Sb 206.836†	476.3	5.86	1.23%	[500]	µg/L
Se 196.026†	344.8	8.04	2.33%	[500]	µg/L
SiO2†	26757.8	245.06	0.92%	[5347.5]	µg/L
Si 251.611†	31201.2	206.39	0.66%	[2500]	µg/L

Sn 189.927†	978.5	12.98	1.33%	[500] µg/L
Sr 421.552†	87399.5	413.57	0.47%	[500] µg/L
Ti 334.940†	216271.5	3544.31	1.64%	[500] µg/L
Tl 190.801†	322.0	1.42	0.44%	[500] µg/L
U 409.014†	5067.8	33.54	0.66%	[500] µg/L
V 292.402†	42482.4	326.05	0.77%	[500] µg/L
Zn 213.857†	18359.5	148.65	0.81%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/14/2009 09:38:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113984.2	113984.2	102	%	09:38:59
1	Al 396.153Radial†	19633.5	19123.8	[10000]	µg/L	09:38:59
1	Ca 317.933Radial†	25941.3	25072.6	[10000]	µg/L	09:39:20
1	Fe 238.204 Radial†	1941.5	1895.4	[10000]	µg/L	09:39:20
1	K 766.490 Radial†	18702.5	17627.0	[10000]	µg/L	09:38:59
1	Mg 279.077 IEC†	1873.6	1824.7	[10000]	µg/L	09:39:20
1	Na 589.592 Radial†	36184.2	35949.6	[10000]	µg/L	09:38:59
1	Sr 421.552†	175317.1	172325.9	[1000]	µg/L	09:38:59
1	Sc 361.383	2002622.8	2002622.8	99.740	%	09:40:24
1	Y 371.029	1211370.5	1211370.5	99.019	%	09:40:24
1	Ag 328.068†	97950.1	98221.5	[1000]	µg/L	09:40:29
1	As 188.979†	516.3	514.5	[1000]	µg/L	09:40:50
1	B 249.677†	20088.4	19978.9	[1000]	µg/L	09:40:29
1	Ba 233.527†	34606.7	34769.2	[1000]	µg/L	09:40:29
1	Be 313.107†	1521377.2	1521721.3	[1000]	µg/L	09:40:24
1	Cd 226.502†	32736.7	32919.5	[1000]	µg/L	09:40:29
1	Co 228.616†	18130.4	18247.5	[1000]	µg/L	09:40:29
1	Cr 267.716†	41721.4	41954.3	[1000]	µg/L	09:40:29
1	Cu 324.752†	142345.0	139406.9	[1000]	µg/L	09:40:24
1	Mn 257.610†	300545.4	301576.1	[1000]	µg/L	09:40:24
1	Mo 202.031†	7796.8	7821.9	[1000]	µg/L	09:40:29
1	Ni 231.604†	16335.8	16087.3	[1000]	µg/L	09:40:29
1	P 214.914†	2434.2	2250.6	[5000]	µg/L	09:40:50
1	Pb 220.353†	3825.9	3784.9	[1000]	µg/L	09:40:50
1	S 181.975 Axial†	399.4	374.7	[2000]	µg/L	09:40:50
1	Sb 206.836†	978.4	956.8	[1000]	µg/L	09:40:50
1	Se 196.026†	687.9	678.9	[1000]	µg/L	09:40:50
1	SiO2†	51027.7	49127.0	[10695]	µg/L	09:40:29
1	Si 251.611†	57470.9	57263.8	[5000]	µg/L	09:40:29
1	Sn 189.927†	1985.2	1968.0	[1000]	µg/L	09:40:50
1	Ti 334.940†	431310.9	431635.8	[1000]	µg/L	09:40:24
1	Tl 190.801†	616.0	637.7	[1000]	µg/L	09:40:50
1	U 409.014†	10037.0	9361.6	[1000]	µg/L	09:40:29
1	V 292.402†	77375.4	77667.4	[1000]	µg/L	09:40:29
1	Zn 213.857†	33125.2	32683.7	[1000]	µg/L	09:40:29
2	Sc RADIAL	115022.4	115022.4	103	%	09:39:25
2	Al 396.153Radial†	19978.9	19286.0	[10000]	µg/L	09:39:25
2	Ca 317.933Radial†	25982.6	24882.7	[10000]	µg/L	09:39:46
2	Fe 238.204 Radial†	1947.5	1884.1	[10000]	µg/L	09:39:46
2	K 766.490 Radial†	18885.4	17639.2	[10000]	µg/L	09:39:25
2	Mg 279.077 IEC†	1872.0	1806.5	[10000]	µg/L	09:39:46
2	Na 589.592 Radial†	36634.6	36067.2	[10000]	µg/L	09:39:25
2	Sr 421.552†	177897.5	173283.4	[1000]	µg/L	09:39:25
2	Sc 361.383	1987476.1	1987476.1	98.986	%	09:40:57
2	Y 371.029	1202627.3	1202627.3	98.305	%	09:40:57
2	Ag 328.068†	106954.6	108066.7	[1000]	µg/L	09:41:03
2	As 188.979†	509.0	511.0	[1000]	µg/L	09:41:23
2	B 249.677†	22072.5	22136.9	[1000]	µg/L	09:41:03
2	Ba 233.527†	37878.1	38338.6	[1000]	µg/L	09:41:03
2	Be 313.107†	1522406.9	1534386.3	[1000]	µg/L	09:40:57
2	Cd 226.502†	35984.5	36450.8	[1000]	µg/L	09:41:03
2	Co 228.616†	19904.3	20178.1	[1000]	µg/L	09:41:03
2	Cr 267.716†	45601.7	46193.1	[1000]	µg/L	09:41:03
2	Cu 324.752†	142429.9	140580.3	[1000]	µg/L	09:40:57
2	Mn 257.610†	300479.8	303806.3	[1000]	µg/L	09:40:57
2	Mo 202.031†	8534.0	8626.2	[1000]	µg/L	09:41:03
2	Ni 231.604†	17835.8	17727.5	[1000]	µg/L	09:41:03
2	P 214.914†	2364.1	2198.3	[5000]	µg/L	09:41:23
2	Pb 220.353†	3727.1	3714.3	[1000]	µg/L	09:41:23

2	S 181.975 Axial†	386.7	365.0	[2000]	µg/L	09:41:23
2	Sb 206.836†	957.7	943.3	[1000]	µg/L	09:41:23
2	Se 196.026†	659.8	655.8	[1000]	µg/L	09:41:23
2	SiO2†	55658.8	54195.5	[10695]	µg/L	09:41:03
2	Si 251.611†	62839.4	63126.4	[5000]	µg/L	09:41:03
2	Sn 189.927†	1932.7	1930.2	[1000]	µg/L	09:41:23
2	Ti 334.940†	431769.8	435395.0	[1000]	µg/L	09:40:57
2	Tl 190.801†	595.3	621.5	[1000]	µg/L	09:41:23
2	U 409.014†	10924.6	10334.9	[1000]	µg/L	09:41:03
2	V 292.402†	84519.4	85475.9	[1000]	µg/L	09:41:03
2	Zn 213.857†	36348.0	36192.6	[1000]	µg/L	09:41:03
3	Sc RADIAL	114576.2	114576.2	102	%	09:39:51
3	Al 396.153Radial†	19865.3	19250.8	[10000]	µg/L	09:39:51
3	Ca 317.933Radial†	26072.4	25069.0	[10000]	µg/L	09:40:11
3	Fe 238.204 Radial†	1950.8	1894.7	[10000]	µg/L	09:40:11
3	K 766.490 Radial†	18915.9	17740.7	[10000]	µg/L	09:39:51
3	Mg 279.077 IEC†	1874.0	1815.5	[10000]	µg/L	09:40:11
3	Na 589.592 Radial†	36541.3	36115.0	[10000]	µg/L	09:39:51
3	Sr 421.552†	176983.3	173064.3	[1000]	µg/L	09:39:51
3	Sc 361.383	1973630.6	1973630.6	98.296	%	09:41:31
3	Y 371.029	1193662.4	1193662.4	97.572	%	09:41:31
3	Ag 328.068†	106378.5	108238.7	[1000]	µg/L	09:41:36
3	As 188.979†	511.6	517.3	[1000]	µg/L	09:41:57
3	B 249.677†	21914.7	22132.8	[1000]	µg/L	09:41:36
3	Ba 233.527†	37652.3	38377.3	[1000]	µg/L	09:41:36
3	Be 313.107†	1520544.2	1543280.7	[1000]	µg/L	09:41:31
3	Cd 226.502†	35759.5	36476.9	[1000]	µg/L	09:41:36
3	Co 228.616†	19791.9	20204.8	[1000]	µg/L	09:41:36
3	Cr 267.716†	45351.7	46262.0	[1000]	µg/L	09:41:36
3	Cu 324.752†	142170.4	141325.6	[1000]	µg/L	09:41:31
3	Mn 257.610†	300447.6	305903.0	[1000]	µg/L	09:41:31
3	Mo 202.031†	8463.9	8615.4	[1000]	µg/L	09:41:36
3	Ni 231.604†	17731.0	17747.3	[1000]	µg/L	09:41:36
3	P 214.914†	2425.6	2277.7	[5000]	µg/L	09:41:57
3	Pb 220.353†	3821.9	3837.2	[1000]	µg/L	09:41:57
3	S 181.975 Axial†	398.7	379.9	[2000]	µg/L	09:41:57
3	Sb 206.836†	983.6	976.5	[1000]	µg/L	09:41:57
3	Se 196.026†	687.6	688.8	[1000]	µg/L	09:41:57
3	SiO2†	55281.5	54206.1	[10695]	µg/L	09:41:36
3	Si 251.611†	62523.2	63250.1	[5000]	µg/L	09:41:36
3	Sn 189.927†	1984.8	1996.8	[1000]	µg/L	09:41:57
3	Ti 334.940†	431265.9	437942.4	[1000]	µg/L	09:41:31
3	Tl 190.801†	611.3	642.0	[1000]	µg/L	09:41:57
3	U 409.014†	10814.2	10300.0	[1000]	µg/L	09:41:36
3	V 292.402†	83984.0	85530.2	[1000]	µg/L	09:41:36
3	Zn 213.857†	36147.7	36246.4	[1000]	µg/L	09:41:36

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1987909.9	14500.97	0.73%	99.007	%
Sc RADIAL	114527.6	520.84	0.45%	102	%
Y 371.029	1202553.4	8854.29	0.74%	98.299	%
Ag 328.068†	104842.3	5734.40	5.47%	[1000]	µg/L
Al 396.153Radial†	19220.2	85.29	0.44%	[10000]	µg/L
As 188.979†	514.3	3.16	0.61%	[1000]	µg/L
B 249.677†	21416.2	1244.71	5.81%	[1000]	µg/L
Ba 233.527†	37161.7	2072.05	5.58%	[1000]	µg/L
Be 313.107†	1533129.4	10834.53	0.71%	[1000]	µg/L
Ca 317.933Radial†	25008.1	108.58	0.43%	[10000]	µg/L
Cd 226.502†	35282.4	2046.37	5.80%	[1000]	µg/L
Co 228.616†	19543.4	1122.41	5.74%	[1000]	µg/L
Cr 267.716†	44803.2	2467.41	5.51%	[1000]	µg/L
Cu 324.752†	140437.6	967.31	0.69%	[1000]	µg/L
Fe 238.204 Radial†	1891.4	6.35	0.34%	[10000]	µg/L
K 766.490 Radial†	17669.0	62.38	0.35%	[10000]	µg/L
Mg 279.077 IEC†	1815.6	9.09	0.50%	[10000]	µg/L
Mn 257.610†	303761.8	2163.82	0.71%	[1000]	µg/L
Mo 202.031†	8354.5	461.30	5.52%	[1000]	µg/L
Na 589.592 Radial†	36043.9	85.10	0.24%	[10000]	µg/L

Ni 231.604†	17187.4	952.75	5.54%	[1000]	µg/L
P 214.914†	2242.2	40.35	1.80%	[5000]	µg/L
Pb 220.353†	3778.8	61.65	1.63%	[1000]	µg/L
S 181.975 Axial†	373.2	7.59	2.03%	[2000]	µg/L
Sb 206.836†	958.9	16.70	1.74%	[1000]	µg/L
Se 196.026†	674.5	16.91	2.51%	[1000]	µg/L
SiO2†	52509.5	2929.33	5.58%	[10695]	µg/L
Si 251.611†	61213.4	3421.05	5.59%	[5000]	µg/L
Sn 189.927†	1965.0	33.43	1.70%	[1000]	µg/L
Sr 421.552†	172891.2	501.67	0.29%	[1000]	µg/L
Ti 334.940†	434991.1	3172.65	0.73%	[1000]	µg/L
Tl 190.801†	633.7	10.80	1.70%	[1000]	µg/L
U 409.014†	9998.8	552.16	5.52%	[1000]	µg/L
V 292.402†	82891.2	4523.96	5.46%	[1000]	µg/L
Zn 213.857†	35040.9	2041.60	5.83%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/14/2009 09:42:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113332.7	113332.7	101	%	09:42:39
1	Al 396.153Radial†	95459.3	94155.5	[50000]	µg/L	09:42:39
1	Ca 317.933Radial†	125338.2	123429.6	[50000]	µg/L	09:42:39
1	Fe 238.204 Radial†	3838.1	3780.3	[20000]	µg/L	09:42:59
1	Mg 279.077 IEC†	9002.2	8878.8	[50000]	µg/L	09:42:59
1	Na 589.592 Radial†	70741.8	70299.1	[20000]	µg/L	09:42:39
1	Sc 361.383	2011704.5	2011704.5	100.19	%	09:44:03
1	Y 371.029	1207873.5	1207873.5	98.733	%	09:44:03
2	Sc RADIAL	113612.7	113612.7	101	%	09:43:05
2	Al 396.153Radial†	96073.6	94528.5	[50000]	µg/L	09:43:05
2	Ca 317.933Radial†	125946.7	123724.2	[50000]	µg/L	09:43:05
2	Fe 238.204 Radial†	3833.2	3766.2	[20000]	µg/L	09:43:25
2	Mg 279.077 IEC†	8997.8	8852.4	[50000]	µg/L	09:43:25
2	Na 589.592 Radial†	71222.2	70600.4	[20000]	µg/L	09:43:05
2	Sc 361.383	1998934.0	1998934.0	99.556	%	09:44:11
2	Y 371.029	1200091.9	1200091.9	98.097	%	09:44:11
3	Sc RADIAL	113863.0	113863.0	102	%	09:43:31
3	Al 396.153Radial†	96638.5	94876.0	[50000]	µg/L	09:43:31
3	Ca 317.933Radial†	126940.8	124429.0	[50000]	µg/L	09:43:31
3	Fe 238.204 Radial†	3816.9	3741.8	[20000]	µg/L	09:43:51
3	Mg 279.077 IEC†	8983.4	8818.8	[50000]	µg/L	09:43:51
3	Na 589.592 Radial†	71729.6	70945.1	[20000]	µg/L	09:43:31
3	Sc 361.383	1997184.4	1997184.4	99.469	%	09:44:19
3	Y 371.029	1199432.9	1199432.9	98.044	%	09:44:19

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2002607.6	7926.56	0.40%	99.739	%
Sc RADIAL	113602.8	265.26	0.23%	101	%
Y 371.029	1202466.1	4694.53	0.39%	98.291	%
Al 396.153Radial†	94520.0	360.33	0.38%	[50000]	µg/L
Ca 317.933Radial†	123860.9	513.55	0.41%	[50000]	µg/L
Fe 238.204 Radial†	3762.8	19.50	0.52%	[20000]	µg/L
Mg 279.077 IEC†	8850.0	30.05	0.34%	[50000]	µg/L
Na 589.592 Radial†	70614.8	323.23	0.46%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	105.5	0.00000	0.999931	
Al 396.153Radial	3	Lin Thru 0	0.0	1.892	0.00000	0.999991	
As 188.979	3	Lin Thru 0	0.0	0.5148	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	21.50	0.00000	0.999966	
Ba 233.527	3	Lin Thru 0	0.0	37.38	0.00000	0.999933	
Be 313.107	3	Lin Thru 0	0.0	1534	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.479	0.00000	0.999996	
Cd 226.502	3	Lin Thru 0	0.0	35.59	0.00000	0.999857	
Co 228.616	3	Lin Thru 0	0.0	19.68	0.00000	0.999906	
Cr 267.716	3	Lin Thru 0	0.0	45.05	0.00000	0.999941	
Cu 324.752	3	Lin Thru 0	0.0	140.0	0.00000	0.999977	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1883	0.00000	0.999998	
K 766.490 Radial	3	Lin Thru 0	0.0	1.773	0.00000	0.999976	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1772	0.00000	0.999979	
Mn 257.610	3	Lin Thru 0	0.0	303.9	0.00000	0.999999	
Mo 202.031	3	Lin Thru 0	0.0	8.375	0.00000	0.999989	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.545	0.00000	0.999965	

Ni 231.604	3	Lin Thru 0	0.0	17.33	0.00000	0.999873
P 214.914	3	Lin Thru 0	0.0	0.4493	0.00000	0.999991
Pb 220.353	3	Lin Thru 0	0.0	3.786	0.00000	0.999993
S 181.975 Axial	3	Lin Thru 0	0.0	0.1869	0.00000	0.999995
Sb 206.836	3	Lin Thru 0	0.0	0.9573	0.00000	0.999992
Se 196.026	3	Lin Thru 0	0.0	0.6773	0.00000	0.999956
SiO2	3	Lin Thru 0	0.0	4.930	0.00000	0.999968
Si 251.611	3	Lin Thru 0	0.0	12.29	0.00000	0.999969
Sn 189.927	3	Lin Thru 0	0.0	1.963	0.00000	0.999998
Sr 421.552	3	Lin Thru 0	0.0	173.3	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	434.4	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	0.6359	0.00000	0.999978
U 409.014	3	Lin Thru 0	0.0	10.03	0.00000	0.999985
V 292.402	3	Lin Thru 0	0.0	83.32	0.00000	0.999949
Zn 213.857	3	Lin Thru 0	0.0	35.39	0.00000	0.999813

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/14/2009 09:44:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113953.0	113953.0	102	%			09:45:01
1	Al 396.153Radial†	10437.3	10092.2	5313.0	µg/L	5313.0	ppb	09:45:01
1	Ca 317.933Radial†	13606.0	12957.8	5227.8	µg/L	5227.8	ppb	09:45:21
1	Fe 238.204 Radial†	1030.3	1000.5	5330.3	µg/L	5330.3	ppb	09:45:21
1	K 766.490 Radial†	5264.3	4426.5	2497.2	µg/L	2497.2	ppb	09:45:01
1	Mg 279.077 IEC†	979.6	946.6	5346.3	µg/L	5346.3	ppb	09:45:21
1	Na 589.592 Radial†	9003.0	9248.8	2608.6	µg/L	2608.6	ppb	09:45:01
1	Sr 421.552†	96077.4	94505.2	545.40	µg/L	545.40	ppb	09:45:01
1	Sc 361.383	1997243.5	1997243.5	99.472	%			09:46:25
1	Y 371.029	1210136.5	1210136.5	98.918	%			09:46:25
1	Ag 328.068†	28000.3	28165.1	271.08	µg/L	271.08	ppb	09:46:31
1	As 188.979†	256.4	254.6	493.26	µg/L	493.26	ppb	09:46:51
1	B 249.677†	11982.4	11884.3	550.96	µg/L	550.96	ppb	09:46:31
1	Ba 233.527†	20016.3	20195.0	541.33	µg/L	541.33	ppb	09:46:31
1	Be 313.107†	408975.7	407526.5	265.42	µg/L	265.42	ppb	09:46:25
1	Cd 226.502†	18823.0	19020.5	534.98	µg/L	534.98	ppb	09:46:31
1	Co 228.616†	10534.7	10660.4	541.91	µg/L	541.91	ppb	09:46:31
1	Cr 267.716†	23139.8	23386.8	520.35	µg/L	520.35	ppb	09:46:31
1	Cu 324.752†	75513.2	72604.9	519.85	µg/L	519.85	ppb	09:46:31
1	Mn 257.610†	156485.3	157563.4	519.09	µg/L	519.09	ppb	09:46:25
1	Mo 202.031†	4557.6	4586.6	547.86	µg/L	547.86	ppb	09:46:51
1	Ni 231.604†	9292.9	9051.1	522.36	µg/L	522.36	ppb	09:46:31
1	P 214.914†	1361.2	1178.4	2566.5	µg/L	2566.5	ppb	09:46:51
1	Pb 220.353†	1990.0	1949.5	515.88	µg/L	515.88	ppb	09:46:51
1	S 181.975 Axial†	496.7	473.6	2532.8	µg/L	2532.8	ppb	09:46:51
1	Sb 206.836†	510.2	488.8	508.95	µg/L	508.95	ppb	09:46:51
1	Se 196.026†	1823.8	1822.7	2693.4	µg/L	2693.4	ppb	09:46:51
1	SiO2†	56741.8	55009.2	11159	µg/L	11159	ppb	09:46:31
1	Si 251.611†	63941.4	63923.8	5151.0	µg/L	5151.0	ppb	09:46:31
1	Sn 189.927†	1088.2	1071.6	548.68	µg/L	548.68	ppb	09:46:51
1	Ti 334.940†	217136.9	217490.3	500.33	µg/L	500.33	ppb	09:46:25
1	Tl 190.801†	316.6	338.4	534.37	µg/L	534.37	ppb	09:46:51
1	U 409.014†	5756.3	5085.2	506.31	µg/L	506.31	ppb	09:46:31
1	V 292.402†	43683.0	44005.2	533.22	µg/L	533.22	ppb	09:46:31
1	Zn 213.857†	19397.5	18972.6	531.93	µg/L	531.93	ppb	09:46:31
2	Sc RADIAL	114478.8	114478.8	102	%			09:45:27
2	Al 396.153Radial†	10422.5	10030.5	5280.7	µg/L	5280.7	ppb	09:45:27
2	Ca 317.933Radial†	13567.2	12858.5	5187.7	µg/L	5187.7	ppb	09:45:47
2	Fe 238.204 Radial†	1021.9	987.6	5260.1	µg/L	5260.1	ppb	09:45:47
2	K 766.490 Radial†	5323.2	4460.3	2516.3	µg/L	2516.3	ppb	09:45:27
2	Mg 279.077 IEC†	986.8	949.2	5361.0	µg/L	5361.0	ppb	09:45:47
2	Na 589.592 Radial†	8928.8	9135.5	2576.7	µg/L	2576.7	ppb	09:45:27
2	Sr 421.552†	95504.7	93511.4	539.67	µg/L	539.67	ppb	09:45:27
2	Sc 361.383	2011772.2	2011772.2	100.20	%			09:46:58
2	Y 371.029	1219654.8	1219654.8	99.696	%			09:46:58
2	Ag 328.068†	25871.1	25836.8	248.69	µg/L	248.69	ppb	09:47:04
2	As 188.979†	254.3	250.7	485.69	µg/L	485.69	ppb	09:47:25
2	B 249.677†	10985.7	10802.4	500.68	µg/L	500.68	ppb	09:47:04
2	Ba 233.527†	18364.2	18400.7	493.24	µg/L	493.24	ppb	09:47:04
2	Be 313.107†	406654.6	402240.7	261.97	µg/L	261.97	ppb	09:46:58
2	Cd 226.502†	17194.9	17258.9	485.41	µg/L	485.41	ppb	09:47:04
2	Co 228.616†	9653.8	9704.7	493.34	µg/L	493.34	ppb	09:47:04
2	Cr 267.716†	21324.3	21406.9	476.30	µg/L	476.30	ppb	09:47:04
2	Cu 324.752†	70041.9	66596.0	476.91	µg/L	476.91	ppb	09:47:04
2	Mn 257.610†	155329.0	155273.2	511.55	µg/L	511.55	ppb	09:46:58
2	Mo 202.031†	4526.6	4522.5	540.21	µg/L	540.21	ppb	09:47:25
2	Ni 231.604†	8546.3	8238.5	475.46	µg/L	475.46	ppb	09:47:04
2	P 214.914†	1367.6	1175.0	2563.9	µg/L	2563.9	ppb	09:47:25
2	Pb 220.353†	1995.1	1940.2	513.49	µg/L	513.49	ppb	09:47:25

2	S 181.975 Axial†	497.3	470.6	2516.6 µg/L	2516.6 ppb	09:47:25
2	Sb 206.836†	510.5	485.3	505.54 µg/L	505.54 ppb	09:47:25
2	Se 196.026†	1809.2	1794.9	2652.2 µg/L	2652.2 ppb	09:47:25
2	SiO2†	52371.5	50235.5	10191 µg/L	10191 ppb	09:47:04
2	Si 251.611†	59001.6	58529.5	4712.8 µg/L	4712.8 ppb	09:47:04
2	Sn 189.927†	1079.2	1054.7	540.08 µg/L	540.08 ppb	09:47:25
2	Ti 334.940†	216043.6	214822.7	494.19 µg/L	494.19 ppb	09:46:58
2	Tl 190.801†	318.6	338.0	533.95 µg/L	533.95 ppb	09:47:25
2	U 409.014†	5398.6	4686.5	466.56 µg/L	466.56 ppb	09:47:04
2	V 292.402†	40246.6	40258.4	488.13 µg/L	488.13 ppb	09:47:04
2	Zn 213.857†	17749.0	17186.5	481.78 µg/L	481.78 ppb	09:47:04
3	Sc RADIAL	114490.4	114490.4	102 %		09:45:53
3	Al 396.153Radial†	10514.5	10119.5	5327.6 µg/L	5327.6 ppb	09:45:53
3	Ca 317.933Radial†	13556.9	12847.0	5183.1 µg/L	5183.1 ppb	09:46:13
3	Fe 238.204 Radial†	1022.7	988.3	5263.1 µg/L	5263.1 ppb	09:46:13
3	K 766.490 Radial†	5409.2	4544.0	2563.5 µg/L	2563.5 ppb	09:45:53
3	Mg 279.077 IEC†	979.9	942.4	5322.9 µg/L	5322.9 ppb	09:46:13
3	Na 589.592 Radial†	8965.4	9170.5	2586.5 µg/L	2586.5 ppb	09:45:53
3	Sr 421.552†	96754.2	94724.0	546.67 µg/L	546.67 ppb	09:45:53
3	Sc 361.383	2013467.6	2013467.6	100.28 %		09:47:32
3	Y 371.029	1220558.6	1220558.6	99.770 %		09:47:32
3	Ag 328.068†	25011.4	24957.8	240.24 µg/L	240.24 ppb	09:47:38
3	As 188.979†	255.4	251.5	487.29 µg/L	487.29 ppb	09:47:58
3	B 249.677†	10636.2	10444.7	484.04 µg/L	484.04 ppb	09:47:38
3	Ba 233.527†	17784.4	17807.1	477.32 µg/L	477.32 ppb	09:47:38
3	Be 313.107†	405320.6	400568.7	260.88 µg/L	260.88 ppb	09:47:32
3	Cd 226.502†	16607.1	16658.3	468.49 µg/L	468.49 ppb	09:47:38
3	Co 228.616†	9338.6	9382.4	476.98 µg/L	476.98 ppb	09:47:38
3	Cr 267.716†	20633.8	20700.4	460.58 µg/L	460.58 ppb	09:47:38
3	Cu 324.752†	67797.9	64299.5	460.50 µg/L	460.50 ppb	09:47:38
3	Mn 257.610†	155067.7	154882.1	510.26 µg/L	510.26 ppb	09:47:32
3	Mo 202.031†	4564.9	4556.9	544.32 µg/L	544.32 ppb	09:47:58
3	Ni 231.604†	8287.9	7973.7	460.17 µg/L	460.17 ppb	09:47:38
3	P 214.914†	1359.7	1165.9	2545.7 µg/L	2545.7 ppb	09:47:58
3	Pb 220.353†	2002.7	1946.1	515.09 µg/L	515.09 ppb	09:47:58
3	S 181.975 Axial†	496.4	469.3	2509.9 µg/L	2509.9 ppb	09:47:58
3	Sb 206.836†	509.2	483.6	503.78 µg/L	503.78 ppb	09:47:58
3	Se 196.026†	1812.1	1796.2	2654.3 µg/L	2654.3 ppb	09:47:58
3	SiO2†	50700.9	48525.6	9843.8 µg/L	9843.8 ppb	09:47:38
3	Si 251.611†	56994.0	56477.9	4545.8 µg/L	4545.8 ppb	09:47:38
3	Sn 189.927†	1085.5	1060.1	542.82 µg/L	542.82 ppb	09:47:58
3	Ti 334.940†	215417.1	214016.4	492.33 µg/L	492.33 ppb	09:47:32
3	Tl 190.801†	323.1	342.3	540.67 µg/L	540.67 ppb	09:47:58
3	U 409.014†	5156.4	4440.4	442.02 µg/L	442.02 ppb	09:47:38
3	V 292.402†	38865.9	38847.8	471.19 µg/L	471.19 ppb	09:47:38
3	Zn 213.857†	17222.3	16646.3	466.62 µg/L	466.62 ppb	09:47:38

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2007494.4	99.983	%	0.4442				0.44%
Sc RADIAL	114307.4	102	%	0.3				0.27%
Y 371.029	1216783.3	99.462	%	0.4720				0.47%
Ag 328.068†	26319.9	253.34	µg/L	15.936	253.34	ppb	15.936	6.29%
QC value within limits for Ag 328.068 Recovery = 101.33%								
Al 396.153Radial†	10080.7	5307.1	µg/L	23.99	5307.1	ppb	23.99	0.45%
QC value within limits for Al 396.153Radial Recovery = 106.14%								
As 188.979†	252.2	488.75	µg/L	3.987	488.75	ppb	3.987	0.82%
QC value within limits for As 188.979 Recovery = 97.75%								
B 249.677†	11043.8	511.89	µg/L	34.842	511.89	ppb	34.842	6.81%
QC value within limits for B 249.677 Recovery = 102.38%								
Ba 233.527†	18800.9	503.96	µg/L	33.324	503.96	ppb	33.324	6.61%
QC value within limits for Ba 233.527 Recovery = 100.79%								
Be 313.107†	403445.3	262.76	µg/L	2.366	262.76	ppb	2.366	0.90%
QC value within limits for Be 313.107 Recovery = 105.10%								
Ca 317.933Radial†	12887.8	5199.5	µg/L	24.58	5199.5	ppb	24.58	0.47%
QC value within limits for Ca 317.933Radial Recovery = 103.99%								
Cd 226.502†	17645.9	496.29	µg/L	34.553	496.29	ppb	34.553	6.96%
QC value within limits for Cd 226.502 Recovery = 99.26%								
Co 228.616†	9915.8	504.08	µg/L	33.771	504.08	ppb	33.771	6.70%

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   QC value within limits for Co 228.616  Recovery = 100.82%
Cr 267.716†          21831.3      485.74 µg/L        30.986      485.74 ppb        30.986   6.38%
   QC value within limits for Cr 267.716  Recovery = 97.15%
Cu 324.752†          67833.5      485.76 µg/L        30.648      485.76 ppb        30.648   6.31%
   QC value within limits for Cu 324.752  Recovery = 97.15%
Fe 238.204 Radial†     992.1      5284.5 µg/L         39.72      5284.5 ppb         39.72   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.69%
K 766.490 Radial†     4476.9      2525.6 µg/L         34.13      2525.6 ppb         34.13   1.35%
   QC value within limits for K 766.490 Radial  Recovery = 101.02%
Mg 279.077 IEC†        946.1      5343.4 µg/L         19.26      5343.4 ppb         19.26   0.36%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.87%
Mn 257.610†         155906.2      513.63 µg/L         4.770      513.63 ppb         4.770   0.93%
   QC value within limits for Mn 257.610  Recovery = 102.73%
Mo 202.031†          4555.3      544.13 µg/L         3.830      544.13 ppb         3.830   0.70%
   QC value within limits for Mo 202.031  Recovery = 108.83%
Na 589.592 Radial†   9184.9      2590.6 µg/L         16.35      2590.6 ppb         16.35   0.63%
   QC value within limits for Na 589.592 Radial  Recovery = 103.62%
Ni 231.604†          8421.1      486.00 µg/L        32.403      486.00 ppb        32.403   6.67%
   QC value within limits for Ni 231.604  Recovery = 97.20%
P 214.914†           1173.1      2558.7 µg/L         11.31      2558.7 ppb         11.31   0.44%
   QC value within limits for P 214.914  Recovery = 102.35%
Pb 220.353†          1945.3      514.82 µg/L         1.219      514.82 ppb         1.219   0.24%
   QC value within limits for Pb 220.353  Recovery = 102.96%
S 181.975 Axial†      471.2      2519.8 µg/L         11.77      2519.8 ppb         11.77   0.47%
   QC value within limits for S 181.975 Axial  Recovery = 100.79%
Sb 206.836†           485.9      506.09 µg/L         2.628      506.09 ppb         2.628   0.52%
   QC value within limits for Sb 206.836  Recovery = 101.22%
Se 196.026†          1804.6      2666.6 µg/L         23.22      2666.6 ppb         23.22   0.87%
   QC value within limits for Se 196.026  Recovery = 106.67%
SiO2†               51256.8       10398 µg/L         681.7       10398 ppb         681.7   6.56%
   QC value within limits for SiO2  Recovery = 97.22%
Si 251.611†         59643.7      4803.2 µg/L        312.56      4803.2 ppb        312.56   6.51%
   QC value within limits for Si 251.611  Recovery = 96.06%
Sn 189.927†          1062.1      543.86 µg/L         4.395      543.86 ppb         4.395   0.81%
   QC value within limits for Sn 189.927  Recovery = 108.77%
Sr 421.552†         94246.9      543.91 µg/L         3.730      543.91 ppb         3.730   0.69%
   QC value within limits for Sr 421.552  Recovery = 108.78%
Ti 334.940†        215443.1      495.62 µg/L         4.184      495.62 ppb         4.184   0.84%
   QC value within limits for Ti 334.940  Recovery = 99.12%
Tl 190.801†           339.6      536.33 µg/L         3.765      536.33 ppb         3.765   0.70%
   QC value within limits for Tl 190.801  Recovery = 107.27%
U 409.014†           4737.4      471.63 µg/L        32.447      471.63 ppb        32.447   6.88%
   QC value within limits for U 409.014  Recovery = 94.33%
V 292.402†          41037.1      497.51 µg/L        32.064      497.51 ppb        32.064   6.44%
   QC value within limits for V 292.402  Recovery = 99.50%
Zn 213.857†         17601.8      493.44 µg/L        34.185      493.44 ppb        34.185   6.93%
   QC value within limits for Zn 213.857  Recovery = 98.69%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/14/2009 09:48:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112827.5	112827.5	101	%			09:48:40
1	Al 396.153Radial†	170.8	5.1	2.6478	µg/L	2.6478	ppb	09:48:40
1	Ca 317.933Radial†	433.8	18.0	7.2533	µg/L	7.2533	ppb	09:49:01
1	Fe 238.204 Radial†	11.6	-0.5	-2.6026	µg/L	-2.6026	ppb	09:49:01
1	K 766.490 Radial†	737.0	-15.2	-8.5554	µg/L	-8.5554	ppb	09:48:40
1	Mg 279.077 IEC†	17.4	1.3	7.2632	µg/L	7.2632	ppb	09:49:01
1	Na 589.592 Radial†	-531.1	-125.5	-35.386	µg/L	-35.386	ppb	09:48:40
1	Sr 421.552†	-71.1	20.8	0.1199	µg/L	0.1199	ppb	09:48:40
1	Sc 361.383	2007680.3	2007680.3	99.992	%			09:50:03
1	Y 371.029	1222869.6	1222869.6	99.959	%			09:50:03
1	Ag 328.068†	29.5	45.8	0.4301	µg/L	0.4301	ppb	09:50:09
1	As 188.979†	4.4	1.2	2.3614	µg/L	2.3614	ppb	09:50:29
1	B 249.677†	202.4	40.6	1.8910	µg/L	1.8910	ppb	09:50:09
1	Ba 233.527†	-69.8	2.7	0.0706	µg/L	0.0706	ppb	09:50:29
1	Be 313.107†	3752.1	133.5	0.0870	µg/L	0.0870	ppb	09:50:09
1	Cd 226.502†	-95.0	2.6	0.0713	µg/L	0.0713	ppb	09:50:29
1	Co 228.616†	-70.4	-0.6	-0.0265	µg/L	-0.0265	ppb	09:50:29
1	Cr 267.716†	-131.8	-7.5	-0.1688	µg/L	-0.1688	ppb	09:50:09
1	Cu 324.752†	3259.5	-49.2	-0.3518	µg/L	-0.3518	ppb	09:50:09
1	Mn 257.610†	-214.4	33.4	0.1097	µg/L	0.1097	ppb	09:50:29
1	Mo 202.031†	2.7	7.4	0.8864	µg/L	0.8864	ppb	09:50:29
1	Ni 231.604†	304.7	13.7	0.7918	µg/L	0.7918	ppb	09:50:29
1	P 214.914†	193.1	3.1	7.0654	µg/L	7.0654	ppb	09:50:29
1	Pb 220.353†	52.5	1.5	0.4133	µg/L	0.4133	ppb	09:50:29
1	S 181.975 Axial†	24.0	-1.7	-9.2132	µg/L	-9.2132	ppb	09:50:29
1	Sb 206.836†	20.1	-4.0	-4.2298	µg/L	-4.2298	ppb	09:50:29
1	Se 196.026†	7.9	-2.9	-4.3184	µg/L	-4.3184	ppb	09:50:29
1	SiO2†	2022.8	-10.7	-2.1606	µg/L	-2.1606	ppb	09:50:09
1	Si 251.611†	385.6	28.8	2.2529	µg/L	2.2529	ppb	09:50:29
1	Sn 189.927†	26.2	3.8	1.9388	µg/L	1.9388	ppb	09:50:29
1	Ti 334.940†	866.7	68.2	0.1567	µg/L	0.1567	ppb	09:50:09
1	Tl 190.801†	-15.5	4.5	7.1541	µg/L	7.1541	ppb	09:50:29
1	U 409.014†	674.1	-27.4	-2.7356	µg/L	-2.7356	ppb	09:50:09
1	V 292.402†	-137.4	-46.9	-0.5618	µg/L	-0.5618	ppb	09:50:09
1	Zn 213.857†	531.3	3.5	0.0964	µg/L	0.0964	ppb	09:50:29
2	Sc RADIAL	111831.2	111831.2	99.9	%			09:49:06
2	Al 396.153Radial†	149.7	-14.5	-7.6887	µg/L	-7.6887	ppb	09:49:06
2	Ca 317.933Radial†	408.8	-3.3	-1.3308	µg/L	-1.3308	ppb	09:49:27
2	Fe 238.204 Radial†	8.7	-3.3	-17.476	µg/L	-17.476	ppb	09:49:27
2	K 766.490 Radial†	746.7	1.1	0.5925	µg/L	0.5925	ppb	09:49:06
2	Mg 279.077 IEC†	23.7	7.7	43.308	µg/L	43.308	ppb	09:49:27
2	Na 589.592 Radial†	-479.3	-78.3	-22.071	µg/L	-22.071	ppb	09:49:06
2	Sr 421.552†	-73.9	17.3	0.1000	µg/L	0.1000	ppb	09:49:06
2	Sc 361.383	2016824.5	2016824.5	100.45	%			09:50:35
2	Y 371.029	1227442.3	1227442.3	100.33	%			09:50:35
2	Ag 328.068†	50.5	66.6	0.6317	µg/L	0.6317	ppb	09:50:41
2	As 188.979†	-1.4	-4.5	-8.7854	µg/L	-8.7854	ppb	09:51:01
2	B 249.677†	148.1	-14.3	-0.6592	µg/L	-0.6592	ppb	09:50:41
2	Ba 233.527†	-65.8	6.9	0.1848	µg/L	0.1848	ppb	09:51:01
2	Be 313.107†	3741.9	106.4	0.0694	µg/L	0.0694	ppb	09:50:41
2	Cd 226.502†	-79.8	18.1	0.5105	µg/L	0.5105	ppb	09:51:01
2	Co 228.616†	-63.8	6.3	0.3223	µg/L	0.3223	ppb	09:51:01
2	Cr 267.716†	-135.8	-10.9	-0.2423	µg/L	-0.2423	ppb	09:50:41
2	Cu 324.752†	3278.8	-44.8	-0.3237	µg/L	-0.3237	ppb	09:50:41
2	Mn 257.610†	-198.7	50.0	0.1623	µg/L	0.1623	ppb	09:51:01
2	Mo 202.031†	2.0	6.8	0.8074	µg/L	0.8074	ppb	09:51:01
2	Ni 231.604†	309.2	16.8	0.9711	µg/L	0.9711	ppb	09:51:01
2	P 214.914†	187.8	-3.1	-6.7341	µg/L	-6.7341	ppb	09:51:01
2	Pb 220.353†	52.0	0.8	0.2156	µg/L	0.2156	ppb	09:51:01

2	S 181.975 Axial†	23.9	-1.9	-10.262 µg/L	-10.262 ppb	09:51:01
2	Sb 206.836†	21.7	-2.6	-2.6723 µg/L	-2.6723 ppb	09:51:01
2	Se 196.026†	9.8	-1.0	-1.5735 µg/L	-1.5735 ppb	09:51:01
2	SiO2†	2033.4	-9.2	-1.8760 µg/L	-1.8760 ppb	09:50:41
2	Si 251.611†	384.8	26.2	2.0802 µg/L	2.0802 ppb	09:51:01
2	Sn 189.927†	24.7	2.2	1.1237 µg/L	1.1237 ppb	09:51:01
2	Ti 334.940†	770.2	-31.7	-0.0730 µg/L	-0.0730 ppb	09:50:41
2	Tl 190.801†	-20.2	-0.1	-0.0898 µg/L	-0.0898 ppb	09:51:01
2	U 409.014†	696.3	-8.4	-0.8325 µg/L	-0.8325 ppb	09:50:41
2	V 292.402†	-67.1	23.8	0.2880 µg/L	0.2880 ppb	09:50:41
2	Zn 213.857†	528.9	-1.2	-0.0392 µg/L	-0.0392 ppb	09:51:01
3	Sc RADIAL	113675.2	113675.2	102 %		09:49:32
3	Al 396.153Radial†	184.3	17.1	9.0554 µg/L	9.0554 ppb	09:49:32
3	Ca 317.933Radial†	423.2	4.3	1.7306 µg/L	1.7306 ppb	09:49:53
3	Fe 238.204 Radial†	6.5	-5.6	-29.583 µg/L	-29.583 ppb	09:49:53
3	K 766.490 Radial†	707.8	-49.4	-27.854 µg/L	-27.854 ppb	09:49:32
3	Mg 279.077 IEC†	14.6	-1.7	-9.3890 µg/L	-9.3890 ppb	09:49:53
3	Na 589.592 Radial†	-505.5	-96.4	-27.179 µg/L	-27.179 ppb	09:49:32
3	Sr 421.552†	-35.6	56.2	0.3245 µg/L	0.3245 ppb	09:49:32
3	Sc 361.383	2009779.9	2009779.9	100.10 %		09:51:07
3	Y 371.029	1223681.0	1223681.0	100.03 %		09:51:07
3	Ag 328.068†	69.1	85.3	0.8041 µg/L	0.8041 ppb	09:51:13
3	As 188.979†	4.8	1.7	3.2341 µg/L	3.2341 ppb	09:51:33
3	B 249.677†	191.6	29.6	1.3875 µg/L	1.3875 ppb	09:51:13
3	Ba 233.527†	-70.4	2.1	0.0544 µg/L	0.0544 ppb	09:51:33
3	Be 313.107†	3745.1	122.7	0.0799 µg/L	0.0799 ppb	09:51:13
3	Cd 226.502†	-85.6	12.1	0.3444 µg/L	0.3444 ppb	09:51:33
3	Co 228.616†	-69.7	0.2	0.0087 µg/L	0.0087 ppb	09:51:33
3	Cr 267.716†	-135.1	-10.7	-0.2383 µg/L	-0.2383 ppb	09:51:13
3	Cu 324.752†	3281.0	-31.1	-0.2286 µg/L	-0.2286 ppb	09:51:13
3	Mn 257.610†	-208.9	39.1	0.1250 µg/L	0.1250 ppb	09:51:33
3	Mo 202.031†	-10.4	-5.7	-0.6762 µg/L	-0.6762 ppb	09:51:33
3	Ni 231.604†	307.3	15.9	0.9193 µg/L	0.9193 ppb	09:51:33
3	P 214.914†	190.3	0.1	0.4058 µg/L	0.4058 ppb	09:51:33
3	Pb 220.353†	60.4	9.4	2.4672 µg/L	2.4672 ppb	09:51:33
3	S 181.975 Axial†	22.7	-3.0	-16.196 µg/L	-16.196 ppb	09:51:33
3	Sb 206.836†	24.1	-0.1	-0.0889 µg/L	-0.0889 ppb	09:51:33
3	Se 196.026†	12.2	1.4	2.0630 µg/L	2.0630 ppb	09:51:33
3	SiO2†	2030.3	-5.3	-1.0727 µg/L	-1.0727 ppb	09:51:13
3	Si 251.611†	373.3	16.2	1.3025 µg/L	1.3025 ppb	09:51:33
3	Sn 189.927†	23.8	1.4	0.6883 µg/L	0.6883 ppb	09:51:33
3	Ti 334.940†	890.2	90.8	0.2089 µg/L	0.2089 ppb	09:51:13
3	Tl 190.801†	-22.0	-1.9	-3.0047 µg/L	-3.0047 ppb	09:51:33
3	U 409.014†	732.6	30.3	3.0253 µg/L	3.0253 ppb	09:51:13
3	V 292.402†	-120.2	-29.6	-0.3577 µg/L	-0.3577 ppb	09:51:13
3	Zn 213.857†	528.1	-0.2	-0.0077 µg/L	-0.0077 ppb	09:51:33

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2011428.2	100.18	%	0.239				0.24%
Sc RADIAL	112778.0	101	%	0.8				0.82%
Y 371.029	1224664.3	100.11	%	0.199				0.20%
Ag 328.068†	65.9	0.6220	µg/L	0.18722	0.6220	ppb	0.18722	30.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.6	1.3382	µg/L	8.44854	1.3382	ppb	8.44854	631.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-1.0633	µg/L	6.70173	-1.0633	ppb	6.70173	630.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	18.7	0.8731	µg/L	1.35067	0.8731	ppb	1.35067	154.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.9	0.1033	µg/L	0.07108	0.1033	ppb	0.07108	68.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.9	0.0787	µg/L	0.00886	0.0787	ppb	0.00886	11.25%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	2.5510	µg/L	4.35044	2.5510	ppb	4.35044	170.54%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.9	0.3087	µg/L	0.22172	0.3087	ppb	0.22172	71.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.0	0.1015	µg/L	0.19201	0.1015	ppb	0.19201	189.21%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -9.7     -0.2165 µg/L       0.04135     -0.2165 ppb        0.04135  19.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -41.7     -0.3014 µg/L       0.06457     -0.3014 ppb        0.06457  21.43%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -3.1     -16.554 µg/L       13.5140     -16.554 ppb        13.5140  81.64%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -21.2     -11.939 µg/L       14.5219     -11.939 ppb        14.5219 121.63%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           2.4      13.727 µg/L       26.9367      13.727 ppb        26.9367 196.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              40.8      0.1323 µg/L       0.02705      0.1323 ppb        0.02705  20.45%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.8      0.3392 µg/L       0.88027      0.3392 ppb        0.88027 259.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -100.0     -28.212 µg/L        6.7172     -28.212 ppb         6.7172  23.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              15.5      0.8940 µg/L       0.09227      0.8940 ppb        0.09227  10.32%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                0.1      0.2457 µg/L       6.90113      0.2457 ppb        6.90113 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               3.9      1.0321 µg/L       1.24680      1.0321 ppb        1.24680 120.81%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.2     -11.891 µg/L        3.7653     -11.891 ppb         3.7653  31.67%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.2     -2.3303 µg/L       2.09152     -2.3303 ppb        2.09152  89.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.9     -1.2763 µg/L       3.20106     -1.2763 ppb        3.20106 250.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -8.4     -1.7031 µg/L       0.56417     -1.7031 ppb        0.56417  33.13%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              23.7      1.8785 µg/L       0.50628      1.8785 ppb        0.50628  26.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.5      1.2502 µg/L       0.63477      1.2502 ppb        0.63477  50.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              31.4      0.1815 µg/L       0.12427      0.1815 ppb        0.12427  68.48%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              42.4      0.0975 µg/L       0.14994      0.0975 ppb        0.14994 153.74%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.9      1.3532 µg/L       5.23089      1.3532 ppb        5.23089 386.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -1.8     -0.1810 µg/L       2.93522     -0.1810 ppb        2.93522 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -17.6     -0.2105 µg/L       0.44359     -0.2105 ppb        0.44359 210.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               0.7      0.0165 µg/L       0.07095      0.0165 ppb        0.07095 429.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/14/2009 09:51:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111486.8	111486.8	99.6	%			09:52:15
1	Al 396.153Radial†	599.4	437.6	230.90	µg/L	230.90	ppb	09:52:15
1	Ca 317.933Radial†	919.7	511.2	206.25	µg/L	206.25	ppb	09:52:36
1	Fe 238.204 Radial†	28.0	16.1	85.843	µg/L	85.843	ppb	09:52:36
1	K 766.490 Radial†	1025.5	283.4	159.85	µg/L	159.85	ppb	09:52:15
1	Mg 279.077 IEC†	71.4	55.7	314.52	µg/L	314.52	ppb	09:52:36
1	Na 589.592 Radial†	591.7	995.9	280.90	µg/L	280.90	ppb	09:52:15
1	Sr 421.552†	801.6	896.4	5.1735	µg/L	5.1735	ppb	09:52:15
1	Sc 361.383	2008736.7	2008736.7	100.04	%			09:53:38
1	Y 371.029	1223315.6	1223315.6	99.996	%			09:53:38
1	Ag 328.068†	640.7	656.7	6.2665	µg/L	6.2665	ppb	09:53:43
1	As 188.979†	17.2	14.0	27.151	µg/L	27.151	ppb	09:54:04
1	B 249.677†	1240.2	1077.9	50.095	µg/L	50.095	ppb	09:53:43
1	Ba 233.527†	113.6	186.0	4.9848	µg/L	4.9848	ppb	09:54:04
1	Be 313.107†	11049.1	7425.4	4.8375	µg/L	4.8375	ppb	09:53:43
1	Cd 226.502†	86.5	184.1	5.2076	µg/L	5.2076	ppb	09:54:04
1	Co 228.616†	32.7	102.5	5.2187	µg/L	5.2187	ppb	09:54:04
1	Cr 267.716†	99.5	223.7	4.9768	µg/L	4.9768	ppb	09:53:43
1	Cu 324.752†	4605.0	1294.0	9.2634	µg/L	9.2634	ppb	09:53:43
1	Mn 257.610†	2778.1	3024.6	9.9626	µg/L	9.9626	ppb	09:53:43
1	Mo 202.031†	76.6	81.3	9.7157	µg/L	9.7157	ppb	09:54:04
1	Ni 231.604†	389.9	98.7	5.6944	µg/L	5.6944	ppb	09:54:04
1	P 214.914†	262.5	72.4	160.07	µg/L	160.07	ppb	09:54:04
1	Pb 220.353†	92.1	41.0	10.833	µg/L	10.833	ppb	09:54:04
1	S 181.975 Axial†	47.1	21.4	114.63	µg/L	114.63	ppb	09:54:04
1	Sb 206.836†	26.9	2.8	2.8637	µg/L	2.8637	ppb	09:54:04
1	Se 196.026†	29.5	18.7	27.510	µg/L	27.510	ppb	09:54:04
1	SiO2†	3112.7	1077.7	218.61	µg/L	218.61	ppb	09:53:43
1	Si 251.611†	1624.2	1266.6	102.29	µg/L	102.29	ppb	09:54:04
1	Sn 189.927†	40.0	17.6	9.0750	µg/L	9.0750	ppb	09:54:04
1	Ti 334.940†	2954.0	2154.1	4.9468	µg/L	4.9468	ppb	09:53:43
1	Tl 190.801†	-5.1	15.0	23.672	µg/L	23.672	ppb	09:54:04
1	U 409.014†	1205.7	503.6	50.215	µg/L	50.215	ppb	09:53:43
1	V 292.402†	312.4	402.7	4.9896	µg/L	4.9896	ppb	09:53:43
1	Zn 213.857†	893.4	365.2	10.258	µg/L	10.258	ppb	09:54:04
2	Sc RADIAL	112464.9	112464.9	100	%			09:52:41
2	Al 396.153Radial†	566.1	399.2	210.59	µg/L	210.59	ppb	09:52:41
2	Ca 317.933Radial†	922.0	505.4	203.91	µg/L	203.91	ppb	09:53:02
2	Fe 238.204 Radial†	28.8	16.7	88.678	µg/L	88.678	ppb	09:53:02
2	K 766.490 Radial†	1058.2	307.0	173.18	µg/L	173.18	ppb	09:52:41
2	Mg 279.077 IEC†	69.6	53.3	300.77	µg/L	300.77	ppb	09:53:02
2	Na 589.592 Radial†	622.1	1021.1	287.99	µg/L	287.99	ppb	09:52:41
2	Sr 421.552†	810.5	898.3	5.1844	µg/L	5.1844	ppb	09:52:41
2	Sc 361.383	2002532.7	2002532.7	99.736	%			09:54:10
2	Y 371.029	1219424.4	1219424.4	99.678	%			09:54:10
2	Ag 328.068†	572.3	590.0	5.6360	µg/L	5.6360	ppb	09:54:16
2	As 188.979†	17.2	14.1	27.410	µg/L	27.410	ppb	09:54:36
2	B 249.677†	1271.5	1113.1	51.732	µg/L	51.732	ppb	09:54:16
2	Ba 233.527†	117.1	189.8	5.0889	µg/L	5.0889	ppb	09:54:36
2	Be 313.107†	11489.0	7900.6	5.1472	µg/L	5.1472	ppb	09:54:16
2	Cd 226.502†	89.8	187.6	5.3096	µg/L	5.3096	ppb	09:54:36
2	Co 228.616†	36.9	106.8	5.4394	µg/L	5.4394	ppb	09:54:36
2	Cr 267.716†	95.7	220.2	4.8996	µg/L	4.8996	ppb	09:54:16
2	Cu 324.752†	4746.6	1450.3	10.380	µg/L	10.380	ppb	09:54:16
2	Mn 257.610†	2948.0	3203.7	10.552	µg/L	10.552	ppb	09:54:16
2	Mo 202.031†	80.8	85.8	10.250	µg/L	10.250	ppb	09:54:36
2	Ni 231.604†	394.8	104.8	6.0490	µg/L	6.0490	ppb	09:54:36
2	P 214.914†	259.9	70.6	155.92	µg/L	155.92	ppb	09:54:36
2	Pb 220.353†	91.5	40.8	10.766	µg/L	10.766	ppb	09:54:36

2	S 181.975 Axial†	44.7	19.2	102.56 µg/L	102.56 ppb	09:54:36
2	Sb 206.836†	29.4	5.3	5.5299 µg/L	5.5299 ppb	09:54:36
2	Se 196.026†	23.9	13.2	19.409 µg/L	19.409 ppb	09:54:36
2	SiO2†	3171.0	1145.8	232.43 µg/L	232.43 ppb	09:54:16
2	Si 251.611†	1611.6	1259.1	101.65 µg/L	101.65 ppb	09:54:36
2	Sn 189.927†	40.1	17.8	9.1795 µg/L	9.1795 ppb	09:54:36
2	Ti 334.940†	3034.5	2244.0	5.1539 µg/L	5.1539 ppb	09:54:16
2	Tl 190.801†	-4.8	15.3	24.087 µg/L	24.087 ppb	09:54:36
2	U 409.014†	1231.6	533.3	53.174 µg/L	53.174 ppb	09:54:16
2	V 292.402†	330.6	422.0	5.2291 µg/L	5.2291 ppb	09:54:16
2	Zn 213.857†	891.0	365.6	10.266 µg/L	10.266 ppb	09:54:36
3	Sc RADIAL	111864.6	111864.6	99.9 %		09:53:07
3	Al 396.153Radial†	546.3	382.5	201.74 µg/L	201.74 ppb	09:53:07
3	Ca 317.933Radial†	922.9	511.3	206.26 µg/L	206.26 ppb	09:53:28
3	Fe 238.204 Radial†	27.5	15.6	83.017 µg/L	83.017 ppb	09:53:28
3	K 766.490 Radial†	1044.4	298.8	168.59 µg/L	168.59 ppb	09:53:07
3	Mg 279.077 IEC†	71.1	55.1	311.19 µg/L	311.19 ppb	09:53:28
3	Na 589.592 Radial†	627.2	1029.5	290.38 µg/L	290.38 ppb	09:53:07
3	Sr 421.552†	818.8	911.0	5.2574 µg/L	5.2574 ppb	09:53:07
3	Sc 361.383	2029392.3	2029392.3	101.07 %		09:54:42
3	Y 371.029	1235996.0	1235996.0	101.03 %		09:54:42
3	Ag 328.068†	606.9	616.7	5.8885 µg/L	5.8885 ppb	09:54:48
3	As 188.979†	15.9	12.6	24.359 µg/L	24.359 ppb	09:55:08
3	B 249.677†	1258.3	1083.2	50.344 µg/L	50.344 ppb	09:54:48
3	Ba 233.527†	123.6	194.8	5.2204 µg/L	5.2204 ppb	09:55:08
3	Be 313.107†	11368.5	7628.9	4.9702 µg/L	4.9702 ppb	09:54:48
3	Cd 226.502†	83.0	179.7	5.0838 µg/L	5.0838 ppb	09:55:08
3	Co 228.616†	35.3	104.8	5.3376 µg/L	5.3376 ppb	09:55:08
3	Cr 267.716†	131.0	253.8	5.6458 µg/L	5.6458 ppb	09:54:48
3	Cu 324.752†	4649.0	1290.7	9.2387 µg/L	9.2387 ppb	09:54:48
3	Mn 257.610†	2949.7	3166.2	10.428 µg/L	10.428 ppb	09:54:48
3	Mo 202.031†	85.4	89.2	10.656 µg/L	10.656 ppb	09:55:08
3	Ni 231.604†	378.3	83.3	4.8069 µg/L	4.8069 ppb	09:55:08
3	P 214.914†	256.0	63.3	139.87 µg/L	139.87 ppb	09:55:08
3	Pb 220.353†	98.7	46.7	12.319 µg/L	12.319 ppb	09:55:08
3	S 181.975 Axial†	45.6	19.4	103.73 µg/L	103.73 ppb	09:55:08
3	Sb 206.836†	29.6	5.1	5.3356 µg/L	5.3356 ppb	09:55:08
3	Se 196.026†	29.2	18.1	26.645 µg/L	26.645 ppb	09:55:08
3	SiO2†	3091.9	1025.4	208.01 µg/L	208.01 ppb	09:54:48
3	Si 251.611†	1618.0	1244.0	100.42 µg/L	100.42 ppb	09:55:08
3	Sn 189.927†	41.4	18.6	9.5783 µg/L	9.5783 ppb	09:55:08
3	Ti 334.940†	2963.3	2133.3	4.8989 µg/L	4.8989 ppb	09:54:48
3	Tl 190.801†	-12.4	7.9	12.389 µg/L	12.389 ppb	09:55:08
3	U 409.014†	1219.8	505.2	50.380 µg/L	50.380 ppb	09:54:48
3	V 292.402†	337.6	424.5	5.2576 µg/L	5.2576 ppb	09:54:48
3	Zn 213.857†	911.2	373.7	10.503 µg/L	10.503 ppb	09:55:08

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2013553.9	100.28	%	0.700				0.70%
Sc RADIAL	111938.8	100.0	%	0.44				0.44%
Y 371.029	1226245.3	100.24	%	0.708				0.71%
Ag 328.068†	621.2	5.9303	µg/L	0.31731	5.9303	ppb	0.31731	5.35%
QC value within limits for Ag 328.068 Recovery = 118.61%								
Al 396.153Radial†	406.4	214.41	µg/L	14.952	214.41	ppb	14.952	6.97%
QC value within limits for Al 396.153Radial Recovery = 107.20%								
As 188.979†	13.6	26.307	µg/L	1.6920	26.307	ppb	1.6920	6.43%
QC value within limits for As 188.979 Recovery = 87.69%								
B 249.677†	1091.4	50.724	µg/L	0.8822	50.724	ppb	0.8822	1.74%
QC value within limits for B 249.677 Recovery = 101.45%								
Ba 233.527†	190.2	5.0981	µg/L	0.11807	5.0981	ppb	0.11807	2.32%
QC value within limits for Ba 233.527 Recovery = 101.96%								
Be 313.107†	7651.6	4.9850	µg/L	0.15534	4.9850	ppb	0.15534	3.12%
QC value within limits for Be 313.107 Recovery = 99.70%								
Ca 317.933Radial†	509.3	205.47	µg/L	1.357	205.47	ppb	1.357	0.66%
QC value within limits for Ca 317.933Radial Recovery = 102.74%								
Cd 226.502†	183.8	5.2003	µg/L	0.11307	5.2003	ppb	0.11307	2.17%
QC value within limits for Cd 226.502 Recovery = 104.01%								
Co 228.616†	104.7	5.3319	µg/L	0.11045	5.3319	ppb	0.11045	2.07%

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   QC value within limits for Co 228.616  Recovery = 106.64%
Cr 267.716†              232.6      5.1741 µg/L       0.41034      5.1741 ppb        0.41034   7.93%
   QC value within limits for Cr 267.716  Recovery = 103.48%
Cu 324.752†             1345.0      9.6275 µg/L       0.65207      9.6275 ppb        0.65207   6.77%
   QC value within limits for Cu 324.752  Recovery = 96.27%
Fe 238.204 Radial†        16.1      85.846 µg/L        2.8308      85.846 ppb         2.8308   3.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 85.85%
K 766.490 Radial†        296.4      167.21 µg/L         6.772      167.21 ppb          6.772   4.05%
   QC value within limits for K 766.490 Radial  Recovery = 111.47%
Mg 279.077 IEC†           54.7      308.83 µg/L         7.177      308.83 ppb          7.177   2.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.94%
Mn 257.610†             3131.5      10.314 µg/L        0.3108      10.314 ppb         0.3108   3.01%
   QC value within limits for Mn 257.610  Recovery = 103.14%
Mo 202.031†               85.5      10.207 µg/L        0.4716      10.207 ppb         0.4716   4.62%
   QC value within limits for Mo 202.031  Recovery = 102.07%
Na 589.592 Radial†      1015.5      286.42 µg/L         4.930      286.42 ppb          4.930   1.72%
   QC value within limits for Na 589.592 Radial  Recovery = 95.47%
Ni 231.604†               95.6      5.5168 µg/L       0.63981      5.5168 ppb        0.63981  11.60%
   QC value within limits for Ni 231.604  Recovery = 110.34%
P 214.914†                68.7      151.95 µg/L        10.668      151.95 ppb         10.668   7.02%
   QC value within limits for P 214.914  Recovery = 101.30%
Pb 220.353†               42.8      11.306 µg/L        0.8781      11.306 ppb         0.8781   7.77%
   QC value within limits for Pb 220.353  Recovery = 113.06%
S 181.975 Axial†          20.0      106.97 µg/L         6.659      106.97 ppb          6.659   6.22%
   QC value within limits for S 181.975 Axial  Recovery = 106.97%
Sb 206.836†                4.4      4.5764 µg/L       1.48643      4.5764 ppb        1.48643  32.48%
   QC value less than the lower limit for Sb 206.836  Recovery = 45.76%
Se 196.026†               16.6      24.521 µg/L        4.4486      24.521 ppb         4.4486  18.14%
   QC value within limits for Se 196.026  Recovery = 81.74%
SiO2†                   1083.0      219.69 µg/L        12.246      219.69 ppb         12.246   5.57%
   QC value within limits for SiO2  Recovery = 103.14%
Si 251.611†             1256.6      101.45 µg/L         0.955      101.45 ppb          0.955   0.94%
   QC value within limits for Si 251.611  Recovery = 101.45%
Sn 189.927†               18.0      9.2776 µg/L       0.26565      9.2776 ppb        0.26565   2.86%
   QC value within limits for Sn 189.927  Recovery = 92.78%
Sr 421.552†              901.9      5.2051 µg/L       0.04562      5.2051 ppb        0.04562   0.88%
   QC value within limits for Sr 421.552  Recovery = 104.10%
Ti 334.940†             2177.2      4.9999 µg/L       0.13553      4.9999 ppb        0.13553   2.71%
   QC value within limits for Ti 334.940  Recovery = 100.00%
Tl 190.801†               12.7      20.049 µg/L        6.6372      20.049 ppb         6.6372  33.10%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†               514.0      51.257 µg/L        1.6629      51.257 ppb         1.6629   3.24%
   QC value within limits for U 409.014  Recovery = 102.51%
V 292.402†               416.4      5.1588 µg/L       0.14719      5.1588 ppb        0.14719   2.85%
   QC value within limits for V 292.402  Recovery = 103.18%
Zn 213.857†              368.1      10.342 µg/L        0.1390      10.342 ppb         0.1390   1.34%
   QC value within limits for Zn 213.857  Recovery = 103.42%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/14/2009 09:55:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107749.6	107749.6	96.2	%			09:55:59
1	Al 396.153Radial†	951514.8	988708.4	522540	µg/L	522540	ppb	09:55:54
1	Ca 317.933Radial†	1199950.4	1246649.8	502950	µg/L	502950	ppb	09:55:54
1	Fe 238.204 Radial†	35150.4	36518.5	193900	µg/L	193900	ppb	09:55:59
1	K 766.490 Radial†	763.0	46.3	26.115	µg/L	26.115	ppb	09:55:59
1	Mg 279.077 IEC†	84894.9	88212.0	497380	µg/L	497380	ppb	09:55:59
1	Na 589.592 Radial†	-471.5	-88.4	-24.935	µg/L	-24.935	ppb	09:55:59
1	Sr 421.552†	508.9	620.2	3.5790	µg/L	3.5790	ppb	09:55:59
1	Sc 361.383	1828500.5	1828500.5	91.068	%			09:56:33
1	Y 371.029	1097993.9	1097993.9	89.752	%			09:56:33
1	Ag 328.068†	-1787.4	-1946.4	-3.2667	µg/L	-3.2667	ppb	09:56:33
1	As 188.979†	39.6	40.4	-26.102	µg/L	-26.102	ppb	09:56:54
1	B 249.677†	1798.9	1813.6	23.363	µg/L	23.363	ppb	09:56:33
1	Ba 233.527†	124.7	209.4	5.5671	µg/L	5.5671	ppb	09:56:54
1	Be 313.107†	2707.3	-646.0	-0.4304	µg/L	-0.4304	ppb	09:56:33
1	Cd 226.502†	488.5	634.0	2.8159	µg/L	2.8159	ppb	09:56:54
1	Co 228.616†	-92.4	-31.7	-1.6957	µg/L	-1.6957	ppb	09:56:54
1	Cr 267.716†	-233.5	-132.2	-2.9723	µg/L	-2.9723	ppb	09:56:54
1	Cu 324.752†	-1091.0	-4506.9	9.4504	µg/L	9.4504	ppb	09:56:33
1	Mn 257.610†	-2119.7	-2079.8	17.530	µg/L	17.530	ppb	09:56:33
1	Mo 202.031†	-111.5	-117.7	-6.4343	µg/L	-6.4343	ppb	09:56:54
1	Ni 231.604†	263.1	-2.2	-0.1241	µg/L	-0.1241	ppb	09:56:54
1	P 214.914†	202.2	32.0	34.850	µg/L	34.850	ppb	09:56:54
1	Pb 220.353†	-54.6	-110.9	13.788	µg/L	13.788	ppb	09:56:54
1	S 181.975 Axial†	58.5	38.6	106.74	µg/L	106.74	ppb	09:56:54
1	Sb 206.836†	59.7	41.4	-3.8424	µg/L	-3.8424	ppb	09:56:54
1	Se 196.026†	27.4	19.3	29.607	µg/L	29.607	ppb	09:56:54
1	SiO2†	1797.0	-60.4	-12.250	µg/L	-12.250	ppb	09:56:54
1	Si 251.611†	444.4	131.1	19.093	µg/L	19.093	ppb	09:56:54
1	Sn 189.927†	-401.9	-463.7	-2.3477	µg/L	-2.3477	ppb	09:56:54
1	Ti 334.940†	10814.0	11076.1	-2.7861	µg/L	-2.7861	ppb	09:56:33
1	Tl 190.801†	22.5	44.8	3.2165	µg/L	3.2165	ppb	09:56:54
1	U 409.014†	970.5	364.1	12.027	µg/L	12.027	ppb	09:56:33
1	V 292.402†	-1306.8	-1344.5	-0.3577	µg/L	-0.3577	ppb	09:56:33
1	Zn 213.857†	1681.2	1318.3	3.0803	µg/L	3.0803	ppb	09:56:54
2	Sc RADIAL	109100.0	109100.0	97.4	%			09:56:11
2	Al 396.153Radial†	957494.0	982605.2	519320	µg/L	519320	ppb	09:56:05
2	Ca 317.933Radial†	1209166.1	1240672.7	500540	µg/L	500540	ppb	09:56:05
2	Fe 238.204 Radial†	35390.4	36312.7	192810	µg/L	192810	ppb	09:56:11
2	K 766.490 Radial†	744.5	17.5	9.8698	µg/L	9.8698	ppb	09:56:11
2	Mg 279.077 IEC†	85442.1	87681.5	494390	µg/L	494390	ppb	09:56:11
2	Na 589.592 Radial†	-421.3	-30.7	-8.6672	µg/L	-8.6672	ppb	09:56:11
2	Sr 421.552†	529.8	635.1	3.6652	µg/L	3.6652	ppb	09:56:11
2	Sc 361.383	1844902.6	1844902.6	91.885	%			09:57:01
2	Y 371.029	1108308.6	1108308.6	90.595	%			09:57:01
2	Ag 328.068†	-1816.3	-1960.4	-3.4856	µg/L	-3.4856	ppb	09:57:01
2	As 188.979†	34.3	34.2	-37.606	µg/L	-37.606	ppb	09:57:22
2	B 249.677†	1892.8	1898.2	27.640	µg/L	27.640	ppb	09:57:01
2	Ba 233.527†	120.0	203.1	5.3984	µg/L	5.3984	ppb	09:57:22
2	Be 313.107†	2712.6	-666.7	-0.4440	µg/L	-0.4440	ppb	09:57:01
2	Cd 226.502†	458.9	597.1	1.8622	µg/L	1.8622	ppb	09:57:22
2	Co 228.616†	-96.7	-35.4	-1.8855	µg/L	-1.8855	ppb	09:57:22
2	Cr 267.716†	-240.6	-137.6	-3.0915	µg/L	-3.0915	ppb	09:57:22
2	Cu 324.752†	-1168.1	-4580.2	8.6923	µg/L	8.6923	ppb	09:57:01
2	Mn 257.610†	-2145.8	-2087.5	17.367	µg/L	17.367	ppb	09:57:01
2	Mo 202.031†	-111.5	-116.6	-6.3424	µg/L	-6.3424	ppb	09:57:22
2	Ni 231.604†	272.4	5.4	0.3134	µg/L	0.3134	ppb	09:57:22
2	P 214.914†	196.5	23.9	17.004	µg/L	17.004	ppb	09:57:22
2	Pb 220.353†	-52.2	-107.8	14.341	µg/L	14.341	ppb	09:57:22

2	S 181.975 Axial†	58.9	38.5	106.64 µg/L	106.64 ppb	09:57:22
2	Sb 206.836†	66.2	47.9	3.2300 µg/L	3.2300 ppb	09:57:22
2	Se 196.026†	15.4	6.0	10.089 µg/L	10.089 ppb	09:57:22
2	SiO2†	1781.9	-94.3	-19.133 µg/L	-19.133 ppb	09:57:22
2	Si 251.611†	452.5	135.7	19.287 µg/L	19.287 ppb	09:57:22
2	Sn 189.927†	-397.2	-454.7	0.9797 µg/L	0.9797 ppb	09:57:22
2	Ti 334.940†	10966.6	11136.5	-2.5113 µg/L	-2.5113 ppb	09:57:01
2	Tl 190.801†	16.4	37.9	-7.3010 µg/L	-7.3010 ppb	09:57:22
2	U 409.014†	972.6	356.9	11.454 µg/L	11.454 ppb	09:57:01
2	V 292.402†	-1321.7	-1348.0	-0.4886 µg/L	-0.4886 ppb	09:57:01
2	Zn 213.857†	1670.2	1289.9	2.4755 µg/L	2.4755 ppb	09:57:22
3	Sc RADIAL	109206.8	109206.8	97.5 %		09:56:22
3	Al 396.153Radial†	949895.1	973852.8	514690 µg/L	514690 ppb	09:56:17
3	Ca 317.933Radial†	1197102.9	1227090.1	495060 µg/L	495060 ppb	09:56:17
3	Fe 238.204 Radial†	34977.8	35854.0	190370 µg/L	190370 ppb	09:56:22
3	K 766.490 Radial†	704.1	-24.7	-13.912 µg/L	-13.912 ppb	09:56:22
3	Mg 279.077 IEC†	84516.2	86646.4	488560 µg/L	488560 ppb	09:56:22
3	Na 589.592 Radial†	-459.9	-69.9	-19.728 µg/L	-19.728 ppb	09:56:22
3	Sr 421.552†	547.1	652.3	3.7644 µg/L	3.7644 ppb	09:56:22
3	Sc 361.383	1875439.1	1875439.1	93.406 %		09:57:28
3	Y 371.029	1126491.1	1126491.1	92.081 %		09:57:28
3	Ag 328.068†	-1755.8	-1863.4	-2.7599 µg/L	-2.7599 ppb	09:57:28
3	As 188.979†	34.0	33.3	-38.167 µg/L	-38.167 ppb	09:57:49
3	B 249.677†	1789.3	1753.9	21.695 µg/L	21.695 ppb	09:57:28
3	Ba 233.527†	116.9	197.6	5.2508 µg/L	5.2508 ppb	09:57:49
3	Be 313.107†	2687.1	-742.0	-0.4930 µg/L	-0.4930 ppb	09:57:28
3	Cd 226.502†	471.6	602.5	2.1917 µg/L	2.1917 ppb	09:57:49
3	Co 228.616†	-81.0	-16.9	-0.9448 µg/L	-0.9448 ppb	09:57:49
3	Cr 267.716†	-245.9	-139.0	-3.1238 µg/L	-3.1238 ppb	09:57:49
3	Cu 324.752†	-1142.6	-4532.2	8.5119 µg/L	8.5119 ppb	09:57:28
3	Mn 257.610†	-2117.2	-2018.8	17.287 µg/L	17.287 ppb	09:57:28
3	Mo 202.031†	-113.6	-116.9	-6.4732 µg/L	-6.4732 ppb	09:57:49
3	Ni 231.604†	267.8	-4.3	-0.2499 µg/L	-0.2499 ppb	09:57:49
3	P 214.914†	192.1	15.6	-0.0920 µg/L	-0.0920 ppb	09:57:49
3	Pb 220.353†	-71.9	-128.0	8.6429 µg/L	8.6429 ppb	09:57:49
3	S 181.975 Axial†	61.5	40.2	117.16 µg/L	117.16 ppb	09:57:49
3	Sb 206.836†	56.7	36.6	-8.1469 µg/L	-8.1469 ppb	09:57:49
3	Se 196.026†	13.0	3.1	5.8342 µg/L	5.8342 ppb	09:57:49
3	SiO2†	1768.2	-140.5	-28.511 µg/L	-28.511 ppb	09:57:49
3	Si 251.611†	465.0	141.1	19.566 µg/L	19.566 ppb	09:57:49
3	Sn 189.927†	-395.6	-446.0	2.7609 µg/L	2.7609 ppb	09:57:49
3	Ti 334.940†	11076.7	11060.1	-2.3790 µg/L	-2.3790 ppb	09:57:28
3	Tl 190.801†	19.7	41.2	-1.3970 µg/L	-1.3970 ppb	09:57:49
3	U 409.014†	848.0	206.3	-3.2413 µg/L	-3.2413 ppb	09:57:28
3	V 292.402†	-1360.7	-1366.2	-0.9312 µg/L	-0.9312 ppb	09:57:28
3	Zn 213.857†	1671.6	1261.8	2.1021 µg/L	2.1021 ppb	09:57:49

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1849614.1	92.120	%	1.1864				1.29%
Sc RADIAL	108685.5	97.1	%	0.73				0.75%
Y 371.029	1110931.2	90.809	%	1.1794				1.30%
Ag 328.068†	-1923.4	-3.1708	µg/L	0.37224	-3.1708	ppb	0.37224	11.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	981722.1	518850	µg/L	3946.4	518850	ppb	3946.4	0.76%
QC value within limits for Al 396.153Radial Recovery = 103.77%								
As 188.979†	35.9	-33.959	µg/L	6.8096	-33.959	ppb	6.8096	20.05%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1821.9	24.232	µg/L	3.0662	24.232	ppb	3.0662	12.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	203.3	5.4054	µg/L	0.15830	5.4054	ppb	0.15830	2.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-684.9	-0.4558	µg/L	0.03291	-0.4558	ppb	0.03291	7.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1238137.5	499520	µg/L	4043.8	499520	ppb	4043.8	0.81%
QC value within limits for Ca 317.933Radial Recovery = 99.90%								
Cd 226.502†	611.2	2.2900	µg/L	0.48439	2.2900	ppb	0.48439	21.15%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-28.0	-1.5087	µg/L	0.49744	-1.5087	ppb	0.49744	32.97%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -136.3     -3.0626 µg/L      0.07977     -3.0626 ppb       0.07977   2.60%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4539.8      8.8849 µg/L      0.49802      8.8849 ppb       0.49802   5.61%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    36228.4      192360 µg/L       1806.0      192360 ppb        1806.0   0.94%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.18%
K 766.490 Radial†        13.0      7.3577 µg/L     20.13120      7.3577 ppb      20.13120 273.61%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       87513.3      493440 µg/L       4489.6      493440 ppb        4489.6   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.69%
Mn 257.610†           -2062.0      17.395 µg/L       0.1237      17.395 ppb        0.1237   0.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -117.1     -6.4166 µg/L      0.06720     -6.4166 ppb       0.06720   1.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -63.0     -17.777 µg/L       8.3078     -17.777 ppb        8.3078  46.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -0.4     -0.0202 µg/L      0.29564     -0.0202 ppb       0.29564 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               23.8      17.254 µg/L      17.4722      17.254 ppb       17.4722 101.27%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -115.6      12.257 µg/L       3.1423      12.257 ppb        3.1423  25.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         39.1      110.18 µg/L        6.043      110.18 ppb         6.043   5.49%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              42.0     -2.9198 µg/L      5.74428     -2.9198 ppb       5.74428 196.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               9.4      15.177 µg/L      12.6770      15.177 ppb       12.6770  83.53%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -98.4     -19.965 µg/L       8.1622     -19.965 ppb        8.1622  40.88%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             136.0      19.315 µg/L       0.2377      19.315 ppb        0.2377   1.23%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -454.8      0.4643 µg/L      2.59300      0.4643 ppb       2.59300 558.44%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             635.8      3.6695 µg/L      0.09276      3.6695 ppb       0.09276   2.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11090.9     -2.5588 µg/L      0.20765     -2.5588 ppb       0.20765   8.12%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              41.3     -1.8271 µg/L      5.27193     -1.8271 ppb       5.27193 288.53%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              309.1      6.7466 µg/L      8.65451      6.7466 ppb       8.65451 128.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1352.9     -0.5925 µg/L      0.30051     -0.5925 ppb       0.30051  50.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1290.0      2.5526 µg/L      0.49365      2.5526 ppb       0.49365  19.34%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/14/2009 09:57:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108734.5	108734.5	97.1	%			09:58:38
1	Al 396.153Radial†	953843.1	982149.0	519060	µg/L	519060	ppb	09:58:32
1	Ca 317.933Radial†	1198857.6	1234228.5	497940	µg/L	497940	ppb	09:58:32
1	Fe 238.204 Radial†	35210.5	36249.5	192480	µg/L	192480	ppb	09:58:38
1	K 766.490 Radial†	9615.0	9155.3	5164.9	µg/L	5164.9	ppb	09:58:38
1	Mg 279.077 IEC†	85660.5	88201.3	497340	µg/L	497340	ppb	09:58:38
1	Na 589.592 Radial†	17537.3	18462.4	5207.3	µg/L	5207.3	ppb	09:58:38
1	Sr 421.552†	85229.8	87865.0	507.08	µg/L	507.08	ppb	09:58:38
1	Sc 361.383	1847746.6	1847746.6	92.027	%			09:59:12
1	Y 371.029	1111633.4	1111633.4	90.867	%			09:59:12
1	Ag 328.068†	24036.0	26134.8	266.40	µg/L	266.40	ppb	09:59:18
1	As 188.979†	274.4	295.1	470.07	µg/L	470.07	ppb	09:59:38
1	B 249.677†	12248.0	13147.4	550.85	µg/L	550.85	ppb	09:59:18
1	Ba 233.527†	17189.9	18751.7	502.66	µg/L	502.66	ppb	09:59:18
1	Be 313.107†	346135.1	372506.1	242.58	µg/L	242.58	ppb	09:59:12
1	Cd 226.502†	16128.8	17623.9	481.13	µg/L	481.13	ppb	09:59:18
1	Co 228.616†	7890.5	8644.0	439.26	µg/L	439.26	ppb	09:59:38
1	Cr 267.716†	19976.9	21832.0	485.77	µg/L	485.77	ppb	09:59:18
1	Cu 324.752†	67734.2	70293.9	543.54	µg/L	543.54	ppb	09:59:18
1	Mn 257.610†	127748.6	139064.9	481.75	µg/L	481.75	ppb	09:59:18
1	Mo 202.031†	3695.4	4020.4	487.61	µg/L	487.61	ppb	09:59:38
1	Ni 231.604†	7321.7	7665.0	442.36	µg/L	442.36	ppb	09:59:38
1	P 214.914†	1248.5	1166.7	2505.8	µg/L	2505.8	ppb	09:59:38
1	Pb 220.353†	1566.2	1651.0	479.28	µg/L	479.28	ppb	09:59:38
1	S 181.975 Axial†	502.8	520.6	2686.4	µg/L	2686.4	ppb	09:59:38
1	Sb 206.836†	507.5	527.4	503.31	µg/L	503.31	ppb	09:59:38
1	Se 196.026†	1477.0	1594.2	2353.3	µg/L	2353.3	ppb	09:59:38
1	SiO2†	52348.3	54850.2	11127	µg/L	11127	ppb	09:59:18
1	Si 251.611†	59420.6	64212.2	5184.6	µg/L	5184.6	ppb	09:59:18
1	Sn 189.927†	506.4	527.9	501.46	µg/L	501.46	ppb	09:59:38
1	Ti 334.940†	207738.3	224938.7	489.77	µg/L	489.77	ppb	09:59:18
1	Tl 190.801†	287.6	332.6	459.60	µg/L	459.60	ppb	09:59:38
1	U 409.014†	5105.3	4846.0	459.19	µg/L	459.19	ppb	09:59:18
1	V 292.402†	38195.9	41595.8	519.06	µg/L	519.06	ppb	09:59:18
1	Zn 213.857†	17469.5	18455.3	484.40	µg/L	484.40	ppb	09:59:18
2	Sc RADIAL	109658.8	109658.8	97.9	%			09:58:49
2	Al 396.153Radial†	956398.3	976478.4	516060	µg/L	516060	ppb	09:58:44
2	Ca 317.933Radial†	1202313.5	1227350.9	495170	µg/L	495170	ppb	09:58:44
2	Fe 238.204 Radial†	35384.1	36121.1	191800	µg/L	191800	ppb	09:58:49
2	K 766.490 Radial†	9680.0	9138.2	5155.3	µg/L	5155.3	ppb	09:58:49
2	Mg 279.077 IEC†	86074.2	87880.1	495530	µg/L	495530	ppb	09:58:49
2	Na 589.592 Radial†	17687.2	18463.2	5207.5	µg/L	5207.5	ppb	09:58:49
2	Sr 421.552†	85742.4	87648.6	505.83	µg/L	505.83	ppb	09:58:49
2	Sc 361.383	1845548.7	1845548.7	91.917	%			09:59:45
2	Y 371.029	1110407.0	1110407.0	90.766	%			09:59:45
2	Ag 328.068†	24184.6	26327.6	268.21	µg/L	268.21	ppb	09:59:51
2	As 188.979†	286.4	308.4	496.53	µg/L	496.53	ppb	10:00:11
2	B 249.677†	12380.8	13307.8	558.52	µg/L	558.52	ppb	09:59:51
2	Ba 233.527†	17360.6	18959.7	508.23	µg/L	508.23	ppb	09:59:51
2	Be 313.107†	346914.3	373801.8	243.43	µg/L	243.43	ppb	09:59:45
2	Cd 226.502†	16245.1	17771.2	485.33	µg/L	485.33	ppb	09:59:51
2	Co 228.616†	7927.1	8694.0	441.80	µg/L	441.80	ppb	10:00:11
2	Cr 267.716†	20165.8	22063.4	490.92	µg/L	490.92	ppb	09:59:51
2	Cu 324.752†	68218.7	70908.6	547.79	µg/L	547.79	ppb	09:59:51
2	Mn 257.610†	129027.8	140621.8	486.79	µg/L	486.79	ppb	09:59:51
2	Mo 202.031†	3727.8	4060.3	492.36	µg/L	492.36	ppb	10:00:11
2	Ni 231.604†	7370.4	7727.5	445.97	µg/L	445.97	ppb	10:00:11
2	P 214.914†	1240.0	1159.1	2488.0	µg/L	2488.0	ppb	10:00:11
2	Pb 220.353†	1584.0	1672.3	484.66	µg/L	484.66	ppb	10:00:11

2	S 181.975 Axial†	508.9	528.0	2726.0	µg/L	2726.0 ppb	10:00:11
2	Sb 206.836†	500.0	519.8	495.66	µg/L	495.66 ppb	10:00:11
2	Se 196.026†	1491.3	1611.7	2379.0	µg/L	2379.0 ppb	10:00:11
2	SiO2†	52864.7	55479.8	11254	µg/L	11254 ppb	09:59:51
2	Si 251.611†	60071.8	64997.5	5248.1	µg/L	5248.1 ppb	09:59:51
2	Sn 189.927†	514.0	536.8	504.97	µg/L	504.97 ppb	10:00:11
2	Ti 334.940†	209475.6	227097.5	494.89	µg/L	494.89 ppb	09:59:51
2	Tl 190.801†	290.4	336.0	465.40	µg/L	465.40 ppb	10:00:11
2	U 409.014†	5194.8	4950.0	469.62	µg/L	469.62 ppb	09:59:51
2	V 292.402†	38550.5	42031.0	524.28	µg/L	524.28 ppb	09:59:51
2	Zn 213.857†	17694.7	18722.9	492.06	µg/L	492.06 ppb	09:59:51
3	Sc RADIAL	109921.3	109921.3	98.2	%		09:59:01
3	Al 396.153Radial†	958907.4	976702.2	516180	µg/L	516180 ppb	09:58:55
3	Ca 317.933Radial†	1206793.8	1228983.0	495830	µg/L	495830 ppb	09:58:55
3	Fe 238.204 Radial†	35378.4	36029.1	191310	µg/L	191310 ppb	09:59:01
3	K 766.490 Radial†	9666.4	9100.7	5134.1	µg/L	5134.1 ppb	09:59:01
3	Mg 279.077 IEC†	85961.0	87555.0	493690	µg/L	493690 ppb	09:59:01
3	Na 589.592 Radial†	17626.2	18358.0	5177.9	µg/L	5177.9 ppb	09:59:01
3	Sr 421.552†	85517.6	87210.6	503.31	µg/L	503.31 ppb	09:59:01
3	Sc 361.383	1813219.7	1813219.7	90.307	%		10:00:17
3	Y 371.029	1091058.4	1091058.4	89.185	%		10:00:17
3	Ag 328.068†	24361.6	26992.7	274.55	µg/L	274.55 ppb	10:00:23
3	As 188.979†	272.9	299.0	478.22	µg/L	478.22 ppb	10:00:44
3	B 249.677†	12462.5	13638.4	574.04	µg/L	574.04 ppb	10:00:23
3	Ba 233.527†	17427.0	19369.9	519.23	µg/L	519.23 ppb	10:00:23
3	Be 313.107†	346543.4	380120.3	247.54	µg/L	247.54 ppb	10:00:17
3	Cd 226.502†	16373.1	18228.1	498.23	µg/L	498.23 ppb	10:00:23
3	Co 228.616†	7937.0	8858.7	450.16	µg/L	450.16 ppb	10:00:44
3	Cr 267.716†	20278.2	22579.0	502.39	µg/L	502.39 ppb	10:00:23
3	Cu 324.752†	68622.1	72678.7	560.33	µg/L	560.33 ppb	10:00:23
3	Mn 257.610†	129748.0	143922.1	497.59	µg/L	497.59 ppb	10:00:23
3	Mo 202.031†	3720.8	4124.9	500.05	µg/L	500.05 ppb	10:00:44
3	Ni 231.604†	7391.8	7894.2	455.59	µg/L	455.59 ppb	10:00:44
3	P 214.914†	1248.9	1192.9	2562.5	µg/L	2562.5 ppb	10:00:44
3	Pb 220.353†	1588.5	1708.0	494.10	µg/L	494.10 ppb	10:00:44
3	S 181.975 Axial†	498.5	526.4	2717.7	µg/L	2717.7 ppb	10:00:44
3	Sb 206.836†	513.8	544.8	521.66	µg/L	521.66 ppb	10:00:44
3	Se 196.026†	1492.0	1641.4	2423.3	µg/L	2423.3 ppb	10:00:44
3	SiO2†	53086.9	56751.3	11512	µg/L	11512 ppb	10:00:23
3	Si 251.611†	60348.9	66469.6	5367.3	µg/L	5367.3 ppb	10:00:23
3	Sn 189.927†	501.9	533.4	502.95	µg/L	502.95 ppb	10:00:44
3	Ti 334.940†	210933.5	232775.3	507.93	µg/L	507.93 ppb	10:00:23
3	Tl 190.801†	282.4	332.8	460.33	µg/L	460.33 ppb	10:00:44
3	U 409.014†	5223.4	5082.5	482.94	µg/L	482.94 ppb	10:00:23
3	V 292.402†	38725.4	42972.4	535.61	µg/L	535.61 ppb	10:00:23
3	Zn 213.857†	17755.4	19133.3	503.69	µg/L	503.69 ppb	10:00:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1835505.0	91.417	%	0.9628				1.05%
Sc RADIAL	109438.2	97.7	%	0.56				0.57%
Y 371.029	1104366.3	90.273	%	0.9434				1.05%
Ag 328.068†	26485.0	269.72	µg/L	4.282	269.72	ppb	4.282	1.59%
QC value within limits for Ag 328.068 Recovery = 107.89%								
Al 396.153Radial†	978443.2	517100	µg/L	1697.4	517100	ppb	1697.4	0.33%
QC value within limits for Al 396.153Radial Recovery = 103.42%								
As 188.979†	300.8	481.61	µg/L	13.553	481.61	ppb	13.553	2.81%
QC value within limits for As 188.979 Recovery = 96.32%								
B 249.677†	13364.5	561.14	µg/L	11.819	561.14	ppb	11.819	2.11%
QC value within limits for B 249.677 Recovery = 112.23%								
Ba 233.527†	19027.1	510.04	µg/L	8.433	510.04	ppb	8.433	1.65%
QC value within limits for Ba 233.527 Recovery = 102.01%								
Be 313.107†	375476.1	244.52	µg/L	2.652	244.52	ppb	2.652	1.08%
QC value within limits for Be 313.107 Recovery = 97.81%								
Ca 317.933Radial†	1230187.5	496310	µg/L	1449.8	496310	ppb	1449.8	0.29%
QC value within limits for Ca 317.933Radial Recovery = 99.26%								
Cd 226.502†	17874.4	488.23	µg/L	8.911	488.23	ppb	8.911	1.83%
QC value within limits for Cd 226.502 Recovery = 97.65%								
Co 228.616†	8732.2	443.74	µg/L	5.703	443.74	ppb	5.703	1.29%

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   QC value within limits for Co 228.616  Recovery = 88.75%
Cr 267.716†            22158.1      493.03 µg/L        8.508      493.03 ppb          8.508   1.73%
   QC value within limits for Cr 267.716  Recovery = 98.61%
Cu 324.752†            71293.7      550.55 µg/L        8.728      550.55 ppb          8.728   1.59%
   QC value within limits for Cu 324.752  Recovery = 110.11%
Fe 238.204 Radial†     36133.2      191870 µg/L        587.5      191870 ppb          587.5   0.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.93%
K 766.490 Radial†       9131.4      5151.4 µg/L        15.76      5151.4 ppb          15.76   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 103.03%
Mg 279.077 IEC†        87878.8      495520 µg/L       1822.1      495520 ppb         1822.1   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.10%
Mn 257.610†           141202.9      488.71 µg/L        8.090      488.71 ppb          8.090   1.66%
   QC value within limits for Mn 257.610  Recovery = 97.74%
Mo 202.031†             4068.5      493.34 µg/L        6.274      493.34 ppb          6.274   1.27%
   QC value within limits for Mo 202.031  Recovery = 98.67%
Na 589.592 Radial†     18427.9      5197.6 µg/L        17.07      5197.6 ppb          17.07   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 103.95%
Ni 231.604†             7762.2      447.97 µg/L        6.837      447.97 ppb          6.837   1.53%
   QC value within limits for Ni 231.604  Recovery = 89.59%
P 214.914†              1172.9      2518.8 µg/L        38.88      2518.8 ppb          38.88   1.54%
   QC value within limits for P 214.914  Recovery = 100.75%
Pb 220.353†             1677.1      486.01 µg/L        7.504      486.01 ppb          7.504   1.54%
   QC value within limits for Pb 220.353  Recovery = 97.20%
S 181.975 Axial†         525.0      2710.0 µg/L        20.85      2710.0 ppb          20.85   0.77%
   QC value within limits for S 181.975 Axial  Recovery = 108.40%
Sb 206.836†              530.6      506.88 µg/L       13.364      506.88 ppb         13.364   2.64%
   QC value within limits for Sb 206.836  Recovery = 101.38%
Se 196.026†             1615.8      2385.2 µg/L        35.44      2385.2 ppb          35.44   1.49%
   QC value within limits for Se 196.026  Recovery = 95.41%
SiO2†                  55693.8       11298 µg/L        196.4       11298 ppb          196.4   1.74%
   QC value within limits for SiO2  Recovery = 105.64%
Si 251.611†            65226.4      5266.7 µg/L        92.75      5266.7 ppb          92.75   1.76%
   QC value within limits for Si 251.611  Recovery = 105.33%
Sn 189.927†              532.7      503.13 µg/L        1.764      503.13 ppb          1.764   0.35%
   QC value within limits for Sn 189.927  Recovery = 100.63%
Sr 421.552†            87574.7      505.41 µg/L        1.924      505.41 ppb          1.924   0.38%
   QC value within limits for Sr 421.552  Recovery = 101.08%
Ti 334.940†           228270.5      497.53 µg/L        9.361      497.53 ppb          9.361   1.88%
   QC value within limits for Ti 334.940  Recovery = 99.51%
Tl 190.801†              333.8      461.78 µg/L        3.161      461.78 ppb          3.161   0.68%
   QC value within limits for Tl 190.801  Recovery = 92.36%
U 409.014†              4959.5      470.58 µg/L       11.904      470.58 ppb         11.904   2.53%
   QC value within limits for U 409.014  Recovery = 94.12%
V 292.402†             42199.7      526.32 µg/L        8.462      526.32 ppb          8.462   1.61%
   QC value within limits for V 292.402  Recovery = 105.26%
Zn 213.857†            18770.5      493.39 µg/L        9.713      493.39 ppb          9.713   1.97%
   QC value within limits for Zn 213.857  Recovery = 98.68%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/14/2009 10:00:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105695.7	105695.7	94.4	%			10:01:35
1	Al 396.153Radial†	961081.0	1018059.2	538060	µg/L	538060	ppb	10:01:29
1	Ca 317.933Radial†	1215148.5	1286984.6	519230	µg/L	519230	ppb	10:01:29
1	Fe 238.204 Radial†	86797.7	91946.4	488200	µg/L	488200	ppb	10:01:35
1	K 766.490 Radial†	743.1	40.6	22.929	µg/L	22.929	ppb	10:01:35
1	Mg 279.077 IEC†	85994.1	91091.0	513190	µg/L	513190	ppb	10:01:35
1	Na 589.592 Radial†	1741308.2	1845242.2	520450	µg/L	520450	ppb	10:01:29
1	Sr 421.552†	832.7	973.5	5.6185	µg/L	5.6185	ppb	10:01:35
1	Sc 361.383	1799524.9	1799524.9	89.625	%			10:02:10
1	Y 371.029	1073809.0	1073809.0	87.775	%			10:02:10
1	Ag 328.068†	-3716.0	-4130.0	-1.0561	µg/L	-1.0561	ppb	10:02:16
1	As 188.979†	36.8	37.9	-76.061	µg/L	-76.061	ppb	10:02:37
1	B 249.677†	4442.0	4794.5	69.431	µg/L	69.431	ppb	10:02:16
1	Ba 233.527†	263.8	366.7	9.6819	µg/L	9.6819	ppb	10:02:37
1	Be 313.107†	-1964.1	-5810.3	-3.8022	µg/L	-3.8022	ppb	10:02:16
1	Cd 226.502†	1258.0	1501.2	15.186	µg/L	15.186	ppb	10:02:16
1	Co 228.616†	49.9	125.5	6.2274	µg/L	6.2274	ppb	10:02:37
1	Cr 267.716†	-253.1	-158.2	-3.6550	µg/L	-3.6550	ppb	10:02:37
1	Cu 324.752†	-8522.1	-12817.5	13.293	µg/L	13.293	ppb	10:02:16
1	Mn 257.610†	-13185.6	-14464.1	13.776	µg/L	13.776	ppb	10:02:16
1	Mo 202.031†	-200.0	-218.3	-6.8844	µg/L	-6.8844	ppb	10:02:37
1	Ni 231.604†	264.0	3.5	0.2014	µg/L	0.2014	ppb	10:02:37
1	P 214.914†	351.7	202.4	79.871	µg/L	79.871	ppb	10:02:37
1	Pb 220.353†	-0.8	-51.9	14.353	µg/L	14.353	ppb	10:02:37
1	S 181.975 Axial†	66.2	48.1	111.90	µg/L	111.90	ppb	10:02:37
1	Sb 206.836†	58.6	41.2	2.9994	µg/L	2.9994	ppb	10:02:37
1	Se 196.026†	-103.7	-126.4	16.300	µg/L	16.300	ppb	10:02:37
1	SiO2†	1586.7	-263.3	-53.406	µg/L	-53.406	ppb	10:02:37
1	Si 251.611†	-270.3	-658.4	-44.575	µg/L	-44.575	ppb	10:02:37
1	Sn 189.927†	-438.0	-511.1	14.854	µg/L	14.854	ppb	10:02:37
1	Ti 334.940†	16860.0	18013.2	12.267	µg/L	12.267	ppb	10:02:16
1	Tl 190.801†	9.7	30.9	-20.868	µg/L	-20.868	ppb	10:02:37
1	U 409.014†	137175.8	152353.8	15116	µg/L	15116	ppb	10:02:16
1	V 292.402†	-4635.4	-5081.5	3.2391	µg/L	3.2391	ppb	10:02:16
1	Zn 213.857†	2905.0	2713.5	10.809	µg/L	10.809	ppb	10:02:37
2	Sc RADIAL	106427.2	106427.2	95.0	%			10:01:47
2	Al 396.153Radial†	956805.4	1006562.4	531980	µg/L	531980	ppb	10:01:42
2	Ca 317.933Radial†	1208082.7	1270702.0	512660	µg/L	512660	ppb	10:01:42
2	Fe 238.204 Radial†	87256.2	91796.9	487400	µg/L	487400	ppb	10:01:47
2	K 766.490 Radial†	781.5	75.6	42.652	µg/L	42.652	ppb	10:01:47
2	Mg 279.077 IEC†	86445.1	90939.4	512340	µg/L	512340	ppb	10:01:47
2	Na 589.592 Radial†	1734652.7	1825560.1	514900	µg/L	514900	ppb	10:01:42
2	Sr 421.552†	860.1	996.3	5.7500	µg/L	5.7500	ppb	10:01:47
2	Sc 361.383	1801215.5	1801215.5	89.709	%			10:02:43
2	Y 371.029	1074936.4	1074936.4	87.867	%			10:02:43
2	Ag 328.068†	-3686.9	-4093.6	-0.7623	µg/L	-0.7623	ppb	10:02:48
2	As 188.979†	47.0	49.2	-52.988	µg/L	-52.988	ppb	10:03:09
2	B 249.677†	4395.3	4737.8	67.043	µg/L	67.043	ppb	10:02:48
2	Ba 233.527†	270.6	374.1	9.8827	µg/L	9.8827	ppb	10:03:09
2	Be 313.107†	-1872.5	-5706.1	-3.7341	µg/L	-3.7341	ppb	10:02:48
2	Cd 226.502†	1262.6	1505.0	15.270	µg/L	15.270	ppb	10:02:48
2	Co 228.616†	44.0	118.8	5.8893	µg/L	5.8893	ppb	10:03:09
2	Cr 267.716†	-232.1	-134.5	-3.1257	µg/L	-3.1257	ppb	10:03:09
2	Cu 324.752†	-8450.9	-12729.3	13.752	µg/L	13.752	ppb	10:02:48
2	Mn 257.610†	-13120.0	-14377.2	13.962	µg/L	13.962	ppb	10:02:48
2	Mo 202.031†	-203.9	-222.6	-7.4213	µg/L	-7.4213	ppb	10:03:09
2	Ni 231.604†	247.4	-15.2	-0.8783	µg/L	-0.8783	ppb	10:03:09
2	P 214.914†	360.1	211.4	98.488	µg/L	98.488	ppb	10:03:09
2	Pb 220.353†	3.9	-46.7	15.304	µg/L	15.304	ppb	10:03:09

2	S 181.975 Axial†	58.6	39.7	66.874 µg/L	66.874 ppb	10:03:09
2	Sb 206.836†	56.1	38.4	0.6063 µg/L	0.6063 ppb	10:03:09
2	Se 196.026†	-113.0	-136.8	-0.0953 µg/L	-0.0953 ppb	10:03:09
2	SiO2†	1560.9	-293.6	-59.561 µg/L	-59.561 ppb	10:03:09
2	Si 251.611†	-227.7	-610.6	-40.563 µg/L	-40.563 ppb	10:03:09
2	Sn 189.927†	-443.3	-516.6	10.370 µg/L	10.370 ppb	10:03:09
2	Ti 334.940†	16711.7	17830.3	12.215 µg/L	12.215 ppb	10:02:48
2	Tl 190.801†	4.2	24.8	-29.648 µg/L	-29.648 ppb	10:03:09
2	U 409.014†	136280.2	151211.8	15003 µg/L	15003 ppb	10:02:48
2	V 292.402†	-4516.7	-4944.3	4.6330 µg/L	4.6330 ppb	10:02:48
2	Zn 213.857†	2901.7	2706.7	10.731 µg/L	10.731 ppb	10:03:09
3	Sc RADIAL	107262.1	107262.1	95.8 %		10:02:00
3	Al 396.153Radial†	967820.2	1010225.8	533920 µg/L	533920 ppb	10:01:55
3	Ca 317.933Radial†	1224920.1	1278386.2	515760 µg/L	515760 ppb	10:01:55
3	Fe 238.204 Radial†	87873.8	91727.0	487030 µg/L	487030 ppb	10:02:00
3	K 766.490 Radial†	771.3	58.6	33.074 µg/L	33.074 ppb	10:02:00
3	Mg 279.077 IEC†	86875.7	90681.0	510880 µg/L	510880 ppb	10:02:00
3	Na 589.592 Radial†	1754275.6	1831839.8	516670 µg/L	516670 ppb	10:01:55
3	Sr 421.552†	854.9	983.8	5.6778 µg/L	5.6778 ppb	10:02:00
3	Sc 361.383	1801066.5	1801066.5	89.702 %		10:03:15
3	Y 371.029	1075069.5	1075069.5	87.878 %		10:03:15
3	Ag 328.068†	-3666.4	-4071.1	-0.5811 µg/L	-0.5811 ppb	10:03:21
3	As 188.979†	30.6	30.9	-88.948 µg/L	-88.948 ppb	10:03:41
3	B 249.677†	4371.8	4711.9	65.958 µg/L	65.958 ppb	10:03:21
3	Ba 233.527†	282.3	387.2	10.232 µg/L	10.232 ppb	10:03:41
3	Be 313.107†	-1890.3	-5726.2	-3.7471 µg/L	-3.7471 ppb	10:03:21
3	Cd 226.502†	1249.9	1491.0	14.922 µg/L	14.922 ppb	10:03:21
3	Co 228.616†	46.4	121.5	6.0313 µg/L	6.0313 ppb	10:03:41
3	Cr 267.716†	-228.9	-131.0	-3.0478 µg/L	-3.0478 ppb	10:03:41
3	Cu 324.752†	-8388.5	-12660.5	14.164 µg/L	14.164 ppb	10:03:21
3	Mn 257.610†	-13134.3	-14394.4	13.859 µg/L	13.859 ppb	10:03:21
3	Mo 202.031†	-196.4	-214.2	-6.4366 µg/L	-6.4366 ppb	10:03:41
3	Ni 231.604†	234.8	-29.3	-1.6903 µg/L	-1.6903 ppb	10:03:41
3	P 214.914†	357.7	208.8	93.502 µg/L	93.502 ppb	10:03:41
3	Pb 220.353†	-6.9	-58.7	12.278 µg/L	12.278 ppb	10:03:41
3	S 181.975 Axial†	60.4	41.6	77.532 µg/L	77.532 ppb	10:03:41
3	Sb 206.836†	53.9	35.9	-2.2906 µg/L	-2.2906 ppb	10:03:41
3	Se 196.026†	-97.9	-119.9	25.549 µg/L	25.549 ppb	10:03:41
3	SiO2†	1563.6	-290.4	-58.919 µg/L	-58.919 ppb	10:03:41
3	Si 251.611†	-272.6	-660.7	-44.385 µg/L	-44.385 ppb	10:03:41
3	Sn 189.927†	-455.2	-529.8	3.9573 µg/L	3.9573 ppb	10:03:41
3	Ti 334.940†	16599.4	17706.5	11.756 µg/L	11.756 ppb	10:03:21
3	Tl 190.801†	-1.0	19.0	-39.201 µg/L	-39.201 ppb	10:03:41
3	U 409.014†	136494.7	151463.5	15028 µg/L	15028 ppb	10:03:21
3	V 292.402†	-4542.8	-4973.9	4.2954 µg/L	4.2954 ppb	10:03:21
3	Zn 213.857†	2899.8	2704.9	10.763 µg/L	10.763 ppb	10:03:41

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1800602.3	89.679	%	0.0466				0.05%
Sc RADIAL	106461.6	95.1	%	0.70				0.74%
Y 371.029	1074605.0	87.840	%	0.0566				0.06%
Ag 328.068†	-4098.2	-0.7998	µg/L	0.23970	-0.7998	ppb	0.23970	29.97%
Al 396.153Radial†	1011615.8	534650	µg/L	3104.0	534650	ppb	3104.0	0.58%
QC value within limits for Al 396.153Radial Recovery = 106.93%								
As 188.979†	39.4	-72.666	µg/L	18.2192	-72.666	ppb	18.2192	25.07%
B 249.677†	4748.1	67.477	µg/L	1.7768	67.477	ppb	1.7768	2.63%
Ba 233.527†	376.0	9.9322	µg/L	0.27833	9.9322	ppb	0.27833	2.80%
Be 313.107†	-5747.6	-3.7611	µg/L	0.03615	-3.7611	ppb	0.03615	0.96%
Ca 317.933Radial†	1278690.9	515880	µg/L	3286.3	515880	ppb	3286.3	0.64%
QC value within limits for Ca 317.933Radial Recovery = 103.18%								
Cd 226.502†	1499.1	15.126	µg/L	0.1816	15.126	ppb	0.1816	1.20%
Co 228.616†	121.9	6.0493	µg/L	0.16977	6.0493	ppb	0.16977	2.81%
Cr 267.716†	-141.3	-3.2762	µg/L	0.33039	-3.2762	ppb	0.33039	10.08%
Cu 324.752†	-12735.8	13.736	µg/L	0.4359	13.736	ppb	0.4359	3.17%
Fe 238.204 Radial†	91823.4	487550	µg/L	595.2	487550	ppb	595.2	0.12%
QC value within limits for Fe 238.204 Radial Recovery = 97.51%								
K 766.490 Radial†	58.3	32.885	µg/L	9.8627	32.885	ppb	9.8627	29.99%
Mg 279.077 IEC†	90903.8	512140	µg/L	1168.7	512140	ppb	1168.7	0.23%

QC value within limits for Mg 279.077 IEC Recovery = 102.43%

Mn 257.610†	-14411.9	13.866	µg/L	0.0931	13.866	ppb	0.0931	0.67%
Mo 202.031†	-218.4	-6.9141	µg/L	0.49302	-6.9141	ppb	0.49302	7.13%
Na 589.592 Radial†	1834214.0	517340	µg/L	2835.6	517340	ppb	2835.6	0.55%

QC value within limits for Na 589.592 Radial Recovery = 103.47%

Ni 231.604†	-13.7	-0.7890	µg/L	0.94902	-0.7890	ppb	0.94902	120.28%
P 214.914†	207.5	90.620	µg/L	9.6371	90.620	ppb	9.6371	10.63%
Pb 220.353†	-52.4	13.979	µg/L	1.5470	13.979	ppb	1.5470	11.07%
S 181.975 Axial†	43.1	85.435	µg/L	23.5303	85.435	ppb	23.5303	27.54%
Sb 206.836†	38.5	0.4383	µg/L	2.64902	0.4383	ppb	2.64902	604.33%
Se 196.026†	-127.7	13.918	µg/L	12.9870	13.918	ppb	12.9870	93.31%
SiO2†	-282.4	-57.295	µg/L	3.3833	-57.295	ppb	3.3833	5.91%
Si 251.611†	-643.2	-43.174	µg/L	2.2635	-43.174	ppb	2.2635	5.24%
Sn 189.927†	-519.2	9.7273	µg/L	5.47682	9.7273	ppb	5.47682	56.30%
Sr 421.552†	984.6	5.6821	µg/L	0.06587	5.6821	ppb	0.06587	1.16%
Ti 334.940†	17850.0	12.079	µg/L	0.2812	12.079	ppb	0.2812	2.33%
Tl 190.801†	24.9	-29.906	µg/L	9.1689	-29.906	ppb	9.1689	30.66%
U 409.014†	151676.4	15049	µg/L	59.8	15049	ppb	59.8	0.40%

QC value within limits for U 409.014 Recovery = 100.33%

V 292.402†	-4999.9	4.0558	µg/L	0.72713	4.0558	ppb	0.72713	17.93%
Zn 213.857†	2708.4	10.767	µg/L	0.0395	10.767	ppb	0.0395	0.37%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/14/2009 10:03:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112000.3	112000.3	100	%			10:04:33
1	Al 396.153Radial†	1017.7	853.1	65.951	µg/L	65.951	ppb	10:04:33
1	Ca 317.933Radial†	829.1	416.4	167.98	µg/L	167.98	ppb	10:04:53
1	Fe 238.204 Radial†	5.9	-6.1	299.44	µg/L	299.44	ppb	10:04:53
1	K 766.490 Radial†	546245.2	545399.6	307680	µg/L	307680	ppb	10:04:27
1	Mg 279.077 IEC†	-28.9	-44.9	-0.5041	µg/L	-0.5041	ppb	10:04:53
1	Na 589.592 Radial†	92.6	494.3	139.41	µg/L	139.41	ppb	10:04:33
1	Sr 421.552†	1757694.5	1757467.5	10143	µg/L	10143	ppb	10:04:27
1	Sc 361.383	1992183.8	1992183.8	99.220	%			10:06:25
1	Y 371.029	1196389.6	1196389.6	97.795	%			10:06:25
1	Ag 328.068†	-7085.5	-7124.9	4.1279	µg/L	4.1279	ppb	10:06:25
1	As 188.979†	5185.1	5222.7	10153	µg/L	10153	ppb	10:06:30
1	B 249.677†	110421.0	111127.0	5167.5	µg/L	5167.5	ppb	10:06:25
1	Ba 233.527†	488566.3	492478.1	13196	µg/L	13196	ppb	10:06:25
1	Be 313.107†	4559739.4	4591953.0	2989.0	µg/L	2989.0	ppb	10:06:15
1	Cd 226.502†	362215.2	365159.3	10272	µg/L	10272	ppb	10:06:25
1	Co 228.616†	195547.5	197154.0	10020	µg/L	10020	ppb	10:06:25
1	Cr 267.716†	1130526.2	1139534.6	25319	µg/L	25319	ppb	10:06:25
1	Cu 324.752†	2859386.1	2878547.5	20565	µg/L	20565	ppb	10:06:25
1	Mn 257.610†	2904859.8	2927935.2	9633.7	µg/L	9633.7	ppb	10:06:25
1	Mo 202.031†	84104.8	84770.5	10122	µg/L	10122	ppb	10:06:25
1	Ni 231.604†	175160.3	176245.8	10171	µg/L	10171	ppb	10:06:25
1	P 214.914†	8360.3	8236.0	16038	µg/L	16038	ppb	10:06:30
1	Pb 220.353†	95142.4	95839.1	25319	µg/L	25319	ppb	10:06:25
1	S 181.975 Axial†	9748.4	9799.4	52436	µg/L	52436	ppb	10:06:30
1	Sb 206.836†	9960.0	10014.1	10363	µg/L	10363	ppb	10:06:30
1	Se 196.026†	6822.3	6865.1	10136	µg/L	10136	ppb	10:06:30
1	SiO2†	509044.2	511010.9	103660	µg/L	103660	ppb	10:06:25
1	Si 251.611†	589863.1	594141.7	47266	µg/L	47266	ppb	10:06:25
1	Sn 189.927†	21177.3	21321.4	10861	µg/L	10861	ppb	10:06:30
1	Ti 334.940†	4324125.1	4357307.4	10030	µg/L	10030	ppb	10:06:15
1	Tl 190.801†	6230.1	6299.1	9966.1	µg/L	9966.1	ppb	10:06:30
1	U 409.014†	1855.7	1168.7	116.57	µg/L	116.57	ppb	10:06:25
1	V 292.402†	864775.9	871662.2	10532	µg/L	10532	ppb	10:06:25
1	Zn 213.857†	545730.3	549491.0	15444	µg/L	15444	ppb	10:06:25
2	Sc RADIAL	113218.8	113218.8	101	%			10:05:05
2	Al 396.153Radial†	984.0	808.8	40.958	µg/L	40.958	ppb	10:05:05
2	Ca 317.933Radial†	831.4	409.8	165.31	µg/L	165.31	ppb	10:05:25
2	Fe 238.204 Radial†	5.6	-6.5	298.59	µg/L	298.59	ppb	10:05:25
2	K 766.490 Radial†	547114.8	540381.7	304850	µg/L	304850	ppb	10:04:59
2	Mg 279.077 IEC†	-31.5	-47.1	-12.162	µg/L	-12.162	ppb	10:05:25
2	Na 589.592 Radial†	58.1	459.1	129.50	µg/L	129.50	ppb	10:05:05
2	Sr 421.552†	1758402.3	1739253.4	10037	µg/L	10037	ppb	10:04:59
2	Sc 361.383	2012096.8	2012096.8	100.21	%			10:06:50
2	Y 371.029	1208323.8	1208323.8	98.770	%			10:06:50
2	Ag 328.068†	-7167.8	-7136.4	4.2882	µg/L	4.2882	ppb	10:06:50
2	As 188.979†	5206.8	5192.6	10095	µg/L	10095	ppb	10:06:55
2	B 249.677†	112037.5	111638.7	5191.3	µg/L	5191.3	ppb	10:06:50
2	Ba 233.527†	495240.0	494264.5	13244	µg/L	13244	ppb	10:06:50
2	Be 313.107†	4593424.3	4580085.9	2981.3	µg/L	2981.3	ppb	10:06:39
2	Cd 226.502†	367918.0	367237.1	10330	µg/L	10330	ppb	10:06:50
2	Co 228.616†	198290.2	197940.4	10061	µg/L	10061	ppb	10:06:50
2	Cr 267.716†	1146551.1	1144249.3	25423	µg/L	25423	ppb	10:06:50
2	Cu 324.752†	2898824.5	2889381.8	20643	µg/L	20643	ppb	10:06:50
2	Mn 257.610†	2946696.2	2940708.9	9675.7	µg/L	9675.7	ppb	10:06:50
2	Mo 202.031†	85291.1	85115.4	10163	µg/L	10163	ppb	10:06:50
2	Ni 231.604†	177776.2	177109.0	10221	µg/L	10221	ppb	10:06:50
2	P 214.914†	8349.5	8141.8	15817	µg/L	15817	ppb	10:06:55
2	Pb 220.353†	96561.0	96305.7	25442	µg/L	25442	ppb	10:06:50

2	S 181.975 Axial†	9796.9	9750.5	52175 µg/L	52175 ppb	10:06:55
2	Sb 206.836†	9989.7	9944.4	10289 µg/L	10289 ppb	10:06:55
2	Se 196.026†	6856.6	6831.3	10086 µg/L	10086 ppb	10:06:55
2	SiO2†	516470.2	513343.8	104140 µg/L	104140 ppb	10:06:50
2	Si 251.611†	598593.1	596969.7	47501 µg/L	47501 ppb	10:06:50
2	Sn 189.927†	21251.0	21183.7	10790 µg/L	10790 ppb	10:06:55
2	Ti 334.940†	4353240.2	4343230.4	9997.3 µg/L	9997.3 ppb	10:06:39
2	Tl 190.801†	6241.6	6248.5	9886.2 µg/L	9886.2 ppb	10:06:55
2	U 409.014†	1733.4	1028.1	102.55 µg/L	102.55 ppb	10:06:50
2	V 292.402†	876700.3	874935.7	10572 µg/L	10572 ppb	10:06:50
2	Zn 213.857†	553272.7	551574.2	15503 µg/L	15503 ppb	10:06:50
3	Sc RADIAL	114192.0	114192.0	102 %		10:05:37
3	Al 396.153Radial†	981.1	797.7	35.580 µg/L	35.580 ppb	10:05:37
3	Ca 317.933Radial†	853.2	424.1	171.09 µg/L	171.09 ppb	10:05:57
3	Fe 238.204 Radial†	13.6	1.4	340.15 µg/L	340.15 ppb	10:05:57
3	K 766.490 Radial†	544768.7	533469.7	300950 µg/L	300950 ppb	10:05:31
3	Mg 279.077 IEC†	-27.5	-43.0	10.972 µg/L	10.972 ppb	10:05:57
3	Na 589.592 Radial†	37.6	438.5	123.68 µg/L	123.68 ppb	10:05:37
3	Sr 421.552†	1749494.9	1715698.0	9901.6 µg/L	9901.6 ppb	10:05:31
3	Sc 361.383	1998752.1	1998752.1	99.547 %		10:07:15
3	Y 371.029	1199878.5	1199878.5	98.080 %		10:07:15
3	Ag 328.068†	-7107.6	-7123.7	4.3810 µg/L	4.3810 ppb	10:07:15
3	As 188.979†	5193.7	5214.2	10137 µg/L	10137 ppb	10:07:20
3	B 249.677†	111294.7	111639.0	5191.3 µg/L	5191.3 ppb	10:07:15
3	Ba 233.527†	491885.4	494194.2	13242 µg/L	13242 ppb	10:07:15
3	Be 313.107†	4625695.8	4643107.3	3022.3 µg/L	3022.3 ppb	10:07:04
3	Cd 226.502†	365035.4	366792.6	10318 µg/L	10318 ppb	10:07:15
3	Co 228.616†	196834.2	197798.9	10053 µg/L	10053 ppb	10:07:15
3	Cr 267.716†	1138480.2	1143780.4	25413 µg/L	25413 ppb	10:07:15
3	Cu 324.752†	2875936.7	2885703.0	20616 µg/L	20616 ppb	10:07:15
3	Mn 257.610†	2925566.4	2939115.1	9670.5 µg/L	9670.5 ppb	10:07:15
3	Mo 202.031†	84618.9	85008.3	10150 µg/L	10150 ppb	10:07:15
3	Ni 231.604†	176470.8	176982.1	10214 µg/L	10214 ppb	10:07:15
3	P 214.914†	8336.7	8184.6	15917 µg/L	15917 ppb	10:07:20
3	Pb 220.353†	95947.0	96332.2	25449 µg/L	25449 ppb	10:07:15
3	S 181.975 Axial†	9742.8	9761.4	52233 µg/L	52233 ppb	10:07:20
3	Sb 206.836†	10010.8	10032.1	10381 µg/L	10381 ppb	10:07:20
3	Se 196.026†	6834.4	6854.7	10121 µg/L	10121 ppb	10:07:20
3	SiO2†	512812.2	513110.0	104090 µg/L	104090 ppb	10:07:15
3	Si 251.611†	593993.0	596336.7	47443 µg/L	47443 ppb	10:07:15
3	Sn 189.927†	21253.0	21327.2	10864 µg/L	10864 ppb	10:07:20
3	Ti 334.940†	4382582.4	4401708.9	10132 µg/L	10132 ppb	10:07:04
3	Tl 190.801†	6229.5	6277.9	9933.5 µg/L	9933.5 ppb	10:07:20
3	U 409.014†	1811.1	1117.7	111.48 µg/L	111.48 ppb	10:07:15
3	V 292.402†	870510.7	874559.0	10567 µg/L	10567 ppb	10:07:15
3	Zn 213.857†	549214.1	551183.3	15492 µg/L	15492 ppb	10:07:15

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2001010.9	99.660	%	0.5054				0.51%
Sc RADIAL	113137.0	101	%	1.0				0.97%
Y 371.029	1201530.6	98.215	%	0.5016				0.51%
Ag 328.068†	-7128.3	4.2657	µg/L	0.12805	4.2657	ppb	0.12805	3.00%
Al 396.153Radial†	819.9	47.496	µg/L	16.2072	47.496	ppb	16.2072	34.12%
As 188.979†	5209.8	10128	µg/L	30.2	10128	ppb	30.2	0.30%
QC value within limits for As 188.979 Recovery = 101.28%								
B 249.677†	111468.2	5183.4	µg/L	13.74	5183.4	ppb	13.74	0.27%
QC value within limits for B 249.677 Recovery = 103.67%								
Ba 233.527†	493645.6	13227	µg/L	27.1	13227	ppb	27.1	0.20%
QC value less than the lower limit for Ba 233.527 Recovery = 88.18%								
Be 313.107†	4605048.7	2997.6	µg/L	21.80	2997.6	ppb	21.80	0.73%
QC value within limits for Be 313.107 Recovery = 99.92%								
Ca 317.933Radial†	416.7	168.13	µg/L	2.890	168.13	ppb	2.890	1.72%
Cd 226.502†	366396.3	10307	µg/L	30.8	10307	ppb	30.8	0.30%
QC value within limits for Cd 226.502 Recovery = 103.07%								
Co 228.616†	197631.1	10045	µg/L	21.3	10045	ppb	21.3	0.21%
QC value within limits for Co 228.616 Recovery = 100.45%								
Cr 267.716†	1142521.4	25385	µg/L	57.7	25385	ppb	57.7	0.23%
QC value within limits for Cr 267.716 Recovery = 101.54%								

Cu 324.752†	2884544.1	20608 µg/L	39.4	20608 ppb	39.4	0.19%
QC value within limits for Cu 324.752 Recovery = 103.04%						
Fe 238.204 Radial†	-3.7	312.73 µg/L	23.754	312.73 ppb	23.754	7.60%
K 766.490 Radial†	539750.4	304500 µg/L	3379.2	304500 ppb	3379.2	1.11%
QC value within limits for K 766.490 Radial Recovery = 101.50%						
Mg 279.077 IEC†	-45.0	-0.5649 µg/L	11.56723	-0.5649 ppb	11.56723	>999.9%
Mn 257.610†	2935919.7	9659.9 µg/L	22.90	9659.9 ppb	22.90	0.24%
QC value within limits for Mn 257.610 Recovery = 96.60%						
Mo 202.031†	84964.7	10145 µg/L	21.1	10145 ppb	21.1	0.21%
QC value within limits for Mo 202.031 Recovery = 101.45%						
Na 589.592 Radial†	464.0	130.86 µg/L	7.950	130.86 ppb	7.950	6.08%
Ni 231.604†	176778.9	10202 µg/L	26.9	10202 ppb	26.9	0.26%
QC value within limits for Ni 231.604 Recovery = 102.02%						
P 214.914†	8187.5	15924 µg/L	110.5	15924 ppb	110.5	0.69%
QC value within limits for P 214.914 Recovery = 106.16%						
Pb 220.353†	96159.0	25403 µg/L	73.3	25403 ppb	73.3	0.29%
QC value within limits for Pb 220.353 Recovery = 101.61%						
S 181.975 Axial†	9770.4	52281 µg/L	137.2	52281 ppb	137.2	0.26%
QC value within limits for S 181.975 Axial Recovery = 104.56%						
Sb 206.836†	9996.9	10345 µg/L	48.7	10345 ppb	48.7	0.47%
QC value within limits for Sb 206.836 Recovery = 103.45%						
Se 196.026†	6850.4	10114 µg/L	25.6	10114 ppb	25.6	0.25%
QC value within limits for Se 196.026 Recovery = 101.14%						
SiO2†	512488.2	103960 µg/L	260.6	103960 ppb	260.6	0.25%
QC value within limits for SiO2 Recovery = 97.16%						
Si 251.611†	595816.0	47403 µg/L	122.1	47403 ppb	122.1	0.26%
QC value within limits for Si 251.611 Recovery = 94.81%						
Sn 189.927†	21277.4	10838 µg/L	41.4	10838 ppb	41.4	0.38%
QC value within limits for Sn 189.927 Recovery = 108.38%						
Sr 421.552†	1737473.0	10027 µg/L	120.9	10027 ppb	120.9	1.21%
QC value within limits for Sr 421.552 Recovery = 100.27%						
Ti 334.940†	4367415.6	10053 µg/L	70.3	10053 ppb	70.3	0.70%
QC value within limits for Ti 334.940 Recovery = 100.53%						
Tl 190.801†	6275.2	9928.6 µg/L	40.17	9928.6 ppb	40.17	0.40%
QC value within limits for Tl 190.801 Recovery = 99.29%						
U 409.014†	1104.8	110.20 µg/L	7.098	110.20 ppb	7.098	6.44%
V 292.402†	873719.0	10557 µg/L	21.6	10557 ppb	21.6	0.20%
QC value within limits for V 292.402 Recovery = 105.57%						
Zn 213.857†	550749.5	15480 µg/L	31.1	15480 ppb	31.1	0.20%
QC value within limits for Zn 213.857 Recovery = 103.20%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:07:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113486.1	113486.1	101	%			10:08:07
1	Al 396.153Radial†	10393.3	10091.0	5313.3	µg/L	5313.3	ppb	10:08:07
1	Ca 317.933Radial†	13831.5	13235.4	5339.8	µg/L	5339.8	ppb	10:08:27
1	Fe 238.204 Radial†	1037.5	1011.8	5389.9	µg/L	5389.9	ppb	10:08:27
1	K 766.490 Radial†	10272.7	9389.7	5297.1	µg/L	5297.1	ppb	10:08:07
1	Mg 279.077 IEC†	996.3	967.1	5461.2	µg/L	5461.2	ppb	10:08:27
1	Na 589.592 Radial†	37489.7	37393.9	10547	µg/L	10547	ppb	10:08:07
1	Sr 421.552†	90533.1	89422.9	516.07	µg/L	516.07	ppb	10:08:07
1	Sc 361.383	2011456.8	2011456.8	100.18	%			10:09:31
1	Y 371.029	1217127.6	1217127.6	99.490	%			10:09:31
1	Ag 328.068†	55258.1	55175.0	527.16	µg/L	527.16	ppb	10:09:37
1	As 188.979†	272.4	268.7	520.82	µg/L	520.82	ppb	10:09:57
1	B 249.677†	11603.3	11420.7	529.38	µg/L	529.38	ppb	10:09:37
1	Ba 233.527†	19749.4	19786.3	530.39	µg/L	530.39	ppb	10:09:37
1	Be 313.107†	799813.8	794756.5	517.78	µg/L	517.78	ppb	10:09:31
1	Cd 226.502†	19001.6	19065.0	536.25	µg/L	536.25	ppb	10:09:37
1	Co 228.616†	10428.2	10479.3	532.63	µg/L	532.63	ppb	10:09:37
1	Cr 267.716†	23704.6	23786.2	529.21	µg/L	529.21	ppb	10:09:37
1	Cu 324.752†	74458.5	71015.6	508.51	µg/L	508.51	ppb	10:09:37
1	Mn 257.610†	156978.5	156944.0	517.06	µg/L	517.06	ppb	10:09:31
1	Mo 202.031†	4391.3	4388.2	524.18	µg/L	524.18	ppb	10:09:57
1	Ni 231.604†	9462.0	9153.9	528.29	µg/L	528.29	ppb	10:09:37
1	P 214.914†	1363.2	1170.8	2550.2	µg/L	2550.2	ppb	10:09:57
1	Pb 220.353†	2035.7	1981.0	524.12	µg/L	524.12	ppb	10:09:57
1	S 181.975 Axial†	222.1	196.0	1047.4	µg/L	1047.4	ppb	10:09:57
1	Sb 206.836†	521.1	496.0	516.54	µg/L	516.54	ppb	10:09:57
1	Se 196.026†	379.1	367.7	545.09	µg/L	545.09	ppb	10:09:57
1	SiO2†	30117.4	28029.6	5686.0	µg/L	5686.0	ppb	10:09:37
1	Si 251.611†	33165.9	32749.4	2614.8	µg/L	2614.8	ppb	10:09:37
1	Sn 189.927†	1045.1	1020.8	522.89	µg/L	522.89	ppb	10:09:57
1	Ti 334.940†	223556.8	222356.2	511.52	µg/L	511.52	ppb	10:09:31
1	Tl 190.801†	321.4	340.9	538.51	µg/L	538.51	ppb	10:09:57
1	U 409.014†	6000.9	5288.5	526.58	µg/L	526.58	ppb	10:09:37
1	V 292.402†	43865.9	43877.5	531.56	µg/L	531.56	ppb	10:09:37
1	Zn 213.857†	19580.9	19017.8	533.19	µg/L	533.19	ppb	10:09:37
2	Sc RADIAL	113841.8	113841.8	102	%			10:08:33
2	Al 396.153Radial†	10286.6	9953.9	5241.0	µg/L	5241.0	ppb	10:08:33
2	Ca 317.933Radial†	13764.9	13127.2	5296.1	µg/L	5296.1	ppb	10:08:53
2	Fe 238.204 Radial†	1029.2	1000.4	5329.4	µg/L	5329.4	ppb	10:08:53
2	K 766.490 Radial†	10234.5	9320.5	5258.1	µg/L	5258.1	ppb	10:08:33
2	Mg 279.077 IEC†	984.4	952.3	5377.8	µg/L	5377.8	ppb	10:08:53
2	Na 589.592 Radial†	37462.7	37251.7	10507	µg/L	10507	ppb	10:08:33
2	Sr 421.552†	90280.7	88895.5	513.03	µg/L	513.03	ppb	10:08:33
2	Sc 361.383	2030674.1	2030674.1	101.14	%			10:10:04
2	Y 371.029	1229184.0	1229184.0	100.48	%			10:10:04
2	Ag 328.068†	55563.1	54954.5	525.04	µg/L	525.04	ppb	10:10:10
2	As 188.979†	272.7	266.5	516.53	µg/L	516.53	ppb	10:10:30
2	B 249.677†	11648.3	11355.6	526.38	µg/L	526.38	ppb	10:10:10
2	Ba 233.527†	19836.5	19685.8	527.70	µg/L	527.70	ppb	10:10:10
2	Be 313.107†	805663.5	792985.0	516.63	µg/L	516.63	ppb	10:10:04
2	Cd 226.502†	19066.3	18949.5	533.00	µg/L	533.00	ppb	10:10:10
2	Co 228.616†	10450.3	10402.6	528.72	µg/L	528.72	ppb	10:10:10
2	Cr 267.716†	23829.6	23685.9	526.98	µg/L	526.98	ppb	10:10:10
2	Cu 324.752†	74722.2	70573.1	505.34	µg/L	505.34	ppb	10:10:10
2	Mn 257.610†	158256.3	156724.5	516.33	µg/L	516.33	ppb	10:10:04
2	Mo 202.031†	4397.4	4352.7	519.94	µg/L	519.94	ppb	10:10:30
2	Ni 231.604†	9531.8	9133.6	527.11	µg/L	527.11	ppb	10:10:10
2	P 214.914†	1370.4	1165.0	2537.6	µg/L	2537.6	ppb	10:10:30
2	Pb 220.353†	2054.1	1980.0	523.84	µg/L	523.84	ppb	10:10:30

2	S 181.975 Axial†	219.7	191.6	1023.6 µg/L	1023.6 ppb	10:10:30
2	Sb 206.836†	532.8	502.7	523.49 µg/L	523.49 ppb	10:10:30
2	Se 196.026†	377.9	362.9	538.00 µg/L	538.00 ppb	10:10:30
2	SiO2†	30276.7	27902.7	5660.3 µg/L	5660.3 ppb	10:10:10
2	Si 251.611†	33249.5	32518.8	2596.4 µg/L	2596.4 ppb	10:10:10
2	Sn 189.927†	1043.5	1009.4	517.02 µg/L	517.02 ppb	10:10:30
2	Ti 334.940†	225097.6	221767.8	510.17 µg/L	510.17 ppb	10:10:04
2	Tl 190.801†	314.4	331.0	522.84 µg/L	522.84 ppb	10:10:30
2	U 409.014†	6012.5	5243.3	522.08 µg/L	522.08 ppb	10:10:10
2	V 292.402†	44038.0	43633.3	528.59 µg/L	528.59 ppb	10:10:10
2	Zn 213.857†	19673.5	18924.4	530.57 µg/L	530.57 ppb	10:10:10
3	Sc RADIAL	113430.7	113430.7	101 %		10:08:59
3	Al 396.153Radial†	10331.9	10035.3	5284.2 µg/L	5284.2 ppb	10:08:59
3	Ca 317.933Radial†	13846.0	13256.3	5348.2 µg/L	5348.2 ppb	10:09:19
3	Fe 238.204 Radial†	1030.4	1005.3	5355.1 µg/L	5355.1 ppb	10:09:19
3	K 766.490 Radial†	10279.6	9401.5	5303.8 µg/L	5303.8 ppb	10:08:59
3	Mg 279.077 IEC†	992.4	963.7	5442.1 µg/L	5442.1 ppb	10:09:19
3	Na 589.592 Radial†	37636.8	37557.2	10593 µg/L	10593 ppb	10:08:59
3	Sr 421.552†	90882.5	89811.5	518.32 µg/L	518.32 ppb	10:08:59
3	Sc 361.383	2026788.4	2026788.4	100.94 %		10:10:37
3	Y 371.029	1226999.3	1226999.3	100.30 %		10:10:37
3	Ag 328.068†	55706.2	55201.7	527.40 µg/L	527.40 ppb	10:10:43
3	As 188.979†	269.9	264.2	512.12 µg/L	512.12 ppb	10:11:04
3	B 249.677†	11671.1	11400.3	528.45 µg/L	528.45 ppb	10:10:43
3	Ba 233.527†	19869.6	19756.3	529.59 µg/L	529.59 ppb	10:10:43
3	Be 313.107†	809784.7	798594.9	520.28 µg/L	520.28 ppb	10:10:37
3	Cd 226.502†	19092.3	19011.4	534.74 µg/L	534.74 ppb	10:10:43
3	Co 228.616†	10486.3	10458.1	531.53 µg/L	531.53 ppb	10:10:43
3	Cr 267.716†	23914.7	23815.3	529.86 µg/L	529.86 ppb	10:10:43
3	Cu 324.752†	74956.1	70946.4	508.01 µg/L	508.01 ppb	10:10:43
3	Mn 257.610†	159111.4	157871.6	520.11 µg/L	520.11 ppb	10:10:37
3	Mo 202.031†	4351.6	4315.6	515.52 µg/L	515.52 ppb	10:11:04
3	Ni 231.604†	9623.0	9242.0	533.37 µg/L	533.37 ppb	10:10:43
3	P 214.914†	1349.2	1146.6	2496.2 µg/L	2496.2 ppb	10:11:04
3	Pb 220.353†	2035.8	1965.7	520.07 µg/L	520.07 ppb	10:11:04
3	S 181.975 Axial†	219.5	191.8	1024.5 µg/L	1024.5 ppb	10:11:04
3	Sb 206.836†	524.8	495.7	516.26 µg/L	516.26 ppb	10:11:04
3	Se 196.026†	371.1	356.8	529.08 µg/L	529.08 ppb	10:11:04
3	SiO2†	30299.3	27982.4	5676.4 µg/L	5676.4 ppb	10:10:43
3	Si 251.611†	33320.7	32652.4	2607.3 µg/L	2607.3 ppb	10:10:43
3	Sn 189.927†	1034.7	1002.6	513.61 µg/L	513.61 ppb	10:11:04
3	Ti 334.940†	226327.5	223412.9	513.95 µg/L	513.95 ppb	10:10:37
3	Tl 190.801†	312.3	329.5	520.56 µg/L	520.56 ppb	10:11:04
3	U 409.014†	5934.6	5177.5	515.52 µg/L	515.52 ppb	10:10:43
3	V 292.402†	44126.8	43804.7	530.61 µg/L	530.61 ppb	10:10:43
3	Zn 213.857†	19672.5	18960.8	531.55 µg/L	531.55 ppb	10:10:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2022973.1	100.75	%	0.506				0.50%
Sc RADIAL	113586.2	101	%	0.2				0.20%
Y 371.029	1224437.0	100.09	%	0.525				0.52%
Ag 328.068†	55110.4	526.54	µg/L	1.297	526.54	ppb	1.297	0.25%
QC value within limits for Ag 328.068 Recovery = 105.31%								
Al 396.153Radial†	10026.7	5279.5	µg/L	36.37	5279.5	ppb	36.37	0.69%
QC value within limits for Al 396.153Radial Recovery = 105.59%								
As 188.979†	266.5	516.49	µg/L	4.353	516.49	ppb	4.353	0.84%
QC value within limits for As 188.979 Recovery = 103.30%								
B 249.677†	11392.2	528.07	µg/L	1.539	528.07	ppb	1.539	0.29%
QC value within limits for B 249.677 Recovery = 105.61%								
Ba 233.527†	19742.8	529.23	µg/L	1.382	529.23	ppb	1.382	0.26%
QC value within limits for Ba 233.527 Recovery = 105.85%								
Be 313.107†	795445.4	518.23	µg/L	1.868	518.23	ppb	1.868	0.36%
QC value within limits for Be 313.107 Recovery = 103.65%								
Ca 317.933Radial†	13206.3	5328.0	µg/L	27.96	5328.0	ppb	27.96	0.52%
QC value within limits for Ca 317.933Radial Recovery = 106.56%								
Cd 226.502†	19008.6	534.66	µg/L	1.624	534.66	ppb	1.624	0.30%
QC value within limits for Cd 226.502 Recovery = 106.93%								
Co 228.616†	10446.7	530.96	µg/L	2.012	530.96	ppb	2.012	0.38%

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   QC value within limits for Co 228.616  Recovery = 106.19%
Cr 267.716†            23762.5      528.68 µg/L        1.510      528.68 ppb          1.510   0.29%
   QC value within limits for Cr 267.716  Recovery = 105.74%
Cu 324.752†            70845.0      507.29 µg/L        1.707      507.29 ppb          1.707   0.34%
   QC value within limits for Cu 324.752  Recovery = 101.46%
Fe 238.204 Radial†      1005.8      5358.2 µg/L       30.37      5358.2 ppb         30.37   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.16%
K 766.490 Radial†       9370.6      5286.3 µg/L       24.69      5286.3 ppb         24.69   0.47%
   QC value within limits for K 766.490 Radial  Recovery = 105.73%
Mg 279.077 IEC†          961.0      5427.0 µg/L       43.69      5427.0 ppb         43.69   0.81%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.54%
Mn 257.610†           157180.0      517.83 µg/L        2.004      517.83 ppb          2.004   0.39%
   QC value within limits for Mn 257.610  Recovery = 103.57%
Mo 202.031†             4352.2      519.88 µg/L        4.331      519.88 ppb          4.331   0.83%
   QC value within limits for Mo 202.031  Recovery = 103.98%
Na 589.592 Radial†     37400.9       10549 µg/L         43.1       10549 ppb           43.1   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 105.49%
Ni 231.604†             9176.5      529.59 µg/L        3.326      529.59 ppb          3.326   0.63%
   QC value within limits for Ni 231.604  Recovery = 105.92%
P 214.914†              1160.8      2528.0 µg/L       28.21      2528.0 ppb         28.21   1.12%
   QC value within limits for P 214.914  Recovery = 101.12%
Pb 220.353†             1975.6      522.68 µg/L        2.264      522.68 ppb          2.264   0.43%
   QC value within limits for Pb 220.353  Recovery = 104.54%
S 181.975 Axial†         193.1      1031.8 µg/L       13.49      1031.8 ppb         13.49   1.31%
   QC value within limits for S 181.975 Axial  Recovery = 103.18%
Sb 206.836†              498.1      518.76 µg/L        4.098      518.76 ppb          4.098   0.79%
   QC value within limits for Sb 206.836  Recovery = 103.75%
Se 196.026†              362.4      537.39 µg/L        8.025      537.39 ppb          8.025   1.49%
   QC value within limits for Se 196.026  Recovery = 107.48%
SiO2†                  27971.6      5674.2 µg/L       13.02      5674.2 ppb         13.02   0.23%
   QC value within limits for SiO2  Recovery = 106.11%
Si 251.611†            32640.2      2606.2 µg/L        9.25      2606.2 ppb          9.25   0.36%
   QC value within limits for Si 251.611  Recovery = 104.25%
Sn 189.927†             1010.9      517.84 µg/L        4.695      517.84 ppb          4.695   0.91%
   QC value within limits for Sn 189.927  Recovery = 103.57%
Sr 421.552†            89376.6      515.81 µg/L        2.653      515.81 ppb          2.653   0.51%
   QC value within limits for Sr 421.552  Recovery = 103.16%
Ti 334.940†           222512.3      511.88 µg/L        1.917      511.88 ppb          1.917   0.37%
   QC value within limits for Ti 334.940  Recovery = 102.38%
Tl 190.801†              333.8      527.30 µg/L        9.773      527.30 ppb          9.773   1.85%
   QC value within limits for Tl 190.801  Recovery = 105.46%
U 409.014†              5236.4      521.39 µg/L        5.566      521.39 ppb          5.566   1.07%
   QC value within limits for U 409.014  Recovery = 104.28%
V 292.402†             43771.8      530.25 µg/L        1.518      530.25 ppb          1.518   0.29%
   QC value within limits for V 292.402  Recovery = 106.05%
Zn 213.857†            18967.7      531.77 µg/L        1.323      531.77 ppb          1.323   0.25%
   QC value within limits for Zn 213.857  Recovery = 106.35%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 10:11:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113537.7	113537.7	101	%			10:11:45
1	Al 396.153Radial†	252.2	84.4	44.553	µg/L	44.553	ppb	10:11:45
1	Ca 317.933Radial†	496.9	77.5	31.264	µg/L	31.264	ppb	10:12:06
1	Fe 238.204 Radial†	13.5	1.3	7.0047	µg/L	7.0047	ppb	10:12:06
1	K 766.490 Radial†	856.4	98.0	55.279	µg/L	55.279	ppb	10:11:45
1	Mg 279.077 IEC†	27.7	11.3	63.610	µg/L	63.610	ppb	10:12:06
1	Na 589.592 Radial†	-478.1	-69.9	-19.721	µg/L	-19.721	ppb	10:11:45
1	Sr 421.552†	-27.6	64.1	0.3697	µg/L	0.3697	ppb	10:11:45
1	Sc 361.383	2028385.1	2028385.1	101.02	%			10:13:08
1	Y 371.029	1233307.6	1233307.6	100.81	%			10:13:08
1	Ag 328.068†	81.2	96.7	0.9196	µg/L	0.9196	ppb	10:13:13
1	As 188.979†	0.9	-2.2	-4.3025	µg/L	-4.3025	ppb	10:13:34
1	B 249.677†	255.5	91.2	4.2393	µg/L	4.2393	ppb	10:13:13
1	Ba 233.527†	-49.8	23.1	0.6190	µg/L	0.6190	ppb	10:13:34
1	Be 313.107†	3801.8	144.4	0.0940	µg/L	0.0940	ppb	10:13:13
1	Cd 226.502†	-71.4	26.9	0.7557	µg/L	0.7557	ppb	10:13:34
1	Co 228.616†	-62.4	8.0	0.4090	µg/L	0.4090	ppb	10:13:34
1	Cr 267.716†	-64.0	60.8	1.3515	µg/L	1.3515	ppb	10:13:13
1	Cu 324.752†	3365.6	22.6	0.1627	µg/L	0.1627	ppb	10:13:13
1	Mn 257.610†	-67.0	181.6	0.5982	µg/L	0.5982	ppb	10:13:34
1	Mo 202.031†	1.7	6.4	0.7671	µg/L	0.7671	ppb	10:13:34
1	Ni 231.604†	306.3	12.2	0.7042	µg/L	0.7042	ppb	10:13:34
1	P 214.914†	191.5	-0.4	-0.9798	µg/L	-0.9798	ppb	10:13:34
1	Pb 220.353†	54.8	3.3	0.8747	µg/L	0.8747	ppb	10:13:34
1	S 181.975 Axial†	26.1	0.2	0.9982	µg/L	0.9982	ppb	10:13:34
1	Sb 206.836†	15.9	-8.4	-8.8231	µg/L	-8.8231	ppb	10:13:34
1	Se 196.026†	8.2	-2.6	-3.9028	µg/L	-3.9028	ppb	10:13:34
1	SiO2†	2099.2	44.4	8.9975	µg/L	8.9975	ppb	10:13:13
1	Si 251.611†	407.6	46.6	3.7329	µg/L	3.7329	ppb	10:13:34
1	Sn 189.927†	23.2	0.6	0.3192	µg/L	0.3192	ppb	10:13:34
1	Ti 334.940†	993.4	184.8	0.4237	µg/L	0.4237	ppb	10:13:13
1	Tl 190.801†	-16.5	3.8	5.9396	µg/L	5.9396	ppb	10:13:34
1	U 409.014†	707.1	-1.6	-0.1643	µg/L	-0.1643	ppb	10:13:13
1	V 292.402†	-60.1	31.1	0.3784	µg/L	0.3784	ppb	10:13:13
1	Zn 213.857†	563.1	29.6	0.8299	µg/L	0.8299	ppb	10:13:34
2	Sc RADIAL	114686.0	114686.0	102	%			10:12:11
2	Al 396.153Radial†	230.8	60.9	32.164	µg/L	32.164	ppb	10:12:11
2	Ca 317.933Radial†	518.6	93.7	37.818	µg/L	37.818	ppb	10:12:32
2	Fe 238.204 Radial†	12.1	-0.2	-0.9304	µg/L	-0.9304	ppb	10:12:32
2	K 766.490 Radial†	868.8	101.7	57.349	µg/L	57.349	ppb	10:12:11
2	Mg 279.077 IEC†	22.6	6.1	34.344	µg/L	34.344	ppb	10:12:32
2	Na 589.592 Radial†	-475.1	-62.2	-17.547	µg/L	-17.547	ppb	10:12:11
2	Sr 421.552†	47.8	138.0	0.7964	µg/L	0.7964	ppb	10:12:11
2	Sc 361.383	2030887.1	2030887.1	101.15	%			10:13:40
2	Y 371.029	1234961.1	1234961.1	100.95	%			10:13:40
2	Ag 328.068†	45.2	60.9	0.5860	µg/L	0.5860	ppb	10:13:46
2	As 188.979†	-2.9	-6.1	-11.784	µg/L	-11.784	ppb	10:14:06
2	B 249.677†	217.6	53.4	2.4843	µg/L	2.4843	ppb	10:13:46
2	Ba 233.527†	-32.2	40.6	1.0893	µg/L	1.0893	ppb	10:14:06
2	Be 313.107†	4126.5	460.8	0.3000	µg/L	0.3000	ppb	10:13:46
2	Cd 226.502†	-52.0	46.2	1.2997	µg/L	1.2997	ppb	10:14:06
2	Co 228.616†	-51.2	19.2	0.9750	µg/L	0.9750	ppb	10:14:06
2	Cr 267.716†	-5.7	118.6	2.6352	µg/L	2.6352	ppb	10:13:46
2	Cu 324.752†	3434.5	86.6	0.6183	µg/L	0.6183	ppb	10:13:46
2	Mn 257.610†	17.6	265.3	0.8726	µg/L	0.8726	ppb	10:14:06
2	Mo 202.031†	0.0	4.8	0.5698	µg/L	0.5698	ppb	10:14:06
2	Ni 231.604†	320.6	25.9	1.4943	µg/L	1.4943	ppb	10:14:06
2	P 214.914†	193.1	0.9	1.9459	µg/L	1.9459	ppb	10:14:06
2	Pb 220.353†	67.9	16.1	4.2626	µg/L	4.2626	ppb	10:14:06

2	S 181.975 Axial†	24.7	-1.3	-7.0642 µg/L	-7.0642 ppb	10:14:06
2	Sb 206.836†	28.0	3.5	3.6351 µg/L	3.6351 ppb	10:14:06
2	Se 196.026†	12.6	1.7	2.4587 µg/L	2.4587 ppb	10:14:06
2	SiO2†	2123.7	66.0	13.390 µg/L	13.390 ppb	10:13:46
2	Si 251.611†	433.4	71.7	5.8638 µg/L	5.8638 ppb	10:14:06
2	Sn 189.927†	17.7	-4.9	-2.4810 µg/L	-2.4810 ppb	10:14:06
2	Ti 334.940†	1220.3	407.9	0.9368 µg/L	0.9368 ppb	10:13:46
2	Tl 190.801†	-15.2	5.1	7.9832 µg/L	7.9832 ppb	10:14:06
2	U 409.014†	723.3	13.5	1.3466 µg/L	1.3466 ppb	10:13:46
2	V 292.402†	9.3	99.8	1.2033 µg/L	1.2033 ppb	10:13:46
2	Zn 213.857†	595.0	60.4	1.6966 µg/L	1.6966 ppb	10:14:06
3	Sc RADIAL	113545.2	113545.2	101 %		10:12:37
3	Al 396.153Radial†	211.9	44.5	23.507 µg/L	23.507 ppb	10:12:37
3	Ca 317.933Radial†	488.8	69.4	28.013 µg/L	28.013 ppb	10:12:57
3	Fe 238.204 Radial†	11.7	-0.4	-2.3299 µg/L	-2.3299 ppb	10:12:57
3	K 766.490 Radial†	850.1	91.8	51.765 µg/L	51.765 ppb	10:12:37
3	Mg 279.077 IEC†	16.7	0.4	2.3758 µg/L	2.3758 ppb	10:12:57
3	Na 589.592 Radial†	-455.9	-48.0	-13.533 µg/L	-13.533 ppb	10:12:37
3	Sr 421.552†	46.4	137.1	0.7913 µg/L	0.7913 ppb	10:12:37
3	Sc 361.383	2031816.9	2031816.9	101.19 %		10:14:12
3	Y 371.029	1235932.0	1235932.0	101.03 %		10:14:12
3	Ag 328.068†	77.8	93.2	0.8883 µg/L	0.8883 ppb	10:14:18
3	As 188.979†	0.5	-2.6	-5.0734 µg/L	-5.0734 ppb	10:14:38
3	B 249.677†	223.6	59.2	2.7528 µg/L	2.7528 ppb	10:14:18
3	Ba 233.527†	-24.0	48.7	1.3038 µg/L	1.3038 ppb	10:14:38
3	Be 313.107†	4143.3	475.5	0.3096 µg/L	0.3096 ppb	10:14:18
3	Cd 226.502†	-64.2	34.1	0.9605 µg/L	0.9605 ppb	10:14:38
3	Co 228.616†	-48.7	21.7	1.1042 µg/L	1.1042 ppb	10:14:38
3	Cr 267.716†	-30.9	93.7	2.0811 µg/L	2.0811 ppb	10:14:18
3	Cu 324.752†	3507.2	156.9	1.1202 µg/L	1.1202 ppb	10:14:18
3	Mn 257.610†	12.3	260.0	0.8551 µg/L	0.8551 ppb	10:14:38
3	Mo 202.031†	2.3	7.0	0.8362 µg/L	0.8362 ppb	10:14:38
3	Ni 231.604†	330.3	35.3	2.0391 µg/L	2.0391 ppb	10:14:38
3	P 214.914†	193.2	0.9	1.8677 µg/L	1.8677 ppb	10:14:38
3	Pb 220.353†	63.4	11.7	3.0837 µg/L	3.0837 ppb	10:14:38
3	S 181.975 Axial†	22.9	-3.1	-16.609 µg/L	-16.609 ppb	10:14:38
3	Sb 206.836†	19.9	-4.4	-4.6546 µg/L	-4.6546 ppb	10:14:38
3	Se 196.026†	12.3	1.4	2.0681 µg/L	2.0681 ppb	10:14:38
3	SiO2†	2107.7	49.2	9.9831 µg/L	9.9831 ppb	10:14:18
3	Si 251.611†	434.6	72.7	5.9087 µg/L	5.9087 ppb	10:14:38
3	Sn 189.927†	19.5	-3.1	-1.5781 µg/L	-1.5781 ppb	10:14:38
3	Ti 334.940†	1186.5	374.0	0.8592 µg/L	0.8592 ppb	10:14:18
3	Tl 190.801†	-14.7	5.6	8.7730 µg/L	8.7730 ppb	10:14:38
3	U 409.014†	691.2	-18.5	-1.8470 µg/L	-1.8470 ppb	10:14:18
3	V 292.402†	-26.5	64.4	0.7751 µg/L	0.7751 ppb	10:14:18
3	Zn 213.857†	587.1	52.3	1.4658 µg/L	1.4658 ppb	10:14:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030363.1	101.12	%	0.088				0.09%
Sc RADIAL	113923.0	102	%	0.6				0.58%
Y 371.029	1234733.6	100.93	%	0.108				0.11%
Ag 328.068†	83.6	0.7980	µg/L	0.18427	0.7980	ppb	0.18427	23.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	63.3	33.408	µg/L	10.5777	33.408	ppb	10.5777	31.66%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.0535	µg/L	4.11524	-7.0535	ppb	4.11524	58.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	67.9	3.1588	µg/L	0.94534	3.1588	ppb	0.94534	29.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	37.5	1.0040	µg/L	0.35031	1.0040	ppb	0.35031	34.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	360.2	0.2345	µg/L	0.12182	0.2345	ppb	0.12182	51.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	80.2	32.365	µg/L	4.9945	32.365	ppb	4.9945	15.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	35.7	1.0053	µg/L	0.27474	1.0053	ppb	0.27474	27.33%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	16.3	0.8294	µg/L	0.36973	0.8294	ppb	0.36973	44.58%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                91.0      2.0226 µg/L       0.64386      2.0226 ppb        0.64386  31.83%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                88.7      0.6337 µg/L       0.47893      0.6337 ppb        0.47893  75.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.2      1.2481 µg/L       5.03419      1.2481 ppb        5.03419 403.35%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          97.1     54.797 µg/L        2.8226     54.797 ppb         2.8226   5.15%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             5.9     33.443 µg/L       30.6272     33.443 ppb        30.6272  91.58%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               235.6      0.7753 µg/L       0.15360      0.7753 ppb        0.15360  19.81%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.1      0.7244 µg/L       0.13824      0.7244 ppb        0.13824  19.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -60.0    -16.934 µg/L        3.1389    -16.934 ppb         3.1389  18.54%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                24.5      1.4125 µg/L       0.67120      1.4125 ppb        0.67120  47.52%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  0.5      0.9446 µg/L       1.66706      0.9446 ppb        1.66706 176.48%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.4      2.7403 µg/L       1.71983      2.7403 ppb        1.71983  62.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.4     -7.5584 µg/L       8.81410     -7.5584 ppb        8.81410 116.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.1     -3.2809 µg/L       6.34170     -3.2809 ppb        6.34170 193.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.1      0.2080 µg/L       3.56541      0.2080 ppb        3.56541 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      53.2     10.790 µg/L        2.3050     10.790 ppb         2.3050  21.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                63.7      5.1685 µg/L       1.24347      5.1685 ppb        1.24347  24.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.5     -1.2467 µg/L       1.42922     -1.2467 ppb        1.42922 114.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               113.1      0.6525 µg/L       0.24489      0.6525 ppb        0.24489  37.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               322.2      0.7399 µg/L       0.27657      0.7399 ppb        0.27657  37.38%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.8      7.5653 µg/L       1.46220      7.5653 ppb        1.46220  19.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 -2.2     -0.2216 µg/L       1.59758     -0.2216 ppb        1.59758 721.01%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 65.1      0.7856 µg/L       0.41257      0.7856 ppb        0.41257  52.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.4      1.3308 µg/L       0.44885      1.3308 ppb        0.44885  33.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/14/2009 10:23:37 **Plasma On Time: 12/13/2009 18:56:27**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121409A.sif
Batch ID:
Results Data Set: 121409A
Results Library: c:\pe\optima1\Results\Results.mdb

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Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 12/14/2009 09:32:02**
IEC File: 101509.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 113**
Sample ID: LR2 **Date Collected: 12/14/2009 10:23:39**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113428.7	113428.7	101	%			10:24:13
1	Al 396.153Radial†	198.7	31.7	16.714	µg/L	16.714	ppb	10:24:13
1	Ca 317.933Radial†	471.6	53.0	21.379	µg/L	21.379	ppb	10:24:34
1	Fe 238.204 Radial†	10.8	-1.3	-6.9400	µg/L	-6.9400	ppb	10:24:34

1	K 766.490 Radial†	846.6	89.1	50.266 µg/L	50.266 ppb	10:24:13
1	Mg 279.077 IEC†	17.3	1.1	6.0474 µg/L	6.0474 ppb	10:24:34
1	Na 589.592 Radial†	-556.2	-147.4	-41.575 µg/L	-41.575 ppb	10:24:13
1	Sr 421.552†	-49.1	42.8	0.2473 µg/L	0.2473 ppb	10:24:13
1	Sc 361.383	2015299.5	2015299.5	100.37 %		10:25:36
1	Y 371.029	1226931.4	1226931.4	100.29 %		10:25:36
1	Ag 328.068†	23.5	39.7	0.3769 µg/L	0.3769 ppb	10:25:42
1	As 188.979†	1.8	-1.4	-2.7052 µg/L	-2.7052 ppb	10:26:02
1	B 249.677†	169.6	7.2	0.3368 µg/L	0.3368 ppb	10:25:42
1	Ba 233.527†	403272.5	401852.1	10750 µg/L	10750 ppb	10:25:36
1	Be 313.107†	3753.9	121.1	0.0788 µg/L	0.0788 ppb	10:25:42
1	Cd 226.502†	-87.5	10.5	0.2946 µg/L	0.2946 ppb	10:26:02
1	Co 228.616†	13.1	82.9	4.2118 µg/L	4.2118 ppb	10:26:02
1	Cr 267.716†	-78.8	45.8	1.0161 µg/L	1.0161 ppb	10:25:42
1	Cu 324.752†	3294.3	-26.8	-0.1933 µg/L	-0.1933 ppb	10:25:42
1	Mn 257.610†	-183.3	65.2	0.2136 µg/L	0.2136 ppb	10:26:02
1	Mo 202.031†	3.7	8.4	1.0050 µg/L	1.0050 ppb	10:26:02
1	Ni 231.604†	345.9	53.6	3.0938 µg/L	3.0938 ppb	10:26:02
1	P 214.914†	190.0	-0.7	-1.5423 µg/L	-1.5423 ppb	10:26:02
1	Pb 220.353†	52.9	1.7	0.4647 µg/L	0.4647 ppb	10:26:02
1	S 181.975 Axial†	25.3	-0.5	-2.5643 µg/L	-2.5643 ppb	10:26:02
1	Sb 206.836†	20.1	-4.1	-4.2699 µg/L	-4.2699 ppb	10:26:02
1	Se 196.026†	15.6	4.7	6.9919 µg/L	6.9919 ppb	10:26:02
1	SiO2†	2026.9	-14.2	-2.8872 µg/L	-2.8872 ppb	10:25:42
1	Si 251.611†	364.6	6.4	0.5417 µg/L	0.5417 ppb	10:26:02
1	Sn 189.927†	19.1	-3.4	-1.7099 µg/L	-1.7099 ppb	10:26:02
1	Ti 334.940†	959.8	157.7	0.3618 µg/L	0.3618 ppb	10:25:42
1	Tl 190.801†	-22.2	-2.0	-3.1488 µg/L	-3.1488 ppb	10:26:02
1	U 409.014†	660.9	-43.2	-4.3028 µg/L	-4.3028 ppb	10:25:42
1	V 292.402†	-80.4	10.4	0.1241 µg/L	0.1241 ppb	10:25:42
1	Zn 213.857†	559.7	29.8	0.8262 µg/L	0.8262 ppb	10:26:02
2	Sc RADIAL	113221.8	113221.8	101 %		10:24:39
2	Al 396.153Radial†	217.3	50.5	26.726 µg/L	26.726 ppb	10:24:39
2	Ca 317.933Radial†	487.7	69.7	28.129 µg/L	28.129 ppb	10:25:00
2	Fe 238.204 Radial†	14.3	2.2	11.789 µg/L	11.789 ppb	10:25:00
2	K 766.490 Radial†	814.5	58.9	33.242 µg/L	33.242 ppb	10:24:39
2	Mg 279.077 IEC†	23.0	6.7	37.969 µg/L	37.969 ppb	10:25:00
2	Na 589.592 Radial†	-552.1	-144.3	-40.714 µg/L	-40.714 ppb	10:24:39
2	Sr 421.552†	-33.4	58.3	0.3364 µg/L	0.3364 ppb	10:24:39
2	Sc 361.383	2031897.6	2031897.6	101.20 %		10:26:09
2	Y 371.029	1237118.6	1237118.6	101.12 %		10:26:09
2	Ag 328.068†	24.2	40.2	0.3838 µg/L	0.3838 ppb	10:26:14
2	As 188.979†	-0.3	-3.5	-6.7764 µg/L	-6.7764 ppb	10:26:35
2	B 249.677†	189.9	25.9	1.1994 µg/L	1.1994 ppb	10:26:14
2	Ba 233.527†	406926.5	402180.8	10758 µg/L	10758 ppb	10:26:09
2	Be 313.107†	3695.0	32.4	0.0211 µg/L	0.0211 ppb	10:26:14
2	Cd 226.502†	-88.4	10.3	0.2879 µg/L	0.2879 ppb	10:26:35
2	Co 228.616†	20.6	90.2	4.5788 µg/L	4.5788 ppb	10:26:35
2	Cr 267.716†	-108.3	17.2	0.3832 µg/L	0.3832 ppb	10:26:14
2	Cu 324.752†	3299.8	-48.2	-0.3417 µg/L	-0.3417 ppb	10:26:14
2	Mn 257.610†	-174.1	75.8	0.2508 µg/L	0.2508 ppb	10:26:35
2	Mo 202.031†	-12.3	-7.4	-0.8790 µg/L	-0.8790 ppb	10:26:35
2	Ni 231.604†	346.9	51.8	2.9897 µg/L	2.9897 ppb	10:26:35
2	P 214.914†	192.9	0.6	1.4012 µg/L	1.4012 ppb	10:26:35
2	Pb 220.353†	49.9	-1.7	-0.4473 µg/L	-0.4473 ppb	10:26:35
2	S 181.975 Axial†	27.2	1.1	6.1384 µg/L	6.1384 ppb	10:26:35
2	Sb 206.836†	21.3	-3.1	-3.2586 µg/L	-3.2586 ppb	10:26:35
2	Se 196.026†	14.1	3.1	4.6114 µg/L	4.6114 ppb	10:26:35
2	SiO2†	2028.9	-28.7	-5.8213 µg/L	-5.8213 ppb	10:26:14
2	Si 251.611†	353.5	-7.4	-0.5958 µg/L	-0.5958 ppb	10:26:35
2	Sn 189.927†	22.1	-0.5	-0.2637 µg/L	-0.2637 ppb	10:26:35
2	Ti 334.940†	861.9	53.1	0.1207 µg/L	0.1207 ppb	10:26:14
2	Tl 190.801†	-22.1	-1.8	-2.7979 µg/L	-2.7979 ppb	10:26:35
2	U 409.014†	666.6	-42.9	-4.2818 µg/L	-4.2818 ppb	10:26:14
2	V 292.402†	-74.0	17.4	0.1962 µg/L	0.1962 ppb	10:26:14
2	Zn 213.857†	561.0	26.5	0.7328 µg/L	0.7328 ppb	10:26:35
3	Sc RADIAL	113206.0	113206.0	101 %		10:25:05
3	Al 396.153Radial†	226.1	59.2	31.278 µg/L	31.278 ppb	10:25:05
3	Ca 317.933Radial†	467.4	49.8	20.075 µg/L	20.075 ppb	10:25:26
3	Fe 238.204 Radial†	10.8	-1.2	-6.4720 µg/L	-6.4720 ppb	10:25:26
3	K 766.490 Radial†	753.2	-1.6	-0.9013 µg/L	-0.9013 ppb	10:25:05

3	Mg 279.077 IEC†	20.7	4.5	25.429 µg/L	25.429 ppb	10:25:26
3	Na 589.592 Radial†	-567.4	-159.6	-45.020 µg/L	-45.020 ppb	10:25:05
3	Sr 421.552†	-58.3	33.6	0.1941 µg/L	0.1941 ppb	10:25:05
3	Sc 361.383	2027780.3	2027780.3	100.99 %		10:26:41
3	Y 371.029	1235476.0	1235476.0	100.99 %		10:26:41
3	Ag 328.068†	-19.2	-2.8	-0.0241 µg/L	-0.0241 ppb	10:26:47
3	As 188.979†	-1.9	-5.1	-9.8574 µg/L	-9.8574 ppb	10:27:07
3	B 249.677†	180.9	17.4	0.8092 µg/L	0.8092 ppb	10:26:47
3	Ba 233.527†	404106.1	400204.6	10706 µg/L	10706 ppb	10:26:41
3	Be 313.107†	3785.8	129.8	0.0844 µg/L	0.0844 ppb	10:26:47
3	Cd 226.502†	-91.3	7.2	0.2049 µg/L	0.2049 ppb	10:27:07
3	Co 228.616†	15.7	85.3	4.3356 µg/L	4.3356 ppb	10:27:07
3	Cr 267.716†	-121.2	4.2	0.0937 µg/L	0.0937 ppb	10:26:47
3	Cu 324.752†	3308.6	-32.9	-0.2365 µg/L	-0.2365 ppb	10:26:47
3	Mn 257.610†	-165.1	84.4	0.2767 µg/L	0.2767 ppb	10:27:07
3	Mo 202.031†	-1.8	3.0	0.3600 µg/L	0.3600 ppb	10:27:07
3	Ni 231.604†	347.0	52.6	3.0349 µg/L	3.0349 ppb	10:27:07
3	P 214.914†	198.7	6.7	14.935 µg/L	14.935 ppb	10:27:07
3	Pb 220.353†	61.0	9.4	2.5000 µg/L	2.5000 ppb	10:27:07
3	S 181.975 Axial†	25.9	-0.0	-0.2542 µg/L	-0.2542 ppb	10:27:07
3	Sb 206.836†	23.7	-0.7	-0.7034 µg/L	-0.7034 ppb	10:27:07
3	Se 196.026†	6.8	-4.0	-5.9721 µg/L	-5.9721 ppb	10:27:07
3	SiO2†	2025.3	-28.2	-5.7180 µg/L	-5.7180 ppb	10:26:47
3	Si 251.611†	368.8	8.4	0.7746 µg/L	0.7746 ppb	10:27:07
3	Sn 189.927†	16.9	-5.6	-2.8491 µg/L	-2.8491 ppb	10:27:07
3	Ti 334.940†	953.9	146.0	0.3349 µg/L	0.3349 ppb	10:26:47
3	Tl 190.801†	-21.4	-1.1	-1.6806 µg/L	-1.6806 ppb	10:27:07
3	U 409.014†	691.7	-16.7	-1.6634 µg/L	-1.6634 ppb	10:26:47
3	V 292.402†	-58.2	32.9	0.3945 µg/L	0.3945 ppb	10:26:47
3	Zn 213.857†	561.2	27.9	0.7722 µg/L	0.7722 ppb	10:27:07

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2024992.5	100.85	%	0.430				0.43%
Sc RADIAL	113285.5	101	%	0.1				0.11%
Y 371.029	1233175.3	100.80	%	0.447				0.44%
Ag 328.068†	25.7	0.2455	µg/L	0.23349	0.2455	ppb	0.23349	95.10%
Al 396.153Radial†	47.1	24.906	µg/L	7.4502	24.906	ppb	7.4502	29.91%
As 188.979†	-3.3	-6.4463	µg/L	3.58753	-6.4463	ppb	3.58753	55.65%
B 249.677†	16.8	0.7818	µg/L	0.43192	0.7818	ppb	0.43192	55.25%
Ba 233.527†	401412.5	10738	µg/L	28.3	10738	ppb	28.3	0.26%
Be 313.107†	94.4	0.0614	µg/L	0.03506	0.0614	ppb	0.03506	57.06%
Ca 317.933Radial†	57.5	23.194	µg/L	4.3229	23.194	ppb	4.3229	18.64%
Cd 226.502†	9.3	0.2625	µg/L	0.04995	0.2625	ppb	0.04995	19.03%
Co 228.616†	86.1	4.3754	µg/L	0.18671	4.3754	ppb	0.18671	4.27%
Cr 267.716†	22.4	0.4977	µg/L	0.47173	0.4977	ppb	0.47173	94.79%
Cu 324.752†	-36.0	-0.2572	µg/L	0.07632	-0.2572	ppb	0.07632	29.68%
Fe 238.204 Radial†	-0.1	-0.5410	µg/L	10.68076	-0.5410	ppb	10.68076	>999.9%
K 766.490 Radial†	48.8	27.535	µg/L	26.0564	27.535	ppb	26.0564	94.63%
Mg 279.077 IEC†	4.1	23.148	µg/L	16.0825	23.148	ppb	16.0825	69.48%
Mn 257.610†	75.1	0.2470	µg/L	0.03172	0.2470	ppb	0.03172	12.84%
Mo 202.031†	1.4	0.1620	µg/L	0.95748	0.1620	ppb	0.95748	590.88%
Na 589.592 Radial†	-150.5	-42.436	µg/L	2.2787	-42.436	ppb	2.2787	5.37%
Ni 231.604†	52.7	3.0395	µg/L	0.05222	3.0395	ppb	0.05222	1.72%
P 214.914†	2.2	4.9312	µg/L	8.78741	4.9312	ppb	8.78741	178.20%
Pb 220.353†	3.2	0.8392	µg/L	1.50889	0.8392	ppb	1.50889	179.81%
S 181.975 Axial†	0.2	1.1066	µg/L	4.50812	1.1066	ppb	4.50812	407.37%
Sb 206.836†	-2.6	-2.7439	µg/L	1.83810	-2.7439	ppb	1.83810	66.99%
Se 196.026†	1.3	1.8770	µg/L	6.90102	1.8770	ppb	6.90102	367.65%
SiO2†	-23.7	-4.8089	µg/L	1.66498	-4.8089	ppb	1.66498	34.62%
Si 251.611†	2.5	0.2402	µg/L	0.73329	0.2402	ppb	0.73329	305.33%
Sn 189.927†	-3.2	-1.6076	µg/L	1.29575	-1.6076	ppb	1.29575	80.60%
Sr 421.552†	44.9	0.2593	µg/L	0.07192	0.2593	ppb	0.07192	27.74%
Ti 334.940†	118.9	0.2725	µg/L	0.13213	0.2725	ppb	0.13213	48.49%
Tl 190.801†	-1.6	-2.5424	µg/L	0.76671	-2.5424	ppb	0.76671	30.16%
U 409.014†	-34.3	-3.4160	µg/L	1.51780	-3.4160	ppb	1.51780	44.43%
V 292.402†	20.2	0.2383	µg/L	0.14001	0.2383	ppb	0.14001	58.76%
Zn 213.857†	28.1	0.7771	µg/L	0.04688	0.7771	ppb	0.04688	6.03%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:27:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114311.6	114311.6	102	%			10:27:52
1	Al 396.153Radial†	10318.5	9943.6	5235.7	µg/L	5235.7	ppb	10:27:52
1	Ca 317.933Radial†	13687.7	12996.0	5243.2	µg/L	5243.2	ppb	10:28:12
1	Fe 238.204 Radial†	1023.7	990.9	5278.4	µg/L	5278.4	ppb	10:28:12
1	K 766.490 Radial†	10176.8	9222.6	5202.8	µg/L	5202.8	ppb	10:27:52
1	Mg 279.077 IEC†	979.6	943.6	5328.8	µg/L	5328.8	ppb	10:28:12
1	Na 589.592 Radial†	37293.4	36934.4	10417	µg/L	10417	ppb	10:27:52
1	Sr 421.552†	90560.7	88804.9	512.51	µg/L	512.51	ppb	10:27:52
1	Sc 361.383	2027504.8	2027504.8	100.98	%			10:29:15
1	Y 371.029	1226162.8	1226162.8	100.23	%			10:29:15
1	Ag 328.068†	54896.9	54380.7	519.54	µg/L	519.54	ppb	10:29:21
1	As 188.979†	269.5	263.7	511.18	µg/L	511.18	ppb	10:29:42
1	B 249.677†	11391.3	11119.0	515.39	µg/L	515.39	ppb	10:29:21
1	Ba 233.527†	19537.8	19420.8	520.59	µg/L	520.59	ppb	10:29:21
1	Be 313.107†	799974.3	788596.2	513.77	µg/L	513.77	ppb	10:29:15
1	Cd 226.502†	18705.3	18621.5	523.77	µg/L	523.77	ppb	10:29:21
1	Co 228.616†	10308.2	10278.0	522.39	µg/L	522.39	ppb	10:29:21
1	Cr 267.716†	23358.2	23255.9	517.41	µg/L	517.41	ppb	10:29:21
1	Cu 324.752†	73615.4	69592.4	498.32	µg/L	498.32	ppb	10:29:21
1	Mn 257.610†	157038.6	155763.3	513.16	µg/L	513.16	ppb	10:29:15
1	Mo 202.031†	4357.0	4319.5	515.98	µg/L	515.98	ppb	10:29:42
1	Ni 231.604†	9366.7	8984.8	518.53	µg/L	518.53	ppb	10:29:21
1	P 214.914†	1353.9	1150.7	2506.8	µg/L	2506.8	ppb	10:29:42
1	Pb 220.353†	2024.0	1953.4	516.82	µg/L	516.82	ppb	10:29:42
1	S 181.975 Axial†	214.1	186.3	995.42	µg/L	995.42	ppb	10:29:42
1	Sb 206.836†	519.5	490.3	510.66	µg/L	510.66	ppb	10:29:42
1	Se 196.026†	378.4	363.9	539.55	µg/L	539.55	ppb	10:29:42
1	SiO2†	29689.7	27368.1	5551.8	µg/L	5551.8	ppb	10:29:21
1	Si 251.611†	32685.9	32012.1	2555.4	µg/L	2555.4	ppb	10:29:21
1	Sn 189.927†	1038.5	1006.1	515.32	µg/L	515.32	ppb	10:29:42
1	Ti 334.940†	223415.3	220449.8	507.14	µg/L	507.14	ppb	10:29:15
1	Tl 190.801†	306.7	323.8	511.60	µg/L	511.60	ppb	10:29:42
1	U 409.014†	5856.4	5098.0	507.60	µg/L	507.60	ppb	10:29:21
1	V 292.402†	43273.2	42944.0	520.26	µg/L	520.26	ppb	10:29:21
1	Zn 213.857†	19231.6	18517.3	519.12	µg/L	519.12	ppb	10:29:21
2	Sc RADIAL	113831.2	113831.2	102	%			10:28:17
2	Al 396.153Radial†	10348.8	10016.0	5273.9	µg/L	5273.9	ppb	10:28:17
2	Ca 317.933Radial†	13670.0	13035.1	5258.9	µg/L	5258.9	ppb	10:28:38
2	Fe 238.204 Radial†	1023.4	994.8	5299.6	µg/L	5299.6	ppb	10:28:38
2	K 766.490 Radial†	10150.4	9238.7	5211.9	µg/L	5211.9	ppb	10:28:17
2	Mg 279.077 IEC†	984.1	952.1	5376.4	µg/L	5376.4	ppb	10:28:38
2	Na 589.592 Radial†	37493.5	37285.4	10516	µg/L	10516	ppb	10:28:17
2	Sr 421.552†	90666.1	89282.9	515.27	µg/L	515.27	ppb	10:28:17
2	Sc 361.383	2022656.1	2022656.1	100.74	%			10:29:49
2	Y 371.029	1223740.6	1223740.6	100.03	%			10:29:49
2	Ag 328.068†	55734.0	55342.0	528.73	µg/L	528.73	ppb	10:29:54
2	As 188.979†	272.0	266.8	517.19	µg/L	517.19	ppb	10:30:15
2	B 249.677†	11577.0	11330.4	525.22	µg/L	525.22	ppb	10:29:54
2	Ba 233.527†	19859.4	19786.4	530.39	µg/L	530.39	ppb	10:29:54
2	Be 313.107†	802638.6	793140.1	516.73	µg/L	516.73	ppb	10:29:49
2	Cd 226.502†	19051.0	19009.1	534.69	µg/L	534.69	ppb	10:29:54
2	Co 228.616†	10480.8	10473.8	532.34	µg/L	532.34	ppb	10:29:54
2	Cr 267.716†	23762.4	23712.5	527.58	µg/L	527.58	ppb	10:29:54
2	Cu 324.752†	74749.6	70893.1	507.62	µg/L	507.62	ppb	10:29:54
2	Mn 257.610†	157400.1	156494.9	515.57	µg/L	515.57	ppb	10:29:49
2	Mo 202.031†	4357.0	4329.8	517.21	µg/L	517.21	ppb	10:30:15
2	Ni 231.604†	9539.4	9178.5	529.71	µg/L	529.71	ppb	10:29:54
2	P 214.914†	1351.3	1151.4	2507.0	µg/L	2507.0	ppb	10:30:15
2	Pb 220.353†	2013.0	1947.2	515.17	µg/L	515.17	ppb	10:30:15

2	S 181.975 Axial†	220.9	193.6	1034.5 µg/L	1034.5 ppb	10:30:15
2	Sb 206.836†	517.4	489.5	509.72 µg/L	509.72 ppb	10:30:15
2	Se 196.026†	366.9	353.4	524.01 µg/L	524.01 ppb	10:30:15
2	SiO2†	30183.9	27929.2	5665.6 µg/L	5665.6 ppb	10:29:54
2	Si 251.611†	33136.8	32537.3	2598.0 µg/L	2598.0 ppb	10:29:54
2	Sn 189.927†	1035.5	1005.5	515.06 µg/L	515.06 ppb	10:30:15
2	Ti 334.940†	224174.2	221733.5	510.09 µg/L	510.09 ppb	10:29:49
2	Tl 190.801†	316.2	334.0	527.54 µg/L	527.54 ppb	10:30:15
2	U 409.014†	6064.7	5318.6	529.60 µg/L	529.60 ppb	10:29:54
2	V 292.402†	44059.2	43827.0	530.90 µg/L	530.90 ppb	10:29:54
2	Zn 213.857†	19624.4	18952.8	531.36 µg/L	531.36 ppb	10:29:54
3	Sc RADIAL	113536.1	113536.1	101 %		10:28:43
3	Al 396.153Radial†	10298.3	9992.7	5261.8 µg/L	5261.8 ppb	10:28:43
3	Ca 317.933Radial†	13718.9	13118.3	5292.5 µg/L	5292.5 ppb	10:29:04
3	Fe 238.204 Radial†	1021.7	995.7	5304.1 µg/L	5304.1 ppb	10:29:04
3	K 766.490 Radial†	10078.7	9193.9	5186.7 µg/L	5186.7 ppb	10:28:43
3	Mg 279.077 IEC†	975.1	945.7	5340.5 µg/L	5340.5 ppb	10:29:04
3	Na 589.592 Radial†	37231.0	37122.3	10470 µg/L	10470 ppb	10:28:43
3	Sr 421.552†	90098.5	88954.9	513.37 µg/L	513.37 ppb	10:28:43
3	Sc 361.383	2026929.4	2026929.4	100.95 %		10:30:22
3	Y 371.029	1226564.7	1226564.7	100.26 %		10:30:22
3	Ag 328.068†	55140.6	54637.5	522.00 µg/L	522.00 ppb	10:30:28
3	As 188.979†	270.1	264.4	512.48 µg/L	512.48 ppb	10:30:48
3	B 249.677†	11449.4	11179.8	518.21 µg/L	518.21 ppb	10:30:28
3	Ba 233.527†	19614.8	19502.5	522.79 µg/L	522.79 ppb	10:30:28
3	Be 313.107†	802973.7	791792.2	515.85 µg/L	515.85 ppb	10:30:22
3	Cd 226.502†	18873.2	18793.0	528.60 µg/L	528.60 ppb	10:30:28
3	Co 228.616†	10320.2	10292.8	523.13 µg/L	523.13 ppb	10:30:28
3	Cr 267.716†	23513.8	23416.6	520.99 µg/L	520.99 ppb	10:30:28
3	Cu 324.752†	73891.4	69886.5	500.43 µg/L	500.43 ppb	10:30:28
3	Mn 257.610†	157526.6	156290.8	514.90 µg/L	514.90 ppb	10:30:22
3	Mo 202.031†	4332.3	4296.3	513.20 µg/L	513.20 ppb	10:30:48
3	Ni 231.604†	9469.0	9088.8	524.53 µg/L	524.53 ppb	10:30:28
3	P 214.914†	1350.2	1147.4	2499.1 µg/L	2499.1 ppb	10:30:48
3	Pb 220.353†	2018.1	1948.1	515.40 µg/L	515.40 ppb	10:30:48
3	S 181.975 Axial†	218.1	190.3	1016.9 µg/L	1016.9 ppb	10:30:48
3	Sb 206.836†	520.0	490.9	511.29 µg/L	511.29 ppb	10:30:48
3	Se 196.026†	368.8	354.5	525.65 µg/L	525.65 ppb	10:30:48
3	SiO2†	29823.4	27508.9	5580.4 µg/L	5580.4 ppb	10:30:28
3	Si 251.611†	32829.6	32163.6	2567.8 µg/L	2567.8 ppb	10:30:28
3	Sn 189.927†	1033.9	1001.8	513.17 µg/L	513.17 ppb	10:30:48
3	Ti 334.940†	224374.4	221462.6	509.47 µg/L	509.47 ppb	10:30:22
3	Tl 190.801†	312.5	329.6	520.72 µg/L	520.72 ppb	10:30:48
3	U 409.014†	5995.0	5236.9	521.45 µg/L	521.45 ppb	10:30:28
3	V 292.402†	43543.9	43224.3	523.63 µg/L	523.63 ppb	10:30:28
3	Zn 213.857†	19413.7	18703.1	524.34 µg/L	524.34 ppb	10:30:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2025696.8	100.89	%	0.132				0.13%
Sc RADIAL	113893.0	102	%	0.3				0.34%
Y 371.029	1225489.4	100.17	%	0.125				0.12%
Ag 328.068†	54786.8	523.43	µg/L	4.757	523.43	ppb	4.757	0.91%
QC value within limits for Ag 328.068 Recovery = 104.69%								
Al 396.153Radial†	9984.1	5257.1	µg/L	19.52	5257.1	ppb	19.52	0.37%
QC value within limits for Al 396.153Radial Recovery = 105.14%								
As 188.979†	265.0	513.62	µg/L	3.159	513.62	ppb	3.159	0.62%
QC value within limits for As 188.979 Recovery = 102.72%								
B 249.677†	11209.8	519.61	µg/L	5.059	519.61	ppb	5.059	0.97%
QC value within limits for B 249.677 Recovery = 103.92%								
Ba 233.527†	19569.9	524.59	µg/L	5.144	524.59	ppb	5.144	0.98%
QC value within limits for Ba 233.527 Recovery = 104.92%								
Be 313.107†	791176.2	515.45	µg/L	1.520	515.45	ppb	1.520	0.29%
QC value within limits for Be 313.107 Recovery = 103.09%								
Ca 317.933Radial†	13049.8	5264.9	µg/L	25.20	5264.9	ppb	25.20	0.48%
QC value within limits for Ca 317.933Radial Recovery = 105.30%								
Cd 226.502†	18807.9	529.02	µg/L	5.471	529.02	ppb	5.471	1.03%
QC value within limits for Cd 226.502 Recovery = 105.80%								
Co 228.616†	10348.2	525.95	µg/L	5.541	525.95	ppb	5.541	1.05%

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   QC value within limits for Co 228.616  Recovery = 105.19%
Cr 267.716†            23461.7      521.99 µg/L        5.154      521.99 ppb        5.154   0.99%
   QC value within limits for Cr 267.716  Recovery = 104.40%
Cu 324.752†            70124.0      502.12 µg/L        4.875      502.12 ppb        4.875   0.97%
   QC value within limits for Cu 324.752  Recovery = 100.42%
Fe 238.204 Radial†       993.8      5294.0 µg/L        13.72      5294.0 ppb        13.72   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.88%
K 766.490 Radial†       9218.4      5200.5 µg/L        12.79      5200.5 ppb        12.79   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 104.01%
Mg 279.077 IEC†          947.1      5348.5 µg/L        24.78      5348.5 ppb        24.78   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.97%
Mn 257.610†           156183.0      514.55 µg/L        1.244      514.55 ppb        1.244   0.24%
   QC value within limits for Mn 257.610  Recovery = 102.91%
Mo 202.031†            4315.2      515.46 µg/L        2.052      515.46 ppb        2.052   0.40%
   QC value within limits for Mo 202.031  Recovery = 103.09%
Na 589.592 Radial†     37114.1       10468 µg/L         49.5       10468 ppb         49.5   0.47%
   QC value within limits for Na 589.592 Radial  Recovery = 104.68%
Ni 231.604†            9084.0      524.25 µg/L        5.594      524.25 ppb        5.594   1.07%
   QC value within limits for Ni 231.604  Recovery = 104.85%
P 214.914†             1149.9      2504.3 µg/L         4.51      2504.3 ppb         4.51   0.18%
   QC value within limits for P 214.914  Recovery = 100.17%
Pb 220.353†            1949.6      515.80 µg/L        0.892      515.80 ppb        0.892   0.17%
   QC value within limits for Pb 220.353  Recovery = 103.16%
S 181.975 Axial†        190.1      1015.6 µg/L        19.57      1015.6 ppb        19.57   1.93%
   QC value within limits for S 181.975 Axial  Recovery = 101.56%
Sb 206.836†             490.2      510.56 µg/L        0.789      510.56 ppb        0.789   0.15%
   QC value within limits for Sb 206.836  Recovery = 102.11%
Se 196.026†             357.3      529.74 µg/L        8.539      529.74 ppb        8.539   1.61%
   QC value within limits for Se 196.026  Recovery = 105.95%
SiO2†                  27602.1      5599.3 µg/L        59.22      5599.3 ppb        59.22   1.06%
   QC value within limits for SiO2  Recovery = 104.71%
Si 251.611†            32237.7      2573.8 µg/L        21.92      2573.8 ppb        21.92   0.85%
   QC value within limits for Si 251.611  Recovery = 102.95%
Sn 189.927†            1004.5      514.52 µg/L        1.171      514.52 ppb        1.171   0.23%
   QC value within limits for Sn 189.927  Recovery = 102.90%
Sr 421.552†            89014.3      513.71 µg/L        1.411      513.71 ppb        1.411   0.27%
   QC value within limits for Sr 421.552  Recovery = 102.74%
Ti 334.940†           221215.3      508.90 µg/L        1.557      508.90 ppb        1.557   0.31%
   QC value within limits for Ti 334.940  Recovery = 101.78%
Tl 190.801†             329.1      519.95 µg/L        7.997      519.95 ppb        7.997   1.54%
   QC value within limits for Tl 190.801  Recovery = 103.99%
U 409.014†             5217.9      519.55 µg/L       11.123      519.55 ppb       11.123   2.14%
   QC value within limits for U 409.014  Recovery = 103.91%
V 292.402†             43331.8      524.93 µg/L        5.440      524.93 ppb        5.440   1.04%
   QC value within limits for V 292.402  Recovery = 104.99%
Zn 213.857†            18724.4      524.94 µg/L        6.138      524.94 ppb        6.138   1.17%
   QC value within limits for Zn 213.857  Recovery = 104.99%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 10:30:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114009.0	114009.0	102	%			10:31:31
1	Al 396.153Radial†	164.2	-3.1	-1.6921	µg/L	-1.6921	ppb	10:31:31
1	Ca 317.933Radial†	432.6	12.3	4.9750	µg/L	4.9750	ppb	10:31:51
1	Fe 238.204 Radial†	10.8	-1.3	-7.0626	µg/L	-7.0626	ppb	10:31:51
1	K 766.490 Radial†	759.8	-0.3	-0.1824	µg/L	-0.1824	ppb	10:31:31
1	Mg 279.077 IEC†	18.8	2.5	14.020	µg/L	14.020	ppb	10:31:51
1	Na 589.592 Radial†	-607.9	-195.4	-55.117	µg/L	-55.117	ppb	10:31:31
1	Sr 421.552†	-62.9	29.5	0.1703	µg/L	0.1703	ppb	10:31:31
1	Sc 361.383	2035762.9	2035762.9	101.39	%			10:32:53
1	Y 371.029	1239214.1	1239214.1	101.30	%			10:32:53
1	Ag 328.068†	95.8	110.7	1.0521	µg/L	1.0521	ppb	10:32:58
1	As 188.979†	2.1	-1.0	-2.0183	µg/L	-2.0183	ppb	10:33:19
1	B 249.677†	186.0	21.7	1.0097	µg/L	1.0097	ppb	10:32:58
1	Ba 233.527†	-42.9	30.2	0.8077	µg/L	0.8077	ppb	10:33:19
1	Be 313.107†	3699.6	30.0	0.0196	µg/L	0.0196	ppb	10:32:58
1	Cd 226.502†	-96.9	2.0	0.0534	µg/L	0.0534	ppb	10:33:19
1	Co 228.616†	-55.2	15.3	0.7824	µg/L	0.7824	ppb	10:33:19
1	Cr 267.716†	-134.5	-8.4	-0.1865	µg/L	-0.1865	ppb	10:32:58
1	Cu 324.752†	3311.9	-42.5	-0.3050	µg/L	-0.3050	ppb	10:32:58
1	Mn 257.610†	-193.4	57.1	0.1871	µg/L	0.1871	ppb	10:33:19
1	Mo 202.031†	6.1	10.8	1.2922	µg/L	1.2922	ppb	10:33:19
1	Ni 231.604†	306.8	11.6	0.6693	µg/L	0.6693	ppb	10:33:19
1	P 214.914†	191.7	-0.9	-2.0024	µg/L	-2.0024	ppb	10:33:19
1	Pb 220.353†	57.3	5.5	1.4592	µg/L	1.4592	ppb	10:33:19
1	S 181.975 Axial†	24.2	-1.8	-9.6608	µg/L	-9.6608	ppb	10:33:19
1	Sb 206.836†	18.9	-5.5	-5.7664	µg/L	-5.7664	ppb	10:33:19
1	Se 196.026†	15.2	4.2	6.2295	µg/L	6.2295	ppb	10:33:19
1	SiO2†	2026.0	-35.4	-7.1878	µg/L	-7.1878	ppb	10:32:58
1	Si 251.611†	348.9	-12.7	-1.0131	µg/L	-1.0131	ppb	10:33:19
1	Sn 189.927†	20.5	-2.2	-1.1071	µg/L	-1.1071	ppb	10:33:19
1	Ti 334.940†	812.5	2.9	0.0063	µg/L	0.0063	ppb	10:32:58
1	Tl 190.801†	-19.5	0.8	1.2980	µg/L	1.2980	ppb	10:33:19
1	U 409.014†	654.1	-56.5	-5.6317	µg/L	-5.6317	ppb	10:32:58
1	V 292.402†	-59.3	32.0	0.3835	µg/L	0.3835	ppb	10:32:58
1	Zn 213.857†	542.6	7.3	0.2044	µg/L	0.2044	ppb	10:33:19
2	Sc RADIAL	112391.7	112391.7	100	%			10:31:56
2	Al 396.153Radial†	160.1	-4.9	-2.5568	µg/L	-2.5568	ppb	10:31:56
2	Ca 317.933Radial†	424.3	10.2	4.1002	µg/L	4.1002	ppb	10:32:17
2	Fe 238.204 Radial†	8.1	-3.9	-20.661	µg/L	-20.661	ppb	10:32:17
2	K 766.490 Radial†	758.0	8.6	4.8419	µg/L	4.8419	ppb	10:31:56
2	Mg 279.077 IEC†	15.5	-0.5	-2.9562	µg/L	-2.9562	ppb	10:32:17
2	Na 589.592 Radial†	-575.3	-171.6	-48.392	µg/L	-48.392	ppb	10:31:56
2	Sr 421.552†	-54.7	36.8	0.2125	µg/L	0.2125	ppb	10:31:56
2	Sc 361.383	2045701.9	2045701.9	101.89	%			10:33:25
2	Y 371.029	1244707.3	1244707.3	101.74	%			10:33:25
2	Ag 328.068†	14.3	30.3	0.2856	µg/L	0.2856	ppb	10:33:30
2	As 188.979†	2.1	-1.1	-2.1551	µg/L	-2.1551	ppb	10:33:51
2	B 249.677†	184.6	19.4	0.9108	µg/L	0.9108	ppb	10:33:30
2	Ba 233.527†	-45.3	28.0	0.7492	µg/L	0.7492	ppb	10:33:51
2	Be 313.107†	3718.5	30.8	0.0200	µg/L	0.0200	ppb	10:33:30
2	Cd 226.502†	-98.5	0.9	0.0238	µg/L	0.0238	ppb	10:33:51
2	Co 228.616†	-66.3	4.8	0.2406	µg/L	0.2406	ppb	10:33:51
2	Cr 267.716†	-117.4	9.0	0.2008	µg/L	0.2008	ppb	10:33:30
2	Cu 324.752†	3286.1	-83.7	-0.6021	µg/L	-0.6021	ppb	10:33:30
2	Mn 257.610†	-208.5	43.1	0.1394	µg/L	0.1394	ppb	10:33:51
2	Mo 202.031†	-9.5	-4.6	-0.5492	µg/L	-0.5492	ppb	10:33:51
2	Ni 231.604†	304.2	7.5	0.4325	µg/L	0.4325	ppb	10:33:51
2	P 214.914†	189.3	-4.2	-9.1845	µg/L	-9.1845	ppb	10:33:51
2	Pb 220.353†	50.2	-1.7	-0.4427	µg/L	-0.4427	ppb	10:33:51

2	S 181.975 Axial†	24.6	-1.5	-8.2828 µg/L	-8.2828 ppb	10:33:51
2	Sb 206.836†	21.1	-3.4	-3.5749 µg/L	-3.5749 ppb	10:33:51
2	Se 196.026†	12.0	1.0	1.5223 µg/L	1.5223 ppb	10:33:51
2	SiO2†	2094.9	22.5	4.5641 µg/L	4.5641 ppb	10:33:30
2	Si 251.611†	366.2	2.6	0.2416 µg/L	0.2416 ppb	10:33:51
2	Sn 189.927†	21.5	-1.3	-0.6670 µg/L	-0.6670 ppb	10:33:51
2	Ti 334.940†	877.5	62.7	0.1441 µg/L	0.1441 ppb	10:33:30
2	Tl 190.801†	-16.0	4.4	6.9108 µg/L	6.9108 ppb	10:33:51
2	U 409.014†	659.5	-54.4	-5.4184 µg/L	-5.4184 ppb	10:33:30
2	V 292.402†	-89.9	2.2	0.0126 µg/L	0.0126 ppb	10:33:30
2	Zn 213.857†	536.5	-1.2	-0.0339 µg/L	-0.0339 ppb	10:33:51
3	Sc RADIAL	113653.3	113653.3	101 %		10:32:22
3	Al 396.153Radial†	180.4	13.3	7.0111 µg/L	7.0111 ppb	10:32:22
3	Ca 317.933Radial†	433.2	14.3	5.7553 µg/L	5.7553 ppb	10:32:43
3	Fe 238.204 Radial†	9.2	-2.9	-15.572 µg/L	-15.572 ppb	10:32:43
3	K 766.490 Radial†	748.6	-9.1	-5.1297 µg/L	-5.1297 ppb	10:32:22
3	Mg 279.077 IEC†	18.6	2.3	13.287 µg/L	13.287 ppb	10:32:43
3	Na 589.592 Radial†	-622.3	-211.5	-59.661 µg/L	-59.661 ppb	10:32:22
3	Sr 421.552†	-50.1	41.9	0.2419 µg/L	0.2419 ppb	10:32:22
3	Sc 361.383	2009444.2	2009444.2	100.08 %		10:33:57
3	Y 371.029	1222762.1	1222762.1	99.950 %		10:33:57
3	Ag 328.068†	80.4	96.6	0.9117 µg/L	0.9117 ppb	10:34:03
3	As 188.979†	3.7	0.5	1.0482 µg/L	1.0482 ppb	10:34:23
3	B 249.677†	169.1	7.3	0.3427 µg/L	0.3427 ppb	10:34:03
3	Ba 233.527†	-39.0	33.5	0.8943 µg/L	0.8943 ppb	10:34:23
3	Be 313.107†	3744.0	122.2	0.0795 µg/L	0.0795 ppb	10:34:03
3	Cd 226.502†	-81.4	16.2	0.4592 µg/L	0.4592 ppb	10:34:23
3	Co 228.616†	-63.1	6.8	0.3438 µg/L	0.3438 ppb	10:34:23
3	Cr 267.716†	-109.6	14.7	0.3263 µg/L	0.3263 ppb	10:34:03
3	Cu 324.752†	3284.1	-27.4	-0.1993 µg/L	-0.1993 ppb	10:34:03
3	Mn 257.610†	-191.6	56.4	0.1835 µg/L	0.1835 ppb	10:34:23
3	Mo 202.031†	-0.8	3.9	0.4680 µg/L	0.4680 ppb	10:34:23
3	Ni 231.604†	291.1	-0.2	-0.0100 µg/L	-0.0100 ppb	10:34:23
3	P 214.914†	193.1	3.0	6.6812 µg/L	6.6812 ppb	10:34:23
3	Pb 220.353†	49.7	-1.4	-0.3573 µg/L	-0.3573 ppb	10:34:23
3	S 181.975 Axial†	23.0	-2.7	-14.703 µg/L	-14.703 ppb	10:34:23
3	Sb 206.836†	20.3	-3.8	-4.0044 µg/L	-4.0044 ppb	10:34:23
3	Se 196.026†	13.6	2.8	4.1249 µg/L	4.1249 ppb	10:34:23
3	SiO2†	2012.5	-22.7	-4.6108 µg/L	-4.6108 ppb	10:34:03
3	Si 251.611†	339.6	-17.5	-1.5151 µg/L	-1.5151 ppb	10:34:23
3	Sn 189.927†	26.3	3.9	1.9812 µg/L	1.9812 ppb	10:34:23
3	Ti 334.940†	911.5	112.2	0.2580 µg/L	0.2580 ppb	10:34:03
3	Tl 190.801†	-21.9	-1.8	-2.7877 µg/L	-2.7877 ppb	10:34:23
3	U 409.014†	727.4	25.2	2.5186 µg/L	2.5186 ppb	10:34:03
3	V 292.402†	-127.9	-37.3	-0.4413 µg/L	-0.4413 ppb	10:34:03
3	Zn 213.857†	527.3	-1.0	-0.0259 µg/L	-0.0259 ppb	10:34:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030303.0	101.12	%	0.933				0.92%
Sc RADIAL	113351.3	101	%	0.8				0.75%
Y 371.029	1235561.2	101.00	%	0.933				0.92%
Ag 328.068†	79.2	0.7498	µg/L	0.40810	0.7498	ppb	0.40810	54.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.8	0.9207	µg/L	5.29210	0.9207	ppb	5.29210	574.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-1.0418	µg/L	1.81120	-1.0418	ppb	1.81120	173.86%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	16.1	0.7544	µg/L	0.35995	0.7544	ppb	0.35995	47.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	30.5	0.8170	µg/L	0.07300	0.8170	ppb	0.07300	8.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	61.0	0.0397	µg/L	0.03449	0.0397	ppb	0.03449	86.87%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.3	4.9435	µg/L	0.82796	4.9435	ppb	0.82796	16.75%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.4	0.1788	µg/L	0.24327	0.1788	ppb	0.24327	136.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	9.0	0.4556	µg/L	0.28767	0.4556	ppb	0.28767	63.14%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                5.1      0.1135 µg/L       0.26728      0.1135 ppb        0.26728 235.43%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -51.2     -0.3688 µg/L       0.20883     -0.3688 ppb        0.20883  56.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -2.7     -14.432 µg/L        6.8705     -14.432 ppb         6.8705  47.61%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -0.3     -0.1567 µg/L       4.98585     -0.1567 ppb        4.98585 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.4      8.1171 µg/L       9.59676      8.1171 ppb        9.59676 118.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               52.2      0.1700 µg/L       0.02656      0.1700 ppb        0.02656  15.63%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                3.4      0.4037 µg/L       0.92234      0.4037 ppb        0.92234 228.48%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -192.8     -54.390 µg/L        5.6698     -54.390 ppb         5.6698  10.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                6.3      0.3639 µg/L       0.34482      0.3639 ppb        0.34482  94.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -0.7     -1.5019 µg/L       7.94469     -1.5019 ppb        7.94469 528.97%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                0.8      0.2197 µg/L       1.07424      0.2197 ppb        1.07424 488.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -2.0     -10.882 µg/L        3.3799     -10.882 ppb         3.3799  31.06%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -4.3     -4.4486 µg/L       1.16128     -4.4486 ppb        1.16128  26.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.7      3.9589 µg/L       2.35801      3.9589 ppb        2.35801  59.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -11.9     -2.4115 µg/L       6.17695     -2.4115 ppb        6.17695 256.15%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               -9.2     -0.7622 µg/L       0.90481     -0.7622 ppb        0.90481 118.71%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.1      0.0690 µg/L       1.67054      0.0690 ppb        1.67054 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               36.1      0.2082 µg/L       0.03599      0.2082 ppb        0.03599  17.28%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               59.3      0.1361 µg/L       0.12603      0.1361 ppb        0.12603  92.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.1      1.8070 µg/L       4.86924      1.8070 ppb        4.86924 269.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -28.5     -2.8438 µg/L       4.64523     -2.8438 ppb        4.64523 163.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -1.0     -0.0151 µg/L       0.41308     -0.0151 ppb        0.41308 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                1.7      0.0482 µg/L       0.13535      0.0482 ppb        0.13535 280.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 10:56:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114455.6	114455.6	102	%			10:57:06
1	Al 396.153Radial†	10440.2	10050.0	5291.7	µg/L	5291.7	ppb	10:57:06
1	Ca 317.933Radial†	13677.5	12969.0	5232.3	µg/L	5232.3	ppb	10:57:26
1	Fe 238.204 Radial†	1034.0	999.7	5325.6	µg/L	5325.6	ppb	10:57:26
1	K 766.490 Radial†	10055.1	9091.0	5128.6	µg/L	5128.6	ppb	10:57:06
1	Mg 279.077 IEC†	990.0	952.6	5379.6	µg/L	5379.6	ppb	10:57:26
1	Na 589.592 Radial†	37542.5	37132.1	10473	µg/L	10473	ppb	10:57:06
1	Sr 421.552†	91022.1	89144.7	514.47	µg/L	514.47	ppb	10:57:06
1	Sc 361.383	2013074.5	2013074.5	100.26	%			10:58:30
1	Y 371.029	1218048.7	1218048.7	99.565	%			10:58:30
1	Ag 328.068†	55305.1	55177.5	527.16	µg/L	527.16	ppb	10:58:36
1	As 188.979†	269.9	266.1	515.74	µg/L	515.74	ppb	10:58:56
1	B 249.677†	11460.2	11268.7	522.34	µg/L	522.34	ppb	10:58:36
1	Ba 233.527†	19628.4	19649.8	526.74	µg/L	526.74	ppb	10:58:36
1	Be 313.107†	802197.7	796492.7	518.91	µg/L	518.91	ppb	10:58:30
1	Cd 226.502†	18828.2	18876.8	530.96	µg/L	530.96	ppb	10:58:36
1	Co 228.616†	10393.4	10436.2	530.43	µg/L	530.43	ppb	10:58:36
1	Cr 267.716†	23516.0	23579.1	524.61	µg/L	524.61	ppb	10:58:36
1	Cu 324.752†	74156.7	70654.9	505.92	µg/L	505.92	ppb	10:58:36
1	Mn 257.610†	157699.5	157537.2	519.01	µg/L	519.01	ppb	10:58:30
1	Mo 202.031†	4376.0	4369.4	521.93	µg/L	521.93	ppb	10:58:56
1	Ni 231.604†	9439.1	9123.5	526.53	µg/L	526.53	ppb	10:58:36
1	P 214.914†	1359.0	1165.4	2538.5	µg/L	2538.5	ppb	10:58:56
1	Pb 220.353†	2023.9	1967.6	520.57	µg/L	520.57	ppb	10:58:56
1	S 181.975 Axial†	221.1	194.8	1040.9	µg/L	1040.9	ppb	10:58:56
1	Sb 206.836†	521.9	496.4	517.00	µg/L	517.00	ppb	10:58:56
1	Se 196.026†	369.7	357.9	530.71	µg/L	530.71	ppb	10:58:56
1	SiO2†	30108.5	27996.5	5679.3	µg/L	5679.3	ppb	10:58:36
1	Si 251.611†	33108.7	32665.8	2608.1	µg/L	2608.1	ppb	10:58:36
1	Sn 189.927†	1040.0	1014.9	519.82	µg/L	519.82	ppb	10:58:56
1	Ti 334.940†	224710.5	223327.6	513.76	µg/L	513.76	ppb	10:58:30
1	Tl 190.801†	314.4	333.7	527.12	µg/L	527.12	ppb	10:58:56
1	U 409.014†	6002.3	5285.1	526.25	µg/L	526.25	ppb	10:58:36
1	V 292.402†	43647.1	43624.1	528.50	µg/L	528.50	ppb	10:58:36
1	Zn 213.857†	19470.1	18891.7	529.65	µg/L	529.65	ppb	10:58:36
2	Sc RADIAL	114452.1	114452.1	102	%			10:57:32
2	Al 396.153Radial†	10474.8	10084.2	5309.8	µg/L	5309.8	ppb	10:57:32
2	Ca 317.933Radial†	13654.5	12947.0	5223.4	µg/L	5223.4	ppb	10:57:52
2	Fe 238.204 Radial†	1040.3	1005.8	5358.3	µg/L	5358.3	ppb	10:57:52
2	K 766.490 Radial†	10065.8	9101.7	5134.7	µg/L	5134.7	ppb	10:57:32
2	Mg 279.077 IEC†	982.4	945.1	5337.4	µg/L	5337.4	ppb	10:57:52
2	Na 589.592 Radial†	37670.5	37258.5	10509	µg/L	10509	ppb	10:57:32
2	Sr 421.552†	91316.0	89435.0	516.14	µg/L	516.14	ppb	10:57:32
2	Sc 361.383	2007572.0	2007572.0	99.987	%			10:59:03
2	Y 371.029	1214163.2	1214163.2	99.248	%			10:59:03
2	Ag 328.068†	55812.5	55836.2	533.45	µg/L	533.45	ppb	10:59:09
2	As 188.979†	267.4	264.3	512.31	µg/L	512.31	ppb	10:59:29
2	B 249.677†	11574.8	11414.6	529.11	µg/L	529.11	ppb	10:59:09
2	Ba 233.527†	19857.9	19933.0	534.33	µg/L	534.33	ppb	10:59:09
2	Be 313.107†	806869.2	803357.8	523.39	µg/L	523.39	ppb	10:59:03
2	Cd 226.502†	19063.0	19163.1	539.01	µg/L	539.01	ppb	10:59:09
2	Co 228.616†	10434.3	10505.6	533.94	µg/L	533.94	ppb	10:59:09
2	Cr 267.716†	23820.9	23948.3	532.82	µg/L	532.82	ppb	10:59:09
2	Cu 324.752†	74848.7	71549.7	512.32	µg/L	512.32	ppb	10:59:09
2	Mn 257.610†	158504.7	158773.7	523.08	µg/L	523.08	ppb	10:59:03
2	Mo 202.031†	4363.3	4368.6	521.84	µg/L	521.84	ppb	10:59:29
2	Ni 231.604†	9565.9	9276.2	535.34	µg/L	535.34	ppb	10:59:09
2	P 214.914†	1355.8	1166.0	2539.0	µg/L	2539.0	ppb	10:59:29
2	Pb 220.353†	2042.3	1991.6	526.90	µg/L	526.90	ppb	10:59:29

2	S 181.975 Axial†	218.8	193.2	1032.2 µg/L	1032.2 ppb	10:59:29
2	Sb 206.836†	523.0	498.9	519.54 µg/L	519.54 ppb	10:59:29
2	Se 196.026†	374.5	363.7	539.32 µg/L	539.32 ppb	10:59:29
2	SiO2†	30395.6	28366.1	5754.3 µg/L	5754.3 ppb	10:59:09
2	Si 251.611†	33414.5	33062.2	2640.3 µg/L	2640.3 ppb	10:59:09
2	Sn 189.927†	1034.6	1012.4	518.54 µg/L	518.54 ppb	10:59:29
2	Ti 334.940†	225715.9	224947.4	517.49 µg/L	517.49 ppb	10:59:03
2	Tl 190.801†	316.2	336.3	531.35 µg/L	531.35 ppb	10:59:29
2	U 409.014†	6009.1	5308.3	528.56 µg/L	528.56 ppb	10:59:09
2	V 292.402†	44073.6	44170.0	535.06 µg/L	535.06 ppb	10:59:09
2	Zn 213.857†	19622.8	19097.5	535.40 µg/L	535.40 ppb	10:59:09
3	Sc RADIAL	113455.2	113455.2	101 %		10:57:58
3	Al 396.153Radial†	10390.7	10091.2	5313.3 µg/L	5313.3 ppb	10:57:58
3	Ca 317.933Radial†	13706.4	13115.6	5291.4 µg/L	5291.4 ppb	10:58:18
3	Fe 238.204 Radial†	1040.2	1014.7	5405.3 µg/L	5405.3 ppb	10:58:18
3	K 766.490 Radial†	10069.6	9192.1	5185.6 µg/L	5185.6 ppb	10:57:58
3	Mg 279.077 IEC†	991.1	962.2	5433.8 µg/L	5433.8 ppb	10:58:18
3	Na 589.592 Radial†	37451.6	37366.3	10539 µg/L	10539 ppb	10:57:58
3	Sr 421.552†	90487.9	89402.7	515.96 µg/L	515.96 ppb	10:57:58
3	Sc 361.383	2004204.5	2004204.5	99.819 %		10:59:37
3	Y 371.029	1212492.2	1212492.2	99.111 %		10:59:37
3	Ag 328.068†	55874.9	55992.5	534.94 µg/L	534.94 ppb	10:59:42
3	As 188.979†	272.6	270.0	523.26 µg/L	523.26 ppb	11:00:03
3	B 249.677†	11579.5	11438.7	530.22 µg/L	530.22 ppb	10:59:42
3	Ba 233.527†	19816.4	19924.8	534.11 µg/L	534.11 ppb	10:59:42
3	Be 313.107†	804639.2	802479.6	522.81 µg/L	522.81 ppb	10:59:37
3	Cd 226.502†	19009.0	19141.0	538.39 µg/L	538.39 ppb	10:59:42
3	Co 228.616†	10457.9	10546.7	536.04 µg/L	536.04 ppb	10:59:42
3	Cr 267.716†	23827.8	23995.2	533.86 µg/L	533.86 ppb	10:59:42
3	Cu 324.752†	74789.7	71616.4	512.81 µg/L	512.81 ppb	10:59:42
3	Mn 257.610†	158107.6	158642.2	522.65 µg/L	522.65 ppb	10:59:37
3	Mo 202.031†	4379.1	4391.8	524.62 µg/L	524.62 ppb	11:00:03
3	Ni 231.604†	9569.2	9295.5	536.46 µg/L	536.46 ppb	10:59:42
3	P 214.914†	1358.9	1171.4	2551.1 µg/L	2551.1 ppb	11:00:03
3	Pb 220.353†	2038.9	1991.7	526.92 µg/L	526.92 ppb	11:00:03
3	S 181.975 Axial†	226.3	201.0	1074.1 µg/L	1074.1 ppb	11:00:03
3	Sb 206.836†	530.7	507.5	528.51 µg/L	528.51 ppb	11:00:03
3	Se 196.026†	375.9	365.8	542.33 µg/L	542.33 ppb	11:00:03
3	SiO2†	30303.0	28324.4	5745.8 µg/L	5745.8 ppb	10:59:42
3	Si 251.611†	33388.8	33092.5	2642.3 µg/L	2642.3 ppb	10:59:42
3	Sn 189.927†	1053.4	1033.0	529.06 µg/L	529.06 ppb	11:00:03
3	Ti 334.940†	225020.2	224629.7	516.76 µg/L	516.76 ppb	10:59:37
3	Tl 190.801†	316.4	337.0	532.43 µg/L	532.43 ppb	11:00:03
3	U 409.014†	6004.9	5314.2	529.14 µg/L	529.14 ppb	10:59:42
3	V 292.402†	44000.3	44170.6	535.09 µg/L	535.09 ppb	10:59:42
3	Zn 213.857†	19621.8	19129.5	536.29 µg/L	536.29 ppb	10:59:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2008283.7	100.02	%	0.223				0.22%
Sc RADIAL	114120.9	102	%	0.5				0.51%
Y 371.029	1214901.4	99.308	%	0.2330				0.23%
Ag 328.068†	55668.7	531.85	µg/L	4.129	531.85	ppb	4.129	0.78%
QC value within limits for Ag 328.068 Recovery = 106.37%								
Al 396.153Radial†	10075.1	5304.9	µg/L	11.62	5304.9	ppb	11.62	0.22%
QC value within limits for Al 396.153Radial Recovery = 106.10%								
As 188.979†	266.8	517.11	µg/L	5.602	517.11	ppb	5.602	1.08%
QC value within limits for As 188.979 Recovery = 103.42%								
B 249.677†	11374.0	527.22	µg/L	4.267	527.22	ppb	4.267	0.81%
QC value within limits for B 249.677 Recovery = 105.44%								
Ba 233.527†	19835.9	531.72	µg/L	4.320	531.72	ppb	4.320	0.81%
QC value within limits for Ba 233.527 Recovery = 106.34%								
Be 313.107†	800776.7	521.71	µg/L	2.434	521.71	ppb	2.434	0.47%
QC value within limits for Be 313.107 Recovery = 104.34%								
Ca 317.933Radial†	13010.6	5249.0	µg/L	36.98	5249.0	ppb	36.98	0.70%
QC value within limits for Ca 317.933Radial Recovery = 104.98%								
Cd 226.502†	19060.3	536.12	µg/L	4.481	536.12	ppb	4.481	0.84%
QC value within limits for Cd 226.502 Recovery = 107.22%								
Co 228.616†	10496.1	533.47	µg/L	2.837	533.47	ppb	2.837	0.53%

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   QC value within limits for Co 228.616  Recovery = 106.69%
Cr 267.716†            23840.9      530.43 µg/L        5.068      530.43 ppb          5.068   0.96%
   QC value within limits for Cr 267.716  Recovery = 106.09%
Cu 324.752†            71273.7      510.35 µg/L        3.843      510.35 ppb          3.843   0.75%
   QC value within limits for Cu 324.752  Recovery = 102.07%
Fe 238.204 Radial†      1006.7      5363.0 µg/L       40.07      5363.0 ppb          40.07   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.26%
K 766.490 Radial†       9128.2      5149.6 µg/L       31.32      5149.6 ppb          31.32   0.61%
   QC value within limits for K 766.490 Radial  Recovery = 102.99%
Mg 279.077 IEC†          953.3      5383.6 µg/L       48.34      5383.6 ppb          48.34   0.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.67%
Mn 257.610†           158317.7      521.58 µg/L        2.238      521.58 ppb          2.238   0.43%
   QC value within limits for Mn 257.610  Recovery = 104.32%
Mo 202.031†             4376.6      522.80 µg/L        1.576      522.80 ppb          1.576   0.30%
   QC value within limits for Mo 202.031  Recovery = 104.56%
Na 589.592 Radial†     37252.3       10507 µg/L         33.1       10507 ppb           33.1   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 105.07%
Ni 231.604†             9231.7      532.78 µg/L        5.438      532.78 ppb          5.438   1.02%
   QC value within limits for Ni 231.604  Recovery = 106.56%
P 214.914†              1167.6      2542.9 µg/L         7.11      2542.9 ppb           7.11   0.28%
   QC value within limits for P 214.914  Recovery = 101.72%
Pb 220.353†             1983.6      524.80 µg/L        3.660      524.80 ppb          3.660   0.70%
   QC value within limits for Pb 220.353  Recovery = 104.96%
S 181.975 Axial†         196.3      1049.1 µg/L        22.12      1049.1 ppb          22.12   2.11%
   QC value within limits for S 181.975 Axial  Recovery = 104.91%
Sb 206.836†              500.9      521.68 µg/L        6.044      521.68 ppb          6.044   1.16%
   QC value within limits for Sb 206.836  Recovery = 104.34%
Se 196.026†              362.5      537.46 µg/L        6.030      537.46 ppb          6.030   1.12%
   QC value within limits for Se 196.026  Recovery = 107.49%
SiO2†                  28229.0      5726.5 µg/L        41.06      5726.5 ppb          41.06   0.72%
   QC value within limits for SiO2  Recovery = 107.09%
Si 251.611†            32940.2      2630.2 µg/L        19.18      2630.2 ppb          19.18   0.73%
   QC value within limits for Si 251.611  Recovery = 105.21%
Sn 189.927†             1020.1      522.47 µg/L        5.741      522.47 ppb          5.741   1.10%
   QC value within limits for Sn 189.927  Recovery = 104.49%
Sr 421.552†            89327.5      515.52 µg/L        0.918      515.52 ppb          0.918   0.18%
   QC value within limits for Sr 421.552  Recovery = 103.10%
Ti 334.940†           224301.6      516.01 µg/L        1.975      516.01 ppb          1.975   0.38%
   QC value within limits for Ti 334.940  Recovery = 103.20%
Tl 190.801†              335.7      530.30 µg/L        2.808      530.30 ppb          2.808   0.53%
   QC value within limits for Tl 190.801  Recovery = 106.06%
U 409.014†              5302.5      527.98 µg/L        1.528      527.98 ppb          1.528   0.29%
   QC value within limits for U 409.014  Recovery = 105.60%
V 292.402†             43988.2      532.88 µg/L        3.795      532.88 ppb          3.795   0.71%
   QC value within limits for V 292.402  Recovery = 106.58%
Zn 213.857†            19039.6      533.78 µg/L        3.610      533.78 ppb          3.610   0.68%
   QC value within limits for Zn 213.857  Recovery = 106.76%
All analyte(s) passed QC.
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Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 11:00:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111462.7	111462.7	99.5	%			11:00:45
1	Al 396.153Radial†	187.1	23.5	12.410	µg/L	12.410	ppb	11:00:45
1	Ca 317.933Radial†	416.9	6.2	2.4999	µg/L	2.4999	ppb	11:01:06
1	Fe 238.204 Radial†	12.3	0.4	2.3752	µg/L	2.3752	ppb	11:01:06
1	K 766.490 Radial†	741.2	-2.0	-1.1351	µg/L	-1.1351	ppb	11:00:45
1	Mg 279.077 IEC†	12.7	-3.3	-18.405	µg/L	-18.405	ppb	11:01:06
1	Na 589.592 Radial†	-653.9	-255.2	-71.992	µg/L	-71.992	ppb	11:00:45
1	Sr 421.552†	-19.5	71.7	0.4141	µg/L	0.4141	ppb	11:00:45
1	Sc 361.383	1998738.5	1998738.5	99.547	%			11:02:08
1	Y 371.029	1214838.3	1214838.3	99.303	%			11:02:08
1	Ag 328.068†	-2.8	13.5	0.1273	µg/L	0.1273	ppb	11:02:13
1	As 188.979†	0.1	-3.1	-5.9892	µg/L	-5.9892	ppb	11:02:34
1	B 249.677†	171.1	10.1	0.4687	µg/L	0.4687	ppb	11:02:13
1	Ba 233.527†	-65.2	6.9	0.1848	µg/L	0.1848	ppb	11:02:34
1	Be 313.107†	3804.8	203.2	0.1323	µg/L	0.1323	ppb	11:02:13
1	Cd 226.502†	-90.5	6.7	0.1793	µg/L	0.1793	ppb	11:02:34
1	Co 228.616†	-61.0	8.5	0.4320	µg/L	0.4320	ppb	11:02:34
1	Cr 267.716†	-107.6	16.1	0.3578	µg/L	0.3578	ppb	11:02:13
1	Cu 324.752†	3204.8	-89.5	-0.6389	µg/L	-0.6389	ppb	11:02:13
1	Mn 257.610†	-162.3	84.8	0.2793	µg/L	0.2793	ppb	11:02:34
1	Mo 202.031†	-3.7	1.1	0.1264	µg/L	0.1264	ppb	11:02:34
1	Ni 231.604†	292.5	2.8	0.1628	µg/L	0.1628	ppb	11:02:34
1	P 214.914†	187.1	-2.1	-4.5980	µg/L	-4.5980	ppb	11:02:34
1	Pb 220.353†	55.8	5.0	1.3473	µg/L	1.3473	ppb	11:02:34
1	S 181.975 Axial†	29.6	4.0	21.614	µg/L	21.614	ppb	11:02:34
1	Sb 206.836†	21.2	-2.9	-3.0329	µg/L	-3.0329	ppb	11:02:34
1	Se 196.026†	15.0	4.3	6.3064	µg/L	6.3064	ppb	11:02:34
1	SiO2†	2086.8	62.7	12.715	µg/L	12.715	ppb	11:02:13
1	Si 251.611†	433.9	79.1	6.4847	µg/L	6.4847	ppb	11:02:34
1	Sn 189.927†	19.0	-3.3	-1.6980	µg/L	-1.6980	ppb	11:02:34
1	Ti 334.940†	961.1	166.9	0.3840	µg/L	0.3840	ppb	11:02:13
1	Tl 190.801†	-19.7	0.3	0.5314	µg/L	0.5314	ppb	11:02:34
1	U 409.014†	567.1	-131.9	-13.160	µg/L	-13.160	ppb	11:02:13
1	V 292.402†	-99.7	-9.6	-0.1359	µg/L	-0.1359	ppb	11:02:13
1	Zn 213.857†	543.3	18.0	0.5085	µg/L	0.5085	ppb	11:02:34
2	Sc RADIAL	112604.0	112604.0	101	%			11:01:11
2	Al 396.153Radial†	210.7	45.1	23.800	µg/L	23.800	ppb	11:01:11
2	Ca 317.933Radial†	431.6	16.6	6.6842	µg/L	6.6842	ppb	11:01:32
2	Fe 238.204 Radial†	11.6	-0.5	-2.4769	µg/L	-2.4769	ppb	11:01:32
2	K 766.490 Radial†	721.8	-28.8	-16.261	µg/L	-16.261	ppb	11:01:11
2	Mg 279.077 IEC†	16.4	0.3	1.7206	µg/L	1.7206	ppb	11:01:32
2	Na 589.592 Radial†	-641.0	-235.8	-66.515	µg/L	-66.515	ppb	11:01:11
2	Sr 421.552†	-71.0	20.7	0.1193	µg/L	0.1193	ppb	11:01:11
2	Sc 361.383	2009001.7	2009001.7	100.06	%			11:02:40
2	Y 371.029	1221229.2	1221229.2	99.825	%			11:02:40
2	Ag 328.068†	-23.8	-7.5	-0.0710	µg/L	-0.0710	ppb	11:02:45
2	As 188.979†	4.2	1.0	1.9962	µg/L	1.9962	ppb	11:03:06
2	B 249.677†	187.3	25.4	1.1819	µg/L	1.1819	ppb	11:02:45
2	Ba 233.527†	-72.9	-0.4	-0.0097	µg/L	-0.0097	ppb	11:03:06
2	Be 313.107†	3731.7	110.7	0.0720	µg/L	0.0720	ppb	11:02:45
2	Cd 226.502†	-81.6	16.1	0.4538	µg/L	0.4538	ppb	11:03:06
2	Co 228.616†	-74.1	-4.3	-0.2178	µg/L	-0.2178	ppb	11:03:06
2	Cr 267.716†	-97.6	26.7	0.5931	µg/L	0.5931	ppb	11:02:45
2	Cu 324.752†	3260.3	-50.5	-0.3611	µg/L	-0.3611	ppb	11:02:45
2	Mn 257.610†	-146.3	101.6	0.3340	µg/L	0.3340	ppb	11:03:06
2	Mo 202.031†	-1.4	3.4	0.4066	µg/L	0.4066	ppb	11:03:06
2	Ni 231.604†	306.4	15.2	0.8781	µg/L	0.8781	ppb	11:03:06
2	P 214.914†	192.6	2.5	5.6781	µg/L	5.6781	ppb	11:03:06
2	Pb 220.353†	55.0	3.9	1.0444	µg/L	1.0444	ppb	11:03:06

2	S 181.975 Axial†	25.8	0.1	0.3574 µg/L	0.3574 ppb	11:03:06
2	Sb 206.836†	27.6	3.4	3.5503 µg/L	3.5503 ppb	11:03:06
2	Se 196.026†	25.1	14.3	21.077 µg/L	21.077 ppb	11:03:06
2	SiO2†	2060.2	25.4	5.1506 µg/L	5.1506 ppb	11:02:45
2	Si 251.611†	425.1	68.0	5.4730 µg/L	5.4730 ppb	11:03:06
2	Sn 189.927†	24.6	2.3	1.1502 µg/L	1.1502 ppb	11:03:06
2	Ti 334.940†	973.4	174.3	0.4008 µg/L	0.4008 ppb	11:02:45
2	Tl 190.801†	-21.6	-1.5	-2.3481 µg/L	-2.3481 ppb	11:03:06
2	U 409.014†	722.1	20.1	2.0024 µg/L	2.0024 ppb	11:02:45
2	V 292.402†	-81.5	9.1	0.1151 µg/L	0.1151 ppb	11:02:45
2	Zn 213.857†	530.7	2.5	0.0673 µg/L	0.0673 ppb	11:03:06
3	Sc RADIAL	111949.3	111949.3	100.0 %		11:01:37
3	Al 396.153Radial†	194.9	30.5	16.120 µg/L	16.120 ppb	11:01:37
3	Ca 317.933Radial†	420.0	7.5	3.0243 µg/L	3.0243 ppb	11:01:58
3	Fe 238.204 Radial†	12.0	0.1	0.4183 µg/L	0.4183 ppb	11:01:58
3	K 766.490 Radial†	751.4	5.0	2.7977 µg/L	2.7977 ppb	11:01:37
3	Mg 279.077 IEC†	19.3	3.3	18.533 µg/L	18.533 ppb	11:01:58
3	Na 589.592 Radial†	-706.6	-305.1	-86.053 µg/L	-86.053 ppb	11:01:37
3	Sr 421.552†	-77.5	13.8	0.0798 µg/L	0.0798 ppb	11:01:37
3	Sc 361.383	2009674.4	2009674.4	100.09 %		11:03:12
3	Y 371.029	1221393.1	1221393.1	99.839 %		11:03:12
3	Ag 328.068†	5.4	21.7	0.2064 µg/L	0.2064 ppb	11:03:18
3	As 188.979†	4.2	1.0	2.0327 µg/L	2.0327 ppb	11:03:38
3	B 249.677†	150.2	-11.7	-0.5428 µg/L	-0.5428 ppb	11:03:18
3	Ba 233.527†	-72.6	-0.1	-0.0035 µg/L	-0.0035 ppb	11:03:38
3	Be 313.107†	3730.6	108.4	0.0705 µg/L	0.0705 ppb	11:03:18
3	Cd 226.502†	-91.1	6.6	0.1857 µg/L	0.1857 ppb	11:03:38
3	Co 228.616†	-62.9	7.0	0.3526 µg/L	0.3526 ppb	11:03:38
3	Cr 267.716†	-131.9	-7.5	-0.1662 µg/L	-0.1662 ppb	11:03:18
3	Cu 324.752†	3206.0	-105.8	-0.7560 µg/L	-0.7560 ppb	11:03:18
3	Mn 257.610†	-165.4	82.6	0.2719 µg/L	0.2719 ppb	11:03:38
3	Mo 202.031†	-3.7	1.1	0.1285 µg/L	0.1285 ppb	11:03:38
3	Ni 231.604†	288.6	-2.7	-0.1562 µg/L	-0.1562 ppb	11:03:38
3	P 214.914†	197.2	7.1	15.826 µg/L	15.826 ppb	11:03:38
3	Pb 220.353†	55.2	4.2	1.1127 µg/L	1.1127 ppb	11:03:38
3	S 181.975 Axial†	23.0	-2.7	-14.615 µg/L	-14.615 ppb	11:03:38
3	Sb 206.836†	19.2	-5.0	-5.2008 µg/L	-5.2008 ppb	11:03:38
3	Se 196.026†	11.3	0.5	0.7005 µg/L	0.7005 ppb	11:03:38
3	SiO2†	2093.5	57.9	11.753 µg/L	11.753 ppb	11:03:18
3	Si 251.611†	407.4	50.2	4.0516 µg/L	4.0516 ppb	11:03:38
3	Sn 189.927†	23.1	0.7	0.3480 µg/L	0.3480 ppb	11:03:38
3	Ti 334.940†	987.4	187.9	0.4324 µg/L	0.4324 ppb	11:03:18
3	Tl 190.801†	-21.1	-1.0	-1.5574 µg/L	-1.5574 ppb	11:03:38
3	U 409.014†	707.1	4.8	0.4819 µg/L	0.4819 ppb	11:03:18
3	V 292.402†	-77.5	13.1	0.1587 µg/L	0.1587 ppb	11:03:18
3	Zn 213.857†	541.4	13.1	0.3707 µg/L	0.3707 ppb	11:03:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2005804.8	99.899	%	0.3052				0.31%
Sc RADIAL	112005.3	100	%	0.5				0.51%
Y 371.029	1219153.5	99.656	%	0.3056				0.31%
Ag 328.068†	9.2	0.0876	µg/L	0.14289	0.0876	ppb	0.14289	163.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	33.0	17.443	µg/L	5.8094	17.443	ppb	5.8094	33.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.6535	µg/L	4.62095	-0.6535	ppb	4.62095	707.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	7.9	0.3693	µg/L	0.86666	0.3693	ppb	0.86666	234.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0572	µg/L	0.11054	0.0572	ppb	0.11054	193.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	140.8	0.0916	µg/L	0.03527	0.0916	ppb	0.03527	38.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.1	4.0695	µg/L	2.27954	4.0695	ppb	2.27954	56.02%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.8	0.2729	µg/L	0.15670	0.2729	ppb	0.15670	57.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.7	0.1889	µg/L	0.35449	0.1889	ppb	0.35449	187.64%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                11.8      0.2615 µg/L       0.38870      0.2615 ppb        0.38870 148.62%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -81.9     -0.5853 µg/L       0.20284     -0.5853 ppb        0.20284  34.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.1055 µg/L       2.44108      0.1055 ppb        2.44108 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -8.6     -4.8660 µg/L      10.06202     -4.8660 ppb       10.06202 206.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.1      0.6163 µg/L      18.49354      0.6163 ppb       18.49354 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                89.7      0.2951 µg/L       0.03393      0.2951 ppb        0.03393  11.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.8      0.2205 µg/L       0.16112      0.2205 ppb        0.16112  73.07%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -265.4     -74.853 µg/L      10.0783     -74.853 ppb        10.0783  13.46%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.1      0.2949 µg/L       0.52967      0.2949 ppb        0.52967 179.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  2.5      5.6353 µg/L      10.21202      5.6353 ppb       10.21202 181.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.4      1.1682 µg/L       0.15887      1.1682 ppb        0.15887  13.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      2.4522 µg/L      18.20481      2.4522 ppb       18.20481 742.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -1.5     -1.5611 µg/L       4.55741     -1.5611 ppb        4.55741 291.93%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 6.3      9.3612 µg/L      10.52608      9.3612 ppb       10.52608 112.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      48.7      9.8730 µg/L       4.11797      9.8730 ppb        4.11797  41.71%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                65.8      5.3364 µg/L       1.22231      5.3364 ppb        1.22231  22.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.1     -0.0666 µg/L       1.46864     -0.0666 ppb        1.46864 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                35.4      0.2044 µg/L       0.18267      0.2044 ppb        0.18267  89.38%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               176.4      0.4057 µg/L       0.02453      0.4057 ppb        0.02453   6.05%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.7     -1.1247 µg/L       1.48772     -1.1247 ppb        1.48772 132.28%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -35.7     -3.5586 µg/L       8.34979     -3.5586 ppb        8.34979 234.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  4.2      0.0460 µg/L       0.15900      0.0460 ppb        0.15900 345.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                11.2      0.3155 µg/L       0.22574      0.3155 ppb        0.22574  71.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 11:23:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113974.6	113974.6	102	%			11:23:37
1	Al 396.153Radial†	10411.8	10065.2	5299.7	µg/L	5299.7	ppb	11:23:37
1	Ca 317.933Radial†	13739.5	13086.5	5279.7	µg/L	5279.7	ppb	11:23:57
1	Fe 238.204 Radial†	1055.7	1025.3	5461.4	µg/L	5461.4	ppb	11:23:57
1	K 766.490 Radial†	10092.5	9169.2	5172.7	µg/L	5172.7	ppb	11:23:37
1	Mg 279.077 IEC†	995.2	961.8	5431.0	µg/L	5431.0	ppb	11:23:57
1	Na 589.592 Radial†	37264.9	37014.4	10440	µg/L	10440	ppb	11:23:37
1	Sr 421.552†	90140.8	88654.6	511.64	µg/L	511.64	ppb	11:23:37
1	Sc 361.383	2016329.9	2016329.9	100.42	%			11:25:01
1	Y 371.029	1220042.0	1220042.0	99.728	%			11:25:01
1	Ag 328.068†	56002.4	55782.9	532.95	µg/L	532.95	ppb	11:25:06
1	As 188.979†	273.6	269.3	521.89	µg/L	521.89	ppb	11:25:27
1	B 249.677†	11603.4	11392.8	528.06	µg/L	528.06	ppb	11:25:06
1	Ba 233.527†	19933.6	19922.1	534.03	µg/L	534.03	ppb	11:25:06
1	Be 313.107†	805453.8	798443.3	520.18	µg/L	520.18	ppb	11:25:01
1	Cd 226.502†	19059.8	19077.1	536.58	µg/L	536.58	ppb	11:25:06
1	Co 228.616†	10469.4	10495.1	533.42	µg/L	533.42	ppb	11:25:06
1	Cr 267.716†	23871.5	23895.2	531.64	µg/L	531.64	ppb	11:25:06
1	Cu 324.752†	75024.4	71399.6	511.27	µg/L	511.27	ppb	11:25:06
1	Mn 257.610†	158671.3	158250.9	521.37	µg/L	521.37	ppb	11:25:01
1	Mo 202.031†	4384.9	4371.1	522.15	µg/L	522.15	ppb	11:25:27
1	Ni 231.604†	9582.5	9251.1	533.90	µg/L	533.90	ppb	11:25:06
1	P 214.914†	1365.6	1169.9	2547.7	µg/L	2547.7	ppb	11:25:27
1	Pb 220.353†	2037.5	1977.9	523.29	µg/L	523.29	ppb	11:25:27
1	S 181.975 Axial†	222.5	195.9	1046.7	µg/L	1046.7	ppb	11:25:27
1	Sb 206.836†	528.5	502.2	522.98	µg/L	522.98	ppb	11:25:27
1	Se 196.026†	369.3	357.0	529.41	µg/L	529.41	ppb	11:25:27
1	SiO2†	30507.9	28345.8	5750.2	µg/L	5750.2	ppb	11:25:06
1	Si 251.611†	33508.7	33010.8	2636.0	µg/L	2636.0	ppb	11:25:06
1	Sn 189.927†	1046.7	1019.9	522.43	µg/L	522.43	ppb	11:25:27
1	Ti 334.940†	225988.9	224238.7	515.86	µg/L	515.86	ppb	11:25:01
1	Tl 190.801†	308.6	327.4	517.29	µg/L	517.29	ppb	11:25:27
1	U 409.014†	5942.2	5215.6	519.30	µg/L	519.30	ppb	11:25:06
1	V 292.402†	44239.4	44143.6	534.74	µg/L	534.74	ppb	11:25:06
1	Zn 213.857†	19725.7	19114.8	535.89	µg/L	535.89	ppb	11:25:06
2	Sc RADIAL	113133.0	113133.0	101	%			11:24:03
2	Al 396.153Radial†	10386.5	10116.2	5326.8	µg/L	5326.8	ppb	11:24:03
2	Ca 317.933Radial†	13808.3	13255.0	5347.7	µg/L	5347.7	ppb	11:24:23
2	Fe 238.204 Radial†	1059.3	1036.6	5521.4	µg/L	5521.4	ppb	11:24:23
2	K 766.490 Radial†	10105.0	9255.4	5221.4	µg/L	5221.4	ppb	11:24:03
2	Mg 279.077 IEC†	1008.1	981.9	5544.2	µg/L	5544.2	ppb	11:24:23
2	Na 589.592 Radial†	37238.8	37260.9	10509	µg/L	10509	ppb	11:24:03
2	Sr 421.552†	90060.1	89233.6	514.98	µg/L	514.98	ppb	11:24:03
2	Sc 361.383	2032103.4	2032103.4	101.21	%			11:25:34
2	Y 371.029	1229305.8	1229305.8	100.49	%			11:25:34
2	Ag 328.068†	56022.9	55370.3	529.01	µg/L	529.01	ppb	11:25:40
2	As 188.979†	272.3	265.9	515.29	µg/L	515.29	ppb	11:26:00
2	B 249.677†	11582.6	11282.6	522.92	µg/L	522.92	ppb	11:25:40
2	Ba 233.527†	19914.9	19749.5	529.41	µg/L	529.41	ppb	11:25:40
2	Be 313.107†	811300.1	797994.0	519.89	µg/L	519.89	ppb	11:25:34
2	Cd 226.502†	19182.8	19051.3	535.85	µg/L	535.85	ppb	11:25:40
2	Co 228.616†	10527.6	10471.7	532.22	µg/L	532.22	ppb	11:25:40
2	Cr 267.716†	23835.6	23675.3	526.75	µg/L	526.75	ppb	11:25:40
2	Cu 324.752†	75065.7	70860.5	507.43	µg/L	507.43	ppb	11:25:40
2	Mn 257.610†	159766.6	158106.8	520.90	µg/L	520.90	ppb	11:25:34
2	Mo 202.031†	4388.9	4341.2	518.58	µg/L	518.58	ppb	11:26:00
2	Ni 231.604†	9594.6	9189.0	530.31	µg/L	530.31	ppb	11:25:40
2	P 214.914†	1363.7	1157.4	2520.3	µg/L	2520.3	ppb	11:26:00
2	Pb 220.353†	2038.9	1963.6	519.52	µg/L	519.52	ppb	11:26:00

2	S 181.975 Axial†	218.9	190.6	1018.1 µg/L	1018.1 ppb	11:26:00
2	Sb 206.836†	525.0	494.6	515.09 µg/L	515.09 ppb	11:26:00
2	Se 196.026†	367.1	351.9	521.93 µg/L	521.93 ppb	11:26:00
2	SiO2†	30530.1	28131.9	5706.8 µg/L	5706.8 ppb	11:25:40
2	Si 251.611†	33626.8	32868.5	2624.7 µg/L	2624.7 ppb	11:25:40
2	Sn 189.927†	1043.5	1008.6	516.71 µg/L	516.71 ppb	11:26:00
2	Ti 334.940†	227168.0	223657.0	514.52 µg/L	514.52 ppb	11:25:34
2	Tl 190.801†	315.9	332.3	524.92 µg/L	524.92 ppb	11:26:00
2	U 409.014†	5958.2	5185.5	516.28 µg/L	516.28 ppb	11:25:40
2	V 292.402†	44226.3	43788.8	530.45 µg/L	530.45 ppb	11:25:40
2	Zn 213.857†	19631.4	18869.1	528.96 µg/L	528.96 ppb	11:25:40
3	Sc RADIAL	113196.4	113196.4	101 %		11:24:29
3	Al 396.153Radial†	10443.8	10167.1	5353.5 µg/L	5353.5 ppb	11:24:29
3	Ca 317.933Radial†	13779.7	13219.0	5333.1 µg/L	5333.1 ppb	11:24:49
3	Fe 238.204 Radial†	1055.6	1032.3	5499.0 µg/L	5499.0 ppb	11:24:49
3	K 766.490 Radial†	10201.7	9345.5	5272.2 µg/L	5272.2 ppb	11:24:29
3	Mg 279.077 IEC†	1009.4	982.6	5548.4 µg/L	5548.4 ppb	11:24:49
3	Na 589.592 Radial†	37300.7	37301.5	10521 µg/L	10521 ppb	11:24:29
3	Sr 421.552†	90448.7	89568.1	516.91 µg/L	516.91 ppb	11:24:29
3	Sc 361.383	2013250.2	2013250.2	100.27 %		11:26:07
3	Y 371.029	1217631.3	1217631.3	99.531 %		11:26:07
3	Ag 328.068†	55768.3	55634.7	531.54 µg/L	531.54 ppb	11:26:13
3	As 188.979†	268.2	264.3	512.29 µg/L	512.29 ppb	11:26:34
3	B 249.677†	11547.2	11354.4	526.27 µg/L	526.27 ppb	11:26:13
3	Ba 233.527†	19854.0	19873.1	532.72 µg/L	532.72 ppb	11:26:13
3	Be 313.107†	805968.2	800183.2	521.32 µg/L	521.32 ppb	11:26:07
3	Cd 226.502†	19009.4	19055.9	535.99 µg/L	535.99 ppb	11:26:13
3	Co 228.616†	10473.6	10515.3	534.45 µg/L	534.45 ppb	11:26:13
3	Cr 267.716†	23728.6	23789.1	529.28 µg/L	529.28 ppb	11:26:13
3	Cu 324.752†	74781.5	71271.6	510.36 µg/L	510.36 ppb	11:26:13
3	Mn 257.610†	158825.1	158646.1	522.68 µg/L	522.68 ppb	11:26:07
3	Mo 202.031†	4396.6	4389.6	524.35 µg/L	524.35 ppb	11:26:34
3	Ni 231.604†	9556.0	9239.2	533.21 µg/L	533.21 ppb	11:26:13
3	P 214.914†	1363.9	1170.2	2548.5 µg/L	2548.5 ppb	11:26:34
3	Pb 220.353†	2042.4	1985.9	525.41 µg/L	525.41 ppb	11:26:34
3	S 181.975 Axial†	221.8	195.5	1044.6 µg/L	1044.6 ppb	11:26:34
3	Sb 206.836†	530.6	505.0	525.99 µg/L	525.99 ppb	11:26:34
3	Se 196.026†	378.0	366.2	543.05 µg/L	543.05 ppb	11:26:34
3	SiO2†	30305.0	28189.9	5718.5 µg/L	5718.5 ppb	11:26:13
3	Si 251.611†	33394.3	32947.7	2630.9 µg/L	2630.9 ppb	11:26:13
3	Sn 189.927†	1037.4	1012.2	518.53 µg/L	518.53 ppb	11:26:34
3	Ti 334.940†	225697.5	224292.3	515.98 µg/L	515.98 ppb	11:26:07
3	Tl 190.801†	311.0	330.3	521.82 µg/L	521.82 ppb	11:26:34
3	U 409.014†	6034.2	5316.4	529.34 µg/L	529.34 ppb	11:26:13
3	V 292.402†	44065.2	44037.2	533.49 µg/L	533.49 ppb	11:26:13
3	Zn 213.857†	19593.5	19013.0	533.01 µg/L	533.01 ppb	11:26:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020561.1	100.63	%	0.504				0.50%
Sc RADIAL	113434.7	101	%	0.4				0.41%
Y 371.029	1222326.4	99.915	%	0.5038				0.50%
Ag 328.068†	55595.9	531.17	µg/L	1.995	531.17	ppb	1.995	0.38%
QC value within limits for Ag 328.068 Recovery = 106.23%								
Al 396.153Radial†	10116.2	5326.7	µg/L	26.90	5326.7	ppb	26.90	0.50%
QC value within limits for Al 396.153Radial Recovery = 106.53%								
As 188.979†	266.5	516.49	µg/L	4.910	516.49	ppb	4.910	0.95%
QC value within limits for As 188.979 Recovery = 103.30%								
B 249.677†	11343.3	525.75	µg/L	2.610	525.75	ppb	2.610	0.50%
QC value within limits for B 249.677 Recovery = 105.15%								
Ba 233.527†	19848.3	532.05	µg/L	2.384	532.05	ppb	2.384	0.45%
QC value within limits for Ba 233.527 Recovery = 106.41%								
Be 313.107†	798873.5	520.46	µg/L	0.753	520.46	ppb	0.753	0.14%
QC value within limits for Be 313.107 Recovery = 104.09%								
Ca 317.933Radial†	13186.8	5320.2	µg/L	35.81	5320.2	ppb	35.81	0.67%
QC value within limits for Ca 317.933Radial Recovery = 106.40%								
Cd 226.502†	19061.4	536.14	µg/L	0.390	536.14	ppb	0.390	0.07%
QC value within limits for Cd 226.502 Recovery = 107.23%								
Co 228.616†	10494.0	533.36	µg/L	1.113	533.36	ppb	1.113	0.21%

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   QC value within limits for Co 228.616  Recovery = 106.67%
Cr 267.716†            23786.5      529.22 µg/L         2.446      529.22 ppb          2.446   0.46%
   QC value within limits for Cr 267.716  Recovery = 105.84%
Cu 324.752†            71177.2      509.69 µg/L         2.007      509.69 ppb          2.007   0.39%
   QC value within limits for Cu 324.752  Recovery = 101.94%
Fe 238.204 Radial†      1031.4      5493.9 µg/L        30.33      5493.9 ppb         30.33   0.55%
   QC value within limits for Fe 238.204 Radial  Recovery = 109.88%
K 766.490 Radial†       9256.7      5222.1 µg/L        49.72      5222.1 ppb         49.72   0.95%
   QC value within limits for K 766.490 Radial  Recovery = 104.44%
Mg 279.077 IEC†          975.4      5507.9 µg/L        66.63      5507.9 ppb         66.63   1.21%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 110.16%
Mn 257.610†           158334.6      521.65 µg/L         0.918      521.65 ppb         0.918   0.18%
   QC value within limits for Mn 257.610  Recovery = 104.33%
Mo 202.031†             4367.3      521.69 µg/L         2.913      521.69 ppb         2.913   0.56%
   QC value within limits for Mo 202.031  Recovery = 104.34%
Na 589.592 Radial†     37192.3       10490 µg/L          43.8       10490 ppb          43.8   0.42%
   QC value within limits for Na 589.592 Radial  Recovery = 104.90%
Ni 231.604†             9226.4      532.47 µg/L         1.904      532.47 ppb         1.904   0.36%
   QC value within limits for Ni 231.604  Recovery = 106.49%
P 214.914†              1165.8      2538.8 µg/L        16.03      2538.8 ppb         16.03   0.63%
   QC value within limits for P 214.914  Recovery = 101.55%
Pb 220.353†             1975.8      522.74 µg/L         2.987      522.74 ppb         2.987   0.57%
   QC value within limits for Pb 220.353  Recovery = 104.55%
S 181.975 Axial†         194.0      1036.5 µg/L        15.95      1036.5 ppb         15.95   1.54%
   QC value within limits for S 181.975 Axial  Recovery = 103.65%
Sb 206.836†              500.6      521.36 µg/L         5.627      521.36 ppb         5.627   1.08%
   QC value within limits for Sb 206.836  Recovery = 104.27%
Se 196.026†              358.4      531.46 µg/L        10.709      531.46 ppb        10.709   2.01%
   QC value within limits for Se 196.026  Recovery = 106.29%
SiO2†                   28222.6      5725.1 µg/L        22.44      5725.1 ppb         22.44   0.39%
   QC value within limits for SiO2  Recovery = 107.06%
Si 251.611†             32942.3      2630.6 µg/L         5.64      2630.6 ppb          5.64   0.21%
   QC value within limits for Si 251.611  Recovery = 105.22%
Sn 189.927†             1013.6      519.23 µg/L         2.923      519.23 ppb         2.923   0.56%
   QC value within limits for Sn 189.927  Recovery = 103.85%
Sr 421.552†            89152.1      514.51 µg/L         2.667      514.51 ppb         2.667   0.52%
   QC value within limits for Sr 421.552  Recovery = 102.90%
Ti 334.940†           224062.7      515.45 µg/L         0.812      515.45 ppb         0.812   0.16%
   QC value within limits for Ti 334.940  Recovery = 103.09%
Tl 190.801†              330.0      521.34 µg/L         3.840      521.34 ppb         3.840   0.74%
   QC value within limits for Tl 190.801  Recovery = 104.27%
U 409.014†              5239.2      521.64 µg/L         6.840      521.64 ppb         6.840   1.31%
   QC value within limits for U 409.014  Recovery = 104.33%
V 292.402†             43989.9      532.89 µg/L         2.204      532.89 ppb         2.204   0.41%
   QC value within limits for V 292.402  Recovery = 106.58%
Zn 213.857†            18999.0      532.62 µg/L         3.480      532.62 ppb         3.480   0.65%
   QC value within limits for Zn 213.857  Recovery = 106.52%
QC Failed.  Continue with analysis.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 11:26:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113833.6	113833.6	102	%			11:27:15
1	Al 396.153Radial†	242.3	73.9	39.041	µg/L	39.041	ppb	11:27:15
1	Ca 317.933Radial†	434.4	14.8	5.9540	µg/L	5.9540	ppb	11:27:35
1	Fe 238.204 Radial†	20.5	8.2	43.385	µg/L	43.385	ppb	11:27:35
1	K 766.490 Radial†	732.8	-25.8	-14.554	µg/L	-14.554	ppb	11:27:15
1	Mg 279.077 IEC†	16.8	0.5	2.7910	µg/L	2.7910	ppb	11:27:35
1	Na 589.592 Radial†	-671.7	-259.1	-73.087	µg/L	-73.087	ppb	11:27:15
1	Sr 421.552†	-58.3	33.9	0.1957	µg/L	0.1957	ppb	11:27:15
1	Sc 361.383	2020205.0	2020205.0	100.62	%			11:28:37
1	Y 371.029	1227769.5	1227769.5	100.36	%			11:28:37
1	Ag 328.068†	0.2	16.5	0.1602	µg/L	0.1602	ppb	11:28:43
1	As 188.979†	2.1	-1.1	-2.1177	µg/L	-2.1177	ppb	11:29:03
1	B 249.677†	166.2	3.4	0.1466	µg/L	0.1466	ppb	11:28:43
1	Ba 233.527†	-51.1	21.6	0.5789	µg/L	0.5789	ppb	11:29:03
1	Be 313.107†	3780.3	138.3	0.0899	µg/L	0.0899	ppb	11:28:43
1	Cd 226.502†	-79.8	18.3	0.5217	µg/L	0.5217	ppb	11:29:03
1	Co 228.616†	-74.7	-4.4	-0.2249	µg/L	-0.2249	ppb	11:29:03
1	Cr 267.716†	-107.8	17.1	0.3799	µg/L	0.3799	ppb	11:28:43
1	Cu 324.752†	3258.9	-69.9	-0.4904	µg/L	-0.4904	ppb	11:28:43
1	Mn 257.610†	17.7	265.4	0.8786	µg/L	0.8786	ppb	11:29:03
1	Mo 202.031†	-2.9	1.9	0.2254	µg/L	0.2254	ppb	11:29:03
1	Ni 231.604†	294.8	2.0	0.1143	µg/L	0.1143	ppb	11:29:03
1	P 214.914†	190.8	-0.3	-0.7842	µg/L	-0.7842	ppb	11:29:03
1	Pb 220.353†	45.1	-6.1	-1.6233	µg/L	-1.6233	ppb	11:29:03
1	S 181.975 Axial†	27.1	1.2	6.4330	µg/L	6.4330	ppb	11:29:03
1	Sb 206.836†	23.4	-0.9	-0.9416	µg/L	-0.9416	ppb	11:29:03
1	Se 196.026†	7.1	-3.7	-5.4948	µg/L	-5.4948	ppb	11:29:03
1	SiO2†	2121.9	75.3	15.276	µg/L	15.276	ppb	11:28:43
1	Si 251.611†	446.6	87.1	7.1538	µg/L	7.1538	ppb	11:29:03
1	Sn 189.927†	17.7	-4.8	-2.4484	µg/L	-2.4484	ppb	11:29:03
1	Ti 334.940†	1147.8	342.2	0.7874	µg/L	0.7874	ppb	11:28:43
1	Tl 190.801†	-14.7	5.5	8.6697	µg/L	8.6697	ppb	11:29:03
1	U 409.014†	847.7	140.9	14.043	µg/L	14.043	ppb	11:28:43
1	V 292.402†	-81.9	9.1	0.1369	µg/L	0.1369	ppb	11:28:43
1	Zn 213.857†	538.9	7.7	0.2137	µg/L	0.2137	ppb	11:29:03
2	Sc RADIAL	113433.5	113433.5	101	%			11:27:41
2	Al 396.153Radial†	191.8	24.9	13.117	µg/L	13.117	ppb	11:27:41
2	Ca 317.933Radial†	447.2	28.9	11.651	µg/L	11.651	ppb	11:28:01
2	Fe 238.204 Radial†	13.3	1.2	6.2201	µg/L	6.2201	ppb	11:28:01
2	K 766.490 Radial†	826.0	68.8	38.798	µg/L	38.798	ppb	11:27:41
2	Mg 279.077 IEC†	17.1	0.8	4.8052	µg/L	4.8052	ppb	11:28:01
2	Na 589.592 Radial†	-671.7	-261.5	-73.752	µg/L	-73.752	ppb	11:27:41
2	Sr 421.552†	-66.3	25.8	0.1491	µg/L	0.1491	ppb	11:27:41
2	Sc 361.383	2008436.7	2008436.7	100.03	%			11:29:09
2	Y 371.029	1221310.2	1221310.2	99.832	%			11:29:09
2	Ag 328.068†	23.5	39.7	0.3761	µg/L	0.3761	ppb	11:29:15
2	As 188.979†	0.2	-2.9	-5.6888	µg/L	-5.6888	ppb	11:29:36
2	B 249.677†	154.5	-7.3	-0.3403	µg/L	-0.3403	ppb	11:29:15
2	Ba 233.527†	-58.2	14.3	0.3811	µg/L	0.3811	ppb	11:29:36
2	Be 313.107†	3727.5	107.6	0.0698	µg/L	0.0698	ppb	11:29:15
2	Cd 226.502†	-78.7	18.9	0.5303	µg/L	0.5303	ppb	11:29:36
2	Co 228.616†	-63.1	6.7	0.3434	µg/L	0.3434	ppb	11:29:36
2	Cr 267.716†	-96.5	27.8	0.6169	µg/L	0.6169	ppb	11:29:15
2	Cu 324.752†	3257.8	-52.1	-0.3708	µg/L	-0.3708	ppb	11:29:15
2	Mn 257.610†	1.4	249.3	0.8210	µg/L	0.8210	ppb	11:29:36
2	Mo 202.031†	3.2	8.0	0.9528	µg/L	0.9528	ppb	11:29:36
2	Ni 231.604†	292.5	1.4	0.0812	µg/L	0.0812	ppb	11:29:36
2	P 214.914†	193.6	3.5	7.8601	µg/L	7.8601	ppb	11:29:36
2	Pb 220.353†	57.5	6.4	1.7078	µg/L	1.7078	ppb	11:29:36

2	S 181.975 Axial†	23.4	-2.3	-12.189 µg/L	-12.189 ppb	11:29:36
2	Sb 206.836†	19.3	-4.8	-5.0363 µg/L	-5.0363 ppb	11:29:36
2	Se 196.026†	13.9	3.1	4.5995 µg/L	4.5995 ppb	11:29:36
2	SiO2†	2106.5	72.3	14.661 µg/L	14.661 ppb	11:29:15
2	Si 251.611†	441.2	84.3	6.7215 µg/L	6.7215 ppb	11:29:36
2	Sn 189.927†	26.2	3.9	1.9659 µg/L	1.9659 ppb	11:29:36
2	Ti 334.940†	1140.5	341.6	0.7857 µg/L	0.7857 ppb	11:29:15
2	Tl 190.801†	-18.5	1.6	2.4516 µg/L	2.4516 ppb	11:29:36
2	U 409.014†	704.2	2.4	0.2402 µg/L	0.2402 ppb	11:29:15
2	V 292.402†	-103.1	-12.5	-0.1428 µg/L	-0.1428 ppb	11:29:15
2	Zn 213.857†	540.5	12.5	0.3527 µg/L	0.3527 ppb	11:29:36
3	Sc RADIAL	113389.5	113389.5	101 %		11:28:07
3	Al 396.153Radial†	202.8	35.9	18.940 µg/L	18.940 ppb	11:28:07
3	Ca 317.933Radial†	435.0	17.0	6.8600 µg/L	6.8600 ppb	11:28:27
3	Fe 238.204 Radial†	12.1	-0.0	-0.1913 µg/L	-0.1913 ppb	11:28:27
3	K 766.490 Radial†	791.8	35.3	19.907 µg/L	19.907 ppb	11:28:07
3	Mg 279.077 IEC†	14.2	-2.0	-11.387 µg/L	-11.387 ppb	11:28:27
3	Na 589.592 Radial†	-708.8	-298.4	-84.151 µg/L	-84.151 ppb	11:28:07
3	Sr 421.552†	-30.5	61.2	0.3530 µg/L	0.3530 ppb	11:28:07
3	Sc 361.383	2023587.8	2023587.8	100.78 %		11:29:42
3	Y 371.029	1230114.7	1230114.7	100.55 %		11:29:42
3	Ag 328.068†	35.0	51.0	0.4866 µg/L	0.4866 ppb	11:29:47
3	As 188.979†	-3.7	-6.9	-13.319 µg/L	-13.319 ppb	11:30:08
3	B 249.677†	198.6	35.4	1.6439 µg/L	1.6439 ppb	11:29:47
3	Ba 233.527†	-58.2	14.7	0.3943 µg/L	0.3943 ppb	11:30:08
3	Be 313.107†	3764.8	116.6	0.0756 µg/L	0.0756 ppb	11:29:47
3	Cd 226.502†	-102.0	-3.6	-0.1009 µg/L	-0.1009 ppb	11:30:08
3	Co 228.616†	-65.9	4.4	0.2237 µg/L	0.2237 ppb	11:30:08
3	Cr 267.716†	-146.6	-21.2	-0.4705 µg/L	-0.4705 ppb	11:29:47
3	Cu 324.752†	3232.1	-102.0	-0.7284 µg/L	-0.7284 ppb	11:29:47
3	Mn 257.610†	39.6	287.1	0.9447 µg/L	0.9447 ppb	11:30:08
3	Mo 202.031†	-3.1	1.6	0.1959 µg/L	0.1959 ppb	11:30:08
3	Ni 231.604†	297.1	3.8	0.2185 µg/L	0.2185 ppb	11:30:08
3	P 214.914†	188.5	-3.0	-6.5980 µg/L	-6.5980 ppb	11:30:08
3	Pb 220.353†	53.9	2.5	0.6725 µg/L	0.6725 ppb	11:30:08
3	S 181.975 Axial†	25.6	-0.3	-1.7818 µg/L	-1.7818 ppb	11:30:08
3	Sb 206.836†	19.9	-4.4	-4.6338 µg/L	-4.6338 ppb	11:30:08
3	Se 196.026†	10.1	-0.7	-1.0610 µg/L	-1.0610 ppb	11:30:08
3	SiO2†	2121.7	71.5	14.513 µg/L	14.513 ppb	11:29:47
3	Si 251.611†	429.1	68.9	5.6235 µg/L	5.6235 ppb	11:30:08
3	Sn 189.927†	19.1	-3.4	-1.7497 µg/L	-1.7497 ppb	11:30:08
3	Ti 334.940†	1302.6	493.9	1.1366 µg/L	1.1366 ppb	11:29:47
3	Tl 190.801†	-18.2	2.1	3.2508 µg/L	3.2508 ppb	11:30:08
3	U 409.014†	713.8	6.7	0.6641 µg/L	0.6641 ppb	11:29:47
3	V 292.402†	-57.0	33.9	0.4095 µg/L	0.4095 ppb	11:29:47
3	Zn 213.857†	539.0	7.0	0.1978 µg/L	0.1978 ppb	11:30:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2017409.8	100.48	%	0.396				0.39%
Sc RADIAL	113552.2	101	%	0.2				0.22%
Y 371.029	1226398.1	100.25	%	0.373				0.37%
Ag 328.068†	35.7	0.3409	µg/L	0.16603	0.3409	ppb	0.16603	48.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	44.9	23.699	µg/L	13.6014	23.699	ppb	13.6014	57.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-7.0419	µg/L	5.72202	-7.0419	ppb	5.72202	81.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	10.5	0.4834	µg/L	1.03409	0.4834	ppb	1.03409	213.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	16.9	0.4514	µg/L	0.11055	0.4514	ppb	0.11055	24.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.8	0.0784	µg/L	0.01033	0.0784	ppb	0.01033	13.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	20.2	8.1550	µg/L	3.06135	8.1550	ppb	3.06135	37.54%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.2	0.3170	µg/L	0.36196	0.3170	ppb	0.36196	114.17%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.3	0.1141	µg/L	0.29962	0.1141	ppb	0.29962	262.64%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.9      0.1754 µg/L       0.57179      0.1754 ppb        0.57179 325.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -74.7     -0.5299 µg/L       0.18206     -0.5299 ppb        0.18206  34.36%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          3.1      16.471 µg/L       23.5274      16.471 ppb        23.5274 142.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          26.1      14.717 µg/L       27.0519      14.717 ppb        27.0519 183.81%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.2     -1.2636 µg/L       8.82478     -1.2636 ppb        8.82478 698.40%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               267.3      0.8815 µg/L       0.06194      0.8815 ppb        0.06194   7.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4580 µg/L       0.42873      0.4580 ppb        0.42873  93.60%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -273.0     -76.997 µg/L        6.2051     -76.997 ppb         6.2051   8.06%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.4      0.1380 µg/L       0.07167      0.1380 ppb        0.07167  51.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  0.1      0.1593 µg/L       7.27508      0.1593 ppb        7.27508 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.0      0.2524 µg/L       1.70484      0.2524 ppb        1.70484 675.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.5     -2.5125 µg/L       9.33222     -2.5125 ppb        9.33222 371.44%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.4     -3.5372 µg/L       2.25688     -3.5372 ppb        2.25688  63.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.5     -0.6521 µg/L       5.05957     -0.6521 ppb        5.05957 775.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      73.0      14.817 µg/L        0.4044      14.817 ppb         0.4044   2.73%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                80.1      6.4996 µg/L       0.78891      6.4996 ppb        0.78891  12.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.5     -0.7441 µg/L       2.37278     -0.7441 ppb        2.37278 318.90%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                40.3      0.2326 µg/L       0.10686      0.2326 ppb        0.10686  45.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               392.6      0.9032 µg/L       0.20210      0.9032 ppb        0.20210  22.38%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.0      4.7907 µg/L       3.38299      4.7907 ppb        3.38299  70.62%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 50.0      4.9825 µg/L       7.84962      4.9825 ppb        7.84962 157.54%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 10.2      0.1345 µg/L       0.27620      0.1345 ppb        0.27620 205.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.1      0.2548 µg/L       0.08518      0.2548 ppb        0.08518  33.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 12:03:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115688.4	115688.4	103	%			12:03:54
1	Al 396.153Radial†	10435.7	9936.8	5232.0	µg/L	5232.0	ppb	12:03:54
1	Ca 317.933Radial†	13760.7	12907.0	5207.3	µg/L	5207.3	ppb	12:04:14
1	Fe 238.204 Radial†	1051.4	1005.8	5357.9	µg/L	5357.9	ppb	12:04:14
1	K 766.490 Radial†	10075.5	9005.9	5080.6	µg/L	5080.6	ppb	12:03:54
1	Mg 279.077 IEC†	1004.2	955.9	5398.3	µg/L	5398.3	ppb	12:04:14
1	Na 589.592 Radial†	37658.9	36853.4	10394	µg/L	10394	ppb	12:03:54
1	Sr 421.552†	90646.8	87832.5	506.89	µg/L	506.89	ppb	12:03:54
1	Sc 361.383	2026117.2	2026117.2	100.91	%			12:05:18
1	Y 371.029	1225080.0	1225080.0	100.14	%			12:05:18
1	Ag 328.068†	56143.3	55653.1	531.71	µg/L	531.71	ppb	12:05:23
1	As 188.979†	266.0	260.5	504.83	µg/L	504.83	ppb	12:05:44
1	B 249.677†	11616.4	11349.8	526.10	µg/L	526.10	ppb	12:05:23
1	Ba 233.527†	20031.0	19922.8	534.05	µg/L	534.05	ppb	12:05:23
1	Be 313.107†	800593.7	789752.6	514.52	µg/L	514.52	ppb	12:05:18
1	Cd 226.502†	19239.7	19163.7	539.02	µg/L	539.02	ppb	12:05:23
1	Co 228.616†	10557.8	10532.4	535.32	µg/L	535.32	ppb	12:05:23
1	Cr 267.716†	23994.2	23901.9	531.79	µg/L	531.79	ppb	12:05:23
1	Cu 324.752†	75191.6	71204.4	509.85	µg/L	509.85	ppb	12:05:23
1	Mn 257.610†	157621.1	156447.0	515.42	µg/L	515.42	ppb	12:05:18
1	Mo 202.031†	4371.7	4337.0	518.07	µg/L	518.07	ppb	12:05:44
1	Ni 231.604†	9656.0	9277.8	535.44	µg/L	535.44	ppb	12:05:23
1	P 214.914†	1375.0	1172.6	2554.0	µg/L	2554.0	ppb	12:05:44
1	Pb 220.353†	2041.8	1972.4	521.83	µg/L	521.83	ppb	12:05:44
1	S 181.975 Axial†	219.5	191.8	1024.7	µg/L	1024.7	ppb	12:05:44
1	Sb 206.836†	527.7	498.8	519.48	µg/L	519.48	ppb	12:05:44
1	Se 196.026†	371.0	356.9	529.19	µg/L	529.19	ppb	12:05:44
1	SiO2†	30625.0	28315.1	5743.9	µg/L	5743.9	ppb	12:05:23
1	Si 251.611†	33675.5	33014.9	2636.7	µg/L	2636.7	ppb	12:05:23
1	Sn 189.927†	1049.7	1017.8	521.33	µg/L	521.33	ppb	12:05:44
1	Ti 334.940†	223902.0	221083.6	508.60	µg/L	508.60	ppb	12:05:18
1	Tl 190.801†	316.2	333.4	526.64	µg/L	526.64	ppb	12:05:44
1	U 409.014†	5936.1	5181.0	515.86	µg/L	515.86	ppb	12:05:23
1	V 292.402†	44367.7	44058.0	533.67	µg/L	533.67	ppb	12:05:23
1	Zn 213.857†	19784.2	19077.9	534.85	µg/L	534.85	ppb	12:05:23
2	Sc RADIAL	115059.1	115059.1	103	%			12:04:19
2	Al 396.153Radial†	10371.0	9929.0	5228.0	µg/L	5228.0	ppb	12:04:19
2	Ca 317.933Radial†	13730.4	12950.4	5224.8	µg/L	5224.8	ppb	12:04:40
2	Fe 238.204 Radial†	1045.4	1005.5	5356.4	µg/L	5356.4	ppb	12:04:40
2	K 766.490 Radial†	10037.4	9022.2	5089.8	µg/L	5089.8	ppb	12:04:19
2	Mg 279.077 IEC†	990.1	947.6	5351.0	µg/L	5351.0	ppb	12:04:40
2	Na 589.592 Radial†	37462.4	36861.5	10397	µg/L	10397	ppb	12:04:19
2	Sr 421.552†	90364.9	88038.0	508.08	µg/L	508.08	ppb	12:04:19
2	Sc 361.383	2036361.8	2036361.8	101.42	%			12:05:51
2	Y 371.029	1231181.7	1231181.7	100.64	%			12:05:51
2	Ag 328.068†	55963.6	55196.0	527.34	µg/L	527.34	ppb	12:05:57
2	As 188.979†	264.5	257.6	499.27	µg/L	499.27	ppb	12:06:17
2	B 249.677†	11602.2	11277.9	522.76	µg/L	522.76	ppb	12:05:57
2	Ba 233.527†	19915.1	19708.6	528.31	µg/L	528.31	ppb	12:05:57
2	Be 313.107†	801685.2	786837.5	512.62	µg/L	512.62	ppb	12:05:51
2	Cd 226.502†	19164.6	18993.7	534.24	µg/L	534.24	ppb	12:05:57
2	Co 228.616†	10579.2	10500.8	533.71	µg/L	533.71	ppb	12:05:57
2	Cr 267.716†	23887.5	23677.2	526.78	µg/L	526.78	ppb	12:05:57
2	Cu 324.752†	75083.5	70722.9	506.41	µg/L	506.41	ppb	12:05:57
2	Mn 257.610†	157706.8	155745.7	513.11	µg/L	513.11	ppb	12:05:51
2	Mo 202.031†	4361.2	4304.8	514.23	µg/L	514.23	ppb	12:06:17
2	Ni 231.604†	9576.5	9151.3	528.14	µg/L	528.14	ppb	12:05:57
2	P 214.914†	1370.0	1160.8	2528.0	µg/L	2528.0	ppb	12:06:17
2	Pb 220.353†	2032.4	1952.9	516.66	µg/L	516.66	ppb	12:06:17

2	S 181.975 Axial†	217.6	188.8	1008.9 µg/L	1008.9 ppb	12:06:17
2	Sb 206.836†	521.2	489.8	510.05 µg/L	510.05 ppb	12:06:17
2	Se 196.026†	380.4	364.3	540.07 µg/L	540.07 ppb	12:06:17
2	SiO2†	30441.1	27981.1	5676.2 µg/L	5676.2 ppb	12:05:57
2	Si 251.611†	33554.6	32727.8	2613.8 µg/L	2613.8 ppb	12:05:57
2	Sn 189.927†	1042.8	1005.8	515.20 µg/L	515.20 ppb	12:06:17
2	Ti 334.940†	224140.9	220202.9	506.57 µg/L	506.57 ppb	12:05:51
2	Tl 190.801†	314.2	329.8	521.04 µg/L	521.04 ppb	12:06:17
2	U 409.014†	6048.8	5262.4	523.99 µg/L	523.99 ppb	12:05:57
2	V 292.402†	44164.1	43636.0	528.59 µg/L	528.59 ppb	12:05:57
2	Zn 213.857†	19706.6	18902.8	529.95 µg/L	529.95 ppb	12:05:57
3	Sc RADIAL	116120.5	116120.5	104 %		12:04:45
3	Al 396.153Radial†	10488.8	9950.3	5239.3 µg/L	5239.3 ppb	12:04:45
3	Ca 317.933Radial†	13728.2	12826.1	5174.6 µg/L	5174.6 ppb	12:05:06
3	Fe 238.204 Radial†	1045.5	996.3	5307.4 µg/L	5307.4 ppb	12:05:06
3	K 766.490 Radial†	10127.6	9019.8	5088.5 µg/L	5088.5 ppb	12:04:45
3	Mg 279.077 IEC†	989.7	938.4	5299.5 µg/L	5299.5 ppb	12:05:06
3	Na 589.592 Radial†	37704.0	36761.2	10369 µg/L	10369 ppb	12:04:45
3	Sr 421.552†	91333.7	88168.3	508.83 µg/L	508.83 ppb	12:04:45
3	Sc 361.383	2016231.6	2016231.6	100.42 %		12:06:24
3	Y 371.029	1219340.2	1219340.2	99.671 %		12:06:24
3	Ag 328.068†	55659.7	55444.3	529.71 µg/L	529.71 ppb	12:06:30
3	As 188.979†	268.0	263.7	511.11 µg/L	511.11 ppb	12:06:50
3	B 249.677†	11584.7	11374.7	527.27 µg/L	527.27 ppb	12:06:30
3	Ba 233.527†	19837.3	19827.2	531.49 µg/L	531.49 ppb	12:06:30
3	Be 313.107†	800622.7	793671.4	517.08 µg/L	517.08 ppb	12:06:24
3	Cd 226.502†	19022.8	19041.2	535.59 µg/L	535.59 ppb	12:06:30
3	Co 228.616†	10479.8	10506.0	533.96 µg/L	533.96 ppb	12:06:30
3	Cr 267.716†	23713.3	23738.8	528.16 µg/L	528.16 ppb	12:06:30
3	Cu 324.752†	74692.7	71072.9	508.90 µg/L	508.90 ppb	12:06:30
3	Mn 257.610†	157575.0	157166.9	517.79 µg/L	517.79 ppb	12:06:24
3	Mo 202.031†	4330.6	4317.4	515.72 µg/L	515.72 ppb	12:06:50
3	Ni 231.604†	9548.5	9217.7	531.97 µg/L	531.97 ppb	12:06:30
3	P 214.914†	1343.0	1147.4	2498.1 µg/L	2498.1 ppb	12:06:50
3	Pb 220.353†	2011.7	1952.3	516.50 µg/L	516.50 ppb	12:06:50
3	S 181.975 Axial†	218.7	192.1	1026.4 µg/L	1026.4 ppb	12:06:50
3	Sb 206.836†	520.3	494.0	514.44 µg/L	514.44 ppb	12:06:50
3	Se 196.026†	367.0	354.6	525.87 µg/L	525.87 ppb	12:06:50
3	SiO2†	30257.1	28097.5	5699.8 µg/L	5699.8 ppb	12:06:30
3	Si 251.611†	33324.2	32828.7	2621.7 µg/L	2621.7 ppb	12:06:30
3	Sn 189.927†	1034.2	1007.5	516.04 µg/L	516.04 ppb	12:06:50
3	Ti 334.940†	223983.1	222252.3	511.29 µg/L	511.29 ppb	12:06:24
3	Tl 190.801†	314.1	332.9	525.89 µg/L	525.89 ppb	12:06:50
3	U 409.014†	5989.9	5263.3	524.08 µg/L	524.08 ppb	12:06:30
3	V 292.402†	43984.5	43892.0	531.67 µg/L	531.67 ppb	12:06:30
3	Zn 213.857†	19588.1	18978.8	532.08 µg/L	532.08 ppb	12:06:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2026236.9	100.92	%	0.501				0.50%
Sc RADIAL	115622.6	103	%	0.5				0.46%
Y 371.029	1225200.6	100.15	%	0.484				0.48%
Ag 328.068†	55431.2	529.58	µg/L	2.187	529.58	ppb	2.187	0.41%
QC value within limits for Ag 328.068 Recovery = 105.92%								
Al 396.153Radial†	9938.7	5233.1	µg/L	5.69	5233.1	ppb	5.69	0.11%
QC value within limits for Al 396.153Radial Recovery = 104.66%								
As 188.979†	260.6	505.07	µg/L	5.924	505.07	ppb	5.924	1.17%
QC value within limits for As 188.979 Recovery = 101.01%								
B 249.677†	11334.2	525.38	µg/L	2.343	525.38	ppb	2.343	0.45%
QC value within limits for B 249.677 Recovery = 105.08%								
Ba 233.527†	19819.5	531.28	µg/L	2.875	531.28	ppb	2.875	0.54%
QC value within limits for Ba 233.527 Recovery = 106.26%								
Be 313.107†	790087.1	514.74	µg/L	2.234	514.74	ppb	2.234	0.43%
QC value within limits for Be 313.107 Recovery = 102.95%								
Ca 317.933Radial†	12894.5	5202.2	µg/L	25.46	5202.2	ppb	25.46	0.49%
QC value within limits for Ca 317.933Radial Recovery = 104.04%								
Cd 226.502†	19066.2	536.28	µg/L	2.464	536.28	ppb	2.464	0.46%
QC value within limits for Cd 226.502 Recovery = 107.26%								
Co 228.616†	10513.1	534.33	µg/L	0.864	534.33	ppb	0.864	0.16%

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   QC value within limits for Co 228.616  Recovery = 106.87%
Cr 267.716†            23772.6      528.91 µg/L        2.584      528.91 ppb        2.584   0.49%
   QC value within limits for Cr 267.716  Recovery = 105.78%
Cu 324.752†            71000.0      508.39 µg/L        1.777      508.39 ppb        1.777   0.35%
   QC value within limits for Cu 324.752  Recovery = 101.68%
Fe 238.204 Radial†      1002.5      5340.6 µg/L        28.77      5340.6 ppb        28.77   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.81%
K 766.490 Radial†       9016.0      5086.3 µg/L         4.96      5086.3 ppb         4.96   0.10%
   QC value within limits for K 766.490 Radial  Recovery = 101.73%
Mg 279.077 IEC†          947.3      5349.6 µg/L        49.39      5349.6 ppb        49.39   0.92%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.99%
Mn 257.610†           156453.2      515.44 µg/L        2.335      515.44 ppb        2.335   0.45%
   QC value within limits for Mn 257.610  Recovery = 103.09%
Mo 202.031†             4319.7      516.01 µg/L        1.938      516.01 ppb        1.938   0.38%
   QC value within limits for Mo 202.031  Recovery = 103.20%
Na 589.592 Radial†     36825.4       10387 µg/L         15.7       10387 ppb         15.7   0.15%
   QC value within limits for Na 589.592 Radial  Recovery = 103.87%
Ni 231.604†             9215.6      531.85 µg/L        3.652      531.85 ppb        3.652   0.69%
   QC value within limits for Ni 231.604  Recovery = 106.37%
P 214.914†              1160.3      2526.7 µg/L        28.00      2526.7 ppb        28.00   1.11%
   QC value within limits for P 214.914  Recovery = 101.07%
Pb 220.353†             1959.2      518.33 µg/L        3.029      518.33 ppb        3.029   0.58%
   QC value within limits for Pb 220.353  Recovery = 103.67%
S 181.975 Axial†         190.9      1020.0 µg/L         9.67      1020.0 ppb         9.67   0.95%
   QC value within limits for S 181.975 Axial  Recovery = 102.00%
Sb 206.836†              494.2      514.66 µg/L        4.716      514.66 ppb        4.716   0.92%
   QC value within limits for Sb 206.836  Recovery = 102.93%
Se 196.026†              358.6      531.71 µg/L        7.428      531.71 ppb        7.428   1.40%
   QC value within limits for Se 196.026  Recovery = 106.34%
SiO2†                   28131.2      5706.6 µg/L        34.40      5706.6 ppb        34.40   0.60%
   QC value within limits for SiO2  Recovery = 106.72%
Si 251.611†             32857.2      2624.1 µg/L        11.67      2624.1 ppb        11.67   0.44%
   QC value within limits for Si 251.611  Recovery = 104.96%
Sn 189.927†             1010.4      517.52 µg/L        3.322      517.52 ppb        3.322   0.64%
   QC value within limits for Sn 189.927  Recovery = 103.50%
Sr 421.552†            88012.9      507.94 µg/L        0.977      507.94 ppb        0.977   0.19%
   QC value within limits for Sr 421.552  Recovery = 101.59%
Ti 334.940†           221179.6      508.82 µg/L        2.368      508.82 ppb        2.368   0.47%
   QC value within limits for Ti 334.940  Recovery = 101.76%
Tl 190.801†              332.0      524.52 µg/L        3.044      524.52 ppb        3.044   0.58%
   QC value within limits for Tl 190.801  Recovery = 104.90%
U 409.014†              5235.6      521.31 µg/L        4.720      521.31 ppb        4.720   0.91%
   QC value within limits for U 409.014  Recovery = 104.26%
V 292.402†             43862.0      531.31 µg/L        2.558      531.31 ppb        2.558   0.48%
   QC value within limits for V 292.402  Recovery = 106.26%
Zn 213.857†            18986.5      532.29 µg/L        2.458      532.29 ppb        2.458   0.46%
   QC value within limits for Zn 213.857  Recovery = 106.46%
All analyte(s) passed QC.
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Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 12:06:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113628.7	113628.7	101	%			12:07:32
1	Al 396.153Radial†	170.7	3.8	1.9760	µg/L	1.9760	ppb	12:07:32
1	Ca 317.933Radial†	427.6	8.8	3.5511	µg/L	3.5511	ppb	12:07:52
1	Fe 238.204 Radial†	6.8	-5.2	-27.828	µg/L	-27.828	ppb	12:07:52
1	K 766.490 Radial†	734.1	-23.2	-13.062	µg/L	-13.062	ppb	12:07:32
1	Mg 279.077 IEC†	13.2	-3.0	-17.101	µg/L	-17.101	ppb	12:07:52
1	Na 589.592 Radial†	-679.4	-267.9	-75.572	µg/L	-75.572	ppb	12:07:32
1	Sr 421.552†	-46.6	45.4	0.2617	µg/L	0.2617	ppb	12:07:32
1	Sc 361.383	2042751.5	2042751.5	101.74	%			12:08:54
1	Y 371.029	1241594.6	1241594.6	101.49	%			12:08:54
1	Ag 328.068†	15.0	31.0	0.2913	µg/L	0.2913	ppb	12:09:00
1	As 188.979†	3.2	-0.0	-0.0554	µg/L	-0.0554	ppb	12:09:20
1	B 249.677†	218.0	52.6	2.4534	µg/L	2.4534	ppb	12:09:00
1	Ba 233.527†	-73.9	-0.2	-0.0049	µg/L	-0.0049	ppb	12:09:20
1	Be 313.107†	3720.6	38.2	0.0248	µg/L	0.0248	ppb	12:09:00
1	Cd 226.502†	-98.5	0.8	0.0272	µg/L	0.0272	ppb	12:09:20
1	Co 228.616†	-54.3	16.4	0.8350	µg/L	0.8350	ppb	12:09:20
1	Cr 267.716†	-152.4	-25.5	-0.5672	µg/L	-0.5672	ppb	12:09:00
1	Cu 324.752†	3282.3	-82.7	-0.5969	µg/L	-0.5969	ppb	12:09:00
1	Mn 257.610†	-97.4	152.1	0.4969	µg/L	0.4969	ppb	12:09:20
1	Mo 202.031†	-2.8	2.0	0.2348	µg/L	0.2348	ppb	12:09:20
1	Ni 231.604†	303.7	7.5	0.4322	µg/L	0.4322	ppb	12:09:20
1	P 214.914†	189.1	-4.1	-9.1089	µg/L	-9.1089	ppb	12:09:20
1	Pb 220.353†	49.3	-2.5	-0.6737	µg/L	-0.6737	ppb	12:09:20
1	S 181.975 Axial†	27.5	1.4	7.3911	µg/L	7.3911	ppb	12:09:20
1	Sb 206.836†	23.8	-0.8	-0.8248	µg/L	-0.8248	ppb	12:09:20
1	Se 196.026†	16.9	5.8	8.5429	µg/L	8.5429	ppb	12:09:20
1	SiO2†	2059.2	-9.6	-1.9503	µg/L	-1.9503	ppb	12:09:00
1	Si 251.611†	439.5	75.2	6.1231	µg/L	6.1231	ppb	12:09:20
1	Sn 189.927†	22.0	-0.8	-0.3952	µg/L	-0.3952	ppb	12:09:20
1	Ti 334.940†	920.7	106.5	0.2449	µg/L	0.2449	ppb	12:09:00
1	Tl 190.801†	-17.6	2.8	4.4044	µg/L	4.4044	ppb	12:09:20
1	U 409.014†	744.5	30.1	3.0084	µg/L	3.0084	ppb	12:09:00
1	V 292.402†	-99.3	-7.1	-0.0813	µg/L	-0.0813	ppb	12:09:00
1	Zn 213.857†	527.5	-9.3	-0.2610	µg/L	-0.2610	ppb	12:09:20
2	Sc RADIAL	113856.8	113856.8	102	%			12:07:58
2	Al 396.153Radial†	161.6	-5.5	-2.8945	µg/L	-2.8945	ppb	12:07:58
2	Ca 317.933Radial†	427.0	7.4	2.9749	µg/L	2.9749	ppb	12:08:18
2	Fe 238.204 Radial†	10.5	-1.7	-8.8359	µg/L	-8.8359	ppb	12:08:18
2	K 766.490 Radial†	781.6	22.1	12.465	µg/L	12.465	ppb	12:07:58
2	Mg 279.077 IEC†	17.9	1.6	8.9857	µg/L	8.9857	ppb	12:08:18
2	Na 589.592 Radial†	-629.6	-217.5	-61.355	µg/L	-61.355	ppb	12:07:58
2	Sr 421.552†	-91.5	1.4	0.0079	µg/L	0.0079	ppb	12:07:58
2	Sc 361.383	2024953.7	2024953.7	100.85	%			12:09:26
2	Y 371.029	1230941.1	1230941.1	100.62	%			12:09:26
2	Ag 328.068†	27.7	43.7	0.4150	µg/L	0.4150	ppb	12:09:32
2	As 188.979†	-4.4	-7.5	-14.575	µg/L	-14.575	ppb	12:09:52
2	B 249.677†	164.4	1.2	0.0594	µg/L	0.0594	ppb	12:09:32
2	Ba 233.527†	-77.0	-3.9	-0.1052	µg/L	-0.1052	ppb	12:09:52
2	Be 313.107†	3728.8	78.4	0.0509	µg/L	0.0509	ppb	12:09:32
2	Cd 226.502†	-89.3	9.0	0.2515	µg/L	0.2515	ppb	12:09:52
2	Co 228.616†	-67.0	3.4	0.1720	µg/L	0.1720	ppb	12:09:52
2	Cr 267.716†	-131.3	-6.0	-0.1330	µg/L	-0.1330	ppb	12:09:32
2	Cu 324.752†	3237.3	-99.0	-0.7092	µg/L	-0.7092	ppb	12:09:32
2	Mn 257.610†	-57.7	190.6	0.6259	µg/L	0.6259	ppb	12:09:52
2	Mo 202.031†	-6.4	-1.6	-0.1951	µg/L	-0.1951	ppb	12:09:52
2	Ni 231.604†	286.9	-6.5	-0.3776	µg/L	-0.3776	ppb	12:09:52
2	P 214.914†	192.7	1.1	2.4667	µg/L	2.4667	ppb	12:09:52
2	Pb 220.353†	68.3	16.7	4.4119	µg/L	4.4119	ppb	12:09:52

2	S 181.975 Axial†	27.5	1.6	8.4040 µg/L	8.4040 ppb	12:09:52
2	Sb 206.836†	23.4	-1.0	-0.9913 µg/L	-0.9913 ppb	12:09:52
2	Se 196.026†	16.3	5.4	7.9328 µg/L	7.9328 ppb	12:09:52
2	SiO2†	2121.0	69.4	14.083 µg/L	14.083 ppb	12:09:32
2	Si 251.611†	428.8	68.4	5.5905 µg/L	5.5905 ppb	12:09:52
2	Sn 189.927†	20.2	-2.4	-1.2060 µg/L	-1.2060 ppb	12:09:52
2	Ti 334.940†	1038.8	231.5	0.5326 µg/L	0.5326 ppb	12:09:32
2	Tl 190.801†	-20.1	0.1	0.2026 µg/L	0.2026 ppb	12:09:52
2	U 409.014†	679.7	-27.7	-2.7590 µg/L	-2.7590 ppb	12:09:32
2	V 292.402†	-76.9	14.2	0.1642 µg/L	0.1642 ppb	12:09:32
2	Zn 213.857†	534.2	1.9	0.0575 µg/L	0.0575 ppb	12:09:52
3	Sc RADIAL	113661.7	113661.7	102 %		12:08:24
3	Al 396.153Radial†	207.8	40.3	21.292 µg/L	21.292 ppb	12:08:24
3	Ca 317.933Radial†	432.7	13.7	5.5197 µg/L	5.5197 ppb	12:08:44
3	Fe 238.204 Radial†	9.4	-2.7	-14.338 µg/L	-14.338 ppb	12:08:44
3	K 766.490 Radial†	795.0	36.6	20.656 µg/L	20.656 ppb	12:08:24
3	Mg 279.077 IEC†	20.3	4.0	22.509 µg/L	22.509 ppb	12:08:44
3	Na 589.592 Radial†	-676.7	-265.0	-74.748 µg/L	-74.748 ppb	12:08:24
3	Sr 421.552†	-58.1	34.1	0.1968 µg/L	0.1968 ppb	12:08:24
3	Sc 361.383	2034783.4	2034783.4	101.34 %		12:09:58
3	Y 371.029	1236956.9	1236956.9	101.11 %		12:09:58
3	Ag 328.068†	32.1	47.9	0.4540 µg/L	0.4540 ppb	12:10:04
3	As 188.979†	4.0	0.8	1.6300 µg/L	1.6300 ppb	12:10:24
3	B 249.677†	153.6	-10.1	-0.4669 µg/L	-0.4669 ppb	12:10:04
3	Ba 233.527†	-71.3	2.1	0.0570 µg/L	0.0570 ppb	12:10:24
3	Be 313.107†	3787.5	118.5	0.0770 µg/L	0.0770 ppb	12:10:04
3	Cd 226.502†	-88.6	10.1	0.2867 µg/L	0.2867 ppb	12:10:24
3	Co 228.616†	-66.9	3.8	0.1922 µg/L	0.1922 ppb	12:10:24
3	Cr 267.716†	-141.6	-15.5	-0.3430 µg/L	-0.3430 ppb	12:10:04
3	Cu 324.752†	3292.2	-60.3	-0.4339 µg/L	-0.4339 ppb	12:10:04
3	Mn 257.610†	-114.5	134.8	0.4418 µg/L	0.4418 ppb	12:10:24
3	Mo 202.031†	-4.3	0.5	0.0583 µg/L	0.0583 ppb	12:10:24
3	Ni 231.604†	290.3	-4.6	-0.2646 µg/L	-0.2646 ppb	12:10:24
3	P 214.914†	191.5	-1.1	-2.3569 µg/L	-2.3569 ppb	12:10:24
3	Pb 220.353†	48.6	-3.0	-0.7950 µg/L	-0.7950 ppb	12:10:24
3	S 181.975 Axial†	21.6	-4.4	-23.486 µg/L	-23.486 ppb	12:10:24
3	Sb 206.836†	16.3	-8.0	-8.3964 µg/L	-8.3964 ppb	12:10:24
3	Se 196.026†	9.1	-1.8	-2.6972 µg/L	-2.6972 ppb	12:10:24
3	SiO2†	2162.1	99.9	20.256 µg/L	20.256 ppb	12:10:04
3	Si 251.611†	427.1	64.6	5.3370 µg/L	5.3370 ppb	12:10:24
3	Sn 189.927†	17.0	-5.6	-2.8418 µg/L	-2.8418 ppb	12:10:24
3	Ti 334.940†	1046.6	234.2	0.5389 µg/L	0.5389 ppb	12:10:04
3	Tl 190.801†	-21.8	-1.5	-2.3051 µg/L	-2.3051 ppb	12:10:24
3	U 409.014†	720.9	9.7	0.9720 µg/L	0.9720 ppb	12:10:04
3	V 292.402†	-80.9	10.6	0.1285 µg/L	0.1285 ppb	12:10:04
3	Zn 213.857†	519.8	-14.9	-0.4190 µg/L	-0.4190 ppb	12:10:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2034162.9	101.31	%	0.444				0.44%
Sc RADIAL	113715.7	102	%	0.1				0.11%
Y 371.029	1236497.5	101.07	%	0.437				0.43%
Ag 328.068†	40.9	0.3867	µg/L	0.08494	0.3867	ppb	0.08494	21.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.9	6.7913	µg/L	12.79227	6.7913	ppb	12.79227	188.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.2	-4.3335	µg/L	8.90948	-4.3335	ppb	8.90948	205.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	14.6	0.6820	µg/L	1.55656	0.6820	ppb	1.55656	228.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.7	-0.0177	µg/L	0.08182	-0.0177	ppb	0.08182	462.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.4	0.0509	µg/L	0.02610	0.0509	ppb	0.02610	51.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.0	4.0153	µg/L	1.33438	4.0153	ppb	1.33438	33.23%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.7	0.1885	µg/L	0.14077	0.1885	ppb	0.14077	74.70%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	7.9	0.3997	µg/L	0.37706	0.3997	ppb	0.37706	94.33%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -15.7     -0.3477 µg/L       0.21713     -0.3477 ppb        0.21713  62.45%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -80.7     -0.5800 µg/L       0.13844     -0.5800 ppb        0.13844  23.87%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -3.2     -17.000 µg/L        9.7720     -17.000 ppb         9.7720  57.48%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         11.9      6.6863 µg/L      17.58585      6.6863 ppb       17.58585 263.01%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.8      4.7980 µg/L      20.13439      4.7980 ppb       20.13439 419.64%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              159.2      0.5215 µg/L       0.09453      0.5215 ppb        0.09453  18.12%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.3      0.0327 µg/L       0.21610      0.0327 ppb        0.21610 661.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -250.2     -70.558 µg/L        7.9806     -70.558 ppb         7.9806  11.31%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -1.2     -0.0700 µg/L       0.43858     -0.0700 ppb        0.43858 626.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -1.4     -2.9997 µg/L       5.81453     -2.9997 ppb        5.81453 193.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.7      0.9811 µg/L       2.97184      0.9811 ppb        2.97184 302.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.5     -2.5636 µg/L      18.12627     -2.5636 ppb       18.12627 707.07%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.3     -3.4042 µg/L       4.32418     -3.4042 ppb        4.32418 127.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.1      4.5928 µg/L       6.32069      4.5928 ppb        6.32069 137.62%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     53.2      10.796 µg/L       11.4621      10.796 ppb        11.4621 106.17%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               69.4      5.6835 µg/L       0.40121      5.6835 ppb        0.40121   7.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.9     -1.4810 µg/L       1.24630     -1.4810 ppb        1.24630  84.15%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               26.9      0.1555 µg/L       0.13190      0.1555 ppb        0.13190  84.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              190.7      0.4388 µg/L       0.16797      0.4388 ppb        0.16797  38.28%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.5      0.7673 µg/L       3.39023      0.7673 ppb        3.39023 441.85%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 4.0      0.4071 µg/L       2.92493      0.4071 ppb        2.92493 718.43%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 5.9      0.0705 µg/L       0.13264      0.0705 ppb        0.13264 188.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -7.4     -0.2075 µg/L       0.24274     -0.2075 ppb        0.24274 116.99%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: 1201993442|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 324
Date Collected: 12/14/2009 12:10:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993442|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110700.9	110700.9	98.9	%			12:11:13
1	Al 396.153Radial†	235.3	73.6	38.898	µg/L	38.898	ppb	12:11:13
1	Ca 317.933Radial†	497.1	90.2	36.399	µg/L	36.399	ppb	12:11:34
1	Fe 238.204 Radial†	22.9	11.2	59.696	µg/L	59.696	ppb	12:11:34
1	K 766.490 Radial†	793.8	56.4	31.790	µg/L	31.790	ppb	12:11:13
1	Mg 279.077 IEC†	18.3	2.5	13.942	µg/L	13.942	ppb	12:11:34
1	Na 589.592 Radial†	-657.5	-263.5	-74.315	µg/L	-74.315	ppb	12:11:13
1	Sr 421.552†	-7.2	84.0	0.4848	µg/L	0.4848	ppb	12:11:13
1	Sc 361.383	2008360.2	2008360.2	100.03	%			12:12:36
1	Y 371.029	1220068.5	1220068.5	99.730	%			12:12:36
1	Ag 328.068†	18.0	34.2	0.3334	µg/L	0.3334	ppb	12:12:41
1	As 188.979†	1.8	-1.3	-2.5619	µg/L	-2.5619	ppb	12:13:02
1	B 249.677†	202.5	40.7	1.8754	µg/L	1.8754	ppb	12:12:41
1	Ba 233.527†	-56.0	16.5	0.4425	µg/L	0.4425	ppb	12:13:02
1	Be 313.107†	3790.8	171.0	0.1109	µg/L	0.1109	ppb	12:12:41
1	Cd 226.502†	-95.4	2.3	0.0586	µg/L	0.0586	ppb	12:13:02
1	Co 228.616†	-57.1	12.7	0.6423	µg/L	0.6423	ppb	12:13:02
1	Cr 267.716†	-88.8	35.5	0.7887	µg/L	0.7887	ppb	12:12:41
1	Cu 324.752†	3317.1	7.4	0.0653	µg/L	0.0653	ppb	12:12:41
1	Mn 257.610†	347.5	595.3	1.9661	µg/L	1.9661	ppb	12:12:41
1	Mo 202.031†	-3.2	1.5	0.1874	µg/L	0.1874	ppb	12:13:02
1	Ni 231.604†	311.6	20.4	1.1799	µg/L	1.1799	ppb	12:13:02
1	P 214.914†	185.7	-4.4	-9.9240	µg/L	-9.9240	ppb	12:13:02
1	Pb 220.353†	55.4	4.4	1.1678	µg/L	1.1678	ppb	12:13:02
1	S 181.975 Axial†	23.4	-2.3	-12.208	µg/L	-12.208	ppb	12:13:02
1	Sb 206.836†	20.2	-4.0	-4.1778	µg/L	-4.1778	ppb	12:13:02
1	Se 196.026†	13.3	2.5	3.7499	µg/L	3.7499	ppb	12:13:02
1	SiO2†	2291.7	257.5	52.235	µg/L	52.235	ppb	12:12:41
1	Si 251.611†	691.8	334.8	27.334	µg/L	27.334	ppb	12:13:02
1	Sn 189.927†	14.0	-8.4	-4.2677	µg/L	-4.2677	ppb	12:13:02
1	Ti 334.940†	1454.2	655.3	1.5064	µg/L	1.5064	ppb	12:12:41
1	Tl 190.801†	-22.5	-2.4	-3.8081	µg/L	-3.8081	ppb	12:13:02
1	U 409.014†	677.5	-24.3	-2.4320	µg/L	-2.4320	ppb	12:12:41
1	V 292.402†	-40.6	49.9	0.6013	µg/L	0.6013	ppb	12:12:41
1	Zn 213.857†	611.9	83.9	2.3577	µg/L	2.3577	ppb	12:13:02
2	Sc RADIAL	111674.6	111674.6	99.7	%			12:11:39
2	Al 396.153Radial†	210.2	46.4	24.524	µg/L	24.524	ppb	12:11:39
2	Ca 317.933Radial†	484.2	72.9	29.418	µg/L	29.418	ppb	12:11:59
2	Fe 238.204 Radial†	20.4	8.5	45.266	µg/L	45.266	ppb	12:11:59
2	K 766.490 Radial†	768.0	23.4	13.210	µg/L	13.210	ppb	12:11:39
2	Mg 279.077 IEC†	19.5	3.5	19.815	µg/L	19.815	ppb	12:11:59
2	Na 589.592 Radial†	-682.6	-282.8	-79.770	µg/L	-79.770	ppb	12:11:39
2	Sr 421.552†	-14.9	76.3	0.4406	µg/L	0.4406	ppb	12:11:39
2	Sc 361.383	1979403.1	1979403.1	98.584	%			12:13:08
2	Y 371.029	1201260.7	1201260.7	98.193	%			12:13:08
2	Ag 328.068†	0.6	16.9	0.1635	µg/L	0.1635	ppb	12:13:13
2	As 188.979†	0.9	-2.3	-4.4340	µg/L	-4.4340	ppb	12:13:34
2	B 249.677†	181.7	22.5	1.0333	µg/L	1.0333	ppb	12:13:13
2	Ba 233.527†	-46.1	25.7	0.6868	µg/L	0.6868	ppb	12:13:34
2	Be 313.107†	3773.0	208.3	0.1353	µg/L	0.1353	ppb	12:13:13
2	Cd 226.502†	-104.1	-8.0	-0.2170	µg/L	-0.2170	ppb	12:13:34
2	Co 228.616†	-67.3	1.5	0.0740	µg/L	0.0740	ppb	12:13:34
2	Cr 267.716†	-117.9	4.7	0.1039	µg/L	0.1039	ppb	12:13:13
2	Cu 324.752†	3342.0	81.1	0.5893	µg/L	0.5893	ppb	12:13:13
2	Mn 257.610†	184.9	435.4	1.4384	µg/L	1.4384	ppb	12:13:13
2	Mo 202.031†	-9.0	-4.4	-0.5200	µg/L	-0.5200	ppb	12:13:34
2	Ni 231.604†	303.8	17.1	0.9890	µg/L	0.9890	ppb	12:13:34
2	P 214.914†	201.4	14.2	31.598	µg/L	31.598	ppb	12:13:34
2	Pb 220.353†	46.2	-4.1	-1.0908	µg/L	-1.0908	ppb	12:13:34

2	S 181.975 Axial†	26.5	1.2	6.2019 µg/L	6.2019 ppb	12:13:34
2	Sb 206.836†	18.5	-5.4	-5.5989 µg/L	-5.5989 ppb	12:13:34
2	Se 196.026†	10.1	-0.6	-0.8116 µg/L	-0.8116 ppb	12:13:34
2	SiO2†	2279.5	278.6	56.520 µg/L	56.520 ppb	12:13:13
2	Si 251.611†	654.8	307.4	24.945 µg/L	24.945 ppb	12:13:34
2	Sn 189.927†	23.5	1.5	0.7568 µg/L	0.7568 ppb	12:13:34
2	Ti 334.940†	1283.8	503.7	1.1578 µg/L	1.1578 ppb	12:13:13
2	Tl 190.801†	-20.8	-1.1	-1.6454 µg/L	-1.6454 ppb	12:13:34
2	U 409.014†	821.3	131.5	13.103 µg/L	13.103 ppb	12:13:13
2	V 292.402†	-88.4	0.8	0.0312 µg/L	0.0312 ppb	12:13:13
2	Zn 213.857†	601.4	82.2	2.3126 µg/L	2.3126 ppb	12:13:34
3	Sc RADIAL	112954.4	112954.4	101 %		12:12:05
3	Al 396.153Radial†	181.2	15.2	8.0212 µg/L	8.0212 ppb	12:12:05
3	Ca 317.933Radial†	485.9	69.2	27.904 µg/L	27.904 ppb	12:12:25
3	Fe 238.204 Radial†	23.6	11.4	60.747 µg/L	60.747 ppb	12:12:25
3	K 766.490 Radial†	747.8	-5.3	-2.9951 µg/L	-2.9951 ppb	12:12:05
3	Mg 279.077 IEC†	18.7	2.6	14.413 µg/L	14.413 ppb	12:12:25
3	Na 589.592 Radial†	-667.2	-259.8	-73.273 µg/L	-73.273 ppb	12:12:05
3	Sr 421.552†	34.1	125.1	0.7219 µg/L	0.7219 ppb	12:12:05
3	Sc 361.383	1998367.8	1998367.8	99.528 %		12:13:40
3	Y 371.029	1214073.1	1214073.1	99.240 %		12:13:40
3	Ag 328.068†	-34.5	-18.3	-0.1675 µg/L	-0.1675 ppb	12:13:45
3	As 188.979†	0.9	-2.2	-4.2848 µg/L	-4.2848 ppb	12:14:06
3	B 249.677†	194.9	34.0	1.5635 µg/L	1.5635 ppb	12:13:45
3	Ba 233.527†	-52.1	20.1	0.5388 µg/L	0.5388 ppb	12:14:06
3	Be 313.107†	3883.1	282.6	0.1838 µg/L	0.1838 ppb	12:13:45
3	Cd 226.502†	-89.0	8.1	0.2194 µg/L	0.2194 ppb	12:14:06
3	Co 228.616†	-58.6	10.9	0.5546 µg/L	0.5546 ppb	12:14:06
3	Cr 267.716†	-108.8	14.9	0.3319 µg/L	0.3319 ppb	12:13:45
3	Cu 324.752†	3307.5	14.2	0.1148 µg/L	0.1148 ppb	12:13:45
3	Mn 257.610†	176.5	425.1	1.4064 µg/L	1.4064 ppb	12:13:45
3	Mo 202.031†	2.5	7.2	0.8664 µg/L	0.8664 ppb	12:14:06
3	Ni 231.604†	305.1	15.5	0.8965 µg/L	0.8965 ppb	12:14:06
3	P 214.914†	195.6	6.5	14.429 µg/L	14.429 ppb	12:14:06
3	Pb 220.353†	56.0	5.3	1.4004 µg/L	1.4004 ppb	12:14:06
3	S 181.975 Axial†	21.6	-4.0	-21.229 µg/L	-21.229 ppb	12:14:06
3	Sb 206.836†	22.6	-1.4	-1.4630 µg/L	-1.4630 ppb	12:14:06
3	Se 196.026†	13.7	2.9	4.3777 µg/L	4.3777 ppb	12:14:06
3	SiO2†	2295.6	272.9	55.359 µg/L	55.359 ppb	12:13:45
3	Si 251.611†	684.4	330.9	26.870 µg/L	26.870 ppb	12:14:06
3	Sn 189.927†	22.0	-0.3	-0.1124 µg/L	-0.1124 ppb	12:14:06
3	Ti 334.940†	1238.6	446.0	1.0250 µg/L	1.0250 ppb	12:13:45
3	Tl 190.801†	-23.1	-3.1	-4.9379 µg/L	-4.9379 ppb	12:14:06
3	U 409.014†	627.1	-71.6	-7.1480 µg/L	-7.1480 ppb	12:13:45
3	V 292.402†	-70.1	20.1	0.2409 µg/L	0.2409 ppb	12:13:45
3	Zn 213.857†	598.3	73.3	2.0608 µg/L	2.0608 ppb	12:14:06

Mean Data: 1201993442|931895|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1995377.1	99.379	%	0.7325				0.74%
Sc RADIAL	111776.6	99.8	%	1.01				1.01%
Y 371.029	1211800.8	99.054	%	0.7853				0.79%
Ag 328.068†	10.9	0.1098	µg/L	0.25472	0.1098	ppb	0.25472	232.05%
Al 396.153Radial†	45.1	23.815	µg/L	15.4506	23.815	ppb	15.4506	64.88%
As 188.979†	-1.9	-3.7603	µg/L	1.04046	-3.7603	ppb	1.04046	27.67%
B 249.677†	32.4	1.4907	µg/L	0.42575	1.4907	ppb	0.42575	28.56%
Ba 233.527†	20.8	0.5560	µg/L	0.12307	0.5560	ppb	0.12307	22.13%
Be 313.107†	220.6	0.1433	µg/L	0.03713	0.1433	ppb	0.03713	25.90%
Ca 317.933Radial†	77.4	31.240	µg/L	4.5311	31.240	ppb	4.5311	14.50%
Cd 226.502†	0.8	0.0203	µg/L	0.22071	0.0203	ppb	0.22071	>999.9%
Co 228.616†	8.4	0.4236	µg/L	0.30595	0.4236	ppb	0.30595	72.23%
Cr 267.716†	18.4	0.4082	µg/L	0.34874	0.4082	ppb	0.34874	85.44%
Cu 324.752†	34.2	0.2565	µg/L	0.28932	0.2565	ppb	0.28932	112.80%
Fe 238.204 Radial†	10.4	55.236	µg/L	8.6502	55.236	ppb	8.6502	15.66%
K 766.490 Radial†	24.8	14.001	µg/L	17.4059	14.001	ppb	17.4059	124.31%
Mg 279.077 IEC†	2.9	16.057	µg/L	3.2636	16.057	ppb	3.2636	20.33%
Mn 257.610†	485.3	1.6036	µg/L	0.31431	1.6036	ppb	0.31431	19.60%
Mo 202.031†	1.5	0.1779	µg/L	0.69324	0.1779	ppb	0.69324	389.68%
Na 589.592 Radial†	-268.7	-75.786	µg/L	3.4895	-75.786	ppb	3.4895	4.60%

Ni 231.604†	17.7	1.0218	µg/L	0.14450	1.0218	ppb	0.14450 14.14%
P 214.914†	5.5	12.034	µg/L	20.8644	12.034	ppb	20.8644 173.38%
Pb 220.353†	1.9	0.4925	µg/L	1.37604	0.4925	ppb	1.37604 279.41%
S 181.975 Axial†	-1.7	-9.0783	µg/L	13.98063	-9.0783	ppb	13.98063 154.00%
Sb 206.836†	-3.6	-3.7466	µg/L	2.10145	-3.7466	ppb	2.10145 56.09%
Se 196.026†	1.6	2.4387	µg/L	2.83227	2.4387	ppb	2.83227 116.14%
SiO2†	269.7	54.705	µg/L	2.2161	54.705	ppb	2.2161 4.05%
Si 251.611†	324.4	26.383	µg/L	1.2669	26.383	ppb	1.2669 4.80%
Sn 189.927†	-2.4	-1.2078	µg/L	2.68539	-1.2078	ppb	2.68539 222.35%
Sr 421.552†	95.1	0.5491	µg/L	0.15127	0.5491	ppb	0.15127 27.55%
Ti 334.940†	535.0	1.2297	µg/L	0.24862	1.2297	ppb	0.24862 20.22%
Tl 190.801†	-2.2	-3.4638	µg/L	1.67302	-3.4638	ppb	1.67302 48.30%
U 409.014†	11.9	1.1743	µg/L	10.59627	1.1743	ppb	10.59627 902.32%
V 292.402†	23.6	0.2911	µg/L	0.28834	0.2911	ppb	0.28834 99.04%
Zn 213.857†	79.8	2.2437	µg/L	0.16001	2.2437	ppb	0.16001 7.13%

Sequence No.: 34
Sample ID: 1201993443|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 325
Date Collected: 12/14/2009 12:14:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201993443|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111180.1	111180.1	99.3	%			12:14:54
1	Al 396.153Radial†	189260.4	190457.7	100640	µg/L	100640	ppb	12:14:48
1	Ca 317.933Radial†	283570.4	285198.0	115060	µg/L	115060	ppb	12:14:48
1	Fe 238.204 Radial†	40845.1	41127.0	218400	µg/L	218400	ppb	12:14:54
1	K 766.490 Radial†	80285.6	80116.6	45197	µg/L	45197	ppb	12:14:48
1	Mg 279.077 IEC†	7704.7	7744.1	43383	µg/L	43383	ppb	12:14:54
1	Na 589.592 Radial†	38720.6	39400.8	11113	µg/L	11113	ppb	12:14:54
1	Sr 421.552†	431019.7	434212.2	2505.9	µg/L	2505.9	ppb	12:14:48
1	Sc 361.383	1980933.3	1980933.3	98.660	%			12:15:29
1	Y 371.029	1218675.5	1218675.5	99.616	%			12:15:29
1	Ag 328.068†	32760.1	33221.3	341.44	µg/L	341.44	ppb	12:15:35
1	As 188.979†	609.0	614.2	1159.5	µg/L	1159.5	ppb	12:15:55
1	B 249.677†	37855.7	38208.1	1708.1	µg/L	1708.1	ppb	12:15:35
1	Ba 233.527†	75764.5	76866.0	2059.0	µg/L	2059.0	ppb	12:15:35
1	Be 313.107†	1352775.4	1367530.6	888.97	µg/L	888.97	ppb	12:15:29
1	Cd 226.502†	25272.4	25713.3	707.28	µg/L	707.28	ppb	12:15:35
1	Co 228.616†	20661.3	21011.7	1056.0	µg/L	1056.0	ppb	12:15:35
1	Cr 267.716†	121606.1	123382.0	2741.8	µg/L	2741.8	ppb	12:15:35
1	Cu 324.752†	278378.5	278850.7	2039.1	µg/L	2039.1	ppb	12:15:35
1	Mn 257.610†	1759499.0	1783645.2	5896.1	µg/L	5896.1	ppb	12:15:29
1	Mo 202.031†	4818.3	4888.5	592.29	µg/L	592.29	ppb	12:15:55
1	Ni 231.604†	27130.2	27207.6	1570.2	µg/L	1570.2	ppb	12:15:35
1	P 214.914†	4159.1	4025.6	8516.5	µg/L	8516.5	ppb	12:15:55
1	Pb 220.353†	3451.8	3447.7	915.85	µg/L	915.85	ppb	12:15:55
1	S 181.975 Axial†	846.4	832.2	4414.7	µg/L	4414.7	ppb	12:15:55
1	Sb 206.836†	1703.2	1702.2	1776.6	µg/L	1776.6	ppb	12:15:55
1	Se 196.026†	2131.9	2150.1	3325.6	µg/L	3325.6	ppb	12:15:55
1	SiO2†	188961.7	189494.6	38440	µg/L	38440	ppb	12:15:35
1	Si 251.611†	217555.2	220153.4	17619	µg/L	17619	ppb	12:15:35
1	Sn 189.927†	2028.2	2033.3	1095.5	µg/L	1095.5	ppb	12:15:55
1	Ti 334.940†	2662809.5	2698178.6	6204.2	µg/L	6204.2	ppb	12:15:29
1	Tl 190.801†	790.1	820.9	1338.4	µg/L	1338.4	ppb	12:15:55
1	U 409.014†	208.7	-490.1	-86.927	µg/L	-86.927	ppb	12:15:35
1	V 292.402†	110650.1	112243.6	1369.0	µg/L	1369.0	ppb	12:15:35
1	Zn 213.857†	234369.6	237025.1	6662.1	µg/L	6662.1	ppb	12:15:35
2	Sc RADIAL	113722.9	113722.9	102	%			12:15:05
2	Al 396.153Radial†	191096.2	188003.1	99340	µg/L	99340	ppb	12:15:00
2	Ca 317.933Radial†	286027.3	281231.2	113460	µg/L	113460	ppb	12:15:00
2	Fe 238.204 Radial†	41784.4	41132.1	218430	µg/L	218430	ppb	12:15:05
2	K 766.490 Radial†	80712.2	78728.6	44414	µg/L	44414	ppb	12:15:00
2	Mg 279.077 IEC†	7863.1	7726.6	43284	µg/L	43284	ppb	12:15:05
2	Na 589.592 Radial†	39334.8	39133.6	11038	µg/L	11038	ppb	12:15:05
2	Sr 421.552†	434576.7	428007.8	2470.1	µg/L	2470.1	ppb	12:15:00
2	Sc 361.383	1993058.1	1993058.1	99.264	%			12:16:02
2	Y 371.029	1226582.3	1226582.3	100.26	%			12:16:02
2	Ag 328.068†	32716.8	32975.7	339.04	µg/L	339.04	ppb	12:16:08
2	As 188.979†	611.8	613.2	1157.9	µg/L	1157.9	ppb	12:16:29
2	B 249.677†	37857.8	37976.9	1697.3	µg/L	1697.3	ppb	12:16:08
2	Ba 233.527†	75657.0	76290.5	2043.6	µg/L	2043.6	ppb	12:16:08
2	Be 313.107†	1361299.7	1367776.8	889.13	µg/L	889.13	ppb	12:16:02
2	Cd 226.502†	25210.3	25494.9	701.12	µg/L	701.12	ppb	12:16:08
2	Co 228.616†	20620.2	20842.9	1047.4	µg/L	1047.4	ppb	12:16:08
2	Cr 267.716†	121480.2	122505.4	2722.4	µg/L	2722.4	ppb	12:16:08
2	Cu 324.752†	278251.2	277005.8	2025.9	µg/L	2025.9	ppb	12:16:08
2	Mn 257.610†	1771675.2	1785062.4	5900.8	µg/L	5900.8	ppb	12:16:02
2	Mo 202.031†	4812.0	4852.4	587.99	µg/L	587.99	ppb	12:16:29
2	Ni 231.604†	27093.0	27002.9	1558.4	µg/L	1558.4	ppb	12:16:08
2	P 214.914†	4150.4	3991.2	8440.7	µg/L	8440.7	ppb	12:16:29
2	Pb 220.353†	3449.7	3424.3	909.57	µg/L	909.57	ppb	12:16:29

2	S 181.975 Axial†	839.7	820.2	4350.2 µg/L	4350.2 ppb		12:16:29
2	Sb 206.836†	1712.0	1700.6	1775.2 µg/L	1775.2 ppb		12:16:29
2	Se 196.026†	2121.0	2125.9	3289.8 µg/L	3289.8 ppb		12:16:29
2	SiO2†	188274.2	187636.9	38063 µg/L	38063 ppb		12:16:08
2	Si 251.611†	216819.9	218071.1	17450 µg/L	17450 ppb		12:16:08
2	Sn 189.927†	2013.3	2005.8	1081.1 µg/L	1081.1 ppb		12:16:29
2	Ti 334.940†	2681043.1	2700128.1	6208.8 µg/L	6208.8 ppb		12:16:02
2	Tl 190.801†	785.9	811.8	1324.4 µg/L	1324.4 ppb		12:16:29
2	U 409.014†	144.2	-556.4	-93.580 µg/L	-93.580 ppb		12:16:08
2	V 292.402†	110486.8	111396.7	1358.8 µg/L	1358.8 ppb		12:16:08
2	Zn 213.857†	234280.3	235490.0	6618.8 µg/L	6618.8 ppb		12:16:08
3	Sc RADIAL	113563.0	113563.0	101 %			12:15:16
3	Al 396.153Radial†	189722.9	186913.9	98764 µg/L	98764 ppb		12:15:11
3	Ca 317.933Radial†	283295.5	278934.0	112530 µg/L	112530 ppb		12:15:11
3	Fe 238.204 Radial†	41690.0	41096.9	218240 µg/L	218240 ppb		12:15:16
3	K 766.490 Radial†	80346.8	78480.2	44274 µg/L	44274 ppb		12:15:11
3	Mg 279.077 IEC†	7879.8	7753.9	43438 µg/L	43438 ppb		12:15:16
3	Na 589.592 Radial†	39188.8	39044.2	11012 µg/L	11012 ppb		12:15:16
3	Sr 421.552†	431147.2	425228.6	2454.1 µg/L	2454.1 ppb		12:15:11
3	Sc 361.383	2002810.7	2002810.7	99.750 %			12:16:36
3	Y 371.029	1232600.2	1232600.2	100.75 %			12:16:36
3	Ag 328.068†	32502.6	32600.5	335.39 µg/L	335.39 ppb		12:16:42
3	As 188.979†	612.8	611.2	1154.1 µg/L	1154.1 ppb		12:17:02
3	B 249.677†	37626.7	37559.4	1677.9 µg/L	1677.9 ppb		12:16:42
3	Ba 233.527†	75383.9	75645.6	2026.3 µg/L	2026.3 ppb		12:16:42
3	Be 313.107†	1362867.3	1362670.3	885.81 µg/L	885.81 ppb		12:16:36
3	Cd 226.502†	25132.9	25293.6	695.46 µg/L	695.46 ppb		12:16:42
3	Co 228.616†	20543.3	20664.7	1038.4 µg/L	1038.4 ppb		12:16:42
3	Cr 267.716†	120931.8	121359.6	2696.9 µg/L	2696.9 ppb		12:16:42
3	Cu 324.752†	277053.4	274440.1	2007.6 µg/L	2007.6 ppb		12:16:42
3	Mn 257.610†	1773075.7	1777775.3	5876.8 µg/L	5876.8 ppb		12:16:36
3	Mo 202.031†	4830.6	4847.5	587.39 µg/L	587.39 ppb		12:17:02
3	Ni 231.604†	26871.9	26648.4	1537.9 µg/L	1537.9 ppb		12:16:42
3	P 214.914†	4155.7	3976.1	8409.5 µg/L	8409.5 ppb		12:17:02
3	Pb 220.353†	3453.6	3411.3	906.11 µg/L	906.11 ppb		12:17:02
3	S 181.975 Axial†	846.0	822.5	4362.4 µg/L	4362.4 ppb		12:17:02
3	Sb 206.836†	1711.3	1691.4	1765.7 µg/L	1765.7 ppb		12:17:02
3	Se 196.026†	2142.7	2137.3	3306.3 µg/L	3306.3 ppb		12:17:02
3	SiO2†	188694.3	187134.5	37962 µg/L	37962 ppb		12:16:42
3	Si 251.611†	217217.8	217406.4	17397 µg/L	17397 ppb		12:16:42
3	Sn 189.927†	2023.9	2006.6	1081.3 µg/L	1081.3 ppb		12:17:02
3	Ti 334.940†	2686006.2	2691951.7	6190.0 µg/L	6190.0 ppb		12:16:36
3	Tl 190.801†	785.7	807.8	1318.0 µg/L	1318.0 ppb		12:17:02
3	U 409.014†	174.5	-526.7	-90.603 µg/L	-90.603 ppb		12:16:42
3	V 292.402†	110070.5	110437.4	1347.2 µg/L	1347.2 ppb		12:16:42
3	Zn 213.857†	232982.3	233039.5	6549.7 µg/L	6549.7 ppb		12:16:42

Mean Data: 1201993443|931895|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1992267.3	99.224	%	0.5459				0.55%
Sc RADIAL	112822.0	101	%	1.3				1.26%
Y 371.029	1225952.7	100.21	%	0.571				0.57%
Ag 328.068†	32932.5	338.62	µg/L	3.045	338.62	ppb	3.045	0.90%
Al 396.153Radial†	188458.2	99580	µg/L	959.3	99580	ppb	959.3	0.96%
As 188.979†	612.8	1157.1	µg/L	2.77	1157.1	ppb	2.77	0.24%
B 249.677†	37914.8	1694.4	µg/L	15.26	1694.4	ppb	15.26	0.90%
Ba 233.527†	76267.4	2043.0	µg/L	16.35	2043.0	ppb	16.35	0.80%
Be 313.107†	1365992.6	887.97	µg/L	1.873	887.97	ppb	1.873	0.21%
Ca 317.933Radial†	281787.7	113690	µg/L	1278.5	113690	ppb	1278.5	1.12%
Cd 226.502†	25500.6	701.29	µg/L	5.911	701.29	ppb	5.911	0.84%
Co 228.616†	20839.8	1047.3	µg/L	8.81	1047.3	ppb	8.81	0.84%
Cr 267.716†	122415.7	2720.4	µg/L	22.54	2720.4	ppb	22.54	0.83%
Cu 324.752†	276765.5	2024.2	µg/L	15.84	2024.2	ppb	15.84	0.78%
Fe 238.204 Radial†	41118.7	218360	µg/L	101.2	218360	ppb	101.2	0.05%
K 766.490 Radial†	79108.5	44628	µg/L	497.5	44628	ppb	497.5	1.11%
Mg 279.077 IEC†	7741.5	43368	µg/L	78.3	43368	ppb	78.3	0.18%
Mn 257.610†	1782161.0	5891.2	µg/L	12.72	5891.2	ppb	12.72	0.22%
Mo 202.031†	4862.8	589.22	µg/L	2.675	589.22	ppb	2.675	0.45%
Na 589.592 Radial†	39192.9	11054	µg/L	52.3	11054	ppb	52.3	0.47%

Ni 231.604†	26953.0	1555.5	µg/L	16.33	1555.5	ppb	16.33	1.05%
P 214.914†	3997.6	8455.6	µg/L	55.07	8455.6	ppb	55.07	0.65%
Pb 220.353†	3427.8	910.51	µg/L	4.937	910.51	ppb	4.937	0.54%
S 181.975 Axial†	825.0	4375.8	µg/L	34.28	4375.8	ppb	34.28	0.78%
Sb 206.836†	1698.1	1772.5	µg/L	5.91	1772.5	ppb	5.91	0.33%
Se 196.026†	2137.8	3307.2	µg/L	17.93	3307.2	ppb	17.93	0.54%
SiO2†	188088.7	38155	µg/L	252.2	38155	ppb	252.2	0.66%
Si 251.611†	218543.6	17489	µg/L	115.9	17489	ppb	115.9	0.66%
Sn 189.927†	2015.3	1085.9	µg/L	8.24	1085.9	ppb	8.24	0.76%
Sr 421.552†	429149.5	2476.7	µg/L	26.54	2476.7	ppb	26.54	1.07%
Ti 334.940†	2696752.8	6201.0	µg/L	9.79	6201.0	ppb	9.79	0.16%
Tl 190.801†	813.5	1326.9	µg/L	10.44	1326.9	ppb	10.44	0.79%
U 409.014†	-524.4	-90.370	µg/L	3.3325	-90.370	ppb	3.3325	3.69%
V 292.402†	111359.2	1358.3	µg/L	10.87	1358.3	ppb	10.87	0.80%
Zn 213.857†	235184.9	6610.2	µg/L	56.69	6610.2	ppb	56.69	0.86%

Sequence No.: 35
Sample ID: 241541001|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 326
Date Collected: 12/14/2009 12:17:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541001|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114868.5	114868.5	103	%			12:17:45
1	Al 396.153Radial†	221533.8	215798.7	114050	µg/L	114050	ppb	12:17:45
1	Ca 317.933Radial†	54948.6	53154.3	21445	µg/L	21445	ppb	12:17:50
1	Fe 238.204 Radial†	30653.6	29870.8	158600	µg/L	158600	ppb	12:17:50
1	K 766.490 Radial†	18303.6	17096.7	9645.0	µg/L	9645.0	ppb	12:17:50
1	Mg 279.077 IEC†	4574.8	4443.8	24837	µg/L	24837	ppb	12:17:50
1	Na 589.592 Radial†	18711.1	18642.2	5258.0	µg/L	5258.0	ppb	12:17:50
1	Sr 421.552†	53873.2	52609.9	303.62	µg/L	303.62	ppb	12:17:45
1	Sc 361.383	1998699.7	1998699.7	99.545	%			12:18:25
1	Y 371.029	1241742.8	1241742.8	101.50	%			12:18:25
1	Ag 328.068†	-1455.2	-1445.6	0.8062	µg/L	0.8062	ppb	12:18:30
1	As 188.979†	31.8	28.8	39.405	µg/L	39.405	ppb	12:18:51
1	B 249.677†	2074.8	1922.5	39.525	µg/L	39.525	ppb	12:18:30
1	Ba 233.527†	33951.1	34178.8	914.90	µg/L	914.90	ppb	12:18:30
1	Be 313.107†	19604.9	16075.7	9.1515	µg/L	9.1515	ppb	12:18:30
1	Cd 226.502†	375.8	475.1	1.1259	µg/L	1.1259	ppb	12:18:30
1	Co 228.616†	1156.7	1231.8	55.104	µg/L	55.104	ppb	12:18:51
1	Cr 267.716†	4705.7	4851.4	108.37	µg/L	108.37	ppb	12:18:30
1	Cu 324.752†	10125.1	6862.5	83.096	µg/L	83.096	ppb	12:18:30
1	Mn 257.610†	821228.4	825231.5	2735.2	µg/L	2735.2	ppb	12:18:25
1	Mo 202.031†	-29.3	-24.7	3.2865	µg/L	3.2865	ppb	12:18:51
1	Ni 231.604†	1474.3	1190.0	68.679	µg/L	68.679	ppb	12:18:51
1	P 214.914†	625.5	438.4	823.63	µg/L	823.63	ppb	12:18:51
1	Pb 220.353†	544.6	496.1	138.95	µg/L	138.95	ppb	12:18:51
1	S 181.975 Axial†	177.9	153.1	791.97	µg/L	791.97	ppb	12:18:51
1	Sb 206.836†	19.9	-4.2	6.4861	µg/L	6.4861	ppb	12:18:51
1	Se 196.026†	-49.2	-60.2	14.968	µg/L	14.968	ppb	12:18:51
1	SiO2†	189419.9	188252.5	38188	µg/L	38188	ppb	12:18:25
1	Si 251.611†	217268.2	217904.9	17597	µg/L	17597	ppb	12:18:25
1	Sn 189.927†	-93.4	-116.2	-30.803	µg/L	-30.803	ppb	12:18:51
1	Ti 334.940†	1549240.9	1555526.6	3579.3	µg/L	3579.3	ppb	12:18:25
1	Tl 190.801†	-37.4	-17.5	7.6768	µg/L	7.6768	ppb	12:18:51
1	U 409.014†	573.2	-125.8	-41.654	µg/L	-41.654	ppb	12:18:25
1	V 292.402†	24097.2	24297.9	304.52	µg/L	304.52	ppb	12:18:30
1	Zn 213.857†	9748.5	9265.3	243.81	µg/L	243.81	ppb	12:18:30
2	Sc RADIAL	114091.9	114091.9	102	%			12:17:55
2	Al 396.153Radial†	222390.8	218109.9	115270	µg/L	115270	ppb	12:17:55
2	Ca 317.933Radial†	54784.4	53357.8	21527	µg/L	21527	ppb	12:18:01
2	Fe 238.204 Radial†	30587.0	30008.9	159340	µg/L	159340	ppb	12:18:01
2	K 766.490 Radial†	18205.1	17121.5	9658.9	µg/L	9658.9	ppb	12:18:01
2	Mg 279.077 IEC†	4536.7	4436.7	24796	µg/L	24796	ppb	12:18:01
2	Na 589.592 Radial†	18703.8	18759.3	5291.1	µg/L	5291.1	ppb	12:18:01
2	Sr 421.552†	54012.7	53104.2	306.47	µg/L	306.47	ppb	12:17:55
2	Sc 361.383	2000937.5	2000937.5	99.656	%			12:18:58
2	Y 371.029	1243260.4	1243260.4	101.63	%			12:18:58
2	Ag 328.068†	-1411.3	-1399.9	1.3002	µg/L	1.3002	ppb	12:19:04
2	As 188.979†	29.5	26.5	34.712	µg/L	34.712	ppb	12:19:25
2	B 249.677†	2091.0	1936.4	39.941	µg/L	39.941	ppb	12:19:04
2	Ba 233.527†	34092.4	34282.4	917.67	µg/L	917.67	ppb	12:19:04
2	Be 313.107†	19592.1	16040.8	9.1244	µg/L	9.1244	ppb	12:19:04
2	Cd 226.502†	396.5	495.4	1.6436	µg/L	1.6436	ppb	12:19:04
2	Co 228.616†	1145.6	1219.4	54.449	µg/L	54.449	ppb	12:19:25
2	Cr 267.716†	4702.4	4842.8	108.18	µg/L	108.18	ppb	12:19:04
2	Cu 324.752†	10118.0	6843.9	83.120	µg/L	83.120	ppb	12:19:04
2	Mn 257.610†	825661.4	828757.2	2746.9	µg/L	2746.9	ppb	12:18:58
2	Mo 202.031†	-27.5	-22.9	3.5318	µg/L	3.5318	ppb	12:19:25
2	Ni 231.604†	1469.5	1183.6	68.305	µg/L	68.305	ppb	12:19:25
2	P 214.914†	644.4	456.6	863.76	µg/L	863.76	ppb	12:19:25
2	Pb 220.353†	557.7	508.7	142.36	µg/L	142.36	ppb	12:19:25

2	S 181.975 Axial†	176.5	151.4	783.02 µg/L	783.02 ppb	12:19:25
2	Sb 206.836†	25.4	1.3	12.307 µg/L	12.307 ppb	12:19:25
2	Se 196.026†	-38.5	-49.4	31.361 µg/L	31.361 ppb	12:19:25
2	SiO2†	190432.6	189055.8	38351 µg/L	38351 ppb	12:18:58
2	Si 251.611†	218326.5	218722.8	17663 µg/L	17663 ppb	12:18:58
2	Sn 189.927†	-99.1	-121.8	-33.572 µg/L	-33.572 ppb	12:19:25
2	Ti 334.940†	1556079.6	1560648.4	3591.1 µg/L	3591.1 ppb	12:18:58
2	Tl 190.801†	-39.6	-19.6	4.3796 µg/L	4.3796 ppb	12:19:25
2	U 409.014†	630.2	-69.2	-36.140 µg/L	-36.140 ppb	12:18:58
2	V 292.402†	24164.1	24337.9	305.07 µg/L	305.07 ppb	12:19:04
2	Zn 213.857†	9754.7	9260.5	243.60 µg/L	243.60 ppb	12:19:04
3	Sc RADIAL	114251.1	114251.1	102 %		12:18:06
3	Al 396.153Radial†	221009.9	216452.2	114400 µg/L	114400 ppb	12:18:06
3	Ca 317.933Radial†	54484.8	52989.1	21378 µg/L	21378 ppb	12:18:12
3	Fe 238.204 Radial†	30408.0	29791.6	158180 µg/L	158180 ppb	12:18:12
3	K 766.490 Radial†	18238.6	17129.4	9663.4 µg/L	9663.4 ppb	12:18:12
3	Mg 279.077 IEC†	4526.5	4420.5	24706 µg/L	24706 ppb	12:18:12
3	Na 589.592 Radial†	18662.1	18692.8	5272.3 µg/L	5272.3 ppb	12:18:12
3	Sr 421.552†	53679.0	52703.3	304.16 µg/L	304.16 ppb	12:18:06
3	Sc 361.383	2014393.0	2014393.0	100.33 %		12:19:32
3	Y 371.029	1251328.8	1251328.8	102.29 %		12:19:32
3	Ag 328.068†	-1510.5	-1489.3	0.3505 µg/L	0.3505 ppb	12:19:38
3	As 188.979†	26.3	23.1	28.270 µg/L	28.270 ppb	12:19:59
3	B 249.677†	2057.5	1889.1	38.102 µg/L	38.102 ppb	12:19:38
3	Ba 233.527†	34133.7	34095.1	912.66 µg/L	912.66 ppb	12:19:38
3	Be 313.107†	19687.0	16004.1	9.1012 µg/L	9.1012 ppb	12:19:38
3	Cd 226.502†	412.4	508.7	2.1046 µg/L	2.1046 ppb	12:19:38
3	Co 228.616†	1154.7	1220.8	54.525 µg/L	54.525 ppb	12:19:59
3	Cr 267.716†	4737.1	4846.0	108.25 µg/L	108.25 ppb	12:19:38
3	Cu 324.752†	10147.9	6806.0	82.602 µg/L	82.602 ppb	12:19:38
3	Mn 257.610†	831125.1	828668.9	2746.4 µg/L	2746.4 ppb	12:19:32
3	Mo 202.031†	-19.4	-14.6	4.4782 µg/L	4.4782 ppb	12:19:59
3	Ni 231.604†	1474.0	1178.2	67.995 µg/L	67.995 ppb	12:19:59
3	P 214.914†	635.2	443.2	834.94 µg/L	834.94 ppb	12:19:59
3	Pb 220.353†	562.5	509.6	142.56 µg/L	142.56 ppb	12:19:59
3	S 181.975 Axial†	177.3	151.1	781.29 µg/L	781.29 ppb	12:19:59
3	Sb 206.836†	30.0	5.7	16.921 µg/L	16.921 ppb	12:19:59
3	Se 196.026†	-39.5	-50.1	29.574 µg/L	29.574 ppb	12:19:59
3	SiO2†	191662.9	189005.8	38341 µg/L	38341 ppb	12:19:32
3	Si 251.611†	219710.3	218638.7	17656 µg/L	17656 ppb	12:19:32
3	Sn 189.927†	-91.3	-113.4	-29.502 µg/L	-29.502 ppb	12:19:59
3	Ti 334.940†	1565690.8	1559798.4	3589.2 µg/L	3589.2 ppb	12:19:32
3	Tl 190.801†	-35.8	-15.6	10.805 µg/L	10.805 ppb	12:19:59
3	U 409.014†	617.7	-85.9	-37.593 µg/L	-37.593 ppb	12:19:32
3	V 292.402†	24187.9	24199.7	303.32 µg/L	303.32 ppb	12:19:38
3	Zn 213.857†	9804.2	9244.5	243.27 µg/L	243.27 ppb	12:19:38

Mean Data: 241541001|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2004676.8	99.842	%	0.4228				0.42%
Sc RADIAL	114403.8	102	%	0.4				0.36%
Y 371.029	1245444.0	101.80	%	0.421				0.41%
Ag 328.068†	-1444.9	0.8190	µg/L	0.47497	0.8190	ppb	0.47497	58.00%
Al 396.153Radial†	216786.9	114570	µg/L	629.7	114570	ppb	629.7	0.55%
As 188.979†	26.1	34.129	µg/L	5.5906	34.129	ppb	5.5906	16.38%
B 249.677†	1916.0	39.190	µg/L	0.9642	39.190	ppb	0.9642	2.46%
Ba 233.527†	34185.4	915.08	µg/L	2.512	915.08	ppb	2.512	0.27%
Be 313.107†	16040.2	9.1257	µg/L	0.02517	9.1257	ppb	0.02517	0.28%
Ca 317.933Radial†	53167.0	21450	µg/L	74.5	21450	ppb	74.5	0.35%
Cd 226.502†	493.1	1.6247	µg/L	0.48962	1.6247	ppb	0.48962	30.14%
Co 228.616†	1224.0	54.693	µg/L	0.3579	54.693	ppb	0.3579	0.65%
Cr 267.716†	4846.7	108.27	µg/L	0.096	108.27	ppb	0.096	0.09%
Cu 324.752†	6837.5	82.939	µg/L	0.2926	82.939	ppb	0.2926	0.35%
Fe 238.204 Radial†	29890.4	158710	µg/L	583.8	158710	ppb	583.8	0.37%
K 766.490 Radial†	17115.9	9655.8	µg/L	9.63	9655.8	ppb	9.63	0.10%
Mg 279.077 IEC†	4433.6	24779	µg/L	66.8	24779	ppb	66.8	0.27%
Mn 257.610†	827552.5	2742.8	µg/L	6.63	2742.8	ppb	6.63	0.24%
Mo 202.031†	-20.7	3.7655	µg/L	0.62931	3.7655	ppb	0.62931	16.71%
Na 589.592 Radial†	18698.1	5273.8	µg/L	16.56	5273.8	ppb	16.56	0.31%

Ni 231.604†	1183.9	68.327	µg/L	0.3424	68.327	ppb	0.3424	0.50%
P 214.914†	446.1	840.78	µg/L	20.689	840.78	ppb	20.689	2.46%
Pb 220.353†	504.8	141.29	µg/L	2.027	141.29	ppb	2.027	1.43%
S 181.975 Axial†	151.8	785.43	µg/L	5.732	785.43	ppb	5.732	0.73%
Sb 206.836†	1.0	11.905	µg/L	5.2291	11.905	ppb	5.2291	43.92%
Se 196.026†	-53.2	25.301	µg/L	8.9934	25.301	ppb	8.9934	35.55%
SiO2†	188771.4	38294	µg/L	91.3	38294	ppb	91.3	0.24%
Si 251.611†	218422.1	17638	µg/L	36.4	17638	ppb	36.4	0.21%
Sn 189.927†	-117.1	-31.292	µg/L	2.0787	-31.292	ppb	2.0787	6.64%
Sr 421.552†	52805.8	304.75	µg/L	1.516	304.75	ppb	1.516	0.50%
Ti 334.940†	1558657.8	3586.5	µg/L	6.32	3586.5	ppb	6.32	0.18%
Tl 190.801†	-17.6	7.6206	µg/L	3.21323	7.6206	ppb	3.21323	42.17%
U 409.014†	-93.6	-38.462	µg/L	2.8582	-38.462	ppb	2.8582	7.43%
V 292.402†	24278.5	304.31	µg/L	0.894	304.31	ppb	0.894	0.29%
Zn 213.857†	9256.7	243.56	µg/L	0.270	243.56	ppb	0.270	0.11%

Sequence No.: 36
Sample ID: 1201978596|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 327
Date Collected: 12/14/2009 12:20:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978596|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113574.3	113574.3	101	%			12:20:40
1	Al 396.153Radial†	219772.8	216523.2	114430	µg/L	114430	ppb	12:20:40
1	Ca 317.933Radial†	55523.7	54331.7	21920	µg/L	21920	ppb	12:20:45
1	Fe 238.204 Radial†	34094.6	33604.1	178430	µg/L	178430	ppb	12:20:45
1	K 766.490 Radial†	17768.4	16772.3	9462.0	µg/L	9462.0	ppb	12:20:45
1	Mg 279.077 IEC†	4465.2	4386.5	24484	µg/L	24484	ppb	12:20:45
1	Na 589.592 Radial†	18737.9	18876.5	5324.1	µg/L	5324.1	ppb	12:20:45
1	Sr 421.552†	54561.1	53886.5	310.99	µg/L	310.99	ppb	12:20:40
1	Sc 361.383	2003504.2	2003504.2	99.784	%			12:21:20
1	Y 371.029	1247775.4	1247775.4	102.00	%			12:21:20
1	Ag 328.068†	-1553.3	-1540.4	1.8656	µg/L	1.8656	ppb	12:21:26
1	As 188.979†	29.7	26.7	31.787	µg/L	31.787	ppb	12:21:46
1	B 249.677†	2171.5	2014.4	37.565	µg/L	37.565	ppb	12:21:26
1	Ba 233.527†	45416.9	45587.6	1220.2	µg/L	1220.2	ppb	12:21:26
1	Be 313.107†	20955.5	17382.0	10.060	µg/L	10.060	ppb	12:21:26
1	Cd 226.502†	406.4	504.8	0.4374	µg/L	0.4374	ppb	12:21:26
1	Co 228.616†	2401.5	2476.5	118.67	µg/L	118.67	ppb	12:21:46
1	Cr 267.716†	4684.7	4819.0	107.79	µg/L	107.79	ppb	12:21:26
1	Cu 324.752†	9914.7	6627.2	85.672	µg/L	85.672	ppb	12:21:26
1	Mn 257.610†	2518732.9	2524430.6	8328.5	µg/L	8328.5	ppb	12:21:20
1	Mo 202.031†	-16.4	-11.7	5.6145	µg/L	5.6145	ppb	12:21:46
1	Ni 231.604†	1518.3	1230.5	71.015	µg/L	71.015	ppb	12:21:46
1	P 214.914†	673.9	485.3	904.98	µg/L	904.98	ppb	12:21:46
1	Pb 220.353†	1049.4	1000.7	272.02	µg/L	272.02	ppb	12:21:46
1	S 181.975 Axial†	174.3	149.0	767.44	µg/L	767.44	ppb	12:21:46
1	Sb 206.836†	20.8	-3.3	6.8237	µg/L	6.8237	ppb	12:21:46
1	Se 196.026†	-59.7	-70.6	13.673	µg/L	13.673	ppb	12:21:46
1	SiO2†	193344.3	191729.1	38894	µg/L	38894	ppb	12:21:20
1	Si 251.611†	221723.6	221846.6	17923	µg/L	17923	ppb	12:21:20
1	Sn 189.927†	-100.7	-123.3	-32.096	µg/L	-32.096	ppb	12:21:46
1	Ti 334.940†	1486449.4	1488867.2	3425.9	µg/L	3425.9	ppb	12:21:20
1	Tl 190.801†	-45.8	-25.8	15.075	µg/L	15.075	ppb	12:21:46
1	U 409.014†	709.8	9.7	-31.828	µg/L	-31.828	ppb	12:21:20
1	V 292.402†	28946.5	29099.7	363.80	µg/L	363.80	ppb	12:21:26
1	Zn 213.857†	9715.6	9208.7	240.10	µg/L	240.10	ppb	12:21:26
2	Sc RADIAL	114195.8	114195.8	102	%			12:20:51
2	Al 396.153Radial†	222819.8	218332.0	115390	µg/L	115390	ppb	12:20:51
2	Ca 317.933Radial†	55322.5	53836.5	21720	µg/L	21720	ppb	12:20:56
2	Fe 238.204 Radial†	34006.9	33335.1	177000	µg/L	177000	ppb	12:20:56
2	K 766.490 Radial†	17736.6	16645.8	9390.6	µg/L	9390.6	ppb	12:20:56
2	Mg 279.077 IEC†	4438.2	4336.0	24202	µg/L	24202	ppb	12:20:56
2	Na 589.592 Radial†	18718.1	18756.5	5290.3	µg/L	5290.3	ppb	12:20:56
2	Sr 421.552†	55232.7	54252.3	313.10	µg/L	313.10	ppb	12:20:51
2	Sc 361.383	2012129.0	2012129.0	100.21	%			12:21:54
2	Y 371.029	1252178.5	1252178.5	102.36	%			12:21:54
2	Ag 328.068†	-1545.9	-1526.3	1.8891	µg/L	1.8891	ppb	12:22:00
2	As 188.979†	32.5	29.3	37.100	µg/L	37.100	ppb	12:22:20
2	B 249.677†	2251.8	2085.2	41.307	µg/L	41.307	ppb	12:22:00
2	Ba 233.527†	45512.5	45487.9	1217.5	µg/L	1217.5	ppb	12:22:00
2	Be 313.107†	21045.2	17381.5	10.071	µg/L	10.071	ppb	12:22:00
2	Cd 226.502†	432.9	529.6	1.2378	µg/L	1.2378	ppb	12:22:00
2	Co 228.616†	2387.8	2452.5	117.52	µg/L	117.52	ppb	12:22:20
2	Cr 267.716†	4710.2	4824.4	107.91	µg/L	107.91	ppb	12:22:00
2	Cu 324.752†	9938.3	6608.2	85.230	µg/L	85.230	ppb	12:22:00
2	Mn 257.610†	2503499.8	2498410.4	8242.7	µg/L	8242.7	ppb	12:21:54
2	Mo 202.031†	-23.5	-18.7	4.7279	µg/L	4.7279	ppb	12:22:20
2	Ni 231.604†	1525.7	1231.5	71.067	µg/L	71.067	ppb	12:22:20
2	P 214.914†	673.0	481.6	898.67	µg/L	898.67	ppb	12:22:20
2	Pb 220.353†	1035.9	982.7	267.37	µg/L	267.37	ppb	12:22:20

2	S 181.975 Axial†	168.6	142.6	733.16 µg/L	733.16 ppb	12:22:20
2	Sb 206.836†	22.6	-1.6	8.4525 µg/L	8.4525 ppb	12:22:20
2	Se 196.026†	-44.8	-55.4	35.116 µg/L	35.116 ppb	12:22:20
2	SiO2†	192345.6	189901.9	38523 µg/L	38523 ppb	12:21:54
2	Si 251.611†	220797.1	219969.5	17772 µg/L	17772 ppb	12:21:54
2	Sn 189.927†	-103.5	-125.7	-33.549 µg/L	-33.549 ppb	12:22:20
2	Ti 334.940†	1478814.7	1474863.5	3393.6 µg/L	3393.6 ppb	12:21:54
2	Tl 190.801†	-47.5	-27.3	12.202 µg/L	12.202 ppb	12:22:20
2	U 409.014†	635.7	-67.2	-39.236 µg/L	-39.236 ppb	12:21:54
2	V 292.402†	29096.5	29125.0	363.97 µg/L	363.97 ppb	12:22:00
2	Zn 213.857†	9712.1	9163.6	238.98 µg/L	238.98 ppb	12:22:00
3	Sc RADIAL	114642.0	114642.0	102 %		12:21:02
3	Al 396.153Radial†	222237.3	216912.6	114640 µg/L	114640 ppb	12:21:02
3	Ca 317.933Radial†	55441.9	53741.9	21682 µg/L	21682 ppb	12:21:07
3	Fe 238.204 Radial†	34094.5	33290.9	176770 µg/L	176770 ppb	12:21:07
3	K 766.490 Radial†	17670.1	16513.2	9315.8 µg/L	9315.8 ppb	12:21:07
3	Mg 279.077 IEC†	4444.3	4325.1	24140 µg/L	24140 ppb	12:21:07
3	Na 589.592 Radial†	18774.3	18740.0	5285.6 µg/L	5285.6 ppb	12:21:07
3	Sr 421.552†	55187.3	53997.2	311.63 µg/L	311.63 ppb	12:21:02
3	Sc 361.383	2011115.7	2011115.7	100.16 %		12:22:28
3	Y 371.029	1251442.3	1251442.3	102.29 %		12:22:28
3	Ag 328.068†	-1589.5	-1570.6	1.4480 µg/L	1.4480 ppb	12:22:34
3	As 188.979†	34.5	31.3	41.025 µg/L	41.025 ppb	12:22:54
3	B 249.677†	2171.5	2006.2	37.706 µg/L	37.706 ppb	12:22:34
3	Ba 233.527†	45365.0	45363.6	1214.2 µg/L	1214.2 ppb	12:22:34
3	Be 313.107†	20950.9	17298.0	10.009 µg/L	10.009 ppb	12:22:34
3	Cd 226.502†	468.5	565.3	2.2615 µg/L	2.2615 ppb	12:22:34
3	Co 228.616†	2405.2	2471.1	118.42 µg/L	118.42 ppb	12:22:54
3	Cr 267.716†	4685.3	4801.9	107.41 µg/L	107.41 ppb	12:22:34
3	Cu 324.752†	9975.5	6650.3	85.480 µg/L	85.480 ppb	12:22:34
3	Mn 257.610†	2516642.0	2512789.9	8290.0 µg/L	8290.0 ppb	12:22:28
3	Mo 202.031†	-19.3	-14.5	5.2162 µg/L	5.2162 ppb	12:22:54
3	Ni 231.604†	1539.1	1245.6	71.883 µg/L	71.883 ppb	12:22:54
3	P 214.914†	665.3	474.2	882.21 µg/L	882.21 ppb	12:22:54
3	Pb 220.353†	1057.4	1004.7	273.13 µg/L	273.13 ppb	12:22:54
3	S 181.975 Axial†	165.8	139.9	718.65 µg/L	718.65 ppb	12:22:54
3	Sb 206.836†	13.0	-11.1	-1.3704 µg/L	-1.3704 ppb	12:22:54
3	Se 196.026†	-56.8	-67.4	17.265 µg/L	17.265 ppb	12:22:54
3	SiO2†	193554.2	191205.2	38787 µg/L	38787 ppb	12:22:28
3	Si 251.611†	221941.9	221223.5	17873 µg/L	17873 ppb	12:22:28
3	Sn 189.927†	-101.2	-123.4	-32.461 µg/L	-32.461 ppb	12:22:54
3	Ti 334.940†	1487535.0	1484313.0	3415.4 µg/L	3415.4 ppb	12:22:28
3	Tl 190.801†	-44.2	-24.1	17.644 µg/L	17.644 ppb	12:22:54
3	U 409.014†	646.4	-56.3	-38.104 µg/L	-38.104 ppb	12:22:28
3	V 292.402†	29053.5	29096.7	363.62 µg/L	363.62 ppb	12:22:34
3	Zn 213.857†	9694.0	9150.3	238.63 µg/L	238.63 ppb	12:22:34

Mean Data: 1201978596|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2008916.3	100.05	%	0.235				0.23%
Sc RADIAL	114137.4	102	%	0.5				0.47%
Y 371.029	1250465.4	102.21	%	0.193				0.19%
Ag 328.068†	-1545.8	1.7342	µg/L	0.24817	1.7342	ppb	0.24817	14.31%
Al 396.153Radial†	217256.0	114820	µg/L	503.2	114820	ppb	503.2	0.44%
As 188.979†	29.1	36.637	µg/L	4.6363	36.637	ppb	4.6363	12.65%
B 249.677†	2035.3	38.859	µg/L	2.1212	38.859	ppb	2.1212	5.46%
Ba 233.527†	45479.7	1217.3	µg/L	3.00	1217.3	ppb	3.00	0.25%
Be 313.107†	17353.8	10.047	µg/L	0.0332	10.047	ppb	0.0332	0.33%
Ca 317.933Radial†	53970.1	21774	µg/L	127.8	21774	ppb	127.8	0.59%
Cd 226.502†	533.2	1.3122	µg/L	0.91434	1.3122	ppb	0.91434	69.68%
Co 228.616†	2466.7	118.21	µg/L	0.607	118.21	ppb	0.607	0.51%
Cr 267.716†	4815.1	107.70	µg/L	0.261	107.70	ppb	0.261	0.24%
Cu 324.752†	6628.6	85.461	µg/L	0.2220	85.461	ppb	0.2220	0.26%
Fe 238.204 Radial†	33410.0	177400	µg/L	899.9	177400	ppb	899.9	0.51%
K 766.490 Radial†	16643.8	9389.4	µg/L	73.10	9389.4	ppb	73.10	0.78%
Mg 279.077 IEC†	4349.2	24275	µg/L	183.5	24275	ppb	183.5	0.76%
Mn 257.610†	2511877.0	8287.0	µg/L	42.97	8287.0	ppb	42.97	0.52%
Mo 202.031†	-15.0	5.1862	µg/L	0.44404	5.1862	ppb	0.44404	8.56%
Na 589.592 Radial†	18791.0	5300.0	µg/L	21.02	5300.0	ppb	21.02	0.40%

Ni 231.604†	1235.9	71.321	µg/L	0.4869	71.321	ppb	0.4869	0.68%
P 214.914†	480.4	895.29	µg/L	11.755	895.29	ppb	11.755	1.31%
Pb 220.353†	996.0	270.84	µg/L	3.055	270.84	ppb	3.055	1.13%
S 181.975 Axial†	143.8	739.75	µg/L	25.053	739.75	ppb	25.053	3.39%
Sb 206.836†	-5.4	4.6353	µg/L	5.26442	4.6353	ppb	5.26442	113.57%
Se 196.026†	-64.5	22.018	µg/L	11.4844	22.018	ppb	11.4844	52.16%
SiO2†	190945.4	38735	µg/L	190.9	38735	ppb	190.9	0.49%
Si 251.611†	221013.2	17856	µg/L	77.1	17856	ppb	77.1	0.43%
Sn 189.927†	-124.1	-32.702	µg/L	0.7560	-32.702	ppb	0.7560	2.31%
Sr 421.552†	54045.4	311.90	µg/L	1.083	311.90	ppb	1.083	0.35%
Ti 334.940†	1482681.2	3411.6	µg/L	16.44	3411.6	ppb	16.44	0.48%
Tl 190.801†	-25.7	14.974	µg/L	2.7226	14.974	ppb	2.7226	18.18%
U 409.014†	-38.0	-36.389	µg/L	3.9906	-36.389	ppb	3.9906	10.97%
V 292.402†	29107.1	363.80	µg/L	0.177	363.80	ppb	0.177	0.05%
Zn 213.857†	9174.2	239.24	µg/L	0.767	239.24	ppb	0.767	0.32%

Sequence No.: 37
Sample ID: 1201978598|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 328
Date Collected: 12/14/2009 12:23:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978598|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113560.8	113560.8	101	%			12:23:42
1	Al 396.153Radial†	404974.8	399173.1	210950	µg/L	210950	ppb	12:23:37
1	Ca 317.933Radial†	77904.0	76407.0	30826	µg/L	30826	ppb	12:23:42
1	Fe 238.204 Radial†	43970.4	43346.4	230170	µg/L	230170	ppb	12:23:42
1	K 766.490 Radial†	37778.5	36506.0	20595	µg/L	20595	ppb	12:23:42
1	Mg 279.077 IEC†	7337.9	7219.7	40405	µg/L	40405	ppb	12:23:42
1	Na 589.592 Radial†	41290.4	41117.3	11597	µg/L	11597	ppb	12:23:42
1	Sr 421.552†	161409.7	159254.2	919.08	µg/L	919.08	ppb	12:23:37
1	Sc 361.383	2012365.7	2012365.7	100.23	%			12:24:17
1	Y 371.029	1250043.8	1250043.8	102.18	%			12:24:17
1	Ag 328.068†	55792.8	55683.6	552.73	µg/L	552.73	ppb	12:24:23
1	As 188.979†	308.9	305.0	568.03	µg/L	568.03	ppb	12:24:43
1	B 249.677†	13683.9	13491.4	554.99	µg/L	554.99	ppb	12:24:23
1	Ba 233.527†	99075.7	98925.3	2648.3	µg/L	2648.3	ppb	12:24:23
1	Be 313.107†	852776.9	847239.9	550.18	µg/L	550.18	ppb	12:24:17
1	Cd 226.502†	19646.3	19699.7	536.69	µg/L	536.69	ppb	12:24:23
1	Co 228.616†	11785.1	11828.4	590.90	µg/L	590.90	ppb	12:24:43
1	Cr 267.716†	31013.4	31067.8	691.87	µg/L	691.87	ppb	12:24:23
1	Cu 324.752†	88814.7	85306.0	658.89	µg/L	658.89	ppb	12:24:23
1	Mn 257.610†	1432845.0	1429869.9	4733.6	µg/L	4733.6	ppb	12:24:17
1	Mo 202.031†	4116.8	4112.3	500.08	µg/L	500.08	ppb	12:24:43
1	Ni 231.604†	10850.7	10535.3	608.01	µg/L	608.01	ppb	12:24:43
1	P 214.914†	1056.3	864.0	1664.6	µg/L	1664.6	ppb	12:24:43
1	Pb 220.353†	2758.2	2701.0	729.27	µg/L	729.27	ppb	12:24:43
1	S 181.975 Axial†	1251.0	1222.5	6501.7	µg/L	6501.7	ppb	12:24:43
1	Sb 206.836†	428.8	403.6	435.17	µg/L	435.17	ppb	12:24:43
1	Se 196.026†	282.2	270.8	548.62	µg/L	548.62	ppb	12:24:43
1	SiO2†	228565.6	226017.9	45849	µg/L	45849	ppb	12:24:23
1	Si 251.611†	263140.5	262191.8	21102	µg/L	21102	ppb	12:24:23
1	Sn 189.927†	920.7	896.2	498.49	µg/L	498.49	ppb	12:24:43
1	Ti 334.940†	2348875.3	2342793.5	5390.9	µg/L	5390.9	ppb	12:24:17
1	Tl 190.801†	274.9	294.3	516.59	µg/L	516.59	ppb	12:24:43
1	U 409.014†	5211.0	4497.6	406.34	µg/L	406.34	ppb	12:24:23
1	V 292.402†	80569.0	80478.3	988.83	µg/L	988.83	ppb	12:24:23
1	Zn 213.857†	32149.5	31549.4	861.83	µg/L	861.83	ppb	12:24:23
2	Sc RADIAL	113506.5	113506.5	101	%			12:23:53
2	Al 396.153Radial†	409151.5	403484.6	213230	µg/L	213230	ppb	12:23:48
2	Ca 317.933Radial†	77648.8	76192.0	30739	µg/L	30739	ppb	12:23:53
2	Fe 238.204 Radial†	43849.7	43248.0	229650	µg/L	229650	ppb	12:23:53
2	K 766.490 Radial†	37766.7	36512.2	20598	µg/L	20598	ppb	12:23:53
2	Mg 279.077 IEC†	7341.3	7226.6	40444	µg/L	40444	ppb	12:23:53
2	Na 589.592 Radial†	41119.5	40968.2	11555	µg/L	11555	ppb	12:23:53
2	Sr 421.552†	162851.2	160752.4	927.73	µg/L	927.73	ppb	12:23:48
2	Sc 361.383	2006703.6	2006703.6	99.943	%			12:24:50
2	Y 371.029	1246884.8	1246884.8	101.92	%			12:24:50
2	Ag 328.068†	56058.1	56106.1	556.75	µg/L	556.75	ppb	12:24:56
2	As 188.979†	305.8	302.8	563.88	µg/L	563.88	ppb	12:25:16
2	B 249.677†	13783.5	13629.5	561.58	µg/L	561.58	ppb	12:24:56
2	Ba 233.527†	99759.4	99888.3	2674.1	µg/L	2674.1	ppb	12:24:56
2	Be 313.107†	856026.4	852892.0	553.85	µg/L	553.85	ppb	12:24:50
2	Cd 226.502†	19822.9	19931.7	543.26	µg/L	543.26	ppb	12:24:56
2	Co 228.616†	11854.4	11930.9	596.05	µg/L	596.05	ppb	12:25:16
2	Cr 267.716†	31271.0	31412.9	699.55	µg/L	699.55	ppb	12:24:56
2	Cu 324.752†	89155.9	85897.5	663.00	µg/L	663.00	ppb	12:24:56
2	Mn 257.610†	1438598.2	1439660.2	4765.7	µg/L	4765.7	ppb	12:24:50
2	Mo 202.031†	4151.2	4158.3	505.54	µg/L	505.54	ppb	12:25:16
2	Ni 231.604†	10879.1	10594.2	611.41	µg/L	611.41	ppb	12:25:16
2	P 214.914†	1066.8	877.4	1695.5	µg/L	1695.5	ppb	12:25:16
2	Pb 220.353†	2752.2	2702.8	729.94	µg/L	729.94	ppb	12:25:16

2	S 181.975 Axial†	1261.3	1236.4	6575.9 µg/L	6575.9 ppb	12:25:16
2	Sb 206.836†	426.7	402.8	434.40 µg/L	434.40 ppb	12:25:16
2	Se 196.026†	296.6	285.9	570.58 µg/L	570.58 ppb	12:25:16
2	SiO2†	230097.3	228194.0	46291 µg/L	46291 ppb	12:24:56
2	Si 251.611†	265121.8	264915.0	21322 µg/L	21322 ppb	12:24:56
2	Sn 189.927†	921.2	899.4	500.02 µg/L	500.02 ppb	12:25:16
2	Ti 334.940†	2358928.9	2359465.4	5429.3 µg/L	5429.3 ppb	12:24:50
2	Tl 190.801†	282.5	302.8	530.33 µg/L	530.33 ppb	12:25:16
2	U 409.014†	5243.6	4544.9	411.15 µg/L	411.15 ppb	12:24:56
2	V 292.402†	81076.7	81213.1	997.65 µg/L	997.65 ppb	12:24:56
2	Zn 213.857†	32384.7	31875.2	871.07 µg/L	871.07 ppb	12:24:56
3	Sc RADIAL	114348.2	114348.2	102 %		12:24:04
3	Al 396.153Radial†	409420.9	400777.3	211800 µg/L	211800 ppb	12:23:59
3	Ca 317.933Radial†	77724.5	75702.2	30542 µg/L	30542 ppb	12:24:04
3	Fe 238.204 Radial†	43917.3	42995.8	228310 µg/L	228310 ppb	12:24:04
3	K 766.490 Radial†	37762.1	36233.4	20441 µg/L	20441 ppb	12:24:04
3	Mg 279.077 IEC†	7347.1	7178.9	40177 µg/L	40177 ppb	12:24:04
3	Na 589.592 Radial†	41344.3	40889.7	11533 µg/L	11533 ppb	12:24:04
3	Sr 421.552†	163086.4	159800.1	922.23 µg/L	922.23 ppb	12:23:59
3	Sc 361.383	2014764.0	2014764.0	100.34 %		12:25:24
3	Y 371.029	1252085.5	1252085.5	102.35 %		12:25:24
3	Ag 328.068†	55708.5	55533.3	551.16 µg/L	551.16 ppb	12:25:29
3	As 188.979†	306.6	302.4	563.35 µg/L	563.35 ppb	12:25:50
3	B 249.677†	13653.5	13444.9	553.41 µg/L	553.41 ppb	12:25:29
3	Ba 233.527†	99088.3	98820.2	2645.5 µg/L	2645.5 ppb	12:25:29
3	Be 313.107†	859029.1	852457.8	553.57 µg/L	553.57 ppb	12:25:24
3	Cd 226.502†	19610.6	19640.8	535.20 µg/L	535.20 ppb	12:25:29
3	Co 228.616†	11871.7	11900.7	594.52 µg/L	594.52 ppb	12:25:50
3	Cr 267.716†	31135.5	31152.7	693.76 µg/L	693.76 ppb	12:25:29
3	Cu 324.752†	88805.6	85191.4	657.67 µg/L	657.67 ppb	12:25:29
3	Mn 257.610†	1443329.6	1438616.8	4762.1 µg/L	4762.1 ppb	12:25:24
3	Mo 202.031†	4143.3	4133.9	502.57 µg/L	502.57 ppb	12:25:50
3	Ni 231.604†	10906.2	10577.7	610.45 µg/L	610.45 ppb	12:25:50
3	P 214.914†	1066.6	872.9	1687.3 µg/L	1687.3 ppb	12:25:50
3	Pb 220.353†	2749.3	2688.8	726.14 µg/L	726.14 ppb	12:25:50
3	S 181.975 Axial†	1259.9	1229.9	6541.4 µg/L	6541.4 ppb	12:25:50
3	Sb 206.836†	432.8	407.1	438.94 µg/L	438.94 ppb	12:25:50
3	Se 196.026†	289.6	277.8	557.78 µg/L	557.78 ppb	12:25:50
3	SiO2†	229157.0	226335.8	45914 µg/L	45914 ppb	12:25:29
3	Si 251.611†	263862.0	262598.3	21133 µg/L	21133 ppb	12:25:29
3	Sn 189.927†	929.1	903.5	501.89 µg/L	501.89 ppb	12:25:50
3	Ti 334.940†	2365530.9	2356602.1	5422.7 µg/L	5422.7 ppb	12:25:24
3	Tl 190.801†	284.8	303.9	531.96 µg/L	531.96 ppb	12:25:50
3	U 409.014†	5387.6	4667.4	423.62 µg/L	423.62 ppb	12:25:29
3	V 292.402†	80701.3	80514.5	989.15 µg/L	989.15 ppb	12:25:29
3	Zn 213.857†	32226.5	31587.9	863.12 µg/L	863.12 ppb	12:25:29

Mean Data: 1201978598|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2011277.8	100.17	%	0.206				0.21%
Sc RADIAL	113805.2	102	%	0.4				0.41%
Y 371.029	1249671.4	102.15	%	0.214				0.21%
Ag 328.068†	55774.3	553.55	µg/L	2.885	553.55	ppb	2.885	0.52%
Al 396.153Radial†	401145.0	211990	µg/L	1151.6	211990	ppb	1151.6	0.54%
As 188.979†	303.4	565.09	µg/L	2.561	565.09	ppb	2.561	0.45%
B 249.677†	13521.9	556.66	µg/L	4.332	556.66	ppb	4.332	0.78%
Ba 233.527†	99211.2	2656.0	µg/L	15.76	2656.0	ppb	15.76	0.59%
Be 313.107†	850863.2	552.53	µg/L	2.042	552.53	ppb	2.042	0.37%
Ca 317.933Radial†	76100.4	30702	µg/L	145.7	30702	ppb	145.7	0.47%
Cd 226.502†	19757.4	538.38	µg/L	4.289	538.38	ppb	4.289	0.80%
Co 228.616†	11886.7	593.82	µg/L	2.641	593.82	ppb	2.641	0.44%
Cr 267.716†	31211.1	695.06	µg/L	4.002	695.06	ppb	4.002	0.58%
Cu 324.752†	85465.0	659.85	µg/L	2.794	659.85	ppb	2.794	0.42%
Fe 238.204 Radial†	43196.7	229380	µg/L	960.3	229380	ppb	960.3	0.42%
K 766.490 Radial†	36417.2	20544	µg/L	89.8	20544	ppb	89.8	0.44%
Mg 279.077 IEC†	7208.4	40342	µg/L	144.0	40342	ppb	144.0	0.36%
Mn 257.610†	1436049.0	4753.8	µg/L	17.61	4753.8	ppb	17.61	0.37%
Mo 202.031†	4134.8	502.73	µg/L	2.736	502.73	ppb	2.736	0.54%
Na 589.592 Radial†	40991.7	11562	µg/L	32.6	11562	ppb	32.6	0.28%

Ni 231.604†	10569.0	609.96 µg/L	1.754	609.96 ppb	1.754	0.29%
P 214.914†	871.4	1682.5 µg/L	15.99	1682.5 ppb	15.99	0.95%
Pb 220.353†	2697.6	728.45 µg/L	2.029	728.45 ppb	2.029	0.28%
S 181.975 Axial†	1229.6	6539.6 µg/L	37.15	6539.6 ppb	37.15	0.57%
Sb 206.836†	404.5	436.17 µg/L	2.430	436.17 ppb	2.430	0.56%
Se 196.026†	278.2	558.99 µg/L	11.033	558.99 ppb	11.033	1.97%
SiO2†	226849.2	46018 µg/L	238.4	46018 ppb	238.4	0.52%
Si 251.611†	263235.1	21186 µg/L	118.9	21186 ppb	118.9	0.56%
Sn 189.927†	899.7	500.13 µg/L	1.704	500.13 ppb	1.704	0.34%
Sr 421.552†	159935.6	923.01 µg/L	4.376	923.01 ppb	4.376	0.47%
Ti 334.940†	2352953.7	5414.3 µg/L	20.52	5414.3 ppb	20.52	0.38%
Tl 190.801†	300.3	526.29 µg/L	8.445	526.29 ppb	8.445	1.60%
U 409.014†	4570.0	413.70 µg/L	8.916	413.70 ppb	8.916	2.16%
V 292.402†	80735.3	991.88 µg/L	5.002	991.88 ppb	5.002	0.50%
Zn 213.857†	31670.8	865.34 µg/L	5.004	865.34 ppb	5.004	0.58%

Sequence No.: 38
Sample ID: 1201978599|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 329
Date Collected: 12/14/2009 12:25:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978599|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114739.5	114739.5	102	%			12:26:38
1	Al 396.153Radial†	388832.0	379316.1	200450	µg/L	200450	ppb	12:26:32
1	Ca 317.933Radial†	76117.3	73874.1	29804	µg/L	29804	ppb	12:26:38
1	Fe 238.204 Radial†	43557.6	42498.1	225670	µg/L	225670	ppb	12:26:38
1	K 766.490 Radial†	36175.2	34558.6	19496	µg/L	19496	ppb	12:26:38
1	Mg 279.077 IEC†	7042.1	6856.7	38364	µg/L	38364	ppb	12:26:38
1	Na 589.592 Radial†	40181.5	39616.8	11174	µg/L	11174	ppb	12:26:38
1	Sr 421.552†	157008.5	153323.8	884.85	µg/L	884.85	ppb	12:26:32
1	Sc 361.383	2017931.6	2017931.6	100.50	%			12:27:12
1	Y 371.029	1250756.6	1250756.6	102.24	%			12:27:12
1	Ag 328.068†	55800.9	55538.1	551.00	µg/L	551.00	ppb	12:27:18
1	As 188.979†	306.1	301.4	560.20	µg/L	560.20	ppb	12:27:39
1	B 249.677†	13469.6	13240.5	544.74	µg/L	544.74	ppb	12:27:18
1	Ba 233.527†	62475.7	62235.7	1666.8	µg/L	1666.8	ppb	12:27:18
1	Be 313.107†	848821.2	840957.1	546.31	µg/L	546.31	ppb	12:27:12
1	Cd 226.502†	19688.6	19687.7	536.72	µg/L	536.72	ppb	12:27:18
1	Co 228.616†	12065.7	12075.1	604.72	µg/L	604.72	ppb	12:27:39
1	Cr 267.716†	30582.1	30553.3	680.46	µg/L	680.46	ppb	12:27:18
1	Cu 324.752†	88649.7	84897.4	655.00	µg/L	655.00	ppb	12:27:18
1	Mn 257.610†	1626653.0	1618765.4	5354.5	µg/L	5354.5	ppb	12:27:12
1	Mo 202.031†	4170.4	4154.3	504.91	µg/L	504.91	ppb	12:27:39
1	Ni 231.604†	10867.5	10522.2	607.25	µg/L	607.25	ppb	12:27:39
1	P 214.914†	1072.9	877.6	1696.8	µg/L	1696.8	ppb	12:27:39
1	Pb 220.353†	2800.7	2735.7	737.56	µg/L	737.56	ppb	12:27:39
1	S 181.975 Axial†	1209.0	1177.3	6260.5	µg/L	6260.5	ppb	12:27:39
1	Sb 206.836†	461.0	434.5	465.29	µg/L	465.29	ppb	12:27:39
1	Se 196.026†	283.9	271.7	547.47	µg/L	547.47	ppb	12:27:39
1	SiO2†	167746.3	164873.8	33446	µg/L	33446	ppb	12:27:18
1	Si 251.611†	192735.5	191414.8	15366	µg/L	15366	ppb	12:27:18
1	Sn 189.927†	931.0	903.9	501.26	µg/L	501.26	ppb	12:27:39
1	Ti 334.940†	2091624.7	2080365.3	4786.9	µg/L	4786.9	ppb	12:27:12
1	Tl 190.801†	281.2	299.9	523.33	µg/L	523.33	ppb	12:27:39
1	U 409.014†	5455.8	4726.8	430.02	µg/L	430.02	ppb	12:27:18
1	V 292.402†	80935.8	80621.6	990.25	µg/L	990.25	ppb	12:27:18
1	Zn 213.857†	31748.1	31061.5	848.59	µg/L	848.59	ppb	12:27:18
2	Sc RADIAL	113929.7	113929.7	102	%			12:26:49
2	Al 396.153Radial†	390400.6	383555.3	202690	µg/L	202690	ppb	12:26:43
2	Ca 317.933Radial†	74914.9	73220.3	29540	µg/L	29540	ppb	12:26:49
2	Fe 238.204 Radial†	42776.2	42032.2	223190	µg/L	223190	ppb	12:26:49
2	K 766.490 Radial†	35692.8	34335.4	19370	µg/L	19370	ppb	12:26:49
2	Mg 279.077 IEC†	6960.3	6825.2	38189	µg/L	38189	ppb	12:26:49
2	Na 589.592 Radial†	39656.9	39379.9	11107	µg/L	11107	ppb	12:26:49
2	Sr 421.552†	157384.7	154782.7	893.27	µg/L	893.27	ppb	12:26:43
2	Sc 361.383	2016405.2	2016405.2	100.43	%			12:27:46
2	Y 371.029	1250792.1	1250792.1	102.24	%			12:27:46
2	Ag 328.068†	55729.7	55509.2	550.53	µg/L	550.53	ppb	12:27:52
2	As 188.979†	312.4	307.9	573.32	µg/L	573.32	ppb	12:28:12
2	B 249.677†	13442.6	13223.8	544.74	µg/L	544.74	ppb	12:27:52
2	Ba 233.527†	62446.6	62253.8	1667.3	µg/L	1667.3	ppb	12:27:52
2	Be 313.107†	855704.7	848450.7	551.18	µg/L	551.18	ppb	12:27:46
2	Cd 226.502†	19625.0	19639.2	535.54	µg/L	535.54	ppb	12:27:52
2	Co 228.616†	12002.8	12021.6	601.91	µg/L	601.91	ppb	12:28:12
2	Cr 267.716†	30494.7	30489.4	679.03	µg/L	679.03	ppb	12:27:52
2	Cu 324.752†	88544.6	84859.6	654.20	µg/L	654.20	ppb	12:27:52
2	Mn 257.610†	1638909.4	1632195.0	5398.4	µg/L	5398.4	ppb	12:27:46
2	Mo 202.031†	4168.7	4155.7	504.98	µg/L	504.98	ppb	12:28:12
2	Ni 231.604†	10831.6	10494.5	605.66	µg/L	605.66	ppb	12:28:12
2	P 214.914†	1085.5	890.9	1730.3	µg/L	1730.3	ppb	12:28:12
2	Pb 220.353†	2768.8	2706.0	729.97	µg/L	729.97	ppb	12:28:12

2	S 181.975 Axial†	1199.1	1168.3	6212.9 µg/L	6212.9 ppb	12:28:12
2	Sb 206.836†	450.3	424.2	454.73 µg/L	454.73 ppb	12:28:12
2	Se 196.026†	284.1	272.1	546.45 µg/L	546.45 ppb	12:28:12
2	SiO2†	167980.8	165233.6	33519 µg/L	33519 ppb	12:27:52
2	Si 251.611†	193095.1	191918.0	15405 µg/L	15405 ppb	12:27:52
2	Sn 189.927†	929.5	903.2	500.48 µg/L	500.48 ppb	12:28:12
2	Ti 334.940†	2108689.9	2098933.4	4829.7 µg/L	4829.7 ppb	12:27:46
2	Tl 190.801†	282.6	301.5	526.38 µg/L	526.38 ppb	12:28:12
2	U 409.014†	5344.8	4620.5	419.87 µg/L	419.87 ppb	12:27:52
2	V 292.402†	80835.4	80582.5	989.56 µg/L	989.56 ppb	12:27:52
2	Zn 213.857†	31663.5	31001.2	847.16 µg/L	847.16 ppb	12:27:52
3	Sc RADIAL	114287.1	114287.1	102 %		12:27:00
3	Al 396.153Radial†	387449.1	379463.2	200530 µg/L	200530 ppb	12:26:54
3	Ca 317.933Radial†	75730.9	73789.6	29770 µg/L	29770 ppb	12:27:00
3	Fe 238.204 Radial†	43248.6	42363.5	224950 µg/L	224950 ppb	12:27:00
3	K 766.490 Radial†	36090.1	34614.9	19528 µg/L	19528 ppb	12:27:00
3	Mg 279.077 IEC†	6994.6	6837.4	38256 µg/L	38256 ppb	12:27:00
3	Na 589.592 Radial†	39930.6	39526.2	11148 µg/L	11148 ppb	12:27:00
3	Sr 421.552†	156210.4	153148.3	883.84 µg/L	883.84 ppb	12:26:54
3	Sc 361.383	2023545.3	2023545.3	100.78 %		12:28:19
3	Y 371.029	1254502.8	1254502.8	102.55 %		12:28:19
3	Ag 328.068†	55697.1	55281.1	548.47 µg/L	548.47 ppb	12:28:25
3	As 188.979†	311.7	306.2	569.61 µg/L	569.61 ppb	12:28:46
3	B 249.677†	13410.8	13144.9	540.52 µg/L	540.52 ppb	12:28:25
3	Ba 233.527†	62403.1	61991.2	1660.3 µg/L	1660.3 ppb	12:28:25
3	Be 313.107†	855629.2	845369.3	549.18 µg/L	549.18 ppb	12:28:19
3	Cd 226.502†	19588.6	19534.1	532.45 µg/L	532.45 ppb	12:28:25
3	Co 228.616†	12013.2	11989.8	600.32 µg/L	600.32 ppb	12:28:46
3	Cr 267.716†	30444.8	30332.7	675.54 µg/L	675.54 ppb	12:28:25
3	Cu 324.752†	88500.1	84504.2	652.04 µg/L	652.04 ppb	12:28:25
3	Mn 257.610†	1639080.0	1626606.0	5380.2 µg/L	5380.2 ppb	12:28:19
3	Mo 202.031†	4172.1	4144.5	503.71 µg/L	503.71 ppb	12:28:46
3	Ni 231.604†	10851.9	10476.6	604.62 µg/L	604.62 ppb	12:28:46
3	P 214.914†	1078.6	880.2	1703.9 µg/L	1703.9 ppb	12:28:46
3	Pb 220.353†	2779.4	2706.8	729.97 µg/L	729.97 ppb	12:28:46
3	S 181.975 Axial†	1204.0	1169.0	6216.3 µg/L	6216.3 ppb	12:28:46
3	Sb 206.836†	462.4	434.7	465.60 µg/L	465.60 ppb	12:28:46
3	Se 196.026†	288.0	274.9	551.83 µg/L	551.83 ppb	12:28:46
3	SiO2†	167450.9	164117.6	33292 µg/L	33292 ppb	12:28:25
3	Si 251.611†	192446.0	190595.6	15298 µg/L	15298 ppb	12:28:25
3	Sn 189.927†	931.6	902.0	500.15 µg/L	500.15 ppb	12:28:46
3	Ti 334.940†	2108807.7	2091641.4	4812.9 µg/L	4812.9 ppb	12:28:19
3	Tl 190.801†	274.0	292.0	511.20 µg/L	511.20 ppb	12:28:46
3	U 409.014†	5341.7	4598.6	417.36 µg/L	417.36 ppb	12:28:25
3	V 292.402†	80612.0	80076.8	983.62 µg/L	983.62 ppb	12:28:25
3	Zn 213.857†	31548.3	30775.6	840.61 µg/L	840.61 ppb	12:28:25

Mean Data: 1201978599|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2019294.0	100.57	%	0.187				0.19%
Sc RADIAL	114318.8	102	%	0.4				0.36%
Y 371.029	1252017.2	102.34	%	0.176				0.17%
Ag 328.068†	55442.8	550.00	µg/L	1.350	550.00	ppb	1.350	0.25%
Al 396.153Radial†	380778.2	201230	µg/L	1271.7	201230	ppb	1271.7	0.63%
As 188.979†	305.2	567.71	µg/L	6.765	567.71	ppb	6.765	1.19%
B 249.677†	13203.1	543.33	µg/L	2.435	543.33	ppb	2.435	0.45%
Ba 233.527†	62160.2	1664.8	µg/L	3.93	1664.8	ppb	3.93	0.24%
Be 313.107†	844925.7	548.89	µg/L	2.447	548.89	ppb	2.447	0.45%
Ca 317.933Radial†	73628.0	29705	µg/L	143.5	29705	ppb	143.5	0.48%
Cd 226.502†	19620.3	534.90	µg/L	2.206	534.90	ppb	2.206	0.41%
Co 228.616†	12028.8	602.32	µg/L	2.225	602.32	ppb	2.225	0.37%
Cr 267.716†	30458.5	678.34	µg/L	2.528	678.34	ppb	2.528	0.37%
Cu 324.752†	84753.7	653.75	µg/L	1.532	653.75	ppb	1.532	0.23%
Fe 238.204 Radial†	42297.9	224610	µg/L	1273.1	224610	ppb	1273.1	0.57%
K 766.490 Radial†	34502.9	19465	µg/L	83.4	19465	ppb	83.4	0.43%
Mg 279.077 IEC†	6839.8	38269	µg/L	88.0	38269	ppb	88.0	0.23%
Mn 257.610†	1625855.5	5377.7	µg/L	22.05	5377.7	ppb	22.05	0.41%
Mo 202.031†	4151.5	504.53	µg/L	0.715	504.53	ppb	0.715	0.14%
Na 589.592 Radial†	39507.6	11143	µg/L	33.7	11143	ppb	33.7	0.30%

Ni 231.604†	10497.8	605.84	µg/L	1.324	605.84 ppb	1.324	0.22%
P 214.914†	882.9	1710.3	µg/L	17.66	1710.3 ppb	17.66	1.03%
Pb 220.353†	2716.2	732.50	µg/L	4.386	732.50 ppb	4.386	0.60%
S 181.975 Axial†	1171.5	6229.9	µg/L	26.56	6229.9 ppb	26.56	0.43%
Sb 206.836†	431.1	461.88	µg/L	6.189	461.88 ppb	6.189	1.34%
Se 196.026†	272.9	548.58	µg/L	2.858	548.58 ppb	2.858	0.52%
SiO2†	164741.7	33419	µg/L	115.5	33419 ppb	115.5	0.35%
Si 251.611†	191309.5	15356	µg/L	54.1	15356 ppb	54.1	0.35%
Sn 189.927†	903.0	500.63	µg/L	0.571	500.63 ppb	0.571	0.11%
Sr 421.552†	153751.6	887.32	µg/L	5.178	887.32 ppb	5.178	0.58%
Ti 334.940†	2090313.4	4809.8	µg/L	21.54	4809.8 ppb	21.54	0.45%
Tl 190.801†	297.8	520.30	µg/L	8.032	520.30 ppb	8.032	1.54%
U 409.014†	4648.6	422.41	µg/L	6.704	422.41 ppb	6.704	1.59%
V 292.402†	80427.0	987.81	µg/L	3.643	987.81 ppb	3.643	0.37%
Zn 213.857†	30946.1	845.45	µg/L	4.256	845.45 ppb	4.256	0.50%

Sequence No.: 39
Sample ID: 1201978597|931895|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 330
Date Collected: 12/14/2009 12:28:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978597|931895|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113938.8	113938.8	102	%			12:29:27
1	Al 396.153Radial†	45160.1	44219.3	23370	µg/L	23370	ppb	12:29:27
1	Ca 317.933Radial†	11475.0	10865.1	4383.5	µg/L	4383.5	ppb	12:29:48
1	Fe 238.204 Radial†	6287.8	6167.7	32749	µg/L	32749	ppb	12:29:48
1	K 766.490 Radial†	4331.2	3510.1	1980.2	µg/L	1980.2	ppb	12:29:27
1	Mg 279.077 IEC†	929.6	897.6	5015.5	µg/L	5015.5	ppb	12:29:48
1	Na 589.592 Radial†	3237.9	3583.9	1010.8	µg/L	1010.8	ppb	12:29:48
1	Sr 421.552†	10756.0	10662.4	61.534	µg/L	61.534	ppb	12:29:48
1	Sc 361.383	2038351.6	2038351.6	101.52	%			12:30:51
1	Y 371.029	1240398.9	1240398.9	101.39	%			12:30:51
1	Ag 328.068†	-291.0	-270.4	0.4138	µg/L	0.4138	ppb	12:30:56
1	As 188.979†	7.6	4.4	4.9794	µg/L	4.9794	ppb	12:31:17
1	B 249.677†	573.4	403.0	8.4436	µg/L	8.4436	ppb	12:30:56
1	Ba 233.527†	6903.3	6872.4	183.96	µg/L	183.96	ppb	12:30:56
1	Be 313.107†	7003.3	3279.6	1.8700	µg/L	1.8700	ppb	12:30:56
1	Cd 226.502†	-0.4	97.2	0.2011	µg/L	0.2011	ppb	12:31:17
1	Co 228.616†	189.9	256.9	11.541	µg/L	11.541	ppb	12:31:17
1	Cr 267.716†	847.7	959.2	21.427	µg/L	21.427	ppb	12:30:56
1	Cu 324.752†	4570.5	1193.1	15.558	µg/L	15.558	ppb	12:30:56
1	Mn 257.610†	171983.1	169656.6	562.33	µg/L	562.33	ppb	12:30:51
1	Mo 202.031†	-13.5	-8.5	0.2674	µg/L	0.2674	ppb	12:31:17
1	Ni 231.604†	556.3	257.0	14.830	µg/L	14.830	ppb	12:31:17
1	P 214.914†	284.6	90.3	169.65	µg/L	169.65	ppb	12:31:17
1	Pb 220.353†	155.3	102.0	28.563	µg/L	28.563	ppb	12:31:17
1	S 181.975 Axial†	54.7	28.2	145.50	µg/L	145.50	ppb	12:31:17
1	Sb 206.836†	22.1	-2.4	-0.3150	µg/L	-0.3150	ppb	12:31:17
1	Se 196.026†	-3.3	-14.1	0.7081	µg/L	0.7081	ppb	12:31:17
1	SiO2†	40021.3	37388.6	7584.5	µg/L	7584.5	ppb	12:30:56
1	Si 251.611†	44492.3	43469.5	3510.1	µg/L	3510.1	ppb	12:30:56
1	Sn 189.927†	-6.6	-28.8	-8.8639	µg/L	-8.8639	ppb	12:31:17
1	Ti 334.940†	319467.0	313886.3	722.26	µg/L	722.26	ppb	12:30:51
1	Tl 190.801†	-25.7	-5.3	-1.1575	µg/L	-1.1575	ppb	12:31:17
1	U 409.014†	578.3	-132.0	-19.171	µg/L	-19.171	ppb	12:30:56
1	V 292.402†	4770.2	4789.3	60.124	µg/L	60.124	ppb	12:30:56
1	Zn 213.857†	2398.4	1834.6	48.127	µg/L	48.127	ppb	12:31:17
2	Sc RADIAL	113531.7	113531.7	101	%			12:29:53
2	Al 396.153Radial†	44964.5	44185.5	23353	µg/L	23353	ppb	12:29:53
2	Ca 317.933Radial†	11505.1	10935.2	4411.8	µg/L	4411.8	ppb	12:30:14
2	Fe 238.204 Radial†	6290.6	6192.7	32881	µg/L	32881	ppb	12:30:14
2	K 766.490 Radial†	4277.3	3472.2	1958.8	µg/L	1958.8	ppb	12:29:53
2	Mg 279.077 IEC†	939.1	910.2	5086.7	µg/L	5086.7	ppb	12:30:14
2	Na 589.592 Radial†	3196.2	3554.2	1002.4	µg/L	1002.4	ppb	12:30:14
2	Sr 421.552†	10762.3	10706.5	61.789	µg/L	61.789	ppb	12:30:14
2	Sc 361.383	2037878.7	2037878.7	101.50	%			12:31:24
2	Y 371.029	1240368.4	1240368.4	101.39	%			12:31:24
2	Ag 328.068†	-316.4	-295.5	0.1937	µg/L	0.1937	ppb	12:31:29
2	As 188.979†	6.9	3.6	3.5392	µg/L	3.5392	ppb	12:31:50
2	B 249.677†	567.0	396.9	8.1178	µg/L	8.1178	ppb	12:31:29
2	Ba 233.527†	6942.0	6912.1	185.02	µg/L	185.02	ppb	12:31:29
2	Be 313.107†	6871.3	3151.2	1.7867	µg/L	1.7867	ppb	12:31:29
2	Cd 226.502†	3.7	101.3	0.3030	µg/L	0.3030	ppb	12:31:50
2	Co 228.616†	182.1	249.2	11.154	µg/L	11.154	ppb	12:31:50
2	Cr 267.716†	857.5	969.0	21.647	µg/L	21.647	ppb	12:31:29
2	Cu 324.752†	4569.6	1193.3	15.588	µg/L	15.588	ppb	12:31:29
2	Mn 257.610†	171456.7	169177.2	560.77	µg/L	560.77	ppb	12:31:24
2	Mo 202.031†	-11.9	-7.0	0.4576	µg/L	0.4576	ppb	12:31:50
2	Ni 231.604†	555.8	256.6	14.807	µg/L	14.807	ppb	12:31:50
2	P 214.914†	283.4	89.2	167.00	µg/L	167.00	ppb	12:31:50
2	Pb 220.353†	161.1	107.7	30.081	µg/L	30.081	ppb	12:31:50

2	S 181.975 Axial†	50.0	23.5	120.27 µg/L	120.27 ppb	12:31:50
2	Sb 206.836†	16.8	-7.6	-5.8028 µg/L	-5.8028 ppb	12:31:50
2	Se 196.026†	7.9	-2.9	17.189 µg/L	17.189 ppb	12:31:50
2	SiO2†	40082.0	37457.6	7598.5 µg/L	7598.5 ppb	12:31:29
2	Si 251.611†	44552.2	43538.7	3515.9 µg/L	3515.9 ppb	12:31:29
2	Sn 189.927†	-11.1	-33.3	-11.104 µg/L	-11.104 ppb	12:31:50
2	Ti 334.940†	318809.6	313311.6	720.94 µg/L	720.94 ppb	12:31:24
2	Tl 190.801†	-18.2	2.1	10.471 µg/L	10.471 ppb	12:31:50
2	U 409.014†	553.6	-156.2	-21.611 µg/L	-21.611 ppb	12:31:29
2	V 292.402†	4856.9	4875.8	61.171 µg/L	61.171 ppb	12:31:29
2	Zn 213.857†	2382.2	1819.2	47.675 µg/L	47.675 ppb	12:31:50
3	Sc RADIAL	113405.6	113405.6	101 %		12:30:19
3	Al 396.153Radial†	44786.4	44059.0	23286 µg/L	23286 ppb	12:30:19
3	Ca 317.933Radial†	11496.9	10939.8	4413.6 µg/L	4413.6 ppb	12:30:40
3	Fe 238.204 Radial†	6302.2	6211.1	32979 µg/L	32979 ppb	12:30:40
3	K 766.490 Radial†	4223.8	3424.1	1931.7 µg/L	1931.7 ppb	12:30:19
3	Mg 279.077 IEC†	937.8	910.0	5085.3 µg/L	5085.3 ppb	12:30:40
3	Na 589.592 Radial†	3226.3	3587.4	1011.8 µg/L	1011.8 ppb	12:30:40
3	Sr 421.552†	10772.7	10728.5	61.916 µg/L	61.916 ppb	12:30:40
3	Sc 361.383	2033777.1	2033777.1	101.29 %		12:31:57
3	Y 371.029	1237999.4	1237999.4	101.20 %		12:31:57
3	Ag 328.068†	-283.7	-263.8	0.5013 µg/L	0.5013 ppb	12:32:02
3	As 188.979†	11.1	7.8	11.613 µg/L	11.613 ppb	12:32:23
3	B 249.677†	561.7	392.8	7.8954 µg/L	7.8954 ppb	12:32:02
3	Ba 233.527†	6897.1	6881.6	184.21 µg/L	184.21 ppb	12:32:02
3	Be 313.107†	6874.7	3168.2	1.7974 µg/L	1.7974 ppb	12:32:02
3	Cd 226.502†	13.4	110.8	0.5682 µg/L	0.5682 ppb	12:32:23
3	Co 228.616†	177.6	245.1	10.946 µg/L	10.946 ppb	12:32:23
3	Cr 267.716†	877.6	990.6	22.125 µg/L	22.125 ppb	12:32:02
3	Cu 324.752†	4523.5	1156.9	15.349 µg/L	15.349 ppb	12:32:02
3	Mn 257.610†	171645.2	169703.9	562.52 µg/L	562.52 ppb	12:31:57
3	Mo 202.031†	-10.0	-5.1	0.6824 µg/L	0.6824 ppb	12:32:23
3	Ni 231.604†	531.5	233.7	13.489 µg/L	13.489 ppb	12:32:23
3	P 214.914†	280.6	87.1	162.20 µg/L	162.20 ppb	12:32:23
3	Pb 220.353†	156.2	103.2	28.875 µg/L	28.875 ppb	12:32:23
3	S 181.975 Axial†	51.5	25.1	128.71 µg/L	128.71 ppb	12:32:23
3	Sb 206.836†	17.2	-7.2	-5.2952 µg/L	-5.2952 ppb	12:32:23
3	Se 196.026†	-5.8	-16.5	-2.6869 µg/L	-2.6869 ppb	12:32:23
3	SiO2†	39887.8	37345.5	7575.8 µg/L	7575.8 ppb	12:32:02
3	Si 251.611†	44326.3	43404.2	3504.8 µg/L	3504.8 ppb	12:32:02
3	Sn 189.927†	-4.2	-26.5	-7.6399 µg/L	-7.6399 ppb	12:32:23
3	Ti 334.940†	318658.9	313796.3	722.05 µg/L	722.05 ppb	12:31:57
3	Tl 190.801†	-26.5	-6.0	-2.3779 µg/L	-2.3779 ppb	12:32:23
3	U 409.014†	653.5	-56.4	-11.682 µg/L	-11.682 ppb	12:32:02
3	V 292.402†	4838.1	4866.9	61.089 µg/L	61.089 ppb	12:32:02
3	Zn 213.857†	2384.3	1826.1	47.866 µg/L	47.866 ppb	12:32:23

Mean Data: 1201978597|931895|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2036669.1	101.44	%	0.125				0.12%
Sc RADIAL	113625.4	101	%	0.2				0.25%
Y 371.029	1239588.9	101.33	%	0.113				0.11%
Ag 328.068†	-276.6	0.3696	µg/L	0.15847	0.3696	ppb	0.15847	42.87%
Al 396.153Radial†	44154.6	23336	µg/L	44.7	23336	ppb	44.7	0.19%
As 188.979†	5.3	6.7106	µg/L	4.30651	6.7106	ppb	4.30651	64.17%
B 249.677†	397.6	8.1523	µg/L	0.27574	8.1523	ppb	0.27574	3.38%
Ba 233.527†	6888.7	184.40	µg/L	0.557	184.40	ppb	0.557	0.30%
Be 313.107†	3199.7	1.8180	µg/L	0.04529	1.8180	ppb	0.04529	2.49%
Ca 317.933Radial†	10913.4	4402.9	µg/L	16.89	4402.9	ppb	16.89	0.38%
Cd 226.502†	103.1	0.3574	µg/L	0.18951	0.3574	ppb	0.18951	53.02%
Co 228.616†	250.4	11.214	µg/L	0.3018	11.214	ppb	0.3018	2.69%
Cr 267.716†	973.0	21.733	µg/L	0.3569	21.733	ppb	0.3569	1.64%
Cu 324.752†	1181.1	15.499	µg/L	0.1305	15.499	ppb	0.1305	0.84%
Fe 238.204 Radial†	6190.5	32869	µg/L	115.4	32869	ppb	115.4	0.35%
K 766.490 Radial†	3468.8	1956.9	µg/L	24.31	1956.9	ppb	24.31	1.24%
Mg 279.077 IEC†	905.9	5062.5	µg/L	40.69	5062.5	ppb	40.69	0.80%
Mn 257.610†	169512.5	561.87	µg/L	0.959	561.87	ppb	0.959	0.17%
Mo 202.031†	-6.9	0.4691	µg/L	0.20775	0.4691	ppb	0.20775	44.28%
Na 589.592 Radial†	3575.2	1008.4	µg/L	5.15	1008.4	ppb	5.15	0.51%

Ni 231.604†	249.1	14.375	µg/L	0.7679	14.375	ppb	0.7679	5.34%
P 214.914†	88.9	166.28	µg/L	3.774	166.28	ppb	3.774	2.27%
Pb 220.353†	104.3	29.173	µg/L	0.8020	29.173	ppb	0.8020	2.75%
S 181.975 Axial†	25.6	131.49	µg/L	12.843	131.49	ppb	12.843	9.77%
Sb 206.836†	-5.7	-3.8044	µg/L	3.03248	-3.8044	ppb	3.03248	79.71%
Se 196.026†	-11.2	5.0700	µg/L	10.63165	5.0700	ppb	10.63165	209.70%
SiO2†	37397.2	7586.3	µg/L	11.47	7586.3	ppb	11.47	0.15%
Si 251.611†	43470.8	3510.3	µg/L	5.55	3510.3	ppb	5.55	0.16%
Sn 189.927†	-29.6	-9.2025	µg/L	1.75653	-9.2025	ppb	1.75653	19.09%
Sr 421.552†	10699.1	61.746	µg/L	0.1944	61.746	ppb	0.1944	0.31%
Ti 334.940†	313664.7	721.75	µg/L	0.712	721.75	ppb	0.712	0.10%
Tl 190.801†	-3.1	2.3119	µg/L	7.09234	2.3119	ppb	7.09234	306.78%
U 409.014†	-114.9	-17.488	µg/L	5.1743	-17.488	ppb	5.1743	29.59%
V 292.402†	4844.0	60.795	µg/L	0.5823	60.795	ppb	0.5823	0.96%
Zn 213.857†	1826.6	47.889	µg/L	0.2267	47.889	ppb	0.2267	0.47%

Sequence No.: 40
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 12:32:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114120.1	114120.1	102	%			12:33:10
1	Al 396.153Radial†	10333.8	9975.6	5252.4	µg/L	5252.4	ppb	12:33:10
1	Ca 317.933Radial†	13687.2	13017.9	5252.0	µg/L	5252.0	ppb	12:33:31
1	Fe 238.204 Radial†	1046.4	1014.9	5406.0	µg/L	5406.0	ppb	12:33:31
1	K 766.490 Radial†	10099.2	9163.2	5169.3	µg/L	5169.3	ppb	12:33:10
1	Mg 279.077 IEC†	993.3	958.7	5413.6	µg/L	5413.6	ppb	12:33:31
1	Na 589.592 Radial†	37106.0	36811.9	10383	µg/L	10383	ppb	12:33:10
1	Sr 421.552†	89830.6	88237.3	509.23	µg/L	509.23	ppb	12:33:10
1	Sc 361.383	2015866.8	2015866.8	100.40	%			12:34:34
1	Y 371.029	1218917.2	1218917.2	99.636	%			12:34:34
1	Ag 328.068†	55288.7	55084.8	526.29	µg/L	526.29	ppb	12:34:40
1	As 188.979†	269.5	265.3	514.24	µg/L	514.24	ppb	12:35:00
1	B 249.677†	11551.6	11343.9	525.81	µg/L	525.81	ppb	12:34:40
1	Ba 233.527†	19778.7	19772.3	530.02	µg/L	530.02	ppb	12:34:40
1	Be 313.107†	804834.8	798011.0	519.90	µg/L	519.90	ppb	12:34:34
1	Cd 226.502†	18964.4	18986.5	534.03	µg/L	534.03	ppb	12:34:40
1	Co 228.616†	10395.7	10424.2	529.82	µg/L	529.82	ppb	12:34:40
1	Cr 267.716†	23614.1	23644.3	526.06	µg/L	526.06	ppb	12:34:40
1	Cu 324.752†	74211.7	70607.2	505.60	µg/L	505.60	ppb	12:34:40
1	Mn 257.610†	158278.7	157896.3	520.20	µg/L	520.20	ppb	12:34:34
1	Mo 202.031†	4381.3	4368.6	521.85	µg/L	521.85	ppb	12:35:00
1	Ni 231.604†	9497.1	9168.3	529.12	µg/L	529.12	ppb	12:34:40
1	P 214.914†	1371.2	1175.7	2561.4	µg/L	2561.4	ppb	12:35:00
1	Pb 220.353†	2037.8	1978.7	523.51	µg/L	523.51	ppb	12:35:00
1	S 181.975 Axial†	214.1	187.6	1002.0	µg/L	1002.0	ppb	12:35:00
1	Sb 206.836†	527.6	501.4	522.19	µg/L	522.19	ppb	12:35:00
1	Se 196.026†	369.0	356.8	529.08	µg/L	529.08	ppb	12:35:00
1	SiO2†	30242.1	28088.1	5697.9	µg/L	5697.9	ppb	12:34:40
1	Si 251.611†	33248.8	32759.6	2615.8	µg/L	2615.8	ppb	12:34:40
1	Sn 189.927†	1042.5	1016.0	520.40	µg/L	520.40	ppb	12:35:00
1	Ti 334.940†	224635.1	222942.0	512.88	µg/L	512.88	ppb	12:34:34
1	Tl 190.801†	315.4	334.3	528.05	µg/L	528.05	ppb	12:35:00
1	U 409.014†	5929.4	5204.2	518.17	µg/L	518.17	ppb	12:34:40
1	V 292.402†	43751.1	43667.4	529.01	µg/L	529.01	ppb	12:34:40
1	Zn 213.857†	19521.9	18916.4	530.32	µg/L	530.32	ppb	12:34:40
2	Sc RADIAL	111659.6	111659.6	99.7	%			12:33:36
2	Al 396.153Radial†	10186.3	10051.1	5292.4	µg/L	5292.4	ppb	12:33:36
2	Ca 317.933Radial†	13748.5	13375.4	5396.2	µg/L	5396.2	ppb	12:33:57
2	Fe 238.204 Radial†	1051.4	1042.5	5552.6	µg/L	5552.6	ppb	12:33:57
2	K 766.490 Radial†	9967.7	9249.6	5218.1	µg/L	5218.1	ppb	12:33:36
2	Mg 279.077 IEC†	998.9	985.7	5565.9	µg/L	5565.9	ppb	12:33:57
2	Na 589.592 Radial†	36668.6	37175.5	10485	µg/L	10485	ppb	12:33:36
2	Sr 421.552†	88474.8	88820.1	512.59	µg/L	512.59	ppb	12:33:36
2	Sc 361.383	2029268.2	2029268.2	101.07	%			12:35:07
2	Y 371.029	1226973.3	1226973.3	100.29	%			12:35:07
2	Ag 328.068†	55487.9	54918.2	524.71	µg/L	524.71	ppb	12:35:13
2	As 188.979†	271.0	265.0	513.50	µg/L	513.50	ppb	12:35:34
2	B 249.677†	11525.5	11242.0	521.03	µg/L	521.03	ppb	12:35:13
2	Ba 233.527†	19833.5	19696.5	527.98	µg/L	527.98	ppb	12:35:13
2	Be 313.107†	803607.9	791503.0	515.66	µg/L	515.66	ppb	12:35:07
2	Cd 226.502†	19023.3	18920.0	532.16	µg/L	532.16	ppb	12:35:13
2	Co 228.616†	10472.0	10431.3	530.18	µg/L	530.18	ppb	12:35:13
2	Cr 267.716†	23786.2	23659.2	526.38	µg/L	526.38	ppb	12:35:13
2	Cu 324.752†	74429.0	70334.1	503.68	µg/L	503.68	ppb	12:35:13
2	Mn 257.610†	158121.6	156699.7	516.28	µg/L	516.28	ppb	12:35:07
2	Mo 202.031†	4383.6	4342.1	518.69	µg/L	518.69	ppb	12:35:34
2	Ni 231.604†	9555.5	9163.6	528.84	µg/L	528.84	ppb	12:35:13
2	P 214.914†	1379.2	1174.6	2559.0	µg/L	2559.0	ppb	12:35:34
2	Pb 220.353†	2045.0	1972.4	521.84	µg/L	521.84	ppb	12:35:34

2	S 181.975 Axial†	217.4	189.5	1012.2 µg/L	1012.2 ppb	12:35:34
2	Sb 206.836†	522.6	493.0	513.35 µg/L	513.35 ppb	12:35:34
2	Se 196.026†	372.2	357.5	530.15 µg/L	530.15 ppb	12:35:34
2	SiO2†	30341.7	27987.7	5677.5 µg/L	5677.5 ppb	12:35:13
2	Si 251.611†	33349.7	32640.7	2606.4 µg/L	2606.4 ppb	12:35:13
2	Sn 189.927†	1044.9	1011.5	518.19 µg/L	518.19 ppb	12:35:34
2	Ti 334.940†	224037.6	220873.2	508.11 µg/L	508.11 ppb	12:35:07
2	Tl 190.801†	311.5	328.3	518.58 µg/L	518.58 ppb	12:35:34
2	U 409.014†	5984.4	5219.6	519.68 µg/L	519.68 ppb	12:35:13
2	V 292.402†	43950.1	43576.5	527.91 µg/L	527.91 ppb	12:35:13
2	Zn 213.857†	19605.0	18870.1	529.00 µg/L	529.00 ppb	12:35:13
3	Sc RADIAL	112848.1	112848.1	101 %		12:34:02
3	Al 396.153Radial†	10313.4	10069.7	5302.2 µg/L	5302.2 ppb	12:34:02
3	Ca 317.933Radial†	13767.3	13248.9	5345.2 µg/L	5345.2 ppb	12:34:22
3	Fe 238.204 Radial†	1051.0	1030.9	5491.4 µg/L	5491.4 ppb	12:34:22
3	K 766.490 Radial†	10092.4	9268.1	5228.5 µg/L	5228.5 ppb	12:34:02
3	Mg 279.077 IEC†	999.0	975.3	5507.3 µg/L	5507.3 ppb	12:34:22
3	Na 589.592 Radial†	37106.6	37222.8	10499 µg/L	10499 ppb	12:34:02
3	Sr 421.552†	89828.7	89229.0	514.95 µg/L	514.95 ppb	12:34:02
3	Sc 361.383	2019132.9	2019132.9	100.56 %		12:35:41
3	Y 371.029	1221203.2	1221203.2	99.823 %		12:35:41
3	Ag 328.068†	55097.4	54805.5	523.62 µg/L	523.62 ppb	12:35:46
3	As 188.979†	271.5	266.8	517.14 µg/L	517.14 ppb	12:36:07
3	B 249.677†	11423.1	11197.4	518.97 µg/L	518.97 ppb	12:35:46
3	Ba 233.527†	19662.8	19625.2	526.07 µg/L	526.07 ppb	12:35:46
3	Be 313.107†	807417.3	799282.3	520.73 µg/L	520.73 ppb	12:35:41
3	Cd 226.502†	18830.0	18822.3	529.41 µg/L	529.41 ppb	12:35:46
3	Co 228.616†	10380.0	10391.8	528.17 µg/L	528.17 ppb	12:35:46
3	Cr 267.716†	23548.3	23540.8	523.75 µg/L	523.75 ppb	12:35:46
3	Cu 324.752†	73808.3	70086.5	501.90 µg/L	501.90 ppb	12:35:46
3	Mn 257.610†	158807.4	158167.0	521.10 µg/L	521.10 ppb	12:35:41
3	Mo 202.031†	4373.0	4353.3	520.02 µg/L	520.02 ppb	12:36:07
3	Ni 231.604†	9495.3	9151.2	528.13 µg/L	528.13 ppb	12:35:46
3	P 214.914†	1356.8	1159.2	2525.0 µg/L	2525.0 ppb	12:36:07
3	Pb 220.353†	2023.6	1961.3	518.92 µg/L	518.92 ppb	12:36:07
3	S 181.975 Axial†	220.6	193.6	1034.5 µg/L	1034.5 ppb	12:36:07
3	Sb 206.836†	522.3	495.2	515.72 µg/L	515.72 ppb	12:36:07
3	Se 196.026†	378.4	365.5	541.93 µg/L	541.93 ppb	12:36:07
3	SiO2†	30070.1	27868.3	5653.3 µg/L	5653.3 ppb	12:35:46
3	Si 251.611†	33084.8	32543.0	2598.1 µg/L	2598.1 ppb	12:35:46
3	Sn 189.927†	1046.9	1018.7	521.81 µg/L	521.81 ppb	12:36:07
3	Ti 334.940†	225051.2	222993.9	512.99 µg/L	512.99 ppb	12:35:41
3	Tl 190.801†	315.4	333.7	527.24 µg/L	527.24 ppb	12:36:07
3	U 409.014†	5946.8	5212.0	518.93 µg/L	518.93 ppb	12:35:46
3	V 292.402†	43484.5	43331.8	524.98 µg/L	524.98 ppb	12:35:46
3	Zn 213.857†	19431.0	18794.5	526.88 µg/L	526.88 ppb	12:35:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2021422.6	100.68	%	0.348				0.35%
Sc RADIAL	112875.9	101	%	1.1				1.09%
Y 371.029	1222364.6	99.918	%	0.3394				0.34%
Ag 328.068†	54936.2	524.87	µg/L	1.342	524.87	ppb	1.342	0.26%
QC value within limits for Ag 328.068 Recovery = 104.97%								
Al 396.153Radial†	10032.1	5282.3	µg/L	26.38	5282.3	ppb	26.38	0.50%
QC value within limits for Al 396.153Radial Recovery = 105.65%								
As 188.979†	265.7	514.96	µg/L	1.923	514.96	ppb	1.923	0.37%
QC value within limits for As 188.979 Recovery = 102.99%								
B 249.677†	11261.1	521.94	µg/L	3.509	521.94	ppb	3.509	0.67%
QC value within limits for B 249.677 Recovery = 104.39%								
Ba 233.527†	19698.0	528.02	µg/L	1.972	528.02	ppb	1.972	0.37%
QC value within limits for Ba 233.527 Recovery = 105.60%								
Be 313.107†	796265.4	518.77	µg/L	2.719	518.77	ppb	2.719	0.52%
QC value within limits for Be 313.107 Recovery = 103.75%								
Ca 317.933Radial†	13214.0	5331.1	µg/L	73.14	5331.1	ppb	73.14	1.37%
QC value within limits for Ca 317.933Radial Recovery = 106.62%								
Cd 226.502†	18909.6	531.87	µg/L	2.324	531.87	ppb	2.324	0.44%
QC value within limits for Cd 226.502 Recovery = 106.37%								
Co 228.616†	10415.7	529.39	µg/L	1.073	529.39	ppb	1.073	0.20%

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   QC value within limits for Co 228.616  Recovery = 105.88%
Cr 267.716†            23614.8      525.40 µg/L        1.436      525.40 ppb        1.436   0.27%
   QC value within limits for Cr 267.716  Recovery = 105.08%
Cu 324.752†            70342.6      503.72 µg/L        1.851      503.72 ppb        1.851   0.37%
   QC value within limits for Cu 324.752  Recovery = 100.74%
Fe 238.204 Radial†      1029.4      5483.3 µg/L       73.63      5483.3 ppb       73.63   1.34%
   QC value within limits for Fe 238.204 Radial  Recovery = 109.67%
K 766.490 Radial†       9227.0      5205.3 µg/L       31.60      5205.3 ppb       31.60   0.61%
   QC value within limits for K 766.490 Radial  Recovery = 104.11%
Mg 279.077 IEC†          973.2      5495.6 µg/L       76.83      5495.6 ppb       76.83   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.91%
Mn 257.610†           157587.6      519.19 µg/L        2.563      519.19 ppb        2.563   0.49%
   QC value within limits for Mn 257.610  Recovery = 103.84%
Mo 202.031†             4354.7      520.18 µg/L        1.586      520.18 ppb        1.586   0.30%
   QC value within limits for Mo 202.031  Recovery = 104.04%
Na 589.592 Radial†     37070.1       10456 µg/L         63.4       10456 ppb         63.4   0.61%
   QC value within limits for Na 589.592 Radial  Recovery = 104.56%
Ni 231.604†             9161.0      528.70 µg/L        0.509      528.70 ppb        0.509   0.10%
   QC value within limits for Ni 231.604  Recovery = 105.74%
P 214.914†              1169.8      2548.5 µg/L       20.34      2548.5 ppb       20.34   0.80%
   QC value within limits for P 214.914  Recovery = 101.94%
Pb 220.353†             1970.8      521.42 µg/L        2.324      521.42 ppb        2.324   0.45%
   QC value within limits for Pb 220.353  Recovery = 104.28%
S 181.975 Axial†         190.2      1016.2 µg/L       16.62      1016.2 ppb       16.62   1.64%
   QC value within limits for S 181.975 Axial  Recovery = 101.62%
Sb 206.836†              496.5      517.09 µg/L        4.577      517.09 ppb        4.577   0.89%
   QC value within limits for Sb 206.836  Recovery = 103.42%
Se 196.026†              359.9      533.72 µg/L        7.131      533.72 ppb        7.131   1.34%
   QC value within limits for Se 196.026  Recovery = 106.74%
SiO2†                  27981.4      5676.2 µg/L       22.31      5676.2 ppb       22.31   0.39%
   QC value within limits for SiO2  Recovery = 106.15%
Si 251.611†            32647.8      2606.7 µg/L        8.84      2606.7 ppb        8.84   0.34%
   QC value within limits for Si 251.611  Recovery = 104.27%
Sn 189.927†             1015.4      520.13 µg/L        1.826      520.13 ppb        1.826   0.35%
   QC value within limits for Sn 189.927  Recovery = 104.03%
Sr 421.552†            88762.1      512.26 µg/L        2.876      512.26 ppb        2.876   0.56%
   QC value within limits for Sr 421.552  Recovery = 102.45%
Ti 334.940†           222269.7      511.32 µg/L        2.788      511.32 ppb        2.788   0.55%
   QC value within limits for Ti 334.940  Recovery = 102.26%
Tl 190.801†              332.1      524.62 µg/L        5.250      524.62 ppb        5.250   1.00%
   QC value within limits for Tl 190.801  Recovery = 104.92%
U 409.014†              5211.9      518.92 µg/L        0.756      518.92 ppb        0.756   0.15%
   QC value within limits for U 409.014  Recovery = 103.78%
V 292.402†             43525.2      527.30 µg/L        2.085      527.30 ppb        2.085   0.40%
   QC value within limits for V 292.402  Recovery = 105.46%
Zn 213.857†            18860.3      528.73 µg/L        1.738      528.73 ppb        1.738   0.33%
   QC value within limits for Zn 213.857  Recovery = 105.75%
All analyte(s) passed QC.
```

Sequence No.: 41
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 12:36:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112866.4	112866.4	101	%			12:36:49
1	Al 396.153Radial†	159.6	-6.0	-3.2097	µg/L	-3.2097	ppb	12:36:49
1	Ca 317.933Radial†	405.9	-9.8	-3.9713	µg/L	-3.9713	ppb	12:37:10
1	Fe 238.204 Radial†	10.9	-1.1	-5.9952	µg/L	-5.9952	ppb	12:37:10
1	K 766.490 Radial†	719.7	-32.6	-18.382	µg/L	-18.382	ppb	12:36:49
1	Mg 279.077 IEC†	14.1	-2.1	-11.609	µg/L	-11.609	ppb	12:37:10
1	Na 589.592 Radial†	-677.7	-270.8	-76.373	µg/L	-76.373	ppb	12:36:49
1	Sr 421.552†	-54.3	37.4	0.2158	µg/L	0.2158	ppb	12:36:49
1	Sc 361.383	2020991.4	2020991.4	100.66	%			12:38:12
1	Y 371.029	1228170.3	1228170.3	100.39	%			12:38:12
1	Ag 328.068†	-25.7	-9.3	-0.0889	µg/L	-0.0889	ppb	12:38:17
1	As 188.979†	4.5	1.4	2.6329	µg/L	2.6329	ppb	12:38:38
1	B 249.677†	181.4	18.4	0.8597	µg/L	0.8597	ppb	12:38:17
1	Ba 233.527†	-71.7	1.2	0.0316	µg/L	0.0316	ppb	12:38:38
1	Be 313.107†	3690.0	47.1	0.0307	µg/L	0.0307	ppb	12:38:17
1	Cd 226.502†	-100.0	-1.7	-0.0440	µg/L	-0.0440	ppb	12:38:38
1	Co 228.616†	-67.9	2.3	0.1191	µg/L	0.1191	ppb	12:38:38
1	Cr 267.716†	-123.9	1.1	0.0250	µg/L	0.0250	ppb	12:38:17
1	Cu 324.752†	3242.0	-88.0	-0.6303	µg/L	-0.6303	ppb	12:38:17
1	Mn 257.610†	-213.2	36.0	0.1176	µg/L	0.1176	ppb	12:38:38
1	Mo 202.031†	-0.7	4.1	0.4872	µg/L	0.4872	ppb	12:38:38
1	Ni 231.604†	271.0	-21.8	-1.2558	µg/L	-1.2558	ppb	12:38:38
1	P 214.914†	192.4	1.2	2.6255	µg/L	2.6255	ppb	12:38:38
1	Pb 220.353†	54.8	3.4	0.9015	µg/L	0.9015	ppb	12:38:38
1	S 181.975 Axial†	20.8	-5.0	-26.795	µg/L	-26.795	ppb	12:38:38
1	Sb 206.836†	18.1	-6.2	-6.4525	µg/L	-6.4525	ppb	12:38:38
1	Se 196.026†	5.7	-5.1	-7.5773	µg/L	-7.5773	ppb	12:38:38
1	SiO2†	2124.3	76.9	15.598	µg/L	15.598	ppb	12:38:17
1	Si 251.611†	431.5	71.9	5.9052	µg/L	5.9052	ppb	12:38:38
1	Sn 189.927†	19.6	-2.9	-1.4861	µg/L	-1.4861	ppb	12:38:38
1	Ti 334.940†	794.0	-9.7	-0.0222	µg/L	-0.0222	ppb	12:38:17
1	Tl 190.801†	-19.7	0.5	0.8596	µg/L	0.8596	ppb	12:38:38
1	U 409.014†	781.4	74.6	7.4460	µg/L	7.4460	ppb	12:38:17
1	V 292.402†	-93.3	-2.2	-0.0109	µg/L	-0.0109	ppb	12:38:17
1	Zn 213.857†	529.0	-2.3	-0.0556	µg/L	-0.0556	ppb	12:38:38
2	Sc RADIAL	112292.4	112292.4	100	%			12:37:15
2	Al 396.153Radial†	163.3	-1.6	-0.8219	µg/L	-0.8219	ppb	12:37:15
2	Ca 317.933Radial†	416.2	2.5	1.0028	µg/L	1.0028	ppb	12:37:36
2	Fe 238.204 Radial†	7.0	-5.0	-26.345	µg/L	-26.345	ppb	12:37:36
2	K 766.490 Radial†	733.7	-15.0	-8.4706	µg/L	-8.4706	ppb	12:37:15
2	Mg 279.077 IEC†	23.8	7.7	43.303	µg/L	43.303	ppb	12:37:36
2	Na 589.592 Radial†	-694.7	-291.1	-82.105	µg/L	-82.105	ppb	12:37:15
2	Sr 421.552†	-70.8	20.7	0.1195	µg/L	0.1195	ppb	12:37:15
2	Sc 361.383	2011308.1	2011308.1	100.17	%			12:38:44
2	Y 371.029	1222117.2	1222117.2	99.898	%			12:38:44
2	Ag 328.068†	-35.2	-18.8	-0.1795	µg/L	-0.1795	ppb	12:38:49
2	As 188.979†	6.2	3.0	5.9022	µg/L	5.9022	ppb	12:39:10
2	B 249.677†	190.6	28.5	1.3327	µg/L	1.3327	ppb	12:38:49
2	Ba 233.527†	-79.6	-7.0	-0.1881	µg/L	-0.1881	ppb	12:39:10
2	Be 313.107†	3654.9	29.7	0.0194	µg/L	0.0194	ppb	12:38:49
2	Cd 226.502†	-84.8	13.0	0.3741	µg/L	0.3741	ppb	12:39:10
2	Co 228.616†	-67.1	2.9	0.1444	µg/L	0.1444	ppb	12:39:10
2	Cr 267.716†	-139.3	-14.8	-0.3280	µg/L	-0.3280	ppb	12:38:49
2	Cu 324.752†	3290.6	-24.0	-0.1772	µg/L	-0.1772	ppb	12:38:49
2	Mn 257.610†	-224.2	24.0	0.0757	µg/L	0.0757	ppb	12:39:10
2	Mo 202.031†	-6.9	-2.1	-0.2550	µg/L	-0.2550	ppb	12:39:10
2	Ni 231.604†	292.6	1.1	0.0620	µg/L	0.0620	ppb	12:39:10
2	P 214.914†	193.8	3.5	7.7456	µg/L	7.7456	ppb	12:39:10
2	Pb 220.353†	59.7	8.6	2.2617	µg/L	2.2617	ppb	12:39:10

2	S 181.975 Axial†	18.1	-7.6	-40.641 µg/L	-40.641 ppb	12:39:10
2	Sb 206.836†	21.2	-3.0	-3.0758 µg/L	-3.0758 ppb	12:39:10
2	Se 196.026†	10.0	-0.8	-1.2133 µg/L	-1.2133 ppb	12:39:10
2	SiO2†	2164.7	127.3	25.831 µg/L	25.831 ppb	12:38:49
2	Si 251.611†	443.4	85.8	6.9703 µg/L	6.9703 ppb	12:39:10
2	Sn 189.927†	23.5	1.1	0.5421 µg/L	0.5421 ppb	12:39:10
2	Ti 334.940†	803.8	3.9	0.0089 µg/L	0.0089 ppb	12:38:49
2	Tl 190.801†	-20.2	-0.1	-0.1746 µg/L	-0.1746 ppb	12:39:10
2	U 409.014†	803.4	100.4	10.018 µg/L	10.018 ppb	12:38:49
2	V 292.402†	-76.5	14.1	0.1818 µg/L	0.1818 ppb	12:38:49
2	Zn 213.857†	532.6	3.8	0.1097 µg/L	0.1097 ppb	12:39:10
3	Sc RADIAL	112984.9	112984.9	101 %		12:37:41
3	Al 396.153Radial†	164.8	-1.1	-0.5987 µg/L	-0.5987 ppb	12:37:41
3	Ca 317.933Radial†	417.4	1.0	0.4233 µg/L	0.4233 ppb	12:38:01
3	Fe 238.204 Radial†	6.2	-5.8	-30.742 µg/L	-30.742 ppb	12:38:01
3	K 766.490 Radial†	769.2	15.7	8.8486 µg/L	8.8486 ppb	12:37:41
3	Mg 279.077 IEC†	18.0	1.8	10.187 µg/L	10.187 ppb	12:38:01
3	Na 589.592 Radial†	-705.2	-297.3	-83.852 µg/L	-83.852 ppb	12:37:41
3	Sr 421.552†	-82.9	9.2	0.0530 µg/L	0.0530 ppb	12:37:41
3	Sc 361.383	2016091.8	2016091.8	100.41 %		12:39:16
3	Y 371.029	1225195.4	1225195.4	100.15 %		12:39:16
3	Ag 328.068†	-58.4	-41.8	-0.3965 µg/L	-0.3965 ppb	12:39:22
3	As 188.979†	-0.3	-3.5	-6.7283 µg/L	-6.7283 ppb	12:39:42
3	B 249.677†	173.2	10.8	0.5106 µg/L	0.5106 ppb	12:39:22
3	Ba 233.527†	-77.7	-4.9	-0.1306 µg/L	-0.1306 ppb	12:39:42
3	Be 313.107†	3638.3	4.6	0.0030 µg/L	0.0030 ppb	12:39:22
3	Cd 226.502†	-96.8	1.1	0.0336 µg/L	0.0336 ppb	12:39:42
3	Co 228.616†	-65.6	4.5	0.2293 µg/L	0.2293 ppb	12:39:42
3	Cr 267.716†	-124.1	0.6	0.0148 µg/L	0.0148 ppb	12:39:22
3	Cu 324.752†	3272.6	-49.7	-0.3616 µg/L	-0.3616 ppb	12:39:22
3	Mn 257.610†	-210.8	37.9	0.1209 µg/L	0.1209 ppb	12:39:42
3	Mo 202.031†	-3.7	1.0	0.1214 µg/L	0.1214 ppb	12:39:42
3	Ni 231.604†	287.1	-5.1	-0.2965 µg/L	-0.2965 ppb	12:39:42
3	P 214.914†	191.3	0.5	1.2941 µg/L	1.2941 ppb	12:39:42
3	Pb 220.353†	53.7	2.5	0.6601 µg/L	0.6601 ppb	12:39:42
3	S 181.975 Axial†	22.9	-2.9	-15.446 µg/L	-15.446 ppb	12:39:42
3	Sb 206.836†	20.1	-4.2	-4.3433 µg/L	-4.3433 ppb	12:39:42
3	Se 196.026†	10.0	-0.8	-1.1995 µg/L	-1.1995 ppb	12:39:42
3	SiO2†	2078.9	36.8	7.4612 µg/L	7.4612 ppb	12:39:22
3	Si 251.611†	442.8	84.2	6.8457 µg/L	6.8457 ppb	12:39:42
3	Sn 189.927†	22.2	-0.3	-0.1348 µg/L	-0.1348 ppb	12:39:42
3	Ti 334.940†	800.5	-1.4	-0.0032 µg/L	-0.0032 ppb	12:39:22
3	Tl 190.801†	-16.4	3.8	5.9440 µg/L	5.9440 ppb	12:39:42
3	U 409.014†	694.3	-10.1	-1.0065 µg/L	-1.0065 ppb	12:39:22
3	V 292.402†	-58.4	32.3	0.3849 µg/L	0.3849 ppb	12:39:22
3	Zn 213.857†	529.9	-0.1	0.0021 µg/L	0.0021 ppb	12:39:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2016130.4	100.41	%	0.241				0.24%
Sc RADIAL	112714.6	101	%	0.3				0.33%
Y 371.029	1225161.0	100.15	%	0.247				0.25%
Ag 328.068†	-23.3	-0.2216	µg/L	0.15810	-0.2216	ppb	0.15810	71.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.9	-1.5434	µg/L	1.44737	-1.5434	ppb	1.44737	93.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.3	0.6023	µg/L	6.55553	0.6023	ppb	6.55553	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	19.2	0.9010	µg/L	0.41263	0.9010	ppb	0.41263	45.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.6	-0.0957	µg/L	0.11395	-0.0957	ppb	0.11395	119.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	27.1	0.0177	µg/L	0.01394	0.0177	ppb	0.01394	78.81%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.1	-0.8484	µg/L	2.71997	-0.8484	ppb	2.71997	320.60%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.1	0.1212	µg/L	0.22240	0.1212	ppb	0.22240	183.44%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.2	0.1643	µg/L	0.05776	0.1643	ppb	0.05776	35.16%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.3     -0.0961 µg/L       0.20094     -0.0961 ppb        0.20094 209.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -53.9     -0.3897 µg/L       0.22784     -0.3897 ppb        0.22784  58.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -4.0     -21.028 µg/L       13.2027     -21.028 ppb        13.2027  62.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -10.6     -6.0012 µg/L      13.78200     -6.0012 ppb       13.78200 229.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.5      13.961 µg/L       27.6498      13.961 ppb        27.6498 198.06%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               32.6      0.1048 µg/L       0.02519      0.1048 ppb        0.02519  24.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.0      0.1179 µg/L       0.37112      0.1179 ppb        0.37112 314.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -286.4     -80.776 µg/L        3.9127     -80.776 ppb         3.9127   4.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -8.6     -0.4968 µg/L       0.68135     -0.4968 ppb        0.68135 137.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.7      3.8884 µg/L       3.40610      3.8884 ppb        3.40610  87.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                4.8      1.2745 µg/L       0.86346      1.2745 ppb        0.86346  67.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.2     -27.627 µg/L       12.6179     -27.627 ppb        12.6179  45.67%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -4.4     -4.6239 µg/L       1.70576     -4.6239 ppb        1.70576  36.89%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.2     -3.3300 µg/L       3.67826     -3.3300 ppb        3.67826 110.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     80.3      16.297 µg/L        9.2049      16.297 ppb         9.2049  56.48%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               80.6      6.5738 µg/L       0.58230      6.5738 ppb        0.58230   8.86%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.7     -0.3596 µg/L       1.03265     -0.3596 ppb        1.03265 287.15%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               22.4      0.1294 µg/L       0.08188      0.1294 ppb        0.08188  63.26%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -2.4     -0.0055 µg/L       0.01566     -0.0055 ppb        0.01566 284.80%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.4      2.2097 µg/L       3.27510      2.2097 ppb        3.27510 148.22%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                55.0      5.4859 µg/L       5.76777      5.4859 ppb        5.76777 105.14%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                14.8      0.1853 µg/L       0.19795      0.1853 ppb        0.19795 106.84%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                0.5      0.0188 µg/L       0.08387      0.0188 ppb        0.08387 447.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 42
Sample ID: 241541002|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 331
Date Collected: 12/14/2009 12:39:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541002|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116621.0	116621.0	104	%			12:40:30
1	Al 396.153Radial†	343190.3	329368.6	174080	µg/L	174080	ppb	12:40:30
1	Ca 317.933Radial†	100727.2	96306.1	38854	µg/L	38854	ppb	12:40:30
1	Fe 238.204 Radial†	32811.4	31493.7	167220	µg/L	167220	ppb	12:40:35
1	K 766.490 Radial†	21783.7	20170.2	11379	µg/L	11379	ppb	12:40:35
1	Mg 279.077 IEC†	4793.9	4587.1	25633	µg/L	25633	ppb	12:40:35
1	Na 589.592 Radial†	119809.9	115443.7	32561	µg/L	32561	ppb	12:40:30
1	Sr 421.552†	64199.8	61736.3	356.29	µg/L	356.29	ppb	12:40:30
1	Sc 361.383	2038635.7	2038635.7	101.53	%			12:41:10
1	Y 371.029	1294777.6	1294777.6	105.84	%			12:41:10
1	Ag 328.068†	-1571.8	-1531.8	0.2476	µg/L	0.2476	ppb	12:41:16
1	As 188.979†	35.4	31.8	34.463	µg/L	34.463	ppb	12:41:36
1	B 249.677†	2021.7	1829.4	32.485	µg/L	32.485	ppb	12:41:16
1	Ba 233.527†	28057.4	27706.0	741.62	µg/L	741.62	ppb	12:41:16
1	Be 313.107†	24339.7	20353.1	12.854	µg/L	12.854	ppb	12:41:16
1	Cd 226.502†	402.6	494.1	1.0465	µg/L	1.0465	ppb	12:41:16
1	Co 228.616†	827.2	884.6	42.622	µg/L	42.622	ppb	12:41:36
1	Cr 267.716†	10563.4	10528.1	234.23	µg/L	234.23	ppb	12:41:16
1	Cu 324.752†	13400.6	9889.3	106.57	µg/L	106.57	ppb	12:41:16
1	Mn 257.610†	475812.7	468872.7	1563.7	µg/L	1563.7	ppb	12:41:10
1	Mo 202.031†	-26.5	-21.3	4.0255	µg/L	4.0255	ppb	12:41:36
1	Ni 231.604†	2611.4	2280.9	131.64	µg/L	131.64	ppb	12:41:36
1	P 214.914†	711.6	510.8	994.09	µg/L	994.09	ppb	12:41:36
1	Pb 220.353†	534.0	474.9	138.46	µg/L	138.46	ppb	12:41:36
1	S 181.975 Axial†	166.2	138.0	709.79	µg/L	709.79	ppb	12:41:36
1	Sb 206.836†	26.5	1.9	1.3902	µg/L	1.3902	ppb	12:41:36
1	Se 196.026†	-59.2	-69.1	9.8913	µg/L	9.8913	ppb	12:41:36
1	SiO2†	107044.3	103393.6	20974	µg/L	20974	ppb	12:41:16
1	Si 251.611†	122272.8	120068.9	9726.1	µg/L	9726.1	ppb	12:41:16
1	Sn 189.927†	-105.4	-126.2	-30.914	µg/L	-30.914	ppb	12:41:36
1	Ti 334.940†	490309.6	482104.2	1107.5	µg/L	1107.5	ppb	12:41:10
1	Tl 190.801†	-16.7	3.7	16.850	µg/L	16.850	ppb	12:41:36
1	U 409.014†	374.7	-332.6	-63.469	µg/L	-63.469	ppb	12:41:10
1	V 292.402†	19384.3	19182.0	243.79	µg/L	243.79	ppb	12:41:16
1	Zn 213.857†	11256.8	10558.9	279.07	µg/L	279.07	ppb	12:41:16
2	Sc RADIAL	117982.4	117982.4	105	%			12:40:41
2	Al 396.153Radial†	348451.6	330559.7	174700	µg/L	174700	ppb	12:40:41
2	Ca 317.933Radial†	102302.9	96685.7	39007	µg/L	39007	ppb	12:40:41
2	Fe 238.204 Radial†	32849.3	31166.1	165480	µg/L	165480	ppb	12:40:47
2	K 766.490 Radial†	21886.7	20026.6	11298	µg/L	11298	ppb	12:40:47
2	Mg 279.077 IEC†	4766.1	4507.6	25187	µg/L	25187	ppb	12:40:47
2	Na 589.592 Radial†	121743.0	115951.0	32704	µg/L	32704	ppb	12:40:41
2	Sr 421.552†	65283.6	62053.6	358.12	µg/L	358.12	ppb	12:40:41
2	Sc 361.383	2031977.3	2031977.3	101.20	%			12:41:44
2	Y 371.029	1289981.3	1289981.3	105.45	%			12:41:44
2	Ag 328.068†	-1597.5	-1562.2	-0.1717	µg/L	-0.1717	ppb	12:41:49
2	As 188.979†	40.3	36.7	44.256	µg/L	44.256	ppb	12:42:10
2	B 249.677†	2043.0	1857.0	34.314	µg/L	34.314	ppb	12:41:49
2	Ba 233.527†	28048.2	27787.5	743.81	µg/L	743.81	ppb	12:41:49
2	Be 313.107†	24409.5	20500.7	12.950	µg/L	12.950	ppb	12:41:49
2	Cd 226.502†	386.0	479.0	0.7592	µg/L	0.7592	ppb	12:41:49
2	Co 228.616†	837.1	897.0	43.253	µg/L	43.253	ppb	12:42:10
2	Cr 267.716†	10597.0	10595.3	235.72	µg/L	235.72	ppb	12:41:49
2	Cu 324.752†	13488.3	10019.1	107.12	µg/L	107.12	ppb	12:41:49
2	Mn 257.610†	473436.5	468060.4	1560.8	µg/L	1560.8	ppb	12:41:44
2	Mo 202.031†	-24.6	-19.6	4.1639	µg/L	4.1639	ppb	12:42:10
2	Ni 231.604†	2612.1	2290.0	132.16	µg/L	132.16	ppb	12:42:10
2	P 214.914†	705.6	507.2	988.34	µg/L	988.34	ppb	12:42:10
2	Pb 220.353†	560.1	502.4	145.80	µg/L	145.80	ppb	12:42:10

2	S 181.975 Axial†	165.0	137.4	706.99	µg/L	706.99 ppb	12:42:10
2	Sb 206.836†	34.1	9.5	9.2959	µg/L	9.2959 ppb	12:42:10
2	Se 196.026†	-53.7	-63.9	16.611	µg/L	16.611 ppb	12:42:10
2	SiO2†	107040.9	103735.8	21044	µg/L	21044 ppb	12:41:49
2	Si 251.611†	122451.6	120640.2	9772.6	µg/L	9772.6 ppb	12:41:49
2	Sn 189.927†	-102.1	-123.3	-29.702	µg/L	-29.702 ppb	12:42:10
2	Ti 334.940†	488541.8	481939.8	1107.1	µg/L	1107.1 ppb	12:41:44
2	Tl 190.801†	-25.8	-5.4	2.5433	µg/L	2.5433 ppb	12:42:10
2	U 409.014†	404.8	-301.6	-60.050	µg/L	-60.050 ppb	12:41:44
2	V 292.402†	19401.3	19261.3	244.61	µg/L	244.61 ppb	12:41:49
2	Zn 213.857†	11226.5	10565.3	279.44	µg/L	279.44 ppb	12:41:49
3	Sc RADIAL	116966.0	116966.0	104	%		12:40:52
3	Al 396.153Radial†	346492.0	331557.6	175230	µg/L	175230 ppb	12:40:52
3	Ca 317.933Radial†	101293.4	96562.9	38958	µg/L	38958 ppb	12:40:52
3	Fe 238.204 Radial†	32807.8	31397.3	166710	µg/L	166710 ppb	12:40:58
3	K 766.490 Radial†	21880.2	20200.9	11396	µg/L	11396 ppb	12:40:58
3	Mg 279.077 IEC†	4790.3	4570.1	25538	µg/L	25538 ppb	12:40:58
3	Na 589.592 Radial†	120911.5	116159.0	32763	µg/L	32763 ppb	12:40:52
3	Sr 421.552†	64766.9	62097.4	358.37	µg/L	358.37 ppb	12:40:52
3	Sc 361.383	2020191.4	2020191.4	100.62	%		12:42:18
3	Y 371.029	1283660.4	1283660.4	104.93	%		12:42:18
3	Ag 328.068†	-1532.8	-1507.2	0.4782	µg/L	0.4782 ppb	12:42:23
3	As 188.979†	33.5	30.1	31.302	µg/L	31.302 ppb	12:42:44
3	B 249.677†	2010.0	1835.9	32.950	µg/L	32.950 ppb	12:42:23
3	Ba 233.527†	28423.3	28321.9	758.11	µg/L	758.11 ppb	12:42:23
3	Be 313.107†	24567.9	20798.8	13.144	µg/L	13.144 ppb	12:42:23
3	Cd 226.502†	382.9	478.1	0.6479	µg/L	0.6479 ppb	12:42:23
3	Co 228.616†	841.6	906.3	43.730	µg/L	43.730 ppb	12:42:44
3	Cr 267.716†	10715.8	10774.5	239.71	µg/L	239.71 ppb	12:42:23
3	Cu 324.752†	13589.0	10197.0	108.66	µg/L	108.66 ppb	12:42:23
3	Mn 257.610†	470828.1	468197.2	1561.4	µg/L	1561.4 ppb	12:42:18
3	Mo 202.031†	-16.9	-12.0	5.1168	µg/L	5.1168 ppb	12:42:44
3	Ni 231.604†	2635.3	2328.2	134.37	µg/L	134.37 ppb	12:42:44
3	P 214.914†	717.5	523.1	1022.2	µg/L	1022.2 ppb	12:42:44
3	Pb 220.353†	544.7	490.3	142.63	µg/L	142.63 ppb	12:42:44
3	S 181.975 Axial†	165.3	138.6	713.18	µg/L	713.18 ppb	12:42:44
3	Sb 206.836†	25.8	1.4	0.8588	µg/L	0.8588 ppb	12:42:44
3	Se 196.026†	-73.9	-84.3	-12.788	µg/L	-12.788 ppb	12:42:44
3	SiO2†	108299.2	105603.4	21422	µg/L	21422 ppb	12:42:23
3	Si 251.611†	123881.1	122766.9	9945.6	µg/L	9945.6 ppb	12:42:23
3	Sn 189.927†	-104.8	-126.5	-31.133	µg/L	-31.133 ppb	12:42:44
3	Ti 334.940†	485981.4	482211.4	1107.8	µg/L	1107.8 ppb	12:42:18
3	Tl 190.801†	-20.4	-0.1	10.868	µg/L	10.868 ppb	12:42:44
3	U 409.014†	475.5	-229.0	-53.043	µg/L	-53.043 ppb	12:42:18
3	V 292.402†	19664.6	19634.9	249.21	µg/L	249.21 ppb	12:42:23
3	Zn 213.857†	11385.4	10787.9	285.58	µg/L	285.58 ppb	12:42:23

Mean Data: 241541002|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030268.1	101.12	%	0.465				0.46%
Sc RADIAL	117189.8	105	%	0.6				0.60%
Y 371.029	1289473.1	105.40	%	0.456				0.43%
Ag 328.068†	-1533.7	0.1847	µg/L	0.32948	0.1847	ppb	0.32948	178.37%
Al 396.153Radial†	330495.3	174670	µg/L	579.2	174670	ppb	579.2	0.33%
As 188.979†	32.8	36.673	µg/L	6.7539	36.673	ppb	6.7539	18.42%
B 249.677†	1840.8	33.250	µg/L	0.9505	33.250	ppb	0.9505	2.86%
Ba 233.527†	27938.5	747.85	µg/L	8.956	747.85	ppb	8.956	1.20%
Be 313.107†	20550.9	12.983	µg/L	0.1479	12.983	ppb	0.1479	1.14%
Ca 317.933Radial†	96518.3	38940	µg/L	78.1	38940	ppb	78.1	0.20%
Cd 226.502†	483.7	0.8178	µg/L	0.20567	0.8178	ppb	0.20567	25.15%
Co 228.616†	895.9	43.202	µg/L	0.5555	43.202	ppb	0.5555	1.29%
Cr 267.716†	10632.6	236.56	µg/L	2.834	236.56	ppb	2.834	1.20%
Cu 324.752†	10035.1	107.45	µg/L	1.082	107.45	ppb	1.082	1.01%
Fe 238.204 Radial†	31352.4	166470	µg/L	893.8	166470	ppb	893.8	0.54%
K 766.490 Radial†	20132.5	11358	µg/L	52.5	11358	ppb	52.5	0.46%
Mg 279.077 IEC†	4554.9	25452	µg/L	234.9	25452	ppb	234.9	0.92%
Mn 257.610†	468376.8	1562.0	µg/L	1.53	1562.0	ppb	1.53	0.10%
Mo 202.031†	-17.6	4.4354	µg/L	0.59410	4.4354	ppb	0.59410	13.39%
Na 589.592 Radial†	115851.2	32676	µg/L	103.8	32676	ppb	103.8	0.32%

Ni 231.604†	2299.7	132.72	µg/L	1.447	132.72	ppb	1.447	1.09%
P 214.914†	513.7	1001.6	µg/L	18.13	1001.6	ppb	18.13	1.81%
Pb 220.353†	489.2	142.30	µg/L	3.679	142.30	ppb	3.679	2.59%
S 181.975 Axial†	138.0	709.99	µg/L	3.101	709.99	ppb	3.101	0.44%
Sb 206.836†	4.3	3.8483	µg/L	4.72523	3.8483	ppb	4.72523	122.79%
Se 196.026†	-72.4	4.5712	µg/L	15.40453	4.5712	ppb	15.40453	336.99%
SiO2†	104244.3	21147	µg/L	241.3	21147	ppb	241.3	1.14%
Si 251.611†	121158.7	9814.8	µg/L	115.65	9814.8	ppb	115.65	1.18%
Sn 189.927†	-125.3	-30.583	µg/L	0.7707	-30.583	ppb	0.7707	2.52%
Sr 421.552†	61962.4	357.59	µg/L	1.137	357.59	ppb	1.137	0.32%
Ti 334.940†	482085.1	1107.5	µg/L	0.32	1107.5	ppb	0.32	0.03%
Tl 190.801†	-0.6	10.087	µg/L	7.1853	10.087	ppb	7.1853	71.23%
U 409.014†	-287.7	-58.854	µg/L	5.3148	-58.854	ppb	5.3148	9.03%
V 292.402†	19359.4	245.87	µg/L	2.922	245.87	ppb	2.922	1.19%
Zn 213.857†	10637.4	281.36	µg/L	3.656	281.36	ppb	3.656	1.30%

Sequence No.: 43
Sample ID: 241541003|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 332
Date Collected: 12/14/2009 12:42:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541003|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114617.9	114617.9	102	%			12:43:25
1	Al 396.153Radial†	144061.9	140582.0	74299	µg/L	74299	ppb	12:43:25
1	Ca 317.933Radial†	97103.7	94456.3	38108	µg/L	38108	ppb	12:43:25
1	Fe 238.204 Radial†	25359.0	24763.5	131490	µg/L	131490	ppb	12:43:46
1	K 766.490 Radial†	16396.5	15272.5	8615.9	µg/L	8615.9	ppb	12:43:25
1	Mg 279.077 IEC†	2814.1	2733.3	15227	µg/L	15227	ppb	12:43:46
1	Na 589.592 Radial†	12928.8	13032.9	3675.9	µg/L	3675.9	ppb	12:43:25
1	Sr 421.552†	40437.7	39598.4	228.53	µg/L	228.53	ppb	12:43:25
1	Sc 361.383	2010806.8	2010806.8	100.15	%			12:44:50
1	Y 371.029	1258976.2	1258976.2	102.91	%			12:44:50
1	Ag 328.068†	-1217.0	-1199.0	0.1561	µg/L	0.1561	ppb	12:44:56
1	As 188.979†	24.2	21.1	24.660	µg/L	24.660	ppb	12:45:16
1	B 249.677†	1827.4	1662.9	35.981	µg/L	35.981	ppb	12:44:56
1	Ba 233.527†	30973.6	31000.3	829.62	µg/L	829.62	ppb	12:44:56
1	Be 313.107†	16641.7	12998.3	7.2848	µg/L	7.2848	ppb	12:44:56
1	Cd 226.502†	319.1	416.2	1.5270	µg/L	1.5270	ppb	12:45:16
1	Co 228.616†	629.7	698.6	28.822	µg/L	28.822	ppb	12:45:16
1	Cr 267.716†	2798.5	2918.6	65.177	µg/L	65.177	ppb	12:45:16
1	Cu 324.752†	7197.1	3877.5	55.945	µg/L	55.945	ppb	12:44:56
1	Mn 257.610†	631485.8	630801.7	2092.0	µg/L	2092.0	ppb	12:44:50
1	Mo 202.031†	71.2	75.9	14.229	µg/L	14.229	ppb	12:45:16
1	Ni 231.604†	1150.6	857.9	49.511	µg/L	49.511	ppb	12:45:16
1	P 214.914†	836.7	645.4	1304.4	µg/L	1304.4	ppb	12:45:16
1	Pb 220.353†	877.7	825.5	222.92	µg/L	222.92	ppb	12:45:16
1	S 181.975 Axial†	202.8	176.8	924.17	µg/L	924.17	ppb	12:45:16
1	Sb 206.836†	33.6	9.4	17.943	µg/L	17.943	ppb	12:45:16
1	Se 196.026†	-46.0	-56.7	7.3243	µg/L	7.3243	ppb	12:45:16
1	SiO2†	164047.5	161771.8	32817	µg/L	32817	ppb	12:44:50
1	Si 251.611†	187824.9	187190.9	15112	µg/L	15112	ppb	12:44:50
1	Sn 189.927†	-86.0	-108.3	-28.251	µg/L	-28.251	ppb	12:45:16
1	Ti 334.940†	1395347.2	1392489.4	3203.1	µg/L	3203.1	ppb	12:44:50
1	Tl 190.801†	-33.5	-13.4	5.6628	µg/L	5.6628	ppb	12:45:16
1	U 409.014†	227.3	-474.6	-70.984	µg/L	-70.984	ppb	12:44:50
1	V 292.402†	13911.8	13981.7	178.52	µg/L	178.52	ppb	12:44:56
1	Zn 213.857†	16504.2	15952.0	436.04	µg/L	436.04	ppb	12:44:56
2	Sc RADIAL	115864.3	115864.3	103	%			12:43:51
2	Al 396.153Radial†	144780.9	139762.7	73866	µg/L	73866	ppb	12:43:51
2	Ca 317.933Radial†	97666.0	93979.2	37915	µg/L	37915	ppb	12:43:51
2	Fe 238.204 Radial†	25517.3	24649.9	130880	µg/L	130880	ppb	12:44:12
2	K 766.490 Radial†	16580.7	15278.2	8619.1	µg/L	8619.1	ppb	12:43:51
2	Mg 279.077 IEC†	2824.7	2714.0	15119	µg/L	15119	ppb	12:44:12
2	Na 589.592 Radial†	13076.2	13039.5	3677.8	µg/L	3677.8	ppb	12:43:51
2	Sr 421.552†	40628.0	39357.3	227.14	µg/L	227.14	ppb	12:43:51
2	Sc 361.383	2019277.5	2019277.5	100.57	%			12:45:24
2	Y 371.029	1264659.0	1264659.0	103.38	%			12:45:24
2	Ag 328.068†	-1282.8	-1259.3	-0.4634	µg/L	-0.4634	ppb	12:45:30
2	As 188.979†	26.2	22.9	28.286	µg/L	28.286	ppb	12:45:50
2	B 249.677†	1841.1	1668.9	36.451	µg/L	36.451	ppb	12:45:30
2	Ba 233.527†	31142.7	31038.7	830.64	µg/L	830.64	ppb	12:45:30
2	Be 313.107†	16672.2	12958.9	7.2645	µg/L	7.2645	ppb	12:45:30
2	Cd 226.502†	302.8	398.6	1.0801	µg/L	1.0801	ppb	12:45:50
2	Co 228.616†	626.8	693.1	28.570	µg/L	28.570	ppb	12:45:50
2	Cr 267.716†	2789.1	2897.5	64.710	µg/L	64.710	ppb	12:45:50
2	Cu 324.752†	7245.9	3895.9	55.947	µg/L	55.947	ppb	12:45:30
2	Mn 257.610†	631397.8	628069.1	2083.0	µg/L	2083.0	ppb	12:45:24
2	Mo 202.031†	62.4	66.8	13.118	µg/L	13.118	ppb	12:45:50
2	Ni 231.604†	1135.5	838.0	48.363	µg/L	48.363	ppb	12:45:50
2	P 214.914†	829.6	634.9	1281.4	µg/L	1281.4	ppb	12:45:50
2	Pb 220.353†	879.5	823.5	222.36	µg/L	222.36	ppb	12:45:50

2	S 181.975 Axial†	193.2	166.4	869.06 µg/L	869.06 ppb		12:45:50
2	Sb 206.836†	29.8	5.5	13.777 µg/L	13.777 ppb		12:45:50
2	Se 196.026†	-47.4	-57.9	5.2002 µg/L	5.2002 ppb		12:45:50
2	SiO2†	163991.3	161028.8	32666 µg/L	32666 ppb		12:45:24
2	Si 251.611†	187874.9	186453.9	15052 µg/L	15052 ppb		12:45:24
2	Sn 189.927†	-95.4	-117.2	-32.935 µg/L	-32.935 ppb		12:45:50
2	Ti 334.940†	1394802.3	1386102.8	3188.4 µg/L	3188.4 ppb		12:45:24
2	Tl 190.801†	-32.0	-11.7	8.1672 µg/L	8.1672 ppb		12:45:50
2	U 409.014†	246.6	-456.4	-69.054 µg/L	-69.054 ppb		12:45:24
2	V 292.402†	13965.5	13976.9	178.41 µg/L	178.41 ppb		12:45:30
2	Zn 213.857†	16644.2	16022.1	438.09 µg/L	438.09 ppb		12:45:30
3	Sc RADIAL	115072.2	115072.2	103 %			12:44:17
3	Al 396.153Radial†	144000.8	139966.9	73974 µg/L	73974 ppb		12:44:17
3	Ca 317.933Radial†	96580.7	93572.8	37751 µg/L	37751 ppb		12:44:17
3	Fe 238.204 Radial†	25479.2	24782.5	131590 µg/L	131590 ppb		12:44:38
3	K 766.490 Radial†	16357.9	15171.7	8559.0 µg/L	8559.0 ppb		12:44:17
3	Mg 279.077 IEC†	2825.5	2733.6	15228 µg/L	15228 ppb		12:44:38
3	Na 589.592 Radial†	13026.8	13078.4	3688.8 µg/L	3688.8 ppb		12:44:17
3	Sr 421.552†	40374.9	39381.3	227.28 µg/L	227.28 ppb		12:44:17
3	Sc 361.383	2010411.0	2010411.0	100.13 %			12:45:58
3	Y 371.029	1258879.6	1258879.6	102.90 %			12:45:58
3	Ag 328.068†	-1282.7	-1264.8	-0.4573 µg/L	-0.4573 ppb		12:46:04
3	As 188.979†	25.4	22.2	26.892 µg/L	26.892 ppb		12:46:24
3	B 249.677†	1881.3	1717.1	38.471 µg/L	38.471 ppb		12:46:04
3	Ba 233.527†	31053.6	31086.3	831.92 µg/L	831.92 ppb		12:46:04
3	Be 313.107†	16570.1	12930.0	7.2430 µg/L	7.2430 ppb		12:46:04
3	Cd 226.502†	322.5	419.7	1.6157 µg/L	1.6157 ppb		12:46:24
3	Co 228.616†	634.3	703.3	29.073 µg/L	29.073 ppb		12:46:24
3	Cr 267.716†	2797.4	2918.1	65.166 µg/L	65.166 ppb		12:46:24
3	Cu 324.752†	7179.1	3860.9	55.848 µg/L	55.848 ppb		12:46:04
3	Mn 257.610†	629956.6	629398.6	2087.4 µg/L	2087.4 ppb		12:45:58
3	Mo 202.031†	61.8	66.4	13.104 µg/L	13.104 ppb		12:46:24
3	Ni 231.604†	1140.4	847.9	48.932 µg/L	48.932 ppb		12:46:24
3	P 214.914†	823.9	632.9	1276.1 µg/L	1276.1 ppb		12:46:24
3	Pb 220.353†	877.0	824.9	222.73 µg/L	222.73 ppb		12:46:24
3	S 181.975 Axial†	199.5	173.6	907.14 µg/L	907.14 ppb		12:46:24
3	Sb 206.836†	28.8	4.6	12.897 µg/L	12.897 ppb		12:46:24
3	Se 196.026†	-50.9	-61.6	0.1738 µg/L	0.1738 ppb		12:46:24
3	SiO2†	163569.6	161326.8	32726 µg/L	32726 ppb		12:45:58
3	Si 251.611†	187269.6	186673.3	15070 µg/L	15070 ppb		12:45:58
3	Sn 189.927†	-93.8	-116.1	-32.277 µg/L	-32.277 ppb		12:46:24
3	Ti 334.940†	1391933.5	1389354.4	3195.9 µg/L	3195.9 ppb		12:45:58
3	Tl 190.801†	-23.6	-3.4	21.308 µg/L	21.308 ppb		12:46:24
3	U 409.014†	207.0	-494.9	-73.036 µg/L	-73.036 ppb		12:45:58
3	V 292.402†	13940.1	14012.8	178.89 µg/L	178.89 ppb		12:46:04
3	Zn 213.857†	16505.4	15956.5	436.16 µg/L	436.16 ppb		12:46:04

Mean Data: 241541003|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2013498.4	100.28	%	0.249				0.25%
Sc RADIAL	115184.8	103	%	0.6				0.55%
Y 371.029	1260838.2	103.06	%	0.271				0.26%
Ag 328.068†	-1241.0	-0.2549	µg/L	0.35593	-0.2549	ppb	0.35593	139.66%
Al 396.153Radial†	140103.9	74046	µg/L	225.4	74046	ppb	225.4	0.30%
As 188.979†	22.0	26.613	µg/L	1.8287	26.613	ppb	1.8287	6.87%
B 249.677†	1683.0	36.968	µg/L	1.3228	36.968	ppb	1.3228	3.58%
Ba 233.527†	31041.8	830.73	µg/L	1.153	830.73	ppb	1.153	0.14%
Be 313.107†	12962.4	7.2641	µg/L	0.02092	7.2641	ppb	0.02092	0.29%
Ca 317.933Radial†	94002.8	37925	µg/L	178.4	37925	ppb	178.4	0.47%
Cd 226.502†	411.5	1.4076	µg/L	0.28709	1.4076	ppb	0.28709	20.40%
Co 228.616†	698.3	28.822	µg/L	0.2514	28.822	ppb	0.2514	0.87%
Cr 267.716†	2911.4	65.018	µg/L	0.2669	65.018	ppb	0.2669	0.41%
Cu 324.752†	3878.1	55.913	µg/L	0.0564	55.913	ppb	0.0564	0.10%
Fe 238.204 Radial†	24732.0	131320	µg/L	380.8	131320	ppb	380.8	0.29%
K 766.490 Radial†	15240.8	8598.0	µg/L	33.80	8598.0	ppb	33.80	0.39%
Mg 279.077 IEC†	2727.0	15191	µg/L	62.8	15191	ppb	62.8	0.41%
Mn 257.610†	629423.1	2087.5	µg/L	4.53	2087.5	ppb	4.53	0.22%
Mo 202.031†	69.7	13.484	µg/L	0.6456	13.484	ppb	0.6456	4.79%
Na 589.592 Radial†	13050.3	3680.8	µg/L	6.94	3680.8	ppb	6.94	0.19%

Ni 231.604†	847.9	48.935	µg/L	0.5736	48.935	ppb	0.5736	1.17%
P 214.914†	637.7	1287.3	µg/L	15.02	1287.3	ppb	15.02	1.17%
Pb 220.353†	824.6	222.67	µg/L	0.282	222.67	ppb	0.282	0.13%
S 181.975 Axial†	172.3	900.12	µg/L	28.220	900.12	ppb	28.220	3.14%
Sb 206.836†	6.5	14.872	µg/L	2.6955	14.872	ppb	2.6955	18.12%
Se 196.026†	-58.7	4.2328	µg/L	3.67210	4.2328	ppb	3.67210	86.75%
SiO2†	161375.8	32736	µg/L	75.9	32736	ppb	75.9	0.23%
Si 251.611†	186772.7	15078	µg/L	30.4	15078	ppb	30.4	0.20%
Sn 189.927†	-113.9	-31.154	µg/L	2.5360	-31.154	ppb	2.5360	8.14%
Sr 421.552†	39445.7	227.65	µg/L	0.767	227.65	ppb	0.767	0.34%
Ti 334.940†	1389315.5	3195.8	µg/L	7.35	3195.8	ppb	7.35	0.23%
Tl 190.801†	-9.5	11.713	µg/L	8.4036	11.713	ppb	8.4036	71.75%
U 409.014†	-475.3	-71.025	µg/L	1.9911	-71.025	ppb	1.9911	2.80%
V 292.402†	13990.5	178.61	µg/L	0.252	178.61	ppb	0.252	0.14%
Zn 213.857†	15976.9	436.76	µg/L	1.152	436.76	ppb	1.152	0.26%

Sequence No.: 44
Sample ID: 241541004|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 333
Date Collected: 12/14/2009 12:46:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541004|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116391.8	116391.8	104	%			12:47:06
1	Al 396.153Radial†	146763.5	141036.1	74539	µg/L	74539	ppb	12:47:06
1	Ca 317.933Radial†	61679.2	58928.7	23774	µg/L	23774	ppb	12:47:06
1	Fe 238.204 Radial†	25738.8	24751.2	131420	µg/L	131420	ppb	12:47:26
1	K 766.490 Radial†	17009.3	15617.9	8810.7	µg/L	8810.7	ppb	12:47:06
1	Mg 279.077 IEC†	2811.2	2688.6	14975	µg/L	14975	ppb	12:47:26
1	Na 589.592 Radial†	13342.0	13238.0	3733.8	µg/L	3733.8	ppb	12:47:06
1	Sr 421.552†	38753.5	37375.8	215.70	µg/L	215.70	ppb	12:47:06
1	Sc 361.383	2042796.2	2042796.2	101.74	%			12:48:31
1	Y 371.029	1273219.8	1273219.8	104.07	%			12:48:31
1	Ag 328.068†	-1287.8	-1249.5	-0.0287	µg/L	-0.0287	ppb	12:48:37
1	As 188.979†	23.4	19.9	25.276	µg/L	25.276	ppb	12:48:57
1	B 249.677†	1791.3	1598.9	33.023	µg/L	33.023	ppb	12:48:37
1	Ba 233.527†	35967.1	35424.1	948.05	µg/L	948.05	ppb	12:48:37
1	Be 313.107†	17202.9	13289.6	7.3697	µg/L	7.3697	ppb	12:48:37
1	Cd 226.502†	319.5	411.7	1.4180	µg/L	1.4180	ppb	12:48:57
1	Co 228.616†	1086.5	1137.7	50.535	µg/L	50.535	ppb	12:48:57
1	Cr 267.716†	3480.9	3545.5	79.196	µg/L	79.196	ppb	12:48:37
1	Cu 324.752†	6620.5	3198.3	51.078	µg/L	51.078	ppb	12:48:37
1	Mn 257.610†	1164459.9	1144781.2	3783.1	µg/L	3783.1	ppb	12:48:31
1	Mo 202.031†	39.2	43.3	10.331	µg/L	10.331	ppb	12:48:57
1	Ni 231.604†	1230.9	918.8	53.024	µg/L	53.024	ppb	12:48:57
1	P 214.914†	807.2	603.4	1211.7	µg/L	1211.7	ppb	12:48:57
1	Pb 220.353†	761.9	697.8	189.21	µg/L	189.21	ppb	12:48:57
1	S 181.975 Axial†	193.7	164.7	859.52	µg/L	859.52	ppb	12:48:57
1	Sb 206.836†	21.0	-3.6	6.7161	µg/L	6.7161	ppb	12:48:57
1	Se 196.026†	-39.1	-49.2	16.523	µg/L	16.523	ppb	12:48:57
1	SiO2†	183575.7	178400.7	36190	µg/L	36190	ppb	12:48:31
1	Si 251.611†	210380.3	206423.4	16666	µg/L	16666	ppb	12:48:31
1	Sn 189.927†	-81.1	-102.0	-28.284	µg/L	-28.284	ppb	12:48:57
1	Ti 334.940†	1542893.4	1515692.4	3487.5	µg/L	3487.5	ppb	12:48:31
1	Tl 190.801†	-31.6	-11.0	20.239	µg/L	20.239	ppb	12:48:57
1	U 409.014†	373.3	-334.7	-57.352	µg/L	-57.352	ppb	12:48:31
1	V 292.402†	17839.8	17625.0	222.24	µg/L	222.24	ppb	12:48:37
1	Zn 213.857†	13361.3	12604.8	341.46	µg/L	341.46	ppb	12:48:37
2	Sc RADIAL	115498.4	115498.4	103	%			12:47:32
2	Al 396.153Radial†	145308.3	140717.4	74370	µg/L	74370	ppb	12:47:32
2	Ca 317.933Radial†	60514.6	58258.5	23504	µg/L	23504	ppb	12:47:32
2	Fe 238.204 Radial†	25723.4	24927.8	132360	µg/L	132360	ppb	12:47:52
2	K 766.490 Radial†	16918.7	15656.7	8832.6	µg/L	8832.6	ppb	12:47:32
2	Mg 279.077 IEC†	2797.0	2695.8	15014	µg/L	15014	ppb	12:47:52
2	Na 589.592 Radial†	13146.1	13147.3	3708.2	µg/L	3708.2	ppb	12:47:32
2	Sr 421.552†	38239.0	37165.5	214.49	µg/L	214.49	ppb	12:47:32
2	Sc 361.383	2037504.2	2037504.2	101.48	%			12:49:05
2	Y 371.029	1269783.4	1269783.4	103.79	%			12:49:05
2	Ag 328.068†	-1205.5	-1171.7	0.7972	µg/L	0.7972	ppb	12:49:11
2	As 188.979†	22.6	19.2	23.811	µg/L	23.811	ppb	12:49:31
2	B 249.677†	1801.7	1613.7	33.418	µg/L	33.418	ppb	12:49:11
2	Ba 233.527†	36115.4	35662.0	954.41	µg/L	954.41	ppb	12:49:11
2	Be 313.107†	17130.3	13262.1	7.3575	µg/L	7.3575	ppb	12:49:11
2	Cd 226.502†	314.5	407.5	1.2291	µg/L	1.2291	ppb	12:49:31
2	Co 228.616†	1098.5	1152.4	51.312	µg/L	51.312	ppb	12:49:31
2	Cr 267.716†	3492.0	3565.4	79.641	µg/L	79.641	ppb	12:49:11
2	Cu 324.752†	6640.0	3234.4	51.538	µg/L	51.538	ppb	12:49:11
2	Mn 257.610†	1155935.8	1139353.8	3765.4	µg/L	3765.4	ppb	12:49:05
2	Mo 202.031†	45.4	49.5	11.108	µg/L	11.108	ppb	12:49:31
2	Ni 231.604†	1225.0	916.1	52.872	µg/L	52.872	ppb	12:49:31
2	P 214.914†	800.7	599.0	1200.7	µg/L	1200.7	ppb	12:49:31
2	Pb 220.353†	778.5	716.2	194.03	µg/L	194.03	ppb	12:49:31

2	S 181.975 Axial†	189.7	161.2	840.90	µg/L	840.90 ppb	12:49:31
2	Sb 206.836†	19.2	-5.3	4.8945	µg/L	4.8945 ppb	12:49:31
2	Se 196.026†	-38.8	-49.0	17.463	µg/L	17.463 ppb	12:49:31
2	SiO2†	182367.2	177678.4	36043	µg/L	36043 ppb	12:49:05
2	Si 251.611†	209067.3	205666.6	16605	µg/L	16605 ppb	12:49:05
2	Sn 189.927†	-84.9	-106.0	-30.239	µg/L	-30.239 ppb	12:49:31
2	Ti 334.940†	1532029.4	1508925.3	3471.9	µg/L	3471.9 ppb	12:49:05
2	Tl 190.801†	-40.6	-19.9	6.0570	µg/L	6.0570 ppb	12:49:31
2	U 409.014†	390.6	-316.7	-55.742	µg/L	-55.742 ppb	12:49:05
2	V 292.402†	17961.8	17790.8	224.31	µg/L	224.31 ppb	12:49:11
2	Zn 213.857†	13388.5	12665.7	343.08	µg/L	343.08 ppb	12:49:11
3	Sc RADIAL	117200.8	117200.8	105	%		12:47:58
3	Al 396.153Radial†	147169.5	140449.3	74229	µg/L	74229 ppb	12:47:58
3	Ca 317.933Radial†	61647.0	58488.4	23597	µg/L	23597 ppb	12:47:58
3	Fe 238.204 Radial†	25682.6	24526.6	130230	µg/L	130230 ppb	12:48:18
3	K 766.490 Radial†	17065.1	15558.3	8777.1	µg/L	8777.1 ppb	12:47:58
3	Mg 279.077 IEC†	2800.7	2659.9	14815	µg/L	14815 ppb	12:48:18
3	Na 589.592 Radial†	13387.0	13192.3	3720.9	µg/L	3720.9 ppb	12:47:58
3	Sr 421.552†	38840.3	37201.5	214.70	µg/L	214.70 ppb	12:47:58
3	Sc 361.383	2036397.1	2036397.1	101.42	%		12:49:39
3	Y 371.029	1269588.1	1269588.1	103.78	%		12:49:39
3	Ag 328.068†	-1258.1	-1224.2	0.1278	µg/L	0.1278 ppb	12:49:45
3	As 188.979†	32.4	28.8	42.918	µg/L	42.918 ppb	12:50:05
3	B 249.677†	1788.3	1601.4	33.518	µg/L	33.518 ppb	12:49:45
3	Ba 233.527†	36050.6	35617.5	953.22	µg/L	953.22 ppb	12:49:45
3	Be 313.107†	17155.0	13295.6	7.3735	µg/L	7.3735 ppb	12:49:45
3	Cd 226.502†	319.9	413.0	1.5545	µg/L	1.5545 ppb	12:50:05
3	Co 228.616†	1088.3	1142.9	50.797	µg/L	50.797 ppb	12:50:05
3	Cr 267.716†	3472.7	3548.3	79.260	µg/L	79.260 ppb	12:49:45
3	Cu 324.752†	6519.0	3118.6	50.253	µg/L	50.253 ppb	12:49:45
3	Mn 257.610†	1159873.3	1143855.4	3780.0	µg/L	3780.0 ppb	12:49:39
3	Mo 202.031†	42.8	46.9	10.720	µg/L	10.720 ppb	12:50:05
3	Ni 231.604†	1238.1	929.7	53.655	µg/L	53.655 ppb	12:50:05
3	P 214.914†	811.1	609.7	1227.1	µg/L	1227.1 ppb	12:50:05
3	Pb 220.353†	761.7	700.0	189.77	µg/L	189.77 ppb	12:50:05
3	S 181.975 Axial†	199.8	171.3	894.97	µg/L	894.97 ppb	12:50:05
3	Sb 206.836†	25.4	0.9	11.376	µg/L	11.376 ppb	12:50:05
3	Se 196.026†	-47.8	-57.9	2.9192	µg/L	2.9192 ppb	12:50:05
3	SiO2†	182709.3	178113.5	36132	µg/L	36132 ppb	12:49:39
3	Si 251.611†	209661.2	206364.2	16661	µg/L	16661 ppb	12:49:39
3	Sn 189.927†	-81.0	-102.2	-28.576	µg/L	-28.576 ppb	12:50:05
3	Ti 334.940†	1538179.1	1515809.6	3487.8	µg/L	3487.8 ppb	12:49:39
3	Tl 190.801†	-38.3	-17.7	9.7884	µg/L	9.7884 ppb	12:50:05
3	U 409.014†	471.3	-236.9	-47.386	µg/L	-47.386 ppb	12:49:39
3	V 292.402†	17910.4	17749.8	223.66	µg/L	223.66 ppb	12:49:45
3	Zn 213.857†	13319.0	12604.4	341.58	µg/L	341.58 ppb	12:49:45

Mean Data: 241541004|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2038899.2	101.55	%	0.170				0.17%
Sc RADIAL	116363.7	104	%	0.8				0.73%
Y 371.029	1270863.8	103.88	%	0.167				0.16%
Ag 328.068†	-1215.1	0.2988	µg/L	0.43868	0.2988	ppb	0.43868	146.83%
Al 396.153Radial†	140734.3	74379	µg/L	155.2	74379	ppb	155.2	0.21%
As 188.979†	22.6	30.668	µg/L	10.6338	30.668	ppb	10.6338	34.67%
B 249.677†	1604.7	33.320	µg/L	0.2614	33.320	ppb	0.2614	0.78%
Ba 233.527†	35567.8	951.89	µg/L	3.385	951.89	ppb	3.385	0.36%
Be 313.107†	13282.5	7.3669	µg/L	0.00835	7.3669	ppb	0.00835	0.11%
Ca 317.933Radial†	58558.5	23625	µg/L	137.4	23625	ppb	137.4	0.58%
Cd 226.502†	410.7	1.4005	µg/L	0.16339	1.4005	ppb	0.16339	11.67%
Co 228.616†	1144.3	50.881	µg/L	0.3955	50.881	ppb	0.3955	0.78%
Cr 267.716†	3553.1	79.365	µg/L	0.2405	79.365	ppb	0.2405	0.30%
Cu 324.752†	3183.8	50.956	µg/L	0.6509	50.956	ppb	0.6509	1.28%
Fe 238.204 Radial†	24735.2	131340	µg/L	1067.8	131340	ppb	1067.8	0.81%
K 766.490 Radial†	15611.0	8806.8	µg/L	27.96	8806.8	ppb	27.96	0.32%
Mg 279.077 IEC†	2681.4	14934	µg/L	105.6	14934	ppb	105.6	0.71%
Mn 257.610†	1142663.5	3776.2	µg/L	9.46	3776.2	ppb	9.46	0.25%
Mo 202.031†	46.5	10.720	µg/L	0.3887	10.720	ppb	0.3887	3.63%
Na 589.592 Radial†	13192.5	3721.0	µg/L	12.79	3721.0	ppb	12.79	0.34%

Ni 231.604†	921.5	53.184	µg/L	0.4152	53.184	ppb	0.4152	0.78%
P 214.914†	604.1	1213.1	µg/L	13.26	1213.1	ppb	13.26	1.09%
Pb 220.353†	704.7	191.00	µg/L	2.633	191.00	ppb	2.633	1.38%
S 181.975 Axial†	165.7	865.13	µg/L	27.467	865.13	ppb	27.467	3.17%
Sb 206.836†	-2.6	7.6622	µg/L	3.34265	7.6622	ppb	3.34265	43.63%
Se 196.026†	-52.0	12.302	µg/L	8.1391	12.302	ppb	8.1391	66.16%
SiO2†	178064.2	36122	µg/L	73.8	36122	ppb	73.8	0.20%
Si 251.611†	206151.4	16644	µg/L	33.9	16644	ppb	33.9	0.20%
Sn 189.927†	-103.4	-29.033	µg/L	1.0544	-29.033	ppb	1.0544	3.63%
Sr 421.552†	37247.6	214.96	µg/L	0.649	214.96	ppb	0.649	0.30%
Ti 334.940†	1513475.8	3482.4	µg/L	9.07	3482.4	ppb	9.07	0.26%
Tl 190.801†	-16.2	12.028	µg/L	7.3516	12.028	ppb	7.3516	61.12%
U 409.014†	-296.1	-53.494	µg/L	5.3500	-53.494	ppb	5.3500	10.00%
V 292.402†	17721.9	223.40	µg/L	1.061	223.40	ppb	1.061	0.47%
Zn 213.857†	12625.0	342.04	µg/L	0.904	342.04	ppb	0.904	0.26%

Sequence No.: 45
Sample ID: 241541005|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 334
Date Collected: 12/14/2009 12:50:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541005|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115663.1	115663.1	103	%			12:50:47
1	Al 396.153Radial†	92136.1	89037.7	47057	µg/L	47057	ppb	12:50:47
1	Ca 317.933Radial†	44516.2	42686.1	17221	µg/L	17221	ppb	12:50:47
1	Fe 238.204 Radial†	19993.9	19345.3	102720	µg/L	102720	ppb	12:51:08
1	K 766.490 Radial†	18950.2	17600.1	9928.9	µg/L	9928.9	ppb	12:50:47
1	Mg 279.077 IEC†	2555.6	2458.2	13717	µg/L	13717	ppb	12:51:08
1	Na 589.592 Radial†	47561.0	46448.2	13101	µg/L	13101	ppb	12:50:47
1	Sr 421.552†	27625.6	26837.3	154.88	µg/L	154.88	ppb	12:50:47
1	Sc 361.383	2042445.9	2042445.9	101.72	%			12:52:12
1	Y 371.029	1263428.1	1263428.1	103.27	%			12:52:12
1	Ag 328.068†	-1023.8	-990.2	0.3900	µg/L	0.3900	ppb	12:52:18
1	As 188.979†	14.5	11.1	13.122	µg/L	13.122	ppb	12:52:38
1	B 249.677†	1331.6	1147.3	21.052	µg/L	21.052	ppb	12:52:18
1	Ba 233.527†	40302.9	39692.4	1062.3	µg/L	1062.3	ppb	12:52:18
1	Be 313.107†	12630.8	8797.9	4.4824	µg/L	4.4824	ppb	12:52:18
1	Cd 226.502†	235.4	329.0	1.3323	µg/L	1.3323	ppb	12:52:38
1	Co 228.616†	931.2	985.2	42.997	µg/L	42.997	ppb	12:52:38
1	Cr 267.716†	4348.9	4399.4	98.226	µg/L	98.226	ppb	12:52:18
1	Cu 324.752†	10107.7	6627.5	69.412	µg/L	69.412	ppb	12:52:18
1	Mn 257.610†	738344.8	726082.4	2401.9	µg/L	2401.9	ppb	12:52:12
1	Mo 202.031†	-18.2	-13.1	2.4740	µg/L	2.4740	ppb	12:52:38
1	Ni 231.604†	1465.1	1149.3	66.327	µg/L	66.327	ppb	12:52:38
1	P 214.914†	1671.2	1452.8	3122.9	µg/L	3122.9	ppb	12:52:38
1	Pb 220.353†	403.1	345.3	94.002	µg/L	94.002	ppb	12:52:38
1	S 181.975 Axial†	132.4	104.4	541.61	µg/L	541.61	ppb	12:52:38
1	Sb 206.836†	16.5	-7.9	2.3135	µg/L	2.3135	ppb	12:52:38
1	Se 196.026†	-22.2	-32.6	20.475	µg/L	20.475	ppb	12:52:38
1	SiO2†	148922.3	144365.3	29286	µg/L	29286	ppb	12:52:12
1	Si 251.611†	170335.7	167092.7	13470	µg/L	13470	ppb	12:52:12
1	Sn 189.927†	-67.1	-88.3	-26.347	µg/L	-26.347	ppb	12:52:38
1	Ti 334.940†	1494623.8	1468500.8	3379.2	µg/L	3379.2	ppb	12:52:12
1	Tl 190.801†	-35.0	-14.3	9.3556	µg/L	9.3556	ppb	12:52:38
1	U 409.014†	343.4	-364.1	-55.079	µg/L	-55.079	ppb	12:52:18
1	V 292.402†	20618.0	20359.1	252.66	µg/L	252.66	ppb	12:52:18
1	Zn 213.857†	8723.4	8047.8	215.68	µg/L	215.68	ppb	12:52:18
2	Sc RADIAL	114873.6	114873.6	103	%			12:51:13
2	Al 396.153Radial†	91976.0	89494.8	47299	µg/L	47299	ppb	12:51:13
2	Ca 317.933Radial†	44276.5	42748.6	17247	µg/L	17247	ppb	12:51:13
2	Fe 238.204 Radial†	19882.0	19369.3	102840	µg/L	102840	ppb	12:51:34
2	K 766.490 Radial†	18955.5	17731.4	10003	µg/L	10003	ppb	12:51:13
2	Mg 279.077 IEC†	2543.7	2463.6	13747	µg/L	13747	ppb	12:51:34
2	Na 589.592 Radial†	47582.1	46785.2	13196	µg/L	13196	ppb	12:51:13
2	Sr 421.552†	27550.6	26947.9	155.52	µg/L	155.52	ppb	12:51:13
2	Sc 361.383	2037309.9	2037309.9	101.47	%			12:52:46
2	Y 371.029	1260405.5	1260405.5	103.03	%			12:52:46
2	Ag 328.068†	-997.0	-966.3	0.6324	µg/L	0.6324	ppb	12:52:51
2	As 188.979†	19.7	16.3	23.355	µg/L	23.355	ppb	12:53:12
2	B 249.677†	1371.0	1189.4	22.969	µg/L	22.969	ppb	12:52:51
2	Ba 233.527†	40370.5	39858.9	1066.7	µg/L	1066.7	ppb	12:52:51
2	Be 313.107†	12767.2	8963.7	4.5784	µg/L	4.5784	ppb	12:52:51
2	Cd 226.502†	244.6	338.7	1.6010	µg/L	1.6010	ppb	12:53:12
2	Co 228.616†	930.8	987.2	43.027	µg/L	43.027	ppb	12:53:12
2	Cr 267.716†	4343.8	4405.2	98.355	µg/L	98.355	ppb	12:52:51
2	Cu 324.752†	10092.2	6637.3	69.510	µg/L	69.510	ppb	12:52:51
2	Mn 257.610†	742693.4	732197.8	2422.0	µg/L	2422.0	ppb	12:52:46
2	Mo 202.031†	-18.0	-13.0	2.4947	µg/L	2.4947	ppb	12:53:12
2	Ni 231.604†	1487.0	1174.4	67.779	µg/L	67.779	ppb	12:53:12
2	P 214.914†	1658.3	1444.3	3103.8	µg/L	3103.8	ppb	12:53:12
2	Pb 220.353†	380.9	324.4	88.475	µg/L	88.475	ppb	12:53:12

2	S 181.975 Axial†	128.5	100.9	522.85 µg/L	522.85 ppb	12:53:12
2	Sb 206.836†	24.2	-0.3	10.337 µg/L	10.337 ppb	12:53:12
2	Se 196.026†	-34.2	-44.5	3.1128 µg/L	3.1128 ppb	12:53:12
2	SiO2†	149614.2	145416.4	29499 µg/L	29499 ppb	12:52:46
2	Si 251.611†	171269.3	168435.0	13578 µg/L	13578 ppb	12:52:46
2	Sn 189.927†	-71.6	-93.0	-28.703 µg/L	-28.703 ppb	12:53:12
2	Ti 334.940†	1505233.0	1482660.6	3411.8 µg/L	3411.8 ppb	12:52:46
2	Tl 190.801†	-29.9	-9.4	17.509 µg/L	17.509 ppb	12:53:12
2	U 409.014†	424.3	-283.4	-47.062 µg/L	-47.062 ppb	12:52:51
2	V 292.402†	20633.9	20425.9	253.49 µg/L	253.49 ppb	12:52:51
2	Zn 213.857†	8735.9	8081.7	216.61 µg/L	216.61 ppb	12:52:51
3	Sc RADIAL	114546.9	114546.9	102 %		12:51:39
3	Al 396.153Radial†	91749.0	89528.6	47317 µg/L	47317 ppb	12:51:39
3	Ca 317.933Radial†	44048.3	42648.6	17206 µg/L	17206 ppb	12:51:39
3	Fe 238.204 Radial†	19886.3	19428.7	103160 µg/L	103160 ppb	12:52:00
3	K 766.490 Radial†	18870.2	17700.6	9985.7 µg/L	9985.7 ppb	12:51:39
3	Mg 279.077 IEC†	2547.4	2474.3	13807 µg/L	13807 ppb	12:52:00
3	Na 589.592 Radial†	47458.0	46796.1	13199 µg/L	13199 ppb	12:51:39
3	Sr 421.552†	27421.5	26898.3	155.23 µg/L	155.23 ppb	12:51:39
3	Sc 361.383	2021594.5	2021594.5	100.69 %		12:53:19
3	Y 371.029	1249931.7	1249931.7	102.17 %		12:53:19
3	Ag 328.068†	-1021.1	-997.9	0.3748 µg/L	0.3748 ppb	12:53:24
3	As 188.979†	12.0	8.8	8.7584 µg/L	8.7584 ppb	12:53:45
3	B 249.677†	1376.8	1205.6	23.624 µg/L	23.624 ppb	12:53:24
3	Ba 233.527†	40443.4	40240.7	1077.0 µg/L	1077.0 ppb	12:53:24
3	Be 313.107†	12761.0	9055.4	4.6338 µg/L	4.6338 ppb	12:53:24
3	Cd 226.502†	216.2	312.3	0.8323 µg/L	0.8323 ppb	12:53:45
3	Co 228.616†	924.3	987.8	43.035 µg/L	43.035 ppb	12:53:45
3	Cr 267.716†	4365.7	4460.2	99.583 µg/L	99.583 ppb	12:53:24
3	Cu 324.752†	10094.9	6717.3	70.149 µg/L	70.149 ppb	12:53:24
3	Mn 257.610†	739348.9	734566.1	2429.9 µg/L	2429.9 ppb	12:53:19
3	Mo 202.031†	-23.0	-18.1	1.8947 µg/L	1.8947 ppb	12:53:45
3	Ni 231.604†	1482.2	1181.1	68.162 µg/L	68.162 ppb	12:53:45
3	P 214.914†	1681.7	1480.2	3183.2 µg/L	3183.2 ppb	12:53:45
3	Pb 220.353†	386.1	332.4	90.610 µg/L	90.610 ppb	12:53:45
3	S 181.975 Axial†	129.9	103.3	535.48 µg/L	535.48 ppb	12:53:45
3	Sb 206.836†	21.7	-2.6	7.9916 µg/L	7.9916 ppb	12:53:45
3	Se 196.026†	-32.1	-42.7	5.9589 µg/L	5.9589 ppb	12:53:45
3	SiO2†	148726.5	145680.9	29552 µg/L	29552 ppb	12:53:19
3	Si 251.611†	170187.4	168672.6	13597 µg/L	13597 ppb	12:53:19
3	Sn 189.927†	-75.1	-97.0	-30.718 µg/L	-30.718 ppb	12:53:45
3	Ti 334.940†	1498734.8	1487738.6	3423.5 µg/L	3423.5 ppb	12:53:19
3	Tl 190.801†	-39.0	-18.6	3.0244 µg/L	3.0244 ppb	12:53:45
3	U 409.014†	378.2	-326.0	-51.368 µg/L	-51.368 ppb	12:53:24
3	V 292.402†	20685.4	20635.2	256.01 µg/L	256.01 ppb	12:53:24
3	Zn 213.857†	8792.8	8205.1	220.06 µg/L	220.06 ppb	12:53:24

Mean Data: 241541005|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2033783.5	101.29	%	0.541				0.53%
Sc RADIAL	115027.9	103	%	0.5				0.50%
Y 371.029	1257921.8	102.82	%	0.579				0.56%
Ag 328.068†	-984.8	0.4658	µg/L	0.14451	0.4658	ppb	0.14451	31.03%
Al 396.153Radial†	89353.7	47224	µg/L	144.9	47224	ppb	144.9	0.31%
As 188.979†	12.1	15.078	µg/L	7.4921	15.078	ppb	7.4921	49.69%
B 249.677†	1180.8	22.548	µg/L	1.3367	22.548	ppb	1.3367	5.93%
Ba 233.527†	39930.7	1068.7	µg/L	7.52	1068.7	ppb	7.52	0.70%
Be 313.107†	8939.0	4.5649	µg/L	0.07660	4.5649	ppb	0.07660	1.68%
Ca 317.933Radial†	42694.5	17225	µg/L	20.4	17225	ppb	20.4	0.12%
Cd 226.502†	326.7	1.2552	µg/L	0.39010	1.2552	ppb	0.39010	31.08%
Co 228.616†	986.7	43.020	µg/L	0.0197	43.020	ppb	0.0197	0.05%
Cr 267.716†	4421.6	98.721	µg/L	0.7491	98.721	ppb	0.7491	0.76%
Cu 324.752†	6660.7	69.690	µg/L	0.4000	69.690	ppb	0.4000	0.57%
Fe 238.204 Radial†	19381.1	102910	µg/L	228.0	102910	ppb	228.0	0.22%
K 766.490 Radial†	17677.4	9972.5	µg/L	38.74	9972.5	ppb	38.74	0.39%
Mg 279.077 IEC†	2465.4	13757	µg/L	45.9	13757	ppb	45.9	0.33%
Mn 257.610†	730948.7	2417.9	µg/L	14.43	2417.9	ppb	14.43	0.60%
Mo 202.031†	-14.7	2.2878	µg/L	0.34058	2.2878	ppb	0.34058	14.89%
Na 589.592 Radial†	46676.5	13165	µg/L	55.8	13165	ppb	55.8	0.42%

Ni 231.604†	1168.3	67.423	µg/L	0.9679	67.423	ppb	0.9679	1.44%
P 214.914†	1459.1	3136.6	µg/L	41.46	3136.6	ppb	41.46	1.32%
Pb 220.353†	334.0	91.029	µg/L	2.7873	91.029	ppb	2.7873	3.06%
S 181.975 Axial†	102.9	533.31	µg/L	9.567	533.31	ppb	9.567	1.79%
Sb 206.836†	-3.6	6.8808	µg/L	4.12568	6.8808	ppb	4.12568	59.96%
Se 196.026†	-39.9	9.8490	µg/L	9.31208	9.8490	ppb	9.31208	94.55%
SiO2†	145154.2	29446	µg/L	141.2	29446	ppb	141.2	0.48%
Si 251.611†	168066.8	13548	µg/L	68.6	13548	ppb	68.6	0.51%
Sn 189.927†	-92.8	-28.589	µg/L	2.1877	-28.589	ppb	2.1877	7.65%
Sr 421.552†	26894.5	155.21	µg/L	0.320	155.21	ppb	0.320	0.21%
Ti 334.940†	1479633.4	3404.9	µg/L	22.95	3404.9	ppb	22.95	0.67%
Tl 190.801†	-14.1	9.9631	µg/L	7.26153	9.9631	ppb	7.26153	72.88%
U 409.014†	-324.5	-51.170	µg/L	4.0120	-51.170	ppb	4.0120	7.84%
V 292.402†	20473.4	254.05	µg/L	1.746	254.05	ppb	1.746	0.69%
Zn 213.857†	8111.5	217.45	µg/L	2.310	217.45	ppb	2.310	1.06%

Sequence No.: 46
Sample ID: 241541006|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 335
Date Collected: 12/14/2009 12:53:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541006|931895|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114744.6	114744.6	102	%			12:54:27
1	Al 396.153Radial†	99508.1	96946.1	51233	µg/L	51233	ppb	12:54:27
1	Ca 317.933Radial†	45008.5	43511.5	17554	µg/L	17554	ppb	12:54:27
1	Fe 238.204 Radial†	82218.2	80225.3	425970	µg/L	425970	ppb	12:54:27
1	K 766.490 Radial†	12917.2	11859.4	6690.4	µg/L	6690.4	ppb	12:54:27
1	Mg 279.077 IEC†	1920.1	1857.8	9855.8	µg/L	9855.8	ppb	12:54:47
1	Na 589.592 Radial†	3037.6	3366.0	949.39	µg/L	949.39	ppb	12:54:47
1	Sr 421.552†	21545.6	21117.8	121.87	µg/L	121.87	ppb	12:54:27
1	Sc 361.383	2018750.4	2018750.4	100.54	%			12:55:52
1	Y 371.029	1254068.6	1254068.6	102.51	%			12:55:52
1	Ag 328.068†	-3211.1	-3177.4	4.7611	µg/L	4.7611	ppb	12:55:58
1	As 188.979†	28.8	25.5	-7.3761	µg/L	-7.3761	ppb	12:56:18
1	B 249.677†	4670.7	4483.7	74.548	µg/L	74.548	ppb	12:55:58
1	Ba 233.527†	24340.7	24281.6	649.93	µg/L	649.93	ppb	12:55:58
1	Be 313.107†	11587.6	7906.1	4.0600	µg/L	4.0600	ppb	12:55:58
1	Cd 226.502†	1230.4	1321.3	4.4421	µg/L	4.4421	ppb	12:55:58
1	Co 228.616†	1133.7	1197.4	54.932	µg/L	54.932	ppb	12:56:18
1	Cr 267.716†	31279.0	31234.2	693.74	µg/L	693.74	ppb	12:55:58
1	Cu 324.752†	53404.8	49807.2	447.34	µg/L	447.34	ppb	12:55:58
1	Mn 257.610†	1115273.9	1109493.8	3704.1	µg/L	3704.1	ppb	12:55:52
1	Mo 202.031†	908.3	908.1	125.18	µg/L	125.18	ppb	12:56:18
1	Ni 231.604†	4731.1	4414.5	254.78	µg/L	254.78	ppb	12:55:58
1	P 214.914†	1075.7	879.9	1430.8	µg/L	1430.8	ppb	12:56:18
1	Pb 220.353†	841.3	785.7	206.49	µg/L	206.49	ppb	12:56:18
1	S 181.975 Axial†	135.7	109.3	520.20	µg/L	520.20	ppb	12:56:18
1	Sb 206.836†	40.9	16.5	23.228	µg/L	23.228	ppb	12:56:18
1	Se 196.026†	-168.8	-178.7	32.784	µg/L	32.784	ppb	12:56:18
1	SiO2†	138610.5	135827.7	27554	µg/L	27554	ppb	12:55:58
1	Si 251.611†	161475.2	160245.6	12927	µg/L	12927	ppb	12:55:52
1	Sn 189.927†	-48.3	-70.4	20.013	µg/L	20.013	ppb	12:56:18
1	Ti 334.940†	1289900.9	1282130.6	2950.2	µg/L	2950.2	ppb	12:55:52
1	Tl 190.801†	-50.7	-30.3	-14.101	µg/L	-14.101	ppb	12:56:18
1	U 409.014†	1327.2	618.4	-17.437	µg/L	-17.437	ppb	12:55:52
1	V 292.402†	15540.2	15546.7	222.20	µg/L	222.20	ppb	12:55:58
1	Zn 213.857†	23789.9	23133.5	606.20	µg/L	606.20	ppb	12:55:58
2	Sc RADIAL	115969.4	115969.4	104	%			12:54:53
2	Al 396.153Radial†	99972.9	96369.4	50928	µg/L	50928	ppb	12:54:53
2	Ca 317.933Radial†	45252.9	43283.6	17463	µg/L	17463	ppb	12:54:53
2	Fe 238.204 Radial†	82619.3	79765.2	423520	µg/L	423520	ppb	12:54:53
2	K 766.490 Radial†	13028.0	11833.2	6675.6	µg/L	6675.6	ppb	12:54:53
2	Mg 279.077 IEC†	1920.3	1838.3	9749.0	µg/L	9749.0	ppb	12:55:13
2	Na 589.592 Radial†	3043.1	3340.0	942.06	µg/L	942.06	ppb	12:55:13
2	Sr 421.552†	21608.5	20956.5	120.94	µg/L	120.94	ppb	12:54:53
2	Sc 361.383	2001965.1	2001965.1	99.707	%			12:56:26
2	Y 371.029	1244142.5	1244142.5	101.70	%			12:56:26
2	Ag 328.068†	-3295.5	-3288.8	3.5334	µg/L	3.5334	ppb	12:56:32
2	As 188.979†	27.9	24.9	-8.0601	µg/L	-8.0601	ppb	12:56:52
2	B 249.677†	4678.5	4530.5	77.494	µg/L	77.494	ppb	12:56:32
2	Ba 233.527†	24641.0	24785.7	663.42	µg/L	663.42	ppb	12:56:32
2	Be 313.107†	11551.3	7966.3	4.0871	µg/L	4.0871	ppb	12:56:32
2	Cd 226.502†	1206.5	1307.6	4.2461	µg/L	4.2461	ppb	12:56:32
2	Co 228.616†	1142.0	1215.2	55.766	µg/L	55.766	ppb	12:56:52
2	Cr 267.716†	31579.2	31796.0	706.21	µg/L	706.21	ppb	12:56:32
2	Cu 324.752†	53727.4	50576.1	452.30	µg/L	452.30	ppb	12:56:32
2	Mn 257.610†	1117532.2	1121059.1	3741.8	µg/L	3741.8	ppb	12:56:26
2	Mo 202.031†	909.7	917.2	126.16	µg/L	126.16	ppb	12:56:52
2	Ni 231.604†	4733.6	4456.5	257.20	µg/L	257.20	ppb	12:56:32
2	P 214.914†	1091.0	904.2	1486.9	µg/L	1486.9	ppb	12:56:52
2	Pb 220.353†	826.4	777.8	204.41	µg/L	204.41	ppb.	12:56:52

2	S 181.975 Axial†	138.5	113.2	541.28 µg/L	541.28 ppb	12:56:52
2	Sb 206.836†	57.4	33.5	41.004 µg/L	41.004 ppb	12:56:52
2	Se 196.026†	-168.8	-180.1	29.005 µg/L	29.005 ppb	12:56:52
2	SiO2†	139721.3	138097.6	28014 µg/L	28014 ppb	12:56:32
2	Si 251.611†	161795.5	161913.5	13061 µg/L	13061 ppb	12:56:26
2	Sn 189.927†	-48.3	-70.8	19.517 µg/L	19.517 ppb	12:56:52
2	Ti 334.940†	1293419.8	1296416.4	2983.1 µg/L	2983.1 ppb	12:56:26
2	Tl 190.801†	-47.7	-27.7	-9.5996 µg/L	-9.5996 ppb	12:56:52
2	U 409.014†	1269.2	571.3	-21.675 µg/L	-21.675 ppb	12:56:26
2	V 292.402†	15670.6	15807.1	225.12 µg/L	225.12 ppb	12:56:32
2	Zn 213.857†	24045.2	23588.0	619.29 µg/L	619.29 ppb	12:56:32
3	Sc RADIAL	115185.6	115185.6	103 %		12:55:19
3	Al 396.153Radial†	99839.9	96896.9	51207 µg/L	51207 ppb	12:55:19
3	Ca 317.933Radial†	45000.6	43335.6	17484 µg/L	17484 ppb	12:55:19
3	Fe 238.204 Radial†	82286.2	79984.3	424690 µg/L	424690 ppb	12:55:19
3	K 766.490 Radial†	13087.2	11976.3	6756.3 µg/L	6756.3 ppb	12:55:19
3	Mg 279.077 IEC†	1923.9	1854.4	9838.2 µg/L	9838.2 ppb	12:55:39
3	Na 589.592 Radial†	3066.9	3383.2	954.23 µg/L	954.23 ppb	12:55:39
3	Sr 421.552†	21566.4	21057.5	121.53 µg/L	121.53 ppb	12:55:19
3	Sc 361.383	1999045.1	1999045.1	99.562 %		12:57:00
3	Y 371.029	1241929.5	1241929.5	101.52 %		12:57:00
3	Ag 328.068†	-3239.9	-3237.8	4.1061 µg/L	4.1061 ppb	12:57:05
3	As 188.979†	26.6	23.6	-10.681 µg/L	-10.681 ppb	12:57:26
3	B 249.677†	4630.8	4489.4	75.218 µg/L	75.218 ppb	12:57:05
3	Ba 233.527†	24594.9	24775.5	663.15 µg/L	663.15 ppb	12:57:05
3	Be 313.107†	11657.3	8089.7	4.1666 µg/L	4.1666 ppb	12:57:05
3	Cd 226.502†	1212.7	1315.6	4.3710 µg/L	4.3710 ppb	12:57:05
3	Co 228.616†	1134.9	1209.7	55.480 µg/L	55.480 ppb	12:57:26
3	Cr 267.716†	31489.0	31751.8	705.23 µg/L	705.23 ppb	12:57:05
3	Cu 324.752†	53819.5	50747.4	453.78 µg/L	453.78 ppb	12:57:05
3	Mn 257.610†	1117343.6	1122506.8	3746.7 µg/L	3746.7 ppb	12:57:00
3	Mo 202.031†	898.7	907.5	125.04 µg/L	125.04 ppb	12:57:26
3	Ni 231.604†	4720.7	4450.4	256.85 µg/L	256.85 ppb	12:57:05
3	P 214.914†	1095.3	910.1	1498.8 µg/L	1498.8 ppb	12:57:26
3	Pb 220.353†	832.3	784.9	206.30 µg/L	206.30 ppb	12:57:26
3	S 181.975 Axial†	138.4	113.4	542.09 µg/L	542.09 ppb	12:57:26
3	Sb 206.836†	41.2	17.2	24.066 µg/L	24.066 ppb	12:57:26
3	Se 196.026†	-174.5	-186.1	20.982 µg/L	20.982 ppb	12:57:26
3	SiO2†	139564.7	138145.1	28024 µg/L	28024 ppb	12:57:05
3	Si 251.611†	161718.2	162072.8	13074 µg/L	13074 ppb	12:57:00
3	Sn 189.927†	-42.2	-64.7	22.755 µg/L	22.755 ppb	12:57:26
3	Ti 334.940†	1292611.5	1297499.4	2985.6 µg/L	2985.6 ppb	12:57:00
3	Tl 190.801†	-34.3	-14.4	11.437 µg/L	11.437 ppb	12:57:26
3	U 409.014†	1132.8	436.2	-35.370 µg/L	-35.370 ppb	12:57:00
3	V 292.402†	15614.9	15774.1	224.79 µg/L	224.79 ppb	12:57:05
3	Zn 213.857†	23996.2	23573.9	618.76 µg/L	618.76 ppb	12:57:05

Mean Data: 241541006|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2006586.9	99.938	%	0.5297				0.53%
Sc RADIAL	115299.9	103	%	0.6				0.54%
Y 371.029	1246713.5	101.91	%	0.528				0.52%
Ag 328.068†	-3234.7	4.1335	µg/L	0.61434	4.1335	ppb	0.61434	14.86%
Al 396.153Radial†	96737.5	51123	µg/L	169.0	51123	ppb	169.0	0.33%
As 188.979†	24.7	-8.7059	µg/L	1.74470	-8.7059	ppb	1.74470	20.04%
B 249.677†	4501.2	75.753	µg/L	1.5442	75.753	ppb	1.5442	2.04%
Ba 233.527†	24614.3	658.83	µg/L	7.712	658.83	ppb	7.712	1.17%
Be 313.107†	7987.4	4.1046	µg/L	0.05540	4.1046	ppb	0.05540	1.35%
Ca 317.933Radial†	43376.9	17500	µg/L	48.2	17500	ppb	48.2	0.28%
Cd 226.502†	1314.8	4.3531	µg/L	0.09922	4.3531	ppb	0.09922	2.28%
Co 228.616†	1207.4	55.393	µg/L	0.4240	55.393	ppb	0.4240	0.77%
Cr 267.716†	31594.0	701.73	µg/L	6.938	701.73	ppb	6.938	0.99%
Cu 324.752†	50376.9	451.14	µg/L	3.375	451.14	ppb	3.375	0.75%
Fe 238.204 Radial†	79991.6	424730	µg/L	1221.9	424730	ppb	1221.9	0.29%
K 766.490 Radial†	11889.6	6707.4	µg/L	42.99	6707.4	ppb	42.99	0.64%
Mg 279.077 IEC†	1850.2	9814.4	µg/L	57.26	9814.4	ppb	57.26	0.58%
Mn 257.610†	1117686.6	3730.9	µg/L	23.34	3730.9	ppb	23.34	0.63%
Mo 202.031†	910.9	125.46	µg/L	0.608	125.46	ppb	0.608	0.49%
Na 589.592 Radial†	3363.1	948.56	µg/L	6.129	948.56	ppb	6.129	0.65%

Ni 231.604†	4440.5	256.27	µg/L	1.309	256.27	ppb	1.309	0.51%
P 214.914†	898.1	1472.1	µg/L	36.31	1472.1	ppb	36.31	2.47%
Pb 220.353†	782.8	205.73	µg/L	1.150	205.73	ppb	1.150	0.56%
S 181.975 Axial†	111.9	534.52	µg/L	12.409	534.52	ppb	12.409	2.32%
Sb 206.836†	22.4	29.432	µg/L	10.0298	29.432	ppb	10.0298	34.08%
Se 196.026†	-181.6	27.590	µg/L	6.0266	27.590	ppb	6.0266	21.84%
SiO2†	137356.8	27864	µg/L	268.7	27864	ppb	268.7	0.96%
Si 251.611†	161410.6	13021	µg/L	81.6	13021	ppb	81.6	0.63%
Sn 189.927†	-68.7	20.761	µg/L	1.7438	20.761	ppb	1.7438	8.40%
Sr 421.552†	21043.9	121.45	µg/L	0.470	121.45	ppb	0.470	0.39%
Ti 334.940†	1292015.5	2973.0	µg/L	19.75	2973.0	ppb	19.75	0.66%
Tl 190.801†	-24.2	-4.0877	µg/L	13.63195	-4.0877	ppb	13.63195	333.49%
U 409.014†	542.0	-24.828	µg/L	9.3728	-24.828	ppb	9.3728	37.75%
V 292.402†	15709.3	224.04	µg/L	1.602	224.04	ppb	1.602	0.72%
Zn 213.857†	23431.8	614.75	µg/L	7.409	614.75	ppb	7.409	1.21%

Sequence No.: 47
Sample ID: 241541007|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 336
Date Collected: 12/14/2009 12:57:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541007|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114863.6	114863.6	103	%			12:58:08
1	Al 396.153Radial†	173995.8	169463.3	89563	µg/L	89563	ppb	12:58:08
1	Ca 317.933Radial†	62496.2	60514.7	24414	µg/L	24414	ppb	12:58:13
1	Fe 238.204 Radial†	25599.8	24945.2	132450	µg/L	132450	ppb	12:58:13
1	K 766.490 Radial†	24072.7	22721.8	12818	µg/L	12818	ppb	12:58:13
1	Mg 279.077 IEC†	3421.5	3319.6	18533	µg/L	18533	ppb	12:58:13
1	Na 589.592 Radial†	7757.5	7964.4	2246.4	µg/L	2246.4	ppb	12:58:13
1	Sr 421.552†	54816.4	53531.6	308.94	µg/L	308.94	ppb	12:58:08
1	Sc 361.383	2011013.4	2011013.4	100.16	%			12:58:48
1	Y 371.029	1271431.6	1271431.6	103.93	%			12:58:48
1	Ag 328.068†	-1255.4	-1237.1	0.5871	µg/L	0.5871	ppb	12:58:54
1	As 188.979†	29.4	26.2	36.902	µg/L	36.902	ppb	12:59:14
1	B 249.677†	1738.8	1574.3	31.557	µg/L	31.557	ppb	12:58:54
1	Ba 233.527†	63423.5	63395.9	1696.4	µg/L	1696.4	ppb	12:58:54
1	Be 313.107†	21671.1	18018.1	10.514	µg/L	10.514	ppb	12:58:54
1	Cd 226.502†	328.8	425.9	1.7787	µg/L	1.7787	ppb	12:59:14
1	Co 228.616†	1273.6	1341.4	61.221	µg/L	61.221	ppb	12:59:14
1	Cr 267.716†	4298.6	4416.1	98.662	µg/L	98.662	ppb	12:58:54
1	Cu 324.752†	9392.8	6069.0	71.809	µg/L	71.809	ppb	12:58:54
1	Mn 257.610†	1555792.9	1553585.1	5128.3	µg/L	5128.3	ppb	12:58:48
1	Mo 202.031†	-18.7	-13.9	3.5488	µg/L	3.5488	ppb	12:59:14
1	Ni 231.604†	1643.0	1349.3	77.873	µg/L	77.873	ppb	12:59:14
1	P 214.914†	878.4	687.0	1399.4	µg/L	1399.4	ppb	12:59:14
1	Pb 220.353†	592.3	540.4	148.85	µg/L	148.85	ppb	12:59:14
1	S 181.975 Axial†	155.5	129.6	671.13	µg/L	671.13	ppb	12:59:14
1	Sb 206.836†	20.6	-3.6	5.9266	µg/L	5.9266	ppb	12:59:14
1	Se 196.026†	-37.7	-48.4	17.001	µg/L	17.001	ppb	12:59:14
1	SiO2†	166423.7	164127.5	33294	µg/L	33294	ppb	12:58:48
1	Si 251.611†	190617.4	189959.7	15331	µg/L	15331	ppb	12:58:48
1	Sn 189.927†	-92.0	-114.2	-33.518	µg/L	-33.518	ppb	12:59:14
1	Ti 334.940†	1445301.2	1442221.4	3318.4	µg/L	3318.4	ppb	12:58:48
1	Tl 190.801†	-39.9	-19.7	10.699	µg/L	10.699	ppb	12:59:14
1	U 409.014†	568.9	-133.7	-37.480	µg/L	-37.480	ppb	12:58:48
1	V 292.402†	22642.1	22696.9	283.18	µg/L	283.18	ppb	12:58:54
1	Zn 213.857†	11382.1	10836.3	291.12	µg/L	291.12	ppb	12:58:54
2	Sc RADIAL	115842.6	115842.6	103	%			12:58:19
2	Al 396.153Radial†	177021.8	170954.9	90352	µg/L	90352	ppb	12:58:19
2	Ca 317.933Radial†	62955.2	60443.5	24386	µg/L	24386	ppb	12:58:24
2	Fe 238.204 Radial†	25750.7	24880.1	132110	µg/L	132110	ppb	12:58:24
2	K 766.490 Radial†	24237.9	22683.1	12796	µg/L	12796	ppb	12:58:24
2	Mg 279.077 IEC†	3418.9	3288.9	18360	µg/L	18360	ppb	12:58:24
2	Na 589.592 Radial†	7756.7	7899.8	2228.1	µg/L	2228.1	ppb	12:58:24
2	Sr 421.552†	55824.8	54054.8	311.96	µg/L	311.96	ppb	12:58:19
2	Sc 361.383	2007591.0	2007591.0	99.988	%			12:59:22
2	Y 371.029	1269398.0	1269398.0	103.76	%			12:59:22
2	Ag 328.068†	-1238.1	-1222.0	0.7078	µg/L	0.7078	ppb	12:59:28
2	As 188.979†	23.9	20.8	26.383	µg/L	26.383	ppb	12:59:48
2	B 249.677†	1715.1	1553.6	30.702	µg/L	30.702	ppb	12:59:28
2	Ba 233.527†	63526.0	63606.3	1702.1	µg/L	1702.1	ppb	12:59:28
2	Be 313.107†	21701.6	18085.4	10.559	µg/L	10.559	ppb	12:59:28
2	Cd 226.502†	328.8	426.5	1.8248	µg/L	1.8248	ppb	12:59:48
2	Co 228.616†	1266.6	1336.6	60.982	µg/L	60.982	ppb	12:59:48
2	Cr 267.716†	4297.7	4422.4	98.804	µg/L	98.804	ppb	12:59:28
2	Cu 324.752†	9399.5	6091.8	71.897	µg/L	71.897	ppb	12:59:28
2	Mn 257.610†	1552561.0	1553000.8	5126.4	µg/L	5126.4	ppb	12:59:22
2	Mo 202.031†	-29.4	-24.6	2.2542	µg/L	2.2542	ppb	12:59:48
2	Ni 231.604†	1657.1	1366.3	78.852	µg/L	78.852	ppb	12:59:48
2	P 214.914†	889.8	699.9	1428.6	µg/L	1428.6	ppb	12:59:48
2	Pb 220.353†	611.9	561.0	154.35	µg/L	154.35	ppb	12:59:48

2	S 181.975 Axial†	162.9	137.3	712.21 µg/L	712.21 ppb	12:59:48
2	Sb 206.836†	20.4	-3.7	5.7871 µg/L	5.7871 ppb	12:59:48
2	Se 196.026†	-40.6	-51.4	12.493 µg/L	12.493 ppb	12:59:48
2	SiO2†	166222.6	164209.5	33311 µg/L	33311 ppb	12:59:22
2	Si 251.611†	190492.0	190158.7	15348 µg/L	15348 ppb	12:59:22
2	Sn 189.927†	-98.9	-121.3	-37.204 µg/L	-37.204 ppb	12:59:48
2	Ti 334.940†	1441195.5	1440575.2	3314.6 µg/L	3314.6 ppb	12:59:22
2	Tl 190.801†	-36.6	-16.5	15.822 µg/L	15.822 ppb	12:59:48
2	U 409.014†	593.9	-107.6	-34.819 µg/L	-34.819 ppb	12:59:22
2	V 292.402†	22653.1	22746.4	283.74 µg/L	283.74 ppb	12:59:28
2	Zn 213.857†	11380.4	10854.0	291.66 µg/L	291.66 ppb	12:59:28
3	Sc RADIAL	115071.4	115071.4	103 %		12:58:30
3	Al 396.153Radial†	175446.9	170569.1	90148 µg/L	90148 ppb	12:58:30
3	Ca 317.933Radial†	62611.6	60516.9	24415 µg/L	24415 ppb	12:58:35
3	Fe 238.204 Radial†	25676.3	24974.6	132610 µg/L	132610 ppb	12:58:35
3	K 766.490 Radial†	24136.1	22741.0	12829 µg/L	12829 ppb	12:58:35
3	Mg 279.077 IEC†	3418.1	3310.3	18480 µg/L	18480 ppb	12:58:35
3	Na 589.592 Radial†	7662.2	7858.0	2216.3 µg/L	2216.3 ppb	12:58:35
3	Sr 421.552†	55242.6	53849.9	310.78 µg/L	310.78 ppb	12:58:30
3	Sc 361.383	2025487.8	2025487.8	100.88 %		12:59:56
3	Y 371.029	1280537.1	1280537.1	104.67 %		12:59:56
3	Ag 328.068†	-1198.7	-1172.0	1.1966 µg/L	1.1966 ppb	13:00:02
3	As 188.979†	28.0	24.6	33.746 µg/L	33.746 ppb	13:00:22
3	B 249.677†	1730.3	1553.4	30.538 µg/L	30.538 ppb	13:00:02
3	Ba 233.527†	63042.4	62565.5	1674.2 µg/L	1674.2 ppb	13:00:02
3	Be 313.107†	21670.8	17863.1	10.419 µg/L	10.419 ppb	13:00:02
3	Cd 226.502†	317.4	412.2	1.3786 µg/L	1.3786 ppb	13:00:22
3	Co 228.616†	1279.4	1338.0	61.088 µg/L	61.088 ppb	13:00:22
3	Cr 267.716†	4238.6	4325.9	96.652 µg/L	96.652 ppb	13:00:02
3	Cu 324.752†	9279.0	5889.2	70.558 µg/L	70.558 ppb	13:00:02
3	Mn 257.610†	1559963.6	1546619.1	5105.4 µg/L	5105.4 ppb	12:59:56
3	Mo 202.031†	-13.7	-8.8	4.1567 µg/L	4.1567 ppb	13:00:22
3	Ni 231.604†	1644.0	1338.6	77.255 µg/L	77.255 ppb	13:00:22
3	P 214.914†	880.5	682.9	1390.3 µg/L	1390.3 ppb	13:00:22
3	Pb 220.353†	607.8	551.5	151.85 µg/L	151.85 ppb	13:00:22
3	S 181.975 Axial†	153.4	126.4	653.96 µg/L	653.96 ppb	13:00:22
3	Sb 206.836†	24.0	-0.3	9.2559 µg/L	9.2559 ppb	13:00:22
3	Se 196.026†	-38.6	-49.1	16.159 µg/L	16.159 ppb	13:00:22
3	SiO2†	166744.2	163257.7	33118 µg/L	33118 ppb	12:59:56
3	Si 251.611†	191182.7	189160.1	15267 µg/L	15267 ppb	12:59:56
3	Sn 189.927†	-94.0	-115.5	-34.157 µg/L	-34.157 ppb	13:00:22
3	Ti 334.940†	1448006.7	1434591.4	3300.8 µg/L	3300.8 ppb	12:59:56
3	Tl 190.801†	-43.5	-23.1	5.2623 µg/L	5.2623 ppb	13:00:22
3	U 409.014†	527.4	-178.9	-42.017 µg/L	-42.017 ppb	12:59:56
3	V 292.402†	22550.4	22444.4	280.16 µg/L	280.16 ppb	13:00:02
3	Zn 213.857†	11275.9	10649.9	285.84 µg/L	285.84 ppb	13:00:02

Mean Data: 241541007|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2014697.4	100.34	%	0.473				0.47%
Sc RADIAL	115259.2	103	%	0.5				0.45%
Y 371.029	1273788.9	104.12	%	0.485				0.47%
Ag 328.068†	-1210.4	0.8305	µg/L	0.32275	0.8305	ppb	0.32275	38.86%
Al 396.153Radial†	170329.1	90021	µg/L	409.2	90021	ppb	409.2	0.45%
As 188.979†	23.9	32.344	µg/L	5.3978	32.344	ppb	5.3978	16.69%
B 249.677†	1560.4	30.932	µg/L	0.5470	30.932	ppb	0.5470	1.77%
Ba 233.527†	63189.2	1690.9	µg/L	14.72	1690.9	ppb	14.72	0.87%
Be 313.107†	17988.9	10.498	µg/L	0.0713	10.498	ppb	0.0713	0.68%
Ca 317.933Radial†	60491.7	24405	µg/L	16.8	24405	ppb	16.8	0.07%
Cd 226.502†	421.5	1.6607	µg/L	0.24536	1.6607	ppb	0.24536	14.77%
Co 228.616†	1338.7	61.097	µg/L	0.1195	61.097	ppb	0.1195	0.20%
Cr 267.716†	4388.1	98.039	µg/L	1.2035	98.039	ppb	1.2035	1.23%
Cu 324.752†	6016.7	71.421	µg/L	0.7492	71.421	ppb	0.7492	1.05%
Fe 238.204 Radial†	24933.3	132390	µg/L	256.7	132390	ppb	256.7	0.19%
K 766.490 Radial†	22715.3	12815	µg/L	16.6	12815	ppb	16.6	0.13%
Mg 279.077 IEC†	3306.2	18458	µg/L	88.4	18458	ppb	88.4	0.48%
Mn 257.610†	1551068.4	5120.1	µg/L	12.69	5120.1	ppb	12.69	0.25%
Mo 202.031†	-15.8	3.3199	µg/L	0.97166	3.3199	ppb	0.97166	29.27%
Na 589.592 Radial†	7907.4	2230.3	µg/L	15.12	2230.3	ppb	15.12	0.68%

Ni 231.604†	1351.4	77.994	µg/L	0.8053	77.994	ppb	0.8053	1.03%
P 214.914†	689.9	1406.1	µg/L	20.02	1406.1	ppb	20.02	1.42%
Pb 220.353†	551.0	151.68	µg/L	2.752	151.68	ppb	2.752	1.81%
S 181.975 Axial†	131.1	679.10	µg/L	29.935	679.10	ppb	29.935	4.41%
Sb 206.836†	-2.5	6.9899	µg/L	1.96366	6.9899	ppb	1.96366	28.09%
Se 196.026†	-49.6	15.218	µg/L	2.3969	15.218	ppb	2.3969	15.75%
SiO2†	163864.9	33241	µg/L	107.0	33241	ppb	107.0	0.32%
Si 251.611†	189759.5	15315	µg/L	42.8	15315	ppb	42.8	0.28%
Sn 189.927†	-117.0	-34.960	µg/L	1.9701	-34.960	ppb	1.9701	5.64%
Sr 421.552†	53812.1	310.56	µg/L	1.521	310.56	ppb	1.521	0.49%
Ti 334.940†	1439129.3	3311.2	µg/L	9.24	3311.2	ppb	9.24	0.28%
Tl 190.801†	-19.8	10.595	µg/L	5.2808	10.595	ppb	5.2808	49.84%
U 409.014†	-140.0	-38.105	µg/L	3.6396	-38.105	ppb	3.6396	9.55%
V 292.402†	22629.2	282.36	µg/L	1.927	282.36	ppb	1.927	0.68%
Zn 213.857†	10780.0	289.54	µg/L	3.213	289.54	ppb	3.213	1.11%

Sequence No.: 48
Sample ID: 241541008|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 337
Date Collected: 12/14/2009 13:00:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541008|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114730.0	114730.0	102	%			13:01:05
1	Al 396.153Radial†	357095.9	348372.1	184120	µg/L	184120	ppb	13:01:05
1	Ca 317.933Radial†	127222.1	123760.1	49930	µg/L	49930	ppb	13:01:05
1	Fe 238.204 Radial†	35201.4	34345.7	182360	µg/L	182360	ppb	13:01:10
1	K 766.490 Radial†	30474.8	28997.7	16359	µg/L	16359	ppb	13:01:05
1	Mg 279.077 IEC†	6908.5	6726.9	37682	µg/L	37682	ppb	13:01:10
1	Na 589.592 Radial†	17725.5	17702.3	4992.9	µg/L	4992.9	ppb	13:01:10
1	Sr 421.552†	84347.1	82416.6	475.64	µg/L	475.64	ppb	13:01:05
1	Sc 361.383	2013168.2	2013168.2	100.27	%			13:01:45
1	Y 371.029	1335968.8	1335968.8	109.20	%			13:01:45
1	Ag 328.068†	-1677.4	-1656.7	0.8623	µg/L	0.8623	ppb	13:01:51
1	As 188.979†	59.5	56.2	80.115	µg/L	80.115	ppb	13:02:12
1	B 249.677†	2312.0	2144.1	42.358	µg/L	42.358	ppb	13:01:51
1	Ba 233.527†	37971.3	37943.2	1015.7	µg/L	1015.7	ppb	13:01:51
1	Be 313.107†	30599.8	26900.0	16.836	µg/L	16.836	ppb	13:01:51
1	Cd 226.502†	460.4	556.8	1.6540	µg/L	1.6540	ppb	13:01:51
1	Co 228.616†	983.9	1051.1	49.477	µg/L	49.477	ppb	13:02:12
1	Cr 267.716†	9320.4	9420.0	209.84	µg/L	209.84	ppb	13:01:51
1	Cu 324.752†	14555.2	11207.8	119.24	µg/L	119.24	ppb	13:01:51
1	Mn 257.610†	476802.2	475787.9	1588.4	µg/L	1588.4	ppb	13:01:45
1	Mo 202.031†	-20.8	-16.0	5.2533	µg/L	5.2533	ppb	13:02:12
1	Ni 231.604†	2954.2	2655.3	153.25	µg/L	153.25	ppb	13:02:12
1	P 214.914†	585.7	394.1	718.70	µg/L	718.70	ppb	13:02:12
1	Pb 220.353†	646.4	593.7	170.53	µg/L	170.53	ppb	13:02:12
1	S 181.975 Axial†	161.1	135.0	689.79	µg/L	689.79	ppb	13:02:12
1	Sb 206.836†	36.6	12.3	14.210	µg/L	14.210	ppb	13:02:12
1	Se 196.026†	-56.2	-66.8	20.468	µg/L	20.468	ppb	13:02:12
1	SiO2†	185775.3	183249.9	37174	µg/L	37174	ppb	13:01:45
1	Si 251.611†	213383.2	212461.6	17213	µg/L	17213	ppb	13:01:45
1	Sn 189.927†	-137.7	-159.7	-41.311	µg/L	-41.311	ppb	13:02:12
1	Ti 334.940†	819693.9	816725.6	1877.1	µg/L	1877.1	ppb	13:01:45
1	Tl 190.801†	-15.6	4.6	22.399	µg/L	22.399	ppb	13:02:12
1	U 409.014†	301.0	-401.4	-72.898	µg/L	-72.898	ppb	13:01:45
1	V 292.402†	26509.8	26530.1	333.21	µg/L	333.21	ppb	13:01:51
1	Zn 213.857†	13236.9	12674.0	336.77	µg/L	336.77	ppb	13:01:51
2	Sc RADIAL	115036.7	115036.7	103	%			13:01:16
2	Al 396.153Radial†	359838.8	350113.1	185040	µg/L	185040	ppb	13:01:16
2	Ca 317.933Radial†	128087.4	124271.4	50137	µg/L	50137	ppb	13:01:16
2	Fe 238.204 Radial†	35064.9	34121.2	181170	µg/L	181170	ppb	13:01:21
2	K 766.490 Radial†	30716.1	29153.3	16447	µg/L	16447	ppb	13:01:16
2	Mg 279.077 IEC†	6891.9	6692.7	37492	µg/L	37492	ppb	13:01:21
2	Na 589.592 Radial†	17734.6	17665.1	4982.4	µg/L	4982.4	ppb	13:01:21
2	Sr 421.552†	84994.0	82827.0	478.01	µg/L	478.01	ppb	13:01:16
2	Sc 361.383	1988734.2	1988734.2	99.048	%			13:02:20
2	Y 371.029	1319787.4	1319787.4	107.88	%			13:02:20
2	Ag 328.068†	-1730.4	-1730.7	0.0974	µg/L	0.0974	ppb	13:02:25
2	As 188.979†	50.3	47.6	63.641	µg/L	63.641	ppb	13:02:46
2	B 249.677†	2295.4	2155.7	43.271	µg/L	43.271	ppb	13:02:25
2	Ba 233.527†	37931.1	38367.9	1027.0	µg/L	1027.0	ppb	13:02:25
2	Be 313.107†	30502.3	27176.5	17.013	µg/L	17.013	ppb	13:02:25
2	Cd 226.502†	440.6	542.4	1.3474	µg/L	1.3474	ppb	13:02:25
2	Co 228.616†	977.7	1057.0	49.759	µg/L	49.759	ppb	13:02:46
2	Cr 267.716†	9298.7	9512.2	211.90	µg/L	211.90	ppb	13:02:25
2	Cu 324.752†	14475.7	11305.9	119.69	µg/L	119.69	ppb	13:02:25
2	Mn 257.610†	472132.4	476915.9	1592.0	µg/L	1592.0	ppb	13:02:20
2	Mo 202.031†	-20.9	-16.3	5.1722	µg/L	5.1722	ppb	13:02:46
2	Ni 231.604†	2929.3	2666.4	153.89	µg/L	153.89	ppb	13:02:46
2	P 214.914†	594.4	410.1	755.92	µg/L	755.92	ppb	13:02:46
2	Pb 220.353†	635.6	590.7	169.82	µg/L	169.82	ppb	13:02:46

2	S 181.975 Axial†	164.9	140.8	720.91 µg/L	720.91 ppb	13:02:46
2	Sb 206.836†	29.0	5.1	6.6461 µg/L	6.6461 ppb	13:02:46
2	Se 196.026†	-55.5	-66.9	19.691 µg/L	19.691 ppb	13:02:46
2	SiO2†	183993.5	183727.4	37270 µg/L	37270 ppb	13:02:20
2	Si 251.611†	211196.1	212868.1	17246 µg/L	17246 ppb	13:02:20
2	Sn 189.927†	-140.9	-164.6	-43.953 µg/L	-43.953 ppb	13:02:46
2	Ti 334.940†	812827.4	819837.4	1884.3 µg/L	1884.3 ppb	13:02:20
2	Tl 190.801†	-17.7	2.2	18.784 µg/L	18.784 ppb	13:02:46
2	U 409.014†	374.9	-323.1	-64.865 µg/L	-64.865 ppb	13:02:20
2	V 292.402†	26558.2	26903.9	337.61 µg/L	337.61 ppb	13:02:25
2	Zn 213.857†	13192.3	12791.2	340.21 µg/L	340.21 ppb	13:02:25
3	Sc RADIAL	115846.9	115846.9	103 %		13:01:27
3	Al 396.153Radial†	361273.6	349050.2	184480 µg/L	184480 ppb	13:01:27
3	Ca 317.933Radial†	128471.5	123770.6	49935 µg/L	49935 ppb	13:01:27
3	Fe 238.204 Radial†	35381.3	34188.3	181530 µg/L	181530 ppb	13:01:33
3	K 766.490 Radial†	30789.6	29015.2	16369 µg/L	16369 ppb	13:01:27
3	Mg 279.077 IEC†	6948.9	6701.0	37537 µg/L	37537 ppb	13:01:33
3	Na 589.592 Radial†	17907.3	17711.2	4995.4 µg/L	4995.4 ppb	13:01:33
3	Sr 421.552†	85243.2	82489.2	476.06 µg/L	476.06 ppb	13:01:27
3	Sc 361.383	2004543.9	2004543.9	99.836 %		13:02:53
3	Y 371.029	1329831.2	1329831.2	108.70 %		13:02:53
3	Ag 328.068†	-1695.8	-1682.3	0.5732 µg/L	0.5732 ppb	13:02:59
3	As 188.979†	47.5	44.4	57.335 µg/L	57.335 ppb	13:03:19
3	B 249.677†	2386.9	2229.1	46.573 µg/L	46.573 ppb	13:02:59
3	Ba 233.527†	38173.9	38309.1	1025.5 µg/L	1025.5 ppb	13:02:59
3	Be 313.107†	30705.8	27137.4	16.990 µg/L	16.990 ppb	13:02:59
3	Cd 226.502†	452.9	551.3	1.5653 µg/L	1.5653 ppb	13:02:59
3	Co 228.616†	980.0	1051.4	49.488 µg/L	49.488 ppb	13:03:19
3	Cr 267.716†	9378.1	9517.7	212.02 µg/L	212.02 ppb	13:02:59
3	Cu 324.752†	14545.6	11260.6	119.44 µg/L	119.44 ppb	13:02:59
3	Mn 257.610†	475232.2	476261.3	1589.8 µg/L	1589.8 ppb	13:02:53
3	Mo 202.031†	-22.6	-17.9	5.0006 µg/L	5.0006 ppb	13:03:19
3	Ni 231.604†	2965.8	2679.6	154.65 µg/L	154.65 ppb	13:03:19
3	P 214.914†	595.6	406.6	747.58 µg/L	747.58 ppb	13:03:19
3	Pb 220.353†	640.4	590.5	169.70 µg/L	169.70 ppb	13:03:19
3	S 181.975 Axial†	155.8	130.3	665.09 µg/L	665.09 ppb	13:03:19
3	Sb 206.836†	36.8	12.7	14.629 µg/L	14.629 ppb	13:03:19
3	Se 196.026†	-57.9	-68.8	17.083 µg/L	17.083 ppb	13:03:19
3	SiO2†	184975.0	183245.5	37173 µg/L	37173 ppb	13:02:53
3	Si 251.611†	212357.2	212349.5	17204 µg/L	17204 ppb	13:02:53
3	Sn 189.927†	-137.8	-160.4	-41.817 µg/L	-41.817 ppb	13:03:19
3	Ti 334.940†	816964.0	817508.5	1878.9 µg/L	1878.9 ppb	13:02:53
3	Tl 190.801†	-22.2	-2.1	11.905 µg/L	11.905 ppb	13:03:19
3	U 409.014†	313.8	-387.3	-71.339 µg/L	-71.339 ppb	13:02:53
3	V 292.402†	26630.0	26764.3	335.96 µg/L	335.96 ppb	13:02:59
3	Zn 213.857†	13245.4	12739.3	338.70 µg/L	338.70 ppb	13:02:59

Mean Data: 241541008|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2002148.8	99.717	%	0.6172				0.62%
Sc RADIAL	115204.5	103	%	0.5				0.50%
Y 371.029	1328529.1	108.60	%	0.668				0.61%
Ag 328.068†	-1689.9	0.5110	µg/L	0.38624	0.5110	ppb	0.38624	75.59%
Al 396.153Radial†	349178.5	184540	µg/L	463.8	184540	ppb	463.8	0.25%
As 188.979†	49.4	67.030	µg/L	11.7619	67.030	ppb	11.7619	17.55%
B 249.677†	2176.3	44.067	µg/L	2.2174	44.067	ppb	2.2174	5.03%
Ba 233.527†	38206.7	1022.7	µg/L	6.16	1022.7	ppb	6.16	0.60%
Be 313.107†	27071.3	16.946	µg/L	0.0965	16.946	ppb	0.0965	0.57%
Ca 317.933Radial†	123934.0	50001	µg/L	117.9	50001	ppb	117.9	0.24%
Cd 226.502†	550.2	1.5222	µg/L	0.15776	1.5222	ppb	0.15776	10.36%
Co 228.616†	1053.2	49.575	µg/L	0.1597	49.575	ppb	0.1597	0.32%
Cr 267.716†	9483.3	211.25	µg/L	1.223	211.25	ppb	1.223	0.58%
Cu 324.752†	11258.1	119.46	µg/L	0.223	119.46	ppb	0.223	0.19%
Fe 238.204 Radial†	34218.4	181690	µg/L	611.9	181690	ppb	611.9	0.34%
K 766.490 Radial†	29055.4	16391	µg/L	48.1	16391	ppb	48.1	0.29%
Mg 279.077 IEC†	6706.9	37570	µg/L	99.7	37570	ppb	99.7	0.27%
Mn 257.610†	476321.7	1590.1	µg/L	1.79	1590.1	ppb	1.79	0.11%
Mo 202.031†	-16.7	5.1420	µg/L	0.12899	5.1420	ppb	0.12899	2.51%
Na 589.592 Radial†	17692.8	4990.3	µg/L	6.90	4990.3	ppb	6.90	0.14%

Ni 231.604†	2667.1	153.93	µg/L	0.702	153.93	ppb	0.702	0.46%
P 214.914†	403.6	740.73	µg/L	19.534	740.73	ppb	19.534	2.64%
Pb 220.353†	591.6	170.02	µg/L	0.449	170.02	ppb	0.449	0.26%
S 181.975 Axial†	135.4	691.93	µg/L	27.973	691.93	ppb	27.973	4.04%
Sb 206.836†	10.0	11.828	µg/L	4.4928	11.828	ppb	4.4928	37.98%
Se 196.026†	-67.5	19.081	µg/L	1.7731	19.081	ppb	1.7731	9.29%
SiO2†	183407.6	37206	µg/L	56.2	37206	ppb	56.2	0.15%
Si 251.611†	212559.7	17221	µg/L	22.1	17221	ppb	22.1	0.13%
Sn 189.927†	-161.6	-42.360	µg/L	1.4023	-42.360	ppb	1.4023	3.31%
Sr 421.552†	82577.6	476.57	µg/L	1.264	476.57	ppb	1.264	0.27%
Ti 334.940†	818023.9	1880.1	µg/L	3.72	1880.1	ppb	3.72	0.20%
Tl 190.801†	1.6	17.696	µg/L	5.3309	17.696	ppb	5.3309	30.12%
U 409.014†	-370.6	-69.700	µg/L	4.2599	-69.700	ppb	4.2599	6.11%
V 292.402†	26732.8	335.60	µg/L	2.223	335.60	ppb	2.223	0.66%
Zn 213.857†	12734.9	338.56	µg/L	1.724	338.56	ppb	1.724	0.51%

Sequence No.: 49
Sample ID: 241541009|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 338
Date Collected: 12/14/2009 13:03:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541009|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114718.5	114718.5	102	%			13:04:01
1	Al 396.153Radial†	144339.2	140729.2	74376	µg/L	74376	ppb	13:04:01
1	Ca 317.933Radial†	62953.2	61037.8	24625	µg/L	24625	ppb	13:04:01
1	Fe 238.204 Radial†	27264.9	26602.1	141250	µg/L	141250	ppb	13:04:22
1	K 766.490 Radial†	20765.7	19523.4	11014	µg/L	11014	ppb	13:04:01
1	Mg 279.077 IEC†	2561.5	2484.3	13808	µg/L	13808	ppb	13:04:22
1	Na 589.592 Radial†	2839.3	3173.1	894.98	µg/L	894.98	ppb	13:04:22
1	Sr 421.552†	27283.5	26723.5	154.23	µg/L	154.23	ppb	13:04:01
1	Sc 361.383	2009679.3	2009679.3	100.09	%			13:05:26
1	Y 371.029	1262904.9	1262904.9	103.23	%			13:05:26
1	Ag 328.068†	-985.4	-968.2	3.5300	µg/L	3.5300	ppb	13:05:32
1	As 188.979†	27.9	24.7	34.396	µg/L	34.396	ppb	13:05:52
1	B 249.677†	3009.4	2844.9	87.876	µg/L	87.876	ppb	13:05:32
1	Ba 233.527†	33333.1	33375.0	893.27	µg/L	893.27	ppb	13:05:32
1	Be 313.107†	18631.1	14995.2	8.3025	µg/L	8.3025	ppb	13:05:32
1	Cd 226.502†	496.6	593.8	5.8498	µg/L	5.8498	ppb	13:05:52
1	Co 228.616†	875.7	944.7	39.737	µg/L	39.737	ppb	13:05:52
1	Cr 267.716†	4398.7	4518.9	100.84	µg/L	100.84	ppb	13:05:32
1	Cu 324.752†	28223.2	24888.4	208.15	µg/L	208.15	ppb	13:05:32
1	Mn 257.610†	724320.5	723905.2	2399.6	µg/L	2399.6	ppb	13:05:26
1	Mo 202.031†	105.8	110.4	18.738	µg/L	18.738	ppb	13:05:52
1	Ni 231.604†	1767.3	1474.6	85.104	µg/L	85.104	ppb	13:05:52
1	P 214.914†	1009.7	818.8	1660.7	µg/L	1660.7	ppb	13:05:52
1	Pb 220.353†	1363.8	1311.6	350.97	µg/L	350.97	ppb	13:05:52
1	S 181.975 Axial†	203.9	178.0	929.41	µg/L	929.41	ppb	13:05:52
1	Sb 206.836†	71.5	47.3	61.456	µg/L	61.456	ppb	13:05:52
1	Se 196.026†	-43.9	-54.6	15.977	µg/L	15.977	ppb	13:05:52
1	SiO2†	182597.6	180396.8	36595	µg/L	36595	ppb	13:05:26
1	Si 251.611†	209373.1	208824.6	16842	µg/L	16842	ppb	13:05:26
1	Sn 189.927†	-47.8	-70.1	-10.924	µg/L	-10.924	ppb	13:05:52
1	Ti 334.940†	1727790.7	1725410.2	3970.2	µg/L	3970.2	ppb	13:05:26
1	Tl 190.801†	-32.6	-12.5	15.852	µg/L	15.852	ppb	13:05:52
1	U 409.014†	953.9	251.4	-0.7152	µg/L	-0.7152	ppb	13:05:26
1	V 292.402†	18966.6	19039.7	240.17	µg/L	240.17	ppb	13:05:32
1	Zn 213.857†	46730.8	46160.2	1288.2	µg/L	1288.2	ppb	13:05:32
2	Sc RADIAL	114252.8	114252.8	102	%			13:04:27
2	Al 396.153Radial†	144744.5	141700.8	74890	µg/L	74890	ppb	13:04:27
2	Ca 317.933Radial†	63043.4	61376.7	24762	µg/L	24762	ppb	13:04:27
2	Fe 238.204 Radial†	27359.8	26803.6	142320	µg/L	142320	ppb	13:04:48
2	K 766.490 Radial†	20806.9	19646.3	11083	µg/L	11083	ppb	13:04:27
2	Mg 279.077 IEC†	2580.3	2512.9	13968	µg/L	13968	ppb	13:04:48
2	Na 589.592 Radial†	2877.2	3221.7	908.67	µg/L	908.67	ppb	13:04:48
2	Sr 421.552†	27344.7	26892.1	155.20	µg/L	155.20	ppb	13:04:27
2	Sc 361.383	2024860.6	2024860.6	100.85	%			13:06:00
2	Y 371.029	1271435.8	1271435.8	103.93	%			13:06:00
2	Ag 328.068†	-872.9	-849.3	4.6301	µg/L	4.6301	ppb	13:06:06
2	As 188.979†	24.5	21.1	27.148	µg/L	27.148	ppb	13:06:26
2	B 249.677†	2828.1	2642.6	78.132	µg/L	78.132	ppb	13:06:06
2	Ba 233.527†	31349.1	31158.0	833.93	µg/L	833.93	ppb	13:06:06
2	Be 313.107†	17739.7	13971.8	7.6542	µg/L	7.6542	ppb	13:06:06
2	Cd 226.502†	491.5	585.0	5.5163	µg/L	5.5163	ppb	13:06:26
2	Co 228.616†	876.2	938.7	39.536	µg/L	39.536	ppb	13:06:26
2	Cr 267.716†	4108.0	4197.7	93.672	µg/L	93.672	ppb	13:06:06
2	Cu 324.752†	26577.0	23044.7	195.21	µg/L	195.21	ppb	13:06:06
2	Mn 257.610†	721297.3	715481.8	2372.0	µg/L	2372.0	ppb	13:06:00
2	Mo 202.031†	112.9	116.7	19.525	µg/L	19.525	ppb	13:06:26
2	Ni 231.604†	1790.9	1484.8	85.691	µg/L	85.691	ppb	13:06:26
2	P 214.914†	1019.6	821.0	1666.1	µg/L	1666.1	ppb	13:06:26
2	Pb 220.353†	1377.8	1315.2	351.98	µg/L	351.98	ppb	13:06:26

2	S 181.975 Axial†	211.0	183.5	959.03 µg/L	959.03 ppb	13:06:26
2	Sb 206.836†	75.3	50.5	64.617 µg/L	64.617 ppb	13:06:26
2	Se 196.026†	-45.1	-55.5	15.376 µg/L	15.376 ppb	13:06:26
2	SiO2†	181867.1	178304.7	36170 µg/L	36170 ppb	13:06:00
2	Si 251.611†	208568.0	206457.9	16651 µg/L	16651 ppb	13:06:00
2	Sn 189.927†	-51.5	-73.4	-12.409 µg/L	-12.409 ppb	13:06:26
2	Ti 334.940†	1718740.6	1703494.1	3919.7 µg/L	3919.7 ppb	13:06:00
2	Tl 190.801†	-43.3	-22.9	-0.9273 µg/L	-0.9273 ppb	13:06:26
2	U 409.014†	899.5	190.4	-6.9975 µg/L	-6.9975 ppb	13:06:00
2	V 292.402†	17732.7	17674.2	223.86 µg/L	223.86 ppb	13:06:06
2	Zn 213.857†	44024.3	43126.4	1202.4 µg/L	1202.4 ppb	13:06:06
3	Sc RADIAL	113631.2	113631.2	101 %		13:04:53
3	Al 396.153Radial†	143662.2	141410.2	74736 µg/L	74736 ppb	13:04:53
3	Ca 317.933Radial†	62313.6	60995.5	24608 µg/L	24608 ppb	13:04:53
3	Fe 238.204 Radial†	27290.3	26881.7	142730 µg/L	142730 ppb	13:05:14
3	K 766.490 Radial†	20755.0	19706.8	11117 µg/L	11117 ppb	13:04:53
3	Mg 279.077 IEC†	2564.7	2511.4	13959 µg/L	13959 ppb	13:05:14
3	Na 589.592 Radial†	2871.8	3231.7	911.50 µg/L	911.50 ppb	13:05:14
3	Sr 421.552†	27089.6	26787.3	154.59 µg/L	154.59 ppb	13:04:53
3	Sc 361.383	2024494.9	2024494.9	100.83 %		13:06:34
3	Y 371.029	1271119.6	1271119.6	103.90 %		13:06:34
3	Ag 328.068†	-872.7	-849.3	4.6625 µg/L	4.6625 ppb	13:06:40
3	As 188.979†	29.4	26.0	36.622 µg/L	36.622 ppb	13:07:00
3	B 249.677†	2784.0	2599.3	75.988 µg/L	75.988 ppb	13:06:40
3	Ba 233.527†	31196.2	31012.0	830.02 µg/L	830.02 ppb	13:06:40
3	Be 313.107†	17689.5	13925.1	7.6295 µg/L	7.6295 ppb	13:06:40
3	Cd 226.502†	496.3	589.8	5.6218 µg/L	5.6218 ppb	13:07:00
3	Co 228.616†	876.3	938.9	39.579 µg/L	39.579 ppb	13:07:00
3	Cr 267.716†	4103.4	4193.9	93.588 µg/L	93.588 ppb	13:06:40
3	Cu 324.752†	26505.8	22978.8	194.83 µg/L	194.83 ppb	13:06:40
3	Mn 257.610†	717939.6	712280.9	2361.5 µg/L	2361.5 ppb	13:06:34
3	Mo 202.031†	101.8	105.8	18.238 µg/L	18.238 ppb	13:07:00
3	Ni 231.604†	1790.5	1484.8	85.690 µg/L	85.690 ppb	13:07:00
3	P 214.914†	1014.5	816.2	1654.8 µg/L	1654.8 ppb	13:07:00
3	Pb 220.353†	1370.9	1308.6	350.21 µg/L	350.21 ppb	13:07:00
3	S 181.975 Axial†	210.0	182.6	954.05 µg/L	954.05 ppb	13:07:00
3	Sb 206.836†	75.3	50.5	64.645 µg/L	64.645 ppb	13:07:00
3	Se 196.026†	-47.1	-57.5	12.758 µg/L	12.758 ppb	13:07:00
3	SiO2†	181163.0	177638.9	36035 µg/L	36035 ppb	13:06:34
3	Si 251.611†	207655.6	205590.4	16581 µg/L	16581 ppb	13:06:34
3	Sn 189.927†	-52.8	-74.8	-13.075 µg/L	-13.075 ppb	13:07:00
3	Ti 334.940†	1711700.3	1696819.5	3904.4 µg/L	3904.4 ppb	13:06:34
3	Tl 190.801†	-41.9	-21.4	1.1750 µg/L	1.1750 ppb	13:07:00
3	U 409.014†	914.1	204.9	-5.6259 µg/L	-5.6259 ppb	13:06:34
3	V 292.402†	17724.9	17669.6	223.84 µg/L	223.84 ppb	13:06:40
3	Zn 213.857†	43812.7	42924.5	1196.7 µg/L	1196.7 ppb	13:06:40

Mean Data: 241541009|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2019678.3	100.59	%	0.431				0.43%
Sc RADIAL	114200.8	102	%	0.5				0.48%
Y 371.029	1268486.8	103.69	%	0.395				0.38%
Ag 328.068†	-888.9	4.2742	µg/L	0.64468	4.2742	ppb	0.64468	15.08%
Al 396.153Radial†	141280.1	74668	µg/L	263.6	74668	ppb	263.6	0.35%
As 188.979†	23.9	32.722	µg/L	4.9536	32.722	ppb	4.9536	15.14%
B 249.677†	2695.6	80.666	µg/L	6.3358	80.666	ppb	6.3358	7.85%
Ba 233.527†	31848.3	852.41	µg/L	35.442	852.41	ppb	35.442	4.16%
Be 313.107†	14297.3	7.8620	µg/L	0.38163	7.8620	ppb	0.38163	4.85%
Ca 317.933Radial†	61136.7	24665	µg/L	84.3	24665	ppb	84.3	0.34%
Cd 226.502†	589.5	5.6626	µg/L	0.17048	5.6626	ppb	0.17048	3.01%
Co 228.616†	940.8	39.618	µg/L	0.1058	39.618	ppb	0.1058	0.27%
Cr 267.716†	4303.5	96.034	µg/L	4.1640	96.034	ppb	4.1640	4.34%
Cu 324.752†	23637.3	199.40	µg/L	7.585	199.40	ppb	7.585	3.80%
Fe 238.204 Radial†	26762.5	142100	µg/L	766.2	142100	ppb	766.2	0.54%
K 766.490 Radial†	19625.5	11072	µg/L	52.7	11072	ppb	52.7	0.48%
Mg 279.077 IEC†	2502.9	13911	µg/L	89.7	13911	ppb	89.7	0.64%
Mn 257.610†	717222.6	2377.7	µg/L	19.66	2377.7	ppb	19.66	0.83%
Mo 202.031†	111.0	18.834	µg/L	0.6486	18.834	ppb	0.6486	3.44%
Na 589.592 Radial†	3208.8	905.05	µg/L	8.832	905.05	ppb	8.832	0.98%

Ni 231.604†	1481.4	85.495	µg/L	0.3385	85.495	ppb	0.3385	0.40%
P 214.914†	818.7	1660.6	µg/L	5.63	1660.6	ppb	5.63	0.34%
Pb 220.353†	1311.8	351.05	µg/L	0.889	351.05	ppb	0.889	0.25%
S 181.975 Axial†	181.4	947.50	µg/L	15.864	947.50	ppb	15.864	1.67%
Sb 206.836†	49.4	63.573	µg/L	1.8332	63.573	ppb	1.8332	2.88%
Se 196.026†	-55.9	14.703	µg/L	1.7118	14.703	ppb	1.7118	11.64%
SiO2†	178780.1	36267	µg/L	291.9	36267	ppb	291.9	0.80%
Si 251.611†	206957.7	16692	µg/L	134.9	16692	ppb	134.9	0.81%
Sn 189.927†	-72.8	-12.136	µg/L	1.1009	-12.136	ppb	1.1009	9.07%
Sr 421.552†	26801.0	154.67	µg/L	0.491	154.67	ppb	0.491	0.32%
Ti 334.940†	1708574.6	3931.4	µg/L	34.43	3931.4	ppb	34.43	0.88%
Tl 190.801†	-18.9	5.3667	µg/L	9.14146	5.3667	ppb	9.14146	170.34%
U 409.014†	215.6	-4.4462	µg/L	3.30316	-4.4462	ppb	3.30316	74.29%
V 292.402†	18127.8	229.29	µg/L	9.423	229.29	ppb	9.423	4.11%
Zn 213.857†	44070.4	1229.1	µg/L	51.29	1229.1	ppb	51.29	4.17%

Sequence No.: 50
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 13:07:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113079.6	113079.6	101	%			13:07:45
1	Al 396.153Radial†	10169.2	9905.9	5215.5	µg/L	5215.5	ppb	13:07:45
1	Ca 317.933Radial†	13639.0	13093.8	5282.6	µg/L	5282.6	ppb	13:08:06
1	Fe 238.204 Radial†	1047.3	1025.1	5460.5	µg/L	5460.5	ppb	13:08:06
1	K 766.490 Radial†	10034.3	9190.1	5184.5	µg/L	5184.5	ppb	13:07:45
1	Mg 279.077 IEC†	991.9	966.2	5456.2	µg/L	5456.2	ppb	13:08:06
1	Na 589.592 Radial†	36738.8	36783.2	10375	µg/L	10375	ppb	13:07:45
1	Sr 421.552†	88470.5	87701.5	506.14	µg/L	506.14	ppb	13:07:45
1	Sc 361.383	2012537.7	2012537.7	100.23	%			13:09:09
1	Y 371.029	1218666.4	1218666.4	99.616	%			13:09:09
1	Ag 328.068†	55294.4	55181.6	527.22	µg/L	527.22	ppb	13:09:15
1	As 188.979†	269.8	266.0	515.59	µg/L	515.59	ppb	13:09:35
1	B 249.677†	11429.2	11240.8	521.00	µg/L	521.00	ppb	13:09:15
1	Ba 233.527†	19670.7	19697.2	528.01	µg/L	528.01	ppb	13:09:15
1	Be 313.107†	801078.0	795589.0	518.33	µg/L	518.33	ppb	13:09:09
1	Cd 226.502†	18917.0	18970.4	533.58	µg/L	533.58	ppb	13:09:15
1	Co 228.616†	10397.6	10443.1	530.78	µg/L	530.78	ppb	13:09:15
1	Cr 267.716†	23616.3	23685.4	526.97	µg/L	526.97	ppb	13:09:15
1	Cu 324.752†	74041.6	70559.8	505.27	µg/L	505.27	ppb	13:09:15
1	Mn 257.610†	157815.6	157695.0	519.54	µg/L	519.54	ppb	13:09:09
1	Mo 202.031†	4367.2	4361.8	521.03	µg/L	521.03	ppb	13:09:35
1	Ni 231.604†	9510.7	9197.5	530.80	µg/L	530.80	ppb	13:09:15
1	P 214.914†	1366.4	1173.2	2555.7	µg/L	2555.7	ppb	13:09:35
1	Pb 220.353†	2050.4	1994.6	527.71	µg/L	527.71	ppb	13:09:35
1	S 181.975 Axial†	215.6	189.4	1011.7	µg/L	1011.7	ppb	13:09:35
1	Sb 206.836†	523.1	497.7	518.31	µg/L	518.31	ppb	13:09:35
1	Se 196.026†	366.2	354.6	525.80	µg/L	525.80	ppb	13:09:35
1	SiO2†	30182.7	28078.6	5696.0	µg/L	5696.0	ppb	13:09:15
1	Si 251.611†	33171.6	32737.3	2614.0	µg/L	2614.0	ppb	13:09:15
1	Sn 189.927†	1039.7	1014.9	519.89	µg/L	519.89	ppb	13:09:35
1	Ti 334.940†	223913.7	222592.4	512.07	µg/L	512.07	ppb	13:09:09
1	Tl 190.801†	311.6	331.0	522.88	µg/L	522.88	ppb	13:09:35
1	U 409.014†	5918.5	5203.0	518.04	µg/L	518.04	ppb	13:09:15
1	V 292.402†	43797.6	43785.9	530.43	µg/L	530.43	ppb	13:09:15
1	Zn 213.857†	19483.2	18909.9	530.12	µg/L	530.12	ppb	13:09:15
2	Sc RADIAL	113102.9	113102.9	101	%			13:08:11
2	Al 396.153Radial†	10307.5	10040.8	5287.0	µg/L	5287.0	ppb	13:08:11
2	Ca 317.933Radial†	13573.0	13025.6	5255.1	µg/L	5255.1	ppb	13:08:32
2	Fe 238.204 Radial†	1045.7	1023.4	5451.1	µg/L	5451.1	ppb	13:08:32
2	K 766.490 Radial†	10098.4	9251.5	5219.1	µg/L	5219.1	ppb	13:08:11
2	Mg 279.077 IEC†	992.3	966.4	5457.0	µg/L	5457.0	ppb	13:08:32
2	Na 589.592 Radial†	37084.8	37118.3	10469	µg/L	10469	ppb	13:08:11
2	Sr 421.552†	89577.7	88779.7	512.36	µg/L	512.36	ppb	13:08:11
2	Sc 361.383	2027014.9	2027014.9	100.96	%			13:09:42
2	Y 371.029	1226792.3	1226792.3	100.28	%			13:09:42
2	Ag 328.068†	55174.5	54668.8	522.33	µg/L	522.33	ppb	13:09:48
2	As 188.979†	274.3	268.6	520.50	µg/L	520.50	ppb	13:10:09
2	B 249.677†	11416.9	11147.1	516.64	µg/L	516.64	ppb	13:09:48
2	Ba 233.527†	19742.9	19628.5	526.16	µg/L	526.16	ppb	13:09:48
2	Be 313.107†	800364.8	789174.5	514.15	µg/L	514.15	ppb	13:09:42
2	Cd 226.502†	18967.1	18885.2	531.19	µg/L	531.19	ppb	13:09:48
2	Co 228.616†	10401.3	10372.7	527.20	µg/L	527.20	ppb	13:09:48
2	Cr 267.716†	23613.5	23514.3	523.17	µg/L	523.17	ppb	13:09:48
2	Cu 324.752†	74216.4	70205.3	502.74	µg/L	502.74	ppb	13:09:48
2	Mn 257.610†	157678.9	156435.1	515.40	µg/L	515.40	ppb	13:09:42
2	Mo 202.031†	4354.6	4318.2	515.83	µg/L	515.83	ppb	13:10:09
2	Ni 231.604†	9487.2	9106.5	525.55	µg/L	525.55	ppb	13:09:48
2	P 214.914†	1374.0	1171.0	2551.2	µg/L	2551.2	ppb	13:10:09
2	Pb 220.353†	2035.2	1965.0	519.87	µg/L	519.87	ppb	13:10:09

2	S 181.975 Axial†	217.5	189.7	1013.6	µg/L	1013.6 ppb	13:10:09
2	Sb 206.836†	514.4	485.4	505.52	µg/L	505.52 ppb	13:10:09
2	Se 196.026†	373.3	359.0	532.33	µg/L	532.33 ppb	13:10:09
2	SiO2†	30200.9	27881.6	5656.0	µg/L	5656.0 ppb	13:09:48
2	Si 251.611†	33227.2	32556.0	2599.6	µg/L	2599.6 ppb	13:09:48
2	Sn 189.927†	1041.6	1009.4	517.07	µg/L	517.07 ppb	13:10:09
2	Ti 334.940†	223740.8	220825.7	508.00	µg/L	508.00 ppb	13:09:42
2	Tl 190.801†	304.3	321.5	507.99	µg/L	507.99 ppb	13:10:09
2	U 409.014†	6029.1	5270.5	524.77	µg/L	524.77 ppb	13:09:48
2	V 292.402†	43815.7	43491.8	526.88	µg/L	526.88 ppb	13:09:48
2	Zn 213.857†	19528.3	18815.7	527.49	µg/L	527.49 ppb	13:09:48
3	Sc RADIAL	111827.2	111827.2	99.9	%		13:08:37
3	Al 396.153Radial†	10223.4	10072.9	5304.1	µg/L	5304.1 ppb	13:08:37
3	Ca 317.933Radial†	13503.8	13109.6	5289.0	µg/L	5289.0 ppb	13:08:57
3	Fe 238.204 Radial†	1047.2	1036.6	5521.6	µg/L	5521.6 ppb	13:08:57
3	K 766.490 Radial†	9994.2	9261.2	5224.6	µg/L	5224.6 ppb	13:08:37
3	Mg 279.077 IEC†	993.7	979.0	5528.1	µg/L	5528.1 ppb	13:08:57
3	Na 589.592 Radial†	36770.1	37222.0	10498	µg/L	10498 ppb	13:08:37
3	Sr 421.552†	88533.3	88745.5	512.16	µg/L	512.16 ppb	13:08:37
3	Sc 361.383	2021494.8	2021494.8	100.68	%		13:10:16
3	Y 371.029	1223595.3	1223595.3	100.02	%		13:10:16
3	Ag 328.068†	55520.8	55162.0	527.03	µg/L	527.03 ppb	13:10:22
3	As 188.979†	274.5	269.5	522.38	µg/L	522.38 ppb	13:10:42
3	B 249.677†	11495.2	11255.8	521.67	µg/L	521.67 ppb	13:10:22
3	Ba 233.527†	19849.0	19787.3	530.42	µg/L	530.42 ppb	13:10:22
3	Be 313.107†	801721.0	792686.4	516.43	µg/L	516.43 ppb	13:10:16
3	Cd 226.502†	19056.5	19025.4	535.13	µg/L	535.13 ppb	13:10:22
3	Co 228.616†	10433.2	10432.6	530.23	µg/L	530.23 ppb	13:10:22
3	Cr 267.716†	23761.7	23725.4	527.86	µg/L	527.86 ppb	13:10:22
3	Cu 324.752†	74398.4	70586.9	505.48	µg/L	505.48 ppb	13:10:22
3	Mn 257.610†	157973.1	157153.8	517.77	µg/L	517.77 ppb	13:10:16
3	Mo 202.031†	4334.2	4309.7	514.81	µg/L	514.81 ppb	13:10:42
3	Ni 231.604†	9584.2	9228.4	532.59	µg/L	532.59 ppb	13:10:22
3	P 214.914†	1367.2	1167.9	2543.8	µg/L	2543.8 ppb	13:10:42
3	Pb 220.353†	2028.3	1963.6	519.48	µg/L	519.48 ppb	13:10:42
3	S 181.975 Axial†	220.9	193.7	1035.1	µg/L	1035.1 ppb	13:10:42
3	Sb 206.836†	515.1	487.5	507.66	µg/L	507.66 ppb	13:10:42
3	Se 196.026†	371.9	358.6	531.77	µg/L	531.77 ppb	13:10:42
3	SiO2†	30268.6	28030.5	5686.2	µg/L	5686.2 ppb	13:10:22
3	Si 251.611†	33335.0	32753.0	2615.7	µg/L	2615.7 ppb	13:10:22
3	Sn 189.927†	1032.1	1002.7	513.69	µg/L	513.69 ppb	13:10:42
3	Ti 334.940†	223929.7	221618.4	509.83	µg/L	509.83 ppb	13:10:16
3	Tl 190.801†	311.5	329.5	520.50	µg/L	520.50 ppb	13:10:42
3	U 409.014†	6049.3	5306.8	528.38	µg/L	528.38 ppb	13:10:22
3	V 292.402†	43914.7	43708.6	529.48	µg/L	529.48 ppb	13:10:22
3	Zn 213.857†	19585.9	18925.8	530.55	µg/L	530.55 ppb	13:10:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020349.1	100.62	%	0.364				0.36%
Sc RADIAL	112669.9	101	%	0.7				0.65%
Y 371.029	1223018.0	99.971	%	0.3346				0.33%
Ag 328.068†	55004.1	525.53	µg/L	2.769	525.53	ppb	2.769	0.53%
QC value within limits for Ag 328.068 Recovery = 105.11%								
Al 396.153Radial†	10006.5	5268.9	µg/L	46.98	5268.9	ppb	46.98	0.89%
QC value within limits for Al 396.153Radial Recovery = 105.38%								
As 188.979†	268.0	519.49	µg/L	3.506	519.49	ppb	3.506	0.67%
QC value within limits for As 188.979 Recovery = 103.90%								
B 249.677†	11214.5	519.77	µg/L	2.730	519.77	ppb	2.730	0.53%
QC value within limits for B 249.677 Recovery = 103.95%								
Ba 233.527†	19704.4	528.20	µg/L	2.133	528.20	ppb	2.133	0.40%
QC value within limits for Ba 233.527 Recovery = 105.64%								
Be 313.107†	792483.3	516.30	µg/L	2.093	516.30	ppb	2.093	0.41%
QC value within limits for Be 313.107 Recovery = 103.26%								
Ca 317.933Radial†	13076.3	5275.6	µg/L	18.01	5275.6	ppb	18.01	0.34%
QC value within limits for Ca 317.933Radial Recovery = 105.51%								
Cd 226.502†	18960.4	533.30	µg/L	1.987	533.30	ppb	1.987	0.37%
QC value within limits for Cd 226.502 Recovery = 106.66%								
Co 228.616†	10416.1	529.41	µg/L	1.930	529.41	ppb	1.930	0.36%

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   QC value within limits for Co 228.616  Recovery = 105.88%
Cr 267.716†            23641.7      526.00 µg/L         2.492      526.00 ppb          2.492   0.47%
   QC value within limits for Cr 267.716  Recovery = 105.20%
Cu 324.752†            70450.7      504.49 µg/L         1.526      504.49 ppb          1.526   0.30%
   QC value within limits for Cu 324.752  Recovery = 100.90%
Fe 238.204 Radial†      1028.4      5477.8 µg/L        38.29      5477.8 ppb         38.29   0.70%
   QC value within limits for Fe 238.204 Radial  Recovery = 109.56%
K 766.490 Radial†       9234.3      5209.4 µg/L        21.76      5209.4 ppb         21.76   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 104.19%
Mg 279.077 IEC†          970.5      5480.4 µg/L        41.28      5480.4 ppb         41.28   0.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.61%
Mn 257.610†           157094.7      517.57 µg/L         2.081      517.57 ppb          2.081   0.40%
   QC value within limits for Mn 257.610  Recovery = 103.51%
Mo 202.031†             4329.9      517.22 µg/L         3.336      517.22 ppb          3.336   0.65%
   QC value within limits for Mo 202.031  Recovery = 103.44%
Na 589.592 Radial†     37041.2       10447 µg/L        64.7        10447 ppb          64.7   0.62%
   QC value within limits for Na 589.592 Radial  Recovery = 104.47%
Ni 231.604†             9177.5      529.65 µg/L         3.659      529.65 ppb          3.659   0.69%
   QC value within limits for Ni 231.604  Recovery = 105.93%
P 214.914†              1170.7      2550.2 µg/L         5.99      2550.2 ppb           5.99   0.24%
   QC value within limits for P 214.914  Recovery = 102.01%
Pb 220.353†             1974.4      522.35 µg/L         4.644      522.35 ppb          4.644   0.89%
   QC value within limits for Pb 220.353  Recovery = 104.47%
S 181.975 Axial†         190.9      1020.1 µg/L        13.00      1020.1 ppb         13.00   1.27%
   QC value within limits for S 181.975 Axial  Recovery = 102.01%
Sb 206.836†              490.2      510.50 µg/L         6.855      510.50 ppb          6.855   1.34%
   QC value within limits for Sb 206.836  Recovery = 102.10%
Se 196.026†              357.4      529.97 µg/L         3.617      529.97 ppb          3.617   0.68%
   QC value within limits for Se 196.026  Recovery = 105.99%
SiO2†                  27996.9      5679.4 µg/L        20.84      5679.4 ppb         20.84   0.37%
   QC value within limits for SiO2  Recovery = 106.21%
Si 251.611†            32682.1      2609.8 µg/L         8.85      2609.8 ppb          8.85   0.34%
   QC value within limits for Si 251.611  Recovery = 104.39%
Sn 189.927†             1009.0      516.88 µg/L         3.102      516.88 ppb          3.102   0.60%
   QC value within limits for Sn 189.927  Recovery = 103.38%
Sr 421.552†            88408.9      510.22 µg/L         3.537      510.22 ppb          3.537   0.69%
   QC value within limits for Sr 421.552  Recovery = 102.04%
Ti 334.940†           221678.8      509.97 µg/L         2.036      509.97 ppb          2.036   0.40%
   QC value within limits for Ti 334.940  Recovery = 101.99%
Tl 190.801†              327.3      517.12 µg/L         7.998      517.12 ppb          7.998   1.55%
   QC value within limits for Tl 190.801  Recovery = 103.42%
U 409.014†              5260.1      523.73 µg/L         5.247      523.73 ppb          5.247   1.00%
   QC value within limits for U 409.014  Recovery = 104.75%
V 292.402†             43662.1      528.93 µg/L         1.841      528.93 ppb          1.841   0.35%
   QC value within limits for V 292.402  Recovery = 105.79%
Zn 213.857†            18883.8      529.39 µg/L         1.657      529.39 ppb          1.657   0.31%
   QC value within limits for Zn 213.857  Recovery = 105.88%
All analyte(s) passed QC.
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Sequence No.: 51
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 13:10:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111454.3	111454.3	99.5	%			13:11:24
1	Al 396.153Radial†	206.4	43.0	22.699	µg/L	22.699	ppb	13:11:24
1	Ca 317.933Radial†	407.1	-3.6	-1.4563	µg/L	-1.4563	ppb	13:11:44
1	Fe 238.204 Radial†	11.5	-0.4	-2.0349	µg/L	-2.0349	ppb	13:11:44
1	K 766.490 Radial†	757.0	14.0	7.8827	µg/L	7.8827	ppb	13:11:24
1	Mg 279.077 IEC†	19.3	3.4	18.919	µg/L	18.919	ppb	13:11:44
1	Na 589.592 Radial†	-745.7	-347.6	-98.031	µg/L	-98.031	ppb	13:11:24
1	Sr 421.552†	-69.2	21.8	0.1256	µg/L	0.1256	ppb	13:11:24
1	Sc 361.383	2018022.6	2018022.6	100.51	%			13:12:46
1	Y 371.029	1227243.3	1227243.3	100.32	%			13:12:46
1	Ag 328.068†	-14.9	1.4	0.0140	µg/L	0.0140	ppb	13:12:52
1	As 188.979†	4.4	1.2	2.3010	µg/L	2.3010	ppb	13:13:12
1	B 249.677†	165.5	2.9	0.1345	µg/L	0.1345	ppb	13:12:52
1	Ba 233.527†	-77.1	-4.3	-0.1146	µg/L	-0.1146	ppb	13:13:12
1	Be 313.107†	3635.2	-2.0	-0.0013	µg/L	-0.0013	ppb	13:12:52
1	Cd 226.502†	-90.6	7.5	0.2067	µg/L	0.2067	ppb	13:13:12
1	Co 228.616†	-68.9	1.3	0.0654	µg/L	0.0654	ppb	13:13:12
1	Cr 267.716†	-127.6	-2.7	-0.0601	µg/L	-0.0601	ppb	13:12:52
1	Cu 324.752†	3229.3	-95.9	-0.6859	µg/L	-0.6859	ppb	13:12:52
1	Mn 257.610†	-232.3	16.7	0.0547	µg/L	0.0547	ppb	13:13:12
1	Mo 202.031†	-4.0	0.8	0.0911	µg/L	0.0911	ppb	13:13:12
1	Ni 231.604†	279.8	-12.6	-0.7289	µg/L	-0.7289	ppb	13:13:12
1	P 214.914†	194.9	3.9	8.6703	µg/L	8.6703	ppb	13:13:12
1	Pb 220.353†	43.8	-7.4	-1.9525	µg/L	-1.9525	ppb	13:13:12
1	S 181.975 Axial†	25.0	-0.8	-4.2886	µg/L	-4.2886	ppb	13:13:12
1	Sb 206.836†	14.1	-10.1	-10.562	µg/L	-10.562	ppb	13:13:12
1	Se 196.026†	7.4	-3.5	-5.1085	µg/L	-5.1085	ppb	13:13:12
1	SiO2†	2107.0	62.8	12.733	µg/L	12.733	ppb	13:12:52
1	Si 251.611†	404.0	45.2	3.8036	µg/L	3.8036	ppb	13:13:12
1	Sn 189.927†	15.8	-6.7	-3.4020	µg/L	-3.4020	ppb	13:13:12
1	Ti 334.940†	814.7	12.1	0.0278	µg/L	0.0278	ppb	13:12:52
1	Tl 190.801†	-18.3	1.9	2.9277	µg/L	2.9277	ppb	13:13:12
1	U 409.014†	669.7	-35.3	-3.5176	µg/L	-3.5176	ppb	13:12:52
1	V 292.402†	-84.8	6.1	0.0682	µg/L	0.0682	ppb	13:12:52
1	Zn 213.857†	532.1	1.6	0.0501	µg/L	0.0501	ppb	13:13:12
2	Sc RADIAL	111963.9	111963.9	100.0	%			13:11:50
2	Al 396.153Radial†	156.4	-8.0	-4.2576	µg/L	-4.2576	ppb	13:11:50
2	Ca 317.933Radial†	418.2	5.7	2.2879	µg/L	2.2879	ppb	13:12:10
2	Fe 238.204 Radial†	7.0	-4.9	-26.047	µg/L	-26.047	ppb	13:12:10
2	K 766.490 Radial†	798.7	52.1	29.418	µg/L	29.418	ppb	13:11:50
2	Mg 279.077 IEC†	21.7	5.6	31.848	µg/L	31.848	ppb	13:12:10
2	Na 589.592 Radial†	-669.5	-267.9	-75.562	µg/L	-75.562	ppb	13:11:50
2	Sr 421.552†	-34.4	56.9	0.3282	µg/L	0.3282	ppb	13:11:50
2	Sc 361.383	2017793.2	2017793.2	100.50	%			13:13:18
2	Y 371.029	1227475.4	1227475.4	100.34	%			13:13:18
2	Ag 328.068†	19.4	35.6	0.3342	µg/L	0.3342	ppb	13:13:24
2	As 188.979†	3.3	0.1	0.1905	µg/L	0.1905	ppb	13:13:45
2	B 249.677†	138.0	-24.4	-1.1258	µg/L	-1.1258	ppb	13:13:24
2	Ba 233.527†	-79.9	-7.1	-0.1897	µg/L	-0.1897	ppb	13:13:45
2	Be 313.107†	3707.6	70.5	0.0459	µg/L	0.0459	ppb	13:13:24
2	Cd 226.502†	-92.6	5.4	0.1517	µg/L	0.1517	ppb	13:13:45
2	Co 228.616†	-54.0	16.1	0.8188	µg/L	0.8188	ppb	13:13:45
2	Cr 267.716†	-104.0	20.7	0.4596	µg/L	0.4596	ppb	13:13:24
2	Cu 324.752†	3246.5	-78.5	-0.5663	µg/L	-0.5663	ppb	13:13:24
2	Mn 257.610†	-225.8	23.2	0.0730	µg/L	0.0730	ppb	13:13:45
2	Mo 202.031†	0.9	5.6	0.6722	µg/L	0.6722	ppb	13:13:45
2	Ni 231.604†	290.9	-1.6	-0.0909	µg/L	-0.0909	ppb	13:13:45
2	P 214.914†	196.0	5.1	11.338	µg/L	11.338	ppb	13:13:45
2	Pb 220.353†	50.0	-1.2	-0.3178	µg/L	-0.3178	ppb	13:13:45

2	S 181.975 Axial†	21.8	-4.0	-21.565 µg/L	-21.565 ppb	13:13:45
2	Sb 206.836†	16.3	-8.0	-8.3371 µg/L	-8.3371 ppb	13:13:45
2	Se 196.026†	16.6	5.7	8.3740 µg/L	8.3740 ppb	13:13:45
2	SiO2†	2098.7	54.7	11.103 µg/L	11.103 ppb	13:13:24
2	Si 251.611†	394.8	36.1	2.9143 µg/L	2.9143 ppb	13:13:45
2	Sn 189.927†	22.4	-0.1	-0.0445 µg/L	-0.0445 ppb	13:13:45
2	Ti 334.940†	814.1	11.5	0.0263 µg/L	0.0263 ppb	13:13:24
2	Tl 190.801†	-24.7	-4.5	-7.0271 µg/L	-7.0271 ppb	13:13:45
2	U 409.014†	666.9	-38.0	-3.7889 µg/L	-3.7889 ppb	13:13:24
2	V 292.402†	-102.1	-11.1	-0.1370 µg/L	-0.1370 ppb	13:13:24
2	Zn 213.857†	530.4	-0.1	0.0014 µg/L	0.0014 ppb	13:13:45
3	Sc RADIAL	111362.4	111362.4	99.4 %		13:12:16
3	Al 396.153Radial†	163.7	0.2	0.0879 µg/L	0.0879 ppb	13:12:16
3	Ca 317.933Radial†	414.5	4.2	1.7024 µg/L	1.7024 ppb	13:12:36
3	Fe 238.204 Radial†	9.2	-2.7	-14.328 µg/L	-14.328 ppb	13:12:36
3	K 766.490 Radial†	695.8	-47.0	-26.535 µg/L	-26.535 ppb	13:12:16
3	Mg 279.077 IEC†	13.2	-2.7	-15.358 µg/L	-15.358 ppb	13:12:36
3	Na 589.592 Radial†	-681.1	-283.2	-79.875 µg/L	-79.875 ppb	13:12:16
3	Sr 421.552†	-67.0	24.0	0.1384 µg/L	0.1384 ppb	13:12:16
3	Sc 361.383	2030069.1	2030069.1	101.11 %		13:13:51
3	Y 371.029	1234622.8	1234622.8	100.92 %		13:13:51
3	Ag 328.068†	-30.3	-13.7	-0.1298 µg/L	-0.1298 ppb	13:13:56
3	As 188.979†	-0.2	-3.3	-6.4937 µg/L	-6.4937 ppb	13:14:17
3	B 249.677†	182.4	18.6	0.8715 µg/L	0.8715 ppb	13:13:56
3	Ba 233.527†	-83.0	-9.6	-0.2570 µg/L	-0.2570 ppb	13:14:17
3	Be 313.107†	3711.1	51.6	0.0336 µg/L	0.0336 ppb	13:13:56
3	Cd 226.502†	-100.2	-1.5	-0.0398 µg/L	-0.0398 ppb	13:14:17
3	Co 228.616†	-65.7	4.8	0.2454 µg/L	0.2454 ppb	13:14:17
3	Cr 267.716†	-149.4	-23.6	-0.5227 µg/L	-0.5227 ppb	13:13:56
3	Cu 324.752†	3284.0	-60.9	-0.4381 µg/L	-0.4381 ppb	13:13:56
3	Mn 257.610†	-216.8	33.4	0.1082 µg/L	0.1082 ppb	13:14:17
3	Mo 202.031†	-0.9	3.9	0.4671 µg/L	0.4671 ppb	13:14:17
3	Ni 231.604†	291.7	-2.6	-0.1484 µg/L	-0.1484 ppb	13:14:17
3	P 214.914†	195.6	3.5	7.8015 µg/L	7.8015 ppb	13:14:17
3	Pb 220.353†	61.2	9.6	2.5310 µg/L	2.5310 ppb	13:14:17
3	S 181.975 Axial†	22.1	-3.8	-20.348 µg/L	-20.348 ppb	13:14:17
3	Sb 206.836†	19.9	-4.5	-4.6522 µg/L	-4.6522 ppb	13:14:17
3	Se 196.026†	13.4	2.4	3.5861 µg/L	3.5861 ppb	13:14:17
3	SiO2†	2064.0	7.8	1.5811 µg/L	1.5811 ppb	13:13:56
3	Si 251.611†	405.3	44.1	3.5642 µg/L	3.5642 ppb	13:14:17
3	Sn 189.927†	24.0	1.4	0.6867 µg/L	0.6867 ppb	13:14:17
3	Ti 334.940†	774.3	-32.8	-0.0755 µg/L	-0.0755 ppb	13:13:56
3	Tl 190.801†	-16.2	4.1	6.3683 µg/L	6.3683 ppb	13:14:17
3	U 409.014†	721.8	12.3	1.2287 µg/L	1.2287 ppb	13:13:56
3	V 292.402†	-76.9	14.5	0.1778 µg/L	0.1778 ppb	13:13:56
3	Zn 213.857†	523.4	-10.2	-0.2839 µg/L	-0.2839 ppb	13:14:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2021961.6	100.70	%	0.350				0.35%
Sc RADIAL	111593.6	99.7	%	0.29				0.29%
Y 371.029	1229780.5	100.52	%	0.343				0.34%
Ag 328.068†	7.8	0.0728	µg/L	0.23748	0.0728	ppb	0.23748	326.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.7	6.1765	µg/L	14.47314	6.1765	ppb	14.47314	234.32%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.7	-1.3341	µg/L	4.59130	-1.3341	ppb	4.59130	344.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-1.0	-0.0399	µg/L	1.01005	-0.0399	ppb	1.01005	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-7.0	-0.1871	µg/L	0.07122	-0.1871	ppb	0.07122	38.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	40.0	0.0261	µg/L	0.02452	0.0261	ppb	0.02452	93.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.1	0.8446	µg/L	2.01408	0.8446	ppb	2.01408	238.45%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	3.8	0.1062	µg/L	0.12941	0.1062	ppb	0.12941	121.84%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	7.4	0.3765	µg/L	0.39345	0.3765	ppb	0.39345	104.50%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -1.9     -0.0411 µg/L       0.49144     -0.0411 ppb        0.49144 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -78.4     -0.5635 µg/L       0.12393     -0.5635 ppb        0.12393  21.99%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.7     -14.137 µg/L       12.0074     -14.137 ppb        12.0074  84.94%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         6.4      3.5884 µg/L      28.22254      3.5884 ppb       28.22254 786.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           2.1      11.803 µg/L       24.3940      11.803 ppb        24.3940 206.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              24.4      0.0786 µg/L       0.02720      0.0786 ppb        0.02720  34.60%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               3.4      0.4101 µg/L       0.29473      0.4101 ppb        0.29473  71.87%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -299.6     -84.489 µg/L       11.9241     -84.489 ppb        11.9241  14.11%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.6     -0.3227 µg/L       0.35290     -0.3227 ppb        0.35290 109.35%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.1      9.2701 µg/L       1.84321      9.2701 ppb        1.84321  19.88%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               0.3      0.0869 µg/L       2.26894      0.0869 ppb        2.26894 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.9     -15.401 µg/L        9.6426     -15.401 ppb         9.6426  62.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -7.5     -7.8504 µg/L       2.98464     -7.8504 ppb        2.98464  38.02%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.6      2.2839 µg/L       6.83495      2.2839 ppb        6.83495 299.27%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    41.8      8.4726 µg/L       6.02361      8.4726 ppb        6.02361  71.09%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              41.8      3.4274 µg/L       0.46018      3.4274 ppb        0.46018  13.43%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.8     -0.9200 µg/L       2.18041     -0.9200 ppb        2.18041 237.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              34.2      0.1974 µg/L       0.11347      0.1974 ppb        0.11347  57.48%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -3.1     -0.0071 µg/L       0.05923     -0.0071 ppb        0.05923 833.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.5      0.7563 µg/L       6.95667      0.7563 ppb        6.95667 919.78%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -20.3     -2.0259 µg/L       2.82185     -2.0259 ppb        2.82185 139.29%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                3.2      0.0364 µg/L       0.15978      0.0364 ppb        0.15978 439.53%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -2.9     -0.0775 µg/L       0.18044     -0.0775 ppb        0.18044 232.92%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 52
Sample ID: 241541010|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 339
Date Collected: 12/14/2009 13:14:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541010|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114422.9	114422.9	102	%			13:15:02
1	Al 396.153Radial†	173246.7	169383.6	89521	µg/L	89521	ppb	13:15:02
1	Ca 317.933Radial†	53289.8	51739.5	20874	µg/L	20874	ppb	13:15:02
1	Fe 238.204 Radial†	25104.8	24556.8	130390	µg/L	130390	ppb	13:15:22
1	K 766.490 Radial†	25033.2	23752.1	13400	µg/L	13400	ppb	13:15:02
1	Mg 279.077 IEC†	3274.4	3188.5	17797	µg/L	17797	ppb	13:15:22
1	Na 589.592 Radial†	8925.8	9136.9	2577.1	µg/L	2577.1	ppb	13:15:02
1	Sr 421.552†	46449.5	45549.2	262.87	µg/L	262.87	ppb	13:15:02
1	Sc 361.383	2020580.9	2020580.9	100.63	%			13:16:27
1	Y 371.029	1269811.6	1269811.6	103.80	%			13:16:27
1	Ag 328.068†	-1181.5	-1157.8	1.1654	µg/L	1.1654	ppb	13:16:33
1	As 188.979†	29.0	25.6	38.213	µg/L	38.213	ppb	13:16:53
1	B 249.677†	1785.2	1612.2	33.967	µg/L	33.967	ppb	13:16:33
1	Ba 233.527†	66029.7	65685.7	1757.7	µg/L	1757.7	ppb	13:16:33
1	Be 313.107†	20525.1	16776.9	9.4883	µg/L	9.4883	ppb	13:16:33
1	Cd 226.502†	321.1	416.7	1.7044	µg/L	1.7044	ppb	13:16:53
1	Co 228.616†	1596.3	1656.0	75.996	µg/L	75.996	ppb	13:16:53
1	Cr 267.716†	4678.2	4772.9	106.58	µg/L	106.58	ppb	13:16:33
1	Cu 324.752†	10789.5	7412.5	80.965	µg/L	80.965	ppb	13:16:33
1	Mn 257.610†	2387253.0	2372447.0	7822.4	µg/L	7822.4	ppb	13:16:27
1	Mo 202.031†	24.6	29.2	8.6096	µg/L	8.6096	ppb	13:16:53
1	Ni 231.604†	1863.8	1561.0	90.091	µg/L	90.091	ppb	13:16:53
1	P 214.914†	965.2	769.1	1583.3	µg/L	1583.3	ppb	13:16:53
1	Pb 220.353†	613.8	559.0	153.77	µg/L	153.77	ppb	13:16:53
1	S 181.975 Axial†	194.8	167.9	876.29	µg/L	876.29	ppb	13:16:53
1	Sb 206.836†	20.9	-3.3	8.6693	µg/L	8.6693	ppb	13:16:53
1	Se 196.026†	-32.6	-43.2	23.117	µg/L	23.117	ppb	13:16:53
1	SiO2†	187368.6	184153.4	37357	µg/L	37357	ppb	13:16:27
1	Si 251.611†	214902.9	213191.0	17200	µg/L	17200	ppb	13:16:27
1	Sn 189.927†	-90.1	-111.9	-33.499	µg/L	-33.499	ppb	13:16:53
1	Ti 334.940†	1708040.9	1696471.6	3903.8	µg/L	3903.8	ppb	13:16:27
1	Tl 190.801†	-54.9	-34.5	2.8350	µg/L	2.8350	ppb	13:16:53
1	U 409.014†	718.8	12.6	-22.591	µg/L	-22.591	ppb	13:16:27
1	V 292.402†	22614.1	22562.0	281.45	µg/L	281.45	ppb	13:16:33
1	Zn 213.857†	11932.6	11329.5	305.22	µg/L	305.22	ppb	13:16:33
2	Sc RADIAL	114519.0	114519.0	102	%			13:15:28
2	Al 396.153Radial†	172996.6	168996.8	89317	µg/L	89317	ppb	13:15:28
2	Ca 317.933Radial†	52969.1	51382.2	20730	µg/L	20730	ppb	13:15:28
2	Fe 238.204 Radial†	25248.1	24676.4	131020	µg/L	131020	ppb	13:15:48
2	K 766.490 Radial†	24975.4	23675.0	13356	µg/L	13356	ppb	13:15:28
2	Mg 279.077 IEC†	3294.0	3205.0	17889	µg/L	17889	ppb	13:15:48
2	Na 589.592 Radial†	8890.8	9095.4	2565.3	µg/L	2565.3	ppb	13:15:28
2	Sr 421.552†	46147.5	45215.7	260.95	µg/L	260.95	ppb	13:15:28
2	Sc 361.383	2015361.9	2015361.9	100.37	%			13:17:01
2	Y 371.029	1266634.5	1266634.5	103.54	%			13:17:01
2	Ag 328.068†	-1194.6	-1173.9	1.0896	µg/L	1.0896	ppb	13:17:07
2	As 188.979†	30.1	26.8	40.356	µg/L	40.356	ppb	13:17:27
2	B 249.677†	1804.4	1636.0	34.873	µg/L	34.873	ppb	13:17:07
2	Ba 233.527†	66579.1	66403.0	1776.9	µg/L	1776.9	ppb	13:17:07
2	Be 313.107†	20643.4	16947.5	9.6066	µg/L	9.6066	ppb	13:17:07
2	Cd 226.502†	327.0	423.4	1.8403	µg/L	1.8403	ppb	13:17:27
2	Co 228.616†	1598.7	1662.5	76.367	µg/L	76.367	ppb	13:17:27
2	Cr 267.716†	4704.8	4811.5	107.44	µg/L	107.44	ppb	13:17:07
2	Cu 324.752†	10860.8	7511.3	81.807	µg/L	81.807	ppb	13:17:07
2	Mn 257.610†	2369460.6	2360864.1	7784.3	µg/L	7784.3	ppb	13:17:01
2	Mo 202.031†	24.3	28.9	8.6038	µg/L	8.6038	ppb	13:17:27
2	Ni 231.604†	1847.6	1549.7	89.437	µg/L	89.437	ppb	13:17:27
2	P 214.914†	972.6	779.0	1604.5	µg/L	1604.5	ppb	13:17:27
2	Pb 220.353†	615.1	561.9	154.51	µg/L	154.51	ppb	13:17:27

2	S 181.975 Axial†	195.3	168.9	881.86	µg/L	881.86 ppb	13:17:27
2	Sb 206.836†	15.7	-8.5	3.1664	µg/L	3.1664 ppb	13:17:27
2	Se 196.026†	-32.9	-43.6	22.894	µg/L	22.894 ppb	13:17:27
2	SiO2†	185884.2	183156.7	37155	µg/L	37155 ppb	13:17:01
2	Si 251.611†	213417.3	212263.8	17125	µg/L	17125 ppb	13:17:01
2	Sn 189.927†	-89.1	-111.2	-33.053	µg/L	-33.053 ppb	13:17:27
2	Ti 334.940†	1695243.3	1688117.0	3884.6	µg/L	3884.6 ppb	13:17:01
2	Tl 190.801†	-53.9	-33.6	3.9452	µg/L	3.9452 ppb	13:17:27
2	U 409.014†	671.2	-32.9	-27.254	µg/L	-27.254 ppb	13:17:01
2	V 292.402†	22880.9	22886.0	285.39	µg/L	285.39 ppb	13:17:07
2	Zn 213.857†	12009.9	11437.3	308.20	µg/L	308.20 ppb	13:17:07
3	Sc RADIAL	114851.4	114851.4	103	%		13:15:54
3	Al 396.153Radial†	174705.3	170173.1	89938	µg/L	89938 ppb	13:15:54
3	Ca 317.933Radial†	53477.8	51728.2	20870	µg/L	20870 ppb	13:15:54
3	Fe 238.204 Radial†	25035.6	24397.7	129540	µg/L	129540 ppb	13:16:14
3	K 766.490 Radial†	25231.4	23853.9	13457	µg/L	13457 ppb	13:15:54
3	Mg 279.077 IEC†	3286.8	3188.6	17798	µg/L	17798 ppb	13:16:14
3	Na 589.592 Radial†	8988.2	9165.1	2585.0	µg/L	2585.0 ppb	13:15:54
3	Sr 421.552†	46620.8	45546.6	262.86	µg/L	262.86 ppb	13:15:54
3	Sc 361.383	2028225.9	2028225.9	101.02	%		13:17:35
3	Y 371.029	1274280.9	1274280.9	104.16	%		13:17:35
3	Ag 328.068†	-1145.8	-1118.0	1.4789	µg/L	1.4789 ppb	13:17:41
3	As 188.979†	26.8	23.4	33.955	µg/L	33.955 ppb	13:18:01
3	B 249.677†	1791.1	1611.4	34.196	µg/L	34.196 ppb	13:17:41
3	Ba 233.527†	66065.0	65473.4	1752.0	µg/L	1752.0 ppb	13:17:41
3	Be 313.107†	20495.7	16670.9	9.4330	µg/L	9.4330 ppb	13:17:41
3	Cd 226.502†	341.1	435.2	2.2865	µg/L	2.2865 ppb	13:18:01
3	Co 228.616†	1601.7	1655.4	76.043	µg/L	76.043 ppb	13:18:01
3	Cr 267.716†	4694.6	4771.6	106.55	µg/L	106.55 ppb	13:17:41
3	Cu 324.752†	10765.8	7348.6	80.327	µg/L	80.327 ppb	13:17:41
3	Mn 257.610†	2372663.4	2349062.5	7745.3	µg/L	7745.3 ppb	13:17:35
3	Mo 202.031†	25.5	30.0	8.6756	µg/L	8.6756 ppb	13:18:01
3	Ni 231.604†	1860.5	1550.7	89.495	µg/L	89.495 ppb	13:18:01
3	P 214.914†	967.7	768.0	1582.0	µg/L	1582.0 ppb	13:18:01
3	Pb 220.353†	599.9	542.9	149.57	µg/L	149.57 ppb	13:18:01
3	S 181.975 Axial†	190.1	162.5	847.90	µg/L	847.90 ppb	13:18:01
3	Sb 206.836†	23.6	-0.8	11.217	µg/L	11.217 ppb	13:18:01
3	Se 196.026†	-43.5	-53.8	6.7794	µg/L	6.7794 ppb	13:18:01
3	SiO2†	186157.6	182252.8	36971	µg/L	36971 ppb	13:17:35
3	Si 251.611†	213370.6	210869.2	17012	µg/L	17012 ppb	13:17:35
3	Sn 189.927†	-93.9	-115.3	-35.327	µg/L	-35.327 ppb	13:18:01
3	Ti 334.940†	1698194.4	1680326.5	3866.6	µg/L	3866.6 ppb	13:17:35
3	Tl 190.801†	-52.8	-32.1	5.9448	µg/L	5.9448 ppb	13:18:01
3	U 409.014†	667.4	-41.0	-27.777	µg/L	-27.777 ppb	13:17:35
3	V 292.402†	22732.4	22594.4	281.76	µg/L	281.76 ppb	13:17:41
3	Zn 213.857†	11962.8	11314.7	304.89	µg/L	304.89 ppb	13:17:41

Mean Data: 241541010|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2021389.6	100.67	%	0.322				0.32%
Sc RADIAL	114597.7	102	%	0.2				0.20%
Y 371.029	1270242.3	103.83	%	0.314				0.30%
Ag 328.068†	-1149.9	1.2446	µg/L	0.20635	1.2446	ppb	0.20635	16.58%
Al 396.153Radial†	169517.8	89592	µg/L	316.9	89592	ppb	316.9	0.35%
As 188.979†	25.3	37.508	µg/L	3.2579	37.508	ppb	3.2579	8.69%
B 249.677†	1619.8	34.345	µg/L	0.4712	34.345	ppb	0.4712	1.37%
Ba 233.527†	65854.1	1762.2	µg/L	13.04	1762.2	ppb	13.04	0.74%
Be 313.107†	16798.4	9.5093	µg/L	0.08869	9.5093	ppb	0.08869	0.93%
Ca 317.933Radial†	51616.6	20824	µg/L	81.9	20824	ppb	81.9	0.39%
Cd 226.502†	425.1	1.9438	µg/L	0.30448	1.9438	ppb	0.30448	15.66%
Co 228.616†	1658.0	76.135	µg/L	0.2021	76.135	ppb	0.2021	0.27%
Cr 267.716†	4785.3	106.86	µg/L	0.508	106.86	ppb	0.508	0.48%
Cu 324.752†	7424.2	81.033	µg/L	0.7424	81.033	ppb	0.7424	0.92%
Fe 238.204 Radial†	24543.6	130320	µg/L	742.3	130320	ppb	742.3	0.57%
K 766.490 Radial†	23760.4	13404	µg/L	50.6	13404	ppb	50.6	0.38%
Mg 279.077 IEC†	3194.0	17828	µg/L	52.7	17828	ppb	52.7	0.30%
Mn 257.610†	2360791.2	7784.0	µg/L	38.52	7784.0	ppb	38.52	0.49%
Mo 202.031†	29.4	8.6297	µg/L	0.03990	8.6297	ppb	0.03990	0.46%
Na 589.592 Radial†	9132.5	2575.8	µg/L	9.90	2575.8	ppb	9.90	0.38%

Ni 231.604†	1553.8	89.674	µg/L	0.3619	89.674	ppb	0.3619	0.40%
P 214.914†	772.0	1589.9	µg/L	12.63	1589.9	ppb	12.63	0.79%
Pb 220.353†	554.6	152.62	µg/L	2.666	152.62	ppb	2.666	1.75%
S 181.975 Axial†	166.4	868.68	µg/L	18.215	868.68	ppb	18.215	2.10%
Sb 206.836†	-4.2	7.6843	µg/L	4.11479	7.6843	ppb	4.11479	53.55%
Se 196.026†	-46.9	17.597	µg/L	9.3687	17.597	ppb	9.3687	53.24%
SiO2†	183187.7	37161	µg/L	192.9	37161	ppb	192.9	0.52%
Si 251.611†	212108.0	17112	µg/L	94.4	17112	ppb	94.4	0.55%
Sn 189.927†	-112.8	-33.960	µg/L	1.2050	-33.960	ppb	1.2050	3.55%
Sr 421.552†	45437.2	262.22	µg/L	1.107	262.22	ppb	1.107	0.42%
Ti 334.940†	1688305.0	3885.0	µg/L	18.59	3885.0	ppb	18.59	0.48%
Tl 190.801†	-33.4	4.2417	µg/L	1.57594	4.2417	ppb	1.57594	37.15%
U 409.014†	-20.4	-25.874	µg/L	2.8552	-25.874	ppb	2.8552	11.03%
V 292.402†	22680.8	282.87	µg/L	2.186	282.87	ppb	2.186	0.77%
Zn 213.857†	11360.5	306.10	µg/L	1.820	306.10	ppb	1.820	0.59%

Sequence No.: 53
Sample ID: 241541011|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 340
Date Collected: 12/14/2009 13:18:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541011|931895|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115096.2	115096.2	103	%			13:18:44
1	Al 396.153Radial†	126750.7	123154.5	65088	µg/L	65088	ppb	13:18:44
1	Ca 317.933Radial†	52922.2	51076.7	20607	µg/L	20607	ppb	13:18:44
1	Fe 238.204 Radial†	24334.3	23663.5	125640	µg/L	125640	ppb	13:19:04
1	K 766.490 Radial†	16929.7	15724.7	8870.9	µg/L	8870.9	ppb	13:18:44
1	Mg 279.077 IEC†	2598.4	2512.0	13987	µg/L	13987	ppb	13:19:04
1	Na 589.592 Radial†	5237.2	5497.0	1550.4	µg/L	1550.4	ppb	13:19:04
1	Sr 421.552†	33134.0	32328.2	186.57	µg/L	186.57	ppb	13:18:44
1	Sc 361.383	2026583.0	2026583.0	100.93	%			13:20:09
1	Y 371.029	1287574.9	1287574.9	105.25	%			13:20:09
1	Ag 328.068†	-1163.1	-1136.1	0.1453	µg/L	0.1453	ppb	13:20:14
1	As 188.979†	25.4	22.0	29.945	µg/L	29.945	ppb	13:20:35
1	B 249.677†	1688.4	1511.0	30.754	µg/L	30.754	ppb	13:20:14
1	Ba 233.527†	35879.1	35619.7	953.14	µg/L	953.14	ppb	13:20:14
1	Be 313.107†	18797.6	15004.9	8.5981	µg/L	8.5981	ppb	13:20:14
1	Cd 226.502†	292.7	387.6	1.1706	µg/L	1.1706	ppb	13:20:35
1	Co 228.616†	677.6	741.1	31.010	µg/L	31.010	ppb	13:20:35
1	Cr 267.716†	2833.1	2931.1	65.405	µg/L	65.405	ppb	13:20:14
1	Cu 324.752†	5796.0	2433.5	44.374	µg/L	44.374	ppb	13:20:14
1	Mn 257.610†	820635.6	813293.4	2691.7	µg/L	2691.7	ppb	13:20:09
1	Mo 202.031†	57.6	61.8	12.323	µg/L	12.323	ppb	13:20:35
1	Ni 231.604†	1310.3	1007.2	58.128	µg/L	58.128	ppb	13:20:35
1	P 214.914†	915.6	717.1	1469.0	µg/L	1469.0	ppb	13:20:35
1	Pb 220.353†	469.7	414.4	113.63	µg/L	113.63	ppb	13:20:35
1	S 181.975 Axial†	212.1	184.4	966.07	µg/L	966.07	ppb	13:20:35
1	Sb 206.836†	24.1	-0.3	9.3660	µg/L	9.3660	ppb	13:20:35
1	Se 196.026†	-46.5	-56.9	1.0759	µg/L	1.0759	ppb	13:20:35
1	SiO2†	165389.2	161825.9	32828	µg/L	32828	ppb	13:20:09
1	Si 251.611†	189379.5	187271.2	15118	µg/L	15118	ppb	13:20:09
1	Sn 189.927†	-53.3	-75.2	-16.186	µg/L	-16.186	ppb	13:20:35
1	Ti 334.940†	1399736.0	1385991.4	3189.1	µg/L	3189.1	ppb	13:20:09
1	Tl 190.801†	-42.3	-21.8	-2.7941	µg/L	-2.7941	ppb	13:20:35
1	U 409.014†	42.2	-659.8	-88.775	µg/L	-88.775	ppb	13:20:09
1	V 292.402†	12226.1	12203.6	156.66	µg/L	156.66	ppb	13:20:14
1	Zn 213.857†	14131.9	13473.4	366.62	µg/L	366.62	ppb	13:20:14
2	Sc RADIAL	115659.2	115659.2	103	%			13:19:10
2	Al 396.153Radial†	127586.5	123363.4	65199	µg/L	65199	ppb	13:19:10
2	Ca 317.933Radial†	53290.7	51182.9	20649	µg/L	20649	ppb	13:19:10
2	Fe 238.204 Radial†	24223.3	23440.8	124460	µg/L	124460	ppb	13:19:30
2	K 766.490 Radial†	17014.0	15726.1	8871.8	µg/L	8871.8	ppb	13:19:10
2	Mg 279.077 IEC†	2579.1	2481.0	13814	µg/L	13814	ppb	13:19:30
2	Na 589.592 Radial†	5248.6	5483.3	1546.6	µg/L	1546.6	ppb	13:19:30
2	Sr 421.552†	33288.0	32320.4	186.53	µg/L	186.53	ppb	13:19:10
2	Sc 361.383	2033918.5	2033918.5	101.30	%			13:20:43
2	Y 371.029	1292018.3	1292018.3	105.61	%			13:20:43
2	Ag 328.068†	-1128.0	-1097.3	0.4169	µg/L	0.4169	ppb	13:20:48
2	As 188.979†	23.2	19.8	25.742	µg/L	25.742	ppb	13:21:09
2	B 249.677†	1683.4	1500.0	30.616	µg/L	30.616	ppb	13:20:48
2	Ba 233.527†	35878.5	35490.9	949.69	µg/L	949.69	ppb	13:20:48
2	Be 313.107†	18835.8	14975.4	8.5834	µg/L	8.5834	ppb	13:20:48
2	Cd 226.502†	288.3	382.2	1.1117	µg/L	1.1117	ppb	13:21:09
2	Co 228.616†	681.7	742.8	31.119	µg/L	31.119	ppb	13:21:09
2	Cr 267.716†	2807.9	2896.1	64.627	µg/L	64.627	ppb	13:20:48
2	Cu 324.752†	5776.8	2393.8	43.836	µg/L	43.836	ppb	13:20:48
2	Mn 257.610†	821563.4	811277.0	2685.0	µg/L	2685.0	ppb	13:20:43
2	Mo 202.031†	53.9	58.0	11.813	µg/L	11.813	ppb	13:21:09
2	Ni 231.604†	1332.0	1023.9	59.094	µg/L	59.094	ppb	13:21:09
2	P 214.914†	933.2	731.3	1502.0	µg/L	1502.0	ppb	13:21:09
2	Pb 220.353†	474.4	417.3	114.42	µg/L	114.42	ppb	13:21:09

2	S 181.975 Axial†	212.0	183.6	962.02 µg/L	962.02 ppb	13:21:09
2	Sb 206.836†	22.3	-2.1	7.3931 µg/L	7.3931 ppb	13:21:09
2	Se 196.026†	-36.9	-47.2	14.598 µg/L	14.598 ppb	13:21:09
2	SiO2†	165740.9	161582.1	32778 µg/L	32778 ppb	13:20:43
2	Si 251.611†	189772.8	186982.7	15095 µg/L	15095 ppb	13:20:43
2	Sn 189.927†	-53.2	-74.8	-16.169 µg/L	-16.169 ppb	13:21:09
2	Ti 334.940†	1399423.8	1380681.7	3176.9 µg/L	3176.9 ppb	13:20:43
2	Tl 190.801†	-38.8	-18.2	2.7297 µg/L	2.7297 ppb	13:21:09
2	U 409.014†	28.7	-673.3	-89.902 µg/L	-89.902 ppb	13:20:43
2	V 292.402†	12231.7	12165.4	156.10 µg/L	156.10 ppb	13:20:48
2	Zn 213.857†	14181.9	13472.2	366.72 µg/L	366.72 ppb	13:20:48
3	Sc RADIAL	115556.6	115556.6	103 %		13:19:36
3	Al 396.153Radial†	127872.2	123750.0	65403 µg/L	65403 ppb	13:19:36
3	Ca 317.933Radial†	53188.1	51129.3	20628 µg/L	20628 ppb	13:19:36
3	Fe 238.204 Radial†	24297.6	23533.6	124960 µg/L	124960 ppb	13:19:56
3	K 766.490 Radial†	17061.3	15786.6	8905.9 µg/L	8905.9 ppb	13:19:36
3	Mg 279.077 IEC†	2587.6	2491.5	13872 µg/L	13872 ppb	13:19:56
3	Na 589.592 Radial†	5219.6	5459.7	1539.9 µg/L	1539.9 ppb	13:19:56
3	Sr 421.552†	33440.7	32497.0	187.55 µg/L	187.55 ppb	13:19:36
3	Sc 361.383	2023829.3	2023829.3	100.80 %		13:21:17
3	Y 371.029	1285078.1	1285078.1	105.04 %		13:21:17
3	Ag 328.068†	-1134.5	-1109.3	0.3448 µg/L	0.3448 ppb	13:21:22
3	As 188.979†	20.1	16.8	19.852 µg/L	19.852 ppb	13:21:43
3	B 249.677†	1700.8	1525.6	31.650 µg/L	31.650 ppb	13:21:22
3	Ba 233.527†	35791.6	35581.3	952.11 µg/L	952.11 ppb	13:21:22
3	Be 313.107†	18801.7	15034.3	8.6201 µg/L	8.6201 ppb	13:21:22
3	Cd 226.502†	283.4	378.8	0.9785 µg/L	0.9785 ppb	13:21:43
3	Co 228.616†	678.0	742.4	31.090 µg/L	31.090 ppb	13:21:43
3	Cr 267.716†	2804.0	2906.1	64.848 µg/L	64.848 ppb	13:21:22
3	Cu 324.752†	5777.1	2422.6	44.148 µg/L	44.148 ppb	13:21:22
3	Mn 257.610†	818442.1	812223.5	2688.1 µg/L	2688.1 ppb	13:21:17
3	Mo 202.031†	47.9	52.3	11.153 µg/L	11.153 ppb	13:21:43
3	Ni 231.604†	1341.9	1040.3	60.038 µg/L	60.038 ppb	13:21:43
3	P 214.914†	926.1	728.8	1495.9 µg/L	1495.9 ppb	13:21:43
3	Pb 220.353†	481.1	426.3	116.80 µg/L	116.80 ppb	13:21:43
3	S 181.975 Axial†	216.2	188.8	989.80 µg/L	989.80 ppb	13:21:43
3	Sb 206.836†	14.9	-9.3	-0.1228 µg/L	-0.1228 ppb	13:21:43
3	Se 196.026†	-38.2	-48.7	12.724 µg/L	12.724 ppb	13:21:43
3	SiO2†	164882.4	161546.1	32771 µg/L	32771 ppb	13:21:17
3	Si 251.611†	188947.2	187097.6	15104 µg/L	15104 ppb	13:21:17
3	Sn 189.927†	-56.2	-78.1	-17.770 µg/L	-17.770 ppb	13:21:43
3	Ti 334.940†	1394436.1	1382620.2	3181.4 µg/L	3181.4 ppb	13:21:17
3	Tl 190.801†	-36.9	-16.5	5.4130 µg/L	5.4130 ppb	13:21:43
3	U 409.014†	40.1	-661.8	-88.846 µg/L	-88.846 ppb	13:21:17
3	V 292.402†	12205.8	12199.9	156.55 µg/L	156.55 ppb	13:21:22
3	Zn 213.857†	14087.1	13448.0	365.97 µg/L	365.97 ppb	13:21:22

Mean Data: 241541011|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2028110.3	101.01	%	0.260				0.26%
Sc RADIAL	115437.4	103	%	0.3				0.26%
Y 371.029	1288223.8	105.30	%	0.287				0.27%
Ag 328.068†	-1114.2	0.3023	µg/L	0.14070	0.3023	ppb	0.14070	46.54%
Al 396.153Radial†	123422.7	65230	µg/L	159.7	65230	ppb	159.7	0.24%
As 188.979†	19.5	25.180	µg/L	5.0699	25.180	ppb	5.0699	20.13%
B 249.677†	1512.2	31.006	µg/L	0.5613	31.006	ppb	0.5613	1.81%
Ba 233.527†	35563.9	951.65	µg/L	1.770	951.65	ppb	1.770	0.19%
Be 313.107†	15004.9	8.6005	µg/L	0.01848	8.6005	ppb	0.01848	0.21%
Ca 317.933Radial†	51129.6	20628	µg/L	21.4	20628	ppb	21.4	0.10%
Cd 226.502†	382.8	1.0869	µg/L	0.09838	1.0869	ppb	0.09838	9.05%
Co 228.616†	742.1	31.073	µg/L	0.0564	31.073	ppb	0.0564	0.18%
Cr 267.716†	2911.1	64.960	µg/L	0.4010	64.960	ppb	0.4010	0.62%
Cu 324.752†	2416.6	44.119	µg/L	0.2701	44.119	ppb	0.2701	0.61%
Fe 238.204 Radial†	23545.9	125020	µg/L	593.9	125020	ppb	593.9	0.48%
K 766.490 Radial†	15745.8	8882.9	µg/L	19.95	8882.9	ppb	19.95	0.22%
Mg 279.077 IEC†	2494.9	13891	µg/L	88.1	13891	ppb	88.1	0.63%
Mn 257.610†	812264.6	2688.3	µg/L	3.39	2688.3	ppb	3.39	0.13%
Mo 202.031†	57.4	11.763	µg/L	0.5865	11.763	ppb	0.5865	4.99%
Na 589.592 Radial†	5480.0	1545.6	µg/L	5.33	1545.6	ppb	5.33	0.34%

Ni 231.604†	1023.8	59.086	µg/L	0.9551	59.086	ppb	0.9551	1.62%
P 214.914†	725.7	1489.0	µg/L	17.53	1489.0	ppb	17.53	1.18%
Pb 220.353†	419.3	114.95	µg/L	1.654	114.95	ppb	1.654	1.44%
S 181.975 Axial†	185.6	972.63	µg/L	15.009	972.63	ppb	15.009	1.54%
Sb 206.836†	-3.9	5.5454	µg/L	5.00697	5.5454	ppb	5.00697	90.29%
Se 196.026†	-50.9	9.4658	µg/L	7.32605	9.4658	ppb	7.32605	77.40%
SiO2†	161651.4	32792	µg/L	30.9	32792	ppb	30.9	0.09%
Si 251.611†	187117.1	15106	µg/L	11.6	15106	ppb	11.6	0.08%
Sn 189.927†	-76.1	-16.708	µg/L	0.9194	-16.708	ppb	0.9194	5.50%
Sr 421.552†	32381.9	186.88	µg/L	0.576	186.88	ppb	0.576	0.31%
Ti 334.940†	1383097.8	3182.5	µg/L	6.19	3182.5	ppb	6.19	0.19%
Tl 190.801†	-18.9	1.7829	µg/L	4.18466	1.7829	ppb	4.18466	234.71%
U 409.014†	-665.0	-89.174	µg/L	0.6314	-89.174	ppb	0.6314	0.71%
V 292.402†	12189.6	156.44	µg/L	0.297	156.44	ppb	0.297	0.19%
Zn 213.857†	13464.5	366.44	µg/L	0.405	366.44	ppb	0.405	0.11%

Sequence No.: 54
Sample ID: 241541012|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 341
Date Collected: 12/14/2009 13:21:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541012|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114817.5	114817.5	103	%			13:22:24
1	Al 396.153Radial†	143131.7	139430.1	73690	µg/L	73690	ppb	13:22:24
1	Ca 317.933Radial†	44468.3	42956.8	17331	µg/L	17331	ppb	13:22:24
1	Fe 238.204 Radial†	30373.3	29610.7	157220	µg/L	157220	ppb	13:22:45
1	K 766.490 Radial†	19478.6	18250.6	10296	µg/L	10296	ppb	13:22:24
1	Mg 279.077 IEC†	2909.3	2821.4	15686	µg/L	15686	ppb	13:22:45
1	Na 589.592 Radial†	18241.6	18192.4	5131.2	µg/L	5131.2	ppb	13:22:24
1	Sr 421.552†	38429.9	37571.6	216.83	µg/L	216.83	ppb	13:22:24
1	Sc 361.383	2029049.8	2029049.8	101.06	%			13:23:50
1	Y 371.029	1267892.6	1267892.6	103.64	%			13:23:50
1	Ag 328.068†	-1538.6	-1506.2	0.6035	µg/L	0.6035	ppb	13:23:55
1	As 188.979†	34.2	30.7	43.825	µg/L	43.825	ppb	13:24:16
1	B 249.677†	2044.7	1861.6	37.125	µg/L	37.125	ppb	13:23:55
1	Ba 233.527†	48179.4	47748.2	1278.0	µg/L	1278.0	ppb	13:23:55
1	Be 313.107†	20571.2	16737.3	9.5900	µg/L	9.5900	ppb	13:23:55
1	Cd 226.502†	407.8	501.1	1.9593	µg/L	1.9593	ppb	13:23:55
1	Co 228.616†	1929.7	1979.3	93.136	µg/L	93.136	ppb	13:24:16
1	Cr 267.716†	4055.3	4137.1	92.680	µg/L	92.680	ppb	13:23:55
1	Cu 324.752†	8088.4	4695.0	67.313	µg/L	67.313	ppb	13:23:55
1	Mn 257.610†	1981017.0	1960556.4	6470.5	µg/L	6470.5	ppb	13:23:50
1	Mo 202.031†	-4.8	-0.0	6.1766	µg/L	6.1766	ppb	13:24:16
1	Ni 231.604†	1405.0	1099.3	63.439	µg/L	63.439	ppb	13:24:16
1	P 214.914†	978.3	778.1	1568.3	µg/L	1568.3	ppb	13:24:16
1	Pb 220.353†	841.8	782.0	211.01	µg/L	211.01	ppb	13:24:16
1	S 181.975 Axial†	207.4	179.6	935.23	µg/L	935.23	ppb	13:24:16
1	Sb 206.836†	26.1	1.7	13.046	µg/L	13.046	ppb	13:24:16
1	Se 196.026†	-45.3	-55.6	23.888	µg/L	23.888	ppb	13:24:16
1	SiO2†	165946.8	162178.5	32899	µg/L	32899	ppb	13:23:50
1	Si 251.611†	190214.2	187869.0	15153	µg/L	15153	ppb	13:23:50
1	Sn 189.927†	-81.2	-102.7	-26.863	µg/L	-26.863	ppb	13:24:16
1	Ti 334.940†	1564166.3	1547016.9	3560.0	µg/L	3560.0	ppb	13:23:50
1	Tl 190.801†	-49.3	-28.7	4.2623	µg/L	4.2623	ppb	13:24:16
1	U 409.014†	590.4	-117.4	-40.650	µg/L	-40.650	ppb	13:23:50
1	V 292.402†	30382.2	30155.1	374.73	µg/L	374.73	ppb	13:23:55
1	Zn 213.857†	10597.4	9958.8	263.85	µg/L	263.85	ppb	13:23:55
2	Sc RADIAL	115811.4	115811.4	103	%			13:22:50
2	Al 396.153Radial†	145544.1	140564.7	74290	µg/L	74290	ppb	13:22:50
2	Ca 317.933Radial†	45227.6	43318.7	17477	µg/L	17477	ppb	13:22:50
2	Fe 238.204 Radial†	30297.8	29283.5	155490	µg/L	155490	ppb	13:23:11
2	K 766.490 Radial†	19844.2	18441.1	10403	µg/L	10403	ppb	13:22:50
2	Mg 279.077 IEC†	2902.8	2790.8	15515	µg/L	15515	ppb	13:23:11
2	Na 589.592 Radial†	18639.0	18424.0	5196.5	µg/L	5196.5	ppb	13:22:50
2	Sr 421.552†	39049.6	37849.0	218.43	µg/L	218.43	ppb	13:22:50
2	Sc 361.383	2011377.9	2011377.9	100.18	%			13:24:23
2	Y 371.029	1256952.8	1256952.8	102.75	%			13:24:23
2	Ag 328.068†	-1504.9	-1486.0	0.6835	µg/L	0.6835	ppb	13:24:29
2	As 188.979†	27.6	24.4	31.774	µg/L	31.774	ppb	13:24:50
2	B 249.677†	2015.8	1850.5	37.157	µg/L	37.157	ppb	13:24:29
2	Ba 233.527†	48266.6	48254.1	1291.6	µg/L	1291.6	ppb	13:24:29
2	Be 313.107†	20578.2	16923.1	9.7090	µg/L	9.7090	ppb	13:24:29
2	Cd 226.502†	410.6	507.5	2.2756	µg/L	2.2756	ppb	13:24:29
2	Co 228.616†	1903.2	1969.7	92.637	µg/L	92.637	ppb	13:24:50
2	Cr 267.716†	4106.6	4223.6	94.607	µg/L	94.607	ppb	13:24:29
2	Cu 324.752†	8095.8	4772.7	67.495	µg/L	67.495	ppb	13:24:29
2	Mn 257.610†	1966215.6	1963004.2	6478.3	µg/L	6478.3	ppb	13:24:23
2	Mo 202.031†	10.2	14.9	7.8913	µg/L	7.8913	ppb	13:24:50
2	Ni 231.604†	1406.5	1113.0	64.229	µg/L	64.229	ppb	13:24:50
2	P 214.914†	968.5	776.8	1567.6	µg/L	1567.6	ppb	13:24:50
2	Pb 220.353†	830.5	778.1	210.04	µg/L	210.04	ppb	13:24:50

2	S 181.975 Axial†	195.4	169.4	881.17 µg/L	881.17 ppb	13:24:50
2	Sb 206.836†	22.6	-1.6	9.6036 µg/L	9.6036 ppb	13:24:50
2	Se 196.026†	-43.2	-53.9	25.307 µg/L	25.307 ppb	13:24:50
2	SiO2†	164781.8	162458.3	32956 µg/L	32956 ppb	13:24:23
2	Si 251.611†	188805.7	188116.7	15173 µg/L	15173 ppb	13:24:23
2	Sn 189.927†	-86.7	-108.9	-30.229 µg/L	-30.229 ppb	13:24:50
2	Ti 334.940†	1552995.6	1549464.9	3565.6 µg/L	3565.6 ppb	13:24:23
2	Tl 190.801†	-52.4	-32.2	-1.0878 µg/L	-1.0878 ppb	13:24:50
2	U 409.014†	613.8	-88.9	-37.482 µg/L	-37.482 ppb	13:24:23
2	V 292.402†	30419.1	30456.1	378.22 µg/L	378.22 ppb	13:24:29
2	Zn 213.857†	10601.3	10054.8	266.75 µg/L	266.75 ppb	13:24:29
3	Sc RADIAL	115557.8	115557.8	103 %		13:23:16
3	Al 396.153Radial†	144348.7	139715.1	73841 µg/L	73841 ppb	13:23:16
3	Ca 317.933Radial†	44737.8	42940.1	17324 µg/L	17324 ppb	13:23:16
3	Fe 238.204 Radial†	30322.9	29372.1	155960 µg/L	155960 ppb	13:23:37
3	K 766.490 Radial†	19662.5	18307.1	10328 µg/L	10328 ppb	13:23:16
3	Mg 279.077 IEC†	2915.1	2808.8	15616 µg/L	15616 ppb	13:23:37
3	Na 589.592 Radial†	18407.5	18239.2	5144.4 µg/L	5144.4 ppb	13:23:16
3	Sr 421.552†	38683.9	37577.5	216.87 µg/L	216.87 ppb	13:23:16
3	Sc 361.383	2027001.0	2027001.0	100.95 %		13:24:57
3	Y 371.029	1265990.1	1265990.1	103.48 %		13:24:57
3	Ag 328.068†	-1490.7	-1460.3	0.9438 µg/L	0.9438 ppb	13:25:03
3	As 188.979†	43.6	40.0	62.077 µg/L	62.077 ppb	13:25:23
3	B 249.677†	2013.2	1832.4	36.167 µg/L	36.167 ppb	13:25:03
3	Ba 233.527†	48184.8	47801.8	1279.5 µg/L	1279.5 ppb	13:25:03
3	Be 313.107†	20494.9	16682.3	9.5553 µg/L	9.5553 ppb	13:25:03
3	Cd 226.502†	403.5	497.3	1.9558 µg/L	1.9558 ppb	13:25:03
3	Co 228.616†	1882.1	1934.1	90.845 µg/L	90.845 ppb	13:25:23
3	Cr 267.716†	4062.3	4148.2	92.926 µg/L	92.926 ppb	13:25:03
3	Cu 324.752†	8029.2	4644.4	66.680 µg/L	66.680 ppb	13:25:03
3	Mn 257.610†	1976330.2	1957895.4	6461.6 µg/L	6461.6 ppb	13:24:57
3	Mo 202.031†	-6.3	-1.5	5.9466 µg/L	5.9466 ppb	13:25:23
3	Ni 231.604†	1391.2	1087.0	62.730 µg/L	62.730 ppb	13:25:23
3	P 214.914†	959.0	759.9	1529.6 µg/L	1529.6 ppb	13:25:23
3	Pb 220.353†	825.6	766.8	207.00 µg/L	207.00 ppb	13:25:23
3	S 181.975 Axial†	198.9	171.3	891.40 µg/L	891.40 ppb	13:25:23
3	Sb 206.836†	19.4	-5.0	6.0611 µg/L	6.0611 ppb	13:25:23
3	Se 196.026†	-57.0	-67.2	5.9410 µg/L	5.9410 ppb	13:25:23
3	SiO2†	165883.4	162281.7	32920 µg/L	32920 ppb	13:24:57
3	Si 251.611†	189926.4	187774.2	15146 µg/L	15146 ppb	13:24:57
3	Sn 189.927†	-77.0	-98.7	-24.981 µg/L	-24.981 ppb	13:25:23
3	Ti 334.940†	1561107.6	1545551.5	3556.6 µg/L	3556.6 ppb	13:24:57
3	Tl 190.801†	-49.0	-28.5	4.6503 µg/L	4.6503 ppb	13:25:23
3	U 409.014†	696.3	-11.9	-29.892 µg/L	-29.892 ppb	13:24:57
3	V 292.402†	30407.6	30210.7	375.31 µg/L	375.31 ppb	13:25:03
3	Zn 213.857†	10621.9	9993.7	264.98 µg/L	264.98 ppb	13:25:03

Mean Data: 241541012|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2022476.2	100.73	%	0.481				0.48%
Sc RADIAL	115395.5	103	%	0.5				0.45%
Y 371.029	1263611.8	103.29	%	0.478				0.46%
Ag 328.068†	-1484.2	0.7436	µg/L	0.17790	0.7436	ppb	0.17790	23.92%
Al 396.153Radial†	139903.3	73940	µg/L	311.9	73940	ppb	311.9	0.42%
As 188.979†	31.7	45.892	µg/L	15.2568	45.892	ppb	15.2568	33.24%
B 249.677†	1848.2	36.817	µg/L	0.5625	36.817	ppb	0.5625	1.53%
Ba 233.527†	47934.7	1283.0	µg/L	7.44	1283.0	ppb	7.44	0.58%
Be 313.107†	16780.9	9.6181	µg/L	0.08059	9.6181	ppb	0.08059	0.84%
Ca 317.933Radial†	43071.9	17377	µg/L	86.3	17377	ppb	86.3	0.50%
Cd 226.502†	502.0	2.0636	µg/L	0.18359	2.0636	ppb	0.18359	8.90%
Co 228.616†	1961.1	92.206	µg/L	1.2046	92.206	ppb	1.2046	1.31%
Cr 267.716†	4169.6	93.404	µg/L	1.0488	93.404	ppb	1.0488	1.12%
Cu 324.752†	4704.0	67.163	µg/L	0.4281	67.163	ppb	0.4281	0.64%
Fe 238.204 Radial†	29422.1	156220	µg/L	898.5	156220	ppb	898.5	0.58%
K 766.490 Radial†	18332.9	10342	µg/L	55.2	10342	ppb	55.2	0.53%
Mg 279.077 IEC†	2807.0	15606	µg/L	85.5	15606	ppb	85.5	0.55%
Mn 257.610†	1960485.3	6470.1	µg/L	8.38	6470.1	ppb	8.38	0.13%
Mo 202.031†	4.5	6.6715	µg/L	1.06261	6.6715	ppb	1.06261	15.93%
Na 589.592 Radial†	18285.2	5157.3	µg/L	34.54	5157.3	ppb	34.54	0.67%

Ni 231.604†	1099.7	63.466	µg/L	0.7500	63.466	ppb	0.7500	1.18%
P 214.914†	771.6	1555.2	µg/L	22.19	1555.2	ppb	22.19	1.43%
Pb 220.353†	775.6	209.35	µg/L	2.092	209.35	ppb	2.092	1.00%
S 181.975 Axial†	173.4	902.60	µg/L	28.719	902.60	ppb	28.719	3.18%
Sb 206.836†	-1.6	9.5704	µg/L	3.49271	9.5704	ppb	3.49271	36.50%
Se 196.026†	-58.9	18.379	µg/L	10.7945	18.379	ppb	10.7945	58.73%
SiO2†	162306.2	32925	µg/L	28.7	32925	ppb	28.7	0.09%
Si 251.611†	187920.0	15157	µg/L	14.3	15157	ppb	14.3	0.09%
Sn 189.927†	-103.4	-27.358	µg/L	2.6591	-27.358	ppb	2.6591	9.72%
Sr 421.552†	37666.0	217.38	µg/L	0.915	217.38	ppb	0.915	0.42%
Ti 334.940†	1547344.4	3560.7	µg/L	4.55	3560.7	ppb	4.55	0.13%
Tl 190.801†	-29.8	2.6083	µg/L	3.20677	2.6083	ppb	3.20677	122.95%
U 409.014†	-72.7	-36.008	µg/L	5.5283	-36.008	ppb	5.5283	15.35%
V 292.402†	30274.0	376.08	µg/L	1.869	376.08	ppb	1.869	0.50%
Zn 213.857†	10002.4	265.19	µg/L	1.460	265.19	ppb	1.460	0.55%

Sequence No.: 55
Sample ID: 241541013|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 342
Date Collected: 12/14/2009 13:25:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541013|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	116020.7	116020.7	104	%			13:26:05
1	Al 396.153Radial†	158897.0	153198.7	80967	µg/L	80967	ppb	13:26:05
1	Ca 317.933Radial†	49726.0	47581.6	19197	µg/L	19197	ppb	13:26:05
1	Fe 238.204 Radial†	25854.5	24942.1	132440	µg/L	132440	ppb	13:26:25
1	K 766.490 Radial†	19260.5	17843.0	10066	µg/L	10066	ppb	13:26:05
1	Mg 279.077 IEC†	3005.6	2884.9	16081	µg/L	16081	ppb	13:26:25
1	Na 589.592 Radial†	3493.1	3773.1	1064.2	µg/L	1064.2	ppb	13:26:25
1	Sr 421.552†	35302.2	34164.1	197.17	µg/L	197.17	ppb	13:26:05
1	Sc 361.383	2019803.4	2019803.4	100.60	%			13:27:30
1	Y 371.029	1268271.7	1268271.7	103.67	%			13:27:30
1	Ag 328.068†	-1255.7	-1232.0	0.6766	µg/L	0.6766	ppb	13:27:36
1	As 188.979†	26.2	22.9	32.317	µg/L	32.317	ppb	13:27:56
1	B 249.677†	1858.0	1685.2	36.720	µg/L	36.720	ppb	13:27:36
1	Ba 233.527†	36512.1	36368.3	973.44	µg/L	973.44	ppb	13:27:36
1	Be 313.107†	18198.7	14472.1	8.0646	µg/L	8.0646	ppb	13:27:36
1	Cd 226.502†	328.4	424.0	1.7215	µg/L	1.7215	ppb	13:27:56
1	Co 228.616†	1625.7	1685.8	77.950	µg/L	77.950	ppb	13:27:56
1	Cr 267.716†	4380.8	4479.1	100.08	µg/L	100.08	ppb	13:27:36
1	Cu 324.752†	10663.1	7291.0	80.536	µg/L	80.536	ppb	13:27:36
1	Mn 257.610†	1231978.1	1224928.5	4047.0	µg/L	4047.0	ppb	13:27:30
1	Mo 202.031†	6.7	11.4	6.5683	µg/L	6.5683	ppb	13:27:56
1	Ni 231.604†	1435.3	1135.8	65.549	µg/L	65.549	ppb	13:27:56
1	P 214.914†	892.3	697.0	1417.6	µg/L	1417.6	ppb	13:27:56
1	Pb 220.353†	609.1	554.5	151.82	µg/L	151.82	ppb	13:27:56
1	S 181.975 Axial†	199.7	172.8	902.67	µg/L	902.67	ppb	13:27:56
1	Sb 206.836†	23.0	-1.3	10.241	µg/L	10.241	ppb	13:27:56
1	Se 196.026†	-38.5	-49.0	16.360	µg/L	16.360	ppb	13:27:56
1	SiO2†	172911.4	169853.6	34456	µg/L	34456	ppb	13:27:30
1	Si 251.611†	198179.5	196648.8	15863	µg/L	15863	ppb	13:27:30
1	Sn 189.927†	-82.8	-104.7	-30.303	µg/L	-30.303	ppb	13:27:56
1	Ti 334.940†	1614864.8	1604500.8	3692.2	µg/L	3692.2	ppb	13:27:30
1	Tl 190.801†	-47.1	-26.8	-1.3136	µg/L	-1.3136	ppb	13:27:56
1	U 409.014†	668.3	-37.3	-27.990	µg/L	-27.990	ppb	13:27:30
1	V 292.402†	23255.1	23207.9	289.35	µg/L	289.35	ppb	13:27:36
1	Zn 213.857†	13961.0	13350.5	362.28	µg/L	362.28	ppb	13:27:36
2	Sc RADIAL	115502.0	115502.0	103	%			13:26:31
2	Al 396.153Radial†	159478.3	154451.0	81629	µg/L	81629	ppb	13:26:31
2	Ca 317.933Radial†	49698.9	47770.8	19273	µg/L	19273	ppb	13:26:31
2	Fe 238.204 Radial†	25827.6	25028.1	132890	µg/L	132890	ppb	13:26:51
2	K 766.490 Radial†	19268.5	17934.3	10118	µg/L	10118	ppb	13:26:31
2	Mg 279.077 IEC†	2986.1	2879.0	16047	µg/L	16047	ppb	13:26:51
2	Na 589.592 Radial†	3511.5	3806.1	1073.5	µg/L	1073.5	ppb	13:26:51
2	Sr 421.552†	35470.5	34480.2	198.99	µg/L	198.99	ppb	13:26:31
2	Sc 361.383	2021362.8	2021362.8	100.67	%			13:28:04
2	Y 371.029	1268640.1	1268640.1	103.70	%			13:28:04
2	Ag 328.068†	-1331.0	-1305.8	-0.0139	µg/L	-0.0139	ppb	13:28:10
2	As 188.979†	27.4	24.1	34.549	µg/L	34.549	ppb	13:28:30
2	B 249.677†	1840.2	1666.2	35.690	µg/L	35.690	ppb	13:28:10
2	Ba 233.527†	36107.3	35938.2	961.93	µg/L	961.93	ppb	13:28:10
2	Be 313.107†	17939.2	14200.4	7.8910	µg/L	7.8910	ppb	13:28:10
2	Cd 226.502†	325.7	421.1	1.5993	µg/L	1.5993	ppb	13:28:30
2	Co 228.616†	1606.2	1665.2	76.924	µg/L	76.924	ppb	13:28:30
2	Cr 267.716†	4280.4	4376.0	97.778	µg/L	97.778	ppb	13:28:10
2	Cu 324.752†	10406.9	7028.3	78.757	µg/L	78.757	ppb	13:28:10
2	Mn 257.610†	1230327.1	1222343.7	4038.5	µg/L	4038.5	ppb	13:28:04
2	Mo 202.031†	11.4	16.1	7.1402	µg/L	7.1402	ppb	13:28:30
2	Ni 231.604†	1424.7	1124.1	64.875	µg/L	64.875	ppb	13:28:30
2	P 214.914†	902.4	706.3	1438.1	µg/L	1438.1	ppb	13:28:30
2	Pb 220.353†	592.8	537.9	147.49	µg/L	147.49	ppb	13:28:30

2	S 181.975 Axial†	200.7	173.6	907.15	µg/L	907.15 ppb	13:28:30
2	Sb 206.836†	22.9	-1.4	10.011	µg/L	10.011 ppb	13:28:30
2	Se 196.026†	-34.8	-45.3	22.219	µg/L	22.219 ppb	13:28:30
2	SiO2†	172778.0	169588.5	34402	µg/L	34402 ppb	13:28:04
2	Si 251.611†	197793.3	196113.2	15820	µg/L	15820 ppb	13:28:04
2	Sn 189.927†	-88.3	-110.1	-32.994	µg/L	-32.994 ppb	13:28:30
2	Ti 334.940†	1611994.3	1600411.0	3682.8	µg/L	3682.8 ppb	13:28:04
2	Tl 190.801†	-47.2	-26.8	-1.4970	µg/L	-1.4970 ppb	13:28:30
2	U 409.014†	596.3	-109.3	-35.258	µg/L	-35.258 ppb	13:28:04
2	V 292.402†	22949.9	22886.8	285.52	µg/L	285.52 ppb	13:28:10
2	Zn 213.857†	13734.8	13115.1	355.59	µg/L	355.59 ppb	13:28:10
3	Sc RADIAL	115866.5	115866.5	103	%		13:26:57
3	Al 396.153Radial†	158912.8	153418.0	81083	µg/L	81083 ppb	13:26:57
3	Ca 317.933Radial†	49588.3	47512.4	19169	µg/L	19169 ppb	13:26:57
3	Fe 238.204 Radial†	25701.0	24827.0	131820	µg/L	131820 ppb	13:27:17
3	K 766.490 Radial†	19225.5	17834.0	10061	µg/L	10061 ppb	13:26:57
3	Mg 279.077 IEC†	2968.5	2853.0	15901	µg/L	15901 ppb	13:27:17
3	Na 589.592 Radial†	3480.6	3765.5	1062.1	µg/L	1062.1 ppb	13:27:17
3	Sr 421.552†	35295.1	34202.5	197.39	µg/L	197.39 ppb	13:26:57
3	Sc 361.383	2019286.7	2019286.7	100.57	%		13:28:38
3	Y 371.029	1267019.0	1267019.0	103.57	%		13:28:38
3	Ag 328.068†	-1263.1	-1239.6	0.5562	µg/L	0.5562 ppb	13:28:44
3	As 188.979†	25.9	22.6	31.882	µg/L	31.882 ppb	13:29:04
3	B 249.677†	1856.3	1684.0	36.856	µg/L	36.856 ppb	13:28:44
3	Ba 233.527†	36585.3	36450.4	975.64	µg/L	975.64 ppb	13:28:44
3	Be 313.107†	18156.9	14435.1	8.0384	µg/L	8.0384 ppb	13:28:44
3	Cd 226.502†	329.4	425.1	1.7940	µg/L	1.7940 ppb	13:29:04
3	Co 228.616†	1611.0	1671.7	77.220	µg/L	77.220 ppb	13:29:04
3	Cr 267.716†	4413.6	4512.8	100.82	µg/L	100.82 ppb	13:28:44
3	Cu 324.752†	10547.8	7179.1	79.605	µg/L	79.605 ppb	13:28:44
3	Mn 257.610†	1233648.8	1226903.0	4053.4	µg/L	4053.4 ppb	13:28:38
3	Mo 202.031†	19.4	24.1	8.0543	µg/L	8.0543 ppb	13:29:04
3	Ni 231.604†	1420.2	1121.2	64.703	µg/L	64.703 ppb	13:29:04
3	P 214.914†	904.5	709.3	1445.8	µg/L	1445.8 ppb	13:29:04
3	Pb 220.353†	596.6	542.2	148.61	µg/L	148.61 ppb	13:29:04
3	S 181.975 Axial†	199.9	173.1	904.26	µg/L	904.26 ppb	13:29:04
3	Sb 206.836†	21.1	-3.2	8.2616	µg/L	8.2616 ppb	13:29:04
3	Se 196.026†	-43.5	-54.1	8.5701	µg/L	8.5701 ppb	13:29:04
3	SiO2†	173387.9	170371.4	34561	µg/L	34561 ppb	13:28:38
3	Si 251.611†	198639.7	197156.8	15904	µg/L	15904 ppb	13:28:38
3	Sn 189.927†	-82.3	-104.2	-30.160	µg/L	-30.160 ppb	13:29:04
3	Ti 334.940†	1616974.4	1607009.1	3698.0	µg/L	3698.0 ppb	13:28:38
3	Tl 190.801†	-45.8	-25.5	0.8067	µg/L	0.8067 ppb	13:29:04
3	U 409.014†	602.3	-102.7	-34.400	µg/L	-34.400 ppb	13:28:38
3	V 292.402†	23250.8	23209.5	289.32	µg/L	289.32 ppb	13:28:44
3	Zn 213.857†	13955.0	13348.1	362.29	µg/L	362.29 ppb	13:28:44

Mean Data: 241541013|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2020151.0	100.61	%	0.054				0.05%
Sc RADIAL	115796.4	103	%	0.2				0.23%
Y 371.029	1267977.0	103.65	%	0.069				0.07%
Ag 328.068†	-1259.2	0.4063	µg/L	0.36885	0.4063	ppb	0.36885	90.79%
Al 396.153Radial†	153689.2	81226	µg/L	353.4	81226	ppb	353.4	0.44%
As 188.979†	23.2	32.916	µg/L	1.4310	32.916	ppb	1.4310	4.35%
B 249.677†	1678.5	36.422	µg/L	0.6377	36.422	ppb	0.6377	1.75%
Ba 233.527†	36252.3	970.34	µg/L	7.363	970.34	ppb	7.363	0.76%
Be 313.107†	14369.2	7.9980	µg/L	0.09358	7.9980	ppb	0.09358	1.17%
Ca 317.933Radial†	47621.6	19213	µg/L	54.0	19213	ppb	54.0	0.28%
Cd 226.502†	423.4	1.7049	µg/L	0.09839	1.7049	ppb	0.09839	5.77%
Co 228.616†	1674.3	77.364	µg/L	0.5280	77.364	ppb	0.5280	0.68%
Cr 267.716†	4456.0	99.559	µg/L	1.5869	99.559	ppb	1.5869	1.59%
Cu 324.752†	7166.2	79.633	µg/L	0.8898	79.633	ppb	0.8898	1.12%
Fe 238.204 Radial†	24932.4	132380	µg/L	535.9	132380	ppb	535.9	0.40%
K 766.490 Radial†	17870.4	10081	µg/L	31.3	10081	ppb	31.3	0.31%
Mg 279.077 IEC†	2872.3	16010	µg/L	95.3	16010	ppb	95.3	0.60%
Mn 257.610†	1224725.0	4046.3	µg/L	7.46	4046.3	ppb	7.46	0.18%
Mo 202.031†	17.2	7.2543	µg/L	0.74950	7.2543	ppb	0.74950	10.33%
Na 589.592 Radial†	3781.6	1066.6	µg/L	6.08	1066.6	ppb	6.08	0.57%

Ni 231.604†	1127.0	65.042	µg/L	0.4470	65.042	ppb	0.4470	0.69%
P 214.914†	704.2	1433.9	µg/L	14.58	1433.9	ppb	14.58	1.02%
Pb 220.353†	544.9	149.31	µg/L	2.249	149.31	ppb	2.249	1.51%
S 181.975 Axial†	173.2	904.69	µg/L	2.270	904.69	ppb	2.270	0.25%
Sb 206.836†	-1.9	9.5043	µg/L	1.08240	9.5043	ppb	1.08240	11.39%
Se 196.026†	-49.5	15.716	µg/L	6.8472	15.716	ppb	6.8472	43.57%
SiO2†	169937.8	34473	µg/L	80.8	34473	ppb	80.8	0.23%
Si 251.611†	196639.6	15862	µg/L	42.1	15862	ppb	42.1	0.27%
Sn 189.927†	-106.3	-31.152	µg/L	1.5968	-31.152	ppb	1.5968	5.13%
Sr 421.552†	34282.3	197.85	µg/L	0.995	197.85	ppb	0.995	0.50%
Ti 334.940†	1603973.6	3691.0	µg/L	7.67	3691.0	ppb	7.67	0.21%
Tl 190.801†	-26.4	-0.6680	µg/L	1.28040	-0.6680	ppb	1.28040	191.69%
U 409.014†	-83.1	-32.549	µg/L	3.9719	-32.549	ppb	3.9719	12.20%
V 292.402†	23101.4	288.06	µg/L	2.199	288.06	ppb	2.199	0.76%
Zn 213.857†	13271.2	360.06	µg/L	3.867	360.06	ppb	3.867	1.07%

Sequence No.: 56
Sample ID: 241541014|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 343
Date Collected: 12/14/2009 13:29:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541014|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114485.8	114485.8	102	%			13:29:46
1	Al 396.153Radial†	188811.5	184514.6	97518	µg/L	97518	ppb	13:29:46
1	Ca 317.933Radial†	81540.4	79343.2	32011	µg/L	32011	ppb	13:29:46
1	Fe 238.204 Radial†	24776.8	24222.5	128620	µg/L	128620	ppb	13:29:51
1	K 766.490 Radial†	19819.5	18639.1	10515	µg/L	10515	ppb	13:29:51
1	Mg 279.077 IEC†	3663.1	3566.9	19934	µg/L	19934	ppb	13:29:51
1	Na 589.592 Radial†	10650.7	10819.3	3051.6	µg/L	3051.6	ppb	13:29:51
1	Sr 421.552†	50798.6	49778.1	287.28	µg/L	287.28	ppb	13:29:46
1	Sc 361.383	2024869.2	2024869.2	100.85	%			13:30:26
1	Y 371.029	1278062.2	1278062.2	104.47	%			13:30:26
1	Ag 328.068†	-1236.5	-1209.9	0.2375	µg/L	0.2375	ppb	13:30:32
1	As 188.979†	32.3	28.8	38.749	µg/L	38.749	ppb	13:30:53
1	B 249.677†	1732.4	1556.0	31.914	µg/L	31.914	ppb	13:30:32
1	Ba 233.527†	52131.4	51765.4	1385.2	µg/L	1385.2	ppb	13:30:32
1	Be 313.107†	20432.3	16641.6	9.9827	µg/L	9.9827	ppb	13:30:32
1	Cd 226.502†	302.8	397.8	1.2594	µg/L	1.2594	ppb	13:30:53
1	Co 228.616†	2413.5	2463.0	120.28	µg/L	120.28	ppb	13:30:53
1	Cr 267.716†	3774.2	3866.6	86.362	µg/L	86.362	ppb	13:30:32
1	Cu 324.752†	10098.9	6705.0	75.529	µg/L	75.529	ppb	13:30:32
1	Mn 257.610†	1258553.1	1248216.1	4123.1	µg/L	4123.1	ppb	13:30:26
1	Mo 202.031†	-6.0	-1.2	4.9161	µg/L	4.9161	ppb	13:30:53
1	Ni 231.604†	1503.2	1199.6	69.226	µg/L	69.226	ppb	13:30:53
1	P 214.914†	777.9	581.4	1171.2	µg/L	1171.2	ppb	13:30:53
1	Pb 220.353†	682.3	625.6	172.12	µg/L	172.12	ppb	13:30:53
1	S 181.975 Axial†	175.8	148.6	773.35	µg/L	773.35	ppb	13:30:53
1	Sb 206.836†	38.4	13.9	19.794	µg/L	19.794	ppb	13:30:53
1	Se 196.026†	-45.9	-56.3	3.1168	µg/L	3.1168	ppb	13:30:53
1	SiO2†	178510.4	174975.5	35495	µg/L	35495	ppb	13:30:26
1	Si 251.611†	204675.9	202597.8	16396	µg/L	16396	ppb	13:30:26
1	Sn 189.927†	-92.9	-114.5	-32.137	µg/L	-32.137	ppb	13:30:53
1	Ti 334.940†	1022389.0	1012991.8	2329.9	µg/L	2329.9	ppb	13:30:26
1	Tl 190.801†	-33.2	-12.8	9.2089	µg/L	9.2089	ppb	13:30:53
1	U 409.014†	304.8	-399.4	-63.091	µg/L	-63.091	ppb	13:30:26
1	V 292.402†	19052.3	18982.6	238.26	µg/L	238.26	ppb	13:30:32
1	Zn 213.857†	12057.3	11428.1	308.25	µg/L	308.25	ppb	13:30:32
2	Sc RADIAL	114477.5	114477.5	102	%			13:29:57
2	Al 396.153Radial†	188460.1	184184.2	97343	µg/L	97343	ppb	13:29:57
2	Ca 317.933Radial†	81217.5	79033.0	31885	µg/L	31885	ppb	13:29:57
2	Fe 238.204 Radial†	24744.8	24193.0	128460	µg/L	128460	ppb	13:30:02
2	K 766.490 Radial†	19839.5	18660.0	10527	µg/L	10527	ppb	13:30:02
2	Mg 279.077 IEC†	3667.8	3571.7	19961	µg/L	19961	ppb	13:30:02
2	Na 589.592 Radial†	10622.5	10792.4	3044.0	µg/L	3044.0	ppb	13:30:02
2	Sr 421.552†	50679.1	49664.8	286.62	µg/L	286.62	ppb	13:29:57
2	Sc 361.383	2007238.6	2007238.6	99.970	%			13:31:00
2	Y 371.029	1267510.9	1267510.9	103.61	%			13:31:00
2	Ag 328.068†	-1266.8	-1250.9	-0.1479	µg/L	-0.1479	ppb	13:31:06
2	As 188.979†	27.7	24.5	30.420	µg/L	30.420	ppb	13:31:26
2	B 249.677†	1693.5	1532.2	30.857	µg/L	30.857	ppb	13:31:06
2	Ba 233.527†	52246.5	52334.6	1400.4	µg/L	1400.4	ppb	13:31:06
2	Be 313.107†	20484.6	16871.9	10.136	µg/L	10.136	ppb	13:31:06
2	Cd 226.502†	294.1	391.8	1.1103	µg/L	1.1103	ppb	13:31:26
2	Co 228.616†	2434.0	2504.5	122.41	µg/L	122.41	ppb	13:31:26
2	Cr 267.716†	3785.0	3910.4	87.337	µg/L	87.337	ppb	13:31:06
2	Cu 324.752†	10134.7	6828.8	76.379	µg/L	76.379	ppb	13:31:06
2	Mn 257.610†	1241602.2	1242221.6	4103.4	µg/L	4103.4	ppb	13:31:00
2	Mo 202.031†	1.3	6.0	5.7689	µg/L	5.7689	ppb	13:31:26
2	Ni 231.604†	1507.5	1217.0	70.230	µg/L	70.230	ppb	13:31:26
2	P 214.914†	774.8	585.0	1179.3	µg/L	1179.3	ppb	13:31:26
2	Pb 220.353†	690.6	639.9	175.87	µg/L	175.87	ppb	13:31:26

2	S 181.975 Axial†	174.7	149.1	775.96 µg/L	775.96 ppb		13:31:26
2	Sb 206.836†	25.3	1.2	6.5060 µg/L	6.5060 ppb		13:31:26
2	Se 196.026†	-49.2	-60.0	-2.4128 µg/L	-2.4128 ppb		13:31:26
2	SiO2†	176150.8	174170.0	35332 µg/L	35332 ppb		13:31:00
2	Si 251.611†	201855.5	201559.1	16312 µg/L	16312 ppb		13:31:00
2	Sn 189.927†	-91.8	-114.2	-32.047 µg/L	-32.047 ppb		13:31:26
2	Ti 334.940†	1009520.9	1009024.5	2320.8 µg/L	2320.8 ppb		13:31:00
2	Tl 190.801†	-33.9	-13.8	7.5739 µg/L	7.5739 ppb		13:31:26
2	U 409.014†	407.2	-294.3	-52.578 µg/L	-52.578 ppb		13:31:00
2	V 292.402†	19080.6	19176.9	240.60 µg/L	240.60 ppb		13:31:06
2	Zn 213.857†	12090.3	11566.1	312.16 µg/L	312.16 ppb		13:31:06
3	Sc RADIAL	114954.4	114954.4	103 %			13:30:08
3	Al 396.153Radial†	189995.0	184914.6	97729 µg/L	97729 ppb		13:30:08
3	Ca 317.933Radial†	81949.8	79416.8	32040 µg/L	32040 ppb		13:30:08
3	Fe 238.204 Radial†	24788.2	24134.8	128150 µg/L	128150 ppb		13:30:13
3	K 766.490 Radial†	19867.1	18606.4	10497 µg/L	10497 ppb		13:30:13
3	Mg 279.077 IEC†	3667.3	3556.4	19875 µg/L	19875 ppb		13:30:13
3	Na 589.592 Radial†	10646.5	10772.7	3038.4 µg/L	3038.4 ppb		13:30:13
3	Sr 421.552†	51188.1	49955.0	288.30 µg/L	288.30 ppb		13:30:08
3	Sc 361.383	2025946.5	2025946.5	100.90 %			13:31:34
3	Y 371.029	1277833.8	1277833.8	104.45 %			13:31:34
3	Ag 328.068†	-1267.0	-1239.4	-0.0771 µg/L	-0.0771 ppb		13:31:40
3	As 188.979†	28.2	24.8	31.000 µg/L	31.000 ppb		13:32:00
3	B 249.677†	1711.2	1534.1	31.042 µg/L	31.042 ppb		13:31:40
3	Ba 233.527†	52202.3	51808.2	1386.4 µg/L	1386.4 ppb		13:31:40
3	Be 313.107†	20507.7	16705.5	10.027 µg/L	10.027 ppb		13:31:40
3	Cd 226.502†	305.7	400.5	1.3835 µg/L	1.3835 ppb		13:32:00
3	Co 228.616†	2430.6	2478.7	121.10 µg/L	121.10 ppb		13:32:00
3	Cr 267.716†	3762.0	3852.6	86.050 µg/L	86.050 ppb		13:31:40
3	Cu 324.752†	10050.2	6651.4	75.046 µg/L	75.046 ppb		13:31:40
3	Mn 257.610†	1254493.9	1243529.5	4107.6 µg/L	4107.6 ppb		13:31:34
3	Mo 202.031†	9.0	13.7	6.6665 µg/L	6.6665 ppb		13:32:00
3	Ni 231.604†	1533.1	1228.4	70.890 µg/L	70.890 ppb		13:32:00
3	P 214.914†	781.8	584.8	1179.6 µg/L	1179.6 ppb		13:32:00
3	Pb 220.353†	691.9	634.7	174.55 µg/L	174.55 ppb		13:32:00
3	S 181.975 Axial†	171.8	144.6	752.00 µg/L	752.00 ppb		13:32:00
3	Sb 206.836†	34.7	10.3	15.992 µg/L	15.992 ppb		13:32:00
3	Se 196.026†	-42.4	-52.8	7.9863 µg/L	7.9863 ppb		13:32:00
3	SiO2†	178118.6	174493.1	35397 µg/L	35397 ppb		13:31:34
3	Si 251.611†	204233.0	202050.8	16352 µg/L	16352 ppb		13:31:34
3	Sn 189.927†	-90.0	-111.6	-30.716 µg/L	-30.716 ppb		13:32:00
3	Ti 334.940†	1019335.8	1009426.8	2321.7 µg/L	2321.7 ppb		13:31:34
3	Tl 190.801†	-30.9	-10.5	12.737 µg/L	12.737 ppb		13:32:00
3	U 409.014†	443.3	-262.3	-49.324 µg/L	-49.324 ppb		13:31:34
3	V 292.402†	19085.1	19005.0	238.52 µg/L	238.52 ppb		13:31:40
3	Zn 213.857†	12049.1	11413.5	307.88 µg/L	307.88 ppb		13:31:40

Mean Data: 241541014|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2019351.4	100.57	%	0.523				0.52%
Sc RADIAL	114639.2	102	%	0.2				0.24%
Y 371.029	1274469.0	104.18	%	0.493				0.47%
Ag 328.068†	-1233.4	0.0042	µg/L	0.20515	0.0042	ppb	0.20515	>999.9%
Al 396.153Radial†	184537.8	97530	µg/L	193.3	97530	ppb	193.3	0.20%
As 188.979†	26.1	33.390	µg/L	4.6500	33.390	ppb	4.6500	13.93%
B 249.677†	1540.8	31.271	µg/L	0.5649	31.271	ppb	0.5649	1.81%
Ba 233.527†	51969.4	1390.7	µg/L	8.48	1390.7	ppb	8.48	0.61%
Be 313.107†	16739.7	10.049	µg/L	0.0789	10.049	ppb	0.0789	0.79%
Ca 317.933Radial†	79264.3	31979	µg/L	82.2	31979	ppb	82.2	0.26%
Cd 226.502†	396.7	1.2511	µg/L	0.13681	1.2511	ppb	0.13681	10.94%
Co 228.616†	2482.1	121.26	µg/L	1.074	121.26	ppb	1.074	0.89%
Cr 267.716†	3876.5	86.583	µg/L	0.6716	86.583	ppb	0.6716	0.78%
Cu 324.752†	6728.4	75.651	µg/L	0.6751	75.651	ppb	0.6751	0.89%
Fe 238.204 Radial†	24183.4	128410	µg/L	236.9	128410	ppb	236.9	0.18%
K 766.490 Radial†	18635.2	10513	µg/L	15.3	10513	ppb	15.3	0.15%
Mg 279.077 IEC†	3565.0	19923	µg/L	44.0	19923	ppb	44.0	0.22%
Mn 257.610†	1244655.7	4111.4	µg/L	10.39	4111.4	ppb	10.39	0.25%
Mo 202.031†	6.2	5.7838	µg/L	0.87526	5.7838	ppb	0.87526	15.13%
Na 589.592 Radial†	10794.8	3044.7	µg/L	6.60	3044.7	ppb	6.60	0.22%

Ni 231.604†	1215.0	70.115	µg/L	0.8379	70.115	ppb	0.8379	1.20%
P 214.914†	583.7	1176.7	µg/L	4.77	1176.7	ppb	4.77	0.41%
Pb 220.353†	633.4	174.18	µg/L	1.901	174.18	ppb	1.901	1.09%
S 181.975 Axial†	147.5	767.10	µg/L	13.144	767.10	ppb	13.144	1.71%
Sb 206.836†	8.4	14.097	µg/L	6.8434	14.097	ppb	6.8434	48.54%
Se 196.026†	-56.4	2.8967	µg/L	5.20304	2.8967	ppb	5.20304	179.62%
SiO2†	174546.2	35408	µg/L	82.2	35408	ppb	82.2	0.23%
Si 251.611†	202069.2	16353	µg/L	42.1	16353	ppb	42.1	0.26%
Sn 189.927†	-113.4	-31.634	µg/L	0.7957	-31.634	ppb	0.7957	2.52%
Sr 421.552†	49799.3	287.40	µg/L	0.844	287.40	ppb	0.844	0.29%
Ti 334.940†	1010481.0	2324.1	µg/L	5.02	2324.1	ppb	5.02	0.22%
Tl 190.801†	-12.4	9.8399	µg/L	2.63878	9.8399	ppb	2.63878	26.82%
U 409.014†	-318.7	-54.998	µg/L	7.1953	-54.998	ppb	7.1953	13.08%
V 292.402†	19054.8	239.13	µg/L	1.282	239.13	ppb	1.282	0.54%
Zn 213.857†	11469.2	309.43	µg/L	2.370	309.43	ppb	2.370	0.77%

Sequence No.: 57
Sample ID: 241541015|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 344
Date Collected: 12/14/2009 13:32:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541015|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114429.4	114429.4	102	%			13:32:42
1	Al 396.153Radial†	148992.9	145639.3	76972	µg/L	76972	ppb	13:32:42
1	Ca 317.933Radial†	67356.2	65501.9	26426	µg/L	26426	ppb	13:32:42
1	Fe 238.204 Radial†	24965.5	24419.2	129660	µg/L	129660	ppb	13:33:02
1	K 766.490 Radial†	32589.0	31144.8	17570	µg/L	17570	ppb	13:32:42
1	Mg 279.077 IEC†	3139.3	3056.1	17051	µg/L	17051	ppb	13:33:02
1	Na 589.592 Radial†	6343.0	6608.9	1864.0	µg/L	1864.0	ppb	13:32:42
1	Sr 421.552†	53709.2	52650.9	303.86	µg/L	303.86	ppb	13:32:42
1	Sc 361.383	2010306.6	2010306.6	100.12	%			13:34:07
1	Y 371.029	1269648.3	1269648.3	103.78	%			13:34:07
1	Ag 328.068†	-1237.2	-1219.4	0.5824	µg/L	0.5824	ppb	13:34:13
1	As 188.979†	23.8	20.7	27.752	µg/L	27.752	ppb	13:34:33
1	B 249.677†	1837.3	1673.3	37.040	µg/L	37.040	ppb	13:34:13
1	Ba 233.527†	66771.3	66761.8	1786.5	µg/L	1786.5	ppb	13:34:13
1	Be 313.107†	20825.6	17181.2	9.7658	µg/L	9.7658	ppb	13:34:13
1	Cd 226.502†	337.2	434.4	2.2411	µg/L	2.2411	ppb	13:34:33
1	Co 228.616†	1620.1	1687.9	77.694	µg/L	77.694	ppb	13:34:33
1	Cr 267.716†	4327.4	4446.3	99.349	µg/L	99.349	ppb	13:34:13
1	Cu 324.752†	12562.3	9237.9	93.849	µg/L	93.849	ppb	13:34:13
1	Mn 257.610†	2130217.0	2127850.3	7017.5	µg/L	7017.5	ppb	13:34:07
1	Mo 202.031†	20.0	24.8	8.0541	µg/L	8.0541	ppb	13:34:33
1	Ni 231.604†	1727.8	1434.6	82.794	µg/L	82.794	ppb	13:34:33
1	P 214.914†	1193.2	1001.7	2095.6	µg/L	2095.6	ppb	13:34:33
1	Pb 220.353†	716.9	665.0	180.69	µg/L	180.69	ppb	13:34:33
1	S 181.975 Axial†	272.6	246.6	1297.8	µg/L	1297.8	ppb	13:34:33
1	Sb 206.836†	22.8	-1.4	10.057	µg/L	10.057	ppb	13:34:33
1	Se 196.026†	-40.7	-51.4	11.506	µg/L	11.506	ppb	13:34:33
1	SiO2†	185714.6	183453.1	37215	µg/L	37215	ppb	13:34:07
1	Si 251.611†	213192.2	212573.7	17150	µg/L	17150	ppb	13:34:07
1	Sn 189.927†	-94.7	-116.9	-35.070	µg/L	-35.070	ppb	13:34:33
1	Ti 334.940†	1682972.7	1680108.6	3865.8	µg/L	3865.8	ppb	13:34:07
1	Tl 190.801†	-51.3	-31.1	3.6084	µg/L	3.6084	ppb	13:34:33
1	U 409.014†	574.5	-127.8	-36.328	µg/L	-36.328	ppb	13:34:07
1	V 292.402†	23210.4	23272.4	289.89	µg/L	289.89	ppb	13:34:13
1	Zn 213.857†	12245.5	11702.7	315.88	µg/L	315.88	ppb	13:34:13
2	Sc RADIAL	114797.5	114797.5	103	%			13:33:08
2	Al 396.153Radial†	149809.4	145968.2	77146	µg/L	77146	ppb	13:33:08
2	Ca 317.933Radial†	67589.3	65517.8	26433	µg/L	26433	ppb	13:33:08
2	Fe 238.204 Radial†	24929.0	24305.2	129050	µg/L	129050	ppb	13:33:28
2	K 766.490 Radial†	32839.7	31287.0	17650	µg/L	17650	ppb	13:33:08
2	Mg 279.077 IEC†	3144.1	3050.9	17022	µg/L	17022	ppb	13:33:28
2	Na 589.592 Radial†	6393.8	6638.5	1872.4	µg/L	1872.4	ppb	13:33:08
2	Sr 421.552†	54035.3	52800.4	304.72	µg/L	304.72	ppb	13:33:08
2	Sc 361.383	2019720.8	2019720.8	100.59	%			13:34:41
2	Y 371.029	1275328.2	1275328.2	104.25	%			13:34:41
2	Ag 328.068†	-1198.6	-1175.2	0.9504	µg/L	0.9504	ppb	13:34:47
2	As 188.979†	29.2	25.9	37.891	µg/L	37.891	ppb	13:35:07
2	B 249.677†	1882.7	1709.9	38.930	µg/L	38.930	ppb	13:34:47
2	Ba 233.527†	67211.5	66888.6	1789.9	µg/L	1789.9	ppb	13:34:47
2	Be 313.107†	20934.4	17192.4	9.7839	µg/L	9.7839	ppb	13:34:47
2	Cd 226.502†	338.7	434.3	2.2821	µg/L	2.2821	ppb	13:35:07
2	Co 228.616†	1592.7	1653.1	75.986	µg/L	75.986	ppb	13:35:07
2	Cr 267.716†	4328.7	4427.5	98.931	µg/L	98.931	ppb	13:34:47
2	Cu 324.752†	12633.5	9250.2	93.807	µg/L	93.807	ppb	13:34:47
2	Mn 257.610†	2124108.9	2111861.2	6964.8	µg/L	6964.8	ppb	13:34:41
2	Mo 202.031†	16.0	20.7	7.5434	µg/L	7.5434	ppb	13:35:07
2	Ni 231.604†	1694.6	1393.6	80.425	µg/L	80.425	ppb	13:35:07
2	P 214.914†	1172.2	975.3	2037.5	µg/L	2037.5	ppb	13:35:07
2	Pb 220.353†	689.4	634.3	172.60	µg/L	172.60	ppb	13:35:07

2	S 181.975 Axial†	272.1	244.8	1288.6 µg/L	1288.6 ppb	13:35:07
2	Sb 206.836†	30.6	6.3	17.961 µg/L	17.961 ppb	13:35:07
2	Se 196.026†	-39.9	-50.4	12.609 µg/L	12.609 ppb	13:35:07
2	SiO2†	185220.0	182096.8	36940 µg/L	36940 ppb	13:34:41
2	Si 251.611†	212403.4	210797.1	17006 µg/L	17006 ppb	13:34:41
2	Sn 189.927†	-98.2	-120.0	-36.686 µg/L	-36.686 ppb	13:35:07
2	Ti 334.940†	1678118.5	1667448.0	3836.7 µg/L	3836.7 ppb	13:34:41
2	Tl 190.801†	-43.4	-23.1	15.827 µg/L	15.827 ppb	13:35:07
2	U 409.014†	584.1	-120.9	-35.528 µg/L	-35.528 ppb	13:34:41
2	V 292.402†	23285.3	23238.8	289.44 µg/L	289.44 ppb	13:34:47
2	Zn 213.857†	12255.5	11655.6	314.63 µg/L	314.63 ppb	13:34:47
3	Sc RADIAL	115607.2	115607.2	103 %		13:33:34
3	Al 396.153Radial†	150993.9	146092.0	77211 µg/L	77211 ppb	13:33:34
3	Ca 317.933Radial†	68264.9	65710.5	26511 µg/L	26511 ppb	13:33:34
3	Fe 238.204 Radial†	24946.6	24151.9	128240 µg/L	128240 ppb	13:33:54
3	K 766.490 Radial†	32973.4	31192.2	17597 µg/L	17597 ppb	13:33:34
3	Mg 279.077 IEC†	3141.8	3027.2	16890 µg/L	16890 ppb	13:33:54
3	Na 589.592 Radial†	6422.4	6622.5	1867.9 µg/L	1867.9 ppb	13:33:34
3	Sr 421.552†	54489.4	52871.1	305.13 µg/L	305.13 ppb	13:33:34
3	Sc 361.383	2012294.8	2012294.8	100.22 %		13:35:15
3	Y 371.029	1270604.5	1270604.5	103.86 %		13:35:15
3	Ag 328.068†	-1217.0	-1198.0	0.6722 µg/L	0.6722 ppb	13:35:21
3	As 188.979†	26.7	23.5	33.482 µg/L	33.482 ppb	13:35:41
3	B 249.677†	1841.1	1675.2	37.575 µg/L	37.575 ppb	13:35:21
3	Ba 233.527†	66825.3	66749.8	1786.2 µg/L	1786.2 ppb	13:35:21
3	Be 313.107†	20837.3	17172.3	9.7631 µg/L	9.7631 ppb	13:35:21
3	Cd 226.502†	339.8	436.6	2.4164 µg/L	2.4164 ppb	13:35:41
3	Co 228.616†	1622.4	1688.6	77.742 µg/L	77.742 ppb	13:35:41
3	Cr 267.716†	4345.2	4459.8	99.648 µg/L	99.648 ppb	13:35:21
3	Cu 324.752†	12620.0	9283.1	93.867 µg/L	93.867 ppb	13:35:21
3	Mn 257.610†	2129169.3	2124702.9	7006.9 µg/L	7006.9 ppb	13:35:15
3	Mo 202.031†	4.5	9.2	6.1422 µg/L	6.1422 ppb	13:35:41
3	Ni 231.604†	1718.9	1424.1	82.185 µg/L	82.185 ppb	13:35:41
3	P 214.914†	1199.1	1006.5	2107.9 µg/L	2107.9 ppb	13:35:41
3	Pb 220.353†	701.9	649.3	176.57 µg/L	176.57 ppb	13:35:41
3	S 181.975 Axial†	286.7	260.4	1371.9 µg/L	1371.9 ppb	13:35:41
3	Sb 206.836†	26.2	2.0	13.534 µg/L	13.534 ppb	13:35:41
3	Se 196.026†	-41.0	-51.7	10.222 µg/L	10.222 ppb	13:35:41
3	SiO2†	185536.6	183092.2	37142 µg/L	37142 ppb	13:35:15
3	Si 251.611†	212754.8	211926.9	17097 µg/L	17097 ppb	13:35:15
3	Sn 189.927†	-101.1	-123.3	-38.483 µg/L	-38.483 ppb	13:35:41
3	Ti 334.940†	1681050.2	1676529.6	3857.6 µg/L	3857.6 ppb	13:35:15
3	Tl 190.801†	-44.8	-24.6	13.810 µg/L	13.810 ppb	13:35:41
3	U 409.014†	643.1	-59.9	-29.293 µg/L	-29.293 ppb	13:35:15
3	V 292.402†	23221.1	23260.2	289.63 µg/L	289.63 ppb	13:35:21
3	Zn 213.857†	12230.1	11675.2	315.26 µg/L	315.26 ppb	13:35:21

Mean Data: 241541015|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2014107.4	100.31	%	0.247				0.25%
Sc RADIAL	114944.7	103	%	0.5				0.52%
Y 371.029	1271860.4	103.96	%	0.249				0.24%
Ag 328.068†	-1197.5	0.7350	µg/L	0.19190	0.7350	ppb	0.19190	26.11%
Al 396.153Radial†	145899.8	77110	µg/L	123.7	77110	ppb	123.7	0.16%
As 188.979†	23.4	33.042	µg/L	5.0837	33.042	ppb	5.0837	15.39%
B 249.677†	1686.2	37.849	µg/L	0.9743	37.849	ppb	0.9743	2.57%
Ba 233.527†	66800.0	1787.5	µg/L	2.06	1787.5	ppb	2.06	0.12%
Be 313.107†	17182.0	9.7709	µg/L	0.01131	9.7709	ppb	0.01131	0.12%
Ca 317.933Radial†	65576.7	26457	µg/L	46.8	26457	ppb	46.8	0.18%
Cd 226.502†	435.1	2.3132	µg/L	0.09172	2.3132	ppb	0.09172	3.97%
Co 228.616†	1676.5	77.141	µg/L	1.0002	77.141	ppb	1.0002	1.30%
Cr 267.716†	4444.5	99.309	µg/L	0.3605	99.309	ppb	0.3605	0.36%
Cu 324.752†	9257.1	93.841	µg/L	0.0308	93.841	ppb	0.0308	0.03%
Fe 238.204 Radial†	24292.1	128980	µg/L	712.0	128980	ppb	712.0	0.55%
K 766.490 Radial†	31208.0	17606	µg/L	40.8	17606	ppb	40.8	0.23%
Mg 279.077 IEC†	3044.8	16988	µg/L	85.8	16988	ppb	85.8	0.51%
Mn 257.610†	2121471.5	6996.4	µg/L	27.88	6996.4	ppb	27.88	0.40%
Mo 202.031†	18.2	7.2466	µg/L	0.98989	7.2466	ppb	0.98989	13.66%
Na 589.592 Radial†	6623.3	1868.1	µg/L	4.18	1868.1	ppb	4.18	0.22%

Ni 231.604†	1417.4	81.801	µg/L	1.2302	81.801	ppb	1.2302	1.50%
P 214.914†	994.5	2080.3	µg/L	37.57	2080.3	ppb	37.57	1.81%
Pb 220.353†	649.6	176.62	µg/L	4.047	176.62	ppb	4.047	2.29%
S 181.975 Axial†	250.6	1319.4	µg/L	45.67	1319.4	ppb	45.67	3.46%
Sb 206.836†	2.3	13.851	µg/L	3.9612	13.851	ppb	3.9612	28.60%
Se 196.026†	-51.2	11.446	µg/L	1.1950	11.446	ppb	1.1950	10.44%
SiO2†	182880.7	37099	µg/L	142.5	37099	ppb	142.5	0.38%
Si 251.611†	211765.9	17084	µg/L	72.6	17084	ppb	72.6	0.42%
Sn 189.927†	-120.1	-36.747	µg/L	1.7074	-36.747	ppb	1.7074	4.65%
Sr 421.552†	52774.1	304.57	µg/L	0.649	304.57	ppb	0.649	0.21%
Ti 334.940†	1674695.4	3853.3	µg/L	15.02	3853.3	ppb	15.02	0.39%
Tl 190.801†	-26.3	11.082	µg/L	6.5500	11.082	ppb	6.5500	59.11%
U 409.014†	-102.9	-33.716	µg/L	3.8515	-33.716	ppb	3.8515	11.42%
V 292.402†	23257.1	289.65	µg/L	0.229	289.65	ppb	0.229	0.08%
Zn 213.857†	11677.8	315.26	µg/L	0.627	315.26	ppb	0.627	0.20%

Sequence No.: 58
Sample ID: 241541016|931895|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 345
Date Collected: 12/14/2009 13:35:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541016|931895|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	115070.4	115070.4	103	%			13:36:23
1	Al 396.153Radial†	135337.5	131538.4	69519	µg/L	69519	ppb	13:36:23
1	Ca 317.933Radial†	67545.3	65318.7	26352	µg/L	26352	ppb	13:36:23
1	Fe 238.204 Radial†	23221.8	22586.2	119930	µg/L	119930	ppb	13:36:44
1	K 766.490 Radial†	26560.2	25100.2	14160	µg/L	14160	ppb	13:36:23
1	Mg 279.077 IEC†	2924.5	2829.9	15789	µg/L	15789	ppb	13:36:44
1	Na 589.592 Radial†	7802.3	7994.4	2254.8	µg/L	2254.8	ppb	13:36:23
1	Sr 421.552†	43755.8	42672.0	246.27	µg/L	246.27	ppb	13:36:23
1	Sc 361.383	2021688.5	2021688.5	100.69	%			13:37:48
1	Y 371.029	1267338.7	1267338.7	103.59	%			13:37:48
1	Ag 328.068†	-1189.1	-1164.7	0.2565	µg/L	0.2565	ppb	13:37:54
1	As 188.979†	28.6	25.3	36.653	µg/L	36.653	ppb	13:38:14
1	B 249.677†	1793.3	1619.3	37.588	µg/L	37.588	ppb	13:37:54
1	Ba 233.527†	59003.8	58672.1	1570.1	µg/L	1570.1	ppb	13:37:54
1	Be 313.107†	18355.6	14611.0	8.2874	µg/L	8.2874	ppb	13:37:54
1	Cd 226.502†	295.0	390.5	1.7814	µg/L	1.7814	ppb	13:38:14
1	Co 228.616†	1437.3	1497.3	69.126	µg/L	69.126	ppb	13:38:14
1	Cr 267.716†	6692.7	6771.1	150.93	µg/L	150.93	ppb	13:37:54
1	Cu 324.752†	11693.8	8304.8	85.092	µg/L	85.092	ppb	13:37:54
1	Mn 257.610†	1726781.5	1715200.4	5658.5	µg/L	5658.5	ppb	13:37:48
1	Mo 202.031†	51.0	55.4	11.323	µg/L	11.323	ppb	13:38:14
1	Ni 231.604†	1946.4	1642.0	94.766	µg/L	94.766	ppb	13:38:14
1	P 214.914†	1127.5	929.8	1945.0	µg/L	1945.0	ppb	13:38:14
1	Pb 220.353†	753.2	697.0	188.64	µg/L	188.64	ppb	13:38:14
1	S 181.975 Axial†	245.1	217.7	1144.8	µg/L	1144.8	ppb	13:38:14
1	Sb 206.836†	22.9	-1.4	7.8335	µg/L	7.8335	ppb	13:38:14
1	Se 196.026†	-31.3	-41.8	19.347	µg/L	19.347	ppb	13:38:14
1	SiO2†	130707.5	127778.5	25921	µg/L	25921	ppb	13:37:54
1	Si 251.611†	149890.3	148506.8	11958	µg/L	11958	ppb	13:37:54
1	Sn 189.927†	-94.3	-116.0	-36.006	µg/L	-36.006	ppb	13:38:14
1	Ti 334.940†	1460171.2	1449370.0	3334.7	µg/L	3334.7	ppb	13:37:48
1	Tl 190.801†	-42.3	-21.9	8.7793	µg/L	8.7793	ppb	13:38:14
1	U 409.014†	662.6	-43.6	-26.112	µg/L	-26.112	ppb	13:37:48
1	V 292.402†	22402.1	22339.2	277.94	µg/L	277.94	ppb	13:37:54
1	Zn 213.857†	13084.0	12466.5	338.48	µg/L	338.48	ppb	13:37:54
2	Sc RADIAL	116234.6	116234.6	104	%			13:36:49
2	Al 396.153Radial†	135137.9	130026.9	68720	µg/L	68720	ppb	13:36:49
2	Ca 317.933Radial†	67365.8	64487.4	26017	µg/L	26017	ppb	13:36:49
2	Fe 238.204 Radial†	23482.7	22611.2	120060	µg/L	120060	ppb	13:37:10
2	K 766.490 Radial†	26495.8	24779.3	13979	µg/L	13979	ppb	13:36:49
2	Mg 279.077 IEC†	2954.7	2830.5	15792	µg/L	15792	ppb	13:37:10
2	Na 589.592 Radial†	7782.2	7899.0	2227.9	µg/L	2227.9	ppb	13:36:49
2	Sr 421.552†	43698.7	42190.5	243.49	µg/L	243.49	ppb	13:36:49
2	Sc 361.383	2027704.6	2027704.6	100.99	%			13:38:22
2	Y 371.029	1272016.9	1272016.9	103.98	%			13:38:22
2	Ag 328.068†	-1166.9	-1139.2	0.5063	µg/L	0.5063	ppb	13:38:27
2	As 188.979†	31.8	28.4	42.762	µg/L	42.762	ppb	13:38:48
2	B 249.677†	1770.7	1591.6	36.256	µg/L	36.256	ppb	13:38:27
2	Ba 233.527†	58935.6	58430.7	1563.6	µg/L	1563.6	ppb	13:38:27
2	Be 313.107†	18430.2	14630.8	8.2955	µg/L	8.2955	ppb	13:38:27
2	Cd 226.502†	315.8	410.3	2.3270	µg/L	2.3270	ppb	13:38:48
2	Co 228.616†	1439.3	1495.1	68.985	µg/L	68.985	ppb	13:38:48
2	Cr 267.716†	6704.7	6763.3	150.75	µg/L	150.75	ppb	13:38:27
2	Cu 324.752†	11756.7	8332.5	85.318	µg/L	85.318	ppb	13:38:27
2	Mn 257.610†	1739100.8	1722310.7	5681.9	µg/L	5681.9	ppb	13:38:22
2	Mo 202.031†	47.6	51.9	10.918	µg/L	10.918	ppb	13:38:48
2	Ni 231.604†	1956.7	1646.4	95.020	µg/L	95.020	ppb	13:38:48
2	P 214.914†	1136.1	934.9	1956.1	µg/L	1956.1	ppb	13:38:48
2	Pb 220.353†	746.1	687.8	186.12	µg/L	186.12	ppb	13:38:48

2	S 181.975 Axial†	250.4	222.2	1169.0 µg/L	1169.0 ppb	13:38:48
2	Sb 206.836†	24.8	0.4	9.7605 µg/L	9.7605 ppb	13:38:48
2	Se 196.026†	-38.8	-49.2	8.5479 µg/L	8.5479 ppb	13:38:48
2	SiO2†	130884.2	127568.4	25878 µg/L	25878 ppb	13:38:27
2	Si 251.611†	149897.8	148072.5	11922 µg/L	11922 ppb	13:38:27
2	Sn 189.927†	-89.7	-111.2	-33.607 µg/L	-33.607 ppb	13:38:48
2	Ti 334.940†	1470126.2	1454924.9	3347.5 µg/L	3347.5 ppb	13:38:22
2	Tl 190.801†	-41.9	-21.4	9.7964 µg/L	9.7964 ppb	13:38:48
2	U 409.014†	685.2	-23.1	-24.104 µg/L	-24.104 ppb	13:38:22
2	V 292.402†	22437.7	22308.4	277.58 µg/L	277.58 ppb	13:38:27
2	Zn 213.857†	13075.9	12420.0	337.15 µg/L	337.15 ppb	13:38:27
3	Sc RADIAL	115309.6	115309.6	103 %		13:37:15
3	Al 396.153Radial†	135282.1	131211.3	69346 µg/L	69346 ppb	13:37:15
3	Ca 317.933Radial†	67404.0	65045.2	26242 µg/L	26242 ppb	13:37:15
3	Fe 238.204 Radial†	23456.1	22766.8	120890 µg/L	120890 ppb	13:37:36
3	K 766.490 Radial†	26482.4	24971.1	14087 µg/L	14087 ppb	13:37:15
3	Mg 279.077 IEC†	2955.5	2854.2	15924 µg/L	15924 ppb	13:37:36
3	Na 589.592 Radial†	7864.5	8039.0	2267.4 µg/L	2267.4 ppb	13:37:15
3	Sr 421.552†	43645.9	42477.0	245.14 µg/L	245.14 ppb	13:37:15
3	Sc 361.383	2040789.1	2040789.1	101.64 %		13:38:55
3	Y 371.029	1279372.9	1279372.9	104.58 %		13:38:55
3	Ag 328.068†	-1160.9	-1125.9	0.6812 µg/L	0.6812 ppb	13:39:01
3	As 188.979†	24.6	21.0	28.229 µg/L	28.229 ppb	13:39:22
3	B 249.677†	1775.8	1585.4	35.710 µg/L	35.710 ppb	13:39:01
3	Ba 233.527†	58950.2	58070.8	1554.0 µg/L	1554.0 ppb	13:39:01
3	Be 313.107†	18332.5	14417.6	8.1681 µg/L	8.1681 ppb	13:39:01
3	Cd 226.502†	300.2	393.0	1.7729 µg/L	1.7729 ppb	13:39:22
3	Co 228.616†	1443.5	1490.0	68.792 µg/L	68.792 ppb	13:39:22
3	Cr 267.716†	6696.6	6712.7	149.62 µg/L	149.62 ppb	13:39:01
3	Cu 324.752†	11714.0	8215.9	84.663 µg/L	84.663 ppb	13:39:01
3	Mn 257.610†	1734843.6	1707081.3	5631.9 µg/L	5631.9 ppb	13:38:55
3	Mo 202.031†	48.4	52.4	11.003 µg/L	11.003 ppb	13:39:22
3	Ni 231.604†	1956.3	1633.7	94.282 µg/L	94.282 ppb	13:39:22
3	P 214.914†	1134.2	925.9	1935.4 µg/L	1935.4 ppb	13:39:22
3	Pb 220.353†	761.9	698.6	189.03 µg/L	189.03 ppb	13:39:22
3	S 181.975 Axial†	253.8	224.0	1178.5 µg/L	1178.5 ppb	13:39:22
3	Sb 206.836†	29.6	5.0	14.416 µg/L	14.416 ppb	13:39:22
3	Se 196.026†	-33.3	-43.6	17.432 µg/L	17.432 ppb	13:39:22
3	SiO2†	130847.3	126701.1	25702 µg/L	25702 ppb	13:39:01
3	Si 251.611†	149789.2	147013.9	11837 µg/L	11837 ppb	13:39:01
3	Sn 189.927†	-89.3	-110.2	-32.960 µg/L	-32.960 ppb	13:39:22
3	Ti 334.940†	1465889.0	1441422.7	3316.4 µg/L	3316.4 ppb	13:38:55
3	Tl 190.801†	-35.6	-15.0	19.516 µg/L	19.516 ppb	13:39:22
3	U 409.014†	644.6	-67.4	-28.670 µg/L	-28.670 ppb	13:38:55
3	V 292.402†	22378.4	22107.6	275.23 µg/L	275.23 ppb	13:39:01
3	Zn 213.857†	13072.4	12333.6	334.62 µg/L	334.62 ppb	13:39:01

Mean Data: 241541016|931895|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2030060.7	101.11	%	0.486				0.48%
Sc RADIAL	115538.2	103	%	0.5				0.53%
Y 371.029	1272909.5	104.05	%	0.496				0.48%
Ag 328.068†	-1143.2	0.4813	µg/L	0.21341	0.4813	ppb	0.21341	44.34%
Al 396.153Radial†	130925.6	69195	µg/L	420.3	69195	ppb	420.3	0.61%
As 188.979†	24.9	35.881	µg/L	7.2973	35.881	ppb	7.2973	20.34%
B 249.677†	1598.8	36.518	µg/L	0.9660	36.518	ppb	0.9660	2.65%
Ba 233.527†	58391.2	1562.5	µg/L	8.10	1562.5	ppb	8.10	0.52%
Be 313.107†	14553.2	8.2503	µg/L	0.07134	8.2503	ppb	0.07134	0.86%
Ca 317.933Radial†	64950.4	26204	µg/L	170.9	26204	ppb	170.9	0.65%
Cd 226.502†	397.9	1.9604	µg/L	0.31748	1.9604	ppb	0.31748	16.19%
Co 228.616†	1494.1	68.968	µg/L	0.1678	68.968	ppb	0.1678	0.24%
Cr 267.716†	6749.0	150.43	µg/L	0.708	150.43	ppb	0.708	0.47%
Cu 324.752†	8284.4	85.024	µg/L	0.3329	85.024	ppb	0.3329	0.39%
Fe 238.204 Radial†	22654.7	120290	µg/L	519.7	120290	ppb	519.7	0.43%
K 766.490 Radial†	24950.2	14075	µg/L	91.1	14075	ppb	91.1	0.65%
Mg 279.077 IEC†	2838.2	15835	µg/L	77.3	15835	ppb	77.3	0.49%
Mn 257.610†	1714864.1	5657.5	µg/L	25.02	5657.5	ppb	25.02	0.44%
Mo 202.031†	53.2	11.081	µg/L	0.2137	11.081	ppb	0.2137	1.93%
Na 589.592 Radial†	7977.5	2250.1	µg/L	20.17	2250.1	ppb	20.17	0.90%

Ni 231.604†	1640.7	94.689	µg/L	0.3749	94.689	ppb	0.3749	0.40%
P 214.914†	930.2	1945.5	µg/L	10.35	1945.5	ppb	10.35	0.53%
Pb 220.353†	694.5	187.93	µg/L	1.575	187.93	ppb	1.575	0.84%
S 181.975 Axial†	221.3	1164.1	µg/L	17.39	1164.1	ppb	17.39	1.49%
Sb 206.836†	1.3	10.670	µg/L	3.3839	10.670	ppb	3.3839	31.71%
Se 196.026†	-44.9	15.109	µg/L	5.7623	15.109	ppb	5.7623	38.14%
SiO2†	127349.3	25834	µg/L	115.9	25834	ppb	115.9	0.45%
Si 251.611†	147864.4	11906	µg/L	62.1	11906	ppb	62.1	0.52%
Sn 189.927†	-112.5	-34.191	µg/L	1.6048	-34.191	ppb	1.6048	4.69%
Sr 421.552†	42446.5	244.97	µg/L	1.398	244.97	ppb	1.398	0.57%
Ti 334.940†	1448572.6	3332.9	µg/L	15.63	3332.9	ppb	15.63	0.47%
Tl 190.801†	-19.4	12.697	µg/L	5.9271	12.697	ppb	5.9271	46.68%
U 409.014†	-44.7	-26.295	µg/L	2.2886	-26.295	ppb	2.2886	8.70%
V 292.402†	22251.7	276.92	µg/L	1.471	276.92	ppb	1.471	0.53%
Zn 213.857†	12406.7	336.75	µg/L	1.961	336.75	ppb	1.961	0.58%

Sequence No.: 59
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/14/2009 13:39:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113102.3	113102.3	101	%			13:40:09
1	Al 396.153Radial†	10465.0	10196.7	5369.2	µg/L	5369.2	ppb	13:40:09
1	Ca 317.933Radial†	13822.3	13272.5	5354.7	µg/L	5354.7	ppb	13:40:29
1	Fe 238.204 Radial†	1066.1	1043.6	5558.5	µg/L	5558.5	ppb	13:40:29
1	K 766.490 Radial†	10092.9	9246.1	5216.1	µg/L	5216.1	ppb	13:40:09
1	Mg 279.077 IEC†	999.4	973.5	5497.0	µg/L	5497.0	ppb	13:40:29
1	Na 589.592 Radial†	37702.9	37730.4	10642	µg/L	10642	ppb	13:40:09
1	Sr 421.552†	90906.7	90096.0	519.96	µg/L	519.96	ppb	13:40:09
1	Sc 361.383	2027122.2	2027122.2	100.96	%			13:41:33
1	Y 371.029	1226776.5	1226776.5	100.28	%			13:41:33
1	Ag 328.068†	55359.5	54849.1	524.05	µg/L	524.05	ppb	13:41:39
1	As 188.979†	272.9	267.2	517.76	µg/L	517.76	ppb	13:41:59
1	B 249.677†	11433.0	11162.5	517.33	µg/L	517.33	ppb	13:41:39
1	Ba 233.527†	19730.8	19615.5	525.81	µg/L	525.81	ppb	13:41:39
1	Be 313.107†	817244.5	805851.7	525.01	µg/L	525.01	ppb	13:41:33
1	Cd 226.502†	18972.3	18889.4	531.29	µg/L	531.29	ppb	13:41:39
1	Co 228.616†	10426.9	10397.5	528.45	µg/L	528.45	ppb	13:41:39
1	Cr 267.716†	23662.5	23561.7	524.22	µg/L	524.22	ppb	13:41:39
1	Cu 324.752†	74204.4	70189.6	502.65	µg/L	502.65	ppb	13:41:39
1	Mn 257.610†	160994.5	159710.9	526.19	µg/L	526.19	ppb	13:41:33
1	Mo 202.031†	4407.0	4369.8	521.99	µg/L	521.99	ppb	13:41:59
1	Ni 231.604†	9514.3	9132.7	527.06	µg/L	527.06	ppb	13:41:39
1	P 214.914†	1375.2	1172.1	2553.7	µg/L	2553.7	ppb	13:41:59
1	Pb 220.353†	2040.0	1969.6	521.13	µg/L	521.13	ppb	13:41:59
1	S 181.975 Axial†	218.2	190.4	1017.3	µg/L	1017.3	ppb	13:41:59
1	Sb 206.836†	525.2	496.0	516.61	µg/L	516.61	ppb	13:41:59
1	Se 196.026†	378.7	364.3	540.30	µg/L	540.30	ppb	13:41:59
1	SiO2†	30168.3	27847.7	5649.1	µg/L	5649.1	ppb	13:41:39
1	Si 251.611†	33206.1	32533.5	2597.0	µg/L	2597.0	ppb	13:41:39
1	Sn 189.927†	1054.7	1022.3	523.66	µg/L	523.66	ppb	13:41:59
1	Ti 334.940†	228310.4	225340.1	518.39	µg/L	518.39	ppb	13:41:33
1	Tl 190.801†	314.0	331.1	523.15	µg/L	523.15	ppb	13:41:59
1	U 409.014†	5903.8	5146.0	512.34	µg/L	512.34	ppb	13:41:39
1	V 292.402†	43763.5	43437.7	526.26	µg/L	526.26	ppb	13:41:39
1	Zn 213.857†	19504.5	18791.1	526.78	µg/L	526.78	ppb	13:41:39
2	Sc RADIAL	113823.8	113823.8	102	%			13:40:35
2	Al 396.153Radial†	10464.6	10130.7	5334.3	µg/L	5334.3	ppb	13:40:35
2	Ca 317.933Radial†	13877.0	13239.7	5341.5	µg/L	5341.5	ppb	13:40:56
2	Fe 238.204 Radial†	1067.0	1037.7	5527.6	µg/L	5527.6	ppb	13:40:56
2	K 766.490 Radial†	10179.6	9268.0	5228.5	µg/L	5228.5	ppb	13:40:35
2	Mg 279.077 IEC†	1005.2	972.9	5494.0	µg/L	5494.0	ppb	13:40:56
2	Na 589.592 Radial†	37800.4	37589.7	10602	µg/L	10602	ppb	13:40:35
2	Sr 421.552†	91485.3	90094.7	519.95	µg/L	519.95	ppb	13:40:35
2	Sc 361.383	2030657.7	2030657.7	101.14	%			13:42:06
2	Y 371.029	1228140.8	1228140.8	100.39	%			13:42:06
2	Ag 328.068†	55969.8	55357.1	528.90	µg/L	528.90	ppb	13:42:12
2	As 188.979†	270.2	264.0	511.64	µg/L	511.64	ppb	13:42:33
2	B 249.677†	11600.4	11308.3	524.12	µg/L	524.12	ppb	13:42:12
2	Ba 233.527†	20031.4	19878.8	532.87	µg/L	532.87	ppb	13:42:12
2	Be 313.107†	817315.9	804512.9	524.14	µg/L	524.14	ppb	13:42:06
2	Cd 226.502†	19165.0	19047.2	535.74	µg/L	535.74	ppb	13:42:12
2	Co 228.616†	10539.7	10491.1	533.21	µg/L	533.21	ppb	13:42:12
2	Cr 267.716†	23972.6	23827.4	530.13	µg/L	530.13	ppb	13:42:12
2	Cu 324.752†	75034.5	70882.4	507.59	µg/L	507.59	ppb	13:42:12
2	Mn 257.610†	160968.4	159407.4	525.18	µg/L	525.18	ppb	13:42:06
2	Mo 202.031†	4420.1	4375.2	522.63	µg/L	522.63	ppb	13:42:33
2	Ni 231.604†	9609.6	9210.6	531.56	µg/L	531.56	ppb	13:42:12
2	P 214.914†	1385.6	1180.0	2570.7	µg/L	2570.7	ppb	13:42:33
2	Pb 220.353†	2052.6	1978.6	523.47	µg/L	523.47	ppb	13:42:33

2	S 181.975 Axial†	218.9	190.8	1019.2 µg/L	1019.2 ppb	13:42:33
2	Sb 206.836†	527.4	497.3	517.92 µg/L	517.92 ppb	13:42:33
2	Se 196.026†	374.3	359.3	532.86 µg/L	532.86 ppb	13:42:33
2	SiO2†	30464.8	28088.8	5698.0 µg/L	5698.0 ppb	13:42:12
2	Si 251.611†	33558.0	32824.1	2620.7 µg/L	2620.7 ppb	13:42:12
2	Sn 189.927†	1055.3	1021.0	523.01 µg/L	523.01 ppb	13:42:33
2	Ti 334.940†	228444.2	225078.7	517.79 µg/L	517.79 ppb	13:42:06
2	Tl 190.801†	316.8	333.3	526.66 µg/L	526.66 ppb	13:42:33
2	U 409.014†	6049.7	5280.1	525.72 µg/L	525.72 ppb	13:42:12
2	V 292.402†	44317.4	43909.9	531.95 µg/L	531.95 ppb	13:42:12
2	Zn 213.857†	19673.7	18924.8	530.53 µg/L	530.53 ppb	13:42:12
3	Sc RADIAL	113750.4	113750.4	102 %		13:41:01
3	Al 396.153Radial†	10428.2	10101.5	5318.9 µg/L	5318.9 ppb	13:41:01
3	Ca 317.933Radial†	13810.5	13183.0	5318.6 µg/L	5318.6 ppb	13:41:22
3	Fe 238.204 Radial†	1060.7	1032.2	5498.5 µg/L	5498.5 ppb	13:41:22
3	K 766.490 Radial†	10026.4	9123.7	5147.1 µg/L	5147.1 ppb	13:41:01
3	Mg 279.077 IEC†	1003.2	971.6	5486.6 µg/L	5486.6 ppb	13:41:22
3	Na 589.592 Radial†	37348.9	37169.3	10484 µg/L	10484 ppb	13:41:01
3	Sr 421.552†	90706.9	89386.5	515.86 µg/L	515.86 ppb	13:41:01
3	Sc 361.383	2014132.3	2014132.3	100.31 %		13:42:40
3	Y 371.029	1217831.9	1217831.9	99.547 %		13:42:40
3	Ag 328.068†	56055.4	55896.5	534.04 µg/L	534.04 ppb	13:42:46
3	As 188.979†	278.5	274.5	531.98 µg/L	531.98 ppb	13:43:06
3	B 249.677†	11587.6	11389.6	527.91 µg/L	527.91 ppb	13:42:46
3	Ba 233.527†	19977.3	19987.3	535.78 µg/L	535.78 ppb	13:42:46
3	Be 313.107†	810356.0	804205.3	523.94 µg/L	523.94 ppb	13:42:40
3	Cd 226.502†	19165.7	19203.4	540.13 µg/L	540.13 ppb	13:42:46
3	Co 228.616†	10546.1	10583.0	537.88 µg/L	537.88 ppb	13:42:46
3	Cr 267.716†	23931.8	23981.3	533.55 µg/L	533.55 ppb	13:42:46
3	Cu 324.752†	75178.9	71635.0	512.96 µg/L	512.96 ppb	13:42:46
3	Mn 257.610†	159716.4	159465.2	525.37 µg/L	525.37 ppb	13:42:40
3	Mo 202.031†	4381.2	4372.2	522.28 µg/L	522.28 ppb	13:43:06
3	Ni 231.604†	9611.5	9290.5	536.17 µg/L	536.17 ppb	13:42:46
3	P 214.914†	1367.3	1173.0	2554.4 µg/L	2554.4 ppb	13:43:06
3	Pb 220.353†	2044.4	1987.0	525.70 µg/L	525.70 ppb	13:43:06
3	S 181.975 Axial†	217.9	191.6	1023.5 µg/L	1023.5 ppb	13:43:06
3	Sb 206.836†	521.6	495.8	516.35 µg/L	516.35 ppb	13:43:06
3	Se 196.026†	377.7	365.7	542.29 µg/L	542.29 ppb	13:43:06
3	SiO2†	30594.5	28465.3	5774.4 µg/L	5774.4 ppb	13:42:46
3	Si 251.611†	33558.5	33096.9	2643.0 µg/L	2643.0 ppb	13:42:46
3	Sn 189.927†	1044.5	1018.8	521.90 µg/L	521.90 ppb	13:43:06
3	Ti 334.940†	226609.1	225102.5	517.85 µg/L	517.85 ppb	13:42:40
3	Tl 190.801†	316.1	335.2	529.50 µg/L	529.50 ppb	13:43:06
3	U 409.014†	5964.8	5244.5	522.18 µg/L	522.18 ppb	13:42:46
3	V 292.402†	44310.6	44262.7	536.17 µg/L	536.17 ppb	13:42:46
3	Zn 213.857†	19737.1	19147.6	536.80 µg/L	536.80 ppb	13:42:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2023970.7	100.80	%	0.433				0.43%
Sc RADIAL	113558.8	101	%	0.4				0.35%
Y 371.029	1224249.7	100.07	%	0.458				0.46%
Ag 328.068†	55367.6	529.00	µg/L	4.998	529.00	ppb	4.998	0.94%
QC value within limits for Ag 328.068 Recovery = 105.80%								
Al 396.153Radial†	10143.0	5340.8	µg/L	25.78	5340.8	ppb	25.78	0.48%
QC value within limits for Al 396.153Radial Recovery = 106.82%								
As 188.979†	268.5	520.46	µg/L	10.436	520.46	ppb	10.436	2.01%
QC value within limits for As 188.979 Recovery = 104.09%								
B 249.677†	11286.8	523.12	µg/L	5.361	523.12	ppb	5.361	1.02%
QC value within limits for B 249.677 Recovery = 104.62%								
Ba 233.527†	19827.2	531.49	µg/L	5.125	531.49	ppb	5.125	0.96%
QC value within limits for Ba 233.527 Recovery = 106.30%								
Be 313.107†	804856.6	524.36	µg/L	0.570	524.36	ppb	0.570	0.11%
QC value within limits for Be 313.107 Recovery = 104.87%								
Ca 317.933Radial†	13231.7	5338.3	µg/L	18.27	5338.3	ppb	18.27	0.34%
QC value within limits for Ca 317.933Radial Recovery = 106.77%								
Cd 226.502†	19046.7	535.72	µg/L	4.422	535.72	ppb	4.422	0.83%
QC value within limits for Cd 226.502 Recovery = 107.14%								
Co 228.616†	10490.5	533.18	µg/L	4.712	533.18	ppb	4.712	0.88%

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   QC value within limits for Co 228.616  Recovery = 106.64%
Cr 267.716†            23790.1      529.30 µg/L        4.723      529.30 ppb          4.723   0.89%
   QC value within limits for Cr 267.716  Recovery = 105.86%
Cu 324.752†            70902.3      507.73 µg/L        5.158      507.73 ppb          5.158   1.02%
   QC value within limits for Cu 324.752  Recovery = 101.55%
Fe 238.204 Radial†      1037.9      5528.2 µg/L       29.98      5528.2 ppb         29.98   0.54%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 110.56%
K 766.490 Radial†       9212.6      5197.2 µg/L       43.86      5197.2 ppb         43.86   0.84%
   QC value within limits for K 766.490 Radial  Recovery = 103.94%
Mg 279.077 IEC†          972.7      5492.5 µg/L        5.38      5492.5 ppb          5.38   0.10%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.85%
Mn 257.610†           159527.8      525.58 µg/L        0.533      525.58 ppb         0.533   0.10%
   QC value within limits for Mn 257.610  Recovery = 105.12%
Mo 202.031†             4372.4      522.30 µg/L        0.322      522.30 ppb         0.322   0.06%
   QC value within limits for Mo 202.031  Recovery = 104.46%
Na 589.592 Radial†     37496.5       10576 µg/L       82.3        10576 ppb         82.3   0.78%
   QC value within limits for Na 589.592 Radial  Recovery = 105.76%
Ni 231.604†             9211.3      531.60 µg/L        4.551      531.60 ppb         4.551   0.86%
   QC value within limits for Ni 231.604  Recovery = 106.32%
P 214.914†              1175.1      2559.6 µg/L        9.65      2559.6 ppb          9.65   0.38%
   QC value within limits for P 214.914  Recovery = 102.38%
Pb 220.353†             1978.4      523.43 µg/L        2.283      523.43 ppb         2.283   0.44%
   QC value within limits for Pb 220.353  Recovery = 104.69%
S 181.975 Axial†         190.9      1020.0 µg/L        3.16      1020.0 ppb          3.16   0.31%
   QC value within limits for S 181.975 Axial  Recovery = 102.00%
Sb 206.836†              496.4      516.96 µg/L        0.840      516.96 ppb         0.840   0.16%
   QC value within limits for Sb 206.836  Recovery = 103.39%
Se 196.026†              363.1      538.48 µg/L        4.975      538.48 ppb         4.975   0.92%
   QC value within limits for Se 196.026  Recovery = 107.70%
SiO2†                   28134.0      5707.2 µg/L       63.15      5707.2 ppb         63.15   1.11%
   QC value within limits for SiO2  Recovery = 106.73%
Si 251.611†             32818.1      2620.2 µg/L       22.97      2620.2 ppb         22.97   0.88%
   QC value within limits for Si 251.611  Recovery = 104.81%
Sn 189.927†             1020.7      522.85 µg/L        0.891      522.85 ppb         0.891   0.17%
   QC value within limits for Sn 189.927  Recovery = 104.57%
Sr 421.552†             89859.1      518.59 µg/L        2.362      518.59 ppb         2.362   0.46%
   QC value within limits for Sr 421.552  Recovery = 103.72%
Ti 334.940†            225173.8      518.01 µg/L        0.332      518.01 ppb         0.332   0.06%
   QC value within limits for Ti 334.940  Recovery = 103.60%
Tl 190.801†              333.2      526.43 µg/L        3.179      526.43 ppb         3.179   0.60%
   QC value within limits for Tl 190.801  Recovery = 105.29%
U 409.014†              5223.5      520.08 µg/L        6.934      520.08 ppb         6.934   1.33%
   QC value within limits for U 409.014  Recovery = 104.02%
V 292.402†              43870.1      531.46 µg/L        4.975      531.46 ppb         4.975   0.94%
   QC value within limits for V 292.402  Recovery = 106.29%
Zn 213.857†             18954.5      531.37 µg/L        5.061      531.37 ppb         5.061   0.95%
   QC value within limits for Zn 213.857  Recovery = 106.27%
QC Failed.  Continue with analysis.
```

Sequence No.: 60
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/14/2009 13:43:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112853.2	112853.2	101	%			13:43:48
1	Al 396.153Radial†	219.1	53.0	27.973	µg/L	27.973	ppb	13:43:48
1	Ca 317.933Radial†	421.6	5.7	2.3058	µg/L	2.3058	ppb	13:44:08
1	Fe 238.204 Radial†	7.4	-4.6	-24.539	µg/L	-24.539	ppb	13:44:08
1	K 766.490 Radial†	729.5	-22.8	-12.870	µg/L	-12.870	ppb	13:43:48
1	Mg 279.077 IEC†	16.1	-0.1	-0.2598	µg/L	-0.2598	ppb	13:44:08
1	Na 589.592 Radial†	-707.7	-300.5	-84.764	µg/L	-84.764	ppb	13:43:48
1	Sr 421.552†	-57.4	34.3	0.1981	µg/L	0.1981	ppb	13:43:48
1	Sc 361.383	1999371.1	1999371.1	99.578	%			13:45:10
1	Y 371.029	1215390.4	1215390.4	99.348	%			13:45:10
1	Ag 328.068†	29.8	46.2	0.4344	µg/L	0.4344	ppb	13:45:16
1	As 188.979†	0.1	-3.1	-6.0071	µg/L	-6.0071	ppb	13:45:36
1	B 249.677†	128.1	-33.1	-1.5295	µg/L	-1.5295	ppb	13:45:16
1	Ba 233.527†	-65.5	6.7	0.1780	µg/L	0.1780	ppb	13:45:36
1	Be 313.107†	3699.3	96.2	0.0626	µg/L	0.0626	ppb	13:45:16
1	Cd 226.502†	-96.2	1.0	0.0290	µg/L	0.0290	ppb	13:45:36
1	Co 228.616†	-73.4	-3.9	-0.1995	µg/L	-0.1995	ppb	13:45:36
1	Cr 267.716†	-103.6	20.2	0.4472	µg/L	0.4472	ppb	13:45:16
1	Cu 324.752†	3250.0	-45.2	-0.3282	µg/L	-0.3282	ppb	13:45:16
1	Mn 257.610†	-174.0	73.1	0.2373	µg/L	0.2373	ppb	13:45:36
1	Mo 202.031†	0.1	4.8	0.5778	µg/L	0.5778	ppb	13:45:36
1	Ni 231.604†	285.4	-4.4	-0.2553	µg/L	-0.2553	ppb	13:45:36
1	P 214.914†	193.6	4.4	9.8785	µg/L	9.8785	ppb	13:45:36
1	Pb 220.353†	53.1	2.4	0.6260	µg/L	0.6260	ppb	13:45:36
1	S 181.975 Axial†	21.4	-4.2	-22.524	µg/L	-22.524	ppb	13:45:36
1	Sb 206.836†	18.5	-5.5	-5.7908	µg/L	-5.7908	ppb	13:45:36
1	Se 196.026†	11.3	0.6	0.8380	µg/L	0.8380	ppb	13:45:36
1	SiO2†	2025.1	0.1	0.0215	µg/L	0.0215	ppb	13:45:16
1	Si 251.611†	387.1	31.9	2.5116	µg/L	2.5116	ppb	13:45:36
1	Sn 189.927†	26.1	3.8	1.9427	µg/L	1.9427	ppb	13:45:36
1	Ti 334.940†	875.5	80.7	0.1856	µg/L	0.1856	ppb	13:45:16
1	Tl 190.801†	-19.4	0.6	0.9879	µg/L	0.9879	ppb	13:45:36
1	U 409.014†	699.1	0.5	0.0535	µg/L	0.0535	ppb	13:45:16
1	V 292.402†	-106.9	-16.8	-0.1994	µg/L	-0.1994	ppb	13:45:16
1	Zn 213.857†	524.5	-1.1	-0.0276	µg/L	-0.0276	ppb	13:45:36
2	Sc RADIAL	112187.9	112187.9	100	%			13:44:14
2	Al 396.153Radial†	169.8	5.0	2.6402	µg/L	2.6402	ppb	13:44:14
2	Ca 317.933Radial†	417.6	4.2	1.7096	µg/L	1.7096	ppb	13:44:34
2	Fe 238.204 Radial†	11.1	-0.9	-4.5758	µg/L	-4.5758	ppb	13:44:34
2	K 766.490 Radial†	749.6	1.6	0.8967	µg/L	0.8967	ppb	13:44:14
2	Mg 279.077 IEC†	26.3	10.2	57.725	µg/L	57.725	ppb	13:44:34
2	Na 589.592 Radial†	-715.2	-312.2	-88.052	µg/L	-88.052	ppb	13:44:14
2	Sr 421.552†	-87.4	4.1	0.0237	µg/L	0.0237	ppb	13:44:14
2	Sc 361.383	1984070.8	1984070.8	98.816	%			13:45:43
2	Y 371.029	1205950.6	1205950.6	98.576	%			13:45:43
2	Ag 328.068†	-2.7	13.5	0.1241	µg/L	0.1241	ppb	13:45:48
2	As 188.979†	-0.5	-3.6	-7.0673	µg/L	-7.0673	ppb	13:46:09
2	B 249.677†	141.2	-18.8	-0.8743	µg/L	-0.8743	ppb	13:45:48
2	Ba 233.527†	-65.4	6.2	0.1654	µg/L	0.1654	ppb	13:46:09
2	Be 313.107†	3643.5	68.3	0.0445	µg/L	0.0445	ppb	13:45:48
2	Cd 226.502†	-104.1	-7.8	-0.2057	µg/L	-0.2057	ppb	13:46:09
2	Co 228.616†	-68.1	0.9	0.0471	µg/L	0.0471	ppb	13:46:09
2	Cr 267.716†	-157.6	-35.3	-0.7847	µg/L	-0.7847	ppb	13:45:48
2	Cu 324.752†	3221.2	-49.2	-0.3523	µg/L	-0.3523	ppb	13:45:48
2	Mn 257.610†	-171.0	74.8	0.2455	µg/L	0.2455	ppb	13:46:09
2	Mo 202.031†	1.3	6.0	0.7207	µg/L	0.7207	ppb	13:46:09
2	Ni 231.604†	305.1	17.7	1.0213	µg/L	1.0213	ppb	13:46:09
2	P 214.914†	195.2	7.5	16.825	µg/L	16.825	ppb	13:46:09
2	Pb 220.353†	49.9	-0.4	-0.1281	µg/L	-0.1281	ppb	13:46:09

2	S 181.975 Axial†	18.8	-6.7	-35.615	µg/L	-35.615 ppb	13:46:09
2	Sb 206.836†	20.7	-3.2	-3.2934	µg/L	-3.2934 ppb	13:46:09
2	Se 196.026†	14.0	3.4	4.9973	µg/L	4.9973 ppb	13:46:09
2	SiO2†	2046.2	37.1	7.5280	µg/L	7.5280 ppb	13:45:48
2	Si 251.611†	380.8	28.5	2.2768	µg/L	2.2768 ppb	13:46:09
2	Sn 189.927†	23.5	1.4	0.7362	µg/L	0.7362 ppb	13:46:09
2	Ti 334.940†	833.7	45.1	0.1038	µg/L	0.1038 ppb	13:45:48
2	Tl 190.801†	-21.9	-2.1	-3.2425	µg/L	-3.2425 ppb	13:46:09
2	U 409.014†	847.1	155.7	15.528	µg/L	15.528 ppb	13:45:48
2	V 292.402†	-131.3	-42.4	-0.4789	µg/L	-0.4789 ppb	13:45:48
2	Zn 213.857†	521.5	-0.1	-0.0076	µg/L	-0.0076 ppb	13:46:09
3	Sc RADIAL	111581.5	111581.5	99.6	%		13:44:40
3	Al 396.153Radial†	170.5	6.7	3.5263	µg/L	3.5263 ppb	13:44:40
3	Ca 317.933Radial†	410.9	-0.2	-0.0827	µg/L	-0.0827 ppb	13:45:00
3	Fe 238.204 Radial†	9.1	-2.9	-15.263	µg/L	-15.263 ppb	13:45:00
3	K 766.490 Radial†	720.2	-23.9	-13.491	µg/L	-13.491 ppb	13:44:40
3	Mg 279.077 IEC†	19.0	3.1	17.514	µg/L	17.514 ppb	13:45:00
3	Na 589.592 Radial†	-702.1	-302.9	-85.440	µg/L	-85.440 ppb	13:44:40
3	Sr 421.552†	-44.4	46.7	0.2698	µg/L	0.2698 ppb	13:44:40
3	Sc 361.383	1985370.5	1985370.5	98.881	%		13:46:15
3	Y 371.029	1206644.1	1206644.1	98.633	%		13:46:15
3	Ag 328.068†	-14.5	1.6	0.0115	µg/L	0.0115 ppb	13:46:20
3	As 188.979†	0.5	-2.6	-5.1191	µg/L	-5.1191 ppb	13:46:41
3	B 249.677†	162.4	2.5	0.1190	µg/L	0.1190 ppb	13:46:20
3	Ba 233.527†	-76.5	-4.9	-0.1321	µg/L	-0.1321 ppb	13:46:41
3	Be 313.107†	3681.9	104.7	0.0682	µg/L	0.0682 ppb	13:46:20
3	Cd 226.502†	-100.9	-4.4	-0.1250	µg/L	-0.1250 ppb	13:46:41
3	Co 228.616†	-67.2	1.9	0.0946	µg/L	0.0946 ppb	13:46:41
3	Cr 267.716†	-120.5	2.4	0.0523	µg/L	0.0523 ppb	13:46:20
3	Cu 324.752†	3229.3	-43.1	-0.3112	µg/L	-0.3112 ppb	13:46:20
3	Mn 257.610†	-171.9	74.0	0.2415	µg/L	0.2415 ppb	13:46:41
3	Mo 202.031†	-2.7	2.0	0.2432	µg/L	0.2432 ppb	13:46:41
3	Ni 231.604†	298.8	11.1	0.6407	µg/L	0.6407 ppb	13:46:41
3	P 214.914†	201.0	13.3	29.648	µg/L	29.648 ppb	13:46:41
3	Pb 220.353†	64.1	13.8	3.6474	µg/L	3.6474 ppb	13:46:41
3	S 181.975 Axial†	25.1	-0.3	-1.4822	µg/L	-1.4822 ppb	13:46:41
3	Sb 206.836†	21.7	-2.2	-2.2743	µg/L	-2.2743 ppb	13:46:41
3	Se 196.026†	11.9	1.2	1.8221	µg/L	1.8221 ppb	13:46:41
3	SiO2†	2072.7	62.6	12.695	µg/L	12.695 ppb	13:46:20
3	Si 251.611†	384.8	32.4	2.6564	µg/L	2.6564 ppb	13:46:41
3	Sn 189.927†	20.9	-1.2	-0.6161	µg/L	-0.6161 ppb	13:46:41
3	Ti 334.940†	797.3	7.7	0.0178	µg/L	0.0178 ppb	13:46:20
3	Tl 190.801†	-20.4	-0.5	-0.8486	µg/L	-0.8486 ppb	13:46:41
3	U 409.014†	667.7	-26.3	-2.6231	µg/L	-2.6231 ppb	13:46:20
3	V 292.402†	-122.2	-33.1	-0.4006	µg/L	-0.4006 ppb	13:46:20
3	Zn 213.857†	528.1	6.3	0.1762	µg/L	0.1762 ppb	13:46:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1989604.1	99.092	%	0.4225				0.43%
Sc RADIAL	112207.6	100	%	0.6				0.57%
Y 371.029	1209328.4	98.852	%	0.4301				0.44%
Ag 328.068†	20.4	0.1900	µg/L	0.21903	0.1900	ppb	0.21903	115.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	21.6	11.380	µg/L	14.3768	11.380	ppb	14.3768	126.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.1	-6.0645	µg/L	0.97536	-6.0645	ppb	0.97536	16.08%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-16.5	-0.7616	µg/L	0.82998	-0.7616	ppb	0.82998	108.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.7	0.0704	µg/L	0.17554	0.0704	ppb	0.17554	249.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	89.7	0.0584	µg/L	0.01240	0.0584	ppb	0.01240	21.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.2	1.3109	µg/L	1.24316	1.3109	ppb	1.24316	94.83%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-3.7	-0.1006	µg/L	0.11926	-0.1006	ppb	0.11926	118.57%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.4	-0.0193	µg/L	0.15785	-0.0193	ppb	0.15785	819.62%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -4.2     -0.0950 µg/L       0.62903     -0.0950 ppb        0.62903 661.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -45.8     -0.3306 µg/L       0.02065     -0.3306 ppb        0.02065   6.25%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.8     -14.793 µg/L        9.9899     -14.793 ppb         9.9899  67.53%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -15.0     -8.4881 µg/L       8.13341     -8.4881 ppb        8.13341  95.82%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           4.4      24.993 µg/L       29.7071      24.993 ppb        29.7071 118.86%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              73.9      0.2414 µg/L       0.00409      0.2414 ppb        0.00409   1.69%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.3      0.5139 µg/L       0.24507      0.5139 ppb        0.24507  47.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -305.2     -86.085 µg/L        1.7364     -86.085 ppb         1.7364   2.02%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               8.1      0.4689 µg/L       0.65542      0.4689 ppb        0.65542 139.77%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                8.4      18.784 µg/L       10.0292      18.784 ppb        10.0292  53.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               5.2      1.3818 µg/L       1.99797      1.3818 ppb        1.99797 144.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -3.7     -19.874 µg/L       17.2198     -19.874 ppb        17.2198  86.65%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -3.6     -3.7862 µg/L       1.80928     -3.7862 ppb        1.80928  47.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.7      2.5524 µg/L       2.17374      2.5524 ppb        2.17374  85.16%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    33.3      6.7483 µg/L       6.37284      6.7483 ppb        6.37284  94.44%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              30.9      2.4816 µg/L       0.19157      2.4816 ppb        0.19157   7.72%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.3      0.6876 µg/L       1.28011      0.6876 ppb        1.28011 186.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              28.4      0.1639 µg/L       0.12657      0.1639 ppb        0.12657  77.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              44.5      0.1024 µg/L       0.08392      0.1024 ppb        0.08392  81.94%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.7     -1.0344 µg/L       2.12131     -1.0344 ppb        2.12131 205.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               43.3      4.3194 µg/L       9.79850      4.3194 ppb        9.79850 226.85%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -30.7     -0.3597 µg/L       0.14418     -0.3597 ppb        0.14418  40.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               1.7      0.0470 µg/L       0.11231      0.0470 ppb        0.11231 239.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 121709

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

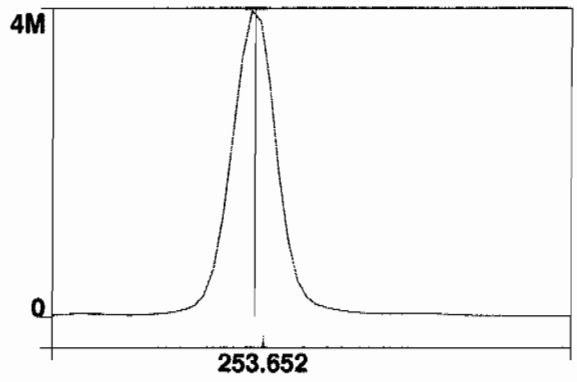

Intensity: 3580478.4 cps
Conc:

1

12/8/2009 07:27:56 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 2

Analysis Begun

Start Time: 12/8/2009 07:28:37 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/7/2009 08:20:00**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/8/2009 07:28:38**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5745.6	5745.6	98.3	%	07:30:31
1	Y RADIAL	6211.7	6211.7	98.79	%	07:30:31
1	Al 396.153Radial†	-19.0	-19.3	[0.00]	ug/L	07:30:31
1	Ca 317.933Radial†	15.5	15.8	[0.00]	ug/L	07:30:51
1	Fe 238.204 Radial†	5.3	5.4	[0.00]	ug/L	07:30:51
1	K 766.490 Radial†	2457.5	2499.5	[0.00]	ug/L	07:30:31
1	Mg 279.077 IEC†	0.5	0.5	[0.00]	ug/L	07:30:51
1	Na 589.592 Radial†	-1085.4	-1103.9	[0.00]	ug/L	07:30:31
1	Sr 421.552†	-7.0	-7.1	[0.00]	ug/L	07:30:31
1	Sc 361.383	900693.7	900693.7	99.937	%	07:31:48
1	Y 371.029	750994.5	750994.5	99.988	%	07:31:48
1	Ag 328.068†	258.4	258.6	[0.00]	ug/L	07:31:48
1	As 188.979†	-20.1	-20.1	[0.00]	ug/L	07:32:08
1	B 249.677†	-538.8	-539.2	[0.00]	ug/L	07:32:08
1	Ba 233.527†	-14.2	-14.2	[0.00]	ug/L	07:32:08
1	Be 313.107†	-5056.8	-5060.0	[0.00]	ug/L	07:31:48
1	Cd 226.502†	-193.9	-194.0	[0.00]	ug/L	07:32:08
1	Co 228.616†	-62.5	-62.5	[0.00]	ug/L	07:32:08
1	Cr 267.716†	74.9	74.9	[0.00]	ug/L	07:32:08
1	Cu 324.752†	6750.3	6754.6	[0.00]	ug/L	07:31:48
1	Mn 257.610†	418.2	418.5	[0.00]	ug/L	07:32:08
1	Mo 202.031†	24.3	24.3	[0.00]	ug/L	07:32:08
1	Ni 231.604†	82.5	82.6	[0.00]	ug/L	07:32:08
1	P 214.914†	227.9	228.1	[0.00]	ug/L	07:32:08
1	Pb 220.353†	-62.4	-62.5	[0.00]	ug/L	07:32:08
1	S 181.975 Axial†	41.2	41.3	[0.00]	ug/L	07:32:08
1	Sb 206.836†	33.6	33.6	[0.00]	ug/L	07:32:08
1	Se 196.026†	-24.2	-24.2	[0.00]	ug/L	07:32:08
1	Si 251.611†	437.2	437.5	[0.00]	ug/L	07:32:08
1	Sn 189.927†	-2.2	-2.2	[0.00]	ug/L	07:32:08
1	Ti 334.940†	-1030.7	-1031.3	[0.00]	ug/L	07:31:48
1	Tl 190.801†	-27.6	-27.6	[0.00]	ug/L	07:32:08
1	U 409.014†	-2346.9	-2348.4	[0.00]	ug/L	07:31:48
1	V 292.402†	-1372.8	-1373.7	[0.00]	ug/L	07:31:48
1	Zn 213.857†	625.8	626.2	[0.00]	ug/L	07:32:08
1	SiO2†	455.0	455.3	[0.00]	ug/L	07:33:04
2	Sc Radial	5922.7	5922.7	101	%	07:30:56
2	Y RADIAL	6350.2	6350.2	101.0	%	07:30:56
2	Al 396.153Radial†	-27.2	-26.9	[0.00]	ug/L	07:30:56
2	Ca 317.933Radial†	15.9	15.6	[0.00]	ug/L	07:31:16
2	Fe 238.204 Radial†	8.7	8.6	[0.00]	ug/L	07:31:16
2	K 766.490 Radial†	2256.7	2226.7	[0.00]	ug/L	07:30:56
2	Mg 279.077 IEC†	1.4	1.4	[0.00]	ug/L	07:31:16
2	Na 589.592 Radial†	-1070.6	-1056.4	[0.00]	ug/L	07:30:56
2	Sr 421.552†	-29.3	-28.9	[0.00]	ug/L	07:30:56
2	Sc 361.383	897080.5	897080.5	99.536	%	07:32:13
2	Y 371.029	746552.6	746552.6	99.397	%	07:32:13
2	Ag 328.068†	238.8	240.0	[0.00]	ug/L	07:32:13
2	As 188.979†	-23.4	-23.5	[0.00]	ug/L	07:32:33
2	B 249.677†	-533.8	-536.2	[0.00]	ug/L	07:32:33
2	Ba 233.527†	0.1	0.1	[0.00]	ug/L	07:32:33
2	Be 313.107†	-5169.1	-5193.2	[0.00]	ug/L	07:32:13
2	Cd 226.502†	-185.9	-186.8	[0.00]	ug/L	07:32:33
2	Co 228.616†	-67.4	-67.7	[0.00]	ug/L	07:32:33
2	Cr 267.716†	72.6	72.9	[0.00]	ug/L	07:32:33
2	Cu 324.752†	6796.2	6827.9	[0.00]	ug/L	07:32:13
2	Mn 257.610†	427.5	429.5	[0.00]	ug/L	07:32:33
2	Mo 202.031†	14.6	14.7	[0.00]	ug/L	07:32:33
2	Ni 231.604†	86.6	87.0	[0.00]	ug/L	07:32:33
2	P 214.914†	222.0	223.0	[0.00]	ug/L	07:32:33
2	Pb 220.353†	-69.2	-69.5	[0.00]	ug/L	07:32:33
2	S 181.975 Axial†	41.0	41.2	[0.00]	ug/L	07:32:33
2	Sb 206.836†	36.1	36.3	[0.00]	ug/L	07:32:33
2	Se 196.026†	-32.4	-32.6	[0.00]	ug/L	07:32:33
2	Si 251.611†	455.6	457.8	[0.00]	ug/L	07:32:33
2	Sn 189.927†	9.9	10.0	[0.00]	ug/L	07:32:33
2	Ti 334.940†	-1182.5	-1188.0	[0.00]	ug/L	07:32:13
2	Tl 190.801†	-32.3	-32.4	[0.00]	ug/L	07:32:33
2	U 409.014†	-2442.7	-2454.1	[0.00]	ug/L	07:32:13
2	V 292.402†	-1362.6	-1369.0	[0.00]	ug/L	07:32:13

2	Zn 213.857†	620.7	623.6	[0.00]	ug/L	07:32:33
2	SiO2†	500.9	503.3	[0.00]	ug/L	07:33:09
3	Sc Radial	5863.5	5863.5	100	%	07:31:21
3	Y RADIAL	6301.5	6301.5	100.2	%	07:31:21
3	Al 396.153Radial†	-15.1	-15.0	[0.00]	ug/L	07:31:21
3	Ca 317.933Radial†	15.4	15.3	[0.00]	ug/L	07:31:41
3	Fe 238.204 Radial†	6.4	6.4	[0.00]	ug/L	07:31:41
3	K 766.490 Radial†	2336.7	2328.9	[0.00]	ug/L	07:31:21
3	Mg 279.077 IEC†	1.6	1.6	[0.00]	ug/L	07:31:41
3	Na 589.592 Radial†	-1107.2	-1103.5	[0.00]	ug/L	07:31:21
3	Sr 421.552†	-46.2	-46.0	[0.00]	ug/L	07:31:21
3	Sc 361.383	906018.4	906018.4	100.53	%	07:32:38
3	Y 371.029	755705.3	755705.3	100.62	%	07:32:38
3	Ag 328.068†	381.7	379.7	[0.00]	ug/L	07:32:38
3	As 188.979†	-29.1	-29.0	[0.00]	ug/L	07:32:58
3	B 249.677†	-519.4	-516.6	[0.00]	ug/L	07:32:58
3	Ba 233.527†	-11.3	-11.2	[0.00]	ug/L	07:32:58
3	Be 313.107†	-5112.7	-5085.8	[0.00]	ug/L	07:32:38
3	Cd 226.502†	-205.6	-204.5	[0.00]	ug/L	07:32:58
3	Co 228.616†	-66.3	-66.0	[0.00]	ug/L	07:32:58
3	Cr 267.716†	88.6	88.1	[0.00]	ug/L	07:32:58
3	Cu 324.752†	6722.9	6687.6	[0.00]	ug/L	07:32:38
3	Mn 257.610†	421.2	419.0	[0.00]	ug/L	07:32:58
3	Mo 202.031†	16.1	16.0	[0.00]	ug/L	07:32:58
3	Ni 231.604†	90.6	90.1	[0.00]	ug/L	07:32:58
3	P 214.914†	220.6	219.4	[0.00]	ug/L	07:32:58
3	Pb 220.353†	-73.8	-73.4	[0.00]	ug/L	07:32:58
3	S 181.975 Axial†	42.5	42.2	[0.00]	ug/L	07:32:58
3	Sb 206.836†	33.0	32.8	[0.00]	ug/L	07:32:58
3	Se 196.026†	-29.8	-29.7	[0.00]	ug/L	07:32:58
3	Si 251.611†	456.1	453.7	[0.00]	ug/L	07:32:58
3	Sn 189.927†	7.3	7.2	[0.00]	ug/L	07:32:58
3	Ti 334.940†	-1131.4	-1125.5	[0.00]	ug/L	07:32:38
3	Tl 190.801†	-37.6	-37.4	[0.00]	ug/L	07:32:58
3	U 409.014†	-2415.7	-2403.0	[0.00]	ug/L	07:32:38
3	V 292.402†	-1339.4	-1332.4	[0.00]	ug/L	07:32:38
3	Zn 213.857†	618.9	615.7	[0.00]	ug/L	07:32:58
3	SiO2†	446.1	443.8	[0.00]	ug/L	07:33:14

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	901264.2	4496.20	0.50%	100.00	%
Sc Radial	5843.9	90.14	1.54%	100	%
Y 371.029	751084.2	4577.00	0.61%	100.00	%
Y RADIAL	6287.8	70.25	1.12%	100.0	%
Ag 328.068†	292.7	75.86	25.92%	[0.00]	ug/L
Al 396.153Radial†	-20.4	5.98	29.32%	[0.00]	ug/L
As 188.979†	-24.2	4.49	18.59%	[0.00]	ug/L
B 249.677†	-530.7	12.25	2.31%	[0.00]	ug/L
Ba 233.527†	-8.5	7.54	89.18%	[0.00]	ug/L
Be 313.107†	-5113.0	70.64	1.38%	[0.00]	ug/L
Ca 317.933Radial†	15.6	0.26	1.66%	[0.00]	ug/L
Cd 226.502†	-195.1	8.91	4.57%	[0.00]	ug/L
Co 228.616†	-65.4	2.64	4.04%	[0.00]	ug/L
Cr 267.716†	78.7	8.27	10.52%	[0.00]	ug/L
Cu 324.752†	6756.7	70.20	1.04%	[0.00]	ug/L
Fe 238.204 Radial†	6.8	1.66	24.44%	[0.00]	ug/L
K 766.490 Radial†	2351.7	137.81	5.86%	[0.00]	ug/L
Mg 279.077 IEC†	1.2	0.61	52.53%	[0.00]	ug/L
Mn 257.610†	422.3	6.23	1.47%	[0.00]	ug/L
Mo 202.031†	18.3	5.20	28.34%	[0.00]	ug/L
Na 589.592 Radial†	-1087.9	27.36	2.52%	[0.00]	ug/L
Ni 231.604†	86.6	3.79	4.38%	[0.00]	ug/L
P 214.914†	223.5	4.34	1.94%	[0.00]	ug/L
Pb 220.353†	-68.5	5.55	8.11%	[0.00]	ug/L
S 181.975 Axial†	41.6	0.57	1.37%	[0.00]	ug/L
Sb 206.836†	34.2	1.82	5.32%	[0.00]	ug/L
Se 196.026†	-28.8	4.23	14.66%	[0.00]	ug/L
Si 251.611†	449.7	10.73	2.39%	[0.00]	ug/L

Sn 189.927†	5.0	6.41	128.46%	[0.00]	ug/L
Sr 421.552†	-27.4	19.51	71.35%	[0.00]	ug/L
Ti 334.940†	-1114.9	78.85	7.07%	[0.00]	ug/L
Tl 190.801†	-32.5	4.90	15.07%	[0.00]	ug/L
U 409.014†	-2401.8	52.87	2.20%	[0.00]	ug/L
V 292.402†	-1358.4	22.59	1.66%	[0.00]	ug/L
Zn 213.857†	621.8	5.49	0.88%	[0.00]	ug/L
SiO2†	467.5	31.54	6.75%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/8/2009 07:35:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5765.8	5765.8	98.7	%	07:37:21
1	Y RADIAL	6189.1	6189.1	98.43	%	07:37:21
1	K 766.490 Radial†	8010.4	5767.1	[1000]	ug/L	07:37:16
1	Sr 421.552†	15682.7	15922.4	[100]	ug/L	07:37:21
1	Sc 361.383	914536.7	914536.7	101.47	%	07:37:48
1	Y 371.029	754661.2	754661.2	100.48	%	07:37:48
1	Ag 328.068†	21843.7	21234.0	[100]	ug/L	07:37:53
1	As 188.979†	227.9	248.8	[100]	ug/L	07:38:13
1	B 249.677†	3929.5	4403.2	[100]	ug/L	07:37:53
1	Ba 233.527†	13325.8	13140.9	[100]	ug/L	07:37:53
1	Be 313.107†	260898.9	262225.5	[100]	ug/L	07:37:48
1	Cd 226.502†	9200.0	9261.6	[100]	ug/L	07:37:53
1	Co 228.616†	5047.2	5039.4	[100]	ug/L	07:38:13
1	Cr 267.716†	9428.4	9212.9	[100]	ug/L	07:37:53
1	Cu 324.752†	40509.5	33164.9	[100]	ug/L	07:37:53
1	Mn 257.610†	93021.3	91249.0	[100]	ug/L	07:37:53
1	Mo 202.031†	1542.1	1501.4	[100]	ug/L	07:38:13
1	Ni 231.604†	4280.0	4131.4	[100]	ug/L	07:38:13
1	P 214.914†	1053.7	814.9	[500]	ug/L	07:38:13
1	Pb 220.353†	819.7	876.2	[100]	ug/L	07:38:13
1	S 181.975 Axial†	175.1	130.9	[200]	ug/L	07:38:13
1	Sb 206.836†	334.6	295.5	[100]	ug/L	07:38:13
1	Se 196.026†	142.3	169.1	[100]	ug/L	07:38:13
1	Si 251.611†	16559.7	15869.7	[500]	ug/L	07:37:53
1	Sn 189.927†	576.8	563.4	[100]	ug/L	07:38:13
1	Ti 334.940†	59872.4	60118.4	[100]	ug/L	07:37:53
1	Tl 190.801†	319.5	347.4	[100]	ug/L	07:38:13
1	U 409.014†	1213.1	3597.3	[100]	ug/L	07:37:48
1	V 292.402†	13311.9	14477.1	[100]	ug/L	07:37:53
1	Zn 213.857†	11943.1	11147.9	[100]	ug/L	07:37:53
1	SiO2†	16722.0	16011.9	[1069.5]	ug/L	07:39:19
2	Sc Radial	5769.0	5769.0	98.7	%	07:37:31
2	Y RADIAL	6129.7	6129.7	97.49	%	07:37:31
2	K 766.490 Radial†	7990.0	5742.1	[1000]	ug/L	07:37:26
2	Sr 421.552†	15612.4	15842.5	[100]	ug/L	07:37:31
2	Sc 361.383	915362.8	915362.8	101.56	%	07:38:18
2	Y 371.029	757053.4	757053.4	100.79	%	07:38:18
2	Ag 328.068†	22010.2	21378.4	[100]	ug/L	07:38:23
2	As 188.979†	219.9	240.7	[100]	ug/L	07:38:43
2	B 249.677†	3929.3	4399.5	[100]	ug/L	07:38:23
2	Ba 233.527†	13353.9	13156.7	[100]	ug/L	07:38:23
2	Be 313.107†	261281.3	262369.9	[100]	ug/L	07:38:18
2	Cd 226.502†	9245.9	9298.6	[100]	ug/L	07:38:23
2	Co 228.616†	5066.0	5053.3	[100]	ug/L	07:38:43
2	Cr 267.716†	9513.3	9288.1	[100]	ug/L	07:38:23
2	Cu 324.752†	40726.1	33342.1	[100]	ug/L	07:38:23
2	Mn 257.610†	93398.3	91537.5	[100]	ug/L	07:38:23
2	Mo 202.031†	1547.3	1505.1	[100]	ug/L	07:38:43
2	Ni 231.604†	4269.5	4117.2	[100]	ug/L	07:38:43
2	P 214.914†	1060.5	820.7	[500]	ug/L	07:38:43
2	Pb 220.353†	815.7	871.6	[100]	ug/L	07:38:43
2	S 181.975 Axial†	174.2	129.9	[200]	ug/L	07:38:43
2	Sb 206.836†	333.9	294.5	[100]	ug/L	07:38:43
2	Se 196.026†	147.7	174.2	[100]	ug/L	07:38:43
2	Si 251.611†	16619.4	15913.7	[500]	ug/L	07:38:23
2	Sn 189.927†	602.2	587.9	[100]	ug/L	07:38:43
2	Ti 334.940†	60122.7	60311.6	[100]	ug/L	07:38:23
2	Tl 190.801†	325.1	352.6	[100]	ug/L	07:38:43
2	U 409.014†	1005.2	3391.5	[100]	ug/L	07:38:18

2	V 292.402†	13412.6	14564.3	[100]	ug/L	07:38:23
2	Zn 213.857†	11968.2	11162.1	[100]	ug/L	07:38:23
2	SiO2†	16537.0	15814.9	[1069.5]	ug/L	07:39:24
3	Sc Radial	5875.5	5875.5	101	%	07:37:41
3	Y RADIAL	6269.8	6269.8	99.71	%	07:37:41
3	K 766.490 Radial†	7932.9	5538.6	[1000]	ug/L	07:37:36
3	Sr 421.552†	15938.0	15879.7	[100]	ug/L	07:37:41
3	Sc 361.383	919222.5	919222.5	101.99	%	07:38:49
3	Y 371.029	759136.1	759136.1	101.07	%	07:38:49
3	Ag 328.068†	22234.4	21507.3	[100]	ug/L	07:38:54
3	As 188.979†	225.1	244.9	[100]	ug/L	07:39:14
3	B 249.677†	4040.0	4491.7	[100]	ug/L	07:38:54
3	Ba 233.527†	13560.3	13303.8	[100]	ug/L	07:38:54
3	Be 313.107†	261887.7	261884.4	[100]	ug/L	07:38:49
3	Cd 226.502†	9334.1	9346.9	[100]	ug/L	07:38:54
3	Co 228.616†	5039.9	5006.8	[100]	ug/L	07:39:14
3	Cr 267.716†	9582.2	9316.3	[100]	ug/L	07:38:54
3	Cu 324.752†	40945.3	33388.7	[100]	ug/L	07:38:54
3	Mn 257.610†	94457.9	92190.2	[100]	ug/L	07:38:54
3	Mo 202.031†	1552.8	1504.1	[100]	ug/L	07:39:14
3	Ni 231.604†	4263.2	4093.4	[100]	ug/L	07:39:14
3	P 214.914†	1052.4	808.3	[500]	ug/L	07:39:14
3	Pb 220.353†	818.7	871.2	[100]	ug/L	07:39:14
3	S 181.975 Axial†	175.0	130.0	[200]	ug/L	07:39:14
3	Sb 206.836†	329.8	289.1	[100]	ug/L	07:39:14
3	Se 196.026†	150.6	176.5	[100]	ug/L	07:39:14
3	Si 251.611†	16850.5	16071.6	[500]	ug/L	07:38:54
3	Sn 189.927†	596.2	579.5	[100]	ug/L	07:39:14
3	Ti 334.940†	60935.8	60860.2	[100]	ug/L	07:38:54
3	Tl 190.801†	315.6	342.0	[100]	ug/L	07:39:14
3	U 409.014†	972.6	3355.4	[100]	ug/L	07:38:49
3	V 292.402†	13503.5	14598.0	[100]	ug/L	07:38:54
3	Zn 213.857†	12098.0	11239.8	[100]	ug/L	07:38:54
3	SiO2†	16521.2	15731.0	[1069.5]	ug/L	07:39:29

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	916374.0	2501.23	0.27%	101.68	%
Sc Radial	5803.4	62.41	1.08%	99.3	%
Y 371.029	756950.2	2239.21	0.30%	100.78	%
Y RADIAL	6196.2	70.31	1.13%	98.54	%
Ag 328.068†	21373.3	136.74	0.64%	[100]	ug/L
As 188.979†	244.8	4.02	1.64%	[100]	ug/L
B 249.677†	4431.5	52.22	1.18%	[100]	ug/L
Ba 233.527†	13200.4	89.86	0.68%	[100]	ug/L
Be 313.107†	262159.9	249.34	0.10%	[100]	ug/L
Cd 226.502†	9302.4	42.77	0.46%	[100]	ug/L
Co 228.616†	5033.2	23.87	0.47%	[100]	ug/L
Cr 267.716†	9272.4	53.46	0.58%	[100]	ug/L
Cu 324.752†	33298.6	118.07	0.35%	[100]	ug/L
K 766.490 Radial†	5682.6	125.36	2.21%	[1000]	ug/L
Mn 257.610†	91658.9	482.19	0.53%	[100]	ug/L
Mo 202.031†	1503.6	1.93	0.13%	[100]	ug/L
Ni 231.604†	4114.0	19.19	0.47%	[100]	ug/L
P 214.914†	814.6	6.21	0.76%	[500]	ug/L
Pb 220.353†	873.0	2.80	0.32%	[100]	ug/L
S 181.975 Axial†	130.3	0.57	0.43%	[200]	ug/L
Sb 206.836†	293.0	3.44	1.17%	[100]	ug/L
Se 196.026†	173.3	3.78	2.18%	[100]	ug/L
Si 251.611†	15951.7	106.20	0.67%	[500]	ug/L
Sn 189.927†	576.9	12.46	2.16%	[100]	ug/L
Sr 421.552†	15881.5	39.96	0.25%	[100]	ug/L
Ti 334.940†	60430.1	384.83	0.64%	[100]	ug/L
Tl 190.801†	347.3	5.29	1.52%	[100]	ug/L
U 409.014†	3448.1	130.52	3.79%	[100]	ug/L
V 292.402†	14546.5	62.44	0.43%	[100]	ug/L
Zn 213.857†	11183.3	49.46	0.44%	[100]	ug/L
SiO2†	15852.6	144.20	0.91%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/8/2009 07:41:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5755.3	5755.3	98.5	%	07:43:33
1	Y RADIAL	6135.8	6135.8	97.58	%	07:43:33
1	Al 396.153Radial†	6940.6	7067.9	[5000]	ug/L	07:43:33
1	Ca 317.933Radial†	3383.4	3419.9	[5000]	ug/L	07:43:53
1	K 766.490 Radial†	30250.2	28364.4	[5000]	ug/L	07:43:33
1	Mg 279.077 IEC†	149.6	150.7	[5000]	ug/L	07:43:53
1	Sr 421.552†	79566.2	80818.9	[500]	ug/L	07:43:33
1	Sc 361.383	902007.9	902007.9	100.08	%	07:44:50
1	Y 371.029	736818.6	736818.6	98.101	%	07:44:50
1	Ag 328.068†	110404.5	110020.7	[500]	ug/L	07:44:55
1	As 188.979†	1227.6	1250.8	[500]	ug/L	07:45:15
1	B 249.677†	22624.2	23136.2	[500]	ug/L	07:44:55
1	Ba 233.527†	66321.3	66275.0	[500]	ug/L	07:44:55
1	Be 313.107†	1344073.3	1348078.1	[500]	ug/L	07:44:50
1	Cd 226.502†	46481.0	46637.8	[500]	ug/L	07:44:55
1	Co 228.616†	25957.4	26001.4	[500]	ug/L	07:44:55
1	Cr 267.716†	46880.7	46763.4	[500]	ug/L	07:44:55
1	Cu 324.752†	176748.5	169846.1	[500]	ug/L	07:44:55
1	Mn 257.610†	463225.0	462420.8	[500]	ug/L	07:44:50
1	Mo 202.031†	7863.2	7838.4	[500]	ug/L	07:45:15
1	Ni 231.604†	21487.8	21383.5	[500]	ug/L	07:44:55
1	P 214.914†	4473.1	4245.9	[2500]	ug/L	07:45:15
1	Pb 220.353†	4294.6	4359.5	[500]	ug/L	07:45:15
1	S 181.975 Axial†	761.5	719.3	[1000]	ug/L	07:45:15
1	Sb 206.836†	1615.7	1580.1	[500]	ug/L	07:45:15
1	Se 196.026†	818.6	846.7	[500]	ug/L	07:45:15
1	Si 251.611†	82564.9	82047.1	[2500]	ug/L	07:44:55
1	Sn 189.927†	3040.6	3033.1	[500]	ug/L	07:45:15
1	Ti 334.940†	310662.0	311520.8	[500]	ug/L	07:44:55
1	Tl 190.801†	1746.7	1777.8	[500]	ug/L	07:45:15
1	U 409.014†	15499.0	17888.0	[500]	ug/L	07:44:55
1	V 292.402†	72745.3	74043.7	[500]	ug/L	07:44:55
1	Zn 213.857†	56861.0	56192.3	[500]	ug/L	07:44:55
1	SiO2†	83677.9	83141.4	[5347.5]	ug/L	07:46:23
2	Sc Radial	5753.2	5753.2	98.4	%	07:43:58
2	Y RADIAL	6098.6	6098.6	96.99	%	07:43:58
2	Al 396.153Radial†	7008.5	7139.3	[5000]	ug/L	07:43:58
2	Ca 317.933Radial†	3357.1	3394.4	[5000]	ug/L	07:44:18
2	K 766.490 Radial†	30376.3	28503.4	[5000]	ug/L	07:43:58
2	Mg 279.077 IEC†	145.0	146.2	[5000]	ug/L	07:44:18
2	Sr 421.552†	80143.3	81433.9	[500]	ug/L	07:43:58
2	Sc 361.383	897050.9	897050.9	99.533	%	07:45:21
2	Y 371.029	733930.5	733930.5	97.716	%	07:45:21
2	Ag 328.068†	111157.6	111387.0	[500]	ug/L	07:45:26
2	As 188.979†	1224.7	1254.7	[500]	ug/L	07:45:46
2	B 249.677†	22833.2	23471.2	[500]	ug/L	07:45:26
2	Ba 233.527†	66766.7	67088.7	[500]	ug/L	07:45:26
2	Be 313.107†	1337696.5	1349092.5	[500]	ug/L	07:45:21
2	Cd 226.502†	46562.9	46976.7	[500]	ug/L	07:45:26
2	Co 228.616†	26072.6	26260.5	[500]	ug/L	07:45:26
2	Cr 267.716†	47094.3	47236.9	[500]	ug/L	07:45:26
2	Cu 324.752†	179116.2	173200.8	[500]	ug/L	07:45:26
2	Mn 257.610†	460045.0	461783.5	[500]	ug/L	07:45:21
2	Mo 202.031†	7897.3	7916.1	[500]	ug/L	07:45:46
2	Ni 231.604†	21502.8	21517.2	[500]	ug/L	07:45:26
2	P 214.914†	4483.7	4281.3	[2500]	ug/L	07:45:46
2	Pb 220.353†	4299.8	4388.4	[500]	ug/L	07:45:46
2	S 181.975 Axial†	755.4	717.4	[1000]	ug/L	07:45:46
2	Sb 206.836†	1616.8	1590.2	[500]	ug/L	07:45:46

2	Se 196.026†	835.3	868.1	[500]	ug/L	07:45:46
2	Si 251.611†	83146.9	83087.8	[2500]	ug/L	07:45:26
2	Sn 189.927†	3056.2	3065.6	[500]	ug/L	07:45:46
2	Ti 334.940†	313337.6	315924.2	[500]	ug/L	07:45:26
2	Tl 190.801†	1732.8	1773.5	[500]	ug/L	07:45:46
2	U 409.014†	15713.5	18189.1	[500]	ug/L	07:45:26
2	V 292.402†	73060.5	74762.0	[500]	ug/L	07:45:26
2	Zn 213.857†	57384.3	57032.0	[500]	ug/L	07:45:26
2	SiO2†	82111.0	82029.2	[5347.5]	ug/L	07:46:28
3	Sc Radial	5658.5	5658.5	96.8	%	07:44:23
3	Y RADIAL	6000.3	6000.3	95.43	%	07:44:23
3	Al 396.153Radial†	7008.2	7258.2	[5000]	ug/L	07:44:23
3	Ca 317.933Radial†	3379.5	3474.7	[5000]	ug/L	07:44:43
3	K 766.490 Radial†	30355.1	28998.2	[5000]	ug/L	07:44:23
3	Mg 279.077 IEC†	146.2	149.8	[5000]	ug/L	07:44:43
3	Sr 421.552†	80169.9	82824.7	[500]	ug/L	07:44:23
3	Sc 361.383	903673.3	903673.3	100.27	%	07:45:52
3	Y 371.029	738349.2	738349.2	98.304	%	07:45:52
3	Ag 328.068†	111866.7	111275.7	[500]	ug/L	07:45:57
3	As 188.979†	1213.8	1234.8	[500]	ug/L	07:46:17
3	B 249.677†	23191.3	23660.2	[500]	ug/L	07:45:57
3	Ba 233.527†	67179.0	67008.4	[500]	ug/L	07:45:57
3	Be 313.107†	1348404.0	1349922.3	[500]	ug/L	07:45:52
3	Cd 226.502†	47083.0	47152.6	[500]	ug/L	07:45:57
3	Co 228.616†	26298.3	26293.6	[500]	ug/L	07:45:57
3	Cr 267.716†	47483.6	47278.4	[500]	ug/L	07:45:57
3	Cu 324.752†	179916.3	172680.0	[500]	ug/L	07:45:57
3	Mn 257.610†	464824.3	463162.8	[500]	ug/L	07:45:52
3	Mo 202.031†	7859.2	7820.0	[500]	ug/L	07:46:17
3	Ni 231.604†	21680.2	21535.9	[500]	ug/L	07:45:57
3	P 214.914†	4444.9	4209.6	[2500]	ug/L	07:46:17
3	Pb 220.353†	4302.0	4359.0	[500]	ug/L	07:46:17
3	S 181.975 Axial†	750.3	706.7	[1000]	ug/L	07:46:17
3	Sb 206.836†	1605.1	1566.6	[500]	ug/L	07:46:17
3	Se 196.026†	826.7	853.3	[500]	ug/L	07:46:17
3	Si 251.611†	83765.2	83092.2	[2500]	ug/L	07:45:57
3	Sn 189.927†	3059.4	3046.2	[500]	ug/L	07:46:17
3	Ti 334.940†	315390.3	315664.4	[500]	ug/L	07:45:57
3	Tl 190.801†	1716.4	1744.4	[500]	ug/L	07:46:17
3	U 409.014†	15674.1	18034.2	[500]	ug/L	07:45:57
3	V 292.402†	73603.1	74765.2	[500]	ug/L	07:45:57
3	Zn 213.857†	57834.5	57058.5	[500]	ug/L	07:45:57
3	SiO2†	81804.4	81118.8	[5347.5]	ug/L	07:46:33

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	900910.7	3444.89	0.38%	99.961	%
Sc Radial	5722.3	55.31	0.97%	97.9	%
Y 371.029	736366.1	2243.84	0.30%	98.040	%
Y RADIAL	6078.3	70.01	1.15%	96.67	%
Ag 328.068†	110894.5	758.70	0.68%	[500]	ug/L
Al 396.153Radial†	7155.2	96.14	1.34%	[5000]	ug/L
As 188.979†	1246.7	10.54	0.85%	[500]	ug/L
B 249.677†	23422.5	265.36	1.13%	[500]	ug/L
Ba 233.527†	66790.7	448.39	0.67%	[500]	ug/L
Be 313.107†	1349030.9	923.63	0.07%	[500]	ug/L
Ca 317.933Radial†	3429.7	41.02	1.20%	[5000]	ug/L
Cd 226.502†	46922.4	261.67	0.56%	[500]	ug/L
Co 228.616†	26185.2	159.97	0.61%	[500]	ug/L
Cr 267.716†	47092.9	286.09	0.61%	[500]	ug/L
Cu 324.752†	171909.0	1805.36	1.05%	[500]	ug/L
K 766.490 Radial†	28622.0	333.13	1.16%	[5000]	ug/L
Mg 279.077 IEC†	148.9	2.41	1.62%	[5000]	ug/L
Mn 257.610†	462455.7	690.31	0.15%	[500]	ug/L
Mo 202.031†	7858.1	51.01	0.65%	[500]	ug/L
Ni 231.604†	21478.9	83.11	0.39%	[500]	ug/L
P 214.914†	4245.6	35.86	0.84%	[2500]	ug/L
Pb 220.353†	4369.0	16.86	0.39%	[500]	ug/L
S 181.975 Axial†	714.5	6.78	0.95%	[1000]	ug/L

Sb 206.836†	1579.0	11.84	0.75%	[500]	ug/L
Se 196.026†	856.0	10.93	1.28%	[500]	ug/L
Si 251.611†	82742.4	602.11	0.73%	[2500]	ug/L
Sn 189.927†	3048.3	16.37	0.54%	[500]	ug/L
Sr 421.552†	81692.5	1027.61	1.26%	[500]	ug/L
Ti 334.940†	314369.8	2470.75	0.79%	[500]	ug/L
Tl 190.801†	1765.2	18.18	1.03%	[500]	ug/L
U 409.014†	18037.1	150.54	0.83%	[500]	ug/L
V 292.402†	74523.6	415.67	0.56%	[500]	ug/L
Zn 213.857†	56760.9	492.63	0.87%	[500]	ug/L
SiO2†	82096.5	1012.97	1.23%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/8/2009 07:48:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5727.6	5727.6	98.0	%	07:50:36
1	Y RADIAL	6092.4	6092.4	96.89	%	07:50:36
1	Al 396.153Radial†	13699.9	13998.6	[10000]	ug/L	07:50:36
1	Ca 317.933Radial†	6656.5	6776.1	[10000]	ug/L	07:50:36
1	Fe 238.204 Radial†	1055.7	1070.4	[10000]	ug/L	07:50:56
1	K 766.490 Radial†	57301.4	56113.4	[10000]	ug/L	07:50:36
1	Mg 279.077 IEC†	286.7	291.4	[10000]	ug/L	07:50:56
1	Na 589.592 Radial†	26952.5	28587.8	[10000]	ug/L	07:50:36
1	Sr 421.552†	156642.7	159851.3	[1000]	ug/L	07:50:36
1	Sc 361.383	866703.8	866703.8	96.165	%	07:51:59
1	Y 371.029	725126.9	725126.9	96.544	%	07:51:59
1	Ag 328.068†	212191.8	220360.3	[1000]	ug/L	07:51:59
1	As 188.979†	2413.4	2533.8	[1000]	ug/L	07:52:19
1	B 249.677†	45434.2	47776.6	[1000]	ug/L	07:51:59
1	Ba 233.527†	129842.7	135028.7	[1000]	ug/L	07:51:59
1	Be 313.107†	2636643.4	2746894.1	[1000]	ug/L	07:51:54
1	Cd 226.502†	90744.2	94557.8	[1000]	ug/L	07:51:59
1	Co 228.616†	50574.3	52656.4	[1000]	ug/L	07:51:59
1	Cr 267.716†	91836.0	95419.4	[1000]	ug/L	07:51:59
1	Cu 324.752†	343293.5	350225.9	[1000]	ug/L	07:51:59
1	Mn 257.610†	901280.3	936797.1	[1000]	ug/L	07:51:54
1	Mo 202.031†	15191.7	15779.1	[1000]	ug/L	07:52:19
1	Ni 231.604†	41580.1	43151.6	[1000]	ug/L	07:51:59
1	P 214.914†	8615.8	8735.8	[5000]	ug/L	07:52:19
1	Pb 220.353†	8464.2	8870.1	[1000]	ug/L	07:52:19
1	S 181.975 Axial†	1409.9	1424.5	[2000]	ug/L	07:52:19
1	Sb 206.836†	3070.7	3158.9	[1000]	ug/L	07:52:19
1	Se 196.026†	1640.1	1734.3	[1000]	ug/L	07:52:19
1	Si 251.611†	161079.4	167052.8	[5000]	ug/L	07:51:59
1	Sn 189.927†	5873.8	6103.0	[1000]	ug/L	07:52:19
1	Ti 334.940†	600269.7	625320.7	[1000]	ug/L	07:51:59
1	Tl 190.801†	3419.3	3588.1	[1000]	ug/L	07:52:19
1	U 409.014†	32652.6	36356.5	[1000]	ug/L	07:51:59
1	V 292.402†	144700.9	151829.2	[1000]	ug/L	07:51:59
1	Zn 213.857†	110773.1	114568.4	[1000]	ug/L	07:51:59
1	SiO2†	162097.8	168094.0	[10695]	ug/L	07:53:28
2	Sc Radial	5706.1	5706.1	97.6	%	07:51:01
2	Y RADIAL	6044.1	6044.1	96.12	%	07:51:01
2	Al 396.153Radial†	13658.2	14008.6	[10000]	ug/L	07:51:01
2	Ca 317.933Radial†	6641.4	6786.2	[10000]	ug/L	07:51:01
2	Fe 238.204 Radial†	1051.8	1070.4	[10000]	ug/L	07:51:21
2	K 766.490 Radial†	57341.9	56375.2	[10000]	ug/L	07:51:01
2	Mg 279.077 IEC†	284.9	290.6	[10000]	ug/L	07:51:21
2	Na 589.592 Radial†	26942.8	28681.5	[10000]	ug/L	07:51:01
2	Sr 421.552†	156508.0	160315.7	[1000]	ug/L	07:51:01
2	Sc 361.383	870985.3	870985.3	96.640	%	07:52:31
2	Y 371.029	731540.9	731540.9	97.398	%	07:52:31
2	Ag 328.068†	213845.0	220986.4	[1000]	ug/L	07:52:31
2	As 188.979†	2432.4	2541.1	[1000]	ug/L	07:52:51
2	B 249.677†	46010.4	48140.5	[1000]	ug/L	07:52:31
2	Ba 233.527†	130856.3	135413.9	[1000]	ug/L	07:52:31
2	Be 313.107†	2666787.9	2764609.1	[1000]	ug/L	07:52:25
2	Cd 226.502†	91618.2	94998.3	[1000]	ug/L	07:52:31
2	Co 228.616†	51055.4	52895.7	[1000]	ug/L	07:52:31
2	Cr 267.716†	92533.4	95671.6	[1000]	ug/L	07:52:31
2	Cu 324.752†	346989.1	352295.1	[1000]	ug/L	07:52:31
2	Mn 257.610†	910927.9	942173.1	[1000]	ug/L	07:52:25
2	Mo 202.031†	15202.7	15712.9	[1000]	ug/L	07:52:51
2	Ni 231.604†	42023.0	43397.4	[1000]	ug/L	07:52:31

2	P 214.914†	8619.1	8695.2	[5000]	ug/L	07:52:51
2	Pb 220.353†	8484.9	8848.3	[1000]	ug/L	07:52:51
2	S 181.975 Axial†	1414.8	1422.4	[2000]	ug/L	07:52:51
2	Sb 206.836†	3088.5	3161.7	[1000]	ug/L	07:52:51
2	Se 196.026†	1638.9	1724.7	[1000]	ug/L	07:52:51
2	Si 251.611†	162691.4	167897.5	[5000]	ug/L	07:52:31
2	Sn 189.927†	5905.9	6106.2	[1000]	ug/L	07:52:51
2	Ti 334.940†	605448.6	627611.3	[1000]	ug/L	07:52:31
2	Tl 190.801†	3427.2	3578.8	[1000]	ug/L	07:52:51
2	U 409.014†	32852.3	36396.2	[1000]	ug/L	07:52:31
2	V 292.402†	145972.5	152405.4	[1000]	ug/L	07:52:31
2	Zn 213.857†	111675.6	114936.0	[1000]	ug/L	07:52:31
2	SiO2†	162732.6	167922.3	[10695]	ug/L	07:53:33
3	Sc Radial	5835.4	5835.4	99.9	%	07:51:26
3	Y RADIAL	6153.0	6153.0	97.86	%	07:51:26
3	Al 396.153Radial†	13935.7	13976.5	[10000]	ug/L	07:51:26
3	Ca 317.933Radial†	6750.2	6744.5	[10000]	ug/L	07:51:26
3	Fe 238.204 Radial†	1062.5	1057.3	[10000]	ug/L	07:51:46
3	K 766.490 Radial†	58299.6	56033.1	[10000]	ug/L	07:51:26
3	Mg 279.077 IEC†	286.1	285.3	[10000]	ug/L	07:51:46
3	Na 589.592 Radial†	27504.4	28632.6	[10000]	ug/L	07:51:26
3	Sr 421.552†	159231.4	159491.6	[1000]	ug/L	07:51:26
3	Sc 361.383	870659.7	870659.7	96.604	%	07:53:02
3	Y 371.029	729400.6	729400.6	97.113	%	07:53:02
3	Ag 328.068†	213245.6	220448.6	[1000]	ug/L	07:53:02
3	As 188.979†	2437.9	2547.8	[1000]	ug/L	07:53:22
3	B 249.677†	45730.3	47868.4	[1000]	ug/L	07:53:02
3	Ba 233.527†	130842.6	135450.2	[1000]	ug/L	07:53:02
3	Be 313.107†	2658103.6	2756651.3	[1000]	ug/L	07:52:57
3	Cd 226.502†	91430.2	94839.1	[1000]	ug/L	07:53:02
3	Co 228.616†	50994.1	52852.0	[1000]	ug/L	07:53:02
3	Cr 267.716†	92409.5	95579.1	[1000]	ug/L	07:53:02
3	Cu 324.752†	345135.9	350511.0	[1000]	ug/L	07:53:02
3	Mn 257.610†	911726.2	943351.9	[1000]	ug/L	07:52:57
3	Mo 202.031†	15254.9	15772.8	[1000]	ug/L	07:53:22
3	Ni 231.604†	41851.4	43236.0	[1000]	ug/L	07:53:02
3	P 214.914†	8647.5	8728.0	[5000]	ug/L	07:53:22
3	Pb 220.353†	8535.4	8903.9	[1000]	ug/L	07:53:22
3	S 181.975 Axial†	1428.8	1437.4	[2000]	ug/L	07:53:22
3	Sb 206.836†	3094.4	3169.0	[1000]	ug/L	07:53:22
3	Se 196.026†	1655.8	1742.8	[1000]	ug/L	07:53:22
3	Si 251.611†	162249.9	167503.4	[5000]	ug/L	07:53:02
3	Sn 189.927†	5928.4	6131.8	[1000]	ug/L	07:53:22
3	Ti 334.940†	603756.8	626094.3	[1000]	ug/L	07:53:02
3	Tl 190.801†	3424.4	3577.2	[1000]	ug/L	07:53:22
3	U 409.014†	32820.6	36376.1	[1000]	ug/L	07:53:02
3	V 292.402†	145449.4	151920.4	[1000]	ug/L	07:53:02
3	Zn 213.857†	111377.9	114671.1	[1000]	ug/L	07:53:02
3	SiO2†	161107.2	166302.8	[10695]	ug/L	07:53:38

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	869449.6	2383.48	0.27%	96.470	%
Sc Radial	5756.4	69.28	1.20%	98.5	%
Y 371.029	728689.4	3265.57	0.45%	97.018	%
Y RADIAL	6096.5	54.59	0.90%	96.96	%
Ag 328.068†	220598.4	338.87	0.15%	[1000]	ug/L
Al 396.153Radial†	13994.5	16.43	0.12%	[10000]	ug/L
As 188.979†	2540.9	6.99	0.28%	[1000]	ug/L
B 249.677†	47928.5	189.28	0.39%	[1000]	ug/L
Ba 233.527†	135297.6	233.59	0.17%	[1000]	ug/L
Be 313.107†	2756051.5	8872.70	0.32%	[1000]	ug/L
Ca 317.933Radial†	6768.9	21.76	0.32%	[10000]	ug/L
Cd 226.502†	94798.4	223.05	0.24%	[1000]	ug/L
Co 228.616†	52801.4	127.43	0.24%	[1000]	ug/L
Cr 267.716†	95556.7	127.57	0.13%	[1000]	ug/L
Cu 324.752†	351010.6	1121.46	0.32%	[1000]	ug/L
Fe 238.204 Radial†	1066.0	7.56	0.71%	[10000]	ug/L
K 766.490 Radial†	56173.9	178.89	0.32%	[10000]	ug/L

Mg 279.077 IEC†	289.1	3.30	1.14%	[10000]	ug/L
Mn 257.610†	940774.0	3494.17	0.37%	[1000]	ug/L
Mo 202.031†	15754.9	36.54	0.23%	[1000]	ug/L
Na 589.592 Radial†	28634.0	46.86	0.16%	[10000]	ug/L
Ni 231.604†	43261.7	124.89	0.29%	[1000]	ug/L
P 214.914†	8719.7	21.52	0.25%	[5000]	ug/L
Pb 220.353†	8874.1	28.01	0.32%	[1000]	ug/L
S 181.975 Axial†	1428.1	8.14	0.57%	[2000]	ug/L
Sb 206.836†	3163.2	5.19	0.16%	[1000]	ug/L
Se 196.026†	1733.9	9.04	0.52%	[1000]	ug/L
Si 251.611†	167484.6	422.65	0.25%	[5000]	ug/L
Sn 189.927†	6113.7	15.78	0.26%	[1000]	ug/L
Sr 421.552†	159886.2	413.17	0.26%	[1000]	ug/L
Ti 334.940†	626342.1	1165.23	0.19%	[1000]	ug/L
Tl 190.801†	3581.4	5.88	0.16%	[1000]	ug/L
U 409.014†	36376.3	19.85	0.05%	[1000]	ug/L
V 292.402†	152051.7	309.69	0.20%	[1000]	ug/L
Zn 213.857†	114725.2	189.70	0.17%	[1000]	ug/L
SiO2†	167439.7	988.35	0.59%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/8/2009 07:55:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5634.4	5634.4	96.4	%	07:58:03
1	Y RADIAL	5976.9	5976.9	95.06	%	07:58:03
1	Al 396.153Radial†	70118.2	72745.8	[50000]	ug/L	07:57:43
1	Ca 317.933Radial†	33119.0	34334.9	[50000]	ug/L	07:57:43
1	Fe 238.204 Radial†	2068.2	2138.3	[20000]	ug/L	07:58:03
1	Mg 279.077 IEC†	1367.9	1417.6	[50000]	ug/L	07:58:03
1	Na 589.592 Radial†	57661.4	60893.3	[20000]	ug/L	07:57:43
1	Sc 361.383	873678.1	873678.1	96.939	%	07:59:00
1	Y 371.029	712440.2	712440.2	94.855	%	07:59:00
2	Sc Radial	5657.2	5657.2	96.8	%	07:58:28
2	Y RADIAL	5981.2	5981.2	95.12	%	07:58:28
2	Al 396.153Radial†	69017.3	71315.7	[50000]	ug/L	07:58:08
2	Ca 317.933Radial†	32519.9	33577.7	[50000]	ug/L	07:58:08
2	Fe 238.204 Radial†	2074.1	2135.7	[20000]	ug/L	07:58:28
2	Mg 279.077 IEC†	1366.8	1410.8	[50000]	ug/L	07:58:28
2	Na 589.592 Radial†	56539.3	59493.5	[20000]	ug/L	07:58:08
2	Sc 361.383	887334.1	887334.1	98.454	%	07:59:05
2	Y 371.029	723198.7	723198.7	96.287	%	07:59:05
3	Sc Radial	5603.7	5603.7	95.9	%	07:58:53
3	Y RADIAL	5935.7	5935.7	94.40	%	07:58:53
3	Al 396.153Radial†	69152.0	72137.0	[50000]	ug/L	07:58:33
3	Ca 317.933Radial†	32476.7	33853.5	[50000]	ug/L	07:58:33
3	Fe 238.204 Radial†	2056.8	2138.2	[20000]	ug/L	07:58:53
3	Mg 279.077 IEC†	1360.7	1417.9	[50000]	ug/L	07:58:53
3	Na 589.592 Radial†	56639.2	60155.3	[20000]	ug/L	07:58:33
3	Sc 361.383	876437.1	876437.1	97.245	%	07:59:11
3	Y 371.029	715214.6	715214.6	95.224	%	07:59:11

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	879149.8	7220.84	0.82%	97.546	%
Sc Radial	5631.8	26.85	0.48%	96.4	%
Y 371.029	716951.2	5585.53	0.78%	95.456	%
Y RADIAL	5964.6	25.13	0.42%	94.86	%
Al 396.153Radial†	72066.2	717.65	1.00%	[50000]	ug/L
Ca 317.933Radial†	33922.0	383.22	1.13%	[50000]	ug/L
Fe 238.204 Radial†	2137.4	1.46	0.07%	[20000]	ug/L
Mg 279.077 IEC†	1415.5	4.03	0.28%	[50000]	ug/L
Na 589.592 Radial†	60180.7	700.27	1.16%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	220.8	0.00000	0.999994	
Al 396.153Radial	3	Lin Thru 0	0.0	1.440	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	2.531	0.00000	0.999968	
B 249.677	3	Lin Thru 0	0.0	47.68	0.00000	0.999939	
Ba 233.527	3	Lin Thru 0	0.0	134.9	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	2743	0.00000	0.999957	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6785	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	94.60	0.00000	0.999991	
Co 228.616	3	Lin Thru 0	0.0	52.70	0.00000	0.999987	
Cr 267.716	3	Lin Thru 0	0.0	95.26	0.00000	0.999981	
Cu 324.752	3	Lin Thru 0	0.0	349.4	0.00000	0.999958	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1068	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.639	0.00000	0.999971	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0283	0.00000	0.999979
Mn 257.610	3	Lin Thru 0	0.0	937.4	0.00000	0.999975
Mo 202.031	3	Lin Thru 0	0.0	15.74	0.00000	0.999991
Na 589.592 Radia	2	Lin Thru 0	0.0	2.980	0.00000	0.999809
Ni 231.604	3	Lin Thru 0	0.0	43.18	0.00000	0.999987
P 214.914	3	Lin Thru 0	0.0	1.734	0.00000	0.999930
Pb 220.353	3	Lin Thru 0	0.0	8.846	0.00000	0.999981
S 181.975 Axial	3	Lin Thru 0	0.0	0.7136	0.00000	0.999970
Sb 206.836	3	Lin Thru 0	0.0	3.160	0.00000	0.999979
Se 196.026	3	Lin Thru 0	0.0	1.730	0.00000	0.999987
Si 251.611	3	Lin Thru 0	0.0	33.40	0.00000	0.999981
Sn 189.927	3	Lin Thru 0	0.0	6.108	0.00000	0.999987
Sr 421.552	3	Lin Thru 0	0.0	160.6	0.00000	0.999962
Ti 334.940	3	Lin Thru 0	0.0	626.6	0.00000	0.999994
Tl 190.801	3	Lin Thru 0	0.0	3.570	0.00000	0.999981
U 409.014	3	Lin Thru 0	0.0	36.30	0.00000	0.999984
V 292.402	3	Lin Thru 0	0.0	151.4	0.00000	0.999963
Zn 213.857	3	Lin Thru 0	0.0	114.5	0.00000	0.999989
SiO2	3	Lin Thru 0	0.0	15.59	0.00000	0.999960

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/8/2009 08:01:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6009.6	6009.6	103	%			08:03:14
1	Y RADIAL	6456.4	6456.4	102.7	%			08:03:14
1	Al 396.153Radial†	7067.2	6892.7	4765.0	ug/L	4765.0	ppb	08:03:14
1	Ca 317.933Radial†	3331.3	3223.9	4751.8	ug/L	4751.8	ppb	08:03:35
1	Fe 238.204 Radial†	542.1	520.4	4887.1	ug/L	4887.1	ppb	08:03:35
1	K 766.490 Radial†	16331.3	13529.3	2394.0	ug/L	2394.0	ppb	08:03:14
1	Mg 279.077 IEC†	148.3	143.1	5053.8	ug/L	5053.8	ppb	08:03:35
1	Na 589.592 Radial†	6072.0	6992.5	2346.6	ug/L	2346.6	ppb	08:03:14
1	Sr 421.552†	83886.5	81601.2	508.15	ug/L	508.15	ppb	08:03:14
1	Sc 361.383	912453.5	912453.5	101.24	%			08:04:32
1	Y 371.029	752091.5	752091.5	100.13	%			08:04:32
1	Ag 328.068†	57656.7	56656.9	259.65	ug/L	259.65	ppb	08:04:32
1	As 188.979†	1167.3	1177.2	469.45	ug/L	469.45	ppb	08:04:52
1	B 249.677†	23906.7	24144.2	504.43	ug/L	504.43	ppb	08:04:32
1	Ba 233.527†	68424.2	67593.6	502.25	ug/L	502.25	ppb	08:04:32
1	Be 313.107†	705987.4	702442.9	257.03	ug/L	257.03	ppb	08:04:32
1	Cd 226.502†	47081.6	46699.3	493.50	ug/L	493.50	ppb	08:04:32
1	Co 228.616†	26273.8	26017.0	494.03	ug/L	494.03	ppb	08:04:52
1	Cr 267.716†	46520.1	45871.0	482.33	ug/L	482.33	ppb	08:04:32
1	Cu 324.752†	183044.9	174043.5	498.31	ug/L	498.31	ppb	08:04:32
1	Mn 257.610†	477045.7	470773.4	502.59	ug/L	502.59	ppb	08:04:32
1	Mo 202.031†	8517.1	8394.4	533.61	ug/L	533.61	ppb	08:04:52
1	Ni 231.604†	21479.4	21129.4	488.97	ug/L	488.97	ppb	08:04:52
1	P 214.914†	4554.6	4275.2	2390.8	ug/L	2390.8	ppb	08:04:52
1	Pb 220.353†	4364.0	4378.9	496.61	ug/L	496.61	ppb	08:04:52
1	S 181.975 Axial†	1818.9	1755.0	2458.3	ug/L	2458.3	ppb	08:04:52
1	Sb 206.836†	1586.3	1532.6	494.01	ug/L	494.01	ppb	08:04:52
1	Se 196.026†	4375.9	4351.0	2533.6	ug/L	2533.6	ppb	08:04:52
1	Si 251.611†	160353.0	157937.0	4716.2	ug/L	4716.2	ppb	08:04:32
1	Sn 189.927†	3306.2	3260.6	534.43	ug/L	534.43	ppb	08:04:52
1	Ti 334.940†	317801.3	315019.0	502.58	ug/L	502.58	ppb	08:04:32
1	Tl 190.801†	1838.8	1848.8	521.06	ug/L	521.06	ppb	08:04:52
1	U 409.014†	14870.6	17090.1	469.24	ug/L	469.24	ppb	08:04:32
1	V 292.402†	74687.1	75129.5	503.39	ug/L	503.39	ppb	08:04:32
1	Zn 213.857†	58836.0	57492.6	497.92	ug/L	497.92	ppb	08:04:32
1	SiO2†	158439.0	156028.6	9983.3	ug/L	9983.3	ppb	08:05:50
2	Sc Radial	5793.2	5793.2	99.1	%			08:03:40
2	Y RADIAL	6177.7	6177.7	98.25	%			08:03:40
2	Al 396.153Radial†	7001.0	7082.7	4896.9	ug/L	4896.9	ppb	08:03:40
2	Ca 317.933Radial†	3313.6	3327.0	4903.8	ug/L	4903.8	ppb	08:04:00
2	Fe 238.204 Radial†	539.7	537.6	5048.4	ug/L	5048.4	ppb	08:04:00
2	K 766.490 Radial†	16265.1	14055.7	2487.4	ug/L	2487.4	ppb	08:03:40
2	Mg 279.077 IEC†	149.3	149.4	5277.4	ug/L	5277.4	ppb	08:04:00
2	Na 589.592 Radial†	5957.8	7097.9	2381.9	ug/L	2381.9	ppb	08:03:40
2	Sr 421.552†	83562.4	84321.3	525.09	ug/L	525.09	ppb	08:03:40
2	Sc 361.383	907490.4	907490.4	100.69	%			08:04:58
2	Y 371.029	745986.1	745986.1	99.321	%			08:04:58
2	Ag 328.068†	56982.2	56298.5	258.07	ug/L	258.07	ppb	08:04:58
2	As 188.979†	1163.4	1179.6	470.43	ug/L	470.43	ppb	08:05:18
2	B 249.677†	23675.8	24044.1	502.30	ug/L	502.30	ppb	08:04:58
2	Ba 233.527†	67850.0	67393.0	500.76	ug/L	500.76	ppb	08:04:58
2	Be 313.107†	697546.8	697874.0	255.36	ug/L	255.36	ppb	08:04:58
2	Cd 226.502†	46668.9	46543.8	491.84	ug/L	491.84	ppb	08:04:58
2	Co 228.616†	26211.1	26096.7	495.55	ug/L	495.55	ppb	08:05:18
2	Cr 267.716†	46057.8	45663.2	480.15	ug/L	480.15	ppb	08:04:58
2	Cu 324.752†	181224.7	173224.6	495.98	ug/L	495.98	ppb	08:04:58
2	Mn 257.610†	473022.1	469354.4	501.08	ug/L	501.08	ppb	08:04:58
2	Mo 202.031†	8509.7	8433.0	536.07	ug/L	536.07	ppb	08:05:18
2	Ni 231.604†	21412.6	21179.1	490.12	ug/L	490.12	ppb	08:05:18

2	P 214.914†	4536.6	4281.9	2394.9 ug/L	2394.9 ppb	08:05:18
2	Pb 220.353†	4334.8	4373.6	496.03 ug/L	496.03 ppb	08:05:18
2	S 181.975 Axial†	1822.1	1768.0	2476.4 ug/L	2476.4 ppb	08:05:18
2	Sb 206.836†	1605.6	1560.3	502.85 ug/L	502.85 ppb	08:05:18
2	Se 196.026†	4352.9	4351.8	2534.6 ug/L	2534.6 ppb	08:05:18
2	Si 251.611†	158990.5	157450.0	4701.6 ug/L	4701.6 ppb	08:04:58
2	Sn 189.927†	3284.1	3256.6	533.79 ug/L	533.79 ppb	08:05:18
2	Ti 334.940†	314891.7	313846.1	500.72 ug/L	500.72 ppb	08:04:58
2	Tl 190.801†	1828.3	1848.3	520.91 ug/L	520.91 ppb	08:05:18
2	U 409.014†	14835.2	17135.3	470.47 ug/L	470.47 ppb	08:04:58
2	V 292.402†	73950.2	74801.2	501.24 ug/L	501.24 ppb	08:04:58
2	Zn 213.857†	58273.9	57252.3	495.79 ug/L	495.79 ppb	08:04:58
2	SiO2†	160101.9	158536.0	10144 ug/L	10144 ppb	08:05:55
3	Sc Radial	5889.1	5889.1	101 %		08:04:05
3	Y RADIAL	6279.1	6279.1	99.86 %		08:04:05
3	Al 396.153Radial†	7083.1	7049.2	4873.9 ug/L	4873.9 ppb	08:04:05
3	Ca 317.933Radial†	3333.3	3292.1	4852.4 ug/L	4852.4 ppb	08:04:25
3	Fe 238.204 Radial†	542.0	531.1	4987.3 ug/L	4987.3 ppb	08:04:25
3	K 766.490 Radial†	16313.1	13836.3	2448.5 ug/L	2448.5 ppb	08:04:05
3	Mg 279.077 IEC†	149.3	147.0	5193.5 ug/L	5193.5 ppb	08:04:25
3	Na 589.592 Radial†	6061.0	7102.5	2383.5 ug/L	2383.5 ppb	08:04:05
3	Sr 421.552†	83836.6	83221.2	518.23 ug/L	518.23 ppb	08:04:05
3	Sc 361.383	911772.7	911772.7	101.17 %		08:05:24
3	Y 371.029	751267.0	751267.0	100.02 %		08:05:24
3	Ag 328.068†	57151.9	56200.5	257.60 ug/L	257.60 ppb	08:05:24
3	As 188.979†	1153.3	1164.1	464.30 ug/L	464.30 ppb	08:05:44
3	B 249.677†	23705.7	23963.1	500.63 ug/L	500.63 ppb	08:05:24
3	Ba 233.527†	68150.6	67373.6	500.61 ug/L	500.61 ppb	08:05:24
3	Be 313.107†	702427.5	699444.7	255.93 ug/L	255.93 ppb	08:05:24
3	Cd 226.502†	46920.7	46575.1	492.18 ug/L	492.18 ppb	08:05:24
3	Co 228.616†	25964.5	25730.7	488.58 ug/L	488.58 ppb	08:05:44
3	Cr 267.716†	46302.7	45690.4	480.44 ug/L	480.44 ppb	08:05:24
3	Cu 324.752†	181422.2	172574.6	494.11 ug/L	494.11 ppb	08:05:24
3	Mn 257.610†	475160.7	469262.0	500.98 ug/L	500.98 ppb	08:05:24
3	Mo 202.031†	8439.4	8323.8	529.13 ug/L	529.13 ppb	08:05:44
3	Ni 231.604†	21253.5	20922.0	484.17 ug/L	484.17 ppb	08:05:44
3	P 214.914†	4499.7	4224.3	2362.0 ug/L	2362.0 ppb	08:05:44
3	Pb 220.353†	4320.0	4338.7	492.07 ug/L	492.07 ppb	08:05:44
3	S 181.975 Axial†	1804.6	1742.3	2440.4 ug/L	2440.4 ppb	08:05:44
3	Sb 206.836†	1602.0	1549.3	499.13 ug/L	499.13 ppb	08:05:44
3	Se 196.026†	4323.5	4302.5	2505.8 ug/L	2505.8 ppb	08:05:44
3	Si 251.611†	159550.9	157262.3	4696.1 ug/L	4696.1 ppb	08:05:24
3	Sn 189.927†	3266.4	3223.7	528.40 ug/L	528.40 ppb	08:05:44
3	Ti 334.940†	315966.4	313439.7	500.07 ug/L	500.07 ppb	08:05:24
3	Tl 190.801†	1822.4	1833.9	516.90 ug/L	516.90 ppb	08:05:44
3	U 409.014†	14891.2	17121.4	470.10 ug/L	470.10 ppb	08:05:24
3	V 292.402†	74284.8	74787.0	501.05 ug/L	501.05 ppb	08:05:24
3	Zn 213.857†	58572.4	57275.5	496.05 ug/L	496.05 ppb	08:05:24
3	SiO2†	157929.4	155641.7	9958.7 ug/L	9958.7 ppb	08:06:00

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910572.2	101.03	%	0.299				0.30%
Sc Radial	5897.3	101	%	1.9				1.84%
Y 371.029	749781.5	99.827	%	0.4411				0.44%
Y RADIAL	6304.4	100.3	%	2.24				2.24%
Ag 328.068†	56385.3	258.44	ug/L	1.073	258.44	ppb	1.073	0.42%
QC value within limits for Ag 328.068 Recovery = 103.38%								
Al 396.153Radial†	7008.2	4845.3	ug/L	70.45	4845.3	ppb	70.45	1.45%
QC value within limits for Al 396.153Radial Recovery = 96.91%								
As 188.979†	1173.6	468.06	ug/L	3.291	468.06	ppb	3.291	0.70%
QC value within limits for As 188.979 Recovery = 93.61%								
B 249.677†	24050.5	502.45	ug/L	1.903	502.45	ppb	1.903	0.38%
QC value within limits for B 249.677 Recovery = 100.49%								
Ba 233.527†	67453.4	501.21	ug/L	0.903	501.21	ppb	0.903	0.18%
QC value within limits for Ba 233.527 Recovery = 100.24%								
Be 313.107†	699920.5	256.11	ug/L	0.848	256.11	ppb	0.848	0.33%
QC value within limits for Be 313.107 Recovery = 102.44%								
Ca 317.933Radial†	3281.0	4836.0	ug/L	77.30	4836.0	ppb	77.30	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.72%
Cd 226.502†            46606.1      492.51 ug/L        0.878      492.51 ppb        0.878   0.18%
   QC value within limits for Cd 226.502  Recovery = 98.50%
Co 228.616†            25948.1      492.72 ug/L        3.661      492.72 ppb        3.661   0.74%
   QC value within limits for Co 228.616  Recovery = 98.54%
Cr 267.716†            45741.5      480.97 ug/L        1.187      480.97 ppb        1.187   0.25%
   QC value within limits for Cr 267.716  Recovery = 96.19%
Cu 324.752†           173280.9      496.13 ug/L        2.104      496.13 ppb        2.104   0.42%
   QC value within limits for Cu 324.752  Recovery = 99.23%
Fe 238.204 Radial†       529.7      4974.3 ug/L       81.47      4974.3 ppb       81.47   1.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.49%
K 766.490 Radial†      13807.1      2443.3 ug/L       46.90      2443.3 ppb       46.90   1.92%
   QC value within limits for K 766.490 Radial  Recovery = 97.73%
Mg 279.077 IEC†          146.5      5174.9 ug/L      112.95      5174.9 ppb      112.95   2.18%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           469796.6      501.55 ug/L        0.898      501.55 ppb        0.898   0.18%
   QC value within limits for Mn 257.610  Recovery = 100.31%
Mo 202.031†             8383.7      532.94 ug/L        3.519      532.94 ppb        3.519   0.66%
   QC value within limits for Mo 202.031  Recovery = 106.59%
Na 589.592 Radial†      7064.3      2370.6 ug/L       20.88      2370.6 ppb       20.88   0.88%
   QC value within limits for Na 589.592 Radial  Recovery = 94.83%
Ni 231.604†            21076.9      487.75 ug/L        3.155      487.75 ppb        3.155   0.65%
   QC value within limits for Ni 231.604  Recovery = 97.55%
P 214.914†              4260.5      2382.6 ug/L       17.95      2382.6 ppb       17.95   0.75%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4363.7      494.90 ug/L        2.468      494.90 ppb        2.468   0.50%
   QC value within limits for Pb 220.353  Recovery = 98.98%
S 181.975 Axial†        1755.1      2458.4 ug/L       18.02      2458.4 ppb       18.02   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 98.33%
Sb 206.836†             1547.4      498.66 ug/L        4.442      498.66 ppb        4.442   0.89%
   QC value within limits for Sb 206.836  Recovery = 99.73%
Se 196.026†             4335.1      2524.7 ug/L       16.33      2524.7 ppb       16.33   0.65%
   QC value within limits for Se 196.026  Recovery = 100.99%
Si 251.611†           157549.8      4704.6 ug/L       10.40      4704.6 ppb       10.40   0.22%
   QC value within limits for Si 251.611  Recovery = 94.09%
Sn 189.927†             3247.0      532.21 ug/L        3.311      532.21 ppb        3.311   0.62%
   QC value within limits for Sn 189.927  Recovery = 106.44%
Sr 421.552†            83047.9      517.16 ug/L        8.521      517.16 ppb        8.521   1.65%
   QC value within limits for Sr 421.552  Recovery = 103.43%
Ti 334.940†           314101.6      501.12 ug/L        1.305      501.12 ppb        1.305   0.26%
   QC value within limits for Ti 334.940  Recovery = 100.22%
Tl 190.801†             1843.6      519.62 ug/L        2.361      519.62 ppb        2.361   0.45%
   QC value within limits for Tl 190.801  Recovery = 103.92%
U 409.014†             17115.6      469.94 ug/L        0.630      469.94 ppb        0.630   0.13%
   QC value within limits for U 409.014  Recovery = 93.99%
V 292.402†             74905.9      501.89 ug/L        1.297      501.89 ppb        1.297   0.26%
   QC value within limits for V 292.402  Recovery = 100.38%
Zn 213.857†            57340.1      496.59 ug/L        1.162      496.59 ppb        1.162   0.23%
   QC value within limits for Zn 213.857  Recovery = 99.32%
SiO2†                 156735.4       10029 ug/L        100.6       10029 ppb        100.6   1.00%
   QC value within limits for SiO2  Recovery = 93.77%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/8/2009 08:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5863.4	5863.4	100	%			08:10:04
1	Y RADIAL	6302.2	6302.2	100.2	%			08:10:04
1	Al 396.153Radial†	-13.8	6.7	4.5878	ug/L	4.5878	ppb	08:10:04
1	Ca 317.933Radial†	19.2	3.6	5.2688	ug/L	5.2688	ppb	08:10:24
1	Fe 238.204 Radial†	8.0	1.2	11.415	ug/L	11.415	ppb	08:10:24
1	K 766.490 Radial†	2488.1	128.1	22.724	ug/L	22.724	ppb	08:10:04
1	Mg 279.077 IEC†	2.3	1.1	38.489	ug/L	38.489	ppb	08:10:24
1	Na 589.592 Radial†	-1113.9	-22.2	-7.4610	ug/L	-7.4610	ppb	08:10:04
1	Sr 421.552†	-33.7	-6.3	-0.0391	ug/L	-0.0391	ppb	08:10:04
1	Sc 361.383	917080.9	917080.9	101.75	%			08:11:21
1	Y 371.029	764417.3	764417.3	101.78	%			08:11:21
1	Ag 328.068†	348.3	49.5	0.2333	ug/L	0.2333	ppb	08:11:26
1	As 188.979†	-22.9	1.6	0.6456	ug/L	0.6456	ppb	08:11:46
1	B 249.677†	-334.1	202.3	4.2414	ug/L	4.2414	ppb	08:11:46
1	Ba 233.527†	-12.6	-4.0	-0.0287	ug/L	-0.0287	ppb	08:11:46
1	Be 313.107†	-4947.4	250.9	0.0916	ug/L	0.0916	ppb	08:11:26
1	Cd 226.502†	-181.7	16.5	0.1736	ug/L	0.1736	ppb	08:11:46
1	Co 228.616†	-63.4	3.1	0.0612	ug/L	0.0612	ppb	08:11:46
1	Cr 267.716†	66.2	-13.6	-0.1409	ug/L	-0.1409	ppb	08:11:46
1	Cu 324.752†	6717.4	-155.2	-0.4435	ug/L	-0.4435	ppb	08:11:26
1	Mn 257.610†	419.5	-10.1	-0.0103	ug/L	-0.0103	ppb	08:11:46
1	Mo 202.031†	32.0	13.1	0.8345	ug/L	0.8345	ppb	08:11:46
1	Ni 231.604†	83.7	-4.3	-0.0992	ug/L	-0.0992	ppb	08:11:46
1	P 214.914†	209.3	-17.8	-10.216	ug/L	-10.216	ppb	08:11:46
1	Pb 220.353†	-65.1	4.5	0.5114	ug/L	0.5114	ppb	08:11:46
1	S 181.975 Axial†	40.0	-2.3	-3.1993	ug/L	-3.1993	ppb	08:11:46
1	Sb 206.836†	39.9	5.0	1.5899	ug/L	1.5899	ppb	08:11:46
1	Se 196.026†	-24.9	4.4	2.5561	ug/L	2.5561	ppb	08:11:46
1	Si 251.611†	479.1	21.1	0.6112	ug/L	0.6112	ppb	08:11:46
1	Sn 189.927†	4.3	-0.8	-0.1275	ug/L	-0.1275	ppb	08:11:46
1	Ti 334.940†	-1091.9	41.9	0.0697	ug/L	0.0697	ppb	08:11:26
1	Tl 190.801†	-35.8	-2.6	-0.7368	ug/L	-0.7368	ppb	08:11:46
1	U 409.014†	-2659.8	-212.1	-5.8431	ug/L	-5.8431	ppb	08:11:21
1	V 292.402†	-1367.8	14.2	0.0934	ug/L	0.0934	ppb	08:11:26
1	Zn 213.857†	672.2	38.8	0.3379	ug/L	0.3379	ppb	08:11:46
1	SiO2†	486.6	10.7	0.6409	ug/L	0.6409	ppb	08:12:52
2	Sc Radial	5788.1	5788.1	99.0	%			08:10:29
2	Y RADIAL	6221.9	6221.9	98.95	%			08:10:29
2	Al 396.153Radial†	-45.4	-25.4	-17.699	ug/L	-17.699	ppb	08:10:29
2	Ca 317.933Radial†	19.1	3.7	5.5102	ug/L	5.5102	ppb	08:10:49
2	Fe 238.204 Radial†	8.1	1.4	13.251	ug/L	13.251	ppb	08:10:49
2	K 766.490 Radial†	2366.7	37.8	6.7059	ug/L	6.7059	ppb	08:10:29
2	Mg 279.077 IEC†	0.6	-0.5	-18.604	ug/L	-18.604	ppb	08:10:49
2	Na 589.592 Radial†	-1117.3	-40.2	-13.477	ug/L	-13.477	ppb	08:10:29
2	Sr 421.552†	-26.1	1.0	0.0061	ug/L	0.0061	ppb	08:10:29
2	Sc 361.383	921030.5	921030.5	102.19	%			08:11:51
2	Y 371.029	765704.1	765704.1	101.95	%			08:11:51
2	Ag 328.068†	345.6	45.5	0.2119	ug/L	0.2119	ppb	08:11:56
2	As 188.979†	-20.9	3.7	1.4577	ug/L	1.4577	ppb	08:12:17
2	B 249.677†	-369.6	169.0	3.5417	ug/L	3.5417	ppb	08:12:17
2	Ba 233.527†	4.8	13.1	0.0982	ug/L	0.0982	ppb	08:12:17
2	Be 313.107†	-4999.5	220.8	0.0806	ug/L	0.0806	ppb	08:11:56
2	Cd 226.502†	-187.8	11.3	0.1186	ug/L	0.1186	ppb	08:12:17
2	Co 228.616†	-68.1	-1.2	-0.0205	ug/L	-0.0205	ppb	08:12:17
2	Cr 267.716†	69.1	-11.0	-0.1148	ug/L	-0.1148	ppb	08:12:17
2	Cu 324.752†	6713.4	-187.4	-0.5357	ug/L	-0.5357	ppb	08:11:56
2	Mn 257.610†	439.8	8.1	0.0103	ug/L	0.0103	ppb	08:12:17
2	Mo 202.031†	36.4	17.3	1.1000	ug/L	1.1000	ppb	08:12:17
2	Ni 231.604†	100.8	12.1	0.2799	ug/L	0.2799	ppb	08:12:17

2	P 214.914†	201.9	-26.0	-14.897 ug/L	-14.897 ppb	08:12:17
2	Pb 220.353†	-58.2	11.5	1.2990 ug/L	1.2990 ppb	08:12:17
2	S 181.975 Axial†	32.1	-10.2	-14.223 ug/L	-14.223 ppb	08:12:17
2	Sb 206.836†	32.9	-2.0	-0.6113 ug/L	-0.6113 ppb	08:12:17
2	Se 196.026†	-24.0	5.4	3.1479 ug/L	3.1479 ppb	08:12:17
2	Si 251.611†	484.7	24.6	0.7154 ug/L	0.7154 ppb	08:12:17
2	Sn 189.927†	5.4	0.3	0.0478 ug/L	0.0478 ppb	08:12:17
2	Ti 334.940†	-1097.3	41.2	0.0666 ug/L	0.0666 ppb	08:11:56
2	Tl 190.801†	-38.7	-5.4	-1.5059 ug/L	-1.5059 ppb	08:12:17
2	U 409.014†	-2499.4	-43.9	-1.2109 ug/L	-1.2109 ppb	08:11:51
2	V 292.402†	-1362.2	25.3	0.1783 ug/L	0.1783 ppb	08:11:56
2	Zn 213.857†	657.7	21.7	0.1879 ug/L	0.1879 ppb	08:12:17
2	SiO2†	477.7	-0.0	-0.0471 ug/L	-0.0471 ppb	08:12:57
3	Sc Radial	5801.4	5801.4	99.3 %		08:10:54
3	Y RADIAL	6256.3	6256.3	99.50 %		08:10:54
3	Al 396.153Radial†	-3.8	16.6	11.493 ug/L	11.493 ppb	08:10:54
3	Ca 317.933Radial†	21.4	6.0	8.8051 ug/L	8.8051 ppb	08:11:15
3	Fe 238.204 Radial†	7.9	1.2	11.147 ug/L	11.147 ppb	08:11:15
3	K 766.490 Radial†	2292.2	-42.7	-7.5763 ug/L	-7.5763 ppb	08:10:54
3	Mg 279.077 IEC†	1.9	0.8	26.566 ug/L	26.566 ppb	08:11:15
3	Na 589.592 Radial†	-1095.1	-15.2	-5.1014 ug/L	-5.1014 ppb	08:10:54
3	Sr 421.552†	-24.4	2.8	0.0174 ug/L	0.0174 ppb	08:10:54
3	Sc 361.383	917281.5	917281.5	101.78 %		08:12:22
3	Y 371.029	764497.1	764497.1	101.79 %		08:12:22
3	Ag 328.068†	371.5	72.2	0.3336 ug/L	0.3336 ppb	08:12:27
3	As 188.979†	-26.0	-1.4	-0.5580 ug/L	-0.5580 ppb	08:12:47
3	B 249.677†	-364.7	172.3	3.6127 ug/L	3.6127 ppb	08:12:47
3	Ba 233.527†	3.5	11.9	0.0885 ug/L	0.0885 ppb	08:12:47
3	Be 313.107†	-4952.6	246.9	0.0901 ug/L	0.0901 ppb	08:12:27
3	Cd 226.502†	-187.5	10.8	0.1139 ug/L	0.1139 ppb	08:12:47
3	Co 228.616†	-63.4	3.1	0.0586 ug/L	0.0586 ppb	08:12:47
3	Cr 267.716†	63.9	-15.9	-0.1653 ug/L	-0.1653 ppb	08:12:47
3	Cu 324.752†	6714.5	-159.4	-0.4557 ug/L	-0.4557 ppb	08:12:27
3	Mn 257.610†	459.3	28.9	0.0315 ug/L	0.0315 ppb	08:12:47
3	Mo 202.031†	20.1	1.4	0.0900 ug/L	0.0900 ppb	08:12:47
3	Ni 231.604†	116.1	27.5	0.6373 ug/L	0.6373 ppb	08:12:47
3	P 214.914†	209.1	-18.1	-10.383 ug/L	-10.383 ppb	08:12:47
3	Pb 220.353†	-61.8	7.7	0.8752 ug/L	0.8752 ppb	08:12:47
3	S 181.975 Axial†	37.7	-4.5	-6.3631 ug/L	-6.3631 ppb	08:12:47
3	Sb 206.836†	36.0	1.1	0.3524 ug/L	0.3524 ppb	08:12:47
3	Se 196.026†	-23.5	5.7	3.3461 ug/L	3.3461 ppb	08:12:47
3	Si 251.611†	486.9	28.7	0.8618 ug/L	0.8618 ppb	08:12:47
3	Sn 189.927†	0.7	-4.3	-0.7058 ug/L	-0.7058 ppb	08:12:47
3	Ti 334.940†	-1114.9	19.5	0.0330 ug/L	0.0330 ppb	08:12:27
3	Tl 190.801†	-24.6	8.3	2.3260 ug/L	2.3260 ppb	08:12:47
3	U 409.014†	-2560.9	-114.4	-3.1511 ug/L	-3.1511 ppb	08:12:22
3	V 292.402†	-1372.0	10.3	0.0621 ug/L	0.0621 ppb	08:12:27
3	Zn 213.857†	632.6	-0.3	-0.0081 ug/L	-0.0081 ppb	08:12:47
3	SiO2†	481.9	6.1	0.3958 ug/L	0.3958 ppb	08:13:02

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918464.3	101.91	%	0.247				0.24%
Sc Radial	5817.6	99.6	%	0.69				0.69%
Y 371.029	764872.8	101.84	%	0.096				0.09%
Y RADIAL	6260.2	99.56	%	0.641				0.64%
Ag 328.068†	55.8	0.2596	ug/L	0.06495	0.2596	ppb	0.06495	25.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.5396	ug/L	15.25647	-0.5396	ppb	15.25647	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5151	ug/L	1.01417	0.5151	ppb	1.01417	196.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	181.2	3.7986	ug/L	0.38512	3.7986	ppb	0.38512	10.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0527	ug/L	0.07066	0.0527	ppb	0.07066	134.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	239.5	0.0874	ug/L	0.00595	0.0874	ppb	0.00595	6.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.4	6.5280	ug/L	1.97572	6.5280	ppb	1.97572	30.27%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              12.9      0.1354 ug/L       0.03318      0.1354 ppb        0.03318  24.51%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               1.7      0.0331 ug/L       0.04646      0.0331 ppb        0.04646 140.40%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -13.5     -0.1403 ug/L       0.02526     -0.1403 ppb        0.02526  18.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -167.4     -0.4783 ug/L       0.05006     -0.4783 ppb        0.05006  10.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.3      11.938 ug/L        1.1452      11.938 ppb         1.1452   9.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        41.0      7.2846 ug/L      15.15852      7.2846 ppb       15.15852 208.09%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.4      15.484 ug/L       30.1170      15.484 ppb        30.1170 194.51%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               9.0      0.0105 ug/L       0.02090      0.0105 ppb        0.02090 199.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              10.6      0.6748 ug/L       0.52359      0.6748 ppb        0.52359  77.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -25.9     -8.6799 ug/L       4.31890     -8.6799 ppb        4.31890  49.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              11.8      0.2727 ug/L       0.36830      0.2727 ppb        0.36830 135.08%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -20.6     -11.832 ug/L        2.6556     -11.832 ppb         2.6556  22.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.9      0.8952 ug/L       0.39415      0.8952 ppb        0.39415  44.03%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -5.7     -7.9284 ug/L       5.67605     -7.9284 ppb        5.67605  71.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               1.4      0.4437 ug/L       1.10344      0.4437 ppb        1.10344 248.71%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               5.1      3.0167 ug/L       0.41103      3.0167 ppb        0.41103  13.63%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              24.8      0.7294 ug/L       0.12588      0.7294 ppb        0.12588  17.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.6     -0.2618 ug/L       0.39435     -0.2618 ppb        0.39435 150.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -0.8     -0.0052 ug/L       0.02993     -0.0052 ppb        0.02993 575.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              34.2      0.0564 ug/L       0.02032      0.0564 ppb        0.02032  36.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.1      0.0278 ug/L       2.02711      0.0278 ppb        2.02711 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†            -123.4     -3.4017 ug/L       2.32626     -3.4017 ppb        2.32626  68.38%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               16.6      0.1113 ug/L       0.06011      0.1113 ppb        0.06011  54.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              20.1      0.1726 ug/L       0.17351      0.1726 ppb        0.17351 100.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     5.6      0.3299 ug/L       0.34869      0.3299 ppb        0.34869 105.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/8/2009 08:15:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5940.5	5940.5	102	%			08:17:06
1	Y RADIAL	6395.2	6395.2	101.7	%			08:17:06
1	Al 396.153Radial†	260.7	276.9	191.93	ug/L	191.93	ppb	08:17:06
1	Ca 317.933Radial†	153.9	135.9	200.25	ug/L	200.25	ppb	08:17:26
1	Fe 238.204 Radial†	20.4	13.3	124.24	ug/L	124.24	ppb	08:17:26
1	K 766.490 Radial†	3305.8	900.3	159.44	ug/L	159.44	ppb	08:17:06
1	Mg 279.077 IEC†	7.2	5.9	209.88	ug/L	209.88	ppb	08:17:26
1	Na 589.592 Radial†	-237.5	854.3	286.69	ug/L	286.69	ppb	08:17:06
1	Sr 421.552†	769.9	784.8	4.8854	ug/L	4.8854	ppb	08:17:06
1	Sc 361.383	901641.8	901641.8	100.04	%			08:18:23
1	Y 371.029	753823.3	753823.3	100.36	%			08:18:23
1	Ag 328.068†	1343.5	1050.2	4.7669	ug/L	4.7669	ppb	08:18:23
1	As 188.979†	48.4	72.6	28.705	ug/L	28.705	ppb	08:18:43
1	B 249.677†	1835.1	2365.0	49.569	ug/L	49.569	ppb	08:18:23
1	Ba 233.527†	676.8	684.9	5.0920	ug/L	5.0920	ppb	08:18:43
1	Be 313.107†	8490.6	13600.1	4.9675	ug/L	4.9675	ppb	08:18:23
1	Cd 226.502†	271.5	466.4	4.9219	ug/L	4.9219	ppb	08:18:43
1	Co 228.616†	190.1	255.4	4.8605	ug/L	4.8605	ppb	08:18:43
1	Cr 267.716†	535.1	456.2	4.7826	ug/L	4.7826	ppb	08:18:43
1	Cu 324.752†	10202.8	3441.8	9.8558	ug/L	9.8558	ppb	08:18:23
1	Mn 257.610†	10097.5	9670.9	10.325	ug/L	10.325	ppb	08:18:23
1	Mo 202.031†	173.7	155.3	9.8742	ug/L	9.8742	ppb	08:18:43
1	Ni 231.604†	315.7	229.0	5.2994	ug/L	5.2994	ppb	08:18:43
1	P 214.914†	456.1	232.4	132.55	ug/L	132.55	ppb	08:18:43
1	Pb 220.353†	25.9	94.4	10.717	ug/L	10.717	ppb	08:18:43
1	S 181.975 Axial†	110.1	68.5	95.956	ug/L	95.956	ppb	08:18:43
1	Sb 206.836†	69.5	35.3	11.434	ug/L	11.434	ppb	08:18:43
1	Se 196.026†	33.0	61.8	36.168	ug/L	36.168	ppb	08:18:43
1	Si 251.611†	3632.7	3181.5	94.983	ug/L	94.983	ppb	08:18:43
1	Sn 189.927†	68.9	63.9	10.481	ug/L	10.481	ppb	08:18:43
1	Ti 334.940†	2173.8	3287.9	5.2317	ug/L	5.2317	ppb	08:18:23
1	Tl 190.801†	39.9	72.4	20.346	ug/L	20.346	ppb	08:18:43
1	U 409.014†	-441.2	1960.8	53.991	ug/L	53.991	ppb	08:18:23
1	V 292.402†	-596.4	762.2	5.2581	ug/L	5.2581	ppb	08:18:23
1	Zn 213.857†	1785.0	1162.4	10.091	ug/L	10.091	ppb	08:18:43
1	SiO2†	3760.9	3291.8	210.60	ug/L	210.60	ppb	08:19:40
2	Sc Radial	5778.3	5778.3	98.9	%			08:17:31
2	Y RADIAL	6209.6	6209.6	98.76	%			08:17:31
2	Al 396.153Radial†	262.1	285.5	197.91	ug/L	197.91	ppb	08:17:31
2	Ca 317.933Radial†	154.9	141.0	207.90	ug/L	207.90	ppb	08:17:52
2	Fe 238.204 Radial†	20.3	13.7	128.46	ug/L	128.46	ppb	08:17:52
2	K 766.490 Radial†	3191.9	876.4	155.21	ug/L	155.21	ppb	08:17:31
2	Mg 279.077 IEC†	10.5	9.5	335.33	ug/L	335.33	ppb	08:17:52
2	Na 589.592 Radial†	-280.7	804.1	269.83	ug/L	269.83	ppb	08:17:31
2	Sr 421.552†	760.1	796.1	4.9557	ug/L	4.9557	ppb	08:17:31
2	Sc 361.383	901543.3	901543.3	100.03	%			08:18:49
2	Y 371.029	753311.9	753311.9	100.30	%			08:18:49
2	Ag 328.068†	1410.9	1117.8	5.0769	ug/L	5.0769	ppb	08:18:49
2	As 188.979†	51.1	75.3	29.767	ug/L	29.767	ppb	08:19:09
2	B 249.677†	1816.1	2346.2	49.173	ug/L	49.173	ppb	08:18:49
2	Ba 233.527†	673.4	681.6	5.0677	ug/L	5.0677	ppb	08:19:09
2	Be 313.107†	8482.4	13592.8	4.9644	ug/L	4.9644	ppb	08:18:49
2	Cd 226.502†	284.4	479.4	5.0588	ug/L	5.0588	ppb	08:19:09
2	Co 228.616†	174.4	239.8	4.5649	ug/L	4.5649	ppb	08:19:09
2	Cr 267.716†	547.3	468.5	4.9130	ug/L	4.9130	ppb	08:19:09
2	Cu 324.752†	10227.0	3467.1	9.9285	ug/L	9.9285	ppb	08:18:49
2	Mn 257.610†	10053.3	9627.9	10.277	ug/L	10.277	ppb	08:18:49
2	Mo 202.031†	176.8	158.4	10.073	ug/L	10.073	ppb	08:19:09
2	Ni 231.604†	319.1	232.5	5.3801	ug/L	5.3801	ppb	08:19:09

2	P 214.914†	470.3	246.6	140.77 ug/L	140.77 ppb	08:19:09
2	Pb 220.353†	11.6	80.1	9.1052 ug/L	9.1052 ppb	08:19:09
2	S 181.975 Axial†	109.3	67.7	94.849 ug/L	94.849 ppb	08:19:09
2	Sb 206.836†	66.3	32.0	10.412 ug/L	10.412 ppb	08:19:09
2	Se 196.026†	28.9	57.7	33.851 ug/L	33.851 ppb	08:19:09
2	Si 251.611†	3618.6	3167.8	94.570 ug/L	94.570 ppb	08:19:09
2	Sn 189.927†	71.4	66.3	10.886 ug/L	10.886 ppb	08:19:09
2	Ti 334.940†	2003.5	3117.8	4.9622 ug/L	4.9622 ppb	08:18:49
2	Tl 190.801†	32.8	65.3	18.347 ug/L	18.347 ppb	08:19:09
2	U 409.014†	-563.6	1838.4	50.616 ug/L	50.616 ppb	08:18:49
2	V 292.402†	-605.8	752.7	5.1946 ug/L	5.1946 ppb	08:18:49
2	Zn 213.857†	1781.3	1158.9	10.054 ug/L	10.054 ppb	08:19:09
2	SiO2†	3752.2	3283.5	210.06 ug/L	210.06 ppb	08:19:45
3	Sc Radial	5805.0	5805.0	99.3 %		08:17:57
3	Y RADIAL	6273.9	6273.9	99.78 %		08:17:57
3	Al 396.153Radial†	262.7	284.9	197.48 ug/L	197.48 ppb	08:17:57
3	Ca 317.933Radial†	153.3	138.7	204.49 ug/L	204.49 ppb	08:18:17
3	Fe 238.204 Radial†	21.8	15.2	142.16 ug/L	142.16 ppb	08:18:17
3	K 766.490 Radial†	3276.4	946.6	167.66 ug/L	167.66 ppb	08:17:57
3	Mg 279.077 IEC†	12.6	11.5	405.90 ug/L	405.90 ppb	08:18:17
3	Na 589.592 Radial†	-294.2	791.8	265.71 ug/L	265.71 ppb	08:17:57
3	Sr 421.552†	792.6	825.2	5.1374 ug/L	5.1374 ppb	08:17:57
3	Sc 361.383	905114.1	905114.1	100.43 %		08:19:14
3	Y 371.029	758310.9	758310.9	100.96 %		08:19:14
3	Ag 328.068†	1518.1	1218.9	5.5368 ug/L	5.5368 ppb	08:19:14
3	As 188.979†	45.6	69.5	27.505 ug/L	27.505 ppb	08:19:34
3	B 249.677†	1844.8	2367.6	49.620 ug/L	49.620 ppb	08:19:14
3	Ba 233.527†	684.6	690.2	5.1316 ug/L	5.1316 ppb	08:19:34
3	Be 313.107†	8549.0	13625.7	4.9766 ug/L	4.9766 ppb	08:19:14
3	Cd 226.502†	270.4	464.4	4.8984 ug/L	4.8984 ppb	08:19:34
3	Co 228.616†	191.0	255.6	4.8644 ug/L	4.8644 ppb	08:19:34
3	Cr 267.716†	535.3	454.3	4.7632 ug/L	4.7632 ppb	08:19:34
3	Cu 324.752†	10231.8	3431.6	9.8274 ug/L	9.8274 ppb	08:19:14
3	Mn 257.610†	10048.0	9582.9	10.229 ug/L	10.229 ppb	08:19:14
3	Mo 202.031†	175.0	155.9	9.9140 ug/L	9.9140 ppb	08:19:34
3	Ni 231.604†	317.8	229.9	5.3208 ug/L	5.3208 ppb	08:19:34
3	P 214.914†	462.6	237.2	135.29 ug/L	135.29 ppb	08:19:34
3	Pb 220.353†	18.1	86.5	9.8297 ug/L	9.8297 ppb	08:19:34
3	S 181.975 Axial†	109.9	67.8	95.025 ug/L	95.025 ppb	08:19:34
3	Sb 206.836†	58.7	24.2	7.9299 ug/L	7.9299 ppb	08:19:34
3	Se 196.026†	37.1	65.8	38.547 ug/L	38.547 ppb	08:19:34
3	Si 251.611†	3618.1	3153.0	94.127 ug/L	94.127 ppb	08:19:34
3	Sn 189.927†	69.7	64.5	10.576 ug/L	10.576 ppb	08:19:34
3	Ti 334.940†	2093.8	3199.8	5.0916 ug/L	5.0916 ppb	08:19:14
3	Tl 190.801†	40.4	72.7	20.436 ug/L	20.436 ppb	08:19:34
3	U 409.014†	-456.0	1947.7	53.628 ug/L	53.628 ppb	08:19:14
3	V 292.402†	-603.6	757.3	5.2280 ug/L	5.2280 ppb	08:19:14
3	Zn 213.857†	1787.2	1157.7	10.041 ug/L	10.041 ppb	08:19:34
3	SiO2†	3771.9	3288.4	210.37 ug/L	210.37 ppb	08:19:50

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902766.4	100.17	%	0.226				0.23%
Sc Radial	5841.3	100.0	%	1.49				1.49%
Y 371.029	755148.7	100.54	%	0.366				0.36%
Y RADIAL	6292.9	100.1	%	1.50				1.50%
Ag 328.068†	1128.9	5.1269	ug/L	0.38740	5.1269	ppb	0.38740	7.56%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	282.5	195.77	ug/L	3.334	195.77	ppb	3.334	1.70%
QC value within limits for Al 396.153Radial Recovery = 97.89%								
As 188.979†	72.5	28.659	ug/L	1.1313	28.659	ppb	1.1313	3.95%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2359.6	49.454	ug/L	0.2442	49.454	ppb	0.2442	0.49%
QC value within limits for B 249.677 Recovery = 98.91%								
Ba 233.527†	685.6	5.0971	ug/L	0.03226	5.0971	ppb	0.03226	0.63%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	13606.2	4.9695	ug/L	0.00635	4.9695	ppb	0.00635	0.13%
QC value within limits for Be 313.107 Recovery = 99.39%								
Ca 317.933Radial†	138.5	204.21	ug/L	3.830	204.21	ppb	3.830	1.88%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.11%
Cd 226.502†              470.1      4.9597 ug/L       0.08663      4.9597 ppb        0.08663   1.75%
   QC value within limits for Cd 226.502  Recovery = 99.19%
Co 228.616†              250.3      4.7633 ug/L       0.17179      4.7633 ppb        0.17179   3.61%
   QC value within limits for Co 228.616  Recovery = 95.27%
Cr 267.716†              459.7      4.8196 ug/L       0.08146      4.8196 ppb        0.08146   1.69%
   QC value within limits for Cr 267.716  Recovery = 96.39%
Cu 324.752†             3446.8      9.8706 ug/L       0.05214      9.8706 ppb        0.05214   0.53%
   QC value within limits for Cu 324.752  Recovery = 98.71%
Fe 238.204 Radial†        14.0      131.62 ug/L         9.372      131.62 ppb          9.372   7.12%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 131.62%
K 766.490 Radial†        907.8      160.77 ug/L         6.329      160.77 ppb          6.329   3.94%
   QC value within limits for K 766.490 Radial  Recovery = 107.18%
Mg 279.077 IEC†           9.0      317.04 ug/L        99.282      317.04 ppb         99.282  31.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.68%
Mn 257.610†             9627.3      10.277 ug/L       0.0479      10.277 ppb         0.0479   0.47%
   QC value within limits for Mn 257.610  Recovery = 102.77%
Mo 202.031†              156.5      9.9537 ug/L       0.10505      9.9537 ppb        0.10505   1.06%
   QC value within limits for Mo 202.031  Recovery = 99.54%
Na 589.592 Radial†       816.7      274.08 ug/L        11.114      274.08 ppb         11.114   4.05%
   QC value within limits for Na 589.592 Radial  Recovery = 91.36%
Ni 231.604†              230.5      5.3334 ug/L       0.04181      5.3334 ppb        0.04181   0.78%
   QC value within limits for Ni 231.604  Recovery = 106.67%
P 214.914†               238.7      136.20 ug/L         4.184      136.20 ppb          4.184   3.07%
   QC value within limits for P 214.914  Recovery = 90.80%
Pb 220.353†               87.0      9.8839 ug/L       0.80722      9.8839 ppb        0.80722   8.17%
   QC value within limits for Pb 220.353  Recovery = 98.84%
S 181.975 Axial†          68.0      95.277 ug/L        0.5949      95.277 ppb         0.5949   0.62%
   QC value within limits for S 181.975 Axial  Recovery = 95.28%
Sb 206.836†               30.5      9.9256 ug/L       1.80229      9.9256 ppb        1.80229  18.16%
   QC value within limits for Sb 206.836  Recovery = 99.26%
Se 196.026†               61.8      36.189 ug/L        2.3479      36.189 ppb         2.3479   6.49%
   QC value within limits for Se 196.026  Recovery = 120.63%
Si 251.611†             3167.4      94.560 ug/L        0.4282      94.560 ppb         0.4282   0.45%
   QC value within limits for Si 251.611  Recovery = 94.56%
Sn 189.927†               64.9      10.648 ug/L        0.2117      10.648 ppb         0.2117   1.99%
   QC value within limits for Sn 189.927  Recovery = 106.48%
Sr 421.552†              802.0      4.9928 ug/L       0.13002      4.9928 ppb        0.13002   2.60%
   QC value within limits for Sr 421.552  Recovery = 99.86%
Ti 334.940†             3201.8      5.0952 ug/L       0.13476      5.0952 ppb        0.13476   2.64%
   QC value within limits for Ti 334.940  Recovery = 101.90%
Tl 190.801†               70.1      19.710 ug/L        1.1813      19.710 ppb         1.1813   5.99%
   QC value within limits for Tl 190.801  Recovery = 98.55%
U 409.014†              1915.6      52.745 ug/L        1.8523      52.745 ppb         1.8523   3.51%
   QC value within limits for U 409.014  Recovery = 105.49%
V 292.402†               757.4      5.2269 ug/L       0.03179      5.2269 ppb        0.03179   0.61%
   QC value within limits for V 292.402  Recovery = 104.54%
Zn 213.857†             1159.7      10.062 ug/L        0.0256      10.062 ppb         0.0256   0.25%
   QC value within limits for Zn 213.857  Recovery = 100.62%
SiO2†                   3287.9      210.35 ug/L         0.271      210.35 ppb          0.271   0.13%
   QC value within limits for SiO2  Recovery = 98.75%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/8/2009 08:22:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5189.8	5189.8	88.8	%			08:23:59
1	Y RADIAL	5590.3	5590.3	88.91	%			08:23:59
1	Al 396.153Radial†	669734.8	754172.3	523870	ug/L	523870	ppb	08:23:54
1	Ca 317.933Radial†	291928.0	328708.7	484500	ug/L	484500	ppb	08:23:54
1	Fe 238.204 Radial†	17643.1	19860.1	185930	ug/L	185930	ppb	08:23:59
1	K 766.490 Radial†	2220.3	148.4	42.540	ug/L	42.540	ppb	08:23:59
1	Mg 279.077 IEC†	12418.2	13982.3	493110	ug/L	493110	ppb	08:23:59
1	Na 589.592 Radial†	-979.9	-15.4	-5.1754	ug/L	-5.1754	ppb	08:23:59
1	Sr 421.552†	535.4	630.3	-0.5657	ug/L	-0.5657	ppb	08:23:59
1	Sc 361.383	776307.7	776307.7	86.135	%			08:24:26
1	Y 371.029	629776.0	629776.0	83.849	%			08:24:26
1	Ag 328.068†	-9607.7	-11447.0	0.2578	ug/L	0.2578	ppb	08:24:26
1	As 188.979†	-78.4	-66.9	2.0669	ug/L	2.0669	ppb	08:24:46
1	B 249.677†	446.4	1048.9	-2.6705	ug/L	-2.6705	ppb	08:24:26
1	Ba 233.527†	-463.0	-529.1	3.0093	ug/L	3.0093	ppb	08:24:46
1	Be 313.107†	-5475.2	-1243.6	-0.5072	ug/L	-0.5072	ppb	08:24:26
1	Cd 226.502†	1417.2	1840.4	0.8697	ug/L	0.8697	ppb	08:24:46
1	Co 228.616†	-13.4	49.8	-1.6911	ug/L	-1.6911	ppb	08:24:46
1	Cr 267.716†	-127.7	-226.9	0.9593	ug/L	0.9593	ppb	08:24:46
1	Cu 324.752†	3902.7	-2225.8	3.1148	ug/L	3.1148	ppb	08:24:26
1	Mn 257.610†	-402.3	-889.3	8.4088	ug/L	8.4088	ppb	08:24:26
1	Mo 202.031†	-211.4	-263.7	-3.5634	ug/L	-3.5634	ppb	08:24:46
1	Ni 231.604†	221.2	170.3	3.9419	ug/L	3.9419	ppb	08:24:46
1	P 214.914†	179.5	-15.1	18.966	ug/L	18.966	ppb	08:24:46
1	Pb 220.353†	-791.2	-850.1	6.1602	ug/L	6.1602	ppb	08:24:46
1	S 181.975 Axial†	83.0	54.8	-26.290	ug/L	-26.290	ppb	08:24:46
1	Sb 206.836†	63.7	39.7	-0.1476	ug/L	-0.1476	ppb	08:24:46
1	Se 196.026†	-1063.9	-1206.3	-16.785	ug/L	-16.785	ppb	08:24:46
1	Si 251.611†	453.6	76.9	2.8018	ug/L	2.8018	ppb	08:24:46
1	Sn 189.927†	-361.1	-424.2	-16.384	ug/L	-16.384	ppb	08:24:46
1	Ti 334.940†	-15761.9	-17184.0	-2.1640	ug/L	-2.1640	ppb	08:24:26
1	Tl 190.801†	-85.3	-66.6	-4.5522	ug/L	-4.5522	ppb	08:24:46
1	U 409.014†	-1013.4	1225.3	10.365	ug/L	10.365	ppb	08:24:26
1	V 292.402†	867.1	2365.0	-1.6778	ug/L	-1.6778	ppb	08:24:46
1	Zn 213.857†	3296.5	3205.3	-6.6524	ug/L	-6.6524	ppb	08:24:46
1	SiO2†	440.3	43.7	3.8863	ug/L	3.8863	ppb	08:25:43
2	Sc Radial	5172.2	5172.2	88.5	%			08:24:09
2	Y RADIAL	5524.2	5524.2	87.86	%			08:24:09
2	Al 396.153Radial†	671985.1	759276.6	527410	ug/L	527410	ppb	08:24:04
2	Ca 317.933Radial†	292632.2	330620.9	487320	ug/L	487320	ppb	08:24:04
2	Fe 238.204 Radial†	17633.3	19916.5	186450	ug/L	186450	ppb	08:24:09
2	K 766.490 Radial†	2182.2	113.9	36.591	ug/L	36.591	ppb	08:24:09
2	Mg 279.077 IEC†	12395.4	14004.0	493880	ug/L	493880	ppb	08:24:09
2	Na 589.592 Radial†	-942.9	22.6	7.5962	ug/L	7.5962	ppb	08:24:09
2	Sr 421.552†	494.0	585.5	-0.8709	ug/L	-0.8709	ppb	08:24:09
2	Sc 361.383	703840.2	703840.2	78.095	%			08:24:52
2	Y 371.029	571920.7	571920.7	76.146	%			08:24:52
2	Ag 328.068†	-9831.3	-12881.6	-6.1038	ug/L	-6.1038	ppb	08:24:52
2	As 188.979†	-85.5	-85.3	-5.1682	ug/L	-5.1682	ppb	08:25:12
2	B 249.677†	361.2	993.2	-3.9085	ug/L	-3.9085	ppb	08:24:52
2	Ba 233.527†	-536.2	-678.2	1.9266	ug/L	1.9266	ppb	08:25:12
2	Be 313.107†	-5405.9	-1809.3	-0.7211	ug/L	-0.7211	ppb	08:24:52
2	Cd 226.502†	1474.1	2082.7	3.3788	ug/L	3.3788	ppb	08:25:12
2	Co 228.616†	-20.8	38.8	-1.9097	ug/L	-1.9097	ppb	08:25:12
2	Cr 267.716†	-87.7	-191.0	1.3502	ug/L	1.3502	ppb	08:25:12
2	Cu 324.752†	3771.0	-1927.9	3.9942	ug/L	3.9942	ppb	08:24:52
2	Mn 257.610†	-522.6	-1091.4	8.2316	ug/L	8.2316	ppb	08:24:52
2	Mo 202.031†	-238.1	-323.2	-7.3030	ug/L	-7.3030	ppb	08:25:12
2	Ni 231.604†	205.0	175.9	4.0727	ug/L	4.0727	ppb	08:25:12

2	P 214.914†	142.8	-40.6	4.8366 ug/L	4.8366 ppb	08:25:12
2	Pb 220.353†	-811.4	-970.5	-6.7096 ug/L	-6.7096 ppb	08:25:12
2	S 181.975 Axial†	82.5	64.0	-14.051 ug/L	-14.051 ppb	08:25:12
2	Sb 206.836†	80.0	68.2	8.6688 ug/L	8.6688 ppb	08:25:12
2	Se 196.026†	-1075.3	-1348.1	-96.472 ug/L	-96.472 ppb	08:25:12
2	Si 251.611†	393.7	54.5	2.2031 ug/L	2.2031 ppb	08:25:12
2	Sn 189.927†	-335.1	-434.1	-17.705 ug/L	-17.705 ppb	08:25:12
2	Ti 334.940†	-16209.8	-19641.7	-5.9362 ug/L	-5.9362 ppb	08:24:52
2	Tl 190.801†	-76.2	-65.1	-4.0711 ug/L	-4.0711 ppb	08:25:12
2	U 409.014†	-1109.0	981.8	3.5914 ug/L	3.5914 ppb	08:24:52
2	V 292.402†	911.5	2525.6	-0.7433 ug/L	-0.7433 ppb	08:25:12
2	Zn 213.857†	3324.6	3635.3	-2.9743 ug/L	-2.9743 ppb	08:25:12
2	SiO2†	494.5	165.8	11.879 ug/L	11.879 ppb	08:25:48
3	Sc Radial	5341.1	5341.1	91.4 %		08:24:20
3	Y RADIAL	5696.8	5696.8	90.60 %		08:24:20
3	Al 396.153Radial†	668773.5	731756.6	508300 ug/L	508300 ppb	08:24:14
3	Ca 317.933Radial†	291429.1	318850.6	469970 ug/L	469970 ppb	08:24:14
3	Fe 238.204 Radial†	17266.5	18885.3	176800 ug/L	176800 ppb	08:24:20
3	K 766.490 Radial†	2229.6	87.8	31.346 ug/L	31.346 ppb	08:24:20
3	Mg 279.077 IEC†	12175.8	13320.9	469790 ug/L	469790 ppb	08:24:20
3	Na 589.592 Radial†	-901.3	101.7	34.145 ug/L	34.145 ppb	08:24:20
3	Sr 421.552†	505.0	579.9	-0.7448 ug/L	-0.7448 ppb	08:24:20
3	Sc 361.383	766708.2	766708.2	85.070 %		08:25:17
3	Y 371.029	621737.7	621737.7	82.779 %		08:25:17
3	Ag 328.068†	-9560.5	-11531.1	-2.8107 ug/L	-2.8107 ppb	08:25:17
3	As 188.979†	-93.2	-85.4	-6.6566 ug/L	-6.6566 ppb	08:25:37
3	B 249.677†	425.5	1030.8	-1.8388 ug/L	-1.8388 ppb	08:25:17
3	Ba 233.527†	-496.6	-575.2	2.3293 ug/L	2.3293 ppb	08:25:37
3	Be 313.107†	-5346.4	-1171.7	-0.4819 ug/L	-0.4819 ppb	08:25:17
3	Cd 226.502†	1451.3	1901.1	2.4241 ug/L	2.4241 ppb	08:25:37
3	Co 228.616†	-9.2	54.7	-1.4754 ug/L	-1.4754 ppb	08:25:37
3	Cr 267.716†	-93.8	-188.9	1.1967 ug/L	1.1967 ppb	08:25:37
3	Cu 324.752†	3834.9	-2248.8	2.5836 ug/L	2.5836 ppb	08:25:17
3	Mn 257.610†	-380.3	-869.3	7.9544 ug/L	7.9544 ppb	08:25:17
3	Mo 202.031†	-241.1	-301.8	-6.6288 ug/L	-6.6288 ppb	08:25:37
3	Ni 231.604†	204.1	153.3	3.5498 ug/L	3.5498 ppb	08:25:37
3	P 214.914†	162.7	-32.3	11.143 ug/L	11.143 ppb	08:25:37
3	Pb 220.353†	-803.2	-875.7	0.5132 ug/L	0.5132 ppb	08:25:37
3	S 181.975 Axial†	75.6	47.3	-33.723 ug/L	-33.723 ppb	08:25:37
3	Sb 206.836†	59.7	36.0	-1.1159 ug/L	-1.1159 ppb	08:25:37
3	Se 196.026†	-1060.8	-1218.2	-55.253 ug/L	-55.253 ppb	08:25:37
3	Si 251.611†	410.8	33.3	1.5399 ug/L	1.5399 ppb	08:25:37
3	Sn 189.927†	-354.6	-421.8	-17.629 ug/L	-17.629 ppb	08:25:37
3	Ti 334.940†	-15808.1	-17467.5	-3.3724 ug/L	-3.3724 ppb	08:25:17
3	Tl 190.801†	-85.2	-67.6	-5.2665 ug/L	-5.2665 ppb	08:25:37
3	U 409.014†	-1140.9	1060.7	6.9789 ug/L	6.9789 ppb	08:25:17
3	V 292.402†	872.8	2384.3	-0.7314 ug/L	-0.7314 ppb	08:25:37
3	Zn 213.857†	3339.7	3304.0	-4.1173 ug/L	-4.1173 ppb	08:25:37
3	SiO2†	414.5	19.8	2.4542 ug/L	2.4542 ppb	08:25:53

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	748952.0	83.100	%	4.3674				5.26%
Sc Radial	5234.3	89.6	%	1.59				1.77%
Y 371.029	607811.5	80.925	%	4.1728				5.16%
Y RADIAL	5603.8	89.12	%	1.385				1.55%
Ag 328.068†	-11953.2	-2.8856	ug/L	3.18143	-2.8856	ppb	3.18143	110.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	748401.9	519860	ug/L	10168.8	519860	ppb	10168.8	1.96%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	-79.2	-3.2526	ug/L	4.66656	-3.2526	ppb	4.66656	143.47%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1024.3	-2.8059	ug/L	1.04145	-2.8059	ppb	1.04145	37.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-594.2	2.4218	ug/L	0.54724	2.4218	ppb	0.54724	22.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1408.2	-0.5701	ug/L	0.13141	-0.5701	ppb	0.13141	23.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	326060.1	480590	ug/L	9310.0	480590	ppb	9310.0	1.94%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.12%
Cd 226.502†            1941.4      2.2242 ug/L       1.26642      2.2242 ppb        1.26642  56.94%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              47.8     -1.6920 ug/L       0.21716     -1.6920 ppb        0.21716  12.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -202.3      1.1687 ug/L       0.19695      1.1687 ppb        0.19695  16.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2134.2      3.2308 ug/L       0.71244      3.2308 ppb        0.71244  22.05%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    19554.0      183060 ug/L        5428.0      183060 ppb         5428.0   2.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.53%
K 766.490 Radial†       116.7      36.826 ug/L        5.6005      36.826 ppb         5.6005  15.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       13769.1      485590 ug/L       13692.7      485590 ppb        13692.7   2.82%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.12%
Mn 257.610†            -950.0      8.1983 ug/L       0.22901      8.1983 ppb        0.22901   2.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -296.2     -5.8318 ug/L       1.99315     -5.8318 ppb        1.99315  34.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       36.3      12.189 ug/L       20.0583      12.189 ppb       20.0583 164.57%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             166.5      3.8548 ug/L       0.27213      3.8548 ppb        0.27213   7.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -29.3      11.648 ug/L        7.0781      11.648 ppb         7.0781  60.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -898.8     -0.0121 ug/L       6.45097     -0.0121 ppb       6.45097 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         55.4     -24.688 ug/L        9.9331     -24.688 ppb        9.9331  40.23%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              48.0      2.4684 ug/L       5.39148      2.4684 ppb       5.39148 218.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1257.5     -56.170 ug/L       39.8514     -56.170 ppb       39.8514  70.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              54.9      2.1816 ug/L       0.63120      2.1816 ppb        0.63120  28.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -426.7     -17.239 ug/L        0.7416     -17.239 ppb         0.7416   4.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             598.5     -0.7271 ug/L       0.15335     -0.7271 ppb        0.15335  21.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -18097.7     -3.8242 ug/L       1.92624     -3.8242 ppb        1.92624  50.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -66.4     -4.6299 ug/L       0.60148     -4.6299 ppb        0.60148  12.99%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1089.2      6.9786 ug/L       3.38696      6.9786 ppb        3.38696  48.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2425.0     -1.0508 ug/L       0.54301     -1.0508 ppb        0.54301  51.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            3381.5     -4.5813 ug/L       1.88241     -4.5813 ppb        1.88241  41.09%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    76.4      6.0733 ug/L       5.07889      6.0733 ppb        5.07889  83.63%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/8/2009 08:28:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5678.5	5678.5	97.2	%			08:30:02
1	Y RADIAL	6082.3	6082.3	96.73	%			08:30:02
1	Al 396.153Radial†	666388.7	685819.7	476370	ug/L	476370	ppb	08:29:57
1	Ca 317.933Radial†	290269.6	298709.0	440280	ug/L	440280	ppb	08:29:57
1	Fe 238.204 Radial†	17682.4	18190.6	170310	ug/L	170310	ppb	08:30:02
1	K 766.490 Radial†	30306.4	28837.4	5122.4	ug/L	5122.4	ppb	08:29:57
1	Mg 279.077 IEC†	12380.2	12739.7	449300	ug/L	449300	ppb	08:30:02
1	Na 589.592 Radial†	12920.7	14385.0	4827.3	ug/L	4827.3	ppb	08:30:02
1	Sr 421.552†	73414.3	75580.0	466.61	ug/L	466.61	ppb	08:29:57
1	Sc 361.383	798852.1	798852.1	88.637	%			08:30:29
1	Y 371.029	647271.7	647271.7	86.178	%			08:30:29
1	Ag 328.068†	42822.1	48019.2	266.81	ug/L	266.81	ppb	08:30:29
1	As 188.979†	1018.7	1173.4	493.46	ug/L	493.46	ppb	08:30:50
1	B 249.677†	21666.1	24974.3	500.05	ug/L	500.05	ppb	08:30:29
1	Ba 233.527†	57014.2	64331.8	484.23	ug/L	484.23	ppb	08:30:29
1	Be 313.107†	576364.8	655367.2	239.84	ug/L	239.84	ppb	08:30:29
1	Cd 226.502†	38769.0	43934.3	447.70	ug/L	447.70	ppb	08:30:50
1	Co 228.616†	20156.9	22806.4	430.59	ug/L	430.59	ppb	08:30:50
1	Cr 267.716†	39430.2	44406.4	469.93	ug/L	469.93	ppb	08:30:29
1	Cu 324.752†	171408.3	186626.0	542.76	ug/L	542.76	ppb	08:30:29
1	Mn 257.610†	389330.6	438820.1	476.72	ug/L	476.72	ppb	08:30:29
1	Mo 202.031†	6497.4	7312.0	476.58	ug/L	476.58	ppb	08:30:50
1	Ni 231.604†	16695.5	18749.2	433.89	ug/L	433.89	ppb	08:30:50
1	P 214.914†	3977.5	4263.9	2403.3	ug/L	2403.3	ppb	08:30:50
1	Pb 220.353†	2698.9	3113.3	445.59	ug/L	445.59	ppb	08:30:50
1	S 181.975 Axial†	1732.0	1912.5	2586.2	ug/L	2586.2	ppb	08:30:50
1	Sb 206.836†	1484.7	1640.8	514.93	ug/L	514.93	ppb	08:30:50
1	Se 196.026†	2736.6	3116.2	2426.1	ug/L	2426.1	ppb	08:30:50
1	Si 251.611†	152690.0	171815.1	5132.3	ug/L	5132.3	ppb	08:30:29
1	Sn 189.927†	2275.0	2561.6	467.67	ug/L	467.67	ppb	08:30:50
1	Ti 334.940†	268963.2	304558.9	508.60	ug/L	508.60	ppb	08:30:29
1	Tl 190.801†	1347.6	1552.8	451.07	ug/L	451.07	ppb	08:30:50
1	U 409.014†	13644.1	17795.1	467.88	ug/L	467.88	ppb	08:30:29
1	V 292.402†	66527.3	76414.4	495.81	ug/L	495.81	ppb	08:30:29
1	Zn 213.857†	52450.8	58553.1	476.49	ug/L	476.49	ppb	08:30:29
1	SiO2†	152506.2	171589.9	10983	ug/L	10983	ppb	08:31:47
2	Sc Radial	5253.3	5253.3	89.9	%			08:30:12
2	Y RADIAL	5660.3	5660.3	90.02	%			08:30:12
2	Al 396.153Radial†	669134.5	744386.3	517050	ug/L	517050	ppb	08:30:07
2	Ca 317.933Radial†	291040.4	323746.7	477180	ug/L	477180	ppb	08:30:07
2	Fe 238.204 Radial†	17943.6	19954.2	186820	ug/L	186820	ppb	08:30:12
2	K 766.490 Radial†	30260.5	31311.0	5562.1	ug/L	5562.1	ppb	08:30:07
2	Mg 279.077 IEC†	12561.2	13972.3	492770	ug/L	492770	ppb	08:30:12
2	Na 589.592 Radial†	13114.0	15676.3	5260.7	ug/L	5260.7	ppb	08:30:12
2	Sr 421.552†	73629.2	81934.7	505.84	ug/L	505.84	ppb	08:30:07
2	Sc 361.383	796712.5	796712.5	88.399	%			08:30:55
2	Y 371.029	643552.7	643552.7	85.683	%			08:30:55
2	Ag 328.068†	42735.7	48051.2	271.67	ug/L	271.67	ppb	08:30:55
2	As 188.979†	1015.2	1172.6	495.72	ug/L	495.72	ppb	08:31:16
2	B 249.677†	21486.0	24836.2	494.95	ug/L	494.95	ppb	08:30:55
2	Ba 233.527†	57186.8	64699.9	487.57	ug/L	487.57	ppb	08:30:55
2	Be 313.107†	575113.2	655697.7	239.96	ug/L	239.96	ppb	08:30:55
2	Cd 226.502†	38833.6	44124.8	448.06	ug/L	448.06	ppb	08:31:16
2	Co 228.616†	20227.1	22946.9	433.02	ug/L	433.02	ppb	08:31:16
2	Cr 267.716†	39521.6	44629.3	472.56	ug/L	472.56	ppb	08:30:55
2	Cu 324.752†	171480.3	187226.7	545.32	ug/L	545.32	ppb	08:30:55
2	Mn 257.610†	391057.2	441952.9	480.90	ug/L	480.90	ppb	08:30:55
2	Mo 202.031†	6536.7	7376.1	481.83	ug/L	481.83	ppb	08:31:16
2	Ni 231.604†	16709.6	18815.9	435.43	ug/L	435.43	ppb	08:31:16

2	P 214.914†	3949.7	4244.6	2392.4 ug/L	2392.4 ppb	08:31:16
2	Pb 220.353†	2735.7	3163.2	459.01 ug/L	459.01 ppb	08:31:16
2	S 181.975 Axial†	1746.4	1934.0	2608.4 ug/L	2608.4 ppb	08:31:16
2	Sb 206.836†	1494.1	1656.0	518.97 ug/L	518.97 ppb	08:31:16
2	Se 196.026†	2715.8	3101.0	2476.7 ug/L	2476.7 ppb	08:31:16
2	Si 251.611†	153211.3	172867.4	5163.6 ug/L	5163.6 ppb	08:30:55
2	Sn 189.927†	2278.8	2572.8	473.58 ug/L	473.58 ppb	08:31:16
2	Ti 334.940†	269939.9	306478.8	513.59 ug/L	513.59 ppb	08:30:55
2	Tl 190.801†	1329.2	1536.1	447.53 ug/L	447.53 ppb	08:31:16
2	U 409.014†	13777.1	17986.9	471.08 ug/L	471.08 ppb	08:30:55
2	V 292.402†	66665.8	76772.6	496.71 ug/L	496.71 ppb	08:30:55
2	Zn 213.857†	52594.9	58875.0	476.22 ug/L	476.22 ppb	08:30:55
2	SiO2†	151895.1	171360.7	10968 ug/L	10968 ppb	08:31:52
3	Sc Radial	5329.5	5329.5	91.2 %		08:30:22
3	Y RADIAL	5716.9	5716.9	90.92 %		08:30:22
3	Al 396.153Radial†	656419.4	719803.9	499970 ug/L	499970 ppb	08:30:17
3	Ca 317.933Radial†	287241.2	314952.9	464220 ug/L	464220 ppb	08:30:17
3	Fe 238.204 Radial†	17841.4	19556.9	183100 ug/L	183100 ppb	08:30:22
3	K 766.490 Radial†	29973.6	30515.2	5420.2 ug/L	5420.2 ppb	08:30:17
3	Mg 279.077 IEC†	12509.3	13715.6	483720 ug/L	483720 ppb	08:30:22
3	Na 589.592 Radial†	13157.8	15515.9	5206.8 ug/L	5206.8 ppb	08:30:22
3	Sr 421.552†	72231.6	79231.4	489.13 ug/L	489.13 ppb	08:30:17
3	Sc 361.383	790190.3	790190.3	87.676 %		08:31:21
3	Y 371.029	639607.1	639607.1	85.158 %		08:31:21
3	Ag 328.068†	42287.3	47938.8	270.17 ug/L	270.17 ppb	08:31:21
3	As 188.979†	1035.6	1205.4	508.07 ug/L	508.07 ppb	08:31:42
3	B 249.677†	21305.2	24830.6	495.33 ug/L	495.33 ppb	08:31:21
3	Ba 233.527†	56590.8	64554.0	486.35 ug/L	486.35 ppb	08:31:21
3	Be 313.107†	570088.1	655336.1	239.83 ug/L	239.83 ppb	08:31:21
3	Cd 226.502†	38615.9	44239.1	449.65 ug/L	449.65 ppb	08:31:42
3	Co 228.616†	20126.4	23020.9	434.49 ug/L	434.49 ppb	08:31:42
3	Cr 267.716†	39221.0	44655.5	472.77 ug/L	472.77 ppb	08:31:21
3	Cu 324.752†	169737.3	186839.9	544.02 ug/L	544.02 ppb	08:31:21
3	Mn 257.610†	386530.2	440441.0	479.09 ug/L	479.09 ppb	08:31:21
3	Mo 202.031†	6526.6	7425.7	484.71 ug/L	484.71 ppb	08:31:42
3	Ni 231.604†	16652.9	18907.1	437.54 ug/L	437.54 ppb	08:31:42
3	P 214.914†	3959.3	4292.4	2417.3 ug/L	2417.3 ppb	08:31:42
3	Pb 220.353†	2673.5	3117.8	450.36 ug/L	450.36 ppb	08:31:42
3	S 181.975 Axial†	1725.8	1926.8	2601.6 ug/L	2601.6 ppb	08:31:42
3	Sb 206.836†	1474.2	1647.1	516.57 ug/L	516.57 ppb	08:31:42
3	Se 196.026†	2692.7	3100.1	2461.3 ug/L	2461.3 ppb	08:31:42
3	Si 251.611†	151474.4	172316.8	5147.1 ug/L	5147.1 ppb	08:31:21
3	Sn 189.927†	2237.1	2546.5	467.87 ug/L	467.87 ppb	08:31:42
3	Ti 334.940†	267030.2	305680.5	511.64 ug/L	511.64 ppb	08:31:21
3	Tl 190.801†	1335.4	1555.6	452.50 ug/L	452.50 ppb	08:31:42
3	U 409.014†	13591.7	17904.1	469.27 ug/L	469.27 ppb	08:31:21
3	V 292.402†	65923.7	76548.7	495.64 ug/L	495.64 ppb	08:31:21
3	Zn 213.857†	51997.0	58684.2	475.21 ug/L	475.21 ppb	08:31:21
3	SiO2†	151961.7	172854.8	11064 ug/L	11064 ppb	08:31:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	795251.6	88.237	%	0.5006				0.57%
Sc Radial	5420.4	92.8	%	3.88				4.18%
Y 371.029	643477.2	85.673	%	0.5103				0.60%
Y RADIAL	5819.8	92.56	%	3.643				3.94%
Ag 328.068†	48003.0	269.55	ug/L	2.490	269.55	ppb	2.490	0.92%
QC value within limits for Ag 328.068 Recovery = 107.82%								
Al 396.153Radial†	716670.0	497800	ug/L	20427.9	497800	ppb	20427.9	4.10%
QC value within limits for Al 396.153Radial Recovery = 99.56%								
As 188.979†	1183.8	499.08	ug/L	7.867	499.08	ppb	7.867	1.58%
QC value within limits for As 188.979 Recovery = 99.82%								
B 249.677†	24880.4	496.78	ug/L	2.839	496.78	ppb	2.839	0.57%
QC value within limits for B 249.677 Recovery = 99.36%								
Ba 233.527†	64528.6	486.05	ug/L	1.693	486.05	ppb	1.693	0.35%
QC value within limits for Ba 233.527 Recovery = 97.21%								
Be 313.107†	655467.0	239.88	ug/L	0.075	239.88	ppb	0.075	0.03%
QC value within limits for Be 313.107 Recovery = 95.95%								
Ca 317.933Radial†	312469.5	460560	ug/L	18722.4	460560	ppb	18722.4	4.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 92.11%
Cd 226.502†            44099.4      448.47 ug/L         1.035      448.47 ppb          1.035   0.23%
   QC value within limits for Cd 226.502  Recovery = 89.69%
Co 228.616†            22924.7      432.70 ug/L         1.971      432.70 ppb          1.971   0.46%
   QC value within limits for Co 228.616  Recovery = 86.54%
Cr 267.716†            44563.7      471.75 ug/L         1.586      471.75 ppb          1.586   0.34%
   QC value within limits for Cr 267.716  Recovery = 94.35%
Cu 324.752†           186897.5      544.03 ug/L         1.281      544.03 ppb          1.281   0.24%
   QC value within limits for Cu 324.752  Recovery = 108.81%
Fe 238.204 Radial†     19233.9      180080 ug/L        8660.4      180080 ppb         8660.4   4.81%
   QC value within limits for Fe 238.204 Radial  Recovery = 90.04%
K 766.490 Radial†      30221.2      5368.2 ug/L        224.43      5368.2 ppb         224.43   4.18%
   QC value within limits for K 766.490 Radial  Recovery = 107.36%
Mg 279.077 IEC†        13475.9      475260 ug/L       22935.4      475260 ppb        22935.4   4.83%
   QC value within limits for Mg 279.077 IEC  Recovery = 95.05%
Mn 257.610†           440404.7      478.90 ug/L         2.095      478.90 ppb          2.095   0.44%
   QC value within limits for Mn 257.610  Recovery = 95.78%
Mo 202.031†             7371.3      481.04 ug/L         4.122      481.04 ppb          4.122   0.86%
   QC value within limits for Mo 202.031  Recovery = 96.21%
Na 589.592 Radial†     15192.4      5098.3 ug/L        236.19      5098.3 ppb         236.19   4.63%
   QC value within limits for Na 589.592 Radial  Recovery = 101.97%
Ni 231.604†            18824.1      435.62 ug/L         1.834      435.62 ppb          1.834   0.42%
   QC value within limits for Ni 231.604  Recovery = 87.12%
P 214.914†              4266.9      2404.3 ug/L        12.48      2404.3 ppb          12.48   0.52%
   QC value within limits for P 214.914  Recovery = 96.17%
Pb 220.353†             3131.4      451.66 ug/L         6.802      451.66 ppb          6.802   1.51%
   QC value within limits for Pb 220.353  Recovery = 90.33%
S 181.975 Axial†        1924.4      2598.7 ug/L        11.39      2598.7 ppb          11.39   0.44%
   QC value within limits for S 181.975 Axial  Recovery = 103.95%
Sb 206.836†             1648.0      516.82 ug/L         2.030      516.82 ppb          2.030   0.39%
   QC value within limits for Sb 206.836  Recovery = 103.36%
Se 196.026†             3105.8      2454.7 ug/L        25.95      2454.7 ppb          25.95   1.06%
   QC value within limits for Se 196.026  Recovery = 98.19%
Si 251.611†           172333.1      5147.7 ug/L        15.65      5147.7 ppb          15.65   0.30%
   QC value within limits for Si 251.611  Recovery = 102.95%
Sn 189.927†             2560.3      469.70 ug/L         3.357      469.70 ppb          3.357   0.71%
   QC value within limits for Sn 189.927  Recovery = 93.94%
Sr 421.552†            78915.4      487.20 ug/L        19.688      487.20 ppb         19.688   4.04%
   QC value within limits for Sr 421.552  Recovery = 97.44%
Ti 334.940†           305572.7      511.28 ug/L         2.512      511.28 ppb          2.512   0.49%
   QC value within limits for Ti 334.940  Recovery = 102.26%
Tl 190.801†             1548.2      450.37 ug/L         2.558      450.37 ppb          2.558   0.57%
   QC value within limits for Tl 190.801  Recovery = 90.07%
U 409.014†             17895.4      469.41 ug/L         1.606      469.41 ppb          1.606   0.34%
   QC value within limits for U 409.014  Recovery = 93.88%
V 292.402†             76578.6      496.05 ug/L         0.577      496.05 ppb          0.577   0.12%
   QC value within limits for V 292.402  Recovery = 99.21%
Zn 213.857†            58704.1      475.97 ug/L         0.675      475.97 ppb          0.675   0.14%
   QC value within limits for Zn 213.857  Recovery = 95.19%
SiO2†                 171935.1       11005 ug/L          51.5       11005 ppb           51.5   0.47%
   QC value within limits for SiO2  Recovery = 102.90%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/8/2009 08:34:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5000.9	5000.9	85.6	%			08:36:06
1	Y RADIAL	5375.7	5375.7	85.49	%			08:36:06
1	Al 396.153Radial†	649764.4	759313.3	527440	ug/L	527440	ppb	08:36:01
1	Ca 317.933Radial†	281096.4	328464.2	484140	ug/L	484140	ppb	08:36:01
1	Fe 238.204 Radial†	39476.3	46123.9	431800	ug/L	431800	ppb	08:36:06
1	K 766.490 Radial†	3503.5	1742.3	121.03	ug/L	121.03	ppb	08:36:06
1	Mg 279.077 IEC†	11841.5	13836.5	487760	ug/L	487760	ppb	08:36:06
1	Na 589.592 Radial†	1231875.6	1440616.5	483440	ug/L	483440	ppb	08:36:01
1	Sr 421.552†	695.9	840.5	0.7472	ug/L	0.7472	ppb	08:36:06
1	Sc 361.383	771300.7	771300.7	85.580	%			08:36:34
1	Y 371.029	626017.5	626017.5	83.349	%			08:36:34
1	Ag 328.068†	-22719.5	-26840.4	-3.2200	ug/L	-3.2200	ppb	08:36:34
1	As 188.979†	-207.8	-218.6	-19.790	ug/L	-19.790	ppb	08:36:54
1	B 249.677†	1415.1	2184.2	-11.491	ug/L	-11.491	ppb	08:36:34
1	Ba 233.527†	-1526.8	-1775.6	2.9110	ug/L	2.9110	ppb	08:36:54
1	Be 313.107†	-11993.9	-8901.9	-3.2741	ug/L	-3.2741	ppb	08:36:34
1	Cd 226.502†	3639.7	4448.1	3.8564	ug/L	3.8564	ppb	08:36:54
1	Co 228.616†	198.8	297.7	-0.5794	ug/L	-0.5794	ppb	08:36:54
1	Cr 267.716†	123.2	65.3	3.8985	ug/L	3.8985	ppb	08:36:54
1	Cu 324.752†	1091.9	-5480.9	6.3424	ug/L	6.3424	ppb	08:36:34
1	Mn 257.610†	-25668.8	-30416.2	1.5267	ug/L	1.5267	ppb	08:36:34
1	Mo 202.031†	-493.2	-594.6	-7.1425	ug/L	-7.1425	ppb	08:36:54
1	Ni 231.604†	283.8	245.0	5.6702	ug/L	5.6702	ppb	08:36:54
1	P 214.914†	594.9	471.6	103.98	ug/L	103.98	ppb	08:36:54
1	Pb 220.353†	-558.6	-584.3	16.782	ug/L	16.782	ppb	08:36:54
1	S 181.975 Axial†	112.6	90.0	22.368	ug/L	22.368	ppb	08:36:54
1	Sb 206.836†	65.0	41.7	3.7037	ug/L	3.7037	ppb	08:36:54
1	Se 196.026†	-2484.6	-2874.4	-206.03	ug/L	-206.03	ppb	08:36:54
1	Si 251.611†	-583.5	-1131.5	-33.075	ug/L	-33.075	ppb	08:36:54
1	Sn 189.927†	-400.0	-472.4	-21.025	ug/L	-21.025	ppb	08:36:54
1	Ti 334.940†	-8964.2	-9359.7	4.0726	ug/L	4.0726	ppb	08:36:34
1	Tl 190.801†	-104.9	-90.1	-11.168	ug/L	-11.168	ppb	08:36:54
1	U 409.014†	437392.5	513494.5	14091	ug/L	14091	ppb	08:36:34
1	V 292.402†	2035.5	3736.8	-3.0468	ug/L	-3.0468	ppb	08:36:54
1	Zn 213.857†	6171.5	6589.6	-0.3854	ug/L	-0.3854	ppb	08:36:54
1	SiO2†	-667.1	-1247.0	-78.271	ug/L	-78.271	ppb	08:37:51
2	Sc Radial	5047.1	5047.1	86.4	%			08:36:16
2	Y RADIAL	5379.7	5379.7	85.56	%			08:36:16
2	Al 396.153Radial†	648919.6	751395.2	521940	ug/L	521940	ppb	08:36:11
2	Ca 317.933Radial†	280281.3	324518.2	478320	ug/L	478320	ppb	08:36:11
2	Fe 238.204 Radial†	39267.0	45459.9	425590	ug/L	425590	ppb	08:36:16
2	K 766.490 Radial†	3384.7	1567.4	92.631	ug/L	92.631	ppb	08:36:16
2	Mg 279.077 IEC†	11734.0	13585.5	478910	ug/L	478910	ppb	08:36:16
2	Na 589.592 Radial†	1226896.0	1421693.4	477090	ug/L	477090	ppb	08:36:11
2	Sr 421.552†	705.7	844.5	0.8257	ug/L	0.8257	ppb	08:36:16
2	Sc 361.383	760812.5	760812.5	84.416	%			08:36:59
2	Y 371.029	617644.0	617644.0	82.234	%			08:36:59
2	Ag 328.068†	-22429.0	-26862.3	-5.1840	ug/L	-5.1840	ppb	08:36:59
2	As 188.979†	-197.3	-209.6	-17.174	ug/L	-17.174	ppb	08:37:19
2	B 249.677†	1451.0	2249.6	-9.2958	ug/L	-9.2958	ppb	08:36:59
2	Ba 233.527†	-1497.0	-1764.9	2.7630	ug/L	2.7630	ppb	08:37:19
2	Be 313.107†	-11778.7	-8840.1	-3.2506	ug/L	-3.2506	ppb	08:36:59
2	Cd 226.502†	3625.7	4490.2	4.9226	ug/L	4.9226	ppb	08:37:19
2	Co 228.616†	200.5	302.9	-0.4003	ug/L	-0.4003	ppb	08:37:19
2	Cr 267.716†	67.3	1.1	3.1242	ug/L	3.1242	ppb	08:37:19
2	Cu 324.752†	1131.9	-5415.9	6.2112	ug/L	6.2112	ppb	08:36:59
2	Mn 257.610†	-25098.4	-30154.0	1.3513	ug/L	1.3513	ppb	08:36:59
2	Mo 202.031†	-524.4	-639.6	-10.441	ug/L	-10.441	ppb	08:37:19
2	Ni 231.604†	280.4	245.7	5.6851	ug/L	5.6851	ppb	08:37:19

2	P 214.914†	587.8	472.7	107.76 ug/L	107.76 ppb	08:37:19
2	Pb 220.353†	-552.6	-586.2	15.843 ug/L	15.843 ppb	08:37:19
2	S 181.975 Axial†	102.3	79.6	8.8127 ug/L	8.8127 ppb	08:37:19
2	Sb 206.836†	51.5	26.8	-0.9806 ug/L	-0.9806 ppb	08:37:19
2	Se 196.026†	-2486.1	-2916.3	-250.79 ug/L	-250.79 ppb	08:37:19
2	Si 251.611†	-513.5	-1058.0	-30.818 ug/L	-30.818 ppb	08:37:19
2	Sn 189.927†	-389.4	-466.3	-20.709 ug/L	-20.709 ppb	08:37:19
2	Ti 334.940†	-8570.3	-9037.5	4.2951 ug/L	4.2951 ppb	08:36:59
2	Tl 190.801†	-106.2	-93.3	-12.214 ug/L	-12.214 ppb	08:37:19
2	U 409.014†	430645.6	512547.8	14066 ug/L	14066 ppb	08:36:59
2	V 292.402†	2197.4	3961.4	-0.9096 ug/L	-0.9096 ppb	08:37:19
2	Zn 213.857†	6159.1	6674.3	1.2507 ug/L	1.2507 ppb	08:37:19
2	SiO2†	-605.6	-1184.9	-74.162 ug/L	-74.162 ppb	08:37:56
3	Sc Radial	5165.7	5165.7	88.4 %		08:36:27
3	Y RADIAL	5522.4	5522.4	87.83 %		08:36:27
3	Al 396.153Radial†	642891.5	727321.1	505220 ug/L	505220 ppb	08:36:21
3	Ca 317.933Radial†	278315.4	314841.6	464060 ug/L	464060 ppb	08:36:21
3	Fe 238.204 Radial†	39710.3	44917.3	420510 ug/L	420510 ppb	08:36:27
3	K 766.490 Radial†	3439.3	1539.1	94.417 ug/L	94.417 ppb	08:36:27
3	Mg 279.077 IEC†	11899.8	13461.0	474520 ug/L	474520 ppb	08:36:27
3	Na 589.592 Radial†	1210113.3	1370084.6	459770 ug/L	459770 ppb	08:36:21
3	Sr 421.552†	717.5	839.1	0.9243 ug/L	0.9243 ppb	08:36:27
3	Sc 361.383	772776.7	772776.7	85.744 %		08:37:25
3	Y 371.029	625753.3	625753.3	83.313 %		08:37:25
3	Ag 328.068†	-22889.6	-26988.2	-7.1932 ug/L	-7.1932 ppb	08:37:25
3	As 188.979†	-196.3	-204.7	-16.043 ug/L	-16.043 ppb	08:37:45
3	B 249.677†	1532.1	2317.5	-7.1964 ug/L	-7.1964 ppb	08:37:25
3	Ba 233.527†	-1572.7	-1825.8	2.1229 ug/L	2.1229 ppb	08:37:45
3	Be 313.107†	-12043.2	-8932.6	-3.2847 ug/L	-3.2847 ppb	08:37:25
3	Cd 226.502†	3599.9	4393.5	4.4090 ug/L	4.4090 ppb	08:37:45
3	Co 228.616†	199.7	298.3	-0.4121 ug/L	-0.4121 ppb	08:37:45
3	Cr 267.716†	74.0	7.7	3.0910 ug/L	3.0910 ppb	08:37:45
3	Cu 324.752†	1115.2	-5456.1	5.8371 ug/L	5.8371 ppb	08:37:25
3	Mn 257.610†	-25593.9	-30271.7	0.8010 ug/L	0.8010 ppb	08:37:25
3	Mo 202.031†	-517.6	-622.0	-9.6842 ug/L	-9.6842 ppb	08:37:45
3	Ni 231.604†	292.4	254.5	5.8899 ug/L	5.8899 ppb	08:37:45
3	P 214.914†	577.1	449.5	92.795 ug/L	92.795 ppb	08:37:45
3	Pb 220.353†	-556.8	-581.0	13.099 ug/L	13.099 ppb	08:37:45
3	S 181.975 Axial†	91.4	65.0	-8.2624 ug/L	-8.2624 ppb	08:37:45
3	Sb 206.836†	35.6	7.3	-6.7597 ug/L	-6.7597 ppb	08:37:45
3	Se 196.026†	-2465.4	-2846.5	-229.50 ug/L	-229.50 ppb	08:37:45
3	Si 251.611†	-520.1	-1056.3	-30.784 ug/L	-30.784 ppb	08:37:45
3	Sn 189.927†	-398.3	-469.5	-22.789 ug/L	-22.789 ppb	08:37:45
3	Ti 334.940†	-8828.6	-9181.6	3.3055 ug/L	3.3055 ppb	08:37:25
3	Tl 190.801†	-95.8	-79.2	-8.7262 ug/L	-8.7262 ppb	08:37:45
3	U 409.014†	438523.0	513836.9	14102 ug/L	14102 ppb	08:37:25
3	V 292.402†	2204.3	3929.2	-0.3636 ug/L	-0.3636 ppb	08:37:45
3	Zn 213.857†	6143.8	6543.5	0.7426 ug/L	0.7426 ppb	08:37:45
3	SiO2†	-603.9	-1171.7	-73.351 ug/L	-73.351 ppb	08:38:01

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	768296.6	85.247	%	0.7238				0.85%
Sc Radial	5071.2	86.8	%	1.45				1.68%
Y 371.029	623138.3	82.965	%	0.6338				0.76%
Y RADIAL	5425.9	86.29	%	1.329				1.54%
Ag 328.068†	-26897.0	-5.1991	ug/L	1.98666	-5.1991	ppb	1.98666	38.21%
Al 396.153Radial†	746009.9	518200	ug/L	11573.9	518200	ppb	11573.9	2.23%
QC value within limits for Al 396.153Radial Recovery = 103.64%								
As 188.979†	-211.0	-17.669	ug/L	1.9221	-17.669	ppb	1.9221	10.88%
B 249.677†	2250.4	-9.3278	ug/L	2.14768	-9.3278	ppb	2.14768	23.02%
Ba 233.527†	-1788.7	2.5990	ug/L	0.41885	2.5990	ppb	0.41885	16.12%
Be 313.107†	-8891.5	-3.2698	ug/L	0.01747	-3.2698	ppb	0.01747	0.53%
Ca 317.933Radial†	322608.0	475510	ug/L	10331.3	475510	ppb	10331.3	2.17%
QC value within limits for Ca 317.933Radial Recovery = 95.10%								
Cd 226.502†	4443.9	4.3960	ug/L	0.53322	4.3960	ppb	0.53322	12.13%
Co 228.616†	299.6	-0.4640	ug/L	0.10017	-0.4640	ppb	0.10017	21.59%
Cr 267.716†	24.7	3.3712	ug/L	0.45693	3.3712	ppb	0.45693	13.55%
Cu 324.752†	-5450.9	6.1302	ug/L	0.26219	6.1302	ppb	0.26219	4.28%

Fe 238.204 Radial†	45500.4	425970	ug/L	5657.7	425970	ppb	5657.7	1.33%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 85.19%								
K 766.490 Radial†	1616.3	102.69	ug/L	15.907	102.69	ppb	15.907	15.49%
Mg 279.077 IEC†	13627.6	480400	ug/L	6742.2	480400	ppb	6742.2	1.40%
QC value within limits for Mg 279.077 IEC Recovery = 96.08%								
Mn 257.610†	-30280.6	1.2263	ug/L	0.37865	1.2263	ppb	0.37865	30.88%
Mo 202.031†	-618.7	-9.0891	ug/L	1.72772	-9.0891	ppb	1.72772	19.01%
Na 589.592 Radial†	1410798.2	473440	ug/L	12250.8	473440	ppb	12250.8	2.59%
QC value within limits for Na 589.592 Radial Recovery = 94.69%								
Ni 231.604†	248.4	5.7484	ug/L	0.12280	5.7484	ppb	0.12280	2.14%
P 214.914†	464.6	101.51	ug/L	7.782	101.51	ppb	7.782	7.67%
Pb 220.353†	-583.8	15.241	ug/L	1.9138	15.241	ppb	1.9138	12.56%
S 181.975 Axial†	78.2	7.6395	ug/L	15.34901	7.6395	ppb	15.34901	200.92%
Sb 206.836†	25.3	-1.3456	ug/L	5.24120	-1.3456	ppb	5.24120	389.52%
Se 196.026†	-2879.1	-228.77	ug/L	22.392	-228.77	ppb	22.392	9.79%
Si 251.611†	-1081.9	-31.559	ug/L	1.3131	-31.559	ppb	1.3131	4.16%
Sn 189.927†	-469.4	-21.508	ug/L	1.1209	-21.508	ppb	1.1209	5.21%
Sr 421.552†	841.4	0.8324	ug/L	0.08875	0.8324	ppb	0.08875	10.66%
Ti 334.940†	-9192.9	3.8911	ug/L	0.51918	3.8911	ppb	0.51918	13.34%
Tl 190.801†	-87.5	-10.703	ug/L	1.7899	-10.703	ppb	1.7899	16.72%
U 409.014†	513293.1	14086	ug/L	18.5	14086	ppb	18.5	0.13%
QC value within limits for U 409.014 Recovery = 93.91%								
V 292.402†	3875.8	-1.4400	ug/L	1.41804	-1.4400	ppb	1.41804	98.48%
Zn 213.857†	6602.5	0.5360	ug/L	0.83740	0.5360	ppb	0.83740	156.24%
SiO2†	-1201.2	-75.261	ug/L	2.6374	-75.261	ppb	2.6374	3.50%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/8/2009 08:40:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5467.0	5467.0	93.5	%			08:42:08
1	Y RADIAL	5820.4	5820.4	92.57	%			08:42:08
1	Al 396.153Radial†	648.2	713.3	73.153	ug/L	73.153	ppb	08:42:08
1	Ca 317.933Radial†	40.2	27.3	40.294	ug/L	40.294	ppb	08:42:28
1	Fe 238.204 Radial†	-20.2	-28.4	30.402	ug/L	30.402	ppb	08:42:28
1	K 766.490 Radial†	1630640.1	1740720.3	308600	ug/L	308600	ppb	08:42:03
1	Mg 279.077 IEC†	-4.9	-6.4	-27.533	ug/L	-27.533	ppb	08:42:28
1	Na 589.592 Radial†	-395.2	665.5	223.32	ug/L	223.32	ppb	08:42:08
1	Sr 421.552†	1474708.6	1576416.5	9817.5	ug/L	9817.5	ppb	08:42:03
1	Sc 361.383	867124.6	867124.6	96.212	%			08:43:46
1	Y 371.029	701273.1	701273.1	93.368	%			08:43:46
1	Ag 328.068†	-7380.9	-7964.3	3.0125	ug/L	3.0125	ppb	08:43:51
1	As 188.979†	24239.3	25217.9	10051	ug/L	10051	ppb	08:43:51
1	B 249.677†	225599.7	235012.5	4904.6	ug/L	4904.6	ppb	08:43:46
1	Ba 233.527†	1819903.5	1891563.5	14041	ug/L	14041	ppb	08:43:46
1	Be 313.107†	7677022.8	7984388.4	2930.5	ug/L	2930.5	ppb	08:43:39
1	Cd 226.502†	883298.9	918270.4	9713.7	ug/L	9713.7	ppb	08:43:46
1	Co 228.616†	476506.8	495332.8	9401.0	ug/L	9401.0	ppb	08:43:51
1	Cr 267.716†	2192143.9	2278372.3	23934	ug/L	23934	ppb	08:43:46
1	Cu 324.752†	6813641.4	7075145.1	20247	ug/L	20247	ppb	08:43:39
1	Mn 257.610†	8511935.4	8846637.1	9437.0	ug/L	9437.0	ppb	08:43:39
1	Mo 202.031†	149411.9	155276.0	9864.1	ug/L	9864.1	ppb	08:43:51
1	Ni 231.604†	406202.4	422108.5	9768.5	ug/L	9768.5	ppb	08:43:46
1	P 214.914†	30887.7	31880.2	15285	ug/L	15285	ppb	08:43:51
1	Pb 220.353†	205565.7	213727.5	24170	ug/L	24170	ppb	08:43:51
1	S 181.975 Axial†	36410.6	37802.5	52971	ug/L	52971	ppb	08:43:51
1	Sb 206.836†	32057.5	33285.4	10343	ug/L	10343	ppb	08:43:51
1	Se 196.026†	16842.4	17534.3	10169	ug/L	10169	ppb	08:43:51
1	Si 251.611†	1547757.8	1608245.0	47837	ug/L	47837	ppb	08:43:46
1	Sn 189.927†	62087.1	64526.6	10565	ug/L	10565	ppb	08:43:51
1	Ti 334.940†	6182963.9	6427508.7	10249	ug/L	10249	ppb	08:43:39
1	Tl 190.801†	33155.5	34493.4	9723.9	ug/L	9723.9	ppb	08:43:51
1	U 409.014†	-1235.9	1117.3	-15.386	ug/L	-15.386	ppb	08:43:51
1	V 292.402†	1452120.7	1510650.6	10098	ug/L	10098	ppb	08:43:46
1	Zn 213.857†	1555331.3	1615944.6	14031	ug/L	14031	ppb	08:43:46
1	SiO2†	1561537.4	1622549.4	103410	ug/L	103410	ppb	08:44:38
2	Sc Radial	5444.5	5444.5	93.2	%			08:42:39
2	Y RADIAL	5757.5	5757.5	91.57	%			08:42:39
2	Al 396.153Radial†	634.7	701.7	68.198	ug/L	68.198	ppb	08:42:39
2	Ca 317.933Radial†	40.9	28.3	41.687	ug/L	41.687	ppb	08:42:59
2	Fe 238.204 Radial†	-21.6	-30.0	14.286	ug/L	14.286	ppb	08:42:59
2	K 766.490 Radial†	1678331.1	1799114.9	318960	ug/L	318960	ppb	08:42:34
2	Mg 279.077 IEC†	-4.3	-5.8	-5.8103	ug/L	-5.8103	ppb	08:42:59
2	Na 589.592 Radial†	-444.2	611.2	205.10	ug/L	205.10	ppb	08:42:39
2	Sr 421.552†	1524852.5	1636755.0	10193	ug/L	10193	ppb	08:42:34
2	Sc 361.383	875997.1	875997.1	97.196	%			08:44:05
2	Y 371.029	706892.2	706892.2	94.116	%			08:44:05
2	Ag 328.068†	-7542.1	-8052.4	2.5047	ug/L	2.5047	ppb	08:44:11
2	As 188.979†	24445.9	25175.2	10032	ug/L	10032	ppb	08:44:11
2	B 249.677†	227893.7	234997.7	4904.4	ug/L	4904.4	ppb	08:44:05
2	Ba 233.527†	1836991.3	1889985.5	14029	ug/L	14029	ppb	08:44:05
2	Be 313.107†	7606544.6	7831059.2	2874.2	ug/L	2874.2	ppb	08:43:59
2	Cd 226.502†	890702.9	916589.3	9695.9	ug/L	9695.9	ppb	08:44:05
2	Co 228.616†	478916.3	492795.5	9353.1	ug/L	9353.1	ppb	08:44:11
2	Cr 267.716†	2207826.3	2271429.7	23862	ug/L	23862	ppb	08:44:05
2	Cu 324.752†	6728151.8	6915460.5	19790	ug/L	19790	ppb	08:43:59
2	Mn 257.610†	8436455.1	8679372.2	9258.6	ug/L	9258.6	ppb	08:43:59
2	Mo 202.031†	149840.4	154144.1	9792.2	ug/L	9792.2	ppb	08:44:11
2	Ni 231.604†	409458.3	421182.0	9747.1	ug/L	9747.1	ppb	08:44:05

2	P 214.914†	31072.0	31744.7	15279 ug/L	15279 ppb	08:44:11
2	Pb 220.353†	206625.4	212653.7	24048 ug/L	24048 ppb	08:44:11
2	S 181.975 Axial†	36505.0	37516.4	52570 ug/L	52570 ppb	08:44:11
2	Sb 206.836†	32226.2	33121.5	10291 ug/L	10291 ppb	08:44:11
2	Se 196.026†	16905.3	17421.7	10103 ug/L	10103 ppb	08:44:11
2	Si 251.611†	1563796.3	1608452.5	47841 ug/L	47841 ppb	08:44:05
2	Sn 189.927†	62338.6	64131.7	10500 ug/L	10500 ppb	08:44:11
2	Ti 334.940†	6117371.6	6294934.8	10037 ug/L	10037 ppb	08:43:59
2	Tl 190.801†	33295.1	34288.0	9664.0 ug/L	9664.0 ppb	08:44:11
2	U 409.014†	-1090.5	1279.9	-10.764 ug/L	-10.764 ppb	08:44:11
2	V 292.402†	1463232.8	1506796.3	10072 ug/L	10072 ppb	08:44:05
2	Zn 213.857†	1567638.7	1612233.5	13999 ug/L	13999 ppb	08:44:05
2	SiO2†	1556021.4	1600435.5	101990 ug/L	101990 ppb	08:44:45
3	Sc Radial	5627.2	5627.2	96.3 %		08:43:09
3	Y RADIAL	5959.5	5959.5	94.78 %		08:43:09
3	Al 396.153Radial†	620.4	664.7	38.156 ug/L	38.156 ppb	08:43:09
3	Ca 317.933Radial†	43.5	29.6	43.629 ug/L	43.629 ppb	08:43:29
3	Fe 238.204 Radial†	-20.6	-28.2	34.402 ug/L	34.402 ppb	08:43:29
3	K 766.490 Radial†	1663829.2	1725552.7	305910 ug/L	305910 ppb	08:43:04
3	Mg 279.077 IEC†	-2.4	-3.7	71.666 ug/L	71.666 ppb	08:43:29
3	Na 589.592 Radial†	-505.0	563.5	189.12 ug/L	189.12 ppb	08:43:09
3	Sr 421.552†	1503489.9	1561417.6	9724.1 ug/L	9724.1 ppb	08:43:04
3	Sc 361.383	860972.2	860972.2	95.529 %		08:44:25
3	Y 371.029	693995.6	693995.6	92.399 %		08:44:25
3	Ag 328.068†	-7391.7	-8030.3	2.6685 ug/L	2.6685 ppb	08:44:30
3	As 188.979†	24137.2	25291.0	10079 ug/L	10079 ppb	08:44:30
3	B 249.677†	224130.1	235149.6	4907.3 ug/L	4907.3 ppb	08:44:25
3	Ba 233.527†	1812109.2	1896921.1	14081 ug/L	14081 ppb	08:44:25
3	Be 313.107†	7558719.3	7917566.9	2906.0 ug/L	2906.0 ppb	08:44:19
3	Cd 226.502†	877962.6	919244.8	9724.0 ug/L	9724.0 ppb	08:44:25
3	Co 228.616†	475940.9	498279.5	9457.1 ug/L	9457.1 ppb	08:44:30
3	Cr 267.716†	2176726.4	2278514.6	23936 ug/L	23936 ppb	08:44:25
3	Cu 324.752†	6705646.3	7012701.8	20068 ug/L	20068 ppb	08:44:19
3	Mn 257.610†	8434113.9	8828393.0	9417.6 ug/L	9417.6 ppb	08:44:19
3	Mo 202.031†	148782.4	155726.8	9892.7 ug/L	9892.7 ppb	08:44:30
3	Ni 231.604†	403751.5	422559.8	9778.9 ug/L	9778.9 ppb	08:44:25
3	P 214.914†	30822.4	32041.3	15407 ug/L	15407 ppb	08:44:30
3	Pb 220.353†	205278.5	214953.7	24308 ug/L	24308 ppb	08:44:30
3	S 181.975 Axial†	36042.6	37687.8	52810 ug/L	52810 ppb	08:44:30
3	Sb 206.836†	31930.0	33390.0	10378 ug/L	10378 ppb	08:44:30
3	Se 196.026†	16715.5	17526.6	10164 ug/L	10164 ppb	08:44:30
3	Si 251.611†	1540381.3	1612018.7	47950 ug/L	47950 ppb	08:44:25
3	Sn 189.927†	61948.9	64843.0	10617 ug/L	10617 ppb	08:44:30
3	Ti 334.940†	6107035.0	6393948.3	10195 ug/L	10195 ppb	08:44:19
3	Tl 190.801†	33080.3	34660.9	9770.0 ug/L	9770.0 ppb	08:44:30
3	U 409.014†	-984.4	1371.4	-8.3904 ug/L	-8.3904 ppb	08:44:30
3	V 292.402†	1440370.5	1509135.6	10089 ug/L	10089 ppb	08:44:25
3	Zn 213.857†	1547039.7	1618816.6	14056 ug/L	14056 ppb	08:44:25
3	SiO2†	1561660.1	1634275.6	104160 ug/L	104160 ppb	08:44:52

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868031.3	96.313	%	0.8381				0.87%
Sc Radial	5512.9	94.3	%	1.71				1.81%
Y 371.029	700720.3	93.295	%	0.8609				0.92%
Y RADIAL	5845.8	92.97	%	1.643				1.77%
Ag 328.068†	-8015.7	2.7286	ug/L	0.25915	2.7286	ppb	0.25915	9.50%
Al 396.153Radial†	693.2	59.836	ug/L	18.9377	59.836	ppb	18.9377	31.65%
As 188.979†	25228.0	10054	ug/L	23.7	10054	ppb	23.7	0.24%
QC value within limits for As 188.979 Recovery = 100.54%								
B 249.677†	235053.3	4905.5	ug/L	1.63	4905.5	ppb	1.63	0.03%
QC value within limits for B 249.677 Recovery = 98.11%								
Ba 233.527†	1892823.4	14050	ug/L	27.0	14050	ppb	27.0	0.19%
QC value within limits for Ba 233.527 Recovery = 93.67%								
Be 313.107†	7911004.8	2903.6	ug/L	28.23	2903.6	ppb	28.23	0.97%
QC value within limits for Be 313.107 Recovery = 96.79%								
Ca 317.933Radial†	28.4	41.870	ug/L	1.6750	41.870	ppb	1.6750	4.00%
Cd 226.502†	918034.8	9711.2	ug/L	14.21	9711.2	ppb	14.21	0.15%
QC value within limits for Cd 226.502 Recovery = 97.11%								

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Co 228.616†          495469.3      9403.8 ug/L        52.05      9403.8 ppb        52.05   0.55%
   QC value within limits for Co 228.616  Recovery = 94.04%
Cr 267.716†         2276105.6       23911 ug/L         42.5       23911 ppb         42.5   0.18%
   QC value within limits for Cr 267.716  Recovery = 95.64%
Cu 324.752†         7001102.5       20035 ug/L        230.3       20035 ppb        230.3   1.15%
   QC value within limits for Cu 324.752  Recovery = 100.18%
Fe 238.204 Radial†      -28.9      26.363 ug/L      10.6490      26.363 ppb      10.6490  40.39%
K 766.490 Radial†   1755129.3      311160 ug/L       6888.6      311160 ppb       6888.6   2.21%
   QC value within limits for K 766.490 Radial  Recovery = 103.72%
Mg 279.077 IEC†         -5.3      12.774 ug/L      52.1454      12.774 ppb      52.1454 408.21%
Mn 257.610†         8784800.8      9371.1 ug/L        97.88      9371.1 ppb        97.88   1.04%
   QC value within limits for Mn 257.610  Recovery = 93.71%
Mo 202.031†          155049.0      9849.6 ug/L        51.80      9849.6 ppb        51.80   0.53%
   QC value within limits for Mo 202.031  Recovery = 98.50%
Na 589.592 Radial†      613.4      205.85 ug/L       17.116      205.85 ppb       17.116   8.32%
Ni 231.604†          421950.1      9764.9 ug/L        16.23      9764.9 ppb        16.23   0.17%
   QC value within limits for Ni 231.604  Recovery = 97.65%
P 214.914†            31888.7       15324 ug/L         72.3       15324 ppb         72.3   0.47%
   QC value within limits for P 214.914  Recovery = 102.16%
Pb 220.353†          213778.3       24175 ug/L        130.1       24175 ppb        130.1   0.54%
   QC value within limits for Pb 220.353  Recovery = 96.70%
S 181.975 Axial†      37668.9       52784 ug/L        201.8       52784 ppb        201.8   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 105.57%
Sb 206.836†           33265.6       10337 ug/L         43.8       10337 ppb         43.8   0.42%
   QC value within limits for Sb 206.836  Recovery = 103.37%
Se 196.026†           17494.2       10145 ug/L         36.5       10145 ppb         36.5   0.36%
   QC value within limits for Se 196.026  Recovery = 101.45%
Si 251.611†         1609572.1       47876 ug/L         64.2       47876 ppb         64.2   0.13%
   QC value within limits for Si 251.611  Recovery = 95.75%
Sn 189.927†           64500.4       10561 ug/L         58.4       10561 ppb         58.4   0.55%
   QC value within limits for Sn 189.927  Recovery = 105.61%
Sr 421.552†         1591529.7      9911.6 ug/L       248.35      9911.6 ppb       248.35   2.51%
   QC value within limits for Sr 421.552  Recovery = 99.12%
Ti 334.940†         6372130.6       10160 ug/L        110.0       10160 ppb        110.0   1.08%
   QC value within limits for Ti 334.940  Recovery = 101.60%
Tl 190.801†           34480.7      9719.3 ug/L        53.15      9719.3 ppb        53.15   0.55%
   QC value within limits for Tl 190.801  Recovery = 97.19%
U 409.014†             1256.2     -11.514 ug/L       3.5577     -11.514 ppb       3.5577  30.90%
V 292.402†          1508860.8       10086 ug/L         13.3       10086 ppb         13.3   0.13%
   QC value within limits for V 292.402  Recovery = 100.86%
Zn 213.857†         1615664.9       14029 ug/L         28.5       14029 ppb         28.5   0.20%
   QC value within limits for Zn 213.857  Recovery = 93.53%
SiO2†               1619086.8      103190 ug/L       1105.0      103190 ppb       1105.0   1.07%
   QC value within limits for SiO2  Recovery = 96.44%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 08:47:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5782.1	5782.1	98.9	%			08:48:55
1	Y RADIAL	6146.7	6146.7	97.76	%			08:48:55
1	Al 396.153Radial†	7076.6	7172.7	4961.1	ug/L	4961.1	ppb	08:48:55
1	Ca 317.933Radial†	3407.2	3428.0	5052.7	ug/L	5052.7	ppb	08:49:15
1	Fe 238.204 Radial†	532.6	531.5	4991.6	ug/L	4991.6	ppb	08:49:15
1	K 766.490 Radial†	32409.0	30403.6	5383.4	ug/L	5383.4	ppb	08:48:55
1	Mg 279.077 IEC†	148.2	148.6	5249.8	ug/L	5249.8	ppb	08:49:15
1	Na 589.592 Radial†	25995.9	27361.6	9182.0	ug/L	9182.0	ppb	08:48:55
1	Sr 421.552†	78123.6	78985.8	491.86	ug/L	491.86	ppb	08:48:55
1	Sc 361.383	915700.9	915700.9	101.60	%			08:50:12
1	Y 371.029	748883.0	748883.0	99.707	%			08:50:12
1	Ag 328.068†	111463.9	109413.9	498.59	ug/L	498.59	ppb	08:50:17
1	As 188.979†	1317.5	1320.9	526.25	ug/L	526.25	ppb	08:50:37
1	B 249.677†	24216.2	24365.1	509.06	ug/L	509.06	ppb	08:50:17
1	Ba 233.527†	67026.7	65978.4	490.26	ug/L	490.26	ppb	08:50:17
1	Be 313.107†	1367141.0	1350700.0	493.30	ug/L	493.30	ppb	08:50:12
1	Cd 226.502†	47097.9	46550.5	491.92	ug/L	491.92	ppb	08:50:17
1	Co 228.616†	26192.0	25844.5	490.66	ug/L	490.66	ppb	08:50:17
1	Cr 267.716†	47478.6	46651.4	490.51	ug/L	490.51	ppb	08:50:17
1	Cu 324.752†	179450.2	169864.4	486.36	ug/L	486.36	ppb	08:50:17
1	Mn 257.610†	468544.1	460734.8	491.88	ug/L	491.88	ppb	08:50:12
1	Mo 202.031†	7937.6	7794.1	495.48	ug/L	495.48	ppb	08:50:37
1	Ni 231.604†	21717.3	21288.4	492.65	ug/L	492.65	ppb	08:50:17
1	P 214.914†	4496.1	4201.7	2349.8	ug/L	2349.8	ppb	08:50:37
1	Pb 220.353†	4339.1	4339.2	492.07	ug/L	492.07	ppb	08:50:37
1	S 181.975 Axial†	768.7	715.0	1001.0	ug/L	1001.0	ppb	08:50:37
1	Sb 206.836†	1660.7	1600.3	513.72	ug/L	513.72	ppb	08:50:37
1	Se 196.026†	829.5	845.2	506.85	ug/L	506.85	ppb	08:50:37
1	Si 251.611†	83963.3	82189.9	2448.4	ug/L	2448.4	ppb	08:50:17
1	Sn 189.927†	3091.0	3037.3	497.89	ug/L	497.89	ppb	08:50:37
1	Ti 334.940†	314148.2	310310.4	495.07	ug/L	495.07	ppb	08:50:17
1	Tl 190.801†	1753.9	1758.8	495.78	ug/L	495.78	ppb	08:50:37
1	U 409.014†	15497.7	17655.2	484.78	ug/L	484.78	ppb	08:50:17
1	V 292.402†	73683.2	73879.9	494.61	ug/L	494.61	ppb	08:50:17
1	Zn 213.857†	58008.6	56472.2	488.98	ug/L	488.98	ppb	08:50:17
1	SiO2†	84671.3	82869.0	5289.8	ug/L	5289.8	ppb	08:51:45
2	Sc Radial	5788.5	5788.5	99.1	%			08:49:20
2	Y RADIAL	6144.8	6144.8	97.73	%			08:49:20
2	Al 396.153Radial†	7103.7	7192.2	4974.5	ug/L	4974.5	ppb	08:49:20
2	Ca 317.933Radial†	3346.8	3363.2	4957.2	ug/L	4957.2	ppb	08:49:40
2	Fe 238.204 Radial†	527.8	526.1	4940.5	ug/L	4940.5	ppb	08:49:40
2	K 766.490 Radial†	32276.6	30234.0	5353.3	ug/L	5353.3	ppb	08:49:20
2	Mg 279.077 IEC†	146.4	146.7	5180.9	ug/L	5180.9	ppb	08:49:40
2	Na 589.592 Radial†	25876.0	27211.8	9131.8	ug/L	9131.8	ppb	08:49:20
2	Sr 421.552†	78170.1	78946.0	491.61	ug/L	491.61	ppb	08:49:20
2	Sc 361.383	916693.8	916693.8	101.71	%			08:50:43
2	Y 371.029	749698.1	749698.1	99.815	%			08:50:43
2	Ag 328.068†	111726.1	109552.8	499.21	ug/L	499.21	ppb	08:50:48
2	As 188.979†	1322.7	1324.7	527.73	ug/L	527.73	ppb	08:51:08
2	B 249.677†	24303.2	24424.8	510.31	ug/L	510.31	ppb	08:50:48
2	Ba 233.527†	67467.5	66340.4	492.94	ug/L	492.94	ppb	08:50:48
2	Be 313.107†	1368824.6	1350897.8	493.38	ug/L	493.38	ppb	08:50:43
2	Cd 226.502†	47404.8	46802.0	494.59	ug/L	494.59	ppb	08:50:48
2	Co 228.616†	26331.6	25953.8	492.74	ug/L	492.74	ppb	08:50:48
2	Cr 267.716†	47593.6	46713.8	491.16	ug/L	491.16	ppb	08:50:48
2	Cu 324.752†	179807.8	170024.6	486.81	ug/L	486.81	ppb	08:50:48
2	Mn 257.610†	469543.6	461218.1	492.39	ug/L	492.39	ppb	08:50:43
2	Mo 202.031†	8012.0	7858.8	499.59	ug/L	499.59	ppb	08:51:08
2	Ni 231.604†	21790.2	21336.9	493.77	ug/L	493.77	ppb	08:50:48

2	P 214.914†	4553.2	4253.0	2379.4 ug/L	2379.4 ppb	08:51:08
2	Pb 220.353†	4360.0	4355.1	493.88 ug/L	493.88 ppb	08:51:08
2	S 181.975 Axial†	776.7	722.1	1010.8 ug/L	1010.8 ppb	08:51:08
2	Sb 206.836†	1674.2	1611.8	517.49 ug/L	517.49 ppb	08:51:08
2	Se 196.026†	850.9	865.4	518.35 ug/L	518.35 ppb	08:51:08
2	Si 251.611†	84254.2	82386.4	2454.3 ug/L	2454.3 ppb	08:50:48
2	Sn 189.927†	3110.0	3052.7	500.40 ug/L	500.40 ppb	08:51:08
2	Ti 334.940†	315465.2	311270.3	496.60 ug/L	496.60 ppb	08:50:48
2	Tl 190.801†	1762.5	1765.4	497.62 ug/L	497.62 ppb	08:51:08
2	U 409.014†	15551.4	17691.4	485.78 ug/L	485.78 ppb	08:50:48
2	V 292.402†	73936.6	74050.4	495.80 ug/L	495.80 ppb	08:50:48
2	Zn 213.857†	58308.9	56705.6	491.02 ug/L	491.02 ppb	08:50:48
2	SiO2†	84289.9	82403.7	5259.8 ug/L	5259.8 ppb	08:51:50
3	Sc Radial	5847.4	5847.4	100 %		08:49:45
3	Y RADIAL	6208.4	6208.4	98.74 %		08:49:45
3	Al 396.153Radial†	7161.0	7177.2	4964.1 ug/L	4964.1 ppb	08:49:45
3	Ca 317.933Radial†	3361.4	3343.9	4928.7 ug/L	4928.7 ppb	08:50:05
3	Fe 238.204 Radial†	533.2	526.1	4940.8 ug/L	4940.8 ppb	08:50:05
3	K 766.490 Radial†	32465.1	30094.2	5328.5 ug/L	5328.5 ppb	08:49:45
3	Mg 279.077 IEC†	147.3	146.0	5157.2 ug/L	5157.2 ppb	08:50:05
3	Na 589.592 Radial†	26135.2	27207.7	9130.4 ug/L	9130.4 ppb	08:49:45
3	Sr 421.552†	79104.0	79084.6	492.47 ug/L	492.47 ppb	08:49:45
3	Sc 361.383	913157.2	913157.2	101.32 %		08:51:14
3	Y 371.029	746146.8	746146.8	99.343 %		08:51:14
3	Ag 328.068†	111949.4	110198.7	502.13 ug/L	502.13 ppb	08:51:19
3	As 188.979†	1322.9	1329.9	529.82 ug/L	529.82 ppb	08:51:39
3	B 249.677†	24230.2	24445.3	510.73 ug/L	510.73 ppb	08:51:19
3	Ba 233.527†	67345.5	66476.8	493.96 ug/L	493.96 ppb	08:51:19
3	Be 313.107†	1359749.2	1347152.8	492.02 ug/L	492.02 ppb	08:51:14
3	Cd 226.502†	47198.8	46779.2	494.35 ug/L	494.35 ppb	08:51:19
3	Co 228.616†	26403.8	26125.3	495.99 ug/L	495.99 ppb	08:51:19
3	Cr 267.716†	47416.6	46720.4	491.23 ug/L	491.23 ppb	08:51:19
3	Cu 324.752†	180362.3	171256.6	490.34 ug/L	490.34 ppb	08:51:19
3	Mn 257.610†	467972.0	461454.8	492.65 ug/L	492.65 ppb	08:51:14
3	Mo 202.031†	7964.6	7842.6	498.56 ug/L	498.56 ppb	08:51:39
3	Ni 231.604†	21690.8	21321.7	493.42 ug/L	493.42 ppb	08:51:19
3	P 214.914†	4511.2	4229.0	2365.0 ug/L	2365.0 ppb	08:51:39
3	Pb 220.353†	4333.2	4345.2	492.76 ug/L	492.76 ppb	08:51:39
3	S 181.975 Axial†	770.2	718.6	1005.9 ug/L	1005.9 ppb	08:51:39
3	Sb 206.836†	1648.3	1592.6	511.39 ug/L	511.39 ppb	08:51:39
3	Se 196.026†	837.6	855.5	512.64 ug/L	512.64 ppb	08:51:39
3	Si 251.611†	84314.0	82766.2	2465.7 ug/L	2465.7 ppb	08:51:19
3	Sn 189.927†	3099.7	3054.3	500.67 ug/L	500.67 ppb	08:51:39
3	Ti 334.940†	315905.7	312906.3	499.20 ug/L	499.20 ppb	08:51:19
3	Tl 190.801†	1760.2	1769.7	498.86 ug/L	498.86 ppb	08:51:39
3	U 409.014†	15741.3	17938.2	492.58 ug/L	492.58 ppb	08:51:19
3	V 292.402†	73739.7	74137.7	496.37 ug/L	496.37 ppb	08:51:19
3	Zn 213.857†	58213.2	56833.2	492.13 ug/L	492.13 ppb	08:51:19
3	SiO2†	84868.2	83295.4	5317.0 ug/L	5317.0 ppb	08:51:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915183.9	101.54	%	0.202				0.20%
Sc Radial	5806.0	99.4	%	0.62				0.62%
Y 371.029	748242.6	99.622	%	0.2477				0.25%
Y RADIAL	6166.6	98.07	%	0.575				0.59%
Ag 328.068†	109721.8	499.98	ug/L	1.891	499.98	ppb	1.891	0.38%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	7180.7	4966.6	ug/L	7.01	4966.6	ppb	7.01	0.14%
QC value within limits for Al 396.153Radial Recovery = 99.33%								
As 188.979†	1325.2	527.94	ug/L	1.794	527.94	ppb	1.794	0.34%
QC value within limits for As 188.979 Recovery = 105.59%								
B 249.677†	24411.7	510.03	ug/L	0.871	510.03	ppb	0.871	0.17%
QC value within limits for B 249.677 Recovery = 102.01%								
Ba 233.527†	66265.2	492.39	ug/L	1.910	492.39	ppb	1.910	0.39%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	1349583.6	492.90	ug/L	0.764	492.90	ppb	0.764	0.16%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	3378.4	4979.5	ug/L	64.94	4979.5	ppb	64.94	1.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.59%
Cd 226.502†            46710.6      493.62 ug/L        1.474      493.62 ppb        1.474   0.30%
   QC value within limits for Cd 226.502  Recovery = 98.72%
Co 228.616†            25974.5      493.13 ug/L        2.686      493.13 ppb        2.686   0.54%
   QC value within limits for Co 228.616  Recovery = 98.63%
Cr 267.716†            46695.2      490.97 ug/L        0.400      490.97 ppb        0.400   0.08%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†           170381.8      487.84 ug/L        2.179      487.84 ppb        2.179   0.45%
   QC value within limits for Cu 324.752  Recovery = 97.57%
Fe 238.204 Radial†       527.9      4957.6 ug/L        29.40      4957.6 ppb        29.40   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.15%
K 766.490 Radial†      30243.9      5355.1 ug/L        27.45      5355.1 ppb        27.45   0.51%
   QC value within limits for K 766.490 Radial  Recovery = 107.10%
Mg 279.077 IEC†          147.1      5195.9 ug/L        48.14      5195.9 ppb        48.14   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†           461135.9      492.31 ug/L        0.390      492.31 ppb        0.390   0.08%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             7831.8      497.88 ug/L        2.135      497.88 ppb        2.135   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     27260.4      9148.1 ug/L        29.43      9148.1 ppb        29.43   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 91.48%
Ni 231.604†            21315.7      493.28 ug/L        0.574      493.28 ppb        0.574   0.12%
   QC value within limits for Ni 231.604  Recovery = 98.66%
P 214.914†              4227.9      2364.7 ug/L        14.81      2364.7 ppb        14.81   0.63%
   QC value within limits for P 214.914  Recovery = 94.59%
Pb 220.353†             4346.5      492.90 ug/L        0.915      492.90 ppb        0.915   0.19%
   QC value within limits for Pb 220.353  Recovery = 98.58%
S 181.975 Axial†         718.6      1005.9 ug/L         4.92      1005.9 ppb         4.92   0.49%
   QC value within limits for S 181.975 Axial  Recovery = 100.59%
Sb 206.836†             1601.6      514.20 ug/L        3.082      514.20 ppb        3.082   0.60%
   QC value within limits for Sb 206.836  Recovery = 102.84%
Se 196.026†              855.4      512.61 ug/L        5.748      512.61 ppb        5.748   1.12%
   QC value within limits for Se 196.026  Recovery = 102.52%
Si 251.611†            82447.5      2456.1 ug/L         8.75      2456.1 ppb         8.75   0.36%
   QC value within limits for Si 251.611  Recovery = 98.24%
Sn 189.927†             3048.1      499.65 ug/L        1.532      499.65 ppb        1.532   0.31%
   QC value within limits for Sn 189.927  Recovery = 99.93%
Sr 421.552†            79005.5      491.98 ug/L        0.445      491.98 ppb        0.445   0.09%
   QC value within limits for Sr 421.552  Recovery = 98.40%
Ti 334.940†           311495.6      496.96 ug/L        2.090      496.96 ppb        2.090   0.42%
   QC value within limits for Ti 334.940  Recovery = 99.39%
Tl 190.801†             1764.6      497.42 ug/L        1.546      497.42 ppb        1.546   0.31%
   QC value within limits for Tl 190.801  Recovery = 99.48%
U 409.014†             17761.6      487.71 ug/L        4.243      487.71 ppb        4.243   0.87%
   QC value within limits for U 409.014  Recovery = 97.54%
V 292.402†             74022.7      495.60 ug/L        0.899      495.60 ppb        0.899   0.18%
   QC value within limits for V 292.402  Recovery = 99.12%
Zn 213.857†            56670.3      490.71 ug/L        1.599      490.71 ppb        1.599   0.33%
   QC value within limits for Zn 213.857  Recovery = 98.14%
SiO2†                  82856.0      5288.9 ug/L        28.64      5288.9 ppb        28.64   0.54%
   QC value within limits for SiO2  Recovery = 98.90%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 08:54:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.9	5848.9	100	%			08:55:57
1	Y RADIAL	6279.8	6279.8	99.87	%			08:55:57
1	Al 396.153Radial†	-26.0	-5.6	-3.9206	ug/L	-3.9206	ppb	08:55:57
1	Ca 317.933Radial†	21.0	5.4	7.9071	ug/L	7.9071	ppb	08:56:17
1	Fe 238.204 Radial†	5.7	-1.1	-10.330	ug/L	-10.330	ppb	08:56:17
1	K 766.490 Radial†	3182.5	828.1	146.83	ug/L	146.83	ppb	08:55:57
1	Mg 279.077 IEC†	2.1	1.0	34.534	ug/L	34.534	ppb	08:56:17
1	Na 589.592 Radial†	-941.9	146.9	49.290	ug/L	49.290	ppb	08:55:57
1	Sr 421.552†	15.9	43.3	0.2694	ug/L	0.2694	ppb	08:55:57
1	Sc 361.383	901425.1	901425.1	100.02	%			08:57:14
1	Y 371.029	753544.9	753544.9	100.33	%			08:57:14
1	Ag 328.068†	368.5	75.7	0.3398	ug/L	0.3398	ppb	08:57:14
1	As 188.979†	15.2	39.3	15.531	ug/L	15.531	ppb	08:57:34
1	B 249.677†	312.7	843.3	17.688	ug/L	17.688	ppb	08:57:34
1	Ba 233.527†	11.1	19.6	0.1457	ug/L	0.1457	ppb	08:57:34
1	Be 313.107†	-4890.2	223.7	0.0819	ug/L	0.0819	ppb	08:57:14
1	Cd 226.502†	-156.4	38.7	0.4107	ug/L	0.4107	ppb	08:57:34
1	Co 228.616†	-74.1	-8.7	-0.1627	ug/L	-0.1627	ppb	08:57:34
1	Cr 267.716†	79.8	1.2	0.0123	ug/L	0.0123	ppb	08:57:34
1	Cu 324.752†	6899.0	141.1	0.4032	ug/L	0.4032	ppb	08:57:14
1	Mn 257.610†	479.6	57.2	0.0593	ug/L	0.0593	ppb	08:57:34
1	Mo 202.031†	34.7	16.4	1.0403	ug/L	1.0403	ppb	08:57:34
1	Ni 231.604†	94.7	8.1	0.1884	ug/L	0.1884	ppb	08:57:34
1	P 214.914†	218.2	-5.3	-3.0892	ug/L	-3.0892	ppb	08:57:34
1	Pb 220.353†	-50.4	18.1	2.0453	ug/L	2.0453	ppb	08:57:34
1	S 181.975 Axial†	42.4	0.8	1.0843	ug/L	1.0843	ppb	08:57:34
1	Sb 206.836†	62.0	27.7	8.8422	ug/L	8.8422	ppb	08:57:34
1	Se 196.026†	-16.2	12.6	7.2774	ug/L	7.2774	ppb	08:57:34
1	Si 251.611†	602.0	152.3	4.4842	ug/L	4.4842	ppb	08:57:34
1	Sn 189.927†	18.6	13.6	2.2351	ug/L	2.2351	ppb	08:57:34
1	Ti 334.940†	-1003.7	111.4	0.1774	ug/L	0.1774	ppb	08:57:14
1	Tl 190.801†	-20.6	11.9	3.3333	ug/L	3.3333	ppb	08:57:34
1	U 409.014†	-2337.6	64.6	1.7809	ug/L	1.7809	ppb	08:57:14
1	V 292.402†	-1287.7	70.9	0.4890	ug/L	0.4890	ppb	08:57:14
1	Zn 213.857†	853.4	231.4	2.0199	ug/L	2.0199	ppb	08:57:34
1	SiO2†	567.6	100.0	6.2536	ug/L	6.2536	ppb	08:58:30
2	Sc Radial	5763.2	5763.2	98.6	%			08:56:22
2	Y RADIAL	6204.0	6204.0	98.67	%			08:56:22
2	Al 396.153Radial†	-35.2	-15.2	-10.645	ug/L	-10.645	ppb	08:56:22
2	Ca 317.933Radial†	18.1	2.8	4.1167	ug/L	4.1167	ppb	08:56:42
2	Fe 238.204 Radial†	8.3	1.6	14.665	ug/L	14.665	ppb	08:56:42
2	K 766.490 Radial†	3056.0	747.1	132.47	ug/L	132.47	ppb	08:56:22
2	Mg 279.077 IEC†	0.6	-0.6	-19.519	ug/L	-19.519	ppb	08:56:42
2	Na 589.592 Radial†	-945.8	128.9	43.263	ug/L	43.263	ppb	08:56:22
2	Sr 421.552†	-26.0	1.0	0.0062	ug/L	0.0062	ppb	08:56:22
2	Sc 361.383	904499.4	904499.4	100.36	%			08:57:39
2	Y 371.029	753447.4	753447.4	100.31	%			08:57:39
2	Ag 328.068†	351.8	57.8	0.2600	ug/L	0.2600	ppb	08:57:39
2	As 188.979†	11.6	35.7	14.109	ug/L	14.109	ppb	08:57:59
2	B 249.677†	271.6	801.3	16.804	ug/L	16.804	ppb	08:57:59
2	Ba 233.527†	-16.9	-8.4	-0.0622	ug/L	-0.0622	ppb	08:57:59
2	Be 313.107†	-5037.8	93.2	0.0338	ug/L	0.0338	ppb	08:57:39
2	Cd 226.502†	-148.0	47.6	0.5021	ug/L	0.5021	ppb	08:57:59
2	Co 228.616†	-75.2	-9.5	-0.1759	ug/L	-0.1759	ppb	08:57:59
2	Cr 267.716†	96.7	17.7	0.1836	ug/L	0.1836	ppb	08:57:59
2	Cu 324.752†	6834.9	53.7	0.1545	ug/L	0.1545	ppb	08:57:39
2	Mn 257.610†	476.0	52.0	0.0573	ug/L	0.0573	ppb	08:57:59
2	Mo 202.031†	41.2	22.7	1.4411	ug/L	1.4411	ppb	08:57:59
2	Ni 231.604†	102.3	15.4	0.3561	ug/L	0.3561	ppb	08:57:59

2	P 214.914†	217.8	-6.5	-3.7894 ug/L	-3.7894 ppb	08:57:59
2	Pb 220.353†	-42.2	26.4	2.9877 ug/L	2.9877 ppb	08:57:59
2	S 181.975 Axial†	42.4	0.7	0.9493 ug/L	0.9493 ppb	08:57:59
2	Sb 206.836†	61.2	26.7	8.5108 ug/L	8.5108 ppb	08:57:59
2	Se 196.026†	-30.8	-1.9	-1.0542 ug/L	-1.0542 ppb	08:57:59
2	Si 251.611†	599.3	147.4	4.3396 ug/L	4.3396 ppb	08:57:59
2	Sn 189.927†	15.2	10.1	1.6614 ug/L	1.6614 ppb	08:57:59
2	Ti 334.940†	-1183.0	-63.8	-0.1044 ug/L	-0.1044 ppb	08:57:39
2	Tl 190.801†	-30.7	1.9	0.5410 ug/L	0.5410 ppb	08:57:59
2	U 409.014†	-2192.6	217.1	5.9770 ug/L	5.9770 ppb	08:57:39
2	V 292.402†	-1417.6	-54.1	-0.3279 ug/L	-0.3279 ppb	08:57:39
2	Zn 213.857†	827.2	202.4	1.7647 ug/L	1.7647 ppb	08:57:59
2	SiO2†	578.3	108.8	6.8154 ug/L	6.8154 ppb	08:58:35
3	Sc Radial	5778.5	5778.5	98.9 %		08:56:47
3	Y RADIAL	6196.6	6196.6	98.55 %		08:56:47
3	Al 396.153Radial†	-13.1	7.2	4.9512 ug/L	4.9512 ppb	08:56:47
3	Ca 317.933Radial†	17.3	1.9	2.8636 ug/L	2.8636 ppb	08:57:07
3	Fe 238.204 Radial†	5.3	-1.4	-13.193 ug/L	-13.193 ppb	08:57:07
3	K 766.490 Radial†	3077.8	760.9	134.91 ug/L	134.91 ppb	08:56:47
3	Mg 279.077 IEC†	2.2	1.0	36.914 ug/L	36.914 ppb	08:57:07
3	Na 589.592 Radial†	-940.2	137.1	45.999 ug/L	45.999 ppb	08:56:47
3	Sr 421.552†	-14.7	12.4	0.0774 ug/L	0.0774 ppb	08:56:47
3	Sc 361.383	901678.2	901678.2	100.05 %		08:58:05
3	Y 371.029	751276.9	751276.9	100.03 %		08:58:05
3	Ag 328.068†	353.0	60.1	0.2640 ug/L	0.2640 ppb	08:58:05
3	As 188.979†	1.1	25.2	9.9656 ug/L	9.9656 ppb	08:58:25
3	B 249.677†	234.5	765.1	16.046 ug/L	16.046 ppb	08:58:25
3	Ba 233.527†	16.8	25.3	0.1861 ug/L	0.1861 ppb	08:58:25
3	Be 313.107†	-4967.7	147.6	0.0540 ug/L	0.0540 ppb	08:58:05
3	Cd 226.502†	-152.4	42.8	0.4533 ug/L	0.4533 ppb	08:58:25
3	Co 228.616†	-67.8	-2.4	-0.0438 ug/L	-0.0438 ppb	08:58:25
3	Cr 267.716†	87.7	9.0	0.0923 ug/L	0.0923 ppb	08:58:25
3	Cu 324.752†	6900.3	140.5	0.4013 ug/L	0.4013 ppb	08:58:05
3	Mn 257.610†	424.4	1.9	0.0000 ug/L	0.0000 ppb	08:58:25
3	Mo 202.031†	28.5	10.1	0.6413 ug/L	0.6413 ppb	08:58:25
3	Ni 231.604†	91.4	4.8	0.1114 ug/L	0.1114 ppb	08:58:25
3	P 214.914†	212.5	-11.1	-6.4313 ug/L	-6.4313 ppb	08:58:25
3	Pb 220.353†	-56.8	11.7	1.3264 ug/L	1.3264 ppb	08:58:25
3	S 181.975 Axial†	35.8	-5.8	-8.1206 ug/L	-8.1206 ppb	08:58:25
3	Sb 206.836†	49.5	15.2	4.8512 ug/L	4.8512 ppb	08:58:25
3	Se 196.026†	-26.0	2.9	1.6149 ug/L	1.6149 ppb	08:58:25
3	Si 251.611†	583.4	133.4	3.9342 ug/L	3.9342 ppb	08:58:25
3	Sn 189.927†	13.7	8.8	1.4330 ug/L	1.4330 ppb	08:58:25
3	Ti 334.940†	-1043.5	71.9	0.1135 ug/L	0.1135 ppb	08:58:05
3	Tl 190.801†	-33.7	-1.2	-0.3407 ug/L	-0.3407 ppb	08:58:25
3	U 409.014†	-2289.9	113.0	3.1135 ug/L	3.1135 ppb	08:58:05
3	V 292.402†	-1405.9	-46.9	-0.2917 ug/L	-0.2917 ppb	08:58:05
3	Zn 213.857†	837.0	214.7	1.8749 ug/L	1.8749 ppb	08:58:25
3	SiO2†	586.3	118.6	7.4719 ug/L	7.4719 ppb	08:58:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902534.2	100.14	%	0.189				0.19%
Sc Radial	5796.9	99.2	%	0.78				0.79%
Y 371.029	752756.4	100.22	%	0.171				0.17%
Y RADIAL	6226.8	99.03	%	0.732				0.74%
Ag 328.068†	64.5	0.2879	ug/L	0.04497	0.2879	ppb	0.04497	15.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.5	-3.2049	ug/L	7.82294	-3.2049	ppb	7.82294	244.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	33.4	13.202	ug/L	2.8916	13.202	ppb	2.8916	21.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	803.2	16.846	ug/L	0.8218	16.846	ppb	0.8218	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.0899	ug/L	0.13323	0.0899	ppb	0.13323	148.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.8	0.0566	ug/L	0.02416	0.0566	ppb	0.02416	42.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9625	ug/L	2.62598	4.9625	ppb	2.62598	52.92%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              43.0      0.4554 ug/L       0.04576      0.4554 ppb        0.04576  10.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -6.9     -0.1275 ug/L       0.07277     -0.1275 ppb        0.07277  57.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               9.3      0.0961 ug/L       0.08574      0.0961 ppb        0.08574  89.25%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             111.8      0.3197 ug/L       0.14300      0.3197 ppb        0.14300  44.74%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.3     -2.9527 ug/L      15.32419     -2.9527 ppb       15.32419 518.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        778.7      138.07 ug/L         7.683      138.07 ppb          7.683   5.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.5      17.309 ug/L       31.9168      17.309 ppb        31.9168 184.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              37.0      0.0389 ug/L       0.03368      0.0389 ppb        0.03368  86.60%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              16.4      1.0409 ug/L       0.39988      1.0409 ppb        0.39988  38.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       137.6      46.184 ug/L        3.0177      46.184 ppb         3.0177   6.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               9.4      0.2186 ug/L       0.12512      0.2186 ppb        0.12512  57.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.6     -4.4366 ug/L       1.76250     -4.4366 ppb        1.76250  39.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              18.7      2.1198 ug/L       0.83315      2.1198 ppb        0.83315  39.30%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.4     -2.0290 ug/L       5.27591     -2.0290 ppb        5.27591 260.03%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              23.2      7.4014 ug/L       2.21472      7.4014 ppb        2.21472  29.92%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.5      2.6127 ug/L       4.25448      2.6127 ppb        4.25448 162.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             144.4      4.2527 ug/L       0.28511      4.2527 ppb        0.28511   6.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              10.8      1.7765 ug/L       0.41326      1.7765 ppb        0.41326  23.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.9      0.1177 ug/L       0.13614      0.1177 ppb        0.13614 115.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              39.8      0.0622 ug/L       0.14773      0.0622 ppb        0.14773 237.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.2      1.1779 ug/L       1.91799      1.1779 ppb        1.91799 162.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               131.5      3.6238 ug/L       2.14410      3.6238 ppb        2.14410  59.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -10.0     -0.0436 ug/L       0.46154     -0.0436 ppb        0.46154 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              216.2      1.8865 ug/L       0.12801      1.8865 ppb        0.12801   6.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    109.1      6.8470 ug/L       0.60978      6.8470 ppb        0.60978   8.91%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Analysis Begun

Start Time: 12/8/2009 09:04:46 **Plasma On Time:** 12/7/2009 05:17:52
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved:** 12/8/2009 07:33:15
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location:** 37
Sample ID: LR1 **Date Collected:** 12/8/2009 09:04:47
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5674.8	5674.8	97.1	%			09:06:40
1	Y RADIAL	6109.0	6109.0	97.16	%			09:06:40
1	Al 396.153Radial†	-44.6	-25.5	-16.605	ug/L	-16.605	ppb	09:06:40

1	Ca 317.933Radial†	48.4	34.2	50.475 ug/L	50.475 ppb	09:07:00
1	Fe 238.204 Radial†	39249.2	40411.8	378330 ug/L	378330 ppb	09:06:40
1	K 766.490 Radial†	2474.7	196.7	47.290 ug/L	47.290 ppb	09:06:40
1	Mg 279.077 IEC†	8.2	7.2	-68.508 ug/L	-68.508 ppb	09:07:00
1	Na 589.592 Radial†	-982.9	75.8	25.423 ug/L	25.423 ppb	09:06:40
1	Sr 421.552†	73.8	103.4	0.6433 ug/L	0.6433 ppb	09:06:40
1	Sc 361.383	897521.6	897521.6	99.585 %		09:07:58
1	Y 371.029	739294.0	739294.0	98.430 %		09:07:58
1	Ag 328.068†	-25481.6	-25880.6	3.3525 ug/L	3.3525 ppb	09:07:58
1	As 188.979†	-214.5	-191.2	-17.133 ug/L	-17.133 ppb	09:08:18
1	B 249.677†	2487.7	3028.7	13.314 ug/L	13.314 ppb	09:07:58
1	Ba 233.527†	-1770.5	-1769.5	1.0427 ug/L	1.0427 ppb	09:07:58
1	Be 313.107†	-4846.7	246.1	0.0894 ug/L	0.0894 ppb	09:07:58
1	Cd 226.502†	3574.9	3784.9	2.1903 ug/L	2.1903 ppb	09:07:58
1	Co 228.616†	211.8	278.1	-0.1855 ug/L	-0.1855 ppb	09:08:18
1	Cr 267.716†	-619.6	-700.8	-0.5095 ug/L	-0.5095 ppb	09:07:58
1	Cu 324.752†	21.2	-6735.4	0.0244 ug/L	0.0244 ppb	09:07:58
1	Mn 257.610†	-37238.4	-37815.9	-2.6165 ug/L	-2.6165 ppb	09:07:58
1	Mo 202.031†	-382.7	-402.6	1.2600 ug/L	1.2600 ppb	09:07:58
1	Ni 231.604†	208.3	122.6	2.8363 ug/L	2.8363 ppb	09:08:18
1	P 214.914†	753.0	532.6	5.1179 ug/L	5.1179 ppb	09:08:18
1	Pb 220.353†	220.4	289.7	1.6461 ug/L	1.6461 ppb	09:08:18
1	S 181.975 Axial†	53.1	11.7	16.442 ug/L	16.442 ppb	09:08:18
1	Sb 206.836†	31.2	-3.0	4.8987 ug/L	4.8987 ppb	09:08:18
1	Se 196.026†	-2121.3	-2101.3	-23.019 ug/L	-23.019 ppb	09:08:18
1	Si 251.611†	-704.3	-1156.9	-34.181 ug/L	-34.181 ppb	09:07:58
1	Sn 189.927†	-28.8	-33.9	-0.4826 ug/L	-0.4826 ppb	09:08:18
1	Ti 334.940†	-1214.7	-104.8	-0.1851 ug/L	-0.1851 ppb	09:07:58
1	Tl 190.801†	-43.3	-10.9	-3.4531 ug/L	-3.4531 ppb	09:08:18
1	U 409.014†	-505.7	1894.0	4.5915 ug/L	4.5915 ppb	09:07:58
1	V 292.402†	7050.4	8438.2	-2.0700 ug/L	-2.0700 ppb	09:07:58
1	Zn 213.857†	4885.8	4284.4	1.3044 ug/L	1.3044 ppb	09:08:18
1	SiO2†	-783.5	-1254.3	-79.480 ug/L	-79.480 ppb	09:09:15
2	Sc Radial	5859.6	5859.6	100 %		09:07:05
2	Y RADIAL	6268.0	6268.0	99.69 %		09:07:05
2	Al 396.153Radial†	-53.2	-32.6	-21.569 ug/L	-21.569 ppb	09:07:05
2	Ca 317.933Radial†	51.5	35.8	52.701 ug/L	52.701 ppb	09:07:25
2	Fe 238.204 Radial†	39706.4	39593.5	370670 ug/L	370670 ppb	09:07:05
2	K 766.490 Radial†	2416.7	58.5	22.531 ug/L	22.531 ppb	09:07:05
2	Mg 279.077 IEC†	7.2	6.0	-104.83 ug/L	-104.83 ppb	09:07:25
2	Na 589.592 Radial†	-981.9	108.7	36.480 ug/L	36.480 ppb	09:07:05
2	Sr 421.552†	69.0	96.2	0.5986 ug/L	0.5986 ppb	09:07:05
2	Sc 361.383	892276.6	892276.6	99.003 %		09:08:24
2	Y 371.029	734022.9	734022.9	97.728 %		09:08:24
2	Ag 328.068†	-25591.8	-26142.3	-0.2725 ug/L	-0.2725 ppb	09:08:24
2	As 188.979†	-212.9	-190.9	-18.162 ug/L	-18.162 ppb	09:08:44
2	B 249.677†	2371.1	2925.6	12.168 ug/L	12.168 ppb	09:08:24
2	Ba 233.527†	-1757.7	-1767.0	0.7774 ug/L	0.7774 ppb	09:08:24
2	Be 313.107†	-4974.3	88.6	0.0322 ug/L	0.0322 ppb	09:08:24
2	Cd 226.502†	3528.9	3759.6	2.6878 ug/L	2.6878 ppb	09:08:24
2	Co 228.616†	210.9	278.5	-0.0703 ug/L	-0.0703 ppb	09:08:44
2	Cr 267.716†	-604.4	-689.1	-0.5247 ug/L	-0.5247 ppb	09:08:24
2	Cu 324.752†	24.9	-6731.6	-0.3556 ug/L	-0.3556 ppb	09:08:24
2	Mn 257.610†	-37010.4	-37805.5	-3.3686 ug/L	-3.3686 ppb	09:08:24
2	Mo 202.031†	-385.1	-407.3	0.4165 ug/L	0.4165 ppb	09:08:24
2	Ni 231.604†	185.1	100.5	2.3228 ug/L	2.3228 ppb	09:08:44
2	P 214.914†	738.7	522.7	5.5558 ug/L	5.5558 ppb	09:08:44
2	Pb 220.353†	220.1	290.8	2.3945 ug/L	2.3945 ppb	09:08:44
2	S 181.975 Axial†	57.0	16.0	22.396 ug/L	22.396 ppb	09:08:44
2	Sb 206.836†	24.3	-9.7	2.6260 ug/L	2.6260 ppb	09:08:44
2	Se 196.026†	-2108.8	-2101.2	-47.131 ug/L	-47.131 ppb	09:08:44
2	Si 251.611†	-790.8	-1248.4	-36.906 ug/L	-36.906 ppb	09:08:24
2	Sn 189.927†	-30.1	-35.3	-0.8273 ug/L	-0.8273 ppb	09:08:44
2	Ti 334.940†	-1122.8	-19.2	-0.0494 ug/L	-0.0494 ppb	09:08:24
2	Tl 190.801†	-38.2	-6.0	-2.0739 ug/L	-2.0739 ppb	09:08:44
2	U 409.014†	-422.2	1975.4	7.7953 ug/L	7.7953 ppb	09:08:24
2	V 292.402†	7016.4	8445.5	-0.8577 ug/L	-0.8577 ppb	09:08:24
2	Zn 213.857†	4882.3	4309.7	2.2615 ug/L	2.2615 ppb	09:08:44
2	SiO2†	-749.4	-1224.4	-77.532 ug/L	-77.532 ppb	09:09:20
3	Sc Radial	5765.3	5765.3	98.7 %		09:07:30
3	Y RADIAL	6199.1	6199.1	98.59 %		09:07:30

3	Al 396.153Radial†	-80.6	-61.3	-41.455 ug/L	-41.455 ppb	09:07:30
3	Ca 317.933Radial†	48.2	33.3	49.051 ug/L	49.051 ppb	09:07:50
3	Fe 238.204 Radial†	39281.5	39810.2	372700 ug/L	372700 ppb	09:07:30
3	K 766.490 Radial†	2355.2	35.6	18.540 ug/L	18.540 ppb	09:07:30
3	Mg 279.077 IEC†	13.9	12.9	136.09 ug/L	136.09 ppb	09:07:50
3	Na 589.592 Radial†	-1033.0	40.9	13.709 ug/L	13.709 ppb	09:07:30
3	Sr 421.552†	60.1	88.3	0.5492 ug/L	0.5492 ppb	09:07:30
3	Sc 361.383	894183.3	894183.3	99.214 %		09:08:50
3	Y 371.029	735495.5	735495.5	97.925 %		09:08:50
3	Ag 328.068†	-25540.2	-26035.2	0.8586 ug/L	0.8586 ppb	09:08:50
3	As 188.979†	-218.4	-195.9	-19.849 ug/L	-19.849 ppb	09:09:10
3	B 249.677†	2406.5	2956.3	12.542 ug/L	12.542 ppb	09:08:50
3	Ba 233.527†	-1710.9	-1716.0	1.2281 ug/L	1.2281 ppb	09:08:50
3	Be 313.107†	-4932.6	141.3	0.0513 ug/L	0.0513 ppb	09:08:50
3	Cd 226.502†	3569.6	3793.0	2.8380 ug/L	2.8380 ppb	09:08:50
3	Co 228.616†	200.3	267.3	-0.3114 ug/L	-0.3114 ppb	09:09:10
3	Cr 267.716†	-627.3	-710.9	-0.7171 ug/L	-0.7171 ppb	09:08:50
3	Cu 324.752†	-29.6	-6786.5	-0.4093 ug/L	-0.4093 ppb	09:08:50
3	Mn 257.610†	-37288.3	-38005.9	-3.3844 ug/L	-3.3844 ppb	09:08:50
3	Mo 202.031†	-394.6	-416.1	0.0069 ug/L	0.0069 ppb	09:08:50
3	Ni 231.604†	174.2	89.0	2.0577 ug/L	2.0577 ppb	09:09:10
3	P 214.914†	751.9	534.3	10.658 ug/L	10.658 ppb	09:09:10
3	Pb 220.353†	253.9	324.4	6.0178 ug/L	6.0178 ppb	09:09:10
3	S 181.975 Axial†	58.5	17.4	24.396 ug/L	24.396 ppb	09:09:10
3	Sb 206.836†	22.0	-12.1	1.9004 ug/L	1.9004 ppb	09:09:10
3	Se 196.026†	-2099.6	-2087.5	-32.776 ug/L	-32.776 ppb	09:09:10
3	Si 251.611†	-792.9	-1248.9	-36.910 ug/L	-36.910 ppb	09:08:50
3	Sn 189.927†	-27.3	-32.5	-0.3349 ug/L	-0.3349 ppb	09:09:10
3	Ti 334.940†	-1172.2	-66.6	-0.1230 ug/L	-0.1230 ppb	09:08:50
3	Tl 190.801†	-37.5	-5.3	-1.8614 ug/L	-1.8614 ppb	09:09:10
3	U 409.014†	-595.4	1801.7	2.7559 ug/L	2.7559 ppb	09:08:50
3	V 292.402†	6887.9	8300.8	-2.1334 ug/L	-2.1334 ppb	09:08:50
3	Zn 213.857†	4888.1	4305.0	2.0203 ug/L	2.0203 ppb	09:09:10
3	SiO2†	-772.8	-1246.4	-78.924 ug/L	-78.924 ppb	09:09:25

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894660.5	99.267	%	0.2946				0.30%
Sc Radial	5766.6	98.7	%	1.58				1.60%
Y 371.029	736270.8	98.028	%	0.3621				0.37%
Y RADIAL	6192.0	98.48	%	1.269				1.29%
Ag 328.068†	-26019.4	1.3128	ug/L	1.85472	1.3128	ppb	1.85472	141.28%
Al 396.153Radial†	-39.8	-26.543	ug/L	13.1508	-26.543	ppb	13.1508	49.55%
As 188.979†	-192.7	-18.381	ug/L	1.3714	-18.381	ppb	1.3714	7.46%
B 249.677†	2970.2	12.675	ug/L	0.5842	12.675	ppb	0.5842	4.61%
Ba 233.527†	-1750.8	1.0161	ug/L	0.22652	1.0161	ppb	0.22652	22.29%
Be 313.107†	158.7	0.0576	ug/L	0.02910	0.0576	ppb	0.02910	50.48%
Ca 317.933Radial†	34.4	50.742	ug/L	1.8397	50.742	ppb	1.8397	3.63%
Cd 226.502†	3779.2	2.5720	ug/L	0.33898	2.5720	ppb	0.33898	13.18%
Co 228.616†	274.6	-0.1891	ug/L	0.12058	-0.1891	ppb	0.12058	63.77%
Cr 267.716†	-700.3	-0.5838	ug/L	0.11570	-0.5838	ppb	0.11570	19.82%
Cu 324.752†	-6751.2	-0.2468	ug/L	0.23640	-0.2468	ppb	0.23640	95.77%
Fe 238.204 Radial†	39938.5	373900	ug/L	3969.2	373900	ppb	3969.2	1.06%
K 766.490 Radial†	97.0	29.454	ug/L	15.5752	29.454	ppb	15.5752	52.88%
Mg 279.077 IEC†	8.7	-12.417	ug/L	129.8883	-12.417	ppb	129.8883	>999.9%
Mn 257.610†	-37875.8	-3.1232	ug/L	0.43887	-3.1232	ppb	0.43887	14.05%
Mo 202.031†	-408.7	0.5611	ug/L	0.63894	0.5611	ppb	0.63894	113.87%
Na 589.592 Radial†	75.1	25.204	ug/L	11.3872	25.204	ppb	11.3872	45.18%
Ni 231.604†	104.0	2.4056	ug/L	0.39584	2.4056	ppb	0.39584	16.45%
P 214.914†	529.9	7.1105	ug/L	3.07985	7.1105	ppb	3.07985	43.31%
Pb 220.353†	301.6	3.3528	ug/L	2.33809	3.3528	ppb	2.33809	69.74%
S 181.975 Axial†	15.0	21.078	ug/L	4.1374	21.078	ppb	4.1374	19.63%
Sb 206.836†	-8.2	3.1417	ug/L	1.56424	3.1417	ppb	1.56424	49.79%
Se 196.026†	-2096.7	-34.309	ug/L	12.1289	-34.309	ppb	12.1289	35.35%
Si 251.611†	-1218.1	-35.999	ug/L	1.5747	-35.999	ppb	1.5747	4.37%
Sn 189.927†	-33.9	-0.5483	ug/L	0.25266	-0.5483	ppb	0.25266	46.08%
Sr 421.552†	95.9	0.5970	ug/L	0.04707	0.5970	ppb	0.04707	7.88%
Ti 334.940†	-63.5	-0.1192	ug/L	0.06791	-0.1192	ppb	0.06791	56.99%
Tl 190.801†	-7.4	-2.4628	ug/L	0.86420	-2.4628	ppb	0.86420	35.09%

U 409.014†	1890.4	5.0475	ug/L	2.55046	5.0475	ppb	2.55046	50.53%
V 292.402†	8394.8	-1.6870	ug/L	0.71891	-1.6870	ppb	0.71891	42.61%
Zn 213.857†	4299.7	1.8621	ug/L	0.49779	1.8621	ppb	0.49779	26.73%
SiO2†	-1241.7	-78.646	ug/L	1.0035	-78.646	ppb	1.0035	1.28%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5760.8	5760.8	98.6	%			09:13:29
1	Y RADIAL	6116.4	6116.4	97.27	%			09:13:29
1	Al 396.153Radial†	7034.5	7156.4	4950.1	ug/L	4950.1	ppb	09:13:29
1	Ca 317.933Radial†	3364.6	3397.5	5007.8	ug/L	5007.8	ppb	09:13:49
1	Fe 238.204 Radial†	538.1	539.0	5061.5	ug/L	5061.5	ppb	09:13:49
1	K 766.490 Radial†	31007.5	29103.4	5152.6	ug/L	5152.6	ppb	09:13:29
1	Mg 279.077 IEC†	150.9	151.9	5364.4	ug/L	5364.4	ppb	09:13:49
1	Na 589.592 Radial†	26896.4	28372.6	9521.3	ug/L	9521.3	ppb	09:13:29
1	Sr 421.552†	79592.9	80769.1	502.96	ug/L	502.96	ppb	09:13:29
1	Sc 361.383	922734.0	922734.0	102.38	%			09:14:46
1	Y 371.029	754063.7	754063.7	100.40	%			09:14:46
1	Ag 328.068†	110965.4	108090.8	492.60	ug/L	492.60	ppb	09:14:51
1	As 188.979†	1231.3	1226.8	489.06	ug/L	489.06	ppb	09:15:12
1	B 249.677†	22929.7	22926.9	478.90	ug/L	478.90	ppb	09:14:51
1	Ba 233.527†	66920.1	65371.5	485.75	ug/L	485.75	ppb	09:14:51
1	Be 313.107†	1375184.7	1348300.4	492.42	ug/L	492.42	ppb	09:14:46
1	Cd 226.502†	46992.1	46093.8	487.09	ug/L	487.09	ppb	09:14:51
1	Co 228.616†	26129.9	25587.3	485.77	ug/L	485.77	ppb	09:14:51
1	Cr 267.716†	47317.9	46138.3	485.11	ug/L	485.11	ppb	09:14:51
1	Cu 324.752†	177843.4	166948.7	478.02	ug/L	478.02	ppb	09:14:51
1	Mn 257.610†	471345.6	459956.2	491.06	ug/L	491.06	ppb	09:14:46
1	Mo 202.031†	7882.8	7681.1	488.31	ug/L	488.31	ppb	09:15:12
1	Ni 231.604†	21715.5	21123.7	488.84	ug/L	488.84	ppb	09:14:51
1	P 214.914†	4481.1	4153.3	2323.1	ug/L	2323.1	ppb	09:15:12
1	Pb 220.353†	4313.2	4281.3	485.50	ug/L	485.50	ppb	09:15:12
1	S 181.975 Axial†	757.5	698.3	977.50	ug/L	977.50	ppb	09:15:12
1	Sb 206.836†	1596.8	1525.4	489.90	ug/L	489.90	ppb	09:15:12
1	Se 196.026†	838.3	847.6	508.44	ug/L	508.44	ppb	09:15:12
1	Si 251.611†	83061.3	80679.0	2403.4	ug/L	2403.4	ppb	09:14:51
1	Sn 189.927†	3071.2	2994.7	490.93	ug/L	490.93	ppb	09:15:12
1	Ti 334.940†	312506.5	306350.1	488.75	ug/L	488.75	ppb	09:14:51
1	Tl 190.801†	1729.6	1721.8	485.42	ug/L	485.42	ppb	09:15:12
1	U 409.014†	15419.3	17462.3	479.47	ug/L	479.47	ppb	09:14:51
1	V 292.402†	73201.8	72857.0	487.74	ug/L	487.74	ppb	09:14:51
1	Zn 213.857†	57549.1	55588.2	481.28	ug/L	481.28	ppb	09:14:51
1	SiO2†	83836.2	81418.0	5197.2	ug/L	5197.2	ppb	09:16:19
2	Sc Radial	5745.5	5745.5	98.3	%			09:13:54
2	Y RADIAL	6192.6	6192.6	98.49	%			09:13:54
2	Al 396.153Radial†	7003.1	7143.6	4941.1	ug/L	4941.1	ppb	09:13:54
2	Ca 317.933Radial†	3363.9	3406.0	5020.2	ug/L	5020.2	ppb	09:14:14
2	Fe 238.204 Radial†	533.2	535.5	5028.9	ug/L	5028.9	ppb	09:14:14
2	K 766.490 Radial†	30739.7	28914.8	5119.2	ug/L	5119.2	ppb	09:13:54
2	Mg 279.077 IEC†	147.9	149.3	5273.6	ug/L	5273.6	ppb	09:14:14
2	Na 589.592 Radial†	26537.9	28080.6	9423.3	ug/L	9423.3	ppb	09:13:54
2	Sr 421.552†	78795.9	80173.6	499.25	ug/L	499.25	ppb	09:13:54
2	Sc 361.383	918645.3	918645.3	101.93	%			09:15:17
2	Y 371.029	749404.0	749404.0	99.776	%			09:15:17
2	Ag 328.068†	111114.6	108719.5	495.44	ug/L	495.44	ppb	09:15:22
2	As 188.979†	1241.3	1241.9	495.05	ug/L	495.05	ppb	09:15:43
2	B 249.677†	22912.8	23009.9	480.64	ug/L	480.64	ppb	09:15:22
2	Ba 233.527†	66956.5	65698.1	488.17	ug/L	488.17	ppb	09:15:22
2	Be 313.107†	1358622.3	1338029.7	488.68	ug/L	488.68	ppb	09:15:17
2	Cd 226.502†	46897.3	46205.1	488.27	ug/L	488.27	ppb	09:15:22
2	Co 228.616†	26185.9	25755.9	488.97	ug/L	488.97	ppb	09:15:22
2	Cr 267.716†	47298.1	46324.5	487.07	ug/L	487.07	ppb	09:15:22
2	Cu 324.752†	178329.4	168198.6	481.59	ug/L	481.59	ppb	09:15:22
2	Mn 257.610†	468894.0	459600.0	490.68	ug/L	490.68	ppb	09:15:17
2	Mo 202.031†	7898.2	7730.5	491.44	ug/L	491.44	ppb	09:15:43
2	Ni 231.604†	21658.2	21161.9	489.72	ug/L	489.72	ppb	09:15:22

2	P 214.914†	4481.9	4173.6	2334.2 ug/L	2334.2 ppb	09:15:43
2	Pb 220.353†	4305.7	4292.7	486.80 ug/L	486.80 ppb	09:15:43
2	S 181.975 Axial†	742.6	687.0	961.68 ug/L	961.68 ppb	09:15:43
2	Sb 206.836†	1611.4	1546.7	496.65 ug/L	496.65 ppb	09:15:43
2	Se 196.026†	816.5	829.9	498.09 ug/L	498.09 ppb	09:15:43
2	Si 251.611†	83451.2	81422.6	2425.7 ug/L	2425.7 ppb	09:15:22
2	Sn 189.927†	3064.3	3001.3	492.00 ug/L	492.00 ppb	09:15:43
2	Ti 334.940†	313467.9	308651.9	492.42 ug/L	492.42 ppb	09:15:22
2	Tl 190.801†	1733.8	1733.5	488.68 ug/L	488.68 ppb	09:15:43
2	U 409.014†	15637.9	17743.9	487.22 ug/L	487.22 ppb	09:15:22
2	V 292.402†	73233.5	73206.2	490.11 ug/L	490.11 ppb	09:15:22
2	Zn 213.857†	57577.9	55866.6	483.71 ug/L	483.71 ppb	09:15:22
2	SiO2†	84539.8	82472.9	5264.8 ug/L	5264.8 ppb	09:16:24
3	Sc Radial	5870.9	5870.9	100 %		09:14:19
3	Y RADIAL	6265.4	6265.4	99.64 %		09:14:19
3	Al 396.153Radial†	7091.8	7079.6	4896.6 ug/L	4896.6 ppb	09:14:19
3	Ca 317.933Radial†	3390.8	3359.6	4951.9 ug/L	4951.9 ppb	09:14:39
3	Fe 238.204 Radial†	544.0	534.7	5021.2 ug/L	5021.2 ppb	09:14:39
3	K 766.490 Radial†	31070.1	28575.4	5059.1 ug/L	5059.1 ppb	09:14:19
3	Mg 279.077 IEC†	148.1	146.3	5165.6 ug/L	5165.6 ppb	09:14:39
3	Na 589.592 Radial†	26868.9	27833.2	9340.3 ug/L	9340.3 ppb	09:14:19
3	Sr 421.552†	79717.2	79377.6	494.30 ug/L	494.30 ppb	09:14:19
3	Sc 361.383	925667.8	925667.8	102.71 %		09:15:48
3	Y 371.029	756709.0	756709.0	100.75 %		09:15:48
3	Ag 328.068†	111245.2	108019.7	492.26 ug/L	492.26 ppb	09:15:53
3	As 188.979†	1236.1	1227.6	489.36 ug/L	489.36 ppb	09:16:14
3	B 249.677†	23103.8	23025.4	480.97 ug/L	480.97 ppb	09:15:53
3	Ba 233.527†	66683.4	64933.9	482.50 ug/L	482.50 ppb	09:15:53
3	Be 313.107†	1368635.9	1337667.3	488.54 ug/L	488.54 ppb	09:15:48
3	Cd 226.502†	46751.6	45714.1	483.07 ug/L	483.07 ppb	09:15:53
3	Co 228.616†	26093.7	25471.2	483.57 ug/L	483.57 ppb	09:15:53
3	Cr 267.716†	47245.6	45921.4	482.83 ug/L	482.83 ppb	09:15:53
3	Cu 324.752†	179081.9	167604.0	479.89 ug/L	479.89 ppb	09:15:53
3	Mn 257.610†	469661.4	456857.3	487.75 ug/L	487.75 ppb	09:15:48
3	Mo 202.031†	7946.8	7719.0	490.71 ug/L	490.71 ppb	09:16:14
3	Ni 231.604†	21620.0	20963.5	485.13 ug/L	485.13 ppb	09:15:53
3	P 214.914†	4497.4	4155.4	2324.0 ug/L	2324.0 ppb	09:16:14
3	Pb 220.353†	4343.4	4297.4	487.32 ug/L	487.32 ppb	09:16:14
3	S 181.975 Axial†	765.5	703.7	985.12 ug/L	985.12 ppb	09:16:14
3	Sb 206.836†	1633.4	1556.1	499.75 ug/L	499.75 ppb	09:16:14
3	Se 196.026†	833.8	840.6	504.26 ug/L	504.26 ppb	09:16:14
3	Si 251.611†	83304.0	80658.2	2402.8 ug/L	2402.8 ppb	09:15:53
3	Sn 189.927†	3097.9	3011.3	493.62 ug/L	493.62 ppb	09:16:14
3	Ti 334.940†	313165.7	306024.6	488.23 ug/L	488.23 ppb	09:15:53
3	Tl 190.801†	1748.1	1734.5	488.96 ug/L	488.96 ppb	09:16:14
3	U 409.014†	15443.1	17437.8	478.80 ug/L	478.80 ppb	09:15:53
3	V 292.402†	73192.0	72620.7	486.22 ug/L	486.22 ppb	09:15:53
3	Zn 213.857†	57567.6	55428.1	479.91 ug/L	479.91 ppb	09:15:53
3	SiO2†	83513.2	80844.1	5160.3 ug/L	5160.3 ppb	09:16:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922349.0	102.34	%	0.391				0.38%
Sc Radial	5792.4	99.1	%	1.17				1.18%
Y 371.029	753392.2	100.31	%	0.492				0.49%
Y RADIAL	6191.5	98.47	%	1.186				1.20%
Ag 328.068†	108276.7	493.43	ug/L	1.746	493.43	ppb	1.746	0.35%
QC value within limits for Ag 328.068 Recovery = 98.69%								
Al 396.153Radial†	7126.5	4929.3	ug/L	28.62	4929.3	ppb	28.62	0.58%
QC value within limits for Al 396.153Radial Recovery = 98.59%								
As 188.979†	1232.1	491.16	ug/L	3.377	491.16	ppb	3.377	0.69%
QC value within limits for As 188.979 Recovery = 98.23%								
B 249.677†	22987.4	480.17	ug/L	1.114	480.17	ppb	1.114	0.23%
QC value within limits for B 249.677 Recovery = 96.03%								
Ba 233.527†	65334.5	485.48	ug/L	2.846	485.48	ppb	2.846	0.59%
QC value within limits for Ba 233.527 Recovery = 97.10%								
Be 313.107†	1341332.5	489.88	ug/L	2.199	489.88	ppb	2.199	0.45%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	3387.7	4993.3	ug/L	36.39	4993.3	ppb	36.39	0.73%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.87%
Cd 226.502†            46004.4      486.14 ug/L         2.722      486.14 ppb          2.722   0.56%
   QC value within limits for Cd 226.502  Recovery = 97.23%
Co 228.616†            25604.8      486.10 ug/L         2.713      486.10 ppb          2.713   0.56%
   QC value within limits for Co 228.616  Recovery = 97.22%
Cr 267.716†            46128.1      485.01 ug/L         2.120      485.01 ppb          2.120   0.44%
   QC value within limits for Cr 267.716  Recovery = 97.00%
Cu 324.752†           167583.8      479.83 ug/L         1.788      479.83 ppb          1.788   0.37%
   QC value within limits for Cu 324.752  Recovery = 95.97%
Fe 238.204 Radial†       536.4      5037.2 ug/L        21.40      5037.2 ppb         21.40   0.42%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      28864.5      5110.3 ug/L        47.39      5110.3 ppb         47.39   0.93%
   QC value within limits for K 766.490 Radial  Recovery = 102.21%
Mg 279.077 IEC†          149.2      5267.9 ug/L        99.54      5267.9 ppb         99.54   1.89%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.36%
Mn 257.610†           458804.5      489.83 ug/L         1.809      489.83 ppb          1.809   0.37%
   QC value within limits for Mn 257.610  Recovery = 97.97%
Mo 202.031†             7710.2      490.15 ug/L         1.640      490.15 ppb          1.640   0.33%
   QC value within limits for Mo 202.031  Recovery = 98.03%
Na 589.592 Radial†     28095.5      9428.3 ug/L        90.60      9428.3 ppb         90.60   0.96%
   QC value within limits for Na 589.592 Radial  Recovery = 94.28%
Ni 231.604†            21083.0      487.90 ug/L         2.436      487.90 ppb          2.436   0.50%
   QC value within limits for Ni 231.604  Recovery = 97.58%
P 214.914†              4160.8      2327.1 ug/L         6.18      2327.1 ppb          6.18   0.27%
   QC value within limits for P 214.914  Recovery = 93.08%
Pb 220.353†             4290.5      486.54 ug/L         0.936      486.54 ppb          0.936   0.19%
   QC value within limits for Pb 220.353  Recovery = 97.31%
S 181.975 Axial†         696.3      974.77 ug/L        11.960      974.77 ppb         11.960   1.23%
   QC value within limits for S 181.975 Axial  Recovery = 97.48%
Sb 206.836†             1542.7      495.43 ug/L         5.037      495.43 ppb          5.037   1.02%
   QC value within limits for Sb 206.836  Recovery = 99.09%
Se 196.026†              839.4      503.59 ug/L         5.207      503.59 ppb          5.207   1.03%
   QC value within limits for Se 196.026  Recovery = 100.72%
Si 251.611†            80919.9      2410.6 ug/L        13.01      2410.6 ppb         13.01   0.54%
   QC value within limits for Si 251.611  Recovery = 96.43%
Sn 189.927†             3002.4      492.18 ug/L         1.357      492.18 ppb          1.357   0.28%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            80106.8      498.84 ug/L         4.348      498.84 ppb          4.348   0.87%
   QC value within limits for Sr 421.552  Recovery = 99.77%
Ti 334.940†           307008.9      489.80 ug/L         2.284      489.80 ppb          2.284   0.47%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†             1729.9      487.69 ug/L         1.971      487.69 ppb          1.971   0.40%
   QC value within limits for Tl 190.801  Recovery = 97.54%
U 409.014†             17548.0      481.83 ug/L         4.683      481.83 ppb          4.683   0.97%
   QC value within limits for U 409.014  Recovery = 96.37%
V 292.402†             72894.6      488.02 ug/L         1.960      488.02 ppb          1.960   0.40%
   QC value within limits for V 292.402  Recovery = 97.60%
Zn 213.857†            55627.6      481.63 ug/L         1.922      481.63 ppb          1.922   0.40%
   QC value within limits for Zn 213.857  Recovery = 96.33%
SiO2†                  81578.3      5207.4 ug/L        52.96      5207.4 ppb         52.96   1.02%
   QC value within limits for SiO2  Recovery = 97.38%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:18:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5673.3	5673.3	97.1	%			09:20:32
1	Y RADIAL	6094.3	6094.3	96.92	%			09:20:32
1	Al 396.153Radial†	-30.7	-11.2	-7.7882	ug/L	-7.7882	ppb	09:20:32
1	Ca 317.933Radial†	21.1	6.1	9.0265	ug/L	9.0265	ppb	09:20:52
1	Fe 238.204 Radial†	7.9	1.3	12.187	ug/L	12.187	ppb	09:20:52
1	K 766.490 Radial†	2609.3	336.1	59.601	ug/L	59.601	ppb	09:20:32
1	Mg 279.077 IEC†	2.8	1.7	61.423	ug/L	61.423	ppb	09:20:52
1	Na 589.592 Radial†	-1099.0	-44.1	-14.808	ug/L	-14.808	ppb	09:20:32
1	Sr 421.552†	0.7	28.1	0.1748	ug/L	0.1748	ppb	09:20:32
1	Sc 361.383	904057.2	904057.2	100.31	%			09:21:49
1	Y 371.029	754720.7	754720.7	100.48	%			09:21:49
1	Ag 328.068†	312.9	19.2	0.0919	ug/L	0.0919	ppb	09:21:49
1	As 188.979†	-23.0	1.2	0.4798	ug/L	0.4798	ppb	09:22:09
1	B 249.677†	-87.7	443.2	9.2934	ug/L	9.2934	ppb	09:22:09
1	Ba 233.527†	-11.7	-3.2	-0.0229	ug/L	-0.0229	ppb	09:22:09
1	Be 313.107†	-4874.0	254.1	0.0927	ug/L	0.0927	ppb	09:21:49
1	Cd 226.502†	-179.4	16.3	0.1714	ug/L	0.1714	ppb	09:22:09
1	Co 228.616†	-79.9	-14.3	-0.2709	ug/L	-0.2709	ppb	09:22:09
1	Cr 267.716†	68.7	-10.1	-0.1056	ug/L	-0.1056	ppb	09:22:09
1	Cu 324.752†	6725.9	-51.6	-0.1469	ug/L	-0.1469	ppb	09:21:49
1	Mn 257.610†	420.1	-3.5	-0.0036	ug/L	-0.0036	ppb	09:22:09
1	Mo 202.031†	18.8	0.4	0.0244	ug/L	0.0244	ppb	09:22:09
1	Ni 231.604†	113.9	27.0	0.6255	ug/L	0.6255	ppb	09:22:09
1	P 214.914†	226.0	1.7	1.0491	ug/L	1.0491	ppb	09:22:09
1	Pb 220.353†	-56.2	12.4	1.4025	ug/L	1.4025	ppb	09:22:09
1	S 181.975 Axial†	39.2	-2.5	-3.4623	ug/L	-3.4623	ppb	09:22:09
1	Sb 206.836†	40.8	6.4	2.0583	ug/L	2.0583	ppb	09:22:09
1	Se 196.026†	-27.6	1.3	0.7972	ug/L	0.7972	ppb	09:22:09
1	Si 251.611†	479.1	28.0	0.8114	ug/L	0.8114	ppb	09:22:09
1	Sn 189.927†	17.7	12.7	2.0783	ug/L	2.0783	ppb	09:22:09
1	Ti 334.940†	-1083.6	34.6	0.0561	ug/L	0.0561	ppb	09:21:49
1	Tl 190.801†	-28.5	4.1	1.1534	ug/L	1.1534	ppb	09:22:09
1	U 409.014†	-2434.0	-24.7	-0.6809	ug/L	-0.6809	ppb	09:21:49
1	V 292.402†	-1342.8	19.7	0.1285	ug/L	0.1285	ppb	09:21:49
1	Zn 213.857†	711.6	87.6	0.7583	ug/L	0.7583	ppb	09:22:09
1	SiO2†	526.8	57.7	3.6408	ug/L	3.6408	ppb	09:23:05
2	Sc Radial	5946.6	5946.6	102	%			09:20:57
2	Y RADIAL	6401.7	6401.7	101.8	%			09:20:57
2	Al 396.153Radial†	-7.9	12.7	8.7846	ug/L	8.7846	ppb	09:20:57
2	Ca 317.933Radial†	24.4	8.4	12.347	ug/L	12.347	ppb	09:21:17
2	Fe 238.204 Radial†	8.6	1.6	15.360	ug/L	15.360	ppb	09:21:17
2	K 766.490 Radial†	2552.1	156.3	27.714	ug/L	27.714	ppb	09:20:57
2	Mg 279.077 IEC†	0.8	-0.4	-14.689	ug/L	-14.689	ppb	09:21:17
2	Na 589.592 Radial†	-1075.1	31.4	10.531	ug/L	10.531	ppb	09:20:57
2	Sr 421.552†	-38.2	-10.2	-0.0635	ug/L	-0.0635	ppb	09:20:57
2	Sc 361.383	913109.6	913109.6	101.31	%			09:22:14
2	Y 371.029	762217.3	762217.3	101.48	%			09:22:14
2	Ag 328.068†	373.3	75.7	0.3473	ug/L	0.3473	ppb	09:22:14
2	As 188.979†	-22.0	2.5	0.9795	ug/L	0.9795	ppb	09:22:34
2	B 249.677†	-143.7	388.9	8.1531	ug/L	8.1531	ppb	09:22:34
2	Ba 233.527†	-8.4	0.2	0.0033	ug/L	0.0033	ppb	09:22:34
2	Be 313.107†	-4965.6	211.8	0.0770	ug/L	0.0770	ppb	09:22:14
2	Cd 226.502†	-173.3	24.0	0.2526	ug/L	0.2526	ppb	09:22:34
2	Co 228.616†	-67.4	-1.1	-0.0193	ug/L	-0.0193	ppb	09:22:34
2	Cr 267.716†	75.4	-4.2	-0.0439	ug/L	-0.0439	ppb	09:22:34
2	Cu 324.752†	6711.1	-132.7	-0.3789	ug/L	-0.3789	ppb	09:22:14
2	Mn 257.610†	437.1	9.1	0.0115	ug/L	0.0115	ppb	09:22:34
2	Mo 202.031†	27.1	8.4	0.5349	ug/L	0.5349	ppb	09:22:34
2	Ni 231.604†	93.1	5.4	0.1242	ug/L	0.1242	ppb	09:22:34

2	P 214.914†	209.0	-17.2	-9.8660 ug/L	-9.8660 ppb	09:22:34
2	Pb 220.353†	-64.7	4.6	0.5214 ug/L	0.5214 ppb	09:22:34
2	S 181.975 Axial†	41.5	-0.6	-0.8812 ug/L	-0.8812 ppb	09:22:34
2	Sb 206.836†	44.6	9.8	3.1149 ug/L	3.1149 ppb	09:22:34
2	Se 196.026†	-31.9	-2.7	-1.4810 ug/L	-1.4810 ppb	09:22:34
2	Si 251.611†	482.1	26.2	0.7650 ug/L	0.7650 ppb	09:22:34
2	Sn 189.927†	8.0	2.9	0.4693 ug/L	0.4693 ppb	09:22:34
2	Ti 334.940†	-1207.0	-76.4	-0.1226 ug/L	-0.1226 ppb	09:22:14
2	Tl 190.801†	-28.9	4.0	1.1274 ug/L	1.1274 ppb	09:22:34
2	U 409.014†	-2327.4	104.7	2.8810 ug/L	2.8810 ppb	09:22:14
2	V 292.402†	-1294.0	81.1	0.5465 ug/L	0.5465 ppb	09:22:14
2	Zn 213.857†	712.1	81.1	0.7069 ug/L	0.7069 ppb	09:22:34
2	SiO2†	494.8	20.9	1.2965 ug/L	1.2965 ppb	09:23:10
3	Sc Radial	5965.8	5965.8	102 %		09:21:22
3	Y RADIAL	6390.8	6390.8	101.6 %		09:21:22
3	Al 396.153Radial†	-18.0	2.8	1.8837 ug/L	1.8837 ppb	09:21:22
3	Ca 317.933Radial†	21.0	5.0	7.3675 ug/L	7.3675 ppb	09:21:42
3	Fe 238.204 Radial†	8.8	1.8	17.163 ug/L	17.163 ppb	09:21:42
3	K 766.490 Radial†	2654.1	248.2	44.012 ug/L	44.012 ppb	09:21:22
3	Mg 279.077 IEC†	2.7	1.5	51.921 ug/L	51.921 ppb	09:21:42
3	Na 589.592 Radial†	-1140.7	-29.5	-9.8839 ug/L	-9.8839 ppb	09:21:22
3	Sr 421.552†	-12.2	15.4	0.0956 ug/L	0.0956 ppb	09:21:22
3	Sc 361.383	916495.3	916495.3	101.69 %		09:22:39
3	Y 371.029	767046.2	767046.2	102.13 %		09:22:39
3	Ag 328.068†	305.8	8.0	0.0385 ug/L	0.0385 ppb	09:22:39
3	As 188.979†	-16.6	7.9	3.1139 ug/L	3.1139 ppb	09:22:59
3	B 249.677†	-153.3	379.9	7.9653 ug/L	7.9653 ppb	09:22:59
3	Ba 233.527†	-1.6	6.9	0.0519 ug/L	0.0519 ppb	09:22:59
3	Be 313.107†	-4926.0	268.9	0.0981 ug/L	0.0981 ppb	09:22:39
3	Cd 226.502†	-178.1	19.9	0.2092 ug/L	0.2092 ppb	09:22:59
3	Co 228.616†	-68.9	-2.4	-0.0426 ug/L	-0.0426 ppb	09:22:59
3	Cr 267.716†	77.8	-2.2	-0.0234 ug/L	-0.0234 ppb	09:22:59
3	Cu 324.752†	6814.0	-56.0	-0.1594 ug/L	-0.1594 ppb	09:22:39
3	Mn 257.610†	440.3	10.7	0.0122 ug/L	0.0122 ppb	09:22:59
3	Mo 202.031†	34.1	15.2	0.9654 ug/L	0.9654 ppb	09:22:59
3	Ni 231.604†	98.7	10.5	0.2430 ug/L	0.2430 ppb	09:22:59
3	P 214.914†	223.4	-3.8	-2.1956 ug/L	-2.1956 ppb	09:22:59
3	Pb 220.353†	-65.7	3.8	0.4307 ug/L	0.4307 ppb	09:22:59
3	S 181.975 Axial†	39.1	-3.1	-4.3810 ug/L	-4.3810 ppb	09:22:59
3	Sb 206.836†	43.6	8.7	2.7720 ug/L	2.7720 ppb	09:22:59
3	Se 196.026†	-25.3	3.9	2.3314 ug/L	2.3314 ppb	09:22:59
3	Si 251.611†	505.4	47.3	1.3841 ug/L	1.3841 ppb	09:22:59
3	Sn 189.927†	6.5	1.4	0.2312 ug/L	0.2312 ppb	09:22:59
3	Ti 334.940†	-1100.5	32.7	0.0506 ug/L	0.0506 ppb	09:22:39
3	Tl 190.801†	-31.0	2.0	0.5543 ug/L	0.5543 ppb	09:22:59
3	U 409.014†	-2281.5	158.3	4.3581 ug/L	4.3581 ppb	09:22:39
3	V 292.402†	-1351.2	29.6	0.2165 ug/L	0.2165 ppb	09:22:39
3	Zn 213.857†	707.0	73.4	0.6366 ug/L	0.6366 ppb	09:22:59
3	SiO2†	503.4	27.6	1.6973 ug/L	1.6973 ppb	09:23:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911220.7	101.10	%	0.714				0.71%
Sc Radial	5861.9	100	%	2.8				2.79%
Y 371.029	761328.0	101.36	%	0.827				0.82%
Y RADIAL	6295.6	100.1	%	2.77				2.77%
Ag 328.068†	34.3	0.1592	ug/L	0.16502	0.1592	ppb	0.16502	103.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.4	0.9600	ug/L	8.32490	0.9600	ppb	8.32490	867.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.9	1.5244	ug/L	1.39905	1.5244	ppb	1.39905	91.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	404.0	8.4706	ug/L	0.71870	8.4706	ppb	0.71870	8.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.3	0.0108	ug/L	0.03799	0.0108	ppb	0.03799	352.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	244.9	0.0893	ug/L	0.01098	0.0893	ppb	0.01098	12.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.5	9.5803	ug/L	2.53552	9.5803	ppb	2.53552	26.47%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                20.1      0.2111 ug/L       0.04065      0.2111 ppb        0.04065  19.26%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.9     -0.1109 ug/L       0.13905     -0.1109 ppb        0.13905 125.33%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -5.5     -0.0576 ug/L       0.04278     -0.0576 ppb        0.04278  74.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -80.1     -0.2284 ug/L       0.13050     -0.2284 ppb        0.13050  57.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.6      14.903 ug/L        2.5196      14.903 ppb         2.5196  16.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         246.8      43.776 ug/L       15.9447      43.776 ppb        15.9447  36.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.9      32.885 ug/L       41.4731      32.885 ppb        41.4731 126.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 5.5      0.0067 ug/L       0.00894      0.0067 ppb        0.00894 133.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.0      0.5082 ug/L       0.47108      0.5082 ppb        0.47108  92.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -14.1     -4.7202 ug/L      13.43550     -4.7202 ppb       13.43550 284.64%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.3      0.3309 ug/L       0.26193      0.3309 ppb        0.26193  79.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.4     -3.6708 ug/L       5.60512     -3.6708 ppb        5.60512 152.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.9      0.7849 ug/L       0.53682      0.7849 ppb        0.53682  68.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.1     -2.9082 ug/L       1.81452     -2.9082 ppb        1.81452  62.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 8.3      2.6484 ug/L       0.53904      2.6484 ppb        0.53904  20.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5492 ug/L       1.91828      0.5492 ppb        1.91828 349.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                33.8      0.9868 ug/L       0.34483      0.9868 ppb        0.34483  34.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.9263 ug/L       1.00478      0.9263 ppb        1.00478 108.48%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.1      0.0690 ug/L       0.12137      0.0690 ppb        0.12137 175.94%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -3.0     -0.0053 ug/L       0.10161     -0.0053 ppb        0.10161 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.4      0.9450 ug/L       0.33865      0.9450 ppb        0.33865  35.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 79.4      2.1861 ug/L       2.59036      2.1861 ppb        2.59036 118.49%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 43.5      0.2972 ug/L       0.22039      0.2972 ppb        0.22039  74.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                80.7      0.7006 ug/L       0.06110      0.7006 ppb        0.06110   8.72%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      35.4      2.2115 ug/L       1.25386      2.2115 ppb        1.25386  56.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 09:52:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5798.3	5798.3	99.2	%			09:54:38
1	Y RADIAL	6170.9	6170.9	98.14	%			09:54:38
1	Al 396.153Radial†	7003.2	7078.7	4895.8	ug/L	4895.8	ppb	09:54:38
1	Ca 317.933Radial†	3348.4	3359.1	4951.2	ug/L	4951.2	ppb	09:54:58
1	Fe 238.204 Radial†	532.5	529.9	4976.0	ug/L	4976.0	ppb	09:54:58
1	K 766.490 Radial†	30386.2	28273.5	5005.6	ug/L	5005.6	ppb	09:54:38
1	Mg 279.077 IEC†	143.2	143.2	5056.6	ug/L	5056.6	ppb	09:54:58
1	Na 589.592 Radial†	26305.9	27600.8	9262.3	ug/L	9262.3	ppb	09:54:38
1	Sr 421.552†	78338.6	78982.3	491.84	ug/L	491.84	ppb	09:54:38
1	Sc 361.383	913291.3	913291.3	101.33	%			09:55:55
1	Y 371.029	746166.9	746166.9	99.345	%			09:55:55
1	Ag 328.068†	111619.8	109857.2	500.60	ug/L	500.60	ppb	09:56:00
1	As 188.979†	1235.9	1243.8	495.83	ug/L	495.83	ppb	09:56:20
1	B 249.677†	22935.9	23164.5	483.87	ug/L	483.87	ppb	09:56:00
1	Ba 233.527†	67190.5	66314.2	492.75	ug/L	492.75	ppb	09:56:00
1	Be 313.107†	1363119.3	1350281.4	493.16	ug/L	493.16	ppb	09:55:55
1	Cd 226.502†	47270.4	46843.0	495.02	ug/L	495.02	ppb	09:56:00
1	Co 228.616†	26329.1	26047.8	494.52	ug/L	494.52	ppb	09:56:00
1	Cr 267.716†	47557.2	46852.2	492.62	ug/L	492.62	ppb	09:56:00
1	Cu 324.752†	179106.7	169991.4	486.72	ug/L	486.72	ppb	09:56:00
1	Mn 257.610†	467768.4	461186.1	492.37	ug/L	492.37	ppb	09:55:55
1	Mo 202.031†	7951.8	7828.7	497.68	ug/L	497.68	ppb	09:56:20
1	Ni 231.604†	21776.8	21403.5	495.31	ug/L	495.31	ppb	09:56:00
1	P 214.914†	4496.3	4213.6	2356.6	ug/L	2356.6	ppb	09:56:20
1	Pb 220.353†	4324.7	4336.2	491.73	ug/L	491.73	ppb	09:56:20
1	S 181.975 Axial†	761.4	709.8	993.59	ug/L	993.59	ppb	09:56:20
1	Sb 206.836†	1610.3	1554.9	499.36	ug/L	499.36	ppb	09:56:20
1	Se 196.026†	830.1	847.9	508.36	ug/L	508.36	ppb	09:56:20
1	Si 251.611†	83663.7	82112.3	2446.2	ug/L	2446.2	ppb	09:56:00
1	Sn 189.927†	3087.2	3041.6	498.59	ug/L	498.59	ppb	09:56:20
1	Ti 334.940†	314687.5	311658.3	497.22	ug/L	497.22	ppb	09:56:00
1	Tl 190.801†	1737.0	1746.6	492.37	ug/L	492.37	ppb	09:56:20
1	U 409.014†	15597.8	17794.2	488.61	ug/L	488.61	ppb	09:56:00
1	V 292.402†	73648.2	74036.7	495.68	ug/L	495.68	ppb	09:56:00
1	Zn 213.857†	57897.4	56513.1	489.33	ug/L	489.33	ppb	09:56:00
1	SiO2†	82623.5	81068.0	5174.4	ug/L	5174.4	ppb	09:57:28
2	Sc Radial	5699.5	5699.5	97.5	%			09:55:03
2	Y RADIAL	6095.6	6095.6	96.94	%			09:55:03
2	Al 396.153Radial†	6983.8	7181.2	4967.1	ug/L	4967.1	ppb	09:55:03
2	Ca 317.933Radial†	3382.0	3452.1	5088.2	ug/L	5088.2	ppb	09:55:23
2	Fe 238.204 Radial†	536.3	543.1	5100.2	ug/L	5100.2	ppb	09:55:23
2	K 766.490 Radial†	30276.6	28692.1	5079.8	ug/L	5079.8	ppb	09:55:03
2	Mg 279.077 IEC†	148.2	150.8	5324.3	ug/L	5324.3	ppb	09:55:23
2	Na 589.592 Radial†	26033.4	27781.1	9322.8	ug/L	9322.8	ppb	09:55:03
2	Sr 421.552†	77942.2	79944.7	497.83	ug/L	497.83	ppb	09:55:03
2	Sc 361.383	917308.5	917308.5	101.78	%			09:56:26
2	Y 371.029	749645.7	749645.7	99.808	%			09:56:26
2	Ag 328.068†	112752.9	110488.1	503.50	ug/L	503.50	ppb	09:56:31
2	As 188.979†	1226.0	1228.7	489.90	ug/L	489.90	ppb	09:56:51
2	B 249.677†	23222.7	23347.2	487.68	ug/L	487.68	ppb	09:56:31
2	Ba 233.527†	68008.6	66827.5	496.57	ug/L	496.57	ppb	09:56:31
2	Be 313.107†	1371532.3	1352656.2	494.03	ug/L	494.03	ppb	09:56:26
2	Cd 226.502†	47576.1	46939.1	496.02	ug/L	496.02	ppb	09:56:31
2	Co 228.616†	26565.9	26166.7	496.75	ug/L	496.75	ppb	09:56:31
2	Cr 267.716†	48003.3	47085.1	495.07	ug/L	495.07	ppb	09:56:31
2	Cu 324.752†	181535.2	171603.3	491.34	ug/L	491.34	ppb	09:56:31
2	Mn 257.610†	470796.4	462139.6	493.39	ug/L	493.39	ppb	09:56:26
2	Mo 202.031†	7918.0	7761.2	493.40	ug/L	493.40	ppb	09:56:51
2	Ni 231.604†	21967.0	21496.2	497.46	ug/L	497.46	ppb	09:56:31

2	P 214.914†	4508.4	4206.0	2351.4 ug/L	2351.4 ppb	09:56:51
2	Pb 220.353†	4313.4	4306.4	488.35 ug/L	488.35 ppb	09:56:51
2	S 181.975 Axial†	750.8	696.1	974.45 ug/L	974.45 ppb	09:56:51
2	Sb 206.836†	1620.0	1557.5	499.99 ug/L	499.99 ppb	09:56:51
2	Se 196.026†	819.8	834.2	500.83 ug/L	500.83 ppb	09:56:51
2	Si 251.611†	84641.3	82711.1	2464.2 ug/L	2464.2 ppb	09:56:31
2	Sn 189.927†	3086.1	3027.1	496.23 ug/L	496.23 ppb	09:56:51
2	Ti 334.940†	318134.5	313685.0	500.46 ug/L	500.46 ppb	09:56:31
2	Tl 190.801†	1738.7	1740.8	490.77 ug/L	490.77 ppb	09:56:51
2	U 409.014†	15717.0	17843.9	489.96 ug/L	489.96 ppb	09:56:31
2	V 292.402†	74442.7	74499.0	498.66 ug/L	498.66 ppb	09:56:31
2	Zn 213.857†	58410.1	56766.6	491.50 ug/L	491.50 ppb	09:56:31
2	SiO2†	83428.0	81501.3	5202.4 ug/L	5202.4 ppb	09:57:33
3	Sc Radial	5781.7	5781.7	98.9 %		09:55:28
3	Y RADIAL	6134.2	6134.2	97.56 %		09:55:28
3	Al 396.153Radial†	7144.4	7241.7	5009.0 ug/L	5009.0 ppb	09:55:28
3	Ca 317.933Radial†	3390.8	3411.7	5028.7 ug/L	5028.7 ppb	09:55:48
3	Fe 238.204 Radial†	533.2	532.2	4997.9 ug/L	4997.9 ppb	09:55:48
3	K 766.490 Radial†	31003.1	28985.2	5131.8 ug/L	5131.8 ppb	09:55:28
3	Mg 279.077 IEC†	146.5	146.9	5189.7 ug/L	5189.7 ppb	09:55:48
3	Na 589.592 Radial†	26404.0	27776.3	9321.2 ug/L	9321.2 ppb	09:55:28
3	Sr 421.552†	79363.0	80245.0	499.70 ug/L	499.70 ppb	09:55:28
3	Sc 361.383	911611.3	911611.3	101.15 %		09:56:57
3	Y 371.029	745769.9	745769.9	99.292 %		09:56:57
3	Ag 328.068†	112067.6	110502.8	503.55 ug/L	503.55 ppb	09:57:02
3	As 188.979†	1237.5	1247.6	497.35 ug/L	497.35 ppb	09:57:22
3	B 249.677†	23101.5	23370.0	488.17 ug/L	488.17 ppb	09:57:02
3	Ba 233.527†	67671.0	66911.4	497.19 ug/L	497.19 ppb	09:57:02
3	Be 313.107†	1364038.9	1353669.5	494.40 ug/L	494.40 ppb	09:56:57
3	Cd 226.502†	47536.3	47191.8	498.71 ug/L	498.71 ppb	09:57:02
3	Co 228.616†	26480.7	26245.6	498.26 ug/L	498.26 ppb	09:57:02
3	Cr 267.716†	47913.3	47290.8	497.23 ug/L	497.23 ppb	09:57:02
3	Cu 324.752†	179727.3	170930.7	489.41 ug/L	489.41 ppb	09:57:02
3	Mn 257.610†	467403.8	461676.3	492.89 ug/L	492.89 ppb	09:56:57
3	Mo 202.031†	7909.1	7801.0	495.92 ug/L	495.92 ppb	09:57:22
3	Ni 231.604†	21876.1	21541.2	498.50 ug/L	498.50 ppb	09:57:02
3	P 214.914†	4487.9	4213.5	2356.1 ug/L	2356.1 ppb	09:57:22
3	Pb 220.353†	4324.6	4343.9	492.62 ug/L	492.62 ppb	09:57:22
3	S 181.975 Axial†	753.5	703.4	984.64 ug/L	984.64 ppb	09:57:22
3	Sb 206.836†	1616.8	1564.2	502.10 ug/L	502.10 ppb	09:57:22
3	Se 196.026†	830.8	850.1	509.72 ug/L	509.72 ppb	09:57:22
3	Si 251.611†	84048.4	82644.7	2462.1 ug/L	2462.1 ppb	09:57:02
3	Sn 189.927†	3062.7	3023.0	495.55 ug/L	495.55 ppb	09:57:22
3	Ti 334.940†	316195.2	313721.2	500.51 ug/L	500.51 ppb	09:57:02
3	Tl 190.801†	1738.8	1751.6	493.76 ug/L	493.76 ppb	09:57:22
3	U 409.014†	15569.6	17794.7	488.61 ug/L	488.61 ppb	09:57:02
3	V 292.402†	74329.4	74844.1	500.98 ug/L	500.98 ppb	09:57:02
3	Zn 213.857†	58136.8	56855.1	492.29 ug/L	492.29 ppb	09:57:02
3	SiO2†	82825.2	81417.6	5196.9 ug/L	5196.9 ppb	09:57:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914070.4	101.42	%	0.325				0.32%
Sc Radial	5759.8	98.6	%	0.91				0.92%
Y 371.029	747194.2	99.482	%	0.2839				0.29%
Y RADIAL	6133.6	97.55	%	0.599				0.61%
Ag 328.068†	110282.7	502.55	ug/L	1.691	502.55	ppb	1.691	0.34%
QC value within limits for Ag 328.068 Recovery = 100.51%								
Al 396.153Radial†	7167.2	4957.3	ug/L	57.27	4957.3	ppb	57.27	1.16%
QC value within limits for Al 396.153Radial Recovery = 99.15%								
As 188.979†	1240.1	494.36	ug/L	3.935	494.36	ppb	3.935	0.80%
QC value within limits for As 188.979 Recovery = 98.87%								
B 249.677†	23293.9	486.57	ug/L	2.353	486.57	ppb	2.353	0.48%
QC value within limits for B 249.677 Recovery = 97.31%								
Ba 233.527†	66684.4	495.50	ug/L	2.403	495.50	ppb	2.403	0.49%
QC value within limits for Ba 233.527 Recovery = 99.10%								
Be 313.107†	1352202.4	493.86	ug/L	0.637	493.86	ppb	0.637	0.13%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	3407.6	5022.7	ug/L	68.70	5022.7	ppb	68.70	1.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.45%
Cd 226.502†            46991.3      496.58 ug/L         1.906      496.58 ppb          1.906   0.38%
   QC value within limits for Cd 226.502  Recovery = 99.32%
Co 228.616†            26153.3      496.51 ug/L         1.883      496.51 ppb          1.883   0.38%
   QC value within limits for Co 228.616  Recovery = 99.30%
Cr 267.716†            47076.0      494.97 ug/L         2.308      494.97 ppb          2.308   0.47%
   QC value within limits for Cr 267.716  Recovery = 98.99%
Cu 324.752†           170841.8      489.16 ug/L         2.320      489.16 ppb          2.320   0.47%
   QC value within limits for Cu 324.752  Recovery = 97.83%
Fe 238.204 Radial†       535.0      5024.7 ug/L        66.27      5024.7 ppb         66.27   1.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.49%
K 766.490 Radial†      28650.3      5072.4 ug/L        63.41      5072.4 ppb         63.41   1.25%
   QC value within limits for K 766.490 Radial  Recovery = 101.45%
Mg 279.077 IEC†          147.0      5190.2 ug/L       133.85      5190.2 ppb        133.85   2.58%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.80%
Mn 257.610†           461667.3      492.88 ug/L         0.512      492.88 ppb          0.512   0.10%
   QC value within limits for Mn 257.610  Recovery = 98.58%
Mo 202.031†             7797.0      495.67 ug/L         2.152      495.67 ppb          2.152   0.43%
   QC value within limits for Mo 202.031  Recovery = 99.13%
Na 589.592 Radial†     27719.4      9302.1 ug/L        34.47      9302.1 ppb         34.47   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 93.02%
Ni 231.604†            21480.3      497.09 ug/L         1.625      497.09 ppb          1.625   0.33%
   QC value within limits for Ni 231.604  Recovery = 99.42%
P 214.914†              4211.0      2354.7 ug/L         2.87      2354.7 ppb          2.87   0.12%
   QC value within limits for P 214.914  Recovery = 94.19%
Pb 220.353†             4328.9      490.90 ug/L         2.250      490.90 ppb          2.250   0.46%
   QC value within limits for Pb 220.353  Recovery = 98.18%
S 181.975 Axial†         703.1      984.23 ug/L         9.577      984.23 ppb          9.577   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 98.42%
Sb 206.836†             1558.8      500.49 ug/L         1.436      500.49 ppb          1.436   0.29%
   QC value within limits for Sb 206.836  Recovery = 100.10%
Se 196.026†              844.1      506.30 ug/L         4.789      506.30 ppb          4.789   0.95%
   QC value within limits for Se 196.026  Recovery = 101.26%
Si 251.611†            82489.4      2457.5 ug/L         9.85      2457.5 ppb          9.85   0.40%
   QC value within limits for Si 251.611  Recovery = 98.30%
Sn 189.927†             3030.5      496.79 ug/L         1.593      496.79 ppb          1.593   0.32%
   QC value within limits for Sn 189.927  Recovery = 99.36%
Sr 421.552†            79724.0      496.45 ug/L         4.108      496.45 ppb          4.108   0.83%
   QC value within limits for Sr 421.552  Recovery = 99.29%
Ti 334.940†           313021.5      499.39 ug/L         1.886      499.39 ppb          1.886   0.38%
   QC value within limits for Ti 334.940  Recovery = 99.88%
Tl 190.801†             1746.4      492.30 ug/L         1.499      492.30 ppb          1.499   0.30%
   QC value within limits for Tl 190.801  Recovery = 98.46%
U 409.014†             17810.9      489.06 ug/L         0.779      489.06 ppb          0.779   0.16%
   QC value within limits for U 409.014  Recovery = 97.81%
V 292.402†             74459.9      498.44 ug/L         2.658      498.44 ppb          2.658   0.53%
   QC value within limits for V 292.402  Recovery = 99.69%
Zn 213.857†            56711.6      491.04 ug/L         1.532      491.04 ppb          1.532   0.31%
   QC value within limits for Zn 213.857  Recovery = 98.21%
SiO2†                  81329.0      5191.2 ug/L        14.79      5191.2 ppb         14.79   0.28%
   QC value within limits for SiO2  Recovery = 97.08%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 09:59:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5856.6	5856.6	100	%			10:01:40
1	Y RADIAL	6302.7	6302.7	100.2	%			10:01:40
1	Al 396.153Radial†	-34.9	-14.4	-10.047	ug/L	-10.047	ppb	10:01:40
1	Ca 317.933Radial†	25.4	9.8	14.456	ug/L	14.456	ppb	10:02:00
1	Fe 238.204 Radial†	10.4	3.5	33.153	ug/L	33.153	ppb	10:02:00
1	K 766.490 Radial†	2417.2	60.2	10.691	ug/L	10.691	ppb	10:01:40
1	Mg 279.077 IEC†	1.7	0.5	17.521	ug/L	17.521	ppb	10:02:00
1	Na 589.592 Radial†	-1131.4	-41.1	-13.778	ug/L	-13.778	ppb	10:01:40
1	Sr 421.552†	-11.1	16.3	0.1012	ug/L	0.1012	ppb	10:01:40
1	Sc 361.383	910453.7	910453.7	101.02	%			10:02:57
1	Y 371.029	761123.5	761123.5	101.34	%			10:02:57
1	Ag 328.068†	424.3	127.3	0.5854	ug/L	0.5854	ppb	10:02:57
1	As 188.979†	-20.3	4.1	1.6169	ug/L	1.6169	ppb	10:03:17
1	B 249.677†	-282.4	251.1	5.2624	ug/L	5.2624	ppb	10:03:17
1	Ba 233.527†	-10.7	-2.2	-0.0145	ug/L	-0.0145	ppb	10:03:17
1	Be 313.107†	-4984.1	179.2	0.0655	ug/L	0.0655	ppb	10:02:57
1	Cd 226.502†	-199.5	-2.4	-0.0279	ug/L	-0.0279	ppb	10:03:17
1	Co 228.616†	-71.1	-4.9	-0.0924	ug/L	-0.0924	ppb	10:03:17
1	Cr 267.716†	90.6	11.0	0.1154	ug/L	0.1154	ppb	10:03:17
1	Cu 324.752†	6722.7	-101.8	-0.2898	ug/L	-0.2898	ppb	10:02:57
1	Mn 257.610†	429.7	3.1	0.0062	ug/L	0.0062	ppb	10:03:17
1	Mo 202.031†	29.8	11.2	0.7111	ug/L	0.7111	ppb	10:03:17
1	Ni 231.604†	110.3	22.6	0.5242	ug/L	0.5242	ppb	10:03:17
1	P 214.914†	216.2	-9.5	-5.4823	ug/L	-5.4823	ppb	10:03:17
1	Pb 220.353†	-58.5	10.5	1.1878	ug/L	1.1878	ppb	10:03:17
1	S 181.975 Axial†	42.2	0.2	0.2210	ug/L	0.2210	ppb	10:03:17
1	Sb 206.836†	42.3	7.6	2.4420	ug/L	2.4420	ppb	10:03:17
1	Se 196.026†	-34.3	-5.1	-2.8713	ug/L	-2.8713	ppb	10:03:17
1	Si 251.611†	498.1	43.4	1.2818	ug/L	1.2818	ppb	10:03:17
1	Sn 189.927†	7.9	2.9	0.4713	ug/L	0.4713	ppb	10:03:17
1	Ti 334.940†	-1069.0	56.8	0.0901	ug/L	0.0901	ppb	10:02:57
1	Tl 190.801†	-32.9	-0.0	-0.0121	ug/L	-0.0121	ppb	10:03:17
1	U 409.014†	-2331.2	94.1	2.5885	ug/L	2.5885	ppb	10:02:57
1	V 292.402†	-1353.0	19.0	0.1359	ug/L	0.1359	ppb	10:02:57
1	Zn 213.857†	694.0	65.1	0.5621	ug/L	0.5621	ppb	10:03:17
1	SiO2†	465.2	-7.0	-0.4864	ug/L	-0.4864	ppb	10:04:13
2	Sc Radial	5902.5	5902.5	101	%			10:02:05
2	Y RADIAL	6366.5	6366.5	101.3	%			10:02:05
2	Al 396.153Radial†	-13.1	7.4	5.1522	ug/L	5.1522	ppb	10:02:05
2	Ca 317.933Radial†	20.3	4.5	6.7005	ug/L	6.7005	ppb	10:02:25
2	Fe 238.204 Radial†	5.6	-1.3	-11.735	ug/L	-11.735	ppb	10:02:25
2	K 766.490 Radial†	2448.0	72.0	12.773	ug/L	12.773	ppb	10:02:05
2	Mg 279.077 IEC†	2.0	0.9	30.205	ug/L	30.205	ppb	10:02:25
2	Na 589.592 Radial†	-1120.1	-21.0	-7.0524	ug/L	-7.0524	ppb	10:02:05
2	Sr 421.552†	-4.8	22.6	0.1409	ug/L	0.1409	ppb	10:02:05
2	Sc 361.383	906696.3	906696.3	100.60	%			10:03:22
2	Y 371.029	757143.8	757143.8	100.81	%			10:03:22
2	Ag 328.068†	460.3	164.8	0.7406	ug/L	0.7406	ppb	10:03:22
2	As 188.979†	-18.5	5.8	2.2924	ug/L	2.2924	ppb	10:03:42
2	B 249.677†	-286.2	246.2	5.1636	ug/L	5.1636	ppb	10:03:42
2	Ba 233.527†	-12.4	-3.8	-0.0285	ug/L	-0.0285	ppb	10:03:42
2	Be 313.107†	-4940.5	202.1	0.0737	ug/L	0.0737	ppb	10:03:22
2	Cd 226.502†	-189.0	7.3	0.0778	ug/L	0.0778	ppb	10:03:42
2	Co 228.616†	-61.9	3.9	0.0757	ug/L	0.0757	ppb	10:03:42
2	Cr 267.716†	76.6	-2.5	-0.0269	ug/L	-0.0269	ppb	10:03:42
2	Cu 324.752†	6780.8	-16.6	-0.0480	ug/L	-0.0480	ppb	10:03:22
2	Mn 257.610†	438.7	13.7	0.0129	ug/L	0.0129	ppb	10:03:42
2	Mo 202.031†	24.4	6.0	0.3775	ug/L	0.3775	ppb	10:03:42
2	Ni 231.604†	74.4	-12.6	-0.2911	ug/L	-0.2911	ppb	10:03:42

2	P 214.914†	211.6	-13.2	-7.5926 ug/L	-7.5926 ppb	10:03:42
2	Pb 220.353†	-63.4	5.4	0.6161 ug/L	0.6161 ppb	10:03:42
2	S 181.975 Axial†	45.7	3.9	5.4030 ug/L	5.4030 ppb	10:03:42
2	Sb 206.836†	42.8	8.3	2.6247 ug/L	2.6247 ppb	10:03:42
2	Se 196.026†	-24.4	4.6	2.6330 ug/L	2.6330 ppb	10:03:42
2	Si 251.611†	494.0	41.4	1.2271 ug/L	1.2271 ppb	10:03:42
2	Sn 189.927†	5.3	0.3	0.0474 ug/L	0.0474 ppb	10:03:42
2	Ti 334.940†	-1108.9	12.6	0.0192 ug/L	0.0192 ppb	10:03:22
2	Tl 190.801†	-30.9	1.8	0.5082 ug/L	0.5082 ppb	10:03:42
2	U 409.014†	-2307.9	107.7	2.9690 ug/L	2.9690 ppb	10:03:22
2	V 292.402†	-1348.2	18.2	0.1339 ug/L	0.1339 ppb	10:03:22
2	Zn 213.857†	689.0	63.0	0.5524 ug/L	0.5524 ppb	10:03:42
2	SiO2†	513.6	43.1	2.7395 ug/L	2.7395 ppb	10:04:18
3	Sc Radial	5922.3	5922.3	101 %		10:02:30
3	Y RADIAL	6371.5	6371.5	101.3 %		10:02:30
3	Al 396.153Radial†	-29.0	-8.2	-5.7155 ug/L	-5.7155 ppb	10:02:30
3	Ca 317.933Radial†	20.3	4.5	6.5597 ug/L	6.5597 ppb	10:02:50
3	Fe 238.204 Radial†	8.3	1.4	13.121 ug/L	13.121 ppb	10:02:50
3	K 766.490 Radial†	2353.1	-29.8	-5.2822 ug/L	-5.2822 ppb	10:02:30
3	Mg 279.077 IEC†	0.6	-0.6	-20.672 ug/L	-20.672 ppb	10:02:50
3	Na 589.592 Radial†	-1094.9	7.5	2.5235 ug/L	2.5235 ppb	10:02:30
3	Sr 421.552†	3.7	31.0	0.1931 ug/L	0.1931 ppb	10:02:30
3	Sc 361.383	902829.2	902829.2	100.17 %		10:03:47
3	Y 371.029	755411.0	755411.0	100.58 %		10:03:47
3	Ag 328.068†	358.0	64.7	0.2988 ug/L	0.2988 ppb	10:03:47
3	As 188.979†	-15.0	9.2	3.6283 ug/L	3.6283 ppb	10:04:07
3	B 249.677†	-300.1	231.1	4.8434 ug/L	4.8434 ppb	10:04:07
3	Ba 233.527†	-0.7	7.7	0.0580 ug/L	0.0580 ppb	10:04:07
3	Be 313.107†	-4892.1	229.3	0.0837 ug/L	0.0837 ppb	10:03:47
3	Cd 226.502†	-180.1	15.3	0.1610 ug/L	0.1610 ppb	10:04:07
3	Co 228.616†	-60.9	4.6	0.0881 ug/L	0.0881 ppb	10:04:07
3	Cr 267.716†	79.3	0.5	0.0064 ug/L	0.0064 ppb	10:04:07
3	Cu 324.752†	6709.2	-59.1	-0.1685 ug/L	-0.1685 ppb	10:03:47
3	Mn 257.610†	438.1	15.0	0.0177 ug/L	0.0177 ppb	10:04:07
3	Mo 202.031†	21.5	3.2	0.2015 ug/L	0.2015 ppb	10:04:07
3	Ni 231.604†	99.5	12.8	0.2969 ug/L	0.2969 ppb	10:04:07
3	P 214.914†	215.8	-8.1	-4.6716 ug/L	-4.6716 ppb	10:04:07
3	Pb 220.353†	-65.9	2.6	0.2959 ug/L	0.2959 ppb	10:04:07
3	S 181.975 Axial†	39.7	-2.0	-2.7906 ug/L	-2.7906 ppb	10:04:07
3	Sb 206.836†	32.3	-2.0	-0.6310 ug/L	-0.6310 ppb	10:04:07
3	Se 196.026†	-16.8	12.0	6.9843 ug/L	6.9843 ppb	10:04:07
3	Si 251.611†	489.0	38.5	1.1488 ug/L	1.1488 ppb	10:04:07
3	Sn 189.927†	6.7	1.7	0.2867 ug/L	0.2867 ppb	10:04:07
3	Ti 334.940†	-1078.5	38.3	0.0622 ug/L	0.0622 ppb	10:03:47
3	Tl 190.801†	-33.1	-0.6	-0.1545 ug/L	-0.1545 ppb	10:04:07
3	U 409.014†	-2470.8	-64.7	-1.7847 ug/L	-1.7847 ppb	10:03:47
3	V 292.402†	-1354.7	6.0	0.0363 ug/L	0.0363 ppb	10:03:47
3	Zn 213.857†	672.6	49.6	0.4309 ug/L	0.4309 ppb	10:04:07
3	SiO2†	501.7	33.4	2.1374 ug/L	2.1374 ppb	10:04:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	906659.7	100.60	%	0.423				0.42%
Sc Radial	5893.8	101	%	0.6				0.57%
Y 371.029	757892.8	100.91	%	0.390				0.39%
Y RADIAL	6346.9	100.9	%	0.61				0.60%
Ag 328.068†	118.9	0.5416	ug/L	0.22414	0.5416	ppb	0.22414	41.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.1	-3.5369	ug/L	7.83042	-3.5369	ppb	7.83042	221.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.4	2.5125	ug/L	1.02361	2.5125	ppb	1.02361	40.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	242.8	5.0898	ug/L	0.21902	5.0898	ppb	0.21902	4.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.6	0.0050	ug/L	0.04645	0.0050	ppb	0.04645	932.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.5	0.0743	ug/L	0.00913	0.0743	ppb	0.00913	12.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	9.2388	ug/L	4.51901	9.2388	ppb	4.51901	48.91%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 6.7      0.0703 ug/L       0.09465      0.0703 ppb        0.09465 134.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.2      0.0238 ug/L       0.10080      0.0238 ppb        0.10080 423.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.0      0.0316 ug/L       0.07442      0.0316 ppb        0.07442 235.34%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -59.2     -0.1688 ug/L       0.12088     -0.1688 ppb        0.12088  71.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.2      11.513 ug/L       22.4868      11.513 ppb        22.4868 195.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          34.2      6.0606 ug/L       9.87817      6.0606 ppb        9.87817 162.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      9.0182 ug/L      26.48267      9.0182 ppb       26.48267 293.66%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.6      0.0123 ug/L       0.00577      0.0123 ppb        0.00577  46.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.8      0.4300 ug/L       0.25880      0.4300 ppb        0.25880  60.18%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -18.2     -6.1022 ug/L       8.19208     -6.1022 ppb        8.19208 134.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.6      0.1767 ug/L       0.42074      0.1767 ppb        0.42074 238.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -10.3     -5.9155 ug/L       1.50790     -5.9155 ppb        1.50790  25.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.2      0.7000 ug/L       0.45182      0.7000 ppb        0.45182  64.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.7      0.9445 ug/L       4.14441      0.9445 ppb        4.14441 438.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.6      1.4786 ug/L       1.82922      1.4786 ppb        1.82922 123.72%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.8      2.2487 ug/L       4.93905      2.2487 ppb        4.93905 219.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                41.1      1.2192 ug/L       0.06684      1.2192 ppb        0.06684   5.48%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.6      0.2684 ug/L       0.21256      0.2684 ppb        0.21256  79.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.3      0.1451 ug/L       0.04613      0.1451 ppb        0.04613  31.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                35.9      0.0572 ug/L       0.03572      0.0572 ppb        0.03572  62.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.4      0.1139 ug/L       0.34885      0.1139 ppb        0.34885 306.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 45.7      1.2576 ug/L       2.64158      1.2576 ppb        2.64158 210.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 14.4      0.1020 ug/L       0.05695      0.1020 ppb        0.05695  55.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                59.2      0.5151 ug/L       0.07311      0.5151 ppb        0.07311  14.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      23.2      1.4635 ug/L       1.71530      1.4635 ppb        1.71530 117.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 10:55:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5836.7	5836.7	99.9	%			10:56:54
1	Y RADIAL	6210.2	6210.2	98.77	%			10:56:54
1	Al 396.153Radial†	7234.6	7264.0	5024.4	ug/L	5024.4	ppb	10:56:54
1	Ca 317.933Radial†	3402.4	3391.0	4998.2	ug/L	4998.2	ppb	10:57:14
1	Fe 238.204 Radial†	541.2	535.0	5024.5	ug/L	5024.5	ppb	10:57:14
1	K 766.490 Radial†	31171.5	28858.3	5109.2	ug/L	5109.2	ppb	10:56:54
1	Mg 279.077 IEC†	147.8	146.8	5185.7	ug/L	5185.7	ppb	10:57:14
1	Na 589.592 Radial†	26951.7	28073.0	9420.8	ug/L	9420.8	ppb	10:56:54
1	Sr 421.552†	80685.7	80812.9	503.24	ug/L	503.24	ppb	10:56:54
1	Sc 361.383	912942.5	912942.5	101.30	%			10:58:11
1	Y 371.029	746090.1	746090.1	99.335	%			10:58:11
1	Ag 328.068†	113045.6	111306.8	507.20	ug/L	507.20	ppb	10:58:16
1	As 188.979†	1243.0	1251.3	498.84	ug/L	498.84	ppb	10:58:36
1	B 249.677†	23351.6	23583.6	492.64	ug/L	492.64	ppb	10:58:16
1	Ba 233.527†	68082.7	67220.2	499.48	ug/L	499.48	ppb	10:58:16
1	Be 313.107†	1379726.6	1367190.1	499.33	ug/L	499.33	ppb	10:58:11
1	Cd 226.502†	47784.4	47368.2	500.57	ug/L	500.57	ppb	10:58:16
1	Co 228.616†	26603.3	26328.4	499.82	ug/L	499.82	ppb	10:58:16
1	Cr 267.716†	48114.7	47420.6	498.60	ug/L	498.60	ppb	10:58:16
1	Cu 324.752†	182183.4	173096.2	495.61	ug/L	495.61	ppb	10:58:16
1	Mn 257.610†	472775.1	466305.0	497.83	ug/L	497.83	ppb	10:58:11
1	Mo 202.031†	7944.6	7824.7	497.43	ug/L	497.43	ppb	10:58:36
1	Ni 231.604†	22018.7	21650.5	501.03	ug/L	501.03	ppb	10:58:16
1	P 214.914†	4530.0	4248.6	2375.4	ug/L	2375.4	ppb	10:58:36
1	Pb 220.353†	4336.0	4349.0	493.19	ug/L	493.19	ppb	10:58:36
1	S 181.975 Axial†	760.5	709.2	992.78	ug/L	992.78	ppb	10:58:36
1	Sb 206.836†	1628.6	1573.5	505.12	ug/L	505.12	ppb	10:58:36
1	Se 196.026†	832.9	851.0	510.32	ug/L	510.32	ppb	10:58:36
1	Si 251.611†	85003.3	83466.2	2486.7	ug/L	2486.7	ppb	10:58:16
1	Sn 189.927†	3093.2	3048.7	499.75	ug/L	499.75	ppb	10:58:36
1	Ti 334.940†	319189.1	316220.9	504.49	ug/L	504.49	ppb	10:58:16
1	Tl 190.801†	1748.6	1758.7	495.80	ug/L	495.80	ppb	10:58:36
1	U 409.014†	15769.5	17969.6	493.42	ug/L	493.42	ppb	10:58:16
1	V 292.402†	74759.8	75161.8	503.10	ug/L	503.10	ppb	10:58:16
1	Zn 213.857†	58554.3	57183.4	495.13	ug/L	495.13	ppb	10:58:16
1	SiO2†	84380.2	82833.4	5287.6	ug/L	5287.6	ppb	10:59:44
2	Sc Radial	5834.9	5834.9	99.8	%			10:57:19
2	Y RADIAL	6222.6	6222.6	98.96	%			10:57:19
2	Al 396.153Radial†	7203.7	7235.3	5004.3	ug/L	5004.3	ppb	10:57:19
2	Ca 317.933Radial†	3392.1	3381.8	4984.6	ug/L	4984.6	ppb	10:57:39
2	Fe 238.204 Radial†	535.4	529.4	4972.3	ug/L	4972.3	ppb	10:57:39
2	K 766.490 Radial†	31223.2	28919.9	5120.1	ug/L	5120.1	ppb	10:57:19
2	Mg 279.077 IEC†	147.2	146.2	5165.0	ug/L	5165.0	ppb	10:57:39
2	Na 589.592 Radial†	27037.9	28167.8	9452.6	ug/L	9452.6	ppb	10:57:19
2	Sr 421.552†	80750.8	80903.3	503.80	ug/L	503.80	ppb	10:57:19
2	Sc 361.383	909552.0	909552.0	100.92	%			10:58:42
2	Y 371.029	743255.5	743255.5	98.958	%			10:58:42
2	Ag 328.068†	112515.9	111198.0	506.69	ug/L	506.69	ppb	10:58:47
2	As 188.979†	1256.0	1268.7	505.70	ug/L	505.70	ppb	10:59:07
2	B 249.677†	23323.4	23641.6	493.86	ug/L	493.86	ppb	10:58:47
2	Ba 233.527†	67589.6	66982.2	497.72	ug/L	497.72	ppb	10:58:47
2	Be 313.107†	1376097.3	1368671.4	499.87	ug/L	499.87	ppb	10:58:42
2	Cd 226.502†	47400.4	47163.6	498.41	ug/L	498.41	ppb	10:58:47
2	Co 228.616†	26513.1	26336.9	500.00	ug/L	500.00	ppb	10:58:47
2	Cr 267.716†	47769.9	47256.0	496.86	ug/L	496.86	ppb	10:58:47
2	Cu 324.752†	181689.9	173277.6	496.12	ug/L	496.12	ppb	10:58:47
2	Mn 257.610†	471465.6	466747.3	498.30	ug/L	498.30	ppb	10:58:42
2	Mo 202.031†	7999.6	7908.4	502.74	ug/L	502.74	ppb	10:59:07
2	Ni 231.604†	21920.1	21633.9	500.64	ug/L	500.64	ppb	10:58:47

2	P 214.914†	4543.1	4278.2	2392.4 ug/L	2392.4 ppb	10:59:07
2	Pb 220.353†	4354.4	4383.1	497.06 ug/L	497.06 ppb	10:59:07
2	S 181.975 Axial†	764.8	716.3	1002.7 ug/L	1002.7 ppb	10:59:07
2	Sb 206.836†	1632.7	1583.6	508.54 ug/L	508.54 ppb	10:59:07
2	Se 196.026†	848.5	869.6	520.92 ug/L	520.92 ppb	10:59:07
2	Si 251.611†	84780.6	83558.4	2489.4 ug/L	2489.4 ppb	10:58:47
2	Sn 189.927†	3104.1	3070.8	503.38 ug/L	503.38 ppb	10:59:07
2	Ti 334.940†	317707.7	315927.7	504.03 ug/L	504.03 ppb	10:58:47
2	Tl 190.801†	1746.8	1763.4	497.13 ug/L	497.13 ppb	10:59:07
2	U 409.014†	15661.1	17920.2	492.07 ug/L	492.07 ppb	10:58:47
2	V 292.402†	74294.6	74976.0	501.96 ug/L	501.96 ppb	10:58:47
2	Zn 213.857†	58260.9	57108.1	494.48 ug/L	494.48 ppb	10:58:47
2	SiO2†	84649.4	83410.6	5324.4 ug/L	5324.4 ppb	10:59:49
3	Sc Radial	5661.5	5661.5	96.9 %		10:57:44
3	Y RADIAL	6036.7	6036.7	96.01 %		10:57:44
3	Al 396.153Radial†	7058.0	7305.9	5053.4 ug/L	5053.4 ppb	10:57:44
3	Ca 317.933Radial†	3401.0	3495.0	5151.4 ug/L	5151.4 ppb	10:58:04
3	Fe 238.204 Radial†	540.2	550.8	5172.0 ug/L	5172.0 ppb	10:58:04
3	K 766.490 Radial†	30464.0	29093.9	5150.9 ug/L	5150.9 ppb	10:57:44
3	Mg 279.077 IEC†	150.6	154.3	5450.5 ug/L	5450.5 ppb	10:58:04
3	Na 589.592 Radial†	26299.4	28234.8	9475.0 ug/L	9475.0 ppb	10:57:44
3	Sr 421.552†	78649.8	81211.4	505.72 ug/L	505.72 ppb	10:57:44
3	Sc 361.383	910135.6	910135.6	100.98 %		10:59:13
3	Y 371.029	743780.8	743780.8	99.028 %		10:59:13
3	Ag 328.068†	112947.9	111554.2	508.37 ug/L	508.37 ppb	10:59:18
3	As 188.979†	1238.3	1250.4	498.50 ug/L	498.50 ppb	10:59:38
3	B 249.677†	23406.9	23709.4	495.25 ug/L	495.25 ppb	10:59:18
3	Ba 233.527†	67980.8	67326.6	500.28 ug/L	500.28 ppb	10:59:18
3	Be 313.107†	1377213.7	1368902.5	499.96 ug/L	499.96 ppb	10:59:13
3	Cd 226.502†	47687.0	47417.3	501.07 ug/L	501.07 ppb	10:59:18
3	Co 228.616†	26599.4	26405.6	501.29 ug/L	501.29 ppb	10:59:18
3	Cr 267.716†	47962.8	47416.7	498.56 ug/L	498.56 ppb	10:59:18
3	Cu 324.752†	182088.2	173556.6	496.93 ug/L	496.93 ppb	10:59:18
3	Mn 257.610†	472502.0	467474.0	499.09 ug/L	499.09 ppb	10:59:13
3	Mo 202.031†	7966.0	7870.1	500.32 ug/L	500.32 ppb	10:59:38
3	Ni 231.604†	21954.6	21654.0	501.11 ug/L	501.11 ppb	10:59:18
3	P 214.914†	4524.4	4256.8	2379.8 ug/L	2379.8 ppb	10:59:38
3	Pb 220.353†	4326.4	4352.7	493.61 ug/L	493.61 ppb	10:59:38
3	S 181.975 Axial†	764.3	715.3	1001.3 ug/L	1001.3 ppb	10:59:38
3	Sb 206.836†	1612.5	1562.5	501.73 ug/L	501.73 ppb	10:59:38
3	Se 196.026†	836.6	857.2	514.39 ug/L	514.39 ppb	10:59:38
3	Si 251.611†	85020.0	83741.6	2494.9 ug/L	2494.9 ppb	10:59:18
3	Sn 189.927†	3089.6	3054.5	500.73 ug/L	500.73 ppb	10:59:38
3	Ti 334.940†	318560.4	316570.2	505.06 ug/L	505.06 ppb	10:59:18
3	Tl 190.801†	1744.8	1760.3	496.26 ug/L	496.26 ppb	10:59:38
3	U 409.014†	15645.4	17894.7	491.34 ug/L	491.34 ppb	10:59:18
3	V 292.402†	74546.6	75178.3	503.23 ug/L	503.23 ppb	10:59:18
3	Zn 213.857†	58671.4	57477.7	497.67 ug/L	497.67 ppb	10:59:18
3	SiO2†	83527.3	82245.7	5249.8 ug/L	5249.8 ppb	10:59:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910876.7	101.07	%	0.201				0.20%
Sc Radial	5777.7	98.9	%	1.72				1.74%
Y 371.029	744375.4	99.107	%	0.2008				0.20%
Y RADIAL	6156.5	97.91	%	1.653				1.69%
Ag 328.068†	111353.0	507.42	ug/L	0.861	507.42	ppb	0.861	0.17%
QC value within limits for Ag 328.068 Recovery = 101.48%								
Al 396.153Radial†	7268.4	5027.4	ug/L	24.71	5027.4	ppb	24.71	0.49%
QC value within limits for Al 396.153Radial Recovery = 100.55%								
As 188.979†	1256.8	501.01	ug/L	4.064	501.01	ppb	4.064	0.81%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	23644.8	493.92	ug/L	1.308	493.92	ppb	1.308	0.26%
QC value within limits for B 249.677 Recovery = 98.78%								
Ba 233.527†	67176.3	499.16	ug/L	1.312	499.16	ppb	1.312	0.26%
QC value within limits for Ba 233.527 Recovery = 99.83%								
Be 313.107†	1368254.7	499.72	ug/L	0.339	499.72	ppb	0.339	0.07%
QC value within limits for Be 313.107 Recovery = 99.94%								
Ca 317.933Radial†	3422.6	5044.7	ug/L	92.67	5044.7	ppb	92.67	1.84%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.89%
Cd 226.502†            47316.4      500.02 ug/L        1.414      500.02 ppb        1.414   0.28%
   QC value within limits for Cd 226.502  Recovery = 100.00%
Co 228.616†            26357.0      500.37 ug/L        0.802      500.37 ppb        0.802   0.16%
   QC value within limits for Co 228.616  Recovery = 100.07%
Cr 267.716†            47364.4      498.01 ug/L        0.988      498.01 ppb        0.988   0.20%
   QC value within limits for Cr 267.716  Recovery = 99.60%
Cu 324.752†           173310.1      496.22 ug/L        0.668      496.22 ppb        0.668   0.13%
   QC value within limits for Cu 324.752  Recovery = 99.24%
Fe 238.204 Radial†       538.4      5056.3 ug/L       103.60      5056.3 ppb       103.60   2.05%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.13%
K 766.490 Radial†      28957.4      5126.7 ug/L        21.65      5126.7 ppb        21.65   0.42%
   QC value within limits for K 766.490 Radial  Recovery = 102.53%
Mg 279.077 IEC†          149.1      5267.1 ug/L       159.20      5267.1 ppb       159.20   3.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.34%
Mn 257.610†           466842.1      498.40 ug/L        0.635      498.40 ppb        0.635   0.13%
   QC value within limits for Mn 257.610  Recovery = 99.68%
Mo 202.031†             7867.7      500.16 ug/L        2.660      500.16 ppb        2.660   0.53%
   QC value within limits for Mo 202.031  Recovery = 100.03%
Na 589.592 Radial†     28158.5      9449.5 ug/L        27.27      9449.5 ppb        27.27   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 94.49%
Ni 231.604†            21646.1      500.93 ug/L        0.249      500.93 ppb        0.249   0.05%
   QC value within limits for Ni 231.604  Recovery = 100.19%
P 214.914†              4261.2      2382.5 ug/L         8.85      2382.5 ppb         8.85   0.37%
   QC value within limits for P 214.914  Recovery = 95.30%
Pb 220.353†             4361.6      494.62 ug/L        2.124      494.62 ppb        2.124   0.43%
   QC value within limits for Pb 220.353  Recovery = 98.92%
S 181.975 Axial†         713.6      998.91 ug/L        5.360      998.91 ppb        5.360   0.54%
   QC value within limits for S 181.975 Axial  Recovery = 99.89%
Sb 206.836†             1573.2      505.13 ug/L        3.408      505.13 ppb        3.408   0.67%
   QC value within limits for Sb 206.836  Recovery = 101.03%
Se 196.026†              859.3      515.21 ug/L        5.347      515.21 ppb        5.347   1.04%
   QC value within limits for Se 196.026  Recovery = 103.04%
Si 251.611†            83588.8      2490.3 ug/L         4.17      2490.3 ppb         4.17   0.17%
   QC value within limits for Si 251.611  Recovery = 99.61%
Sn 189.927†             3058.0      501.29 ug/L        1.878      501.29 ppb        1.878   0.37%
   QC value within limits for Sn 189.927  Recovery = 100.26%
Sr 421.552†            80975.9      504.25 ug/L        1.300      504.25 ppb        1.300   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†           316239.6      504.53 ug/L        0.518      504.53 ppb        0.518   0.10%
   QC value within limits for Ti 334.940  Recovery = 100.91%
Tl 190.801†             1760.8      496.40 ug/L        0.673      496.40 ppb        0.673   0.14%
   QC value within limits for Tl 190.801  Recovery = 99.28%
U 409.014†             17928.2      492.28 ug/L        1.056      492.28 ppb        1.056   0.21%
   QC value within limits for U 409.014  Recovery = 98.46%
V 292.402†             75105.4      502.76 ug/L        0.701      502.76 ppb        0.701   0.14%
   QC value within limits for V 292.402  Recovery = 100.55%
Zn 213.857†            57256.4      495.76 ug/L        1.689      495.76 ppb        1.689   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.15%
SiO2†                  82829.9      5287.3 ug/L        37.32      5287.3 ppb        37.32   0.71%
   QC value within limits for SiO2  Recovery = 98.87%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 11:02:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5907.4	5907.4	101	%			11:03:56
1	Y RADIAL	6373.2	6373.2	101.4	%			11:03:56
1	Al 396.153Radial†	-16.4	4.2	2.8934	ug/L	2.8934	ppb	11:03:56
1	Ca 317.933Radial†	26.3	10.4	15.372	ug/L	15.372	ppb	11:04:16
1	Fe 238.204 Radial†	8.9	2.0	18.992	ug/L	18.992	ppb	11:04:16
1	K 766.490 Radial†	2487.0	108.5	19.254	ug/L	19.254	ppb	11:03:56
1	Mg 279.077 IEC†	1.8	0.6	20.816	ug/L	20.816	ppb	11:04:16
1	Na 589.592 Radial†	-1139.5	-39.4	-13.208	ug/L	-13.208	ppb	11:03:56
1	Sr 421.552†	-17.9	9.7	0.0600	ug/L	0.0600	ppb	11:03:56
1	Sc 361.383	921090.1	921090.1	102.20	%			11:05:13
1	Y 371.029	765057.3	765057.3	101.86	%			11:05:13
1	Ag 328.068†	422.5	120.7	0.5537	ug/L	0.5537	ppb	11:05:18
1	As 188.979†	-29.5	-4.7	-1.8629	ug/L	-1.8629	ppb	11:05:38
1	B 249.677†	-196.7	338.2	7.0890	ug/L	7.0890	ppb	11:05:38
1	Ba 233.527†	-11.6	-2.9	-0.0190	ug/L	-0.0190	ppb	11:05:38
1	Be 313.107†	-5013.6	207.3	0.0759	ug/L	0.0759	ppb	11:05:18
1	Cd 226.502†	-193.1	6.1	0.0631	ug/L	0.0631	ppb	11:05:38
1	Co 228.616†	-63.1	3.7	0.0701	ug/L	0.0701	ppb	11:05:38
1	Cr 267.716†	78.2	-2.2	-0.0219	ug/L	-0.0219	ppb	11:05:38
1	Cu 324.752†	6827.8	-75.9	-0.2162	ug/L	-0.2162	ppb	11:05:18
1	Mn 257.610†	450.5	18.5	0.0213	ug/L	0.0213	ppb	11:05:38
1	Mo 202.031†	27.3	8.4	0.5323	ug/L	0.5323	ppb	11:05:38
1	Ni 231.604†	89.4	0.9	0.0214	ug/L	0.0214	ppb	11:05:38
1	P 214.914†	211.9	-16.2	-9.3236	ug/L	-9.3236	ppb	11:05:38
1	Pb 220.353†	-64.3	5.6	0.6285	ug/L	0.6285	ppb	11:05:38
1	S 181.975 Axial†	41.5	-1.0	-1.3774	ug/L	-1.3774	ppb	11:05:38
1	Sb 206.836†	36.6	1.5	0.4904	ug/L	0.4904	ppb	11:05:38
1	Se 196.026†	-26.5	2.9	1.7419	ug/L	1.7419	ppb	11:05:38
1	Si 251.611†	653.6	189.9	5.6697	ug/L	5.6697	ppb	11:05:38
1	Sn 189.927†	2.2	-2.9	-0.4695	ug/L	-0.4695	ppb	11:05:38
1	Ti 334.940†	-1019.1	117.8	0.1879	ug/L	0.1879	ppb	11:05:18
1	Tl 190.801†	-30.7	2.5	0.6973	ug/L	0.6973	ppb	11:05:38
1	U 409.014†	-2386.4	66.7	1.8362	ug/L	1.8362	ppb	11:05:13
1	V 292.402†	-1272.8	113.0	0.7547	ug/L	0.7547	ppb	11:05:18
1	Zn 213.857†	691.1	54.4	0.4729	ug/L	0.4729	ppb	11:05:38
1	SiO2†	679.7	197.6	12.642	ug/L	12.642	ppb	11:06:44
2	Sc Radial	5763.9	5763.9	98.6	%			11:04:21
2	Y RADIAL	6194.3	6194.3	98.51	%			11:04:21
2	Al 396.153Radial†	4.4	24.8	17.233	ug/L	17.233	ppb	11:04:21
2	Ca 317.933Radial†	28.7	13.5	19.943	ug/L	19.943	ppb	11:04:41
2	Fe 238.204 Radial†	6.9	0.2	1.8678	ug/L	1.8678	ppb	11:04:41
2	K 766.490 Radial†	2548.3	232.0	41.140	ug/L	41.140	ppb	11:04:21
2	Mg 279.077 IEC†	3.6	2.5	86.967	ug/L	86.967	ppb	11:04:41
2	Na 589.592 Radial†	-1094.3	-21.6	-7.2337	ug/L	-7.2337	ppb	11:04:21
2	Sr 421.552†	-18.4	8.7	0.0542	ug/L	0.0542	ppb	11:04:21
2	Sc 361.383	926942.0	926942.0	102.85	%			11:05:43
2	Y 371.029	770672.4	770672.4	102.61	%			11:05:43
2	Ag 328.068†	401.4	97.5	0.4398	ug/L	0.4398	ppb	11:05:48
2	As 188.979†	-22.5	2.3	0.9165	ug/L	0.9165	ppb	11:06:08
2	B 249.677†	-182.2	353.5	7.4138	ug/L	7.4138	ppb	11:06:08
2	Ba 233.527†	-3.0	5.6	0.0422	ug/L	0.0422	ppb	11:06:08
2	Be 313.107†	-5006.2	245.5	0.0896	ug/L	0.0896	ppb	11:05:48
2	Cd 226.502†	-191.4	9.0	0.0952	ug/L	0.0952	ppb	11:06:08
2	Co 228.616†	-69.6	-2.2	-0.0411	ug/L	-0.0411	ppb	11:06:08
2	Cr 267.716†	63.2	-17.2	-0.1810	ug/L	-0.1810	ppb	11:06:08
2	Cu 324.752†	6828.8	-117.1	-0.3350	ug/L	-0.3350	ppb	11:05:48
2	Mn 257.610†	438.6	4.1	0.0030	ug/L	0.0030	ppb	11:06:08
2	Mo 202.031†	23.8	4.8	0.3045	ug/L	0.3045	ppb	11:06:08
2	Ni 231.604†	81.8	-7.1	-0.1636	ug/L	-0.1636	ppb	11:06:08

2	P 214.914†	205.3	-23.9	-13.726	ug/L	-13.726 ppb	11:06:08
2	Pb 220.353†	-62.5	7.7	0.8775	ug/L	0.8775 ppb	11:06:08
2	S 181.975 Axial†	41.7	-1.0	-1.4676	ug/L	-1.4676 ppb	11:06:08
2	Sb 206.836†	29.2	-5.9	-1.8352	ug/L	-1.8352 ppb	11:06:08
2	Se 196.026†	-22.1	7.4	4.2662	ug/L	4.2662 ppb	11:06:08
2	Si 251.611†	667.8	199.7	5.9570	ug/L	5.9570 ppb	11:06:08
2	Sn 189.927†	8.0	2.8	0.4656	ug/L	0.4656 ppb	11:06:08
2	Ti 334.940†	-1103.5	42.0	0.0662	ug/L	0.0662 ppb	11:05:48
2	Tl 190.801†	-29.8	3.5	0.9826	ug/L	0.9826 ppb	11:06:08
2	U 409.014†	-2304.3	161.3	4.4447	ug/L	4.4447 ppb	11:05:43
2	V 292.402†	-1330.3	64.9	0.4431	ug/L	0.4431 ppb	11:05:48
2	Zn 213.857†	694.5	53.4	0.4652	ug/L	0.4652 ppb	11:06:08
2	SiO2†	634.7	149.7	9.5550	ug/L	9.5550 ppb	11:06:49
3	Sc Radial	5852.5	5852.5	100	%		11:04:46
3	Y RADIAL	6294.3	6294.3	100.1	%		11:04:46
3	Al 396.153Radial†	-20.8	-0.3	-0.2076	ug/L	-0.2076 ppb	11:04:46
3	Ca 317.933Radial†	26.3	10.6	15.688	ug/L	15.688 ppb	11:05:06
3	Fe 238.204 Radial†	7.6	0.7	6.9508	ug/L	6.9508 ppb	11:05:06
3	K 766.490 Radial†	2526.5	171.1	30.334	ug/L	30.334 ppb	11:04:46
3	Mg 279.077 IEC†	-0.1	-1.2	-43.215	ug/L	-43.215 ppb	11:05:06
3	Na 589.592 Radial†	-1082.0	7.5	2.5188	ug/L	2.5188 ppb	11:04:46
3	Sr 421.552†	-35.5	-8.1	-0.0508	ug/L	-0.0508 ppb	11:04:46
3	Sc 361.383	926310.6	926310.6	102.78	%		11:06:13
3	Y 371.029	767982.9	767982.9	102.25	%		11:06:13
3	Ag 328.068†	331.6	29.9	0.1375	ug/L	0.1375 ppb	11:06:18
3	As 188.979†	-35.3	-10.2	-4.0182	ug/L	-4.0182 ppb	11:06:38
3	B 249.677†	-161.8	373.2	7.8261	ug/L	7.8261 ppb	11:06:38
3	Ba 233.527†	-5.2	3.4	0.0266	ug/L	0.0266 ppb	11:06:38
3	Be 313.107†	-5081.7	168.7	0.0619	ug/L	0.0619 ppb	11:06:18
3	Cd 226.502†	-185.5	14.6	0.1543	ug/L	0.1543 ppb	11:06:38
3	Co 228.616†	-67.0	0.2	0.0024	ug/L	0.0024 ppb	11:06:38
3	Cr 267.716†	86.4	5.4	0.0568	ug/L	0.0568 ppb	11:06:38
3	Cu 324.752†	6866.4	-75.9	-0.2170	ug/L	-0.2170 ppb	11:06:18
3	Mn 257.610†	434.6	0.6	0.0021	ug/L	0.0021 ppb	11:06:38
3	Mo 202.031†	13.3	-5.4	-0.3443	ug/L	-0.3443 ppb	11:06:38
3	Ni 231.604†	103.4	14.1	0.3264	ug/L	0.3264 ppb	11:06:38
3	P 214.914†	224.7	-4.9	-2.7834	ug/L	-2.7834 ppb	11:06:38
3	Pb 220.353†	-59.6	10.5	1.1836	ug/L	1.1836 ppb	11:06:38
3	S 181.975 Axial†	39.4	-3.2	-4.5029	ug/L	-4.5029 ppb	11:06:38
3	Sb 206.836†	24.5	-10.4	-3.3172	ug/L	-3.3172 ppb	11:06:38
3	Se 196.026†	-23.1	6.4	3.7104	ug/L	3.7104 ppb	11:06:38
3	Si 251.611†	645.3	178.2	5.3332	ug/L	5.3332 ppb	11:06:38
3	Sn 189.927†	1.3	-3.7	-0.6028	ug/L	-0.6028 ppb	11:06:38
3	Ti 334.940†	-1024.2	118.4	0.1890	ug/L	0.1890 ppb	11:06:18
3	Tl 190.801†	-28.7	4.6	1.2797	ug/L	1.2797 ppb	11:06:38
3	U 409.014†	-2403.5	63.3	1.7426	ug/L	1.7426 ppb	11:06:13
3	V 292.402†	-1333.5	61.0	0.3988	ug/L	0.3988 ppb	11:06:18
3	Zn 213.857†	675.7	35.6	0.3103	ug/L	0.3103 ppb	11:06:38
3	SiO2†	640.4	155.6	9.9788	ug/L	9.9788 ppb	11:06:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	924780.9	102.61	%	0.356				0.35%
Sc Radial	5841.3	100.0	%	1.24				1.24%
Y 371.029	767904.2	102.24	%	0.374				0.37%
Y RADIAL	6287.3	99.99	%	1.426				1.43%
Ag 328.068†	82.7	0.3770	ug/L	0.21509	0.3770	ppb	0.21509	57.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.6	6.6396	ug/L	9.30430	6.6396	ppb	9.30430	140.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.2	-1.6548	ug/L	2.47392	-1.6548	ppb	2.47392	149.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	355.0	7.4429	ug/L	0.36945	7.4429	ppb	0.36945	4.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0166	ug/L	0.03179	0.0166	ppb	0.03179	191.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	207.1	0.0758	ug/L	0.01388	0.0758	ppb	0.01388	18.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.5	17.001	ug/L	2.5526	17.001	ppb	2.5526	15.01%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.9      0.1042 ug/L       0.04626      0.1042 ppb        0.04626  44.41%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0104 ug/L       0.05605      0.0104 ppb        0.05605 536.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.7     -0.0487 ug/L       0.12113     -0.0487 ppb        0.12113 248.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -89.6     -0.2560 ug/L       0.06838     -0.2560 ppb        0.06838  26.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2701 ug/L       8.79450      9.2701 ppb        8.79450  94.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         170.5      30.243 ug/L       10.9433      30.243 ppb        10.9433  36.18%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.522 ug/L       65.0937      21.522 ppb        65.0937 302.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 7.7      0.0088 ug/L       0.01083      0.0088 ppb        0.01083 123.29%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.6      0.1642 ug/L       0.45483      0.1642 ppb        0.45483 277.06%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -17.8     -5.9743 ug/L       7.93874     -5.9743 ppb        7.93874 132.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.7      0.0614 ug/L       0.24741      0.0614 ppb        0.24741 402.87%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.0     -8.6109 ug/L       5.50587     -8.6109 ppb        5.50587  63.94%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.9      0.8965 ug/L       0.27803      0.8965 ppb        0.27803  31.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.7     -2.4493 ug/L       1.77904     -2.4493 ppb        1.77904  72.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.9     -1.5540 ug/L       1.91933     -1.5540 ppb        1.91933 123.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      3.2395 ug/L       1.32638      3.2395 ppb        1.32638  40.94%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               189.3      5.6533 ug/L       0.31226      5.6533 ppb        0.31226   5.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.2     -0.2022 ug/L       0.58216     -0.2022 ppb        0.58216 287.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 3.4      0.0211 ug/L       0.06241      0.0211 ppb        0.06241 295.14%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                92.7      0.1477 ug/L       0.07062      0.1477 ppb        0.07062  47.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.5      0.9865 ug/L       0.29122      0.9865 ppb        0.29122  29.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 97.1      2.6745 ug/L       1.53372      2.6745 ppb        1.53372  57.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 79.6      0.5322 ug/L       0.19394      0.5322 ppb        0.19394  36.44%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.8      0.4161 ug/L       0.09172      0.4161 ppb        0.09172  22.04%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     167.6      10.725 ug/L        1.6735      10.725 ppb         1.6735  15.60%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 11:57:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5830.5	5830.5	99.8	%			11:59:41
1	Y RADIAL	6202.8	6202.8	98.65	%			11:59:41
1	Al 396.153Radial†	7094.2	7130.9	4932.0	ug/L	4932.0	ppb	11:59:41
1	Ca 317.933Radial†	3394.3	3386.6	4991.6	ug/L	4991.6	ppb	12:00:01
1	Fe 238.204 Radial†	542.6	537.1	5043.6	ug/L	5043.6	ppb	12:00:01
1	K 766.490 Radial†	30903.2	28622.7	5067.4	ug/L	5067.4	ppb	11:59:41
1	Mg 279.077 IEC†	148.5	147.6	5214.1	ug/L	5214.1	ppb	12:00:01
1	Na 589.592 Radial†	27223.4	28374.1	9521.8	ug/L	9521.8	ppb	11:59:41
1	Sr 421.552†	80201.0	80413.2	500.75	ug/L	500.75	ppb	11:59:41
1	Sc 361.383	918521.4	918521.4	101.91	%			12:00:59
1	Y 371.029	750066.3	750066.3	99.864	%			12:00:59
1	Ag 328.068†	112350.8	109947.2	501.03	ug/L	501.03	ppb	12:01:04
1	As 188.979†	1247.6	1248.3	497.63	ug/L	497.63	ppb	12:01:24
1	B 249.677†	22959.7	23059.0	481.64	ug/L	481.64	ppb	12:01:04
1	Ba 233.527†	67958.6	66690.2	495.54	ug/L	495.54	ppb	12:01:04
1	Be 313.107†	1373495.7	1352803.5	494.08	ug/L	494.08	ppb	12:00:59
1	Cd 226.502†	47617.2	46917.7	495.80	ug/L	495.80	ppb	12:01:04
1	Co 228.616†	26557.5	26124.0	495.96	ug/L	495.96	ppb	12:01:04
1	Cr 267.716†	47889.0	46910.6	493.23	ug/L	493.23	ppb	12:01:04
1	Cu 324.752†	180614.2	170464.1	488.08	ug/L	488.08	ppb	12:01:04
1	Mn 257.610†	472034.3	462743.4	494.03	ug/L	494.03	ppb	12:00:59
1	Mo 202.031†	8022.2	7853.2	499.24	ug/L	499.24	ppb	12:01:24
1	Ni 231.604†	21931.5	21432.9	495.99	ug/L	495.99	ppb	12:01:04
1	P 214.914†	4554.7	4245.6	2374.8	ug/L	2374.8	ppb	12:01:24
1	Pb 220.353†	4352.0	4338.7	492.01	ug/L	492.01	ppb	12:01:24
1	S 181.975 Axial†	765.9	710.0	993.87	ug/L	993.87	ppb	12:01:24
1	Sb 206.836†	1635.2	1570.2	504.25	ug/L	504.25	ppb	12:01:24
1	Se 196.026†	844.2	857.1	513.90	ug/L	513.90	ppb	12:01:24
1	Si 251.611†	84702.9	82661.8	2462.6	ug/L	2462.6	ppb	12:01:04
1	Sn 189.927†	3110.9	3047.4	499.55	ug/L	499.55	ppb	12:01:24
1	Ti 334.940†	317360.8	312513.2	498.58	ug/L	498.58	ppb	12:01:04
1	Tl 190.801†	1776.2	1775.3	500.42	ug/L	500.42	ppb	12:01:24
1	U 409.014†	15668.6	17776.0	488.10	ug/L	488.10	ppb	12:01:04
1	V 292.402†	74306.5	74268.8	497.23	ug/L	497.23	ppb	12:01:04
1	Zn 213.857†	58266.2	56549.7	489.63	ug/L	489.63	ppb	12:01:04
1	SiO2†	83444.8	81409.6	5196.2	ug/L	5196.2	ppb	12:02:31
2	Sc Radial	5836.0	5836.0	99.9	%			12:00:06
2	Y RADIAL	6237.9	6237.9	99.21	%			12:00:06
2	Al 396.153Radial†	7113.8	7143.8	4941.2	ug/L	4941.2	ppb	12:00:06
2	Ca 317.933Radial†	3379.1	3368.1	4964.4	ug/L	4964.4	ppb	12:00:26
2	Fe 238.204 Radial†	541.4	535.4	5027.5	ug/L	5027.5	ppb	12:00:26
2	K 766.490 Radial†	30922.1	28612.4	5065.6	ug/L	5065.6	ppb	12:00:06
2	Mg 279.077 IEC†	145.0	144.1	5087.7	ug/L	5087.7	ppb	12:00:26
2	Na 589.592 Radial†	27104.4	28229.2	9473.2	ug/L	9473.2	ppb	12:00:06
2	Sr 421.552†	79988.6	80124.7	498.95	ug/L	498.95	ppb	12:00:06
2	Sc 361.383	915777.4	915777.4	101.61	%			12:01:29
2	Y 371.029	747914.5	747914.5	99.578	%			12:01:29
2	Ag 328.068†	112273.2	110201.2	502.17	ug/L	502.17	ppb	12:01:35
2	As 188.979†	1226.2	1230.9	490.75	ug/L	490.75	ppb	12:01:55
2	B 249.677†	22927.2	23094.5	482.39	ug/L	482.39	ppb	12:01:35
2	Ba 233.527†	67534.9	66473.1	493.93	ug/L	493.93	ppb	12:01:35
2	Be 313.107†	1367741.0	1351178.1	493.49	ug/L	493.49	ppb	12:01:29
2	Cd 226.502†	47330.6	46775.6	494.30	ug/L	494.30	ppb	12:01:35
2	Co 228.616†	26423.0	26069.6	494.91	ug/L	494.91	ppb	12:01:35
2	Cr 267.716†	47634.4	46800.8	492.08	ug/L	492.08	ppb	12:01:35
2	Cu 324.752†	181101.5	171474.7	490.97	ug/L	490.97	ppb	12:01:35
2	Mn 257.610†	470818.6	462934.8	494.24	ug/L	494.24	ppb	12:01:29
2	Mo 202.031†	7886.3	7742.9	492.23	ug/L	492.23	ppb	12:01:55
2	Ni 231.604†	21779.2	21347.5	494.02	ug/L	494.02	ppb	12:01:35

2	P 214.914†	4507.0	4212.1	2354.9	ug/L	2354.9	ppb	12:01:55
2	Pb 220.353†	4296.6	4297.0	487.28	ug/L	487.28	ppb	12:01:55
2	S 181.975 Axial†	749.8	696.4	974.83	ug/L	974.83	ppb	12:01:55
2	Sb 206.836†	1600.2	1540.6	494.60	ug/L	494.60	ppb	12:01:55
2	Se 196.026†	823.5	839.3	503.52	ug/L	503.52	ppb	12:01:55
2	Si 251.611†	84593.1	82802.8	2467.0	ug/L	2467.0	ppb	12:01:35
2	Sn 189.927†	3046.2	2993.0	490.63	ug/L	490.63	ppb	12:01:55
2	Ti 334.940†	316972.8	313064.4	499.46	ug/L	499.46	ppb	12:01:35
2	Tl 190.801†	1733.2	1738.2	490.05	ug/L	490.05	ppb	12:01:55
2	U 409.014†	15918.3	18067.9	496.14	ug/L	496.14	ppb	12:01:35
2	V 292.402†	74100.8	74284.8	497.25	ug/L	497.25	ppb	12:01:35
2	Zn 213.857†	58044.3	56502.6	489.23	ug/L	489.23	ppb	12:01:35
2	SiO2†	84324.6	82520.8	5267.8	ug/L	5267.8	ppb	12:02:36
3	Sc Radial	5884.4	5884.4	101	%			12:00:31
3	Y RADIAL	6270.2	6270.2	99.72	%			12:00:31
3	Al 396.153Radial†	7158.7	7129.8	4931.4	ug/L	4931.4	ppb	12:00:31
3	Ca 317.933Radial†	3409.0	3370.0	4967.2	ug/L	4967.2	ppb	12:00:51
3	Fe 238.204 Radial†	545.2	534.7	5021.0	ug/L	5021.0	ppb	12:00:51
3	K 766.490 Radial†	31146.7	28580.5	5059.9	ug/L	5059.9	ppb	12:00:31
3	Mg 279.077 IEC†	147.8	145.7	5144.4	ug/L	5144.4	ppb	12:00:51
3	Na 589.592 Radial†	27319.4	28219.2	9469.8	ug/L	9469.8	ppb	12:00:31
3	Sr 421.552†	80838.8	80309.4	500.10	ug/L	500.10	ppb	12:00:31
3	Sc 361.383	916763.4	916763.4	101.72	%			12:02:00
3	Y 371.029	750219.5	750219.5	99.885	%			12:02:00
3	Ag 328.068†	112532.6	110337.4	502.79	ug/L	502.79	ppb	12:02:06
3	As 188.979†	1232.9	1236.2	492.84	ug/L	492.84	ppb	12:02:26
3	B 249.677†	22961.7	23104.2	482.60	ug/L	482.60	ppb	12:02:06
3	Ba 233.527†	67633.9	66498.9	494.13	ug/L	494.13	ppb	12:02:06
3	Be 313.107†	1372957.1	1354858.4	494.83	ug/L	494.83	ppb	12:02:00
3	Cd 226.502†	47315.4	46710.6	493.61	ug/L	493.61	ppb	12:02:06
3	Co 228.616†	26421.4	26040.1	494.36	ug/L	494.36	ppb	12:02:06
3	Cr 267.716†	47764.7	46878.6	492.90	ug/L	492.90	ppb	12:02:06
3	Cu 324.752†	181442.5	171618.3	491.38	ug/L	491.38	ppb	12:02:06
3	Mn 257.610†	470737.9	462357.1	493.62	ug/L	493.62	ppb	12:02:00
3	Mo 202.031†	7937.8	7785.2	494.92	ug/L	494.92	ppb	12:02:26
3	Ni 231.604†	21824.4	21368.9	494.51	ug/L	494.51	ppb	12:02:06
3	P 214.914†	4510.5	4210.8	2354.1	ug/L	2354.1	ppb	12:02:26
3	Pb 220.353†	4325.6	4321.0	490.00	ug/L	490.00	ppb	12:02:26
3	S 181.975 Axial†	761.3	706.8	989.49	ug/L	989.49	ppb	12:02:26
3	Sb 206.836†	1624.9	1563.2	501.88	ug/L	501.88	ppb	12:02:26
3	Se 196.026†	832.2	846.9	507.93	ug/L	507.93	ppb	12:02:26
3	Si 251.611†	84649.0	82768.2	2465.9	ug/L	2465.9	ppb	12:02:06
3	Sn 189.927†	3082.7	3025.6	495.96	ug/L	495.96	ppb	12:02:26
3	Ti 334.940†	317453.6	313201.5	499.68	ug/L	499.68	ppb	12:02:06
3	Tl 190.801†	1745.8	1748.8	493.00	ug/L	493.00	ppb	12:02:26
3	U 409.014†	15926.1	18058.6	495.88	ug/L	495.88	ppb	12:02:06
3	V 292.402†	74332.9	74434.6	498.28	ug/L	498.28	ppb	12:02:06
3	Zn 213.857†	58061.6	56458.2	488.84	ug/L	488.84	ppb	12:02:06
3	SiO2†	84953.7	83050.0	5301.7	ug/L	5301.7	ppb	12:02:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917020.7	101.75	%	0.154				0.15%
Sc Radial	5850.3	100	%	0.5				0.51%
Y 371.029	749400.1	99.776	%	0.1716				0.17%
Y RADIAL	6237.0	99.19	%	0.536				0.54%
Ag 328.068†	110161.9	502.00	ug/L	0.892	502.00	ppb	0.892	0.18%
QC value within limits for Ag 328.068 Recovery = 100.40%								
Al 396.153Radial†	7134.9	4934.8	ug/L	5.53	4934.8	ppb	5.53	0.11%
QC value within limits for Al 396.153Radial Recovery = 98.70%								
As 188.979†	1238.5	493.74	ug/L	3.525	493.74	ppb	3.525	0.71%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	23085.9	482.21	ug/L	0.502	482.21	ppb	0.502	0.10%
QC value within limits for B 249.677 Recovery = 96.44%								
Ba 233.527†	66554.1	494.54	ug/L	0.879	494.54	ppb	0.879	0.18%
QC value within limits for Ba 233.527 Recovery = 98.91%								
Be 313.107†	1352946.7	494.13	ug/L	0.673	494.13	ppb	0.673	0.14%
QC value within limits for Be 313.107 Recovery = 98.83%								
Ca 317.933Radial†	3374.9	4974.4	ug/L	14.97	4974.4	ppb	14.97	0.30%

```
   QC value within limits for Ca 317.933Radial  Recovery = 99.49%
Cd 226.502†            46801.3      494.57 ug/L        1.119      494.57 ppb        1.119   0.23%
   QC value within limits for Cd 226.502  Recovery = 98.91%
Co 228.616†            26077.9      495.08 ug/L        0.815      495.08 ppb        0.815   0.16%
   QC value within limits for Co 228.616  Recovery = 99.02%
Cr 267.716†            46863.3      492.74 ug/L        0.594      492.74 ppb        0.594   0.12%
   QC value within limits for Cr 267.716  Recovery = 98.55%
Cu 324.752†           171185.7      490.14 ug/L        1.800      490.14 ppb        1.800   0.37%
   QC value within limits for Cu 324.752  Recovery = 98.03%
Fe 238.204 Radial†       535.7      5030.7 ug/L       11.65      5030.7 ppb       11.65   0.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.61%
K 766.490 Radial†      28605.2      5064.3 ug/L        3.89      5064.3 ppb        3.89   0.08%
   QC value within limits for K 766.490 Radial  Recovery = 101.29%
Mg 279.077 IEC†          145.8      5148.7 ug/L       63.35      5148.7 ppb       63.35   1.23%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.97%
Mn 257.610†           462678.4      493.96 ug/L        0.315      493.96 ppb        0.315   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.79%
Mo 202.031†             7793.8      495.46 ug/L        3.533      495.46 ppb        3.533   0.71%
   QC value within limits for Mo 202.031  Recovery = 99.09%
Na 589.592 Radial†     28274.2      9488.3 ug/L       29.09      9488.3 ppb       29.09   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 94.88%
Ni 231.604†            21383.1      494.84 ug/L        1.030      494.84 ppb        1.030   0.21%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4222.8      2361.3 ug/L       11.71      2361.3 ppb       11.71   0.50%
   QC value within limits for P 214.914  Recovery = 94.45%
Pb 220.353†             4318.9      489.76 ug/L        2.373      489.76 ppb        2.373   0.48%
   QC value within limits for Pb 220.353  Recovery = 97.95%
S 181.975 Axial†         704.4      986.06 ug/L        9.972      986.06 ppb        9.972   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 98.61%
Sb 206.836†             1558.0      500.24 ug/L        5.028      500.24 ppb        5.028   1.01%
   QC value within limits for Sb 206.836  Recovery = 100.05%
Se 196.026†              847.8      508.45 ug/L        5.213      508.45 ppb        5.213   1.03%
   QC value within limits for Se 196.026  Recovery = 101.69%
Si 251.611†            82744.3      2465.2 ug/L        2.27      2465.2 ppb        2.27   0.09%
   QC value within limits for Si 251.611  Recovery = 98.61%
Sn 189.927†             3022.0      495.38 ug/L        4.487      495.38 ppb        4.487   0.91%
   QC value within limits for Sn 189.927  Recovery = 99.08%
Sr 421.552†            80282.4      499.93 ug/L        0.910      499.93 ppb        0.910   0.18%
   QC value within limits for Sr 421.552  Recovery = 99.99%
Ti 334.940†           312926.3      499.24 ug/L        0.579      499.24 ppb        0.579   0.12%
   QC value within limits for Ti 334.940  Recovery = 99.85%
Tl 190.801†             1754.1      494.49 ug/L        5.347      494.49 ppb        5.347   1.08%
   QC value within limits for Tl 190.801  Recovery = 98.90%
U 409.014†             17967.5      493.37 ug/L        4.573      493.37 ppb        4.573   0.93%
   QC value within limits for U 409.014  Recovery = 98.67%
V 292.402†             74329.4      497.58 ug/L        0.600      497.58 ppb        0.600   0.12%
   QC value within limits for V 292.402  Recovery = 99.52%
Zn 213.857†            56503.5      489.23 ug/L        0.395      489.23 ppb        0.395   0.08%
   QC value within limits for Zn 213.857  Recovery = 97.85%
SiO2†                  82326.8      5255.2 ug/L       53.83      5255.2 ppb       53.83   1.02%
   QC value within limits for SiO2  Recovery = 98.27%
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 12:04:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5943.6	5943.6	102	%			12:06:44
1	Y RADIAL	6397.8	6397.8	101.7	%			12:06:44
1	Al 396.153Radial†	-36.7	-15.7	-10.945	ug/L	-10.945	ppb	12:06:44
1	Ca 317.933Radial†	31.9	15.8	23.253	ug/L	23.253	ppb	12:07:04
1	Fe 238.204 Radial†	6.4	-0.5	-5.0186	ug/L	-5.0186	ppb	12:07:04
1	K 766.490 Radial†	2423.9	31.5	5.5818	ug/L	5.5818	ppb	12:06:44
1	Mg 279.077 IEC†	1.9	0.7	26.364	ug/L	26.364	ppb	12:07:04
1	Na 589.592 Radial†	-1049.6	55.9	18.772	ug/L	18.772	ppb	12:06:44
1	Sr 421.552†	-27.7	0.1	0.0002	ug/L	0.0002	ppb	12:06:44
1	Sc 361.383	904747.1	904747.1	100.39	%			12:08:01
1	Y 371.029	752940.7	752940.7	100.25	%			12:08:01
1	Ag 328.068†	351.0	57.0	0.2560	ug/L	0.2560	ppb	12:08:01
1	As 188.979†	-22.3	2.0	0.7794	ug/L	0.7794	ppb	12:08:21
1	B 249.677†	-384.4	147.8	3.0992	ug/L	3.0992	ppb	12:08:21
1	Ba 233.527†	-10.1	-1.6	-0.0110	ug/L	-0.0110	ppb	12:08:21
1	Be 313.107†	-4990.4	141.8	0.0518	ug/L	0.0518	ppb	12:08:01
1	Cd 226.502†	-182.7	13.1	0.1395	ug/L	0.1395	ppb	12:08:21
1	Co 228.616†	-62.0	3.6	0.0702	ug/L	0.0702	ppb	12:08:21
1	Cr 267.716†	81.3	2.4	0.0248	ug/L	0.0248	ppb	12:08:21
1	Cu 324.752†	6819.0	36.1	0.1029	ug/L	0.1029	ppb	12:08:01
1	Mn 257.610†	447.6	23.6	0.0241	ug/L	0.0241	ppb	12:08:21
1	Mo 202.031†	28.1	9.7	0.6137	ug/L	0.6137	ppb	12:08:21
1	Ni 231.604†	95.1	8.2	0.1888	ug/L	0.1888	ppb	12:08:21
1	P 214.914†	211.1	-13.3	-7.6724	ug/L	-7.6724	ppb	12:08:21
1	Pb 220.353†	-64.7	4.0	0.4526	ug/L	0.4526	ppb	12:08:21
1	S 181.975 Axial†	39.4	-2.3	-3.2083	ug/L	-3.2083	ppb	12:08:21
1	Sb 206.836†	34.8	0.4	0.1241	ug/L	0.1241	ppb	12:08:21
1	Se 196.026†	-25.1	3.8	2.1663	ug/L	2.1663	ppb	12:08:21
1	Si 251.611†	725.9	273.4	8.1744	ug/L	8.1744	ppb	12:08:21
1	Sn 189.927†	0.5	-4.5	-0.7298	ug/L	-0.7298	ppb	12:08:21
1	Ti 334.940†	-1079.7	39.4	0.0632	ug/L	0.0632	ppb	12:08:01
1	Tl 190.801†	-37.9	-5.2	-1.4600	ug/L	-1.4600	ppb	12:08:21
1	U 409.014†	-2334.6	76.2	2.1001	ug/L	2.1001	ppb	12:08:01
1	V 292.402†	-1295.7	67.6	0.4609	ug/L	0.4609	ppb	12:08:01
1	Zn 213.857†	678.6	54.1	0.4711	ug/L	0.4711	ppb	12:08:21
1	SiO2†	563.1	93.5	5.9727	ug/L	5.9727	ppb	12:09:17
2	Sc Radial	5877.5	5877.5	101	%			12:07:09
2	Y RADIAL	6301.1	6301.1	100.2	%			12:07:09
2	Al 396.153Radial†	-30.4	-9.8	-6.7942	ug/L	-6.7942	ppb	12:07:09
2	Ca 317.933Radial†	29.5	13.7	20.250	ug/L	20.250	ppb	12:07:29
2	Fe 238.204 Radial†	8.5	1.6	15.144	ug/L	15.144	ppb	12:07:29
2	K 766.490 Radial†	2420.9	55.3	9.8013	ug/L	9.8013	ppb	12:07:09
2	Mg 279.077 IEC†	0.3	-0.9	-30.512	ug/L	-30.512	ppb	12:07:29
2	Na 589.592 Radial†	-1064.0	30.1	10.092	ug/L	10.092	ppb	12:07:09
2	Sr 421.552†	-6.2	21.2	0.1316	ug/L	0.1316	ppb	12:07:09
2	Sc 361.383	915787.5	915787.5	101.61	%			12:08:26
2	Y 371.029	763840.5	763840.5	101.70	%			12:08:26
2	Ag 328.068†	373.0	74.4	0.3355	ug/L	0.3355	ppb	12:08:26
2	As 188.979†	-22.8	1.8	0.7053	ug/L	0.7053	ppb	12:08:46
2	B 249.677†	-358.0	178.3	3.7375	ug/L	3.7375	ppb	12:08:46
2	Ba 233.527†	16.7	24.9	0.1859	ug/L	0.1859	ppb	12:08:46
2	Be 313.107†	-5092.2	101.6	0.0371	ug/L	0.0371	ppb	12:08:26
2	Cd 226.502†	-198.1	0.2	0.0002	ug/L	0.0002	ppb	12:08:46
2	Co 228.616†	-66.9	-0.4	-0.0071	ug/L	-0.0071	ppb	12:08:46
2	Cr 267.716†	95.7	15.5	0.1608	ug/L	0.1608	ppb	12:08:46
2	Cu 324.752†	6866.8	1.2	0.0042	ug/L	0.0042	ppb	12:08:26
2	Mn 257.610†	453.6	24.1	0.0278	ug/L	0.0278	ppb	12:08:46
2	Mo 202.031†	21.7	3.0	0.1917	ug/L	0.1917	ppb	12:08:46
2	Ni 231.604†	90.0	2.1	0.0479	ug/L	0.0479	ppb	12:08:46

2	P 214.914†	213.6	-13.3	-7.6526 ug/L	-7.6526 ppb	12:08:46
2	Pb 220.353†	-68.6	0.9	0.1004 ug/L	0.1004 ppb	12:08:46
2	S 181.975 Axial†	40.1	-2.1	-2.9631 ug/L	-2.9631 ppb	12:08:46
2	Sb 206.836†	38.8	3.9	1.2504 ug/L	1.2504 ppb	12:08:46
2	Se 196.026†	-16.0	13.1	7.5950 ug/L	7.5950 ppb	12:08:46
2	Si 251.611†	678.6	218.2	6.5230 ug/L	6.5230 ppb	12:08:46
2	Sn 189.927†	9.9	4.8	0.7858 ug/L	0.7858 ppb	12:08:46
2	Ti 334.940†	-1103.3	29.1	0.0434 ug/L	0.0434 ppb	12:08:26
2	Tl 190.801†	-37.2	-4.1	-1.1582 ug/L	-1.1582 ppb	12:08:46
2	U 409.014†	-2106.4	328.8	9.0562 ug/L	9.0562 ppb	12:08:26
2	V 292.402†	-1307.0	72.1	0.4934 ug/L	0.4934 ppb	12:08:26
2	Zn 213.857†	689.6	56.9	0.4960 ug/L	0.4960 ppb	12:08:46
2	SiO2†	577.4	100.8	6.4452 ug/L	6.4452 ppb	12:09:22
3	Sc Radial	5765.2	5765.2	98.7 %		12:07:34
3	Y RADIAL	6230.6	6230.6	99.09 %		12:07:34
3	Al 396.153Radial†	-30.3	-10.3	-7.1552 ug/L	-7.1552 ppb	12:07:34
3	Ca 317.933Radial†	31.8	16.7	24.546 ug/L	24.546 ppb	12:07:54
3	Fe 238.204 Radial†	6.9	0.1	1.3209 ug/L	1.3209 ppb	12:07:54
3	K 766.490 Radial†	2425.1	106.5	18.876 ug/L	18.876 ppb	12:07:34
3	Mg 279.077 IEC†	0.7	-0.5	-16.193 ug/L	-16.193 ppb	12:07:54
3	Na 589.592 Radial†	-1040.0	33.8	11.341 ug/L	11.341 ppb	12:07:34
3	Sr 421.552†	0.5	27.8	0.1730 ug/L	0.1730 ppb	12:07:34
3	Sc 361.383	904812.9	904812.9	100.39 %		12:08:51
3	Y 371.029	754674.2	754674.2	100.48 %		12:08:51
3	Ag 328.068†	311.7	17.7	0.0780 ug/L	0.0780 ppb	12:08:51
3	As 188.979†	-26.5	-2.2	-0.8622 ug/L	-0.8622 ppb	12:09:11
3	B 249.677†	-375.9	156.2	3.2768 ug/L	3.2768 ppb	12:09:11
3	Ba 233.527†	-9.4	-1.0	-0.0062 ug/L	-0.0062 ppb	12:09:11
3	Be 313.107†	-4986.8	145.8	0.0531 ug/L	0.0531 ppb	12:08:51
3	Cd 226.502†	-180.6	15.3	0.1612 ug/L	0.1612 ppb	12:09:11
3	Co 228.616†	-73.7	-8.0	-0.1515 ug/L	-0.1515 ppb	12:09:11
3	Cr 267.716†	75.4	-3.5	-0.0376 ug/L	-0.0376 ppb	12:09:11
3	Cu 324.752†	6811.0	27.6	0.0790 ug/L	0.0790 ppb	12:08:51
3	Mn 257.610†	443.6	19.6	0.0213 ug/L	0.0213 ppb	12:09:11
3	Mo 202.031†	20.5	2.1	0.1318 ug/L	0.1318 ppb	12:09:11
3	Ni 231.604†	90.4	3.4	0.0800 ug/L	0.0800 ppb	12:09:11
3	P 214.914†	205.7	-18.7	-10.767 ug/L	-10.767 ppb	12:09:11
3	Pb 220.353†	-57.3	11.3	1.2803 ug/L	1.2803 ppb	12:09:11
3	S 181.975 Axial†	42.1	0.4	0.5027 ug/L	0.5027 ppb	12:09:11
3	Sb 206.836†	31.3	-3.1	-0.9572 ug/L	-0.9572 ppb	12:09:11
3	Se 196.026†	-28.5	0.4	0.2427 ug/L	0.2427 ppb	12:09:11
3	Si 251.611†	587.0	135.0	4.0314 ug/L	4.0314 ppb	12:09:11
3	Sn 189.927†	7.7	2.6	0.4341 ug/L	0.4341 ppb	12:09:11
3	Ti 334.940†	-1138.7	-19.4	-0.0317 ug/L	-0.0317 ppb	12:08:51
3	Tl 190.801†	-40.8	-8.1	-2.2771 ug/L	-2.2771 ppb	12:09:11
3	U 409.014†	-2241.4	169.2	4.6600 ug/L	4.6600 ppb	12:08:51
3	V 292.402†	-1304.3	59.2	0.4013 ug/L	0.4013 ppb	12:08:51
3	Zn 213.857†	688.0	63.4	0.5539 ug/L	0.5539 ppb	12:09:11
3	SiO2†	579.7	110.0	7.0334 ug/L	7.0334 ppb	12:09:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908449.2	100.80	%	0.705				0.70%
Sc Radial	5862.1	100	%	1.5				1.54%
Y 371.029	757151.8	100.81	%	0.780				0.77%
Y RADIAL	6309.8	100.4	%	1.34				1.33%
Ag 328.068†	49.7	0.2232	ug/L	0.13185	0.2232	ppb	0.13185	59.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.9	-8.2981	ug/L	2.29928	-8.2981	ppb	2.29928	27.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.2075	ug/L	0.92711	0.2075	ppb	0.92711	446.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.8	3.3712	ug/L	0.32948	3.3712	ppb	0.32948	9.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.4	0.0562	ug/L	0.11232	0.0562	ppb	0.11232	199.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	129.7	0.0473	ug/L	0.00887	0.0473	ppb	0.00887	18.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.4	22.683	ug/L	2.2037	22.683	ppb	2.2037	9.72%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.5      0.1003 ug/L       0.08734      0.1003 ppb        0.08734  87.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.6     -0.0295 ug/L       0.11254     -0.0295 ppb        0.11254 381.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.8      0.0494 ug/L       0.10145      0.0494 ppb        0.10145 205.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                21.6      0.0621 ug/L       0.05151      0.0621 ppb        0.05151  83.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.4      3.8155 ug/L      10.31030      3.8155 ppb       10.31030 270.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          64.4      11.420 ug/L        6.7935      11.420 ppb         6.7935  59.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.2     -6.7803 ug/L      29.58356     -6.7803 ppb       29.58356 436.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.4      0.0244 ug/L       0.00323      0.0244 ppb        0.00323  13.22%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.9      0.3124 ug/L       0.26266      0.3124 ppb        0.26266  84.08%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         39.9      13.402 ug/L        4.6928      13.402 ppb         4.6928  35.02%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.6      0.1056 ug/L       0.07387      0.1056 ppb        0.07387  69.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.1     -8.6973 ug/L       1.79249     -8.6973 ppb        1.79249  20.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 5.4      0.6111 ug/L       0.60572      0.6111 ppb        0.60572  99.12%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.3     -1.8896 ug/L       2.07538     -1.8896 ppb        2.07538 109.83%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.4      0.1391 ug/L       1.10385      0.1391 ppb        1.10385 793.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.7      3.3347 ug/L       3.81286      3.3347 ppb        3.81286 114.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               208.9      6.2429 ug/L       2.08565      6.2429 ppb        2.08565  33.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.0      0.1634 ug/L       0.79323      0.1634 ppb        0.79323 485.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                16.3      0.1016 ug/L       0.09020      0.1016 ppb        0.09020  88.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                16.4      0.0250 ug/L       0.05004      0.0250 ppb        0.05004 200.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.8     -1.6318 ug/L       0.57888     -1.6318 ppb        0.57888  35.48%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                191.4      5.2721 ug/L       3.51825      5.2721 ppb        3.51825  66.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 66.3      0.4518 ug/L       0.04670      0.4518 ppb        0.04670  10.33%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                58.1      0.5070 ug/L       0.04248      0.5070 ppb        0.04248   8.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     101.4      6.4838 ug/L       0.53137      6.4838 ppb        0.53137   8.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 12:54:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5848.2	5848.2	100	%			12:56:17
1	Y RADIAL	6232.2	6232.2	99.12	%			12:56:17
1	Al 396.153Radial†	7194.6	7209.7	4986.7	ug/L	4986.7	ppb	12:56:17
1	Ca 317.933Radial†	3408.9	3390.8	4997.8	ug/L	4997.8	ppb	12:56:37
1	Fe 238.204 Radial†	540.1	532.9	5005.0	ug/L	5005.0	ppb	12:56:37
1	K 766.490 Radial†	31431.1	29056.3	5144.2	ug/L	5144.2	ppb	12:56:17
1	Mg 279.077 IEC†	146.4	145.1	5124.1	ug/L	5124.1	ppb	12:56:37
1	Na 589.592 Radial†	27231.8	28299.8	9496.9	ug/L	9496.9	ppb	12:56:17
1	Sr 421.552†	80956.2	80924.2	503.93	ug/L	503.93	ppb	12:56:17
1	Sc 361.383	912254.4	912254.4	101.22	%			12:57:34
1	Y 371.029	744537.5	744537.5	99.128	%			12:57:34
1	Ag 328.068†	112666.9	111016.8	505.86	ug/L	505.86	ppb	12:57:39
1	As 188.979†	1234.9	1244.2	496.11	ug/L	496.11	ppb	12:57:59
1	B 249.677†	22942.3	23196.5	484.53	ug/L	484.53	ppb	12:57:39
1	Ba 233.527†	67793.9	66985.6	497.74	ug/L	497.74	ppb	12:57:39
1	Be 313.107†	1375749.3	1364288.2	498.30	ug/L	498.30	ppb	12:57:34
1	Cd 226.502†	47434.1	47057.7	497.29	ug/L	497.29	ppb	12:57:39
1	Co 228.616†	26515.2	26261.2	498.53	ug/L	498.53	ppb	12:57:39
1	Cr 267.716†	47769.1	47114.9	495.38	ug/L	495.38	ppb	12:57:39
1	Cu 324.752†	181657.9	172712.7	494.51	ug/L	494.51	ppb	12:57:39
1	Mn 257.610†	473453.5	467327.3	498.92	ug/L	498.92	ppb	12:57:34
1	Mo 202.031†	7948.0	7833.9	498.01	ug/L	498.01	ppb	12:57:59
1	Ni 231.604†	21906.5	21556.1	498.84	ug/L	498.84	ppb	12:57:39
1	P 214.914†	4536.0	4257.8	2380.8	ug/L	2380.8	ppb	12:57:59
1	Pb 220.353†	4319.8	4336.2	491.73	ug/L	491.73	ppb	12:57:59
1	S 181.975 Axial†	756.8	706.1	988.42	ug/L	988.42	ppb	12:57:59
1	Sb 206.836†	1617.9	1564.2	502.19	ug/L	502.19	ppb	12:57:59
1	Se 196.026†	831.0	849.9	509.57	ug/L	509.57	ppb	12:57:59
1	Si 251.611†	84761.3	83290.5	2481.4	ug/L	2481.4	ppb	12:57:39
1	Sn 189.927†	3078.5	3036.4	497.75	ug/L	497.75	ppb	12:57:59
1	Ti 334.940†	325620.8	322812.9	515.01	ug/L	515.01	ppb	12:57:34
1	Tl 190.801†	1749.0	1760.5	496.40	ug/L	496.40	ppb	12:57:59
1	U 409.014†	15897.7	18108.0	497.24	ug/L	497.24	ppb	12:57:39
1	V 292.402†	74188.5	74653.1	499.75	ug/L	499.75	ppb	12:57:39
1	Zn 213.857†	58215.4	56892.3	492.60	ug/L	492.60	ppb	12:57:39
1	SiO2†	84461.0	82976.0	5296.7	ug/L	5296.7	ppb	12:59:07
2	Sc Radial	5803.5	5803.5	99.3	%			12:56:42
2	Y RADIAL	6206.0	6206.0	98.70	%			12:56:42
2	Al 396.153Radial†	7175.4	7245.8	5011.9	ug/L	5011.9	ppb	12:56:42
2	Ca 317.933Radial†	3438.4	3446.8	5080.3	ug/L	5080.3	ppb	12:57:02
2	Fe 238.204 Radial†	545.7	542.7	5096.7	ug/L	5096.7	ppb	12:57:02
2	K 766.490 Radial†	31189.8	29055.6	5144.1	ug/L	5144.1	ppb	12:56:42
2	Mg 279.077 IEC†	147.8	147.6	5214.0	ug/L	5214.0	ppb	12:57:02
2	Na 589.592 Radial†	26929.5	28205.2	9465.1	ug/L	9465.1	ppb	12:56:42
2	Sr 421.552†	80181.3	80767.7	502.95	ug/L	502.95	ppb	12:56:42
2	Sc 361.383	913415.6	913415.6	101.35	%			12:58:05
2	Y 371.029	745440.7	745440.7	99.249	%			12:58:05
2	Ag 328.068†	113535.7	111732.6	509.14	ug/L	509.14	ppb	12:58:11
2	As 188.979†	1239.3	1247.0	497.24	ug/L	497.24	ppb	12:58:31
2	B 249.677†	23165.3	23387.8	488.52	ug/L	488.52	ppb	12:58:11
2	Ba 233.527†	68388.5	67487.2	501.47	ug/L	501.47	ppb	12:58:11
2	Be 313.107†	1373939.6	1360774.7	497.01	ug/L	497.01	ppb	12:58:05
2	Cd 226.502†	47909.1	47466.9	501.61	ug/L	501.61	ppb	12:58:11
2	Co 228.616†	26781.7	26490.8	502.88	ug/L	502.88	ppb	12:58:11
2	Cr 267.716†	48292.3	47571.2	500.18	ug/L	500.18	ppb	12:58:11
2	Cu 324.752†	183289.2	174094.2	498.47	ug/L	498.47	ppb	12:58:11
2	Mn 257.610†	473255.3	466537.2	498.08	ug/L	498.08	ppb	12:58:05
2	Mo 202.031†	7917.2	7793.5	495.45	ug/L	495.45	ppb	12:58:31
2	Ni 231.604†	22089.9	21709.5	502.39	ug/L	502.39	ppb	12:58:11

2	P 214.914†	4515.2	4231.6	2365.1 ug/L	2365.1 ppb	12:58:31
2	Pb 220.353†	4309.4	4320.5	489.95 ug/L	489.95 ppb	12:58:31
2	S 181.975 Axial†	752.7	701.1	981.44 ug/L	981.44 ppb	12:58:31
2	Sb 206.836†	1612.0	1556.4	499.57 ug/L	499.57 ppb	12:58:31
2	Se 196.026†	835.8	853.5	511.94 ug/L	511.94 ppb	12:58:31
2	Si 251.611†	85473.2	83886.5	2499.3 ug/L	2499.3 ppb	12:58:11
2	Sn 189.927†	3086.7	3040.6	498.45 ug/L	498.45 ppb	12:58:31
2	Ti 334.940†	325546.6	322330.7	514.24 ug/L	514.24 ppb	12:58:05
2	Tl 190.801†	1735.6	1745.1	492.04 ug/L	492.04 ppb	12:58:31
2	U 409.014†	16225.5	18411.5	505.58 ug/L	505.58 ppb	12:58:11
2	V 292.402†	74965.0	75326.1	504.16 ug/L	504.16 ppb	12:58:11
2	Zn 213.857†	58717.4	57314.4	496.25 ug/L	496.25 ppb	12:58:11
2	SiO2†	85200.7	83599.8	5336.8 ug/L	5336.8 ppb	12:59:12
3	Sc Radial	5762.9	5762.9	98.6 %		12:57:07
3	Y RADIAL	6173.0	6173.0	98.17 %		12:57:07
3	Al 396.153Radial†	7133.9	7254.6	5017.9 ug/L	5017.9 ppb	12:57:07
3	Ca 317.933Radial†	3390.6	3422.7	5044.8 ug/L	5044.8 ppb	12:57:27
3	Fe 238.204 Radial†	542.7	543.5	5103.8 ug/L	5103.8 ppb	12:57:27
3	K 766.490 Radial†	30798.1	28879.2	5112.9 ug/L	5112.9 ppb	12:57:07
3	Mg 279.077 IEC†	149.9	150.9	5328.4 ug/L	5328.4 ppb	12:57:27
3	Na 589.592 Radial†	26765.7	28229.9	9473.4 ug/L	9473.4 ppb	12:57:07
3	Sr 421.552†	79557.2	80702.8	502.55 ug/L	502.55 ppb	12:57:07
3	Sc 361.383	913286.2	913286.2	101.33 %		12:58:37
3	Y 371.029	745920.9	745920.9	99.313 %		12:58:37
3	Ag 328.068†	113322.2	111537.7	508.26 ug/L	508.26 ppb	12:58:42
3	As 188.979†	1234.0	1242.0	495.25 ug/L	495.25 ppb	12:59:02
3	B 249.677†	23113.6	23340.1	487.52 ug/L	487.52 ppb	12:58:42
3	Ba 233.527†	68321.3	67430.4	501.05 ug/L	501.05 ppb	12:58:42
3	Be 313.107†	1375010.7	1362023.8	497.47 ug/L	497.47 ppb	12:58:37
3	Cd 226.502†	47830.2	47395.7	500.85 ug/L	500.85 ppb	12:58:42
3	Co 228.616†	26719.9	26433.6	501.80 ug/L	501.80 ppb	12:58:42
3	Cr 267.716†	48139.2	47426.9	498.66 ug/L	498.66 ppb	12:58:42
3	Cu 324.752†	182898.0	173733.7	497.44 ug/L	497.44 ppb	12:58:42
3	Mn 257.610†	473496.5	466841.3	498.41 ug/L	498.41 ppb	12:58:37
3	Mo 202.031†	7957.6	7834.5	498.06 ug/L	498.06 ppb	12:59:02
3	Ni 231.604†	21966.3	21590.6	499.64 ug/L	499.64 ppb	12:58:42
3	P 214.914†	4534.6	4251.4	2376.6 ug/L	2376.6 ppb	12:59:02
3	Pb 220.353†	4365.7	4376.6	496.30 ug/L	496.30 ppb	12:59:02
3	S 181.975 Axial†	771.7	720.0	1007.9 ug/L	1007.9 ppb	12:59:02
3	Sb 206.836†	1609.2	1553.8	498.84 ug/L	498.84 ppb	12:59:02
3	Se 196.026†	823.7	841.7	505.15 ug/L	505.15 ppb	12:59:02
3	Si 251.611†	85416.9	83842.8	2498.0 ug/L	2498.0 ppb	12:58:42
3	Sn 189.927†	3083.0	3037.5	497.92 ug/L	497.92 ppb	12:59:02
3	Ti 334.940†	325654.1	322482.3	514.48 ug/L	514.48 ppb	12:58:37
3	Tl 190.801†	1752.9	1762.4	496.90 ug/L	496.90 ppb	12:59:02
3	U 409.014†	16132.8	18322.3	503.13 ug/L	503.13 ppb	12:58:42
3	V 292.402†	74830.0	75203.4	503.39 ug/L	503.39 ppb	12:58:42
3	Zn 213.857†	58637.8	57244.1	495.65 ug/L	495.65 ppb	12:58:42
3	SiO2†	84734.0	83151.2	5308.0 ug/L	5308.0 ppb	12:59:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912985.4	101.30	%	0.071				0.07%
Sc Radial	5804.9	99.3	%	0.73				0.73%
Y 371.029	745299.7	99.230	%	0.0935				0.09%
Y RADIAL	6203.8	98.66	%	0.472				0.48%
Ag 328.068†	111429.0	507.76	ug/L	1.698	507.76	ppb	1.698	0.33%
QC value within limits for Ag 328.068 Recovery = 101.55%								
Al 396.153Radial†	7236.7	5005.5	ug/L	16.55	5005.5	ppb	16.55	0.33%
QC value within limits for Al 396.153Radial Recovery = 100.11%								
As 188.979†	1244.4	496.20	ug/L	0.999	496.20	ppb	0.999	0.20%
QC value within limits for As 188.979 Recovery = 99.24%								
B 249.677†	23308.1	486.85	ug/L	2.075	486.85	ppb	2.075	0.43%
QC value within limits for B 249.677 Recovery = 97.37%								
Ba 233.527†	67301.1	500.08	ug/L	2.043	500.08	ppb	2.043	0.41%
QC value within limits for Ba 233.527 Recovery = 100.02%								
Be 313.107†	1362362.2	497.59	ug/L	0.650	497.59	ppb	0.650	0.13%
QC value within limits for Be 313.107 Recovery = 99.52%								
Ca 317.933Radial†	3420.1	5041.0	ug/L	41.39	5041.0	ppb	41.39	0.82%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.82%
Cd 226.502†            47306.8      499.91 ug/L         2.306      499.91 ppb          2.306   0.46%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†            26395.2      501.07 ug/L         2.265      501.07 ppb          2.265   0.45%
   QC value within limits for Co 228.616  Recovery = 100.21%
Cr 267.716†            47371.0      498.07 ug/L         2.452      498.07 ppb          2.452   0.49%
   QC value within limits for Cr 267.716  Recovery = 99.61%
Cu 324.752†           173513.5      496.80 ug/L         2.053      496.80 ppb          2.053   0.41%
   QC value within limits for Cu 324.752  Recovery = 99.36%
Fe 238.204 Radial†       539.7      5068.5 ug/L        55.12      5068.5 ppb         55.12   1.09%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.37%
K 766.490 Radial†      28997.0      5133.7 ug/L        18.08      5133.7 ppb         18.08   0.35%
   QC value within limits for K 766.490 Radial  Recovery = 102.67%
Mg 279.077 IEC†          147.9      5222.2 ug/L       102.39      5222.2 ppb        102.39   1.96%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.44%
Mn 257.610†           466901.9      498.47 ug/L         0.421      498.47 ppb          0.421   0.08%
   QC value within limits for Mn 257.610  Recovery = 99.69%
Mo 202.031†             7820.7      497.17 ug/L         1.491      497.17 ppb          1.491   0.30%
   QC value within limits for Mo 202.031  Recovery = 99.43%
Na 589.592 Radial†     28245.0      9478.5 ug/L        16.47      9478.5 ppb         16.47   0.17%
   QC value within limits for Na 589.592 Radial  Recovery = 94.78%
Ni 231.604†            21618.7      500.29 ug/L         1.863      500.29 ppb          1.863   0.37%
   QC value within limits for Ni 231.604  Recovery = 100.06%
P 214.914†              4247.0      2374.2 ug/L         8.17      2374.2 ppb          8.17   0.34%
   QC value within limits for P 214.914  Recovery = 94.97%
Pb 220.353†             4344.4      492.66 ug/L         3.276      492.66 ppb          3.276   0.67%
   QC value within limits for Pb 220.353  Recovery = 98.53%
S 181.975 Axial†         709.1      992.58 ug/L        13.705      992.58 ppb         13.705   1.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.26%
Sb 206.836†             1558.1      500.20 ug/L         1.762      500.20 ppb          1.762   0.35%
   QC value within limits for Sb 206.836  Recovery = 100.04%
Se 196.026†              848.3      508.89 ug/L         3.448      508.89 ppb          3.448   0.68%
   QC value within limits for Se 196.026  Recovery = 101.78%
Si 251.611†            83673.3      2492.9 ug/L         9.96      2492.9 ppb          9.96   0.40%
   QC value within limits for Si 251.611  Recovery = 99.72%
Sn 189.927†             3038.2      498.04 ug/L         0.362      498.04 ppb          0.362   0.07%
   QC value within limits for Sn 189.927  Recovery = 99.61%
Sr 421.552†            80798.2      503.14 ug/L         0.709      503.14 ppb          0.709   0.14%
   QC value within limits for Sr 421.552  Recovery = 100.63%
Ti 334.940†           322542.0      514.58 ug/L         0.394      514.58 ppb          0.394   0.08%
   QC value within limits for Ti 334.940  Recovery = 102.92%
Tl 190.801†             1756.0      495.11 ug/L         2.674      495.11 ppb          2.674   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.02%
U 409.014†             18280.6      501.98 ug/L         4.285      501.98 ppb          4.285   0.85%
   QC value within limits for U 409.014  Recovery = 100.40%
V 292.402†             75060.8      502.43 ug/L         2.355      502.43 ppb          2.355   0.47%
   QC value within limits for V 292.402  Recovery = 100.49%
Zn 213.857†            57150.3      494.84 ug/L         1.957      494.84 ppb          1.957   0.40%
   QC value within limits for Zn 213.857  Recovery = 98.97%
SiO2†                  83242.3      5313.8 ug/L        20.69      5313.8 ppb         20.69   0.39%
   QC value within limits for SiO2  Recovery = 99.37%
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 13:01:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5868.7	5868.7	100	%			13:03:21
1	Y RADIAL	6266.3	6266.3	99.66	%			13:03:21
1	Al 396.153Radial†	-30.6	-10.0	-6.9732	ug/L	-6.9732	ppb	13:03:21
1	Ca 317.933Radial†	27.1	11.4	16.834	ug/L	16.834	ppb	13:03:41
1	Fe 238.204 Radial†	7.1	0.3	2.8617	ug/L	2.8617	ppb	13:03:41
1	K 766.490 Radial†	2529.2	166.8	29.557	ug/L	29.557	ppb	13:03:21
1	Mg 279.077 IEC†	2.6	1.4	48.947	ug/L	48.947	ppb	13:03:41
1	Na 589.592 Radial†	-997.4	94.8	31.813	ug/L	31.813	ppb	13:03:21
1	Sr 421.552†	-4.1	23.2	0.1444	ug/L	0.1444	ppb	13:03:21
1	Sc 361.383	909330.4	909330.4	100.89	%			13:04:37
1	Y 371.029	756247.7	756247.7	100.69	%			13:04:37
1	Ag 328.068†	309.1	13.6	0.0644	ug/L	0.0644	ppb	13:04:37
1	As 188.979†	-26.8	-2.4	-0.9536	ug/L	-0.9536	ppb	13:04:57
1	B 249.677†	-417.1	117.3	2.4588	ug/L	2.4588	ppb	13:04:57
1	Ba 233.527†	-20.7	-12.0	-0.0874	ug/L	-0.0874	ppb	13:04:57
1	Be 313.107†	-5096.0	62.2	0.0227	ug/L	0.0227	ppb	13:04:37
1	Cd 226.502†	-193.8	3.0	0.0311	ug/L	0.0311	ppb	13:04:57
1	Co 228.616†	-60.1	5.8	0.1104	ug/L	0.1104	ppb	13:04:57
1	Cr 267.716†	70.5	-8.8	-0.0914	ug/L	-0.0914	ppb	13:04:57
1	Cu 324.752†	6809.4	-7.7	-0.0218	ug/L	-0.0218	ppb	13:04:37
1	Mn 257.610†	455.0	28.6	0.0299	ug/L	0.0299	ppb	13:04:57
1	Mo 202.031†	16.2	-2.3	-0.1469	ug/L	-0.1469	ppb	13:04:57
1	Ni 231.604†	76.1	-11.2	-0.2588	ug/L	-0.2588	ppb	13:04:57
1	P 214.914†	204.8	-20.5	-11.821	ug/L	-11.821	ppb	13:04:57
1	Pb 220.353†	-56.1	12.9	1.4528	ug/L	1.4528	ppb	13:04:57
1	S 181.975 Axial†	41.0	-1.0	-1.3701	ug/L	-1.3701	ppb	13:04:57
1	Sb 206.836†	35.0	0.4	0.1492	ug/L	0.1492	ppb	13:04:57
1	Se 196.026†	-22.5	6.6	3.7976	ug/L	3.7976	ppb	13:04:57
1	Si 251.611†	555.9	101.3	3.0211	ug/L	3.0211	ppb	13:04:57
1	Sn 189.927†	11.9	6.8	1.1211	ug/L	1.1211	ppb	13:04:57
1	Ti 334.940†	-1127.8	-2.9	-0.0042	ug/L	-0.0042	ppb	13:04:37
1	Tl 190.801†	-37.4	-4.6	-1.2783	ug/L	-1.2783	ppb	13:04:57
1	U 409.014†	-2380.6	42.3	1.1648	ug/L	1.1648	ppb	13:04:37
1	V 292.402†	-1258.8	110.7	0.7320	ug/L	0.7320	ppb	13:04:37
1	Zn 213.857†	683.4	55.5	0.4848	ug/L	0.4848	ppb	13:04:57
1	SiO2†	542.9	70.6	4.5059	ug/L	4.5059	ppb	13:05:53
2	Sc Radial	5855.0	5855.0	100	%			13:03:46
2	Y RADIAL	6293.2	6293.2	100.1	%			13:03:46
2	Al 396.153Radial†	-28.1	-7.6	-5.3089	ug/L	-5.3089	ppb	13:03:46
2	Ca 317.933Radial†	28.7	13.1	19.271	ug/L	19.271	ppb	13:04:06
2	Fe 238.204 Radial†	6.7	-0.1	-0.8685	ug/L	-0.8685	ppb	13:04:06
2	K 766.490 Radial†	2589.7	233.1	41.320	ug/L	41.320	ppb	13:03:46
2	Mg 279.077 IEC†	2.6	1.4	50.157	ug/L	50.157	ppb	13:04:06
2	Na 589.592 Radial†	-1015.8	74.1	24.869	ug/L	24.869	ppb	13:03:46
2	Sr 421.552†	-45.3	-17.9	-0.1116	ug/L	-0.1116	ppb	13:03:46
2	Sc 361.383	901165.7	901165.7	99.989	%			13:05:03
2	Y 371.029	749854.7	749854.7	99.836	%			13:05:03
2	Ag 328.068†	310.6	17.9	0.0813	ug/L	0.0813	ppb	13:05:03
2	As 188.979†	-14.4	9.8	3.8646	ug/L	3.8646	ppb	13:05:23
2	B 249.677†	-420.0	110.6	2.3197	ug/L	2.3197	ppb	13:05:23
2	Ba 233.527†	1.0	9.5	0.0704	ug/L	0.0704	ppb	13:05:23
2	Be 313.107†	-5025.4	87.0	0.0318	ug/L	0.0318	ppb	13:05:03
2	Cd 226.502†	-196.4	-1.3	-0.0140	ug/L	-0.0140	ppb	13:05:23
2	Co 228.616†	-58.2	7.2	0.1379	ug/L	0.1379	ppb	13:05:23
2	Cr 267.716†	91.5	12.8	0.1348	ug/L	0.1348	ppb	13:05:23
2	Cu 324.752†	6670.0	-86.0	-0.2461	ug/L	-0.2461	ppb	13:05:03
2	Mn 257.610†	575.8	153.5	0.1628	ug/L	0.1628	ppb	13:05:23
2	Mo 202.031†	22.9	4.5	0.2874	ug/L	0.2874	ppb	13:05:23
2	Ni 231.604†	88.3	1.7	0.0399	ug/L	0.0399	ppb	13:05:23

2	P 214.914†	217.0	-6.5	-3.7298 ug/L	-3.7298 ppb	13:05:23
2	Pb 220.353†	-51.8	16.6	1.8791 ug/L	1.8791 ppb	13:05:23
2	S 181.975 Axial†	44.5	2.9	4.0947 ug/L	4.0947 ppb	13:05:23
2	Sb 206.836†	33.9	-0.3	-0.1071 ug/L	-0.1071 ppb	13:05:23
2	Se 196.026†	-13.0	15.9	9.1655 ug/L	9.1655 ppb	13:05:23
2	Si 251.611†	597.7	148.1	4.4168 ug/L	4.4168 ppb	13:05:23
2	Sn 189.927†	2.5	-2.5	-0.4044 ug/L	-0.4044 ppb	13:05:23
2	Ti 334.940†	-1080.2	34.6	0.0563 ug/L	0.0563 ppb	13:05:03
2	Tl 190.801†	-32.3	0.3	0.0723 ug/L	0.0723 ppb	13:05:23
2	U 409.014†	-2419.0	-17.5	-0.4815 ug/L	-0.4815 ppb	13:05:03
2	V 292.402†	-1344.5	13.7	0.0947 ug/L	0.0947 ppb	13:05:03
2	Zn 213.857†	675.2	53.4	0.4649 ug/L	0.4649 ppb	13:05:23
2	SiO2†	559.6	92.2	5.8782 ug/L	5.8782 ppb	13:05:58
3	Sc Radial	5767.9	5767.9	98.7 %		13:04:11
3	Y RADIAL	6173.0	6173.0	98.17 %		13:04:11
3	Al 396.153Radial†	-28.0	-8.0	-5.5661 ug/L	-5.5661 ppb	13:04:11
3	Ca 317.933Radial†	25.0	9.7	14.340 ug/L	14.340 ppb	13:04:31
3	Fe 238.204 Radial†	6.6	-0.2	-1.4562 ug/L	-1.4562 ppb	13:04:31
3	K 766.490 Radial†	2509.3	190.6	33.799 ug/L	33.799 ppb	13:04:11
3	Mg 279.077 IEC†	-1.3	-2.5	-87.543 ug/L	-87.543 ppb	13:04:31
3	Na 589.592 Radial†	-1023.7	50.7	17.013 ug/L	17.013 ppb	13:04:11
3	Sr 421.552†	-34.9	-8.0	-0.0497 ug/L	-0.0497 ppb	13:04:11
3	Sc 361.383	904623.9	904623.9	100.37 %		13:05:28
3	Y 371.029	754861.8	754861.8	100.50 %		13:05:28
3	Ag 328.068†	417.8	123.5	0.5554 ug/L	0.5554 ppb	13:05:28
3	As 188.979†	-16.9	7.3	2.8912 ug/L	2.8912 ppb	13:05:48
3	B 249.677†	-395.9	136.2	2.8560 ug/L	2.8560 ppb	13:05:48
3	Ba 233.527†	1.7	10.1	0.0762 ug/L	0.0762 ppb	13:05:48
3	Be 313.107†	-4983.4	148.1	0.0545 ug/L	0.0545 ppb	13:05:28
3	Cd 226.502†	-176.5	19.2	0.2035 ug/L	0.2035 ppb	13:05:48
3	Co 228.616†	-58.4	7.2	0.1366 ug/L	0.1366 ppb	13:05:48
3	Cr 267.716†	78.7	-0.3	-0.0042 ug/L	-0.0042 ppb	13:05:48
3	Cu 324.752†	6872.2	90.0	0.2573 ug/L	0.2573 ppb	13:05:28
3	Mn 257.610†	469.1	45.1	0.0496 ug/L	0.0496 ppb	13:05:48
3	Mo 202.031†	22.0	3.6	0.2268 ug/L	0.2268 ppb	13:05:48
3	Ni 231.604†	96.7	9.8	0.2258 ug/L	0.2258 ppb	13:05:48
3	P 214.914†	225.9	1.5	0.8286 ug/L	0.8286 ppb	13:05:48
3	Pb 220.353†	-48.5	20.1	2.2709 ug/L	2.2709 ppb	13:05:48
3	S 181.975 Axial†	40.5	-1.3	-1.7683 ug/L	-1.7683 ppb	13:05:48
3	Sb 206.836†	35.0	0.7	0.2079 ug/L	0.2079 ppb	13:05:48
3	Se 196.026†	-15.1	13.8	7.9618 ug/L	7.9618 ppb	13:05:48
3	Si 251.611†	545.0	93.3	2.7804 ug/L	2.7804 ppb	13:05:48
3	Sn 189.927†	2.6	-2.4	-0.3905 ug/L	-0.3905 ppb	13:05:48
3	Ti 334.940†	-944.1	174.4	0.2764 ug/L	0.2764 ppb	13:05:28
3	Tl 190.801†	-31.8	0.9	0.2397 ug/L	0.2397 ppb	13:05:48
3	U 409.014†	-2197.1	212.9	5.8648 ug/L	5.8648 ppb	13:05:28
3	V 292.402†	-1294.3	68.9	0.4674 ug/L	0.4674 ppb	13:05:28
3	Zn 213.857†	659.7	35.5	0.3111 ug/L	0.3111 ppb	13:05:48
3	SiO2†	559.8	90.3	5.7599 ug/L	5.7599 ppb	13:06:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905040.0	100.42	%	0.455				0.45%
Sc Radial	5830.5	99.8	%	0.94				0.94%
Y 371.029	753654.7	100.34	%	0.448				0.45%
Y RADIAL	6244.2	99.31	%	1.004				1.01%
Ag 328.068†	51.7	0.2337	ug/L	0.27875	0.2337	ppb	0.27875	119.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.6	-5.9494	ug/L	0.89589	-5.9494	ppb	0.89589	15.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.9	1.9341	ug/L	2.54769	1.9341	ppb	2.54769	131.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	121.4	2.5448	ug/L	0.27833	2.5448	ppb	0.27833	10.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.5	0.0197	ug/L	0.09280	0.0197	ppb	0.09280	470.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	99.1	0.0363	ug/L	0.01641	0.0363	ppb	0.01641	45.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.4	16.815	ug/L	2.4656	16.815	ppb	2.4656	14.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.0      0.0735 ug/L       0.11483      0.0735 ppb        0.11483 156.20%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                6.8      0.1283 ug/L       0.01552      0.1283 ppb        0.01552  12.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.2      0.0131 ug/L       0.11408      0.0131 ppb        0.11408 872.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -1.2     -0.0035 ug/L       0.25223     -0.0035 ppb        0.25223 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.0      0.1790 ug/L       2.34180      0.1790 ppb        2.34180 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        196.8     34.892 ug/L        5.9572     34.892 ppb         5.9572  17.07%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      3.8537 ug/L      79.15382      3.8537 ppb       79.15382 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               75.8      0.0808 ug/L       0.07169      0.0808 ppb        0.07169  88.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.9      0.1224 ug/L       0.23521      0.1224 ppb        0.23521 192.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        73.2     24.565 ug/L        7.4046     24.565 ppb         7.4046  30.14%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.1      0.0023 ug/L       0.24447      0.0023 ppb        0.24447 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -8.5     -4.9075 ug/L       6.40658     -4.9075 ppb        6.40658 130.55%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               16.5      1.8676 ug/L       0.40916      1.8676 ppb        0.40916  21.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.3188 ug/L       3.27610      0.3188 ppb        3.27610 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                0.2      0.0833 ug/L       0.16755      0.0833 ppb        0.16755 201.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               12.1      6.9750 ug/L       2.81675      6.9750 ppb        2.81675  40.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              114.2      3.4061 ug/L       0.88355      3.4061 ppb        0.88355  25.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.7      0.1087 ug/L       0.87675      0.1087 ppb        0.87675 806.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -0.9     -0.0056 ug/L       0.13359     -0.0056 ppb        0.13359 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               68.7      0.1095 ug/L       0.14767      0.1095 ppb        0.14767 134.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.1     -0.3221 ug/L       0.83232     -0.3221 ppb        0.83232 258.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                79.2      2.1827 ug/L       3.29335      2.1827 ppb        3.29335 150.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                64.4      0.4314 ug/L       0.32014      0.4314 ppb        0.32014  74.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               48.1      0.4203 ug/L       0.09507      0.4203 ppb        0.09507  22.62%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     84.4      5.3813 ug/L       0.76046      5.3813 ppb        0.76046  14.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 14:10:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5767.6	5767.6	98.7	%			14:12:27
1	Y RADIAL	6113.9	6113.9	97.23	%			14:12:27
1	Al 396.153Radial†	7037.9	7151.4	4946.2	ug/L	4946.2	ppb	14:12:27
1	Ca 317.933Radial†	3411.0	3440.5	5071.1	ug/L	5071.1	ppb	14:12:47
1	Fe 238.204 Radial†	551.7	552.2	5185.6	ug/L	5185.6	ppb	14:12:47
1	K 766.490 Radial†	30862.4	28918.9	5119.7	ug/L	5119.7	ppb	14:12:27
1	Mg 279.077 IEC†	148.5	149.4	5274.6	ug/L	5274.6	ppb	14:12:47
1	Na 589.592 Radial†	28095.3	29554.8	9918.0	ug/L	9918.0	ppb	14:12:27
1	Sr 421.552†	80684.1	81778.7	509.25	ug/L	509.25	ppb	14:12:27
1	Sc 361.383	914335.1	914335.1	101.45	%			14:13:44
1	Y 371.029	745873.4	745873.4	99.306	%			14:13:44
1	Ag 328.068†	112981.5	111073.6	506.18	ug/L	506.18	ppb	14:13:49
1	As 188.979†	1241.4	1247.8	497.49	ug/L	497.49	ppb	14:14:09
1	B 249.677†	23031.8	23233.2	485.27	ug/L	485.27	ppb	14:13:49
1	Ba 233.527†	67901.6	66939.4	497.40	ug/L	497.40	ppb	14:13:49
1	Be 313.107†	1359268.7	1344950.1	491.23	ug/L	491.23	ppb	14:13:44
1	Cd 226.502†	47511.2	47027.1	496.94	ug/L	496.94	ppb	14:13:49
1	Co 228.616†	26580.2	26265.6	498.63	ug/L	498.63	ppb	14:13:49
1	Cr 267.716†	47865.6	47102.7	495.25	ug/L	495.25	ppb	14:13:49
1	Cu 324.752†	182072.2	172712.6	494.52	ug/L	494.52	ppb	14:13:49
1	Mn 257.610†	469610.4	462474.8	493.76	ug/L	493.76	ppb	14:13:44
1	Mo 202.031†	7966.9	7834.7	498.07	ug/L	498.07	ppb	14:14:09
1	Ni 231.604†	21836.7	21438.0	496.11	ug/L	496.11	ppb	14:13:49
1	P 214.914†	4530.8	4242.6	2371.9	ug/L	2371.9	ppb	14:14:09
1	Pb 220.353†	4334.3	4340.8	492.23	ug/L	492.23	ppb	14:14:09
1	S 181.975 Axial†	752.5	700.2	980.20	ug/L	980.20	ppb	14:14:09
1	Sb 206.836†	1621.5	1564.0	502.20	ug/L	502.20	ppb	14:14:09
1	Se 196.026†	835.3	852.1	511.46	ug/L	511.46	ppb	14:14:09
1	Si 251.611†	84831.3	83168.9	2477.8	ug/L	2477.8	ppb	14:13:49
1	Sn 189.927†	3088.6	3039.5	498.26	ug/L	498.26	ppb	14:14:09
1	Ti 334.940†	319504.6	316052.1	504.23	ug/L	504.23	ppb	14:13:49
1	Tl 190.801†	1751.4	1758.9	495.84	ug/L	495.84	ppb	14:14:09
1	U 409.014†	16013.2	18186.1	499.37	ug/L	499.37	ppb	14:13:49
1	V 292.402†	74358.8	74654.1	499.75	ug/L	499.75	ppb	14:13:49
1	Zn 213.857†	58240.8	56786.4	491.67	ug/L	491.67	ppb	14:13:49
1	SiO2†	84590.2	82913.5	5292.7	ug/L	5292.7	ppb	14:15:17
2	Sc Radial	5844.2	5844.2	100	%			14:12:52
2	Y RADIAL	6183.7	6183.7	98.34	%			14:12:52
2	Al 396.153Radial†	7136.0	7156.1	4949.6	ug/L	4949.6	ppb	14:12:52
2	Ca 317.933Radial†	3429.6	3413.8	5031.8	ug/L	5031.8	ppb	14:13:12
2	Fe 238.204 Radial†	560.4	553.6	5198.5	ug/L	5198.5	ppb	14:13:12
2	K 766.490 Radial†	31201.2	28848.2	5107.2	ug/L	5107.2	ppb	14:12:52
2	Mg 279.077 IEC†	150.4	149.3	5271.3	ug/L	5271.3	ppb	14:13:12
2	Na 589.592 Radial†	28413.1	29499.8	9899.6	ug/L	9899.6	ppb	14:12:52
2	Sr 421.552†	81619.5	81643.5	508.41	ug/L	508.41	ppb	14:12:52
2	Sc 361.383	916326.9	916326.9	101.67	%			14:14:15
2	Y 371.029	747946.9	747946.9	99.582	%			14:14:15
2	Ag 328.068†	112044.5	109909.9	500.90	ug/L	500.90	ppb	14:14:20
2	As 188.979†	1222.6	1226.7	489.10	ug/L	489.10	ppb	14:14:40
2	B 249.677†	22946.8	23100.3	482.49	ug/L	482.49	ppb	14:14:20
2	Ba 233.527†	67507.5	66406.3	493.44	ug/L	493.44	ppb	14:14:20
2	Be 313.107†	1365317.7	1347987.5	492.33	ug/L	492.33	ppb	14:14:15
2	Cd 226.502†	47350.7	46767.4	494.19	ug/L	494.19	ppb	14:14:20
2	Co 228.616†	26500.9	26130.7	496.07	ug/L	496.07	ppb	14:14:20
2	Cr 267.716†	47619.4	46758.0	491.63	ug/L	491.63	ppb	14:14:20
2	Cu 324.752†	180608.4	170882.9	489.28	ug/L	489.28	ppb	14:14:20
2	Mn 257.610†	471448.2	463276.2	494.61	ug/L	494.61	ppb	14:14:15
2	Mo 202.031†	7948.2	7799.2	495.82	ug/L	495.82	ppb	14:14:40
2	Ni 231.604†	21746.7	21302.6	492.98	ug/L	492.98	ppb	14:14:20

2	P 214.914†	4549.4	4251.1	2377.6 ug/L	2377.6 ppb	14:14:40
2	Pb 220.353†	4320.6	4318.0	489.66 ug/L	489.66 ppb	14:14:40
2	S 181.975 Axial†	751.5	697.6	976.54 ug/L	976.54 ppb	14:14:40
2	Sb 206.836†	1620.3	1559.4	500.74 ug/L	500.74 ppb	14:14:40
2	Se 196.026†	837.8	852.8	511.89 ug/L	511.89 ppb	14:14:40
2	Si 251.611†	84132.7	82300.0	2451.8 ug/L	2451.8 ppb	14:14:20
2	Sn 189.927†	3084.6	3028.9	496.53 ug/L	496.53 ppb	14:14:40
2	Ti 334.940†	317654.2	313547.4	500.23 ug/L	500.23 ppb	14:14:20
2	Tl 190.801†	1736.1	1740.1	490.58 ug/L	490.58 ppb	14:14:40
2	U 409.014†	15862.4	18003.5	494.35 ug/L	494.35 ppb	14:14:20
2	V 292.402†	73950.4	74093.1	496.01 ug/L	496.01 ppb	14:14:20
2	Zn 213.857†	57929.0	56354.9	487.93 ug/L	487.93 ppb	14:14:20
2	SiO2†	84189.5	82338.1	5255.9 ug/L	5255.9 ppb	14:15:22
3	Sc Radial	5890.8	5890.8	101 %		14:13:17
3	Y RADIAL	6272.3	6272.3	99.75 %		14:13:17
3	Al 396.153Radial†	7123.1	7086.9	4901.4 ug/L	4901.4 ppb	14:13:17
3	Ca 317.933Radial†	3415.8	3373.1	4971.7 ug/L	4971.7 ppb	14:13:37
3	Fe 238.204 Radial†	550.4	539.2	5063.4 ug/L	5063.4 ppb	14:13:37
3	K 766.490 Radial†	31389.4	28788.0	5096.5 ug/L	5096.5 ppb	14:13:17
3	Mg 279.077 IEC†	148.3	146.0	5156.2 ug/L	5156.2 ppb	14:13:37
3	Na 589.592 Radial†	28750.2	29609.5	9936.4 ug/L	9936.4 ppb	14:13:17
3	Sr 421.552†	82414.1	81785.9	509.30 ug/L	509.30 ppb	14:13:17
3	Sc 361.383	917143.5	917143.5	101.76 %		14:14:46
3	Y 371.029	747714.9	747714.9	99.551 %		14:14:46
3	Ag 328.068†	111815.0	109586.3	499.39 ug/L	499.39 ppb	14:14:51
3	As 188.979†	1227.9	1230.8	490.72 ug/L	490.72 ppb	14:15:11
3	B 249.677†	22960.0	23093.1	482.36 ug/L	482.36 ppb	14:14:51
3	Ba 233.527†	67497.4	66337.2	492.92 ug/L	492.92 ppb	14:14:51
3	Be 313.107†	1368447.3	1349867.2	493.01 ug/L	493.01 ppb	14:14:46
3	Cd 226.502†	47312.9	46688.8	493.38 ug/L	493.38 ppb	14:14:51
3	Co 228.616†	26449.5	26057.0	494.69 ug/L	494.69 ppb	14:14:51
3	Cr 267.716†	47510.7	46609.4	490.07 ug/L	490.07 ppb	14:14:51
3	Cu 324.752†	180160.7	170284.7	487.56 ug/L	487.56 ppb	14:14:51
3	Mn 257.610†	473615.9	464993.5	496.44 ug/L	496.44 ppb	14:14:46
3	Mo 202.031†	7973.5	7817.1	496.95 ug/L	496.95 ppb	14:15:11
3	Ni 231.604†	21750.4	21287.3	492.62 ug/L	492.62 ppb	14:14:51
3	P 214.914†	4556.7	4254.3	2379.9 ug/L	2379.9 ppb	14:15:11
3	Pb 220.353†	4347.5	4340.6	492.22 ug/L	492.22 ppb	14:15:11
3	S 181.975 Axial†	765.3	710.5	994.61 ug/L	994.61 ppb	14:15:11
3	Sb 206.836†	1636.8	1574.2	505.57 ug/L	505.57 ppb	14:15:11
3	Se 196.026†	835.3	849.7	509.63 ug/L	509.63 ppb	14:15:11
3	Si 251.611†	84088.3	82182.7	2448.3 ug/L	2448.3 ppb	14:14:51
3	Sn 189.927†	3113.9	3055.0	500.79 ug/L	500.79 ppb	14:15:11
3	Ti 334.940†	316824.9	312454.3	498.49 ug/L	498.49 ppb	14:14:51
3	Tl 190.801†	1742.6	1745.0	491.94 ug/L	491.94 ppb	14:15:11
3	U 409.014†	15712.7	17842.5	489.93 ug/L	489.93 ppb	14:14:51
3	V 292.402†	73846.4	73926.1	494.93 ug/L	494.93 ppb	14:14:51
3	Zn 213.857†	57930.5	56305.7	487.52 ug/L	487.52 ppb	14:14:51
3	SiO2†	84838.9	82902.6	5292.1 ug/L	5292.1 ppb	14:15:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	915935.2	101.63	%	0.160				0.16%
Sc Radial	5834.2	99.8	%	1.06				1.07%
Y 371.029	747178.4	99.480	%	0.1513				0.15%
Y RADIAL	6189.9	98.44	%	1.262				1.28%
Ag 328.068†	110190.0	502.16	ug/L	3.563	502.16	ppb	3.563	0.71%
QC value within limits for Ag 328.068 Recovery = 100.43%								
Al 396.153Radial†	7131.5	4932.4	ug/L	26.88	4932.4	ppb	26.88	0.55%
QC value within limits for Al 396.153Radial Recovery = 98.65%								
As 188.979†	1235.1	492.44	ug/L	4.451	492.44	ppb	4.451	0.90%
QC value within limits for As 188.979 Recovery = 98.49%								
B 249.677†	23142.2	483.37	ug/L	1.645	483.37	ppb	1.645	0.34%
QC value within limits for B 249.677 Recovery = 96.67%								
Ba 233.527†	66560.9	494.59	ug/L	2.449	494.59	ppb	2.449	0.50%
QC value within limits for Ba 233.527 Recovery = 98.92%								
Be 313.107†	1347601.6	492.19	ug/L	0.899	492.19	ppb	0.899	0.18%
QC value within limits for Be 313.107 Recovery = 98.44%								
Ca 317.933Radial†	3409.1	5024.9	ug/L	50.04	5024.9	ppb	50.04	1.00%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.50%
Cd 226.502†            46827.8      494.84 ug/L         1.868      494.84 ppb          1.868   0.38%
   QC value within limits for Cd 226.502  Recovery = 98.97%
Co 228.616†            26151.1      496.46 ug/L         2.003      496.46 ppb          2.003   0.40%
   QC value within limits for Co 228.616  Recovery = 99.29%
Cr 267.716†            46823.4      492.32 ug/L         2.660      492.32 ppb          2.660   0.54%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           171293.4      490.46 ug/L         3.622      490.46 ppb          3.622   0.74%
   QC value within limits for Cu 324.752  Recovery = 98.09%
Fe 238.204 Radial†       548.3      5149.1 ug/L        74.56      5149.1 ppb         74.56   1.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.98%
K 766.490 Radial†      28851.7      5107.8 ug/L        11.64      5107.8 ppb         11.64   0.23%
   QC value within limits for K 766.490 Radial  Recovery = 102.16%
Mg 279.077 IEC†          148.2      5234.1 ug/L        67.45      5234.1 ppb         67.45   1.29%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.68%
Mn 257.610†           463581.5      494.94 ug/L         1.367      494.94 ppb          1.367   0.28%
   QC value within limits for Mn 257.610  Recovery = 98.99%
Mo 202.031†             7817.0      496.95 ug/L         1.126      496.95 ppb          1.126   0.23%
   QC value within limits for Mo 202.031  Recovery = 99.39%
Na 589.592 Radial†     29554.7      9918.0 ug/L        18.39      9918.0 ppb         18.39   0.19%
   QC value within limits for Na 589.592 Radial  Recovery = 99.18%
Ni 231.604†            21342.6      493.90 ug/L         1.919      493.90 ppb          1.919   0.39%
   QC value within limits for Ni 231.604  Recovery = 98.78%
P 214.914†              4249.3      2376.5 ug/L         4.13      2376.5 ppb          4.13   0.17%
   QC value within limits for P 214.914  Recovery = 95.06%
Pb 220.353†             4333.1      491.37 ug/L         1.482      491.37 ppb          1.482   0.30%
   QC value within limits for Pb 220.353  Recovery = 98.27%
S 181.975 Axial†         702.8      983.78 ug/L         9.551      983.78 ppb          9.551   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 98.38%
Sb 206.836†             1565.9      502.84 ug/L         2.475      502.84 ppb          2.475   0.49%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†              851.5      510.99 ug/L         1.202      510.99 ppb          1.202   0.24%
   QC value within limits for Se 196.026  Recovery = 102.20%
Si 251.611†            82550.6      2459.3 ug/L        16.11      2459.3 ppb         16.11   0.66%
   QC value within limits for Si 251.611  Recovery = 98.37%
Sn 189.927†             3041.1      498.53 ug/L         2.145      498.53 ppb          2.145   0.43%
   QC value within limits for Sn 189.927  Recovery = 99.71%
Sr 421.552†            81736.0      508.98 ug/L         0.500      508.98 ppb          0.500   0.10%
   QC value within limits for Sr 421.552  Recovery = 101.80%
Ti 334.940†           314017.9      500.98 ug/L         2.943      500.98 ppb          2.943   0.59%
   QC value within limits for Ti 334.940  Recovery = 100.20%
Tl 190.801†             1748.0      492.79 ug/L         2.732      492.79 ppb          2.732   0.55%
   QC value within limits for Tl 190.801  Recovery = 98.56%
U 409.014†             18010.7      494.55 ug/L         4.724      494.55 ppb          4.724   0.96%
   QC value within limits for U 409.014  Recovery = 98.91%
V 292.402†             74224.5      496.90 ug/L         2.529      496.90 ppb          2.529   0.51%
   QC value within limits for V 292.402  Recovery = 99.38%
Zn 213.857†            56482.3      489.04 ug/L         2.289      489.04 ppb          2.289   0.47%
   QC value within limits for Zn 213.857  Recovery = 97.81%
SiO2†                  82718.1      5280.2 ug/L        21.06      5280.2 ppb         21.06   0.40%
   QC value within limits for SiO2  Recovery = 98.74%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 14:17:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5779.9	5779.9	98.9	%			14:19:30
1	Y RADIAL	6181.0	6181.0	98.30	%			14:19:30
1	Al 396.153Radial†	-29.7	-9.6	-6.7264	ug/L	-6.7264	ppb	14:19:30
1	Ca 317.933Radial†	26.3	11.0	16.241	ug/L	16.241	ppb	14:19:50
1	Fe 238.204 Radial†	8.6	1.9	18.113	ug/L	18.113	ppb	14:19:50
1	K 766.490 Radial†	2440.0	115.3	20.422	ug/L	20.422	ppb	14:19:30
1	Mg 279.077 IEC†	6.0	5.0	174.72	ug/L	174.72	ppb	14:19:50
1	Na 589.592 Radial†	-917.1	160.7	53.921	ug/L	53.921	ppb	14:19:30
1	Sr 421.552†	-12.7	14.5	0.0901	ug/L	0.0901	ppb	14:19:30
1	Sc 361.383	909647.7	909647.7	100.93	%			14:20:46
1	Y 371.029	757756.8	757756.8	100.89	%			14:20:46
1	Ag 328.068†	423.4	126.8	0.5784	ug/L	0.5784	ppb	14:20:46
1	As 188.979†	-34.0	-9.5	-3.7454	ug/L	-3.7454	ppb	14:21:06
1	B 249.677†	-308.9	224.6	4.7091	ug/L	4.7091	ppb	14:21:06
1	Ba 233.527†	-18.5	-9.9	-0.0707	ug/L	-0.0707	ppb	14:21:06
1	Be 313.107†	-5051.6	107.9	0.0395	ug/L	0.0395	ppb	14:20:46
1	Cd 226.502†	-187.7	9.2	0.0950	ug/L	0.0950	ppb	14:21:06
1	Co 228.616†	-73.9	-7.8	-0.1459	ug/L	-0.1459	ppb	14:21:06
1	Cr 267.716†	52.3	-26.9	-0.2821	ug/L	-0.2821	ppb	14:21:06
1	Cu 324.752†	6834.6	14.9	0.0437	ug/L	0.0437	ppb	14:20:46
1	Mn 257.610†	459.5	33.0	0.0337	ug/L	0.0337	ppb	14:21:06
1	Mo 202.031†	31.7	13.1	0.8318	ug/L	0.8318	ppb	14:21:06
1	Ni 231.604†	81.5	-5.8	-0.1348	ug/L	-0.1348	ppb	14:21:06
1	P 214.914†	215.4	-10.1	-5.8334	ug/L	-5.8334	ppb	14:21:06
1	Pb 220.353†	-79.5	-10.3	-1.1620	ug/L	-1.1620	ppb	14:21:06
1	S 181.975 Axial†	49.6	7.6	10.649	ug/L	10.649	ppb	14:21:06
1	Sb 206.836†	36.7	2.1	0.6884	ug/L	0.6884	ppb	14:21:06
1	Se 196.026†	-27.8	1.2	0.7741	ug/L	0.7741	ppb	14:21:06
1	Si 251.611†	506.0	51.6	1.5257	ug/L	1.5257	ppb	14:21:06
1	Sn 189.927†	2.4	-2.6	-0.4235	ug/L	-0.4235	ppb	14:21:06
1	Ti 334.940†	-1063.5	61.2	0.0960	ug/L	0.0960	ppb	14:20:46
1	Tl 190.801†	-32.4	0.4	0.1073	ug/L	0.1073	ppb	14:21:06
1	U 409.014†	-2204.8	217.4	5.9861	ug/L	5.9861	ppb	14:20:46
1	V 292.402†	-1225.7	143.9	0.9754	ug/L	0.9754	ppb	14:20:46
1	Zn 213.857†	664.9	37.0	0.3160	ug/L	0.3160	ppb	14:21:06
1	SiO2†	526.4	54.1	3.4289	ug/L	3.4289	ppb	14:22:02
2	Sc Radial	5959.4	5959.4	102	%			14:19:55
2	Y RADIAL	6404.8	6404.8	101.9	%			14:19:55
2	Al 396.153Radial†	-5.4	15.1	10.491	ug/L	10.491	ppb	14:19:55
2	Ca 317.933Radial†	25.8	9.7	14.314	ug/L	14.314	ppb	14:20:15
2	Fe 238.204 Radial†	7.3	0.3	2.9071	ug/L	2.9071	ppb	14:20:15
2	K 766.490 Radial†	2446.3	47.2	8.3442	ug/L	8.3442	ppb	14:19:55
2	Mg 279.077 IEC†	3.8	2.6	90.907	ug/L	90.907	ppb	14:20:15
2	Na 589.592 Radial†	-903.6	201.9	67.746	ug/L	67.746	ppb	14:19:55
2	Sr 421.552†	-25.1	2.8	0.0172	ug/L	0.0172	ppb	14:19:55
2	Sc 361.383	908783.6	908783.6	100.83	%			14:21:12
2	Y 371.029	756729.9	756729.9	100.75	%			14:21:12
2	Ag 328.068†	283.9	-11.2	-0.0528	ug/L	-0.0528	ppb	14:21:12
2	As 188.979†	-25.2	-0.8	-0.3109	ug/L	-0.3109	ppb	14:21:32
2	B 249.677†	-341.6	191.9	4.0240	ug/L	4.0240	ppb	14:21:32
2	Ba 233.527†	0.6	9.0	0.0675	ug/L	0.0675	ppb	14:21:32
2	Be 313.107†	-5046.8	107.9	0.0397	ug/L	0.0397	ppb	14:21:12
2	Cd 226.502†	-188.4	8.3	0.0874	ug/L	0.0874	ppb	14:21:32
2	Co 228.616†	-67.7	-1.7	-0.0324	ug/L	-0.0324	ppb	14:21:32
2	Cr 267.716†	72.1	-7.2	-0.0763	ug/L	-0.0763	ppb	14:21:32
2	Cu 324.752†	6841.1	27.7	0.0795	ug/L	0.0795	ppb	14:21:12
2	Mn 257.610†	445.1	19.1	0.0190	ug/L	0.0190	ppb	14:21:32
2	Mo 202.031†	22.8	4.3	0.2711	ug/L	0.2711	ppb	14:21:32
2	Ni 231.604†	93.9	6.6	0.1531	ug/L	0.1531	ppb	14:21:32

2	P 214.914†	214.6	-10.6	-6.1467 ug/L	-6.1467 ppb	14:21:32
2	Pb 220.353†	-60.6	8.3	0.9438 ug/L	0.9438 ppb	14:21:32
2	S 181.975 Axial†	36.6	-5.3	-7.4290 ug/L	-7.4290 ppb	14:21:32
2	Sb 206.836†	37.6	3.0	0.9719 ug/L	0.9719 ppb	14:21:32
2	Se 196.026†	-20.0	9.0	5.2124 ug/L	5.2124 ppb	14:21:32
2	Si 251.611†	519.1	65.1	1.9397 ug/L	1.9397 ppb	14:21:32
2	Sn 189.927†	7.8	2.7	0.4462 ug/L	0.4462 ppb	14:21:32
2	Ti 334.940†	-1004.7	118.5	0.1881 ug/L	0.1881 ppb	14:21:12
2	Tl 190.801†	-40.0	-7.2	-2.0118 ug/L	-2.0118 ppb	14:21:32
2	U 409.014†	-2272.1	148.5	4.0899 ug/L	4.0899 ppb	14:21:12
2	V 292.402†	-1336.7	32.7	0.2295 ug/L	0.2295 ppb	14:21:12
2	Zn 213.857†	682.4	54.9	0.4756 ug/L	0.4756 ppb	14:21:32
2	SiO2†	512.1	40.5	2.5755 ug/L	2.5755 ppb	14:22:07
3	Sc Radial	5788.7	5788.7	99.1 %		14:20:20
3	Y RADIAL	6193.0	6193.0	98.49 %		14:20:20
3	Al 396.153Radial†	-6.4	14.0	9.6925 ug/L	9.6925 ppb	14:20:20
3	Ca 317.933Radial†	22.9	7.6	11.132 ug/L	11.132 ppb	14:20:40
3	Fe 238.204 Radial†	7.5	0.7	6.8252 ug/L	6.8252 ppb	14:20:40
3	K 766.490 Radial†	2436.9	108.4	19.211 ug/L	19.211 ppb	14:20:20
3	Mg 279.077 IEC†	1.4	0.2	7.9298 ug/L	7.9298 ppb	14:20:40
3	Na 589.592 Radial†	-957.5	121.3	40.692 ug/L	40.692 ppb	14:20:20
3	Sr 421.552†	-28.7	-1.6	-0.0099 ug/L	-0.0099 ppb	14:20:20
3	Sc 361.383	905762.9	905762.9	100.50 %		14:21:37
3	Y 371.029	752952.0	752952.0	100.25 %		14:21:37
3	Ag 328.068†	361.0	66.5	0.2960 ug/L	0.2960 ppb	14:21:37
3	As 188.979†	-25.1	-0.8	-0.2998 ug/L	-0.2998 ppb	14:21:57
3	B 249.677†	-323.7	208.6	4.3734 ug/L	4.3734 ppb	14:21:57
3	Ba 233.527†	-0.1	8.4	0.0620 ug/L	0.0620 ppb	14:21:57
3	Be 313.107†	-5132.6	5.9	0.0023 ug/L	0.0023 ppb	14:21:37
3	Cd 226.502†	-190.0	6.0	0.0629 ug/L	0.0629 ppb	14:21:57
3	Co 228.616†	-72.6	-6.8	-0.1294 ug/L	-0.1294 ppb	14:21:57
3	Cr 267.716†	63.2	-15.8	-0.1685 ug/L	-0.1685 ppb	14:21:57
3	Cu 324.752†	6868.5	77.6	0.2225 ug/L	0.2225 ppb	14:21:37
3	Mn 257.610†	440.9	16.4	0.0181 ug/L	0.0181 ppb	14:21:57
3	Mo 202.031†	18.6	0.2	0.0118 ug/L	0.0118 ppb	14:21:57
3	Ni 231.604†	65.2	-21.6	-0.5012 ug/L	-0.5012 ppb	14:21:57
3	P 214.914†	236.2	11.5	6.6189 ug/L	6.6189 ppb	14:21:57
3	Pb 220.353†	-71.8	-2.9	-0.3313 ug/L	-0.3313 ppb	14:21:57
3	S 181.975 Axial†	40.8	-0.9	-1.3172 ug/L	-1.3172 ppb	14:21:57
3	Sb 206.836†	34.9	0.5	0.1676 ug/L	0.1676 ppb	14:21:57
3	Se 196.026†	-18.1	10.9	6.2998 ug/L	6.2998 ppb	14:21:57
3	Si 251.611†	487.7	35.6	1.0576 ug/L	1.0576 ppb	14:21:57
3	Sn 189.927†	11.0	5.9	0.9712 ug/L	0.9712 ppb	14:21:57
3	Ti 334.940†	-1073.9	46.4	0.0711 ug/L	0.0711 ppb	14:21:37
3	Tl 190.801†	-26.7	6.0	1.6702 ug/L	1.6702 ppb	14:21:57
3	U 409.014†	-2121.2	291.1	8.0187 ug/L	8.0187 ppb	14:21:37
3	V 292.402†	-1378.9	-13.7	-0.0759 ug/L	-0.0759 ppb	14:21:37
3	Zn 213.857†	670.1	44.9	0.3946 ug/L	0.3946 ppb	14:21:57
3	SiO2†	535.4	65.3	4.1658 ug/L	4.1658 ppb	14:22:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908064.7	100.75	%	0.226				0.22%
Sc Radial	5842.6	100.0	%	1.73				1.73%
Y 371.029	755812.9	100.63	%	0.337				0.33%
Y RADIAL	6259.6	99.55	%	2.002				2.01%
Ag 328.068†	60.7	0.2739	ug/L	0.31617	0.2739	ppb	0.31617	115.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.5	4.4856	ug/L	9.71812	4.4856	ppb	9.71812	216.65%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.7	-1.4520	ug/L	1.98609	-1.4520	ppb	1.98609	136.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	208.4	4.3688	ug/L	0.34256	4.3688	ppb	0.34256	7.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.5	0.0196	ug/L	0.07825	0.0196	ppb	0.07825	399.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	73.9	0.0272	ug/L	0.02155	0.0272	ppb	0.02155	79.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.4	13.896	ug/L	2.5799	13.896	ppb	2.5799	18.57%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.8      0.0818 ug/L       0.01677      0.0818 ppb        0.01677  20.51%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.4     -0.1026 ug/L       0.06129     -0.1026 ppb        0.06129  59.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -16.6     -0.1757 ug/L       0.10308     -0.1757 ppb        0.10308  58.68%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                40.1      0.1153 ug/L       0.09462      0.1153 ppb        0.09462  82.09%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      9.2817 ug/L       7.89488      9.2817 ppb        7.89488  85.06%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          90.3     15.993 ug/L        6.6513      15.993 ppb         6.6513  41.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.6     91.186 ug/L       83.3967      91.186 ppb        83.3967  91.46%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.8      0.0236 ug/L       0.00878      0.0236 ppb        0.00878  37.21%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.8      0.3716 ug/L       0.41915      0.3716 ppb        0.41915 112.80%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        161.3     54.119 ug/L       13.5282      54.119 ppb        13.5282  25.00%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.0     -0.1609 ug/L       0.32793     -0.1609 ppb        0.32793 203.75%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.1     -1.7871 ug/L       7.28143     -1.7871 ppb        7.28143 407.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.6     -0.1832 ug/L       1.06072     -0.1832 ppb        1.06072 579.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.5      0.6343 ug/L       9.19569      0.6343 ppb        9.19569 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.9      0.6093 ug/L       0.40795      0.6093 ppb        0.40795  66.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 7.0      4.0954 ug/L       2.92732      4.0954 ppb        2.92732  71.48%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                50.8      1.5077 ug/L       0.44134      1.5077 ppb        0.44134  29.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.0      0.3313 ug/L       0.70441      0.3313 ppb        0.70441 212.60%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 5.2      0.0324 ug/L       0.05170      0.0324 ppb        0.05170 159.31%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                75.4      0.1184 ug/L       0.06165      0.1184 ppb        0.06165  52.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.3     -0.0781 ug/L       1.84797     -0.0781 ppb        1.84797 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                219.0      6.0315 ug/L       1.96482      6.0315 ppb        1.96482  32.58%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 54.3      0.3763 ug/L       0.54084      0.3763 ppb        0.54084 143.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                45.6      0.3954 ug/L       0.07979      0.3954 ppb        0.07979  20.18%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      53.3      3.3901 ug/L       0.79588      3.3901 ppb        0.79588  23.48%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/8/2009 14:50:31 **Plasma On Time:** 12/7/2009 05:17:52
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\120809.sif
Batch ID:
Results Data Set: 120809
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/8/2009 14:50:32
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5822.2	5822.2	99.6	%			14:52:24
1	Y RADIAL	6192.0	6192.0	98.48	%			14:52:24
1	Al 396.153Radial†	7058.7	7105.5	4914.4	ug/L	4914.4	ppb	14:52:24
1	Ca 317.933Radial†	3404.7	3401.9	5014.2	ug/L	5014.2	ppb	14:52:44
1	Fe 238.204 Radial†	550.1	545.4	5121.3	ug/L	5121.3	ppb	14:52:44
1	K 766.490 Radial†	31002.7	28766.8	5092.8	ug/L	5092.8	ppb	14:52:24
1	Mg 279.077 IEC†	144.6	144.0	5084.9	ug/L	5084.9	ppb	14:52:44
1	Na 589.592 Radial†	27765.1	28956.8	9717.3	ug/L	9717.3	ppb	14:52:24
1	Sr 421.552†	80833.4	81162.8	505.41	ug/L	505.41	ppb	14:52:24
1	Sc 361.383	915510.8	915510.8	101.58	%			14:53:41
1	Y 371.029	747043.4	747043.4	99.462	%			14:53:41
1	Ag 328.068†	112542.6	110498.6	503.55	ug/L	503.55	ppb	14:53:47
1	As 188.979†	1230.0	1235.1	492.43	ug/L	492.43	ppb	14:54:07
1	B 249.677†	23010.6	23183.2	484.23	ug/L	484.23	ppb	14:53:47
1	Ba 233.527†	67960.1	66911.0	497.19	ug/L	497.19	ppb	14:53:47
1	Be 313.107†	1366061.7	1349916.9	493.03	ug/L	493.03	ppb	14:53:41
1	Cd 226.502†	47421.5	46878.7	495.38	ug/L	495.38	ppb	14:53:47
1	Co 228.616†	26607.5	26258.8	498.51	ug/L	498.51	ppb	14:53:47
1	Cr 267.716†	47728.8	46907.4	493.20	ug/L	493.20	ppb	14:53:47
1	Cu 324.752†	181924.0	172336.3	493.44	ug/L	493.44	ppb	14:53:47
1	Mn 257.610†	472404.0	464630.4	496.05	ug/L	496.05	ppb	14:53:41
1	Mo 202.031†	7952.7	7810.6	496.54	ug/L	496.54	ppb	14:54:07
1	Ni 231.604†	21858.5	21431.8	495.97	ug/L	495.97	ppb	14:53:47
1	P 214.914†	4557.0	4262.5	2383.6	ug/L	2383.6	ppb	14:54:07
1	Pb 220.353†	4349.2	4349.9	493.26	ug/L	493.26	ppb	14:54:07
1	S 181.975 Axial†	763.2	709.7	993.53	ug/L	993.53	ppb	14:54:07
1	Sb 206.836†	1642.4	1582.6	508.08	ug/L	508.08	ppb	14:54:07
1	Se 196.026†	841.8	857.5	514.37	ug/L	514.37	ppb	14:54:07
1	Si 251.611†	84801.0	83031.7	2473.7	ug/L	2473.7	ppb	14:53:47
1	Sn 189.927†	3092.8	3039.6	498.28	ug/L	498.28	ppb	14:54:07
1	Ti 334.940†	318949.2	315100.9	502.71	ug/L	502.71	ppb	14:53:47
1	Tl 190.801†	1739.0	1744.5	491.81	ug/L	491.81	ppb	14:54:07
1	U 409.014†	16013.8	18166.4	498.84	ug/L	498.84	ppb	14:53:47
1	V 292.402†	74225.3	74428.6	498.25	ug/L	498.25	ppb	14:53:47
1	Zn 213.857†	58235.3	56707.3	491.00	ug/L	491.00	ppb	14:53:47
1	SiO2†	84454.5	82672.9	5277.4	ug/L	5277.4	ppb	14:55:14
2	Sc Radial	5840.7	5840.7	99.9	%			14:52:49
2	Y RADIAL	6177.5	6177.5	98.25	%			14:52:49
2	Al 396.153Radial†	7114.7	7139.0	4937.6	ug/L	4937.6	ppb	14:52:49
2	Ca 317.933Radial†	3401.7	3388.0	4993.7	ug/L	4993.7	ppb	14:53:09
2	Fe 238.204 Radial†	549.0	542.5	5094.1	ug/L	5094.1	ppb	14:53:09
2	K 766.490 Radial†	31029.7	28694.9	5080.1	ug/L	5080.1	ppb	14:52:49
2	Mg 279.077 IEC†	144.1	143.0	5051.4	ug/L	5051.4	ppb	14:53:09
2	Na 589.592 Radial†	27808.3	28911.3	9702.1	ug/L	9702.1	ppb	14:52:49
2	Sr 421.552†	80809.8	80881.1	503.66	ug/L	503.66	ppb	14:52:49
2	Sc 361.383	911931.0	911931.0	101.18	%			14:54:12
2	Y 371.029	743477.2	743477.2	98.987	%			14:54:12

2	Ag 328.068†	112131.9	110527.6	503.67 ug/L	503.67 ppb	14:54:18
2	As 188.979†	1213.4	1223.4	487.81 ug/L	487.81 ppb	14:54:38
2	B 249.677†	22948.1	23210.4	484.81 ug/L	484.81 ppb	14:54:18
2	Ba 233.527†	67669.9	66886.8	497.00 ug/L	497.00 ppb	14:54:18
2	Be 313.107†	1361351.3	1350540.7	493.26 ug/L	493.26 ppb	14:54:12
2	Cd 226.502†	47361.4	47002.5	496.69 ug/L	496.69 ppb	14:54:18
2	Co 228.616†	26515.1	26270.3	498.73 ug/L	498.73 ppb	14:54:18
2	Cr 267.716†	47582.9	46947.6	493.62 ug/L	493.62 ppb	14:54:18
2	Cu 324.752†	180697.2	171826.9	491.98 ug/L	491.98 ppb	14:54:18
2	Mn 257.610†	471591.4	465653.0	497.14 ug/L	497.14 ppb	14:54:12
2	Mo 202.031†	7931.5	7820.4	497.16 ug/L	497.16 ppb	14:54:38
2	Ni 231.604†	21841.5	21499.5	497.53 ug/L	497.53 ppb	14:54:18
2	P 214.914†	4504.8	4228.6	2364.3 ug/L	2364.3 ppb	14:54:38
2	Pb 220.353†	4329.5	4347.3	492.97 ug/L	492.97 ppb	14:54:38
2	S 181.975 Axial†	755.4	705.0	986.92 ug/L	986.92 ppb	14:54:38
2	Sb 206.836†	1623.1	1569.8	504.04 ug/L	504.04 ppb	14:54:38
2	Se 196.026†	832.9	851.9	511.05 ug/L	511.05 ppb	14:54:38
2	Si 251.611†	84247.4	82812.3	2467.1 ug/L	2467.1 ppb	14:54:18
2	Sn 189.927†	3077.6	3036.6	497.78 ug/L	497.78 ppb	14:54:38
2	Ti 334.940†	317593.7	314993.8	502.54 ug/L	502.54 ppb	14:54:18
2	Tl 190.801†	1745.4	1757.5	495.45 ug/L	495.45 ppb	14:54:38
2	U 409.014†	15837.1	18053.7	495.74 ug/L	495.74 ppb	14:54:18
2	V 292.402†	73904.7	74398.6	498.05 ug/L	498.05 ppb	14:54:18
2	Zn 213.857†	57941.6	56642.0	490.42 ug/L	490.42 ppb	14:54:18
2	SiO2†	84207.9	82755.5	5282.7 ug/L	5282.7 ppb	14:55:19
3	Sc Radial	5817.3	5817.3	99.5 %		14:53:14
3	Y RADIAL	6180.6	6180.6	98.29 %		14:53:14
3	Al 396.153Radial†	7065.5	7118.2	4923.2 ug/L	4923.2 ppb	14:53:14
3	Ca 317.933Radial†	3380.1	3380.0	4981.9 ug/L	4981.9 ppb	14:53:34
3	Fe 238.204 Radial†	543.2	538.9	5060.4 ug/L	5060.4 ppb	14:53:34
3	K 766.490 Radial†	30832.3	28621.8	5067.1 ug/L	5067.1 ppb	14:53:14
3	Mg 279.077 IEC†	147.0	146.5	5175.5 ug/L	5175.5 ppb	14:53:34
3	Na 589.592 Radial†	27563.1	28777.3	9657.1 ug/L	9657.1 ppb	14:53:14
3	Sr 421.552†	80590.1	80986.6	504.32 ug/L	504.32 ppb	14:53:14
3	Sc 361.383	915362.0	915362.0	101.56 %		14:54:43
3	Y 371.029	746392.0	746392.0	99.375 %		14:54:43
3	Ag 328.068†	112967.2	110934.6	505.50 ug/L	505.50 ppb	14:54:49
3	As 188.979†	1242.1	1247.1	497.19 ug/L	497.19 ppb	14:55:09
3	B 249.677†	23119.9	23294.5	486.58 ug/L	486.58 ppb	14:54:49
3	Ba 233.527†	67702.8	66668.5	495.38 ug/L	495.38 ppb	14:54:49
3	Be 313.107†	1365727.3	1349806.3	492.99 ug/L	492.99 ppb	14:54:43
3	Cd 226.502†	47339.7	46805.8	494.61 ug/L	494.61 ppb	14:54:49
3	Co 228.616†	26567.5	26223.7	497.84 ug/L	497.84 ppb	14:54:49
3	Cr 267.716†	47693.6	46880.4	492.91 ug/L	492.91 ppb	14:54:49
3	Cu 324.752†	182283.0	172718.9	494.53 ug/L	494.53 ppb	14:54:49
3	Mn 257.610†	472909.7	465204.0	496.66 ug/L	496.66 ppb	14:54:43
3	Mo 202.031†	7974.5	7833.4	497.98 ug/L	497.98 ppb	14:55:09
3	Ni 231.604†	21778.0	21356.1	494.21 ug/L	494.21 ppb	14:54:49
3	P 214.914†	4553.2	4259.5	2381.8 ug/L	2381.8 ppb	14:55:09
3	Pb 220.353†	4345.3	4346.8	492.92 ug/L	492.92 ppb	14:55:09
3	S 181.975 Axial†	762.9	709.6	993.35 ug/L	993.35 ppb	14:55:09
3	Sb 206.836†	1635.2	1575.7	505.93 ug/L	505.93 ppb	14:55:09
3	Se 196.026†	835.2	851.1	510.48 ug/L	510.48 ppb	14:55:09
3	Si 251.611†	84744.7	82989.9	2472.5 ug/L	2472.5 ppb	14:54:49
3	Sn 189.927†	3087.9	3035.3	497.56 ug/L	497.56 ppb	14:55:09
3	Ti 334.940†	319146.8	315346.5	503.10 ug/L	503.10 ppb	14:54:49
3	Tl 190.801†	1744.9	1750.5	493.51 ug/L	493.51 ppb	14:55:09
3	U 409.014†	16177.8	18330.5	503.37 ug/L	503.37 ppb	14:54:49
3	V 292.402†	74115.1	74332.0	497.65 ug/L	497.65 ppb	14:54:49
3	Zn 213.857†	58078.5	56562.2	489.74 ug/L	489.74 ppb	14:54:49
3	SiO2†	83709.4	81952.7	5231.1 ug/L	5231.1 ppb	14:55:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914267.9	101.44	%	0.225				0.22%
Sc Radial	5826.7	99.7	%	0.21				0.21%
Y 371.029	745637.5	99.275	%	0.2528				0.25%
Y RADIAL	6183.4	98.34	%	0.122				0.12%
Ag 328.068†	110653.6	504.24	ug/L	1.091	504.24	ppb	1.091	0.22%

```
   QC value within limits for Ag 328.068  Recovery = 100.85%
Al 396.153Radial†       7120.9      4925.1 ug/L        11.72      4925.1 ppb        11.72   0.24%
   QC value within limits for Al 396.153Radial  Recovery = 98.50%
As 188.979†             1235.2      492.48 ug/L        4.693      492.48 ppb        4.693   0.95%
   QC value within limits for As 188.979  Recovery = 98.50%
B 249.677†             23229.4      485.20 ug/L        1.222      485.20 ppb        1.222   0.25%
   QC value within limits for B 249.677  Recovery = 97.04%
Ba 233.527†            66822.1      496.53 ug/L        0.992      496.53 ppb        0.992   0.20%
   QC value within limits for Ba 233.527  Recovery = 99.31%
Be 313.107†          1350087.9      493.10 ug/L        0.144      493.10 ppb        0.144   0.03%
   QC value within limits for Be 313.107  Recovery = 98.62%
Ca 317.933Radial†       3390.0      4996.6 ug/L        16.32      4996.6 ppb        16.32   0.33%
   QC value within limits for Ca 317.933Radial  Recovery = 99.93%
Cd 226.502†            46895.6      495.56 ug/L        1.051      495.56 ppb        1.051   0.21%
   QC value within limits for Cd 226.502  Recovery = 99.11%
Co 228.616†            26251.0      498.36 ug/L        0.460      498.36 ppb        0.460   0.09%
   QC value within limits for Co 228.616  Recovery = 99.67%
Cr 267.716†            46911.8      493.24 ug/L        0.357      493.24 ppb        0.357   0.07%
   QC value within limits for Cr 267.716  Recovery = 98.65%
Cu 324.752†           172294.0      493.32 ug/L        1.280      493.32 ppb        1.280   0.26%
   QC value within limits for Cu 324.752  Recovery = 98.66%
Fe 238.204 Radial†       542.2      5091.9 ug/L        30.51      5091.9 ppb        30.51   0.60%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.84%
K 766.490 Radial†      28694.5      5080.0 ug/L        12.84      5080.0 ppb        12.84   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 101.60%
Mg 279.077 IEC†          144.5      5103.9 ug/L        64.19      5103.9 ppb        64.19   1.26%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.08%
Mn 257.610†           465162.4      496.62 ug/L        0.545      496.62 ppb        0.545   0.11%
   QC value within limits for Mn 257.610  Recovery = 99.32%
Mo 202.031†             7821.5      497.23 ug/L        0.723      497.23 ppb        0.723   0.15%
   QC value within limits for Mo 202.031  Recovery = 99.45%
Na 589.592 Radial†     28881.8      9692.2 ug/L        31.31      9692.2 ppb        31.31   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 96.92%
Ni 231.604†            21429.1      495.90 ug/L        1.661      495.90 ppb        1.661   0.33%
   QC value within limits for Ni 231.604  Recovery = 99.18%
P 214.914†              4250.2      2376.6 ug/L        10.67      2376.6 ppb        10.67   0.45%
   QC value within limits for P 214.914  Recovery = 95.06%
Pb 220.353†             4348.0      493.05 ug/L        0.184      493.05 ppb        0.184   0.04%
   QC value within limits for Pb 220.353  Recovery = 98.61%
S 181.975 Axial†         708.1      991.26 ug/L        3.765      991.26 ppb        3.765   0.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.13%
Sb 206.836†             1576.1      506.02 ug/L        2.019      506.02 ppb        2.019   0.40%
   QC value within limits for Sb 206.836  Recovery = 101.20%
Se 196.026†              853.5      511.97 ug/L        2.100      511.97 ppb        2.100   0.41%
   QC value within limits for Se 196.026  Recovery = 102.39%
Si 251.611†            82944.7      2471.1 ug/L         3.49      2471.1 ppb         3.49   0.14%
   QC value within limits for Si 251.611  Recovery = 98.84%
Sn 189.927†             3037.2      497.87 ug/L        0.365      497.87 ppb        0.365   0.07%
   QC value within limits for Sn 189.927  Recovery = 99.57%
Sr 421.552†            81010.2      504.46 ug/L        0.886      504.46 ppb        0.886   0.18%
   QC value within limits for Sr 421.552  Recovery = 100.89%
Ti 334.940†           315147.0      502.78 ug/L        0.287      502.78 ppb        0.287   0.06%
   QC value within limits for Ti 334.940  Recovery = 100.56%
Tl 190.801†             1750.8      493.59 ug/L        1.822      493.59 ppb        1.822   0.37%
   QC value within limits for Tl 190.801  Recovery = 98.72%
U 409.014†             18183.5      499.32 ug/L        3.837      499.32 ppb        3.837   0.77%
   QC value within limits for U 409.014  Recovery = 99.86%
V 292.402†             74386.4      497.98 ug/L        0.305      497.98 ppb        0.305   0.06%
   QC value within limits for V 292.402  Recovery = 99.60%
Zn 213.857†            56637.1      490.39 ug/L        0.628      490.39 ppb        0.628   0.13%
   QC value within limits for Zn 213.857  Recovery = 98.08%
SiO2†                  82460.3      5263.7 ug/L        28.34      5263.7 ppb        28.34   0.54%
   QC value within limits for SiO2  Recovery = 98.43%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 14:57:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5708.5	5708.5	97.7	%			14:59:27
1	Y RADIAL	6146.7	6146.7	97.76	%			14:59:27
1	Al 396.153Radial†	-34.6	-15.0	-10.435	ug/L	-10.435	ppb	14:59:27
1	Ca 317.933Radial†	23.3	8.2	12.117	ug/L	12.117	ppb	14:59:47
1	Fe 238.204 Radial†	7.7	1.1	10.024	ug/L	10.024	ppb	14:59:47
1	K 766.490 Radial†	2297.5	0.3	0.0198	ug/L	0.0198	ppb	14:59:27
1	Mg 279.077 IEC†	3.7	2.6	92.377	ug/L	92.377	ppb	14:59:47
1	Na 589.592 Radial†	-905.5	161.0	54.029	ug/L	54.029	ppb	14:59:27
1	Sr 421.552†	-23.8	2.9	0.0182	ug/L	0.0182	ppb	14:59:27
1	Sc 361.383	930405.4	930405.4	103.23	%			15:00:44
1	Y 371.029	770314.6	770314.6	102.56	%			15:00:44
1	Ag 328.068†	345.4	41.8	0.1963	ug/L	0.1963	ppb	15:00:49
1	As 188.979†	-21.1	3.8	1.4839	ug/L	1.4839	ppb	15:01:09
1	B 249.677†	-321.6	219.2	4.5956	ug/L	4.5956	ppb	15:01:09
1	Ba 233.527†	3.0	11.4	0.0861	ug/L	0.0861	ppb	15:01:09
1	Be 313.107†	-5132.0	141.7	0.0518	ug/L	0.0518	ppb	15:00:49
1	Cd 226.502†	-185.8	15.1	0.1592	ug/L	0.1592	ppb	15:01:09
1	Co 228.616†	-79.4	-11.5	-0.2181	ug/L	-0.2181	ppb	15:01:09
1	Cr 267.716†	76.0	-5.1	-0.0516	ug/L	-0.0516	ppb	15:01:09
1	Cu 324.752†	6884.0	-88.4	-0.2523	ug/L	-0.2523	ppb	15:00:49
1	Mn 257.610†	448.0	11.7	0.0117	ug/L	0.0117	ppb	15:01:09
1	Mo 202.031†	25.4	6.3	0.4009	ug/L	0.4009	ppb	15:01:09
1	Ni 231.604†	94.5	4.9	0.1147	ug/L	0.1147	ppb	15:01:09
1	P 214.914†	210.7	-19.4	-11.154	ug/L	-11.154	ppb	15:01:09
1	Pb 220.353†	-57.1	13.2	1.4879	ug/L	1.4879	ppb	15:01:09
1	S 181.975 Axial†	40.9	-2.0	-2.7523	ug/L	-2.7523	ppb	15:01:09
1	Sb 206.836†	42.1	6.6	2.0734	ug/L	2.0734	ppb	15:01:09
1	Se 196.026†	-25.0	4.6	2.6994	ug/L	2.6994	ppb	15:01:09
1	Si 251.611†	472.3	7.8	0.2299	ug/L	0.2299	ppb	15:01:09
1	Sn 189.927†	0.7	-4.3	-0.7095	ug/L	-0.7095	ppb	15:01:09
1	Ti 334.940†	-1106.1	43.5	0.0708	ug/L	0.0708	ppb	15:00:49
1	Tl 190.801†	-36.8	-3.2	-0.8907	ug/L	-0.8907	ppb	15:01:09
1	U 409.014†	-2546.5	-64.9	-1.7890	ug/L	-1.7890	ppb	15:00:49
1	V 292.402†	-1311.2	88.2	0.5854	ug/L	0.5854	ppb	15:00:49
1	Zn 213.857†	674.5	31.5	0.2710	ug/L	0.2710	ppb	15:01:09
1	SiO2†	489.0	6.2	0.3875	ug/L	0.3875	ppb	15:02:30
2	Sc Radial	5775.2	5775.2	98.8	%			14:59:52
2	Y RADIAL	6224.9	6224.9	99.00	%			14:59:52
2	Al 396.153Radial†	-20.3	-0.2	-0.1197	ug/L	-0.1197	ppb	14:59:52
2	Ca 317.933Radial†	31.1	15.9	23.407	ug/L	23.407	ppb	15:00:12
2	Fe 238.204 Radial†	8.7	2.0	18.368	ug/L	18.368	ppb	15:00:12
2	K 766.490 Radial†	2352.1	28.4	5.0073	ug/L	5.0073	ppb	14:59:52
2	Mg 279.077 IEC†	4.4	3.3	115.49	ug/L	115.49	ppb	15:00:12
2	Na 589.592 Radial†	-913.4	163.7	54.946	ug/L	54.946	ppb	14:59:52
2	Sr 421.552†	0.4	27.8	0.1729	ug/L	0.1729	ppb	14:59:52
2	Sc 361.383	909855.2	909855.2	100.95	%			15:01:14
2	Y 371.029	753755.3	753755.3	100.36	%			15:01:14
2	Ag 328.068†	272.0	-23.3	-0.0966	ug/L	-0.0966	ppb	15:01:19
2	As 188.979†	-17.1	7.2	2.8471	ug/L	2.8471	ppb	15:01:39
2	B 249.677†	-375.6	158.6	3.3247	ug/L	3.3247	ppb	15:01:39
2	Ba 233.527†	-16.9	-8.3	-0.0604	ug/L	-0.0604	ppb	15:01:39
2	Be 313.107†	-5144.8	16.8	0.0064	ug/L	0.0064	ppb	15:01:19
2	Cd 226.502†	-181.0	15.9	0.1658	ug/L	0.1658	ppb	15:01:39
2	Co 228.616†	-81.2	-15.0	-0.2850	ug/L	-0.2850	ppb	15:01:39
2	Cr 267.716†	62.7	-16.5	-0.1717	ug/L	-0.1717	ppb	15:01:39
2	Cu 324.752†	6757.1	-63.5	-0.1807	ug/L	-0.1807	ppb	15:01:19
2	Mn 257.610†	455.0	28.4	0.0300	ug/L	0.0300	ppb	15:01:39
2	Mo 202.031†	21.8	3.2	0.2060	ug/L	0.2060	ppb	15:01:39
2	Ni 231.604†	86.1	-1.3	-0.0298	ug/L	-0.0298	ppb	15:01:39

2	P 214.914†	210.7	-14.8	-8.5016 ug/L	-8.5016 ppb	15:01:39
2	Pb 220.353†	-70.1	-0.9	-0.1080 ug/L	-0.1080 ppb	15:01:39
2	S 181.975 Axial†	43.6	1.7	2.3145 ug/L	2.3145 ppb	15:01:39
2	Sb 206.836†	27.3	-7.2	-2.2535 ug/L	-2.2535 ppb	15:01:39
2	Se 196.026†	-25.0	4.0	2.3953 ug/L	2.3953 ppb	15:01:39
2	Si 251.611†	497.2	42.9	1.2744 ug/L	1.2744 ppb	15:01:39
2	Sn 189.927†	12.2	7.0	1.1567 ug/L	1.1567 ppb	15:01:39
2	Ti 334.940†	-1045.9	78.9	0.1284 ug/L	0.1284 ppb	15:01:19
2	Tl 190.801†	-40.9	-8.0	-2.2272 ug/L	-2.2272 ppb	15:01:39
2	U 409.014†	-2531.4	-105.7	-2.9140 ug/L	-2.9140 ppb	15:01:19
2	V 292.402†	-1333.6	37.4	0.2440 ug/L	0.2440 ppb	15:01:19
2	Zn 213.857†	678.4	50.1	0.4325 ug/L	0.4325 ppb	15:01:39
2	SiO2†	516.3	44.0	2.8008 ug/L	2.8008 ppb	15:02:50
3	Sc Radial	5949.9	5949.9	102 %		15:00:17
3	Y RADIAL	6376.5	6376.5	101.4 %		15:00:17
3	Al 396.153Radial†	-37.8	-16.8	-11.650 ug/L	-11.650 ppb	15:00:17
3	Ca 317.933Radial†	24.5	8.5	12.469 ug/L	12.469 ppb	15:00:37
3	Fe 238.204 Radial†	8.0	1.1	9.9854 ug/L	9.9854 ppb	15:00:37
3	K 766.490 Radial†	2252.8	-139.0	-24.682 ug/L	-24.682 ppb	15:00:17
3	Mg 279.077 IEC†	2.2	1.0	34.866 ug/L	34.866 ppb	15:00:37
3	Na 589.592 Radial†	-937.8	166.8	55.991 ug/L	55.991 ppb	15:00:17
3	Sr 421.552†	-24.7	3.1	0.0189 ug/L	0.0189 ppb	15:00:17
3	Sc 361.383	921452.8	921452.8	102.24 %		15:01:44
3	Y 371.029	764859.6	764859.6	101.83 %		15:01:44
3	Ag 328.068†	285.4	-13.5	-0.0495 ug/L	-0.0495 ppb	15:01:50
3	As 188.979†	-21.1	3.6	1.4137 ug/L	1.4137 ppb	15:02:10
3	B 249.677†	-391.5	147.8	3.0975 ug/L	3.0975 ppb	15:02:10
3	Ba 233.527†	-5.1	3.5	0.0278 ug/L	0.0278 ppb	15:02:10
3	Be 313.107†	-5044.9	178.6	0.0653 ug/L	0.0653 ppb	15:01:50
3	Cd 226.502†	-179.4	19.6	0.2060 ug/L	0.2060 ppb	15:02:10
3	Co 228.616†	-69.6	-2.7	-0.0502 ug/L	-0.0502 ppb	15:02:10
3	Cr 267.716†	76.4	-3.9	-0.0372 ug/L	-0.0372 ppb	15:02:10
3	Cu 324.752†	6767.8	-137.2	-0.3921 ug/L	-0.3921 ppb	15:01:50
3	Mn 257.610†	420.6	-11.0	-0.0114 ug/L	-0.0114 ppb	15:02:10
3	Mo 202.031†	22.2	3.4	0.2169 ug/L	0.2169 ppb	15:02:10
3	Ni 231.604†	79.5	-8.8	-0.2037 ug/L	-0.2037 ppb	15:02:10
3	P 214.914†	231.2	2.6	1.5628 ug/L	1.5628 ppb	15:02:10
3	Pb 220.353†	-73.8	-3.7	-0.4191 ug/L	-0.4191 ppb	15:02:10
3	S 181.975 Axial†	37.9	-4.5	-6.2915 ug/L	-6.2915 ppb	15:02:10
3	Sb 206.836†	26.9	-7.9	-2.5117 ug/L	-2.5117 ppb	15:02:10
3	Se 196.026†	-19.1	10.1	5.8643 ug/L	5.8643 ppb	15:02:10
3	Si 251.611†	482.4	22.1	0.6683 ug/L	0.6683 ppb	15:02:10
3	Sn 189.927†	3.0	-2.1	-0.3391 ug/L	-0.3391 ppb	15:02:10
3	Ti 334.940†	-1093.9	44.9	0.0755 ug/L	0.0755 ppb	15:01:50
3	Tl 190.801†	-28.0	5.1	1.4355 ug/L	1.4355 ppb	15:02:10
3	U 409.014†	-2718.7	-257.3	-7.0900 ug/L	-7.0900 ppb	15:01:50
3	V 292.402†	-1279.4	107.0	0.6952 ug/L	0.6952 ppb	15:01:50
3	Zn 213.857†	666.2	29.8	0.2597 ug/L	0.2597 ppb	15:02:10
3	SiO2†	499.5	21.1	1.3636 ug/L	1.3636 ppb	15:03:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	920571.1	102.14	%	1.143				1.12%
Sc Radial	5811.2	99.4	%	2.13				2.14%
Y 371.029	762976.5	101.58	%	1.124				1.11%
Y RADIAL	6249.4	99.39	%	1.858				1.87%
Ag 328.068†	1.7	0.0167	ug/L	0.15729	0.0167	ppb	0.15729	939.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.6	-7.4018	ug/L	6.33562	-7.4018	ppb	6.33562	85.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.8	1.9149	ug/L	0.80807	1.9149	ppb	0.80807	42.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	175.2	3.6726	ug/L	0.80738	3.6726	ppb	0.80738	21.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.2	0.0178	ug/L	0.07377	0.0178	ppb	0.07377	414.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	112.4	0.0411	ug/L	0.03085	0.0411	ppb	0.03085	75.00%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.9	15.997	ug/L	6.4191	15.997	ppb	6.4191	40.13%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              16.9      0.1770 ug/L       0.02534      0.1770 ppb        0.02534  14.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -9.7     -0.1844 ug/L       0.12096     -0.1844 ppb        0.12096  65.59%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -8.5     -0.0868 ug/L       0.07386     -0.0868 ppb        0.07386  85.07%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -96.3     -0.2750 ug/L       0.10752     -0.2750 ppb        0.10752  39.10%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.4      12.793 ug/L        4.8288      12.793 ppb         4.8288  37.75%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -36.8     -6.5515 ug/L      15.89795     -6.5515 ppb       15.89795 242.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           2.3      80.913 ug/L       41.5191      80.913 ppb        41.5191  51.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               9.7      0.0101 ug/L       0.02072      0.0101 ppb        0.02072 204.57%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.3      0.2746 ug/L       0.10955      0.2746 ppb        0.10955  39.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      163.9      54.989 ug/L        0.9819      54.989 ppb         0.9819   1.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.7     -0.0396 ug/L       0.15940     -0.0396 ppb        0.15940 402.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -10.5     -6.0310 ug/L       6.70884     -6.0310 ppb        6.70884 111.24%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               2.8      0.3203 ug/L       1.02310      0.3203 ppb        1.02310 319.45%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.6     -2.2431 ug/L       4.32555     -2.2431 ppb        4.32555 192.84%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.9     -0.8973 ug/L       2.57591     -0.8973 ppb        2.57591 287.08%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.2      3.6530 ug/L       1.92103      3.6530 ppb        1.92103  52.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              24.3      0.7242 ug/L       0.52448      0.7242 ppb        0.52448  72.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.2      0.0360 ug/L       0.98807      0.0360 ppb        0.98807 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              11.3      0.0700 ug/L       0.08912      0.0700 ppb        0.08912 127.27%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              55.8      0.0916 ug/L       0.03198      0.0916 ppb        0.03198  34.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.0     -0.5608 ug/L       1.85351     -0.5608 ppb        1.85351 330.50%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -142.6     -3.9310 ug/L       2.79299     -3.9310 ppb        2.79299  71.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               77.5      0.5082 ug/L       0.23528      0.5082 ppb        0.23528  46.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              37.1      0.3211 ug/L       0.09669      0.3211 ppb        0.09669  30.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    23.7      1.5173 ug/L       1.21400      1.5173 ppb        1.21400  80.01%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 16:07:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5850.9	5850.9	100	%			16:09:41
1	Y RADIAL	6234.6	6234.6	99.15	%			16:09:41
1	Al 396.153Radial†	6877.4	6889.7	4765.0	ug/L	4765.0	ppb	16:09:41
1	Ca 317.933Radial†	3305.2	3285.7	4842.9	ug/L	4842.9	ppb	16:10:01
1	Fe 238.204 Radial†	535.3	527.8	4956.9	ug/L	4956.9	ppb	16:10:01
1	K 766.490 Radial†	30340.3	27952.4	4948.6	ug/L	4948.6	ppb	16:09:41
1	Mg 279.077 IEC†	144.6	143.3	5060.7	ug/L	5060.7	ppb	16:10:01
1	Na 589.592 Radial†	27420.7	28476.0	9556.0	ug/L	9556.0	ppb	16:09:41
1	Sr 421.552†	79295.3	79228.2	493.37	ug/L	493.37	ppb	16:09:41
1	Sc 361.383	918568.4	918568.4	101.92	%			16:10:58
1	Y 371.029	748533.4	748533.4	99.660	%			16:10:58
1	Ag 328.068†	112592.0	110178.2	502.02	ug/L	502.02	ppb	16:11:04
1	As 188.979†	1199.4	1201.0	478.92	ug/L	478.92	ppb	16:11:24
1	B 249.677†	22683.7	22787.0	475.97	ug/L	475.97	ppb	16:11:04
1	Ba 233.527†	66684.8	65437.0	486.24	ug/L	486.24	ppb	16:11:04
1	Be 313.107†	1332146.9	1312164.5	479.26	ug/L	479.26	ppb	16:10:58
1	Cd 226.502†	46897.1	46208.8	488.31	ug/L	488.31	ppb	16:11:04
1	Co 228.616†	26184.8	25757.0	488.96	ug/L	488.96	ppb	16:11:04
1	Cr 267.716†	46946.7	45983.6	483.49	ug/L	483.49	ppb	16:11:04
1	Cu 324.752†	179478.0	169340.2	484.86	ug/L	484.86	ppb	16:11:04
1	Mn 257.610†	462810.3	453669.5	484.35	ug/L	484.35	ppb	16:10:58
1	Mo 202.031†	7794.0	7628.8	484.98	ug/L	484.98	ppb	16:11:24
1	Ni 231.604†	21496.0	21004.5	486.08	ug/L	486.08	ppb	16:11:04
1	P 214.914†	4416.5	4109.8	2296.8	ug/L	2296.8	ppb	16:11:24
1	Pb 220.353†	4224.1	4213.0	477.74	ug/L	477.74	ppb	16:11:24
1	S 181.975 Axial†	741.8	686.3	960.71	ug/L	960.71	ppb	16:11:24
1	Sb 206.836†	1582.4	1518.4	487.52	ug/L	487.52	ppb	16:11:24
1	Se 196.026†	826.1	839.3	503.25	ug/L	503.25	ppb	16:11:24
1	Si 251.611†	84571.1	82528.2	2458.9	ug/L	2458.9	ppb	16:11:04
1	Sn 189.927†	3027.0	2965.0	486.04	ug/L	486.04	ppb	16:11:24
1	Ti 334.940†	316778.2	311925.6	497.64	ug/L	497.64	ppb	16:11:04
1	Tl 190.801†	1703.6	1704.0	480.43	ug/L	480.43	ppb	16:11:24
1	U 409.014†	15719.3	17825.0	489.48	ug/L	489.48	ppb	16:11:04
1	V 292.402†	73108.4	73089.5	489.25	ug/L	489.25	ppb	16:11:04
1	Zn 213.857†	57568.1	55861.8	483.70	ug/L	483.70	ppb	16:11:04
1	SiO2†	82916.7	80887.3	5163.5	ug/L	5163.5	ppb	16:12:31
2	Sc Radial	5901.5	5901.5	101	%			16:10:06
2	Y RADIAL	6268.4	6268.4	99.69	%			16:10:06
2	Al 396.153Radial†	6974.0	6926.3	4790.5	ug/L	4790.5	ppb	16:10:06
2	Ca 317.933Radial†	3332.2	3284.1	4840.6	ug/L	4840.6	ppb	16:10:26
2	Fe 238.204 Radial†	539.3	527.3	4951.3	ug/L	4951.3	ppb	16:10:26
2	K 766.490 Radial†	30635.4	27984.7	4954.3	ug/L	4954.3	ppb	16:10:06
2	Mg 279.077 IEC†	146.1	143.5	5067.7	ug/L	5067.7	ppb	16:10:26
2	Na 589.592 Radial†	27823.9	28640.3	9611.1	ug/L	9611.1	ppb	16:10:06
2	Sr 421.552†	80286.9	79530.7	495.25	ug/L	495.25	ppb	16:10:06
2	Sc 361.383	919638.9	919638.9	102.04	%			16:11:29
2	Y 371.029	751015.9	751015.9	99.991	%			16:11:29
2	Ag 328.068†	110240.2	107744.8	490.97	ug/L	490.97	ppb	16:11:35
2	As 188.979†	1197.5	1197.8	477.54	ug/L	477.54	ppb	16:11:55
2	B 249.677†	22199.6	22286.8	465.51	ug/L	465.51	ppb	16:11:35
2	Ba 233.527†	65453.8	64154.4	476.71	ug/L	476.71	ppb	16:11:35
2	Be 313.107†	1337732.1	1316116.8	480.68	ug/L	480.68	ppb	16:11:29
2	Cd 226.502†	45845.4	45124.5	476.84	ug/L	476.84	ppb	16:11:35
2	Co 228.616†	25662.6	25215.2	478.70	ug/L	478.70	ppb	16:11:35
2	Cr 267.716†	46095.5	45095.8	474.15	ug/L	474.15	ppb	16:11:35
2	Cu 324.752†	175119.1	164863.4	472.04	ug/L	472.04	ppb	16:11:35
2	Mn 257.610†	463010.9	453337.5	483.99	ug/L	483.99	ppb	16:11:29
2	Mo 202.031†	7780.5	7606.7	483.57	ug/L	483.57	ppb	16:11:55
2	Ni 231.604†	21027.6	20521.0	474.89	ug/L	474.89	ppb	16:11:35

2	P 214.914†	4404.0	4092.5	2288.9 ug/L	2288.9 ppb	16:11:55
2	Pb 220.353†	4194.6	4179.2	473.93 ug/L	473.93 ppb	16:11:55
2	S 181.975 Axial†	734.7	678.4	949.72 ug/L	949.72 ppb	16:11:55
2	Sb 206.836†	1574.0	1508.3	484.47 ug/L	484.47 ppb	16:11:55
2	Se 196.026†	822.7	835.1	500.79 ug/L	500.79 ppb	16:11:55
2	Si 251.611†	82493.3	80395.4	2395.1 ug/L	2395.1 ppb	16:11:35
2	Sn 189.927†	3006.7	2941.6	482.20 ug/L	482.20 ppb	16:11:55
2	Ti 334.940†	310141.3	305059.5	486.69 ug/L	486.69 ppb	16:11:35
2	Tl 190.801†	1702.3	1700.8	479.52 ug/L	479.52 ppb	16:11:55
2	U 409.014†	15331.4	17426.9	478.53 ug/L	478.53 ppb	16:11:35
2	V 292.402†	71683.9	71610.0	479.46 ug/L	479.46 ppb	16:11:35
2	Zn 213.857†	56396.1	54647.5	473.18 ug/L	473.18 ppb	16:11:35
2	SiO2†	82737.3	80616.8	5146.2 ug/L	5146.2 ppb	16:12:36
3	Sc Radial	5704.2	5704.2	97.6 %		16:10:31
3	Y RADIAL	6069.3	6069.3	96.52 %		16:10:31
3	Al 396.153Radial†	6754.1	6939.9	4799.5 ug/L	4799.5 ppb	16:10:31
3	Ca 317.933Radial†	3340.4	3406.6	5021.2 ug/L	5021.2 ppb	16:10:51
3	Fe 238.204 Radial†	535.6	541.9	5089.1 ug/L	5089.1 ppb	16:10:51
3	K 766.490 Radial†	30011.7	28395.0	5027.1 ug/L	5027.1 ppb	16:10:31
3	Mg 279.077 IEC†	144.6	147.0	5191.5 ug/L	5191.5 ppb	16:10:51
3	Na 589.592 Radial†	26842.5	28588.0	9593.6 ug/L	9593.6 ppb	16:10:31
3	Sr 421.552†	77467.2	79392.1	494.39 ug/L	494.39 ppb	16:10:31
3	Sc 361.383	906617.1	906617.1	100.59 %		16:12:00
3	Y 371.029	740468.1	740468.1	98.587 %		16:12:00
3	Ag 328.068†	111277.4	110327.7	502.74 ug/L	502.74 ppb	16:12:06
3	As 188.979†	1205.7	1222.8	487.55 ug/L	487.55 ppb	16:12:26
3	B 249.677†	22492.4	22890.3	478.11 ug/L	478.11 ppb	16:12:06
3	Ba 233.527†	66213.4	65830.9	489.16 ug/L	489.16 ppb	16:12:06
3	Be 313.107†	1321558.0	1318868.1	481.71 ug/L	481.71 ppb	16:12:00
3	Cd 226.502†	46483.9	46404.6	490.37 ug/L	490.37 ppb	16:12:06
3	Co 228.616†	25976.3	25888.4	491.48 ug/L	491.48 ppb	16:12:06
3	Cr 267.716†	46690.2	46335.9	487.19 ug/L	487.19 ppb	16:12:06
3	Cu 324.752†	177158.5	169355.8	484.91 ug/L	484.91 ppb	16:12:06
3	Mn 257.610†	457488.6	454365.1	485.10 ug/L	485.10 ppb	16:12:00
3	Mo 202.031†	7831.4	7766.9	493.76 ug/L	493.76 ppb	16:12:26
3	Ni 231.604†	21315.9	21103.5	488.37 ug/L	488.37 ppb	16:12:06
3	P 214.914†	4461.5	4211.7	2355.6 ug/L	2355.6 ppb	16:12:26
3	Pb 220.353†	4234.0	4277.4	485.04 ug/L	485.04 ppb	16:12:26
3	S 181.975 Axial†	755.6	709.5	993.31 ug/L	993.31 ppb	16:12:26
3	Sb 206.836†	1606.1	1562.4	501.70 ug/L	501.70 ppb	16:12:26
3	Se 196.026†	823.7	847.6	508.51 ug/L	508.51 ppb	16:12:26
3	Si 251.611†	83546.7	82603.8	2461.0 ug/L	2461.0 ppb	16:12:06
3	Sn 189.927†	3042.1	3019.1	494.92 ug/L	494.92 ppb	16:12:26
3	Ti 334.940†	313486.9	312750.9	498.96 ug/L	498.96 ppb	16:12:06
3	Tl 190.801†	1720.0	1742.3	491.16 ug/L	491.16 ppb	16:12:26
3	U 409.014†	15456.7	17767.2	487.86 ug/L	487.86 ppb	16:12:06
3	V 292.402†	72417.5	73348.2	491.06 ug/L	491.06 ppb	16:12:06
3	Zn 213.857†	56968.8	56010.6	484.97 ug/L	484.97 ppb	16:12:06
3	SiO2†	82132.3	81179.9	5181.8 ug/L	5181.8 ppb	16:12:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914941.5	101.52	%	0.802				0.79%
Sc Radial	5818.9	99.6	%	1.75				1.76%
Y 371.029	746672.5	99.413	%	0.7342				0.74%
Y RADIAL	6190.8	98.46	%	1.694				1.72%
Ag 328.068†	109416.9	498.58	ug/L	6.600	498.58	ppb	6.600	1.32%
QC value within limits for Ag 328.068 Recovery = 99.72%								
Al 396.153Radial†	6918.6	4785.0	ug/L	17.92	4785.0	ppb	17.92	0.37%
QC value within limits for Al 396.153Radial Recovery = 95.70%								
As 188.979†	1207.2	481.34	ug/L	5.423	481.34	ppb	5.423	1.13%
QC value within limits for As 188.979 Recovery = 96.27%								
B 249.677†	22654.7	473.20	ug/L	6.745	473.20	ppb	6.745	1.43%
QC value within limits for B 249.677 Recovery = 94.64%								
Ba 233.527†	65140.8	484.04	ug/L	6.513	484.04	ppb	6.513	1.35%
QC value within limits for Ba 233.527 Recovery = 96.81%								
Be 313.107†	1315716.5	480.55	ug/L	1.228	480.55	ppb	1.228	0.26%
QC value within limits for Be 313.107 Recovery = 96.11%								
Ca 317.933Radial†	3325.5	4901.6	ug/L	103.61	4901.6	ppb	103.61	2.11%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.03%
Cd 226.502†            45912.6      485.17 ug/L         7.289      485.17 ppb          7.289   1.50%
   QC value within limits for Cd 226.502  Recovery = 97.03%
Co 228.616†            25620.2      486.38 ug/L         6.767      486.38 ppb          6.767   1.39%
   QC value within limits for Co 228.616  Recovery = 97.28%
Cr 267.716†            45805.1      481.61 ug/L         6.718      481.61 ppb          6.718   1.39%
   QC value within limits for Cr 267.716  Recovery = 96.32%
Cu 324.752†           167853.1      480.60 ug/L         7.412      480.60 ppb          7.412   1.54%
   QC value within limits for Cu 324.752  Recovery = 96.12%
Fe 238.204 Radial†       532.4      4999.1 ug/L        77.94      4999.1 ppb          77.94   1.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.98%
K 766.490 Radial†      28110.7      4976.6 ug/L        43.76      4976.6 ppb          43.76   0.88%
   QC value within limits for K 766.490 Radial  Recovery = 99.53%
Mg 279.077 IEC†          144.6      5106.6 ug/L        73.61      5106.6 ppb          73.61   1.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.13%
Mn 257.610†           453790.7      484.48 ug/L         0.566      484.48 ppb          0.566   0.12%
   QC value within limits for Mn 257.610  Recovery = 96.90%
Mo 202.031†             7667.5      487.44 ug/L         5.519      487.44 ppb          5.519   1.13%
   QC value within limits for Mo 202.031  Recovery = 97.49%
Na 589.592 Radial†     28568.1      9586.9 ug/L        28.16      9586.9 ppb          28.16   0.29%
   QC value within limits for Na 589.592 Radial  Recovery = 95.87%
Ni 231.604†            20876.3      483.11 ug/L         7.214      483.11 ppb          7.214   1.49%
   QC value within limits for Ni 231.604  Recovery = 96.62%
P 214.914†              4138.0      2313.8 ug/L        36.45      2313.8 ppb          36.45   1.58%
   QC value within limits for P 214.914  Recovery = 92.55%
Pb 220.353†             4223.2      478.90 ug/L         5.647      478.90 ppb          5.647   1.18%
   QC value within limits for Pb 220.353  Recovery = 95.78%
S 181.975 Axial†         691.4      967.91 ug/L        22.668      967.91 ppb         22.668   2.34%
   QC value within limits for S 181.975 Axial  Recovery = 96.79%
Sb 206.836†             1529.7      491.23 ug/L         9.195      491.23 ppb          9.195   1.87%
   QC value within limits for Sb 206.836  Recovery = 98.25%
Se 196.026†              840.7      504.18 ug/L         3.941      504.18 ppb          3.941   0.78%
   QC value within limits for Se 196.026  Recovery = 100.84%
Si 251.611†            81842.5      2438.3 ug/L        37.45      2438.3 ppb          37.45   1.54%
   QC value within limits for Si 251.611  Recovery = 97.53%
Sn 189.927†             2975.2      487.72 ug/L         6.524      487.72 ppb          6.524   1.34%
   QC value within limits for Sn 189.927  Recovery = 97.54%
Sr 421.552†            79383.6      494.34 ug/L         0.943      494.34 ppb          0.943   0.19%
   QC value within limits for Sr 421.552  Recovery = 98.87%
Ti 334.940†           309912.0      494.43 ug/L         6.737      494.43 ppb          6.737   1.36%
   QC value within limits for Ti 334.940  Recovery = 98.89%
Tl 190.801†             1715.7      483.70 ug/L         6.472      483.70 ppb          6.472   1.34%
   QC value within limits for Tl 190.801  Recovery = 96.74%
U 409.014†             17673.1      485.29 ug/L         5.910      485.29 ppb          5.910   1.22%
   QC value within limits for U 409.014  Recovery = 97.06%
V 292.402†             72682.6      486.59 ug/L         6.245      486.59 ppb          6.245   1.28%
   QC value within limits for V 292.402  Recovery = 97.32%
Zn 213.857†            55506.6      480.62 ug/L         6.472      480.62 ppb          6.472   1.35%
   QC value within limits for Zn 213.857  Recovery = 96.12%
SiO2†                  80894.7      5163.8 ug/L        17.80      5163.8 ppb          17.80   0.34%
   QC value within limits for SiO2  Recovery = 96.56%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 16:14:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5997.3	5997.3	103	%			16:16:44
1	Y RADIAL	6380.2	6380.2	101.5	%			16:16:44
1	Al 396.153Radial†	-11.9	8.8	6.1007	ug/L	6.1007	ppb	16:16:44
1	Ca 317.933Radial†	32.0	15.6	22.925	ug/L	22.925	ppb	16:17:04
1	Fe 238.204 Radial†	7.8	0.8	7.6576	ug/L	7.6576	ppb	16:17:04
1	K 766.490 Radial†	2266.6	-143.1	-25.393	ug/L	-25.393	ppb	16:16:44
1	Mg 279.077 IEC†	0.9	-0.3	-10.086	ug/L	-10.086	ppb	16:17:04
1	Na 589.592 Radial†	-974.3	138.5	46.492	ug/L	46.492	ppb	16:16:44
1	Sr 421.552†	-10.3	17.3	0.1078	ug/L	0.1078	ppb	16:16:44
1	Sc 361.383	902141.4	902141.4	100.10	%			16:18:01
1	Y 371.029	750918.2	750918.2	99.978	%			16:18:01
1	Ag 328.068†	359.0	65.9	0.2960	ug/L	0.2960	ppb	16:18:01
1	As 188.979†	-25.0	-0.8	-0.2985	ug/L	-0.2985	ppb	16:18:21
1	B 249.677†	-348.1	182.9	3.8358	ug/L	3.8358	ppb	16:18:21
1	Ba 233.527†	-16.1	-7.7	-0.0562	ug/L	-0.0562	ppb	16:18:21
1	Be 313.107†	-5089.1	28.8	0.0108	ug/L	0.0108	ppb	16:18:01
1	Cd 226.502†	-196.2	-0.9	-0.0104	ug/L	-0.0104	ppb	16:18:21
1	Co 228.616†	-73.6	-8.2	-0.1541	ug/L	-0.1541	ppb	16:18:21
1	Cr 267.716†	73.9	-4.8	-0.0521	ug/L	-0.0521	ppb	16:18:21
1	Cu 324.752†	6951.8	188.3	0.5394	ug/L	0.5394	ppb	16:18:01
1	Mn 257.610†	454.0	31.2	0.0342	ug/L	0.0342	ppb	16:18:21
1	Mo 202.031†	24.9	6.5	0.4161	ug/L	0.4161	ppb	16:18:21
1	Ni 231.604†	68.3	-18.3	-0.4244	ug/L	-0.4244	ppb	16:18:21
1	P 214.914†	234.5	10.8	6.1249	ug/L	6.1249	ppb	16:18:21
1	Pb 220.353†	-59.3	9.2	1.0407	ug/L	1.0407	ppb	16:18:21
1	S 181.975 Axial†	45.3	3.7	5.1474	ug/L	5.1474	ppb	16:18:21
1	Sb 206.836†	43.5	9.3	2.9348	ug/L	2.9348	ppb	16:18:21
1	Se 196.026†	-26.6	2.2	1.3150	ug/L	1.3150	ppb	16:18:21
1	Si 251.611†	542.2	92.0	2.7574	ug/L	2.7574	ppb	16:18:21
1	Sn 189.927†	3.0	-2.0	-0.3265	ug/L	-0.3265	ppb	16:18:21
1	Ti 334.940†	-1017.3	98.6	0.1559	ug/L	0.1559	ppb	16:18:01
1	Tl 190.801†	-26.6	5.9	1.6513	ug/L	1.6513	ppb	16:18:21
1	U 409.014†	-2189.4	214.6	5.9103	ug/L	5.9103	ppb	16:18:01
1	V 292.402†	-1339.5	20.2	0.1490	ug/L	0.1490	ppb	16:18:01
1	Zn 213.857†	694.2	71.7	0.6283	ug/L	0.6283	ppb	16:18:21
1	SiO2†	516.1	48.1	3.0941	ug/L	3.0941	ppb	16:19:17
2	Sc Radial	6012.1	6012.1	103	%			16:17:09
2	Y RADIAL	6408.9	6408.9	101.9	%			16:17:09
2	Al 396.153Radial†	-36.3	-14.9	-10.362	ug/L	-10.362	ppb	16:17:09
2	Ca 317.933Radial†	30.7	14.3	21.060	ug/L	21.060	ppb	16:17:29
2	Fe 238.204 Radial†	9.5	2.4	22.746	ug/L	22.746	ppb	16:17:29
2	K 766.490 Radial†	2357.0	-60.7	-10.790	ug/L	-10.790	ppb	16:17:09
2	Mg 279.077 IEC†	0.1	-1.0	-36.764	ug/L	-36.764	ppb	16:17:29
2	Na 589.592 Radial†	-977.1	138.2	46.378	ug/L	46.378	ppb	16:17:09
2	Sr 421.552†	-16.5	11.4	0.0706	ug/L	0.0706	ppb	16:17:09
2	Sc 361.383	903845.4	903845.4	100.29	%			16:18:26
2	Y 371.029	752600.8	752600.8	100.20	%			16:18:26
2	Ag 328.068†	358.1	64.3	0.2983	ug/L	0.2983	ppb	16:18:26
2	As 188.979†	-29.0	-4.8	-1.8783	ug/L	-1.8783	ppb	16:18:46
2	B 249.677†	-359.2	172.5	3.6144	ug/L	3.6144	ppb	16:18:46
2	Ba 233.527†	-11.6	-3.1	-0.0207	ug/L	-0.0207	ppb	16:18:46
2	Be 313.107†	-5050.4	77.1	0.0283	ug/L	0.0283	ppb	16:18:26
2	Cd 226.502†	-179.2	16.4	0.1712	ug/L	0.1712	ppb	16:18:46
2	Co 228.616†	-66.3	-0.7	-0.0139	ug/L	-0.0139	ppb	16:18:46
2	Cr 267.716†	82.9	4.1	0.0432	ug/L	0.0432	ppb	16:18:46
2	Cu 324.752†	6849.8	73.5	0.2116	ug/L	0.2116	ppb	16:18:26
2	Mn 257.610†	454.3	30.7	0.0357	ug/L	0.0357	ppb	16:18:46
2	Mo 202.031†	16.9	-1.5	-0.0918	ug/L	-0.0918	ppb	16:18:46
2	Ni 231.604†	83.6	-3.2	-0.0736	ug/L	-0.0736	ppb	16:18:46

2	P 214.914†	212.9	-11.2	-6.5142 ug/L	-6.5142 ppb	16:18:46
2	Pb 220.353†	-57.7	10.9	1.2306 ug/L	1.2306 ppb	16:18:46
2	S 181.975 Axial†	43.3	1.6	2.2762 ug/L	2.2762 ppb	16:18:46
2	Sb 206.836†	36.6	2.2	0.7144 ug/L	0.7144 ppb	16:18:46
2	Se 196.026†	-30.1	-1.2	-0.6243 ug/L	-0.6243 ppb	16:18:46
2	Si 251.611†	542.4	91.2	2.7314 ug/L	2.7314 ppb	16:18:46
2	Sn 189.927†	11.5	6.5	1.0600 ug/L	1.0600 ppb	16:18:46
2	Ti 334.940†	-1064.7	53.3	0.0846 ug/L	0.0846 ppb	16:18:26
2	Tl 190.801†	-26.4	6.2	1.7321 ug/L	1.7321 ppb	16:18:46
2	U 409.014†	-2287.8	120.6	3.3181 ug/L	3.3181 ppb	16:18:26
2	V 292.402†	-1251.6	110.3	0.7294 ug/L	0.7294 ppb	16:18:26
2	Zn 213.857†	688.9	65.1	0.5680 ug/L	0.5680 ppb	16:18:46
2	SiO2†	534.2	65.2	4.1883 ug/L	4.1883 ppb	16:19:22
3	Sc Radial	5984.6	5984.6	102 %		16:17:34
3	Y RADIAL	6405.1	6405.1	101.9 %		16:17:34
3	Al 396.153Radial†	-28.8	-7.7	-5.3395 ug/L	-5.3395 ppb	16:17:34
3	Ca 317.933Radial†	25.8	9.6	14.150 ug/L	14.150 ppb	16:17:54
3	Fe 238.204 Radial†	7.6	0.6	5.3339 ug/L	5.3339 ppb	16:17:54
3	K 766.490 Radial†	2358.4	-48.7	-8.6670 ug/L	-8.6670 ppb	16:17:34
3	Mg 279.077 IEC†	4.6	3.4	119.26 ug/L	119.26 ppb	16:17:54
3	Na 589.592 Radial†	-940.3	169.7	56.954 ug/L	56.954 ppb	16:17:34
3	Sr 421.552†	-2.0	25.4	0.1583 ug/L	0.1583 ppb	16:17:34
3	Sc 361.383	891886.2	891886.2	98.959 %		16:18:51
3	Y 371.029	741776.6	741776.6	98.761 %		16:18:51
3	Ag 328.068†	352.6	63.5	0.2859 ug/L	0.2859 ppb	16:18:51
3	As 188.979†	-26.7	-2.8	-1.1194 ug/L	-1.1194 ppb	16:19:12
3	B 249.677†	-361.9	164.9	3.4576 ug/L	3.4576 ppb	16:19:12
3	Ba 233.527†	-3.3	5.1	0.0388 ug/L	0.0388 ppb	16:19:12
3	Be 313.107†	-5098.4	-39.0	-0.0142 ug/L	-0.0142 ppb	16:18:51
3	Cd 226.502†	-168.8	24.6	0.2590 ug/L	0.2590 ppb	16:19:12
3	Co 228.616†	-53.5	11.4	0.2166 ug/L	0.2166 ppb	16:19:12
3	Cr 267.716†	59.9	-18.1	-0.1915 ug/L	-0.1915 ppb	16:19:12
3	Cu 324.752†	6742.8	57.0	0.1633 ug/L	0.1633 ppb	16:18:51
3	Mn 257.610†	457.3	39.8	0.0408 ug/L	0.0408 ppb	16:19:12
3	Mo 202.031†	21.3	3.2	0.2013 ug/L	0.2013 ppb	16:19:12
3	Ni 231.604†	87.1	1.5	0.0337 ug/L	0.0337 ppb	16:19:12
3	P 214.914†	223.2	2.0	1.1147 ug/L	1.1147 ppb	16:19:12
3	Pb 220.353†	-74.9	-7.3	-0.8213 ug/L	-0.8213 ppb	16:19:12
3	S 181.975 Axial†	41.4	0.2	0.3184 ug/L	0.3184 ppb	16:19:12
3	Sb 206.836†	28.0	-6.0	-1.8934 ug/L	-1.8934 ppb	16:19:12
3	Se 196.026†	-18.4	10.3	5.9484 ug/L	5.9484 ppb	16:19:12
3	Si 251.611†	522.5	78.3	2.3466 ug/L	2.3466 ppb	16:19:12
3	Sn 189.927†	-1.4	-6.4	-1.0542 ug/L	-1.0542 ppb	16:19:12
3	Ti 334.940†	-1101.5	1.9	0.0016 ug/L	0.0016 ppb	16:18:51
3	Tl 190.801†	-35.8	-3.7	-1.0409 ug/L	-1.0409 ppb	16:19:12
3	U 409.014†	-2199.4	179.2	4.9375 ug/L	4.9375 ppb	16:18:51
3	V 292.402†	-1313.3	31.3	0.2210 ug/L	0.2210 ppb	16:18:51
3	Zn 213.857†	716.8	102.5	0.8901 ug/L	0.8901 ppb	16:19:12
3	SiO2†	521.6	59.6	3.8314 ug/L	3.8314 ppb	16:19:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899291.0	99.781	%	0.7178				0.72%
Sc Radial	5998.0	103	%	0.2				0.23%
Y 371.029	748431.9	99.647	%	0.7755				0.78%
Y RADIAL	6398.0	101.8	%	0.25				0.24%
Ag 328.068†	64.6	0.2934	ug/L	0.00659	0.2934	ppb	0.00659	2.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.6	-3.2003	ug/L	8.43731	-3.2003	ppb	8.43731	263.64%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-1.0987	ug/L	0.79011	-1.0987	ppb	0.79011	71.91%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	173.5	3.6359	ug/L	0.19001	3.6359	ppb	0.19001	5.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0127	ug/L	0.04799	-0.0127	ppb	0.04799	377.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	22.3	0.0083	ug/L	0.02134	0.0083	ppb	0.02134	257.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.1	19.378	ug/L	4.6227	19.378	ppb	4.6227	23.86%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.4      0.1399 ug/L       0.13744      0.1399 ppb        0.13744  98.22%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               0.8      0.0162 ug/L       0.18717      0.0162 ppb        0.18717 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -6.3     -0.0668 ug/L       0.11801     -0.0668 ppb        0.11801 176.66%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             106.3      0.3047 ug/L       0.20461      0.3047 ppb        0.20461  67.14%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.3      11.913 ug/L        9.4538      11.913 ppb         9.4538  79.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -84.2     -14.950 ug/L        9.1059     -14.950 ppb         9.1059  60.91%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.7      24.137 ug/L       83.4519      24.137 ppb        83.4519 345.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              33.9      0.0369 ug/L       0.00341      0.0369 ppb        0.00341   9.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.7      0.1752 ug/L       0.25494      0.1752 ppb        0.25494 145.50%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      148.8      49.941 ug/L        6.0737      49.941 ppb         6.0737  12.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -6.7     -0.1548 ug/L       0.23961     -0.1548 ppb        0.23961 154.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                0.5      0.2418 ug/L       6.36463      0.2418 ppb        6.36463 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.3      0.4834 ug/L       1.13387      0.4834 ppb        1.13387 234.58%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.8      2.5807 ug/L       2.42887      2.5807 ppb        2.42887  94.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               1.8      0.5853 ug/L       2.41670      0.5853 ppb        2.41670 412.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.8      2.2131 ug/L       3.37712      2.2131 ppb        3.37712 152.60%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              87.2      2.6118 ug/L       0.23004      2.6118 ppb        0.23004   8.81%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -0.7     -0.1069 ug/L       1.07406     -0.1069 ppb        1.07406 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              18.0      0.1122 ug/L       0.04403      0.1122 ppb        0.04403  39.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              51.2      0.0807 ug/L       0.07724      0.0807 ppb        0.07724  95.69%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.8      0.7808 ug/L       1.57821      0.7808 ppb        1.57821 202.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              171.5      4.7220 ug/L       1.30950      4.7220 ppb        1.30950  27.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               53.9      0.3665 ug/L       0.31636      0.3665 ppb        0.31636  86.33%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              79.8      0.6955 ug/L       0.17122      0.6955 ppb        0.17122  24.62%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    57.7      3.7046 ug/L       0.55801      3.7046 ppb        0.55801  15.06%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/8/2009 17:18:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5781.8	5781.8	98.9	%			17:20:03
1	Y RADIAL	6171.4	6171.4	98.15	%			17:20:03
1	Al 396.153Radial†	6864.1	6958.2	4812.3	ug/L	4812.3	ppb	17:20:03
1	Ca 317.933Radial†	3323.3	3343.4	4928.0	ug/L	4928.0	ppb	17:20:23
1	Fe 238.204 Radial†	540.1	539.1	5062.1	ug/L	5062.1	ppb	17:20:23
1	K 766.490 Radial†	30485.6	28461.2	5038.7	ug/L	5038.7	ppb	17:20:03
1	Mg 279.077 IEC†	146.4	146.8	5185.6	ug/L	5185.6	ppb	17:20:23
1	Na 589.592 Radial†	27745.2	29131.1	9775.8	ug/L	9775.8	ppb	17:20:03
1	Sr 421.552†	79846.6	80731.3	502.73	ug/L	502.73	ppb	17:20:03
1	Sc 361.383	905894.9	905894.9	100.51	%			17:21:21
1	Y 371.029	738248.8	738248.8	98.291	%			17:21:21
1	Ag 328.068†	111798.2	110934.0	505.49	ug/L	505.49	ppb	17:21:26
1	As 188.979†	1192.9	1211.0	482.91	ug/L	482.91	ppb	17:21:46
1	B 249.677†	22472.9	22888.7	478.07	ug/L	478.07	ppb	17:21:26
1	Ba 233.527†	66453.6	66122.4	491.33	ug/L	491.33	ppb	17:21:26
1	Be 313.107†	1326019.3	1324354.0	483.72	ug/L	483.72	ppb	17:21:21
1	Cd 226.502†	46626.6	46583.4	492.26	ug/L	492.26	ppb	17:21:26
1	Co 228.616†	26107.4	26039.3	494.33	ug/L	494.33	ppb	17:21:26
1	Cr 267.716†	46747.8	46430.2	488.18	ug/L	488.18	ppb	17:21:26
1	Cu 324.752†	178355.4	170687.0	488.72	ug/L	488.72	ppb	17:21:26
1	Mn 257.610†	461681.8	458899.5	489.93	ug/L	489.93	ppb	17:21:21
1	Mo 202.031†	7805.7	7747.5	492.53	ug/L	492.53	ppb	17:21:46
1	Ni 231.604†	21340.1	21144.4	489.31	ug/L	489.31	ppb	17:21:26
1	P 214.914†	4455.3	4209.1	2353.5	ug/L	2353.5	ppb	17:21:46
1	Pb 220.353†	4221.8	4268.7	484.05	ug/L	484.05	ppb	17:21:46
1	S 181.975 Axial†	746.5	701.1	981.48	ug/L	981.48	ppb	17:21:46
1	Sb 206.836†	1603.1	1560.6	501.09	ug/L	501.09	ppb	17:21:46
1	Se 196.026†	809.7	834.4	500.75	ug/L	500.75	ppb	17:21:46
1	Si 251.611†	83972.4	83093.5	2475.7	ug/L	2475.7	ppb	17:21:26
1	Sn 189.927†	3034.4	3013.9	494.05	ug/L	494.05	ppb	17:21:46
1	Ti 334.940†	315786.0	315286.7	503.00	ug/L	503.00	ppb	17:21:26
1	Tl 190.801†	1707.6	1731.4	488.13	ug/L	488.13	ppb	17:21:46
1	U 409.014†	15657.6	17979.4	493.71	ug/L	493.71	ppb	17:21:26
1	V 292.402†	72858.4	73844.3	494.33	ug/L	494.33	ppb	17:21:26
1	Zn 213.857†	57202.8	56288.6	487.39	ug/L	487.39	ppb	17:21:26
1	SiO2†	82835.5	81944.6	5230.9	ug/L	5230.9	ppb	17:22:53
2	Sc Radial	5767.0	5767.0	98.7	%			17:20:28
2	Y RADIAL	6129.9	6129.9	97.49	%			17:20:28
2	Al 396.153Radial†	6894.5	7006.9	4846.1	ug/L	4846.1	ppb	17:20:28
2	Ca 317.933Radial†	3337.2	3366.2	4961.5	ug/L	4961.5	ppb	17:20:48
2	Fe 238.204 Radial†	542.6	543.0	5099.1	ug/L	5099.1	ppb	17:20:48
2	K 766.490 Radial†	30568.5	28624.6	5067.7	ug/L	5067.7	ppb	17:20:28
2	Mg 279.077 IEC†	147.1	147.9	5224.2	ug/L	5224.2	ppb	17:20:48
2	Na 589.592 Radial†	27639.2	29095.9	9764.0	ug/L	9764.0	ppb	17:20:28
2	Sr 421.552†	79437.0	80524.3	501.44	ug/L	501.44	ppb	17:20:28
2	Sc 361.383	910972.4	910972.4	101.08	%			17:21:52
2	Y 371.029	743666.0	743666.0	99.012	%			17:21:52
2	Ag 328.068†	112646.0	111152.8	506.49	ug/L	506.49	ppb	17:21:57
2	As 188.979†	1215.5	1226.7	489.13	ug/L	489.13	ppb	17:22:17
2	B 249.677†	22738.1	23026.4	480.96	ug/L	480.96	ppb	17:21:57
2	Ba 233.527†	67026.2	66320.4	492.80	ug/L	492.80	ppb	17:21:57
2	Be 313.107†	1335969.0	1326844.6	484.63	ug/L	484.63	ppb	17:21:52
2	Cd 226.502†	47012.3	46706.4	493.56	ug/L	493.56	ppb	17:21:57
2	Co 228.616†	26250.7	26036.3	494.27	ug/L	494.27	ppb	17:21:57
2	Cr 267.716†	47196.3	46614.7	490.12	ug/L	490.12	ppb	17:21:57
2	Cu 324.752†	180061.7	171386.1	490.72	ug/L	490.72	ppb	17:21:57
2	Mn 257.610†	463718.2	458354.1	489.35	ug/L	489.35	ppb	17:21:52
2	Mo 202.031†	7843.5	7741.6	492.16	ug/L	492.16	ppb	17:22:17
2	Ni 231.604†	21593.1	21276.4	492.37	ug/L	492.37	ppb	17:21:57

2	P 214.914†	4449.0	4178.1	2335.3 ug/L	2335.3 ppb	17:22:17
2	Pb 220.353†	4248.1	4271.3	484.34 ug/L	484.34 ppb	17:22:17
2	S 181.975 Axial†	755.6	706.0	988.27 ug/L	988.27 ppb	17:22:17
2	Sb 206.836†	1592.0	1540.8	494.76 ug/L	494.76 ppb	17:22:17
2	Se 196.026†	826.6	846.6	507.94 ug/L	507.94 ppb	17:22:17
2	Si 251.611†	84789.7	83436.4	2485.9 ug/L	2485.9 ppb	17:21:57
2	Sn 189.927†	3049.6	3012.2	493.77 ug/L	493.77 ppb	17:22:17
2	Ti 334.940†	318016.8	315742.6	503.73 ug/L	503.73 ppb	17:21:57
2	Tl 190.801†	1724.6	1738.7	490.19 ug/L	490.19 ppb	17:22:17
2	U 409.014†	15697.5	17932.1	492.39 ug/L	492.39 ppb	17:21:57
2	V 292.402†	73238.0	73815.9	494.13 ug/L	494.13 ppb	17:21:57
2	Zn 213.857†	57676.2	56439.7	488.68 ug/L	488.68 ppb	17:21:57
2	SiO2†	83388.7	82032.6	5236.5 ug/L	5236.5 ppb	17:22:59
3	Sc Radial	5793.8	5793.8	99.1 %		17:20:54
3	Y RADIAL	6135.3	6135.3	97.57 %		17:20:54
3	Al 396.153Radial†	6915.4	6995.6	4838.1 ug/L	4838.1 ppb	17:20:54
3	Ca 317.933Radial†	3304.2	3317.1	4889.3 ug/L	4889.3 ppb	17:21:14
3	Fe 238.204 Radial†	534.3	532.1	4997.4 ug/L	4997.4 ppb	17:21:14
3	K 766.490 Radial†	30785.1	28699.4	5080.9 ug/L	5080.9 ppb	17:20:54
3	Mg 279.077 IEC†	144.7	144.8	5115.4 ug/L	5115.4 ppb	17:21:14
3	Na 589.592 Radial†	27868.4	29197.2	9798.0 ug/L	9798.0 ppb	17:20:54
3	Sr 421.552†	80176.8	80897.2	503.76 ug/L	503.76 ppb	17:20:54
3	Sc 361.383	906362.7	906362.7	100.57 %		17:22:23
3	Y 371.029	738656.8	738656.8	98.345 %		17:22:23
3	Ag 328.068†	111616.4	110695.8	504.38 ug/L	504.38 ppb	17:22:28
3	As 188.979†	1202.1	1219.5	486.25 ug/L	486.25 ppb	17:22:48
3	B 249.677†	22477.8	22882.0	477.94 ug/L	477.94 ppb	17:22:28
3	Ba 233.527†	66511.9	66146.2	491.50 ug/L	491.50 ppb	17:22:28
3	Be 313.107†	1326542.3	1324193.3	483.66 ug/L	483.66 ppb	17:22:23
3	Cd 226.502†	46831.6	46763.3	494.17 ug/L	494.17 ppb	17:22:28
3	Co 228.616†	26135.8	26054.2	494.62 ug/L	494.62 ppb	17:22:28
3	Cr 267.716†	46775.4	46433.6	488.21 ug/L	488.21 ppb	17:22:28
3	Cu 324.752†	177477.1	169722.1	485.95 ug/L	485.95 ppb	17:22:28
3	Mn 257.610†	462310.8	459287.9	490.34 ug/L	490.34 ppb	17:22:23
3	Mo 202.031†	7864.1	7801.5	495.95 ug/L	495.95 ppb	17:22:48
3	Ni 231.604†	21448.6	21241.4	491.56 ug/L	491.56 ppb	17:22:28
3	P 214.914†	4476.1	4227.4	2364.6 ug/L	2364.6 ppb	17:22:48
3	Pb 220.353†	4273.2	4317.6	489.60 ug/L	489.60 ppb	17:22:48
3	S 181.975 Axial†	754.2	708.4	991.63 ug/L	991.63 ppb	17:22:48
3	Sb 206.836†	1619.6	1576.2	506.16 ug/L	506.16 ppb	17:22:48
3	Se 196.026†	841.8	865.9	518.80 ug/L	518.80 ppb	17:22:48
3	Si 251.611†	83988.5	83066.3	2474.8 ug/L	2474.8 ppb	17:22:28
3	Sn 189.927†	3056.7	3034.5	497.42 ug/L	497.42 ppb	17:22:48
3	Ti 334.940†	315122.1	314464.4	501.69 ug/L	501.69 ppb	17:22:28
3	Tl 190.801†	1721.9	1744.7	491.87 ug/L	491.87 ppb	17:22:48
3	U 409.014†	15787.3	18100.3	497.04 ug/L	497.04 ppb	17:22:28
3	V 292.402†	72549.5	73499.8	492.12 ug/L	492.12 ppb	17:22:28
3	Zn 213.857†	57163.0	56219.6	486.79 ug/L	486.79 ppb	17:22:28
3	SiO2†	83011.4	82077.0	5239.2 ug/L	5239.2 ppb	17:23:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907743.3	100.72	%	0.311				0.31%
Sc Radial	5780.9	98.9	%	0.23				0.23%
Y 371.029	740190.6	98.550	%	0.4017				0.41%
Y RADIAL	6145.5	97.74	%	0.359				0.37%
Ag 328.068†	110927.5	505.45	ug/L	1.057	505.45	ppb	1.057	0.21%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153Radial†	6986.9	4832.1	ug/L	17.66	4832.1	ppb	17.66	0.37%
QC value within limits for Al 396.153Radial Recovery = 96.64%								
As 188.979†	1219.0	486.10	ug/L	3.115	486.10	ppb	3.115	0.64%
QC value within limits for As 188.979 Recovery = 97.22%								
B 249.677†	22932.4	478.99	ug/L	1.704	478.99	ppb	1.704	0.36%
QC value within limits for B 249.677 Recovery = 95.80%								
Ba 233.527†	66196.3	491.88	ug/L	0.803	491.88	ppb	0.803	0.16%
QC value within limits for Ba 233.527 Recovery = 98.38%								
Be 313.107†	1325130.6	484.00	ug/L	0.543	484.00	ppb	0.543	0.11%
QC value within limits for Be 313.107 Recovery = 96.80%								
Ca 317.933Radial†	3342.2	4926.3	ug/L	36.15	4926.3	ppb	36.15	0.73%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.53%
Cd 226.502†            46684.4      493.33 ug/L         0.975      493.33 ppb          0.975   0.20%
   QC value within limits for Cd 226.502  Recovery = 98.67%
Co 228.616†            26043.3      494.41 ug/L         0.190      494.41 ppb          0.190   0.04%
   QC value within limits for Co 228.616  Recovery = 98.88%
Cr 267.716†            46492.8      488.84 ug/L         1.110      488.84 ppb          1.110   0.23%
   QC value within limits for Cr 267.716  Recovery = 97.77%
Cu 324.752†           170598.4      488.46 ug/L         2.394      488.46 ppb          2.394   0.49%
   QC value within limits for Cu 324.752  Recovery = 97.69%
Fe 238.204 Radial†       538.1      5052.9 ug/L        51.46      5052.9 ppb         51.46   1.02%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.06%
K 766.490 Radial†      28595.1      5062.4 ug/L        21.61      5062.4 ppb         21.61   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 101.25%
Mg 279.077 IEC†          146.5      5175.1 ug/L        55.15      5175.1 ppb         55.15   1.07%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           458847.2      489.88 ug/L         0.496      489.88 ppb          0.496   0.10%
   QC value within limits for Mn 257.610  Recovery = 97.98%
Mo 202.031†             7763.5      493.55 ug/L         2.094      493.55 ppb          2.094   0.42%
   QC value within limits for Mo 202.031  Recovery = 98.71%
Na 589.592 Radial†     29141.4      9779.3 ug/L        17.25      9779.3 ppb         17.25   0.18%
   QC value within limits for Na 589.592 Radial  Recovery = 97.79%
Ni 231.604†            21220.8      491.08 ug/L         1.583      491.08 ppb          1.583   0.32%
   QC value within limits for Ni 231.604  Recovery = 98.22%
P 214.914†              4204.9      2351.1 ug/L        14.80      2351.1 ppb         14.80   0.63%
   QC value within limits for P 214.914  Recovery = 94.05%
Pb 220.353†             4285.8      486.00 ug/L         3.125      486.00 ppb          3.125   0.64%
   QC value within limits for Pb 220.353  Recovery = 97.20%
S 181.975 Axial†         705.1      987.13 ug/L         5.173      987.13 ppb          5.173   0.52%
   QC value within limits for S 181.975 Axial  Recovery = 98.71%
Sb 206.836†             1559.2      500.67 ug/L         5.712      500.67 ppb          5.712   1.14%
   QC value within limits for Sb 206.836  Recovery = 100.13%
Se 196.026†              849.0      509.16 ug/L         9.088      509.16 ppb          9.088   1.78%
   QC value within limits for Se 196.026  Recovery = 101.83%
Si 251.611†            83198.7      2478.8 ug/L          6.20      2478.8 ppb           6.20   0.25%
   QC value within limits for Si 251.611  Recovery = 99.15%
Sn 189.927†             3020.2      495.08 ug/L         2.029      495.08 ppb          2.029   0.41%
   QC value within limits for Sn 189.927  Recovery = 99.02%
Sr 421.552†            80717.6      502.64 ug/L         1.164      502.64 ppb          1.164   0.23%
   QC value within limits for Sr 421.552  Recovery = 100.53%
Ti 334.940†           315164.6      502.81 ug/L         1.036      502.81 ppb          1.036   0.21%
   QC value within limits for Ti 334.940  Recovery = 100.56%
Tl 190.801†             1738.3      490.06 ug/L         1.876      490.06 ppb          1.876   0.38%
   QC value within limits for Tl 190.801  Recovery = 98.01%
U 409.014†             18003.9      494.38 ug/L         2.398      494.38 ppb          2.398   0.49%
   QC value within limits for U 409.014  Recovery = 98.88%
V 292.402†             73720.0      493.53 ug/L         1.222      493.53 ppb          1.222   0.25%
   QC value within limits for V 292.402  Recovery = 98.71%
Zn 213.857†            56316.0      487.62 ug/L         0.970      487.62 ppb          0.970   0.20%
   QC value within limits for Zn 213.857  Recovery = 97.52%
SiO2†                  82018.1      5235.5 ug/L          4.24      5235.5 ppb           4.24   0.08%
   QC value within limits for SiO2  Recovery = 97.91%
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/8/2009 17:25:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5889.0	5889.0	101	%			17:27:06
1	Y RADIAL	6303.6	6303.6	100.3	%			17:27:06
1	Al 396.153Radial†	-13.8	6.7	4.6319	ug/L	4.6319	ppb	17:27:06
1	Ca 317.933Radial†	31.9	16.1	23.698	ug/L	23.698	ppb	17:27:26
1	Fe 238.204 Radial†	6.7	-0.1	-1.1536	ug/L	-1.1536	ppb	17:27:26
1	K 766.490 Radial†	2284.2	-85.0	-15.095	ug/L	-15.095	ppb	17:27:06
1	Mg 279.077 IEC†	3.5	2.3	81.146	ug/L	81.146	ppb	17:27:26
1	Na 589.592 Radial†	-932.1	163.0	54.694	ug/L	54.694	ppb	17:27:06
1	Sr 421.552†	-36.3	-8.7	-0.0542	ug/L	-0.0542	ppb	17:27:06
1	Sc 361.383	913423.2	913423.2	101.35	%			17:28:22
1	Y 371.029	756971.6	756971.6	100.78	%			17:28:22
1	Ag 328.068†	363.2	65.6	0.3007	ug/L	0.3007	ppb	17:28:28
1	As 188.979†	-26.7	-2.2	-0.8715	ug/L	-0.8715	ppb	17:28:48
1	B 249.677†	-412.2	123.9	2.5990	ug/L	2.5990	ppb	17:28:48
1	Ba 233.527†	-1.0	7.4	0.0563	ug/L	0.0563	ppb	17:28:48
1	Be 313.107†	-5260.3	-77.3	-0.0278	ug/L	-0.0278	ppb	17:28:28
1	Cd 226.502†	-170.5	26.8	0.2838	ug/L	0.2838	ppb	17:28:48
1	Co 228.616†	-66.8	-0.4	-0.0084	ug/L	-0.0084	ppb	17:28:48
1	Cr 267.716†	78.3	-1.4	-0.0124	ug/L	-0.0124	ppb	17:28:48
1	Cu 324.752†	6856.6	8.6	0.0245	ug/L	0.0245	ppb	17:28:28
1	Mn 257.610†	426.6	-1.4	-0.0031	ug/L	-0.0031	ppb	17:28:48
1	Mo 202.031†	21.3	2.7	0.1696	ug/L	0.1696	ppb	17:28:48
1	Ni 231.604†	89.8	2.1	0.0480	ug/L	0.0480	ppb	17:28:48
1	P 214.914†	221.7	-4.8	-2.7469	ug/L	-2.7469	ppb	17:28:48
1	Pb 220.353†	-53.5	15.6	1.7702	ug/L	1.7702	ppb	17:28:48
1	S 181.975 Axial†	46.6	4.4	6.1355	ug/L	6.1355	ppb	17:28:48
1	Sb 206.836†	41.5	6.7	2.1347	ug/L	2.1347	ppb	17:28:48
1	Se 196.026†	-18.0	11.1	6.3915	ug/L	6.3915	ppb	17:28:48
1	Si 251.611†	531.4	74.6	2.2355	ug/L	2.2355	ppb	17:28:48
1	Sn 189.927†	6.8	1.7	0.2815	ug/L	0.2815	ppb	17:28:48
1	Ti 334.940†	-1014.5	113.9	0.1841	ug/L	0.1841	ppb	17:28:28
1	Tl 190.801†	-34.9	-1.9	-0.5317	ug/L	-0.5317	ppb	17:28:48
1	U 409.014†	-2522.5	-87.1	-2.3987	ug/L	-2.3987	ppb	17:28:28
1	V 292.402†	-1289.6	85.9	0.5669	ug/L	0.5669	ppb	17:28:28
1	Zn 213.857†	689.3	58.3	0.5061	ug/L	0.5061	ppb	17:28:48
1	SiO2†	513.8	39.5	2.5345	ug/L	2.5345	ppb	17:29:53
2	Sc Radial	5797.9	5797.9	99.2	%			17:27:31
2	Y RADIAL	6245.1	6245.1	99.32	%			17:27:31
2	Al 396.153Radial†	-22.2	-1.9	-1.3379	ug/L	-1.3379	ppb	17:27:31
2	Ca 317.933Radial†	29.5	14.1	20.799	ug/L	20.799	ppb	17:27:51
2	Fe 238.204 Radial†	6.8	0.0	0.1501	ug/L	0.1501	ppb	17:27:51
2	K 766.490 Radial†	2373.4	40.5	7.1602	ug/L	7.1602	ppb	17:27:31
2	Mg 279.077 IEC†	0.5	-0.7	-24.392	ug/L	-24.392	ppb	17:27:51
2	Na 589.592 Radial†	-897.8	183.0	61.414	ug/L	61.414	ppb	17:27:31
2	Sr 421.552†	-7.4	19.9	0.1235	ug/L	0.1235	ppb	17:27:31
2	Sc 361.383	910340.8	910340.8	101.01	%			17:28:53
2	Y 371.029	754574.2	754574.2	100.46	%			17:28:53
2	Ag 328.068†	359.6	63.3	0.2903	ug/L	0.2903	ppb	17:28:58
2	As 188.979†	-25.6	-1.2	-0.4657	ug/L	-0.4657	ppb	17:29:18
2	B 249.677†	-420.0	114.9	2.4089	ug/L	2.4089	ppb	17:29:18
2	Ba 233.527†	-6.0	2.5	0.0205	ug/L	0.0205	ppb	17:29:18
2	Be 313.107†	-5246.5	-81.2	-0.0297	ug/L	-0.0297	ppb	17:28:58
2	Cd 226.502†	-183.7	13.2	0.1392	ug/L	0.1392	ppb	17:29:18
2	Co 228.616†	-74.0	-7.8	-0.1478	ug/L	-0.1478	ppb	17:29:18
2	Cr 267.716†	91.9	12.4	0.1316	ug/L	0.1316	ppb	17:29:18
2	Cu 324.752†	6940.9	115.0	0.3290	ug/L	0.3290	ppb	17:28:58
2	Mn 257.610†	452.6	25.8	0.0280	ug/L	0.0280	ppb	17:29:18
2	Mo 202.031†	18.9	0.4	0.0229	ug/L	0.0229	ppb	17:29:18
2	Ni 231.604†	77.3	-10.0	-0.2311	ug/L	-0.2311	ppb	17:29:18

2	P 214.914†	221.9	-3.8	-2.2334 ug/L	-2.2334 ppb	17:29:18
2	Pb 220.353†	-57.3	11.7	1.3258 ug/L	1.3258 ppb	17:29:18
2	S 181.975 Axial†	39.1	-2.8	-3.9872 ug/L	-3.9872 ppb	17:29:18
2	Sb 206.836†	41.5	6.9	2.2034 ug/L	2.2034 ppb	17:29:18
2	Se 196.026†	-35.4	-6.2	-3.5971 ug/L	-3.5971 ppb	17:29:18
2	Si 251.611†	503.6	48.9	1.4568 ug/L	1.4568 ppb	17:29:18
2	Sn 189.927†	15.3	10.2	1.6725 ug/L	1.6725 ppb	17:29:18
2	Ti 334.940†	-1157.4	-30.9	-0.0480 ug/L	-0.0480 ppb	17:28:58
2	Tl 190.801†	-34.4	-1.6	-0.4393 ug/L	-0.4393 ppb	17:29:18
2	U 409.014†	-2451.5	-25.3	-0.6965 ug/L	-0.6965 ppb	17:28:58
2	V 292.402†	-1237.4	133.3	0.8786 ug/L	0.8786 ppb	17:28:58
2	Zn 213.857†	698.6	69.8	0.6120 ug/L	0.6120 ppb	17:29:18
2	SiO2†	509.9	37.4	2.3819 ug/L	2.3819 ppb	17:29:58
3	Sc Radial	5740.4	5740.4	98.2 %		17:27:56
3	Y RADIAL	6157.5	6157.5	97.93 %		17:27:56
3	Al 396.153Radial†	-18.2	1.9	1.3303 ug/L	1.3303 ppb	17:27:56
3	Ca 317.933Radial†	36.2	21.3	31.400 ug/L	31.400 ppb	17:28:16
3	Fe 238.204 Radial†	7.1	0.4	3.7312 ug/L	3.7312 ppb	17:28:16
3	K 766.490 Radial†	2301.9	-8.4	-1.5076 ug/L	-1.5076 ppb	17:27:56
3	Mg 279.077 IEC†	0.0	-1.2	-40.709 ug/L	-40.709 ppb	17:28:16
3	Na 589.592 Radial†	-915.4	156.0	52.353 ug/L	52.353 ppb	17:27:56
3	Sr 421.552†	-17.2	9.9	0.0613 ug/L	0.0613 ppb	17:27:56
3	Sc 361.383	914588.7	914588.7	101.48 %		17:29:23
3	Y 371.029	756001.4	756001.4	100.65 %		17:29:23
3	Ag 328.068†	302.0	4.9	0.0259 ug/L	0.0259 ppb	17:29:28
3	As 188.979†	-22.7	1.8	0.7187 ug/L	0.7187 ppb	17:29:48
3	B 249.677†	-398.4	138.1	2.8964 ug/L	2.8964 ppb	17:29:48
3	Ba 233.527†	-10.1	-1.5	-0.0099 ug/L	-0.0099 ppb	17:29:48
3	Be 313.107†	-5217.3	-28.3	-0.0099 ug/L	-0.0099 ppb	17:29:28
3	Cd 226.502†	-183.4	14.4	0.1513 ug/L	0.1513 ppb	17:29:48
3	Co 228.616†	-84.5	-17.9	-0.3404 ug/L	-0.3404 ppb	17:29:48
3	Cr 267.716†	88.9	8.9	0.0947 ug/L	0.0947 ppb	17:29:48
3	Cu 324.752†	6886.2	29.2	0.0837 ug/L	0.0837 ppb	17:29:28
3	Mn 257.610†	446.1	17.3	0.0196 ug/L	0.0196 ppb	17:29:48
3	Mo 202.031†	15.6	-3.0	-0.1908 ug/L	-0.1908 ppb	17:29:48
3	Ni 231.604†	60.0	-27.4	-0.6354 ug/L	-0.6354 ppb	17:29:48
3	P 214.914†	230.3	3.4	1.9868 ug/L	1.9868 ppb	17:29:48
3	Pb 220.353†	-66.1	3.3	0.3723 ug/L	0.3723 ppb	17:29:48
3	S 181.975 Axial†	43.9	1.7	2.3158 ug/L	2.3158 ppb	17:29:48
3	Sb 206.836†	41.0	6.2	1.9689 ug/L	1.9689 ppb	17:29:48
3	Se 196.026†	-23.7	5.5	3.1954 ug/L	3.1954 ppb	17:29:48
3	Si 251.611†	516.2	59.0	1.7641 ug/L	1.7641 ppb	17:29:48
3	Sn 189.927†	15.0	9.7	1.5994 ug/L	1.5994 ppb	17:29:48
3	Ti 334.940†	-980.8	148.4	0.2392 ug/L	0.2392 ppb	17:29:28
3	Tl 190.801†	-20.4	12.4	3.4646 ug/L	3.4646 ppb	17:29:48
3	U 409.014†	-2500.1	-61.9	-1.7059 ug/L	-1.7059 ppb	17:29:28
3	V 292.402†	-1321.1	56.5	0.3654 ug/L	0.3654 ppb	17:29:28
3	Zn 213.857†	692.4	60.5	0.5337 ug/L	0.5337 ppb	17:29:48
3	SiO2†	533.7	58.5	3.7487 ug/L	3.7487 ppb	17:30:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912784.2	101.28	%	0.244				0.24%
Sc Radial	5809.1	99.4	%	1.28				1.29%
Y 371.029	755849.1	100.63	%	0.161				0.16%
Y RADIAL	6235.4	99.17	%	1.170				1.18%
Ag 328.068†	44.6	0.2056	ug/L	0.15574	0.2056	ppb	0.15574	75.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.2	1.5414	ug/L	2.99050	1.5414	ppb	2.99050	194.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.2062	ug/L	0.82626	-0.2062	ppb	0.82626	400.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	125.6	2.6348	ug/L	0.24573	2.6348	ppb	0.24573	9.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.8	0.0223	ug/L	0.03310	0.0223	ppb	0.03310	148.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-62.3	-0.0225	ug/L	0.01096	-0.0225	ppb	0.01096	48.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	17.2	25.299	ug/L	5.4788	25.299	ppb	5.4788	21.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.1      0.1914 ug/L       0.08020      0.1914 ppb        0.08020  41.89%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -8.7     -0.1656 ug/L       0.16671     -0.1656 ppb        0.16671 100.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               6.6      0.0713 ug/L       0.07480      0.0713 ppb        0.07480 104.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              50.9      0.1457 ug/L       0.16148      0.1457 ppb        0.16148 110.79%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.1      0.9092 ug/L       2.52935      0.9092 ppb        2.52935 278.18%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -17.6     -3.1475 ug/L      11.21792     -3.1475 ppb       11.21792 356.40%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.2      5.3483 ug/L      66.14817      5.3483 ppb       66.14817 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              13.9      0.0148 ug/L       0.01606      0.0148 ppb        0.01606 108.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.0      0.0006 ug/L       0.18123      0.0006 ppb        0.18123 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      167.3     56.154 ug/L        4.7038     56.154 ppb         4.7038   8.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -11.8     -0.2728 ug/L       0.34363     -0.2728 ppb        0.34363 125.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -1.7     -0.9978 ug/L       2.59749     -0.9978 ppb        2.59749 260.31%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.2      1.1561 ug/L       0.71422      1.1561 ppb        0.71422  61.78%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.1      1.4880 ug/L       5.11184      1.4880 ppb        5.11184 343.53%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.6      2.1024 ug/L       0.12055      2.1024 ppb        0.12055   5.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.4      1.9966 ug/L       5.10107      1.9966 ppb        5.10107 255.49%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              60.8      1.8188 ug/L       0.39223      1.8188 ppb        0.39223  21.57%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               7.2      1.1845 ug/L       0.78287      1.1845 ppb        0.78287  66.09%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               7.0      0.0435 ug/L       0.09014      0.0435 ppb        0.09014 207.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              77.2      0.1251 ug/L       0.15241      0.1251 ppb        0.15241 121.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.0      0.8312 ug/L       2.28104      0.8312 ppb        2.28104 274.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -58.1     -1.6004 ug/L       0.85598     -1.6004 ppb        0.85598  53.49%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               91.9      0.6036 ug/L       0.25853      0.6036 ppb        0.25853  42.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              62.9      0.5506 ug/L       0.05497      0.5506 ppb        0.05497   9.98%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    45.1      2.8884 ug/L       0.74896      2.8884 ppb        0.74896  25.93%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 18:28:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5760.8	5760.8	98.6	%			18:30:38
1	Y RADIAL	6107.4	6107.4	97.13	%			18:30:38
1	Al 396.153Radial†	6833.2	6952.1	4808.4	ug/L	4808.4	ppb	18:30:38
1	Ca 317.933Radial†	3329.2	3361.7	4954.9	ug/L	4954.9	ppb	18:30:58
1	Fe 238.204 Radial†	548.6	549.7	5161.4	ug/L	5161.4	ppb	18:30:58
1	K 766.490 Radial†	30552.9	28641.8	5070.5	ug/L	5070.5	ppb	18:30:38
1	Mg 279.077 IEC†	146.7	147.6	5213.1	ug/L	5213.1	ppb	18:30:58
1	Na 589.592 Radial†	29127.4	30635.5	10281	ug/L	10281	ppb	18:30:38
1	Sr 421.552†	81156.2	82354.1	512.83	ug/L	512.83	ppb	18:30:38
1	Sc 361.383	931865.0	931865.0	103.40	%			18:31:55
1	Y 371.029	760429.7	760429.7	101.24	%			18:31:55
1	Ag 328.068†	112468.0	108482.0	494.37	ug/L	494.37	ppb	18:32:00
1	As 188.979†	1219.5	1203.6	479.94	ug/L	479.94	ppb	18:32:20
1	B 249.677†	22486.3	22278.6	465.29	ug/L	465.29	ppb	18:32:00
1	Ba 233.527†	66777.1	64592.7	479.97	ug/L	479.97	ppb	18:32:00
1	Be 313.107†	1345739.2	1306660.5	477.24	ug/L	477.24	ppb	18:31:55
1	Cd 226.502†	46955.7	45608.8	481.94	ug/L	481.94	ppb	18:32:00
1	Co 228.616†	26262.4	25465.4	483.44	ug/L	483.44	ppb	18:32:00
1	Cr 267.716†	46948.6	45328.3	476.60	ug/L	476.60	ppb	18:32:00
1	Cu 324.752†	178634.2	166011.4	475.34	ug/L	475.34	ppb	18:32:00
1	Mn 257.610†	469210.1	453379.7	484.05	ug/L	484.05	ppb	18:31:55
1	Mo 202.031†	7911.3	7633.2	485.27	ug/L	485.27	ppb	18:32:20
1	Ni 231.604†	21527.7	20734.2	479.82	ug/L	479.82	ppb	18:32:00
1	P 214.914†	4543.7	4171.0	2333.5	ug/L	2333.5	ppb	18:32:20
1	Pb 220.353†	4303.0	4230.2	479.68	ug/L	479.68	ppb	18:32:20
1	S 181.975 Axial†	769.6	702.8	983.85	ug/L	983.85	ppb	18:32:20
1	Sb 206.836†	1622.5	1535.0	492.98	ug/L	492.98	ppb	18:32:20
1	Se 196.026†	842.4	843.6	506.38	ug/L	506.38	ppb	18:32:20
1	Si 251.611†	84383.8	81163.1	2418.0	ug/L	2418.0	ppb	18:32:00
1	Sn 189.927†	3079.4	2973.3	487.41	ug/L	487.41	ppb	18:32:20
1	Ti 334.940†	317125.3	307826.4	491.10	ug/L	491.10	ppb	18:32:00
1	Tl 190.801†	1740.1	1715.5	483.63	ug/L	483.63	ppb	18:32:20
1	U 409.014†	16017.5	17893.3	491.34	ug/L	491.34	ppb	18:32:00
1	V 292.402†	73029.2	71989.4	481.98	ug/L	481.98	ppb	18:32:00
1	Zn 213.857†	57479.2	54969.9	475.94	ug/L	475.94	ppb	18:32:00
1	SiO2†	82997.9	79804.9	5093.9	ug/L	5093.9	ppb	18:33:28
2	Sc Radial	5744.2	5744.2	98.3	%			18:31:03
2	Y RADIAL	6103.4	6103.4	97.07	%			18:31:03
2	Al 396.153Radial†	6818.3	6957.0	4810.7	ug/L	4810.7	ppb	18:31:03
2	Ca 317.933Radial†	3381.0	3424.0	5046.8	ug/L	5046.8	ppb	18:31:23
2	Fe 238.204 Radial†	559.0	561.9	5276.2	ug/L	5276.2	ppb	18:31:23
2	K 766.490 Radial†	30656.7	28837.0	5105.0	ug/L	5105.0	ppb	18:31:03
2	Mg 279.077 IEC†	145.9	147.3	5200.7	ug/L	5200.7	ppb	18:31:23
2	Na 589.592 Radial†	29101.1	30694.1	10300	ug/L	10300	ppb	18:31:03
2	Sr 421.552†	81509.9	82951.9	516.56	ug/L	516.56	ppb	18:31:03
2	Sc 361.383	888199.6	888199.6	98.550	%			18:32:26
2	Y 371.029	723758.1	723758.1	96.362	%			18:32:26
2	Ag 328.068†	110933.3	112272.3	511.63	ug/L	511.63	ppb	18:32:31
2	As 188.979†	1220.6	1262.8	503.44	ug/L	503.44	ppb	18:32:51
2	B 249.677†	22233.5	23091.3	482.27	ug/L	482.27	ppb	18:32:31
2	Ba 233.527†	66165.6	67147.3	498.94	ug/L	498.94	ppb	18:32:31
2	Be 313.107†	1326528.2	1351153.2	493.50	ug/L	493.50	ppb	18:32:26
2	Cd 226.502†	46496.3	47375.3	500.62	ug/L	500.62	ppb	18:32:31
2	Co 228.616†	25990.9	26438.7	501.94	ug/L	501.94	ppb	18:32:31
2	Cr 267.716†	46634.2	47241.5	496.71	ug/L	496.71	ppb	18:32:31
2	Cu 324.752†	176114.3	171948.1	492.34	ug/L	492.34	ppb	18:32:31
2	Mn 257.610†	464207.7	470613.4	502.45	ug/L	502.45	ppb	18:32:26
2	Mo 202.031†	7920.1	8018.3	509.75	ug/L	509.75	ppb	18:32:51
2	Ni 231.604†	21294.6	21521.2	498.04	ug/L	498.04	ppb	18:32:31

2	P 214.914†	4496.8	4339.5	2428.2 ug/L	2428.2 ppb	18:32:51
2	Pb 220.353†	4270.7	4402.0	499.14 ug/L	499.14 ppb	18:32:51
2	S 181.975 Axial†	753.6	723.1	1012.4 ug/L	1012.4 ppb	18:32:51
2	Sb 206.836†	1613.4	1602.9	514.90 ug/L	514.90 ppb	18:32:51
2	Se 196.026†	846.7	888.0	532.49 ug/L	532.49 ppb	18:32:51
2	Si 251.611†	83330.0	84106.0	2505.6 ug/L	2505.6 ppb	18:32:31
2	Sn 189.927†	3071.9	3112.1	510.14 ug/L	510.14 ppb	18:32:51
2	Ti 334.940†	313584.0	319311.4	509.43 ug/L	509.43 ppb	18:32:31
2	Tl 190.801†	1729.2	1787.1	503.82 ug/L	503.82 ppb	18:32:51
2	U 409.014†	15513.7	18143.7	498.19 ug/L	498.19 ppb	18:32:31
2	V 292.402†	72142.9	74562.4	499.29 ug/L	499.29 ppb	18:32:31
2	Zn 213.857†	56861.9	57076.4	494.19 ug/L	494.19 ppb	18:32:31
2	SiO2†	84093.7	84863.2	5417.3 ug/L	5417.3 ppb	18:33:33
3	Sc Radial	5812.9	5812.9	99.5 %		18:31:28
3	Y RADIAL	6138.3	6138.3	97.62 %		18:31:28
3	Al 396.153Radial†	6881.6	6938.8	4798.5 ug/L	4798.5 ppb	18:31:28
3	Ca 317.933Radial†	3371.4	3373.9	4972.9 ug/L	4972.9 ppb	18:31:48
3	Fe 238.204 Radial†	553.4	549.6	5160.7 ug/L	5160.7 ppb	18:31:48
3	K 766.490 Radial†	30745.4	28557.9	5055.6 ug/L	5055.6 ppb	18:31:28
3	Mg 279.077 IEC†	145.9	145.5	5139.5 ug/L	5139.5 ppb	18:31:48
3	Na 589.592 Radial†	29249.0	30493.2	10233 ug/L	10233 ppb	18:31:28
3	Sr 421.552†	81853.5	82318.1	512.61 ug/L	512.61 ppb	18:31:28
3	Sc 361.383	902897.8	902897.8	100.18 %		18:32:57
3	Y 371.029	735966.5	735966.5	97.987 %		18:32:57
3	Ag 328.068†	111386.7	110892.4	505.32 ug/L	505.32 ppb	18:33:02
3	As 188.979†	1209.4	1231.4	490.99 ug/L	490.99 ppb	18:33:22
3	B 249.677†	22344.7	22834.9	476.94 ug/L	476.94 ppb	18:33:02
3	Ba 233.527†	66227.0	66115.6	491.28 ug/L	491.28 ppb	18:33:02
3	Be 313.107†	1320143.6	1322868.1	483.17 ug/L	483.17 ppb	18:32:57
3	Cd 226.502†	46497.5	46608.4	492.52 ug/L	492.52 ppb	18:33:02
3	Co 228.616†	25971.7	25990.1	493.41 ug/L	493.41 ppb	18:33:02
3	Cr 267.716†	46557.9	46395.0	487.81 ug/L	487.81 ppb	18:33:02
3	Cu 324.752†	176686.9	169610.5	485.64 ug/L	485.64 ppb	18:33:02
3	Mn 257.610†	460920.3	459664.1	490.76 ug/L	490.76 ppb	18:32:57
3	Mo 202.031†	7881.0	7848.4	498.94 ug/L	498.94 ppb	18:33:22
3	Ni 231.604†	21335.0	21209.8	490.83 ug/L	490.83 ppb	18:33:02
3	P 214.914†	4474.4	4242.8	2373.4 ug/L	2373.4 ppb	18:33:22
3	Pb 220.353†	4249.5	4310.3	488.76 ug/L	488.76 ppb	18:33:22
3	S 181.975 Axial†	757.2	714.2	999.90 ug/L	999.90 ppb	18:33:22
3	Sb 206.836†	1618.7	1581.5	507.90 ug/L	507.90 ppb	18:33:22
3	Se 196.026†	826.2	853.6	512.18 ug/L	512.18 ppb	18:33:22
3	Si 251.611†	83427.3	82826.7	2467.6 ug/L	2467.6 ppb	18:33:02
3	Sn 189.927†	3044.9	3034.4	497.42 ug/L	497.42 ppb	18:33:22
3	Ti 334.940†	314076.2	314622.9	501.95 ug/L	501.95 ppb	18:33:02
3	Tl 190.801†	1711.7	1741.1	490.86 ug/L	490.86 ppb	18:33:22
3	U 409.014†	15730.5	18103.8	497.12 ug/L	497.12 ppb	18:33:02
3	V 292.402†	72340.5	73568.0	492.59 ug/L	492.59 ppb	18:33:02
3	Zn 213.857†	56954.5	56229.6	486.86 ug/L	486.86 ppb	18:33:02
3	SiO2†	84008.2	83388.8	5323.2 ug/L	5323.2 ppb	18:33:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907654.1	100.71	%	2.465				2.45%
Sc Radial	5772.6	98.8	%	0.61				0.62%
Y 371.029	740051.5	98.531	%	2.4863				2.52%
Y RADIAL	6116.4	97.27	%	0.303				0.31%
Ag 328.068†	110548.9	503.78	ug/L	8.735	503.78	ppb	8.735	1.73%
QC value within limits for Ag 328.068 Recovery = 100.76%								
Al 396.153Radial†	6949.3	4805.9	ug/L	6.47	4805.9	ppb	6.47	0.13%
QC value within limits for Al 396.153Radial Recovery = 96.12%								
As 188.979†	1232.6	491.46	ug/L	11.762	491.46	ppb	11.762	2.39%
QC value within limits for As 188.979 Recovery = 98.29%								
B 249.677†	22734.9	474.84	ug/L	8.683	474.84	ppb	8.683	1.83%
QC value within limits for B 249.677 Recovery = 94.97%								
Ba 233.527†	65951.9	490.06	ug/L	9.546	490.06	ppb	9.546	1.95%
QC value within limits for Ba 233.527 Recovery = 98.01%								
Be 313.107†	1326893.9	484.64	ug/L	8.225	484.64	ppb	8.225	1.70%
QC value within limits for Be 313.107 Recovery = 96.93%								
Ca 317.933Radial†	3386.5	4991.5	ug/L	48.73	4991.5	ppb	48.73	0.98%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.83%
Cd 226.502†          46530.9      491.69 ug/L        9.364      491.69 ppb        9.364   1.90%
   QC value within limits for Cd 226.502  Recovery = 98.34%
Co 228.616†          25964.7      492.93 ug/L        9.256      492.93 ppb        9.256   1.88%
   QC value within limits for Co 228.616  Recovery = 98.59%
Cr 267.716†          46321.6      487.04 ug/L       10.079      487.04 ppb       10.079   2.07%
   QC value within limits for Cr 267.716  Recovery = 97.41%
Cu 324.752†         169190.0      484.44 ug/L        8.561      484.44 ppb        8.561   1.77%
   QC value within limits for Cu 324.752  Recovery = 96.89%
Fe 238.204 Radial†     553.7      5199.4 ug/L       66.47      5199.4 ppb       66.47   1.28%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.99%
K 766.490 Radial†    28678.9      5077.0 ug/L       25.31      5077.0 ppb       25.31   0.50%
   QC value within limits for K 766.490 Radial  Recovery = 101.54%
Mg 279.077 IEC†        146.8      5184.5 ug/L       39.41      5184.5 ppb       39.41   0.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.69%
Mn 257.610†         461219.1      492.42 ug/L        9.310      492.42 ppb        9.310   1.89%
   QC value within limits for Mn 257.610  Recovery = 98.48%
Mo 202.031†          7833.3      497.99 ug/L       12.265      497.99 ppb       12.265   2.46%
   QC value within limits for Mo 202.031  Recovery = 99.60%
Na 589.592 Radial†   30607.6       10271 ug/L        34.7       10271 ppb        34.7   0.34%
   QC value within limits for Na 589.592 Radial  Recovery = 102.71%
Ni 231.604†          21155.1      489.56 ug/L        9.172      489.56 ppb        9.172   1.87%
   QC value within limits for Ni 231.604  Recovery = 97.91%
P 214.914†            4251.1      2378.4 ug/L       47.53      2378.4 ppb       47.53   2.00%
   QC value within limits for P 214.914  Recovery = 95.13%
Pb 220.353†           4314.1      489.19 ug/L        9.736      489.19 ppb        9.736   1.99%
   QC value within limits for Pb 220.353  Recovery = 97.84%
S 181.975 Axial†       713.4      998.70 ug/L       14.296      998.70 ppb       14.296   1.43%
   QC value within limits for S 181.975 Axial  Recovery = 99.87%
Sb 206.836†           1573.1      505.26 ug/L       11.194      505.26 ppb       11.194   2.22%
   QC value within limits for Sb 206.836  Recovery = 101.05%
Se 196.026†            861.7      517.02 ug/L       13.711      517.02 ppb       13.711   2.65%
   QC value within limits for Se 196.026  Recovery = 103.40%
Si 251.611†          82698.6      2463.7 ug/L       43.92      2463.7 ppb       43.92   1.78%
   QC value within limits for Si 251.611  Recovery = 98.55%
Sn 189.927†           3039.9      498.32 ug/L       11.391      498.32 ppb       11.391   2.29%
   QC value within limits for Sn 189.927  Recovery = 99.66%
Sr 421.552†          82541.4      514.00 ug/L        2.217      514.00 ppb        2.217   0.43%
   QC value within limits for Sr 421.552  Recovery = 102.80%
Ti 334.940†         313920.2      500.83 ug/L        9.212      500.83 ppb        9.212   1.84%
   QC value within limits for Ti 334.940  Recovery = 100.17%
Tl 190.801†           1747.9      492.77 ug/L       10.229      492.77 ppb       10.229   2.08%
   QC value within limits for Tl 190.801  Recovery = 98.55%
U 409.014†           18046.9      495.55 ug/L        3.683      495.55 ppb        3.683   0.74%
   QC value within limits for U 409.014  Recovery = 99.11%
V 292.402†           73373.2      491.28 ug/L        8.729      491.28 ppb        8.729   1.78%
   QC value within limits for V 292.402  Recovery = 98.26%
Zn 213.857†          56092.0      485.66 ug/L        9.187      485.66 ppb        9.187   1.89%
   QC value within limits for Zn 213.857  Recovery = 97.13%
SiO2†                82685.6      5278.1 ug/L      166.33      5278.1 ppb      166.33   3.15%
   QC value within limits for SiO2  Recovery = 98.70%
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 18:35:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5754.5	5754.5	98.5	%			18:37:39
1	Y RADIAL	6166.9	6166.9	98.08	%			18:37:39
1	Al 396.153Radial†	-27.5	-7.5	-5.1991	ug/L	-5.1991	ppb	18:37:39
1	Ca 317.933Radial†	16.6	1.3	1.8648	ug/L	1.8648	ppb	18:37:59
1	Fe 238.204 Radial†	6.9	0.2	1.4284	ug/L	1.4284	ppb	18:37:59
1	K 766.490 Radial†	2299.0	-17.0	-3.0531	ug/L	-3.0531	ppb	18:37:39
1	Mg 279.077 IEC†	-0.2	-1.3	-47.197	ug/L	-47.197	ppb	18:37:59
1	Na 589.592 Radial†	-869.3	205.2	68.852	ug/L	68.852	ppb	18:37:39
1	Sr 421.552†	5.4	32.9	0.2047	ug/L	0.2047	ppb	18:37:39
1	Sc 361.383	910093.8	910093.8	100.98	%			18:38:56
1	Y 371.029	753361.3	753361.3	100.30	%			18:38:56
1	Ag 328.068†	271.7	-23.7	-0.1074	ug/L	-0.1074	ppb	18:39:01
1	As 188.979†	-17.8	6.5	2.5865	ug/L	2.5865	ppb	18:39:21
1	B 249.677†	-445.6	89.4	1.8756	ug/L	1.8756	ppb	18:39:21
1	Ba 233.527†	-1.9	6.5	0.0498	ug/L	0.0498	ppb	18:39:21
1	Be 313.107†	-5234.1	-70.3	-0.0257	ug/L	-0.0257	ppb	18:39:01
1	Cd 226.502†	-180.9	15.9	0.1680	ug/L	0.1680	ppb	18:39:21
1	Co 228.616†	-76.3	-10.2	-0.1931	ug/L	-0.1931	ppb	18:39:21
1	Cr 267.716†	87.6	8.1	0.0854	ug/L	0.0854	ppb	18:39:21
1	Cu 324.752†	6754.5	-67.7	-0.1937	ug/L	-0.1937	ppb	18:39:01
1	Mn 257.610†	442.3	15.7	0.0178	ug/L	0.0178	ppb	18:39:21
1	Mo 202.031†	17.4	-1.1	-0.0713	ug/L	-0.0713	ppb	18:39:21
1	Ni 231.604†	86.2	-1.2	-0.0277	ug/L	-0.0277	ppb	18:39:21
1	P 214.914†	230.5	4.7	2.7512	ug/L	2.7512	ppb	18:39:21
1	Pb 220.353†	-57.2	11.8	1.3348	ug/L	1.3348	ppb	18:39:21
1	S 181.975 Axial†	40.8	-1.2	-1.6205	ug/L	-1.6205	ppb	18:39:21
1	Sb 206.836†	35.0	0.4	0.1198	ug/L	0.1198	ppb	18:39:21
1	Se 196.026†	-33.2	-4.0	-2.3332	ug/L	-2.3332	ppb	18:39:21
1	Si 251.611†	470.7	16.4	0.4945	ug/L	0.4945	ppb	18:39:21
1	Sn 189.927†	3.2	-1.8	-0.2932	ug/L	-0.2932	ppb	18:39:21
1	Ti 334.940†	-1151.9	-25.8	-0.0427	ug/L	-0.0427	ppb	18:39:01
1	Tl 190.801†	-23.0	9.7	2.7127	ug/L	2.7127	ppb	18:39:21
1	U 409.014†	-2300.7	123.5	3.4008	ug/L	3.4008	ppb	18:38:56
1	V 292.402†	-1277.6	93.2	0.6196	ug/L	0.6196	ppb	18:39:01
1	Zn 213.857†	648.1	20.0	0.1768	ug/L	0.1768	ppb	18:39:21
1	SiO2†	486.7	14.6	0.9410	ug/L	0.9410	ppb	18:40:27
2	Sc Radial	5807.3	5807.3	99.4	%			18:38:04
2	Y RADIAL	6166.8	6166.8	98.08	%			18:38:04
2	Al 396.153Radial†	-29.5	-9.3	-6.4595	ug/L	-6.4595	ppb	18:38:04
2	Ca 317.933Radial†	17.7	2.2	3.2387	ug/L	3.2387	ppb	18:38:24
2	Fe 238.204 Radial†	8.1	1.3	12.559	ug/L	12.559	ppb	18:38:24
2	K 766.490 Radial†	2342.0	5.1	0.8704	ug/L	0.8704	ppb	18:38:04
2	Mg 279.077 IEC†	-1.6	-2.8	-98.785	ug/L	-98.785	ppb	18:38:24
2	Na 589.592 Radial†	-862.1	220.5	73.979	ug/L	73.979	ppb	18:38:04
2	Sr 421.552†	8.6	36.0	0.2242	ug/L	0.2242	ppb	18:38:04
2	Sc 361.383	920464.7	920464.7	102.13	%			18:39:26
2	Y 371.029	761317.0	761317.0	101.36	%			18:39:26
2	Ag 328.068†	338.4	38.6	0.1773	ug/L	0.1773	ppb	18:39:32
2	As 188.979†	-24.4	0.3	0.1304	ug/L	0.1304	ppb	18:39:52
2	B 249.677†	-420.5	118.9	2.4926	ug/L	2.4926	ppb	18:39:52
2	Ba 233.527†	-7.1	1.5	0.0123	ug/L	0.0123	ppb	18:39:52
2	Be 313.107†	-5306.5	-82.8	-0.0298	ug/L	-0.0298	ppb	18:39:32
2	Cd 226.502†	-203.9	-4.6	-0.0497	ug/L	-0.0497	ppb	18:39:52
2	Co 228.616†	-75.0	-8.0	-0.1523	ug/L	-0.1523	ppb	18:39:52
2	Cr 267.716†	86.5	6.1	0.0637	ug/L	0.0637	ppb	18:39:52
2	Cu 324.752†	6753.9	-143.7	-0.4104	ug/L	-0.4104	ppb	18:39:32
2	Mn 257.610†	410.0	-20.9	-0.0192	ug/L	-0.0192	ppb	18:39:52
2	Mo 202.031†	23.1	4.3	0.2740	ug/L	0.2740	ppb	18:39:52
2	Ni 231.604†	80.2	-8.0	-0.1852	ug/L	-0.1852	ppb	18:39:52

2	P 214.914†	225.0	-3.2	-1.7759	ug/L	-1.7759 ppb	18:39:52
2	Pb 220.353†	-62.2	7.5	0.8506	ug/L	0.8506 ppb	18:39:52
2	S 181.975 Axial†	36.8	-5.6	-7.8331	ug/L	-7.8331 ppb	18:39:52
2	Sb 206.836†	31.4	-3.5	-1.1030	ug/L	-1.1030 ppb	18:39:52
2	Se 196.026†	-30.1	-0.6	-0.3331	ug/L	-0.3331 ppb	18:39:52
2	Si 251.611†	470.4	10.9	0.3221	ug/L	0.3221 ppb	18:39:52
2	Sn 189.927†	4.8	-0.3	-0.0452	ug/L	-0.0452 ppb	18:39:52
2	Ti 334.940†	-1005.2	130.7	0.2071	ug/L	0.2071 ppb	18:39:32
2	Tl 190.801†	-34.5	-1.3	-0.3516	ug/L	-0.3516 ppb	18:39:52
2	U 409.014†	-2310.9	139.2	3.8318	ug/L	3.8318 ppb	18:39:26
2	V 292.402†	-1312.4	73.3	0.4913	ug/L	0.4913 ppb	18:39:32
2	Zn 213.857†	648.1	12.8	0.1153	ug/L	0.1153 ppb	18:39:52
2	SiO2†	462.9	-14.2	-0.9194	ug/L	-0.9194 ppb	18:40:32
3	Sc Radial	5849.0	5849.0	100	%		18:38:30
3	Y RADIAL	6245.2	6245.2	99.32	%		18:38:30
3	Al 396.153Radial†	-18.9	1.5	1.0270	ug/L	1.0270 ppb	18:38:30
3	Ca 317.933Radial†	21.6	6.0	8.7723	ug/L	8.7723 ppb	18:38:50
3	Fe 238.204 Radial†	10.9	4.0	37.798	ug/L	37.798 ppb	18:38:50
3	K 766.490 Radial†	2322.8	-31.0	-5.5159	ug/L	-5.5159 ppb	18:38:30
3	Mg 279.077 IEC†	-0.4	-1.6	-56.109	ug/L	-56.109 ppb	18:38:50
3	Na 589.592 Radial†	-902.4	186.3	62.531	ug/L	62.531 ppb	18:38:30
3	Sr 421.552†	1.6	29.0	0.1803	ug/L	0.1803 ppb	18:38:30
3	Sc 361.383	922723.4	922723.4	102.38	%		18:39:57
3	Y 371.029	764408.7	764408.7	101.77	%		18:39:57
3	Ag 328.068†	352.9	52.0	0.2470	ug/L	0.2470 ppb	18:40:02
3	As 188.979†	-23.7	1.0	0.4121	ug/L	0.4121 ppb	18:40:22
3	B 249.677†	-447.5	93.6	1.9570	ug/L	1.9570 ppb	18:40:22
3	Ba 233.527†	-15.4	-6.6	-0.0465	ug/L	-0.0465 ppb	18:40:22
3	Be 313.107†	-5233.5	1.2	0.0005	ug/L	0.0005 ppb	18:40:02
3	Cd 226.502†	-184.4	15.0	0.1550	ug/L	0.1550 ppb	18:40:22
3	Co 228.616†	-67.5	-0.5	-0.0091	ug/L	-0.0091 ppb	18:40:22
3	Cr 267.716†	76.7	-3.8	-0.0389	ug/L	-0.0389 ppb	18:40:22
3	Cu 324.752†	6761.6	-152.4	-0.4342	ug/L	-0.4342 ppb	18:40:02
3	Mn 257.610†	449.8	17.0	0.0229	ug/L	0.0229 ppb	18:40:22
3	Mo 202.031†	23.2	4.3	0.2773	ug/L	0.2773 ppb	18:40:22
3	Ni 231.604†	82.2	-6.3	-0.1450	ug/L	-0.1450 ppb	18:40:22
3	P 214.914†	226.0	-2.7	-1.5538	ug/L	-1.5538 ppb	18:40:22
3	Pb 220.353†	-57.6	12.2	1.3732	ug/L	1.3732 ppb	18:40:22
3	S 181.975 Axial†	40.4	-2.1	-3.0113	ug/L	-3.0113 ppb	18:40:22
3	Sb 206.836†	28.2	-6.7	-2.1259	ug/L	-2.1259 ppb	18:40:22
3	Se 196.026†	-29.0	0.5	0.3871	ug/L	0.3871 ppb	18:40:22
3	Si 251.611†	493.6	32.5	0.9725	ug/L	0.9725 ppb	18:40:22
3	Sn 189.927†	-0.4	-5.4	-0.8749	ug/L	-0.8749 ppb	18:40:22
3	Ti 334.940†	-1107.0	33.7	0.0533	ug/L	0.0533 ppb	18:40:02
3	Tl 190.801†	-32.6	0.7	0.1993	ug/L	0.1993 ppb	18:40:22
3	U 409.014†	-2381.2	76.0	2.0891	ug/L	2.0891 ppb	18:39:57
3	V 292.402†	-1334.0	55.4	0.3667	ug/L	0.3667 ppb	18:40:02
3	Zn 213.857†	647.4	10.5	0.0919	ug/L	0.0919 ppb	18:40:22
3	SiO2†	495.3	16.3	1.0443	ug/L	1.0443 ppb	18:40:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917760.7	101.83	%	0.747				0.73%
Sc Radial	5803.6	99.3	%	0.81				0.82%
Y 371.029	759695.7	101.15	%	0.759				0.75%
Y RADIAL	6193.0	98.49	%	0.719				0.73%
Ag 328.068†	22.3	0.1056	ug/L	0.18778	0.1056	ppb	0.18778	177.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.1	-3.5439	ug/L	4.00834	-3.5439	ppb	4.00834	113.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.6	1.0430	ug/L	1.34413	1.0430	ppb	1.34413	128.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	100.6	2.1084	ug/L	0.33520	2.1084	ppb	0.33520	15.90%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.5	0.0052	ug/L	0.04854	0.0052	ppb	0.04854	935.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-50.7	-0.0183	ug/L	0.01645	-0.0183	ppb	0.01645	89.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.1	4.6253	ug/L	3.65656	4.6253	ppb	3.65656	79.06%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.8      0.0911 ug/L       0.12212      0.0911 ppb        0.12212 134.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.2     -0.1182 ug/L       0.09660     -0.1182 ppb        0.09660  81.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.5      0.0367 ug/L       0.06635      0.0367 ppb        0.06635 180.64%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -121.2     -0.3461 ug/L       0.13254     -0.3461 ppb        0.13254  38.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      17.262 ug/L       18.6353      17.262 ppb        18.6353 107.96%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -14.3     -2.5662 ug/L       3.22086     -2.5662 ppb        3.22086 125.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.9     -67.364 ug/L       27.5737     -67.364 ppb        27.5737  40.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 3.9      0.0072 ug/L       0.02296      0.0072 ppb        0.02296 319.61%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.5      0.1600 ug/L       0.20031      0.1600 ppb        0.20031 125.20%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        204.0      68.454 ug/L        5.7341      68.454 ppb         5.7341   8.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.2     -0.1193 ug/L       0.08185     -0.1193 ppb        0.08185  68.60%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -0.4     -0.1928 ug/L       2.55204     -0.1928 ppb        2.55204 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.5      1.1862 ug/L       0.29130      1.1862 ppb        0.29130  24.56%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.0     -4.1550 ug/L       3.26043     -4.1550 ppb        3.26043  78.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.3     -1.0363 ug/L       1.12433     -1.0363 ppb        1.12433 108.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.4     -0.7598 ug/L       1.40945     -0.7598 ppb        1.40945 185.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                19.9      0.5964 ug/L       0.33692      0.5964 ppb        0.33692  56.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.5     -0.4044 ug/L       0.42585     -0.4044 ppb        0.42585 105.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                32.6      0.2031 ug/L       0.02198      0.2031 ppb        0.02198  10.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                46.2      0.0726 ug/L       0.12596      0.0726 ppb        0.12596 173.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.0      0.8535 ug/L       1.63353      0.8535 ppb        1.63353 191.40%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                112.9      3.1072 ug/L       0.90769      3.1072 ppb        0.90769  29.21%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 74.0      0.4925 ug/L       0.12645      0.4925 ppb        0.12645  25.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                14.4      0.1280 ug/L       0.04387      0.1280 ppb        0.04387  34.27%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       5.6      0.3553 ug/L       1.10515      0.3553 ppb        1.10515 311.05%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 44
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 19:52:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5799.2	5799.2	99.2	%			19:54:42
1	Y RADIAL	6156.4	6156.4	97.91	%			19:54:42
1	Al 396.153Radial†	6735.2	6807.5	4707.3	ug/L	4707.3	ppb	19:54:42
1	Ca 317.933Radial†	3300.8	3310.6	4879.7	ug/L	4879.7	ppb	19:55:02
1	Fe 238.204 Radial†	530.1	527.4	4952.8	ug/L	4952.8	ppb	19:55:02
1	K 766.490 Radial†	30046.2	27926.1	4943.9	ug/L	4943.9	ppb	19:54:42
1	Mg 279.077 IEC†	139.9	139.8	4939.0	ug/L	4939.0	ppb	19:55:02
1	Na 589.592 Radial†	26060.7	27349.5	9178.0	ug/L	9178.0	ppb	19:54:42
1	Sr 421.552†	76692.8	77311.2	481.43	ug/L	481.43	ppb	19:54:42
1	Sc 361.383	897338.7	897338.7	99.564	%			19:56:00
1	Y 371.029	729940.1	729940.1	97.185	%			19:56:00
1	Ag 328.068†	111671.9	111867.6	509.69	ug/L	509.69	ppb	19:56:05
1	As 188.979†	1190.2	1219.6	486.35	ug/L	486.35	ppb	19:56:25
1	B 249.677†	22533.9	23163.1	483.83	ug/L	483.83	ppb	19:56:05
1	Ba 233.527†	66576.3	66876.0	496.92	ug/L	496.92	ppb	19:56:05
1	Be 313.107†	1330155.2	1341087.0	489.83	ug/L	489.83	ppb	19:56:00
1	Cd 226.502†	46736.3	47135.9	498.12	ug/L	498.12	ppb	19:56:05
1	Co 228.616†	26213.0	26393.1	501.05	ug/L	501.05	ppb	19:56:05
1	Cr 267.716†	46772.2	46898.1	493.10	ug/L	493.10	ppb	19:56:05
1	Cu 324.752†	178222.0	172244.9	493.17	ug/L	493.17	ppb	19:56:05
1	Mn 257.610†	466706.1	468325.4	499.98	ug/L	499.98	ppb	19:56:00
1	Mo 202.031†	7825.0	7840.9	498.45	ug/L	498.45	ppb	19:56:25
1	Ni 231.604†	21389.5	21396.5	495.15	ug/L	495.15	ppb	19:56:05
1	P 214.914†	4479.3	4275.4	2391.2	ug/L	2391.2	ppb	19:56:25
1	Pb 220.353†	4257.6	4344.7	492.64	ug/L	492.64	ppb	19:56:25
1	S 181.975 Axial†	743.0	704.7	986.54	ug/L	986.54	ppb	19:56:25
1	Sb 206.836†	1600.8	1573.6	505.36	ug/L	505.36	ppb	19:56:25
1	Se 196.026†	833.9	866.4	518.93	ug/L	518.93	ppb	19:56:25
1	Si 251.611†	84064.5	83982.6	2502.2	ug/L	2502.2	ppb	19:56:05
1	Sn 189.927†	3063.3	3071.7	503.51	ug/L	503.51	ppb	19:56:25
1	Ti 334.940†	316322.4	318821.1	508.63	ug/L	508.63	ppb	19:56:05
1	Tl 190.801†	1710.7	1750.7	493.60	ug/L	493.60	ppb	19:56:25
1	U 409.014†	15894.7	18366.1	504.36	ug/L	504.36	ppb	19:56:05
1	V 292.402†	72664.7	74340.9	497.72	ug/L	497.72	ppb	19:56:05
1	Zn 213.857†	57239.0	56867.6	492.42	ug/L	492.42	ppb	19:56:05
1	SiO2†	83671.5	83570.0	5334.9	ug/L	5334.9	ppb	19:57:32
2	Sc Radial	5787.5	5787.5	99.0	%			19:55:07
2	Y RADIAL	6123.8	6123.8	97.39	%			19:55:07
2	Al 396.153Radial†	6980.1	7068.5	4888.2	ug/L	4888.2	ppb	19:55:07
2	Ca 317.933Radial†	3328.4	3345.2	4930.7	ug/L	4930.7	ppb	19:55:27
2	Fe 238.204 Radial†	532.0	530.4	4981.5	ug/L	4981.5	ppb	19:55:27
2	K 766.490 Radial†	30906.9	28856.4	5108.8	ug/L	5108.8	ppb	19:55:07
2	Mg 279.077 IEC†	142.5	142.8	5042.7	ug/L	5042.7	ppb	19:55:27
2	Na 589.592 Radial†	26804.0	28153.2	9447.7	ug/L	9447.7	ppb	19:55:07
2	Sr 421.552†	79276.3	80076.2	498.65	ug/L	498.65	ppb	19:55:07
2	Sc 361.383	890798.0	890798.0	98.839	%			19:56:31
2	Y 371.029	725032.0	725032.0	96.531	%			19:56:31
2	Ag 328.068†	111424.5	112440.9	512.30	ug/L	512.30	ppb	19:56:36
2	As 188.979†	1211.6	1250.0	498.38	ug/L	498.38	ppb	19:56:56
2	B 249.677†	22404.0	23197.9	484.55	ug/L	484.55	ppb	19:56:36
2	Ba 233.527†	66291.4	67078.7	498.43	ug/L	498.43	ppb	19:56:36
2	Be 313.107†	1322457.2	1343108.1	490.57	ug/L	490.57	ppb	19:56:31
2	Cd 226.502†	46568.9	47311.1	499.97	ug/L	499.97	ppb	19:56:36
2	Co 228.616†	26120.9	26493.2	502.97	ug/L	502.97	ppb	19:56:36
2	Cr 267.716†	46662.6	47132.2	495.56	ug/L	495.56	ppb	19:56:36
2	Cu 324.752†	177411.9	172739.7	494.59	ug/L	494.59	ppb	19:56:36
2	Mn 257.610†	462765.1	467780.0	499.40	ug/L	499.40	ppb	19:56:31
2	Mo 202.031†	7940.1	8015.0	509.51	ug/L	509.51	ppb	19:56:56
2	Ni 231.604†	21371.5	21536.1	498.38	ug/L	498.38	ppb	19:56:36

2	P 214.914†	4504.8	4334.2	2425.0 ug/L	2425.0 ppb	19:56:56
2	Pb 220.353†	4283.1	4401.9	499.17 ug/L	499.17 ppb	19:56:56
2	S 181.975 Axial†	760.5	727.8	1018.9 ug/L	1018.9 ppb	19:56:56
2	Sb 206.836†	1618.5	1603.2	515.01 ug/L	515.01 ppb	19:56:56
2	Se 196.026†	839.0	877.7	525.61 ug/L	525.61 ppb	19:56:56
2	Si 251.611†	83703.0	84236.7	2509.5 ug/L	2509.5 ppb	19:56:36
2	Sn 189.927†	3073.5	3104.6	508.91 ug/L	508.91 ppb	19:56:56
2	Ti 334.940†	315464.4	320285.8	510.97 ug/L	510.97 ppb	19:56:36
2	Tl 190.801†	1723.2	1775.9	500.67 ug/L	500.67 ppb	19:56:56
2	U 409.014†	15828.4	18416.2	505.74 ug/L	505.74 ppb	19:56:36
2	V 292.402†	72458.2	74667.9	500.04 ug/L	500.04 ppb	19:56:36
2	Zn 213.857†	57027.9	57076.1	494.22 ug/L	494.22 ppb	19:56:36
2	SiO2†	83847.8	84365.5	5385.4 ug/L	5385.4 ppb	19:57:37
3	Sc Radial	5699.0	5699.0	97.5 %		19:55:33
3	Y RADIAL	6028.3	6028.3	95.87 %		19:55:33
3	Al 396.153Radial†	6974.7	7172.5	4960.5 ug/L	4960.5 ppb	19:55:33
3	Ca 317.933Radial†	3322.1	3391.0	4998.1 ug/L	4998.1 ppb	19:55:53
3	Fe 238.204 Radial†	531.6	538.3	5055.4 ug/L	5055.4 ppb	19:55:53
3	K 766.490 Radial†	30680.6	29109.1	5153.6 ug/L	5153.6 ppb	19:55:33
3	Mg 279.077 IEC†	141.0	143.4	5065.5 ug/L	5065.5 ppb	19:55:53
3	Na 589.592 Radial†	26483.4	28244.8	9478.4 ug/L	9478.4 ppb	19:55:33
3	Sr 421.552†	78473.4	80496.4	501.26 ug/L	501.26 ppb	19:55:33
3	Sc 361.383	890287.6	890287.6	98.782 %		19:57:02
3	Y 371.029	725813.3	725813.3	96.635 %		19:57:02
3	Ag 328.068†	111578.0	112660.9	513.33 ug/L	513.33 ppb	19:57:07
3	As 188.979†	1208.8	1247.8	497.54 ug/L	497.54 ppb	19:57:27
3	B 249.677†	22559.4	23368.3	488.11 ug/L	488.11 ppb	19:57:07
3	Ba 233.527†	66559.2	67388.3	500.73 ug/L	500.73 ppb	19:57:07
3	Be 313.107†	1325687.9	1347145.6	492.04 ug/L	492.04 ppb	19:57:02
3	Cd 226.502†	46843.3	47615.9	503.19 ug/L	503.19 ppb	19:57:07
3	Co 228.616†	26160.6	26548.6	504.01 ug/L	504.01 ppb	19:57:07
3	Cr 267.716†	46751.2	47248.9	496.79 ug/L	496.79 ppb	19:57:07
3	Cu 324.752†	177831.7	173267.6	496.10 ug/L	496.10 ppb	19:57:07
3	Mn 257.610†	463208.7	468497.5	500.17 ug/L	500.17 ppb	19:57:02
3	Mo 202.031†	7900.9	7980.0	507.30 ug/L	507.30 ppb	19:57:27
3	Ni 231.604†	21542.3	21721.4	502.67 ug/L	502.67 ppb	19:57:07
3	P 214.914†	4519.9	4352.1	2435.1 ug/L	2435.1 ppb	19:57:27
3	Pb 220.353†	4270.7	4391.8	498.03 ug/L	498.03 ppb	19:57:27
3	S 181.975 Axial†	756.9	724.7	1014.5 ug/L	1014.5 ppb	19:57:27
3	Sb 206.836†	1619.4	1605.1	515.56 ug/L	515.56 ppb	19:57:27
3	Se 196.026†	830.5	869.5	521.14 ug/L	521.14 ppb	19:57:27
3	Si 251.611†	83979.9	84565.6	2519.4 ug/L	2519.4 ppb	19:57:07
3	Sn 189.927†	3086.5	3119.5	511.35 ug/L	511.35 ppb	19:57:27
3	Ti 334.940†	315915.6	320925.6	512.00 ug/L	512.00 ppb	19:57:07
3	Tl 190.801†	1729.9	1783.7	502.85 ug/L	502.85 ppb	19:57:27
3	U 409.014†	15786.0	18382.5	504.79 ug/L	504.79 ppb	19:57:07
3	V 292.402†	72730.4	74985.4	502.09 ug/L	502.09 ppb	19:57:07
3	Zn 213.857†	57179.0	57262.1	495.81 ug/L	495.81 ppb	19:57:07
3	SiO2†	83050.8	83607.3	5336.8 ug/L	5336.8 ppb	19:57:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892808.1	99.062	%	0.4363				0.44%
Sc Radial	5761.9	98.6	%	0.94				0.95%
Y 371.029	726928.5	96.784	%	0.3511				0.36%
Y RADIAL	6102.8	97.06	%	1.059				1.09%
Ag 328.068†	112323.1	511.77	ug/L	1.877	511.77	ppb	1.877	0.37%
QC value within limits for Ag 328.068 Recovery = 102.35%								
Al 396.153Radial†	7016.2	4852.0	ug/L	130.39	4852.0	ppb	130.39	2.69%
QC value within limits for Al 396.153Radial Recovery = 97.04%								
As 188.979†	1239.2	494.09	ug/L	6.715	494.09	ppb	6.715	1.36%
QC value within limits for As 188.979 Recovery = 98.82%								
B 249.677†	23243.1	485.49	ug/L	2.292	485.49	ppb	2.292	0.47%
QC value within limits for B 249.677 Recovery = 97.10%								
Ba 233.527†	67114.3	498.69	ug/L	1.919	498.69	ppb	1.919	0.38%
QC value within limits for Ba 233.527 Recovery = 99.74%								
Be 313.107†	1343780.2	490.81	ug/L	1.127	490.81	ppb	1.127	0.23%
QC value within limits for Be 313.107 Recovery = 98.16%								
Ca 317.933Radial†	3348.9	4936.2	ug/L	59.43	4936.2	ppb	59.43	1.20%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.72%
Cd 226.502†            47354.3      500.42 ug/L         2.565      500.42 ppb          2.565   0.51%
   QC value within limits for Cd 226.502  Recovery = 100.08%
Co 228.616†            26478.3      502.68 ug/L         1.504      502.68 ppb          1.504   0.30%
   QC value within limits for Co 228.616  Recovery = 100.54%
Cr 267.716†            47093.1      495.15 ug/L         1.880      495.15 ppb          1.880   0.38%
   QC value within limits for Cr 267.716  Recovery = 99.03%
Cu 324.752†           172750.7      494.62 ug/L         1.466      494.62 ppb          1.466   0.30%
   QC value within limits for Cu 324.752  Recovery = 98.92%
Fe 238.204 Radial†       532.0      4996.6 ug/L        52.97       4996.6 ppb         52.97   1.06%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.93%
K 766.490 Radial†      28630.5      5068.8 ug/L       110.44       5068.8 ppb        110.44   2.18%
   QC value within limits for K 766.490 Radial  Recovery = 101.38%
Mg 279.077 IEC†          142.0      5015.8 ug/L        67.43       5015.8 ppb         67.43   1.34%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.32%
Mn 257.610†           468200.9      499.85 ug/L         0.402      499.85 ppb          0.402   0.08%
   QC value within limits for Mn 257.610  Recovery = 99.97%
Mo 202.031†             7945.3      505.09 ug/L         5.852      505.09 ppb          5.852   1.16%
   QC value within limits for Mo 202.031  Recovery = 101.02%
Na 589.592 Radial†     27915.8      9368.0 ug/L       165.30       9368.0 ppb        165.30   1.76%
   QC value within limits for Na 589.592 Radial  Recovery = 93.68%
Ni 231.604†            21551.3      498.73 ug/L         3.773      498.73 ppb          3.773   0.76%
   QC value within limits for Ni 231.604  Recovery = 99.75%
P 214.914†              4320.5      2417.1 ug/L        22.97       2417.1 ppb         22.97   0.95%
   QC value within limits for P 214.914  Recovery = 96.68%
Pb 220.353†             4379.4      496.61 ug/L         3.490      496.61 ppb          3.490   0.70%
   QC value within limits for Pb 220.353  Recovery = 99.32%
S 181.975 Axial†         719.1      1006.7 ug/L        17.56       1006.7 ppb         17.56   1.74%
   QC value within limits for S 181.975 Axial  Recovery = 100.67%
Sb 206.836†             1594.0      511.98 ug/L         5.739      511.98 ppb          5.739   1.12%
   QC value within limits for Sb 206.836  Recovery = 102.40%
Se 196.026†              871.2      521.89 ug/L         3.404      521.89 ppb          3.404   0.65%
   QC value within limits for Se 196.026  Recovery = 104.38%
Si 251.611†            84261.7      2510.4 ug/L         8.63       2510.4 ppb          8.63   0.34%
   QC value within limits for Si 251.611  Recovery = 100.41%
Sn 189.927†             3098.6      507.92 ug/L         4.013      507.92 ppb          4.013   0.79%
   QC value within limits for Sn 189.927  Recovery = 101.58%
Sr 421.552†            79294.6      493.78 ug/L        10.777      493.78 ppb         10.777   2.18%
   QC value within limits for Sr 421.552  Recovery = 98.76%
Ti 334.940†           320010.8      510.54 ug/L         1.724      510.54 ppb          1.724   0.34%
   QC value within limits for Ti 334.940  Recovery = 102.11%
Tl 190.801†             1770.1      499.04 ug/L         4.839      499.04 ppb          4.839   0.97%
   QC value within limits for Tl 190.801  Recovery = 99.81%
U 409.014†             18388.3      504.96 ug/L         0.702      504.96 ppb          0.702   0.14%
   QC value within limits for U 409.014  Recovery = 100.99%
V 292.402†             74664.8      499.95 ug/L         2.185      499.95 ppb          2.185   0.44%
   QC value within limits for V 292.402  Recovery = 99.99%
Zn 213.857†            57068.6      494.15 ug/L         1.692      494.15 ppb          1.692   0.34%
   QC value within limits for Zn 213.857  Recovery = 98.83%
SiO2†                  83847.6      5352.4 ug/L        28.61       5352.4 ppb         28.61   0.53%
   QC value within limits for SiO2  Recovery = 100.09%
All analyte(s) passed QC.
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Sequence No.: 45
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 19:59:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5352.3	5352.3	91.6	%			20:01:44
1	Y RADIAL	5731.8	5731.8	91.16	%			20:01:44
1	Al 396.153Radial†	-32.4	-14.9	-10.398	ug/L	-10.398	ppb	20:01:44
1	Ca 317.933Radial†	21.7	8.1	11.931	ug/L	11.931	ppb	20:02:04
1	Fe 238.204 Radial†	4.2	-2.2	-20.907	ug/L	-20.907	ppb	20:02:04
1	K 766.490 Radial†	2291.1	149.9	26.549	ug/L	26.549	ppb	20:01:44
1	Mg 279.077 IEC†	-0.2	-1.3	-47.256	ug/L	-47.256	ppb	20:02:04
1	Na 589.592 Radial†	-850.8	159.0	53.345	ug/L	53.345	ppb	20:01:44
1	Sr 421.552†	-18.9	6.7	0.0418	ug/L	0.0418	ppb	20:01:44
1	Sc 361.383	904973.1	904973.1	100.41	%			20:03:01
1	Y 371.029	748413.4	748413.4	99.644	%			20:03:01
1	Ag 328.068†	251.9	-41.9	-0.1946	ug/L	-0.1946	ppb	20:03:06
1	As 188.979†	-21.0	3.3	1.2821	ug/L	1.2821	ppb	20:03:26
1	B 249.677†	-349.9	182.2	3.8245	ug/L	3.8245	ppb	20:03:26
1	Ba 233.527†	-19.0	-10.5	-0.0775	ug/L	-0.0775	ppb	20:03:26
1	Be 313.107†	-5300.7	-166.0	-0.0603	ug/L	-0.0603	ppb	20:03:06
1	Cd 226.502†	-181.8	14.0	0.1504	ug/L	0.1504	ppb	20:03:26
1	Co 228.616†	-79.4	-13.7	-0.2581	ug/L	-0.2581	ppb	20:03:26
1	Cr 267.716†	95.6	16.5	0.1737	ug/L	0.1737	ppb	20:03:26
1	Cu 324.752†	6700.2	-84.0	-0.2415	ug/L	-0.2415	ppb	20:03:06
1	Mn 257.610†	451.7	27.5	0.0281	ug/L	0.0281	ppb	20:03:26
1	Mo 202.031†	26.3	7.8	0.4967	ug/L	0.4967	ppb	20:03:26
1	Ni 231.604†	83.8	-3.1	-0.0714	ug/L	-0.0714	ppb	20:03:26
1	P 214.914†	230.1	5.7	3.3319	ug/L	3.3319	ppb	20:03:26
1	Pb 220.353†	-49.1	19.6	2.2142	ug/L	2.2142	ppb	20:03:26
1	S 181.975 Axial†	42.2	0.4	0.5764	ug/L	0.5764	ppb	20:03:26
1	Sb 206.836†	40.0	5.6	1.7829	ug/L	1.7829	ppb	20:03:26
1	Se 196.026†	-21.8	7.1	4.0460	ug/L	4.0460	ppb	20:03:26
1	Si 251.611†	503.8	52.0	1.5371	ug/L	1.5371	ppb	20:03:26
1	Sn 189.927†	10.3	5.3	0.8636	ug/L	0.8636	ppb	20:03:26
1	Ti 334.940†	-1063.5	55.8	0.0896	ug/L	0.0896	ppb	20:03:06
1	Tl 190.801†	-35.4	-2.8	-0.7717	ug/L	-0.7717	ppb	20:03:26
1	U 409.014†	-2415.0	-3.3	-0.0894	ug/L	-0.0894	ppb	20:03:06
1	V 292.402†	-1298.2	65.5	0.4413	ug/L	0.4413	ppb	20:03:06
1	Zn 213.857†	662.1	37.6	0.3325	ug/L	0.3325	ppb	20:03:26
1	SiO2†	464.4	-4.9	-0.3609	ug/L	-0.3609	ppb	20:04:32
2	Sc Radial	5818.3	5818.3	99.6	%			20:02:09
2	Y RADIAL	6230.2	6230.2	99.08	%			20:02:09
2	Al 396.153Radial†	-35.6	-15.4	-10.685	ug/L	-10.685	ppb	20:02:09
2	Ca 317.933Radial†	21.8	6.3	9.3352	ug/L	9.3352	ppb	20:02:29
2	Fe 238.204 Radial†	4.7	-2.1	-19.832	ug/L	-19.832	ppb	20:02:29
2	K 766.490 Radial†	2086.4	-256.2	-45.465	ug/L	-45.465	ppb	20:02:09
2	Mg 279.077 IEC†	1.4	0.3	8.9641	ug/L	8.9641	ppb	20:02:29
2	Na 589.592 Radial†	-853.9	230.3	77.274	ug/L	77.274	ppb	20:02:09
2	Sr 421.552†	-20.8	6.5	0.0402	ug/L	0.0402	ppb	20:02:09
2	Sc 361.383	896955.1	896955.1	99.522	%			20:03:31
2	Y 371.029	742969.9	742969.9	98.920	%			20:03:31
2	Ag 328.068†	237.9	-53.6	-0.2461	ug/L	-0.2461	ppb	20:03:36
2	As 188.979†	-29.5	-5.5	-2.1594	ug/L	-2.1594	ppb	20:03:56
2	B 249.677†	-373.8	155.1	3.2549	ug/L	3.2549	ppb	20:03:56
2	Ba 233.527†	-28.8	-20.5	-0.1518	ug/L	-0.1518	ppb	20:03:56
2	Be 313.107†	-5348.1	-260.9	-0.0947	ug/L	-0.0947	ppb	20:03:36
2	Cd 226.502†	-174.2	20.1	0.2141	ug/L	0.2141	ppb	20:03:56
2	Co 228.616†	-78.5	-13.5	-0.2553	ug/L	-0.2553	ppb	20:03:56
2	Cr 267.716†	95.7	17.5	0.1845	ug/L	0.1845	ppb	20:03:56
2	Cu 324.752†	6737.3	13.0	0.0361	ug/L	0.0361	ppb	20:03:36
2	Mn 257.610†	447.0	26.8	0.0264	ug/L	0.0264	ppb	20:03:56
2	Mo 202.031†	19.9	1.6	0.1027	ug/L	0.1027	ppb	20:03:56
2	Ni 231.604†	62.8	-23.5	-0.5437	ug/L	-0.5437	ppb	20:03:56

2	P 214.914†	210.4	-12.1	-6.9814 ug/L	-6.9814 ppb	20:03:56
2	Pb 220.353†	-45.2	23.0	2.6039 ug/L	2.6039 ppb	20:03:56
2	S 181.975 Axial†	37.5	-3.9	-5.5154 ug/L	-5.5154 ppb	20:03:56
2	Sb 206.836†	32.3	-1.8	-0.5547 ug/L	-0.5547 ppb	20:03:56
2	Se 196.026†	-22.8	5.9	3.3273 ug/L	3.3273 ppb	20:03:56
2	Si 251.611†	499.9	52.7	1.5869 ug/L	1.5869 ppb	20:03:56
2	Sn 189.927†	9.9	5.0	0.8178 ug/L	0.8178 ppb	20:03:56
2	Ti 334.940†	-996.0	114.1	0.1836 ug/L	0.1836 ppb	20:03:36
2	Tl 190.801†	-33.7	-1.3	-0.3632 ug/L	-0.3632 ppb	20:03:56
2	U 409.014†	-2480.0	-90.1	-2.4797 ug/L	-2.4797 ppb	20:03:36
2	V 292.402†	-1305.2	46.9	0.3091 ug/L	0.3091 ppb	20:03:36
2	Zn 213.857†	652.8	34.1	0.3029 ug/L	0.3029 ppb	20:03:56
2	SiO2†	494.6	29.5	1.9174 ug/L	1.9174 ppb	20:04:37
3	Sc Radial	5795.5	5795.5	99.2 %		20:02:34
3	Y RADIAL	6200.0	6200.0	98.60 %		20:02:34
3	Al 396.153Radial†	-29.2	-9.0	-6.2896 ug/L	-6.2896 ppb	20:02:34
3	Ca 317.933Radial†	18.1	2.7	3.9095 ug/L	3.9095 ppb	20:02:54
3	Fe 238.204 Radial†	7.5	0.8	7.1414 ug/L	7.1414 ppb	20:02:54
3	K 766.490 Radial†	2188.4	-145.1	-25.765 ug/L	-25.765 ppb	20:02:34
3	Mg 279.077 IEC†	0.9	-0.3	-9.3734 ug/L	-9.3734 ppb	20:02:54
3	Na 589.592 Radial†	-817.4	263.8	88.511 ug/L	88.511 ppb	20:02:34
3	Sr 421.552†	-12.1	15.2	0.0946 ug/L	0.0946 ppb	20:02:34
3	Sc 361.383	902817.3	902817.3	100.17 %		20:04:01
3	Y 371.029	747183.3	747183.3	99.481 %		20:04:01
3	Ag 328.068†	293.9	0.7	0.0104 ug/L	0.0104 ppb	20:04:06
3	As 188.979†	-17.3	6.9	2.7345 ug/L	2.7345 ppb	20:04:26
3	B 249.677†	-384.6	146.7	3.0766 ug/L	3.0766 ppb	20:04:26
3	Ba 233.527†	-13.7	-5.2	-0.0384 ug/L	-0.0384 ppb	20:04:26
3	Be 313.107†	-5362.9	-240.7	-0.0877 ug/L	-0.0877 ppb	20:04:06
3	Cd 226.502†	-171.8	23.5	0.2479 ug/L	0.2479 ppb	20:04:26
3	Co 228.616†	-79.0	-13.4	-0.2548 ug/L	-0.2548 ppb	20:04:26
3	Cr 267.716†	88.0	9.2	0.0984 ug/L	0.0984 ppb	20:04:26
3	Cu 324.752†	6706.7	-61.6	-0.1758 ug/L	-0.1758 ppb	20:04:06
3	Mn 257.610†	439.6	16.5	0.0185 ug/L	0.0185 ppb	20:04:26
3	Mo 202.031†	21.1	2.8	0.1763 ug/L	0.1763 ppb	20:04:26
3	Ni 231.604†	65.0	-21.7	-0.5025 ug/L	-0.5025 ppb	20:04:26
3	P 214.914†	228.8	4.9	2.8196 ug/L	2.8196 ppb	20:04:26
3	Pb 220.353†	-52.3	16.2	1.8319 ug/L	1.8319 ppb	20:04:26
3	S 181.975 Axial†	40.6	-1.1	-1.5013 ug/L	-1.5013 ppb	20:04:26
3	Sb 206.836†	38.2	3.9	1.2280 ug/L	1.2280 ppb	20:04:26
3	Se 196.026†	-25.9	3.0	1.7599 ug/L	1.7599 ppb	20:04:26
3	Si 251.611†	480.2	29.7	0.8974 ug/L	0.8974 ppb	20:04:26
3	Sn 189.927†	2.1	-2.9	-0.4696 ug/L	-0.4696 ppb	20:04:26
3	Ti 334.940†	-1104.9	11.9	0.0219 ug/L	0.0219 ppb	20:04:06
3	Tl 190.801†	-32.1	0.5	0.1334 ug/L	0.1334 ppb	20:04:26
3	U 409.014†	-2639.2	-232.8	-6.4148 ug/L	-6.4148 ppb	20:04:06
3	V 292.402†	-1375.8	-15.1	-0.1107 ug/L	-0.1107 ppb	20:04:06
3	Zn 213.857†	663.9	41.0	0.3609 ug/L	0.3609 ppb	20:04:26
3	SiO2†	494.1	25.8	1.6709 ug/L	1.6709 ppb	20:04:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901581.8	100.04	%	0.460				0.46%
Sc Radial	5655.4	96.8	%	4.50				4.65%
Y 371.029	746188.9	99.348	%	0.3801				0.38%
Y RADIAL	6054.0	96.28	%	4.444				4.62%
Ag 328.068†	-31.6	-0.1434	ug/L	0.13568	-0.1434	ppb	0.13568	94.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-13.1	-9.1242	ug/L	2.45904	-9.1242	ppb	2.45904	26.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.6	0.6191	ug/L	2.51341	0.6191	ppb	2.51341	405.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	161.3	3.3853	ug/L	0.39063	3.3853	ppb	0.39063	11.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-12.0	-0.0892	ug/L	0.05763	-0.0892	ppb	0.05763	64.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-222.5	-0.0809	ug/L	0.01817	-0.0809	ppb	0.01817	22.45%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.7	8.3918	ug/L	4.09301	8.3918	ppb	4.09301	48.77%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              19.2      0.2041 ug/L       0.04951      0.2041 ppb        0.04951  24.26%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -13.5     -0.2560 ug/L       0.00177     -0.2560 ppb        0.00177   0.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              14.4      0.1522 ug/L       0.04687      0.1522 ppb        0.04687  30.80%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -44.2     -0.1270 ug/L       0.14508     -0.1270 ppb        0.14508 114.20%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.2     -11.199 ug/L       15.8926     -11.199 ppb        15.8926 141.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -83.8     -14.894 ug/L       37.2175     -14.894 ppb        37.2175 249.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.5     -15.889 ug/L       28.6709     -15.889 ppb        28.6709 180.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              23.6      0.0244 ug/L       0.00514      0.0244 ppb        0.00514  21.10%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.1      0.2586 ug/L       0.20948      0.2586 ppb        0.20948  81.02%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      217.7      73.044 ug/L       17.9605      73.044 ppb        17.9605  24.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -16.1     -0.3725 ug/L       0.26159     -0.3725 ppb        0.26159  70.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -0.5     -0.2766 ug/L       5.81213     -0.2766 ppb        5.81213 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              19.6      2.2167 ug/L       0.38599      2.2167 ppb        0.38599  17.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.5     -2.1468 ug/L       3.09677     -2.1468 ppb        3.09677 144.25%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.6      0.8187 ug/L       1.22139      0.8187 ppb        1.22139 149.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               5.3      3.0444 ug/L       1.16903      3.0444 ppb        1.16903  38.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              44.8      1.3405 ug/L       0.38451      1.3405 ppb        0.38451  28.68%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.5      0.4039 ug/L       0.75683      0.4039 ppb        0.75683 187.37%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               9.5      0.0589 ug/L       0.03096      0.0589 ppb        0.03096  52.58%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              60.6      0.0984 ug/L       0.08120      0.0984 ppb        0.08120  82.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.2     -0.3338 ug/L       0.45324     -0.3338 ppb        0.45324 135.77%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -108.7     -2.9946 ug/L       3.19396     -2.9946 ppb        3.19396 106.66%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               32.4      0.2132 ug/L       0.28823      0.2132 ppb        0.28823 135.18%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              37.5      0.3321 ug/L       0.02905      0.3321 ppb        0.02905   8.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    16.8      1.0758 ug/L       1.25029      1.0758 ppb        1.25029 116.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 56
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 21:17:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6025.1	6025.1	103	%			21:19:27
1	Y RADIAL	6358.9	6358.9	101.1	%			21:19:27
1	Al 396.153Radial†	6827.1	6642.2	4592.3	ug/L	4592.3	ppb	21:19:27
1	Ca 317.933Radial†	3342.7	3226.6	4755.9	ug/L	4755.9	ppb	21:19:47
1	Fe 238.204 Radial†	549.6	526.3	4942.7	ug/L	4942.7	ppb	21:19:47
1	K 766.490 Radial†	30725.7	27450.3	4859.3	ug/L	4859.3	ppb	21:19:27
1	Mg 279.077 IEC†	146.1	140.5	4963.4	ug/L	4963.4	ppb	21:19:47
1	Na 589.592 Radial†	29210.4	29420.2	9872.9	ug/L	9872.9	ppb	21:19:27
1	Sr 421.552†	81204.5	78790.5	490.64	ug/L	490.64	ppb	21:19:27
1	Sc 361.383	893452.3	893452.3	99.133	%			21:20:44
1	Y 371.029	727503.4	727503.4	96.860	%			21:20:44
1	Ag 328.068†	111977.0	112663.3	513.30	ug/L	513.30	ppb	21:20:50
1	As 188.979†	1195.1	1229.7	490.35	ug/L	490.35	ppb	21:21:10
1	B 249.677†	22546.9	23274.7	486.16	ug/L	486.16	ppb	21:20:50
1	Ba 233.527†	66724.2	67316.0	500.19	ug/L	500.19	ppb	21:20:50
1	Be 313.107†	1324682.6	1341377.9	489.94	ug/L	489.94	ppb	21:20:44
1	Cd 226.502†	47018.5	47624.7	503.29	ug/L	503.29	ppb	21:20:50
1	Co 228.616†	26272.0	26567.1	504.36	ug/L	504.36	ppb	21:20:50
1	Cr 267.716†	46979.8	47311.9	497.45	ug/L	497.45	ppb	21:20:50
1	Cu 324.752†	178122.0	172922.7	495.11	ug/L	495.11	ppb	21:20:50
1	Mn 257.610†	463952.3	467586.6	499.19	ug/L	499.19	ppb	21:20:44
1	Mo 202.031†	7865.6	7916.0	503.22	ug/L	503.22	ppb	21:21:10
1	Ni 231.604†	21506.8	21608.3	500.05	ug/L	500.05	ppb	21:20:50
1	P 214.914†	4495.1	4310.9	2411.3	ug/L	2411.3	ppb	21:21:10
1	Pb 220.353†	4267.6	4373.3	495.86	ug/L	495.86	ppb	21:21:10
1	S 181.975 Axial†	751.1	716.1	1002.6	ug/L	1002.6	ppb	21:21:10
1	Sb 206.836†	1627.9	1607.9	516.19	ug/L	516.19	ppb	21:21:10
1	Se 196.026†	821.6	857.6	513.80	ug/L	513.80	ppb	21:21:10
1	Si 251.611†	84260.2	84547.2	2519.0	ug/L	2519.0	ppb	21:20:50
1	Sn 189.927†	3043.1	3064.7	502.35	ug/L	502.35	ppb	21:21:10
1	Ti 334.940†	316887.2	320772.8	511.74	ug/L	511.74	ppb	21:20:50
1	Tl 190.801†	1709.3	1756.7	495.28	ug/L	495.28	ppb	21:21:10
1	U 409.014†	16071.0	18613.4	511.17	ug/L	511.17	ppb	21:20:50
1	V 292.402†	72956.1	74952.3	501.84	ug/L	501.84	ppb	21:20:50
1	Zn 213.857†	57358.7	57238.4	495.63	ug/L	495.63	ppb	21:20:50
1	SiO2†	84066.6	84334.1	5383.8	ug/L	5383.8	ppb	21:22:17
2	Sc Radial	5843.3	5843.3	100.0	%			21:19:52
2	Y RADIAL	6191.7	6191.7	98.47	%			21:19:52
2	Al 396.153Radial†	6765.1	6786.2	4692.6	ug/L	4692.6	ppb	21:19:52
2	Ca 317.933Radial†	3316.8	3301.6	4866.3	ug/L	4866.3	ppb	21:20:12
2	Fe 238.204 Radial†	541.3	534.5	5019.4	ug/L	5019.4	ppb	21:20:12
2	K 766.490 Radial†	30557.9	28209.3	4993.9	ug/L	4993.9	ppb	21:19:52
2	Mg 279.077 IEC†	144.7	143.6	5070.9	ug/L	5070.9	ppb	21:20:12
2	Na 589.592 Radial†	28751.6	29842.6	10015	ug/L	10015	ppb	21:19:52
2	Sr 421.552†	80577.2	80613.0	501.99	ug/L	501.99	ppb	21:19:52
2	Sc 361.383	906075.0	906075.0	100.53	%			21:21:15
2	Y 371.029	737827.2	737827.2	98.235	%			21:21:15
2	Ag 328.068†	110774.6	109893.7	500.74	ug/L	500.74	ppb	21:21:21
2	As 188.979†	1201.7	1219.5	486.23	ug/L	486.23	ppb	21:21:41
2	B 249.677†	22265.1	22677.5	473.66	ug/L	473.66	ppb	21:21:21
2	Ba 233.527†	66026.3	65684.2	488.07	ug/L	488.07	ppb	21:21:21
2	Be 313.107†	1323804.5	1321888.8	482.81	ug/L	482.81	ppb	21:21:15
2	Cd 226.502†	46401.8	46350.5	489.80	ug/L	489.80	ppb	21:21:21
2	Co 228.616†	25990.7	25918.1	492.05	ug/L	492.05	ppb	21:21:21
2	Cr 267.716†	46376.5	46051.6	484.20	ug/L	484.20	ppb	21:21:21
2	Cu 324.752†	175961.7	168270.7	481.80	ug/L	481.80	ppb	21:21:21
2	Mn 257.610†	463940.0	461054.4	492.23	ug/L	492.23	ppb	21:21:15
2	Mo 202.031†	7852.0	7792.0	495.35	ug/L	495.35	ppb	21:21:41
2	Ni 231.604†	21224.7	21025.5	486.56	ug/L	486.56	ppb	21:21:21

2	P 214.914†	4501.0	4253.6	2380.3 ug/L	2380.3 ppb	21:21:41
2	Pb 220.353†	4266.7	4312.5	488.99 ug/L	488.99 ppb	21:21:41
2	S 181.975 Axial†	747.8	702.2	983.10 ug/L	983.10 ppb	21:21:41
2	Sb 206.836†	1614.9	1572.1	504.88 ug/L	504.88 ppb	21:21:41
2	Se 196.026†	827.8	852.2	510.91 ug/L	510.91 ppb	21:21:41
2	Si 251.611†	83236.5	82344.9	2453.2 ug/L	2453.2 ppb	21:21:21
2	Sn 189.927†	3041.9	3020.8	495.18 ug/L	495.18 ppb	21:21:41
2	Ti 334.940†	313233.5	312685.3	498.85 ug/L	498.85 ppb	21:21:21
2	Tl 190.801†	1711.0	1734.5	489.00 ug/L	489.00 ppb	21:21:41
2	U 409.014†	15906.8	18224.2	500.46 ug/L	500.46 ppb	21:21:21
2	V 292.402†	71983.3	72959.5	488.55 ug/L	488.55 ppb	21:21:21
2	Zn 213.857†	56773.2	55850.0	483.59 ug/L	483.59 ppb	21:21:21
2	SiO2†	84082.0	83168.1	5309.3 ug/L	5309.3 ppb	21:22:22
3	Sc Radial	6045.1	6045.1	103 %		21:20:17
3	Y RADIAL	6398.8	6398.8	101.8 %		21:20:17
3	Al 396.153Radial†	6859.6	6651.6	4599.1 ug/L	4599.1 ppb	21:20:17
3	Ca 317.933Radial†	3314.8	3188.9	4700.2 ug/L	4700.2 ppb	21:20:37
3	Fe 238.204 Radial†	544.2	519.3	4877.0 ug/L	4877.0 ppb	21:20:37
3	K 766.490 Radial†	30960.0	27577.7	4881.9 ug/L	4881.9 ppb	21:20:17
3	Mg 279.077 IEC†	141.5	135.6	4791.3 ug/L	4791.3 ppb	21:20:37
3	Na 589.592 Radial†	29130.5	29248.7	9815.3 ug/L	9815.3 ppb	21:20:17
3	Sr 421.552†	81661.9	78970.9	491.77 ug/L	491.77 ppb	21:20:17
3	Sc 361.383	903703.1	903703.1	100.27 %		21:21:46
3	Y 371.029	735491.4	735491.4	97.924 %		21:21:46
3	Ag 328.068†	112175.9	111580.4	508.36 ug/L	508.36 ppb	21:21:52
3	As 188.979†	1211.0	1231.9	491.17 ug/L	491.17 ppb	21:22:12
3	B 249.677†	22608.4	23078.1	482.06 ug/L	482.06 ppb	21:21:52
3	Ba 233.527†	66751.7	66580.0	494.72 ug/L	494.72 ppb	21:21:52
3	Be 313.107†	1327395.7	1328926.4	485.39 ug/L	485.39 ppb	21:21:46
3	Cd 226.502†	47051.5	47119.6	497.95 ug/L	497.95 ppb	21:21:52
3	Co 228.616†	26255.1	26249.6	498.33 ug/L	498.33 ppb	21:21:52
3	Cr 267.716†	46894.7	46689.5	490.90 ug/L	490.90 ppb	21:21:52
3	Cu 324.752†	178307.2	171069.3	489.80 ug/L	489.80 ppb	21:21:52
3	Mn 257.610†	465570.9	463892.1	495.25 ug/L	495.25 ppb	21:21:46
3	Mo 202.031†	7851.2	7811.7	496.59 ug/L	496.59 ppb	21:22:12
3	Ni 231.604†	21527.6	21383.0	494.84 ug/L	494.84 ppb	21:21:52
3	P 214.914†	4495.9	4260.2	2383.0 ug/L	2383.0 ppb	21:22:12
3	Pb 220.353†	4257.9	4314.9	489.25 ug/L	489.25 ppb	21:22:12
3	S 181.975 Axial†	759.5	715.9	1002.3 ug/L	1002.3 ppb	21:22:12
3	Sb 206.836†	1608.0	1569.4	503.97 ug/L	503.97 ppb	21:22:12
3	Se 196.026†	834.9	861.5	515.83 ug/L	515.83 ppb	21:22:12
3	Si 251.611†	84266.7	83589.7	2490.5 ug/L	2490.5 ppb	21:21:52
3	Sn 189.927†	3056.7	3043.5	498.87 ug/L	498.87 ppb	21:22:12
3	Ti 334.940†	317311.2	317569.8	506.63 ug/L	506.63 ppb	21:21:52
3	Tl 190.801†	1721.6	1749.4	493.22 ug/L	493.22 ppb	21:22:12
3	U 409.014†	16151.4	18509.6	508.33 ug/L	508.33 ppb	21:21:52
3	V 292.402†	72963.2	74124.6	496.28 ug/L	496.28 ppb	21:21:52
3	Zn 213.857†	57424.3	56647.5	490.52 ug/L	490.52 ppb	21:21:52
3	SiO2†	83800.3	83106.7	5305.3 ug/L	5305.3 ppb	21:22:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901076.8	99.979	%	0.7444				0.74%
Sc Radial	5971.2	102	%	1.9				1.86%
Y 371.029	733607.4	97.673	%	0.7208				0.74%
Y RADIAL	6316.5	100.5	%	1.75				1.74%
Ag 328.068†	111379.1	507.47	ug/L	6.329	507.47	ppb	6.329	1.25%
QC value within limits for Ag 328.068 Recovery = 101.49%								
Al 396.153Radial†	6693.3	4628.0	ug/L	56.06	4628.0	ppb	56.06	1.21%
QC value within limits for Al 396.153Radial Recovery = 92.56%								
As 188.979†	1227.0	489.25	ug/L	2.651	489.25	ppb	2.651	0.54%
QC value within limits for As 188.979 Recovery = 97.85%								
B 249.677†	23010.1	480.63	ug/L	6.374	480.63	ppb	6.374	1.33%
QC value within limits for B 249.677 Recovery = 96.13%								
Ba 233.527†	66526.7	494.32	ug/L	6.070	494.32	ppb	6.070	1.23%
QC value within limits for Ba 233.527 Recovery = 98.86%								
Be 313.107†	1330731.0	486.05	ug/L	3.610	486.05	ppb	3.610	0.74%
QC value within limits for Be 313.107 Recovery = 97.21%								
Ca 317.933Radial†	3239.0	4774.1	ug/L	84.56	4774.1	ppb	84.56	1.77%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.48%
Cd 226.502†            47031.6      497.01 ug/L         6.792      497.01 ppb          6.792   1.37%
   QC value within limits for Cd 226.502  Recovery = 99.40%
Co 228.616†            26244.9      498.24 ug/L         6.156      498.24 ppb          6.156   1.24%
   QC value within limits for Co 228.616  Recovery = 99.65%
Cr 267.716†            46684.3      490.85 ug/L         6.624      490.85 ppb          6.624   1.35%
   QC value within limits for Cr 267.716  Recovery = 98.17%
Cu 324.752†           170754.3      488.90 ug/L         6.700      488.90 ppb          6.700   1.37%
   QC value within limits for Cu 324.752  Recovery = 97.78%
Fe 238.204 Radial†       526.7      4946.4 ug/L        71.27      4946.4 ppb         71.27   1.44%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.93%
K 766.490 Radial†      27745.8      4911.7 ug/L        72.07      4911.7 ppb         72.07   1.47%
   QC value within limits for K 766.490 Radial  Recovery = 98.23%
Mg 279.077 IEC†          139.9      4941.9 ug/L       141.05      4941.9 ppb        141.05   2.85%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.84%
Mn 257.610†           464177.7      495.56 ug/L         3.491      495.56 ppb          3.491   0.70%
   QC value within limits for Mn 257.610  Recovery = 99.11%
Mo 202.031†             7839.9      498.39 ug/L         4.234      498.39 ppb          4.234   0.85%
   QC value within limits for Mo 202.031  Recovery = 99.68%
Na 589.592 Radial†     29503.8      9900.9 ug/L       102.56      9900.9 ppb        102.56   1.04%
   QC value within limits for Na 589.592 Radial  Recovery = 99.01%
Ni 231.604†            21338.9      493.82 ug/L         6.802      493.82 ppb          6.802   1.38%
   QC value within limits for Ni 231.604  Recovery = 98.76%
P 214.914†              4274.9      2391.5 ug/L        17.19      2391.5 ppb         17.19   0.72%
   QC value within limits for P 214.914  Recovery = 95.66%
Pb 220.353†             4333.6      491.37 ug/L         3.894      491.37 ppb          3.894   0.79%
   QC value within limits for Pb 220.353  Recovery = 98.27%
S 181.975 Axial†         711.4      995.98 ug/L        11.157      995.98 ppb         11.157   1.12%
   QC value within limits for S 181.975 Axial  Recovery = 99.60%
Sb 206.836†             1583.1      508.35 ug/L         6.807      508.35 ppb          6.807   1.34%
   QC value within limits for Sb 206.836  Recovery = 101.67%
Se 196.026†              857.1      513.51 ug/L         2.474      513.51 ppb          2.474   0.48%
   QC value within limits for Se 196.026  Recovery = 102.70%
Si 251.611†            83493.9      2487.6 ug/L        33.00      2487.6 ppb         33.00   1.33%
   QC value within limits for Si 251.611  Recovery = 99.50%
Sn 189.927†             3043.0      498.80 ug/L         3.589      498.80 ppb          3.589   0.72%
   QC value within limits for Sn 189.927  Recovery = 99.76%
Sr 421.552†            79458.1      494.80 ug/L         6.253      494.80 ppb          6.253   1.26%
   QC value within limits for Sr 421.552  Recovery = 98.96%
Ti 334.940†           317009.3      505.74 ug/L         6.491      505.74 ppb          6.491   1.28%
   QC value within limits for Ti 334.940  Recovery = 101.15%
Tl 190.801†             1746.9      492.50 ug/L         3.201      492.50 ppb          3.201   0.65%
   QC value within limits for Tl 190.801  Recovery = 98.50%
U 409.014†             18449.1      506.65 ug/L         5.546      506.65 ppb          5.546   1.09%
   QC value within limits for U 409.014  Recovery = 101.33%
V 292.402†             74012.1      495.56 ug/L         6.673      495.56 ppb          6.673   1.35%
   QC value within limits for V 292.402  Recovery = 99.11%
Zn 213.857†            56578.6      489.91 ug/L         6.042      489.91 ppb          6.042   1.23%
   QC value within limits for Zn 213.857  Recovery = 97.98%
SiO2†                  83536.3      5332.8 ug/L        44.22      5332.8 ppb         44.22   0.83%
   QC value within limits for SiO2  Recovery = 99.73%
All analyte(s) passed QC.
```

Sequence No.: 57
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 21:24:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5863.1	5863.1	100	%			21:26:29
1	Y RADIAL	6208.0	6208.0	98.73	%			21:26:29
1	Al 396.153Radial†	-49.0	-28.4	-19.786	ug/L	-19.786	ppb	21:26:29
1	Ca 317.933Radial†	16.4	0.8	1.1186	ug/L	1.1186	ppb	21:26:49
1	Fe 238.204 Radial†	7.0	0.1	1.1840	ug/L	1.1840	ppb	21:26:49
1	K 766.490 Radial†	2290.0	-69.2	-12.316	ug/L	-12.316	ppb	21:26:29
1	Mg 279.077 IEC†	3.5	2.4	83.176	ug/L	83.176	ppb	21:26:49
1	Na 589.592 Radial†	-802.4	288.1	96.696	ug/L	96.696	ppb	21:26:29
1	Sr 421.552†	23.0	50.3	0.3133	ug/L	0.3133	ppb	21:26:29
1	Sc 361.383	910256.5	910256.5	101.00	%			21:27:46
1	Y 371.029	753610.4	753610.4	100.34	%			21:27:46
1	Ag 328.068†	217.0	-77.9	-0.3521	ug/L	-0.3521	ppb	21:27:51
1	As 188.979†	-25.2	-0.7	-0.2944	ug/L	-0.2944	ppb	21:28:11
1	B 249.677†	-410.0	124.7	2.6162	ug/L	2.6162	ppb	21:28:11
1	Ba 233.527†	-21.4	-12.7	-0.0935	ug/L	-0.0935	ppb	21:28:11
1	Be 313.107†	-5317.5	-152.0	-0.0555	ug/L	-0.0555	ppb	21:27:51
1	Cd 226.502†	-179.0	17.8	0.1884	ug/L	0.1884	ppb	21:28:11
1	Co 228.616†	-81.2	-15.0	-0.2826	ug/L	-0.2826	ppb	21:28:11
1	Cr 267.716†	90.3	10.8	0.1135	ug/L	0.1135	ppb	21:28:11
1	Cu 324.752†	6768.0	-55.6	-0.1589	ug/L	-0.1589	ppb	21:27:51
1	Mn 257.610†	428.9	2.3	0.0010	ug/L	0.0010	ppb	21:28:11
1	Mo 202.031†	28.0	9.4	0.5963	ug/L	0.5963	ppb	21:28:11
1	Ni 231.604†	88.2	0.8	0.0193	ug/L	0.0193	ppb	21:28:11
1	P 214.914†	222.5	-3.2	-1.8366	ug/L	-1.8366	ppb	21:28:11
1	Pb 220.353†	-53.2	15.7	1.7765	ug/L	1.7765	ppb	21:28:11
1	S 181.975 Axial†	41.8	-0.2	-0.2898	ug/L	-0.2898	ppb	21:28:11
1	Sb 206.836†	41.8	7.1	2.2628	ug/L	2.2628	ppb	21:28:11
1	Se 196.026†	-28.9	0.2	0.1226	ug/L	0.1226	ppb	21:28:11
1	Si 251.611†	494.6	40.1	1.1944	ug/L	1.1944	ppb	21:28:11
1	Sn 189.927†	2.3	-2.7	-0.4368	ug/L	-0.4368	ppb	21:28:11
1	Ti 334.940†	-1153.6	-27.2	-0.0441	ug/L	-0.0441	ppb	21:27:51
1	Tl 190.801†	-29.9	2.9	0.8024	ug/L	0.8024	ppb	21:28:11
1	U 409.014†	-2373.2	52.1	1.4342	ug/L	1.4342	ppb	21:27:46
1	V 292.402†	-1316.3	55.1	0.3768	ug/L	0.3768	ppb	21:27:51
1	Zn 213.857†	657.2	28.8	0.2490	ug/L	0.2490	ppb	21:28:11
1	SiO2†	513.4	40.9	2.6139	ug/L	2.6139	ppb	21:29:17
2	Sc Radial	5879.6	5879.6	101	%			21:26:54
2	Y RADIAL	6293.5	6293.5	100.1	%			21:26:54
2	Al 396.153Radial†	0.7	21.1	14.619	ug/L	14.619	ppb	21:26:54
2	Ca 317.933Radial†	23.0	7.3	10.779	ug/L	10.779	ppb	21:27:14
2	Fe 238.204 Radial†	7.5	0.7	6.5227	ug/L	6.5227	ppb	21:27:14
2	K 766.490 Radial†	2300.4	-65.3	-11.606	ug/L	-11.606	ppb	21:26:54
2	Mg 279.077 IEC†	-1.2	-2.3	-81.843	ug/L	-81.843	ppb	21:27:14
2	Na 589.592 Radial†	-826.0	267.0	89.593	ug/L	89.593	ppb	21:26:54
2	Sr 421.552†	-15.0	12.5	0.0776	ug/L	0.0776	ppb	21:26:54
2	Sc 361.383	907753.0	907753.0	100.72	%			21:28:16
2	Y 371.029	751536.6	751536.6	100.06	%			21:28:16
2	Ag 328.068†	379.5	84.0	0.3836	ug/L	0.3836	ppb	21:28:21
2	As 188.979†	-23.6	0.8	0.3041	ug/L	0.3041	ppb	21:28:41
2	B 249.677†	-395.6	137.9	2.8926	ug/L	2.8926	ppb	21:28:41
2	Ba 233.527†	-20.5	-11.9	-0.0860	ug/L	-0.0860	ppb	21:28:41
2	Be 313.107†	-5315.6	-164.6	-0.0597	ug/L	-0.0597	ppb	21:28:21
2	Cd 226.502†	-167.4	28.9	0.3049	ug/L	0.3049	ppb	21:28:41
2	Co 228.616†	-83.5	-17.5	-0.3302	ug/L	-0.3302	ppb	21:28:41
2	Cr 267.716†	94.6	15.2	0.1607	ug/L	0.1607	ppb	21:28:41
2	Cu 324.752†	6711.8	-92.8	-0.2654	ug/L	-0.2654	ppb	21:28:21
2	Mn 257.610†	437.0	11.6	0.0145	ug/L	0.0145	ppb	21:28:41
2	Mo 202.031†	27.7	9.2	0.5846	ug/L	0.5846	ppb	21:28:41
2	Ni 231.604†	82.4	-4.8	-0.1105	ug/L	-0.1105	ppb	21:28:41

2	P 214.914†	214.1	-11.0	-6.3066 ug/L	-6.3066 ppb	21:28:41
2	Pb 220.353†	-61.7	7.2	0.8183 ug/L	0.8183 ppb	21:28:41
2	S 181.975 Axial†	56.1	14.1	19.767 ug/L	19.767 ppb	21:28:41
2	Sb 206.836†	34.1	-0.4	-0.1339 ug/L	-0.1339 ppb	21:28:41
2	Se 196.026†	-26.0	3.0	1.7750 ug/L	1.7750 ppb	21:28:41
2	Si 251.611†	471.9	18.9	0.5620 ug/L	0.5620 ppb	21:28:41
2	Sn 189.927†	-1.9	-6.9	-1.1224 ug/L	-1.1224 ppb	21:28:41
2	Ti 334.940†	-1028.8	93.4	0.1487 ug/L	0.1487 ppb	21:28:21
2	Tl 190.801†	-40.0	-7.2	-2.0093 ug/L	-2.0093 ppb	21:28:41
2	U 409.014†	-2340.2	78.3	2.1571 ug/L	2.1571 ppb	21:28:16
2	V 292.402†	-1257.2	110.1	0.7370 ug/L	0.7370 ppb	21:28:21
2	Zn 213.857†	645.2	18.7	0.1669 ug/L	0.1669 ppb	21:28:41
2	SiO2†	486.3	15.4	0.9795 ug/L	0.9795 ppb	21:29:22
3	Sc Radial	5801.1	5801.1	99.3 %		21:27:19
3	Y RADIAL	6194.6	6194.6	98.52 %		21:27:19
3	Al 396.153Radial†	-20.8	-0.6	-0.3992 ug/L	-0.3992 ppb	21:27:19
3	Ca 317.933Radial†	19.6	4.1	6.0922 ug/L	6.0922 ppb	21:27:39
3	Fe 238.204 Radial†	8.3	1.6	14.644 ug/L	14.644 ppb	21:27:39
3	K 766.490 Radial†	2358.3	24.0	4.2165 ug/L	4.2165 ppb	21:27:19
3	Mg 279.077 IEC†	2.5	1.3	46.801 ug/L	46.801 ppb	21:27:39
3	Na 589.592 Radial†	-795.3	286.8	96.249 ug/L	96.249 ppb	21:27:19
3	Sr 421.552†	-18.3	8.9	0.0552 ug/L	0.0552 ppb	21:27:19
3	Sc 361.383	914436.2	914436.2	101.46 %		21:28:47
3	Y 371.029	756886.4	756886.4	100.77 %		21:28:47
3	Ag 328.068†	289.1	-7.8	-0.0360 ug/L	-0.0360 ppb	21:28:52
3	As 188.979†	-23.2	1.4	0.5364 ug/L	0.5364 ppb	21:29:12
3	B 249.677†	-424.1	112.7	2.3608 ug/L	2.3608 ppb	21:29:12
3	Ba 233.527†	-17.9	-9.2	-0.0672 ug/L	-0.0672 ppb	21:29:12
3	Be 313.107†	-5264.0	-75.2	-0.0273 ug/L	-0.0273 ppb	21:28:52
3	Cd 226.502†	-189.6	8.3	0.0862 ug/L	0.0862 ppb	21:29:12
3	Co 228.616†	-72.4	-6.0	-0.1134 ug/L	-0.1134 ppb	21:29:12
3	Cr 267.716†	74.6	-5.1	-0.0557 ug/L	-0.0557 ppb	21:29:12
3	Cu 324.752†	6650.3	-202.2	-0.5780 ug/L	-0.5780 ppb	21:28:52
3	Mn 257.610†	444.6	15.9	0.0176 ug/L	0.0176 ppb	21:29:12
3	Mo 202.031†	21.4	2.8	0.1770 ug/L	0.1770 ppb	21:29:12
3	Ni 231.604†	96.5	8.6	0.1990 ug/L	0.1990 ppb	21:29:12
3	P 214.914†	221.5	-5.2	-2.9225 ug/L	-2.9225 ppb	21:29:12
3	Pb 220.353†	-40.7	28.3	3.1998 ug/L	3.1998 ppb	21:29:12
3	S 181.975 Axial†	44.7	2.5	3.4448 ug/L	3.4448 ppb	21:29:12
3	Sb 206.836†	27.6	-7.1	-2.2518 ug/L	-2.2518 ppb	21:29:12
3	Se 196.026†	-24.5	4.7	2.7574 ug/L	2.7574 ppb	21:29:12
3	Si 251.611†	462.2	5.8	0.1727 ug/L	0.1727 ppb	21:29:12
3	Sn 189.927†	-0.7	-5.7	-0.9310 ug/L	-0.9310 ppb	21:29:12
3	Ti 334.940†	-1103.4	27.4	0.0410 ug/L	0.0410 ppb	21:28:52
3	Tl 190.801†	-31.8	1.1	0.3209 ug/L	0.3209 ppb	21:29:12
3	U 409.014†	-2180.4	252.9	6.9637 ug/L	6.9637 ppb	21:28:47
3	V 292.402†	-1356.1	21.8	0.1589 ug/L	0.1589 ppb	21:28:52
3	Zn 213.857†	653.0	21.7	0.1864 ug/L	0.1864 ppb	21:29:12
3	SiO2†	422.9	-50.7	-3.2542 ug/L	-3.2542 ppb	21:29:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910815.2	101.06	%	0.375				0.37%
Sc Radial	5847.9	100	%	0.7				0.71%
Y 371.029	754011.1	100.39	%	0.359				0.36%
Y RADIAL	6232.1	99.11	%	0.853				0.86%
Ag 328.068†	-0.5	-0.0015	ug/L	0.36908	-0.0015	ppb	0.36908	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.6	-1.8555	ug/L	17.24883	-1.8555	ppb	17.24883	929.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.1820	ug/L	0.42863	0.1820	ppb	0.42863	235.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	125.1	2.6232	ug/L	0.26598	2.6232	ppb	0.26598	10.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.3	-0.0822	ug/L	0.01358	-0.0822	ppb	0.01358	16.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-130.6	-0.0475	ug/L	0.01761	-0.0475	ppb	0.01761	37.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.1	5.9966	ug/L	4.83090	5.9966	ppb	4.83090	80.56%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.3      0.1931 ug/L       0.10945      0.1931 ppb        0.10945  56.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -12.8     -0.2421 ug/L       0.11393     -0.2421 ppb        0.11393  47.06%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               7.0      0.0728 ug/L       0.11377      0.0728 ppb        0.11377 156.22%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -116.9     -0.3341 ug/L       0.21781     -0.3341 ppb        0.21781  65.20%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.8      7.4502 ug/L       6.77779      7.4502 ppb        6.77779  90.97%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -36.8     -6.5685 ug/L       9.34683     -6.5685 ppb        9.34683 142.30%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.5      16.045 ug/L       86.7026      16.045 ppb        86.7026 540.38%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               9.9      0.0110 ug/L       0.00879      0.0110 ppb        0.00879  79.62%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               7.1      0.4526 ug/L       0.23878      0.4526 ppb        0.23878  52.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      280.6      94.179 ug/L        3.9780      94.179 ppb         3.9780   4.22%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               1.5      0.0359 ug/L       0.15546      0.0359 ppb        0.15546 432.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -6.5     -3.6886 ug/L       2.33140     -3.6886 ppb        2.33140  63.21%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              17.1      1.9315 ug/L       1.19831      1.9315 ppb        1.19831  62.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          5.5      7.6407 ug/L      10.66648      7.6407 ppb       10.66648 139.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -0.1     -0.0410 ug/L       2.25877     -0.0410 ppb        2.25877 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               2.6      1.5516 ug/L       1.33152      1.5516 ppb        1.33152  85.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              21.6      0.6430 ug/L       0.51564      0.6430 ppb        0.51564  80.19%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -5.1     -0.8300 ug/L       0.35378     -0.8300 ppb        0.35378  42.62%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              23.9      0.1487 ug/L       0.14301      0.1487 ppb        0.14301  96.18%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              31.2      0.0485 ug/L       0.09661      0.0485 ppb        0.09661 199.04%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.1     -0.2953 ug/L       1.50373     -0.2953 ppb        1.50373 509.18%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              127.8      3.5183 ug/L       3.00563      3.5183 ppb        3.00563  85.43%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               62.3      0.4242 ug/L       0.29195      0.4242 ppb        0.29195  68.82%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              23.1      0.2008 ug/L       0.04289      0.2008 ppb        0.04289  21.36%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     1.9      0.1131 ug/L       3.02846      0.1131 ppb        3.02846 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 68
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/8/2009 22:41:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5710.6	5710.6	97.7	%			22:43:43
1	Y RADIAL	6052.0	6052.0	96.25	%			22:43:43
1	Al 396.153Radial†	6867.4	7048.2	4874.3	ug/L	4874.3	ppb	22:43:43
1	Ca 317.933Radial†	3328.5	3390.7	4997.7	ug/L	4997.7	ppb	22:44:03
1	Fe 238.204 Radial†	538.6	544.4	5112.4	ug/L	5112.4	ppb	22:44:03
1	K 766.490 Radial†	30952.8	29324.0	5191.5	ug/L	5191.5	ppb	22:43:43
1	Mg 279.077 IEC†	144.6	146.8	5184.3	ug/L	5184.3	ppb	22:44:03
1	Na 589.592 Radial†	27947.0	29687.6	9962.6	ug/L	9962.6	ppb	22:43:43
1	Sr 421.552†	80331.1	82234.5	512.09	ug/L	512.09	ppb	22:43:43
1	Sc 361.383	892658.9	892658.9	99.045	%			22:45:01
1	Y 371.029	725002.8	725002.8	96.528	%			22:45:01
1	Ag 328.068†	112307.2	113097.1	515.32	ug/L	515.32	ppb	22:45:06
1	As 188.979†	1195.9	1231.6	491.15	ug/L	491.15	ppb	22:45:26
1	B 249.677†	22496.0	23243.5	485.48	ug/L	485.48	ppb	22:45:06
1	Ba 233.527†	66897.1	67550.4	501.93	ug/L	501.93	ppb	22:45:06
1	Be 313.107†	1311424.7	1329179.9	485.50	ug/L	485.50	ppb	22:45:01
1	Cd 226.502†	46935.2	47582.8	502.83	ug/L	502.83	ppb	22:45:06
1	Co 228.616†	26388.6	26708.4	507.03	ug/L	507.03	ppb	22:45:06
1	Cr 267.716†	46761.1	47133.2	495.57	ug/L	495.57	ppb	22:45:06
1	Cu 324.752†	179119.8	174089.8	498.46	ug/L	498.46	ppb	22:45:06
1	Mn 257.610†	463910.7	467960.5	499.60	ug/L	499.60	ppb	22:45:01
1	Mo 202.031†	7857.7	7915.2	503.18	ug/L	503.18	ppb	22:45:26
1	Ni 231.604†	21495.1	21615.7	500.22	ug/L	500.22	ppb	22:45:06
1	P 214.914†	4503.5	4323.4	2418.0	ug/L	2418.0	ppb	22:45:26
1	Pb 220.353†	4244.0	4353.3	493.65	ug/L	493.65	ppb	22:45:26
1	S 181.975 Axial†	752.5	718.2	1005.4	ug/L	1005.4	ppb	22:45:26
1	Sb 206.836†	1627.8	1609.2	516.66	ug/L	516.66	ppb	22:45:26
1	Se 196.026†	828.3	865.1	518.75	ug/L	518.75	ppb	22:45:26
1	Si 251.611†	84643.1	85009.4	2532.8	ug/L	2532.8	ppb	22:45:06
1	Sn 189.927†	3045.1	3069.5	503.17	ug/L	503.17	ppb	22:45:26
1	Ti 334.940†	318697.7	322884.9	515.12	ug/L	515.12	ppb	22:45:06
1	Tl 190.801†	1708.0	1756.9	495.36	ug/L	495.36	ppb	22:45:26
1	U 409.014†	16097.6	18654.6	512.29	ug/L	512.29	ppb	22:45:06
1	V 292.402†	72868.3	74929.1	501.66	ug/L	501.66	ppb	22:45:06
1	Zn 213.857†	57337.7	57268.6	495.87	ug/L	495.87	ppb	22:45:06
1	SiO2†	83476.3	83813.5	5350.2	ug/L	5350.2	ppb	22:46:33
2	Sc Radial	5710.5	5710.5	97.7	%			22:44:08
2	Y RADIAL	6055.0	6055.0	96.30	%			22:44:08
2	Al 396.153Radial†	6825.0	7004.9	4844.4	ug/L	4844.4	ppb	22:44:08
2	Ca 317.933Radial†	3330.6	3392.9	5000.9	ug/L	5000.9	ppb	22:44:28
2	Fe 238.204 Radial†	539.9	545.8	5125.0	ug/L	5125.0	ppb	22:44:28
2	K 766.490 Radial†	30734.9	29101.3	5152.0	ug/L	5152.0	ppb	22:44:08
2	Mg 279.077 IEC†	145.6	147.8	5221.4	ug/L	5221.4	ppb	22:44:28
2	Na 589.592 Radial†	27740.3	29476.4	9891.7	ug/L	9891.7	ppb	22:44:08
2	Sr 421.552†	79614.2	81501.7	507.53	ug/L	507.53	ppb	22:44:08
2	Sc 361.383	894196.8	894196.8	99.216	%			22:45:32
2	Y 371.029	727762.9	727762.9	96.895	%			22:45:32
2	Ag 328.068†	110549.7	111130.7	506.39	ug/L	506.39	ppb	22:45:37
2	As 188.979†	1184.1	1217.7	485.59	ug/L	485.59	ppb	22:45:57
2	B 249.677†	22170.8	22876.7	477.80	ug/L	477.80	ppb	22:45:37
2	Ba 233.527†	65848.0	66376.9	493.22	ug/L	493.22	ppb	22:45:37
2	Be 313.107†	1314278.5	1329779.0	485.70	ug/L	485.70	ppb	22:45:32
2	Cd 226.502†	46180.3	46740.4	493.91	ug/L	493.91	ppb	22:45:37
2	Co 228.616†	25977.3	26248.0	498.30	ug/L	498.30	ppb	22:45:37
2	Cr 267.716†	46179.4	46465.7	488.55	ug/L	488.55	ppb	22:45:37
2	Cu 324.752†	176332.7	170969.6	489.53	ug/L	489.53	ppb	22:45:37
2	Mn 257.610†	463698.5	466941.0	498.52	ug/L	498.52	ppb	22:45:32
2	Mo 202.031†	7829.7	7873.3	500.52	ug/L	500.52	ppb	22:45:57
2	Ni 231.604†	21144.6	21225.1	491.18	ug/L	491.18	ppb	22:45:37

2	P 214.914†	4470.0	4281.8	2395.4	ug/L	2395.4 ppb	22:45:57
2	Pb 220.353†	4210.4	4312.1	488.98	ug/L	488.98 ppb	22:45:57
2	S 181.975 Axial†	750.9	715.2	1001.3	ug/L	1001.3 ppb	22:45:57
2	Sb 206.836†	1608.2	1586.7	509.59	ug/L	509.59 ppb	22:45:57
2	Se 196.026†	822.5	857.8	514.52	ug/L	514.52 ppb	22:45:57
2	Si 251.611†	83136.0	83343.3	2483.0	ug/L	2483.0 ppb	22:45:37
2	Sn 189.927†	3033.5	3052.5	500.38	ug/L	500.38 ppb	22:45:57
2	Ti 334.940†	314007.0	317603.7	506.70	ug/L	506.70 ppb	22:45:37
2	Tl 190.801†	1709.7	1755.8	495.02	ug/L	495.02 ppb	22:45:57
2	U 409.014†	15855.1	18382.2	504.79	ug/L	504.79 ppb	22:45:37
2	V 292.402†	71830.1	73756.2	493.87	ug/L	493.87 ppb	22:45:37
2	Zn 213.857†	56505.8	56330.5	487.74	ug/L	487.74 ppb	22:45:37
2	SiO2†	83819.4	84014.4	5363.2	ug/L	5363.2 ppb	22:46:38
3	Sc Radial	5747.7	5747.7	98.4	%		22:44:33
3	Y RADIAL	6103.3	6103.3	97.06	%		22:44:33
3	Al 396.153Radial†	6819.6	6954.2	4809.3	ug/L	4809.3 ppb	22:44:33
3	Ca 317.933Radial†	3310.9	3350.7	4938.7	ug/L	4938.7 ppb	22:44:53
3	Fe 238.204 Radial†	537.3	539.5	5066.6	ug/L	5066.6 ppb	22:44:53
3	K 766.490 Radial†	30840.2	29004.7	5134.9	ug/L	5134.9 ppb	22:44:33
3	Mg 279.077 IEC†	143.3	144.5	5103.7	ug/L	5103.7 ppb	22:44:53
3	Na 589.592 Radial†	27877.9	29432.6	9877.0	ug/L	9877.0 ppb	22:44:33
3	Sr 421.552†	80025.9	81393.0	506.85	ug/L	506.85 ppb	22:44:33
3	Sc 361.383	900527.6	900527.6	99.918	%		22:46:03
3	Y 371.029	732709.2	732709.2	97.554	%		22:46:03
3	Ag 328.068†	111387.6	111186.0	506.62	ug/L	506.62 ppb	22:46:08
3	As 188.979†	1187.0	1212.2	483.40	ug/L	483.40 ppb	22:46:28
3	B 249.677†	22461.9	23010.9	480.63	ug/L	480.63 ppb	22:46:08
3	Ba 233.527†	66190.9	66253.5	492.30	ug/L	492.30 ppb	22:46:08
3	Be 313.107†	1322607.9	1328802.7	485.34	ug/L	485.34 ppb	22:46:03
3	Cd 226.502†	46380.8	46613.9	492.58	ug/L	492.58 ppb	22:46:08
3	Co 228.616†	26090.6	26177.3	496.95	ug/L	496.95 ppb	22:46:08
3	Cr 267.716†	46376.7	46335.9	487.19	ug/L	487.19 ppb	22:46:08
3	Cu 324.752†	177673.9	171062.5	489.79	ug/L	489.79 ppb	22:46:08
3	Mn 257.610†	466053.1	466012.0	497.52	ug/L	497.52 ppb	22:46:03
3	Mo 202.031†	7825.3	7813.4	496.71	ug/L	496.71 ppb	22:46:28
3	Ni 231.604†	21225.7	21156.5	489.59	ug/L	489.59 ppb	22:46:08
3	P 214.914†	4467.3	4247.4	2375.4	ug/L	2375.4 ppb	22:46:28
3	Pb 220.353†	4238.7	4310.6	488.80	ug/L	488.80 ppb	22:46:28
3	S 181.975 Axial†	749.0	708.1	991.24	ug/L	991.24 ppb	22:46:28
3	Sb 206.836†	1616.4	1583.5	508.45	ug/L	508.45 ppb	22:46:28
3	Se 196.026†	820.3	849.8	509.71	ug/L	509.71 ppb	22:46:28
3	Si 251.611†	83798.1	83417.0	2485.2	ug/L	2485.2 ppb	22:46:08
3	Sn 189.927†	3023.2	3020.7	495.17	ug/L	495.17 ppb	22:46:28
3	Ti 334.940†	315474.5	316847.4	505.49	ug/L	505.49 ppb	22:46:08
3	Tl 190.801†	1705.6	1739.5	490.46	ug/L	490.46 ppb	22:46:28
3	U 409.014†	16005.3	18420.2	505.85	ug/L	505.85 ppb	22:46:08
3	V 292.402†	72144.4	73561.8	492.54	ug/L	492.54 ppb	22:46:08
3	Zn 213.857†	56730.9	56155.5	486.23	ug/L	486.23 ppb	22:46:08
3	SiO2†	83268.9	82869.6	5290.0	ug/L	5290.0 ppb	22:46:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895794.4	99.393	%	0.4627				0.47%
Sc Radial	5722.9	97.9	%	0.37				0.38%
Y 371.029	728491.6	96.992	%	0.5199				0.54%
Y RADIAL	6070.1	96.54	%	0.457				0.47%
Ag 328.068†	111804.6	509.44	ug/L	5.090	509.44	ppb	5.090	1.00%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7002.4	4842.6	ug/L	32.56	4842.6	ppb	32.56	0.67%
QC value within limits for Al 396.153Radial Recovery = 96.85%								
As 188.979†	1220.5	486.71	ug/L	3.992	486.71	ppb	3.992	0.82%
QC value within limits for As 188.979 Recovery = 97.34%								
B 249.677†	23043.7	481.30	ug/L	3.880	481.30	ppb	3.880	0.81%
QC value within limits for B 249.677 Recovery = 96.26%								
Ba 233.527†	66727.0	495.82	ug/L	5.316	495.82	ppb	5.316	1.07%
QC value within limits for Ba 233.527 Recovery = 99.16%								
Be 313.107†	1329253.9	485.51	ug/L	0.180	485.51	ppb	0.180	0.04%
QC value within limits for Be 313.107 Recovery = 97.10%								
Ca 317.933Radial†	3378.1	4979.1	ug/L	34.99	4979.1	ppb	34.99	0.70%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.58%
Cd 226.502†            46979.0      496.44 ug/L         5.570      496.44 ppb          5.570   1.12%
   QC value within limits for Cd 226.502  Recovery = 99.29%
Co 228.616†            26377.9      500.76 ug/L         5.469      500.76 ppb          5.469   1.09%
   QC value within limits for Co 228.616  Recovery = 100.15%
Cr 267.716†            46644.9      490.44 ug/L         4.498      490.44 ppb          4.498   0.92%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†           172040.7      492.59 ug/L         5.081      492.59 ppb          5.081   1.03%
   QC value within limits for Cu 324.752  Recovery = 98.52%
Fe 238.204 Radial†       543.2      5101.3 ug/L         30.72      5101.3 ppb          30.72   0.60%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.03%
K 766.490 Radial†      29143.3      5159.5 ug/L         29.01      5159.5 ppb          29.01   0.56%
   QC value within limits for K 766.490 Radial  Recovery = 103.19%
Mg 279.077 IEC†          146.4      5169.8 ug/L         60.16      5169.8 ppb          60.16   1.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.40%
Mn 257.610†           466971.2      498.55 ug/L         1.041      498.55 ppb          1.041   0.21%
   QC value within limits for Mn 257.610  Recovery = 99.71%
Mo 202.031†             7867.3      500.14 ug/L         3.250      500.14 ppb          3.250   0.65%
   QC value within limits for Mo 202.031  Recovery = 100.03%
Na 589.592 Radial†     29532.2      9910.4 ug/L         45.77      9910.4 ppb          45.77   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 99.10%
Ni 231.604†            21332.5      493.66 ug/L         5.732      493.66 ppb          5.732   1.16%
   QC value within limits for Ni 231.604  Recovery = 98.73%
P 214.914†              4284.2      2396.3 ug/L         21.30      2396.3 ppb          21.30   0.89%
   QC value within limits for P 214.914  Recovery = 95.85%
Pb 220.353†             4325.4      490.48 ug/L         2.748      490.48 ppb          2.748   0.56%
   QC value within limits for Pb 220.353  Recovery = 98.10%
S 181.975 Axial†         713.8      999.31 ug/L         7.301      999.31 ppb          7.301   0.73%
   QC value within limits for S 181.975 Axial  Recovery = 99.93%
Sb 206.836†             1593.1      511.57 ug/L         4.449      511.57 ppb          4.449   0.87%
   QC value within limits for Sb 206.836  Recovery = 102.31%
Se 196.026†              857.6      514.33 ug/L         4.524      514.33 ppb          4.524   0.88%
   QC value within limits for Se 196.026  Recovery = 102.87%
Si 251.611†            83923.3      2500.3 ug/L         28.12      2500.3 ppb          28.12   1.12%
   QC value within limits for Si 251.611  Recovery = 100.01%
Sn 189.927†             3047.6      499.57 ug/L         4.060      499.57 ppb          4.060   0.81%
   QC value within limits for Sn 189.927  Recovery = 99.91%
Sr 421.552†            81709.8      508.82 ug/L         2.850      508.82 ppb          2.850   0.56%
   QC value within limits for Sr 421.552  Recovery = 101.76%
Ti 334.940†           319112.0      509.10 ug/L         5.247      509.10 ppb          5.247   1.03%
   QC value within limits for Ti 334.940  Recovery = 101.82%
Tl 190.801†             1750.7      493.61 ug/L         2.735      493.61 ppb          2.735   0.55%
   QC value within limits for Tl 190.801  Recovery = 98.72%
U 409.014†             18485.7      507.64 ug/L         4.055      507.64 ppb          4.055   0.80%
   QC value within limits for U 409.014  Recovery = 101.53%
V 292.402†             74082.3      496.03 ug/L         4.925      496.03 ppb          4.925   0.99%
   QC value within limits for V 292.402  Recovery = 99.21%
Zn 213.857†            56584.9      489.94 ug/L         5.185      489.94 ppb          5.185   1.06%
   QC value within limits for Zn 213.857  Recovery = 97.99%
SiO2†                  83565.9      5334.5 ug/L         39.07      5334.5 ppb          39.07   0.73%
   QC value within limits for SiO2  Recovery = 99.76%
All analyte(s) passed QC.
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Sequence No.: 69
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/8/2009 22:48:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5833.8	5833.8	99.8	%			22:50:45
1	Y RADIAL	6248.7	6248.7	99.38	%			22:50:45
1	Al 396.153Radial†	-21.7	-1.3	-0.8959	ug/L	-0.8959	ppb	22:50:45
1	Ca 317.933Radial†	13.4	-2.2	-3.2077	ug/L	-3.2077	ppb	22:51:05
1	Fe 238.204 Radial†	8.7	2.0	18.244	ug/L	18.244	ppb	22:51:05
1	K 766.490 Radial†	2192.0	-155.9	-27.689	ug/L	-27.689	ppb	22:50:45
1	Mg 279.077 IEC†	1.9	0.8	27.288	ug/L	27.288	ppb	22:51:05
1	Na 589.592 Radial†	-758.0	328.7	110.29	ug/L	110.29	ppb	22:50:45
1	Sr 421.552†	-9.6	17.8	0.1106	ug/L	0.1106	ppb	22:50:45
1	Sc 361.383	907581.3	907581.3	100.70	%			22:52:02
1	Y 371.029	750170.6	750170.6	99.878	%			22:52:02
1	Ag 328.068†	301.0	6.2	0.0391	ug/L	0.0391	ppb	22:52:07
1	As 188.979†	-26.5	-2.1	-0.8426	ug/L	-0.8426	ppb	22:52:27
1	B 249.677†	-371.6	161.7	3.3893	ug/L	3.3893	ppb	22:52:27
1	Ba 233.527†	-23.0	-14.4	-0.1039	ug/L	-0.1039	ppb	22:52:27
1	Be 313.107†	-5437.9	-287.0	-0.1046	ug/L	-0.1046	ppb	22:52:07
1	Cd 226.502†	-183.4	13.0	0.1350	ug/L	0.1350	ppb	22:52:27
1	Co 228.616†	-89.3	-23.2	-0.4409	ug/L	-0.4409	ppb	22:52:27
1	Cr 267.716†	82.6	3.4	0.0383	ug/L	0.0383	ppb	22:52:27
1	Cu 324.752†	6642.2	-160.7	-0.4591	ug/L	-0.4591	ppb	22:52:07
1	Mn 257.610†	434.8	9.5	0.0114	ug/L	0.0114	ppb	22:52:27
1	Mo 202.031†	19.8	1.3	0.0865	ug/L	0.0865	ppb	22:52:27
1	Ni 231.604†	64.3	-22.7	-0.5261	ug/L	-0.5261	ppb	22:52:27
1	P 214.914†	226.4	1.3	0.8334	ug/L	0.8334	ppb	22:52:27
1	Pb 220.353†	-65.0	3.9	0.4426	ug/L	0.4426	ppb	22:52:27
1	S 181.975 Axial†	40.4	-1.4	-1.9809	ug/L	-1.9809	ppb	22:52:27
1	Sb 206.836†	41.5	7.0	2.2294	ug/L	2.2294	ppb	22:52:27
1	Se 196.026†	-27.5	1.5	0.9451	ug/L	0.9451	ppb	22:52:27
1	Si 251.611†	476.7	23.7	0.7165	ug/L	0.7165	ppb	22:52:27
1	Sn 189.927†	9.0	3.9	0.6459	ug/L	0.6459	ppb	22:52:27
1	Ti 334.940†	-1109.6	13.1	0.0218	ug/L	0.0218	ppb	22:52:07
1	Tl 190.801†	-34.4	-1.7	-0.4669	ug/L	-0.4669	ppb	22:52:27
1	U 409.014†	-2509.6	-90.3	-2.4892	ug/L	-2.4892	ppb	22:52:07
1	V 292.402†	-1242.7	124.3	0.8150	ug/L	0.8150	ppb	22:52:07
1	Zn 213.857†	641.3	15.0	0.1324	ug/L	0.1324	ppb	22:52:27
1	SiO2†	492.3	21.4	1.3882	ug/L	1.3882	ppb	22:53:33
2	Sc Radial	5845.5	5845.5	100	%			22:51:10
2	Y RADIAL	6240.3	6240.3	99.24	%			22:51:10
2	Al 396.153Radial†	-30.3	-9.9	-6.9308	ug/L	-6.9308	ppb	22:51:10
2	Ca 317.933Radial†	13.2	-2.4	-3.5705	ug/L	-3.5705	ppb	22:51:30
2	Fe 238.204 Radial†	7.1	0.3	2.3558	ug/L	2.3558	ppb	22:51:30
2	K 766.490 Radial†	2186.7	-165.7	-29.431	ug/L	-29.431	ppb	22:51:10
2	Mg 279.077 IEC†	3.0	1.8	65.024	ug/L	65.024	ppb	22:51:30
2	Na 589.592 Radial†	-718.6	369.5	124.01	ug/L	124.01	ppb	22:51:10
2	Sr 421.552†	-22.0	5.4	0.0334	ug/L	0.0334	ppb	22:51:10
2	Sc 361.383	912418.1	912418.1	101.24	%			22:52:32
2	Y 371.029	755004.5	755004.5	100.52	%			22:52:32
2	Ag 328.068†	277.4	-18.7	-0.0800	ug/L	-0.0800	ppb	22:52:37
2	As 188.979†	-26.8	-2.3	-0.9058	ug/L	-0.9058	ppb	22:52:57
2	B 249.677†	-388.7	146.7	3.0766	ug/L	3.0766	ppb	22:52:57
2	Ba 233.527†	-30.0	-21.2	-0.1549	ug/L	-0.1549	ppb	22:52:57
2	Be 313.107†	-5421.9	-242.6	-0.0885	ug/L	-0.0885	ppb	22:52:37
2	Cd 226.502†	-186.5	10.9	0.1150	ug/L	0.1150	ppb	22:52:57
2	Co 228.616†	-77.8	-11.5	-0.2154	ug/L	-0.2154	ppb	22:52:57
2	Cr 267.716†	89.1	9.3	0.0999	ug/L	0.0999	ppb	22:52:57
2	Cu 324.752†	6700.6	-138.1	-0.3950	ug/L	-0.3950	ppb	22:52:37
2	Mn 257.610†	427.9	0.4	-0.0005	ug/L	-0.0005	ppb	22:52:57
2	Mo 202.031†	32.9	14.2	0.9026	ug/L	0.9026	ppb	22:52:57
2	Ni 231.604†	87.8	0.2	0.0051	ug/L	0.0051	ppb	22:52:57

2	P 214.914†	226.4	0.1	0.1013	ug/L	0.1013 ppb	22:52:57
2	Pb 220.353†	-55.1	14.0	1.5836	ug/L	1.5836 ppb	22:52:57
2	S 181.975 Axial†	46.1	4.0	5.5634	ug/L	5.5634 ppb	22:52:57
2	Sb 206.836†	37.1	2.4	0.7694	ug/L	0.7694 ppb	22:52:57
2	Se 196.026†	-32.9	-3.7	-2.1114	ug/L	-2.1114 ppb	22:52:57
2	Si 251.611†	481.8	26.2	0.7793	ug/L	0.7793 ppb	22:52:57
2	Sn 189.927†	3.0	-2.1	-0.3375	ug/L	-0.3375 ppb	22:52:57
2	Ti 334.940†	-1142.7	-13.8	-0.0219	ug/L	-0.0219 ppb	22:52:37
2	Tl 190.801†	-30.6	2.3	0.6376	ug/L	0.6376 ppb	22:52:57
2	U 409.014†	-2460.6	-28.7	-0.7907	ug/L	-0.7907 ppb	22:52:37
2	V 292.402†	-1241.4	132.1	0.8849	ug/L	0.8849 ppb	22:52:37
2	Zn 213.857†	648.3	18.5	0.1600	ug/L	0.1600 ppb	22:52:57
2	SiO2†	457.8	-15.2	-0.9877	ug/L	-0.9877 ppb	22:53:38
3	Sc Radial	5847.3	5847.3	100	%		22:51:35
3	Y RADIAL	6255.9	6255.9	99.49	%		22:51:35
3	Al 396.153Radial†	-16.5	3.9	2.6838	ug/L	2.6838 ppb	22:51:35
3	Ca 317.933Radial†	14.9	-0.7	-1.0402	ug/L	-1.0402 ppb	22:51:55
3	Fe 238.204 Radial†	7.3	0.5	4.3509	ug/L	4.3509 ppb	22:51:55
3	K 766.490 Radial†	2088.9	-264.0	-46.869	ug/L	-46.869 ppb	22:51:35
3	Mg 279.077 IEC†	2.1	0.9	32.667	ug/L	32.667 ppb	22:51:55
3	Na 589.592 Radial†	-709.4	379.0	127.18	ug/L	127.18 ppb	22:51:35
3	Sr 421.552†	-2.3	25.1	0.1561	ug/L	0.1561 ppb	22:51:35
3	Sc 361.383	916090.5	916090.5	101.65	%		22:53:02
3	Y 371.029	757828.5	757828.5	100.90	%		22:53:02
3	Ag 328.068†	280.1	-17.1	-0.0770	ug/L	-0.0770 ppb	22:53:07
3	As 188.979†	-26.2	-1.6	-0.6295	ug/L	-0.6295 ppb	22:53:27
3	B 249.677†	-432.6	105.1	2.2038	ug/L	2.2038 ppb	22:53:27
3	Ba 233.527†	-25.9	-17.0	-0.1252	ug/L	-0.1252 ppb	22:53:27
3	Be 313.107†	-5330.0	-130.7	-0.0472	ug/L	-0.0472 ppb	22:53:07
3	Cd 226.502†	-182.5	15.6	0.1637	ug/L	0.1637 ppb	22:53:27
3	Co 228.616†	-71.8	-5.2	-0.0978	ug/L	-0.0978 ppb	22:53:27
3	Cr 267.716†	90.4	10.3	0.1083	ug/L	0.1083 ppb	22:53:27
3	Cu 324.752†	6683.4	-181.5	-0.5192	ug/L	-0.5192 ppb	22:53:07
3	Mn 257.610†	425.1	-4.1	-0.0045	ug/L	-0.0045 ppb	22:53:27
3	Mo 202.031†	27.9	9.2	0.5817	ug/L	0.5817 ppb	22:53:27
3	Ni 231.604†	67.1	-20.5	-0.4750	ug/L	-0.4750 ppb	22:53:27
3	P 214.914†	231.9	4.6	2.7672	ug/L	2.7672 ppb	22:53:27
3	Pb 220.353†	-56.6	12.7	1.4425	ug/L	1.4425 ppb	22:53:27
3	S 181.975 Axial†	43.8	1.6	2.1775	ug/L	2.1775 ppb	22:53:27
3	Sb 206.836†	33.3	-1.5	-0.4518	ug/L	-0.4518 ppb	22:53:27
3	Se 196.026†	-23.9	5.3	3.0652	ug/L	3.0652 ppb	22:53:27
3	Si 251.611†	468.4	11.2	0.3366	ug/L	0.3366 ppb	22:53:27
3	Sn 189.927†	10.9	5.8	0.9437	ug/L	0.9437 ppb	22:53:27
3	Ti 334.940†	-995.0	136.1	0.2159	ug/L	0.2159 ppb	22:53:07
3	Tl 190.801†	-35.9	-2.8	-0.7896	ug/L	-0.7896 ppb	22:53:27
3	U 409.014†	-2341.7	98.0	2.6981	ug/L	2.6981 ppb	22:53:07
3	V 292.402†	-1319.4	60.4	0.4120	ug/L	0.4120 ppb	22:53:07
3	Zn 213.857†	640.5	8.3	0.0745	ug/L	0.0745 ppb	22:53:27
3	SiO2†	453.5	-21.3	-1.3577	ug/L	-1.3577 ppb	22:53:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912030.0	101.19	%	0.474				0.47%
Sc Radial	5842.2	100.0	%	0.13				0.13%
Y 371.029	754334.5	100.43	%	0.516				0.51%
Y RADIAL	6248.3	99.37	%	0.124				0.12%
Ag 328.068†	-9.9	-0.0393	ug/L	0.06790	-0.0393	ppb	0.06790	172.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.4	-1.7143	ug/L	4.85926	-1.7143	ppb	4.85926	283.45%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-0.7926	ug/L	0.14477	-0.7926	ppb	0.14477	18.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	137.8	2.8899	ug/L	0.61440	2.8899	ppb	0.61440	21.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-17.5	-0.1280	ug/L	0.02564	-0.1280	ppb	0.02564	20.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-220.1	-0.0801	ug/L	0.02959	-0.0801	ppb	0.02959	36.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.8	-2.6061	ug/L	1.36826	-2.6061	ppb	1.36826	52.50%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.1      0.1379 ug/L       0.02446      0.1379 ppb        0.02446  17.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -13.3     -0.2513 ug/L       0.17436     -0.2513 ppb        0.17436  69.37%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               7.7      0.0822 ug/L       0.03825      0.0822 ppb        0.03825  46.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -160.1     -0.4578 ug/L       0.06212     -0.4578 ppb        0.06212  13.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.9      8.3170 ug/L       8.65505      8.3170 ppb        8.65505 104.06%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -195.2     -34.663 ug/L       10.6068     -34.663 ppb        10.6068  30.60%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.2      41.660 ug/L       20.4122      41.660 ppb        20.4122  49.00%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               1.9      0.0021 ug/L       0.00831      0.0021 ppb        0.00831 392.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.2      0.5236 ug/L       0.41114      0.5236 ppb        0.41114  78.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      359.1      120.49 ug/L         8.973      120.49 ppb          8.973   7.45%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -14.3     -0.3320 ug/L       0.29304     -0.3320 ppb        0.29304  88.26%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                2.0      1.2340 ug/L       1.37737      1.2340 ppb        1.37737 111.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.2      1.1562 ug/L       0.62205      1.1562 ppb        0.62205  53.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.4      1.9200 ug/L       3.77870      1.9200 ppb        3.77870 196.81%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.6      0.8490 ug/L       1.34235      0.8490 ppb        1.34235 158.11%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.0      0.6330 ug/L       2.60241      0.6330 ppb        2.60241 411.15%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              20.4      0.6108 ug/L       0.23955      0.6108 ppb        0.23955  39.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.5      0.4173 ug/L       0.67048      0.4173 ppb        0.67048 160.66%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              16.1      0.1000 ug/L       0.06204      0.1000 ppb        0.06204  62.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              45.1      0.0719 ug/L       0.12657      0.0719 ppb        0.12657 176.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.7     -0.2063 ug/L       0.74842     -0.2063 ppb        0.74842 362.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -7.0     -0.1939 ug/L       2.64461     -0.1939 ppb        2.64461 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              105.6      0.7040 ug/L       0.25525      0.7040 ppb        0.25525  36.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              13.9      0.1223 ug/L       0.04360      0.1223 ppb        0.04360  35.65%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -5.0     -0.3191 ug/L       1.49006     -0.3191 ppb        1.49006 467.01%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 80
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 00:06:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5785.8	5785.8	99.0	%			00:08:12
1	Y RADIAL	6109.8	6109.8	97.17	%			00:08:12
1	Al 396.153Radial†	6854.7	6944.0	4802.2	ug/L	4802.2	ppb	00:08:12
1	Ca 317.933Radial†	3297.1	3314.6	4885.6	ug/L	4885.6	ppb	00:08:32
1	Fe 238.204 Radial†	540.7	539.3	5065.0	ug/L	5065.0	ppb	00:08:32
1	K 766.490 Radial†	30984.2	28943.7	5124.0	ug/L	5124.0	ppb	00:08:12
1	Mg 279.077 IEC†	142.3	142.6	5035.7	ug/L	5035.7	ppb	00:08:32
1	Na 589.592 Radial†	28715.7	30092.1	10098	ug/L	10098	ppb	00:08:12
1	Sr 421.552†	81335.0	82179.3	511.75	ug/L	511.75	ppb	00:08:12
1	Sc 361.383	899083.5	899083.5	99.758	%			00:09:29
1	Y 371.029	730689.1	730689.1	97.285	%			00:09:29
1	Ag 328.068†	111290.6	111267.8	506.98	ug/L	506.98	ppb	00:09:34
1	As 188.979†	1186.8	1213.9	484.08	ug/L	484.08	ppb	00:09:54
1	B 249.677†	22438.7	23023.8	480.90	ug/L	480.90	ppb	00:09:34
1	Ba 233.527†	66160.6	66329.5	492.86	ug/L	492.86	ppb	00:09:34
1	Be 313.107†	1317378.7	1325687.0	484.21	ug/L	484.21	ppb	00:09:29
1	Cd 226.502†	46514.8	46822.7	494.79	ug/L	494.79	ppb	00:09:34
1	Co 228.616†	26076.2	26204.9	497.47	ug/L	497.47	ppb	00:09:34
1	Cr 267.716†	46338.5	46372.2	487.57	ug/L	487.57	ppb	00:09:34
1	Cu 324.752†	177400.5	171074.1	489.82	ug/L	489.82	ppb	00:09:34
1	Mn 257.610†	466008.1	466716.1	498.28	ug/L	498.28	ppb	00:09:29
1	Mo 202.031†	7798.2	7798.8	495.79	ug/L	495.79	ppb	00:09:54
1	Ni 231.604†	21249.2	21214.2	490.93	ug/L	490.93	ppb	00:09:34
1	P 214.914†	4480.3	4267.6	2387.1	ug/L	2387.1	ppb	00:09:54
1	Pb 220.353†	4241.8	4320.5	489.92	ug/L	489.92	ppb	00:09:54
1	S 181.975 Axial†	753.2	713.5	998.83	ug/L	998.83	ppb	00:09:54
1	Sb 206.836†	1619.3	1589.0	510.20	ug/L	510.20	ppb	00:09:54
1	Se 196.026†	829.1	859.9	515.53	ug/L	515.53	ppb	00:09:54
1	Si 251.611†	83864.4	83618.1	2491.3	ug/L	2491.3	ppb	00:09:34
1	Sn 189.927†	3032.5	3034.9	497.49	ug/L	497.49	ppb	00:09:54
1	Ti 334.940†	315679.6	317560.2	506.62	ug/L	506.62	ppb	00:09:34
1	Tl 190.801†	1697.8	1734.5	489.06	ug/L	489.06	ppb	00:09:54
1	U 409.014†	16144.3	18585.3	510.40	ug/L	510.40	ppb	00:09:34
1	V 292.402†	72080.1	73613.3	492.88	ug/L	492.88	ppb	00:09:34
1	Zn 213.857†	56763.8	56279.7	487.31	ug/L	487.31	ppb	00:09:34
1	SiO2†	84168.9	83905.6	5356.5	ug/L	5356.5	ppb	00:11:02
2	Sc Radial	5606.2	5606.2	95.9	%			00:08:37
2	Y RADIAL	5902.2	5902.2	93.87	%			00:08:37
2	Al 396.153Radial†	6664.5	6967.5	4818.2	ug/L	4818.2	ppb	00:08:37
2	Ca 317.933Radial†	3291.3	3415.3	5033.9	ug/L	5033.9	ppb	00:08:57
2	Fe 238.204 Radial†	538.3	554.4	5205.6	ug/L	5205.6	ppb	00:08:57
2	K 766.490 Radial†	30293.4	29226.4	5174.2	ug/L	5174.2	ppb	00:08:37
2	Mg 279.077 IEC†	146.0	151.0	5333.0	ug/L	5333.0	ppb	00:08:57
2	Na 589.592 Radial†	27742.4	30006.8	10070	ug/L	10070	ppb	00:08:37
2	Sr 421.552†	78766.2	82133.7	511.46	ug/L	511.46	ppb	00:08:37
2	Sc 361.383	883320.6	883320.6	98.009	%			00:10:00
2	Y 371.029	720503.6	720503.6	95.928	%			00:10:00
2	Ag 328.068†	111272.5	113240.2	515.99	ug/L	515.99	ppb	00:10:05
2	As 188.979†	1186.1	1234.3	492.25	ug/L	492.25	ppb	00:10:25
2	B 249.677†	22402.8	23388.6	488.51	ug/L	488.51	ppb	00:10:05
2	Ba 233.527†	66035.8	67385.7	500.71	ug/L	500.71	ppb	00:10:05
2	Be 313.107†	1292541.2	1323910.5	483.58	ug/L	483.58	ppb	00:10:00
2	Cd 226.502†	46267.6	47402.6	500.91	ug/L	500.91	ppb	00:10:05
2	Co 228.616†	26007.4	26601.2	505.00	ug/L	505.00	ppb	00:10:05
2	Cr 267.716†	46188.7	47048.3	494.68	ug/L	494.68	ppb	00:10:05
2	Cu 324.752†	177142.0	173983.8	498.16	ug/L	498.16	ppb	00:10:05
2	Mn 257.610†	455492.0	464322.5	495.73	ug/L	495.73	ppb	00:10:00
2	Mo 202.031†	7791.1	7931.0	504.20	ug/L	504.20	ppb	00:10:25
2	Ni 231.604†	21194.4	21538.4	498.43	ug/L	498.43	ppb	00:10:05

2	P 214.914†	4456.9	4324.0	2418.3 ug/L	2418.3 ppb	00:10:25
2	Pb 220.353†	4197.7	4351.5	493.42 ug/L	493.42 ppb	00:10:25
2	S 181.975 Axial†	734.3	707.6	990.64 ug/L	990.64 ppb	00:10:25
2	Sb 206.836†	1604.3	1602.6	514.63 ug/L	514.63 ppb	00:10:25
2	Se 196.026†	819.3	864.8	518.81 ug/L	518.81 ppb	00:10:25
2	Si 251.611†	83569.8	84817.7	2527.0 ug/L	2527.0 ppb	00:10:05
2	Sn 189.927†	3016.6	3072.8	503.72 ug/L	503.72 ppb	00:10:25
2	Ti 334.940†	315068.2	322583.3	514.64 ug/L	514.64 ppb	00:10:05
2	Tl 190.801†	1702.9	1770.0	498.99 ug/L	498.99 ppb	00:10:25
2	U 409.014†	16030.6	18758.0	515.12 ug/L	515.12 ppb	00:10:05
2	V 292.402†	72174.8	74999.3	502.13 ug/L	502.13 ppb	00:10:05
2	Zn 213.857†	56569.1	57096.3	494.36 ug/L	494.36 ppb	00:10:05
2	SiO2†	84092.9	85333.7	5447.7 ug/L	5447.7 ppb	00:11:07
3	Sc Radial	5688.4	5688.4	97.3 %		00:09:02
3	Y RADIAL	6014.9	6014.9	95.66 %		00:09:02
3	Al 396.153Radial†	6782.9	6988.7	4833.2 ug/L	4833.2 ppb	00:09:02
3	Ca 317.933Radial†	3330.2	3405.7	5019.7 ug/L	5019.7 ppb	00:09:22
3	Fe 238.204 Radial†	543.6	551.7	5180.3 ug/L	5180.3 ppb	00:09:22
3	K 766.490 Radial†	30627.1	29112.7	5154.0 ug/L	5154.0 ppb	00:09:02
3	Mg 279.077 IEC†	144.9	147.7	5216.7 ug/L	5216.7 ppb	00:09:22
3	Na 589.592 Radial†	28282.2	30143.4	10116 ug/L	10116 ppb	00:09:02
3	Sr 421.552†	80158.8	82377.7	512.98 ug/L	512.98 ppb	00:09:02
3	Sc 361.383	897243.1	897243.1	99.554 %		00:10:31
3	Y 371.029	730515.1	730515.1	97.261 %		00:10:31
3	Ag 328.068†	109699.7	109898.6	500.81 ug/L	500.81 ppb	00:10:36
3	As 188.979†	1194.1	1223.7	487.92 ug/L	487.92 ppb	00:10:56
3	B 249.677†	22152.5	22782.5	475.83 ug/L	475.83 ppb	00:10:36
3	Ba 233.527†	65442.6	65744.3	488.52 ug/L	488.52 ppb	00:10:36
3	Be 313.107†	1307618.6	1318591.9	481.61 ug/L	481.61 ppb	00:10:31
3	Cd 226.502†	45899.2	46300.0	489.25 ug/L	489.25 ppb	00:10:36
3	Co 228.616†	25784.7	25965.7	492.95 ug/L	492.95 ppb	00:10:36
3	Cr 267.716†	45784.9	45911.4	482.73 ug/L	482.73 ppb	00:10:36
3	Cu 324.752†	174566.3	168591.9	482.73 ug/L	482.73 ppb	00:10:36
3	Mn 257.610†	462245.3	463894.6	495.27 ug/L	495.27 ppb	00:10:31
3	Mo 202.031†	7813.2	7829.9	497.77 ug/L	497.77 ppb	00:10:56
3	Ni 231.604†	21005.8	21013.4	486.28 ug/L	486.28 ppb	00:10:36
3	P 214.914†	4494.3	4290.9	2401.7 ug/L	2401.7 ppb	00:10:56
3	Pb 220.353†	4237.4	4324.9	490.42 ug/L	490.42 ppb	00:10:56
3	S 181.975 Axial†	749.7	711.5	996.05 ug/L	996.05 ppb	00:10:56
3	Sb 206.836†	1608.7	1581.7	508.10 ug/L	508.10 ppb	00:10:56
3	Se 196.026†	829.8	862.3	517.31 ug/L	517.31 ppb	00:10:56
3	Si 251.611†	82688.7	82609.6	2461.0 ug/L	2461.0 ppb	00:10:36
3	Sn 189.927†	3043.4	3052.0	500.31 ug/L	500.31 ppb	00:10:56
3	Ti 334.940†	311575.5	314086.8	501.09 ug/L	501.09 ppb	00:10:36
3	Tl 190.801†	1707.1	1747.3	492.62 ug/L	492.62 ppb	00:10:56
3	U 409.014†	15750.2	18222.6	500.40 ug/L	500.40 ppb	00:10:36
3	V 292.402†	71202.1	72879.5	488.03 ug/L	488.03 ppb	00:10:36
3	Zn 213.857†	56157.6	55787.4	483.03 ug/L	483.03 ppb	00:10:36
3	SiO2†	83783.7	83691.7	5342.6 ug/L	5342.6 ppb	00:11:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	893215.7	99.107	%	0.9563				0.96%
Sc Radial	5693.5	97.4	%	1.54				1.58%
Y 371.029	727235.9	96.825	%	0.7763				0.80%
Y RADIAL	6009.0	95.57	%	1.654				1.73%
Ag 328.068†	111468.9	507.93	ug/L	7.636	507.93	ppb	7.636	1.50%
QC value within limits for Ag 328.068 Recovery = 101.59%								
Al 396.153Radial†	6966.7	4817.9	ug/L	15.51	4817.9	ppb	15.51	0.32%
QC value within limits for Al 396.153Radial Recovery = 96.36%								
As 188.979†	1224.0	488.08	ug/L	4.088	488.08	ppb	4.088	0.84%
QC value within limits for As 188.979 Recovery = 97.62%								
B 249.677†	23064.9	481.75	ug/L	6.381	481.75	ppb	6.381	1.32%
QC value within limits for B 249.677 Recovery = 96.35%								
Ba 233.527†	66486.5	494.03	ug/L	6.182	494.03	ppb	6.182	1.25%
QC value within limits for Ba 233.527 Recovery = 98.81%								
Be 313.107†	1322729.8	483.13	ug/L	1.354	483.13	ppb	1.354	0.28%
QC value within limits for Be 313.107 Recovery = 96.63%								
Ca 317.933Radial†	3378.5	4979.7	ug/L	81.86	4979.7	ppb	81.86	1.64%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.59%
Cd 226.502†            46841.8      494.98 ug/L         5.833      494.98 ppb          5.833   1.18%
   QC value within limits for Cd 226.502  Recovery = 99.00%
Co 228.616†            26257.3      498.47 ug/L         6.086      498.47 ppb          6.086   1.22%
   QC value within limits for Co 228.616  Recovery = 99.69%
Cr 267.716†            46444.0      488.33 ug/L         6.014      488.33 ppb          6.014   1.23%
   QC value within limits for Cr 267.716  Recovery = 97.67%
Cu 324.752†           171216.6      490.24 ug/L         7.724      490.24 ppb          7.724   1.58%
   QC value within limits for Cu 324.752  Recovery = 98.05%
Fe 238.204 Radial†       548.5      5150.3 ug/L        74.97      5150.3 ppb         74.97   1.46%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.01%
K 766.490 Radial†      29094.2      5150.7 ug/L        25.25      5150.7 ppb         25.25   0.49%
   QC value within limits for K 766.490 Radial  Recovery = 103.01%
Mg 279.077 IEC†          147.1      5195.2 ug/L       149.82      5195.2 ppb        149.82   2.88%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.90%
Mn 257.610†           464977.8      496.43 ug/L         1.617      496.43 ppb          1.617   0.33%
   QC value within limits for Mn 257.610  Recovery = 99.29%
Mo 202.031†             7853.2      499.25 ug/L         4.397      499.25 ppb          4.397   0.88%
   QC value within limits for Mo 202.031  Recovery = 99.85%
Na 589.592 Radial†     30080.7       10095 ug/L          23.2       10095 ppb           23.2   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 100.95%
Ni 231.604†            21255.3      491.88 ug/L         6.130      491.88 ppb          6.130   1.25%
   QC value within limits for Ni 231.604  Recovery = 98.38%
P 214.914†              4294.2      2402.4 ug/L        15.57      2402.4 ppb         15.57   0.65%
   QC value within limits for P 214.914  Recovery = 96.09%
Pb 220.353†             4332.3      491.25 ug/L         1.894      491.25 ppb          1.894   0.39%
   QC value within limits for Pb 220.353  Recovery = 98.25%
S 181.975 Axial†         710.9      995.17 ug/L         4.163      995.17 ppb          4.163   0.42%
   QC value within limits for S 181.975 Axial  Recovery = 99.52%
Sb 206.836†             1591.1      510.98 ug/L         3.333      510.98 ppb          3.333   0.65%
   QC value within limits for Sb 206.836  Recovery = 102.20%
Se 196.026†              862.3      517.22 ug/L         1.643      517.22 ppb          1.643   0.32%
   QC value within limits for Se 196.026  Recovery = 103.44%
Si 251.611†            83681.8      2493.1 ug/L        33.02      2493.1 ppb         33.02   1.32%
   QC value within limits for Si 251.611  Recovery = 99.72%
Sn 189.927†             3053.3      500.50 ug/L         3.120      500.50 ppb          3.120   0.62%
   QC value within limits for Sn 189.927  Recovery = 100.10%
Sr 421.552†            82230.2      512.06 ug/L         0.808      512.06 ppb          0.808   0.16%
   QC value within limits for Sr 421.552  Recovery = 102.41%
Ti 334.940†           318076.8      507.45 ug/L         6.812      507.45 ppb          6.812   1.34%
   QC value within limits for Ti 334.940  Recovery = 101.49%
Tl 190.801†             1750.6      493.55 ug/L         5.031      493.55 ppb          5.031   1.02%
   QC value within limits for Tl 190.801  Recovery = 98.71%
U 409.014†             18522.0      508.64 ug/L         7.517      508.64 ppb          7.517   1.48%
   QC value within limits for U 409.014  Recovery = 101.73%
V 292.402†             73830.7      494.35 ug/L         7.164      494.35 ppb          7.164   1.45%
   QC value within limits for V 292.402  Recovery = 98.87%
Zn 213.857†            56387.8      488.23 ug/L         5.723      488.23 ppb          5.723   1.17%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                  84310.3      5382.2 ug/L        57.08      5382.2 ppb         57.08   1.06%
   QC value within limits for SiO2  Recovery = 100.65%
All analyte(s) passed QC.
```

Sequence No.: 81
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 00:13:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5961.8	5961.8	102	%			00:15:13
1	Y RADIAL	6382.9	6382.9	101.5	%			00:15:13
1	Al 396.153Radial†	-34.1	-13.1	-9.1070	ug/L	-9.1070	ppb	00:15:13
1	Ca 317.933Radial†	18.3	2.4	3.4821	ug/L	3.4821	ppb	00:15:33
1	Fe 238.204 Radial†	10.2	3.2	30.223	ug/L	30.223	ppb	00:15:33
1	K 766.490 Radial†	2337.9	-60.0	-10.697	ug/L	-10.697	ppb	00:15:13
1	Mg 279.077 IEC†	4.3	3.1	108.13	ug/L	108.13	ppb	00:15:33
1	Na 589.592 Radial†	-753.9	349.0	117.11	ug/L	117.11	ppb	00:15:13
1	Sr 421.552†	41.2	67.8	0.4220	ug/L	0.4220	ppb	00:15:13
1	Sc 361.383	893463.0	893463.0	99.134	%			00:16:30
1	Y 371.029	739012.8	739012.8	98.393	%			00:16:30
1	Ag 328.068†	281.0	-9.3	-0.0279	ug/L	-0.0279	ppb	00:16:35
1	As 188.979†	-23.7	0.3	0.1276	ug/L	0.1276	ppb	00:16:55
1	B 249.677†	-347.7	179.9	3.7707	ug/L	3.7707	ppb	00:16:55
1	Ba 233.527†	-22.9	-14.6	-0.1060	ug/L	-0.1060	ppb	00:16:55
1	Be 313.107†	-5398.7	-332.9	-0.1210	ug/L	-0.1210	ppb	00:16:35
1	Cd 226.502†	-179.6	13.9	0.1436	ug/L	0.1436	ppb	00:16:55
1	Co 228.616†	-87.4	-22.7	-0.4292	ug/L	-0.4292	ppb	00:16:55
1	Cr 267.716†	91.2	13.3	0.1419	ug/L	0.1419	ppb	00:16:55
1	Cu 324.752†	6716.5	18.4	0.0543	ug/L	0.0543	ppb	00:16:35
1	Mn 257.610†	449.4	31.0	0.0341	ug/L	0.0341	ppb	00:16:55
1	Mo 202.031†	32.9	14.9	0.9479	ug/L	0.9479	ppb	00:16:55
1	Ni 231.604†	60.1	-25.9	-0.5993	ug/L	-0.5993	ppb	00:16:55
1	P 214.914†	238.3	16.9	9.6898	ug/L	9.6898	ppb	00:16:55
1	Pb 220.353†	-42.8	25.2	2.8506	ug/L	2.8506	ppb	00:16:55
1	S 181.975 Axial†	42.2	1.0	1.4491	ug/L	1.4491	ppb	00:16:55
1	Sb 206.836†	41.3	7.4	2.3611	ug/L	2.3611	ppb	00:16:55
1	Se 196.026†	-28.4	0.1	0.1794	ug/L	0.1794	ppb	00:16:55
1	Si 251.611†	526.0	80.9	2.4097	ug/L	2.4097	ppb	00:16:55
1	Sn 189.927†	4.6	-0.4	-0.0620	ug/L	-0.0620	ppb	00:16:55
1	Ti 334.940†	-982.9	123.5	0.1984	ug/L	0.1984	ppb	00:16:35
1	Tl 190.801†	-31.6	0.7	0.1931	ug/L	0.1931	ppb	00:16:55
1	U 409.014†	-2482.6	-102.4	-2.8262	ug/L	-2.8262	ppb	00:16:35
1	V 292.402†	-1264.9	82.4	0.5500	ug/L	0.5500	ppb	00:16:35
1	Zn 213.857†	642.2	25.9	0.2239	ug/L	0.2239	ppb	00:16:55
1	SiO2†	524.8	61.9	3.9457	ug/L	3.9457	ppb	00:18:01
2	Sc Radial	5883.1	5883.1	101	%			00:15:38
2	Y RADIAL	6312.3	6312.3	100.4	%			00:15:38
2	Al 396.153Radial†	-19.5	1.0	0.6747	ug/L	0.6747	ppb	00:15:38
2	Ca 317.933Radial†	20.8	5.1	7.4637	ug/L	7.4637	ppb	00:15:58
2	Fe 238.204 Radial†	6.2	-0.6	-5.9880	ug/L	-5.9880	ppb	00:15:58
2	K 766.490 Radial†	2194.1	-172.2	-30.598	ug/L	-30.598	ppb	00:15:38
2	Mg 279.077 IEC†	1.5	0.4	13.370	ug/L	13.370	ppb	00:15:58
2	Na 589.592 Radial†	-731.4	361.4	121.28	ug/L	121.28	ppb	00:15:38
2	Sr 421.552†	-10.4	17.0	0.1059	ug/L	0.1059	ppb	00:15:38
2	Sc 361.383	912220.2	912220.2	101.22	%			00:17:00
2	Y 371.029	754541.7	754541.7	100.46	%			00:17:00
2	Ag 328.068†	358.5	61.5	0.2835	ug/L	0.2835	ppb	00:17:05
2	As 188.979†	-28.1	-3.6	-1.4123	ug/L	-1.4123	ppb	00:17:25
2	B 249.677†	-372.3	162.8	3.4161	ug/L	3.4161	ppb	00:17:25
2	Ba 233.527†	-24.7	-15.9	-0.1162	ug/L	-0.1162	ppb	00:17:25
2	Be 313.107†	-5371.7	-194.2	-0.0705	ug/L	-0.0705	ppb	00:17:05
2	Cd 226.502†	-177.5	19.7	0.2088	ug/L	0.2088	ppb	00:17:25
2	Co 228.616†	-74.2	-7.9	-0.1493	ug/L	-0.1493	ppb	00:17:25
2	Cr 267.716†	101.9	22.1	0.2344	ug/L	0.2344	ppb	00:17:25
2	Cu 324.752†	6729.4	-108.2	-0.3098	ug/L	-0.3098	ppb	00:17:05
2	Mn 257.610†	445.8	18.2	0.0185	ug/L	0.0185	ppb	00:17:25
2	Mo 202.031†	27.1	8.4	0.5347	ug/L	0.5347	ppb	00:17:25
2	Ni 231.604†	69.4	-18.0	-0.4165	ug/L	-0.4165	ppb	00:17:25

2	P 214.914†	220.1	-6.0	-3.4054 ug/L	-3.4054 ppb	00:17:25
2	Pb 220.353†	-49.8	19.2	2.1781 ug/L	2.1781 ppb	00:17:25
2	S 181.975 Axial†	42.6	0.5	0.6641 ug/L	0.6641 ppb	00:17:25
2	Sb 206.836†	43.9	9.1	2.9056 ug/L	2.9056 ppb	00:17:25
2	Se 196.026†	-26.8	2.3	1.3234 ug/L	1.3234 ppb	00:17:25
2	Si 251.611†	536.6	80.5	2.4084 ug/L	2.4084 ppb	00:17:25
2	Sn 189.927†	8.6	3.5	0.5671 ug/L	0.5671 ppb	00:17:25
2	Ti 334.940†	-1034.2	93.1	0.1506 ug/L	0.1506 ppb	00:17:05
2	Tl 190.801†	-41.9	-8.9	-2.5004 ug/L	-2.5004 ppb	00:17:25
2	U 409.014†	-2574.1	-141.4	-3.8949 ug/L	-3.8949 ppb	00:17:05
2	V 292.402†	-1235.0	138.2	0.9137 ug/L	0.9137 ppb	00:17:05
2	Zn 213.857†	652.3	22.6	0.2009 ug/L	0.2009 ppb	00:17:25
2	SiO2†	544.6	70.6	4.5256 ug/L	4.5256 ppb	00:18:06
3	Sc Radial	5790.8	5790.8	99.1 %		00:16:03
3	Y RADIAL	6164.3	6164.3	98.04 %		00:16:03
3	Al 396.153Radial†	-25.9	-5.8	-4.0277 ug/L	-4.0277 ppb	00:16:03
3	Ca 317.933Radial†	17.4	2.0	2.8895 ug/L	2.8895 ppb	00:16:23
3	Fe 238.204 Radial†	7.1	0.3	3.1665 ug/L	3.1665 ppb	00:16:23
3	K 766.490 Radial†	2207.3	-124.1	-22.065 ug/L	-22.065 ppb	00:16:03
3	Mg 279.077 IEC†	1.2	0.1	2.6302 ug/L	2.6302 ppb	00:16:23
3	Na 589.592 Radial†	-733.9	347.3	116.55 ug/L	116.55 ppb	00:16:03
3	Sr 421.552†	-10.2	17.1	0.1064 ug/L	0.1064 ppb	00:16:03
3	Sc 361.383	898819.2	898819.2	99.729 %		00:17:30
3	Y 371.029	743666.7	743666.7	99.012 %		00:17:30
3	Ag 328.068†	301.1	9.2	0.0439 ug/L	0.0439 ppb	00:17:36
3	As 188.979†	-25.5	-1.4	-0.5619 ug/L	-0.5619 ppb	00:17:56
3	B 249.677†	-390.7	139.0	2.9140 ug/L	2.9140 ppb	00:17:56
3	Ba 233.527†	-10.3	-1.8	-0.0122 ug/L	-0.0122 ppb	00:17:56
3	Be 313.107†	-5373.6	-275.2	-0.1002 ug/L	-0.1002 ppb	00:17:36
3	Cd 226.502†	-165.2	29.4	0.3101 ug/L	0.3101 ppb	00:17:56
3	Co 228.616†	-70.5	-5.3	-0.0992 ug/L	-0.0992 ppb	00:17:56
3	Cr 267.716†	84.5	6.1	0.0647 ug/L	0.0647 ppb	00:17:56
3	Cu 324.752†	6773.8	35.5	0.1019 ug/L	0.1019 ppb	00:17:36
3	Mn 257.610†	444.6	23.5	0.0253 ug/L	0.0253 ppb	00:17:56
3	Mo 202.031†	23.8	5.5	0.3524 ug/L	0.3524 ppb	00:17:56
3	Ni 231.604†	54.4	-32.0	-0.7402 ug/L	-0.7402 ppb	00:17:56
3	P 214.914†	231.1	8.2	4.7125 ug/L	4.7125 ppb	00:17:56
3	Pb 220.353†	-56.0	12.3	1.3868 ug/L	1.3868 ppb	00:17:56
3	S 181.975 Axial†	39.2	-2.3	-3.2360 ug/L	-3.2360 ppb	00:17:56
3	Sb 206.836†	54.1	20.0	6.3520 ug/L	6.3520 ppb	00:17:56
3	Se 196.026†	-20.9	7.9	4.5799 ug/L	4.5799 ppb	00:17:56
3	Si 251.611†	547.7	99.5	2.9779 ug/L	2.9779 ppb	00:17:56
3	Sn 189.927†	7.7	2.7	0.4479 ug/L	0.4479 ppb	00:17:56
3	Ti 334.940†	-1076.9	35.1	0.0556 ug/L	0.0556 ppb	00:17:36
3	Tl 190.801†	-43.9	-11.5	-3.2272 ug/L	-3.2272 ppb	00:17:56
3	U 409.014†	-2348.3	47.1	1.2972 ug/L	1.2972 ppb	00:17:36
3	V 292.402†	-1270.8	84.1	0.5624 ug/L	0.5624 ppb	00:17:36
3	Zn 213.857†	645.7	25.6	0.2278 ug/L	0.2278 ppb	00:17:56
3	SiO2†	509.5	43.4	2.7871 ug/L	2.7871 ppb	00:18:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901500.8	100.03	%	1.072				1.07%
Sc Radial	5878.6	101	%	1.5				1.46%
Y 371.029	745740.4	99.289	%	1.0611				1.07%
Y RADIAL	6286.5	99.98	%	1.774				1.77%
Ag 328.068†	20.5	0.0998	ug/L	0.16306	0.0998	ppb	0.16306	163.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.9	-4.1533	ug/L	4.89204	-4.1533	ppb	4.89204	117.79%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.6	-0.6155	ug/L	0.77139	-0.6155	ppb	0.77139	125.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	160.6	3.3669	ug/L	0.43045	3.3669	ppb	0.43045	12.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-10.8	-0.0781	ug/L	0.05731	-0.0781	ppb	0.05731	73.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-267.4	-0.0972	ug/L	0.02537	-0.0972	ppb	0.02537	26.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.1	4.6118	ug/L	2.48753	4.6118	ppb	2.48753	53.94%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              21.0      0.2208 ug/L       0.08392      0.2208 ppb        0.08392  38.00%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -12.0     -0.2259 ug/L       0.17785     -0.2259 ppb        0.17785  78.72%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              13.8      0.1470 ug/L       0.08495      0.1470 ppb        0.08495  57.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -18.1     -0.0512 ug/L       0.22521     -0.0512 ppb        0.22521 439.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       1.0      9.1337 ug/L      18.82837      9.1337 ppb       18.82837 206.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -118.8     -21.120 ug/L        9.9841     -21.120 ppb        9.9841  47.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          1.2      41.375 ug/L       58.0570      41.375 ppb        58.0570 140.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             24.2      0.0260 ug/L       0.00780      0.0260 ppb        0.00780  30.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              9.6      0.6117 ug/L       0.30512      0.6117 ppb        0.30512  49.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     352.6      118.31 ug/L         2.589      118.31 ppb          2.589   2.19%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -25.3     -0.5853 ug/L       0.16226     -0.5853 ppb        0.16226  27.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               6.3      3.6657 ug/L       6.61006      3.6657 ppb        6.61006 180.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             18.9      2.1385 ug/L       0.73271      2.1385 ppb        0.73271  34.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -0.3     -0.3743 ug/L       2.50921     -0.3743 ppb        2.50921 670.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             12.2      3.8729 ug/L       2.16416      3.8729 ppb        2.16416  55.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              3.5      2.0276 ug/L       2.28318      2.0276 ppb        2.28318 112.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             87.0      2.5987 ug/L       0.32843      2.5987 ppb        0.32843  12.64%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              1.9      0.3177 ug/L       0.33416      0.3177 ppb        0.33416 105.19%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             34.0      0.2114 ug/L       0.18235      0.2114 ppb        0.18235  86.26%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             83.9      0.1349 ug/L       0.07271      0.1349 ppb        0.07271  53.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -6.6     -1.8448 ug/L       1.80192     -1.8448 ppb        1.80192  97.67%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -65.6     -1.8080 ug/L       2.74174     -1.8080 ppb        2.74174 151.65%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             101.6      0.6754 ug/L       0.20653      0.6754 ppb        0.20653  30.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             24.7      0.2175 ug/L       0.01452      0.2175 ppb        0.01452   6.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   58.7      3.7528 ug/L       0.88516      3.7528 ppb        0.88516  23.59%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 82
Sample ID: 1201978595|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 12/9/2009 00:20:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978595|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5810.9	5810.9	99.4	%			00:22:13
1	Y RADIAL	6225.6	6225.6	99.01	%			00:22:13
1	Al 396.153Radial†	-25.2	-5.0	-3.4935	ug/L	-3.4935	ppb	00:22:13
1	Ca 317.933Radial†	22.9	7.5	11.003	ug/L	11.003	ppb	00:22:33
1	Fe 238.204 Radial†	10.0	3.3	30.494	ug/L	30.494	ppb	00:22:33
1	K 766.490 Radial†	2218.1	-121.0	-21.515	ug/L	-21.515	ppb	00:22:13
1	Mg 279.077 IEC†	2.2	1.1	37.552	ug/L	37.552	ppb	00:22:33
1	Na 589.592 Radial†	-673.3	410.8	137.85	ug/L	137.85	ppb	00:22:13
1	Sr 421.552†	-17.7	9.6	0.0595	ug/L	0.0595	ppb	00:22:13
1	Sc 361.383	900621.5	900621.5	99.929	%			00:23:30
1	Y 371.029	742752.6	742752.6	98.891	%			00:23:30
1	Ag 328.068†	233.5	-59.0	-0.2549	ug/L	-0.2549	ppb	00:23:35
1	As 188.979†	-30.7	-6.6	-2.5970	ug/L	-2.5970	ppb	00:23:55
1	B 249.677†	-431.3	99.1	2.0732	ug/L	2.0732	ppb	00:23:55
1	Ba 233.527†	-24.8	-16.4	-0.1180	ug/L	-0.1180	ppb	00:23:55
1	Be 313.107†	-5438.2	-329.1	-0.1194	ug/L	-0.1194	ppb	00:23:35
1	Cd 226.502†	-170.3	24.7	0.2579	ug/L	0.2579	ppb	00:23:55
1	Co 228.616†	-59.0	6.4	0.1225	ug/L	0.1225	ppb	00:23:55
1	Cr 267.716†	100.5	21.9	0.2317	ug/L	0.2317	ppb	00:23:55
1	Cu 324.752†	6664.2	-87.7	-0.2494	ug/L	-0.2494	ppb	00:23:35
1	Mn 257.610†	678.2	256.4	0.2759	ug/L	0.2759	ppb	00:23:55
1	Mo 202.031†	29.6	11.3	0.7205	ug/L	0.7205	ppb	00:23:55
1	Ni 231.604†	70.1	-16.4	-0.3798	ug/L	-0.3798	ppb	00:23:55
1	P 214.914†	226.0	2.7	1.5494	ug/L	1.5494	ppb	00:23:55
1	Pb 220.353†	-58.3	10.1	1.1406	ug/L	1.1406	ppb	00:23:55
1	S 181.975 Axial†	42.2	0.6	0.8661	ug/L	0.8661	ppb	00:23:55
1	Sb 206.836†	35.5	1.2	0.3915	ug/L	0.3915	ppb	00:23:55
1	Se 196.026†	-22.1	6.7	3.9606	ug/L	3.9606	ppb	00:23:55
1	Si 251.611†	696.0	246.8	7.3865	ug/L	7.3865	ppb	00:23:55
1	Sn 189.927†	0.3	-4.7	-0.7711	ug/L	-0.7711	ppb	00:23:55
1	Ti 334.940†	-954.1	160.1	0.2554	ug/L	0.2554	ppb	00:23:35
1	Tl 190.801†	-33.7	-1.2	-0.3300	ug/L	-0.3300	ppb	00:23:55
1	U 409.014†	-2343.2	57.0	1.5653	ug/L	1.5653	ppb	00:23:35
1	V 292.402†	-1193.0	164.5	1.0954	ug/L	1.0954	ppb	00:23:35
1	Zn 213.857†	780.4	159.1	1.3883	ug/L	1.3883	ppb	00:23:55
1	SiO2†	707.9	240.9	15.449	ug/L	15.449	ppb	00:25:01
2	Sc Radial	5720.4	5720.4	97.9	%			00:22:38
2	Y RADIAL	6125.7	6125.7	97.42	%			00:22:38
2	Al 396.153Radial†	-14.8	5.3	3.6712	ug/L	3.6712	ppb	00:22:38
2	Ca 317.933Radial†	24.2	9.1	13.400	ug/L	13.400	ppb	00:22:58
2	Fe 238.204 Radial†	7.9	1.3	11.870	ug/L	11.870	ppb	00:22:58
2	K 766.490 Radial†	2225.2	-78.5	-13.981	ug/L	-13.981	ppb	00:22:38
2	Mg 279.077 IEC†	1.6	0.5	17.458	ug/L	17.458	ppb	00:22:58
2	Na 589.592 Radial†	-675.1	398.3	133.66	ug/L	133.66	ppb	00:22:38
2	Sr 421.552†	-20.5	6.4	0.0398	ug/L	0.0398	ppb	00:22:38
2	Sc 361.383	903075.8	903075.8	100.20	%			00:24:00
2	Y 371.029	746567.6	746567.6	99.399	%			00:24:00
2	Ag 328.068†	262.9	-30.4	-0.1309	ug/L	-0.1309	ppb	00:24:05
2	As 188.979†	-32.3	-8.0	-3.1736	ug/L	-3.1736	ppb	00:24:25
2	B 249.677†	-404.6	126.9	2.6604	ug/L	2.6604	ppb	00:24:25
2	Ba 233.527†	-16.9	-8.5	-0.0610	ug/L	-0.0610	ppb	00:24:25
2	Be 313.107†	-5351.9	-228.1	-0.0826	ug/L	-0.0826	ppb	00:24:05
2	Cd 226.502†	-174.5	20.9	0.2195	ug/L	0.2195	ppb	00:24:25
2	Co 228.616†	-77.8	-12.2	-0.2343	ug/L	-0.2343	ppb	00:24:25
2	Cr 267.716†	109.1	30.2	0.3184	ug/L	0.3184	ppb	00:24:25
2	Cu 324.752†	6543.3	-226.5	-0.6477	ug/L	-0.6477	ppb	00:24:05
2	Mn 257.610†	683.2	259.5	0.2777	ug/L	0.2777	ppb	00:24:25
2	Mo 202.031†	9.8	-8.6	-0.5442	ug/L	-0.5442	ppb	00:24:25
2	Ni 231.604†	61.0	-25.7	-0.5945	ug/L	-0.5945	ppb	00:24:25

2	P 214.914†	234.5	10.5	6.1669 ug/L	6.1669 ppb	00:24:25
2	Pb 220.353†	-58.5	10.1	1.1383 ug/L	1.1383 ppb	00:24:25
2	S 181.975 Axial†	43.3	1.7	2.3169 ug/L	2.3169 ppb	00:24:25
2	Sb 206.836†	36.4	2.0	0.6443 ug/L	0.6443 ppb	00:24:25
2	Se 196.026†	-23.6	5.2	3.0578 ug/L	3.0578 ppb	00:24:25
2	Si 251.611†	702.2	251.2	7.5297 ug/L	7.5297 ppb	00:24:25
2	Sn 189.927†	11.2	6.2	1.0101 ug/L	1.0101 ppb	00:24:25
2	Ti 334.940†	-948.1	168.7	0.2703 ug/L	0.2703 ppb	00:24:05
2	Tl 190.801†	-40.5	-8.0	-2.2236 ug/L	-2.2236 ppb	00:24:25
2	U 409.014†	-2453.0	-46.2	-1.2753 ug/L	-1.2753 ppb	00:24:05
2	V 292.402†	-1279.1	81.8	0.5284 ug/L	0.5284 ppb	00:24:05
2	Zn 213.857†	783.3	159.9	1.3999 ug/L	1.3999 ppb	00:24:25
2	SiO2†	702.2	233.3	14.991 ug/L	14.991 ppb	00:25:06
3	Sc Radial	5772.0	5772.0	98.8 %		00:23:04
3	Y RADIAL	6145.3	6145.3	97.73 %		00:23:04
3	Al 396.153Radial†	-26.1	-6.0	-4.1692 ug/L	-4.1692 ppb	00:23:04
3	Ca 317.933Radial†	22.1	6.8	10.045 ug/L	10.045 ppb	00:23:24
3	Fe 238.204 Radial†	9.6	2.9	26.944 ug/L	26.944 ppb	00:23:24
3	K 766.490 Radial†	2228.2	-95.8	-17.057 ug/L	-17.057 ppb	00:23:04
3	Mg 279.077 IEC†	3.4	2.2	79.101 ug/L	79.101 ppb	00:23:24
3	Na 589.592 Radial†	-633.4	446.7	149.90 ug/L	149.90 ppb	00:23:04
3	Sr 421.552†	-7.0	20.2	0.1258 ug/L	0.1258 ppb	00:23:04
3	Sc 361.383	901699.8	901699.8	100.05 %		00:24:31
3	Y 371.029	744812.5	744812.5	99.165 %		00:24:31
3	Ag 328.068†	302.7	9.8	0.0533 ug/L	0.0533 ppb	00:24:36
3	As 188.979†	-26.7	-2.5	-0.9873 ug/L	-0.9873 ppb	00:24:56
3	B 249.677†	-413.0	117.9	2.4691 ug/L	2.4691 ppb	00:24:56
3	Ba 233.527†	-16.1	-7.7	-0.0553 ug/L	-0.0553 ppb	00:24:56
3	Be 313.107†	-5427.1	-311.5	-0.1129 ug/L	-0.1129 ppb	00:24:36
3	Cd 226.502†	-179.5	15.7	0.1627 ug/L	0.1627 ppb	00:24:56
3	Co 228.616†	-71.7	-6.2	-0.1185 ug/L	-0.1185 ppb	00:24:56
3	Cr 267.716†	104.3	25.6	0.2692 ug/L	0.2692 ppb	00:24:56
3	Cu 324.752†	6682.4	-77.5	-0.2205 ug/L	-0.2205 ppb	00:24:36
3	Mn 257.610†	687.1	264.4	0.2833 ug/L	0.2833 ppb	00:24:56
3	Mo 202.031†	23.3	5.0	0.3165 ug/L	0.3165 ppb	00:24:56
3	Ni 231.604†	62.1	-24.5	-0.5667 ug/L	-0.5667 ppb	00:24:56
3	P 214.914†	220.8	-2.9	-1.6316 ug/L	-1.6316 ppb	00:24:56
3	Pb 220.353†	-48.1	20.4	2.2999 ug/L	2.2999 ppb	00:24:56
3	S 181.975 Axial†	50.3	8.7	12.156 ug/L	12.156 ppb	00:24:56
3	Sb 206.836†	39.0	4.7	1.5090 ug/L	1.5090 ppb	00:24:56
3	Se 196.026†	-20.9	7.9	4.6693 ug/L	4.6693 ppb	00:24:56
3	Si 251.611†	762.4	312.4	9.3484 ug/L	9.3484 ppb	00:24:56
3	Sn 189.927†	9.7	4.7	0.7737 ug/L	0.7737 ppb	00:24:56
3	Ti 334.940†	-930.1	185.3	0.2958 ug/L	0.2958 ppb	00:24:36
3	Tl 190.801†	-38.1	-5.5	-1.5479 ug/L	-1.5479 ppb	00:24:56
3	U 409.014†	-2372.4	30.6	0.8394 ug/L	0.8394 ppb	00:24:36
3	V 292.402†	-1311.5	47.5	0.3169 ug/L	0.3169 ppb	00:24:36
3	Zn 213.857†	766.2	144.0	1.2568 ug/L	1.2568 ppb	00:24:56
3	SiO2†	691.4	223.7	14.342 ug/L	14.342 ppb	00:25:11

Mean Data: 1201978595|925478|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901799.1	100.06	%	0.136				0.14%
Sc Radial	5767.8	98.7	%	0.78				0.79%
Y 371.029	744710.9	99.151	%	0.2542				0.26%
Y RADIAL	6165.5	98.05	%	0.842				0.86%
Ag 328.068†	-26.5	-0.1108	ug/L	0.15506	-0.1108	ppb	0.15506	139.91%
Al 396.153Radial†	-1.9	-1.3305	ug/L	4.34476	-1.3305	ppb	4.34476	326.55%
As 188.979†	-5.7	-2.2526	ug/L	1.13308	-2.2526	ppb	1.13308	50.30%
B 249.677†	114.6	2.4009	ug/L	0.29950	2.4009	ppb	0.29950	12.47%
Ba 233.527†	-10.9	-0.0781	ug/L	0.03470	-0.0781	ppb	0.03470	44.42%
Be 313.107†	-289.6	-0.1050	ug/L	0.01965	-0.1050	ppb	0.01965	18.71%
Ca 317.933Radial†	7.8	11.483	ug/L	1.7281	11.483	ppb	1.7281	15.05%
Cd 226.502†	20.4	0.2134	ug/L	0.04789	0.2134	ppb	0.04789	22.44%
Co 228.616†	-4.0	-0.0768	ug/L	0.18207	-0.0768	ppb	0.18207	237.19%
Cr 267.716†	25.9	0.2731	ug/L	0.04350	0.2731	ppb	0.04350	15.93%
Cu 324.752†	-130.6	-0.3725	ug/L	0.23871	-0.3725	ppb	0.23871	64.08%
Fe 238.204 Radial†	2.5	23.102	ug/L	9.8884	23.102	ppb	9.8884	42.80%
K 766.490 Radial†	-98.4	-17.518	ug/L	3.7879	-17.518	ppb	3.7879	21.62%

Mg 279.077 IEC†	1.3	44.703	ug/L	31.4374	44.703	ppb	31.4374 70.32%
Mn 257.610†	260.1	0.2789	ug/L	0.00387	0.2789	ppb	0.00387 1.39%
Mo 202.031†	2.6	0.1643	ug/L	0.64592	0.1643	ppb	0.64592 393.20%
Na 589.592 Radial†	418.6	140.47	ug/L	8.429	140.47	ppb	8.429 6.00%
Ni 231.604†	-22.2	-0.5137	ug/L	0.11676	-0.5137	ppb	0.11676 22.73%
P 214.914†	3.4	2.0282	ug/L	3.92125	2.0282	ppb	3.92125 193.33%
Pb 220.353†	13.5	1.5263	ug/L	0.66999	1.5263	ppb	0.66999 43.90%
S 181.975 Axial†	3.6	5.1131	ug/L	6.14252	5.1131	ppb	6.14252 120.13%
Sb 206.836†	2.7	0.8483	ug/L	0.58598	0.8483	ppb	0.58598 69.08%
Se 196.026†	6.6	3.8959	ug/L	0.80768	3.8959	ppb	0.80768 20.73%
Si 251.611†	270.1	8.0882	ug/L	1.09369	8.0882	ppb	1.09369 13.52%
Sn 189.927†	2.1	0.3376	ug/L	0.96741	0.3376	ppb	0.96741 286.57%
Sr 421.552†	12.1	0.0751	ug/L	0.04504	0.0751	ppb	0.04504 60.00%
Ti 334.940†	171.4	0.2738	ug/L	0.02043	0.2738	ppb	0.02043 7.46%
Tl 190.801†	-4.9	-1.3672	ug/L	0.95968	-1.3672	ppb	0.95968 70.20%
U 409.014†	13.8	0.3765	ug/L	1.47580	0.3765	ppb	1.47580 392.03%
V 292.402†	97.9	0.6469	ug/L	0.40255	0.6469	ppb	0.40255 62.23%
Zn 213.857†	154.3	1.3483	ug/L	0.07946	1.3483	ppb	0.07946 5.89%
SiO2†	232.6	14.927	ug/L	0.5558	14.927	ppb	0.5558 3.72%

Sequence No.: 83
Sample ID: 1201978600|925478|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 12/9/2009 00:27:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978600|925478|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5813.6	5813.6	99.5	%			00:29:36
1	Y RADIAL	6512.1	6512.1	103.6	%			00:29:36
1	Al 396.153Radial†	44530.4	44782.8	31091	ug/L	31091	ppb	00:29:16
1	Ca 317.933Radial†	11556.9	11601.6	17100	ug/L	17100	ppb	00:29:16
1	Fe 238.204 Radial†	10189.2	10235.5	95835	ug/L	95835	ppb	00:29:16
1	K 766.490 Radial†	65047.7	63034.8	11162	ug/L	11162	ppb	00:29:16
1	Mg 279.077 IEC†	399.7	400.6	14058	ug/L	14058	ppb	00:29:36
1	Na 589.592 Radial†	7384.5	8510.9	2856.1	ug/L	2856.1	ppb	00:29:16
1	Sr 421.552†	126804.8	127492.8	793.83	ug/L	793.83	ppb	00:29:16
1	Sc 361.383	898728.9	898728.9	99.719	%			00:30:35
1	Y 371.029	774912.5	774912.5	103.17	%			00:30:35
1	Ag 328.068†	132712.7	132794.4	634.65	ug/L	634.65	ppb	00:30:35
1	As 188.979†	2937.9	2970.4	1202.6	ug/L	1202.6	ppb	00:30:55
1	B 249.677†	29635.0	30249.3	620.65	ug/L	620.65	ppb	00:30:35
1	Ba 233.527†	299058.2	299910.3	2227.9	ug/L	2227.9	ppb	00:30:35
1	Be 313.107†	1121762.9	1130040.3	415.35	ug/L	415.35	ppb	00:30:35
1	Cd 226.502†	52818.3	53162.4	552.73	ug/L	552.73	ppb	00:30:35
1	Co 228.616†	20551.7	20675.1	389.12	ug/L	389.12	ppb	00:30:55
1	Cr 267.716†	34481.3	34499.9	365.18	ug/L	365.18	ppb	00:30:35
1	Cu 324.752†	172686.7	166417.1	481.13	ug/L	481.13	ppb	00:30:35
1	Mn 257.610†	1641070.4	1645277.6	1764.4	ug/L	1764.4	ppb	00:30:35
1	Mo 202.031†	6041.3	6040.0	390.50	ug/L	390.50	ppb	00:30:55
1	Ni 231.604†	20540.9	20512.3	474.74	ug/L	474.74	ppb	00:30:55
1	P 214.914†	6604.2	6399.3	3554.4	ug/L	3554.4	ppb	00:30:55
1	Pb 220.353†	6847.2	6934.9	783.65	ug/L	783.65	ppb	00:30:55
1	S 181.975 Axial†	752.4	712.9	992.85	ug/L	992.85	ppb	00:30:55
1	Sb 206.836†	1335.3	1304.8	418.75	ug/L	418.75	ppb	00:30:55
1	Se 196.026†	1074.3	1106.1	948.29	ug/L	948.29	ppb	00:30:55
1	Si 251.611†	440000.1	440791.7	13183	ug/L	13183	ppb	00:30:35
1	Sn 189.927†	3034.3	3037.8	500.46	ug/L	500.46	ppb	00:30:55
1	Ti 334.940†	1096186.7	1100394.0	1756.8	ug/L	1756.8	ppb	00:30:35
1	Tl 190.801†	3264.4	3306.1	946.96	ug/L	946.96	ppb	00:30:55
1	U 409.014†	-6354.3	-3970.4	-122.13	ug/L	-122.13	ppb	00:30:35
1	V 292.402†	107668.9	109331.0	711.06	ug/L	711.06	ppb	00:30:35
1	Zn 213.857†	108075.0	107758.0	928.18	ug/L	928.18	ppb	00:30:35
1	SiO2†	446946.4	447739.8	28695	ug/L	28695	ppb	00:31:56
2	Sc Radial	5785.9	5785.9	99.0	%			00:30:01
2	Y RADIAL	6495.8	6495.8	103.3	%			00:30:01
2	Al 396.153Radial†	44543.3	45010.4	31249	ug/L	31249	ppb	00:29:41
2	Ca 317.933Radial†	11598.2	11698.9	17244	ug/L	17244	ppb	00:29:41
2	Fe 238.204 Radial†	10201.2	10296.7	96408	ug/L	96408	ppb	00:29:41
2	K 766.490 Radial†	64894.8	63193.8	11190	ug/L	11190	ppb	00:29:41
2	Mg 279.077 IEC†	399.3	402.2	14114	ug/L	14114	ppb	00:30:01
2	Na 589.592 Radial†	7341.9	8503.5	2853.6	ug/L	2853.6	ppb	00:29:41
2	Sr 421.552†	126731.2	128029.4	797.17	ug/L	797.17	ppb	00:29:41
2	Sc 361.383	904949.8	904949.8	100.41	%			00:31:02
2	Y 371.029	782204.3	782204.3	104.14	%			00:31:02
2	Ag 328.068†	133567.2	132730.5	634.55	ug/L	634.55	ppb	00:31:02
2	As 188.979†	2951.6	2963.8	1200.1	ug/L	1200.1	ppb	00:31:22
2	B 249.677†	30010.5	30419.0	624.14	ug/L	624.14	ppb	00:31:02
2	Ba 233.527†	301140.1	299922.0	2228.0	ug/L	2228.0	ppb	00:31:02
2	Be 313.107†	1134175.8	1134669.5	417.04	ug/L	417.04	ppb	00:31:02
2	Cd 226.502†	53292.5	53270.5	553.81	ug/L	553.81	ppb	00:31:02
2	Co 228.616†	20622.7	20604.2	387.76	ug/L	387.76	ppb	00:31:22
2	Cr 267.716†	34760.5	34540.3	365.61	ug/L	365.61	ppb	00:31:02
2	Cu 324.752†	173771.5	166307.1	480.84	ug/L	480.84	ppb	00:31:02
2	Mn 257.610†	1651002.5	1643856.0	1762.9	ug/L	1762.9	ppb	00:31:02
2	Mo 202.031†	6065.0	6022.0	389.39	ug/L	389.39	ppb	00:31:22
2	Ni 231.604†	20647.7	20477.1	473.93	ug/L	473.93	ppb	00:31:22

2	P 214.914†	6628.0	6377.5	3541.4 ug/L	3541.4 ppb	00:31:22
2	Pb 220.353†	6891.2	6931.6	783.26 ug/L	783.26 ppb	00:31:22
2	S 181.975 Axial†	746.5	701.9	977.42 ug/L	977.42 ppb	00:31:22
2	Sb 206.836†	1350.5	1310.8	420.64 ug/L	420.64 ppb	00:31:22
2	Se 196.026†	1089.4	1113.8	954.54 ug/L	954.54 ppb	00:31:22
2	Si 251.611†	442974.0	440720.2	13181 ug/L	13181 ppb	00:31:02
2	Sn 189.927†	3062.8	3045.4	501.72 ug/L	501.72 ppb	00:31:22
2	Ti 334.940†	1103352.0	1099973.2	1756.2 ug/L	1756.2 ppb	00:31:02
2	Tl 190.801†	3287.2	3306.3	947.00 ug/L	947.00 ppb	00:31:22
2	U 409.014†	-6458.1	-4030.0	-123.84 ug/L	-123.84 ppb	00:31:02
2	V 292.402†	108502.8	109419.2	711.53 ug/L	711.53 ppb	00:31:02
2	Zn 213.857†	108851.1	107785.9	928.37 ug/L	928.37 ppb	00:31:02
2	SiO2†	439976.8	437717.4	28052 ug/L	28052 ppb	00:32:01
3	Sc Radial	5765.2	5765.2	98.7 %		00:30:26
3	Y RADIAL	6458.5	6458.5	102.7 %		00:30:26
3	Al 396.153Radial†	44963.7	45598.2	31657 ug/L	31657 ppb	00:30:06
3	Ca 317.933Radial†	11707.0	11851.4	17468 ug/L	17468 ppb	00:30:06
3	Fe 238.204 Radial†	10336.2	10470.6	98036 ug/L	98036 ppb	00:30:06
3	K 766.490 Radial†	65601.5	64145.8	11359 ug/L	11359 ppb	00:30:06
3	Mg 279.077 IEC†	402.7	407.1	14285 ug/L	14285 ppb	00:30:26
3	Na 589.592 Radial†	7502.1	8692.6	2917.1 ug/L	2917.1 ppb	00:30:06
3	Sr 421.552†	128523.4	130306.3	811.35 ug/L	811.35 ppb	00:30:06
3	Sc 361.383	905128.9	905128.9	100.43 %		00:31:30
3	Y 371.029	780882.4	780882.4	103.97 %		00:31:30
3	Ag 328.068†	133923.6	133059.0	636.56 ug/L	636.56 ppb	00:31:30
3	As 188.979†	2940.0	2951.6	1195.6 ug/L	1195.6 ppb	00:31:50
3	B 249.677†	29977.0	30379.6	623.10 ug/L	623.10 ppb	00:31:30
3	Ba 233.527†	302822.1	301537.5	2240.0 ug/L	2240.0 ppb	00:31:30
3	Be 313.107†	1136656.9	1136916.5	417.87 ug/L	417.87 ppb	00:31:30
3	Cd 226.502†	53505.1	53471.8	555.77 ug/L	555.77 ppb	00:31:30
3	Co 228.616†	20555.1	20532.8	386.37 ug/L	386.37 ppb	00:31:50
3	Cr 267.716†	34827.2	34599.8	366.27 ug/L	366.27 ppb	00:31:30
3	Cu 324.752†	174362.0	166860.8	482.51 ug/L	482.51 ppb	00:31:30
3	Mn 257.610†	1660300.3	1652788.8	1772.6 ug/L	1772.6 ppb	00:31:30
3	Mo 202.031†	6030.6	5986.5	387.25 ug/L	387.25 ppb	00:31:50
3	Ni 231.604†	20575.9	20401.5	472.18 ug/L	472.18 ppb	00:31:50
3	P 214.914†	6576.3	6324.7	3509.6 ug/L	3509.6 ppb	00:31:50
3	Pb 220.353†	6856.9	6896.0	779.19 ug/L	779.19 ppb	00:31:50
3	S 181.975 Axial†	749.1	704.3	980.68 ug/L	980.68 ppb	00:31:50
3	Sb 206.836†	1329.1	1289.2	413.75 ug/L	413.75 ppb	00:31:50
3	Se 196.026†	1082.0	1106.2	955.34 ug/L	955.34 ppb	00:31:50
3	Si 251.611†	444821.2	442472.3	13234 ug/L	13234 ppb	00:31:30
3	Sn 189.927†	3059.4	3041.4	501.11 ug/L	501.11 ppb	00:31:50
3	Ti 334.940†	1107784.7	1104169.6	1762.9 ug/L	1762.9 ppb	00:31:30
3	Tl 190.801†	3276.5	3295.0	943.95 ug/L	943.95 ppb	00:31:50
3	U 409.014†	-6382.1	-3953.0	-121.93 ug/L	-121.93 ppb	00:31:30
3	V 292.402†	108926.6	109819.9	713.90 ug/L	713.90 ppb	00:31:30
3	Zn 213.857†	109393.2	108304.3	932.75 ug/L	932.75 ppb	00:31:30
3	SiO2†	439830.5	437485.0	28037 ug/L	28037 ppb	00:32:06

Mean Data: 1201978600|925478|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902935.9	100.19	%	0.404				0.40%
Sc Radial	5788.2	99.0	%	0.42				0.42%
Y 371.029	779333.0	103.76	%	0.517				0.50%
Y RADIAL	6488.8	103.2	%	0.44				0.42%
Ag 328.068†	132861.3	635.25	ug/L	1.132	635.25	ppb	1.132	0.18%
Al 396.153Radial†	45130.5	31332	ug/L	292.4	31332	ppb	292.4	0.93%
As 188.979†	2961.9	1199.4	ug/L	3.55	1199.4	ppb	3.55	0.30%
B 249.677†	30349.3	622.63	ug/L	1.790	622.63	ppb	1.790	0.29%
Ba 233.527†	300456.6	2232.0	ug/L	6.98	2232.0	ppb	6.98	0.31%
Be 313.107†	1133875.5	416.75	ug/L	1.283	416.75	ppb	1.283	0.31%
Ca 317.933Radial†	11717.3	17271	ug/L	185.6	17271	ppb	185.6	1.07%
Cd 226.502†	53301.6	554.10	ug/L	1.545	554.10	ppb	1.545	0.28%
Co 228.616†	20604.0	387.75	ug/L	1.375	387.75	ppb	1.375	0.35%
Cr 267.716†	34546.7	365.69	ug/L	0.551	365.69	ppb	0.551	0.15%
Cu 324.752†	166528.3	481.49	ug/L	0.892	481.49	ppb	0.892	0.19%
Fe 238.204 Radial†	10334.2	96759	ug/L	1141.8	96759	ppb	1141.8	1.18%
K 766.490 Radial†	63458.2	11237	ug/L	106.5	11237	ppb	106.5	0.95%

Mg 279.077 IEC†	403.3	14152	ug/L	118.4	14152	ppb	118.4	0.84%
Mn 257.610†	1647307.4	1766.6	ug/L	5.22	1766.6	ppb	5.22	0.30%
Mo 202.031†	6016.2	389.05	ug/L	1.648	389.05	ppb	1.648	0.42%
Na 589.592 Radial†	8569.0	2875.6	ug/L	35.93	2875.6	ppb	35.93	1.25%
Ni 231.604†	20463.6	473.62	ug/L	1.311	473.62	ppb	1.311	0.28%
P 214.914†	6367.2	3535.1	ug/L	23.05	3535.1	ppb	23.05	0.65%
Pb 220.353†	6920.8	782.03	ug/L	2.470	782.03	ppb	2.470	0.32%
S 181.975 Axial†	706.4	983.65	ug/L	8.132	983.65	ppb	8.132	0.83%
Sb 206.836†	1301.6	417.71	ug/L	3.562	417.71	ppb	3.562	0.85%
Se 196.026†	1108.7	952.72	ug/L	3.864	952.72	ppb	3.864	0.41%
Si 251.611†	441328.1	13200	ug/L	29.7	13200	ppb	29.7	0.22%
Sn 189.927†	3041.5	501.10	ug/L	0.627	501.10	ppb	0.627	0.13%
Sr 421.552†	128609.5	800.79	ug/L	9.301	800.79	ppb	9.301	1.16%
Ti 334.940†	1101512.2	1758.6	ug/L	3.70	1758.6	ppb	3.70	0.21%
Tl 190.801†	3302.5	945.97	ug/L	1.750	945.97	ppb	1.750	0.18%
U 409.014†	-3984.5	-122.63	ug/L	1.052	-122.63	ppb	1.052	0.86%
V 292.402†	109523.4	712.16	ug/L	1.523	712.16	ppb	1.523	0.21%
Zn 213.857†	107949.4	929.77	ug/L	2.584	929.77	ppb	2.584	0.28%
SiO2†	440980.7	28262	ug/L	375.6	28262	ppb	375.6	1.33%

Sequence No.: 84
Sample ID: 241541001|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 12/9/2009 00:34:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541001|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5919.1	5919.1	101	%			00:36:31
1	Y RADIAL	6986.5	6986.5	111.1	%			00:36:31
1	Al 396.153Radial†	148188.7	146327.7	101640	ug/L	101640	ppb	00:36:11
1	Ca 317.933Radial†	13604.0	13415.7	19774	ug/L	19774	ppb	00:36:11
1	Fe 238.204 Radial†	15611.2	15406.2	144230	ug/L	144230	ppb	00:36:11
1	K 766.490 Radial†	55038.6	51988.1	9182.2	ug/L	9182.2	ppb	00:36:11
1	Mg 279.077 IEC†	629.4	620.2	21757	ug/L	21757	ppb	00:36:31
1	Na 589.592 Radial†	14700.6	15601.9	5235.7	ug/L	5235.7	ppb	00:36:11
1	Sr 421.552†	48193.0	47608.5	296.31	ug/L	296.31	ppb	00:36:11
1	Sc 361.383	915758.0	915758.0	101.61	%			00:37:29
1	Y 371.029	815448.8	815448.8	108.57	%			00:37:34
1	Ag 328.068†	-9293.6	-9439.3	4.1298	ug/L	4.1298	ppb	00:37:34
1	As 188.979†	-61.5	-36.3	33.792	ug/L	33.792	ppb	00:37:54
1	B 249.677†	1735.6	2238.8	27.571	ug/L	27.571	ppb	00:37:34
1	Ba 233.527†	117479.0	115628.1	862.95	ug/L	862.95	ppb	00:37:34
1	Be 313.107†	229.0	5338.4	7.9999	ug/L	7.9999	ppb	00:37:34
1	Cd 226.502†	1260.8	1435.9	0.8002	ug/L	0.8002	ppb	00:37:54
1	Co 228.616†	5108.4	5093.0	88.377	ug/L	88.377	ppb	00:37:54
1	Cr 267.716†	8907.3	8687.7	94.339	ug/L	94.339	ppb	00:37:54
1	Cu 324.752†	31106.5	23857.5	75.631	ug/L	75.631	ppb	00:37:34
1	Mn 257.610†	3874498.5	3812754.0	4081.2	ug/L	4081.2	ppb	00:37:29
1	Mo 202.031†	-76.7	-93.8	4.2712	ug/L	4.2712	ppb	00:37:54
1	Ni 231.604†	2833.1	2701.7	62.500	ug/L	62.500	ppb	00:37:54
1	P 214.914†	1640.9	1391.4	709.35	ug/L	709.35	ppb	00:37:54
1	Pb 220.353†	1209.2	1258.5	153.17	ug/L	153.17	ppb	00:37:54
1	S 181.975 Axial†	567.9	517.3	704.86	ug/L	704.86	ppb	00:37:54
1	Sb 206.836†	53.1	18.0	-5.1656	ug/L	-5.1656	ppb	00:37:54
1	Se 196.026†	-628.4	-589.7	131.88	ug/L	131.88	ppb	00:37:54
1	Si 251.611†	1165802.5	1146901.5	34330	ug/L	34330	ppb	00:37:29
1	Sn 189.927†	-116.1	-119.2	-15.480	ug/L	-15.480	ppb	00:37:54
1	Ti 334.940†	1960016.5	1930109.9	3081.1	ug/L	3081.1	ppb	00:37:29
1	Tl 190.801†	-198.0	-162.4	3.6346	ug/L	3.6346	ppb	00:37:54
1	U 409.014†	-7771.7	-5246.8	-162.86	ug/L	-162.86	ppb	00:37:34
1	V 292.402†	43626.4	44294.3	267.32	ug/L	267.32	ppb	00:37:34
1	Zn 213.857†	25980.3	24947.2	202.95	ug/L	202.95	ppb	00:37:54
1	SiO2†	1165509.9	1146595.8	73545	ug/L	73545	ppb	00:39:04
2	Sc Radial	5712.3	5712.3	97.7	%			00:36:56
2	Y RADIAL	6755.9	6755.9	107.4	%			00:36:56
2	Al 396.153Radial†	144639.3	147991.2	102800	ug/L	102800	ppb	00:36:36
2	Ca 317.933Radial†	13312.8	13603.9	20051	ug/L	20051	ppb	00:36:36
2	Fe 238.204 Radial†	15275.6	15620.6	146240	ug/L	146240	ppb	00:36:36
2	K 766.490 Radial†	53845.9	52734.4	9314.8	ug/L	9314.8	ppb	00:36:36
2	Mg 279.077 IEC†	635.9	649.4	22785	ug/L	22785	ppb	00:36:56
2	Na 589.592 Radial†	14368.2	15787.1	5297.9	ug/L	5297.9	ppb	00:36:36
2	Sr 421.552†	46957.2	48066.1	299.16	ug/L	299.16	ppb	00:36:36
2	Sc 361.383	923106.3	923106.3	102.42	%			00:38:01
2	Y 371.029	812079.9	812079.9	108.12	%			00:38:06
2	Ag 328.068†	-9126.5	-9203.2	5.8212	ug/L	5.8212	ppb	00:38:06
2	As 188.979†	-53.1	-27.7	37.513	ug/L	37.513	ppb	00:38:26
2	B 249.677†	1615.0	2107.4	24.550	ug/L	24.550	ppb	00:38:06
2	Ba 233.527†	116855.0	114098.5	851.68	ug/L	851.68	ppb	00:38:06
2	Be 313.107†	137.0	5246.7	7.9677	ug/L	7.9677	ppb	00:38:06
2	Cd 226.502†	1278.1	1442.9	0.6739	ug/L	0.6739	ppb	00:38:26
2	Co 228.616†	5141.7	5085.5	88.198	ug/L	88.198	ppb	00:38:26
2	Cr 267.716†	8964.6	8673.9	94.224	ug/L	94.224	ppb	00:38:26
2	Cu 324.752†	30954.5	23465.4	74.611	ug/L	74.611	ppb	00:38:06
2	Mn 257.610†	3894940.0	3802357.2	4070.3	ug/L	4070.3	ppb	00:38:01
2	Mo 202.031†	-83.2	-99.5	4.0502	ug/L	4.0502	ppb	00:38:26
2	Ni 231.604†	2859.6	2705.4	62.586	ug/L	62.586	ppb	00:38:26

2	P 214.914†	1636.3	1374.1	698.32 ug/L	698.32 ppb	00:38:26
2	Pb 220.353†	1186.6	1227.0	149.70 ug/L	149.70 ppb	00:38:26
2	S 181.975 Axial†	584.7	529.3	721.49 ug/L	721.49 ppb	00:38:26
2	Sb 206.836†	63.3	27.5	-2.1977 ug/L	-2.1977 ppb	00:38:26
2	Se 196.026†	-631.1	-587.3	139.78 ug/L	139.78 ppb	00:38:26
2	Si 251.611†	1174971.7	1146720.3	34325 ug/L	34325 ppb	00:38:01
2	Sn 189.927†	-125.9	-128.0	-16.856 ug/L	-16.856 ppb	00:38:26
2	Ti 334.940†	1976133.8	1930490.3	3081.8 ug/L	3081.8 ppb	00:38:01
2	Tl 190.801†	-187.1	-150.1	7.0391 ug/L	7.0391 ppb	00:38:26
2	U 409.014†	-7988.5	-5397.7	-167.27 ug/L	-167.27 ppb	00:38:06
2	V 292.402†	43342.6	43675.4	262.93 ug/L	262.93 ppb	00:38:06
2	Zn 213.857†	26186.9	24945.4	202.71 ug/L	202.71 ppb	00:38:26
2	SiO2†	1174680.1	1146417.9	73533 ug/L	73533 ppb	00:39:10
3	Sc Radial	5898.2	5898.2	101 %		00:37:21
3	Y RADIAL	6963.6	6963.6	110.7 %		00:37:21
3	Al 396.153Radial†	147296.4	145962.4	101390 ug/L	101390 ppb	00:37:01
3	Ca 317.933Radial†	13502.4	13362.6	19696 ug/L	19696 ppb	00:37:01
3	Fe 238.204 Radial†	15478.9	15329.8	143520 ug/L	143520 ppb	00:37:01
3	K 766.490 Radial†	54739.5	51884.5	9163.9 ug/L	9163.9 ppb	00:37:01
3	Mg 279.077 IEC†	639.0	631.9	22171 ug/L	22171 ppb	00:37:21
3	Na 589.592 Radial†	14578.3	15532.2	5212.3 ug/L	5212.3 ppb	00:37:01
3	Sr 421.552†	47740.4	47328.8	294.57 ug/L	294.57 ppb	00:37:01
3	Sc 361.383	924249.6	924249.6	102.55 %		00:38:33
3	Y 371.029	818671.3	818671.3	109.00 %		00:38:38
3	Ag 328.068†	-9327.7	-9388.5	4.1305 ug/L	4.1305 ppb	00:38:38
3	As 188.979†	-63.5	-37.8	33.059 ug/L	33.059 ppb	00:38:58
3	B 249.677†	1618.1	2108.5	24.935 ug/L	24.935 ppb	00:38:38
3	Ba 233.527†	118526.5	115587.3	862.62 ug/L	862.62 ppb	00:38:38
3	Be 313.107†	327.5	5432.3	8.0227 ug/L	8.0227 ppb	00:38:38
3	Cd 226.502†	1256.9	1420.7	0.7111 ug/L	0.7111 ppb	00:38:58
3	Co 228.616†	5134.0	5071.7	87.992 ug/L	87.992 ppb	00:38:58
3	Cr 267.716†	8958.3	8656.8	94.001 ug/L	94.001 ppb	00:38:58
3	Cu 324.752†	31296.0	23760.9	75.318 ug/L	75.318 ppb	00:38:38
3	Mn 257.610†	3900873.7	3803439.6	4071.2 ug/L	4071.2 ppb	00:38:33
3	Mo 202.031†	-96.6	-112.5	3.0320 ug/L	3.0320 ppb	00:38:58
3	Ni 231.604†	2858.2	2700.6	62.475 ug/L	62.475 ppb	00:38:58
3	P 214.914†	1644.2	1379.8	703.24 ug/L	703.24 ppb	00:38:58
3	Pb 220.353†	1191.7	1230.5	150.00 ug/L	150.00 ppb	00:38:58
3	S 181.975 Axial†	581.7	525.7	716.64 ug/L	716.64 ppb	00:38:58
3	Sb 206.836†	56.7	21.1	-4.1627 ug/L	-4.1627 ppb	00:38:58
3	Se 196.026†	-629.1	-584.6	132.49 ug/L	132.49 ppb	00:38:58
3	Si 251.611†	1174023.1	1144376.4	34255 ug/L	34255 ppb	00:38:33
3	Sn 189.927†	-100.6	-103.1	-12.857 ug/L	-12.857 ppb	00:38:58
3	Ti 334.940†	1974436.9	1926449.1	3075.3 ug/L	3075.3 ppb	00:38:33
3	Tl 190.801†	-196.2	-158.8	4.5238 ug/L	4.5238 ppb	00:38:58
3	U 409.014†	-7847.8	-5250.9	-162.88 ug/L	-162.88 ppb	00:38:38
3	V 292.402†	43914.4	44180.7	266.68 ug/L	266.68 ppb	00:38:38
3	Zn 213.857†	26221.4	24947.5	203.01 ug/L	203.01 ppb	00:38:58
3	SiO2†	1157958.9	1128693.9	72397 ug/L	72397 ppb	00:39:16

Mean Data: 241541001|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	921038.0	102.19	%	0.511				0.50%
Sc Radial	5843.2	100.0	%	1.95				1.95%
Y 371.029	815400.0	108.56	%	0.439				0.40%
Y RADIAL	6902.0	109.8	%	2.02				1.84%
Ag 328.068†	-9343.7	4.6938	ug/L	0.97629	4.6938	ppb	0.97629	20.80%
Al 396.153Radial†	146760.4	101940	ug/L	751.2	101940	ppb	751.2	0.74%
As 188.979†	-33.9	34.788	ug/L	2.3881	34.788	ppb	2.3881	6.86%
B 249.677†	2151.6	25.685	ug/L	1.6442	25.685	ppb	1.6442	6.40%
Ba 233.527†	115104.6	859.08	ug/L	6.414	859.08	ppb	6.414	0.75%
Be 313.107†	5339.2	7.9967	ug/L	0.02762	7.9967	ppb	0.02762	0.35%
Ca 317.933Radial†	13460.7	19840	ug/L	186.9	19840	ppb	186.9	0.94%
Cd 226.502†	1433.2	0.7284	ug/L	0.06489	0.7284	ppb	0.06489	8.91%
Co 228.616†	5083.4	88.189	ug/L	0.1922	88.189	ppb	0.1922	0.22%
Cr 267.716†	8672.8	94.188	ug/L	0.1720	94.188	ppb	0.1720	0.18%
Cu 324.752†	23694.6	75.187	ug/L	0.5224	75.187	ppb	0.5224	0.69%
Fe 238.204 Radial†	15452.2	144660	ug/L	1411.5	144660	ppb	1411.5	0.98%
K 766.490 Radial†	52202.3	9220.3	ug/L	82.36	9220.3	ppb	82.36	0.89%

Mg 279.077 IEC†	633.9	22237	ug/L	517.2	22237	ppb	517.2	2.33%
Mn 257.610†	3806183.6	4074.2	ug/L	6.06	4074.2	ppb	6.06	0.15%
Mo 202.031†	-102.0	3.7844	ug/L	0.66094	3.7844	ppb	0.66094	17.46%
Na 589.592 Radial†	15640.4	5248.6	ug/L	44.21	5248.6	ppb	44.21	0.84%
Ni 231.604†	2702.6	62.520	ug/L	0.0581	62.520	ppb	0.0581	0.09%
P 214.914†	1381.8	703.64	ug/L	5.527	703.64	ppb	5.527	0.79%
Pb 220.353†	1238.6	150.96	ug/L	1.922	150.96	ppb	1.922	1.27%
S 181.975 Axial†	524.1	714.33	ug/L	8.550	714.33	ppb	8.550	1.20%
Sb 206.836†	22.2	-3.8420	ug/L	1.50974	-3.8420	ppb	1.50974	39.30%
Se 196.026†	-587.2	134.72	ug/L	4.394	134.72	ppb	4.394	3.26%
Si 251.611†	1145999.4	34303	ug/L	42.1	34303	ppb	42.1	0.12%
Sn 189.927†	-116.7	-15.064	ug/L	2.0317	-15.064	ppb	2.0317	13.49%
Sr 421.552†	47667.8	296.68	ug/L	2.316	296.68	ppb	2.316	0.78%
Ti 334.940†	1929016.4	3079.4	ug/L	3.57	3079.4	ppb	3.57	0.12%
Tl 190.801†	-157.1	5.0659	ug/L	1.76579	5.0659	ppb	1.76579	34.86%
U 409.014†	-5298.5	-164.33	ug/L	2.539	-164.33	ppb	2.539	1.55%
V 292.402†	44050.1	265.64	ug/L	2.367	265.64	ppb	2.367	0.89%
Zn 213.857†	24946.7	202.89	ug/L	0.159	202.89	ppb	0.159	0.08%
SiO2†	1140569.2	73158	ug/L	659.7	73158	ppb	659.7	0.90%

Sequence No.: 85
Sample ID: 1201978596|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 12/9/2009 00:41:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978596|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5874.5	5874.5	101	%			00:43:41
1	Y RADIAL	6841.0	6841.0	108.8	%			00:43:41
1	Al 396.153Radial†	153446.5	152667.7	106050	ug/L	106050	ppb	00:43:21
1	Ca 317.933Radial†	13710.4	13623.4	20080	ug/L	20080	ppb	00:43:21
1	Fe 238.204 Radial†	15205.9	15119.8	141550	ug/L	141550	ppb	00:43:21
1	K 766.490 Radial†	55866.5	53223.8	9415.3	ug/L	9415.3	ppb	00:43:21
1	Mg 279.077 IEC†	646.4	641.9	22524	ug/L	22524	ppb	00:43:41
1	Na 589.592 Radial†	15119.2	16128.4	5412.4	ug/L	5412.4	ppb	00:43:21
1	Sr 421.552†	48339.1	48114.6	299.46	ug/L	299.46	ppb	00:43:21
1	Sc 361.383	908506.2	908506.2	100.80	%			00:44:39
1	Y 371.029	815933.5	815933.5	108.63	%			00:44:39
1	Ag 328.068†	-8712.5	-8935.8	5.5276	ug/L	5.5276	ppb	00:44:59
1	As 188.979†	-64.0	-39.3	32.630	ug/L	32.630	ppb	00:44:59
1	B 249.677†	1492.3	2011.1	23.233	ug/L	23.233	ppb	00:44:39
1	Ba 233.527†	119395.8	118452.6	883.76	ug/L	883.76	ppb	00:44:39
1	Be 313.107†	-406.1	4710.1	7.8734	ug/L	7.8734	ppb	00:44:39
1	Cd 226.502†	1227.8	1413.1	0.8286	ug/L	0.8286	ppb	00:44:59
1	Co 228.616†	3357.3	3396.0	56.108	ug/L	56.108	ppb	00:44:59
1	Cr 267.716†	9120.6	8969.3	97.235	ug/L	97.235	ppb	00:44:59
1	Cu 324.752†	30843.7	23841.1	75.447	ug/L	75.447	ppb	00:44:39
1	Mn 257.610†	2814006.9	2791153.3	2991.1	ug/L	2991.1	ppb	00:44:39
1	Mo 202.031†	-84.5	-102.1	3.5524	ug/L	3.5524	ppb	00:44:59
1	Ni 231.604†	2882.9	2773.4	64.181	ug/L	64.181	ppb	00:44:59
1	P 214.914†	1599.3	1363.1	696.69	ug/L	696.69	ppb	00:44:59
1	Pb 220.353†	1027.6	1087.9	135.09	ug/L	135.09	ppb	00:44:59
1	S 181.975 Axial†	577.8	531.6	724.12	ug/L	724.12	ppb	00:44:59
1	Sb 206.836†	68.5	33.7	-0.6090	ug/L	-0.6090	ppb	00:44:59
1	Se 196.026†	-625.5	-591.7	123.04	ug/L	123.04	ppb	00:44:59
1	Si 251.611†	1136989.0	1127476.0	33749	ug/L	33749	ppb	00:44:39
1	Sn 189.927†	-108.3	-112.4	-14.370	ug/L	-14.370	ppb	00:44:59
1	Ti 334.940†	1977442.5	1962794.7	3133.3	ug/L	3133.3	ppb	00:44:39
1	Tl 190.801†	-167.9	-134.0	5.8888	ug/L	5.8888	ppb	00:44:59
1	U 409.014†	-8174.5	-5707.5	-175.22	ug/L	-175.22	ppb	00:44:39
1	V 292.402†	41880.4	42904.9	258.48	ug/L	258.48	ppb	00:44:39
1	Zn 213.857†	26984.5	26147.5	213.65	ug/L	213.65	ppb	00:44:59
1	SiO2†	1141529.8	1131962.8	72606	ug/L	72606	ppb	00:45:59
2	Sc Radial	5869.0	5869.0	100	%			00:44:06
2	Y RADIAL	6863.2	6863.2	109.2	%			00:44:06
2	Al 396.153Radial†	151337.9	150711.3	104690	ug/L	104690	ppb	00:43:46
2	Ca 317.933Radial†	13503.8	13430.4	19796	ug/L	19796	ppb	00:43:46
2	Fe 238.204 Radial†	14948.6	14877.9	139290	ug/L	139290	ppb	00:43:46
2	K 766.490 Radial†	55070.0	52482.8	9283.5	ug/L	9283.5	ppb	00:43:46
2	Mg 279.077 IEC†	650.4	646.4	22685	ug/L	22685	ppb	00:44:06
2	Na 589.592 Radial†	14925.9	15950.1	5352.5	ug/L	5352.5	ppb	00:43:46
2	Sr 421.552†	47611.5	47435.3	295.23	ug/L	295.23	ppb	00:43:46
2	Sc 361.383	910151.7	910151.7	100.99	%			00:45:06
2	Y 371.029	817217.7	817217.7	108.81	%			00:45:06
2	Ag 328.068†	-8730.9	-8938.3	4.8027	ug/L	4.8027	ppb	00:45:26
2	As 188.979†	-58.2	-33.4	34.714	ug/L	34.714	ppb	00:45:26
2	B 249.677†	1290.7	1808.8	19.291	ug/L	19.291	ppb	00:45:06
2	Ba 233.527†	120086.2	118922.0	887.16	ug/L	887.16	ppb	00:45:06
2	Be 313.107†	-314.9	4801.1	7.9276	ug/L	7.9276	ppb	00:45:06
2	Cd 226.502†	1213.6	1396.9	0.8830	ug/L	0.8830	ppb	00:45:26
2	Co 228.616†	3369.3	3401.8	56.230	ug/L	56.230	ppb	00:45:26
2	Cr 267.716†	9091.9	8924.4	96.725	ug/L	96.725	ppb	00:45:26
2	Cu 324.752†	31043.9	23984.0	75.741	ug/L	75.741	ppb	00:45:06
2	Mn 257.610†	2831698.4	2803625.1	3004.2	ug/L	3004.2	ppb	00:45:06
2	Mo 202.031†	-85.4	-102.9	3.3427	ug/L	3.3427	ppb	00:45:26
2	Ni 231.604†	2875.1	2760.5	63.881	ug/L	63.881	ppb	00:45:26

2	P 214.914†	1611.7	1372.5	703.42 ug/L	703.42 ppb	00:45:26
2	Pb 220.353†	1017.9	1076.4	133.67 ug/L	133.67 ppb	00:45:26
2	S 181.975 Axial†	562.4	515.3	701.48 ug/L	701.48 ppb	00:45:26
2	Sb 206.836†	60.9	26.0	-3.0398 ug/L	-3.0398 ppb	00:45:26
2	Se 196.026†	-623.9	-589.0	117.23 ug/L	117.23 ppb	00:45:26
2	Si 251.611†	1142256.6	1130653.0	33844 ug/L	33844 ppb	00:45:06
2	Sn 189.927†	-106.0	-109.9	-14.025 ug/L	-14.025 ppb	00:45:26
2	Ti 334.940†	1987787.7	1969492.2	3144.0 ug/L	3144.0 ppb	00:45:06
2	Tl 190.801†	-183.7	-149.4	1.6988 ug/L	1.6988 ppb	00:45:26
2	U 409.014†	-8161.7	-5680.2	-174.18 ug/L	-174.18 ppb	00:45:06
2	V 292.402†	42116.2	43063.3	259.86 ug/L	259.86 ppb	00:45:06
2	Zn 213.857†	26963.3	26078.2	213.26 ug/L	213.26 ppb	00:45:26
2	SiO2†	1132726.6	1121198.3	71916 ug/L	71916 ppb	00:46:05
3	Sc Radial	5793.0	5793.0	99.1 %		00:44:31
3	Y RADIAL	6787.4	6787.4	107.9 %		00:44:31
3	Al 396.153Radial†	152302.5	153661.4	106740 ug/L	106740 ppb	00:44:11
3	Ca 317.933Radial†	13572.2	13675.9	20158 ug/L	20158 ppb	00:44:11
3	Fe 238.204 Radial†	15082.3	15208.0	142380 ug/L	142380 ppb	00:44:11
3	K 766.490 Radial†	55454.3	53590.0	9480.2 ug/L	9480.2 ppb	00:44:11
3	Mg 279.077 IEC†	648.6	653.2	22921 ug/L	22921 ppb	00:44:31
3	Na 589.592 Radial†	14859.5	16078.1	5395.5 ug/L	5395.5 ppb	00:44:11
3	Sr 421.552†	47964.1	48412.9	301.32 ug/L	301.32 ppb	00:44:11
3	Sc 361.383	917810.0	917810.0	101.84 %		00:45:33
3	Y 371.029	823270.2	823270.2	109.61 %		00:45:33
3	Ag 328.068†	-8730.8	-8866.1	6.1031 ug/L	6.1031 ppb	00:45:53
3	As 188.979†	-61.9	-36.6	33.898 ug/L	33.898 ppb	00:45:53
3	B 249.677†	1383.1	1888.8	20.562 ug/L	20.562 ppb	00:45:33
3	Ba 233.527†	120759.8	118591.2	884.82 ug/L	884.82 ppb	00:45:33
3	Be 313.107†	-138.7	4976.8	7.9803 ug/L	7.9803 ppb	00:45:33
3	Cd 226.502†	1205.2	1378.6	0.3800 ug/L	0.3800 ppb	00:45:53
3	Co 228.616†	3363.8	3368.6	55.566 ug/L	55.566 ppb	00:45:53
3	Cr 267.716†	9075.0	8832.8	95.816 ug/L	95.816 ppb	00:45:53
3	Cu 324.752†	31252.6	23932.5	75.751 ug/L	75.751 ppb	00:45:33
3	Mn 257.610†	2849202.9	2797416.6	2997.9 ug/L	2997.9 ppb	00:45:33
3	Mo 202.031†	-88.3	-105.0	3.4284 ug/L	3.4284 ppb	00:45:53
3	Ni 231.604†	2844.4	2706.5	62.633 ug/L	62.633 ppb	00:45:53
3	P 214.914†	1609.7	1357.2	692.81 ug/L	692.81 ppb	00:45:53
3	Pb 220.353†	1011.9	1062.2	132.27 ug/L	132.27 ppb	00:45:53
3	S 181.975 Axial†	569.4	517.6	704.29 ug/L	704.29 ppb	00:45:53
3	Sb 206.836†	74.3	38.7	0.9698 ug/L	0.9698 ppb	00:45:53
3	Se 196.026†	-605.7	-565.9	140.69 ug/L	140.69 ppb	00:45:53
3	Si 251.611†	1150716.3	1129522.1	33810 ug/L	33810 ppb	00:45:33
3	Sn 189.927†	-117.5	-120.4	-15.650 ug/L	-15.650 ppb	00:45:53
3	Ti 334.940†	2000830.5	1965875.5	3138.2 ug/L	3138.2 ppb	00:45:33
3	Tl 190.801†	-182.4	-146.6	2.4718 ug/L	2.4718 ppb	00:45:53
3	U 409.014†	-8142.0	-5593.4	-172.18 ug/L	-172.18 ppb	00:45:33
3	V 292.402†	42352.3	42947.2	258.64 ug/L	258.64 ppb	00:45:33
3	Zn 213.857†	26998.4	25889.9	211.32 ug/L	211.32 ppb	00:45:53
3	SiO2†	1119901.2	1099244.7	70507 ug/L	70507 ppb	00:46:11

Mean Data: 1201978596|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912155.9	101.21	%	0.551				0.54%
Sc Radial	5845.5	100	%	0.8				0.78%
Y 371.029	818807.1	109.02	%	0.522				0.48%
Y RADIAL	6830.5	108.6	%	0.62				0.57%
Ag 328.068†	-8913.4	5.4778	ug/L	0.65163	5.4778	ppb	0.65163	11.90%
Al 396.153Radial†	152346.8	105820	ug/L	1042.6	105820	ppb	1042.6	0.99%
As 188.979†	-36.4	33.747	ug/L	1.0498	33.747	ppb	1.0498	3.11%
B 249.677†	1902.9	21.029	ug/L	2.0122	21.029	ppb	2.0122	9.57%
Ba 233.527†	118655.2	885.25	ug/L	1.738	885.25	ppb	1.738	0.20%
Be 313.107†	4829.4	7.9271	ug/L	0.05344	7.9271	ppb	0.05344	0.67%
Ca 317.933Radial†	13576.6	20011	ug/L	190.5	20011	ppb	190.5	0.95%
Cd 226.502†	1396.2	0.6972	ug/L	0.27606	0.6972	ppb	0.27606	39.60%
Co 228.616†	3388.8	55.968	ug/L	0.3536	55.968	ppb	0.3536	0.63%
Cr 267.716†	8908.8	96.592	ug/L	0.7186	96.592	ppb	0.7186	0.74%
Cu 324.752†	23919.2	75.646	ug/L	0.1725	75.646	ppb	0.1725	0.23%
Fe 238.204 Radial†	15068.6	141070	ug/L	1600.1	141070	ppb	1600.1	1.13%
K 766.490 Radial†	53098.9	9393.0	ug/L	100.23	9393.0	ppb	100.23	1.07%

Mg 279.077 IEC†	647.2	22710	ug/L	199.4	22710	ppb	199.4	0.88%
Mn 257.610†	2797398.3	2997.7	ug/L	6.54	2997.7	ppb	6.54	0.22%
Mo 202.031†	-103.4	3.4412	ug/L	0.10539	3.4412	ppb	0.10539	3.06%
Na 589.592 Radial†	16052.2	5386.8	ug/L	30.85	5386.8	ppb	30.85	0.57%
Ni 231.604†	2746.8	63.565	ug/L	0.8213	63.565	ppb	0.8213	1.29%
P 214.914†	1364.2	697.64	ug/L	5.370	697.64	ppb	5.370	0.77%
Pb 220.353†	1075.5	133.68	ug/L	1.409	133.68	ppb	1.409	1.05%
S 181.975 Axial†	521.5	709.96	ug/L	12.338	709.96	ppb	12.338	1.74%
Sb 206.836†	32.8	-0.8930	ug/L	2.01984	-0.8930	ppb	2.01984	226.19%
Se 196.026†	-582.2	126.99	ug/L	12.214	126.99	ppb	12.214	9.62%
Si 251.611†	1129217.0	33801	ug/L	48.2	33801	ppb	48.2	0.14%
Sn 189.927†	-114.2	-14.682	ug/L	0.8565	-14.682	ppb	0.8565	5.83%
Sr 421.552†	47987.6	298.67	ug/L	3.119	298.67	ppb	3.119	1.04%
Ti 334.940†	1966054.1	3138.5	ug/L	5.34	3138.5	ppb	5.34	0.17%
Tl 190.801†	-143.4	3.3531	ug/L	2.22971	3.3531	ppb	2.22971	66.50%
U 409.014†	-5660.4	-173.86	ug/L	1.545	-173.86	ppb	1.545	0.89%
V 292.402†	42971.8	258.99	ug/L	0.757	258.99	ppb	0.757	0.29%
Zn 213.857†	26038.5	212.74	ug/L	1.249	212.74	ppb	1.249	0.59%
SiO2†	1117468.6	71676	ug/L	1069.7	71676	ppb	1069.7	1.49%

Sequence No.: 86
Sample ID: 1201978598|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 12/9/2009 00:48:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978598|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5964.9	5964.9	102	%			00:50:35
1	Y RADIAL	7015.3	7015.3	111.6	%			00:50:35
1	Al 396.153Radial†	257073.5	251878.9	174940	ug/L	174940	ppb	00:50:15
1	Ca 317.933Radial†	16533.3	16182.3	23852	ug/L	23852	ppb	00:50:35
1	Fe 238.204 Radial†	18948.8	18557.6	173750	ug/L	173750	ppb	00:50:15
1	K 766.490 Radial†	109492.2	104919.3	18583	ug/L	18583	ppb	00:50:15
1	Mg 279.077 IEC†	950.6	930.1	32673	ug/L	32673	ppb	00:50:35
1	Na 589.592 Radial†	29292.7	29786.4	9995.8	ug/L	9995.8	ppb	00:50:15
1	Sr 421.552†	130808.7	128182.5	798.07	ug/L	798.07	ppb	00:50:15
1	Sc 361.383	906946.9	906946.9	100.63	%			00:51:34
1	Y 371.029	811614.5	811614.5	108.06	%			00:51:34
1	Ag 328.068†	96016.6	95122.3	488.76	ug/L	488.76	ppb	00:51:34
1	As 188.979†	1061.0	1078.6	491.39	ug/L	491.39	ppb	00:51:54
1	B 249.677†	22586.1	22975.2	457.46	ug/L	457.46	ppb	00:51:34
1	Ba 233.527†	183865.0	182721.4	1362.5	ug/L	1362.5	ppb	00:51:34
1	Be 313.107†	1289460.1	1286493.6	478.02	ug/L	478.02	ppb	00:51:34
1	Cd 226.502†	44882.0	44795.8	456.52	ug/L	456.52	ppb	00:51:34
1	Co 228.616†	27249.6	27144.3	504.29	ug/L	504.29	ppb	00:51:54
1	Cr 267.716†	55360.0	54934.5	581.12	ug/L	581.12	ppb	00:51:34
1	Cu 324.752†	208219.8	200158.4	581.66	ug/L	581.66	ppb	00:51:34
1	Mn 257.610†	3475025.3	3452829.3	3700.0	ug/L	3700.0	ppb	00:51:34
1	Mo 202.031†	6669.2	6609.0	432.17	ug/L	432.17	ppb	00:51:54
1	Ni 231.604†	22597.6	22369.5	517.67	ug/L	517.67	ppb	00:51:54
1	P 214.914†	2897.9	2656.3	1365.4	ug/L	1365.4	ppb	00:51:54
1	Pb 220.353†	5102.4	5138.9	606.52	ug/L	606.52	ppb	00:51:54
1	S 181.975 Axial†	4044.3	3977.4	5539.0	ug/L	5539.0	ppb	00:51:54
1	Sb 206.836†	1046.8	1006.0	308.58	ug/L	308.58	ppb	00:51:54
1	Se 196.026†	34.9	63.5	617.12	ug/L	617.12	ppb	00:51:54
1	Si 251.611†	1232673.8	1224500.5	36641	ug/L	36641	ppb	00:51:34
1	Sn 189.927†	2743.2	2721.0	450.41	ug/L	450.41	ppb	00:51:54
1	Ti 334.940†	2917180.3	2900016.8	4628.8	ug/L	4628.8	ppb	00:51:34
1	Tl 190.801†	1397.5	1421.2	455.45	ug/L	455.45	ppb	00:51:54
1	U 409.014†	9121.5	11466.2	292.89	ug/L	292.89	ppb	00:51:34
1	V 292.402†	124262.1	124841.9	800.17	ug/L	800.17	ppb	00:51:34
1	Zn 213.857†	86372.8	85209.7	722.72	ug/L	722.72	ppb	00:51:34
1	SiO2†	1243396.1	1235137.8	79198	ug/L	79198	ppb	00:52:55
2	Sc Radial	5993.6	5993.6	103	%			00:51:00
2	Y RADIAL	7034.6	7034.6	111.9	%			00:51:00
2	Al 396.153Radial†	258417.0	251984.8	175020	ug/L	175020	ppb	00:50:40
2	Ca 317.933Radial†	16551.5	16122.7	23764	ug/L	23764	ppb	00:51:00
2	Fe 238.204 Radial†	19082.2	18598.9	174140	ug/L	174140	ppb	00:50:40
2	K 766.490 Radial†	110273.4	105168.2	18627	ug/L	18627	ppb	00:50:40
2	Mg 279.077 IEC†	958.1	933.0	32775	ug/L	32775	ppb	00:51:00
2	Na 589.592 Radial†	29301.8	29658.1	9952.7	ug/L	9952.7	ppb	00:50:40
2	Sr 421.552†	131293.3	128042.3	797.19	ug/L	797.19	ppb	00:50:40
2	Sc 361.383	909687.4	909687.4	100.93	%			00:52:01
2	Y 371.029	812752.5	812752.5	108.21	%			00:52:01
2	Ag 328.068†	96349.9	95165.0	489.08	ug/L	489.08	ppb	00:52:01
2	As 188.979†	1066.0	1080.3	492.17	ug/L	492.17	ppb	00:52:22
2	B 249.677†	22844.1	23163.2	461.35	ug/L	461.35	ppb	00:52:01
2	Ba 233.527†	184869.1	183165.7	1365.8	ug/L	1365.8	ppb	00:52:01
2	Be 313.107†	1297746.8	1290843.3	479.62	ug/L	479.62	ppb	00:52:01
2	Cd 226.502†	45204.2	44980.7	458.43	ug/L	458.43	ppb	00:52:01
2	Co 228.616†	27364.9	27177.0	504.89	ug/L	504.89	ppb	00:52:22
2	Cr 267.716†	55682.4	55088.2	582.75	ug/L	582.75	ppb	00:52:01
2	Cu 324.752†	209038.5	200346.2	582.22	ug/L	582.22	ppb	00:52:01
2	Mn 257.610†	3497934.6	3465123.1	3713.1	ug/L	3713.1	ppb	00:52:01
2	Mo 202.031†	6712.4	6631.9	433.65	ug/L	433.65	ppb	00:52:22
2	Ni 231.604†	22667.8	22371.4	517.71	ug/L	517.71	ppb	00:52:22

2	P 214.914†	2906.0	2655.6	1364.7 ug/L	1364.7 ppb	00:52:22
2	Pb 220.353†	5135.8	5156.7	608.51 ug/L	608.51 ppb	00:52:22
2	S 181.975 Axial†	4061.4	3982.2	5545.6 ug/L	5545.6 ppb	00:52:22
2	Sb 206.836†	1018.3	974.6	298.71 ug/L	298.71 ppb	00:52:22
2	Se 196.026†	39.4	67.9	620.88 ug/L	620.88 ppb	00:52:22
2	Si 251.611†	1240756.4	1228818.0	36771 ug/L	36771 ppb	00:52:01
2	Sn 189.927†	2780.6	2749.9	455.14 ug/L	455.14 ppb	00:52:22
2	Ti 334.940†	2930665.8	2904644.3	4636.1 ug/L	4636.1 ppb	00:52:01
2	Tl 190.801†	1413.3	1432.8	458.81 ug/L	458.81 ppb	00:52:22
2	U 409.014†	9205.4	11521.9	294.37 ug/L	294.37 ppb	00:52:01
2	V 292.402†	124885.3	125087.3	801.75 ug/L	801.75 ppb	00:52:01
2	Zn 213.857†	87022.2	85594.6	726.04 ug/L	726.04 ppb	00:52:01
2	SiO2†	1244956.9	1232961.8	79059 ug/L	79059 ppb	00:53:01
3	Sc Radial	5951.0	5951.0	102 %		00:51:25
3	Y RADIAL	6960.2	6960.2	110.7 %		00:51:25
3	Al 396.153Radial†	252372.6	247851.5	172150 ug/L	172150 ppb	00:51:05
3	Ca 317.933Radial†	16459.9	16148.1	23801 ug/L	23801 ppb	00:51:25
3	Fe 238.204 Radial†	18635.7	18293.5	171280 ug/L	171280 ppb	00:51:05
3	K 766.490 Radial†	108034.0	103738.2	18373 ug/L	18373 ppb	00:51:05
3	Mg 279.077 IEC†	951.4	933.1	32780 ug/L	32780 ppb	00:51:25
3	Na 589.592 Radial†	28631.0	29203.7	9800.2 ug/L	9800.2 ppb	00:51:05
3	Sr 421.552†	128154.9	125876.1	783.70 ug/L	783.70 ppb	00:51:05
3	Sc 361.383	912151.1	912151.1	101.21 %		00:52:29
3	Y 371.029	814885.3	814885.3	108.49 %		00:52:29
3	Ag 328.068†	96711.4	95264.4	488.61 ug/L	488.61 ppb	00:52:29
3	As 188.979†	1049.9	1061.6	484.37 ug/L	484.37 ppb	00:52:49
3	B 249.677†	22891.1	23148.6	461.43 ug/L	461.43 ppb	00:52:29
3	Ba 233.527†	185065.2	182864.8	1363.5 ug/L	1363.5 ppb	00:52:29
3	Be 313.107†	1297261.3	1286891.0	478.19 ug/L	478.19 ppb	00:52:29
3	Cd 226.502†	45087.6	44744.5	456.22 ug/L	456.22 ppb	00:52:29
3	Co 228.616†	27249.0	26989.1	501.35 ug/L	501.35 ppb	00:52:49
3	Cr 267.716†	55600.6	54858.3	580.28 ug/L	580.28 ppb	00:52:29
3	Cu 324.752†	210051.1	200787.3	583.33 ug/L	583.33 ppb	00:52:29
3	Mn 257.610†	3504643.2	3462391.6	3709.9 ug/L	3709.9 ppb	00:52:29
3	Mo 202.031†	6650.6	6552.9	428.43 ug/L	428.43 ppb	00:52:49
3	Ni 231.604†	22553.9	22198.1	513.70 ug/L	513.70 ppb	00:52:49
3	P 214.914†	2903.1	2644.9	1359.6 ug/L	1359.6 ppb	00:52:49
3	Pb 220.353†	5102.8	5110.4	602.86 ug/L	602.86 ppb	00:52:49
3	S 181.975 Axial†	4047.6	3957.7	5511.9 ug/L	5511.9 ppb	00:52:49
3	Sb 206.836†	1024.4	978.0	299.67 ug/L	299.67 ppb	00:52:49
3	Se 196.026†	36.7	65.1	609.73 ug/L	609.73 ppb	00:52:49
3	Si 251.611†	1243586.3	1228293.9	36755 ug/L	36755 ppb	00:52:29
3	Sn 189.927†	2770.2	2732.2	452.20 ug/L	452.20 ppb	00:52:49
3	Ti 334.940†	2940573.9	2906591.9	4639.3 ug/L	4639.3 ppb	00:52:29
3	Tl 190.801†	1412.5	1428.2	457.48 ug/L	457.48 ppb	00:52:49
3	U 409.014†	9245.6	11537.1	295.16 ug/L	295.16 ppb	00:52:29
3	V 292.402†	124983.2	124849.9	800.54 ug/L	800.54 ppb	00:52:29
3	Zn 213.857†	87113.3	85451.8	725.09 ug/L	725.09 ppb	00:52:29
3	SiO2†	1247733.6	1232374.0	79021 ug/L	79021 ppb	00:53:07

Mean Data: 1201978598|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	909595.1	100.92	%	0.289				0.29%
Sc Radial	5969.8	102	%	0.4				0.36%
Y 371.029	813084.1	108.25	%	0.221				0.20%
Y RADIAL	7003.4	111.4	%	0.61				0.55%
Ag 328.068†	95183.9	488.82	ug/L	0.239	488.82	ppb	0.239	0.05%
Al 396.153Radial†	250571.7	174030	ug/L	1636.7	174030	ppb	1636.7	0.94%
As 188.979†	1073.5	489.31	ug/L	4.296	489.31	ppb	4.296	0.88%
B 249.677†	23095.7	460.08	ug/L	2.269	460.08	ppb	2.269	0.49%
Ba 233.527†	182917.3	1363.9	ug/L	1.70	1363.9	ppb	1.70	0.12%
Be 313.107†	1288076.0	478.61	ug/L	0.880	478.61	ppb	0.880	0.18%
Ca 317.933Radial†	16151.0	23806	ug/L	44.1	23806	ppb	44.1	0.19%
Cd 226.502†	44840.4	457.06	ug/L	1.201	457.06	ppb	1.201	0.26%
Co 228.616†	27103.5	503.51	ug/L	1.896	503.51	ppb	1.896	0.38%
Cr 267.716†	54960.3	581.38	ug/L	1.254	581.38	ppb	1.254	0.22%
Cu 324.752†	200430.7	582.40	ug/L	0.852	582.40	ppb	0.852	0.15%
Fe 238.204 Radial†	18483.4	173050	ug/L	1551.5	173050	ppb	1551.5	0.90%
K 766.490 Radial†	104608.6	18528	ug/L	135.7	18528	ppb	135.7	0.73%

Mg 279.077 IEC†	932.1	32743	ug/L	60.4	32743	ppb	60.4	0.18%
Mn 257.610†	3460114.7	3707.7	ug/L	6.86	3707.7	ppb	6.86	0.18%
Mo 202.031†	6597.9	431.42	ug/L	2.693	431.42	ppb	2.693	0.62%
Na 589.592 Radial†	29549.4	9916.2	ug/L	102.75	9916.2	ppb	102.75	1.04%
Ni 231.604†	22313.0	516.36	ug/L	2.302	516.36	ppb	2.302	0.45%
P 214.914†	2652.2	1363.3	ug/L	3.15	1363.3	ppb	3.15	0.23%
Pb 220.353†	5135.3	605.96	ug/L	2.869	605.96	ppb	2.869	0.47%
S 181.975 Axial†	3972.4	5532.2	ug/L	17.86	5532.2	ppb	17.86	0.32%
Sb 206.836†	986.2	302.32	ug/L	5.440	302.32	ppb	5.440	1.80%
Se 196.026†	65.5	615.91	ug/L	5.670	615.91	ppb	5.670	0.92%
Si 251.611†	1227204.1	36722	ug/L	70.5	36722	ppb	70.5	0.19%
Sn 189.927†	2734.4	452.59	ug/L	2.387	452.59	ppb	2.387	0.53%
Sr 421.552†	127366.9	792.99	ug/L	8.053	792.99	ppb	8.053	1.02%
Ti 334.940†	2903751.0	4634.7	ug/L	5.39	4634.7	ppb	5.39	0.12%
Tl 190.801†	1427.4	457.24	ug/L	1.692	457.24	ppb	1.692	0.37%
U 409.014†	11508.4	294.14	ug/L	1.150	294.14	ppb	1.150	0.39%
V 292.402†	124926.3	800.82	ug/L	0.825	800.82	ppb	0.825	0.10%
Zn 213.857†	85418.7	724.62	ug/L	1.710	724.62	ppb	1.710	0.24%
SiO2†	1233491.2	79093	ug/L	93.3	79093	ppb	93.3	0.12%

Sequence No.: 87
Sample ID: 1201978599|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 12/9/2009 00:55:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978599|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5968.4	5968.4	102	%			00:57:31
1	Y RADIAL	6983.8	6983.8	111.1	%			00:57:31
1	Al 396.153Radial†	243279.1	238224.4	165460	ug/L	165460	ppb	00:57:11
1	Ca 317.933Radial†	16413.6	16055.6	23665	ug/L	23665	ppb	00:57:31
1	Fe 238.204 Radial†	17785.1	17407.3	162980	ug/L	162980	ppb	00:57:11
1	K 766.490 Radial†	104158.4	99633.8	17656	ug/L	17656	ppb	00:57:11
1	Mg 279.077 IEC†	938.6	917.9	32249	ug/L	32249	ppb	00:57:31
1	Na 589.592 Radial†	29278.7	29755.8	9985.5	ug/L	9985.5	ppb	00:57:11
1	Sr 421.552†	130645.4	127947.4	796.60	ug/L	796.60	ppb	00:57:11
1	Sc 361.383	904170.0	904170.0	100.32	%			00:58:30
1	Y 371.029	804216.0	804216.0	107.07	%			00:58:30
1	Ag 328.068†	97645.0	97038.4	493.85	ug/L	493.85	ppb	00:58:30
1	As 188.979†	1060.7	1081.5	490.37	ug/L	490.37	ppb	00:58:50
1	B 249.677†	22752.7	23210.3	463.85	ug/L	463.85	ppb	00:58:30
1	Ba 233.527†	183509.3	182928.0	1363.5	ug/L	1363.5	ppb	00:58:30
1	Be 313.107†	1298110.4	1299051.5	482.49	ug/L	482.49	ppb	00:58:30
1	Cd 226.502†	44983.2	45033.7	460.11	ug/L	460.11	ppb	00:58:30
1	Co 228.616†	26485.0	26465.3	491.69	ug/L	491.69	ppb	00:58:50
1	Cr 267.716†	54979.2	54723.8	578.65	ug/L	578.65	ppb	00:58:30
1	Cu 324.752†	209970.4	202538.9	587.92	ug/L	587.92	ppb	00:58:30
1	Mn 257.610†	2611043.6	2602229.9	2791.6	ug/L	2791.6	ppb	00:58:30
1	Mo 202.031†	6710.1	6670.2	435.29	ug/L	435.29	ppb	00:58:50
1	Ni 231.604†	22454.3	22295.5	515.97	ug/L	515.97	ppb	00:58:50
1	P 214.914†	2752.2	2519.8	1291.2	ug/L	1291.2	ppb	00:58:50
1	Pb 220.353†	4884.1	4936.9	582.44	ug/L	582.44	ppb	00:58:50
1	S 181.975 Axial†	4116.3	4061.5	5658.7	ug/L	5658.7	ppb	00:58:50
1	Sb 206.836†	1047.3	1009.7	310.14	ug/L	310.14	ppb	00:58:50
1	Se 196.026†	94.1	122.6	615.68	ug/L	615.68	ppb	00:58:50
1	Si 251.611†	1292889.4	1288284.7	38551	ug/L	38551	ppb	00:58:30
1	Sn 189.927†	2772.5	2758.6	456.41	ug/L	456.41	ppb	00:58:50
1	Ti 334.940†	2871820.7	2863706.2	4570.8	ug/L	4570.8	ppb	00:58:30
1	Tl 190.801†	1421.7	1449.7	457.54	ug/L	457.54	ppb	00:58:50
1	U 409.014†	9700.4	12071.0	310.91	ug/L	310.91	ppb	00:58:30
1	V 292.402†	118035.8	119014.8	763.46	ug/L	763.46	ppb	00:58:30
1	Zn 213.857†	85385.1	84488.9	717.47	ug/L	717.47	ppb	00:58:30
1	SiO2†	1299105.7	1294463.2	83005	ug/L	83005	ppb	00:59:51
2	Sc Radial	5918.0	5918.0	101	%			00:57:56
2	Y RADIAL	6916.1	6916.1	110.0	%			00:57:56
2	Al 396.153Radial†	248543.4	245451.7	170480	ug/L	170480	ppb	00:57:36
2	Ca 317.933Radial†	16273.5	16054.1	23663	ug/L	23663	ppb	00:57:56
2	Fe 238.204 Radial†	18113.3	17879.7	167400	ug/L	167400	ppb	00:57:36
2	K 766.490 Radial†	106745.0	103056.7	18263	ug/L	18263	ppb	00:57:36
2	Mg 279.077 IEC†	927.6	914.8	32137	ug/L	32137	ppb	00:57:56
2	Na 589.592 Radial†	29975.3	30687.9	10298	ug/L	10298	ppb	00:57:36
2	Sr 421.552†	133816.5	132168.3	822.89	ug/L	822.89	ppb	00:57:36
2	Sc 361.383	903319.6	903319.6	100.23	%			00:58:58
2	Y 371.029	804982.6	804982.6	107.18	%			00:58:58
2	Ag 328.068†	97415.6	96901.2	494.63	ug/L	494.63	ppb	00:58:58
2	As 188.979†	1048.4	1070.2	486.53	ug/L	486.53	ppb	00:59:18
2	B 249.677†	22688.3	23167.3	462.36	ug/L	462.36	ppb	00:58:58
2	Ba 233.527†	183132.0	182723.8	1362.2	ug/L	1362.2	ppb	00:58:58
2	Be 313.107†	1300448.1	1302602.0	483.76	ug/L	483.76	ppb	00:58:58
2	Cd 226.502†	45044.9	45137.5	460.76	ug/L	460.76	ppb	00:58:58
2	Co 228.616†	26484.9	26490.0	492.12	ug/L	492.12	ppb	00:59:18
2	Cr 267.716†	54966.9	54763.2	579.14	ug/L	579.14	ppb	00:58:58
2	Cu 324.752†	209127.7	201895.1	586.31	ug/L	586.31	ppb	00:58:58
2	Mn 257.610†	2605368.7	2599018.1	2788.6	ug/L	2788.6	ppb	00:58:58
2	Mo 202.031†	6718.7	6685.1	436.55	ug/L	436.55	ppb	00:59:18
2	Ni 231.604†	22471.0	22333.4	516.84	ug/L	516.84	ppb	00:59:18

2	P 214.914†	2731.1	2501.3	1279.0 ug/L	1279.0 ppb	00:59:18
2	Pb 220.353†	4891.8	4949.1	584.59 ug/L	584.59 ppb	00:59:18
2	S 181.975 Axial†	4107.9	4057.0	5651.4 ug/L	5651.4 ppb	00:59:18
2	Sb 206.836†	1024.2	987.6	303.17 ug/L	303.17 ppb	00:59:18
2	Se 196.026†	93.3	121.9	630.08 ug/L	630.08 ppb	00:59:18
2	Si 251.611†	1288785.3	1285403.2	38465 ug/L	38465 ppb	00:58:58
2	Sn 189.927†	2783.7	2772.4	458.72 ug/L	458.72 ppb	00:59:18
2	Ti 334.940†	2862840.2	2857441.1	4560.8 ug/L	4560.8 ppb	00:58:58
2	Tl 190.801†	1434.2	1463.5	461.45 ug/L	461.45 ppb	00:59:18
2	U 409.014†	9622.5	12002.4	308.46 ug/L	308.46 ppb	00:58:58
2	V 292.402†	117858.9	118949.1	762.37 ug/L	762.37 ppb	00:58:58
2	Zn 213.857†	85187.6	84372.0	716.03 ug/L	716.03 ppb	00:58:58
2	SiO2†	1293452.3	1290041.7	82720 ug/L	82720 ppb	00:59:57
3	Sc Radial	5875.0	5875.0	101 %		00:58:21
3	Y RADIAL	6861.2	6861.2	109.1 %		00:58:21
3	Al 396.153Radial†	246951.5	245663.8	170630 ug/L	170630 ppb	00:58:01
3	Ca 317.933Radial†	16161.4	16060.2	23672 ug/L	23672 ppb	00:58:21
3	Fe 238.204 Radial†	17945.1	17843.2	167060 ug/L	167060 ppb	00:58:01
3	K 766.490 Radial†	105943.2	103030.3	18259 ug/L	18259 ppb	00:58:01
3	Mg 279.077 IEC†	920.0	913.9	32108 ug/L	32108 ppb	00:58:21
3	Na 589.592 Radial†	29748.1	30678.5	10295 ug/L	10295 ppb	00:58:01
3	Sr 421.552†	132858.6	132182.2	822.98 ug/L	822.98 ppb	00:58:01
3	Sc 361.383	907179.7	907179.7	100.66 %		00:59:25
3	Y 371.029	807590.1	807590.1	107.52 %		00:59:25
3	Ag 328.068†	97878.1	96947.1	494.72 ug/L	494.72 ppb	00:59:25
3	As 188.979†	1050.1	1067.5	485.32 ug/L	485.32 ppb	00:59:45
3	B 249.677†	22903.8	23285.1	464.88 ug/L	464.88 ppb	00:59:25
3	Ba 233.527†	183216.8	182030.6	1357.0 ug/L	1357.0 ppb	00:59:25
3	Be 313.107†	1301127.3	1297756.0	481.98 ug/L	481.98 ppb	00:59:25
3	Cd 226.502†	45067.6	44968.8	459.01 ug/L	459.01 ppb	00:59:25
3	Co 228.616†	26573.1	26465.3	491.66 ug/L	491.66 ppb	00:59:45
3	Cr 267.716†	54914.0	54477.3	576.13 ug/L	576.13 ppb	00:59:25
3	Cu 324.752†	210486.8	202357.6	587.61 ug/L	587.61 ppb	00:59:25
3	Mn 257.610†	2608501.3	2591069.6	2780.1 ug/L	2780.1 ppb	00:59:25
3	Mo 202.031†	6707.5	6645.4	434.01 ug/L	434.01 ppb	00:59:45
3	Ni 231.604†	22501.1	22267.8	515.32 ug/L	515.32 ppb	00:59:45
3	P 214.914†	2726.8	2485.5	1269.9 ug/L	1269.9 ppb	00:59:45
3	Pb 220.353†	4895.1	4931.6	582.66 ug/L	582.66 ppb	00:59:45
3	S 181.975 Axial†	4107.8	4039.4	5626.8 ug/L	5626.8 ppb	00:59:45
3	Sb 206.836†	1044.7	1003.6	308.16 ug/L	308.16 ppb	00:59:45
3	Se 196.026†	108.4	136.5	637.48 ug/L	637.48 ppb	00:59:45
3	Si 251.611†	1292714.0	1283834.9	38418 ug/L	38418 ppb	00:59:25
3	Sn 189.927†	2767.7	2744.6	454.17 ug/L	454.17 ppb	00:59:45
3	Ti 334.940†	2870307.4	2852705.8	4553.3 ug/L	4553.3 ppb	00:59:25
3	Tl 190.801†	1415.9	1439.1	454.54 ug/L	454.54 ppb	00:59:45
3	U 409.014†	9732.2	12070.6	310.39 ug/L	310.39 ppb	00:59:25
3	V 292.402†	118049.6	118638.2	760.35 ug/L	760.35 ppb	00:59:25
3	Zn 213.857†	85470.4	84291.2	715.36 ug/L	715.36 ppb	00:59:25
3	SiO2†	1296693.8	1287770.9	82575 ug/L	82575 ppb	01:00:03

Mean Data: 1201978599|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904889.8	100.40	%	0.225				0.22%
Sc Radial	5920.5	101	%	0.8				0.79%
Y 371.029	805596.2	107.26	%	0.235				0.22%
Y RADIAL	6920.4	110.1	%	0.98				0.89%
Ag 328.068†	96962.2	494.40	ug/L	0.482	494.40	ppb	0.482	0.10%
Al 396.153Radial†	243113.3	168850	ug/L	2941.9	168850	ppb	2941.9	1.74%
As 188.979†	1073.0	487.41	ug/L	2.637	487.41	ppb	2.637	0.54%
B 249.677†	23220.9	463.70	ug/L	1.266	463.70	ppb	1.266	0.27%
Ba 233.527†	182560.8	1360.9	ug/L	3.43	1360.9	ppb	3.43	0.25%
Be 313.107†	1299803.2	482.74	ug/L	0.918	482.74	ppb	0.918	0.19%
Ca 317.933Radial†	16056.6	23667	ug/L	4.7	23667	ppb	4.7	0.02%
Cd 226.502†	45046.7	459.96	ug/L	0.884	459.96	ppb	0.884	0.19%
Co 228.616†	26473.5	491.82	ug/L	0.256	491.82	ppb	0.256	0.05%
Cr 267.716†	54654.8	577.97	ug/L	1.616	577.97	ppb	1.616	0.28%
Cu 324.752†	202263.9	587.28	ug/L	0.858	587.28	ppb	0.858	0.15%
Fe 238.204 Radial†	17710.1	165810	ug/L	2460.8	165810	ppb	2460.8	1.48%
K 766.490 Radial†	101906.9	18059	ug/L	349.6	18059	ppb	349.6	1.94%

Mg 279.077 IEC†	915.5	32165	ug/L	74.6	32165	ppb	74.6	0.23%
Mn 257.610†	2597439.2	2786.7	ug/L	5.97	2786.7	ppb	5.97	0.21%
Mo 202.031†	6666.9	435.28	ug/L	1.271	435.28	ppb	1.271	0.29%
Na 589.592 Radial†	30374.1	10193	ug/L	179.7	10193	ppb	179.7	1.76%
Ni 231.604†	22298.9	516.04	ug/L	0.761	516.04	ppb	0.761	0.15%
P 214.914†	2502.2	1280.0	ug/L	10.69	1280.0	ppb	10.69	0.84%
Pb 220.353†	4939.2	583.23	ug/L	1.184	583.23	ppb	1.184	0.20%
S 181.975 Axial†	4052.7	5645.6	ug/L	16.75	5645.6	ppb	16.75	0.30%
Sb 206.836†	1000.3	307.16	ug/L	3.592	307.16	ppb	3.592	1.17%
Se 196.026†	127.0	627.75	ug/L	11.085	627.75	ppb	11.085	1.77%
Si 251.611†	1285840.9	38478	ug/L	67.7	38478	ppb	67.7	0.18%
Sn 189.927†	2758.6	456.43	ug/L	2.274	456.43	ppb	2.274	0.50%
Sr 421.552†	130765.9	814.16	ug/L	15.202	814.16	ppb	15.202	1.87%
Ti 334.940†	2857951.0	4561.6	ug/L	8.80	4561.6	ppb	8.80	0.19%
Tl 190.801†	1450.8	457.84	ug/L	3.465	457.84	ppb	3.465	0.76%
U 409.014†	12048.0	309.92	ug/L	1.290	309.92	ppb	1.290	0.42%
V 292.402†	118867.4	762.06	ug/L	1.580	762.06	ppb	1.580	0.21%
Zn 213.857†	84384.0	716.29	ug/L	1.077	716.29	ppb	1.077	0.15%
SiO2†	1290758.6	82767	ug/L	218.5	82767	ppb	218.5	0.26%

Sequence No.: 88
Sample ID: 1201978597|925478|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 12/9/2009 01:02:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201978597|925478|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5799.6	5799.6	99.2	%			01:04:08
1	Y RADIAL	6278.9	6278.9	99.86	%			01:04:08
1	Al 396.153Radial†	28751.7	28991.6	20138	ug/L	20138	ppb	01:04:08
1	Ca 317.933Radial†	2731.0	2736.3	4033.1	ug/L	4033.1	ppb	01:04:28
1	Fe 238.204 Radial†	3224.9	3242.7	30358	ug/L	30358	ppb	01:04:28
1	K 766.490 Radial†	12655.5	10400.4	1836.3	ug/L	1836.3	ppb	01:04:08
1	Mg 279.077 IEC†	132.1	132.0	4630.5	ug/L	4630.5	ppb	01:04:28
1	Na 589.592 Radial†	2387.7	3493.9	1172.5	ug/L	1172.5	ppb	01:04:08
1	Sr 421.552†	9444.1	9543.5	59.397	ug/L	59.397	ppb	01:04:08
1	Sc 361.383	907824.6	907824.6	100.73	%			01:05:25
1	Y 371.029	759649.2	759649.2	101.14	%			01:05:25
1	Ag 328.068†	-1684.2	-1964.8	0.9574	ug/L	0.9574	ppb	01:05:30
1	As 188.979†	-25.1	-0.7	9.7202	ug/L	9.7202	ppb	01:05:50
1	B 249.677†	67.6	597.7	8.4570	ug/L	8.4570	ppb	01:05:30
1	Ba 233.527†	24016.2	23851.1	178.02	ug/L	178.02	ppb	01:05:30
1	Be 313.107†	-4425.5	719.5	1.5045	ug/L	1.5045	ppb	01:05:30
1	Cd 226.502†	121.0	315.2	0.3055	ug/L	0.3055	ppb	01:05:50
1	Co 228.616†	1003.2	1061.4	18.435	ug/L	18.435	ppb	01:05:50
1	Cr 267.716†	1944.2	1851.5	20.091	ug/L	20.091	ppb	01:05:30
1	Cu 324.752†	11412.4	4573.2	14.636	ug/L	14.636	ppb	01:05:30
1	Mn 257.610†	815900.7	809582.3	866.56	ug/L	866.56	ppb	01:05:25
1	Mo 202.031†	6.5	-11.9	1.4004	ug/L	1.4004	ppb	01:05:50
1	Ni 231.604†	641.6	550.4	12.733	ug/L	12.733	ppb	01:05:50
1	P 214.914†	507.3	280.1	141.72	ug/L	141.72	ppb	01:05:50
1	Pb 220.353†	206.3	273.2	32.905	ug/L	32.905	ppb	01:05:50
1	S 181.975 Axial†	153.7	111.0	151.63	ug/L	151.63	ppb	01:05:50
1	Sb 206.836†	34.4	-0.1	-2.2583	ug/L	-2.2583	ppb	01:05:50
1	Se 196.026†	-144.7	-114.9	32.882	ug/L	32.882	ppb	01:05:50
1	Si 251.611†	236528.2	234369.2	7015.4	ug/L	7015.4	ppb	01:05:25
1	Sn 189.927†	-28.5	-33.3	-4.6122	ug/L	-4.6122	ppb	01:05:50
1	Ti 334.940†	397796.2	396036.5	632.21	ug/L	632.21	ppb	01:05:25
1	Tl 190.801†	-66.0	-33.0	0.9824	ug/L	0.9824	ppb	01:05:50
1	U 409.014†	-3327.2	-901.3	-28.686	ug/L	-28.686	ppb	01:05:25
1	V 292.402†	7685.0	8987.9	54.088	ug/L	54.088	ppb	01:05:30
1	Zn 213.857†	5873.1	5208.9	42.352	ug/L	42.352	ppb	01:05:30
1	SiO2†	236427.2	234251.2	15025	ug/L	15025	ppb	01:06:57
2	Sc Radial	5912.5	5912.5	101	%			01:04:33
2	Y RADIAL	6399.1	6399.1	101.8	%			01:04:33
2	Al 396.153Radial†	29237.4	28918.6	20088	ug/L	20088	ppb	01:04:33
2	Ca 317.933Radial†	2732.9	2685.6	3958.5	ug/L	3958.5	ppb	01:04:53
2	Fe 238.204 Radial†	3226.4	3182.2	29792	ug/L	29792	ppb	01:04:53
2	K 766.490 Radial†	12802.1	10301.9	1818.8	ug/L	1818.8	ppb	01:04:33
2	Mg 279.077 IEC†	132.9	130.2	4566.2	ug/L	4566.2	ppb	01:04:53
2	Na 589.592 Radial†	2440.3	3499.9	1174.5	ug/L	1174.5	ppb	01:04:33
2	Sr 421.552†	9641.7	9557.2	59.483	ug/L	59.483	ppb	01:04:33
2	Sc 361.383	900468.0	900468.0	99.912	%			01:05:56
2	Y 371.029	753887.9	753887.9	100.37	%			01:05:56
2	Ag 328.068†	-1726.3	-2020.5	0.5356	ug/L	0.5356	ppb	01:06:01
2	As 188.979†	-34.7	-10.6	5.7389	ug/L	5.7389	ppb	01:06:21
2	B 249.677†	46.9	577.6	8.1107	ug/L	8.1107	ppb	01:06:01
2	Ba 233.527†	24164.1	24193.9	180.55	ug/L	180.55	ppb	01:06:01
2	Be 313.107†	-4423.9	685.2	1.4923	ug/L	1.4923	ppb	01:06:01
2	Cd 226.502†	117.8	313.0	0.3380	ug/L	0.3380	ppb	01:06:21
2	Co 228.616†	980.8	1047.0	18.171	ug/L	18.171	ppb	01:06:21
2	Cr 267.716†	1924.1	1847.2	20.040	ug/L	20.040	ppb	01:06:01
2	Cu 324.752†	11473.7	4727.2	15.048	ug/L	15.048	ppb	01:06:01
2	Mn 257.610†	809102.9	809396.1	866.30	ug/L	866.30	ppb	01:05:56
2	Mo 202.031†	-0.2	-18.6	0.9334	ug/L	0.9334	ppb	01:06:21
2	Ni 231.604†	618.8	532.8	12.326	ug/L	12.326	ppb	01:06:21

2	P 214.914†	510.9	287.8	146.54 ug/L	146.54 ppb	01:06:21
2	Pb 220.353†	197.9	266.5	32.178 ug/L	32.178 ppb	01:06:21
2	S 181.975 Axial†	150.2	108.7	148.41 ug/L	148.41 ppb	01:06:21
2	Sb 206.836†	41.1	6.9	-0.0613 ug/L	-0.0613 ppb	01:06:21
2	Se 196.026†	-145.6	-116.9	29.929 ug/L	29.929 ppb	01:06:21
2	Si 251.611†	234959.9	234718.0	7025.9 ug/L	7025.9 ppb	01:05:56
2	Sn 189.927†	-29.3	-34.3	-4.7908 ug/L	-4.7908 ppb	01:06:21
2	Ti 334.940†	394663.5	396127.4	632.35 ug/L	632.35 ppb	01:05:56
2	Tl 190.801†	-78.8	-46.4	-2.7702 ug/L	-2.7702 ppb	01:06:21
2	U 409.014†	-3465.2	-1066.5	-33.164 ug/L	-33.164 ppb	01:05:56
2	V 292.402†	7857.4	9222.8	55.709 ug/L	55.709 ppb	01:06:01
2	Zn 213.857†	5878.8	5262.1	42.875 ug/L	42.875 ppb	01:06:01
2	SiO2†	235886.8	235627.9	15114 ug/L	15114 ppb	01:07:02
3	Sc Radial	5883.4	5883.4	101 %		01:04:58
3	Y RADIAL	6371.8	6371.8	101.3 %		01:04:58
3	Al 396.153Radial†	29124.2	28949.4	20109 ug/L	20109 ppb	01:04:58
3	Ca 317.933Radial†	2718.3	2684.5	3956.8 ug/L	3956.8 ppb	01:05:18
3	Fe 238.204 Radial†	3214.2	3185.8	29826 ug/L	29826 ppb	01:05:18
3	K 766.490 Radial†	12783.2	10345.7	1826.5 ug/L	1826.5 ppb	01:04:58
3	Mg 279.077 IEC†	132.9	130.8	4589.9 ug/L	4589.9 ppb	01:05:18
3	Na 589.592 Radial†	2388.1	3460.0	1161.1 ug/L	1161.1 ppb	01:04:58
3	Sr 421.552†	9520.1	9483.6	59.025 ug/L	59.025 ppb	01:04:58
3	Sc 361.383	901051.5	901051.5	99.976 %		01:06:26
3	Y 371.029	753588.8	753588.8	100.33 %		01:06:26
3	Ag 328.068†	-1763.8	-2056.9	0.3806 ug/L	0.3806 ppb	01:06:32
3	As 188.979†	-27.1	-2.9	8.7726 ug/L	8.7726 ppb	01:06:52
3	B 249.677†	67.2	597.9	8.5312 ug/L	8.5312 ppb	01:06:32
3	Ba 233.527†	24180.9	24195.0	180.56 ug/L	180.56 ppb	01:06:32
3	Be 313.107†	-4511.4	600.6	1.4619 ug/L	1.4619 ppb	01:06:32
3	Cd 226.502†	115.7	310.8	0.3115 ug/L	0.3115 ppb	01:06:52
3	Co 228.616†	1002.1	1067.8	18.563 ug/L	18.563 ppb	01:06:52
3	Cr 267.716†	1896.9	1818.7	19.742 ug/L	19.742 ppb	01:06:32
3	Cu 324.752†	11674.3	4920.3	15.602 ug/L	15.602 ppb	01:06:32
3	Mn 257.610†	811250.2	811019.4	868.04 ug/L	868.04 ppb	01:06:26
3	Mo 202.031†	-0.7	-19.1	0.9053 ug/L	0.9053 ppb	01:06:52
3	Ni 231.604†	610.5	524.1	12.124 ug/L	12.124 ppb	01:06:52
3	P 214.914†	510.9	287.5	146.24 ug/L	146.24 ppb	01:06:52
3	Pb 220.353†	221.0	289.5	34.778 ug/L	34.778 ppb	01:06:52
3	S 181.975 Axial†	153.4	111.8	152.76 ug/L	152.76 ppb	01:06:52
3	Sb 206.836†	36.5	2.3	-1.5149 ug/L	-1.5149 ppb	01:06:52
3	Se 196.026†	-136.3	-107.5	35.451 ug/L	35.451 ppb	01:06:52
3	Si 251.611†	234989.8	234595.6	7022.2 ug/L	7022.2 ppb	01:06:26
3	Sn 189.927†	-28.8	-33.8	-4.7138 ug/L	-4.7138 ppb	01:06:52
3	Ti 334.940†	395078.7	396286.9	632.61 ug/L	632.61 ppb	01:06:26
3	Tl 190.801†	-72.8	-40.3	-1.0535 ug/L	-1.0535 ppb	01:06:52
3	U 409.014†	-3372.9	-971.9	-30.562 ug/L	-30.562 ppb	01:06:26
3	V 292.402†	7905.8	9266.0	55.995 ug/L	55.995 ppb	01:06:32
3	Zn 213.857†	5947.7	5327.2	43.441 ug/L	43.441 ppb	01:06:32
3	SiO2†	236813.8	236402.3	15163 ug/L	15163 ppb	01:07:08

Mean Data: 1201978597|925478|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903114.7	100.21	%	0.454				0.45%
Sc Radial	5865.2	100	%	1.0				1.00%
Y 371.029	755708.7	100.62	%	0.455				0.45%
Y RADIAL	6349.9	101.0	%	1.00				0.99%
Ag 328.068†	-2014.1	0.6245	ug/L	0.29847	0.6245	ppb	0.29847	47.79%
Al 396.153Radial†	28953.2	20112	ug/L	25.4	20112	ppb	25.4	0.13%
As 188.979†	-4.7	8.0772	ug/L	2.07972	8.0772	ppb	2.07972	25.75%
B 249.677†	591.1	8.3663	ug/L	0.22444	8.3663	ppb	0.22444	2.68%
Ba 233.527†	24080.0	179.71	ug/L	1.460	179.71	ppb	1.460	0.81%
Be 313.107†	668.4	1.4862	ug/L	0.02191	1.4862	ppb	0.02191	1.47%
Ca 317.933Radial†	2702.1	3982.8	ug/L	43.58	3982.8	ppb	43.58	1.09%
Cd 226.502†	313.0	0.3183	ug/L	0.01733	0.3183	ppb	0.01733	5.44%
Co 228.616†	1058.7	18.390	ug/L	0.2002	18.390	ppb	0.2002	1.09%
Cr 267.716†	1839.1	19.958	ug/L	0.1887	19.958	ppb	0.1887	0.95%
Cu 324.752†	4740.2	15.095	ug/L	0.4849	15.095	ppb	0.4849	3.21%
Fe 238.204 Radial†	3203.6	29992	ug/L	317.6	29992	ppb	317.6	1.06%
K 766.490 Radial†	10349.3	1827.2	ug/L	8.75	1827.2	ppb	8.75	0.48%

Mg 279.077 IEC†	131.0	4595.5	ug/L	32.54	4595.5	ppb	32.54	0.71%
Mn 257.610†	809999.2	866.96	ug/L	0.937	866.96	ppb	0.937	0.11%
Mo 202.031†	-16.5	1.0797	ug/L	0.27807	1.0797	ppb	0.27807	25.76%
Na 589.592 Radial†	3484.6	1169.4	ug/L	7.22	1169.4	ppb	7.22	0.62%
Ni 231.604†	535.8	12.394	ug/L	0.3102	12.394	ppb	0.3102	2.50%
P 214.914†	285.2	144.83	ug/L	2.699	144.83	ppb	2.699	1.86%
Pb 220.353†	276.4	33.287	ug/L	1.3412	33.287	ppb	1.3412	4.03%
S 181.975 Axial†	110.5	150.93	ug/L	2.260	150.93	ppb	2.260	1.50%
Sb 206.836†	3.0	-1.2782	ug/L	1.11749	-1.2782	ppb	1.11749	87.43%
Se 196.026†	-113.1	32.754	ug/L	2.7633	32.754	ppb	2.7633	8.44%
Si 251.611†	234560.9	7021.2	ug/L	5.30	7021.2	ppb	5.30	0.08%
Sn 189.927†	-33.8	-4.7056	ug/L	0.08956	-4.7056	ppb	0.08956	1.90%
Sr 421.552†	9528.1	59.302	ug/L	0.2437	59.302	ppb	0.2437	0.41%
Ti 334.940†	396150.2	632.39	ug/L	0.201	632.39	ppb	0.201	0.03%
Tl 190.801†	-39.9	-0.9471	ug/L	1.87854	-0.9471	ppb	1.87854	198.34%
U 409.014†	-979.9	-30.804	ug/L	2.2486	-30.804	ppb	2.2486	7.30%
V 292.402†	9158.9	55.264	ug/L	1.0282	55.264	ppb	1.0282	1.86%
Zn 213.857†	5266.1	42.889	ug/L	0.5447	42.889	ppb	0.5447	1.27%
SiO2†	235427.1	15101	ug/L	69.9	15101	ppb	69.9	0.46%

Sequence No.: 89
Sample ID: 241541002|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 12/9/2009 01:09:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541002|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5950.1	5950.1	102	%			01:11:32
1	Y RADIAL	7720.6	7720.6	122.8	%			01:11:32
1	Al 396.153Radial†	257776.3	253198.2	175880	ug/L	175880	ppb	01:11:12
1	Ca 317.933Radial†	23047.4	22620.7	33342	ug/L	33342	ppb	01:11:12
1	Fe 238.204 Radial†	17133.2	16820.8	157470	ug/L	157470	ppb	01:11:12
1	K 766.490 Radial†	74849.8	71162.9	12602	ug/L	12602	ppb	01:11:12
1	Mg 279.077 IEC†	730.5	716.3	25135	ug/L	25135	ppb	01:11:32
1	Na 589.592 Radial†	89115.9	88614.1	29737	ug/L	29737	ppb	01:11:12
1	Sr 421.552†	55740.4	54773.4	340.81	ug/L	340.81	ppb	01:11:12
1	Sc 361.383	916077.9	916077.9	101.64	%			01:12:31
1	Y 371.029	913424.8	913424.8	121.61	%			01:12:31
1	Ag 328.068†	-10401.1	-10525.6	3.2548	ug/L	3.2548	ppb	01:12:31
1	As 188.979†	4.1	28.2	46.972	ug/L	46.972	ppb	01:12:51
1	B 249.677†	1801.4	2302.9	27.300	ug/L	27.300	ppb	01:12:31
1	Ba 233.527†	96121.0	94575.1	707.41	ug/L	707.41	ppb	01:12:31
1	Be 313.107†	19703.4	24497.8	11.602	ug/L	11.602	ppb	01:12:31
1	Cd 226.502†	1391.8	1564.4	0.8651	ug/L	0.8651	ppb	01:12:51
1	Co 228.616†	2139.4	2170.2	36.269	ug/L	36.269	ppb	01:12:51
1	Cr 267.716†	17076.7	16721.9	178.92	ug/L	178.92	ppb	01:12:51
1	Cu 324.752†	39585.9	32189.1	100.15	ug/L	100.15	ppb	01:12:31
1	Mn 257.610†	2275076.3	2237864.3	2402.5	ug/L	2402.5	ppb	01:12:31
1	Mo 202.031†	-136.6	-152.7	1.4713	ug/L	1.4713	ppb	01:12:51
1	Ni 231.604†	4885.5	4719.9	109.27	ug/L	109.27	ppb	01:12:51
1	P 214.914†	1992.6	1736.8	919.21	ug/L	919.21	ppb	01:12:51
1	Pb 220.353†	961.5	1014.4	141.12	ug/L	141.12	ppb	01:12:51
1	S 181.975 Axial†	507.2	457.4	606.31	ug/L	606.31	ppb	01:12:51
1	Sb 206.836†	64.1	28.8	-1.0623	ug/L	-1.0623	ppb	01:12:51
1	Se 196.026†	-709.3	-669.1	141.15	ug/L	141.15	ppb	01:12:51
1	Si 251.611†	1231932.3	1211561.3	36265	ug/L	36265	ppb	01:12:31
1	Sn 189.927†	-128.8	-131.7	-15.896	ug/L	-15.896	ppb	01:12:51
1	Ti 334.940†	864755.0	851886.2	1361.2	ug/L	1361.2	ppb	01:12:31
1	Tl 190.801†	-133.9	-99.2	0.6032	ug/L	0.6032	ppb	01:12:51
1	U 409.014†	-9124.9	-6575.5	-201.29	ug/L	-201.29	ppb	01:12:31
1	V 292.402†	43586.5	44240.1	266.76	ug/L	266.76	ppb	01:12:31
1	Zn 213.857†	34043.3	32870.9	270.47	ug/L	270.47	ppb	01:12:31
1	SiO2†	1240140.7	1219619.2	78227	ug/L	78227	ppb	01:13:51
2	Sc Radial	5916.9	5916.9	101	%			01:11:57
2	Y RADIAL	7664.2	7664.2	121.9	%			01:11:57
2	Al 396.153Radial†	260362.4	257170.4	178640	ug/L	178640	ppb	01:11:37
2	Ca 317.933Radial†	23297.2	22994.2	33892	ug/L	33892	ppb	01:11:37
2	Fe 238.204 Radial†	17330.9	17110.2	160180	ug/L	160180	ppb	01:11:37
2	K 766.490 Radial†	75901.1	72612.9	12859	ug/L	12859	ppb	01:11:37
2	Mg 279.077 IEC†	725.7	715.6	25107	ug/L	25107	ppb	01:11:57
2	Na 589.592 Radial†	90322.8	90296.3	30302	ug/L	30302	ppb	01:11:37
2	Sr 421.552†	56322.8	55655.2	346.29	ug/L	346.29	ppb	01:11:37
2	Sc 361.383	920354.7	920354.7	102.12	%			01:12:58
2	Y 371.029	917392.3	917392.3	122.14	%			01:12:58
2	Ag 328.068†	-10433.9	-10510.2	4.1797	ug/L	4.1797	ppb	01:12:58
2	As 188.979†	-11.8	12.7	41.264	ug/L	41.264	ppb	01:13:18
2	B 249.677†	1879.8	2371.5	28.377	ug/L	28.377	ppb	01:12:58
2	Ba 233.527†	96572.0	94577.3	707.53	ug/L	707.53	ppb	01:12:58
2	Be 313.107†	19847.4	24548.7	11.624	ug/L	11.624	ppb	01:12:58
2	Cd 226.502†	1378.6	1545.1	0.3893	ug/L	0.3893	ppb	01:13:18
2	Co 228.616†	2160.2	2180.8	36.427	ug/L	36.427	ppb	01:13:18
2	Cr 267.716†	17101.2	16667.9	178.41	ug/L	178.41	ppb	01:13:18
2	Cu 324.752†	39988.7	32402.6	100.90	ug/L	100.90	ppb	01:12:58
2	Mn 257.610†	2286878.6	2239020.5	2404.0	ug/L	2404.0	ppb	01:12:58
2	Mo 202.031†	-143.1	-158.5	1.2962	ug/L	1.2962	ppb	01:13:18
2	Ni 231.604†	4891.6	4703.6	108.89	ug/L	108.89	ppb	01:13:18

2	P 214.914†	2000.1	1735.1	916.78	ug/L	916.78 ppb	01:13:18
2	Pb 220.353†	973.6	1021.9	142.36	ug/L	142.36 ppb	01:13:18
2	S 181.975 Axial†	517.0	464.7	616.00	ug/L	616.00 ppb	01:13:18
2	Sb 206.836†	74.8	39.0	2.0415	ug/L	2.0415 ppb	01:13:18
2	Se 196.026†	-684.5	-641.5	166.14	ug/L	166.14 ppb	01:13:18
2	Si 251.611†	1239051.8	1212901.0	36305	ug/L	36305 ppb	01:12:58
2	Sn 189.927†	-162.3	-163.9	-21.073	ug/L	-21.073 ppb	01:13:18
2	Ti 334.940†	869996.3	853065.3	1363.1	ug/L	1363.1 ppb	01:12:58
2	Tl 190.801†	-125.6	-90.5	3.1286	ug/L	3.1286 ppb	01:13:18
2	U 409.014†	-9197.5	-6604.9	-202.44	ug/L	-202.44 ppb	01:12:58
2	V 292.402†	43780.4	44230.6	266.28	ug/L	266.28 ppb	01:12:58
2	Zn 213.857†	34252.7	32920.4	270.64	ug/L	270.64 ppb	01:12:58
2	SiO2†	1220210.5	1194432.8	76611	ug/L	76611 ppb	01:13:57
3	Sc Radial	5966.1	5966.1	102	%		01:12:22
3	Y RADIAL	7727.8	7727.8	122.9	%		01:12:22
3	Al 396.153Radial†	258945.9	253662.4	176200	ug/L	176200 ppb	01:12:02
3	Ca 317.933Radial†	23093.3	22604.7	33318	ug/L	33318 ppb	01:12:02
3	Fe 238.204 Radial†	17216.9	16857.4	157820	ug/L	157820 ppb	01:12:02
3	K 766.490 Radial†	75299.8	71405.8	12645	ug/L	12645 ppb	01:12:02
3	Mg 279.077 IEC†	725.0	709.0	24876	ug/L	24876 ppb	01:12:22
3	Na 589.592 Radial†	89600.5	88853.2	29817	ug/L	29817 ppb	01:12:02
3	Sr 421.552†	56081.3	54960.0	341.97	ug/L	341.97 ppb	01:12:02
3	Sc 361.383	918657.5	918657.5	101.93	%		01:13:25
3	Y 371.029	913814.6	913814.6	121.67	%		01:13:25
3	Ag 328.068†	-10392.9	-10488.9	3.5335	ug/L	3.5335 ppb	01:13:25
3	As 188.979†	12.3	36.2	50.205	ug/L	50.205 ppb	01:13:45
3	B 249.677†	1933.9	2428.0	29.878	ug/L	29.878 ppb	01:13:25
3	Ba 233.527†	96492.7	94674.3	708.16	ug/L	708.16 ppb	01:13:25
3	Be 313.107†	19932.0	24667.6	11.665	ug/L	11.665 ppb	01:13:25
3	Cd 226.502†	1356.4	1525.9	0.4228	ug/L	0.4228 ppb	01:13:45
3	Co 228.616†	2137.2	2162.1	36.111	ug/L	36.111 ppb	01:13:45
3	Cr 267.716†	17047.5	16646.1	178.14	ug/L	178.14 ppb	01:13:45
3	Cu 324.752†	39814.8	32304.3	100.50	ug/L	100.50 ppb	01:13:25
3	Mn 257.610†	2283331.3	2239677.9	2404.4	ug/L	2404.4 ppb	01:13:25
3	Mo 202.031†	-129.8	-145.7	1.9417	ug/L	1.9417 ppb	01:13:45
3	Ni 231.604†	4890.4	4711.2	109.07	ug/L	109.07 ppb	01:13:45
3	P 214.914†	2007.8	1746.3	924.37	ug/L	924.37 ppb	01:13:45
3	Pb 220.353†	962.5	1012.7	140.97	ug/L	140.97 ppb	01:13:45
3	S 181.975 Axial†	512.9	461.6	612.23	ug/L	612.23 ppb	01:13:45
3	Sb 206.836†	55.3	20.0	-3.8974	ug/L	-3.8974 ppb	01:13:45
3	Se 196.026†	-706.6	-664.4	144.99	ug/L	144.99 ppb	01:13:45
3	Si 251.611†	1236721.4	1212856.5	36304	ug/L	36304 ppb	01:13:25
3	Sn 189.927†	-157.1	-159.1	-20.384	ug/L	-20.384 ppb	01:13:45
3	Ti 334.940†	867667.8	852354.9	1361.9	ug/L	1361.9 ppb	01:13:25
3	Tl 190.801†	-138.0	-102.9	-0.4165	ug/L	-0.4165 ppb	01:13:45
3	U 409.014†	-9159.6	-6584.4	-201.57	ug/L	-201.57 ppb	01:13:25
3	V 292.402†	43802.7	44331.7	267.31	ug/L	267.31 ppb	01:13:25
3	Zn 213.857†	34087.0	32819.7	270.00	ug/L	270.00 ppb	01:13:25
3	SiO2†	1236584.6	1212704.4	77783	ug/L	77783 ppb	01:14:03

Mean Data: 241541002|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918363.3	101.90	%	0.239				0.23%
Sc Radial	5944.4	102	%	0.4				0.42%
Y 371.029	914877.2	121.81	%	0.291				0.24%
Y RADIAL	7704.2	122.5	%	0.55				0.45%
Ag 328.068†	-10508.2	3.6560	ug/L	0.47446	3.6560	ppb	0.47446	12.98%
Al 396.153Radial†	254677.0	176900	ug/L	1508.6	176900	ppb	1508.6	0.85%
As 188.979†	25.7	46.147	ug/L	4.5270	46.147	ppb	4.5270	9.81%
B 249.677†	2367.5	28.518	ug/L	1.2949	28.518	ppb	1.2949	4.54%
Ba 233.527†	94608.9	707.70	ug/L	0.403	707.70	ppb	0.403	0.06%
Be 313.107†	24571.4	11.630	ug/L	0.0322	11.630	ppb	0.0322	0.28%
Ca 317.933Radial†	22739.8	33517	ug/L	324.9	33517	ppb	324.9	0.97%
Cd 226.502†	1545.1	0.5591	ug/L	0.26554	0.5591	ppb	0.26554	47.50%
Co 228.616†	2171.0	36.269	ug/L	0.1581	36.269	ppb	0.1581	0.44%
Cr 267.716†	16678.6	178.49	ug/L	0.401	178.49	ppb	0.401	0.22%
Cu 324.752†	32298.6	100.51	ug/L	0.375	100.51	ppb	0.375	0.37%
Fe 238.204 Radial†	16929.5	158490	ug/L	1475.4	158490	ppb	1475.4	0.93%
K 766.490 Radial†	71727.2	12702	ug/L	137.8	12702	ppb	137.8	1.08%

Mg 279.077 IEC†	713.6	25039	ug/L	142.3	25039	ppb	142.3	0.57%
Mn 257.610†	2238854.2	2403.6	ug/L	1.03	2403.6	ppb	1.03	0.04%
Mo 202.031†	-152.3	1.5698	ug/L	0.33382	1.5698	ppb	0.33382	21.27%
Na 589.592 Radial†	89254.5	29952	ug/L	305.4	29952	ppb	305.4	1.02%
Ni 231.604†	4711.6	109.08	ug/L	0.189	109.08	ppb	0.189	0.17%
P 214.914†	1739.4	920.12	ug/L	3.880	920.12	ppb	3.880	0.42%
Pb 220.353†	1016.3	141.49	ug/L	0.763	141.49	ppb	0.763	0.54%
S 181.975 Axial†	461.2	611.52	ug/L	4.886	611.52	ppb	4.886	0.80%
Sb 206.836†	29.3	-0.9728	ug/L	2.97049	-0.9728	ppb	2.97049	305.37%
Se 196.026†	-658.3	150.76	ug/L	13.458	150.76	ppb	13.458	8.93%
Si 251.611†	1212439.6	36291	ug/L	22.8	36291	ppb	22.8	0.06%
Sn 189.927†	-151.6	-19.118	ug/L	2.8112	-19.118	ppb	2.8112	14.70%
Sr 421.552†	55129.5	343.02	ug/L	2.891	343.02	ppb	2.891	0.84%
Ti 334.940†	852435.5	1362.1	ug/L	0.96	1362.1	ppb	0.96	0.07%
Tl 190.801†	-97.5	1.1051	ug/L	1.82503	1.1051	ppb	1.82503	165.14%
U 409.014†	-6588.3	-201.77	ug/L	0.598	-201.77	ppb	0.598	0.30%
V 292.402†	44267.5	266.78	ug/L	0.519	266.78	ppb	0.519	0.19%
Zn 213.857†	32870.3	270.37	ug/L	0.334	270.37	ppb	0.334	0.12%
SiO2†	1208918.8	77540	ug/L	834.8	77540	ppb	834.8	1.08%

Sequence No.: 90
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 01:16:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5658.9	5658.9	96.8	%			01:18:06
1	Y RADIAL	6014.3	6014.3	95.65	%			01:18:06
1	Al 396.153Radial†	6688.3	6927.3	4790.7	ug/L	4790.7	ppb	01:18:06
1	Ca 317.933Radial†	3281.5	3373.3	4972.0	ug/L	4972.0	ppb	01:18:26
1	Fe 238.204 Radial†	534.7	545.4	5121.4	ug/L	5121.4	ppb	01:18:26
1	K 766.490 Radial†	30542.8	29189.8	5167.7	ug/L	5167.7	ppb	01:18:06
1	Mg 279.077 IEC†	142.5	146.0	5156.3	ug/L	5156.3	ppb	01:18:26
1	Na 589.592 Radial†	27527.6	29515.6	9904.9	ug/L	9904.9	ppb	01:18:06
1	Sr 421.552†	78625.3	81223.4	505.79	ug/L	505.79	ppb	01:18:06
1	Sc 361.383	893164.6	893164.6	99.101	%			01:19:23
1	Y 371.029	726802.2	726802.2	96.767	%			01:19:23
1	Ag 328.068†	110434.2	111142.9	506.43	ug/L	506.43	ppb	01:19:28
1	As 188.979†	1163.4	1198.1	477.86	ug/L	477.86	ppb	01:19:48
1	B 249.677†	22162.2	22893.8	478.16	ug/L	478.16	ppb	01:19:28
1	Ba 233.527†	65678.4	66282.4	492.51	ug/L	492.51	ppb	01:19:28
1	Be 313.107†	1304973.9	1321920.9	482.84	ug/L	482.84	ppb	01:19:23
1	Cd 226.502†	46067.9	46680.7	493.28	ug/L	493.28	ppb	01:19:28
1	Co 228.616†	25937.2	26237.8	498.09	ug/L	498.09	ppb	01:19:28
1	Cr 267.716†	46005.3	46343.9	487.27	ug/L	487.27	ppb	01:19:28
1	Cu 324.752†	175544.2	170379.4	487.84	ug/L	487.84	ppb	01:19:28
1	Mn 257.610†	462385.9	466156.7	497.68	ug/L	497.68	ppb	01:19:23
1	Mo 202.031†	7728.4	7780.1	494.60	ug/L	494.60	ppb	01:19:48
1	Ni 231.604†	21106.7	21211.5	490.87	ug/L	490.87	ppb	01:19:28
1	P 214.914†	4436.8	4253.5	2379.2	ug/L	2379.2	ppb	01:19:48
1	Pb 220.353†	4194.8	4301.3	487.73	ug/L	487.73	ppb	01:19:48
1	S 181.975 Axial†	729.4	694.5	972.20	ug/L	972.20	ppb	01:19:48
1	Sb 206.836†	1586.1	1566.2	502.94	ug/L	502.94	ppb	01:19:48
1	Se 196.026†	826.6	863.0	517.47	ug/L	517.47	ppb	01:19:48
1	Si 251.611†	83062.0	83365.6	2483.7	ug/L	2483.7	ppb	01:19:28
1	Sn 189.927†	2999.5	3021.7	495.34	ug/L	495.34	ppb	01:19:48
1	Ti 334.940†	313387.7	317344.5	506.28	ug/L	506.28	ppb	01:19:28
1	Tl 190.801†	1690.6	1738.4	490.17	ug/L	490.17	ppb	01:19:48
1	U 409.014†	16036.2	18583.4	510.34	ug/L	510.34	ppb	01:19:28
1	V 292.402†	71584.1	73591.6	492.71	ug/L	492.71	ppb	01:19:28
1	Zn 213.857†	56340.2	56229.3	486.86	ug/L	486.86	ppb	01:19:28
1	SiO2†	82885.0	83169.1	5309.2	ug/L	5309.2	ppb	01:20:56
2	Sc Radial	5701.8	5701.8	97.6	%			01:18:31
2	Y RADIAL	6108.5	6108.5	97.15	%			01:18:31
2	Al 396.153Radial†	6798.7	6988.6	4833.0	ug/L	4833.0	ppb	01:18:31
2	Ca 317.933Radial†	3307.4	3374.3	4973.4	ug/L	4973.4	ppb	01:18:51
2	Fe 238.204 Radial†	535.3	541.8	5088.3	ug/L	5088.3	ppb	01:18:51
2	K 766.490 Radial†	30894.3	29312.7	5189.5	ug/L	5189.5	ppb	01:18:31
2	Mg 279.077 IEC†	144.2	146.6	5177.7	ug/L	5177.7	ppb	01:18:51
2	Na 589.592 Radial†	27956.6	29741.5	9980.7	ug/L	9980.7	ppb	01:18:31
2	Sr 421.552†	79769.3	81785.2	509.29	ug/L	509.29	ppb	01:18:31
2	Sc 361.383	887703.7	887703.7	98.495	%			01:19:54
2	Y 371.029	722125.2	722125.2	96.144	%			01:19:54
2	Ag 328.068†	110344.4	111737.3	509.13	ug/L	509.13	ppb	01:19:59
2	As 188.979†	1190.4	1232.8	491.59	ug/L	491.59	ppb	01:20:19
2	B 249.677†	22291.4	23162.6	483.80	ug/L	483.80	ppb	01:19:59
2	Ba 233.527†	65942.4	66958.2	497.53	ug/L	497.53	ppb	01:19:59
2	Be 313.107†	1295872.7	1320781.4	482.43	ug/L	482.43	ppb	01:19:54
2	Cd 226.502†	46156.5	47056.7	497.26	ug/L	497.26	ppb	01:19:59
2	Co 228.616†	25951.1	26413.0	501.43	ug/L	501.43	ppb	01:19:59
2	Cr 267.716†	45870.8	46492.9	488.84	ug/L	488.84	ppb	01:19:59
2	Cu 324.752†	175818.7	171747.8	491.75	ug/L	491.75	ppb	01:19:59
2	Mn 257.610†	459763.6	466364.6	497.90	ug/L	497.90	ppb	01:19:54
2	Mo 202.031†	7805.3	7906.2	502.61	ug/L	502.61	ppb	01:20:19
2	Ni 231.604†	21113.0	21348.9	494.05	ug/L	494.05	ppb	01:19:59

2	P 214.914†	4471.3	4316.1	2414.8 ug/L	2414.8 ppb	01:20:19
2	Pb 220.353†	4235.6	4368.8	495.39 ug/L	495.39 ppb	01:20:19
2	S 181.975 Axial†	744.3	714.1	999.68 ug/L	999.68 ppb	01:20:19
2	Sb 206.836†	1618.0	1608.5	516.58 ug/L	516.58 ppb	01:20:19
2	Se 196.026†	831.8	873.3	523.37 ug/L	523.37 ppb	01:20:19
2	Si 251.611†	83290.2	84112.8	2505.9 ug/L	2505.9 ppb	01:19:59
2	Sn 189.927†	3025.6	3066.9	502.73 ug/L	502.73 ppb	01:20:19
2	Ti 334.940†	313888.2	319798.0	510.20 ug/L	510.20 ppb	01:19:59
2	Tl 190.801†	1694.9	1753.3	494.34 ug/L	494.34 ppb	01:20:19
2	U 409.014†	16015.5	18662.0	512.51 ug/L	512.51 ppb	01:19:59
2	V 292.402†	71616.7	74069.1	495.99 ug/L	495.99 ppb	01:19:59
2	Zn 213.857†	56409.5	56649.4	490.51 ug/L	490.51 ppb	01:19:59
2	SiO2†	83272.2	84076.8	5367.1 ug/L	5367.1 ppb	01:21:01
3	Sc Radial	5735.3	5735.3	98.1 %		01:18:56
3	Y RADIAL	6115.2	6115.2	97.26 %		01:18:56
3	Al 396.153Radial†	6737.6	6885.5	4761.6 ug/L	4761.6 ppb	01:18:56
3	Ca 317.933Radial†	3304.7	3351.6	4940.1 ug/L	4940.1 ppb	01:19:16
3	Fe 238.204 Radial†	535.1	538.5	5056.5 ug/L	5056.5 ppb	01:19:16
3	K 766.490 Radial†	30896.4	29129.6	5157.0 ug/L	5157.0 ppb	01:18:56
3	Mg 279.077 IEC†	142.8	144.3	5097.6 ug/L	5097.6 ppb	01:19:16
3	Na 589.592 Radial†	27879.5	29495.2	9898.0 ug/L	9898.0 ppb	01:18:56
3	Sr 421.552†	79710.8	81247.2	505.94 ug/L	505.94 ppb	01:18:56
3	Sc 361.383	894812.5	894812.5	99.284 %		01:20:25
3	Y 371.029	726134.7	726134.7	96.678 %		01:20:25
3	Ag 328.068†	109891.4	110391.0	503.00 ug/L	503.00 ppb	01:20:30
3	As 188.979†	1190.8	1223.5	487.87 ug/L	487.87 ppb	01:20:50
3	B 249.677†	22116.3	22806.5	476.35 ug/L	476.35 ppb	01:20:30
3	Ba 233.527†	65490.2	65970.9	490.20 ug/L	490.20 ppb	01:20:30
3	Be 313.107†	1304073.1	1318588.6	481.62 ug/L	481.62 ppb	01:20:25
3	Cd 226.502†	45885.4	46411.3	490.44 ug/L	490.44 ppb	01:20:30
3	Co 228.616†	25790.9	26042.3	494.40 ug/L	494.40 ppb	01:20:30
3	Cr 267.716†	45700.9	45951.8	483.15 ug/L	483.15 ppb	01:20:30
3	Cu 324.752†	174952.9	169457.6	485.20 ug/L	485.20 ppb	01:20:30
3	Mn 257.610†	463570.6	466490.7	498.03 ug/L	498.03 ppb	01:20:25
3	Mo 202.031†	7771.2	7808.9	496.43 ug/L	496.43 ppb	01:20:50
3	Ni 231.604†	21001.0	21065.8	487.49 ug/L	487.49 ppb	01:20:30
3	P 214.914†	4453.7	4262.3	2384.8 ug/L	2384.8 ppb	01:20:50
3	Pb 220.353†	4218.2	4317.1	489.53 ug/L	489.53 ppb	01:20:50
3	S 181.975 Axial†	751.2	715.1	1001.1 ug/L	1001.1 ppb	01:20:50
3	Sb 206.836†	1615.5	1592.9	511.55 ug/L	511.55 ppb	01:20:50
3	Se 196.026†	816.6	851.3	510.55 ug/L	510.55 ppb	01:20:50
3	Si 251.611†	82756.3	82903.3	2469.9 ug/L	2469.9 ppb	01:20:30
3	Sn 189.927†	3019.7	3036.5	497.76 ug/L	497.76 ppb	01:20:50
3	Ti 334.940†	311997.2	315361.7	503.12 ug/L	503.12 ppb	01:20:30
3	Tl 190.801†	1699.6	1744.3	491.82 ug/L	491.82 ppb	01:20:50
3	U 409.014†	15972.5	18489.5	507.77 ug/L	507.77 ppb	01:20:30
3	V 292.402†	71230.4	73102.4	489.52 ug/L	489.52 ppb	01:20:30
3	Zn 213.857†	56011.8	55793.8	483.09 ug/L	483.09 ppb	01:20:30
3	SiO2†	84324.6	84465.1	5392.3 ug/L	5392.3 ppb	01:21:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891893.6	98.960	%	0.4129				0.42%
Sc Radial	5698.7	97.5	%	0.66				0.67%
Y 371.029	725020.7	96.530	%	0.3368				0.35%
Y RADIAL	6079.3	96.68	%	0.898				0.93%
Ag 328.068†	111090.4	506.19	ug/L	3.072	506.19	ppb	3.072	0.61%
QC value within limits for Ag 328.068 Recovery = 101.24%								
Al 396.153Radial†	6933.8	4795.1	ug/L	35.88	4795.1	ppb	35.88	0.75%
QC value within limits for Al 396.153Radial Recovery = 95.90%								
As 188.979†	1218.2	485.77	ug/L	7.099	485.77	ppb	7.099	1.46%
QC value within limits for As 188.979 Recovery = 97.15%								
B 249.677†	22954.3	479.44	ug/L	3.883	479.44	ppb	3.883	0.81%
QC value within limits for B 249.677 Recovery = 95.89%								
Ba 233.527†	66403.8	493.41	ug/L	3.748	493.41	ppb	3.748	0.76%
QC value within limits for Ba 233.527 Recovery = 98.68%								
Be 313.107†	1320430.3	482.29	ug/L	0.622	482.29	ppb	0.622	0.13%
QC value within limits for Be 313.107 Recovery = 96.46%								
Ca 317.933Radial†	3366.4	4961.8	ug/L	18.84	4961.8	ppb	18.84	0.38%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.24%
Cd 226.502†            46716.2      493.66 ug/L         3.427      493.66 ppb          3.427   0.69%
   QC value within limits for Cd 226.502  Recovery = 98.73%
Co 228.616†            26231.0      497.97 ug/L         3.520      497.97 ppb          3.520   0.71%
   QC value within limits for Co 228.616  Recovery = 99.59%
Cr 267.716†            46262.9      486.42 ug/L         2.939      486.42 ppb          2.939   0.60%
   QC value within limits for Cr 267.716  Recovery = 97.28%
Cu 324.752†           170528.3      488.26 ug/L         3.298      488.26 ppb          3.298   0.68%
   QC value within limits for Cu 324.752  Recovery = 97.65%
Fe 238.204 Radial†       541.9      5088.7 ug/L        32.48      5088.7 ppb         32.48   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.77%
K 766.490 Radial†      29210.7      5171.4 ug/L        16.55      5171.4 ppb         16.55   0.32%
   QC value within limits for K 766.490 Radial  Recovery = 103.43%
Mg 279.077 IEC†          145.6      5143.9 ug/L        41.48      5143.9 ppb         41.48   0.81%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.88%
Mn 257.610†           466337.3      497.87 ug/L         0.177      497.87 ppb          0.177   0.04%
   QC value within limits for Mn 257.610  Recovery = 99.57%
Mo 202.031†             7831.7      497.88 ug/L         4.194      497.88 ppb          4.194   0.84%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     29584.1      9927.9 ug/L        45.87      9927.9 ppb         45.87   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 99.28%
Ni 231.604†            21208.8      490.80 ug/L         3.276      490.80 ppb          3.276   0.67%
   QC value within limits for Ni 231.604  Recovery = 98.16%
P 214.914†              4277.3      2393.0 ug/L        19.15      2393.0 ppb         19.15   0.80%
   QC value within limits for P 214.914  Recovery = 95.72%
Pb 220.353†             4329.0      490.88 ug/L         4.007      490.88 ppb          4.007   0.82%
   QC value within limits for Pb 220.353  Recovery = 98.18%
S 181.975 Axial†         707.9      990.98 ug/L        16.281      990.98 ppb         16.281   1.64%
   QC value within limits for S 181.975 Axial  Recovery = 99.10%
Sb 206.836†             1589.2      510.36 ug/L         6.901      510.36 ppb          6.901   1.35%
   QC value within limits for Sb 206.836  Recovery = 102.07%
Se 196.026†              862.5      517.13 ug/L         6.420      517.13 ppb          6.420   1.24%
   QC value within limits for Se 196.026  Recovery = 103.43%
Si 251.611†            83460.6      2486.5 ug/L        18.20      2486.5 ppb         18.20   0.73%
   QC value within limits for Si 251.611  Recovery = 99.46%
Sn 189.927†             3041.7      498.61 ug/L         3.768      498.61 ppb          3.768   0.76%
   QC value within limits for Sn 189.927  Recovery = 99.72%
Sr 421.552†            81418.6      507.01 ug/L         1.979      507.01 ppb          1.979   0.39%
   QC value within limits for Sr 421.552  Recovery = 101.40%
Ti 334.940†           317501.4      506.53 ug/L         3.545      506.53 ppb          3.545   0.70%
   QC value within limits for Ti 334.940  Recovery = 101.31%
Tl 190.801†             1745.4      492.11 ug/L         2.101      492.11 ppb          2.101   0.43%
   QC value within limits for Tl 190.801  Recovery = 98.42%
U 409.014†             18578.3      510.20 ug/L         2.371      510.20 ppb          2.371   0.46%
   QC value within limits for U 409.014  Recovery = 102.04%
V 292.402†             73587.7      492.74 ug/L         3.235      492.74 ppb          3.235   0.66%
   QC value within limits for V 292.402  Recovery = 98.55%
Zn 213.857†            56224.2      486.82 ug/L         3.710      486.82 ppb          3.710   0.76%
   QC value within limits for Zn 213.857  Recovery = 97.36%
SiO2†                  83903.7      5356.2 ug/L        42.59      5356.2 ppb         42.59   0.80%
   QC value within limits for SiO2  Recovery = 100.16%
All analyte(s) passed QC.
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Sequence No.: 91
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 01:23:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5898.6	5898.6	101	%			01:25:07
1	Y RADIAL	6317.9	6317.9	100.5	%			01:25:07
1	Al 396.153Radial†	-35.4	-14.6	-10.188	ug/L	-10.188	ppb	01:25:07
1	Ca 317.933Radial†	15.7	0.0	0.0021	ug/L	0.0021	ppb	01:25:27
1	Fe 238.204 Radial†	8.6	1.7	16.349	ug/L	16.349	ppb	01:25:27
1	K 766.490 Radial†	2422.9	48.7	8.5629	ug/L	8.5629	ppb	01:25:07
1	Mg 279.077 IEC†	3.2	2.0	72.073	ug/L	72.073	ppb	01:25:27
1	Na 589.592 Radial†	-603.4	490.1	164.47	ug/L	164.47	ppb	01:25:07
1	Sr 421.552†	-2.3	25.0	0.1559	ug/L	0.1559	ppb	01:25:07
1	Sc 361.383	900763.7	900763.7	99.944	%			01:26:24
1	Y 371.029	746155.6	746155.6	99.344	%			01:26:24
1	Ag 328.068†	355.0	62.5	0.2862	ug/L	0.2862	ppb	01:26:29
1	As 188.979†	-19.5	4.6	1.8298	ug/L	1.8298	ppb	01:26:49
1	B 249.677†	-294.0	236.5	4.9594	ug/L	4.9594	ppb	01:26:49
1	Ba 233.527†	-15.0	-6.6	-0.0464	ug/L	-0.0464	ppb	01:26:49
1	Be 313.107†	-5499.0	-389.0	-0.1415	ug/L	-0.1415	ppb	01:26:29
1	Cd 226.502†	-170.1	24.9	0.2606	ug/L	0.2606	ppb	01:26:49
1	Co 228.616†	-87.8	-22.5	-0.4260	ug/L	-0.4260	ppb	01:26:49
1	Cr 267.716†	89.3	10.7	0.1124	ug/L	0.1124	ppb	01:26:49
1	Cu 324.752†	6838.7	85.8	0.2463	ug/L	0.2463	ppb	01:26:29
1	Mn 257.610†	430.5	8.4	0.0092	ug/L	0.0092	ppb	01:26:49
1	Mo 202.031†	25.3	7.0	0.4457	ug/L	0.4457	ppb	01:26:49
1	Ni 231.604†	49.7	-36.8	-0.8522	ug/L	-0.8522	ppb	01:26:49
1	P 214.914†	233.9	10.5	5.9959	ug/L	5.9959	ppb	01:26:49
1	Pb 220.353†	-46.4	22.0	2.4860	ug/L	2.4860	ppb	01:26:49
1	S 181.975 Axial†	44.3	2.7	3.7888	ug/L	3.7888	ppb	01:26:49
1	Sb 206.836†	37.7	3.5	1.1096	ug/L	1.1096	ppb	01:26:49
1	Se 196.026†	-22.8	6.0	3.5320	ug/L	3.5320	ppb	01:26:49
1	Si 251.611†	499.7	50.3	1.4954	ug/L	1.4954	ppb	01:26:49
1	Sn 189.927†	6.2	1.2	0.1915	ug/L	0.1915	ppb	01:26:49
1	Ti 334.940†	-1003.7	110.6	0.1740	ug/L	0.1740	ppb	01:26:29
1	Tl 190.801†	-46.2	-13.8	-3.8499	ug/L	-3.8499	ppb	01:26:49
1	U 409.014†	-2194.6	206.0	5.6714	ug/L	5.6714	ppb	01:26:24
1	V 292.402†	-1244.3	113.4	0.7653	ug/L	0.7653	ppb	01:26:29
1	Zn 213.857†	644.3	22.8	0.2004	ug/L	0.2004	ppb	01:26:49
1	SiO2†	505.9	38.7	2.4593	ug/L	2.4593	ppb	01:27:55
2	Sc Radial	5642.3	5642.3	96.6	%			01:25:32
2	Y RADIAL	5996.7	5996.7	95.37	%			01:25:32
2	Al 396.153Radial†	-30.1	-10.7	-7.4713	ug/L	-7.4713	ppb	01:25:32
2	Ca 317.933Radial†	19.1	4.2	6.1650	ug/L	6.1650	ppb	01:25:52
2	Fe 238.204 Radial†	5.2	-1.4	-13.131	ug/L	-13.131	ppb	01:25:52
2	K 766.490 Radial†	2437.9	173.3	30.670	ug/L	30.670	ppb	01:25:32
2	Mg 279.077 IEC†	1.1	0.0	0.2827	ug/L	0.2827	ppb	01:25:52
2	Na 589.592 Radial†	-609.6	456.5	153.20	ug/L	153.20	ppb	01:25:32
2	Sr 421.552†	-5.0	22.2	0.1382	ug/L	0.1382	ppb	01:25:32
2	Sc 361.383	897445.2	897445.2	99.576	%			01:26:54
2	Y 371.029	742249.6	742249.6	98.824	%			01:26:54
2	Ag 328.068†	357.9	66.7	0.2960	ug/L	0.2960	ppb	01:26:59
2	As 188.979†	-16.8	7.3	2.8649	ug/L	2.8649	ppb	01:27:19
2	B 249.677†	-323.9	205.4	4.3098	ug/L	4.3098	ppb	01:27:19
2	Ba 233.527†	-16.9	-8.5	-0.0614	ug/L	-0.0614	ppb	01:27:19
2	Be 313.107†	-5480.6	-390.9	-0.1423	ug/L	-0.1423	ppb	01:26:59
2	Cd 226.502†	-191.6	2.7	0.0295	ug/L	0.0295	ppb	01:27:19
2	Co 228.616†	-83.6	-18.5	-0.3504	ug/L	-0.3504	ppb	01:27:19
2	Cr 267.716†	78.0	-0.3	-0.0043	ug/L	-0.0043	ppb	01:27:19
2	Cu 324.752†	6643.1	-85.3	-0.2449	ug/L	-0.2449	ppb	01:26:59
2	Mn 257.610†	436.2	15.7	0.0154	ug/L	0.0154	ppb	01:27:19
2	Mo 202.031†	27.5	9.3	0.5913	ug/L	0.5913	ppb	01:27:19
2	Ni 231.604†	57.0	-29.4	-0.6796	ug/L	-0.6796	ppb	01:27:19

2	P 214.914†	244.0	21.5	12.472	ug/L	12.472 ppb	01:27:19
2	Pb 220.353†	-63.1	5.1	0.5773	ug/L	0.5773 ppb	01:27:19
2	S 181.975 Axial†	40.8	-0.6	-0.8367	ug/L	-0.8367 ppb	01:27:19
2	Sb 206.836†	40.6	6.5	2.0916	ug/L	2.0916 ppb	01:27:19
2	Se 196.026†	-22.7	6.0	3.4469	ug/L	3.4469 ppb	01:27:19
2	Si 251.611†	493.2	45.6	1.3437	ug/L	1.3437 ppb	01:27:19
2	Sn 189.927†	6.8	1.8	0.2938	ug/L	0.2938 ppb	01:27:19
2	Ti 334.940†	-1048.6	61.8	0.0962	ug/L	0.0962 ppb	01:26:59
2	Tl 190.801†	-39.2	-6.8	-1.9099	ug/L	-1.9099 ppb	01:27:19
2	U 409.014†	-2163.7	228.9	6.3072	ug/L	6.3072 ppb	01:26:54
2	V 292.402†	-1219.6	133.5	0.9045	ug/L	0.9045 ppb	01:26:59
2	Zn 213.857†	631.1	12.0	0.1104	ug/L	0.1104 ppb	01:27:19
2	SiO2†	504.9	39.6	2.4910	ug/L	2.4910 ppb	01:28:00
3	Sc Radial	5705.0	5705.0	97.6	%		01:25:57
3	Y RADIAL	6101.7	6101.7	97.04	%		01:25:57
3	Al 396.153Radial†	-45.1	-25.8	-17.921	ug/L	-17.921 ppb	01:25:57
3	Ca 317.933Radial†	21.2	6.2	9.0983	ug/L	9.0983 ppb	01:26:17
3	Fe 238.204 Radial†	8.0	1.4	13.060	ug/L	13.060 ppb	01:26:17
3	K 766.490 Radial†	2428.3	135.7	24.001	ug/L	24.001 ppb	01:25:57
3	Mg 279.077 IEC†	1.6	0.4	15.408	ug/L	15.408 ppb	01:26:17
3	Na 589.592 Radial†	-641.1	431.2	144.70	ug/L	144.70 ppb	01:25:57
3	Sr 421.552†	14.4	42.1	0.2623	ug/L	0.2623 ppb	01:25:57
3	Sc 361.383	896279.3	896279.3	99.447	%		01:27:25
3	Y 371.029	740343.4	740343.4	98.570	%		01:27:25
3	Ag 328.068†	294.0	2.9	0.0162	ug/L	0.0162 ppb	01:27:30
3	As 188.979†	-21.6	2.4	0.9565	ug/L	0.9565 ppb	01:27:50
3	B 249.677†	-299.6	229.4	4.8090	ug/L	4.8090 ppb	01:27:50
3	Ba 233.527†	-18.1	-9.7	-0.0709	ug/L	-0.0709 ppb	01:27:50
3	Be 313.107†	-5514.5	-432.1	-0.1569	ug/L	-0.1569 ppb	01:27:30
3	Cd 226.502†	-165.4	28.8	0.3032	ug/L	0.3032 ppb	01:27:50
3	Co 228.616†	-81.8	-16.9	-0.3210	ug/L	-0.3210 ppb	01:27:50
3	Cr 267.716†	76.3	-1.9	-0.0204	ug/L	-0.0204 ppb	01:27:50
3	Cu 324.752†	6725.9	6.6	0.0196	ug/L	0.0196 ppb	01:27:30
3	Mn 257.610†	443.6	23.8	0.0264	ug/L	0.0264 ppb	01:27:50
3	Mo 202.031†	17.4	-0.8	-0.0498	ug/L	-0.0498 ppb	01:27:50
3	Ni 231.604†	75.6	-10.5	-0.2430	ug/L	-0.2430 ppb	01:27:50
3	P 214.914†	244.9	22.7	13.109	ug/L	13.109 ppb	01:27:50
3	Pb 220.353†	-52.7	15.5	1.7418	ug/L	1.7418 ppb	01:27:50
3	S 181.975 Axial†	48.2	6.9	9.6243	ug/L	9.6243 ppb	01:27:50
3	Sb 206.836†	38.8	4.8	1.5414	ug/L	1.5414 ppb	01:27:50
3	Se 196.026†	-26.9	1.8	1.0581	ug/L	1.0581 ppb	01:27:50
3	Si 251.611†	502.1	55.2	1.6406	ug/L	1.6406 ppb	01:27:50
3	Sn 189.927†	12.8	7.9	1.2928	ug/L	1.2928 ppb	01:27:50
3	Ti 334.940†	-906.2	203.6	0.3245	ug/L	0.3245 ppb	01:27:30
3	Tl 190.801†	-38.6	-6.3	-1.7579	ug/L	-1.7579 ppb	01:27:50
3	U 409.014†	-2308.4	80.5	2.2172	ug/L	2.2172 ppb	01:27:25
3	V 292.402†	-1308.0	43.1	0.2865	ug/L	0.2865 ppb	01:27:30
3	Zn 213.857†	641.1	22.8	0.1989	ug/L	0.1989 ppb	01:27:50
3	SiO2†	563.6	99.3	6.3422	ug/L	6.3422 ppb	01:28:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898162.7	99.656	%	0.2582				0.26%
Sc Radial	5748.6	98.4	%	2.29				2.32%
Y 371.029	742916.2	98.913	%	0.3945				0.40%
Y RADIAL	6138.8	97.63	%	2.605				2.67%
Ag 328.068†	44.0	0.1994	ug/L	0.15878	0.1994	ppb	0.15878	79.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-17.1	-11.860	ug/L	5.4216	-11.860	ppb	5.4216	45.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.8	1.8837	ug/L	0.95530	1.8837	ppb	0.95530	50.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	223.8	4.6927	ug/L	0.34006	4.6927	ppb	0.34006	7.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.3	-0.0595	ug/L	0.01231	-0.0595	ppb	0.01231	20.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-404.0	-0.1469	ug/L	0.00867	-0.1469	ppb	0.00867	5.90%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.0885	ug/L	4.64266	5.0885	ppb	4.64266	91.24%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.8      0.1978 ug/L       0.14729      0.1978 ppb        0.14729  74.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -19.3     -0.3658 ug/L       0.05419     -0.3658 ppb        0.05419  14.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               2.8      0.0292 ug/L       0.07245      0.0292 ppb        0.07245 247.97%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               2.4      0.0070 ug/L       0.24586      0.0070 ppb        0.24586 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.6      5.4263 ug/L      16.15488      5.4263 ppb       16.15488 297.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       119.3     21.078 ug/L       11.3397     21.078 ppb        11.3397  53.80%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.8     29.255 ug/L       37.8455     29.255 ppb        37.8455 129.37%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              16.0      0.0170 ug/L       0.00866      0.0170 ppb        0.00866  50.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.2      0.3291 ug/L       0.33610      0.3291 ppb        0.33610 102.14%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      459.3     154.13 ug/L         9.920     154.13 ppb          9.920   6.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -25.6     -0.5916 ug/L       0.31401     -0.5916 ppb        0.31401  53.08%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               18.3     10.526 ug/L        3.9357     10.526 ppb         3.9357  37.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              14.2      1.6017 ug/L       0.96200      1.6017 ppb        0.96200  60.06%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.0      4.1921 ug/L       5.24211      4.1921 ppb        5.24211 125.05%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.9      1.5808 ug/L       0.49219      1.5808 ppb        0.49219  31.13%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.6      2.6790 ug/L       1.40440      2.6790 ppb        1.40440  52.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              50.4      1.4932 ug/L       0.14848      1.4932 ppb        0.14848   9.94%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.6      0.5927 ug/L       0.60842      0.5927 ppb        0.60842 102.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              29.8      0.1855 ug/L       0.06712      0.1855 ppb        0.06712  36.19%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             125.4      0.1982 ug/L       0.11606      0.1982 ppb        0.11606  58.55%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -9.0     -2.5059 ug/L       1.16640     -2.5059 ppb        1.16640  46.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              171.8      4.7319 ug/L       2.20093      4.7319 ppb        2.20093  46.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               96.7      0.6521 ug/L       0.32420      0.6521 ppb        0.32420  49.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              19.2      0.1699 ug/L       0.05153      0.1699 ppb        0.05153  30.33%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    59.2      3.7642 ug/L       2.23271      3.7642 ppb        2.23271  59.32%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 92
Sample ID: 241541003|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 97
Date Collected: 12/9/2009 01:30:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541003|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5854.9	5854.9	100	%			01:32:29
1	Y RADIAL	7257.9	7257.9	115.4	%			01:32:29
1	Al 396.153Radial†	93936.4	93781.0	65142	ug/L	65142	ppb	01:32:09
1	Ca 317.933Radial†	23893.2	23832.9	35128	ug/L	35128	ppb	01:32:09
1	Fe 238.204 Radial†	12819.9	12789.1	119730	ug/L	119730	ppb	01:32:09
1	K 766.490 Radial†	51561.9	49113.7	8688.4	ug/L	8688.4	ppb	01:32:09
1	Mg 279.077 IEC†	409.8	407.9	14286	ug/L	14286	ppb	01:32:29
1	Na 589.592 Radial†	9666.5	10736.4	3602.9	ug/L	3602.9	ppb	01:32:09
1	Sr 421.552†	35478.7	35439.6	220.38	ug/L	220.38	ppb	01:32:09
1	Sc 361.383	916859.8	916859.8	101.73	%			01:33:27
1	Y 371.029	873812.3	873812.3	116.34	%			01:33:27
1	Ag 328.068†	-7730.5	-7891.8	2.7113	ug/L	2.7113	ppb	01:33:32
1	As 188.979†	-60.3	-35.1	30.855	ug/L	30.855	ppb	01:33:52
1	B 249.677†	1528.3	2032.9	26.668	ug/L	26.668	ppb	01:33:32
1	Ba 233.527†	103988.4	102228.0	762.46	ug/L	762.46	ppb	01:33:32
1	Be 313.107†	-4653.6	538.6	6.3454	ug/L	6.3454	ppb	01:33:32
1	Cd 226.502†	1106.0	1282.3	1.6148	ug/L	1.6148	ppb	01:33:52
1	Co 228.616†	1670.7	1707.7	24.376	ug/L	24.376	ppb	01:33:52
1	Cr 267.716†	5512.6	5340.2	58.574	ug/L	58.574	ppb	01:33:32
1	Cu 324.752†	22602.5	15461.4	50.354	ug/L	50.354	ppb	01:33:32
1	Mn 257.610†	2154242.8	2117177.2	2270.2	ug/L	2270.2	ppb	01:33:27
1	Mo 202.031†	75.4	55.8	12.038	ug/L	12.038	ppb	01:33:52
1	Ni 231.604†	2095.8	1973.6	45.680	ug/L	45.680	ppb	01:33:52
1	P 214.914†	2325.9	2062.8	1107.8	ug/L	1107.8	ppb	01:33:52
1	Pb 220.353†	1910.1	1946.0	224.76	ug/L	224.76	ppb	01:33:52
1	S 181.975 Axial†	687.3	634.1	875.69	ug/L	875.69	ppb	01:33:52
1	Sb 206.836†	79.5	43.9	4.2085	ug/L	4.2085	ppb	01:33:52
1	Se 196.026†	-524.9	-487.1	107.39	ug/L	107.39	ppb	01:33:52
1	Si 251.611†	1130508.3	1110828.9	33251	ug/L	33251	ppb	01:33:27
1	Sn 189.927†	-140.4	-143.0	-18.134	ug/L	-18.134	ppb	01:33:52
1	Ti 334.940†	1993187.3	1960398.4	3130.3	ug/L	3130.3	ppb	01:33:27
1	Tl 190.801†	-191.3	-155.5	-5.0722	ug/L	-5.0722	ppb	01:33:52
1	U 409.014†	-10727.5	-8143.2	-239.49	ug/L	-239.49	ppb	01:33:27
1	V 292.402†	25111.7	26042.9	150.27	ug/L	150.27	ppb	01:33:32
1	Zn 213.857†	48922.0	47468.1	402.43	ug/L	402.43	ppb	01:33:32
1	SiO2†	1131948.0	1112226.3	71340	ug/L	71340	ppb	01:35:01
2	Sc Radial	5813.0	5813.0	99.5	%			01:32:54
2	Y RADIAL	7212.8	7212.8	114.7	%			01:32:54
2	Al 396.153Radial†	94529.4	95052.2	66025	ug/L	66025	ppb	01:32:34
2	Ca 317.933Radial†	24037.6	24149.8	35595	ug/L	35595	ppb	01:32:34
2	Fe 238.204 Radial†	12867.1	12928.7	121040	ug/L	121040	ppb	01:32:34
2	K 766.490 Radial†	51947.9	49872.3	8823.0	ug/L	8823.0	ppb	01:32:34
2	Mg 279.077 IEC†	407.4	408.4	14306	ug/L	14306	ppb	01:32:54
2	Na 589.592 Radial†	9681.2	10820.6	3631.2	ug/L	3631.2	ppb	01:32:34
2	Sr 421.552†	35671.2	35888.1	223.17	ug/L	223.17	ppb	01:32:34
2	Sc 361.383	921203.2	921203.2	102.21	%			01:33:58
2	Y 371.029	877082.2	877082.2	116.78	%			01:33:58
2	Ag 328.068†	-7906.6	-8028.2	2.5170	ug/L	2.5170	ppb	01:34:03
2	As 188.979†	-77.3	-51.4	24.663	ug/L	24.663	ppb	01:34:23
2	B 249.677†	1607.5	2103.4	27.971	ug/L	27.971	ppb	01:34:03
2	Ba 233.527†	106512.4	104215.4	777.24	ug/L	777.24	ppb	01:34:03
2	Be 313.107†	-4389.2	818.8	6.4564	ug/L	6.4564	ppb	01:34:03
2	Cd 226.502†	1086.4	1258.0	1.2274	ug/L	1.2274	ppb	01:34:23
2	Co 228.616†	1697.7	1726.4	24.706	ug/L	24.706	ppb	01:34:23
2	Cr 267.716†	5620.4	5420.1	59.443	ug/L	59.443	ppb	01:34:03
2	Cu 324.752†	23112.9	15855.9	51.549	ug/L	51.549	ppb	01:34:03
2	Mn 257.610†	2168671.1	2121308.9	2274.7	ug/L	2274.7	ppb	01:33:58
2	Mo 202.031†	65.4	45.6	11.484	ug/L	11.484	ppb	01:34:23
2	Ni 231.604†	2126.8	1994.3	46.159	ug/L	46.159	ppb	01:34:23

2	P 214.914†	2320.6	2046.8	1097.6	ug/L	1097.6 ppb	01:34:23
2	Pb 220.353†	1914.3	1941.3	224.31	ug/L	224.31 ppb	01:34:23
2	S 181.975 Axial†	686.1	629.6	869.30	ug/L	869.30 ppb	01:34:23
2	Sb 206.836†	67.2	31.5	0.2874	ug/L	0.2874 ppb	01:34:23
2	Se 196.026†	-527.7	-487.4	111.50	ug/L	111.50 ppb	01:34:23
2	Si 251.611†	1137243.7	1112179.0	33291	ug/L	33291 ppb	01:33:58
2	Sn 189.927†	-131.8	-133.9	-16.576	ug/L	-16.576 ppb	01:34:23
2	Ti 334.940†	2005527.7	1963233.9	3134.9	ug/L	3134.9 ppb	01:33:58
2	Tl 190.801†	-182.3	-145.8	-2.2797	ug/L	-2.2797 ppb	01:34:23
2	U 409.014†	-10811.9	-8176.0	-240.56	ug/L	-240.56 ppb	01:33:58
2	V 292.402†	25771.9	26572.4	153.55	ug/L	153.55 ppb	01:34:03
2	Zn 213.857†	50199.9	48491.5	411.24	ug/L	411.24 ppb	01:34:03
2	SiO2†	1131518.8	1106560.1	70977	ug/L	70977 ppb	01:35:06
3	Sc Radial	5837.4	5837.4	99.9	%		01:33:20
3	Y RADIAL	7250.8	7250.8	115.3	%		01:33:20
3	Al 396.153Radial†	94444.9	94570.5	65691	ug/L	65691 ppb	01:33:00
3	Ca 317.933Radial†	24025.5	24036.7	35429	ug/L	35429 ppb	01:33:00
3	Fe 238.204 Radial†	12850.8	12858.4	120380	ug/L	120380 ppb	01:33:00
3	K 766.490 Radial†	51950.9	49657.1	8784.9	ug/L	8784.9 ppb	01:33:00
3	Mg 279.077 IEC†	409.7	409.0	14325	ug/L	14325 ppb	01:33:20
3	Na 589.592 Radial†	9711.7	10810.5	3627.8	ug/L	3627.8 ppb	01:33:00
3	Sr 421.552†	35702.0	35769.1	222.43	ug/L	222.43 ppb	01:33:00
3	Sc 361.383	923085.0	923085.0	102.42	%		01:34:29
3	Y 371.029	877901.1	877901.1	116.88	%		01:34:29
3	Ag 328.068†	-7796.9	-7905.3	2.8523	ug/L	2.8523 ppb	01:34:34
3	As 188.979†	-67.6	-41.8	28.326	ug/L	28.326 ppb	01:34:54
3	B 249.677†	1603.2	2096.0	27.904	ug/L	27.904 ppb	01:34:34
3	Ba 233.527†	104392.2	101933.0	760.30	ug/L	760.30 ppb	01:34:34
3	Be 313.107†	-4547.6	672.9	6.3947	ug/L	6.3947 ppb	01:34:34
3	Cd 226.502†	1098.0	1267.1	1.3898	ug/L	1.3898 ppb	01:34:54
3	Co 228.616†	1669.8	1695.8	24.140	ug/L	24.140 ppb	01:34:54
3	Cr 267.716†	5563.1	5352.9	58.720	ug/L	58.720 ppb	01:34:34
3	Cu 324.752†	22584.7	15294.1	49.908	ug/L	49.908 ppb	01:34:34
3	Mn 257.610†	2168009.2	2116337.4	2269.3	ug/L	2269.3 ppb	01:34:29
3	Mo 202.031†	83.0	62.7	12.522	ug/L	12.522 ppb	01:34:54
3	Ni 231.604†	2097.4	1961.3	45.395	ug/L	45.395 ppb	01:34:54
3	P 214.914†	2319.3	2040.9	1094.9	ug/L	1094.9 ppb	01:34:54
3	Pb 220.353†	1900.2	1923.8	222.31	ug/L	222.31 ppb	01:34:54
3	S 181.975 Axial†	679.1	621.5	857.96	ug/L	857.96 ppb	01:34:54
3	Sb 206.836†	67.8	31.9	0.4372	ug/L	0.4372 ppb	01:34:54
3	Se 196.026†	-525.3	-484.1	111.30	ug/L	111.30 ppb	01:34:54
3	Si 251.611†	1138201.2	1110845.6	33251	ug/L	33251 ppb	01:34:29
3	Sn 189.927†	-135.7	-137.5	-17.187	ug/L	-17.187 ppb	01:34:54
3	Ti 334.940†	2006840.1	1960515.4	3130.5	ug/L	3130.5 ppb	01:34:29
3	Tl 190.801†	-194.9	-157.8	-5.6901	ug/L	-5.6901 ppb	01:34:54
3	U 409.014†	-10853.9	-8195.5	-241.02	ug/L	-241.02 ppb	01:34:29
3	V 292.402†	25253.5	26014.9	149.99	ug/L	149.99 ppb	01:34:34
3	Zn 213.857†	49173.2	47388.9	401.68	ug/L	401.68 ppb	01:34:34
3	SiO2†	1126651.2	1099550.9	70527	ug/L	70527 ppb	01:35:12

Mean Data: 241541003|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	920382.7	102.12	%	0.354				0.35%
Sc Radial	5835.1	99.8	%	0.36				0.36%
Y 371.029	876265.2	116.67	%	0.288				0.25%
Y RADIAL	7240.5	115.2	%	0.39				0.33%
Ag 328.068†	-7941.8	2.6935	ug/L	0.16838	2.6935	ppb	0.16838	6.25%
Al 396.153Radial†	94467.9	65619	ug/L	445.8	65619	ppb	445.8	0.68%
As 188.979†	-42.8	27.948	ug/L	3.1132	27.948	ppb	3.1132	11.14%
B 249.677†	2077.4	27.514	ug/L	0.7340	27.514	ppb	0.7340	2.67%
Ba 233.527†	102792.1	766.67	ug/L	9.224	766.67	ppb	9.224	1.20%
Be 313.107†	676.8	6.3988	ug/L	0.05564	6.3988	ppb	0.05564	0.87%
Ca 317.933Radial†	24006.5	35384	ug/L	236.7	35384	ppb	236.7	0.67%
Cd 226.502†	1269.1	1.4107	ug/L	0.19452	1.4107	ppb	0.19452	13.79%
Co 228.616†	1709.9	24.408	ug/L	0.2844	24.408	ppb	0.2844	1.17%
Cr 267.716†	5371.1	58.912	ug/L	0.4652	58.912	ppb	0.4652	0.79%
Cu 324.752†	15537.1	50.604	ug/L	0.8487	50.604	ppb	0.8487	1.68%
Fe 238.204 Radial†	12858.7	120380	ug/L	653.3	120380	ppb	653.3	0.54%
K 766.490 Radial†	49547.7	8765.4	ug/L	69.36	8765.4	ppb	69.36	0.79%

Mg 279.077 IEC†	408.4	14306	ug/L	19.6	14306	ppb	19.6	0.14%
Mn 257.610†	2118274.5	2271.4	ug/L	2.89	2271.4	ppb	2.89	0.13%
Mo 202.031†	54.7	12.015	ug/L	0.5195	12.015	ppb	0.5195	4.32%
Na 589.592 Radial†	10789.1	3620.6	ug/L	15.43	3620.6	ppb	15.43	0.43%
Ni 231.604†	1976.4	45.745	ug/L	0.3858	45.745	ppb	0.3858	0.84%
P 214.914†	2050.2	1100.1	ug/L	6.78	1100.1	ppb	6.78	0.62%
Pb 220.353†	1937.0	223.79	ug/L	1.304	223.79	ppb	1.304	0.58%
S 181.975 Axial†	628.4	867.65	ug/L	8.980	867.65	ppb	8.980	1.03%
Sb 206.836†	35.8	1.6444	ug/L	2.22186	1.6444	ppb	2.22186	135.12%
Se 196.026†	-486.2	110.07	ug/L	2.318	110.07	ppb	2.318	2.11%
Si 251.611†	1111284.5	33264	ug/L	23.2	33264	ppb	23.2	0.07%
Sn 189.927†	-138.1	-17.299	ug/L	0.7851	-17.299	ppb	0.7851	4.54%
Sr 421.552†	35699.0	222.00	ug/L	1.445	222.00	ppb	1.445	0.65%
Ti 334.940†	1961382.6	3131.9	ug/L	2.57	3131.9	ppb	2.57	0.08%
Tl 190.801†	-153.0	-4.3473	ug/L	1.81708	-4.3473	ppb	1.81708	41.80%
U 409.014†	-8171.6	-240.36	ug/L	0.782	-240.36	ppb	0.782	0.33%
V 292.402†	26210.1	151.27	ug/L	1.981	151.27	ppb	1.981	1.31%
Zn 213.857†	47782.8	405.12	ug/L	5.318	405.12	ppb	5.318	1.31%
SiO2†	1106112.4	70948	ug/L	407.4	70948	ppb	407.4	0.57%

Sequence No.: 93
Sample ID: 241541004|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 12/9/2009 01:37:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541004|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5889.7	5889.7	101	%			01:39:38
1	Y RADIAL	7050.8	7050.8	112.1	%			01:39:38
1	Al 396.153Radial†	96470.8	95740.8	66504	ug/L	66504	ppb	01:39:18
1	Ca 317.933Radial†	16016.4	15876.2	23401	ug/L	23401	ppb	01:39:18
1	Fe 238.204 Radial†	14344.4	14226.0	133190	ug/L	133190	ppb	01:39:18
1	K 766.490 Radial†	47893.6	45169.4	7879.3	ug/L	7879.3	ppb	01:39:18
1	Mg 279.077 IEC†	392.6	388.4	13589	ug/L	13589	ppb	01:39:38
1	Na 589.592 Radial†	10673.5	11678.4	3919.0	ug/L	3919.0	ppb	01:39:18
1	Sr 421.552†	39641.1	39360.1	244.91	ug/L	244.91	ppb	01:39:18
1	Sc 361.383	909179.1	909179.1	100.88	%			01:40:43
1	Y 371.029	836474.3	836474.3	111.37	%			01:40:43
1	Ag 328.068†	-8241.0	-8462.0	5.1801	ug/L	5.1801	ppb	01:40:43
1	As 188.979†	-54.0	-29.3	37.560	ug/L	37.560	ppb	01:41:03
1	B 249.677†	1374.0	1892.8	21.381	ug/L	21.381	ppb	01:40:43
1	Ba 233.527†	271735.5	269378.3	2002.0	ug/L	2002.0	ppb	01:40:43
1	Be 313.107†	-2277.0	2855.9	7.7336	ug/L	7.7336	ppb	01:40:43
1	Cd 226.502†	1216.0	1400.5	1.5324	ug/L	1.5324	ppb	01:41:03
1	Co 228.616†	13419.7	13368.3	245.43	ug/L	245.43	ppb	01:41:03
1	Cr 267.716†	7030.3	6890.5	75.346	ug/L	75.346	ppb	01:41:03
1	Cu 324.752†	22168.0	15218.3	50.344	ug/L	50.344	ppb	01:40:43
1	Mn 257.610†	10616592.1	10523746.6	11239	ug/L	11239	ppb	01:40:36
1	Mo 202.031†	68.4	49.5	12.591	ug/L	12.591	ppb	01:41:03
1	Ni 231.604†	2943.5	2831.3	65.400	ug/L	65.400	ppb	01:41:03
1	P 214.914†	2625.6	2379.2	1280.0	ug/L	1280.0	ppb	01:41:03
1	Pb 220.353†	2851.2	2894.8	331.22	ug/L	331.22	ppb	01:41:03
1	S 181.975 Axial†	648.2	600.9	829.00	ug/L	829.00	ppb	01:41:03
1	Sb 206.836†	64.6	29.7	-0.9608	ug/L	-0.9608	ppb	01:41:03
1	Se 196.026†	-565.5	-531.7	124.24	ug/L	124.24	ppb	01:41:03
1	Si 251.611†	1077594.1	1067763.4	31962	ug/L	31962	ppb	01:40:43
1	Sn 189.927†	-132.0	-135.8	-17.988	ug/L	-17.988	ppb	01:41:03
1	Ti 334.940†	2151320.3	2133706.8	3406.4	ug/L	3406.4	ppb	01:40:43
1	Tl 190.801†	-317.9	-282.6	12.634	ug/L	12.634	ppb	01:41:03
1	U 409.014†	-17127.9	-14577.0	-418.45	ug/L	-418.45	ppb	01:40:43
1	V 292.402†	42299.6	43289.7	261.46	ug/L	261.46	ppb	01:40:43
1	Zn 213.857†	37612.5	36663.3	306.65	ug/L	306.65	ppb	01:40:43
1	SiO2†	1073807.5	1063992.0	68247	ug/L	68247	ppb	01:42:15
2	Sc Radial	5833.2	5833.2	99.8	%			01:40:03
2	Y RADIAL	6994.1	6994.1	111.2	%			01:40:03
2	Al 396.153Radial†	94857.7	95053.1	66026	ug/L	66026	ppb	01:39:43
2	Ca 317.933Radial†	15754.2	15767.7	23241	ug/L	23241	ppb	01:39:43
2	Fe 238.204 Radial†	14072.0	14091.2	131930	ug/L	131930	ppb	01:39:43
2	K 766.490 Radial†	47133.2	44868.4	7826.0	ug/L	7826.0	ppb	01:39:43
2	Mg 279.077 IEC†	383.9	383.4	13414	ug/L	13414	ppb	01:40:03
2	Na 589.592 Radial†	10442.7	11549.9	3875.9	ug/L	3875.9	ppb	01:39:43
2	Sr 421.552†	38831.4	38930.3	242.23	ug/L	242.23	ppb	01:39:43
2	Sc 361.383	908774.0	908774.0	100.83	%			01:41:16
2	Y 371.029	835053.4	835053.4	111.18	%			01:41:16
2	Ag 328.068†	-8414.9	-8638.1	3.9856	ug/L	3.9856	ppb	01:41:16
2	As 188.979†	-43.2	-18.7	41.626	ug/L	41.626	ppb	01:41:36
2	B 249.677†	1411.1	1930.1	22.332	ug/L	22.332	ppb	01:41:16
2	Ba 233.527†	272260.3	270018.9	2006.7	ug/L	2006.7	ppb	01:41:16
2	Be 313.107†	-2114.8	3015.7	7.8068	ug/L	7.8068	ppb	01:41:16
2	Cd 226.502†	1210.8	1395.9	1.6098	ug/L	1.6098	ppb	01:41:36
2	Co 228.616†	13409.4	13364.1	245.35	ug/L	245.35	ppb	01:41:36
2	Cr 267.716†	7028.9	6892.1	75.342	ug/L	75.342	ppb	01:41:36
2	Cu 324.752†	22208.7	15268.5	50.424	ug/L	50.424	ppb	01:41:16
2	Mn 257.610†	10602459.0	10514421.8	11229	ug/L	11229	ppb	01:41:09
2	Mo 202.031†	65.0	46.1	12.289	ug/L	12.289	ppb	01:41:36
2	Ni 231.604†	2909.1	2798.5	64.640	ug/L	64.640	ppb	01:41:36

2	P 214.914†	2623.7	2378.5	1280.4	ug/L	1280.4 ppb	01:41:36
2	Pb 220.353†	2860.5	2905.3	332.40	ug/L	332.40 ppb	01:41:36
2	S 181.975 Axial†	638.0	591.2	815.40	ug/L	815.40 ppb	01:41:36
2	Sb 206.836†	56.6	21.9	-3.4823	ug/L	-3.4823 ppb	01:41:36
2	Se 196.026†	-564.2	-530.7	120.75	ug/L	120.75 ppb	01:41:36
2	Si 251.611†	1080648.4	1071268.7	32067	ug/L	32067 ppb	01:41:16
2	Sn 189.927†	-131.1	-135.0	-17.896	ug/L	-17.896 ppb	01:41:36
2	Ti 334.940†	2155153.5	2138459.0	3413.9	ug/L	3413.9 ppb	01:41:16
2	Tl 190.801†	-319.1	-284.0	12.227	ug/L	12.227 ppb	01:41:36
2	U 409.014†	-17169.4	-14625.7	-419.63	ug/L	-419.63 ppb	01:41:16
2	V 292.402†	42336.2	43344.7	262.00	ug/L	262.00 ppb	01:41:16
2	Zn 213.857†	37624.0	36691.2	307.03	ug/L	307.03 ppb	01:41:16
2	SiO2†	1077547.5	1068175.6	68515	ug/L	68515 ppb	01:42:21
3	Sc Radial	5838.6	5838.6	99.9	%		01:40:28
3	Y RADIAL	7001.1	7001.1	111.3	%		01:40:28
3	Al 396.153Radial†	96017.9	96125.2	66771	ug/L	66771 ppb	01:40:08
3	Ca 317.933Radial†	15958.1	15956.9	23520	ug/L	23520 ppb	01:40:08
3	Fe 238.204 Radial†	14217.3	14223.4	133160	ug/L	133160 ppb	01:40:08
3	K 766.490 Radial†	47516.0	45207.3	7886.6	ug/L	7886.6 ppb	01:40:08
3	Mg 279.077 IEC†	390.2	389.4	13624	ug/L	13624 ppb	01:40:28
3	Na 589.592 Radial†	10445.9	11543.3	3873.7	ug/L	3873.7 ppb	01:40:08
3	Sr 421.552†	39292.9	39355.8	244.88	ug/L	244.88 ppb	01:40:08
3	Sc 361.383	908246.7	908246.7	100.77	%		01:41:49
3	Y 371.029	836211.4	836211.4	111.33	%		01:41:49
3	Ag 328.068†	-8267.7	-8496.9	5.0065	ug/L	5.0065 ppb	01:41:49
3	As 188.979†	-54.4	-29.8	37.318	ug/L	37.318 ppb	01:42:09
3	B 249.677†	1367.7	1887.8	21.287	ug/L	21.287 ppb	01:41:49
3	Ba 233.527†	270159.4	268090.9	1992.5	ug/L	1992.5 ppb	01:41:49
3	Be 313.107†	-2360.8	2770.3	7.6887	ug/L	7.6887 ppb	01:41:49
3	Cd 226.502†	1204.7	1390.5	1.4290	ug/L	1.4290 ppb	01:42:09
3	Co 228.616†	13289.4	13252.7	243.24	ug/L	243.24 ppb	01:42:09
3	Cr 267.716†	7002.2	6869.8	75.126	ug/L	75.126 ppb	01:42:09
3	Cu 324.752†	22194.2	15266.9	50.482	ug/L	50.482 ppb	01:41:49
3	Mn 257.610†	10562817.2	10481188.7	11194	ug/L	11194 ppb	01:41:42
3	Mo 202.031†	69.8	50.9	12.678	ug/L	12.678 ppb	01:42:09
3	Ni 231.604†	2924.3	2815.3	65.031	ug/L	65.031 ppb	01:42:09
3	P 214.914†	2596.3	2352.8	1264.9	ug/L	1264.9 ppb	01:42:09
3	Pb 220.353†	2830.4	2877.1	329.27	ug/L	329.27 ppb	01:42:09
3	S 181.975 Axial†	644.6	598.1	824.97	ug/L	824.97 ppb	01:42:09
3	Sb 206.836†	63.9	29.2	-1.1084	ug/L	-1.1084 ppb	01:42:09
3	Se 196.026†	-566.0	-532.9	123.55	ug/L	123.55 ppb	01:42:09
3	Si 251.611†	1073836.5	1065131.2	31883	ug/L	31883 ppb	01:41:49
3	Sn 189.927†	-125.1	-129.1	-16.879	ug/L	-16.879 ppb	01:42:09
3	Ti 334.940†	2144708.3	2129334.8	3399.4	ug/L	3399.4 ppb	01:41:49
3	Tl 190.801†	-316.8	-281.9	12.540	ug/L	12.540 ppb	01:42:09
3	U 409.014†	-17217.5	-14683.3	-421.38	ug/L	-421.38 ppb	01:41:49
3	V 292.402†	41916.0	42952.1	259.24	ug/L	259.24 ppb	01:41:49
3	Zn 213.857†	37413.3	36503.8	305.26	ug/L	305.26 ppb	01:41:49
3	SiO2†	1085699.8	1076885.5	69074	ug/L	69074 ppb	01:42:27

Mean Data: 241541004|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908733.3	100.83	%	0.052				0.05%
Sc Radial	5853.8	100	%	0.5				0.53%
Y 371.029	835913.0	111.29	%	0.101				0.09%
Y RADIAL	7015.3	111.6	%	0.49				0.44%
Ag 328.068†	-8532.3	4.7241	ug/L	0.64535	4.7241	ppb	0.64535	13.66%
Al 396.153Radial†	95639.7	66433	ug/L	377.3	66433	ppb	377.3	0.57%
As 188.979†	-25.9	38.835	ug/L	2.4203	38.835	ppb	2.4203	6.23%
B 249.677†	1903.6	21.666	ug/L	0.5779	21.666	ppb	0.5779	2.67%
Ba 233.527†	269162.7	2000.4	ug/L	7.26	2000.4	ppb	7.26	0.36%
Be 313.107†	2880.6	7.7430	ug/L	0.05958	7.7430	ppb	0.05958	0.77%
Ca 317.933Radial†	15867.0	23387	ug/L	140.0	23387	ppb	140.0	0.60%
Cd 226.502†	1395.6	1.5237	ug/L	0.09070	1.5237	ppb	0.09070	5.95%
Co 228.616†	13328.4	244.67	ug/L	1.239	244.67	ppb	1.239	0.51%
Cr 267.716†	6884.1	75.272	ug/L	0.1264	75.272	ppb	0.1264	0.17%
Cu 324.752†	15251.2	50.417	ug/L	0.0691	50.417	ppb	0.0691	0.14%
Fe 238.204 Radial†	14180.2	132760	ug/L	721.9	132760	ppb	721.9	0.54%
K 766.490 Radial†	45081.7	7863.9	ug/L	33.10	7863.9	ppb	33.10	0.42%

Mg 279.077 IEC†	387.1	13542	ug/L	112.7	13542	ppb	112.7	0.83%
Mn 257.610†	10506452.4	11221	ug/L	23.8	11221	ppb	23.8	0.21%
Mo 202.031†	48.8	12.519	ug/L	0.2042	12.519	ppb	0.2042	1.63%
Na 589.592 Radial†	11590.5	3889.6	ug/L	25.56	3889.6	ppb	25.56	0.66%
Ni 231.604†	2815.0	65.024	ug/L	0.3800	65.024	ppb	0.3800	0.58%
P 214.914†	2370.2	1275.1	ug/L	8.85	1275.1	ppb	8.85	0.69%
Pb 220.353†	2892.4	330.96	ug/L	1.577	330.96	ppb	1.577	0.48%
S 181.975 Axial†	596.7	823.12	ug/L	6.985	823.12	ppb	6.985	0.85%
Sb 206.836†	26.9	-1.8505	ug/L	1.41510	-1.8505	ppb	1.41510	76.47%
Se 196.026†	-531.8	122.85	ug/L	1.851	122.85	ppb	1.851	1.51%
Si 251.611†	1068054.4	31970	ug/L	92.2	31970	ppb	92.2	0.29%
Sn 189.927†	-133.3	-17.588	ug/L	0.6152	-17.588	ppb	0.6152	3.50%
Sr 421.552†	39215.4	244.01	ug/L	1.536	244.01	ppb	1.536	0.63%
Ti 334.940†	2133833.6	3406.6	ug/L	7.27	3406.6	ppb	7.27	0.21%
Tl 190.801†	-282.8	12.467	ug/L	0.2132	12.467	ppb	0.2132	1.71%
U 409.014†	-14628.6	-419.82	ug/L	1.471	-419.82	ppb	1.471	0.35%
V 292.402†	43195.5	260.90	ug/L	1.463	260.90	ppb	1.463	0.56%
Zn 213.857†	36619.4	306.31	ug/L	0.930	306.31	ppb	0.930	0.30%
SiO2†	1069684.4	68612	ug/L	421.9	68612	ppb	421.9	0.61%

Sequence No.: 94
Sample ID: 241541005|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 12/9/2009 01:44:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541005|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5753.5	5753.5	98.5	%			01:46:52
1	Y RADIAL	6648.5	6648.5	105.7	%			01:46:52
1	Al 396.153Radial†	65838.2	66893.7	46466	ug/L	46466	ppb	01:46:32
1	Ca 317.933Radial†	11522.0	11687.6	17227	ug/L	17227	ppb	01:46:32
1	Fe 238.204 Radial†	9457.1	9599.0	89865	ug/L	89865	ppb	01:46:32
1	K 766.490 Radial†	59436.2	58019.0	10260	ug/L	10260	ppb	01:46:32
1	Mg 279.077 IEC†	370.3	374.9	13150	ug/L	13150	ppb	01:46:52
1	Na 589.592 Radial†	37763.9	39445.6	13237	ug/L	13237	ppb	01:46:32
1	Sr 421.552†	26713.0	27160.3	168.99	ug/L	168.99	ppb	01:46:32
1	Sc 361.383	904699.6	904699.6	100.38	%			01:47:49
1	Y 371.029	803033.0	803033.0	106.92	%			01:47:49
1	Ag 328.068†	-5705.6	-5976.6	2.2799	ug/L	2.2799	ppb	01:47:54
1	As 188.979†	-113.8	-89.2	5.9902	ug/L	5.9902	ppb	01:48:14
1	B 249.677†	677.6	1205.7	13.250	ug/L	13.250	ppb	01:47:54
1	Ba 233.527†	137371.8	136858.6	1018.1	ug/L	1018.1	ppb	01:47:54
1	Be 313.107†	-11225.8	-6070.2	4.1870	ug/L	4.1870	ppb	01:47:54
1	Cd 226.502†	742.7	935.0	0.9381	ug/L	0.9381	ppb	01:48:14
1	Co 228.616†	2281.2	2337.9	36.573	ug/L	36.573	ppb	01:48:14
1	Cr 267.716†	8478.5	8367.6	89.889	ug/L	89.889	ppb	01:47:54
1	Cu 324.752†	25592.0	18738.1	58.207	ug/L	58.207	ppb	01:47:54
1	Mn 257.610†	2263557.3	2254539.5	2413.7	ug/L	2413.7	ppb	01:47:49
1	Mo 202.031†	-47.0	-65.2	2.2349	ug/L	2.2349	ppb	01:48:14
1	Ni 231.604†	2677.6	2580.9	59.736	ug/L	59.736	ppb	01:48:14
1	P 214.914†	4602.2	4361.2	2449.5	ug/L	2449.5	ppb	01:48:14
1	Pb 220.353†	581.9	648.2	76.272	ug/L	76.272	ppb	01:48:14
1	S 181.975 Axial†	411.4	368.3	506.94	ug/L	506.94	ppb	01:48:14
1	Sb 206.836†	56.5	22.0	-3.8708	ug/L	-3.8708	ppb	01:48:14
1	Se 196.026†	-380.2	-350.0	89.200	ug/L	89.200	ppb	01:48:14
1	Si 251.611†	892960.2	889119.7	26613	ug/L	26613	ppb	01:47:49
1	Sn 189.927†	-147.0	-151.4	-21.773	ug/L	-21.773	ppb	01:48:14
1	Ti 334.940†	2046950.8	2040292.8	3256.8	ug/L	3256.8	ppb	01:47:49
1	Tl 190.801†	-176.7	-143.5	-0.5892	ug/L	-0.5892	ppb	01:48:14
1	U 409.014†	-5942.1	-3517.7	-108.38	ug/L	-108.38	ppb	01:47:54
1	V 292.402†	34265.9	35494.2	217.20	ug/L	217.20	ppb	01:47:54
1	Zn 213.857†	23441.4	22730.5	189.10	ug/L	189.10	ppb	01:47:54
1	SiO2†	902590.0	898695.1	57642	ug/L	57642	ppb	01:49:23
2	Sc Radial	5752.6	5752.6	98.4	%			01:47:17
2	Y RADIAL	6642.6	6642.6	105.6	%			01:47:17
2	Al 396.153Radial†	65412.7	66472.0	46173	ug/L	46173	ppb	01:46:57
2	Ca 317.933Radial†	11429.0	11594.9	17090	ug/L	17090	ppb	01:46:57
2	Fe 238.204 Radial†	9375.5	9517.6	89103	ug/L	89103	ppb	01:46:57
2	K 766.490 Radial†	59240.4	57829.5	10226	ug/L	10226	ppb	01:46:57
2	Mg 279.077 IEC†	374.2	379.0	13293	ug/L	13293	ppb	01:47:17
2	Na 589.592 Radial†	37245.5	38925.0	13062	ug/L	13062	ppb	01:46:57
2	Sr 421.552†	26490.8	26938.8	167.61	ug/L	167.61	ppb	01:46:57
2	Sc 361.383	905921.7	905921.7	100.52	%			01:48:20
2	Y 371.029	803159.2	803159.2	106.93	%			01:48:20
2	Ag 328.068†	-5640.3	-5904.0	2.3724	ug/L	2.3724	ppb	01:48:25
2	As 188.979†	-112.1	-87.3	6.5837	ug/L	6.5837	ppb	01:48:45
2	B 249.677†	664.6	1191.9	13.063	ug/L	13.063	ppb	01:48:25
2	Ba 233.527†	137599.7	136900.7	1018.4	ug/L	1018.4	ppb	01:48:25
2	Be 313.107†	-11264.1	-6093.2	4.1711	ug/L	4.1711	ppb	01:48:25
2	Cd 226.502†	747.4	938.7	1.0536	ug/L	1.0536	ppb	01:48:45
2	Co 228.616†	2271.6	2325.3	36.352	ug/L	36.352	ppb	01:48:45
2	Cr 267.716†	8464.1	8342.0	89.608	ug/L	89.608	ppb	01:48:25
2	Cu 324.752†	25801.1	18911.7	58.665	ug/L	58.665	ppb	01:48:25
2	Mn 257.610†	2263495.4	2251435.9	2410.3	ug/L	2410.3	ppb	01:48:20
2	Mo 202.031†	-57.1	-75.2	1.5455	ug/L	1.5455	ppb	01:48:45
2	Ni 231.604†	2681.7	2581.4	59.748	ug/L	59.748	ppb	01:48:45

2	P 214.914†	4612.9	4365.7	2452.6	ug/L	2452.6 ppb	01:48:45
2	Pb 220.353†	590.7	656.1	77.164	ug/L	77.164 ppb	01:48:45
2	S 181.975 Axial†	405.7	362.0	498.24	ug/L	498.24 ppb	01:48:45
2	Sb 206.836†	61.3	26.8	-2.3307	ug/L	-2.3307 ppb	01:48:45
2	Se 196.026†	-389.5	-358.7	81.689	ug/L	81.689 ppb	01:48:45
2	Si 251.611†	892588.6	887550.0	26566	ug/L	26566 ppb	01:48:20
2	Sn 189.927†	-137.3	-141.5	-20.184	ug/L	-20.184 ppb	01:48:45
2	Ti 334.940†	2047298.1	2037887.4	3253.0	ug/L	3253.0 ppb	01:48:20
2	Tl 190.801†	-166.9	-133.6	2.1411	ug/L	2.1411 ppb	01:48:45
2	U 409.014†	-6031.8	-3599.0	-110.52	ug/L	-110.52 ppb	01:48:25
2	V 292.402†	34402.2	35583.7	217.90	ug/L	217.90 ppb	01:48:25
2	Zn 213.857†	23550.0	22807.1	189.84	ug/L	189.84 ppb	01:48:25
2	SiO2†	899769.7	894676.3	57384	ug/L	57384 ppb	01:49:29
3	Sc Radial	5781.1	5781.1	98.9	%		01:47:42
3	Y RADIAL	6681.4	6681.4	106.3	%		01:47:42
3	Al 396.153Radial†	65442.9	66175.0	45967	ug/L	45967 ppb	01:47:22
3	Ca 317.933Radial†	11438.7	11547.5	17020	ug/L	17020 ppb	01:47:22
3	Fe 238.204 Radial†	9357.7	9452.7	88495	ug/L	88495 ppb	01:47:22
3	K 766.490 Radial†	59126.0	57417.3	10153	ug/L	10153 ppb	01:47:22
3	Mg 279.077 IEC†	373.9	376.8	13219	ug/L	13219 ppb	01:47:42
3	Na 589.592 Radial†	37160.4	38652.5	12971	ug/L	12971 ppb	01:47:22
3	Sr 421.552†	26498.9	26814.4	166.84	ug/L	166.84 ppb	01:47:22
3	Sc 361.383	906237.3	906237.3	100.55	%		01:48:51
3	Y 371.029	804574.5	804574.5	107.12	%		01:48:51
3	Ag 328.068†	-5557.6	-5819.9	2.5447	ug/L	2.5447 ppb	01:48:57
3	As 188.979†	-98.7	-73.9	11.730	ug/L	11.730 ppb	01:49:17
3	B 249.677†	698.5	1225.3	13.845	ug/L	13.845 ppb	01:48:57
3	Ba 233.527†	135914.4	135177.0	1005.6	ug/L	1005.6 ppb	01:48:57
3	Be 313.107†	-11287.8	-6112.9	4.1548	ug/L	4.1548 ppb	01:48:57
3	Cd 226.502†	742.4	933.4	1.0585	ug/L	1.0585 ppb	01:49:17
3	Co 228.616†	2262.4	2315.4	36.178	ug/L	36.178 ppb	01:49:17
3	Cr 267.716†	8328.1	8203.7	88.139	ug/L	88.139 ppb	01:48:57
3	Cu 324.752†	25297.9	18402.4	57.177	ug/L	57.177 ppb	01:48:57
3	Mn 257.610†	2261147.9	2248317.1	2406.9	ug/L	2406.9 ppb	01:48:51
3	Mo 202.031†	-44.0	-62.1	2.3341	ug/L	2.3341 ppb	01:49:17
3	Ni 231.604†	2670.1	2568.9	59.459	ug/L	59.459 ppb	01:49:17
3	P 214.914†	4592.9	4344.2	2440.8	ug/L	2440.8 ppb	01:49:17
3	Pb 220.353†	572.8	638.1	75.138	ug/L	75.138 ppb	01:49:17
3	S 181.975 Axial†	409.0	365.2	502.73	ug/L	502.73 ppb	01:49:17
3	Sb 206.836†	67.0	32.4	-0.5106	ug/L	-0.5106 ppb	01:49:17
3	Se 196.026†	-383.5	-352.6	83.277	ug/L	83.277 ppb	01:49:17
3	Si 251.611†	892184.6	886838.9	26545	ug/L	26545 ppb	01:48:51
3	Sn 189.927†	-136.9	-141.1	-20.127	ug/L	-20.127 ppb	01:49:17
3	Ti 334.940†	2045067.3	2034959.5	3248.3	ug/L	3248.3 ppb	01:48:51
3	Tl 190.801†	-185.4	-151.9	-3.0448	ug/L	-3.0448 ppb	01:49:17
3	U 409.014†	-5777.7	-3344.1	-103.42	ug/L	-103.42 ppb	01:48:57
3	V 292.402†	34005.5	35177.2	215.33	ug/L	215.33 ppb	01:48:57
3	Zn 213.857†	23183.5	22434.5	186.65	ug/L	186.65 ppb	01:48:57
3	SiO2†	876266.0	870989.9	55865	ug/L	55865 ppb	01:49:35

Mean Data: 241541005|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905619.6	100.48	%	0.090				0.09%
Sc Radial	5762.4	98.6	%	0.28				0.28%
Y 371.029	803588.9	106.99	%	0.114				0.11%
Y RADIAL	6657.5	105.9	%	0.33				0.31%
Ag 328.068†	-5900.2	2.3990	ug/L	0.13436	2.3990	ppb	0.13436	5.60%
Al 396.153Radial†	66513.6	46202	ug/L	250.9	46202	ppb	250.9	0.54%
As 188.979†	-83.5	8.1014	ug/L	3.15669	8.1014	ppb	3.15669	38.96%
B 249.677†	1207.6	13.386	ug/L	0.4084	13.386	ppb	0.4084	3.05%
Ba 233.527†	136312.1	1014.1	ug/L	7.31	1014.1	ppb	7.31	0.72%
Be 313.107†	-6092.1	4.1710	ug/L	0.01614	4.1710	ppb	0.01614	0.39%
Ca 317.933Radial†	11610.0	17112	ug/L	105.0	17112	ppb	105.0	0.61%
Cd 226.502†	935.7	1.0167	ug/L	0.06813	1.0167	ppb	0.06813	6.70%
Co 228.616†	2326.2	36.368	ug/L	0.1980	36.368	ppb	0.1980	0.54%
Cr 267.716†	8304.4	89.212	ug/L	0.9399	89.212	ppb	0.9399	1.05%
Cu 324.752†	18684.1	58.016	ug/L	0.7624	58.016	ppb	0.7624	1.31%
Fe 238.204 Radial†	9523.1	89155	ug/L	686.5	89155	ppb	686.5	0.77%
K 766.490 Radial†	57755.3	10213	ug/L	54.5	10213	ppb	54.5	0.53%

Mg 279.077 IEC†	376.9	13220	ug/L	71.5	13220	ppb	71.5	0.54%
Mn 257.610†	2251430.9	2410.3	ug/L	3.39	2410.3	ppb	3.39	0.14%
Mo 202.031†	-67.5	2.0381	ug/L	0.42953	2.0381	ppb	0.42953	21.07%
Na 589.592 Radial†	39007.7	13090	ug/L	135.2	13090	ppb	135.2	1.03%
Ni 231.604†	2577.1	59.648	ug/L	0.1632	59.648	ppb	0.1632	0.27%
P 214.914†	4357.0	2447.6	ug/L	6.09	2447.6	ppb	6.09	0.25%
Pb 220.353†	647.5	76.192	ug/L	1.0152	76.192	ppb	1.0152	1.33%
S 181.975 Axial†	365.2	502.64	ug/L	4.351	502.64	ppb	4.351	0.87%
Sb 206.836†	27.0	-2.2374	ug/L	1.68203	-2.2374	ppb	1.68203	75.18%
Se 196.026†	-353.7	84.722	ug/L	3.9586	84.722	ppb	3.9586	4.67%
Si 251.611†	887836.2	26575	ug/L	34.9	26575	ppb	34.9	0.13%
Sn 189.927†	-144.7	-20.695	ug/L	0.9344	-20.695	ppb	0.9344	4.52%
Sr 421.552†	26971.2	167.81	ug/L	1.090	167.81	ppb	1.090	0.65%
Ti 334.940†	2037713.2	3252.7	ug/L	4.27	3252.7	ppb	4.27	0.13%
Tl 190.801†	-143.0	-0.4976	ug/L	2.59419	-0.4976	ppb	2.59419	521.30%
U 409.014†	-3487.0	-107.44	ug/L	3.642	-107.44	ppb	3.642	3.39%
V 292.402†	35418.4	216.81	ug/L	1.324	216.81	ppb	1.324	0.61%
Zn 213.857†	22657.4	188.53	ug/L	1.671	188.53	ppb	1.671	0.89%
SiO2†	888120.5	56964	ug/L	960.3	56964	ppb	960.3	1.69%

Sequence No.: 95
Sample ID: 241541006|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 100
Date Collected: 12/9/2009 01:51:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541006|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5787.0	5787.0	99.0	%			01:53:40
1	Y RADIAL	6866.7	6866.7	109.2	%			01:53:40
1	Al 396.153Radial†	83919.3	84765.3	58880	ug/L	58880	ppb	01:53:40
1	Ca 317.933Radial†	10729.1	10819.1	15947	ug/L	15947	ppb	01:53:40
1	Fe 238.204 Radial†	10841.0	10940.8	102430	ug/L	102430	ppb	01:53:40
1	K 766.490 Radial†	45194.7	43287.6	7666.5	ug/L	7666.5	ppb	01:53:40
1	Mg 279.077 IEC†	316.1	318.0	11132	ug/L	11132	ppb	01:54:00
1	Na 589.592 Radial†	2133.5	3242.4	1088.1	ug/L	1088.1	ppb	01:53:40
1	Sr 421.552†	20926.8	21160.0	131.63	ug/L	131.63	ppb	01:53:40
1	Sc 361.383	915816.6	915816.6	101.61	%			01:54:58
1	Y 371.029	828025.8	828025.8	110.24	%			01:54:58
1	Ag 328.068†	-6587.4	-6775.4	2.6412	ug/L	2.6412	ppb	01:55:03
1	As 188.979†	-69.6	-44.3	26.399	ug/L	26.399	ppb	01:55:23
1	B 249.677†	1450.5	1958.1	27.351	ug/L	27.351	ppb	01:55:03
1	Ba 233.527†	86889.5	85517.2	638.06	ug/L	638.06	ppb	01:55:03
1	Be 313.107†	-11079.7	-5790.7	4.4677	ug/L	4.4677	ppb	01:55:03
1	Cd 226.502†	1071.9	1250.0	3.0039	ug/L	3.0039	ppb	01:55:23
1	Co 228.616†	2579.2	2603.7	41.105	ug/L	41.105	ppb	01:55:23
1	Cr 267.716†	6841.5	6654.2	72.107	ug/L	72.107	ppb	01:55:03
1	Cu 324.752†	35130.4	27815.5	84.825	ug/L	84.825	ppb	01:55:03
1	Mn 257.610†	1432663.6	1409476.1	1513.6	ug/L	1513.6	ppb	01:54:58
1	Mo 202.031†	104.9	84.9	12.661	ug/L	12.661	ppb	01:55:23
1	Ni 231.604†	2110.0	1990.0	46.049	ug/L	46.049	ppb	01:55:23
1	P 214.914†	2561.6	2297.4	1249.4	ug/L	1249.4	ppb	01:55:23
1	Pb 220.353†	1566.9	1610.4	186.81	ug/L	186.81	ppb	01:55:23
1	S 181.975 Axial†	370.3	322.8	440.80	ug/L	440.80	ppb	01:55:23
1	Sb 206.836†	86.8	51.1	5.8505	ug/L	5.8505	ppb	01:55:23
1	Se 196.026†	-452.2	-416.2	92.731	ug/L	92.731	ppb	01:55:23
1	Si 251.611†	1081647.1	1064009.9	31849	ug/L	31849	ppb	01:54:58
1	Sn 189.927†	-50.5	-54.6	-5.8886	ug/L	-5.8886	ppb	01:55:23
1	Ti 334.940†	2130007.2	2097276.1	3347.7	ug/L	3347.7	ppb	01:54:58
1	Tl 190.801†	-183.5	-148.1	-6.0988	ug/L	-6.0988	ppb	01:55:23
1	U 409.014†	-7906.4	-5378.9	-161.20	ug/L	-161.20	ppb	01:54:58
1	V 292.402†	31515.4	32372.9	194.57	ug/L	194.57	ppb	01:55:03
1	Zn 213.857†	59860.5	58287.5	498.67	ug/L	498.67	ppb	01:55:03
1	SiO2†	1092531.5	1074703.7	68934	ug/L	68934	ppb	01:56:32
2	Sc Radial	5857.0	5857.0	100	%			01:54:05
2	Y RADIAL	6989.2	6989.2	111.2	%			01:54:05
2	Al 396.153Radial†	84919.9	84750.0	58869	ug/L	58869	ppb	01:54:05
2	Ca 317.933Radial†	10770.2	10730.5	15816	ug/L	15816	ppb	01:54:05
2	Fe 238.204 Radial†	10958.4	10927.0	102300	ug/L	102300	ppb	01:54:05
2	K 766.490 Radial†	45778.3	43324.0	7673.0	ug/L	7673.0	ppb	01:54:05
2	Mg 279.077 IEC†	321.1	319.2	11173	ug/L	11173	ppb	01:54:25
2	Na 589.592 Radial†	2168.5	3251.6	1091.2	ug/L	1091.2	ppb	01:54:05
2	Sr 421.552†	21127.9	21107.9	131.31	ug/L	131.31	ppb	01:54:05
2	Sc 361.383	920955.2	920955.2	102.18	%			01:55:29
2	Y 371.029	833843.8	833843.8	111.02	%			01:55:29
2	Ag 328.068†	-6778.6	-6926.4	1.9277	ug/L	1.9277	ppb	01:55:34
2	As 188.979†	-70.3	-44.6	26.220	ug/L	26.220	ppb	01:55:54
2	B 249.677†	1534.6	2032.4	28.928	ug/L	28.928	ppb	01:55:34
2	Ba 233.527†	88136.2	86260.2	643.57	ug/L	643.57	ppb	01:55:34
2	Be 313.107†	-11513.2	-6154.1	4.3290	ug/L	4.3290	ppb	01:55:34
2	Cd 226.502†	1061.1	1233.5	2.8426	ug/L	2.8426	ppb	01:55:54
2	Co 228.616†	2562.5	2573.2	40.537	ug/L	40.537	ppb	01:55:54
2	Cr 267.716†	6978.1	6750.2	73.117	ug/L	73.117	ppb	01:55:34
2	Cu 324.752†	35892.2	28368.1	86.400	ug/L	86.400	ppb	01:55:34
2	Mn 257.610†	1436769.9	1405627.9	1509.4	ug/L	1509.4	ppb	01:55:29
2	Mo 202.031†	110.9	90.2	12.987	ug/L	12.987	ppb	01:55:54
2	Ni 231.604†	2126.1	1994.1	46.145	ug/L	46.145	ppb	01:55:54

2	P 214.914†	2549.8	2271.8	1234.5 ug/L	1234.5 ppb	01:55:54
2	Pb 220.353†	1573.4	1608.2	186.56 ug/L	186.56 ppb	01:55:54
2	S 181.975 Axial†	371.2	321.7	439.21 ug/L	439.21 ppb	01:55:54
2	Sb 206.836†	79.4	43.5	3.4234 ug/L	3.4234 ppb	01:55:54
2	Se 196.026†	-464.4	-425.6	86.901 ug/L	86.901 ppb	01:55:54
2	Si 251.611†	1085390.1	1061733.6	31781 ug/L	31781 ppb	01:55:29
2	Sn 189.927†	-50.7	-54.6	-5.9033 ug/L	-5.9033 ppb	01:55:54
2	Ti 334.940†	2139919.1	2095280.2	3344.5 ug/L	3344.5 ppb	01:55:29
2	Tl 190.801†	-170.2	-134.1	-2.2216 ug/L	-2.2216 ppb	01:55:54
2	U 409.014†	-7975.9	-5403.6	-161.86 ug/L	-161.86 ppb	01:55:29
2	V 292.402†	32043.7	32716.9	196.87 ug/L	196.87 ppb	01:55:34
2	Zn 213.857†	60753.5	58832.7	503.44 ug/L	503.44 ppb	01:55:34
2	SiO2†	1090641.7	1066855.1	68430 ug/L	68430 ppb	01:56:37
3	Sc Radial	5890.6	5890.6	101 %		01:54:31
3	Y RADIAL	6948.9	6948.9	110.5 %		01:54:31
3	Al 396.153Radial†	84974.1	84320.7	58571 ug/L	58571 ppb	01:54:31
3	Ca 317.933Radial†	10819.9	10718.5	15798 ug/L	15798 ppb	01:54:31
3	Fe 238.204 Radial†	10970.3	10876.6	101830 ug/L	101830 ppb	01:54:31
3	K 766.490 Radial†	45771.4	43056.7	7625.5 ug/L	7625.5 ppb	01:54:31
3	Mg 279.077 IEC†	319.9	316.2	11067 ug/L	11067 ppb	01:54:51
3	Na 589.592 Radial†	2158.4	3229.2	1083.7 ug/L	1083.7 ppb	01:54:31
3	Sr 421.552†	21210.1	21069.2	131.07 ug/L	131.07 ppb	01:54:31
3	Sc 361.383	917476.2	917476.2	101.80 %		01:56:00
3	Y 371.029	831782.9	831782.9	110.74 %		01:56:00
3	Ag 328.068†	-6646.5	-6821.8	2.2423 ug/L	2.2423 ppb	01:56:05
3	As 188.979†	-74.9	-49.4	24.304 ug/L	24.304 ppb	01:56:25
3	B 249.677†	1514.3	2018.2	28.689 ug/L	28.689 ppb	01:56:05
3	Ba 233.527†	86921.1	85393.6	637.13 ug/L	637.13 ppb	01:56:05
3	Be 313.107†	-11372.2	-6058.2	4.3709 ug/L	4.3709 ppb	01:56:05
3	Cd 226.502†	1096.8	1272.5	3.3023 ug/L	3.3023 ppb	01:56:25
3	Co 228.616†	2607.1	2626.5	41.545 ug/L	41.545 ppb	01:56:25
3	Cr 267.716†	6835.7	6636.3	71.909 ug/L	71.909 ppb	01:56:05
3	Cu 324.752†	35085.9	27709.2	84.490 ug/L	84.490 ppb	01:56:05
3	Mn 257.610†	1433725.8	1407969.4	1511.9 ug/L	1511.9 ppb	01:56:00
3	Mo 202.031†	107.1	86.9	12.741 ug/L	12.741 ppb	01:56:25
3	Ni 231.604†	2160.3	2035.5	47.104 ug/L	47.104 ppb	01:56:25
3	P 214.914†	2564.7	2295.9	1249.0 ug/L	1249.0 ppb	01:56:25
3	Pb 220.353†	1576.4	1617.0	187.53 ug/L	187.53 ppb	01:56:25
3	S 181.975 Axial†	381.7	333.4	455.62 ug/L	455.62 ppb	01:56:25
3	Sb 206.836†	84.6	48.8	5.1497 ug/L	5.1497 ppb	01:56:25
3	Se 196.026†	-467.2	-430.1	82.741 ug/L	82.741 ppb	01:56:25
3	Si 251.611†	1082657.0	1063076.6	31821 ug/L	31821 ppb	01:56:00
3	Sn 189.927†	-39.4	-43.7	-4.1130 ug/L	-4.1130 ppb	01:56:25
3	Ti 334.940†	2134108.7	2097513.6	3348.1 ug/L	3348.1 ppb	01:56:00
3	Tl 190.801†	-182.0	-146.3	-5.5977 ug/L	-5.5977 ppb	01:56:25
3	U 409.014†	-8001.7	-5458.5	-163.31 ug/L	-163.31 ppb	01:56:00
3	V 292.402†	31521.1	32322.5	194.32 ug/L	194.32 ppb	01:56:05
3	Zn 213.857†	59799.9	58121.4	497.27 ug/L	497.27 ppb	01:56:05
3	SiO2†	1080270.3	1060714.3	68036 ug/L	68036 ppb	01:56:43

Mean Data: 241541006|925478|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	918082.7	101.87	%	0.291				0.29%
Sc Radial	5844.9	100	%	0.9				0.90%
Y 371.029	831217.5	110.67	%	0.393				0.35%
Y RADIAL	6935.0	110.3	%	0.99				0.90%
Ag 328.068†	-6841.2	2.2704	ug/L	0.35755	2.2704	ppb	0.35755	15.75%
Al 396.153Radial†	84612.0	58773	ug/L	175.3	58773	ppb	175.3	0.30%
As 188.979†	-46.1	25.641	ug/L	1.1613	25.641	ppb	1.1613	4.53%
B 249.677†	2002.9	28.323	ug/L	0.8502	28.323	ppb	0.8502	3.00%
Ba 233.527†	85723.7	639.59	ug/L	3.482	639.59	ppb	3.482	0.54%
Be 313.107†	-6001.0	4.3892	ug/L	0.07114	4.3892	ppb	0.07114	1.62%
Ca 317.933Radial†	10756.0	15854	ug/L	81.0	15854	ppb	81.0	0.51%
Cd 226.502†	1252.0	3.0496	ug/L	0.23322	3.0496	ppb	0.23322	7.65%
Co 228.616†	2601.1	41.062	ug/L	0.5052	41.062	ppb	0.5052	1.23%
Cr 267.716†	6680.2	72.378	ug/L	0.6481	72.378	ppb	0.6481	0.90%
Cu 324.752†	27964.3	85.238	ug/L	1.0197	85.238	ppb	1.0197	1.20%
Fe 238.204 Radial†	10914.8	102180	ug/L	316.6	102180	ppb	316.6	0.31%
K 766.490 Radial†	43222.8	7655.0	ug/L	25.74	7655.0	ppb	25.74	0.34%

Mg 279.077 IEC†	317.8	11124	ug/L	53.5	11124	ppb	53.5	0.48%
Mn 257.610†	1407691.1	1511.6	ug/L	2.07	1511.6	ppb	2.07	0.14%
Mo 202.031†	87.3	12.796	ug/L	0.1698	12.796	ppb	0.1698	1.33%
Na 589.592 Radial†	3241.1	1087.6	ug/L	3.78	1087.6	ppb	3.78	0.35%
Ni 231.604†	2006.5	46.433	ug/L	0.5834	46.433	ppb	0.5834	1.26%
P 214.914†	2288.4	1244.3	ug/L	8.51	1244.3	ppb	8.51	0.68%
Pb 220.353†	1611.9	186.97	ug/L	0.505	186.97	ppb	0.505	0.27%
S 181.975 Axial†	326.0	445.21	ug/L	9.051	445.21	ppb	9.051	2.03%
Sb 206.836†	47.8	4.8079	ug/L	1.24914	4.8079	ppb	1.24914	25.98%
Se 196.026†	-424.0	87.458	ug/L	5.0184	87.458	ppb	5.0184	5.74%
Si 251.611†	1062940.0	31817	ug/L	34.3	31817	ppb	34.3	0.11%
Sn 189.927†	-51.0	-5.3016	ug/L	1.02941	-5.3016	ppb	1.02941	19.42%
Sr 421.552†	21112.4	131.34	ug/L	0.283	131.34	ppb	0.283	0.22%
Ti 334.940†	2096690.0	3346.8	ug/L	1.96	3346.8	ppb	1.96	0.06%
Tl 190.801†	-142.8	-4.6394	ug/L	2.10877	-4.6394	ppb	2.10877	45.45%
U 409.014†	-5413.7	-162.12	ug/L	1.082	-162.12	ppb	1.082	0.67%
V 292.402†	32470.8	195.25	ug/L	1.404	195.25	ppb	1.404	0.72%
Zn 213.857†	58413.9	499.80	ug/L	3.235	499.80	ppb	3.235	0.65%
SiO2†	1067424.4	68467	ug/L	449.8	68467	ppb	449.8	0.66%

Sequence No.: 96
Sample ID: 241541007|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/9/2009 01:58:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541007|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5861.8	5861.8	100	%			02:01:08
1	Y RADIAL	7366.4	7366.4	117.2	%			02:01:08
1	Al 396.153Radial†	121044.0	120695.8	83838	ug/L	83838	ppb	02:00:48
1	Ca 317.933Radial†	15484.3	15421.5	22730	ug/L	22730	ppb	02:00:48
1	Fe 238.204 Radial†	13782.4	13733.6	128570	ug/L	128570	ppb	02:00:48
1	K 766.490 Radial†	77013.0	74426.8	13145	ug/L	13145	ppb	02:00:48
1	Mg 279.077 IEC†	492.2	489.5	17160	ug/L	17160	ppb	02:01:08
1	Na 589.592 Radial†	5910.9	6980.9	2342.7	ug/L	2342.7	ppb	02:00:48
1	Sr 421.552†	50110.7	49985.5	311.09	ug/L	311.09	ppb	02:00:48
1	Sc 361.383	919746.1	919746.1	102.05	%			02:02:07
1	Y 371.029	887868.6	887868.6	118.21	%			02:02:07
1	Ag 328.068†	-8191.8	-8319.9	4.2840	ug/L	4.2840	ppb	02:02:32
1	As 188.979†	-45.8	-20.7	39.321	ug/L	39.321	ppb	02:02:32
1	B 249.677†	1480.3	1981.2	24.304	ug/L	24.304	ppb	02:02:12
1	Ba 233.527†	227688.3	223121.4	1659.1	ug/L	1659.1	ppb	02:02:12
1	Be 313.107†	4464.9	9488.2	9.9282	ug/L	9.9282	ppb	02:02:12
1	Cd 226.502†	1167.6	1339.2	1.3504	ug/L	1.3504	ppb	02:02:32
1	Co 228.616†	3898.1	3885.2	65.590	ug/L	65.590	ppb	02:02:32
1	Cr 267.716†	8746.4	8492.0	92.051	ug/L	92.051	ppb	02:02:32
1	Cu 324.752†	30536.7	23166.4	72.854	ug/L	72.854	ppb	02:02:12
1	Mn 257.610†	5034605.5	4933014.8	5274.7	ug/L	5274.7	ppb	02:02:07
1	Mo 202.031†	-76.6	-93.4	3.1895	ug/L	3.1895	ppb	02:02:32
1	Ni 231.604†	3317.5	3164.3	73.226	ug/L	73.226	ppb	02:02:32
1	P 214.914†	2815.5	2535.4	1376.0	ug/L	1376.0	ppb	02:02:32
1	Pb 220.353†	1345.7	1387.1	165.01	ug/L	165.01	ppb	02:02:32
1	S 181.975 Axial†	515.9	464.0	633.65	ug/L	633.65	ppb	02:02:32
1	Sb 206.836†	52.9	17.6	-5.6038	ug/L	-5.6038	ppb	02:02:32
1	Se 196.026†	-565.1	-525.0	116.74	ug/L	116.74	ppb	02:02:32
1	Si 251.611†	1029737.8	1008596.0	30189	ug/L	30189	ppb	02:02:07
1	Sn 189.927†	-134.3	-136.6	-18.239	ug/L	-18.239	ppb	02:02:32
1	Ti 334.940†	2103809.3	2062649.0	3292.8	ug/L	3292.8	ppb	02:02:07
1	Tl 190.801†	-223.3	-186.3	5.1536	ug/L	5.1536	ppb	02:02:32
1	U 409.014†	-9936.3	-7334.9	-218.40	ug/L	-218.40	ppb	02:02:12
1	V 292.402†	46229.3	46658.7	284.87	ug/L	284.87	ppb	02:02:12
1	Zn 213.857†	33682.0	32383.3	269.50	ug/L	269.50	ppb	02:02:12
1	SiO2†	1018054.8	997130.0	63954	ug/L	63954	ppb	02:03:43
2	Sc Radial	5939.6	5939.6	102	%			02:01:33
2	Y RADIAL	7469.9	7469.9	118.8	%			02:01:33
2	Al 396.153Radial†	121708.0	119767.6	83194	ug/L	83194	ppb	02:01:13
2	Ca 317.933Radial†	15504.7	15239.3	22462	ug/L	22462	ppb	02:01:13
2	Fe 238.204 Radial†	13812.8	13583.4	127170	ug/L	127170	ppb	02:01:13
2	K 766.490 Radial†	77412.0	73813.1	13036	ug/L	13036	ppb	02:01:13
2	Mg 279.077 IEC†	495.6	486.4	17051	ug/L	17051	ppb	02:01:33
2	Na 589.592 Radial†	5932.2	6924.6	2323.8	ug/L	2323.8	ppb	02:01:13
2	Sr 421.552†	50423.9	49638.9	308.93	ug/L	308.93	ppb	02:01:13
2	Sc 361.383	921563.3	921563.3	102.25	%			02:02:39
2	Y 371.029	891134.7	891134.7	118.65	%			02:02:39
2	Ag 328.068†	-8121.7	-8235.6	4.2044	ug/L	4.2044	ppb	02:03:04
2	As 188.979†	-50.0	-24.7	37.511	ug/L	37.511	ppb	02:03:04
2	B 249.677†	1319.3	1820.9	21.130	ug/L	21.130	ppb	02:02:44
2	Ba 233.527†	227229.8	222233.1	1652.4	ug/L	1652.4	ppb	02:02:44
2	Be 313.107†	4423.6	9439.2	9.9059	ug/L	9.9059	ppb	02:02:44
2	Cd 226.502†	1179.3	1348.4	1.5887	ug/L	1.5887	ppb	02:03:04
2	Co 228.616†	3899.5	3879.0	65.492	ug/L	65.492	ppb	02:03:04
2	Cr 267.716†	8716.7	8446.0	91.536	ug/L	91.536	ppb	02:03:04
2	Cu 324.752†	30441.3	23014.1	72.347	ug/L	72.347	ppb	02:02:44
2	Mn 257.610†	5040903.8	4929446.4	5270.8	ug/L	5270.8	ppb	02:02:39
2	Mo 202.031†	-91.4	-107.8	2.1746	ug/L	2.1746	ppb	02:03:04
2	Ni 231.604†	3339.1	3179.0	73.567	ug/L	73.567	ppb	02:03:04

2	P 214.914†	2780.5	2495.7	1354.1 ug/L	1354.1 ppb	02:03:04
2	Pb 220.353†	1349.6	1388.3	165.10 ug/L	165.10 ppb	02:03:04
2	S 181.975 Axial†	514.3	461.4	630.12 ug/L	630.12 ppb	02:03:04
2	Sb 206.836†	73.1	37.2	0.6064 ug/L	0.6064 ppb	02:03:04
2	Se 196.026†	-554.5	-513.5	118.80 ug/L	118.80 ppb	02:03:04
2	Si 251.611†	1031129.2	1007967.0	30170 ug/L	30170 ppb	02:02:39
2	Sn 189.927†	-129.6	-131.8	-17.495 ug/L	-17.495 ppb	02:03:04
2	Ti 334.940†	2106519.8	2061234.8	3290.6 ug/L	3290.6 ppb	02:02:39
2	Tl 190.801†	-227.5	-190.0	4.0571 ug/L	4.0571 ppb	02:03:04
2	U 409.014†	-9587.6	-6974.6	-208.30 ug/L	-208.30 ppb	02:02:44
2	V 292.402†	45952.0	46298.2	282.71 ug/L	282.71 ppb	02:02:44
2	Zn 213.857†	33606.5	32244.4	268.42 ug/L	268.42 ppb	02:02:44
2	SiO2†	1030983.6	1007806.8	64639 ug/L	64639 ppb	02:03:49
3	Sc Radial	5835.0	5835.0	99.8 %		02:01:59
3	Y RADIAL	7309.4	7309.4	116.2 %		02:01:59
3	Al 396.153Radial†	120088.6	120293.5	83559 ug/L	83559 ppb	02:01:39
3	Ca 317.933Radial†	15322.8	15330.7	22597 ug/L	22597 ppb	02:01:39
3	Fe 238.204 Radial†	13690.6	13704.8	128300 ug/L	128300 ppb	02:01:39
3	K 766.490 Radial†	76555.8	74321.7	13126 ug/L	13126 ppb	02:01:39
3	Mg 279.077 IEC†	489.5	489.1	17143 ug/L	17143 ppb	02:01:59
3	Na 589.592 Radial†	5882.0	6979.0	2342.0 ug/L	2342.0 ppb	02:01:39
3	Sr 421.552†	49825.3	49929.2	310.74 ug/L	310.74 ppb	02:01:39
3	Sc 361.383	920004.0	920004.0	102.08 %		02:03:11
3	Y 371.029	889426.3	889426.3	118.42 %		02:03:11
3	Ag 328.068†	-8140.7	-8267.6	4.4293 ug/L	4.4293 ppb	02:03:36
3	As 188.979†	-71.0	-45.4	29.539 ug/L	29.539 ppb	02:03:36
3	B 249.677†	1469.4	1970.2	24.111 ug/L	24.111 ppb	02:03:16
3	Ba 233.527†	227377.6	222754.5	1656.3 ug/L	1656.3 ppb	02:03:16
3	Be 313.107†	4550.3	9570.6	9.9633 ug/L	9.9633 ppb	02:03:16
3	Cd 226.502†	1163.9	1335.3	1.3361 ug/L	1.3361 ppb	02:03:36
3	Co 228.616†	3864.2	3850.9	64.937 ug/L	64.937 ppb	02:03:36
3	Cr 267.716†	8682.4	8426.8	91.359 ug/L	91.359 ppb	02:03:36
3	Cu 324.752†	30501.9	23123.9	72.719 ug/L	72.719 ppb	02:03:16
3	Mn 257.610†	5042842.1	4939700.6	5281.9 ug/L	5281.9 ppb	02:03:11
3	Mo 202.031†	-72.2	-89.0	3.4449 ug/L	3.4449 ppb	02:03:36
3	Ni 231.604†	3336.0	3181.5	73.625 ug/L	73.625 ppb	02:03:36
3	P 214.914†	2764.7	2484.8	1347.0 ug/L	1347.0 ppb	02:03:36
3	Pb 220.353†	1350.9	1391.8	165.49 ug/L	165.49 ppb	02:03:36
3	S 181.975 Axial†	516.6	464.5	634.46 ug/L	634.46 ppb	02:03:36
3	Sb 206.836†	67.9	32.3	-0.9322 ug/L	-0.9322 ppb	02:03:36
3	Se 196.026†	-553.0	-512.9	122.81 ug/L	122.81 ppb	02:03:36
3	Si 251.611†	1031923.7	1010454.4	30244 ug/L	30244 ppb	02:03:11
3	Sn 189.927†	-127.5	-129.9	-17.164 ug/L	-17.164 ppb	02:03:36
3	Ti 334.940†	2106030.1	2064246.6	3295.4 ug/L	3295.4 ppb	02:03:11
3	Tl 190.801†	-228.1	-191.0	3.9013 ug/L	3.9013 ppb	02:03:36
3	U 409.014†	-9811.4	-7209.7	-214.92 ug/L	-214.92 ppb	02:03:16
3	V 292.402†	46056.2	46476.5	283.71 ug/L	283.71 ppb	02:03:16
3	Zn 213.857†	33694.7	32386.5	269.55 ug/L	269.55 ppb	02:03:16
3	SiO2†	1028738.6	1007316.5	64608 ug/L	64608 ppb	02:03:54

Mean Data: 241541007|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	920437.8	102.13	%	0.109				0.11%
Sc Radial	5878.8	101	%	0.9				0.92%
Y 371.029	889476.5	118.43	%	0.217				0.18%
Y RADIAL	7381.9	117.4	%	1.29				1.10%
Ag 328.068†	-8274.3	4.3059	ug/L	0.11403	4.3059	ppb	0.11403	2.65%
Al 396.153Radial†	120252.3	83530	ug/L	323.3	83530	ppb	323.3	0.39%
As 188.979†	-30.3	35.457	ug/L	5.2045	35.457	ppb	5.2045	14.68%
B 249.677†	1924.1	23.182	ug/L	1.7794	23.182	ppb	1.7794	7.68%
Ba 233.527†	222703.0	1655.9	ug/L	3.34	1655.9	ppb	3.34	0.20%
Be 313.107†	9499.3	9.9325	ug/L	0.02891	9.9325	ppb	0.02891	0.29%
Ca 317.933Radial†	15330.5	22596	ug/L	134.3	22596	ppb	134.3	0.59%
Cd 226.502†	1341.0	1.4251	ug/L	0.14186	1.4251	ppb	0.14186	9.95%
Co 228.616†	3871.7	65.339	ug/L	0.3522	65.339	ppb	0.3522	0.54%
Cr 267.716†	8454.9	91.648	ug/L	0.3594	91.648	ppb	0.3594	0.39%
Cu 324.752†	23101.5	72.640	ug/L	0.2629	72.640	ppb	0.2629	0.36%
Fe 238.204 Radial†	13674.0	128020	ug/L	746.4	128020	ppb	746.4	0.58%
K 766.490 Radial†	74187.2	13102	ug/L	58.2	13102	ppb	58.2	0.44%

Mg 279.077 IEC†	488.3	17118	ug/L	58.5	17118	ppb	58.5	0.34%
Mn 257.610†	4934054.0	5275.8	ug/L	5.60	5275.8	ppb	5.60	0.11%
Mo 202.031†	-96.7	2.9363	ug/L	0.67190	2.9363	ppb	0.67190	22.88%
Na 589.592 Radial†	6961.5	2336.1	ug/L	10.73	2336.1	ppb	10.73	0.46%
Ni 231.604†	3174.9	73.473	ug/L	0.2157	73.473	ppb	0.2157	0.29%
P 214.914†	2505.3	1359.0	ug/L	15.11	1359.0	ppb	15.11	1.11%
Pb 220.353†	1389.1	165.20	ug/L	0.258	165.20	ppb	0.258	0.16%
S 181.975 Axial†	463.3	632.74	ug/L	2.312	632.74	ppb	2.312	0.37%
Sb 206.836†	29.0	-1.9765	ug/L	3.23415	-1.9765	ppb	3.23415	163.63%
Se 196.026†	-517.1	119.45	ug/L	3.088	119.45	ppb	3.088	2.58%
Si 251.611†	1009005.8	30201	ug/L	38.7	30201	ppb	38.7	0.13%
Sn 189.927†	-132.8	-17.633	ug/L	0.5504	-17.633	ppb	0.5504	3.12%
Sr 421.552†	49851.2	310.25	ug/L	1.157	310.25	ppb	1.157	0.37%
Ti 334.940†	2062710.2	3292.9	ug/L	2.41	3292.9	ppb	2.41	0.07%
Tl 190.801†	-189.1	4.3707	ug/L	0.68253	4.3707	ppb	0.68253	15.62%
U 409.014†	-7173.0	-213.87	ug/L	5.132	-213.87	ppb	5.132	2.40%
V 292.402†	46477.8	283.76	ug/L	1.081	283.76	ppb	1.081	0.38%
Zn 213.857†	32338.1	269.16	ug/L	0.637	269.16	ppb	0.637	0.24%
SiO2†	1004084.4	64400	ug/L	386.7	64400	ppb	386.7	0.60%

Sequence No.: 97
Sample ID: 241541008|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 12/9/2009 02:06:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541008|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5861.4	5861.4	100	%			02:08:20
1	Y RADIAL	7972.4	7972.4	126.8	%			02:08:20
1	Al 396.153Radial†	192805.3	192250.0	133540	ug/L	133540	ppb	02:08:00
1	Ca 317.933Radial†	18192.9	18123.0	26712	ug/L	26712	ppb	02:08:00
1	Fe 238.204 Radial†	15301.2	15248.7	142760	ug/L	142760	ppb	02:08:00
1	K 766.490 Radial†	63573.4	61031.8	10813	ug/L	10813	ppb	02:08:00
1	Mg 279.077 IEC†	659.1	656.0	23019	ug/L	23019	ppb	02:08:20
1	Na 589.592 Radial†	8021.5	9085.5	3048.9	ug/L	3048.9	ppb	02:08:00
1	Sr 421.552†	46576.3	46464.6	289.12	ug/L	289.12	ppb	02:08:00
1	Sc 361.383	920038.2	920038.2	102.08	%			02:09:19
1	Y 371.029	960522.5	960522.5	127.88	%			02:09:19
1	Ag 328.068†	-9593.5	-9690.5	2.4479	ug/L	2.4479	ppb	02:09:19
1	As 188.979†	-38.2	-13.3	40.623	ug/L	40.623	ppb	02:09:39
1	B 249.677†	1506.6	2006.5	22.986	ug/L	22.986	ppb	02:09:19
1	Ba 233.527†	92194.3	90321.4	675.34	ug/L	675.34	ppb	02:09:19
1	Be 313.107†	3239.5	8286.4	8.5511	ug/L	8.5511	ppb	02:09:19
1	Cd 226.502†	1291.7	1460.4	1.2882	ug/L	1.2882	ppb	02:09:39
1	Co 228.616†	3239.6	3238.9	53.595	ug/L	53.595	ppb	02:09:39
1	Cr 267.716†	36114.0	35298.4	373.66	ug/L	373.66	ppb	02:09:19
1	Cu 324.752†	35463.2	27982.8	87.361	ug/L	87.361	ppb	02:09:19
1	Mn 257.610†	2191365.5	2146226.9	2303.3	ug/L	2303.3	ppb	02:09:19
1	Mo 202.031†	-22.9	-40.8	7.5362	ug/L	7.5362	ppb	02:09:39
1	Ni 231.604†	8423.7	8165.3	189.04	ug/L	189.04	ppb	02:09:39
1	P 214.914†	1689.9	1431.9	742.75	ug/L	742.75	ppb	02:09:39
1	Pb 220.353†	995.0	1043.2	136.11	ug/L	136.11	ppb	02:09:39
1	S 181.975 Axial†	484.5	433.0	580.55	ug/L	580.55	ppb	02:09:39
1	Sb 206.836†	88.3	52.3	-1.3555	ug/L	-1.3555	ppb	02:09:39
1	Se 196.026†	-623.6	-582.0	137.44	ug/L	137.44	ppb	02:09:39
1	Si 251.611†	1118283.8	1095014.8	32777	ug/L	32777	ppb	02:09:19
1	Sn 189.927†	-141.3	-143.5	-18.730	ug/L	-18.730	ppb	02:09:39
1	Ti 334.940†	1798849.0	1763257.1	2815.2	ug/L	2815.2	ppb	02:09:19
1	Tl 190.801†	-169.4	-133.4	0.3406	ug/L	0.3406	ppb	02:09:39
1	U 409.014†	-9145.1	-6556.7	-199.29	ug/L	-199.29	ppb	02:09:19
1	V 292.402†	43673.4	44140.6	266.72	ug/L	266.72	ppb	02:09:19
1	Zn 213.857†	31551.1	30285.4	248.86	ug/L	248.86	ppb	02:09:39
1	SiO2†	1122025.9	1098662.7	70469	ug/L	70469	ppb	02:10:40
2	Sc Radial	5772.2	5772.2	98.8	%			02:08:46
2	Y RADIAL	7881.1	7881.1	125.3	%			02:08:46
2	Al 396.153Radial†	198350.0	200835.3	139500	ug/L	139500	ppb	02:08:26
2	Ca 317.933Radial†	18665.0	18881.4	27830	ug/L	27830	ppb	02:08:26
2	Fe 238.204 Radial†	15719.3	15907.8	148930	ug/L	148930	ppb	02:08:26
2	K 766.490 Radial†	65275.7	63735.2	11292	ug/L	11292	ppb	02:08:26
2	Mg 279.077 IEC†	655.7	662.7	23250	ug/L	23250	ppb	02:08:46
2	Na 589.592 Radial†	8289.1	9480.1	3181.3	ug/L	3181.3	ppb	02:08:26
2	Sr 421.552†	47924.1	48547.1	302.08	ug/L	302.08	ppb	02:08:26
2	Sc 361.383	911164.6	911164.6	101.10	%			02:09:46
2	Y 371.029	956932.4	956932.4	127.41	%			02:09:46
2	Ag 328.068†	-9614.2	-9802.5	3.9186	ug/L	3.9186	ppb	02:09:46
2	As 188.979†	-41.4	-16.7	40.678	ug/L	40.678	ppb	02:10:06
2	B 249.677†	1633.5	2146.4	25.097	ug/L	25.097	ppb	02:09:46
2	Ba 233.527†	93266.1	92261.1	689.96	ug/L	689.96	ppb	02:09:46
2	Be 313.107†	3406.0	8482.0	8.7318	ug/L	8.7318	ppb	02:09:46
2	Cd 226.502†	1264.8	1446.1	0.5226	ug/L	0.5226	ppb	02:10:06
2	Co 228.616†	3281.1	3310.9	54.759	ug/L	54.759	ppb	02:10:06
2	Cr 267.716†	36548.6	36072.8	381.92	ug/L	381.92	ppb	02:09:46
2	Cu 324.752†	35913.8	28766.9	89.920	ug/L	89.920	ppb	02:09:46
2	Mn 257.610†	2212312.6	2187852.0	2348.3	ug/L	2348.3	ppb	02:09:46
2	Mo 202.031†	-20.5	-38.6	8.1135	ug/L	8.1135	ppb	02:10:06
2	Ni 231.604†	8493.8	8314.9	192.50	ug/L	192.50	ppb	02:10:06

2	P 214.914†	1696.5	1454.5	752.48 ug/L	752.48 ppb	02:10:06
2	Pb 220.353†	1006.2	1063.7	139.26 ug/L	139.26 ppb	02:10:06
2	S 181.975 Axial†	488.2	441.4	591.03 ug/L	591.03 ppb	02:10:06
2	Sb 206.836†	78.4	43.3	-4.6303 ug/L	-4.6303 ppb	02:10:06
2	Se 196.026†	-634.1	-598.4	148.49 ug/L	148.49 ppb	02:10:06
2	Si 251.611†	1128098.0	1115390.7	33386 ug/L	33386 ppb	02:09:46
2	Sn 189.927†	-152.1	-155.4	-20.489 ug/L	-20.489 ppb	02:10:06
2	Ti 334.940†	1816776.3	1798150.7	2870.9 ug/L	2870.9 ppb	02:09:46
2	Tl 190.801†	-180.1	-145.7	-2.2562 ug/L	-2.2562 ppb	02:10:06
2	U 409.014†	-9332.3	-6829.0	-207.59 ug/L	-207.59 ppb	02:09:46
2	V 292.402†	44196.0	45074.1	271.87 ug/L	271.87 ppb	02:09:46
2	Zn 213.857†	31736.7	30770.0	252.47 ug/L	252.47 ppb	02:10:06
2	SiO2†	1129175.5	1116438.8	71609 ug/L	71609 ppb	02:10:46
3	Sc Radial	5843.5	5843.5	100.0 %		02:09:11
3	Y RADIAL	7958.6	7958.6	126.6 %		02:09:11
3	Al 396.153Radial†	195127.3	195162.1	135560 ug/L	135560 ppb	02:08:51
3	Ca 317.933Radial†	18350.4	18336.2	27026 ug/L	27026 ppb	02:08:51
3	Fe 238.204 Radial†	15429.9	15424.3	144400 ug/L	144400 ppb	02:08:51
3	K 766.490 Radial†	64265.9	61918.9	10970 ug/L	10970 ppb	02:08:51
3	Mg 279.077 IEC†	660.6	659.5	23142 ug/L	23142 ppb	02:09:11
3	Na 589.592 Radial†	8100.3	9188.8	3083.6 ug/L	3083.6 ppb	02:08:51
3	Sr 421.552†	47154.1	47184.9	293.60 ug/L	293.60 ppb	02:08:51
3	Sc 361.383	907709.4	907709.4	100.72 %		02:10:13
3	Y 371.029	951753.2	951753.2	126.72 %		02:10:13
3	Ag 328.068†	-9535.8	-9760.8	2.6820 ug/L	2.6820 ppb	02:10:13
3	As 188.979†	-43.1	-18.6	39.248 ug/L	39.248 ppb	02:10:34
3	B 249.677†	1673.1	2191.9	26.654 ug/L	26.654 ppb	02:10:13
3	Ba 233.527†	92910.7	92259.5	689.78 ug/L	689.78 ppb	02:10:13
3	Be 313.107†	3375.2	8464.2	8.7279 ug/L	8.7279 ppb	02:10:13
3	Cd 226.502†	1244.3	1430.6	0.8107 ug/L	0.8107 ppb	02:10:34
3	Co 228.616†	3223.1	3265.7	53.964 ug/L	53.964 ppb	02:10:34
3	Cr 267.716†	36230.7	35894.8	379.97 ug/L	379.97 ppb	02:10:13
3	Cu 324.752†	35695.6	28685.4	89.456 ug/L	89.456 ppb	02:10:13
3	Mn 257.610†	2207007.2	2190913.9	2351.1 ug/L	2351.1 ppb	02:10:13
3	Mo 202.031†	-17.0	-35.3	8.0032 ug/L	8.0032 ppb	02:10:34
3	Ni 231.604†	8449.3	8302.8	192.22 ug/L	192.22 ppb	02:10:34
3	P 214.914†	1704.7	1469.1	763.27 ug/L	763.27 ppb	02:10:34
3	Pb 220.353†	1004.1	1065.4	138.94 ug/L	138.94 ppb	02:10:34
3	S 181.975 Axial†	484.3	439.2	588.83 ug/L	588.83 ppb	02:10:34
3	Sb 206.836†	78.2	43.4	-4.4689 ug/L	-4.4689 ppb	02:10:34
3	Se 196.026†	-631.9	-598.5	133.44 ug/L	133.44 ppb	02:10:34
3	Si 251.611†	1125076.1	1116637.7	33424 ug/L	33424 ppb	02:10:13
3	Sn 189.927†	-138.0	-142.0	-18.431 ug/L	-18.431 ppb	02:10:34
3	Ti 334.940†	1810704.0	1798961.9	2872.2 ug/L	2872.2 ppb	02:10:13
3	Tl 190.801†	-184.0	-150.2	-3.6113 ug/L	-3.6113 ppb	02:10:34
3	U 409.014†	-9510.0	-7040.6	-212.85 ug/L	-212.85 ppb	02:10:13
3	V 292.402†	43970.9	45017.1	272.17 ug/L	272.17 ppb	02:10:13
3	Zn 213.857†	31509.9	30664.4	251.99 ug/L	251.99 ppb	02:10:34
3	SiO2†	1118391.3	1109982.6	71195 ug/L	71195 ppb	02:10:52

Mean Data: 241541008|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912970.8	101.30	%	0.706				0.70%
Sc Radial	5825.7	99.7	%	0.81				0.81%
Y 371.029	956402.7	127.34	%	0.587				0.46%
Y RADIAL	7937.4	126.2	%	0.78				0.62%
Ag 328.068†	-9751.3	3.0162	ug/L	0.79026	3.0162	ppb	0.79026	26.20%
Al 396.153Radial†	196082.5	136200	ug/L	3032.7	136200	ppb	3032.7	2.23%
As 188.979†	-16.2	40.183	ug/L	0.8099	40.183	ppb	0.8099	2.02%
B 249.677†	2115.0	24.912	ug/L	1.8411	24.912	ppb	1.8411	7.39%
Ba 233.527†	91614.0	685.03	ug/L	8.388	685.03	ppb	8.388	1.22%
Be 313.107†	8410.9	8.6703	ug/L	0.10323	8.6703	ppb	0.10323	1.19%
Ca 317.933Radial†	18446.9	27190	ug/L	576.5	27190	ppb	576.5	2.12%
Cd 226.502†	1445.7	0.8738	ug/L	0.38669	0.8738	ppb	0.38669	44.25%
Co 228.616†	3271.8	54.106	ug/L	0.5947	54.106	ppb	0.5947	1.10%
Cr 267.716†	35755.4	378.52	ug/L	4.314	378.52	ppb	4.314	1.14%
Cu 324.752†	28478.4	88.912	ug/L	1.3631	88.912	ppb	1.3631	1.53%
Fe 238.204 Radial†	15526.9	145360	ug/L	3195.7	145360	ppb	3195.7	2.20%
K 766.490 Radial†	62228.6	11025	ug/L	244.6	11025	ppb	244.6	2.22%

Mg 279.077 IEC†	659.4	23137	ug/L	115.6	23137	ppb	115.6	0.50%
Mn 257.610†	2174997.6	2334.2	ug/L	26.84	2334.2	ppb	26.84	1.15%
Mo 202.031†	-38.2	7.8843	ug/L	0.30648	7.8843	ppb	0.30648	3.89%
Na 589.592 Radial†	9251.5	3104.6	ug/L	68.67	3104.6	ppb	68.67	2.21%
Ni 231.604†	8261.0	191.26	ug/L	1.924	191.26	ppb	1.924	1.01%
P 214.914†	1451.8	752.83	ug/L	10.264	752.83	ppb	10.264	1.36%
Pb 220.353†	1057.4	138.10	ug/L	1.737	138.10	ppb	1.737	1.26%
S 181.975 Axial†	437.9	586.80	ug/L	5.526	586.80	ppb	5.526	0.94%
Sb 206.836†	46.3	-3.4849	ug/L	1.84592	-3.4849	ppb	1.84592	52.97%
Se 196.026†	-593.0	139.79	ug/L	7.794	139.79	ppb	7.794	5.58%
Si 251.611†	1109014.4	33196	ug/L	363.4	33196	ppb	363.4	1.09%
Sn 189.927†	-146.9	-19.217	ug/L	1.1120	-19.217	ppb	1.1120	5.79%
Sr 421.552†	47398.8	294.94	ug/L	6.581	294.94	ppb	6.581	2.23%
Ti 334.940†	1786789.9	2852.7	ug/L	32.55	2852.7	ppb	32.55	1.14%
Tl 190.801†	-143.1	-1.8423	ug/L	2.00815	-1.8423	ppb	2.00815	109.00%
U 409.014†	-6808.8	-206.58	ug/L	6.832	-206.58	ppb	6.832	3.31%
V 292.402†	44743.9	270.25	ug/L	3.067	270.25	ppb	3.067	1.13%
Zn 213.857†	30573.3	251.11	ug/L	1.960	251.11	ppb	1.960	0.78%
SiO2†	1108361.4	71091	ug/L	577.0	71091	ppb	577.0	0.81%

Sequence No.: 98
Sample ID: 241541009|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/9/2009 02:13:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541009|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5975.2	5975.2	102	%			02:14:56
1	Y RADIAL	7337.9	7337.9	116.7	%			02:14:56
1	Al 396.153Radial†	85876.6	84010.6	58355	ug/L	58355	ppb	02:14:56
1	Ca 317.933Radial†	14267.2	13938.3	20544	ug/L	20544	ppb	02:14:56
1	Fe 238.204 Radial†	13990.1	13676.0	128030	ug/L	128030	ppb	02:14:56
1	K 766.490 Radial†	57332.3	53721.2	9500.2	ug/L	9500.2	ppb	02:14:56
1	Mg 279.077 IEC†	339.8	331.1	11573	ug/L	11573	ppb	02:15:16
1	Na 589.592 Radial†	1972.6	3017.2	1012.5	ug/L	1012.5	ppb	02:14:56
1	Sr 421.552†	21697.3	21248.0	132.14	ug/L	132.14	ppb	02:14:56
1	Sc 361.383	914095.3	914095.3	101.42	%			02:16:14
1	Y 371.029	859101.0	859101.0	114.38	%			02:16:14
1	Ag 328.068†	-6050.1	-6257.9	12.995	ug/L	12.995	ppb	02:16:19
1	As 188.979†	-75.4	-50.2	29.776	ug/L	29.776	ppb	02:16:39
1	B 249.677†	3287.9	3772.4	62.009	ug/L	62.009	ppb	02:16:19
1	Ba 233.527†	100362.4	98962.0	738.61	ug/L	738.61	ppb	02:16:19
1	Be 313.107†	-9077.1	-3836.7	5.5959	ug/L	5.5959	ppb	02:16:19
1	Cd 226.502†	1539.5	1712.9	5.3455	ug/L	5.3455	ppb	02:16:39
1	Co 228.616†	2404.1	2435.8	37.155	ug/L	37.155	ppb	02:16:39
1	Cr 267.716†	7474.8	7291.2	79.220	ug/L	79.220	ppb	02:16:19
1	Cu 324.752†	65199.4	57527.5	171.16	ug/L	171.16	ppb	02:16:19
1	Mn 257.610†	2716418.3	2677865.7	2869.1	ug/L	2869.1	ppb	02:16:14
1	Mo 202.031†	159.1	138.6	17.885	ug/L	17.885	ppb	02:16:39
1	Ni 231.604†	2634.9	2511.4	58.125	ug/L	58.125	ppb	02:16:39
1	P 214.914†	3058.6	2792.2	1500.4	ug/L	1500.4	ppb	02:16:39
1	Pb 220.353†	2803.0	2832.1	322.63	ug/L	322.63	ppb	02:16:39
1	S 181.975 Axial†	665.9	615.0	850.33	ug/L	850.33	ppb	02:16:39
1	Sb 206.836†	186.8	149.9	36.927	ug/L	36.927	ppb	02:16:39
1	Se 196.026†	-558.0	-521.4	112.54	ug/L	112.54	ppb	02:16:39
1	Si 251.611†	1025688.9	1010841.6	30257	ug/L	30257	ppb	02:16:14
1	Sn 189.927†	-17.5	-22.2	0.2375	ug/L	0.2375	ppb	02:16:39
1	Ti 334.940†	2260537.6	2229921.4	3559.6	ug/L	3559.6	ppb	02:16:14
1	Tl 190.801†	-203.7	-168.3	-2.1574	ug/L	-2.1574	ppb	02:16:39
1	U 409.014†	-8083.1	-5567.8	-169.63	ug/L	-169.63	ppb	02:16:14
1	V 292.402†	28491.6	29450.0	171.18	ug/L	171.18	ppb	02:16:19
1	Zn 213.857†	138005.6	135446.6	1170.1	ug/L	1170.1	ppb	02:16:19
1	SiO2†	1026968.1	1012085.1	64915	ug/L	64915	ppb	02:17:48
2	Sc Radial	5844.6	5844.6	100	%			02:15:21
2	Y RADIAL	7236.0	7236.0	115.1	%			02:15:21
2	Al 396.153Radial†	84838.0	84848.1	58937	ug/L	58937	ppb	02:15:21
2	Ca 317.933Radial†	14127.4	14110.1	20798	ug/L	20798	ppb	02:15:21
2	Fe 238.204 Radial†	13843.3	13834.8	129520	ug/L	129520	ppb	02:15:21
2	K 766.490 Radial†	56691.2	54332.6	9608.6	ug/L	9608.6	ppb	02:15:21
2	Mg 279.077 IEC†	333.1	331.9	11598	ug/L	11598	ppb	02:15:41
2	Na 589.592 Radial†	1969.3	3057.0	1025.9	ug/L	1025.9	ppb	02:15:21
2	Sr 421.552†	21333.1	21357.8	132.82	ug/L	132.82	ppb	02:15:21
2	Sc 361.383	912637.5	912637.5	101.26	%			02:16:45
2	Y 371.029	857471.3	857471.3	114.16	%			02:16:45
2	Ag 328.068†	-6165.7	-6381.6	12.906	ug/L	12.906	ppb	02:16:50
2	As 188.979†	-91.3	-66.0	23.819	ug/L	23.819	ppb	02:17:10
2	B 249.677†	3369.2	3857.9	63.603	ug/L	63.603	ppb	02:16:50
2	Ba 233.527†	100864.2	99615.6	743.51	ug/L	743.51	ppb	02:16:50
2	Be 313.107†	-8837.1	-3614.0	5.6893	ug/L	5.6893	ppb	02:16:50
2	Cd 226.502†	1511.3	1687.5	4.9285	ug/L	4.9285	ppb	02:17:10
2	Co 228.616†	2427.0	2462.2	37.625	ug/L	37.625	ppb	02:17:10
2	Cr 267.716†	7489.6	7317.6	79.525	ug/L	79.525	ppb	02:16:50
2	Cu 324.752†	65114.3	57546.2	171.29	ug/L	171.29	ppb	02:16:50
2	Mn 257.610†	2716841.9	2682562.3	2874.3	ug/L	2874.3	ppb	02:16:45
2	Mo 202.031†	165.5	145.1	18.408	ug/L	18.408	ppb	02:17:10
2	Ni 231.604†	2640.0	2520.5	58.336	ug/L	58.336	ppb	02:17:10

2	P 214.914†	3074.1	2812.3	1510.9 ug/L	1510.9 ppb	02:17:10
2	Pb 220.353†	2821.5	2854.7	325.21 ug/L	325.21 ppb	02:17:10
2	S 181.975 Axial†	677.9	627.9	868.20 ug/L	868.20 ppb	02:17:10
2	Sb 206.836†	189.7	153.1	37.874 ug/L	37.874 ppb	02:17:10
2	Se 196.026†	-551.8	-516.1	120.36 ug/L	120.36 ppb	02:17:10
2	Si 251.611†	1026751.4	1013506.3	30337 ug/L	30337 ppb	02:16:45
2	Sn 189.927†	-34.1	-38.7	-2.4067 ug/L	-2.4067 ppb	02:17:10
2	Ti 334.940†	2260870.8	2233810.6	3565.9 ug/L	3565.9 ppb	02:16:45
2	Tl 190.801†	-203.8	-168.7	-2.1856 ug/L	-2.1856 ppb	02:17:10
2	U 409.014†	-8079.2	-5576.7	-170.07 ug/L	-170.07 ppb	02:16:45
2	V 292.402†	28498.4	29501.6	171.29 ug/L	171.29 ppb	02:16:50
2	Zn 213.857†	138472.1	136124.6	1175.9 ug/L	1175.9 ppb	02:16:50
2	SiO2†	1028675.9	1015389.1	65127 ug/L	65127 ppb	02:17:53
3	Sc Radial	5936.4	5936.4	102 %		02:15:47
3	Y RADIAL	7271.4	7271.4	115.6 %		02:15:47
3	Al 396.153Radial†	85446.1	84135.5	58442 ug/L	58442 ppb	02:15:47
3	Ca 317.933Radial†	14163.8	13927.6	20529 ug/L	20529 ppb	02:15:47
3	Fe 238.204 Radial†	13869.2	13646.3	127760 ug/L	127760 ppb	02:15:47
3	K 766.490 Radial†	56811.9	53575.3	9474.3 ug/L	9474.3 ppb	02:15:47
3	Mg 279.077 IEC†	332.4	326.0	11393 ug/L	11393 ppb	02:16:07
3	Na 589.592 Radial†	1964.1	3021.5	1014.0 ug/L	1014.0 ppb	02:15:47
3	Sr 421.552†	21475.7	21168.6	131.64 ug/L	131.64 ppb	02:15:47
3	Sc 361.383	904342.9	904342.9	100.34 %		02:17:16
3	Y 371.029	849305.7	849305.7	113.08 %		02:17:16
3	Ag 328.068†	-6268.8	-6540.2	11.643 ug/L	11.643 ppb	02:17:21
3	As 188.979†	-76.5	-52.1	29.001 ug/L	29.001 ppb	02:17:41
3	B 249.677†	3420.7	3939.7	65.552 ug/L	65.552 ppb	02:17:21
3	Ba 233.527†	101170.5	100834.5	752.49 ug/L	752.49 ppb	02:17:21
3	Be 313.107†	-8801.6	-3658.6	5.6674 ug/L	5.6674 ppb	02:17:21
3	Cd 226.502†	1528.3	1718.2	5.4297 ug/L	5.4297 ppb	02:17:41
3	Co 228.616†	2429.1	2486.2	38.117 ug/L	38.117 ppb	02:17:41
3	Cr 267.716†	7486.5	7382.4	80.178 ug/L	80.178 ppb	02:17:21
3	Cu 324.752†	65568.5	58588.5	174.18 ug/L	174.18 ppb	02:17:21
3	Mn 257.610†	2690287.7	2680706.7	2872.1 ug/L	2872.1 ppb	02:17:16
3	Mo 202.031†	165.1	146.2	18.350 ug/L	18.350 ppb	02:17:41
3	Ni 231.604†	2643.6	2548.1	58.974 ug/L	58.974 ppb	02:17:41
3	P 214.914†	3085.9	2851.9	1534.6 ug/L	1534.6 ppb	02:17:41
3	Pb 220.353†	2831.4	2890.2	329.25 ug/L	329.25 ppb	02:17:41
3	S 181.975 Axial†	681.0	637.1	881.27 ug/L	881.27 ppb	02:17:41
3	Sb 206.836†	207.6	172.6	44.065 ug/L	44.065 ppb	02:17:41
3	Se 196.026†	-565.0	-534.3	104.21 ug/L	104.21 ppb	02:17:41
3	Si 251.611†	1016656.7	1012745.9	30314 ug/L	30314 ppb	02:17:16
3	Sn 189.927†	-24.2	-29.1	-0.8977 ug/L	-0.8977 ppb	02:17:41
3	Ti 334.940†	2238504.8	2231999.1	3562.9 ug/L	3562.9 ppb	02:17:16
3	Tl 190.801†	-206.6	-173.4	-3.5643 ug/L	-3.5643 ppb	02:17:41
3	U 409.014†	-8004.9	-5575.8	-169.82 ug/L	-169.82 ppb	02:17:16
3	V 292.402†	28703.5	29964.1	174.62 ug/L	174.62 ppb	02:17:21
3	Zn 213.857†	139402.1	138305.7	1195.1 ug/L	1195.1 ppb	02:17:21
3	SiO2†	1016796.4	1012867.4	64966 ug/L	64966 ppb	02:17:59

Mean Data: 241541009|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	910358.6	101.01	%	0.584				0.58%
Sc Radial	5918.7	101	%	1.1				1.13%
Y 371.029	855292.7	113.87	%	0.699				0.61%
Y RADIAL	7281.8	115.8	%	0.82				0.71%
Ag 328.068†	-6393.2	12.515	ug/L	0.7567	12.515	ppb	0.7567	6.05%
Al 396.153Radial†	84331.4	58578	ug/L	313.8	58578	ppb	313.8	0.54%
As 188.979†	-56.1	27.532	ug/L	3.2387	27.532	ppb	3.2387	11.76%
B 249.677†	3856.7	63.721	ug/L	1.7742	63.721	ppb	1.7742	2.78%
Ba 233.527†	99804.1	744.87	ug/L	7.036	744.87	ppb	7.036	0.94%
Be 313.107†	-3703.1	5.6509	ug/L	0.04884	5.6509	ppb	0.04884	0.86%
Ca 317.933Radial†	13992.0	20623	ug/L	151.0	20623	ppb	151.0	0.73%
Cd 226.502†	1706.2	5.2346	ug/L	0.26839	5.2346	ppb	0.26839	5.13%
Co 228.616†	2461.4	37.632	ug/L	0.4808	37.632	ppb	0.4808	1.28%
Cr 267.716†	7330.4	79.641	ug/L	0.4895	79.641	ppb	0.4895	0.61%
Cu 324.752†	57887.4	172.21	ug/L	1.709	172.21	ppb	1.709	0.99%
Fe 238.204 Radial†	13719.0	128440	ug/L	948.9	128440	ppb	948.9	0.74%
K 766.490 Radial†	53876.4	9527.7	ug/L	71.28	9527.7	ppb	71.28	0.75%

Mg 279.077 IEC†	329.7	11521	ug/L	111.5	11521	ppb	111.5	0.97%
Mn 257.610†	2680378.2	2871.9	ug/L	2.59	2871.9	ppb	2.59	0.09%
Mo 202.031†	143.3	18.215	ug/L	0.2867	18.215	ppb	0.2867	1.57%
Na 589.592 Radial†	3031.9	1017.4	ug/L	7.33	1017.4	ppb	7.33	0.72%
Ni 231.604†	2526.7	58.479	ug/L	0.4423	58.479	ppb	0.4423	0.76%
P 214.914†	2818.8	1515.3	ug/L	17.51	1515.3	ppb	17.51	1.16%
Pb 220.353†	2859.0	325.70	ug/L	3.333	325.70	ppb	3.333	1.02%
S 181.975 Axial†	626.7	866.60	ug/L	15.531	866.60	ppb	15.531	1.79%
Sb 206.836†	158.6	39.622	ug/L	3.8769	39.622	ppb	3.8769	9.78%
Se 196.026†	-523.9	112.37	ug/L	8.074	112.37	ppb	8.074	7.19%
Si 251.611†	1012364.6	30303	ug/L	41.1	30303	ppb	41.1	0.14%
Sn 189.927†	-30.0	-1.0223	ug/L	1.32649	-1.0223	ppb	1.32649	129.76%
Sr 421.552†	21258.1	132.20	ug/L	0.591	132.20	ppb	0.591	0.45%
Ti 334.940†	2231910.4	3562.8	ug/L	3.11	3562.8	ppb	3.11	0.09%
Tl 190.801†	-170.1	-2.6358	ug/L	0.80424	-2.6358	ppb	0.80424	30.51%
U 409.014†	-5573.5	-169.84	ug/L	0.217	-169.84	ppb	0.217	0.13%
V 292.402†	29638.6	172.36	ug/L	1.952	172.36	ppb	1.952	1.13%
Zn 213.857†	136625.6	1180.4	ug/L	13.09	1180.4	ppb	13.09	1.11%
SiO2†	1013447.2	65003	ug/L	110.7	65003	ppb	110.7	0.17%

Sequence No.: 99
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 02:20:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5762.1	5762.1	98.6	%			02:22:03
1	Y RADIAL	6110.2	6110.2	97.18	%			02:22:03
1	Al 396.153Radial†	6774.8	6891.4	4765.9	ug/L	4765.9	ppb	02:22:03
1	Ca 317.933Radial†	3286.4	3317.5	4889.8	ug/L	4889.8	ppb	02:22:23
1	Fe 238.204 Radial†	534.1	534.9	5023.1	ug/L	5023.1	ppb	02:22:23
1	K 766.490 Radial†	30956.4	29044.3	5142.0	ug/L	5142.0	ppb	02:22:03
1	Mg 279.077 IEC†	141.1	142.0	5013.5	ug/L	5013.5	ppb	02:22:23
1	Na 589.592 Radial†	27628.8	29109.1	9768.5	ug/L	9768.5	ppb	02:22:03
1	Sr 421.552†	79698.2	80857.3	503.51	ug/L	503.51	ppb	02:22:03
1	Sc 361.383	904059.2	904059.2	100.31	%			02:23:20
1	Y 371.029	736076.6	736076.6	98.002	%			02:23:20
1	Ag 328.068†	111559.8	110922.1	505.40	ug/L	505.40	ppb	02:23:25
1	As 188.979†	1178.6	1199.1	478.24	ug/L	478.24	ppb	02:23:45
1	B 249.677†	22353.4	22815.0	476.53	ug/L	476.53	ppb	02:23:25
1	Ba 233.527†	66397.6	66200.8	491.90	ug/L	491.90	ppb	02:23:25
1	Be 313.107†	1317563.6	1318603.3	481.63	ug/L	481.63	ppb	02:23:20
1	Cd 226.502†	46519.4	46570.7	492.13	ug/L	492.13	ppb	02:23:25
1	Co 228.616†	26191.3	26175.8	496.91	ug/L	496.91	ppb	02:23:25
1	Cr 267.716†	46353.3	46131.3	485.04	ug/L	485.04	ppb	02:23:25
1	Cu 324.752†	178097.4	170790.0	489.01	ug/L	489.01	ppb	02:23:25
1	Mn 257.610†	466489.5	464625.0	496.04	ug/L	496.04	ppb	02:23:20
1	Mo 202.031†	7784.6	7742.2	492.19	ug/L	492.19	ppb	02:23:45
1	Ni 231.604†	21291.1	21138.8	489.18	ug/L	489.18	ppb	02:23:25
1	P 214.914†	4467.3	4230.0	2365.5	ug/L	2365.5	ppb	02:23:45
1	Pb 220.353†	4224.0	4279.3	485.25	ug/L	485.25	ppb	02:23:45
1	S 181.975 Axial†	729.9	686.0	960.39	ug/L	960.39	ppb	02:23:45
1	Sb 206.836†	1601.6	1562.4	501.66	ug/L	501.66	ppb	02:23:45
1	Se 196.026†	827.5	853.8	511.84	ug/L	511.84	ppb	02:23:45
1	Si 251.611†	84059.8	83350.2	2483.3	ug/L	2483.3	ppb	02:23:25
1	Sn 189.927†	3016.5	3002.2	492.14	ug/L	492.14	ppb	02:23:45
1	Ti 334.940†	317082.1	317216.7	506.08	ug/L	506.08	ppb	02:23:25
1	Tl 190.801†	1709.0	1736.2	489.54	ug/L	489.54	ppb	02:23:45
1	U 409.014†	16099.2	18451.2	506.71	ug/L	506.71	ppb	02:23:25
1	V 292.402†	72227.1	73362.2	491.17	ug/L	491.17	ppb	02:23:25
1	Zn 213.857†	56873.6	56075.9	485.54	ug/L	485.54	ppb	02:23:25
1	SiO2†	83217.4	82492.7	5266.0	ug/L	5266.0	ppb	02:24:53
2	Sc Radial	5668.4	5668.4	97.0	%			02:22:28
2	Y RADIAL	6010.3	6010.3	95.59	%			02:22:28
2	Al 396.153Radial†	6676.7	6903.8	4774.2	ug/L	4774.2	ppb	02:22:28
2	Ca 317.933Radial†	3281.0	3367.0	4962.8	ug/L	4962.8	ppb	02:22:48
2	Fe 238.204 Radial†	531.1	540.7	5077.9	ug/L	5077.9	ppb	02:22:48
2	K 766.490 Radial†	30462.3	29053.6	5143.6	ug/L	5143.6	ppb	02:22:28
2	Mg 279.077 IEC†	143.6	146.9	5187.4	ug/L	5187.4	ppb	02:22:48
2	Na 589.592 Radial†	27162.6	29091.4	9762.5	ug/L	9762.5	ppb	02:22:28
2	Sr 421.552†	78056.5	80500.3	501.29	ug/L	501.29	ppb	02:22:28
2	Sc 361.383	890627.2	890627.2	98.820	%			02:23:51
2	Y 371.029	724348.2	724348.2	96.440	%			02:23:51
2	Ag 328.068†	111034.9	112068.3	510.63	ug/L	510.63	ppb	02:23:56
2	As 188.979†	1177.7	1215.9	484.93	ug/L	484.93	ppb	02:24:16
2	B 249.677†	22385.9	23183.9	484.24	ug/L	484.24	ppb	02:23:56
2	Ba 233.527†	66269.1	67069.0	498.35	ug/L	498.35	ppb	02:23:56
2	Be 313.107†	1298712.3	1319336.2	481.90	ug/L	481.90	ppb	02:23:51
2	Cd 226.502†	46435.4	47185.1	498.62	ug/L	498.62	ppb	02:23:56
2	Co 228.616†	26161.7	26539.5	503.82	ug/L	503.82	ppb	02:23:56
2	Cr 267.716†	46279.0	46753.1	491.57	ug/L	491.57	ppb	02:23:56
2	Cu 324.752†	177017.2	172374.6	493.55	ug/L	493.55	ppb	02:23:56
2	Mn 257.610†	461178.4	466264.1	497.79	ug/L	497.79	ppb	02:23:51
2	Mo 202.031†	7780.7	7855.3	499.38	ug/L	499.38	ppb	02:24:16
2	Ni 231.604†	21300.0	21467.8	496.80	ug/L	496.80	ppb	02:23:56

2	P 214.914†	4481.6	4311.7	2412.0 ug/L	2412.0 ppb	02:24:16
2	Pb 220.353†	4206.6	4325.3	490.45 ug/L	490.45 ppb	02:24:16
2	S 181.975 Axial†	733.7	700.9	981.23 ug/L	981.23 ppb	02:24:16
2	Sb 206.836†	1612.5	1597.6	512.96 ug/L	512.96 ppb	02:24:16
2	Se 196.026†	828.4	867.1	519.74 ug/L	519.74 ppb	02:24:16
2	Si 251.611†	83798.9	84350.1	2513.1 ug/L	2513.1 ppb	02:23:56
2	Sn 189.927†	3032.0	3063.3	502.14 ug/L	502.14 ppb	02:24:16
2	Ti 334.940†	315803.5	320690.2	511.62 ug/L	511.62 ppb	02:23:56
2	Tl 190.801†	1707.3	1760.2	496.26 ug/L	496.26 ppb	02:24:16
2	U 409.014†	16064.8	18658.5	512.40 ug/L	512.40 ppb	02:23:56
2	V 292.402†	72093.7	74313.1	497.55 ug/L	497.55 ppb	02:23:56
2	Zn 213.857†	56836.4	56893.4	492.62 ug/L	492.62 ppb	02:23:56
2	SiO2†	84288.4	84827.6	5415.4 ug/L	5415.4 ppb	02:24:58
3	Sc Radial	5738.9	5738.9	98.2 %		02:22:53
3	Y RADIAL	6092.6	6092.6	96.90 %		02:22:53
3	Al 396.153Radial†	6782.2	6926.6	4790.1 ug/L	4790.1 ppb	02:22:53
3	Ca 317.933Radial†	3298.3	3343.0	4927.4 ug/L	4927.4 ppb	02:23:13
3	Fe 238.204 Radial†	534.7	537.7	5049.9 ug/L	5049.9 ppb	02:23:13
3	K 766.490 Radial†	30744.1	28954.7	5126.1 ug/L	5126.1 ppb	02:22:53
3	Mg 279.077 IEC†	141.3	142.8	5042.4 ug/L	5042.4 ppb	02:23:13
3	Na 589.592 Radial†	27523.5	29114.9	9770.4 ug/L	9770.4 ppb	02:22:53
3	Sr 421.552†	79196.7	80672.7	502.36 ug/L	502.36 ppb	02:22:53
3	Sc 361.383	891259.4	891259.4	98.890 %		02:24:22
3	Y 371.029	724850.0	724850.0	96.507 %		02:24:22
3	Ag 328.068†	111403.3	112361.1	511.95 ug/L	511.95 ppb	02:24:27
3	As 188.979†	1175.8	1213.2	483.84 ug/L	483.84 ppb	02:24:47
3	B 249.677†	22466.9	23249.8	485.63 ug/L	485.63 ppb	02:24:27
3	Ba 233.527†	66409.6	67163.5	499.06 ug/L	499.06 ppb	02:24:27
3	Be 313.107†	1296238.1	1315902.0	480.66 ug/L	480.66 ppb	02:24:22
3	Cd 226.502†	46491.5	47208.5	498.88 ug/L	498.88 ppb	02:24:27
3	Co 228.616†	26169.4	26528.6	503.61 ug/L	503.61 ppb	02:24:27
3	Cr 267.716†	46379.0	46821.0	492.29 ug/L	492.29 ppb	02:24:27
3	Cu 324.752†	177904.8	173145.2	495.75 ug/L	495.75 ppb	02:24:27
3	Mn 257.610†	460865.8	465617.0	497.10 ug/L	497.10 ppb	02:24:22
3	Mo 202.031†	7755.0	7823.7	497.36 ug/L	497.36 ppb	02:24:47
3	Ni 231.604†	21341.3	21494.3	497.41 ug/L	497.41 ppb	02:24:27
3	P 214.914†	4442.9	4269.3	2387.2 ug/L	2387.2 ppb	02:24:47
3	Pb 220.353†	4218.8	4334.6	491.51 ug/L	491.51 ppb	02:24:47
3	S 181.975 Axial†	736.5	703.2	984.45 ug/L	984.45 ppb	02:24:47
3	Sb 206.836†	1606.1	1589.9	510.39 ug/L	510.39 ppb	02:24:47
3	Se 196.026†	829.8	867.9	520.13 ug/L	520.13 ppb	02:24:47
3	Si 251.611†	84201.7	84697.2	2523.6 ug/L	2523.6 ppb	02:24:27
3	Sn 189.927†	3009.3	3038.1	498.01 ug/L	498.01 ppb	02:24:47
3	Ti 334.940†	316645.6	321315.0	512.61 ug/L	512.61 ppb	02:24:27
3	Tl 190.801†	1679.0	1730.3	487.90 ug/L	487.90 ppb	02:24:47
3	U 409.014†	16095.4	18677.9	512.94 ug/L	512.94 ppb	02:24:27
3	V 292.402†	72355.1	74525.7	498.93 ug/L	498.93 ppb	02:24:27
3	Zn 213.857†	56876.9	56893.5	492.62 ug/L	492.62 ppb	02:24:27
3	SiO2†	83717.0	84189.3	5374.6 ug/L	5374.6 ppb	02:25:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895315.2	99.340	%	0.8409				0.85%
Sc Radial	5723.2	97.9	%	0.83				0.85%
Y 371.029	728424.9	96.983	%	0.8829				0.91%
Y RADIAL	6071.1	96.55	%	0.848				0.88%
Ag 328.068†	111783.8	509.33	ug/L	3.464	509.33	ppb	3.464	0.68%
QC value within limits for Ag 328.068 Recovery = 101.87%								
Al 396.153Radial†	6907.3	4776.7	ug/L	12.32	4776.7	ppb	12.32	0.26%
QC value within limits for Al 396.153Radial Recovery = 95.53%								
As 188.979†	1209.4	482.34	ug/L	3.587	482.34	ppb	3.587	0.74%
QC value within limits for As 188.979 Recovery = 96.47%								
B 249.677†	23082.9	482.13	ug/L	4.902	482.13	ppb	4.902	1.02%
QC value within limits for B 249.677 Recovery = 96.43%								
Ba 233.527†	66811.1	496.44	ug/L	3.943	496.44	ppb	3.943	0.79%
QC value within limits for Ba 233.527 Recovery = 99.29%								
Be 313.107†	1317947.1	481.40	ug/L	0.656	481.40	ppb	0.656	0.14%
QC value within limits for Be 313.107 Recovery = 96.28%								
Ca 317.933Radial†	3342.5	4926.6	ug/L	36.50	4926.6	ppb	36.50	0.74%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.53%
Cd 226.502†            46988.1      496.54 ug/L         3.824      496.54 ppb          3.824   0.77%
   QC value within limits for Cd 226.502  Recovery = 99.31%
Co 228.616†            26414.6      501.45 ug/L         3.929      501.45 ppb          3.929   0.78%
   QC value within limits for Co 228.616  Recovery = 100.29%
Cr 267.716†            46568.5      489.63 ug/L         3.997      489.63 ppb          3.997   0.82%
   QC value within limits for Cr 267.716  Recovery = 97.93%
Cu 324.752†           172103.3      492.77 ug/L         3.437      492.77 ppb          3.437   0.70%
   QC value within limits for Cu 324.752  Recovery = 98.55%
Fe 238.204 Radial†       537.8      5050.3 ug/L        27.41      5050.3 ppb         27.41   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.01%
K 766.490 Radial†      29017.6      5137.2 ug/L         9.69      5137.2 ppb          9.69   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 102.74%
Mg 279.077 IEC†          143.9      5081.1 ug/L        93.18      5081.1 ppb         93.18   1.83%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.62%
Mn 257.610†           465502.0      496.98 ug/L         0.882      496.98 ppb          0.882   0.18%
   QC value within limits for Mn 257.610  Recovery = 99.40%
Mo 202.031†             7807.1      496.31 ug/L         3.708      496.31 ppb          3.708   0.75%
   QC value within limits for Mo 202.031  Recovery = 99.26%
Na 589.592 Radial†     29105.1      9767.1 ug/L         4.10      9767.1 ppb          4.10   0.04%
   QC value within limits for Na 589.592 Radial  Recovery = 97.67%
Ni 231.604†            21367.0      494.46 ug/L         4.585      494.46 ppb         4.585   0.93%
   QC value within limits for Ni 231.604  Recovery = 98.89%
P 214.914†              4270.3      2388.2 ug/L        23.25      2388.2 ppb         23.25   0.97%
   QC value within limits for P 214.914  Recovery = 95.53%
Pb 220.353†             4313.1      489.07 ug/L         3.351      489.07 ppb         3.351   0.69%
   QC value within limits for Pb 220.353  Recovery = 97.81%
S 181.975 Axial†         696.7      975.36 ug/L        13.060      975.36 ppb        13.060   1.34%
   QC value within limits for S 181.975 Axial  Recovery = 97.54%
Sb 206.836†             1583.3      508.34 ug/L         5.926      508.34 ppb         5.926   1.17%
   QC value within limits for Sb 206.836  Recovery = 101.67%
Se 196.026†              862.9      517.24 ug/L         4.683      517.24 ppb         4.683   0.91%
   QC value within limits for Se 196.026  Recovery = 103.45%
Si 251.611†            84132.5      2506.7 ug/L        20.87      2506.7 ppb         20.87   0.83%
   QC value within limits for Si 251.611  Recovery = 100.27%
Sn 189.927†             3034.5      497.43 ug/L         5.027      497.43 ppb         5.027   1.01%
   QC value within limits for Sn 189.927  Recovery = 99.49%
Sr 421.552†            80676.8      502.39 ug/L         1.112      502.39 ppb         1.112   0.22%
   QC value within limits for Sr 421.552  Recovery = 100.48%
Ti 334.940†           319740.6      510.10 ug/L         3.522      510.10 ppb         3.522   0.69%
   QC value within limits for Ti 334.940  Recovery = 102.02%
Tl 190.801†             1742.3      491.23 ug/L         4.431      491.23 ppb         4.431   0.90%
   QC value within limits for Tl 190.801  Recovery = 98.25%
U 409.014†             18595.9      510.69 ug/L         3.451      510.69 ppb         3.451   0.68%
   QC value within limits for U 409.014  Recovery = 102.14%
V 292.402†             74067.0      495.88 ug/L         4.139      495.88 ppb         4.139   0.83%
   QC value within limits for V 292.402  Recovery = 99.18%
Zn 213.857†            56621.0      490.26 ug/L         4.086      490.26 ppb         4.086   0.83%
   QC value within limits for Zn 213.857  Recovery = 98.05%
SiO2†                  83836.6      5352.0 ug/L        77.24      5352.0 ppb         77.24   1.44%
   QC value within limits for SiO2  Recovery = 100.08%
All analyte(s) passed QC.
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Sequence No.: 100
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 02:27:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5629.6	5629.6	96.3	%			02:29:04
1	Y RADIAL	5994.6	5994.6	95.34	%			02:29:04
1	Al 396.153Radial†	-4.6	15.6	10.824	ug/L	10.824	ppb	02:29:04
1	Ca 317.933Radial†	16.1	1.1	1.6278	ug/L	1.6278	ppb	02:29:24
1	Fe 238.204 Radial†	6.9	0.3	3.1044	ug/L	3.1044	ppb	02:29:24
1	K 766.490 Radial†	2248.4	-17.8	-3.2136	ug/L	-3.2136	ppb	02:29:04
1	Mg 279.077 IEC†	2.8	1.7	61.330	ug/L	61.330	ppb	02:29:24
1	Na 589.592 Radial†	-610.7	454.0	152.36	ug/L	152.36	ppb	02:29:04
1	Sr 421.552†	-38.5	-12.6	-0.0787	ug/L	-0.0787	ppb	02:29:04
1	Sc 361.383	893949.9	893949.9	99.188	%			02:30:21
1	Y 371.029	741434.5	741434.5	98.715	%			02:30:21
1	Ag 328.068†	284.6	-5.8	-0.0263	ug/L	-0.0263	ppb	02:30:26
1	As 188.979†	-25.0	-1.0	-0.4038	ug/L	-0.4038	ppb	02:30:46
1	B 249.677†	-373.3	154.3	3.2360	ug/L	3.2360	ppb	02:30:46
1	Ba 233.527†	-27.3	-19.1	-0.1407	ug/L	-0.1407	ppb	02:30:46
1	Be 313.107†	-5553.0	-485.5	-0.1765	ug/L	-0.1765	ppb	02:30:26
1	Cd 226.502†	-178.2	15.5	0.1630	ug/L	0.1630	ppb	02:30:46
1	Co 228.616†	-73.8	-9.0	-0.1691	ug/L	-0.1691	ppb	02:30:46
1	Cr 267.716†	74.0	-4.0	-0.0426	ug/L	-0.0426	ppb	02:30:46
1	Cu 324.752†	6795.9	94.8	0.2714	ug/L	0.2714	ppb	02:30:26
1	Mn 257.610†	441.8	23.1	0.0239	ug/L	0.0239	ppb	02:30:46
1	Mo 202.031†	31.6	13.6	0.8623	ug/L	0.8623	ppb	02:30:46
1	Ni 231.604†	60.8	-25.2	-0.5835	ug/L	-0.5835	ppb	02:30:46
1	P 214.914†	231.3	9.6	5.5487	ug/L	5.5487	ppb	02:30:46
1	Pb 220.353†	-55.4	12.6	1.4321	ug/L	1.4321	ppb	02:30:46
1	S 181.975 Axial†	40.5	-0.7	-0.9812	ug/L	-0.9812	ppb	02:30:46
1	Sb 206.836†	39.7	5.8	1.8771	ug/L	1.8771	ppb	02:30:46
1	Se 196.026†	-18.1	10.5	6.1000	ug/L	6.1000	ppb	02:30:46
1	Si 251.611†	496.9	51.3	1.5139	ug/L	1.5139	ppb	02:30:46
1	Sn 189.927†	17.9	13.0	2.1348	ug/L	2.1348	ppb	02:30:46
1	Ti 334.940†	-952.5	154.6	0.2459	ug/L	0.2459	ppb	02:30:26
1	Tl 190.801†	-36.0	-3.8	-1.0610	ug/L	-1.0610	ppb	02:30:46
1	U 409.014†	-2303.9	79.0	2.1766	ug/L	2.1766	ppb	02:30:26
1	V 292.402†	-1318.1	29.5	0.2120	ug/L	0.2120	ppb	02:30:26
1	Zn 213.857†	639.8	23.2	0.2041	ug/L	0.2041	ppb	02:30:46
1	SiO2†	500.8	37.5	2.3587	ug/L	2.3587	ppb	02:31:52
2	Sc Radial	5811.6	5811.6	99.4	%			02:29:29
2	Y RADIAL	6239.4	6239.4	99.23	%			02:29:29
2	Al 396.153Radial†	-3.3	17.0	11.799	ug/L	11.799	ppb	02:29:29
2	Ca 317.933Radial†	18.8	3.3	4.9035	ug/L	4.9035	ppb	02:29:49
2	Fe 238.204 Radial†	8.3	1.6	14.576	ug/L	14.576	ppb	02:29:49
2	K 766.490 Radial†	2030.6	-309.8	-54.994	ug/L	-54.994	ppb	02:29:29
2	Mg 279.077 IEC†	0.3	-0.9	-30.164	ug/L	-30.164	ppb	02:29:49
2	Na 589.592 Radial†	-652.8	431.5	144.82	ug/L	144.82	ppb	02:29:29
2	Sr 421.552†	18.5	45.9	0.2859	ug/L	0.2859	ppb	02:29:29
2	Sc 361.383	900014.5	900014.5	99.861	%			02:30:51
2	Y 371.029	744221.5	744221.5	99.086	%			02:30:51
2	Ag 328.068†	244.7	-47.7	-0.2090	ug/L	-0.2090	ppb	02:30:56
2	As 188.979†	-30.5	-6.4	-2.5178	ug/L	-2.5178	ppb	02:31:16
2	B 249.677†	-362.6	167.5	3.5123	ug/L	3.5123	ppb	02:31:16
2	Ba 233.527†	-22.3	-13.9	-0.1007	ug/L	-0.1007	ppb	02:31:16
2	Be 313.107†	-5590.4	-485.1	-0.1762	ug/L	-0.1762	ppb	02:30:56
2	Cd 226.502†	-189.8	5.0	0.0513	ug/L	0.0513	ppb	02:31:16
2	Co 228.616†	-79.2	-13.9	-0.2622	ug/L	-0.2622	ppb	02:31:16
2	Cr 267.716†	98.7	20.2	0.2130	ug/L	0.2130	ppb	02:31:16
2	Cu 324.752†	6704.9	-42.5	-0.1209	ug/L	-0.1209	ppb	02:30:56
2	Mn 257.610†	446.8	25.1	0.0288	ug/L	0.0288	ppb	02:31:16
2	Mo 202.031†	33.3	15.0	0.9546	ug/L	0.9546	ppb	02:31:16
2	Ni 231.604†	55.0	-31.5	-0.7284	ug/L	-0.7284	ppb	02:31:16

2	P 214.914†	231.2	8.0	4.6399	ug/L	4.6399 ppb	02:31:16
2	Pb 220.353†	-52.7	15.7	1.7749	ug/L	1.7749 ppb	02:31:16
2	S 181.975 Axial†	44.2	2.7	3.7228	ug/L	3.7228 ppb	02:31:16
2	Sb 206.836†	36.0	1.8	0.6136	ug/L	0.6136 ppb	02:31:16
2	Se 196.026†	-23.0	5.8	3.4085	ug/L	3.4085 ppb	02:31:16
2	Si 251.611†	478.9	29.9	0.8923	ug/L	0.8923 ppb	02:31:16
2	Sn 189.927†	12.2	7.2	1.1772	ug/L	1.1772 ppb	02:31:16
2	Ti 334.940†	-915.9	197.7	0.3155	ug/L	0.3155 ppb	02:30:56
2	Tl 190.801†	-43.3	-10.9	-3.0495	ug/L	-3.0495 ppb	02:31:16
2	U 409.014†	-2379.9	18.6	0.5107	ug/L	0.5107 ppb	02:30:56
2	V 292.402†	-1240.0	116.6	0.7815	ug/L	0.7815 ppb	02:30:56
2	Zn 213.857†	636.2	15.3	0.1378	ug/L	0.1378 ppb	02:31:16
2	SiO2†	494.8	28.1	1.7977	ug/L	1.7977 ppb	02:31:57
3	Sc Radial	5720.4	5720.4	97.9	%		02:29:54
3	Y RADIAL	6104.0	6104.0	97.08	%		02:29:54
3	Al 396.153Radial†	-21.9	-1.9	-1.3487	ug/L	-1.3487 ppb	02:29:54
3	Ca 317.933Radial†	14.8	-0.5	-0.6676	ug/L	-0.6676 ppb	02:30:14
3	Fe 238.204 Radial†	6.9	0.3	2.5032	ug/L	2.5032 ppb	02:30:14
3	K 766.490 Radial†	2329.8	28.4	4.9770	ug/L	4.9770 ppb	02:29:54
3	Mg 279.077 IEC†	2.4	1.3	47.280	ug/L	47.280 ppb	02:30:14
3	Na 589.592 Radial†	-627.1	447.3	150.10	ug/L	150.10 ppb	02:29:54
3	Sr 421.552†	35.1	63.2	0.3933	ug/L	0.3933 ppb	02:29:54
3	Sc 361.383	905297.6	905297.6	100.45	%		02:31:21
3	Y 371.029	747984.4	747984.4	99.587	%		02:31:21
3	Ag 328.068†	315.5	21.4	0.1000	ug/L	0.1000 ppb	02:31:26
3	As 188.979†	-17.7	6.5	2.5792	ug/L	2.5792 ppb	02:31:46
3	B 249.677†	-388.2	144.2	3.0233	ug/L	3.0233 ppb	02:31:46
3	Ba 233.527†	-33.1	-24.5	-0.1799	ug/L	-0.1799 ppb	02:31:46
3	Be 313.107†	-5536.3	-398.6	-0.1451	ug/L	-0.1451 ppb	02:31:26
3	Cd 226.502†	-176.9	19.0	0.2003	ug/L	0.2003 ppb	02:31:46
3	Co 228.616†	-72.6	-6.9	-0.1307	ug/L	-0.1307 ppb	02:31:46
3	Cr 267.716†	78.4	-0.6	-0.0054	ug/L	-0.0054 ppb	02:31:46
3	Cu 324.752†	6672.0	-114.5	-0.3275	ug/L	-0.3275 ppb	02:31:26
3	Mn 257.610†	443.8	19.5	0.0202	ug/L	0.0202 ppb	02:31:46
3	Mo 202.031†	18.8	0.4	0.0270	ug/L	0.0270 ppb	02:31:46
3	Ni 231.604†	51.0	-35.8	-0.8289	ug/L	-0.8289 ppb	02:31:46
3	P 214.914†	234.2	9.7	5.6604	ug/L	5.6604 ppb	02:31:46
3	Pb 220.353†	-62.5	6.3	0.7088	ug/L	0.7088 ppb	02:31:46
3	S 181.975 Axial†	42.1	0.3	0.4355	ug/L	0.4355 ppb	02:31:46
3	Sb 206.836†	34.8	0.4	0.1674	ug/L	0.1674 ppb	02:31:46
3	Se 196.026†	-25.2	3.7	2.1735	ug/L	2.1735 ppb	02:31:46
3	Si 251.611†	495.4	43.6	1.2958	ug/L	1.2958 ppb	02:31:46
3	Sn 189.927†	16.6	11.5	1.8902	ug/L	1.8902 ppb	02:31:46
3	Ti 334.940†	-1064.3	55.3	0.0883	ug/L	0.0883 ppb	02:31:26
3	Tl 190.801†	-33.1	-0.5	-0.1308	ug/L	-0.1308 ppb	02:31:46
3	U 409.014†	-2412.9	-0.3	-0.0096	ug/L	-0.0096 ppb	02:31:26
3	V 292.402†	-1276.0	88.1	0.5828	ug/L	0.5828 ppb	02:31:26
3	Zn 213.857†	627.9	3.3	0.0327	ug/L	0.0327 ppb	02:31:46
3	SiO2†	485.3	15.7	0.9890	ug/L	0.9890 ppb	02:32:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899754.0	99.832	%	0.6300				0.63%
Sc Radial	5720.5	97.9	%	1.56				1.59%
Y 371.029	744546.8	99.130	%	0.4376				0.44%
Y RADIAL	6112.7	97.21	%	1.950				2.01%
Ag 328.068†	-10.7	-0.0451	ug/L	0.15533	-0.0451	ppb	0.15533	344.58%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.2	7.0914	ug/L	7.32553	7.0914	ppb	7.32553	103.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.1141	ug/L	2.56080	-0.1141	ppb	2.56080	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	155.3	3.2572	ug/L	0.24523	3.2572	ppb	0.24523	7.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-19.1	-0.1404	ug/L	0.03961	-0.1404	ppb	0.03961	28.20%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-456.4	-0.1659	ug/L	0.01802	-0.1659	ppb	0.01802	10.86%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.3	1.9546	ug/L	2.79989	1.9546	ppb	2.79989	143.25%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                13.2      0.1382 ug/L       0.07755      0.1382 ppb        0.07755  56.12%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -9.9     -0.1873 ug/L       0.06764     -0.1873 ppb        0.06764  36.11%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.2      0.0550 ug/L       0.13807      0.0550 ppb        0.13807 250.97%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -20.7     -0.0590 ug/L       0.30421     -0.0590 ppb        0.30421 515.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.7      6.7280 ug/L       6.80349      6.7280 ppb        6.80349 101.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -99.7     -17.744 ug/L       32.5190     -17.744 ppb        32.5190 183.27%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      26.148 ug/L       49.2716      26.148 ppb        49.2716 188.43%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.6      0.0243 ug/L       0.00431      0.0243 ppb        0.00431  17.75%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.7      0.6147 ug/L       0.51100      0.6147 ppb        0.51100  83.13%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        444.3      149.09 ug/L         3.873      149.09 ppb          3.873   2.60%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -30.8     -0.7136 ug/L       0.12334     -0.7136 ppb        0.12334  17.28%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.1      5.2830 ug/L       0.55975      5.2830 ppb        0.55975  10.60%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.5      1.3052 ug/L       0.54424      1.3052 ppb        0.54424  41.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.8      1.0591 ug/L       2.41319      1.0591 ppb        2.41319 227.86%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.7      0.8860 ug/L       0.88680      0.8860 ppb        0.88680 100.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 6.7      3.8940 ug/L       2.00780      3.8940 ppb        2.00780  51.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                41.6      1.2340 ug/L       0.31537      1.2340 ppb        0.31537  25.56%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.6      1.7340 ug/L       0.49754      1.7340 ppb        0.49754  28.69%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                32.1      0.2002 ug/L       0.24741      0.2002 ppb        0.24741 123.60%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               135.9      0.2165 ug/L       0.11641      0.2165 ppb        0.11641  53.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.1     -1.4138 ug/L       1.49098     -1.4138 ppb        1.49098 105.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 32.4      0.8926 ug/L       1.14207      0.8926 ppb        1.14207 127.95%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 78.1      0.5254 ug/L       0.28901      0.5254 ppb        0.28901  55.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                13.9      0.1249 ug/L       0.08642      0.1249 ppb        0.08642  69.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      27.1      1.7151 ug/L       0.68858      1.7151 ppb        0.68858  40.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 101
Sample ID: 241541010|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/9/2009 02:34:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541010|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5937.5	5937.5	102	%			02:36:25
1	Y RADIAL	7297.0	7297.0	116.0	%			02:36:25
1	Al 396.153Radial†	125804.3	123841.4	86023	ug/L	86023	ppb	02:36:05
1	Ca 317.933Radial†	13184.1	12960.7	19103	ug/L	19103	ppb	02:36:05
1	Fe 238.204 Radial†	14364.1	14130.8	132290	ug/L	132290	ppb	02:36:05
1	K 766.490 Radial†	79857.7	76247.1	13438	ug/L	13438	ppb	02:36:05
1	Mg 279.077 IEC†	505.1	496.0	17384	ug/L	17384	ppb	02:36:25
1	Na 589.592 Radial†	7591.6	8559.9	2872.5	ug/L	2872.5	ppb	02:36:05
1	Sr 421.552†	43737.9	43075.8	268.09	ug/L	268.09	ppb	02:36:05
1	Sc 361.383	907074.3	907074.3	100.64	%			02:37:30
1	Y 371.029	862463.8	862463.8	114.83	%			02:37:30
1	Ag 328.068†	-8758.3	-8994.9	2.5238	ug/L	2.5238	ppb	02:37:30
1	As 188.979†	-81.8	-57.1	29.980	ug/L	29.980	ppb	02:37:50
1	B 249.677†	1471.8	1993.1	24.038	ug/L	24.038	ppb	02:37:30
1	Ba 233.527†	231257.8	229784.9	1708.6	ug/L	1708.6	ppb	02:37:30
1	Be 313.107†	-579.0	4537.7	9.1724	ug/L	9.1724	ppb	02:37:30
1	Cd 226.502†	1253.9	1440.9	2.0634	ug/L	2.0634	ppb	02:37:50
1	Co 228.616†	4299.6	4337.4	73.010	ug/L	73.010	ppb	02:37:50
1	Cr 267.716†	10558.0	10411.7	112.30	ug/L	112.30	ppb	02:37:50
1	Cu 324.752†	32258.9	25295.5	79.137	ug/L	79.137	ppb	02:37:30
1	Mn 257.610†	7220224.1	7173554.1	7665.2	ug/L	7665.2	ppb	02:37:23
1	Mo 202.031†	-9.0	-27.3	7.6519	ug/L	7.6519	ppb	02:37:50
1	Ni 231.604†	3904.1	3792.5	87.769	ug/L	87.769	ppb	02:37:50
1	P 214.914†	3030.3	2787.3	1518.1	ug/L	1518.1	ppb	02:37:50
1	Pb 220.353†	1232.9	1293.5	154.61	ug/L	154.61	ppb	02:37:50
1	S 181.975 Axial†	640.9	595.2	817.09	ug/L	817.09	ppb	02:37:50
1	Sb 206.836†	66.7	32.0	-2.7971	ug/L	-2.7971	ppb	02:37:50
1	Se 196.026†	-551.2	-518.8	132.41	ug/L	132.41	ppb	02:37:50
1	Si 251.611†	1133982.9	1126269.8	33711	ug/L	33711	ppb	02:37:30
1	Sn 189.927†	-110.7	-114.9	-15.020	ug/L	-15.020	ppb	02:37:50
1	Ti 334.940†	2411310.4	2396980.2	3826.2	ug/L	3826.2	ppb	02:37:30
1	Tl 190.801†	-263.3	-229.1	11.242	ug/L	11.242	ppb	02:37:50
1	U 409.014†	-9191.2	-6730.5	-202.26	ug/L	-202.26	ppb	02:37:30
1	V 292.402†	48504.7	49552.4	302.92	ug/L	302.92	ppb	02:37:30
1	Zn 213.857†	36045.2	35192.5	293.58	ug/L	293.58	ppb	02:37:30
1	SiO2†	1126693.1	1119008.8	71772	ug/L	71772	ppb	02:39:02
2	Sc Radial	5903.7	5903.7	101	%			02:36:50
2	Y RADIAL	7281.0	7281.0	115.8	%			02:36:50
2	Al 396.153Radial†	128463.3	127182.1	88344	ug/L	88344	ppb	02:36:30
2	Ca 317.933Radial†	13432.0	13280.4	19574	ug/L	19574	ppb	02:36:30
2	Fe 238.204 Radial†	14661.5	14506.1	135810	ug/L	135810	ppb	02:36:30
2	K 766.490 Radial†	81063.2	77890.1	13736	ug/L	13736	ppb	02:36:30
2	Mg 279.077 IEC†	504.3	498.0	17453	ug/L	17453	ppb	02:36:50
2	Na 589.592 Radial†	7685.9	8696.0	2918.2	ug/L	2918.2	ppb	02:36:30
2	Sr 421.552†	44568.1	44143.9	274.74	ug/L	274.74	ppb	02:36:30
2	Sc 361.383	957004.3	957004.3	106.18	%			02:38:03
2	Y 371.029	899851.7	899851.7	119.81	%			02:38:03
2	Ag 328.068†	-8523.1	-8319.4	6.5972	ug/L	6.5972	ppb	02:38:03
2	As 188.979†	-85.1	-56.0	28.785	ug/L	28.785	ppb	02:38:23
2	B 249.677†	1492.2	1935.9	22.381	ug/L	22.381	ppb	02:38:03
2	Ba 233.527†	227482.4	214241.3	1593.5	ug/L	1593.5	ppb	02:38:03
2	Be 313.107†	-402.4	4734.0	8.7328	ug/L	8.7328	ppb	02:38:03
2	Cd 226.502†	1250.8	1373.1	0.9925	ug/L	0.9925	ppb	02:38:23
2	Co 228.616†	4368.1	4179.1	70.459	ug/L	70.459	ppb	02:38:23
2	Cr 267.716†	10665.6	9965.8	107.64	ug/L	107.64	ppb	02:38:23
2	Cu 324.752†	31920.0	23304.2	73.618	ug/L	73.618	ppb	02:38:03
2	Mn 257.610†	7115281.2	6700434.2	7160.8	ug/L	7160.8	ppb	02:37:56
2	Mo 202.031†	-8.0	-25.8	7.9924	ug/L	7.9924	ppb	02:38:23
2	Ni 231.604†	3959.2	3642.1	84.286	ug/L	84.286	ppb	02:38:23

2	P 214.914†	3090.1	2686.6	1458.8 ug/L	1458.8 ppb	02:38:23
2	Pb 220.353†	1227.6	1224.5	147.05 ug/L	147.05 ppb	02:38:23
2	S 181.975 Axial†	653.4	573.8	786.65 ug/L	786.65 ppb	02:38:23
2	Sb 206.836†	67.9	29.7	-2.8147 ug/L	-2.8147 ppb	02:38:23
2	Se 196.026†	-592.4	-529.1	137.96 ug/L	137.96 ppb	02:38:23
2	Si 251.611†	1119016.4	1053390.4	31530 ug/L	31530 ppb	02:38:03
2	Sn 189.927†	-132.0	-129.3	-17.266 ug/L	-17.266 ppb	02:38:23
2	Ti 334.940†	2370987.3	2234005.6	3566.1 ug/L	3566.1 ppb	02:38:03
2	Tl 190.801†	-271.2	-222.9	8.1594 ug/L	8.1594 ppb	02:38:23
2	U 409.014†	-9135.1	-6201.2	-188.11 ug/L	-188.11 ppb	02:38:03
2	V 292.402†	47698.9	46279.1	281.08 ug/L	281.08 ppb	02:38:03
2	Zn 213.857†	35497.7	32808.3	272.44 ug/L	272.44 ppb	02:38:03
2	SiO2†	1146989.2	1079716.1	69251 ug/L	69251 ppb	02:39:08
3	Sc Radial	5637.4	5637.4	96.5 %		02:37:15
3	Y RADIAL	7040.0	7040.0	112.0 %		02:37:15
3	Al 396.153Radial†	127623.0	132318.4	91911 ug/L	91911 ppb	02:36:55
3	Ca 317.933Radial†	13312.2	13784.2	20317 ug/L	20317 ppb	02:36:55
3	Fe 238.204 Radial†	14524.1	15049.3	140890 ug/L	140890 ppb	02:36:55
3	K 766.490 Radial†	80691.5	81295.6	14335 ug/L	14335 ppb	02:36:55
3	Mg 279.077 IEC†	518.7	536.6	18809 ug/L	18809 ppb	02:37:15
3	Na 589.592 Radial†	7501.7	8864.4	2974.7 ug/L	2974.7 ppb	02:36:55
3	Sr 421.552†	44229.3	45876.8	285.52 ug/L	285.52 ppb	02:36:55
3	Sc 361.383	887113.5	887113.5	98.430 %		02:38:36
3	Y 371.029	849006.9	849006.9	113.04 %		02:38:36
3	Ag 328.068†	-8817.1	-9250.4	4.1290 ug/L	4.1290 ppb	02:38:36
3	As 188.979†	-69.5	-46.4	36.578 ug/L	36.578 ppb	02:38:56
3	B 249.677†	1387.1	1939.9	21.776 ug/L	21.776 ppb	02:38:36
3	Ba 233.527†	233241.5	236970.5	1762.2 ug/L	1762.2 ppb	02:38:36
3	Be 313.107†	-577.8	4526.0	9.4124 ug/L	9.4124 ppb	02:38:36
3	Cd 226.502†	1260.0	1475.2	1.5680 ug/L	1.5680 ppb	02:38:56
3	Co 228.616†	4323.2	4457.5	74.925 ug/L	74.925 ppb	02:38:56
3	Cr 267.716†	10623.8	10714.6	115.65 ug/L	115.65 ppb	02:38:56
3	Cu 324.752†	32568.9	26331.7	82.541 ug/L	82.541 ppb	02:38:36
3	Mn 257.610†	6989105.9	7100169.5	7587.7 ug/L	7587.7 ppb	02:38:29
3	Mo 202.031†	-9.1	-27.6	8.2418 ug/L	8.2418 ppb	02:38:56
3	Ni 231.604†	3929.8	3905.9	90.394 ug/L	90.394 ppb	02:38:56
3	P 214.914†	3048.3	2873.4	1562.3 ug/L	1562.3 ppb	02:38:56
3	Pb 220.353†	1210.2	1297.9	155.72 ug/L	155.72 ppb	02:38:56
3	S 181.975 Axial†	635.6	604.2	828.51 ug/L	828.51 ppb	02:38:56
3	Sb 206.836†	59.8	26.5	-5.0358 ug/L	-5.0358 ppb	02:38:56
3	Se 196.026†	-576.9	-557.2	138.35 ug/L	138.35 ppb	02:38:56
3	Si 251.611†	1142096.8	1159865.1	34717 ug/L	34717 ppb	02:38:36
3	Sn 189.927†	-129.8	-136.8	-18.357 ug/L	-18.357 ppb	02:38:56
3	Ti 334.940†	2434891.4	2474846.2	3950.5 ug/L	3950.5 ppb	02:38:36
3	Tl 190.801†	-259.1	-230.8	11.394 ug/L	11.394 ppb	02:38:56
3	U 409.014†	-9096.7	-6840.0	-206.36 ug/L	-206.36 ppb	02:38:36
3	V 292.402†	48998.2	51138.1	311.97 ug/L	311.97 ppb	02:38:36
3	Zn 213.857†	36380.8	36339.2	302.71 ug/L	302.71 ppb	02:38:36
3	SiO2†	1132800.6	1150402.9	73785 ug/L	73785 ppb	02:39:14

Mean Data: 241541010|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	917064.0	101.75	%	3.994				3.93%
Sc Radial	5826.2	99.7	%	2.81				2.82%
Y 371.029	870440.8	115.89	%	3.508				3.03%
Y RADIAL	7206.0	114.6	%	2.29				2.00%
Ag 328.068†	-8854.9	4.4167	ug/L	2.05189	4.4167	ppb	2.05189	46.46%
Al 396.153Radial†	127780.6	88759	ug/L	2966.1	88759	ppb	2966.1	3.34%
As 188.979†	-53.2	31.781	ug/L	4.1972	31.781	ppb	4.1972	13.21%
B 249.677†	1956.3	22.732	ug/L	1.1711	22.732	ppb	1.1711	5.15%
Ba 233.527†	226998.9	1688.1	ug/L	86.20	1688.1	ppb	86.20	5.11%
Be 313.107†	4599.2	9.1059	ug/L	0.34465	9.1059	ppb	0.34465	3.78%
Ca 317.933Radial†	13341.8	19665	ug/L	612.0	19665	ppb	612.0	3.11%
Cd 226.502†	1429.8	1.5413	ug/L	0.53594	1.5413	ppb	0.53594	34.77%
Co 228.616†	4324.7	72.798	ug/L	2.2405	72.798	ppb	2.2405	3.08%
Cr 267.716†	10364.0	111.86	ug/L	4.025	111.86	ppb	4.025	3.60%
Cu 324.752†	24977.2	78.432	ug/L	4.5033	78.432	ppb	4.5033	5.74%
Fe 238.204 Radial†	14562.1	136330	ug/L	4323.3	136330	ppb	4323.3	3.17%
K 766.490 Radial†	78477.6	13837	ug/L	456.9	13837	ppb	456.9	3.30%

Mg 279.077 IEC†	510.2	17882	ug/L	803.6	17882	ppb	803.6	4.49%
Mn 257.610†	6991385.9	7471.3	ug/L	271.60	7471.3	ppb	271.60	3.64%
Mo 202.031†	-26.9	7.9621	ug/L	0.29613	7.9621	ppb	0.29613	3.72%
Na 589.592 Radial†	8706.8	2921.8	ug/L	51.20	2921.8	ppb	51.20	1.75%
Ni 231.604†	3780.2	87.483	ug/L	3.0636	87.483	ppb	3.0636	3.50%
P 214.914†	2782.5	1513.1	ug/L	51.91	1513.1	ppb	51.91	3.43%
Pb 220.353†	1272.0	152.46	ug/L	4.719	152.46	ppb	4.719	3.10%
S 181.975 Axial†	591.0	810.75	ug/L	21.635	810.75	ppb	21.635	2.67%
Sb 206.836†	29.4	-3.5492	ug/L	1.28747	-3.5492	ppb	1.28747	36.27%
Se 196.026†	-535.1	136.24	ug/L	3.324	136.24	ppb	3.324	2.44%
Si 251.611†	1113175.1	33319	ug/L	1629.4	33319	ppb	1629.4	4.89%
Sn 189.927†	-127.0	-16.881	ug/L	1.7017	-16.881	ppb	1.7017	10.08%
Sr 421.552†	44365.5	276.11	ug/L	8.798	276.11	ppb	8.798	3.19%
Ti 334.940†	2368610.7	3780.9	ug/L	196.14	3780.9	ppb	196.14	5.19%
Tl 190.801†	-227.6	10.265	ug/L	1.8254	10.265	ppb	1.8254	17.78%
U 409.014†	-6590.6	-198.91	ug/L	9.575	-198.91	ppb	9.575	4.81%
V 292.402†	48989.9	298.66	ug/L	15.879	298.66	ppb	15.879	5.32%
Zn 213.857†	34780.0	289.58	ug/L	15.525	289.58	ppb	15.525	5.36%
SiO2†	1116375.9	71603	ug/L	2271.7	71603	ppb	2271.7	3.17%

Sequence No.: 102
Sample ID: 241541011|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/9/2009 02:41:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541011|925478|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5885.4	5885.4	101	%			02:43:39
1	Y RADIAL	7289.5	7289.5	115.9	%			02:43:39
1	Al 396.153Radial†	93310.9	92674.3	64374	ug/L	64374	ppb	02:43:19
1	Ca 317.933Radial†	13724.4	13612.2	20064	ug/L	20064	ppb	02:43:19
1	Fe 238.204 Radial†	11583.7	11495.4	107620	ug/L	107620	ppb	02:43:19
1	K 766.490 Radial†	51711.1	48995.3	8670.1	ug/L	8670.1	ppb	02:43:19
1	Mg 279.077 IEC†	391.8	387.8	13591	ug/L	13591	ppb	02:43:39
1	Na 589.592 Radial†	3785.6	4846.9	1626.5	ug/L	1626.5	ppb	02:43:19
1	Sr 421.552†	31244.6	31052.0	193.20	ug/L	193.20	ppb	02:43:19
1	Sc 361.383	906104.4	906104.4	100.54	%			02:44:36
1	Y 371.029	867457.1	867457.1	115.49	%			02:44:36
1	Ag 328.068†	-6830.5	-7086.7	2.7088	ug/L	2.7088	ppb	02:44:41
1	As 188.979†	-61.2	-36.7	25.729	ug/L	25.729	ppb	02:45:01
1	B 249.677†	1276.4	1800.3	23.388	ug/L	23.388	ppb	02:44:41
1	Ba 233.527†	108341.8	107771.5	803.09	ug/L	803.09	ppb	02:44:41
1	Be 313.107†	-378.5	4736.5	7.2528	ug/L	7.2528	ppb	02:44:41
1	Cd 226.502†	942.1	1132.2	1.2442	ug/L	1.2442	ppb	02:45:01
1	Co 228.616†	1794.1	1849.9	27.929	ug/L	27.929	ppb	02:45:01
1	Cr 267.716†	5810.1	5700.4	62.133	ug/L	62.133	ppb	02:45:01
1	Cu 324.752†	20697.0	13829.8	45.067	ug/L	45.067	ppb	02:44:41
1	Mn 257.610†	2079569.5	2068038.6	2216.5	ug/L	2216.5	ppb	02:44:36
1	Mo 202.031†	19.7	1.2	7.7129	ug/L	7.7129	ppb	02:45:01
1	Ni 231.604†	2403.6	2304.2	53.335	ug/L	53.335	ppb	02:45:01
1	P 214.914†	2539.4	2302.4	1256.3	ug/L	1256.3	ppb	02:45:01
1	Pb 220.353†	707.2	771.9	92.843	ug/L	92.843	ppb	02:45:01
1	S 181.975 Axial†	695.6	650.3	898.59	ug/L	898.59	ppb	02:45:01
1	Sb 206.836†	63.2	28.6	0.0518	ug/L	0.0518	ppb	02:45:01
1	Se 196.026†	-461.9	-430.6	101.77	ug/L	101.77	ppb	02:45:01
1	Si 251.611†	1065071.9	1058932.8	31697	ug/L	31697	ppb	02:44:36
1	Sn 189.927†	-82.4	-86.9	-10.676	ug/L	-10.676	ppb	02:45:01
1	Ti 334.940†	1770205.9	1761864.7	2812.7	ug/L	2812.7	ppb	02:44:36
1	Tl 190.801†	-170.2	-136.7	-2.5912	ug/L	-2.5912	ppb	02:45:01
1	U 409.014†	-10107.4	-7651.6	-224.44	ug/L	-224.44	ppb	02:44:36
1	V 292.402†	24675.5	25902.0	151.49	ug/L	151.49	ppb	02:44:41
1	Zn 213.857†	37211.8	36391.2	306.80	ug/L	306.80	ppb	02:44:41
1	SiO2†	1060515.0	1054382.5	67630	ug/L	67630	ppb	02:46:10
2	Sc Radial	5805.4	5805.4	99.3	%			02:44:04
2	Y RADIAL	7231.6	7231.6	115.0	%			02:44:04
2	Al 396.153Radial†	93909.7	94553.1	65679	ug/L	65679	ppb	02:43:44
2	Ca 317.933Radial†	13854.3	13930.6	20533	ug/L	20533	ppb	02:43:44
2	Fe 238.204 Radial†	11638.2	11708.6	109610	ug/L	109610	ppb	02:43:44
2	K 766.490 Radial†	51963.1	49956.1	8840.6	ug/L	8840.6	ppb	02:43:44
2	Mg 279.077 IEC†	387.6	389.0	13629	ug/L	13629	ppb	02:44:04
2	Na 589.592 Radial†	3838.0	4951.4	1661.6	ug/L	1661.6	ppb	02:43:44
2	Sr 421.552†	31340.6	31575.9	196.46	ug/L	196.46	ppb	02:43:44
2	Sc 361.383	910310.1	910310.1	101.00	%			02:45:07
2	Y 371.029	870369.0	870369.0	115.88	%			02:45:07
2	Ag 328.068†	-6758.0	-6983.5	3.8040	ug/L	3.8040	ppb	02:45:12
2	As 188.979†	-56.5	-31.7	28.005	ug/L	28.005	ppb	02:45:33
2	B 249.677†	1192.2	1711.1	21.255	ug/L	21.255	ppb	02:45:12
2	Ba 233.527†	107843.2	106780.0	795.82	ug/L	795.82	ppb	02:45:12
2	Be 313.107†	-540.1	4578.3	7.2004	ug/L	7.2004	ppb	02:45:12
2	Cd 226.502†	890.4	1076.7	0.4572	ug/L	0.4572	ppb	02:45:33
2	Co 228.616†	1756.3	1804.2	27.024	ug/L	27.024	ppb	02:45:33
2	Cr 267.716†	5791.5	5655.3	61.695	ug/L	61.695	ppb	02:45:33
2	Cu 324.752†	20747.0	13784.1	45.038	ug/L	45.038	ppb	02:45:12
2	Mn 257.610†	2090081.9	2068890.1	2217.6	ug/L	2217.6	ppb	02:45:07
2	Mo 202.031†	17.3	-1.2	7.7012	ug/L	7.7012	ppb	02:45:33
2	Ni 231.604†	2375.7	2265.6	52.441	ug/L	52.441	ppb	02:45:33

2	P 214.914†	2533.3	2284.6	1244.9 ug/L	1244.9 ppb	02:45:33
2	Pb 220.353†	740.3	801.4	96.303 ug/L	96.303 ppb	02:45:33
2	S 181.975 Axial†	681.8	633.5	874.72 ug/L	874.72 ppb	02:45:33
2	Sb 206.836†	59.4	24.6	-1.2188 ug/L	-1.2188 ppb	02:45:33
2	Se 196.026†	-453.7	-420.3	114.23 ug/L	114.23 ppb	02:45:33
2	Si 251.611†	1071138.0	1060044.3	31730 ug/L	31730 ppb	02:45:07
2	Sn 189.927†	-82.7	-86.9	-10.592 ug/L	-10.592 ppb	02:45:33
2	Ti 334.940†	1780123.8	1763549.4	2815.4 ug/L	2815.4 ppb	02:45:07
2	Tl 190.801†	-175.2	-140.9	-3.6901 ug/L	-3.6901 ppb	02:45:33
2	U 409.014†	-10060.3	-7558.5	-222.12 ug/L	-222.12 ppb	02:45:07
2	V 292.402†	24860.6	25971.9	151.65 ug/L	151.65 ppb	02:45:12
2	Zn 213.857†	37063.3	36073.1	303.83 ug/L	303.83 ppb	02:45:12
2	SiO2†	1069400.7	1058306.4	67881 ug/L	67881 ppb	02:46:16
3	Sc Radial	5864.7	5864.7	100 %		02:44:29
3	Y RADIAL	7295.3	7295.3	116.0 %		02:44:29
3	Al 396.153Radial†	95303.9	94985.8	65979 ug/L	65979 ppb	02:44:09
3	Ca 317.933Radial†	14048.6	13983.1	20610 ug/L	20610 ppb	02:44:09
3	Fe 238.204 Radial†	11824.1	11775.3	110240 ug/L	110240 ppb	02:44:09
3	K 766.490 Radial†	52718.4	50179.5	8880.3 ug/L	8880.3 ppb	02:44:09
3	Mg 279.077 IEC†	397.0	394.4	13820 ug/L	13820 ppb	02:44:29
3	Na 589.592 Radial†	3916.4	4990.4	1674.7 ug/L	1674.7 ppb	02:44:09
3	Sr 421.552†	31840.2	31754.4	197.57 ug/L	197.57 ppb	02:44:09
3	Sc 361.383	906606.7	906606.7	100.59 %		02:45:38
3	Y 371.029	869292.9	869292.9	115.74 %		02:45:38
3	Ag 328.068†	-6814.1	-7066.7	3.6320 ug/L	3.6320 ppb	02:45:44
3	As 188.979†	-60.8	-36.3	26.261 ug/L	26.261 ppb	02:46:04
3	B 249.677†	1203.0	1726.6	21.496 ug/L	21.496 ppb	02:45:44
3	Ba 233.527†	108630.5	107998.8	804.88 ug/L	804.88 ppb	02:45:44
3	Be 313.107†	-501.3	4614.7	7.2038 ug/L	7.2038 ppb	02:45:44
3	Cd 226.502†	908.7	1098.4	0.6250 ug/L	0.6250 ppb	02:46:04
3	Co 228.616†	1774.6	1829.6	27.512 ug/L	27.512 ppb	02:46:04
3	Cr 267.716†	5798.3	5685.5	62.026 ug/L	62.026 ppb	02:46:04
3	Cu 324.752†	20739.1	13860.2	45.287 ug/L	45.287 ppb	02:45:44
3	Mn 257.610†	2078311.6	2065642.1	2214.2 ug/L	2214.2 ppb	02:45:38
3	Mo 202.031†	20.4	2.0	7.9448 ug/L	7.9448 ppb	02:46:04
3	Ni 231.604†	2390.0	2289.4	52.992 ug/L	52.992 ppb	02:46:04
3	P 214.914†	2526.6	2288.2	1246.5 ug/L	1246.5 ppb	02:46:04
3	Pb 220.353†	740.9	805.0	96.729 ug/L	96.729 ppb	02:46:04
3	S 181.975 Axial†	684.6	639.0	882.43 ug/L	882.43 ppb	02:46:04
3	Sb 206.836†	62.0	27.4	-0.2967 ug/L	-0.2967 ppb	02:46:04
3	Se 196.026†	-450.5	-419.0	117.01 ug/L	117.01 ppb	02:46:04
3	Si 251.611†	1063491.7	1056775.1	31632 ug/L	31632 ppb	02:45:38
3	Sn 189.927†	-77.1	-81.7	-9.7230 ug/L	-9.7230 ppb	02:46:04
3	Ti 334.940†	1769728.0	1760414.2	2810.4 ug/L	2810.4 ppb	02:45:38
3	Tl 190.801†	-165.8	-132.3	-1.3480 ug/L	-1.3480 ppb	02:46:04
3	U 409.014†	-10067.2	-7606.1	-223.51 ug/L	-223.51 ppb	02:45:38
3	V 292.402†	24988.9	26200.0	153.07 ug/L	153.07 ppb	02:45:44
3	Zn 213.857†	37258.7	36417.4	306.77 ug/L	306.77 ppb	02:45:44
3	SiO2†	1063391.3	1056657.5	67776 ug/L	67776 ppb	02:46:22

Mean Data: 241541011|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907673.7	100.71	%	0.255				0.25%
Sc Radial	5851.8	100	%	0.7				0.71%
Y 371.029	869039.6	115.70	%	0.196				0.17%
Y RADIAL	7272.1	115.7	%	0.56				0.48%
Ag 328.068†	-7045.6	3.3816	ug/L	0.58895	3.3816	ppb	0.58895	17.42%
Al 396.153Radial†	94071.1	65344	ug/L	853.6	65344	ppb	853.6	1.31%
As 188.979†	-34.9	26.665	ug/L	1.1907	26.665	ppb	1.1907	4.47%
B 249.677†	1746.0	22.047	ug/L	1.1684	22.047	ppb	1.1684	5.30%
Ba 233.527†	107516.8	801.26	ug/L	4.799	801.26	ppb	4.799	0.60%
Be 313.107†	4643.1	7.2190	ug/L	0.02930	7.2190	ppb	0.02930	0.41%
Ca 317.933Radial†	13842.0	20402	ug/L	295.9	20402	ppb	295.9	1.45%
Cd 226.502†	1102.4	0.7754	ug/L	0.41451	0.7754	ppb	0.41451	53.46%
Co 228.616†	1827.9	27.488	ug/L	0.4527	27.488	ppb	0.4527	1.65%
Cr 267.716†	5680.4	61.951	ug/L	0.2282	61.951	ppb	0.2282	0.37%
Cu 324.752†	13824.7	45.131	ug/L	0.1365	45.131	ppb	0.1365	0.30%
Fe 238.204 Radial†	11659.8	109160	ug/L	1368.8	109160	ppb	1368.8	1.25%
K 766.490 Radial†	49710.3	8797.0	ug/L	111.71	8797.0	ppb	111.71	1.27%

Mg 279.077 IEC†	390.4	13680	ug/L	122.6	13680	ppb	122.6	0.90%
Mn 257.610†	2067523.6	2216.1	ug/L	1.74	2216.1	ppb	1.74	0.08%
Mo 202.031†	0.7	7.7863	ug/L	0.13740	7.7863	ppb	0.13740	1.76%
Na 589.592 Radial†	4929.6	1654.3	ug/L	24.91	1654.3	ppb	24.91	1.51%
Ni 231.604†	2286.4	52.923	ug/L	0.4513	52.923	ppb	0.4513	0.85%
P 214.914†	2291.7	1249.3	ug/L	6.16	1249.3	ppb	6.16	0.49%
Pb 220.353†	792.8	95.292	ug/L	2.1313	95.292	ppb	2.1313	2.24%
S 181.975 Axial†	640.9	885.25	ug/L	12.183	885.25	ppb	12.183	1.38%
Sb 206.836†	26.9	-0.4879	ug/L	0.65652	-0.4879	ppb	0.65652	134.57%
Se 196.026†	-423.3	111.00	ug/L	8.119	111.00	ppb	8.119	7.31%
Si 251.611†	1058584.1	31687	ug/L	49.8	31687	ppb	49.8	0.16%
Sn 189.927†	-85.2	-10.330	ug/L	0.5275	-10.330	ppb	0.5275	5.11%
Sr 421.552†	31460.8	195.74	ug/L	2.271	195.74	ppb	2.271	1.16%
Ti 334.940†	1761942.8	2812.9	ug/L	2.50	2812.9	ppb	2.50	0.09%
Tl 190.801†	-136.7	-2.5431	ug/L	1.17179	-2.5431	ppb	1.17179	46.08%
U 409.014†	-7605.4	-223.36	ug/L	1.165	-223.36	ppb	1.165	0.52%
V 292.402†	26024.6	152.07	ug/L	0.870	152.07	ppb	0.870	0.57%
Zn 213.857†	36293.9	305.80	ug/L	1.704	305.80	ppb	1.704	0.56%
SiO2†	1056448.8	67762	ug/L	126.3	67762	ppb	126.3	0.19%

Sequence No.: 103
Sample ID: 241541012|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 12/9/2009 02:48:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541012|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5895.6	5895.6	101	%			02:50:47
1	Y RADIAL	7018.2	7018.2	111.6	%			02:50:47
1	Al 396.153Radial†	102527.4	101648.7	70608	ug/L	70608	ppb	02:50:27
1	Ca 317.933Radial†	10723.9	10614.3	15645	ug/L	15645	ppb	02:50:27
1	Fe 238.204 Radial†	12354.4	12239.3	114580	ug/L	114580	ppb	02:50:27
1	K 766.490 Radial†	60801.9	57917.0	10237	ug/L	10237	ppb	02:50:27
1	Mg 279.077 IEC†	435.2	430.2	15080	ug/L	15080	ppb	02:50:47
1	Na 589.592 Radial†	13881.7	14847.9	4982.7	ug/L	4982.7	ppb	02:50:27
1	Sr 421.552†	34848.6	34570.4	215.15	ug/L	215.15	ppb	02:50:27
1	Sc 361.383	908710.1	908710.1	100.83	%			02:51:45
1	Y 371.029	833859.0	833859.0	111.02	%			02:51:45
1	Ag 328.068†	-7399.2	-7631.3	2.8810	ug/L	2.8810	ppb	02:51:50
1	As 188.979†	-75.7	-50.9	28.102	ug/L	28.102	ppb	02:52:10
1	B 249.677†	1366.9	1886.4	24.201	ug/L	24.201	ppb	02:51:50
1	Ba 233.527†	140197.5	139057.2	1035.5	ug/L	1035.5	ppb	02:51:50
1	Be 313.107†	-5654.2	-494.9	6.9644	ug/L	6.9644	ppb	02:51:50
1	Cd 226.502†	1015.4	1202.2	1.2912	ug/L	1.2912	ppb	02:52:10
1	Co 228.616†	3254.3	3293.0	53.547	ug/L	53.547	ppb	02:52:10
1	Cr 267.716†	7861.3	7718.2	83.604	ug/L	83.604	ppb	02:51:50
1	Cu 324.752†	26716.4	19740.7	62.337	ug/L	62.337	ppb	02:51:50
1	Mn 257.610†	3239389.4	3212423.8	3438.0	ug/L	3438.0	ppb	02:51:45
1	Mo 202.031†	-58.4	-76.3	3.2836	ug/L	3.2836	ppb	02:52:10
1	Ni 231.604†	2648.8	2540.5	58.790	ug/L	58.790	ppb	02:52:10
1	P 214.914†	2334.7	2092.1	1128.8	ug/L	1128.8	ppb	02:52:10
1	Pb 220.353†	1014.6	1074.8	127.88	ug/L	127.88	ppb	02:52:10
1	S 181.975 Axial†	690.6	643.4	887.63	ug/L	887.63	ppb	02:52:10
1	Sb 206.836†	67.7	32.9	-1.3499	ug/L	-1.3499	ppb	02:52:10
1	Se 196.026†	-468.6	-435.9	121.75	ug/L	121.75	ppb	02:52:10
1	Si 251.611†	1054431.3	1045341.6	31290	ug/L	31290	ppb	02:51:45
1	Sn 189.927†	-104.2	-108.4	-14.549	ug/L	-14.549	ppb	02:52:10
1	Ti 334.940†	2295546.7	2277852.0	3635.9	ug/L	3635.9	ppb	02:51:45
1	Tl 190.801†	-194.3	-160.2	4.0962	ug/L	4.0962	ppb	02:52:10
1	U 409.014†	-7734.9	-5269.7	-159.74	ug/L	-159.74	ppb	02:51:45
1	V 292.402†	40833.0	41856.8	254.99	ug/L	254.99	ppb	02:51:50
1	Zn 213.857†	26920.4	26078.0	215.92	ug/L	215.92	ppb	02:51:50
1	SiO2†	1066727.9	1057519.7	67830	ug/L	67830	ppb	02:53:19
2	Sc Radial	5831.5	5831.5	99.8	%			02:51:12
2	Y RADIAL	6957.4	6957.4	110.6	%			02:51:12
2	Al 396.153Radial†	103764.9	104005.7	72245	ug/L	72245	ppb	02:50:52
2	Ca 317.933Radial†	10854.1	10861.6	16009	ug/L	16009	ppb	02:50:52
2	Fe 238.204 Radial†	12439.6	12459.2	116640	ug/L	116640	ppb	02:50:52
2	K 766.490 Radial†	61473.2	59252.1	10474	ug/L	10474	ppb	02:50:52
2	Mg 279.077 IEC†	438.8	438.6	15372	ug/L	15372	ppb	02:51:12
2	Na 589.592 Radial†	13989.6	15107.3	5069.7	ug/L	5069.7	ppb	02:50:52
2	Sr 421.552†	35284.4	35386.7	220.23	ug/L	220.23	ppb	02:50:52
2	Sc 361.383	916865.3	916865.3	101.73	%			02:52:16
2	Y 371.029	842191.6	842191.6	112.13	%			02:52:16
2	Ag 328.068†	-7465.5	-7631.2	3.5298	ug/L	3.5298	ppb	02:52:21
2	As 188.979†	-79.5	-54.0	27.165	ug/L	27.165	ppb	02:52:41
2	B 249.677†	1303.1	1811.6	22.360	ug/L	22.360	ppb	02:52:21
2	Ba 233.527†	141758.5	139354.8	1037.7	ug/L	1037.7	ppb	02:52:21
2	Be 313.107†	-5783.0	-571.6	6.9280	ug/L	6.9280	ppb	02:52:21
2	Cd 226.502†	1044.4	1221.8	1.2913	ug/L	1.2913	ppb	02:52:41
2	Co 228.616†	3242.2	3252.5	52.760	ug/L	52.760	ppb	02:52:41
2	Cr 267.716†	7957.6	7743.6	83.906	ug/L	83.906	ppb	02:52:21
2	Cu 324.752†	27010.7	19794.4	62.596	ug/L	62.596	ppb	02:52:21
2	Mn 257.610†	3252039.8	3196281.8	3420.9	ug/L	3420.9	ppb	02:52:16
2	Mo 202.031†	-54.5	-71.9	3.7069	ug/L	3.7069	ppb	02:52:41
2	Ni 231.604†	2602.3	2471.5	57.192	ug/L	57.192	ppb	02:52:41

2	P 214.914†	2332.7	2069.5	1114.6	ug/L	1114.6 ppb	02:52:41
2	Pb 220.353†	1028.5	1079.5	128.61	ug/L	128.61 ppb	02:52:41
2	S 181.975 Axial†	691.7	638.4	880.33	ug/L	880.33 ppb	02:52:41
2	Sb 206.836†	62.4	27.1	-3.1869	ug/L	-3.1869 ppb	02:52:41
2	Se 196.026†	-492.8	-455.6	117.13	ug/L	117.13 ppb	02:52:41
2	Si 251.611†	1062179.0	1043655.6	31239	ug/L	31239 ppb	02:52:16
2	Sn 189.927†	-110.1	-113.2	-15.272	ug/L	-15.272 ppb	02:52:41
2	Ti 334.940†	2313403.1	2275153.9	3631.6	ug/L	3631.6 ppb	02:52:16
2	Tl 190.801†	-200.8	-164.9	2.7107	ug/L	2.7107 ppb	02:52:41
2	U 409.014†	-7655.3	-5123.2	-155.96	ug/L	-155.96 ppb	02:52:16
2	V 292.402†	41270.4	41926.5	255.16	ug/L	255.16 ppb	02:52:21
2	Zn 213.857†	27248.9	26163.4	216.47	ug/L	216.47 ppb	02:52:21
2	SiO2†	1057430.2	1038969.8	66640	ug/L	66640 ppb	02:53:24
3	Sc Radial	5849.3	5849.3	100	%		02:51:38
3	Y RADIAL	6995.6	6995.6	111.3	%		02:51:38
3	Al 396.153Radial†	103601.7	103526.8	71912	ug/L	71912 ppb	02:51:18
3	Ca 317.933Radial†	10770.8	10745.3	15838	ug/L	15838 ppb	02:51:18
3	Fe 238.204 Radial†	12482.7	12464.4	116690	ug/L	116690 ppb	02:51:18
3	K 766.490 Radial†	61247.1	58839.0	10401	ug/L	10401 ppb	02:51:18
3	Mg 279.077 IEC†	436.3	434.7	15237	ug/L	15237 ppb	02:51:38
3	Na 589.592 Radial†	14065.0	15140.0	5080.7	ug/L	5080.7 ppb	02:51:18
3	Sr 421.552†	35233.1	35228.0	219.24	ug/L	219.24 ppb	02:51:18
3	Sc 361.383	911576.7	911576.7	101.14	%		02:52:47
3	Y 371.029	837437.6	837437.6	111.50	%		02:52:47
3	Ag 328.068†	-7485.4	-7693.4	3.2718	ug/L	3.2718 ppb	02:52:52
3	As 188.979†	-82.9	-57.8	25.674	ug/L	25.674 ppb	02:53:12
3	B 249.677†	1263.6	1780.0	21.689	ug/L	21.689 ppb	02:52:52
3	Ba 233.527†	141254.1	139664.6	1040.0	ug/L	1040.0 ppb	02:52:52
3	Be 313.107†	-5779.5	-601.2	6.9203	ug/L	6.9203 ppb	02:52:52
3	Cd 226.502†	1062.1	1245.2	1.5348	ug/L	1.5348 ppb	02:53:12
3	Co 228.616†	3276.5	3304.8	53.751	ug/L	53.751 ppb	02:53:12
3	Cr 267.716†	7890.2	7722.2	83.686	ug/L	83.686 ppb	02:52:52
3	Cu 324.752†	27003.8	19941.6	63.020	ug/L	63.020 ppb	02:52:52
3	Mn 257.610†	3246217.5	3209071.2	3434.6	ug/L	3434.6 ppb	02:52:47
3	Mo 202.031†	-45.8	-63.7	4.2338	ug/L	4.2338 ppb	02:53:12
3	Ni 231.604†	2641.3	2524.9	58.428	ug/L	58.428 ppb	02:53:12
3	P 214.914†	2352.4	2102.3	1133.3	ug/L	1133.3 ppb	02:53:12
3	Pb 220.353†	1031.0	1087.7	129.47	ug/L	129.47 ppb	02:53:12
3	S 181.975 Axial†	677.1	627.8	865.61	ug/L	865.61 ppb	02:53:12
3	Sb 206.836†	65.0	30.0	-2.2539	ug/L	-2.2539 ppb	02:53:12
3	Se 196.026†	-492.0	-457.6	116.07	ug/L	116.07 ppb	02:53:12
3	Si 251.611†	1056810.2	1044405.0	31262	ug/L	31262 ppb	02:52:47
3	Sn 189.927†	-112.8	-116.5	-15.833	ug/L	-15.833 ppb	02:53:12
3	Ti 334.940†	2301067.6	2276150.9	3633.2	ug/L	3633.2 ppb	02:52:47
3	Tl 190.801†	-203.7	-168.9	1.6590	ug/L	1.6590 ppb	02:53:12
3	U 409.014†	-7610.1	-5122.1	-155.94	ug/L	-155.94 ppb	02:52:47
3	V 292.402†	41264.9	42156.5	256.67	ug/L	256.67 ppb	02:52:52
3	Zn 213.857†	27192.6	26263.2	217.34	ug/L	217.34 ppb	02:52:52
3	SiO2†	1050794.1	1038439.2	66606	ug/L	66606 ppb	02:53:30

Mean Data: 241541012|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912384.0	101.23	%	0.459				0.45%
Sc Radial	5858.8	100	%	0.6				0.56%
Y 371.029	837829.4	111.55	%	0.557				0.50%
Y RADIAL	6990.4	111.2	%	0.49				0.44%
Ag 328.068†	-7652.0	3.2275	ug/L	0.32662	3.2275	ppb	0.32662	10.12%
Al 396.153Radial†	103060.4	71588	ug/L	865.3	71588	ppb	865.3	1.21%
As 188.979†	-54.2	26.981	ug/L	1.2245	26.981	ppb	1.2245	4.54%
B 249.677†	1826.0	22.750	ug/L	1.3005	22.750	ppb	1.3005	5.72%
Ba 233.527†	139358.9	1037.7	ug/L	2.29	1037.7	ppb	2.29	0.22%
Be 313.107†	-555.9	6.9376	ug/L	0.02355	6.9376	ppb	0.02355	0.34%
Ca 317.933Radial†	10740.4	15831	ug/L	182.4	15831	ppb	182.4	1.15%
Cd 226.502†	1223.0	1.3724	ug/L	0.14061	1.3724	ppb	0.14061	10.25%
Co 228.616†	3283.4	53.353	ug/L	0.5236	53.353	ppb	0.5236	0.98%
Cr 267.716†	7728.0	83.732	ug/L	0.1564	83.732	ppb	0.1564	0.19%
Cu 324.752†	19825.6	62.651	ug/L	0.3445	62.651	ppb	0.3445	0.55%
Fe 238.204 Radial†	12387.6	115970	ug/L	1203.0	115970	ppb	1203.0	1.04%
K 766.490 Radial†	58669.4	10371	ug/L	121.4	10371	ppb	121.4	1.17%

Mg 279.077 IEC†	434.5	15230	ug/L	146.1	15230	ppb	146.1	0.96%
Mn 257.610†	3205925.6	3431.2	ug/L	9.01	3431.2	ppb	9.01	0.26%
Mo 202.031†	-70.6	3.7414	ug/L	0.47605	3.7414	ppb	0.47605	12.72%
Na 589.592 Radial†	15031.7	5044.4	ug/L	53.70	5044.4	ppb	53.70	1.06%
Ni 231.604†	2512.3	58.137	ug/L	0.8378	58.137	ppb	0.8378	1.44%
P 214.914†	2087.9	1125.5	ug/L	9.75	1125.5	ppb	9.75	0.87%
Pb 220.353†	1080.7	128.66	ug/L	0.794	128.66	ppb	0.794	0.62%
S 181.975 Axial†	636.5	877.86	ug/L	11.213	877.86	ppb	11.213	1.28%
Sb 206.836†	30.0	-2.2636	ug/L	0.91850	-2.2636	ppb	0.91850	40.58%
Se 196.026†	-449.7	118.32	ug/L	3.021	118.32	ppb	3.021	2.55%
Si 251.611†	1044467.4	31264	ug/L	25.3	31264	ppb	25.3	0.08%
Sn 189.927†	-112.7	-15.218	ug/L	0.6438	-15.218	ppb	0.6438	4.23%
Sr 421.552†	35061.7	218.21	ug/L	2.694	218.21	ppb	2.694	1.23%
Ti 334.940†	2276385.6	3633.5	ug/L	2.17	3633.5	ppb	2.17	0.06%
Tl 190.801†	-164.7	2.8220	ug/L	1.22244	2.8220	ppb	1.22244	43.32%
U 409.014†	-5171.7	-157.21	ug/L	2.187	-157.21	ppb	2.187	1.39%
V 292.402†	41979.9	255.60	ug/L	0.927	255.60	ppb	0.927	0.36%
Zn 213.857†	26168.2	216.58	ug/L	0.712	216.58	ppb	0.712	0.33%
SiO2†	1044976.2	67025	ug/L	697.1	67025	ppb	697.1	1.04%

Sequence No.: 104
Sample ID: 241541013|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 12/9/2009 02:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541013|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5784.6	5784.6	99.0	%			02:57:55
1	Y RADIAL	6976.6	6976.6	111.0	%			02:57:55
1	Al 396.153Radial†	92115.2	93080.9	64656	ug/L	64656	ppb	02:57:35
1	Ca 317.933Radial†	12395.7	12507.3	18435	ug/L	18435	ppb	02:57:35
1	Fe 238.204 Radial†	11431.4	11541.9	108060	ug/L	108060	ppb	02:57:35
1	K 766.490 Radial†	59013.6	57267.5	10125	ug/L	10125	ppb	02:57:35
1	Mg 279.077 IEC†	385.1	387.9	13591	ug/L	13591	ppb	02:57:55
1	Na 589.592 Radial†	2138.0	3247.9	1089.9	ug/L	1089.9	ppb	02:57:35
1	Sr 421.552†	29930.1	30264.6	188.31	ug/L	188.31	ppb	02:57:35
1	Sc 361.383	910713.1	910713.1	101.05	%			02:58:53
1	Y 371.029	839775.2	839775.2	111.81	%			02:58:53
1	Ag 328.068†	-6948.3	-7168.9	2.8425	ug/L	2.8425	ppb	02:58:58
1	As 188.979†	-48.7	-24.0	32.460	ug/L	32.460	ppb	02:59:18
1	B 249.677†	1385.5	1901.8	25.385	ug/L	25.385	ppb	02:58:58
1	Ba 233.527†	114698.7	113517.1	845.92	ug/L	845.92	ppb	02:58:58
1	Be 313.107†	-4403.7	755.0	6.1834	ug/L	6.1834	ppb	02:58:58
1	Cd 226.502†	1008.6	1193.2	1.8496	ug/L	1.8496	ppb	02:59:18
1	Co 228.616†	3357.8	3388.4	56.710	ug/L	56.710	ppb	02:59:18
1	Cr 267.716†	8715.6	8546.5	92.176	ug/L	92.176	ppb	02:58:58
1	Cu 324.752†	32669.3	25573.6	78.696	ug/L	78.696	ppb	02:58:58
1	Mn 257.610†	3010019.8	2978367.8	3187.7	ug/L	3187.7	ppb	02:58:53
1	Mo 202.031†	1.9	-16.5	6.6179	ug/L	6.6179	ppb	02:59:18
1	Ni 231.604†	2681.1	2566.7	59.394	ug/L	59.394	ppb	02:59:18
1	P 214.914†	2805.4	2552.8	1395.0	ug/L	1395.0	ppb	02:59:18
1	Pb 220.353†	1201.6	1257.6	147.74	ug/L	147.74	ppb	02:59:18
1	S 181.975 Axial†	784.9	735.2	1017.5	ug/L	1017.5	ppb	02:59:18
1	Sb 206.836†	52.7	17.9	-4.5181	ug/L	-4.5181	ppb	02:59:18
1	Se 196.026†	-461.8	-428.2	104.56	ug/L	104.56	ppb	02:59:18
1	Si 251.611†	1088604.5	1076860.3	32233	ug/L	32233	ppb	02:58:53
1	Sn 189.927†	-123.9	-127.6	-17.501	ug/L	-17.501	ppb	02:59:18
1	Ti 334.940†	1902235.0	1883613.8	3006.9	ug/L	3006.9	ppb	02:58:53
1	Tl 190.801†	-190.5	-156.1	-1.1869	ug/L	-1.1869	ppb	02:59:18
1	U 409.014†	-7590.4	-5109.8	-154.53	ug/L	-154.53	ppb	02:58:53
1	V 292.402†	40507.5	41445.5	253.98	ug/L	253.98	ppb	02:58:58
1	Zn 213.857†	39904.1	38868.3	328.32	ug/L	328.32	ppb	02:58:58
1	SiO2†	1084817.0	1073094.3	68829	ug/L	68829	ppb	03:00:27
2	Sc Radial	5824.7	5824.7	99.7	%			02:58:21
2	Y RADIAL	6997.6	6997.6	111.3	%			02:58:21
2	Al 396.153Radial†	92777.1	93104.4	64672	ug/L	64672	ppb	02:58:00
2	Ca 317.933Radial†	12487.7	12513.4	18444	ug/L	18444	ppb	02:58:00
2	Fe 238.204 Radial†	11499.2	11530.4	107950	ug/L	107950	ppb	02:58:00
2	K 766.490 Radial†	59409.8	57254.6	10123	ug/L	10123	ppb	02:58:00
2	Mg 279.077 IEC†	385.8	385.9	13521	ug/L	13521	ppb	02:58:21
2	Na 589.592 Radial†	2187.9	3283.1	1101.7	ug/L	1101.7	ppb	02:58:00
2	Sr 421.552†	30136.1	30263.1	188.30	ug/L	188.30	ppb	02:58:00
2	Sc 361.383	896215.5	896215.5	99.440	%			02:59:24
2	Y 371.029	827275.9	827275.9	110.14	%			02:59:24
2	Ag 328.068†	-7029.5	-7361.8	1.9566	ug/L	1.9566	ppb	02:59:29
2	As 188.979†	-60.2	-36.3	27.527	ug/L	27.527	ppb	02:59:49
2	B 249.677†	1473.3	2012.2	27.714	ug/L	27.714	ppb	02:59:29
2	Ba 233.527†	114641.7	115296.0	859.11	ug/L	859.11	ppb	02:59:29
2	Be 313.107†	-4502.8	584.8	6.1129	ug/L	6.1129	ppb	02:59:29
2	Cd 226.502†	1000.8	1201.5	1.9486	ug/L	1.9486	ppb	02:59:49
2	Co 228.616†	3330.5	3414.7	57.224	ug/L	57.224	ppb	02:59:49
2	Cr 267.716†	8801.3	8772.2	94.553	ug/L	94.553	ppb	02:59:29
2	Cu 324.752†	32635.9	26063.0	80.092	ug/L	80.092	ppb	02:59:29
2	Mn 257.610†	2960081.2	2976334.0	3185.5	ug/L	3185.5	ppb	02:59:24
2	Mo 202.031†	3.2	-15.1	6.6980	ug/L	6.6980	ppb	02:59:49
2	Ni 231.604†	2659.0	2587.4	59.874	ug/L	59.874	ppb	02:59:49

2	P 214.914†	2773.5	2565.6	1402.3	ug/L	1402.3 ppb	02:59:49
2	Pb 220.353†	1156.5	1231.5	144.80	ug/L	144.80 ppb	02:59:49
2	S 181.975 Axial†	780.7	743.5	1029.1	ug/L	1029.1 ppb	02:59:49
2	Sb 206.836†	61.4	27.5	-1.5344	ug/L	-1.5344 ppb	02:59:49
2	Se 196.026†	-460.5	-434.3	100.73	ug/L	100.73 ppb	02:59:49
2	Si 251.611†	1069779.6	1075356.4	32188	ug/L	32188 ppb	02:59:24
2	Sn 189.927†	-128.2	-133.9	-18.534	ug/L	-18.534 ppb	02:59:49
2	Ti 334.940†	1869255.8	1880900.9	3002.5	ug/L	3002.5 ppb	02:59:24
2	Tl 190.801†	-194.9	-163.5	-3.3380	ug/L	-3.3380 ppb	02:59:49
2	U 409.014†	-7737.5	-5379.3	-161.94	ug/L	-161.94 ppb	02:59:24
2	V 292.402†	40471.9	42058.3	258.03	ug/L	258.03 ppb	02:59:29
2	Zn 213.857†	39962.8	39566.1	334.42	ug/L	334.42 ppb	02:59:29
2	SiO2†	1086769.6	1092424.3	70069	ug/L	70069 ppb	03:00:32
3	Sc Radial	5746.7	5746.7	98.3	%		02:58:46
3	Y RADIAL	6901.7	6901.7	109.8	%		02:58:46
3	Al 396.153Radial†	91428.8	92995.3	64597	ug/L	64597 ppb	02:58:26
3	Ca 317.933Radial†	12286.9	12479.0	18393	ug/L	18393 ppb	02:58:26
3	Fe 238.204 Radial†	11315.6	11500.1	107660	ug/L	107660 ppb	02:58:26
3	K 766.490 Radial†	58288.3	56922.2	10064	ug/L	10064 ppb	02:58:26
3	Mg 279.077 IEC†	383.6	388.9	13629	ug/L	13629 ppb	02:58:46
3	Na 589.592 Radial†	2147.7	3272.0	1098.0	ug/L	1098.0 ppb	02:58:26
3	Sr 421.552†	29678.1	30207.3	187.95	ug/L	187.95 ppb	02:58:26
3	Sc 361.383	906832.4	906832.4	100.62	%		02:59:55
3	Y 371.029	836428.9	836428.9	111.36	%		02:59:55
3	Ag 328.068†	-7011.4	-7261.1	2.3167	ug/L	2.3167 ppb	03:00:00
3	As 188.979†	-54.8	-30.3	29.869	ug/L	29.869 ppb	03:00:20
3	B 249.677†	1435.8	1957.6	26.607	ug/L	26.607 ppb	03:00:00
3	Ba 233.527†	115273.9	114574.6	853.75	ug/L	853.75 ppb	03:00:00
3	Be 313.107†	-4276.5	862.8	6.2116	ug/L	6.2116 ppb	03:00:00
3	Cd 226.502†	992.8	1181.8	1.7681	ug/L	1.7681 ppb	03:00:20
3	Co 228.616†	3365.8	3410.6	57.152	ug/L	57.152 ppb	03:00:20
3	Cr 267.716†	8797.4	8664.8	93.417	ug/L	93.417 ppb	03:00:00
3	Cu 324.752†	32940.7	25981.7	79.844	ug/L	79.844 ppb	03:00:00
3	Mn 257.610†	2993433.5	2974630.8	3183.6	ug/L	3183.6 ppb	02:59:55
3	Mo 202.031†	7.5	-10.9	6.9453	ug/L	6.9453 ppb	03:00:20
3	Ni 231.604†	2689.8	2586.7	59.858	ug/L	59.858 ppb	03:00:20
3	P 214.914†	2808.0	2567.2	1403.4	ug/L	1403.4 ppb	03:00:20
3	Pb 220.353†	1168.0	1229.3	144.56	ug/L	144.56 ppb	03:00:20
3	S 181.975 Axial†	775.4	729.0	1008.8	ug/L	1008.8 ppb	03:00:20
3	Sb 206.836†	69.4	34.7	0.8370	ug/L	0.8370 ppb	03:00:20
3	Se 196.026†	-459.3	-427.6	103.67	ug/L	103.67 ppb	03:00:20
3	Si 251.611†	1082815.7	1075717.3	32199	ug/L	32199 ppb	02:59:55
3	Sn 189.927†	-116.5	-120.8	-16.397	ug/L	-16.397 ppb	03:00:20
3	Ti 334.940†	1890565.1	1880071.5	3001.2	ug/L	3001.2 ppb	02:59:55
3	Tl 190.801†	-186.9	-153.3	-0.4905	ug/L	-0.4905 ppb	03:00:20
3	U 409.014†	-7745.6	-5296.2	-159.62	ug/L	-159.62 ppb	02:59:55
3	V 292.402†	40777.4	41885.4	256.95	ug/L	256.95 ppb	03:00:00
3	Zn 213.857†	40097.0	39229.0	331.50	ug/L	331.50 ppb	03:00:00
3	SiO2†	1081438.9	1074331.2	68908	ug/L	68908 ppb	03:00:38

Mean Data: 241541013|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904587.0	100.37	%	0.833				0.83%
Sc Radial	5785.3	99.0	%	0.67				0.67%
Y 371.029	834493.3	111.11	%	0.861				0.78%
Y RADIAL	6958.6	110.7	%	0.80				0.72%
Ag 328.068†	-7263.9	2.3719	ug/L	0.44556	2.3719	ppb	0.44556	18.78%
Al 396.153Radial†	93060.2	64642	ug/L	39.9	64642	ppb	39.9	0.06%
As 188.979†	-30.2	29.952	ug/L	2.4674	29.952	ppb	2.4674	8.24%
B 249.677†	1957.2	26.569	ug/L	1.1652	26.569	ppb	1.1652	4.39%
Ba 233.527†	114462.6	852.93	ug/L	6.633	852.93	ppb	6.633	0.78%
Be 313.107†	734.2	6.1693	ug/L	0.05085	6.1693	ppb	0.05085	0.82%
Ca 317.933Radial†	12499.9	18424	ug/L	27.0	18424	ppb	27.0	0.15%
Cd 226.502†	1192.2	1.8554	ug/L	0.09042	1.8554	ppb	0.09042	4.87%
Co 228.616†	3404.6	57.029	ug/L	0.2783	57.029	ppb	0.2783	0.49%
Cr 267.716†	8661.2	93.382	ug/L	1.1889	93.382	ppb	1.1889	1.27%
Cu 324.752†	25872.8	79.544	ug/L	0.7445	79.544	ppb	0.7445	0.94%
Fe 238.204 Radial†	11524.2	107890	ug/L	202.0	107890	ppb	202.0	0.19%
K 766.490 Radial†	57148.1	10104	ug/L	34.7	10104	ppb	34.7	0.34%

Mg 279.077 IEC†	387.6	13580	ug/L	54.8	13580	ppb	54.8	0.40%
Mn 257.610†	2976444.2	3185.6	ug/L	2.02	3185.6	ppb	2.02	0.06%
Mo 202.031†	-14.2	6.7537	ug/L	0.17065	6.7537	ppb	0.17065	2.53%
Na 589.592 Radial†	3267.6	1096.6	ug/L	6.04	1096.6	ppb	6.04	0.55%
Ni 231.604†	2580.3	59.709	ug/L	0.2724	59.709	ppb	0.2724	0.46%
P 214.914†	2561.9	1400.2	ug/L	4.58	1400.2	ppb	4.58	0.33%
Pb 220.353†	1239.4	145.70	ug/L	1.771	145.70	ppb	1.771	1.22%
S 181.975 Axial†	735.9	1018.5	ug/L	10.17	1018.5	ppb	10.17	1.00%
Sb 206.836†	26.7	-1.7385	ug/L	2.68340	-1.7385	ppb	2.68340	154.35%
Se 196.026†	-430.0	102.99	ug/L	2.006	102.99	ppb	2.006	1.95%
Si 251.611†	1075978.0	32207	ug/L	23.5	32207	ppb	23.5	0.07%
Sn 189.927†	-127.5	-17.477	ug/L	1.0683	-17.477	ppb	1.0683	6.11%
Sr 421.552†	30245.0	188.19	ug/L	0.203	188.19	ppb	0.203	0.11%
Ti 334.940†	1881528.7	3003.5	ug/L	2.96	3003.5	ppb	2.96	0.10%
Tl 190.801†	-157.6	-1.6718	ug/L	1.48440	-1.6718	ppb	1.48440	88.79%
U 409.014†	-5261.8	-158.70	ug/L	3.792	-158.70	ppb	3.792	2.39%
V 292.402†	41796.4	256.32	ug/L	2.098	256.32	ppb	2.098	0.82%
Zn 213.857†	39221.1	331.41	ug/L	3.053	331.41	ppb	3.053	0.92%
SiO2†	1079949.9	69269	ug/L	694.1	69269	ppb	694.1	1.00%

Sequence No.: 105
Sample ID: 241541014|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/9/2009 03:02:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541014|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5853.0	5853.0	100	%			03:05:04
1	Y RADIAL	7197.5	7197.5	114.5	%			03:05:04
1	Al 396.153Radial†	152125.8	151910.3	105520	ug/L	105520	ppb	03:04:44
1	Ca 317.933Radial†	19098.8	19053.6	28084	ug/L	28084	ppb	03:04:44
1	Fe 238.204 Radial†	13902.6	13874.2	129890	ug/L	129890	ppb	03:04:44
1	K 766.490 Radial†	66388.5	63933.9	11316	ug/L	11316	ppb	03:04:44
1	Mg 279.077 IEC†	584.8	582.7	20446	ug/L	20446	ppb	03:05:04
1	Na 589.592 Radial†	8603.6	9678.2	3247.8	ug/L	3247.8	ppb	03:04:44
1	Sr 421.552†	48386.0	48338.3	300.78	ug/L	300.78	ppb	03:04:44
1	Sc 361.383	906919.5	906919.5	100.63	%			03:06:02
1	Y 371.029	857818.5	857818.5	114.21	%			03:06:02
1	Ag 328.068†	-8208.2	-8449.8	3.8273	ug/L	3.8273	ppb	03:06:07
1	As 188.979†	-34.9	-10.5	37.231	ug/L	37.231	ppb	03:06:27
1	B 249.677†	1499.4	2020.8	24.975	ug/L	24.975	ppb	03:06:07
1	Ba 233.527†	156674.0	155705.5	1159.4	ug/L	1159.4	ppb	03:06:07
1	Be 313.107†	5411.6	10490.8	8.8122	ug/L	8.8122	ppb	03:06:07
1	Cd 226.502†	1107.8	1296.0	0.7563	ug/L	0.7563	ppb	03:06:27
1	Co 228.616†	3512.2	3555.7	60.699	ug/L	60.699	ppb	03:06:27
1	Cr 267.716†	8731.5	8598.4	93.098	ug/L	93.098	ppb	03:06:07
1	Cu 324.752†	29473.9	22533.4	71.110	ug/L	71.110	ppb	03:06:07
1	Mn 257.610†	2707935.8	2690627.5	2882.8	ug/L	2882.8	ppb	03:06:02
1	Mo 202.031†	-55.7	-73.7	4.5332	ug/L	4.5332	ppb	03:06:27
1	Ni 231.604†	2911.8	2807.0	64.958	ug/L	64.958	ppb	03:06:27
1	P 214.914†	2161.0	1924.0	1029.9	ug/L	1029.9	ppb	03:06:27
1	Pb 220.353†	1079.3	1141.0	141.94	ug/L	141.94	ppb	03:06:27
1	S 181.975 Axial†	635.6	590.1	806.12	ug/L	806.12	ppb	03:06:27
1	Sb 206.836†	67.9	33.2	0.6932	ug/L	0.6932	ppb	03:06:27
1	Se 196.026†	-546.2	-514.0	131.17	ug/L	131.17	ppb	03:06:27
1	Si 251.611†	1151000.4	1143373.4	34224	ug/L	34224	ppb	03:06:02
1	Sn 189.927†	-135.8	-139.9	-18.197	ug/L	-18.197	ppb	03:06:27
1	Ti 334.940†	1599177.6	1590320.5	2539.4	ug/L	2539.4	ppb	03:06:02
1	Tl 190.801†	-148.2	-114.8	6.1130	ug/L	6.1130	ppb	03:06:27
1	U 409.014†	-9569.2	-7107.7	-212.31	ug/L	-212.31	ppb	03:06:02
1	V 292.402†	37699.1	38822.4	233.85	ug/L	233.85	ppb	03:06:07
1	Zn 213.857†	36518.7	35669.1	298.02	ug/L	298.02	ppb	03:06:07
1	SiO2†	1149129.3	1141496.2	73216	ug/L	73216	ppb	03:07:35
2	Sc Radial	5874.6	5874.6	101	%			03:05:29
2	Y RADIAL	7203.3	7203.3	114.6	%			03:05:29
2	Al 396.153Radial†	150903.4	150134.8	104290	ug/L	104290	ppb	03:05:09
2	Ca 317.933Radial†	19034.8	18919.7	27887	ug/L	27887	ppb	03:05:09
2	Fe 238.204 Radial†	13804.1	13725.1	128490	ug/L	128490	ppb	03:05:09
2	K 766.490 Radial†	65794.3	63098.6	11167	ug/L	11167	ppb	03:05:09
2	Mg 279.077 IEC†	583.7	579.5	20334	ug/L	20334	ppb	03:05:29
2	Na 589.592 Radial†	8480.1	9523.8	3196.0	ug/L	3196.0	ppb	03:05:09
2	Sr 421.552†	47861.8	47639.0	296.42	ug/L	296.42	ppb	03:05:09
2	Sc 361.383	906493.1	906493.1	100.58	%			03:06:33
2	Y 371.029	855599.1	855599.1	113.92	%			03:06:33
2	Ag 328.068†	-8283.7	-8528.6	3.0373	ug/L	3.0373	ppb	03:06:38
2	As 188.979†	-34.5	-10.1	37.169	ug/L	37.169	ppb	03:06:58
2	B 249.677†	1506.3	2028.3	25.318	ug/L	25.318	ppb	03:06:38
2	Ba 233.527†	158106.1	157202.5	1170.4	ug/L	1170.4	ppb	03:06:38
2	Be 313.107†	5487.6	10569.0	8.8417	ug/L	8.8417	ppb	03:06:38
2	Cd 226.502†	1119.5	1308.2	1.0253	ug/L	1.0253	ppb	03:06:58
2	Co 228.616†	3519.4	3564.5	60.890	ug/L	60.890	ppb	03:06:58
2	Cr 267.716†	8820.7	8691.2	94.051	ug/L	94.051	ppb	03:06:38
2	Cu 324.752†	29886.9	22957.8	72.253	ug/L	72.253	ppb	03:06:38
2	Mn 257.610†	2709097.8	2693048.8	2885.2	ug/L	2885.2	ppb	03:06:33
2	Mo 202.031†	-47.1	-65.1	4.9765	ug/L	4.9765	ppb	03:06:58
2	Ni 231.604†	2927.4	2823.9	65.349	ug/L	65.349	ppb	03:06:58

2	P 214.914†	2165.6	1929.6	1033.7 ug/L	1033.7 ppb	03:06:58
2	Pb 220.353†	1089.9	1152.1	143.03 ug/L	143.03 ppb	03:06:58
2	S 181.975 Axial†	633.2	588.0	803.37 ug/L	803.37 ppb	03:06:58
2	Sb 206.836†	65.6	30.9	0.0182 ug/L	0.0182 ppb	03:06:58
2	Se 196.026†	-546.1	-514.2	126.45 ug/L	126.45 ppb	03:06:58
2	Si 251.611†	1152135.3	1145039.8	34274 ug/L	34274 ppb	03:06:33
2	Sn 189.927†	-120.0	-124.3	-15.684 ug/L	-15.684 ppb	03:06:58
2	Ti 334.940†	1598771.4	1590664.2	2539.9 ug/L	2539.9 ppb	03:06:33
2	Tl 190.801†	-160.2	-126.8	2.7363 ug/L	2.7363 ppb	03:06:58
2	U 409.014†	-9469.7	-7013.2	-209.54 ug/L	-209.54 ppb	03:06:33
2	V 292.402†	38091.6	39230.2	236.76 ug/L	236.76 ppb	03:06:38
2	Zn 213.857†	36893.8	36059.2	301.56 ug/L	301.56 ppb	03:06:38
2	SiO2†	1151314.0	1144205.5	73390 ug/L	73390 ppb	03:07:41
3	Sc Radial	5920.3	5920.3	101 %		03:05:54
3	Y RADIAL	7258.1	7258.1	115.4 %		03:05:54
3	Al 396.153Radial†	150831.7	148906.9	103430 ug/L	103430 ppb	03:05:34
3	Ca 317.933Radial†	18976.8	18716.5	27587 ug/L	27587 ppb	03:05:34
3	Fe 238.204 Radial†	13752.4	13568.2	127030 ug/L	127030 ppb	03:05:34
3	K 766.490 Radial†	65654.7	62456.3	11053 ug/L	11053 ppb	03:05:34
3	Mg 279.077 IEC†	585.4	576.7	20237 ug/L	20237 ppb	03:05:54
3	Na 589.592 Radial†	8379.3	9359.2	3140.8 ug/L	3140.8 ppb	03:05:34
3	Sr 421.552†	47756.3	47167.7	293.49 ug/L	293.49 ppb	03:05:34
3	Sc 361.383	900867.7	900867.7	99.956 %		03:07:04
3	Y 371.029	850045.8	850045.8	113.18 %		03:07:04
3	Ag 328.068†	-8425.3	-8721.7	1.7166 ug/L	1.7166 ppb	03:07:09
3	As 188.979†	-49.2	-25.0	31.091 ug/L	31.091 ppb	03:07:29
3	B 249.677†	1518.6	2049.9	25.966 ug/L	25.966 ppb	03:07:09
3	Ba 233.527†	160283.3	160362.3	1193.8 ug/L	1193.8 ppb	03:07:09
3	Be 313.107†	5643.4	10758.9	8.9161 ug/L	8.9161 ppb	03:07:09
3	Cd 226.502†	1102.8	1298.4	1.0688 ug/L	1.0688 ppb	03:07:29
3	Co 228.616†	3514.1	3581.1	61.230 ug/L	61.230 ppb	03:07:29
3	Cr 267.716†	8865.8	8791.1	95.081 ug/L	95.081 ppb	03:07:09
3	Cu 324.752†	30257.2	23513.8	73.770 ug/L	73.770 ppb	03:07:09
3	Mn 257.610†	2695365.2	2696129.2	2888.4 ug/L	2888.4 ppb	03:07:04
3	Mo 202.031†	-52.7	-71.1	4.4952 ug/L	4.4952 ppb	03:07:29
3	Ni 231.604†	2927.2	2841.9	65.766 ug/L	65.766 ppb	03:07:29
3	P 214.914†	2154.0	1931.5	1035.4 ug/L	1035.4 ppb	03:07:29
3	Pb 220.353†	1063.6	1132.5	140.75 ug/L	140.75 ppb	03:07:29
3	S 181.975 Axial†	634.7	593.4	811.16 ug/L	811.16 ppb	03:07:29
3	Sb 206.836†	63.6	29.4	-0.5397 ug/L	-0.5397 ppb	03:07:29
3	Se 196.026†	-538.3	-509.7	124.21 ug/L	124.21 ppb	03:07:29
3	Si 251.611†	1146296.9	1146351.8	34313 ug/L	34313 ppb	03:07:04
3	Sn 189.927†	-132.2	-137.2	-17.849 ug/L	-17.849 ppb	03:07:29
3	Ti 334.940†	1590492.9	1592307.9	2542.5 ug/L	2542.5 ppb	03:07:04
3	Tl 190.801†	-176.3	-143.8	-2.0331 ug/L	-2.0331 ppb	03:07:29
3	U 409.014†	-9492.3	-7094.6	-211.60 ug/L	-211.60 ppb	03:07:04
3	V 292.402†	38435.5	39810.8	240.80 ug/L	240.80 ppb	03:07:09
3	Zn 213.857†	37390.9	36785.6	308.05 ug/L	308.05 ppb	03:07:09
3	SiO2†	1163684.6	1163729.3	74643 ug/L	74643 ppb	03:07:47

Mean Data: 241541014|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904760.1	100.39	%	0.375				0.37%
Sc Radial	5882.6	101	%	0.6				0.58%
Y 371.029	854487.8	113.77	%	0.533				0.47%
Y RADIAL	7219.6	114.8	%	0.53				0.46%
Ag 328.068†	-8566.7	2.8604	ug/L	1.06641	2.8604	ppb	1.06641	37.28%
Al 396.153Radial†	150317.3	104410	ug/L	1048.9	104410	ppb	1048.9	1.00%
As 188.979†	-15.2	35.164	ug/L	3.5271	35.164	ppb	3.5271	10.03%
B 249.677†	2033.0	25.420	ug/L	0.5032	25.420	ppb	0.5032	1.98%
Ba 233.527†	157756.8	1174.5	ug/L	17.57	1174.5	ppb	17.57	1.50%
Be 313.107†	10606.2	8.8567	ug/L	0.05356	8.8567	ppb	0.05356	0.60%
Ca 317.933Radial†	18896.6	27853	ug/L	250.2	27853	ppb	250.2	0.90%
Cd 226.502†	1300.8	0.9501	ug/L	0.16929	0.9501	ppb	0.16929	17.82%
Co 228.616†	3567.1	60.940	ug/L	0.2690	60.940	ppb	0.2690	0.44%
Cr 267.716†	8693.6	94.077	ug/L	0.9915	94.077	ppb	0.9915	1.05%
Cu 324.752†	23001.7	72.378	ug/L	1.3342	72.378	ppb	1.3342	1.84%
Fe 238.204 Radial†	13722.5	128470	ug/L	1432.6	128470	ppb	1432.6	1.12%
K 766.490 Radial†	63162.9	11179	ug/L	131.6	11179	ppb	131.6	1.18%

Mg 279.077 IEC†	579.6	20339	ug/L	104.5	20339	ppb	104.5	0.51%
Mn 257.610†	2693268.5	2885.5	ug/L	2.80	2885.5	ppb	2.80	0.10%
Mo 202.031†	-70.0	4.6683	ug/L	0.26758	4.6683	ppb	0.26758	5.73%
Na 589.592 Radial†	9520.4	3194.9	ug/L	53.55	3194.9	ppb	53.55	1.68%
Ni 231.604†	2824.3	65.358	ug/L	0.4039	65.358	ppb	0.4039	0.62%
P 214.914†	1928.3	1033.0	ug/L	2.81	1033.0	ppb	2.81	0.27%
Pb 220.353†	1141.9	141.91	ug/L	1.141	141.91	ppb	1.141	0.80%
S 181.975 Axial†	590.5	806.88	ug/L	3.954	806.88	ppb	3.954	0.49%
Sb 206.836†	31.2	0.0572	ug/L	0.61741	0.0572	ppb	0.61741	>999.9%
Se 196.026†	-512.6	127.28	ug/L	3.554	127.28	ppb	3.554	2.79%
Si 251.611†	1144921.7	34270	ug/L	44.7	34270	ppb	44.7	0.13%
Sn 189.927†	-133.8	-17.243	ug/L	1.3615	-17.243	ppb	1.3615	7.90%
Sr 421.552†	47715.0	296.90	ug/L	3.666	296.90	ppb	3.666	1.23%
Ti 334.940†	1591097.5	2540.6	ug/L	1.68	2540.6	ppb	1.68	0.07%
Tl 190.801†	-128.5	2.2720	ug/L	4.09286	2.2720	ppb	4.09286	180.14%
U 409.014†	-7071.9	-211.15	ug/L	1.441	-211.15	ppb	1.441	0.68%
V 292.402†	39287.8	237.14	ug/L	3.494	237.14	ppb	3.494	1.47%
Zn 213.857†	36171.3	302.55	ug/L	5.084	302.55	ppb	5.084	1.68%
SiO2†	1149810.3	73750	ug/L	778.2	73750	ppb	778.2	1.06%

Sequence No.: 106
Sample ID: 241541015|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 12/9/2009 03:09:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541015|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5816.4	5816.4	99.5	%			03:12:11
1	Y RADIAL	7110.0	7110.0	113.1	%			03:12:11
1	Al 396.153Radial†	105281.3	105799.4	73491	ug/L	73491	ppb	03:11:51
1	Ca 317.933Radial†	15794.0	15853.1	23367	ug/L	23367	ppb	03:11:51
1	Fe 238.204 Radial†	20559.5	20649.9	193320	ug/L	193320	ppb	03:11:51
1	K 766.490 Radial†	97344.1	95452.5	16853	ug/L	16853	ppb	03:11:51
1	Mg 279.077 IEC†	485.8	486.9	17013	ug/L	17013	ppb	03:12:11
1	Na 589.592 Radial†	4603.4	5713.1	1917.2	ug/L	1917.2	ppb	03:11:51
1	Sr 421.552†	44392.6	44629.7	277.73	ug/L	277.73	ppb	03:11:51
1	Sc 361.383	912971.5	912971.5	101.30	%			03:13:10
1	Y 371.029	830945.6	830945.6	110.63	%			03:13:15
1	Ag 328.068†	-13105.9	-13230.5	3.6635	ug/L	3.6635	ppb	03:13:15
1	As 188.979†	-73.7	-48.6	42.657	ug/L	42.657	ppb	03:13:35
1	B 249.677†	2276.3	2777.8	32.394	ug/L	32.394	ppb	03:13:15
1	Ba 233.527†	214075.2	211338.5	1574.7	ug/L	1574.7	ppb	03:13:15
1	Be 313.107†	1849.7	6939.0	10.015	ug/L	10.015	ppb	03:13:15
1	Cd 226.502†	1882.7	2053.7	2.4334	ug/L	2.4334	ppb	03:13:35
1	Co 228.616†	4424.3	4433.0	73.912	ug/L	73.912	ppb	03:13:35
1	Cr 267.716†	10983.2	10763.7	117.52	ug/L	117.52	ppb	03:13:35
1	Cu 324.752†	31106.6	23951.0	78.403	ug/L	78.403	ppb	03:13:15
1	Mn 257.610†	6595051.6	6510058.8	6963.5	ug/L	6963.5	ppb	03:13:10
1	Mo 202.031†	-91.4	-108.6	6.8139	ug/L	6.8139	ppb	03:13:35
1	Ni 231.604†	3530.1	3398.2	78.638	ug/L	78.638	ppb	03:13:35
1	P 214.914†	5218.9	4928.4	2700.0	ug/L	2700.0	ppb	03:13:35
1	Pb 220.353†	2035.4	2077.8	235.44	ug/L	235.44	ppb	03:13:35
1	S 181.975 Axial†	871.8	819.0	1133.2	ug/L	1133.2	ppb	03:13:35
1	Sb 206.836†	50.9	16.0	-6.2277	ug/L	-6.2277	ppb	03:13:35
1	Se 196.026†	-830.9	-791.4	164.80	ug/L	164.80	ppb	03:13:35
1	Si 251.611†	1049386.9	1035480.6	30992	ug/L	30992	ppb	03:13:10
1	Sn 189.927†	-156.8	-159.7	-21.102	ug/L	-21.102	ppb	03:13:35
1	Ti 334.940†	2416406.6	2386535.2	3809.7	ug/L	3809.7	ppb	03:13:10
1	Tl 190.801†	-255.7	-219.9	8.6261	ug/L	8.6261	ppb	03:13:35
1	U 409.014†	-8291.8	-5783.7	-183.87	ug/L	-183.87	ppb	03:13:15
1	V 292.402†	87332.7	87571.2	544.73	ug/L	544.73	ppb	03:13:15
1	Zn 213.857†	34885.8	33816.6	275.81	ug/L	275.81	ppb	03:13:15
1	SiO2†	1053736.8	1039756.9	66686	ug/L	66686	ppb	03:14:45
2	Sc Radial	5773.0	5773.0	98.8	%			03:12:36
2	Y RADIAL	7063.4	7063.4	112.3	%			03:12:36
2	Al 396.153Radial†	106501.1	107829.8	74901	ug/L	74901	ppb	03:12:16
2	Ca 317.933Radial†	15929.9	16110.0	23745	ug/L	23745	ppb	03:12:16
2	Fe 238.204 Radial†	20748.3	20996.4	196570	ug/L	196570	ppb	03:12:16
2	K 766.490 Radial†	98399.5	97256.6	17173	ug/L	17173	ppb	03:12:16
2	Mg 279.077 IEC†	488.1	492.9	17220	ug/L	17220	ppb	03:12:36
2	Na 589.592 Radial†	4719.2	5865.2	1968.2	ug/L	1968.2	ppb	03:12:16
2	Sr 421.552†	45024.9	45605.4	283.80	ug/L	283.80	ppb	03:12:16
2	Sc 361.383	915054.2	915054.2	101.53	%			03:13:41
2	Y 371.029	832356.3	832356.3	110.82	%			03:13:47
2	Ag 328.068†	-13228.4	-13321.8	4.2857	ug/L	4.2857	ppb	03:13:47
2	As 188.979†	-67.9	-42.7	45.546	ug/L	45.546	ppb	03:14:07
2	B 249.677†	2316.4	2812.2	32.687	ug/L	32.687	ppb	03:13:47
2	Ba 233.527†	215588.6	212348.1	1582.3	ug/L	1582.3	ppb	03:13:47
2	Be 313.107†	2042.0	7124.2	10.098	ug/L	10.098	ppb	03:13:47
2	Cd 226.502†	1871.7	2038.6	1.9496	ug/L	1.9496	ppb	03:14:07
2	Co 228.616†	4371.9	4371.4	72.685	ug/L	72.685	ppb	03:14:07
2	Cr 267.716†	10916.5	10673.3	116.63	ug/L	116.63	ppb	03:14:07
2	Cu 324.752†	31379.0	24149.4	79.136	ug/L	79.136	ppb	03:13:47
2	Mn 257.610†	6631384.2	6531026.0	6986.2	ug/L	6986.2	ppb	03:13:41
2	Mo 202.031†	-93.4	-110.3	6.9341	ug/L	6.9341	ppb	03:14:07
2	Ni 231.604†	3557.8	3417.7	79.088	ug/L	79.088	ppb	03:14:07

2	P 214.914†	5186.3	4884.6	2672.5 ug/L	2672.5 ppb	03:14:07
2	Pb 220.353†	2050.7	2088.2	236.67 ug/L	236.67 ppb	03:14:07
2	S 181.975 Axial†	857.9	803.4	1111.0 ug/L	1111.0 ppb	03:14:07
2	Sb 206.836†	82.2	46.7	3.5383 ug/L	3.5383 ppb	03:14:07
2	Se 196.026†	-811.8	-770.7	187.24 ug/L	187.24 ppb	03:14:07
2	Si 251.611†	1055879.1	1039517.2	31113 ug/L	31113 ppb	03:13:41
2	Sn 189.927†	-147.4	-150.2	-19.458 ug/L	-19.458 ppb	03:14:07
2	Ti 334.940†	2426817.1	2391359.6	3817.4 ug/L	3817.4 ppb	03:13:41
2	Tl 190.801†	-251.7	-215.4	10.128 ug/L	10.128 ppb	03:14:07
2	U 409.014†	-8284.8	-5758.1	-183.57 ug/L	-183.57 ppb	03:13:47
2	V 292.402†	87888.1	87921.9	546.55 ug/L	546.55 ppb	03:13:47
2	Zn 213.857†	35262.1	34108.8	278.04 ug/L	278.04 ppb	03:13:47
2	SiO2†	1048279.7	1032014.5	66189 ug/L	66189 ppb	03:14:51
3	Sc Radial	5802.8	5802.8	99.3 %		03:13:02
3	Y RADIAL	7113.3	7113.3	113.1 %		03:13:02
3	Al 396.153Radial†	106002.0	106774.0	74168 ug/L	74168 ppb	03:12:42
3	Ca 317.933Radial†	15890.1	15987.2	23564 ug/L	23564 ppb	03:12:42
3	Fe 238.204 Radial†	20641.4	20781.0	194550 ug/L	194550 ppb	03:12:42
3	K 766.490 Radial†	98059.5	96403.0	17021 ug/L	17021 ppb	03:12:42
3	Mg 279.077 IEC†	486.1	488.4	17062 ug/L	17062 ppb	03:13:02
3	Na 589.592 Radial†	4587.2	5707.6	1915.4 ug/L	1915.4 ppb	03:12:42
3	Sr 421.552†	44748.2	45092.8	280.61 ug/L	280.61 ppb	03:12:42
3	Sc 361.383	910363.2	910363.2	101.01 %		03:14:13
3	Y 371.029	837871.1	837871.1	111.55 %		03:14:19
3	Ag 328.068†	-13273.5	-13433.5	3.1609 ug/L	3.1609 ppb	03:14:19
3	As 188.979†	-61.4	-36.6	47.638 ug/L	47.638 ppb	03:14:39
3	B 249.677†	2156.0	2665.1	29.869 ug/L	29.869 ppb	03:14:19
3	Ba 233.527†	216427.4	214272.7	1596.5 ug/L	1596.5 ppb	03:14:19
3	Be 313.107†	1919.0	7012.8	10.056 ug/L	10.056 ppb	03:14:19
3	Cd 226.502†	1888.0	2064.2	2.4221 ug/L	2.4221 ppb	03:14:39
3	Co 228.616†	4387.6	4409.2	73.439 ug/L	73.439 ppb	03:14:39
3	Cr 267.716†	10868.2	10681.0	116.68 ug/L	116.68 ppb	03:14:39
3	Cu 324.752†	31586.6	24514.2	80.077 ug/L	80.077 ppb	03:14:19
3	Mn 257.610†	6595583.0	6529238.5	6984.1 ug/L	6984.1 ppb	03:14:13
3	Mo 202.031†	-85.4	-102.9	7.2645 ug/L	7.2645 ppb	03:14:39
3	Ni 231.604†	3494.0	3372.6	78.043 ug/L	78.043 ppb	03:14:39
3	P 214.914†	5163.8	4888.7	2676.0 ug/L	2676.0 ppb	03:14:39
3	Pb 220.353†	2012.4	2060.7	233.56 ug/L	233.56 ppb	03:14:39
3	S 181.975 Axial†	855.9	805.7	1114.5 ug/L	1114.5 ppb	03:14:39
3	Sb 206.836†	60.1	25.2	-3.2957 ug/L	-3.2957 ppb	03:14:39
3	Se 196.026†	-826.6	-789.5	169.88 ug/L	169.88 ppb	03:14:39
3	Si 251.611†	1048257.3	1037330.4	31048 ug/L	31048 ppb	03:14:13
3	Sn 189.927†	-159.5	-162.9	-21.589 ug/L	-21.589 ppb	03:14:39
3	Ti 334.940†	2414020.2	2391007.2	3816.8 ug/L	3816.8 ppb	03:14:13
3	Tl 190.801†	-253.8	-218.7	9.1476 ug/L	9.1476 ppb	03:14:39
3	U 409.014†	-8289.8	-5805.2	-184.61 ug/L	-184.61 ppb	03:14:19
3	V 292.402†	88199.5	88676.3	551.84 ug/L	551.84 ppb	03:14:19
3	Zn 213.857†	35352.2	34377.0	280.58 ug/L	280.58 ppb	03:14:19
3	SiO2†	1047507.5	1036570.3	66481 ug/L	66481 ppb	03:14:57

Mean Data: 241541015|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912796.3	101.28	%	0.261				0.26%
Sc Radial	5797.4	99.2	%	0.38				0.38%
Y 371.029	833724.4	111.00	%	0.487				0.44%
Y RADIAL	7095.6	112.8	%	0.44				0.39%
Ag 328.068†	-13328.6	3.7034	ug/L	0.56346	3.7034	ppb	0.56346	15.21%
Al 396.153Radial†	106801.1	74187	ug/L	705.4	74187	ppb	705.4	0.95%
As 188.979†	-42.6	45.280	ug/L	2.5011	45.280	ppb	2.5011	5.52%
B 249.677†	2751.7	31.650	ug/L	1.5492	31.650	ppb	1.5492	4.89%
Ba 233.527†	212653.1	1584.5	ug/L	11.07	1584.5	ppb	11.07	0.70%
Be 313.107†	7025.3	10.056	ug/L	0.0413	10.056	ppb	0.0413	0.41%
Ca 317.933Radial†	15983.4	23559	ug/L	189.4	23559	ppb	189.4	0.80%
Cd 226.502†	2052.2	2.2684	ug/L	0.27608	2.2684	ppb	0.27608	12.17%
Co 228.616†	4404.5	73.345	ug/L	0.6192	73.345	ppb	0.6192	0.84%
Cr 267.716†	10706.0	116.94	ug/L	0.497	116.94	ppb	0.497	0.43%
Cu 324.752†	24204.9	79.205	ug/L	0.8393	79.205	ppb	0.8393	1.06%
Fe 238.204 Radial†	20809.1	194810	ug/L	1638.1	194810	ppb	1638.1	0.84%
K 766.490 Radial†	96370.7	17016	ug/L	160.0	17016	ppb	160.0	0.94%

Mg 279.077 IEC†	489.4	17098	ug/L	108.4	17098	ppb	108.4	0.63%
Mn 257.610†	6523441.1	6977.9	ug/L	12.53	6977.9	ppb	12.53	0.18%
Mo 202.031†	-107.3	7.0041	ug/L	0.23334	7.0041	ppb	0.23334	3.33%
Na 589.592 Radial†	5762.0	1933.6	ug/L	30.00	1933.6	ppb	30.00	1.55%
Ni 231.604†	3396.2	78.590	ug/L	0.5239	78.590	ppb	0.5239	0.67%
P 214.914†	4900.6	2682.8	ug/L	14.94	2682.8	ppb	14.94	0.56%
Pb 220.353†	2075.6	235.22	ug/L	1.567	235.22	ppb	1.567	0.67%
S 181.975 Axial†	809.4	1119.6	ug/L	11.95	1119.6	ppb	11.95	1.07%
Sb 206.836†	29.3	-1.9950	ug/L	5.01126	-1.9950	ppb	5.01126	251.19%
Se 196.026†	-783.9	173.97	ug/L	11.766	173.97	ppb	11.766	6.76%
Si 251.611†	1037442.7	31051	ug/L	60.4	31051	ppb	60.4	0.19%
Sn 189.927†	-157.6	-20.716	ug/L	1.1167	-20.716	ppb	1.1167	5.39%
Sr 421.552†	45109.3	280.71	ug/L	3.038	280.71	ppb	3.038	1.08%
Ti 334.940†	2389634.0	3814.7	ug/L	4.30	3814.7	ppb	4.30	0.11%
Tl 190.801†	-218.0	9.3007	ug/L	0.76276	9.3007	ppb	0.76276	8.20%
U 409.014†	-5782.3	-184.01	ug/L	0.536	-184.01	ppb	0.536	0.29%
V 292.402†	88056.5	547.71	ug/L	3.694	547.71	ppb	3.694	0.67%
Zn 213.857†	34100.8	278.14	ug/L	2.391	278.14	ppb	2.391	0.86%
SiO2†	1036113.9	66452	ug/L	249.7	66452	ppb	249.7	0.38%

Sequence No.: 107
Sample ID: 241541016|925478|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 12/9/2009 03:17:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241541016|925478|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5823.3	5823.3	99.6	%			03:19:02
1	Y RADIAL	7023.9	7023.9	111.7	%			03:19:02
1	Al 396.153Radial†	90801.1	91143.6	63310	ug/L	63310	ppb	03:19:02
1	Ca 317.933Radial†	12839.0	12869.0	18968	ug/L	18968	ppb	03:19:02
1	Fe 238.204 Radial†	10568.0	10598.7	99225	ug/L	99225	ppb	03:19:02
1	K 766.490 Radial†	75997.3	73915.2	13066	ug/L	13066	ppb	03:19:02
1	Mg 279.077 IEC†	377.8	378.0	13249	ug/L	13249	ppb	03:19:22
1	Na 589.592 Radial†	5263.9	6370.5	2137.8	ug/L	2137.8	ppb	03:19:02
1	Sr 421.552†	34199.0	34347.7	213.73	ug/L	213.73	ppb	03:19:02
1	Sc 361.383	904514.0	904514.0	100.36	%			03:20:20
1	Y 371.029	830345.3	830345.3	110.55	%			03:20:20
1	Ag 328.068†	-6162.4	-6433.0	3.2127	ug/L	3.2127	ppb	03:20:25
1	As 188.979†	-62.0	-37.6	27.232	ug/L	27.232	ppb	03:20:45
1	B 249.677†	1369.7	1895.5	26.440	ug/L	26.440	ppb	03:20:25
1	Ba 233.527†	147167.8	146647.5	1091.1	ug/L	1091.1	ppb	03:20:25
1	Be 313.107†	-5571.9	-438.9	6.1021	ug/L	6.1021	ppb	03:20:25
1	Cd 226.502†	881.7	1073.6	1.4707	ug/L	1.4707	ppb	03:20:45
1	Co 228.616†	3009.2	3063.8	50.401	ug/L	50.401	ppb	03:20:45
1	Cr 267.716†	9621.4	9508.2	102.05	ug/L	102.05	ppb	03:20:25
1	Cu 324.752†	29838.4	22974.5	70.808	ug/L	70.808	ppb	03:20:25
1	Mn 257.610†	3760440.4	3746507.4	4006.2	ug/L	4006.2	ppb	03:20:20
1	Mo 202.031†	11.8	-6.6	6.6181	ug/L	6.6181	ppb	03:20:45
1	Ni 231.604†	2867.5	2770.6	64.121	ug/L	64.121	ppb	03:20:45
1	P 214.914†	2927.9	2693.9	1484.2	ug/L	1484.2	ppb	03:20:45
1	Pb 220.353†	1135.8	1200.2	141.69	ug/L	141.69	ppb	03:20:45
1	S 181.975 Axial†	736.5	692.3	957.58	ug/L	957.58	ppb	03:20:45
1	Sb 206.836†	56.6	22.1	-4.0949	ug/L	-4.0949	ppb	03:20:45
1	Se 196.026†	-411.3	-381.0	103.78	ug/L	103.78	ppb	03:20:45
1	Si 251.611†	992725.6	988709.2	29593	ug/L	29593	ppb	03:20:20
1	Sn 189.927†	-127.9	-132.5	-18.359	ug/L	-18.359	ppb	03:20:45
1	Ti 334.940†	2002502.4	1996422.7	3186.9	ug/L	3186.9	ppb	03:20:20
1	Tl 190.801†	-201.5	-168.3	1.6352	ug/L	1.6352	ppb	03:20:45
1	U 409.014†	-7186.8	-4759.1	-143.78	ug/L	-143.78	ppb	03:20:25
1	V 292.402†	34944.0	36176.8	220.34	ug/L	220.34	ppb	03:20:25
1	Zn 213.857†	33470.2	32728.1	275.51	ug/L	275.51	ppb	03:20:25
1	SiO2†	1003670.4	999596.9	64112	ug/L	64112	ppb	03:21:56
2	Sc Radial	5982.3	5982.3	102	%			03:19:27
2	Y RADIAL	7228.4	7228.4	115.0	%			03:19:27
2	Al 396.153Radial†	90821.1	88740.3	61641	ug/L	61641	ppb	03:19:27
2	Ca 317.933Radial†	12794.8	12483.2	18400	ug/L	18400	ppb	03:19:27
2	Fe 238.204 Radial†	10552.6	10301.7	96444	ug/L	96444	ppb	03:19:27
2	K 766.490 Radial†	76024.6	71914.0	12711	ug/L	12711	ppb	03:19:27
2	Mg 279.077 IEC†	377.1	367.2	12871	ug/L	12871	ppb	03:19:47
2	Na 589.592 Radial†	5210.9	6178.3	2073.3	ug/L	2073.3	ppb	03:19:27
2	Sr 421.552†	34219.6	33455.2	208.18	ug/L	208.18	ppb	03:19:27
2	Sc 361.383	909098.4	909098.4	100.87	%			03:20:52
2	Y 371.029	834862.2	834862.2	111.15	%			03:20:52
2	Ag 328.068†	-6304.4	-6542.8	1.8382	ug/L	1.8382	ppb	03:20:57
2	As 188.979†	-63.5	-38.8	26.313	ug/L	26.313	ppb	03:21:17
2	B 249.677†	1374.4	1893.2	26.763	ug/L	26.763	ppb	03:20:57
2	Ba 233.527†	148359.4	147089.3	1094.2	ug/L	1094.2	ppb	03:20:57
2	Be 313.107†	-5623.3	-461.9	6.0889	ug/L	6.0889	ppb	03:20:57
2	Cd 226.502†	872.4	1059.9	1.6039	ug/L	1.6039	ppb	03:21:17
2	Co 228.616†	2981.5	3021.2	49.640	ug/L	49.640	ppb	03:21:17
2	Cr 267.716†	9625.5	9463.9	101.53	ug/L	101.53	ppb	03:20:57
2	Cu 324.752†	30107.3	23091.2	71.000	ug/L	71.000	ppb	03:20:57
2	Mn 257.610†	3772684.0	3739750.3	3998.7	ug/L	3998.7	ppb	03:20:52
2	Mo 202.031†	15.3	-3.1	6.6421	ug/L	6.6421	ppb	03:21:17
2	Ni 231.604†	2852.2	2741.1	63.437	ug/L	63.437	ppb	03:21:17

2	P 214.914†	2914.0	2665.4	1469.4	ug/L	1469.4 ppb	03:21:17
2	Pb 220.353†	1136.1	1194.8	140.93	ug/L	140.93 ppb	03:21:17
2	S 181.975 Axial†	727.1	679.3	939.73	ug/L	939.73 ppb	03:21:17
2	Sb 206.836†	56.0	21.3	-4.3082	ug/L	-4.3082 ppb	03:21:17
2	Se 196.026†	-426.2	-393.7	87.407	ug/L	87.407 ppb	03:21:17
2	Si 251.611†	996585.2	987547.3	29559	ug/L	29559 ppb	03:20:52
2	Sn 189.927†	-115.3	-119.3	-16.300	ug/L	-16.300 ppb	03:21:17
2	Ti 334.940†	2011110.4	1994894.3	3184.4	ug/L	3184.4 ppb	03:20:52
2	Tl 190.801†	-196.9	-162.7	3.0903	ug/L	3.0903 ppb	03:21:17
2	U 409.014†	-7076.9	-4614.1	-139.43	ug/L	-139.43 ppb	03:20:57
2	V 292.402†	35221.2	36276.0	221.43	ug/L	221.43 ppb	03:20:57
2	Zn 213.857†	33738.4	32825.8	276.64	ug/L	276.64 ppb	03:20:57
2	SiO2†	989433.4	980439.4	62884	ug/L	62884 ppb	03:22:01
3	Sc Radial	5944.9	5944.9	102	%		03:19:52
3	Y RADIAL	7189.6	7189.6	114.3	%		03:19:52
3	Al 396.153Radial†	89908.6	88402.0	61406	ug/L	61406 ppb	03:19:52
3	Ca 317.933Radial†	12682.6	12451.7	18353	ug/L	18353 ppb	03:19:52
3	Fe 238.204 Radial†	10450.6	10266.3	96113	ug/L	96113 ppb	03:19:52
3	K 766.490 Radial†	75405.9	71773.4	12687	ug/L	12687 ppb	03:19:52
3	Mg 279.077 IEC†	379.6	372.0	13041	ug/L	13041 ppb	03:20:12
3	Na 589.592 Radial†	5091.4	6092.9	2044.7	ug/L	2044.7 ppb	03:19:52
3	Sr 421.552†	33746.0	33200.2	206.59	ug/L	206.59 ppb	03:19:52
3	Sc 361.383	910142.0	910142.0	100.99	%		03:21:24
3	Y 371.029	836158.5	836158.5	111.33	%		03:21:24
3	Ag 328.068†	-6131.2	-6364.2	2.5365	ug/L	2.5365 ppb	03:21:29
3	As 188.979†	-55.1	-30.4	29.576	ug/L	29.576 ppb	03:21:49
3	B 249.677†	1385.3	1902.4	27.001	ug/L	27.001 ppb	03:21:29
3	Ba 233.527†	146785.2	145361.8	1081.4	ug/L	1081.4 ppb	03:21:29
3	Be 313.107†	-5759.3	-590.1	6.0391	ug/L	6.0391 ppb	03:21:29
3	Cd 226.502†	881.7	1068.2	1.7250	ug/L	1.7250 ppb	03:21:49
3	Co 228.616†	2976.5	3012.9	49.483	ug/L	49.483 ppb	03:21:49
3	Cr 267.716†	9475.7	9304.6	99.853	ug/L	99.853 ppb	03:21:29
3	Cu 324.752†	29752.4	22705.5	69.879	ug/L	69.879 ppb	03:21:29
3	Mn 257.610†	3772777.0	3735553.8	3994.2	ug/L	3994.2 ppb	03:21:24
3	Mo 202.031†	6.3	-12.1	6.0519	ug/L	6.0519 ppb	03:21:49
3	Ni 231.604†	2862.3	2747.8	63.593	ug/L	63.593 ppb	03:21:49
3	P 214.914†	2899.8	2648.0	1459.8	ug/L	1459.8 ppb	03:21:49
3	Pb 220.353†	1137.3	1194.6	140.89	ug/L	140.89 ppb	03:21:49
3	S 181.975 Axial†	721.7	673.1	931.12	ug/L	931.12 ppb	03:21:49
3	Sb 206.836†	66.3	31.4	-1.0383	ug/L	-1.0383 ppb	03:21:49
3	Se 196.026†	-424.2	-391.3	87.722	ug/L	87.722 ppb	03:21:49
3	Si 251.611†	996877.9	986704.4	29534	ug/L	29534 ppb	03:21:24
3	Sn 189.927†	-109.6	-113.6	-15.368	ug/L	-15.368 ppb	03:21:49
3	Ti 334.940†	2012435.2	1993920.2	3182.9	ug/L	3182.9 ppb	03:21:24
3	Tl 190.801†	-190.7	-156.3	4.8485	ug/L	4.8485 ppb	03:21:49
3	U 409.014†	-7152.2	-4680.6	-141.22	ug/L	-141.22 ppb	03:21:29
3	V 292.402†	34966.8	35984.1	219.54	ug/L	219.54 ppb	03:21:29
3	Zn 213.857†	33300.9	32354.2	272.55	ug/L	272.55 ppb	03:21:29
3	SiO2†	999039.7	988827.3	63422	ug/L	63422 ppb	03:22:07

Mean Data: 241541016|925478|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907918.1	100.74	%	0.332				0.33%
Sc Radial	5916.8	101	%	1.4				1.41%
Y 371.029	833788.7	111.01	%	0.406				0.37%
Y RADIAL	7147.3	113.7	%	1.73				1.52%
Ag 328.068†	-6446.6	2.5291	ug/L	0.68728	2.5291	ppb	0.68728	27.17%
Al 396.153Radial†	89428.6	62119	ug/L	1038.3	62119	ppb	1038.3	1.67%
As 188.979†	-35.6	27.707	ug/L	1.6824	27.707	ppb	1.6824	6.07%
B 249.677†	1897.0	26.734	ug/L	0.2816	26.734	ppb	0.2816	1.05%
Ba 233.527†	146366.2	1088.9	ug/L	6.68	1088.9	ppb	6.68	0.61%
Be 313.107†	-497.0	6.0767	ug/L	0.03321	6.0767	ppb	0.03321	0.55%
Ca 317.933Radial†	12601.3	18574	ug/L	342.5	18574	ppb	342.5	1.84%
Cd 226.502†	1067.3	1.5999	ug/L	0.12718	1.5999	ppb	0.12718	7.95%
Co 228.616†	3032.6	49.841	ug/L	0.4910	49.841	ppb	0.4910	0.99%
Cr 267.716†	9425.6	101.14	ug/L	1.148	101.14	ppb	1.148	1.14%
Cu 324.752†	22923.7	70.562	ug/L	0.5993	70.562	ppb	0.5993	0.85%
Fe 238.204 Radial†	10388.9	97261	ug/L	1709.0	97261	ppb	1709.0	1.76%
K 766.490 Radial†	72534.2	12821	ug/L	212.5	12821	ppb	212.5	1.66%

Mg 279.077 IEC†	372.4	13054	ug/L	189.4	13054	ppb	189.4	1.45%
Mn 257.610†	3740603.8	3999.7	ug/L	6.06	3999.7	ppb	6.06	0.15%
Mo 202.031†	-7.3	6.4374	ug/L	0.33403	6.4374	ppb	0.33403	5.19%
Na 589.592 Radial†	6213.9	2085.3	ug/L	47.72	2085.3	ppb	47.72	2.29%
Ni 231.604†	2753.2	63.717	ug/L	0.3585	63.717	ppb	0.3585	0.56%
P 214.914†	2669.1	1471.1	ug/L	12.29	1471.1	ppb	12.29	0.84%
Pb 220.353†	1196.5	141.17	ug/L	0.448	141.17	ppb	0.448	0.32%
S 181.975 Axial†	681.5	942.81	ug/L	13.496	942.81	ppb	13.496	1.43%
Sb 206.836†	24.9	-3.1471	ug/L	1.82941	-3.1471	ppb	1.82941	58.13%
Se 196.026†	-388.7	92.970	ug/L	9.3638	92.970	ppb	9.3638	10.07%
Si 251.611†	987653.6	29562	ug/L	30.1	29562	ppb	30.1	0.10%
Sn 189.927†	-121.8	-16.675	ug/L	1.5304	-16.675	ppb	1.5304	9.18%
Sr 421.552†	33667.7	209.50	ug/L	3.749	209.50	ppb	3.749	1.79%
Ti 334.940†	1995079.1	3184.7	ug/L	2.03	3184.7	ppb	2.03	0.06%
Tl 190.801†	-162.5	3.1913	ug/L	1.60902	3.1913	ppb	1.60902	50.42%
U 409.014†	-4684.6	-141.48	ug/L	2.184	-141.48	ppb	2.184	1.54%
V 292.402†	36145.6	220.44	ug/L	0.945	220.44	ppb	0.945	0.43%
Zn 213.857†	32636.1	274.90	ug/L	2.113	274.90	ppb	2.113	0.77%
SiO2†	989621.2	63472	ug/L	615.9	63472	ppb	615.9	0.97%

Sequence No.: 108
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 03:24:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5733.5	5733.5	98.1	%			03:26:12
1	Y RADIAL	6093.1	6093.1	96.90	%			03:26:12
1	Al 396.153Radial†	6755.1	6905.6	4775.7	ug/L	4775.7	ppb	03:26:12
1	Ca 317.933Radial†	3323.7	3372.1	4970.2	ug/L	4970.2	ppb	03:26:32
1	Fe 238.204 Radial†	547.1	550.9	5172.8	ug/L	5172.8	ppb	03:26:32
1	K 766.490 Radial†	30792.9	29034.0	5139.9	ug/L	5139.9	ppb	03:26:12
1	Mg 279.077 IEC†	145.3	146.9	5189.5	ug/L	5189.5	ppb	03:26:32
1	Na 589.592 Radial†	29302.1	30954.2	10388	ug/L	10388	ppb	03:26:12
1	Sr 421.552†	81573.9	83171.8	517.93	ug/L	517.93	ppb	03:26:12
1	Sc 361.383	899362.5	899362.5	99.789	%			03:27:29
1	Y 371.029	731599.3	731599.3	97.406	%			03:27:29
1	Ag 328.068†	111056.9	110999.0	505.80	ug/L	505.80	ppb	03:27:34
1	As 188.979†	1181.9	1208.6	482.01	ug/L	482.01	ppb	03:27:54
1	B 249.677†	22186.0	22763.5	475.43	ug/L	475.43	ppb	03:27:34
1	Ba 233.527†	65968.9	66116.8	491.29	ug/L	491.29	ppb	03:27:34
1	Be 313.107†	1314073.6	1321965.2	482.85	ug/L	482.85	ppb	03:27:29
1	Cd 226.502†	46359.2	46652.3	492.98	ug/L	492.98	ppb	03:27:34
1	Co 228.616†	26036.6	26157.1	496.56	ug/L	496.56	ppb	03:27:34
1	Cr 267.716†	46194.4	46213.4	485.90	ug/L	485.90	ppb	03:27:34
1	Cu 324.752†	176306.6	169922.7	486.53	ug/L	486.53	ppb	03:27:34
1	Mn 257.610†	466000.2	466563.3	498.12	ug/L	498.12	ppb	03:27:29
1	Mo 202.031†	7767.1	7765.2	493.66	ug/L	493.66	ppb	03:27:54
1	Ni 231.604†	21202.5	21160.8	489.69	ug/L	489.69	ppb	03:27:34
1	P 214.914†	4473.9	4259.8	2383.0	ug/L	2383.0	ppb	03:27:54
1	Pb 220.353†	4230.3	4307.7	488.45	ug/L	488.45	ppb	03:27:54
1	S 181.975 Axial†	744.8	704.8	986.71	ug/L	986.71	ppb	03:27:54
1	Sb 206.836†	1606.8	1575.9	505.99	ug/L	505.99	ppb	03:27:54
1	Se 196.026†	832.0	862.5	517.39	ug/L	517.39	ppb	03:27:54
1	Si 251.611†	83545.0	83272.0	2481.0	ug/L	2481.0	ppb	03:27:34
1	Sn 189.927†	3007.8	3009.2	493.29	ug/L	493.29	ppb	03:27:54
1	Ti 334.940†	314922.6	316703.4	505.26	ug/L	505.26	ppb	03:27:34
1	Tl 190.801†	1687.3	1723.4	485.96	ug/L	485.96	ppb	03:27:54
1	U 409.014†	16047.2	18482.9	507.57	ug/L	507.57	ppb	03:27:34
1	V 292.402†	71892.3	73402.7	491.44	ug/L	491.44	ppb	03:27:34
1	Zn 213.857†	56511.7	56009.4	484.94	ug/L	484.94	ppb	03:27:34
1	SiO2†	84559.7	84271.0	5380.0	ug/L	5380.0	ppb	03:29:02
2	Sc Radial	5806.6	5806.6	99.4	%			03:26:37
2	Y RADIAL	6163.8	6163.8	98.03	%			03:26:37
2	Al 396.153Radial†	6791.9	6856.1	4741.0	ug/L	4741.0	ppb	03:26:37
2	Ca 317.933Radial†	3325.8	3331.7	4910.7	ug/L	4910.7	ppb	03:26:57
2	Fe 238.204 Radial†	549.0	545.8	5125.0	ug/L	5125.0	ppb	03:26:57
2	K 766.490 Radial†	31002.7	28850.5	5107.4	ug/L	5107.4	ppb	03:26:37
2	Mg 279.077 IEC†	137.7	137.4	4853.6	ug/L	4853.6	ppb	03:26:57
2	Na 589.592 Radial†	29452.2	30729.6	10312	ug/L	10312	ppb	03:26:37
2	Sr 421.552†	82168.5	82724.6	515.14	ug/L	515.14	ppb	03:26:37
2	Sc 361.383	894850.3	894850.3	99.288	%			03:28:00
2	Y 371.029	727243.3	727243.3	96.826	%			03:28:00
2	Ag 328.068†	111374.8	111880.3	509.79	ug/L	509.79	ppb	03:28:05
2	As 188.979†	1189.0	1221.7	487.20	ug/L	487.20	ppb	03:28:25
2	B 249.677†	22161.2	22850.7	477.26	ug/L	477.26	ppb	03:28:05
2	Ba 233.527†	66147.6	66630.2	495.10	ug/L	495.10	ppb	03:28:05
2	Be 313.107†	1300816.1	1315252.8	480.41	ug/L	480.41	ppb	03:28:00
2	Cd 226.502†	46365.8	46893.2	495.53	ug/L	495.53	ppb	03:28:05
2	Co 228.616†	26080.5	26332.9	499.91	ug/L	499.91	ppb	03:28:05
2	Cr 267.716†	46296.7	46549.9	489.44	ug/L	489.44	ppb	03:28:05
2	Cu 324.752†	176483.6	170991.9	489.59	ug/L	489.59	ppb	03:28:05
2	Mn 257.610†	463640.0	466540.9	498.10	ug/L	498.10	ppb	03:28:00
2	Mo 202.031†	7836.8	7874.7	500.61	ug/L	500.61	ppb	03:28:25
2	Ni 231.604†	21234.5	21300.2	492.92	ug/L	492.92	ppb	03:28:05

2	P 214.914†	4474.3	4282.9	2395.9	ug/L	2395.9 ppb	03:28:25
2	Pb 220.353†	4236.1	4334.9	491.53	ug/L	491.53 ppb	03:28:25
2	S 181.975 Axial†	742.1	705.8	988.06	ug/L	988.06 ppb	03:28:25
2	Sb 206.836†	1619.9	1597.3	512.90	ug/L	512.90 ppb	03:28:25
2	Se 196.026†	831.7	866.5	519.54	ug/L	519.54 ppb	03:28:25
2	Si 251.611†	83743.0	83893.6	2499.4	ug/L	2499.4 ppb	03:28:05
2	Sn 189.927†	3025.2	3041.9	498.64	ug/L	498.64 ppb	03:28:25
2	Ti 334.940†	315413.6	318789.3	508.59	ug/L	508.59 ppb	03:28:05
2	Tl 190.801†	1710.8	1755.6	494.96	ug/L	494.96 ppb	03:28:25
2	U 409.014†	15975.2	18491.5	507.80	ug/L	507.80 ppb	03:28:05
2	V 292.402†	72024.0	73898.6	494.81	ug/L	494.81 ppb	03:28:05
2	Zn 213.857†	56635.5	56419.6	488.52	ug/L	488.52 ppb	03:28:05
2	SiO2†	83421.2	83551.7	5333.6	ug/L	5333.6 ppb	03:29:07
3	Sc Radial	5777.6	5777.6	98.9	%		03:27:02
3	Y RADIAL	6115.3	6115.3	97.26	%		03:27:02
3	Al 396.153Radial†	6761.1	6859.1	4743.5	ug/L	4743.5 ppb	03:27:02
3	Ca 317.933Radial†	3341.9	3364.7	4959.4	ug/L	4959.4 ppb	03:27:22
3	Fe 238.204 Radial†	550.4	549.9	5163.8	ug/L	5163.8 ppb	03:27:22
3	K 766.490 Radial†	30988.2	28992.1	5132.5	ug/L	5132.5 ppb	03:27:02
3	Mg 279.077 IEC†	143.2	143.6	5073.2	ug/L	5073.2 ppb	03:27:22
3	Na 589.592 Radial†	29241.9	30665.5	10291	ug/L	10291 ppb	03:27:02
3	Sr 421.552†	81705.7	82670.8	514.81	ug/L	514.81 ppb	03:27:02
3	Sc 361.383	907246.0	907246.0	100.66	%		03:28:31
3	Y 371.029	738937.6	738937.6	98.383	%		03:28:31
3	Ag 328.068†	111681.9	110652.8	504.23	ug/L	504.23 ppb	03:28:36
3	As 188.979†	1192.0	1208.4	481.91	ug/L	481.91 ppb	03:28:56
3	B 249.677†	22432.1	22814.9	476.51	ug/L	476.51 ppb	03:28:36
3	Ba 233.527†	66436.8	66007.2	490.47	ug/L	490.47 ppb	03:28:36
3	Be 313.107†	1322373.3	1318767.3	481.68	ug/L	481.68 ppb	03:28:31
3	Cd 226.502†	46594.6	46482.5	491.18	ug/L	491.18 ppb	03:28:36
3	Co 228.616†	26224.7	26117.2	495.80	ug/L	495.80 ppb	03:28:36
3	Cr 267.716†	46492.2	46107.0	484.78	ug/L	484.78 ppb	03:28:36
3	Cu 324.752†	177897.8	169968.2	486.66	ug/L	486.66 ppb	03:28:36
3	Mn 257.610†	468528.4	465016.9	496.47	ug/L	496.47 ppb	03:28:31
3	Mo 202.031†	7807.0	7737.2	491.88	ug/L	491.88 ppb	03:28:56
3	Ni 231.604†	21372.7	21145.2	489.33	ug/L	489.33 ppb	03:28:36
3	P 214.914†	4473.2	4220.2	2360.1	ug/L	2360.1 ppb	03:28:56
3	Pb 220.353†	4227.4	4268.0	483.95	ug/L	483.95 ppb	03:28:56
3	S 181.975 Axial†	740.9	694.5	972.18	ug/L	972.18 ppb	03:28:56
3	Sb 206.836†	1623.8	1578.9	506.91	ug/L	506.91 ppb	03:28:56
3	Se 196.026†	831.9	855.2	513.09	ug/L	513.09 ppb	03:28:56
3	Si 251.611†	83979.0	82975.6	2472.1	ug/L	2472.1 ppb	03:28:36
3	Sn 189.927†	3032.7	3007.7	493.04	ug/L	493.04 ppb	03:28:56
3	Ti 334.940†	317337.6	316360.2	504.72	ug/L	504.72 ppb	03:28:36
3	Tl 190.801†	1709.8	1731.0	488.07	ug/L	488.07 ppb	03:28:56
3	U 409.014†	16031.0	18327.1	503.28	ug/L	503.28 ppb	03:28:36
3	V 292.402†	72443.7	73324.4	490.89	ug/L	490.89 ppb	03:28:36
3	Zn 213.857†	56958.2	55960.8	484.52	ug/L	484.52 ppb	03:28:36
3	SiO2†	83149.1	82133.4	5242.9	ug/L	5242.9 ppb	03:29:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900486.3	99.914	%	0.6961				0.70%
Sc Radial	5772.6	98.8	%	0.63				0.64%
Y 371.029	732593.4	97.538	%	0.7869				0.81%
Y RADIAL	6124.1	97.40	%	0.574				0.59%
Ag 328.068†	111177.4	506.60	ug/L	2.866	506.60	ppb	2.866	0.57%
QC value within limits for Ag 328.068 Recovery = 101.32%								
Al 396.153Radial†	6873.6	4753.4	ug/L	19.36	4753.4	ppb	19.36	0.41%
QC value within limits for Al 396.153Radial Recovery = 95.07%								
As 188.979†	1212.9	483.71	ug/L	3.027	483.71	ppb	3.027	0.63%
QC value within limits for As 188.979 Recovery = 96.74%								
B 249.677†	22809.7	476.40	ug/L	0.918	476.40	ppb	0.918	0.19%
QC value within limits for B 249.677 Recovery = 95.28%								
Ba 233.527†	66251.4	492.29	ug/L	2.468	492.29	ppb	2.468	0.50%
QC value within limits for Ba 233.527 Recovery = 98.46%								
Be 313.107†	1318661.8	481.65	ug/L	1.220	481.65	ppb	1.220	0.25%
QC value within limits for Be 313.107 Recovery = 96.33%								
Ca 317.933Radial†	3356.1	4946.8	ug/L	31.72	4946.8	ppb	31.72	0.64%

```
   QC value within limits for Ca 317.933Radial  Recovery = 98.94%
Cd 226.502†            46676.0      493.23 ug/L        2.185      493.23 ppb        2.185   0.44%
   QC value within limits for Cd 226.502  Recovery = 98.65%
Co 228.616†            26202.4      497.42 ug/L        2.186      497.42 ppb        2.186   0.44%
   QC value within limits for Co 228.616  Recovery = 99.48%
Cr 267.716†            46290.1      486.71 ug/L        2.429      486.71 ppb        2.429   0.50%
   QC value within limits for Cr 267.716  Recovery = 97.34%
Cu 324.752†           170294.3      487.60 ug/L        1.729      487.60 ppb        1.729   0.35%
   QC value within limits for Cu 324.752  Recovery = 97.52%
Fe 238.204 Radial†       548.8      5153.9 ug/L       25.40      5153.9 ppb        25.40   0.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.08%
K 766.490 Radial†      28958.9      5126.6 ug/L       17.02      5126.6 ppb        17.02   0.33%
   QC value within limits for K 766.490 Radial  Recovery = 102.53%
Mg 279.077 IEC†          142.7      5038.7 ug/L      170.57      5038.7 ppb       170.57   3.39%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.77%
Mn 257.610†           466040.4      497.56 ug/L        0.945      497.56 ppb        0.945   0.19%
   QC value within limits for Mn 257.610  Recovery = 99.51%
Mo 202.031†             7792.4      495.38 ug/L        4.613      495.38 ppb        4.613   0.93%
   QC value within limits for Mo 202.031  Recovery = 99.08%
Na 589.592 Radial†     30783.1       10330 ug/L         50.9       10330 ppb         50.9   0.49%
   QC value within limits for Na 589.592 Radial  Recovery = 103.30%
Ni 231.604†            21202.0      490.65 ug/L        1.974      490.65 ppb        1.974   0.40%
   QC value within limits for Ni 231.604  Recovery = 98.13%
P 214.914†              4254.3      2379.7 ug/L       18.13      2379.7 ppb        18.13   0.76%
   QC value within limits for P 214.914  Recovery = 95.19%
Pb 220.353†             4303.5      487.98 ug/L        3.816      487.98 ppb        3.816   0.78%
   QC value within limits for Pb 220.353  Recovery = 97.60%
S 181.975 Axial†         701.7      982.32 ug/L        8.805      982.32 ppb        8.805   0.90%
   QC value within limits for S 181.975 Axial  Recovery = 98.23%
Sb 206.836†             1584.0      508.60 ug/L        3.752      508.60 ppb        3.752   0.74%
   QC value within limits for Sb 206.836  Recovery = 101.72%
Se 196.026†              861.4      516.68 ug/L        3.283      516.68 ppb        3.283   0.64%
   QC value within limits for Se 196.026  Recovery = 103.34%
Si 251.611†            83380.4      2484.2 ug/L       13.94      2484.2 ppb        13.94   0.56%
   QC value within limits for Si 251.611  Recovery = 99.37%
Sn 189.927†             3019.6      494.99 ug/L        3.163      494.99 ppb        3.163   0.64%
   QC value within limits for Sn 189.927  Recovery = 99.00%
Sr 421.552†            82855.7      515.96 ug/L        1.713      515.96 ppb        1.713   0.33%
   QC value within limits for Sr 421.552  Recovery = 103.19%
Ti 334.940†           317284.3      506.19 ug/L        2.095      506.19 ppb        2.095   0.41%
   QC value within limits for Ti 334.940  Recovery = 101.24%
Tl 190.801†             1736.6      489.66 ug/L        4.709      489.66 ppb        4.709   0.96%
   QC value within limits for Tl 190.801  Recovery = 97.93%
U 409.014†             18433.8      506.22 ug/L        2.547      506.22 ppb        2.547   0.50%
   QC value within limits for U 409.014  Recovery = 101.24%
V 292.402†             73541.9      492.38 ug/L        2.123      492.38 ppb        2.123   0.43%
   QC value within limits for V 292.402  Recovery = 98.48%
Zn 213.857†            56129.9      485.99 ug/L        2.195      485.99 ppb        2.195   0.45%
   QC value within limits for Zn 213.857  Recovery = 97.20%
SiO2†                  83318.7      5318.8 ug/L       69.70      5318.8 ppb        69.70   1.31%
   QC value within limits for SiO2  Recovery = 99.46%
All analyte(s) passed QC.
```

Sequence No.: 109
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 03:31:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5784.5	5784.5	99.0	%			03:33:14
1	Y RADIAL	6168.9	6168.9	98.11	%			03:33:14
1	Al 396.153Radial†	-19.1	1.2	0.7721	ug/L	0.7721	ppb	03:33:34
1	Ca 317.933Radial†	26.0	10.7	15.810	ug/L	15.810	ppb	03:33:34
1	Fe 238.204 Radial†	8.6	1.9	17.491	ug/L	17.491	ppb	03:33:34
1	K 766.490 Radial†	2341.9	14.2	2.4509	ug/L	2.4509	ppb	03:33:14
1	Mg 279.077 IEC†	1.8	0.6	22.634	ug/L	22.634	ppb	03:33:34
1	Na 589.592 Radial†	-592.5	489.4	164.23	ug/L	164.23	ppb	03:33:14
1	Sr 421.552†	-14.4	12.8	0.0794	ug/L	0.0794	ppb	03:33:14
1	Sc 361.383	902765.2	902765.2	100.17	%			03:34:31
1	Y 371.029	746174.9	746174.9	99.346	%			03:34:31
1	Ag 328.068†	247.6	-45.5	-0.2026	ug/L	-0.2026	ppb	03:34:36
1	As 188.979†	-24.3	-0.1	-0.0184	ug/L	-0.0184	ppb	03:34:56
1	B 249.677†	-404.8	126.5	2.6523	ug/L	2.6523	ppb	03:34:56
1	Ba 233.527†	-23.3	-14.8	-0.1069	ug/L	-0.1069	ppb	03:34:56
1	Be 313.107†	-5577.3	-455.0	-0.1652	ug/L	-0.1652	ppb	03:34:36
1	Cd 226.502†	-172.5	22.9	0.2399	ug/L	0.2399	ppb	03:34:56
1	Co 228.616†	-82.3	-16.8	-0.3180	ug/L	-0.3180	ppb	03:34:56
1	Cr 267.716†	95.3	16.5	0.1727	ug/L	0.1727	ppb	03:34:56
1	Cu 324.752†	6813.9	45.9	0.1322	ug/L	0.1322	ppb	03:34:36
1	Mn 257.610†	495.7	72.6	0.0788	ug/L	0.0788	ppb	03:34:56
1	Mo 202.031†	28.5	10.2	0.6469	ug/L	0.6469	ppb	03:34:56
1	Ni 231.604†	64.4	-22.3	-0.5158	ug/L	-0.5158	ppb	03:34:56
1	P 214.914†	223.2	-0.6	-0.3979	ug/L	-0.3979	ppb	03:34:56
1	Pb 220.353†	-60.3	8.3	0.9352	ug/L	0.9352	ppb	03:34:56
1	S 181.975 Axial†	46.1	4.4	6.1664	ug/L	6.1664	ppb	03:34:56
1	Sb 206.836†	41.0	6.7	2.1390	ug/L	2.1390	ppb	03:34:56
1	Se 196.026†	-25.3	3.6	2.1266	ug/L	2.1266	ppb	03:34:56
1	Si 251.611†	489.3	38.8	1.1473	ug/L	1.1473	ppb	03:34:56
1	Sn 189.927†	9.0	4.0	0.6524	ug/L	0.6524	ppb	03:34:56
1	Ti 334.940†	-913.5	203.0	0.3219	ug/L	0.3219	ppb	03:34:36
1	Tl 190.801†	-30.8	1.7	0.4888	ug/L	0.4888	ppb	03:34:56
1	U 409.014†	-2180.9	224.6	6.1835	ug/L	6.1835	ppb	03:34:31
1	V 292.402†	-1223.0	137.4	0.9260	ug/L	0.9260	ppb	03:34:36
1	Zn 213.857†	674.0	51.0	0.4465	ug/L	0.4465	ppb	03:34:56
1	SiO2†	505.0	36.7	2.3231	ug/L	2.3231	ppb	03:36:02
2	Sc Radial	5781.6	5781.6	98.9	%			03:33:39
2	Y RADIAL	6198.0	6198.0	98.57	%			03:33:39
2	Al 396.153Radial†	-14.5	5.8	3.9968	ug/L	3.9968	ppb	03:33:59
2	Ca 317.933Radial†	28.9	13.7	20.132	ug/L	20.132	ppb	03:33:59
2	Fe 238.204 Radial†	8.2	1.5	14.195	ug/L	14.195	ppb	03:33:59
2	K 766.490 Radial†	2388.8	62.8	11.071	ug/L	11.071	ppb	03:33:39
2	Mg 279.077 IEC†	0.8	-0.3	-11.102	ug/L	-11.102	ppb	03:33:59
2	Na 589.592 Radial†	-653.8	427.1	143.31	ug/L	143.31	ppb	03:33:39
2	Sr 421.552†	1.9	29.3	0.1820	ug/L	0.1820	ppb	03:33:39
2	Sc 361.383	898696.4	898696.4	99.715	%			03:35:01
2	Y 371.029	742373.1	742373.1	98.840	%			03:35:01
2	Ag 328.068†	278.6	-13.3	-0.0612	ug/L	-0.0612	ppb	03:35:06
2	As 188.979†	-22.0	2.1	0.8357	ug/L	0.8357	ppb	03:35:26
2	B 249.677†	-420.0	109.5	2.2948	ug/L	2.2948	ppb	03:35:26
2	Ba 233.527†	-28.5	-20.1	-0.1465	ug/L	-0.1465	ppb	03:35:26
2	Be 313.107†	-5550.8	-453.7	-0.1652	ug/L	-0.1652	ppb	03:35:06
2	Cd 226.502†	-190.3	4.3	0.0433	ug/L	0.0433	ppb	03:35:26
2	Co 228.616†	-80.9	-15.8	-0.2994	ug/L	-0.2994	ppb	03:35:26
2	Cr 267.716†	61.7	-16.8	-0.1774	ug/L	-0.1774	ppb	03:35:26
2	Cu 324.752†	6756.7	19.3	0.0560	ug/L	0.0560	ppb	03:35:06
2	Mn 257.610†	473.8	52.8	0.0580	ug/L	0.0580	ppb	03:35:26
2	Mo 202.031†	18.0	-0.3	-0.0181	ug/L	-0.0181	ppb	03:35:26
2	Ni 231.604†	51.5	-34.9	-0.8090	ug/L	-0.8090	ppb	03:35:26

2	P 214.914†	232.9	10.1	5.7895 ug/L	5.7895 ppb	03:35:26
2	Pb 220.353†	-59.9	8.4	0.9517 ug/L	0.9517 ppb	03:35:26
2	S 181.975 Axial†	43.7	2.3	3.1667 ug/L	3.1667 ppb	03:35:26
2	Sb 206.836†	41.4	7.2	2.3067 ug/L	2.3067 ppb	03:35:26
2	Se 196.026†	-31.9	-3.2	-1.7935 ug/L	-1.7935 ppb	03:35:26
2	Si 251.611†	494.5	46.2	1.3784 ug/L	1.3784 ppb	03:35:26
2	Sn 189.927†	8.7	3.7	0.6113 ug/L	0.6113 ppb	03:35:26
2	Ti 334.940†	-1058.0	53.9	0.0826 ug/L	0.0826 ppb	03:35:06
2	Tl 190.801†	-36.5	-4.1	-1.1386 ug/L	-1.1386 ppb	03:35:26
2	U 409.014†	-2021.4	374.6	10.318 ug/L	10.318 ppb	03:35:01
2	V 292.402†	-1208.0	146.9	0.9873 ug/L	0.9873 ppb	03:35:06
2	Zn 213.857†	664.5	44.6	0.3935 ug/L	0.3935 ppb	03:35:26
2	SiO2†	501.3	35.2	2.2488 ug/L	2.2488 ppb	03:36:07
3	Sc Radial	5808.8	5808.8	99.4 %		03:34:04
3	Y RADIAL	6223.1	6223.1	98.97 %		03:34:04
3	Al 396.153Radial†	-12.9	7.4	5.1235 ug/L	5.1235 ppb	03:34:24
3	Ca 317.933Radial†	24.2	8.7	12.871 ug/L	12.871 ppb	03:34:24
3	Fe 238.204 Radial†	9.3	2.5	23.686 ug/L	23.686 ppb	03:34:24
3	K 766.490 Radial†	2367.0	29.6	5.1859 ug/L	5.1859 ppb	03:34:04
3	Mg 279.077 IEC†	0.6	-0.5	-18.117 ug/L	-18.117 ppb	03:34:24
3	Na 589.592 Radial†	-613.3	470.9	158.04 ug/L	158.04 ppb	03:34:04
3	Sr 421.552†	8.9	36.3	0.2260 ug/L	0.2260 ppb	03:34:04
3	Sc 361.383	893484.8	893484.8	99.137 %		03:35:32
3	Y 371.029	740417.5	740417.5	98.580 %		03:35:32
3	Ag 328.068†	312.0	22.0	0.1067 ug/L	0.1067 ppb	03:35:37
3	As 188.979†	-25.6	-1.7	-0.6564 ug/L	-0.6564 ppb	03:35:57
3	B 249.677†	-412.5	114.6	2.4002 ug/L	2.4002 ppb	03:35:57
3	Ba 233.527†	-16.9	-8.6	-0.0623 ug/L	-0.0623 ppb	03:35:57
3	Be 313.107†	-5533.9	-469.1	-0.1709 ug/L	-0.1709 ppb	03:35:37
3	Cd 226.502†	-176.2	17.3	0.1807 ug/L	0.1807 ppb	03:35:57
3	Co 228.616†	-75.9	-11.1	-0.2108 ug/L	-0.2108 ppb	03:35:57
3	Cr 267.716†	86.0	8.1	0.0851 ug/L	0.0851 ppb	03:35:57
3	Cu 324.752†	6753.5	55.6	0.1603 ug/L	0.1603 ppb	03:35:37
3	Mn 257.610†	452.5	34.1	0.0391 ug/L	0.0391 ppb	03:35:57
3	Mo 202.031†	25.2	7.1	0.4522 ug/L	0.4522 ppb	03:35:57
3	Ni 231.604†	64.1	-21.9	-0.5058 ug/L	-0.5058 ppb	03:35:57
3	P 214.914†	225.4	3.8	2.1693 ug/L	2.1693 ppb	03:35:57
3	Pb 220.353†	-64.2	3.7	0.4188 ug/L	0.4188 ppb	03:35:57
3	S 181.975 Axial†	41.1	-0.1	-0.1334 ug/L	-0.1334 ppb	03:35:57
3	Sb 206.836†	34.9	1.0	0.3138 ug/L	0.3138 ppb	03:35:57
3	Se 196.026†	-20.1	8.6	5.0372 ug/L	5.0372 ppb	03:35:57
3	Si 251.611†	481.0	35.6	1.0558 ug/L	1.0558 ppb	03:35:57
3	Sn 189.927†	3.1	-1.9	-0.3048 ug/L	-0.3048 ppb	03:35:57
3	Ti 334.940†	-1087.3	18.1	0.0287 ug/L	0.0287 ppb	03:35:37
3	Tl 190.801†	-28.6	3.7	1.0344 ug/L	1.0344 ppb	03:35:57
3	U 409.014†	-2309.2	72.5	1.9945 ug/L	1.9945 ppb	03:35:32
3	V 292.402†	-1296.4	50.7	0.3410 ug/L	0.3410 ppb	03:35:37
3	Zn 213.857†	656.0	39.9	0.3497 ug/L	0.3497 ppb	03:35:57
3	SiO2†	510.6	47.6	3.0365 ug/L	3.0365 ppb	03:36:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898315.5	99.673	%	0.5162				0.52%
Sc Radial	5791.6	99.1	%	0.25				0.26%
Y 371.029	742988.5	98.922	%	0.3898				0.39%
Y RADIAL	6196.7	98.55	%	0.431				0.44%
Ag 328.068†	-12.3	-0.0524	ug/L	0.15485	-0.0524	ppb	0.15485	295.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.8	3.2975	ug/L	2.25838	3.2975	ppb	2.25838	68.49%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.1	0.0536	ug/L	0.74864	0.0536	ppb	0.74864	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	116.9	2.4491	ug/L	0.18367	2.4491	ppb	0.18367	7.50%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-14.5	-0.1052	ug/L	0.04214	-0.1052	ppb	0.04214	40.05%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-459.3	-0.1671	ug/L	0.00330	-0.1671	ppb	0.00330	1.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.0	16.271	ug/L	3.6527	16.271	ppb	3.6527	22.45%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              14.8      0.1546 ug/L       0.10082      0.1546 ppb        0.10082  65.20%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -14.6     -0.2761 ug/L       0.05729     -0.2761 ppb        0.05729  20.75%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               2.6      0.0268 ug/L       0.18219      0.0268 ppb        0.18219 680.16%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              40.3      0.1162 ug/L       0.05397      0.1162 ppb        0.05397  46.45%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.0      18.458 ug/L        4.8187      18.458 ppb         4.8187  26.11%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        35.6      6.2361 ug/L       4.40509      6.2361 ppb        4.40509  70.64%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.1     -2.1951 ug/L      21.78650     -2.1951 ppb       21.78650 992.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              53.2      0.0586 ug/L       0.01986      0.0586 ppb        0.01986  33.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.7      0.3603 ug/L       0.34187      0.3603 ppb        0.34187  94.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       462.5      155.19 ug/L        10.746      155.19 ppb         10.746   6.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -26.4     -0.6102 ug/L       0.17222     -0.6102 ppb        0.17222  28.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.4      2.5203 ug/L       3.10858      2.5203 ppb        3.10858 123.34%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.8      0.7686 ug/L       0.30298      0.7686 ppb        0.30298  39.42%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.2      3.0666 ug/L       3.15105      3.0666 ppb        3.15105 102.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.0      1.5865 ug/L       1.10539      1.5865 ppb        1.10539  69.67%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.0      1.7901 ug/L       3.42776      1.7901 ppb        3.42776 191.49%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              40.2      1.1938 ug/L       0.16628      1.1938 ppb        0.16628  13.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.9      0.3196 ug/L       0.54116      0.3196 ppb        0.54116 169.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              26.1      0.1625 ug/L       0.07522      0.1625 ppb        0.07522  46.30%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              91.7      0.1444 ug/L       0.15609      0.1444 ppb        0.15609 108.09%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.5      0.1282 ug/L       1.13049      0.1282 ppb        1.13049 881.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              223.9      6.1653 ug/L       4.16170      6.1653 ppb        4.16170  67.50%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              111.6      0.7515 ug/L       0.35674      0.7515 ppb        0.35674  47.47%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              45.2      0.3966 ug/L       0.04846      0.3966 ppb        0.04846  12.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    39.9      2.5361 ug/L       0.43493      2.5361 ppb        0.43493  17.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, December 07, 2009 10:32:12
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.296
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	981.6	981.634	24.246	2.5
	Mg	24.0	23039.2	23039.164	118.744	0.5
	Co	58.9	57866.8	57866.764	230.226	0.4
	Rh	102.9	97586.4	97586.386	656.790	0.7
	In	114.9	120909.3	120909.336	954.415	0.8
	Pb	208.0	68869.4	68869.412	465.235	0.7
⌈>	Ba	137.9	103676.0	103675.960	1201.209	1.2
⌊	Ba++	69.0	1829.4	0.018	0.000	1.6
⌈>	Ce	139.9	124546.8	124546.802	1227.123	1.0
⌊	CeO	155.9	2959.3	0.024	0.000	2.0
	Bkgd	220.0	4.9	4.900	0.962	19.6

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	5.8	1331.4
Co	59	15	6.8	39168.3
In	115	15	8.3	85528.6

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	609	2060	0.629
Be	9.0	8.9	2042	2055	0.664
Mg	24.0	23.9	5669	2075	0.670
Mg	25.0	25.0	5931	2080	0.659
Mg	26.0	26.0	6158	2095	0.621
Co	58.9	59.0	14184	2120	0.686
Rh	102.9	103.0	24874	2220	0.650
In	114.9	114.9	27785	2255	0.644
Ce	139.9	139.9	33848	2300	0.637
Pb	206.0	206.0	49928	2460	0.606
Pb	207.0	207.0	50113	2380	0.629
Pb	208.0	208.0	50436	2490	0.632
U	238.1	238.1	57692	2480	0.644

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 07, 2009 18:22:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\Blank.071

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		15	
	Be	9		ug/L		7	
	B	11		ug/L		364	
	Na	23		ug/L		148775	
	Mg	24		ug/L		1333	
	Al	27		ug/L		5334	
	P	31		ug/L		4098	
	K	39		ug/L		451010	
	Ca	43		ug/L		282	
>	Sc	45		ug/L		1226566	
	Ti	47		ug/L		174	
	V	51		ug/L		314	
	Cr	52		ug/L		2692	
	Cr	53		ug/L		121384	
	Mn	55		ug/L		992	
	Fe	57		ug/L		6167	
	Co	59		ug/L		112	
	Ni	60		ug/L		69	
	Cu	63		ug/L		362	
	Cu	65		ug/L		182	
	Zn	66		ug/L		355	
	Zn	67		ug/L		7051	
	Zn	68		ug/L		930	
>	Ge	74		ug/L		272404	
	As	75		ug/L		-265	
	Se	77		ug/L		6221	
	Se	82		ug/L		2	
	Kr	83		ug/L		55	
	Sr	88		ug/L		263	
	Y	89		ug/L		29	
	Zr	90		ug/L		269	
	Mo	98		ug/L		52	
	Ag	107		ug/L		95	
	Cd	111		ug/L		16	
	Cd	114		ug/L		48	
>	In	115		ug/L		167580	
	Sn	120		ug/L		271	
	Sb	121		ug/L		245	
	Sb	123		ug/L		213	
	Ba	135		ug/L		24	
	Ba	137		ug/L		38	
	Ho	165		ug/L		15	
>	Lu	175		ug/L		193975	
	Tl	205		ug/L		317	
	Pb	208		ug/L		2253	
	Bi	209		ug/L		90	
	Th	232		ug/L		368	
	U	238		ug/L		248	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 07, 2009 18:28:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\Standard 1.072

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	5.158	2926	0.002
	Be	9	10.000	ug/L	3.784	1215	0.001
	B	11	20.000	ug/L	1.067	3968	0.003
	Na	23	1000.000	ug/L	4.405	3135347	2.546
	Mg	24	1000.000	ug/L	5.292	1857213	1.579
	Al	27	1000.000	ug/L	3.269	3127674	2.656
	P	31	1000.000	ug/L	1.644	151123	0.125
	K	39	1000.000	ug/L	3.413	6215800	4.920
	Ca	43	1000.000	ug/L	1.740	10377	0.009
>	Sc	45		ug/L		1175663	1175662.651
	Ti	47	10.000	ug/L	2.232	4886	0.004
	V	51	10.000	ug/L	6.794	45887	0.039
	Cr	52	10.000	ug/L	1.721	45085	0.036
	Cr	53		ug/L		121065	0.004
	Mn	55	10.000	ug/L	1.293	72914	0.061
	Fe	57	1000.000	ug/L	0.177	151996	0.124
	Co	59	10.000	ug/L	1.277	54163	0.046
	Ni	60	10.000	ug/L	0.750	11363	0.010
	Cu	63		ug/L		24926	0.021
	Cu	65	10.000	ug/L	1.549	12012	0.010
	Zn	66	10.000	ug/L	0.941	6905	0.024
	Zn	67		ug/L		8106	0.004
	Zn	68		ug/L		5618	0.018
>	Ge	74		ug/L		268298	268298.069
	As	75	10.000	ug/L	9.499	6904	0.027
	Se	77		ug/L		6187	0.000
	Se	82	10.000	ug/L	5.872	807	0.003
	Kr	83		ug/L		51	-0.000
	Sr	88	10.000	ug/L	1.144	107152	0.645
	Y	89		ug/L		34	0.000
	Zr	90	10.000	ug/L	1.459	55083	0.331
	Mo	98	10.000	ug/L	1.404	23034	0.139
	Ag	107	10.000	ug/L	0.682	40633	0.245
	Cd	111	10.000	ug/L	0.847	9159	0.055
	Cd	114		ug/L		21025	0.127
>	In	115		ug/L		165710	165709.827
	Sn	120	10.000	ug/L	1.138	38189	0.229
	Sb	121	10.000	ug/L	0.469	27467	0.164
	Sb	123		ug/L		20561	0.123
	Ba	135		ug/L		8681	0.045
	Ba	137	10.000	ug/L	1.078	14930	0.078
	Ho	165		ug/L		20	0.000
>	Lu	175		ug/L		192021	192020.516
	Tl	205	10.000	ug/L	1.214	61854	0.320
	Pb	208	10.000	ug/L	0.481	130881	0.670
	Bi	209		ug/L		101	0.000
	Th	232	10.000	ug/L	1.101	151636	0.788
	U	238	10.000	ug/L	0.997	157614	0.820

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, December 07, 2009 18:34:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\Standard 2.073

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.991**	ug/L	8.379	27991	0.025
	Be	9	**100.008**	ug/L	2.660	11816	0.010
	B	11	**200.011**	ug/L	1.607	35639	0.031
	Na	23	**9998.601**	ug/L	3.759	28751153	25.103
	Mg	24	**10010.332**	ug/L	3.464	20094055	17.623
	Al	27	**9992.036**	ug/L	10.285	28079081	24.584
	P	31	**9997.113**	ug/L	2.171	1390668	1.217
	K	39	**9992.983**	ug/L	4.489	52802032	45.941
	Ca	43	**9998.948**	ug/L	1.506	97251	0.085
>	Sc	45		ug/L		1140296	1140295.955
	Ti	47	**99.999**	ug/L	0.971	45865	0.040
	V	51	**100.033**	ug/L	2.341	457508	0.401
	Cr	52	**100.000**	ug/L	2.111	414463	0.361
	Cr	53		ug/L		155757	0.038
	Mn	55	**99.980**	ug/L	1.328	685278	0.600
	Fe	57	**9997.305**	ug/L	0.975	1384942	1.210
	Co	59	**99.988**	ug/L	1.432	518174	0.454
	Ni	60	**99.974**	ug/L	1.970	106842	0.094
	Cu	63		ug/L		232640	0.204
	Cu	65	**99.967**	ug/L	1.092	111267	0.097
	Zn	66	**99.958**	ug/L	1.200	62015	0.234
	Zn	67		ug/L		16950	0.039
	Zn	68		ug/L		45251	0.168
>	Ge	74		ug/L		263233	263232.740
	As	75	**100.011**	ug/L	2.168	70829	0.270
	Se	77		ug/L		11099	0.019
	Se	82	**99.993**	ug/L	0.169	7840	0.030
	Kr	83		ug/L		52	-0.000
	Sr	88	**99.997**	ug/L	0.710	1034416	6.433
	Y	89		ug/L		108	0.000
	Zr	90	**100.018**	ug/L	1.290	541654	3.368
	Mo	98	**100.024**	ug/L	1.717	228648	1.422
	Ag	107	**99.980**	ug/L	1.200	385545	2.398
	Cd	111	**100.000**	ug/L	0.817	88679	0.552
	Cd	114		ug/L		203383	1.265
>	In	115		ug/L		160764	160763.835
	Sn	120	**99.994**	ug/L	0.771	365902	2.274
	Sb	121	**100.018**	ug/L	1.184	269240	1.673
	Sb	123		ug/L		206342	1.282
	Ba	135		ug/L		85224	0.446
	Ba	137	**99.991**	ug/L	2.037	146974	0.769
	Ho	165		ug/L		26	0.000
>	Lu	175		ug/L		191201	191200.991
	Tl	205	**99.989**	ug/L	0.958	606207	3.169
	Pb	208	**99.976**	ug/L	1.803	1252796	6.541
	Bi	209		ug/L		175	0.000
	Th	232	**99.990**	ug/L	2.028	1491689	7.801
	U	238	**99.970**	ug/L	1.690	1520353	7.951

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, December 07, 2009 18:40:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 1.074

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.794**	ug/L	5.467	13956	0.012
	Be	9	**51.157**	ug/L	2.523	6050	0.005
	B	11	**98.745**	ug/L	2.010	17769	0.015
	Na	23	**4971.610**	ug/L	1.749	14370921	12.482
	Mg	24	**5047.447**	ug/L	1.614	10134851	8.886
	Al	27	**4905.873**	ug/L	2.354	13767686	12.070
	P	31	**5056.181**	ug/L	1.812	705404	0.615
	K	39	**4922.551**	ug/L	3.831	26221417	22.631
	Ca	43	**5039.803**	ug/L	1.022	49156	0.043
>	Sc	45		ug/L		1140327	1140327.311
	Ti	47	**50.615**	ug/L	1.570	23297	0.020
	V	51	**50.853**	ug/L	3.929	232760	0.204
	Cr	52	**52.046**	ug/L	1.855	216955	0.188
	Cr	53		ug/L		138545	0.023
	Mn	55	**52.319**	ug/L	1.094	359100	0.314
	Fe	57	**5125.612**	ug/L	1.494	712907	0.620
	Co	59	**49.965**	ug/L	1.297	259032	0.227
	Ni	60	**51.115**	ug/L	1.327	54673	0.048
	Cu	63		ug/L		121809	0.107
	Cu	65	**52.417**	ug/L	0.794	58433	0.051
	Zn	66	**52.303**	ug/L	1.467	32487	0.123
	Zn	67		ug/L		11956	0.020
	Zn	68		ug/L		23818	0.087
>	Ge	74		ug/L		262226	262226.407
	As	75	**48.190**	ug/L	0.671	33863	0.130
	Se	77		ug/L		8522	0.010
	Se	82	**49.794**	ug/L	1.311	3890	0.015
	Kr	83		ug/L		49	-0.000
	Sr	88	**49.269**	ug/L	0.580	513801	3.170
	Y	89		ug/L		37	0.000
	Zr	90	**49.767**	ug/L	1.047	271781	1.676
	Mo	98	**49.629**	ug/L	0.849	114377	0.706
	Ag	107	**50.273**	ug/L	0.595	195448	1.206
	Cd	111	**50.372**	ug/L	1.192	45028	0.278
	Cd	114		ug/L		103838	0.641
>	In	115		ug/L		162023	162023.491
	Sn	120	**50.439**	ug/L	1.251	186142	1.147
	Sb	121	**49.989**	ug/L	0.244	135743	0.836
	Sb	123		ug/L		103961	0.640
	Ba	135		ug/L		42778	0.227
	Ba	137	**51.101**	ug/L	0.873	74003	0.393
	Ho	165		ug/L		40	0.000
>	Lu	175		ug/L		188315	188315.311
	Tl	205	**48.713**	ug/L	1.711	291029	1.544
	Pb	208	**52.197**	ug/L	1.198	645286	3.415
	Bi	209		ug/L		135	0.000
	Th	232	**52.353**	ug/L	2.178	769424	4.084
	U	238	**55.023**	ug/L	1.738	824287	4.376

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	99.588				
	Be	9	102.313				
	B	11	98.745				
	Na	23	99.432				
	Mg	24	100.949				
	Al	27	97.146				
	P	31	101.124				
	K	39	98.451				
	Ca	43	100.796				
>	Sc	45		93.0			
	Ti	47	101.230				
	V	51	101.707				
	Cr	52	104.092				
	Cr	53					
	Mn	55	104.638				
	Fe	57	102.512				
	Co	59	99.930				
	Ni	60	102.231				
	Cu	63					
	Cu	65	104.833				
	Zn	66	104.606				
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75	96.380				
	Se	77					
	Se	82	99.588				
	Kr	83					
	Sr	88	98.538				
	Y	89					
	Zr	90	99.534				
	Mo	98	99.259				
	Ag	107	100.547				
	Cd	111	100.744				
	Cd	114					
>	In	115		96.7			
	Sn	120	100.877				
	Sb	121	99.978				
	Sb	123					
	Ba	135					
	Ba	137	102.202				
	Ho	165					
>	Lu	175		97.1			
	Tl	205	97.425				
	Pb	208	104.394				
	Bi	209					
	Th	232	104.705				
	U	238	110.045				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	U	238	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, December 07, 2009 18:46:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 2.075

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.001**	ug/L	134.399	14	0.000
	Be	9	**-0.004**	ug/L	519.818	6	-0.000
	B	11	**2.831**	ug/L	11.952	839	0.000
	Na	23	**14.591**	ug/L	40.174	180473	0.037
	Mg	24	**1.037**	ug/L	72.046	3334	0.002
	Al	27	**-0.344**	ug/L	207.608	4001	-0.001
	P	31	**4.325**	ug/L	47.636	4419	0.001
	K	39	**-3.735**	ug/L	50.826	400540	-0.017
	Ca	43	**1.571**	ug/L	325.873	278	0.000
>	Sc	45		ug/L		1142672	1142671.573
	Ti	47	**0.009**	ug/L	76.152	166	0.000
	V	51	**-0.360**	ug/L	111.070	-1359	-0.001
	Cr	52	**0.042**	ug/L	74.749	2681	0.000
	Cr	53		ug/L		114334	0.001
	Mn	55	**-0.004**	ug/L	129.861	899	-0.000
	Fe	57	**0.822**	ug/L	149.734	5860	0.000
	Co	59	**0.008**	ug/L	86.383	145	0.000
	Ni	60	**0.012**	ug/L	166.984	77	0.000
	Cu	63		ug/L		367	0.000
	Cu	65	**0.003**	ug/L	190.272	173	0.000
	Zn	66	**-0.026**	ug/L	145.759	327	-0.000
	Zn	67		ug/L		6505	-0.001
	Zn	68		ug/L		822	-0.000
>	Ge	74		ug/L		263554	263553.899
	As	75	**-0.093**	ug/L	270.684	-323	-0.000
	Se	77		ug/L		5843	-0.001
	Se	82	**-0.071**	ug/L	186.980	-3	-0.000
	Kr	83		ug/L		56	0.000
	Sr	88	**0.004**	ug/L	139.821	302	0.000
	Y	89		ug/L		21	-0.000
	Zr	90	**0.077**	ug/L	12.198	682	0.003
	Mo	98	**0.040**	ug/L	5.907	143	0.001
	Ag	107	**0.015**	ug/L	37.737	152	0.000
	Cd	111	**0.005**	ug/L	157.359	21	0.000
	Cd	114		ug/L		57	0.000
>	In	115		ug/L		162948	162948.195
	Sn	120	**0.083**	ug/L	3.147	573	0.002
	Sb	121	**0.416**	ug/L	10.174	1372	0.007
	Sb	123		ug/L		1090	0.005
	Ba	135		ug/L		30	0.000
	Ba	137	**0.013**	ug/L	82.288	57	0.000
	Ho	165		ug/L		17	0.000
>	Lu	175		ug/L		188106	188105.973
	Tl	205	**0.128**	ug/L	17.713	1072	0.004
	Pb	208	**-0.039**	ug/L	17.073	1700	-0.003
	Bi	209		ug/L		84	-0.000
	Th	232	**0.058**	ug/L	3.869	1209	0.005
	U	238	**0.011**	ug/L	51.868	412	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, December 07, 2009 18:53:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 3.076

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.681**	ug/L	8.483	3012	0.003
	Be	9	**0.491**	ug/L	9.428	65	0.000
	B	11	**16.316**	ug/L	1.075	3228	0.003
	Na	23	**252.557**	ug/L	4.750	864064	0.634
	Mg	24	**14.971**	ug/L	11.567	31368	0.026
	Al	27	**28.641**	ug/L	6.828	85590	0.070
	P	31	**57.723**	ug/L	1.953	11855	0.007
	K	39	**324.603**	ug/L	16.016	2125475	1.492
	Ca	43	**214.025**	ug/L	1.668	2346	0.002
>	Sc	45		ug/L		1143725	1143724.723
	Ti	47	**8.751**	ug/L	1.024	4174	0.004
	V	51	**10.521**	ug/L	5.192	48525	0.042
	Cr	52	**10.876**	ug/L	1.286	47462	0.039
	Cr	53		ug/L		121890	0.008
	Mn	55	**5.647**	ug/L	0.950	39703	0.034
	Fe	57	**111.540**	ug/L	5.523	21184	0.013
	Co	59	**1.069**	ug/L	3.159	5661	0.005
	Ni	60	**2.182**	ug/L	0.851	2403	0.002
	Cu	63		ug/L		2998	0.002
	Cu	65	**1.159**	ug/L	0.947	1462	0.001
	Zn	66	**11.134**	ug/L	0.829	7194	0.026
	Zn	67		ug/L		7963	0.004
	Zn	68		ug/L		5726	0.018
>	Ge	74		ug/L		262576	262575.906
	As	75	**5.367**	ug/L	10.552	3548	0.014
	Se	77		ug/L		6057	0.000
	Se	82	**5.370**	ug/L	4.554	422	0.002
	Kr	83		ug/L		46	-0.000
	Sr	88	**10.897**	ug/L	1.096	113689	0.701
	Y	89		ug/L		21	-0.000
	Zr	90	**2.043**	ug/L	4.001	11389	0.069
	Mo	98	**0.534**	ug/L	3.006	1279	0.008
	Ag	107	**1.030**	ug/L	0.851	4088	0.025
	Cd	111	**1.091**	ug/L	1.443	989	0.006
	Cd	114		ug/L		2245	0.014
>	In	115		ug/L		161798	161797.703
	Sn	120	**5.300**	ug/L	0.654	19765	0.121
	Sb	121	**3.105**	ug/L	1.584	8643	0.052
	Sb	123		ug/L		6621	0.040
	Ba	135		ug/L		1779	0.009
	Ba	137	**2.125**	ug/L	2.822	3080	0.016
	Ho	165		ug/L		20	0.000
>	Lu	175		ug/L		186352	186351.804
	Tl	205	**1.079**	ug/L	1.933	6676	0.034
	Pb	208	**2.144**	ug/L	0.883	28302	0.140
	Bi	209		ug/L		94	0.000
	Th	232	**1.086**	ug/L	0.927	16146	0.085
	U	238	**0.225**	ug/L	1.144	3580	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	106.807				
	Be	9	98.238				
	B	11	108.776				
	Na	23	101.023				
	Mg	24	99.805				
	Al	27	95.470				
	P	31	115.446				
	K	39	108.201				
	Ca	43	107.012				
>	Sc	45		93.2			
	Ti	47	87.509				
	V	51	105.215				
	Cr	52	108.759				
	Cr	53					
	Mn	55	112.948				
	Fe	57	111.540				
	Co	59	106.900				
	Ni	60	109.124				
	Cu	63					
	Cu	65	115.887				
	Zn	66	111.345				
	Zn	67					
	Zn	68					
>	Ge	74		96.4			
	As	75	107.346				
	Se	77					
	Se	82	107.407				
	Kr	83					
	Sr	88	108.974				
	Y	89					
	Zr	90	102.126				
	Mo	98	106.839				
	Ag	107	102.979				
	Cd	111	109.115				
	Cd	114					
>	In	115		96.5			
	Sn	120	105.990				
	Sb	121	103.515				
	Sb	123					
	Ba	135					
	Ba	137	106.228				
	Ho	165					
>	Lu	175		96.1			
	Tl	205	107.894				
	Pb	208	107.182				
	Bi	209					
	Th	232	108.631				
	U	238	112.739				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, December 07, 2009 18:59:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 4.077

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.083	ug/L	31.744	34	0.000
	Be	9	0.047	ug/L	48.342	11	0.000
	B	11	1.399	ug/L	13.147	536	0.000
	Na	23	98438.968	ug/L	5.819	258462441	247.149
	Mg	24	93494.505	ug/L	1.765	171993869	164.597
	Al	27	98140.042	ug/L	1.453	252367199	241.456
	P	31	107809.263	ug/L	1.263	13713274	13.120
	K	39	99217.001	ug/L	10.870	476655075	456.134
	Ca	43	96892.445	ug/L	1.602	861635	0.824
>	Sc	45		ug/L		1045085	1045085.118
	Ti	47	1499.419	ug/L	0.829	628255	0.601
	V	51	0.165	ug/L	346.674	957	0.001
	Cr	52	5.556	ug/L	2.235	23274	0.020
	Cr	53		ug/L		97315	-0.006
	Mn	55	5.755	ug/L	0.500	36952	0.035
	Fe	57	109554.408	ug/L	0.852	13858065	13.256
	Co	59	0.286	ug/L	2.270	1455	0.001
	Ni	60	4.331	ug/L	2.802	4299	0.004
	Cu	63		ug/L		10178	0.009
	Cu	65	4.888	ug/L	2.041	5134	0.005
	Zn	66	4.716	ug/L	1.138	2827	0.011
	Zn	67		ug/L		6287	0.002
	Zn	68		ug/L		1066	0.001
>	Ge	74		ug/L		228818	228818.142
	As	75	-0.419	ug/L	114.518	-479	-0.001
	Se	77		ug/L		6576	0.006
	Se	82	-0.165	ug/L	200.486	-10	-0.000
	Kr	83		ug/L		144	0.000
	Sr	88	1.155	ug/L	0.346	10846	0.074
	Y	89		ug/L		304	0.002
	Zr	90	0.336	ug/L	41.514	1842	0.011
	Mo	98	2332.641	ug/L	0.274	4739483	33.166
	Ag	107	0.111	ug/L	6.726	460	0.003
	Cd	111	0.435	ug/L	3.869	357	0.002
	Cd	114		ug/L		5964	0.041
>	In	115		ug/L		142903	142903.283
	Sn	120	0.143	ug/L	5.255	696	0.003
	Sb	121	0.150	ug/L	15.184	568	0.003
	Sb	123		ug/L		476	0.002
	Ba	135		ug/L		569	0.003
	Ba	137	0.672	ug/L	4.348	974	0.005
	Ho	165		ug/L		482	0.003
>	Lu	175		ug/L		181461	181461.356
	Tl	205	0.022	ug/L	17.604	421	0.001
	Pb	208	0.110	ug/L	1.754	3408	0.007
	Bi	209		ug/L		446	0.002
	Th	232	0.044	ug/L	32.677	965	0.003
	U	238	-0.004	ug/L	45.699	174	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	98.439				
	Mg	24	93.495				
	Al	27	98.140				
	P	31	107.809				
	K	39	99.217				
	Ca	43	96.892				
>	Sc	45			85.2		
	Ti	47	74.971				
	V	51					
	Cr	52	150.166				
	Cr	53					
	Mn	55	99.216				
	Fe	57	109.554				
	Co	59	114.500				
	Ni	60	160.406				
	Cu	63					
	Cu	65	168.548				
	Zn	66	131.011				
	Zn	67					
	Zn	68					
>	Ge	74			84.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	96.282				
	Y	89					
	Zr	90					
	Mo	98	116.632				
	Ag	107					
	Cd	111	108.750				
	Cd	114					
>	In	115			85.3		
	Sn	120					
	Sb	121	150.160				
	Sb	123					
	Ba	135					
	Ba	137	100.357				
	Ho	165					
>	Lu	175			93.5		
	Tl	205					
	Pb	208	54.763				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, December 07, 2009 19:05:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 5.078

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.715**	ug/L	7.319	5305	0.005
	Be	9	**20.426**	ug/L	2.316	2209	0.002
	B	11	**20.055**	ug/L	2.185	3540	0.003
	Na	23	**100962.124**	ug/L	2.278	263974321	253.484
	Mg	24	**95063.376**	ug/L	2.806	174242154	167.359
	Al	27	**95025.993**	ug/L	3.688	243409455	233.795
	P	31	**108640.963**	ug/L	1.695	13766658	13.221
	K	39	**95676.286**	ug/L	1.136	458336003	439.857
	Ca	43	**97260.926**	ug/L	0.843	861674	0.827
>	Sc	45		ug/L		1041061	1041060.984
	Ti	47	**1503.302**	ug/L	0.210	627506	0.603
	V	51	**21.806**	ug/L	2.978	91294	0.087
	Cr	52	**26.663**	ug/L	1.735	102581	0.096
	Cr	53		ug/L		103226	0.000
	Mn	55	**26.698**	ug/L	1.862	167693	0.160
	Fe	57	**111056.603**	ug/L	1.441	13993053	13.438
	Co	59	**20.369**	ug/L	1.204	96461	0.093
	Ni	60	**23.955**	ug/L	0.301	23423	0.022
	Cu	63		ug/L		50172	0.048
	Cu	65	**23.553**	ug/L	1.421	24053	0.023
	Zn	66	**24.155**	ug/L	1.792	13298	0.057
	Zn	67		ug/L		7760	0.008
	Zn	68		ug/L		8465	0.033
>	Ge	74		ug/L		229636	229635.667
	As	75	**22.479**	ug/L	2.781	13711	0.061
	Se	77		ug/L		7708	0.011
	Se	82	**22.985**	ug/L	1.966	1574	0.007
	Kr	83		ug/L		147	0.000
	Sr	88	**22.929**	ug/L	0.694	213072	1.475
	Y	89		ug/L		303	0.002
	Zr	90	**22.044**	ug/L	0.820	107341	0.742
	Mo	98	**2350.756**	ug/L	0.570	4822631	33.423
	Ag	107	**18.929**	ug/L	0.211	65588	0.454
	Cd	111	**20.447**	ug/L	0.876	16286	0.113
	Cd	114		ug/L		41980	0.291
>	In	115		ug/L		144289	144289.429
	Sn	120	**21.042**	ug/L	1.896	69293	0.479
	Sb	121	**21.109**	ug/L	0.653	51168	0.353
	Sb	123		ug/L		39319	0.271
	Ba	135		ug/L		16741	0.093
	Ba	137	**20.787**	ug/L	1.432	28841	0.160
	Ho	165		ug/L		501	0.003
>	Lu	175		ug/L		180280	180280.210
	Tl	205	**18.931**	ug/L	1.295	108468	0.600
	Pb	208	**19.886**	ug/L	0.402	236667	1.301
	Bi	209		ug/L		586	0.003
	Th	232	**21.587**	ug/L	0.349	303953	1.684
	U	238	**22.350**	ug/L	1.283	320685	1.778

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.577				
	Be	9	102.130				
	B	11	100.273				
	Na	23	100.962				
	Mg	24	95.063				
	Al	27	95.026				
	P	31	108.641				
	K	39	95.676				
	Ca	43	97.261				
>	Sc	45			84.9		
	Ti	47	75.165				
	V	51	109.028				
	Cr	52	112.502				
	Cr	53					
	Mn	55	103.481				
	Fe	57	111.057				
	Co	59	100.589				
	Ni	60	105.528				
	Cu	63					
	Cu	65	102.854				
	Zn	66	102.353				
	Zn	67					
	Zn	68					
>	Ge	74			84.3		
	As	75	112.395				
	Se	77					
	Se	82	114.926				
	Kr	83					
	Sr	88	108.158				
	Y	89					
	Zr	90	110.221				
	Mo	98	117.538				
	Ag	107	94.646				
	Cd	111	100.230				
	Cd	114					
>	In	115			86.1		
	Sn	120	105.211				
	Sb	121	105.021				
	Sb	123					
	Ba	135					
	Ba	137	100.568				
	Ho	165					
>	Lu	175			92.9		
	Tl	205	94.657				
	Pb	208	98.448				
	Bi	209					
	Th	232	107.936				
	U	238	111.749				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 19:11:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.079

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.393**	ug/L	8.525	13408	0.012
	Be	9	**49.317**	ug/L	3.279	5768	0.005
	B	11	**96.491**	ug/L	2.459	17185	0.015
	Na	23	**4847.778**	ug/L	4.975	13863493	12.171
	Mg	24	**4899.599**	ug/L	4.479	9728353	8.626
	Al	27	**4937.131**	ug/L	6.550	13700395	12.147
	P	31	**5032.824**	ug/L	1.414	694623	0.612
	K	39	**5044.413**	ug/L	4.484	26580615	23.191
	Ca	43	**4926.307**	ug/L	0.366	47542	0.042
>	Sc	45		ug/L		1128094	1128093.588
	Ti	47	**51.119**	ug/L	1.006	23276	0.020
	V	51	**51.288**	ug/L	2.244	232238	0.206
	Cr	52	**52.537**	ug/L	1.310	216630	0.190
	Cr	53		ug/L		134972	0.021
	Mn	55	**52.114**	ug/L	1.359	353836	0.313
	Fe	57	**5153.850**	ug/L	1.153	709088	0.624
	Co	59	**50.553**	ug/L	1.426	259255	0.230
	Ni	60	**51.641**	ug/L	1.126	54640	0.048
	Cu	63		ug/L		121875	0.108
	Cu	65	**52.820**	ug/L	0.268	58249	0.051
	Zn	66	**51.267**	ug/L	2.115	31757	0.120
	Zn	67		ug/L		11470	0.018
	Zn	68		ug/L		23151	0.085
>	Ge	74		ug/L		261490	261489.906
	As	75	**48.572**	ug/L	1.463	34041	0.131
	Se	77		ug/L		8476	0.010
	Se	82	**51.148**	ug/L	0.719	3985	0.015
	Kr	83		ug/L		50	-0.000
	Sr	88	**48.983**	ug/L	0.588	506639	3.151
	Y	89		ug/L		50	0.000
	Zr	90	**49.971**	ug/L	1.704	270656	1.683
	Mo	98	**50.263**	ug/L	0.877	114886	0.715
	Ag	107	**50.193**	ug/L	0.254	193536	1.204
	Cd	111	**50.135**	ug/L	1.055	44450	0.277
	Cd	114		ug/L		100830	0.627
>	In	115		ug/L		160693	160692.778
	Sn	120	**50.232**	ug/L	1.600	183866	1.143
	Sb	121	**48.732**	ug/L	0.877	131246	0.815
	Sb	123		ug/L		100527	0.624
	Ba	135		ug/L		42475	0.227
	Ba	137	**50.754**	ug/L	2.364	72928	0.390
	Ho	165		ug/L		42	0.000
>	Lu	175		ug/L		186869	186868.527
	Tl	205	**48.756**	ug/L	0.930	289052	1.545
	Pb	208	**51.860**	ug/L	0.604	636231	3.393
	Bi	209		ug/L		103	0.000
	Th	232	**51.493**	ug/L	1.161	750984	4.017
	U	238	**53.619**	ug/L	1.254	797091	4.265

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	96.785				
	Be	9	98.633				
	B	11	96.491				
	Na	23	96.956				
	Mg	24	97.992				
	Al	27	97.765				
	P	31	100.656				
	K	39	100.888				
	Ca	43	98.526				
>	Sc	45			92.0		
	Ti	47	102.238				
	V	51	102.576				
	Cr	52	105.075				
	Cr	53					
	Mn	55	104.228				
	Fe	57	103.077				
	Co	59	101.106				
	Ni	60	103.283				
	Cu	63					
	Cu	65	105.640				
	Zn	66	102.535				
	Zn	67					
	Zn	68					
>	Ge	74			96.0		
	As	75	97.143				
	Se	77					
	Se	82	102.296				
	Kr	83					
	Sr	88	97.966				
	Y	89					
	Zr	90	99.942				
	Mo	98	100.526				
	Ag	107	100.386				
	Cd	111	100.270				
	Cd	114					
>	In	115			95.9		
	Sn	120	100.465				
	Sb	121	97.465				
	Sb	123					
	Ba	135					
	Ba	137	101.509				
	Ho	165					
>	Lu	175			96.3		
	Tl	205	97.512				
	Pb	208	103.720				
	Bi	209					
	Th	232	102.986				
	U	238	107.238				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 19:17:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.080

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.002**	**ug/L**	122.653	14	-0.000
	Be	9	**-0.024**	**ug/L**	33.641	4	-0.000
	B	11	**1.550**	**ug/L**	32.638	622	0.000
	Na	23	**4.240**	**ug/L**	141.461	153157	0.011
	Mg	24	**1.177**	**ug/L**	24.308	3667	0.002
	Al	27	**1.031**	**ug/L**	66.172	8002	0.003
	P	31	**1.648**	**ug/L**	76.686	4111	0.000
	K	39	**2.629**	**ug/L**	291.146	441082	0.012
	Ca	43	**1.588**	**ug/L**	322.737	283	0.000
>	Sc	45		**ug/L**		1160896	1160896.354
	Ti	47	**0.184**	**ug/L**	13.170	251	0.000
	V	51	**-0.506**	**ug/L**	99.071	-2053	-0.002
	Cr	52	**0.132**	**ug/L**	68.758	3105	0.000
	Cr	53		**ug/L**		115198	0.000
	Mn	55	**-0.004**	**ug/L**	153.417	913	-0.000
	Fe	57	**4.749**	**ug/L**	22.287	6505	0.001
	Co	59	**0.005**	**ug/L**	67.287	133	0.000
	Ni	60	**0.012**	**ug/L**	49.606	78	0.000
	Cu	63		**ug/L**		296	-0.000
	Cu	65	**-0.025**	**ug/L**	57.314	144	-0.000
	Zn	66	**-0.062**	**ug/L**	13.866	308	-0.000
	Zn	67		**ug/L**		6524	-0.001
	Zn	68		**ug/L**		817	-0.000
>	Ge	74		**ug/L**		266054	266053.676
	As	75	**0.571**	**ug/L**	95.154	153	0.002
	Se	77		**ug/L**		5721	-0.001
	Se	82	**0.161**	**ug/L**	51.800	15	0.000
	Kr	83		**ug/L**		50	-0.000
	Sr	88	**-0.003**	**ug/L**	55.876	229	-0.000
	Y	89		**ug/L**		23	-0.000
	Zr	90	**0.077**	**ug/L**	5.024	685	0.003
	Mo	98	**0.114**	**ug/L**	3.266	316	0.002
	Ag	107	**0.009**	**ug/L**	35.967	129	0.000
	Cd	111	**0.008**	**ug/L**	88.351	23	0.000
	Cd	114		**ug/L**		50	0.000
>	In	115		**ug/L**		163810	163809.912
	Sn	120	**0.062**	**ug/L**	14.859	496	0.001
	Sb	121	**0.292**	**ug/L**	13.158	1040	0.005
	Sb	123		**ug/L**		812	0.004
	Ba	135		**ug/L**		24	0.000
	Ba	137	**-0.000**	**ug/L**	10036.617	37	-0.000
	Ho	165		**ug/L**		15	0.000
>	Lu	175		**ug/L**		187857	187857.325
	Tl	205	**0.137**	**ug/L**	24.223	1122	0.004
	Pb	208	**-0.062**	**ug/L**	5.297	1414	-0.004
	Bi	209		**ug/L**		79	-0.000
	Th	232	**0.041**	**ug/L**	11.962	957	0.003
	U	238	**0.008**	**ug/L**	27.267	361	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Monday, December 07, 2009 19:24:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 10.081

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**923.787**	ug/L	6.798	235889	0.227
	Be	9	**913.680**	ug/L	4.379	98448	0.095
	B	11	**0.725**	ug/L	33.037	425	0.000
	Na	23	**47930.296**	ug/L	2.795	125283523	120.338
	Mg	24	**46655.695**	ug/L	1.240	85434863	82.137
	Al	27	**49348.246**	ug/L	7.133	126269731	121.413
	P	31	**26742.575**	ug/L	1.046	3388607	3.254
	K	39	**48069.648**	ug/L	1.454	230245594	220.993
	Ca	43	**48928.059**	ug/L	0.543	433226	0.416
>	Sc	45		ug/L		1040178	1040178.142
	Ti	47	**44.087**	ug/L	2.568	18528	0.018
	V	51	**1169.694**	ug/L	1.969	4878197	4.690
	Cr	52	**1102.462**	ug/L	1.133	4146130	3.984
	Cr	53		ug/L		541455	0.422
	Mn	55	**1099.542**	ug/L	0.336	6867580	6.602
	Fe	57	**56211.791**	ug/L	0.885	7079746	6.801
	Co	59	**1052.422**	ug/L	1.536	4975041	4.783
	Ni	60	**952.440**	ug/L	1.100	928225	0.892
	Cu	63		ug/L		1917881	1.844
	Cu	65	**916.002**	ug/L	0.333	928922	0.893
	Zn	66	**2299.750**	ug/L	1.402	1286167	5.390
	Zn	67		ug/L		212363	0.864
	Zn	68		ug/L		911733	3.818
>	Ge	74		ug/L		238589	238588.798
	As	75	**932.268**	ug/L	1.249	600253	2.517
	Se	77		ug/L		31476	0.109
	Se	82	**491.957**	ug/L	1.845	34950	0.147
	Kr	83		ug/L		84	0.000
	Sr	88	**1149.538**	ug/L	0.261	10390913	73.954
	Y	89		ug/L		290	0.002
	Zr	90	**624.590**	ug/L	0.598	2955378	21.033
	Mo	98	**1222.093**	ug/L	1.416	2441424	17.376
	Ag	107	**258.936**	ug/L	0.486	872611	6.210
	Cd	111	**996.306**	ug/L	1.051	772072	5.495
	Cd	114		ug/L		1723985	12.270
>	In	115		ug/L		140500	140500.161
	Sn	120	**1222.590**	ug/L	0.713	3907539	27.809
	Sb	121	**260.284**	ug/L	0.981	612041	4.355
	Sb	123		ug/L		466569	3.319
	Ba	135		ug/L		771363	4.372
	Ba	137	**968.099**	ug/L	0.758	1312977	7.441
	Ho	165		ug/L		142	0.001
>	Lu	175		ug/L		176441	176440.668
	Tl	205	**554.811**	ug/L	1.561	3102874	17.584
	Pb	208	**5499.960**	ug/L	1.191	63494755	359.856
	Bi	209		ug/L		1348	0.007
	Th	232	**2824.659**	ug/L	0.881	38881107	220.365
	U	238	**5958.314**	ug/L	2.123	83612792	473.894

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	92.379				
	Be	9	91.368				
	B	11					
	Na	23	95.861				
	Mg	24	93.311				
	Al	27	98.696				
	P	31	106.970				
	K	39	96.139				
	Ca	43	97.856				
>	Sc	45		84.8			
	Ti	47					
	V	51	116.969				
	Cr	52	110.246				
	Cr	53					
	Mn	55	109.954				
	Fe	57	112.424				
	Co	59	105.242				
	Ni	60	95.244				
	Cu	63					
	Cu	65	91.600				
	Zn	66	91.990				
	Zn	67					
	Zn	68					
>	Ge	74		87.6			
	As	75	93.227				
	Se	77					
	Se	82	98.391				
	Kr	83					
	Sr	88	114.954				
	Y	89					
	Zr	90	124.918				
	Mo	98	122.209				
	Ag	107	103.574				
	Cd	111	99.631				
	Cd	114					
>	In	115		83.8			
	Sn	120	122.259				
	Sb	121	104.114				
	Sb	123					
	Ba	135					
	Ba	137	96.810				
	Ho	165					
>	Lu	175		91.0			
	Tl	205	110.962				
	Pb	208	109.999				
	Bi	209					
	Th	232	112.986				
	U	238	119.166				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	V	51	LRS is out of limits (+/- 10%)
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Sr	88	LRS is out of limits (+/- 10%)
QC Std 10	Zr	90	LRS is out of limits (+/- 10%)

QC Std 10	Mo	98LRS is out of limits (+/- 10%)
QC Std 10	Sn	120LRS is out of limits (+/- 10%)
QC Std 10	Tl	205LRS is out of limits (+/- 10%)
QC Std 10	Th	232LRS is out of limits (+/- 10%)
QC Std 10	U	238LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Monday, December 07, 2009 19:30:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 11.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.009**	ug/L	9.371	11943	0.011
	Be	9	**46.012**	ug/L	4.486	5270	0.005
	B	11	**91.517**	ug/L	1.298	15978	0.014
	Na	23	**4929.098**	ug/L	2.343	13802974	12.375
	Mg	24	**4907.825**	ug/L	6.554	9545178	8.640
	Al	27	**4771.460**	ug/L	2.631	12970963	11.739
	P	31	**4997.678**	ug/L	0.978	675500	0.608
	K	39	**5503.870**	ug/L	13.410	28376602	25.303
	Ca	43	**4913.741**	ug/L	0.901	46435	0.042
>	Sc	45		ug/L		1104671	1104670.708
	Ti	47	**49.864**	ug/L	0.736	22238	0.020
	V	51	**52.444**	ug/L	1.269	232561	0.210
	Cr	52	**53.163**	ug/L	1.335	214658	0.192
	Cr	53		ug/L		132808	0.021
	Mn	55	**52.558**	ug/L	1.111	349452	0.316
	Fe	57	**5168.424**	ug/L	0.224	696369	0.625
	Co	59	**51.019**	ug/L	1.121	256224	0.232
	Ni	60	**52.468**	ug/L	0.864	54364	0.049
	Cu	63		ug/L		120496	0.109
	Cu	65	**53.310**	ug/L	0.926	57564	0.052
	Zn	66	**51.771**	ug/L	0.876	31455	0.121
	Zn	67		ug/L		11283	0.018
	Zn	68		ug/L		22995	0.086
>	Ge	74		ug/L		256482	256482.162
	As	75	**48.556**	ug/L	1.570	33377	0.131
	Se	77		ug/L		8054	0.009
	Se	82	**50.880**	ug/L	3.822	3889	0.015
	Kr	83		ug/L		46	-0.000
	Sr	88	**48.384**	ug/L	0.455	501441	3.113
	Y	89		ug/L		49	0.000
	Zr	90	**50.948**	ug/L	1.786	276463	1.716
	Mo	98	**50.092**	ug/L	1.201	114724	0.712
	Ag	107	**50.880**	ug/L	1.285	196560	1.220
	Cd	111	**49.950**	ug/L	1.244	44374	0.276
	Cd	114		ug/L		101747	0.632
>	In	115		ug/L		161015	161015.122
	Sn	120	**51.876**	ug/L	1.818	190233	1.180
	Sb	121	**51.501**	ug/L	0.560	138965	0.862
	Sb	123		ug/L		105430	0.653
	Ba	135		ug/L		43062	0.233
	Ba	137	**52.356**	ug/L	2.774	74501	0.402
	Ho	165		ug/L		33	0.000
>	Lu	175		ug/L		185090	185090.065
	Tl	205	**50.497**	ug/L	1.146	296503	1.600
	Pb	208	**53.789**	ug/L	2.563	653366	3.519
	Bi	209		ug/L		111	0.000
	Th	232	**53.842**	ug/L	1.949	777646	4.200
	U	238	**56.228**	ug/L	3.132	827684	4.472

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	88.017				
	Be	9	92.024				
	B	11	91.517				
	Na	23	98.582				
	Mg	24	98.156				
	Al	27	94.484				
	P	31	99.954				
	K	39	110.077				
	Ca	43	98.275				
>	Sc	45		90.1			
	Ti	47	99.729				
	V	51	104.889				
	Cr	52	106.326				
	Cr	53					
	Mn	55	105.115				
	Fe	57	103.368				
	Co	59	102.037				
	Ni	60	104.936				
	Cu	63					
	Cu	65	106.619				
	Zn	66	103.541				
	Zn	67					
	Zn	68					
>	Ge	74		94.2			
	As	75	97.112				
	Se	77					
	Se	82	101.760				
	Kr	83					
	Sr	88	96.768				
	Y	89					
	Zr	90	101.895				
	Mo	98	100.184				
	Ag	107	101.759				
	Cd	111	99.900				
	Cd	114					
>	In	115		96.1			
	Sn	120	103.752				
	Sb	121	103.002				
	Sb	123					
	Ba	135					
	Ba	137	104.711				
	Ho	165					
>	Lu	175		95.4			
	Tl	205	100.994				
	Pb	208	107.579				
	Bi	209					
	Th	232	107.684				
	U	238	112.456				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Li	7	CCV is out of limits (+/- 10%)
QC Std 11	K	39	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Monday, December 07, 2009 19:36:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 12.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.036**	ug/L	62.608	24	0.000
	Be	9	**-0.012**	ug/L	231.508	5	-0.000
	B	11	**1.195**	ug/L	29.285	537	0.000
	Na	23	**-0.533**	ug/L	345.733	133959	-0.001
	Mg	24	**2.775**	ug/L	38.165	6668	0.005
	Al	27	**0.307**	ug/L	571.510	5668	0.001
	P	31	**3.597**	ug/L	71.616	4222	0.000
	K	39	**5.630**	ug/L	125.049	439342	0.026
	Ca	43	**5.688**	ug/L	39.369	311	0.000
>	Sc	45		ug/L		1116896	1116895.912
	Ti	47	**0.046**	ug/L	88.795	179	0.000
	V	51	**0.083**	ug/L	433.006	658	0.000
	Cr	52	**0.145**	ug/L	29.138	3037	0.001
	Cr	53		ug/L		115580	0.005
	Mn	55	**0.016**	ug/L	60.650	1014	0.000
	Fe	57	**5.035**	ug/L	18.037	6295	0.001
	Co	59	**0.024**	ug/L	54.018	225	0.000
	Ni	60	**0.019**	ug/L	17.590	83	0.000
	Cu	63		ug/L		381	0.000
	Cu	65	**0.027**	ug/L	73.992	195	0.000
	Zn	66	**0.047**	ug/L	28.156	370	0.000
	Zn	67		ug/L		6448	-0.001
	Zn	68		ug/L		825	-0.000
>	Ge	74		ug/L		262113	262112.962
	As	75	**0.260**	ug/L	150.077	-73	0.001
	Se	77		ug/L		5550	-0.002
	Se	82	**0.163**	ug/L	43.067	15	0.000
	Kr	83		ug/L		53	0.000
	Sr	88	**0.020**	ug/L	64.284	461	0.001
	Y	89		ug/L		20	-0.000
	Zr	90	**0.126**	ug/L	5.709	949	0.004
	Mo	98	**0.131**	ug/L	1.549	354	0.002
	Ag	107	**0.031**	ug/L	19.921	212	0.001
	Cd	111	**0.031**	ug/L	57.610	44	0.000
	Cd	114		ug/L		106	0.000
>	In	115		ug/L		162579	162579.074
	Sn	120	**0.368**	ug/L	4.381	1626	0.008
	Sb	121	**1.013**	ug/L	8.429	2992	0.017
	Sb	123		ug/L		2269	0.013
	Ba	135		ug/L		42	0.000
	Ba	137	**0.028**	ug/L	69.170	76	0.000
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		183587	183587.059
	Tl	205	**0.216**	ug/L	17.170	1554	0.007
	Pb	208	**0.141**	ug/L	23.228	3827	0.009
	Bi	209		ug/L		82	-0.000
	Th	232	**0.151**	ug/L	8.053	2512	0.012
	U	238	**0.114**	ug/L	37.856	1896	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 20:26:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.692**	**ug/L**	6.161	11691	0.010
	Be	9	**44.349**	**ug/L**	2.246	5125	0.005
	B	11	**89.661**	**ug/L**	0.581	15795	0.014
	Na	23	**4686.125**	**ug/L**	3.209	13242010	11.765
	Mg	24	**4744.026**	**ug/L**	5.624	9306799	8.352
	Al	27	**4766.802**	**ug/L**	9.002	13065170	11.728
	P	31	**4894.897**	**ug/L**	0.684	667365	0.596
	K	39	**4828.462**	**ug/L**	8.458	25143825	22.198
	Ca	43	**4894.444**	**ug/L**	0.678	46648	0.042
>	Sc	45		**ug/L**		1114073	1114073.079
	Ti	47	**50.567**	**ug/L**	0.977	22740	0.020
	V	51	**51.812**	**ug/L**	1.983	231742	0.208
	Cr	52	**52.345**	**ug/L**	0.732	213188	0.189
	Cr	53		**ug/L**		130354	0.018
	Mn	55	**52.064**	**ug/L**	0.745	349132	0.313
	Fe	57	**5151.503**	**ug/L**	0.083	700021	0.623
	Co	59	**50.528**	**ug/L**	0.553	255936	0.230
	Ni	60	**51.061**	**ug/L**	0.361	53360	0.048
	Cu	63		**ug/L**		119393	0.107
	Cu	65	**52.509**	**ug/L**	1.894	57183	0.051
	Zn	66	**51.266**	**ug/L**	0.634	31005	0.120
	Zn	67		**ug/L**		11179	0.018
	Zn	68		**ug/L**		22614	0.085
>	Ge	74		**ug/L**		255275	255275.462
	As	75	**47.371**	**ug/L**	1.537	32402	0.128
	Se	77		**ug/L**		8366	0.010
	Se	82	**49.812**	**ug/L**	4.383	3789	0.015
	Kr	83		**ug/L**		50	-0.000
	Sr	88	**48.235**	**ug/L**	0.474	501687	3.103
	Y	89		**ug/L**		57	0.000
	Zr	90	**48.849**	**ug/L**	0.787	266067	1.645
	Mo	98	**49.243**	**ug/L**	1.079	113181	0.700
	Ag	107	**50.210**	**ug/L**	0.076	194682	1.204
	Cd	111	**49.749**	**ug/L**	1.019	44353	0.274
	Cd	114		**ug/L**		101036	0.625
>	In	115		**ug/L**		161590	161589.642
	Sn	120	**50.326**	**ug/L**	1.453	185228	1.145
	Sb	121	**48.515**	**ug/L**	1.248	131399	0.812
	Sb	123		**ug/L**		100276	0.619
	Ba	135		**ug/L**		42871	0.229
	Ba	137	**50.769**	**ug/L**	0.097	73123	0.390
	Ho	165		**ug/L**		40	0.000
>	Lu	175		**ug/L**		187285	187285.229
	Tl	205	**49.031**	**ug/L**	0.818	291347	1.554
	Pb	208	**51.908**	**ug/L**	0.756	638219	3.396
	Bi	209		**ug/L**		122	0.000
	Th	232	**51.918**	**ug/L**	1.141	758904	4.050
	U	238	**54.398**	**ug/L**	1.356	810486	4.327

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	85.383				
	Be	9	88.698				
	B	11	89.661				
	Na	23	93.723				
	Mg	24	94.881				
	Al	27	94.392				
	P	31	97.898				
	K	39	96.569				
	Ca	43	97.889				
>	Sc	45			90.8		
	Ti	47	101.134				
	V	51	103.623				
	Cr	52	104.690				
	Cr	53					
	Mn	55	104.128				
	Fe	57	103.030				
	Co	59	101.056				
	Ni	60	102.122				
	Cu	63					
	Cu	65	105.019				
	Zn	66	102.531				
	Zn	67					
	Zn	68					
>	Ge	74			93.7		
	As	75	94.743				
	Se	77					
	Se	82	99.624				
	Kr	83					
	Sr	88	96.470				
	Y	89					
	Zr	90	97.699				
	Mo	98	98.486				
	Ag	107	100.420				
	Cd	111	99.497				
	Cd	114					
>	In	115			96.4		
	Sn	120	100.651				
	Sb	121	97.029				
	Sb	123					
	Ba	135					
	Ba	137	101.539				
	Ho	165					
>	Lu	175			96.6		
	Tl	205	98.062				
	Pb	208	103.815				
	Bi	209					
	Th	232	103.835				
	U	238	108.796				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	B	11CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 20:32:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.007	ug/L	154.407	12	-0.000
	Be	9	-0.046	ug/L	10.962	1	-0.000
	B	11	1.045	ug/L	34.473	511	0.000
	Na	23	-0.801	ug/L	241.685	132950	-0.002
	Mg	24	1.420	ug/L	35.263	4001	0.002
	Al	27	0.180	ug/L	514.436	5334	0.000
	P	31	3.098	ug/L	29.223	4145	0.000
	K	39	5.478	ug/L	23.579	437946	0.025
	Ca	43	4.677	ug/L	31.424	301	0.000
>	Sc	45		ug/L		1114646	1114645.714
	Ti	47	0.012	ug/L	450.328	164	0.000
	V	51	-0.671	ug/L	78.753	-2709	-0.003
	Cr	52	0.152	ug/L	17.719	3060	0.001
	Cr	53		ug/L		114251	0.004
	Mn	55	-0.001	ug/L	826.723	898	-0.000
	Fe	57	2.507	ug/L	23.562	5943	0.000
	Co	59	0.013	ug/L	20.611	166	0.000
	Ni	60	0.015	ug/L	32.933	78	0.000
	Cu	63		ug/L		301	-0.000
	Cu	65	-0.019	ug/L	88.263	145	-0.000
	Zn	66	-0.032	ug/L	54.240	315	-0.000
	Zn	67		ug/L		6334	-0.001
	Zn	68		ug/L		822	-0.000
>	Ge	74		ug/L		256439	256438.733
	As	75	-0.151	ug/L	313.064	-355	-0.000
	Se	77		ug/L		5640	-0.001
	Se	82	0.077	ug/L	86.233	8	0.000
	Kr	83		ug/L		47	-0.000
	Sr	88	0.005	ug/L	20.725	306	0.000
	Y	89		ug/L		22	-0.000
	Zr	90	0.085	ug/L	10.091	728	0.003
	Mo	98	0.041	ug/L	12.208	145	0.001
	Ag	107	0.012	ug/L	9.866	141	0.000
	Cd	111	0.012	ug/L	76.466	26	0.000
	Cd	114		ug/L		63	0.000
>	In	115		ug/L		162871	162871.483
	Sn	120	0.076	ug/L	11.018	544	0.002
	Sb	121	0.369	ug/L	12.722	1244	0.006
	Sb	123		ug/L		1002	0.005
	Ba	135		ug/L		32	0.000
	Ba	137	0.003	ug/L	160.768	40	0.000
	Ho	165		ug/L		21	0.000
>	Lu	175		ug/L		183267	183267.218
	Tl	205	0.121	ug/L	17.491	999	0.004
	Pb	208	-0.059	ug/L	2.952	1423	-0.004
	Bi	209		ug/L		75	-0.000
	Th	232	0.084	ug/L	11.534	1545	0.007
	U	238	0.023	ug/L	10.794	568	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			94.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			94.5		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 21:34:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**43.186**	**ug/L**	8.898	11723	0.011
	Be	9	**44.702**	**ug/L**	1.739	5119	0.005
	B	11	**87.696**	**ug/L**	2.658	15318	0.014
	Na	23	**4757.198**	**ug/L**	0.741	13321151	11.944
	Mg	24	**4471.917**	**ug/L**	4.109	8692034	7.873
	Al	27	**4510.295**	**ug/L**	3.324	12254990	11.097
	P	31	**4898.073**	**ug/L**	1.700	661760	0.596
	K	39	**4555.681**	**ug/L**	3.169	23527436	20.944
	Ca	43	**4943.894**	**ug/L**	0.207	46693	0.042
>	Sc	45		**ug/L**		1104077	1104076.579
	Ti	47	**50.686**	**ug/L**	0.580	22589	0.020
	V	51	**50.908**	**ug/L**	1.239	225649	0.204
	Cr	52	**51.968**	**ug/L**	0.209	209767	0.188
	Cr	53		**ug/L**		129703	0.019
	Mn	55	**52.051**	**ug/L**	0.860	345916	0.313
	Fe	57	**5108.551**	**ug/L**	1.229	687975	0.618
	Co	59	**49.891**	**ug/L**	0.299	250441	0.227
	Ni	60	**50.531**	**ug/L**	0.790	52331	0.047
	Cu	63		**ug/L**		116979	0.106
	Cu	65	**51.810**	**ug/L**	1.000	55922	0.051
	Zn	66	**50.608**	**ug/L**	0.308	30295	0.119
	Zn	67		**ug/L**		10937	0.017
	Zn	68		**ug/L**		22282	0.085
>	Ge	74		**ug/L**		252641	252640.575
	As	75	**47.671**	**ug/L**	2.315	32272	0.129
	Se	77		**ug/L**		8140	0.009
	Se	82	**49.094**	**ug/L**	3.318	3696	0.015
	Kr	83		**ug/L**		47	-0.000
	Sr	88	**47.877**	**ug/L**	0.618	494922	3.080
	Y	89		**ug/L**		48	0.000
	Zr	90	**48.403**	**ug/L**	1.642	262025	1.630
	Mo	98	**49.052**	**ug/L**	0.871	112055	0.697
	Ag	107	**49.968**	**ug/L**	0.471	192558	1.198
	Cd	111	**49.746**	**ug/L**	0.928	44079	0.274
	Cd	114		**ug/L**		100132	0.623
>	In	115		**ug/L**		160599	160599.387
	Sn	120	**49.895**	**ug/L**	0.296	182530	1.135
	Sb	121	**48.112**	**ug/L**	1.284	129507	0.805
	Sb	123		**ug/L**		99041	0.615
	Ba	135		**ug/L**		42355	0.229
	Ba	137	**51.100**	**ug/L**	1.169	72768	0.393
	Ho	165		**ug/L**		34	0.000
>	Lu	175		**ug/L**		185174	185174.262
	Tl	205	**48.336**	**ug/L**	0.812	283985	1.532
	Pb	208	**51.210**	**ug/L**	1.275	622580	3.351
	Bi	209		**ug/L**		115	0.000
	Th	232	**51.629**	**ug/L**	0.753	746202	4.028
	U	238	**54.059**	**ug/L**	0.474	796401	4.300

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	86.372				
	Be	9	89.404				
	B	11	87.696				
	Na	23	95.144				
	Mg	24	89.438				
	Al	27	89.313				
	P	31	97.961				
	K	39	91.114				
	Ca	43	98.878				
>	Sc	45			90.0		
	Ti	47	101.373				
	V	51	101.816				
	Cr	52	103.936				
	Cr	53					
	Mn	55	104.103				
	Fe	57	102.171				
	Co	59	99.782				
	Ni	60	101.062				
	Cu	63					
	Cu	65	103.620				
	Zn	66	101.216				
	Zn	67					
	Zn	68					
>	Ge	74			92.7		
	As	75	95.342				
	Se	77					
	Se	82	98.189				
	Kr	83					
	Sr	88	95.754				
	Y	89					
	Zr	90	96.805				
	Mo	98	98.104				
	Ag	107	99.936				
	Cd	111	99.491				
	Cd	114					
>	In	115			95.8		
	Sn	120	99.791				
	Sb	121	96.224				
	Sb	123					
	Ba	135					
	Ba	137	102.200				
	Ho	165					
>	Lu	175			95.5		
	Tl	205	96.673				
	Pb	208	102.420				
	Bi	209					
	Th	232	103.257				
	U	238	108.118				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	B	11CCV is out of limits (+/- 10%)
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 21:40:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.015	ug/L	87.933	10	-0.000
	Be	9	-0.003	ug/L	485.978	6	-0.000
	B	11	0.781	ug/L	51.150	465	0.000
	Na	23	-3.847	ug/L	102.590	124543	-0.010
	Mg	24	1.771	ug/L	117.926	4668	0.003
	Al	27	0.901	ug/L	43.998	7335	0.002
	P	31	1.683	ug/L	54.854	3956	0.000
	K	39	7.501	ug/L	71.653	448613	0.034
	Ca	43	-0.960	ug/L	294.564	247	-0.000
>	Sc	45		ug/L		1115890	1115890.148
	Ti	47	0.003	ug/L	932.163	160	0.000
	V	51	0.134	ug/L	339.515	888	0.001
	Cr	52	0.154	ug/L	26.023	3070	0.001
	Cr	53		ug/L		110451	0.000
	Mn	55	-0.012	ug/L	53.130	823	-0.000
	Fe	57	0.454	ug/L	262.968	5673	0.000
	Co	59	0.005	ug/L	60.859	130	0.000
	Ni	60	0.009	ug/L	76.131	72	0.000
	Cu	63		ug/L		275	-0.000
	Cu	65	-0.021	ug/L	27.092	143	-0.000
	Zn	66	-0.106	ug/L	17.867	269	-0.000
	Zn	67		ug/L		6305	-0.001
	Zn	68		ug/L		780	-0.000
>	Ge	74		ug/L		255740	255739.680
	As	75	0.221	ug/L	132.906	-96	0.001
	Se	77		ug/L		5751	-0.000
	Se	82	0.126	ug/L	192.092	12	0.000
	Kr	83		ug/L		43	-0.000
	Sr	88	0.000	ug/L	898.709	256	0.000
	Y	89		ug/L		21	-0.000
	Zr	90	0.091	ug/L	8.656	757	0.003
	Mo	98	0.034	ug/L	3.960	129	0.000
	Ag	107	0.008	ug/L	48.117	122	0.000
	Cd	111	0.007	ug/L	63.832	22	0.000
	Cd	114		ug/L		48	0.000
>	In	115		ug/L		162562	162562.119
	Sn	120	0.057	ug/L	8.995	476	0.001
	Sb	121	0.365	ug/L	15.679	1231	0.006
	Sb	123		ug/L		984	0.005
	Ba	135		ug/L		18	-0.000
	Ba	137	0.004	ug/L	121.908	42	0.000
	Ho	165		ug/L		17	0.000
>	Lu	175		ug/L		183883	183883.397
	Tl	205	0.104	ug/L	20.454	906	0.003
	Pb	208	-0.082	ug/L	3.610	1152	-0.005
	Bi	209		ug/L		79	-0.000
	Th	232	0.084	ug/L	10.740	1559	0.007
	U	238	0.016	ug/L	26.549	474	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 22:36:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.153**	ug/L	6.691	10788	0.010
	Be	9	**43.575**	ug/L	4.373	4705	0.005
	B	11	**85.003**	ug/L	1.326	14003	0.013
	Na	23	**4648.095**	ug/L	2.545	12271380	11.670
	Mg	24	**4625.364**	ug/L	8.230	8471220	8.143
	Al	27	**4738.013**	ug/L	2.302	12133867	11.657
	P	31	**4849.529**	ug/L	1.529	617578	0.590
	K	39	**4688.331**	ug/L	6.441	22809041	21.554
	Ca	43	**4816.534**	ug/L	2.156	42878	0.041
>	Sc	45		ug/L		1040669	1040669.240
	Ti	47	**50.050**	ug/L	1.494	21025	0.020
	V	51	**51.477**	ug/L	4.124	215000	0.206
	Cr	52	**52.445**	ug/L	1.057	199501	0.190
	Cr	53		ug/L		151725	0.047
	Mn	55	**51.485**	ug/L	0.411	322527	0.309
	Fe	57	**5112.315**	ug/L	2.169	648899	0.619
	Co	59	**50.243**	ug/L	1.852	237696	0.228
	Ni	60	**51.270**	ug/L	1.990	50042	0.048
	Cu	63		ug/L		111197	0.107
	Cu	65	**52.075**	ug/L	0.894	52979	0.051
	Zn	66	**51.485**	ug/L	0.824	29188	0.121
	Zn	67		ug/L		11999	0.024
	Zn	68		ug/L		21190	0.085
>	Ge	74		ug/L		239305	239305.435
	As	75	**48.835**	ug/L	1.249	31321	0.132
	Se	77		ug/L		10321	0.020
	Se	82	**50.746**	ug/L	0.980	3618	0.015
	Kr	83		ug/L		53	0.000
	Sr	88	**46.787**	ug/L	1.057	469883	3.010
	Y	89		ug/L		56	0.000
	Zr	90	**47.685**	ug/L	2.555	250763	1.606
	Mo	98	**48.283**	ug/L	2.343	107148	0.686
	Ag	107	**49.577**	ug/L	1.202	185605	1.189
	Cd	111	**48.837**	ug/L	1.024	42043	0.269
	Cd	114		ug/L		96552	0.619
>	In	115		ug/L		156035	156035.345
	Sn	120	**49.501**	ug/L	1.553	175925	1.126
	Sb	121	**47.650**	ug/L	2.218	124601	0.797
	Sb	123		ug/L		95250	0.609
	Ba	135		ug/L		40937	0.231
	Ba	137	**51.853**	ug/L	0.996	70577	0.399
	Ho	165		ug/L		35	0.000
>	Lu	175		ug/L		176997	176996.532
	Tl	205	**48.538**	ug/L	3.072	272542	1.538
	Pb	208	**51.899**	ug/L	1.312	603040	3.396
	Bi	209		ug/L		104	0.000
	Th	232	**53.075**	ug/L	2.203	733134	4.141
	U	238	**55.437**	ug/L	1.687	780567	4.409

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	84.306				
	Be	9	87.151				
	B	11	85.003				
	Na	23	92.962				
	Mg	24	92.507				
	Al	27	93.822				
	P	31	96.991				
	K	39	93.767				
	Ca	43	96.331				
>	Sc	45		84.8			
	Ti	47	100.101				
	V	51	102.954				
	Cr	52	104.890				
	Cr	53					
	Mn	55	102.971				
	Fe	57	102.246				
	Co	59	100.486				
	Ni	60	102.541				
	Cu	63					
	Cu	65	104.149				
	Zn	66	102.969				
	Zn	67					
	Zn	68					
>	Ge	74		87.8			
	As	75	97.670				
	Se	77					
	Se	82	101.493				
	Kr	83					
	Sr	88	93.575				
	Y	89					
	Zr	90	95.369				
	Mo	98	96.565				
	Ag	107	99.153				
	Cd	111	97.675				
	Cd	114					
>	In	115		93.1			
	Sn	120	99.002				
	Sb	121	95.301				
	Sb	123					
	Ba	135					
	Ba	137	103.706				
	Ho	165					
>	Lu	175		91.2			
	Tl	205	97.076				
	Pb	208	103.799				
	Bi	209					
	Th	232	106.150				
	U	238	110.874				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	B	11CCV is out of limits (+/- 10%)
QC Std 6	U	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 22:43:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.113

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.018	ug/L	23.821	8	-0.000
	Be	9	0.001	ug/L	1865.667	6	0.000
	B	11	1.001	ug/L	43.084	465	0.000
	Na	23	-11.560	ug/L	11.277	94981	-0.029
	Mg	24	1.763	ug/L	63.654	4334	0.003
	Al	27	-0.586	ug/L	65.678	3000	-0.001
	P	31	0.793	ug/L	226.900	3537	0.000
	K	39	-3.872	ug/L	81.658	360152	-0.018
	Ca	43	4.509	ug/L	67.354	276	0.000
>	Sc	45		ug/L		1029695	1029694.617
	Ti	47	0.012	ug/L	729.418	151	0.000
	V	51	0.689	ug/L	133.048	3125	0.003
	Cr	52	0.770	ug/L	8.612	5122	0.003
	Cr	53		ug/L		119067	0.017
	Mn	55	0.013	ug/L	39.949	911	0.000
	Fe	57	0.124	ug/L	641.526	5192	0.000
	Co	59	0.006	ug/L	18.894	123	0.000
	Ni	60	0.014	ug/L	90.203	72	0.000
	Cu	63		ug/L		255	-0.000
	Cu	65	-0.032	ug/L	47.668	121	-0.000
	Zn	66	-0.097	ug/L	38.946	258	-0.000
	Zn	67		ug/L		6497	0.001
	Zn	68		ug/L		759	-0.000
>	Ge	74		ug/L		240651	240650.526
	As	75	0.438	ug/L	31.230	50	0.001
	Se	77		ug/L		7107	0.007
	Se	82	0.024	ug/L	1128.899	4	0.000
	Kr	83		ug/L		54	0.000
	Sr	88	-0.001	ug/L	171.958	234	-0.000
	Y	89		ug/L		20	-0.000
	Zr	90	0.083	ug/L	0.605	685	0.003
	Mo	98	0.045	ug/L	9.170	147	0.001
	Ag	107	0.008	ug/L	6.340	117	0.000
	Cd	111	0.013	ug/L	117.704	27	0.000
	Cd	114		ug/L		52	0.000
>	In	115		ug/L		155852	155852.440
	Sn	120	0.062	ug/L	9.437	473	0.001
	Sb	121	0.366	ug/L	10.320	1183	0.006
	Sb	123		ug/L		959	0.005
	Ba	135		ug/L		19	-0.000
	Ba	137	-0.004	ug/L	110.758	29	-0.000
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		174319	174319.381
	Tl	205	0.480	ug/L	6.991	2937	0.015
	Pb	208	-0.085	ug/L	3.486	1049	-0.006
	Bi	209		ug/L		57	-0.000
	Th	232	0.081	ug/L	10.794	1431	0.006
	U	238	0.016	ug/L	15.776	446	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			83.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			88.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			89.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978601
Sample Date/Time: Monday, December 07, 2009 22:49:17
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978601.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.035**	ug/L	25.046	4	-0.000
	Be	9	**-0.043**	ug/L	11.831	2	-0.000
	B	11	**-0.404**	ug/L	48.820	247	-0.000
	Na	23	**-7.440**	ug/L	92.335	109769	-0.019
	Mg	24	**0.833**	ug/L	84.105	2667	0.001
	Al	27	**0.942**	ug/L	86.006	7002	0.002
	P	31	**21.027**	ug/L	25.787	6228	0.003
	K	39	**-6.762**	ug/L	139.050	355034	-0.031
	Ca	43	**5.367**	ug/L	55.929	291	0.000
>	Sc	45		ug/L		1061729	1061728.509
	Ti	47	**0.180**	ug/L	63.383	225	0.000
	V	51	**1.002**	ug/L	31.449	4600	0.004
	Cr	52	**1.189**	ug/L	7.093	6876	0.004
	Cr	53		ug/L		95423	-0.009
	Mn	55	**0.109**	ug/L	21.045	1544	0.001
	Fe	57	**9.539**	ug/L	46.624	6535	0.001
	Co	59	**-0.000**	ug/L	21108.881	97	-0.000
	Ni	60	**0.086**	ug/L	11.039	144	0.000
	Cu	63		ug/L		351	0.000
	Cu	65	**-0.000**	ug/L	3345.996	157	-0.000
	Zn	66	**0.850**	ug/L	4.763	778	0.002
	Zn	67		ug/L		5199	-0.004
	Zn	68		ug/L		1037	0.001
>	Ge	74		ug/L		236037	236037.140
	As	75	**0.429**	ug/L	207.332	43	0.001
	Se	77		ug/L		5278	-0.000
	Se	82	**0.138**	ug/L	83.764	12	0.000
	Kr	83		ug/L		42	-0.000
	Sr	88	**-0.005**	ug/L	53.356	196	-0.000
	Y	89		ug/L		30	0.000
	Zr	90	**0.254**	ug/L	36.147	1608	0.009
	Mo	98	**0.050**	ug/L	24.054	161	0.001
	Ag	107	**-0.009**	ug/L	16.834	56	-0.000
	Cd	111	**-0.001**	ug/L	354.909	15	-0.000
	Cd	114		ug/L		28	-0.000
>	In	115		ug/L		158459	158459.281
	Sn	120	**0.153**	ug/L	0.278	807	0.003
	Sb	121	**0.036**	ug/L	31.617	329	0.001
	Sb	123		ug/L		244	0.000
	Ba	135		ug/L		46	0.000
	Ba	137	**0.028**	ug/L	16.624	74	0.000
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		179783	179783.398
	Tl	205	**0.324**	ug/L	10.760	2139	0.010
	Pb	208	**-0.092**	ug/L	4.158	1009	-0.006
	Bi	209		ug/L		100	0.000
	Th	232	**0.055**	ug/L	25.457	1106	0.004
	U	238	**-0.012**	ug/L	4.604	65	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			86.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			86.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			92.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978606
Sample Date/Time: Monday, December 07, 2009 22:55:31
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925480|40|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978606.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1.522**	ug/L	5.460	400	0.000
	Be	9	**18.323**	ug/L	5.196	1972	0.002
	B	11	**28.770**	ug/L	2.622	4923	0.004
	Na	23	**122.365**	ug/L	19.403	443871	0.307
	Mg	24	**687.155**	ug/L	7.347	1255006	1.210
	Al	27	**2131.797**	ug/L	4.169	5439784	5.245
	P	31	**181.734**	ug/L	1.830	26379	0.022
	K	39	**643.713**	ug/L	12.000	3446051	2.959
	Ca	43	**914.578**	ug/L	0.764	8301	0.008
>	Sc	45		ug/L		1036250	1036250.252
	Ti	47	**68.549**	ug/L	1.461	28620	0.027
	V	51	**36.067**	ug/L	0.206	150121	0.145
	Cr	52	**19.162**	ug/L	0.773	74030	0.069
	Cr	53		ug/L		121766	0.019
	Mn	55	**96.356**	ug/L	0.469	600305	0.579
	Fe	57	**2683.649**	ug/L	1.205	341676	0.325
	Co	59	**22.535**	ug/L	0.931	106217	0.102
	Ni	60	**27.972**	ug/L	0.831	27215	0.026
	Cu	63		ug/L		57542	0.055
	Cu	65	**27.329**	ug/L	0.801	27758	0.027
	Zn	66	**53.578**	ug/L	0.914	30635	0.126
	Zn	67		ug/L		11234	0.021
	Zn	68		ug/L		23082	0.092
>	Ge	74		ug/L		241458	241457.907
	As	75	**64.265**	ug/L	1.083	41661	0.174
	Se	77		ug/L		9319	0.016
	Se	82	**45.232**	ug/L	2.339	3254	0.013
	Kr	83		ug/L		58	0.000
	Sr	88	**40.045**	ug/L	0.187	412248	2.576
	Y	89		ug/L		31014	0.194
	Zr	90	**1.342**	ug/L	2.164	7483	0.045
	Mo	98	**20.588**	ug/L	0.261	46861	0.293
	Ag	107	**4.108**	ug/L	0.985	15847	0.099
	Cd	111	**28.831**	ug/L	1.735	25442	0.159
	Cd	114		ug/L		59249	0.370
>	In	115		ug/L		159919	159918.719
	Sn	120	**7.488**	ug/L	1.651	27493	0.170
	Sb	121	**9.800**	ug/L	1.887	26450	0.164
	Sb	123		ug/L		20330	0.126
	Ba	135		ug/L		102061	0.568
	Ba	137	**126.902**	ug/L	0.691	175401	0.975
	Ho	165		ug/L		1444	0.008
>	Lu	175		ug/L		179784	179784.368
	Tl	205	**47.802**	ug/L	2.006	272701	1.515
	Pb	208	**45.014**	ug/L	0.648	531578	2.945
	Bi	209		ug/L		863	0.004
	Th	232	**3.169**	ug/L	1.330	44798	0.247
	U	238	**0.419**	ug/L	2.331	6218	0.033

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			84.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			88.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			92.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541001
Sample Date/Time: Monday, December 07, 2009 23:07:59
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541001.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	43.340	ug/L	3.761	11702	0.011
	Be	9	3.878	ug/L	1.450	448	0.000
	B	11	12.444	ug/L	2.702	2441	0.002
	Na	23	2007.781	ug/L	2.402	5667832	5.041
	Mg	24	10547.360	ug/L	2.789	20395165	18.569
	Al	27	63937.774	ug/L	6.429	172781092	157.308
	P	31	470.552	ug/L	0.996	66549	0.057
	K	39	5684.333	ug/L	4.058	29094997	26.133
	Ca	43	7848.560	ug/L	0.721	73578	0.067
>	Sc	45		ug/L		1098179	1098178.563
	Ti	47	1172.260	ug/L	0.711	516168	0.470
	V	51	184.309	ug/L	1.136	811777	0.739
	Cr	52	56.525	ug/L	0.660	226720	0.204
	Cr	53		ug/L		100020	-0.008
	Mn	55	2960.810	ug/L	2.263	19518825	17.776
	Fe	57	83289.858	ug/L	2.816	11070146	10.078
	Co	59	55.663	ug/L	2.389	277854	0.253
	Ni	60	36.762	ug/L	1.209	37883	0.034
	Cu	63		ug/L		70227	0.064
	Cu	65	31.548	ug/L	1.804	33929	0.031
	Zn	66	114.089	ug/L	1.179	60540	0.267
	Zn	67		ug/L		16495	0.047
	Zn	68		ug/L		48164	0.210
>	Ge	74		ug/L		225320	225319.665
	As	75	16.597	ug/L	1.663	9878	0.045
	Se	77		ug/L		3819	-0.006
	Se	82	1.304	ug/L	38.384	89	0.000
	Kr	83		ug/L		142	0.000
	Sr	88	117.490	ug/L	1.639	1140085	7.559
	Y	89		ug/L		519660	3.446
	Zr	90	46.680	ug/L	2.097	237283	1.572
	Mo	98	2.268	ug/L	1.884	4909	0.032
	Ag	107	0.390	ug/L	2.631	1497	0.009
	Cd	111	1.153	ug/L	4.428	974	0.006
	Cd	114		ug/L		438	0.003
>	In	115		ug/L		150807	150806.983
	Sn	120	0.421	ug/L	1.117	1689	0.010
	Sb	121	0.231	ug/L	1.274	805	0.004
	Sb	123		ug/L		643	0.003
	Ba	135		ug/L		432237	2.321
	Ba	137	518.783	ug/L	1.729	742541	3.988
	Ho	165		ug/L		24797	0.133
>	Lu	175		ug/L		186220	186220.469
	Tl	205	1.926	ug/L	7.523	11666	0.061
	Pb	208	87.945	ug/L	0.851	1073643	5.754
	Bi	209		ug/L		8992	0.048
	Th	232	34.280	ug/L	1.466	498348	2.674
	U	238	3.912	ug/L	1.761	58168	0.311

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		82.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201978602
Sample Date/Time: Monday, December 07, 2009 23:14:13
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978602.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.530**	ug/L	7.311	14025	0.013
	Be	9	**3.384**	ug/L	2.109	395	0.000
	B	11	**12.553**	ug/L	1.990	2482	0.002
	Na	23	**2365.255**	ug/L	12.714	6708292	5.938
	Mg	24	**12015.734**	ug/L	9.662	23446410	21.154
	Al	27	**66751.729**	ug/L	6.736	182083364	164.231
	P	31	**381.824**	ug/L	2.643	55176	0.046
	K	39	**5950.047**	ug/L	5.102	30711386	27.354
	Ca	43	**9046.347**	ug/L	1.037	85528	0.077
>	Sc	45		ug/L		1108028	1108027.895
	Ti	47	**1104.822**	ug/L	0.972	490834	0.443
	V	51	**145.911**	ug/L	0.885	648469	0.585
	Cr	52	**54.629**	ug/L	1.224	221158	0.197
	Cr	53		ug/L		94679	-0.013
	Mn	55	**2132.423**	ug/L	0.888	14187572	12.803
	Fe	57	**75502.528**	ug/L	0.497	10128273	9.136
	Co	59	**32.023**	ug/L	0.944	161353	0.146
	Ni	60	**36.694**	ug/L	1.285	38153	0.034
	Cu	63		ug/L		77074	0.069
	Cu	65	**34.106**	ug/L	0.274	37001	0.033
	Zn	66	**120.339**	ug/L	0.898	64146	0.282
	Zn	67		ug/L		16054	0.045
	Zn	68		ug/L		49576	0.216
>	Ge	74		ug/L		226404	226403.705
	As	75	**12.408**	ug/L	5.899	7367	0.034
	Se	77		ug/L		3561	-0.007
	Se	82	**0.849**	ug/L	29.339	59	0.000
	Kr	83		ug/L		147	0.000
	Sr	88	**129.106**	ug/L	0.432	1263658	8.306
	Y	89		ug/L		491062	3.228
	Zr	90	**45.701**	ug/L	1.678	234285	1.539
	Mo	98	**1.479**	ug/L	5.129	3245	0.021
	Ag	107	**0.347**	ug/L	4.981	1352	0.008
	Cd	111	**1.013**	ug/L	9.071	864	0.006
	Cd	114		ug/L		381	0.002
>	In	115		ug/L		152113	152113.360
	Sn	120	**0.337**	ug/L	2.839	1413	0.008
	Sb	121	**0.132**	ug/L	7.638	559	0.002
	Sb	123		ug/L		442	0.002
	Ba	135		ug/L		345260	1.860
	Ba	137	**414.708**	ug/L	1.377	591599	3.188
	Ho	165		ug/L		23882	0.129
>	Lu	175		ug/L		185602	185601.919
	Tl	205	**1.431**	ug/L	1.574	8723	0.045
	Pb	208	**78.346**	ug/L	0.674	953509	5.126
	Bi	209		ug/L		9822	0.052
	Th	232	**35.188**	ug/L	1.693	509785	2.745
	U	238	**3.203**	ug/L	1.687	47520	0.255

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201978604
Sample Date/Time: Monday, December 07, 2009 23:20:28
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978604.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.793**	ug/L	7.368	22204	0.020
	Be	9	**22.566**	ug/L	3.283	2622	0.002
	B	11	**52.845**	ug/L	4.872	9485	0.008
	Na	23	**3406.610**	ug/L	6.183	9703980	8.553
	Mg	24	**15001.883**	ug/L	3.709	29548900	26.411
	Al	27	**90048.791**	ug/L	1.217	247888327	221.549
	P	31	**1177.432**	ug/L	0.998	164053	0.143
	K	39	**9066.846**	ug/L	7.613	47054872	41.683
	Ca	43	**11179.709**	ug/L	0.734	106676	0.095
>	Sc	45		ug/L		1118863	1118863.165
	Ti	47	**1283.778**	ug/L	0.692	575945	0.515
	V	51	**190.841**	ug/L	0.635	856428	0.765
	Cr	52	**91.266**	ug/L	0.593	371461	0.330
	Cr	53		ug/L		113329	0.002
	Mn	55	**1393.929**	ug/L	0.501	9364701	8.369
	Fe	57	**86329.730**	ug/L	0.418	11692789	10.446
	Co	59	**45.747**	ug/L	0.499	232722	0.208
	Ni	60	**60.134**	ug/L	0.715	63099	0.056
	Cu	63		ug/L		140237	0.125
	Cu	65	**61.414**	ug/L	0.813	67146	0.060
	Zn	66	**166.801**	ug/L	1.198	87884	0.391
	Zn	67		ug/L		20348	0.065
	Zn	68		ug/L		66525	0.293
>	Ge	74		ug/L		224071	224070.550
	As	75	**46.656**	ug/L	0.156	28008	0.126
	Se	77		ug/L		3791	-0.006
	Se	82	**7.953**	ug/L	6.527	532	0.002
	Kr	83		ug/L		156	0.000
	Sr	88	**175.345**	ug/L	0.971	1691951	11.281
	Y	89		ug/L		523807	3.493
	Zr	90	**91.410**	ug/L	1.421	461860	3.078
	Mo	98	**19.163**	ug/L	1.222	40907	0.272
	Ag	107	**22.765**	ug/L	0.378	81968	0.546
	Cd	111	**6.230**	ug/L	3.246	5168	0.034
	Cd	114		ug/L		8966	0.060
>	In	115		ug/L		149971	149971.192
	Sn	120	**3.638**	ug/L	1.007	12652	0.083
	Sb	121	**16.144**	ug/L	1.180	40725	0.270
	Sb	123		ug/L		31346	0.208
	Ba	135		ug/L		398621	2.183
	Ba	137	**485.206**	ug/L	0.876	680999	3.730
	Ho	165		ug/L		24187	0.132
>	Lu	175		ug/L		182590	182589.623
	Tl	205	**45.885**	ug/L	2.009	265822	1.454
	Pb	208	**161.098**	ug/L	1.229	1926637	10.540
	Bi	209		ug/L		10322	0.056
	Th	232	**62.468**	ug/L	0.058	890183	4.873
	U	238	**29.725**	ug/L	0.813	431893	2.364

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			82.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			89.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			94.1		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201978605
Sample Date/Time: Monday, December 07, 2009 23:26:44
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978605.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**76.904**	ug/L	7.601	21285	0.019
	Be	9	**22.073**	ug/L	4.871	2583	0.002
	B	11	**51.342**	ug/L	2.801	9290	0.008
	Na	23	**3202.163**	ug/L	3.298	9196552	8.040
	Mg	24	**13680.700**	ug/L	7.614	27140022	24.085
	Al	27	**83871.629**	ug/L	0.756	232556804	206.351
	P	31	**1162.604**	ug/L	0.608	163213	0.141
	K	39	**8800.840**	ug/L	14.839	45977279	40.460
	Ca	43	**10002.910**	ug/L	0.565	96169	0.085
>	Sc	45		ug/L		1126970	1126969.549
	Ti	47	**1262.455**	ug/L	0.997	570449	0.506
	V	51	**176.403**	ug/L	1.082	797345	0.707
	Cr	52	**83.897**	ug/L	0.468	344145	0.303
	Cr	53		ug/L		108597	-0.003
	Mn	55	**1688.213**	ug/L	0.996	11423112	10.136
	Fe	57	**78345.233**	ug/L	1.287	10688454	9.480
	Co	59	**48.184**	ug/L	1.099	246897	0.219
	Ni	60	**58.069**	ug/L	1.383	61380	0.054
	Cu	63		ug/L		127859	0.113
	Cu	65	**55.531**	ug/L	1.119	61166	0.054
	Zn	66	**154.582**	ug/L	0.646	82888	0.362
	Zn	67		ug/L		19169	0.058
	Zn	68		ug/L		62919	0.273
>	Ge	74		ug/L		227960	227960.374
	As	75	**44.954**	ug/L	2.927	27446	0.121
	Se	77		ug/L		3765	-0.006
	Se	82	**7.603**	ug/L	3.491	518	0.002
	Kr	83		ug/L		155	0.000
	Sr	88	**162.261**	ug/L	1.356	1593333	10.439
	Y	89		ug/L		518212	3.395
	Zr	90	**89.384**	ug/L	1.100	459591	3.010
	Mo	98	**18.808**	ug/L	1.066	40858	0.267
	Ag	107	**22.062**	ug/L	1.280	80838	0.529
	Cd	111	**6.073**	ug/L	2.996	5126	0.033
	Cd	114		ug/L		8835	0.058
>	In	115		ug/L		152618	152618.372
	Sn	120	**3.918**	ug/L	2.948	13848	0.089
	Sb	121	**17.071**	ug/L	1.695	43807	0.286
	Sb	123		ug/L		33359	0.217
	Ba	135		ug/L		391625	2.122
	Ba	137	**473.241**	ug/L	1.071	671263	3.638
	Ho	165		ug/L		24034	0.130
>	Lu	175		ug/L		184517	184516.847
	Tl	205	**44.333**	ug/L	0.564	259566	1.405
	Pb	208	**164.951**	ug/L	1.191	1993443	10.793
	Bi	209		ug/L		10044	0.054
	Th	232	**59.127**	ug/L	1.067	851458	4.613
	U	238	**28.559**	ug/L	0.532	419350	2.271

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.1		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201978603
Sample Date/Time: Monday, December 07, 2009 23:33:00
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925480|10|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\1201978603.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**9.865**	ug/L	7.544	2572	0.002
	Be	9	**0.813**	ug/L	10.928	95	0.000
	B	11	**3.325**	ug/L	10.648	857	0.001
	Na	23	**382.905**	ug/L	2.298	1143704	0.961
	Mg	24	**2489.958**	ug/L	12.679	4629562	4.384
	Al	27	**13915.628**	ug/L	4.649	36175503	34.237
	P	31	**109.845**	ug/L	1.875	17649	0.013
	K	39	**1420.970**	ug/L	5.768	7290587	6.533
	Ca	43	**1716.254**	ug/L	2.354	15666	0.015
>	Sc	45		ug/L		1056327	1056326.811
	Ti	47	**252.672**	ug/L	0.394	107141	0.101
	V	51	**39.723**	ug/L	2.932	168494	0.159
	Cr	52	**12.189**	ug/L	3.125	48841	0.044
	Cr	53		ug/L		90891	-0.013
	Mn	55	**638.492**	ug/L	2.344	4050135	3.833
	Fe	57	**18212.402**	ug/L	1.472	2333033	2.204
	Co	59	**12.342**	ug/L	1.153	59345	0.056
	Ni	60	**8.361**	ug/L	2.109	8334	0.008
	Cu	63		ug/L		15805	0.015
	Cu	65	**7.264**	ug/L	2.872	7635	0.007
	Zn	66	**25.222**	ug/L	1.249	14380	0.059
	Zn	67		ug/L		7207	0.004
	Zn	68		ug/L		11476	0.045
>	Ge	74		ug/L		238019	238018.629
	As	75	**3.613**	ug/L	1.534	2090	0.010
	Se	77		ug/L		4347	-0.005
	Se	82	**0.312**	ug/L	49.218	24	0.000
	Kr	83		ug/L		66	0.000
	Sr	88	**23.892**	ug/L	0.320	237659	1.537
	Y	89		ug/L		108378	0.701
	Zr	90	**9.148**	ug/L	1.453	47833	0.308
	Mo	98	**0.439**	ug/L	6.360	1011	0.006
	Ag	107	**0.072**	ug/L	8.394	353	0.002
	Cd	111	**0.206**	ug/L	27.669	191	0.001
	Cd	114		ug/L		94	0.000
>	In	115		ug/L		154460	154460.089
	Sn	120	**0.072**	ug/L	2.643	503	0.002
	Sb	121	**0.027**	ug/L	26.004	295	0.000
	Sb	123		ug/L		250	0.000
	Ba	135		ug/L		87931	0.492
	Ba	137	**110.022**	ug/L	1.063	151007	0.846
	Ho	165		ug/L		4953	0.028
>	Lu	175		ug/L		178528	178528.089
	Tl	205	**0.662**	ug/L	7.128	4038	0.021
	Pb	208	**18.586**	ug/L	1.053	219167	1.216
	Bi	209		ug/L		1898	0.010
	Th	232	**7.120**	ug/L	0.129	99503	0.555
	U	238	**0.816**	ug/L	0.550	11816	0.065

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			86.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			87.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			92.0		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 23:39:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**43.660**	ug/L	9.324	11335	0.011
	Be	9	**44.865**	ug/L	4.385	4915	0.005
	B	11	**88.133**	ug/L	2.438	14727	0.014
	Na	23	**4805.430**	ug/L	3.244	12871914	12.065
	Mg	24	**4576.382**	ug/L	2.811	8511368	8.057
	Al	27	**4503.520**	ug/L	1.428	11708589	11.080
	P	31	**4894.134**	ug/L	1.498	632651	0.596
	K	39	**4728.219**	ug/L	6.124	23347837	21.737
	Ca	43	**4884.660**	ug/L	0.674	44141	0.042
>	Sc	45		ug/L		1056325	1056324.902
	Ti	47	**49.381**	ug/L	0.394	21060	0.020
	V	51	**50.945**	ug/L	2.149	216030	0.204
	Cr	52	**53.050**	ug/L	1.346	204817	0.192
	Cr	53		ug/L		121224	0.016
	Mn	55	**51.608**	ug/L	0.550	328149	0.310
	Fe	57	**5117.968**	ug/L	1.165	659442	0.619
	Co	59	**50.230**	ug/L	1.172	241227	0.228
	Ni	60	**51.069**	ug/L	0.158	50601	0.048
	Cu	63		ug/L		113569	0.107
	Cu	65	**52.234**	ug/L	0.153	53940	0.051
	Zn	66	**51.143**	ug/L	0.980	29457	0.120
	Zn	67		ug/L		10048	0.015
	Zn	68		ug/L		21415	0.085
>	Ge	74		ug/L		243115	243115.354
	As	75	**47.179**	ug/L	2.450	30729	0.127
	Se	77		ug/L		7824	0.009
	Se	82	**50.291**	ug/L	3.364	3642	0.015
	Kr	83		ug/L		49	0.000
	Sr	88	**47.233**	ug/L	0.924	471689	3.039
	Y	89		ug/L		102	0.000
	Zr	90	**48.962**	ug/L	0.406	256056	1.649
	Mo	98	**49.114**	ug/L	0.300	108391	0.698
	Ag	107	**50.286**	ug/L	0.608	187209	1.206
	Cd	111	**49.277**	ug/L	0.570	42183	0.272
	Cd	114		ug/L		97047	0.625
>	In	115		ug/L		155152	155152.222
	Sn	120	**49.584**	ug/L	1.792	175231	1.128
	Sb	121	**48.456**	ug/L	0.807	126005	0.811
	Sb	123		ug/L		96685	0.622
	Ba	135		ug/L		40973	0.233
	Ba	137	**51.729**	ug/L	1.476	70058	0.398
	Ho	165		ug/L		41	0.000
>	Lu	175		ug/L		176119	176118.761
	Tl	205	**49.200**	ug/L	0.795	274915	1.559
	Pb	208	**52.031**	ug/L	1.493	601573	3.404
	Bi	209		ug/L		95	0.000
	Th	232	**52.930**	ug/L	1.373	727561	4.129
	U	238	**55.891**	ug/L	1.714	783057	4.445

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	87.321				
	Be	9	89.729				
	B	11	88.133				
	Na	23	96.109				
	Mg	24	91.528				
	Al	27	89.179				
	P	31	97.883				
	K	39	94.564				
	Ca	43	97.693				
>	Sc	45		86.1			
	Ti	47	98.761				
	V	51	101.889				
	Cr	52	106.099				
	Cr	53					
	Mn	55	103.215				
	Fe	57	102.359				
	Co	59	100.459				
	Ni	60	102.137				
	Cu	63					
	Cu	65	104.468				
	Zn	66	102.287				
	Zn	67					
	Zn	68					
>	Ge	74		89.2			
	As	75	94.359				
	Se	77					
	Se	82	100.581				
	Kr	83					
	Sr	88	94.466				
	Y	89					
	Zr	90	97.924				
	Mo	98	98.228				
	Ag	107	100.571				
	Cd	111	98.553				
	Cd	114					
>	In	115		92.6			
	Sn	120	99.167				
	Sb	121	96.912				
	Sb	123					
	Ba	135					
	Ba	137	103.458				
	Ho	165					
>	Lu	175		90.8			
	Tl	205	98.399				
	Pb	208	104.063				
	Bi	209					
	Th	232	105.861				
	U	238	111.781				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	B	11CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)
QC Std 6	U	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 23:45:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.002**	**ug/L**	855.775	14	0.000
	Be	9	**-0.016**	**ug/L**	128.712	5	-0.000
	B	11	**0.901**	**ug/L**	40.158	473	0.000
	Na	23	**-17.356**	**ug/L**	12.396	84248	-0.044
	Mg	24	**2.701**	**ug/L**	44.750	6335	0.005
	Al	27	**0.610**	**ug/L**	130.071	6335	0.002
	P	31	**0.271**	**ug/L**	667.554	3658	0.000
	K	39	**-5.200**	**ug/L**	41.454	372805	-0.024
	Ca	43	**1.737**	**ug/L**	111.249	265	0.000
>	Sc	45		**ug/L**		1084318	1084317.899
	Ti	47	**0.015**	**ug/L**	92.172	161	0.000
	V	51	**0.414**	**ug/L**	264.418	2080	0.002
	Cr	52	**0.526**	**ug/L**	11.532	4441	0.002
	Cr	53		**ug/L**		104007	-0.003
	Mn	55	**0.016**	**ug/L**	27.796	980	0.000
	Fe	57	**3.551**	**ug/L**	40.955	5917	0.000
	Co	59	**0.009**	**ug/L**	44.810	143	0.000
	Ni	60	**0.011**	**ug/L**	89.746	72	0.000
	Cu	63		**ug/L**		252	-0.000
	Cu	65	**-0.037**	**ug/L**	37.208	121	-0.000
	Zn	66	**-0.118**	**ug/L**	39.073	255	-0.000
	Zn	67		**ug/L**		5497	-0.004
	Zn	68		**ug/L**		649	-0.001
>	Ge	74		**ug/L**		248834	248833.998
	As	75	**-0.055**	**ug/L**	1281.477	-282	-0.000
	Se	77		**ug/L**		5555	-0.001
	Se	82	**-0.065**	**ug/L**	88.404	-3	-0.000
	Kr	83		**ug/L**		51	0.000
	Sr	88	**0.002**	**ug/L**	98.739	267	0.000
	Y	89		**ug/L**		26	-0.000
	Zr	90	**0.089**	**ug/L**	10.347	731	0.003
	Mo	98	**0.041**	**ug/L**	27.283	141	0.001
	Ag	107	**0.006**	**ug/L**	143.495	112	0.000
	Cd	111	**0.011**	**ug/L**	69.202	25	0.000
	Cd	114		**ug/L**		49	0.000
>	In	115		**ug/L**		158502	158501.683
	Sn	120	**0.068**	**ug/L**	14.892	503	0.002
	Sb	121	**0.236**	**ug/L**	17.457	856	0.004
	Sb	123		**ug/L**		704	0.003
	Ba	135		**ug/L**		32	0.000
	Ba	137	**0.015**	**ug/L**	18.051	55	0.000
	Ho	165		**ug/L**		17	0.000
>	Lu	175		**ug/L**		176146	176146.470
	Tl	205	**0.368**	**ug/L**	13.061	2339	0.012
	Pb	208	**-0.093**	**ug/L**	4.649	975	-0.006
	Bi	209		**ug/L**		53	-0.000
	Th	232	**0.059**	**ug/L**	12.548	1142	0.005
	U	238	**0.019**	**ug/L**	14.293	491	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541002
Sample Date/Time: Monday, December 07, 2009 23:51:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541002.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.648**	ug/L	6.364	22323	0.020
	Be	9	**5.077**	ug/L	2.393	599	0.001
	B	11	**18.797**	ug/L	3.551	3613	0.003
	Na	23	**14018.687**	ug/L	10.394	39774912	35.196
	Mg	24	**17074.081**	ug/L	5.425	33884880	30.059
	Al	27	**144768.020**	ug/L	5.327	401548082	356.176
	P	31	**458.346**	ug/L	0.663	66632	0.056
	K	39	**8930.330**	ug/L	3.419	46695674	41.056
	Ca	43	**15361.849**	ug/L	0.129	147574	0.131
>	Sc	45		ug/L		1127148	1127147.990
	Ti	47	**791.976**	ug/L	0.426	357983	0.317
	V	51	**134.782**	ug/L	2.242	609309	0.540
	Cr	52	**91.174**	ug/L	1.119	373815	0.329
	Cr	53		ug/L		114482	0.003
	Mn	55	**801.660**	ug/L	1.407	5425402	4.813
	Fe	57	**105129.435**	ug/L	1.502	14342317	12.720
	Co	59	**21.848**	ug/L	3.002	112001	0.099
	Ni	60	**52.986**	ug/L	2.678	56010	0.050
	Cu	63		ug/L		102106	0.090
	Cu	65	**44.425**	ug/L	1.751	48972	0.043
	Zn	66	**193.673**	ug/L	1.978	100646	0.454
	Zn	67		ug/L		21885	0.073
	Zn	68		ug/L		74471	0.333
>	Ge	74		ug/L		221136	221136.233
	As	75	**10.646**	ug/L	3.298	6140	0.029
	Se	77		ug/L		3826	-0.006
	Se	82	**0.366**	ug/L	120.212	26	0.000
	Kr	83		ug/L		250	0.001
	Sr	88	**168.320**	ug/L	0.488	1606056	10.829
	Y	89		ug/L		940970	6.345
	Zr	90	**49.365**	ug/L	1.265	246755	1.662
	Mo	98	**0.522**	ug/L	4.769	1147	0.007
	Ag	107	**0.579**	ug/L	3.204	2143	0.014
	Cd	111	**1.265**	ug/L	9.168	1049	0.007
	Cd	114		ug/L		353	0.002
>	In	115		ug/L		148292	148292.038
	Sn	120	**0.376**	ug/L	4.298	1509	0.009
	Sb	121	**0.166**	ug/L	12.144	628	0.003
	Sb	123		ug/L		487	0.002
	Ba	135		ug/L		297362	1.634
	Ba	137	**362.143**	ug/L	0.521	506584	2.784
	Ho	165		ug/L		37708	0.207
>	Lu	175		ug/L		181969	181969.455
	Tl	205	**1.789**	ug/L	0.532	10615	0.057
	Pb	208	**66.393**	ug/L	0.343	792581	4.344
	Bi	209		ug/L		10299	0.056
	Th	232	**44.372**	ug/L	1.027	630268	3.462
	U	238	**3.309**	ug/L	0.869	48122	0.263

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			81.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			88.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			93.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541003
Sample Date/Time: Monday, December 07, 2009 23:57:55
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541003.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**70.007**	ug/L	6.295	19239	0.017
	Be	9	**2.835**	ug/L	4.087	335	0.000
	B	11	**14.874**	ug/L	3.054	2909	0.002
	Na	23	**1918.652**	ug/L	1.858	5525845	4.817
	Mg	24	**9701.525**	ug/L	10.698	19110430	17.079
	Al	27	**59836.136**	ug/L	12.058	164856934	147.216
	P	31	**610.844**	ug/L	0.788	86923	0.074
	K	39	**6552.076**	ug/L	3.088	34123762	30.122
	Ca	43	**17753.229**	ug/L	0.872	169293	0.151
>	Sc	45		ug/L		1119094	1119094.399
	Ti	47	**941.389**	ug/L	0.722	422437	0.377
	V	51	**87.954**	ug/L	2.370	394883	0.353
	Cr	52	**40.756**	ug/L	1.515	167261	0.147
	Cr	53		ug/L		84691	-0.023
	Mn	55	**1090.829**	ug/L	0.177	7330029	6.549
	Fe	57	**62190.226**	ug/L	1.872	8425392	7.525
	Co	59	**15.909**	ug/L	1.608	81004	0.072
	Ni	60	**29.229**	ug/L	1.129	30707	0.027
	Cu	63		ug/L		62079	0.055
	Cu	65	**27.252**	ug/L	0.194	29893	0.027
	Zn	66	**196.577**	ug/L	1.250	106146	0.461
	Zn	67		ug/L		21930	0.070
	Zn	68		ug/L		80464	0.347
>	Ge	74		ug/L		229766	229765.888
	As	75	**9.255**	ug/L	2.820	5519	0.025
	Se	77		ug/L		3655	-0.007
	Se	82	**0.947**	ug/L	32.122	67	0.000
	Kr	83		ug/L		160	0.000
	Sr	88	**121.458**	ug/L	0.701	1218733	7.814
	Y	89		ug/L		688791	4.417
	Zr	90	**58.925**	ug/L	2.138	309637	1.984
	Mo	98	**4.034**	ug/L	2.533	8991	0.057
	Ag	107	**0.379**	ug/L	4.684	1504	0.009
	Cd	111	**1.446**	ug/L	5.047	1258	0.008
	Cd	114		ug/L		718	0.004
>	In	115		ug/L		155949	155949.404
	Sn	120	**0.843**	ug/L	1.170	3243	0.019
	Sb	121	**1.151**	ug/L	2.836	3231	0.019
	Sb	123		ug/L		2475	0.015
	Ba	135		ug/L		401514	2.116
	Ba	137	**472.201**	ug/L	0.286	688647	3.630
	Ho	165		ug/L		32058	0.169
>	Lu	175		ug/L		189722	189722.111
	Tl	205	**1.251**	ug/L	1.966	7832	0.040
	Pb	208	**109.659**	ug/L	0.450	1363400	7.175
	Bi	209		ug/L		14574	0.076
	Th	232	**26.414**	ug/L	0.830	391318	2.061
	U	238	**3.212**	ug/L	1.278	48710	0.255

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			84.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541004
Sample Date/Time: Tuesday, December 08, 2009 00:04:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541004.126

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**62.945**	**ug/L**	6.338	17222	0.015
	Be	9	**3.089**	**ug/L**	4.690	363	0.000
	B	11	**12.676**	**ug/L**	2.037	2516	0.002
	Na	23	**1889.442**	**ug/L**	4.617	5418773	4.744
	Mg	24	**8851.137**	**ug/L**	12.652	17351447	15.582
	Al	27	**52108.087**	**ug/L**	3.428	142807104	128.203
	P	31	**551.287**	**ug/L**	1.404	78428	0.067
	K	39	**6305.625**	**ug/L**	3.418	32686972	28.989
	Ca	43	**10532.813**	**ug/L**	0.463	100055	0.090
>	Sc	45		**ug/L**		1113656	1113655.560
	Ti	47	**1045.992**	**ug/L**	1.421	467129	0.419
	V	51	**120.321**	**ug/L**	1.104	537561	0.482
	Cr	52	**43.555**	**ug/L**	0.730	177729	0.157
	Cr	53		**ug/L**		85611	-0.022
	Mn	55	**2156.610**	**ug/L**	0.359	14420750	12.948
	Fe	57	**60961.131**	**ug/L**	1.154	8219686	7.376
	Co	59	**25.769**	**ug/L**	0.556	130530	0.117
	Ni	60	**29.075**	**ug/L**	0.871	30399	0.027
	Cu	63		**ug/L**		51837	0.046
	Cu	65	**22.972**	**ug/L**	1.214	25104	0.022
	Zn	66	**140.876**	**ug/L**	1.982	76682	0.330
	Zn	67		**ug/L**		17462	0.050
	Zn	68		**ug/L**		59066	0.252
>	Ge	74		**ug/L**		231358	231357.831
	As	75	**12.080**	**ug/L**	3.081	7322	0.033
	Se	77		**ug/L**		3481	-0.008
	Se	82	**0.847**	**ug/L**	24.831	60	0.000
	Kr	83		**ug/L**		140	0.000
	Sr	88	**102.806**	**ug/L**	0.512	1026275	6.614
	Y	89		**ug/L**		590941	3.809
	Zr	90	**52.818**	**ug/L**	1.495	276136	1.779
	Mo	98	**3.422**	**ug/L**	1.883	7594	0.049
	Ag	107	**0.332**	**ug/L**	3.299	1321	0.008
	Cd	111	**1.181**	**ug/L**	2.795	1025	0.007
	Cd	114		**ug/L**		553	0.003
>	In	115		**ug/L**		155125	155125.277
	Sn	120	**0.807**	**ug/L**	2.306	3098	0.018
	Sb	121	**0.415**	**ug/L**	3.630	1304	0.007
	Sb	123		**ug/L**		1011	0.005
	Ba	135		**ug/L**		411209	2.178
	Ba	137	**486.002**	**ug/L**	1.320	705239	3.736
	Ho	165		**ug/L**		28092	0.149
>	Lu	175		**ug/L**		188792	188792.363
	Tl	205	**1.052**	**ug/L**	1.671	6600	0.033
	Pb	208	**87.286**	**ug/L**	0.876	1080382	5.711
	Bi	209		**ug/L**		11189	0.059
	Th	232	**27.535**	**ug/L**	1.597	405858	2.148
	U	238	**2.869**	**ug/L**	2.024	43318	0.228

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			84.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.3		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541005
Sample Date/Time: Tuesday, December 08, 2009 00:10:25
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541005.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**38.984**	ug/L	8.055	10407	0.010
	Be	9	**1.560**	ug/L	3.344	182	0.000
	B	11	**6.324**	ug/L	3.055	1385	0.001
	Na	23	**5672.015**	ug/L	5.926	15604577	14.241
	Mg	24	**7853.456**	ug/L	3.023	15022865	13.826
	Al	27	**29712.400**	ug/L	1.244	79413842	73.102
	P	31	**1357.345**	ug/L	0.749	183062	0.165
	K	39	**5423.458**	ug/L	4.757	27478608	24.933
	Ca	43	**8905.592**	ug/L	1.277	82554	0.076
>	Sc	45		ug/L		1086319	1086319.250
	Ti	47	**1186.087**	ug/L	0.337	516649	0.475
	V	51	**89.061**	ug/L	1.427	388186	0.357
	Cr	52	**30.102**	ug/L	0.718	120548	0.109
	Cr	53		ug/L		78338	-0.027
	Mn	55	**1114.308**	ug/L	0.472	7268628	6.690
	Fe	57	**39614.159**	ug/L	0.345	5212305	4.793
	Co	59	**15.790**	ug/L	0.566	78051	0.072
	Ni	60	**26.232**	ug/L	2.356	26757	0.025
	Cu	63		ug/L		70165	0.064
	Cu	65	**31.898**	ug/L	0.830	33938	0.031
	Zn	66	**94.517**	ug/L	1.204	51703	0.222
	Zn	67		ug/L		13356	0.032
	Zn	68		ug/L		40909	0.173
>	Ge	74		ug/L		232064	232064.112
	As	75	**4.986**	ug/L	3.514	2900	0.013
	Se	77		ug/L		3277	-0.009
	Se	82	**0.237**	ug/L	133.140	18	0.000
	Kr	83		ug/L		116	0.000
	Sr	88	**77.249**	ug/L	0.516	763618	4.970
	Y	89		ug/L		368915	2.402
	Zr	90	**54.854**	ug/L	1.163	283976	1.847
	Mo	98	**1.214**	ug/L	3.180	2699	0.017
	Ag	107	**0.281**	ug/L	6.642	1121	0.007
	Cd	111	**1.154**	ug/L	2.545	993	0.006
	Cd	114		ug/L		454	0.003
>	In	115		ug/L		153610	153610.478
	Sn	120	**0.560**	ug/L	4.778	2204	0.013
	Sb	121	**0.144**	ug/L	4.636	596	0.002
	Sb	123		ug/L		462	0.002
	Ba	135		ug/L		370658	1.986
	Ba	137	**440.404**	ug/L	2.713	631891	3.385
	Ho	165		ug/L		16883	0.090
>	Lu	175		ug/L		186725	186725.003
	Tl	205	**0.516**	ug/L	2.112	3357	0.016
	Pb	208	**34.216**	ug/L	2.094	420079	2.239
	Bi	209		ug/L		4425	0.023
	Th	232	**18.607**	ug/L	1.913	271334	1.452
	U	238	**2.962**	ug/L	2.728	44213	0.236

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			88.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			85.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.3		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541006
Sample Date/Time: Tuesday, December 08, 2009 00:16:40
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541006.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**57.474**	ug/L	6.150	15562	0.014
	Be	9	**1.925**	ug/L	6.844	226	0.000
	B	11	**13.380**	ug/L	2.132	2610	0.002
	Na	23	**681.303**	ug/L	16.105	2020394	1.711
	Mg	24	**6761.543**	ug/L	4.966	13123365	11.904
	Al	27	**46258.681**	ug/L	8.469	125408410	113.811
	P	31	**575.286**	ug/L	0.547	80843	0.070
	K	39	**5343.684**	ug/L	5.545	27478608	24.567
	Ca	43	**8145.351**	ug/L	1.052	76633	0.069
>	Sc	45		ug/L		1102156	1102156.388
	Ti	47	**960.249**	ug/L	0.463	424395	0.385
	V	51	**96.755**	ug/L	0.716	427869	0.388
	Cr	52	**41.327**	ug/L	0.986	167019	0.149
	Cr	53		ug/L		82866	-0.024
	Mn	55	**766.129**	ug/L	0.999	5070303	4.600
	Fe	57	**50157.929**	ug/L	0.980	6694290	6.069
	Co	59	**18.855**	ug/L	0.982	94547	0.086
	Ni	60	**26.658**	ug/L	0.664	27589	0.025
	Cu	63		ug/L		99279	0.090
	Cu	65	**43.853**	ug/L	0.679	47278	0.043
	Zn	66	**273.685**	ug/L	1.651	148753	0.641
	Zn	67		ug/L		27654	0.094
	Zn	68		ug/L		107944	0.463
>	Ge	74		ug/L		231467	231467.124
	As	75	**10.162**	ug/L	3.505	6126	0.027
	Se	77		ug/L		3338	-0.008
	Se	82	**0.823**	ug/L	16.681	59	0.000
	Kr	83		ug/L		133	0.000
	Sr	88	**64.112**	ug/L	1.919	633595	4.125
	Y	89		ug/L		510461	3.324
	Zr	90	**99.410**	ug/L	1.656	514290	3.348
	Mo	98	**5.091**	ug/L	2.246	11163	0.072
	Ag	107	**0.806**	ug/L	1.041	3054	0.019
	Cd	111	**2.473**	ug/L	3.718	2109	0.014
	Cd	114		ug/L		2091	0.013
>	In	115		ug/L		153575	153575.095
	Sn	120	**1.500**	ug/L	2.874	5487	0.034
	Sb	121	**2.326**	ug/L	3.100	6199	0.039
	Sb	123		ug/L		4833	0.030
	Ba	135		ug/L		271090	1.442
	Ba	137	**321.813**	ug/L	0.536	465208	2.474
	Ho	165		ug/L		23720	0.126
>	Lu	175		ug/L		188056	188055.984
	Tl	205	**0.958**	ug/L	1.625	6015	0.030
	Pb	208	**93.125**	ug/L	0.841	1148057	6.093
	Bi	209		ug/L		12997	0.069
	Th	232	**25.379**	ug/L	1.435	372692	1.980
	U	238	**12.115**	ug/L	1.611	181454	0.964

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			89.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			85.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541007
Sample Date/Time: Tuesday, December 08, 2009 00:22:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541007.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.563**	ug/L	7.609	13630	0.012
	Be	9	**4.866**	ug/L	4.085	571	0.001
	B	11	**15.839**	ug/L	0.993	3077	0.002
	Na	23	**1267.183**	ug/L	11.120	3696311	3.181
	Mg	24	**10189.635**	ug/L	6.953	20073981	17.939
	Al	27	**64663.393**	ug/L	4.019	178121286	159.093
	P	31	**869.717**	ug/L	1.329	122211	0.106
	K	39	**9165.838**	ug/L	3.691	47593668	42.138
	Ca	43	**12722.443**	ug/L	1.171	121417	0.108
>	Sc	45		ug/L		1119436	1119435.829
	Ti	47	**1277.744**	ug/L	0.712	573513	0.512
	V	51	**163.555**	ug/L	1.842	734352	0.656
	Cr	52	**56.669**	ug/L	1.290	231703	0.205
	Cr	53		ug/L		90222	-0.018
	Mn	55	**4547.745**	ug/L	1.569	30565087	27.304
	Fe	57	**79393.419**	ug/L	1.321	10759255	9.606
	Co	59	**46.157**	ug/L	1.690	234922	0.210
	Ni	60	**49.218**	ug/L	1.558	51685	0.046
	Cu	63		ug/L		80618	0.072
	Cu	65	**35.755**	ug/L	2.257	39178	0.035
	Zn	66	**177.009**	ug/L	1.234	94420	0.415
	Zn	67		ug/L		22081	0.071
	Zn	68		ug/L		76700	0.335
>	Ge	74		ug/L		226910	226909.783
	As	75	**12.403**	ug/L	2.751	7377	0.033
	Se	77		ug/L		3501	-0.007
	Se	82	**1.005**	ug/L	19.524	70	0.000
	Kr	83		ug/L		194	0.001
	Sr	88	**154.683**	ug/L	0.886	1503604	9.951
	Y	89		ug/L		823318	5.450
	Zr	90	**65.195**	ug/L	0.363	331882	2.195
	Mo	98	**1.958**	ug/L	1.095	4253	0.028
	Ag	107	**0.426**	ug/L	1.781	1629	0.010
	Cd	111	**1.776**	ug/L	6.774	1494	0.010
	Cd	114		ug/L		1094	0.007
>	In	115		ug/L		151066	151066.171
	Sn	120	**0.499**	ug/L	5.499	1958	0.011
	Sb	121	**0.199**	ug/L	10.410	723	0.003
	Sb	123		ug/L		578	0.003
	Ba	135		ug/L		760554	3.980
	Ba	137	**882.375**	ug/L	0.437	1296236	6.782
	Ho	165		ug/L		38445	0.201
>	Lu	175		ug/L		191117	191116.689
	Tl	205	**1.394**	ug/L	0.719	8757	0.044
	Pb	208	**93.066**	ug/L	0.892	1165865	6.089
	Bi	209		ug/L		9776	0.051
	Th	232	**39.730**	ug/L	0.980	592666	3.099
	U	238	**6.440**	ug/L	2.027	98129	0.512

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.5		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541008
Sample Date/Time: Tuesday, December 08, 2009 00:29:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541008.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	71.349	ug/L	5.995	19714	0.018
	Be	9	3.983	ug/L	4.482	471	0.000
	B	11	18.401	ug/L	2.020	3537	0.003
	Na	23	1446.204	ug/L	2.175	4220032	3.631
	Mg	24	13381.832	ug/L	1.878	26497655	23.559
	Al	27	98298.542	ug/L	0.977	272005329	241.846
	P	31	490.280	ug/L	0.642	70862	0.060
	K	39	8290.043	ug/L	4.740	43283298	38.112
	Ca	43	12443.962	ug/L	0.350	119334	0.106
>	Sc	45		ug/L		1124715	1124714.880
	Ti	47	1247.781	ug/L	0.968	562713	0.500
	V	51	156.881	ug/L	1.328	707728	0.629
	Cr	52	97.259	ug/L	0.931	397757	0.351
	Cr	53		ug/L		109823	-0.001
	Mn	55	1427.293	ug/L	1.458	9639184	8.569
	Fe	57	88093.729	ug/L	0.850	11993932	10.659
	Co	59	30.139	ug/L	1.487	154160	0.137
	Ni	60	51.133	ug/L	0.861	53945	0.048
	Cu	63		ug/L		87414	0.077
	Cu	65	38.300	ug/L	1.562	42158	0.037
	Zn	66	158.334	ug/L	1.018	85295	0.371
	Zn	67		ug/L		19013	0.057
	Zn	68		ug/L		64067	0.276
>	Ge	74		ug/L		229046	229046.239
	As	75	14.108	ug/L	4.342	8503	0.038
	Se	77		ug/L		3651	-0.007
	Se	82	0.979	ug/L	16.627	69	0.000
	Kr	83		ug/L		271	0.001
	Sr	88	138.381	ug/L	1.051	1348106	8.903
	Y	89		ug/L		1356842	8.961
	Zr	90	73.525	ug/L	1.003	375092	2.476
	Mo	98	2.364	ug/L	4.139	5133	0.034
	Ag	107	0.532	ug/L	2.144	2016	0.013
	Cd	111	1.761	ug/L	6.299	1486	0.010
	Cd	114		ug/L		458	0.003
>	In	115		ug/L		151420	151420.199
	Sn	120	0.423	ug/L	6.209	1701	0.010
	Sb	121	0.151	ug/L	2.292	604	0.003
	Sb	123		ug/L		460	0.002
	Ba	135		ug/L		292517	1.493
	Ba	137	335.531	ug/L	0.693	505354	2.579
	Ho	165		ug/L		56244	0.287
>	Lu	175		ug/L		195921	195921.034
	Tl	205	1.089	ug/L	1.022	7080	0.035
	Pb	208	72.239	ug/L	0.707	928270	4.726
	Bi	209		ug/L		10635	0.054
	Th	232	38.820	ug/L	0.203	593736	3.029
	U	238	3.574	ug/L	0.901	55944	0.284

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			84.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.0		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541009
Sample Date/Time: Tuesday, December 08, 2009 00:35:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541009.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**70.519**	ug/L	7.710	19203	0.017
	Be	9	**2.634**	ug/L	5.187	309	0.000
	B	11	**35.525**	ug/L	2.580	6425	0.005
	Na	23	**559.828**	ug/L	2.684	1692727	1.406
	Mg	24	**7121.339**	ug/L	6.352	13898723	12.537
	Al	27	**47738.130**	ug/L	6.892	130231810	117.451
	P	31	**850.366**	ug/L	1.405	118423	0.103
	K	39	**6086.574**	ug/L	6.841	31429781	27.982
	Ca	43	**10629.318**	ug/L	1.129	100506	0.090
>	Sc	45		ug/L		1108553	1108553.336
	Ti	47	**967.396**	ug/L	0.589	430034	0.388
	V	51	**76.377**	ug/L	1.356	339756	0.306
	Cr	52	**44.300**	ug/L	1.184	179899	0.160
	Cr	53		ug/L		83340	-0.024
	Mn	55	**1006.878**	ug/L	0.694	6702145	6.045
	Fe	57	**48461.242**	ug/L	1.100	6505532	5.864
	Co	59	**15.777**	ug/L	1.159	79585	0.072
	Ni	60	**31.553**	ug/L	0.861	32834	0.030
	Cu	63		ug/L		192214	0.173
	Cu	65	**85.174**	ug/L	0.446	92200	0.083
	Zn	66	**485.579**	ug/L	0.501	264448	1.138
	Zn	67		ug/L		45447	0.170
	Zn	68		ug/L		190215	0.816
>	Ge	74		ug/L		232101	232100.638
	As	75	**10.080**	ug/L	3.619	6092	0.027
	Se	77		ug/L		3405	-0.008
	Se	82	**0.813**	ug/L	14.953	58	0.000
	Kr	83		ug/L		150	0.000
	Sr	88	**65.393**	ug/L	0.780	663936	4.207
	Y	89		ug/L		616153	3.906
	Zr	90	**95.697**	ug/L	0.799	508595	3.223
	Mo	98	**6.348**	ug/L	1.820	14285	0.090
	Ag	107	**1.541**	ug/L	1.828	5918	0.037
	Cd	111	**3.602**	ug/L	3.123	3151	0.020
	Cd	114		ug/L		4086	0.026
>	In	115		ug/L		157759	157759.229
	Sn	120	**3.062**	ug/L	1.205	11243	0.070
	Sb	121	**9.929**	ug/L	0.978	26434	0.166
	Sb	123		ug/L		20223	0.127
	Ba	135		ug/L		343298	1.795
	Ba	137	**398.372**	ug/L	1.332	585521	3.062
	Ho	165		ug/L		28429	0.149
>	Lu	175		ug/L		191204	191203.959
	Tl	205	**1.106**	ug/L	2.557	7014	0.035
	Pb	208	**173.637**	ug/L	1.073	2174438	11.361
	Bi	209		ug/L		16601	0.086
	Th	232	**22.015**	ug/L	1.198	328746	1.717
	U	238	**40.802**	ug/L	1.252	620726	3.245

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			85.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 00:41:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**45.870**	ug/L	10.048	11886	0.011
	Be	9	**47.369**	ug/L	3.344	5183	0.005
	B	11	**93.318**	ug/L	1.972	15558	0.014
	Na	23	**4804.487**	ug/L	2.258	12855620	12.063
	Mg	24	**4767.410**	ug/L	4.298	8855135	8.393
	Al	27	**4830.962**	ug/L	6.273	12548378	11.886
	P	31	**4885.860**	ug/L	0.937	630987	0.595
	K	39	**5136.212**	ug/L	6.424	25323423	23.613
	Ca	43	**4800.358**	ug/L	0.726	43349	0.041
>	Sc	45		ug/L		1055396	1055396.181
	Ti	47	**48.254**	ug/L	1.463	20567	0.019
	V	51	**51.012**	ug/L	2.672	216071	0.205
	Cr	52	**52.404**	ug/L	1.294	202155	0.189
	Cr	53		ug/L		113226	0.008
	Mn	55	**51.814**	ug/L	1.127	329135	0.311
	Fe	57	**5108.852**	ug/L	1.495	657599	0.618
	Co	59	**49.868**	ug/L	1.458	239249	0.227
	Ni	60	**50.501**	ug/L	0.245	49994	0.047
	Cu	63		ug/L		111937	0.106
	Cu	65	**51.666**	ug/L	1.348	53301	0.050
	Zn	66	**50.415**	ug/L	0.579	28968	0.118
	Zn	67		ug/L		9344	0.013
	Zn	68		ug/L		21040	0.083
>	Ge	74		ug/L		242478	242477.856
	As	75	**48.393**	ug/L	1.080	31445	0.131
	Se	77		ug/L		7631	0.009
	Se	82	**49.776**	ug/L	3.537	3596	0.015
	Kr	83		ug/L		46	-0.000
	Sr	88	**46.805**	ug/L	0.293	464553	3.011
	Y	89		ug/L		330	0.002
	Zr	90	**48.732**	ug/L	2.255	253296	1.641
	Mo	98	**48.742**	ug/L	1.424	106909	0.693
	Ag	107	**50.035**	ug/L	1.255	185113	1.200
	Cd	111	**49.026**	ug/L	0.411	41710	0.270
	Cd	114		ug/L		94970	0.616
>	In	115		ug/L		154197	154196.858
	Sn	120	**49.276**	ug/L	1.314	173074	1.121
	Sb	121	**47.901**	ug/L	2.281	123805	0.801
	Sb	123		ug/L		94583	0.612
	Ba	135		ug/L		40502	0.227
	Ba	137	**50.736**	ug/L	1.122	69729	0.390
	Ho	165		ug/L		46	0.000
>	Lu	175		ug/L		178715	178715.201
	Tl	205	**49.613**	ug/L	1.991	281258	1.572
	Pb	208	**52.236**	ug/L	1.987	612750	3.418
	Bi	209		ug/L		113	0.000
	Th	232	**53.367**	ug/L	0.600	744357	4.163
	U	238	**55.884**	ug/L	1.170	794483	4.445

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	91.741				
	Be	9	94.737				
	B	11	93.318				
	Na	23	96.090				
	Mg	24	95.348				
	Al	27	95.663				
	P	31	97.717				
	K	39	102.724				
	Ca	43	96.007				
>	Sc	45			86.0		
	Ti	47	96.509				
	V	51	102.024				
	Cr	52	104.808				
	Cr	53					
	Mn	55	103.629				
	Fe	57	102.177				
	Co	59	99.736				
	Ni	60	101.002				
	Cu	63					
	Cu	65	103.333				
	Zn	66	100.831				
	Zn	67					
	Zn	68					
>	Ge	74			89.0		
	As	75	96.787				
	Se	77					
	Se	82	99.552				
	Kr	83					
	Sr	88	93.609				
	Y	89					
	Zr	90	97.464				
	Mo	98	97.484				
	Ag	107	100.069				
	Cd	111	98.051				
	Cd	114					
>	In	115			92.0		
	Sn	120	98.551				
	Sb	121	95.801				
	Sb	123					
	Ba	135					
	Ba	137	101.471				
	Ho	165					
>	Lu	175			92.1		
	Tl	205	99.227				
	Pb	208	104.471				
	Bi	209					
	Th	232	106.734				
	U	238	111.768				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 00:47:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.003**	**ug/L**	573.386	14	0.000
	Be	9	**-0.028**	**ug/L**	98.854	3	-0.000
	B	11	**1.025**	**ug/L**	48.424	487	0.000
	Na	23	**-20.588**	**ug/L**	13.272	74529	-0.052
	Mg	24	**1.503**	**ug/L**	34.666	4001	0.003
	Al	27	**2.290**	**ug/L**	68.237	10671	0.006
	P	31	**3.016**	**ug/L**	109.197	3971	0.000
	K	39	**-8.384**	**ug/L**	64.196	352305	-0.039
	Ca	43	**-0.811**	**ug/L**	317.554	239	-0.000
>	Sc	45		**ug/L**		1070579	1070578.525
	Ti	47	**-0.009**	**ug/L**	132.083	148	-0.000
	V	51	**0.101**	**ug/L**	304.226	707	0.000
	Cr	52	**0.493**	**ug/L**	11.532	4256	0.002
	Cr	53		**ug/L**		91205	-0.014
	Mn	55	**0.017**	**ug/L**	30.869	978	0.000
	Fe	57	**3.723**	**ug/L**	44.605	5865	0.000
	Co	59	**0.007**	**ug/L**	58.582	131	0.000
	Ni	60	**0.006**	**ug/L**	153.120	66	0.000
	Cu	63		**ug/L**		233	-0.000
	Cu	65	**-0.040**	**ug/L**	23.464	117	-0.000
	Zn	66	**-0.048**	**ug/L**	31.399	294	-0.000
	Zn	67		**ug/L**		4655	-0.007
	Zn	68		**ug/L**		530	-0.001
>	Ge	74		**ug/L**		246908	246908.247
	As	75	**-0.300**	**ug/L**	165.171	-440	-0.001
	Se	77		**ug/L**		5099	-0.002
	Se	82	**0.108**	**ug/L**	146.991	10	0.000
	Kr	83		**ug/L**		51	0.000
	Sr	88	**0.000**	**ug/L**	60.648	250	0.000
	Y	89		**ug/L**		40	0.000
	Zr	90	**0.080**	**ug/L**	7.038	672	0.003
	Mo	98	**0.030**	**ug/L**	42.411	115	0.000
	Ag	107	**0.005**	**ug/L**	29.469	109	0.000
	Cd	111	**0.009**	**ug/L**	38.154	23	0.000
	Cd	114		**ug/L**		45	0.000
>	In	115		**ug/L**		156941	156940.786
	Sn	120	**0.048**	**ug/L**	17.598	424	0.001
	Sb	121	**0.270**	**ug/L**	9.616	939	0.005
	Sb	123		**ug/L**		743	0.003
	Ba	135		**ug/L**		28	0.000
	Ba	137	**0.009**	**ug/L**	39.708	48	0.000
	Ho	165		**ug/L**		15	0.000
>	Lu	175		**ug/L**		178826	178825.649
	Tl	205	**0.193**	**ug/L**	18.078	1381	0.006
	Pb	208	**-0.098**	**ug/L**	2.215	924	-0.006
	Bi	209		**ug/L**		53	-0.000
	Th	232	**0.050**	**ug/L**	16.240	1035	0.004
	U	238	**0.017**	**ug/L**	11.715	466	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			87.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			90.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			92.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541010
Sample Date/Time: Tuesday, December 08, 2009 00:54:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541010.134

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.106**	ug/L	5.967	15147	0.014
	Be	9	**4.037**	ug/L	4.753	474	0.000
	B	11	**14.682**	ug/L	1.970	2874	0.002
	Na	23	**1456.872**	ug/L	2.662	4227015	3.658
	Mg	24	**9783.364**	ug/L	6.411	19271022	17.224
	Al	27	**65290.298**	ug/L	8.573	179671664	160.635
	P	31	**746.404**	ug/L	1.380	105350	0.091
	K	39	**8754.751**	ug/L	2.389	45438483	40.249
	Ca	43	**9676.390**	ug/L	1.110	92352	0.082
>	Sc	45		ug/L		1118752	1118751.737
	Ti	47	**1323.680**	ug/L	0.541	593753	0.531
	V	51	**139.213**	ug/L	1.548	624675	0.558
	Cr	52	**55.042**	ug/L	2.034	224949	0.199
	Cr	53		ug/L		91277	-0.017
	Mn	55	**3539.016**	ug/L	0.906	23771843	21.248
	Fe	57	**69896.935**	ug/L	0.699	9467334	8.457
	Co	59	**32.733**	ug/L	2.005	166506	0.149
	Ni	60	**43.234**	ug/L	1.830	45374	0.041
	Cu	63		ug/L		81925	0.073
	Cu	65	**36.514**	ug/L	2.219	39982	0.036
	Zn	66	**172.985**	ug/L	1.843	92090	0.405
	Zn	67		ug/L		21080	0.067
	Zn	68		ug/L		73219	0.320
>	Ge	74		ug/L		226428	226427.601
	As	75	**9.545**	ug/L	3.066	5616	0.026
	Se	77		ug/L		3593	-0.007
	Se	82	**0.817**	ug/L	5.646	57	0.000
	Kr	83		ug/L		165	0.001
	Sr	88	**125.929**	ug/L	1.432	1224131	8.102
	Y	89		ug/L		710614	4.703
	Zr	90	**57.624**	ug/L	1.334	293396	1.940
	Mo	98	**2.857**	ug/L	3.878	6183	0.041
	Ag	107	**0.372**	ug/L	3.228	1434	0.009
	Cd	111	**1.440**	ug/L	4.272	1215	0.008
	Cd	114		ug/L		839	0.005
>	In	115		ug/L		151093	151093.473
	Sn	120	**0.523**	ug/L	2.472	2043	0.012
	Sb	121	**0.294**	ug/L	9.327	963	0.005
	Sb	123		ug/L		773	0.004
	Ba	135		ug/L		686646	3.604
	Ba	137	**793.673**	ug/L	2.020	1162218	6.101
	Ho	165		ug/L		32814	0.172
>	Lu	175		ug/L		190514	190514.331
	Tl	205	**1.387**	ug/L	3.396	8688	0.044
	Pb	208	**73.887**	ug/L	2.251	923086	4.834
	Bi	209		ug/L		9419	0.049
	Th	232	**37.094**	ug/L	0.705	551712	2.894
	U	238	**6.193**	ug/L	0.863	94084	0.493

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541011
Sample Date/Time: Tuesday, December 08, 2009 01:00:25
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541011.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**57.234**	**ug/L**	8.249	15447	0.014
	Be	9	**3.038**	**ug/L**	6.771	352	0.000
	B	11	**15.894**	**ug/L**	4.590	3030	0.002
	Na	23	**1070.631**	**ug/L**	12.584	3088794	2.688
	Mg	24	**7204.601**	**ug/L**	3.286	13943889	12.684
	Al	27	**50751.901**	**ug/L**	10.157	137122382	124.866
	P	31	**653.639**	**ug/L**	0.780	91112	0.080
	K	39	**6209.903**	**ug/L**	0.632	31788978	28.549
	Ca	43	**7640.721**	**ug/L**	1.136	71720	0.065
>	Sc	45		**ug/L**		1099341	1099341.103
	Ti	47	**943.311**	**ug/L**	0.215	415852	0.378
	V	51	**70.703**	**ug/L**	0.539	311933	0.283
	Cr	52	**34.193**	**ug/L**	1.698	138232	0.124
	Cr	53		**ug/L**		79597	-0.027
	Mn	55	**1095.266**	**ug/L**	0.939	7229363	6.576
	Fe	57	**48479.800**	**ug/L**	1.111	6453390	5.866
	Co	59	**15.980**	**ug/L**	0.625	79935	0.073
	Ni	60	**26.805**	**ug/L**	0.814	27668	0.025
	Cu	63		**ug/L**		41998	0.038
	Cu	65	**18.970**	**ug/L**	1.686	20490	0.018
	Zn	66	**133.888**	**ug/L**	1.573	72072	0.314
	Zn	67		**ug/L**		16311	0.045
	Zn	68		**ug/L**		55140	0.238
>	Ge	74		**ug/L**		228746	228745.893
	As	75	**8.032**	**ug/L**	4.775	4739	0.022
	Se	77		**ug/L**		3430	-0.008
	Se	82	**1.005**	**ug/L**	45.817	70	0.000
	Kr	83		**ug/L**		143	0.000
	Sr	88	**87.383**	**ug/L**	0.489	854105	5.622
	Y	89		**ug/L**		687174	4.524
	Zr	90	**65.477**	**ug/L**	1.232	335103	2.205
	Mo	98	**3.909**	**ug/L**	1.262	8489	0.056
	Ag	107	**0.362**	**ug/L**	2.996	1406	0.009
	Cd	111	**1.458**	**ug/L**	5.046	1236	0.008
	Cd	114		**ug/L**		407	0.002
>	In	115		**ug/L**		151884	151883.580
	Sn	120	**1.787**	**ug/L**	1.223	6420	0.041
	Sb	121	**0.766**	**ug/L**	6.686	2167	0.013
	Sb	123		**ug/L**		1686	0.010
	Ba	135		**ug/L**		336959	1.754
	Ba	137	**389.251**	**ug/L**	1.663	574636	2.992
	Ho	165		**ug/L**		31939	0.166
>	Lu	175		**ug/L**		192041	192041.092
	Tl	205	**0.821**	**ug/L**	1.487	5310	0.026
	Pb	208	**44.008**	**ug/L**	0.977	555192	2.879
	Bi	209		**ug/L**		6234	0.032
	Th	232	**22.238**	**ug/L**	1.158	333540	1.735
	U	238	**2.435**	**ug/L**	1.227	37433	0.194

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541012
Sample Date/Time: Tuesday, December 08, 2009 01:06:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541012.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**43.855**	ug/L	8.286	11712	0.011
	Be	9	**3.274**	ug/L	3.416	375	0.000
	B	11	**13.166**	ug/L	2.204	2538	0.002
	Na	23	**2397.929**	ug/L	8.351	6678033	6.020
	Mg	24	**8384.026**	ug/L	2.880	16044129	14.760
	Al	27	**51011.938**	ug/L	2.631	136433325	125.506
	P	31	**641.968**	ug/L	0.693	88545	0.078
	K	39	**7253.991**	ug/L	6.943	36638144	33.349
	Ca	43	**7339.480**	ug/L	1.124	68120	0.062
>	Sc	45		ug/L		1086888	1086888.087
	Ti	47	**1155.487**	ug/L	0.717	503595	0.463
	V	51	**143.809**	ug/L	0.571	626987	0.577
	Cr	52	**45.848**	ug/L	0.506	182465	0.166
	Cr	53		ug/L		84204	-0.021
	Mn	55	**2129.886**	ug/L	0.482	13899499	12.788
	Fe	57	**64046.166**	ug/L	1.113	8428158	7.749
	Co	59	**29.881**	ug/L	0.616	147696	0.136
	Ni	60	**32.679**	ug/L	0.127	33339	0.031
	Cu	63		ug/L		60875	0.056
	Cu	65	**27.845**	ug/L	1.001	29661	0.027
	Zn	66	**117.813**	ug/L	0.545	62740	0.276
	Zn	67		ug/L		15582	0.043
	Zn	68		ug/L		49704	0.216
>	Ge	74		ug/L		226151	226150.654
	As	75	**13.507**	ug/L	3.854	8027	0.036
	Se	77		ug/L		3348	-0.008
	Se	82	**0.671**	ug/L	38.828	47	0.000
	Kr	83		ug/L		147	0.000
	Sr	88	**97.192**	ug/L	0.404	939354	6.253
	Y	89		ug/L		513473	3.419
	Zr	90	**51.328**	ug/L	1.008	259841	1.728
	Mo	98	**2.058**	ug/L	3.112	4442	0.029
	Ag	107	**0.337**	ug/L	1.369	1297	0.008
	Cd	111	**1.386**	ug/L	8.788	1163	0.008
	Cd	114		ug/L		903	0.006
>	In	115		ug/L		150193	150192.650
	Sn	120	**0.481**	ug/L	1.771	1887	0.011
	Sb	121	**0.242**	ug/L	3.792	827	0.004
	Sb	123		ug/L		646	0.003
	Ba	135		ug/L		411529	2.209
	Ba	137	**485.933**	ug/L	1.332	695905	3.735
	Ho	165		ug/L		23928	0.128
>	Lu	175		ug/L		186306	186305.854
	Tl	205	**0.905**	ug/L	1.013	5648	0.029
	Pb	208	**71.247**	ug/L	0.540	870633	4.662
	Bi	209		ug/L		8231	0.044
	Th	232	**30.676**	ug/L	0.395	446211	2.393
	U	238	**5.321**	ug/L	0.816	79079	0.423

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			88.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			89.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.0		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541013
Sample Date/Time: Tuesday, December 08, 2009 01:12:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541013.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.766**	**ug/L**	5.601	13609	0.012
	Be	9	**3.138**	**ug/L**	6.515	361	0.000
	B	11	**15.551**	**ug/L**	0.841	2952	0.002
	Na	23	**549.092**	**ug/L**	11.342	1634840	1.379
	Mg	24	**8520.071**	**ug/L**	6.442	16382878	15.000
	Al	27	**54301.030**	**ug/L**	6.109	145907862	133.598
	P	31	**713.250**	**ug/L**	0.856	98383	0.087
	K	39	**6792.099**	**ug/L**	0.687	34482959	31.226
	Ca	43	**8982.985**	**ug/L**	1.240	83666	0.076
>	Sc	45		**ug/L**		1091554	1091554.497
	Ti	47	**1038.959**	**ug/L**	0.696	454779	0.416
	V	51	**123.358**	**ug/L**	0.500	540140	0.495
	Cr	52	**48.180**	**ug/L**	0.790	192436	0.174
	Cr	53		**ug/L**		82867	-0.023
	Mn	55	**1654.835**	**ug/L**	1.183	10845095	9.935
	Fe	57	**62052.667**	**ug/L**	1.654	8200023	7.508
	Co	59	**27.465**	**ug/L**	1.704	136324	0.125
	Ni	60	**32.321**	**ug/L**	2.270	33106	0.030
	Cu	63		**ug/L**		78485	0.072
	Cu	65	**35.385**	**ug/L**	1.470	37805	0.034
	Zn	66	**160.601**	**ug/L**	1.066	85555	0.376
	Zn	67		**ug/L**		18378	0.055
	Zn	68		**ug/L**		64633	0.282
>	Ge	74		**ug/L**		226538	226538.417
	As	75	**13.125**	**ug/L**	1.241	7808	0.035
	Se	77		**ug/L**		3327	-0.008
	Se	82	**0.744**	**ug/L**	48.077	52	0.000
	Kr	83		**ug/L**		145	0.000
	Sr	88	**88.663**	**ug/L**	1.811	851398	5.704
	Y	89		**ug/L**		535734	3.590
	Zr	90	**55.489**	**ug/L**	1.621	279063	1.869
	Mo	98	**2.779**	**ug/L**	1.573	5943	0.040
	Ag	107	**0.402**	**ug/L**	4.487	1524	0.010
	Cd	111	**1.363**	**ug/L**	4.158	1137	0.008
	Cd	114		**ug/L**		958	0.006
>	In	115		**ug/L**		149225	149224.605
	Sn	120	**0.493**	**ug/L**	3.608	1914	0.011
	Sb	121	**0.455**	**ug/L**	2.300	1353	0.008
	Sb	123		**ug/L**		1017	0.006
	Ba	135		**ug/L**		340722	1.823
	Ba	137	**408.285**	**ug/L**	0.226	586680	3.138
	Ho	165		**ug/L**		24786	0.133
>	Lu	175		**ug/L**		186927	186926.977
	Tl	205	**0.839**	**ug/L**	1.681	5275	0.027
	Pb	208	**86.486**	**ug/L**	0.512	1059954	5.659
	Bi	209		**ug/L**		8269	0.044
	Th	232	**30.135**	**ug/L**	1.426	439825	2.351
	U	238	**5.954**	**ug/L**	2.253	88752	0.474

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			89.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			89.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541014
Sample Date/Time: Tuesday, December 08, 2009 01:19:14
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541014.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**64.701**	**ug/L**	7.268	17520	0.016
	Be	9	**3.875**	**ug/L**	5.855	449	0.000
	B	11	**17.524**	**ug/L**	2.409	3317	0.003
	Na	23	**1488.381**	**ug/L**	2.736	4252620	3.737
	Mg	24	**11832.895**	**ug/L**	6.254	22964634	20.832
	Al	27	**75272.587**	**ug/L**	1.387	204133195	185.195
	P	31	**593.261**	**ug/L**	0.638	83262	0.072
	K	39	**7788.293**	**ug/L**	1.701	39870922	35.805
	Ca	43	**13703.913**	**ug/L**	0.277	128766	0.117
>	Sc	45		**ug/L**		1102266	1102265.573
	Ti	47	**1093.151**	**ug/L**	0.154	483163	0.438
	V	51	**121.892**	**ug/L**	1.189	538990	0.489
	Cr	52	**51.897**	**ug/L**	1.089	209139	0.188
	Cr	53		**ug/L**		84242	-0.023
	Mn	55	**6953.561**	**ug/L**	2.538	46019911	41.748
	Fe	57	**67566.948**	**ug/L**	1.522	9017286	8.175
	Co	59	**40.919**	**ug/L**	0.793	205086	0.186
	Ni	60	**132.252**	**ug/L**	0.704	136644	0.124
	Cu	63		**ug/L**		83270	0.075
	Cu	65	**37.193**	**ug/L**	1.166	40125	0.036
	Zn	66	**172.836**	**ug/L**	0.917	92010	0.405
	Zn	67		**ug/L**		21791	0.070
	Zn	68		**ug/L**		77246	0.338
>	Ge	74		**ug/L**		226426	226425.733
	As	75	**9.562**	**ug/L**	4.232	5626	0.026
	Se	77		**ug/L**		3467	-0.008
	Se	82	**0.871**	**ug/L**	34.711	61	0.000
	Kr	83		**ug/L**		161	0.001
	Sr	88	**142.306**	**ug/L**	0.631	1384011	9.155
	Y	89		**ug/L**		748877	4.955
	Zr	90	**62.412**	**ug/L**	0.180	317912	2.102
	Mo	98	**3.298**	**ug/L**	0.794	7134	0.047
	Ag	107	**0.405**	**ug/L**	2.390	1555	0.010
	Cd	111	**1.554**	**ug/L**	5.932	1311	0.009
	Cd	114		**ug/L**		843	0.005
>	In	115		**ug/L**		151152	151151.944
	Sn	120	**0.658**	**ug/L**	1.465	2506	0.015
	Sb	121	**0.396**	**ug/L**	6.398	1222	0.007
	Sb	123		**ug/L**		961	0.005
	Ba	135		**ug/L**		932905	4.906
	Ba	137	**1086.642**	**ug/L**	1.302	1588368	8.353
	Ho	165		**ug/L**		35679	0.188
>	Lu	175		**ug/L**		190158	190157.819
	Tl	205	**1.329**	**ug/L**	2.558	8323	0.042
	Pb	208	**91.978**	**ug/L**	0.471	1146587	6.018
	Bi	209		**ug/L**		9014	0.047
	Th	232	**31.309**	**ug/L**	0.970	464817	2.443
	U	238	**3.256**	**ug/L**	0.789	49490	0.259

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			89.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.0		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541015
Sample Date/Time: Tuesday, December 08, 2009 01:25:32
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541015.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.016**	ug/L	5.906	12772	0.012
	Be	9	**3.963**	ug/L	1.963	460	0.000
	B	11	**17.100**	ug/L	3.559	3254	0.003
	Na	23	**1041.386**	ug/L	12.571	3023620	2.615
	Mg	24	**9017.526**	ug/L	1.462	17547169	15.875
	Al	27	**59233.330**	ug/L	9.145	161067120	145.733
	P	31	**1007.483**	ug/L	0.961	139200	0.123
	K	39	**11089.175**	ug/L	1.905	56753204	50.981
	Ca	43	**11671.651**	ug/L	1.449	110005	0.099
>	Sc	45		ug/L		1105245	1105244.829
	Ti	47	**1221.315**	ug/L	1.232	541249	0.490
	V	51	**146.939**	ug/L	2.245	651435	0.589
	Cr	52	**50.323**	ug/L	1.515	203415	0.182
	Cr	53		ug/L		83932	-0.023
	Mn	55	**3795.439**	ug/L	0.682	25186375	22.787
	Fe	57	**69276.321**	ug/L	0.560	9269948	8.382
	Co	59	**38.916**	ug/L	0.346	195580	0.177
	Ni	60	**41.274**	ug/L	0.749	42802	0.039
	Cu	63		ug/L		86555	0.078
	Cu	65	**39.111**	ug/L	0.590	42300	0.038
	Zn	66	**167.657**	ug/L	1.436	88620	0.393
	Zn	67		ug/L		20288	0.064
	Zn	68		ug/L		70996	0.312
>	Ge	74		ug/L		224802	224801.660
	As	75	**12.199**	ug/L	6.744	7182	0.033
	Se	77		ug/L		3416	-0.008
	Se	82	**0.987**	ug/L	19.681	68	0.000
	Kr	83		ug/L		161	0.001
	Sr	88	**139.523**	ug/L	1.057	1334385	8.976
	Y	89		ug/L		694981	4.676
	Zr	90	**60.566**	ug/L	1.419	303370	2.040
	Mo	98	**2.762**	ug/L	2.726	5882	0.039
	Ag	107	**0.343**	ug/L	1.400	1306	0.008
	Cd	111	**1.827**	ug/L	6.992	1513	0.010
	Cd	114		ug/L		1187	0.008
>	In	115		ug/L		148640	148640.171
	Sn	120	**0.520**	ug/L	1.657	1999	0.012
	Sb	121	**0.353**	ug/L	6.238	1096	0.006
	Sb	123		ug/L		854	0.004
	Ba	135		ug/L		658355	3.509
	Ba	137	**780.487**	ug/L	1.834	1125504	5.999
	Ho	165		ug/L		32530	0.173
>	Lu	175		ug/L		187624	187624.425
	Tl	205	**1.198**	ug/L	0.321	7430	0.038
	Pb	208	**89.062**	ug/L	0.813	1095434	5.827
	Bi	209		ug/L		9336	0.049
	Th	232	**35.427**	ug/L	1.159	518864	2.764
	U	238	**7.002**	ug/L	1.016	104714	0.557

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			82.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			88.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241541016
Sample Date/Time: Tuesday, December 08, 2009 01:31:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\241541016.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.214**	**ug/L**	6.058	11717	0.011
	Be	9	**2.981**	**ug/L**	8.417	339	0.000
	B	11	**16.006**	**ug/L**	4.811	2992	0.002
	Na	23	**1088.009**	**ug/L**	0.209	3077156	2.732
	Mg	24	**8209.745**	**ug/L**	10.703	15577409	14.453
	Al	27	**48425.501**	**ug/L**	0.463	128509167	119.142
	P	31	**943.984**	**ug/L**	1.074	127505	0.115
	K	39	**8358.587**	**ug/L**	6.947	41846508	38.427
	Ca	43	**10085.818**	**ug/L**	0.183	92801	0.086
>	Sc	45		**ug/L**		1078607	1078606.656
	Ti	47	**1077.148**	**ug/L**	0.138	465875	0.432
	V	51	**106.718**	**ug/L**	0.907	461769	0.428
	Cr	52	**48.121**	**ug/L**	1.167	189918	0.174
	Cr	53		**ug/L**		81932	-0.023
	Mn	55	**2424.918**	**ug/L**	0.598	15703629	14.559
	Fe	57	**53146.517**	**ug/L**	0.824	6941167	6.431
	Co	59	**26.136**	**ug/L**	1.327	128213	0.119
	Ni	60	**33.737**	**ug/L**	2.436	34148	0.032
	Cu	63		**ug/L**		75043	0.069
	Cu	65	**34.247**	**ug/L**	1.251	36165	0.033
	Zn	66	**158.058**	**ug/L**	0.940	83600	0.370
	Zn	67		**ug/L**		18461	0.056
	Zn	68		**ug/L**		65116	0.286
>	Ge	74		**ug/L**		224892	224892.098
	As	75	**9.129**	**ug/L**	5.661	5324	0.025
	Se	77		**ug/L**		3336	-0.008
	Se	82	**0.805**	**ug/L**	19.037	56	0.000
	Kr	83		**ug/L**		141	0.000
	Sr	88	**100.789**	**ug/L**	1.342	965836	6.484
	Y	89		**ug/L**		534564	3.590
	Zr	90	**52.152**	**ug/L**	0.925	261748	1.756
	Mo	98	**3.679**	**ug/L**	3.556	7835	0.052
	Ag	107	**0.326**	**ug/L**	2.416	1250	0.008
	Cd	111	**1.453**	**ug/L**	9.069	1208	0.008
	Cd	114		**ug/L**		1125	0.007
>	In	115		**ug/L**		148916	148916.378
	Sn	120	**0.581**	**ug/L**	2.518	2211	0.013
	Sb	121	**0.436**	**ug/L**	4.862	1304	0.007
	Sb	123		**ug/L**		1049	0.006
	Ba	135		**ug/L**		472789	2.528
	Ba	137	**559.532**	**ug/L**	1.042	804258	4.301
	Ho	165		**ug/L**		24953	0.133
>	Lu	175		**ug/L**		187007	187007.399
	Tl	205	**0.937**	**ug/L**	1.330	5859	0.030
	Pb	208	**84.836**	**ug/L**	0.504	1040157	5.551
	Bi	209		**ug/L**		7899	0.042
	Th	232	**27.329**	**ug/L**	0.801	399075	2.132
	U	238	**6.896**	**ug/L**	1.098	102811	0.549

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			87.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			82.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			88.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 01:38:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 6.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.105**	**ug/L**	4.979	12263	0.012
	Be	9	**47.506**	**ug/L**	4.364	5110	0.005
	B	11	**95.625**	**ug/L**	0.266	15662	0.015
	Na	23	**4727.457**	**ug/L**	4.000	12436643	11.869
	Mg	24	**4674.404**	**ug/L**	4.245	8536460	8.229
	Al	27	**4732.047**	**ug/L**	3.587	12080034	11.642
	P	31	**4818.798**	**ug/L**	1.514	611679	0.586
	K	39	**4628.049**	**ug/L**	5.565	22449843	21.277
	Ca	43	**4684.980**	**ug/L**	2.733	41578	0.040
>	Sc	45		**ug/L**		1037184	1037183.725
	Ti	47	**47.936**	**ug/L**	1.557	20077	0.019
	V	51	**50.395**	**ug/L**	1.330	209836	0.202
	Cr	52	**52.235**	**ug/L**	1.231	198055	0.189
	Cr	53		**ug/L**		111180	0.008
	Mn	55	**51.307**	**ug/L**	0.713	320335	0.308
	Fe	57	**5027.893**	**ug/L**	1.217	636189	0.608
	Co	59	**49.825**	**ug/L**	1.544	234952	0.226
	Ni	60	**50.543**	**ug/L**	1.940	49173	0.047
	Cu	63		**ug/L**		109431	0.105
	Cu	65	**51.372**	**ug/L**	1.304	52091	0.050
	Zn	66	**50.656**	**ug/L**	1.242	28468	0.119
	Zn	67		**ug/L**		8850	0.011
	Zn	68		**ug/L**		20432	0.083
>	Ge	74		**ug/L**		237203	237202.914
	As	75	**48.564**	**ug/L**	1.284	30871	0.131
	Se	77		**ug/L**		7660	0.009
	Se	82	**49.731**	**ug/L**	1.897	3514	0.015
	Kr	83		**ug/L**		47	-0.000
	Sr	88	**46.499**	**ug/L**	2.008	455308	2.991
	Y	89		**ug/L**		136	0.001
	Zr	90	**47.833**	**ug/L**	3.305	245256	1.611
	Mo	98	**47.758**	**ug/L**	2.315	103341	0.679
	Ag	107	**49.130**	**ug/L**	0.914	179349	1.178
	Cd	111	**47.876**	**ug/L**	1.984	40186	0.264
	Cd	114		**ug/L**		93209	0.612
>	In	115		**ug/L**		152141	152141.262
	Sn	120	**49.211**	**ug/L**	1.789	170528	1.119
	Sb	121	**48.718**	**ug/L**	2.276	124210	0.815
	Sb	123		**ug/L**		94784	0.622
	Ba	135		**ug/L**		39478	0.224
	Ba	137	**49.814**	**ug/L**	1.882	67357	0.383
	Ho	165		**ug/L**		39	0.000
>	Lu	175		**ug/L**		175844	175844.444
	Tl	205	**49.201**	**ug/L**	1.353	274475	1.559
	Pb	208	**52.535**	**ug/L**	0.848	606451	3.437
	Bi	209		**ug/L**		88	0.000
	Th	232	**53.942**	**ug/L**	1.537	740261	4.208
	U	238	**56.890**	**ug/L**	1.689	795801	4.525

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	96.210				
	Be	9	95.012				
	B	11	95.625				
	Na	23	94.549				
	Mg	24	93.488				
	Al	27	93.704				
	P	31	96.376				
	K	39	92.561				
	Ca	43	93.700				
>	Sc	45		84.6			
	Ti	47	95.871				
	V	51	100.790				
	Cr	52	104.470				
	Cr	53					
	Mn	55	102.614				
	Fe	57	100.558				
	Co	59	99.650				
	Ni	60	101.086				
	Cu	63					
	Cu	65	102.744				
	Zn	66	101.311				
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75	97.127				
	Se	77					
	Se	82	99.462				
	Kr	83					
	Sr	88	92.998				
	Y	89					
	Zr	90	95.667				
	Mo	98	95.516				
	Ag	107	98.261				
	Cd	111	95.752				
	Cd	114					
>	In	115		90.8			
	Sn	120	98.421				
	Sb	121	97.437				
	Sb	123					
	Ba	135					
	Ba	137	99.628				
	Ho	165					
>	Lu	175		90.7			
	Tl	205	98.403				
	Pb	208	105.070				
	Bi	209					
	Th	232	107.884				
	U	238	113.779				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	U	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 01:44:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\091207\QC Std 7.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.019**	ug/L	36.230	18	0.000
	Be	9	**0.008**	ug/L	299.749	7	0.000
	B	11	**1.029**	ug/L	38.190	485	0.000
	Na	23	**-25.538**	ug/L	15.122	60798	-0.064
	Mg	24	**1.689**	ug/L	15.491	4334	0.003
	Al	27	**1.282**	ug/L	27.529	8002	0.003
	P	31	**0.203**	ug/L	351.116	3586	0.000
	K	39	**-9.187**	ug/L	0.377	346828	-0.042
	Ca	43	**-3.037**	ug/L	37.181	217	-0.000
>	Sc	45		ug/L		1065648	1065647.830
	Ti	47	**0.003**	ug/L	387.765	153	0.000
	V	51	**-0.581**	ug/L	34.661	-2223	-0.002
	Cr	52	**0.625**	ug/L	12.987	4739	0.002
	Cr	53		ug/L		91058	-0.013
	Mn	55	**0.051**	ug/L	13.212	1186	0.000
	Fe	57	**6.748**	ug/L	27.780	6225	0.001
	Co	59	**0.012**	ug/L	30.222	153	0.000
	Ni	60	**0.019**	ug/L	40.897	79	0.000
	Cu	63		ug/L		256	-0.000
	Cu	65	**-0.044**	ug/L	36.368	112	-0.000
	Zn	66	**-0.103**	ug/L	15.573	260	-0.000
	Zn	67		ug/L		4381	-0.008
	Zn	68		ug/L		512	-0.001
>	Ge	74		ug/L		244729	244729.045
	As	75	**-0.231**	ug/L	209.614	-391	-0.001
	Se	77		ug/L		5213	-0.002
	Se	82	**-0.034**	ug/L	626.263	-0	-0.000
	Kr	83		ug/L		45	-0.000
	Sr	88	**0.007**	ug/L	29.865	308	0.000
	Y	89		ug/L		32	0.000
	Zr	90	**0.091**	ug/L	13.359	721	0.003
	Mo	98	**0.039**	ug/L	24.810	134	0.001
	Ag	107	**0.013**	ug/L	37.641	133	0.000
	Cd	111	**0.014**	ug/L	120.181	26	0.000
	Cd	114		ug/L		59	0.000
>	In	115		ug/L		153948	153947.863
	Sn	120	**0.063**	ug/L	22.962	471	0.001
	Sb	121	**0.171**	ug/L	23.696	666	0.003
	Sb	123		ug/L		509	0.002
	Ba	135		ug/L		32	0.000
	Ba	137	**0.014**	ug/L	10.223	54	0.000
	Ho	165		ug/L		14	0.000
>	Lu	175		ug/L		176754	176753.596
	Tl	205	**0.295**	ug/L	18.996	1942	0.009
	Pb	208	**-0.095**	ug/L	3.517	953	-0.006
	Bi	209		ug/L		46	-0.000
	Th	232	**0.060**	ug/L	18.558	1160	0.005
	U	238	**0.022**	ug/L	16.997	534	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			86.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			89.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			91.1		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 08, 2009 12:52:55
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.298
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1249.3	1249.255	31.462	2.5
	Mg	24.0	21459.1	21459.106	192.084	0.9
	Co	58.9	51886.1	51886.057	248.988	0.5
	Rh	102.9	88615.6	88615.621	958.972	1.1
	In	114.9	113984.8	113984.779	1309.736	1.1
	Pb	208.0	67990.2	67990.215	446.224	0.7
⌈>	Ba	137.9	98903.3	98903.298	1077.531	1.1
⌊	Ba++	69.0	1372.7	0.014	0.000	3.3
⌈>	Ce	139.9	117661.2	117661.181	909.008	0.8
⌊	CeO	155.9	2763.6	0.023	0.001	3.5
	Bkgd	220.0	3.3	3.300	0.908	27.5

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	19	7.0	1259.1
Co	59	19	7.8	35321.3
In	115	19	9.3	83547.3

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	601	2060	0.659
Be	9.0	9.0	2034	2055	0.699
Mg	24.0	24.0	5679	2075	0.647
Mg	25.0	24.9	5917	2080	0.648
Mg	26.0	25.9	6145	2095	0.667
Co	58.9	58.9	14182	2120	0.714
Rh	102.9	102.8	24855	2220	0.680
In	114.9	114.9	27790	2255	0.677
Ce	139.9	139.9	33853	2300	0.662
Pb	206.0	206.0	49929	2460	0.741
Pb	207.0	207.0	50125	2380	0.675
Pb	208.0	208.0	50436	2490	0.753
U	238.1	238.0	57686	2480	0.748

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 13:17:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\Blank.001

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		159762	
⌊	U	238		ug/L		26	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 13:18:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		160143	160143.263
⌊	U	238	10.000	ug/L	0.776	142816	0.892

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 13:20:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		161639	161638.962
⌊	U	238	99.977	ug/L	1.273	1408110	8.712

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 13:22:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		161656	161656.449
⌊	U	238	53.425	ug/L	1.523	752620	4.655

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.2			
⌊	U	238	106.849				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 13:23:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		161985	161984.837
⌊	U	238	0.020	ug/L	5.176	309	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 13:25:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		159551	159550.953
⌊	U	238	0.236	ug/L	2.291	3307	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		99.9			
⌊	U	238	117.995				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 13:27:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		148551	148551.198
⌊	U	238	0.011	ug/L	5.524	161	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			93.0		
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 13:28:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		151290	151289.720
⌊	U	238	22.756	ug/L	0.386	300019	1.983

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			94.7		
⌊	U	238	113.779				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 13:30:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		162063	162062.705
⌊	U	238	**53.299**	ug/L	1.402	752740	4.644

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.4			
⌊	U	238	106.598				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 13:32:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		159833	159833.161
⌊	U	238	0.009	ug/L	9.290	149	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 13:49:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.018

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		161086	161086.386
⌊	U	238	53.219	ug/L	1.953	746884	4.637

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.8			
⌊	U	238	106.438				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 13:51:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.019

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		158725	158724.583
⌊	U	238	0.013	ug/L	10.614	199	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		99.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 14:12:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.029

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		160856	160856.498
⌊	U	238	53.378	ug/L	1.225	748189	4.651

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.7			
⌊	U	238	106.756				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 14:14:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		159805	159804.862
⌊	U	238	0.013	ug/L	18.464	203	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 14:34:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.039

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		157173	157172.809
⌊	U	238	50.136	ug/L	0.574	686698	4.369

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			98.4		
⌊	U	238	100.272				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 14:35:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.040

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		158413	158412.721
⌊	U	238	0.012	ug/L	2.728	189	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			99.2		
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978601
Sample Date/Time: Tuesday, December 08, 2009 14:37:32
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no irs.mth
Dataset File: C:\elandata\Dataset\091208\1201978601.041

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		161412	161412.416
⌊	U	238	0.008	ug/L	10.377	145	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978606
Sample Date/Time: Tuesday, December 08, 2009 14:39:45
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925480|40|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\1201978606.042

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		141558	141557.560
	U	238	0.461	ug/L	3.088	5709	0.040

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		88.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541001
Sample Date/Time: Tuesday, December 08, 2009 14:41:58
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541001.043

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		163186	163186.474
⌊	U	238	3.690	ug/L	0.463	52505	0.322

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		102.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978602
Sample Date/Time: Tuesday, December 08, 2009 14:44:12
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\1201978602.044

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		161642	161641.635
⌊	U	238	3.073	ug/L	1.360	43310	0.268

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978604
Sample Date/Time: Tuesday, December 08, 2009 14:46:25
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\1201978604.045

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		161825	161824.738
	U	238	28.223	ug/L	2.067	397988	2.459

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175			101.3		
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978605
Sample Date/Time: Tuesday, December 08, 2009 14:48:37
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\1201978605.046

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		162076	162075.550
⌊	U	238	**27.206**	ug/L	1.369	384250	2.371

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201978603
Sample Date/Time: Tuesday, December 08, 2009 14:50:49
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925480|10|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\1201978603.047

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		157356	157355.502
⌊	U	238	0.773	ug/L	1.168	10632	0.067

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		98.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541002
Sample Date/Time: Tuesday, December 08, 2009 14:53:02
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\241541002.048

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		161604	161603.522
⌊	U	238	3.150	ug/L	0.780	44381	0.274

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541003
Sample Date/Time: Tuesday, December 08, 2009 14:55:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541003.049

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		163853	163853.036
⌊	U	238	3.037	ug/L	1.681	43385	0.265

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		102.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541004
Sample Date/Time: Tuesday, December 08, 2009 14:57:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541004.050

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		155786	155786.154
⌊	U	238	2.897	ug/L	1.523	39345	0.252

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		97.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 14:59:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.051

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		155631	155630.693
	U	238	51.064	ug/L	1.804	692512	4.450

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		97.4			
	U	238	102.128				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 15:01:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.052

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		156423	156422.951
⌊	U	238	0.020	ug/L	8.486	295	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		97.9			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541005
Sample Date/Time: Tuesday, December 08, 2009 15:03:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\241541005.053

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		163527	163526.596
⌊	U	238	2.753	ug/L	1.144	39250	0.240

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		102.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541006
Sample Date/Time: Tuesday, December 08, 2009 15:05:23
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541006.054

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		164768	164767.754
⌊	U	238	11.071	ug/L	0.539	158977	0.965

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		103.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541007
Sample Date/Time: Tuesday, December 08, 2009 15:07:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541007.055

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		167295	167294.648
⌊	U	238	5.931	ug/L	1.523	86480	0.517

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		104.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541008
Sample Date/Time: Tuesday, December 08, 2009 15:09:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541008.056

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		166466	166466.294
[	U	238	3.370	ug/L	1.020	48910	0.294

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		104.2			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541009
Sample Date/Time: Tuesday, December 08, 2009 15:12:02
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541009.057

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		159392	159391.915
	U	238	39.231	ug/L	0.958	544939	3.419

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		99.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541010
Sample Date/Time: Tuesday, December 08, 2009 15:14:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541010.058

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		166741	166741.132
⌊	U	238	5.655	ug/L	1.137	82188	0.493

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			104.4		
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 15:16:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.059

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		160972	160972.277
⌊	U	238	49.513	ug/L	0.378	694545	4.314

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.8			
⌊	U	238	99.025				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 15:18:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.060

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		160882	160882.112
⌊	U	238	0.011	ug/L	9.555	186	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541011
Sample Date/Time: Tuesday, December 08, 2009 15:19:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541011.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		168928	168928.280
⌊	U	238	2.211	ug/L	1.201	32576	0.193

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		105.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541012
Sample Date/Time: Tuesday, December 08, 2009 15:22:12
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no irs.mth
Dataset File: C:\elandata\Dataset\091208\241541012.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		163239	163238.657
⌊	U	238	4.759	ug/L	0.651	67717	0.415

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		102.2			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541013
Sample Date/Time: Tuesday, December 08, 2009 15:24:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no irs.mth
Dataset File: C:\elandata\Dataset\091208\241541013.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		164134	164133.540
⌊	U	238	5.310	ug/L	1.122	75977	0.463

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		102.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541014
Sample Date/Time: Tuesday, December 08, 2009 15:26:38
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no irs.mth
Dataset File: C:\elandata\Dataset\091208\241541014.064

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		168864	168864.276
⌊	U	238	2.896	ug/L	0.897	42637	0.252

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		105.7			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541015
Sample Date/Time: Tuesday, December 08, 2009 15:28:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541015.065

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		166228	166227.846
⌊	U	238	6.215	ug/L	1.412	90044	0.542

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		104.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241541016
Sample Date/Time: Tuesday, December 08, 2009 15:31:06
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|prb
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\241541016.066

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		163642	163641.893
[	U	238	6.118	ug/L	1.456	87266	0.533

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175			102.4		
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 15:33:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.067

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		159721	159721.219
⌊	U	238	48.946	ug/L	0.927	681292	4.265

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.0			
⌊	U	238	97.892				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 15:35:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.068

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		160365	160364.763
⌊	U	238	0.012	ug/L	10.061	191	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 08, 2009 12:14:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1420
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	7284.7	7284.658	173.033	2.4
	Mg	24.0	60061.7	60061.712	2059.059	3.4
	Co	58.9	158942.6	158942.583	1686.378	1.1
	Rh	102.9	311119.2	311119.217	1716.347	0.6
	In	114.9	405143.7	405143.712	1793.513	0.4
	Pb	208.0	250960.4	250960.382	2944.999	1.2
⌈>	Ba	137.9	382380.2	382380.208	5414.019	1.4
⌊	Ba++	69.0	8329.3	0.022	0.000	1.4
⌈>	Ce	139.9	466717.1	466717.070	5925.086	1.3
⌊	CeO	155.9	12652.4	0.027	0.000	1.6
	Bkgd	220.0	22.6	22.600	3.209	14.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.8	7387.6
Co	59	15	6.8	162601.5
In	115	15	7.5	393283.0

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2060	0.660
Be	9.0	9.0	2042	2070	0.677
Mg	24.0	24.0	5679	2080	0.685
Mg	25.0	25.0	5919	2075	0.643
Mg	26.0	26.0	6187	2070	0.701
Co	58.9	58.9	14182	2110	0.663
Rh	102.9	102.9	24876	2160	0.666
In	114.9	114.9	27790	2180	0.661
Ce	139.9	139.9	33862	2195	0.685
Pb	206.0	206.0	49948	2290	0.674
Pb	207.0	207.0	50147	2260	0.631
Pb	208.0	208.0	50451	2280	0.677
U	238.1	238.1	57727	2285	0.720

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 17:36:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\Blank.081

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		209	
Be	9		ug/L		35	
B	11		ug/L		3606	
Sc	45		ug/L		1017872	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
B	11	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 17:37:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.082

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**10.000**	**ug/L**	2.069	23130	0.023
Be	9	**10.000**	**ug/L**	0.345	5392	0.005
B	11	**20.000**	**ug/L**	2.933	13161	0.009
Sc	45		**ug/L**		1012545	1012545.430

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 17:39:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.992**	**ug/L**	3.340	221497	0.225
	Be	9	**99.981**	**ug/L**	1.753	51219	0.052
	B	11	**200.149**	**ug/L**	2.128	104295	0.102
>	Sc	45		**ug/L**		985606	985605.572

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 17:41:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.084

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**51.117**	**ug/L**	2.194	113311	0.115
Be	9	**52.516**	**ug/L**	2.288	26914	0.027
B	11	**103.321**	**ug/L**	2.066	55510	0.053
Sc	45		**ug/L**		985442	985441.855

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	102.234				
Be	9	105.032				
B	11	103.321				
Sc	45		96.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 17:43:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.085

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	-0.014	ug/L	49.508	178	-0.000
|	Be	9	-0.006	ug/L	107.964	32	-0.000
|	B	11	0.978	ug/L	32.317	4138	0.000
⌊>	Sc	45		ug/L		1024156	1024155.524

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		100.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 17:44:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.839**	**ug/L**	3.918	25511	0.024
	Be	9	**0.486**	**ug/L**	5.518	298	0.000
	B	11	**14.210**	**ug/L**	7.875	11224	0.007
>	Sc	45		**ug/L**		1039771	1039770.905

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	108.389				
	Be	9	97.226				
	B	11	94.735				
>	Sc	45		102.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 17:46:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.065**	**ug/L**	16.353	330	0.000
	Be	9	**0.041**	**ug/L**	16.909	52	0.000
	B	11	**-1.434**	**ug/L**	16.075	2649	-0.001
>	Sc	45		**ug/L**		943221	943221.429

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		92.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 17:48:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.088

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**20.525**	**ug/L**	2.373	41472	0.046
Be	9	**19.969**	**ug/L**	2.954	9321	0.010
B	11	**16.212**	**ug/L**	4.720	10590	0.008
Sc	45		**ug/L**		895721	895721.243

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	102.623				
Be	9	99.844				
B	11	81.059				
Sc	45		88.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 17:50:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.543**	**ug/L**	4.881	110065	0.118
	Be	9	**54.315**	**ug/L**	4.919	26298	0.028
	B	11	**102.210**	**ug/L**	4.488	51929	0.052
>	Sc	45		**ug/L**		931304	931304.428

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	105.085				
	Be	9	108.631				
	B	11	102.210				
>	Sc	45		91.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 17:51:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.090

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.022	ug/L	34.790	157	-0.000
Be	9	-0.019	ug/L	22.484	25	-0.000
B	11	-1.336	ug/L	13.426	2887	-0.001
Sc	45		ug/L		1009585	1009584.717

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		99.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978601
Sample Date/Time: Tuesday, December 08, 2009 17:53:38
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\1201978601.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.036	ug/L	17.581	132	-0.000
	Be	9	-0.027	ug/L	27.824	21	-0.000
	B	11	-2.432	ug/L	7.685	2440	-0.001
>	Sc	45		ug/L		1061778	1061778.174

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		104.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978606
Sample Date/Time: Tuesday, December 08, 2009 17:55:23
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 925480|20|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\1201978606.092

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	3.923	ug/L	3.684	8660	0.009
Be	9	48.029	ug/L	5.872	23982	0.025
B	11	69.056	ug/L	3.360	37307	0.035
Sc	45		ug/L		961152	961151.524

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		94.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541001
Sample Date/Time: Tuesday, December 08, 2009 17:58:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541001.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.675**	**ug/L**	3.323	117102	0.109
	Be	9	**4.269**	**ug/L**	3.518	2407	0.002
	B	11	**9.970**	**ug/L**	3.197	9236	0.005
>	Sc	45		**ug/L**		1069604	1069604.358

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		105.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978602
Sample Date/Time: Tuesday, December 08, 2009 18:00:41
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\1201978602.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**55.236**	**ug/L**	3.722	134527	0.124
Be	9	**3.763**	**ug/L**	3.326	2154	0.002
B	11	**10.834**	**ug/L**	4.920	9829	0.006
Sc	45		**ug/L**		1082886	1082885.833

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45			106.4		

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978604
Sample Date/Time: Tuesday, December 08, 2009 18:02:29
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 925480|2|ba|
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\1201978604.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**87.389**	**ug/L**	2.930	219771	0.196
|	Be	9	**24.459**	**ug/L**	1.741	14249	0.013
|	B	11	**52.310**	**ug/L**	5.539	33840	0.027
⌊>	Sc	45		**ug/L**		1118244	1118243.806

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		109.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978605
Sample Date/Time: Tuesday, December 08, 2009 18:04:17
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\1201978605.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**82.630**	**ug/L**	3.141	203112	0.186
|	Be	9	**23.712**	**ug/L**	2.785	13503	0.012
|	B	11	**52.392**	**ug/L**	4.008	33159	0.027
⌊>	Sc	45		**ug/L**		1093575	1093575.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		107.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201978603
Sample Date/Time: Tuesday, December 08, 2009 18:06:03
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 925480|10|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\1201978603.098

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**11.694**	**ug/L**	4.474	24649	0.026
Be	9	**0.987**	**ug/L**	6.243	510	0.001
B	11	**1.135**	**ug/L**	38.617	3839	0.001
Sc	45		**ug/L**		931909	931908.946

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		91.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 18:07:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.099

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**52.208**	**ug/L**	5.957	111942	0.117
Be	9	**52.899**	**ug/L**	5.272	26224	0.027
B	11	**99.149**	**ug/L**	3.807	51682	0.051
Sc	45		**ug/L**		954297	954297.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	104.415				
Be	9	105.799				
B	11	99.149				
Sc	45		93.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 18:09:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.100

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.028**	**ug/L**	20.048	270	0.000
	Be	9	**0.007**	**ug/L**	139.061	38	0.000
	B	11	**-1.561**	**ug/L**	12.679	2763	-0.001
>	Sc	45		**ug/L**		1006080	1006079.773

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		98.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541002
Sample Date/Time: Tuesday, December 08, 2009 18:11:46
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541002.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**85.659**	**ug/L**	4.215	230543	0.192
	Be	9	**5.297**	**ug/L**	1.657	3337	0.003
	B	11	**15.735**	**ug/L**	1.654	13872	0.008
>	Sc	45		**ug/L**		1197894	1197893.699

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45			117.7		

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541003
Sample Date/Time: Tuesday, December 08, 2009 18:13:32
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541003.102

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**77.171**	**ug/L**	4.278	184145	0.173
Be	9	**3.239**	**ug/L**	2.831	1822	0.002
B	11	**13.403**	**ug/L**	5.131	11027	0.007
Sc	45		**ug/L**		1061759	1061759.033

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		104.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541004
Sample Date/Time: Tuesday, December 08, 2009 18:15:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541004.103

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**68.843**	**ug/L**	1.463	161166	0.155
Be	9	**3.347**	**ug/L**	0.505	1845	0.002
B	11	**10.148**	**ug/L**	4.396	9082	0.005
Sc	45		**ug/L**		1041003	1041002.548

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		102.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541005
Sample Date/Time: Tuesday, December 08, 2009 18:17:06
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541005.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**42.709**	**ug/L**	5.684	97533	0.096
|	Be	9	**1.793**	**ug/L**	7.856	979	0.001
|	B	11	**3.842**	**ug/L**	12.633	5587	0.002
⌊>	Sc	45		**ug/L**		1016099	1016099.343

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		99.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541006
Sample Date/Time: Tuesday, December 08, 2009 18:18:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541006.105

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**62.387**	**ug/L**	4.174	143462	0.140
Be	9	**2.167**	**ug/L**	11.218	1184	0.001
B	11	**10.629**	**ug/L**	10.166	9168	0.005
Sc	45		**ug/L**		1022842	1022841.719

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		100.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541007
Sample Date/Time: Tuesday, December 08, 2009 18:20:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541007.106

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**52.394**	**ug/L**	4.995	127459	0.118
Be	9	**4.958**	**ug/L**	5.137	2822	0.003
B	11	**13.118**	**ug/L**	2.434	11088	0.007
Sc	45		**ug/L**		1082733	1082733.352

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		106.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541008
Sample Date/Time: Tuesday, December 08, 2009 18:22:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541008.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**72.695**	**ug/L**	3.182	181388	0.163
|	Be	9	**4.236**	**ug/L**	3.946	2479	0.002
|	B	11	**14.755**	**ug/L**	2.348	12297	0.008
⌊>	Sc	45		**ug/L**		1109756	1109755.994

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45			109.0		

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 18:24:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.108

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**52.916**	**ug/L**	3.216	115476	0.119
Be	9	**53.520**	**ug/L**	2.132	27004	0.028
B	11	**101.035**	**ug/L**	0.386	53522	0.052
Sc	45		**ug/L**		970266	970266.400

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	105.831				
Be	9	107.040				
B	11	101.035				
Sc	45		95.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 18:26:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	0.049	ug/L	6.229	320	0.000
|	Be	9	-0.012	ug/L	90.300	28	-0.000
|	B	11	-2.249	ug/L	4.562	2422	-0.001
⌊>	Sc	45		ug/L		1011617	1011617.031

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		99.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541009
Sample Date/Time: Tuesday, December 08, 2009 18:29:06
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541009.110

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	71.844	ug/L	4.786	170758	0.161
Be	9	2.746	ug/L	5.467	1543	0.001
B	11	33.997	ug/L	5.578	22103	0.017
Sc	45		ug/L		1058280	1058280.051

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		104.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541010
Sample Date/Time: Tuesday, December 08, 2009 18:30:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541010.111

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**55.684**	**ug/L**	2.612	136994	0.125
Be	9	**4.290**	**ug/L**	2.358	2475	0.002
B	11	**11.753**	**ug/L**	3.592	10443	0.006
Sc	45		**ug/L**		1093782	1093781.823

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		107.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541011
Sample Date/Time: Tuesday, December 08, 2009 18:32:40
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541011.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**61.574**	**ug/L**	5.120	143060	0.138
|	Be	9	**3.313**	**ug/L**	1.750	1813	0.002
|	B	11	**13.872**	**ug/L**	3.853	10983	0.007
⌊>	Sc	45		**ug/L**		1033465	1033465.262

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		101.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541012
Sample Date/Time: Tuesday, December 08, 2009 18:34:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541012.113

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**47.359**	**ug/L**	2.631	107545	0.106
Be	9	**3.701**	**ug/L**	1.817	1974	0.002
B	11	**10.439**	**ug/L**	1.863	8959	0.005
Sc	45		**ug/L**		1009365	1009364.728

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	**7**					
Be	9					
B	11					
Sc	45			99.2		

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541013
Sample Date/Time: Tuesday, December 08, 2009 18:36:16
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541013.114

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**50.784**	**ug/L**	3.927	118904	0.114
Be	9	**3.334**	**ug/L**	4.067	1837	0.002
B	11	**12.594**	**ug/L**	7.191	10382	0.006
Sc	45		**ug/L**		1041189	1041189.091

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		102.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541014
Sample Date/Time: Tuesday, December 08, 2009 18:38:05
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541014.115

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	66.989	ug/L	5.142	156760	0.150
Be	9	4.298	ug/L	8.817	2356	0.002
B	11	14.445	ug/L	8.551	11360	0.007
Sc	45		ug/L		1041233	1041233.272

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		102.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541015
Sample Date/Time: Tuesday, December 08, 2009 18:39:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541015.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.765**	**ug/L**	2.689	116409	0.107
	Be	9	**4.111**	**ug/L**	3.553	2350	0.002
	B	11	**13.249**	**ug/L**	4.010	11170	0.007
>	Sc	45		**ug/L**		1083376	1083376.486

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		106.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541016
Sample Date/Time: Tuesday, December 08, 2009 18:41:40
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541016.117

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**45.776**	**ug/L**	3.703	104217	0.103
Be	9	**3.087**	**ug/L**	4.552	1656	0.002
B	11	**12.759**	**ug/L**	7.709	10176	0.007
Sc	45		**ug/L**		1011578	1011577.891

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		99.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 18:43:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.118

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**55.777**	**ug/L**	2.546	114467	0.125
Be	9	**54.977**	**ug/L**	1.473	26083	0.029
B	11	**102.783**	**ug/L**	2.377	51134	0.053
Sc	45		**ug/L**		912176	912176.156

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	111.553				
Be	9	109.955				
B	11	102.783				
Sc	45		89.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 18:45:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.119

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.043**	**ug/L**	15.517	290	0.000
Be	9	**-0.001**	**ug/L**	998.244	32	-0.000
B	11	**-2.249**	**ug/L**	10.765	2284	-0.001
Sc	45		**ug/L**		954940	954940.461

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		93.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 19:43:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\Blank.135

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		95	
Be	9		ug/L		25	
B	11		ug/L		686	
Sc	45		ug/L		964176	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 19:45:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.136

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	3.122	20718	0.021
Be	9	10.000	ug/L	3.239	5010	0.005
B	11	20.000	ug/L	6.052	10481	0.010
Sc	45		ug/L		978712	978711.697

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 19:48:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.137

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**100.061**	**ug/L**	5.096	208817	0.225
Be	9	**100.048**	**ug/L**	3.972	49766	0.054
B	11	**200.097**	**ug/L**	1.411	98428	0.105
Sc	45		**ug/L**		929305	929305.075

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 19:50:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.138

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**50.798**	**ug/L**	1.983	108487	0.114
Be	9	**51.493**	**ug/L**	2.283	26220	0.028
B	11	**100.974**	**ug/L**	2.031	51144	0.053
Sc	45		**ug/L**		950643	950643.088

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	101.597				
Be	9	102.987				
B	11	100.974				
Sc	45		98.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 19:52:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.139

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.015	ug/L	5.177	127	0.000
Be	9	0.007	ug/L	83.767	28	0.000
B	11	3.862	ug/L	7.496	2619	0.002
Sc	45		ug/L		955830	955830.157

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		99.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 19:54:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.140

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**10.325**	**ug/L**	3.491	23689	0.023
Be	9	**0.494**	**ug/L**	0.880	296	0.000
B	11	**16.576**	**ug/L**	0.700	9596	0.009
Sc	45		**ug/L**		1018116	1018116.383

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	103.253				
Be	9	98.852				
B	11	110.503				
Sc	45		105.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 19:57:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.133**	**ug/L**	4.449	354	0.000
	Be	9	**0.054**	**ug/L**	34.599	49	0.000
	B	11	**2.285**	**ug/L**	5.500	1705	0.001
>	Sc	45		**ug/L**		891150	891150.042

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		92.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 19:59:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.142

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**20.573**	**ug/L**	2.075	38604	0.046
Be	9	**20.005**	**ug/L**	2.308	8951	0.011
B	11	**20.050**	**ug/L**	5.269	9385	0.011
Sc	45		**ug/L**		834064	834064.363

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	102.863				
Be	9	100.026				
B	11	100.248				
Sc	45		86.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 20:01:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.143

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**50.411**	**ug/L**	4.238	101931	0.113
Be	9	**52.368**	**ug/L**	8.257	25205	0.028
B	11	**100.682**	**ug/L**	5.577	48255	0.053
Sc	45		**ug/L**		900780	900779.964

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	100.821				
Be	9	104.736				
B	11	100.682				
Sc	45		93.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 20:04:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.014**	**ug/L**	73.147	118	0.000
	Be	9	**0.006**	**ug/L**	172.976	26	0.000
	B	11	**2.631**	**ug/L**	2.087	1899	0.001
>	Sc	45		**ug/L**		906874	906873.921

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		94.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 20:22:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.152

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**47.938**	**ug/L**	1.916	101868	0.108
Be	9	**49.080**	**ug/L**	0.910	24866	0.026
B	11	**95.626**	**ug/L**	0.116	48225	0.050
Sc	45		**ug/L**		945800	945799.835

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	95.876				
Be	9	98.161				
B	11	95.626				
Sc	45		98.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 20:25:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.153

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.000	ug/L	463.684	91	-0.000
Be	9	-0.002	ug/L	343.116	23	-0.000
B	11	2.900	ug/L	6.149	2087	0.002
Sc	45		ug/L		933688	933687.778

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		96.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 20:34:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.157

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**50.334**	**ug/L**	2.784	101712	0.113
Be	9	**51.042**	**ug/L**	2.966	24583	0.027
B	11	**103.142**	**ug/L**	0.877	49404	0.054
Sc	45		**ug/L**		899307	899306.504

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	100.668				
Be	9	102.084				
B	11	103.142				
Sc	45		93.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 20:36:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.158

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.005	ug/L	47.788	82	-0.000
Be	9	0.001	ug/L	735.703	25	0.000
B	11	4.559	ug/L	6.623	2891	0.002
Sc	45		ug/L		931038	931037.684

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		96.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541009
Sample Date/Time: Tuesday, December 08, 2009 20:38:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541009.159

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	69.474	ug/L	4.761	152925	0.156
	Be	9	2.684	ug/L	6.382	1432	0.001
	B	11	38.733	ug/L	6.101	20643	0.020
>	Sc	45		ug/L		980536	980535.961

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		101.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541010
Sample Date/Time: Tuesday, December 08, 2009 20:41:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541010.160

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**57.239**	ug/L	2.505	124245	0.129
Be	9	**4.356**	ug/L	3.006	2278	0.002
B	11	**18.042**	ug/L	1.751	9851	0.009
Sc	45		ug/L		966198	966197.563

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45			100.2		

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541011
Sample Date/Time: Tuesday, December 08, 2009 20:43:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541011.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	63.811	ug/L	2.937	131007	0.143
|	Be	9	3.390	ug/L	3.764	1682	0.002
|	B	11	19.339	ug/L	3.409	9941	0.010
⌊>	Sc	45		ug/L		914343	914342.627

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		94.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541012
Sample Date/Time: Tuesday, December 08, 2009 20:46:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541012.162

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	47.267	ug/L	2.654	98856	0.106
Be	9	3.522	ug/L	3.063	1778	0.002
B	11	15.235	ug/L	2.477	8116	0.008
Sc	45		ug/L		930800	930800.382

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		96.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541013
Sample Date/Time: Tuesday, December 08, 2009 20:48:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541013.163

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**53.170**	**ug/L**	1.465	110849	0.119
Be	9	**3.415**	**ug/L**	2.608	1720	0.002
B	11	**18.156**	**ug/L**	4.341	9514	0.010
Sc	45		**ug/L**		927764	927763.725

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Sc	45		96.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541014
Sample Date/Time: Tuesday, December 08, 2009 20:50:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541014.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**66.636**	**ug/L**	1.975	144404	0.150
|	Be	9	**4.217**	**ug/L**	3.448	2202	0.002
|	B	11	**19.660**	**ug/L**	0.503	10659	0.010
⌊>	Sc	45		**ug/L**		964806	964805.893

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		100.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541015
Sample Date/Time: Tuesday, December 08, 2009 20:52:45
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541015.165

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	49.479	ug/L	2.422	107573	0.111
|	Be	9	4.218	ug/L	5.309	2209	0.002
|	B	11	19.428	ug/L	3.698	10568	0.010
⌊>	Sc	45		ug/L		967484	967483.918

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
⌊>	Sc	45		100.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241541016
Sample Date/Time: Tuesday, December 08, 2009 20:55:01
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 925480|2|baj
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\241541016.166

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.390**	**ug/L**	4.666	96915	0.104
	Be	9	**3.141**	**ug/L**	6.649	1586	0.002
	B	11	**18.227**	**ug/L**	3.346	9572	0.010
>	Sc	45		**ug/L**		930029	930029.172

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		96.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 20:57:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**55.222**	**ug/L**	1.245	105783	0.124
|	Be	9	**54.299**	**ug/L**	4.514	24779	0.029
|	B	11	**107.197**	**ug/L**	5.065	48618	0.056
⌊>	Sc	45		**ug/L**		852472	852471.994

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	110.444				
|	Be	9	108.597				
|	B	11	107.197				
⌊>	Sc	45		88.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 20:59:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li be and b.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.053	ug/L	21.632	189	0.000
	Be	9	0.004	ug/L	281.979	24	0.000
	B	11	2.864	ug/L	1.533	1932	0.002
>	Sc	45		ug/L		871619	871618.743

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
>	Sc	45		90.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 12/07/2009
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 120709S1.SIF Results Data Set Name: 120709S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 12/07/2009
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0043	09:54:40	No
2			0.0044	0.0044	09:55:15	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.5786			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 12/07/2009
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0056	09:56:37	No
2			0.0017	0.0060	09:57:13	No
Mean:			0.0014			
SD :			0.0003			
%RSD:			21.7220			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00720
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 12/07/2009
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0041	0.0085	09:58:35	No
2			0.0040	0.0084	09:59:11	No
Mean:			0.0041			
SD :			0.0001			
%RSD:			1.6133			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99849 Slope: 0.00824
Intercept : -0.00008

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 12/07/2009
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0165	0.0209	10:00:35	No
2			0.0168	0.0211	10:01:10	No
Mean:			0.0166			
SD :			0.0002			
%RSD:			1.1765			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99992 Slope: 0.00837
Intercept : -0.00010

==========

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 12/07/2009
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0406	0.0449	10:02:36	No
2			0.0407	0.0451	10:03:10	No
Mean:			0.0406			
SD :			0.0001			
%RSD:			0.2535			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99993 Slope: 0.00815
Intercept : 0.00001

==========

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 12/07/2009
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0801	0.0845	10:04:36	No
2			0.0817	0.0860	10:05:11	No
Mean:			0.0809			
SD :			0.0011			
%RSD:			1.3799			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00809
Intercept : 0.00008

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0014	0.200	0.168	0.0003	21.7
S0.5	0.0041	0.500	0.497	0.0001	1.6
S2.0	0.0166	2.000	2.047	0.0002	1.2
S5.0	0.0406	5.000	5.011	0.0001	0.3
S10	0.0809	10.000	9.986	0.0011	1.4
Calib Blank	0.0044	---	----	----	----

Correlation Coefficient: 0.99998 Slope: 0.00809 Intercept: 0.0001

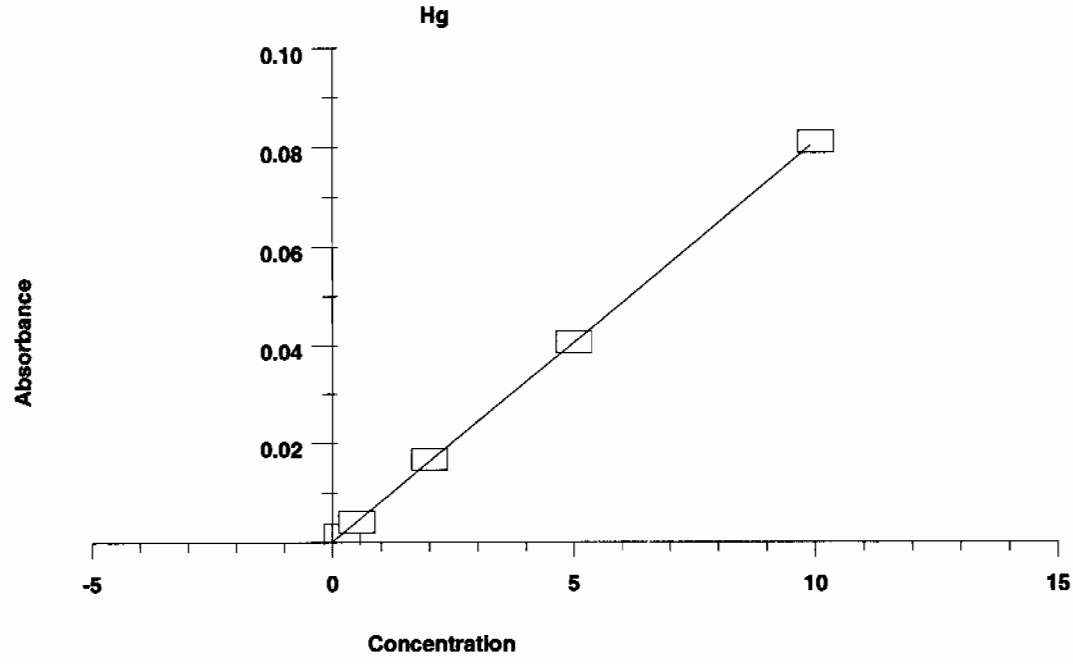

==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 12/07/2009
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0421	0.0465	10:06:40	No
2	5.181	5.181	0.0420	0.0464	10:07:15	No
Mean:	5.188	5.188	0.0421			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.2	0.2	0.2028			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 12/07/2009
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:08:38	No
2	-0.104	-0.104	-0.0008	0.0036	10:09:13	No
Mean:	-0.096	-0.096	-0.0007			
SD :	0.0124	0.0124	0.0001			
%RSD:	13.0	13.0	14.4602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 12/07/2009
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0014	0.0057	10:10:35	No
2	0.148	0.148	0.0013	0.0056	10:11:10	No
Mean:	0.155	0.155	0.0013			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.9	5.9	5.5112			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0420	0.0463	10:12:35	No
2	5.181	5.181	0.0420	0.0464	10:13:09	No
Mean:	5.178	5.178	0.0420			
SD :	0.0040	0.0040	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0006	0.0037	10:14:37	No
2	-0.106	-0.106	-0.0008	0.0036	10:15:12	No
Mean:	-0.098	-0.098	-0.0007			
SD :	0.0123	0.0123	0.0001			
%RSD:	12.5	12.5	13.8998			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 12/07/2009
Sample ID: 1201978905|i||925609|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0039	10:16:38	No
2	-0.093	-0.093	-0.0007	0.0037	10:17:13	No
Mean:	-0.077	-0.077	-0.0005			
SD :	0.0218	0.0218	0.0002			
%RSD:	28.2	28.2	32.1293			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 12/07/2009
Sample ID: 1201978906|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.940	3.940	0.0320	0.0363	10:18:37	No
2	3.939	3.939	0.0319	0.0363	10:19:12	No
Mean:	3.939	3.939	0.0320			
SD :	0.0008	0.0008	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 12/07/2009
Sample ID: 241604001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0057	10:20:38	No
2	0.157	0.157	0.0014	0.0057	10:21:14	No
Mean:	0.158	0.158	0.0014			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.5109			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 12/07/2009
Sample ID: 241604002|i|||

%RSD: 7.6 7.6 8.0893

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 12/07/2009
Sample ID: 241608002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0013	0.0057	10:34:28	No
2	0.136	0.136	0.0012	0.0055	10:35:03	No
Mean:	0.143	0.143	0.0012			
SD :	0.0106	0.0106	0.0001			
%RSD:	7.4	7.4	6.9743			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.376	5.376	0.0436	0.0479	10:36:28	No
2	5.389	5.389	0.0437	0.0481	10:37:02	No
Mean:	5.383	5.383	0.0436			
SD :	0.0096	0.0096	0.0001			
%RSD:	0.2	0.2	0.1786			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0006	0.0037	10:38:30	No
2	-0.095	-0.095	-0.0007	0.0037	10:39:04	No
Mean:	-0.091	-0.091	-0.0007			
SD :	0.0058	0.0058	0.0000			
%RSD:	6.4	6.4	7.1360			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 12/07/2009
Sample ID: 1201977155|i||924862|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0038	10:40:29	No
2	-0.083	-0.083	-0.0006	0.0038	10:41:04	No
Mean:	-0.083	-0.083	-0.0006			
SD :	0.0010	0.0010	0.0000			
%RSD:	1.2	1.2	1.4027			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 12/07/2009
Sample ID: 1201977156|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.825	3.825	0.0310	0.0354	10:42:28	No
2	3.817	3.817	0.0310	0.0353	10:43:02	No
Mean:	3.821	3.821	0.0310			
SD :	0.0054	0.0054	0.0000			
%RSD:	0.1	0.1	0.1420			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 12/07/2009
Sample ID: 241417001|i|||

```
%RSD:        1.9        1.9    1.8136

==========================================================================================
Element: Hg    Seq. No.: 32       AS Loc.: 30   Date: 12/07/2009
Sample ID: 241419005|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.410     0.410    0.0034     0.0078   10:56:30  No
 2        0.392     0.392    0.0033     0.0076   10:57:05  No
Mean:     0.401     0.401    0.0033
SD  :    0.0126    0.0126    0.0001
%RSD:       3.1       3.1    3.0692

==========================================================================================
Element: Hg    Seq. No.: 33       AS Loc.: 31   Date: 12/07/2009
Sample ID: 241419006|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.446     0.446    0.0037     0.0080   10:58:33  No
 2        0.430     0.430    0.0036     0.0079   10:59:07  No
Mean:     0.438     0.438    0.0036
SD  :    0.0109    0.0109    0.0001
%RSD:       2.5       2.5    2.4393

==========================================================================================
Element: Hg    Seq. No.: 34       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.212     5.212    0.0423     0.0466   11:00:33  No
 2        5.240     5.240    0.0425     0.0468   11:01:08  No
Mean:     5.226     5.226    0.0424
SD  :    0.0193    0.0193    0.0002
%RSD:       0.4       0.4    0.3682
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 35       AS Loc.: 8    Date: 12/07/2009
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.122    -0.122   -0.0009     0.0035   11:02:36  No
 2       -0.111    -0.111   -0.0008     0.0035   11:03:10  No
Mean:    -0.116    -0.116   -0.0009
SD  :    0.0079    0.0079    0.0001
%RSD:       6.8       6.8    7.3534
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 36       AS Loc.: 32   Date: 12/07/2009
Sample ID: 241419007|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.387     0.387    0.0032     0.0076   11:04:34  No
 2        0.368     0.368    0.0031     0.0074   11:05:09  No
Mean:     0.377     0.377    0.0031
SD  :    0.0133    0.0133    0.0001
%RSD:       3.5       3.5    3.4418

==========================================================================================
Element: Hg    Seq. No.: 37       AS Loc.: 33   Date: 12/07/2009
Sample ID: 241419008|i|||
```

%RSD: 1.8 1.8 1.7307

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 12/07/2009
Sample ID: 241419014|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0000	0.0043	11:18:08	No
2	-0.016	-0.016	-0.0001	0.0043	11:18:43	No
Mean:	-0.015	-0.015	0.0000			
SD :	0.0014	0.0014	0.0000			
%RSD:	9.3	9.3	24.9239			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 12/07/2009
Sample ID: 241419015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.432	0.432	0.0036	0.0079	11:20:06	No
2	0.415	0.415	0.0034	0.0078	11:20:41	No
Mean:	0.423	0.423	0.0035			
SD :	0.0118	0.0118	0.0001			
%RSD:	2.8	2.8	2.7227			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 12/07/2009
Sample ID: 241419016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0045	11:22:05	No
2	0.006	0.006	0.0001	0.0045	11:22:40	No
Mean:	0.004	0.004	0.0001			
SD :	0.0027	0.0027	0.0000			
%RSD:	70.3	70.3	20.4054			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.803	5.803	0.0470	0.0514	11:24:05	No
2	5.786	5.786	0.0469	0.0513	11:24:40	No
Mean:	5.795	5.795	0.0470			
SD :	0.0123	0.0123	0.0001			
%RSD:	0.2	0.2	0.2123			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0009	0.0034	11:26:08	No
2	-0.150	-0.150	-0.0011	0.0032	11:26:43	No
Mean:	-0.136	-0.136	-0.0010			
SD :	0.0186	0.0186	0.0002			
%RSD:	13.6	13.6	14.6683			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 12/07/2009
Sample ID: 241425001|i|||

%RSD: 0.9 0.9 0.9205

==========

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 12/07/2009
Sample ID: 1201978947|i||925629|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0007	0.0036	11:40:13	No
2	-0.115	-0.115	-0.0009	0.0035	11:40:47	No
Mean:	-0.107	-0.107	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	10.2	10.2	11.2501			

==========

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 12/07/2009
Sample ID: 1201978948|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.055	4.055	0.0329	0.0373	11:42:08	No
2	4.065	4.065	0.0330	0.0373	11:42:43	No
Mean:	4.060	4.060	0.0329			
SD :	0.0066	0.0066	0.0001			
%RSD:	0.2	0.2	0.1622			

==========

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 12/07/2009
Sample ID: 241539001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.375	0.375	0.0031	0.0075	11:44:03	No
2	0.392	0.392	0.0032	0.0076	11:44:38	No
Mean:	0.383	0.383	0.0032			
SD :	0.0119	0.0119	0.0001			
%RSD:	3.1	3.1	3.0346			

==========

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 12/07/2009
Sample ID: 241539002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0012	0.0056	11:45:59	No
2	0.120	0.120	0.0010	0.0054	11:46:34	No
Mean:	0.132	0.132	0.0011			
SD :	0.0167	0.0167	0.0001			
%RSD:	12.7	12.7	11.8118			

==========

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.520	5.520	0.0447	0.0491	11:47:58	No
2	5.454	5.454	0.0442	0.0486	11:48:33	No
Mean:	5.487	5.487	0.0445			
SD :	0.0470	0.0470	0.0004			
%RSD:	0.9	0.9	0.8544			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0043	11:50:01	No
2	-0.023	-0.023	-0.0001	0.0042	11:50:36	No
Mean:	-0.022	-0.022	-0.0001			
SD :	0.0019	0.0019	0.0000			
%RSD:	8.7	8.7	15.3097			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 12/07/2009
Sample ID: 241539003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.086	0.086	0.0008	0.0051	11:52:01	No
2	0.084	0.084	0.0008	0.0051	11:52:37	No
Mean:	0.085	0.085	0.0008			
SD :	0.0009	0.0009	0.0000			
%RSD:	1.1	1.1	0.9509			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 12/07/2009
Sample ID: 241539004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.221	0.221	0.0019	0.0062	11:53:59	No
2	0.209	0.209	0.0018	0.0061	11:54:34	No
Mean:	0.215	0.215	0.0018			
SD :	0.0083	0.0083	0.0001			
%RSD:	3.8	3.8	3.6864			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 12/07/2009
Sample ID: 241541001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.546	0.546	0.0045	0.0089	11:55:56	No
2	0.545	0.545	0.0045	0.0089	11:56:31	No
Mean:	0.546	0.546	0.0045			
SD :	0.0002	0.0002	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 12/07/2009
Sample ID: 1201978949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.487	0.487	0.0040	0.0084	11:57:54	No
2	0.483	0.483	0.0040	0.0083	11:58:29	No
Mean:	0.485	0.485	0.0040			
SD :	0.0026	0.0026	0.0000			
%RSD:	0.5	0.5	0.5236			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 12/07/2009
Sample ID: 1201978950|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	11:59:52	No
2	3.254	3.254	0.0264	0.0308	12:00:27	No
Mean:	3.240	3.240	0.0263			
SD :	0.0199	0.0199	0.0002			

```
%RSD:        0.6         0.6     0.6129

==========================================================================================
Element: Hg    Seq. No.: 65       AS Loc.: 57   Date: 12/07/2009
Sample ID: 1201978952|i|||MSD
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        3.158     3.158    0.0256     0.0300   12:01:51  No
 2        3.162     3.162    0.0257     0.0300   12:02:27  No
Mean:     3.160     3.160    0.0256
SD  :    0.0032    0.0032    0.0000
%RSD:       0.1        0.1    0.1021

==========================================================================================
Element: Hg    Seq. No.: 66       AS Loc.: 58   Date: 12/07/2009
Sample ID: 1201978951|i|5||SDILT
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.048    -0.048   -0.0003     0.0040   12:03:50  No
 2       -0.044    -0.044   -0.0003     0.0041   12:04:26  No
Mean:    -0.046    -0.046   -0.0003
SD  :    0.0026    0.0026    0.0000
%RSD:       5.6        5.6    7.1103

==========================================================================================
Element: Hg    Seq. No.: 67       AS Loc.: 59   Date: 12/07/2009
Sample ID: 241541002|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.289     0.289    0.0024     0.0068   12:05:49  No
 2        0.275     0.275    0.0023     0.0067   12:06:24  No
Mean:     0.282     0.282    0.0024
SD  :    0.0100    0.0100    0.0001
%RSD:       3.6        3.6    3.4438

==========================================================================================
Element: Hg    Seq. No.: 68       AS Loc.: 60   Date: 12/07/2009
Sample ID: 241541003|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.449     0.449    0.0037     0.0081   12:07:49  No
 2        0.441     0.441    0.0036     0.0080   12:08:24  No
Mean:     0.445     0.445    0.0037
SD  :    0.0062    0.0062    0.0001
%RSD:       1.4        1.4    1.3659

==========================================================================================
Element: Hg    Seq. No.: 69       AS Loc.: 61   Date: 12/07/2009
Sample ID: 241541004|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.301     0.301    0.0025     0.0069   12:09:50  No
 2        0.274     0.274    0.0023     0.0067   12:10:25  No
Mean:     0.287     0.287    0.0024
SD  :    0.0190    0.0190    0.0002
%RSD:       6.6        6.6    6.4003

==========================================================================================
Element: Hg    Seq. No.: 70       AS Loc.: 7    Date: 12/07/2009
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
```

#	µg/L	µg/L	Signal	Height		Stored
1	5.542	5.542	0.0449	0.0493	12:11:51	No
2	5.592	5.592	0.0453	0.0497	12:12:25	No
Mean:	5.567	5.567	0.0451			
SD :	0.0353	0.0353	0.0003			
%RSD:	0.6	0.6	0.6332			

QC value within specified limits.

==========

Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0045	12:13:53	No
2	-0.005	-0.005	0.0000	0.0044	12:14:27	No
Mean:	-0.001	-0.001	0.0001			
SD :	0.0060	0.0060	0.0000			
%RSD:	918.9	918.9	67.3940			

QC value within specified limits.

==========

Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 12/07/2009
Sample ID: 241541005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0046	12:15:55	No
2	0.006	0.006	0.0001	0.0045	12:16:29	No
Mean:	0.010	0.010	0.0002			
SD :	0.0064	0.0064	0.0001			
%RSD:	63.0	63.0	32.5458			

==========

Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 12/07/2009
Sample ID: 241541006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.373	2.373	0.0193	0.0236	12:17:52	No
2	2.365	2.365	0.0192	0.0236	12:18:27	No
Mean:	2.369	2.369	0.0192			
SD :	0.0056	0.0056	0.0000			
%RSD:	0.2	0.2	0.2355			

==========

Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 12/07/2009
Sample ID: 241541007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.314	0.314	0.0026	0.0070	12:19:46	No
2	0.309	0.309	0.0026	0.0069	12:20:21	No
Mean:	0.312	0.312	0.0026			
SD :	0.0032	0.0032	0.0000			
%RSD:	1.0	1.0	0.9999			

==========

Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 12/07/2009
Sample ID: 241541008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.619	0.619	0.0051	0.0094	12:21:41	No
2	0.621	0.621	0.0051	0.0095	12:22:16	No
Mean:	0.620	0.620	0.0051			
SD :	0.0014	0.0014	0.0000			

%RSD: 0.2 0.2 0.2237

==========

Element: Hg Seq. No.: 76 AS Loc.: 66 Date: 12/07/2009
Sample ID: 241541009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.226	3.226	0.0262	0.0305	12:23:37	No
2	3.229	3.229	0.0262	0.0306	12:24:12	No
Mean:	3.227	3.227	0.0262			
SD :	0.0019	0.0019	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 77 AS Loc.: 67 Date: 12/07/2009
Sample ID: 241541010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.269	0.269	0.0023	0.0066	12:25:33	No
2	0.264	0.264	0.0022	0.0066	12:26:09	No
Mean:	0.266	0.266	0.0022			
SD :	0.0029	0.0029	0.0000			
%RSD:	1.1	1.1	1.0678			

==========

Element: Hg Seq. No.: 78 AS Loc.: 68 Date: 12/07/2009
Sample ID: 241541011|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.220	0.220	0.0019	0.0062	12:27:31	No
2	0.203	0.203	0.0017	0.0061	12:28:05	No
Mean:	0.212	0.212	0.0018			
SD :	0.0120	0.0120	0.0001			
%RSD:	5.7	5.7	5.4465			

==========

Element: Hg Seq. No.: 79 AS Loc.: 69 Date: 12/07/2009
Sample ID: 241541012|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.400	0.400	0.0033	0.0077	12:29:27	No
2	0.376	0.376	0.0031	0.0075	12:30:02	No
Mean:	0.388	0.388	0.0032			
SD :	0.0170	0.0170	0.0001			
%RSD:	4.4	4.4	4.2749			

==========

Element: Hg Seq. No.: 80 AS Loc.: 70 Date: 12/07/2009
Sample ID: 241541013|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.407	0.407	0.0034	0.0077	12:31:24	No
2	0.412	0.412	0.0034	0.0078	12:31:59	No
Mean:	0.409	0.409	0.0034			
SD :	0.0032	0.0032	0.0000			
%RSD:	0.8	0.8	0.7758			

==========

Element: Hg Seq. No.: 81 AS Loc.: 71 Date: 12/07/2009
Sample ID: 241541014|i|||

Repl	SampleConc	StndConc	BlnkCorr	Peak	Time	Peak

#	µg/L	µg/L	Signal	Height		Stored
1	0.416	0.416	0.0034	0.0078	12:33:22	No
2	0.409	0.409	0.0034	0.0077	12:33:57	No
Mean:	0.412	0.412	0.0034			
SD :	0.0047	0.0047	0.0000			
%RSD:	1.1	1.1	1.1031			

==========

Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.554	5.554	0.0450	0.0494	12:35:22	No
2	5.529	5.529	0.0448	0.0492	12:35:57	No
Mean:	5.541	5.541	0.0449			
SD :	0.0183	0.0183	0.0001			
%RSD:	0.3	0.3	0.3293			

QC value within specified limits.

==========

Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0002	0.0042	12:37:25	No
2	-0.042	-0.042	-0.0003	0.0041	12:38:00	No
Mean:	-0.036	-0.036	-0.0002			
SD :	0.0078	0.0078	0.0001			
%RSD:	21.5	21.5	29.1602			

QC value within specified limits.

==========

Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 12/07/2009
Sample ID: 241541015|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.317	0.317	0.0026	0.0070	12:39:26	No
2	0.302	0.302	0.0025	0.0069	12:40:01	No
Mean:	0.309	0.309	0.0026			
SD :	0.0107	0.0107	0.0001			
%RSD:	3.4	3.4	3.3438			

==========

Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 12/07/2009
Sample ID: 241541016|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0036	0.0080	12:41:25	No
2	0.437	0.437	0.0036	0.0080	12:41:59	No
Mean:	0.438	0.438	0.0036			
SD :	0.0022	0.0022	0.0000			
%RSD:	0.5	0.5	0.4829			

==========

Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 12/07/2009
Sample ID: 1201978959|i||925634|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.055	-0.055	-0.0004	0.0040	12:43:23	No
2	-0.103	-0.103	-0.0008	0.0036	12:43:58	No
Mean:	-0.079	-0.079	-0.0006			
SD :	0.0336	0.0336	0.0003			

#	µg/L	µg/L	Signal	Height		Stored
1	2.691	2.691	0.0219	0.0262	12:55:11	No
2	2.692	2.692	0.0219	0.0262	12:55:46	No
Mean:	2.692	2.692	0.0219			
SD :	0.0005	0.0005	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 93 AS Loc.: 81 Date: 12/07/2009
Sample ID: 1201978964|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.666	2.666	0.0217	0.0260	12:57:06	No
2	2.667	2.667	0.0217	0.0260	12:57:40	No
Mean:	2.667	2.667	0.0217			
SD :	0.0007	0.0007	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 94 AS Loc.: 7 Date: 12/07/2009
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.672	5.672	0.0460	0.0503	12:59:04	No
2	5.684	5.684	0.0461	0.0504	12:59:39	No
Mean:	5.678	5.678	0.0460			
SD :	0.0086	0.0086	0.0001			
%RSD:	0.2	0.2	0.1509			

QC value within specified limits.

==========

Element: Hg Seq. No.: 95 AS Loc.: 8 Date: 12/07/2009
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.077	-0.077	-0.0005	0.0038	13:01:07	No
2	-0.085	-0.085	-0.0006	0.0037	13:01:41	No
Mean:	-0.081	-0.081	-0.0006			
SD :	0.0061	0.0061	0.0000			
%RSD:	7.6	7.6	8.5833			

QC value within specified limits.

==========

Element: Hg Seq. No.: 96 AS Loc.: 82 Date: 12/07/2009
Sample ID: 1201978963|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.196	-0.196	-0.0015	0.0029	13:03:06	No
2	-0.201	-0.201	-0.0015	0.0028	13:03:41	No
Mean:	-0.198	-0.198	-0.0015			
SD :	0.0033	0.0033	0.0000			
%RSD:	1.7	1.7	1.7580			

==========

Element: Hg Seq. No.: 97 AS Loc.: 83 Date: 12/07/2009
Sample ID: 241611002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.059	0.059	0.0006	0.0049	13:05:02	No
2	0.043	0.043	0.0004	0.0048	13:05:37	No
Mean:	0.051	0.051	0.0005			
SD :	0.0118	0.0118	0.0001			

Miscellaneous

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 925477

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978600	UI652380	.505	g
MS	1201978598	UI091119-01	.25	mL
MS	1201978598	UI091119-06	.25	mL
MSD	1201978599	UI091119-01	.25	mL
MSD	1201978599	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978595		SW846 3050B	25-NOV-2009 12:30	0.508 g	50 mL	98.4252	SOIL
LCS	1201978600		SW846 3050B	25-NOV-2009 12:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241541001		SW846 3050B	25-NOV-2009 12:30	0.512 g	50 mL	97.65625	SOIL
DUP	1201978596	241541001	SW846 3050B	25-NOV-2009 12:30	0.5 g	50 mL	100	SOIL
SDILT	1201978597	241541001	SW846 3050B	25-NOV-2009 12:30	0.512 g	50 mL	97.65625	SOIL
MS	1201978598	241541001	SW846 3050B	25-NOV-2009 12:30	0.51 g	50 mL	98.03922	SOIL
MSD	1201978599	241541001	SW846 3050B	25-NOV-2009 12:30	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241541002		SW846 3050B	25-NOV-2009 12:30	0.531 g	50 mL	94.16196	SOIL
SAMPLE	241541003		SW846 3050B	25-NOV-2009 12:30	0.548 g	50 mL	91.24088	SOIL
SAMPLE	241541004		SW846 3050B	25-NOV-2009 12:30	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241541005		SW846 3050B	25-NOV-2009 12:30	0.533 g	50 mL	93.80863	SOIL
SAMPLE	241541006		SW846 3050B	25-NOV-2009 12:30	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241541007		SW846 3050B	25-NOV-2009 12:30	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241541008		SW846 3050B	25-NOV-2009 12:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241541009		SW846 3050B	25-NOV-2009 12:30	0.532 g	50 mL	93.98496	SOIL
SAMPLE	241541010		SW846 3050B	25-NOV-2009 12:30	0.528 g	50 mL	94.69697	SOIL
SAMPLE	241541011		SW846 3050B	25-NOV-2009 12:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241541012		SW846 3050B	25-NOV-2009 12:30	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241541013		SW846 3050B	25-NOV-2009 12:30	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241541014		SW846 3050B	25-NOV-2009 12:30	0.522 g	50 mL	95.78544	SOIL
SAMPLE	241541015		SW846 3050B	25-NOV-2009 12:30	0.539 g	50 mL	92.76438	SOIL
SAMPLE	241541016		SW846 3050B	25-NOV-2009 12:30	0.503 g	50 mL	99.40358	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments Clumpy,light brown soil w/plant roots.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 925479

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978606	UI647733-01	.503	g
MS	1201978604	UI090611-A	.5	mL
MS	1201978604	UI090611-B	.5	mL
MSD	1201978605	UI090611-A	.5	mL
MSD	1201978605	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978601		SW846 3050B	25-NOV-2009 12:30	0.546 g	50 mL	91.57509	SOIL
LCS	1201978606		SW846 3050B	25-NOV-2009 12:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241541001		SW846 3050B	25-NOV-2009 12:30	0.502 g	50 mL	99.60159	SOIL
DUP	1201978602	241541001	SW846 3050B	25-NOV-2009 12:30	0.519 g	50 mL	96.33911	SOIL
SDILT	1201978603	241541001	SW846 3050B	25-NOV-2009 12:30	0.502 g	50 mL	99.60159	SOIL
MS	1201978604	241541001	SW846 3050B	25-NOV-2009 12:30	0.521 g	50 mL	95.96929	SOIL
MSD	1201978605	241541001	SW846 3050B	25-NOV-2009 12:30	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241541002		SW846 3050B	25-NOV-2009 12:30	0.53 g	50 mL	94.33962	SOIL
SAMPLE	241541003		SW846 3050B	25-NOV-2009 12:30	0.553 g	50 mL	90.41591	SOIL
SAMPLE	241541004		SW846 3050B	25-NOV-2009 12:30	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241541005		SW846 3050B	25-NOV-2009 12:30	0.544 g	50 mL	91.91176	SOIL
SAMPLE	241541006		SW846 3050B	25-NOV-2009 12:30	0.533 g	50 mL	93.80863	SOIL
SAMPLE	241541007		SW846 3050B	25-NOV-2009 12:30	0.551 g	50 mL	90.7441	SOIL
SAMPLE	241541008		SW846 3050B	25-NOV-2009 12:30	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241541009		SW846 3050B	25-NOV-2009 12:30	0.548 g	50 mL	91.24088	SOIL
SAMPLE	241541010		SW846 3050B	25-NOV-2009 12:30	0.542 g	50 mL	92.25092	SOIL
SAMPLE	241541011		SW846 3050B	25-NOV-2009 12:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	241541012		SW846 3050B	25-NOV-2009 12:30	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241541013		SW846 3050B	25-NOV-2009 12:30	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241541014		SW846 3050B	25-NOV-2009 12:30	0.531 g	50 mL	94.16196	SOIL
SAMPLE	241541015		SW846 3050B	25-NOV-2009 12:30	0.524 g	50 mL	95.41985	SOIL
SAMPLE	241541016		SW846 3050B	25-NOV-2009 12:30	0.509 g	50 mL	98.23183	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments Clumpy,light brown soil w/plant roots.

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 931892

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201993443	UI062540-I	.506	g
MS	1201978598	UI091124-01	.25	mL
MS	1201978598	UI091124-06	.25	mL
MSD	1201978599	UI091124-01	.25	mL
MSD	1201978599	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201993442		SW846 3050B	12-DEC-2009 08:18	0.501 g	50 mL	99.8004	SOIL
LCS	1201993443		SW846 3050B	12-DEC-2009 08:18	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241541001		SW846 3050B	12-DEC-2009 08:18	0.513 g	50 mL	97.46589	SOIL
DUP	1201978596	241541001	SW846 3050B	12-DEC-2009 08:18	0.5 g	50 mL	100	SOIL
SDILT	1201978597	241541001	SW846 3050B	12-DEC-2009 08:18	0.513 g	50 mL	97.46589	SOIL
MS	1201978598	241541001	SW846 3050B	12-DEC-2009 08:18	0.548 g	50 mL	91.24088	SOIL
MSD	1201978599	241541001	SW846 3050B	12-DEC-2009 08:18	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241541002		SW846 3050B	12-DEC-2009 08:18	0.541 g	50 mL	92.42144	SOIL
SAMPLE	241541003		SW846 3050B	12-DEC-2009 08:18	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241541004		SW846 3050B	12-DEC-2009 08:18	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241541005		SW846 3050B	12-DEC-2009 08:18	0.534 g	50 mL	93.63296	SOIL
SAMPLE	241541006		SW846 3050B	12-DEC-2009 08:18	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241541007		SW846 3050B	12-DEC-2009 08:18	0.5 g	50 mL	100	SOIL
SAMPLE	241541008		SW846 3050B	12-DEC-2009 08:18	0.537 g	50 mL	93.10987	SOIL
SAMPLE	241541009		SW846 3050B	12-DEC-2009 08:18	0.541 g	50 mL	92.42144	SOIL
SAMPLE	241541010		SW846 3050B	12-DEC-2009 08:18	0.501 g	50 mL	99.8004	SOIL
SAMPLE	241541011		SW846 3050B	12-DEC-2009 08:18	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241541012		SW846 3050B	12-DEC-2009 08:18	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241541013		SW846 3050B	12-DEC-2009 08:18	0.539 g	50 mL	92.76438	SOIL
SAMPLE	241541014		SW846 3050B	12-DEC-2009 08:18	0.531 g	50 mL	94.16196	SOIL
SAMPLE	241541015		SW846 3050B	12-DEC-2009 08:18	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241541016		SW846 3050B	12-DEC-2009 08:18	0.556 g	50 mL	89.92806	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238343	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: The QC sample is a medium, brown soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 925628

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201978948	UI031809A	.2	g
MS	1201978950	WHG091204-14	.3	mL
MSD	1201978952	WHG091204-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201978947		SW846 7471A Prep	04-DEC-2009 10:35	0.506 g	30 mL	59.28854	SOIL
LCS	1201978948		SW846 7471A Prep	04-DEC-2009 10:35	0.2 g	30 mL	150	SOIL
SAMPLE	241539001		SW846 7471A Prep	04-DEC-2009 10:35	0.532 g	30 mL	56.39098	SOIL
SAMPLE	241539002		SW846 7471A Prep	04-DEC-2009 10:35	0.538 g	30 mL	55.76208	SOIL
SAMPLE	241539003		SW846 7471A Prep	04-DEC-2009 10:35	0.53 g	30 mL	56.60377	SOIL
SAMPLE	241539004		SW846 7471A Prep	04-DEC-2009 10:35	0.554 g	30 mL	54.15162	SOIL
SAMPLE	241541001		SW846 7471A Prep	04-DEC-2009 10:35	0.549 g	30 mL	54.64481	SOIL
DUP	1201978949	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.558 g	30 mL	53.76344	SOIL
MS	1201978950	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.536 g	30 mL	55.97015	SOIL
MSD	1201978952	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.539 g	30 mL	55.65863	SOIL
SDILT	1201978951	241541001	SW846 7471A Prep	04-DEC-2009 10:35	0.549 g	30 mL	54.64481	SOIL
SAMPLE	241541002		SW846 7471A Prep	04-DEC-2009 10:35	0.502 g	30 mL	59.76096	SOIL
SAMPLE	241541003		SW846 7471A Prep	04-DEC-2009 10:35	0.586 g	30 mL	51.19454	SOIL
SAMPLE	241541004		SW846 7471A Prep	04-DEC-2009 10:35	0.526 g	30 mL	57.03422	SOIL
SAMPLE	241541005		SW846 7471A Prep	04-DEC-2009 10:35	0.557 g	30 mL	53.85996	SOIL
SAMPLE	241541006		SW846 7471A Prep	04-DEC-2009 10:35	0.505 g	30 mL	59.40594	SOIL
SAMPLE	241541007		SW846 7471A Prep	04-DEC-2009 10:35	0.54 g	30 mL	55.55556	SOIL
SAMPLE	241541008		SW846 7471A Prep	04-DEC-2009 10:35	0.527 g	30 mL	56.926	SOIL
SAMPLE	241541009		SW846 7471A Prep	04-DEC-2009 10:35	0.533 g	30 mL	56.28518	SOIL
SAMPLE	241541010		SW846 7471A Prep	04-DEC-2009 10:35	0.531 g	30 mL	56.49718	SOIL
SAMPLE	241541011		SW846 7471A Prep	04-DEC-2009 10:35	0.538 g	30 mL	55.76208	SOIL
SAMPLE	241541012		SW846 7471A Prep	04-DEC-2009 10:35	0.529 g	30 mL	56.71078	SOIL
SAMPLE	241541013		SW846 7471A Prep	04-DEC-2009 10:35	0.55 g	30 mL	54.54545	SOIL
SAMPLE	241541014		SW846 7471A Prep	04-DEC-2009 10:35	0.564 g	30 mL	53.19149	SOIL
SAMPLE	241541015		SW846 7471A Prep	04-DEC-2009 10:35	0.559 g	30 mL	53.66726	SOIL
SAMPLE	241541016		SW846 7471A Prep	04-DEC-2009 10:35	0.503 g	30 mL	59.64215	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution

Comments: Sample 241541001 is a rocky tan soil.
Digestion Start Date: 04-DEC-09 10:35
Digestion End Date: 04-DEC-09 11:05

Prep LogBook

1206350-C	2 mL	Hg reducing agent
WHG091204-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091204-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091204-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091204-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091204-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091204-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

NCR Report No.: 766705
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7471A	Solid	LANL
Batch ID:	**Sample Numbers:**		
925629	See Below		

Potentially affected work order(s)(SDG): 241539(10-603),241541(10-605)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978950MS 2. Failed Recovery for MSD/PSD: QC 1201978952MSD	1. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Sample is a rocky, tan soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike dup recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Sample is a rocky, tan soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jason Loy 07-DEC-09

Data Validator/Group Leader:

Eric Lawson 08-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
10-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
925478	See Below		

Potentially affected work order(s)(SDG): 241541(10-605)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978598MS 2. Failed RPD for DUP: QC 1201978596DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1201978599MSD 4. Failed Recovery for MSD/PSD: QC 1201978599MSD	1./4. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for antimony and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for cobalt and manganese due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 12-DEC-09

Data Validator/Group Leader:

Jamie Johnson 12-DEC-09

NCR Report No.: 769139
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
925480	See Below		

Potentially affected work order(s)(SDG): 241541(10-605)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978604MS 2. Failed RPD for DUP: QC 1201978602DUP 3. Failed Recovery for MSD/PSD: QC 1201978605MSD	The sample and sample duplicate % RPD failed outside the control limits for U due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for As, Se,and Li due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Samantha Jacobs 11-DEC-09

Data Validator/Group Leader:
Paul Boyd 12-DEC-09

NCR Report No.: 769978
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
14-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
931895	See Below		

Potentially affected work order(s)(SDG): 241541(10-605)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201978598MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1201978599MSD 3. Failed Recovery for MSD/PSD: QC 1201978599MSD	1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for silicon due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 14-DEC-09

Data Validator/Group Leader:
Louise Smith 15-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Carnello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

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Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-09 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL

Analyte	Concentration	Analyte	Concentration
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

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Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091130-49.13 **Opened:** 14-DEC-09 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 01-DEC-09 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 15-DEC-09 **Lot Number :** 1018046
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

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Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg

Analyte	Concentration	Analyte	Concentration
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI652380 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOIL7.5SRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis **Verified:** 24-AUG-07
Supplier: ERA
Description: Metals Soil LCS (Reference) 7.5
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7294 mg/kg	Antimony	121 mg/kg
Arsenic	257 mg/kg	Barium	475 mg/kg
Beryllium	90 mg/kg	Boron	139 mg/kg
Cadmium	116 mg/kg	Calcium	3720 mg/kg
Chromium	84 mg/kg	Cobalt	83 mg/kg
Copper	105 mg/kg	Iron	19956 mg/kg
Lead	161 mg/kg	Magnesium	2980 mg/kg
Manganese	398 mg/kg	Mercury	4.18 mg/kg
Molybdenum	86 mg/kg	Nickel	101 mg/kg
Phosphorous	743 mg/kg	Potassium	2387 mg/kg
Selenium	173 mg/kg	Silica	2201 mg/kg
Silicon	1029 mg/kg	Silver	133 mg/kg
Sodium	614 mg/kg	Strontium	169 mg/kg
Sulfur	206 mg/kg	Thallium	202 mg/kg
Tin	105 mg/kg	Titanium	382 mg/kg
Vanadium	166 mg/kg	Zinc	195 mg/kg

Standard Logbook

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Standard Logbook

Serial ID: IHG091204-01 **Opened:** 04-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091204-02 **Opened:** 04-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 05-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091204-07 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091204-08 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Standard Logbook

Serial ID: WHG091204-09 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091204-10 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091204-11 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 07-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091204-12 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091204-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG091204-14 **Opened:** 04-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 04-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 10-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091208-42 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091208-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091208-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091208-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091208-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091208-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091208-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091208-43 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091208-44 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091208-45 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091208-46 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091208-47 **Opened:** 08-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 09-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091214-42 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091214-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091214-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091214-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091214-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091214-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091214-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091214-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091214-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091214-43 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI091214-44 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1242318
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI091214-45 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091214-46 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1242318
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091214-47 **Opened:** 14-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 15-DEC-09 **Solvent :** 3%HCL &1%HNO3-1242318
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091207-04 **Opened:** 07-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 07-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091207-04A **Opened:** 07-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091207-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091207-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091207-05 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091207-07 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 07-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091207-08 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091207-70 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091208-04 **Opened:** 08-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091208-04A **Opened:** 08-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091208-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091208-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091208-05 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091208-06 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 08-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091208-07 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 08-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091208-08 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 08-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Standard Logbook

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Standard Logbook

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242318 **Opened:** 14-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 20-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-666

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8082	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	
		1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8260B	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8270C	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	
		1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	

Final Page of REQUEST NUMBER 10-666

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-666

REQUEST NUMBER: 10-666

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14115	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14115	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14113	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14113	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14125	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14125	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14123	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14123	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14114	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14114	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14126	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14126	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14117	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14117	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14121	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14121	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14129	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14129	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14120	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14120	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14116	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14116	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14111	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14111	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14119	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14119	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14110	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14110	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14127	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14127	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14118	1	SEPTUM AMBER GLASS	8260B	Ice	S

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-666

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14122	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14122	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14124	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14124	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14112	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14112	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14128	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14128	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

11/24/09 1400

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14110 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt3
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO / NA		

JRJ 11-23-09

COMPOSITE TYPE: COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt 3, tuff, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 5.0ppm
Background:
α 17 dpm
β 1557 ↓

Samples: 4MbA

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14111 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	O/e
TIME COLLECTED (HH:MM)		0955	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~TTA~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: clayey Sand, brn (7.5YR 4/4)

SAMPLE COMMENTS:

LOCATION DESC: 46)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background:
α: 17 dpm
β: 1557 ↓
Samples: < MDA

COLLECTED BY (PRINT) M. Sherrill **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jaime Jordan	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14112 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	S + QBt 3
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b)~~-60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S + R	SLS 11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand to 2.5 ft, brn (7.5YR 4/4); below 2.5 ft QBt3, Pinkish gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.7 ppm Background α 17 dpm β 155 ↓ Samples: < MDA

COLLECTED BY (PRINT) M. Shenk **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14113 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBT3
TIME COLLECTED (HH:MM)		1005	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ R IN 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt 3, Pinkish-gray (7.5YR 6/2), weathered

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.2
Background
α: 17 dpm
β: 1557 ↓

Samples: < MDA

COLLECTED BY (PRINT) J. Jordan, M. Sherdo

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jaime Jordan	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14114 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt3
TIME COLLECTED (HH:MM)		1010	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR JJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QBt3, pinkish-gray (7.5YR 6/2),

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.7 ppm Samples: <MDA
Background:
α 17 dpm
β 1557 ↓

COLLECTED BY (PRINT) M. Sherdo **REVIEWED BY (PRINT)** J. Josh

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jerome Josh	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14115 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QB+3
TIME COLLECTED (HH:MM)		1015	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~R JJJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY JJJ 11-23-09	Ice	Y	

SAMPLE DESC: tuff, ~~Pinkish~~ Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.1 ppm
Background
α: 17 dpm
β: 1557 ✓
Samples: <MDA

COLLECTED BY (PRINT) M. Sherdo **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14116 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1040	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE: ~~HA~~	HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice		
1		Metals+CN - GEL	125 ML POLY	Ice		

SAMPLE DESC: Clayey Sand, brn (7.5YR 4/4), dry

SAMPLE COMMENTS:

LOCATION DESC: 46-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0-1 ppm Samples: MDA
Background
α: 17 dpm
β: 1557 ↓

COLLECTED BY (PRINT) M. Shando REVIEWED BY (PRINT) J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jack	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14117 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	S + QBt 3
TIME COLLECTED (HH:MM)		1045	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE: ~~HA~~	HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S + R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand to 2-5 ft, brn (7.5YR 4/4); below 2.5 ft QBt 3, Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.7 ppm Samples: < MDA
Background:
α: 17 dpm
β: 1557 ↓

COLLECTED BY (PRINT) M. Sherrod REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14118 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBT3
TIME COLLECTED (HH:MM)		1050	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, pinkish-gray (7.5YR 6/2), weathered

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.3 ppm Background
α: 17 dpm
β: 1557 ↓
Samples: <MDA

COLLECTED BY (PRINT) H. Shendo REVIEWED BY (PRINT) J. Jurel

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jurel	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14119 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt 3
TIME COLLECTED (HH:MM)		1055	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~69-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~SR~~ JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.5 ppm
Background:
α 17 dpm
β 1557 ↓
Samples: < MDA

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14120 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt3
TIME COLLECTED (HH:MM)		1105	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	SR	11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.1 ppm Samples: MDA
Background:
α 17 dpm
β 1557

COLLECTED BY (PRINT) M. Shando REVIEWED BY (PRINT) J. Jo

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jo	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14121 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1135	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	~~93-608402~~		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand, brn (7.5YR 4/4), sl. moist

SAMPLE COMMENTS:

LOCATION DESC: 4(b)2

FIELD SCREENING/MEASUREMENT RESULTS: PID 1-1 ppm Background
Alpha 17 dpm
Beta 1557 ↓ < MDA

COLLECTED BY (PRINT) M. [illegible] **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature) [illegible]	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14122 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA + R	QBt 3
TIME COLLECTED (HH:MM)		1140	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3	SCREEN/PORT DESC:		
FIELD MATRIX:	S + R		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand to 2.5 ft, brn (7.5YR 4/4); QBt 3 below 2.5 ft, Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID 0.1 ppm Samples < MDA
Background Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. Thomas **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14123 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt 3
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt 3, Pinkish-gray (7.5 YR 6/3)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 1.3 ppm

Samples < MDA
Alpha 17 dpm
Beta 1557 dpm
background

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature) [illegible]	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14124 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt 3
TIME COLLECTED (HH:MM)		1150	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JRJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QBt3, Pinkish-gray (7.5 YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 1.9 ppm

Background samples < MDA
Alpha 17 dpm
Beta 1557 ↓

COLLECTED BY (PRINT) M. Sherlo **REVIEWED BY (PRINT)** J. Jurd

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jurd (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14125 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QB2-3
TIME COLLECTED (HH:MM)		~~1450~~ 1455 JJ 11-23-09	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b),60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14 ft JJ	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15 ft 11-23-09	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR JJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.3 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557 ↓

COLLECTED BY (PRINT) M. Shandy **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14126 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		1220	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b),60-004(d)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand, brn (7.5YR 4/4)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1.3 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557 ↓

COLLECTED BY (PRINT) M. Shanda **REVIEWED BY (PRINT)** J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jack (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14127 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt 3
TIME COLLECTED (HH:MM)		1225	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S + R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: clayey Sand, brn (7.5 YR 4/4) to 2.5 ft; QBt 3 below 2.5 ft, ~~brn~~ Pinkish-gray (7.5 YR 6/2) (RJ 11-23-09)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1.5 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. Shanks **REVIEWED BY (PRINT)** J Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J Jordan	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14128 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt3
TIME COLLECTED (HH:MM)		1230	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt3, Pinkish-gray (7.5 YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1.3 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557 ↓

COLLECTED BY (PRINT) M. Shusko **REVIEWED BY (PRINT)** J. Jul

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jul	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14129 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt3
TIME COLLECTED (HH:MM)		1235	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S	R JLJ 11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QBt3, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1-1 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557 ↓

COLLECTED BY (PRINT) M. [illegible] **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible] (Signature)	11-23-09 1650	(Printed Name) (Signature) [illegible]	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-666 VALIDATION DATE: 01/29/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Susan Ball ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the FTB, sample RE03-09-14290 (in RN 10-668) associated with sample -14110, acetone and benzene were detected. In the FTB, sample -14291 (also in RN 10-668) associated with samples 14116 through 14120, acetone was detected. The acetone results for samples -14110 and -14120 were detects ≤10X the FTB concentrations and, thus, were qualified U,V4d. The remaining associated sample results were NDs and, thus, were not qualified.
2. The ICV and/or CCV %Ds were >20% for acetone; 2-butanone; 2,2-dichloropropane; 1,1,1-trichloroethane; 1,1-dichloropropene; carbon tetrachloride; and 2-hexanone. The acetone and 2-butanone results for samples -14113, -14122, and -14127; the acetone results for samples -14112, -14115, -14123, and -14128; and the 2-hexanone result of sample -14119 were detects and, thus, were qualified J,V7c. All remaining associated sample results were NDs or qualified NDs and, thus, were qualified UJ,V7c.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: DATE: 01/29/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

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Volatile Organic Compound (VOC) Analytical Data Validation Checklist

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Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819014**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14110**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n414.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04	
67-64-1	Acetone	J	2.23	ug/kg	1.72	5.19	U,V4d
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19	
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19	
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	UJ,V7c
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04	
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819014**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14110**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n414.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	166	ug/kg	90	NJ
	Unknown Siloxane	16.79	11.2	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819012**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14111**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n412.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14	
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14	
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14	
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14	
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14	
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14	
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14	
74-88-4	Iodomethane	U	5.70	ug/kg	1.82	5.70	
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70	
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70	
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14	
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14	
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14	
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14	UJ,V7c
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14	
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14	
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14	
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14	
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14	
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14	
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14	
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14	
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14	
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14	
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70	
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14	
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14	
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14	
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14	
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14	
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14	
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14	
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14	
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819012**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14111**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n412.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.82	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	62.9	ug/kg	90	NJ
	Unknown Siloxane	16.78	11.5	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n419.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.383	1.13	
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13	
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13	
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13	
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13	
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13	
67-64-1	Acetone	J	4.51	ug/kg	1.87	5.63	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13	
74-88-4	Iodomethane	U	5.63	ug/kg	1.80	5.63	
75-09-2	Methylene chloride	U	5.63	ug/kg	2.25	5.63	
75-15-0	Carbon disulfide	U	5.63	ug/kg	1.41	5.63	
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13	
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13	
78-93-3	2-Butanone	U	5.63	ug/kg	1.69	5.63	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13	
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13	UJ,V7c
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13	
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.371	1.13	
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13	
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13	
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13	
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13	
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.371	1.13	
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13	
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13	
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13	
108-10-1	4-Methyl-2-pentanone	U	5.63	ug/kg	1.41	5.63	
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13	
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13	
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13	
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13	
591-78-6	2-Hexanone	U	5.63	ug/kg	1.69	5.63	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13	
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13	
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13	
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13	
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n419.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.63	ug/kg	1.80	5.63
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	95.9	ug/kg	90	NJ
	Unknown Siloxane	16.79	10	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n318.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11	
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11	
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11	
67-64-1	Acetone	J	4.49	ug/kg	1.84	5.55	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55	
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55	
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
78-93-3	2-Butanone	J	2.88	ug/kg	1.67	5.55	J,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	UJ,V7c
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11	
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n318.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	323	ug/kg	91	NJ
138-86-3	Limonene	16.03	7.35	ug/kg	94	NJ
	Unknown Siloxane	16.79	13	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819005	Date Received:	11/25/2009 09:10	%Moisture:	.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14114	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928605	Inst:	VOA4.I	Dilution:	1
Run Date:	12/03/2009 02:54	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/02/2009 20:54	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n321.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.01	ug/kg	0.343	1.01	
74-87-3	Chloromethane	U	1.01	ug/kg	0.303	1.01	
75-01-4	Vinyl chloride	U	1.01	ug/kg	0.303	1.01	
74-83-9	Bromomethane	U	1.01	ug/kg	0.303	1.01	
75-00-3	Chloroethane	U	1.01	ug/kg	0.303	1.01	
75-69-4	Trichlorofluoromethane	U	1.01	ug/kg	0.303	1.01	
67-64-1	Acetone	U	5.05	ug/kg	1.68	5.05	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.01	ug/kg	0.303	1.01	
74-88-4	Iodomethane	U	5.05	ug/kg	1.61	5.05	
75-09-2	Methylene chloride	U	5.05	ug/kg	2.02	5.05	
75-15-0	Carbon disulfide	U	5.05	ug/kg	1.26	5.05	
156-60-5	trans-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01	
75-34-3	1,1-Dichloroethane	U	1.01	ug/kg	0.303	1.01	
78-93-3	2-Butanone	U	5.05	ug/kg	1.51	5.05	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01	
594-20-7	2,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01	UJ,V7c
67-66-3	Chloroform	U	1.01	ug/kg	0.303	1.01	
74-97-5	Bromochloromethane	U	1.01	ug/kg	0.333	1.01	
71-55-6	1,1,1-Trichloroethane	U	1.01	ug/kg	0.303	1.01	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.01	ug/kg	0.303	1.01	
56-23-5	Carbon tetrachloride	U	1.01	ug/kg	0.303	1.01	
107-06-2	1,2-Dichloroethane	U	1.01	ug/kg	0.303	1.01	
71-43-2	Benzene	U	1.01	ug/kg	0.303	1.01	
79-01-6	Trichloroethylene	U	1.01	ug/kg	0.333	1.01	
78-87-5	1,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01	
75-27-4	Bromodichloromethane	U	1.01	ug/kg	0.303	1.01	
74-95-3	Dibromomethane	U	1.01	ug/kg	0.303	1.01	
108-10-1	4-Methyl-2-pentanone	U	5.05	ug/kg	1.26	5.05	
10061-01-5	cis-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01	
108-88-3	Toluene	U	1.01	ug/kg	0.303	1.01	
10061-02-6	trans-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01	
79-00-5	1,1,2-Trichloroethane	U	1.01	ug/kg	0.303	1.01	
591-78-6	2-Hexanone	U	5.05	ug/kg	1.51	5.05	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.01	ug/kg	0.303	1.01	
127-18-4	Tetrachloroethylene	U	1.01	ug/kg	0.303	1.01	
124-48-1	Dibromochloromethane	U	1.01	ug/kg	0.303	1.01	
106-93-4	1,2-Dibromoethane	U	1.01	ug/kg	0.303	1.01	
108-90-7	Chlorobenzene	U	1.01	ug/kg	0.303	1.01	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14114**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:54**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n321.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.01	ug/kg	0.303	1.01
179601-23-1	m,p-Xylenes	U	2.02	ug/kg	0.303	2.02
95-47-6	o-Xylene	U	1.01	ug/kg	0.303	1.01
100-42-5	Styrene	U	1.01	ug/kg	0.303	1.01
75-25-2	Bromoform	U	1.01	ug/kg	0.303	1.01
79-34-5	1,1,2,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
96-18-4	1,2,3-Trichloropropane	U	1.01	ug/kg	0.303	1.01
108-86-1	Bromobenzene	U	1.01	ug/kg	0.303	1.01
103-65-1	n-Propylbenzene	U	1.01	ug/kg	0.303	1.01
95-49-8	2-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-82-8	Isopropylbenzene	U	1.01	ug/kg	0.303	1.01
108-67-8	1,3,5-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
106-43-4	4-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-06-6	tert-Butylbenzene	U	1.01	ug/kg	0.303	1.01
95-63-6	1,2,4-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
135-98-8	sec-Butylbenzene	U	1.01	ug/kg	0.303	1.01
99-87-6	4-Isopropyltoluene	U	1.01	ug/kg	0.303	1.01
541-73-1	1,3-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
106-46-7	1,4-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
104-51-8	n-Butylbenzene	U	1.01	ug/kg	0.303	1.01
96-12-8	1,2-Dibromo-3-chloropropane	U	1.01	ug/kg	0.303	1.01
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.05	ug/kg	1.61	5.05
630-20-6	1,1,1,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
95-50-1	1,2-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
110-62-3	Pentanal	11.2	25.2	ug/kg	83	NJ
66-25-1	Hexanal	12.98	217	ug/kg	90	NJ
	Unknown Hydrocarbon	14.06	6.13	ug/kg		J
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	157	ug/kg	90	NJ
124-13-0	Octanal	15.86	5.4	ug/kg	91	NJ
138-86-3	Limonene	16.03	5.57	ug/kg	94	NJ
	Unknown Siloxane	16.79	7.93	ug/kg		J
124-19-6	Nonanal	17.15	9.95	ug/kg	90	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:03**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:50**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n317.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	1.79	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:03**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:50**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n317.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	320	ug/kg	91	NJ
	Unknown Hydrocarbon	16.03	8.39	ug/kg		J
	Unknown Siloxane	16.79	25.6	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819011	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14116	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 23:00	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:03	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n411.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04	
67-64-1	Acetone	U	5.21	ug/kg	1.73	5.21	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
74-88-4	Iodomethane	U	5.21	ug/kg	1.67	5.21	
75-09-2	Methylene chloride	U	5.21	ug/kg	2.09	5.21	
75-15-0	Carbon disulfide	U	5.21	ug/kg	1.30	5.21	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04	
78-93-3	2-Butanone	U	5.21	ug/kg	1.56	5.21	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04	UJ,V7c
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04	
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.21	ug/kg	1.30	5.21	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04	
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04	
591-78-6	2-Hexanone	U	5.21	ug/kg	1.56	5.21	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819011**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14116**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:00**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:03**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n411.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.21	ug/kg	1.67	5.21
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	51	ug/kg	90	NJ
	Unknown Siloxane	16.79	8.37	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n323.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09	
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09	
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09	
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09	
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09	
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09	
67-64-1	Acetone	U	5.44	ug/kg	1.81	5.44	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09	
74-88-4	Iodomethane	U	5.44	ug/kg	1.74	5.44	
75-09-2	Methylene chloride	U	5.44	ug/kg	2.18	5.44	
75-15-0	Carbon disulfide	U	5.44	ug/kg	1.36	5.44	
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09	
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09	
78-93-3	2-Butanone	U	5.44	ug/kg	1.63	5.44	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09	
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09	UJ,V7c
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09	
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09	
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09	
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09	
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09	
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09	
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09	
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09	
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09	
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09	
108-10-1	4-Methyl-2-pentanone	U	5.44	ug/kg	1.36	5.44	
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09	
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09	
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09	
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09	
591-78-6	2-Hexanone	U	5.44	ug/kg	1.63	5.44	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09	
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09	
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09	
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09	
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n323.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.44	ug/kg	1.74	5.44
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	169	ug/kg	90	NJ
	Unknown Siloxane	16.79	16.3	ug/kg		J

SEB
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14118**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 16:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 16:27**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o108.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10	
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10	
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52	
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52	
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	UJ,V7c
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.365	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.365	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819016	Date Received:	11/25/2009 09:10	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14118	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928605	Inst:	VOA4.I	Dilution:	1
Run Date:	12/07/2009 16:54	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/07/2009 16:27	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4o108.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	164	ug/kg	91	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n413.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.02	ug/kg	0.346	1.02	
74-87-3	Chloromethane	U	1.02	ug/kg	0.305	1.02	
75-01-4	Vinyl chloride	U	1.02	ug/kg	0.305	1.02	
74-83-9	Bromomethane	U	1.02	ug/kg	0.305	1.02	
75-00-3	Chloroethane	U	1.02	ug/kg	0.305	1.02	
75-69-4	Trichlorofluoromethane	U	1.02	ug/kg	0.305	1.02	
67-64-1	Acetone	U	5.09	ug/kg	1.69	5.09	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.02	ug/kg	0.305	1.02	
74-88-4	Iodomethane	U	5.09	ug/kg	1.63	5.09	
75-09-2	Methylene chloride	U	5.09	ug/kg	2.03	5.09	
75-15-0	Carbon disulfide	U	5.09	ug/kg	1.27	5.09	
156-60-5	trans-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02	
75-34-3	1,1-Dichloroethane	U	1.02	ug/kg	0.305	1.02	
78-93-3	2-Butanone	U	5.09	ug/kg	1.53	5.09	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02	
594-20-7	2,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02	UJ,V7c
67-66-3	Chloroform	U	1.02	ug/kg	0.305	1.02	
74-97-5	Bromochloromethane	U	1.02	ug/kg	0.336	1.02	
71-55-6	1,1,1-Trichloroethane	U	1.02	ug/kg	0.305	1.02	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.02	ug/kg	0.305	1.02	
56-23-5	Carbon tetrachloride	U	1.02	ug/kg	0.305	1.02	
107-06-2	1,2-Dichloroethane	U	1.02	ug/kg	0.305	1.02	
71-43-2	Benzene	U	1.02	ug/kg	0.305	1.02	
79-01-6	Trichloroethylene	U	1.02	ug/kg	0.336	1.02	
78-87-5	1,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02	
75-27-4	Bromodichloromethane	U	1.02	ug/kg	0.305	1.02	
74-95-3	Dibromomethane	U	1.02	ug/kg	0.305	1.02	
108-10-1	4-Methyl-2-pentanone	U	5.09	ug/kg	1.27	5.09	
10061-01-5	cis-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02	
108-88-3	Toluene	U	1.02	ug/kg	0.305	1.02	
10061-02-6	trans-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02	
79-00-5	1,1,2-Trichloroethane	U	1.02	ug/kg	0.305	1.02	
591-78-6	2-Hexanone	J	2.02	ug/kg	1.53	5.09	J,V7c
142-28-9	1,3-Dichloropropane	U	1.02	ug/kg	0.305	1.02	
127-18-4	Tetrachloroethylene	U	1.02	ug/kg	0.305	1.02	
124-48-1	Dibromochloromethane	U	1.02	ug/kg	0.305	1.02	
106-93-4	1,2-Dibromoethane	U	1.02	ug/kg	0.305	1.02	
108-90-7	Chlorobenzene	U	1.02	ug/kg	0.305	1.02	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n413.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.02	ug/kg	0.305	1.02
179601-23-1	m,p-Xylenes	U	2.03	ug/kg	0.305	2.03
95-47-6	o-Xylene	U	1.02	ug/kg	0.305	1.02
100-42-5	Styrene	U	1.02	ug/kg	0.305	1.02
75-25-2	Bromoform	U	1.02	ug/kg	0.305	1.02
79-34-5	1,1,2,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
96-18-4	1,2,3-Trichloropropane	U	1.02	ug/kg	0.305	1.02
108-86-1	Bromobenzene	U	1.02	ug/kg	0.305	1.02
103-65-1	n-Propylbenzene	U	1.02	ug/kg	0.305	1.02
95-49-8	2-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-82-8	Isopropylbenzene	U	1.02	ug/kg	0.305	1.02
108-67-8	1,3,5-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
106-43-4	4-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-06-6	tert-Butylbenzene	U	1.02	ug/kg	0.305	1.02
95-63-6	1,2,4-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
135-98-8	sec-Butylbenzene	U	1.02	ug/kg	0.305	1.02
99-87-6	4-Isopropyltoluene	U	1.02	ug/kg	0.305	1.02
541-73-1	1,3-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
106-46-7	1,4-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
104-51-8	n-Butylbenzene	U	1.02	ug/kg	0.305	1.02
96-12-8	1,2-Dibromo-3-chloropropane	U	1.02	ug/kg	0.305	1.02
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.09	ug/kg	1.63	5.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
95-50-1	1,2-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	149	ug/kg	91	NJ
	Unknown Siloxane	16.8	15.6	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n410.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.349	1.03	
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03	
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03	
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03	
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03	
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03	
67-64-1	Acetone	J	3.83	ug/kg	1.70	5.13	U,V4d
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03	
74-88-4	Iodomethane	U	5.13	ug/kg	1.64	5.13	
75-09-2	Methylene chloride	U	5.13	ug/kg	2.05	5.13	
75-15-0	Carbon disulfide	U	5.13	ug/kg	1.28	5.13	
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03	
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03	
78-93-3	2-Butanone	U	5.13	ug/kg	1.54	5.13	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03	
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03	UJ,V7c
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03	
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03	
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03	
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03	
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03	
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03	
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03	
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03	
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03	
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03	
108-10-1	4-Methyl-2-pentanone	U	5.13	ug/kg	1.28	5.13	
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03	
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03	
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03	
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03	
591-78-6	2-Hexanone	U	5.13	ug/kg	1.54	5.13	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03	
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03	
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03	
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03	
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4u410.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.05	ug/kg	0.308	2.05
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.13	ug/kg	1.64	5.13
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	101	ug/kg	91	NJ
	Unknown Siloxane	16.79	8.52	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819008	Date Received:	11/25/2009 09:10	%Moisture:	12.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14121	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928605	Inst:	VOA4.I	Dilution:	1
Run Date:	12/03/2009 21:37	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/03/2009 21:00	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n408.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.389	1.15	
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15	
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15	
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15	
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15	
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15	
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73	
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73	
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73	
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	UJ,V7c
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15	
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15	
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15	
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15	
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15	
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15	
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15	
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15	
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73	
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15	
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15	
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15	
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15	
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15	
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819008**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14121**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:37**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n408.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	87.1	ug/kg	83	NJ
	Unknown Siloxane	16.79	13.8	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14122**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 01:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:09**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n417.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06	
74-87-3	Chloromethane	U	1.06	ug/kg	0.318	1.06	
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.318	1.06	
74-83-9	Bromomethane	U	1.06	ug/kg	0.318	1.06	
75-00-3	Chloroethane	U	1.06	ug/kg	0.318	1.06	
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.318	1.06	
67-64-1	Acetone		11.5	ug/kg	1.76	5.30	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.318	1.06	
74-88-4	Iodomethane	U	5.30	ug/kg	1.70	5.30	
75-09-2	Methylene chloride	U	5.30	ug/kg	2.12	5.30	
75-15-0	Carbon disulfide	U	5.30	ug/kg	1.32	5.30	
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06	
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.318	1.06	
78-93-3	2-Butanone	J	3.25	ug/kg	1.59	5.30	J,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06	
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06	UJ,V7c
67-66-3	Chloroform	U	1.06	ug/kg	0.318	1.06	
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.350	1.06	
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.318	1.06	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.318	1.06	
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.318	1.06	
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.318	1.06	
71-43-2	Benzene	U	1.06	ug/kg	0.318	1.06	
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.350	1.06	
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06	
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.318	1.06	
74-95-3	Dibromomethane	U	1.06	ug/kg	0.318	1.06	
108-10-1	4-Methyl-2-pentanone	U	5.30	ug/kg	1.32	5.30	
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06	
108-88-3	Toluene	U	1.06	ug/kg	0.318	1.06	
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06	
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.318	1.06	
591-78-6	2-Hexanone	U	5.30	ug/kg	1.59	5.30	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.318	1.06	
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.318	1.06	
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.318	1.06	
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.318	1.06	
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.318	1.06	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14122**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 01:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:09**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n417.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.318	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.318	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.318	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.318	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.318	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.318	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.318	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.318	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.318	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.318	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.318	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.318	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.318	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.318	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.30	ug/kg	1.70	5.30
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	171	ug/kg	90	NJ
	Unknown Siloxane	16.79	8.82	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:26**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:53**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n320.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06	
74-87-3	Chloromethane	U	1.06	ug/kg	0.318	1.06	
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.318	1.06	
74-83-9	Bromomethane	U	1.06	ug/kg	0.318	1.06	
75-00-3	Chloroethane	U	1.06	ug/kg	0.318	1.06	
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.318	1.06	
67-64-1	Acetone	J	2.18	ug/kg	1.76	5.29	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.318	1.06	
74-88-4	Iodomethane	U	5.29	ug/kg	1.69	5.29	
75-09-2	Methylene chloride	U	5.29	ug/kg	2.12	5.29	
75-15-0	Carbon disulfide	U	5.29	ug/kg	1.32	5.29	
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06	
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.318	1.06	
78-93-3	2-Butanone	U	5.29	ug/kg	1.59	5.29	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06	
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06	UJ,V7c
67-66-3	Chloroform	U	1.06	ug/kg	0.318	1.06	
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.349	1.06	
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.318	1.06	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.318	1.06	
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.318	1.06	
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.318	1.06	
71-43-2	Benzene	U	1.06	ug/kg	0.318	1.06	
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.349	1.06	
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06	
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.318	1.06	
74-95-3	Dibromomethane	U	1.06	ug/kg	0.318	1.06	
108-10-1	4-Methyl-2-pentanone	U	5.29	ug/kg	1.32	5.29	
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06	
108-88-3	Toluene	U	1.06	ug/kg	0.318	1.06	
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06	
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.318	1.06	
591-78-6	2-Hexanone	U	5.29	ug/kg	1.59	5.29	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.318	1.06	
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.318	1.06	
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.318	1.06	
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.318	1.06	
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.318	1.06	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819004	Date Received:	11/25/2009 09:10	%Moisture:	5.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14123	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928605	Inst:	VOA4.I	Dilution:	1
Run Date:	12/03/2009 02:26	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/02/2009 20:53	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n320.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.318	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.318	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.318	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.318	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.318	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.318	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.318	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.318	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.318	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.318	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.318	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.318	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.318	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.318	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.29	ug/kg	1.69	5.29
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	52.3	ug/kg	90	NJ
	Unknown Siloxane	16.79	12.7	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:15**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n418.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.369	1.08	
74-87-3	Chloromethane	U	1.08	ug/kg	0.325	1.08	
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.325	1.08	
74-83-9	Bromomethane	U	1.08	ug/kg	0.325	1.08	
75-00-3	Chloroethane	U	1.08	ug/kg	0.325	1.08	
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.325	1.08	
67-64-1	Acetone	U	5.42	ug/kg	1.80	5.42	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.325	1.08	
74-88-4	Iodomethane	U	5.42	ug/kg	1.74	5.42	
75-09-2	Methylene chloride	U	5.42	ug/kg	2.17	5.42	
75-15-0	Carbon disulfide	U	5.42	ug/kg	1.36	5.42	
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08	
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.325	1.08	
78-93-3	2-Butanone	U	5.42	ug/kg	1.63	5.42	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08	
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08	UJ,V7c
67-66-3	Chloroform	U	1.08	ug/kg	0.325	1.08	
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.358	1.08	
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.325	1.08	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.325	1.08	
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.325	1.08	
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.325	1.08	
71-43-2	Benzene	U	1.08	ug/kg	0.325	1.08	
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.358	1.08	
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08	
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.325	1.08	
74-95-3	Dibromomethane	U	1.08	ug/kg	0.325	1.08	
108-10-1	4-Methyl-2-pentanone	U	5.42	ug/kg	1.36	5.42	
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08	
108-88-3	Toluene	U	1.08	ug/kg	0.325	1.08	
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08	
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.325	1.08	
591-78-6	2-Hexanone	U	5.42	ug/kg	1.63	5.42	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.325	1.08	
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.325	1.08	
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.325	1.08	
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.325	1.08	
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.325	1.08	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:15**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n418.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.325	1.08
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.325	2.17
95-47-6	o-Xylene	U	1.08	ug/kg	0.325	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.325	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.325	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.325	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.325	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.325	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.325	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.325	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.325	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.325	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.325	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.325	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.42	ug/kg	1.74	5.42
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	217	ug/kg	91	NJ
	Unknown Siloxane	16.79	13.5	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819003	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14125	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928605	Inst:	VOA4.I	Dilution:	1
Run Date:	12/03/2009 01:58	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/02/2009 20:52	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n319.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04	
67-64-1	Acetone	U	5.21	ug/kg	1.73	5.21	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
74-88-4	Iodomethane	U	5.21	ug/kg	1.67	5.21	
75-09-2	Methylene chloride	U	5.21	ug/kg	2.09	5.21	
75-15-0	Carbon disulfide	U	5.21	ug/kg	1.30	5.21	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04	
78-93-3	2-Butanone	U	5.21	ug/kg	1.56	5.21	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04	UJ,V7c
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04	
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.21	ug/kg	1.30	5.21	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04	
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04	
591-78-6	2-Hexanone	U	5.21	ug/kg	1.56	5.21	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:58**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n319.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.21	ug/kg	1.67	5.21
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	80.8	ug/kg	91	NJ
	Unknown Siloxane	16.79	10.2	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14126**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:55**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n322.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09	
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09	
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09	
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09	
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09	
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09	
67-64-1	Acetone	U	5.45	ug/kg	1.81	5.45	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09	
74-88-4	Iodomethane	U	5.45	ug/kg	1.74	5.45	
75-09-2	Methylene chloride	U	5.45	ug/kg	2.18	5.45	
75-15-0	Carbon disulfide	U	5.45	ug/kg	1.36	5.45	
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09	
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09	
78-93-3	2-Butanone	U	5.45	ug/kg	1.63	5.45	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09	
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09	UJ,V7c
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09	
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09	
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09	
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09	
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09	
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09	
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09	
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09	
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09	
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09	
108-10-1	4-Methyl-2-pentanone	U	5.45	ug/kg	1.36	5.45	
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09	
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09	
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09	
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09	
591-78-6	2-Hexanone	U	5.45	ug/kg	1.63	5.45	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09	
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09	
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09	
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09	
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14126**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:55**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n322.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.45	ug/kg	1.74	5.45
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	98.9	ug/kg	90	NJ
	Unknown Siloxane	16.79	26.2	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819015	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14127	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 00:52	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n415.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05	
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05	
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05	
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05	
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05	
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05	
67-64-1	Acetone		14.7	ug/kg	1.74	5.25	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
74-88-4	Iodomethane	U	5.25	ug/kg	1.68	5.25	
75-09-2	Methylene chloride	U	5.25	ug/kg	2.10	5.25	
75-15-0	Carbon disulfide	U	5.25	ug/kg	1.31	5.25	
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05	
78-93-3	2-Butanone		7.92	ug/kg	1.58	5.25	J,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05	
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05	UJ,V7c
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05	
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05	
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05	
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05	
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05	
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05	
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05	
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05	
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05	
108-10-1	4-Methyl-2-pentanone	U	5.25	ug/kg	1.31	5.25	
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05	
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05	
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05	
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05	
591-78-6	2-Hexanone	U	5.25	ug/kg	1.58	5.25	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05	
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05	
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05	
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05	
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819015**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14127**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:52**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n415.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.25	ug/kg	1.68	5.25
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	209	ug/kg	91	NJ
	Unknown Siloxane	16.79	13.8	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14128**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 03:11**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n420.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.350	1.03	
74-87-3	Chloromethane	U	1.03	ug/kg	0.309	1.03	
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.309	1.03	
74-83-9	Bromomethane	U	1.03	ug/kg	0.309	1.03	
75-00-3	Chloroethane	U	1.03	ug/kg	0.309	1.03	
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.309	1.03	
67-64-1	Acetone	J	1.74	ug/kg	1.71	5.14	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.309	1.03	
74-88-4	Iodomethane	U	5.14	ug/kg	1.65	5.14	
75-09-2	Methylene chloride	U	5.14	ug/kg	2.06	5.14	
75-15-0	Carbon disulfide	U	5.14	ug/kg	1.29	5.14	
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.309	1.03	
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.309	1.03	
78-93-3	2-Butanone	U	5.14	ug/kg	1.54	5.14	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.309	1.03	
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.309	1.03	UJ,V7c
67-66-3	Chloroform	U	1.03	ug/kg	0.309	1.03	
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03	
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.309	1.03	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.309	1.03	
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.309	1.03	
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.309	1.03	
71-43-2	Benzene	U	1.03	ug/kg	0.309	1.03	
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03	
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.309	1.03	
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.309	1.03	
74-95-3	Dibromomethane	U	1.03	ug/kg	0.309	1.03	
108-10-1	4-Methyl-2-pentanone	U	5.14	ug/kg	1.29	5.14	
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.309	1.03	
108-88-3	Toluene	U	1.03	ug/kg	0.309	1.03	
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.309	1.03	
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.309	1.03	
591-78-6	2-Hexanone	U	5.14	ug/kg	1.54	5.14	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.309	1.03	
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.309	1.03	
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.309	1.03	
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.309	1.03	
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.309	1.03	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14128**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 03:11**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n420.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.309	1.03
179601-23-1	m,p-Xylenes	U	2.06	ug/kg	0.309	2.06
95-47-6	o-Xylene	U	1.03	ug/kg	0.309	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.309	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.309	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.309	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.309	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.309	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.309	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.309	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.309	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.309	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.309	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.309	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.309	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.309	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.309	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.309	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.309	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.14	ug/kg	1.65	5.14
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.309	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	206	ug/kg	91	NJ
	Unknown Siloxane	16.79	18	ug/kg		J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 22:04	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n409.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.02	ug/kg	0.345	1.02	
74-87-3	Chloromethane	U	1.02	ug/kg	0.305	1.02	
75-01-4	Vinyl chloride	U	1.02	ug/kg	0.305	1.02	
74-83-9	Bromomethane	U	1.02	ug/kg	0.305	1.02	
75-00-3	Chloroethane	U	1.02	ug/kg	0.305	1.02	
75-69-4	Trichlorofluoromethane	U	1.02	ug/kg	0.305	1.02	
67-64-1	Acetone	U	5.08	ug/kg	1.69	5.08	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.02	ug/kg	0.305	1.02	
74-88-4	Iodomethane	U	5.08	ug/kg	1.62	5.08	
75-09-2	Methylene chloride	U	5.08	ug/kg	2.03	5.08	
75-15-0	Carbon disulfide	U	5.08	ug/kg	1.27	5.08	
156-60-5	trans-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02	
75-34-3	1,1-Dichloroethane	U	1.02	ug/kg	0.305	1.02	
78-93-3	2-Butanone	U	5.08	ug/kg	1.52	5.08	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02	
594-20-7	2,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02	UJ,V7c
67-66-3	Chloroform	U	1.02	ug/kg	0.305	1.02	
74-97-5	Bromochloromethane	U	1.02	ug/kg	0.335	1.02	
71-55-6	1,1,1-Trichloroethane	U	1.02	ug/kg	0.305	1.02	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.02	ug/kg	0.305	1.02	
56-23-5	Carbon tetrachloride	U	1.02	ug/kg	0.305	1.02	
107-06-2	1,2-Dichloroethane	U	1.02	ug/kg	0.305	1.02	
71-43-2	Benzene	U	1.02	ug/kg	0.305	1.02	
79-01-6	Trichloroethylene	U	1.02	ug/kg	0.335	1.02	
78-87-5	1,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02	
75-27-4	Bromodichloromethane	U	1.02	ug/kg	0.305	1.02	
74-95-3	Dibromomethane	U	1.02	ug/kg	0.305	1.02	
108-10-1	4-Methyl-2-pentanone	U	5.08	ug/kg	1.27	5.08	
10061-01-5	cis-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02	
108-88-3	Toluene	U	1.02	ug/kg	0.305	1.02	
10061-02-6	trans-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02	
79-00-5	1,1,2-Trichloroethane	U	1.02	ug/kg	0.305	1.02	
591-78-6	2-Hexanone	U	5.08	ug/kg	1.52	5.08	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.02	ug/kg	0.305	1.02	
127-18-4	Tetrachloroethylene	U	1.02	ug/kg	0.305	1.02	
124-48-1	Dibromochloromethane	U	1.02	ug/kg	0.305	1.02	
106-93-4	1,2-Dibromoethane	U	1.02	ug/kg	0.305	1.02	
108-90-7	Chlorobenzene	U	1.02	ug/kg	0.305	1.02	

SEB
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819009**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14129**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:04**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:01**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n409.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.02	ug/kg	0.305	1.02
179601-23-1	m,p-Xylenes	U	2.03	ug/kg	0.305	2.03
95-47-6	o-Xylene	U	1.02	ug/kg	0.305	1.02
100-42-5	Styrene	U	1.02	ug/kg	0.305	1.02
75-25-2	Bromoform	U	1.02	ug/kg	0.305	1.02
79-34-5	1,1,2,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
96-18-4	1,2,3-Trichloropropane	U	1.02	ug/kg	0.305	1.02
108-86-1	Bromobenzene	U	1.02	ug/kg	0.305	1.02
103-65-1	n-Propylbenzene	U	1.02	ug/kg	0.305	1.02
95-49-8	2-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-82-8	Isopropylbenzene	U	1.02	ug/kg	0.305	1.02
108-67-8	1,3,5-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
106-43-4	4-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-06-6	tert-Butylbenzene	U	1.02	ug/kg	0.305	1.02
95-63-6	1,2,4-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
135-98-8	sec-Butylbenzene	U	1.02	ug/kg	0.305	1.02
99-87-6	4-Isopropyltoluene	U	1.02	ug/kg	0.305	1.02
541-73-1	1,3-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
106-46-7	1,4-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
104-51-8	n-Butylbenzene	U	1.02	ug/kg	0.305	1.02
96-12-8	1,2-Dibromo-3-chloropropane	U	1.02	ug/kg	0.305	1.02
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.08	ug/kg	1.62	5.08
630-20-6	1,1,1,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
95-50-1	1,2-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
66-25-1	Hexanal	12.99	6.42	ug/kg	91	NJ
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	68.6	ug/kg	90	NJ

SEB
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DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-666 VALIDATION DATE: 01/29/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Susan Ball ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV %Ds were >20% for hexachlorocyclopentadiene and 2,4-dinitrophenol. In the CCV associated with samples RE03-09-14112, -14122, and -14124, the %D was >20% for benzoic acid. In the CCV associated with sample -14128, the %D was >20% for bis(2-chloroisopropyl)ether. In the CCV associated with the remaining samples, the %Ds were >20% for n-nitrosodipropylamine and 3-nitroaniline. All associated sample results were NDs and, thus, were qualified UJ,SV7c.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/29/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below if Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☐	☒	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☐	☒	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819014	Date Received:	11/25/2009 09:10	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14110	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 20:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510621.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	346	ug/kg	69.2	346	
108-95-2	Phenol	U	346	ug/kg	69.2	346	
95-57-8	2-Chlorophenol	U	346	ug/kg	69.2	346	
106-46-7	1,4-Dichlorobenzene	U	346	ug/kg	69.2	346	
621-64-7	N-Nitrosodipropylamine	U	346	ug/kg	69.2	346	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	346	ug/kg	69.2	346	
83-32-9	Acenaphthene	U	34.6	ug/kg	11.4	34.6	
121-14-2	2,4-Dinitrotoluene	U	346	ug/kg	34.6	346	
100-02-7	4-Nitrophenol	U	346	ug/kg	114	346	
87-86-5	Pentachlorophenol	U	346	ug/kg	86.5	346	
129-00-0	Pyrene	U	34.6	ug/kg	10.4	34.6	
110-86-1	Pyridine	U	346	ug/kg	69.2	346	
62-53-3	Aniline	U	346	ug/kg	104	346	
111-44-4	bis(2-Chloroethyl) ether	U	346	ug/kg	69.2	346	
541-73-1	1,3-Dichlorobenzene	U	346	ug/kg	69.2	346	
100-51-6	Benzyl alcohol	U	346	ug/kg	104	346	
95-50-1	1,2-Dichlorobenzene	U	346	ug/kg	69.2	346	
108-60-1	bis(2-Chloroisopropyl)ether	U	346	ug/kg	69.2	346	
95-48-7	o-Cresol	U	346	ug/kg	69.2	346	
65794-96-9	m,p-Cresols	U	346	ug/kg	104	346	
67-72-1	Hexachloroethane	U	346	ug/kg	69.2	346	
98-95-3	Nitrobenzene	U	346	ug/kg	69.2	346	
78-59-1	Isophorone	U	346	ug/kg	69.2	346	
88-75-5	2-Nitrophenol	U	346	ug/kg	69.2	346	
105-67-9	2,4-Dimethylphenol	U	346	ug/kg	121	346	
111-91-1	bis(2-Chloroethoxy)methane	U	346	ug/kg	69.2	346	
120-83-2	2,4-Dichlorophenol	U	346	ug/kg	69.2	346	
65-85-0	Benzoic acid	U	692	ug/kg	173	692	
91-20-3	Naphthalene	U	34.6	ug/kg	10.4	34.6	
106-47-8	4-Chloroaniline	U	346	ug/kg	69.2	346	
87-68-3	Hexachlorobutadiene	U	346	ug/kg	69.2	346	
91-57-6	2-Methylnaphthalene	U	34.6	ug/kg	6.92	34.6	
77-47-4	Hexachlorocyclopentadiene	U	346	ug/kg	69.2	346	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	346	ug/kg	69.2	346	
95-95-4	2,4,5-Trichlorophenol	U	346	ug/kg	69.2	346	
91-58-7	2-Chloronaphthalene	U	34.6	ug/kg	11.4	34.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	346	ug/kg	69.2	346	
99-09-2	3-Nitroaniline	U	346	ug/kg	69.2	346	UJ,SV7c

SEB
1/29/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819014	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14110	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 20:39	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510621.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	346	ug/kg	69.2	346	
606-20-2	2,6-Dinitrotoluene	U	346	ug/kg	34.6	346	
208-96-8	Acenaphthylene	U	34.6	ug/kg	10.4	34.6	
51-28-5	2,4-Dinitrophenol	U	692	ug/kg	131	692	UJ,SV7c
132-64-9	Dibenzofuran	U	346	ug/kg	69.2	346	
84-66-2	Diethylphthalate	U	346	ug/kg	69.2	346	
86-73-7	Fluorene	U	34.6	ug/kg	10.4	34.6	
7005-72-3	4-Chlorophenylphenylether	U	346	ug/kg	69.2	346	
534-52-1	2-Methyl-4,6-dinitrophenol	U	346	ug/kg	69.2	346	
100-01-6	4-Nitroaniline	U	346	ug/kg	104	346	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	346	ug/kg	69.2	346	
122-66-7	Azobenzene	U	346	ug/kg	69.2	346	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	346	ug/kg	69.2	346	
118-74-1	Hexachlorobenzene	U	346	ug/kg	69.2	346	
85-01-8	Phenanthrene	U	34.6	ug/kg	10.4	34.6	
120-12-7	Anthracene	U	34.6	ug/kg	6.92	34.6	
84-74-2	Di-n-butylphthalate	U	346	ug/kg	69.2	346	
206-44-0	Fluoranthene	U	34.6	ug/kg	10.4	34.6	
85-68-7	Butylbenzylphthalate	U	346	ug/kg	69.2	346	
56-55-3	Benzo(a)anthracene	U	34.6	ug/kg	10.4	34.6	
91-94-1	3,3'-Dichlorobenzidine	U	346	ug/kg	104	346	
218-01-9	Chrysene	U	34.6	ug/kg	10.4	34.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	346	ug/kg	69.2	346	
117-84-0	Di-n-octylphthalate	U	346	ug/kg	69.2	346	
205-99-2	Benzo(b)fluoranthene	U	34.6	ug/kg	10.4	34.6	
207-08-9	Benzo(k)fluoranthene	U	34.6	ug/kg	10.4	34.6	
50-32-8	Benzo(a)pyrene	U	34.6	ug/kg	10.4	34.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.6	ug/kg	10.4	34.6	
53-70-3	Dibenzo(a,h)anthracene	U	34.6	ug/kg	10.4	34.6	
191-24-2	Benzo(ghi)perylene	U	34.6	ug/kg	10.4	34.6	
120-82-1	1,2,4-Trichlorobenzene	U	346	ug/kg	69.2	346	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	264	ug/kg		JA

SEB
1/29/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819012	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14111	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 19:53	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s510619.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	76.0	380	
108-95-2	Phenol	U	380	ug/kg	76.0	380	
95-57-8	2-Chlorophenol	U	380	ug/kg	76.0	380	
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	76.0	380	
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	76.0	380	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	76.0	380	
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0	
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380	
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380	
87-86-5	Pentachlorophenol	U	380	ug/kg	95.0	380	
129-00-0	Pyrene	U	38.0	ug/kg	11.4	38.0	
110-86-1	Pyridine	U	380	ug/kg	76.0	380	
62-53-3	Aniline	U	380	ug/kg	114	380	
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	76.0	380	
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	76.0	380	
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380	
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	76.0	380	
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	76.0	380	
95-48-7	o-Cresol	U	380	ug/kg	76.0	380	
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380	
67-72-1	Hexachloroethane	U	380	ug/kg	76.0	380	
98-95-3	Nitrobenzene	U	380	ug/kg	76.0	380	
78-59-1	Isophorone	U	380	ug/kg	76.0	380	
88-75-5	2-Nitrophenol	U	380	ug/kg	76.0	380	
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380	
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	76.0	380	
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	76.0	380	
65-85-0	Benzoic acid	U	760	ug/kg	190	760	
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0	
106-47-8	4-Chloroaniline	U	380	ug/kg	76.0	380	
87-68-3	Hexachlorobutadiene	U	380	ug/kg	76.0	380	
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.60	38.0	
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	76.0	380	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	76.0	380	
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	76.0	380	
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	380	ug/kg	76.0	380	
99-09-2	3-Nitroaniline	U	380	ug/kg	76.0	380	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819012**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14111**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:53**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510619.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	380	ug/kg	76.0	380	
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380	
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0	
51-28-5	2,4-Dinitrophenol	U	760	ug/kg	144	760	UJ,SV7c
132-64-9	Dibenzofuran	U	380	ug/kg	76.0	380	
84-66-2	Diethylphthalate	U	380	ug/kg	76.0	380	
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0	
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	76.0	380	
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	76.0	380	
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	380	ug/kg	76.0	380	
122-66-7	Azobenzene	U	380	ug/kg	76.0	380	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	76.0	380	
118-74-1	Hexachlorobenzene	U	380	ug/kg	76.0	380	
85-01-8	Phenanthrene	U	38.0	ug/kg	11.4	38.0	
120-12-7	Anthracene	U	38.0	ug/kg	7.60	38.0	
84-74-2	Di-n-butylphthalate	U	380	ug/kg	76.0	380	
206-44-0	Fluoranthene	U	38.0	ug/kg	11.4	38.0	
85-68-7	Butylbenzylphthalate	U	380	ug/kg	76.0	380	
56-55-3	Benzo(a)anthracene	U	38.0	ug/kg	11.4	38.0	
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380	
218-01-9	Chrysene	U	38.0	ug/kg	11.4	38.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	380	ug/kg	76.0	380	
117-84-0	Di-n-octylphthalate	U	380	ug/kg	76.0	380	
205-99-2	Benzo(b)fluoranthene	U	38.0	ug/kg	11.4	38.0	
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0	
50-32-8	Benzo(a)pyrene	U	38.0	ug/kg	11.4	38.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0	
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0	
191-24-2	Benzo(ghi)perylene	U	38.0	ug/kg	11.4	38.0	
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	76.0	380	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	268	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 23:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510920.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.0	375	
108-95-2	Phenol	U	375	ug/kg	75.0	375	
95-57-8	2-Chlorophenol	U	375	ug/kg	75.0	375	
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.0	375	
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.0	375	
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.0	375	
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5	
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375	
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375	
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375	
129-00-0	Pyrene	U	37.5	ug/kg	11.2	37.5	
110-86-1	Pyridine	U	375	ug/kg	75.0	375	
62-53-3	Aniline	U	375	ug/kg	112	375	
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.0	375	
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.0	375	
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375	
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.0	375	
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.0	375	
95-48-7	o-Cresol	U	375	ug/kg	75.0	375	
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375	
67-72-1	Hexachloroethane	U	375	ug/kg	75.0	375	
98-95-3	Nitrobenzene	U	375	ug/kg	75.0	375	
78-59-1	Isophorone	U	375	ug/kg	75.0	375	
88-75-5	2-Nitrophenol	U	375	ug/kg	75.0	375	
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375	
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.0	375	
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.0	375	
65-85-0	Benzoic acid	U	750	ug/kg	187	750	UJ,SV7c
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5	
106-47-8	4-Chloroaniline	U	375	ug/kg	75.0	375	
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.0	375	
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.50	37.5	
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.0	375	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.0	375	
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.0	375	
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5	
88-74-4	2-Nitroaniline	U	375	ug/kg	75.0	375	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	375	ug/kg	75.0	375	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819019	Date Received:	11/25/2009 09:10	%Moisture:	11.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14112	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/09/2009 23:28	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s510920.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	375	ug/kg	75.0	375	
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375	
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5	
51-28-5	2,4-Dinitrophenol	U	750	ug/kg	142	750	UJ,SV7c
132-64-9	Dibenzofuran	U	375	ug/kg	75.0	375	
84-66-2	Diethylphthalate	U	375	ug/kg	75.0	375	
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5	
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.0	375	
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.0	375	
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	375	ug/kg	75.0	375	
122-66-7	Azobenzene	U	375	ug/kg	75.0	375	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.0	375	
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.0	375	
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5	
120-12-7	Anthracene	U	37.5	ug/kg	7.50	37.5	
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.0	375	
206-44-0	Fluoranthene	U	37.5	ug/kg	11.2	37.5	
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.0	375	
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5	
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375	
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.0	375	
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.0	375	
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5	
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5	
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5	
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5	
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5	
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.0	375	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	262	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510609.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370	
108-95-2	Phenol	U	370	ug/kg	74.0	370	
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370	
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370	
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370	
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0	
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370	
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370	
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370	
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0	
110-86-1	Pyridine	U	370	ug/kg	74.0	370	
62-53-3	Aniline	U	370	ug/kg	111	370	
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370	
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370	
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370	
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370	
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370	
95-48-7	o-Cresol	U	370	ug/kg	74.0	370	
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370	
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370	
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370	
78-59-1	Isophorone	U	370	ug/kg	74.0	370	
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370	
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370	
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370	
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370	
65-85-0	Benzoic acid	U	740	ug/kg	185	740	
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0	
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370	
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370	
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0	
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370	
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370	
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	370	ug/kg	74.0	370	
99-09-2	3-Nitroaniline	U	370	ug/kg	74.0	370	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510609.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370	
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370	
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0	
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740	UJ,SV7c
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370	
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370	
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0	
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370	
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370	
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370	
122-66-7	Azobenzene	U	370	ug/kg	74.0	370	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370	
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370	
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0	
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0	
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370	
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0	
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370	
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0	
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370	
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370	
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370	
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0	
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0	
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0	
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0	
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0	
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	300	ug/kg		JA

SEB
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819005	Date Received:	11/25/2009 09:10	%Moisture:	.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14114	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 17:13	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510612.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	336	ug/kg	67.3	336	
108-95-2	Phenol	U	336	ug/kg	67.3	336	
95-57-8	2-Chlorophenol	U	336	ug/kg	67.3	336	
106-46-7	1,4-Dichlorobenzene	U	336	ug/kg	67.3	336	
621-64-7	N-Nitrosodipropylamine	U	336	ug/kg	67.3	336	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	336	ug/kg	67.3	336	
83-32-9	Acenaphthene	U	33.6	ug/kg	11.1	33.6	
121-14-2	2,4-Dinitrotoluene	U	336	ug/kg	33.6	336	
100-02-7	4-Nitrophenol	U	336	ug/kg	111	336	
87-86-5	Pentachlorophenol	U	336	ug/kg	84.1	336	
129-00-0	Pyrene	U	33.6	ug/kg	10.1	33.6	
110-86-1	Pyridine	U	336	ug/kg	67.3	336	
62-53-3	Aniline	U	336	ug/kg	101	336	
111-44-4	bis(2-Chloroethyl) ether	U	336	ug/kg	67.3	336	
541-73-1	1,3-Dichlorobenzene	U	336	ug/kg	67.3	336	
100-51-6	Benzyl alcohol	U	336	ug/kg	101	336	
95-50-1	1,2-Dichlorobenzene	U	336	ug/kg	67.3	336	
108-60-1	bis(2-Chloroisopropyl)ether	U	336	ug/kg	67.3	336	
95-48-7	o-Cresol	U	336	ug/kg	67.3	336	
65794-96-9	m,p-Cresols	U	336	ug/kg	101	336	
67-72-1	Hexachloroethane	U	336	ug/kg	67.3	336	
98-95-3	Nitrobenzene	U	336	ug/kg	67.3	336	
78-59-1	Isophorone	U	336	ug/kg	67.3	336	
88-75-5	2-Nitrophenol	U	336	ug/kg	67.3	336	
105-67-9	2,4-Dimethylphenol	U	336	ug/kg	118	336	
111-91-1	bis(2-Chloroethoxy)methane	U	336	ug/kg	67.3	336	
120-83-2	2,4-Dichlorophenol	U	336	ug/kg	67.3	336	
65-85-0	Benzoic acid	U	673	ug/kg	168	673	
91-20-3	Naphthalene	U	33.6	ug/kg	10.1	33.6	
106-47-8	4-Chloroaniline	U	336	ug/kg	67.3	336	
87-68-3	Hexachlorobutadiene	U	336	ug/kg	67.3	336	
91-57-6	2-Methylnaphthalene	U	33.6	ug/kg	6.73	33.6	
77-47-4	Hexachlorocyclopentadiene	U	336	ug/kg	67.3	336	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	336	ug/kg	67.3	336	
95-95-4	2,4,5-Trichlorophenol	U	336	ug/kg	67.3	336	
91-58-7	2-Chloronaphthalene	U	33.6	ug/kg	11.1	33.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	336	ug/kg	67.3	336	
99-09-2	3-Nitroaniline	U	336	ug/kg	67.3	336	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14114**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:13**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510612.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	336	ug/kg	67.3	336	
606-20-2	2,6-Dinitrotoluene	U	336	ug/kg	33.6	336	
208-96-8	Acenaphthylene	U	33.6	ug/kg	10.1	33.6	
51-28-5	2,4-Dinitrophenol	U	673	ug/kg	128	673	UJ,SV7c
132-64-9	Dibenzofuran	U	336	ug/kg	67.3	336	
84-66-2	Diethylphthalate	U	336	ug/kg	67.3	336	
86-73-7	Fluorene	U	33.6	ug/kg	10.1	33.6	
7005-72-3	4-Chlorophenylphenylether	U	336	ug/kg	67.3	336	
534-52-1	2-Methyl-4,6-dinitrophenol	U	336	ug/kg	67.3	336	
100-01-6	4-Nitroaniline	U	336	ug/kg	101	336	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	336	ug/kg	67.3	336	
122-66-7	Azobenzene	U	336	ug/kg	67.3	336	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	336	ug/kg	67.3	336	
118-74-1	Hexachlorobenzene	U	336	ug/kg	67.3	336	
85-01-8	Phenanthrene	U	33.6	ug/kg	10.1	33.6	
120-12-7	Anthracene	U	33.6	ug/kg	6.73	33.6	
84-74-2	Di-n-butylphthalate	U	336	ug/kg	67.3	336	
206-44-0	Fluoranthene	U	33.6	ug/kg	10.1	33.6	
85-68-7	Butylbenzylphthalate	U	336	ug/kg	67.3	336	
56-55-3	Benzo(a)anthracene	U	33.6	ug/kg	10.1	33.6	
91-94-1	3,3'-Dichlorobenzidine	U	336	ug/kg	101	336	
218-01-9	Chrysene	U	33.6	ug/kg	10.1	33.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	336	ug/kg	67.3	336	
117-84-0	Di-n-octylphthalate	U	336	ug/kg	67.3	336	
205-99-2	Benzo(b)fluoranthene	U	33.6	ug/kg	10.1	33.6	
207-08-9	Benzo(k)fluoranthene	U	33.6	ug/kg	10.1	33.6	
50-32-8	Benzo(a)pyrene	U	33.6	ug/kg	10.1	33.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.6	ug/kg	10.1	33.6	
53-70-3	Dibenzo(a,h)anthracene	U	33.6	ug/kg	10.1	33.6	
191-24-2	Benzo(ghi)perylene	U	33.6	ug/kg	10.1	33.6	
120-82-1	1,2,4-Trichlorobenzene	U	336	ug/kg	67.3	336	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	217	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 11:20**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510606.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.6	333	
108-95-2	Phenol	U	333	ug/kg	66.6	333	
95-57-8	2-Chlorophenol	U	333	ug/kg	66.6	333	
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.6	333	
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.6	333	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.6	333	
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3	
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333	
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333	
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333	
129-00-0	Pyrene	U	33.3	ug/kg	9.99	33.3	
110-86-1	Pyridine	U	333	ug/kg	66.6	333	
62-53-3	Aniline	U	333	ug/kg	99.9	333	
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.6	333	
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.6	333	
100-51-6	Benzyl alcohol	U	333	ug/kg	99.9	333	
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.6	333	
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.6	333	
95-48-7	o-Cresol	U	333	ug/kg	66.6	333	
65794-96-9	m,p-Cresols	U	333	ug/kg	99.9	333	
67-72-1	Hexachloroethane	U	333	ug/kg	66.6	333	
98-95-3	Nitrobenzene	U	333	ug/kg	66.6	333	
78-59-1	Isophorone	U	333	ug/kg	66.6	333	
88-75-5	2-Nitrophenol	U	333	ug/kg	66.6	333	
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333	
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.6	333	
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.6	333	
65-85-0	Benzoic acid	U	666	ug/kg	167	666	
91-20-3	Naphthalene	U	33.3	ug/kg	9.99	33.3	
106-47-8	4-Chloroaniline	U	333	ug/kg	66.6	333	
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.6	333	
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.66	33.3	
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.6	333	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.6	333	
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.6	333	
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	333	ug/kg	66.6	333	
99-09-2	3-Nitroaniline	U	333	ug/kg	66.6	333	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 11:20**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510606.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	333	ug/kg	66.6	333	
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333	
208-96-8	Acenaphthylene	U	33.3	ug/kg	9.99	33.3	
51-28-5	2,4-Dinitrophenol	U	666	ug/kg	127	666	UJ,SV7c
132-64-9	Dibenzofuran	U	333	ug/kg	66.6	333	
84-66-2	Diethylphthalate	U	333	ug/kg	66.6	333	
86-73-7	Fluorene	U	33.3	ug/kg	9.99	33.3	
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.6	333	
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.6	333	
100-01-6	4-Nitroaniline	U	333	ug/kg	99.9	333	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	333	ug/kg	66.6	333	
122-66-7	Azobenzene	U	333	ug/kg	66.6	333	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.6	333	
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.6	333	
85-01-8	Phenanthrene	U	33.3	ug/kg	9.99	33.3	
120-12-7	Anthracene	U	33.3	ug/kg	6.66	33.3	
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.6	333	
206-44-0	Fluoranthene	U	33.3	ug/kg	9.99	33.3	
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.6	333	
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	9.99	33.3	
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	99.9	333	
218-01-9	Chrysene	U	33.3	ug/kg	9.99	33.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.6	333	
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.6	333	
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	9.99	33.3	
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	9.99	33.3	
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	9.99	33.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	9.99	33.3	
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	9.99	33.3	
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	9.99	33.3	
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.6	333	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	205	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819011	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14116	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 19:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510618.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	347	ug/kg	69.5	347	
108-95-2	Phenol	U	347	ug/kg	69.5	347	
95-57-8	2-Chlorophenol	U	347	ug/kg	69.5	347	
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.5	347	
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.5	347	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.5	347	
83-32-9	Acenaphthene	U	34.7	ug/kg	11.5	34.7	
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347	
100-02-7	4-Nitrophenol	U	347	ug/kg	115	347	
87-86-5	Pentachlorophenol	U	347	ug/kg	86.9	347	
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7	
110-86-1	Pyridine	U	347	ug/kg	69.5	347	
62-53-3	Aniline	U	347	ug/kg	104	347	
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.5	347	
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.5	347	
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347	
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.5	347	
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.5	347	
95-48-7	o-Cresol	U	347	ug/kg	69.5	347	
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347	
67-72-1	Hexachloroethane	U	347	ug/kg	69.5	347	
98-95-3	Nitrobenzene	U	347	ug/kg	69.5	347	
78-59-1	Isophorone	U	347	ug/kg	69.5	347	
88-75-5	2-Nitrophenol	U	347	ug/kg	69.5	347	
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	122	347	
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.5	347	
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.5	347	
65-85-0	Benzoic acid	U	695	ug/kg	174	695	
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7	
106-47-8	4-Chloroaniline	U	347	ug/kg	69.5	347	
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.5	347	
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.95	34.7	
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.5	347	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.5	347	
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.5	347	
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.5	34.7	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	347	ug/kg	69.5	347	
99-09-2	3-Nitroaniline	U	347	ug/kg	69.5	347	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819011**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14116**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:30**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510618.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	347	ug/kg	69.5	347	
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347	
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7	
51-28-5	2,4-Dinitrophenol	U	695	ug/kg	132	695	UJ,SV7c
132-64-9	Dibenzofuran	U	347	ug/kg	69.5	347	
84-66-2	Diethylphthalate	U	347	ug/kg	69.5	347	
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7	
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.5	347	
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.5	347	
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	347	ug/kg	69.5	347	
122-66-7	Azobenzene	U	347	ug/kg	69.5	347	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.5	347	
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.5	347	
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7	
120-12-7	Anthracene	U	34.7	ug/kg	6.95	34.7	
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.5	347	
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7	
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.5	347	
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7	
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347	
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.5	347	
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.5	347	
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7	
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7	
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7	
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7	
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7	
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.5	347	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	230	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:59**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510614.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.3	362	
108-95-2	Phenol	U	362	ug/kg	72.3	362	
95-57-8	2-Chlorophenol	U	362	ug/kg	72.3	362	
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.3	362	
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.3	362	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.3	362	
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2	
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362	
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362	
87-86-5	Pentachlorophenol	U	362	ug/kg	90.4	362	
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2	
110-86-1	Pyridine	U	362	ug/kg	72.3	362	
62-53-3	Aniline	U	362	ug/kg	109	362	
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.3	362	
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.3	362	
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362	
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.3	362	
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.3	362	
95-48-7	o-Cresol	U	362	ug/kg	72.3	362	
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362	
67-72-1	Hexachloroethane	U	362	ug/kg	72.3	362	
98-95-3	Nitrobenzene	U	362	ug/kg	72.3	362	
78-59-1	Isophorone	U	362	ug/kg	72.3	362	
88-75-5	2-Nitrophenol	U	362	ug/kg	72.3	362	
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362	
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.3	362	
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.3	362	
65-85-0	Benzoic acid	U	723	ug/kg	181	723	
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2	
106-47-8	4-Chloroaniline	U	362	ug/kg	72.3	362	
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.3	362	
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.23	36.2	
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.3	362	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.3	362	
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.3	362	
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	362	ug/kg	72.3	362	
99-09-2	3-Nitroaniline	U	362	ug/kg	72.3	362	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819007	Date Received:	11/25/2009 09:10	%Moisture:	8.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14117	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 17:59	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510614.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	362	ug/kg	72.3	362	
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362	
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2	
51-28-5	2,4-Dinitrophenol	U	723	ug/kg	137	723	UJ,SV7c
132-64-9	Dibenzofuran	U	362	ug/kg	72.3	362	
84-66-2	Diethylphthalate	U	362	ug/kg	72.3	362	
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2	
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.3	362	
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.3	362	
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	362	ug/kg	72.3	362	
122-66-7	Azobenzene	U	362	ug/kg	72.3	362	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.3	362	
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.3	362	
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2	
120-12-7	Anthracene	U	36.2	ug/kg	7.23	36.2	
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.3	362	
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2	
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.3	362	
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2	
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362	
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.3	362	
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.3	362	
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2	
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2	
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2	
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2	
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2	
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.3	362	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	271	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819016	Date Received:	11/25/2009 09:10	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14118	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 21:24	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510623.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.7	368	
108-95-2	Phenol	U	368	ug/kg	73.7	368	
95-57-8	2-Chlorophenol	U	368	ug/kg	73.7	368	
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.7	368	
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.7	368	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.7	368	
83-32-9	Acenaphthene	U	36.8	ug/kg	12.2	36.8	
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368	
100-02-7	4-Nitrophenol	U	368	ug/kg	122	368	
87-86-5	Pentachlorophenol	U	368	ug/kg	92.1	368	
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8	
110-86-1	Pyridine	U	368	ug/kg	73.7	368	
62-53-3	Aniline	U	368	ug/kg	110	368	
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.7	368	
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.7	368	
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368	
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.7	368	
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.7	368	
95-48-7	o-Cresol	U	368	ug/kg	73.7	368	
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368	
67-72-1	Hexachloroethane	U	368	ug/kg	73.7	368	
98-95-3	Nitrobenzene	U	368	ug/kg	73.7	368	
78-59-1	Isophorone	U	368	ug/kg	73.7	368	
88-75-5	2-Nitrophenol	U	368	ug/kg	73.7	368	
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368	
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.7	368	
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.7	368	
65-85-0	Benzoic acid	U	737	ug/kg	184	737	
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8	
106-47-8	4-Chloroaniline	U	368	ug/kg	73.7	368	
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.7	368	
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.37	36.8	
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.7	368	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.7	368	
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.7	368	
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.2	36.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	368	ug/kg	73.7	368	
99-09-2	3-Nitroaniline	U	368	ug/kg	73.7	368	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14118**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 21:24**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510623.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	368	ug/kg	73.7	368	
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368	
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8	
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737	UJ,SV7c
132-64-9	Dibenzofuran	U	368	ug/kg	73.7	368	
84-66-2	Diethylphthalate	U	368	ug/kg	73.7	368	
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8	
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.7	368	
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.7	368	
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	368	ug/kg	73.7	368	
122-66-7	Azobenzene	U	368	ug/kg	73.7	368	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.7	368	
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.7	368	
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8	
120-12-7	Anthracene	U	36.8	ug/kg	7.37	36.8	
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.7	368	
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8	
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.7	368	
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8	
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368	
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.7	368	
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.7	368	
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8	
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8	
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8	
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8	
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8	
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.7	368	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	263	ug/kg		JA
	Unknown	13.12	148	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14119	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 20:16	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510620.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	339	ug/kg	67.8	339	
108-95-2	Phenol	U	339	ug/kg	67.8	339	
95-57-8	2-Chlorophenol	U	339	ug/kg	67.8	339	
106-46-7	1,4-Dichlorobenzene	U	339	ug/kg	67.8	339	
621-64-7	N-Nitrosodipropylamine	U	339	ug/kg	67.8	339	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	339	ug/kg	67.8	339	
83-32-9	Acenaphthene	U	33.9	ug/kg	11.2	33.9	
121-14-2	2,4-Dinitrotoluene	U	339	ug/kg	33.9	339	
100-02-7	4-Nitrophenol	U	339	ug/kg	112	339	
87-86-5	Pentachlorophenol	U	339	ug/kg	84.8	339	
129-00-0	Pyrene	U	33.9	ug/kg	10.2	33.9	
110-86-1	Pyridine	U	339	ug/kg	67.8	339	
62-53-3	Aniline	U	339	ug/kg	102	339	
111-44-4	bis(2-Chloroethyl) ether	U	339	ug/kg	67.8	339	
541-73-1	1,3-Dichlorobenzene	U	339	ug/kg	67.8	339	
100-51-6	Benzyl alcohol	U	339	ug/kg	102	339	
95-50-1	1,2-Dichlorobenzene	U	339	ug/kg	67.8	339	
108-60-1	bis(2-Chloroisopropyl)ether	U	339	ug/kg	67.8	339	
95-48-7	o-Cresol	U	339	ug/kg	67.8	339	
65794-96-9	m,p-Cresols	U	339	ug/kg	102	339	
67-72-1	Hexachloroethane	U	339	ug/kg	67.8	339	
98-95-3	Nitrobenzene	U	339	ug/kg	67.8	339	
78-59-1	Isophorone	U	339	ug/kg	67.8	339	
88-75-5	2-Nitrophenol	U	339	ug/kg	67.8	339	
105-67-9	2,4-Dimethylphenol	U	339	ug/kg	119	339	
111-91-1	bis(2-Chloroethoxy)methane	U	339	ug/kg	67.8	339	
120-83-2	2,4-Dichlorophenol	U	339	ug/kg	67.8	339	
65-85-0	Benzoic acid	U	678	ug/kg	170	678	
91-20-3	Naphthalene	U	33.9	ug/kg	10.2	33.9	
106-47-8	4-Chloroaniline	U	339	ug/kg	67.8	339	
87-68-3	Hexachlorobutadiene	U	339	ug/kg	67.8	339	
91-57-6	2-Methylnaphthalene	U	33.9	ug/kg	6.78	33.9	
77-47-4	Hexachlorocyclopentadiene	U	339	ug/kg	67.8	339	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	339	ug/kg	67.8	339	
95-95-4	2,4,5-Trichlorophenol	U	339	ug/kg	67.8	339	
91-58-7	2-Chloronaphthalene	U	33.9	ug/kg	11.2	33.9	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	339	ug/kg	67.8	339	
99-09-2	3-Nitroaniline	U	339	ug/kg	67.8	339	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14119	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 20:16	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510620.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	339	ug/kg	67.8	339	
606-20-2	2,6-Dinitrotoluene	U	339	ug/kg	33.9	339	
208-96-8	Acenaphthylene	U	33.9	ug/kg	10.2	33.9	
51-28-5	2,4-Dinitrophenol	U	678	ug/kg	129	678	UJ,SV7c
132-64-9	Dibenzofuran	U	339	ug/kg	67.8	339	
84-66-2	Diethylphthalate	U	339	ug/kg	67.8	339	
86-73-7	Fluorene	U	33.9	ug/kg	10.2	33.9	
7005-72-3	4-Chlorophenylphenylether	U	339	ug/kg	67.8	339	
534-52-1	2-Methyl-4,6-dinitrophenol	U	339	ug/kg	67.8	339	
100-01-6	4-Nitroaniline	U	339	ug/kg	102	339	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	339	ug/kg	67.8	339	
122-66-7	Azobenzene	U	339	ug/kg	67.8	339	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	339	ug/kg	67.8	339	
118-74-1	Hexachlorobenzene	U	339	ug/kg	67.8	339	
85-01-8	Phenanthrene	U	33.9	ug/kg	10.2	33.9	
120-12-7	Anthracene	U	33.9	ug/kg	6.78	33.9	
84-74-2	Di-n-butylphthalate	U	339	ug/kg	67.8	339	
206-44-0	Fluoranthene	U	33.9	ug/kg	10.2	33.9	
85-68-7	Butylbenzylphthalate	U	339	ug/kg	67.8	339	
56-55-3	Benzo(a)anthracene	U	33.9	ug/kg	10.2	33.9	
91-94-1	3,3'-Dichlorobenzidine	U	339	ug/kg	102	339	
218-01-9	Chrysene	U	33.9	ug/kg	10.2	33.9	
117-81-7	bis(2-Ethylhexyl)phthalate	U	339	ug/kg	67.8	339	
117-84-0	Di-n-octylphthalate	U	339	ug/kg	67.8	339	
205-99-2	Benzo(b)fluoranthene	U	33.9	ug/kg	10.2	33.9	
207-08-9	Benzo(k)fluoranthene	U	33.9	ug/kg	10.2	33.9	
50-32-8	Benzo(a)pyrene	U	33.9	ug/kg	10.2	33.9	
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.9	ug/kg	10.2	33.9	
53-70-3	Dibenzo(a,h)anthracene	U	33.9	ug/kg	10.2	33.9	
191-24-2	Benzo(ghi)perylene	U	33.9	ug/kg	10.2	33.9	
120-82-1	1,2,4-Trichlorobenzene	U	339	ug/kg	67.8	339	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	251	ug/kg		JA
	Unknown	9.78	186	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:08**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s510617.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.4	342	
108-95-2	Phenol	U	342	ug/kg	68.4	342	
95-57-8	2-Chlorophenol	U	342	ug/kg	68.4	342	
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.4	342	
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.4	342	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.4	342	
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2	
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342	
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342	
87-86-5	Pentachlorophenol	U	342	ug/kg	85.4	342	
129-00-0	Pyrene	U	34.2	ug/kg	10.3	34.2	
110-86-1	Pyridine	U	342	ug/kg	68.4	342	
62-53-3	Aniline	U	342	ug/kg	103	342	
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.4	342	
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.4	342	
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342	
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.4	342	
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.4	342	
95-48-7	o-Cresol	U	342	ug/kg	68.4	342	
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342	
67-72-1	Hexachloroethane	U	342	ug/kg	68.4	342	
98-95-3	Nitrobenzene	U	342	ug/kg	68.4	342	
78-59-1	Isophorone	U	342	ug/kg	68.4	342	
88-75-5	2-Nitrophenol	U	342	ug/kg	68.4	342	
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342	
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.4	342	
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.4	342	
65-85-0	Benzoic acid	U	684	ug/kg	171	684	
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2	
106-47-8	4-Chloroaniline	U	342	ug/kg	68.4	342	
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.4	342	
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.84	34.2	
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.4	342	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.4	342	
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.4	342	
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	342	ug/kg	68.4	342	
99-09-2	3-Nitroaniline	U	342	ug/kg	68.4	342	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:08**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s510617.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	342	ug/kg	68.4	342	
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342	
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2	
51-28-5	2,4-Dinitrophenol	U	684	ug/kg	130	684	UJ,SV7c
132-64-9	Dibenzofuran	U	342	ug/kg	68.4	342	
84-66-2	Diethylphthalate	U	342	ug/kg	68.4	342	
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2	
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.4	342	
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.4	342	
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	342	ug/kg	68.4	342	
122-66-7	Azobenzene	U	342	ug/kg	68.4	342	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.4	342	
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.4	342	
85-01-8	Phenanthrene	U	34.2	ug/kg	10.3	34.2	
120-12-7	Anthracene	U	34.2	ug/kg	6.84	34.2	
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.4	342	
206-44-0	Fluoranthene	U	34.2	ug/kg	10.3	34.2	
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.4	342	
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.3	34.2	
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342	
218-01-9	Chrysene	U	34.2	ug/kg	10.3	34.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.4	342	
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.4	342	
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.3	34.2	
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2	
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.3	34.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.3	34.2	
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2	
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.3	34.2	
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.4	342	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.88	267	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819008	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14121	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 18:22	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510615.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.3	382	
108-95-2	Phenol	U	382	ug/kg	76.3	382	
95-57-8	2-Chlorophenol	U	382	ug/kg	76.3	382	
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.3	382	
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.3	382	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.3	382	
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2	
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382	
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382	
87-86-5	Pentachlorophenol	U	382	ug/kg	95.4	382	
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2	
110-86-1	Pyridine	U	382	ug/kg	76.3	382	
62-53-3	Aniline	U	382	ug/kg	115	382	
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.3	382	
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.3	382	
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382	
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.3	382	
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.3	382	
95-48-7	o-Cresol	U	382	ug/kg	76.3	382	
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382	
67-72-1	Hexachloroethane	U	382	ug/kg	76.3	382	
98-95-3	Nitrobenzene	U	382	ug/kg	76.3	382	
78-59-1	Isophorone	U	382	ug/kg	76.3	382	
88-75-5	2-Nitrophenol	U	382	ug/kg	76.3	382	
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382	
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.3	382	
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.3	382	
65-85-0	Benzoic acid	U	763	ug/kg	191	763	
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2	
106-47-8	4-Chloroaniline	U	382	ug/kg	76.3	382	
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.3	382	
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.63	38.2	
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.3	382	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.3	382	
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.3	382	
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	382	ug/kg	76.3	382	
99-09-2	3-Nitroaniline	U	382	ug/kg	76.3	382	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819008	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14121	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 18:22	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510615.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	382	ug/kg	76.3	382	
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382	
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2	
51-28-5	2,4-Dinitrophenol	U	763	ug/kg	145	763	UJ,SV7c
132-64-9	Dibenzofuran	U	382	ug/kg	76.3	382	
84-66-2	Diethylphthalate	U	382	ug/kg	76.3	382	
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2	
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.3	382	
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.3	382	
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	382	ug/kg	76.3	382	
122-66-7	Azobenzene	U	382	ug/kg	76.3	382	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.3	382	
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.3	382	
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2	
120-12-7	Anthracene	U	38.2	ug/kg	7.63	38.2	
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.3	382	
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2	
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.3	382	
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2	
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382	
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.3	382	
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.3	382	
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2	
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2	
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2	
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2	
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2	
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.3	382	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	267	ug/kg		JA

SEB
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819017	Date Received:	11/25/2009 09:10	%Moisture:	5.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14122	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/09/2009 22:43	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510918.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	352	ug/kg	70.4	352	
108-95-2	Phenol	U	352	ug/kg	70.4	352	
95-57-8	2-Chlorophenol	U	352	ug/kg	70.4	352	
106-46-7	1,4-Dichlorobenzene	U	352	ug/kg	70.4	352	
621-64-7	N-Nitrosodipropylamine	U	352	ug/kg	70.4	352	
59-50-7	4-Chloro-3-methylphenol	U	352	ug/kg	70.4	352	
83-32-9	Acenaphthene	U	35.2	ug/kg	11.6	35.2	
121-14-2	2,4-Dinitrotoluene	U	352	ug/kg	35.2	352	
100-02-7	4-Nitrophenol	U	352	ug/kg	116	352	
87-86-5	Pentachlorophenol	U	352	ug/kg	88.1	352	
129-00-0	Pyrene	U	35.2	ug/kg	10.6	35.2	
110-86-1	Pyridine	U	352	ug/kg	70.4	352	
62-53-3	Aniline	U	352	ug/kg	106	352	
111-44-4	bis(2-Chloroethyl) ether	U	352	ug/kg	70.4	352	
541-73-1	1,3-Dichlorobenzene	U	352	ug/kg	70.4	352	
100-51-6	Benzyl alcohol	U	352	ug/kg	106	352	
95-50-1	1,2-Dichlorobenzene	U	352	ug/kg	70.4	352	
108-60-1	bis(2-Chloroisopropyl)ether	U	352	ug/kg	70.4	352	
95-48-7	o-Cresol	U	352	ug/kg	70.4	352	
65794-96-9	m,p-Cresols	U	352	ug/kg	106	352	
67-72-1	Hexachloroethane	U	352	ug/kg	70.4	352	
98-95-3	Nitrobenzene	U	352	ug/kg	70.4	352	
78-59-1	Isophorone	U	352	ug/kg	70.4	352	
88-75-5	2-Nitrophenol	U	352	ug/kg	70.4	352	
105-67-9	2,4-Dimethylphenol	U	352	ug/kg	123	352	
111-91-1	bis(2-Chloroethoxy)methane	U	352	ug/kg	70.4	352	
120-83-2	2,4-Dichlorophenol	U	352	ug/kg	70.4	352	
65-85-0	Benzoic acid	U	704	ug/kg	176	704	UJ,SV7c
91-20-3	Naphthalene	U	35.2	ug/kg	10.6	35.2	
106-47-8	4-Chloroaniline	U	352	ug/kg	70.4	352	
87-68-3	Hexachlorobutadiene	U	352	ug/kg	70.4	352	
91-57-6	2-Methylnaphthalene	U	35.2	ug/kg	7.04	35.2	
77-47-4	Hexachlorocyclopentadiene	U	352	ug/kg	70.4	352	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	352	ug/kg	70.4	352	
95-95-4	2,4,5-Trichlorophenol	U	352	ug/kg	70.4	352	
91-58-7	2-Chloronaphthalene	U	35.2	ug/kg	11.6	35.2	
88-74-4	2-Nitroaniline	U	352	ug/kg	70.4	352	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	352	ug/kg	70.4	352	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819017	Date Received:	11/25/2009 09:10	%Moisture:	5.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14122	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/09/2009 22:43	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510918.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	352	ug/kg	70.4	352	
606-20-2	2,6-Dinitrotoluene	U	352	ug/kg	35.2	352	
208-96-8	Acenaphthylene	U	35.2	ug/kg	10.6	35.2	
51-28-5	2,4-Dinitrophenol	U	704	ug/kg	134	704	UJ,SV7c
132-64-9	Dibenzofuran	U	352	ug/kg	70.4	352	
84-66-2	Diethylphthalate	U	352	ug/kg	70.4	352	
86-73-7	Fluorene	U	35.2	ug/kg	10.6	35.2	
7005-72-3	4-Chlorophenylphenylether	U	352	ug/kg	70.4	352	
534-52-1	2-Methyl-4,6-dinitrophenol	U	352	ug/kg	70.4	352	
100-01-6	4-Nitroaniline	U	352	ug/kg	106	352	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	352	ug/kg	70.4	352	
122-66-7	Azobenzene	U	352	ug/kg	70.4	352	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	352	ug/kg	70.4	352	
118-74-1	Hexachlorobenzene	U	352	ug/kg	70.4	352	
85-01-8	Phenanthrene	U	35.2	ug/kg	10.6	35.2	
120-12-7	Anthracene	U	35.2	ug/kg	7.04	35.2	
84-74-2	Di-n-butylphthalate	U	352	ug/kg	70.4	352	
206-44-0	Fluoranthene	U	35.2	ug/kg	10.6	35.2	
85-68-7	Butylbenzylphthalate	U	352	ug/kg	70.4	352	
56-55-3	Benzo(a)anthracene	U	35.2	ug/kg	10.6	35.2	
91-94-1	3,3'-Dichlorobenzidine	U	352	ug/kg	106	352	
218-01-9	Chrysene	U	35.2	ug/kg	10.6	35.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	352	ug/kg	70.4	352	
117-84-0	Di-n-octylphthalate	U	352	ug/kg	70.4	352	
205-99-2	Benzo(b)fluoranthene	U	35.2	ug/kg	10.6	35.2	
207-08-9	Benzo(k)fluoranthene	U	35.2	ug/kg	10.6	35.2	
50-32-8	Benzo(a)pyrene	U	35.2	ug/kg	10.6	35.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.2	ug/kg	10.6	35.2	
53-70-3	Dibenzo(a,h)anthracene	U	35.2	ug/kg	10.6	35.2	
191-24-2	Benzo(ghi)perylene	U	35.2	ug/kg	10.6	35.2	
120-82-1	1,2,4-Trichlorobenzene	U	352	ug/kg	70.4	352	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	215	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:51**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0611.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.6	353	
108-95-2	Phenol	U	353	ug/kg	70.6	353	
95-57-8	2-Chlorophenol	U	353	ug/kg	70.6	353	
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.6	353	
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.6	353	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.6	353	
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3	
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353	
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353	
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353	
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3	
110-86-1	Pyridine	U	353	ug/kg	70.6	353	
62-53-3	Aniline	U	353	ug/kg	106	353	
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.6	353	
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.6	353	
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353	
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.6	353	
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.6	353	
95-48-7	o-Cresol	U	353	ug/kg	70.6	353	
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353	
67-72-1	Hexachloroethane	U	353	ug/kg	70.6	353	
98-95-3	Nitrobenzene	U	353	ug/kg	70.6	353	
78-59-1	Isophorone	U	353	ug/kg	70.6	353	
88-75-5	2-Nitrophenol	U	353	ug/kg	70.6	353	
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	124	353	
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.6	353	
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.6	353	
65-85-0	Benzoic acid	U	706	ug/kg	176	706	
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3	
106-47-8	4-Chloroaniline	U	353	ug/kg	70.6	353	
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.6	353	
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.06	35.3	
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.6	353	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.6	353	
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.6	353	
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	353	ug/kg	70.6	353	
99-09-2	3-Nitroaniline	U	353	ug/kg	70.6	353	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:51**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510611.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	353	ug/kg	70.6	353	
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353	
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3	
51-28-5	2,4-Dinitrophenol	U	706	ug/kg	134	706	UJ,SV7c
132-64-9	Dibenzofuran	U	353	ug/kg	70.6	353	
84-66-2	Diethylphthalate	U	353	ug/kg	70.6	353	
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3	
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.6	353	
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.6	353	
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	353	ug/kg	70.6	353	
122-66-7	Azobenzene	U	353	ug/kg	70.6	353	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.6	353	
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.6	353	
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3	
120-12-7	Anthracene	U	35.3	ug/kg	7.06	35.3	
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.6	353	
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3	
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.6	353	
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3	
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353	
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.6	353	
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.6	353	
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3	
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3	
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3	
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3	
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3	
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.6	353	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.88	215	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819018	**Date Received:**	11/25/2009 09:10	**%Moisture:**	7.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14124	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/09/2009 23:05	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s5l0919.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	361	ug/kg	72.3	361	
108-95-2	Phenol	U	361	ug/kg	72.3	361	
95-57-8	2-Chlorophenol	U	361	ug/kg	72.3	361	
106-46-7	1,4-Dichlorobenzene	U	361	ug/kg	72.3	361	
621-64-7	N-Nitrosodipropylamine	U	361	ug/kg	72.3	361	
59-50-7	4-Chloro-3-methylphenol	U	361	ug/kg	72.3	361	
83-32-9	Acenaphthene	U	36.1	ug/kg	11.9	36.1	
121-14-2	2,4-Dinitrotoluene	U	361	ug/kg	36.1	361	
100-02-7	4-Nitrophenol	U	361	ug/kg	119	361	
87-86-5	Pentachlorophenol	U	361	ug/kg	90.4	361	
129-00-0	Pyrene	U	36.1	ug/kg	10.8	36.1	
110-86-1	Pyridine	U	361	ug/kg	72.3	361	
62-53-3	Aniline	U	361	ug/kg	108	361	
111-44-4	bis(2-Chloroethyl) ether	U	361	ug/kg	72.3	361	
541-73-1	1,3-Dichlorobenzene	U	361	ug/kg	72.3	361	
100-51-6	Benzyl alcohol	U	361	ug/kg	108	361	
95-50-1	1,2-Dichlorobenzene	U	361	ug/kg	72.3	361	
108-60-1	bis(2-Chloroisopropyl)ether	U	361	ug/kg	72.3	361	
95-48-7	o-Cresol	U	361	ug/kg	72.3	361	
65794-96-9	m,p-Cresols	U	361	ug/kg	108	361	
67-72-1	Hexachloroethane	U	361	ug/kg	72.3	361	
98-95-3	Nitrobenzene	U	361	ug/kg	72.3	361	
78-59-1	Isophorone	U	361	ug/kg	72.3	361	
88-75-5	2-Nitrophenol	U	361	ug/kg	72.3	361	
105-67-9	2,4-Dimethylphenol	U	361	ug/kg	126	361	
111-91-1	bis(2-Chloroethoxy)methane	U	361	ug/kg	72.3	361	
120-83-2	2,4-Dichlorophenol	U	361	ug/kg	72.3	361	
65-85-0	Benzoic acid	U	723	ug/kg	181	723	UJ,SV7c
91-20-3	Naphthalene	U	36.1	ug/kg	10.8	36.1	
106-47-8	4-Chloroaniline	U	361	ug/kg	72.3	361	
87-68-3	Hexachlorobutadiene	U	361	ug/kg	72.3	361	
91-57-6	2-Methylnaphthalene	U	36.1	ug/kg	7.23	36.1	
77-47-4	Hexachlorocyclopentadiene	U	361	ug/kg	72.3	361	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	361	ug/kg	72.3	361	
95-95-4	2,4,5-Trichlorophenol	U	361	ug/kg	72.3	361	
91-58-7	2-Chloronaphthalene	U	36.1	ug/kg	11.9	36.1	
88-74-4	2-Nitroaniline	U	361	ug/kg	72.3	361	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	361	ug/kg	72.3	361	

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 23:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s510919.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	361	ug/kg	72.3	361	
606-20-2	2,6-Dinitrotoluene	U	361	ug/kg	36.1	361	
208-96-8	Acenaphthylene	U	36.1	ug/kg	10.8	36.1	
51-28-5	2,4-Dinitrophenol	U	723	ug/kg	137	723	UJ,SV7c
132-64-9	Dibenzofuran	U	361	ug/kg	72.3	361	
84-66-2	Diethylphthalate	U	361	ug/kg	72.3	361	
86-73-7	Fluorene	U	36.1	ug/kg	10.8	36.1	
7005-72-3	4-Chlorophenylphenylether	U	361	ug/kg	72.3	361	
534-52-1	2-Methyl-4,6-dinitrophenol	U	361	ug/kg	72.3	361	
100-01-6	4-Nitroaniline	U	361	ug/kg	108	361	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	361	ug/kg	72.3	361	
122-66-7	Azobenzene	U	361	ug/kg	72.3	361	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	361	ug/kg	72.3	361	
118-74-1	Hexachlorobenzene	U	361	ug/kg	72.3	361	
85-01-8	Phenanthrene	U	36.1	ug/kg	10.8	36.1	
120-12-7	Anthracene	U	36.1	ug/kg	7.23	36.1	
84-74-2	Di-n-butylphthalate	U	361	ug/kg	72.3	361	
206-44-0	Fluoranthene	U	36.1	ug/kg	10.8	36.1	
85-68-7	Butylbenzylphthalate	U	361	ug/kg	72.3	361	
56-55-3	Benzo(a)anthracene	U	36.1	ug/kg	10.8	36.1	
91-94-1	3,3'-Dichlorobenzidine	U	361	ug/kg	108	361	
218-01-9	Chrysene	U	36.1	ug/kg	10.8	36.1	
117-81-7	bis(2-Ethylhexyl)phthalate	U	361	ug/kg	72.3	361	
117-84-0	Di-n-octylphthalate	U	361	ug/kg	72.3	361	
205-99-2	Benzo(b)fluoranthene	U	36.1	ug/kg	10.8	36.1	
207-08-9	Benzo(k)fluoranthene	U	36.1	ug/kg	10.8	36.1	
50-32-8	Benzo(a)pyrene	U	36.1	ug/kg	10.8	36.1	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.1	ug/kg	10.8	36.1	
53-70-3	Dibenzo(a,h)anthracene	U	36.1	ug/kg	10.8	36.1	
191-24-2	Benzo(ghi)perylene	U	36.1	ug/kg	10.8	36.1	
120-82-1	1,2,4-Trichlorobenzene	U	361	ug/kg	72.3	361	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	226	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510610.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	347	ug/kg	69.3	347	
108-95-2	Phenol	U	347	ug/kg	69.3	347	
95-57-8	2-Chlorophenol	U	347	ug/kg	69.3	347	
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.3	347	
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.3	347	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.3	347	
83-32-9	Acenaphthene	U	34.7	ug/kg	11.4	34.7	
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347	
100-02-7	4-Nitrophenol	U	347	ug/kg	114	347	
87-86-5	Pentachlorophenol	U	347	ug/kg	86.6	347	
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7	
110-86-1	Pyridine	U	347	ug/kg	69.3	347	
62-53-3	Aniline	U	347	ug/kg	104	347	
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.3	347	
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.3	347	
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347	
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.3	347	
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.3	347	
95-48-7	o-Cresol	U	347	ug/kg	69.3	347	
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347	
67-72-1	Hexachloroethane	U	347	ug/kg	69.3	347	
98-95-3	Nitrobenzene	U	347	ug/kg	69.3	347	
78-59-1	Isophorone	U	347	ug/kg	69.3	347	
88-75-5	2-Nitrophenol	U	347	ug/kg	69.3	347	
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	121	347	
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.3	347	
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.3	347	
65-85-0	Benzoic acid	U	693	ug/kg	173	693	
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7	
106-47-8	4-Chloroaniline	U	347	ug/kg	69.3	347	
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.3	347	
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.93	34.7	
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.3	347	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.3	347	
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.3	347	
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.4	34.7	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	347	ug/kg	69.3	347	
99-09-2	3-Nitroaniline	U	347	ug/kg	69.3	347	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510610.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	347	ug/kg	69.3	347	
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347	
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7	
51-28-5	2,4-Dinitrophenol	U	693	ug/kg	132	693	UJ,SV7c
132-64-9	Dibenzofuran	U	347	ug/kg	69.3	347	
84-66-2	Diethylphthalate	U	347	ug/kg	69.3	347	
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7	
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.3	347	
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.3	347	
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	347	ug/kg	69.3	347	
122-66-7	Azobenzene	U	347	ug/kg	69.3	347	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.3	347	
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.3	347	
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7	
120-12-7	Anthracene	U	34.7	ug/kg	6.93	34.7	
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.3	347	
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7	
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.3	347	
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7	
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347	
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.3	347	
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.3	347	
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7	
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7	
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7	
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7	
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7	
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.3	347	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	293	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819006	Date Received:	11/25/2009 09:10	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14126	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 17:36	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s5l0613.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.6	363	
108-95-2	Phenol	U	363	ug/kg	72.6	363	
95-57-8	2-Chlorophenol	U	363	ug/kg	72.6	363	
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.6	363	
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.6	363	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.6	363	
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3	
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363	
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363	
87-86-5	Pentachlorophenol	U	363	ug/kg	90.8	363	
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3	
110-86-1	Pyridine	U	363	ug/kg	72.6	363	
62-53-3	Aniline	U	363	ug/kg	109	363	
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.6	363	
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.6	363	
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363	
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.6	363	
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.6	363	
95-48-7	o-Cresol	U	363	ug/kg	72.6	363	
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363	
67-72-1	Hexachloroethane	U	363	ug/kg	72.6	363	
98-95-3	Nitrobenzene	U	363	ug/kg	72.6	363	
78-59-1	Isophorone	U	363	ug/kg	72.6	363	
88-75-5	2-Nitrophenol	U	363	ug/kg	72.6	363	
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363	
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.6	363	
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.6	363	
65-85-0	Benzoic acid	U	726	ug/kg	182	726	
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3	
106-47-8	4-Chloroaniline	U	363	ug/kg	72.6	363	
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.6	363	
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.26	36.3	
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.6	363	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.6	363	
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.6	363	
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	363	ug/kg	72.6	363	
99-09-2	3-Nitroaniline	U	363	ug/kg	72.6	363	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14126**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:36**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510613.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	363	ug/kg	72.6	363	
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363	
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3	
51-28-5	2,4-Dinitrophenol	U	726	ug/kg	138	726	UJ,SV7c
132-64-9	Dibenzofuran	U	363	ug/kg	72.6	363	
84-66-2	Diethylphthalate	U	363	ug/kg	72.6	363	
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3	
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.6	363	
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.6	363	
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	363	ug/kg	72.6	363	
122-66-7	Azobenzene	U	363	ug/kg	72.6	363	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.6	363	
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.6	363	
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3	
120-12-7	Anthracene	U	36.3	ug/kg	7.26	36.3	
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.6	363	
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3	
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.6	363	
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3	
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363	
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3	
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.6	363	
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.6	363	
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3	
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3	
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3	
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3	
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3	
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.6	363	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	225	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819015**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14127**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 21:01**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s510622.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	70.0	350	
108-95-2	Phenol	U	350	ug/kg	70.0	350	
95-57-8	2-Chlorophenol	U	350	ug/kg	70.0	350	
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	70.0	350	
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	70.0	350	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	70.0	350	
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0	
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350	
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350	
87-86-5	Pentachlorophenol	U	350	ug/kg	87.4	350	
129-00-0	Pyrene	U	35.0	ug/kg	10.5	35.0	
110-86-1	Pyridine	U	350	ug/kg	70.0	350	
62-53-3	Aniline	U	350	ug/kg	105	350	
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	70.0	350	
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	70.0	350	
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350	
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	70.0	350	
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	70.0	350	
95-48-7	o-Cresol	U	350	ug/kg	70.0	350	
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350	
67-72-1	Hexachloroethane	U	350	ug/kg	70.0	350	
98-95-3	Nitrobenzene	U	350	ug/kg	70.0	350	
78-59-1	Isophorone	U	350	ug/kg	70.0	350	
88-75-5	2-Nitrophenol	U	350	ug/kg	70.0	350	
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350	
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	70.0	350	
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	70.0	350	
65-85-0	Benzoic acid	U	700	ug/kg	175	700	
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0	
106-47-8	4-Chloroaniline	U	350	ug/kg	70.0	350	
87-68-3	Hexachlorobutadiene	U	350	ug/kg	70.0	350	
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	7.00	35.0	
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	70.0	350	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	70.0	350	
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	70.0	350	
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	350	ug/kg	70.0	350	
99-09-2	3-Nitroaniline	U	350	ug/kg	70.0	350	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819015	Date Received:	11/25/2009 09:10	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14127	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 21:01	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s510622.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	350	ug/kg	70.0	350	
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350	
208-96-8	Acenaphthylene	U	35.0	ug/kg	10.5	35.0	
51-28-5	2,4-Dinitrophenol	U	700	ug/kg	133	700	UJ,SV7c
132-64-9	Dibenzofuran	U	350	ug/kg	70.0	350	
84-66-2	Diethylphthalate	U	350	ug/kg	70.0	350	
86-73-7	Fluorene	U	35.0	ug/kg	10.5	35.0	
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	70.0	350	
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	70.0	350	
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	350	ug/kg	70.0	350	
122-66-7	Azobenzene	U	350	ug/kg	70.0	350	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	70.0	350	
118-74-1	Hexachlorobenzene	U	350	ug/kg	70.0	350	
85-01-8	Phenanthrene	U	35.0	ug/kg	10.5	35.0	
120-12-7	Anthracene	U	35.0	ug/kg	7.00	35.0	
84-74-2	Di-n-butylphthalate	U	350	ug/kg	70.0	350	
206-44-0	Fluoranthene	U	35.0	ug/kg	10.5	35.0	
85-68-7	Butylbenzylphthalate	U	350	ug/kg	70.0	350	
56-55-3	Benzo(a)anthracene	U	35.0	ug/kg	10.5	35.0	
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350	
218-01-9	Chrysene	U	35.0	ug/kg	10.5	35.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	70.0	350	
117-84-0	Di-n-octylphthalate	U	350	ug/kg	70.0	350	
205-99-2	Benzo(b)fluoranthene	U	35.0	ug/kg	10.5	35.0	
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0	
50-32-8	Benzo(a)pyrene	U	35.0	ug/kg	10.5	35.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.0	ug/kg	10.5	35.0	
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0	
191-24-2	Benzo(ghi)perylene	U	35.0	ug/kg	10.5	35.0	
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	70.0	350	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	219	ug/kg		JA

SEB
1/29/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14128**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/11/2009 15:23**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s511106.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.4	342	
108-95-2	Phenol	U	342	ug/kg	68.4	342	
95-57-8	2-Chlorophenol	U	342	ug/kg	68.4	342	
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.4	342	
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.4	342	
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.4	342	
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2	
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342	
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342	
87-86-5	Pentachlorophenol	U	342	ug/kg	85.5	342	
129-00-0	Pyrene	U	34.2	ug/kg	10.3	34.2	
110-86-1	Pyridine	U	342	ug/kg	68.4	342	
62-53-3	Aniline	U	342	ug/kg	103	342	
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.4	342	
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.4	342	
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342	
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.4	342	
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.4	342	UJ,SV7c
95-48-7	o-Cresol	U	342	ug/kg	68.4	342	
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342	
67-72-1	Hexachloroethane	U	342	ug/kg	68.4	342	
98-95-3	Nitrobenzene	U	342	ug/kg	68.4	342	
78-59-1	Isophorone	U	342	ug/kg	68.4	342	
88-75-5	2-Nitrophenol	U	342	ug/kg	68.4	342	
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342	
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.4	342	
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.4	342	
65-85-0	Benzoic acid	U	684	ug/kg	171	684	
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2	
106-47-8	4-Chloroaniline	U	342	ug/kg	68.4	342	
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.4	342	
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.84	34.2	
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.4	342	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.4	342	
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.4	342	
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2	
88-74-4	2-Nitroaniline	U	342	ug/kg	68.4	342	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	342	ug/kg	68.4	342	

SEB
1/29/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14128**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/11/2009 15:23**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s511106.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	342	ug/kg	68.4	342	
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342	
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2	
51-28-5	2,4-Dinitrophenol	U	684	ug/kg	130	684	UJ,SV7c
132-64-9	Dibenzofuran	U	342	ug/kg	68.4	342	
84-66-2	Diethylphthalate	U	342	ug/kg	68.4	342	
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2	
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.4	342	
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.4	342	
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	342	ug/kg	68.4	342	
122-66-7	Azobenzene	U	342	ug/kg	68.4	342	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.4	342	
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.4	342	
85-01-8	Phenanthrene	U	34.2	ug/kg	10.3	34.2	
120-12-7	Anthracene	U	34.2	ug/kg	6.84	34.2	
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.4	342	
206-44-0	Fluoranthene	U	34.2	ug/kg	10.3	34.2	
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.4	342	
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.3	34.2	
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342	
218-01-9	Chrysene	U	34.2	ug/kg	10.3	34.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.4	342	
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.4	342	
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.3	34.2	
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2	
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.3	34.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.3	34.2	
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2	
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.3	34.2	
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.4	342	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	262	ug/kg		JA

SEB
1/29/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819009**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14129**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 18:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s510616.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	338	ug/kg	67.6	338	
108-95-2	Phenol	U	338	ug/kg	67.6	338	
95-57-8	2-Chlorophenol	U	338	ug/kg	67.6	338	
106-46-7	1,4-Dichlorobenzene	U	338	ug/kg	67.6	338	
621-64-7	N-Nitrosodipropylamine	U	338	ug/kg	67.6	338	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	338	ug/kg	67.6	338	
83-32-9	Acenaphthene	U	33.8	ug/kg	11.1	33.8	
121-14-2	2,4-Dinitrotoluene	U	338	ug/kg	33.8	338	
100-02-7	4-Nitrophenol	U	338	ug/kg	111	338	
87-86-5	Pentachlorophenol	U	338	ug/kg	84.4	338	
129-00-0	Pyrene	U	33.8	ug/kg	10.1	33.8	
110-86-1	Pyridine	U	338	ug/kg	67.6	338	
62-53-3	Aniline	U	338	ug/kg	101	338	
111-44-4	bis(2-Chloroethyl) ether	U	338	ug/kg	67.6	338	
541-73-1	1,3-Dichlorobenzene	U	338	ug/kg	67.6	338	
100-51-6	Benzyl alcohol	U	338	ug/kg	101	338	
95-50-1	1,2-Dichlorobenzene	U	338	ug/kg	67.6	338	
108-60-1	bis(2-Chloroisopropyl)ether	U	338	ug/kg	67.6	338	
95-48-7	o-Cresol	U	338	ug/kg	67.6	338	
65794-96-9	m,p-Cresols	U	338	ug/kg	101	338	
67-72-1	Hexachloroethane	U	338	ug/kg	67.6	338	
98-95-3	Nitrobenzene	U	338	ug/kg	67.6	338	
78-59-1	Isophorone	U	338	ug/kg	67.6	338	
88-75-5	2-Nitrophenol	U	338	ug/kg	67.6	338	
105-67-9	2,4-Dimethylphenol	U	338	ug/kg	118	338	
111-91-1	bis(2-Chloroethoxy)methane	U	338	ug/kg	67.6	338	
120-83-2	2,4-Dichlorophenol	U	338	ug/kg	67.6	338	
65-85-0	Benzoic acid	U	676	ug/kg	169	676	
91-20-3	Naphthalene	U	33.8	ug/kg	10.1	33.8	
106-47-8	4-Chloroaniline	U	338	ug/kg	67.6	338	
87-68-3	Hexachlorobutadiene	U	338	ug/kg	67.6	338	
91-57-6	2-Methylnaphthalene	U	33.8	ug/kg	6.76	33.8	
77-47-4	Hexachlorocyclopentadiene	U	338	ug/kg	67.6	338	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	338	ug/kg	67.6	338	
95-95-4	2,4,5-Trichlorophenol	U	338	ug/kg	67.6	338	
91-58-7	2-Chloronaphthalene	U	33.8	ug/kg	11.1	33.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	338	ug/kg	67.6	338	
99-09-2	3-Nitroaniline	U	338	ug/kg	67.6	338	UJ,SV7c

SEB
1/29/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819009**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14129**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 18:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s510616.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	338	ug/kg	67.6	338	
606-20-2	2,6-Dinitrotoluene	U	338	ug/kg	33.8	338	
208-96-8	Acenaphthylene	U	33.8	ug/kg	10.1	33.8	
51-28-5	2,4-Dinitrophenol	U	676	ug/kg	128	676	UJ,SV7c
132-64-9	Dibenzofuran	U	338	ug/kg	67.6	338	
84-66-2	Diethylphthalate	U	338	ug/kg	67.6	338	
86-73-7	Fluorene	U	33.8	ug/kg	10.1	33.8	
7005-72-3	4-Chlorophenylphenylether	U	338	ug/kg	67.6	338	
534-52-1	2-Methyl-4,6-dinitrophenol	U	338	ug/kg	67.6	338	
100-01-6	4-Nitroaniline	U	338	ug/kg	101	338	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	338	ug/kg	67.6	338	
122-66-7	Azobenzene	U	338	ug/kg	67.6	338	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	338	ug/kg	67.6	338	
118-74-1	Hexachlorobenzene	U	338	ug/kg	67.6	338	
85-01-8	Phenanthrene	U	33.8	ug/kg	10.1	33.8	
120-12-7	Anthracene	U	33.8	ug/kg	6.76	33.8	
84-74-2	Di-n-butylphthalate	U	338	ug/kg	67.6	338	
206-44-0	Fluoranthene	U	33.8	ug/kg	10.1	33.8	
85-68-7	Butylbenzylphthalate	U	338	ug/kg	67.6	338	
56-55-3	Benzo(a)anthracene	U	33.8	ug/kg	10.1	33.8	
91-94-1	3,3'-Dichlorobenzidine	U	338	ug/kg	101	338	
218-01-9	Chrysene	U	33.8	ug/kg	10.1	33.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	338	ug/kg	67.6	338	
117-84-0	Di-n-octylphthalate	U	338	ug/kg	67.6	338	
205-99-2	Benzo(b)fluoranthene	U	33.8	ug/kg	10.1	33.8	
207-08-9	Benzo(k)fluoranthene	U	33.8	ug/kg	10.1	33.8	
50-32-8	Benzo(a)pyrene	U	33.8	ug/kg	10.1	33.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.8	ug/kg	10.1	33.8	
53-70-3	Dibenzo(a,h)anthracene	U	33.8	ug/kg	10.1	33.8	
191-24-2	Benzo(ghi)perylene	U	33.8	ug/kg	10.1	33.8	
120-82-1	1,2,4-Trichlorobenzene	U	338	ug/kg	67.6	338	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	176	ug/kg		J
	Unknown Aldol Condensate	2.88	253	ug/kg		JA

SEB
1/29/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819009**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14129**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 18:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s510616.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
60-33-3	9,12-Octadecadienoic acid (Z,Z)-	8.18	190	ug/kg	98	NJ

SEB
1/29/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-666 VALIDATION DATE: 1/29/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/29/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 **TPH GRO and DRO Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14115	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 18:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.19 g	Final Volume:	1 mL
Data File:	007f0701.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.63	mg/kg	2.15	6.63

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819002	Date Received:	11/25/2009 09:10	%Moisture:	9.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14113	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 19:10	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.37	mg/kg	2.39	7.37

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819003	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14125	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 19:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.94	mg/kg	2.26	6.94

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819004	Date Received:	11/25/2009 09:10	%Moisture:	5.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14123	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 21:38	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.05	mg/kg	2.29	7.05

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819005	Date Received:	11/25/2009 09:10	%Moisture:	.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14114	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 23:28	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	015f1501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.70	mg/kg	2.18	6.70

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819006	Date Received:	11/25/2009 09:10	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14126	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 00:06	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	016f1601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		24.8	mg/kg	2.35	7.22

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819007	Date Received:	11/25/2009 09:10	%Moisture:	8.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14117	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 00:42	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	017f1701.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.23	mg/kg	2.35	7.23

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819008	Date Received:	11/25/2009 09:10	%Moisture:	12.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14121	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 01:19	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	018f1801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		15.4	mg/kg	2.48	7.63

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819009	Date Received:	11/25/2009 09:10	%Moisture:	1.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14129	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 01:56	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	019f1901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.61	mg/kg	2.19	6.75

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819010	Date Received:	11/25/2009 09:10	%Moisture:	2.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14120	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 02:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	020f2001.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.84	mg/kg	2.22	6.84

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819011	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14116	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 03:10	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	021f2101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.54	mg/kg	2.26	6.94

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819012	Date Received:	11/25/2009 09:10	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14111	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 03:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	022f2201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.57	mg/kg	2.46	7.57

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819013	Date Received:	11/25/2009 09:10	%Moisture:	1.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14119	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 05:37	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	025f2501.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.74	mg/kg	2.19	6.74

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819014	Date Received:	11/25/2009 09:10	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14110	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 06:14	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	026f2601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.89	mg/kg	2.24	6.89

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819015	Date Received:	11/25/2009 09:10	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14127	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 06:50	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	02712701.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.00	mg/kg	2.28	7.00

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819016	Date Received:	11/25/2009 09:10	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14118	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 07:27	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	028f2801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.36	mg/kg	2.39	7.36

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819017	Date Received:	11/25/2009 09:10	%Moisture:	5.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14122	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 08:04	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	029f2901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.05	mg/kg	2.29	7.05

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819018	Date Received:	11/25/2009 09:10	%Moisture:	7.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14124	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 08:40	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	030f3001.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.21	mg/kg	2.34	7.21

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10--666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819019	Date Received:	11/25/2009 09:10	%Moisture:	11.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03--09--14112	Method:	SW846 8015A/B SVOC	SOP Ref:	GL--OA--E--003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 09:17	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	031f3101.d	Column:	DB--5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.50	mg/kg	2.44	7.50

ETM
1/29/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819020	Date Received:	11/25/2009 09:10	%Moisture:	2.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14128	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 09:54	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	032f3201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.84	mg/kg	2.22	6.84

ETM
1/29/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-666 VALIDATION DATE: 1/29/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 1/29/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819014	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14110	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:55	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.44	ug/kg	1.15	3.44	1
11104-28-2	Aroclor-1221	U	3.44	ug/kg	1.15	3.44	1
11141-16-5	Aroclor-1232	U	3.44	ug/kg	1.15	3.44	1
53469-21-9	Aroclor-1242	U	3.44	ug/kg	1.15	3.44	1
12672-29-6	Aroclor-1248	U	3.44	ug/kg	1.15	3.44	1
11097-69-1	Aroclor-1254	U	3.44	ug/kg	1.15	3.44	1
11096-82-5	Aroclor-1260	U	3.44	ug/kg	1.15	3.44	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819012	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14111	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:30	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	078f7801.d	**Column:**	1 CLP1	**Level:**	LOW
	078b7801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.79	ug/kg	1.26	3.79	1
11104-28-2	Aroclor-1221	U	3.79	ug/kg	1.26	3.79	1
11141-16-5	Aroclor-1232	U	3.79	ug/kg	1.26	3.79	1
53469-21-9	Aroclor-1242	U	3.79	ug/kg	1.26	3.79	1
12672-29-6	Aroclor-1248	U	3.79	ug/kg	1.26	3.79	1
11097-69-1	Aroclor-1254	U	3.79	ug/kg	1.26	3.79	1
11096-82-5	Aroclor-1260	U	3.79	ug/kg	1.26	3.79	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819019	**Date Received:**	11/25/2009 09:10	**%Moisture:**	11.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14112	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 22:44	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	089f8901.d	**Column:**	1 CLP1	**Level:**	LOW
	089b8901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.74	ug/kg	1.25	3.74	1
11104-28-2	Aroclor-1221	U	3.74	ug/kg	1.25	3.74	1
11141-16-5	Aroclor-1232	U	3.74	ug/kg	1.25	3.74	1
53469-21-9	Aroclor-1242	U	3.74	ug/kg	1.25	3.74	1
12672-29-6	Aroclor-1248	U	3.74	ug/kg	1.25	3.74	1
11097-69-1	Aroclor-1254	U	3.74	ug/kg	1.25	3.74	1
11096-82-5	Aroclor-1260	U	3.74	ug/kg	1.25	3.74	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14113	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 17:58	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	066f6601.d	**Column:**	1 CLP1	**Level:**	LOW
	066b6601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.69	ug/kg	1.23	3.69	1
11104–28–2	Aroclor–1221	U	3.69	ug/kg	1.23	3.69	1
11141–16–5	Aroclor–1232	U	3.69	ug/kg	1.23	3.69	1
53469–21–9	Aroclor–1242	U	3.69	ug/kg	1.23	3.69	1
12672–29–6	Aroclor–1248	U	3.69	ug/kg	1.23	3.69	1
11097–69–1	Aroclor–1254	U	3.69	ug/kg	1.23	3.69	1
11096–82–5	Aroclor–1260	U	3.69	ug/kg	1.23	3.69	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14114	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:36	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	069f6901.d	**Column:**	1 CLP1	**Level:**	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.36	ug/kg	1.12	3.36	1
11104–28–2	Aroclor–1221	U	3.36	ug/kg	1.12	3.36	1
11141–16–5	Aroclor–1232	U	3.36	ug/kg	1.12	3.36	1
53469–21–9	Aroclor–1242	U	3.36	ug/kg	1.12	3.36	1
12672–29–6	Aroclor–1248	U	3.36	ug/kg	1.12	3.36	1
11097–69–1	Aroclor–1254	U	3.36	ug/kg	1.12	3.36	1
11096–82–5	Aroclor–1260	U	3.36	ug/kg	1.12	3.36	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14115	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 17:46	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819011	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14116	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:17	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.46	ug/kg	1.15	3.46	1
11104–28–2	Aroclor–1221	U	3.46	ug/kg	1.15	3.46	1
11141–16–5	Aroclor–1232	U	3.46	ug/kg	1.15	3.46	1
53469–21–9	Aroclor–1242	U	3.46	ug/kg	1.15	3.46	1
12672–29–6	Aroclor–1248	U	3.46	ug/kg	1.15	3.46	1
11097–69–1	Aroclor–1254	U	3.46	ug/kg	1.15	3.46	1
11096–82–5	Aroclor–1260	U	3.46	ug/kg	1.15	3.46	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819007	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14117	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 19:02	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.61	ug/kg	1.20	3.61	1
11104-28-2	Aroclor-1221	U	3.61	ug/kg	1.20	3.61	1
11141-16-5	Aroclor-1232	U	3.61	ug/kg	1.20	3.61	1
53469-21-9	Aroclor-1242	U	3.61	ug/kg	1.20	3.61	1
12672-29-6	Aroclor-1248	U	3.61	ug/kg	1.20	3.61	1
11097-69-1	Aroclor-1254	U	3.61	ug/kg	1.20	3.61	1
11096-82-5	Aroclor-1260	U	3.61	ug/kg	1.20	3.61	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819016	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14118	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 21:20	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	082f8201.d	**Column:**	1 CLP1	**Level:**	LOW
	082b8201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14119	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:43	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.38	ug/kg	1.12	3.38	1
11104–28–2	Aroclor–1221	U	3.38	ug/kg	1.12	3.38	1
11141–16–5	Aroclor–1232	U	3.38	ug/kg	1.12	3.38	1
53469–21–9	Aroclor–1242	U	3.38	ug/kg	1.12	3.38	1
12672–29–6	Aroclor–1248	U	3.38	ug/kg	1.12	3.38	1
11097–69–1	Aroclor–1254	U	3.38	ug/kg	1.12	3.38	1
11096–82–5	Aroclor–1260	U	3.38	ug/kg	1.12	3.38	1

ETM
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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819010	**Date Received:**	11/25/2009 09:10	**%Moisture:**	2.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14120	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:05	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.42	ug/kg	1.14	3.42	1
11104–28–2	Aroclor–1221	U	3.42	ug/kg	1.14	3.42	1
11141–16–5	Aroclor–1232	U	3.42	ug/kg	1.14	3.42	1
53469–21–9	Aroclor–1242	U	3.42	ug/kg	1.14	3.42	1
12672–29–6	Aroclor–1248	U	3.42	ug/kg	1.14	3.42	1
11097–69–1	Aroclor–1254	U	3.42	ug/kg	1.14	3.42	1
11096–82–5	Aroclor–1260	U	3.42	ug/kg	1.14	3.42	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819008	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14121	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 19:14	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	072f7201.d	**Column:**	1 CLP1	**Level:**	LOW
	072b7201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.79	ug/kg	1.26	3.79	1
11104-28-2	Aroclor-1221	U	3.79	ug/kg	1.26	3.79	1
11141-16-5	Aroclor-1232	U	3.79	ug/kg	1.26	3.79	1
53469-21-9	Aroclor-1242	U	3.79	ug/kg	1.26	3.79	1
12672-29-6	Aroclor-1248	U	3.79	ug/kg	1.26	3.79	1
11097-69-1	Aroclor-1254	U	3.79	ug/kg	1.26	3.79	1
11096-82-5	Aroclor-1260	U	3.79	ug/kg	1.26	3.79	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819017	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14122	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 22:19	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	087f8701.d	**Column:**	1 CLP1	**Level:**	LOW
	087b8701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.52	ug/kg	1.17	3.52	1
11104-28-2	Aroclor-1221	U	3.52	ug/kg	1.17	3.52	1
11141-16-5	Aroclor-1232	U	3.52	ug/kg	1.17	3.52	1
53469-21-9	Aroclor-1242	U	3.52	ug/kg	1.17	3.52	1
12672-29-6	Aroclor-1248	U	3.52	ug/kg	1.17	3.52	1
11097-69-1	Aroclor-1254	U	3.52	ug/kg	1.17	3.52	1
11096-82-5	Aroclor-1260	U	3.52	ug/kg	1.17	3.52	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819004	Date Received:	11/25/2009 09:10	%Moisture:	5.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14123	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	927189	Inst:	ECD1A.I	Dilution:	1
Run Date:	12/04/2009 18:24	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	11/29/2009 16:51	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	068f6801.d	Column:	1 CLP1	Level:	LOW
	068b6801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.52	ug/kg	1.17	3.52	1
11104-28-2	Aroclor-1221	U	3.52	ug/kg	1.17	3.52	1
11141-16-5	Aroclor-1232	U	3.52	ug/kg	1.17	3.52	1
53469-21-9	Aroclor-1242	U	3.52	ug/kg	1.17	3.52	1
12672-29-6	Aroclor-1248	U	3.52	ug/kg	1.17	3.52	1
11097-69-1	Aroclor-1254	U	3.52	ug/kg	1.17	3.52	1
11096-82-5	Aroclor-1260	U	3.52	ug/kg	1.17	3.52	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819018	**Date Received:**	11/25/2009 09:10	**%Moisture:**	7.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14124	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 22:32	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	088f8801.d	**Column:**	1 CLP1	**Level:**	LOW
	088b8801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819003	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14125	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:11	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	067f6701.d	**Column:**	1 CLP1	**Level:**	LOW
	067b6701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.46	ug/kg	1.15	3.46	1
11104-28-2	Aroclor-1221	U	3.46	ug/kg	1.15	3.46	1
11141-16-5	Aroclor-1232	U	3.46	ug/kg	1.15	3.46	1
53469-21-9	Aroclor-1242	U	3.46	ug/kg	1.15	3.46	1
12672-29-6	Aroclor-1248	U	3.46	ug/kg	1.15	3.46	1
11097-69-1	Aroclor-1254	U	3.46	ug/kg	1.15	3.46	1
11096-82-5	Aroclor-1260	U	3.46	ug/kg	1.15	3.46	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14126	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:49	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.63	ug/kg	1.21	3.63	1
11104-28-2	Aroclor-1221	U	3.63	ug/kg	1.21	3.63	1
11141-16-5	Aroclor-1232	U	3.63	ug/kg	1.21	3.63	1
53469-21-9	Aroclor-1242	U	3.63	ug/kg	1.21	3.63	1
12672-29-6	Aroclor-1248	U	3.63	ug/kg	1.21	3.63	1
11097-69-1	Aroclor-1254	U	3.63	ug/kg	1.21	3.63	1
11096-82-5	Aroclor-1260	U	3.63	ug/kg	1.21	3.63	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819015	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14127	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 21:08	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.49	ug/kg	1.16	3.49	1
11104-28-2	Aroclor-1221	U	3.49	ug/kg	1.16	3.49	1
11141-16-5	Aroclor-1232	U	3.49	ug/kg	1.16	3.49	1
53469-21-9	Aroclor-1242	U	3.49	ug/kg	1.16	3.49	1
12672-29-6	Aroclor-1248	U	3.49	ug/kg	1.16	3.49	1
11097-69-1	Aroclor-1254	U	3.49	ug/kg	1.16	3.49	1
11096-82-5	Aroclor-1260	U	3.49	ug/kg	1.16	3.49	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819020	**Date Received:**	11/25/2009 09:10	**%Moisture:**	2.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14128	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 22:57	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	090f9001.d	**Column:**	1 CLP1	**Level:**	LOW
	090b9001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.43	ug/kg	1.14	3.43	1
11104-28-2	Aroclor-1221	U	3.43	ug/kg	1.14	3.43	1
11141-16-5	Aroclor-1232	U	3.43	ug/kg	1.14	3.43	1
53469-21-9	Aroclor-1242	U	3.43	ug/kg	1.14	3.43	1
12672-29-6	Aroclor-1248	U	3.43	ug/kg	1.14	3.43	1
11097-69-1	Aroclor-1254	U	3.43	ug/kg	1.14	3.43	1
11096-82-5	Aroclor-1260	U	3.43	ug/kg	1.14	3.43	1

ETM
1/29/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14129	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 19:52	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	075f7501.d	**Column:**	1 CLP1	**Level:**	LOW
	075b7501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.38	ug/kg	1.13	3.38	1
11104–28–2	Aroclor–1221	U	3.38	ug/kg	1.13	3.38	1
11141–16–5	Aroclor–1232	U	3.38	ug/kg	1.13	3.38	1
53469–21–9	Aroclor–1242	U	3.38	ug/kg	1.13	3.38	1
12672–29–6	Aroclor–1248	U	3.38	ug/kg	1.13	3.38	1
11097–69–1	Aroclor–1254	U	3.38	ug/kg	1.13	3.38	1
11096–82–5	Aroclor–1260	U	3.38	ug/kg	1.13	3.38	1

ETM
1/29/10

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-666

REQUEST NUMBER: 10-666

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241819%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14115	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14115	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14113	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14113	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14125	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14125	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14123	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14123	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14114	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14114	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14126	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14126	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14117	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14117	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14121	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14121	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14129	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14129	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14120	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14120	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14116	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14116	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14111	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14111	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14119	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14119	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14110	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14110	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14127	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14127	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14118	1	SEPTUM AMBER GLASS	8260B	Ice	S

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-666

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14122	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14122	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14124	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14124	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14112	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14112	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14128	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14128	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
[illegible]	[illegible]	11/24/09	(1400)	Greg Tyler	[illegible]	11-25-09	0910
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-666
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009
TURNAROUND/REPORT DUE: 12/24/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8082	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	
		1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8260B	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8270C	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	
		1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	

Final Page of REQUEST NUMBER 10-666

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

December 01, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241819
SDG: 10-666

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 25, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-666
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241819
SDG: 10-666

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Miscellaneous Data.....826

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Standards Data.....941
Quaity Control Data..... 960
Miscellaneous Data.....973

GC Semivolatile PCB Analysis.....980
Sample Data Summary.....989

Quality Control Summary..... 1010
Sample Data..... 1017
Standards Data..... 1118
Quality Control Data..... 1205
Miscellaneous Data..... 1238

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241819
SDG # : 10-666

December 01, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 25, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241819001	RE03-09-14115
241819002	RE03-09-14113
241819003	RE03-09-14125
241819004	RE03-09-14123
241819005	RE03-09-14114
241819006	RE03-09-14126
241819007	RE03-09-14117
241819008	RE03-09-14121
241819009	RE03-09-14129
241819010	RE03-09-14120
241819011	RE03-09-14116
241819012	RE03-09-14111
241819013	RE03-09-14119
241819014	RE03-09-14110
241819015	RE03-09-14127
241819016	RE03-09-14118
241819017	RE03-09-14122
241819018	RE03-09-14124
241819019	RE03-09-14112
241819020	RE03-09-14128

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for Francis

Valerie Davis

Project Manager

GEL Laboratories LLC PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843.556.8171 F 843.766.1178 www.gel.com

List of current GEL Certifications as of 01 December 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-666

REQUEST NUMBER: 10-666

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241819%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14115	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14115	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14113	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14113	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14125	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14125	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14123	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14123	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14114	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14114	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14126	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14126	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14117	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14117	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14121	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14121	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14129	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14129	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14120	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14120	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14116	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14116	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14111	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14111	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14119	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14119	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14110	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14110	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14127	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14127	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14118	1	SEPTUM AMBER GLASS	8260B	Ice	S

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-666

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14122	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14122	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14124	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14124	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14112	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14112	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14128	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14128	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
[illegible]	[illegible]	11/24/09	1400	Greg Tyler	[illegible]	11-25-09	0910
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-666

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8082	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	
		1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8260B	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	
		1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	
	SW-846:8270C	1	RE03-09-14110	S	11/23/2009	
		1	RE03-09-14111	S	11/23/2009	
		1	RE03-09-14112	S	11/23/2009	
		1	RE03-09-14113	S	11/23/2009	
		1	RE03-09-14114	S	11/23/2009	
		1	RE03-09-14115	S	11/23/2009	
		1	RE03-09-14116	S	11/23/2009	
		1	RE03-09-14117	S	11/23/2009	
		1	RE03-09-14118	S	11/23/2009	
		1	RE03-09-14119	S	11/23/2009	
		1	RE03-09-14120	S	11/23/2009	
		1	RE03-09-14121	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-666

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE03-09-14122	S	11/23/2009	
		1	RE03-09-14123	S	11/23/2009	
		1	RE03-09-14124	S	11/23/2009	
		1	RE03-09-14125	S	11/23/2009	
		1	RE03-09-14126	S	11/23/2009	
		1	RE03-09-14127	S	11/23/2009	
		1	RE03-09-14128	S	11/23/2009	
		1	RE03-09-14129	S	11/23/2009	

Final Page of REQUEST NUMBER 10-666

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-666**
Received By: Greg Tyler	**Date Received: 11/25/09**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **20 cpm**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other **2, 4, 5, 6C** **14, 16C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
Fed Ex Tracking Numbers
7209 7849 0285 2C **7209 7849 0263 14C**
7209 7849 0230 2C **7209 7849 0252 16C**
7209 7849 0300 2C
7209 7849 0322 4C
7209 7849 0296 4C
7209 7849 0241 4C
7209 7849 0311 5C
7209 7849 0274 6C

PM Review: Initials P. Nad. Date 11-27-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 58.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0285
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156140-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

2c

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2 of 3
MPS# 0203 7209 7849 0230
Mstr# 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156140-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

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1 of 2
TRK# 0201 7209 7849 0300
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054198D0

4c

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TRK# 0201 7209 7849 0322

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0296
Matrix 7209 7849 0285 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156140-434 NAIT V3 09-09

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2434
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7849 0241
Matrix 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156140-434 NAIT V3 09-09

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

5c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0311
Matrix 7209 7849 0300 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US

XX CHSA

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 28.0 LB MAN
CAD: 0014176/CAFE2434
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419GD0

6c

FedEx Express

RADIOACTIVE SAMPLES

3 of 3
MPS# 0263 7209 7849 0274
Matrix 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407

XX CHSA

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 42.0 LB MAN
CAD: 6014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

14c

FedEx Express

2 of 3

MPS# 0263 7209 7849 0263

Mstr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 59.0 LB MAN
CAD: 6014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419600

16c

FedEx Express

1 of 3

TRK# 0201 7209 7849 0252

MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-666

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	928605
Prep Batch Number:	928603

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241819001	RE03-09-14115
241819002	RE03-09-14113
241819003	RE03-09-14125
241819004	RE03-09-14123
241819005	RE03-09-14114
241819006	RE03-09-14126
241819007	RE03-09-14117
241819008	RE03-09-14121
241819009	RE03-09-14129
241819010	RE03-09-14120
241819011	RE03-09-14116
241819012	RE03-09-14111
241819013	RE03-09-14119
241819014	RE03-09-14110
241819015	RE03-09-14127
241819016	RE03-09-14118
241819017	RE03-09-14122
241819018	RE03-09-14124
241819019	RE03-09-14112
241819020	RE03-09-14128
1201985620	Method Blank (MB)
1201985624	Laboratory Control Sample (LCS)
1201985625	Laboratory Control Sample (LCS)
1201985621	Method Blank (MB)
1201985626	Laboratory Control Sample (LCS)
1201985627	Laboratory Control Sample (LCS)
1201989829	Method Blank (MB)

1201989830	Laboratory Control Sample (LCS)
1201989831	Laboratory Control Sample (LCS)
1201985622	241819001(RE03-09-14115) Post Spike (PS)
1201985623	241819001(RE03-09-14115) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241819001 (RE03-09-14115) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
The following sample in this SDG was re-analyzed due to unacceptable recoveries in the initial analysis: 241819016 (RE03-09-14118).

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The

data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/17/09

Roadmap for LANL 10-666 VOA

This roadmap was analyzed by acj on 12-15-2009, 16:04.
This roadmap was reviewed by ehl on 12-17-2009, 07:46.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/120209v4/4n317.d	241819001	RE03-09-14115	03-DEC-2009	01:03	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n318.d	241819002	RE03-09-14113	03-DEC-2009	01:31	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n319.d	241819003	RE03-09-14125	03-DEC-2009	01:58	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n320.d	241819004	RE03-09-14123	03-DEC-2009	02:26	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n321.d	241819005	RE03-09-14114	03-DEC-2009	02:54	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n322.d	241819006	RE03-09-14126	03-DEC-2009	03:21	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n323.d	241819007	RE03-09-14117	03-DEC-2009	03:49	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n408.d	241819008	RE03-09-14121	03-DEC-2009	21:37	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n409.d	241819009	RE03-09-14129	03-DEC-2009	22:04	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n410.d	241819010	RE03-09-14120	03-DEC-2009	22:32	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n411.d	241819011	RE03-09-14116	03-DEC-2009	23:00	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n412.d	241819012	RE03-09-14111	03-DEC-2009	23:28	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n413.d	241819013	RE03-09-14119	03-DEC-2009	23:56	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n414.d	241819014	RE03-09-14110	04-DEC-2009	00:24	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n415.d	241819015	RE03-09-14127	04-DEC-2009	00:52	10-666.sub	1	928605	
■	N	/chem/VOA4.i/120309v4/4n416.d	241819016	RE03-09-14118	04-DEC-2009	01:20	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n417.d	241819017	RE03-09-14122	04-DEC-2009	01:48	10-666.sub	1	928605	

☐	N	/chem/VOA4.i/120309v4/4n418.d	241819018	RE03-09-14124	04-DEC-2009	02:15	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n419.d	241819019	RE03-09-14112	04-DEC-2009	02:43	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n420.d	241819020	RE03-09-14128	04-DEC-2009	03:11	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120709v4/4o108.d	241819016	RE03-09-14118	07-DEC-2009	16:54	10-666.sub	1	928605	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/120209v4/4n303LA.d	1201985624	LCS	lcs	02-DEC-2009	17:47	all.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n305SA.d	1201985625	LCS	lcs	02-DEC-2009	18:41	all.sub	1	928605	
☐	N	/chem/VOA4.i/120209v4/4n307BA.d	1201985620	BLANK	mb	02-DEC-2009	19:36	all.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n403ll.d	1201985626	LCS	lcs	03-DEC-2009	17:53	all.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n405sl.d	1201985627	LCS	lcs	03-DEC-2009	18:48	all.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n406bl.d	1201985621	BLANK	mb	03-DEC-2009	19:16	all.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n421.d	1201985622	RE03-09-14115MS	ms	04-DEC-2009	03:39	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120309v4/4n422.d	1201985623	RE03-09-14115MSD	msd	04-DEC-2009	04:07	10-666.sub	1	928605	
☐	N	/chem/VOA4.i/120709v4/4o103ll.d	1201989830	LCS	lcs	07-DEC-2009	14:37	all.sub	1	928605	
☐	N	/chem/VOA4.i/120709v4/4o105sl.d	1201989831	LCS	lcs	07-DEC-2009	15:32	all.sub	1	928605	
☐	N	/chem/VOA4.i/120709v4/4o106bl.d	1201989829	BLANK	mb	07-DEC-2009	16:00	all.sub	1	928605	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819014**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14110**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n414.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	J	2.23	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819014**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14110**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n414.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	166	ug/kg	90	NJ
	Unknown Siloxane	16.79	11.2	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819012	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14111	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 23:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:04	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n412.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.82	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819012**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14111**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n412.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.82	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	62.9	ug/kg	90	NJ
	Unknown Siloxane	16.78	11.5	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n419.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.383	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	J	4.51	ug/kg	1.87	5.63
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.63	ug/kg	1.80	5.63
75-09-2	Methylene chloride	U	5.63	ug/kg	2.25	5.63
75-15-0	Carbon disulfide	U	5.63	ug/kg	1.41	5.63
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.63	ug/kg	1.69	5.63
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.371	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.371	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.63	ug/kg	1.41	5.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.63	ug/kg	1.69	5.63
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n419.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.63	ug/kg	1.80	5.63
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	95.9	ug/kg	90	NJ
	Unknown Siloxane	16.79	10	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n318.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	J	4.49	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	J	2.88	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n318.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	323	ug/kg	91	NJ
138-86-3	Limonene	16.03	7.35	ug/kg	94	NJ
	Unknown Siloxane	16.79	13	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14114**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:54**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n321.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.01	ug/kg	0.343	1.01
74-87-3	Chloromethane	U	1.01	ug/kg	0.303	1.01
75-01-4	Vinyl chloride	U	1.01	ug/kg	0.303	1.01
74-83-9	Bromomethane	U	1.01	ug/kg	0.303	1.01
75-00-3	Chloroethane	U	1.01	ug/kg	0.303	1.01
75-69-4	Trichlorofluoromethane	U	1.01	ug/kg	0.303	1.01
67-64-1	Acetone	U	5.05	ug/kg	1.68	5.05
75-35-4	1,1-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
74-88-4	Iodomethane	U	5.05	ug/kg	1.61	5.05
75-09-2	Methylene chloride	U	5.05	ug/kg	2.02	5.05
75-15-0	Carbon disulfide	U	5.05	ug/kg	1.26	5.05
156-60-5	trans-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
75-34-3	1,1-Dichloroethane	U	1.01	ug/kg	0.303	1.01
78-93-3	2-Butanone	U	5.05	ug/kg	1.51	5.05
156-59-2	cis-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
594-20-7	2,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
67-66-3	Chloroform	U	1.01	ug/kg	0.303	1.01
74-97-5	Bromochloromethane	U	1.01	ug/kg	0.333	1.01
71-55-6	1,1,1-Trichloroethane	U	1.01	ug/kg	0.303	1.01
563-58-6	1,1-Dichloropropene	U	1.01	ug/kg	0.303	1.01
56-23-5	Carbon tetrachloride	U	1.01	ug/kg	0.303	1.01
107-06-2	1,2-Dichloroethane	U	1.01	ug/kg	0.303	1.01
71-43-2	Benzene	U	1.01	ug/kg	0.303	1.01
79-01-6	Trichloroethylene	U	1.01	ug/kg	0.333	1.01
78-87-5	1,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
75-27-4	Bromodichloromethane	U	1.01	ug/kg	0.303	1.01
74-95-3	Dibromomethane	U	1.01	ug/kg	0.303	1.01
108-10-1	4-Methyl-2-pentanone	U	5.05	ug/kg	1.26	5.05
10061-01-5	cis-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
108-88-3	Toluene	U	1.01	ug/kg	0.303	1.01
10061-02-6	trans-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
79-00-5	1,1,2-Trichloroethane	U	1.01	ug/kg	0.303	1.01
591-78-6	2-Hexanone	U	5.05	ug/kg	1.51	5.05
142-28-9	1,3-Dichloropropane	U	1.01	ug/kg	0.303	1.01
127-18-4	Tetrachloroethylene	U	1.01	ug/kg	0.303	1.01
124-48-1	Dibromochloromethane	U	1.01	ug/kg	0.303	1.01
106-93-4	1,2-Dibromoethane	U	1.01	ug/kg	0.303	1.01
108-90-7	Chlorobenzene	U	1.01	ug/kg	0.303	1.01

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14114**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:54**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n321.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.01	ug/kg	0.303	1.01
179601-23-1	m,p-Xylenes	U	2.02	ug/kg	0.303	2.02
95-47-6	o-Xylene	U	1.01	ug/kg	0.303	1.01
100-42-5	Styrene	U	1.01	ug/kg	0.303	1.01
75-25-2	Bromoform	U	1.01	ug/kg	0.303	1.01
79-34-5	1,1,2,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
96-18-4	1,2,3-Trichloropropane	U	1.01	ug/kg	0.303	1.01
108-86-1	Bromobenzene	U	1.01	ug/kg	0.303	1.01
103-65-1	n-Propylbenzene	U	1.01	ug/kg	0.303	1.01
95-49-8	2-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-82-8	Isopropylbenzene	U	1.01	ug/kg	0.303	1.01
108-67-8	1,3,5-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
106-43-4	4-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-06-6	tert-Butylbenzene	U	1.01	ug/kg	0.303	1.01
95-63-6	1,2,4-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
135-98-8	sec-Butylbenzene	U	1.01	ug/kg	0.303	1.01
99-87-6	4-Isopropyltoluene	U	1.01	ug/kg	0.303	1.01
541-73-1	1,3-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
106-46-7	1,4-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
104-51-8	n-Butylbenzene	U	1.01	ug/kg	0.303	1.01
96-12-8	1,2-Dibromo-3-chloropropane	U	1.01	ug/kg	0.303	1.01
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.05	ug/kg	1.61	5.05
630-20-6	1,1,1,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
95-50-1	1,2-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
110-62-3	Pentanal	11.2	25.2	ug/kg	83	NJ
66-25-1	Hexanal	12.98	217	ug/kg	90	NJ
	Unknown Hydrocarbon	14.06	6.13	ug/kg		J
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	157	ug/kg	90	NJ
124-13-0	Octanal	15.86	5.4	ug/kg	91	NJ
138-86-3	Limonene	16.03	5.57	ug/kg	94	NJ
	Unknown Siloxane	16.79	7.93	ug/kg		J
124-19-6	Nonanal	17.15	9.95	ug/kg	90	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:03**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:50**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n317.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.79	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:03**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:50**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n317.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	320	ug/kg	91	NJ
	Unknown Hydrocarbon	16.03	8.39	ug/kg		J
	Unknown Siloxane	16.79	25.6	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819011**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14116**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:00**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:03**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n411.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04
67-64-1	Acetone	U	5.21	ug/kg	1.73	5.21
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
74-88-4	Iodomethane	U	5.21	ug/kg	1.67	5.21
75-09-2	Methylene chloride	U	5.21	ug/kg	2.09	5.21
75-15-0	Carbon disulfide	U	5.21	ug/kg	1.30	5.21
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04
78-93-3	2-Butanone	U	5.21	ug/kg	1.56	5.21
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04
108-10-1	4-Methyl-2-pentanone	U	5.21	ug/kg	1.30	5.21
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04
591-78-6	2-Hexanone	U	5.21	ug/kg	1.56	5.21
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819011**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14116**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:00**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:03**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n411.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.21	ug/kg	1.67	5.21
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	51	ug/kg	90	NJ
	Unknown Siloxane	16.79	8.37	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n323.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.44	ug/kg	1.81	5.44
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.44	ug/kg	1.74	5.44
75-09-2	Methylene chloride	U	5.44	ug/kg	2.18	5.44
75-15-0	Carbon disulfide	U	5.44	ug/kg	1.36	5.44
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.44	ug/kg	1.63	5.44
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.44	ug/kg	1.36	5.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.44	ug/kg	1.63	5.44
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n323.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.44	ug/kg	1.74	5.44
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	169	ug/kg	90	NJ
	Unknown Siloxane	16.79	16.3	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819016	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14118	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/07/2009 16:54	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/07/2009 16:27	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4o108.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.365	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.365	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819016	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14118	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/07/2009 16:54	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/07/2009 16:27	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4o108.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	164	ug/kg	91	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n413.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.02	ug/kg	0.346	1.02
74-87-3	Chloromethane	U	1.02	ug/kg	0.305	1.02
75-01-4	Vinyl chloride	U	1.02	ug/kg	0.305	1.02
74-83-9	Bromomethane	U	1.02	ug/kg	0.305	1.02
75-00-3	Chloroethane	U	1.02	ug/kg	0.305	1.02
75-69-4	Trichlorofluoromethane	U	1.02	ug/kg	0.305	1.02
67-64-1	Acetone	U	5.09	ug/kg	1.69	5.09
75-35-4	1,1-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
74-88-4	Iodomethane	U	5.09	ug/kg	1.63	5.09
75-09-2	Methylene chloride	U	5.09	ug/kg	2.03	5.09
75-15-0	Carbon disulfide	U	5.09	ug/kg	1.27	5.09
156-60-5	trans-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
75-34-3	1,1-Dichloroethane	U	1.02	ug/kg	0.305	1.02
78-93-3	2-Butanone	U	5.09	ug/kg	1.53	5.09
156-59-2	cis-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
594-20-7	2,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
67-66-3	Chloroform	U	1.02	ug/kg	0.305	1.02
74-97-5	Bromochloromethane	U	1.02	ug/kg	0.336	1.02
71-55-6	1,1,1-Trichloroethane	U	1.02	ug/kg	0.305	1.02
563-58-6	1,1-Dichloropropene	U	1.02	ug/kg	0.305	1.02
56-23-5	Carbon tetrachloride	U	1.02	ug/kg	0.305	1.02
107-06-2	1,2-Dichloroethane	U	1.02	ug/kg	0.305	1.02
71-43-2	Benzene	U	1.02	ug/kg	0.305	1.02
79-01-6	Trichloroethylene	U	1.02	ug/kg	0.336	1.02
78-87-5	1,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
75-27-4	Bromodichloromethane	U	1.02	ug/kg	0.305	1.02
74-95-3	Dibromomethane	U	1.02	ug/kg	0.305	1.02
108-10-1	4-Methyl-2-pentanone	U	5.09	ug/kg	1.27	5.09
10061-01-5	cis-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
108-88-3	Toluene	U	1.02	ug/kg	0.305	1.02
10061-02-6	trans-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
79-00-5	1,1,2-Trichloroethane	U	1.02	ug/kg	0.305	1.02
591-78-6	2-Hexanone	J	2.02	ug/kg	1.53	5.09
142-28-9	1,3-Dichloropropane	U	1.02	ug/kg	0.305	1.02
127-18-4	Tetrachloroethylene	U	1.02	ug/kg	0.305	1.02
124-48-1	Dibromochloromethane	U	1.02	ug/kg	0.305	1.02
106-93-4	1,2-Dibromoethane	U	1.02	ug/kg	0.305	1.02
108-90-7	Chlorobenzene	U	1.02	ug/kg	0.305	1.02

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14119	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 23:56	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:05	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n413.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.02	ug/kg	0.305	1.02
179601-23-1	m,p-Xylenes	U	2.03	ug/kg	0.305	2.03
95-47-6	o-Xylene	U	1.02	ug/kg	0.305	1.02
100-42-5	Styrene	U	1.02	ug/kg	0.305	1.02
75-25-2	Bromoform	U	1.02	ug/kg	0.305	1.02
79-34-5	1,1,2,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
96-18-4	1,2,3-Trichloropropane	U	1.02	ug/kg	0.305	1.02
108-86-1	Bromobenzene	U	1.02	ug/kg	0.305	1.02
103-65-1	n-Propylbenzene	U	1.02	ug/kg	0.305	1.02
95-49-8	2-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-82-8	Isopropylbenzene	U	1.02	ug/kg	0.305	1.02
108-67-8	1,3,5-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
106-43-4	4-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-06-6	tert-Butylbenzene	U	1.02	ug/kg	0.305	1.02
95-63-6	1,2,4-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
135-98-8	sec-Butylbenzene	U	1.02	ug/kg	0.305	1.02
99-87-6	4-Isopropyltoluene	U	1.02	ug/kg	0.305	1.02
541-73-1	1,3-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
106-46-7	1,4-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
104-51-8	n-Butylbenzene	U	1.02	ug/kg	0.305	1.02
96-12-8	1,2-Dibromo-3-chloropropane	U	1.02	ug/kg	0.305	1.02
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.09	ug/kg	1.63	5.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
95-50-1	1,2-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	149	ug/kg	91	NJ
	Unknown Siloxane	16.8	15.6	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n410.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.349	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	J	3.83	ug/kg	1.70	5.13
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.13	ug/kg	1.64	5.13
75-09-2	Methylene chloride	U	5.13	ug/kg	2.05	5.13
75-15-0	Carbon disulfide	U	5.13	ug/kg	1.28	5.13
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.13	ug/kg	1.54	5.13
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.13	ug/kg	1.28	5.13
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.13	ug/kg	1.54	5.13
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n410.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.05	ug/kg	0.308	2.05
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.13	ug/kg	1.64	5.13
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	101	ug/kg	91	NJ
	Unknown Siloxane	16.79	8.52	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819008**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14121**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:37**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n408.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.389	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819008**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14121**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:37**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n408.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	87.1	ug/kg	83	NJ
	Unknown Siloxane	16.79	13.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819017	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14122	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 01:48	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:09	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n417.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.318	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.318	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.318	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.318	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.318	1.06
67-64-1	Acetone		11.5	ug/kg	1.76	5.30
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
74-88-4	Iodomethane	U	5.30	ug/kg	1.70	5.30
75-09-2	Methylene chloride	U	5.30	ug/kg	2.12	5.30
75-15-0	Carbon disulfide	U	5.30	ug/kg	1.32	5.30
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.318	1.06
78-93-3	2-Butanone	J	3.25	ug/kg	1.59	5.30
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.318	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.350	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.318	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.318	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.318	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.318	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.318	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.350	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.318	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.318	1.06
108-10-1	4-Methyl-2-pentanone	U	5.30	ug/kg	1.32	5.30
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.318	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.318	1.06
591-78-6	2-Hexanone	U	5.30	ug/kg	1.59	5.30
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.318	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.318	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.318	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.318	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.318	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14122**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 01:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:09**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n417.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.318	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.318	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.318	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.318	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.318	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.318	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.318	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.318	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.318	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.318	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.318	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.318	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.318	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.318	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.30	ug/kg	1.70	5.30
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	171	ug/kg	90	NJ
	Unknown Siloxane	16.79	8.82	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:26**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:53**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n320.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.318	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.318	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.318	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.318	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.318	1.06
67-64-1	Acetone	J	2.18	ug/kg	1.76	5.29
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
74-88-4	Iodomethane	U	5.29	ug/kg	1.69	5.29
75-09-2	Methylene chloride	U	5.29	ug/kg	2.12	5.29
75-15-0	Carbon disulfide	U	5.29	ug/kg	1.32	5.29
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.318	1.06
78-93-3	2-Butanone	U	5.29	ug/kg	1.59	5.29
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.318	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.349	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.318	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.318	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.318	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.318	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.318	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.349	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.318	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.318	1.06
108-10-1	4-Methyl-2-pentanone	U	5.29	ug/kg	1.32	5.29
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.318	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.318	1.06
591-78-6	2-Hexanone	U	5.29	ug/kg	1.59	5.29
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.318	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.318	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.318	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.318	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.318	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14123	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 02:26	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:53	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n320.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.318	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.318	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.318	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.318	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.318	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.318	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.318	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.318	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.318	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.318	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.318	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.318	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.318	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.318	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.29	ug/kg	1.69	5.29
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	52.3	ug/kg	90	NJ
	Unknown Siloxane	16.79	12.7	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819018	**Date Received:**	11/25/2009 09:10	**%Moisture:**	7.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14124	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 02:15	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n418.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.369	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.325	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.325	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.325	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.325	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.325	1.08
67-64-1	Acetone	U	5.42	ug/kg	1.80	5.42
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
74-88-4	Iodomethane	U	5.42	ug/kg	1.74	5.42
75-09-2	Methylene chloride	U	5.42	ug/kg	2.17	5.42
75-15-0	Carbon disulfide	U	5.42	ug/kg	1.36	5.42
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.325	1.08
78-93-3	2-Butanone	U	5.42	ug/kg	1.63	5.42
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.325	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.358	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.325	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.325	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.325	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.325	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.325	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.358	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.325	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.325	1.08
108-10-1	4-Methyl-2-pentanone	U	5.42	ug/kg	1.36	5.42
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.325	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.325	1.08
591-78-6	2-Hexanone	U	5.42	ug/kg	1.63	5.42
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.325	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.325	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.325	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.325	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.325	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:15**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n418.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.325	1.08
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.325	2.17
95-47-6	o-Xylene	U	1.08	ug/kg	0.325	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.325	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.325	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.325	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.325	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.325	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.325	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.325	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.325	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.325	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.325	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.325	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.42	ug/kg	1.74	5.42
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	217	ug/kg	91	NJ
	Unknown Siloxane	16.79	13.5	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819003	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14125	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 01:58	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:52	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n319.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04
67-64-1	Acetone	U	5.21	ug/kg	1.73	5.21
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
74-88-4	Iodomethane	U	5.21	ug/kg	1.67	5.21
75-09-2	Methylene chloride	U	5.21	ug/kg	2.09	5.21
75-15-0	Carbon disulfide	U	5.21	ug/kg	1.30	5.21
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04
78-93-3	2-Butanone	U	5.21	ug/kg	1.56	5.21
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04
108-10-1	4-Methyl-2-pentanone	U	5.21	ug/kg	1.30	5.21
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04
591-78-6	2-Hexanone	U	5.21	ug/kg	1.56	5.21
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:58**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n319.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.21	ug/kg	1.67	5.21
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	80.8	ug/kg	91	NJ
	Unknown Siloxane	16.79	10.2	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14126**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:55**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n322.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.45	ug/kg	1.81	5.45
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.45	ug/kg	1.74	5.45
75-09-2	Methylene chloride	U	5.45	ug/kg	2.18	5.45
75-15-0	Carbon disulfide	U	5.45	ug/kg	1.36	5.45
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.45	ug/kg	1.63	5.45
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.45	ug/kg	1.36	5.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.45	ug/kg	1.63	5.45
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14126	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 03:21	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:55	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n322.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.45	ug/kg	1.74	5.45
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	98.9	ug/kg	90	NJ
	Unknown Siloxane	16.79	26.2	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819015**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14127**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:52**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n415.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone		14.7	ug/kg	1.74	5.25
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.25	ug/kg	1.68	5.25
75-09-2	Methylene chloride	U	5.25	ug/kg	2.10	5.25
75-15-0	Carbon disulfide	U	5.25	ug/kg	1.31	5.25
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone		7.92	ug/kg	1.58	5.25
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.25	ug/kg	1.31	5.25
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.25	ug/kg	1.58	5.25
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819015**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14127**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:52**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n415.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.25	ug/kg	1.68	5.25
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	209	ug/kg	91	NJ
	Unknown Siloxane	16.79	13.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819020	**Date Received:**	11/25/2009 09:10	**%Moisture:**	2.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14128	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 03:11	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n420.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.350	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.309	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.309	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.309	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.309	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.309	1.03
67-64-1	Acetone	J	1.74	ug/kg	1.71	5.14
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.309	1.03
74-88-4	Iodomethane	U	5.14	ug/kg	1.65	5.14
75-09-2	Methylene chloride	U	5.14	ug/kg	2.06	5.14
75-15-0	Carbon disulfide	U	5.14	ug/kg	1.29	5.14
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.309	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.309	1.03
78-93-3	2-Butanone	U	5.14	ug/kg	1.54	5.14
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.309	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.309	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.309	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.309	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.309	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.309	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.309	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.309	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.309	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.309	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.309	1.03
108-10-1	4-Methyl-2-pentanone	U	5.14	ug/kg	1.29	5.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.309	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.309	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.309	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.309	1.03
591-78-6	2-Hexanone	U	5.14	ug/kg	1.54	5.14
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.309	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.309	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.309	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.309	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.309	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14128**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 03:11**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n420.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.309	1.03
179601-23-1	m,p-Xylenes	U	2.06	ug/kg	0.309	2.06
95-47-6	o-Xylene	U	1.03	ug/kg	0.309	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.309	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.309	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.309	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.309	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.309	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.309	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.309	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.309	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.309	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.309	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.309	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.309	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.309	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.309	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.309	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.309	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.14	ug/kg	1.65	5.14
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.309	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	206	ug/kg	91	NJ
	Unknown Siloxane	16.79	18	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 22:04	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:01	**Aliqnot:**	5 g	**Final Volume:**	5 mL
Data File:	4n409.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.02	ug/kg	0.345	1.02
74-87-3	Chloromethane	U	1.02	ug/kg	0.305	1.02
75-01-4	Vinyl chloride	U	1.02	ug/kg	0.305	1.02
74-83-9	Bromomethane	U	1.02	ug/kg	0.305	1.02
75-00-3	Chloroethane	U	1.02	ug/kg	0.305	1.02
75-69-4	Trichlorofluoromethane	U	1.02	ug/kg	0.305	1.02
67-64-1	Acetone	U	5.08	ug/kg	1.69	5.08
75-35-4	1,1-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
74-88-4	Iodomethane	U	5.08	ug/kg	1.62	5.08
75-09-2	Methylene chloride	U	5.08	ug/kg	2.03	5.08
75-15-0	Carbon disulfide	U	5.08	ug/kg	1.27	5.08
156-60-5	trans-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
75-34-3	1,1-Dichloroethane	U	1.02	ug/kg	0.305	1.02
78-93-3	2-Butanone	U	5.08	ug/kg	1.52	5.08
156-59-2	cis-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
594-20-7	2,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
67-66-3	Chloroform	U	1.02	ug/kg	0.305	1.02
74-97-5	Bromochloromethane	U	1.02	ug/kg	0.335	1.02
71-55-6	1,1,1-Trichloroethane	U	1.02	ug/kg	0.305	1.02
563-58-6	1,1-Dichloropropene	U	1.02	ug/kg	0.305	1.02
56-23-5	Carbon tetrachloride	U	1.02	ug/kg	0.305	1.02
107-06-2	1,2-Dichloroethane	U	1.02	ug/kg	0.305	1.02
71-43-2	Benzene	U	1.02	ug/kg	0.305	1.02
79-01-6	Trichloroethylene	U	1.02	ug/kg	0.335	1.02
78-87-5	1,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
75-27-4	Bromodichloromethane	U	1.02	ug/kg	0.305	1.02
74-95-3	Dibromomethane	U	1.02	ug/kg	0.305	1.02
108-10-1	4-Methyl-2-pentanone	U	5.08	ug/kg	1.27	5.08
10061-01-5	cis-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
108-88-3	Toluene	U	1.02	ug/kg	0.305	1.02
10061-02-6	trans-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
79-00-5	1,1,2-Trichloroethane	U	1.02	ug/kg	0.305	1.02
591-78-6	2-Hexanone	U	5.08	ug/kg	1.52	5.08
142-28-9	1,3-Dichloropropane	U	1.02	ug/kg	0.305	1.02
127-18-4	Tetrachloroethylene	U	1.02	ug/kg	0.305	1.02
124-48-1	Dibromochloromethane	U	1.02	ug/kg	0.305	1.02
106-93-4	1,2-Dibromoethane	U	1.02	ug/kg	0.305	1.02
108-90-7	Chlorobenzene	U	1.02	ug/kg	0.305	1.02

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 22:04	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n409.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.02	ug/kg	0.305	1.02
179601-23-1	m,p-Xylenes	U	2.03	ug/kg	0.305	2.03
95-47-6	o-Xylene	U	1.02	ug/kg	0.305	1.02
100-42-5	Styrene	U	1.02	ug/kg	0.305	1.02
75-25-2	Bromoform	U	1.02	ug/kg	0.305	1.02
79-34-5	1,1,2,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
96-18-4	1,2,3-Trichloropropane	U	1.02	ug/kg	0.305	1.02
108-86-1	Bromobenzene	U	1.02	ug/kg	0.305	1.02
103-65-1	n-Propylbenzene	U	1.02	ug/kg	0.305	1.02
95-49-8	2-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-82-8	Isopropylbenzene	U	1.02	ug/kg	0.305	1.02
108-67-8	1,3,5-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
106-43-4	4-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-06-6	tert-Butylbenzene	U	1.02	ug/kg	0.305	1.02
95-63-6	1,2,4-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
135-98-8	sec-Butylbenzene	U	1.02	ug/kg	0.305	1.02
99-87-6	4-Isopropyltoluene	U	1.02	ug/kg	0.305	1.02
541-73-1	1,3-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
106-46-7	1,4-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
104-51-8	n-Butylbenzene	U	1.02	ug/kg	0.305	1.02
96-12-8	1,2-Dibromo-3-chloropropane	U	1.02	ug/kg	0.305	1.02
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.08	ug/kg	1.62	5.08
630-20-6	1,1,1,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
95-50-1	1,2-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
66-25-1	Hexanal	12.99	6.42	ug/kg	91	NJ
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	68.6	ug/kg	90	NJ

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-666

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201985624	LCS for batch 928603	117	104	103
1201985625	LCS for batch 928603	103	100	97
1201985620	MB for batch 928603	118	116	116
241819001	RE03-09-14115	106	99	106
241819002	RE03-09-14113	109	106	111
241819003	RE03-09-14125	106	99	108
241819004	RE03-09-14123	107	99	104
241819005	RE03-09-14114	99	91	96
241819006	RE03-09-14126	107	102	114
241819007	RE03-09-14117	98	95	108
1201985626	LCS for batch 928603	109	90	91
1201985627	LCS for batch 928603	101	94	97
1201985621	MB for batch 928603	99	95	100
241819008	RE03-09-14121	93	92	104
241819009	RE03-09-14129	97	90	93
241819010	RE03-09-14120	94	90	93
241819011	RE03-09-14116	93	90	99
241819012	RE03-09-14111	99	95	104
241819013	RE03-09-14119	101	95	106
241819014	RE03-09-14110	106	96	104
241819015	RE03-09-14127	102	92	104
241819017	RE03-09-14122	100	97	106
241819018	RE03-09-14124	102	94	106
241819019	RE03-09-14112	107	103	122

DCED4 = 1,2-Dichloroethane-d4 (68%-131%)
TOL = Toluene-d8 (75%-129%)
BFB = Bromofluorobenzene (68%-133%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Volatile

Surrogate Recovery Report

SDG Number: 10-666

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
241819020	RE03-09-14128	103	96	105
1201985622	RE03-09-14115PS	109	88	98
1201985623	RE03-09-14115PSD	117	97	104
1201989830	LCS for batch 928603	113	93	95
1201989831	LCS for batch 928603	98	90	90
1201989829	MB for batch 928603	104	97	98
241819016	RE03-09-14118	106	102	104

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115PS
Lab Sample ID: 1201985622
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/04/2009 03:39
Prep Batch ID: 928603
Batch ID: 928605
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	40.8	82	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	36.9	74	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	38.6	77	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	38.7	77	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	40.7	81	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	43.0	86	51-151
67-64-1	PS	Acetone	250	1.79	J	236	94	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	42.4	85	61-125
74-88-4	PS	Iodomethane	250	0.00	U	186	75	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	37.9	76	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	214	85	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	42.4	85	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	43.1	86	62-125
78-93-3	PS	2-Butanone	250	0.00	U	227	91	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	41.9	84	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	44.0	88	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	41.6	83	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	39.3	79	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	46.0	92	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	43.1	86	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	45.3	91	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	42.6	85	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115PS
Lab Sample ID: 1201985622
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/04/2009 03:39
Prep Batch ID: 928603
Batch ID: 928605
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	39.7	79	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	43.3	87	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	41.3	83	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	42.1	84	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	41.2	82	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	212	85	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	40.4	81	54-133
108-88-3	PS	Toluene	50.0	0.00	U	38.0	76	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	39.6	79	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	40.1	80	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	185	74	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	39.8	80	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	35.6	71	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	40.7	81	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	41.1	82	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	38.9	78	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	39.4	79	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	76.8	77	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	38.4	77	52-127
100-42-5	PS	Styrene	50.0	0.00	U	37.9	76	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	39.9	80	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	43.3	87	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115PS
Lab Sample ID: 1201985622
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/04/2009 03:39
Prep Batch ID: 928603
Batch ID: 928605
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	45.9	92	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	37.9	76	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	41.9	84	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	40.2	80	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	42.0	84	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	39.9	80	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	40.9	82	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	40.6	81	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	39.5	79	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	40.7	81	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	39.7	79	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	37.7	75	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	37.0	74	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	39.6	79	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	44.7	89	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	39.2	78	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	37.5	75	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115PSD
Lab Sample ID: 1201985623
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/04/2009 04:07
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	36.5	73	25-149	11	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	29.1	58	39-140	24	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	34.6	69	47-129	11	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	35.2	70	31-135	9	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	34.1	68	53-128	18	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	39.7	79	51-151	8	0-25
67-64-1	PSD	Acetone	250	1.79	J	248	98	21-153	5	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	35.4	71	61-125	18	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	177	71	53-142	5	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	33.8	68	59-136	11	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	177	71	46-129	19	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	39.3	79	56-126	8	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	41.5	83	62-125	4	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	249	100	26-152	9	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	41.3	83	60-130	1	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	50.0	100	55-135	13	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	40.9	82	60-127	2	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	40.3	81	61-131	3	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	45.2	90	59-131	2	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	40.8	82	57-128	5	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	42.8	86	58-136	6	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	43.3	87	58-126	2	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115PSD
Lab Sample ID: 1201985623
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/04/2009 04:07
Prep Batch ID: 928603
Batch ID: 928605
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	38.3	77	56-123	4	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	41.1	82	51-137	5	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	41.4	83	60-126	0	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	42.0	84	55-138	0	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	43.2	86	60-132	5	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	235	94	58-136	10	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	40.4	81	54-133	0	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	37.2	74	52-128	2	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	40.2	80	53-137	1	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	42.1	84	59-130	5	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	195	78	31-148	5	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	41.8	84	57-127	5	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	34.5	69	51-128	3	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	41.4	83	59-139	2	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	43.3	87	57-133	5	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	37.8	76	53-122	3	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	37.9	76	51-125	4	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	74.5	75	50-126	3	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	37.0	74	52-127	3	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	36.8	74	49-135	3	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	43.1	86	57-149	8	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	46.4	93	63-127	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115PSD
Lab Sample ID: 1201985623
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/04/2009 04:07
Prep Batch ID: 928603
Batch ID: 928605
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	49.6	99	57-149	8	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	38.1	76	49-131	1	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	40.1	80	40-136	5	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	40.4	81	44-135	0	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	41.0	82	44-140	2	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	39.7	79	42-140	1	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	39.6	79	44-132	3	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	39.8	80	42-142	2	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	39.1	78	43-137	1	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	40.3	81	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	38.7	77	38-145	2	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	37.9	76	43-129	0	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	37.1	74	44-125	0	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	38.5	77	36-141	3	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	47.9	96	47-151	7	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	39.0	78	59-131	0	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	38.8	78	43-129	3	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201985624
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/02/2009 17:47
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	38.9	78	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	40.5	81	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	45.8	92	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	47.0	94	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	48.8	98	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	52.0	104	67-151
67-64-1	LCS	Acetone	250	0.0	231	92	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	51.4	103	70-125
74-88-4	LCS	Iodomethane	250	0.0	250	100	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	50.6	101	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	261	104	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	54.2	108	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	53.9	108	75-120
78-93-3	LCS	2-Butanone	250	0.0	242	97	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	52.9	106	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	57.1	114	74-135
67-66-3	LCS	Chloroform	50.0	0.0	52.9	106	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	51.7	103	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	57.8	116	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	58.1	116	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	60.2	120	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	51.1	102	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201985624
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/02/2009 17:47
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	52.4	105	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	55.9	112	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	52.4	105	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	53.0	106	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	51.6	103	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	264	106	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	53.7	107	80-125
108-88-3	LCS	Toluene	50.0	0.0	51.7	103	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	52.7	105	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	50.9	102	76-120
591-78-6	LCS	2-Hexanone	250	0.0	239	96	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	49.4	99	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	55.1	110	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	53.8	108	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	52.0	104	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	52.4	105	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	51.7	103	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	105	105	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	51.9	104	74-120
100-42-5	LCS	Styrene	50.0	0.0	51.4	103	76-125
75-25-2	LCS	Bromoform	50.0	0.0	55.7	111	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	55.3	111	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 928603
Matrix: SOIL
Lab Sample ID: 1201985624
Instrument: VOA4.I
Analysis Date: 12/02/2009 17:47
Dilution: 1
Analyst: ACJ
Prep Batch ID: 928603
Purge Vol: 5 mL
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	53.0	106	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	51.0	102	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	51.0	102	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	48.7	97	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	51.1	102	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	50.2	100	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	51.2	102	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	51.5	103	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	50.2	100	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	51.8	104	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	52.1	104	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	51.9	104	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	52.0	104	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	52.8	106	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	61.9	124	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	52.1	104	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	53.4	107	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201985625
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/02/2009 18:41
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	229	92	52-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201985626
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 17:53
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	48.7	97	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	41.0	82	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	45.8	92	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	46.5	93	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	47.7	95	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	53.1	106	67-151
67-64-1	LCS	Acetone	250	0.0	225	90	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	51.4	103	70-125
74-88-4	LCS	Iodomethane	250	0.0	236	94	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	46.5	93	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	255	102	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	50.9	102	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	50.6	101	75-120
78-93-3	LCS	2-Butanone	250	0.0	231	92	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	49.5	99	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	54.0	108	74-135
67-66-3	LCS	Chloroform	50.0	0.0	49.6	99	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	48.0	96	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	55.3	111	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	54.5	109	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	56.4	113	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	48.7	97	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201985626
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 17:53
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	48.5	97	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	51.8	104	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	48.9	98	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	50.2	100	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	48.0	96	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	224	90	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	50.0	100	80-125
108-88-3	LCS	Toluene	50.0	0.0	45.3	91	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	46.3	93	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	44.3	89	76-120
591-78-6	LCS	2-Hexanone	250	0.0	197	79	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	43.9	88	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	46.7	93	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	46.2	92	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	45.8	92	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	46.0	92	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	45.7	91	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	91.2	91	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	45.1	90	74-120
100-42-5	LCS	Styrene	50.0	0.0	44.8	90	76-125
75-25-2	LCS	Bromoform	50.0	0.0	44.4	89	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	44.4	89	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201985626
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/03/2009 17:53
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	44.0	88	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	42.3	85	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	45.0	90	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	42.9	86	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	45.1	90	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	43.9	88	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	44.9	90	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	44.7	89	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	43.5	87	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	45.4	91	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	45.3	91	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	43.9	88	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	43.5	87	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	46.4	93	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	44.7	89	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	45.2	90	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	42.9	86	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **10-666**
Client ID: **LCS for batch 928603**
Lab Sample ID: **1201985627**
Instrument: **VOA4.I**
Analyst: **ACJ**
Purge Vol: **5 mL**

Sample Type: **Laboratory Control Sample**
Matrix: **SOIL**
Analysis Date: **12/03/2009 18:48**
Dilution: **1**
Prep Batch ID: **928603**
Batch ID: **928605**

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	216	86	52-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201989830
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/07/2009 14:37
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	57.2	114	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	49.6	99	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	54.0	108	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	52.2	104	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	56.1	112	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	60.4	121	67-151
67-64-1	LCS	Acetone	250	0.0	284	114	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	58.9	118	70-125
74-88-4	LCS	Iodomethane	250	0.0	272	109	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	54.6	109	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	294	118	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	57.9	116	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	57.7	115	75-120
78-93-3	LCS	2-Butanone	250	0.0	289	116	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	56.4	113	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	60.9	122	74-135
67-66-3	LCS	Chloroform	50.0	0.0	55.8	112	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	54.8	110	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	61.5	123	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	61.4	123	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	64.6	129	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	54.7	109	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201989830
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/07/2009 14:37
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	54.5	109	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	58.8	118	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	55.3	111	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	56.8	114	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	54.8	110	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	267	107	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	56.5	113	80-125
108-88-3	LCS	Toluene	50.0	0.0	51.8	104	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.1	106	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	50.6	101	76-120
591-78-6	LCS	2-Hexanone	250	0.0	253	101	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	49.8	100	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	53.6	107	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	53.8	108	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	52.5	105	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	53.4	107	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	52.5	105	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	106	106	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	52.6	105	74-120
100-42-5	LCS	Styrene	50.0	0.0	52.7	105	76-125
75-25-2	LCS	Bromoform	50.0	0.0	53.3	107	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	51.5	103	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201989830
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/07/2009 14:37
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	51.5	103	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	50.4	101	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	52.1	104	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	50.0	100	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	52.3	105	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	51.3	103	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	51.5	103	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	52.0	104	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	50.6	101	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	51.8	104	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	51.7	103	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	50.3	101	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	50.0	100	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	52.2	104	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	52.9	106	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	52.9	106	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	49.4	99	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928603
Lab Sample ID: 1201989831
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/07/2009 15:32
Dilution: 1
Prep Batch ID: 928603
Batch ID: 928605

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	296	118	52-139

Method Blank Summary

SDG Number:	10-666	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928603	Instrument ID:	VOA4.I	Data File:	4n307BA.d
Lab Sample ID:	1201985620	Prep Date:	12/02/2009 16:30	Analyzed:	12/02/09 19:36
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928603	1201985624	4n303LA.d	12/02/09	1747
02 LCS for batch 928603	1201985625	4n305SA.d	12/02/09	1841
03 RE03-09-14115	241819001	4n317.d	12/03/09	0103
04 RE03-09-14113	241819002	4n318.d	12/03/09	0131
05 RE03-09-14125	241819003	4n319.d	12/03/09	0158
06 RE03-09-14123	241819004	4n320.d	12/03/09	0226
07 RE03-09-14114	241819005	4n321.d	12/03/09	0254
08 RE03-09-14126	241819006	4n322.d	12/03/09	0321
09 RE03-09-14117	241819007	4n323.d	12/03/09	0349

Method Blank Summary

SDG Number:	10-666	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928603	Instrument ID:	VOA4.I	Data File:	4n406bl.d
Lab Sample ID:	1201985621	Prep Date:	12/03/2009 16:30	Analyzed:	12/03/09 19:16
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928603	1201985626	4n403ll.d	12/03/09	1753
02 LCS for batch 928603	1201985627	4n405sl.d	12/03/09	1848
03 RE03-09-14121	241819008	4n408.d	12/03/09	2137
04 RE03-09-14129	241819009	4n409.d	12/03/09	2204
05 RE03-09-14120	241819010	4n410.d	12/03/09	2232
06 RE03-09-14116	241819011	4n411.d	12/03/09	2300
07 RE03-09-14111	241819012	4n412.d	12/03/09	2328
08 RE03-09-14119	241819013	4n413.d	12/03/09	2356
09 RE03-09-14110	241819014	4n414.d	12/04/09	0024
10 RE03-09-14127	241819015	4n415.d	12/04/09	0052
11 RE03-09-14122	241819017	4n417.d	12/04/09	0148
12 RE03-09-14124	241819018	4n418.d	12/04/09	0215
13 RE03-09-14112	241819019	4n419.d	12/04/09	0243
14 RE03-09-14128	241819020	4n420.d	12/04/09	0311
15 RE03-09-14115PS	1201985622	4n421.d	12/04/09	0339
16 RE03-09-14115PSD	1201985623	4n422.d	12/04/09	0407

Method Blank Summary

SDG Number:	10-666	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928603	Instrument ID:	VOA4.I	Data File:	4o106bl.d
Lab Sample ID:	1201989829	Prep Date:	12/07/2009 13:30	Analyzed:	12/07/09 16:00
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928603	1201989830	4o103ll.d	12/07/09	1437
02 LCS for batch 928603	1201989831	4o105sl.d	12/07/09	1532
03 RE03-09-14118	241819016	4o108.d	12/07/09	1654

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: VOA4.I **Injection Date/Time:** 02-DEC-09 16:51

Column Description: DB-624 **Lab File ID** /120209v4/4n301.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	98.1
175	5.0 -9.0% of mass 174	7
176	95.0 - 101.0% of mass 174	97.8
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091202-01	/120209v4/4n302.d	02-DEC-09 17:19
LCS	1201985624	/120209v4/4n303LA.d	02-DEC-09 17:47
VSTD250S	UVM091118-08A	/120209v4/4n304.d	02-DEC-09 18:14
LCS	1201985625	/120209v4/4n305SA.d	02-DEC-09 18:41
BLANK	1201985620	/120209v4/4n307BA.d	02-DEC-09 19:36
RE03-09-14115	241819001	/120209v4/4n317.d	03-DEC-09 01:03
RE03-09-14113	241819002	/120209v4/4n318.d	03-DEC-09 01:31
RE03-09-14125	241819003	/120209v4/4n319.d	03-DEC-09 01:58
RE03-09-14123	241819004	/120209v4/4n320.d	03-DEC-09 02:26
RE03-09-14114	241819005	/120209v4/4n321.d	03-DEC-09 02:54
RE03-09-14126	241819006	/120209v4/4n322.d	03-DEC-09 03:21
RE03-09-14117	241819007	/120209v4/4n323.d	03-DEC-09 03:49

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: VOA4.I **Injection Date/Time:** 03-DEC-09 16:57

Column Description: DB-624 **Lab File ID** /120309v4/4n401.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.6
75	30.0 - 60.0% of mass 95	46
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	90.3
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	95.8
177	5.0 - 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091203-01	/120309v4/4n402.d	03-DEC-09 17:25
LCS	1201985626	/120309v4/4n403ll.d	03-DEC-09 17:53
VSTD250S	UVM091118-08A	/120309v4/4n404.d	03-DEC-09 18:20
LCS	1201985627	/120309v4/4n405sl.d	03-DEC-09 18:48
BLANK	1201985621	/120309v4/4n406bl.d	03-DEC-09 19:16
RE03-09-14121	241819008	/120309v4/4n408.d	03-DEC-09 21:37
RE03-09-14129	241819009	/120309v4/4n409.d	03-DEC-09 22:04
RE03-09-14120	241819010	/120309v4/4n410.d	03-DEC-09 22:32
RE03-09-14116	241819011	/120309v4/4n411.d	03-DEC-09 23:00
RE03-09-14111	241819012	/120309v4/4n412.d	03-DEC-09 23:28
RE03-09-14119	241819013	/120309v4/4n413.d	03-DEC-09 23:56
RE03-09-14110	241819014	/120309v4/4n414.d	04-DEC-09 00:24
RE03-09-14127	241819015	/120309v4/4n415.d	04-DEC-09 00:52
RE03-09-14122	241819017	/120309v4/4n417.d	04-DEC-09 01:48
RE03-09-14124	241819018	/120309v4/4n418.d	04-DEC-09 02:15
RE03-09-14112	241819019	/120309v4/4n419.d	04-DEC-09 02:43
RE03-09-14128	241819020	/120309v4/4n420.d	04-DEC-09 03:11
RE03-09-14115MS	1201985622	/120309v4/4n421.d	04-DEC-09 03:39
RE03-09-14115MSD	1201985623	/120309v4/4n422.d	04-DEC-09 04:07

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: VOA4.I **Injection Date/Time:** 07-DEC-09 13:43

Column Description: DB-624 **Lab File ID** /120709v4/4o101.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.7
75	30.0 - 60.0% of mass 95	46.3
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	91
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	98.5
177	5.0 - 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091207-01	/120709v4/4o102.d	07-DEC-09 14:10
LCS	1201989830	/120709v4/4o103ll.d	07-DEC-09 14:37
VSTD250S	W4VM091207-03	/120709v4/4o104.d	07-DEC-09 15:04
LCS	1201989831	/120709v4/4o105sl.d	07-DEC-09 15:32
BLANK	1201989829	/120709v4/4o106bl.d	07-DEC-09 16:00
RE03-09-14118	241819016	/120709v4/4o108.d	07-DEC-09 16:54

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: VOA4.I **Injection Date/Time:** 22-NOV-09 09:20

Column Description: DB-624 **Lab File ID** /112209v4/4I701.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	99.3
175	5.0 -9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W4VM091122-01	/112209v4/4I703.d	22-NOV-09 10:14
VSTD001	W4VM091122-02	/112209v4/4I704.d	22-NOV-09 10:41
VSTD002	W4VM091122-04	/112209v4/4I706.d	22-NOV-09 11:36
VSTD005	W4VM091122-05	/112209v4/4I707.d	22-NOV-09 12:04
VSTD010	W4VM091122-06	/112209v4/4I708.d	22-NOV-09 12:31
VSTD020	W4VM091122-07	/112209v4/4I709.d	22-NOV-09 12:59
VSTD050	W4VM091122-08	/112209v4/4I710.d	22-NOV-09 13:27
VSTD100	W4VM091122-09	/112209v4/4I711.d	22-NOV-09 13:54
VSTD005S	W4VM091122-10	/112209v4/4I713.d	22-NOV-09 14:48
VSTD010S	W4VM091122-11	/112209v4/4I714.d	22-NOV-09 15:16
VSTD025S	W4VM091122-12	/112209v4/4I715.d	22-NOV-09 15:43
VSTD050S	W4VM091122-13	/112209v4/4I716.d	22-NOV-09 16:10
VSTD100S	W4VM091122-14	/112209v4/4I717.d	22-NOV-09 16:37
VSTD250S	W4VM091122-15	/112209v4/4I718.d	22-NOV-09 17:04
VSTD500S	W4VM091122-16	/112209v4/4I719.d	22-NOV-09 17:32
SECOND SOURCE	W4VM091122-17	/112209v4/4I721.d	22-NOV-09 18:26
SHORT SECOND SOURCE	W4VM091122-19	/112209v4/4I723.d	22-NOV-09 19:21

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-666

STD Analysis Time: 02-DEC-09 17:19

Data File: 4n302.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1474109		10.6	1156709		13.8	821958		16.2
Upper Limit	2948218		11.1	2313418		14.3	1643916		16.7
Lower Limit	737055		10.1	578355		13.3	410979		15.7
Sample ID									
BLK01LCS	1648214		10.6	1276321		13.8	903046		16.2
BLK01SLCS	1716236		10.6	1330619		13.8	920803		16.2
BLK01	1445085		10.6	1077546		13.8	721157		16.2
RE03-09-14115	1550470		10.6	1146084		13.8	703278		16.2
RE03-09-14113	1533069		10.6	1139350		13.8	698813		16.2
RE03-09-14125	1552667		10.6	1138917		13.8	676115		16.2
RE03-09-14123	1470200		10.6	1085636		13.8	672826		16.2
RE03-09-14114	1637168		10.6	1225999		13.8	765256		16.2
RE03-09-14126	1530256		10.6	1121246		13.8	646162		16.2
RE03-09-14117	1512163		10.6	1094697		13.8	623241		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-666

STD Analysis Time: 03-DEC-09 17:25

Data File: 4n402.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1552389		10.6	1192298		13.8	809152		16.2
Upper Limit	3104778		11.1	2384596		14.3	1618304		16.7
Lower Limit	776195		10.1	596149		13.3	404576		15.7
Sample ID									
BLK02LCS	1608552		10.6	1318314		13.8	922188		16.2
BLK02SLCS	1615076		10.6	1266312		13.8	884280		16.2
BLK02	1635420		10.6	1241123		13.8	796243		16.2
RE03-09-14121	1709257		10.6	1234839		13.8	667084		16.2
RE03-09-14129	1592772		10.6	1218110		13.8	781089		16.2
RE03-09-14120	1720962		10.6	1285258		13.8	820056		16.2
RE03-09-14116	1678005		10.6	1249271		13.8	730169		16.2
RE03-09-14111	1635184		10.6	1225194		13.8	707185		16.2
RE03-09-14119	1469670		10.6	1098363		13.8	645534		16.2
RE03-09-14110	1649572		10.6	1255872		13.8	777968		16.2
RE03-09-14127	1593533		10.6	1213477		13.8	729485		16.2
RE03-09-14122	1502717		10.6	1101764		13.8	632801		16.2
RE03-09-14124	1516570		10.6	1147891		13.8	682407		16.2
RE03-09-14112	1461678		10.6	1083459		13.8	587165		16.2
RE03-09-14128	1544886		10.6	1165768		13.8	692924		16.2
RE03-09-14115MS	1459722		10.6	1155321		13.8	751633		16.2
RE03-09-14115MSD	957276		10.6	747824		13.8	470963		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-666

STD Analysis Time: 07-DEC-09 14:10

Data File: 4o102.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1591838		10.6	1309716		13.8	927375		16.2
Upper Limit	3183676		11.1	2619432		14.3	1854750		16.7
Lower Limit	795919		10.1	654858		13.3	463688		15.7
Sample ID									
BLK03LCS	1549246		10.6	1256200		13.8	894624		16.2
BLK03SLCS	1614791		10.6	1278237		13.8	905586		16.2
BLK03	1550133		10.6	1195483		13.8	775654		16.2
RE03-09-14118	1522974		10.6	1151960		13.8	733671		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819014**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14110**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n414.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	J	2.23	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819014**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14110**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:06**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n414.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	166	ug/kg	90	NJ
	Unknown Siloxane	16.79	11.2	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n414.d
Lab Smp Id: 241819014 Client Smp ID: RE03-09-14110
Inj Date : 04-DEC-2009 00:24
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819014|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.64280	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1649572	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1255872	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	777968	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.265	(0.967)	343780	53.0604	55.1
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1051017	48.0489	49.9
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	469483	52.1144	54.1
10 Acetone	43	7.364	7.363	(0.693)	14419	2.15132	2.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n414.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819014 SampleType: SAMPLE
Injection Date: 04-DEC-2009 00:24
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819014|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	14419	7.36	7.36	80-120	100	( )
58	3090	7.38	7.36	1- 61	21	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	22206	10.61	10.34	80-120	100	(T)
64	4128	10.62	10.34	2- 62	19	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8860	12.25	12.02	80-120	100	(T)
43	5258	12.25	12.02	230-290	59	(QT)
100	720293	12.25	12.02	8- 68	8129	(QT)
65 Styrene			CAS#: 100-42-5			
104	17883	14.82	14.40	80-120	100	(T)
78	198	14.83	14.40	22- 82	1	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	14511	14.82	14.76	80-120	100	(T)
120	7196	14.83	14.76	0- 57	50	(T)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	15187	14.82	15.11	80-120	100	(T)
75	42560	14.82	15.11	254-314	280	(T)
77	2972	14.82	15.11	62-122	20	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n414.d
Lab Smp Id: 241819014 Client Smp ID: RE03-09-14110
Inj Date : 04-DEC-2009 00:24
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819014|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.64280	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3819705	50.000
* 86 1,4-Dichlorobenzene-d4	16.180	4387406	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-					CAS #: 556-67-2		
14.826	12186075	159.515886	166	90	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	========	======
Unknown Siloxane					CAS #:		
16.789	947317	10.7958635	11.2	0		0	86

Data File: /chem/VOA4.i/120309v4/4n414.d
Date : 04-DEC-2009 00:24
Client ID: RE03-09-14110
Sample Info: |241819014|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

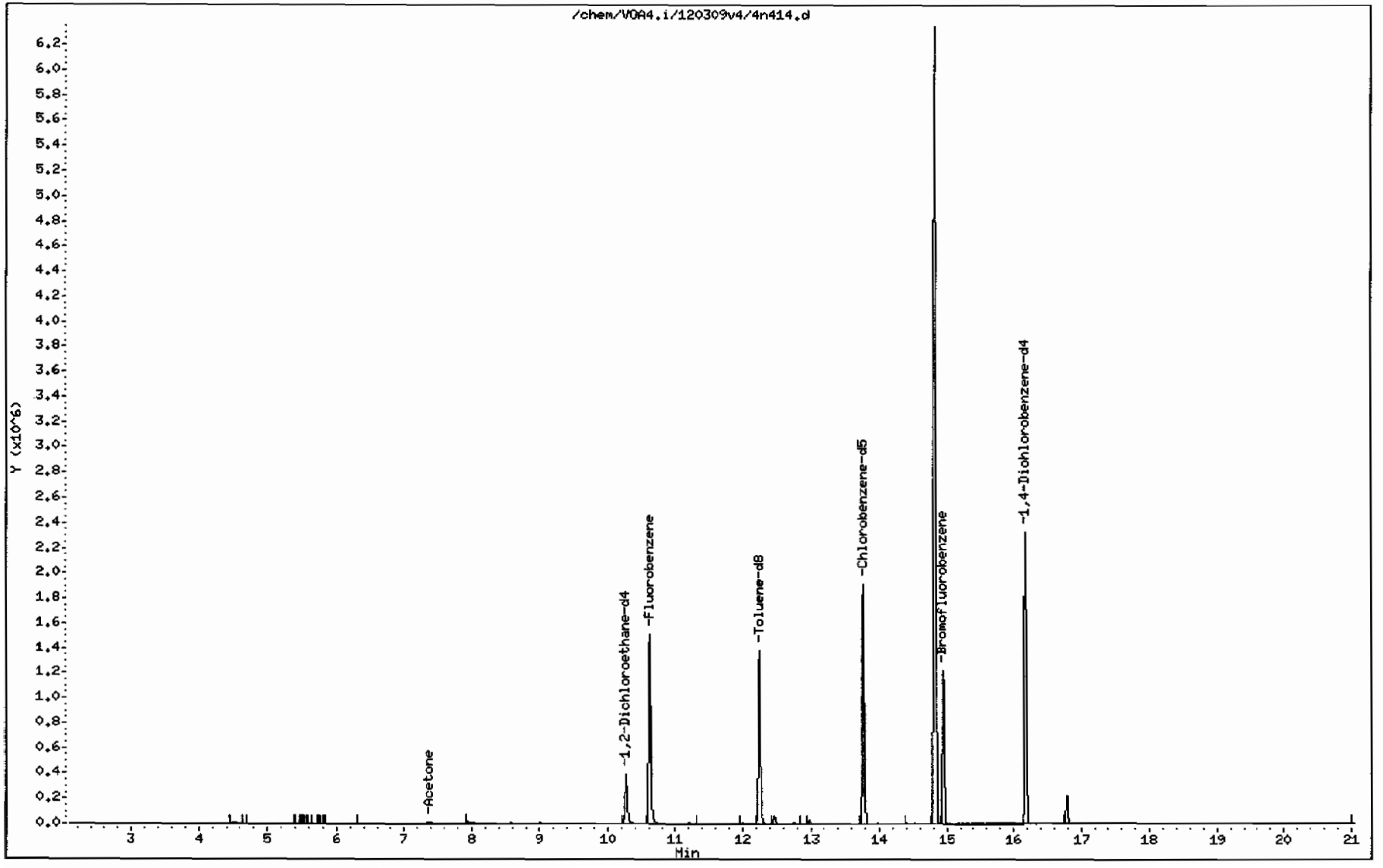

Data File: /chem/VOA4.i/120309v4/4n414.d

Date : 04-DEC-2009 00:24

Client ID: RE03-09-14110

Instrument: VOA4.i

Sample Info: |24181901419286051|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.2 ug/Kg

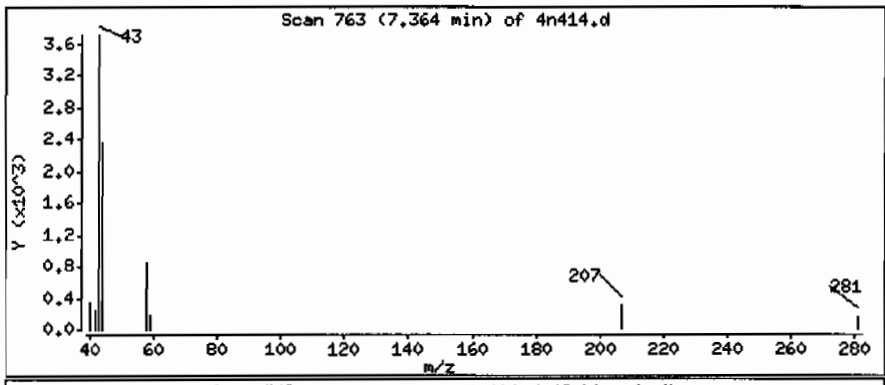

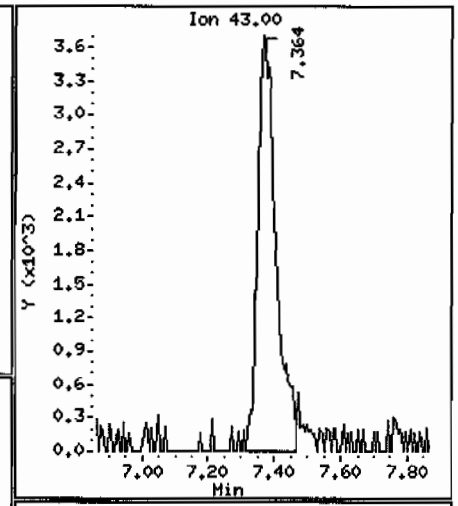

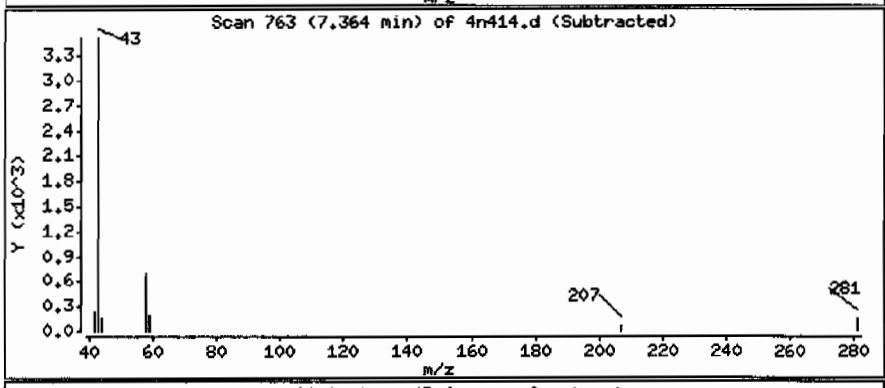

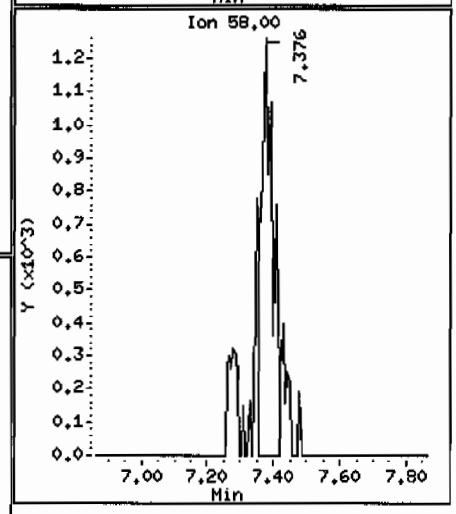

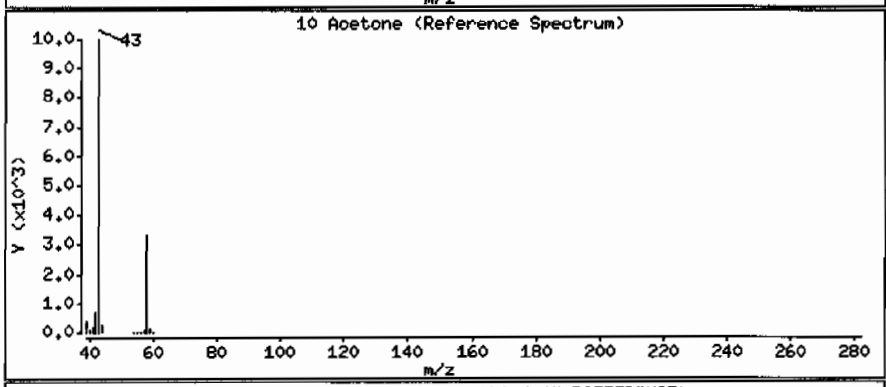

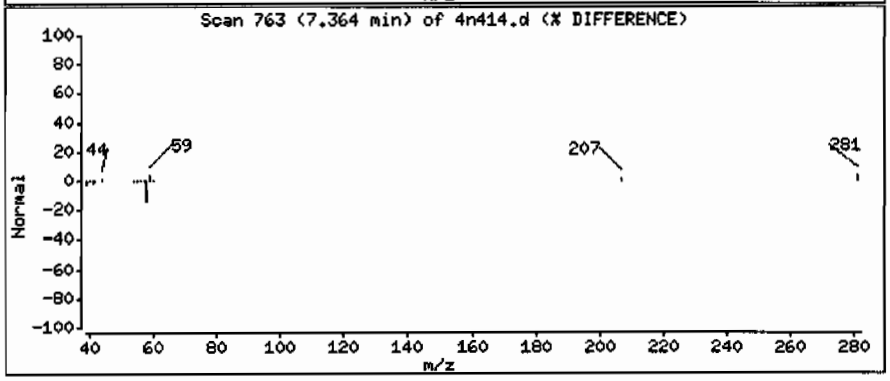

Data File: /chem/VOA4.i/120309v4/4n414.d

Date : 04-DEC-2009 00:24

Client ID: RE03-09-14110

Instrument: VOA4.i

Sample Info: |2418190141928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	87	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	53	C21H15N	281

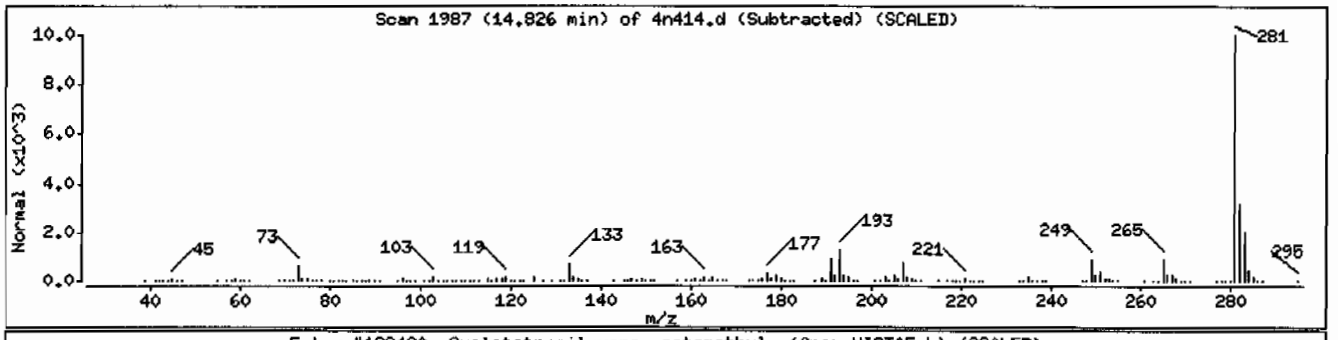

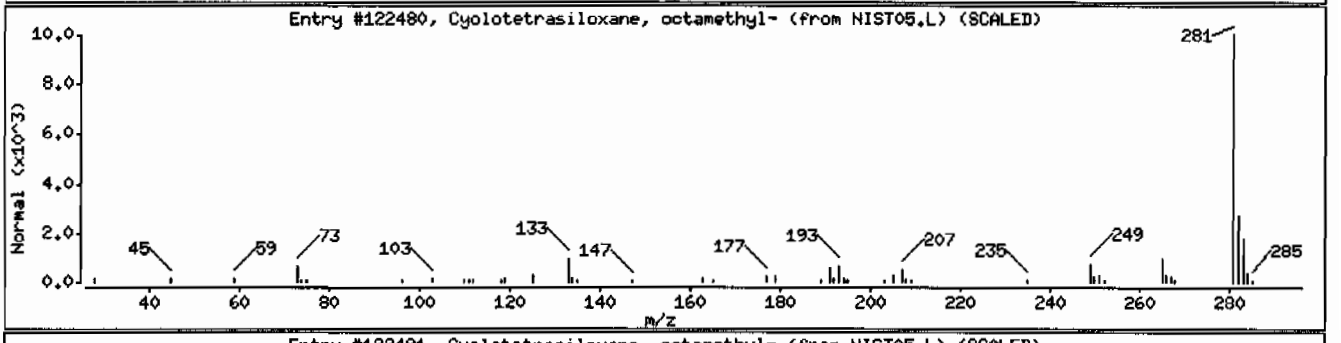

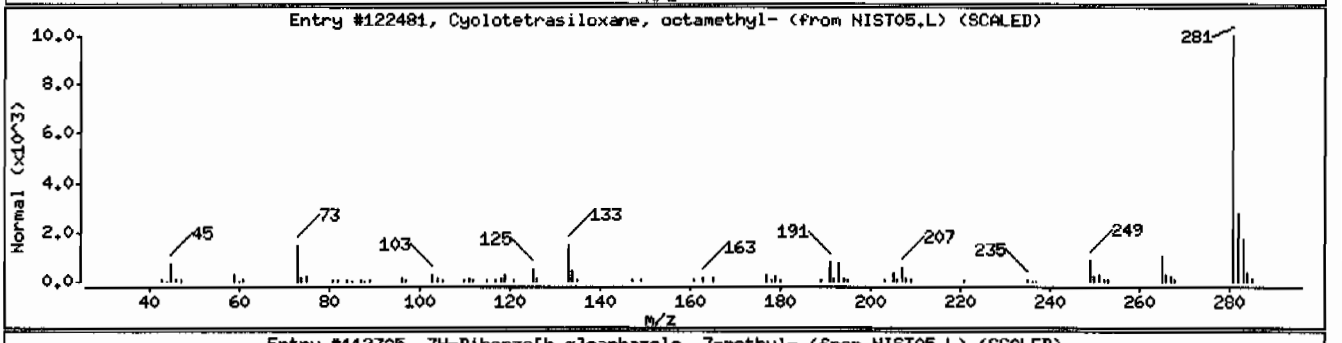

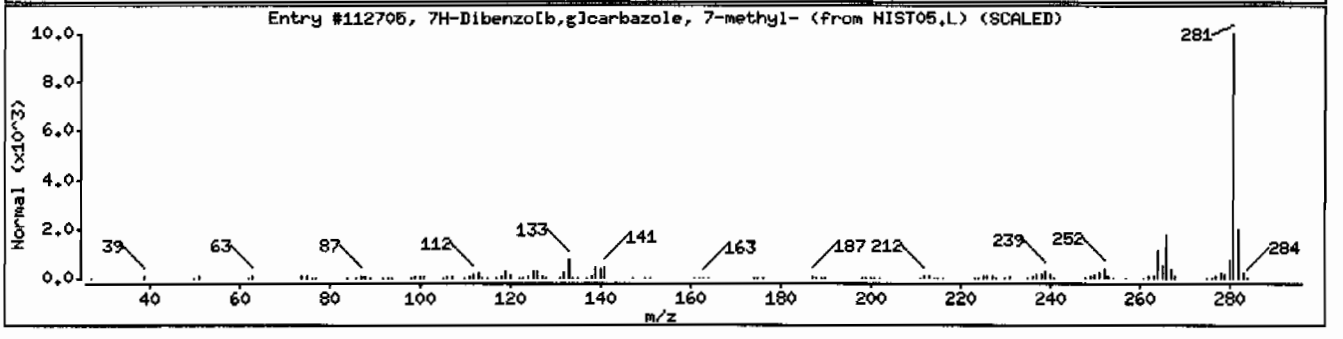

Data File: /chem/VOA4.i/120309v4/4n414.d

Date : 04-DEC-2009 00:24

Client ID: RE03-09-14110

Instrument: VOA4.i

Sample Info: |2418190141928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	72	C13H22O3Si2	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	72	C13H22O3Si2	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	43	C16H17N3O	267

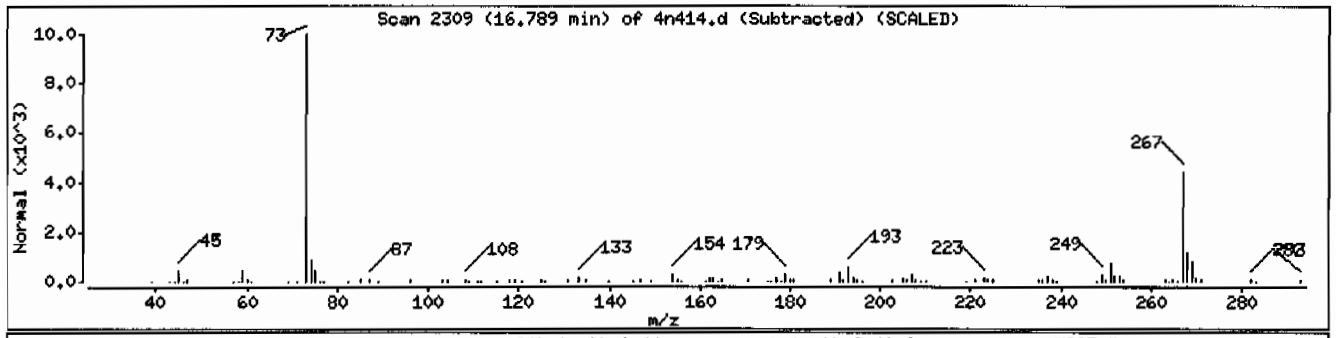

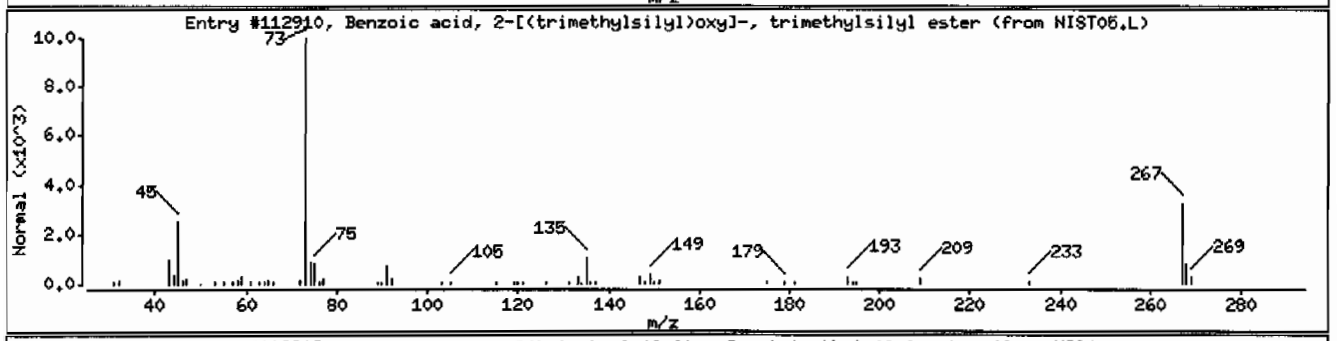

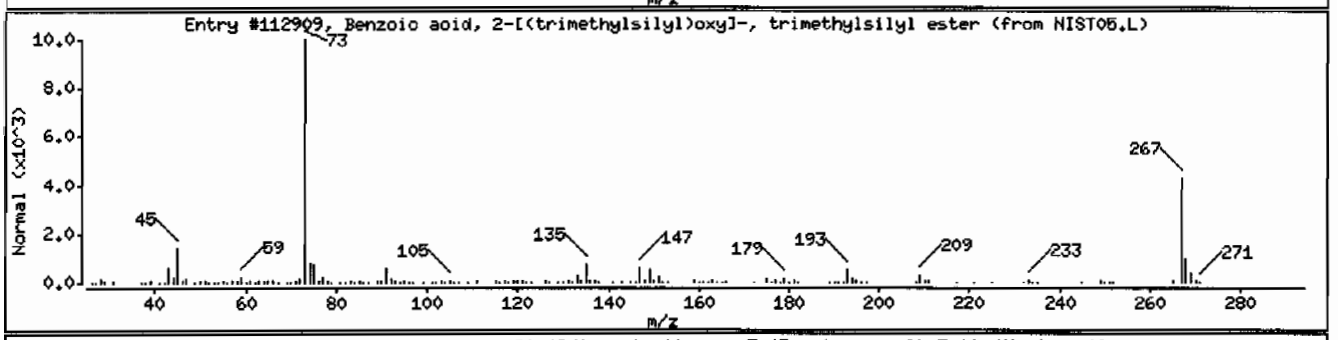

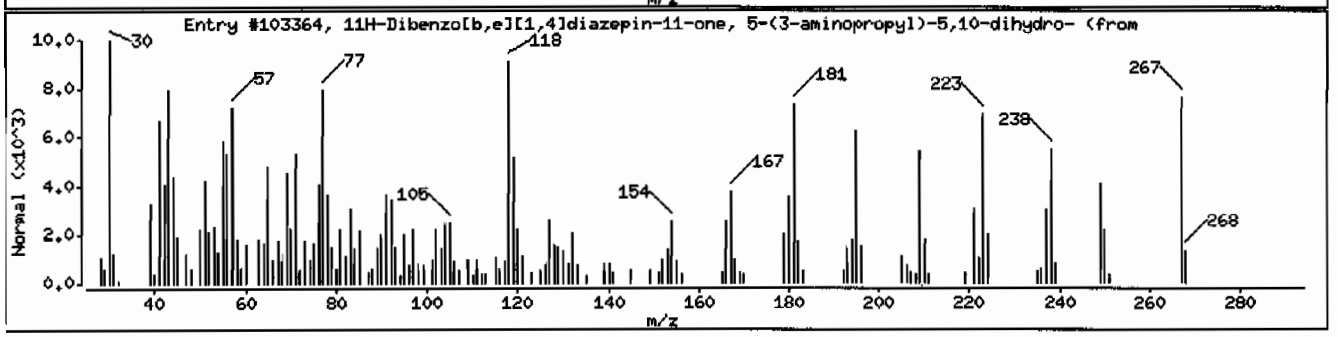

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819012	Date Received:	11/25/2009 09:10	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14111	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928605	Inst:	VOA4.I	Dilution:	1
Run Date:	12/03/2009 23:28	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/03/2009 21:04	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n412.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	U	5.70	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.82	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819012**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14111**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:04**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n412.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.70	ug/kg	1.82	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	62.9	ug/kg	90	NJ
	Unknown Siloxane	16.78	11.5	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n412.d
Lab Smp Id: 241819012 Client Smp ID: RE03-09-14111
Inj Date : 03-DEC-2009 23:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819012|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.29440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1635184	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1225194	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	707185	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	317071	49.3686	56.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1012576	47.4506	54.1
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	427237	52.1718	59.5

ION RATIO REPORT

VOA REPORT

Data file: 4n412.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819012 SampleType: SAMPLE
Injection Date: 03-DEC-2009 23:28
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819012|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	21389	10.62	10.34	80-120	100	(T)
64	4177	10.61	10.34	2- 62	20	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8034	12.26	12.02	80-120	100	(T)
43	4428	12.25	12.02	230-290	55	(QT)
100	695824	12.25	12.02	8- 68	8660	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	5941	14.82	15.11	80-120	100	(T)
75	14744	14.83	15.11	254-314	248	(QT)
77	2463	14.79	15.11	62-122	41	(QT)
89 n-Butylbenzene				CAS#: 104-51-8		
91	14808	16.77	16.50	80-120	100	(T)
92	3229	16.77	16.50	26- 86	22	(QT)
134	1091	16.78	16.51	0- 58	7	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n412.d
Lab Smp Id: 241819012 Client Smp ID: RE03-09-14111
Inj Date : 03-DEC-2009 23:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819012|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.29440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.770	3626229	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	4104993	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	4003869	55.2070536	62.9	90	NIST05.L	122480	61

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
16.776	824860	10.0470275	11.4	0		0	86

Data File: /chem/VOA4.i/120309v4/4n412.d
Date : 03-DEC-2009 23:28
Client ID: RE03-09-14111
Sample Info: |2418190121928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

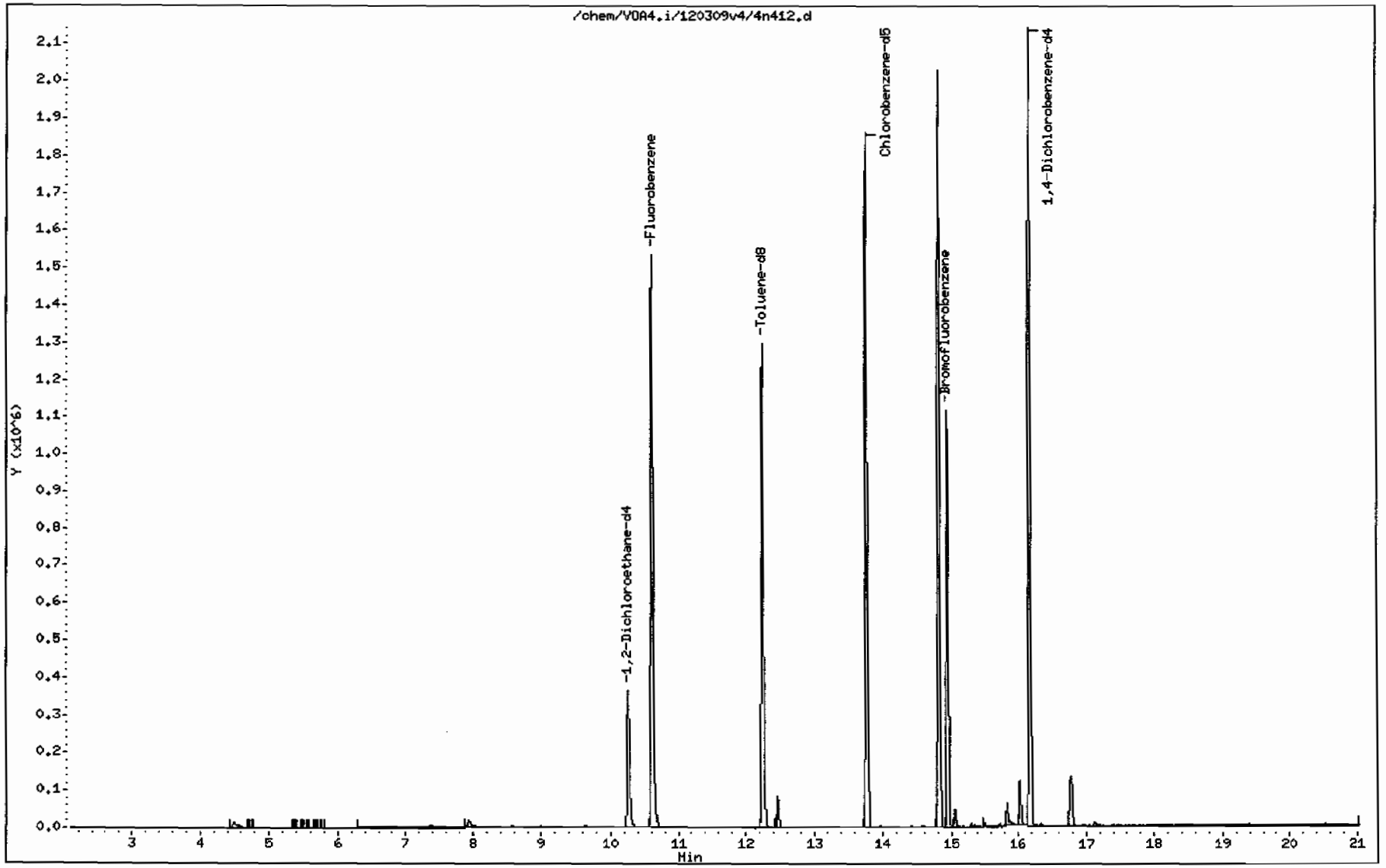

Data File: /chem/VOA4.i/120309v4/4n412.d

Date : 03-DEC-2009 23:28

Client ID: RE03-09-14111

Instrument: VOA4.i

Sample Info: |24181901219286051|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	64	C8H24O4Si4	296
Benzene, 1-phenyl-4-(2-cyano-2-phenyleth	27869-56-3	NIST05.L	112707	59	C21H15N	281

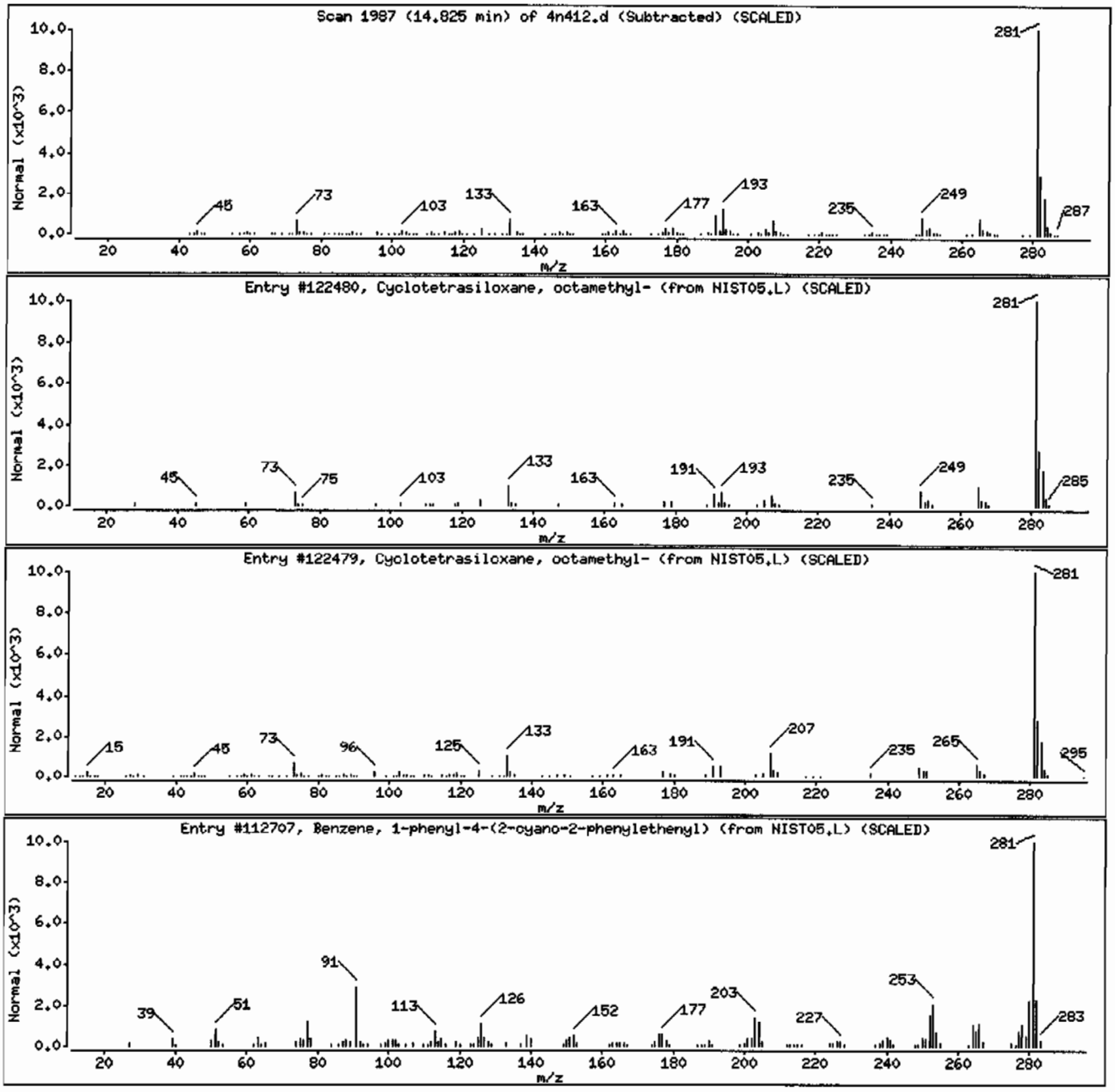

Data File: /chem/VOA4.i/120309v4/4n412.d

Date : 03-DEC-2009 23:28

Client ID: RE03-09-14111

Instrument: VOA4.i

Sample Info: |2418190121928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethy	554-61-0	NIST05.L	15322	83	C10H16	136
(+)-4-Carene	29050-33-7	NIST05.L	15169	78	C10H16	136
Cyclohexene, 4-methylene-1-(1-methylethy	99-84-3	NIST05.L	15324	60	C10H16	136

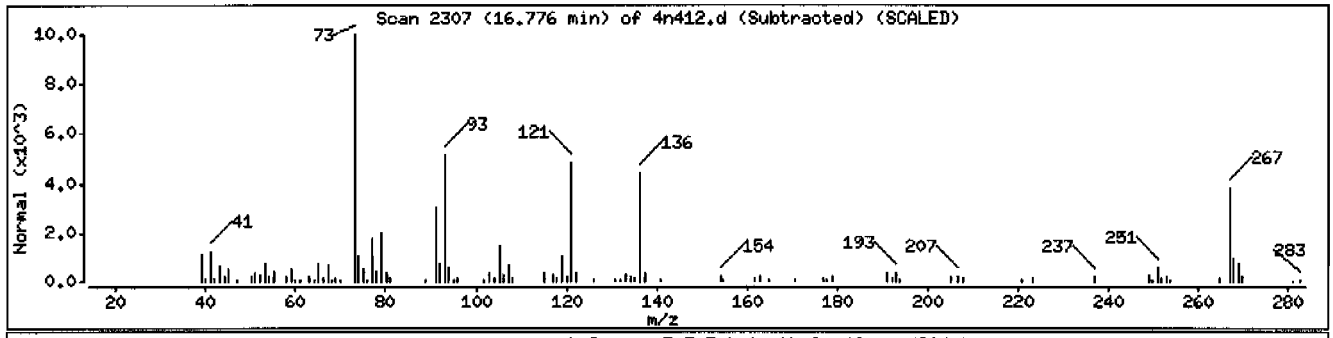

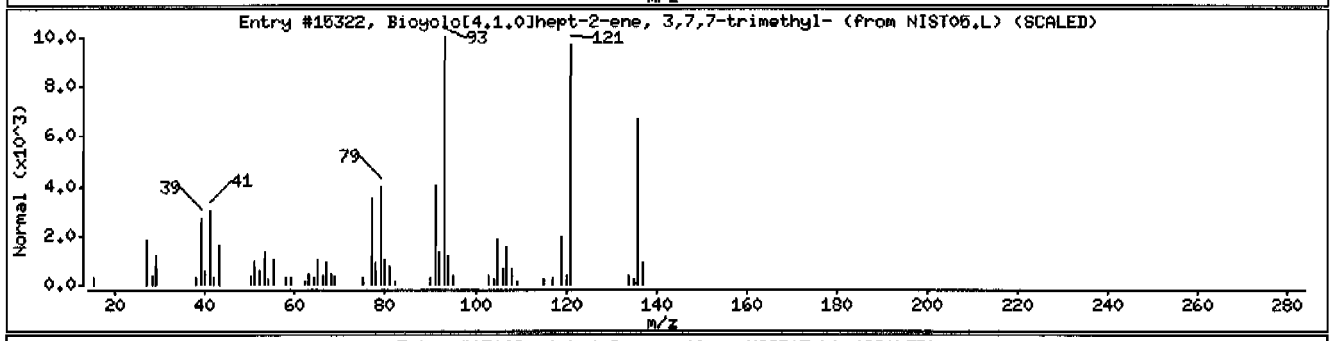

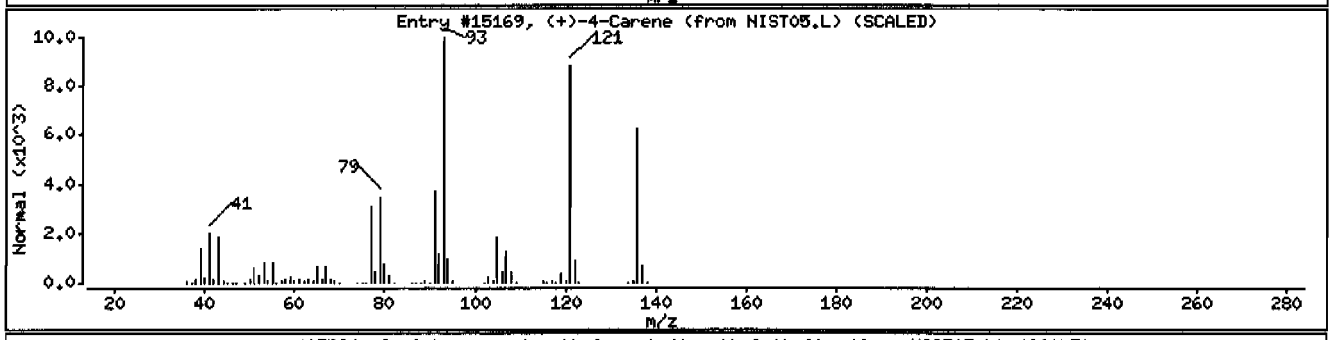

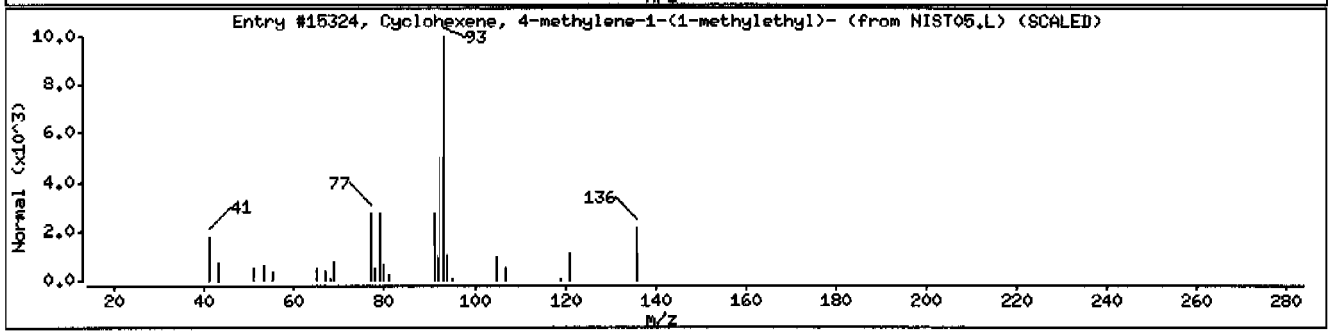

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:43**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n419.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.383	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	J	4.51	ug/kg	1.87	5.63
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.63	ug/kg	1.80	5.63
75-09-2	Methylene chloride	U	5.63	ug/kg	2.25	5.63
75-15-0	Carbon disulfide	U	5.63	ug/kg	1.41	5.63
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.63	ug/kg	1.69	5.63
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.371	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.371	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.63	ug/kg	1.41	5.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.63	ug/kg	1.69	5.63
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819019	**Date Received:**	11/25/2009 09:10	**%Moisture:**	11.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14112	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 02:43	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n419.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.63	ug/kg	1.80	5.63
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	95.9	ug/kg	90	NJ
	Unknown Siloxane	16.79	10	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n419.d
Lab Smp Id: 241819019 Client Smp ID: RE03-09-14112
Inj Date : 04-DEC-2009 02:43
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819019|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	11.14350	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1461678	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1083459	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	587165	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	307331	53.5323	60.2
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	973528	51.5887	58.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	414768	61.0021	68.6
10 Acetone	43	7.375	7.363	(0.695)	23807	4.00862	4.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n419.d
Report Date: 12/04/2009 16:06
Lab. ID: 241819019 SampleType: SAMPLE
Injection Date: 04-DEC-2009 02:43
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819019|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	23807	7.38	7.36	80-120	100	( )
58	6781	7.38	7.36	1- 61	28	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	19857	10.62	10.34	80-120	100	(T)
64	3664	10.62	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7448	12.25	12.02	80-120	100	(T)
43	4651	12.25	12.02	230-290	62	(QT)
100	665151	12.25	12.02	8- 68	8930	(QT)
65 Styrene			CAS#: 100-42-5			
104	9404	14.83	14.40	80-120	100	(T)
78	146	14.81	14.40	22- 82	2	(QT)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	7727	14.82	15.11	80-120	100	(T)
75	22056	14.83	15.11	254-314	285	(T)
77	2116	14.83	15.11	62-122	27	(QT)
89 n-Butylbenzene			CAS#: 104-51-8			
91	19966	16.16	16.50	80-120	100	(T)
92	4339	16.17	16.50	26- 86	22	(QT)
134	215	16.15	16.51	0- 58	1	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n419.d
Lab Smp Id: 241819019 Client Smp ID: RE03-09-14112
Inj Date : 04-DEC-2009 02:43
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819019|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	11.14350	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.770	3270523	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3495185	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-					CAS #: 556-67-2		
14.825	5575563	85.2396010	95.9	90	NIST05.L	122480	61

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
16.788	623026	8.91263859	10.0	0		0	86

Data File: /chem/VOA4.i/120309v4/4n419.d
Date : 04-DEC-2009 02:43
Client ID: RE03-09-14112
Sample Info: |241819019|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

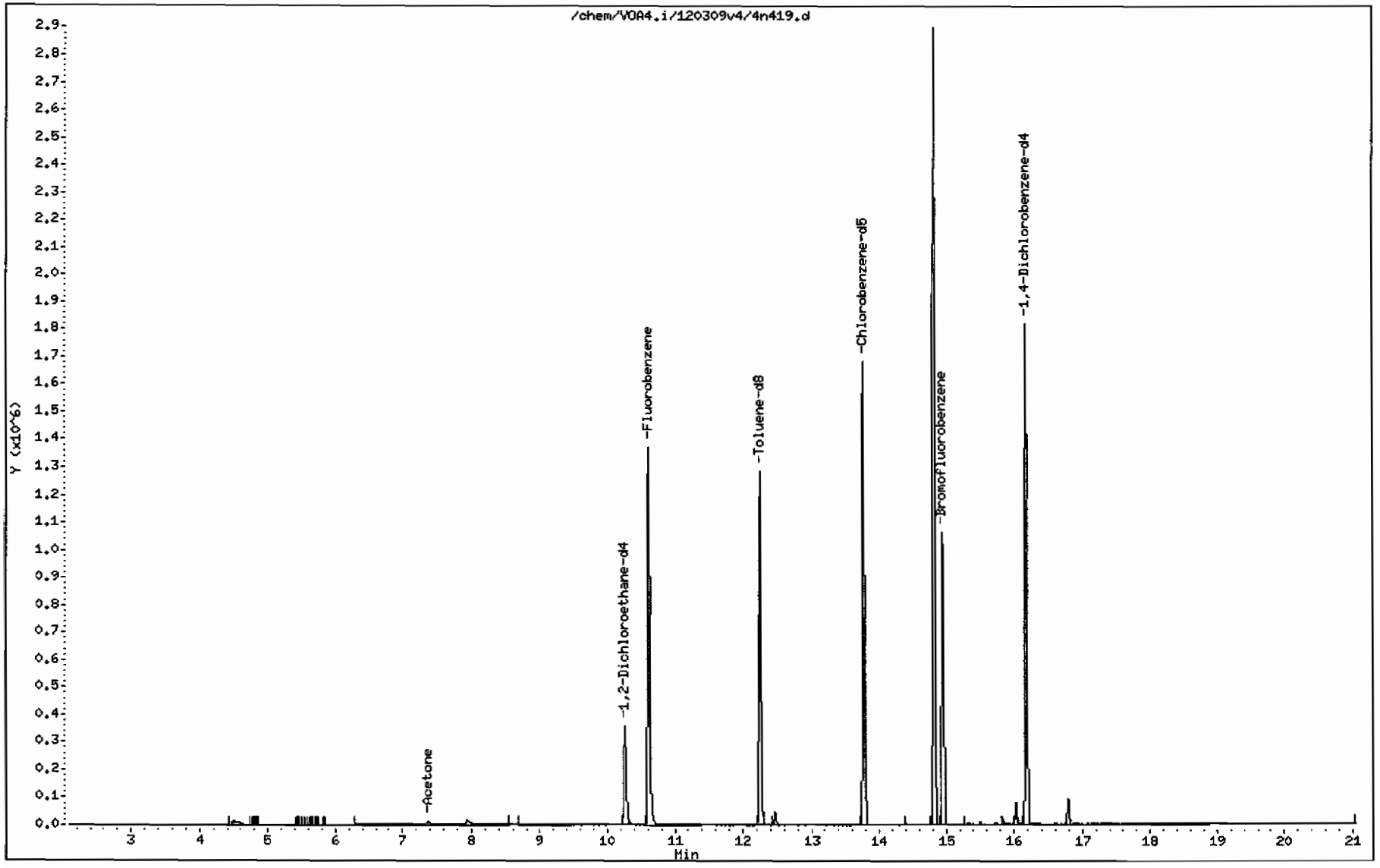

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Date : 04-DEC-2009 02:43

Client ID: RE03-09-14112

Instrument: VOA4.i

Sample Info: |2418190191928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 4.5 ug/Kg

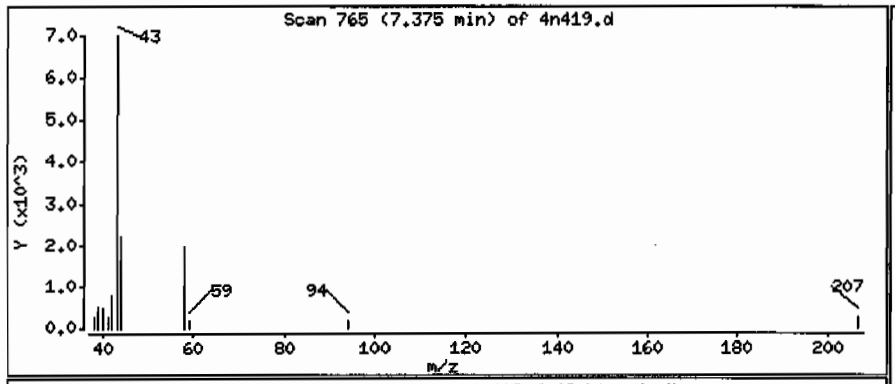

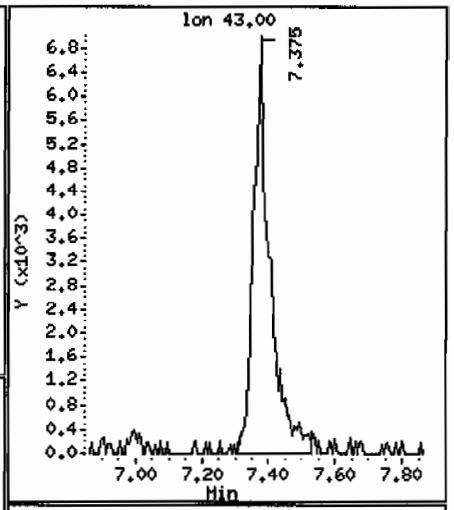

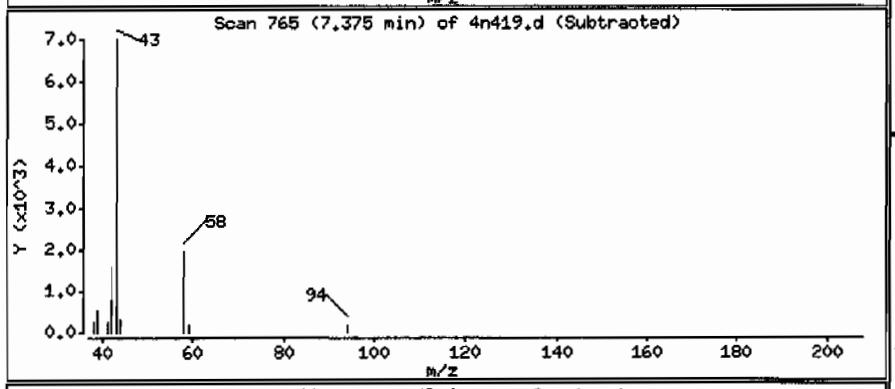

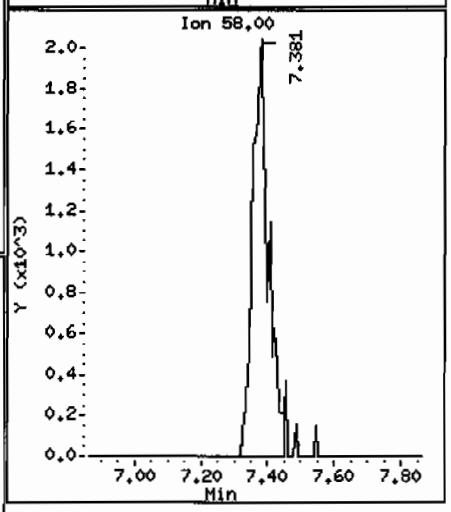

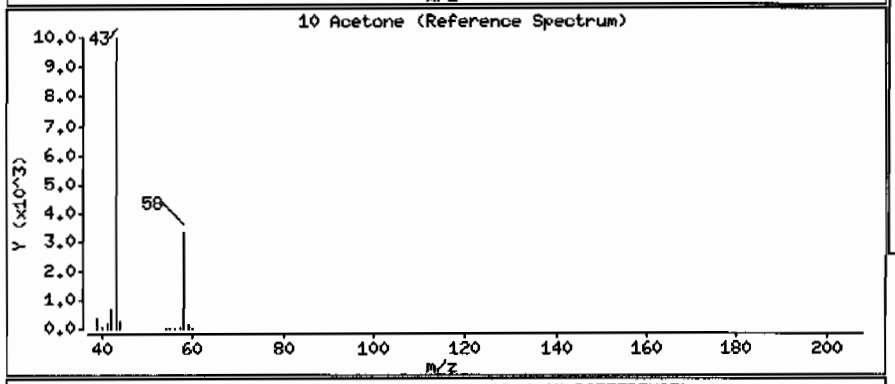

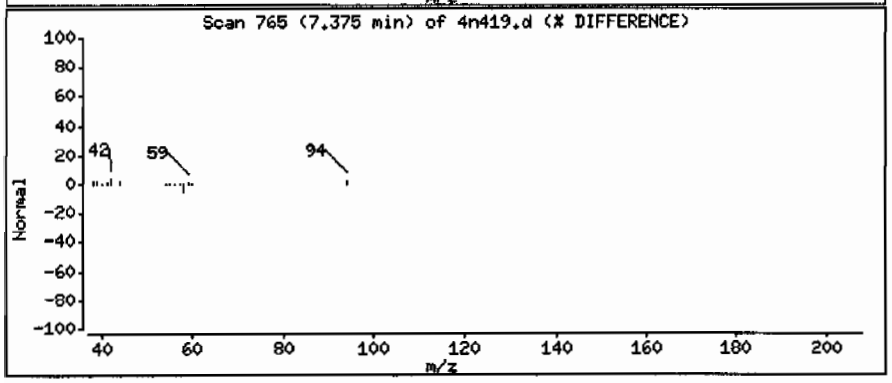

Data File: /chem/VOA4.i/120309v4/4n419.d

Page 1

Date : 04-DEC-2009 02:43

Client ID: RE03-09-14112

Instrument: VOA4.i

Sample Info: |2418190191928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C21H15N	281
4H-1,2,4-Triazole-3-thiol, 4-allyl-5-(1-	31803-13-1	NIST05.L	112550	53	C16H15N3S	281

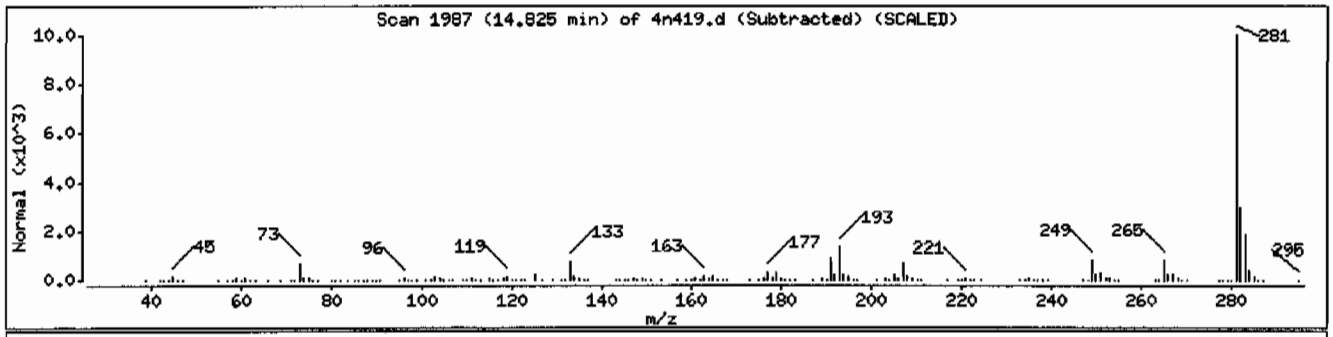

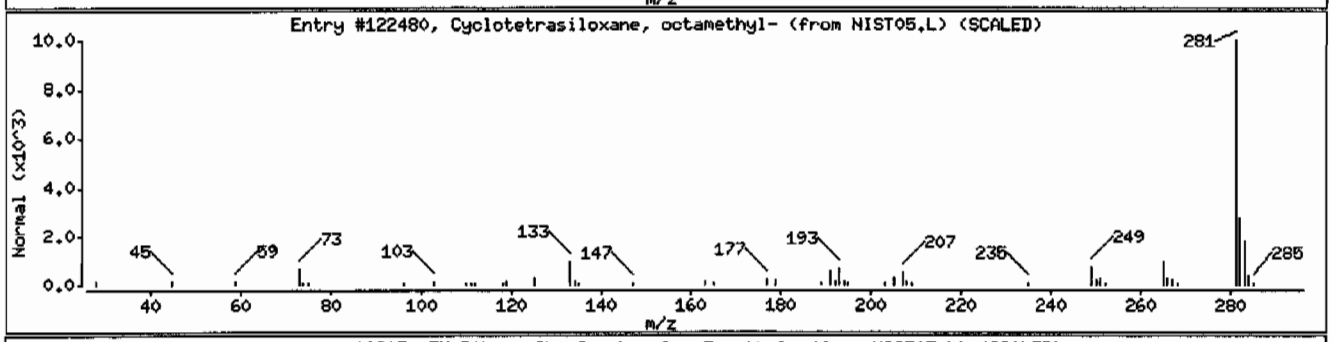

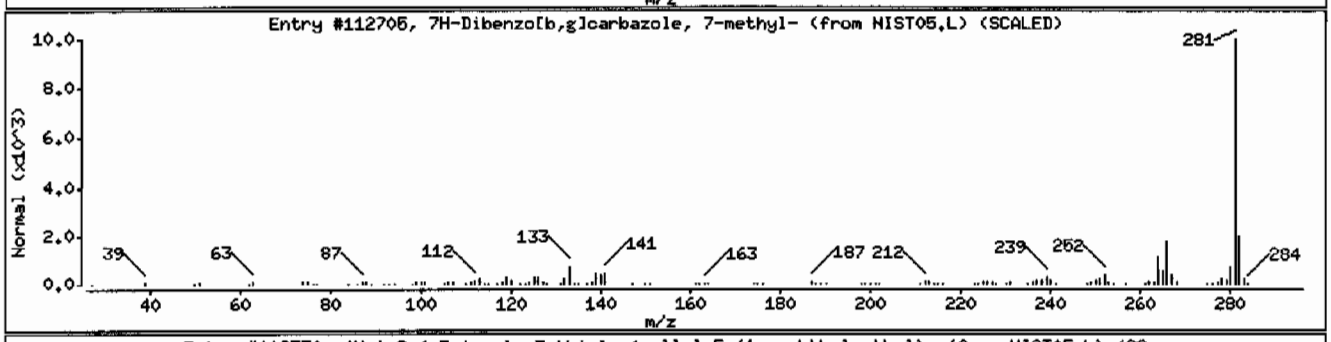

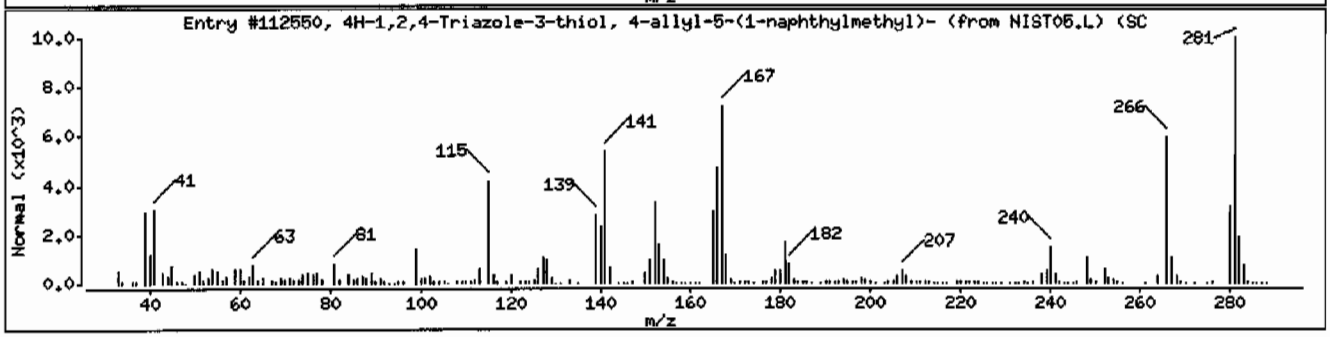

Data File: /chem/VOA4.i/120309v4/4n419.d

Date : 04-DEC-2009 02:43

Client ID: RE03-09-14112

Instrument: VOA4.i

Sample Info: |24181901919286051|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	64	C21H26F5N02Si2	475
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	43	C16H17N30	267
Benzoic acid, 4-[(trimethylsilyl)oxy]-,	2078-13-9	NIST05.L	112913	40	C13H2203Si2	282

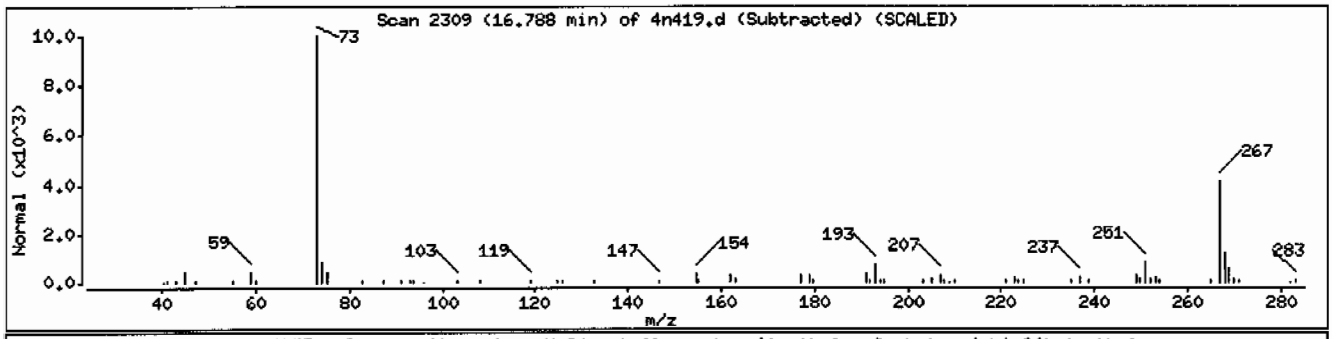

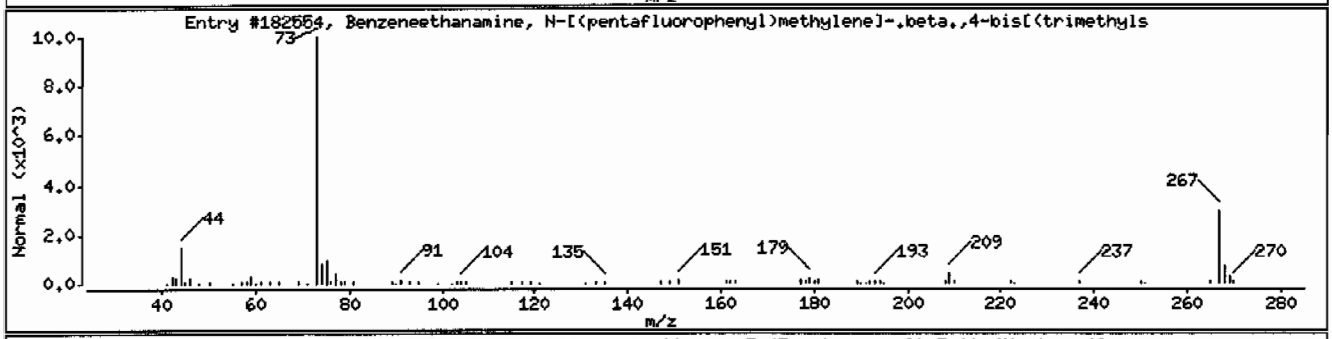

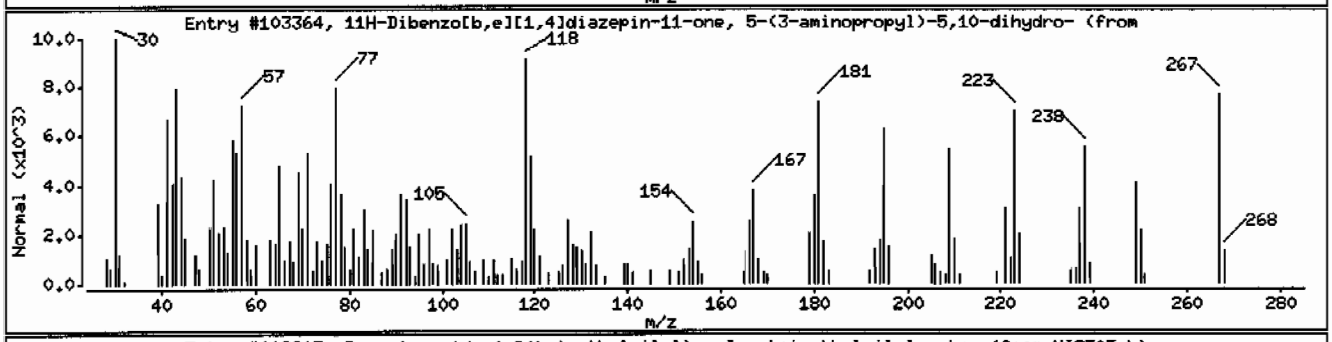

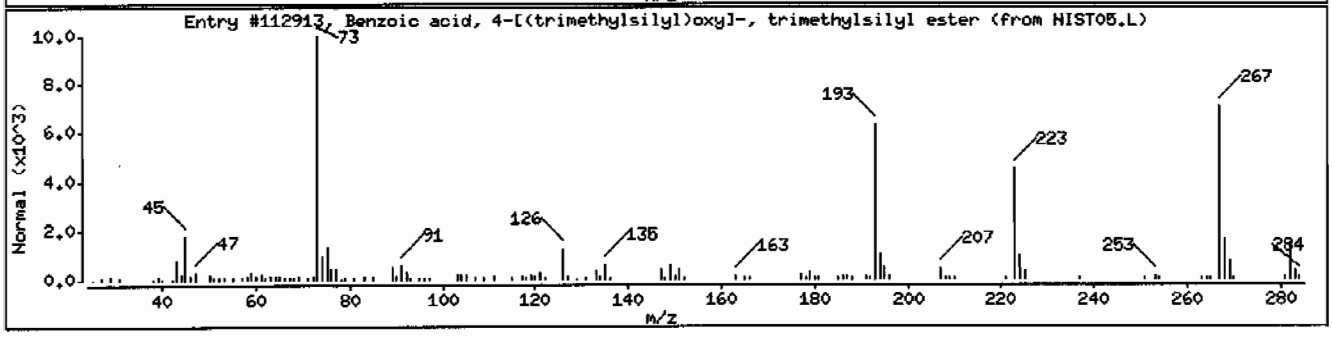

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n318.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	J	4.49	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	J	2.88	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:31**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:51**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n318.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	323	ug/kg	91	NJ
138-86-3	Limonene	16.03	7.35	ug/kg	94	NJ
	Unknown Siloxane	16.79	13	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n318.d
Lab Smp Id: 241819002 Client Smp ID: RE03-09-14113
Inj Date : 03-DEC-2009 01:31
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819002|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.91220	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1533069	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1139350	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	698813	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	329177	54.6675	60.7
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	1047344	52.7778	58.6
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	450592	55.6829	61.8
10 Acetone	43	7.370	7.358	(0.694)	25187	4.04349	4.5(a)
30 2-Butanone	43	9.333	9.327	(0.879)	18619	2.59790	2.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n318.d
Report Date: 12/03/2009 15:47
Lab. ID: 241819002 SampleType: SAMPLE
Injection Date: 03-DEC-2009 01:31
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819002|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	25187	7.37	7.36	80-120	100	( )
58	7193	7.36	7.36	2- 62	29	( )
30 2-Butanone			CAS#: 78-93-3			
43	18619	9.33	9.33	80-120	100	( )
72	2171	9.32	9.33	0- 55	12	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20294	10.61	10.34	80-120	100	(T)
64	3891	10.61	10.34	3- 63	19	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8095	12.25	12.02	80-120	100	(T)
43	4681	12.24	12.02	227-287	58	(QT)
100	722528	12.25	12.02	9- 69	8925	(QT)
65 Styrene			CAS#: 100-42-5			
104	26547	14.82	14.40	80-120	100	(T)
78	482	14.81	14.40	21- 81	2	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	23344	14.83	14.76	80-120	100	(T)
120	10758	14.83	14.76	0- 58	46	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
73 1,1,2,2-Tetrachloroethane				CAS#: 79-34-5		
83	5192	14.82	15.02	80-120	100	(T)
85	8687	14.82	15.02	34- 94	167	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	24220	14.83	15.11	80-120	100	(T)
75	63961	14.83	15.11	249-309	264	(T)
77	5517	14.83	15.11	62-122	23	(QT)
81 tert-Butylbenzene				CAS#: 98-06-6		
119	16179	16.05	15.70	80-120	100	(T)
91	27666	16.03	15.70	41-101	171	(QT)
134	4549	16.05	15.70	0- 53	28	(T)
84 4-Isopropyltoluene				CAS#: 99-87-6		
119	16179	16.05	16.05	80-120	100	( )
134	4549	16.05	16.05	0- 59	28	( )
91	28296	16.03	16.05	0- 54	175	(Q)
89 n-Butylbenzene				CAS#: 104-51-8		
91	29385	16.16	16.50	80-120	100	(T)
92	6792	16.16	16.50	27- 87	23	(QT)
134	492	16.17	16.50	0- 59	2	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n318.d
Lab Smp Id: 241819002 Client Smp ID: RE03-09-14113
Inj Date : 03-DEC-2009 01:31
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819002|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.91220	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3503563	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	4183772	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

Cyclotetrasiloxane, octamethyl- CAS #: 556-67-2

14.826	20404034	291.189717	323	91	NIST05.L	122480	61

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Limonene					CAS #: 138-86-3		
16.027	554082	6.62179527	7.4	94	NIST05.L	15154	86
Unknown Siloxane					CAS #:		
16.789	977103	11.6772947	13.0	0		0	86

Data File: /chem/VOA4.i/120209v4/4n318.d

Date : 03-DEC-2009 01:31

Client ID: RE03-09-14113

Sample Info: |24181900219286051|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

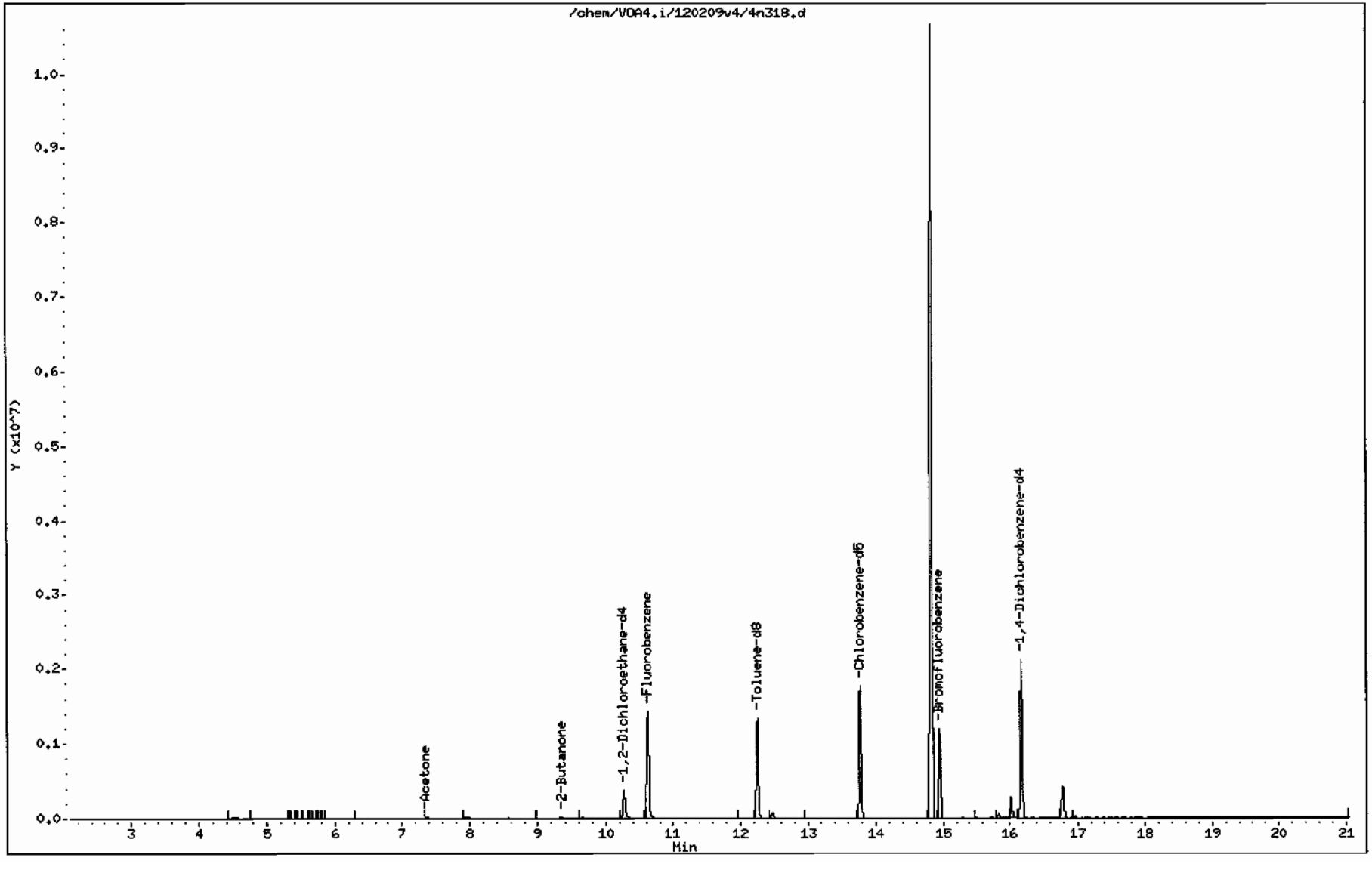

Data File: /chem/VOA4.i/120209v4/4n318.d

Date : 03-DEC-2009 01:31

Client ID: RE03-09-14113

Instrument: VOA4.i

Sample Info: |2418190021928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 4.5 ug/Kg

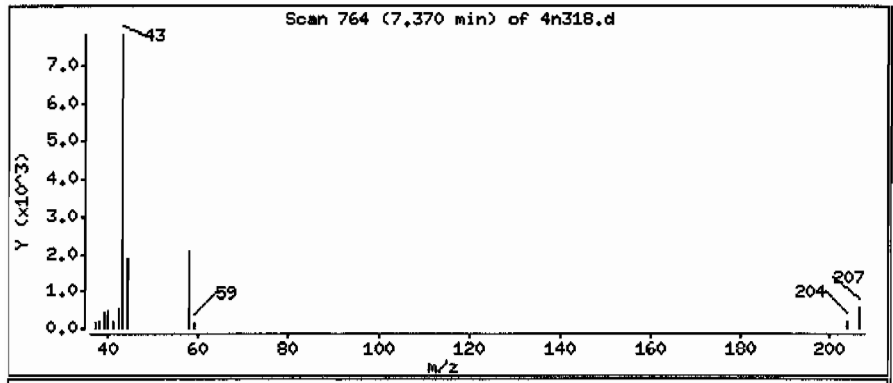

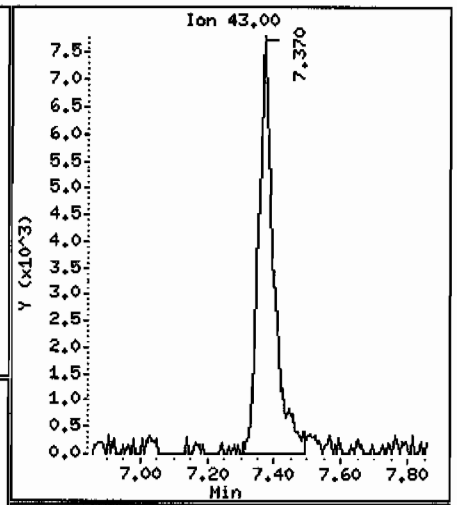

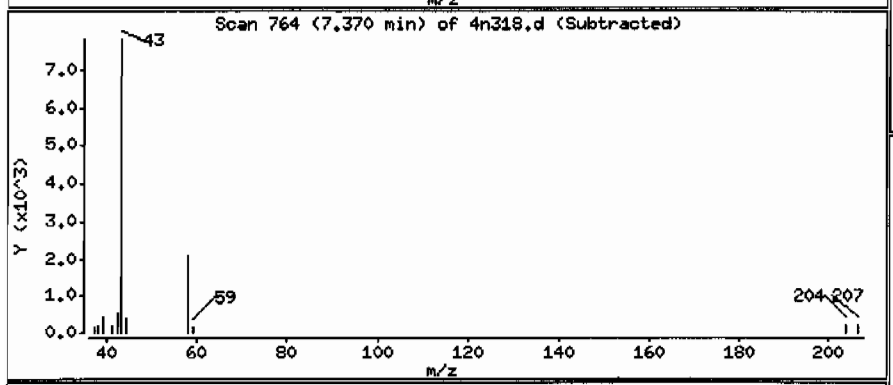

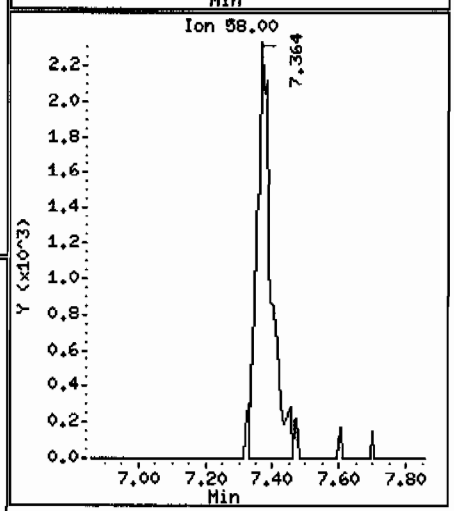

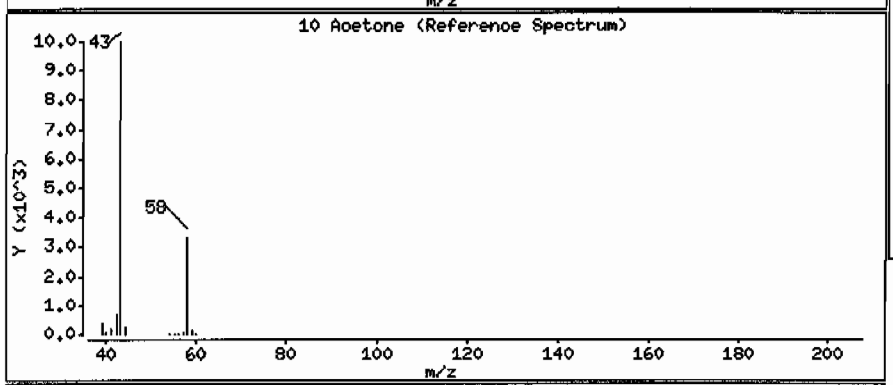

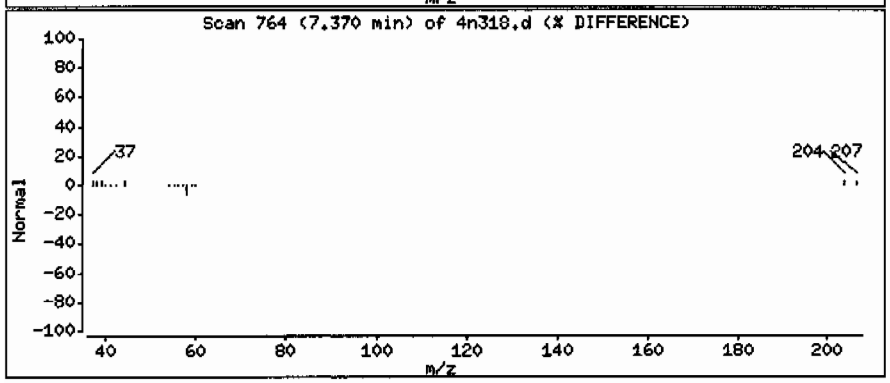

Data File: /chem/VOA4.i/120209v4/4n318.d

Date : 03-DEC-2009 01:31

Client ID: RE03-09-14113

Instrument: VOA4.i

Sample Info: |2418190021928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

30 2-Butanone

Concentration: 2.9 ug/Kg

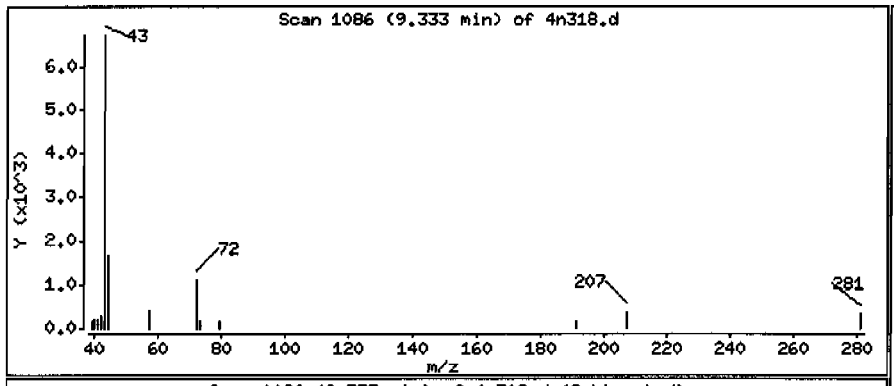

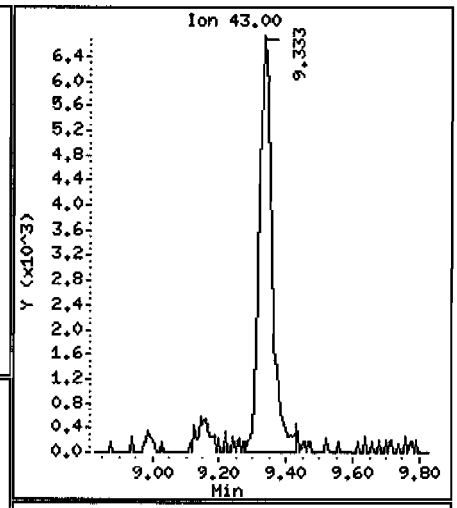

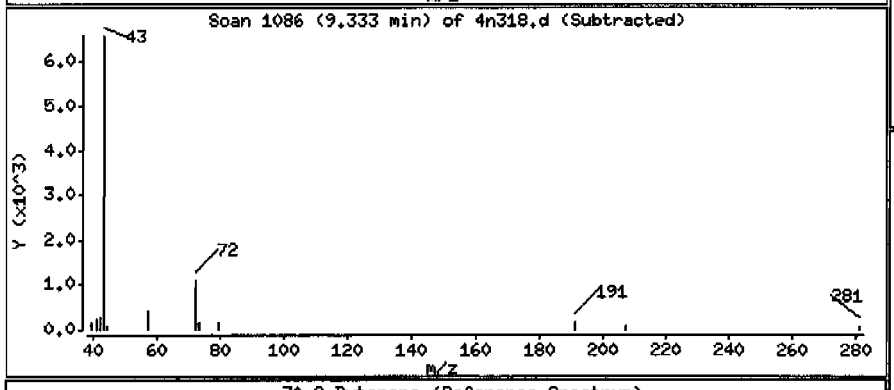

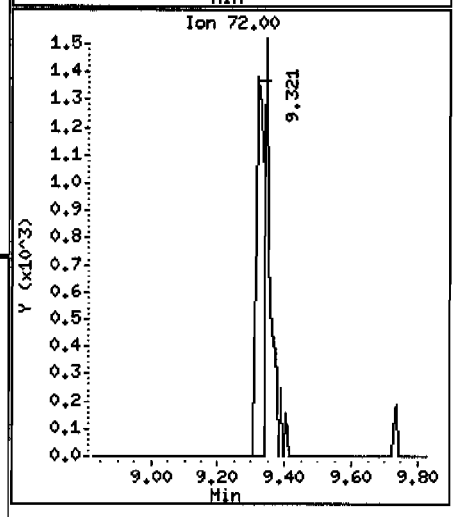

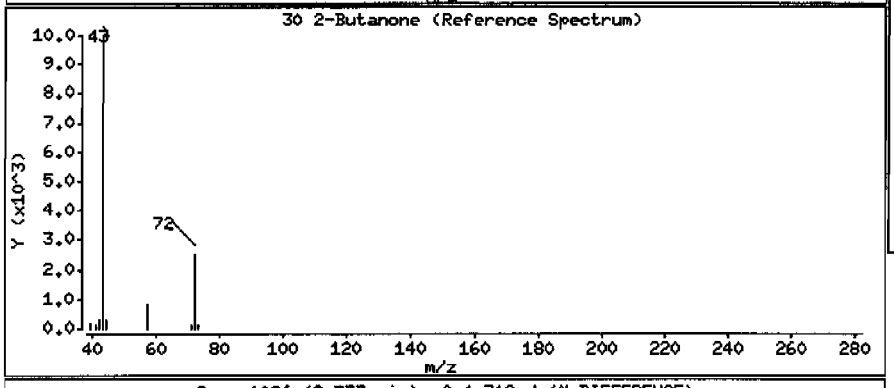

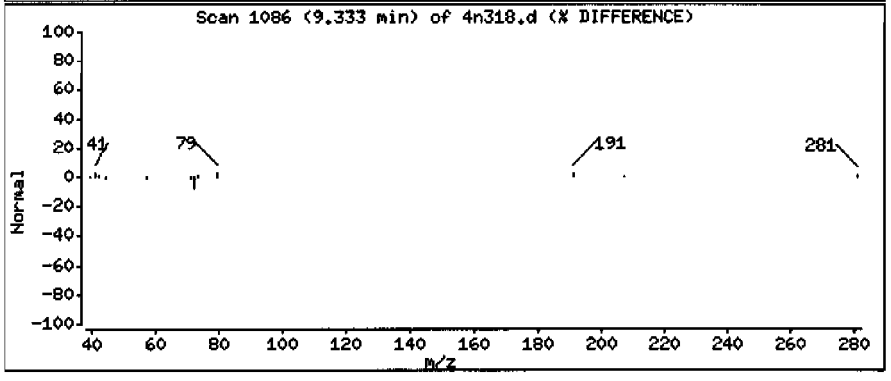

Data File: /chem/VOA4.i/120209v4/4n318.d

Page 1

Date : 03-DEC-2009 01:31

Client ID: RE03-09-14113

Instrument: VOA4.i

Sample Info: |2418190021928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyolotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Cyclotetrasiloxane, ootamethyl-	556-67-2	NIST05.L	122479	78	C8H24O4Si4	296

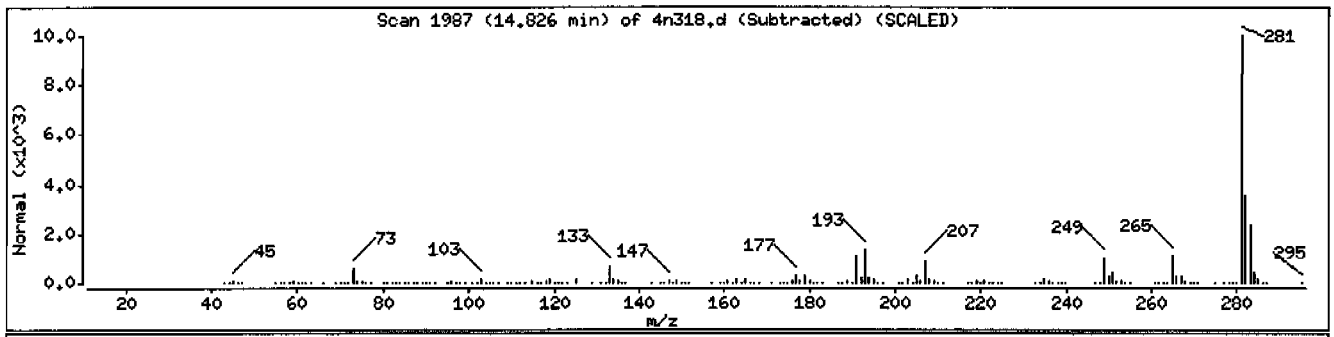

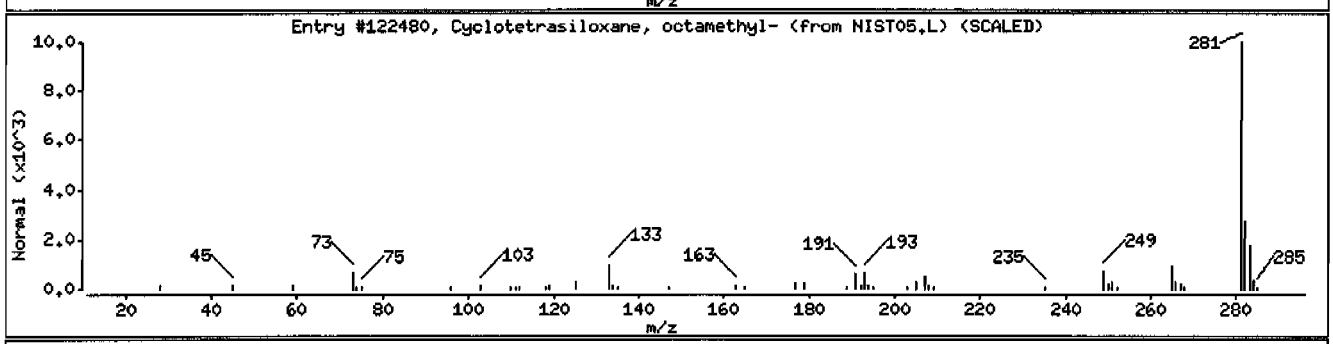

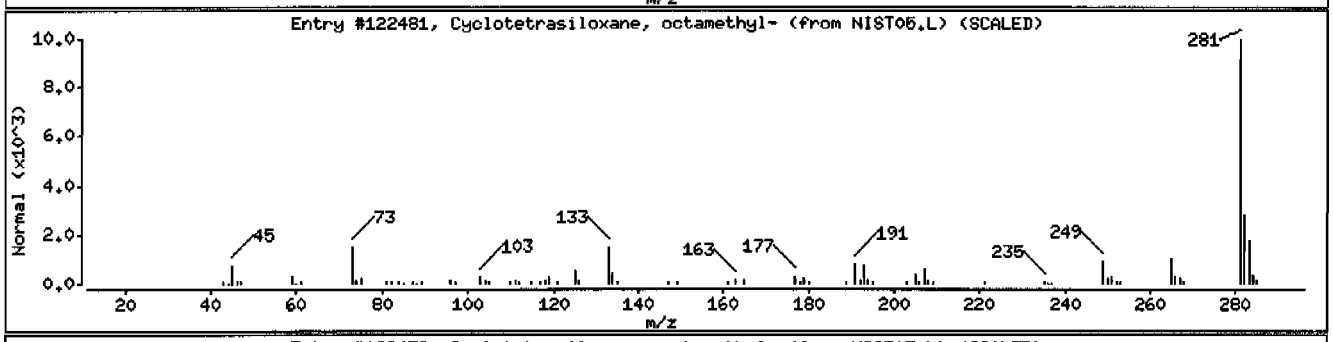

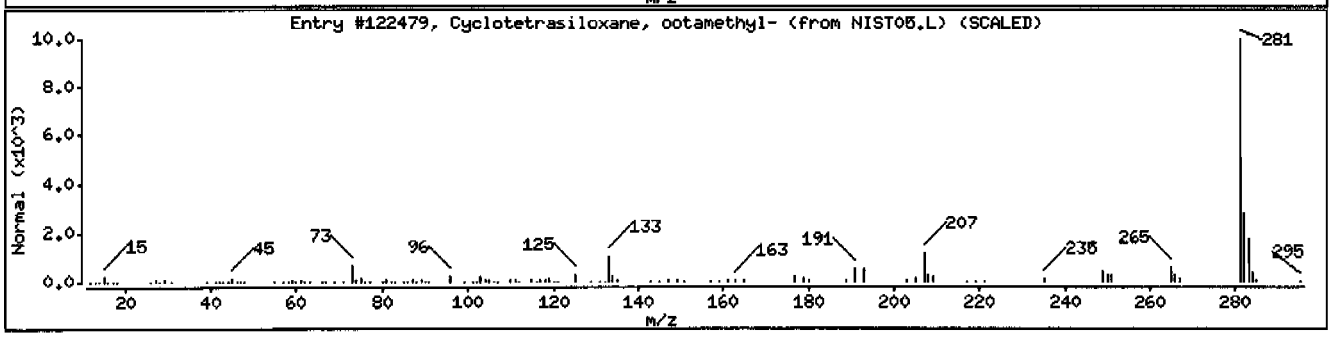

Data File: /chem/VOA4.i/120209v4/4n318.d

Date : 03-DEC-2009 01:31

Client ID: RE03-09-14113

Instrument: VOA4.i

Sample Info: |2418190021928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Limonene	138-86-3	NIST05.L	15154	94	C10H16	136
Limonene	138-86-3	NIST05.L	15153	89	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15162	81	C10H16	136

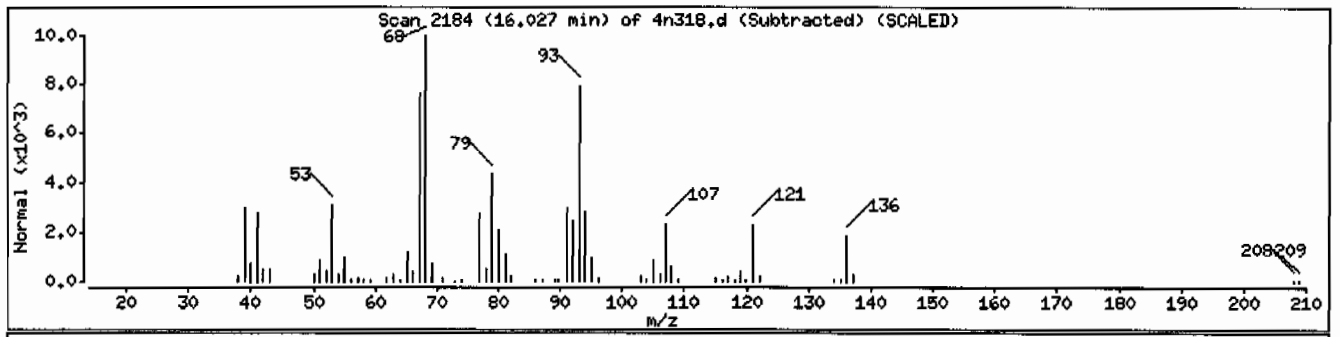

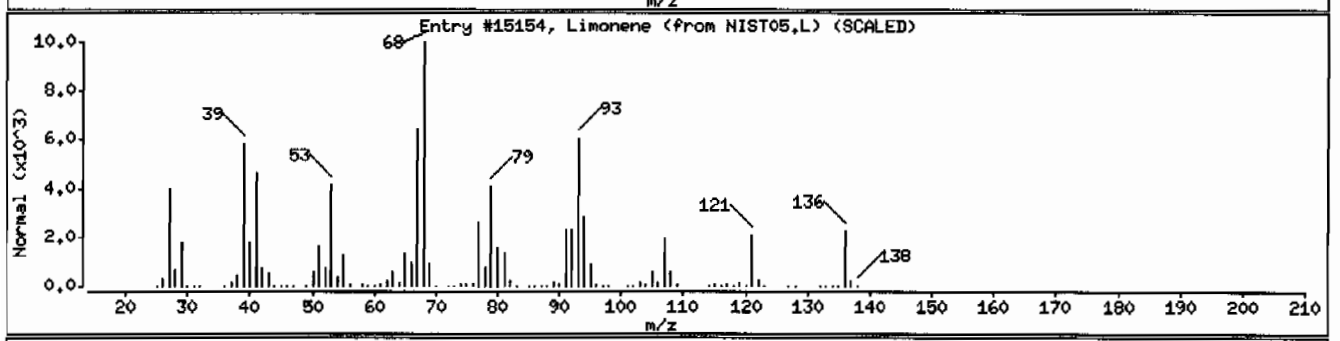

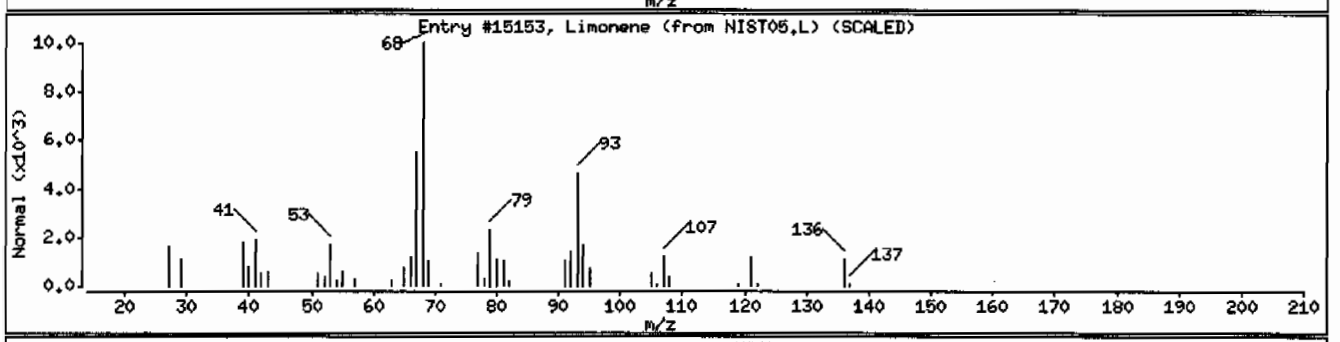

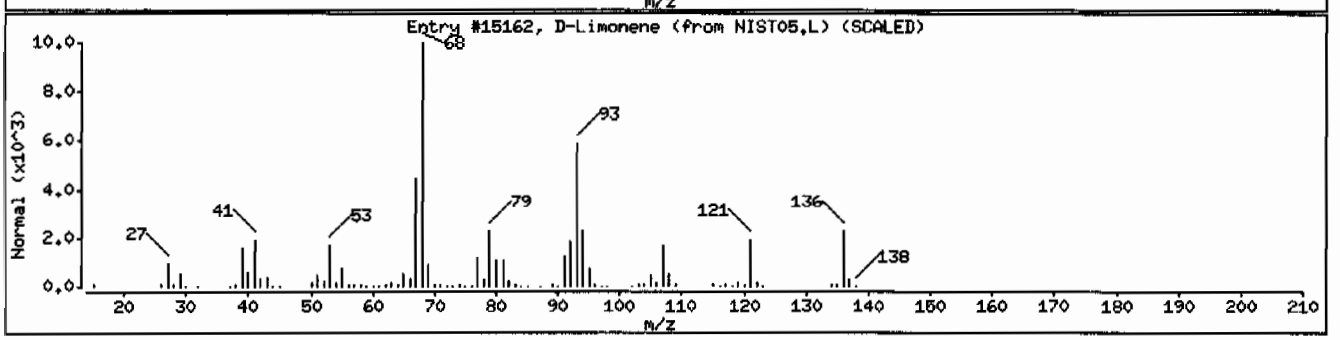

Data File: /chem/VOA4.i/120209v4/4n318.d

Date : 03-DEC-2009 01:31

Client ID: RE03-09-14113

Instrument: VOA4.i

Sample Info: |2418190021928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST06.L	103364	43	C16H17N3O	267
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	39	C13H22O3Si2	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	32	C21H26F5NO2Si	475

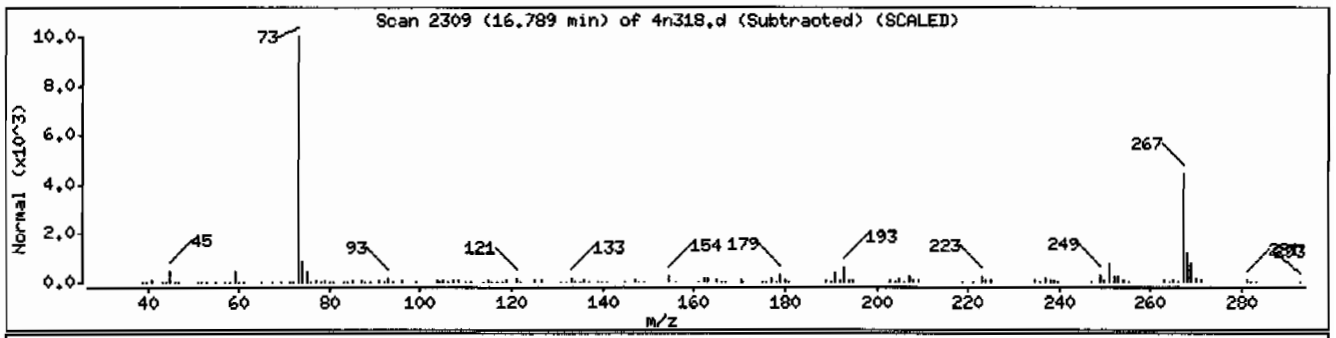

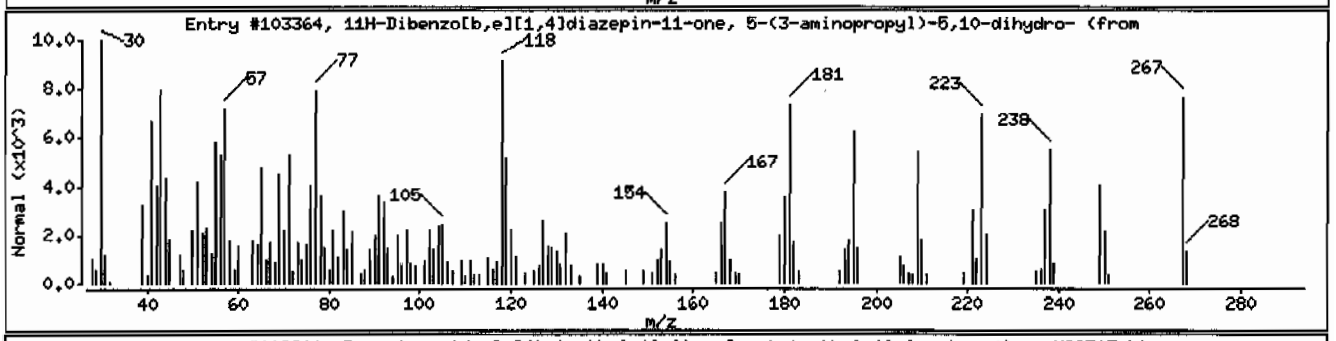

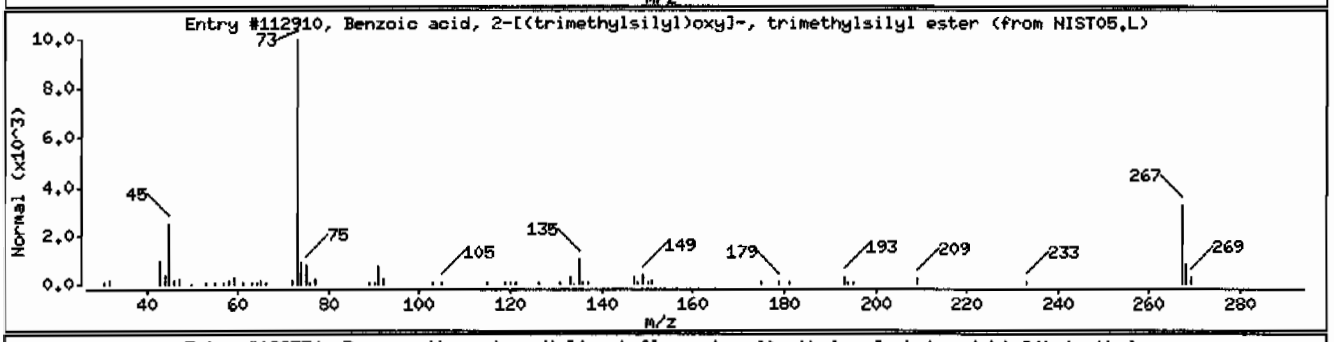

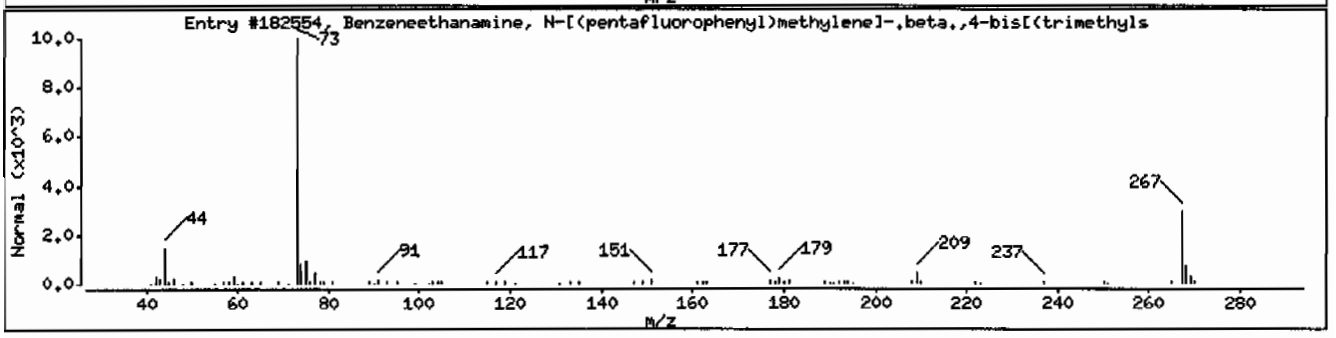

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14114**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:54**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n321.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.01	ug/kg	0.343	1.01
74-87-3	Chloromethane	U	1.01	ug/kg	0.303	1.01
75-01-4	Vinyl chloride	U	1.01	ug/kg	0.303	1.01
74-83-9	Bromomethane	U	1.01	ug/kg	0.303	1.01
75-00-3	Chloroethane	U	1.01	ug/kg	0.303	1.01
75-69-4	Trichlorofluoromethane	U	1.01	ug/kg	0.303	1.01
67-64-1	Acetone	U	5.05	ug/kg	1.68	5.05
75-35-4	1,1-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
74-88-4	Iodomethane	U	5.05	ug/kg	1.61	5.05
75-09-2	Methylene chloride	U	5.05	ug/kg	2.02	5.05
75-15-0	Carbon disulfide	U	5.05	ug/kg	1.26	5.05
156-60-5	trans-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
75-34-3	1,1-Dichloroethane	U	1.01	ug/kg	0.303	1.01
78-93-3	2-Butanone	U	5.05	ug/kg	1.51	5.05
156-59-2	cis-1,2-Dichloroethylene	U	1.01	ug/kg	0.303	1.01
594-20-7	2,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
67-66-3	Chloroform	U	1.01	ug/kg	0.303	1.01
74-97-5	Bromochloromethane	U	1.01	ug/kg	0.333	1.01
71-55-6	1,1,1-Trichloroethane	U	1.01	ug/kg	0.303	1.01
563-58-6	1,1-Dichloropropene	U	1.01	ug/kg	0.303	1.01
56-23-5	Carbon tetrachloride	U	1.01	ug/kg	0.303	1.01
107-06-2	1,2-Dichloroethane	U	1.01	ug/kg	0.303	1.01
71-43-2	Benzene	U	1.01	ug/kg	0.303	1.01
79-01-6	Trichloroethylene	U	1.01	ug/kg	0.333	1.01
78-87-5	1,2-Dichloropropane	U	1.01	ug/kg	0.303	1.01
75-27-4	Bromodichloromethane	U	1.01	ug/kg	0.303	1.01
74-95-3	Dibromomethane	U	1.01	ug/kg	0.303	1.01
108-10-1	4-Methyl-2-pentanone	U	5.05	ug/kg	1.26	5.05
10061-01-5	cis-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
108-88-3	Toluene	U	1.01	ug/kg	0.303	1.01
10061-02-6	trans-1,3-Dichloropropylene	U	1.01	ug/kg	0.303	1.01
79-00-5	1,1,2-Trichloroethane	U	1.01	ug/kg	0.303	1.01
591-78-6	2-Hexanone	U	5.05	ug/kg	1.51	5.05
142-28-9	1,3-Dichloropropane	U	1.01	ug/kg	0.303	1.01
127-18-4	Tetrachloroethylene	U	1.01	ug/kg	0.303	1.01
124-48-1	Dibromochloromethane	U	1.01	ug/kg	0.303	1.01
106-93-4	1,2-Dibromoethane	U	1.01	ug/kg	0.303	1.01
108-90-7	Chlorobenzene	U	1.01	ug/kg	0.303	1.01

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14114**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:54**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n321.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.01	ug/kg	0.303	1.01
179601-23-1	m,p-Xylenes	U	2.02	ug/kg	0.303	2.02
95-47-6	o-Xylene	U	1.01	ug/kg	0.303	1.01
100-42-5	Styrene	U	1.01	ug/kg	0.303	1.01
75-25-2	Bromoform	U	1.01	ug/kg	0.303	1.01
79-34-5	1,1,2,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
96-18-4	1,2,3-Trichloropropane	U	1.01	ug/kg	0.303	1.01
108-86-1	Bromobenzene	U	1.01	ug/kg	0.303	1.01
103-65-1	n-Propylbenzene	U	1.01	ug/kg	0.303	1.01
95-49-8	2-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-82-8	Isopropylbenzene	U	1.01	ug/kg	0.303	1.01
108-67-8	1,3,5-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
106-43-4	4-Chlorotoluene	U	1.01	ug/kg	0.303	1.01
98-06-6	tert-Butylbenzene	U	1.01	ug/kg	0.303	1.01
95-63-6	1,2,4-Trimethylbenzene	U	1.01	ug/kg	0.303	1.01
135-98-8	sec-Butylbenzene	U	1.01	ug/kg	0.303	1.01
99-87-6	4-Isopropyltoluene	U	1.01	ug/kg	0.303	1.01
541-73-1	1,3-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
106-46-7	1,4-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01
104-51-8	n-Butylbenzene	U	1.01	ug/kg	0.303	1.01
96-12-8	1,2-Dibromo-3-chloropropane	U	1.01	ug/kg	0.303	1.01
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.05	ug/kg	1.61	5.05
630-20-6	1,1,1,2-Tetrachloroethane	U	1.01	ug/kg	0.303	1.01
95-50-1	1,2-Dichlorobenzene	U	1.01	ug/kg	0.303	1.01

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
110-62-3	Pentanal	11.2	25.2	ug/kg	83	NJ
66-25-1	Hexanal	12.98	217	ug/kg	90	NJ
	Unknown Hydrocarbon	14.06	6.13	ug/kg		J
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	157	ug/kg	90	NJ
124-13-0	Octanal	15.86	5.4	ug/kg	91	NJ
138-86-3	Limonene	16.03	5.57	ug/kg	94	NJ
	Unknown Siloxane	16.79	7.93	ug/kg		J
124-19-6	Nonanal	17.15	9.95	ug/kg	90	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n321.d
Lab Smp Id: 241819005 Client Smp ID: RE03-09-14114
Inj Date : 03-DEC-2009 02:54
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819005|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.90840	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1637168	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1225999	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	765256	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	319634	49.7074	50.2
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	970820	45.4640	45.9
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	425785	48.0489	48.5

ION RATIO REPORT

VOA REPORT

Data file: 4n321.d
Report Date: 12/03/2009 15:48
Lab. ID: 241819005 SampleType: SAMPLE
Injection Date: 03-DEC-2009 02:54
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819005|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	24740	7.37	7.36	80-120	100	( )
58	11418	7.36	7.36	2- 62	46	( )
30 2-Butanone			CAS#: 78-93-3			
43	18825	9.16	9.33	80-120	100	(T)
72	11137	9.16	9.33	0- 55	59	(QT)
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21152	10.61	10.34	80-120	100	(T)
64	3919	10.62	10.34	3- 63	19	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8596	12.25	12.02	80-120	100	(T)
43	5581	12.25	12.02	227-287	65	(QT)
100	666410	12.25	12.02	9- 69	7752	(QT)
54 1,1,2-Trichloroethane			CAS#: 79-00-5			
83	42306	12.98	12.69	80-120	100	(T)
97	506	12.98	12.69	87-147	1	(QT)
85	10466	12.98	12.69	35- 95	25	(QT)
55 2-Hexanone			CAS#: 591-78-6			
43	1679683	12.98	12.86	80-120	100	(T)
58	272135	12.98	12.86	24- 84	16	(QT)
57	1617100	12.98	12.86	0- 49	96	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
65 Styrene		CAS#: 100-42-5				
104	16889	14.82	14.40	80-120	100	(T)
78	187	14.82	14.40	21- 81	1	(QT)
67 Isopropylbenzene		CAS#: 98-82-8				
105	14121	14.83	14.76	80-120	100	(T)
120	6842	14.83	14.76	0- 58	48	(T)
74 1,2,3-Trichloropropane		CAS#: 96-18-4				
110	14297	14.83	15.11	80-120	100	(T)
75	40390	14.82	15.11	249-309	282	(T)
77	4812	14.81	15.11	62-122	34	(QT)
81 tert-Butylbenzene		CAS#: 98-06-6				
119	13544	16.05	15.70	80-120	100	(T)
91	20907	16.03	15.70	41-101	154	(QT)
134	4077	16.06	15.70	0- 53	30	(T)
84 4-Isopropyltoluene		CAS#: 99-87-6				
119	13544	16.05	16.05	80-120	100	( )
134	4077	16.06	16.05	0- 59	30	( )
91	20907	16.03	16.05	0- 54	154	(Q)
89 n-Butylbenzene		CAS#: 104-51-8				
91	12362	16.16	16.50	80-120	100	(T)
92	2663	16.16	16.50	27- 87	22	(QT)
134	839	16.17	16.50	0- 59	7	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n321.d
Lab Smp Id: 241819005 Client Smp ID: RE03-09-14114
Inj Date : 03-DEC-2009 02:54
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819005|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.90840	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	10.619	3479707	50.000
* 61 Chlorobenzene-d5	13.771	3728273	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	4522733	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Pentanal				CAS #: 110-62-3			
11.198	1739795	24.9991573	25.2	83	NIST05.L	1677	40

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Hexanal					CAS #: 66-25-1		
12.984	16056787	215.338082	217	90	NIST05.L	3690	61
Unknown Hydrocarbon					CAS #:		
14.063	453165	6.07741226	6.1	0		0	61
Cyclotetrasiloxane, octamethyl-					CAS #: 556-67-2		
14.825	11596069	155.515251	157	90	NIST05.L	122480	61
Octanal					CAS #: 124-13-0		
15.862	483833	5.34890367	5.4	91	NIST05.L	12030	86
Limonene					CAS #: 138-86-3		
16.026	499517	5.52229576	5.6	94	NIST05.L	15154	86
Unknown Siloxane					CAS #:		
16.794	710799	7.85807203	7.9	0		0	86
Nonanal					CAS #: 124-19-6		
17.148	892131	9.86274194	10	90	NIST05.L	19202	86

Data File: /chem/VOA4.i/120209v4/4n321.d
Date : 03-DEC-2009 02:54
Client ID: RE03-09-14114
Sample Info: |24181900519286051|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

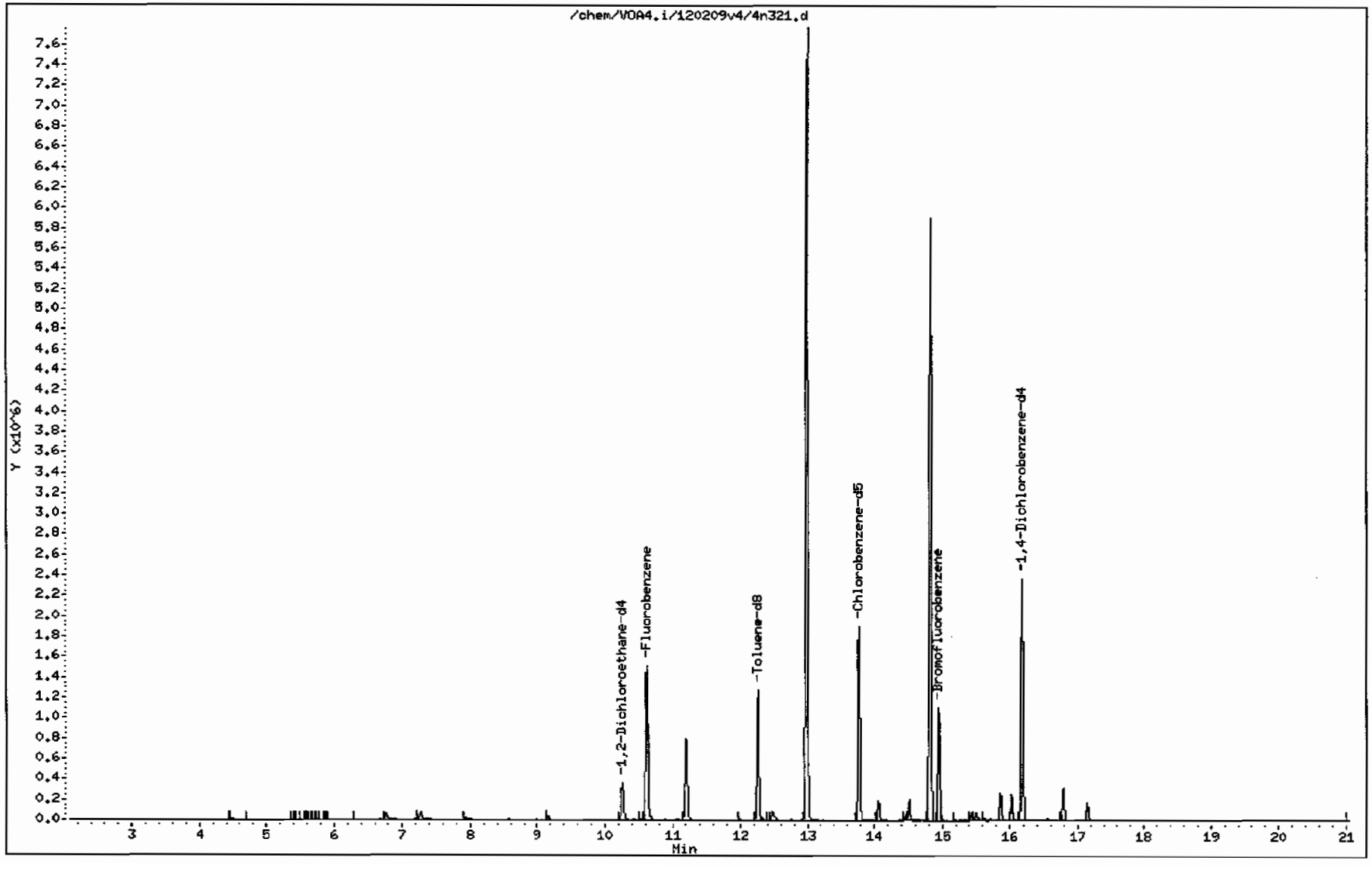

Data File: /chem/VOA4.i/120209v4/4n321.d

Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114

Instrument: VOA4.i

Sample Info: |2418190051928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentanal	110-62-3	NIST05.L	1677	83	C5H10O	86
Pentanal	110-62-3	NIST05.L	1678	64	C5H10O	86
Pentanal	110-62-3	NIST05.L	1676	64	C5H10O	86

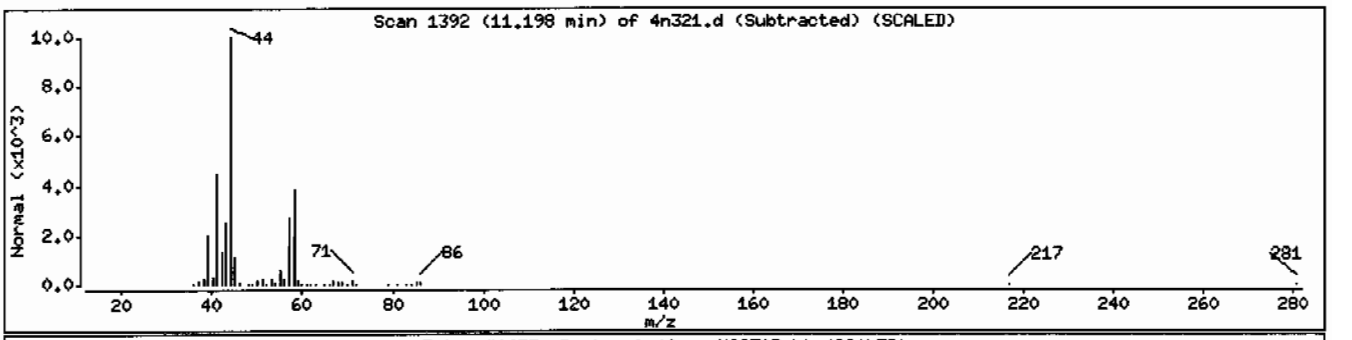

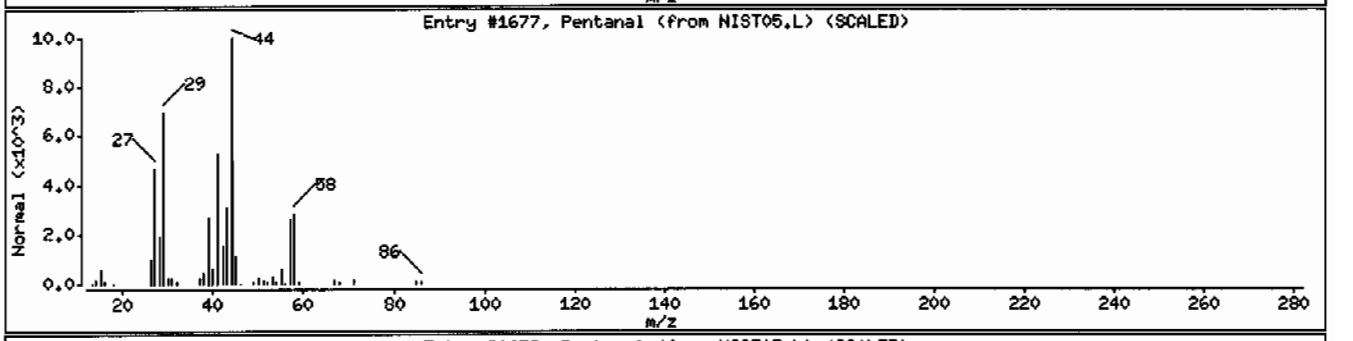

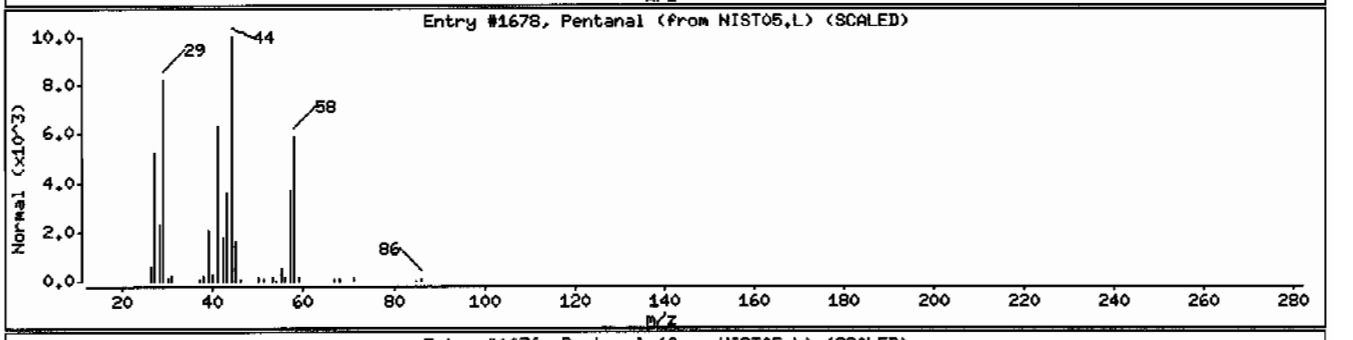

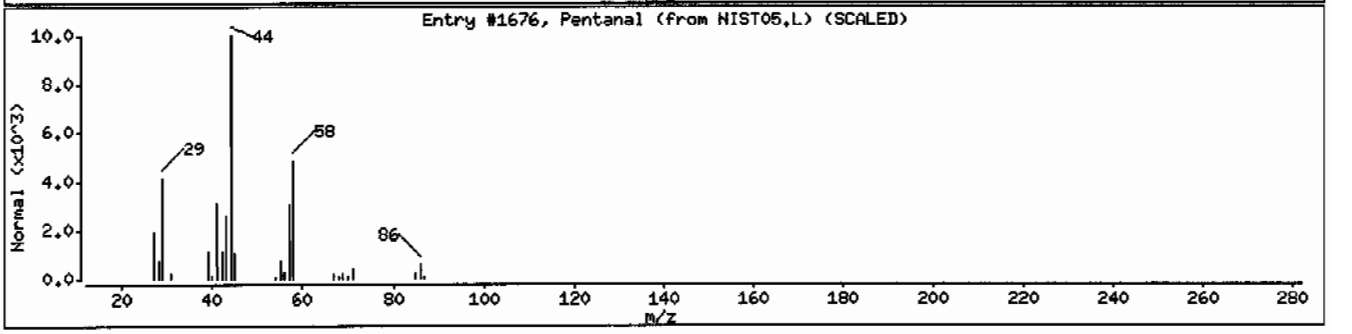

Data File: /chem/VOA4.i/120209v4/4n321.d

Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114 Instrument: VOA4.i

Sample Info: |2418190051928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexanal	66-25-1	NIST05.L	3690	90	C6H12O	100
Hexanal	66-25-1	NIST05.L	3688	90	C6H12O	100
Hexanal	66-25-1	NIST05.L	3684	80	C6H12O	100

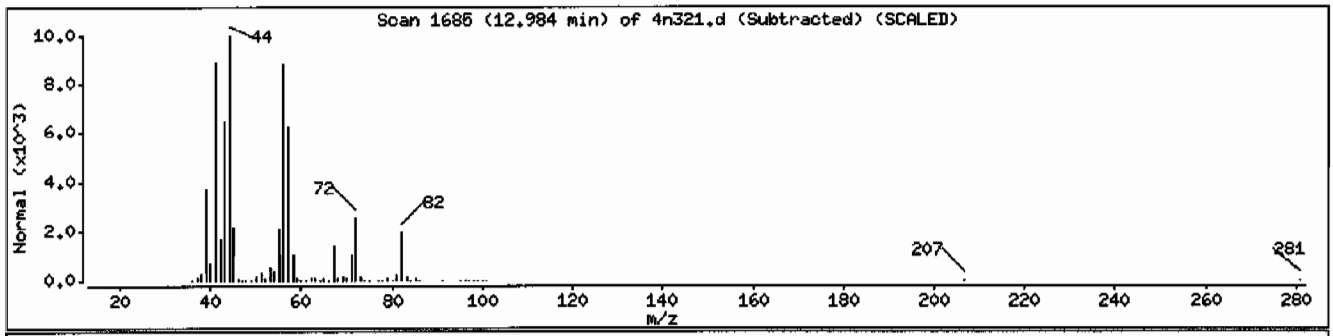

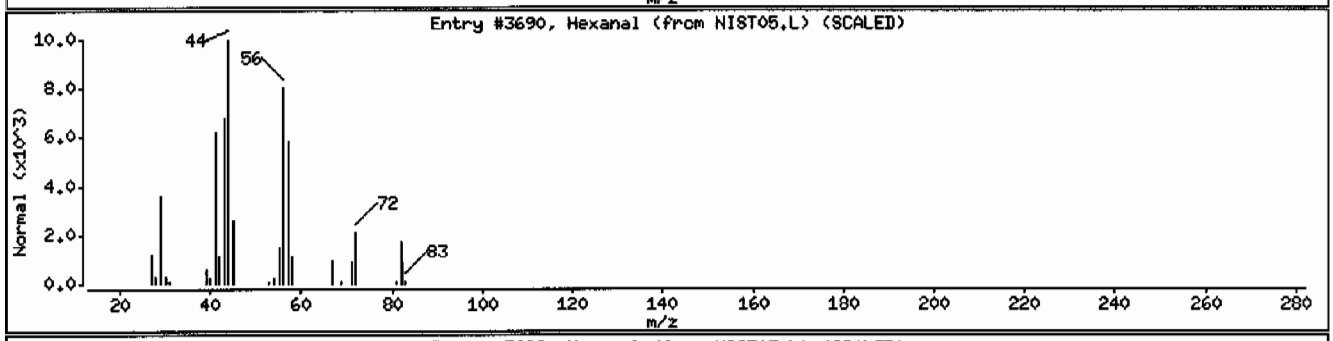

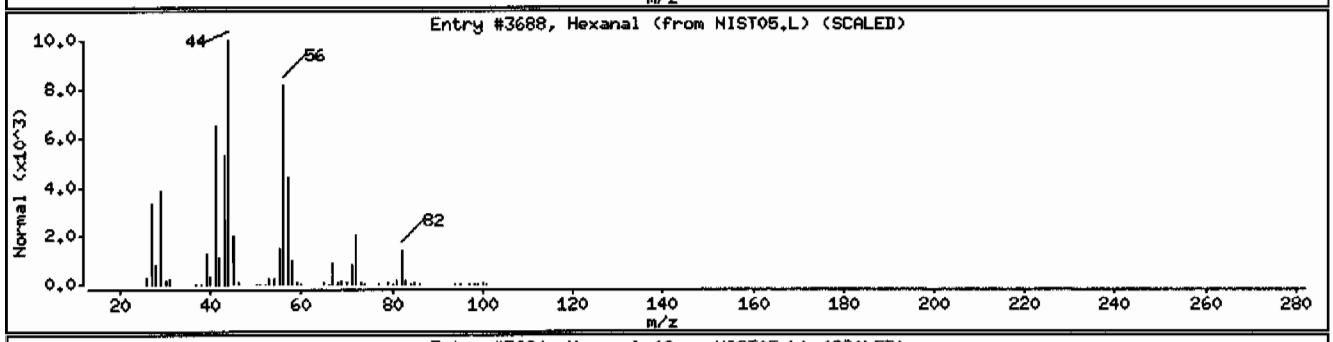

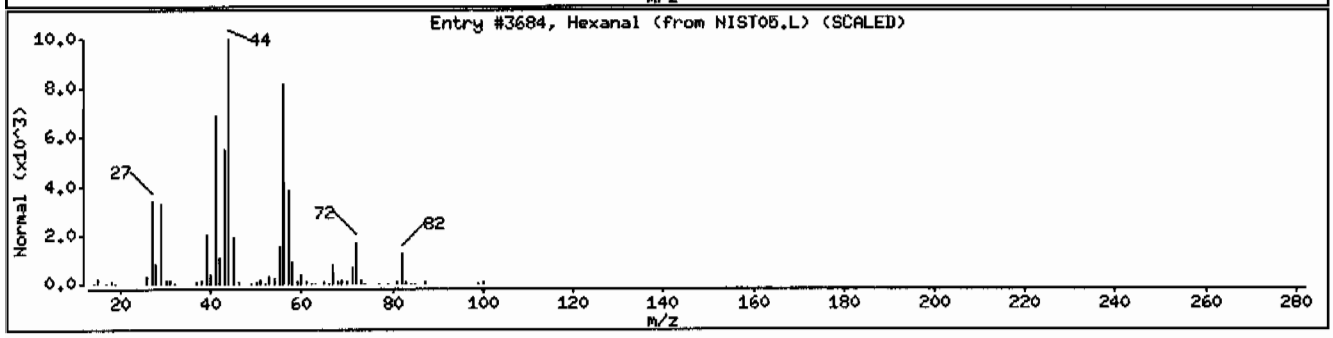

Data File: /chem/VOA4.i/120209v4/4n321.d

Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114 Instrument: VOA4.i

Sample Info: |2418190051928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Cyclopropane, propyl-	2415-72-7	NIST05.L	1464	78	C6H12	84
Hexyl chloroformate	6092-54-2	NIST05.L	32438	78	C7H13ClO2	164
1-Hexanol	111-27-3	NIST05.L	4315	78	C6H14O	102

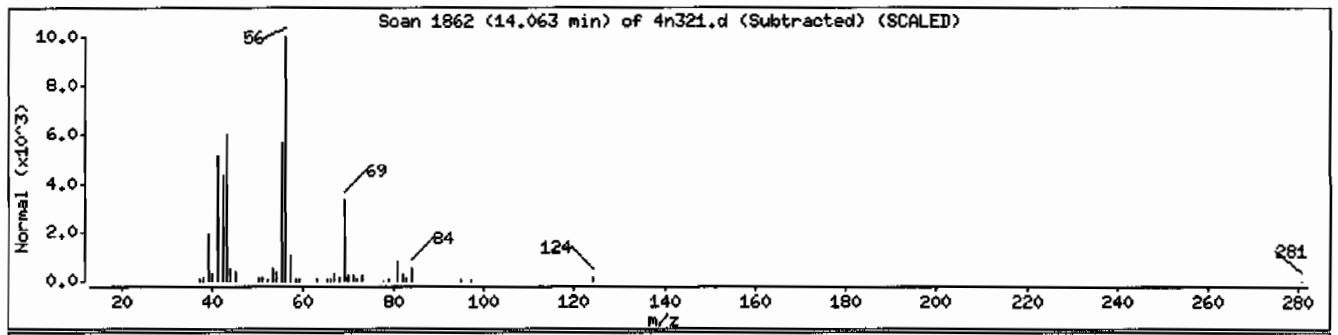

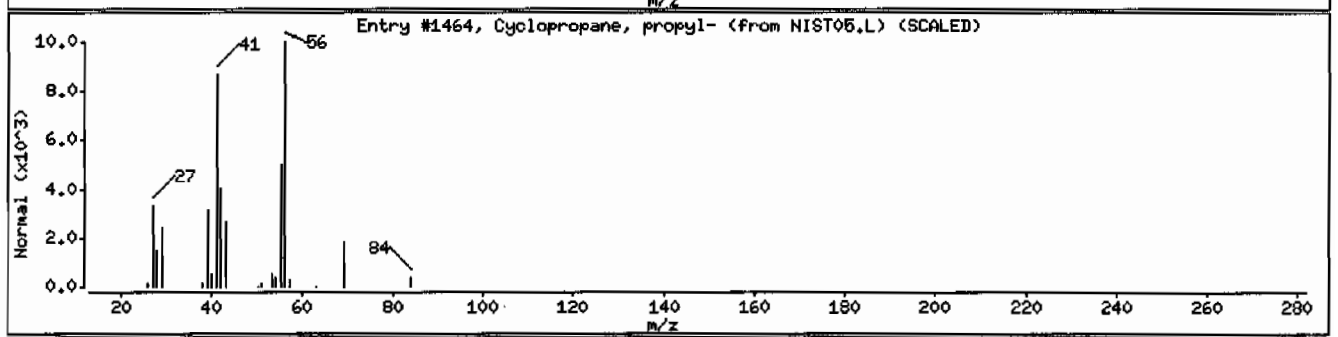

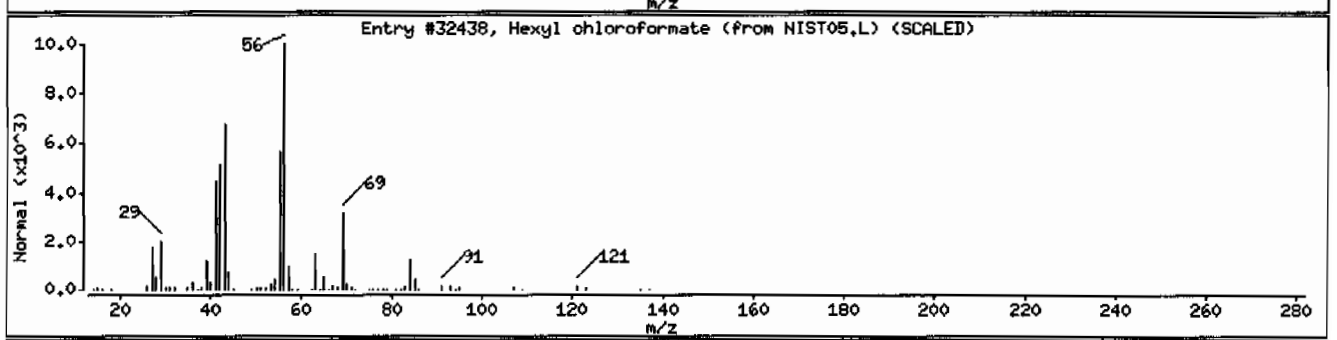

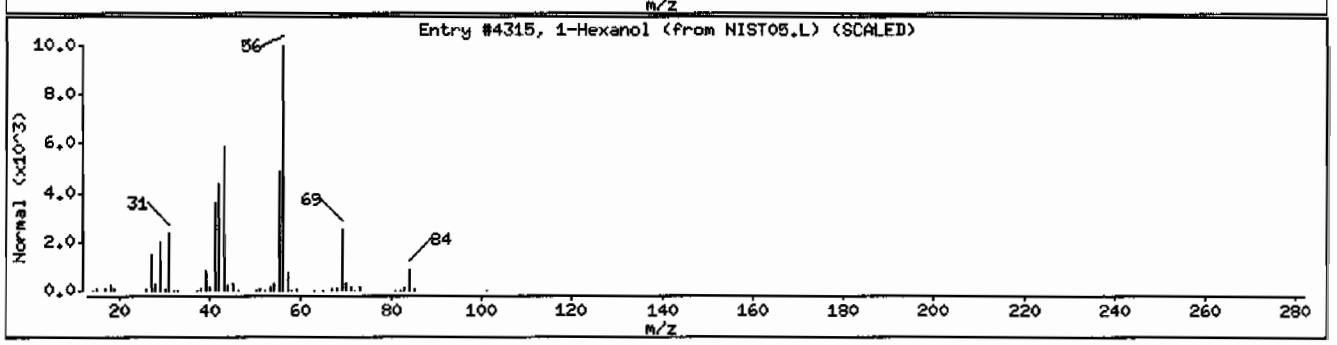

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Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114

Instrument: VOA4.i

Sample Info: |241819005|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	87	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	78	C8H24O4Si4	296

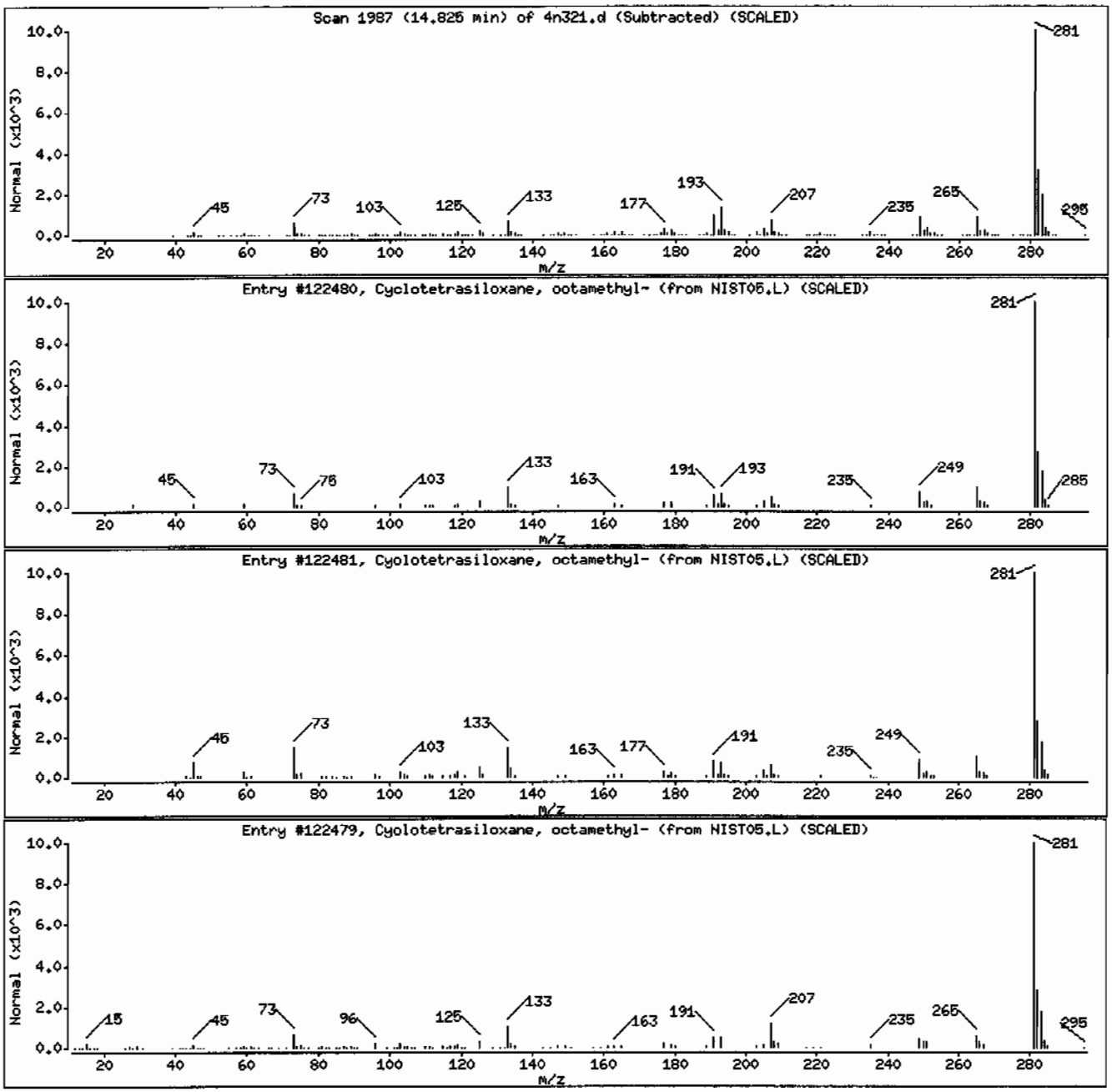

Data File: /chem/VOA4.i/120209v4/4n321.d

Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114

Instrument: VOA4.i

Sample Info: |2418190051928605111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octanal	124-13-0	NIST05.L	12030	91	C8H16O	128
Octanal	124-13-0	NIST05.L	12028	91	C8H16O	128
Octanal	124-13-0	NIST05.L	12031	91	C8H16O	128

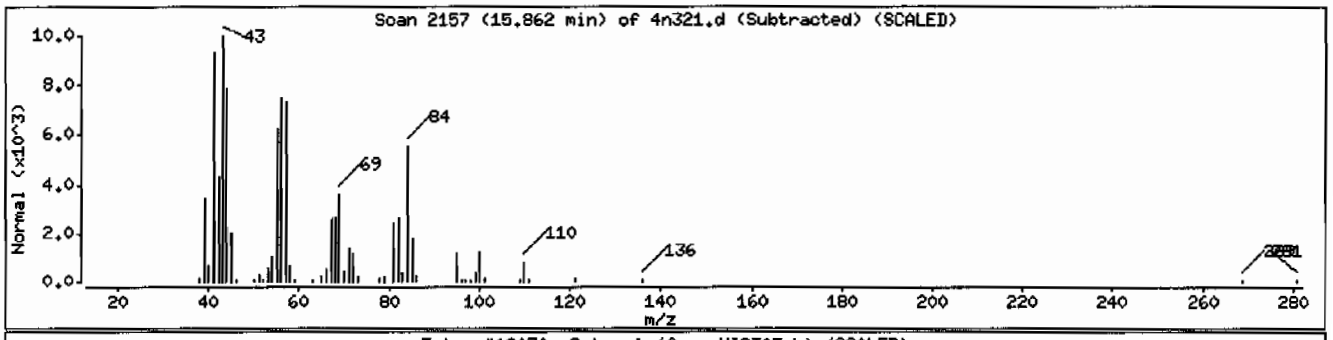

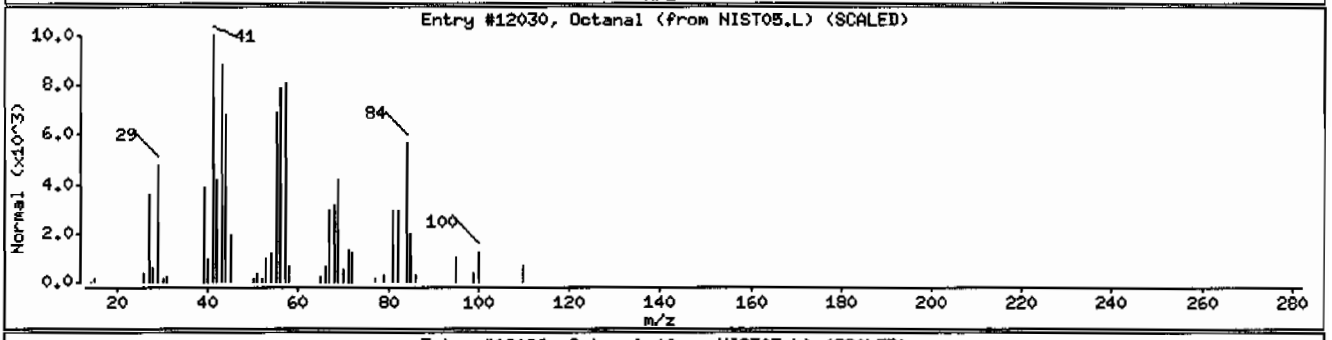

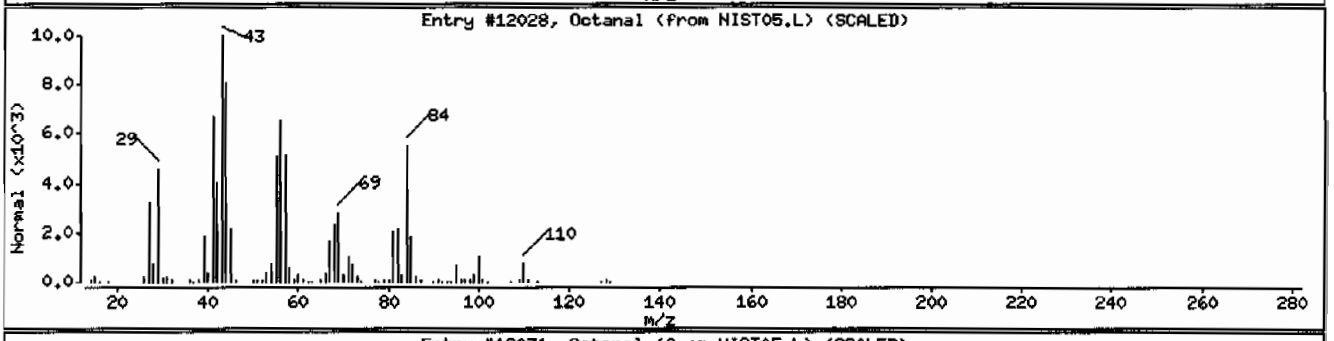

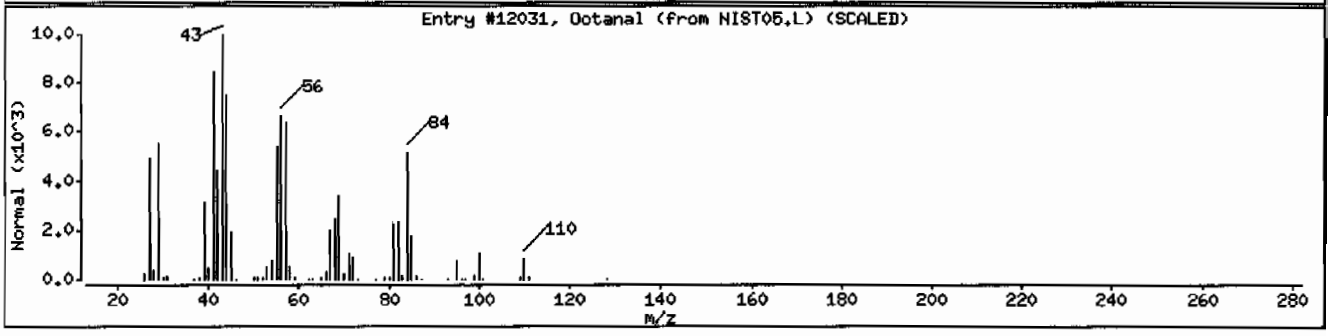

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Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114

Instrument: VOA4.i

Sample Info: |2418190051928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Limonene	138-86-3	NIST05.L	15154	94	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethenyl	5989-54-8	NIST05.L	15365	94	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15165	93	C10H16	136

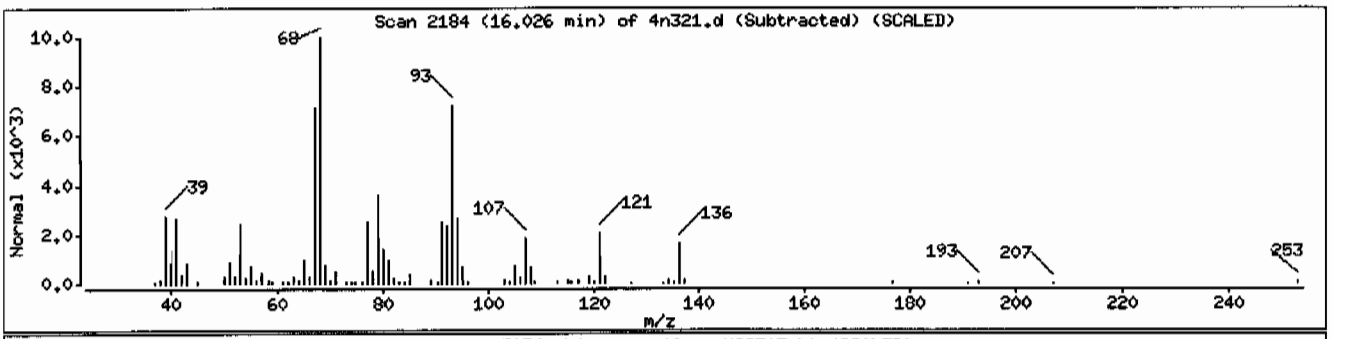

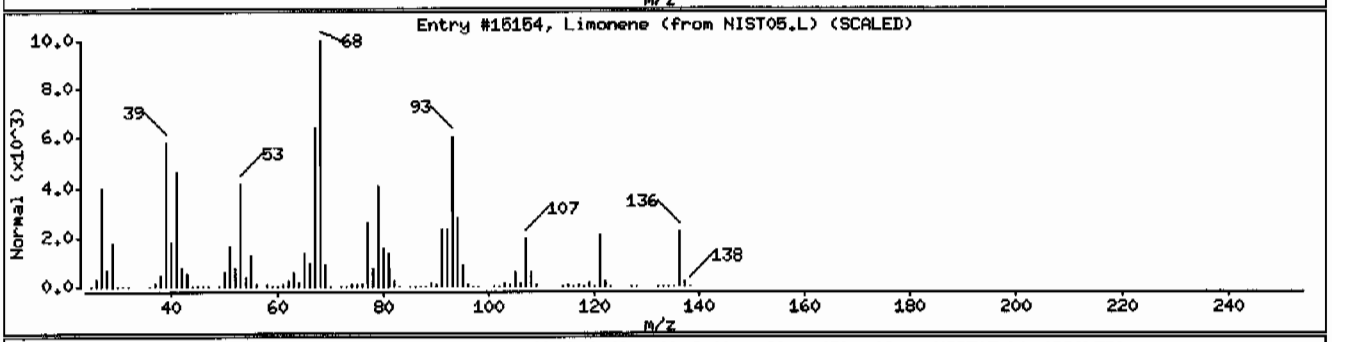

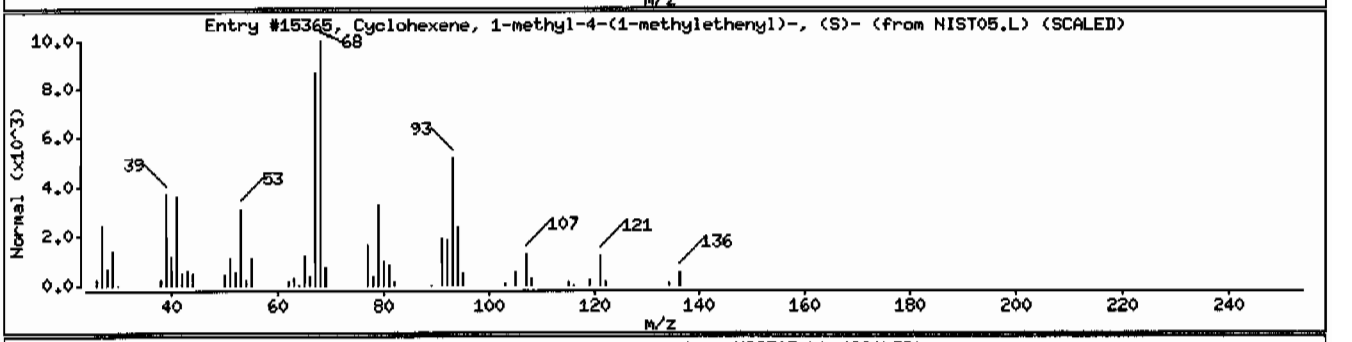

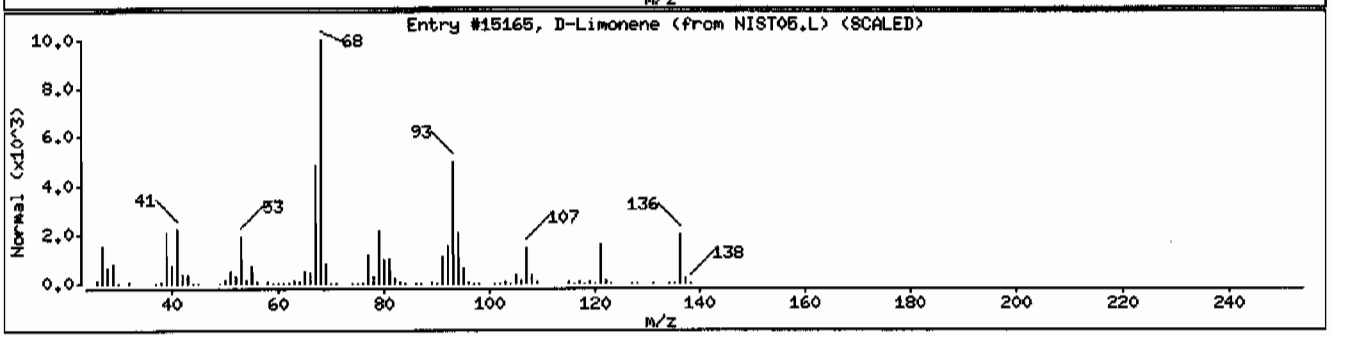

Data File: /chem/VOA4.i/120209v4/4n321.d

Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114

Instrument: VOA4.i

Sample Info: |2418190051928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	56	C16H28O4Si2	340
4-Hydroxymandelic acid, ethyl ester, di-	1000071-53-3	NIST05.L	147514	56	C16H28O4Si2	340
Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-	55471-01-7	NIST05.L	184036	50	C18H26F7NO3Si2	493

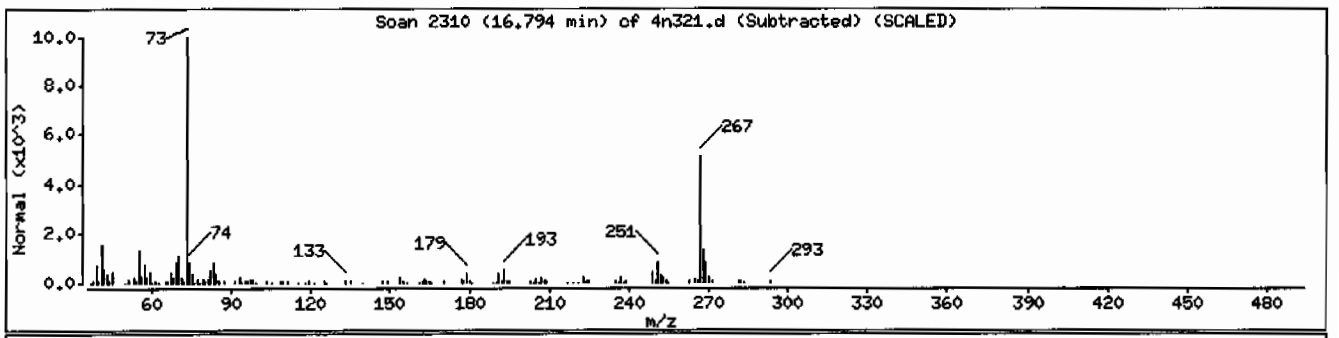

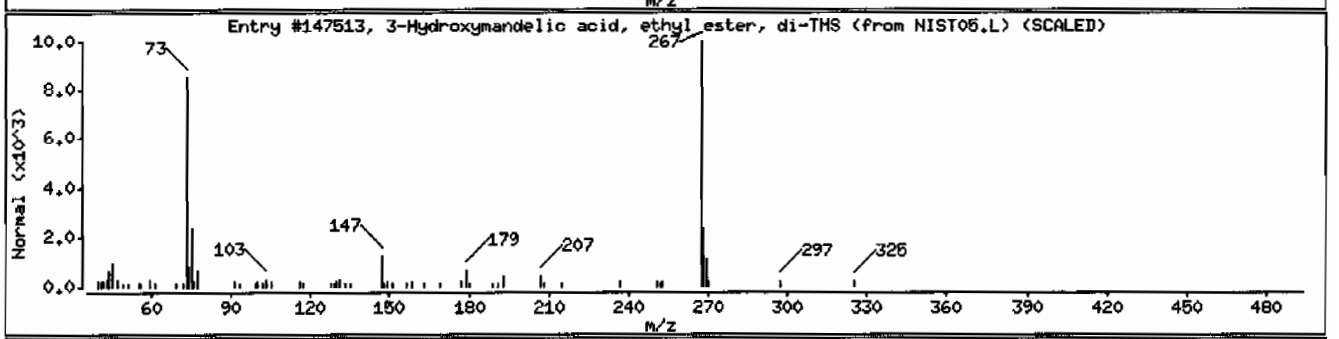

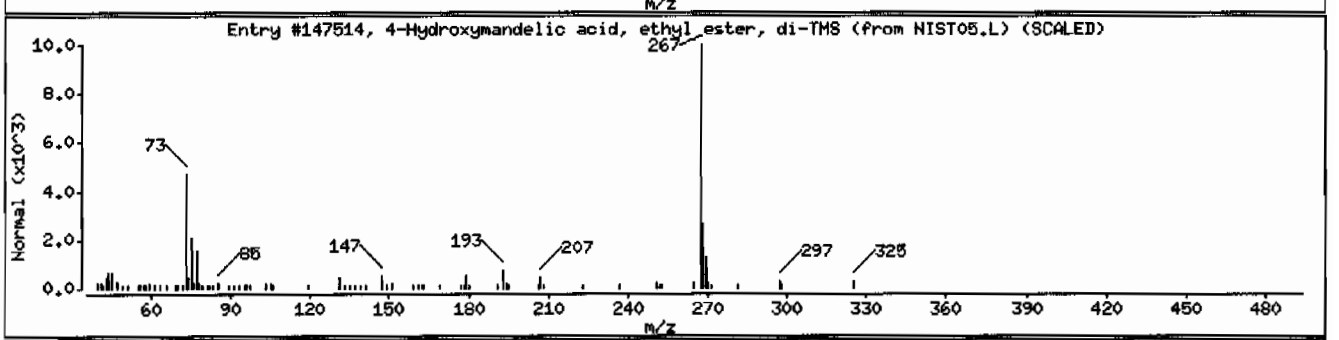

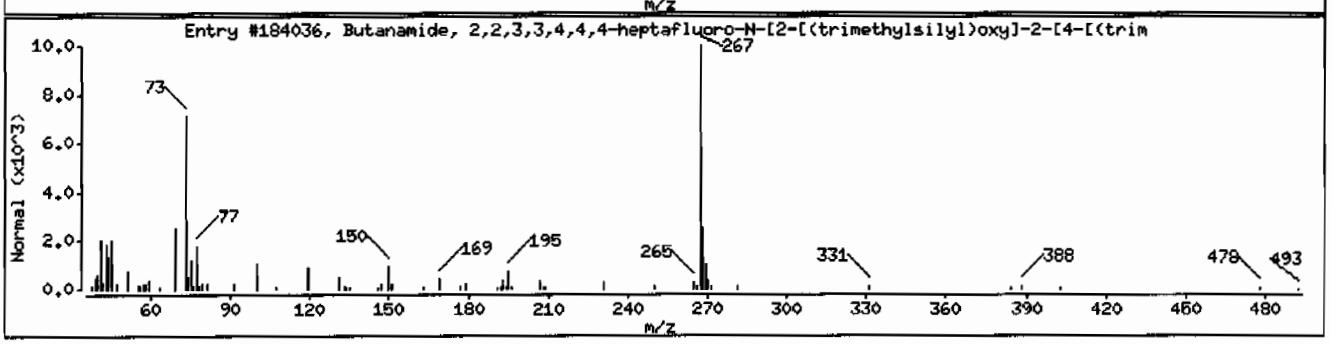

Data File: /chem/VOA4.i/120209v4/4n321.d

Date : 03-DEC-2009 02:54

Client ID: RE03-09-14114

Instrument: VOA4.i

Sample Info: |2418190051928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonanal	124-19-6	NIST05.L	19202	90	C9H18O	142
Nonanal	124-19-6	NIST05.L	19203	78	C9H18O	142
Cycloheptane	291-64-5	NIST05.L	3235	38	C7H14	98

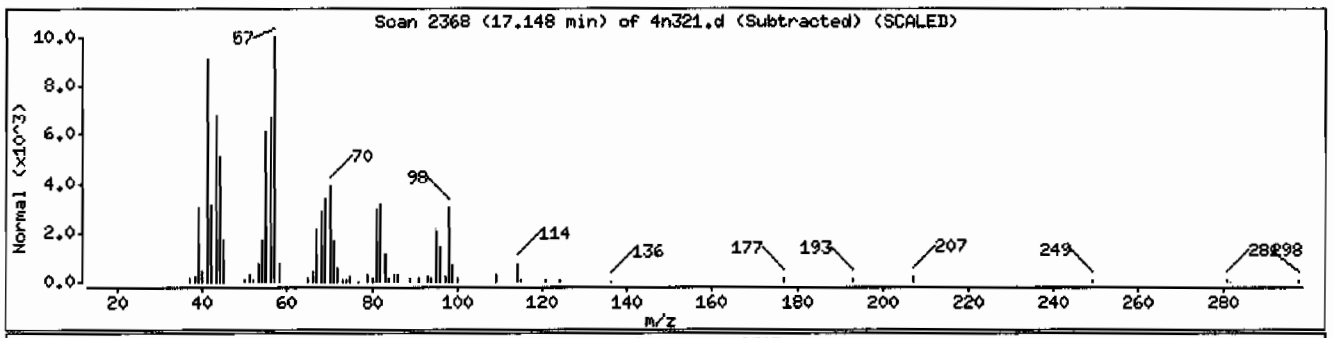

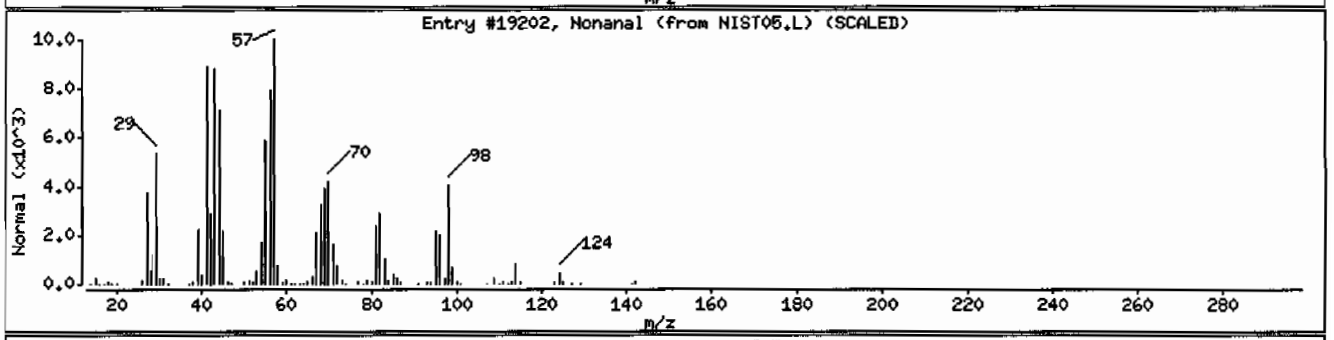

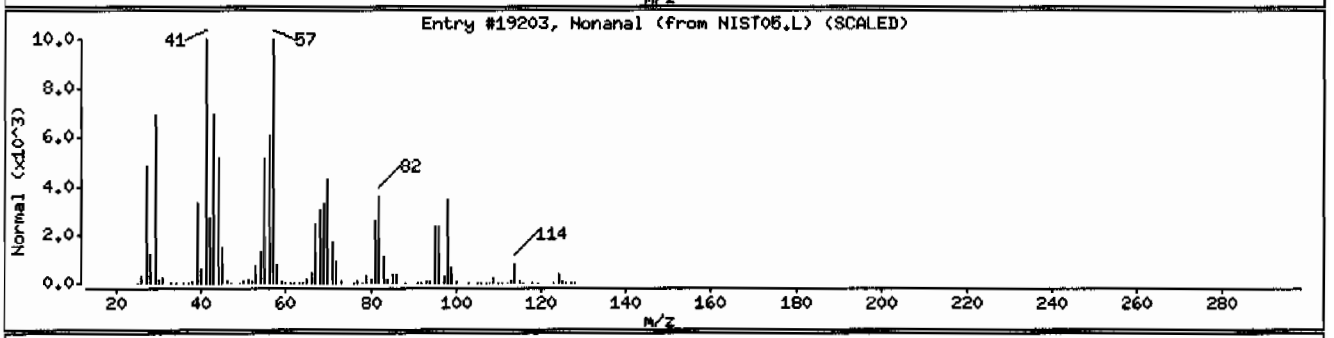

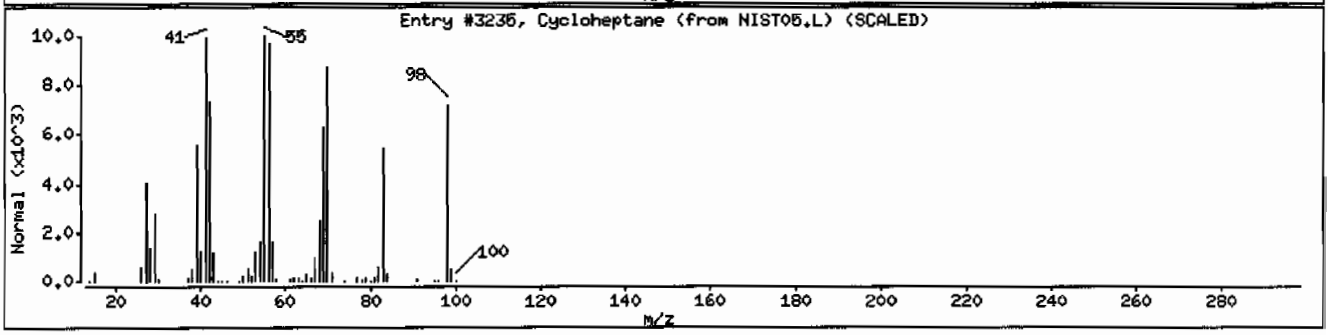

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14115	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 01:03	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n317.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.79	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14115	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 01:03	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:50	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n317.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	320	ug/kg	91	NJ
	Unknown Hydrocarbon	16.03	8.39	ug/kg		J
	Unknown Siloxane	16.79	25.6	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n317.d
Lab Smp Id: 241819001 Client Smp ID: RE03-09-14115
Inj Date : 03-DEC-2009 01:03
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819001|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00940	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1550470	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1146084	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	703278	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	322776	53.0028	53.0
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	986247	49.4069	49.4
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	430379	52.8474	52.8
10 Acetone	43	7.363	7.358	(0.693)	11292	1.79246	1.8(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n317.d
Report Date: 12/03/2009 15:47
Lab. ID: 241819001 SampleType: SAMPLE
Injection Date: 03-DEC-2009 01:03
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819001|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	11292	7.36	7.36	80-120	100	( )
58	2855	7.38	7.36	2- 62	25	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	19697	10.62	10.34	80-120	100	(T)
64	3402	10.62	10.34	3- 63	17	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8109	12.25	12.02	80-120	100	(T)
43	5071	12.25	12.02	227-287	63	(QT)
100	679941	12.25	12.02	9- 69	8384	(QT)
65 Styrene			CAS#: 100-42-5			
104	28105	14.82	14.40	80-120	100	(T)
78	360	14.83	14.40	21- 81	1	(QT)
66 Bromoform			CAS#: 75-25-2			
173	2325	14.82	14.66	80-120	100	(T)
175	22061	14.83	14.66	19- 79	949	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	25684	14.82	14.76	80-120	100	(T)
120	12098	14.82	14.76	0- 58	47	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
73 1,1,2,2-Tetrachloroethane				CAS#: 79-34-5		
83	3576	14.84	15.02	80-120	100	(T)
85	10292	14.83	15.02	34- 94	288	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	25596	14.83	15.11	80-120	100	(T)
75	70877	14.83	15.11	249-309	277	(T)
77	7394	14.82	15.11	62-122	29	(QT)
79 1,2,4-Trimethylbenzene				CAS#: 95-63-6		
105	14781	15.84	15.74	80-120	100	(T)
120	405	15.85	15.74	19- 79	3	(QT)
81 tert-Butylbenzene				CAS#: 98-06-6		
119	25970	16.05	15.70	80-120	100	(T)
91	40795	16.03	15.70	41-101	157	(QT)
134	6873	16.05	15.70	0- 53	26	(T)
83 sec-Butylbenzene				CAS#: 135-98-8		
105	16181	15.84	15.93	80-120	100	(T)
134	207	15.88	15.93	0- 52	1	( )
84 4-Isopropyltoluene				CAS#: 99-87-6		
119	25970	16.05	16.05	80-120	100	( )
134	6873	16.05	16.05	0- 59	26	( )
91	41949	16.03	16.05	0- 54	162	(Q)
89 n-Butylbenzene				CAS#: 104-51-8		
91	14386	16.78	16.50	80-120	100	(T)
92	3143	16.77	16.50	27- 87	22	(QT)
134	1654	16.79	16.50	0- 59	11	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n317.d
Lab Smp Id: 241819001 Client Smp ID: RE03-09-14115
Inj Date : 03-DEC-2009 01:03
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819001|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00940	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3468215	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	4413886	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	22221524	320.359628	320	91	NIST05.L	122480	61

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
16.026	740478	8.38804704	8.4	0		0	86
Unknown Siloxane					CAS #:		
16.788	2263248	25.6378118	25.6	0		0	86

Data File: /chem/VOA4.i/120209v4/4n317.d
Date : 03-DEC-2009 01:03
Client ID: RE03-09-14115
Sample Info: |241819001|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

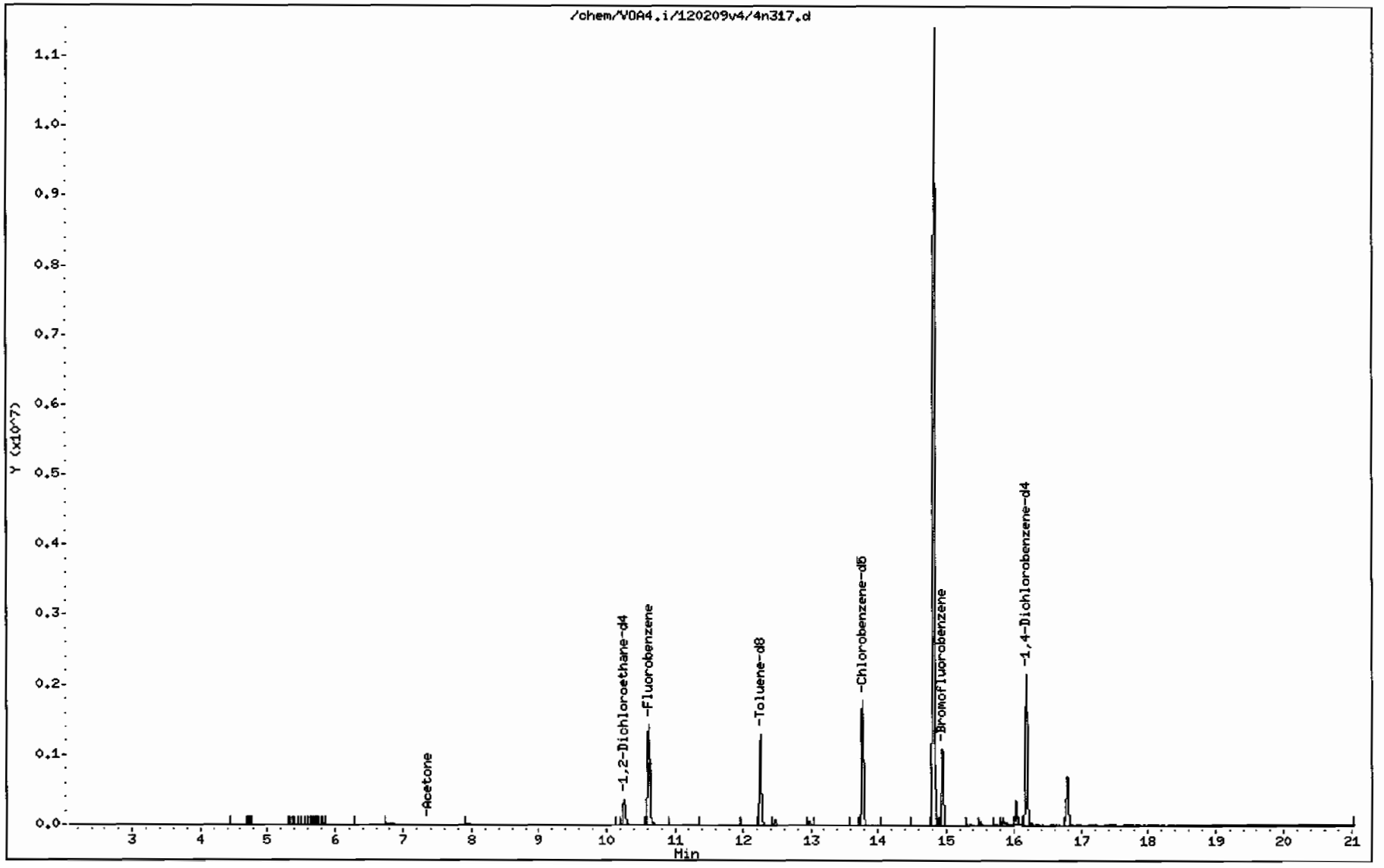

Data File: /chem/VOA4.i/120209v4/4n317.d

Date : 03-DEC-2009 01:03

Client ID: RE03-09-14115

Instrument: VOA4.i

Sample Info: |2418190011928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 1.8 ug/Kg

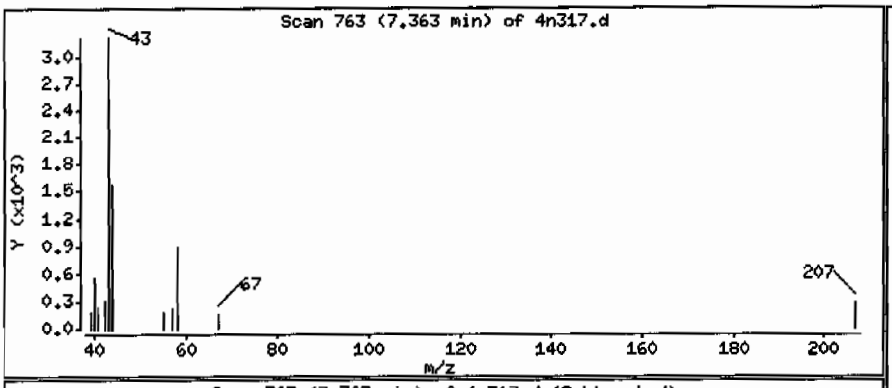

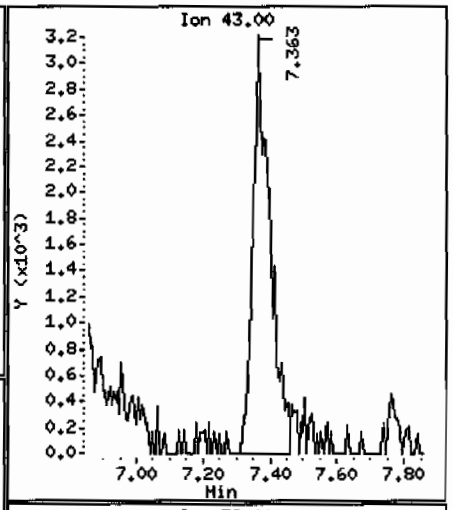

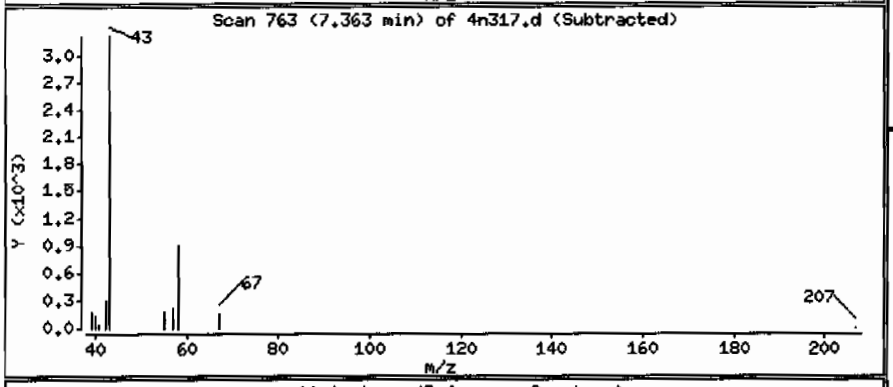

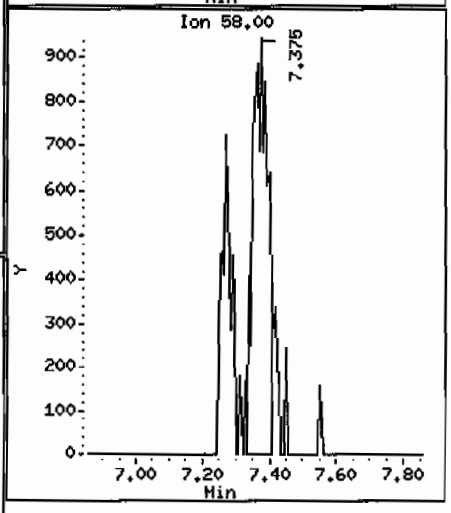

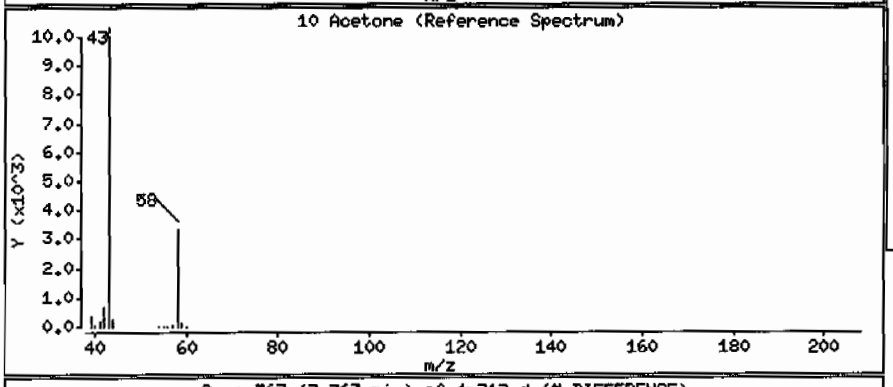

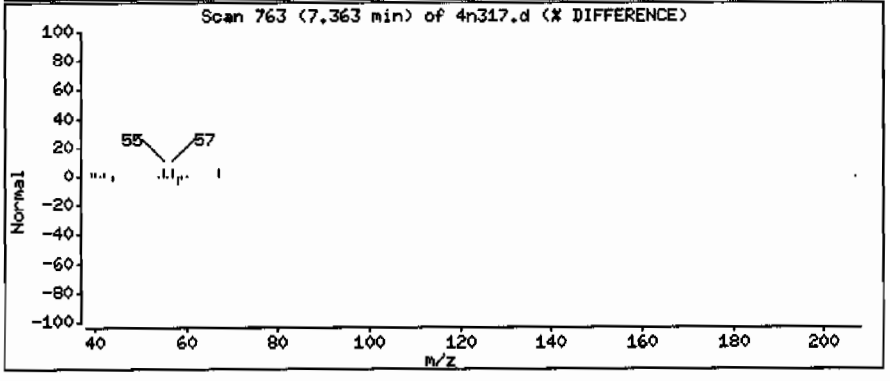

Data File: /chem/VOA4.i/120209v4/4n317.d

Date : 03-DEC-2009 01:03

Client ID: RE03-09-14115

Instrument: VOA4.i

Sample Info: |241819001|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	86	C8H24O4Si4	296

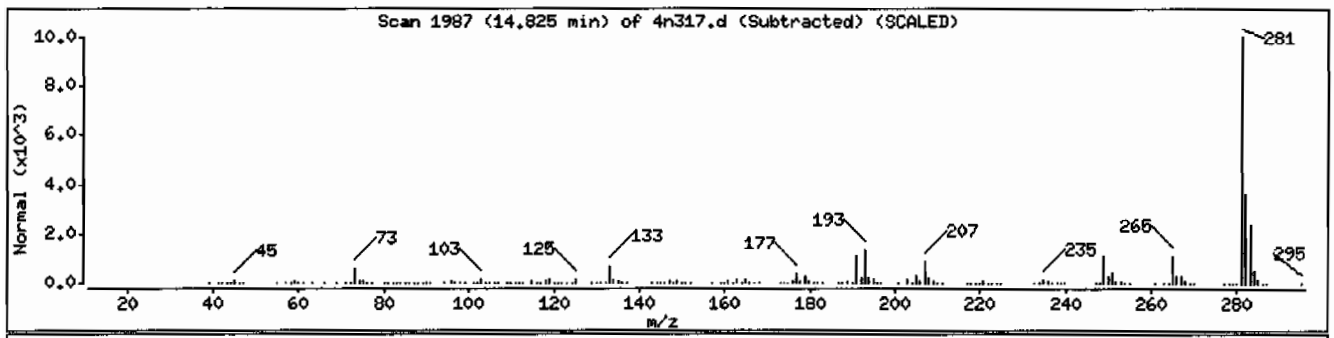

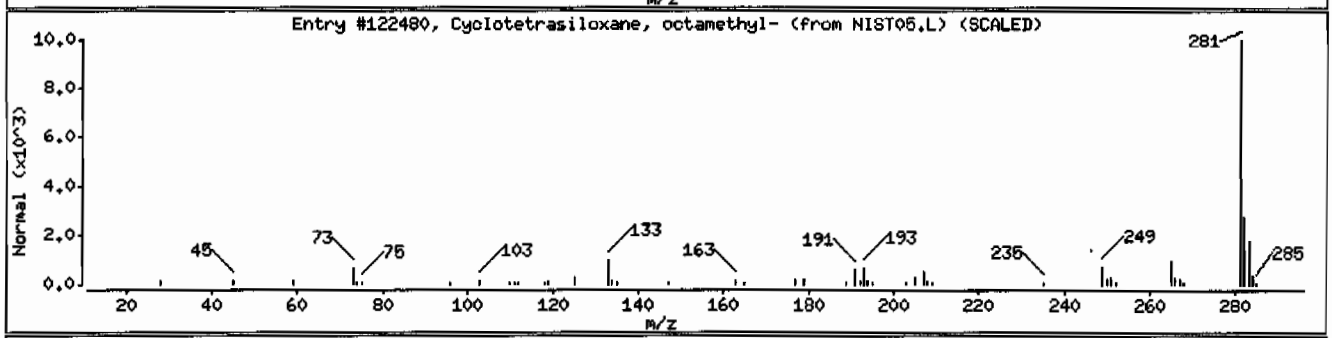

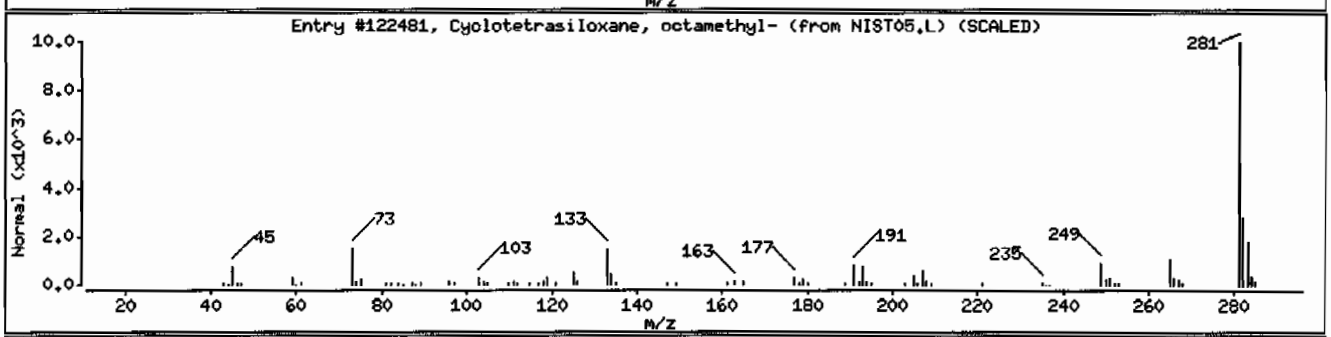

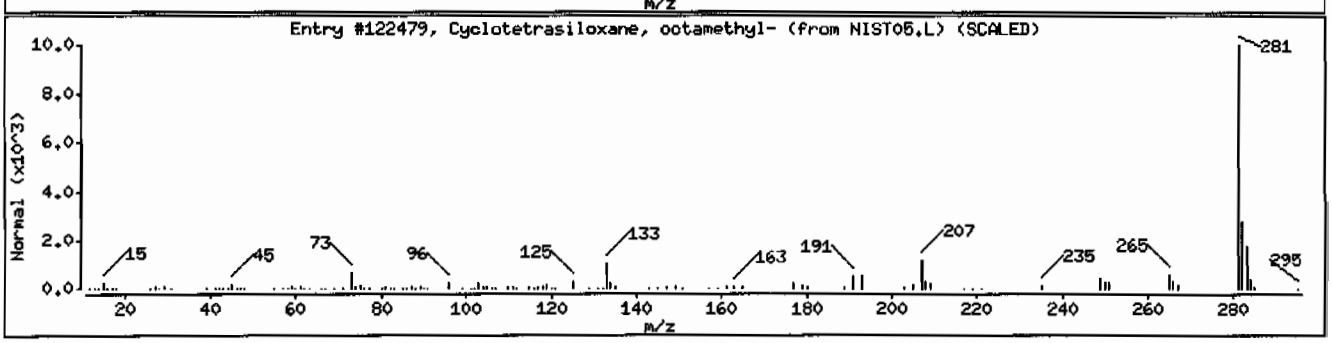

Data File: /chem/VOA4.i/120209v4/4n317.d

Date : 03-DEC-2009 01:03

Client ID: RE03-09-14115

Instrument: VOA4.i

Sample Info: |2418190011928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1,5-Cyclooctadiene, 1,5-dimethyl-	3760-14-3	NIST05.L	15260	64	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15164	64	C10H16	136
1,7-Octadiene, 3-methylene-	68695-13-6	NIST05.L	9712	62	C9H14	122

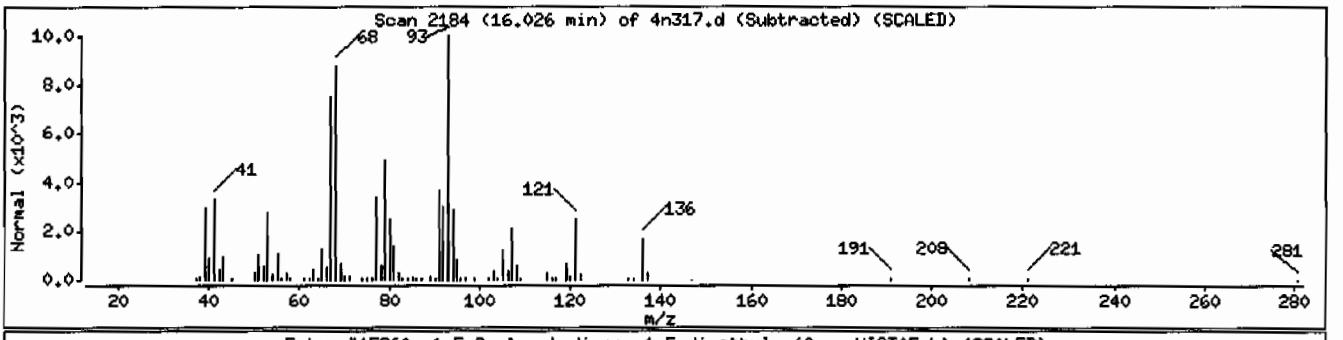

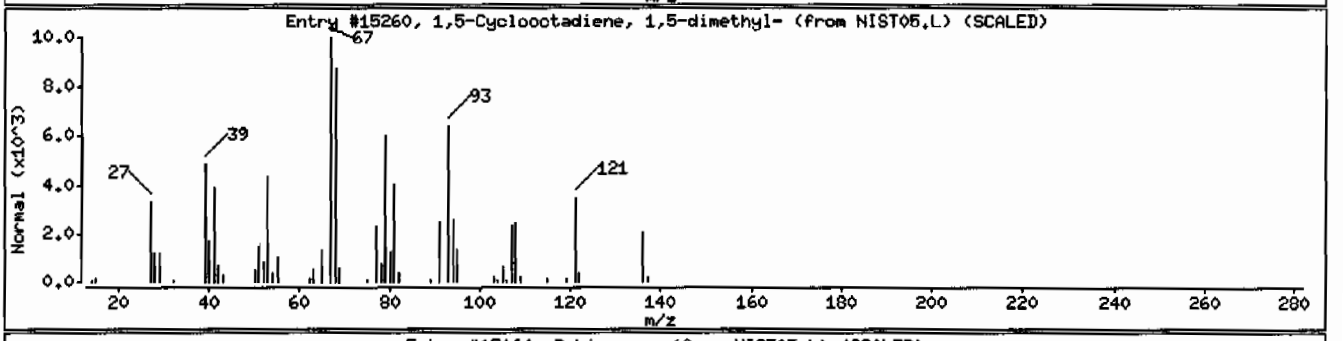

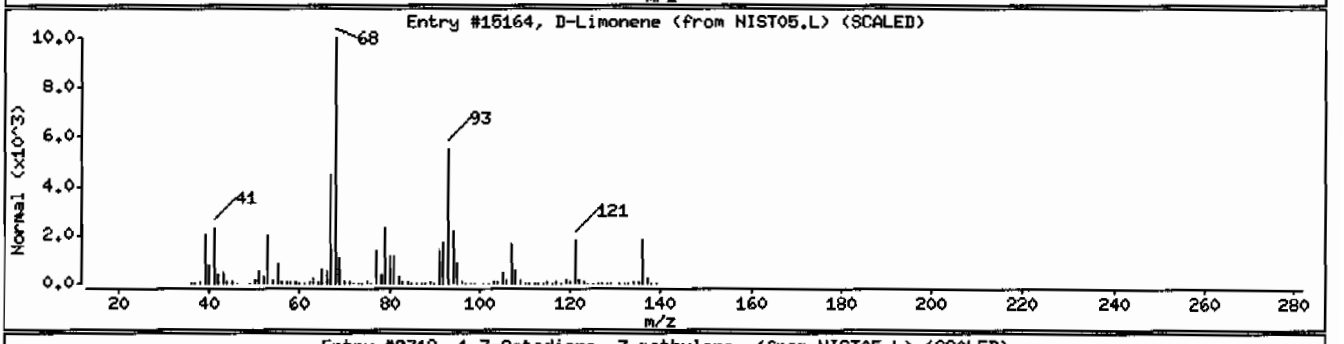

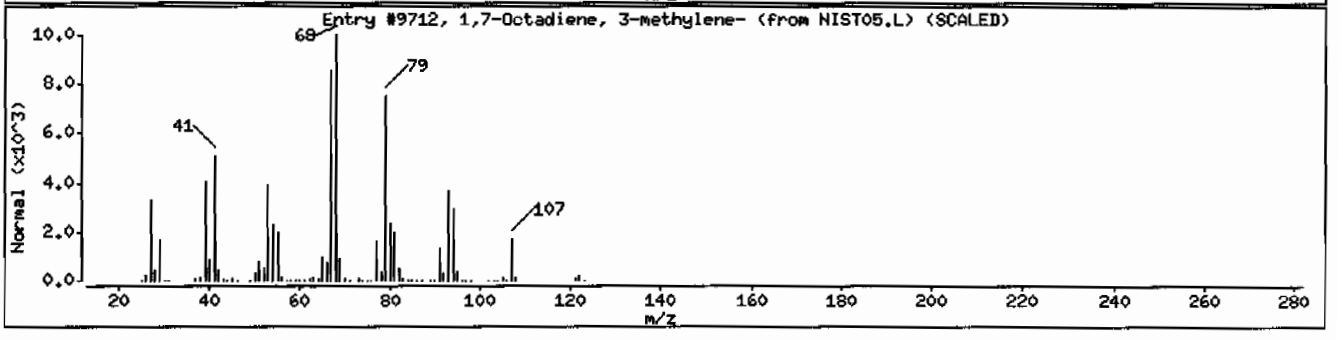

Data File: /chem/VOA4.i/120209v4/4n317.d

Date : 03-DEC-2009 01:03

Client ID: RE03-09-14115

Instrument: VOA4.i

Sample Info: |2418190011928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-86-3	NIST05.L	112909	50	C13H22O3Si2	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	50	C13H22O3Si2	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	50	C21H26F5NO2Si	475

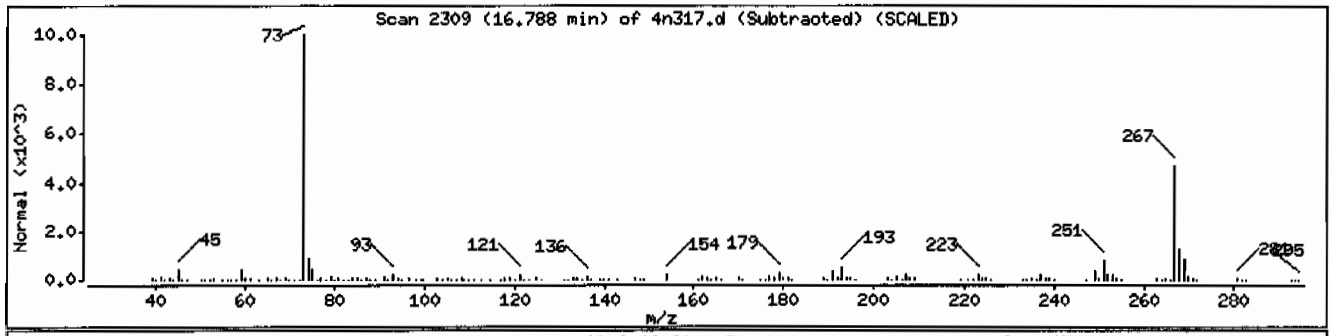

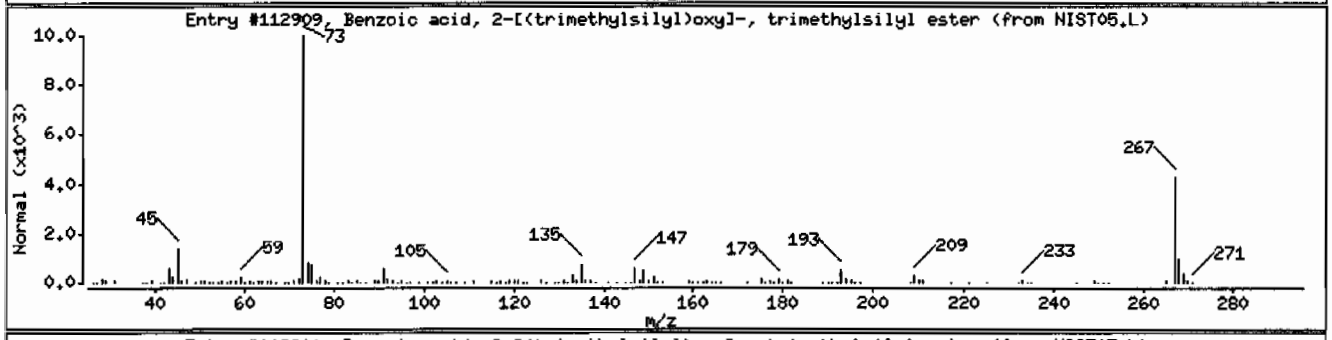

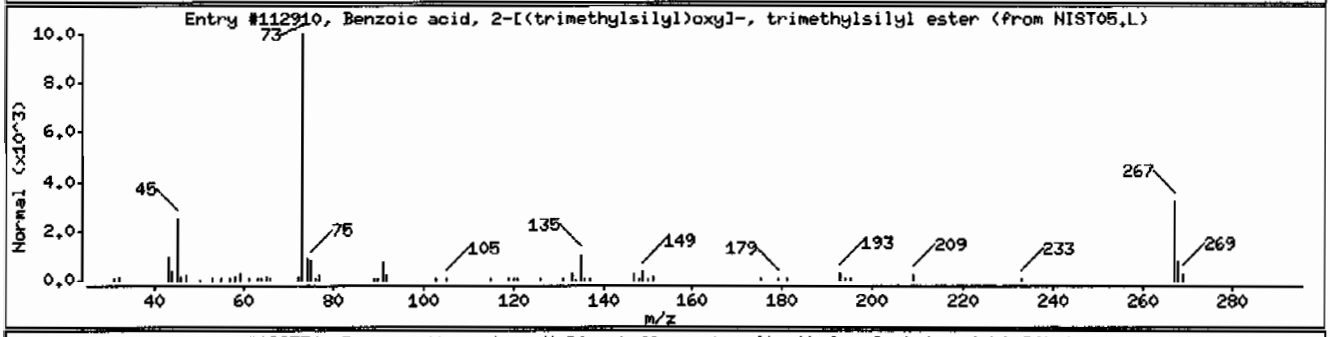

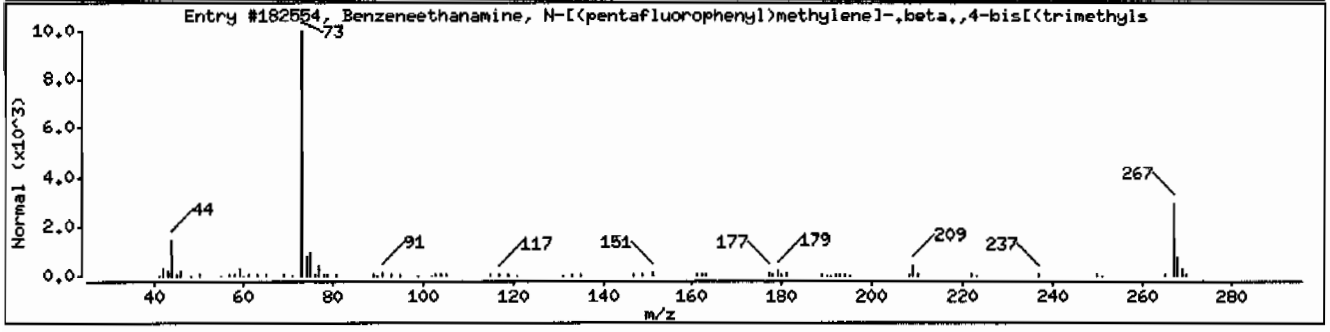

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819011	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14116	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 23:00	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:03	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n411.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04
67-64-1	Acetone	U	5.21	ug/kg	1.73	5.21
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
74-88-4	Iodomethane	U	5.21	ug/kg	1.67	5.21
75-09-2	Methylene chloride	U	5.21	ug/kg	2.09	5.21
75-15-0	Carbon disulfide	U	5.21	ug/kg	1.30	5.21
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04
78-93-3	2-Butanone	U	5.21	ug/kg	1.56	5.21
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04
108-10-1	4-Methyl-2-pentanone	U	5.21	ug/kg	1.30	5.21
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04
591-78-6	2-Hexanone	U	5.21	ug/kg	1.56	5.21
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819011	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14116	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 23:00	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:03	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n411.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.21	ug/kg	1.67	5.21
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	51	ug/kg	90	NJ
	Unknown Siloxane	16.79	8.37	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n411.d
Lab Smp Id: 241819011 Client Smp ID: RE03-09-14116
Inj Date : 03-DEC-2009 23:00
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819011|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.09710	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1678005	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1249271	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	730169	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	304927	46.2662	48.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	975363	44.8258	46.7
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	417517	49.3799	51.5

ION RATIO REPORT

VOA REPORT

Data file: 4n411.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819011 SampleType: SAMPLE
Injection Date: 03-DEC-2009 23:00
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819011|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	22362	10.62	10.34	80-120	100	(T)
64	3670	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7397	12.25	12.02	80-120	100	(T)
43	4911	12.25	12.02	230-290	66	(QT)
100	674738	12.25	12.02	8- 68	9121	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	5383	14.83	15.11	80-120	100	(T)
75	14175	14.82	15.11	254-314	263	(T)
77	1129	14.81	15.11	62-122	21	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n411.d
Lab Smp Id: 241819011 Client Smp ID: RE03-09-14116
Inj Date : 03-DEC-2009 23:00
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819011|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.09710	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3742812	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	4119419	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	3658868	48.8785821	51.0	90	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown Siloxane					CAS #:		
16.794	660970	8.02260932	8.4	0		0	86

Data File: /chem/VOA4.i/120309v4/4n411.d
Date : 03-DEC-2009 23:00
Client ID: RE03-09-14116
Sample Info: |241819011|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

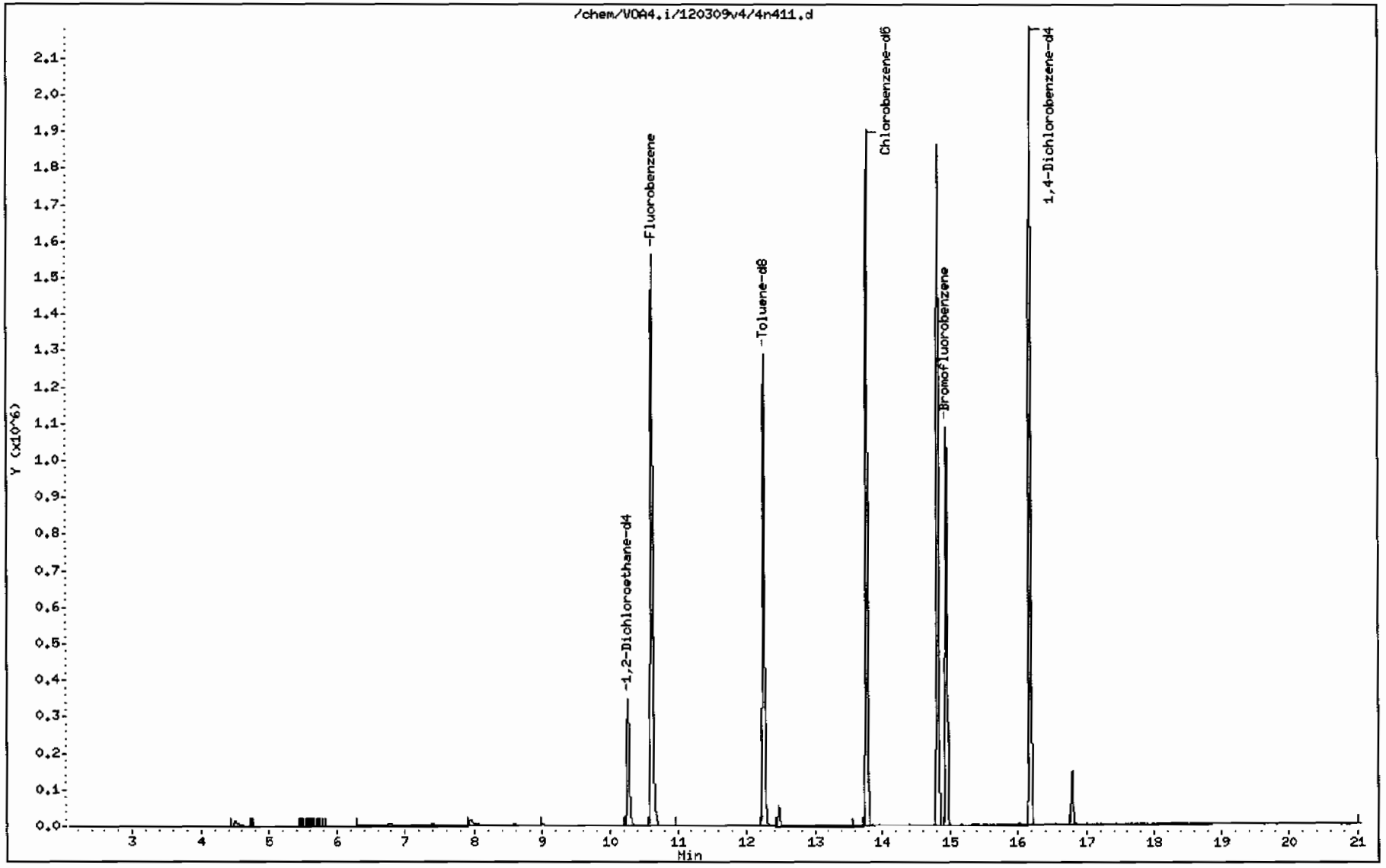

Data File: /chem/VOA4.i/120309v4/4n411.d

Date : 03-DEC-2009 23:00

Client ID: RE03-09-14116

Instrument: VOA4.i

Sample Info: |2418190111928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	86	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	78	C8H24O4Si4	296

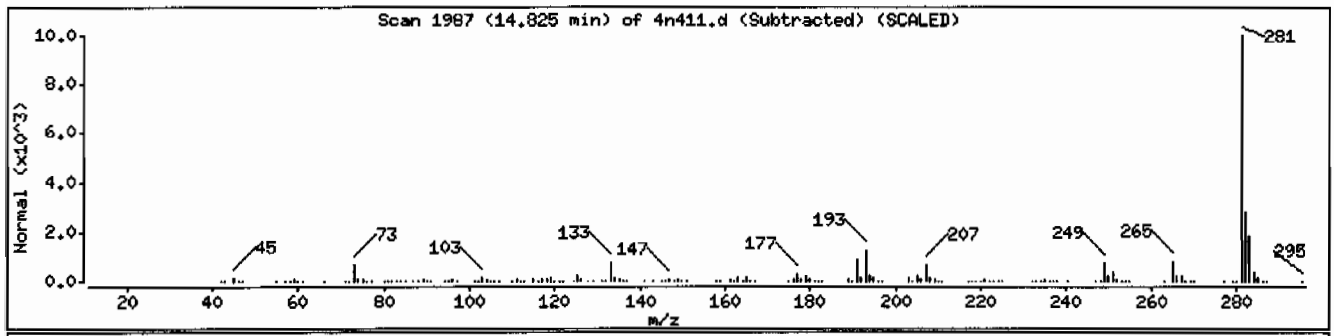

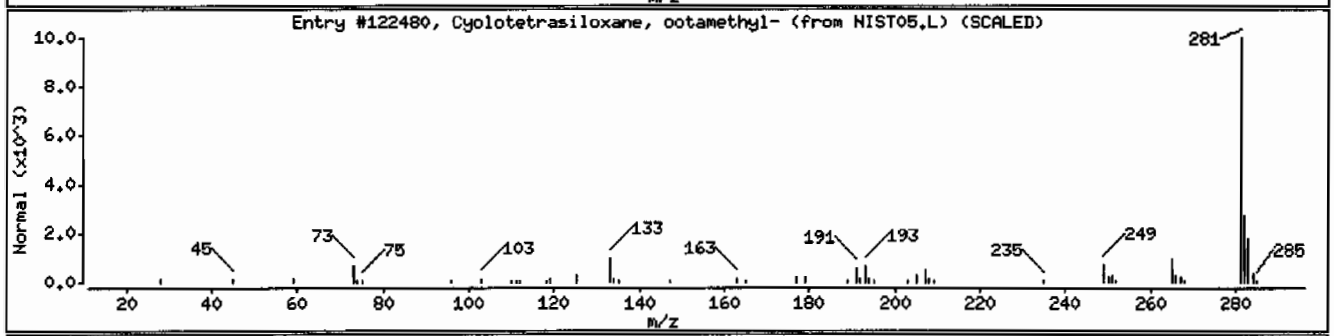

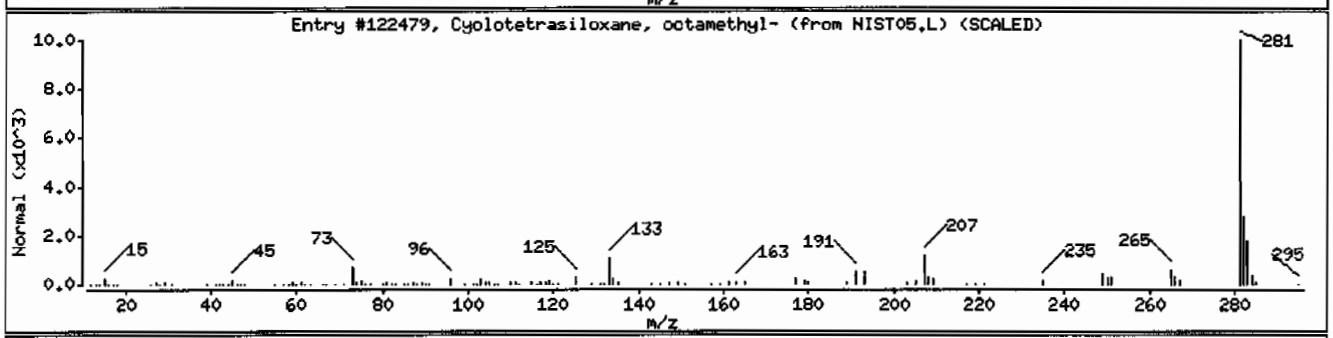

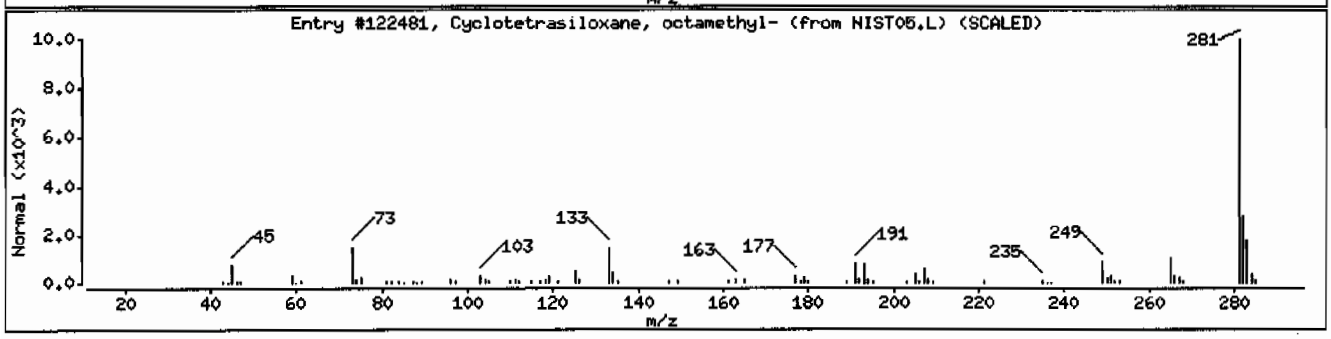

Data File: /chem/VOA4.i/120309v4/4n411.d

Date : 03-DEC-2009 23:00

Client ID: RE03-09-14116

Instrument: VOA4.i

Sample Info: |241819011|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Propenenitrile, 2-(2-benzothiazolyl)-3-(	106833-31-2	NIST05.L	103827	47	C14H8N2S2	268
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	45	C16H28O4Si2	340
Phthalimide, N-(4-methoxybezyl)-	1000314-94-0	NIST05.L	103323	43	C16H13NO3	267

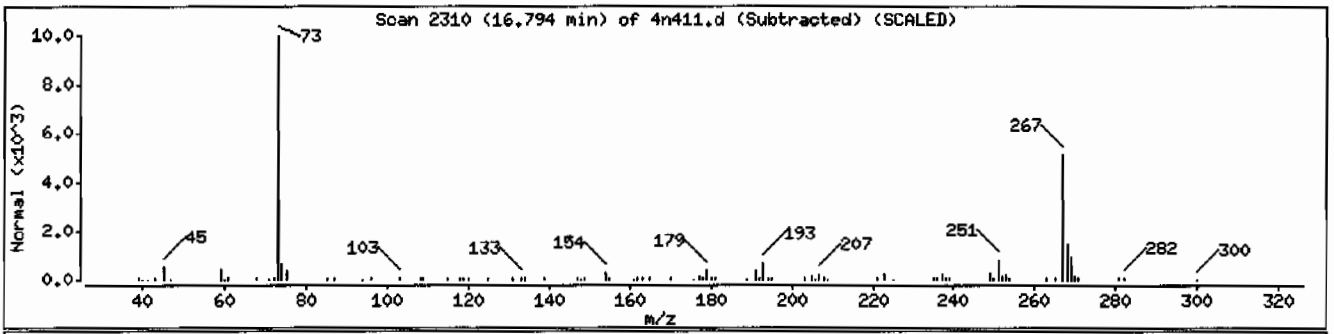

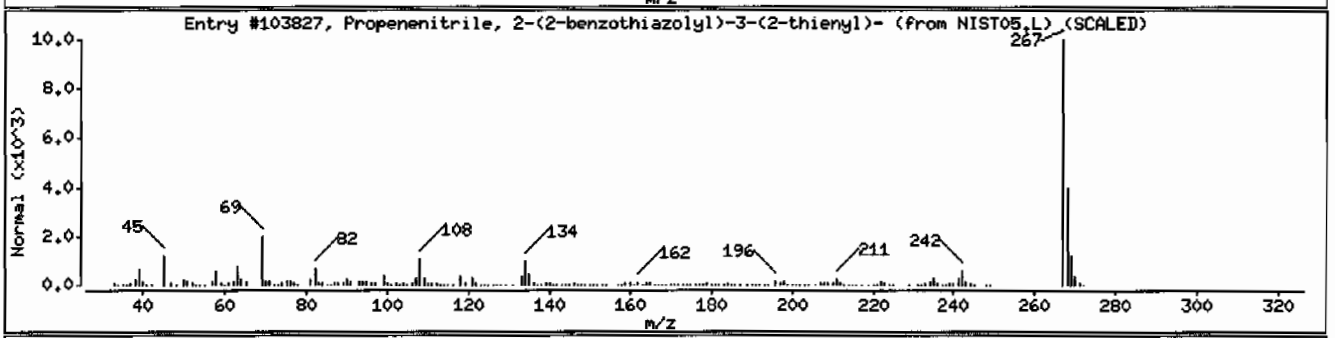

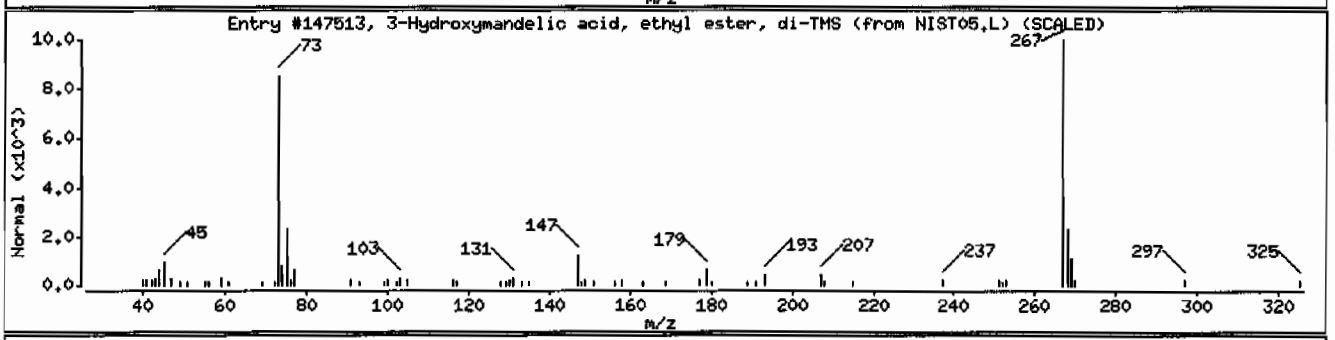

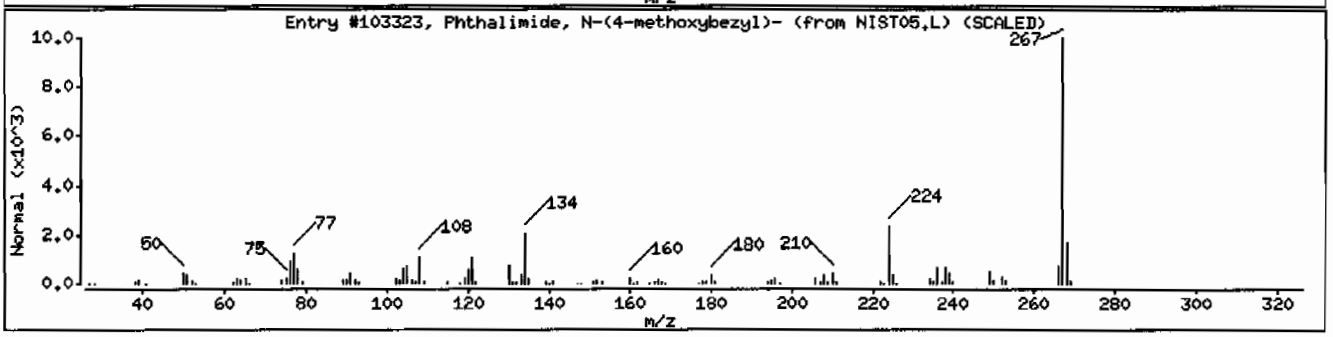

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:56**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n323.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.44	ug/kg	1.81	5.44
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.44	ug/kg	1.74	5.44
75-09-2	Methylene chloride	U	5.44	ug/kg	2.18	5.44
75-15-0	Carbon disulfide	U	5.44	ug/kg	1.36	5.44
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.44	ug/kg	1.63	5.44
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.359	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.359	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.44	ug/kg	1.36	5.44
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.44	ug/kg	1.63	5.44
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819007	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14117	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 03:49	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:56	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n323.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.44	ug/kg	1.74	5.44
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	169	ug/kg	90	NJ
	Unknown Siloxane	16.79	16.3	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n323.d
Lab Smp Id: 241819007 Client Smp ID: RE03-09-14117
Inj Date : 03-DEC-2009 03:49
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819007|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.12930	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1512163	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.772	(1.000)	1094697	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	623241	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	291625	49.1007	53.4
$ 47 Toluene-d8	98	12.254	12.254	(0.890)	904594	47.4437	51.6
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	388794	53.8720	58.6

ION RATIO REPORT

VOA REPORT

Data file: 4n323.d
Report Date: 12/03/2009 15:48
Lab. ID: 241819007 SampleType: SAMPLE
Injection Date: 03-DEC-2009 03:49
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819007|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	20988	10.62	10.34	80-120	100	(T)
64	3788	10.62	10.34	3- 63	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7478	12.25	12.02	80-120	100	(T)
43	4365	12.25	12.02	227-287	58	(QT)
100	624838	12.25	12.02	9- 69	8355	(QT)
65 Styrene				CAS#: 100-42-5		
104	16371	14.82	14.40	80-120	100	(T)
78	463	14.81	14.40	21- 81	3	(QT)
67 Isopropylbenzene				CAS#: 98-82-8		
105	14121	14.82	14.76	80-120	100	(T)
120	6183	14.82	14.76	0- 58	44	(T)
73 1,1,2,2-Tetrachloroethane				CAS#: 79-34-5		
83	3054	14.82	15.02	80-120	100	(T)
85	5435	14.82	15.02	34- 94	178	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	14314	14.82	15.11	80-120	100	(T)
75	39608	14.82	15.11	249-309	277	(T)
77	3061	14.82	15.11	62-122	21	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n323.d
Lab Smp Id: 241819007 Client Smp ID: RE03-09-14117
Inj Date : 03-DEC-2009 03:49
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819007|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.12930	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.772	3519057	50.000
* 86 1,4-Dichlorobenzene-d4	16.180	3572930	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.826	10949830	155.579007	169	90	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL (ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown Siloxane					CAS #:		
16.789	1069162	14.9619737	16.3	0		0	86

Data File: /chem/VOA4.i/120209v4/4n323.d

Date : 03-DEC-2009 03:49

Client ID: RE03-09-14117

Sample Info: |2418190071928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

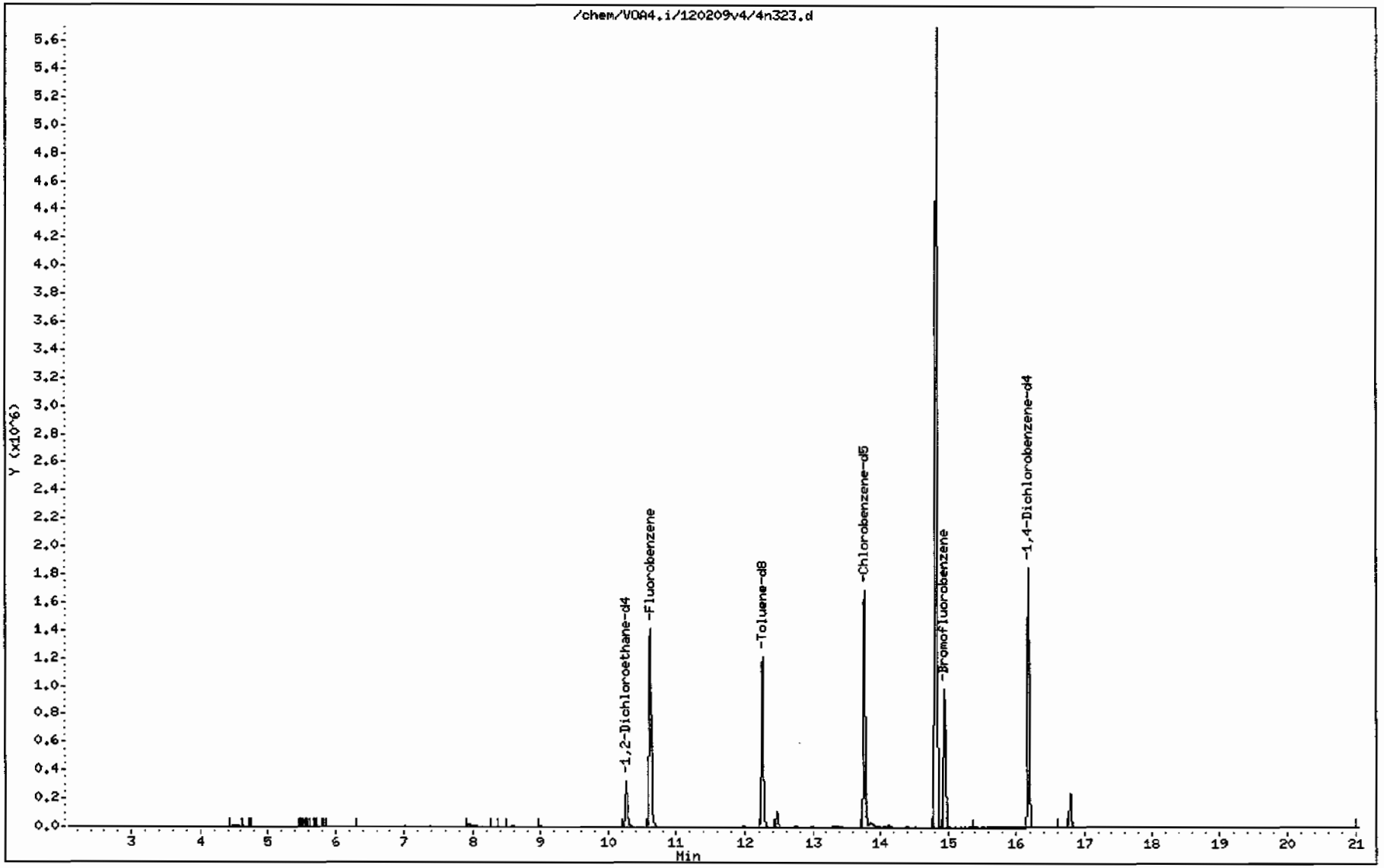

Data File: /chem/VOA4.i/120209v4/4n323.d

Date : 03-DEC-2009 03:49

Client ID: RE03-09-14117

Instrument: VOA4.i

Sample Info: |2418190071928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	87	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C21H15N	281

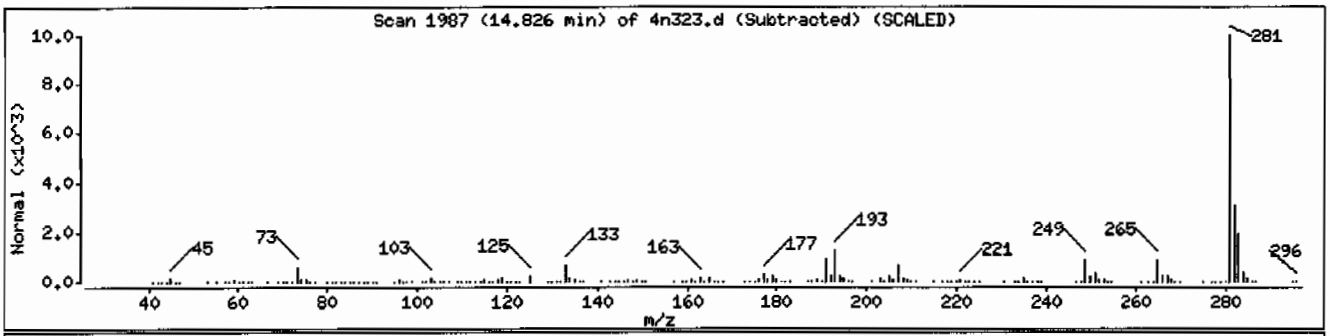

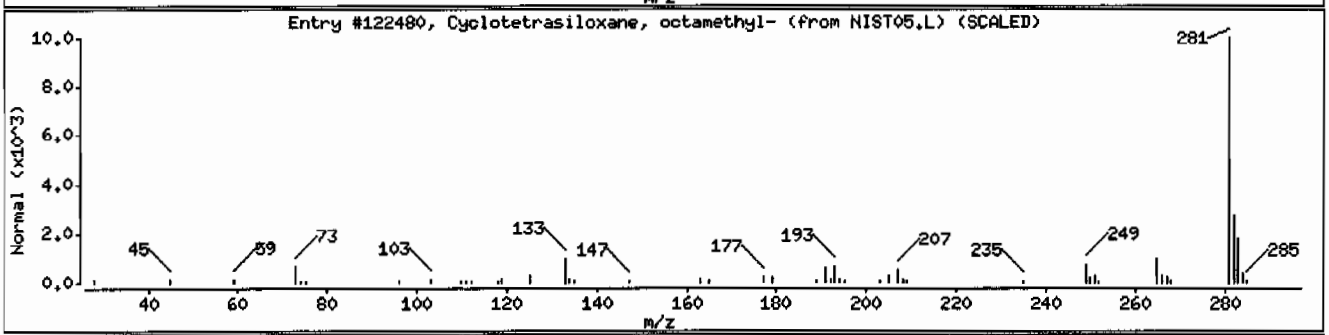

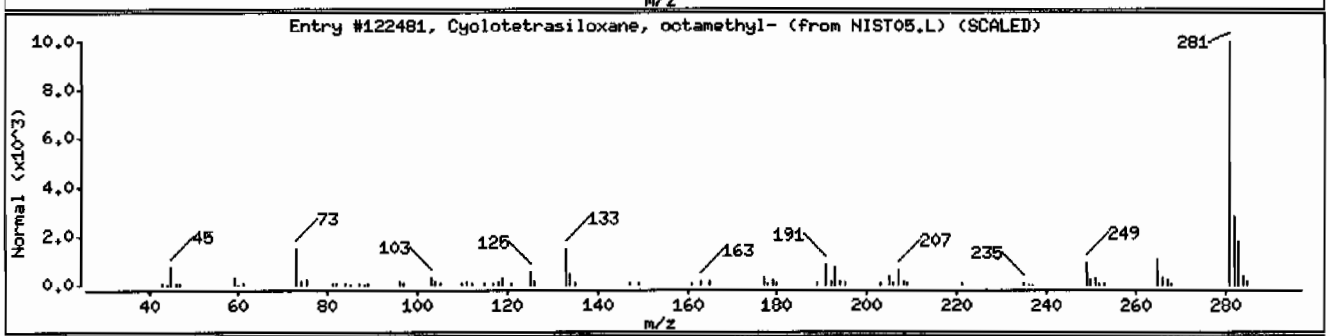

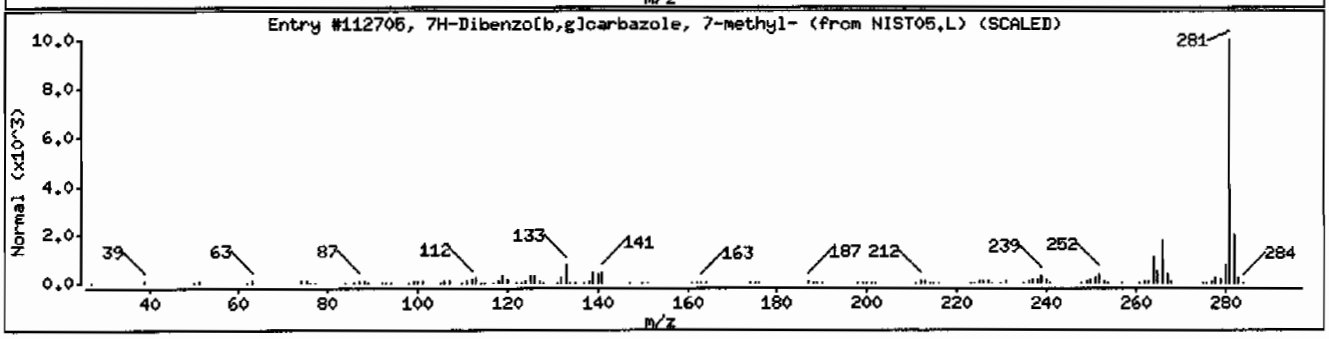

Data File: /chem/VOA4.i/120209v4/4n323.d

Date : 03-DEC-2009 03:49

Client ID: RE03-09-14117

Instrument: VOA4.i

Sample Info: |2418190071928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	72	C13H22O3Si2	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112905	56	C13H22O3Si2	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	37	C21H26F5NO2Si	476

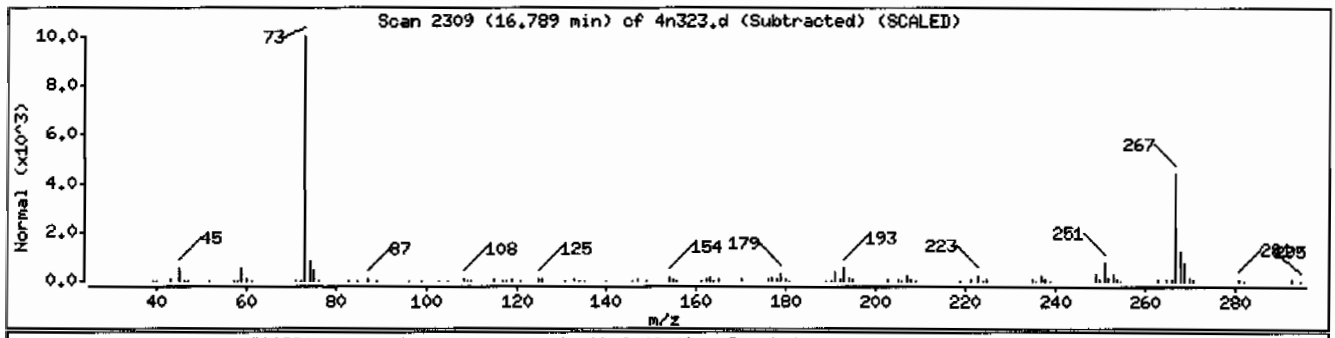

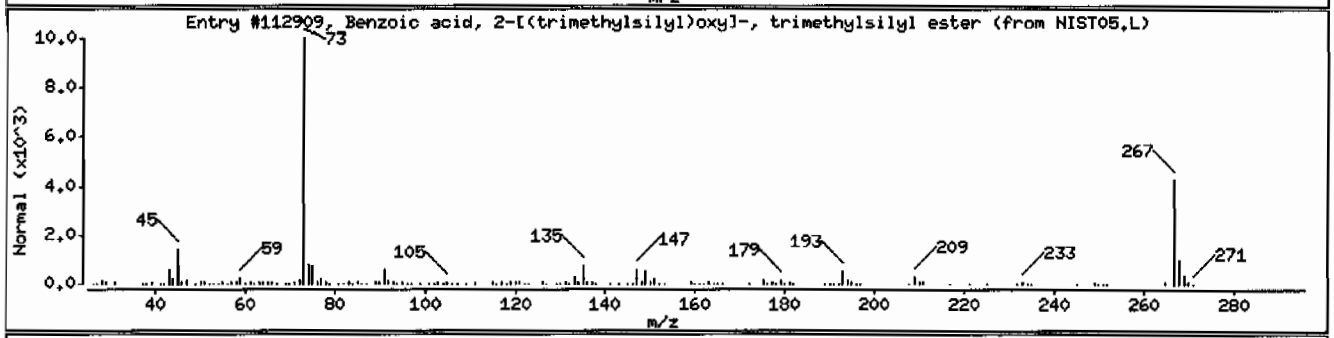

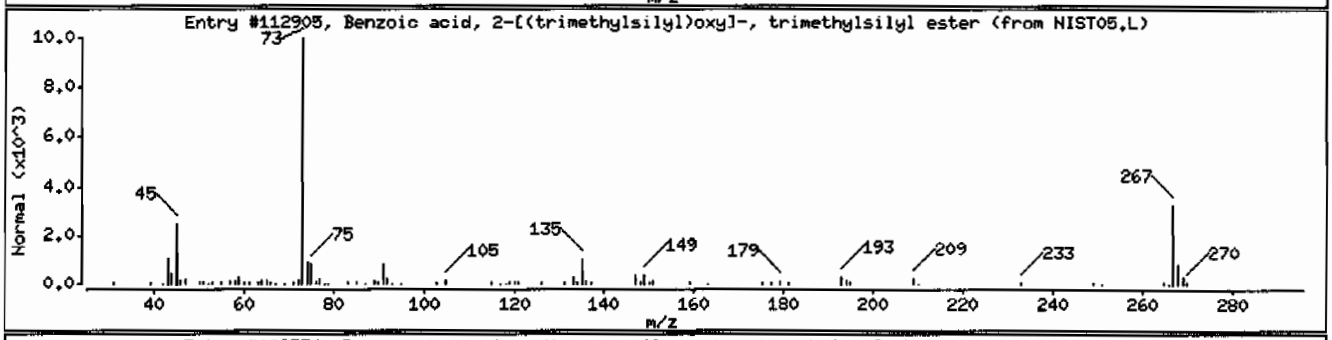

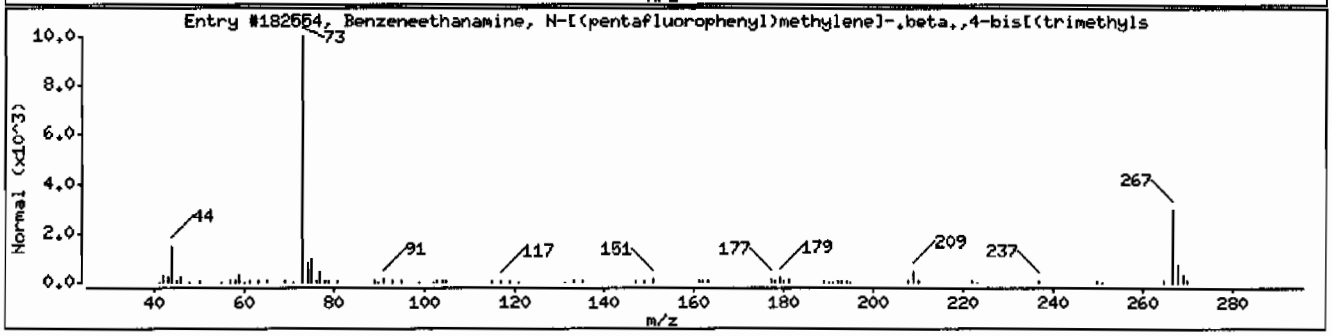

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14118**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 16:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 16:27**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o108.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.365	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.365	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14118**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 16:54**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 16:27**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o108.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	164	ug/kg	91	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o108.d
Lab Smp Id: 241819016 Client Smp ID: RE03-09-14118
Inj Date : 07-DEC-2009 16:54
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819016|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.48220	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1522974	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1151960	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	733671	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	318321	53.2150	58.8
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1021299	50.9019	56.2
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	443060	52.1508	57.6

ION RATIO REPORT

VOA REPORT

Data file: 4o108.d
Report Date: 12/07/2009 17:11
Lab. ID: 241819016 SampleType: SAMPLE
Injection Date: 07-DEC-2009 16:54
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819016|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	19983	10.61	10.34	80-120	100	(T)
64	3574	10.62	10.34	3- 63	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8618	12.25	12.02	80-120	100	(T)
43	5520	12.25	12.02	228-288	64	(QT)
100	703403	12.25	12.02	8- 68	8161	(QT)
65 Styrene				CAS#: 100-42-5		
104	14222	14.82	14.40	80-120	100	(T)
78	127	14.44	14.40	21- 81	1	(Q)
67 Isopropylbenzene				CAS#: 98-82-8		
105	12063	14.82	14.76	80-120	100	(T)
120	5815	14.83	14.76	0- 58	48	(T)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	13735	14.82	15.11	80-120	100	(T)
75	34106	14.83	15.11	251-311	248	(QT)
77	2206	14.83	15.11	61-121	16	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o108.d
Lab Smp Id: 241819016 Client Smp ID: RE03-09-14118
Inj Date : 07-DEC-2009 16:54
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819016|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.48220	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3464287	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.826	10280069	148.372037	164	91	NIST05.L	122480	61

Data File: /chem/VOA4.i/120709v4/4o108.d
Date : 07-DEC-2009 16:54
Client ID: RE03-09-14118
Sample Info: |2418190161928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

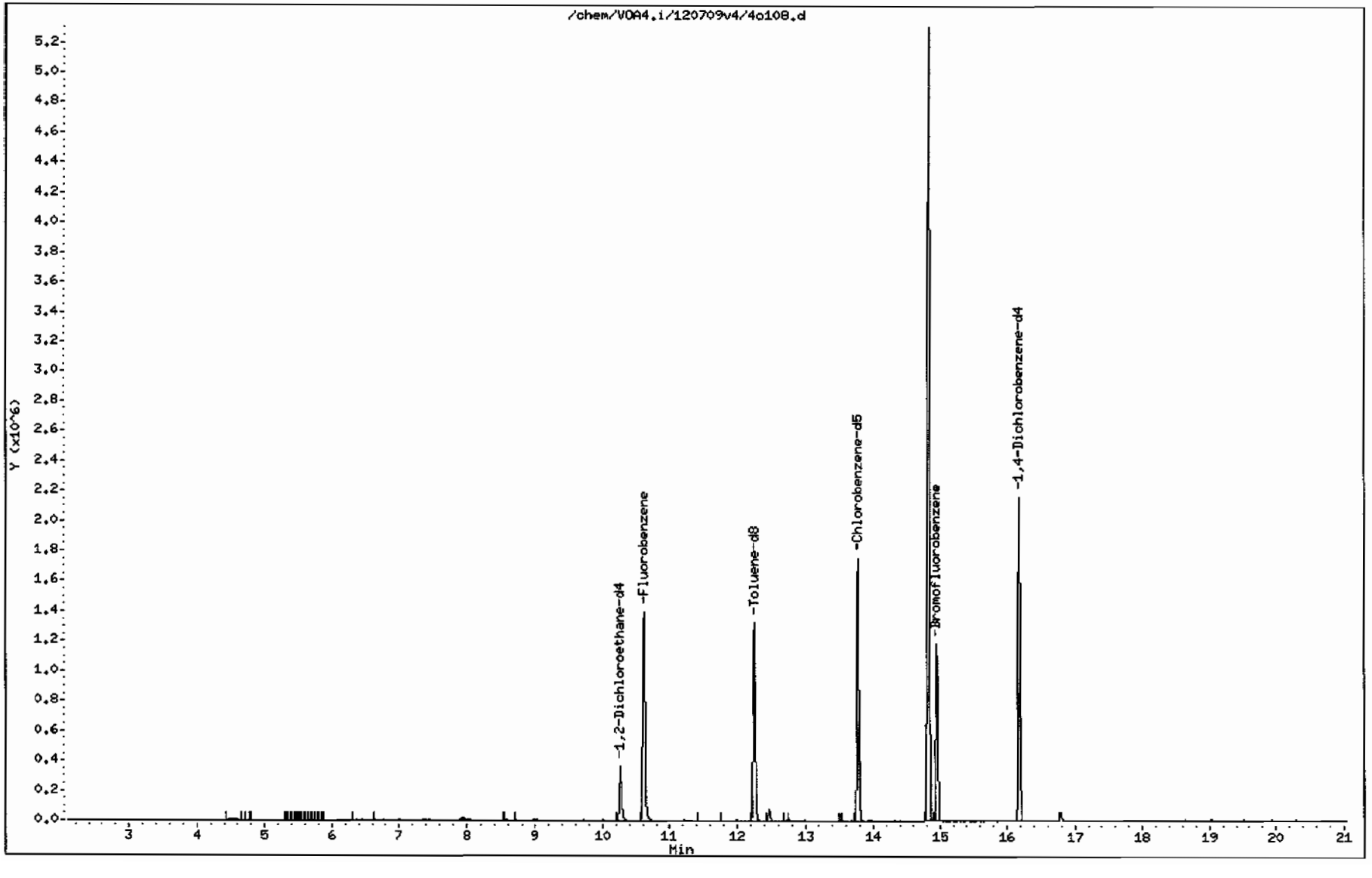

Data File: /chem/VOA4.i/120709v4/4o108.d

Date : 07-DEC-2009 16:54

Client ID: RE03-09-14118

Instrument: VOA4.i

Sample Info: |241819016|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Benzene, 1-phenyl-4-(2-cyano-2-phenyleth	27869-56-3	NIST05.L	112707	53	C21H15N	281

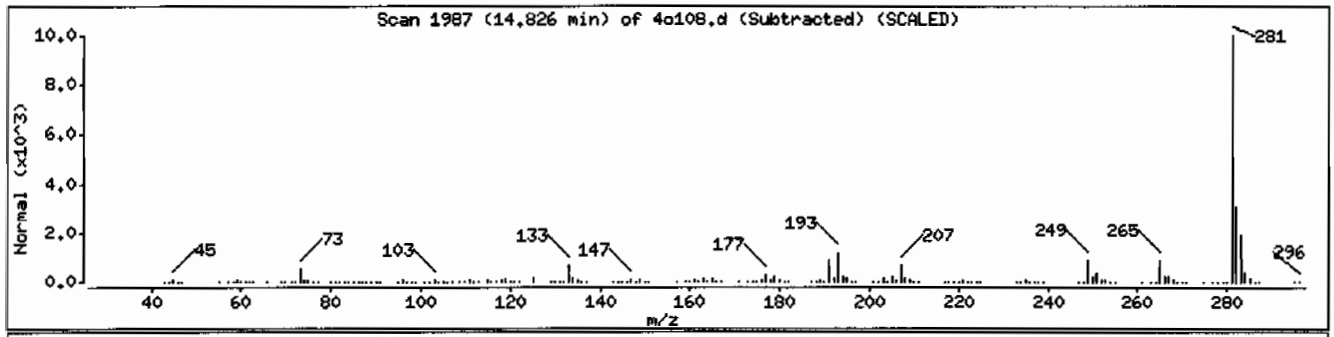

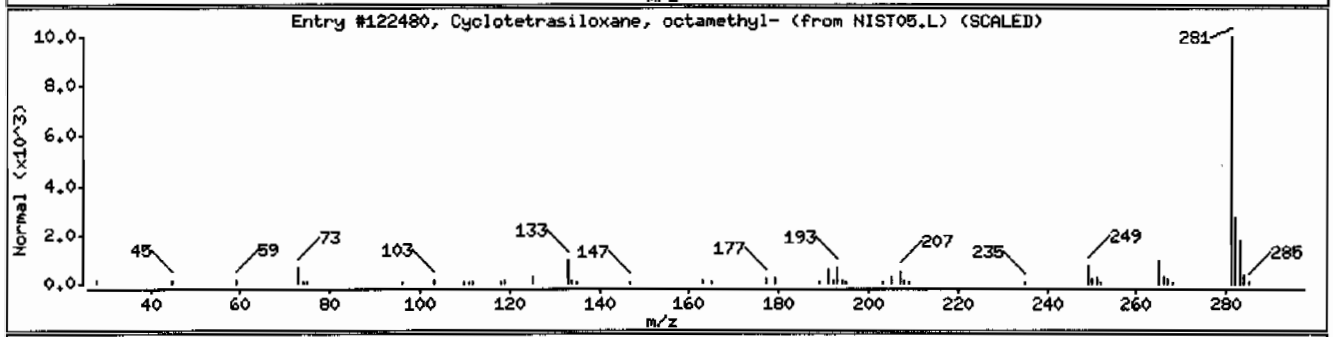

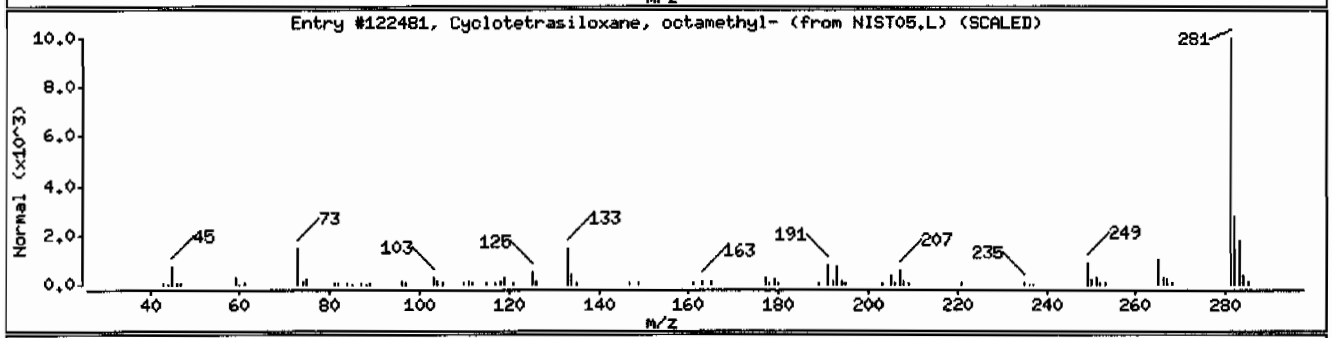

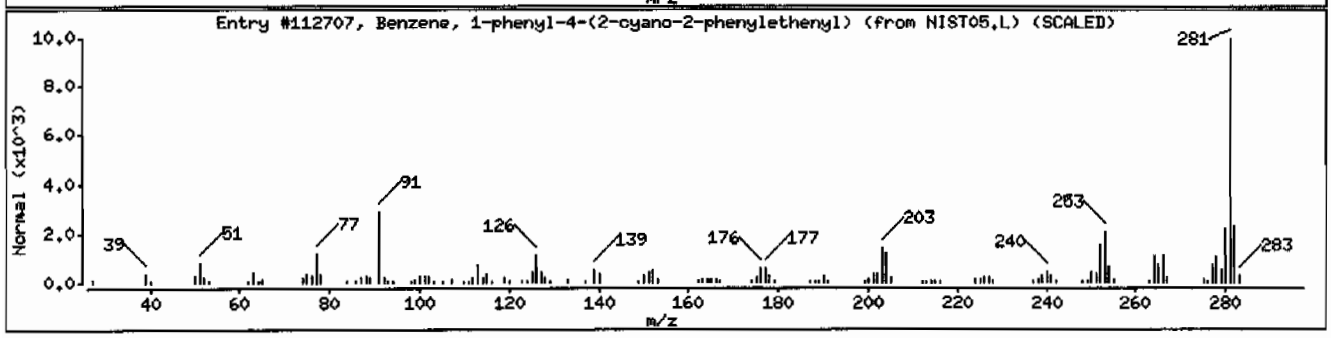

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n413.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.02	ug/kg	0.346	1.02
74-87-3	Chloromethane	U	1.02	ug/kg	0.305	1.02
75-01-4	Vinyl chloride	U	1.02	ug/kg	0.305	1.02
74-83-9	Bromomethane	U	1.02	ug/kg	0.305	1.02
75-00-3	Chloroethane	U	1.02	ug/kg	0.305	1.02
75-69-4	Trichlorofluoromethane	U	1.02	ug/kg	0.305	1.02
67-64-1	Acetone	U	5.09	ug/kg	1.69	5.09
75-35-4	1,1-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
74-88-4	Iodomethane	U	5.09	ug/kg	1.63	5.09
75-09-2	Methylene chloride	U	5.09	ug/kg	2.03	5.09
75-15-0	Carbon disulfide	U	5.09	ug/kg	1.27	5.09
156-60-5	trans-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
75-34-3	1,1-Dichloroethane	U	1.02	ug/kg	0.305	1.02
78-93-3	2-Butanone	U	5.09	ug/kg	1.53	5.09
156-59-2	cis-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
594-20-7	2,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
67-66-3	Chloroform	U	1.02	ug/kg	0.305	1.02
74-97-5	Bromochloromethane	U	1.02	ug/kg	0.336	1.02
71-55-6	1,1,1-Trichloroethane	U	1.02	ug/kg	0.305	1.02
563-58-6	1,1-Dichloropropene	U	1.02	ug/kg	0.305	1.02
56-23-5	Carbon tetrachloride	U	1.02	ug/kg	0.305	1.02
107-06-2	1,2-Dichloroethane	U	1.02	ug/kg	0.305	1.02
71-43-2	Benzene	U	1.02	ug/kg	0.305	1.02
79-01-6	Trichloroethylene	U	1.02	ug/kg	0.336	1.02
78-87-5	1,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
75-27-4	Bromodichloromethane	U	1.02	ug/kg	0.305	1.02
74-95-3	Dibromomethane	U	1.02	ug/kg	0.305	1.02
108-10-1	4-Methyl-2-pentanone	U	5.09	ug/kg	1.27	5.09
10061-01-5	cis-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
108-88-3	Toluene	U	1.02	ug/kg	0.305	1.02
10061-02-6	trans-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
79-00-5	1,1,2-Trichloroethane	U	1.02	ug/kg	0.305	1.02
591-78-6	2-Hexanone	J	2.02	ug/kg	1.53	5.09
142-28-9	1,3-Dichloropropane	U	1.02	ug/kg	0.305	1.02
127-18-4	Tetrachloroethylene	U	1.02	ug/kg	0.305	1.02
124-48-1	Dibromochloromethane	U	1.02	ug/kg	0.305	1.02
106-93-4	1,2-Dibromoethane	U	1.02	ug/kg	0.305	1.02
108-90-7	Chlorobenzene	U	1.02	ug/kg	0.305	1.02

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 23:56**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:05**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n413.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.02	ug/kg	0.305	1.02
179601-23-1	m,p-Xylenes	U	2.03	ug/kg	0.305	2.03
95-47-6	o-Xylene	U	1.02	ug/kg	0.305	1.02
100-42-5	Styrene	U	1.02	ug/kg	0.305	1.02
75-25-2	Bromoform	U	1.02	ug/kg	0.305	1.02
79-34-5	1,1,2,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
96-18-4	1,2,3-Trichloropropane	U	1.02	ug/kg	0.305	1.02
108-86-1	Bromobenzene	U	1.02	ug/kg	0.305	1.02
103-65-1	n-Propylbenzene	U	1.02	ug/kg	0.305	1.02
95-49-8	2-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-82-8	Isopropylbenzene	U	1.02	ug/kg	0.305	1.02
108-67-8	1,3,5-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
106-43-4	4-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-06-6	tert-Butylbenzene	U	1.02	ug/kg	0.305	1.02
95-63-6	1,2,4-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
135-98-8	sec-Butylbenzene	U	1.02	ug/kg	0.305	1.02
99-87-6	4-Isopropyltoluene	U	1.02	ug/kg	0.305	1.02
541-73-1	1,3-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
106-46-7	1,4-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
104-51-8	n-Butylbenzene	U	1.02	ug/kg	0.305	1.02
96-12-8	1,2-Dibromo-3-chloropropane	U	1.02	ug/kg	0.305	1.02
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.09	ug/kg	1.63	5.09
630-20-6	1,1,1,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
95-50-1	1,2-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	149	ug/kg	91	NJ
	Unknown Siloxane	16.8	15.6	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n413.d
Lab Smp Id: 241819013 Client Smp ID: RE03-09-14119
Inj Date : 03-DEC-2009 23:56
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819013|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	1.67390	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1469670	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1098363	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	645534	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.265	(0.967)	291323	50.4680	51.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	912646	47.7062	48.5
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	394644	52.7942	53.7
55 2-Hexanone	43	12.863	12.862	(0.934)	19001	1.98882	2.0(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n413.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819013 SampleType: SAMPLE
Injection Date: 03-DEC-2009 23:56
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819013|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	18811	10.62	10.34	80-120	100	(T)
64	3699	10.63	10.34	2- 62	20	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7868	12.25	12.02	80-120	100	(T)
43	4496	12.25	12.02	230-290	57	(QT)
100	631313	12.25	12.02	8- 68	8023	(QT)
55 2-Hexanone				CAS#: 591-78-6		
43	19001	12.86	12.86	80-120	100	( )
58	9558	12.87	12.86	23- 83	50	( )
57	2846	12.86	12.86	0- 49	15	( )
65 Styrene				CAS#: 100-42-5		
104	13691	14.83	14.40	80-120	100	(T)
78	595	14.82	14.40	22- 82	4	(QT)
67 Isopropylbenzene				CAS#: 98-82-8		
105	12608	14.83	14.76	80-120	100	(T)
120	5444	14.82	14.76	0- 57	43	(T)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	11883	14.81	15.11	80-120	100	(T)
75	33517	14.83	15.11	254-314	282	(T)
77	4023	14.80	15.11	62-122	34	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n413.d
Lab Smp Id: 241819013 Client Smp ID: RE03-09-14119
Inj Date : 03-DEC-2009 23:56
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819013|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	1.67390	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3270657	50.000
* 86 1,4-Dichlorobenzene-d4	16.180	3699775	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.826	9555610	146.080849	148	91	NIST05.L	122480	61

RT	AREA	CONCENTRATIONS ON-COL (ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
16.795	1131891	15.2967501	15.6	0		0	86

Data File: /chem/VOA4.i/120309v4/4n413.d

Date : 03-DEC-2009 23:56

Client ID: RE03-09-14119

Sample Info: |2418190131928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

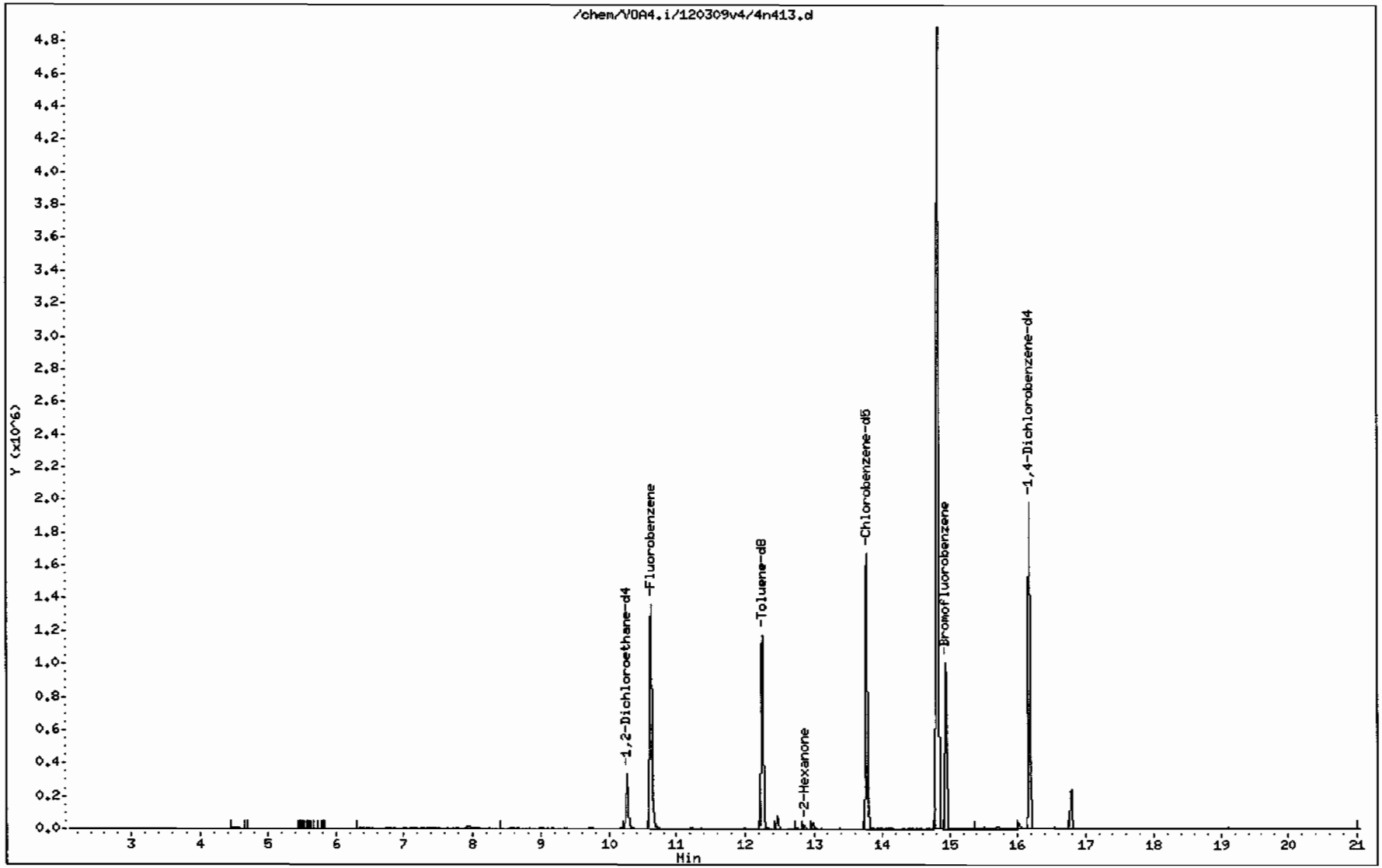

Data File: /chem/VOA4.i/120309v4/4n413.d

Date : 03-DEC-2009 23:56

Client ID: RE03-09-14119

Instrument: VOA4.i

Sample Info: |241819013|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

55 2-Hexanone

Concentration: 2.0 ug/Kg

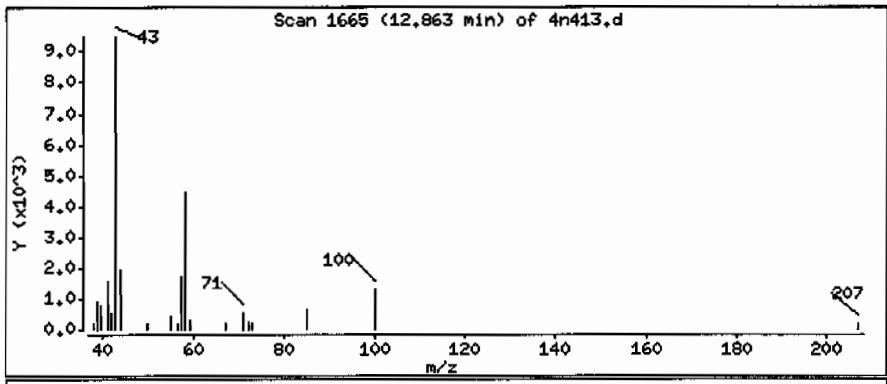

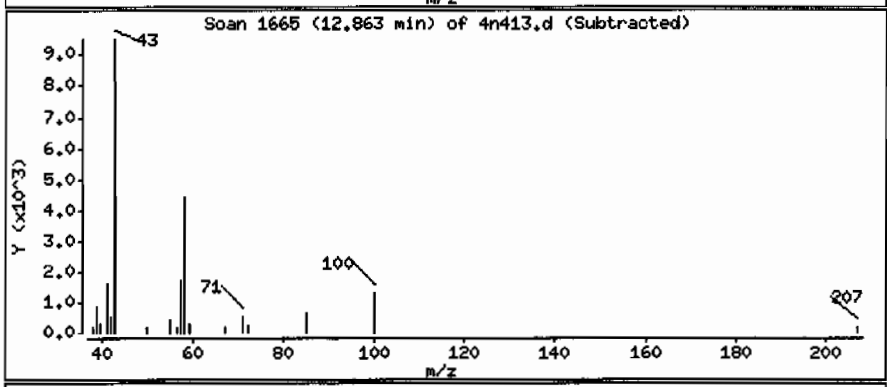

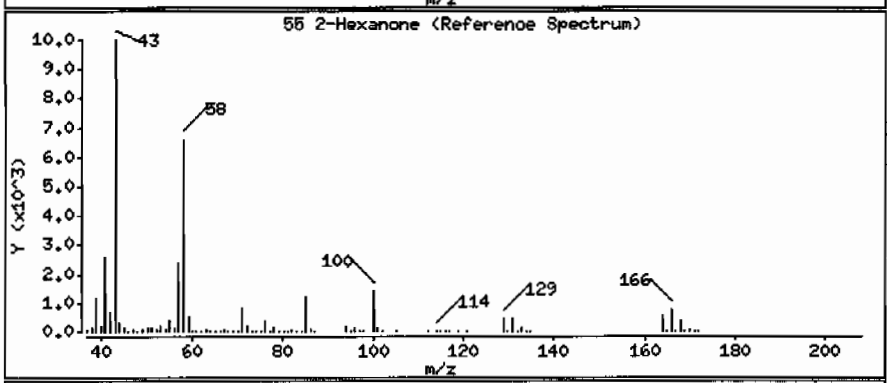

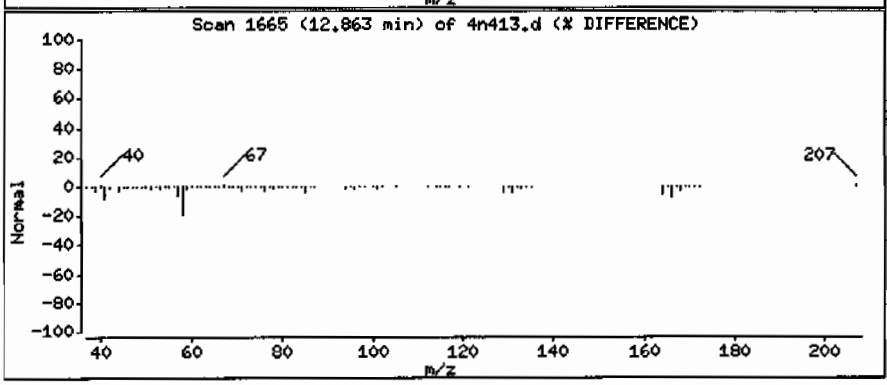

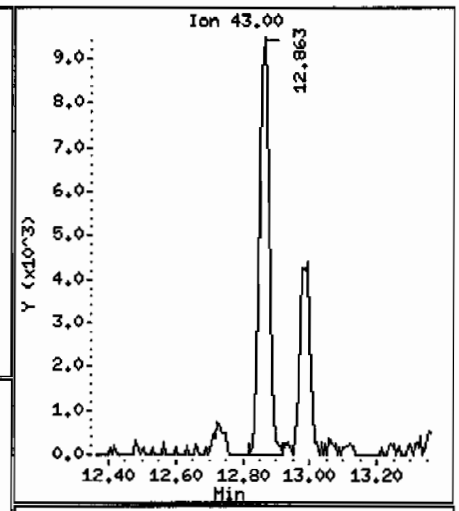

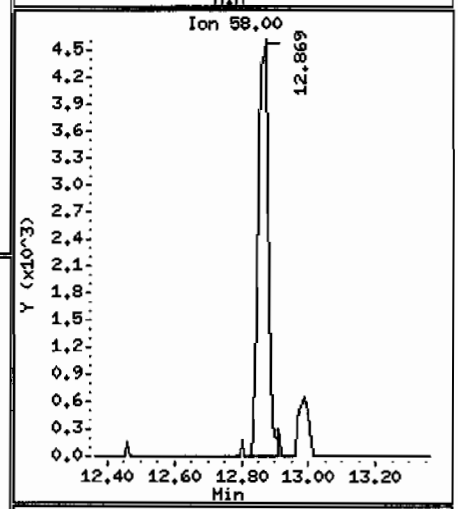

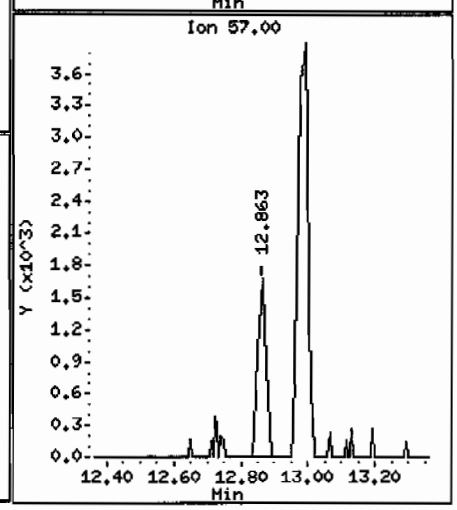

Data File: /chem/VOA4.i/120309v4/4n413.d

Date : 03-DEC-2009 23:56

Client ID: RE03-09-14119

Instrument: VOA4.i

Sample Info: |2418190131928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	87	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	53	C21H15N	281

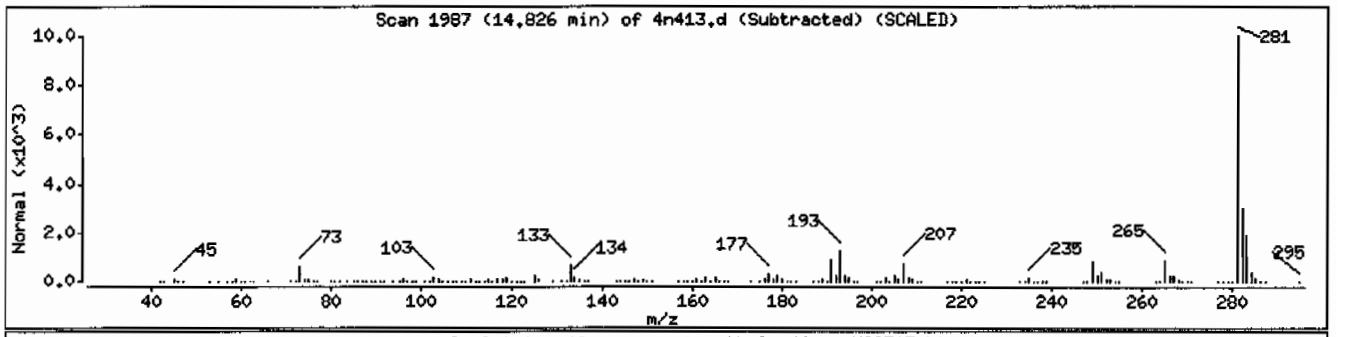

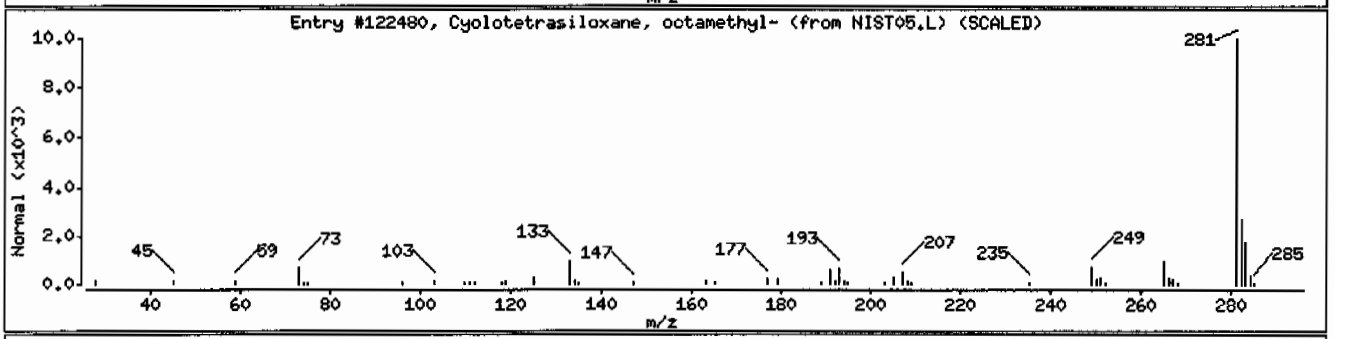

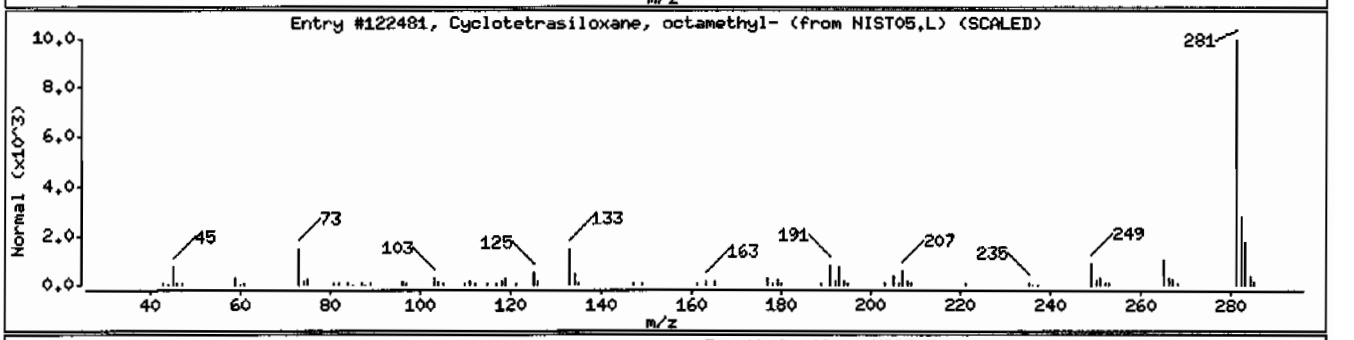

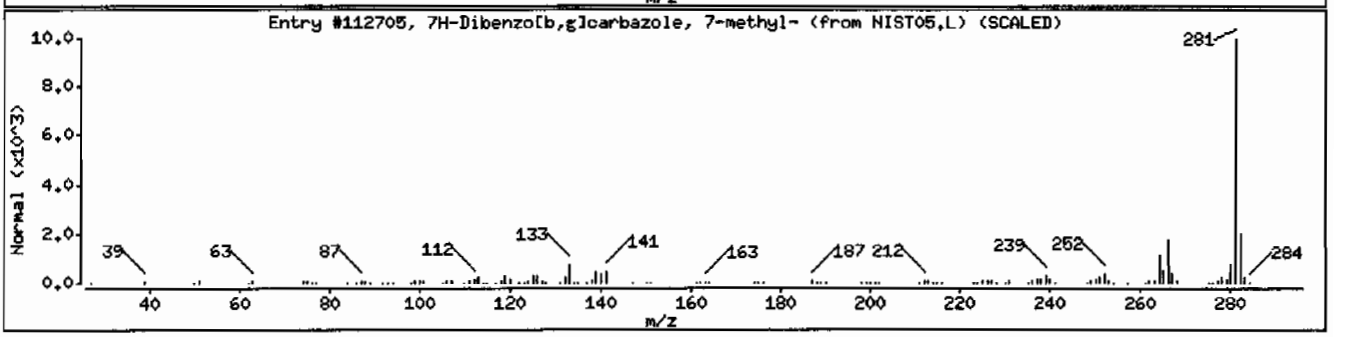

Data File: /chem/VOA4.i/120309v4/4n413.d

Date : 03-DEC-2009 23:56

Client ID: RE03-09-14119

Instrument: VOA4.i

Sample Info: |2418190131928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-	55471-01-7	NIST05.L	184036	59	C18H26F7NO3Si4	493
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	45	C13H22O3Si2	282
p-Trimethylsilyloxyphenyl-(trimethylsily	1000079-05-1	NIST05.L	170606	45	C18H34O4Si3	398

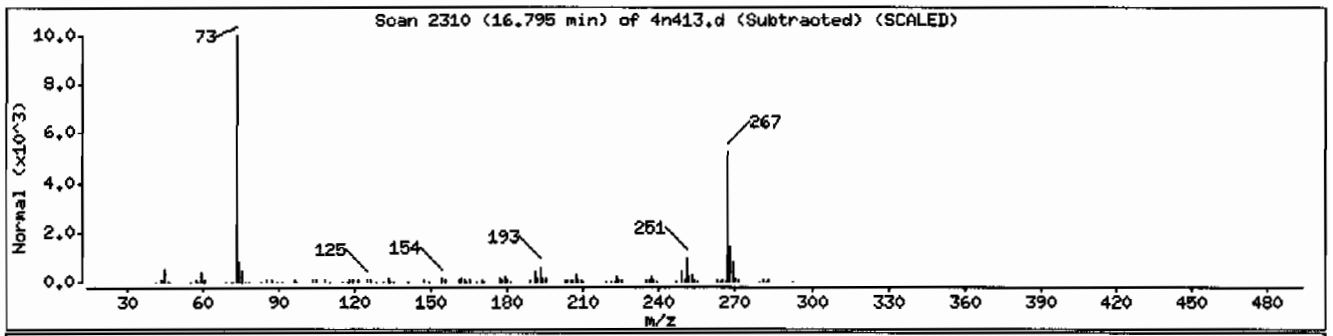

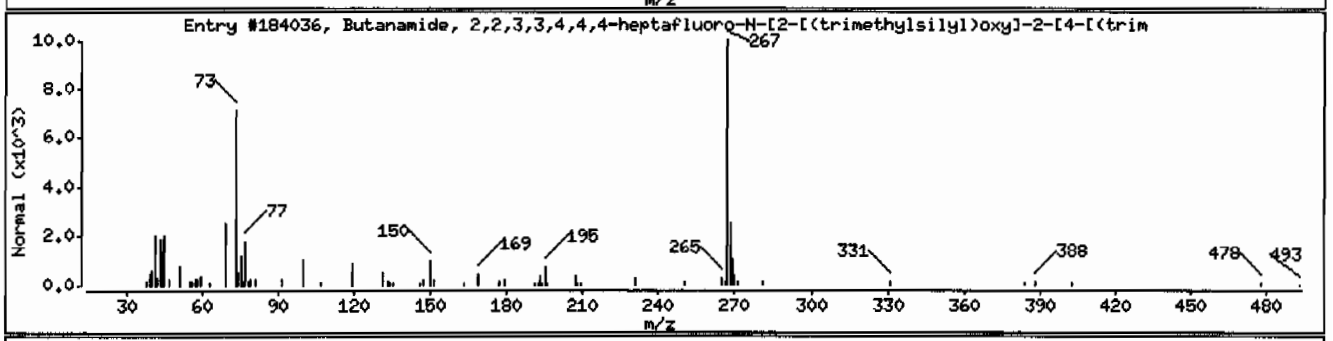

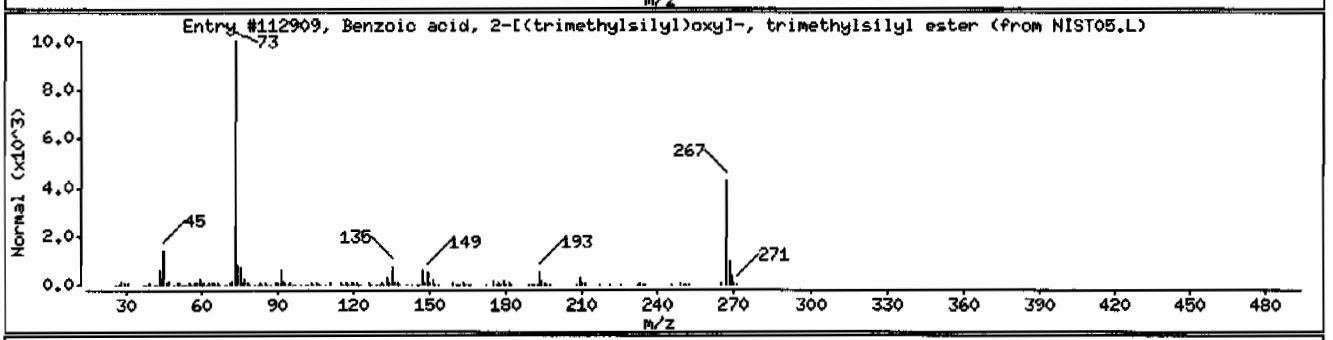

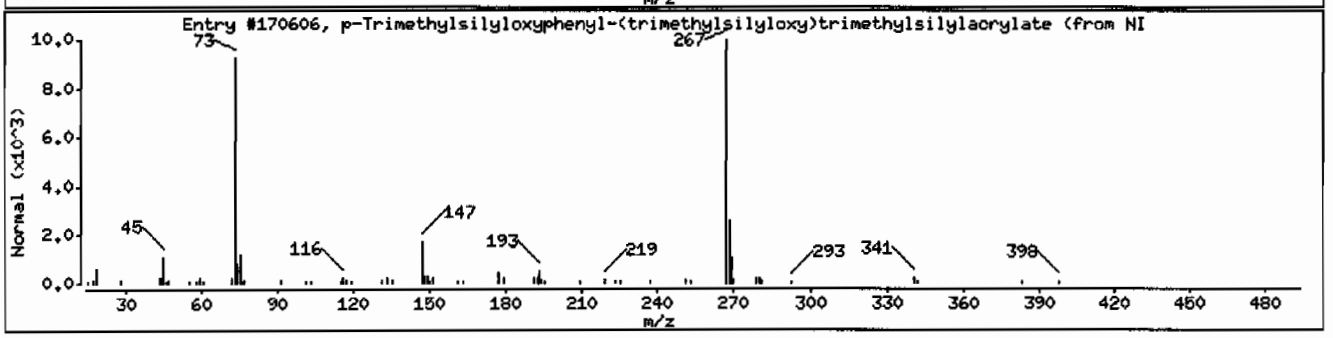

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n410.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.349	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	J	3.83	ug/kg	1.70	5.13
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.13	ug/kg	1.64	5.13
75-09-2	Methylene chloride	U	5.13	ug/kg	2.05	5.13
75-15-0	Carbon disulfide	U	5.13	ug/kg	1.28	5.13
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.13	ug/kg	1.54	5.13
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.13	ug/kg	1.28	5.13
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.13	ug/kg	1.54	5.13
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 22:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:02**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n410.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.05	ug/kg	0.308	2.05
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.13	ug/kg	1.64	5.13
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	101	ug/kg	91	NJ
	Unknown Siloxane	16.79	8.52	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n410.d
Lab Smp Id: 241819010 Client Smp ID: RE03-09-14120
Inj Date : 03-DEC-2009 22:32
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819010|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.62750	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1720962	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1285258	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	820056	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	318582	47.1315	48.4
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1012136	45.2134	46.4
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	442255	46.5724	47.8
10 Acetone	43	7.363	7.363	(0.693)	26082	3.73002	3.8(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n410.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819010 SampleType: SAMPLE
Injection Date: 03-DEC-2009 22:32
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819010|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	26082	7.36	7.36	80-120	100	( )
58	6729	7.37	7.36	1- 61	26	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21932	10.62	10.34	80-120	100	(T)
64	3984	10.61	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8639	12.25	12.02	80-120	100	(T)
43	4566	12.25	12.02	230-290	53	(QT)
100	699597	12.25	12.02	8- 68	8097	(QT)
65 Styrene			CAS#: 100-42-5			
104	11618	14.83	14.40	80-120	100	(T)
78	503	14.41	14.40	22- 82	4	(Q)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	10398	14.83	15.11	80-120	100	(T)
75	26205	14.82	15.11	254-314	252	(QT)
77	1735	14.82	15.11	62-122	17	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n410.d
Lab Smp Id: 241819010 Client Smp ID: RE03-09-14120
Inj Date : 03-DEC-2009 22:32
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819010|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.62750	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3780710	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	4602849	50.000

	CONCENTRATIONS				QUANT			
	RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-					CAS #: 556-67-2			
	14.825	7447313	98.4909176	101	91	NIST05.L	122481	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	========	======
Unknown Siloxane				CAS #:			
16.794	763742	8.29640350	8.5	0		0	86

Data File: /chem/VOA4.i/120309v4/4n410.d

Date : 03-DEC-2009 22:32

Client ID: RE03-09-14120

Sample Info: |24181901019286051|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

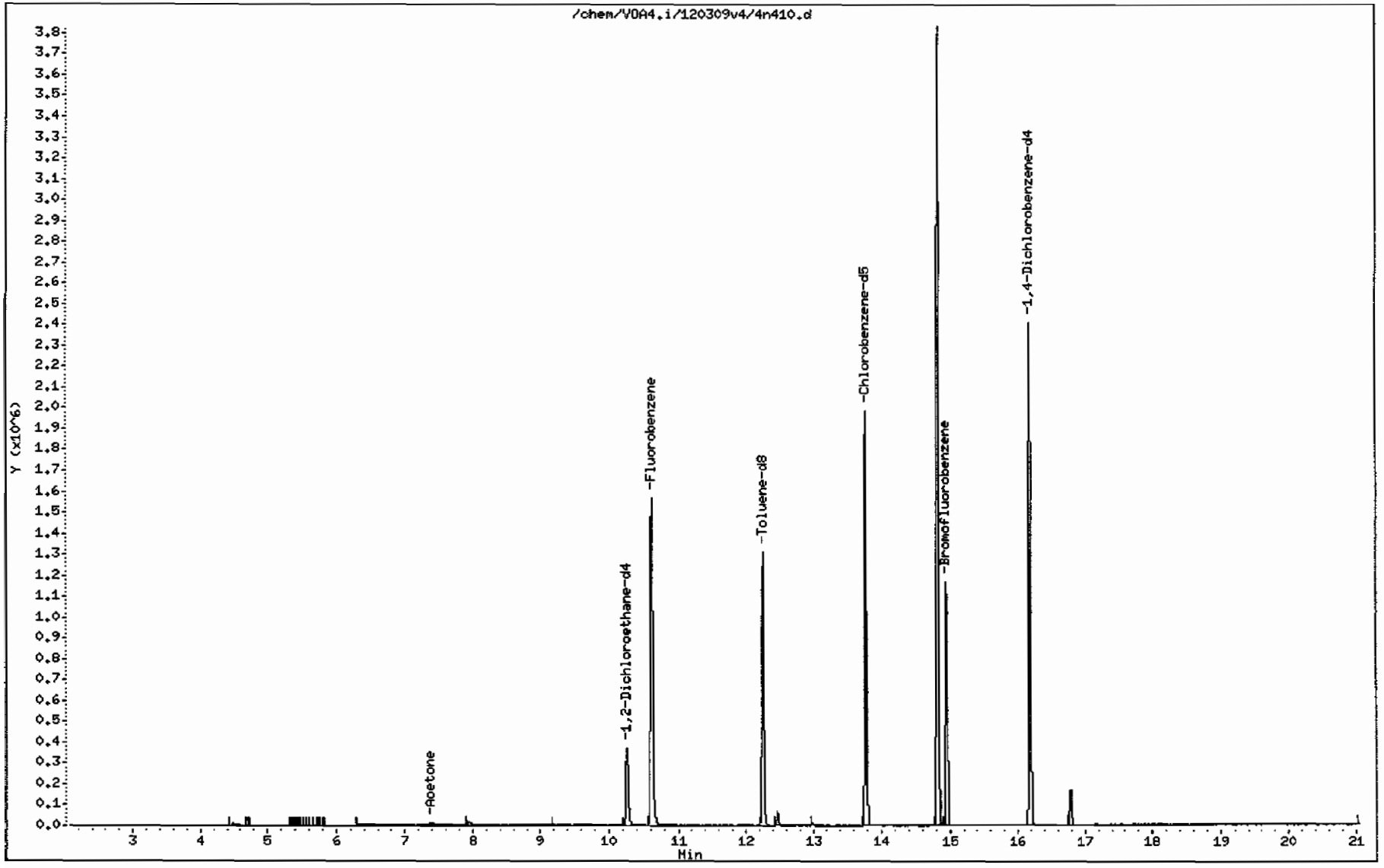

Data File: /chem/VOA4.i/120309v4/4n410.d

Date : 03-DEC-2009 22:32

Client ID: RE03-09-14120

Instrument: VOA4.i

Sample Info: |2418190101928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 3.8 ug/Kg

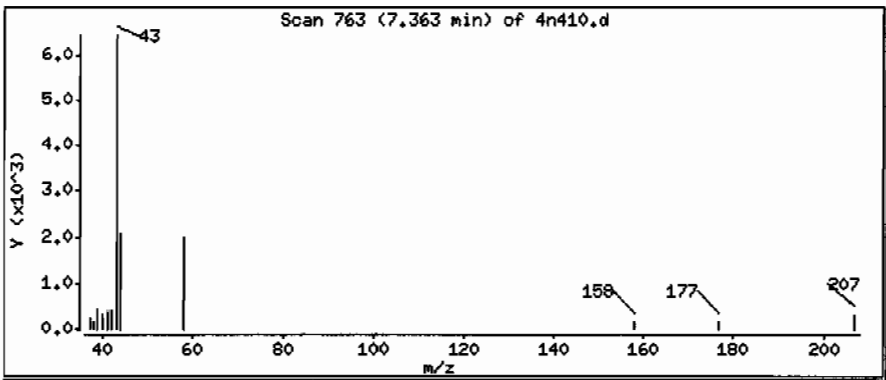

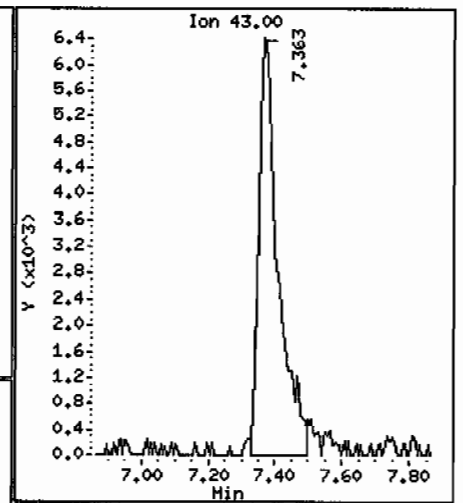

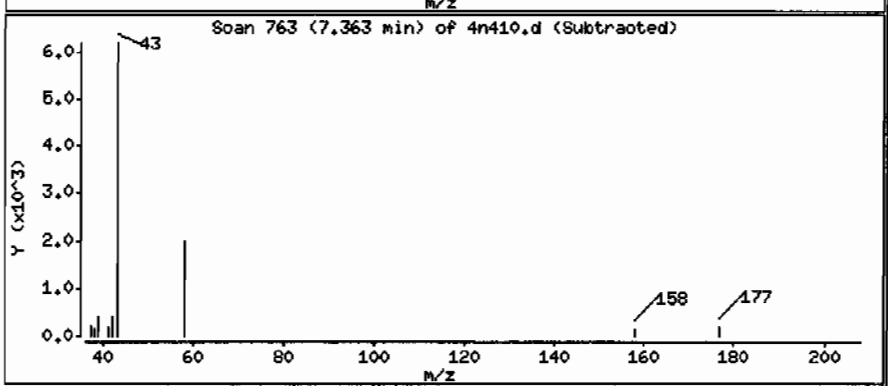

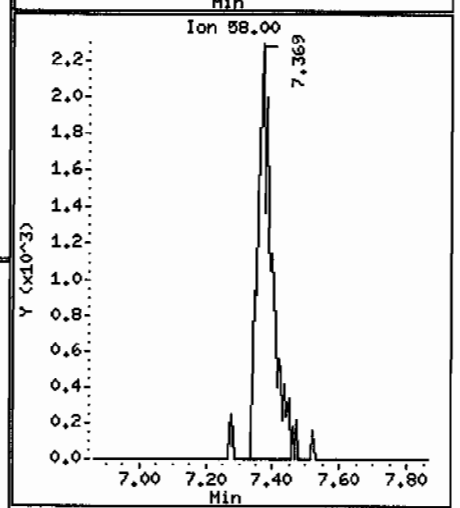

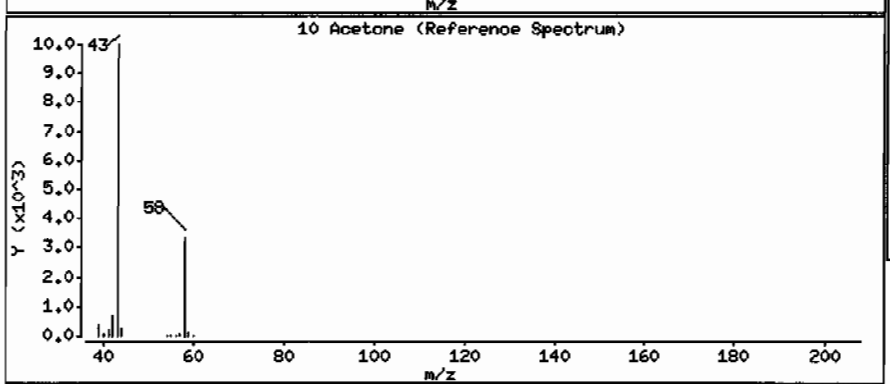

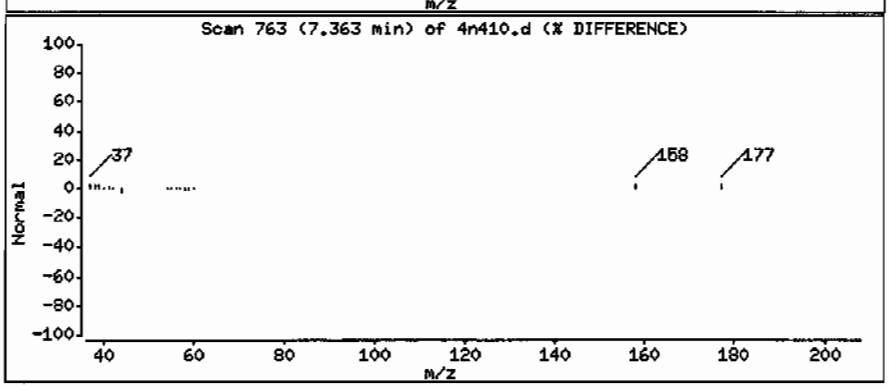

Data File: /chem/VOA4.i/120309v4/4n410.d

Date : 03-DEC-2009 22:32

Client ID: RE03-09-14120

Instrument: VOA4.i

Sample Info: |2418190101928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	78	C8H24O4Si4	296

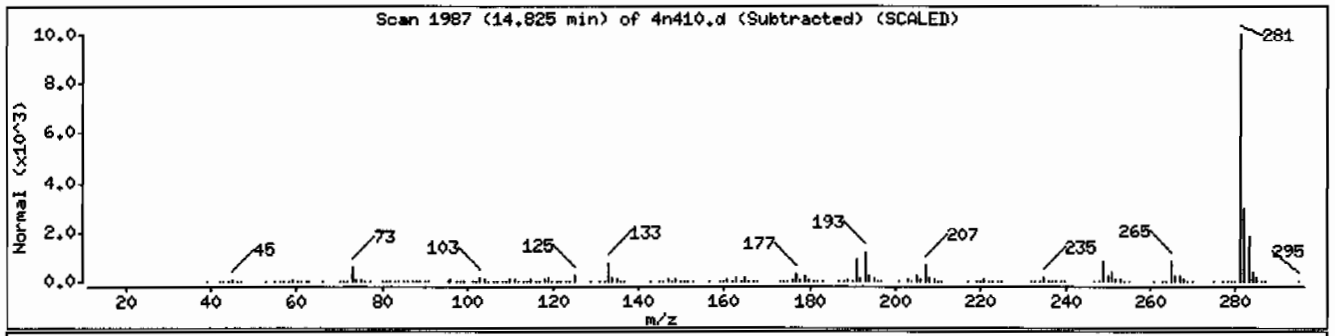

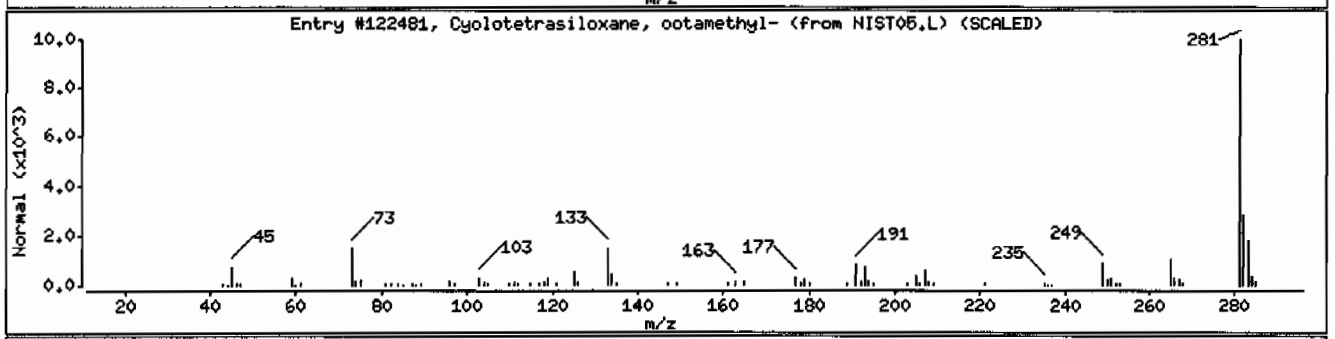

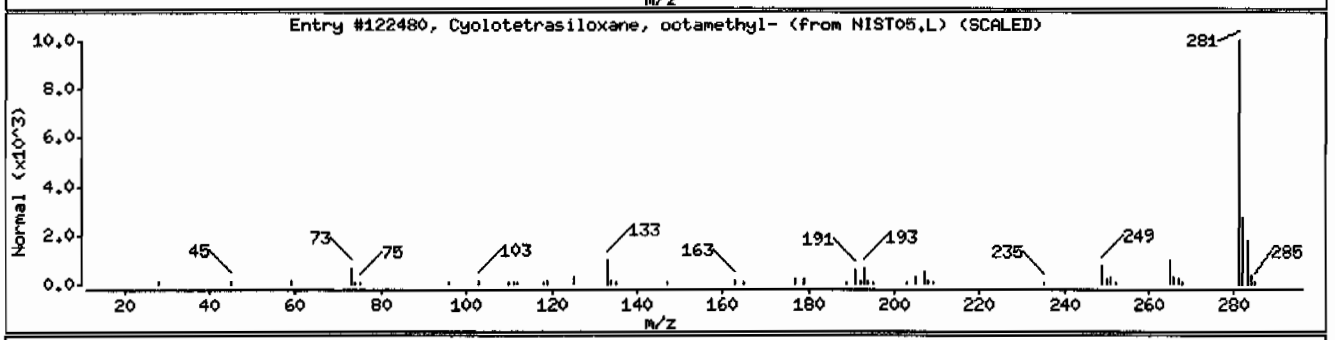

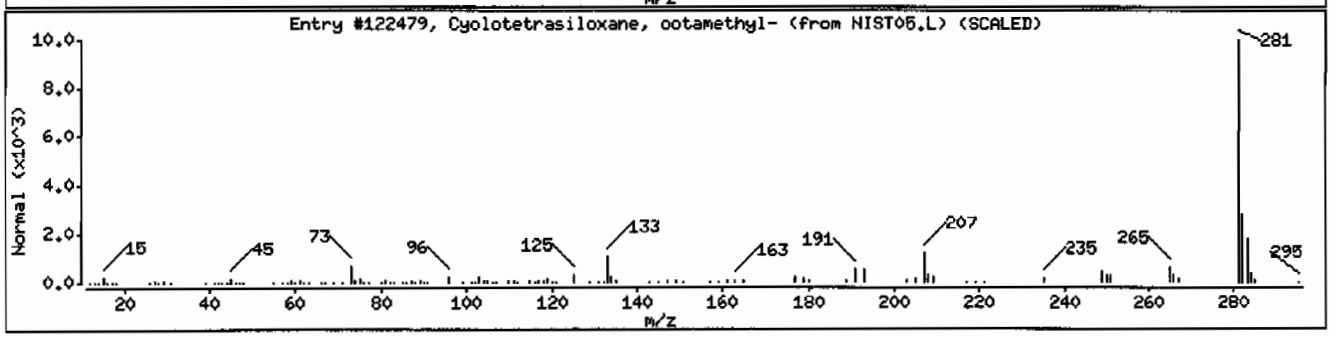

Data File: /chem/VOA4.i/120309v4/4n410.d

Date : 03-DEC-2009 22:32

Client ID: RE03-09-14120

Instrument: VOA4.i

Sample Info: |2418190101928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	64	C13H2203Si2	282
4-Hydroxymandelic acid, ethyl ester, di-	1000071-53-3	NIST05.L	147514	56	C16H2804Si2	340
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	56	C16H2804Si2	340

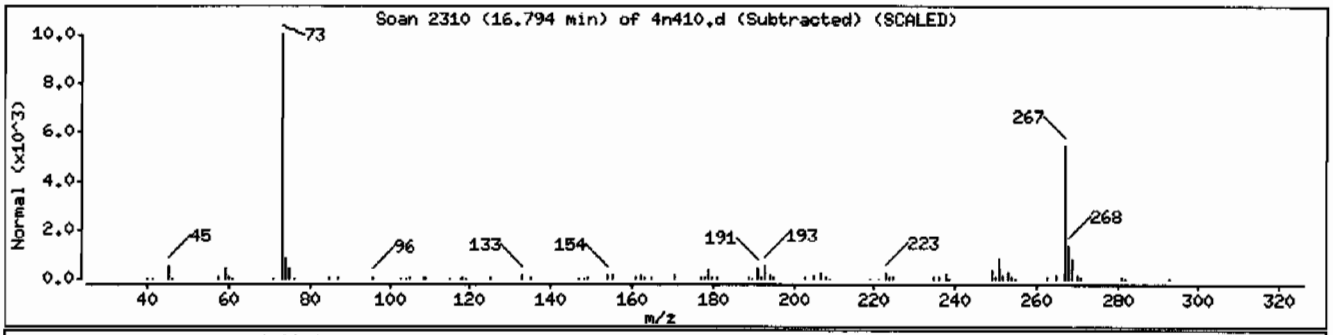

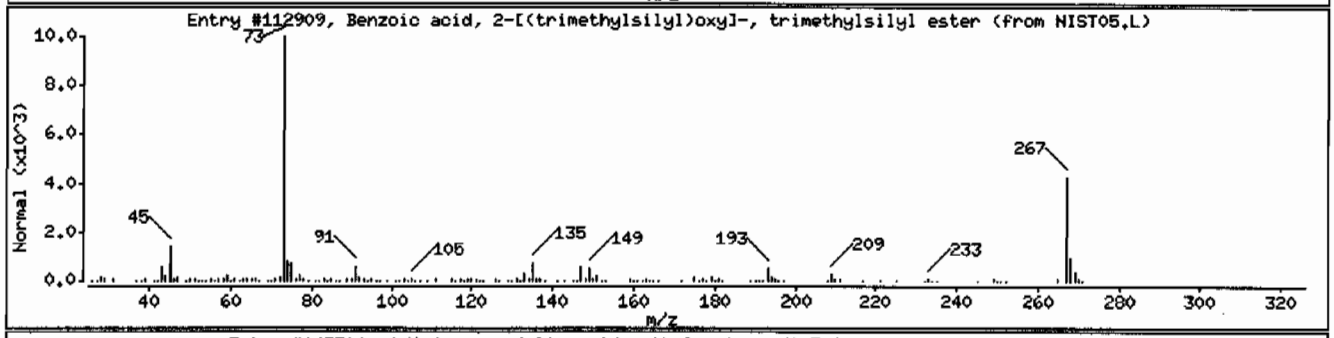

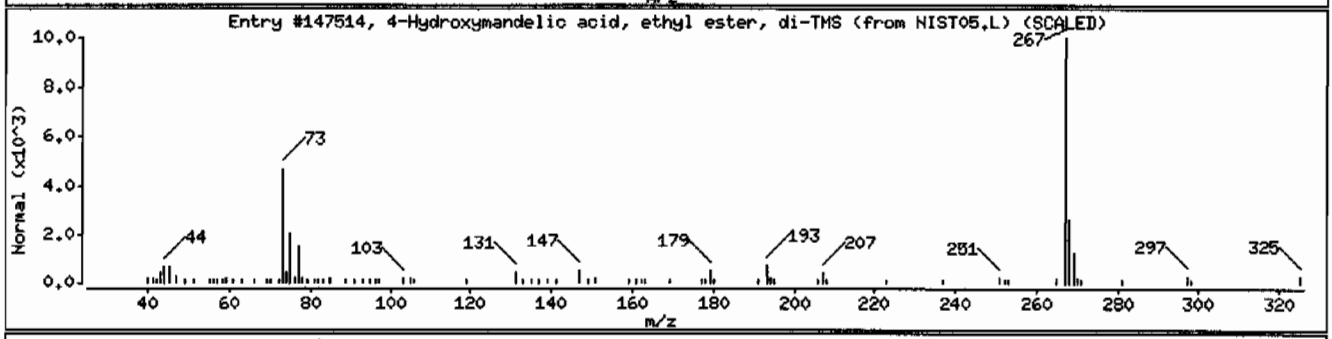

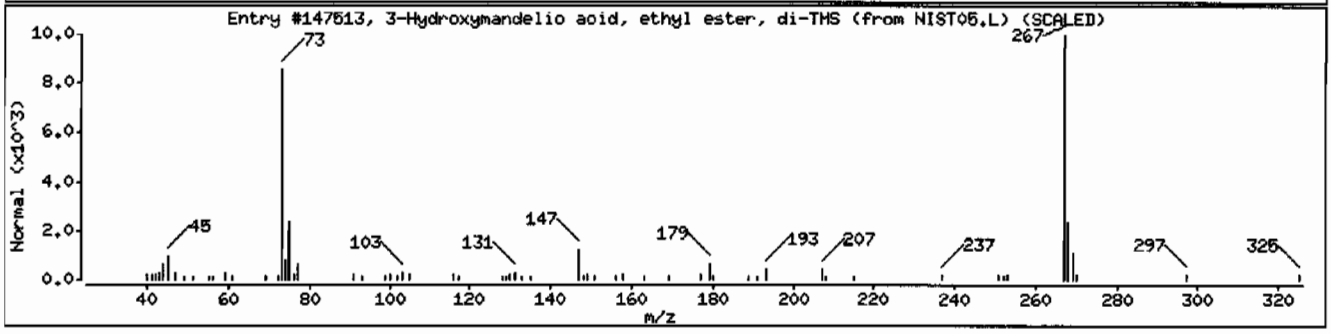

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819008	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14121	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 21:37	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n408.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.389	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone	U	5.73	ug/kg	1.90	5.73
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.73	ug/kg	1.83	5.73
75-09-2	Methylene chloride	U	5.73	ug/kg	2.29	5.73
75-15-0	Carbon disulfide	U	5.73	ug/kg	1.43	5.73
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.73	ug/kg	1.72	5.73
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.378	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.378	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.73	ug/kg	1.43	5.73
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.73	ug/kg	1.72	5.73
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819008**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14121**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 21:37**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n408.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.73	ug/kg	1.83	5.73
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	87.1	ug/kg	83	NJ
	Unknown Siloxane	16.79	13.8	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n408.d
Lab Smp Id: 241819008 Client Smp ID: RE03-09-14121
Inj Date : 03-DEC-2009 21:37
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819008|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.68160	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.613	10.619	(1.000)	1709257	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1234839	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	667084	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.265	(0.967)	312074	46.4849	53.2
$ 47 Toluene-d8	98	12.246	12.253	(0.889)	993240	46.1809	52.9
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	400212	51.8095	59.3

ION RATIO REPORT

VOA REPORT

Data file: 4n408.d
Report Date: 12/04/2009 16:04
Lab. ID: 241819008 SampleType: SAMPLE
Injection Date: 03-DEC-2009 21:37
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819008|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	21730	10.61	10.34	80-120	100	(T)
64	3456	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7842	12.25	12.02	80-120	100	(T)
43	4689	12.24	12.02	230-290	60	(QT)
100	692312	12.25	12.02	8- 68	8828	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	7501	14.81	15.11	80-120	100	(T)
75	20305	14.82	15.11	254-314	271	(T)
77	1460	14.81	15.11	62-122	19	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n408.d
Lab Smp Id: 241819008 Client Smp ID: RE03-09-14121
Inj Date : 03-DEC-2009 21:37
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819008|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.68160	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3688355	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3680070	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	5608721	76.0328169	87.1	83	NIST05.L	122480	61

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
16.788	884629	12.0191872	13.8	0		0	86

Data File: /chem/VOA4.i/120309v4/4n408.d

Date : 03-DEC-2009 21:37

Client ID: RE03-09-14121

Sample Info: |2418190081928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

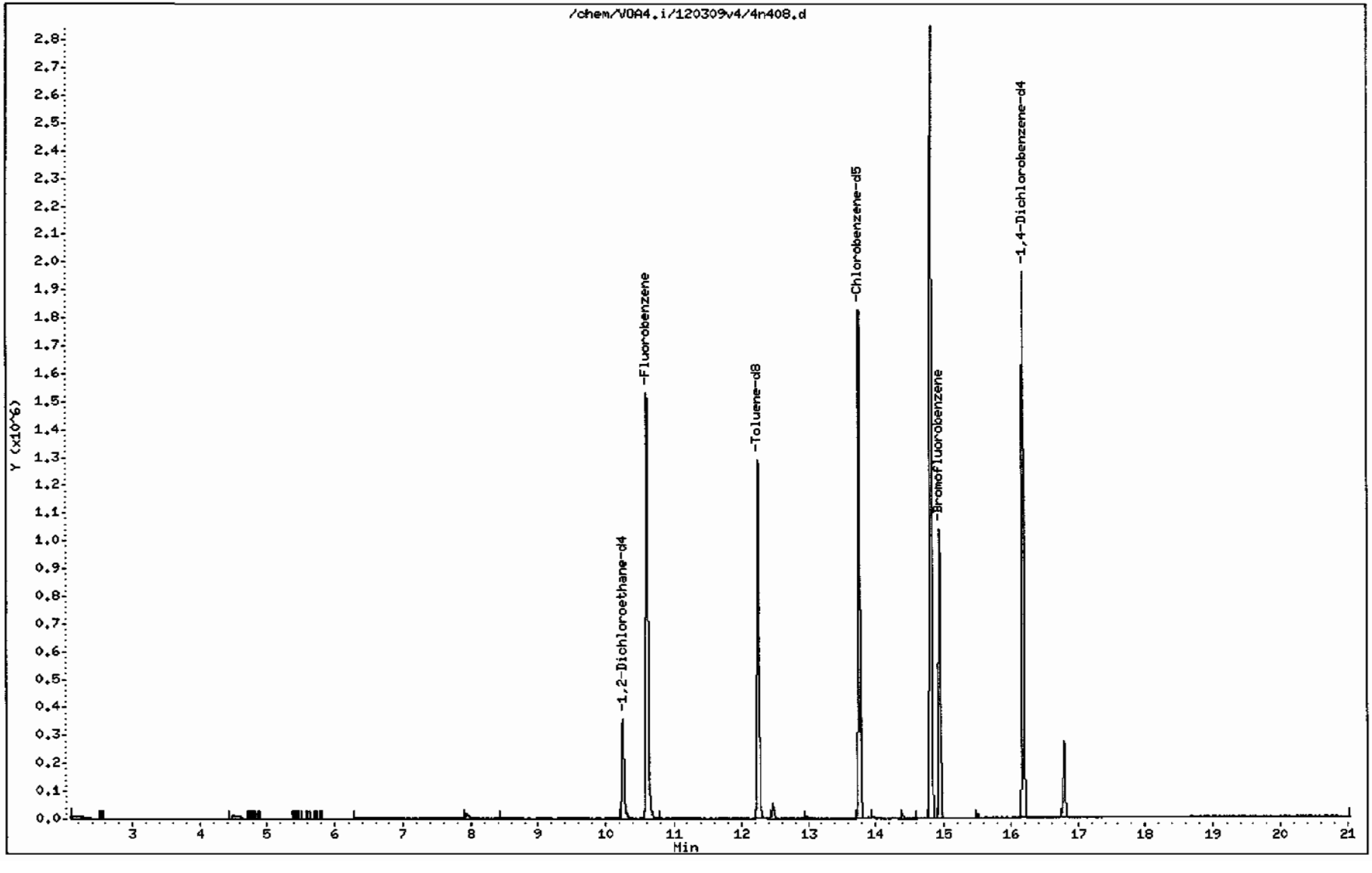

Data File: /chem/VOA4.i/120309v4/4n408.d

Date : 03-DEC-2009 21:37

Client ID: RE03-09-14121

Instrument: VOA4.i

Sample Info: |241819008|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	83	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C21H15N	281
Benzoic acid, 3-methyl-2-trimethylsilylo	1000153-67-1	NIST05.L	121892	45	C14H24O3Si2	296

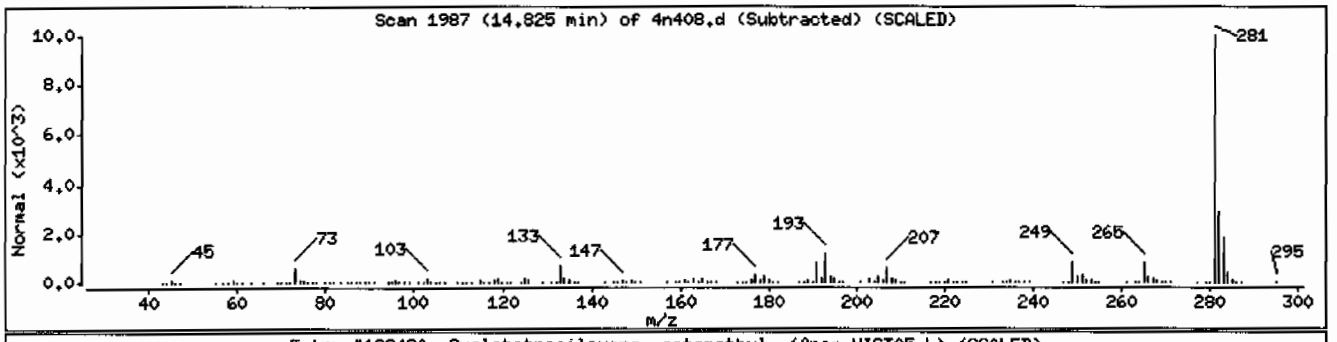

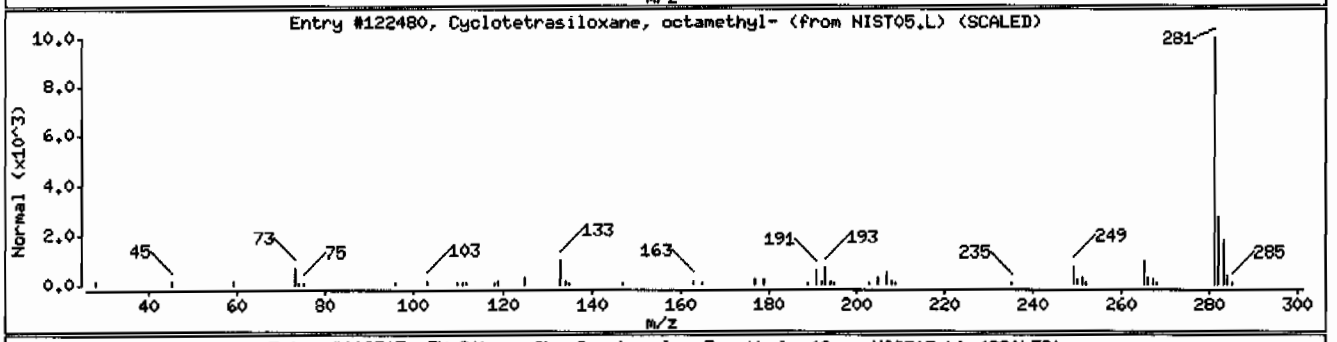

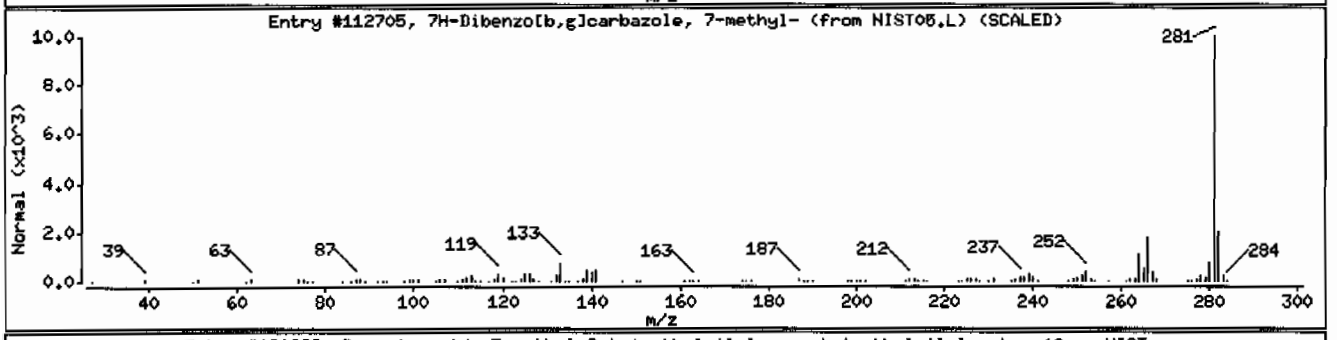

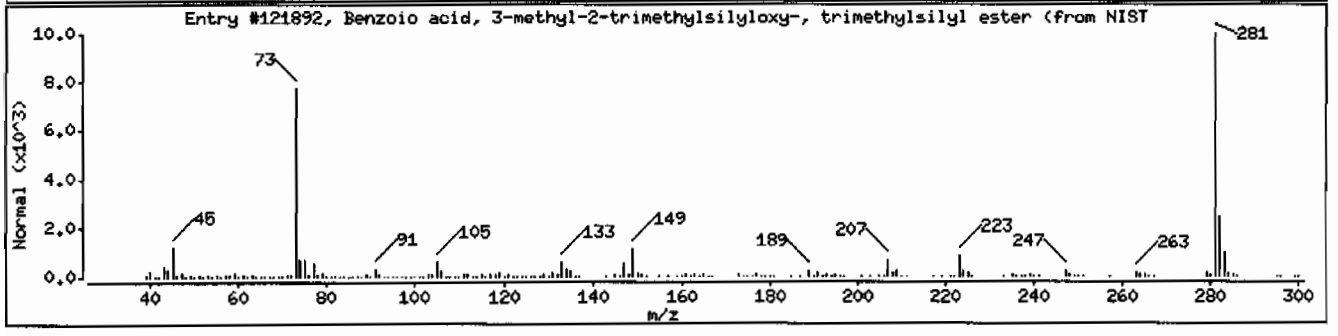

Data File: /chem/VOA4.i/120309v4/4n408.d

Date : 03-DEC-2009 21:37

Client ID: RE03-09-14121

Instrument: VOA4.i

Sample Info: |241819008|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	72	C13H22O3Si2	282
p-Trimethylsilyloxyphenyl-bis(trimethyls	1000079-08-1	NIST05.L	161171	50	C17H34O3Si3	370
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	50	C16H28O4Si2	340

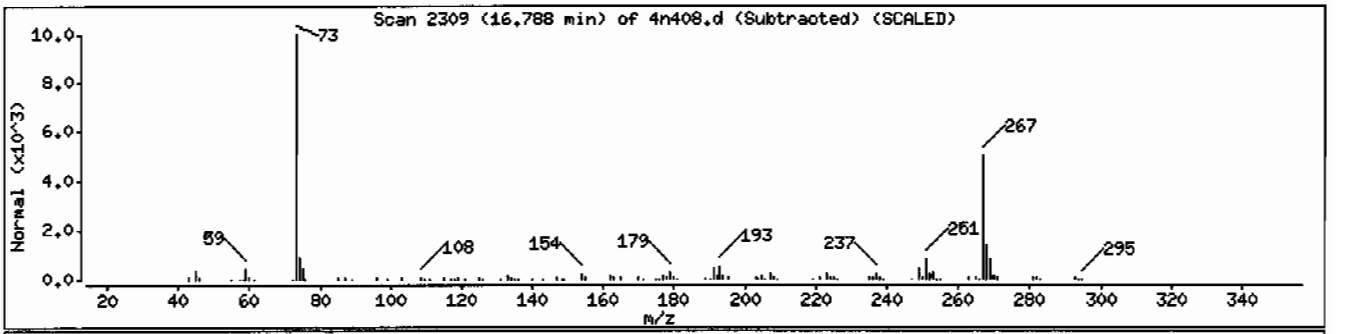

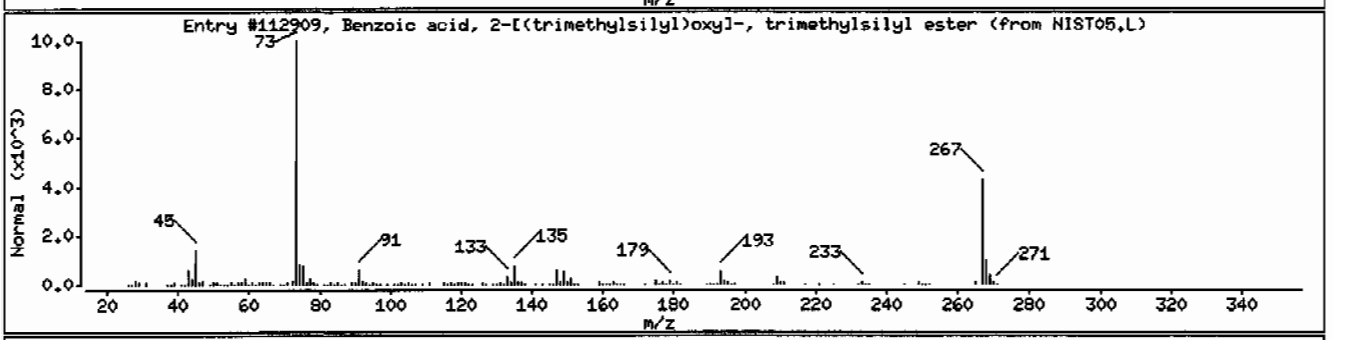

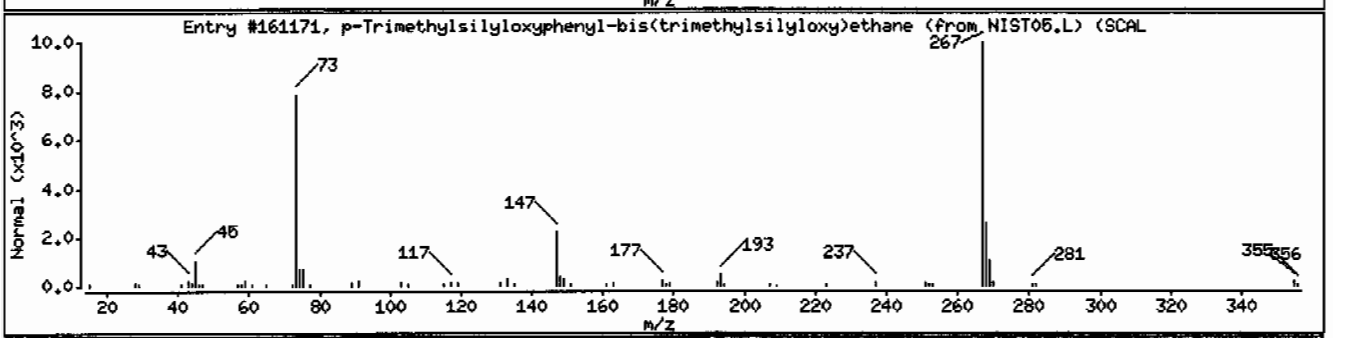

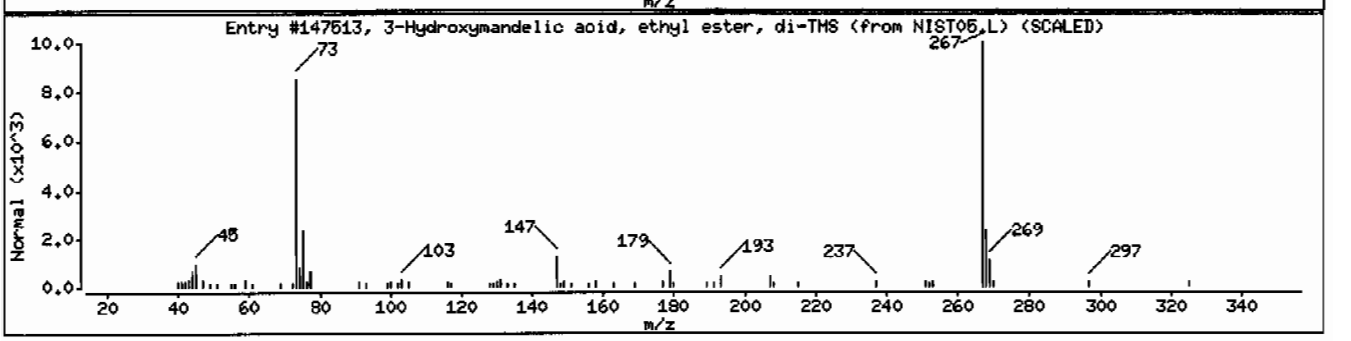

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14122**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 01:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:09**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n417.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.318	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.318	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.318	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.318	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.318	1.06
67-64-1	Acetone		11.5	ug/kg	1.76	5.30
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
74-88-4	Iodomethane	U	5.30	ug/kg	1.70	5.30
75-09-2	Methylene chloride	U	5.30	ug/kg	2.12	5.30
75-15-0	Carbon disulfide	U	5.30	ug/kg	1.32	5.30
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.318	1.06
78-93-3	2-Butanone	J	3.25	ug/kg	1.59	5.30
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.318	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.350	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.318	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.318	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.318	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.318	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.318	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.350	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.318	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.318	1.06
108-10-1	4-Methyl-2-pentanone	U	5.30	ug/kg	1.32	5.30
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.318	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.318	1.06
591-78-6	2-Hexanone	U	5.30	ug/kg	1.59	5.30
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.318	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.318	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.318	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.318	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.318	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14122**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 01:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:09**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n417.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.318	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.318	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.318	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.318	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.318	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.318	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.318	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.318	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.318	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.318	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.318	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.318	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.318	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.318	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.30	ug/kg	1.70	5.30
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	171	ug/kg	90	NJ
	Unknown Siloxane	16.79	8.82	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n417.d
Lab Smp Id: 241819017 Client Smp ID: RE03-09-14122
Inj Date : 04-DEC-2009 01:48
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819017|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.64160	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1502717	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1101764	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	632801	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	294042	49.8188	52.8
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	928388	48.3793	51.3
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	389681	53.1792	56.4
10 Acetone	43	7.369	7.363	(0.694)	66115	10.8284	11.5
30 2-Butanone	43	9.332	9.326	(0.879)	21576	3.07130	3.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n417.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819017 SampleType: SAMPLE
Injection Date: 04-DEC-2009 01:48
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819017|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	66115	7.37	7.36	80-120	100	( )
58	18919	7.36	7.36	1- 61	29	( )
30 2-Butanone			CAS#: 78-93-3			
43	21576	9.33	9.33	80-120	100	( )
72	4886	9.34	9.33	0- 55	23	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20213	10.62	10.34	80-120	100	(T)
64	3257	10.61	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7746	12.25	12.02	80-120	100	(T)
43	4746	12.25	12.02	230-290	61	(QT)
100	638893	12.25	12.02	8- 68	8248	(QT)
65 Styrene			CAS#: 100-42-5			
104	15230	14.83	14.40	80-120	100	(T)
78	139	14.83	14.40	22- 82	1	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	13646	14.83	14.76	80-120	100	(T)
120	6227	14.83	14.76	0- 57	46	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
74	1,2,3-Trichloropropane			CAS#: 96-18-4		
110	14308	14.82	15.11	80-120	100	(T)
75	38796	14.82	15.11	254-314	271	(T)
77	2589	14.83	15.11	62-122	18	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n417.d
Lab Smp Id: 241819017 Client Smp ID: RE03-09-14122
Inj Date : 04-DEC-2009 01:48
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819017|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.64160	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.770	3321096	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3651194	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	10723354	161.442960	171	90	NIST05.L	122480	61

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
16.794	607548	8.31985500	8.8	0		0	86

Data File: /chem/VOA4.i/120309v4/4n417.d
Date : 04-DEC-2009 01:48
Client ID: RE03-09-14122
Sample Info: |241819017|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

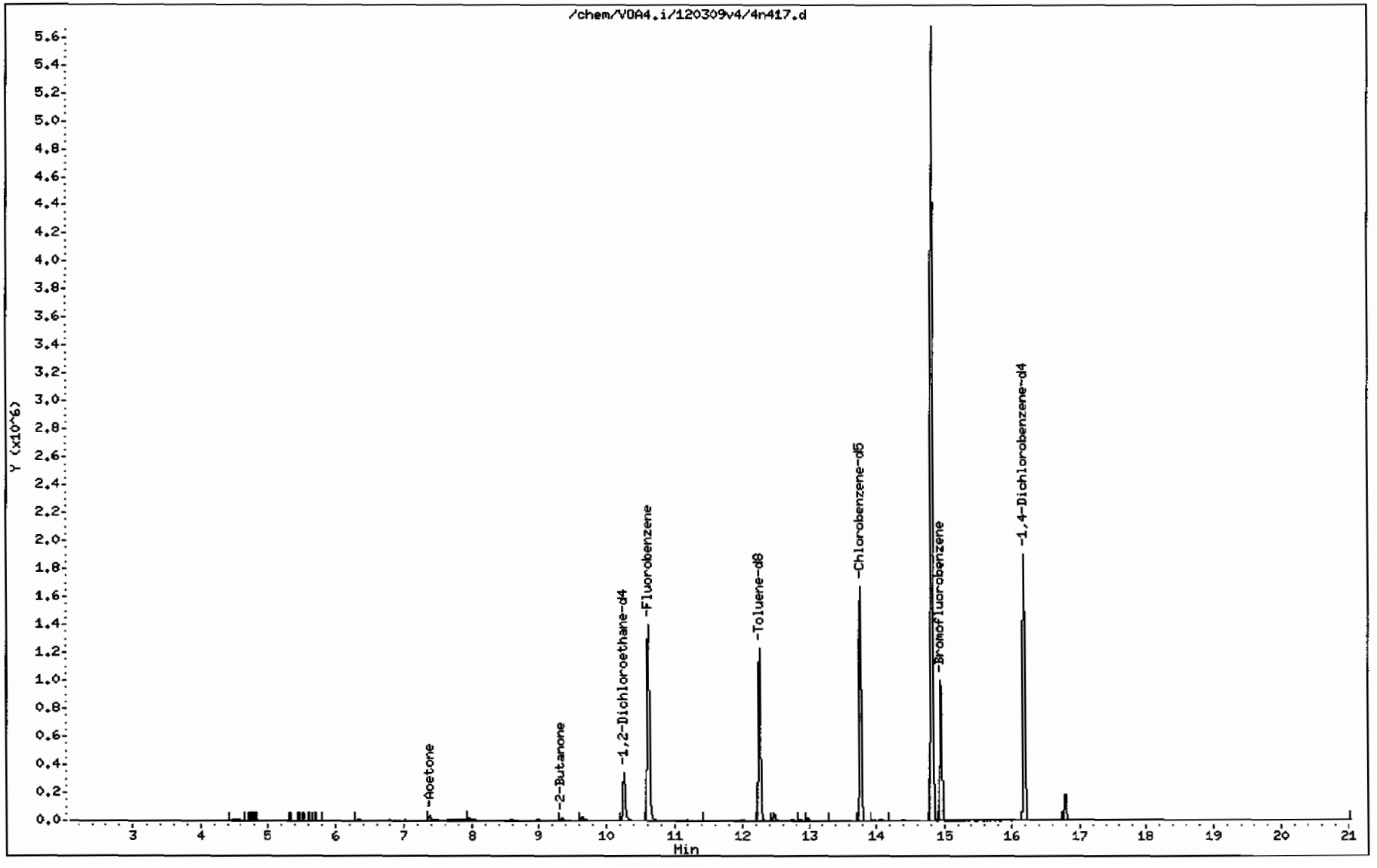

Data File: /chem/VOA4.i/120309v4/4n417.d

Date : 04-DEC-2009 01:48

Client ID: RE03-09-14122

Instrument: VOA4.i

Sample Info: |2418190171928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 11.5 ug/Kg

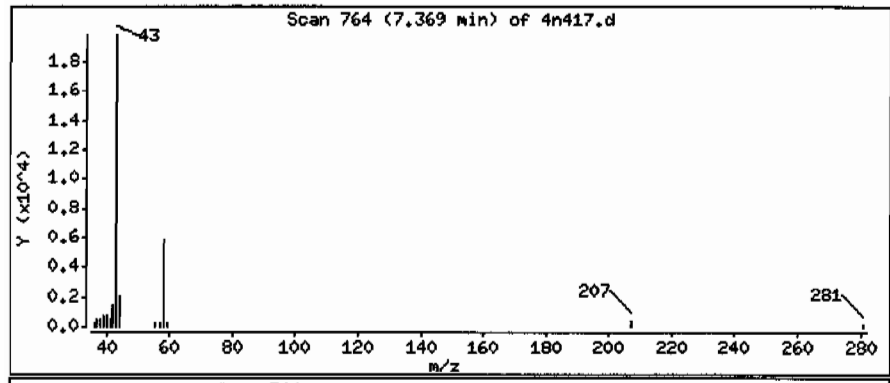

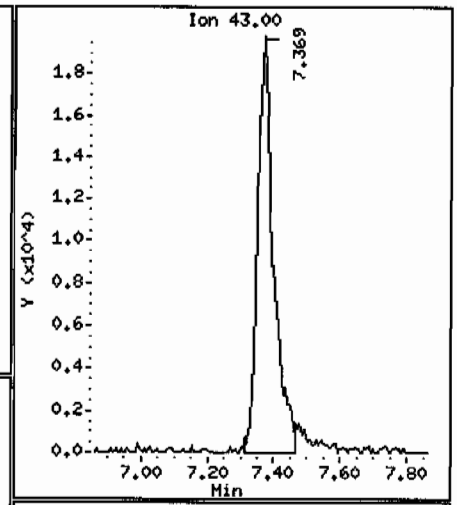

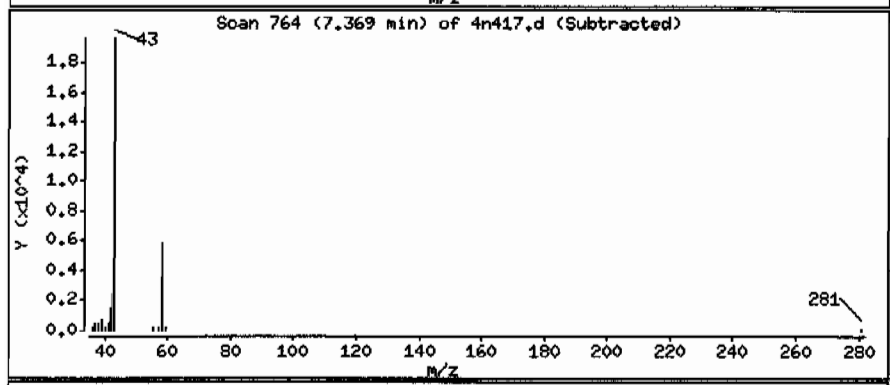

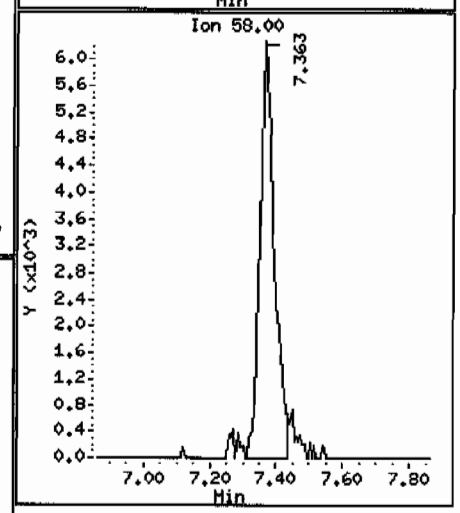

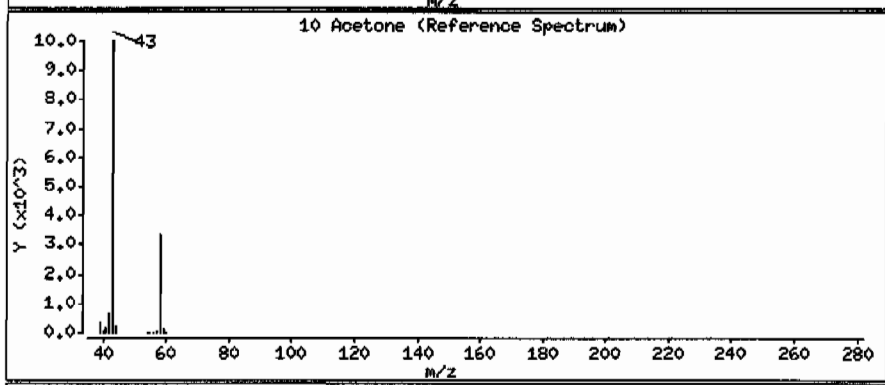

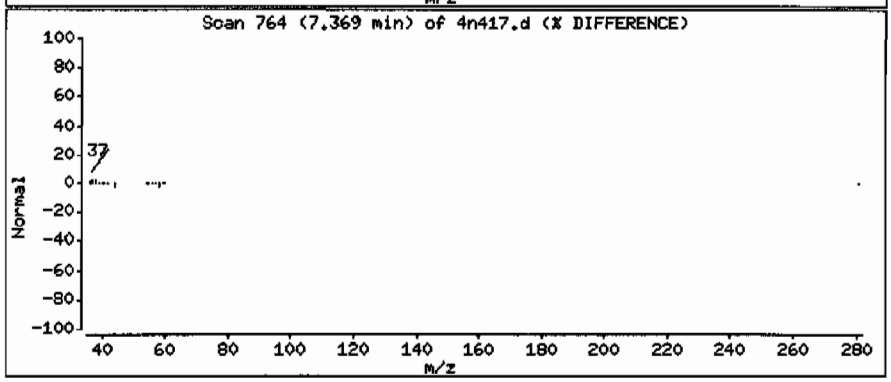

Data File: /chem/VOA4.i/120309v4/4n417.d

Date : 04-DEC-2009 01:48

Client ID: RE03-09-14122

Instrument: VOA4.i

Sample Info: |2418190171928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

30 2-Butanone

Concentration: 3.2 ug/Kg

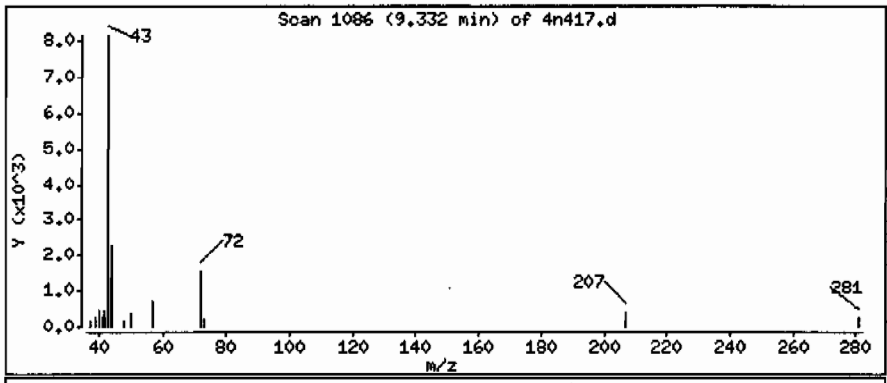

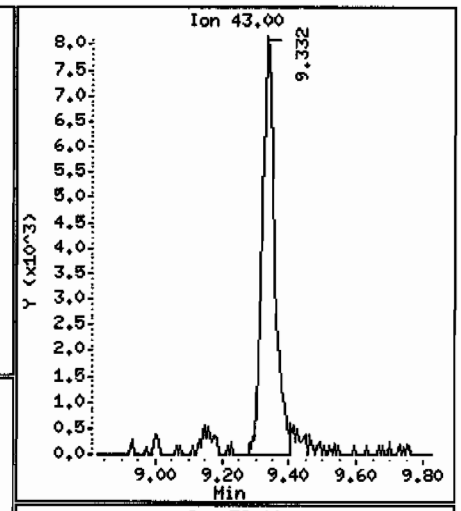

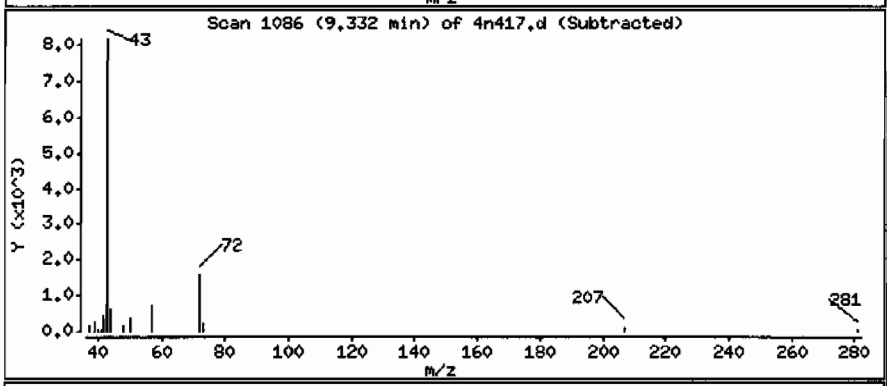

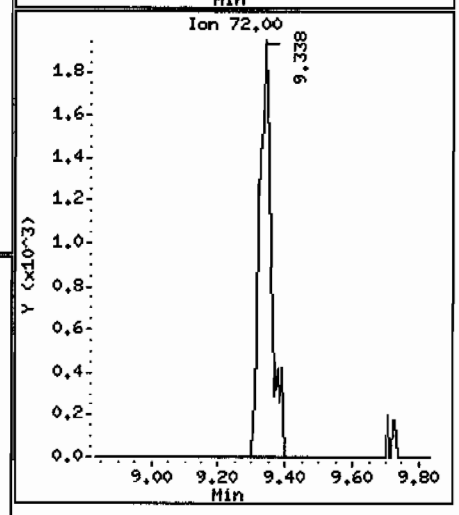

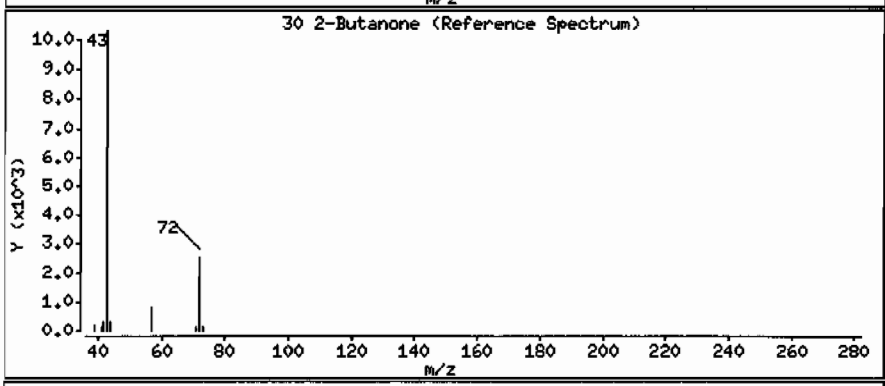

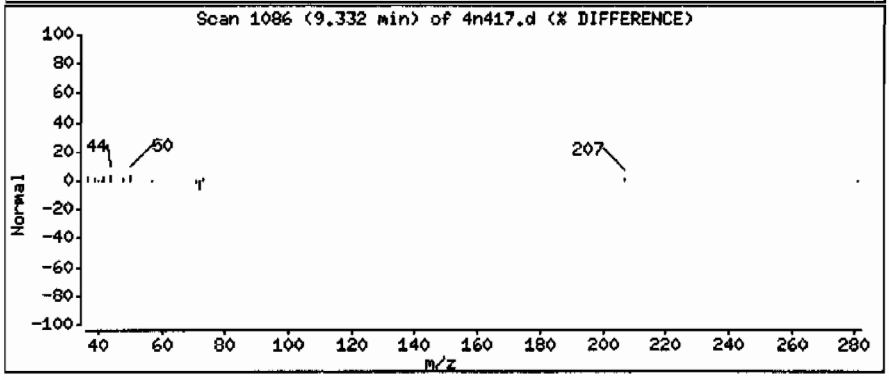

Data File: /chem/VOA4.i/120309v4/4n417.d

Date : 04-DEC-2009 01:48

Client ID: RE03-09-14122

Instrument: VOA4.i

Sample Info: |2418190171928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	87	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	64	C8H24O4Si4	296

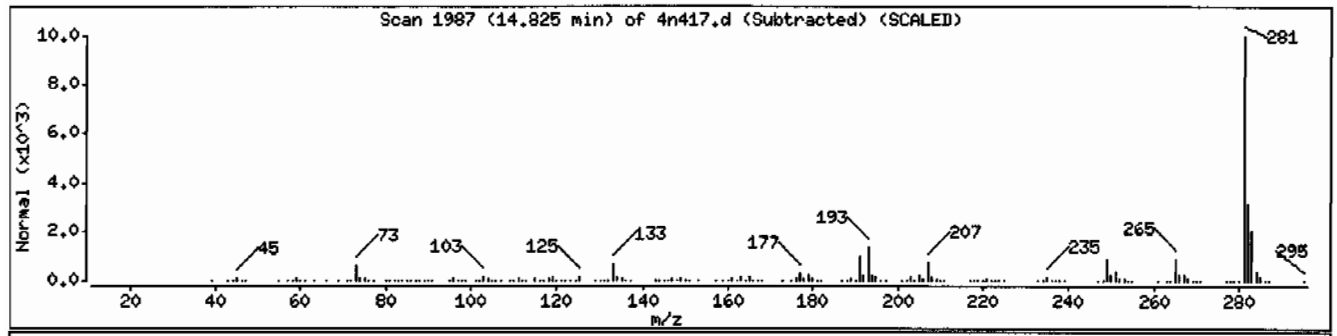

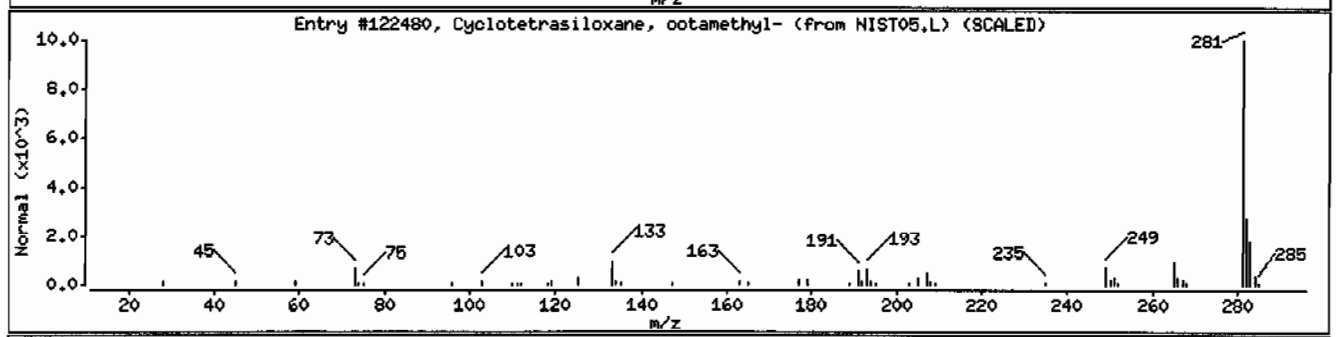

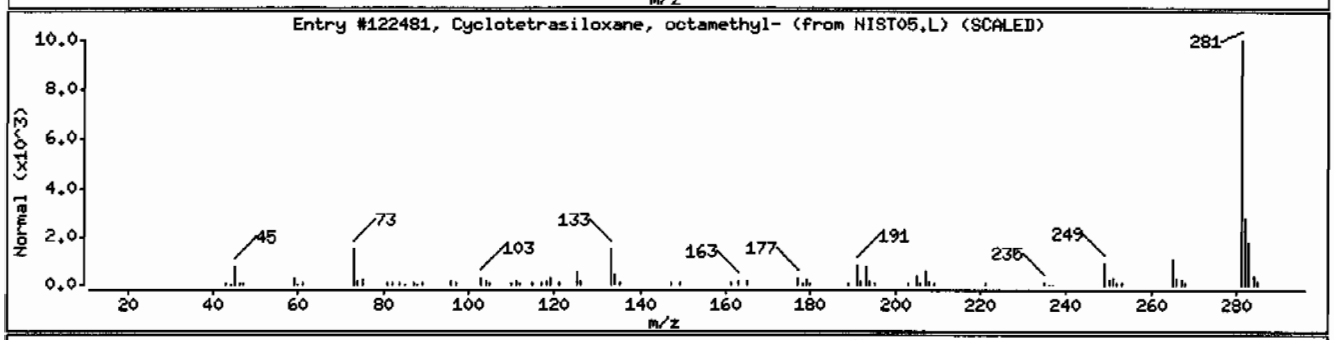

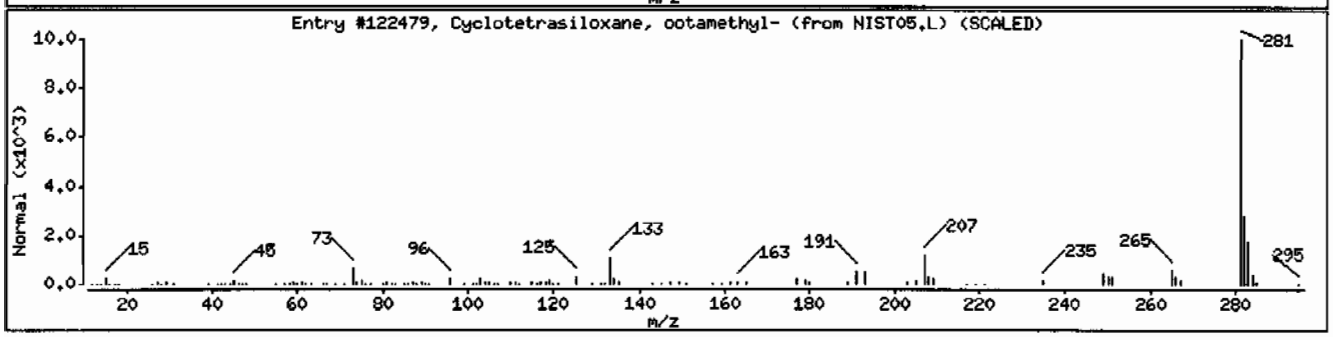

Data File: /chem/VOA4.i/120309v4/4n417.d

Date : 04-DEC-2009 01:48

Client ID: RE03-09-14122

Instrument: VOA4.i

Sample Info: |2418190171928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-	55471-01-7	NIST05.L	184036	64	C18H26F7NO3Si2	493
p-Trimethylsilyloxyphenyl-(trimethylsily	1000079-05-1	NIST05.L	170606	64	C18H34O4Si3	398
Benzaldehyde, 2,5-bis[(trimethylsilyl)ox	56114-69-3	NIST05.L	112903	64	C13H22O3Si2	282

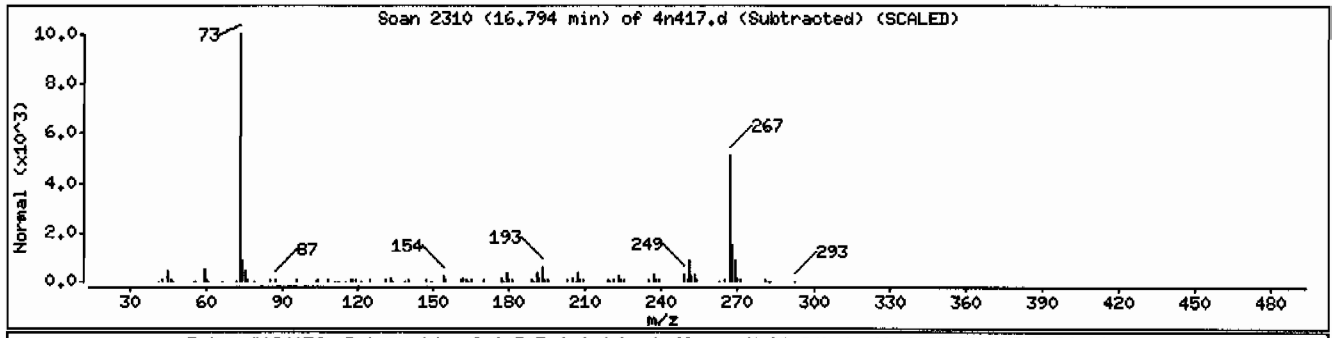

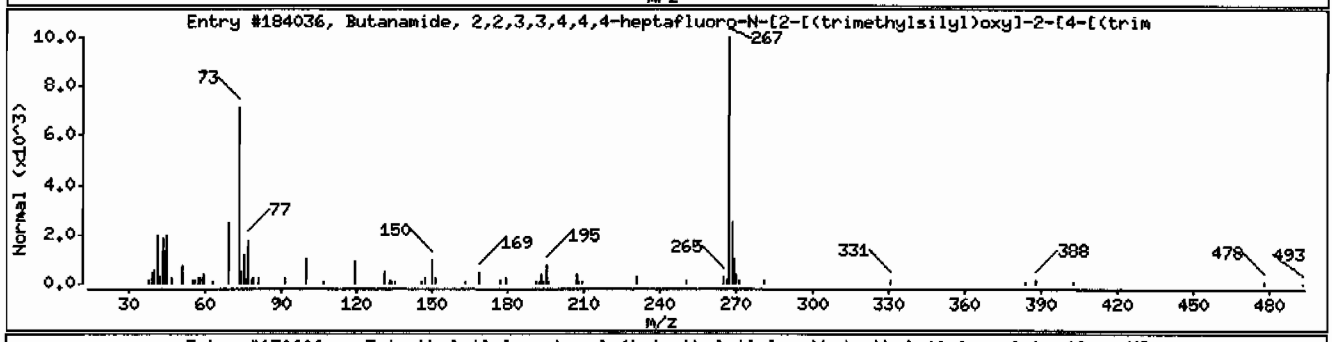

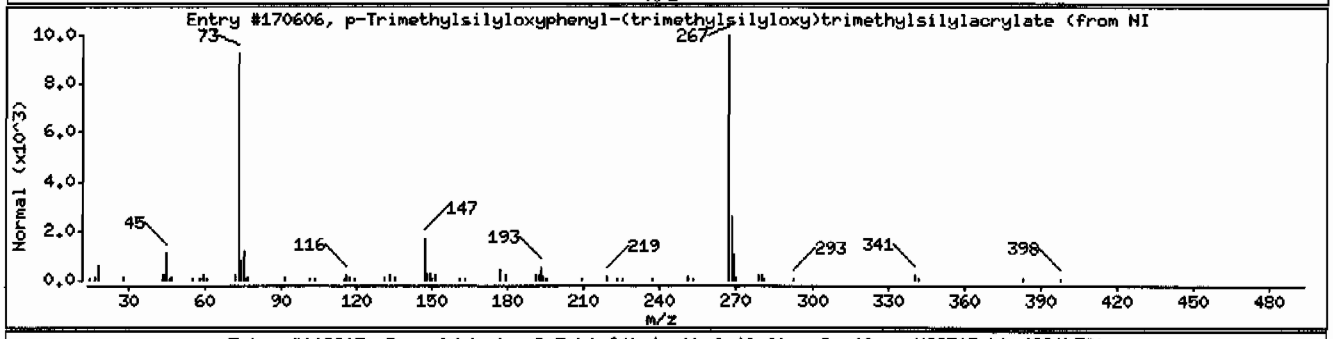

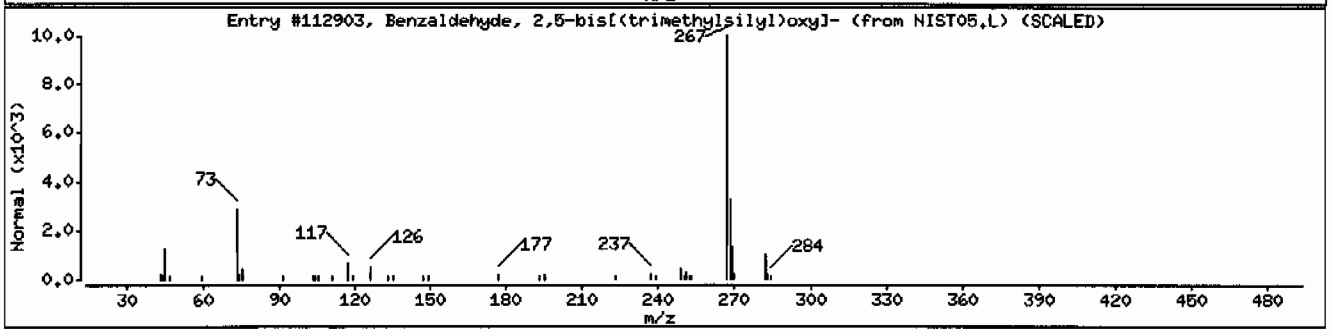

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:26**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:53**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n320.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.06	ug/kg	0.360	1.06
74-87-3	Chloromethane	U	1.06	ug/kg	0.318	1.06
75-01-4	Vinyl chloride	U	1.06	ug/kg	0.318	1.06
74-83-9	Bromomethane	U	1.06	ug/kg	0.318	1.06
75-00-3	Chloroethane	U	1.06	ug/kg	0.318	1.06
75-69-4	Trichlorofluoromethane	U	1.06	ug/kg	0.318	1.06
67-64-1	Acetone	J	2.18	ug/kg	1.76	5.29
75-35-4	1,1-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
74-88-4	Iodomethane	U	5.29	ug/kg	1.69	5.29
75-09-2	Methylene chloride	U	5.29	ug/kg	2.12	5.29
75-15-0	Carbon disulfide	U	5.29	ug/kg	1.32	5.29
156-60-5	trans-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
75-34-3	1,1-Dichloroethane	U	1.06	ug/kg	0.318	1.06
78-93-3	2-Butanone	U	5.29	ug/kg	1.59	5.29
156-59-2	cis-1,2-Dichloroethylene	U	1.06	ug/kg	0.318	1.06
594-20-7	2,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
67-66-3	Chloroform	U	1.06	ug/kg	0.318	1.06
74-97-5	Bromochloromethane	U	1.06	ug/kg	0.349	1.06
71-55-6	1,1,1-Trichloroethane	U	1.06	ug/kg	0.318	1.06
563-58-6	1,1-Dichloropropene	U	1.06	ug/kg	0.318	1.06
56-23-5	Carbon tetrachloride	U	1.06	ug/kg	0.318	1.06
107-06-2	1,2-Dichloroethane	U	1.06	ug/kg	0.318	1.06
71-43-2	Benzene	U	1.06	ug/kg	0.318	1.06
79-01-6	Trichloroethylene	U	1.06	ug/kg	0.349	1.06
78-87-5	1,2-Dichloropropane	U	1.06	ug/kg	0.318	1.06
75-27-4	Bromodichloromethane	U	1.06	ug/kg	0.318	1.06
74-95-3	Dibromomethane	U	1.06	ug/kg	0.318	1.06
108-10-1	4-Methyl-2-pentanone	U	5.29	ug/kg	1.32	5.29
10061-01-5	cis-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
108-88-3	Toluene	U	1.06	ug/kg	0.318	1.06
10061-02-6	trans-1,3-Dichloropropylene	U	1.06	ug/kg	0.318	1.06
79-00-5	1,1,2-Trichloroethane	U	1.06	ug/kg	0.318	1.06
591-78-6	2-Hexanone	U	5.29	ug/kg	1.59	5.29
142-28-9	1,3-Dichloropropane	U	1.06	ug/kg	0.318	1.06
127-18-4	Tetrachloroethylene	U	1.06	ug/kg	0.318	1.06
124-48-1	Dibromochloromethane	U	1.06	ug/kg	0.318	1.06
106-93-4	1,2-Dibromoethane	U	1.06	ug/kg	0.318	1.06
108-90-7	Chlorobenzene	U	1.06	ug/kg	0.318	1.06

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 02:26**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:53**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n320.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.06	ug/kg	0.318	1.06
179601-23-1	m,p-Xylenes	U	2.12	ug/kg	0.318	2.12
95-47-6	o-Xylene	U	1.06	ug/kg	0.318	1.06
100-42-5	Styrene	U	1.06	ug/kg	0.318	1.06
75-25-2	Bromoform	U	1.06	ug/kg	0.318	1.06
79-34-5	1,1,2,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
96-18-4	1,2,3-Trichloropropane	U	1.06	ug/kg	0.318	1.06
108-86-1	Bromobenzene	U	1.06	ug/kg	0.318	1.06
103-65-1	n-Propylbenzene	U	1.06	ug/kg	0.318	1.06
95-49-8	2-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-82-8	Isopropylbenzene	U	1.06	ug/kg	0.318	1.06
108-67-8	1,3,5-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
106-43-4	4-Chlorotoluene	U	1.06	ug/kg	0.318	1.06
98-06-6	tert-Butylbenzene	U	1.06	ug/kg	0.318	1.06
95-63-6	1,2,4-Trimethylbenzene	U	1.06	ug/kg	0.318	1.06
135-98-8	sec-Butylbenzene	U	1.06	ug/kg	0.318	1.06
99-87-6	4-Isopropyltoluene	U	1.06	ug/kg	0.318	1.06
541-73-1	1,3-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
106-46-7	1,4-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06
104-51-8	n-Butylbenzene	U	1.06	ug/kg	0.318	1.06
96-12-8	1,2-Dibromo-3-chloropropane	U	1.06	ug/kg	0.318	1.06
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.29	ug/kg	1.69	5.29
630-20-6	1,1,1,2-Tetrachloroethane	U	1.06	ug/kg	0.318	1.06
95-50-1	1,2-Dichlorobenzene	U	1.06	ug/kg	0.318	1.06

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	52.3	ug/kg	90	NJ
	Unknown Siloxane	16.79	12.7	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n320.d
Lab Smp Id: 241819004 Client Smp ID: RE03-09-14123
Inj Date : 03-DEC-2009 02:26
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819004|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.53440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1470200	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1085636	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	672826	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	307717	53.2888	56.4
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	939450	49.6830	52.6
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	404423	51.9078	54.9
10 Acetone	43	7.375	7.358	(0.695)	12277	2.05522	2.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n320.d
Report Date: 12/03/2009 15:47
Lab. ID: 241819004 SampleType: SAMPLE
Injection Date: 03-DEC-2009 02:26
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819004|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	12277	7.38	7.36	80-120	100	( )
58	2984	7.37	7.36	2- 62	24	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	19592	10.62	10.34	80-120	100	(T)
64	3163	10.62	10.34	3- 63	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7171	12.25	12.02	80-120	100	(T)
43	4588	12.25	12.02	227-287	64	(QT)
100	645034	12.25	12.02	9- 69	8995	(QT)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	4390	14.82	15.11	80-120	100	(T)
75	12237	14.82	15.11	249-309	279	(T)
77	551	14.83	15.11	62-122	13	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n320.d
Lab Smp Id: 241819004 Client Smp ID: RE03-09-14123
Inj Date : 03-DEC-2009 02:26
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819004|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.53440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3235534	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3914740	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	3195378	49.3794535	52.3	90	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown Siloxane					CAS #:		
16.788	937605	11.9753093	12.7	0		0	86

Data File: /chem/VOA4.i/120209v4/4n320.d

Date : 03-DEC-2009 02:26

Client ID: RE03-09-14123

Sample Info: |2418190041928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

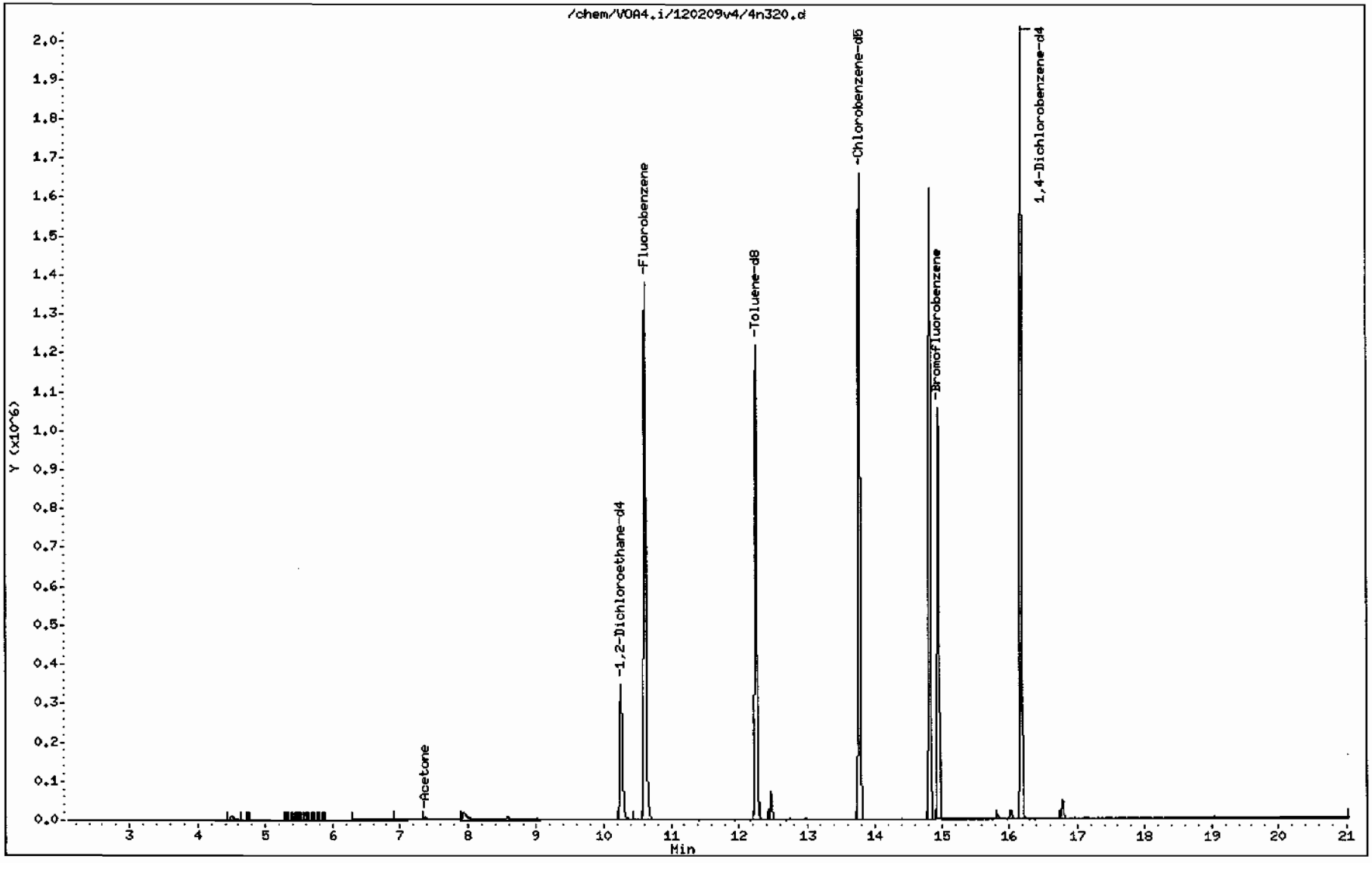

Data File: /chem/VOA4.i/120209v4/4n320.d

Date : 03-DEC-2009 02:26

Client ID: RE03-09-14123

Instrument: VOA4.i

Sample Info: |2418190041928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.2 ug/Kg

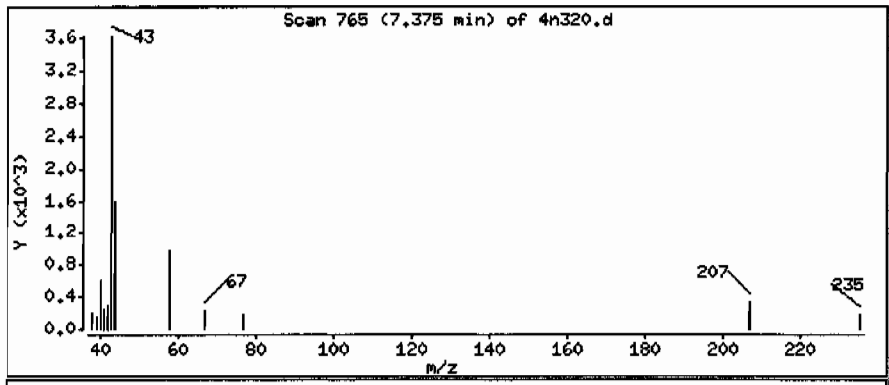

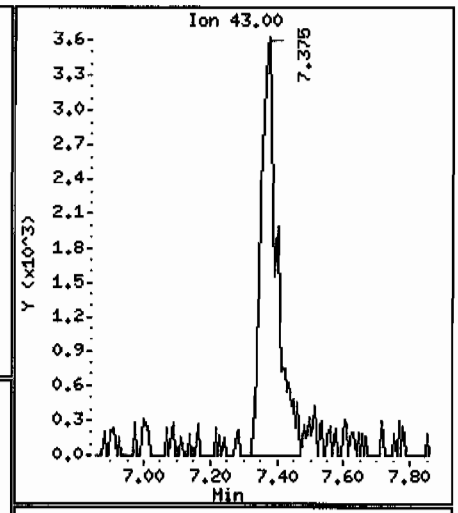

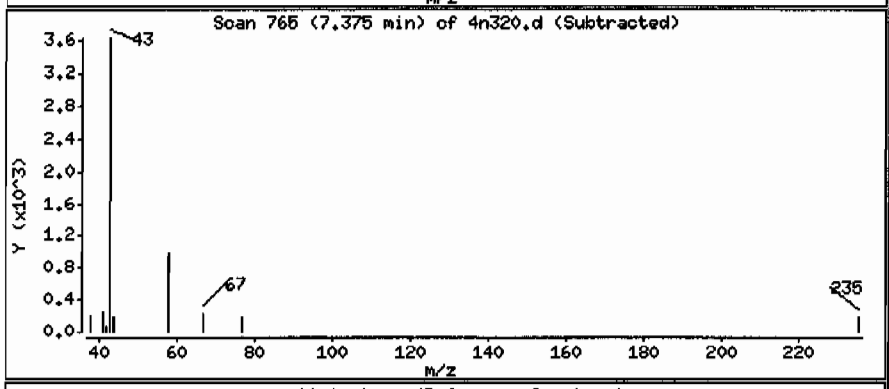

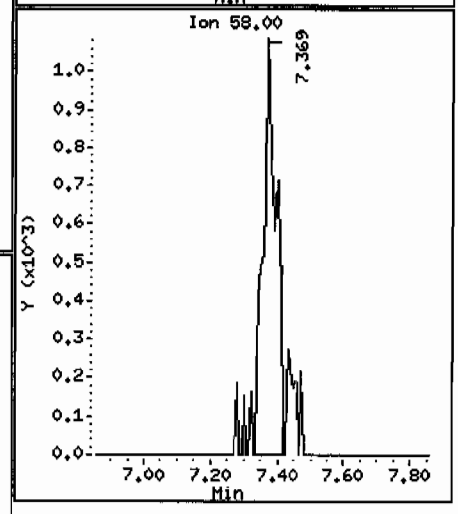

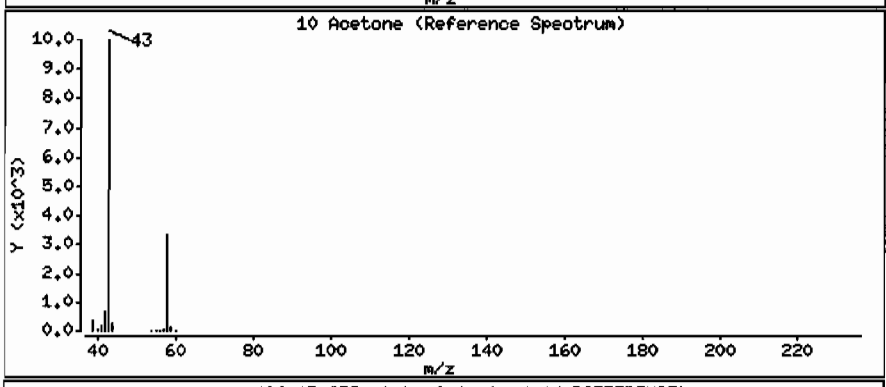

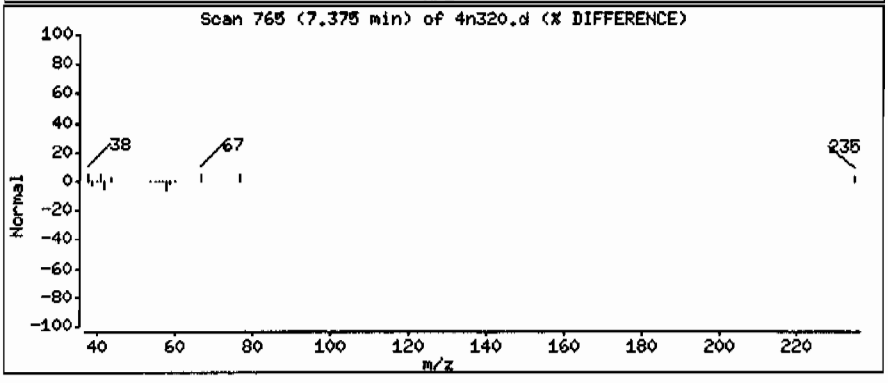

Data File: /chem/VOA4.i/120209v4/4n320.d

Date : 03-DEC-2009 02:26

Client ID: RE03-09-14123

Instrument: VOA4.i

Sample Info: |2418190041928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	78	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3657-49-1	NIST05.L	112705	59	C21H15N	281

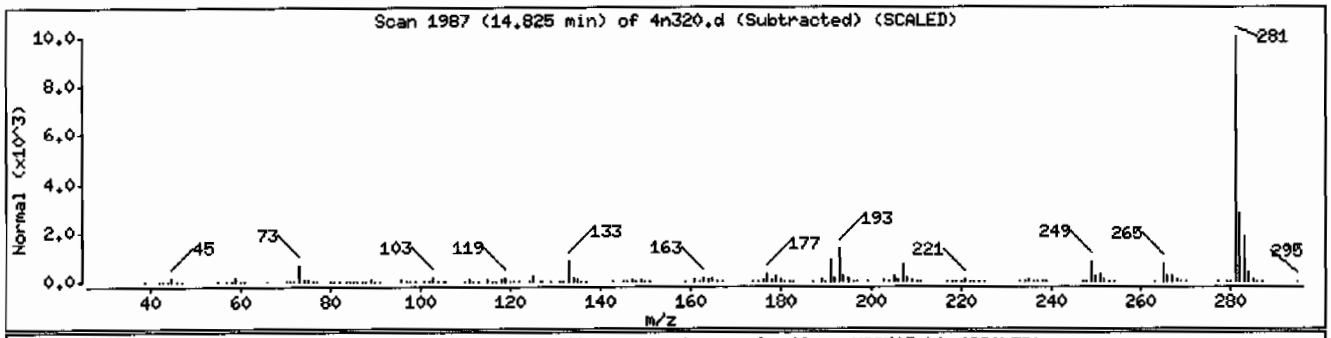

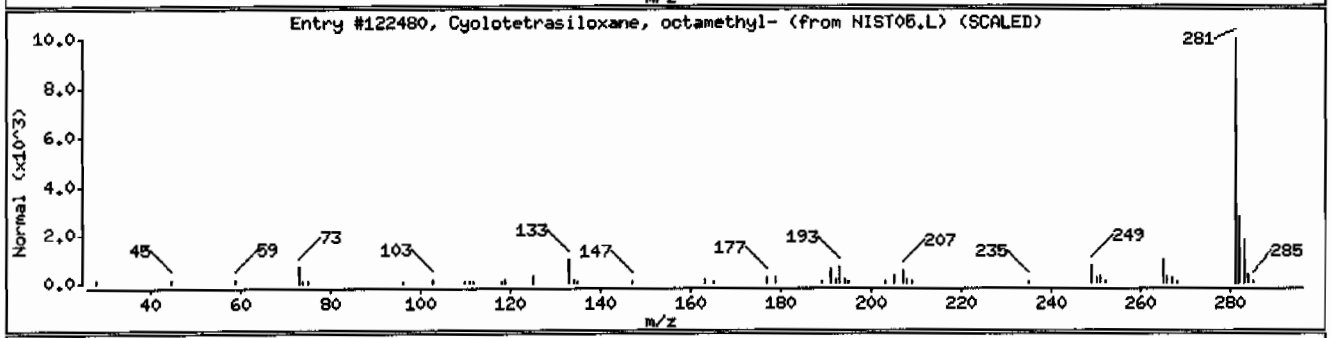

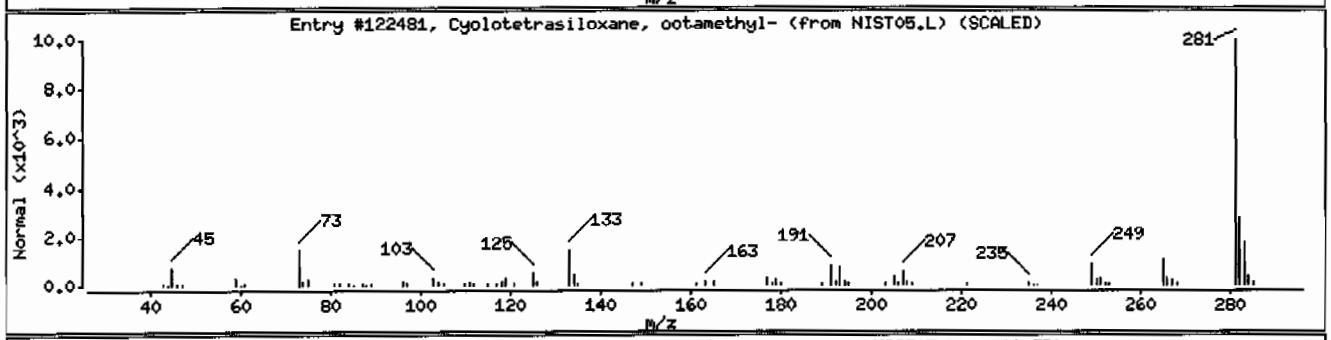

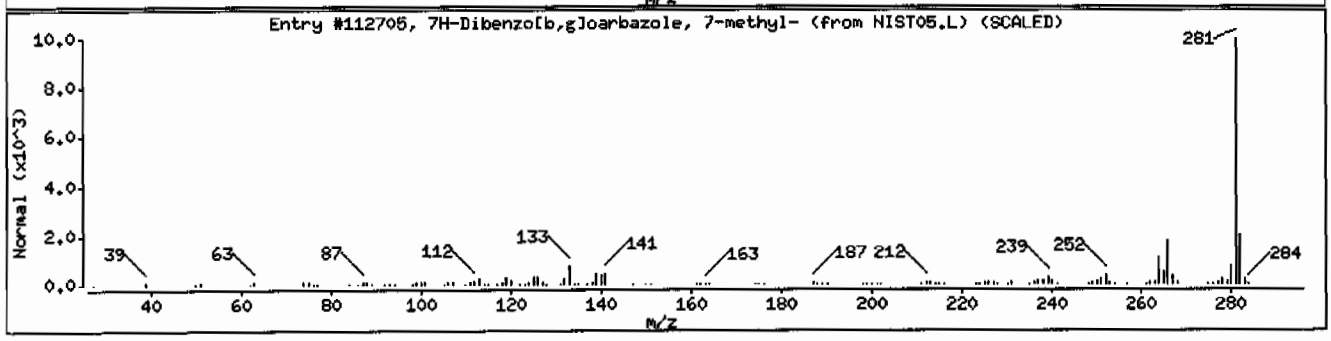

Data File: /chem/VOA4.i/120209v4/4n320.d

Date : 03-DEC-2009 02:26

Client ID: RE03-09-14123

Instrument: VOA4.i

Sample Info: |241819004|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	45	C13H22O3Si2	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	45	C13H22O3Si2	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	45	C21H26F5NO2Si	475

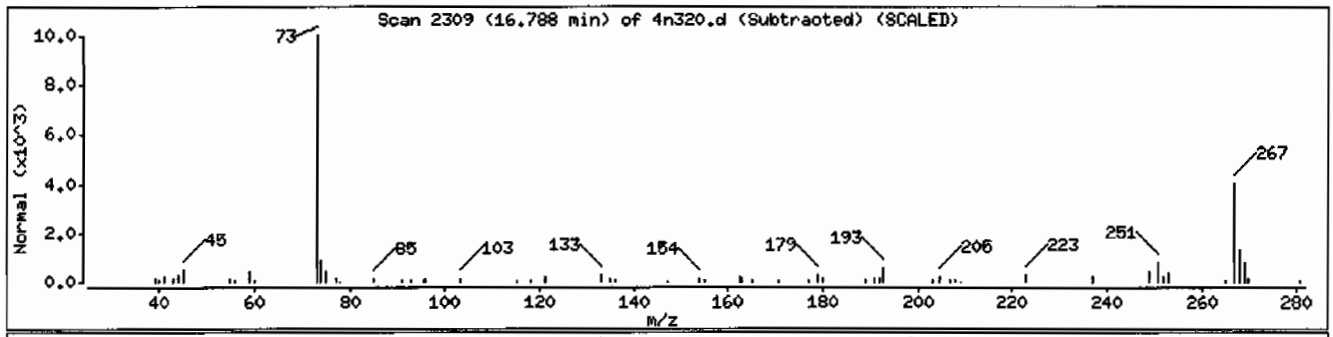

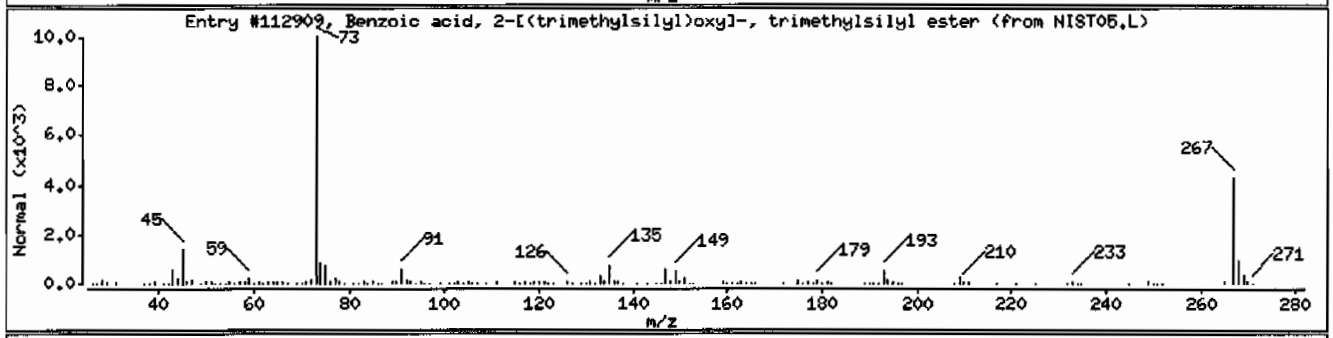

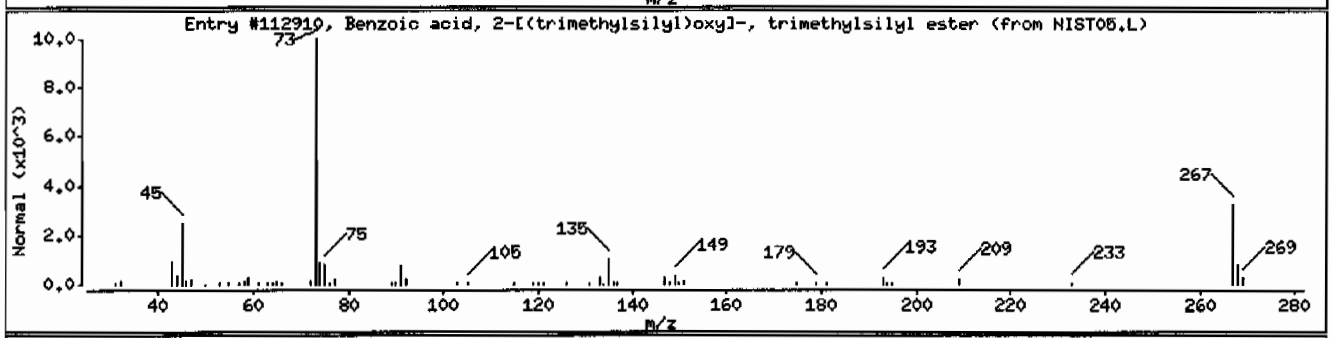

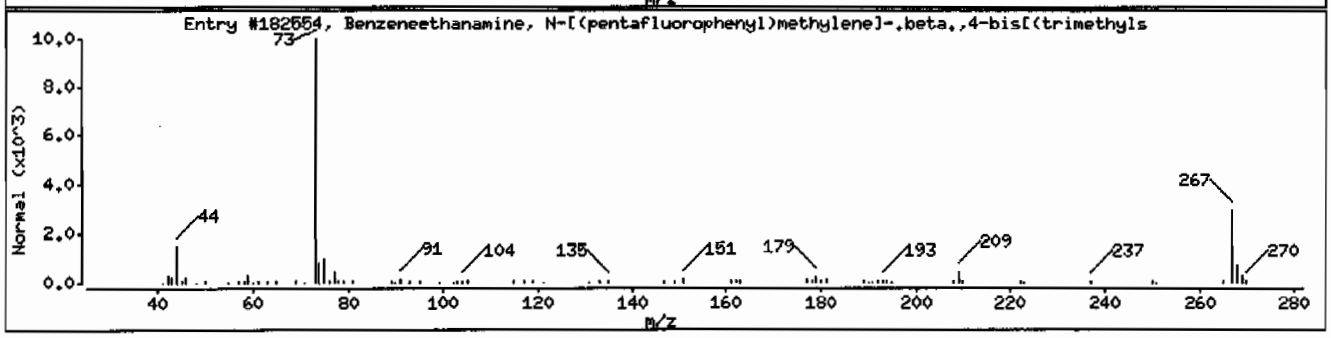

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:15**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n418.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.369	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.325	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.325	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.325	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.325	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.325	1.08
67-64-1	Acetone	U	5.42	ug/kg	1.80	5.42
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
74-88-4	Iodomethane	U	5.42	ug/kg	1.74	5.42
75-09-2	Methylene chloride	U	5.42	ug/kg	2.17	5.42
75-15-0	Carbon disulfide	U	5.42	ug/kg	1.36	5.42
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.325	1.08
78-93-3	2-Butanone	U	5.42	ug/kg	1.63	5.42
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.325	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.325	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.358	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.325	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.325	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.325	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.325	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.325	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.358	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.325	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.325	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.325	1.08
108-10-1	4-Methyl-2-pentanone	U	5.42	ug/kg	1.36	5.42
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
108-88-3	Toluene	U	1.08	ug/kg	0.325	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.325	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.325	1.08
591-78-6	2-Hexanone	U	5.42	ug/kg	1.63	5.42
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.325	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.325	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.325	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.325	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.325	1.08

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 02:15**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n418.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.325	1.08
179601-23-1	m,p-Xylenes	U	2.17	ug/kg	0.325	2.17
95-47-6	o-Xylene	U	1.08	ug/kg	0.325	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.325	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.325	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.325	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.325	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.325	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.325	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.325	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.325	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.325	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.325	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.325	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.325	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.325	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.42	ug/kg	1.74	5.42
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.325	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.325	1.08

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	217	ug/kg	91	NJ
	Unknown Siloxane	16.79	13.5	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n418.d
Lab Smp Id: 241819018 Client Smp ID: RE03-09-14124
Inj Date : 04-DEC-2009 02:15
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819018|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.82910	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1516570	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1147891	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	682407	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	302717	50.8201	55.1
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	935645	46.7982	50.8
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	418119	52.9122	57.4

ION RATIO REPORT

VOA REPORT

Data file: 4n418.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819018 SampleType: SAMPLE
Injection Date: 04-DEC-2009 02:15
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819018|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	20342	10.62	10.34	80-120	100	(T)
64	3450	10.62	10.34	2- 62	17	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8377	12.25	12.02	80-120	100	(T)
43	4385	12.25	12.02	230-290	52	(QT)
100	643230	12.25	12.02	8- 68	7678	(QT)
65 Styrene				CAS#: 100-42-5		
104	19591	14.83	14.40	80-120	100	(T)
78	369	14.81	14.40	22- 82	2	(QT)
67 Isopropylbenzene				CAS#: 98-82-8		
105	16712	14.82	14.76	80-120	100	(T)
120	8498	14.83	14.76	0- 57	51	(T)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	17575	14.82	15.11	80-120	100	(T)
75	48773	14.83	15.11	254-314	278	(T)
77	3558	14.83	15.11	62-122	20	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n418.d
Lab Smp Id: 241819018 Client Smp ID: RE03-09-14124
Inj Date : 04-DEC-2009 02:15
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819018|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	7.82910	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.770	3545097	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3927729	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	14201966	200.304330	217	91	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
16.788	978522	12.4565835	13.5	0		0	86

Data File: /chem/VOA4.i/120309v4/4n418.d

Page 1

Date : 04-DEC-2009 02:15

Client ID: RE03-09-14124

Instrument: VOA4.i

Sample Info: |24181901819286051|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

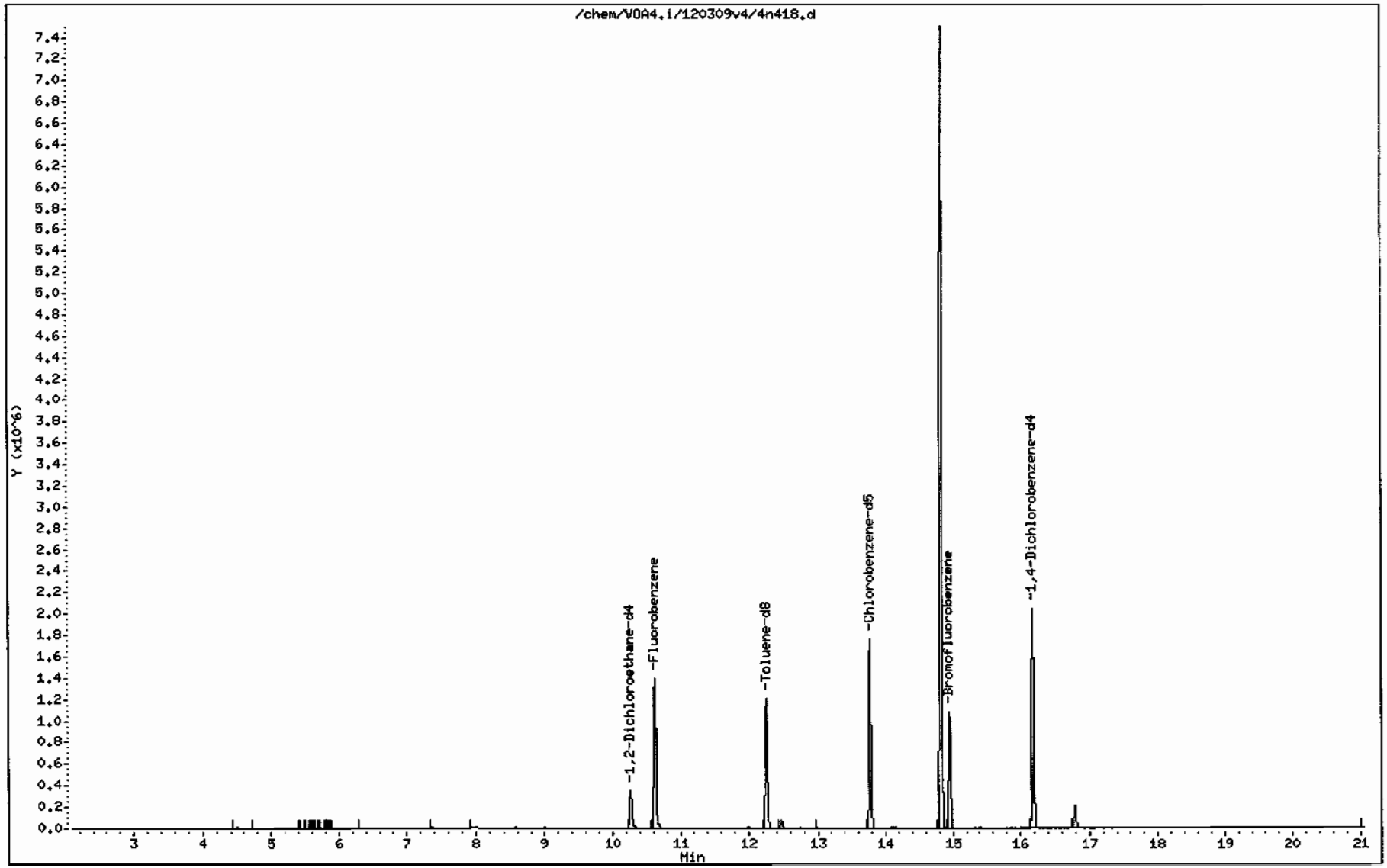

Data File: /chem/VOA4.i/120309v4/4n418.d

Date : 04-DEC-2009 02:15

Client ID: RE03-09-14124

Instrument: VOA4.i

Sample Info: |24181901819286051|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Benzene, 1-phenyl-4-(2-cyano-2-phenyleth	27869-56-3	NIST05.L	112707	50	C21H15N	281

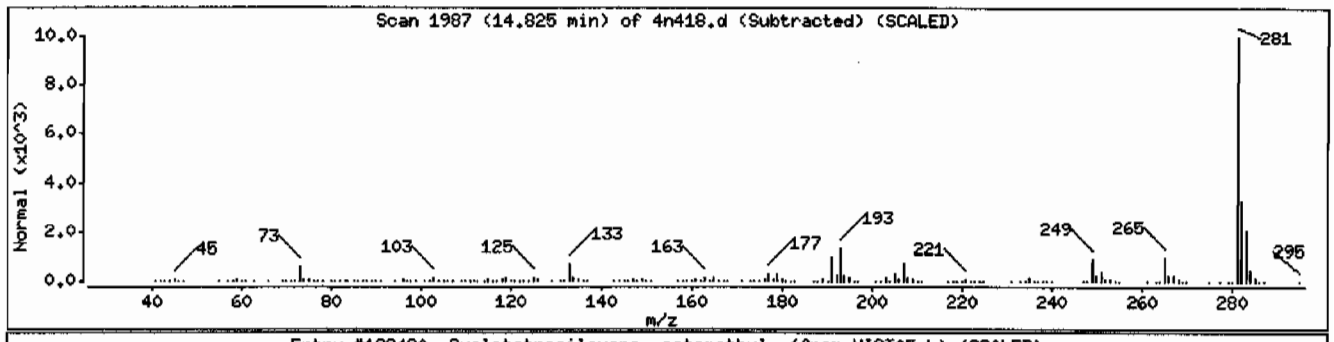

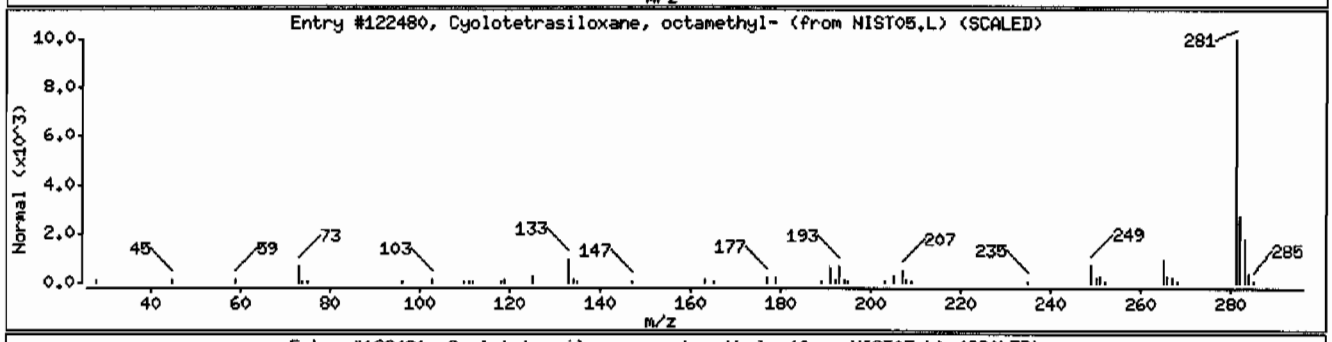

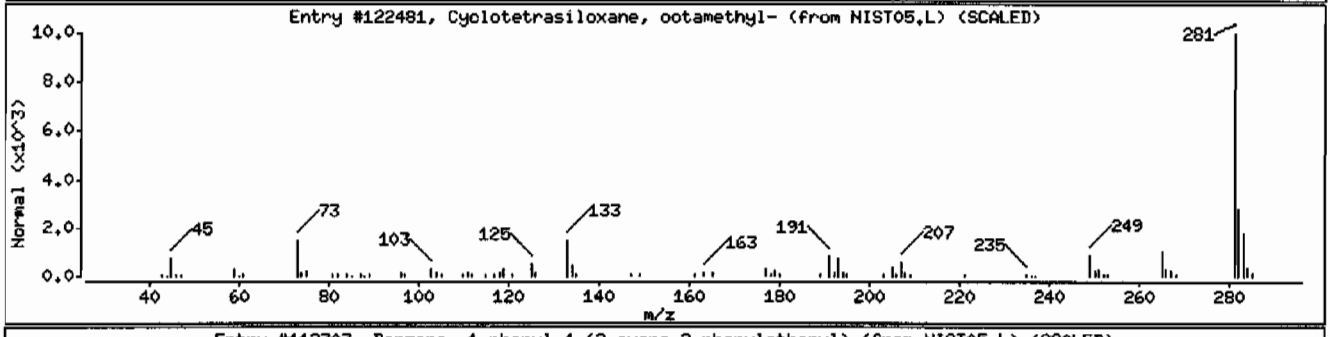

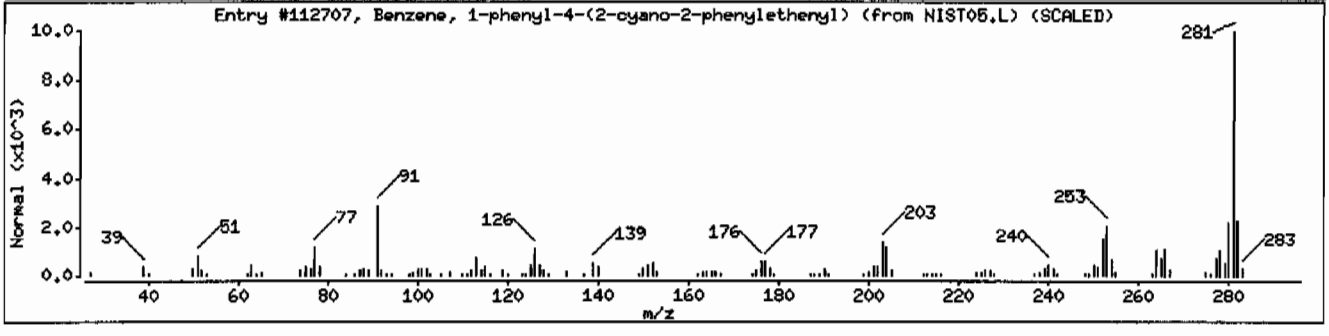

Data File: /chem/VOA4.i/120309v4/4n418.d

Date : 04-DEC-2009 02:15

Client ID: RE03-09-14124

Instrument: VOA4.i

Sample Info: |2418190181928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	59	C21H26F5NO2Si4	475
Tetrasiloxane, 1,1,3,3,5,5,7,7-octamethy	1000-05-1	NIST05.L	113583	56	C8H26O3Si4	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	50	C13H22O3Si2	282

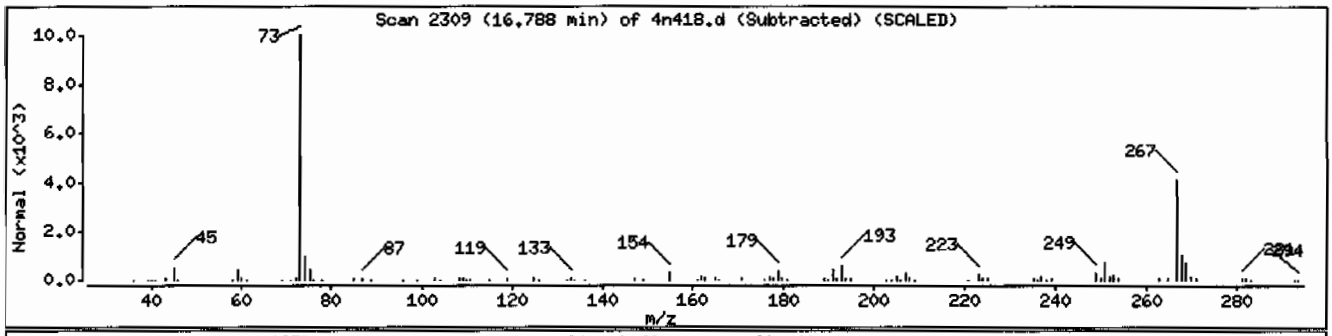

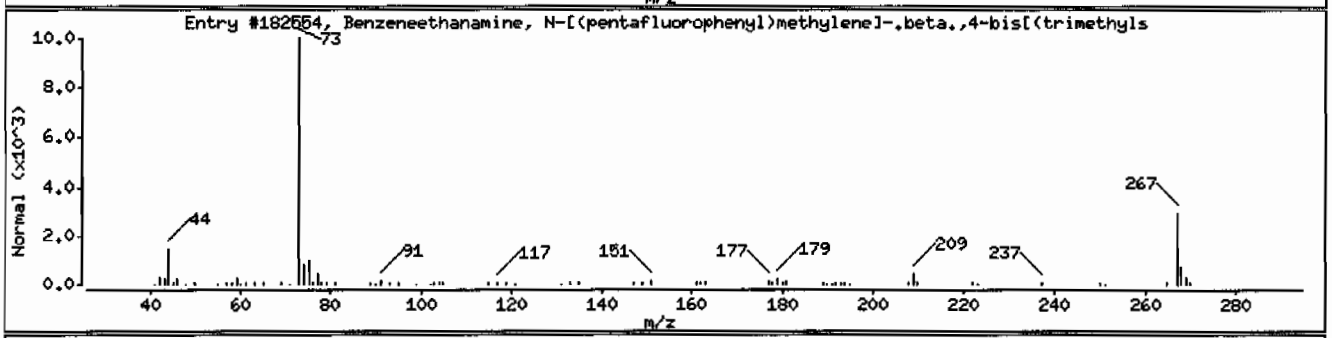

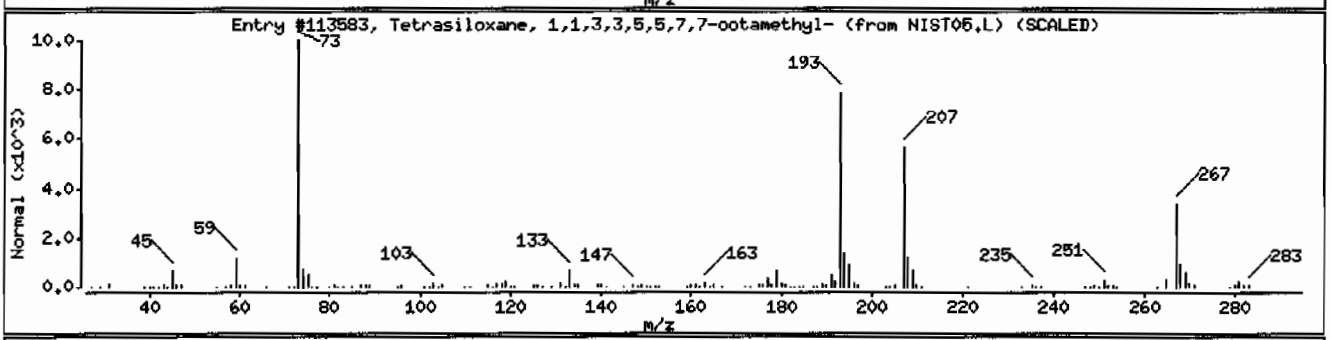

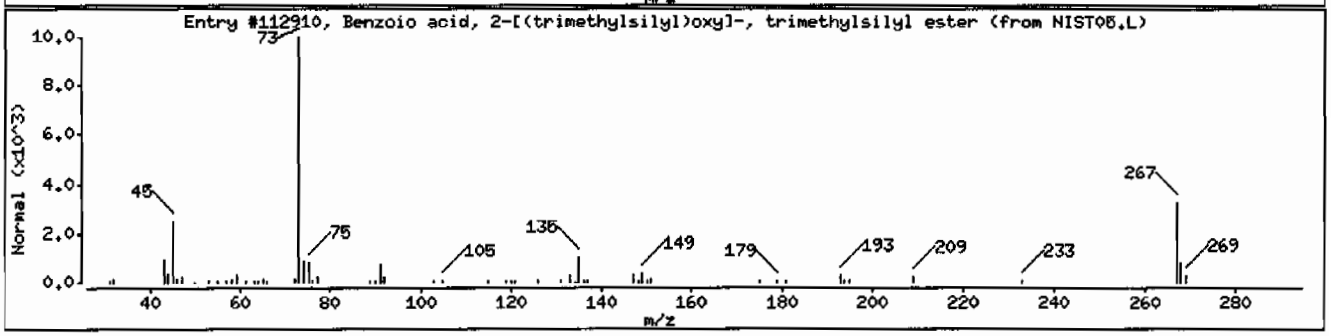

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:58**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n319.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04
67-64-1	Acetone	U	5.21	ug/kg	1.73	5.21
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
74-88-4	Iodomethane	U	5.21	ug/kg	1.67	5.21
75-09-2	Methylene chloride	U	5.21	ug/kg	2.09	5.21
75-15-0	Carbon disulfide	U	5.21	ug/kg	1.30	5.21
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04
78-93-3	2-Butanone	U	5.21	ug/kg	1.56	5.21
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04
108-10-1	4-Methyl-2-pentanone	U	5.21	ug/kg	1.30	5.21
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04
591-78-6	2-Hexanone	U	5.21	ug/kg	1.56	5.21
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 01:58**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:52**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n319.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.21	ug/kg	1.67	5.21
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	80.8	ug/kg	91	NJ
	Unknown Siloxane	16.79	10.2	ug/kg		J

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n319.d
Lab Smp Id: 241819003 Client Smp ID: RE03-09-14125
Inj Date : 03-DEC-2009 01:58
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819003|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.09250	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1552667	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.772	(1.000)	1138917	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	676115	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	323431	53.0352	55.3
$ 47 Toluene-d8	98	12.254	12.254	(0.890)	986044	49.7076	51.8
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	423035	54.0325	56.3

ION RATIO REPORT

VOA REPORT

Data file: 4n319.d
Report Date: 12/03/2009 15:47
Lab. ID: 241819003 SampleType: SAMPLE
Injection Date: 03-DEC-2009 01:58
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819003|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	20701	10.62	10.34	80-120	100	(T)
64	3254	10.61	10.34	3- 63	16	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	7989	12.25	12.02	80-120	100	(T)
43	4905	12.25	12.02	227-287	61	(QT)
100	673820	12.25	12.02	9- 69	8434	(QT)
65 Styrene				CAS#: 100-42-5		
104	8171	14.83	14.40	80-120	100	(T)
78	183	14.84	14.40	21- 81	2	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	7089	14.83	15.11	80-120	100	(T)
75	19712	14.82	15.11	249-309	278	(T)
77	1191	14.82	15.11	62-122	17	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n319.d
Lab Smp Id: 241819003 Client Smp ID: RE03-09-14125
Inj Date : 03-DEC-2009 01:58
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819003|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.09250	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.772	3420961	50.000
* 86 1,4-Dichlorobenzene-d4	16.180	3890168	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.826	5300357	77.4688305	80.8	91	NIST05.L	122481	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown Siloxane				CAS #:			
16.789	764493	9.82596666	10.2	0		0	86

Data File: /chem/VOA4.i/120209v4/4n319.d
Date : 03-DEC-2009 01:58
Client ID: RE03-09-14125
Sample Info: |241819003|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

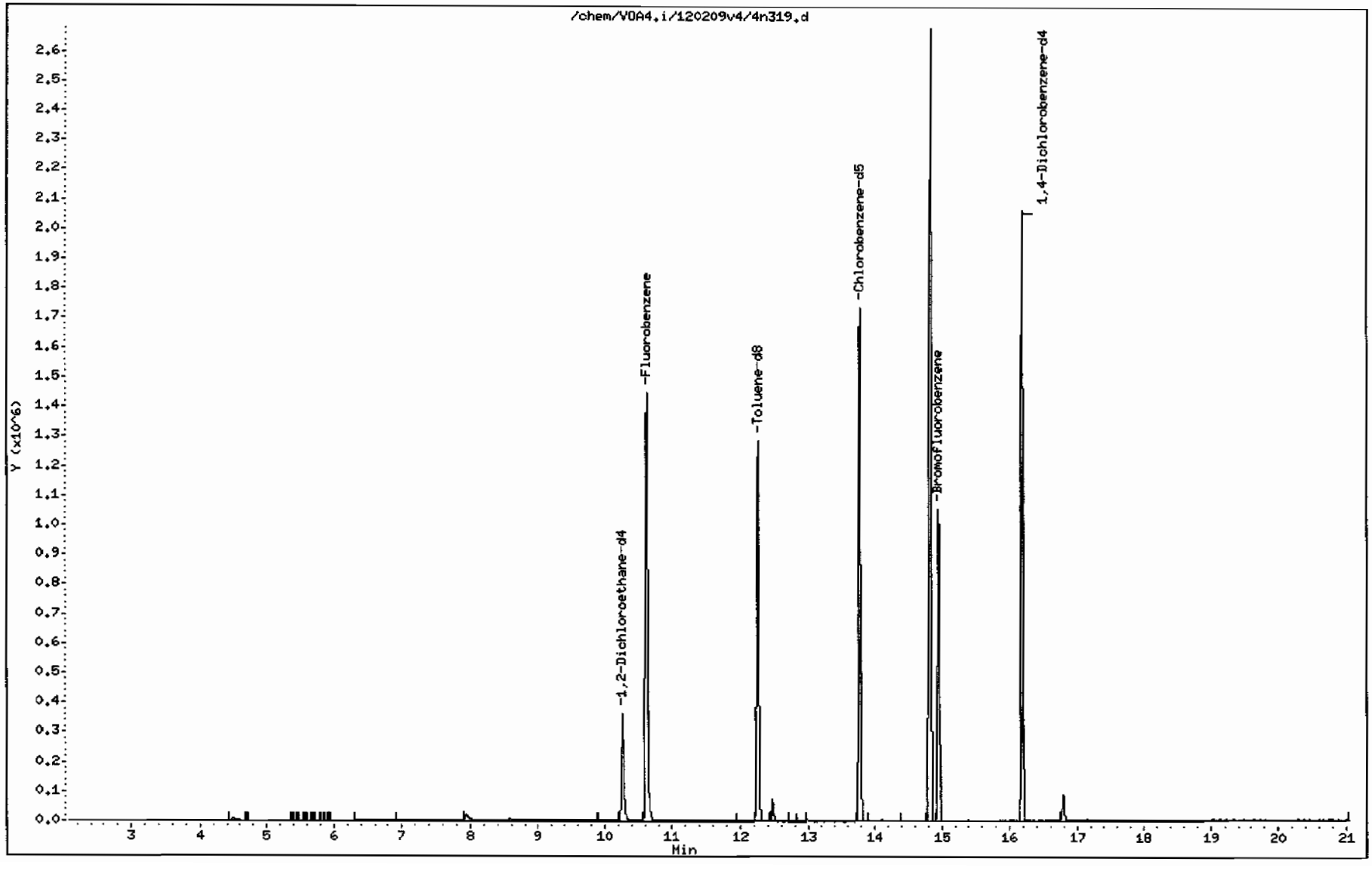

Data File: /chem/VOA4.i/120209v4/4n319.d

Date : 03-DEC-2009 01:58

Client ID: RE03-09-14125

Instrument: VOA4.i

Sample Info: |2418190031928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Benzene, 1-phenyl-4-(2-cyano-2-phenyleth	27869-56-3	NIST05.L	112707	59	C21H15N	281

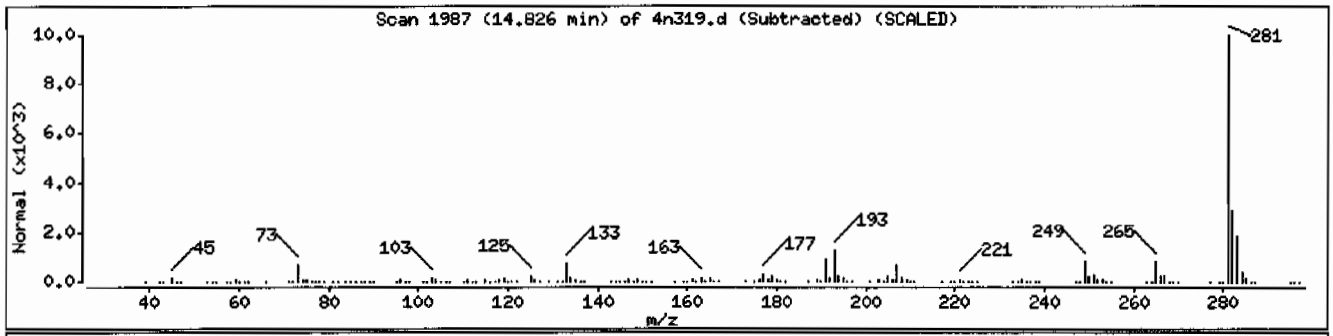

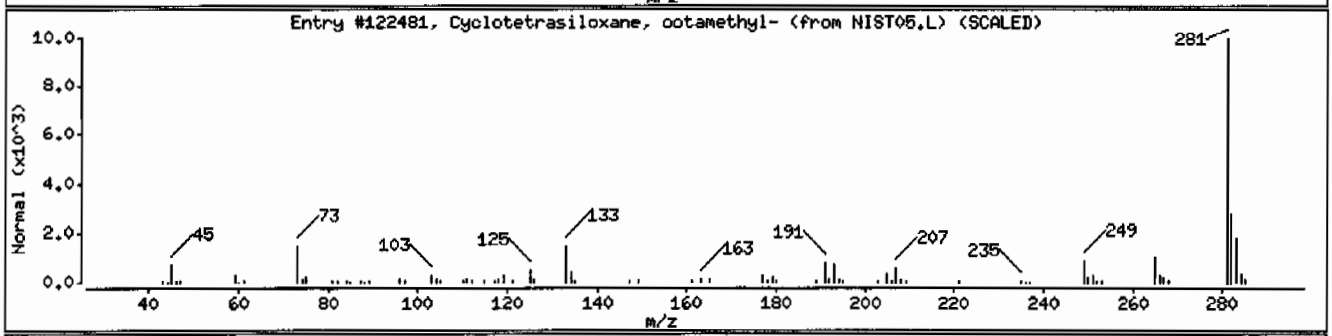

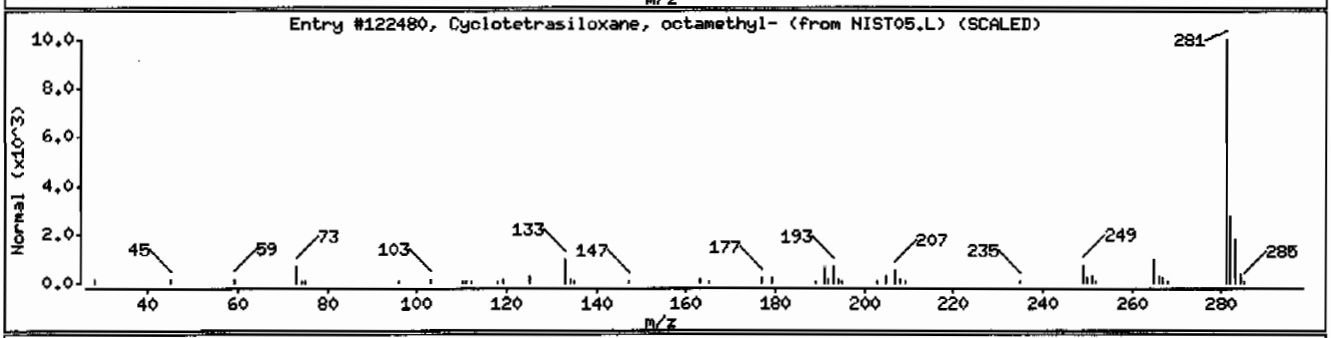

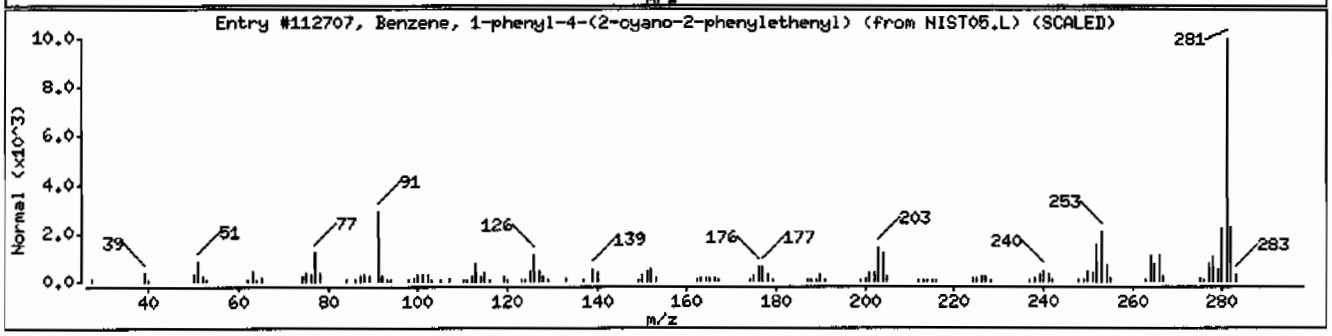

Data File: /chem/VOA4.i/120209v4/4n319.d

Date : 03-DEC-2009 01:58

Client ID: RE03-09-14125

Instrument: VOA4.i

Sample Info: |24181900319286051|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 4-[(trimethylsilyl)oxy]-,	2078-13-9	NIST05.L	112913	50	C13H22O3Si2	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	39	C13H22O3Si2	282
Benzoic acid, 4-[(trimethylsilyl)oxy]-,	2078-13-9	NIST05.L	112906	38	C13H22O3Si2	282

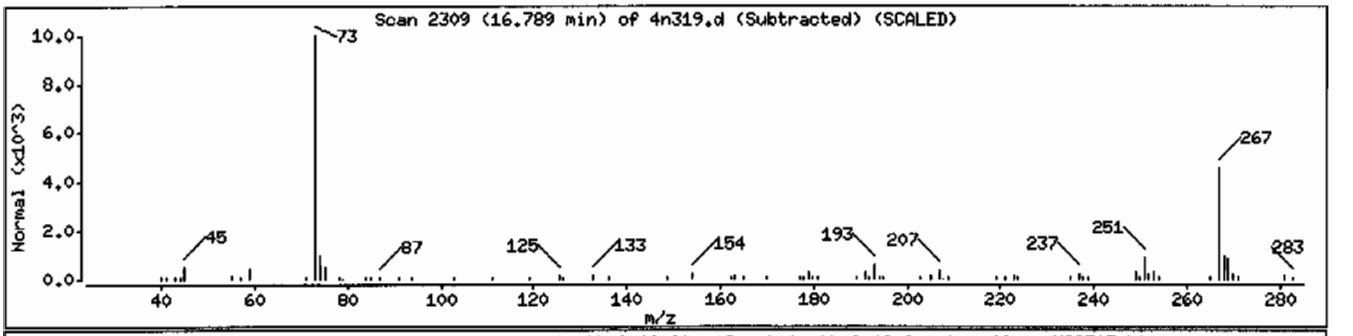

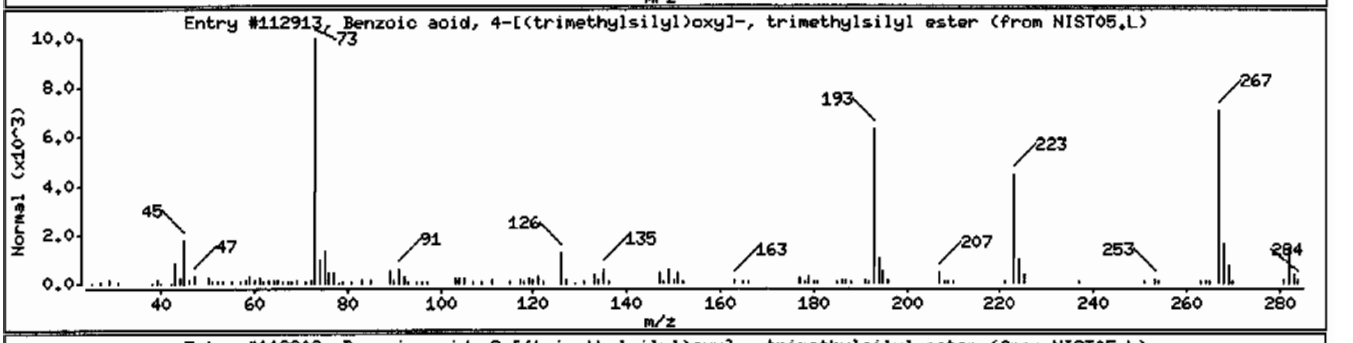

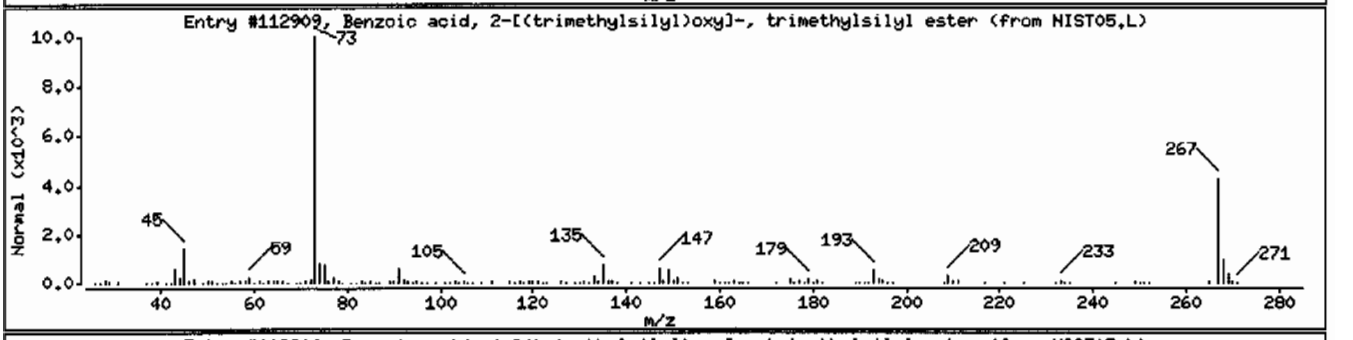

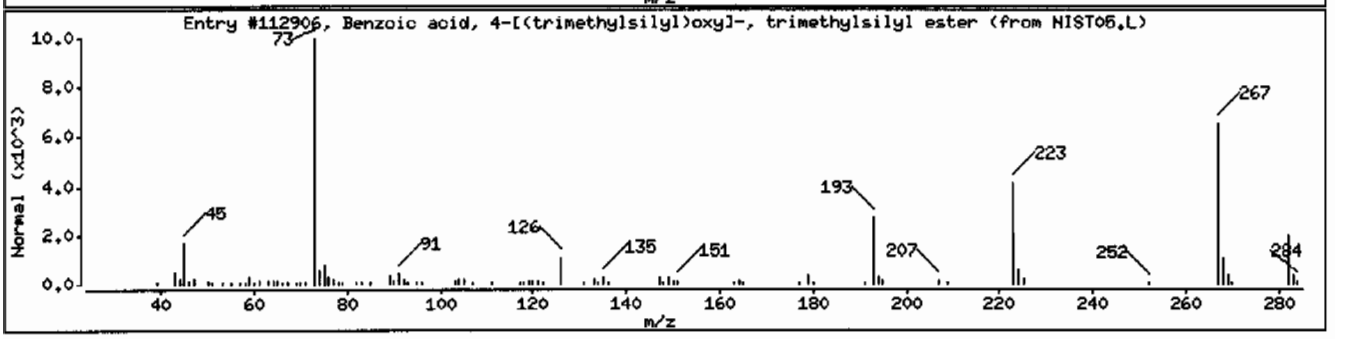

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14126**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:55**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n322.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.09	ug/kg	0.370	1.09
74-87-3	Chloromethane	U	1.09	ug/kg	0.327	1.09
75-01-4	Vinyl chloride	U	1.09	ug/kg	0.327	1.09
74-83-9	Bromomethane	U	1.09	ug/kg	0.327	1.09
75-00-3	Chloroethane	U	1.09	ug/kg	0.327	1.09
75-69-4	Trichlorofluoromethane	U	1.09	ug/kg	0.327	1.09
67-64-1	Acetone	U	5.45	ug/kg	1.81	5.45
75-35-4	1,1-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
74-88-4	Iodomethane	U	5.45	ug/kg	1.74	5.45
75-09-2	Methylene chloride	U	5.45	ug/kg	2.18	5.45
75-15-0	Carbon disulfide	U	5.45	ug/kg	1.36	5.45
156-60-5	trans-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
75-34-3	1,1-Dichloroethane	U	1.09	ug/kg	0.327	1.09
78-93-3	2-Butanone	U	5.45	ug/kg	1.63	5.45
156-59-2	cis-1,2-Dichloroethylene	U	1.09	ug/kg	0.327	1.09
594-20-7	2,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
67-66-3	Chloroform	U	1.09	ug/kg	0.327	1.09
74-97-5	Bromochloromethane	U	1.09	ug/kg	0.360	1.09
71-55-6	1,1,1-Trichloroethane	U	1.09	ug/kg	0.327	1.09
563-58-6	1,1-Dichloropropene	U	1.09	ug/kg	0.327	1.09
56-23-5	Carbon tetrachloride	U	1.09	ug/kg	0.327	1.09
107-06-2	1,2-Dichloroethane	U	1.09	ug/kg	0.327	1.09
71-43-2	Benzene	U	1.09	ug/kg	0.327	1.09
79-01-6	Trichloroethylene	U	1.09	ug/kg	0.360	1.09
78-87-5	1,2-Dichloropropane	U	1.09	ug/kg	0.327	1.09
75-27-4	Bromodichloromethane	U	1.09	ug/kg	0.327	1.09
74-95-3	Dibromomethane	U	1.09	ug/kg	0.327	1.09
108-10-1	4-Methyl-2-pentanone	U	5.45	ug/kg	1.36	5.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
108-88-3	Toluene	U	1.09	ug/kg	0.327	1.09
10061-02-6	trans-1,3-Dichloropropylene	U	1.09	ug/kg	0.327	1.09
79-00-5	1,1,2-Trichloroethane	U	1.09	ug/kg	0.327	1.09
591-78-6	2-Hexanone	U	5.45	ug/kg	1.63	5.45
142-28-9	1,3-Dichloropropane	U	1.09	ug/kg	0.327	1.09
127-18-4	Tetrachloroethylene	U	1.09	ug/kg	0.327	1.09
124-48-1	Dibromochloromethane	U	1.09	ug/kg	0.327	1.09
106-93-4	1,2-Dibromoethane	U	1.09	ug/kg	0.327	1.09
108-90-7	Chlorobenzene	U	1.09	ug/kg	0.327	1.09

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14126**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 03:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:55**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n322.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.09	ug/kg	0.327	1.09
179601-23-1	m,p-Xylenes	U	2.18	ug/kg	0.327	2.18
95-47-6	o-Xylene	U	1.09	ug/kg	0.327	1.09
100-42-5	Styrene	U	1.09	ug/kg	0.327	1.09
75-25-2	Bromoform	U	1.09	ug/kg	0.327	1.09
79-34-5	1,1,2,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
96-18-4	1,2,3-Trichloropropane	U	1.09	ug/kg	0.327	1.09
108-86-1	Bromobenzene	U	1.09	ug/kg	0.327	1.09
103-65-1	n-Propylbenzene	U	1.09	ug/kg	0.327	1.09
95-49-8	2-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-82-8	Isopropylbenzene	U	1.09	ug/kg	0.327	1.09
108-67-8	1,3,5-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
106-43-4	4-Chlorotoluene	U	1.09	ug/kg	0.327	1.09
98-06-6	tert-Butylbenzene	U	1.09	ug/kg	0.327	1.09
95-63-6	1,2,4-Trimethylbenzene	U	1.09	ug/kg	0.327	1.09
135-98-8	sec-Butylbenzene	U	1.09	ug/kg	0.327	1.09
99-87-6	4-Isopropyltoluene	U	1.09	ug/kg	0.327	1.09
541-73-1	1,3-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
106-46-7	1,4-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09
104-51-8	n-Butylbenzene	U	1.09	ug/kg	0.327	1.09
96-12-8	1,2-Dibromo-3-chloropropane	U	1.09	ug/kg	0.327	1.09
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.45	ug/kg	1.74	5.45
630-20-6	1,1,1,2-Tetrachloroethane	U	1.09	ug/kg	0.327	1.09
95-50-1	1,2-Dichlorobenzene	U	1.09	ug/kg	0.327	1.09

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	98.9	ug/kg	90	NJ
	Unknown Siloxane	16.79	26.2	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n322.d
Lab Smp Id: 241819006 Client Smp ID: RE03-09-14126
Inj Date : 03-DEC-2009 03:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819006|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.21600	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1530256	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.772	(1.000)	1121246	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	646162	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	322759	53.7001	58.5
$ 47 Toluene-d8	98	12.252	12.254	(0.890)	998217	51.1143	55.7
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	425701	56.8935	62.0

ION RATIO REPORT

VOA REPORT

Data file: 4n322.d
Report Date: 12/03/2009 15:48
Lab. ID: 241819006 SampleType: SAMPLE
Injection Date: 03-DEC-2009 03:21
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819006|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	20628	10.62	10.34	80-120	100	(T)
64	3769	10.62	10.34	3- 63	18	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8523	12.25	12.02	80-120	100	(T)
43	5089	12.25	12.02	227-287	60	(QT)
100	685761	12.25	12.02	9- 69	8045	(QT)
65 Styrene				CAS#: 100-42-5		
104	9260	14.82	14.40	80-120	100	(T)
78	174	14.84	14.40	21- 81	2	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	9587	14.83	15.11	80-120	100	(T)
75	24554	14.82	15.11	249-309	256	(T)
77	1438	14.81	15.11	62-122	15	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n322.d
Lab Smp Id: 241819006 Client Smp ID: RE03-09-14126
Inj Date : 03-DEC-2009 03:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819006|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	8.21600	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.770	3383838	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3632729	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	6142000	90.7549321	98.9	90	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown Siloxane				CAS #:			
16.788	1749061	24.0736525	26.2	0		0	86

Data File: /chem/VOA4.i/120209v4/4n322.d
Date : 03-DEC-2009 03:21
Client ID: RE03-09-14126
Sample Info: |2418190061928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

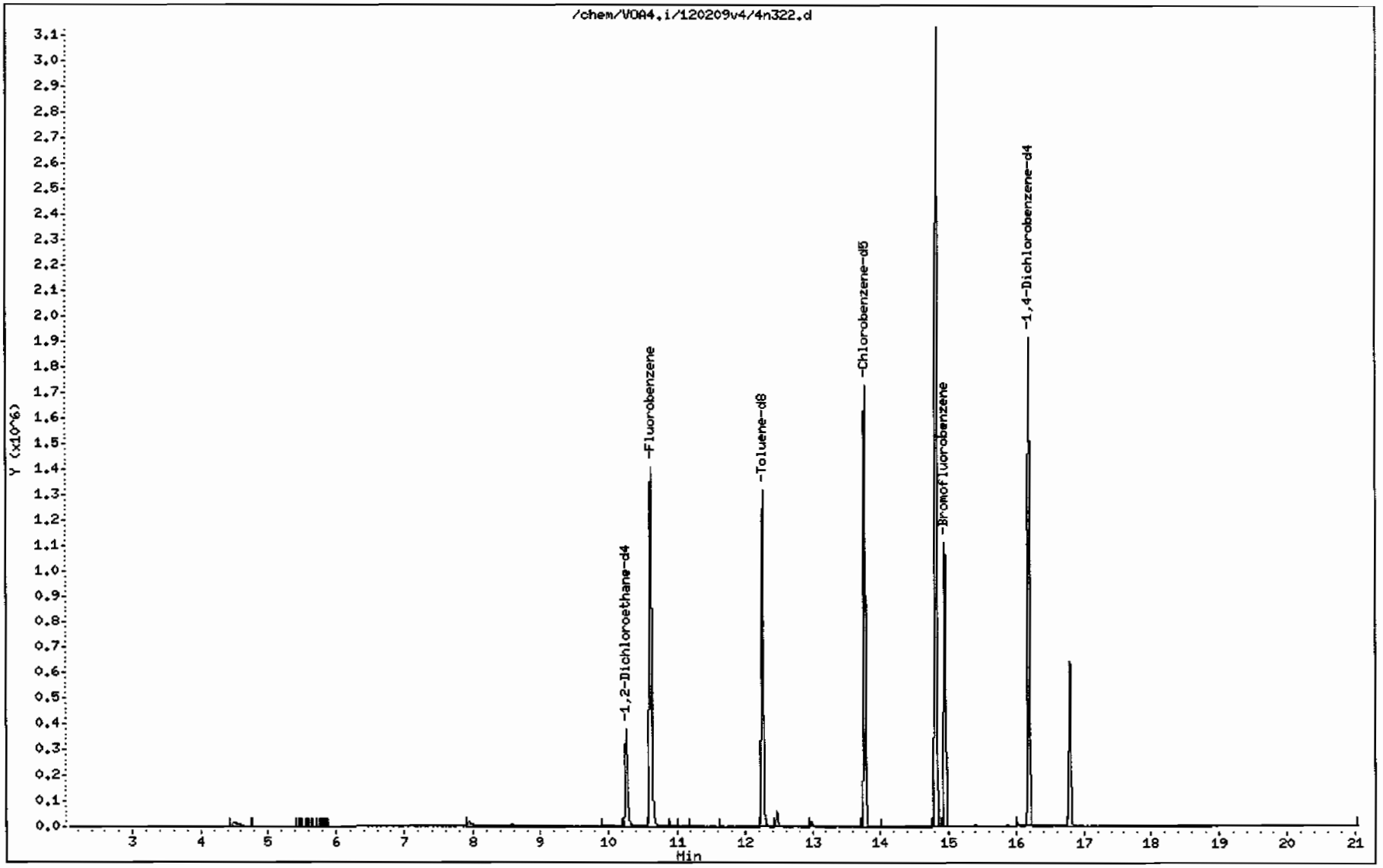

Data File: /chem/VOA4.i/120209v4/4n322.d

Date : 03-DEC-2009 03:21

Client ID: RE03-09-14126

Instrument: VOA4.i

Sample Info: |2418190061928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	56	C8H24O4Si4	296
trans-4-Dimethylamino-4'-methoxychalcone	52119-37-6	NIST05.L	112627	53	C18H19NO2	281

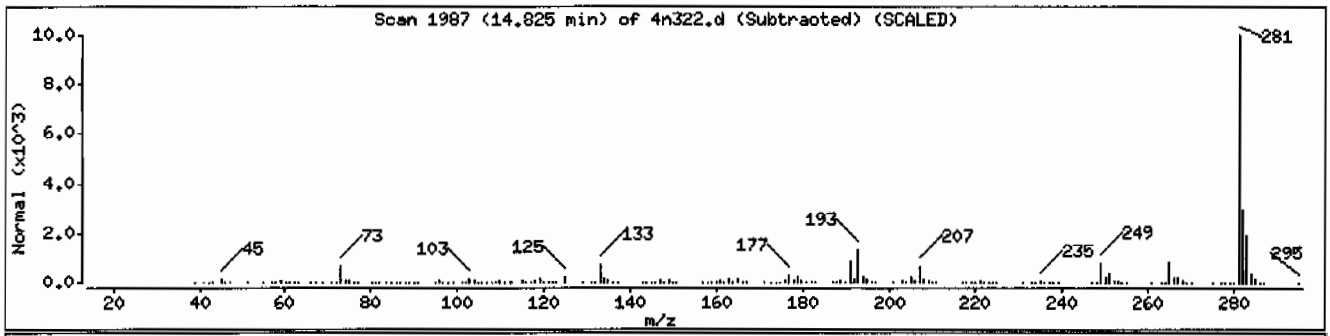

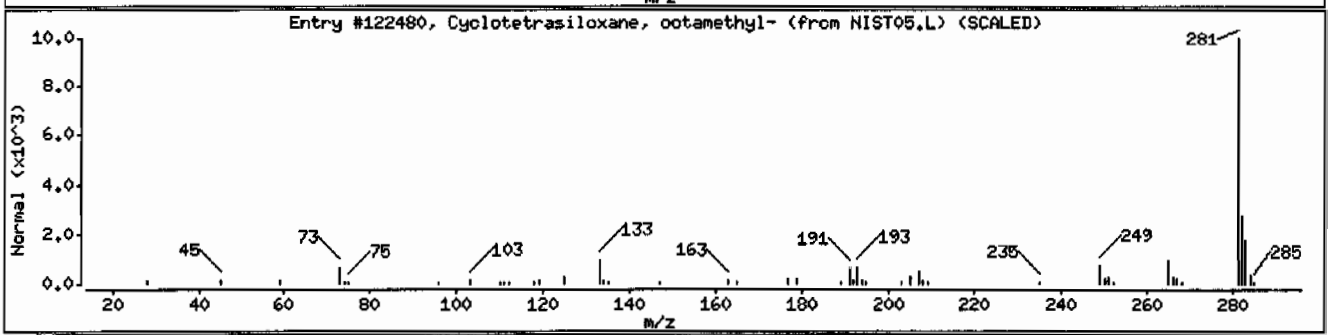

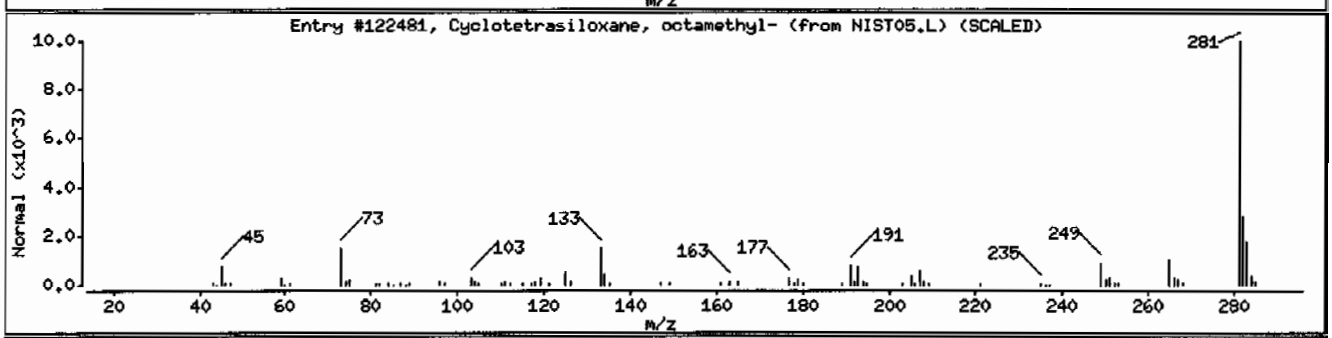

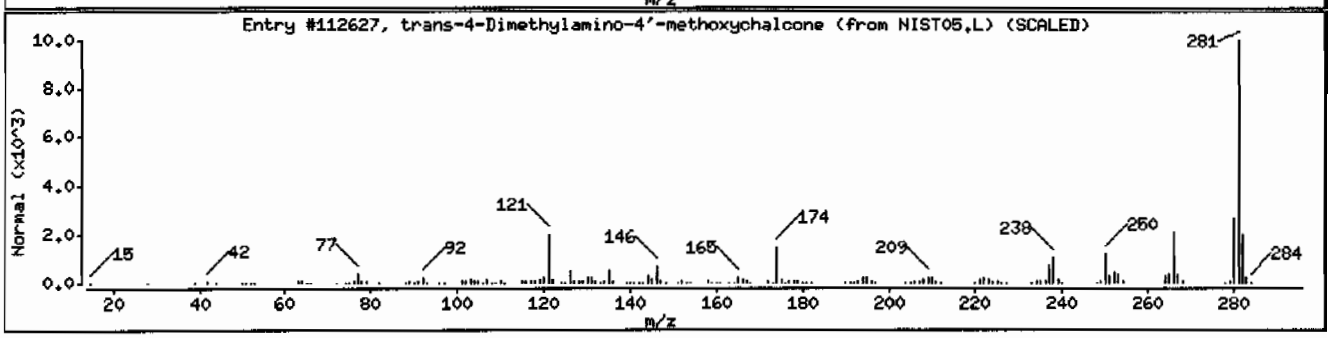

Data File: /chem/VOA4.i/120209v4/4n322.d

Date : 03-DEC-2009 03:21

Client ID: RE03-09-14126

Instrument: VOA4.i

Sample Info: |2418190061928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	39	C13H22O3Si2	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	32	C16H17N3O	267
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	32	C21H26F5NO2Si	475

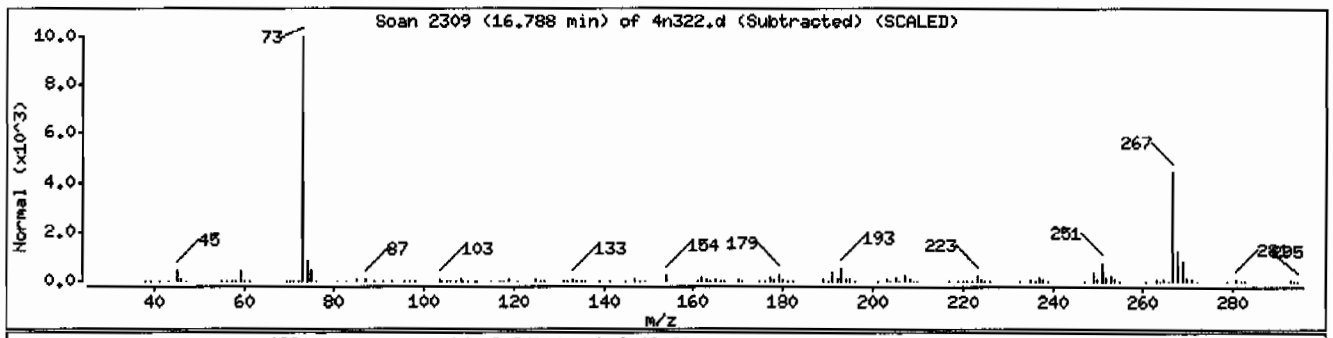

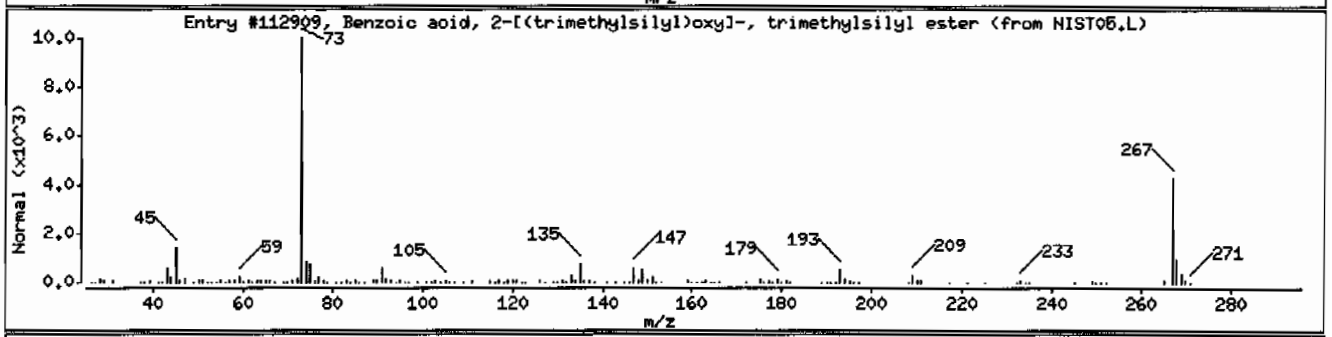

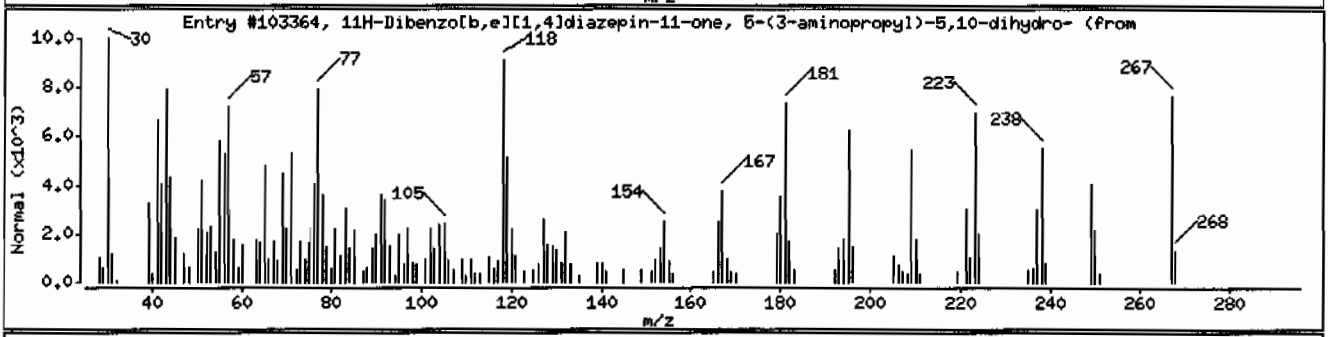

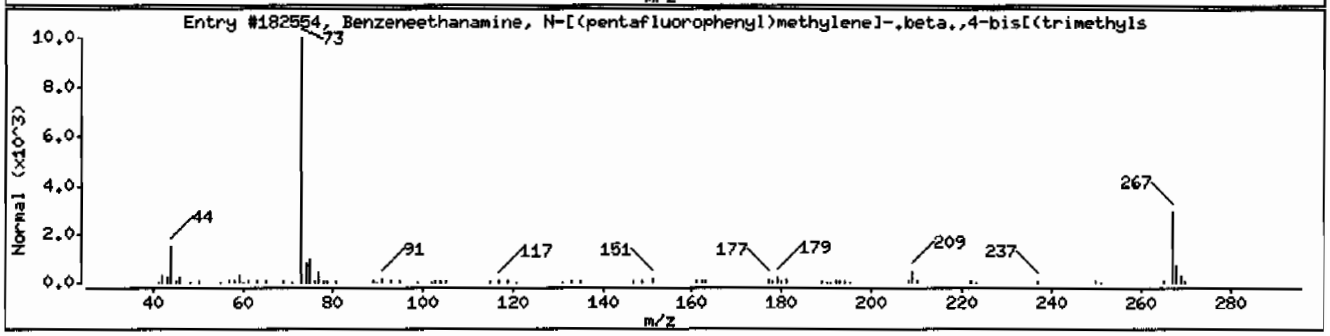

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819015	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14127	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 00:52	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:07	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n415.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.357	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.315	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.315	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.315	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.315	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.315	1.05
67-64-1	Acetone		14.7	ug/kg	1.74	5.25
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
74-88-4	Iodomethane	U	5.25	ug/kg	1.68	5.25
75-09-2	Methylene chloride	U	5.25	ug/kg	2.10	5.25
75-15-0	Carbon disulfide	U	5.25	ug/kg	1.31	5.25
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.315	1.05
78-93-3	2-Butanone		7.92	ug/kg	1.58	5.25
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.315	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.315	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.347	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.315	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.315	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.315	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.315	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.315	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.347	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.315	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.315	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.315	1.05
108-10-1	4-Methyl-2-pentanone	U	5.25	ug/kg	1.31	5.25
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.315	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.315	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.315	1.05
591-78-6	2-Hexanone	U	5.25	ug/kg	1.58	5.25
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.315	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.315	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.315	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.315	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.315	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819015**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14127**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 00:52**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:07**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n415.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.315	1.05
179601-23-1	m,p-Xylenes	U	2.10	ug/kg	0.315	2.10
95-47-6	o-Xylene	U	1.05	ug/kg	0.315	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.315	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.315	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.315	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.315	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.315	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.315	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.315	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.315	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.315	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.315	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.315	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.315	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.315	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.25	ug/kg	1.68	5.25
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.315	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.315	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	209	ug/kg	91	NJ
	Unknown Siloxane	16.79	13.8	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n415.d
Lab Smp Id: 241819015 Client Smp ID: RE03-09-14127
Inj Date : 04-DEC-2009 00:52
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819015|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.83030	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1593533	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1213477	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	729485	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.265	(0.967)	318622	50.9068	53.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	968561	45.8262	48.2
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	438405	51.8990	54.5
10 Acetone	43	7.364	7.363	(0.693)	90378	13.9587	14.7
30 2-Butanone	43	9.339	9.326	(0.879)	56132	7.53490	7.9

ION RATIO REPORT

VOA REPORT

Data file: 4n415.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819015 SampleType: SAMPLE
Injection Date: 04-DEC-2009 00:52
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819015|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	90378	7.36	7.36	80-120	100	( )
58	26921	7.37	7.36	1- 61	30	( )
30 2-Butanone			CAS#: 78-93-3			
43	56132	9.34	9.33	80-120	100	( )
72	12322	9.33	9.33	0- 55	22	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21543	10.62	10.34	80-120	100	(T)
64	3552	10.63	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7632	12.25	12.02	80-120	100	(T)
43	4653	12.25	12.02	230-290	61	(QT)
100	669924	12.25	12.02	8- 68	8778	(QT)
65 Styrene			CAS#: 100-42-5			
104	20839	14.82	14.40	80-120	100	(T)
78	151	14.65	14.40	22- 82	1	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	16756	14.83	14.76	80-120	100	(T)
120	8039	14.82	14.76	0- 57	48	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
74	1,2,3-Trichloropropane			CAS#: 96-18-4		
110	17577	14.83	15.11	80-120	100	(T)
75	49636	14.82	15.11	254-314	282	(T)
77	3397	14.82	15.11	62-122	19	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n415.d
Lab Smp Id: 241819015 Client Smp ID: RE03-09-14127
Inj Date : 04-DEC-2009 00:52
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819015|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.83030	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3641693	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	4168946	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.826	14493685	198.996527	209	91	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
16.789	1097385	13.1614196	13.8	0		0	86

Data File: /chem/VOA4.i/120309v4/4n415.d

Date : 04-DEC-2009 00:52

Client ID: RE03-09-14127

Sample Info: |2418190151928605111VOAF111

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

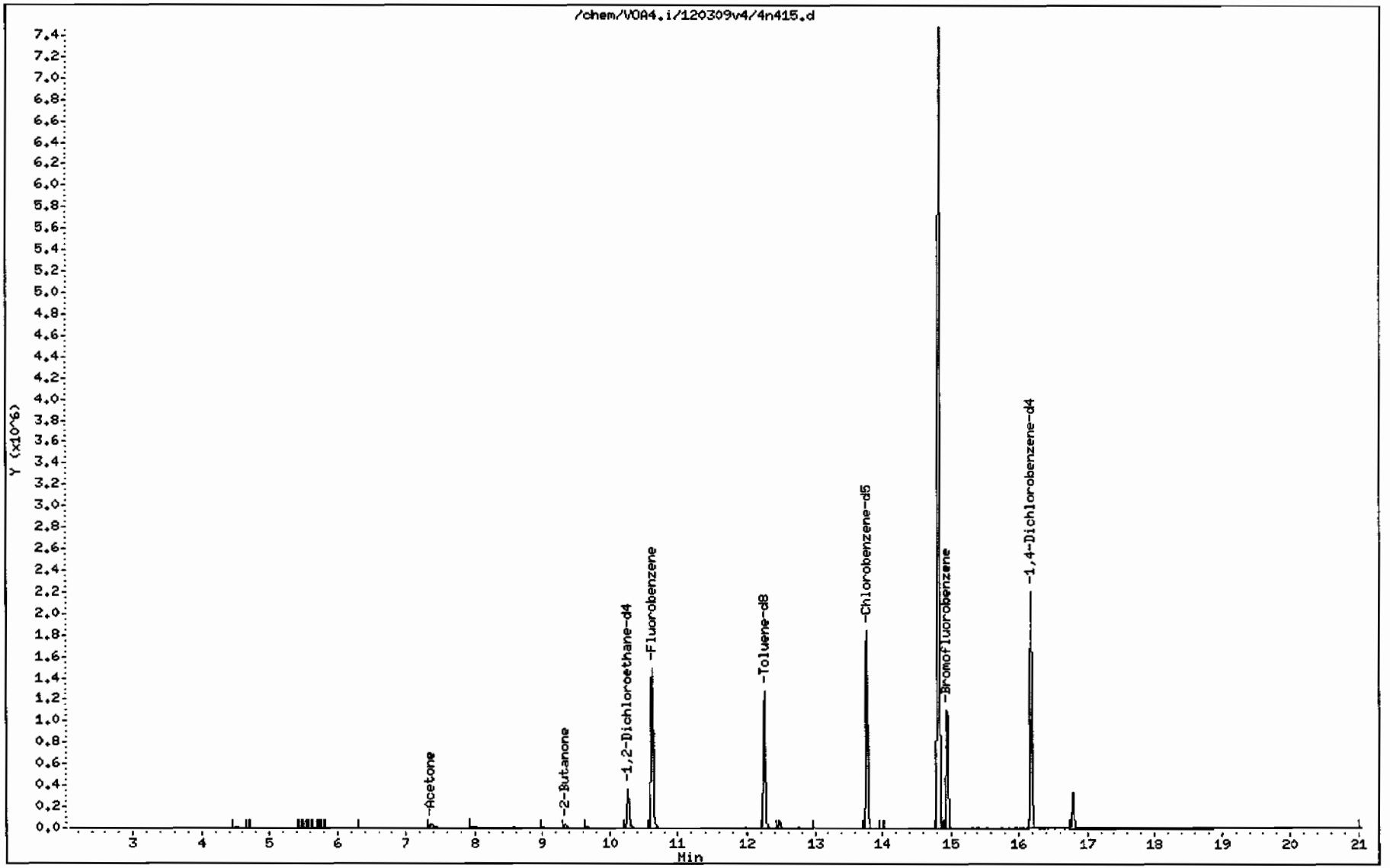

Data File: /chem/VOA4.i/120309v4/4n415.d

Date : 04-DEC-2009 00:52

Client ID: RE03-09-14127

Instrument: VOA4.i

Sample Info: |2418190151928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 14.7 ug/Kg

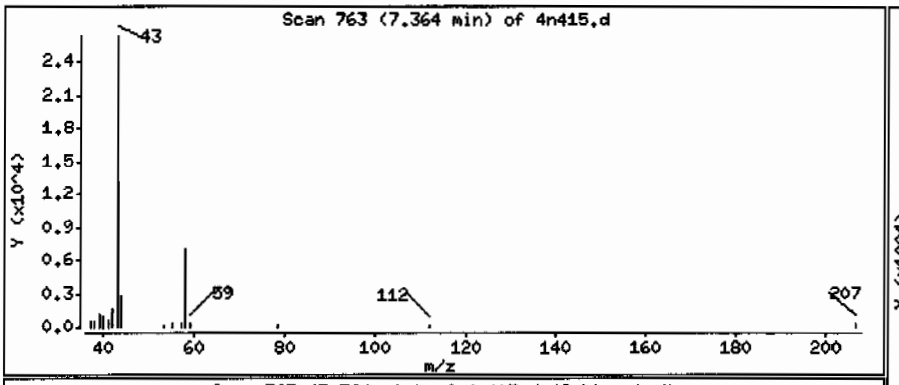

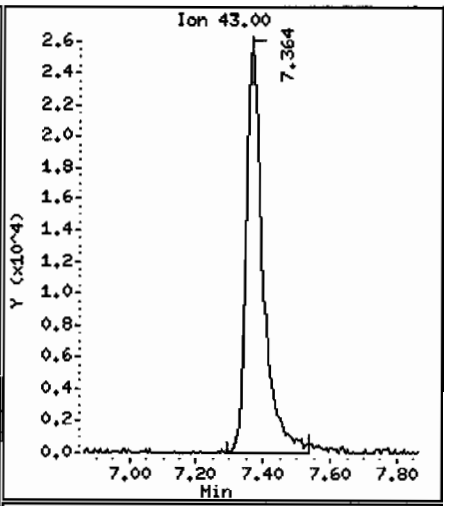

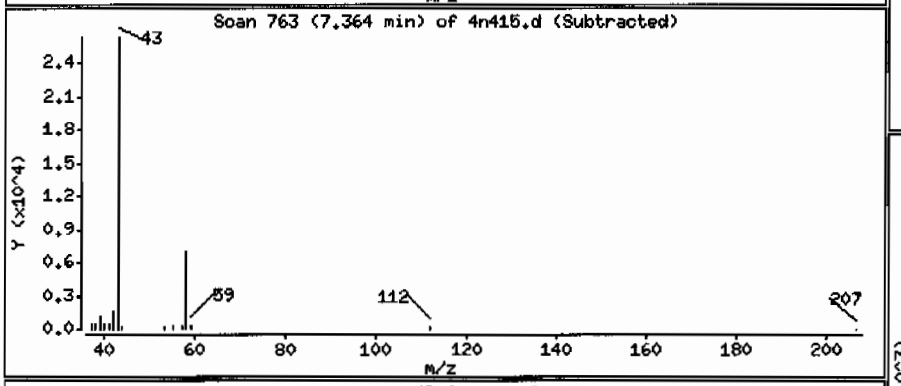

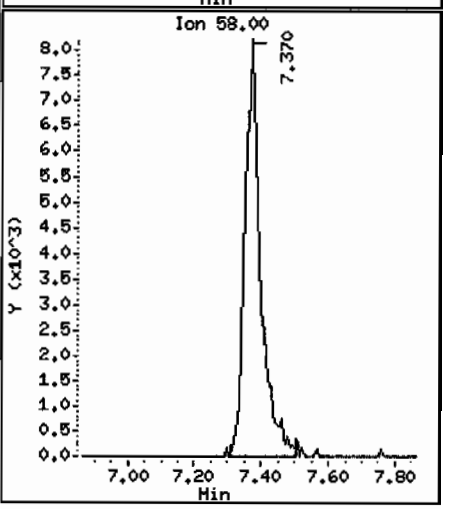

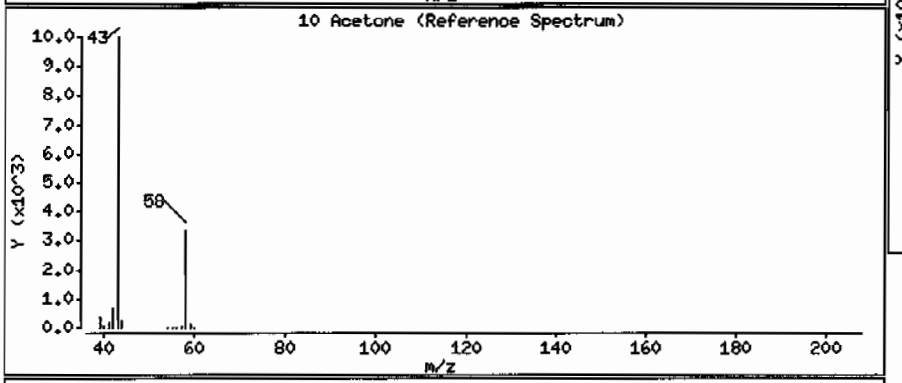

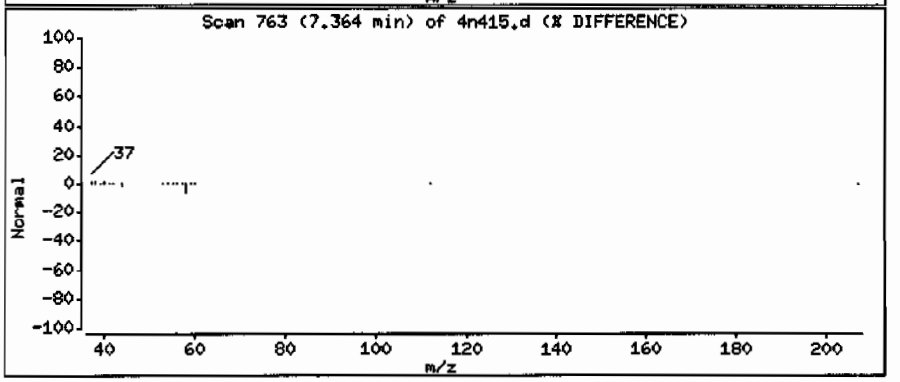

Data File: /chem/VOA4.i/120309v4/4n415.d

Date : 04-DEC-2009 00:52

Client ID: RE03-09-14127

Instrument: VOA4.i

Sample Info: |2418190151928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

30 2-Butanone

Concentration: 7.9 ug/Kg

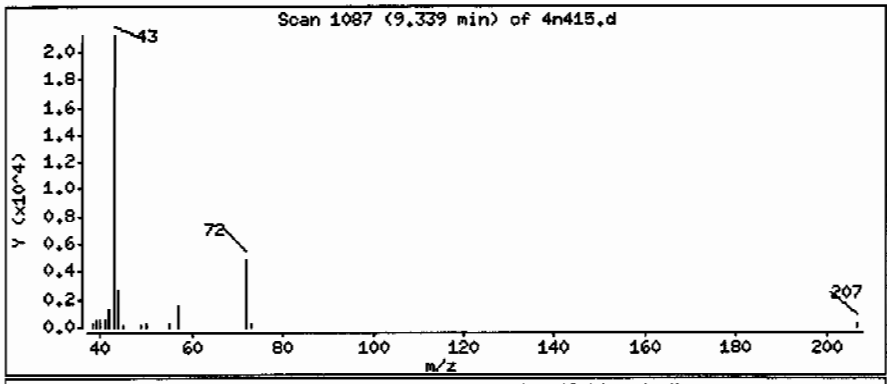

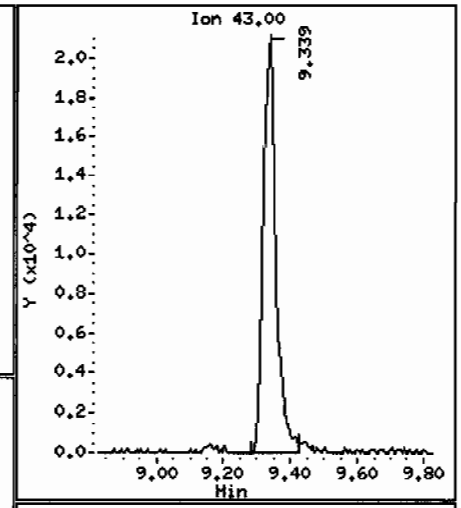

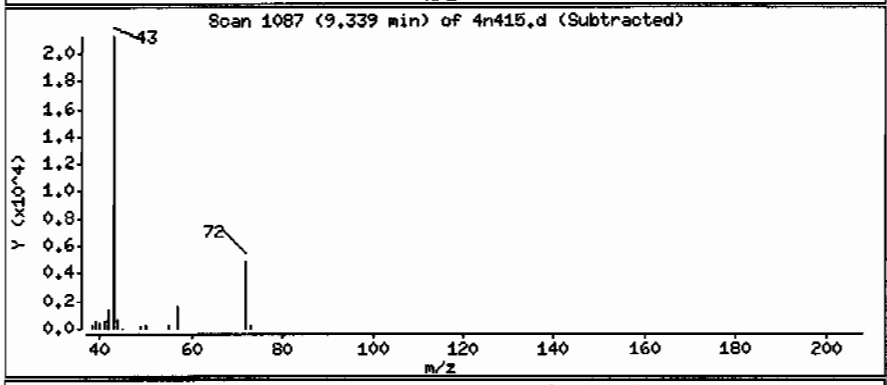

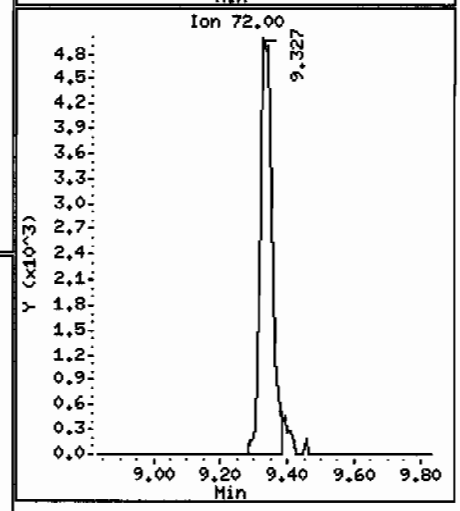

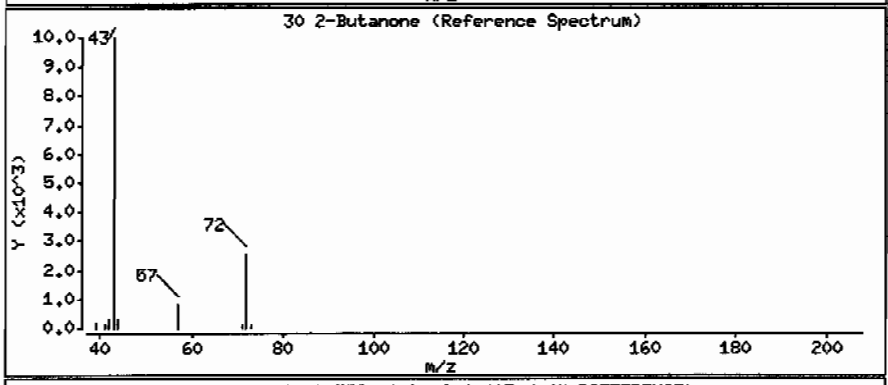

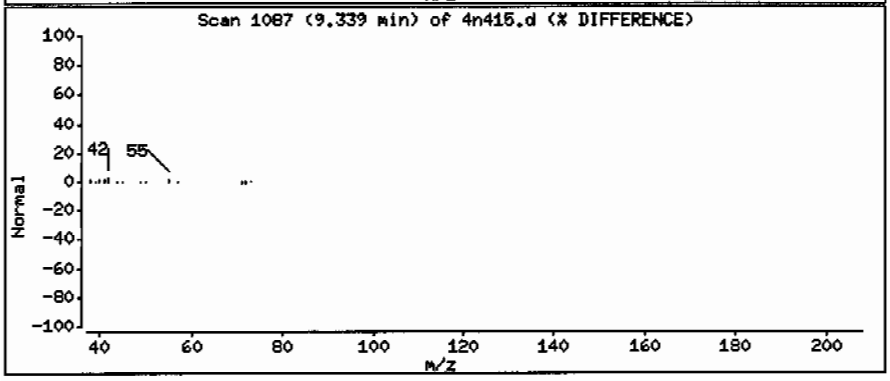

Data File: /chem/VOA4.i/120309v4/4n415.d

Date : 04-DEC-2009 00:52

Client ID: RE03-09-14127

Instrument: VOA4.i

Sample Info: |2418190151928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Benzene, 1-phenyl-4-(2-cyano-2-phenyleth	27869-56-3	NIST05.L	112707	50	C21H15N	281

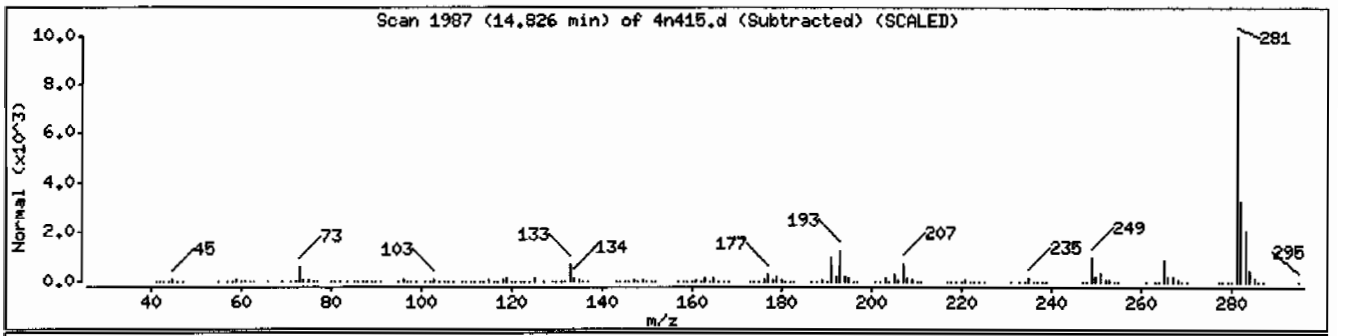

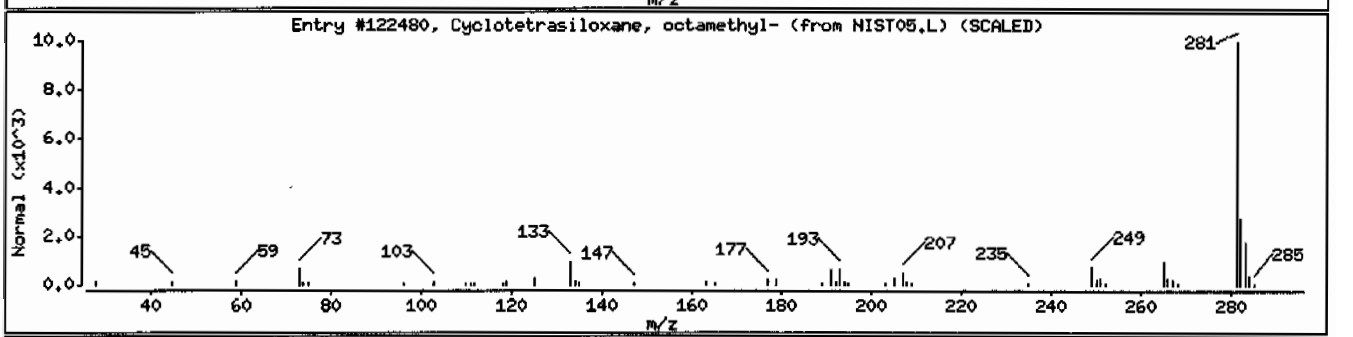

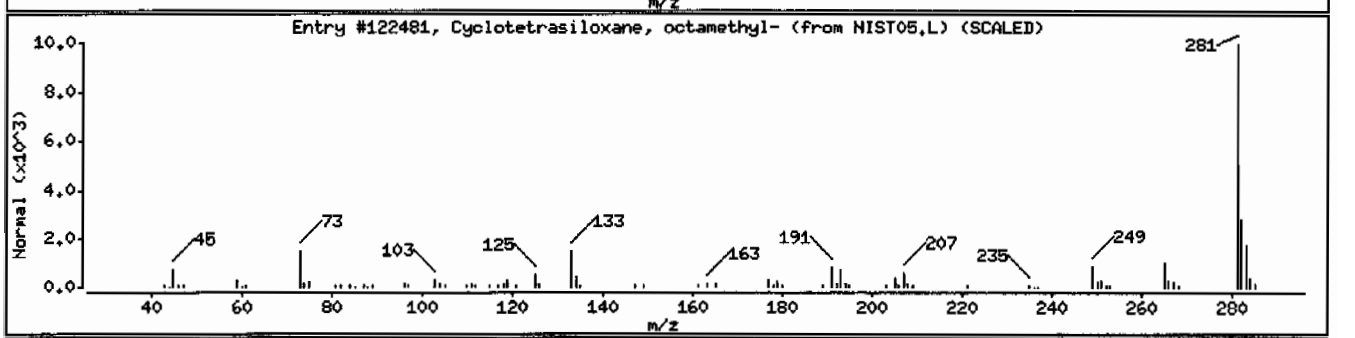

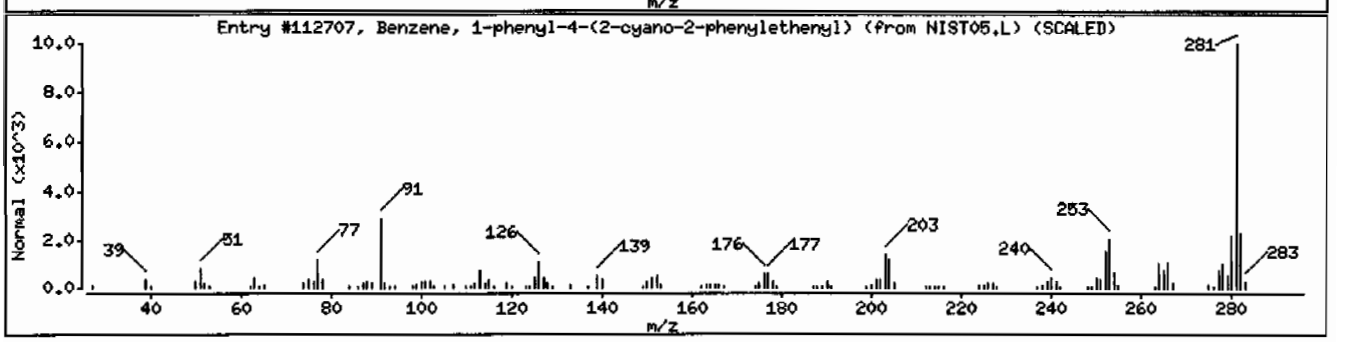

Data File: /chem/VOA4.i/120309v4/4n415.d

Date : 04-DEC-2009 00:52

Client ID: RE03-09-14127

Instrument: VOA4.i

Sample Info: |2418190151928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	40	C13H22O3Si2	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	37	C16H17N3O	267
3,5-Dimethoxyphenylacetic acid, trimethy	1000071-82-4	NIST05.L	103716	10	C13H20O4Si	268

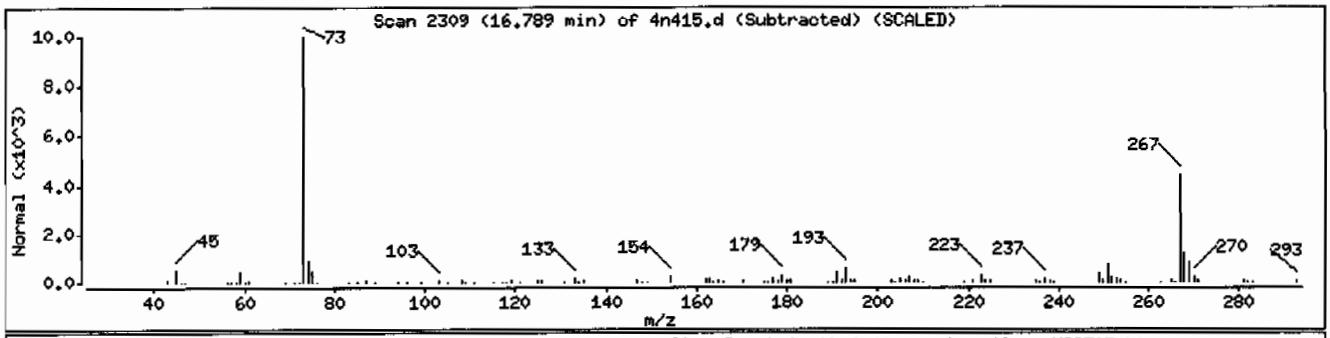

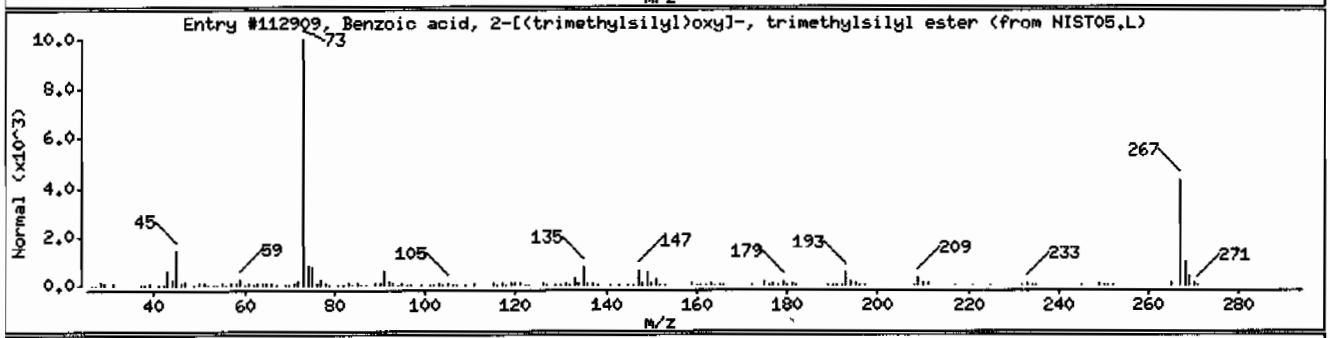

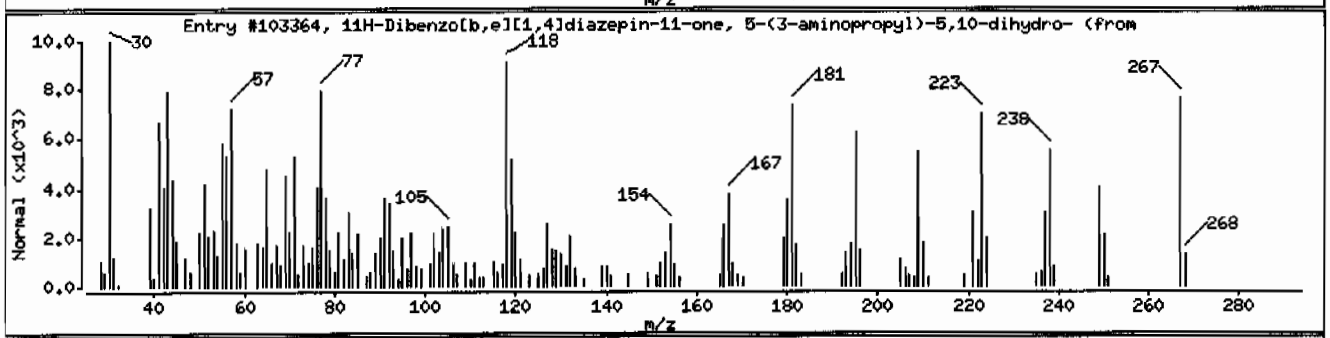

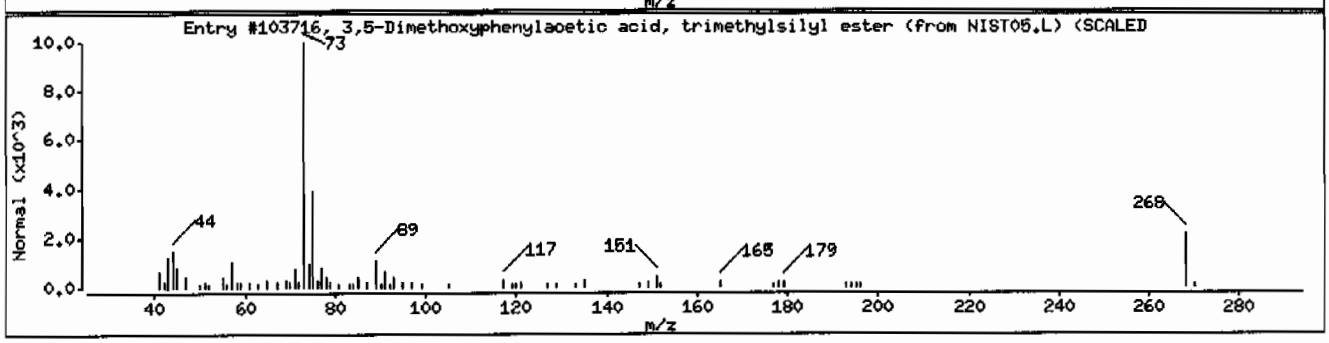

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819020	**Date Received:**	11/25/2009 09:10	**%Moisture:**	2.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14128	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 03:11	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n420.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.350	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.309	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.309	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.309	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.309	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.309	1.03
67-64-1	Acetone	J	1.74	ug/kg	1.71	5.14
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.309	1.03
74-88-4	Iodomethane	U	5.14	ug/kg	1.65	5.14
75-09-2	Methylene chloride	U	5.14	ug/kg	2.06	5.14
75-15-0	Carbon disulfide	U	5.14	ug/kg	1.29	5.14
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.309	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.309	1.03
78-93-3	2-Butanone	U	5.14	ug/kg	1.54	5.14
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.309	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.309	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.309	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.309	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.309	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.309	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.309	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.309	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.309	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.309	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.309	1.03
108-10-1	4-Methyl-2-pentanone	U	5.14	ug/kg	1.29	5.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.309	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.309	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.309	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.309	1.03
591-78-6	2-Hexanone	U	5.14	ug/kg	1.54	5.14
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.309	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.309	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.309	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.309	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.309	1.03

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14128**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 03:11**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n420.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.309	1.03
179601-23-1	m,p-Xylenes	U	2.06	ug/kg	0.309	2.06
95-47-6	o-Xylene	U	1.03	ug/kg	0.309	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.309	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.309	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.309	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.309	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.309	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.309	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.309	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.309	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.309	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.309	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.309	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.309	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.309	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.309	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.309	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.309	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.14	ug/kg	1.65	5.14
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.309	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.309	1.03

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	206	ug/kg	91	NJ
	Unknown Siloxane	16.79	18	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n420.d
Lab Smp Id: 241819020 Client Smp ID: RE03-09-14128
Inj Date : 04-DEC-2009 03:11
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819020|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.78570	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1544886	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1165768	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	692924	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	313263	51.6266	53.1
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	977048	48.1197	49.5
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	422059	52.6002	54.1
10 Acetone	43	7.375	7.363	(0.695)	10621	1.69204	1.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n420.d
Report Date: 12/04/2009 16:06
Lab. ID: 241819020 SampleType: SAMPLE
Injection Date: 04-DEC-2009 03:11
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819020|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	10621	7.38	7.36	80-120	100	( )
58	2965	7.38	7.36	1- 61	28	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20090	10.62	10.34	80-120	100	(T)
64	3826	10.62	10.34	2- 62	19	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8404	12.25	12.02	80-120	100	(T)
43	4564	12.26	12.02	230-290	54	(QT)
100	667057	12.25	12.02	8- 68	7937	(QT)
65 Styrene			CAS#: 100-42-5			
104	20305	14.83	14.40	80-120	100	(T)
78	176	14.83	14.40	22- 82	1	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	17818	14.83	14.76	80-120	100	(T)
120	8477	14.82	14.76	0- 57	48	(T)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	17576	14.82	15.11	80-120	100	(T)
75	49495	14.83	15.11	254-314	282	(T)
77	2685	14.83	15.11	62-122	15	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n420.d
Lab Smp Id: 241819020 Client Smp ID: RE03-09-14128
Inj Date : 04-DEC-2009 03:11
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819020|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.78570	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3479927	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3984408	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.825	13943729	200.345127	206	91	NIST05.L	122480	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown Siloxane					CAS #:		
16.788	1391232	17.4584558	18.0	0		0	86

Data File: /chem/VOA4.i/120309v4/4n420.d
Date : 04-DEC-2009 03:11
Client ID: RE03-09-14128
Sample Info: |24181902019286051|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

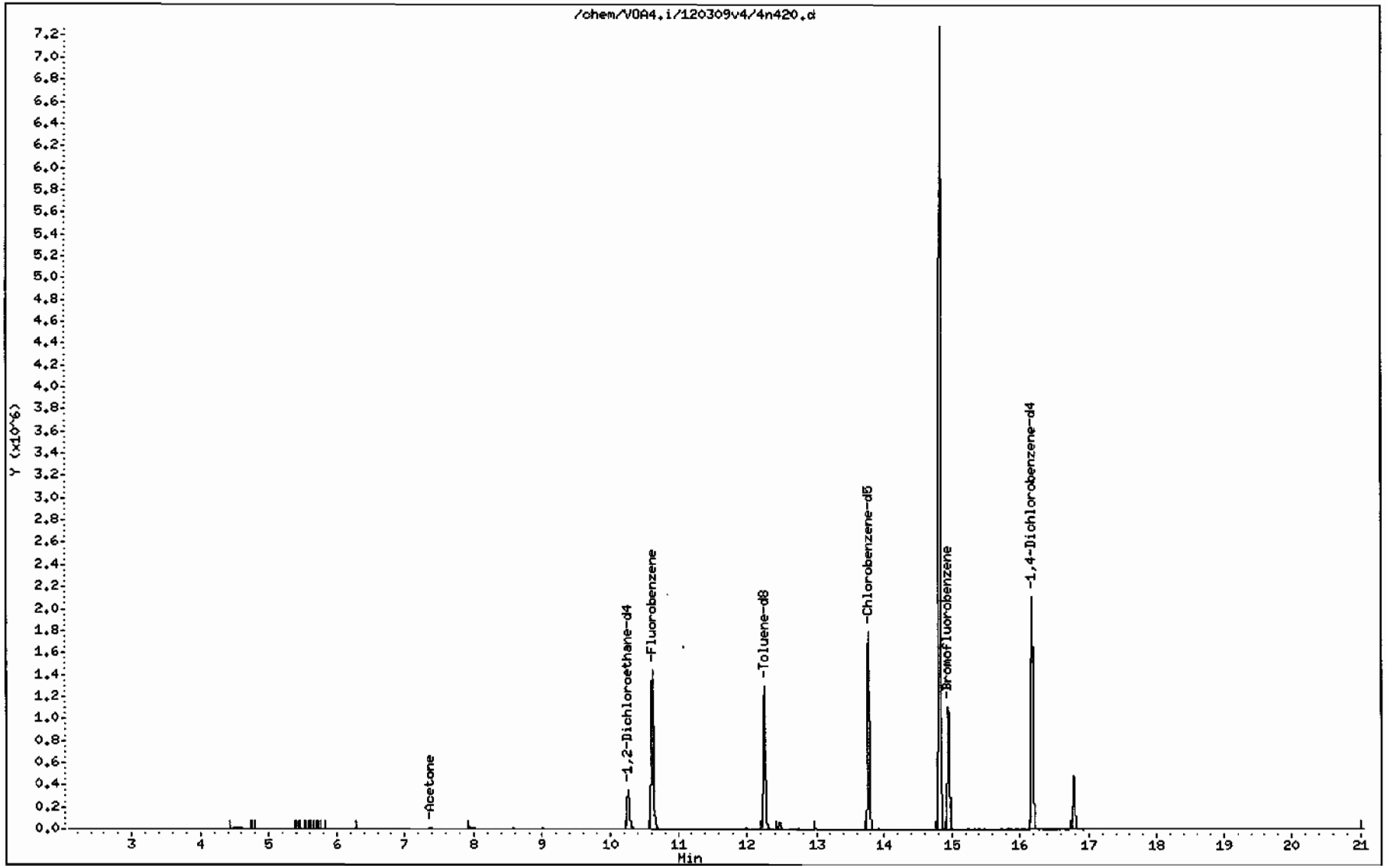

Data File: /chem/VOA4.i/120309v4/4n420.d

Date : 04-DEC-2009 03:11

Client ID: RE03-09-14128

Instrument: VOA4.i

Sample Info: |2418190201928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 1.7 ug/Kg

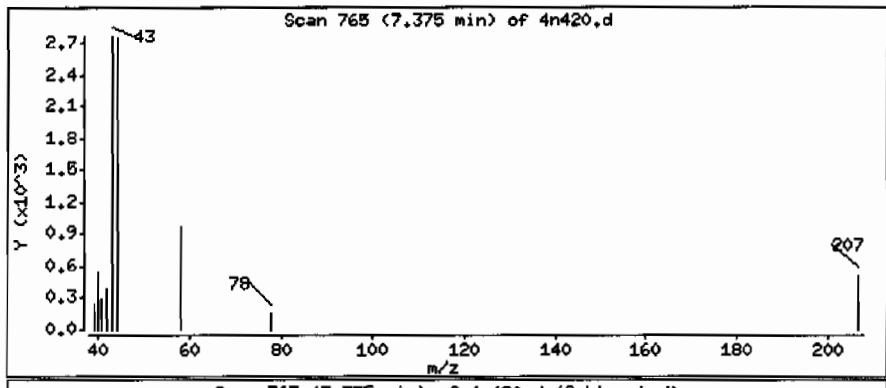

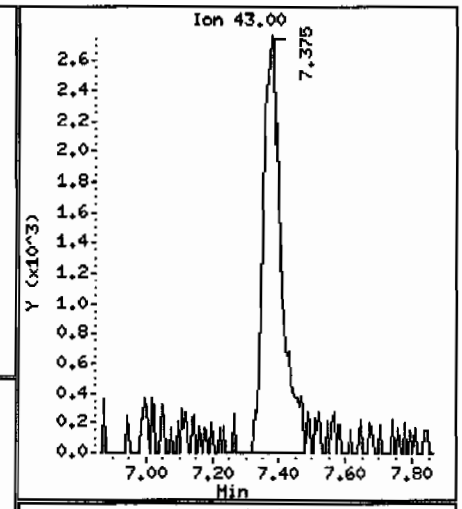

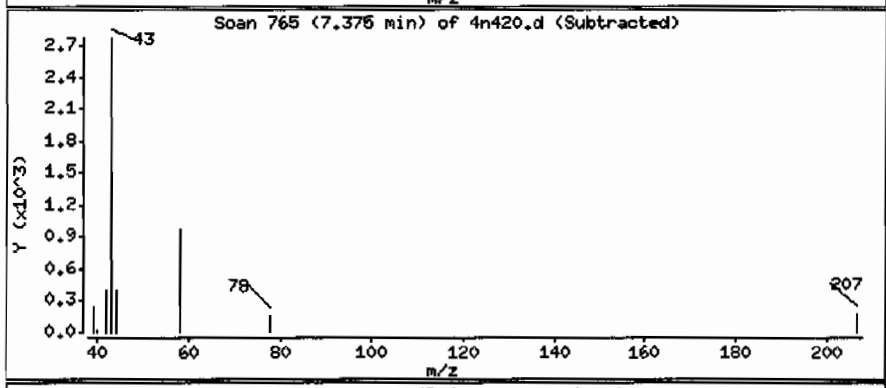

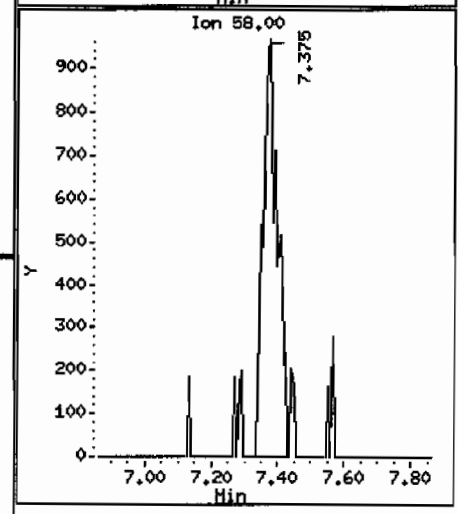

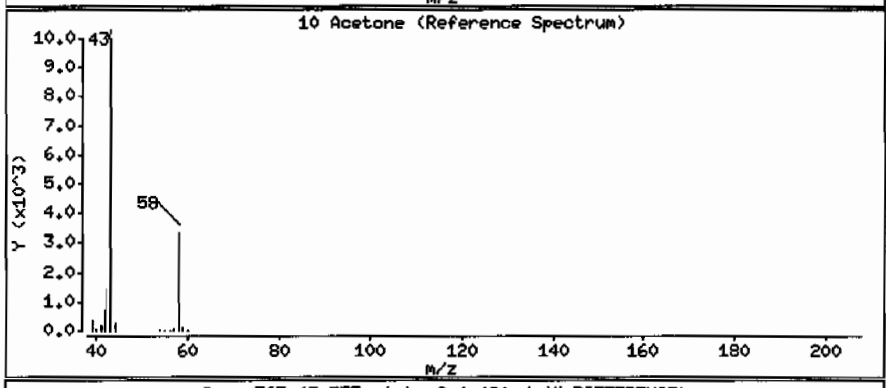

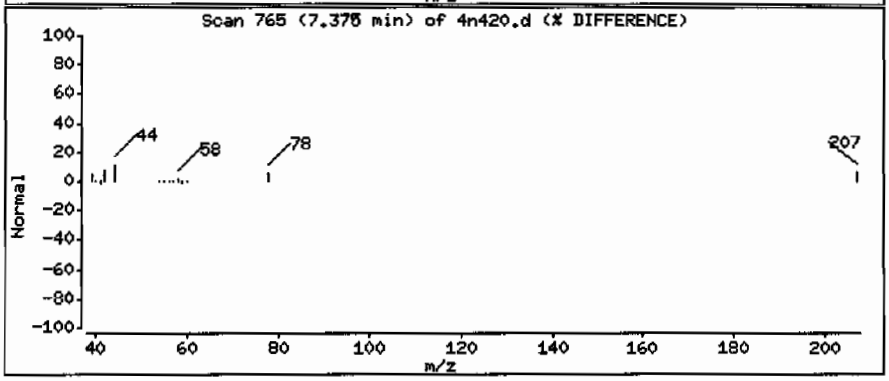

Data File: /chem/VOA4.i/120309v4/4n420.d

Date : 04-DEC-2009 03:11

Client ID: RE03-09-14128

Instrument: VOA4.i

Sample Info: |2418190201928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	83	C8H24O4Si4	296

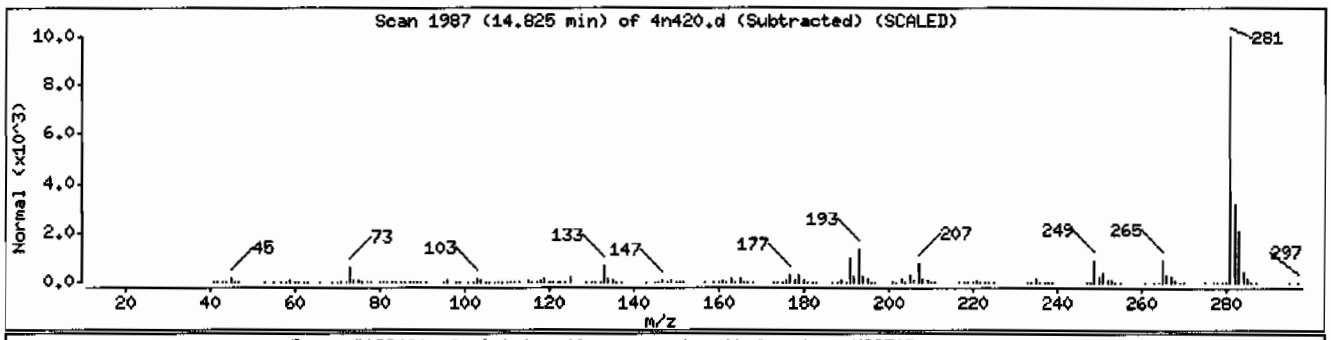

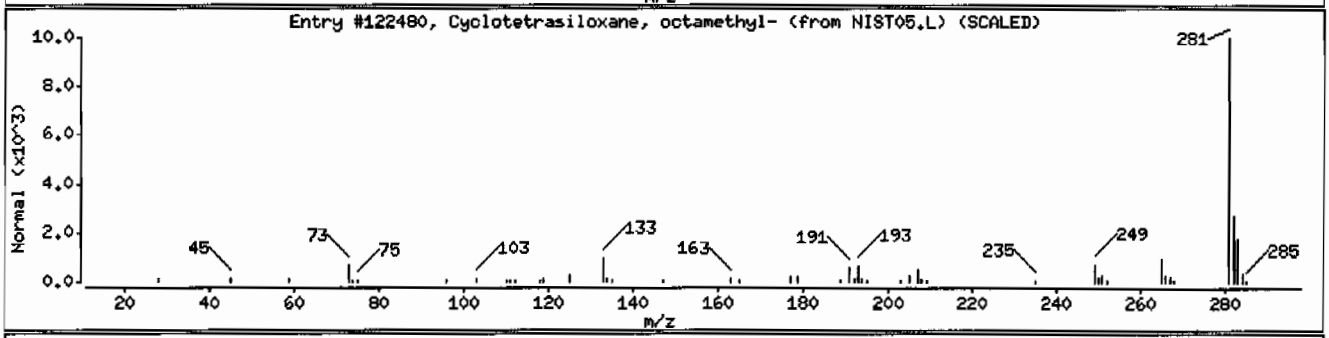

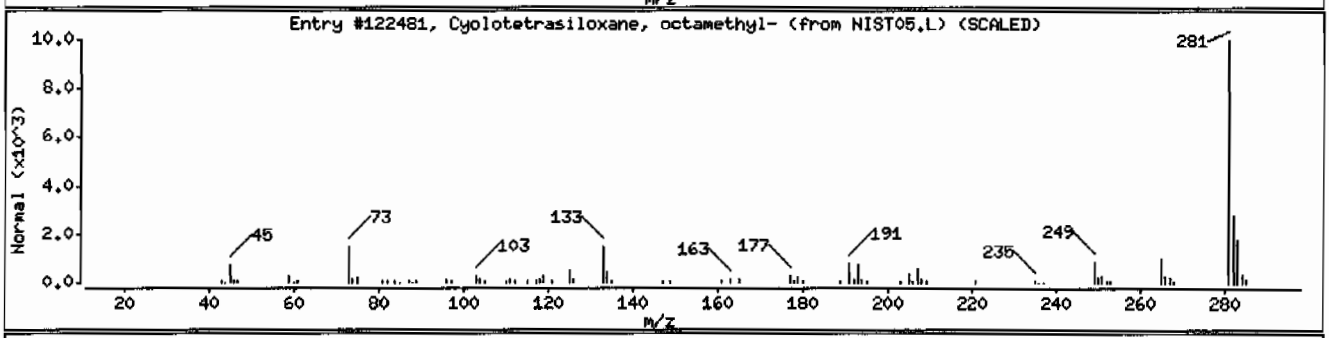

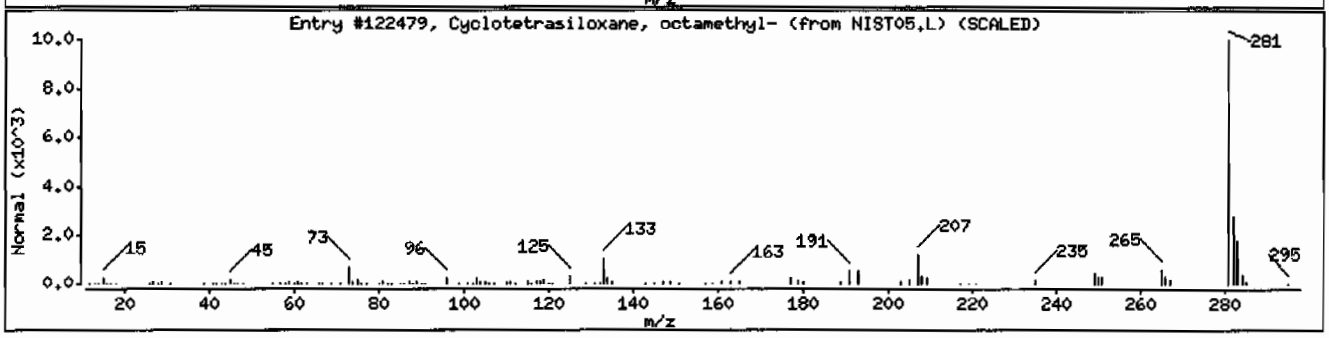

Data File: /chem/VOA4.i/120309v4/4n420.d

Date : 04-DEC-2009 03:11

Client ID: RE03-09-14128

Instrument: VOA4.i

Sample Info: |2418190201928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Tetrasiloxane, 1,1,3,3,5,5,7,7-octamethy	1000-05-1	NIST05.L	113583	39	C8H26O3Si4	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	37	C21H26F5N02Si	475
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	32	C16H17N3O	267

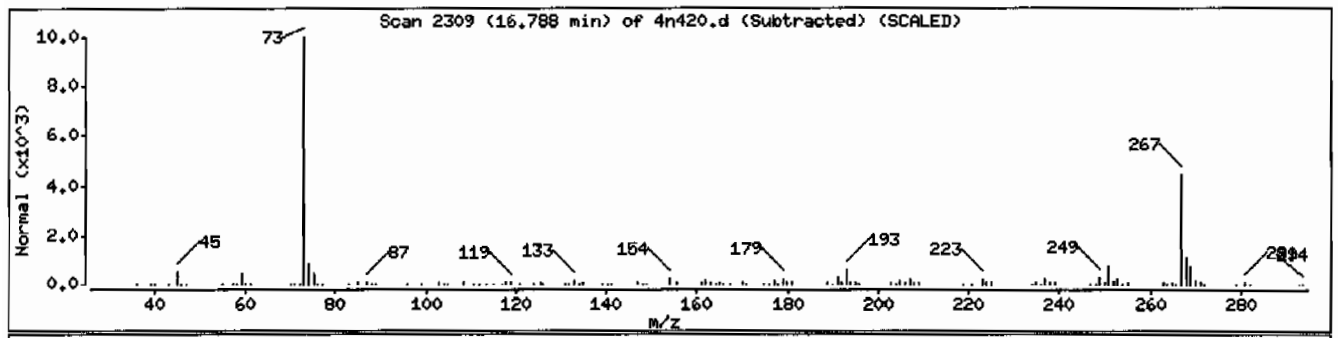

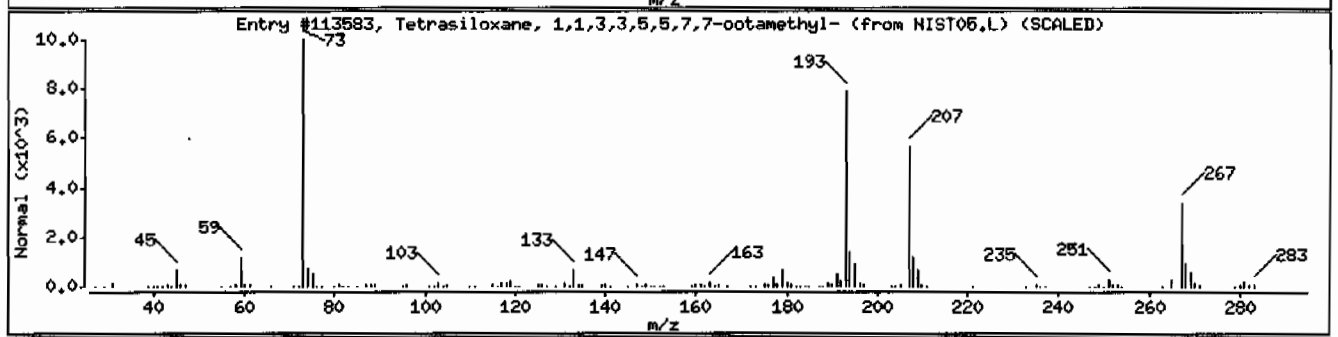

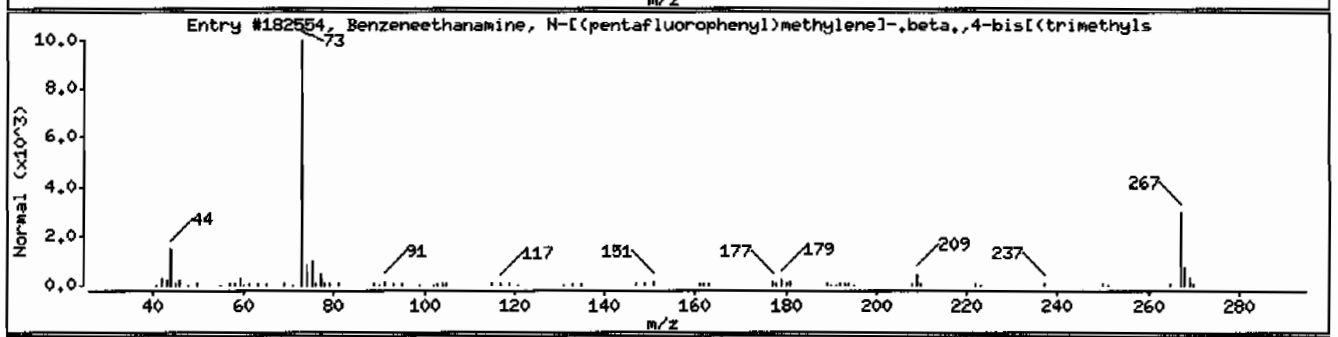

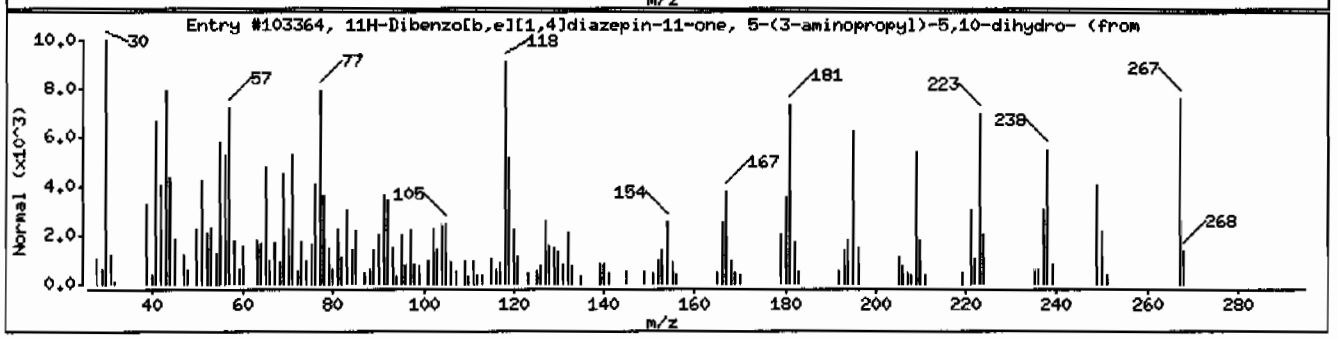

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 22:04	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n409.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.02	ug/kg	0.345	1.02
74-87-3	Chloromethane	U	1.02	ug/kg	0.305	1.02
75-01-4	Vinyl chloride	U	1.02	ug/kg	0.305	1.02
74-83-9	Bromomethane	U	1.02	ug/kg	0.305	1.02
75-00-3	Chloroethane	U	1.02	ug/kg	0.305	1.02
75-69-4	Trichlorofluoromethane	U	1.02	ug/kg	0.305	1.02
67-64-1	Acetone	U	5.08	ug/kg	1.69	5.08
75-35-4	1,1-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
74-88-4	Iodomethane	U	5.08	ug/kg	1.62	5.08
75-09-2	Methylene chloride	U	5.08	ug/kg	2.03	5.08
75-15-0	Carbon disulfide	U	5.08	ug/kg	1.27	5.08
156-60-5	trans-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
75-34-3	1,1-Dichloroethane	U	1.02	ug/kg	0.305	1.02
78-93-3	2-Butanone	U	5.08	ug/kg	1.52	5.08
156-59-2	cis-1,2-Dichloroethylene	U	1.02	ug/kg	0.305	1.02
594-20-7	2,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
67-66-3	Chloroform	U	1.02	ug/kg	0.305	1.02
74-97-5	Bromochloromethane	U	1.02	ug/kg	0.335	1.02
71-55-6	1,1,1-Trichloroethane	U	1.02	ug/kg	0.305	1.02
563-58-6	1,1-Dichloropropene	U	1.02	ug/kg	0.305	1.02
56-23-5	Carbon tetrachloride	U	1.02	ug/kg	0.305	1.02
107-06-2	1,2-Dichloroethane	U	1.02	ug/kg	0.305	1.02
71-43-2	Benzene	U	1.02	ug/kg	0.305	1.02
79-01-6	Trichloroethylene	U	1.02	ug/kg	0.335	1.02
78-87-5	1,2-Dichloropropane	U	1.02	ug/kg	0.305	1.02
75-27-4	Bromodichloromethane	U	1.02	ug/kg	0.305	1.02
74-95-3	Dibromomethane	U	1.02	ug/kg	0.305	1.02
108-10-1	4-Methyl-2-pentanone	U	5.08	ug/kg	1.27	5.08
10061-01-5	cis-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
108-88-3	Toluene	U	1.02	ug/kg	0.305	1.02
10061-02-6	trans-1,3-Dichloropropylene	U	1.02	ug/kg	0.305	1.02
79-00-5	1,1,2-Trichloroethane	U	1.02	ug/kg	0.305	1.02
591-78-6	2-Hexanone	U	5.08	ug/kg	1.52	5.08
142-28-9	1,3-Dichloropropane	U	1.02	ug/kg	0.305	1.02
127-18-4	Tetrachloroethylene	U	1.02	ug/kg	0.305	1.02
124-48-1	Dibromochloromethane	U	1.02	ug/kg	0.305	1.02
106-93-4	1,2-Dibromoethane	U	1.02	ug/kg	0.305	1.02
108-90-7	Chlorobenzene	U	1.02	ug/kg	0.305	1.02

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/03/2009 22:04	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:01	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n409.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.02	ug/kg	0.305	1.02
179601-23-1	m,p-Xylenes	U	2.03	ug/kg	0.305	2.03
95-47-6	o-Xylene	U	1.02	ug/kg	0.305	1.02
100-42-5	Styrene	U	1.02	ug/kg	0.305	1.02
75-25-2	Bromoform	U	1.02	ug/kg	0.305	1.02
79-34-5	1,1,2,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
96-18-4	1,2,3-Trichloropropane	U	1.02	ug/kg	0.305	1.02
108-86-1	Bromobenzene	U	1.02	ug/kg	0.305	1.02
103-65-1	n-Propylbenzene	U	1.02	ug/kg	0.305	1.02
95-49-8	2-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-82-8	Isopropylbenzene	U	1.02	ug/kg	0.305	1.02
108-67-8	1,3,5-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
106-43-4	4-Chlorotoluene	U	1.02	ug/kg	0.305	1.02
98-06-6	tert-Butylbenzene	U	1.02	ug/kg	0.305	1.02
95-63-6	1,2,4-Trimethylbenzene	U	1.02	ug/kg	0.305	1.02
135-98-8	sec-Butylbenzene	U	1.02	ug/kg	0.305	1.02
99-87-6	4-Isopropyltoluene	U	1.02	ug/kg	0.305	1.02
541-73-1	1,3-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
106-46-7	1,4-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02
104-51-8	n-Butylbenzene	U	1.02	ug/kg	0.305	1.02
96-12-8	1,2-Dibromo-3-chloropropane	U	1.02	ug/kg	0.305	1.02
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.08	ug/kg	1.62	5.08
630-20-6	1,1,1,2-Tetrachloroethane	U	1.02	ug/kg	0.305	1.02
95-50-1	1,2-Dichlorobenzene	U	1.02	ug/kg	0.305	1.02

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
66-25-1	Hexanal	12.99	6.42	ug/kg	91	NJ
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	68.6	ug/kg	90	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n409.d
Lab Smp Id: 241819009 Client Smp ID: RE03-09-14129
Inj Date : 03-DEC-2009 22:04
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819009|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	1.50880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1592772	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1218110	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	781089	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.265	(0.967)	303818	48.5647	49.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	954581	44.9930	45.7
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	421473	46.5982	47.3

ION RATIO REPORT

VOA REPORT

Data file: 4n409.d
Report Date: 12/04/2009 16:05
Lab. ID: 241819009 SampleType: SAMPLE
Injection Date: 03-DEC-2009 22:04
Operator: ACJ Instrument: VOA4.i
Sample Info: |241819009|928605|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20890	10.61	10.34	80-120	100	(T)
64	3704	10.62	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7444	12.25	12.02	80-120	100	(T)
43	4928	12.25	12.02	230-290	66	(QT)
100	660558	12.25	12.02	8- 68	8874	(QT)
55 2-Hexanone			CAS#: 591-78-6			
43	48726	12.98	12.86	80-120	100	(T)
58	7232	12.99	12.86	23- 83	15	(QT)
57	46604	12.99	12.86	0- 49	96	(QT)
58 Ethylbenzene			CAS#: 100-41-4			
91	21213	13.86	13.86	80-120	100	( )
106	3646	13.87	13.86	3- 63	17	( )
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	7605	14.82	15.11	80-120	100	(T)
75	18976	14.82	15.11	254-314	250	(QT)
77	1358	14.82	15.11	62-122	18	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n409.d
Lab Smp Id: 241819009 Client Smp ID: RE03-09-14129
Inj Date : 03-DEC-2009 22:04
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241819009|928605|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	1.50880	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3856459	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Hexanal				CAS #: 66-25-1			
12.985	487791	6.32433978	6.4	91	NIST05.L	3688	61
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
14.826	5209092	67.5372295	68.6	90	NIST05.L	122480	61

Data File: /chem/VOA4.i/120309v4/4n409.d

Date : 03-DEC-2009 22:04

Client ID: RE03-09-14129

Sample Info: |2418190091928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

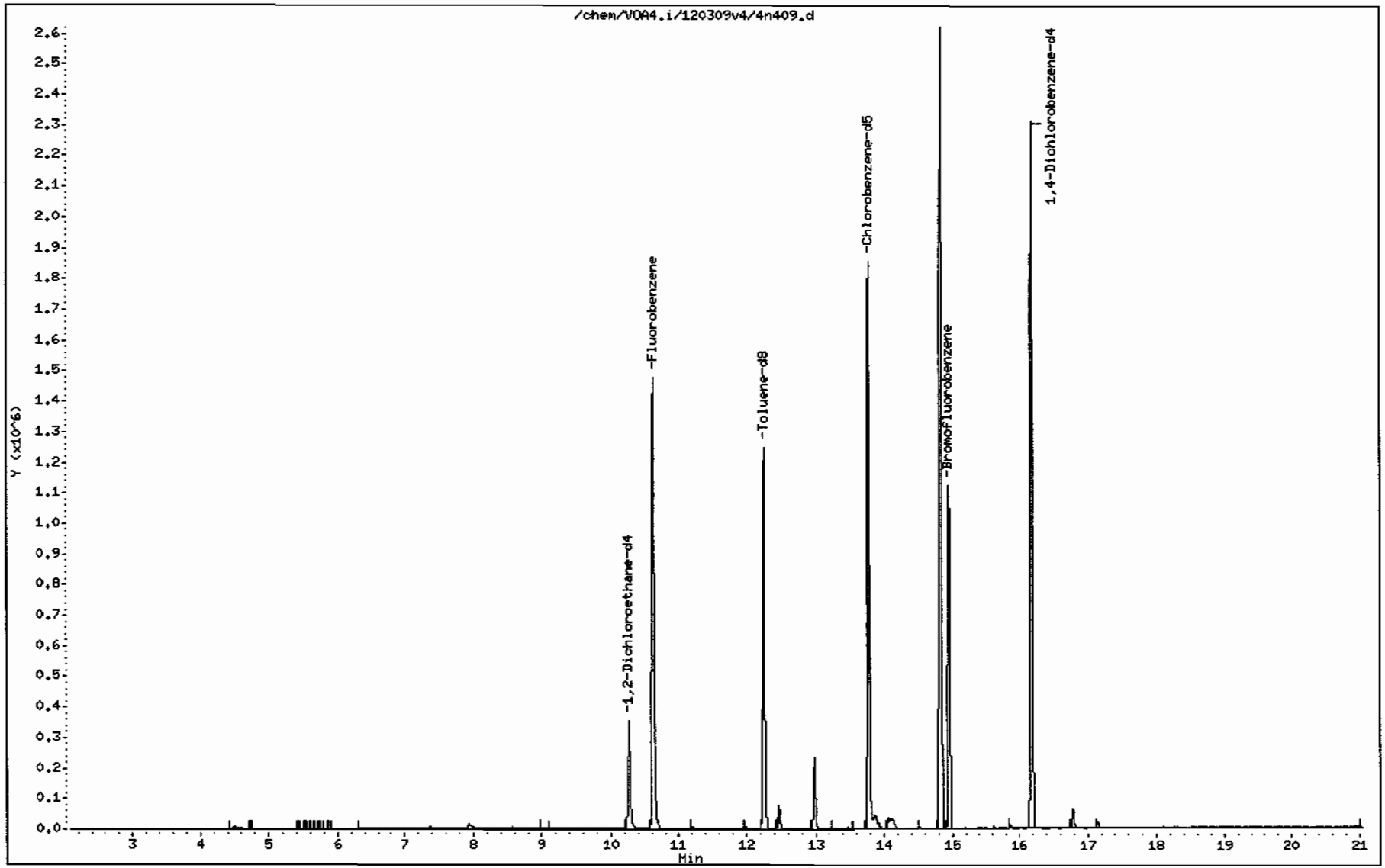

Data File: /chem/VOA4.i/120309v4/4n409.d

Date : 03-DEC-2009 22:04

Client ID: RE03-09-14129

Instrument: VOA4.i

Sample Info: |2418190091928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexanal	66-25-1	NIST05.L	3688	91	C6H12O	100
Hexanal	66-25-1	NIST05.L	3690	83	C6H12O	100
Hexanal	66-25-1	NIST05.L	3689	80	C6H12O	100

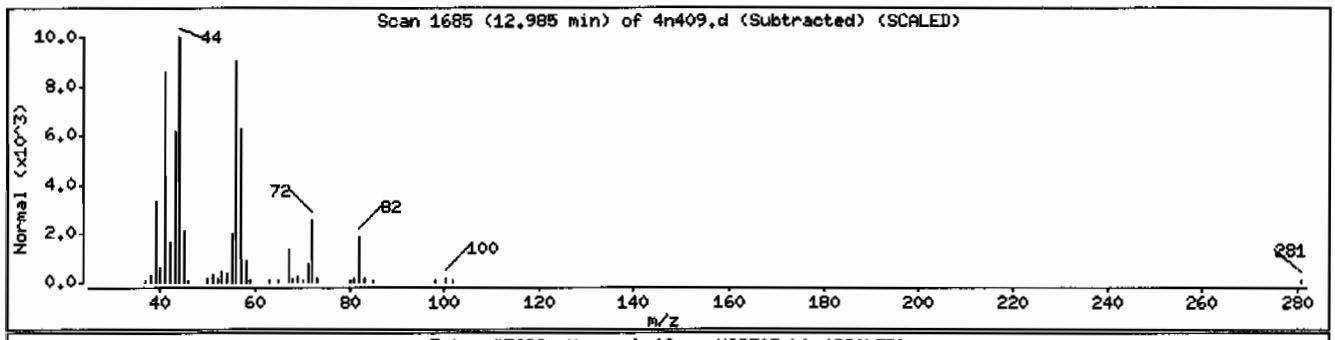

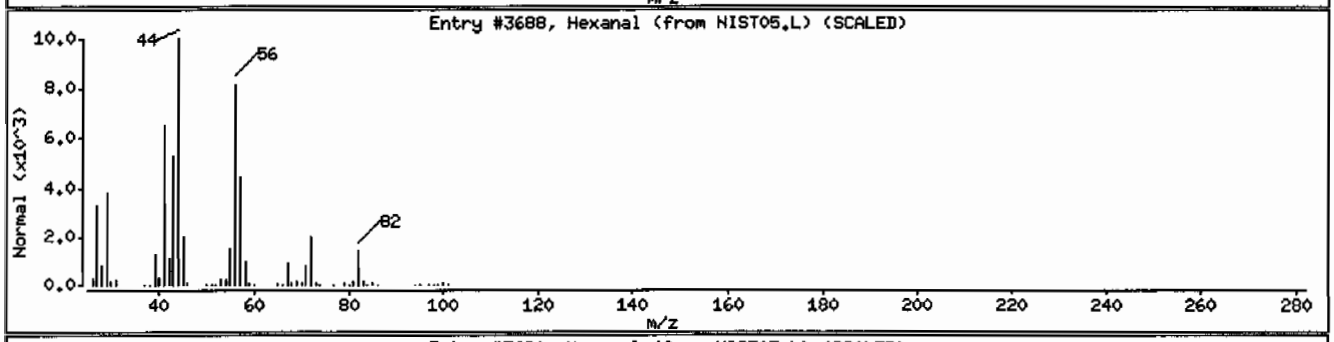

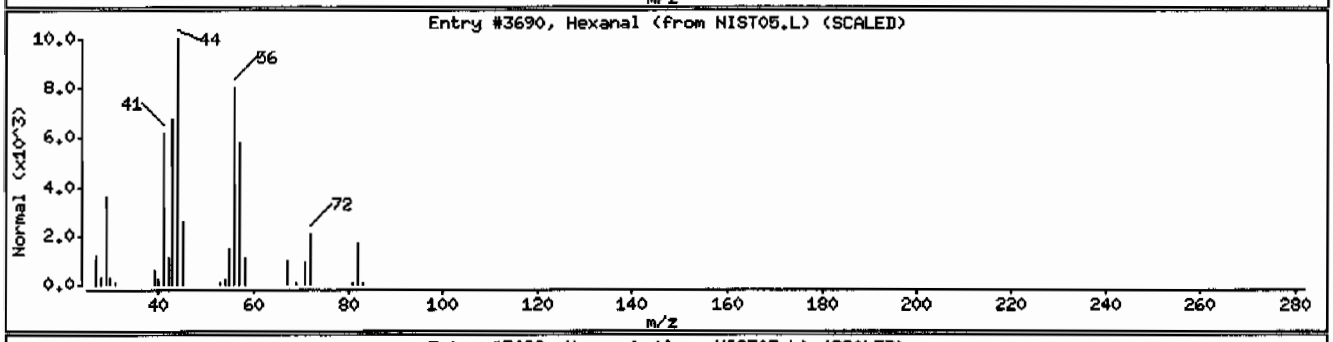

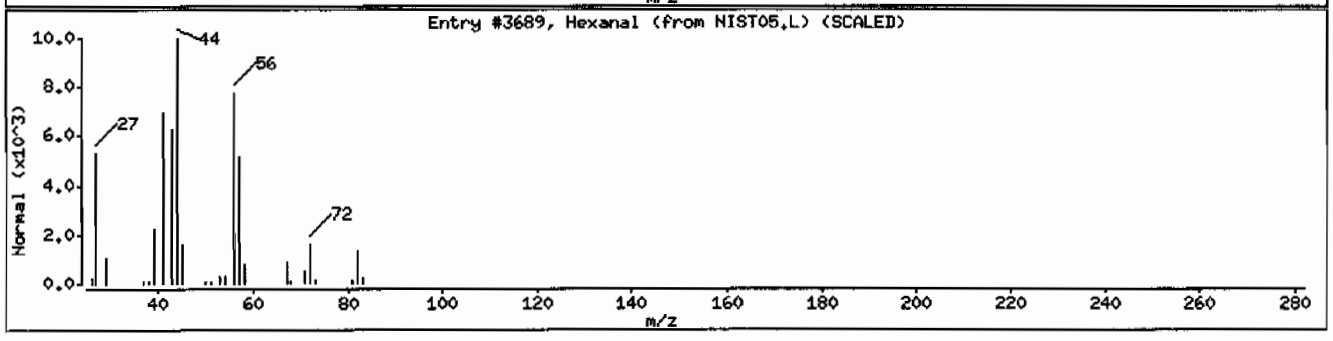

Data File: /chem/VOA4.i/120309v4/4n409.d

Date : 03-DEC-2009 22:04

Client ID: RE03-09-14129

Instrument: VOA4.i

Sample Info: |2418190091928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	86	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	64	C8H24O4Si4	296

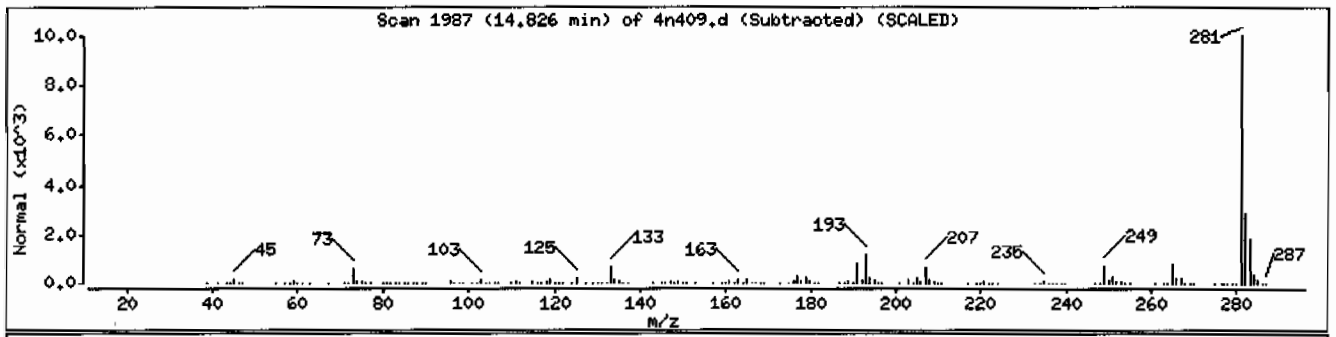

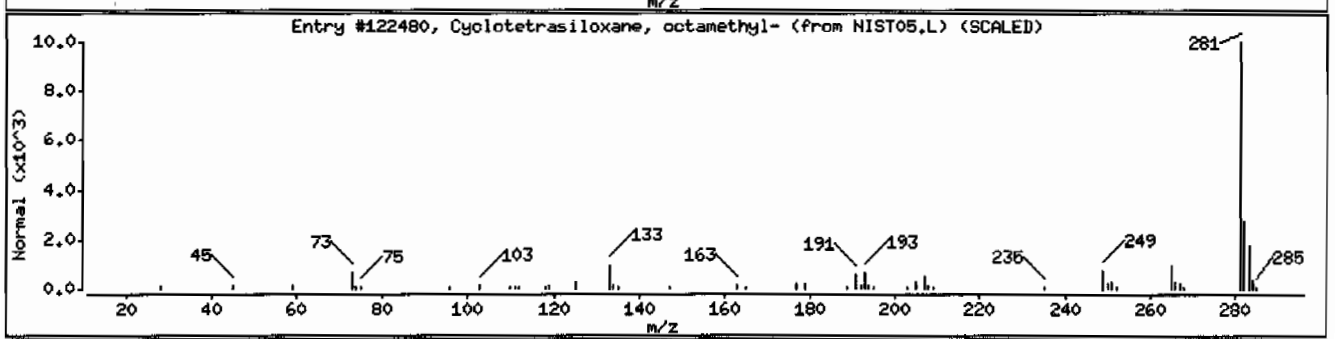

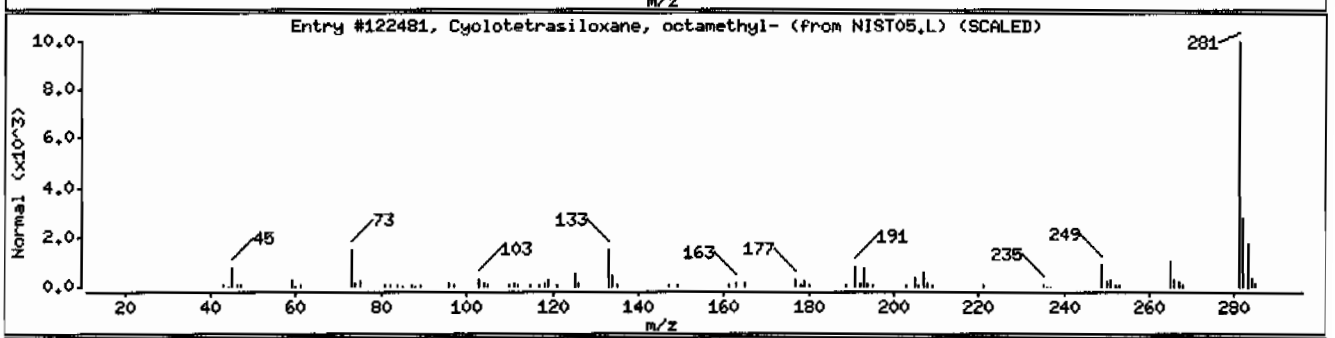

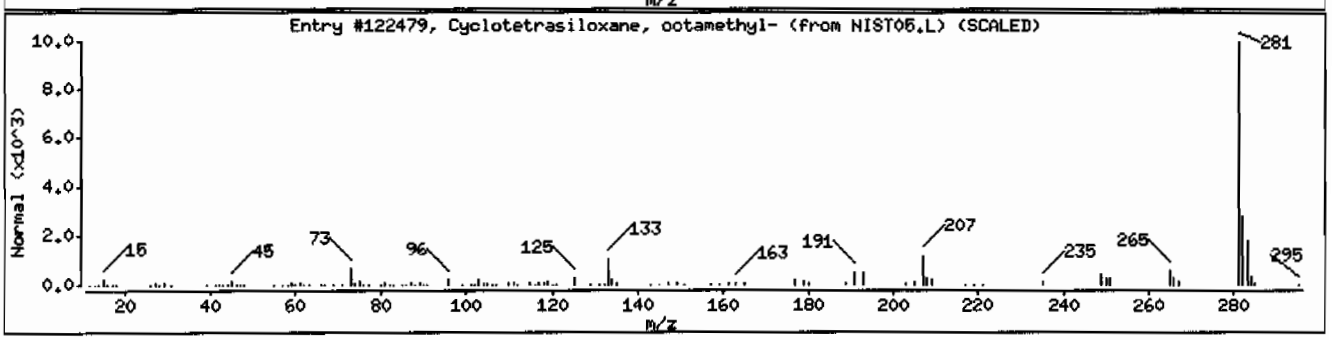

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 04-Dec-2009 17:34

Calibration History

Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Start Cal Date: 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
22-NOV-2009 14:48	ICALsubS	/chem/VOA4.i/112209v4/41713.d
22-NOV-2009 10:41	CALsubL+	/chem/VOA4.i/112209v4/41704.d
Cal Level: 2 , Cal Amount: 2.00000		
22-NOV-2009 15:16	ICALsubS	/chem/VOA4.i/112209v4/41714.d
22-NOV-2009 11:36	CALsubL+	/chem/VOA4.i/112209v4/41706.d
Cal Level: 3 , Cal Amount: 5.00000		
22-NOV-2009 15:43	ICALsubS	/chem/VOA4.i/112209v4/41715.d
22-NOV-2009 12:04	CALsubL+	/chem/VOA4.i/112209v4/41707.d
Cal Level: 4 , Cal Amount: 10.00000		
22-NOV-2009 16:10	ICALsubS	/chem/VOA4.i/112209v4/41716.d
22-NOV-2009 12:31	CALsubL+	/chem/VOA4.i/112209v4/41708.d
Cal Level: 5 , Cal Amount: 20.00000		
22-NOV-2009 16:37	ICALsubS	/chem/VOA4.i/112209v4/41717.d
22-NOV-2009 12:59	CALsubL+	/chem/VOA4.i/112209v4/41709.d
Cal Level: 6 , Cal Amount: 50.00000		
22-NOV-2009 17:04	ICALsubS	/chem/VOA4.i/112209v4/41718.d
22-NOV-2009 13:27	CALsubL+	/chem/VOA4.i/112209v4/41710.d
Cal Level: 7 , Cal Amount: 100.00000		
22-NOV-2009 17:32	ICALsubS	/chem/VOA4.i/112209v4/41719.d
22-NOV-2009 13:54	CALsubL+	/chem/VOA4.i/112209v4/41711.d
Cal Level: 8 , Cal Amount: 200.00000		
22-NOV-2009 10:14	BENZENE+	/chem/VOA4.i/112209v4/41703.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
02-DEC-2009 17:19	CALsubL+	/chem/VOA4.i/120209v4/4n302.d
Ccal Level: 6 , Ccal Amount: 50.0		
02-DEC-2009 18:14	CALsubS+SS	/chem/VOA4.i/120209v4/4n304.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Calibration File Names:
Level 1: /chem/VOA4.i/112209v4/41713.d
Level 2: /chem/VOA4.i/112209v4/41714.d
Level 3: /chem/VOA4.i/112209v4/41715.d
Level 4: /chem/VOA4.i/112209v4/41716.d
Level 5: /chem/VOA4.i/112209v4/41717.d
Level 6: /chem/VOA4.i/112209v4/41718.d
Level 7: /chem/VOA4.i/112209v4/41719.d
Level 8: /chem/VOA4.i/112209v4/41703.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.70135	0.67482	0.71847	0.71001	0.64315	0.71607					
	0.60192	++++++					AVRG		0.68083		6.46217
M 2 1,2-Dichloroethylene (total)	0.39740	0.38742	0.40356	0.41339	0.36979	0.42144					
	0.36963	++++++					AVRG		0.39466		5.12263
M 135 1,3-Dichloropropylene	0.41350	0.40551	0.44628	0.45853	0.42258	0.48108					
	0.42557	++++++					AVRG		0.43615		6.18797
153 Chlorotrifluoroethylene	0.13143	0.18372	0.17447	0.18248	++++++	0.19006					
	++++++	++++++					AVRG		0.17243		13.67715
154 2-Chloro-1,1,1-trifluoroethan	0.26186	0.25912	0.25634	0.25645	++++++	0.26647					
	0.25722	++++++					AVRG		0.25958		1.52910

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INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	ml	m2	%RSD or R^2
	100 Level 7	200 Level 8									
3 Dichlorodifluoromethane	0.21952	0.20478	0.24778	0.23830	0.25344	0.24626					
	0.22084	+++++					AVRG		0.23299		7.76928
4 Chloromethane	0.36252	0.34713	0.37649	0.35126	0.36111	0.38641					
	0.33300	+++++					AVRG		0.35970		5.00875
5 Vinyl chloride	0.33360	0.31585	0.35122	0.33159	0.33730	0.35659					
	0.30468	+++++					AVRG		0.33298		5.49023
6 Bromomethane	0.26744	0.25913	0.27384	0.26317	0.25533	0.28190					
	0.23741	+++++					AVRG		0.26260		5.43369
7 Chloroethane	0.24641	0.22492	0.25216	0.24499	0.24862	0.26778					
	0.22546	+++++					AVRG		0.24433		6.17830
8 Trichlorofluoromethane	0.39788	0.40451	0.41714	0.40395	0.41072	0.45146					
	0.39022	+++++					AVRG		0.41084		4.83812
134 Ethyl Ether	0.20013	0.22799	0.22695	0.23007	0.22323	0.24848					
	0.21817	+++++					AVRG		0.22500		6.43554
9 Acrolein	0.05592	0.05545	0.05313	0.05620	+++++	0.05350					
	0.05200	+++++					AVRG		0.05437		3.16611
12 Trichlorotrifluoroethane	0.10763	0.09987	0.09425	0.09433	+++++	0.08318					
	0.08283	+++++					AVRG		0.09368		10.25666

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Start Cal Date : 22-NOV-2009 10:14
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
10 Acetone	0.21715	0.21091	0.19514	0.20925	0.18498	0.22820					
	0.17644	+++++					AVRG		0.20316		9.05187
11 1,1-Dichloroethylene	0.43010	0.40719	0.43561	0.43488	0.39281	0.46160					
	0.40074	+++++					AVRG		0.42328		5.70354
147 Isopropyl Alcohol	0.02541	0.02962	0.02587	0.02812	+++++	0.02700					
	0.02584	+++++					AVRG		0.02698		6.03712
13 Iodomethane	0.49411	0.49115	0.52557	0.53262	0.47737	0.55006					
	0.47344	+++++					AVRG		0.50633		5.85556
15 Acetonitrile	0.04684	0.04644	0.04649	0.04892	0.04391	0.04889					
	0.03979	+++++					AVRG		0.04590		6.94320
128 Methyl acetate	0.25731	0.23806	0.23684	0.24780	0.21890	0.24259					
	0.19845	+++++					AVRG		0.23428		8.40002
14 Carbon disulfide	0.91167	0.87511	0.91689	0.92639	0.82243	0.92593					
	0.76534	+++++					AVRG		0.87768		7.06555
16 Allyl chloride	0.47481	0.44851	0.43469	0.44980	+++++	0.41236					
	0.38471	+++++					AVRG		0.43415		7.30172
148 tert-Butyl Alcohol	0.03756	0.04508	0.03881	0.04200	+++++	0.04059					
	0.03810	+++++					AVRG		0.04036		7.04178

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
17 Methylene chloride	+++++	89613	104945	156326	244699	561681					
	1084465	+++++					LINR	-0.13197	0.29325		0.99269
18 Acrylonitrile	0.10599	0.11761	0.10731	0.11347	+++++	0.10855					
	0.10484	+++++					AVRG		0.10963		4.48945
20 tert-Butyl methyl ether	0.79558	0.87853	0.81726	0.87060	0.77996	0.85442					
	0.74022	+++++					AVRG		0.81951		6.25004
21 trans-1,2-Dichloroethylene	0.35735	0.37592	0.38478	0.39437	0.35468	0.40358					
	0.35165	+++++					AVRG		0.37462		5.51097
23 Vinyl acetate	0.49838	0.54680	0.57711	0.57802	0.55244	0.60012					
	0.46080	+++++					AVRG		0.54481		9.01724
149 Isopropyl ether	0.95978	0.92001	0.90178	0.92165	+++++	0.89996					
	0.89878	+++++					AVRG		0.91700		2.54124
22 1,1-Dichloroethane	0.46140	0.44295	0.49088	0.48216	0.44328	0.50152					
	0.43956	+++++					AVRG		0.46596		5.47805
24 2-Chloro-1,3-butadiene	0.42752	0.41435	0.41736	0.41116	+++++	0.40092					
	0.40151	+++++					AVRG		0.41214		2.44686
150 Ethyl tert-butyl ether	0.84482	0.84737	0.83195	0.85512	+++++	0.82219					
	0.83043	+++++					AVRG		0.83865		1.47845

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
30 2-Butanone	0.23385	0.23579	0.22472	0.23959	0.21992	0.26519					
	0.21714	+++++					AVRG		0.23374		6.93171
26 Ethyl acetate	0.32623	0.34240	0.30347	0.31352	+++++	0.29024					
	0.26820	+++++					AVRG		0.30734		8.56310
31 cis-1,2-Dichloroethylene	0.43746	0.39893	0.42234	0.43240	0.38490	0.43930					
	0.38761	+++++					AVRG		0.41470		5.71138
25 2,2-Dichloropropane	0.29466	0.25782	0.28219	0.27714	0.24901	0.27503					
	0.24787	+++++					AVRG		0.26910		6.62310
28 Propionitrile	0.04376	0.05227	0.04399	0.04681	+++++	0.04559					
	0.04383	+++++					AVRG		0.04604		7.13467
27 Methacrylonitrile	0.17978	0.19710	0.18112	0.18893	+++++	0.17963					
	0.16721	+++++					AVRG		0.18229		5.51523
29 Bromochloromethane	0.14402	0.13910	0.15114	0.15508	0.13476	0.15841					
	0.14035	+++++					AVRG		0.14612		6.07266
32 Chloroform	0.50037	0.46709	0.47945	0.48569	0.43681	0.49308					
	0.43321	+++++					AVRG		0.47081		5.65257
72 Tetrahydrofuran	28285	49603	91261	180946	+++++	811740					
	1542403	+++++					LINR	-0.21156	0.17273		0.99744

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
36 1,1,1-Trichloroethane	0.34177	0.33797	0.36697	0.35793	0.32888	0.37723					
	0.33495	+++++					AVRG		0.34939		5.19290
19 Isobutyl alcohol	0.01333	0.01535	0.01335	0.01471	+++++	0.01411					
	0.01295	+++++					AVRG		0.01397		6.66101
129 Cyclohexane	0.43240	0.40010	0.41453	0.40591	0.37242	0.42674					
	0.37265	+++++					AVRG		0.40354		5.92718
34 1,1-Dichloropropene	0.34396	0.33259	0.36640	0.35168	0.33247	0.37748					
	0.32857	+++++					AVRG		0.34759		5.37228
33 Carbon tetrachloride	0.33357	0.32239	0.34241	0.34257	0.31834	0.36936					
	0.33037	+++++					AVRG		0.33700		5.03062
37 1,2-Dichloroethane	0.36646	0.37339	0.38216	0.38288	0.34836	0.39447					
	0.34689	+++++					AVRG		0.37066		4.84641
38 Benzene	1.08632	1.03953	1.11726	1.09466	0.97346	1.10695					
	0.94618	1.20943					AVRG		1.07172		7.84406
151 Methyl tert-amyl ether	0.84827	0.86006	0.82129	0.84576	+++++	0.81709					
	0.82104	+++++					AVRG		0.83559		2.15534
139 Cyclohexene	0.52887	0.49537	0.52023	0.51530	0.47626	0.53834					
	0.47205	+++++					AVRG		0.50663		5.09965

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01024	0.01084	0.01043	0.01203	0.00875	0.01249					
	0.01024	0.01084					AVRG		0.01073		10.73836
39 Trichloroethylene	0.27049	0.26768	0.27901	0.28025	0.25066	0.28409					
	0.25133	+++++					AVRG		0.26907		5.04764
42 Methyl methacrylate	0.20522	0.21958	0.20097	0.21212	+++++	0.19781					
	0.18497	+++++					AVRG		0.20344		5.89043
130 Methylcyclohexane	0.45782	0.40944	0.44364	0.43070	0.40942	0.45487					
	0.39748	+++++					AVRG		0.42905		5.61039
41 1,2-Dichloropropane	0.28007	0.27751	0.28731	0.29540	0.26480	0.30111					
	0.26062	+++++					AVRG		0.28098		5.32401
97 1,4-Dioxane	0.00367	0.00391	0.00331	0.00381	+++++	0.00364					
	0.00350	+++++					AVRG		0.00364		5.86751
43 Dibromomethane	0.17297	0.16928	0.17293	0.18369	0.16407	0.18681					
	0.16513	+++++					AVRG		0.17355		5.03688
45 Bromodichloromethane	0.35810	0.34545	0.37438	0.36950	0.34403	0.39092					
	0.34862	+++++					AVRG		0.36157		4.83779
48 2-Nitropropane	0.09325	0.09886	0.08717	0.09749	+++++	0.09739					
	0.09420	+++++					AVRG		0.09473		4.51184

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
44 2-Chloroethylvinyl ether	0.15167	0.15840	0.16203	0.16999	0.15822	0.17712					
	0.14523	+++++					AVRG		0.16038		6.68189
46 cis-1,3-Dichloropropylene	0.42560	0.42436	0.46605	0.47362	0.43654	0.49344					
	0.43654	+++++					AVRG		0.45088		5.94621
49 4-Methyl-2-pentanone	0.16704	0.16573	0.16058	0.16558	0.15177	0.17455					
	0.14456	+++++					AVRG		0.16140		6.28749
50 Toluene	0.95599	0.89242	0.92210	0.90343	0.80436	0.89036					
	0.76529	+++++					AVRG		0.87628		7.67500
51 Ethyl methacrylate	0.52301	0.54250	0.51464	0.52715	+++++	0.46530					
	0.41126	+++++					AVRG		0.49731		9.98259
53 trans-1,3-Dichloropropylene	0.55667	0.52412	0.57667	0.58556	0.53379	0.60809					
	0.53039	+++++					AVRG		0.55933		5.70215
54 1,1,2-Trichloroethane	0.28664	0.26669	0.29062	0.29122	0.26059	0.29539					
	0.25448	+++++					AVRG		0.27795		6.04778
55 2-Hexanone	0.44966	0.43839	0.43114	0.45156	0.41544	0.47289					
	0.38534	+++++					AVRG		0.43492		6.50323
52 1,3-Dichloropropane	0.58992	0.56247	0.59158	0.58963	0.53126	0.58281					
	0.48934	+++++					AVRG		0.56243		6.91458

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
56 Tetrachloroethylene	0.36707	0.34242	0.34742	0.34437	0.31600	0.35293					
	0.31257	+++++					AVRG		0.34040		5.76135
57 Dibromochloromethane	0.36430	0.36503	0.37424	0.40158	0.37199	0.42902					
	0.38635	+++++					AVRG		0.38465		6.12123
59 1,2-Dibromoethane	0.34061	0.33398	0.36106	0.36598	0.34272	0.38240					
	0.33925	+++++					AVRG		0.35228		5.05692
152 1-Chlorohexane	0.27943	0.25644	0.23756	0.24653	+++++	0.25264					
	0.25465	+++++					AVRG		0.25454		5.49819
62 Chlorobenzene	1.00079	1.01568	1.05757	1.06100	0.94511	1.07380					
	0.92098	+++++					AVRG		1.01070		5.87902
60 1,1,1,2-Tetrachloroethane	0.39361	0.35697	0.40153	0.39299	0.36161	0.40793					
	0.35713	+++++					AVRG		0.38168		5.82855
58 Ethylbenzene	1.84025	1.71034	1.78402	1.76603	1.58732	1.73971					
	1.41449	+++++					AVRG		1.69174		8.58326
63 m,p-Xylenes	0.70030	0.66453	0.70747	0.70329	0.63579	0.70407					
	0.59219	+++++					AVRG		0.67252		6.59440
64 o-Xylene	0.70344	0.69541	0.74047	0.72343	0.65786	0.74007					
	0.62137	+++++					AVRG		0.69744		6.34185

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	1.21077	1.15199	1.23797	1.24119	1.13289	1.27542					
	1.05111	+++++					AVRG		1.18591		6.57939
66 Bromoform	0.49404	0.47895	0.51340	0.55884	0.52075	0.63851					
	0.57125	+++++					AVRG		0.53939		10.14098
67 Isopropylbenzene	2.81546	2.75017	2.84421	2.84280	2.56688	2.84161					
	2.30776	+++++					AVRG		2.70984		7.50228
68 cis-1,4-Dichloro-2-butene	0.20831	0.23800	0.22368	0.22817	+++++	0.22092					
	0.20566	+++++					AVRG		0.22079		5.52375
70 Cyclohexanone	0.03515	0.04094	0.03660	0.04054	+++++	0.03802					
	0.03639	+++++					AVRG		0.03794		6.20501
73 1,1,2,2-Tetrachloroethane	0.75747	0.79219	0.83626	0.84224	0.76143	0.85606					
	0.71570	+++++					AVRG		0.79448		6.59872
69 trans-1,4-Dichloro-2-butene	0.21501	0.23443	0.20845	0.21973	+++++	0.20938					
	0.19312	+++++					AVRG		0.21335		6.41608
74 1,2,3-Trichloropropane	0.20845	0.20706	0.21761	0.22120	0.20235	0.23283					
	0.19379	+++++					AVRG		0.21190		6.12869
75 Bromobenzene	0.86711	0.84553	0.88263	0.88735	0.79663	0.92286					
	0.79096	+++++					AVRG		0.85615		5.67234

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
76 n-Propylbenzene	3.39349	3.26326	3.49629	3.38979	3.04662	3.32860					
	2.61397	+++++					AVRG		3.21886		9.37389
78 1,3,5-Trimethylbenzene	2.48326	2.44997	2.58869	2.55937	2.29300	2.53053					
	2.01793	+++++					AVRG		2.41754		8.32003
77 2-Chlorotoluene	2.50052	2.28701	2.46919	2.41383	2.13859	2.33326					
	1.85746	+++++					AVRG		2.28570		9.84026
80 4-Chlorotoluene	2.21104	2.08272	2.22413	2.19063	1.96458	2.21541					
	1.81428	+++++					AVRG		2.10040		7.51638
81 tert-Butylbenzene	2.56778	2.48368	2.56772	2.56479	2.28412	2.57734					
	2.10600	+++++					AVRG		2.45020		7.52754
79 1,2,4-Trimethylbenzene	2.72525	2.55215	2.74018	2.72725	2.37980	2.63816					
	2.14623	+++++					AVRG		2.55843		8.70457
82 Pentachloroethane	0.50501	0.48269	0.48049	0.45126	+++++	0.35124					
	0.40108	+++++					AVRG		0.44529		13.11002
83 sec-Butylbenzene	3.45534	3.21255	3.53229	3.46947	3.10653	3.41341					
	2.68756	+++++					AVRG		3.26817		9.11754
84 4-Isopropyltoluene	2.82093	2.66835	2.87406	2.82119	2.51181	2.79014					
	2.27080	+++++					AVRG		2.67961		8.13997

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	1.63923	1.59498	1.69316	1.70724	1.50639	1.69998					
	1.43192	+++++					AVRG		1.61041		6.61020
87 1,4-Dichlorobenzene	1.71875	1.59053	1.69010	1.67669	1.50062	1.69539					
	1.44149	+++++					AVRG		1.61622		6.70439
88 Benzyl chloride	1.30649	1.38444	1.30279	1.33389	+++++	1.17735					
	0.96630	+++++					AVRG		1.24521		12.26968
89 n-Butylbenzene	2.60812	2.52813	2.66438	2.61551	2.36712	2.57681					
	2.08133	+++++					AVRG		2.49163		8.21192
90 1,2-Dichlorobenzene	1.64359	1.51915	1.65273	1.62268	1.47619	1.63698					
	1.39061	+++++					AVRG		1.56313		6.54277
91 bis(2-Chloroisopropyl)ether	0.37069	0.42630	0.35573	0.38220	+++++	0.37313					
	0.32169	+++++					AVRG		0.37162		9.20525
92 1,2-Dibromo-3-chloropropane	0.16090	0.17023	0.16881	0.18391	0.17674	0.19572					
	0.17820	+++++					AVRG		0.17636		6.41964
93 1,2,4-Trichlorobenzene	0.86804	0.82729	0.90400	0.95532	0.88491	0.92567					
	0.83336	+++++					AVRG		0.88551		5.30559
94 Hexachlorobutadiene	0.65645	0.61705	0.64747	0.65029	0.59424	0.63287					
	0.57806	+++++					AVRG		0.62520		4.80208

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	1.52349	1.43037	1.51173	1.63279	1.54736	1.60261					
	1.40026	+++++					AVRG		1.52123		5.54782
96 1,2,3-Trichlorobenzene	0.70644	0.66598	0.72623	0.74703	0.68968	0.70642					
	0.65102	+++++					AVRG		0.69897		4.75877
$ 138 1,2-Dichloroethane-d4	0.17578	0.18570	0.19564	0.20439	0.18848	0.20826					
	0.21644	+++++					AVRG		0.19639		7.22804
$ 47 Toluene-d8	0.83900	0.85325	0.89204	0.90684	0.83870	0.92761					
	0.83861	+++++					AVRG		0.87087		4.28714
$ 71 Bromofluorobenzene	0.52483	0.55505	0.58369	0.61009	0.55725	0.63913					
	0.58288	+++++					AVRG		0.57899		6.53887

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.69132	0.69132	0.050	1.54202	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.40630	0.40630	0.050	2.95007	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.43846	0.43846	0.050	0.52968	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.21510	0.21510	0.050	-7.67900	30.00000	Averaged	
4 Chloromethane	0.35970	0.31949	0.31949	0.100	-11.17813	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.32061	0.32061	0.050	-3.71515	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.24826	0.24826	0.050	-5.45987	30.00000	Averaged	
7 Chloroethane	0.24433	0.23602	0.23602	0.050	-3.40156	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.40966	0.40966	0.050	-0.28572	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.21166	0.21166	0.001	-5.93017	30.00000	Averaged	
10 Acetone	0.20316	0.14150	0.14150	0.050	-30.34976	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04069	0.04069	0.010	-11.34196	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.42893	0.42893	0.050	1.33577	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.19676	0.19676	0.010	-16.01466	40.00000	Averaged	
13 Iodomethane	0.50633	0.51727	0.51727	0.050	2.16046	30.00000	Averaged	
17 Methylene chloride	51.31291	50.00000	0.33965	0.050	2.62581	30.00000	Linear	
14 Carbon disulfide	0.87768	0.91718	0.91718	0.050	4.50062	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.75110	0.75110	0.050	-8.34781	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.38832	0.38832	0.050	3.65819	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.49355	0.49355	0.010	-9.40872	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.48122	0.48122	0.100	3.27446	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.17581	0.17581	0.030	-24.78714	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.42429	0.42429	0.050	2.31050	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.27404	0.27404	0.050	1.83530	30.00000	Averaged	
32 Chloroform	0.47081	0.47569	0.47569	0.010	1.03561	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.14549	0.14549	0.010	-0.43079	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.36751	0.36751	0.010	5.18800	30.00000	Averaged	
129 Cyclohexane	0.40354	0.42421	0.42421	0.010	5.12308	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.36893	0.36893	0.010	6.13735	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01040	0.01040	0.001	-3.06093	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.35930	0.35930	0.010	6.61503	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.20547	0.20547	0.001	4.62716	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.35941	0.35941	0.010	-3.03368	30.00000	Averaged	
38 Benzene	1.07172	1.07229	1.07229	0.010	0.05259	30.00000	Averaged	
139 Cyclohexene	0.50663	0.51278	0.51278	0.001	1.21436	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.28019	0.28019	0.010	4.13279	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.28134	0.28134	0.010	0.13000	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.44411	0.44411	0.010	3.50875	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.36895	0.36895	0.010	2.04004	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.16757	0.16757	0.010	-3.44731	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14096	0.14096	0.005	-12.11088	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.13941	0.13941	0.010	-13.62299	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.45323	0.45323	0.010	0.52137	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.86829	0.86829	0.010	-0.29589	30.00000	Averaged	
	50 Toluene	0.87628	0.86307	0.86307	0.010	-1.50792	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.54837	0.54837	0.010	-1.95885	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26103	0.26103	0.010	-6.08674	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.29367	0.29367	0.010	-32.47630	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.53703	0.53703	0.010	-4.51590	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.34775	0.34775	0.010	2.16113	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38777	0.38777	0.010	0.81133	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.34520	0.34520	0.010	-2.00984	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.03137	1.03137	0.300	2.04472	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.38883	0.38883	0.010	1.87227	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.67584	1.67584	0.010	-0.93937	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.68291	0.68291	0.010	1.54543	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70815	0.70815	0.010	1.53566	30.00000	Averaged	
	65 Styrene	1.18591	1.21191	1.21191	0.010	2.19258	30.00000	Averaged	
	66 Bromoform	0.53939	0.54722	0.54722	0.100	1.45063	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.67215	2.67215	0.010	-1.39091	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.72562	0.72562	0.300	-8.66743	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.58218	0.58218	0.010	0.55182	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.19674	0.19674	0.010	-7.15485	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.86007	0.86007	0.010	0.45779	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.16972	3.16972	0.010	-1.52666	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.21699	2.21699	0.010	-3.00590	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.39741	2.39741	0.010	-0.83248	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.09083	2.09083	0.010	-0.45555	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.46685	2.46685	0.010	0.67956	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.51478	2.51478	0.010	-1.70627	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.26146	3.26146	0.010	-0.20528	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.67217	2.67217	0.010	-0.27751	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.61689	1.61689	0.010	0.40229	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.59751	1.59751	0.010	-1.15795	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.47231	2.47231	0.010	-0.77540	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.53519	1.53519	0.010	-1.78760	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17202	0.17202	0.010	-2.46241	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.94077	0.94077	0.010	6.24058	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66766	0.66766	0.010	6.79105	30.00000	Averaged
95 Naphthalene	1.52123	1.56791	1.56791	0.010	3.06878	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.76536	0.76536	0.010	9.49837	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41722.d
Lab Smp Id: W4VM091122-18 Client Smp ID: SECOND SOURCE
Inj Date : 22-NOV-2009 18:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-18|ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01C/IVM091122-01
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2583514	150.000	152
M 2 1,2-Dichloroethylene (total)	96				1310123	100.000	103
M 135 1,3-Dichloropropylene	75				1413814	100.000	100
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	346786	50.0000	46.2
4 Chloromethane	50	5.299	5.299	(0.499)	515104	50.0000	44.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	516895	50.0000	48.1
6 Bromomethane	94	6.138	6.138	(0.578)	400262	50.0000	47.3
7 Chloroethane	64	6.288	6.288	(0.592)	380525	50.0000	48.3
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	660479	50.0000	49.8
134 Ethyl Ether	59	7.003	7.003	(0.660)	341247	50.0000	47.0
10 Acetone	43	7.357	7.357	(0.693)	1140649	250.000	174
15 Acetonitrile	41	7.705	7.705	(0.726)	1640110	1250.00	1110
11 1,1-Dichloroethylene	61	7.394	7.394	(0.696)	691539	50.0000	50.7
128 Methyl acetate	43	7.753	7.753	(0.730)	1586132	250.000	210
13 Iodomethane	142	7.631	7.631	(0.719)	4169845	250.000	255
17 Methylene chloride	84	7.942	7.942	(0.748)	547607	50.0000	51.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7393616	250.000	261
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1210958	50.0000	45.8
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	626069	50.0000	51.8
23 Vinyl acetate	• 43	8.710	8.710	(0.820)	3978626	250.000	226
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	775846	50.0000	51.6
30 2-Butanone	43	9.326	9.326	(0.878)	1417213	250.000	188
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	684054	50.0000	51.2
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	441819	50.0000	50.9
32 Chloroform	83	9.692	9.692	(0.913)	766928	50.0000	50.5
29 Bromochloromethane	128	9.662	9.662	(0.910)	234568	50.0000	49.8
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	592518	50.0000	52.6
129 Cyclohexane	56	10.082	10.082	(0.949)	683928	50.0000	52.6
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	594801	50.0000	53.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1677330	5000.00	4850
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	579271	50.0000	53.3
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	331271	50.0000	52.3
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	579461	50.0000	48.5
38 Benzene	78	10.375	10.375	(0.977)	1728792	50.0000	50.0
139 Cyclohexene	67	10.497	10.497	(0.989)	826734	50.0000	50.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1612245	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	451741	50.0000	52.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	453589	50.0000	50.1
130 Methylcyclohexane	83	11.265	11.265	(1.061)	716009	50.0000	51.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	594832	50.0000	51.0
43 Dibromomethane	93	11.375	11.375	(1.071)	270167	50.0000	48.3
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1136285	250.000	220
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	868329	250.000	216
46 cis-1,3-Dichloropropylene	75	11.935	11.935	(1.124)	730715	50.0000	50.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1081613	50.0000	49.8
50 Toluene	92	12.326	12.326	(0.895)	1075108	50.0000	49.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	683099	50.0000	49.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	325158	50.0000	47.0
55 2-Hexanone	43	12.856	12.856	(0.934)	1829103	250.000	169
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	668969	50.0000	47.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	433189	50.0000	51.1
57 Dibromochloromethane	129	13.149	13.149	(0.955)	483033	50.0000	50.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	430015	50.0000	49.0
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1245683	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1284761	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	484356	50.0000	50.9
58 Ethylbenzene	91	13.862	13.862	(1.007)	2087570	50.0000	49.5
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1701387	100.000	102
64 o-Xylene	106	14.404	14.404	(1.046)	882126	50.0000	50.8
65 Styrene	104	14.404	14.404	(1.046)	1509654	50.0000	51.1
66 Bromoform	173	14.661	14.661	(0.906)	479720	50.0000	50.7
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2342561	50.0000	49.3
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	636119	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	510376	50.0000	50.3
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	172470	50.0000	46.4
75 Bromobenzene	156	15.167	15.167	(0.937)	753987	50.0000	50.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2778758	50.0000	49.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1943541	50.0000	48.5
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2101707	50.0000	49.6
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1832943	50.0000	49.8
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2162586	50.0000	50.3
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2204597	50.0000	49.1
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	2859180	50.0000	49.9
84 4-Isopropyltoluene	119	16.050	16.050	(0.992)	2342581	50.0000	49.9
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1417460	50.0000	50.2
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	876657	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1400467	50.0000	49.4
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2167366	50.0000	49.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1345835	50.0000	49.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	150799	50.0000	48.8
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	824735	50.0000	53.1
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	585310	50.0000	53.4
95 Naphthalene	128	19.032	19.032	(1.176)	1374522	50.0000	51.5
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	670958	50.0000	54.7

Data File: /chem/VOA4.i/112209v4/41722.d

Date : 22-NOV-2009 18:53

Client ID: SECOND SOURCE

Sample Info: |W4VM091122-18|ICV|1|VOAF|1|

Purge Volume: 5.0

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

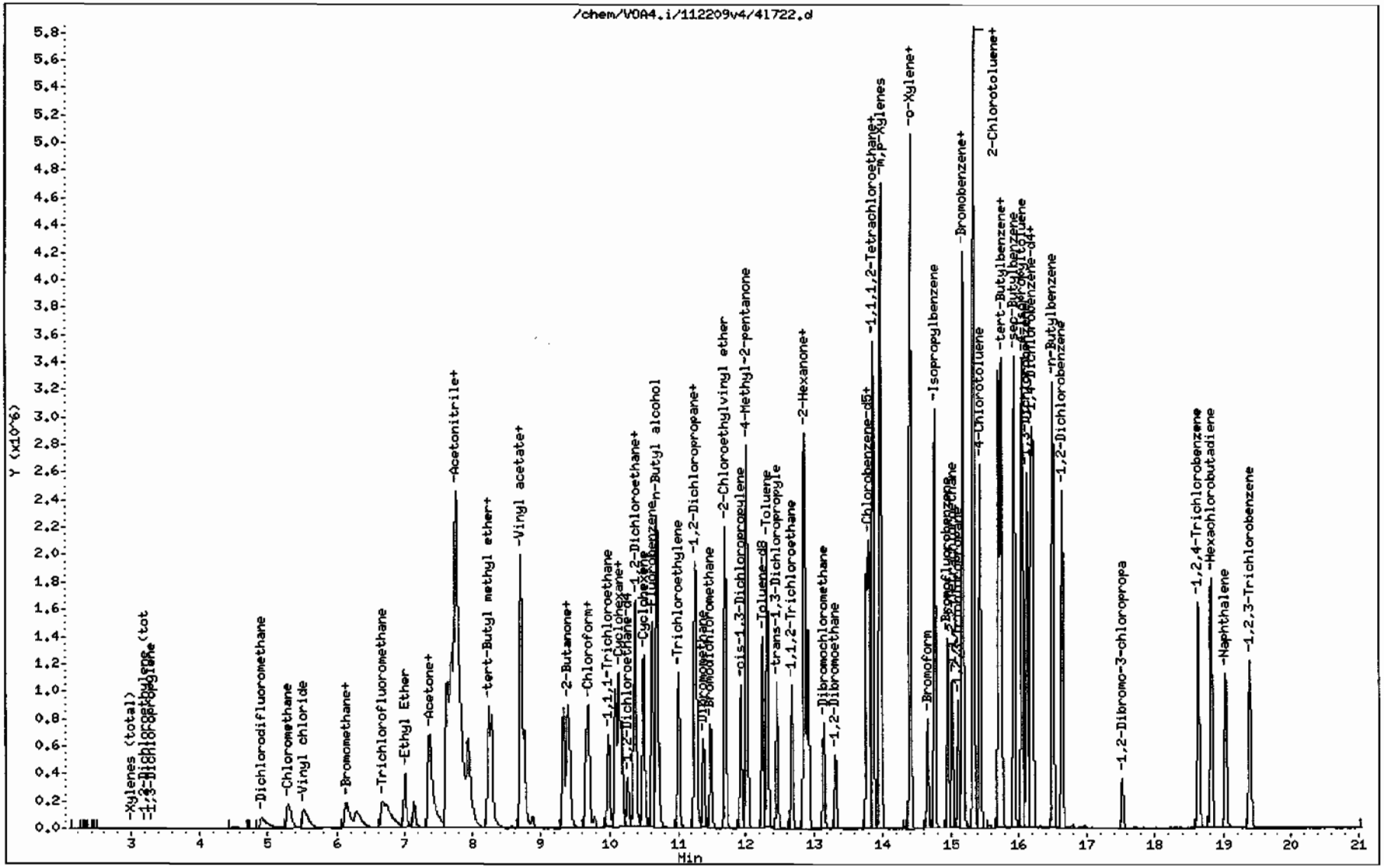

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
153 Chlorotrifluoroethylene	0.17243	0.13061	0.13061	0.010	-24.25152	30.00000	Averaged	
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.25736	0.25736	0.010	-0.85465	30.00000	Averaged	
9 Acrolein	0.05437	0.04991	0.04991	0.001	-8.19106	30.00000	Averaged	
12 Trichlorotrifluoroethane	0.09368	0.10008	0.10008	0.050	6.83147	30.00000	Averaged	
147 Isopropyl Alcohol	0.02698	0.02517	0.02517	0.010	-6.71050	40.00000	Averaged	
16 Allyl chloride	0.43415	0.41792	0.41792	0.010	-3.73840	30.00000	Averaged	
148 tert-Butyl Alcohol	0.04036	0.03739	0.03739	0.010	-7.33967	40.00000	Averaged	
18 Acrylonitrile	0.10963	0.10530	0.10530	0.010	-3.94603	30.00000	Averaged	
149 Isopropyl ether	0.91700	0.84326	0.84326	0.010	-8.04141	30.00000	Averaged	
24 2-Chloro-1,3-butadiene	0.41214	0.40649	0.40649	0.010	-1.36927	30.00000	Averaged	
150 Ethyl tert-butyl ether	0.83865	0.77645	0.77645	0.010	-7.41578	30.00000	Averaged	
28 Propionitrile	0.04604	0.04193	0.04193	0.010	-8.93871	30.00000	Averaged	
26 Ethyl acetate	0.30734	0.26429	0.26429	0.010	-14.00741	40.00000	Averaged	
27 Methacrylonitrile	0.18229	0.17171	0.17171	0.010	-5.80832	30.00000	Averaged	
72 Tetrahydrofuran	255	250	0.18327	0.010	1.87504	30.00000	Linear	
19 Isobutyl alcohol	0.01397	0.01249	0.01249	0.005	-10.58475	40.00000	Averaged	
151 Methyl tert-amyl ether	0.83559	0.76954	0.76954	0.010	-7.90398	30.00000	Averaged	
42 Methyl methacrylate	0.20344	0.18796	0.18796	0.010	-7.61187	30.00000	Averaged	
51 Ethyl methacrylate	0.49731	0.45252	0.45252	0.010	-9.00773	30.00000	Averaged	
152 1-Chlorohexane	0.25454	0.23444	0.23444	0.010	-7.89735	30.00000	Averaged	
97 1,4-Dioxane	0.00364	0.00345	0.00345	0.001	-5.31429	40.00000	Averaged	
48 2-Nitropropane	0.09473	0.09142	0.09142	0.010	-3.49078	30.00000	Averaged	
68 cis-1,4-Dichloro-2-butene	0.22079	0.21768	0.21768	0.010	-1.40961	30.00000	Averaged	
70 Cyclohexanone	0.03794	0.02005	0.02005	0.005	-47.14610	40.00000	Averaged	<-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20712	0.20712	0.010	-2.91969	30.00000	Averaged	
82 Pentachloroethane	0.44529	0.35466	0.35466	0.010	-20.35311	30.00000	Averaged	
88 Benzyl chloride	1.24521	1.01385	1.01385	0.010	-18.57992	30.00000	Averaged	
91 bis(2-Chloroisopropyl)ether	0.37162	0.34611	0.34611	0.010	-6.86391	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.19105	0.19105	0.001	-2.71473	30.00000	Averaged	
$ 47 Toluene-d8	0.87087	0.87045	0.87045	0.010	-0.04734	30.00000	Averaged	
$ 71 Bromofluorobenzene	0.57899	0.57621	0.57621	0.010	-0.48047	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	8.44016
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41723.d
Lab Smp Id: W4VM091122-19 Client Smp ID: SHORT SECOND SOURCE
Inj Date : 22-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02B/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	635460	150.000	114
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1252089	150.000	149
9 Acrolein	56	7.186	7.186	(0.677)	404736	250.000	230
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	811524	250.000	267
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2040774	2500.00	2330
16 Allyl chloride	41	7.802	7.802	(0.735)	3388727	250.000	241
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3032185	2500.00	2320
18 Acrylonitrile	53	8.180	8.180	(0.770)	853858	250.000	240
149 Isopropyl ether	45	8.747	8.747	(0.824)	1367530	50.0000	46.0
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	659221	50.0000	49.3
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1259195	50.0000	46.3
28 Propionitrile	54	9.393	9.393	(0.885)	339970	250.000	228
26 Ethyl acetate	43	9.345	9.345	(0.880)	2143053	250.000	215
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1392303	250.000	235
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	777504	250.000	255
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1012586	2500.00	2240

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1247986	50.0000	46.0
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1524080	250.000	231
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2794372	250.000	227
152 1-Chlorohexane	55	13.667	13.667	(1.287)	380193	50.0000	46.0
97 1,4-Dioxane	88	11.332	11.332	(1.067)	279362	2500.00	2370
48 2-Nitropropane	43	11.673	11.673	(1.099)	741303	250.000	241
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	923462	250.000	246
70 Cyclohexanone	42	14.904	14.904	(1.082)	619165	1250.00	661
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	878692	250.000	243
82 Pentachloroethane	167	15.776	15.776	(0.975)	1504604	250.000	199
88 Benzyl chloride	91	16.319	16.319	(1.009)	4301119	250.000	204
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1468339	250.000	233
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1621726	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1235040	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	848470	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	309837	50.0000	48.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1075045	50.0000	50.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	488894	50.0000	49.8

Data File: /chem/VOA4.i/112209w4/41723.d
Date : 22-NOV-2009 13:21
Client ID: SHORT SECOND SOURCE
Sample Info: IW4VW091122-19|SHORTICV11|VOAF11|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

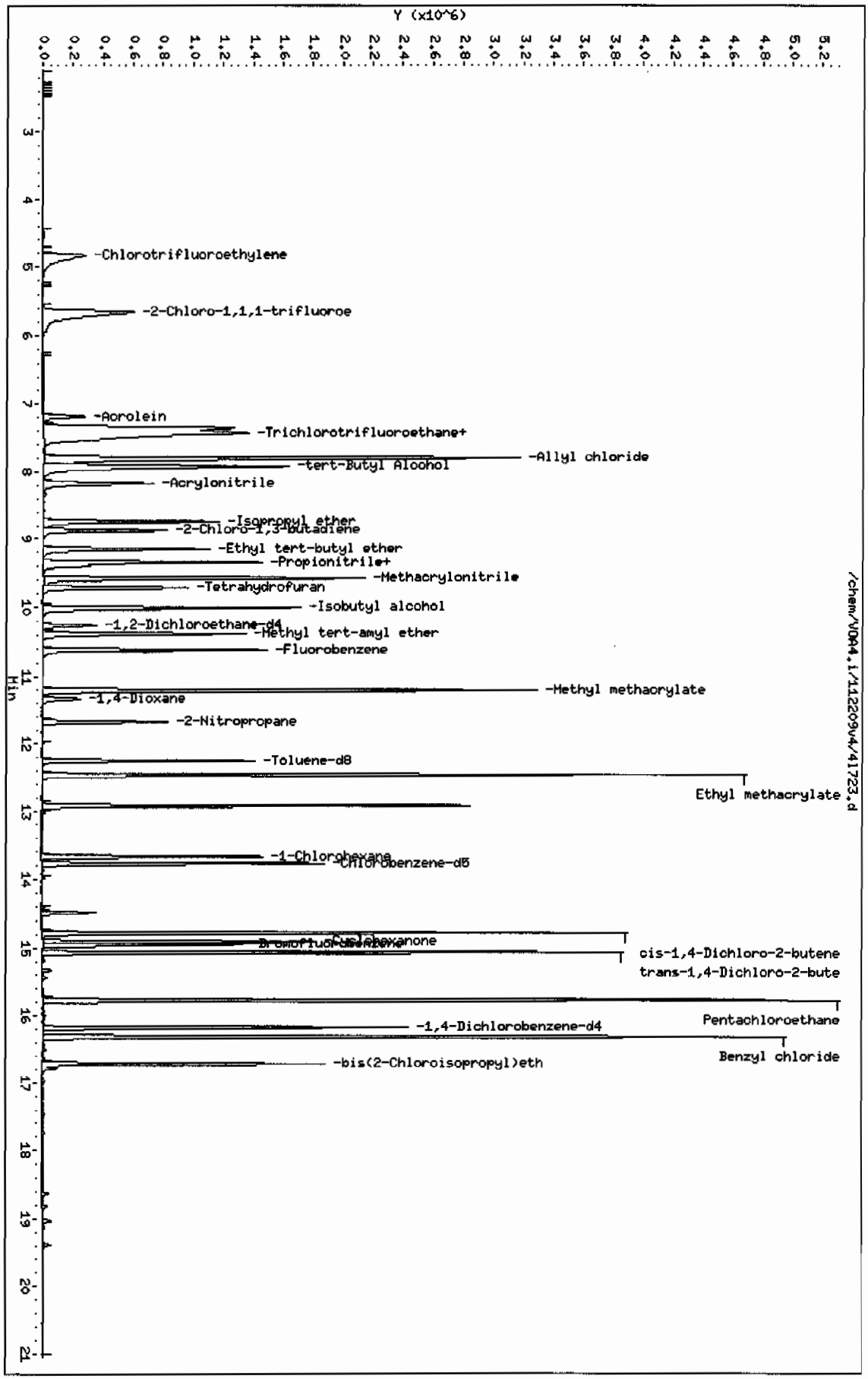

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 02-DEC-2009 17:19
Lab File ID: 4n302.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091202-01 Quant Type: ISTD
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.73297	0.73297	0.050	7.65885	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.44829	0.44829	0.050	13.58781	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.48044	0.48044	0.050	10.15469	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.19530	0.19530	0.050	-16.17482	30.00000	Averaged	
4 Chloromethane	0.35970	0.31941	0.31941	0.100	-11.20216	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.32926	0.32926	0.050	-1.11745	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.26606	0.26606	0.050	1.31786	30.00000	Averaged	
7 Chloroethane	0.24433	0.25762	0.25762	0.050	5.43607	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.46298	0.46298	0.050	12.69049	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.22825	0.22825	0.001	1.44348	30.00000	Averaged	
10 Acetone	0.20316	0.17461	0.17461	0.050	-14.04977	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04512	0.04512	0.010	-1.68881	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.47678	0.47678	0.050	12.63955	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.22007	0.22007	0.010	-6.06464	40.00000	Averaged	
13 Iodomethane	0.50633	0.54305	0.54305	0.050	7.25105	30.00000	Averaged	
17 Methylene chloride	54.57943	50.00000	0.35881	0.050	9.15886	30.00000	Linear	
14 Carbon disulfide	0.87768	0.99567	0.99567	0.050	13.44341	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.82174	0.82174	0.050	0.27232	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.42978	0.42978	0.050	14.72483	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.61700	0.61700	0.010	13.24961	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.53331	0.53331	0.100	14.45425	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.21357	0.21357	0.030	-8.63235	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.46680	0.46680	0.050	12.56082	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.32750	0.32750	0.050	21.70320	30.00000	Averaged	
32 Chloroform	0.47081	0.52535	0.52535	0.010	11.58311	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.15750	0.15750	0.010	7.79039	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.42429	0.42429	0.010	21.43834	30.00000	Averaged	
129 Cyclohexane	0.40354	0.48542	0.48542	0.010	20.29151	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.42754	0.42754	0.010	22.99854	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01263	0.01263	0.001	17.68219	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.42415	0.42415	0.010	25.85964	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.22881	0.22881	0.001	16.51085	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.39031	0.39031	0.010	5.30302	30.00000	Averaged	
38 Benzene	1.07172	1.17309	1.17309	0.010	9.45831	30.00000	Averaged	
139 Cyclohexene	0.50663	0.58524	0.58524	0.001	15.51483	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n302.d
Analysis Type: WATER
Lab Sample ID: W4VM091202-01
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

Injection Date: 02-DEC-2009 17:19
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.31032	0.31032	0.010	15.32763	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.30418	0.30418	0.010	8.25813	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.52702	0.52702	0.010	22.83260	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.39589	0.39589	0.010	9.49253	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.18216	0.18216	0.010	4.96059	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14457	0.14457	0.005	-9.86046	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.16230	0.16230	0.010	0.55628	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.49724	0.49724	0.010	10.28305	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.91458	0.91458	0.010	5.02012	30.00000	Averaged	
	50 Toluene	0.87628	0.93006	0.93006	0.010	6.13702	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.59086	0.59086	0.010	5.63768	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.27973	0.27973	0.010	0.64327	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.39047	0.39047	0.010	-10.21967	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.56234	0.56234	0.010	-0.01622	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.37910	0.37910	0.010	11.36880	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.41337	0.41337	0.010	7.46841	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.36134	0.36134	0.010	2.57085	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.08519	1.08519	0.300	7.36942	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.40606	0.40606	0.010	6.38581	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.80022	1.80022	0.010	6.41263	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.72759	0.72759	0.010	8.18912	30.00000	Averaged	
	64 o-Xylene	0.69744	0.74372	0.74372	0.010	6.63641	30.00000	Averaged	
	65 Styrene	1.18591	1.25776	1.25776	0.010	6.05933	30.00000	Averaged	
	66 Bromoform	0.53939	0.57627	0.57627	0.100	6.83751	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.81387	2.81387	0.010	3.83887	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.82429	0.82429	0.300	3.75236	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.59643	0.59643	0.010	3.01201	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.21429	0.21429	0.010	1.12871	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.88394	0.88394	0.010	3.24607	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.35939	3.35939	0.010	4.36568	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.31932	2.31932	0.010	1.47098	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.49681	2.49681	0.010	3.27893	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.18261	2.18261	0.010	3.91397	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.59678	2.59678	0.010	5.98206	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.64114	2.64114	0.010	3.23283	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.50076	3.50076	0.010	7.11689	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n302.d
Analysis Type: WATER
Lab Sample ID: W4VM091202-01
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

Injection Date: 02-DEC-2009 17:19
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.87015	2.87015	0.010	7.11057	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.69313	1.69313	0.010	5.13656	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.70790	1.70790	0.010	5.67212	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.70144	2.70144	0.010	8.42086	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.62271	1.62271	0.010	3.81151	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.19267	0.19267	0.010	9.24980	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	1.01574	1.01574	0.010	14.70675	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.72267	0.72267	0.010	15.59004	30.00000	Averaged
95 Naphthalene	1.52123	1.65204	1.65204	0.010	8.59920	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.78111	0.78111	0.010	11.75183	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.86469
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n302.d
Lab Smp Id: W4VM091202-01 Client Smp ID: VSTD050
Inj Date : 02-DEC-2009 17:19
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091202-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2543497	150.000	162
M 2 1,2-Dichloroethylene (total)	96				1321648	100.000	114
M 135 1,3-Dichloropropylene	75				1416444	100.000	110
3 Dichlorodifluoromethane	85	4.912	4.912	(0.462)	287895	50.0000	41.9
4 Chloromethane	50	5.299	5.299	(0.499)	470843	50.0000	44.4
5 Vinyl chloride	62	5.528	5.528	(0.521)	485359	50.0000	49.4
6 Bromomethane	94	6.138	6.138	(0.578)	392205	50.0000	50.6
7 Chloroethane	64	6.288	6.288	(0.592)	379753	50.0000	52.7
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	682476	50.0000	56.3
134 Ethyl Ether	59	7.005	7.005	(0.660)	336466	50.0000	50.7
10 Acetone	43	7.358	7.358	(0.693)	1286989	250.000	215
15 Acetonitrile	41	7.706	7.706	(0.726)	1662863	1250.00	1230
11 1,1-Dichloroethylene	61	7.383	7.383	(0.695)	702819	50.0000	56.3
128 Methyl acetate	43	7.748	7.748	(0.730)	1622047	250.000	235
13 Iodomethane	142	7.626	7.626	(0.718)	4002553	250.000	268

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
17 Methylene chloride	84	7.943	7.943	(0.748)	528930	50.0000	54.6
14 Carbon disulfide	76	7.773	7.773	(0.732)	7338642	250.000	284
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1211339	50.0000	50.1
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	633541	50.0000	57.4
23 Vinyl acetate	43	8.712	8.712	(0.820)	4547596	250.000	283
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	786164	50.0000	57.2
30 2-Butanone	43	9.327	9.327	(0.878)	1574106	250.000	228
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	688107	50.0000	56.3
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	482777	50.0000	60.8
32 Chloroform	83	9.693	9.693	(0.913)	774421	50.0000	55.8
29 Bromochloromethane	128	9.656	9.656	(0.909)	232179	50.0000	53.9
36 1,1,1-Trichloroethane	97	9.980	9.980	(0.940)	625446	50.0000	60.7
129 Cyclohexane	56	10.083	10.083	(0.949)	715560	50.0000	60.1
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	630234	50.0000	61.5
131 n-Butyl alcohol	56	10.693	10.693	(1.007)	1861782	5000.00	5880
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	625243	50.0000	62.9
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	337291	50.0000	58.2
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	575364	50.0000	52.6
38 Benzene	78	10.376	10.376	(0.977)	1729265	50.0000	54.7
139 Cyclohexene	67	10.492	10.492	(0.988)	862701	50.0000	57.8
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1474109	50.0000	
39 Trichloroethylene	95	11.004	11.004	(1.036)	457440	50.0000	57.7
41 1,2-Dichloropropane	63	11.242	11.242	(1.059)	448392	50.0000	54.1
130 Methylcyclohexane	83	11.266	11.266	(1.061)	776880	50.0000	61.4
45 Bromodichloromethane	83	11.485	11.485	(1.082)	583589	50.0000	54.7
43 Dibromomethane	93	11.376	11.376	(1.071)	268530	50.0000	52.5
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1065531	250.000	225
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	938668	250.000	251
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	732988	50.0000	55.1
$ 47 Toluene-d8	98	12.254	12.254	(0.890)	1057908	50.0000	52.5
50 Toluene	92	12.327	12.327	(0.895)	1075807	50.0000	53.1
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	683456	50.0000	52.8
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	323571	50.0000	50.3
55 2-Hexanone	43	12.857	12.857	(0.934)	2258290	250.000	224
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	650461	50.0000	50.0
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	438503	50.0000	55.7
57 Dibromochloromethane	129	13.150	13.150	(0.955)	478151	50.0000	53.7
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	417967	50.0000	51.3
* 61 Chlorobenzene-d5	117	13.772	13.772	(1.000)	1156709	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1255246	50.0000	53.7
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	469688	50.0000	53.2
58 Ethylbenzene	91	13.863	13.863	(1.007)	2082331	50.0000	53.2
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1683228	100.000	108
64 o-Xylene	106	14.406	14.406	(1.046)	860269	50.0000	53.3
65 Styrene	104	14.399	14.399	(1.046)	1454868	50.0000	53.0
66 Bromoform	173	14.656	14.656	(0.906)	473671	50.0000	53.4
67 Isopropylbenzene	105	14.759	14.759	(0.912)	2312883	50.0000	51.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	677533	50.0000	51.9
$	71 Bromofluorobenzene	95	14.954	14.954	(0.924)	490239	50.0000	51.5
	74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	176137	50.0000	50.6
	75 Bromobenzene	156	15.168	15.168	(0.937)	726564	50.0000	51.6
	76 n-Propylbenzene	91	15.180	15.180	(0.938)	2761274	50.0000	52.2
	77 2-Chlorotoluene	91	15.332	15.332	(0.948)	1906382	50.0000	50.7
	78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	2052269	50.0000	51.6
	80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1794013	50.0000	52.0
	81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2134441	50.0000	53.0
	79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	2170906	50.0000	51.6
	83 sec-Butylbenzene	105	15.930	15.930	(0.985)	2877475	50.0000	53.6
	84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	2359139	50.0000	53.6
	85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	1391684	50.0000	52.6
*	86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	821958	50.0000	
	87 1,4-Dichlorobenzene	146	16.210	16.210	(1.002)	1403820	50.0000	52.8
	89 n-Butylbenzene	91	16.503	16.503	(1.020)	2220473	50.0000	54.2
	90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1333800	50.0000	51.9
	92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	158368	50.0000	54.6
	93 1,2,4-Trichlorobenzene	180	18.630	18.630	(1.151)	834897	50.0000	57.4
	94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	594007	50.0000	57.8
	95 Naphthalene	128	19.033	19.033	(1.176)	1357910	50.0000	54.3
	96 1,2,3-Trichlorobenzene	180	19.386	19.386	(1.198)	642040	50.0000	55.9

Data File: /chem/VOA4.i/120209v4/4n302.d
Date : 02-DEC-2009 17:19
Client ID: VSTD050
Sample Info: IW4VM091202-01ICCV/LCS1I1VOAF1I1
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

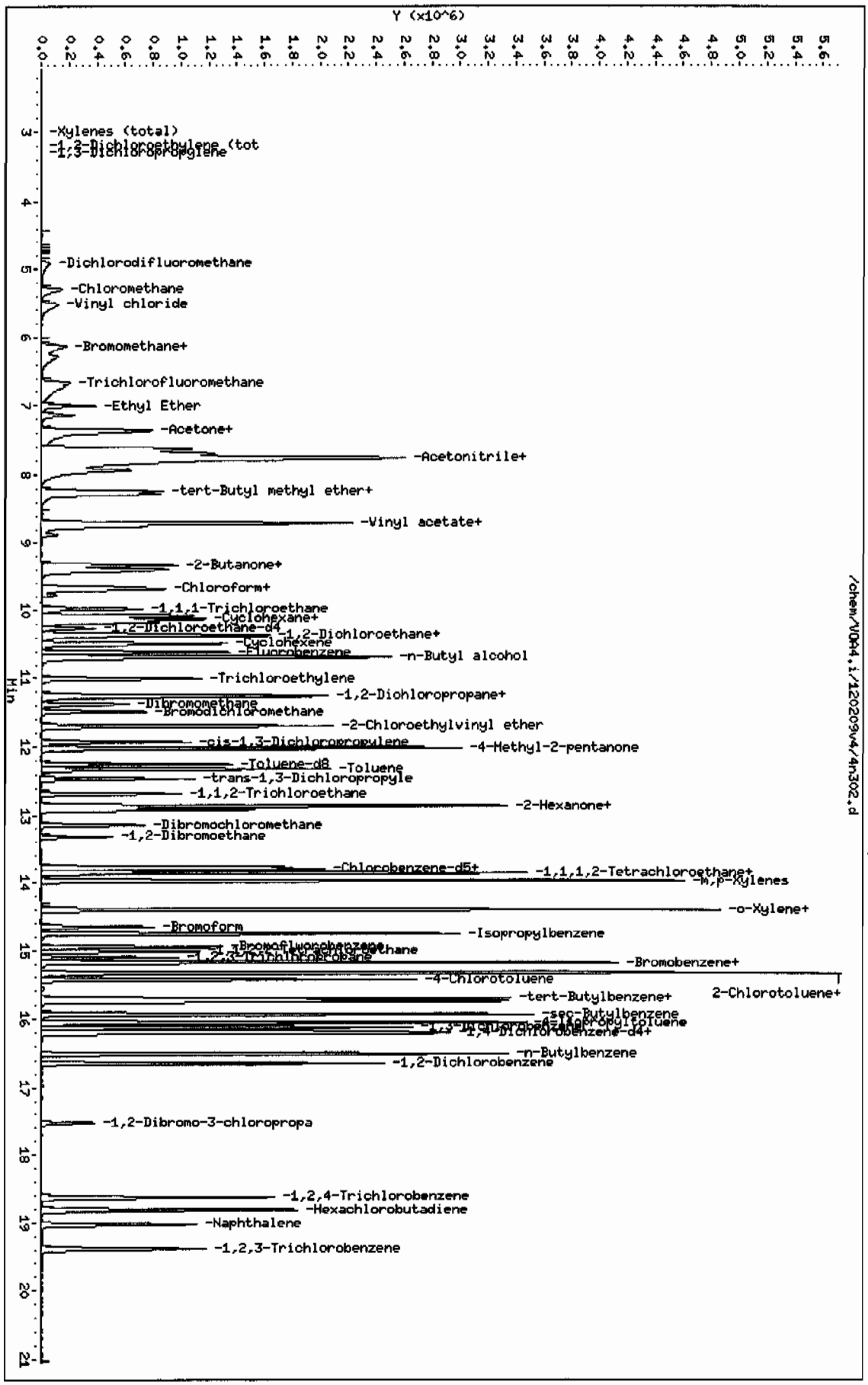

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 02-DEC-2009 18:14
Lab File ID: 4n304.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
9 Acrolein	0.05437	0.04795	0.04795	0.001	-11.80795	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.08408	0.08408	0.050	-10.24865	30.00000	Averaged
16 Allyl chloride	0.43415	0.37605	0.37605	0.010	-13.38072	30.00000	Averaged
18 Acrylonitrile	0.10963	0.09499	0.09499	0.010	-13.35284	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.36112	0.36112	0.010	-12.37794	30.00000	Averaged
28 Propionitrile	0.04604	0.03887	0.03887	0.010	-15.58604	30.00000	Averaged
26 Ethyl acetate	0.30734	0.23902	0.23902	0.010	-22.23135	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.15353	0.15353	0.010	-15.78149	30.00000	Averaged
72 Tetrahydrofuran	234	250	0.16906	0.010	-6.35564	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01157	0.01157	0.005	-17.14221	40.00000	Averaged
42 Methyl methacrylate	0.20344	0.16744	0.16744	0.010	-17.69688	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.39899	0.39899	0.010	-19.76985	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00311	0.00311	0.001	-14.43670	40.00000	Averaged
48 2-Nitropropane	0.09473	0.08373	0.08373	0.010	-11.60560	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.20645	0.20645	0.010	-6.49408	30.00000	Averaged
70 Cyclohexanone	0.03794	0.01905	0.01905	0.005	-49.79935	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.19573	0.19573	0.010	-8.26072	30.00000	Averaged
82 Pentachloroethane	0.44529	0.42766	0.42766	0.010	-3.95985	30.00000	Averaged
88 Benzyl chloride	1.24521	1.14744	1.14744	0.010	-7.85223	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.32144	0.32144	0.010	-13.50460	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.18732	0.18732	0.001	-4.61560	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.83169	0.83169	0.010	-4.49830	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.55269	0.55269	0.010	-4.54161	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 31.15721
Maximun Average %D/Drift = 20.00000
* Failed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n304.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 02-DEC-2009 18:14
Operator : ACJ Inst ID: VOA4.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9 Acrolein	56	7.186	7.186	(0.677)	399552	250.000	220
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	700648	250.000	224
16 Allyl chloride	41	7.802	7.802	(0.735)	3133681	250.000	216
18 Acrylonitrile	53	8.180	8.180	(0.770)	791556	250.000	217
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	601851	50.0000	43.8
28 Propionitrile	54	9.393	9.393	(0.885)	323876	250.000	211
26 Ethyl acetate	43	9.344	9.344	(0.880)	1991742	250.000	194
27 Methacrylonitrile	41	9.582	9.582	(0.902)	1279339	250.000	210
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	723265	250.000	234
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	964296	2500.00	2070
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1395290	250.000	206
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2543159	250.000	200
97 1,4-Dioxane	88	11.332	11.332	(1.067)	259435	2500.00	2140
48 2-Nitropropane	43	11.673	11.673	(1.099)	697764	250.000	221
68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	883252	250.000	234

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70 Cyclohexanone	42	14.904	14.904	(1.082)	607009	1250.00	628
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	837379	250.000	229
82 Pentachloroethane	167	15.776	15.776	(0.975)	1829647	250.000	240
88 Benzyl chloride	91	16.319	16.319	(1.009)	4909032	250.000	230
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1375189	250.000	216
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1666611	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.770	(1.000)	1274786	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.178	(1.000)	855653	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	312191	50.0000	47.7
$ 47 Toluene-d8	98	12.252	12.252	(0.890)	1060229	50.0000	47.8
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	472914	50.0000	47.7

Data File: /chem/VOA4.i/120209v4/4n304.d
Date : 02-DEC-2009 18:14
Client ID: VSTD250S
Sample Info: |UVM091118-08A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

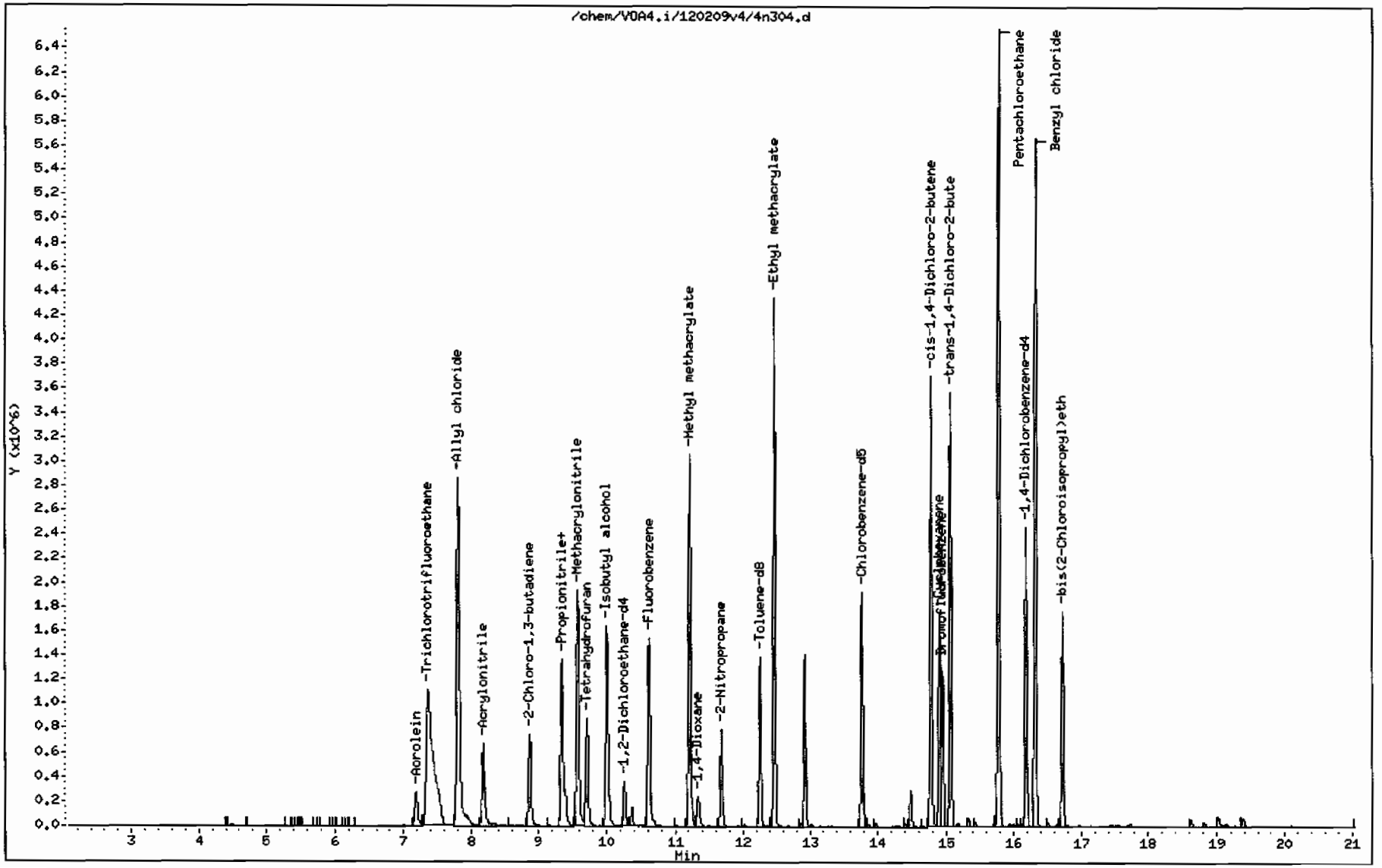

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-DEC-2009 17:25
Lab File ID: 4n402.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091203-01 Quant Type: ISTD
Method: /chem/VOA4.i/120309v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.68083	0.65272	0.65272	0.050	-4.12782	30.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.39466	0.39926	0.39926	0.050	1.16437	30.00000	Averaged
M 135 1,3-Dichloropropylene	0.43615	0.42842	0.42842	0.050	-1.77217	30.00000	Averaged
3 Dichlorodifluoromethane	0.23299	0.22391	0.22391	0.050	-3.89733	30.00000	Averaged
4 Chloromethane	0.35970	0.30077	0.30077	0.100	-16.38345	30.00000	Averaged spcc
5 Vinyl chloride	0.33298	0.30038	0.30038	0.050	-9.78805	20.00000	Averaged ccc
6 Bromomethane	0.26260	0.23836	0.23836	0.050	-9.23245	30.00000	Averaged
7 Chloroethane	0.24433	0.23197	0.23197	0.050	-5.06119	30.00000	Averaged
8 Trichlorofluoromethane	0.41084	0.42295	0.42295	0.050	2.94894	30.00000	Averaged
134 Ethyl Ether	0.22500	0.20815	0.20815	0.001	-7.48902	30.00000	Averaged
10 Acetone	0.20316	0.17506	0.17506	0.050	-13.83063	40.00000	Averaged
15 Acetonitrile	0.04590	0.04271	0.04271	0.010	-6.94840	30.00000	Averaged
11 1,1-Dichloroethylene	0.42328	0.42827	0.42827	0.050	1.17899	20.00000	Averaged ccc
128 Methyl acetate	0.23428	0.20546	0.20546	0.010	-12.29978	40.00000	Averaged
13 Iodomethane	0.50633	0.46822	0.46822	0.050	-7.52771	30.00000	Averaged
17 Methylene chloride	45.70781	50.00000	0.30678	0.050	-8.58439	30.00000	Linear
14 Carbon disulfide	0.87768	0.89048	0.89048	0.050	1.45879	30.00000	Averaged
20 tert-Butyl methyl ether	0.81951	0.74321	0.74321	0.050	-9.31045	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.37462	0.38572	0.38572	0.050	2.96507	30.00000	Averaged
23 Vinyl acetate	0.54481	0.55916	0.55916	0.010	2.63368	40.00000	Averaged
22 1,1-Dichloroethane	0.46596	0.46969	0.46969	0.100	0.80069	30.00000	Averaged spcc
30 2-Butanone	0.23374	0.20496	0.20496	0.030	-12.31546	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.41470	0.41279	0.41279	0.050	-0.46216	30.00000	Averaged
25 2,2-Dichloropropane	0.26910	0.29790	0.29790	0.050	10.70376	30.00000	Averaged
32 Chloroform	0.47081	0.46563	0.46563	0.010	-1.10098	20.00000	Averaged ccc
29 Bromochloromethane	0.14612	0.13623	0.13623	0.010	-6.77225	30.00000	Averaged
36 1,1,1-Trichloroethane	0.34939	0.38298	0.38298	0.010	9.61507	30.00000	Averaged
129 Cyclohexane	0.40354	0.43725	0.43725	0.010	8.35483	30.00000	Averaged
34 1,1-Dichloropropene	0.34759	0.37388	0.37388	0.010	7.56260	30.00000	Averaged
131 n-Butyl alcohol	0.01073	0.01090	0.01090	0.001	1.57636	40.00000	Averaged
33 Carbon tetrachloride	0.33700	0.37517	0.37517	0.010	11.32533	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.20786	0.20786	0.001	5.84314	30.00000	Averaged
37 1,2-Dichloroethane	0.37066	0.35462	0.35462	0.010	-4.32634	30.00000	Averaged
38 Benzene	1.07172	1.02828	1.02828	0.010	-4.05399	30.00000	Averaged
139 Cyclohexene	0.50663	0.52165	0.52165	0.001	2.96487	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-DEC-2009 17:25
Lab File ID: 4n402.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091203-01 Quant Type: ISTD
Method: /chem/VOA4.i/120309v4/VOA4-8260-112209.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.27835	0.27835	0.010	3.44692	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.27453	0.27453	0.010	-2.29297	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.46199	0.46199	0.010	7.67640	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.35852	0.35852	0.010	-0.84252	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.16224	0.16224	0.010	-6.51973	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.12382	0.12382	0.005	-22.79908	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.14550	0.14550	0.010	-9.85173	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.44322	0.44322	0.010	-1.69917	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.82699	0.82699	0.010	-5.03815	30.00000	Averaged	
	50 Toluene	0.87628	0.84076	0.84076	0.010	-4.05394	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.53855	0.53855	0.010	-3.71536	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.25541	0.25541	0.010	-8.10807	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.34857	0.34857	0.010	-19.85317	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.51330	0.51330	0.010	-8.73446	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.32702	0.32702	0.010	-3.92947	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.37295	0.37295	0.010	-3.03994	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.32786	0.32786	0.010	-6.93274	30.00000	Averaged	
	62 Chlorobenzene	1.01070	0.97887	0.97887	0.300	-3.14928	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.36281	0.36281	0.010	-4.94368	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.62828	1.62828	0.010	-3.75106	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.64893	0.64893	0.010	-3.50820	30.00000	Averaged	
	64 o-Xylene	0.69744	0.66031	0.66031	0.010	-5.32259	30.00000	Averaged	
	65 Styrene	1.18591	1.11390	1.11390	0.010	-6.07151	30.00000	Averaged	
	66 Bromoform	0.53939	0.49769	0.49769	0.100	-7.73104	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.66846	2.66846	0.010	-1.52730	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.74683	0.74683	0.300	-5.99791	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.55801	0.55801	0.010	-3.62359	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.19678	0.19678	0.010	-7.13328	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.78347	0.78347	0.010	-8.48968	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.18891	3.18891	0.010	-0.93035	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.16777	2.16777	0.010	-5.15943	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.31689	2.31689	0.010	-4.16316	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.05363	2.05363	0.010	-2.22671	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.40306	2.40306	0.010	-1.92426	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.44780	2.44780	0.010	-4.32411	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.22777	3.22777	0.010	-1.23604	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n402.d
Analysis Type: WATER
Lab Sample ID: W4VM091203-01 Quant Type: ISTD
Method: /chem/VOA4.i/120309v4/VOA4-8260-112209.m

Injection Date: 03-DEC-2009 17:25
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.64647	2.64647	0.010	-1.23686	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.51419	1.51419	0.010	-5.97488	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.49538	1.49538	0.010	-7.47680	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.50115	2.50115	0.010	0.38218	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.41312	1.41312	0.010	-9.59694	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.15933	0.15933	0.010	-9.65450	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.81604	0.81604	0.010	-7.84557	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.57575	0.57575	0.010	-7.90927	30.00000	Averaged
95 Naphthalene	1.52123	1.39293	1.39293	0.010	-8.43402	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.61644	0.61644	0.010	-11.80788	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.00551
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n402.d
Lab Smp Id: W4VM091203-01 Client Smp ID: VSTD050
Inj Date : 03-DEC-2009 17:25
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091203-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091129-01A/IVM091203-01
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2334720	150.000	144
M 2 1,2-Dichloroethylene (total)	96				1239603	100.000	101
M 135 1,3-Dichloropropylene	75				1330154	100.000	98.2
3 Dichlorodifluoromethane	85	4.919	4.919	(0.463)	347589	50.0000	48.0
4 Chloromethane	50	5.299	5.299	(0.499)	466914	50.0000	41.8
5 Vinyl chloride	62	5.521	5.521	(0.520)	466314	50.0000	45.1
6 Bromomethane	94	6.138	6.138	(0.578)	370023	50.0000	45.4
7 Chloroethane	64	6.288	6.288	(0.592)	360103	50.0000	47.5
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	656588	50.0000	51.5
134 Ethyl Ether	59	7.004	7.004	(0.660)	323133	50.0000	46.2
10 Acetone	43	7.363	7.363	(0.693)	1358788	250.000	215
15 Acetonitrile	41	7.705	7.705	(0.726)	1657480	1250.00	1160
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	664835	50.0000	50.6
128 Methyl acetate	43	7.753	7.753	(0.730)	1594799	250.000	219
13 Iodomethane	142	7.632	7.632	(0.719)	3634278	250.000	231
17 Methylene chloride	84	7.942	7.942	(0.748)	476243	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	6911894	250.000	254
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1153753	50.0000	45.3
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	598795	50.0000	51.5
23 Vinyl acetate	43	8.711	8.711	(0.820)	4340163	250.000	256
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	729148	50.0000	50.4
30 2-Butanone	43	9.326	9.326	(0.878)	1590873	250.000	219
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	640808	50.0000	49.8
25 2,2-Dichloropropane	77	9.418	9.418	(0.887)	462464	50.0000	55.4
32 Chloroform	83	9.692	9.692	(0.913)	722839	50.0000	49.4
29 Bromochloromethane	128	9.662	9.662	(0.910)	211475	50.0000	46.6
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	594532	50.0000	54.8
129 Cyclohexane	56	10.082	10.082	(0.949)	678782	50.0000	54.2
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	580409	50.0000	53.8
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1692317	5000.00	5080
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	582408	50.0000	55.7
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	322680	50.0000	52.9
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	550510	50.0000	47.8
38 Benzene	78	10.375	10.375	(0.977)	1596286	50.0000	48.0
139 Cyclohexene	67	10.497	10.497	(0.989)	809809	50.0000	51.5
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1552389	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	432105	50.0000	51.7
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	426181	50.0000	48.8
130 Methylcyclohexane	83	11.265	11.265	(1.061)	717186	50.0000	53.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	556569	50.0000	49.6
43 Dibromomethane	93	11.375	11.375	(1.071)	251859	50.0000	46.7
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	961046	250.000	193
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	867403	250.000	225
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	688044	50.0000	49.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	986019	50.0000	47.5
50 Toluene	92	12.326	12.326	(0.895)	1002433	50.0000	48.0
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	642110	50.0000	48.1
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	304525	50.0000	45.9
55 2-Hexanone	43	12.862	12.862	(0.934)	2078000	250.000	200
52 1,3-Dichloropropane	76	12.881	12.881	(0.935)	612011	50.0000	45.6
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	389906	50.0000	48.0
57 Dibromochloromethane	129	13.149	13.149	(0.955)	444670	50.0000	48.5
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	390909	50.0000	46.5
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1192298	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1167110	50.0000	48.4
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	432581	50.0000	47.5
58 Ethylbenzene	91	13.862	13.862	(1.007)	1941392	50.0000	48.1
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1547428	100.000	96.5
64 o-Xylene	106	14.405	14.405	(1.046)	787292	50.0000	47.3
65 Styrene	104	14.405	14.405	(1.046)	1328106	50.0000	47.0
66 Bromoform	173	14.661	14.661	(0.906)	402707	50.0000	46.1
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2159186	50.0000	49.2
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	604297	50.0000	47.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	451514	50.0000	48.2
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	159227	50.0000	46.4
75 Bromobenzene	156	15.167	15.167	(0.937)	633944	50.0000	45.8
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2580316	50.0000	49.5
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1754053	50.0000	47.4
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1874716	50.0000	47.9
80 4-Chlorotoluene	91	15.435	15.435	(0.954)	1661699	50.0000	48.9
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	1944437	50.0000	49.0
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	1980643	50.0000	47.8
83 sec-Butylbenzene	105	15.929	15.929	(0.985)	2611756	50.0000	49.4
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	2141394	50.0000	49.4
85 1,3-Dichlorobenzene	146	16.118	16.118	(0.996)	1225212	50.0000	47.0
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	809152	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1209991	50.0000	46.3
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2023810	50.0000	50.2
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1143428	50.0000	45.2
92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	128924	50.0000	45.2
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	660299	50.0000	46.1
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	465873	50.0000	46.0
95 Naphthalene	128	19.032	19.032	(1.176)	1127091	50.0000	45.8
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	498790	50.0000	44.1

Data File: /chem/VOA4.i/120309v4/4n402.d
Date : 03-DEC-2009 17:25
Client ID: VSTD050
Sample Info: M4VH091203-01ICV/LCS1ILVOAF11I
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

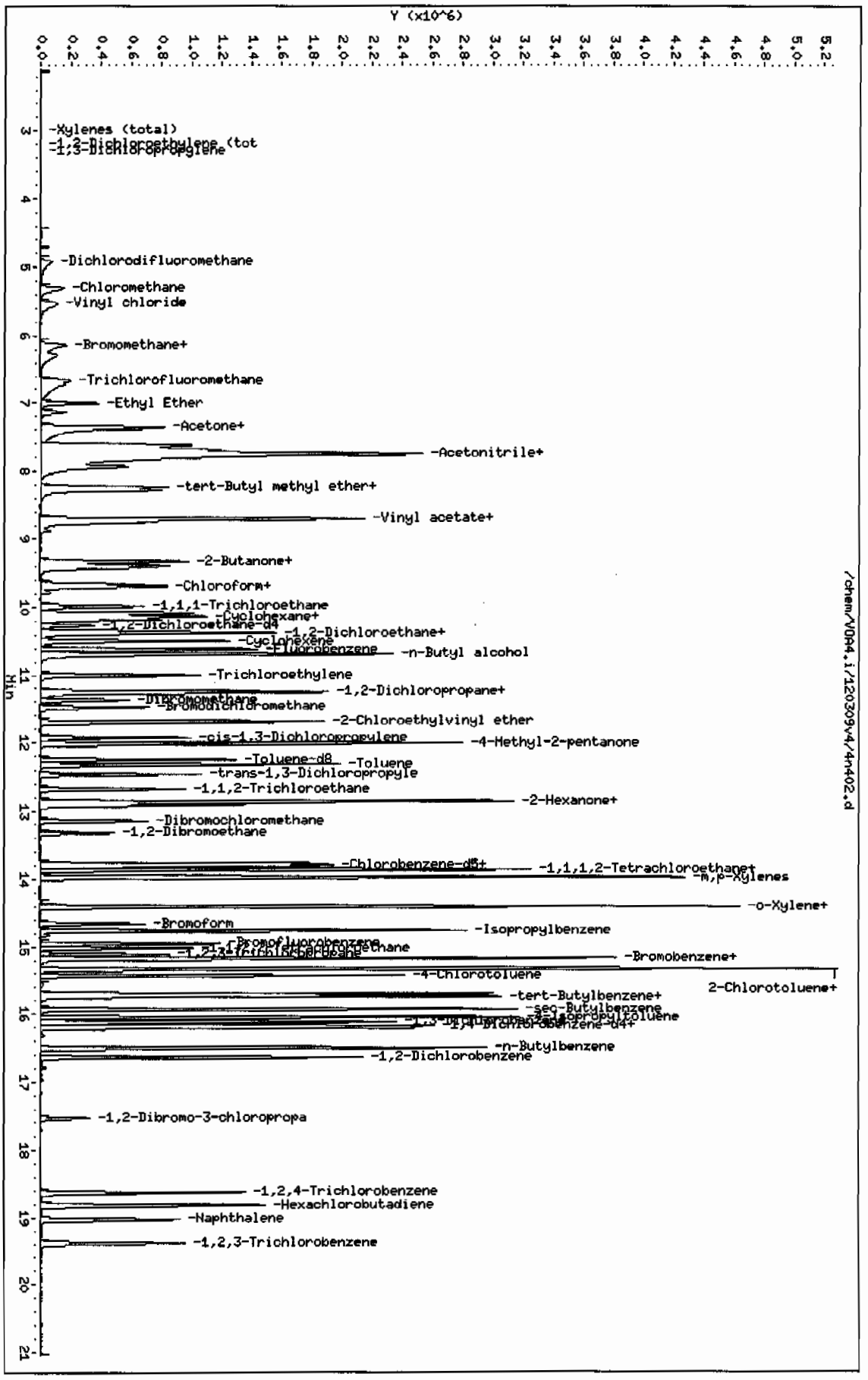

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n404.d
Analysis Type: WATER
Lab Sample ID: UVM091118-08A
Method: /chem/VOA4.i/120309v4/VOA4-8260-112209.m

Injection Date: 03-DEC-2009 18:20
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
9 Acrolein	0.05437	0.04890	0.04890	0.001	-10.06414	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.08808	0.08808	0.050	-5.97587	30.00000	Averaged
16 Allyl chloride	0.43415	0.38189	0.38189	0.010	-12.03625	30.00000	Averaged
18 Acrylonitrile	0.10963	0.09554	0.09554	0.010	-12.85306	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.36555	0.36555	0.010	-11.30432	30.00000	Averaged
28 Propionitrile	0.04604	0.03866	0.03866	0.010	-16.03905	30.00000	Averaged
26 Ethyl acetate	0.30734	0.24275	0.24275	0.010	-21.01683	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.15337	0.15337	0.010	-15.86426	30.00000	Averaged
72 Tetrahydrofuran	248	250	0.17886	0.010	-0.67883	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01200	0.01200	0.005	-14.10473	40.00000	Averaged
42 Methyl methacrylate	0.20344	0.16685	0.16685	0.010	-17.98924	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.39459	0.39459	0.010	-20.65441	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00315	0.00315	0.001	-13.51943	40.00000	Averaged
48 2-Nitropropane	0.09473	0.08533	0.08533	0.010	-9.92404	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.22059	0.22059	0.010	-0.09127	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02000	0.02000	0.005	-47.28853	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20782	0.20782	0.010	-2.59315	30.00000	Averaged
82 Pentachloroethane	0.44529	0.40912	0.40912	0.010	-8.12307	30.00000	Averaged
88 Benzyl chloride	1.24521	1.18193	1.18193	0.010	-5.08203	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.33143	0.33143	0.010	-10.81502	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.20077	0.20077	0.001	2.23066	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.87632	0.87632	0.010	0.62586	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.62267	0.62267	0.010	7.54410	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.00551
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n404.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 03-DEC-2009 18:20
Operator : ACJ Inst ID: VOA4.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
9 Acrolein	56	7.193	7.193	(0.677)	372701	250.000	225
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	671401	250.000	235
16 Allyl chloride	41	7.808	7.808	(0.735)	2910903	250.000	220
18 Acrylonitrile	53	8.180	8.180	(0.770)	728221	250.000	218
24 2-Chloro-1,3-butadiene	53	8.875	8.875	(0.836)	557265	50.0000	44.3
28 Propionitrile	54	9.393	9.393	(0.885)	294663	250.000	210
26 Ethyl acetate	43	9.345	9.345	(0.880)	1850320	250.000	197
27 Methacrylonitrile	41	9.582	9.582	(0.902)	1169075	250.000	210
72 Tetrahydrofuran	42	9.717	9.717	(0.601)	658237	250.000	248
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	914387	2500.00	2150
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1271753	250.000	205
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2308222	250.000	198
97 1,4-Dioxane	88	11.332	11.332	(1.067)	239852	2500.00	2160
48 2-Nitropropane	43	11.680	11.680	(1.100)	650394	250.000	225
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	811798	250.000	250
70 Cyclohexanone	42	14.911	14.911	(1.083)	584938	1250.00	659

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	764813	250.000	244
82 Pentachloroethane	167	15.776	15.776	(0.975)	1505636	250.000	230
88 Benzyl chloride	91	16.319	16.319	(1.009)	4349692	250.000	237
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1219720	250.000	223
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1524467	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1169920	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	736032	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	306061	50.0000	51.1
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1025220	50.0000	50.3
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	458304	50.0000	53.8

Data File: /chem/VOA4.i/120309v4/4n404.d
Date : 03-DEC-2009 18:20
Client ID: VSTD250S
Sample Info: |UVM091118-08A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

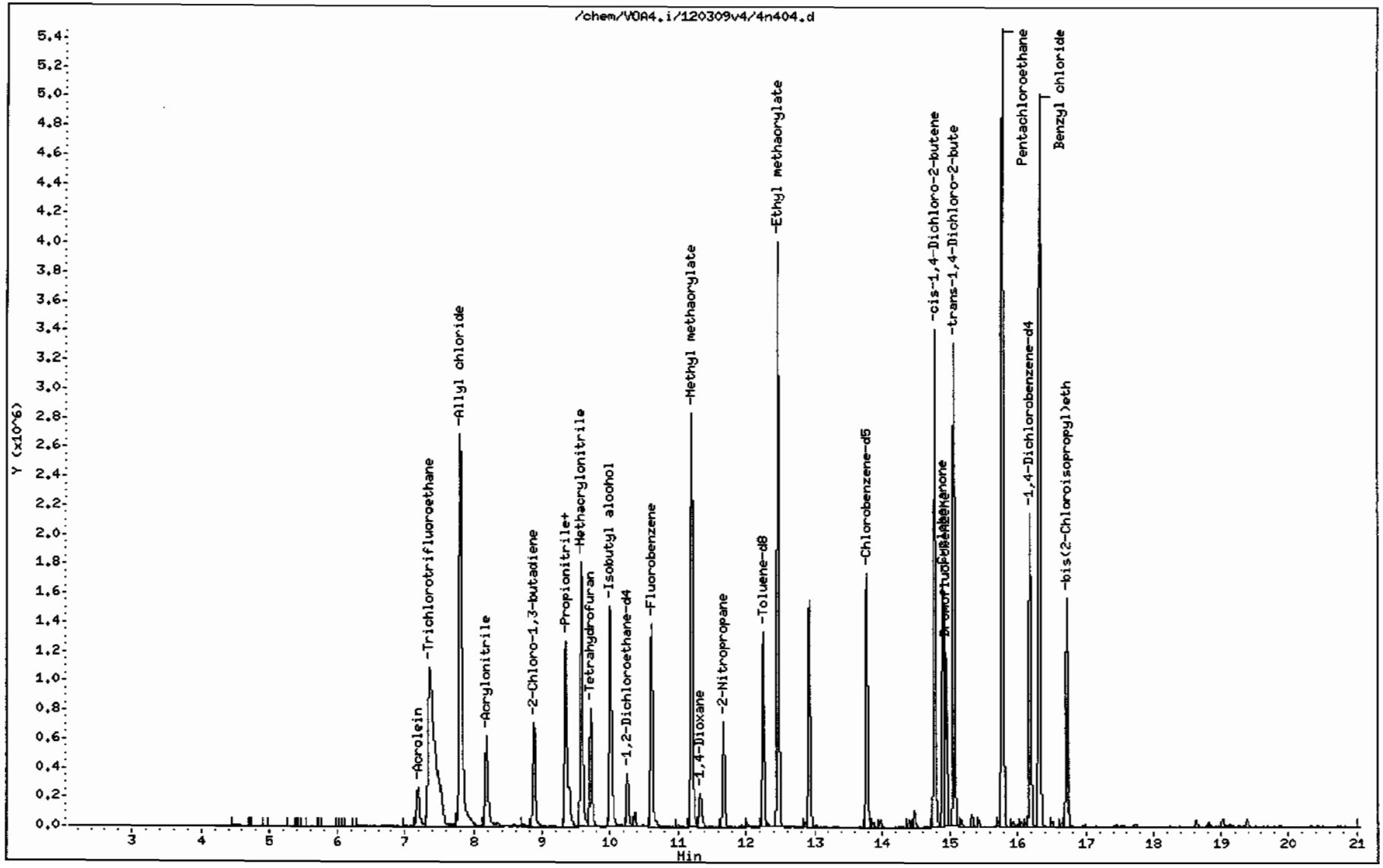

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 07-DEC-2009 14:10
Lab File ID: 4o102.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091207-01 Quant Type: ISTD
Method: /chem/VOA4.i/120709v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.62814	0.62814	0.050	-7.73832	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.40067	0.40067	0.050	1.52311	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.42931	0.42931	0.050	-1.56747	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.23926	0.23926	0.050	2.69116	30.00000	Averaged	
4 Chloromethane	0.35970	0.31945	0.31945	0.100	-11.19161	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.32432	0.32432	0.050	-2.60128	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.25408	0.25408	0.050	-3.24348	30.00000	Averaged	
7 Chloroethane	0.24433	0.24165	0.24165	0.050	-1.09755	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.43720	0.43720	0.050	6.41765	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.20568	0.20568	0.001	-8.58917	30.00000	Averaged	
10 Acetone	0.20316	0.18772	0.18772	0.050	-7.59743	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04238	0.04238	0.010	-7.65738	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.43190	0.43190	0.050	2.03762	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.20085	0.20085	0.010	-14.26911	40.00000	Averaged	
13 Iodomethane	0.50633	0.47885	0.47885	0.050	-5.42856	30.00000	Averaged	
17 Methylene chloride	45.63645	50.00000	0.30636	0.050	-8.72710	30.00000	Linear	
14 Carbon disulfide	0.87768	0.91214	0.91214	0.050	3.92556	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.72269	0.72269	0.050	-11.81441	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.39061	0.39061	0.050	4.26846	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.54146	0.54146	0.010	-0.61466	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.47341	0.47341	0.100	1.59868	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.21749	0.21749	0.030	-6.95241	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.41074	0.41074	0.050	-0.95676	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.30326	0.30326	0.050	12.69295	30.00000	Averaged	
32 Chloroform	0.47081	0.46485	0.46485	0.010	-1.26572	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.13607	0.13607	0.010	-6.87972	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.38814	0.38814	0.010	11.09249	30.00000	Averaged	
129 Cyclohexane	0.40354	0.45400	0.45400	0.010	12.50683	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.38112	0.38112	0.010	9.64402	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01094	0.01094	0.001	1.91558	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.38334	0.38334	0.010	13.75108	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.20490	0.20490	0.001	4.33460	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.34296	0.34296	0.010	-7.47323	30.00000	Averaged	
38 Benzene	1.07172	1.03988	1.03988	0.010	-2.97102	30.00000	Averaged	
139 Cyclohexene	0.50663	0.53303	0.53303	0.001	5.21035	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 07-DEC-2009 14:10
Lab File ID: 4o102.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091207-01 Quant Type: ISTD
Method: /chem/VOA4.i/120709v4/VOA4-8260-112209.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.27731	0.27731	0.010	3.06273	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.27237	0.27237	0.010	-3.06411	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.47854	0.47854	0.010	11.53448	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.35204	0.35204	0.010	-2.63650	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.16143	0.16143	0.010	-6.98673	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.12851	0.12851	0.005	-19.87380	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.14078	0.14078	0.010	-12.77761	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.44187	0.44187	0.010	-1.99712	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.76546	0.76546	0.010	-12.10324	30.00000	Averaged	
	50 Toluene	0.87628	0.79328	0.79328	0.010	-9.47253	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.50653	0.50653	0.010	-9.44009	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.23875	0.23875	0.010	-14.10173	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.35734	0.35734	0.010	-17.83786	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.47166	0.47166	0.010	-16.13936	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.31464	0.31464	0.010	-7.56771	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.34703	0.34703	0.010	-9.77851	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.30766	0.30766	0.010	-12.66600	30.00000	Averaged	
	62 Chlorobenzene	1.01070	0.93105	0.93105	0.300	-7.88115	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.34614	0.34614	0.010	-9.31115	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.55462	1.55462	0.010	-8.10501	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.62506	0.62506	0.010	-7.05689	30.00000	Averaged	
	64 o-Xylene	0.69744	0.63430	0.63430	0.010	-9.05230	30.00000	Averaged	
	65 Styrene	1.18591	1.06758	1.06758	0.010	-9.97741	30.00000	Averaged	
	66 Bromoform	0.53939	0.46060	0.46060	0.100	-14.60693	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.47584	2.47584	0.010	-8.63541	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.67275	0.67275	0.300	-15.32242	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.50975	0.50975	0.010	-11.95925	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.17788	0.17788	0.010	-16.05361	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.71806	0.71806	0.010	-16.12921	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	2.93455	2.93455	0.010	-8.83276	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	1.98512	1.98512	0.010	-13.15015	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.12744	2.12744	0.010	-11.99963	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	1.86507	1.86507	0.010	-11.20418	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.19811	2.19811	0.010	-10.28852	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.21580	2.21580	0.010	-13.39227	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	2.98028	2.98028	0.010	-8.80874	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4o102.d
Analysis Type: WATER
Lab Sample ID: W4VM091207-01
Method: /chem/VOA4.i/120709v4/VOA4-8260-112209.m

Injection Date: 07-DEC-2009 14:10
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.41209	2.41209	0.010	-9.98366	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.38252	1.38252	0.010	-14.15131	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.36873	1.36873	0.010	-15.31320	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.29092	2.29092	0.010	-8.05534	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.30509	1.30509	0.010	-16.50785	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.14903	0.14903	0.010	-15.49657	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.75810	0.75810	0.010	-14.38884	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.54203	0.54203	0.010	-13.30295	30.00000	Averaged
95 Naphthalene	1.52123	1.28003	1.28003	0.010	-15.85583	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.57648	0.57648	0.010	-17.52425	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.08189
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o102.d
Lab Smp Id: W4VM091207-01 Client Smp ID: VSTD050
Inj Date : 07-DEC-2009 14:10
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091207-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091129-01B/IVM091203-01
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2468061	150.000	138
M 2 1,2-Dichloroethylene (total)	96				1275611	100.000	102
M 135 1,3-Dichloropropylene	75				1366798	100.000	98.4
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	380857	50.0000	51.3
4 Chloromethane	50	5.299	5.299	(0.499)	508507	50.0000	44.4
5 Vinyl chloride	62	5.528	5.528	(0.521)	516257	50.0000	48.7
6 Bromomethane	94	6.137	6.137	(0.578)	404461	50.0000	48.4
7 Chloroethane	64	6.288	6.288	(0.592)	384670	50.0000	49.4
8 Trichlorofluoromethane	101	6.669	6.669	(0.628)	695958	50.0000	53.2
134 Ethyl Ether	59	7.005	7.005	(0.660)	327404	50.0000	45.7
10 Acetone	43	7.358	7.358	(0.693)	1494105	250.000	231
15 Acetonitrile	41	7.706	7.706	(0.726)	1686650	1250.00	1150
11 1,1-Dichloroethylene	61	7.389	7.389	(0.696)	687515	50.0000	51.0
128 Methyl acetate	43	7.748	7.748	(0.730)	1598604	250.000	214
13 Iodomethane	142	7.626	7.626	(0.718)	3811227	250.000	236
17 Methylene chloride	84	7.937	7.937	(0.747)	487679	50.0000	45.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.767	7.767	(0.731)	7259857	250.000	260
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1150407	50.0000	44.1
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	621784	50.0000	52.1
23 Vinyl acetate	43	8.711	8.711	(0.820)	4309598	250.000	248
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	753596	50.0000	50.8
30 2-Butanone	43	9.327	9.327	(0.878)	1731075	250.000	233
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	653827	50.0000	49.5
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	482737	50.0000	56.3
32 Chloroform	83	9.693	9.693	(0.913)	739973	50.0000	49.4
29 Bromochloromethane	128	9.663	9.663	(0.910)	216599	50.0000	46.6
36 1,1,1-Trichloroethane	97	9.980	9.980	(0.940)	617857	50.0000	55.5
129 Cyclohexane	56	10.083	10.083	(0.949)	722702	50.0000	56.2
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	606675	50.0000	54.8
131 n-Butyl alcohol	56	10.693	10.693	(1.007)	1741117	5000.00	5100
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	610221	50.0000	56.9
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	326164	50.0000	52.2
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	545932	50.0000	46.3
38 Benzene	78	10.376	10.376	(0.977)	1655326	50.0000	48.5
139 Cyclohexene	67	10.492	10.492	(0.988)	848497	50.0000	52.6
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1591838	50.0000	
39 Trichloroethylene	95	11.004	11.004	(1.036)	441440	50.0000	51.5
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	433562	50.0000	48.5
130 Methylcyclohexane	83	11.266	11.266	(1.061)	761761	50.0000	55.8
45 Bromodichloromethane	83	11.485	11.485	(1.082)	560387	50.0000	48.7
43 Dibromomethane	93	11.376	11.376	(1.071)	256969	50.0000	46.5
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1022809	250.000	200
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	921900	250.000	218
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	703390	50.0000	49.0
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1002539	50.0000	43.9
50 Toluene	92	12.327	12.327	(0.895)	1038965	50.0000	45.3
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	663408	50.0000	45.3
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	312696	50.0000	42.9
55 2-Hexanone	43	12.857	12.857	(0.934)	2340040	250.000	205
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	617736	50.0000	41.9
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	412084	50.0000	46.2
57 Dibromochloromethane	129	13.144	13.144	(0.954)	454514	50.0000	45.1
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	402953	50.0000	43.7
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1309716	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1219410	50.0000	46.0
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	453349	50.0000	45.3
58 Ethylbenzene	91	13.863	13.863	(1.007)	2036111	50.0000	45.9
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1637305	100.000	92.9
64 o-Xylene	106	14.399	14.399	(1.046)	830756	50.0000	45.5
65 Styrene	104	14.399	14.399	(1.046)	1398232	50.0000	45.0
66 Bromoform	173	14.655	14.655	(0.906)	427151	50.0000	42.7
67 Isopropylbenzene	105	14.759	14.759	(0.912)	2296029	50.0000	45.7
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	623888	50.0000	42.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	472726	50.0000	44.0
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	164962	50.0000	42.0
75 Bromobenzene	156	15.168	15.168	(0.937)	665912	50.0000	41.9
76 n-Propylbenzene	91	15.180	15.180	(0.938)	2721425	50.0000	45.6
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	1840954	50.0000	43.4
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	1972935	50.0000	44.0
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1729617	50.0000	44.4
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2038476	50.0000	44.8
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	2054876	50.0000	43.3
83 sec-Butylbenzene	105	15.930	15.930	(0.985)	2763838	50.0000	45.6
84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	2236909	50.0000	45.0
85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	1282113	50.0000	42.9
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	927375	50.0000	
87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	1269324	50.0000	42.3
89 n-Butylbenzene	91	16.503	16.503	(1.020)	2124540	50.0000	46.0
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1210310	50.0000	41.7
92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	138206	50.0000	42.2
93 1,2,4-Trichlorobenzene	180	18.630	18.630	(1.151)	703040	50.0000	42.8
94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	502668	50.0000	43.3
95 Naphthalene	128	19.033	19.033	(1.176)	1187064	50.0000	42.1
96 1,2,3-Trichlorobenzene	180	19.386	19.386	(1.198)	534613	50.0000	41.2

Data File: /chem/VOA4.i/120709v4/4o102.d
Date : 07-DEC-2009 14:10
Client ID: VSTD050
Sample Info: IW4VH091207-01|CCV/LCS|1|VOAF1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

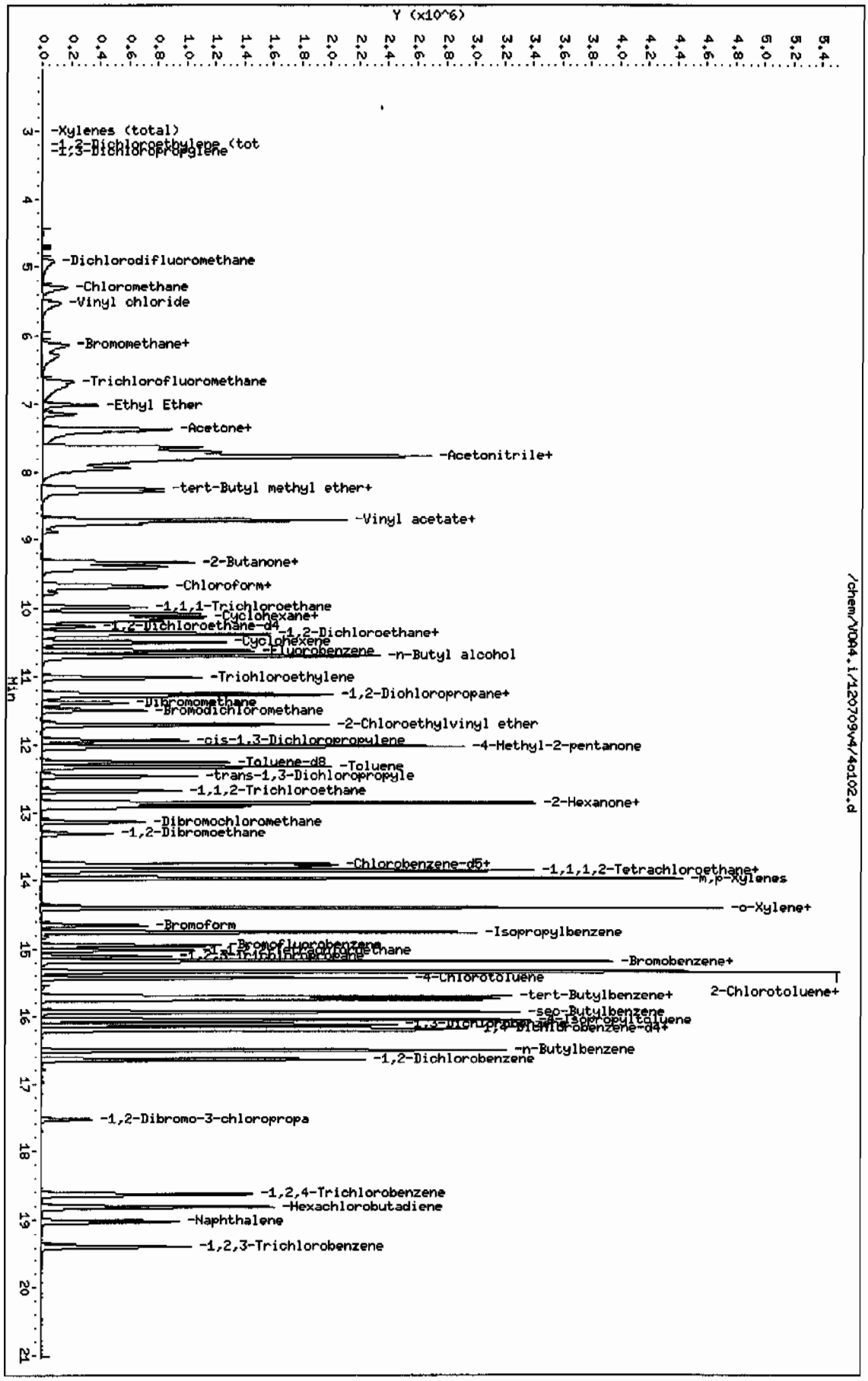

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 07-DEC-2009 15:04
Lab File ID: 4o104.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091207-03 Quant Type: ISTD
Method: /chem/VOA4.i/120709v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	0.17243	0.18757	0.18757	0.010	8.78062	30.00000	Averaged
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.29218	0.29218	0.010	12.56116	30.00000	Averaged
9 Acrolein	0.05437	0.05980	0.05980	0.001	9.98572	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.10451	0.10451	0.050	11.56181	30.00000	Averaged
147 Isopropyl Alcohol	0.02698	0.02625	0.02625	0.010	-2.68716	40.00000	Averaged
16 Allyl chloride	0.43415	0.43145	0.43145	0.010	-0.62045	30.00000	Averaged
148 tert-Butyl Alcohol	0.04036	0.03942	0.03942	0.010	-2.33068	40.00000	Averaged
18 Acrylonitrile	0.10963	0.11033	0.11033	0.010	0.64261	30.00000	Averaged
149 Isopropyl ether	0.91700	0.88994	0.88994	0.010	-2.95012	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.42800	0.42800	0.010	3.84900	30.00000	Averaged
150 Ethyl tert-butyl ether	0.83865	0.81020	0.81020	0.010	-3.39143	30.00000	Averaged
28 Propionitrile	0.04604	0.04517	0.04517	0.010	-1.89585	30.00000	Averaged
26 Ethyl acetate	0.30734	0.27784	0.27784	0.010	-9.59998	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.17947	0.17947	0.010	-1.55175	30.00000	Averaged
72 Tetrahydrofuran	259	250	0.18647	0.010	3.72790	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01356	0.01356	0.005	-2.91971	40.00000	Averaged
151 Methyl tert-amyl ether	0.83559	0.79416	0.79416	0.010	-4.95774	30.00000	Averaged
42 Methyl methacrylate	0.20344	0.19135	0.19135	0.010	-5.94621	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.44046	0.44046	0.010	-11.43082	30.00000	Averaged
152 1-Chlorohexane	0.25454	0.26468	0.26468	0.010	3.98326	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00370	0.00370	0.001	1.77279	40.00000	Averaged
48 2-Nitropropane	0.09473	0.09859	0.09859	0.010	4.07848	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.23010	0.23010	0.010	4.21913	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02364	0.02364	0.005	-37.69301	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.21335	0.21512	0.21512	0.010	0.82661	30.00000	Averaged
82 Pentachloroethane	0.44529	0.44684	0.44684	0.010	0.34713	30.00000	Averaged
88 Benzyl chloride	1.24521	1.23957	1.23957	0.010	-0.45349	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.35692	0.35692	0.010	-3.95687	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.18677	0.18677	0.001	-4.89590	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.80123	0.80123	0.010	-7.99621	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.51860	0.51860	0.010	-10.43071	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4o104.d
Analysis Type: WATER
Lab Sample ID: W4VM091207-03
Method: /chem/VOA4.i/120709v4/VOA4-8260-112209.m

Injection Date: 07-DEC-2009 15:04
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

Average %D / Drift Results.	
Calculated Average %D/Drift =	9.08189
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o104.d
Lab Smp Id: W4VM091207-03 Client Smp ID: VSTD250S
Inj Date : 07-DEC-2009 15:04
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091207-03|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02D/UVM091118-08B
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	929992	150.000	163
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1448655	150.000	169
9 Acrolein	56	7.186	7.186	(0.677)	494125	250.000	275
12 Trichlorotrifluoroethane	85	7.369	7.369	(0.694)	863636	250.000	279
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2169430	2500.00	2430
16 Allyl chloride	41	7.802	7.802	(0.735)	3565282	250.000	248
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3257117	2500.00	2440
18 Acrylonitrile	53	8.180	8.180	(0.770)	911729	250.000	252
149 Isopropyl ether	45	8.747	8.747	(0.824)	1470798	50.0000	48.5
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	707350	50.0000	51.9
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1339014	50.0000	48.3
28 Propionitrile	54	9.393	9.393	(0.885)	373257	250.000	245
26 Ethyl acetate	43	9.344	9.344	(0.880)	2295904	250.000	226
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1483005	250.000	246
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	827548	250.000	259
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1120378	2500.00	2430

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1312499	50.0000	47.5
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1581179	250.000	235
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2832104	250.000	221
152 1-Chlorohexane	55	13.667	13.667	(1.287)	437430	50.0000	52.0
97 1,4-Dioxane	88	11.332	11.332	(1.067)	306005	2500.00	2540
48 2-Nitropropane	43	11.673	11.673	(1.099)	814707	250.000	260
68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	1021183	250.000	260
70 Cyclohexanone	42	14.904	14.904	(1.082)	759999	1250.00	779
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	954669	250.000	252
82 Pentachloroethane	167	15.776	15.776	(0.975)	1983034	250.000	251(A)
88 Benzyl chloride	91	16.319	16.319	(1.009)	5501080	250.000	249
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1583968	250.000	240
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1652688	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1285961	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	887582	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	308673	50.0000	47.6
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1030350	50.0000	46.0
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	460296	50.0000	44.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/120709v4/4o104.d
Date : 07-DEC-2009 15:04
Client ID: VSTD250S
Sample Info: |W4VM091207-03|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

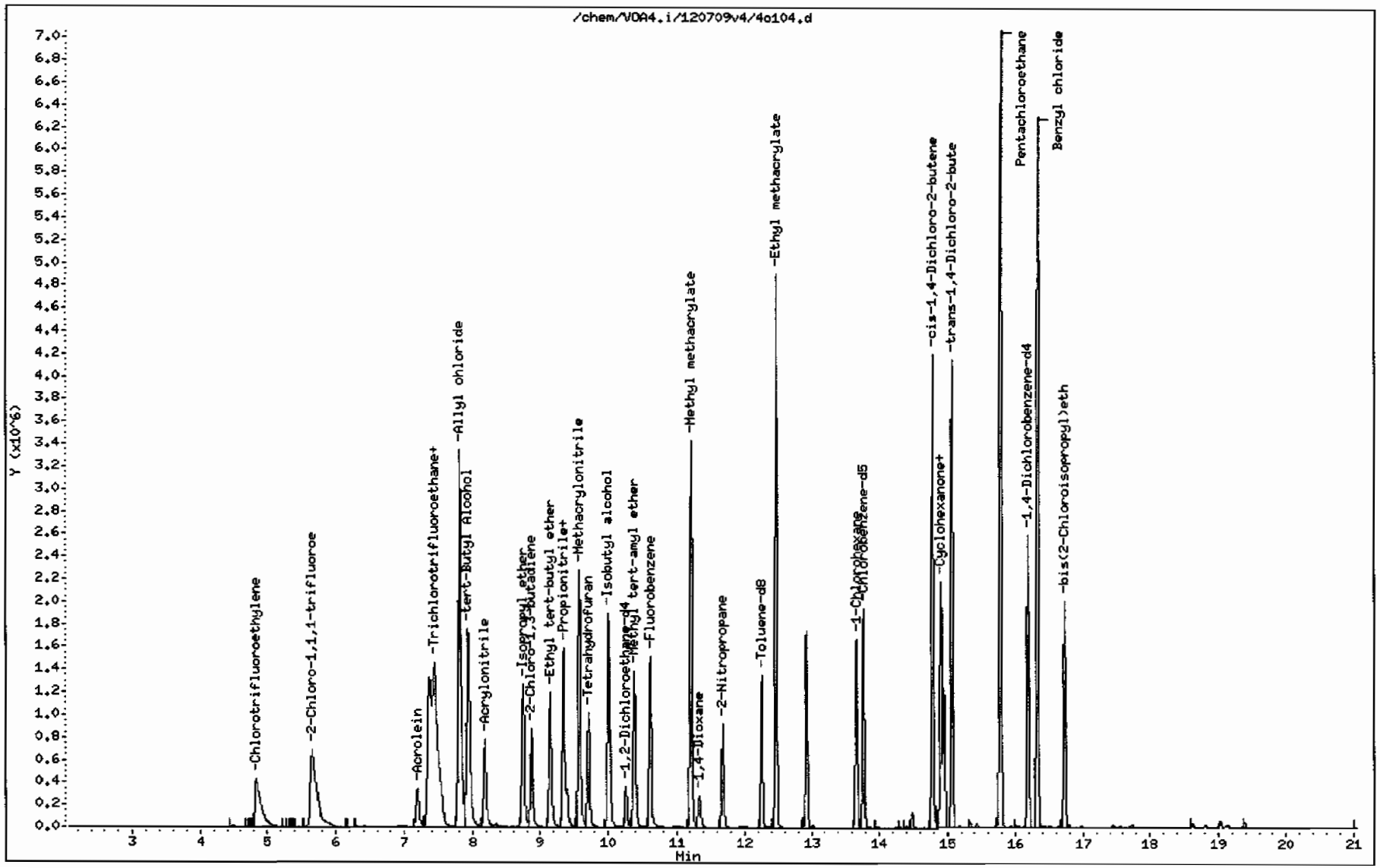

QC Data

Data File: /chem/VOA4.i/112209v4/41701.d

Page 1

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

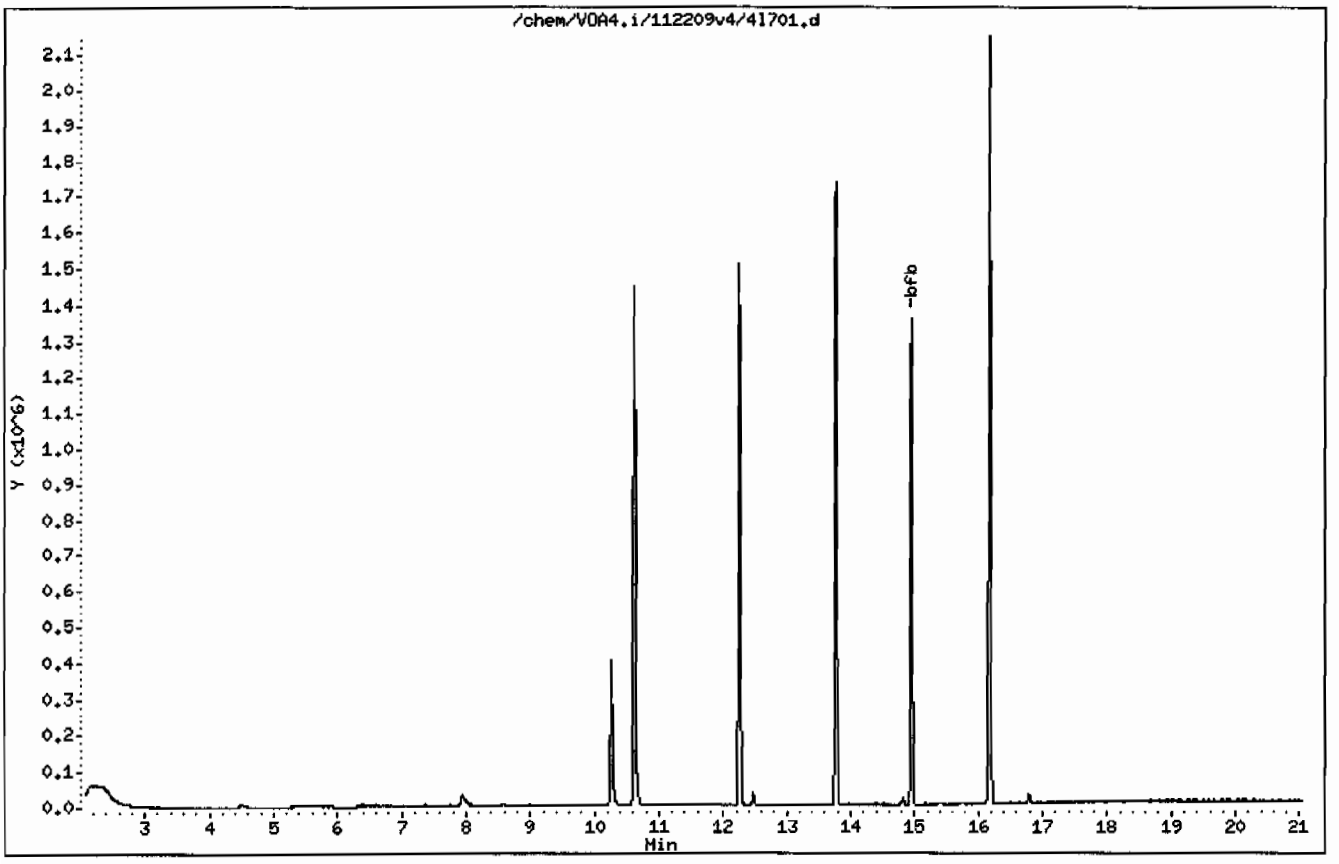

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

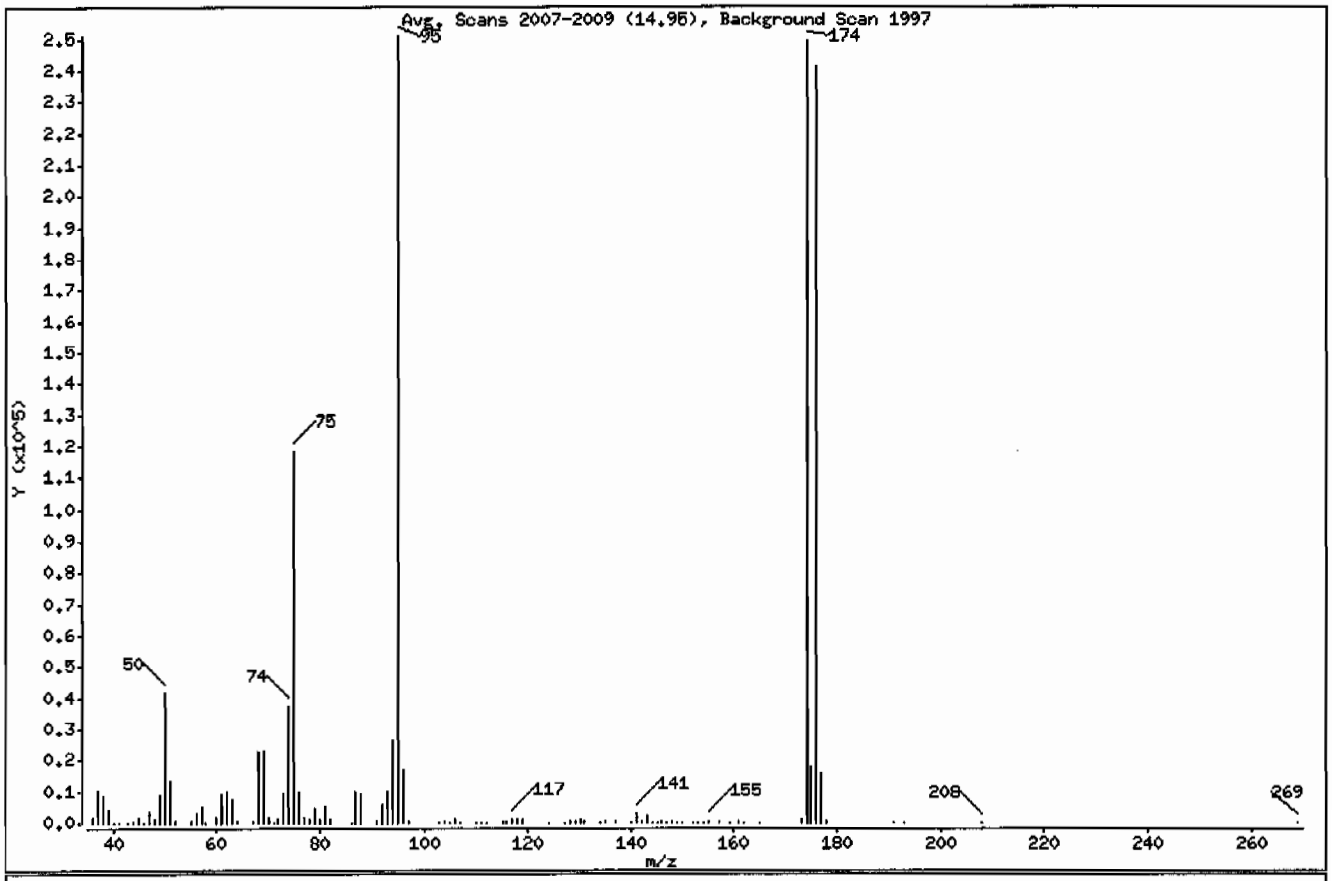

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.46
75	30.00 - 60.00% of mass 95	47.01
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.43 (0.43)
174	50.00 - 100.00% of mass 95	99.29
175	5.00 - 9.00% of mass 174	7.09 (7.14)
176	95.00 - 101.00% of mass 174	96.07 (96.76)
177	5.00 - 9.00% of mass 176	6.11 (6.36)

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVH091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 41701.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1997
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1852	68.00	22712	104.00	786	145.00	227
37.00	10469	69.00	23288	105.00	216	146.00	338
38.00	8405	70.00	1742	106.00	913	147.00	212
39.00	4011	71.00	281	107.00	271	148.00	588
40.00	10	72.00	1018	110.00	50	149.00	261
41.00	174	73.00	9172	111.00	93	150.00	273
43.00	32	74.00	37232	112.00	54	152.00	51
44.00	673	75.00	118008	115.00	294	153.00	133
45.00	1913	76.00	10049	116.00	814	154.00	263
46.00	181	77.00	1447	117.00	1364	155.00	862
47.00	3182	78.00	1010	118.00	999	157.00	488
48.00	1157	79.00	4497	119.00	1228	159.00	282
49.00	8549	80.00	1297	124.00	61	161.00	368
50.00	41280	81.00	4964	127.00	56	162.00	58
51.00	13197	82.00	981	128.00	697	165.00	52
52.00	604	86.00	130	129.00	382	173.00	1069
55.00	416	87.00	9653	130.00	872	174.00	249216
56.00	2604	88.00	9450	131.00	389	175.00	17792
57.00	5395	91.00	777	134.00	55	176.00	241152
58.00	216	92.00	6052	135.00	375	177.00	15329
60.00	1746	93.00	9586	137.00	534	178.00	346
61.00	9083	94.00	26584	140.00	119	191.00	57
62.00	9883	95.00	251008	141.00	2645	193.00	50
63.00	7531	96.00	16696	142.00	321	208.00	106
64.00	738	97.00	497	143.00	2485	269.00	58
67.00	656	103.00	132	144.00	135		

Data File: /chem/VOA4.i/120209v4/4n301.d

Date : 02-DEC-2009 16:51

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

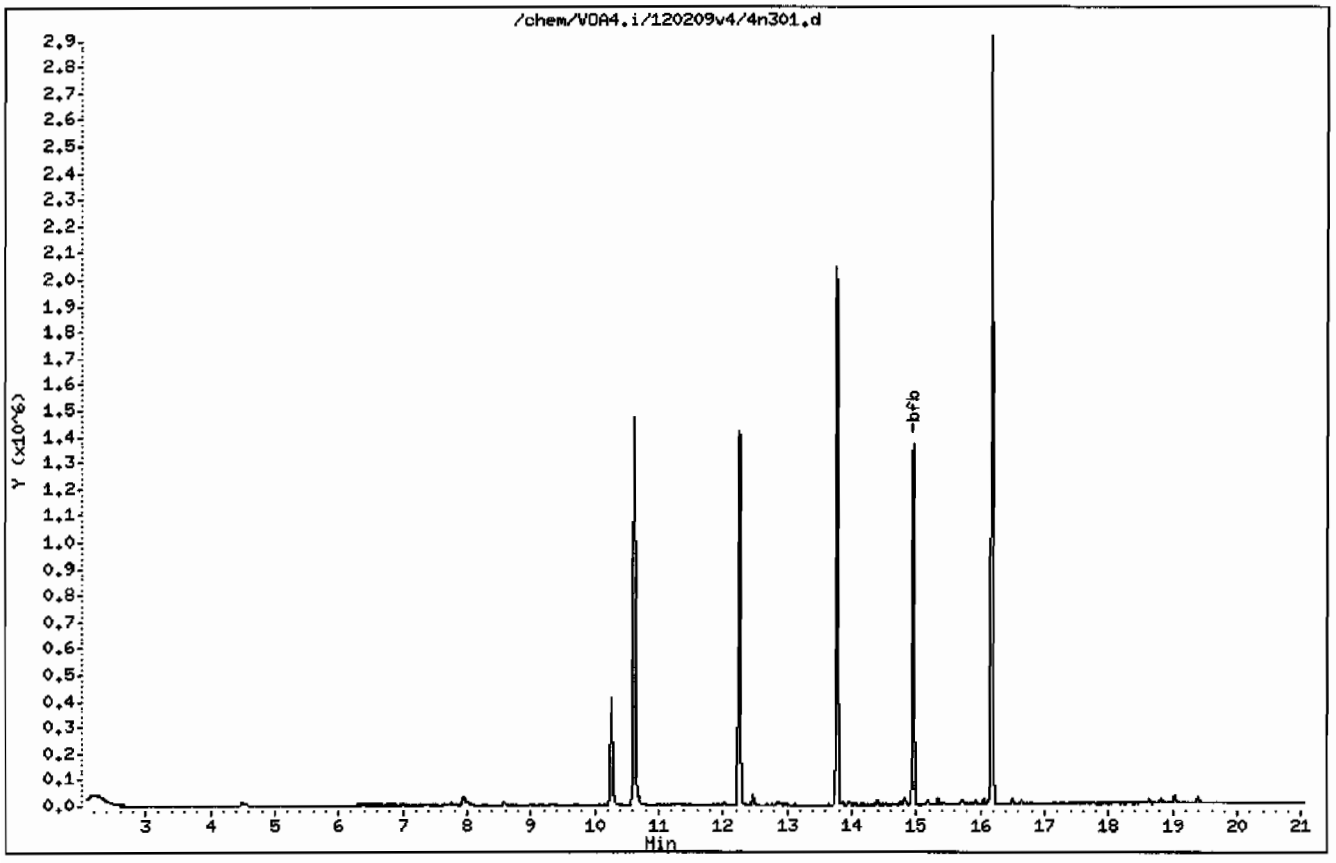

Data File: /chem/VOA4.i/120209v4/4n301.d

Date : 02-DEC-2009 16:51

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

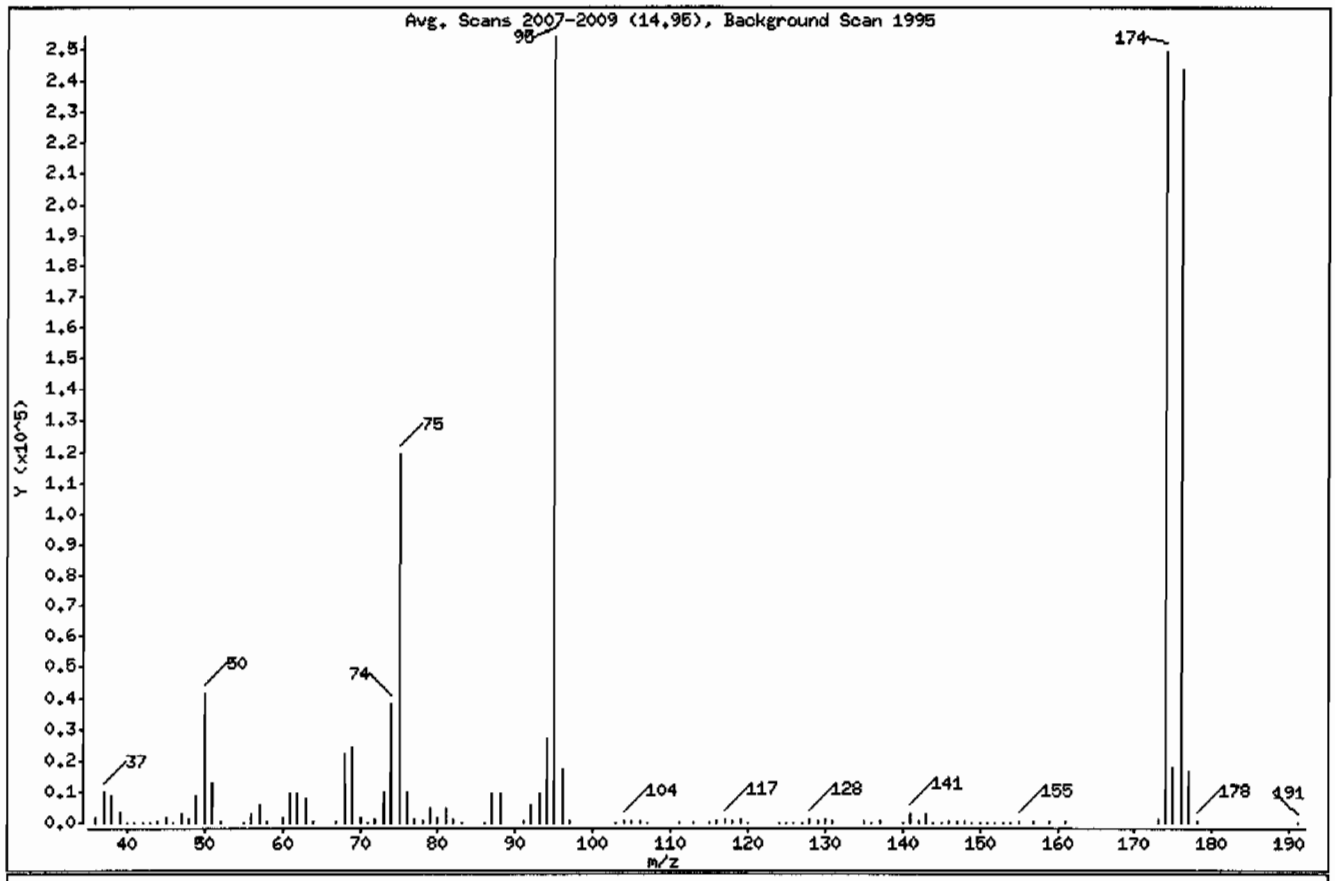

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.41
75	30.00 - 60.00% of mass 95	46.96
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.50 (0.51)
174	50.00 - 100.00% of mass 95	98.09
175	5.00 - 9.00% of mass 174	6.88 (7.02)
176	95.00 - 101.00% of mass 174	95.94 (97.82)
177	5.00 - 9.00% of mass 176	6.44 (6.71)

Data File: /chem/VOA4.i/120209v4/4n301.d

Date : 02-DEC-2009 16:51

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4n301.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1995
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2012	67.00	452	97.00	586	141.00	2673
37.00	9830	68.00	22344	103.00	50	142.00	414
38.00	8781	69.00	24104	104.00	857	143.00	2665
39.00	3559	70.00	1886	105.00	367	144.00	199
40.00	136	71.00	61	106.00	830	145.00	220
41.00	73	72.00	1156	107.00	206	146.00	365
42.00	52	73.00	9851	111.00	145	147.00	326
43.00	63	74.00	37784	113.00	130	148.00	681
44.00	510	75.00	119288	115.00	282	149.00	266
45.00	1634	76.00	9643	116.00	655	150.00	287
46.00	147	77.00	1129	117.00	1276	151.00	54
47.00	2968	78.00	845	118.00	761	152.00	92
48.00	1059	79.00	4852	119.00	1015	153.00	146
49.00	8873	80.00	1530	120.00	68	154.00	105
50.00	41680	81.00	4578	124.00	78	155.00	714
51.00	12772	82.00	964	125.00	54	157.00	488
52.00	587	83.00	123	126.00	82	159.00	326
55.00	170	86.00	205	127.00	53	161.00	335
56.00	2975	87.00	9205	128.00	948	173.00	1267
57.00	5577	88.00	9073	129.00	329	174.00	249152
58.00	324	91.00	821	130.00	904	175.00	17488
60.00	1771	92.00	6005	131.00	333	176.00	243712
61.00	9402	93.00	9600	135.00	388	177.00	16363
62.00	9521	94.00	26664	136.00	85	178.00	500
63.00	7354	95.00	254016	137.00	462	191.00	56
64.00	761	96.00	17224	140.00	250		

Data File: /chem/VOA4.i/120309v4/4n401.d

Date : 03-DEC-2009 16:57

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

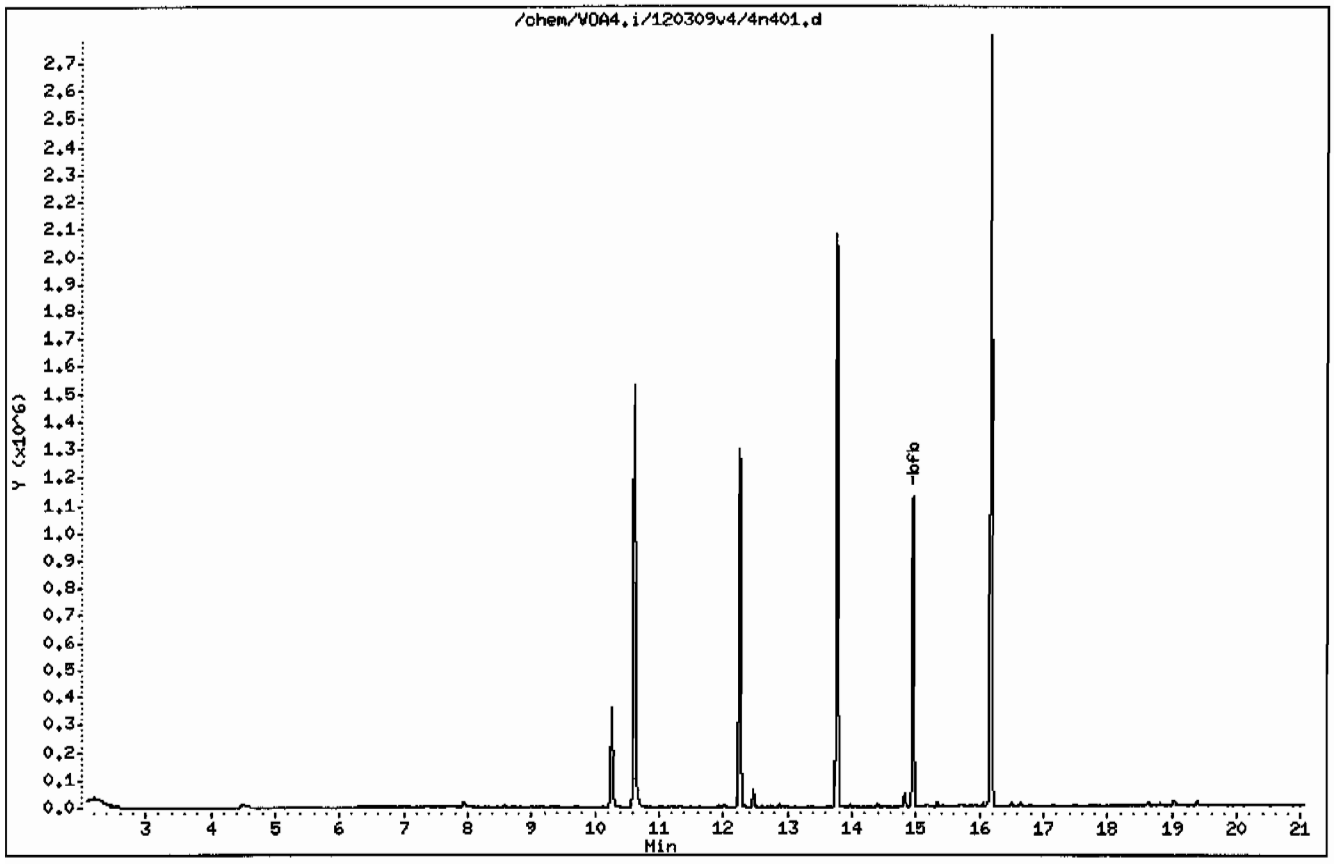

Data File: /chem/VOA4.i/120309v4/4n401.d

Date : 03-DEC-2009 16:57

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

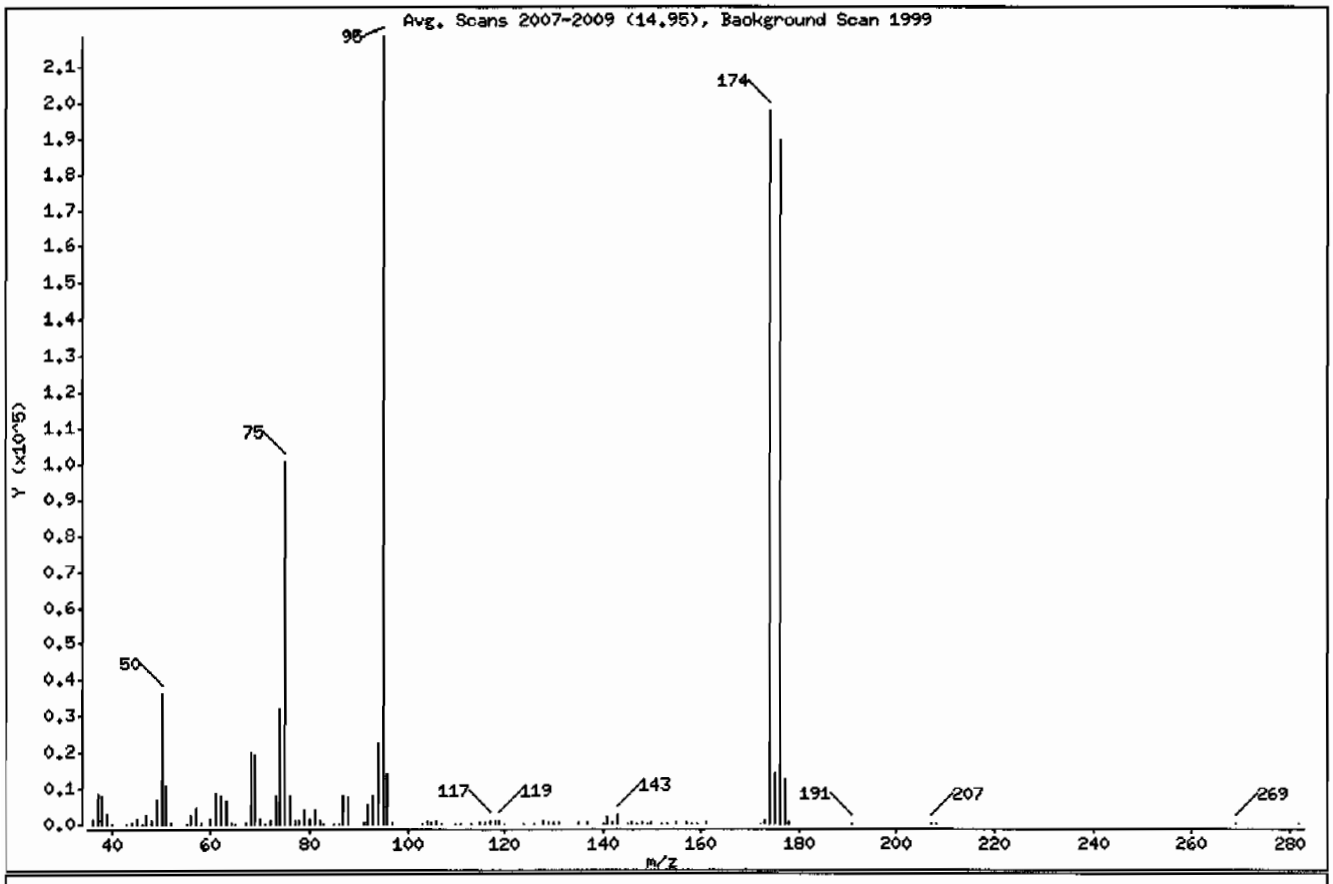

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.58
75	30.00 - 60.00% of mass 95	45.98
96	5.00 - 9.00% of mass 95	6.42
173	Less than 2.00% of mass 174	0.49 (0.55)
174	50.00 - 100.00% of mass 95	90.33
175	5.00 - 9.00% of mass 174	6.48 (7.17)
176	95.00 - 101.00% of mass 174	86.56 (95.82)
177	5.00 - 9.00% of mass 176	5.67 (6.55)

Data File: /chem/VOA4.i/120309v4/4n401.d

Date : 03-DEC-2009 16:57

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4n401.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1999
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1567	69.00	19800	104.00	823	147.00	109
37.00	8518	70.00	1376	105.00	396	148.00	563
38.00	8205	71.00	51	106.00	763	149.00	87
39.00	2947	72.00	1080	107.00	194	150.00	293
40.00	213	73.00	8113	110.00	50	152.00	72
43.00	186	74.00	32072	111.00	140	153.00	134
44.00	581	75.00	100456	113.00	148	155.00	532
45.00	1337	76.00	8271	115.00	314	157.00	431
46.00	62	77.00	944	116.00	701	158.00	76
47.00	2706	78.00	785	117.00	1240	159.00	154
48.00	927	79.00	4140	118.00	831	161.00	264
49.00	7187	80.00	1305	119.00	1159	172.00	55
50.00	36216	81.00	4258	120.00	50	173.00	1076
51.00	10962	82.00	984	124.00	143	174.00	197376
52.00	507	83.00	60	126.00	58	175.00	14154
55.00	159	85.00	52	128.00	817	176.00	189120
56.00	2460	86.00	103	129.00	424	177.00	12391
57.00	4588	87.00	8151	130.00	753	178.00	309
58.00	316	88.00	7676	131.00	382	191.00	119
60.00	1487	91.00	666	135.00	511	207.00	72
61.00	8475	92.00	5457	137.00	333	208.00	57
62.00	7830	93.00	8285	140.00	112	269.00	91
63.00	6338	94.00	22720	141.00	2056	282.00	51
64.00	646	95.00	218496	142.00	314		
65.00	129	96.00	14028	143.00	2337		
67.00	486	97.00	342	145.00	190		
68.00	20192	103.00	58	146.00	363		

Data File: /chem/VOA4.i/120709v4/4o101.d

Date : 07-DEC-2009 13:43

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH090910-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

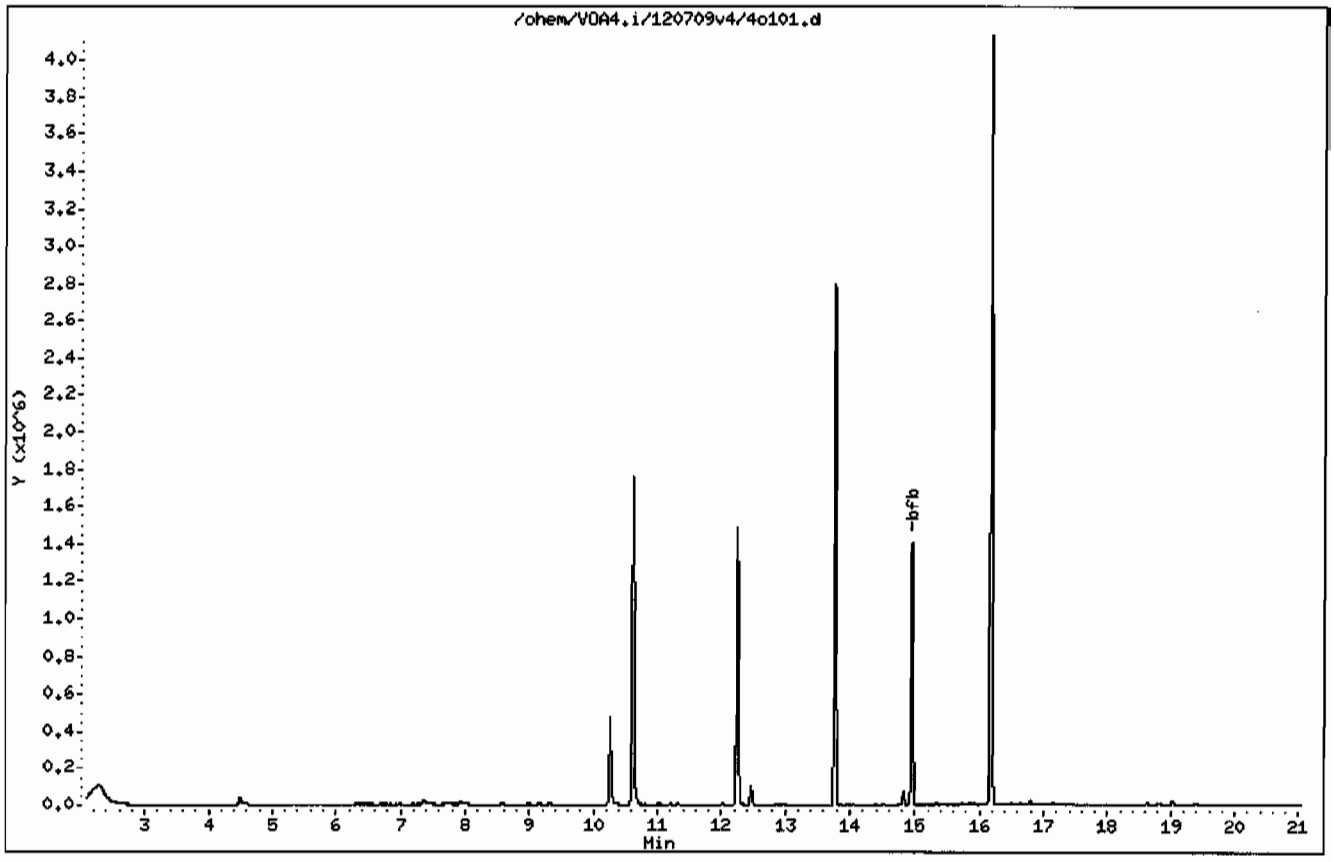

Data File: /chem/VOA4.i/120709v4/4o101.d

Date : 07-DEC-2009 13:43

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH090910-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

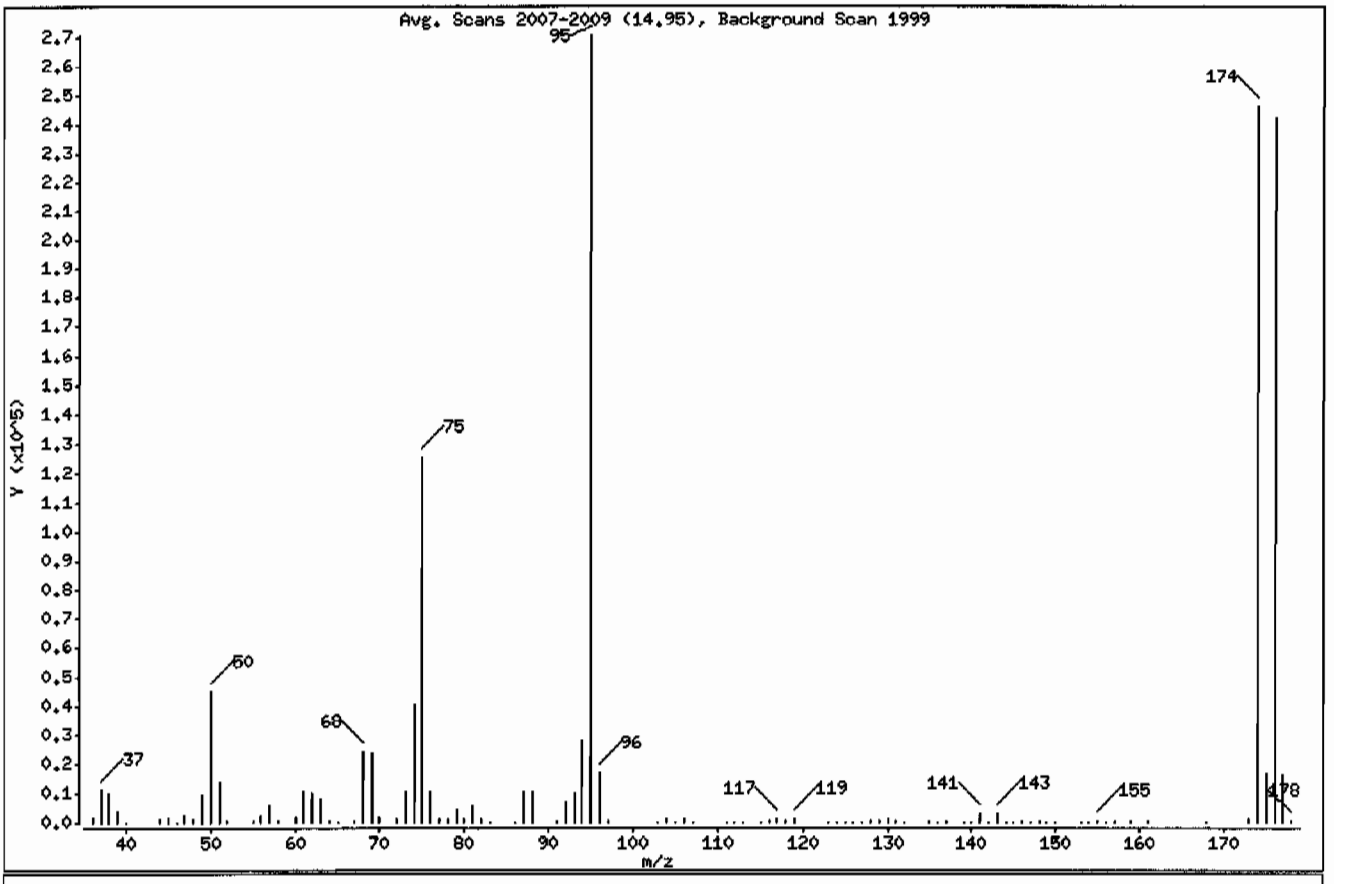

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.66
75	30.00 - 60.00% of mass 95	46.33
96	5.00 - 9.00% of mass 95	6.30
173	Less than 2.00% of mass 174	0.41 (0.45)
174	50.00 - 100.00% of mass 95	90.96
175	5.00 - 9.00% of mass 174	6.30 (6.93)
176	95.00 - 101.00% of mass 174	89.61 (98.52)
177	5.00 - 9.00% of mass 176	5.94 (6.63)

Data File: /chem/VOA4.i/120709v4/4o101.d

Date : 07-DEC-2009 13:43

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVH090910-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4o101.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1999
Location of Maximum: 95.00
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2079	69.00	23496	105.00	310	141.00	2849
37.00	11466	70.00	1952	106.00	1220	142.00	246
38.00	10049	72.00	1226	107.00	243	143.00	2891
39.00	3590	73.00	10830	111.00	245	144.00	116
40.00	28	74.00	40312	112.00	153	145.00	216
44.00	1067	75.00	125248	113.00	88	146.00	469
45.00	1811	76.00	10404	115.00	273	147.00	187
46.00	219	77.00	1356	116.00	816	148.00	636
47.00	2565	78.00	1024	117.00	1505	149.00	89
48.00	1338	79.00	4492	118.00	778	150.00	295
49.00	9054	80.00	1413	119.00	1443	153.00	133
50.00	45032	81.00	5524	123.00	53	154.00	199
51.00	13740	82.00	1316	124.00	194	155.00	634
52.00	605	83.00	141	125.00	71	156.00	59
55.00	336	86.00	257	126.00	61	157.00	418
56.00	2714	87.00	10471	127.00	61	159.00	388
57.00	5883	88.00	10488	128.00	855	161.00	402
58.00	377	91.00	877	129.00	564	168.00	50
60.00	2085	92.00	6901	130.00	1034	173.00	1102
61.00	10471	93.00	9924	131.00	400	174.00	245888
62.00	10184	94.00	27984	132.00	137	175.00	17040
63.00	7779	95.00	270336	135.00	533	176.00	242240
64.00	857	96.00	17024	136.00	61	177.00	16053
65.00	123	97.00	501	137.00	500	178.00	390
67.00	756	103.00	174	139.00	87		
68.00	24000	104.00	954	140.00	71		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985620**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 19:36**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n307BA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985620**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 19:36**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n307BA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n307BA.d
Lab Smp Id: 1201985620 Client Smp ID: BLANK
Inj Date : 02-DEC-2009 19:36
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985620|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	335477	59.1059	59.1
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1445085	50.0000	
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	1089671	58.0602	58.1
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1077546	50.0000	
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	484272	57.9908	58.0
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	721157	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n307BA.d
Lab Smp Id: 1201985620 Client Smp ID: BLANK
Inj Date : 02-DEC-2009 19:36
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985620|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120209v4/4n307BA.d
Date : 02-DEC-2009 19:36
Client ID: BLANK
Sample Info: |1201985620|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

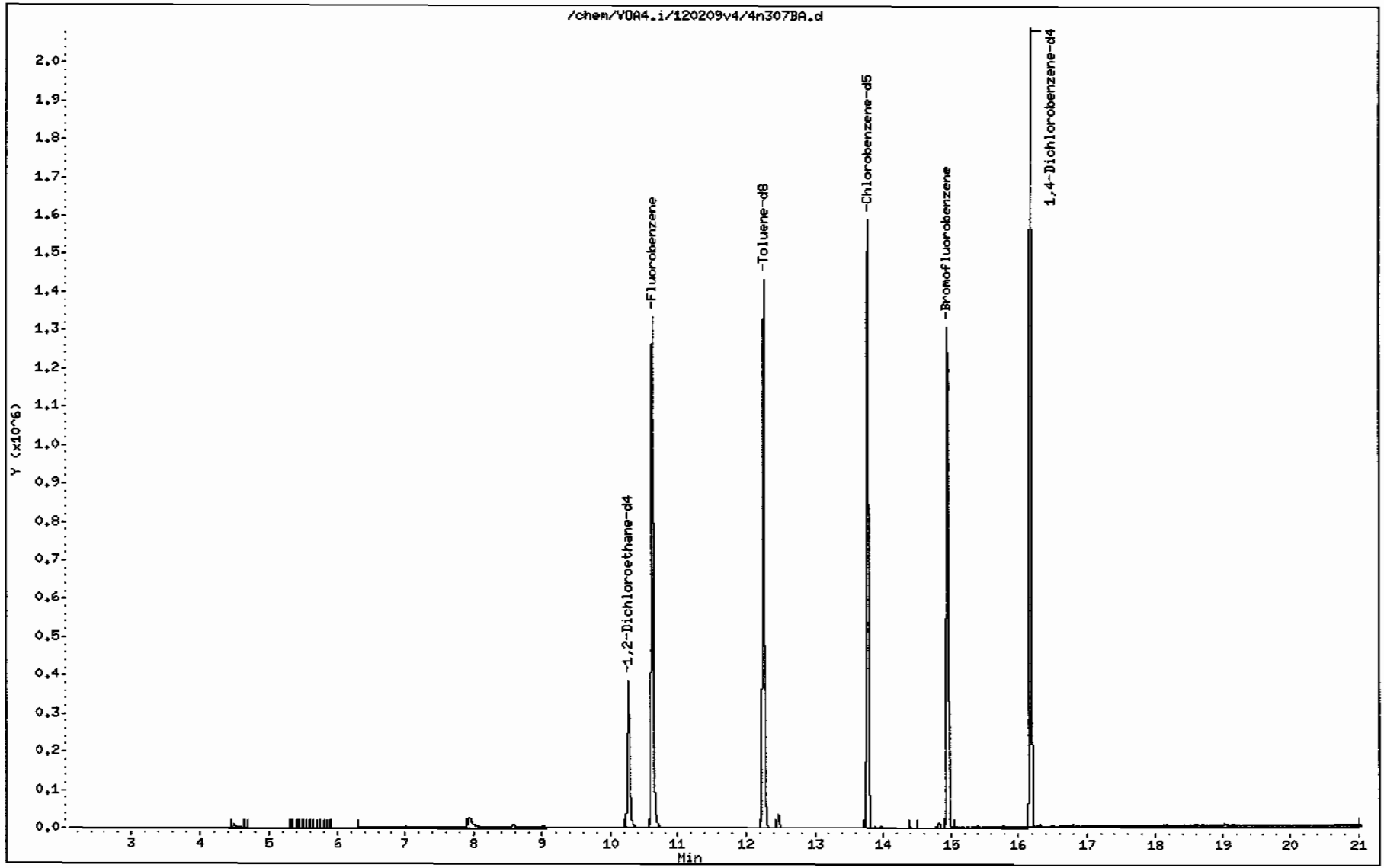

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985621**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:16**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n406bl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985621**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 19:16**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 16:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n406bl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n406bl.d
Lab Smp Id: 1201985621 Client Smp ID: BLANK
Inj Date : 03-DEC-2009 19:16
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985621|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	317024	49.3542	49.4
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1635420	50.0000	
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1026105	47.4674	47.5
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1241123	50.0000	
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	459072	49.7892	49.8
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	796243	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	21187	1.06844	1.1(a)
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	10853	1.83389	1.8(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n406bl.d
Lab Smp Id: 1201985621 Client Smp ID: BLANK
Inj Date : 03-DEC-2009 19:16
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985621|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120309v4/4n406bl.d

Date : 03-DEC-2009 19:16

Client ID: BLANK

Sample Info: |1201985621|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

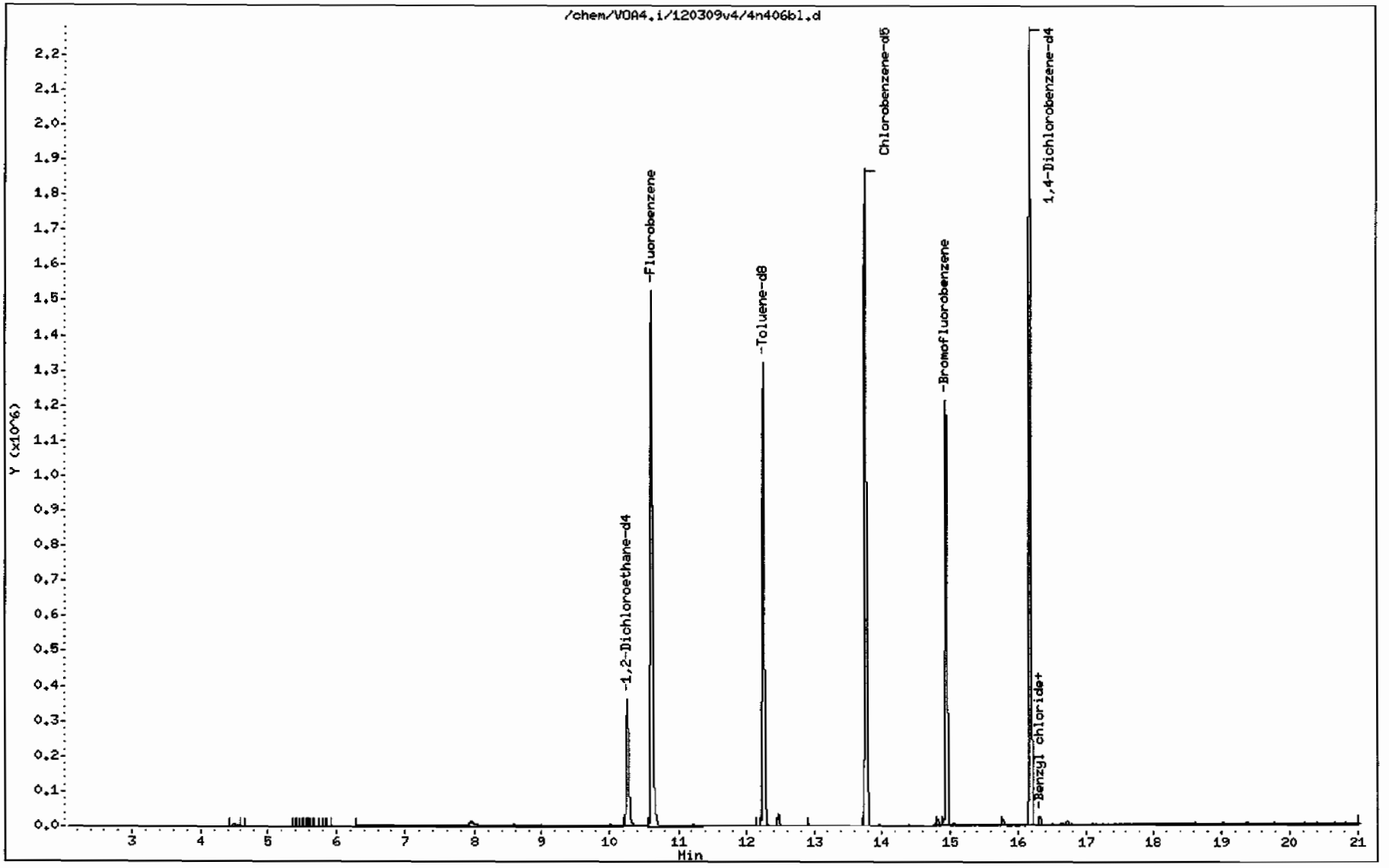

Data File: /chem/VOA4.i/120309v4/4n406bl.d

Date : 03-DEC-2009 19:16

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201985621|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

88 Benzyl chloride

Concentration: 1.1 ug/Kg

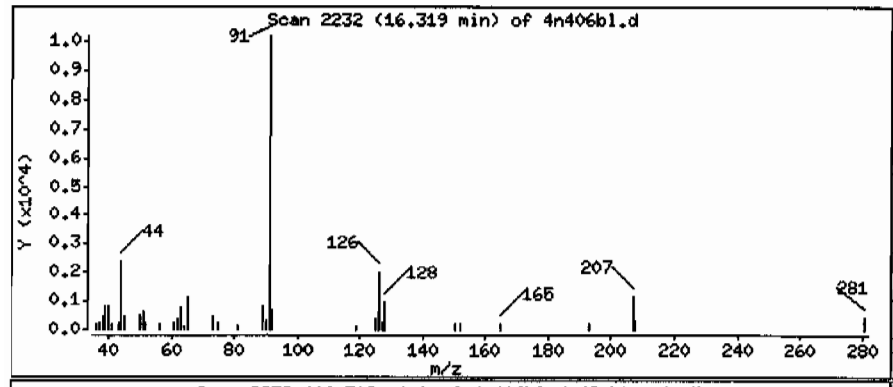

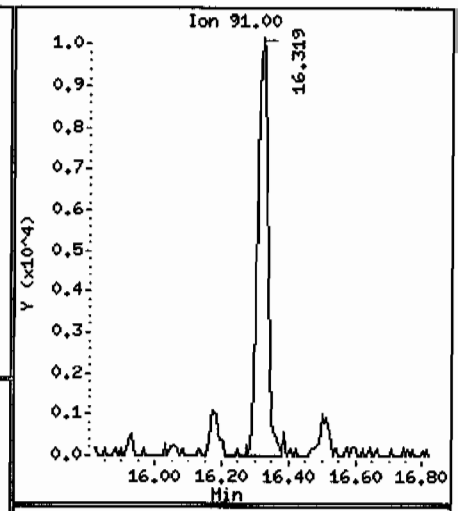

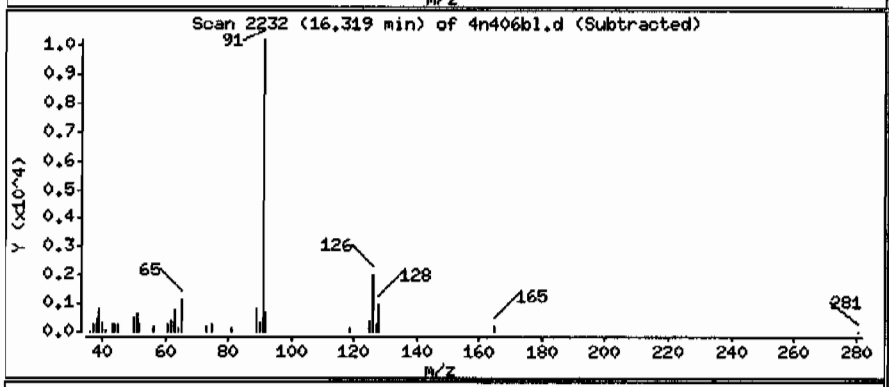

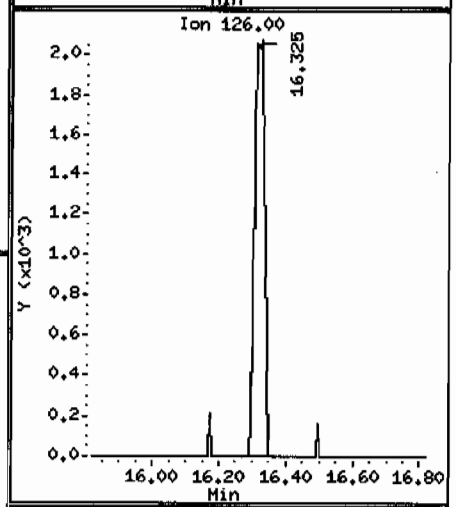

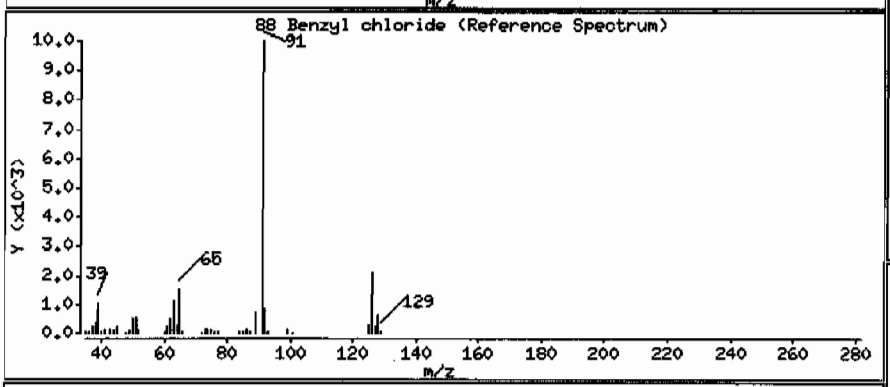

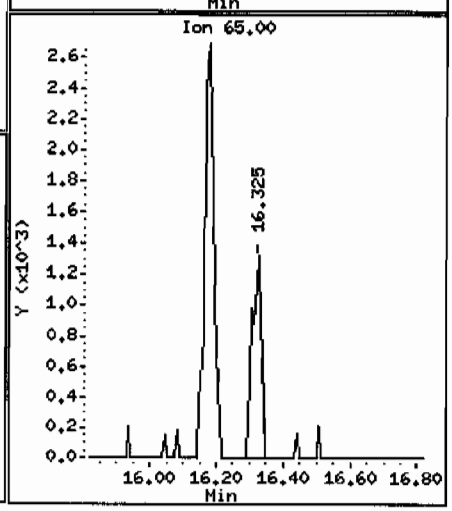

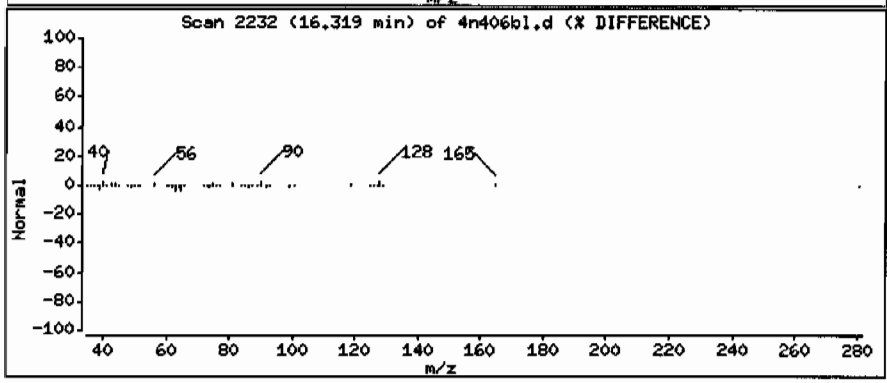

Data File: /chem/VOA4.i/120309v4/4n406bl.d

Date : 03-DEC-2009 19:16

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201985621|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 1.8 ug/Kg

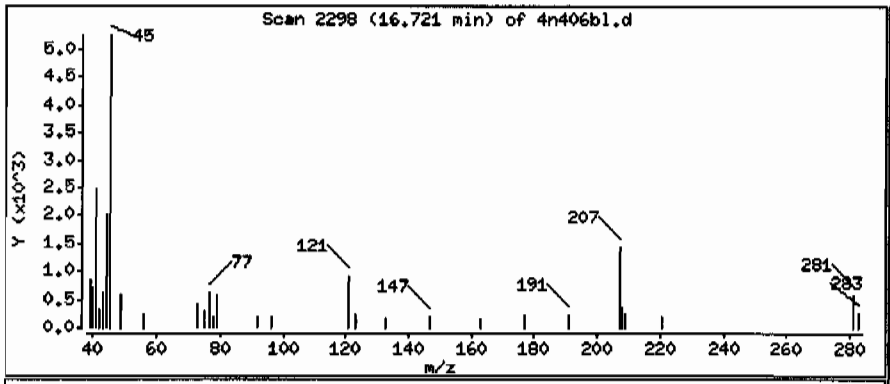

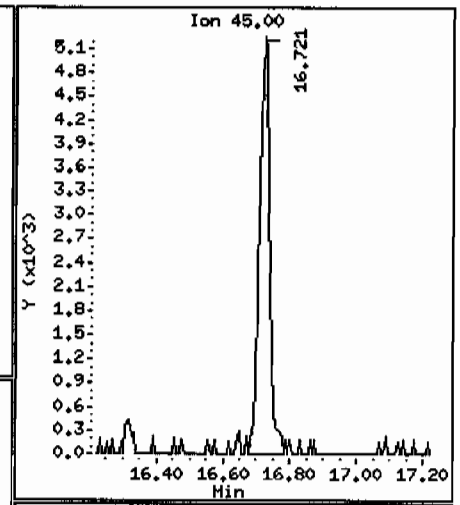

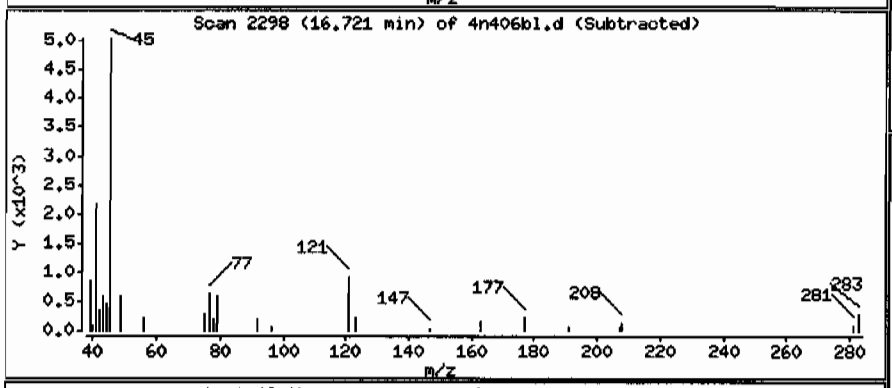

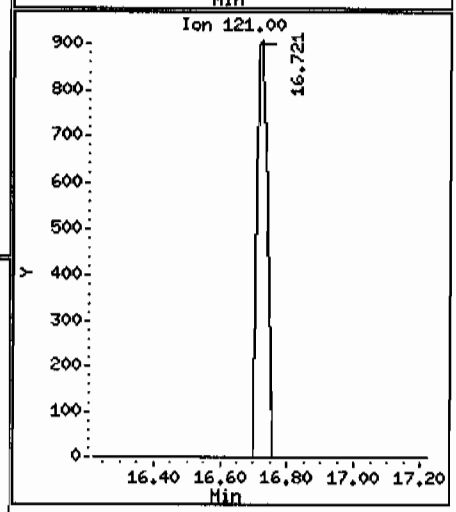

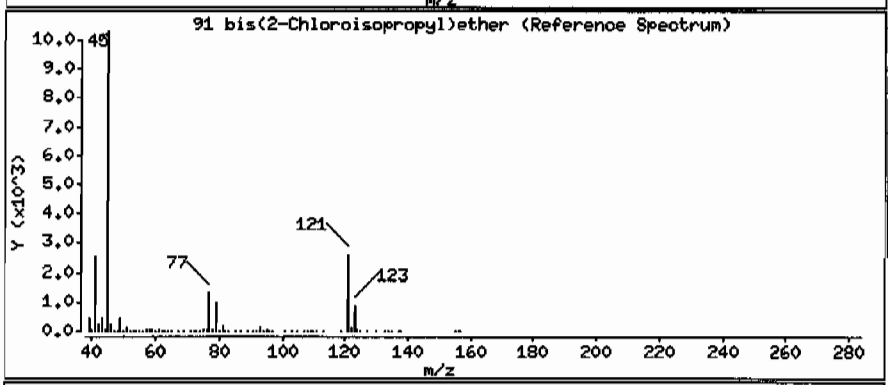

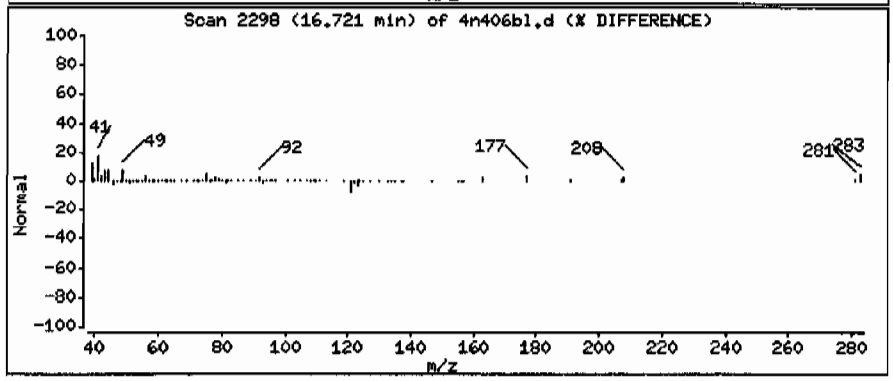

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989829**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 16:00**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 13:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o106bl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989829**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 16:00**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 13:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o106bl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o106bl.d
Lab Smp Id: 1201989829 Client Smp ID: BLANK
Inj Date : 07-DEC-2009 16:00
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989829|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	315600	51.8357	51.8
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1550133	50.0000	
97 1,4-Dioxane	88	11.339	11.332	(1.068)	2468	21.8781	21.9(a)
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	1012191	48.6114	48.6
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1195483	50.0000	
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	440365	49.0280	49.0
69 trans-1,4-Dichloro-2-butene	53	15.070	15.063	(0.931)	2880	0.87015	0.87(a)
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	775654	50.0000	
88 Benzyl chloride	91	16.320	16.319	(1.009)	27771	1.43764	1.4(a)
91 bis(2-Chloroisopropyl)ether	45	16.722	16.721	(1.034)	13883	2.40815	2.4(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o106bl.d
Lab Smp Id: 1201989829 Client Smp ID: BLANK
Inj Date : 07-DEC-2009 16:00
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989829|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120709v4/4o106bl.d
Date : 07-DEC-2009 16:00
Client ID: BLANK
Sample Info: |120198982919286051|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

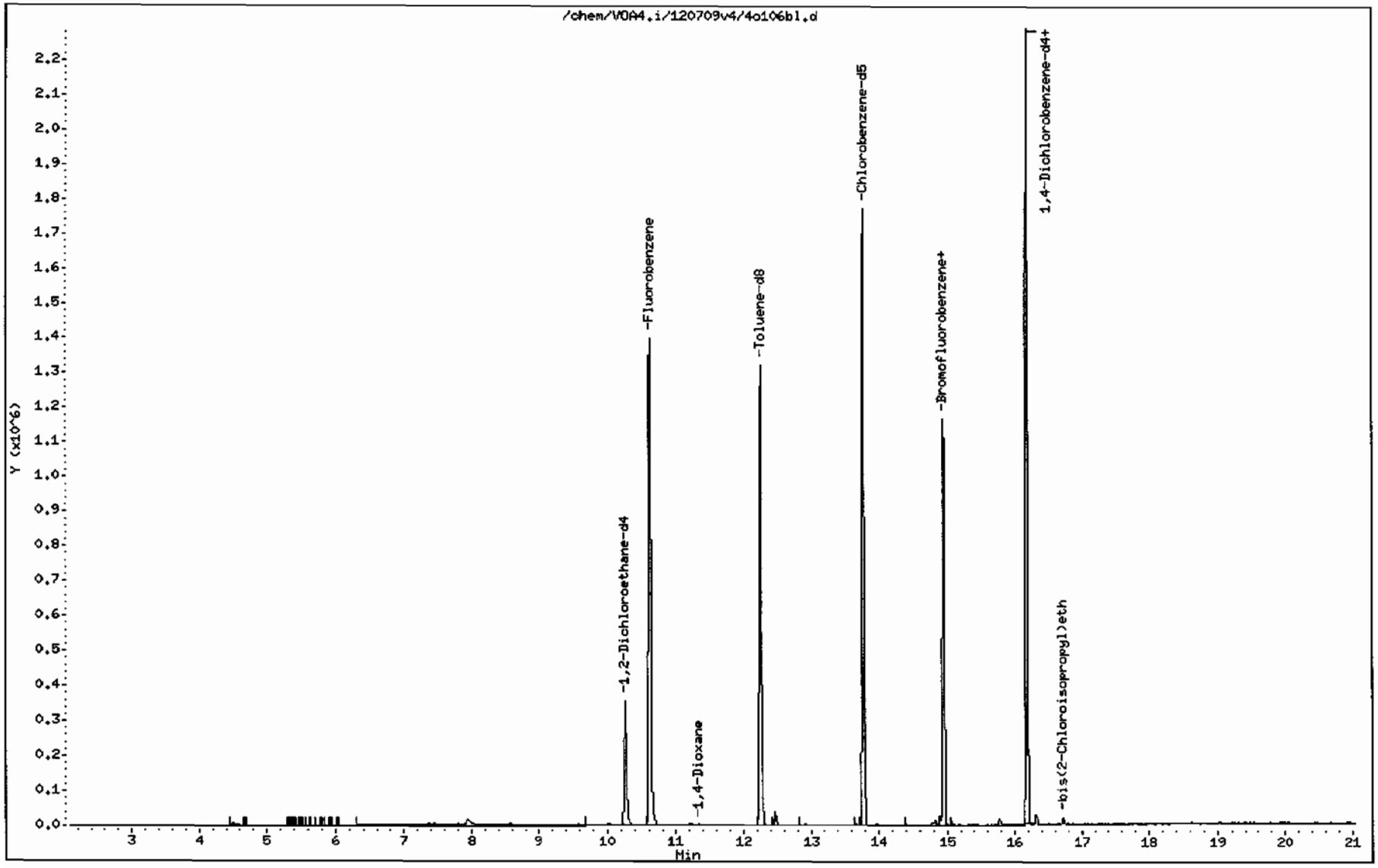

Data File: /chem/VOA4.i/120709v4/4o106bl.d

Date : 07-DEC-2009 16:00

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120198982919286051|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

97 1,4-Dioxane

Concentration: 21.9 ug/Kg

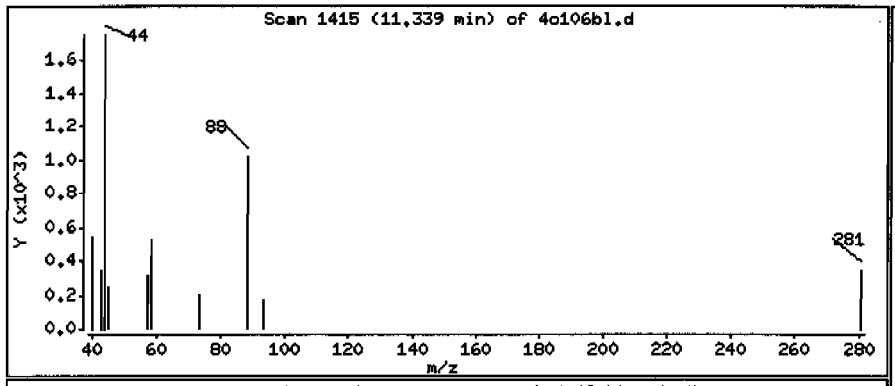

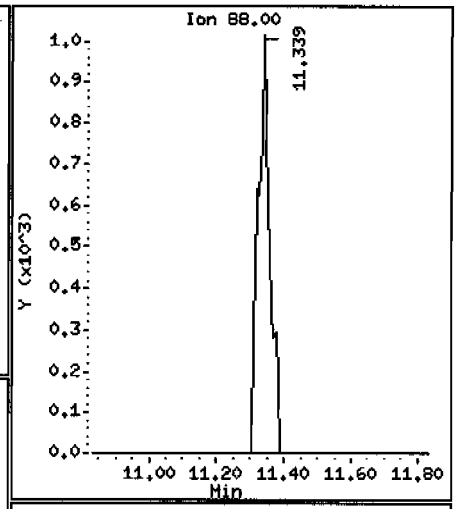

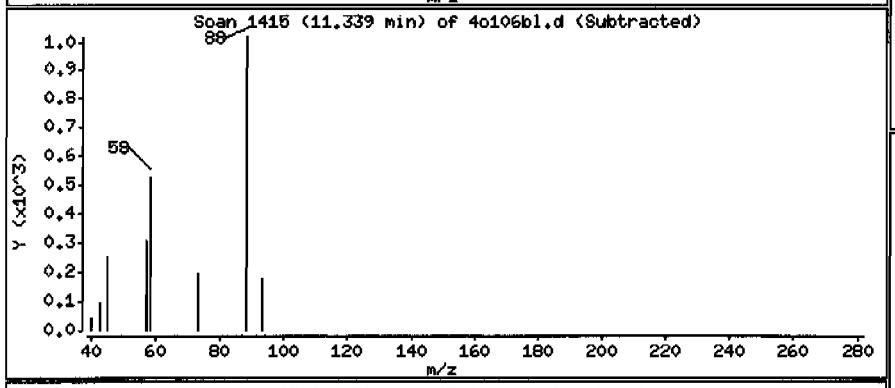

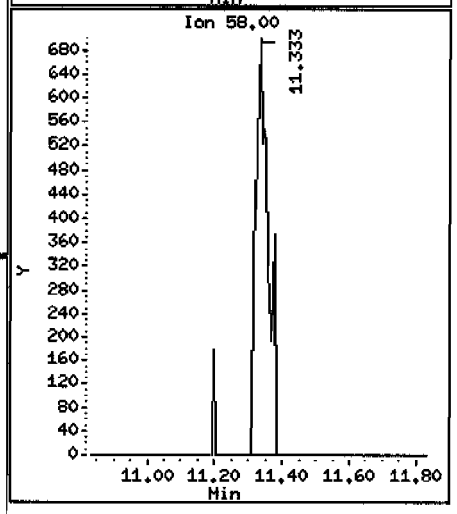

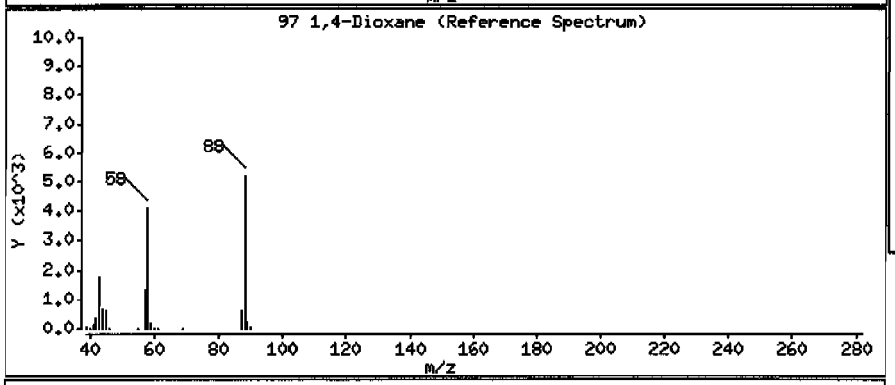

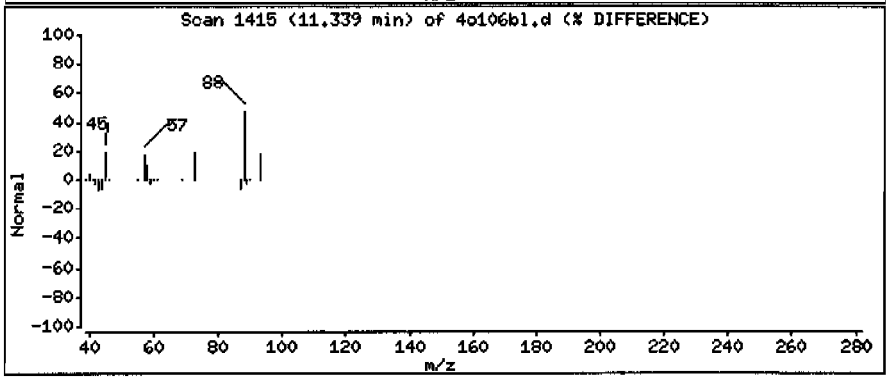

Data File: /chem/VOA4.i/120709v4/4o106bl.d

Page 3

Date : 07-DEC-2009 16:00

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201989829|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

69 trans-1,4-Dichloro-2-butene

Concentration: 0.87 ug/Kg

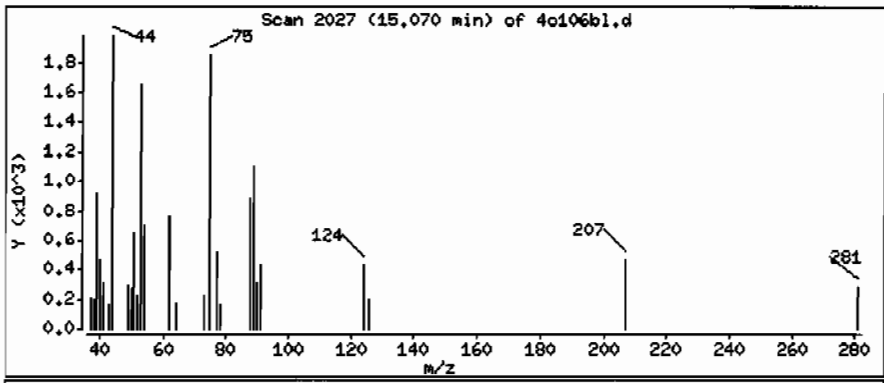

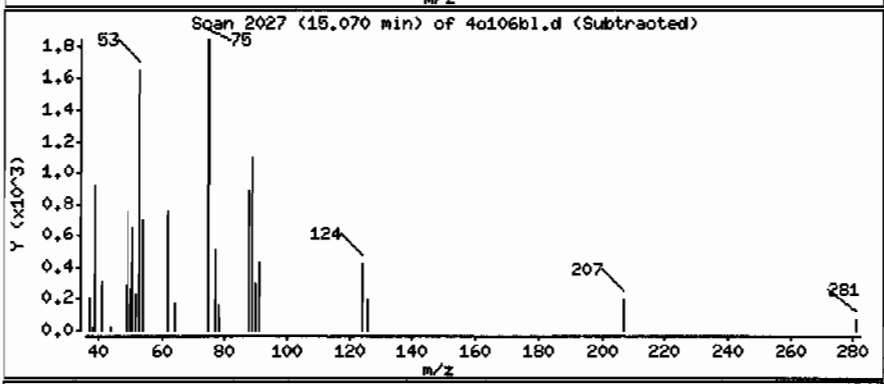

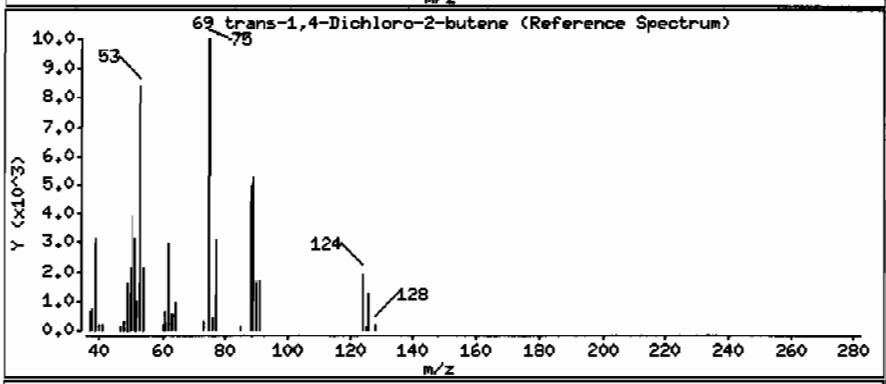

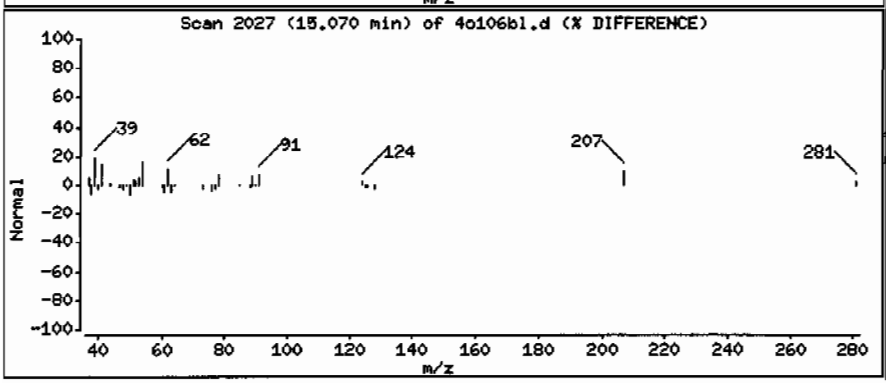

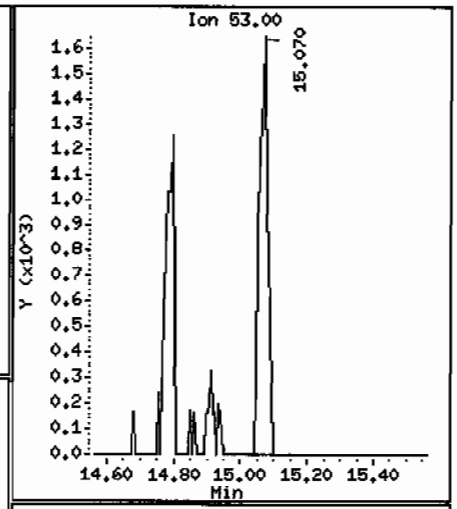

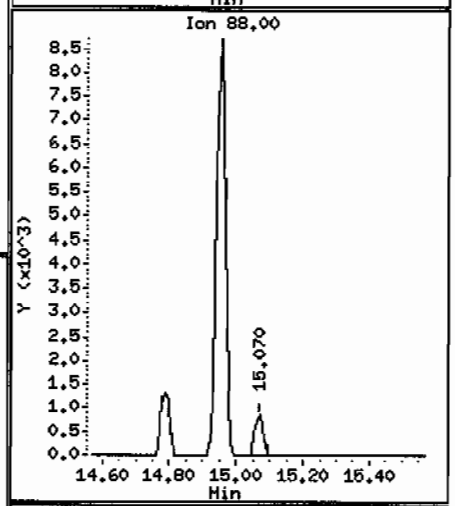

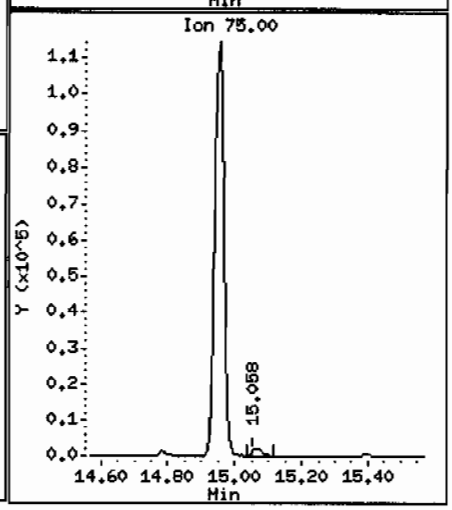

Data File: /chem/VOA4.i/120709v4/4o106bl.d

Date : 07-DEC-2009 16:00

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201989829|928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

88 Benzyl chloride

Concentration: 1.4 ug/Kg

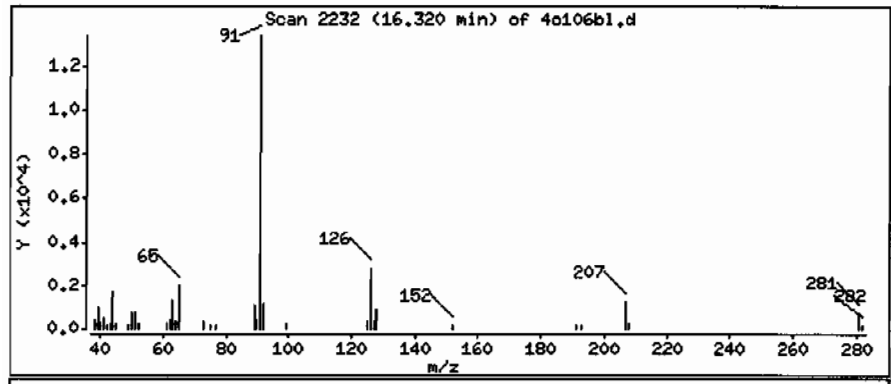

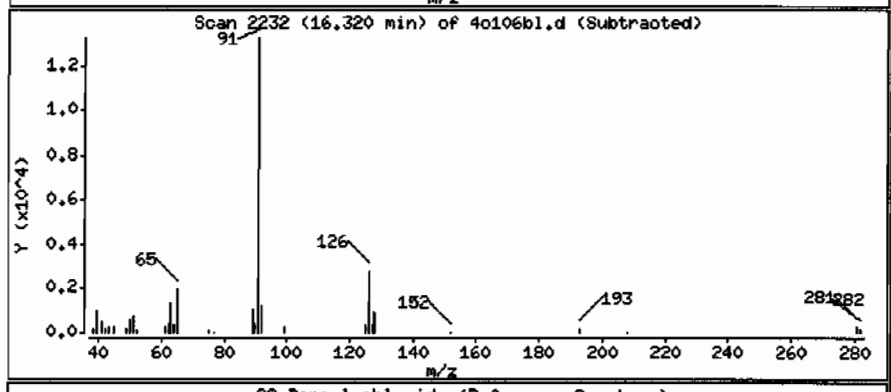

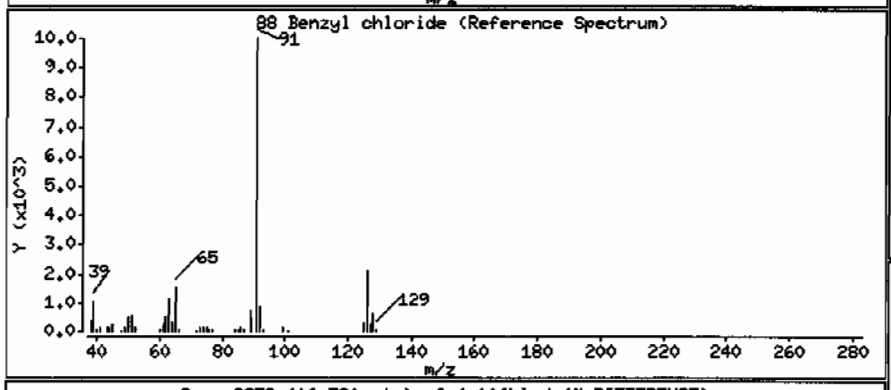

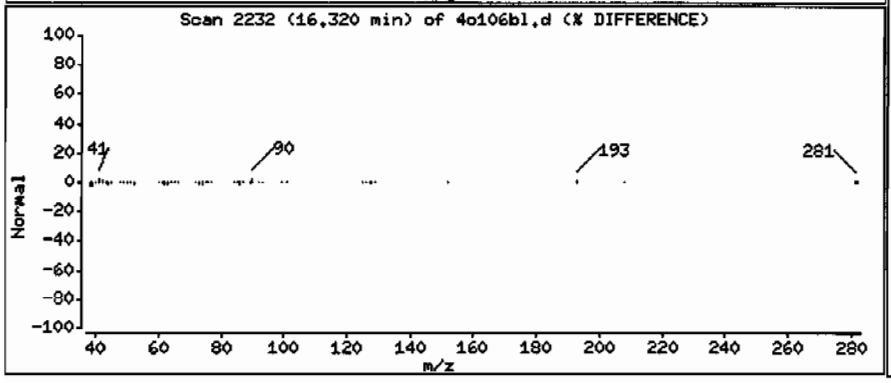

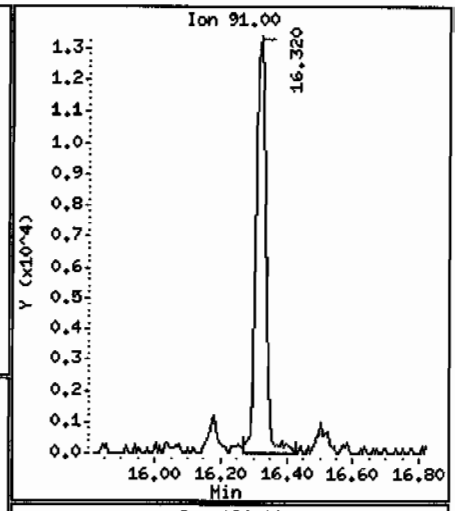

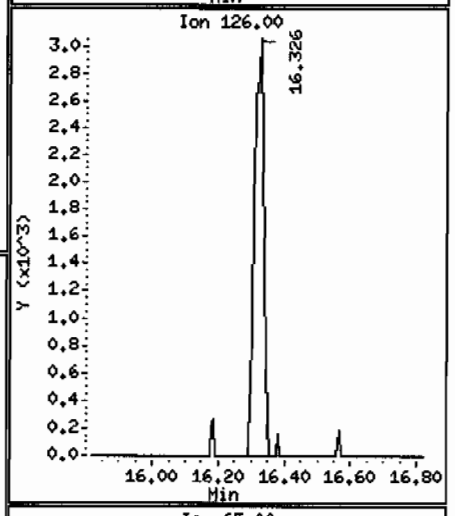

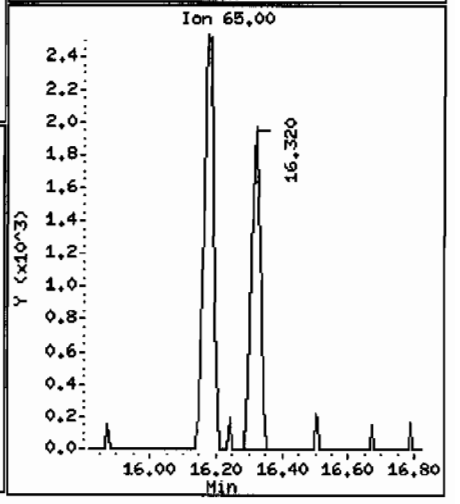

Data File: /chem/VOA4.i/120709v4/4o106bl.d

Date : 07-DEC-2009 16:00

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |12019898291928605|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 2.4 ug/Kg

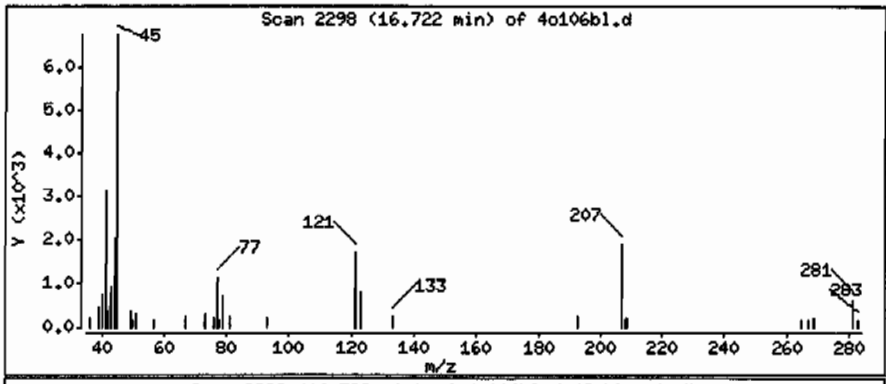

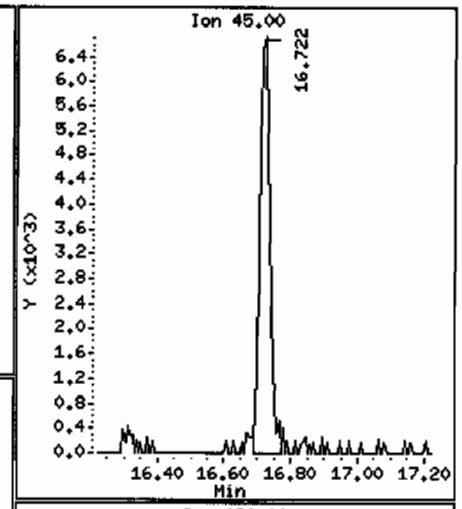

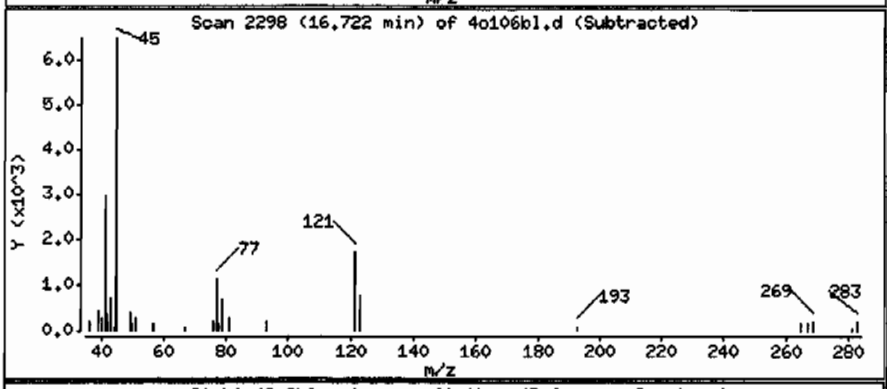

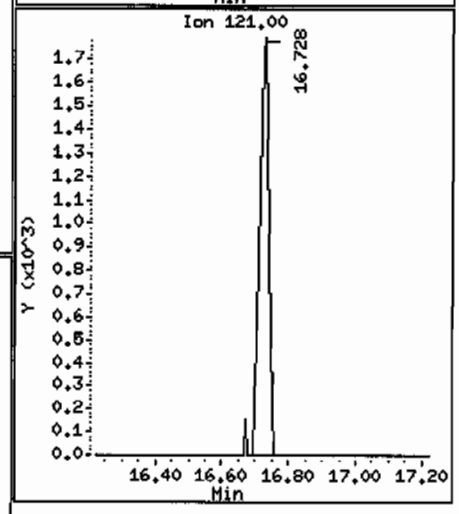

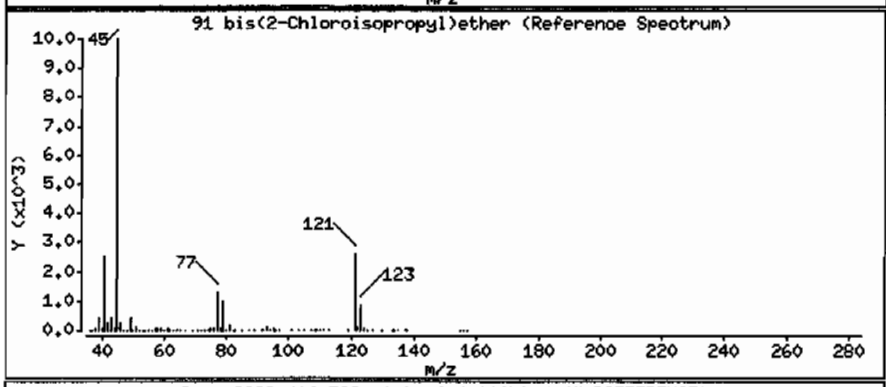

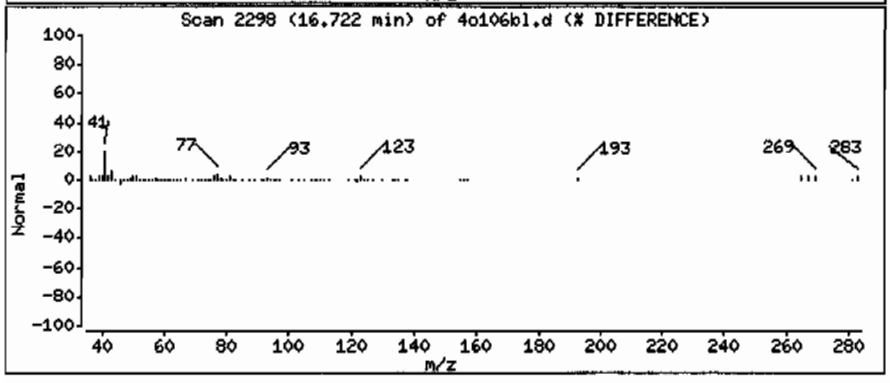

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985624**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n303LA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		38.9	ug/kg	0.340	1.00
74-87-3	Chloromethane		40.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		47.0	ug/kg	0.300	1.00
75-00-3	Chloroethane		48.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		52.0	ug/kg	0.300	1.00
67-64-1	Acetone		231	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		51.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		250	ug/kg	1.60	5.00
75-09-2	Methylene chloride		50.6	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		261	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		54.2	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		53.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		242	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		52.9	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		57.1	ug/kg	0.300	1.00
67-66-3	Chloroform		52.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		51.7	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		57.8	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		58.1	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		60.2	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		51.1	ug/kg	0.300	1.00
71-43-2	Benzene		52.4	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		55.9	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		52.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		53.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		51.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		264	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.7	ug/kg	0.300	1.00
108-88-3	Toluene		51.7	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		52.7	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.9	ug/kg	0.300	1.00
591-78-6	2-Hexanone		239	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		55.1	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		53.8	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		52.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		52.4	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985624**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n303LA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.7	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		105	ug/kg	0.300	2.00
95-47-6	o-Xylene		51.9	ug/kg	0.300	1.00
100-42-5	Styrene		51.4	ug/kg	0.300	1.00
75-25-2	Bromoform		55.7	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		55.3	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		53.0	ug/kg	0.300	1.00
108-86-1	Bromobenzene		51.0	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		51.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		48.7	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		51.1	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		50.2	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		51.2	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		51.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		50.2	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		51.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		52.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		51.9	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		52.0	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		52.8	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		61.9	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		52.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		53.4	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n303LA.d
Lab Smp Id: 1201985624 Client Smp ID: LCS
Inj Date : 02-DEC-2009 17:47
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985624|928605|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2724981	156.810	157
M 2 1,2-Dichloroethylene (total)	96				1393355	107.169	107
M 135 1,3-Dichloropropylene	75				1549891	107.800	108
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	298691	38.8909	38.9
4 Chloromethane	50	5.299	5.299	(0.499)	479920	40.4745	40.5
5 Vinyl chloride	62	5.528	5.528	(0.521)	502822	45.8096	45.8
6 Bromomethane	94	6.130	6.138	(0.577)	406851	46.9996	47.0
7 Chloroethane	64	6.288	6.288	(0.592)	392839	48.7740	48.8
8 Trichlorofluoromethane	101	6.668	6.663	(0.628)	704231	51.9997	52.0
134 Ethyl Ether	59	7.004	7.005	(0.660)	374800	50.5322	50.5
10 Acetone	43	7.363	7.358	(0.693)	1544044	230.562	230
11 1,1-Dichloroethylene	61	7.388	7.383	(0.696)	716752	51.3691	51.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.625	7.626	(0.718)	4174153	250.086	250
15 Acetonitrile	41	7.705	7.706	(0.726)	1882583	1244.30	1240
128 Methyl acetate	43	7.753	7.748	(0.730)	1805386	233.772	234
14 Carbon disulfide	76	7.772	7.773	(0.732)	7551129	260.995	261
17 Methylene chloride	84	7.942	7.943	(0.748)	552687	50.5746	50.6
20 tert-Butyl methyl ether	73	8.241	8.242	(0.776)	1342659	49.7012	49.7
21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.780)	669921	54.2491	54.2
23 Vinyl acetate	43	8.711	8.712	(0.820)	4967490	276.597	276
22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	827535	53.8755	53.9
30 2-Butanone	43	9.326	9.327	(0.878)	1866598	242.251	242
31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.884)	723434	52.9196	52.9
25 2,2-Dichloropropane	77	9.424	9.419	(0.887)	506313	57.0769	57.1
29 Bromochloromethane	128	9.662	9.656	(0.910)	249219	51.7397	51.7
32 Chloroform	83	9.692	9.693	(0.913)	820369	52.8587	52.8
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	665272	57.7632	57.8
129 Cyclohexane	56	10.082	10.083	(0.949)	755607	56.8029	56.8
34 1,1-Dichloropropene	75	10.137	10.132	(0.955)	665854	58.1116	58.1
33 Carbon tetrachloride	117	10.174	10.175	(0.958)	668841	60.2069	60.2
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	379912	58.6855	58.7
37 1,2-Dichloroethane	62	10.338	10.339	(0.974)	624403	51.1033	51.1
38 Benzene	78	10.375	10.376	(0.977)	1849540	52.3524	52.4
139 Cyclohexene	67	10.497	10.492	(0.989)	930168	55.6961	55.7
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1648214	50.0000	
131 n-Butyl alcohol	56	10.692	10.693	(1.007)	2350217	6643.18	6640
39 Trichloroethylene	95	11.003	11.004	(1.036)	496044	55.9249	55.9
130 Methylcyclohexane	83	11.265	11.266	(1.061)	824028	58.2623	58.3
41 1,2-Dichloropropane	63	11.247	11.242	(1.059)	485120	52.3767	52.4
43 Dibromomethane	93	11.375	11.376	(1.071)	295396	51.6326	51.6
45 Bromodichloromethane	83	11.484	11.485	(1.082)	631322	52.9681	53.0
44 2-Chloroethylvinyl ether	63	11.698	11.699	(1.102)	1162881	219.958	220
46 cis-1,3-Dichloropropylene	75	11.936	11.930	(1.124)	797449	53.6538	53.6
49 4-Methyl-2-pentanone	58	12.021	12.016	(0.873)	1088701	264.247	264
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	1152356	51.8377	51.8
50 Toluene	92	12.326	12.327	(0.895)	1156192	51.6888	51.7
53 trans-1,3-Dichloropropylene	75	12.466	12.461	(0.905)	752442	52.7006	52.7
54 1,1,2-Trichloroethane	83	12.685	12.686	(0.921)	361237	50.9145	50.9
55 2-Hexanone	43	12.856	12.857	(0.934)	2657504	239.375	239
52 1,3-Dichloropropane	76	12.880	12.875	(0.935)	709607	49.4266	49.4
56 Tetrachloroethylene	164	12.923	12.918	(0.938)	478547	55.0744	55.1
57 Dibromochloromethane	129	13.149	13.150	(0.955)	528013	53.7768	53.8
59 1,2-Dibromoethane	107	13.319	13.320	(0.967)	467576	51.9958	52.0
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1276321	50.0000	
62 Chlorobenzene	112	13.801	13.802	(1.002)	1352786	52.4342	52.4
60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	507703	52.1097	52.1
58 Ethylbenzene	91	13.862	13.863	(1.007)	2231597	51.6765	51.7
63 m,p-Xylenes	106	13.972	13.973	(1.015)	1800592	104.887	105
64 o-Xylene	106	14.405	14.406	(1.046)	924389	51.9231	51.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	65 Styrene	104	14.405	14.399	(1.046)	1555672	51.3899	51.4
	66 Bromoform	173	14.661	14.656	(0.906)	542821	55.7203	55.7
	67 Isopropylbenzene	105	14.758	14.759	(0.912)	2498763	51.0553	51.0
$	71 Bromofluorobenzene	95	14.953	14.954	(0.924)	539592	51.6007	51.6
	73 1,1,2,2-Tetrachloroethane	83	15.020	15.015	(0.928)	793165	55.2765	55.3
	74 1,2,3-Trichloropropane	110	15.106	15.107	(0.934)	202957	53.0320	53.0
	75 Bromobenzene	156	15.167	15.168	(0.937)	788373	50.9849	51.0
	76 n-Propylbenzene	91	15.185	15.180	(0.939)	2962906	50.9654	51.0
	78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	2191860	50.1996	50.2
	77 2-Chlorotoluene	91	15.331	15.332	(0.948)	2009070	48.6672	48.7
	80 4-Chlorotoluene	91	15.435	15.430	(0.954)	1942825	51.2144	51.2
	81 tert-Butylbenzene	119	15.703	15.704	(0.971)	2278243	51.4823	51.5
	79 1,2,4-Trimethylbenzene	105	15.746	15.741	(0.973)	2318089	50.1668	50.2
	83 sec-Butylbenzene	105	15.935	15.930	(0.985)	3055572	51.7665	51.8
	84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	2521761	52.1066	52.1
	85 1,3-Dichlorobenzene	146	16.124	16.119	(0.997)	1509604	51.9022	51.9
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	903046	50.0000	
	87 1,4-Dichlorobenzene	146	16.209	16.210	(1.002)	1517021	51.9697	52.0
	89 n-Butylbenzene	91	16.502	16.503	(1.020)	2375643	52.7908	52.8
	90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	1508890	53.4469	53.4
	92 1,2-Dibromo-3-chloropropane	157	17.532	17.527	(1.084)	197285	61.9380	61.9
	93 1,2,4-Trichlorobenzene	180	18.629	18.630	(1.151)	957940	59.8969	59.9
	94 Hexachlorobutadiene	225	18.818	18.819	(1.163)	663742	58.7811	58.8
	95 Naphthalene	128	19.032	19.033	(1.176)	1692581	61.6048	61.6
	96 1,2,3-Trichlorobenzene	180	19.385	19.386	(1.198)	787287	62.3642	62.4

Data File: /chem/VOA4.i/120209v4/4n303LA.d
Date : 02-DEC-2009 17:47
Client ID: LCS
Sample Info: 1120198962419286905I1IVOAF1I1
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

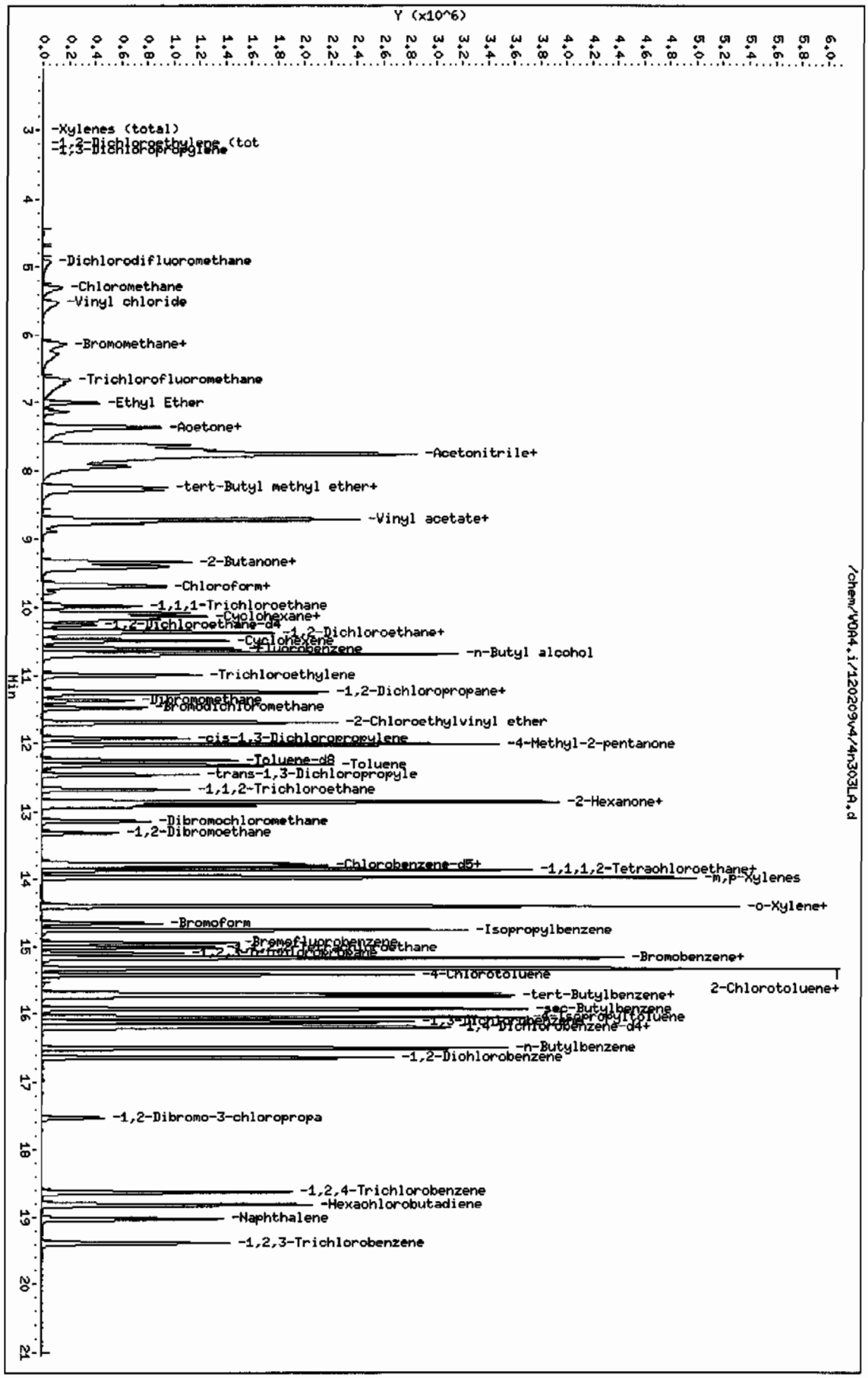

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985625**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 18:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 16:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n305SA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985625**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 18:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 16:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n305SA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		229	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n305SA.d
Lab Smp Id: 1201985625 Client Smp ID: LCS
Inj Date : 02-DEC-2009 18:41
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985625|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
9 Acrolein	56	7.186	7.186	(0.677)	393259	210.733	211
12 Trichlorotrifluoroethane	85	7.363	7.357	(0.693)	737517	229.356	229
16 Allyl chloride	41	7.802	7.802	(0.735)	3130660	210.084	210
18 Acrylonitrile	53	8.180	8.180	(0.770)	794477	211.131	211
24 2-Chloro-1,3-butadiene	53	8.875	8.869	(0.836)	605653	42.8130	42.8
26 Ethyl acetate	43	9.344	9.344	(0.880)	2025638	192.013	192
28 Propionitrile	54	9.393	9.393	(0.885)	320795	202.983	203
27 Methacrylonitrile	41	9.576	9.582	(0.902)	1284473	205.279	205
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	719978	215.765	216
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	959408	2001.35	2000
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	346382	51.3854	51.4
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1716236	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	42 Methyl methacrylate	69	11.210	11.210	(1.056)	1444807	206.899	207
	97 1,4-Dioxane	88	11.332	11.332	(1.067)	265150	2122.99	2120
	48 2-Nitropropane	43	11.673	11.673	(1.099)	699103	215.008	215
$	47 Toluene-d8	98	12.252	12.254	(0.890)	1157641	49.9504	50.0
	51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2601307	196.553	196
*	61 Chlorobenzene-d5	117	13.770	13.772	(1.000)	1330619	50.0000	
	68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	892794	219.572	220
	70 Cyclohexanone	42	14.904	14.904	(1.082)	610597	604.731	605
$	71 Bromofluorobenzene	95	14.953	14.954	(0.924)	518524	48.6297	48.6
	69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	856225	217.918	218
	82 Pentachloroethane	167	15.776	15.776	(0.975)	1713171	208.909	209
*	86 1,4-Dichlorobenzene-d4	152	16.178	16.180	(1.000)	920803	50.0000	
	88 Benzyl chloride	91	16.319	16.319	(1.009)	5058200	220.575	220
	91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1450029	211.874	212

Data File: /chem/VOA4.i/120209v4/4n305SA.d
Date : 02-DEC-2009 18:41
Client ID: LCS
Sample Info: |120198562519286051|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

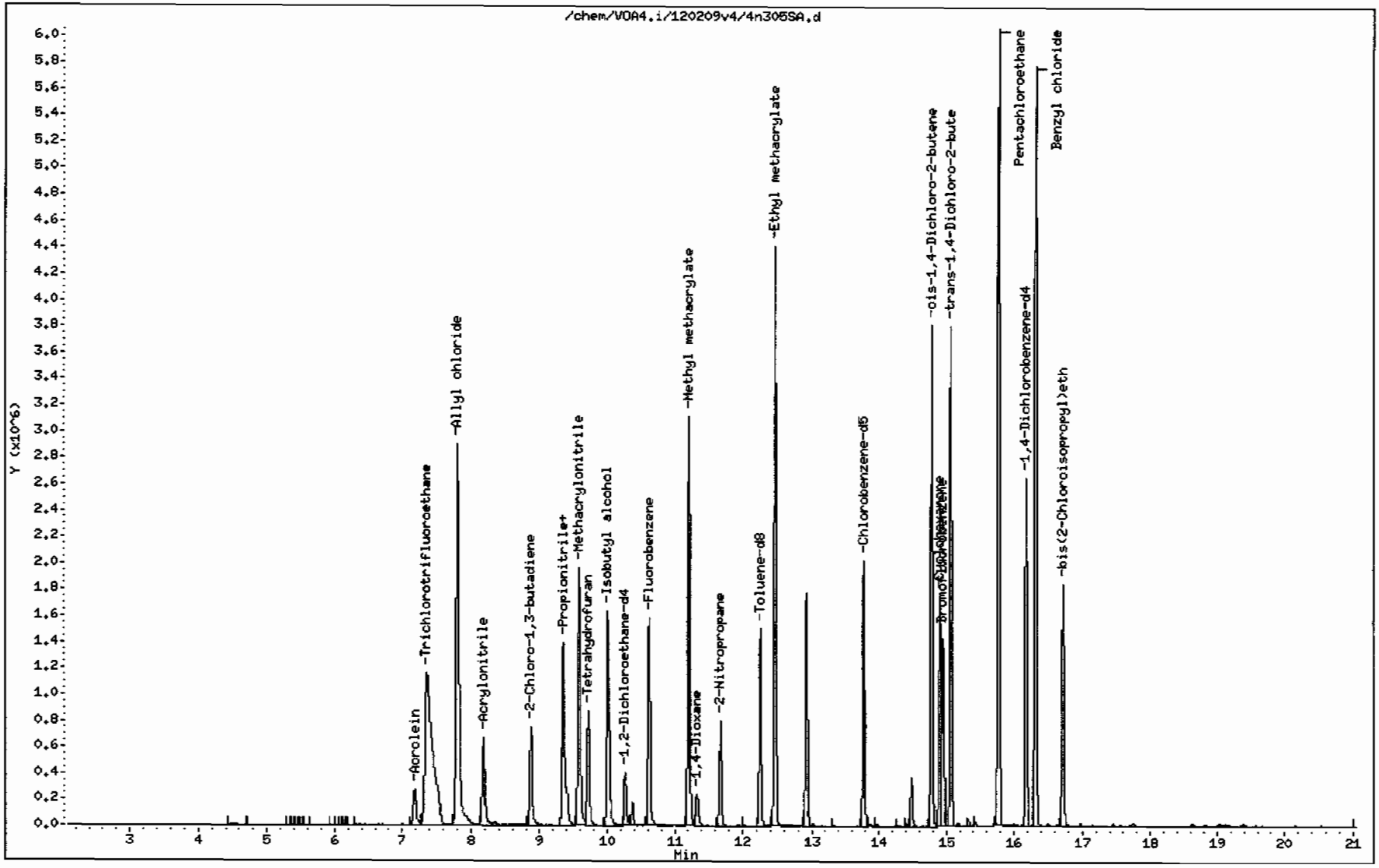

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985626**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:53**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n403ll.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		48.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		41.0	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		46.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		47.7	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		53.1	ug/kg	0.300	1.00
67-64-1	Acetone		225	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		51.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		236	ug/kg	1.60	5.00
75-09-2	Methylene chloride		46.5	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		255	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		50.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		50.6	ug/kg	0.300	1.00
78-93-3	2-Butanone		231	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		49.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		54.0	ug/kg	0.300	1.00
67-66-3	Chloroform		49.6	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		48.0	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		55.3	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		54.5	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		56.4	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		48.7	ug/kg	0.300	1.00
71-43-2	Benzene		48.5	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		51.8	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		48.9	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		50.2	ug/kg	0.300	1.00
74-95-3	Dibromomethane		48.0	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		224	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		50.0	ug/kg	0.300	1.00
108-88-3	Toluene		45.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.3	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		44.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		197	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		43.9	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		46.7	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		46.2	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		45.8	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		46.0	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985626**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 17:53**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n403ll.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		45.7	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		91.2	ug/kg	0.300	2.00
95-47-6	o-Xylene		45.1	ug/kg	0.300	1.00
100-42-5	Styrene		44.8	ug/kg	0.300	1.00
75-25-2	Bromoform		44.4	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		44.4	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		44.0	ug/kg	0.300	1.00
108-86-1	Bromobenzene		42.3	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		45.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		42.9	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		45.1	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		43.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		44.9	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		44.7	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		43.5	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.4	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		45.3	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		43.9	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		43.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		46.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		44.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		45.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		42.9	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n40311.d
Lab Smp Id: 1201985626 Client Smp ID: LCS
Inj Date : 03-DEC-2009 17:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985626|928605|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091129-01A/IVM091203-01
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2445410	136.241	136
M 2 1,2-Dichloroethylene (total)	96				1274421	100.445	100
M 135 1,3-Dichloropropylene	75				1407502	100.311	100
3 Dichlorodifluoromethane	85	4.911	4.919	(0.462)	365235	48.7279	48.7
4 Chloromethane	50	5.299	5.299	(0.499)	474539	41.0074	41.0
5 Vinyl chloride	62	5.528	5.521	(0.521)	490354	45.7753	45.8
6 Bromomethane	94	6.137	6.138	(0.578)	392580	46.4692	46.5
7 Chloroethane	64	6.288	6.288	(0.592)	374832	47.6858	47.7
8 Trichlorofluoromethane	101	6.669	6.668	(0.628)	701955	53.1097	53.1
134 Ethyl Ether	59	7.005	7.004	(0.660)	342887	47.3695	47.4
10 Acetone	43	7.364	7.363	(0.693)	1470674	225.021	225
11 1,1-Dichloroethylene	61	7.389	7.388	(0.696)	699388	51.3606	51.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.632	7.632	(0.719)	3840143	235.747	236
15 Acetonitrile	41	7.706	7.705	(0.726)	1747017	1183.17	1180
128 Methyl acetate	43	7.754	7.753	(0.730)	1709507	226.815	227
14 Carbon disulfide	76	7.773	7.772	(0.732)	7211039	255.385	255
17 Methylene chloride	84	7.943	7.942	(0.748)	500658	46.4694	46.5
20 tert-Butyl methyl ether	73	8.242	8.241	(0.776)	1232717	46.7566	46.8
21 trans-1,2-Dichloroethylene	61	8.285	8.284	(0.780)	613679	50.9200	50.9
23 Vinyl acetate	43	8.711	8.711	(0.820)	4466303	254.822	255
22 1,1-Dichloroethane	63	8.760	8.759	(0.825)	758213	50.5795	50.6
30 2-Butanone	43	9.327	9.326	(0.878)	1738916	231.245	231
31 cis-1,2-Dichloroethylene	61	9.388	9.387	(0.884)	660742	49.5254	49.5
25 2,2-Dichloropropane	77	9.425	9.418	(0.887)	467548	54.0065	54.0
29 Bromochloromethane	128	9.663	9.662	(0.910)	225474	47.9643	48.0
32 Chloroform	83	9.693	9.692	(0.913)	751449	49.6118	49.6
36 1,1,1-Trichloroethane	97	9.980	9.979	(0.940)	621447	55.2885	55.3
129 Cyclohexane	56	10.083	10.082	(0.949)	722838	55.6794	55.7
34 1,1-Dichloropropene	75	10.138	10.137	(0.955)	609274	54.4848	54.5
33 Carbon tetrachloride	117	10.175	10.174	(0.958)	611811	56.4312	56.4
$ 138 1,2-Dichloroethane-d4	65	10.266	10.265	(0.967)	344415	54.5140	54.5
37 1,2-Dichloroethane	62	10.345	10.344	(0.974)	580511	48.6825	48.7
38 Benzene	78	10.376	10.375	(0.977)	1672331	48.5036	48.5
139 Cyclohexene	67	10.498	10.497	(0.989)	847894	52.0216	52.0
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1608552	50.0000	
131 n-Butyl alcohol	56	10.693	10.692	(1.007)	1882145	5451.29	5450
39 Trichloroethylene	95	11.010	11.009	(1.037)	448387	51.7984	51.8
130 Methylcyclohexane	83	11.266	11.265	(1.061)	764785	55.4069	55.4
41 1,2-Dichloropropane	63	11.248	11.247	(1.059)	442450	48.9476	48.9
43 Dibromomethane	93	11.376	11.375	(1.071)	268219	48.0383	48.0
45 Bromodichloromethane	83	11.485	11.484	(1.082)	584362	50.2370	50.2
44 2-Chloroethylvinyl ether	63	11.699	11.698	(1.102)	991764	192.217	192
46 cis-1,3-Dichloropropylene	75	11.930	11.929	(1.123)	724815	49.9693	50.0
49 4-Methyl-2-pentanone	58	12.022	12.021	(0.873)	954217	224.228	224
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1035951	45.1169	45.1
50 Toluene	92	12.327	12.326	(0.895)	1047094	45.3204	45.3
53 trans-1,3-Dichloropropylene	75	12.467	12.466	(0.905)	682687	46.2919	46.3
54 1,1,2-Trichloroethane	83	12.686	12.685	(0.921)	324377	44.2630	44.3
55 2-Hexanone	43	12.857	12.862	(0.934)	2264349	197.465	197
52 1,3-Dichloropropane	76	12.881	12.881	(0.935)	650702	43.8799	43.9
56 Tetrachloroethylene	164	12.924	12.923	(0.938)	418882	46.6722	46.7
57 Dibromochloromethane	129	13.150	13.149	(0.955)	468396	46.1853	46.2
59 1,2-Dibromoethane	107	13.320	13.319	(0.967)	425590	45.8193	45.8
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1318314	50.0000	
62 Chlorobenzene	112	13.802	13.801	(1.002)	1224959	45.9673	46.0
60 1,1,1,2-Tetrachloroethane	131	13.857	13.850	(1.006)	454474	45.1605	45.2
58 Ethylbenzene	91	13.863	13.862	(1.007)	2040608	45.7486	45.7
63 m,p-Xylenes	106	13.973	13.972	(1.015)	1616904	91.1864	91.2
64 o-Xylene	106	14.405	14.405	(1.046)	828506	45.0549	45.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
65 Styrene	104	14.405	14.405	(1.046)	1399433	44.7561	44.8
66 Bromoform	173	14.662	14.661	(0.906)	441788	44.4080	44.4
67 Isopropylbenzene	105	14.759	14.758	(0.912)	2255966	45.1377	45.1
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	486276	45.5369	45.5
73 1,1,2,2-Tetrachloroethane	83	15.021	15.020	(0.928)	649938	44.3547	44.4
74 1,2,3-Trichloropropane	110	15.107	15.112	(0.934)	172082	44.0311	44.0
75 Bromobenzene	156	15.168	15.167	(0.937)	667422	42.2669	42.3
76 n-Propylbenzene	91	15.186	15.185	(0.939)	2670094	44.9754	45.0
78 1,3,5-Trimethylbenzene	105	15.332	15.331	(0.948)	1958258	43.9185	43.9
77 2-Chlorotoluene	91	15.332	15.331	(0.948)	1809801	42.9302	42.9
80 4-Chlorotoluene	91	15.430	15.435	(0.954)	1741006	44.9416	44.9
81 tert-Butylbenzene	119	15.704	15.703	(0.971)	2018498	44.6660	44.7
79 1,2,4-Trimethylbenzene	105	15.747	15.746	(0.973)	2054732	43.5444	43.5
83 sec-Butylbenzene	105	15.930	15.929	(0.985)	2734790	45.3702	45.4
84 4-Isopropyltoluene	119	16.052	16.051	(0.992)	2240252	45.3290	45.3
85 1,3-Dichlorobenzene	146	16.125	16.118	(0.997)	1304457	43.9181	43.9
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	922188	50.0000	
87 1,4-Dichlorobenzene	146	16.210	16.209	(1.002)	1297523	43.5275	43.5
89 n-Butylbenzene	91	16.503	16.502	(1.020)	2133641	46.4290	46.4
90 1,2-Dichlorobenzene	146	16.643	16.642	(1.029)	1237199	42.9136	42.9
92 1,2-Dibromo-3-chloropropane	157	17.527	17.526	(1.083)	145293	44.6682	44.7
93 1,2,4-Trichlorobenzene	180	18.630	18.629	(1.151)	721437	44.1728	44.2
94 Hexachlorobutadiene	225	18.819	18.818	(1.163)	500941	43.4426	43.4
95 Naphthalene	128	19.033	19.032	(1.176)	1269339	45.2411	45.2
96 1,2,3-Trichlorobenzene	180	19.386	19.385	(1.198)	566552	43.9473	43.9

Data File: /chem/VOA4.i/120309v4/4n40311.d
Date : 03-DEC-2009 17:53
Client ID: LCS
Sample Info: 1120198562619286051111VOAF11

Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

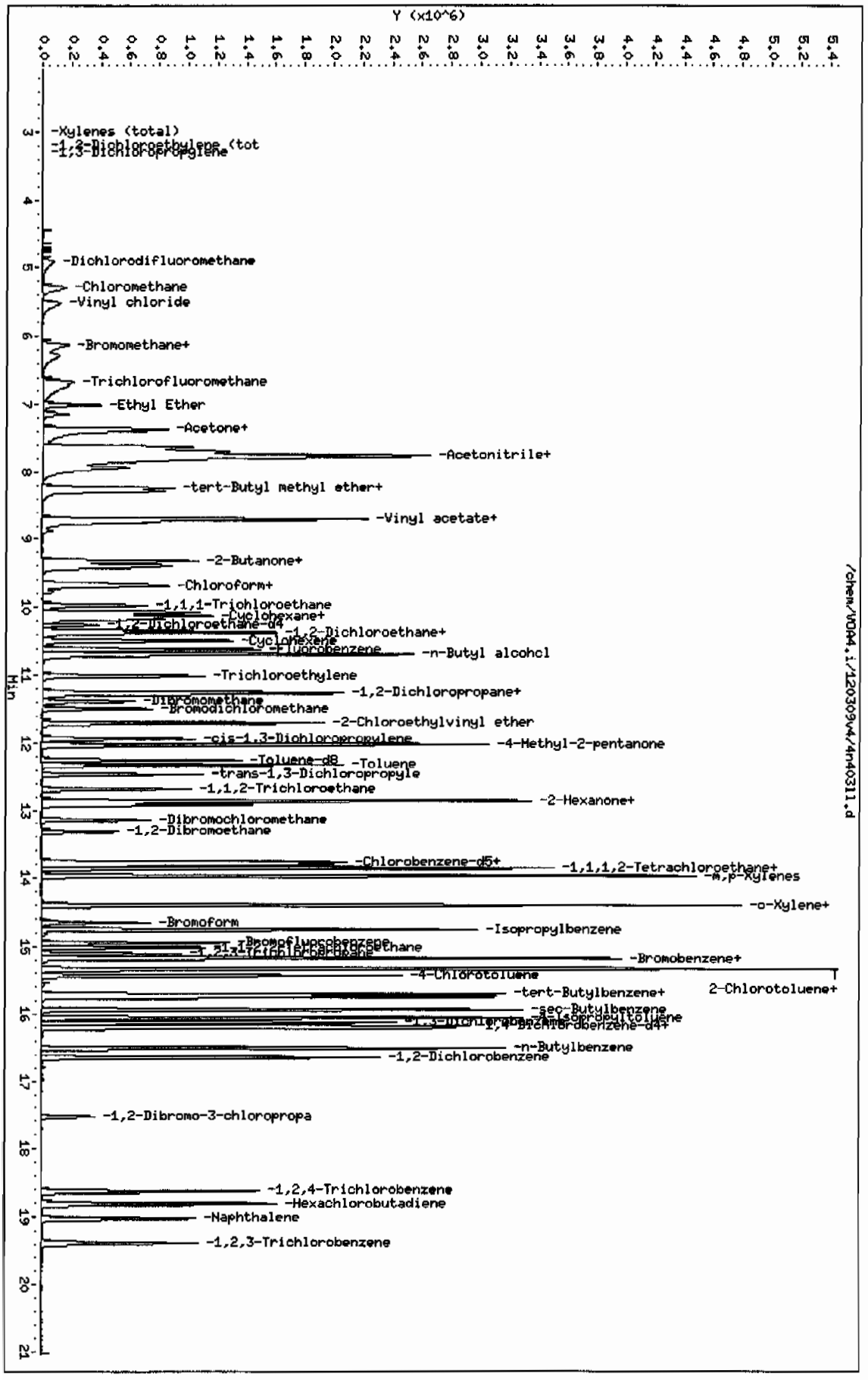

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985627**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 18:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 16:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n405sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985627**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/03/2009 18:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 16:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n405sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		216	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n405sl.d
Lab Smp Id: 1201985627 Client Smp ID: LCS
Inj Date : 03-DEC-2009 18:48
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985627|928605|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
9 Acrolein	56	7.186	7.193	(0.677)	368610	209.896	210
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	654103	216.157	216
16 Allyl chloride	41	7.802	7.808	(0.735)	2872959	204.866	205
18 Acrylonitrile	53	8.180	8.180	(0.770)	717095	202.503	202
24 2-Chloro-1,3-butadiene	53	8.875	8.875	(0.836)	559266	42.0101	42.0
26 Ethyl acetate	43	9.345	9.345	(0.880)	1857466	187.100	187
28 Propionitrile	54	9.399	9.393	(0.885)	295497	198.687	199
27 Methacrylonitrile	41	9.582	9.582	(0.902)	1163952	197.669	198
72 Tetrahydrofuran	42	9.716	9.717	(0.601)	655996	204.168	204
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	912182	2022.02	2020
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	320816	50.5736	50.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1615076	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	42 Methyl methacrylate	69	11.210	11.210	(1.056)	1306666	198.837	199
	97 1,4-Dioxane	88	11.332	11.332	(1.067)	237492	2020.64	2020
	48 2-Nitropropane	43	11.679	11.680	(1.100)	649522	212.271	212
$	47 Toluene-d8	98	12.253	12.253	(0.890)	1037225	47.0274	47.0
	51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2392892	189.987	190
*	61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1266312	50.0000	
	68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	859017	219.991	220
	70 Cyclohexanone	42	14.904	14.911	(1.082)	596913	621.201	621
$	71 Bromofluorobenzene	95	14.953	14.953	(0.924)	494375	48.2799	48.3
	69 trans-1,4-Dichloro-2-butene	53	15.063	15.069	(0.931)	810722	214.859	215
	82 Pentachloroethane	167	15.776	15.776	(0.975)	1548048	196.570	196
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	884280	50.0000	
	88 Benzyl chloride	91	16.319	16.319	(1.009)	4666588	211.903	212
	91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1333162	202.844	203

Data File: /chem/VOA4.i/120309v4/4n405s1.d
Date : 03-DEC-2009 18:48
Client ID: LCS
Sample Info: !120198562719286051!!VOAF!1!
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

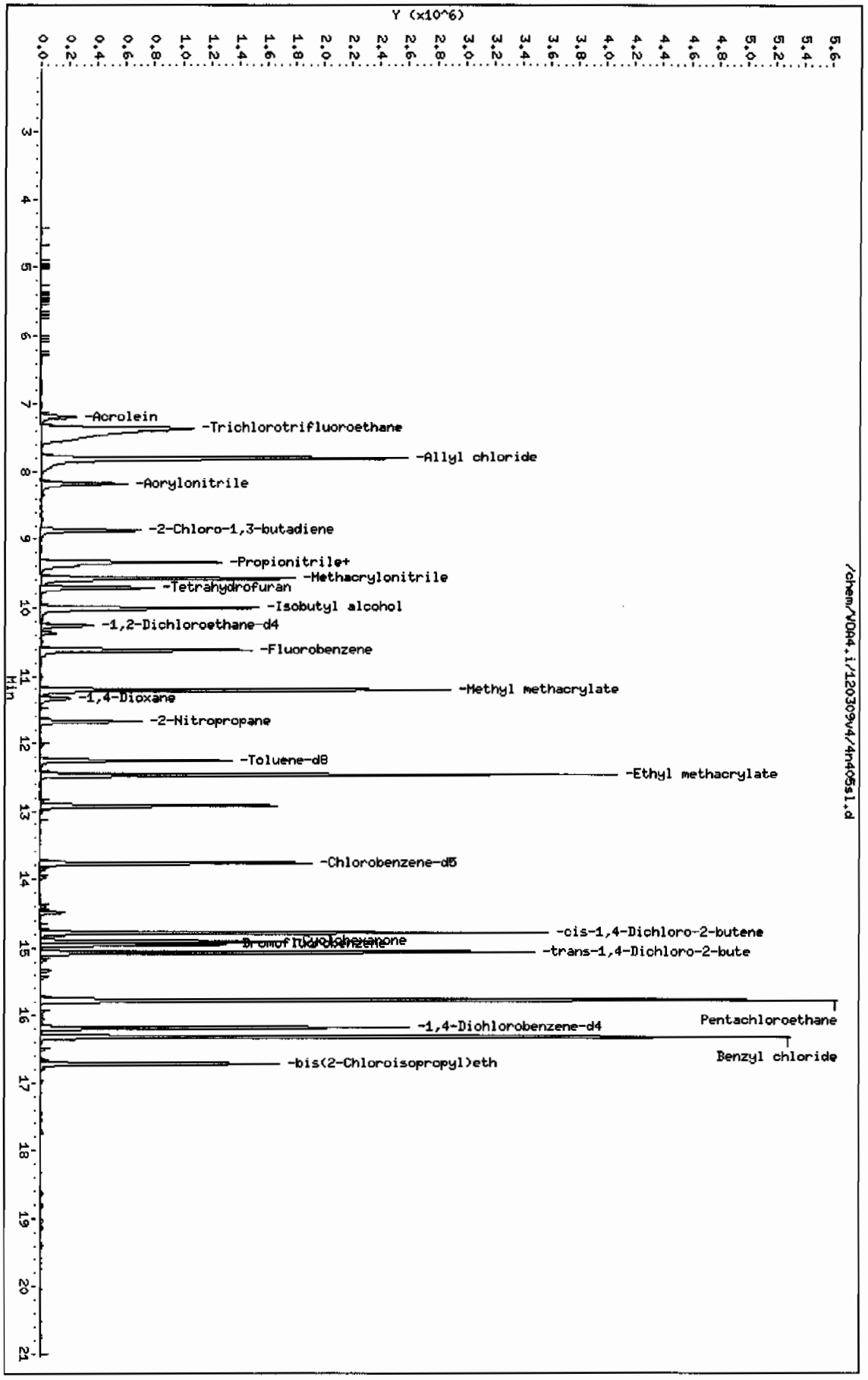

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989830**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 14:37**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 13:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o1031l.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		57.2	ug/kg	0.340	1.00
74-87-3	Chloromethane		49.6	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		54.0	ug/kg	0.300	1.00
74-83-9	Bromomethane		52.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		56.1	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		60.4	ug/kg	0.300	1.00
67-64-1	Acetone		284	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		58.9	ug/kg	0.300	1.00
74-88-4	Iodomethane		272	ug/kg	1.60	5.00
75-09-2	Methylene chloride		54.6	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		294	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		57.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		57.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		289	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		56.4	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		60.9	ug/kg	0.300	1.00
67-66-3	Chloroform		55.8	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		54.8	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		61.5	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		61.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		64.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		54.7	ug/kg	0.300	1.00
71-43-2	Benzene		54.5	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		58.8	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		55.3	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		56.8	ug/kg	0.300	1.00
74-95-3	Dibromomethane		54.8	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		267	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		56.5	ug/kg	0.300	1.00
108-88-3	Toluene		51.8	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.1	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		253	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.8	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		53.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		53.8	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		52.5	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		53.4	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989830**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 14:37**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 13:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o103ll.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.5	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		106	ug/kg	0.300	2.00
95-47-6	o-Xylene		52.6	ug/kg	0.300	1.00
100-42-5	Styrene		52.7	ug/kg	0.300	1.00
75-25-2	Bromoform		53.3	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		51.5	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		51.5	ug/kg	0.300	1.00
108-86-1	Bromobenzene		50.4	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		52.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		50.0	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		52.3	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		51.3	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		51.5	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		52.0	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		50.6	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		51.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		51.7	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		50.3	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		50.0	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		52.2	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.9	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		52.9	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		49.4	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o10311.d
Lab Smp Id: 1201989830 Client Smp ID: LCS
Inj Date : 07-DEC-2009 14:37
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989830|928605|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091129-01B/IVM091203-01
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2706719	158.247	158
M 2 1,2-Dichloroethylene (total)	96				1396135	114.246	114
M 135 1,3-Dichloropropylene	75				1536388	113.688	114
3 Dichlorodifluoromethane	85	4.912	4.911	(0.463)	412646	57.1607	57.2
4 Chloromethane	50	5.299	5.299	(0.499)	553106	49.6265	49.6
5 Vinyl chloride	62	5.528	5.528	(0.521)	556955	53.9829	54.0
6 Bromomethane	94	6.138	6.137	(0.578)	424598	52.1831	52.2
7 Chloroethane	64	6.295	6.288	(0.593)	424831	56.1156	56.1
8 Trichlorofluoromethane	101	6.668	6.669	(0.628)	768791	60.3931	60.4
134 Ethyl Ether	59	7.004	7.005	(0.660)	370671	53.1681	53.2
10 Acetone	43	7.357	7.358	(0.693)	1789602	284.301	284
11 1,1-Dichloroethylene	61	7.388	7.389	(0.696)	771937	58.8584	58.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.625	7.626	(0.718)	4269009	272.108	272
15 Acetonitrile	41	7.705	7.706	(0.726)	1914388	1346.16	1350
128 Methyl acetate	43	7.753	7.748	(0.730)	1834210	252.676	253
14 Carbon disulfide	76	7.772	7.767	(0.732)	7993974	293.951	294
17 Methylene chloride	84	7.942	7.937	(0.748)	555658	54.5539	54.6
20 tert-Butyl methyl ether	73	8.241	8.242	(0.776)	1337415	52.6697	52.7
21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.780)	671748	57.8720	57.9
23 Vinyl acetate	43	8.711	8.711	(0.820)	4868026	288.375	288
22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	832872	57.6868	57.7
30 2-Butanone	43	9.326	9.327	(0.878)	2091543	288.785	289
31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.884)	724387	56.3743	56.4
25 2,2-Dichloropropane	77	9.424	9.419	(0.887)	507470	60.8618	60.9
29 Bromochloromethane	128	9.656	9.663	(0.909)	248044	54.7854	54.8
32 Chloroform	83	9.692	9.693	(0.913)	814704	55.8471	55.8
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	665825	61.5043	61.5
129 Cyclohexane	56	10.082	10.083	(0.949)	785261	62.8033	62.8
34 1,1-Dichloropropene	75	10.131	10.132	(0.954)	661360	61.4066	61.4
33 Carbon tetrachloride	117	10.174	10.175	(0.958)	674579	64.6026	64.6
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	344673	56.6432	56.6
37 1,2-Dichloroethane	62	10.344	10.339	(0.974)	628038	54.6844	54.7
38 Benzene	78	10.375	10.376	(0.977)	1810057	54.5078	54.5
139 Cyclohexene	67	10.497	10.492	(0.989)	934430	59.5255	59.5
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1549246	50.0000	
131 n-Butyl alcohol	56	10.692	10.693	(1.007)	2069142	6222.31	6220
39 Trichloroethylene	95	11.003	11.004	(1.036)	489999	58.7724	58.8
130 Methylcyclohexane	83	11.265	11.266	(1.061)	830026	62.4354	62.4
41 1,2-Dichloropropane	63	11.247	11.241	(1.059)	481697	55.3294	55.3
43 Dibromomethane	93	11.375	11.376	(1.071)	294673	54.7965	54.8
45 Bromodichloromethane	83	11.484	11.485	(1.082)	636621	56.8248	56.8
44 2-Chloroethylvinyl ether	63	11.698	11.699	(1.102)	1008614	202.966	203
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	789855	56.5377	56.5
49 4-Methyl-2-pentanone	58	12.021	12.016	(0.873)	1084481	267.439	267
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1017093	46.4858	46.5
50 Toluene	92	12.326	12.327	(0.895)	1141456	51.8474	51.8
53 trans-1,3-Dichloropropylene	75	12.460	12.461	(0.905)	746533	53.1242	53.1
54 1,1,2-Trichloroethane	83	12.685	12.686	(0.921)	353412	50.6095	50.6
55 2-Hexanone	43	12.856	12.857	(0.934)	2767756	253.300	253
52 1,3-Dichloropropane	76	12.874	12.875	(0.935)	703518	49.7873	49.8
56 Tetrachloroethylene	164	12.917	12.918	(0.938)	458515	53.6142	53.6
57 Dibromochloromethane	129	13.149	13.144	(0.955)	519529	53.7602	53.8
59 1,2-Dibromoethane	107	13.319	13.320	(0.967)	464461	52.4767	52.5
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1256200	50.0000	
62 Chlorobenzene	112	13.801	13.802	(1.002)	1355354	53.3752	53.4
60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	507633	52.9370	52.9
58 Ethylbenzene	91	13.862	13.863	(1.007)	2233344	52.5454	52.5
63 m,p-Xylenes	106	13.972	13.973	(1.015)	1785275	105.660	106
64 o-Xylene	106	14.405	14.399	(1.046)	921444	52.5867	52.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
65 Styrene	104	14.405	14.399	(1.046)	1569598	52.6804	52.7
66 Bromoform	173	14.661	14.655	(0.906)	514481	53.3084	53.3
67 Isopropylbenzene	105	14.758	14.759	(0.912)	2537873	52.3426	52.3
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	493225	47.6107	47.6
73 1,1,2,2-Tetrachloroethane	83	15.020	15.015	(0.928)	732049	51.4976	51.5
74 1,2,3-Trichloropropane	110	15.112	15.107	(0.934)	195182	51.4805	51.5
75 Bromobenzene	156	15.167	15.168	(0.937)	771630	50.3718	50.4
76 n-Propylbenzene	91	15.185	15.180	(0.939)	2998511	52.0635	52.1
78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	2219090	51.3017	51.3
77 2-Chlorotoluene	91	15.331	15.332	(0.948)	2042834	49.9510	50.0
80 4-Chlorotoluene	91	15.429	15.430	(0.954)	1936387	51.5252	51.5
81 tert-Butylbenzene	119	15.703	15.704	(0.971)	2281031	52.0306	52.0
79 1,2,4-Trimethylbenzene	105	15.740	15.741	(0.973)	2315115	50.5741	50.6
83 sec-Butylbenzene	105	15.929	15.930	(0.985)	3026775	51.7614	51.8
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	2480161	51.7294	51.7
85 1,3-Dichlorobenzene	146	16.124	16.119	(0.997)	1450264	50.3314	50.3
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	894624	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.204	(1.002)	1445342	49.9803	50.0
89 n-Butylbenzene	91	16.502	16.503	(1.020)	2326812	52.1925	52.2
90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	1381722	49.4031	49.4
92 1,2-Dibromo-3-chloropropane	157	17.526	17.527	(1.083)	167061	52.9429	52.9
93 1,2,4-Trichlorobenzene	180	18.629	18.630	(1.151)	813955	51.3731	51.4
94 Hexachlorobutadiene	225	18.818	18.819	(1.163)	571031	51.0467	51.0
95 Naphthalene	128	19.032	19.033	(1.176)	1403291	51.5564	51.6
96 1,2,3-Trichlorobenzene	180	19.385	19.386	(1.198)	635716	50.8317	50.8

Data File: /chem/VOA4.i/120709v4/4o10311.d
Date : 07-DEC-2009 14:37
Client ID: LCS
Sample Info: |12019898301928605!1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

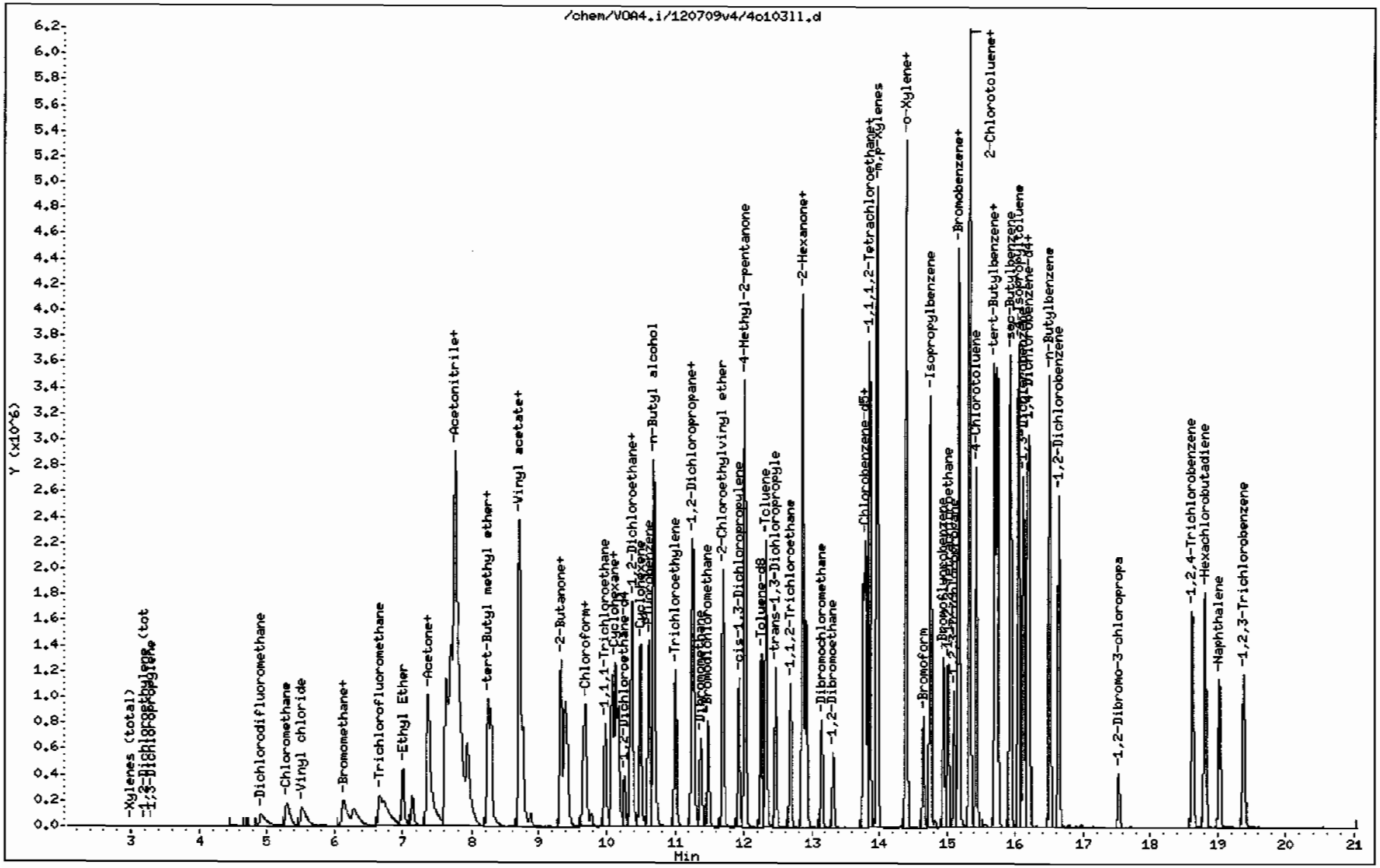

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989831**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 15:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 13:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o105sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989831**				
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928603**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 15:32**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 13:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o105sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		296	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120709v4/4o105sl.d
Lab Smp Id: 1201989831 Client Smp ID: LCS
Inj Date : 07-DEC-2009 15:32
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201989831|928605|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091105-02D/UVM091118-08B
Comment :
Method : /chem/VOA4.i/120709v4/VOA4-8260-112209.m
Meth Date : 07-Dec-2009 15:45 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	951928	170.939	171(A)
154 2-Chloro-1,1,1-trifluoroethane	118	5.664	5.657	(0.533)	1446131	172.503	172
9 Acrolein	56	7.187	7.186	(0.677)	520941	296.690	297
12 Trichlorotrifluoroethane	85	7.364	7.369	(0.693)	895237	295.895	296
147 Isopropyl Alcohol	45	7.437	7.436	(0.700)	2375125	2726.00	2720
16 Allyl chloride	41	7.803	7.802	(0.735)	3476937	247.979	248
148 tert-Butyl Alcohol	59	7.931	7.930	(0.747)	3603942	2765.14	2760
18 Acrylonitrile	53	8.181	8.180	(0.770)	978297	276.313	276
149 Isopropyl ether	45	8.748	8.747	(0.824)	1414555	47.7646	47.8
24 2-Chloro-1,3-butadiene	53	8.870	8.869	(0.835)	719543	54.0591	54.0
150 Ethyl tert-butyl ether	59	9.150	9.149	(0.862)	1314627	48.5375	48.5
26 Ethyl acetate	43	9.345	9.344	(0.880)	2449200	246.748	247

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
28 Propionitrile	54	9.394	9.393	(0.885)	412161	277.179	277
27 Methacrylonitrile	41	9.577	9.576	(0.902)	1544583	262.356	262
72 Tetrahydrofuran	42	9.717	9.716	(0.601)	912243	281.027	281
19 Isobutyl alcohol	41	10.010	10.009	(0.943)	1305775	2895.00	2900
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	310262	48.9185	48.9
151 Methyl tert-amyl ether	73	10.388	10.387	(0.978)	1319694	48.9030	48.9
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1614791	50.0000	
42 Methyl methacrylate	69	11.211	11.210	(1.056)	1677151	255.260	255
97 1,4-Dioxane	88	11.333	11.332	(1.067)	346601	2949.49	2950
48 2-Nitropropane	43	11.674	11.673	(1.099)	871399	284.834	285
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1002111	45.0115	45.0
51 Ethyl methacrylate	69	12.467	12.466	(0.905)	3023508	237.816	238
152 1-Chlorohexane	55	13.668	13.667	(1.287)	429925	52.2988	52.3
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1278237	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.783	14.782	(0.914)	1106436	276.687	277
70 Cyclohexanone	42	14.905	14.904	(1.082)	903124	931.103	931
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	470880	44.9035	44.9
69 trans-1,4-Dichloro-2-butene	53	15.064	15.063	(0.931)	1062560	274.976	275
82 Pentachloroethane	167	15.771	15.776	(0.975)	1649124	204.478	204
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	905586	50.0000	
88 Benzyl chloride	91	16.320	16.319	(1.009)	5906522	261.896	262
91 bis(2-Chloroisopropyl)ether	45	16.722	16.721	(1.034)	1888398	280.564	280

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/120709v4/4c105sl.d
Date : 07-DEC-2009 15:32
Client ID: LCS
Sample Info: |1201989831|928605|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

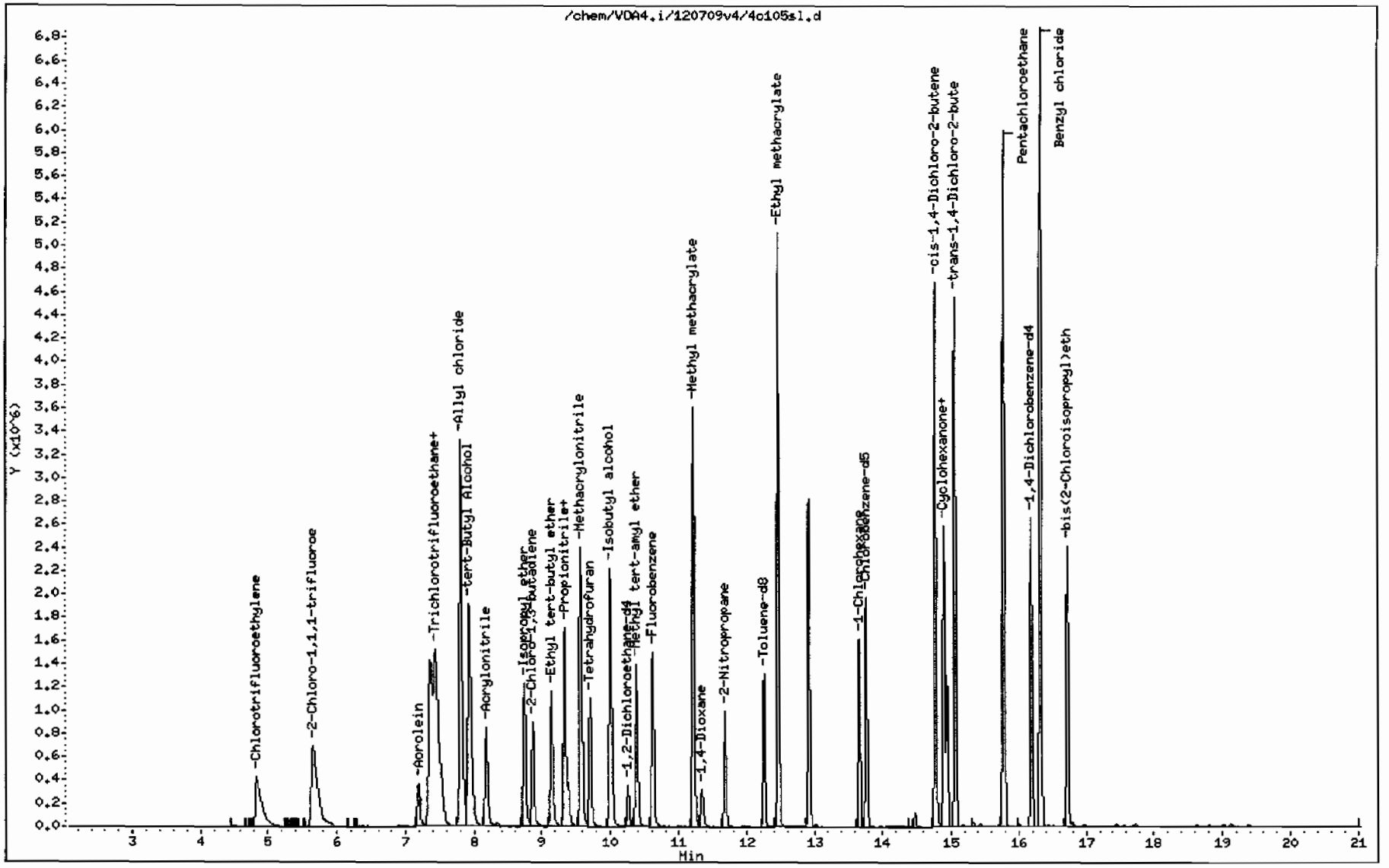

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201985622	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
Client Sample:	QC for batch 928603	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14115PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 03:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n421.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		40.8	ug/kg	0.340	1.00
74-87-3	Chloromethane		36.9	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		38.6	ug/kg	0.300	1.00
74-83-9	Bromomethane		38.7	ug/kg	0.300	1.00
75-00-3	Chloroethane		40.7	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		43.0	ug/kg	0.300	1.00
67-64-1	Acetone		236	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		42.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		186	ug/kg	1.60	5.00
75-09-2	Methylene chloride		37.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		214	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		42.4	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		43.1	ug/kg	0.300	1.00
78-93-3	2-Butanone		227	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		41.9	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		44.0	ug/kg	0.300	1.00
67-66-3	Chloroform		41.6	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		39.3	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		46.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		43.1	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		45.3	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		42.6	ug/kg	0.300	1.00
71-43-2	Benzene		39.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		43.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		41.3	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		42.1	ug/kg	0.300	1.00
74-95-3	Dibromomethane		41.2	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		212	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		40.4	ug/kg	0.300	1.00
108-88-3	Toluene		38.1	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		39.6	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		40.1	ug/kg	0.300	1.00
591-78-6	2-Hexanone		185	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		39.8	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		35.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		40.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		41.1	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		38.9	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201985622**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14115PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 03:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n421.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		39.5	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		76.8	ug/kg	0.300	2.00
95-47-6	o-Xylene		38.4	ug/kg	0.300	1.00
100-42-5	Styrene		37.9	ug/kg	0.300	1.00
75-25-2	Bromoform		39.9	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		43.3	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		45.9	ug/kg	0.300	1.00
108-86-1	Bromobenzene		37.9	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		41.9	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		40.2	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		42.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		39.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		40.9	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		40.6	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		39.5	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		40.7	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		39.7	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		37.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		37.0	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		39.6	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		44.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		39.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		37.5	ug/kg	0.300	1.00

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n421.d
Lab Smp Id: 1201985622 Client Smp ID: RE03-09-14115MS
Inj Date : 04-DEC-2009 03:39
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985622|928605|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241819001
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 21 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00940	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1459722	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1155321	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	751633	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	312408	54.4895	54.5
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	885828	44.0216	44.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	427613	49.1298	49.1
3 Dichlorodifluoromethane	85	4.912	4.919	(0.463)	277489	40.7958	40.8
4 Chloromethane	50	5.306	5.299	(0.500)	387335	36.8844	36.9
5 Vinyl chloride	62	5.528	5.521	(0.521)	375176	38.5941	38.6
6 Bromomethane	94	6.138	6.138	(0.578)	296439	38.6667	38.7
7 Chloroethane	64	6.295	6.288	(0.593)	290490	40.7238	40.7
8 Trichlorofluoromethane	101	6.680	6.668	(0.629)	515180	42.9525	43.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.363	7.363	(0.693)	1402364	236.446	236
11 1,1-Dichloroethylene	61	7.394	7.388	(0.696)	523661	42.3767	42.4
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	897985	36.9600	37.0
13 Iodomethane	142	7.631	7.632	(0.719)	2753515	186.274	186
17 Methylene chloride	84	7.942	7.942	(0.748)	380986	37.9020	37.9
14 Carbon disulfide	76	7.778	7.772	(0.732)	5471558	213.537	214
21 trans-1,2-Dichloroethylene	61	8.290	8.284	(0.781)	463391	42.3701	42.4
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	586638	43.1239	43.1
30 2-Butanone	43	9.332	9.326	(0.879)	1550395	227.196	227
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	507415	41.9106	41.9
85 1,3-Dichlorobenzene	146	16.124	16.118	(0.997)	913482	37.7335	37.7
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	346017	44.0435	44.0
32 Chloroform	83	9.692	9.692	(0.913)	571313	41.5647	41.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	881203	37.5011	37.5
29 Bromochloromethane	128	9.661	9.662	(0.910)	167578	39.2829	39.3
36 1,1,1-Trichloroethane	97	9.985	9.979	(0.940)	468804	45.9607	46.0
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	437505	43.1132	43.1
33 Carbon tetrachloride	117	10.180	10.174	(0.959)	445987	45.3304	45.3
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	460870	42.5898	42.6
38 Benzene	78	10.375	10.375	(0.977)	1242519	39.7118	39.7
39 Trichloroethylene	95	11.009	11.009	(1.037)	339795	43.2559	43.2
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	338538	41.2705	41.3
45 Bromodichloromethane	83	11.484	11.484	(1.082)	444163	42.0774	42.1
43 Dibromomethane	93	11.375	11.375	(1.071)	208984	41.2454	41.2
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	790376	211.930	212
46 cis-1,3-Dichloropropylene	75	11.935	11.929	(1.124)	531904	40.4087	40.4
50 Toluene	92	12.326	12.326	(0.895)	770418	38.0496	38.0
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	512373	39.6448	39.6
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	257536	40.1000	40.1
55 2-Hexanone	43	12.862	12.862	(0.934)	1860409	185.128	185
52 1,3-Dichloropropane	76	12.880	12.881	(0.935)	517486	39.8197	39.8
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	280290	35.6361	35.6
57 Dibromochloromethane	129	13.149	13.149	(0.955)	361438	40.6669	40.7
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	334636	41.1099	41.1
62 Chlorobenzene	112	13.801	13.801	(1.002)	907359	38.8528	38.8
60 1,1,1,2-Tetrachloroethane	131	13.856	13.850	(1.006)	345582	39.1847	39.2
58 Ethylbenzene	91	13.868	13.862	(1.007)	1542007	39.4477	39.4
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1193173	76.7831	76.8
64 o-Xylene	106	14.404	14.405	(1.046)	618166	38.3590	38.4
65 Styrene	104	14.404	14.405	(1.046)	1037685	37.8689	37.9
66 Bromoform	173	14.661	14.661	(0.906)	323335	39.8762	39.9
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	516791	43.2709	43.3
74 1,2,3-Trichloropropane	110	15.106	15.112	(0.934)	146273	45.9200	45.9
75 Bromobenzene	156	15.167	15.167	(0.937)	487164	37.8520	37.8
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2029112	41.9342	41.9
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1382359	40.2315	40.2
67 Isopropylbenzene	105	14.758	14.758	(0.912)	1709241	41.9588	42.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1449082	39.8735	39.9
80 4-Chlorotoluene	91	15.429	15.435	(0.954)	1291976	40.9182	40.9
81 tert-Butylbenzene	119	15.709	15.703	(0.971)	1495100	40.5912	40.6
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	1520858	39.5439	39.5
83 sec-Butylbenzene	105	15.935	15.929	(0.985)	1998722	40.6830	40.7
84 4-Isopropyltoluene	119	16.050	16.051	(0.992)	1600208	39.7255	39.7
89 n-Butylbenzene	91	16.502	16.502	(1.020)	1484599	39.6360	39.6
92 1,2-Dibromo-3-chloropropane	157	17.532	17.526	(1.084)	118609	44.7388	44.7

Data File: /chem/VOA4.i/120309v4/4n421.d
Date : 04-DEC-2009 03:39
Client ID: RE03-09-14115MS
Sample Info: |120198562219286051|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

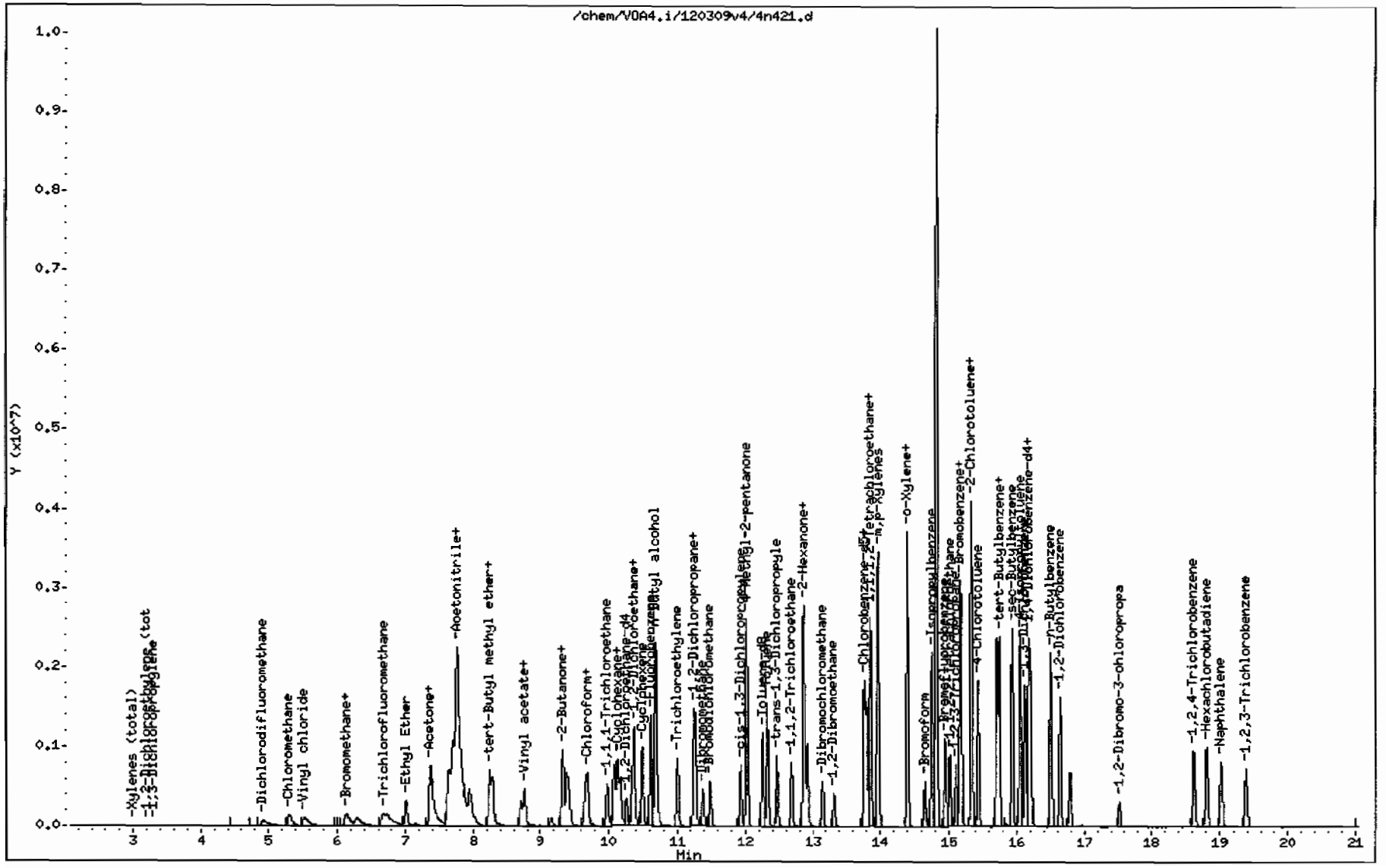

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201985623**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
Client Sample:	**QC for batch 928603**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14115PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928605**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 04:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/03/2009 21:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n422.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		36.5	ug/kg	0.340	1.00
74-87-3	Chloromethane		29.1	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		34.6	ug/kg	0.300	1.00
74-83-9	Bromomethane		35.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		34.1	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		39.7	ug/kg	0.300	1.00
67-64-1	Acetone		248	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		35.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		177	ug/kg	1.60	5.00
75-09-2	Methylene chloride		33.8	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		177	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		39.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		41.5	ug/kg	0.300	1.00
78-93-3	2-Butanone		249	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		41.4	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		50.0	ug/kg	0.300	1.00
67-66-3	Chloroform		40.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		40.3	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		45.2	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		40.8	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		42.8	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		43.3	ug/kg	0.300	1.00
71-43-2	Benzene		38.3	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		41.1	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		41.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		42.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		43.2	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		235	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		40.4	ug/kg	0.300	1.00
108-88-3	Toluene		37.2	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		40.2	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		42.1	ug/kg	0.300	1.00
591-78-6	2-Hexanone		195	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		41.8	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		34.5	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		41.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		43.3	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		37.8	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201985623	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
Client Sample:	QC for batch 928603	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14115PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928605	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/04/2009 04:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/03/2009 21:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n422.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		37.9	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		74.5	ug/kg	0.300	2.00
95-47-6	o-Xylene		37.0	ug/kg	0.300	1.00
100-42-5	Styrene		36.8	ug/kg	0.300	1.00
75-25-2	Bromoform		43.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		46.4	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		49.6	ug/kg	0.300	1.00
108-86-1	Bromobenzene		38.1	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		40.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		40.4	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		41.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		39.7	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		39.6	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		39.8	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		39.1	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		40.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		38.8	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		37.9	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		37.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		38.5	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.9	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		39.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		38.8	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120309v4/4n422.d
Lab Smp Id: 1201985623 Client Smp ID: RE03-09-14115MSD
Inj Date : 04-DEC-2009 04:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201985623|928605|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241819001
Comment :
Method : /chem/VOA4.i/120309v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:38 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 22 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00940	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	957276	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	747824	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	470963	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	219071	58.2652	58.3
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	629896	48.3602	48.4
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	284426	52.1533	52.2
3 Dichlorodifluoromethane	85	4.912	4.919	(0.463)	162976	36.5365	36.5
4 Chloromethane	50	5.292	5.299	(0.498)	200632	29.1333	29.1
5 Vinyl chloride	62	5.521	5.521	(0.520)	220260	34.5505	34.6
6 Bromomethane	94	6.130	6.138	(0.577)	176829	35.1713	35.2
7 Chloroethane	64	6.288	6.288	(0.592)	159539	34.1049	34.1
8 Trichlorofluoromethane	101	6.674	6.668	(0.629)	312626	39.7455	39.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.357	7.363	(0.693)	964626	248.007	248
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	286992	35.4144	35.4
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	564205	37.0611	37.1
13 Iodomethane	142	7.632	7.632	(0.719)	1712154	176.620	177
17 Methylene chloride	84	7.942	7.942	(0.748)	226816	33.7997	33.8
14 Carbon disulfide	76	7.772	7.772	(0.732)	2971694	176.848	177
21 trans-1,2-Dichloroethylene	61	8.290	8.284	(0.781)	281731	39.2807	39.3
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	370482	41.5287	41.5
30 2-Butanone	43	9.326	9.326	(0.878)	1113272	248.767	249
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	328281	41.3466	41.4
85 1,3-Dichlorobenzene	146	16.118	16.118	(0.996)	575007	37.9070	37.9
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	257687	50.0162	50.0
32 Chloroform	83	9.692	9.692	(0.913)	368393	40.8691	40.9
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	570798	38.7677	38.8
29 Bromochloromethane	128	9.662	9.662	(0.910)	112847	40.3376	40.3
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	302563	45.2318	45.2
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	271612	40.8140	40.8
33 Carbon tetrachloride	117	10.180	10.174	(0.959)	276338	42.8293	42.8
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	306992	43.2601	43.3
38 Benzene	78	10.375	10.375	(0.977)	786652	38.3382	38.3
39 Trichloroethylene	95	11.009	11.009	(1.037)	211566	41.0684	41.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	222866	41.4294	41.4
45 Bromodichloromethane	83	11.484	11.484	(1.082)	290773	42.0043	42.0
43 Dibromomethane	93	11.375	11.375	(1.071)	143632	43.2262	43.2
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	567527	235.098	235
46 cis-1,3-Dichloropropylene	75	11.930	11.929	(1.123)	349007	40.4304	40.4
50 Toluene	92	12.326	12.326	(0.895)	488059	37.2391	37.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	336625	40.2392	40.2
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	175021	42.1017	42.1
55 2-Hexanone	43	12.862	12.862	(0.934)	1266829	194.753	195
52 1,3-Dichloropropane	76	12.881	12.881	(0.935)	351875	41.8303	41.8
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	175597	34.4908	34.5
57 Dibromochloromethane	129	13.149	13.149	(0.955)	238269	41.4169	41.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	227992	43.2709	43.3
62 Chlorobenzene	112	13.801	13.801	(1.002)	572031	37.8413	37.8
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	222902	39.0466	39.0
58 Ethylbenzene	91	13.862	13.862	(1.007)	957700	37.8502	37.8
63 m,p-Xylenes	106	13.972	13.972	(1.015)	749707	74.5344	74.5
64 o-Xylene	106	14.405	14.405	(1.046)	386422	37.0448	37.0
65 Styrene	104	14.405	14.405	(1.046)	651857	36.7513	36.8
66 Bromoform	173	14.661	14.661	(0.906)	218986	43.1019	43.1
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	347097	46.3822	46.4
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	98933	49.5676	49.6
75 Bromobenzene	156	15.167	15.167	(0.937)	307086	38.0796	38.1
76 n-Propylbenzene	91	15.185	15.185	(0.939)	1215355	40.0852	40.1
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	869221	40.3734	40.4
67 Isopropylbenzene	105	14.758	14.758	(0.912)	1046501	40.9995	41.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	903357	39.6707	39.7
80 4-Chlorotoluene	91	15.429	15.435	(0.954)	782629	39.5583	39.6
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	917658	39.7614	39.8
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	942032	39.0909	39.1
83 sec-Butylbenzene	105	15.935	15.929	(0.985)	1239374	40.2607	40.3
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	978032	38.7494	38.8
89 n-Butylbenzene	91	16.502	16.502	(1.020)	902452	38.4525	38.4
92 1,2-Dibromo-3-chloropropane	157	17.532	17.526	(1.084)	79620	47.9301	47.9

Data File: /chem/VOA4.i/120309v4/4n422.d
Date : 04-DEC-2009 04:07
Client ID: RE03-09-14115MSD
Sample Info: 1120198562319286051|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

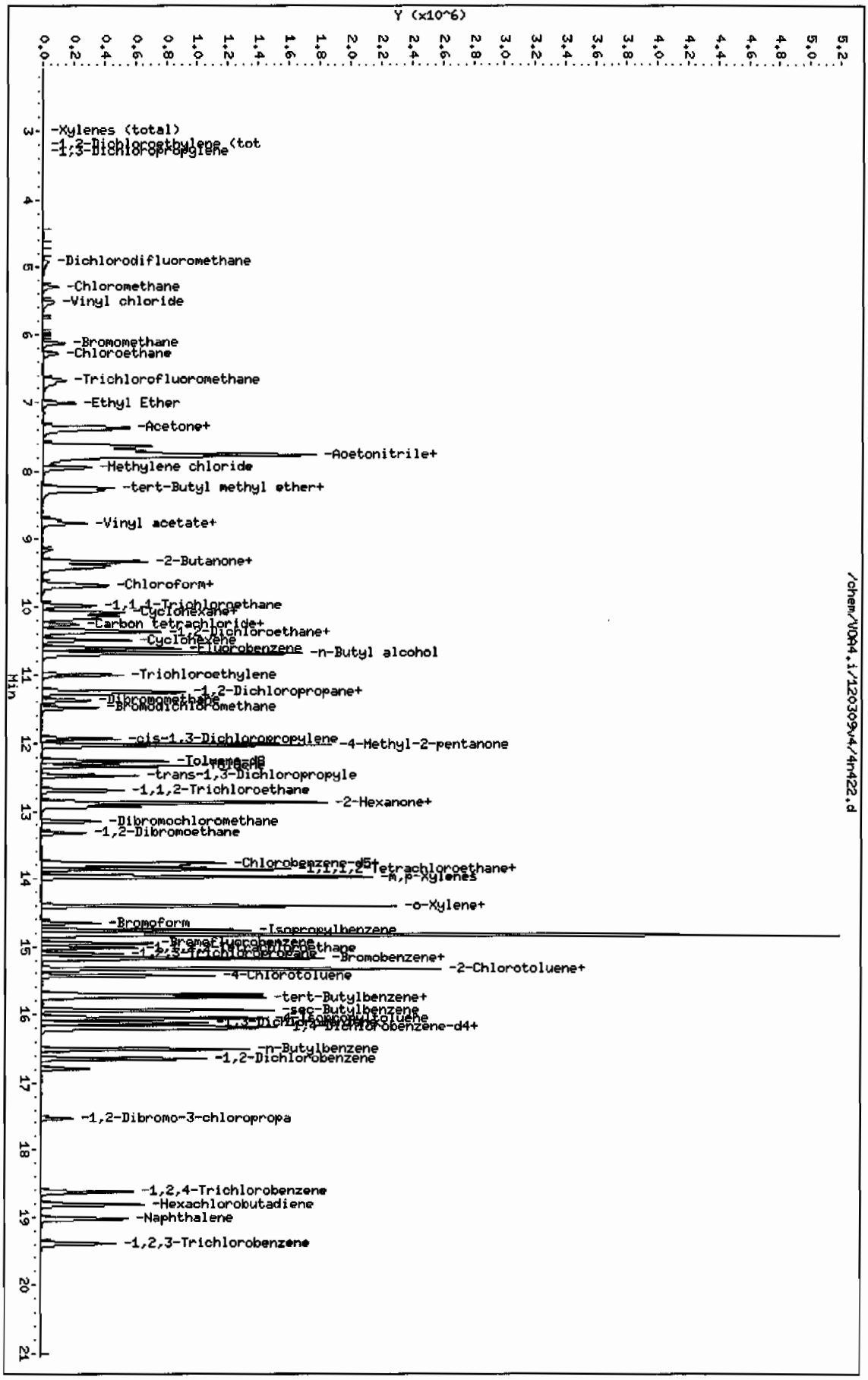

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **928603** Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201985624 LCS	02-DEC-2009 16:00:00	Soil	5	5	1	
1201985625 LCS	02-DEC-2009 16:15:00	Soil	5	5	1	
1201985620 MB	02-DEC-2009 16:30:00	Soil	5	5	1	
241819001	02-DEC-2009 20:50:00	Soil	5	5	1	
241819002	02-DEC-2009 20:51:00	Soil	5	5	1	
241819003	02-DEC-2009 20:52:00	Soil	5	5	1	
241819004	02-DEC-2009 20:53:00	Soil	5	5	1	
241819005	02-DEC-2009 20:54:00	Soil	5	5	1	
241819006	02-DEC-2009 20:55:00	Soil	5	5	1	
241819007	02-DEC-2009 20:56:00	Soil	5	5	1	
1201985626 LCS	03-DEC-2009 16:00:00	Soil	5	5	1	
1201985627 LCS	03-DEC-2009 16:15:00	Soil	5	5	1	
1201985621 MB	03-DEC-2009 16:30:00	Soil	5	5	1	
241819008	03-DEC-2009 21:00:00	Soil	5	5	1	
241819009	03-DEC-2009 21:01:00	Soil	5	5	1	
241819010	03-DEC-2009 21:02:00	Soil	5	5	1	
241819011	03-DEC-2009 21:03:00	Soil	5	5	1	
241819012	03-DEC-2009 21:04:00	Soil	5	5	1	
241819013	03-DEC-2009 21:05:00	Soil	5	5	1	
241819014	03-DEC-2009 21:06:00	Soil	5	5	1	
241819015	03-DEC-2009 21:07:00	Soil	5	5	1	
241819017	03-DEC-2009 21:09:00	Soil	5	5	1	
241819018	03-DEC-2009 21:10:00	Soil	5	5	1	
241819019	03-DEC-2009 21:11:00	Soil	5	5	1	
241819020	03-DEC-2009 21:12:00	Soil	5	5	1	
1201985622 PS (241819001)	03-DEC-2009 21:13:00	Soil	5	5	1	

Prep Logbook

Batch ID: **928603** Verified by: _____

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201985623 PSD (241819001)	03-DEC-2009 21:14:00	Soil	5	5	1	
1201989830 LCS	07-DEC-2009 13:00:00	Soil	5	5	1	
1201989831 LCS	07-DEC-2009 13:15:00	Soil	5	5	1	
1201989829 MB	07-DEC-2009 13:30:00	Soil	5	5	1	
241819016	07-DEC-2009 16:27:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/22/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

CI test lot # 81710

Sequence Number: 112209V4

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS					
BFB	UVM091020-02				1
SHORT					
DHEC					

Purge Amount

5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable (O/X)	Comments
11/22/2009	9:20	4L701.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/22/2009	9:47	4L702.D	12019----	GEL	BLANK	5ML	1	N/A	2	w	ACJ	N/A	X	
11/22/2009	10:14	4L703.D	W4VM091122-01	GEL	VSTD0005	5ML	1	N/A	3	w	ACJ	N/A	O	UVM090911-01C/UVM091116-01A
11/22/2009	10:41	4L704.D	W4VM091122-02	GEL	VSTD001	5ML	1	N/A	4	w	ACJ	N/A	X	UVM090911-02C/UVM091116-02A;NOT NEEDED
11/22/2009	11:09	4L705.D	W4VM091122-03	GEL	VSTD001	5ML	1	N/A	5	w	ACJ	N/A	O	UVM090911-02C/UVM091116-02A
11/22/2009	11:36	4L706.D	W4VM091122-04	GEL	VSTD002	5ML	1	N/A	6	w	ACJ	N/A	O	UVM090911-03C/UVM091116-03A
11/22/2009	12:04	4L707.D	W4VM091122-05	GEL	VSTD005	5ML	1	N/A	7	w	ACJ	N/A	O	UVM090911-04C/UVM091116-04A
11/22/2009	12:31	4L708.D	W4VM091122-06	GEL	VSTD010	5ML	1	N/A	8	w	ACJ	N/A	O	UVM090911-05C/UVM091116-05A
11/22/2009	12:59	4L709.D	W4VM091122-07	GEL	VSTD020	5ML	1	N/A	9	w	ACJ	N/A	O	UVM090911-06C/UVM091116-06A
11/22/2009	13:27	4L710.D	W4VM091122-08	GEL	VSTD050	5ML	1	N/A	10	w	ACJ	N/A	O	UVM090911-07C/UVM091116-07A
11/22/2009	13:54	4L711.D	W4VM091122-09	GEL	VSTD100	5ML	1	N/A	11	w	ACJ	N/A	O	UVM090911-08C/UVM091116-08A
11/22/2009	14:21	4L712.D	12019----	GEL	BLANK	5ML	1	N/A	12	w	ACJ	N/A	X	
11/22/2009	14:48	4L713.D	W4VM091122-10	GEL	VSTD005S	5ML	1	N/A	13	w	ACJ	N/A	O	UVM091110-01A/UVM091118-01
11/22/2009	15:16	4L714.D	W4VM091122-11	GEL	VSTD010S	5ML	1	N/A	14	w	ACJ	N/A	O	UVM091110-02A/UVM091118-02
11/22/2009	15:43	4L715.D	W4VM091122-12	GEL	VSTD025S	5ML	1	N/A	15	w	ACJ	N/A	O	UVM091110-03A/UVM091118-03
11/22/2009	16:10	4L716.D	W4VM091122-13	GEL	VSTD050S	5ML	1	N/A	16	w	ACJ	N/A	O	UVM091110-04A/UVM091118-04
11/22/2009	16:37	4L717.D	W4VM091122-14	GEL	VSTD100S	5ML	1	N/A	17	w	ACJ	N/A	X	UVM091110-05A/UVM091118-05; chlorotrifluoroethylene high
11/22/2009	17:04	4L718.D	W4VM091122-15	GEL	VSTD250S	5ML	1	N/A	18	w	ACJ	N/A	O	UVM091110-06A/UVM091118-06
11/22/2009	17:32	4L719.D	W4VM091122-16	GEL	VSTD500S	5ML	1	N/A	19	w	ACJ	N/A	O	UVM091110-07A/UVM091118-07
11/22/2009	17:59	4L720.D	12019----	GEL	BLANK	5ML	1	N/A	20	w	ACJ	N/A	X	
11/22/2009	18:26	4L721.D	W4VM091122-17	GEL	ICV	5ML	1	N/A	21	w	ACJ	N/A	X	UVM091105-01A/IVM091122-01
11/22/2009	18:53	4L722.D	W4VM091122-18	GEL	ICV	5ML	1	N/A	22	w	ACJ	N/A	O	UVM091111-01C/IVM091122-01
11/22/2009	19:21	4L723.D	W4VM091122-19	GEL	SHORTICV	5ML	1	N/A	23	w	ACJ	N/A	O	UVM091105-02B/UVM091118-08A

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 12/2/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # _____

Sequence Number: 120209V4

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091202-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W4VM091202-02			5+5	
BFB	UVM091020-02				1
SHORT	UVM091118-08A		5	5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
2 Dec 2009 16:51	4N301.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
2 Dec 2009 17:19	4N302.D	W4VM091202-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091111-01E/IVM091130-01
2 Dec 2009 17:47	4N303.D	W4VM091202-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091111-01E/IVM091130-01
2 Dec 2009 18:14	4N304.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	
2 Dec 2009 18:41	4N305.D	UVM091118-08A	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	
2 Dec 2009 19:09	4N306.D	12019----	GEL	BLANK	5ML	1	N/A	6	W	ACJ	N/A	X	NOT NEEDED
2 Dec 2009 19:36	4N307.D	12019----	GEL	BLANK	5G	1	N/A	7	S	ACJ	N/A	O	
2 Dec 2009 20:57	4N308.D	241838001	LANL	928135	5G	1	N/A	8	S	ACJ	N/A	O	
2 Dec 2009 21:24	4N309.D	241838002	LANL	928135	5G	1	N/A	9	S	ACJ	N/A	O	
2 Dec 2009 21:52	4N310.D	241903001	LANL	928135	5G	1	N/A	10	S	ACJ	N/A	O	
2 Dec 2009 22:19	4N311.D	241903002	LANL	928135	5G	1	N/A	11	S	ACJ	N/A	O	
2 Dec 2009 22:47	4N312.D	241907001	LANL	928135	5G	1	N/A	12	S	ACJ	N/A	O	
2 Dec 2009 23:14	4N313.D	241907002	LANL	928135	5G	1	N/A	13	S	ACJ	N/A	O	
2 Dec 2009 23:42	4N314.D	241907003	LANL	928135	5G	1	N/A	14	S	ACJ	N/A	O	
3 Dec 2009 00:09	4N315.D	241911001	LANL	928135	5G	1	N/A	15	S	ACJ	N/A	O	
3 Dec 2009 00:36	4N316.D	241911002	LANL	928135	5G	1	N/A	16	S	ACJ	N/A	O	
3 Dec 2009 01:03	4N317.D	241819001	LANL	928605	5G	1	N/A	17	S	ACJ	N/A	O	
3 Dec 2009 01:31	4N318.D	241819002	LANL	928605	5G	1	N/A	18	S	ACJ	N/A	O	
3 Dec 2009 01:58	4N319.D	241819003	LANL	928605	5G	1	N/A	19	S	ACJ	N/A	O	
3 Dec 2009 02:26	4N320.D	241819004	LANL	928605	5G	1	N/A	20	S	ACJ	N/A	O	
3 Dec 2009 02:54	4N321.D	241819005	LANL	928605	5G	1	N/A	21	S	ACJ	N/A	O	
3 Dec 2009 03:21	4N322.D	241819006	LANL	928605	5G	1	N/A	22	S	ACJ	N/A	O	
3 Dec 2009 03:49	4N323.D	241819007	LANL	928605	5G	1	N/A	23	S	ACJ	N/A	O	
3 Dec 2009 04:16	4N324.D	1201984531	LANL	928135	5G	1	N/A	24	S	ACJ	N/A	x	MS 241827001; see 4n218
3 Dec 2009 04:43	4N325.D	1201984532	LANL	928135	5G	1	N/A	25	S	ACJ	N/A	x	MSD 241827001; confirms 4n219

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 12/3/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot #

Sequence Number: 120309V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091203-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W4VM091203-02			5+5	
BFB	UVM090821-02				1
SHORT	UVM091118-08A		5	5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
5G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
3 Dec 2009 16:57	4N401.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
3 Dec 2009 17:25	4N402.D	W4VM091203-01	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091129-01A/IVM091203-01
3 Dec 2009 17:53	4N403.D	W4VM091203-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091129-01A/IVM091203-01
3 Dec 2009 18:20	4N404.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	
3 Dec 2009 18:48	4N405.D	UVM091118-08A	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	
3 Dec 2009 19:16	4N406.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
3 Dec 2009 19:44	4N407.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	X	NOT NEEDED
3 Dec 2009 21:37	4N408.D	241819008	LANL	928605	5G	1	N/A	8	S	ACJ	N/A	O	
3 Dec 2009 22:04	4N409.D	241819009	LANL	928605	5G	1	N/A	9	S	ACJ	N/A	O	
3 Dec 2009 22:32	4N410.D	241819010	LANL	928605	5G	1	N/A	10	S	ACJ	N/A	O	
3 Dec 2009 23:00	4N411.D	241819011	LANL	928605	5G	1	N/A	11	S	ACJ	N/A	O	
3 Dec 2009 23:28	4N412.D	241819012	LANL	928605	5G	1	N/A	12	S	ACJ	N/A	O	
3 Dec 2009 23:56	4N413.D	241819013	LANL	928605	5G	1	N/A	13	S	ACJ	N/A	O	
4 Dec 2009 00:24	4N414.D	241819014	LANL	928605	5G	1	N/A	14	S	ACJ	N/A	O	
4 Dec 2009 00:52	4N415.D	241819015	LANL	928605	5G	1	N/A	15	S	ACJ	N/A	O	
4 Dec 2009 01:20	4N416.D	241819016	LANL	928605	5G	1	N/A	16	S	ACJ	N/A	X	IS LOW; SEE 4O108
4 Dec 2009 01:48	4N417.D	241819017	LANL	928605	5G	1	N/A	17	S	ACJ	N/A	O	
4 Dec 2009 02:15	4N418.D	241819018	LANL	928605	5G	1	N/A	18	S	ACJ	N/A	O	
4 Dec 2009 02:43	4N419.D	241819019	LANL	928605	5G	1	N/A	19	S	ACJ	N/A	O	
4 Dec 2009 03:11	4N420.D	241819020	LANL	928605	5G	1	N/A	20	S	ACJ	N/A	O	
4 Dec 2009 03:39	4N421.D	1201985622	LANL	928605	5G	1	N/A	21	S	ACJ	N/A	O	MS 241819001
4 Dec 2009 04:07	4N422.D	1201985623	LANL	928605	5G	1	N/A	22	S	ACJ	N/A	O	MSD 241819001

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 12/7/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 120709V4

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091207-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM090910-02	1	1	1	
LCS/MS	W4VM091207-01/02			5+5	
BFB	UVM090821-02				1
SHORT	W4VM091207-03/04		5+5	5+5	
DHEC	N/A			5	

Purge Amount

5	Water Purge Vol:
5G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
7 Dec 2009 13:43	4O101.D	UVM090910-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
7 Dec 2009 14:10	4O102.D	W4VM091207-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091129-01B/IVM091203-01
7 Dec 2009 14:37	4O103.D	W4VM091207-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091129-01B/IVM091203-01
7 Dec 2009 15:04	4O104.D	W4VM091207-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM091105-02D/UVM091118-08B
7 Dec 2009 15:32	4O105.D	W4VM091207-04	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	UVM091105-02D/UVM091118-08B
7 Dec 2009 16:00	4O106.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
7 Dec 2009 16:27	4O107.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	O	
7 Dec 2009 16:54	4O108.D	241819016	LANL	928605	5G	1	N/A	8	S	ACJ	N/A	O	
7 Dec 2009 17:26	4O109.D	1201986543	GEL	930323	500UL	10	N/A	9	W	ACJ	N/A	O	TCLPBLANK
7 Dec 2009 17:53	4O110.D	241863001	NREA	930323	500UL	10	N/A	10	W	ACJ	N/A	O	
7 Dec 2009 18:20	4O111.D	241863002	NREA	930323	500UL	10	N/A	11	W	ACJ	N/A	O	
7 Dec 2009 18:47	4O112.D	241863003	NREA	930323	500UL	10	N/A	12	W	ACJ	N/A	O	
7 Dec 2009 19:15	4O113.D	241863004	NREA	930323	500UL	10	N/A	13	W	ACJ	N/A	O	
7 Dec 2009 19:42	4O114.D	241863005	NREA	930323	500UL	10	N/A	14	W	ACJ	N/A	O	
7 Dec 2009 20:09	4O115.D	241863006	NREA	930323	500UL	10	N/A	15	W	ACJ	N/A	O	
7 Dec 2009 20:36	4O116.D	241863007	NREA	930323	500UL	10	N/A	16	W	ACJ	N/A	O	
7 Dec 2009 21:03	4O117.D	241863008	NREA	930323	500UL	10	N/A	17	W	ACJ	N/A	O	
7 Dec 2009 21:30	4O118.D	241863009	NREA	930323	500UL	10	N/A	18	W	ACJ	N/A	O	
7 Dec 2009 21:57	4O119.D	241863010	NREA	930323	500UL	10	N/A	19	W	ACJ	N/A	O	
7 Dec 2009 22:24	4O120.D	241863011	NREA	930323	500UL	10	N/A	20	W	ACJ	N/A	O	
7 Dec 2009 22:52	4O121.D	241863012	NREA	930323	500UL	10	N/A	21	W	ACJ	N/A	O	
7 Dec 2009 23:19	4O122.D	241863013	NREA	930323	500UL	10	N/A	22	W	ACJ	N/A	O	
7 Dec 2009 23:46	4O123.D	241863014	NREA	930323	500UL	10	N/A	23	W	ACJ	N/A	O	
8 Dec 2009 00:14	4O124.D	241863015	NREA	930323	500UL	10	N/A	24	W	ACJ	N/A	O	
8 Dec 2009 00:41	4O125.D	241863016	NREA	930323	500UL	10	N/A	25	W	ACJ	N/A	O	
8 Dec 2009 01:09	4O126.D	241863017	NREA	930323	500UL	10	N/A	26	W	ACJ	N/A	O	

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-666

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	928100
Prep Batch Number:	928098

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241819001	RE03-09-14115
241819002	RE03-09-14113
241819003	RE03-09-14125
241819004	RE03-09-14123
241819005	RE03-09-14114
241819006	RE03-09-14126
241819007	RE03-09-14117
241819008	RE03-09-14121
241819009	RE03-09-14129
241819010	RE03-09-14120
241819011	RE03-09-14116
241819012	RE03-09-14111
241819013	RE03-09-14119
241819014	RE03-09-14110
241819015	RE03-09-14127
241819016	RE03-09-14118
241819017	RE03-09-14122
241819018	RE03-09-14124
241819019	RE03-09-14112
241819020	RE03-09-14128
1201984453	Method Blank (MB)
1201984454	Laboratory Control Sample (LCS)
1201984455	241819001(RE03-09-14115) Matrix Spike (MS)
1201984456	241819001(RE03-09-14115) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories

LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241819001 (RE03-09-14115) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD5.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: [illegible] **Date:** 12-18-09

Roadmap for LANL 10-666 SVOA

This roadmap was analyzed by rmb on 12-07-2009, 10:34.
This roadmap was reviewed by rmb on 12-14-2009, 09:18.
This roadmap was reviewed by dan01134 on 12-17-2009, 08:56.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s120609.b/s5l0606.d	241819001	06-DEC-2009	11:20	10-666.sub	RE03-09-14115	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0609.d	241819002	06-DEC-2009	16:05	10-666.sub	RE03-09-14113	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0610.d	241819003	06-DEC-2009	16:28	10-666.sub	RE03-09-14125	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0611.d	241819004	06-DEC-2009	16:51	10-666.sub	RE03-09-14123	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0612.d	241819005	06-DEC-2009	17:13	10-666.sub	RE03-09-14114	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0613.d	241819006	06-DEC-2009	17:36	10-666.sub	RE03-09-14126	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0614.d	241819007	06-DEC-2009	17:59	10-666.sub	RE03-09-14117	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0615.d	241819008	06-DEC-2009	18:22	10-666.sub	RE03-09-14121	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0616.d	241819009	06-DEC-2009	18:45	10-666.sub	RE03-09-14129	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0617.d	241819010	06-DEC-2009	19:08	10-666.sub	RE03-09-14120	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0618.d	241819011	06-DEC-2009	19:30	10-666.sub	RE03-09-14116	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0619.d	241819012	06-DEC-2009	19:53	10-666.sub	RE03-09-14111	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0620.d	241819013	06-DEC-2009	20:16	10-666.sub	RE03-09-14119	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0621.d	241819014	06-DEC-2009	20:39	10-666.sub	RE03-09-14110	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0622.d	241819015	06-DEC-2009	21:01	10-666.sub	RE03-09-14127	1	928100	
☐	N	/chem/MSD5.i/s120609.b/s5l0623.d	241819016	06-DEC-2009	21:24	10-666.sub	RE03-09-14118	1	928100	
■	N	/chem/MSD5.i/s120609.b/s5l0624.d	241819017	06-DEC-2009	21:47	10-666.sub	RE03-09-14122	1	928100	DUSE - OUT OF TUNE
■	N	/chem/MSD5.i/s120609.b/s5l0625.d	241819018	06-DEC-2009	22:10	10-666.sub	RE03-09-14124	1	928100	DUSE - OUT OF TUNE
■	N	/chem/MSD5.i/s120609.b/s5l0626.d	241819019	06-DEC-2009	22:33	10-666.sub	RE03-09-14112	1	928100	DUSE - OUT OF TUNE

■	N	/chem/MSD5.i/s120609.b/s5l0627.d	241819020	06-DEC-2009	22:55	10-666.sub	RE03-09-14128	1	928100	DUSE - OUT OF TUNE
□	N	/chem/MSD5.i/s120909.b/s5l0918.d	241819017	09-DEC-2009	22:43	10-666.sub	RE03-09-14122	1	928100	
□	N	/chem/MSD5.i/s120909.b/s5l0919.d	241819018	09-DEC-2009	23:05	10-666.sub	RE03-09-14124	1	928100	
□	N	/chem/MSD5.i/s120909.b/s5l0920.d	241819019	09-DEC-2009	23:28	10-666.sub	RE03-09-14112	1	928100	
■	N	/chem/MSD5.i/s120909.b/s5l0921.d	241819020	09-DEC-2009	23:51	10-666.sub	RE03-09-14128	1	928100	DUSE - bad injection
□	N	/chem/MSD5.i/s121109.b/s5l1106.d	241819020	11-DEC-2009	15:23	10-666.sub	RE03-09-14128	1	928100	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
□	N	/chem/MSD5.i/s120609.b/s5l0604.d	1201984453	mb	06-DEC-2009	10:35	10-666.sub	SBLK01	1	928100	
□	N	/chem/MSD5.i/s120609.b/s5l0605.d	1201984454	lcs	06-DEC-2009	10:58	10-666.sub	SBLK01LCS	1	928100	
□	N	/chem/MSD5.i/s120609.b/s5l0607.d	1201984455	ms	06-DEC-2009	11:43	10-666.sub	RE03-09-14115MS	1	928100	
□	N	/chem/MSD5.i/s120609.b/s5l0608.d	1201984456	msd	06-DEC-2009	15:43	10-666.sub	RE03-09-14115MSD	1	928100	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819014	Date Received:	11/25/2009 09:10	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14110	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 20:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510621.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	346	ug/kg	69.2	346
108-95-2	Phenol	U	346	ug/kg	69.2	346
95-57-8	2-Chlorophenol	U	346	ug/kg	69.2	346
106-46-7	1,4-Dichlorobenzene	U	346	ug/kg	69.2	346
621-64-7	N-Nitrosodipropylamine	U	346	ug/kg	69.2	346
59-50-7	4-Chloro-3-methylphenol	U	346	ug/kg	69.2	346
83-32-9	Acenaphthene	U	34.6	ug/kg	11.4	34.6
121-14-2	2,4-Dinitrotoluene	U	346	ug/kg	34.6	346
100-02-7	4-Nitrophenol	U	346	ug/kg	114	346
87-86-5	Pentachlorophenol	U	346	ug/kg	86.5	346
129-00-0	Pyrene	U	34.6	ug/kg	10.4	34.6
110-86-1	Pyridine	U	346	ug/kg	69.2	346
62-53-3	Aniline	U	346	ug/kg	104	346
111-44-4	bis(2-Chloroethyl) ether	U	346	ug/kg	69.2	346
541-73-1	1,3-Dichlorobenzene	U	346	ug/kg	69.2	346
100-51-6	Benzyl alcohol	U	346	ug/kg	104	346
95-50-1	1,2-Dichlorobenzene	U	346	ug/kg	69.2	346
108-60-1	bis(2-Chloroisopropyl)ether	U	346	ug/kg	69.2	346
95-48-7	o-Cresol	U	346	ug/kg	69.2	346
65794-96-9	m,p-Cresols	U	346	ug/kg	104	346
67-72-1	Hexachloroethane	U	346	ug/kg	69.2	346
98-95-3	Nitrobenzene	U	346	ug/kg	69.2	346
78-59-1	Isophorone	U	346	ug/kg	69.2	346
88-75-5	2-Nitrophenol	U	346	ug/kg	69.2	346
105-67-9	2,4-Dimethylphenol	U	346	ug/kg	121	346
111-91-1	bis(2-Chloroethoxy)methane	U	346	ug/kg	69.2	346
120-83-2	2,4-Dichlorophenol	U	346	ug/kg	69.2	346
65-85-0	Benzoic acid	U	692	ug/kg	173	692
91-20-3	Naphthalene	U	34.6	ug/kg	10.4	34.6
106-47-8	4-Chloroaniline	U	346	ug/kg	69.2	346
87-68-3	Hexachlorobutadiene	U	346	ug/kg	69.2	346
91-57-6	2-Methylnaphthalene	U	34.6	ug/kg	6.92	34.6
77-47-4	Hexachlorocyclopentadiene	U	346	ug/kg	69.2	346
88-06-2	2,4,6-Trichlorophenol	U	346	ug/kg	69.2	346
95-95-4	2,4,5-Trichlorophenol	U	346	ug/kg	69.2	346
91-58-7	2-Chloronaphthalene	U	34.6	ug/kg	11.4	34.6
88-74-4	2-Nitroaniline	U	346	ug/kg	69.2	346
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	346	ug/kg	69.2	346

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819014**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14110**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 20:39**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510621.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	346	ug/kg	69.2	346
606-20-2	2,6-Dinitrotoluene	U	346	ug/kg	34.6	346
208-96-8	Acenaphthylene	U	34.6	ug/kg	10.4	34.6
51-28-5	2,4-Dinitrophenol	U	692	ug/kg	131	692
132-64-9	Dibenzofuran	U	346	ug/kg	69.2	346
84-66-2	Diethylphthalate	U	346	ug/kg	69.2	346
86-73-7	Fluorene	U	34.6	ug/kg	10.4	34.6
7005-72-3	4-Chlorophenylphenylether	U	346	ug/kg	69.2	346
534-52-1	2-Methyl-4,6-dinitrophenol	U	346	ug/kg	69.2	346
100-01-6	4-Nitroaniline	U	346	ug/kg	104	346
	p-Nitroaniline					
122-39-4	Diphenylamine	U	346	ug/kg	69.2	346
122-66-7	Azobenzene	U	346	ug/kg	69.2	346
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	346	ug/kg	69.2	346
118-74-1	Hexachlorobenzene	U	346	ug/kg	69.2	346
85-01-8	Phenanthrene	U	34.6	ug/kg	10.4	34.6
120-12-7	Anthracene	U	34.6	ug/kg	6.92	34.6
84-74-2	Di-n-butylphthalate	U	346	ug/kg	69.2	346
206-44-0	Fluoranthene	U	34.6	ug/kg	10.4	34.6
85-68-7	Butylbenzylphthalate	U	346	ug/kg	69.2	346
56-55-3	Benzo(a)anthracene	U	34.6	ug/kg	10.4	34.6
91-94-1	3,3'-Dichlorobenzidine	U	346	ug/kg	104	346
218-01-9	Chrysene	U	34.6	ug/kg	10.4	34.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	346	ug/kg	69.2	346
117-84-0	Di-n-octylphthalate	U	346	ug/kg	69.2	346
205-99-2	Benzo(b)fluoranthene	U	34.6	ug/kg	10.4	34.6
207-08-9	Benzo(k)fluoranthene	U	34.6	ug/kg	10.4	34.6
50-32-8	Benzo(a)pyrene	U	34.6	ug/kg	10.4	34.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.6	ug/kg	10.4	34.6
53-70-3	Dibenzo(a,h)anthracene	U	34.6	ug/kg	10.4	34.6
191-24-2	Benzo(ghi)perylene	U	34.6	ug/kg	10.4	34.6
120-82-1	1,2,4-Trichlorobenzene	U	346	ug/kg	69.2	346

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	264	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819012	Date Received:	11/25/2009 09:10	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14111	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 19:53	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510619.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	76.0	380
108-95-2	Phenol	U	380	ug/kg	76.0	380
95-57-8	2-Chlorophenol	U	380	ug/kg	76.0	380
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	76.0	380
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	76.0	380
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	76.0	380
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380
87-86-5	Pentachlorophenol	U	380	ug/kg	95.0	380
129-00-0	Pyrene	U	38.0	ug/kg	11.4	38.0
110-86-1	Pyridine	U	380	ug/kg	76.0	380
62-53-3	Aniline	U	380	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	76.0	380
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	76.0	380
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	76.0	380
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	76.0	380
95-48-7	o-Cresol	U	380	ug/kg	76.0	380
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380
67-72-1	Hexachloroethane	U	380	ug/kg	76.0	380
98-95-3	Nitrobenzene	U	380	ug/kg	76.0	380
78-59-1	Isophorone	U	380	ug/kg	76.0	380
88-75-5	2-Nitrophenol	U	380	ug/kg	76.0	380
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	76.0	380
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	76.0	380
65-85-0	Benzoic acid	U	760	ug/kg	190	760
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline	U	380	ug/kg	76.0	380
87-68-3	Hexachlorobutadiene	U	380	ug/kg	76.0	380
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.60	38.0
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	76.0	380
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	76.0	380
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	76.0	380
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline	U	380	ug/kg	76.0	380
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	380	ug/kg	76.0	380

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819012	Date Received:	11/25/2009 09:10	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14111	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 19:53	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510619.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	380	ug/kg	76.0	380
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	U	760	ug/kg	144	760
132-64-9	Dibenzofuran	U	380	ug/kg	76.0	380
84-66-2	Diethylphthalate	U	380	ug/kg	76.0	380
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	76.0	380
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	76.0	380
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380
	p-Nitroaniline					
122-39-4	Diphenylamine	U	380	ug/kg	76.0	380
122-66-7	Azobenzene	U	380	ug/kg	76.0	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	76.0	380
118-74-1	Hexachlorobenzene	U	380	ug/kg	76.0	380
85-01-8	Phenanthrene	U	38.0	ug/kg	11.4	38.0
120-12-7	Anthracene	U	38.0	ug/kg	7.60	38.0
84-74-2	Di-n-butylphthalate	U	380	ug/kg	76.0	380
206-44-0	Fluoranthene	U	38.0	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate	U	380	ug/kg	76.0	380
56-55-3	Benzo(a)anthracene	U	38.0	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380
218-01-9	Chrysene	U	38.0	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	380	ug/kg	76.0	380
117-84-0	Di-n-octylphthalate	U	380	ug/kg	76.0	380
205-99-2	Benzo(b)fluoranthene	U	38.0	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene	U	38.0	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene	U	38.0	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	76.0	380

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	268	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 23:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510920.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.0	375
108-95-2	Phenol	U	375	ug/kg	75.0	375
95-57-8	2-Chlorophenol	U	375	ug/kg	75.0	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.0	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.0	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.0	375
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375
129-00-0	Pyrene	U	37.5	ug/kg	11.2	37.5
110-86-1	Pyridine	U	375	ug/kg	75.0	375
62-53-3	Aniline	U	375	ug/kg	112	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.0	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.0	375
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.0	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.0	375
95-48-7	o-Cresol	U	375	ug/kg	75.0	375
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375
67-72-1	Hexachloroethane	U	375	ug/kg	75.0	375
98-95-3	Nitrobenzene	U	375	ug/kg	75.0	375
78-59-1	Isophorone	U	375	ug/kg	75.0	375
88-75-5	2-Nitrophenol	U	375	ug/kg	75.0	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.0	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.0	375
65-85-0	Benzoic acid	U	750	ug/kg	187	750
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	75.0	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.0	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.50	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.0	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.0	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.0	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	75.0	375
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	375	ug/kg	75.0	375

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819019	Date Received:	11/25/2009 09:10	%Moisture:	11.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14112	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/09/2009 23:28	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	s5l0920.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	375	ug/kg	75.0	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5
51-28-5	2,4-Dinitrophenol	U	750	ug/kg	142	750
132-64-9	Dibenzofuran	U	375	ug/kg	75.0	375
84-66-2	Diethylphthalate	U	375	ug/kg	75.0	375
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.0	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.0	375
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375
	p-Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	75.0	375
122-66-7	Azobenzene	U	375	ug/kg	75.0	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.0	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.0	375
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5
120-12-7	Anthracene	U	37.5	ug/kg	7.50	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.0	375
206-44-0	Fluoranthene	U	37.5	ug/kg	11.2	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.0	375
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.0	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.0	375
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.0	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	262	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510609.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	370	ug/kg	74.0	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510609.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	300	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14114**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:13**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510612.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	336	ug/kg	67.3	336
108-95-2	Phenol	U	336	ug/kg	67.3	336
95-57-8	2-Chlorophenol	U	336	ug/kg	67.3	336
106-46-7	1,4-Dichlorobenzene	U	336	ug/kg	67.3	336
621-64-7	N-Nitrosodipropylamine	U	336	ug/kg	67.3	336
59-50-7	4-Chloro-3-methylphenol	U	336	ug/kg	67.3	336
83-32-9	Acenaphthene	U	33.6	ug/kg	11.1	33.6
121-14-2	2,4-Dinitrotoluene	U	336	ug/kg	33.6	336
100-02-7	4-Nitrophenol	U	336	ug/kg	111	336
87-86-5	Pentachlorophenol	U	336	ug/kg	84.1	336
129-00-0	Pyrene	U	33.6	ug/kg	10.1	33.6
110-86-1	Pyridine	U	336	ug/kg	67.3	336
62-53-3	Aniline	U	336	ug/kg	101	336
111-44-4	bis(2-Chloroethyl) ether	U	336	ug/kg	67.3	336
541-73-1	1,3-Dichlorobenzene	U	336	ug/kg	67.3	336
100-51-6	Benzyl alcohol	U	336	ug/kg	101	336
95-50-1	1,2-Dichlorobenzene	U	336	ug/kg	67.3	336
108-60-1	bis(2-Chloroisopropyl)ether	U	336	ug/kg	67.3	336
95-48-7	o-Cresol	U	336	ug/kg	67.3	336
65794-96-9	m,p-Cresols	U	336	ug/kg	101	336
67-72-1	Hexachloroethane	U	336	ug/kg	67.3	336
98-95-3	Nitrobenzene	U	336	ug/kg	67.3	336
78-59-1	Isophorone	U	336	ug/kg	67.3	336
88-75-5	2-Nitrophenol	U	336	ug/kg	67.3	336
105-67-9	2,4-Dimethylphenol	U	336	ug/kg	118	336
111-91-1	bis(2-Chloroethoxy)methane	U	336	ug/kg	67.3	336
120-83-2	2,4-Dichlorophenol	U	336	ug/kg	67.3	336
65-85-0	Benzoic acid	U	673	ug/kg	168	673
91-20-3	Naphthalene	U	33.6	ug/kg	10.1	33.6
106-47-8	4-Chloroaniline	U	336	ug/kg	67.3	336
87-68-3	Hexachlorobutadiene	U	336	ug/kg	67.3	336
91-57-6	2-Methylnaphthalene	U	33.6	ug/kg	6.73	33.6
77-47-4	Hexachlorocyclopentadiene	U	336	ug/kg	67.3	336
88-06-2	2,4,6-Trichlorophenol	U	336	ug/kg	67.3	336
95-95-4	2,4,5-Trichlorophenol	U	336	ug/kg	67.3	336
91-58-7	2-Chloronaphthalene	U	33.6	ug/kg	11.1	33.6
88-74-4	2-Nitroaniline	U	336	ug/kg	67.3	336
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	336	ug/kg	67.3	336

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14114	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 17:13	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s5l0612.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	336	ug/kg	67.3	336
606-20-2	2,6-Dinitrotoluene	U	336	ug/kg	33.6	336
208-96-8	Acenaphthylene	U	33.6	ug/kg	10.1	33.6
51-28-5	2,4-Dinitrophenol	U	673	ug/kg	128	673
132-64-9	Dibenzofuran	U	336	ug/kg	67.3	336
84-66-2	Diethylphthalate	U	336	ug/kg	67.3	336
86-73-7	Fluorene	U	33.6	ug/kg	10.1	33.6
7005-72-3	4-Chlorophenylphenylether	U	336	ug/kg	67.3	336
534-52-1	2-Methyl-4,6-dinitrophenol	U	336	ug/kg	67.3	336
100-01-6	4-Nitroaniline	U	336	ug/kg	101	336
	p-Nitroaniline					
122-39-4	Diphenylamine	U	336	ug/kg	67.3	336
122-66-7	Azobenzene	U	336	ug/kg	67.3	336
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	336	ug/kg	67.3	336
118-74-1	Hexachlorobenzene	U	336	ug/kg	67.3	336
85-01-8	Phenanthrene	U	33.6	ug/kg	10.1	33.6
120-12-7	Anthracene	U	33.6	ug/kg	6.73	33.6
84-74-2	Di-n-butylphthalate	U	336	ug/kg	67.3	336
206-44-0	Fluoranthene	U	33.6	ug/kg	10.1	33.6
85-68-7	Butylbenzylphthalate	U	336	ug/kg	67.3	336
56-55-3	Benzo(a)anthracene	U	33.6	ug/kg	10.1	33.6
91-94-1	3,3'-Dichlorobenzidine	U	336	ug/kg	101	336
218-01-9	Chrysene	U	33.6	ug/kg	10.1	33.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	336	ug/kg	67.3	336
117-84-0	Di-n-octylphthalate	U	336	ug/kg	67.3	336
205-99-2	Benzo(b)fluoranthene	U	33.6	ug/kg	10.1	33.6
207-08-9	Benzo(k)fluoranthene	U	33.6	ug/kg	10.1	33.6
50-32-8	Benzo(a)pyrene	U	33.6	ug/kg	10.1	33.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.6	ug/kg	10.1	33.6
53-70-3	Dibenzo(a,h)anthracene	U	33.6	ug/kg	10.1	33.6
191-24-2	Benzo(ghi)perylene	U	33.6	ug/kg	10.1	33.6
120-82-1	1,2,4-Trichlorobenzene	U	336	ug/kg	67.3	336

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	217	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 11:20**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510606.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.6	333
108-95-2	Phenol	U	333	ug/kg	66.6	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.6	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.6	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.6	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.6	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	9.99	33.3
110-86-1	Pyridine	U	333	ug/kg	66.6	333
62-53-3	Aniline	U	333	ug/kg	99.9	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.6	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.6	333
100-51-6	Benzyl alcohol	U	333	ug/kg	99.9	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.6	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.6	333
95-48-7	o-Cresol	U	333	ug/kg	66.6	333
65794-96-9	m,p-Cresols	U	333	ug/kg	99.9	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.6	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.6	333
78-59-1	Isophorone	U	333	ug/kg	66.6	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.6	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.6	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.6	333
65-85-0	Benzoic acid	U	666	ug/kg	167	666
91-20-3	Naphthalene	U	33.3	ug/kg	9.99	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.6	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.6	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.66	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.6	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.6	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.6	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.6	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.6	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 11:20**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510606.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.6	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	9.99	33.3
51-28-5	2,4-Dinitrophenol	U	666	ug/kg	127	666
132-64-9	Dibenzofuran	U	333	ug/kg	66.6	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.6	333
86-73-7	Fluorene	U	33.3	ug/kg	9.99	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.6	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.6	333
100-01-6	4-Nitroaniline	U	333	ug/kg	99.9	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.6	333
122-66-7	Azobenzene	U	333	ug/kg	66.6	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.6	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.6	333
85-01-8	Phenanthrene	U	33.3	ug/kg	9.99	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.66	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.6	333
206-44-0	Fluoranthene	U	33.3	ug/kg	9.99	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.6	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	9.99	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	99.9	333
218-01-9	Chrysene	U	33.3	ug/kg	9.99	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.6	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.6	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	9.99	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	9.99	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	9.99	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	9.99	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	9.99	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	9.99	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.6	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	205	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819011	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14116	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 19:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510618.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	347	ug/kg	69.5	347
108-95-2	Phenol	U	347	ug/kg	69.5	347
95-57-8	2-Chlorophenol	U	347	ug/kg	69.5	347
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.5	347
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.5	347
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.5	347
83-32-9	Acenaphthene	U	34.7	ug/kg	11.5	34.7
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347
100-02-7	4-Nitrophenol	U	347	ug/kg	115	347
87-86-5	Pentachlorophenol	U	347	ug/kg	86.9	347
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7
110-86-1	Pyridine	U	347	ug/kg	69.5	347
62-53-3	Aniline	U	347	ug/kg	104	347
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.5	347
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.5	347
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.5	347
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.5	347
95-48-7	o-Cresol	U	347	ug/kg	69.5	347
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347
67-72-1	Hexachloroethane	U	347	ug/kg	69.5	347
98-95-3	Nitrobenzene	U	347	ug/kg	69.5	347
78-59-1	Isophorone	U	347	ug/kg	69.5	347
88-75-5	2-Nitrophenol	U	347	ug/kg	69.5	347
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	122	347
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.5	347
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.5	347
65-85-0	Benzoic acid	U	695	ug/kg	174	695
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7
106-47-8	4-Chloroaniline	U	347	ug/kg	69.5	347
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.5	347
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.95	34.7
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.5	347
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.5	347
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.5	347
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.5	34.7
88-74-4	2-Nitroaniline	U	347	ug/kg	69.5	347
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	347	ug/kg	69.5	347

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819011	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14116	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 19:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s5l0618.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	347	ug/kg	69.5	347
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7
51-28-5	2,4-Dinitrophenol	U	695	ug/kg	132	695
132-64-9	Dibenzofuran	U	347	ug/kg	69.5	347
84-66-2	Diethylphthalate	U	347	ug/kg	69.5	347
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.5	347
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.5	347
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347
	p-Nitroaniline					
122-39-4	Diphenylamine	U	347	ug/kg	69.5	347
122-66-7	Azobenzene	U	347	ug/kg	69.5	347
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.5	347
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.5	347
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7
120-12-7	Anthracene	U	34.7	ug/kg	6.95	34.7
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.5	347
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.5	347
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.5	347
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.5	347
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.5	347

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	230	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:59**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0614.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.3	362
108-95-2	Phenol	U	362	ug/kg	72.3	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.3	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.3	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.3	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.3	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.4	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.3	362
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.3	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.3	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.3	362
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.3	362
95-48-7	o-Cresol	U	362	ug/kg	72.3	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.3	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.3	362
78-59-1	Isophorone	U	362	ug/kg	72.3	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.3	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.3	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.3	362
65-85-0	Benzoic acid	U	723	ug/kg	181	723
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.3	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.3	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.23	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.3	362
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.3	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.3	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline	U	362	ug/kg	72.3	362
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	362	ug/kg	72.3	362

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:59**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510614.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	362	ug/kg	72.3	362
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	U	723	ug/kg	137	723
132-64-9	Dibenzofuran	U	362	ug/kg	72.3	362
84-66-2	Diethylphthalate	U	362	ug/kg	72.3	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.3	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.3	362
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
	p-Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.3	362
122-66-7	Azobenzene	U	362	ug/kg	72.3	362
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.3	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.3	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.23	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.3	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.3	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.3	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.3	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.3	362

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	271	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14118**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 21:24**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510623.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.7	368
108-95-2	Phenol	U	368	ug/kg	73.7	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.7	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.7	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.7	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.7	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.2	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	122	368
87-86-5	Pentachlorophenol	U	368	ug/kg	92.1	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.7	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.7	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.7	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.7	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.7	368
95-48-7	o-Cresol	U	368	ug/kg	73.7	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.7	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.7	368
78-59-1	Isophorone	U	368	ug/kg	73.7	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.7	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.7	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.7	368
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.7	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.7	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.37	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.7	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.7	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.7	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.2	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.7	368
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	368	ug/kg	73.7	368

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14118**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 21:24**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0623.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.7	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	368	ug/kg	73.7	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.7	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.7	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.7	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	p-Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.7	368
122-66-7	Azobenzene	U	368	ug/kg	73.7	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.7	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.7	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.37	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.7	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.7	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.7	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.7	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.7	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	263	ug/kg		JA
	Unknown	13.12	148	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 20:16**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510620.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	339	ug/kg	67.8	339
108-95-2	Phenol	U	339	ug/kg	67.8	339
95-57-8	2-Chlorophenol	U	339	ug/kg	67.8	339
106-46-7	1,4-Dichlorobenzene	U	339	ug/kg	67.8	339
621-64-7	N-Nitrosodipropylamine	U	339	ug/kg	67.8	339
59-50-7	4-Chloro-3-methylphenol	U	339	ug/kg	67.8	339
83-32-9	Acenaphthene	U	33.9	ug/kg	11.2	33.9
121-14-2	2,4-Dinitrotoluene	U	339	ug/kg	33.9	339
100-02-7	4-Nitrophenol	U	339	ug/kg	112	339
87-86-5	Pentachlorophenol	U	339	ug/kg	84.8	339
129-00-0	Pyrene	U	33.9	ug/kg	10.2	33.9
110-86-1	Pyridine	U	339	ug/kg	67.8	339
62-53-3	Aniline	U	339	ug/kg	102	339
111-44-4	bis(2-Chloroethyl) ether	U	339	ug/kg	67.8	339
541-73-1	1,3-Dichlorobenzene	U	339	ug/kg	67.8	339
100-51-6	Benzyl alcohol	U	339	ug/kg	102	339
95-50-1	1,2-Dichlorobenzene	U	339	ug/kg	67.8	339
108-60-1	bis(2-Chloroisopropyl)ether	U	339	ug/kg	67.8	339
95-48-7	o-Cresol	U	339	ug/kg	67.8	339
65794-96-9	m,p-Cresols	U	339	ug/kg	102	339
67-72-1	Hexachloroethane	U	339	ug/kg	67.8	339
98-95-3	Nitrobenzene	U	339	ug/kg	67.8	339
78-59-1	Isophorone	U	339	ug/kg	67.8	339
88-75-5	2-Nitrophenol	U	339	ug/kg	67.8	339
105-67-9	2,4-Dimethylphenol	U	339	ug/kg	119	339
111-91-1	bis(2-Chloroethoxy)methane	U	339	ug/kg	67.8	339
120-83-2	2,4-Dichlorophenol	U	339	ug/kg	67.8	339
65-85-0	Benzoic acid	U	678	ug/kg	170	678
91-20-3	Naphthalene	U	33.9	ug/kg	10.2	33.9
106-47-8	4-Chloroaniline	U	339	ug/kg	67.8	339
87-68-3	Hexachlorobutadiene	U	339	ug/kg	67.8	339
91-57-6	2-Methylnaphthalene	U	33.9	ug/kg	6.78	33.9
77-47-4	Hexachlorocyclopentadiene	U	339	ug/kg	67.8	339
88-06-2	2,4,6-Trichlorophenol	U	339	ug/kg	67.8	339
95-95-4	2,4,5-Trichlorophenol	U	339	ug/kg	67.8	339
91-58-7	2-Chloronaphthalene	U	33.9	ug/kg	11.2	33.9
88-74-4	2-Nitroaniline	U	339	ug/kg	67.8	339
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	339	ug/kg	67.8	339

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 20:16**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510620.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	339	ug/kg	67.8	339
606-20-2	2,6-Dinitrotoluene	U	339	ug/kg	33.9	339
208-96-8	Acenaphthylene	U	33.9	ug/kg	10.2	33.9
51-28-5	2,4-Dinitrophenol	U	678	ug/kg	129	678
132-64-9	Dibenzofuran	U	339	ug/kg	67.8	339
84-66-2	Diethylphthalate	U	339	ug/kg	67.8	339
86-73-7	Fluorene	U	33.9	ug/kg	10.2	33.9
7005-72-3	4-Chlorophenylphenylether	U	339	ug/kg	67.8	339
534-52-1	2-Methyl-4,6-dinitrophenol	U	339	ug/kg	67.8	339
100-01-6	4-Nitroaniline	U	339	ug/kg	102	339
	p-Nitroaniline					
122-39-4	Diphenylamine	U	339	ug/kg	67.8	339
122-66-7	Azobenzene	U	339	ug/kg	67.8	339
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	339	ug/kg	67.8	339
118-74-1	Hexachlorobenzene	U	339	ug/kg	67.8	339
85-01-8	Phenanthrene	U	33.9	ug/kg	10.2	33.9
120-12-7	Anthracene	U	33.9	ug/kg	6.78	33.9
84-74-2	Di-n-butylphthalate	U	339	ug/kg	67.8	339
206-44-0	Fluoranthene	U	33.9	ug/kg	10.2	33.9
85-68-7	Butylbenzylphthalate	U	339	ug/kg	67.8	339
56-55-3	Benzo(a)anthracene	U	33.9	ug/kg	10.2	33.9
91-94-1	3,3'-Dichlorobenzidine	U	339	ug/kg	102	339
218-01-9	Chrysene	U	33.9	ug/kg	10.2	33.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	339	ug/kg	67.8	339
117-84-0	Di-n-octylphthalate	U	339	ug/kg	67.8	339
205-99-2	Benzo(b)fluoranthene	U	33.9	ug/kg	10.2	33.9
207-08-9	Benzo(k)fluoranthene	U	33.9	ug/kg	10.2	33.9
50-32-8	Benzo(a)pyrene	U	33.9	ug/kg	10.2	33.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.9	ug/kg	10.2	33.9
53-70-3	Dibenzo(a,h)anthracene	U	33.9	ug/kg	10.2	33.9
191-24-2	Benzo(ghi)perylene	U	33.9	ug/kg	10.2	33.9
120-82-1	1,2,4-Trichlorobenzene	U	339	ug/kg	67.8	339

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	251	ug/kg		JA
	Unknown	9.78	186	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:08**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s510617.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.4	342
108-95-2	Phenol	U	342	ug/kg	68.4	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.4	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.4	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.4	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.4	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.4	342
129-00-0	Pyrene	U	34.2	ug/kg	10.3	34.2
110-86-1	Pyridine	U	342	ug/kg	68.4	342
62-53-3	Aniline	U	342	ug/kg	103	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.4	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.4	342
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.4	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.4	342
95-48-7	o-Cresol	U	342	ug/kg	68.4	342
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.4	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.4	342
,78-59-1	Isophorone	U	342	ug/kg	68.4	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.4	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.4	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.4	342
65-85-0	Benzoic acid	U	684	ug/kg	171	684
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.4	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.4	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.84	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.4	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.4	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.4	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	342	ug/kg	68.4	342
99-09-2	3-Nitroaniline	U	342	ug/kg	68.4	342

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:08**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0617.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	342	ug/kg	68.4	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2
51-28-5	2,4-Dinitrophenol	U	684	ug/kg	130	684
132-64-9	Dibenzofuran	U	342	ug/kg	68.4	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.4	342
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.4	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.4	342
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342
	p-Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.4	342
122-66-7	Azobenzene	U	342	ug/kg	68.4	342
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.4	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.4	342
85-01-8	Phenanthrene	U	34.2	ug/kg	10.3	34.2
120-12-7	Anthracene	U	34.2	ug/kg	6.84	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.4	342
206-44-0	Fluoranthene	U	34.2	ug/kg	10.3	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.4	342
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.3	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342
218-01-9	Chrysene	U	34.2	ug/kg	10.3	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.4	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.4	342
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.3	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.3	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.3	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.3	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.4	342

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	267	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819008**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 18:22**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510615.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.3	382
108-95-2	Phenol	U	382	ug/kg	76.3	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.3	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.3	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.3	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.3	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.4	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.3	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.3	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.3	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.3	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.3	382
95-48-7	o-Cresol	U	382	ug/kg	76.3	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.3	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.3	382
78-59-1	Isophorone	U	382	ug/kg	76.3	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.3	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.3	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.3	382
65-85-0	Benzoic acid	U	763	ug/kg	191	763
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.3	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.3	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.63	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.3	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.3	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.3	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.3	382
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	382	ug/kg	76.3	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819008	Date Received:	11/25/2009 09:10	%Moisture:	12.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14121	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 18:22	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510615.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.3	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	763	ug/kg	145	763
132-64-9	Dibenzofuran	U	382	ug/kg	76.3	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.3	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.3	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.3	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.3	382
122-66-7	Azobenzene	U	382	ug/kg	76.3	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.3	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.3	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.63	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.3	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.3	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.3	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.3	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.3	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	267	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14122**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 22:43**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510918.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	352	ug/kg	70.4	352
108-95-2	Phenol	U	352	ug/kg	70.4	352
95-57-8	2-Chlorophenol	U	352	ug/kg	70.4	352
106-46-7	1,4-Dichlorobenzene	U	352	ug/kg	70.4	352
621-64-7	N-Nitrosodipropylamine	U	352	ug/kg	70.4	352
59-50-7	4-Chloro-3-methylphenol	U	352	ug/kg	70.4	352
83-32-9	Acenaphthene	U	35.2	ug/kg	11.6	35.2
121-14-2	2,4-Dinitrotoluene	U	352	ug/kg	35.2	352
100-02-7	4-Nitrophenol	U	352	ug/kg	116	352
87-86-5	Pentachlorophenol	U	352	ug/kg	88.1	352
129-00-0	Pyrene	U	35.2	ug/kg	10.6	35.2
110-86-1	Pyridine	U	352	ug/kg	70.4	352
62-53-3	Aniline	U	352	ug/kg	106	352
111-44-4	bis(2-Chloroethyl) ether	U	352	ug/kg	70.4	352
541-73-1	1,3-Dichlorobenzene	U	352	ug/kg	70.4	352
100-51-6	Benzyl alcohol	U	352	ug/kg	106	352
95-50-1	1,2-Dichlorobenzene	U	352	ug/kg	70.4	352
108-60-1	bis(2-Chloroisopropyl)ether	U	352	ug/kg	70.4	352
95-48-7	o-Cresol	U	352	ug/kg	70.4	352
65794-96-9	m,p-Cresols	U	352	ug/kg	106	352
67-72-1	Hexachloroethane	U	352	ug/kg	70.4	352
98-95-3	Nitrobenzene	U	352	ug/kg	70.4	352
78-59-1	Isophorone	U	352	ug/kg	70.4	352
88-75-5	2-Nitrophenol	U	352	ug/kg	70.4	352
105-67-9	2,4-Dimethylphenol	U	352	ug/kg	123	352
111-91-1	bis(2-Chloroethoxy)methane	U	352	ug/kg	70.4	352
120-83-2	2,4-Dichlorophenol	U	352	ug/kg	70.4	352
65-85-0	Benzoic acid	U	704	ug/kg	176	704
91-20-3	Naphthalene	U	35.2	ug/kg	10.6	35.2
106-47-8	4-Chloroaniline	U	352	ug/kg	70.4	352
87-68-3	Hexachlorobutadiene	U	352	ug/kg	70.4	352
91-57-6	2-Methylnaphthalene	U	35.2	ug/kg	7.04	35.2
77-47-4	Hexachlorocyclopentadiene	U	352	ug/kg	70.4	352
88-06-2	2,4,6-Trichlorophenol	U	352	ug/kg	70.4	352
95-95-4	2,4,5-Trichlorophenol	U	352	ug/kg	70.4	352
91-58-7	2-Chloronaphthalene	U	35.2	ug/kg	11.6	35.2
88-74-4	2-Nitroaniline	U	352	ug/kg	70.4	352
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	352	ug/kg	70.4	352

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14122**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 22:43**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510918.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	352	ug/kg	70.4	352
606-20-2	2,6-Dinitrotoluene	U	352	ug/kg	35.2	352
208-96-8	Acenaphthylene	U	35.2	ug/kg	10.6	35.2
51-28-5	2,4-Dinitrophenol	U	704	ug/kg	134	704
132-64-9	Dibenzofuran	U	352	ug/kg	70.4	352
84-66-2	Diethylphthalate	U	352	ug/kg	70.4	352
86-73-7	Fluorene	U	35.2	ug/kg	10.6	35.2
7005-72-3	4-Chlorophenylphenylether	U	352	ug/kg	70.4	352
534-52-1	2-Methyl-4,6-dinitrophenol	U	352	ug/kg	70.4	352
100-01-6	4-Nitroaniline	U	352	ug/kg	106	352
	p-Nitroaniline					
122-39-4	Diphenylamine	U	352	ug/kg	70.4	352
122-66-7	Azobenzene	U	352	ug/kg	70.4	352
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	352	ug/kg	70.4	352
118-74-1	Hexachlorobenzene	U	352	ug/kg	70.4	352
85-01-8	Phenanthrene	U	35.2	ug/kg	10.6	35.2
120-12-7	Anthracene	U	35.2	ug/kg	7.04	35.2
84-74-2	Di-n-butylphthalate	U	352	ug/kg	70.4	352
206-44-0	Fluoranthene	U	35.2	ug/kg	10.6	35.2
85-68-7	Butylbenzylphthalate	U	352	ug/kg	70.4	352
56-55-3	Benzo(a)anthracene	U	35.2	ug/kg	10.6	35.2
91-94-1	3,3'-Dichlorobenzidine	U	352	ug/kg	106	352
218-01-9	Chrysene	U	35.2	ug/kg	10.6	35.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	352	ug/kg	70.4	352
117-84-0	Di-n-octylphthalate	U	352	ug/kg	70.4	352
205-99-2	Benzo(b)fluoranthene	U	35.2	ug/kg	10.6	35.2
207-08-9	Benzo(k)fluoranthene	U	35.2	ug/kg	10.6	35.2
50-32-8	Benzo(a)pyrene	U	35.2	ug/kg	10.6	35.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.2	ug/kg	10.6	35.2
53-70-3	Dibenzo(a,h)anthracene	U	35.2	ug/kg	10.6	35.2
191-24-2	Benzo(ghi)perylene	U	35.2	ug/kg	10.6	35.2
120-82-1	1,2,4-Trichlorobenzene	U	352	ug/kg	70.4	352

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	215	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819004	Date Received:	11/25/2009 09:10	%Moisture:	5.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14123	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 16:51	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510611.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.6	353
108-95-2	Phenol	U	353	ug/kg	70.6	353
95-57-8	2-Chlorophenol	U	353	ug/kg	70.6	353
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.6	353
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.6	353
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.6	353
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3
110-86-1	Pyridine	U	353	ug/kg	70.6	353
62-53-3	Aniline	U	353	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.6	353
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.6	353
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.6	353
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.6	353
95-48-7	o-Cresol	U	353	ug/kg	70.6	353
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353
67-72-1	Hexachloroethane	U	353	ug/kg	70.6	353
98-95-3	Nitrobenzene	U	353	ug/kg	70.6	353
78-59-1	Isophorone	U	353	ug/kg	70.6	353
88-75-5	2-Nitrophenol	U	353	ug/kg	70.6	353
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	124	353
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.6	353
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.6	353
65-85-0	Benzoic acid	U	706	ug/kg	176	706
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline	U	353	ug/kg	70.6	353
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.6	353
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.06	35.3
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.6	353
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.6	353
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.6	353
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline	U	353	ug/kg	70.6	353
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	353	ug/kg	70.6	353

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14123	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 16:51	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510611.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	353	ug/kg	70.6	353
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol	U	706	ug/kg	134	706
132-64-9	Dibenzofuran	U	353	ug/kg	70.6	353
84-66-2	Diethylphthalate	U	353	ug/kg	70.6	353
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.6	353
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.6	353
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353
	p-Nitroaniline					
122-39-4	Diphenylamine	U	353	ug/kg	70.6	353
122-66-7	Azobenzene	U	353	ug/kg	70.6	353
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.6	353
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.6	353
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3
120-12-7	Anthracene	U	35.3	ug/kg	7.06	35.3
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.6	353
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.6	353
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.6	353
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.6	353
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.6	353

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	215	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819018	Date Received:	11/25/2009 09:10	%Moisture:	7.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14124	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/09/2009 23:05	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s510919.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	361	ug/kg	72.3	361
108-95-2	Phenol	U	361	ug/kg	72.3	361
95-57-8	2-Chlorophenol	U	361	ug/kg	72.3	361
106-46-7	1,4-Dichlorobenzene	U	361	ug/kg	72.3	361
621-64-7	N-Nitrosodipropylamine	U	361	ug/kg	72.3	361
59-50-7	4-Chloro-3-methylphenol	U	361	ug/kg	72.3	361
83-32-9	Acenaphthene	U	36.1	ug/kg	11.9	36.1
121-14-2	2,4-Dinitrotoluene	U	361	ug/kg	36.1	361
100-02-7	4-Nitrophenol	U	361	ug/kg	119	361
87-86-5	Pentachlorophenol	U	361	ug/kg	90.4	361
129-00-0	Pyrene	U	36.1	ug/kg	10.8	36.1
110-86-1	Pyridine	U	361	ug/kg	72.3	361
62-53-3	Aniline	U	361	ug/kg	108	361
111-44-4	bis(2-Chloroethyl) ether	U	361	ug/kg	72.3	361
541-73-1	1,3-Dichlorobenzene	U	361	ug/kg	72.3	361
100-51-6	Benzyl alcohol	U	361	ug/kg	108	361
95-50-1	1,2-Dichlorobenzene	U	361	ug/kg	72.3	361
108-60-1	bis(2-Chloroisopropyl)ether	U	361	ug/kg	72.3	361
95-48-7	o-Cresol	U	361	ug/kg	72.3	361
65794-96-9	m,p-Cresols	U	361	ug/kg	108	361
67-72-1	Hexachloroethane	U	361	ug/kg	72.3	361
98-95-3	Nitrobenzene	U	361	ug/kg	72.3	361
78-59-1	Isophorone	U	361	ug/kg	72.3	361
88-75-5	2-Nitrophenol	U	361	ug/kg	72.3	361
105-67-9	2,4-Dimethylphenol	U	361	ug/kg	126	361
111-91-1	bis(2-Chloroethoxy)methane	U	361	ug/kg	72.3	361
120-83-2	2,4-Dichlorophenol	U	361	ug/kg	72.3	361
65-85-0	Benzoic acid	U	723	ug/kg	181	723
91-20-3	Naphthalene	U	36.1	ug/kg	10.8	36.1
106-47-8	4-Chloroaniline	U	361	ug/kg	72.3	361
87-68-3	Hexachlorobutadiene	U	361	ug/kg	72.3	361
91-57-6	2-Methylnaphthalene	U	36.1	ug/kg	7.23	36.1
77-47-4	Hexachlorocyclopentadiene	U	361	ug/kg	72.3	361
88-06-2	2,4,6-Trichlorophenol	U	361	ug/kg	72.3	361
95-95-4	2,4,5-Trichlorophenol	U	361	ug/kg	72.3	361
91-58-7	2-Chloronaphthalene	U	36.1	ug/kg	11.9	36.1
88-74-4	2-Nitroaniline	U	361	ug/kg	72.3	361
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	361	ug/kg	72.3	361

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819018	**Date Received:**	11/25/2009 09:10	**%Moisture:**	7.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14124	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/09/2009 23:05	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	s510919.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	361	ug/kg	72.3	361
606-20-2	2,6-Dinitrotoluene	U	361	ug/kg	36.1	361
208-96-8	Acenaphthylene	U	36.1	ug/kg	10.8	36.1
51-28-5	2,4-Dinitrophenol	U	723	ug/kg	137	723
132-64-9	Dibenzofuran	U	361	ug/kg	72.3	361
84-66-2	Diethylphthalate	U	361	ug/kg	72.3	361
86-73-7	Fluorene	U	36.1	ug/kg	10.8	36.1
7005-72-3	4-Chlorophenylphenylether	U	361	ug/kg	72.3	361
534-52-1	2-Methyl-4,6-dinitrophenol	U	361	ug/kg	72.3	361
100-01-6	4-Nitroaniline	U	361	ug/kg	108	361
	p-Nitroaniline					
122-39-4	Diphenylamine	U	361	ug/kg	72.3	361
122-66-7	Azobenzene	U	361	ug/kg	72.3	361
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	361	ug/kg	72.3	361
118-74-1	Hexachlorobenzene	U	361	ug/kg	72.3	361
85-01-8	Phenanthrene	U	36.1	ug/kg	10.8	36.1
120-12-7	Anthracene	U	36.1	ug/kg	7.23	36.1
84-74-2	Di-n-butylphthalate	U	361	ug/kg	72.3	361
206-44-0	Fluoranthene	U	36.1	ug/kg	10.8	36.1
85-68-7	Butylbenzylphthalate	U	361	ug/kg	72.3	361
56-55-3	Benzo(a)anthracene	U	36.1	ug/kg	10.8	36.1
91-94-1	3,3'-Dichlorobenzidine	U	361	ug/kg	108	361
218-01-9	Chrysene	U	36.1	ug/kg	10.8	36.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	361	ug/kg	72.3	361
117-84-0	Di-n-octylphthalate	U	361	ug/kg	72.3	361
205-99-2	Benzo(b)fluoranthene	U	36.1	ug/kg	10.8	36.1
207-08-9	Benzo(k)fluoranthene	U	36.1	ug/kg	10.8	36.1
50-32-8	Benzo(a)pyrene	U	36.1	ug/kg	10.8	36.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.1	ug/kg	10.8	36.1
53-70-3	Dibenzo(a,h)anthracene	U	36.1	ug/kg	10.8	36.1
191-24-2	Benzo(ghi)perylene	U	36.1	ug/kg	10.8	36.1
120-82-1	1,2,4-Trichlorobenzene	U	361	ug/kg	72.3	361

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	226	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819003	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14125	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 16:28	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	s510610.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	347	ug/kg	69.3	347
108-95-2	Phenol	U	347	ug/kg	69.3	347
95-57-8	2-Chlorophenol	U	347	ug/kg	69.3	347
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.3	347
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.3	347
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.3	347
83-32-9	Acenaphthene	U	34.7	ug/kg	11.4	34.7
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347
100-02-7	4-Nitrophenol	U	347	ug/kg	114	347
87-86-5	Pentachlorophenol	U	347	ug/kg	86.6	347
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7
110-86-1	Pyridine	U	347	ug/kg	69.3	347
62-53-3	Aniline	U	347	ug/kg	104	347
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.3	347
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.3	347
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.3	347
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.3	347
95-48-7	o-Cresol	U	347	ug/kg	69.3	347
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347
67-72-1	Hexachloroethane	U	347	ug/kg	69.3	347
98-95-3	Nitrobenzene	U	347	ug/kg	69.3	347
78-59-1	Isophorone	U	347	ug/kg	69.3	347
88-75-5	2-Nitrophenol	U	347	ug/kg	69.3	347
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	121	347
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.3	347
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.3	347
65-85-0	Benzoic acid	U	693	ug/kg	173	693
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7
106-47-8	4-Chloroaniline	U	347	ug/kg	69.3	347
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.3	347
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.93	34.7
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.3	347
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.3	347
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.3	347
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.4	34.7
88-74-4	2-Nitroaniline	U	347	ug/kg	69.3	347
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	347	ug/kg	69.3	347

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819003	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14125	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 16:28	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	s510610.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	347	ug/kg	69.3	347
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7
51-28-5	2,4-Dinitrophenol	U	693	ug/kg	132	693
132-64-9	Dibenzofuran	U	347	ug/kg	69.3	347
84-66-2	Diethylphthalate	U	347	ug/kg	69.3	347
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.3	347
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.3	347
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347
	p-Nitroaniline					
122-39-4	Diphenylamine	U	347	ug/kg	69.3	347
122-66-7	Azobenzene	U	347	ug/kg	69.3	347
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.3	347
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.3	347
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7
120-12-7	Anthracene	U	34.7	ug/kg	6.93	34.7
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.3	347
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.3	347
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.3	347
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.3	347
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.3	347

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	293	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14126	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 17:36	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510613.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.6	363
108-95-2	Phenol	U	363	ug/kg	72.6	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.6	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.6	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.6	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.6	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.8	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.6	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.6	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.6	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.6	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.6	363
95-48-7	o-Cresol	U	363	ug/kg	72.6	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.6	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.6	363
78-59-1	Isophorone	U	363	ug/kg	72.6	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.6	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.6	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.6	363
65-85-0	Benzoic acid	U	726	ug/kg	182	726
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.6	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.6	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.26	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.6	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.6	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.6	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline	U	363	ug/kg	72.6	363
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	363	ug/kg	72.6	363

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14126	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 17:36	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510613.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.6	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	726	ug/kg	138	726
132-64-9	Dibenzofuran	U	363	ug/kg	72.6	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.6	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.6	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.6	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	p-Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.6	363
122-66-7	Azobenzene	U	363	ug/kg	72.6	363
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.6	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.6	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.26	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.6	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.6	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.6	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.6	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.6	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	225	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819015**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14127**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 21:01**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s510622.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	70.0	350
108-95-2	Phenol	U	350	ug/kg	70.0	350
95-57-8	2-Chlorophenol	U	350	ug/kg	70.0	350
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	70.0	350
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	70.0	350
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	70.0	350
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350
87-86-5	Pentachlorophenol	U	350	ug/kg	87.4	350
129-00-0	Pyrene	U	35.0	ug/kg	10.5	35.0
110-86-1	Pyridine	U	350	ug/kg	70.0	350
62-53-3	Aniline	U	350	ug/kg	105	350
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	70.0	350
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	70.0	350
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	70.0	350
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	70.0	350
95-48-7	o-Cresol	U	350	ug/kg	70.0	350
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350
67-72-1	Hexachloroethane	U	350	ug/kg	70.0	350
98-95-3	Nitrobenzene	U	350	ug/kg	70.0	350
78-59-1	Isophorone	U	350	ug/kg	70.0	350
88-75-5	2-Nitrophenol	U	350	ug/kg	70.0	350
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	70.0	350
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	70.0	350
65-85-0	Benzoic acid	U	700	ug/kg	175	700
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0
106-47-8	4-Chloroaniline	U	350	ug/kg	70.0	350
87-68-3	Hexachlorobutadiene	U	350	ug/kg	70.0	350
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	7.00	35.0
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	70.0	350
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	70.0	350
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	70.0	350
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	350	ug/kg	70.0	350
99-09-2	3-Nitroaniline	U	350	ug/kg	70.0	350

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819015	Date Received:	11/25/2009 09:10	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14127	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 21:01	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s510622.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	350	ug/kg	70.0	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	U	35.0	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	700	ug/kg	133	700
132-64-9	Dibenzofuran	U	350	ug/kg	70.0	350
84-66-2	Diethylphthalate	U	350	ug/kg	70.0	350
86-73-7	Fluorene	U	35.0	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	70.0	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	70.0	350
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	p-Nitroaniline					
122-39-4	Diphenylamine	U	350	ug/kg	70.0	350
122-66-7	Azobenzene	U	350	ug/kg	70.0	350
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	70.0	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	70.0	350
85-01-8	Phenanthrene	U	35.0	ug/kg	10.5	35.0
120-12-7	Anthracene	U	35.0	ug/kg	7.00	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	70.0	350
206-44-0	Fluoranthene	U	35.0	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	70.0	350
56-55-3	Benzo(a)anthracene	U	35.0	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene	U	35.0	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	70.0	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	70.0	350
205-99-2	Benzo(b)fluoranthene	U	35.0	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene	U	35.0	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.0	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene	U	35.0	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	70.0	350

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	219	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819020	Date Received:	11/25/2009 09:10	%Moisture:	2.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14128	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/11/2009 15:23	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s5l1106.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.4	342
108-95-2	Phenol	U	342	ug/kg	68.4	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.4	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.4	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.4	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.4	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.5	342
129-00-0	Pyrene	U	34.2	ug/kg	10.3	34.2
110-86-1	Pyridine	U	342	ug/kg	68.4	342
62-53-3	Aniline	U	342	ug/kg	103	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.4	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.4	342
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.4	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.4	342
95-48-7	o-Cresol	U	342	ug/kg	68.4	342
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.4	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.4	342
78-59-1	Isophorone	U	342	ug/kg	68.4	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.4	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.4	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.4	342
65-85-0	Benzoic acid	U	684	ug/kg	171	684
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.4	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.4	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.84	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.4	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.4	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.4	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.4	342
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	342	ug/kg	68.4	342

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14128**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/11/2009 15:23**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s511106.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	342	ug/kg	68.4	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2
51-28-5	2,4-Dinitrophenol	U	684	ug/kg	130	684
132-64-9	Dibenzofuran	U	342	ug/kg	68.4	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.4	342
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.4	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.4	342
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342
	p-Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.4	342
122-66-7	Azobenzene	U	342	ug/kg	68.4	342
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.4	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.4	342
85-01-8	Phenanthrene	U	34.2	ug/kg	10.3	34.2
120-12-7	Anthracene	U	34.2	ug/kg	6.84	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.4	342
206-44-0	Fluoranthene	U	34.2	ug/kg	10.3	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.4	342
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.3	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342
218-01-9	Chrysene	U	34.2	ug/kg	10.3	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.4	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.4	342
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.3	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.3	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.3	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.3	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.4	342

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	262	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819009	Date Received:	11/25/2009 09:10	%Moisture:	1.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14129	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 18:45	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s5l0616.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	338	ug/kg	67.6	338
108-95-2	Phenol	U	338	ug/kg	67.6	338
95-57-8	2-Chlorophenol	U	338	ug/kg	67.6	338
106-46-7	1,4-Dichlorobenzene	U	338	ug/kg	67.6	338
621-64-7	N-Nitrosodipropylamine	U	338	ug/kg	67.6	338
59-50-7	4-Chloro-3-methylphenol	U	338	ug/kg	67.6	338
83-32-9	Acenaphthene	U	33.8	ug/kg	11.1	33.8
121-14-2	2,4-Dinitrotoluene	U	338	ug/kg	33.8	338
100-02-7	4-Nitrophenol	U	338	ug/kg	111	338
87-86-5	Pentachlorophenol	U	338	ug/kg	84.4	338
129-00-0	Pyrene	U	33.8	ug/kg	10.1	33.8
110-86-1	Pyridine	U	338	ug/kg	67.6	338
62-53-3	Aniline	U	338	ug/kg	101	338
111-44-4	bis(2-Chloroethyl) ether	U	338	ug/kg	67.6	338
541-73-1	1,3-Dichlorobenzene	U	338	ug/kg	67.6	338
100-51-6	Benzyl alcohol	U	338	ug/kg	101	338
95-50-1	1,2-Dichlorobenzene	U	338	ug/kg	67.6	338
108-60-1	bis(2-Chloroisopropyl)ether	U	338	ug/kg	67.6	338
95-48-7	o-Cresol	U	338	ug/kg	67.6	338
65794-96-9	m,p-Cresols	U	338	ug/kg	101	338
67-72-1	Hexachloroethane	U	338	ug/kg	67.6	338
98-95-3	Nitrobenzene	U	338	ug/kg	67.6	338
78-59-1	Isophorone	U	338	ug/kg	67.6	338
88-75-5	2-Nitrophenol	U	338	ug/kg	67.6	338
105-67-9	2,4-Dimethylphenol	U	338	ug/kg	118	338
111-91-1	bis(2-Chloroethoxy)methane	U	338	ug/kg	67.6	338
120-83-2	2,4-Dichlorophenol	U	338	ug/kg	67.6	338
65-85-0	Benzoic acid	U	676	ug/kg	169	676
91-20-3	Naphthalene	U	33.8	ug/kg	10.1	33.8
106-47-8	4-Chloroaniline	U	338	ug/kg	67.6	338
87-68-3	Hexachlorobutadiene	U	338	ug/kg	67.6	338
91-57-6	2-Methylnaphthalene	U	33.8	ug/kg	6.76	33.8
77-47-4	Hexachlorocyclopentadiene	U	338	ug/kg	67.6	338
88-06-2	2,4,6-Trichlorophenol	U	338	ug/kg	67.6	338
95-95-4	2,4,5-Trichlorophenol	U	338	ug/kg	67.6	338
91-58-7	2-Chloronaphthalene	U	33.8	ug/kg	11.1	33.8
88-74-4	2-Nitroaniline	U	338	ug/kg	67.6	338
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	338	ug/kg	67.6	338

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 18:45	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s510616.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	338	ug/kg	67.6	338
606-20-2	2,6-Dinitrotoluene	U	338	ug/kg	33.8	338
208-96-8	Acenaphthylene	U	33.8	ug/kg	10.1	33.8
51-28-5	2,4-Dinitrophenol	U	676	ug/kg	128	676
132-64-9	Dibenzofuran	U	338	ug/kg	67.6	338
84-66-2	Diethylphthalate	U	338	ug/kg	67.6	338
86-73-7	Fluorene	U	33.8	ug/kg	10.1	33.8
7005-72-3	4-Chlorophenylphenylether	U	338	ug/kg	67.6	338
534-52-1	2-Methyl-4,6-dinitrophenol	U	338	ug/kg	67.6	338
100-01-6	4-Nitroaniline	U	338	ug/kg	101	338
	p-Nitroaniline					
122-39-4	Diphenylamine	U	338	ug/kg	67.6	338
122-66-7	Azobenzene	U	338	ug/kg	67.6	338
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	338	ug/kg	67.6	338
118-74-1	Hexachlorobenzene	U	338	ug/kg	67.6	338
85-01-8	Phenanthrene	U	33.8	ug/kg	10.1	33.8
120-12-7	Anthracene	U	33.8	ug/kg	6.76	33.8
84-74-2	Di-n-butylphthalate	U	338	ug/kg	67.6	338
206-44-0	Fluoranthene	U	33.8	ug/kg	10.1	33.8
85-68-7	Butylbenzylphthalate	U	338	ug/kg	67.6	338
56-55-3	Benzo(a)anthracene	U	33.8	ug/kg	10.1	33.8
91-94-1	3,3'-Dichlorobenzidine	U	338	ug/kg	101	338
218-01-9	Chrysene	U	33.8	ug/kg	10.1	33.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	338	ug/kg	67.6	338
117-84-0	Di-n-octylphthalate	U	338	ug/kg	67.6	338
205-99-2	Benzo(b)fluoranthene	U	33.8	ug/kg	10.1	33.8
207-08-9	Benzo(k)fluoranthene	U	33.8	ug/kg	10.1	33.8
50-32-8	Benzo(a)pyrene	U	33.8	ug/kg	10.1	33.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.8	ug/kg	10.1	33.8
53-70-3	Dibenzo(a,h)anthracene	U	33.8	ug/kg	10.1	33.8
191-24-2	Benzo(ghi)perylene	U	33.8	ug/kg	10.1	33.8
120-82-1	1,2,4-Trichlorobenzene	U	338	ug/kg	67.6	338

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	176	ug/kg		J
	Unknown Aldol Condensate	2.88	253	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 18:45	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s510616.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
60-33-3	9,12-Octadecadienoic acid (Z,Z)-	8.18	190	ug/kg	98	NJ

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-666

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201984453	MB for batch 928098	68	66	65	67	72	95
1201984454	LCS for batch 928098	68	64	72	71	73	89
241819001	RE03-09-14115	47	47	47	47	47	65
1201984455	RE03-09-14115MS	58	56	64	61	63	76
1201984456	RE03-09-14115MSD	60	58	66	62	53	74
241819002	RE03-09-14113	55	55	53	57	67	89
241819003	RE03-09-14125	60	58	73	54	77	86
241819004	RE03-09-14123	64	65	63	57	66	79
241819005	RE03-09-14114	57	57	57	57	58	78
241819006	RE03-09-14126	55	54	57	54	57	81
241819007	RE03-09-14117	56	59	59	60	60	96
241819008	RE03-09-14121	66	64	68	66	71	91
241819009	RE03-09-14129	65	63	68	68	64	83
241819010	RE03-09-14120	51	50	50	47	49	70
241819011	RE03-09-14116	60	59	59	57	61	84
241819012	RE03-09-14111	67	66	69	64	66	90
241819013	RE03-09-14119	67	63	67	65	67	89
241819014	RE03-09-14110	65	61	63	58	64	90
241819015	RE03-09-14127	64	61	66	61	63	98
241819016	RE03-09-14118	74	71	75	68	73	97
241819017	RE03-09-14122	52	51	53	47	65	81
241819018	RE03-09-14124	68	66	67	62	79	92
241819019	RE03-09-14112	65	65	68	63	77	98
241819020	RE03-09-14128	74	74	75	67	83	108

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928098
Lab Sample ID: 1201984454
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/06/2009 10:58
Dilution: 1
Prep Batch ID: 928098
Batch ID: 928100

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1090	65	31-95
108-95-2	LCS	Phenol	1670	0.0	1090	66	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1060	64	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	963	58	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1330	80	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1140	68	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1160	70	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1220	73	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1250	75	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1300	78	38-116
129-00-0	LCS	Pyrene	1670	0.0	1360	81	43-108
110-86-1	LCS	Pyridine	1670	0.0	991	59	13-129
62-53-3	LCS	Aniline	1670	0.0	1110	67	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1070	64	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	960	58	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1030	62	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	982	59	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1120	67	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1110	66	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1210	72	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	906	54	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1230	74	37-110

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-666

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 928098

Matrix: SOIL

Lab Sample ID: 1201984454

Instrument: MSD5.I

Analysis Date: 12/06/2009 10:58

Dilution: 1

Analyst: RMB

Prep Batch ID: 928098

Inj. Vol: .5 uL

Batch ID: 928100

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1180	71	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1100	66	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1340	80	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1150	69	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1200	72	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	3140	94	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1150	69	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1270	76	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1120	67	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1210	73	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1190	71	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1180	71	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1200	72	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1120	67	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1080	65	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1480	89	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1200	72	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1180	71	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1210	73	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1220	73	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1360	81	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1180	71	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928098
Lab Sample ID: 1201984454
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/06/2009 10:58
Dilution: 1
Prep Batch ID: 928098
Batch ID: 928100

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1180	71	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1140	69	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1150	69	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	2080	125	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1330	80	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1250	75	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1230	74	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1220	73	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1250	75	45-107
120-12-7	LCS	Anthracene	1670	0.0	1260	76	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1290	77	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1310	78	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1400	84	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1250	75	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1120	67	45-98
218-01-9	LCS	Chrysene	1670	0.0	1260	75	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1330	80	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1340	80	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1350	81	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1260	75	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1320	79	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1240	75	45-128

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: LCS for batch 928098
Lab Sample ID: 1201984454
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/06/2009 10:58
Prep Batch ID: 928098
Batch ID: 928100
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1220	73	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1320	79	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1100	66	36-109

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115MS
Lab Sample ID: 1201984455
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/06/2009 11:43
Prep Batch ID: 928098
Batch ID: 928100
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1670	0.00	U	1000	60	32-90
108-95-2	MS	Phenol	1670	0.00	U	957	57	32-105
95-57-8	MS	2-Chlorophenol	1670	0.00	U	941	56	33-106
106-46-7	MS	1,4-Dichlorobenzene	1670	0.00	U	907	54	33-95
621-64-7	MS	N-Nitrosodipropylamine	1670	0.00	U	1200	72	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1670	0.00	U	1010	61	38-119
83-32-9	MS	Acenaphthene	1670	0.00	U	1040	62	39-100
121-14-2	MS	2,4-Dinitrotoluene	1670	0.00	U	1080	65	42-107
100-02-7	MS	4-Nitrophenol	1670	0.00	U	1070	64	24-120
87-86-5	MS	Pentachlorophenol	1670	0.00	U	1130	68	26-121
129-00-0	MS	Pyrene	1670	0.00	U	1190	71	34-120
110-86-1	MS	Pyridine	1670	0.00	U	807	48	30-95
62-53-3	MS	Aniline	1670	0.00	U	953	57	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1670	0.00	U	963	58	34-101
541-73-1	MS	1,3-Dichlorobenzene	1670	0.00	U	903	54	31-97
100-51-6	MS	Benzyl alcohol	1670	0.00	U	884	53	17-120
95-50-1	MS	1,2-Dichlorobenzene	1670	0.00	U	915	55	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1670	0.00	U	1020	61	32-113
95-48-7	MS	o-Cresol	1670	0.00	U	929	56	31-119
65794-96-9	MS	m,p-Cresols	1670	0.00	U	1090	65	35-125
67-72-1	MS	Hexachloroethane	1670	0.00	U	857	51	30-100
98-95-3	MS	Nitrobenzene	1670	0.00	U	1140	68	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115MS
Lab Sample ID: 1201984455
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/06/2009 11:43
Prep Batch ID: 928098
Batch ID: 928100
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1670	0.00	U	1080	65	34-110
88-75-5	MS	2-Nitrophenol	1670	0.00	U	996	60	32-108
105-67-9	MS	2,4-Dimethylphenol	1670	0.00	U	1160	70	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1670	0.00	U	1040	62	35-108
120-83-2	MS	2,4-Dichlorophenol	1670	0.00	U	1040	62	38-110
65-85-0	MS	Benzoic acid	3330	0.00	U	1880	56	18-134
91-20-3	MS	Naphthalene	1670	0.00	U	1070	64	31-105
106-47-8	MS	4-Chloroaniline	1670	0.00	U	1150	69	29-123
87-68-3	MS	Hexachlorobutadiene	1670	0.00	U	1030	62	31-109
91-57-6	MS	2-Methylnaphthalene	1670	0.00	U	1110	67	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1670	0.00	U	964	58	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1670	0.00	U	1030	62	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1670	0.00	U	1040	63	37-116
91-58-7	MS	2-Chloronaphthalene	1670	0.00	U	1010	60	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1670	0.00	U	962	58	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1670	0.00	U	1340	80	39-117
131-11-3	MS	Dimethylphthalate	1670	0.00	U	1070	64	41-105
606-20-2	MS	2,6-Dinitrotoluene	1670	0.00	U	1060	63	41-103
208-96-8	MS	Acenaphthylene	1670	0.00	U	1100	66	41-103
51-28-5	MS	2,4-Dinitrophenol	1670	0.00	U	886	53	25-104
132-64-9	MS	Dibenzofuran	1670	0.00	U	1240	74	40-114
84-66-2	MS	Diethylphthalate	1670	0.00	U	1040	62	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115MS
Lab Sample ID: 1201984455
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/06/2009 11:43
Prep Batch ID 928098
Batch ID: 928100
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1670	0.00	U	1080	65	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1670	0.00	U	1030	62	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1670	0.00	U	917	55	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1670	0.00	U	1800	108	35-139
122-39-4	MS	Diphenylamine	1670	0.00	U	1190	71	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.00	U	1130	68	37-118
101-55-3	MS	4-Bromophenylphenylether	1670	0.00	U	1090	65	39-112
118-74-1	MS	Hexachlorobenzene	1670	0.00	U	1070	64	38-113
85-01-8	MS	Phenanthrene	1670	0.00	U	1100	66	38-110
120-12-7	MS	Anthracene	1670	0.00	U	1120	67	38-112
84-74-2	MS	Di-n-butylphthalate	1670	0.00	U	1100	66	42-119
206-44-0	MS	Fluoranthene	1670	0.00	U	1120	67	38-119
85-68-7	MS	Butylbenzylphthalate	1670	0.00	U	1210	72	39-126
56-55-3	MS	Benzo(a)anthracene	1670	0.00	U	1080	65	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1670	0.00	U	964	58	35-106
218-01-9	MS	Chrysene	1670	0.00	U	1070	64	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1670	0.00	U	1140	69	40-125
117-84-0	MS	Di-n-octylphthalate	1670	0.00	U	1190	71	30-147
205-99-2	MS	Benzo(b)fluoranthene	1670	0.00	U	1160	69	38-117
207-08-9	MS	Benzo(k)fluoranthene	1670	0.00	U	1090	65	39-120
50-32-8	MS	Benzo(a)pyrene	1670	0.00	U	1130	68	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1670	0.00	U	1050	63	32-120

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-666**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-14115MS**	**Matrix:**	**S**
Lab Sample ID:	**1201984455**	**%Moisture:**	**0**
Instrument:	**MSD5.I**	**Analysis Date:**	**12/06/2009 11:43**
Analyst:	**RMB**	**Prep Batch ID:**	**928098**
Inj. Vol:	**.5 uL**	**Batch ID:**	**928100**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1670	0.00	U	994	60	32-124
191-24-2	MS	Benzo(ghi)perylene	1670	0.00	U	1110	67	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1670	0.00	U	1020	61	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115MSD
Lab Sample ID: 1201984456
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/06/2009 15:43
Dilution: 1
Prep Batch ID: 928098
Batch ID: 928100

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1660	0.00	U	932	56	32-90	7	0-30
108-95-2	MSD Phenol	1660	0.00	U	886	53	32-105	8	0-30
95-57-8	MSD 2-Chlorophenol	1660	0.00	U	864	52	33-106	9	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1660	0.00	U	827	50	33-95	9	0-30
621-64-7	MSD N-Nitrosodipropylamine	1660	0.00	U	1100	66	31-109	9	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1660	0.00	U	917	55	38-119	10	0-30
83-32-9	MSD Acenaphthene	1660	0.00	U	941	57	39-100	10	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1660	0.00	U	937	56	42-107	14	0-30
100-02-7	MSD 4-Nitrophenol	1660	0.00	U	991	60	24-120	8	0-30
87-86-5	MSD Pentachlorophenol	1660	0.00	U	986	59	26-121	14	0-30
129-00-0	MSD Pyrene	1660	0.00	U	1110	67	34-120	7	0-30
110-86-1	MSD Pyridine	1660	0.00	U	793	48	30-95	2	0-30
62-53-3	MSD Aniline	1660	0.00	U	905	54	34-111	5	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1660	0.00	U	899	54	34-101	7	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1660	0.00	U	830	50	31-97	8	0-30
100-51-6	MSD Benzyl alcohol	1660	0.00	U	755	45	17-120	16	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1660	0.00	U	853	51	32-102	7	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1660	0.00	U	956	57	32-113	7	0-30
95-48-7	MSD o-Cresol	1660	0.00	U	899	54	31-119	3	0-30
65794-96-9	MSD m,p-Cresols	1660	0.00	U	1010	61	35-125	7	0-30
67-72-1	MSD Hexachloroethane	1660	0.00	U	762	46	30-100	12	0-30
98-95-3	MSD Nitrobenzene	1660	0.00	U	1040	63	33-108	9	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115MSD
Lab Sample ID: 1201984456
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/06/2009 15:43
Dilution: 1
Prep Batch ID: 928098
Batch ID: 928100

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD	Isophorone	1660	0.00	U	992	60	34-110	8	0-30
88-75-5	MSD	2-Nitrophenol	1660	0.00	U	877	53	32-108	13	0-30
105-67-9	MSD	2,4-Dimethylphenol	1660	0.00	U	1100	66	32-115	6	0-30
111-91-1	MSD	bis(2-Chloroethoxy)methane	1660	0.00	U	948	57	35-108	9	0-30
120-83-2	MSD	2,4-Dichlorophenol	1660	0.00	U	938	56	38-110	10	0-30
65-85-0	MSD	Benzoic acid	3330	0.00	U	1650	50	18-134	13	0-30
91-20-3	MSD	Naphthalene	1660	0.00	U	1010	61	31-105	6	0-30
106-47-8	MSD	4-Chloroaniline	1660	0.00	U	1050	63	29-123	10	0-30
87-68-3	MSD	Hexachlorobutadiene	1660	0.00	U	926	56	31-109	11	0-30
91-57-6	MSD	2-Methylnaphthalene	1660	0.00	U	1020	62	32-110	9	0-30
77-47-4	MSD	Hexachlorocyclopentadiene	1660	0.00	U	776	47	21-122	22	0-30
88-06-2	MSD	2,4,6-Trichlorophenol	1660	0.00	U	1040	62	37-108	1	0-30
95-95-4	MSD	2,4,5-Trichlorophenol	1660	0.00	U	846	51	37-116	21	0-30
91-58-7	MSD	2-Chloronaphthalene	1660	0.00	U	912	55	37-103	10	0-30
88-74-4	MSD	2-Nitroaniline *o-Nitroaniline*	1660	0.00	U	888	53	36-115	8	0-30
99-09-2	MSD	3-Nitroaniline *m-Nitroaniline*	1660	0.00	U	1160	70	39-117	14	0-30
131-11-3	MSD	Dimethylphthalate	1660	0.00	U	908	55	41-105	16	0-30
606-20-2	MSD	2,6-Dinitrotoluene	1660	0.00	U	860	52	41-103	21	0-30
208-96-8	MSD	Acenaphthylene	1660	0.00	U	1000	60	41-103	9	0-30
51-28-5	MSD	2,4-Dinitrophenol	1660	0.00	U	901	54	25-104	2	0-30
132-64-9	MSD	Dibenzofuran	1660	0.00	U	1130	68	40-114	9	0-30
84-66-2	MSD	Diethylphthalate	1660	0.00	U	880	53	43-110	17	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-666

Client ID: RE03-09-14115MSD

Lab Sample ID: 1201984456

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: S

%Moisture: 0

Analysis Date: 12/06/2009 15:43

Dilution: 1

Prep Batch ID: 928098

Batch ID: 928100

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1660	0.00	U	992	60	48-99	8	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1660	0.00	U	941	57	42-111	9	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1660	0.00	U	846	51	19-118	8	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1660	0.00	U	1540	93	35-139	15	0-30
122-39-4	MSD	Diphenylamine	1660	0.00	U	1070	64	41-112	11	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1660	0.00	U	1060	64	37-118	6	0-30
101-55-3	MSD	4-Bromophenylphenylether	1660	0.00	U	990	60	39-112	10	0-30
118-74-1	MSD	Hexachlorobenzene	1660	0.00	U	1010	61	38-113	6	0-30
85-01-8	MSD	Phenanthrene	1660	0.00	U	1040	63	38-110	5	0-30
120-12-7	MSD	Anthracene	1660	0.00	U	1030	62	38-112	8	0-30
84-74-2	MSD	Di-n-butylphthalate	1660	0.00	U	1020	61	42-119	8	0-30
206-44-0	MSD	Fluoranthene	1660	0.00	U	1060	64	38-119	5	0-30
85-68-7	MSD	Butylbenzylphthalate	1660	0.00	U	1070	64	39-126	12	0-30
56-55-3	MSD	Benzo(a)anthracene	1660	0.00	U	1030	62	39-110	4	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1660	0.00	U	806	48	35-106	18	0-30
218-01-9	MSD	Chrysene	1660	0.00	U	1000	60	39-109	7	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1660	0.00	U	1040	63	40-125	9	0-30
117-84-0	MSD	Di-n-octylphthalate	1660	0.00	U	1080	65	30-147	10	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1660	0.00	U	1040	62	38-117	11	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1660	0.00	U	1080	65	39-120	1	0-30
50-32-8	MSD	Benzo(a)pyrene	1660	0.00	U	1060	64	40-115	6	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1660	0.00	U	1010	61	32-120	4	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14115MSD
Lab Sample ID: 1201984456
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/06/2009 15:43
Dilution: 1
Prep Batch ID: 928098
Batch ID: 928100

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1660	0.00	U	987	59	32-124	1	0-30
191-24-2	MSD Benzo(ghi)perylene	1660	0.00	U	1080	65	28-119	3	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1660	0.00	U	939	56	31-105	8	0-30

Method Blank Summary

SDG Number:	10-666	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928098	Instrument ID:	MSD5.I	Data File:	s510604.d
Lab Sample ID:	1201984453	Prep Date:	12/02/2009 09:26	Analyzed:	12/06/09 10:35
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 928098	1201984454	s510605.d	12/06/09	1058
02	RE03-09-14115	241819001	s510606.d	12/06/09	1120
03	RE03-09-14115MS	1201984455	s510607.d	12/06/09	1143
04	RE03-09-14115MSD	1201984456	s510608.d	12/06/09	1543
05	RE03-09-14113	241819002	s510609.d	12/06/09	1605
06	RE03-09-14125	241819003	s510610.d	12/06/09	1628
07	RE03-09-14123	241819004	s510611.d	12/06/09	1651
08	RE03-09-14114	241819005	s510612.d	12/06/09	1713
09	RE03-09-14126	241819006	s510613.d	12/06/09	1736
10	RE03-09-14117	241819007	s510614.d	12/06/09	1759
11	RE03-09-14121	241819008	s510615.d	12/06/09	1822
12	RE03-09-14129	241819009	s510616.d	12/06/09	1845
13	RE03-09-14120	241819010	s510617.d	12/06/09	1908
14	RE03-09-14116	241819011	s510618.d	12/06/09	1930
15	RE03-09-14111	241819012	s510619.d	12/06/09	1953
16	RE03-09-14119	241819013	s510620.d	12/06/09	2016
17	RE03-09-14110	241819014	s510621.d	12/06/09	2039
18	RE03-09-14127	241819015	s510622.d	12/06/09	2101
19	RE03-09-14118	241819016	s510623.d	12/06/09	2124
20	RE03-09-14122	241819017	s510918.d	12/09/09	2243
21	RE03-09-14124	241819018	s510919.d	12/09/09	2305
22	RE03-09-14112	241819019	s510920.d	12/09/09	2328
23	RE03-09-14128	241819020	s511106.d	12/11/09	1523

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: MSD5.I **Injection Date/Time:** 06-DEC-09 09:31

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s120609.b/s510601.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	32
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	38.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.9
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	28.9
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	77.9
442	Greater than 40% of mass 198	58.6
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD5.i/s120609.b/s510602	06-DEC-09 09:44
AP12CVS	WBN091201-03.4	/chem/MSD5.i/s120609.b/s510603	06-DEC-09 10:12
SBLK01	1201984453	/chem/MSD5.i/s120609.b/s510604	06-DEC-09 10:35
SBLK01LCS	1201984454	/chem/MSD5.i/s120609.b/s510605	06-DEC-09 10:58
RE03-09-14115	241819001	/chem/MSD5.i/s120609.b/s510606	06-DEC-09 11:20
RE03-09-14115MS	1201984455	/chem/MSD5.i/s120609.b/s510607	06-DEC-09 11:43
RE03-09-14115MSD	1201984456	/chem/MSD5.i/s120609.b/s510608	06-DEC-09 15:43
RE03-09-14113	241819002	/chem/MSD5.i/s120609.b/s510609	06-DEC-09 16:05
RE03-09-14125	241819003	/chem/MSD5.i/s120609.b/s510610	06-DEC-09 16:28
RE03-09-14123	241819004	/chem/MSD5.i/s120609.b/s510611	06-DEC-09 16:51
RE03-09-14114	241819005	/chem/MSD5.i/s120609.b/s510612	06-DEC-09 17:13
RE03-09-14126	241819006	/chem/MSD5.i/s120609.b/s510613	06-DEC-09 17:36
RE03-09-14117	241819007	/chem/MSD5.i/s120609.b/s510614	06-DEC-09 17:59
RE03-09-14121	241819008	/chem/MSD5.i/s120609.b/s510615	06-DEC-09 18:22
RE03-09-14129	241819009	/chem/MSD5.i/s120609.b/s510616	06-DEC-09 18:45
RE03-09-14120	241819010	/chem/MSD5.i/s120609.b/s510617	06-DEC-09 19:08

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: MSD5.I **Injection Date/Time:** 06-DEC-09 09:31

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s120609.b/s510601.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	32
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	38.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.9
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	28.9
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	77.9
442	Greater than 40% of mass 198	58.6
443	17 - 23% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE03-09-14116	241819011	/chem/MSD5.i/s120609.b/s510618	06-DEC-09 19:30
RE03-09-14111	241819012	/chem/MSD5.i/s120609.b/s510619	06-DEC-09 19:53
RE03-09-14119	241819013	/chem/MSD5.i/s120609.b/s510620	06-DEC-09 20:16
RE03-09-14110	241819014	/chem/MSD5.i/s120609.b/s510621	06-DEC-09 20:39
RE03-09-14127	241819015	/chem/MSD5.i/s120609.b/s510622	06-DEC-09 21:01
RE03-09-14118	241819016	/chem/MSD5.i/s120609.b/s510623	06-DEC-09 21:24

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: MSD5.I **Injection Date/Time:** 09-DEC-09 15:20

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s120909.b/s5l0908.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	31.4
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	37.6
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	45.4
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	28.3
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	56.1
443	17 - 23% of mass 442	19.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD5.i/s120909.b/s5l0909	09-DEC-09 15:34
AP12CVS	WBN091201-03.4	/chem/MSD5.i/s120909.b/s5l0910	09-DEC-09 16:02
RE03-09-14122	241819017	/chem/MSD5.i/s120909.b/s5l0918	09-DEC-09 22:43
RE03-09-14124	241819018	/chem/MSD5.i/s120909.b/s5l0919	09-DEC-09 23:05
RE03-09-14112	241819019	/chem/MSD5.i/s120909.b/s5l0920	09-DEC-09 23:28

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: MSD5.I **Injection Date/Time:** 11-DEC-09 13:34

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s121109.b/s5l1101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	37.7
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	36.1
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	42.7
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	28.2
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	74.3
442	Greater than 40% of mass 198	52.3
443	17 - 23% of mass 442	19.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD5.i/s121109.b/s5l1102	11-DEC-09 13:47
AP12CVS	WBN091201-03.4	/chem/MSD5.i/s121109.b/s5l1103	11-DEC-09 14:15
RE03-09-14128	241819020	/chem/MSD5.i/s121109.b/s5l1106	11-DEC-09 15:23

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN091106-08	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:09
MEGAICAL010	WBN091106-07	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:38
MEGAICAL020	WBN091106-06	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:06
MEGAICAL040	WBN091106-05.1	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:34
MEGAICAL050	WBN091106-04	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:02
MEGAICAL080	WBN091106-03	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:31
MEGAICAL100	WBN091106-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 16:59
MEGAICAL120	WBN091106-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 17:28
MEGAICV	WBN091106-09.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:20
AP12ICAL010	WBN091111-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:48
AP12ICAL020	WBN091111-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:10
AP12ICAL040	WBN091111-03.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:34
AP12ICAL050	WBN091111-04	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:57
AP12ICAL080	WBN091111-05	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:20
AP12ICAL100	WBN091111-06	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:42
AP12ICAL120	WBN091111-07	/chem/MSD5.i/s113009.b/s5k303	30-NOV-09 21:05

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-666

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICV	WBN091111-08.1	/chem/MSD5.i/s113009.b/s5k303	01-DEC-09 00:10

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD5.I

GC Column: J&W DB-5MS

Client SDG: 10-666

STD Analysis Time: 06-DEC-09 09:44

Data File: s510602.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	462845		3.87	1697703		4.74	976195		6	1755344		7.17	1769476		9.58	1633933		11.2
Upper Limit	925690		4.37	3395406		5.24	1952390		6.5	3510688		7.67	3538952		10.1	3267866		11.7
Lower Limit	231423		3.37	848852		4.24	488098		5.5	877672		6.67	884738		9.08	816967		10.7
Sample ID																		
BLK01	472490		3.86	1634973		4.73	1011850		5.99	1801911		7.16	1819932		9.57	1666241		11.2
BLK01LCS	458800		3.86	1702602		4.74	973696		5.99	1743294		7.16	1748008		9.57	1647651		11.2
RE03-09-14115	484000		3.86	1679872		4.73	1021044		5.99	1789099		7.16	1754185		9.57	1642545		11.2
RE03-09-14115MS	476789		3.86	1764276		4.74	1033441		5.99	1843671		7.16	1818453		9.57	1641061		11.2
RE03-09-14115MSD	417008		3.86	1560180		4.74	919189		6	1659258		7.16	1642399		9.57	1500941		11.2
RE03-09-14113	486945		3.85	1693641		4.73	847859		5.99	1634254		7.16	1577384		9.57	1494839		11.2
RE03-09-14125	445038		3.85	1013898		4.73	784245		5.99	1627281		7.16	1670297		9.57	1598323		11.2
RE03-09-14123	445000		3.86	1579973		4.73	980990		5.99	1696741		7.16	1790270		9.57	1737345		11.2
RE03-09-14114	425555		3.86	1495012		4.73	915898		5.99	1610951		7.16	1567161		9.57	1429108		11.2
RE03-09-14126	440452		3.86	1559852		4.73	964128		5.99	1620760		7.16	1650912		9.57	1636113		11.2
RE03-09-14117	471227		3.86	1656577		4.73	922503		5.99	1675488		7.16	1595629		9.57	1518216		11.2
RE03-09-14121	378983		3.86	1331670		4.73	811992		5.99	1397195		7.16	1403778		9.57	1319712		11.2
RE03-09-14129	466179		3.86	1602084		4.73	972628		5.99	1717274		7.16	1712559		9.57	1534774		11.2
RE03-09-14120	445497		3.86	1531591		4.73	942427		5.99	1647465		7.16	1667810		9.57	1585053		11.2
RE03-09-14116	479468		3.86	1683125		4.73	1038478		5.99	1799427		7.16	1705657		9.57	1584497		11.2
RE03-09-14111	441240		3.87	1550111		4.73	969062		5.99	1724055		7.16	1751584		9.57	1626336		11.2
RE03-09-14119	387355		3.86	1342917		4.74	833243		5.99	1514921		7.16	1582701		9.57	1505850		11.2
RE03-09-14110	449012		3.87	1573553		4.73	995665		5.99	1754079		7.16	1708855		9.57	1610428		11.2
RE03-09-14127	415876		3.87	1448507		4.73	885659		5.99	1548276		7.16	1485157		9.57	1401439		11.2
RE03-09-14118	383891		3.87	1347684		4.73	831062		5.99	1501878		7.16	1534168		9.57	1459646		11.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-666

Instrument: MSD5.I

STD Analysis Time: 09-DEC-09 15:34

GC Column: J&W DB-5MS

Data File: s5l0909.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	429392		3.84	1609729		4.71	955049		5.96	1772272		7.12	1924317		9.53	1861455		11.2
Upper Limit	858784		4.34	3219458		5.21	1910098		6.46	3544544		7.62	3848634		10.0	3722910		11.7
Lower Limit	214696		3.34	804865		4.21	477525		5.46	886136		6.62	962159		9.03	930728		10.7
Sample ID																		
RE03-09-14122	445045		3.83	1516512		4.7	981522		5.95	1828894		7.11	1972006		9.52	1914209		11.1
RE03-09-14124	431244		3.83	1507556		4.7	939002		5.95	1746934		7.11	1851068		9.52	1850702		11.1
RE03-09-14112	416906		3.83	1448567		4.7	899611		5.95	1661785		7.11	1735294		9.52	1747213		11.1

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-666

Instrument: MSD5.I

STD Analysis Time: 11-DEC-09 13:47

GC Column: J&W DB-5MS

Data File: s5l1102.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	254873		3.79	967269		4.66	563020		5.91	1065939		7.07	1203150		9.47	1102321		11.1
Upper Limit	509746		4.29	1934538		5.16	1126040		6.41	2131878		7.57	2406300		9.97	2204642		11.6
Lower Limit	127437		3.29	483635		4.16	281510		5.41	532970		6.57	601575		8.97	551161		10.6
Sample ID																		
RE03-09-14128	316180		3.79	1100750		4.65	704609		5.91	1327566		7.06	1364567		9.46	1268674		11.1

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819014	Date Received:	11/25/2009 09:10	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14110	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 20:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510621.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	346	ug/kg	69.2	346
108-95-2	Phenol	U	346	ug/kg	69.2	346
95-57-8	2-Chlorophenol	U	346	ug/kg	69.2	346
106-46-7	1,4-Dichlorobenzene	U	346	ug/kg	69.2	346
621-64-7	N-Nitrosodipropylamine	U	346	ug/kg	69.2	346
59-50-7	4-Chloro-3-methylphenol	U	346	ug/kg	69.2	346
83-32-9	Acenaphthene	U	34.6	ug/kg	11.4	34.6
121-14-2	2,4-Dinitrotoluene	U	346	ug/kg	34.6	346
100-02-7	4-Nitrophenol	U	346	ug/kg	114	346
87-86-5	Pentachlorophenol	U	346	ug/kg	86.5	346
129-00-0	Pyrene	U	34.6	ug/kg	10.4	34.6
110-86-1	Pyridine	U	346	ug/kg	69.2	346
62-53-3	Aniline	U	346	ug/kg	104	346
111-44-4	bis(2-Chloroethyl) ether	U	346	ug/kg	69.2	346
541-73-1	1,3-Dichlorobenzene	U	346	ug/kg	69.2	346
100-51-6	Benzyl alcohol	U	346	ug/kg	104	346
95-50-1	1,2-Dichlorobenzene	U	346	ug/kg	69.2	346
108-60-1	bis(2-Chloroisopropyl)ether	U	346	ug/kg	69.2	346
95-48-7	o-Cresol	U	346	ug/kg	69.2	346
65794-96-9	m,p-Cresols	U	346	ug/kg	104	346
67-72-1	Hexachloroethane	U	346	ug/kg	69.2	346
98-95-3	Nitrobenzene	U	346	ug/kg	69.2	346
78-59-1	Isophorone	U	346	ug/kg	69.2	346
88-75-5	2-Nitrophenol	U	346	ug/kg	69.2	346
105-67-9	2,4-Dimethylphenol	U	346	ug/kg	121	346
111-91-1	bis(2-Chloroethoxy)methane	U	346	ug/kg	69.2	346
120-83-2	2,4-Dichlorophenol	U	346	ug/kg	69.2	346
65-85-0	Benzoic acid	U	692	ug/kg	173	692
91-20-3	Naphthalene	U	34.6	ug/kg	10.4	34.6
106-47-8	4-Chloroaniline	U	346	ug/kg	69.2	346
87-68-3	Hexachlorobutadiene	U	346	ug/kg	69.2	346
91-57-6	2-Methylnaphthalene	U	34.6	ug/kg	6.92	34.6
77-47-4	Hexachlorocyclopentadiene	U	346	ug/kg	69.2	346
88-06-2	2,4,6-Trichlorophenol	U	346	ug/kg	69.2	346
95-95-4	2,4,5-Trichlorophenol	U	346	ug/kg	69.2	346
91-58-7	2-Chloronaphthalene	U	34.6	ug/kg	11.4	34.6
88-74-4	2-Nitroaniline	U	346	ug/kg	69.2	346
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	346	ug/kg	69.2	346

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819014	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14110	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 20:39	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510621.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	346	ug/kg	69.2	346
606-20-2	2,6-Dinitrotoluene	U	346	ug/kg	34.6	346
208-96-8	Acenaphthylene	U	34.6	ug/kg	10.4	34.6
51-28-5	2,4-Dinitrophenol	U	692	ug/kg	131	692
132-64-9	Dibenzofuran	U	346	ug/kg	69.2	346
84-66-2	Diethylphthalate	U	346	ug/kg	69.2	346
86-73-7	Fluorene	U	34.6	ug/kg	10.4	34.6
7005-72-3	4-Chlorophenylphenylether	U	346	ug/kg	69.2	346
534-52-1	2-Methyl-4,6-dinitrophenol	U	346	ug/kg	69.2	346
100-01-6	4-Nitroaniline	U	346	ug/kg	104	346
	p-Nitroaniline					
122-39-4	Diphenylamine	U	346	ug/kg	69.2	346
122-66-7	Azobenzene	U	346	ug/kg	69.2	346
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	346	ug/kg	69.2	346
118-74-1	Hexachlorobenzene	U	346	ug/kg	69.2	346
85-01-8	Phenanthrene	U	34.6	ug/kg	10.4	34.6
120-12-7	Anthracene	U	34.6	ug/kg	6.92	34.6
84-74-2	Di-n-butylphthalate	U	346	ug/kg	69.2	346
206-44-0	Fluoranthene	U	34.6	ug/kg	10.4	34.6
85-68-7	Butylbenzylphthalate	U	346	ug/kg	69.2	346
56-55-3	Benzo(a)anthracene	U	34.6	ug/kg	10.4	34.6
91-94-1	3,3'-Dichlorobenzidine	U	346	ug/kg	104	346
218-01-9	Chrysene	U	34.6	ug/kg	10.4	34.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	346	ug/kg	69.2	346
117-84-0	Di-n-octylphthalate	U	346	ug/kg	69.2	346
205-99-2	Benzo(b)fluoranthene	U	34.6	ug/kg	10.4	34.6
207-08-9	Benzo(k)fluoranthene	U	34.6	ug/kg	10.4	34.6
50-32-8	Benzo(a)pyrene	U	34.6	ug/kg	10.4	34.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.6	ug/kg	10.4	34.6
53-70-3	Dibenzo(a,h)anthracene	U	34.6	ug/kg	10.4	34.6
191-24-2	Benzo(ghi)perylene	U	34.6	ug/kg	10.4	34.6
120-82-1	1,2,4-Trichlorobenzene	U	346	ug/kg	69.2	346

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	264	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510621.d
Lab Smp Id: 241819014 Client Smp ID: RE03-09-14110
Inj Date : 06-DEC-2009 20:39
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819014|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	3.64280	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.866	3.872	(1.000)	449012	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1573553	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	995665	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1754079	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1708855	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1610428	40.0000	
$ 3 2-Fluorophenol	112	3.054	3.054	(0.790)	602147	64.7573	2240
$ 5 Phenol-d5	99	3.578	3.584	(0.925)	708938	61.4707	2130
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	314558	31.2668	1080
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	732356	29.1157	1010
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	235825	64.0303	2220
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1100886	45.0475	1560

ION RATIO REPORT

SV REPORT

Data file: s510621.d
Report Date: 12/07/2009 07:47
Lab. ID: 241819014 SampleType: SAMPLE
Injection Date: 06-DEC-2009 20:39
Operator: RMB Instrument: MSD5.i
Sample Info: |241819014|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	41062	3.58	3.66	80-120	100	(T)
93	2023	3.54	3.66	225-285	5	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45256	4.22	4.11	80-120	100	(T)
42	23704	4.22	4.11	27- 87	52	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	181306	5.99	5.76	80-120	100	(T)
164	995665	5.99	5.76	0- 40	549	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	132051	5.99	5.81	80-120	100	(T)
63	1497	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	132051	5.99	6.11	80-120	100	(T)
89	1874	5.99	6.11	36- 96	1	(QT)
63	1497	5.99	6.11	9- 69	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	10292	6.58	6.41	80-120	100	(T)
165	10395	6.58	6.41	62-122	101	(T)
167	3487	6.58	6.41	0- 44	34	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	727	6.58	6.42	80-120	100	(T)
105	1616	6.58	6.42	6- 66	222	(QT)
51	988	6.58	6.42	21- 81	136	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510621.d
Lab Smp Id: 241819014 Client Smp ID: RE03-09-14110
Inj Date : 06-DEC-2009 20:39
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819014|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	3.64280	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.866	2633484	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.884	502367	7.63044806	264	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510621.d
Date : 06-DEC-2009 20:39
Client ID: RE03-09-14110
Sample Info: 1241819014192810011|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

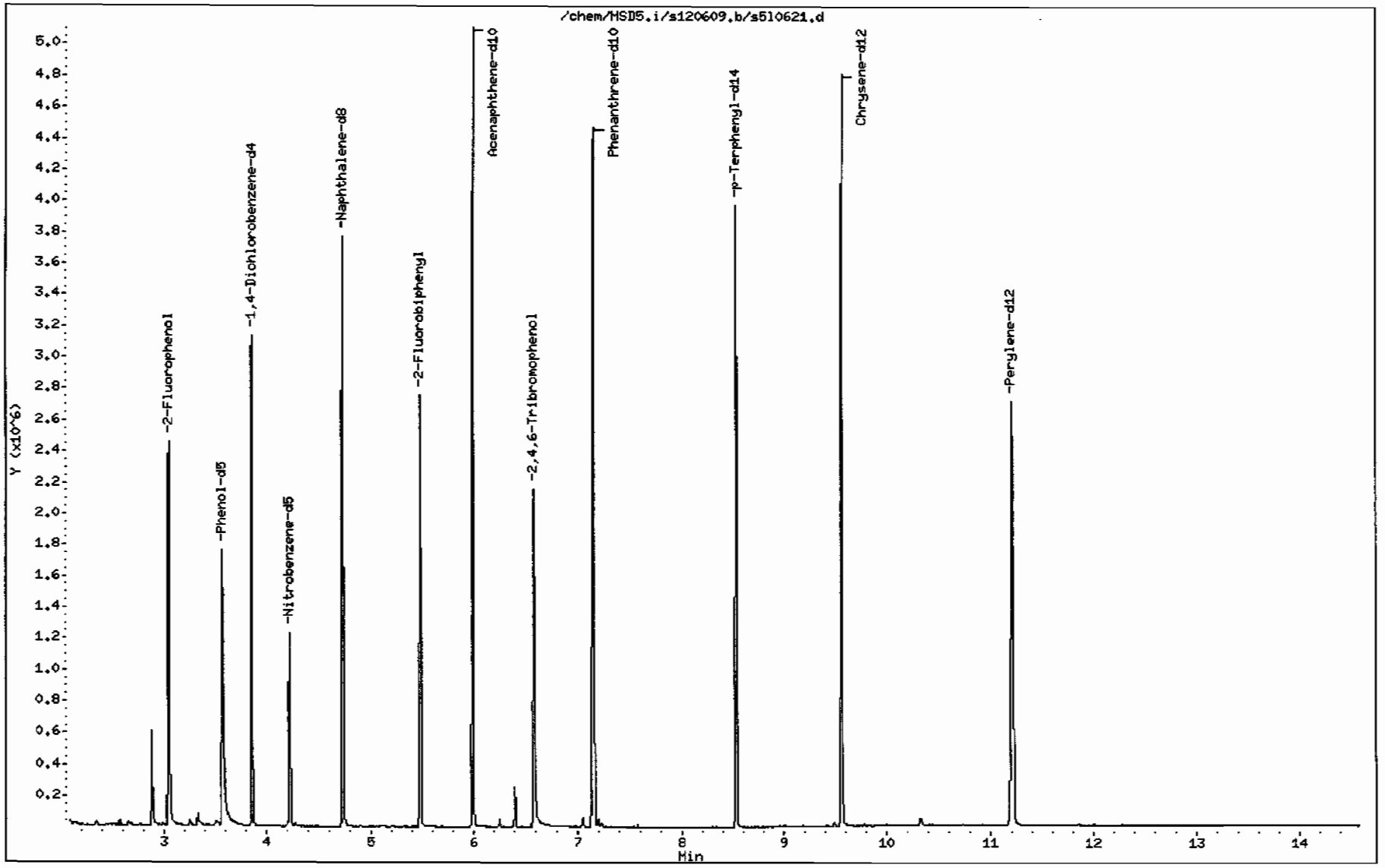

Data File: /chem/MSD5.i/s120609.b/s510621.d

Date : 06-DEC-2009 20:39

Client ID: RE03-09-14110

Instrument: MSD5.i

Sample Info: |24181901419281001|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

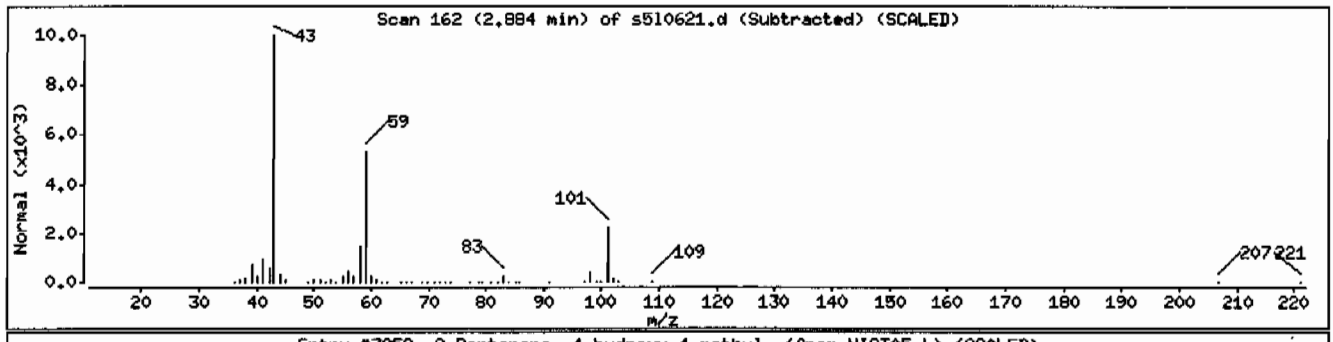

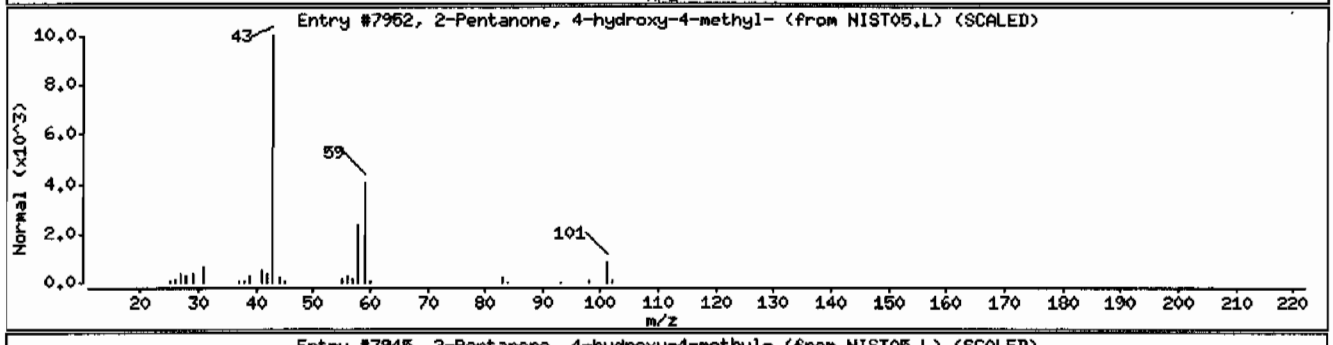

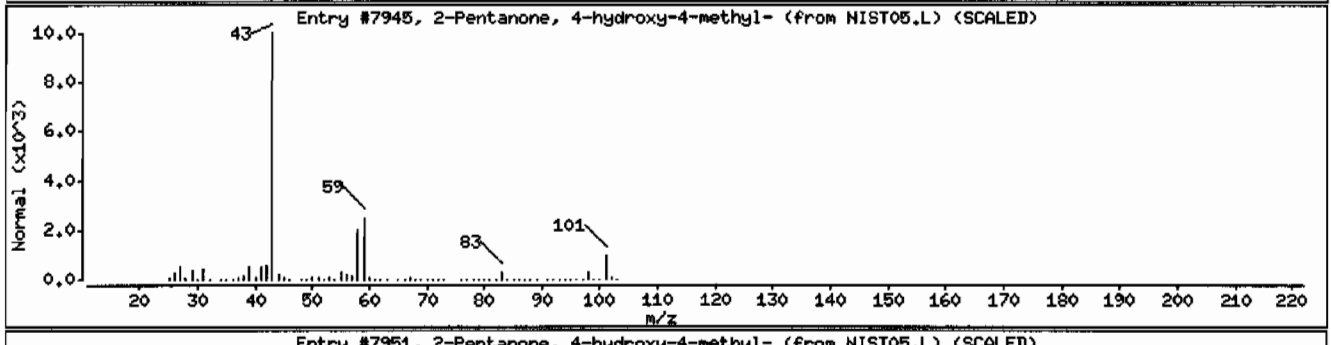

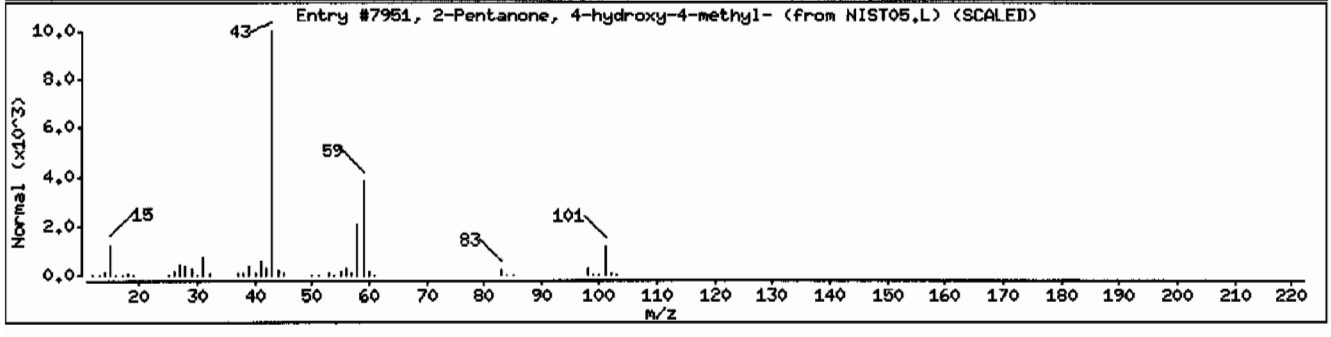

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819012	Date Received:	11/25/2009 09:10	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14111	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 19:53	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510619.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	76.0	380
108-95-2	Phenol	U	380	ug/kg	76.0	380
95-57-8	2-Chlorophenol	U	380	ug/kg	76.0	380
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	76.0	380
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	76.0	380
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	76.0	380
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380
87-86-5	Pentachlorophenol	U	380	ug/kg	95.0	380
129-00-0	Pyrene	U	38.0	ug/kg	11.4	38.0
110-86-1	Pyridine	U	380	ug/kg	76.0	380
62-53-3	Aniline	U	380	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	76.0	380
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	76.0	380
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	76.0	380
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	76.0	380
95-48-7	o-Cresol	U	380	ug/kg	76.0	380
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380
67-72-1	Hexachloroethane	U	380	ug/kg	76.0	380
98-95-3	Nitrobenzene	U	380	ug/kg	76.0	380
78-59-1	Isophorone	U	380	ug/kg	76.0	380
88-75-5	2-Nitrophenol	U	380	ug/kg	76.0	380
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	76.0	380
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	76.0	380
65-85-0	Benzoic acid	U	760	ug/kg	190	760
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline	U	380	ug/kg	76.0	380
87-68-3	Hexachlorobutadiene	U	380	ug/kg	76.0	380
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.60	38.0
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	76.0	380
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	76.0	380
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	76.0	380
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline	U	380	ug/kg	76.0	380
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	380	ug/kg	76.0	380

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819012	Date Received:	11/25/2009 09:10	%Moisture:	12.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14111	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 19:53	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s5l0619.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	380	ug/kg	76.0	380
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	U	760	ug/kg	144	760
132-64-9	Dibenzofuran	U	380	ug/kg	76.0	380
84-66-2	Diethylphthalate	U	380	ug/kg	76.0	380
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	76.0	380
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	76.0	380
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380
	p-Nitroaniline					
122-39-4	Diphenylamine	U	380	ug/kg	76.0	380
122-66-7	Azobenzene	U	380	ug/kg	76.0	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	76.0	380
118-74-1	Hexachlorobenzene	U	380	ug/kg	76.0	380
85-01-8	Phenanthrene	U	38.0	ug/kg	11.4	38.0
120-12-7	Anthracene	U	38.0	ug/kg	7.60	38.0
84-74-2	Di-n-butylphthalate	U	380	ug/kg	76.0	380
206-44-0	Fluoranthene	U	38.0	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate	U	380	ug/kg	76.0	380
56-55-3	Benzo(a)anthracene	U	38.0	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380
218-01-9	Chrysene	U	38.0	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	380	ug/kg	76.0	380
117-84-0	Di-n-octylphthalate	U	380	ug/kg	76.0	380
205-99-2	Benzo(b)fluoranthene	U	38.0	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene	U	38.0	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene	U	38.0	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	76.0	380

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	268	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510619.d
Lab Smp Id: 241819012 Client Smp ID: RE03-09-14111
Inj Date : 06-DEC-2009 19:53
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819012|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	12.29440	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.866	3.872	(1.000)	441240	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1550111	40.0000	
* 46 Acenaphthene-d10	164	5.989	5.996	(1.000)	969062	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1724055	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1751584	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1626336	40.0000	
$ 3 2-Fluorophenol	112	3.054	3.054	(0.790)	614190	67.2159	2550
$ 5 Phenol-d5	99	3.578	3.584	(0.925)	749392	66.1229	2510
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	340191	34.3260	1300
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	786448	32.1245	1220
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	235988	65.8335	2500
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1129041	45.0725	1710

ION RATIO REPORT

SV REPORT

Data file: s510619.d
Report Date: 12/07/2009 07:46
Lab. ID: 241819012 SampleType: SAMPLE
Injection Date: 06-DEC-2009 19:53
Operator: RMB Instrument: MSD5.i
Sample Info: |241819012|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	42618	3.58	3.66	80-120	100	(T)
93	10861	3.54	3.66	225-285	25	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	49095	4.22	4.11	80-120	100	(T)
42	24385	4.22	4.11	27- 87	50	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	173482	5.99	5.76	80-120	100	(T)
164	969062	5.99	5.76	0- 40	559	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	130202	5.99	5.81	80-120	100	(T)
63	1505	5.99	5.81	39- 99	1	(QT)
47 Acenaphthene				CAS#: 83-32-9		
154	7665	5.97	6.02	80-120	100	( )
153	8828	5.97	6.02	71-131	115	( )
152	8467	5.97	6.02	18- 78	110	(Q)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	130202	5.99	6.11	80-120	100	(T)
89	1564	5.99	6.11	36- 96	1	(QT)
63	1505	5.99	6.11	9- 69	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
52 4-Nitrophenol			CAS#: 100-02-7			
139	1454	5.97	6.03	80-120	100	(T)
109	2046	5.99	6.03	42-102	141	(Q)
65	4644	5.99	6.03	63-123	319	(Q)
53 Fluorene			CAS#: 86-73-7			
166	9464	6.58	6.41	80-120	100	(T)
165	11141	6.58	6.41	62-122	118	(T)
167	3300	6.58	6.41	0- 44	35	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	829	6.58	6.42	80-120	100	(T)
105	1564	6.58	6.42	6- 66	189	(QT)
51	956	6.58	6.42	21- 81	115	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510619.d
Lab Smp Id: 241819012 Client Smp ID: RE03-09-14111
Inj Date : 06-DEC-2009 19:53
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819012|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	12.29440	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.866	2592919	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.884	457943	7.06452024	268	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510619.d
Date : 06-DEC-2009 19:53
Client ID: RE03-09-14111
Sample Info: |2418190|2928100|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

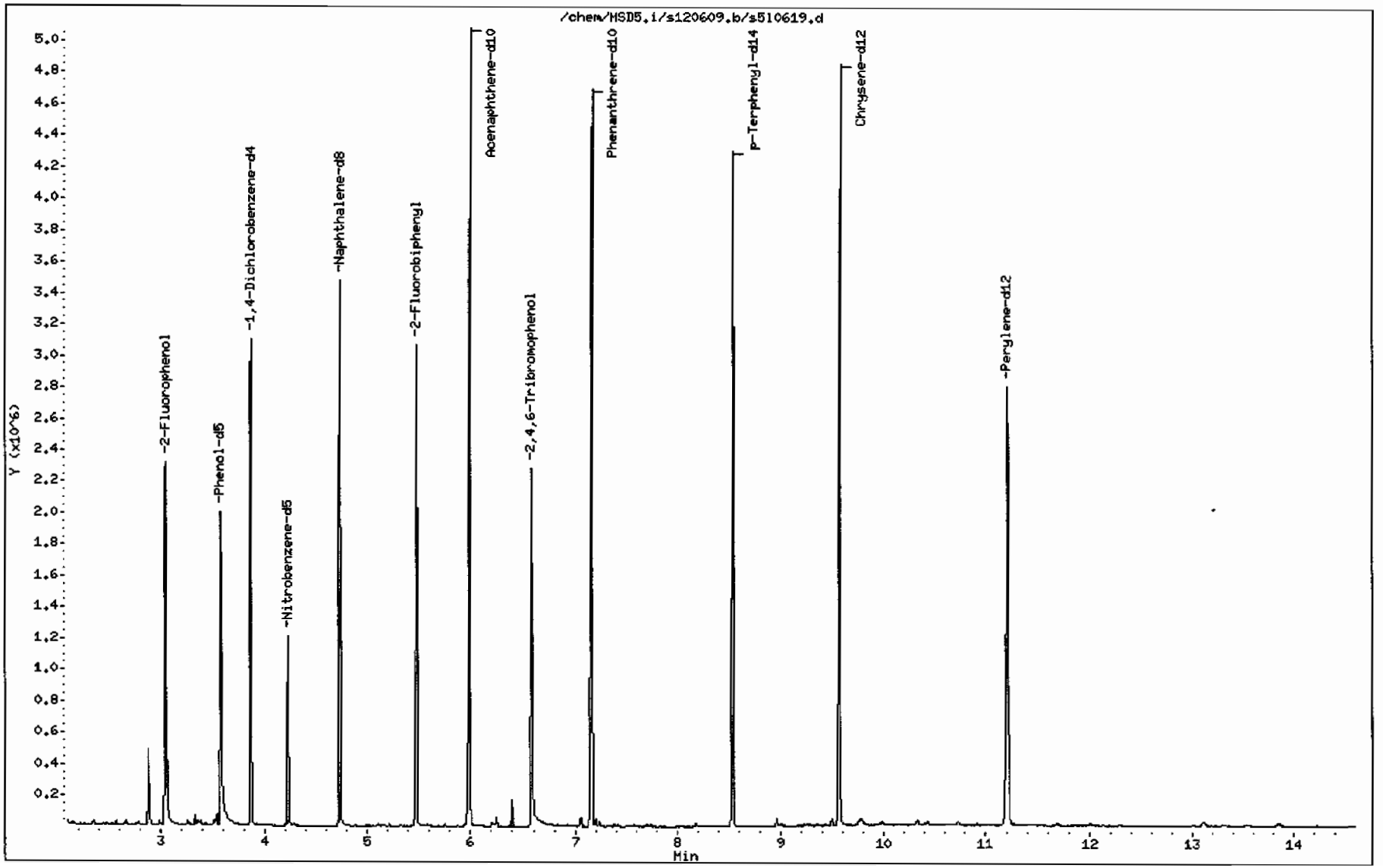

Data File: /chem/MSD5.i/s120609.b/s510619.d

Date : 06-DEC-2009 19:53

Client ID: RE03-09-14111 Instrument: MSD5.i

Sample Info: |2418190121928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
Acetamide, N-(aminocarbonyl)-	591-07-1	NIST05.L	4100	37	C3H6N2O2	102

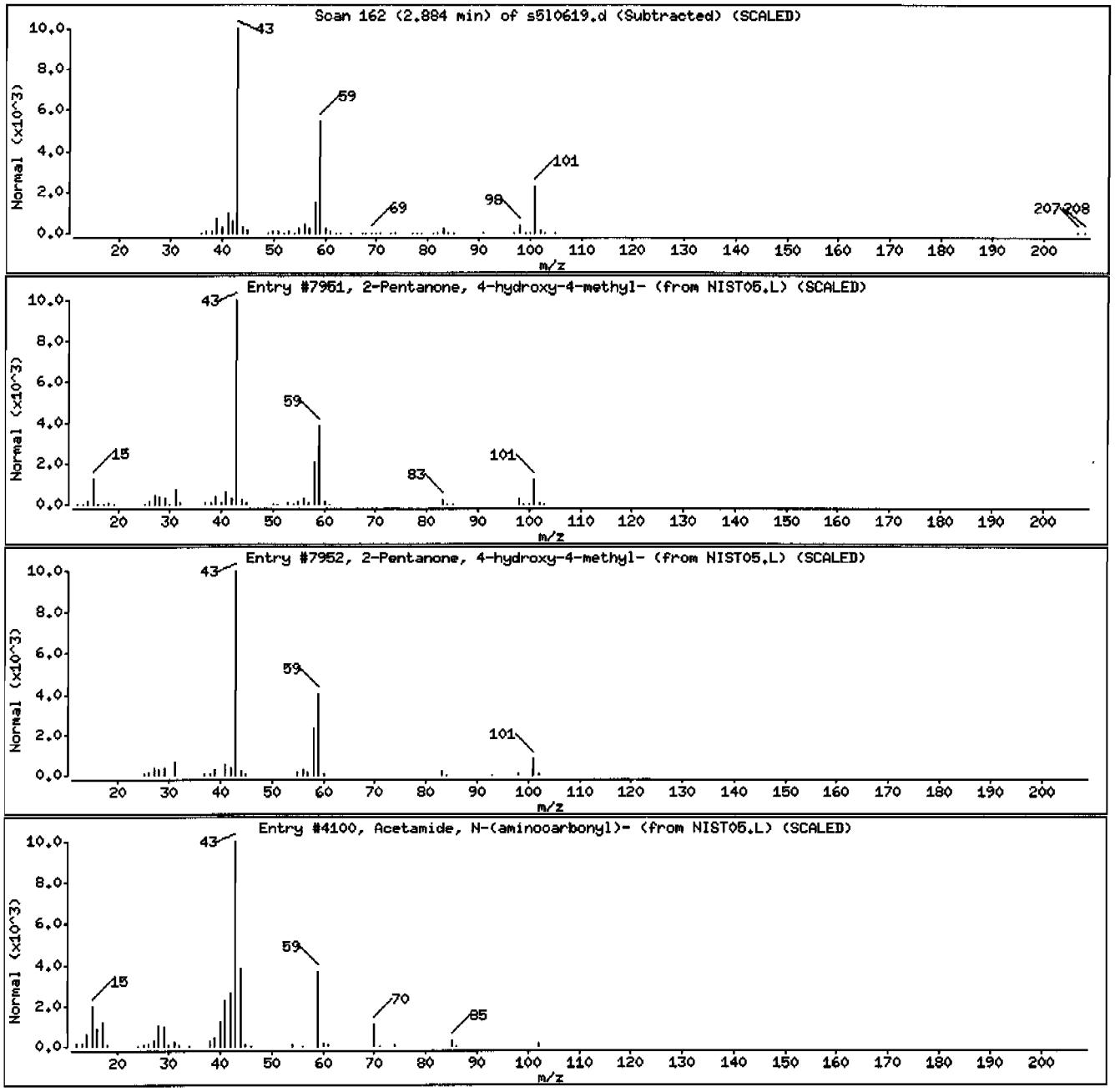

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 23:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510920.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	75.0	375
108-95-2	Phenol	U	375	ug/kg	75.0	375
95-57-8	2-Chlorophenol	U	375	ug/kg	75.0	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	75.0	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	75.0	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	75.0	375
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375
129-00-0	Pyrene	U	37.5	ug/kg	11.2	37.5
110-86-1	Pyridine	U	375	ug/kg	75.0	375
62-53-3	Aniline	U	375	ug/kg	112	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	75.0	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	75.0	375
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	75.0	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	75.0	375
95-48-7	o-Cresol	U	375	ug/kg	75.0	375
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375
67-72-1	Hexachloroethane	U	375	ug/kg	75.0	375
98-95-3	Nitrobenzene	U	375	ug/kg	75.0	375
78-59-1	Isophorone	U	375	ug/kg	75.0	375
88-75-5	2-Nitrophenol	U	375	ug/kg	75.0	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	75.0	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	75.0	375
65-85-0	Benzoic acid	U	750	ug/kg	187	750
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	75.0	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	75.0	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.50	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	75.0	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	75.0	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	75.0	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	75.0	375
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	375	ug/kg	75.0	375

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14112**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 23:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0920.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	375	ug/kg	75.0	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5
51-28-5	2,4-Dinitrophenol	U	750	ug/kg	142	750
132-64-9	Dibenzofuran	U	375	ug/kg	75.0	375
84-66-2	Diethylphthalate	U	375	ug/kg	75.0	375
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	75.0	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	75.0	375
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375
	p-Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	75.0	375
122-66-7	Azobenzene	U	375	ug/kg	75.0	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	75.0	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	75.0	375
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5
120-12-7	Anthracene	U	37.5	ug/kg	7.50	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	75.0	375
206-44-0	Fluoranthene	U	37.5	ug/kg	11.2	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	75.0	375
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	375	ug/kg	75.0	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	75.0	375
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	75.0	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	262	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510920.d
Lab Smp Id: 241819019 Client Smp ID: RE03-09-14112
Inj Date : 09-DEC-2009 23:28
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819019|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 10-Dec-2009 07:20 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	11.14350	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.831	3.839	(1.000)	416906	40.0000	
* 29 Naphthalene-d8	136	4.695	4.706	(1.000)	1448567	40.0000	
* 46 Acenaphthene-d10	164	5.954	5.958	(1.000)	899611	40.0000	
* 67 Phenanthrene-d10	188	7.113	7.123	(1.000)	1661785	40.0000	
* 91 Chrysene-d12	240	9.519	9.531	(1.000)	1735294	40.0000	
* 98 Perylene-d12	264	11.142	11.153	(1.000)	1747213	40.0000	
$ 3 2-Fluorophenol	112	3.019	3.020	(0.788)	561856	65.0775	2440
$ 5 Phenol-d5	99	3.543	3.555	(0.925)	698594	65.2386	2440
$ 20 Nitrobenzene-d5	82	4.190	4.200	(0.892)	314736	33.9838	1270
$ 39 2-Fluorobiphenyl	172	5.442	5.447	(0.914)	718702	31.6237	1180
$ 60 2,4,6-Tribromophenol	329	6.548	6.550	(1.100)	256682	77.1347	2890
$ 81 p-Terphenyl-d14	244	8.495	8.495	(0.892)	1218884	49.1160	1840

ION RATIO REPORT

SV REPORT

Data file: s510920.d
Report Date: 12/10/2009 08:02
Lab. ID: 241819019 SampleType: SAMPLE
Injection Date: 09-DEC-2009 23:28
Operator: RMB Instrument: MSD5.i
Sample Info: |241819019|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	42014	3.54	3.62	80-120	100	(T)
93	3501	3.51	3.62	235-295	8	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45517	4.19	4.08	80-120	100	(T)
42	22210	4.19	4.08	28- 88	49	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	162997	5.95	5.73	80-120	100	(T)
164	899611	5.95	5.73	0- 40	552	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	121061	5.95	5.78	80-120	100	(T)
63	1486	5.95	5.78	38- 98	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	121061	5.95	6.07	80-120	100	(T)
89	1758	5.95	6.07	35- 95	1	(QT)
63	1486	5.95	6.07	9- 69	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	11334	6.54	6.37	80-120	100	(T)
165	11971	6.54	6.37	61-121	106	(T)
167	4128	6.54	6.37	0- 44	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	934	6.54	6.39	80-120	100	(T)
105	1765	6.54	6.38	4- 64	189	(QT)
51	1160	6.54	6.38	8- 68	124	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	16573	6.54	6.73	80-120	100	(T)
141	101257	6.54	6.73	36- 96	611	(QT)
250	33825	6.54	6.73	69-129	204	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510920.d
Lab Smp Id: 241819019 Client Smp ID: RE03-09-14112
Inj Date : 09-DEC-2009 23:28
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819019|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 10-Dec-2009 07:20 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	11.14350	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.831	2408366	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.860	420767	6.98841695	262	0		0	10

Data File: /chem/MSD5.i/s120909.b/s510920.d
Date : 09-DEC-2009 23:28
Client ID: RE03-09-14112
Sample Info: |24181901919281001|SVHF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

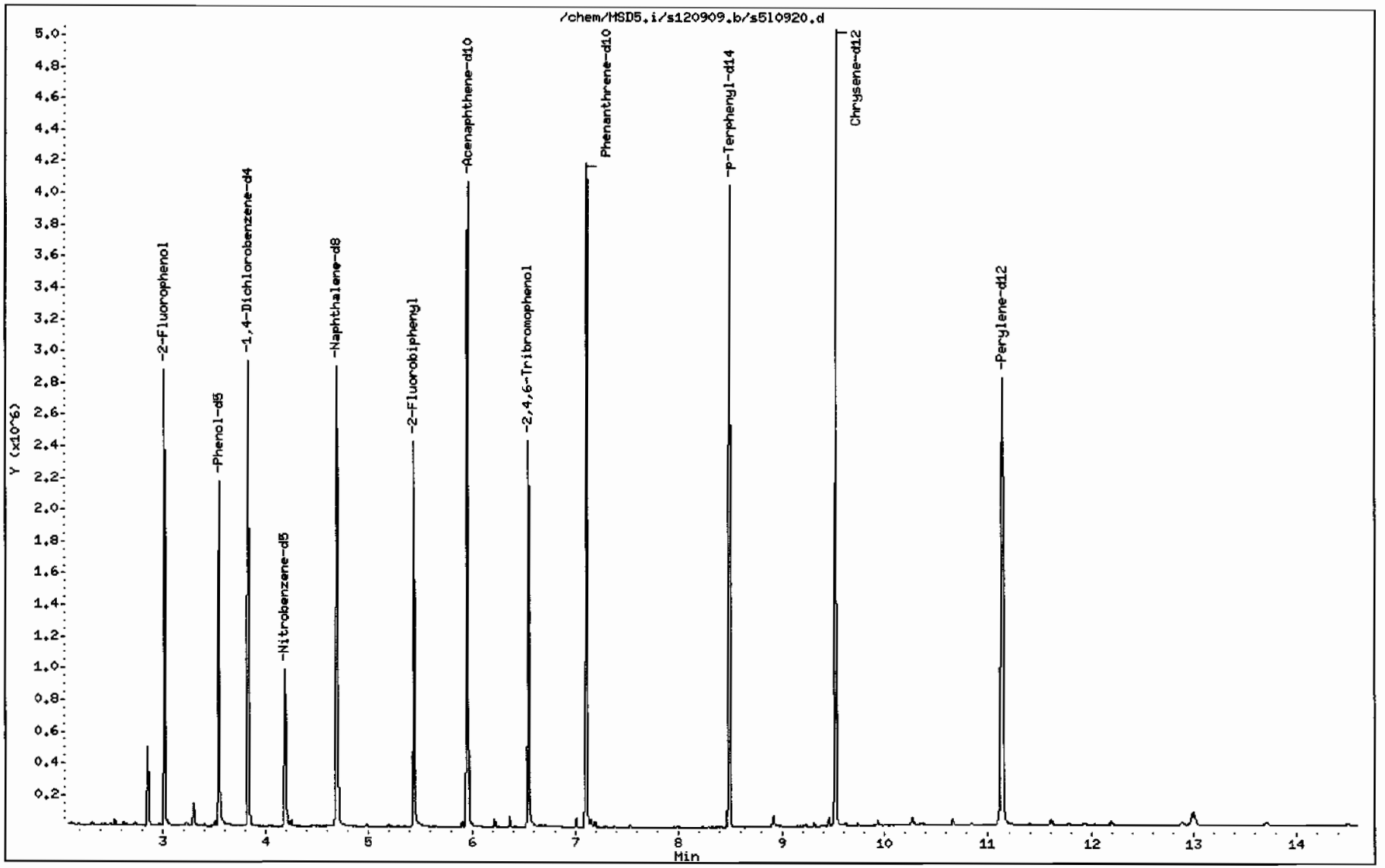

Data File: /chem/MSD5.i/s120909.b/s510920.d

Date : 09-DEC-2009 23:28

Client ID: RE03-09-14112

Instrument: MSD5.i

Sample Info: |2418190191928100111SVMF111LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

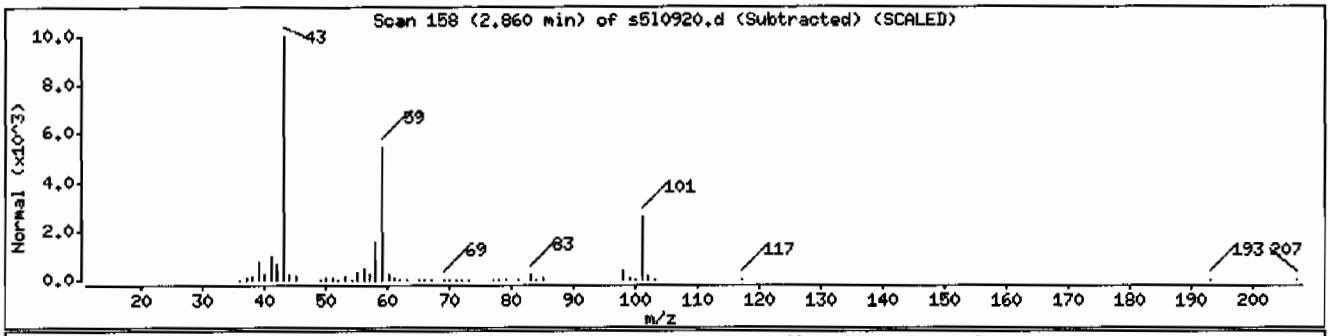

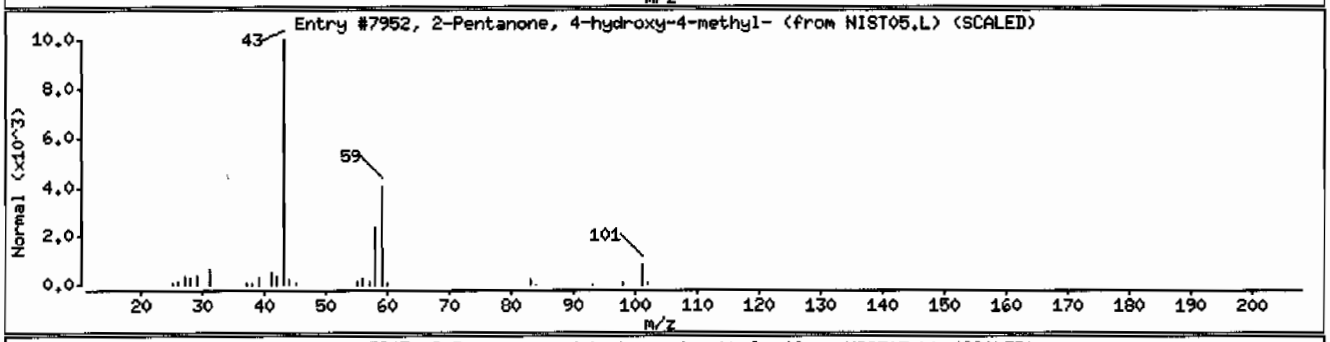

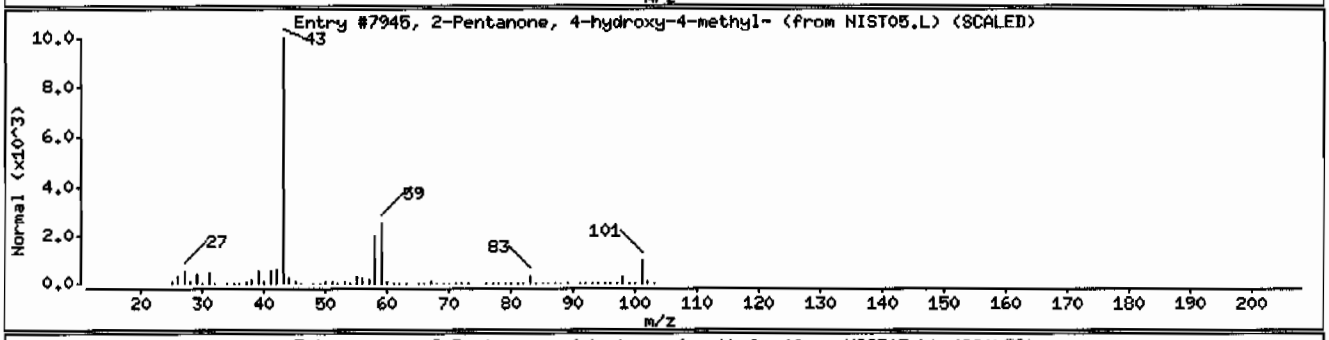

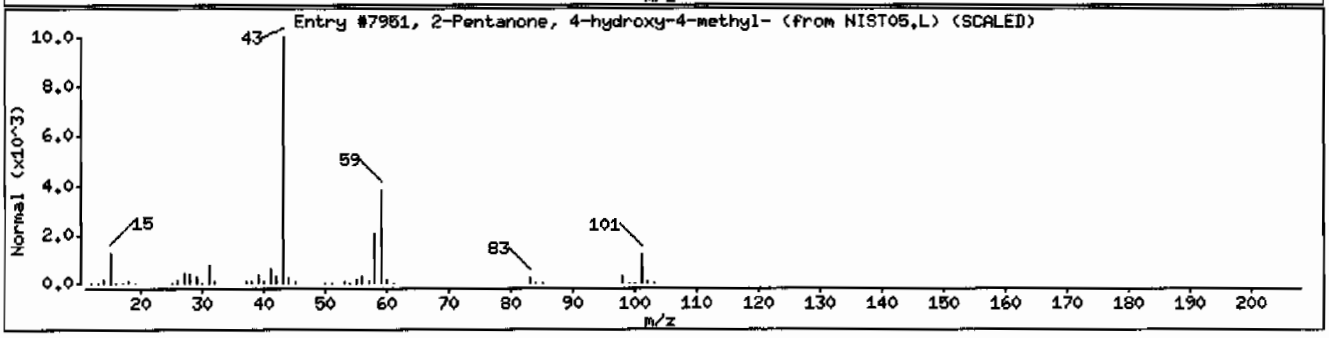

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819002	Date Received:	11/25/2009 09:10	%Moisture:	9.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14113	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 16:05	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510609.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	370	ug/kg	74.0	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14113**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510609.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.0	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	300	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510609.d
Lab Smp Id: 241819002 Client Smp ID: RE03-09-14113
Inj Date : 06-DEC-2009 16:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819002|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	9.91220	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.854	3.872	(1.000)	486945	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1693641	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	847859	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1634254	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1577384	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1494839	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.791)	551241	54.6645	2020
$ 5 Phenol-d5	99	3.572	3.584	(0.927)	692022	55.3296	2050
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	288400	26.6341	985
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	612400	28.5910	1060
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	211287	67.3687	2490
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	1008281	44.6969	1650

ION RATIO REPORT

SV REPORT

Data file: s510609.d
Report Date: 12/07/2009 07:43
Lab. ID: 241819002 SampleType: SAMPLE
Injection Date: 06-DEC-2009 16:05
Operator: RMB Instrument: MSD5.i
Sample Info: |241819002|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	42881	3.57	3.66	80-120	100	(T)
93	1361	3.54	3.66	225-285	3	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	41930	4.23	4.11	80-120	100	(T)
42	21587	4.23	4.11	27- 87	51	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	187709	5.99	5.76	80-120	100	(T)
164	847859	5.99	5.76	0- 40	452	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	37687	5.97	5.81	80-120	100	(T)
63	1443	5.97	5.81	39- 99	4	(QT)
47 Acenaphthene			CAS#: 83-32-9			
154	7511	5.97	6.02	80-120	100	( )
153	7828	5.97	6.02	71-131	104	( )
152	8031	5.97	6.02	18- 78	107	(Q)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	112741	5.99	6.11	80-120	100	(T)
89	1789	5.99	6.11	36- 96	2	(QT)
63	1498	5.99	6.11	9- 69	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
52 4-Nitrophenol			CAS#: 100-02-7			
139	1141	5.97	6.03	80-120	100	(T)
109	2140	5.99	6.03	42-102	188	(Q)
65	4516	5.99	6.03	63-123	396	(Q)
53 Fluorene			CAS#: 86-73-7			
166	9076	6.58	6.41	80-120	100	(T)
165	10612	6.58	6.41	62-122	117	(T)
167	3366	6.58	6.41	0- 44	37	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	738	6.58	6.42	80-120	100	(T)
105	1747	6.58	6.42	6- 66	237	(QT)
51	1303	6.58	6.42	21- 81	177	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510609.d
Lab Smp Id: 241819002 Client Smp ID: RE03-09-14113
Inj Date : 06-DEC-2009 16:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819002|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	9.91220	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.854	2850195	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.890	577729	8.10791859	300	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510609.d
Date : 06-DEC-2009 16:05
Client ID: RE03-09-14113
Sample Info: 1241819002192810011ISVMFI1ILANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

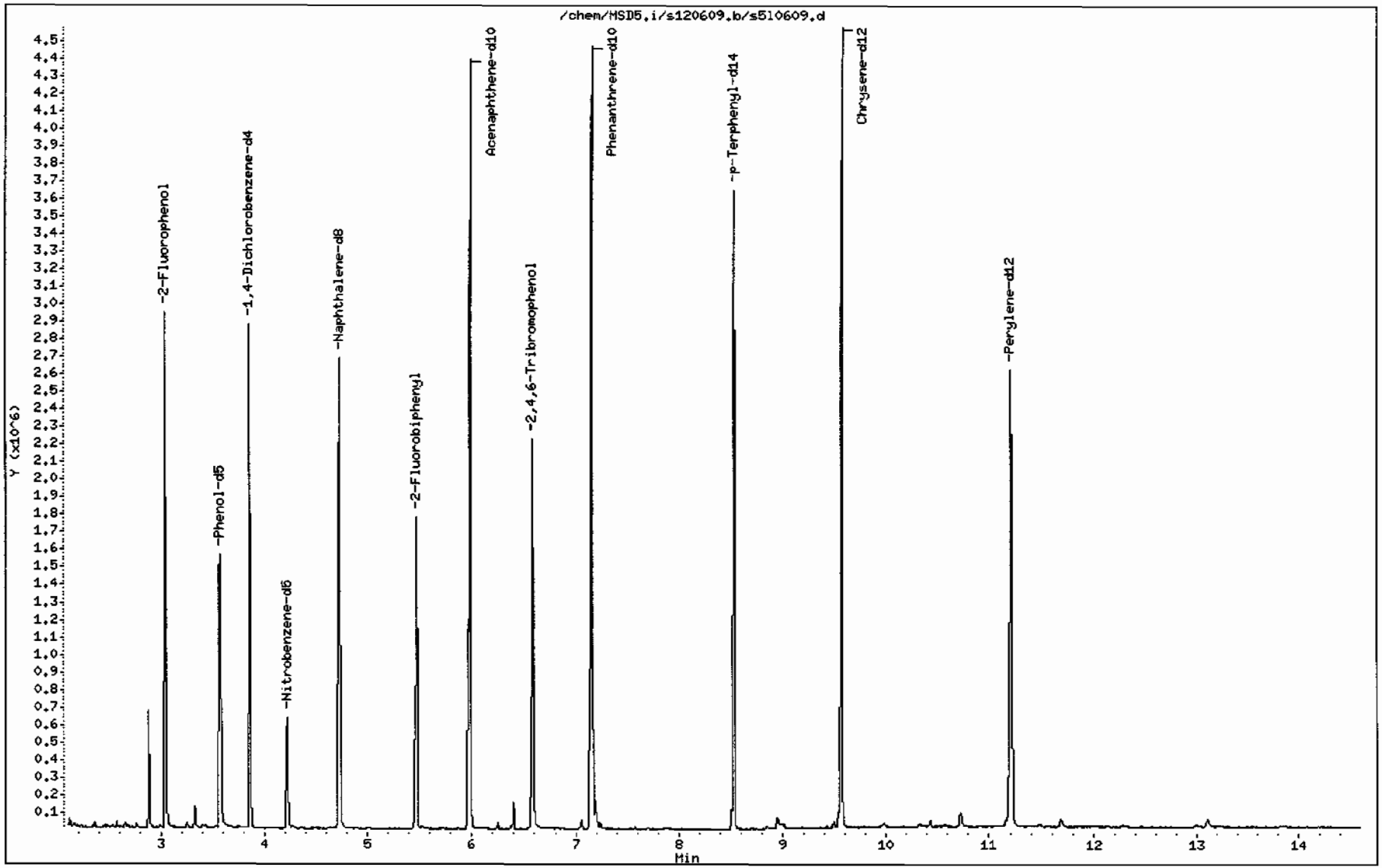

Data File: /chem/MSD5.i/s120609.b/s510609.d

Date : 06-DEC-2009 16:05

Client ID: RE03-09-14113

Instrument: MSD5.i

Sample Info: |241819002|928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

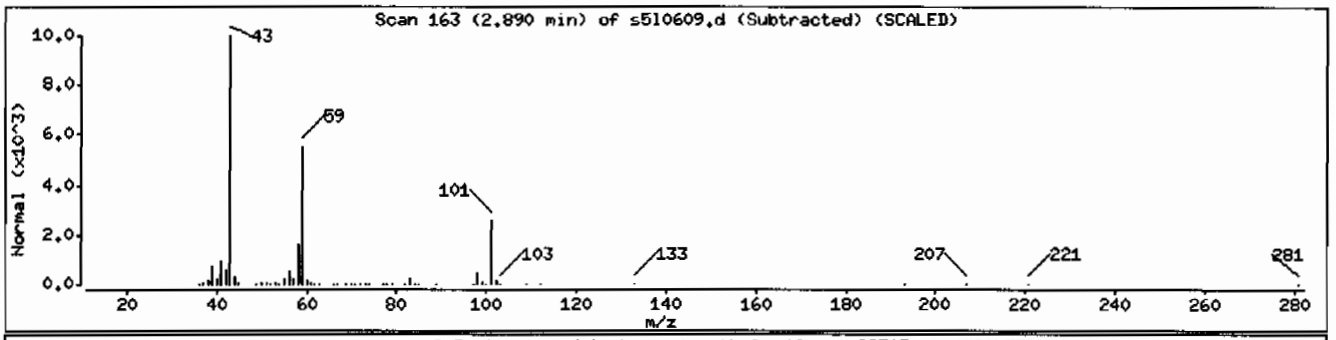

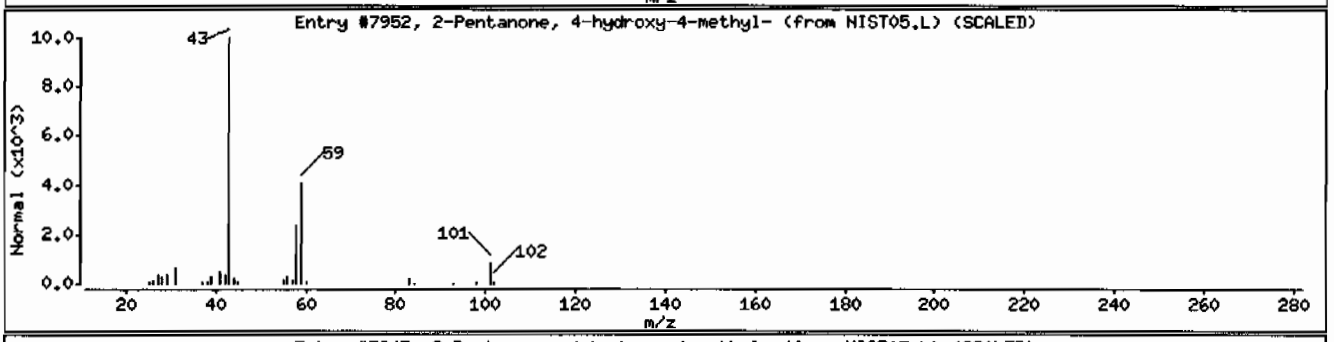

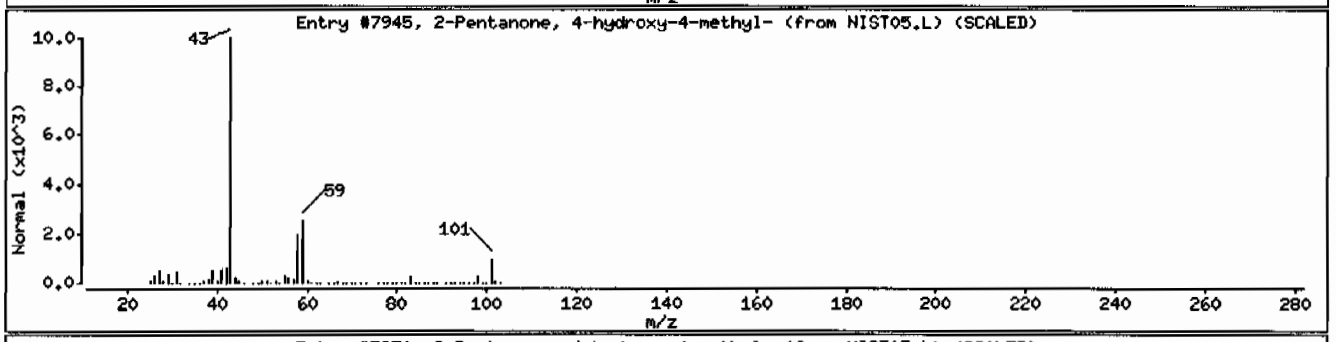

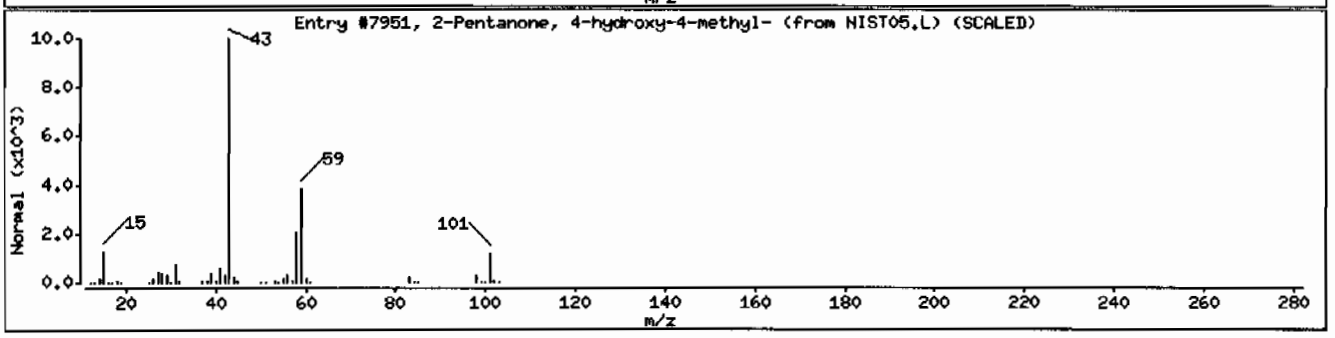

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819005	Date Received:	11/25/2009 09:10	%Moisture:	.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14114	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 17:13	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510612.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	336	ug/kg	67.3	336
108-95-2	Phenol	U	336	ug/kg	67.3	336
95-57-8	2-Chlorophenol	U	336	ug/kg	67.3	336
106-46-7	1,4-Dichlorobenzene	U	336	ug/kg	67.3	336
621-64-7	N-Nitrosodipropylamine	U	336	ug/kg	67.3	336
59-50-7	4-Chloro-3-methylphenol	U	336	ug/kg	67.3	336
83-32-9	Acenaphthene	U	33.6	ug/kg	11.1	33.6
121-14-2	2,4-Dinitrotoluene	U	336	ug/kg	33.6	336
100-02-7	4-Nitrophenol	U	336	ug/kg	111	336
87-86-5	Pentachlorophenol	U	336	ug/kg	84.1	336
129-00-0	Pyrene	U	33.6	ug/kg	10.1	33.6
110-86-1	Pyridine	U	336	ug/kg	67.3	336
62-53-3	Aniline	U	336	ug/kg	101	336
111-44-4	bis(2-Chloroethyl) ether	U	336	ug/kg	67.3	336
541-73-1	1,3-Dichlorobenzene	U	336	ug/kg	67.3	336
100-51-6	Benzyl alcohol	U	336	ug/kg	101	336
95-50-1	1,2-Dichlorobenzene	U	336	ug/kg	67.3	336
108-60-1	bis(2-Chloroisopropyl)ether	U	336	ug/kg	67.3	336
95-48-7	o-Cresol	U	336	ug/kg	67.3	336
65794-96-9	m,p-Cresols	U	336	ug/kg	101	336
67-72-1	Hexachloroethane	U	336	ug/kg	67.3	336
98-95-3	Nitrobenzene	U	336	ug/kg	67.3	336
78-59-1	Isophorone	U	336	ug/kg	67.3	336
88-75-5	2-Nitrophenol	U	336	ug/kg	67.3	336
105-67-9	2,4-Dimethylphenol	U	336	ug/kg	118	336
111-91-1	bis(2-Chloroethoxy)methane	U	336	ug/kg	67.3	336
120-83-2	2,4-Dichlorophenol	U	336	ug/kg	67.3	336
65-85-0	Benzoic acid	U	673	ug/kg	168	673
91-20-3	Naphthalene	U	33.6	ug/kg	10.1	33.6
106-47-8	4-Chloroaniline	U	336	ug/kg	67.3	336
87-68-3	Hexachlorobutadiene	U	336	ug/kg	67.3	336
91-57-6	2-Methylnaphthalene	U	33.6	ug/kg	6.73	33.6
77-47-4	Hexachlorocyclopentadiene	U	336	ug/kg	67.3	336
88-06-2	2,4,6-Trichlorophenol	U	336	ug/kg	67.3	336
95-95-4	2,4,5-Trichlorophenol	U	336	ug/kg	67.3	336
91-58-7	2-Chloronaphthalene	U	33.6	ug/kg	11.1	33.6
88-74-4	2-Nitroaniline	U	336	ug/kg	67.3	336
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	336	ug/kg	67.3	336

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14114	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 17:13	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510612.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	336	ug/kg	67.3	336
606-20-2	2,6-Dinitrotoluene	U	336	ug/kg	33.6	336
208-96-8	Acenaphthylene	U	33.6	ug/kg	10.1	33.6
51-28-5	2,4-Dinitrophenol	U	673	ug/kg	128	673
132-64-9	Dibenzofuran	U	336	ug/kg	67.3	336
84-66-2	Diethylphthalate	U	336	ug/kg	67.3	336
86-73-7	Fluorene	U	33.6	ug/kg	10.1	33.6
7005-72-3	4-Chlorophenylphenylether	U	336	ug/kg	67.3	336
534-52-1	2-Methyl-4,6-dinitrophenol	U	336	ug/kg	67.3	336
100-01-6	4-Nitroaniline	U	336	ug/kg	101	336
	p-Nitroaniline					
122-39-4	Diphenylamine	U	336	ug/kg	67.3	336
122-66-7	Azobenzene	U	336	ug/kg	67.3	336
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	336	ug/kg	67.3	336
118-74-1	Hexachlorobenzene	U	336	ug/kg	67.3	336
85-01-8	Phenanthrene	U	33.6	ug/kg	10.1	33.6
120-12-7	Anthracene	U	33.6	ug/kg	6.73	33.6
84-74-2	Di-n-butylphthalate	U	336	ug/kg	67.3	336
206-44-0	Fluoranthene	U	33.6	ug/kg	10.1	33.6
85-68-7	Butylbenzylphthalate	U	336	ug/kg	67.3	336
56-55-3	Benzo(a)anthracene	U	33.6	ug/kg	10.1	33.6
91-94-1	3,3'-Dichlorobenzidine	U	336	ug/kg	101	336
218-01-9	Chrysene	U	33.6	ug/kg	10.1	33.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	336	ug/kg	67.3	336
117-84-0	Di-n-octylphthalate	U	336	ug/kg	67.3	336
205-99-2	Benzo(b)fluoranthene	U	33.6	ug/kg	10.1	33.6
207-08-9	Benzo(k)fluoranthene	U	33.6	ug/kg	10.1	33.6
50-32-8	Benzo(a)pyrene	U	33.6	ug/kg	10.1	33.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.6	ug/kg	10.1	33.6
53-70-3	Dibenzo(a,h)anthracene	U	33.6	ug/kg	10.1	33.6
191-24-2	Benzo(ghi)perylene	U	33.6	ug/kg	10.1	33.6
120-82-1	1,2,4-Trichlorobenzene	U	336	ug/kg	67.3	336

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	217	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510612.d
Lab Smp Id: 241819005 Client Smp ID: RE03-09-14114
Inj Date : 06-DEC-2009 17:13
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819005|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.90840	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	425555	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1495012	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	915898	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1610951	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1567161	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1429108	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	502034	56.9668	1920
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	622428	56.9444	1920
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	273937	28.6596	964
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	653773	28.2552	950
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	197189	58.2029	1960
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	876991	39.1304	1320

ION RATIO REPORT

SV REPORT

Data file: s510612.d
Report Date: 12/07/2009 07:44
Lab. ID: 241819005 SampleType: SAMPLE
Injection Date: 06-DEC-2009 17:13
Operator: RMB Instrument: MSD5.i
Sample Info: |241819005|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	37585	3.58	3.66	80-120	100	(T)
93	672	3.54	3.66	225-285	2	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	40238	4.23	4.11	80-120	100	(T)
42	20850	4.23	4.11	27- 87	52	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	164834	5.99	5.76	80-120	100	(T)
164	915898	5.99	5.76	0- 40	556	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	120796	5.99	5.81	80-120	100	(T)
63	1464	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	120796	5.99	6.11	80-120	100	(T)
89	1777	5.99	6.11	36- 96	1	(QT)
63	1464	5.99	6.11	9- 69	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	8826	6.58	6.41	80-120	100	(T)
165	10187	6.58	6.41	62-122	115	(T)
167	3498	6.58	6.41	0- 44	40	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	751	6.58	6.42	80-120	100	(T)
105	1574	6.58	6.42	6- 66	210	(QT)
51	915	6.58	6.42	21- 81	122	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510612.d
Lab Smp Id: 241819005 Client Smp ID: RE03-09-14114
Inj Date : 06-DEC-2009 17:13
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819005|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.90840	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2494501	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.884	401668	6.44085558	217	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510612.d
Date : 06-DEC-2009 17:13
Client ID: RE03-09-14114
Sample Info: |2418190051928100|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

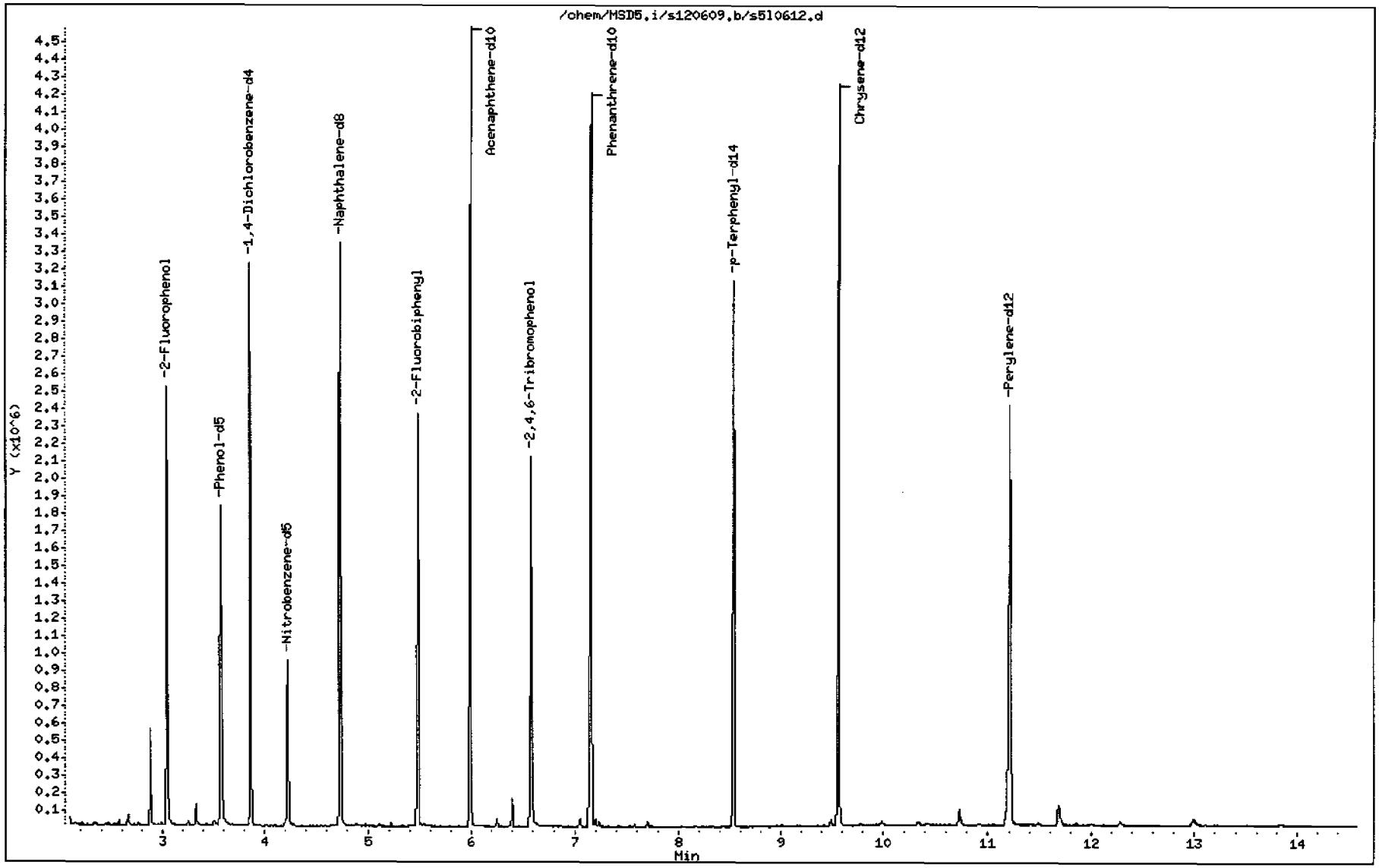

Data File: /chem/MSD5.i/s120609.b/s510612.d

Date : 06-DEC-2009 17:13

Client ID: RE03-09-14114

Instrument: MSD5.i

Sample Info: 1241819005192810011ISVMF11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

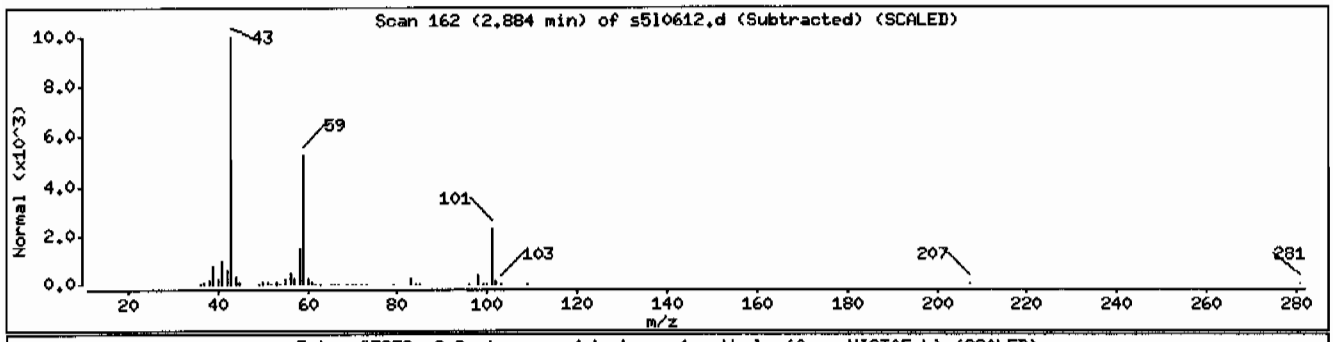

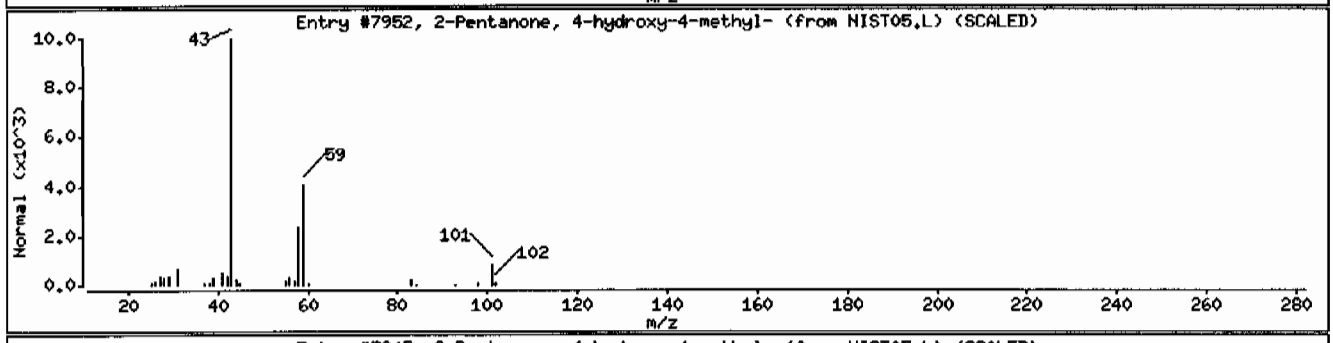

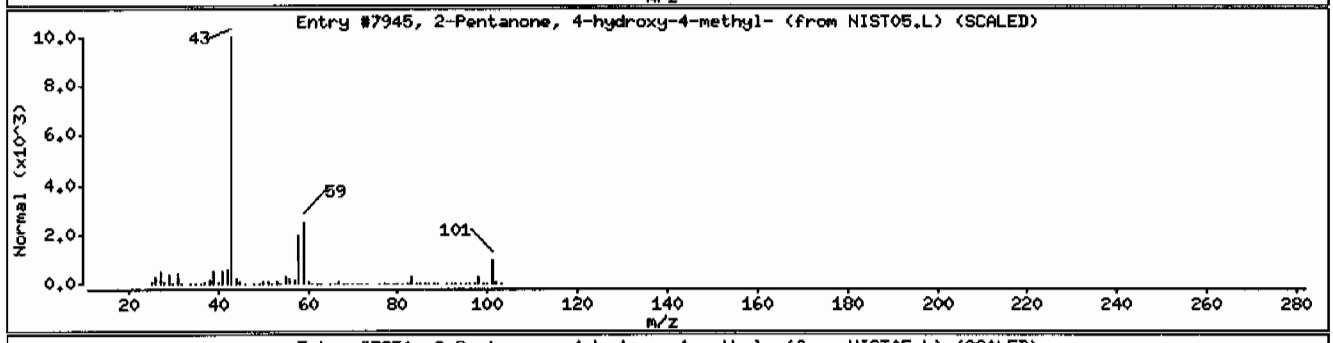

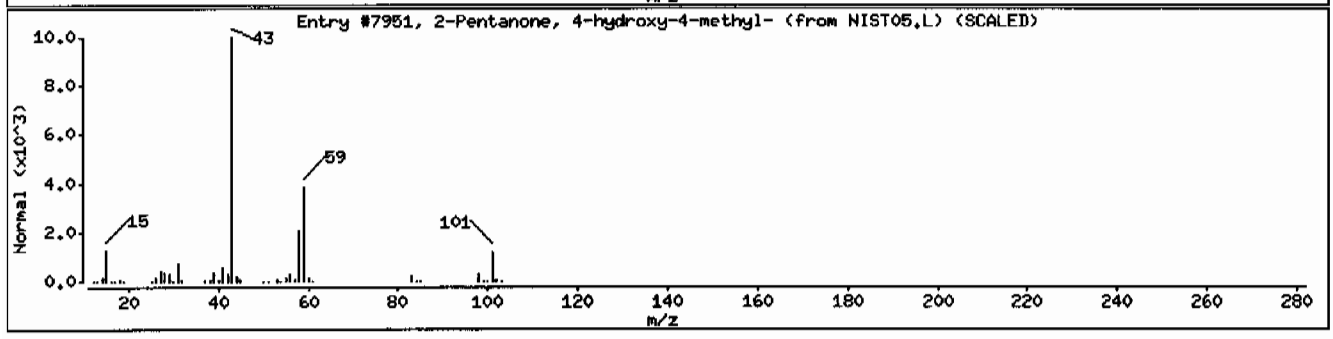

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.1**	**Dilution:**	**1**
Run Date:	**12/06/2009 11:20**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510606.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.6	333
108-95-2	Phenol	U	333	ug/kg	66.6	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.6	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.6	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.6	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.6	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	9.99	33.3
110-86-1	Pyridine	U	333	ug/kg	66.6	333
62-53-3	Aniline	U	333	ug/kg	99.9	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.6	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.6	333
100-51-6	Benzyl alcohol	U	333	ug/kg	99.9	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.6	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.6	333
95-48-7	o-Cresol	U	333	ug/kg	66.6	333
65794-96-9	m,p-Cresols	U	333	ug/kg	99.9	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.6	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.6	333
78-59-1	Isophorone	U	333	ug/kg	66.6	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.6	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.6	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.6	333
65-85-0	Benzoic acid	U	666	ug/kg	167	666
91-20-3	Naphthalene	U	33.3	ug/kg	9.99	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.6	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.6	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.66	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.6	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.6	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.6	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.6	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.6	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14115**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 11:20**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s510606.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.6	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	9.99	33.3
51-28-5	2,4-Dinitrophenol	U	666	ug/kg	127	666
132-64-9	Dibenzofuran	U	333	ug/kg	66.6	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.6	333
86-73-7	Fluorene	U	33.3	ug/kg	9.99	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.6	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.6	333
100-01-6	4-Nitroaniline	U	333	ug/kg	99.9	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.6	333
122-66-7	Azobenzene	U	333	ug/kg	66.6	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.6	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.6	333
85-01-8	Phenanthrene	U	33.3	ug/kg	9.99	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.66	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.6	333
206-44-0	Fluoranthene	U	33.3	ug/kg	9.99	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.6	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	9.99	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	99.9	333
218-01-9	Chrysene	U	33.3	ug/kg	9.99	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.6	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.6	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	9.99	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	9.99	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	9.99	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	9.99	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	9.99	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	9.99	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.6	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	205	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510606.d
Lab Smp Id: 241819001 Client Smp ID: RE03-09-14115
Inj Date : 06-DEC-2009 11:20
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819001|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	0.00940	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	484000	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1679872	40.0000	
* 46 Acenaphthene-d10	164	5.989	5.996	(1.000)	1021044	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1789099	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1754185	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1642545	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	469166	46.8086	1560
$ 5 Phenol-d5	99	3.572	3.584	(0.925)	578276	46.5165	1550
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	251161	23.3851	779
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	609725	23.6378	787
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	179168	47.4378	1580
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	809608	32.2725	1070

ION RATIO REPORT

SV REPORT

Data file: s510606.d
Report Date: 12/07/2009 07:42
Lab. ID: 241819001 SampleType: SAMPLE
Injection Date: 06-DEC-2009 11:20
Operator: RMB Instrument: MSD5.i
Sample Info: |241819001|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	33595	3.57	3.66	80-120	100	(T)
93	8863	3.54	3.66	225-285	26	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	38544	4.22	4.11	80-120	100	(T)
42	18426	4.22	4.11	27- 87	48	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	184368	5.99	5.76	80-120	100	(T)
164	1021044	5.99	5.76	0- 40	554	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	136389	5.99	5.81	80-120	100	(T)
63	1442	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	136389	5.99	6.11	80-120	100	(T)
89	2555	5.99	6.11	36- 96	2	(QT)
63	1442	5.99	6.11	9- 69	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	8119	6.58	6.41	80-120	100	(T)
165	8449	6.58	6.41	62-122	104	(T)
167	3140	6.58	6.41	0- 44	39	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	911	6.58	6.42	80-120	100	(T)
105	1327	6.58	6.42	6- 66	146	(QT)
51	934	6.58	6.42	21- 81	102	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510606.d
Lab Smp Id: 241819001 Client Smp ID: RE03-09-14115
Inj Date : 06-DEC-2009 11:20
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819001|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	0.00940	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2837706	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.890	436894	6.15841514	205	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510606.d
Date : 06-DEC-2009 11:20
Client ID: REO3-09-14115
Sample Info: I24181900119281001I1SVMFI1ILANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

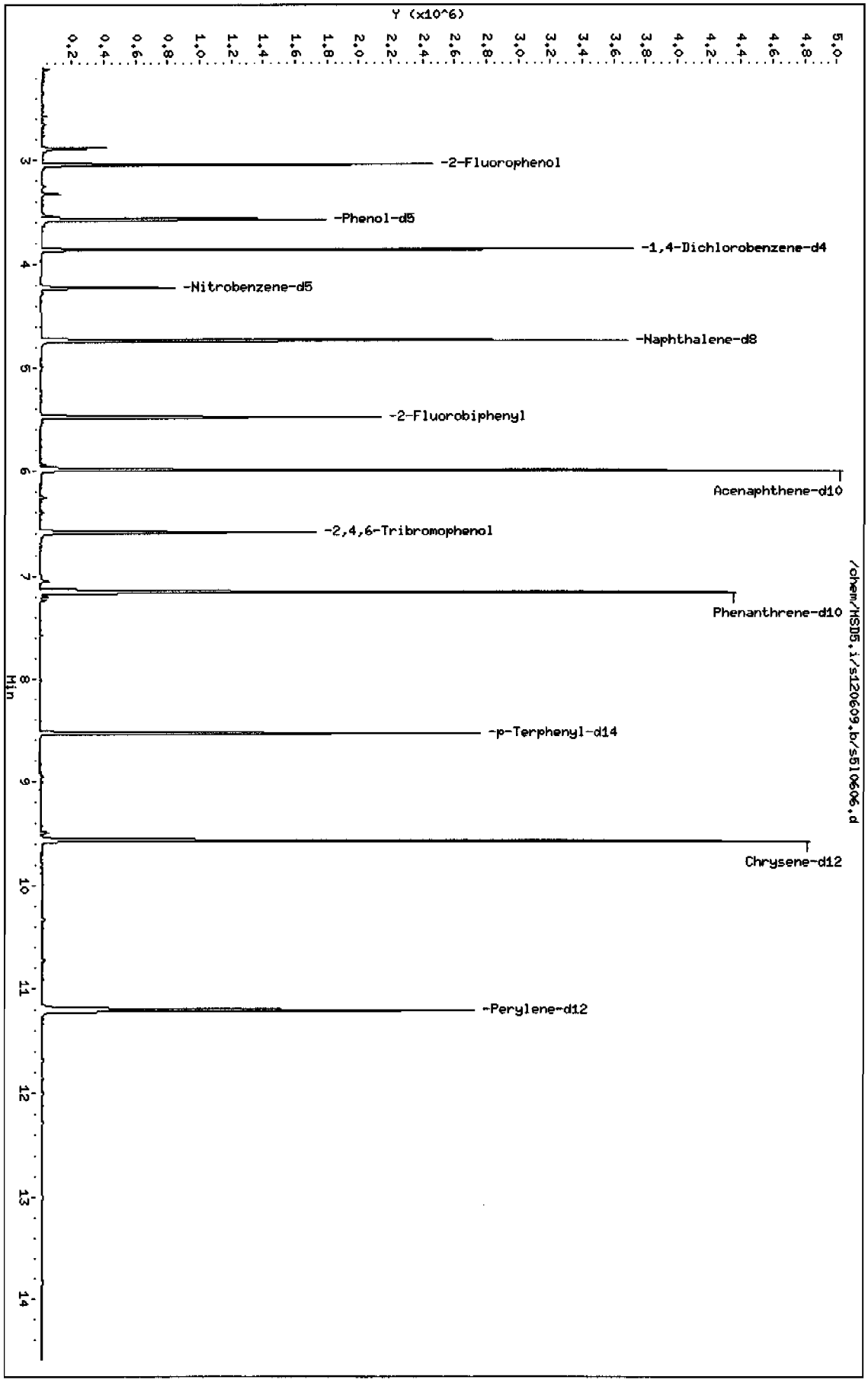

Page 1

Data File: /chem/MSD5.i/s120609.b/s510606.d

Date : 06-DEC-2009 11:20

Client ID: RE03-09-14115

Instrument: MSD5.i

Sample Info: |2418190011928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C6H12O2	116

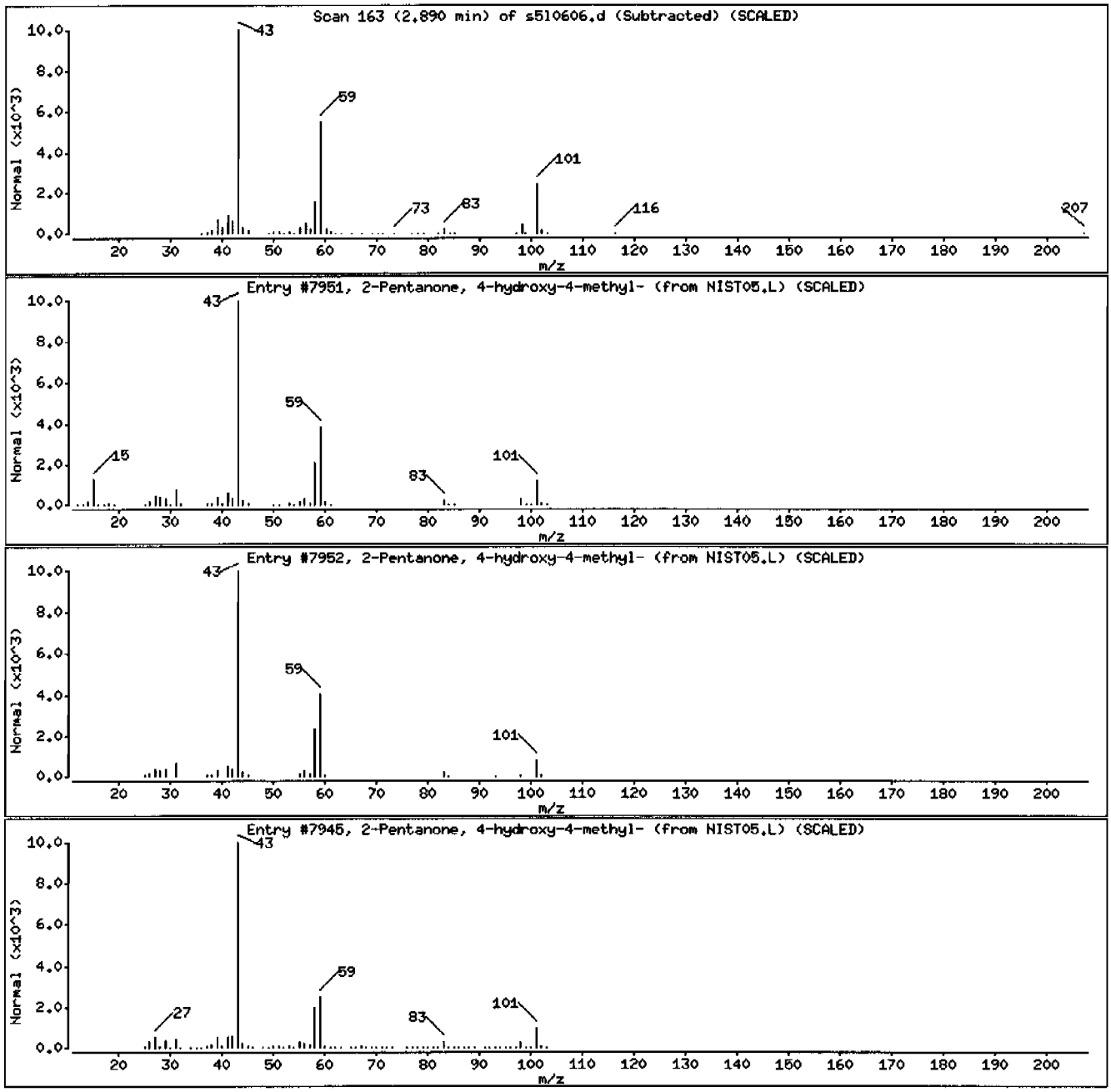

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819011**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14116**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:30**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510618.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	347	ug/kg	69.5	347
108-95-2	Phenol	U	347	ug/kg	69.5	347
95-57-8	2-Chlorophenol	U	347	ug/kg	69.5	347
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.5	347
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.5	347
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.5	347
83-32-9	Acenaphthene	U	34.7	ug/kg	11.5	34.7
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347
100-02-7	4-Nitrophenol	U	347	ug/kg	115	347
87-86-5	Pentachlorophenol	U	347	ug/kg	86.9	347
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7
110-86-1	Pyridine	U	347	ug/kg	69.5	347
62-53-3	Aniline	U	347	ug/kg	104	347
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.5	347
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.5	347
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.5	347
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.5	347
95-48-7	o-Cresol	U	347	ug/kg	69.5	347
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347
67-72-1	Hexachloroethane	U	347	ug/kg	69.5	347
98-95-3	Nitrobenzene	U	347	ug/kg	69.5	347
78-59-1	Isophorone	U	347	ug/kg	69.5	347
88-75-5	2-Nitrophenol	U	347	ug/kg	69.5	347
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	122	347
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.5	347
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.5	347
65-85-0	Benzoic acid	U	695	ug/kg	174	695
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7
106-47-8	4-Chloroaniline	U	347	ug/kg	69.5	347
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.5	347
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.95	34.7
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.5	347
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.5	347
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.5	347
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.5	34.7
88-74-4	2-Nitroaniline	U	347	ug/kg	69.5	347
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	347	ug/kg	69.5	347

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819011	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14116	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 19:30	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s5l0618.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	347	ug/kg	69.5	347
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7
51-28-5	2,4-Dinitrophenol	U	695	ug/kg	132	695
132-64-9	Dibenzofuran	U	347	ug/kg	69.5	347
84-66-2	Diethylphthalate	U	347	ug/kg	69.5	347
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.5	347
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.5	347
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347
	p-Nitroaniline					
122-39-4	Diphenylamine	U	347	ug/kg	69.5	347
122-66-7	Azobenzene	U	347	ug/kg	69.5	347
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.5	347
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.5	347
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7
120-12-7	Anthracene	U	34.7	ug/kg	6.95	34.7
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.5	347
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.5	347
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.5	347
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.5	347
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.5	347

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	230	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510618.d
Lab Smp Id: 241819011 Client Smp ID: RE03-09-14116
Inj Date : 06-DEC-2009 19:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819011|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	4.09710	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	479468	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1683125	40.0000	
* 46 Acenaphthene-d10	164	5.989	5.996	(1.000)	1038478	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1799427	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1705657	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1584497	40.0000	
$ 3 2-Fluorophenol	112	3.054	3.054	(0.791)	598742	60.3010	2100
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	723769	58.7703	2040
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	319987	29.7358	1030
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	749119	28.5543	992
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	235404	61.2809	2130
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1023445	41.9572	1460

ION RATIO REPORT

SV REPORT

Data file: s510618.d
Report Date: 12/07/2009 07:45
Lab. ID: 241819011 SampleType: SAMPLE
Injection Date: 06-DEC-2009 19:30
Operator: RMB Instrument: MSD5.i
Sample Info: |241819011|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	41194	3.58	3.66	80-120	100	(T)
93	11425	3.54	3.66	225-285	28	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	47278	4.22	4.11	80-120	100	(T)
42	23496	4.22	4.11	27- 87	50	(T)
22 Isophorone		CAS#: 78-59-1				
82	321358	4.22	4.41	80-120	100	(T)
138	262	4.54	4.41	0- 51	0	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	186822	5.99	5.76	80-120	100	(T)
164	1038478	5.99	5.76	0- 40	556	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	140466	5.99	5.81	80-120	100	(T)
63	1526	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	140466	5.99	6.11	80-120	100	(T)
89	2276	5.99	6.11	36- 96	2	(QT)
63	1526	5.99	6.11	9- 69	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
52 4-Nitrophenol			CAS#: 100-02-7			
139	307	6.09	6.03	80-120	100	( )
109	909	6.11	6.03	42-102	296	(QT)
65	1841	6.08	6.03	63-123	600	(Q)
53 Fluorene			CAS#: 86-73-7			
166	11322	6.58	6.41	80-120	100	(T)
165	10948	6.58	6.41	62-122	97	(T)
167	3788	6.58	6.41	0- 44	33	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	857	6.58	6.42	80-120	100	(T)
105	1796	6.58	6.42	6- 66	209	(QT)
51	2041	6.58	6.42	21- 81	238	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510618.d
Lab Smp Id: 241819011 Client Smp ID: RE03-09-14116
Inj Date : 06-DEC-2009 19:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819011|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	4.09710	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2821086	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.890	466058	6.60820342	230	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510618.d
Date : 06-DEC-2009 19:30
Client ID: RE03-09-14116
Sample Info: |2418190111928100111SVMF111LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

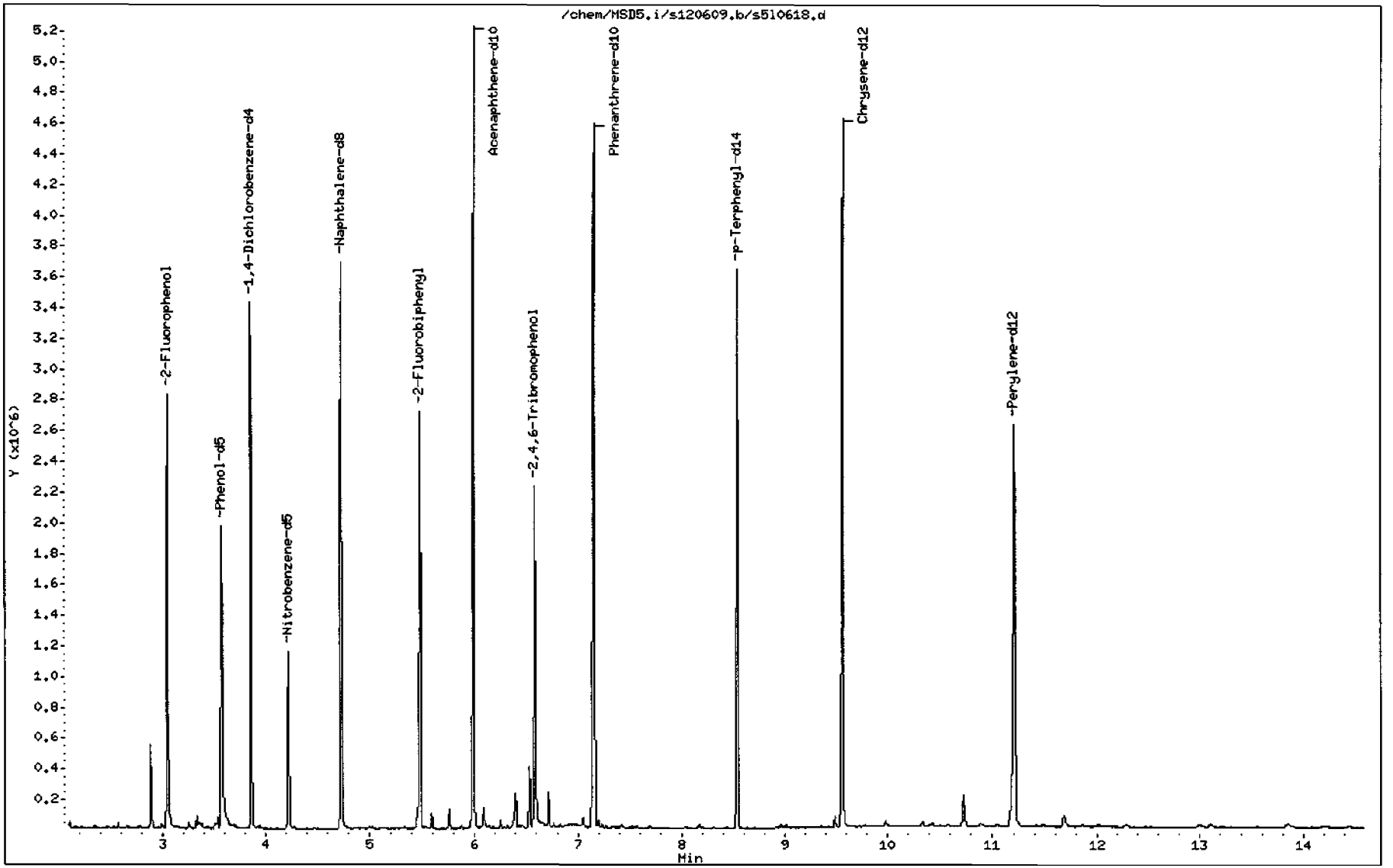

Data File: /chem/MSD5.i/s120609.b/s510618.d

Date : 06-DEC-2009 19:30

Client ID: RE03-09-14116

Instrument: MSD5.i

Sample Info: |2418190111928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

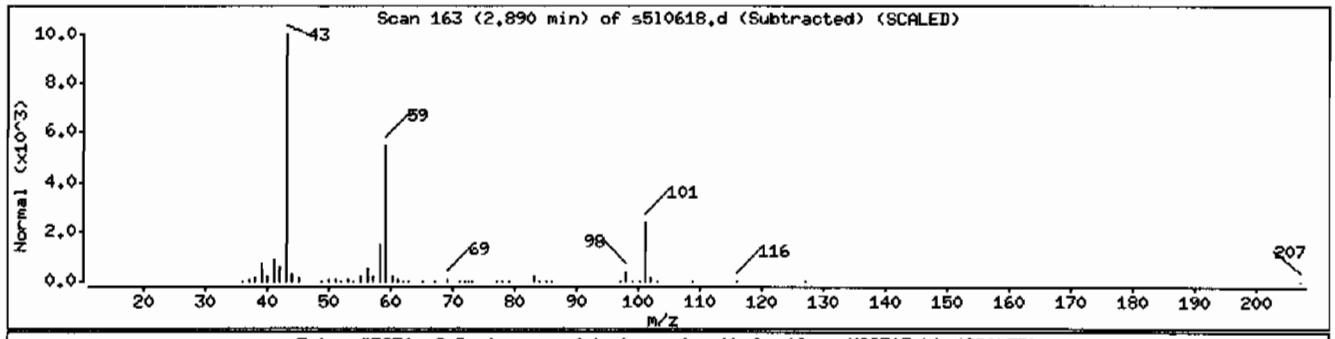

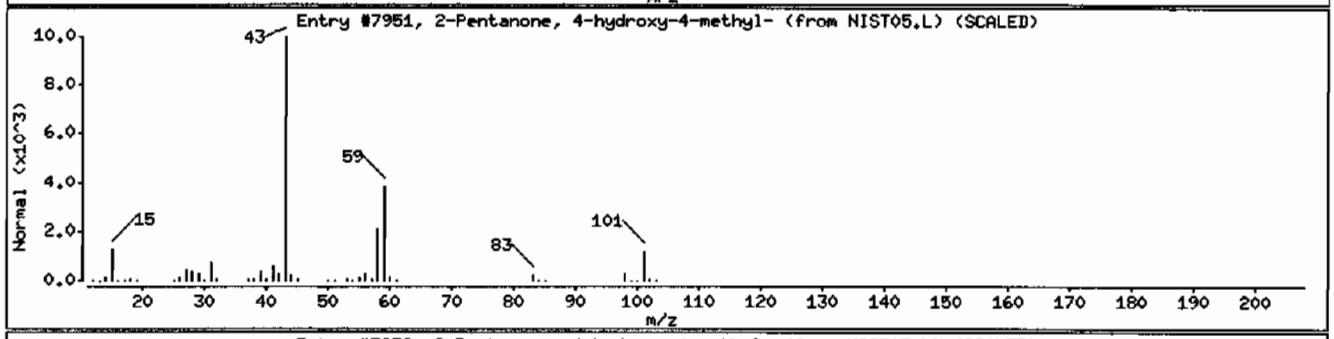

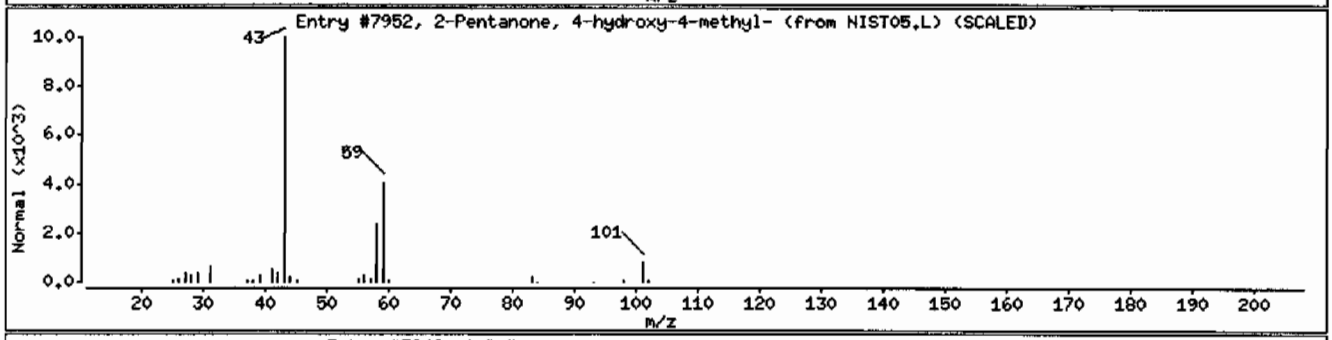

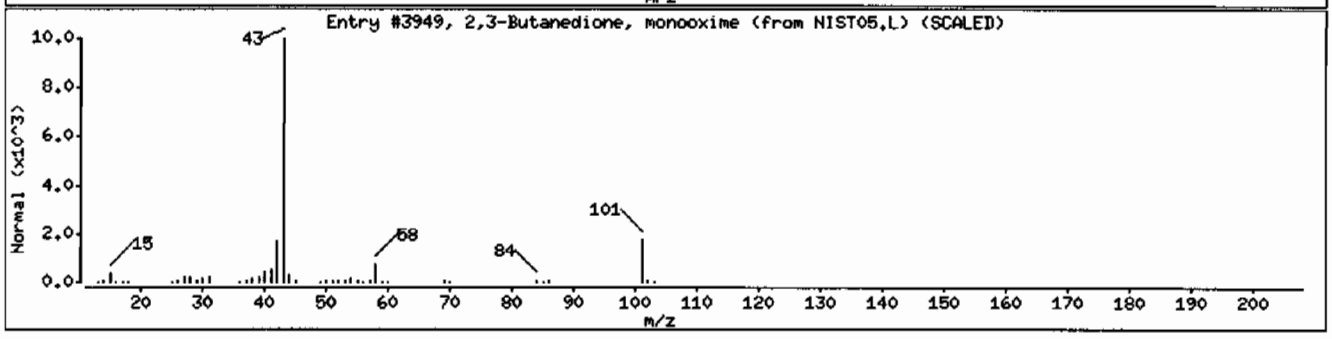

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819007**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14117**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.1**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:59**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510614.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.3	362
108-95-2	Phenol	U	362	ug/kg	72.3	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.3	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.3	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.3	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.3	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.4	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.3	362
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.3	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.3	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.3	362
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.3	362
95-48-7	o-Cresol	U	362	ug/kg	72.3	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.3	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.3	362
78-59-1	Isophorone	U	362	ug/kg	72.3	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.3	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.3	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.3	362
65-85-0	Benzoic acid	U	723	ug/kg	181	723
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.3	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.3	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.23	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.3	362
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.3	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.3	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline	U	362	ug/kg	72.3	362
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	362	ug/kg	72.3	362

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819007	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14117	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 17:59	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	s5l0614.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	362	ug/kg	72.3	362
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	U	723	ug/kg	137	723
132-64-9	Dibenzofuran	U	362	ug/kg	72.3	362
84-66-2	Diethylphthalate	U	362	ug/kg	72.3	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.3	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.3	362
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
	p-Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.3	362
122-66-7	Azobenzene	U	362	ug/kg	72.3	362
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.3	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.3	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.23	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.3	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.3	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.3	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.3	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.3	362

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	271	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510614.d
Lab Smp Id: 241819007 Client Smp ID: RE03-09-14117
Inj Date : 06-DEC-2009 17:59
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819007|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	8.12930	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	471227	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1656577	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	922503	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1675488	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1595629	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1518216	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	548345	56.1911	2030
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	709577	58.6256	2120
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	312626	29.5173	1070
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	693462	29.7559	1080
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	205498	60.2211	2180
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	1097494	48.0954	1740

ION RATIO REPORT

SV REPORT

Data file: s510614.d
Report Date: 12/07/2009 07:44
Lab. ID: 241819007 SampleType: SAMPLE
Injection Date: 06-DEC-2009 17:59
Operator: RMB Instrument: MSD5.i
Sample Info: |241819007|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	40810	3.58	3.66	80-120	100	(T)
93	241	3.63	3.66	225-285	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45700	4.23	4.11	80-120	100	(T)
42	22724	4.23	4.11	27- 87	50	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	178874	5.99	5.76	80-120	100	(T)
164	922503	5.99	5.76	0- 40	516	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	121602	5.99	5.81	80-120	100	(T)
63	1309	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	121602	5.99	6.11	80-120	100	(T)
89	1699	5.99	6.11	36- 96	1	(QT)
63	1309	5.99	6.11	9- 69	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	9370	6.58	6.41	80-120	100	(T)
165	11257	6.58	6.41	62-122	120	(T)
167	3861	6.58	6.41	0- 44	41	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	872	6.58	6.42	80-120	100	(T)
105	1678	6.58	6.42	6- 66	192	(QT)
51	946	6.58	6.42	21- 81	109	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510614.d
Lab Smp Id: 241819007 Client Smp ID: RE03-09-14117
Inj Date : 06-DEC-2009 17:59
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819007|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	8.12930	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2766345	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.884	517620	7.48453811	271	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510614.d

Date : 06-DEC-2009 17:59

Client ID: RE03-09-14117

Sample Info: |2418190071928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

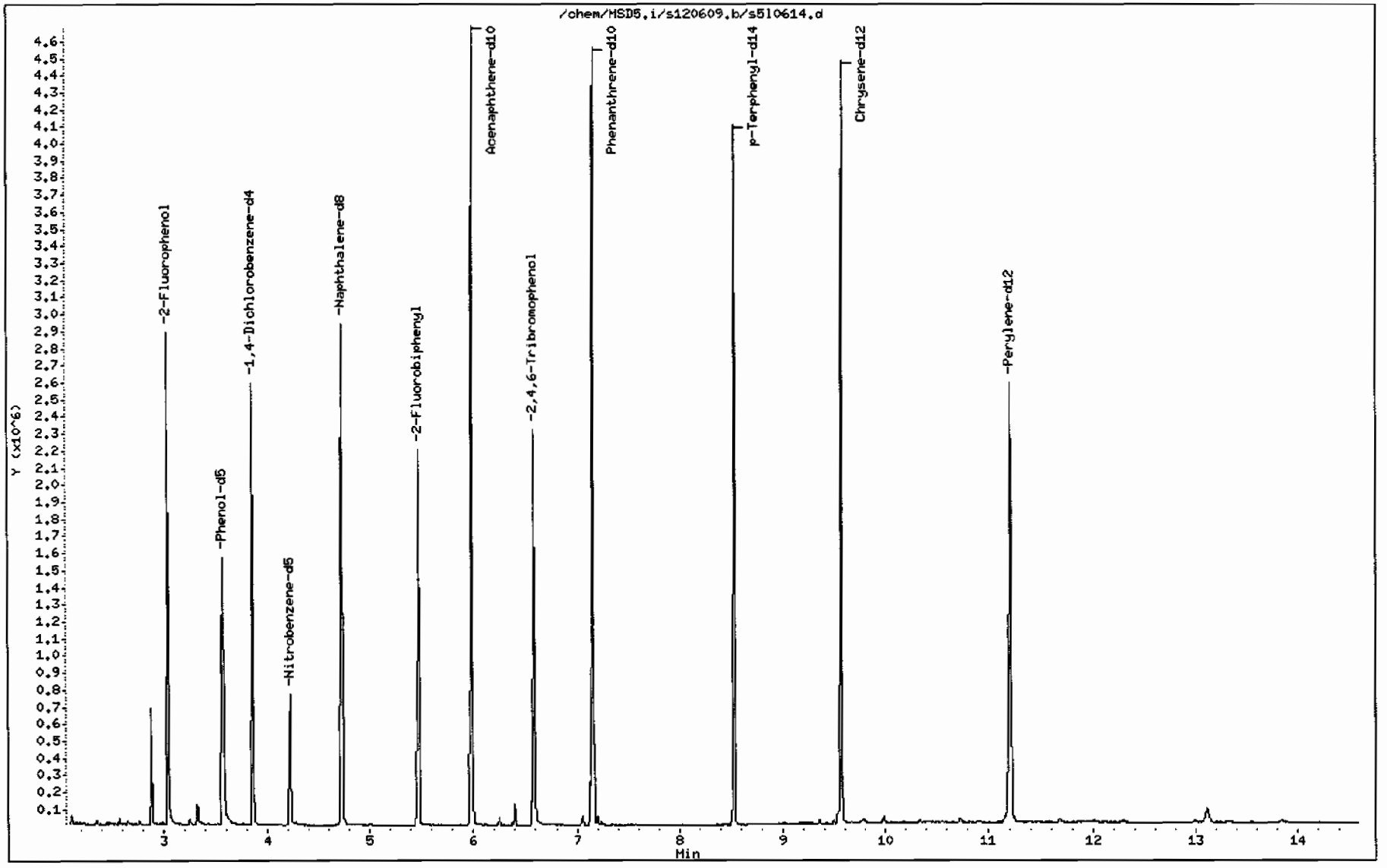

Data File: /chem/MSD5.i/s120609.b/s510614.d

Date : 06-DEC-2009 17:59

Client ID: RE03-09-14117 Instrument: MSD5.i

Sample Info: 1241819007192810011|SVMF11|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

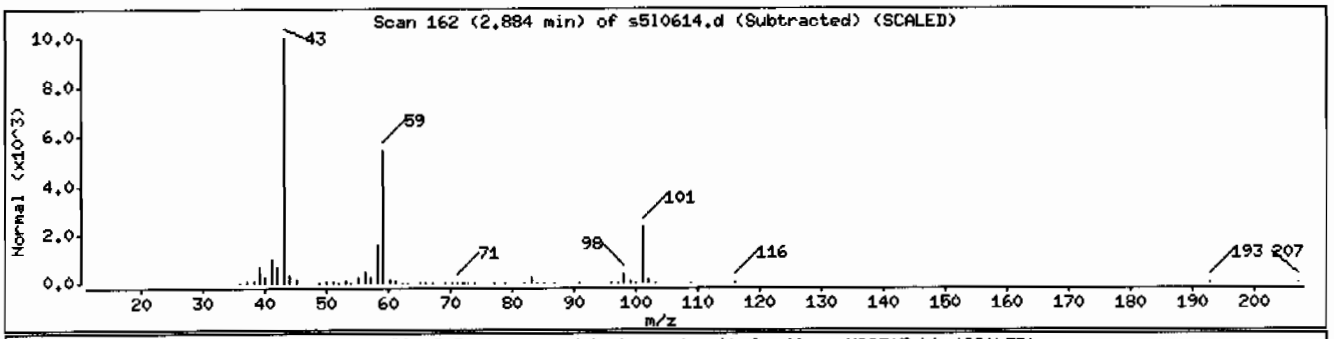

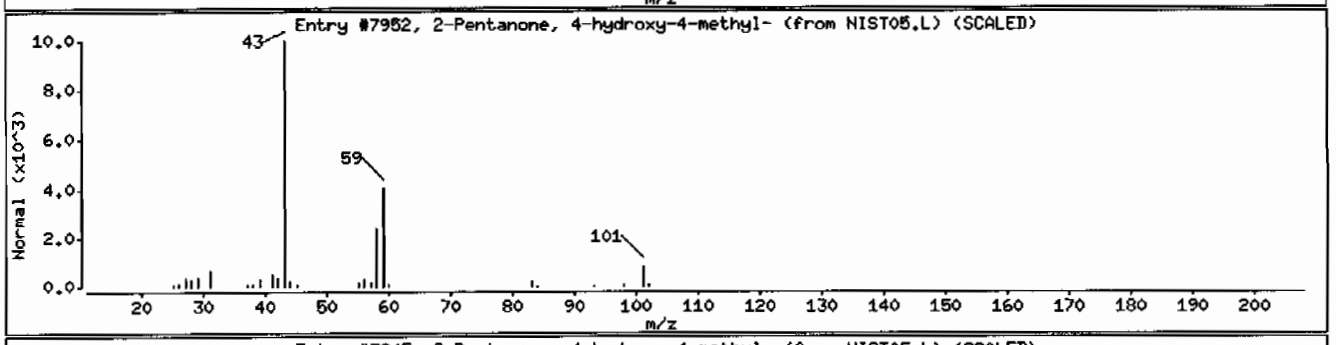

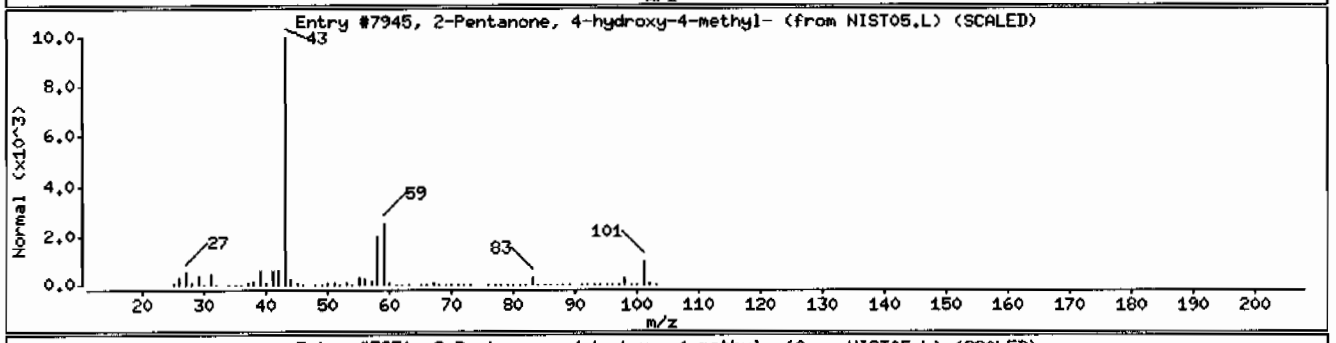

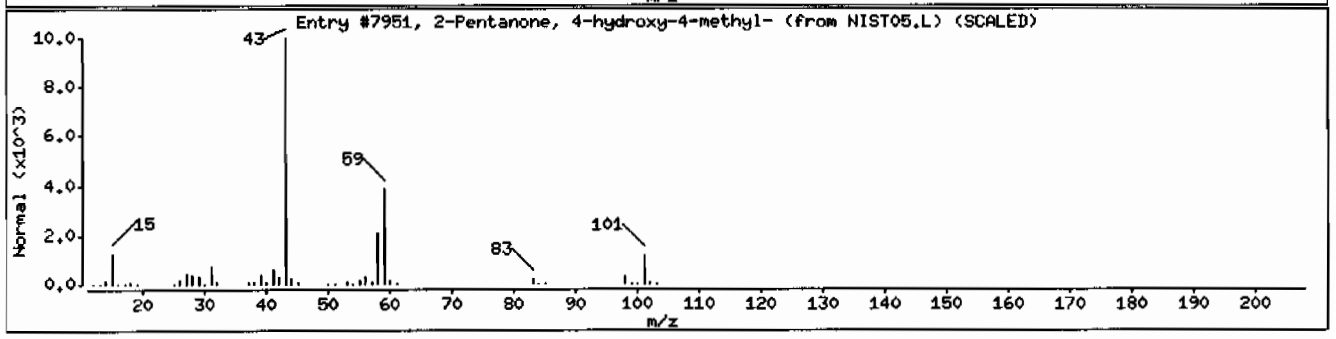

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819016	Date Received:	11/25/2009 09:10	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14118	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 21:24	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510623.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.7	368
108-95-2	Phenol	U	368	ug/kg	73.7	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.7	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.7	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.7	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.7	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.2	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	122	368
87-86-5	Pentachlorophenol	U	368	ug/kg	92.1	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.7	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.7	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.7	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.7	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.7	368
95-48-7	o-Cresol	U	368	ug/kg	73.7	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.7	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.7	368
78-59-1	Isophorone	U	368	ug/kg	73.7	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.7	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.7	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.7	368
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.7	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.7	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.37	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.7	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.7	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.7	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.2	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.7	368
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	368	ug/kg	73.7	368

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819016	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14118	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 21:24	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510623.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.7	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	368	ug/kg	73.7	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.7	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.7	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.7	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	p-Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.7	368
122-66-7	Azobenzene	U	368	ug/kg	73.7	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.7	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.7	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.37	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.7	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.7	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.7	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.7	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.7	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	263	ug/kg		JA
	Unknown	13.12	148	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510623.d
Lab Smp Id: 241819016 Client Smp ID: RE03-09-14118
Inj Date : 06-DEC-2009 21:24
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819016|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.48220	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.866	3.872	(1.000)	383891	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1347684	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	831062	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1501878	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1534168	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1459646	40.0000	
$ 3 2-Fluorophenol	112	3.055	3.054	(0.790)	586236	73.7409	2720
$ 5 Phenol-d5	99	3.578	3.584	(0.925)	700512	71.0437	2620
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	325021	37.7213	1390
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	710586	33.8455	1250
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	225819	73.4575	2700
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	1059619	48.2959	1780

ION RATIO REPORT

SV REPORT

Data file: s510623.d
Report Date: 12/07/2009 07:47
Lab. ID: 241819016 SampleType: SAMPLE
Injection Date: 06-DEC-2009 21:24
Operator: RMB Instrument: MSD5.i
Sample Info: |241819016|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	41465	3.58	3.66	80-120	100	(T)
93	1876	3.54	3.66	225-285	5	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	48252	4.23	4.11	80-120	100	(T)
42	23613	4.23	4.11	27- 87	49	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	150228	5.99	5.76	80-120	100	(T)
164	831062	5.99	5.76	0- 40	553	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	109470	5.99	5.81	80-120	100	(T)
63	1095	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	109470	5.99	6.11	80-120	100	(T)
89	1451	5.99	6.11	36- 96	1	(QT)
63	1095	5.99	6.11	9- 69	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	10698	6.58	6.41	80-120	100	(T)
165	10849	6.58	6.41	62-122	101	(T)
167	3851	6.58	6.41	0- 44	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	806	6.58	6.42	80-120	100	(T)
105	1779	6.58	6.42	6- 66	221	(QT)
51	1056	6.58	6.42	21- 81	131	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	14275	6.58	6.77	80-120	100	(T)
141	89300	6.58	6.77	36- 96	626	(QT)
250	29195	6.58	6.77	68-128	205	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510623.d
Lab Smp Id: 241819016 Client Smp ID: RE03-09-14118
Inj Date : 06-DEC-2009 21:24
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819016|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.48220	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.866	2270763	40.000
* 98 Perylene-d12	11.213	3674685	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.884	404846	7.13144676	263	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
13.119	369582	4.02300909	148	0		0	98

Data File: /chem/MSD5.i/s120609.b/s510623.d

Page 1

Date : 06-DEC-2009 21:24

Client ID: RE03-09-14118

Instrument: MSD5.i

Sample Info: |241819016|928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

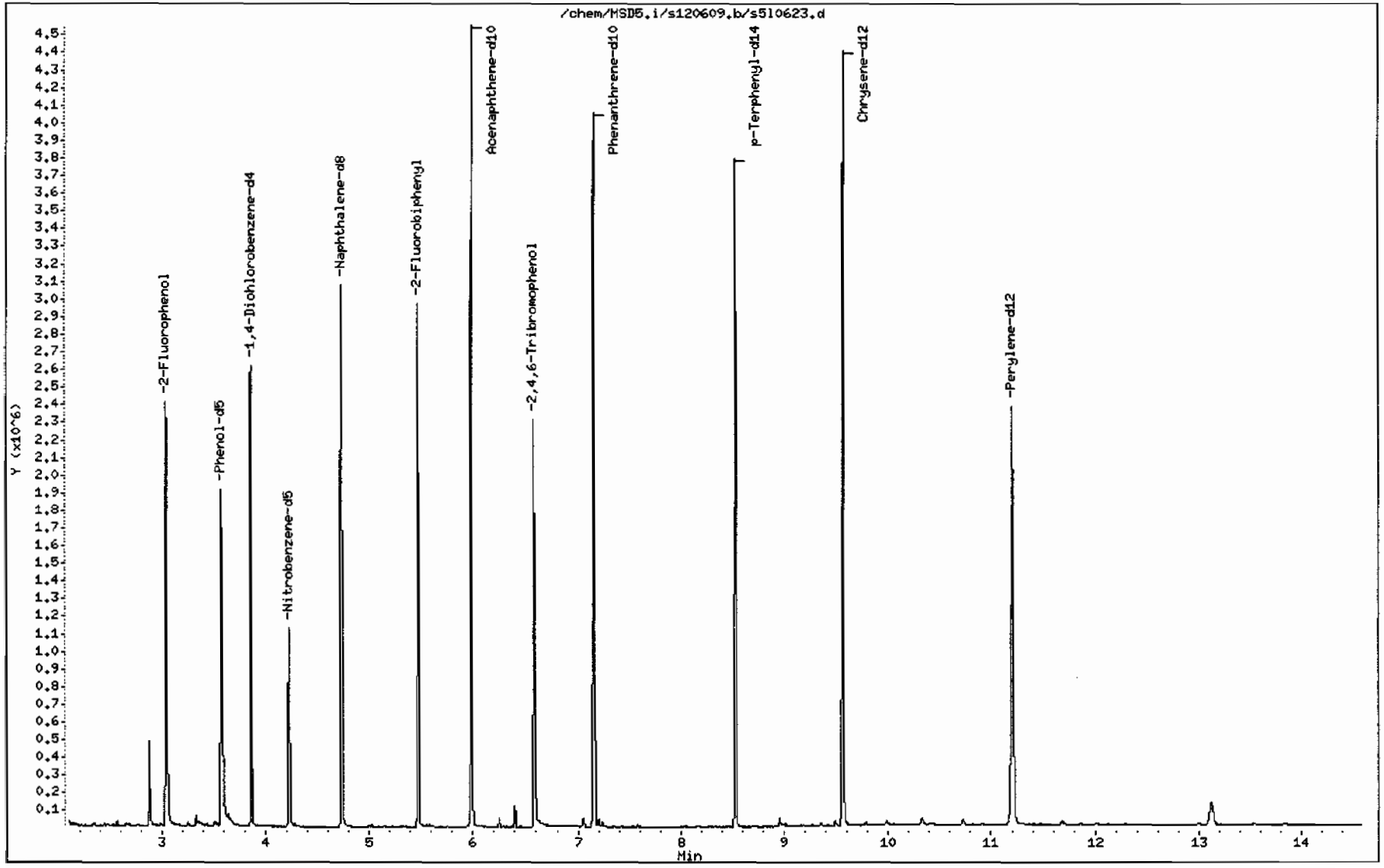

Data File: /chem/MSD5.i/s120609.b/s510623.d

Date : 06-DEC-2009 21:24

Client ID: RE03-09-14118

Instrument: MSD5.i

Sample Info: 1241819016192810011ISVMF11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

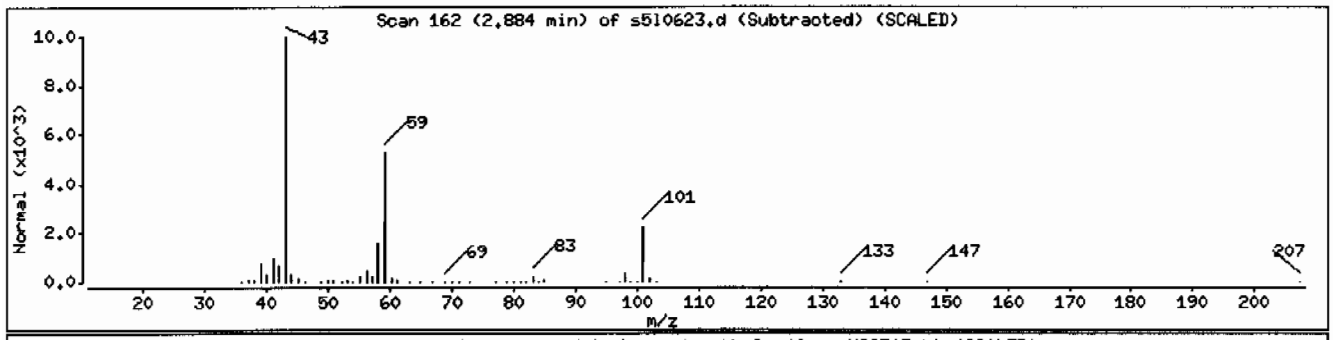

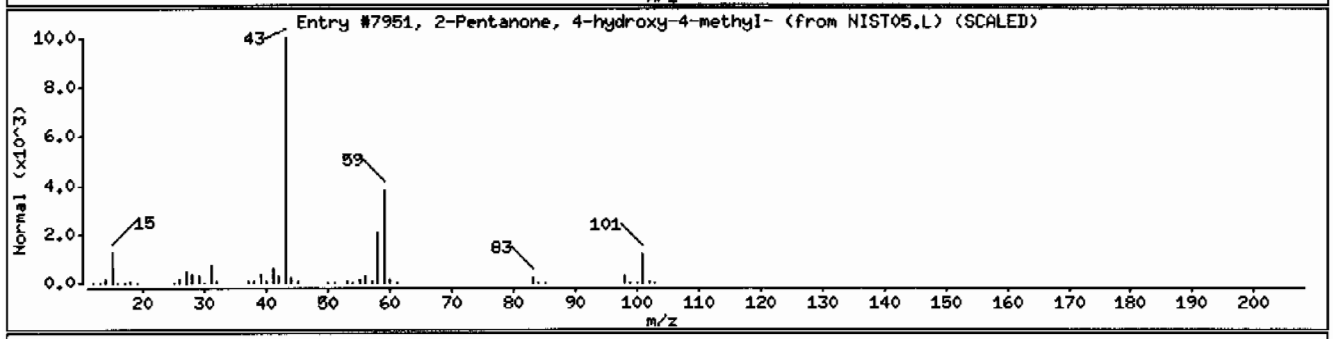

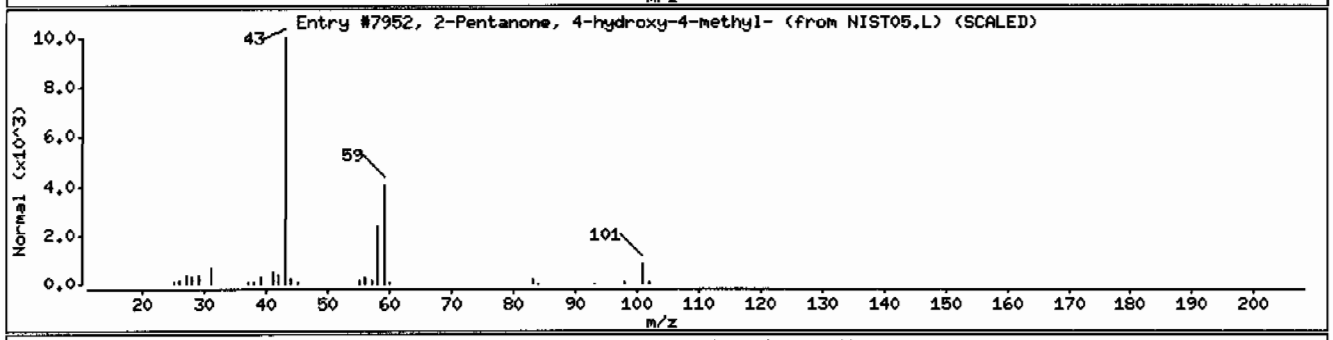

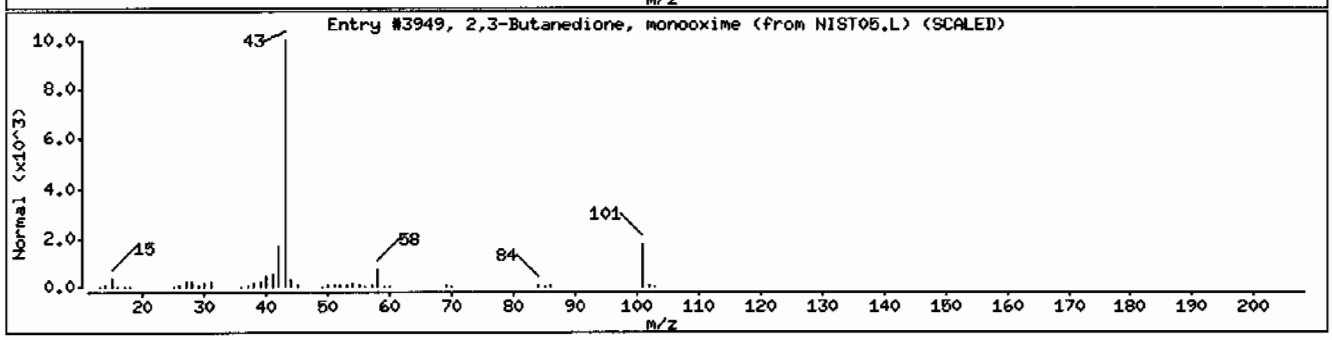

Data File: /chem/MSD5.i/s120609.b/s510623.d

Date : 06-DEC-2009 21:24

Client ID: RE03-09-14118

Instrument: MSD5.i

Sample Info: |2418190161928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Taraxasterol	1059-14-9	NIST05.L	176561	50	C30H50O	426
9,19-Cyclolanost-24-en-3-ol, (3.beta.)-	469-38-5	NIST05.L	176585	32	C30H50O	426
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59929	27	C15H24	204

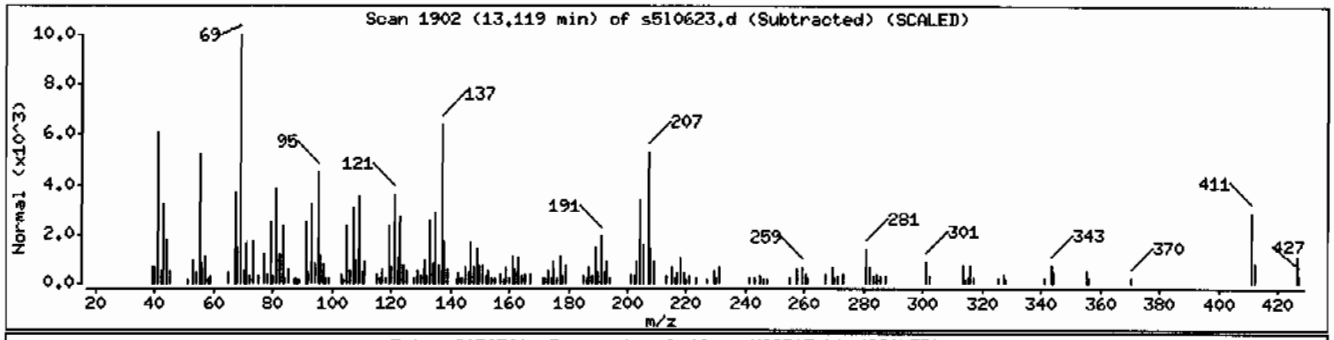

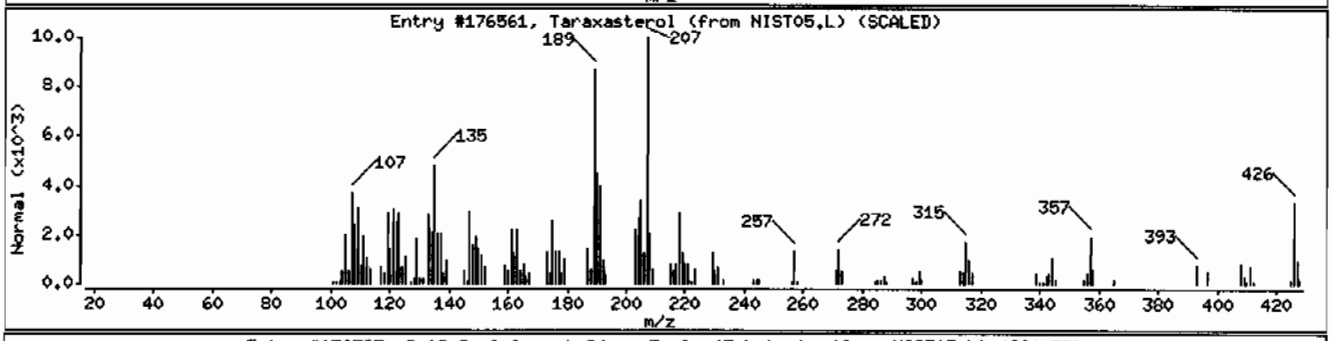

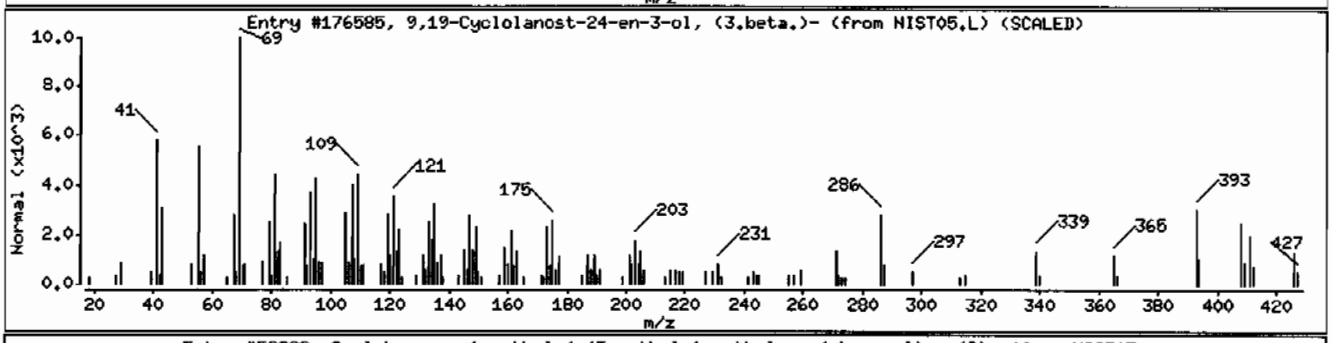

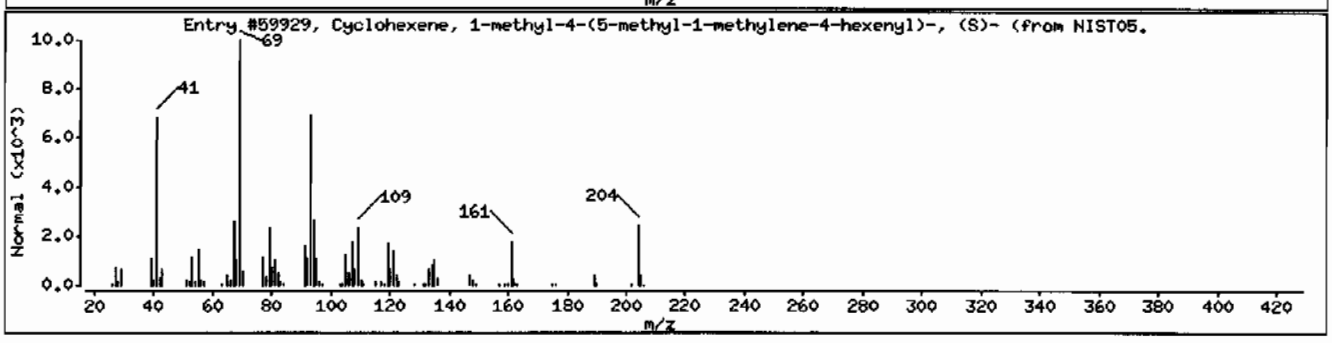

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14119	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 20:16	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510620.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	339	ug/kg	67.8	339
108-95-2	Phenol	U	339	ug/kg	67.8	339
95-57-8	2-Chlorophenol	U	339	ug/kg	67.8	339
106-46-7	1,4-Dichlorobenzene	U	339	ug/kg	67.8	339
621-64-7	N-Nitrosodipropylamine	U	339	ug/kg	67.8	339
59-50-7	4-Chloro-3-methylphenol	U	339	ug/kg	67.8	339
83-32-9	Acenaphthene	U	33.9	ug/kg	11.2	33.9
121-14-2	2,4-Dinitrotoluene	U	339	ug/kg	33.9	339
100-02-7	4-Nitrophenol	U	339	ug/kg	112	339
87-86-5	Pentachlorophenol	U	339	ug/kg	84.8	339
129-00-0	Pyrene	U	33.9	ug/kg	10.2	33.9
110-86-1	Pyridine	U	339	ug/kg	67.8	339
62-53-3	Aniline	U	339	ug/kg	102	339
111-44-4	bis(2-Chloroethyl) ether	U	339	ug/kg	67.8	339
541-73-1	1,3-Dichlorobenzene	U	339	ug/kg	67.8	339
100-51-6	Benzyl alcohol	U	339	ug/kg	102	339
95-50-1	1,2-Dichlorobenzene	U	339	ug/kg	67.8	339
108-60-1	bis(2-Chloroisopropyl)ether	U	339	ug/kg	67.8	339
95-48-7	o-Cresol	U	339	ug/kg	67.8	339
65794-96-9	m,p-Cresols	U	339	ug/kg	102	339
67-72-1	Hexachloroethane	U	339	ug/kg	67.8	339
98-95-3	Nitrobenzene	U	339	ug/kg	67.8	339
78-59-1	Isophorone	U	339	ug/kg	67.8	339
88-75-5	2-Nitrophenol	U	339	ug/kg	67.8	339
105-67-9	2,4-Dimethylphenol	U	339	ug/kg	119	339
111-91-1	bis(2-Chloroethoxy)methane	U	339	ug/kg	67.8	339
120-83-2	2,4-Dichlorophenol	U	339	ug/kg	67.8	339
65-85-0	Benzoic acid	U	678	ug/kg	170	678
91-20-3	Naphthalene	U	33.9	ug/kg	10.2	33.9
106-47-8	4-Chloroaniline	U	339	ug/kg	67.8	339
87-68-3	Hexachlorobutadiene	U	339	ug/kg	67.8	339
91-57-6	2-Methylnaphthalene	U	33.9	ug/kg	6.78	33.9
77-47-4	Hexachlorocyclopentadiene	U	339	ug/kg	67.8	339
88-06-2	2,4,6-Trichlorophenol	U	339	ug/kg	67.8	339
95-95-4	2,4,5-Trichlorophenol	U	339	ug/kg	67.8	339
91-58-7	2-Chloronaphthalene	U	33.9	ug/kg	11.2	33.9
88-74-4	2-Nitroaniline	U	339	ug/kg	67.8	339
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	339	ug/kg	67.8	339

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819013**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14119**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 20:16**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510620.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	339	ug/kg	67.8	339
606-20-2	2,6-Dinitrotoluene	U	339	ug/kg	33.9	339
208-96-8	Acenaphthylene	U	33.9	ug/kg	10.2	33.9
51-28-5	2,4-Dinitrophenol	U	678	ug/kg	129	678
132-64-9	Dibenzofuran	U	339	ug/kg	67.8	339
84-66-2	Diethylphthalate	U	339	ug/kg	67.8	339
86-73-7	Fluorene	U	33.9	ug/kg	10.2	33.9
7005-72-3	4-Chlorophenylphenylether	U	339	ug/kg	67.8	339
534-52-1	2-Methyl-4,6-dinitrophenol	U	339	ug/kg	67.8	339
100-01-6	4-Nitroaniline	U	339	ug/kg	102	339
	p-Nitroaniline					
122-39-4	Diphenylamine	U	339	ug/kg	67.8	339
122-66-7	Azobenzene	U	339	ug/kg	67.8	339
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	339	ug/kg	67.8	339
118-74-1	Hexachlorobenzene	U	339	ug/kg	67.8	339
85-01-8	Phenanthrene	U	33.9	ug/kg	10.2	33.9
120-12-7	Anthracene	U	33.9	ug/kg	6.78	33.9
84-74-2	Di-n-butylphthalate	U	339	ug/kg	67.8	339
206-44-0	Fluoranthene	U	33.9	ug/kg	10.2	33.9
85-68-7	Butylbenzylphthalate	U	339	ug/kg	67.8	339
56-55-3	Benzo(a)anthracene	U	33.9	ug/kg	10.2	33.9
91-94-1	3,3'-Dichlorobenzidine	U	339	ug/kg	102	339
218-01-9	Chrysene	U	33.9	ug/kg	10.2	33.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	339	ug/kg	67.8	339
117-84-0	Di-n-octylphthalate	U	339	ug/kg	67.8	339
205-99-2	Benzo(b)fluoranthene	U	33.9	ug/kg	10.2	33.9
207-08-9	Benzo(k)fluoranthene	U	33.9	ug/kg	10.2	33.9
50-32-8	Benzo(a)pyrene	U	33.9	ug/kg	10.2	33.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.9	ug/kg	10.2	33.9
53-70-3	Dibenzo(a,h)anthracene	U	33.9	ug/kg	10.2	33.9
191-24-2	Benzo(ghi)perylene	U	33.9	ug/kg	10.2	33.9
120-82-1	1,2,4-Trichlorobenzene	U	339	ug/kg	67.8	339

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	251	ug/kg		JA
	Unknown	9.78	186	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510620.d
Lab Smp Id: 241819013 Client Smp ID: RE03-09-14119
Inj Date : 06-DEC-2009 20:16
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819013|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	1.67390	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	387355	40.0000	
* 29 Naphthalene-d8	136	4.737	4.739	(1.000)	1342917	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	833243	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1514921	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1582701	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1505850	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	534374	66.6163	2260
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	631256	63.4474	2150
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.892)	287762	33.5157	1140
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	680635	32.3341	1100
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	206592	67.0271	2270
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1003094	44.3176	1500

ION RATIO REPORT

SV REPORT

Data file: s510620.d
Report Date: 12/07/2009 07:46
Lab. ID: 241819013 SampleType: SAMPLE
Injection Date: 06-DEC-2009 20:16
Operator: RMB Instrument: MSD5.i
Sample Info: |241819013|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	37531	3.58	3.66	80-120	100	(T)
93	847	3.54	3.66	225-285	2	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	43869	4.22	4.11	80-120	100	(T)
42	22237	4.22	4.11	27- 87	51	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	151608	5.99	5.76	80-120	100	(T)
164	833243	5.99	5.76	0- 40	550	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	112457	5.99	5.81	80-120	100	(T)
63	1324	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	112457	5.99	6.11	80-120	100	(T)
89	1719	5.99	6.11	36- 96	2	(QT)
63	1324	5.99	6.11	9- 69	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	9574	6.58	6.41	80-120	100	(T)
165	10247	6.58	6.41	62-122	107	(T)
167	3376	6.58	6.41	0- 44	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	622	6.58	6.42	80-120	100	(T)
105	1502	6.58	6.42	6- 66	241	(QT)
51	1032	6.58	6.42	21- 81	166	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	13753	6.58	6.77	80-120	100	(T)
141	83182	6.58	6.77	36- 96	605	(QT)
250	27741	6.58	6.77	68-128	202	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510620.d
Lab Smp Id: 241819013 Client Smp ID: RE03-09-14119
Inj Date : 06-DEC-2009 20:16
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819013|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	1.67390	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2281519	40.000
* 91 Chrysene-d12	9.566	4078355	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.884	421642	7.39230072	251	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Unknown				CAS #:			
9.778	559027	5.48286196	186	0		0	91

Data File: /chem/MSD5.i/s120609.b/s510620.d

Date : 06-DEC-2009 20:16

Client ID: RE03-09-14119

Sample Info: |241819013|928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

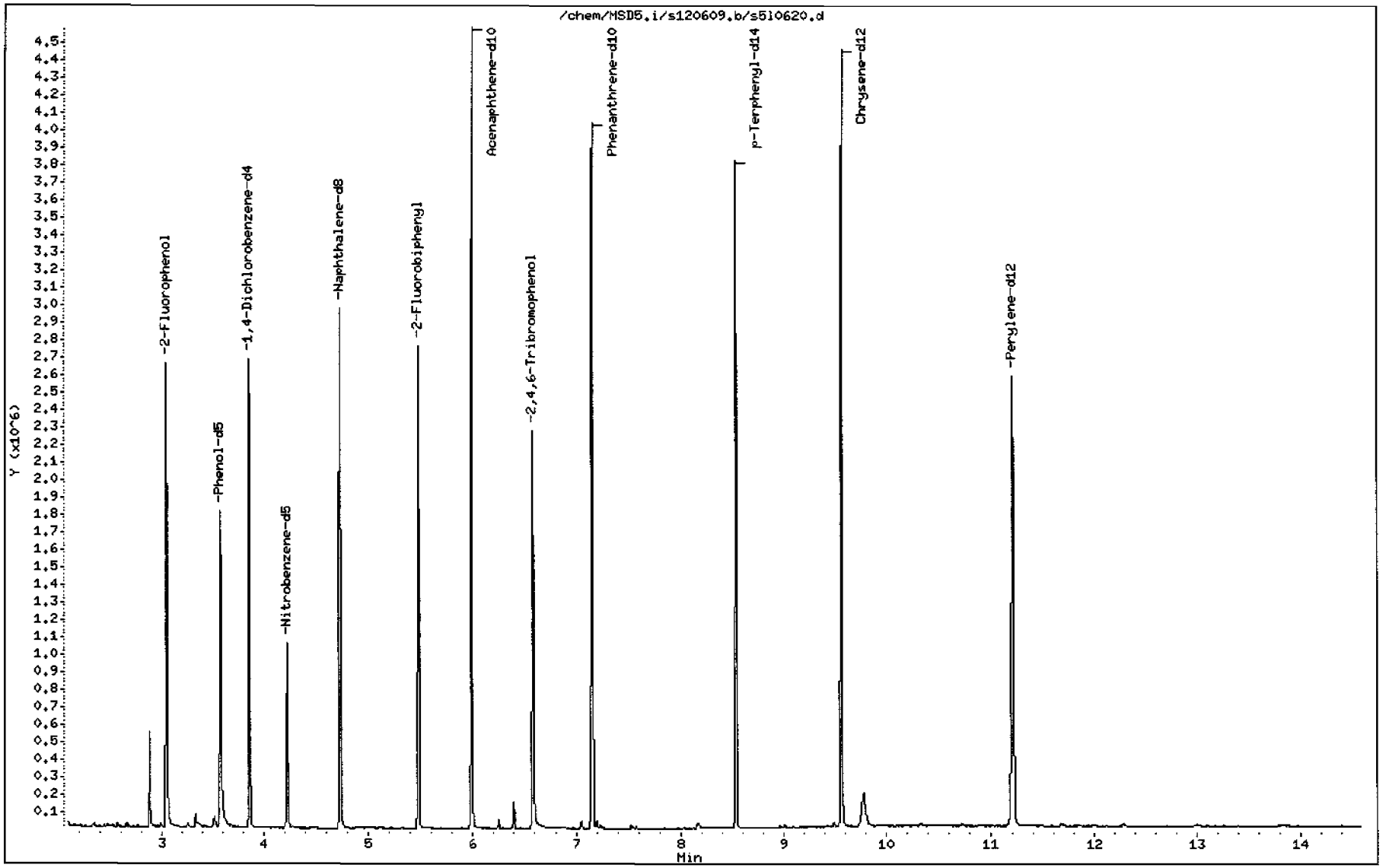

Data File: /chem/MSD5.i/s120609.b/s510620.d

Page 1

Date : 06-DEC-2009 20:16

Client ID: RE03-09-14119

Instrument: MSD5.i

Sample Info: 1241819013|928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3944	35	C4H7NO2	101

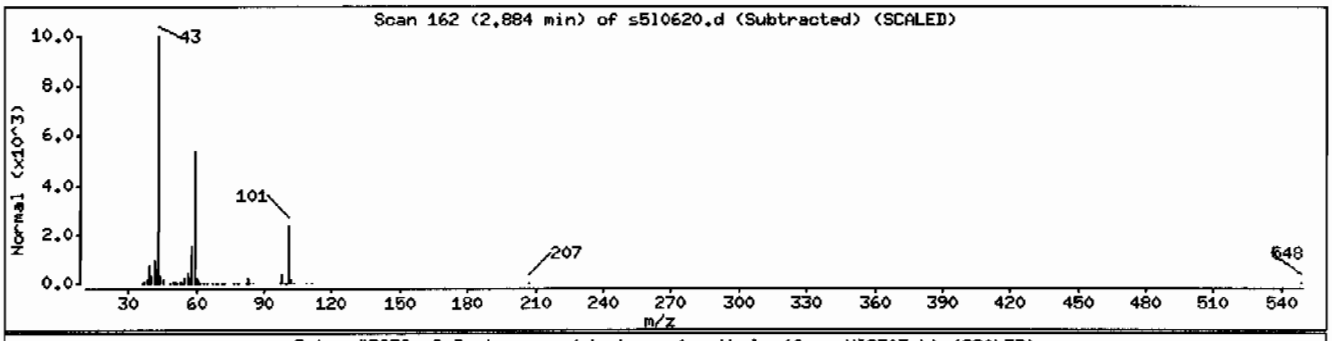

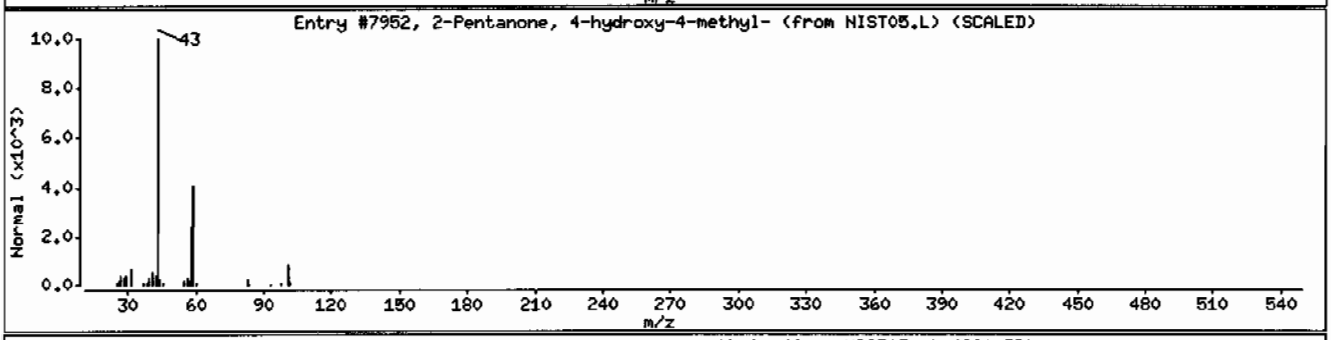

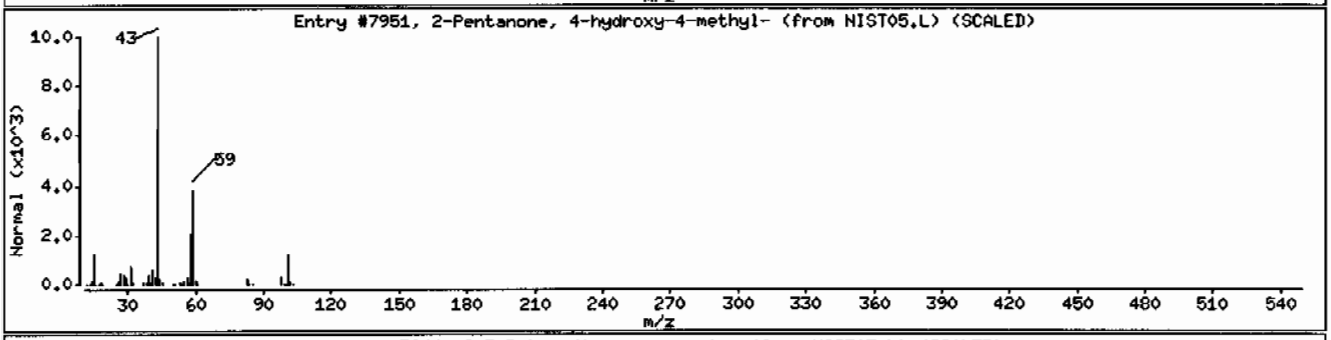

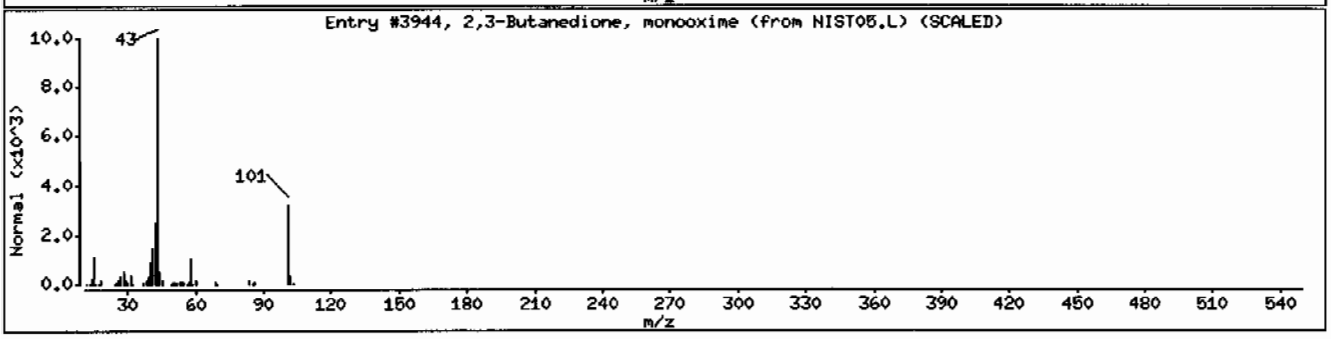

Data File: /chem/MSD5.i/s120609.b/s510620.d

Date : 06-DEC-2009 20:16

Client ID: RE03-09-14119 Instrument: MSD5.i

Sample Info: |24181901319281001|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	300574-36-1	NIST05.L	68738	68	C6H5BrN2O2	216
D:A-Friedoursan-3-one	89950-00-5	NIST05.L	176576	49	C30H50O	426
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	1000188-72-8	NIST05.L	69963	48	C15H22O	218

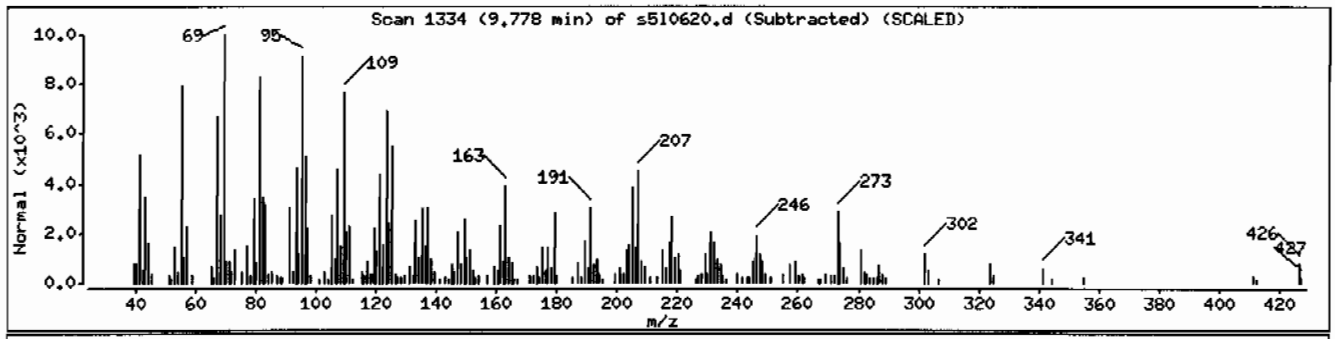

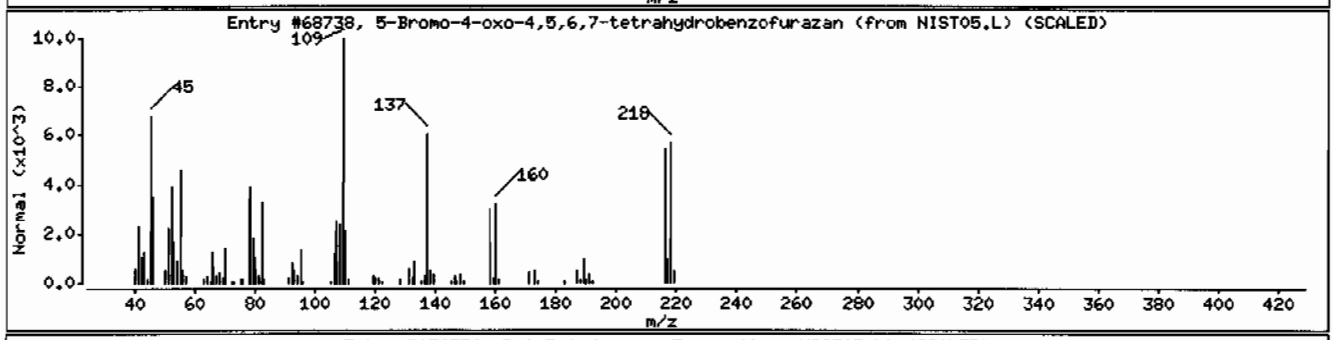

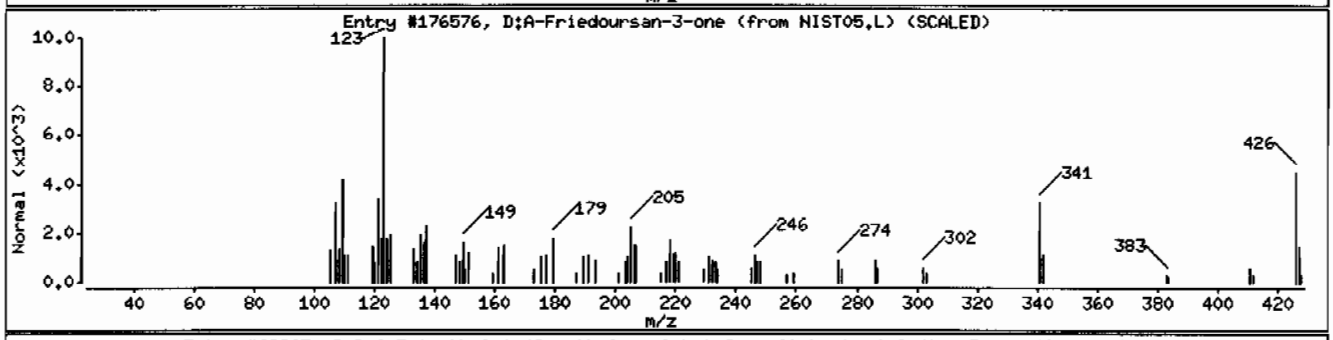

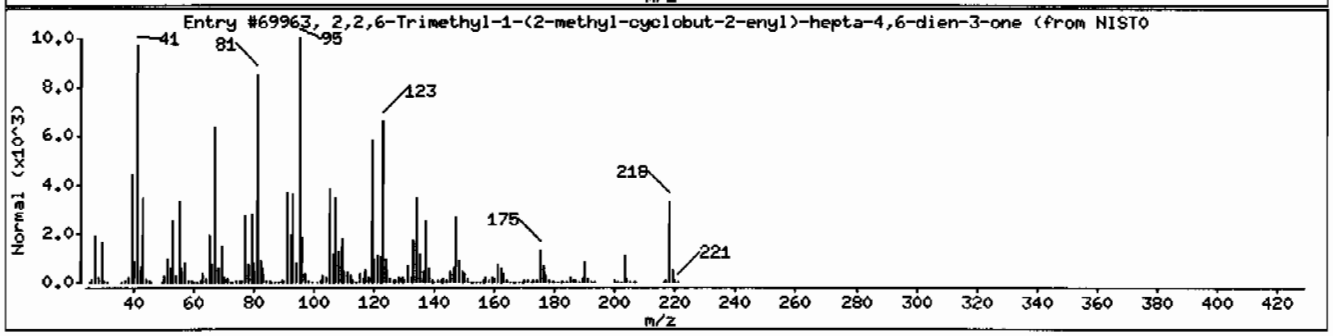

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:08**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s510617.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.4	342
108-95-2	Phenol	U	342	ug/kg	68.4	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.4	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.4	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.4	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.4	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.4	342
129-00-0	Pyrene	U	34.2	ug/kg	10.3	34.2
110-86-1	Pyridine	U	342	ug/kg	68.4	342
62-53-3	Aniline	U	342	ug/kg	103	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.4	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.4	342
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.4	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.4	342
95-48-7	o-Cresol	U	342	ug/kg	68.4	342
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.4	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.4	342
78-59-1	Isophorone	U	342	ug/kg	68.4	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.4	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.4	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.4	342
65-85-0	Benzoic acid	U	684	ug/kg	171	684
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.4	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.4	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.84	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.4	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.4	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.4	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.4	342
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	342	ug/kg	68.4	342

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14120**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 19:08**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s510617.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	342	ug/kg	68.4	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2
51-28-5	2,4-Dinitrophenol	U	684	ug/kg	130	684
132-64-9	Dibenzofuran	U	342	ug/kg	68.4	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.4	342
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.4	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.4	342
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342
	p-Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.4	342
122-66-7	Azobenzene	U	342	ug/kg	68.4	342
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.4	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.4	342
85-01-8	Phenanthrene	U	34.2	ug/kg	10.3	34.2
120-12-7	Anthracene	U	34.2	ug/kg	6.84	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.4	342
206-44-0	Fluoranthene	U	34.2	ug/kg	10.3	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.4	342
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.3	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342
218-01-9	Chrysene	U	34.2	ug/kg	10.3	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.4	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.4	342
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.3	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.3	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.3	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.3	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.4	342

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	267	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510617.d
Lab Smp Id: 241819010 Client Smp ID: RE03-09-14120
Inj Date : 06-DEC-2009 19:08
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819010|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	2.62750	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	445497	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1531591	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	942427	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1647465	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1667810	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1585053	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	472401	51.2047	1750
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	574556	50.2117	1720
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	245631	25.0844	857
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	555430	23.3292	797
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	169893	48.7345	1660
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	830940	34.8383	1190

ION RATIO REPORT

SV REPORT

Data file: s510617.d
Report Date: 12/07/2009 07:45
Lab. ID: 241819010 SampleType: SAMPLE
Injection Date: 06-DEC-2009 19:08
Operator: RMB Instrument: MSD5.i
Sample Info: |241819010|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	33574	3.58	3.66	80-120	100	(T)
93	805	3.54	3.66	225-285	2	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	36232	4.23	4.11	80-120	100	(T)
42	17446	4.23	4.11	27- 87	48	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	168613	5.99	5.76	80-120	100	(T)
164	942427	5.99	5.76	0- 40	559	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	127013	5.99	5.81	80-120	100	(T)
63	1587	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	127013	5.99	6.11	80-120	100	(T)
89	1830	5.99	6.11	36- 96	1	(QT)
63	1587	5.99	6.11	9- 69	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	7724	6.58	6.41	80-120	100	(T)
165	7665	6.58	6.41	62-122	99	(T)
167	2662	6.58	6.41	0- 44	34	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	697	6.58	6.42	80-120	100	(T)
105	1373	6.58	6.42	6- 66	197	(QT)
51	914	6.58	6.42	21- 81	131	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510617.d
Lab Smp Id: 241819010 Client Smp ID: RE03-09-14120
Inj Date : 06-DEC-2009 19:08
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819010|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	2.62750	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2623032	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.884	511900	7.80622687	267	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510617.d
Date : 06-DEC-2009 19:08
Client ID: RE03-09-14120
Sample Info: |24181901019281001|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

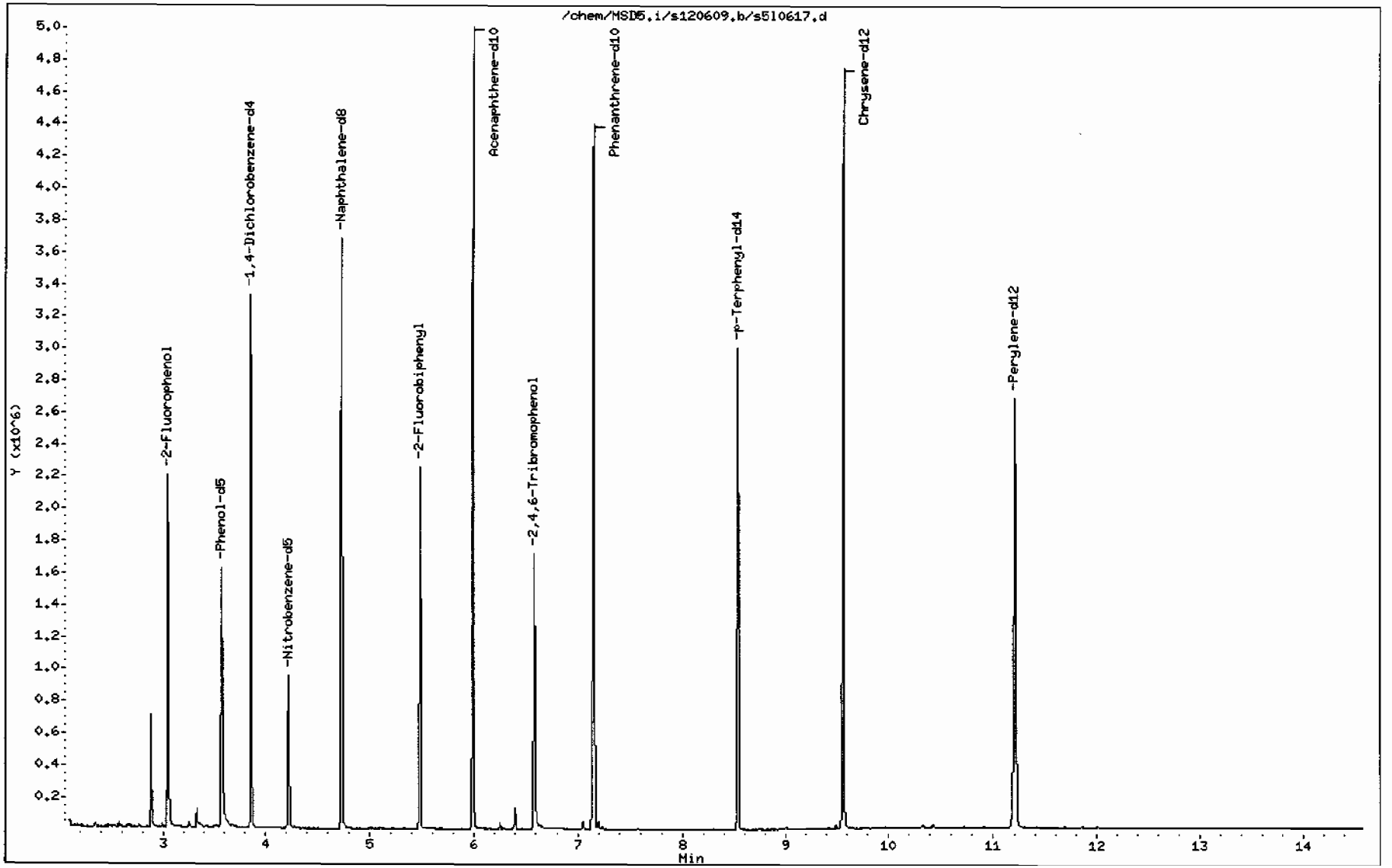

Data File: /chem/MSD5.i/s120609.b/s510617.d

Date : 06-DEC-2009 19:08

Client ID: RE03-09-14120

Instrument: MSD5.i

Sample Info: |2418190101928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3944	35	C4H7NO2	101

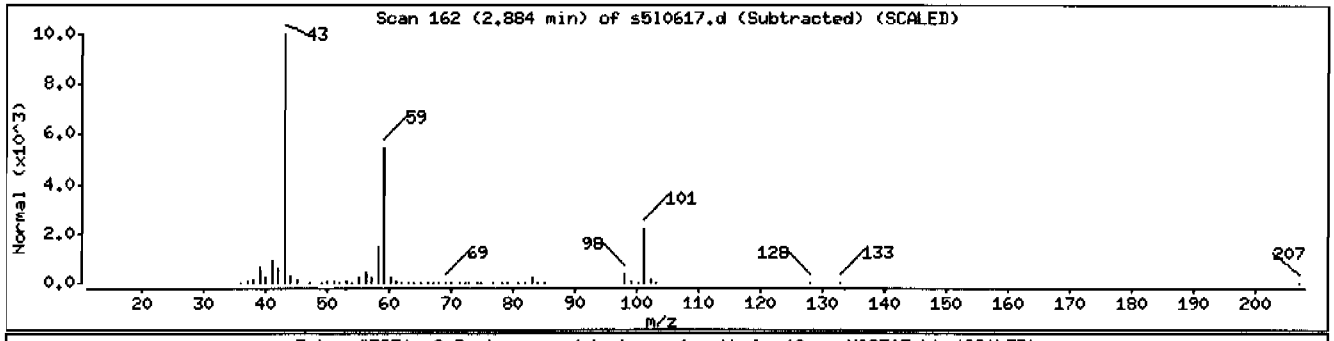

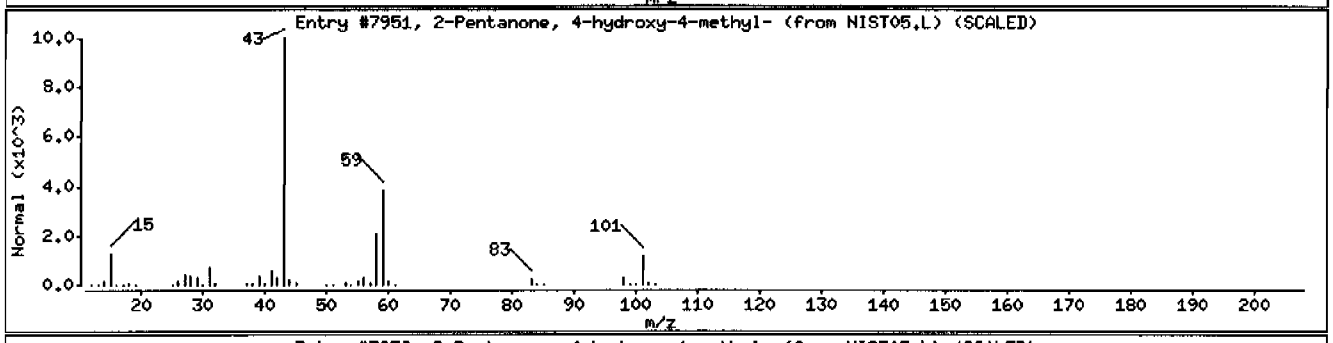

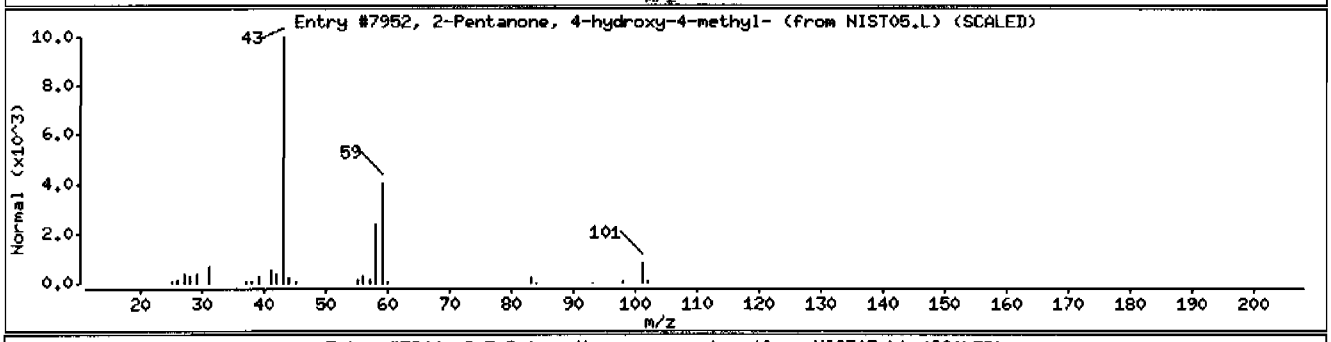

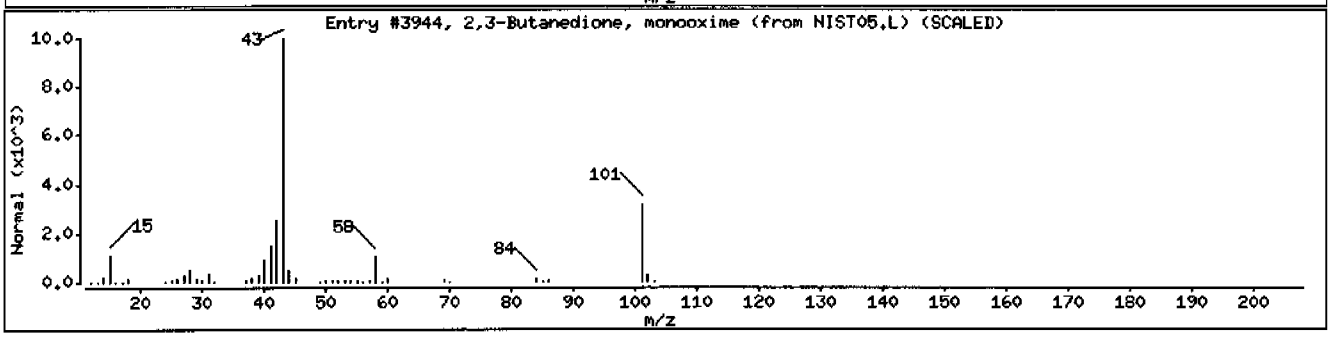

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819008**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 18:22**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510615.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.3	382
108-95-2	Phenol	U	382	ug/kg	76.3	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.3	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.3	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.3	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.3	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.4	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.3	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.3	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.3	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.3	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.3	382
95-48-7	o-Cresol	U	382	ug/kg	76.3	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.3	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.3	382
78-59-1	Isophorone	U	382	ug/kg	76.3	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.3	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.3	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.3	382
65-85-0	Benzoic acid	U	763	ug/kg	191	763
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.3	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.3	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.63	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.3	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.3	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.3	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.3	382
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	382	ug/kg	76.3	382

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819008**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14121**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 18:22**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0615.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	382	ug/kg	76.3	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	763	ug/kg	145	763
132-64-9	Dibenzofuran	U	382	ug/kg	76.3	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.3	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.3	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.3	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	p-Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.3	382
122-66-7	Azobenzene	U	382	ug/kg	76.3	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.3	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.3	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.63	38.2
84-74-2	Di-n-butylphthalate	U	382	ug/kg	76.3	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.3	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.3	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.3	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.3	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	267	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510615.d
Lab Smp Id: 241819008 Client Smp ID: RE03-09-14121
Inj Date : 06-DEC-2009 18:22
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819008|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	12.68160	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	378983	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1331670	40.0000	
* 46 Acenaphthene-d10	164	5.989	5.996	(1.000)	811992	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1397195	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1403778	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1319712	40.0000	
$ 3 2-Fluorophenol	112	3.048	3.054	(0.790)	519741	66.2234	2530
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	627355	64.4483	2460
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	288238	33.8547	1290
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	681206	33.2082	1270
$ 60 2,4,6-Tribromophenol	329	6.583	6.593	(1.099)	212111	70.6188	2700
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	913238	45.4903	1740

ION RATIO REPORT

SV REPORT

Data file: s510615.d
Report Date: 12/07/2009 07:45
Lab. ID: 241819008 SampleType: SAMPLE
Injection Date: 06-DEC-2009 18:22
Operator: RMB Instrument: MSD5.i
Sample Info: |241819008|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	37187	3.58	3.66	80-120	100	(T)
93	11465	3.54	3.66	225-285	31	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	42972	4.22	4.11	80-120	100	(T)
42	21332	4.22	4.11	27- 87	50	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	146022	5.99	5.76	80-120	100	(T)
164	811992	5.99	5.76	0- 40	556	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	100808	5.99	5.81	80-120	100	(T)
63	1113	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	100808	5.99	6.11	80-120	100	(T)
89	1547	5.99	6.11	36- 96	2	(QT)
63	1113	5.99	6.11	9- 69	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	10297	6.58	6.41	80-120	100	(T)
165	10250	6.58	6.41	62-122	100	(T)
167	3149	6.58	6.41	0- 44	31	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	752	6.58	6.42	80-120	100	(T)
105	1519	6.58	6.42	6- 66	202	(QT)
51	1347	6.58	6.42	21- 81	179	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	13962	6.58	6.77	80-120	100	(T)
141	87846	6.58	6.77	36- 96	629	(QT)
250	27135	6.58	6.77	68-128	194	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510615.d
Lab Smp Id: 241819008 Client Smp ID: RE03-09-14121
Inj Date : 06-DEC-2009 18:22
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819008|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	12.68160	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2220135	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.878	387568	6.98278838	266	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510615.d

Date : 06-DEC-2009 18:22

Client ID: RE03-09-14121

Sample Info: |2418190081928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

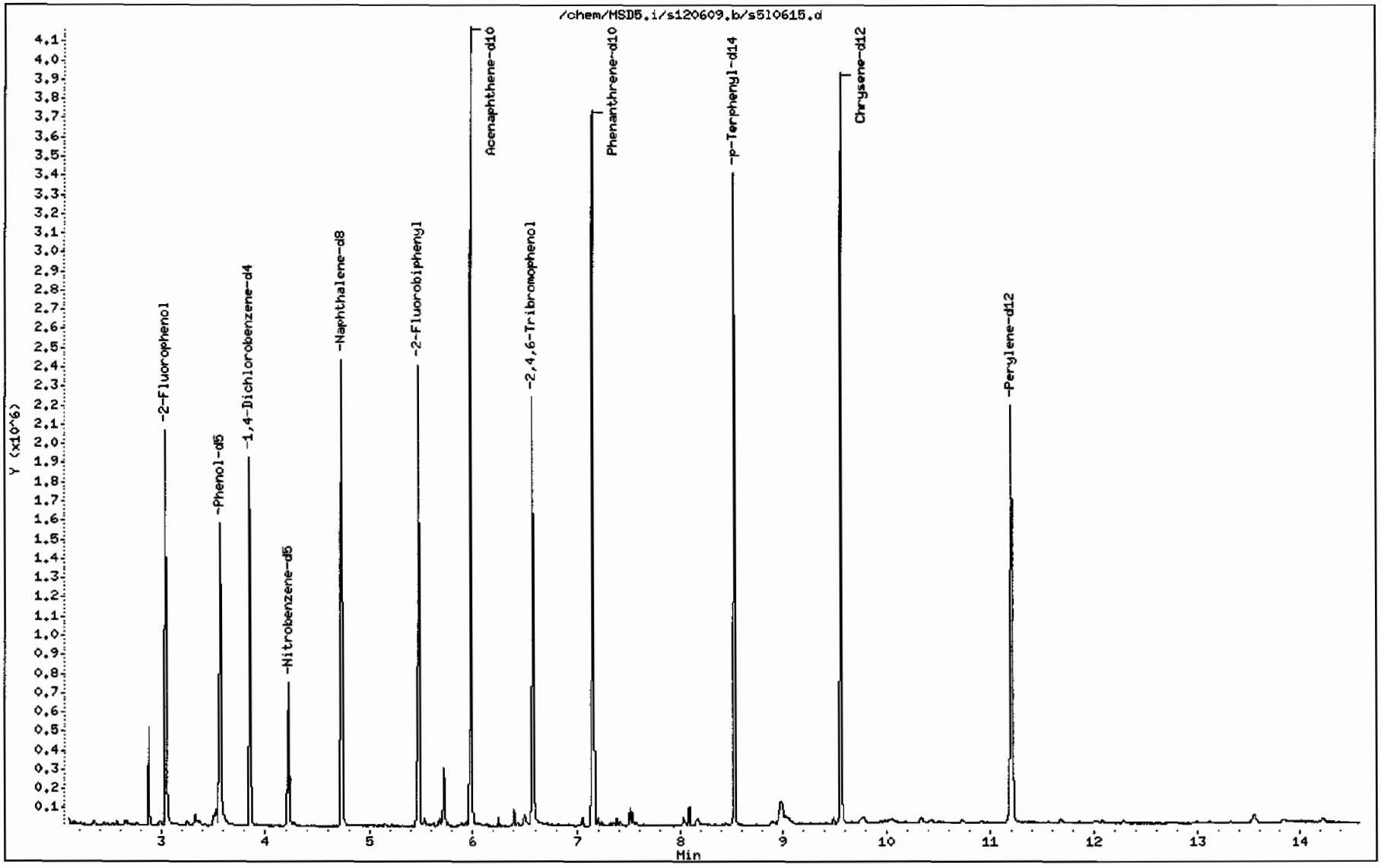

Data File: /chem/MSD5.i/s120609.b/s510615.d

Date : 06-DEC-2009 18:22

Client ID: RE03-09-14121

Instrument: MSD5.i

Sample Info: 1241819008192810011|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

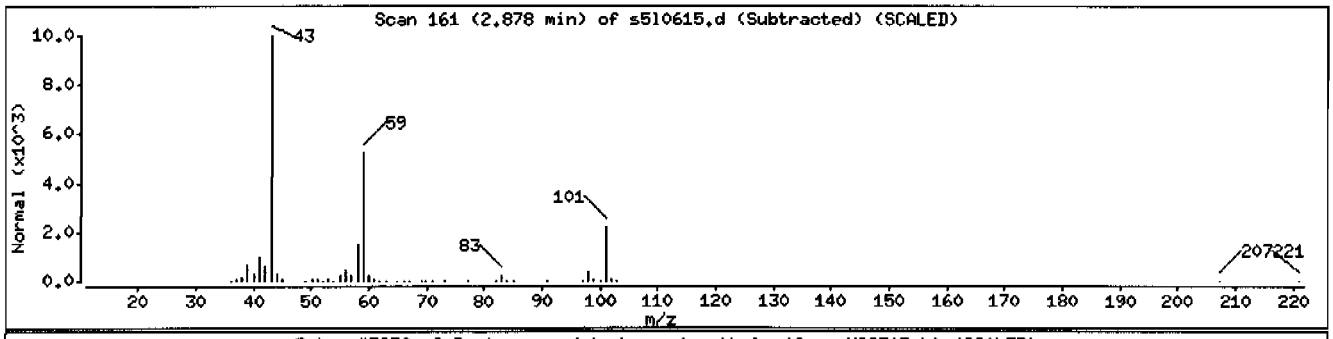

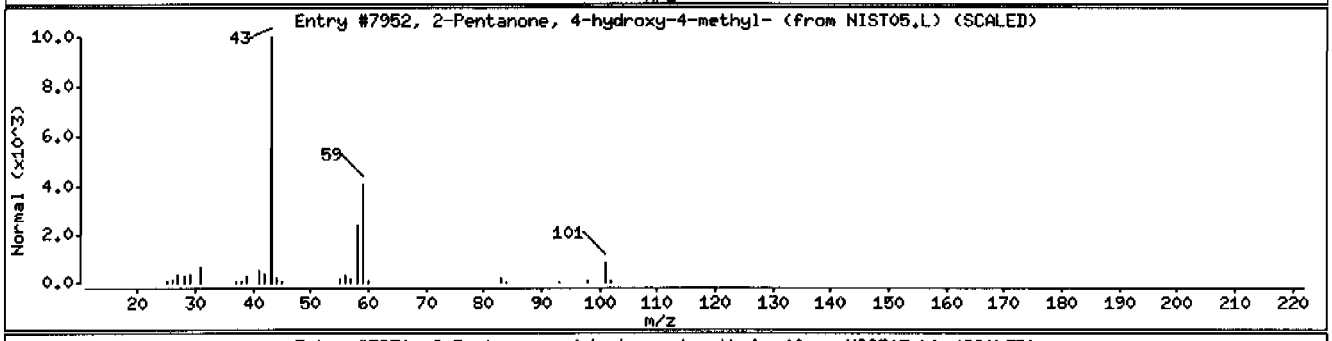

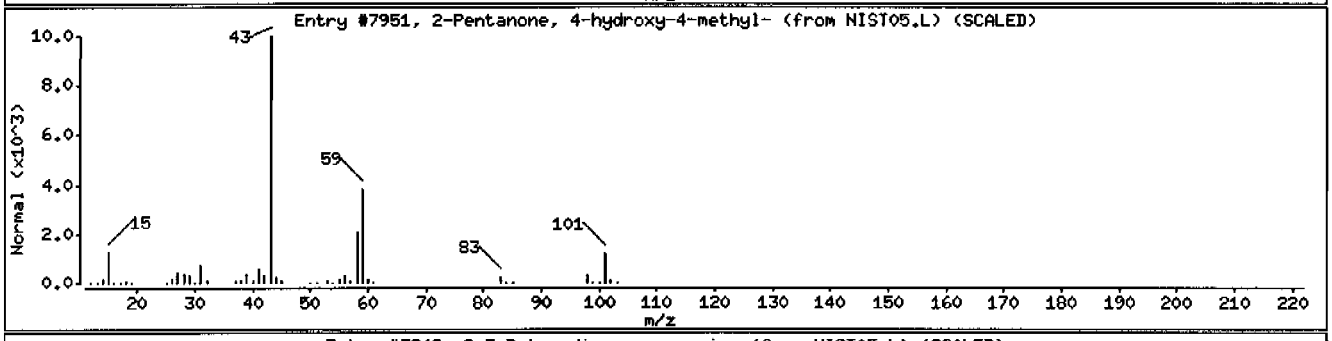

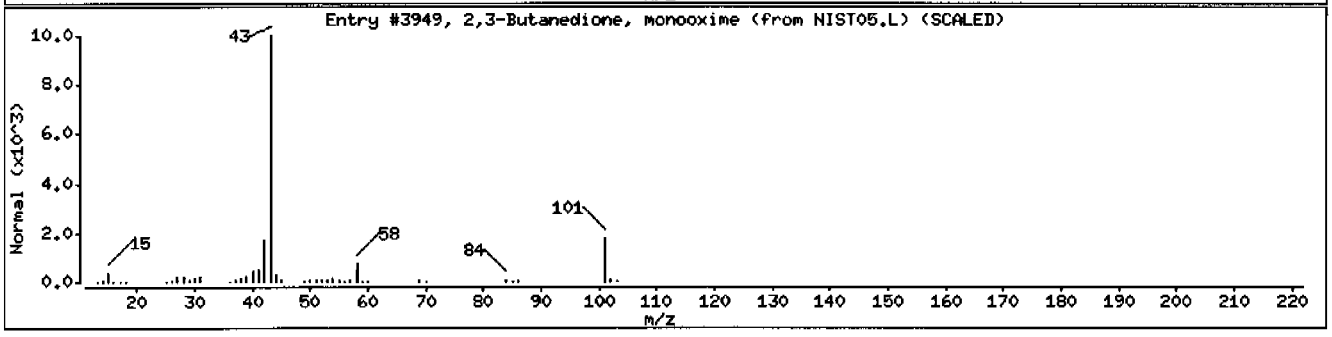

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819017	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14122	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/09/2009 22:43	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	s510918.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	352	ug/kg	70.4	352
108-95-2	Phenol	U	352	ug/kg	70.4	352
95-57-8	2-Chlorophenol	U	352	ug/kg	70.4	352
106-46-7	1,4-Dichlorobenzene	U	352	ug/kg	70.4	352
621-64-7	N-Nitrosodipropylamine	U	352	ug/kg	70.4	352
59-50-7	4-Chloro-3-methylphenol	U	352	ug/kg	70.4	352
83-32-9	Acenaphthene	U	35.2	ug/kg	11.6	35.2
121-14-2	2,4-Dinitrotoluene	U	352	ug/kg	35.2	352
100-02-7	4-Nitrophenol	U	352	ug/kg	116	352
87-86-5	Pentachlorophenol	U	352	ug/kg	88.1	352
129-00-0	Pyrene	U	35.2	ug/kg	10.6	35.2
110-86-1	Pyridine	U	352	ug/kg	70.4	352
62-53-3	Aniline	U	352	ug/kg	106	352
111-44-4	bis(2-Chloroethyl) ether	U	352	ug/kg	70.4	352
541-73-1	1,3-Dichlorobenzene	U	352	ug/kg	70.4	352
100-51-6	Benzyl alcohol	U	352	ug/kg	106	352
95-50-1	1,2-Dichlorobenzene	U	352	ug/kg	70.4	352
108-60-1	bis(2-Chloroisopropyl)ether	U	352	ug/kg	70.4	352
95-48-7	o-Cresol	U	352	ug/kg	70.4	352
65794-96-9	m,p-Cresols	U	352	ug/kg	106	352
67-72-1	Hexachloroethane	U	352	ug/kg	70.4	352
98-95-3	Nitrobenzene	U	352	ug/kg	70.4	352
78-59-1	Isophorone	U	352	ug/kg	70.4	352
88-75-5	2-Nitrophenol	U	352	ug/kg	70.4	352
105-67-9	2,4-Dimethylphenol	U	352	ug/kg	123	352
111-91-1	bis(2-Chloroethoxy)methane	U	352	ug/kg	70.4	352
120-83-2	2,4-Dichlorophenol	U	352	ug/kg	70.4	352
65-85-0	Benzoic acid	U	704	ug/kg	176	704
91-20-3	Naphthalene	U	35.2	ug/kg	10.6	35.2
106-47-8	4-Chloroaniline	U	352	ug/kg	70.4	352
87-68-3	Hexachlorobutadiene	U	352	ug/kg	70.4	352
91-57-6	2-Methylnaphthalene	U	35.2	ug/kg	7.04	35.2
77-47-4	Hexachlorocyclopentadiene	U	352	ug/kg	70.4	352
88-06-2	2,4,6-Trichlorophenol	U	352	ug/kg	70.4	352
95-95-4	2,4,5-Trichlorophenol	U	352	ug/kg	70.4	352
91-58-7	2-Chloronaphthalene	U	35.2	ug/kg	11.6	35.2
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	352	ug/kg	70.4	352
99-09-2	3-Nitroaniline	U	352	ug/kg	70.4	352

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819017	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14122	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/09/2009 22:43	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	s510918.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	352	ug/kg	70.4	352
606-20-2	2,6-Dinitrotoluene	U	352	ug/kg	35.2	352
208-96-8	Acenaphthylene	U	35.2	ug/kg	10.6	35.2
51-28-5	2,4-Dinitrophenol	U	704	ug/kg	134	704
132-64-9	Dibenzofuran	U	352	ug/kg	70.4	352
84-66-2	Diethylphthalate	U	352	ug/kg	70.4	352
86-73-7	Fluorene	U	35.2	ug/kg	10.6	35.2
7005-72-3	4-Chlorophenylphenylether	U	352	ug/kg	70.4	352
534-52-1	2-Methyl-4,6-dinitrophenol	U	352	ug/kg	70.4	352
100-01-6	4-Nitroaniline	U	352	ug/kg	106	352
	p-Nitroaniline					
122-39-4	Diphenylamine	U	352	ug/kg	70.4	352
122-66-7	Azobenzene	U	352	ug/kg	70.4	352
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	352	ug/kg	70.4	352
118-74-1	Hexachlorobenzene	U	352	ug/kg	70.4	352
85-01-8	Phenanthrene	U	35.2	ug/kg	10.6	35.2
120-12-7	Anthracene	U	35.2	ug/kg	7.04	35.2
84-74-2	Di-n-butylphthalate	U	352	ug/kg	70.4	352
206-44-0	Fluoranthene	U	35.2	ug/kg	10.6	35.2
85-68-7	Butylbenzylphthalate	U	352	ug/kg	70.4	352
56-55-3	Benzo(a)anthracene	U	35.2	ug/kg	10.6	35.2
91-94-1	3,3'-Dichlorobenzidine	U	352	ug/kg	106	352
218-01-9	Chrysene	U	35.2	ug/kg	10.6	35.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	352	ug/kg	70.4	352
117-84-0	Di-n-octylphthalate	U	352	ug/kg	70.4	352
205-99-2	Benzo(b)fluoranthene	U	35.2	ug/kg	10.6	35.2
207-08-9	Benzo(k)fluoranthene	U	35.2	ug/kg	10.6	35.2
50-32-8	Benzo(a)pyrene	U	35.2	ug/kg	10.6	35.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.2	ug/kg	10.6	35.2
53-70-3	Dibenzo(a,h)anthracene	U	35.2	ug/kg	10.6	35.2
191-24-2	Benzo(ghi)perylene	U	35.2	ug/kg	10.6	35.2
120-82-1	1,2,4-Trichlorobenzene	U	352	ug/kg	70.4	352

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	215	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510918.d
Lab Smp Id: 241819017 Client Smp ID: RE03-09-14122
Inj Date : 09-DEC-2009 22:43
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819017|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 10-Dec-2009 07:20 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	5.64160	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.831	3.839	(1.000)	445045	40.0000	
* 29 Naphthalene-d8	136	4.695	4.706	(1.000)	1516512	40.0000	
* 46 Acenaphthene-d10	164	5.954	5.958	(1.000)	981522	40.0000	
* 67 Phenanthrene-d10	188	7.113	7.123	(1.000)	1828894	40.0000	
* 91 Chrysene-d12	240	9.519	9.531	(1.000)	1972006	40.0000	
* 98 Perylene-d12	264	11.142	11.153	(1.000)	1914209	40.0000	
$ 3 2-Fluorophenol	112	3.025	3.020	(0.790)	480289	52.1126	1840
$ 5 Phenol-d5	99	3.543	3.555	(0.925)	588657	51.4963	1810
$ 20 Nitrobenzene-d5	82	4.190	4.200	(0.892)	256121	26.4158	930
$ 39 2-Fluorobiphenyl	172	5.442	5.447	(0.914)	586385	23.6484	833
$ 60 2,4,6-Tribromophenol	329	6.548	6.550	(1.100)	236685	65.1898	2300
$ 81 p-Terphenyl-d14	244	8.489	8.495	(0.892)	1143244	40.5382	1430

ION RATIO REPORT

SV REPORT

Data file: s510918.d
Report Date: 12/10/2009 08:02
Lab. ID: 241819017 SampleType: SAMPLE
Injection Date: 09-DEC-2009 22:43
Operator: RMB Instrument: MSD5.i
Sample Info: |241819017|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	35218	3.54	3.62	80-120	100	(T)
93	13108	3.51	3.62	235-295	37	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	37919	4.19	4.08	80-120	100	(T)
42	18972	4.19	4.08	28- 88	50	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	174772	5.95	5.73	80-120	100	(T)
164	981522	5.95	5.73	0- 40	562	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	131783	5.95	5.78	80-120	100	(T)
63	1479	5.95	5.78	38- 98	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	131783	5.95	6.07	80-120	100	(T)
89	1885	5.95	6.07	35- 95	1	(QT)
63	1479	5.95	6.07	9- 69	1	(QT)
52 4-Nitrophenol				CAS#: 100-02-7		
139	1181	5.93	6.00	80-120	100	(T)
109	2378	5.95	6.00	40-100	201	(Q)
65	4382	5.95	6.00	57-117	371	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	10732	6.54	6.37	80-120	100	(T)
165	11263	6.54	6.37	61-121	105	(T)
167	3866	6.54	6.37	0- 44	36	(T)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	1134	6.54	6.39	80-120	100	(T)
105	1681	6.54	6.38	4- 64	148	(QT)
51	1149	6.54	6.38	8- 68	101	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510918.d
Lab Smp Id: 241819017 Client Smp ID: RE03-09-14122
Inj Date : 09-DEC-2009 22:43
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819017|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 10-Dec-2009 07:20 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	5.64160	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.831	2578943	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.860	394402	6.11726605	215	0		0	10

Data File: /chem/MSD5.i/s120909.b/s510918.d
Date : 09-DEC-2009 22:43
Client ID: RE03-09-14122
Sample Info: |2418190171928100|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

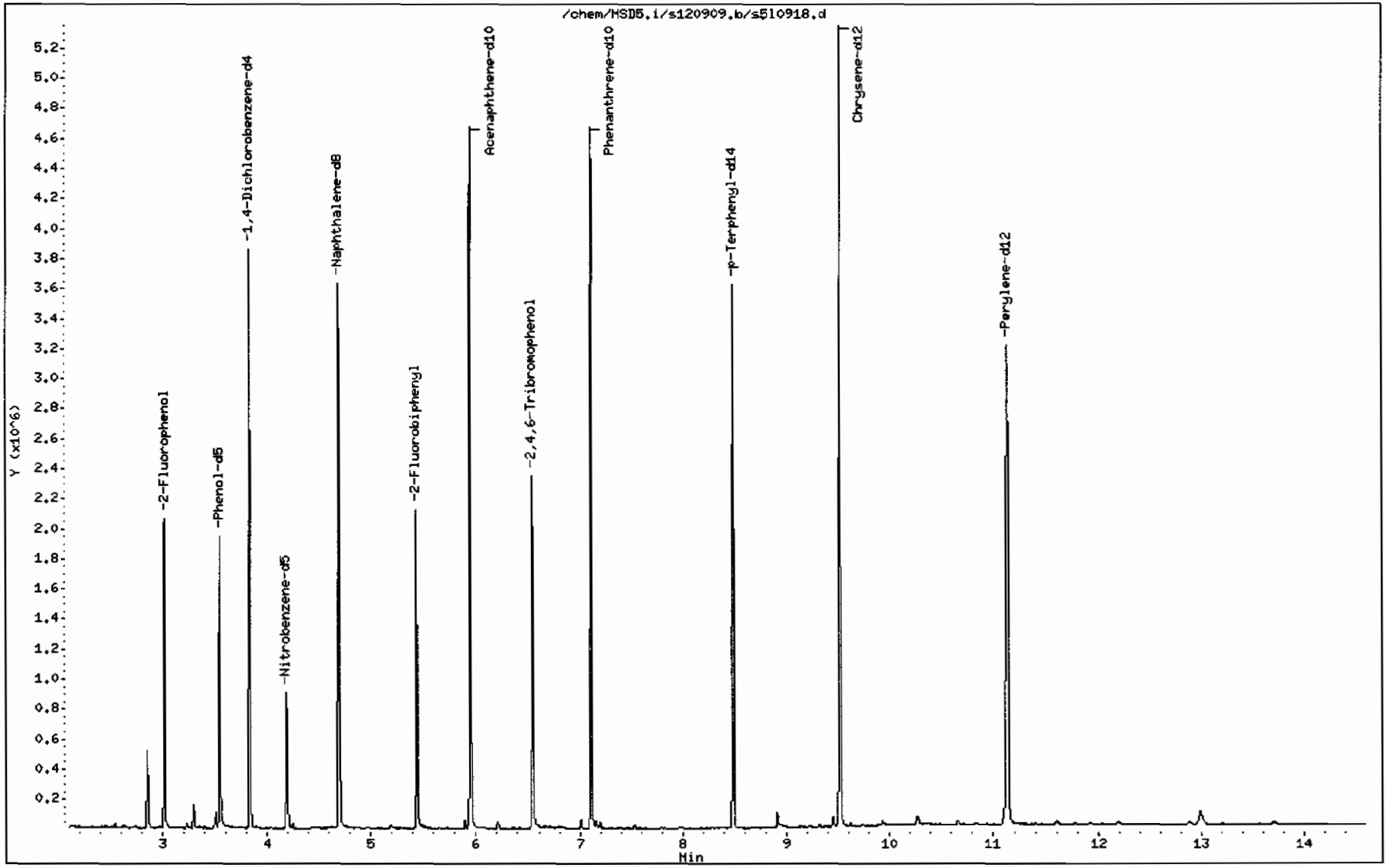

Data File: /chem/MSD5.i/s120909.b/s510918.d

Page 1

Date : 09-DEC-2009 22:43

Client ID: RE03-09-14122

Instrument: MSD5.i

Sample Info: |24181901|928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
Acetamide, N-(aminocarbonyl)-	591-07-1	NIST05.L	4100	37	C3H6N2O2	102

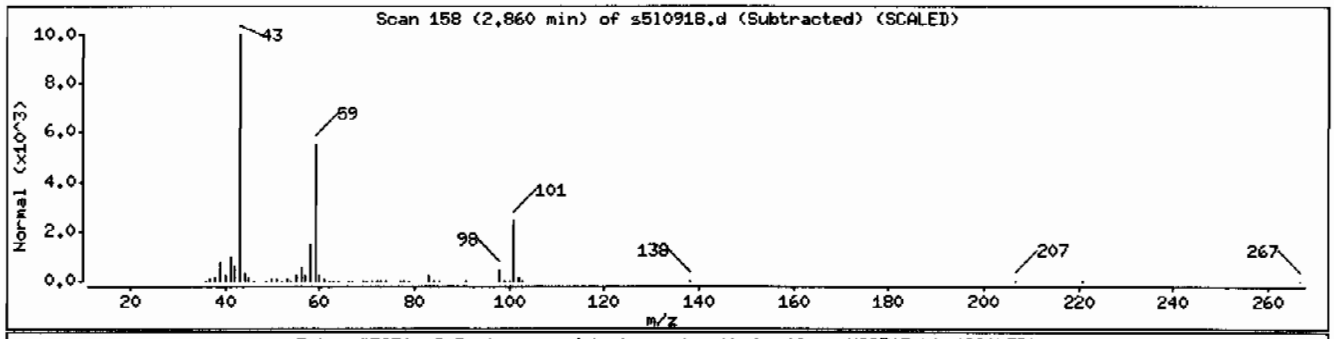

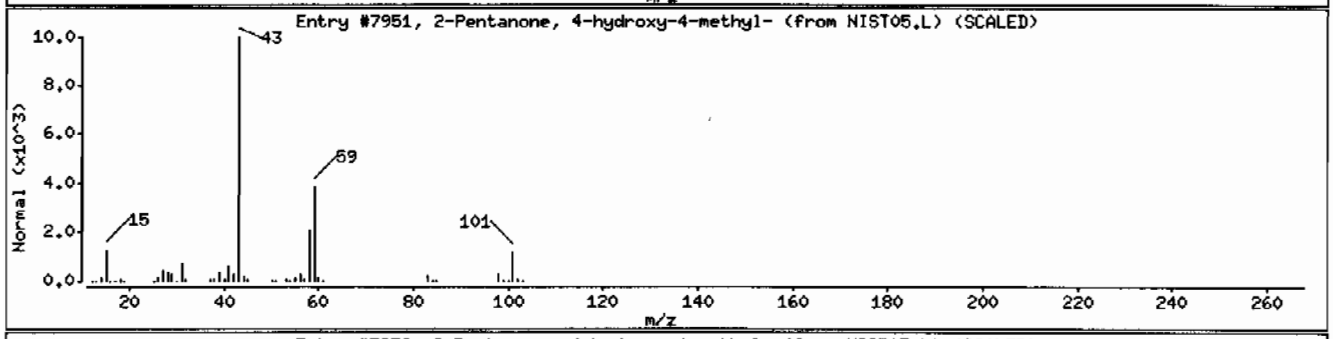

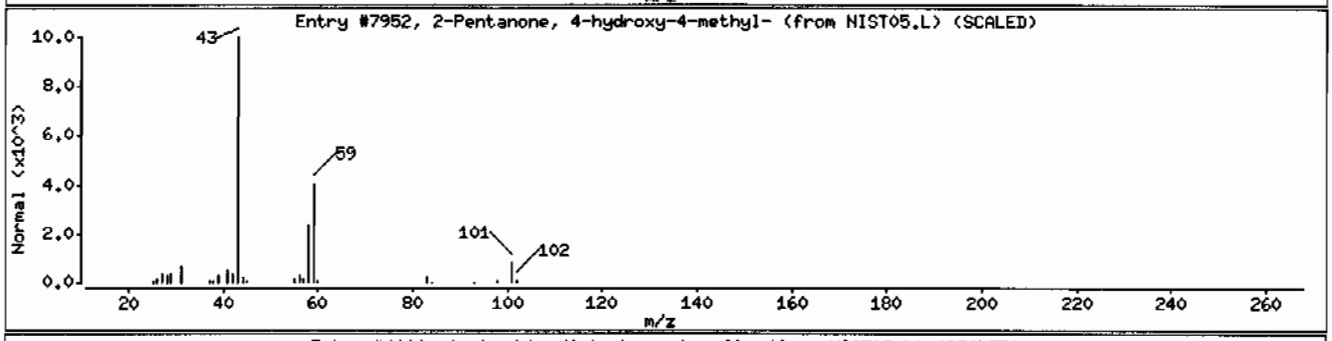

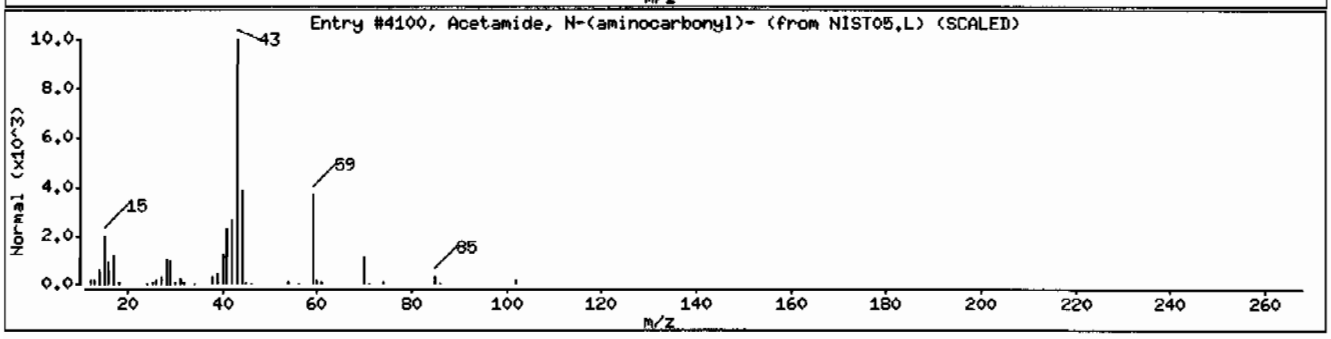

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:51**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0611.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.6	353
108-95-2	Phenol	U	353	ug/kg	70.6	353
95-57-8	2-Chlorophenol	U	353	ug/kg	70.6	353
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.6	353
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.6	353
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.6	353
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3
110-86-1	Pyridine	U	353	ug/kg	70.6	353
62-53-3	Aniline	U	353	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.6	353
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.6	353
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.6	353
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.6	353
95-48-7	o-Cresol	U	353	ug/kg	70.6	353
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353
67-72-1	Hexachloroethane	U	353	ug/kg	70.6	353
98-95-3	Nitrobenzene	U	353	ug/kg	70.6	353
78-59-1	Isophorone	U	353	ug/kg	70.6	353
88-75-5	2-Nitrophenol	U	353	ug/kg	70.6	353
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	124	353
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.6	353
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.6	353
65-85-0	Benzoic acid	U	706	ug/kg	176	706
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline	U	353	ug/kg	70.6	353
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.6	353
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.06	35.3
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.6	353
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.6	353
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.6	353
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	353	ug/kg	70.6	353
99-09-2	3-Nitroaniline	U	353	ug/kg	70.6	353

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:51**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510611.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	353	ug/kg	70.6	353
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol	U	706	ug/kg	134	706
132-64-9	Dibenzofuran	U	353	ug/kg	70.6	353
84-66-2	Diethylphthalate	U	353	ug/kg	70.6	353
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.6	353
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.6	353
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353
	p-Nitroaniline					
122-39-4	Diphenylamine	U	353	ug/kg	70.6	353
122-66-7	Azobenzene	U	353	ug/kg	70.6	353
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.6	353
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.6	353
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3
120-12-7	Anthracene	U	35.3	ug/kg	7.06	35.3
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.6	353
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.6	353
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.6	353
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.6	353
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.6	353

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	215	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510611.d
Lab Smp Id: 241819004 Client Smp ID: RE03-09-14123
Inj Date : 06-DEC-2009 16:51
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819004|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	5.53440	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	445000	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1579973	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	980990	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1696741	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1790270	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1737345	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	590432	64.0699	2260
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	747201	65.3725	2310
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	319016	31.5811	1110
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	710513	28.6699	1010
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	237961	65.5768	2310
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1007327	39.3446	1390

ION RATIO REPORT

SV REPORT

Data file: s510611.d
Report Date: 12/07/2009 07:43
Lab. ID: 241819004 SampleType: SAMPLE
Injection Date: 06-DEC-2009 16:51
Operator: RMB Instrument: MSD5.i
Sample Info: |241819004|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	43261	3.58	3.66	80-120	100	(T)
93	707	3.54	3.66	225-285	2	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	45581	4.22	4.11	80-120	100	(T)
42	23450	4.22	4.11	27- 87	51	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	175032	5.99	5.76	80-120	100	(T)
164	980990	5.99	5.76	0- 40	560	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	118681	5.99	5.81	80-120	100	(T)
63	1165	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	118681	5.99	6.11	80-120	100	(T)
89	1515	5.99	6.11	36- 96	1	(QT)
63	1165	5.99	6.11	9- 69	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	10540	6.58	6.41	80-120	100	(T)
165	11237	6.58	6.41	62-122	107	(T)
167	3749	6.58	6.41	0- 44	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	668	6.58	6.42	80-120	100	(T)
105	1751	6.58	6.42	6- 66	262	(QT)
51	1148	6.58	6.42	21- 81	172	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510611.d
Lab Smp Id: 241819004 Client Smp ID: RE03-09-14123
Inj Date : 06-DEC-2009 16:51
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819004|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	5.53440	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2596611	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.884	395406	6.09110517	215	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510611.d
Date : 06-DEC-2009 16:51
Client ID: RE03-09-14123
Sample Info: |241819004|928100|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

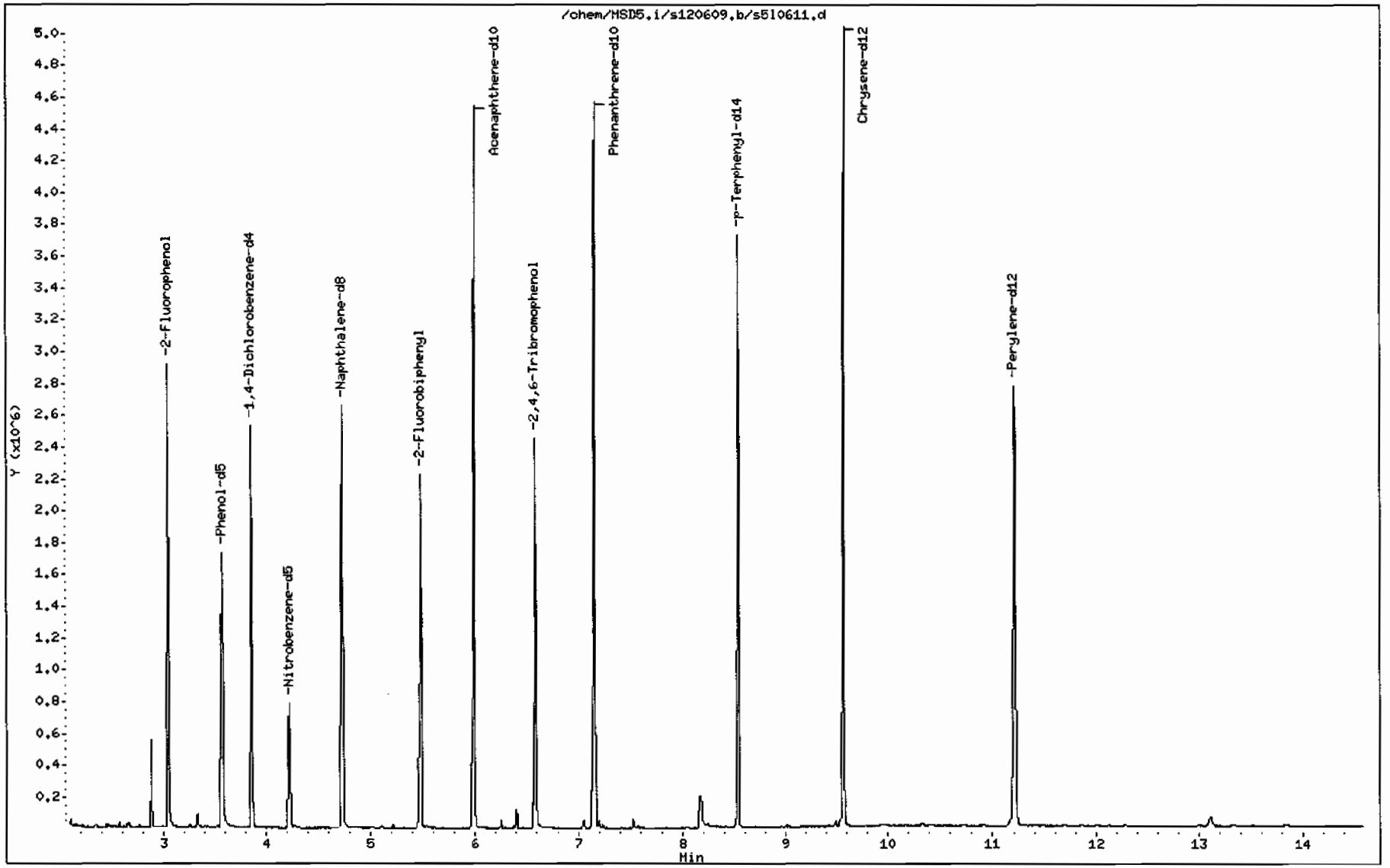

Data File: /chem/MSD5.i/s120609.b/s510611.d

Date : 06-DEC-2009 16:51

Client ID: RE03-09-14123

Instrument: MSD5.i

Sample Info: |241819004|928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C6H12O2	116

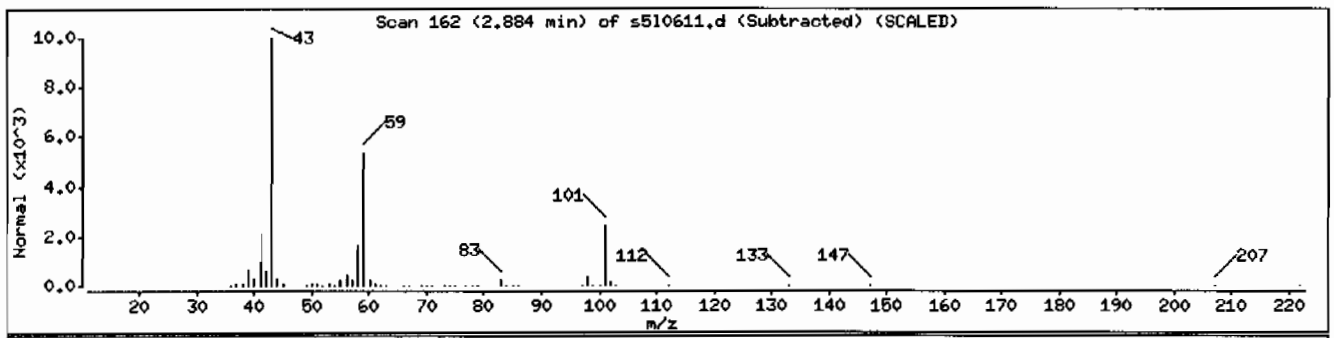

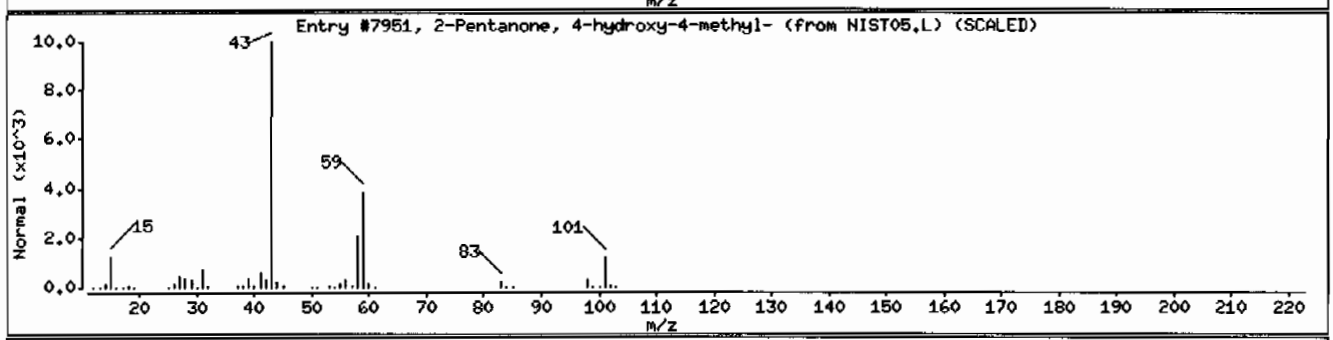

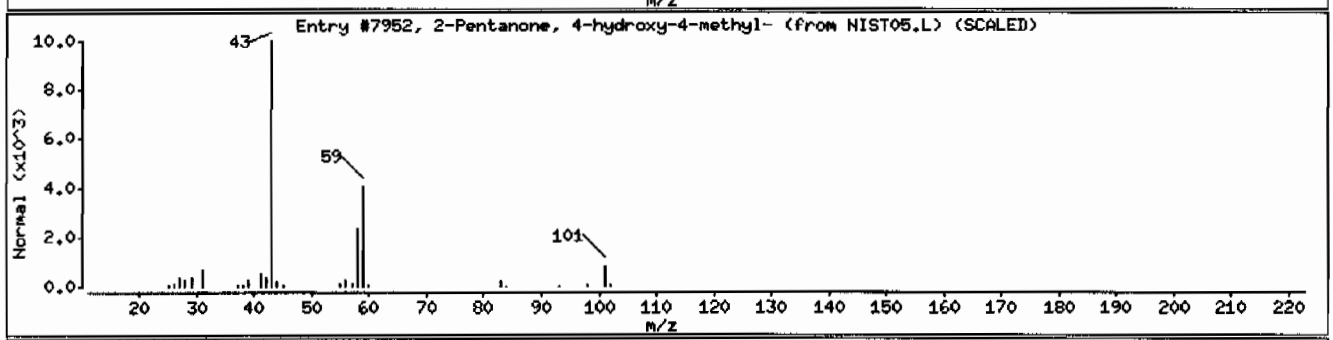

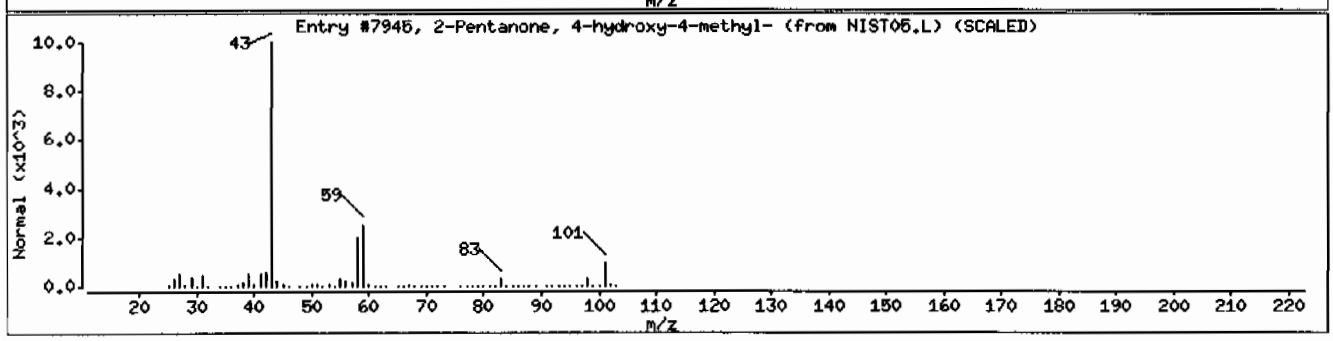

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 23:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s510919.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	361	ug/kg	72.3	361
108-95-2	Phenol	U	361	ug/kg	72.3	361
95-57-8	2-Chlorophenol	U	361	ug/kg	72.3	361
106-46-7	1,4-Dichlorobenzene	U	361	ug/kg	72.3	361
621-64-7	N-Nitrosodipropylamine	U	361	ug/kg	72.3	361
59-50-7	4-Chloro-3-methylphenol	U	361	ug/kg	72.3	361
83-32-9	Acenaphthene	U	36.1	ug/kg	11.9	36.1
121-14-2	2,4-Dinitrotoluene	U	361	ug/kg	36.1	361
100-02-7	4-Nitrophenol	U	361	ug/kg	119	361
87-86-5	Pentachlorophenol	U	361	ug/kg	90.4	361
129-00-0	Pyrene	U	36.1	ug/kg	10.8	36.1
110-86-1	Pyridine	U	361	ug/kg	72.3	361
62-53-3	Aniline	U	361	ug/kg	108	361
111-44-4	bis(2-Chloroethyl) ether	U	361	ug/kg	72.3	361
541-73-1	1,3-Dichlorobenzene	U	361	ug/kg	72.3	361
100-51-6	Benzyl alcohol	U	361	ug/kg	108	361
95-50-1	1,2-Dichlorobenzene	U	361	ug/kg	72.3	361
108-60-1	bis(2-Chloroisopropyl)ether	U	361	ug/kg	72.3	361
95-48-7	o-Cresol	U	361	ug/kg	72.3	361
65794-96-9	m,p-Cresols	U	361	ug/kg	108	361
67-72-1	Hexachloroethane	U	361	ug/kg	72.3	361
98-95-3	Nitrobenzene	U	361	ug/kg	72.3	361
78-59-1	Isophorone	U	361	ug/kg	72.3	361
88-75-5	2-Nitrophenol	U	361	ug/kg	72.3	361
105-67-9	2,4-Dimethylphenol	U	361	ug/kg	126	361
111-91-1	bis(2-Chloroethoxy)methane	U	361	ug/kg	72.3	361
120-83-2	2,4-Dichlorophenol	U	361	ug/kg	72.3	361
65-85-0	Benzoic acid	U	723	ug/kg	181	723
91-20-3	Naphthalene	U	36.1	ug/kg	10.8	36.1
106-47-8	4-Chloroaniline	U	361	ug/kg	72.3	361
87-68-3	Hexachlorobutadiene	U	361	ug/kg	72.3	361
91-57-6	2-Methylnaphthalene	U	36.1	ug/kg	7.23	36.1
77-47-4	Hexachlorocyclopentadiene	U	361	ug/kg	72.3	361
88-06-2	2,4,6-Trichlorophenol	U	361	ug/kg	72.3	361
95-95-4	2,4,5-Trichlorophenol	U	361	ug/kg	72.3	361
91-58-7	2-Chloronaphthalene	U	36.1	ug/kg	11.9	36.1
88-74-4	2-Nitroaniline	U	361	ug/kg	72.3	361
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	361	ug/kg	72.3	361

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 23:05**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**s510919.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	361	ug/kg	72.3	361
606-20-2	2,6-Dinitrotoluene	U	361	ug/kg	36.1	361
208-96-8	Acenaphthylene	U	36.1	ug/kg	10.8	36.1
51-28-5	2,4-Dinitrophenol	U	723	ug/kg	137	723
132-64-9	Dibenzofuran	U	361	ug/kg	72.3	361
84-66-2	Diethylphthalate	U	361	ug/kg	72.3	361
86-73-7	Fluorene	U	36.1	ug/kg	10.8	36.1
7005-72-3	4-Chlorophenylphenylether	U	361	ug/kg	72.3	361
534-52-1	2-Methyl-4,6-dinitrophenol	U	361	ug/kg	72.3	361
100-01-6	4-Nitroaniline	U	361	ug/kg	108	361
	p-Nitroaniline					
122-39-4	Diphenylamine	U	361	ug/kg	72.3	361
122-66-7	Azobenzene	U	361	ug/kg	72.3	361
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	361	ug/kg	72.3	361
118-74-1	Hexachlorobenzene	U	361	ug/kg	72.3	361
85-01-8	Phenanthrene	U	36.1	ug/kg	10.8	36.1
120-12-7	Anthracene	U	36.1	ug/kg	7.23	36.1
84-74-2	Di-n-butylphthalate	U	361	ug/kg	72.3	361
206-44-0	Fluoranthene	U	36.1	ug/kg	10.8	36.1
85-68-7	Butylbenzylphthalate	U	361	ug/kg	72.3	361
56-55-3	Benzo(a)anthracene	U	36.1	ug/kg	10.8	36.1
91-94-1	3,3'-Dichlorobenzidine	U	361	ug/kg	108	361
218-01-9	Chrysene	U	36.1	ug/kg	10.8	36.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	361	ug/kg	72.3	361
117-84-0	Di-n-octylphthalate	U	361	ug/kg	72.3	361
205-99-2	Benzo(b)fluoranthene	U	36.1	ug/kg	10.8	36.1
207-08-9	Benzo(k)fluoranthene	U	36.1	ug/kg	10.8	36.1
50-32-8	Benzo(a)pyrene	U	36.1	ug/kg	10.8	36.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.1	ug/kg	10.8	36.1
53-70-3	Dibenzo(a,h)anthracene	U	36.1	ug/kg	10.8	36.1
191-24-2	Benzo(ghi)perylene	U	36.1	ug/kg	10.8	36.1
120-82-1	1,2,4-Trichlorobenzene	U	361	ug/kg	72.3	361

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	226	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510919.d
Lab Smp Id: 241819018 Client Smp ID: RE03-09-14124
Inj Date : 09-DEC-2009 23:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819018|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 10-Dec-2009 07:20 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	7.82910	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.831	3.839	(1.000)	431244	40.0000	
* 29 Naphthalene-d8	136	4.696	4.706	(1.000)	1507556	40.0000	
* 46 Acenaphthene-d10	164	5.948	5.958	(1.000)	939002	40.0000	
* 67 Phenanthrene-d10	188	7.113	7.123	(1.000)	1746934	40.0000	
* 91 Chrysene-d12	240	9.519	9.531	(1.000)	1851068	40.0000	
* 98 Perylene-d12	264	11.136	11.153	(1.000)	1850702	40.0000	
$ 3 2-Fluorophenol	112	3.019	3.020	(0.788)	610186	68.3256	2470
$ 5 Phenol-d5	99	3.543	3.555	(0.925)	729251	65.8372	2380
$ 20 Nitrobenzene-d5	82	4.190	4.200	(0.892)	323678	33.5818	1210
$ 39 2-Fluorobiphenyl	172	5.443	5.447	(0.915)	730992	30.8151	1110
$ 60 2,4,6-Tribromophenol	329	6.548	6.550	(1.101)	273595	78.7681	2850
$ 81 p-Terphenyl-d14	244	8.489	8.495	(0.892)	1212395	45.7989	1660

ION RATIO REPORT

SV REPORT

Data file: s510919.d
Report Date: 12/10/2009 08:02
Lab. ID: 241819018 SampleType: SAMPLE
Injection Date: 09-DEC-2009 23:05
Operator: RMB Instrument: MSD5.i
Sample Info: |241819018|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02
Comment:
Method used: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	43834	3.54	3.62	80-120	100	(T)
93	14901	3.51	3.62	235-295	34	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	46636	4.19	4.08	80-120	100	(T)
42	23726	4.19	4.08	28- 88	51	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	168679	5.95	5.73	80-120	100	(T)
164	939002	5.95	5.73	0- 40	557	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	126027	5.95	5.78	80-120	100	(T)
63	1491	5.95	5.78	38- 98	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	126027	5.95	6.07	80-120	100	(T)
89	1885	5.95	6.07	35- 95	1	(QT)
63	1491	5.95	6.07	9- 69	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	12828	6.54	6.37	80-120	100	(T)
165	12529	6.54	6.37	61-121	98	(T)
167	4089	6.54	6.37	0- 44	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	1055	6.54	6.39	80-120	100	(T)
105	1981	6.54	6.38	4- 64	188	(QT)
51	1241	6.54	6.38	8- 68	118	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	18284	6.54	6.73	80-120	100	(T)
141	107621	6.54	6.73	36- 96	589	(QT)
250	36476	6.54	6.73	69-129	199	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510919.d
Lab Smp Id: 241819018 Client Smp ID: RE03-09-14124
Inj Date : 09-DEC-2009 23:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819018|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 10-Dec-2009 07:20 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	7.82910	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.831	2502459	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.860	391513	6.25805590	226	0		0	10

Data File: /chem/MSD5.i/s120909.b/s510919.d
Date : 09-DEC-2009 23:05
Client ID: RE03-09-14124
Sample Info: |2418190181928100|1|SVMFI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

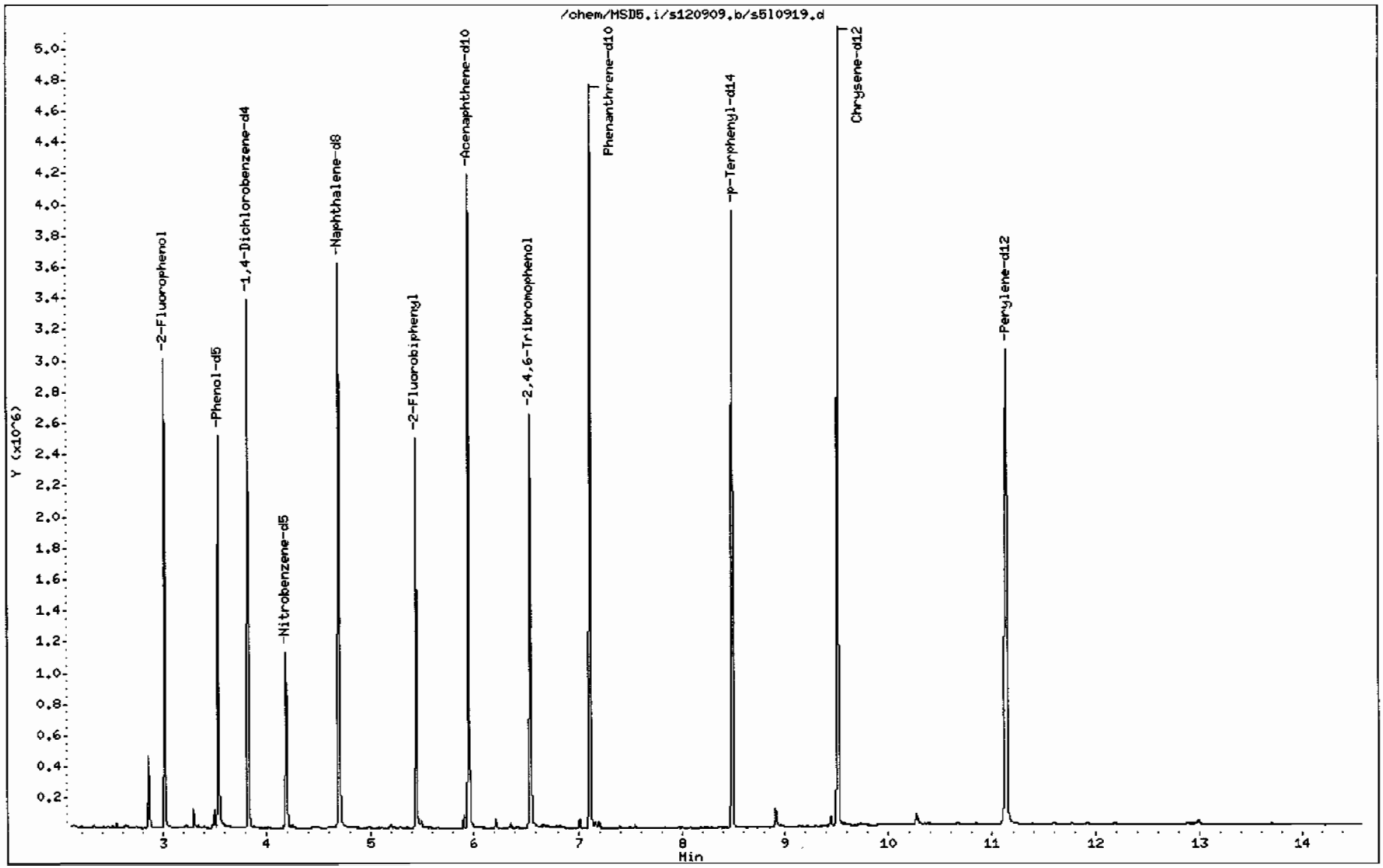

Data File: /chem/MSD5.i/s120909.b/s510919.d

Date : 09-DEC-2009 23:05

Client ID: RE03-09-14124

Instrument: MSD5.i

Sample Info: |24181901819281001|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116

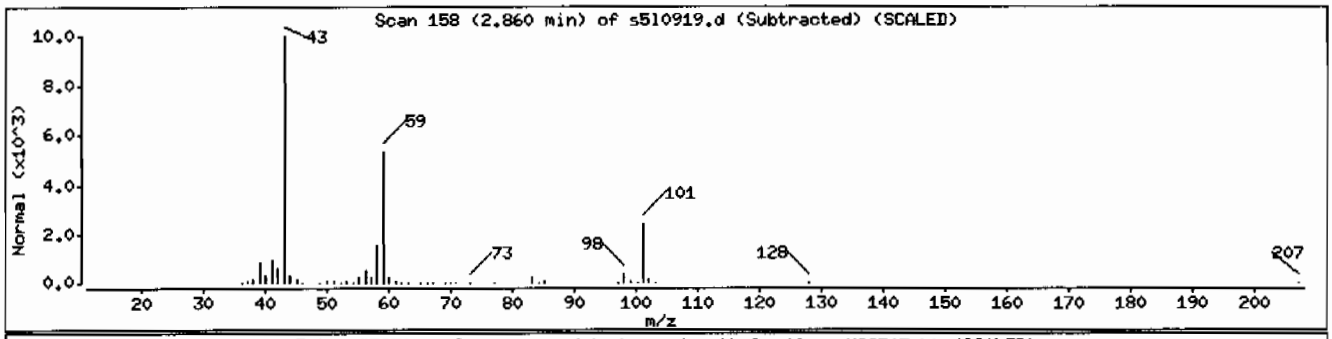

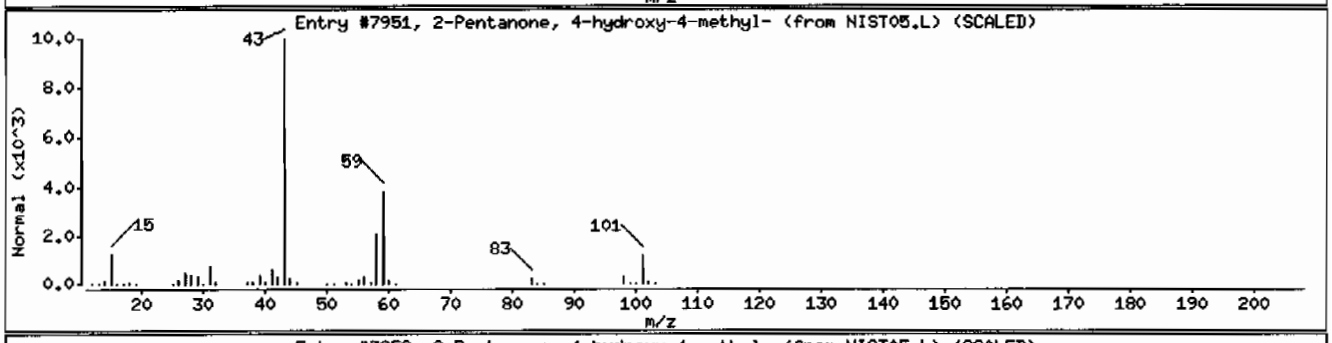

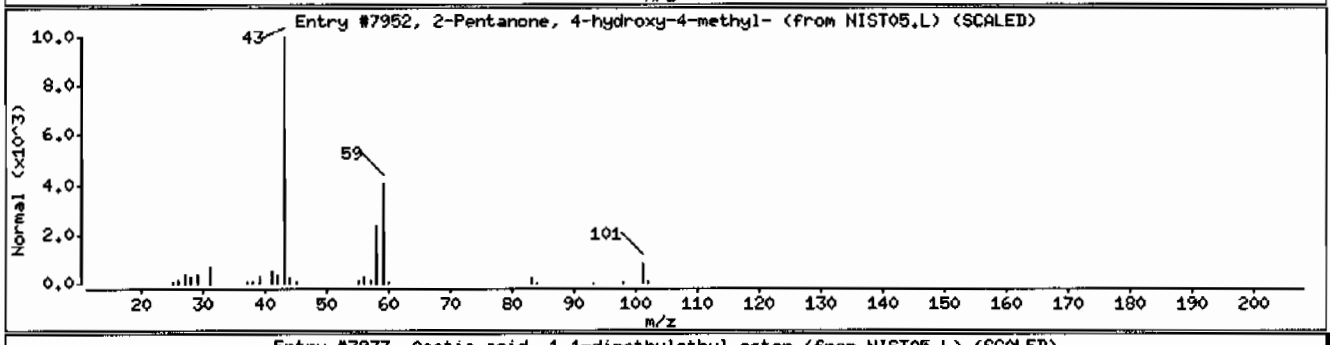

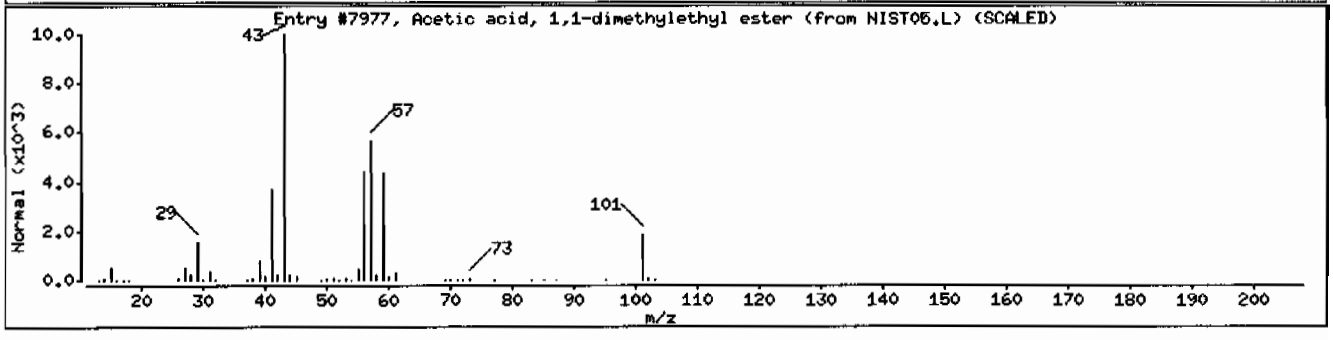

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510610.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	347	ug/kg	69.3	347
108-95-2	Phenol	U	347	ug/kg	69.3	347
95-57-8	2-Chlorophenol	U	347	ug/kg	69.3	347
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.3	347
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.3	347
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.3	347
83-32-9	Acenaphthene	U	34.7	ug/kg	11.4	34.7
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347
100-02-7	4-Nitrophenol	U	347	ug/kg	114	347
87-86-5	Pentachlorophenol	U	347	ug/kg	86.6	347
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7
110-86-1	Pyridine	U	347	ug/kg	69.3	347
62-53-3	Aniline	U	347	ug/kg	104	347
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.3	347
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.3	347
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.3	347
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.3	347
95-48-7	o-Cresol	U	347	ug/kg	69.3	347
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347
67-72-1	Hexachloroethane	U	347	ug/kg	69.3	347
98-95-3	Nitrobenzene	U	347	ug/kg	69.3	347
78-59-1	Isophorone	U	347	ug/kg	69.3	347
88-75-5	2-Nitrophenol	U	347	ug/kg	69.3	347
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	121	347
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.3	347
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.3	347
65-85-0	Benzoic acid	U	693	ug/kg	173	693
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7
106-47-8	4-Chloroaniline	U	347	ug/kg	69.3	347
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.3	347
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.93	34.7
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.3	347
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.3	347
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.3	347
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.4	34.7
88-74-4	2-Nitroaniline	U	347	ug/kg	69.3	347
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	347	ug/kg	69.3	347

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14125**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 16:28**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s510610.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	347	ug/kg	69.3	347
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7
51-28-5	2,4-Dinitrophenol	U	693	ug/kg	132	693
132-64-9	Dibenzofuran	U	347	ug/kg	69.3	347
84-66-2	Diethylphthalate	U	347	ug/kg	69.3	347
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.3	347
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.3	347
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347
	p-Nitroaniline					
122-39-4	Diphenylamine	U	347	ug/kg	69.3	347
122-66-7	Azobenzene	U	347	ug/kg	69.3	347
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.3	347
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.3	347
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7
120-12-7	Anthracene	U	34.7	ug/kg	6.93	34.7
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.3	347
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.3	347
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.3	347
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.3	347
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.3	347

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	293	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510610.d
Lab Smp Id: 241819003 Client Smp ID: RE03-09-14125
Inj Date : 06-DEC-2009 16:28
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819003|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	4.09250	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.854	3.872	(1.000)	445038	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1013898	40.0000	
* 46 Acenaphthene-d10	164	5.989	5.996	(1.000)	784245	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1627281	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1670297	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1598323	40.0000	
$ 3 2-Fluorophenol	112	3.048	3.054	(0.791)	549692	59.6440	2070
$ 5 Phenol-d5	99	3.578	3.584	(0.928)	666145	58.2759	2020
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	237826	36.6884	1270
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	534036	26.9548	934
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	223504	77.0446	2670
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1023556	42.8500	1480

ION RATIO REPORT

SV REPORT

Data file: s510610.d
Report Date: 12/07/2009 07:43
Lab. ID: 241819003 SampleType: SAMPLE
Injection Date: 06-DEC-2009 16:28
Operator: RMB Instrument: MSD5.i
Sample Info: |241819003|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	39556	3.57	3.66	80-120	100	(T)
93	2359	3.53	3.66	225-285	6	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	35564	4.22	4.11	80-120	100	(T)
42	16494	4.22	4.11	27- 87	46	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	43739	5.97	5.76	80-120	100	(T)
164	256879	5.97	5.76	0- 40	587	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	34250	5.97	5.81	80-120	100	(T)
63	429	5.97	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	105043	5.99	6.11	80-120	100	(T)
89	1563	5.99	6.11	36- 96	1	(QT)
63	1336	5.99	6.11	9- 69	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	9995	6.58	6.41	80-120	100	(T)
165	10542	6.58	6.41	62-122	105	(T)
167	3758	6.58	6.41	0- 44	38	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	241	6.56	6.42	80-120	100	(T)
105	152	6.55	6.42	6- 66	63	(T)
51	180	6.56	6.42	21- 81	75	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510610.d
Lab Smp Id: 241819003 Client Smp ID: RE03-09-14125
Inj Date : 06-DEC-2009 16:28
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819003|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	4.09250	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.854	2605664	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.884	550476	8.45045153	293	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510610.d
Date : 06-DEC-2009 16:28
Client ID: RE03-09-14125
Sample Info: 1241819003192810011ISVMFI:ILANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

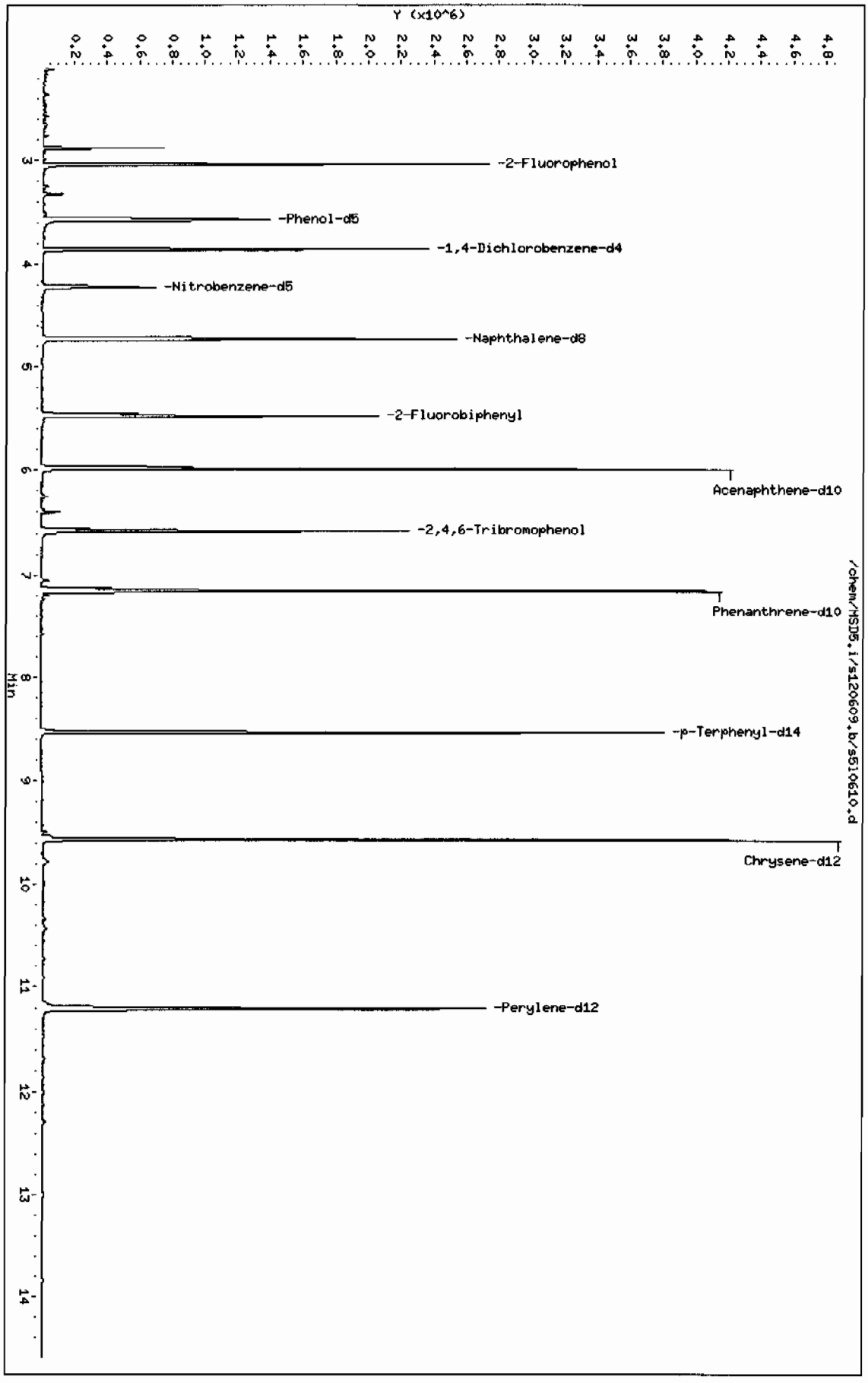

Page 1

Data File: /chem/MSD5.i/s120609.b/s510610.d

Date : 06-DEC-2009 16:28

Client ID: RE03-09-14125

Instrument: MSD5.i

Sample Info: |2418190031928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

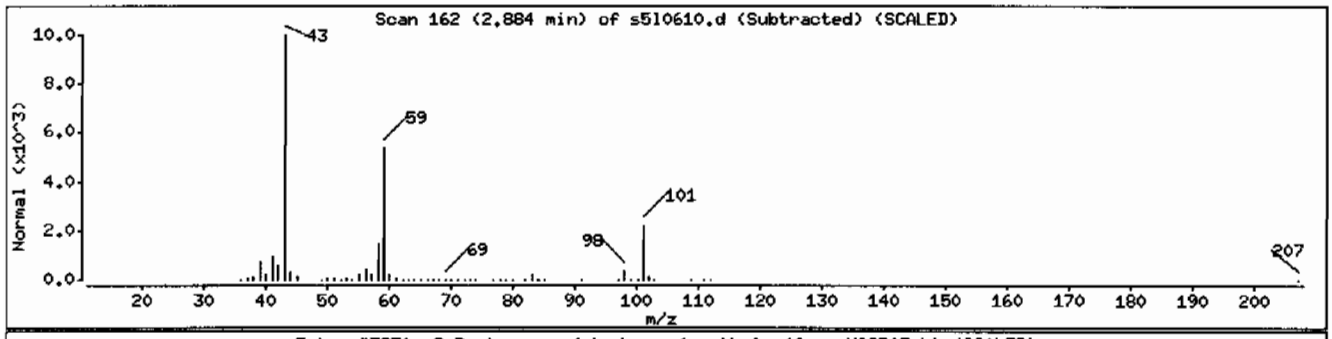

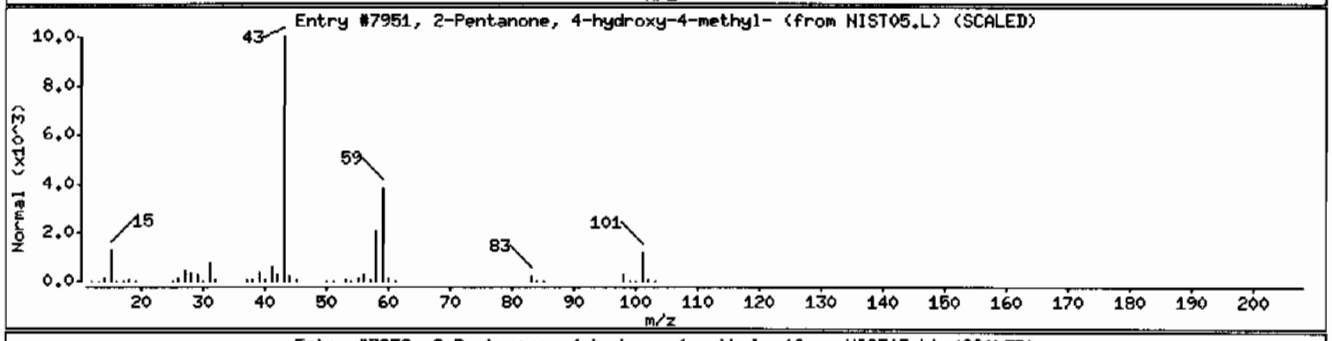

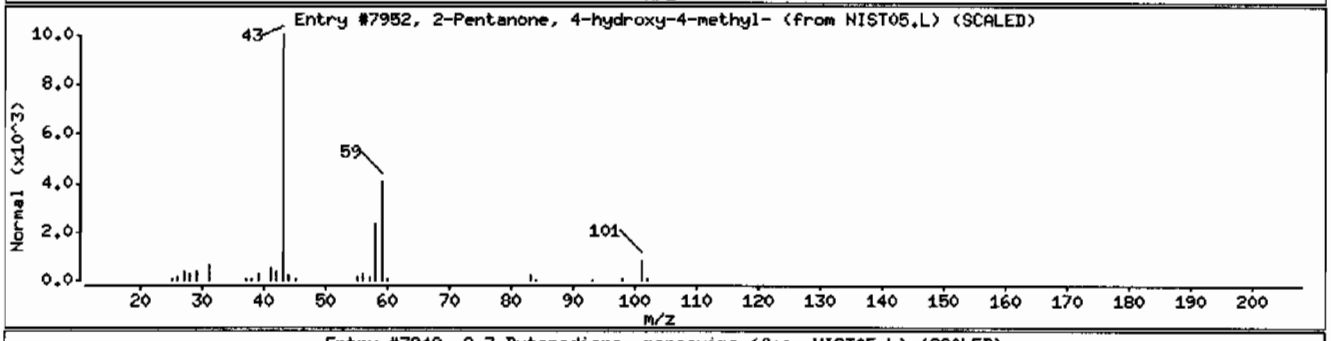

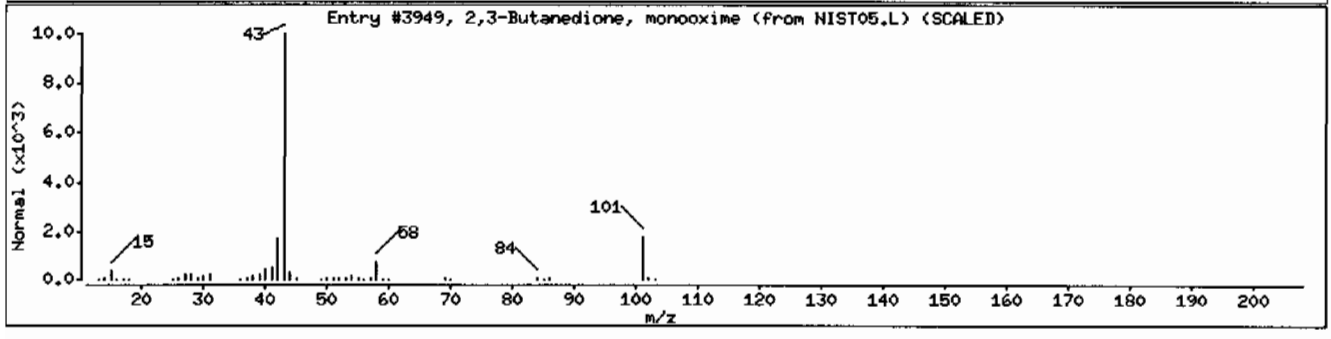

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**8.2**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14126**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 17:36**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510613.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	363	ug/kg	72.6	363
108-95-2	Phenol	U	363	ug/kg	72.6	363
95-57-8	2-Chlorophenol	U	363	ug/kg	72.6	363
106-46-7	1,4-Dichlorobenzene	U	363	ug/kg	72.6	363
621-64-7	N-Nitrosodipropylamine	U	363	ug/kg	72.6	363
59-50-7	4-Chloro-3-methylphenol	U	363	ug/kg	72.6	363
83-32-9	Acenaphthene	U	36.3	ug/kg	12.0	36.3
121-14-2	2,4-Dinitrotoluene	U	363	ug/kg	36.3	363
100-02-7	4-Nitrophenol	U	363	ug/kg	120	363
87-86-5	Pentachlorophenol	U	363	ug/kg	90.8	363
129-00-0	Pyrene	U	36.3	ug/kg	10.9	36.3
110-86-1	Pyridine	U	363	ug/kg	72.6	363
62-53-3	Aniline	U	363	ug/kg	109	363
111-44-4	bis(2-Chloroethyl) ether	U	363	ug/kg	72.6	363
541-73-1	1,3-Dichlorobenzene	U	363	ug/kg	72.6	363
100-51-6	Benzyl alcohol	U	363	ug/kg	109	363
95-50-1	1,2-Dichlorobenzene	U	363	ug/kg	72.6	363
108-60-1	bis(2-Chloroisopropyl)ether	U	363	ug/kg	72.6	363
95-48-7	o-Cresol	U	363	ug/kg	72.6	363
65794-96-9	m,p-Cresols	U	363	ug/kg	109	363
67-72-1	Hexachloroethane	U	363	ug/kg	72.6	363
98-95-3	Nitrobenzene	U	363	ug/kg	72.6	363
78-59-1	Isophorone	U	363	ug/kg	72.6	363
88-75-5	2-Nitrophenol	U	363	ug/kg	72.6	363
105-67-9	2,4-Dimethylphenol	U	363	ug/kg	127	363
111-91-1	bis(2-Chloroethoxy)methane	U	363	ug/kg	72.6	363
120-83-2	2,4-Dichlorophenol	U	363	ug/kg	72.6	363
65-85-0	Benzoic acid	U	726	ug/kg	182	726
91-20-3	Naphthalene	U	36.3	ug/kg	10.9	36.3
106-47-8	4-Chloroaniline	U	363	ug/kg	72.6	363
87-68-3	Hexachlorobutadiene	U	363	ug/kg	72.6	363
91-57-6	2-Methylnaphthalene	U	36.3	ug/kg	7.26	36.3
77-47-4	Hexachlorocyclopentadiene	U	363	ug/kg	72.6	363
88-06-2	2,4,6-Trichlorophenol	U	363	ug/kg	72.6	363
95-95-4	2,4,5-Trichlorophenol	U	363	ug/kg	72.6	363
91-58-7	2-Chloronaphthalene	U	36.3	ug/kg	12.0	36.3
88-74-4	2-Nitroaniline	U	363	ug/kg	72.6	363
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	363	ug/kg	72.6	363

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14126	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 17:36	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	s510613.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	363	ug/kg	72.6	363
606-20-2	2,6-Dinitrotoluene	U	363	ug/kg	36.3	363
208-96-8	Acenaphthylene	U	36.3	ug/kg	10.9	36.3
51-28-5	2,4-Dinitrophenol	U	726	ug/kg	138	726
132-64-9	Dibenzofuran	U	363	ug/kg	72.6	363
84-66-2	Diethylphthalate	U	363	ug/kg	72.6	363
86-73-7	Fluorene	U	36.3	ug/kg	10.9	36.3
7005-72-3	4-Chlorophenylphenylether	U	363	ug/kg	72.6	363
534-52-1	2-Methyl-4,6-dinitrophenol	U	363	ug/kg	72.6	363
100-01-6	4-Nitroaniline	U	363	ug/kg	109	363
	p-Nitroaniline					
122-39-4	Diphenylamine	U	363	ug/kg	72.6	363
122-66-7	Azobenzene	U	363	ug/kg	72.6	363
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	363	ug/kg	72.6	363
118-74-1	Hexachlorobenzene	U	363	ug/kg	72.6	363
85-01-8	Phenanthrene	U	36.3	ug/kg	10.9	36.3
120-12-7	Anthracene	U	36.3	ug/kg	7.26	36.3
84-74-2	Di-n-butylphthalate	U	363	ug/kg	72.6	363
206-44-0	Fluoranthene	U	36.3	ug/kg	10.9	36.3
85-68-7	Butylbenzylphthalate	U	363	ug/kg	72.6	363
56-55-3	Benzo(a)anthracene	U	36.3	ug/kg	10.9	36.3
91-94-1	3,3'-Dichlorobenzidine	U	363	ug/kg	109	363
218-01-9	Chrysene	U	36.3	ug/kg	10.9	36.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	363	ug/kg	72.6	363
117-84-0	Di-n-octylphthalate	U	363	ug/kg	72.6	363
205-99-2	Benzo(b)fluoranthene	U	36.3	ug/kg	10.9	36.3
207-08-9	Benzo(k)fluoranthene	U	36.3	ug/kg	10.9	36.3
50-32-8	Benzo(a)pyrene	U	36.3	ug/kg	10.9	36.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.3	ug/kg	10.9	36.3
53-70-3	Dibenzo(a,h)anthracene	U	36.3	ug/kg	10.9	36.3
191-24-2	Benzo(ghi)perylene	U	36.3	ug/kg	10.9	36.3
120-82-1	1,2,4-Trichlorobenzene	U	363	ug/kg	72.6	363

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	225	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510613.d
Lab Smp Id: 241819006 Client Smp ID: RE03-09-14126
Inj Date : 06-DEC-2009 17:36
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819006|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	8.21600	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	440452	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1559852	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	964128	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1620760	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1650912	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1636113	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	499219	54.7314	1990
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	613719	54.2486	1970
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	282381	28.3150	1030
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	655273	26.9033	977
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	202845	56.8772	2060
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	950379	40.2537	1460

ION RATIO REPORT

SV REPORT

Data file: s510613.d
Report Date: 12/07/2009 07:44
Lab. ID: 241819006 SampleType: SAMPLE
Injection Date: 06-DEC-2009 17:36
Operator: RMB Instrument: MSD5.i
Sample Info: |241819006|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	36617	3.58	3.66	80-120	100	(T)
93	11584	3.54	3.66	225-285	32	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	41798	4.22	4.11	80-120	100	(T)
42	21316	4.22	4.11	27- 87	51	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	170376	5.99	5.76	80-120	100	(T)
164	964128	5.99	5.76	0- 40	566	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	126814	5.99	5.81	80-120	100	(T)
63	1462	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	126814	5.99	6.11	80-120	100	(T)
89	1861	5.99	6.11	36- 96	1	(QT)
63	1462	5.99	6.11	9- 69	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	9289	6.58	6.41	80-120	100	(T)
165	9640	6.58	6.41	62-122	104	(T)
167	3382	6.58	6.41	0- 44	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	651	6.58	6.42	80-120	100	(T)
105	1665	6.58	6.42	6- 66	256	(QT)
51	946	6.58	6.42	21- 81	145	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510613.d
Lab Smp Id: 241819006 Client Smp ID: RE03-09-14126
Inj Date : 06-DEC-2009 17:36
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819006|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	8.21600	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2604489	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.884	403175	6.19200010	225	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510613.d

Date : 06-DEC-2009 17:36

Client ID: RE03-09-14126

Sample Info: |2418190061928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

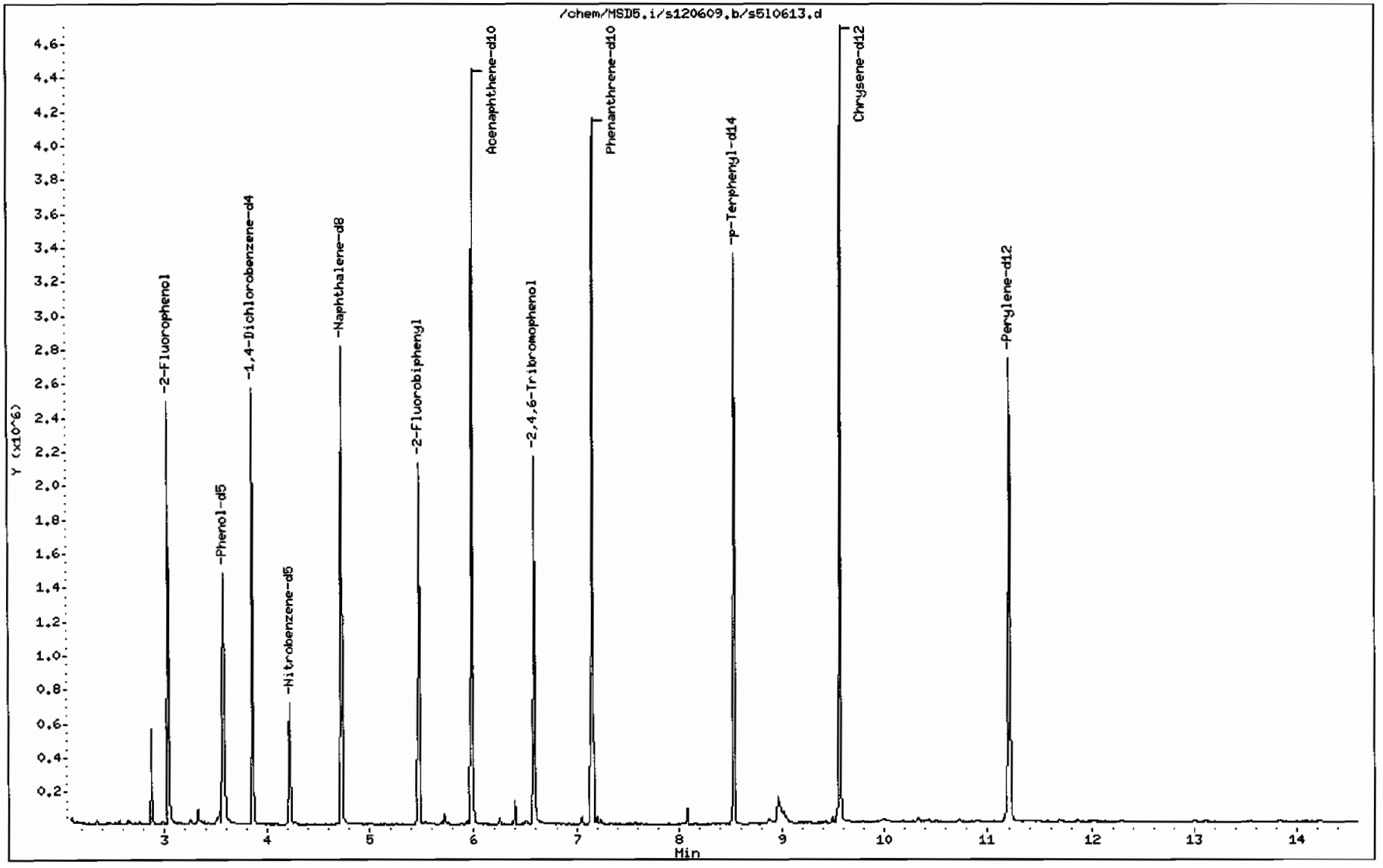

Data File: /chem/MSD5.i/s120609.b/s510613.d

Date : 06-DEC-2009 17:36

Client ID: RE03-09-14126

Instrument: MSD5.i

Sample Info: 1241819006|928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116

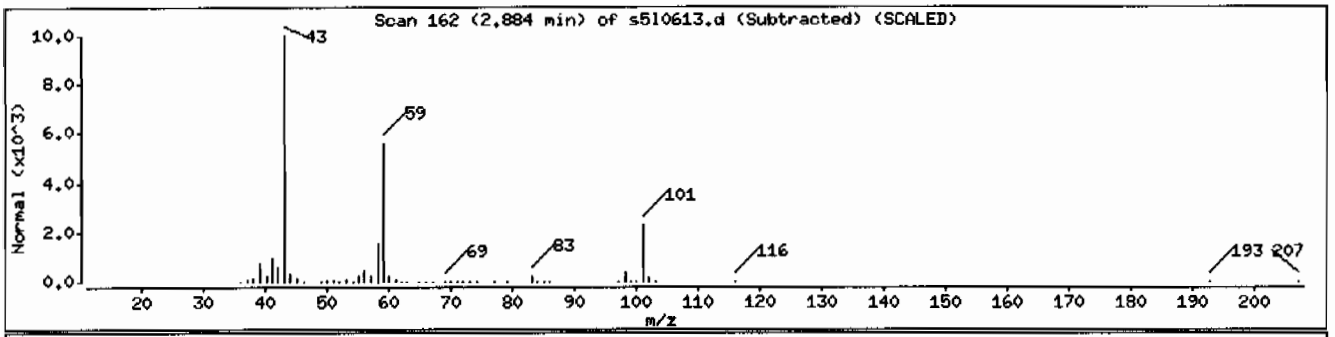

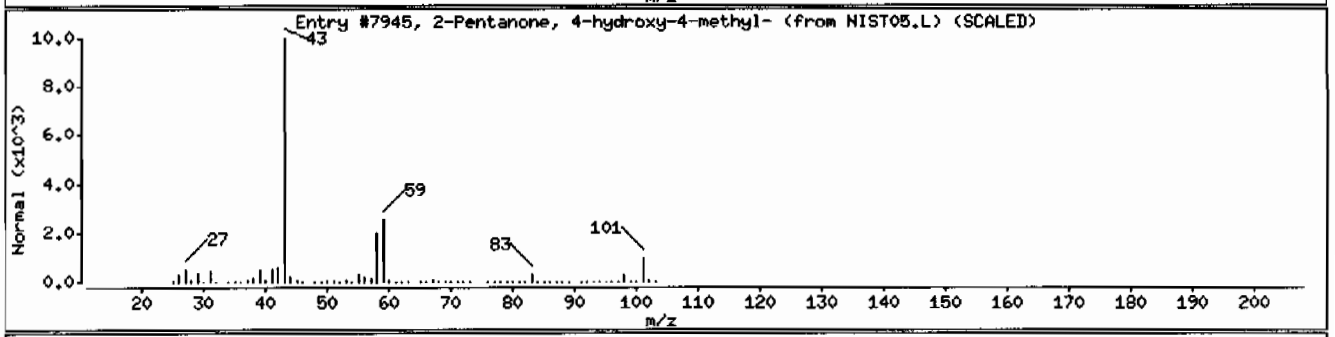

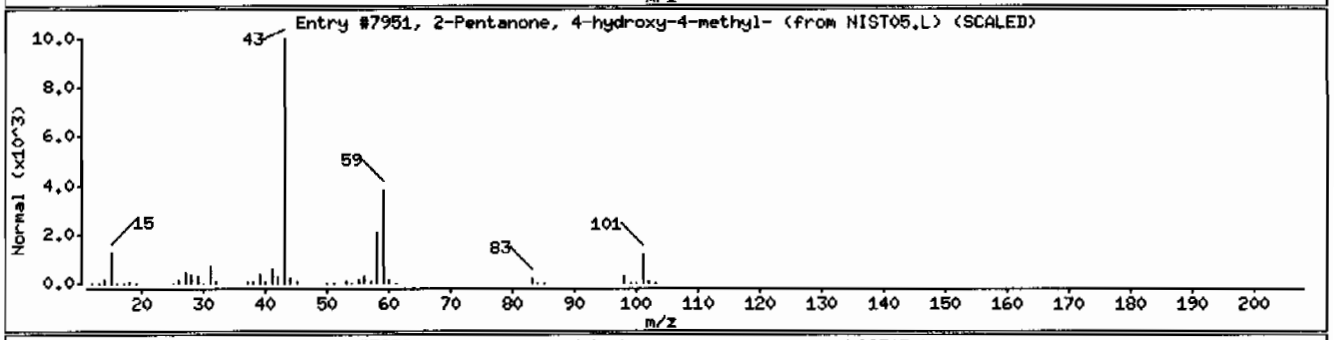

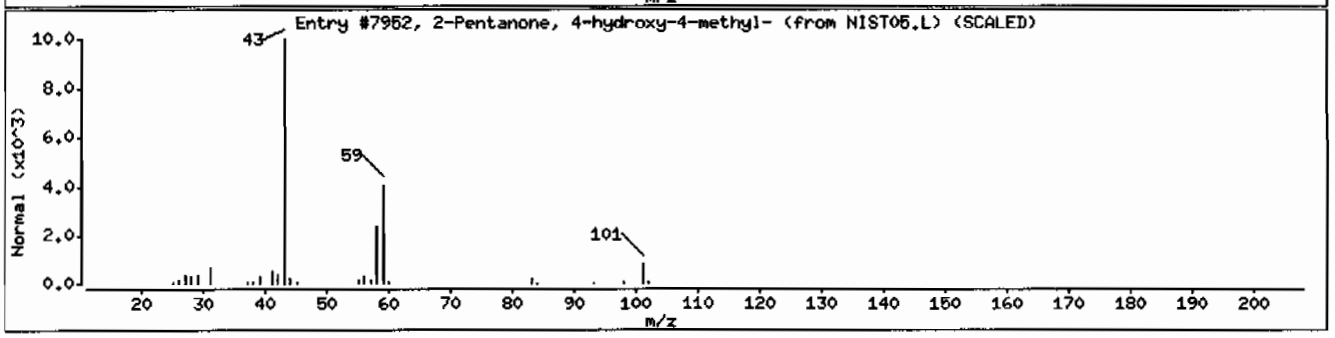

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819015	Date Received:	11/25/2009 09:10	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14127	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 21:01	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s510622.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	70.0	350
108-95-2	Phenol	U	350	ug/kg	70.0	350
95-57-8	2-Chlorophenol	U	350	ug/kg	70.0	350
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	70.0	350
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	70.0	350
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	70.0	350
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350
87-86-5	Pentachlorophenol	U	350	ug/kg	87.4	350
129-00-0	Pyrene	U	35.0	ug/kg	10.5	35.0
110-86-1	Pyridine	U	350	ug/kg	70.0	350
62-53-3	Aniline	U	350	ug/kg	105	350
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	70.0	350
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	70.0	350
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	70.0	350
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	70.0	350
95-48-7	o-Cresol	U	350	ug/kg	70.0	350
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350
67-72-1	Hexachloroethane	U	350	ug/kg	70.0	350
98-95-3	Nitrobenzene	U	350	ug/kg	70.0	350
78-59-1	Isophorone	U	350	ug/kg	70.0	350
88-75-5	2-Nitrophenol	U	350	ug/kg	70.0	350
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	70.0	350
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	70.0	350
65-85-0	Benzoic acid	U	700	ug/kg	175	700
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0
106-47-8	4-Chloroaniline	U	350	ug/kg	70.0	350
87-68-3	Hexachlorobutadiene	U	350	ug/kg	70.0	350
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	7.00	35.0
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	70.0	350
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	70.0	350
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	70.0	350
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0
88-74-4	2-Nitroaniline	U	350	ug/kg	70.0	350
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	350	ug/kg	70.0	350

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819015	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14127	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 21:01	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s510622.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	350	ug/kg	70.0	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	U	35.0	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	700	ug/kg	133	700
132-64-9	Dibenzofuran	U	350	ug/kg	70.0	350
84-66-2	Diethylphthalate	U	350	ug/kg	70.0	350
86-73-7	Fluorene	U	35.0	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	70.0	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	70.0	350
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	p-Nitroaniline					
122-39-4	Diphenylamine	U	350	ug/kg	70.0	350
122-66-7	Azobenzene	U	350	ug/kg	70.0	350
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	70.0	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	70.0	350
85-01-8	Phenanthrene	U	35.0	ug/kg	10.5	35.0
120-12-7	Anthracene	U	35.0	ug/kg	7.00	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	70.0	350
206-44-0	Fluoranthene	U	35.0	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	70.0	350
56-55-3	Benzo(a)anthracene	U	35.0	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene	U	35.0	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	70.0	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	70.0	350
205-99-2	Benzo(b)fluoranthene	U	35.0	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene	U	35.0	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.0	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene	U	35.0	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	70.0	350

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.88	219	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510622.d
Lab Smp Id: 241819015 Client Smp ID: RE03-09-14127
Inj Date : 06-DEC-2009 21:01
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819015|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	4.83030	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.866	3.872	(1.000)	415876	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1448507	40.0000	
* 46 Acenaphthene-d10	164	5.989	5.996	(1.000)	885659	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1548276	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1485157	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1401439	40.0000	
$ 3 2-Fluorophenol	112	3.054	3.054	(0.790)	551287	64.0115	2240
$ 5 Phenol-d5	99	3.578	3.584	(0.925)	653725	61.1996	2140
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	304202	32.8477	1150
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	681123	30.4423	1060
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	205450	62.7117	2190
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1036931	48.8215	1710

ION RATIO REPORT

SV REPORT

Data file: s510622.d
Report Date: 12/07/2009 07:47
Lab. ID: 241819015 SampleType: SAMPLE
Injection Date: 06-DEC-2009 21:01
Operator: RMB Instrument: MSD5.i
Sample Info: |241819015|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	38491	3.58	3.66	80-120	100	(T)
93	1063	3.54	3.66	225-285	3	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	43582	4.22	4.11	80-120	100	(T)
42	22557	4.22	4.11	27- 87	52	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	161108	5.99	5.76	80-120	100	(T)
164	885659	5.99	5.76	0- 40	550	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	119400	5.99	5.81	80-120	100	(T)
63	1390	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	119400	5.99	6.11	80-120	100	(T)
89	1785	5.99	6.11	36- 96	1	(QT)
63	1390	5.99	6.11	9- 69	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	9598	6.58	6.41	80-120	100	(T)
165	9271	6.58	6.41	62-122	97	(T)
167	3194	6.58	6.41	0- 44	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	985	6.58	6.42	80-120	100	(T)
105	1309	6.58	6.42	6- 66	133	(QT)
51	1066	6.58	6.42	21- 81	108	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510622.d
Lab Smp Id: 241819015 Client Smp ID: RE03-09-14127
Inj Date : 06-DEC-2009 21:01
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819015|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	4.83030	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.866	2448667	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.884	383904	6.27123643	219	0		0	10

Data File: /chem/MSD5.i/s120609.b/s510622.d
Date : 06-DEC-2009 21:01
Client ID: RE03-09-14127
Sample Info: 1241819015|928100|1|SVMF1|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

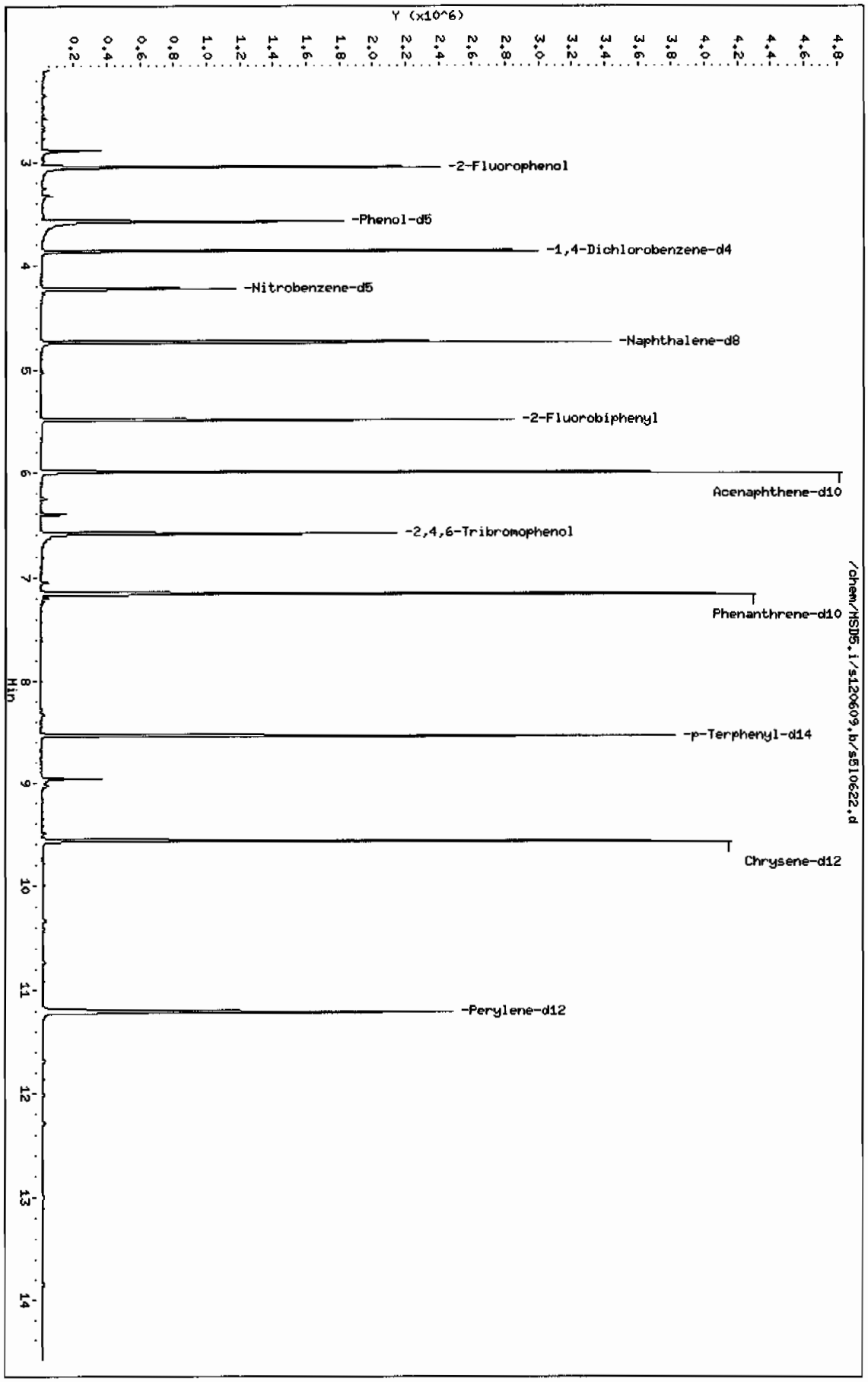

Data File: /chem/MSD5.i/s120609.b/s510622.d

Date : 06-DEC-2009 21:01

Client ID: RE03-09-14127

Instrument: MSD5.i

Sample Info: 1241819015|928100|1|SVHF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

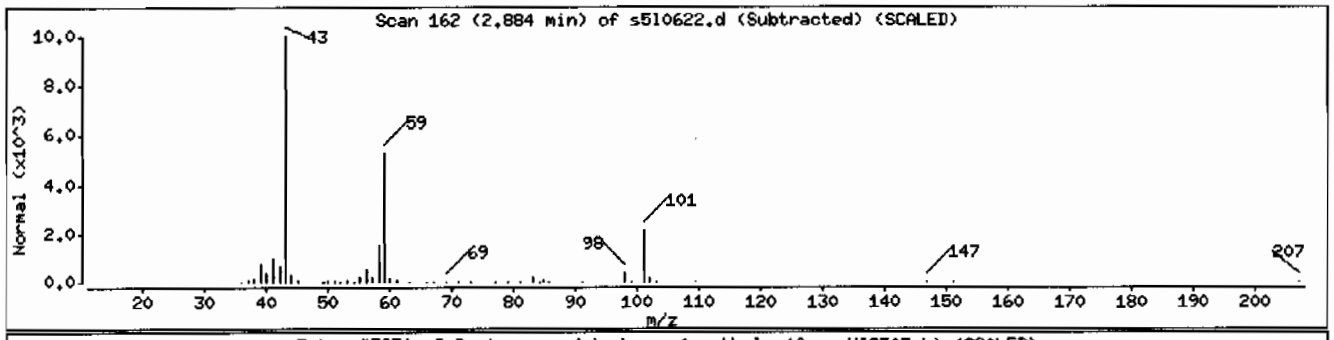

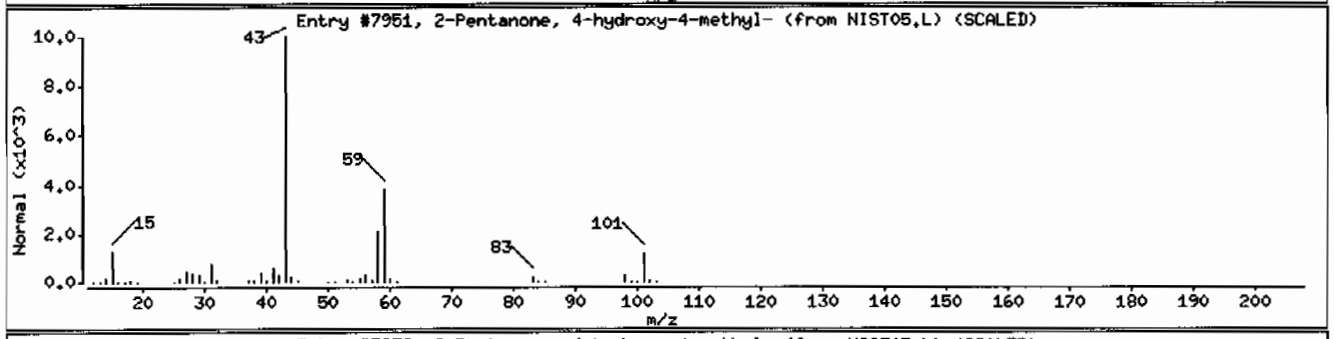

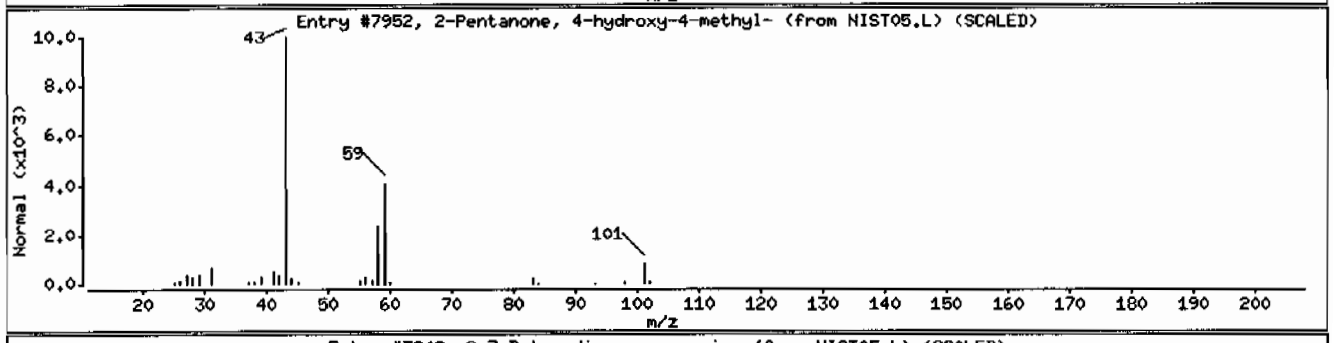

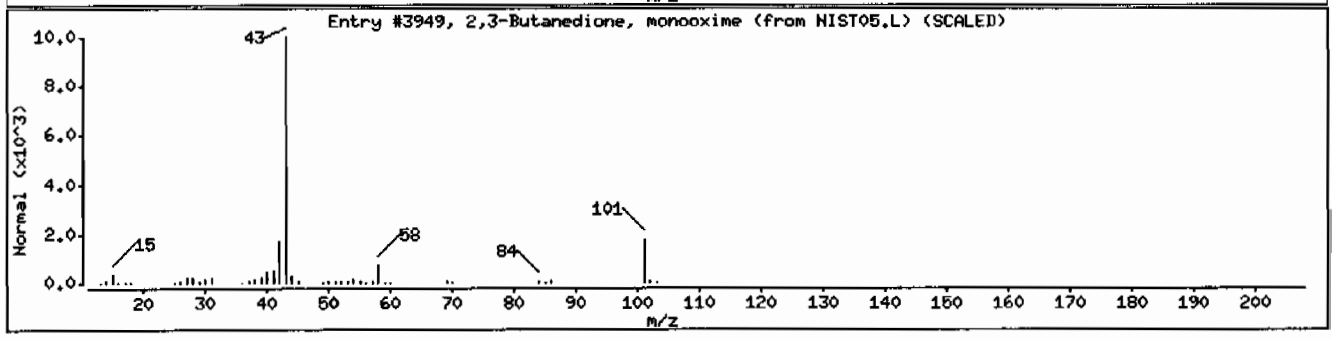

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819020	Date Received:	11/25/2009 09:10	%Moisture:	2.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14128	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.1	Dilution:	1
Run Date:	12/11/2009 15:23	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s511106.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.4	342
108-95-2	Phenol	U	342	ug/kg	68.4	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.4	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.4	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.4	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.4	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.5	342
129-00-0	Pyrene	U	34.2	ug/kg	10.3	34.2
110-86-1	Pyridine	U	342	ug/kg	68.4	342
62-53-3	Aniline	U	342	ug/kg	103	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.4	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.4	342
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.4	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.4	342
95-48-7	o-Cresol	U	342	ug/kg	68.4	342
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.4	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.4	342
78-59-1	Isophorone	U	342	ug/kg	68.4	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.4	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.4	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.4	342
65-85-0	Benzoic acid	U	684	ug/kg	171	684
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.4	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.4	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.84	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.4	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.4	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.4	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.4	342
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	342	ug/kg	68.4	342

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819020	**Date Received:**	11/25/2009 09:10	**%Moisture:**	2.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14128	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/11/2009 15:23	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	s5l1106.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	342	ug/kg	68.4	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2
51-28-5	2,4-Dinitrophenol	U	684	ug/kg	130	684
132-64-9	Dibenzofuran	U	342	ug/kg	68.4	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.4	342
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.4	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.4	342
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342
	p-Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.4	342
122-66-7	Azobenzene	U	342	ug/kg	68.4	342
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.4	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.4	342
85-01-8	Phenanthrene	U	34.2	ug/kg	10.3	34.2
120-12-7	Anthracene	U	34.2	ug/kg	6.84	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.4	342
206-44-0	Fluoranthene	U	34.2	ug/kg	10.3	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.4	342
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.3	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342
218-01-9	Chrysene	U	34.2	ug/kg	10.3	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.4	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.4	342
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.3	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.3	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.3	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.3	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.4	342

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.81	262	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121109.b/s511106.d
Lab Smp Id: 241819020 Client Smp ID: RE03-09-14128
Inj Date : 11-DEC-2009 15:23
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819020|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 07:41 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	2.78570	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.790	3.791	(1.000)	316180	40.0000	
* 29 Naphthalene-d8	136	4.654	4.658	(1.000)	1100750	40.0000	
* 46 Acenaphthene-d10	164	5.907	5.910	(1.000)	704609	40.0000	
* 67 Phenanthrene-d10	188	7.060	7.070	(1.000)	1327566	40.0000	
* 91 Chrysene-d12	240	9.460	9.468	(1.000)	1364567	40.0000	
* 98 Perylene-d12	264	11.048	11.052	(1.000)	1268674	40.0000	
$ 3 2-Fluorophenol	112	2.978	2.977	(0.786)	483092	73.7802	2520
$ 5 Phenol-d5	99	3.507	3.507	(0.926)	601461	74.0612	2530
$ 20 Nitrobenzene-d5	82	4.149	4.157	(0.891)	264286	37.5534	1280
$ 39 2-Fluorobiphenyl	172	5.396	5.399	(0.913)	593891	33.3639	1140
$ 60 2,4,6-Tribromophenol	329	6.495	6.502	(1.100)	217215	83.3394	2850
$ 81 p-Terphenyl-d14	244	8.437	8.442	(0.892)	1050864	53.8499	1840

ION RATIO REPORT

SV REPORT

Data file: s511106.d
Report Date: 12/12/2009 07:47
Lab. ID: 241819020 SampleType: SAMPLE
Injection Date: 11-DEC-2009 15:23
Operator: RMB Instrument: MSD5.i
Sample Info: |241819020|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_S|WBN091128-02
Comment:
Method used: /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	38449	3.51	3.58	80-120	100	(T)
93	3800	3.47	3.58	194-254	10	(QT)
7 bis(2-Chloroethyl) ether				CAS#: 111-44-4		
63	10626	3.78	3.59	80-120	100	(T)
93	321	3.84	3.59	148-208	3	(QT)
95	199	3.79	3.59	12- 72	2	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	37191	4.15	4.03	80-120	100	(T)
42	23987	4.15	4.03	43-103	64	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	125717	5.91	5.68	80-120	100	(T)
164	704609	5.91	5.68	0- 40	560	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	93731	5.91	5.73	80-120	100	(T)
63	1132	5.91	5.73	32- 92	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	93731	5.91	6.03	80-120	100	(T)
89	1252	5.90	6.03	39- 99	1	(QT)
63	1132	5.91	6.03	17- 77	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	9550	6.50	6.31	80-120	100	(T)
165	10007	6.50	6.31	61-121	105	(T)
167	3543	6.50	6.31	0- 44	37	(T)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	959	6.50	6.33	80-120	100	(T)
105	1614	6.50	6.33	7- 67	168	(QT)
51	1208	6.50	6.33	14- 74	126	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	14293	6.50	6.68	80-120	100	(T)
141	86207	6.50	6.68	37- 97	603	(QT)
250	27666	6.50	6.68	68-128	194	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121109.b/s511106.d
Lab Smp Id: 241819020 Client Smp ID: RE03-09-14128
Inj Date : 11-DEC-2009 15:23
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819020|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 07:41 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	2.78570	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.790	1942902	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.807	372440	7.66769656	262	0		0	10

Data File: /chem/MSD5.i/s121109.b/s511106.d
Date : 11-DEC-2009 15:23
Client ID: RE03-09-14128
Sample Info: 12418190201928100111SVMF111LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

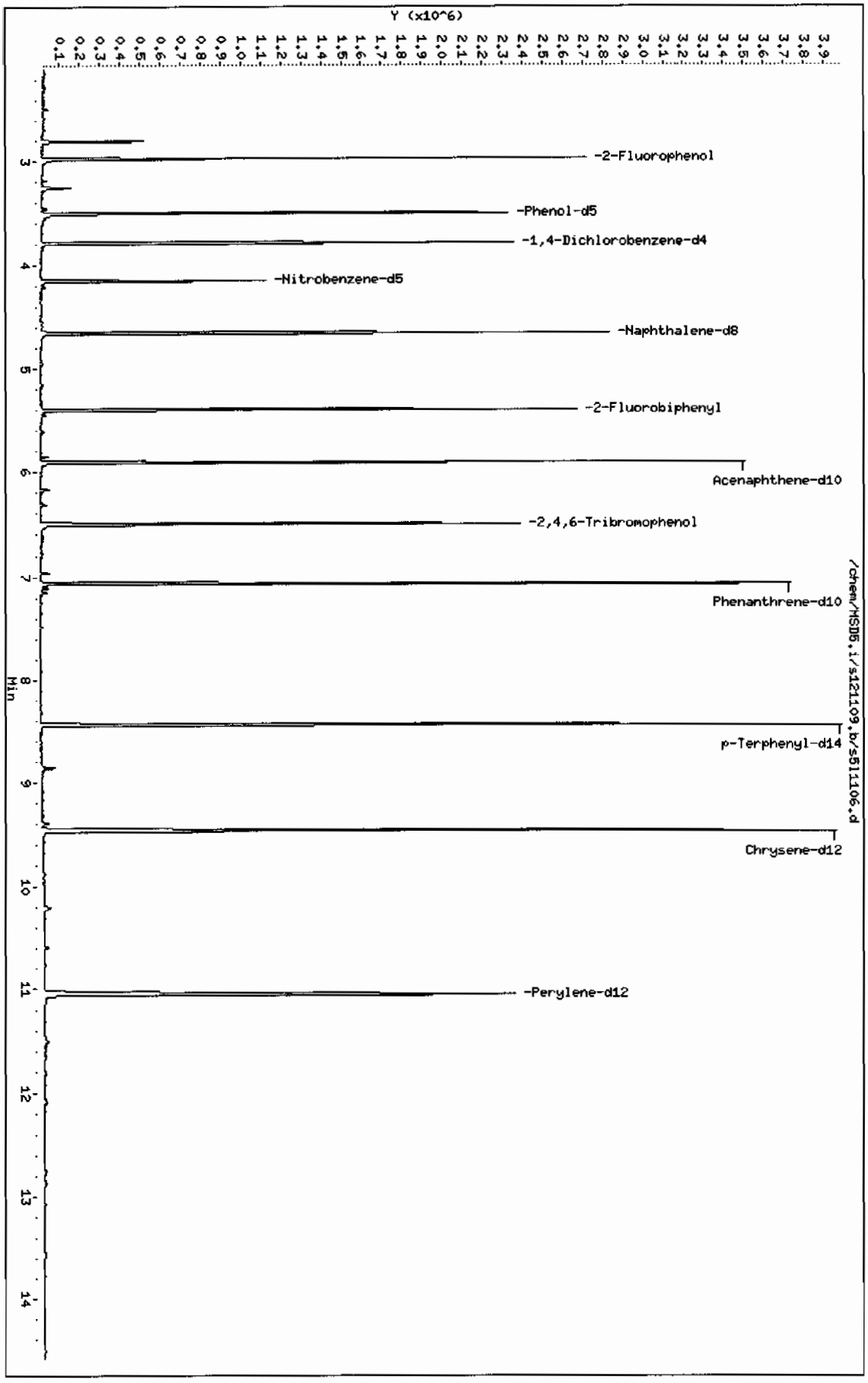

Page 1

Data File: /chem/MSD5.i/s121109.b/s511106.d

Date : 11-DEC-2009 15:23

Client ID: RE03-09-14128

Instrument: MSD5.i

Sample Info: |2418190201928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101

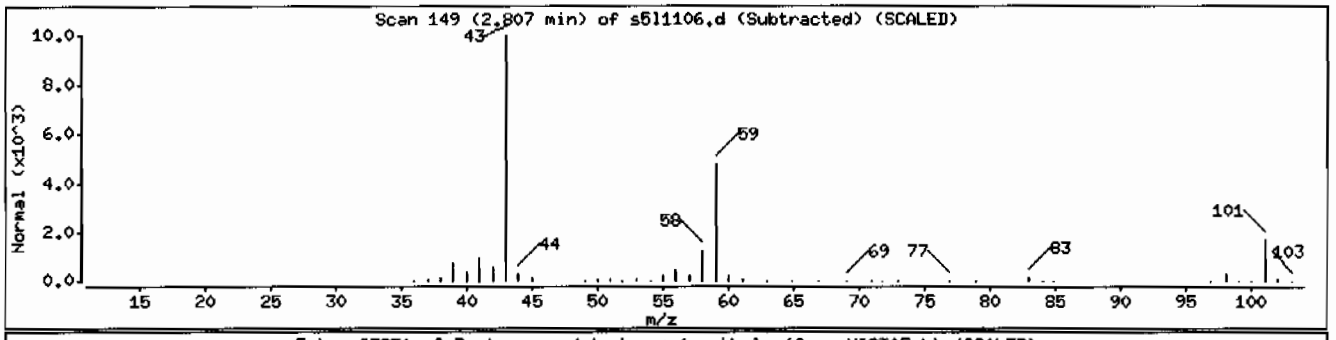

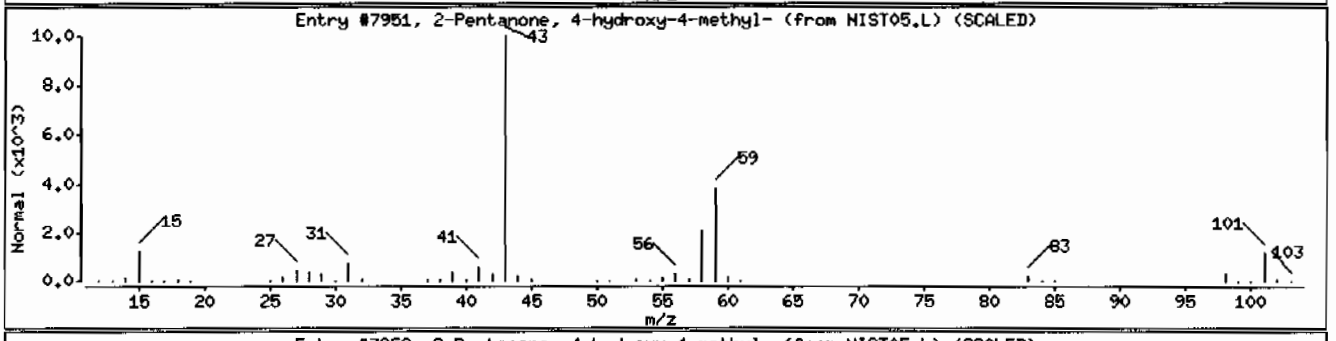

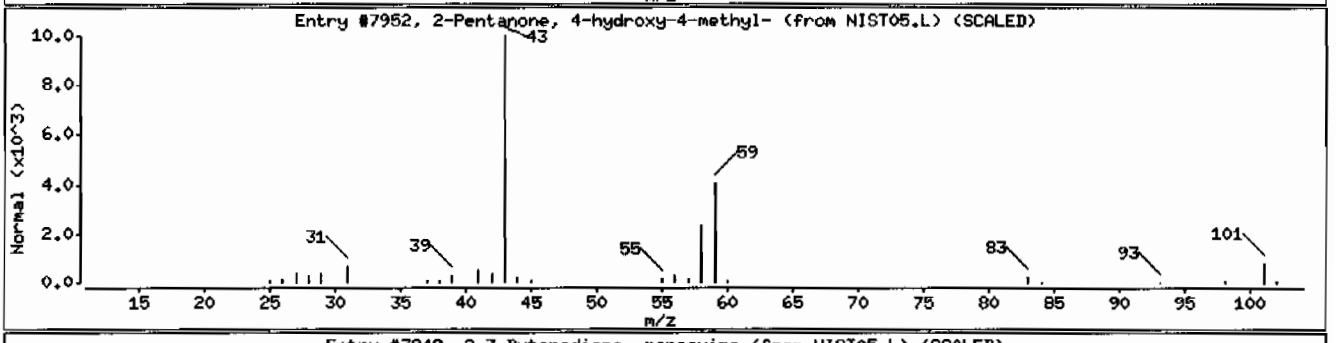

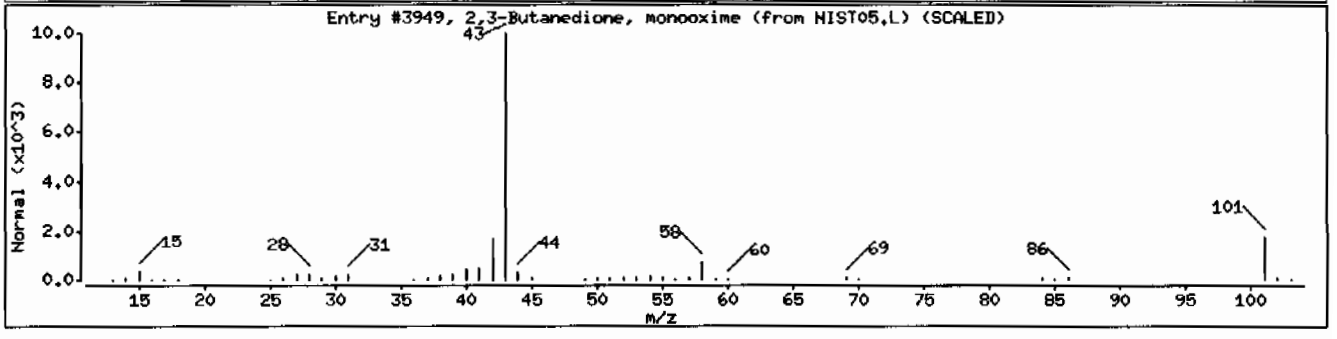

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819009**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14129**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 18:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0616.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	338	ug/kg	67.6	338
108-95-2	Phenol	U	338	ug/kg	67.6	338
95-57-8	2-Chlorophenol	U	338	ug/kg	67.6	338
106-46-7	1,4-Dichlorobenzene	U	338	ug/kg	67.6	338
621-64-7	N-Nitrosodipropylamine	U	338	ug/kg	67.6	338
59-50-7	4-Chloro-3-methylphenol	U	338	ug/kg	67.6	338
83-32-9	Acenaphthene	U	33.8	ug/kg	11.1	33.8
121-14-2	2,4-Dinitrotoluene	U	338	ug/kg	33.8	338
100-02-7	4-Nitrophenol	U	338	ug/kg	111	338
87-86-5	Pentachlorophenol	U	338	ug/kg	84.4	338
129-00-0	Pyrene	U	33.8	ug/kg	10.1	33.8
110-86-1	Pyridine	U	338	ug/kg	67.6	338
62-53-3	Aniline	U	338	ug/kg	101	338
111-44-4	bis(2-Chloroethyl) ether	U	338	ug/kg	67.6	338
541-73-1	1,3-Dichlorobenzene	U	338	ug/kg	67.6	338
100-51-6	Benzyl alcohol	U	338	ug/kg	101	338
95-50-1	1,2-Dichlorobenzene	U	338	ug/kg	67.6	338
108-60-1	bis(2-Chloroisopropyl)ether	U	338	ug/kg	67.6	338
95-48-7	o-Cresol	U	338	ug/kg	67.6	338
65794-96-9	m,p-Cresols	U	338	ug/kg	101	338
67-72-1	Hexachloroethane	U	338	ug/kg	67.6	338
98-95-3	Nitrobenzene	U	338	ug/kg	67.6	338
78-59-1	Isophorone	U	338	ug/kg	67.6	338
88-75-5	2-Nitrophenol	U	338	ug/kg	67.6	338
105-67-9	2,4-Dimethylphenol	U	338	ug/kg	118	338
111-91-1	bis(2-Chloroethoxy)methane	U	338	ug/kg	67.6	338
120-83-2	2,4-Dichlorophenol	U	338	ug/kg	67.6	338
65-85-0	Benzoic acid	U	676	ug/kg	169	676
91-20-3	Naphthalene	U	33.8	ug/kg	10.1	33.8
106-47-8	4-Chloroaniline	U	338	ug/kg	67.6	338
87-68-3	Hexachlorobutadiene	U	338	ug/kg	67.6	338
91-57-6	2-Methylnaphthalene	U	33.8	ug/kg	6.76	33.8
77-47-4	Hexachlorocyclopentadiene	U	338	ug/kg	67.6	338
88-06-2	2,4,6-Trichlorophenol	U	338	ug/kg	67.6	338
95-95-4	2,4,5-Trichlorophenol	U	338	ug/kg	67.6	338
91-58-7	2-Chloronaphthalene	U	33.8	ug/kg	11.1	33.8
88-74-4	2-Nitroaniline	U	338	ug/kg	67.6	338
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	338	ug/kg	67.6	338

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819009	Date Received:	11/25/2009 09:10	%Moisture:	1.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14129	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 18:45	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	s510616.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	338	ug/kg	67.6	338
606-20-2	2,6-Dinitrotoluene	U	338	ug/kg	33.8	338
208-96-8	Acenaphthylene	U	33.8	ug/kg	10.1	33.8
51-28-5	2,4-Dinitrophenol	U	676	ug/kg	128	676
132-64-9	Dibenzofuran	U	338	ug/kg	67.6	338
84-66-2	Diethylphthalate	U	338	ug/kg	67.6	338
86-73-7	Fluorene	U	33.8	ug/kg	10.1	33.8
7005-72-3	4-Chlorophenylphenylether	U	338	ug/kg	67.6	338
534-52-1	2-Methyl-4,6-dinitrophenol	U	338	ug/kg	67.6	338
100-01-6	4-Nitroaniline	U	338	ug/kg	101	338
	p-Nitroaniline					
122-39-4	Diphenylamine	U	338	ug/kg	67.6	338
122-66-7	Azobenzene	U	338	ug/kg	67.6	338
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	338	ug/kg	67.6	338
118-74-1	Hexachlorobenzene	U	338	ug/kg	67.6	338
85-01-8	Phenanthrene	U	33.8	ug/kg	10.1	33.8
120-12-7	Anthracene	U	33.8	ug/kg	6.76	33.8
84-74-2	Di-n-butylphthalate	U	338	ug/kg	67.6	338
206-44-0	Fluoranthene	U	33.8	ug/kg	10.1	33.8
85-68-7	Butylbenzylphthalate	U	338	ug/kg	67.6	338
56-55-3	Benzo(a)anthracene	U	33.8	ug/kg	10.1	33.8
91-94-1	3,3'-Dichlorobenzidine	U	338	ug/kg	101	338
218-01-9	Chrysene	U	33.8	ug/kg	10.1	33.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	338	ug/kg	67.6	338
117-84-0	Di-n-octylphthalate	U	338	ug/kg	67.6	338
205-99-2	Benzo(b)fluoranthene	U	33.8	ug/kg	10.1	33.8
207-08-9	Benzo(k)fluoranthene	U	33.8	ug/kg	10.1	33.8
50-32-8	Benzo(a)pyrene	U	33.8	ug/kg	10.1	33.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.8	ug/kg	10.1	33.8
53-70-3	Dibenzo(a,h)anthracene	U	33.8	ug/kg	10.1	33.8
191-24-2	Benzo(ghi)perylene	U	33.8	ug/kg	10.1	33.8
120-82-1	1,2,4-Trichlorobenzene	U	338	ug/kg	67.6	338

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	176	ug/kg		J
	Unknown Aldol Condensate	2.88	253	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819009	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14129	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928100	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/06/2009 18:45	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 09:26	**Aliquot:**	30.06 g	**Final Volume:**	1 mL
Data File:	s510616.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
60-33-3	9,12-Octadecadienoic acid (Z,Z)-	8.18	190	ug/kg	98	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510616.d
Lab Smp Id: 241819009 Client Smp ID: RE03-09-14129
Inj Date : 06-DEC-2009 18:45
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819009|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	1.50880	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	466179	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1602084	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	972628	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1717274	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1712559	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1534774	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	627857	65.0357	2200
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	750544	62.6818	2120
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	350078	34.1777	1150
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	834257	33.9525	1150
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	231801	64.4284	2180
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	1021103	41.6924	1410

ION RATIO REPORT

SV REPORT

Data file: s510616.d
Report Date: 12/07/2009 07:45
Lab. ID: 241819009 SampleType: SAMPLE
Injection Date: 06-DEC-2009 18:45
Operator: RMB Instrument: MSD5.i
Sample Info: |241819009|928100|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091128-02|
Comment:
Method used: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-666
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	43890	3.58	3.66	80-120	100	(T)
93	277	3.54	3.66	225-285	1	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	54528	4.23	4.11	80-120	100	(T)
42	26887	4.23	4.11	27- 87	49	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	176067	5.99	5.76	80-120	100	(T)
164	972628	5.99	5.76	0- 40	552	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	130584	5.99	5.81	80-120	100	(T)
63	1400	5.99	5.81	39- 99	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	130584	5.99	6.11	80-120	100	(T)
89	2031	5.99	6.11	36- 96	2	(QT)
63	1400	5.99	6.11	9- 69	1	(QT)
53 Fluorene		CAS#: 86-73-7				
166	11490	6.58	6.41	80-120	100	(T)
165	11162	6.58	6.41	62-122	97	(T)
167	3669	6.58	6.41	0- 44	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	942	6.58	6.42	80-120	100	(T)
105	1786	6.58	6.42	6- 66	190	(QT)
51	909	6.58	6.42	21- 81	97	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510616.d
Lab Smp Id: 241819009 Client Smp ID: RE03-09-14129
Inj Date : 06-DEC-2009 18:45
Operator : RMB Inst ID: MSD5.i
Smp Info : |241819009|928100|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	1.50880	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2733115	40.000
* 67 Phenanthrene-d10	7.160	4229786	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.984	356394	5.21594465	176	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.884	512326	7.49804703	253	0		0	10
9,12-Octadecadienoic acid (Z,Z)-				CAS #: 60-33-3			
8.178	593862	5.61600151	190	98	NIST05.L	111993	67

Data File: /chem/MSD5.i/s120609.b/s510616.d

Date : 06-DEC-2009 18:45

Client ID: RE03-09-14129

Sample Info: |2418190091928100|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

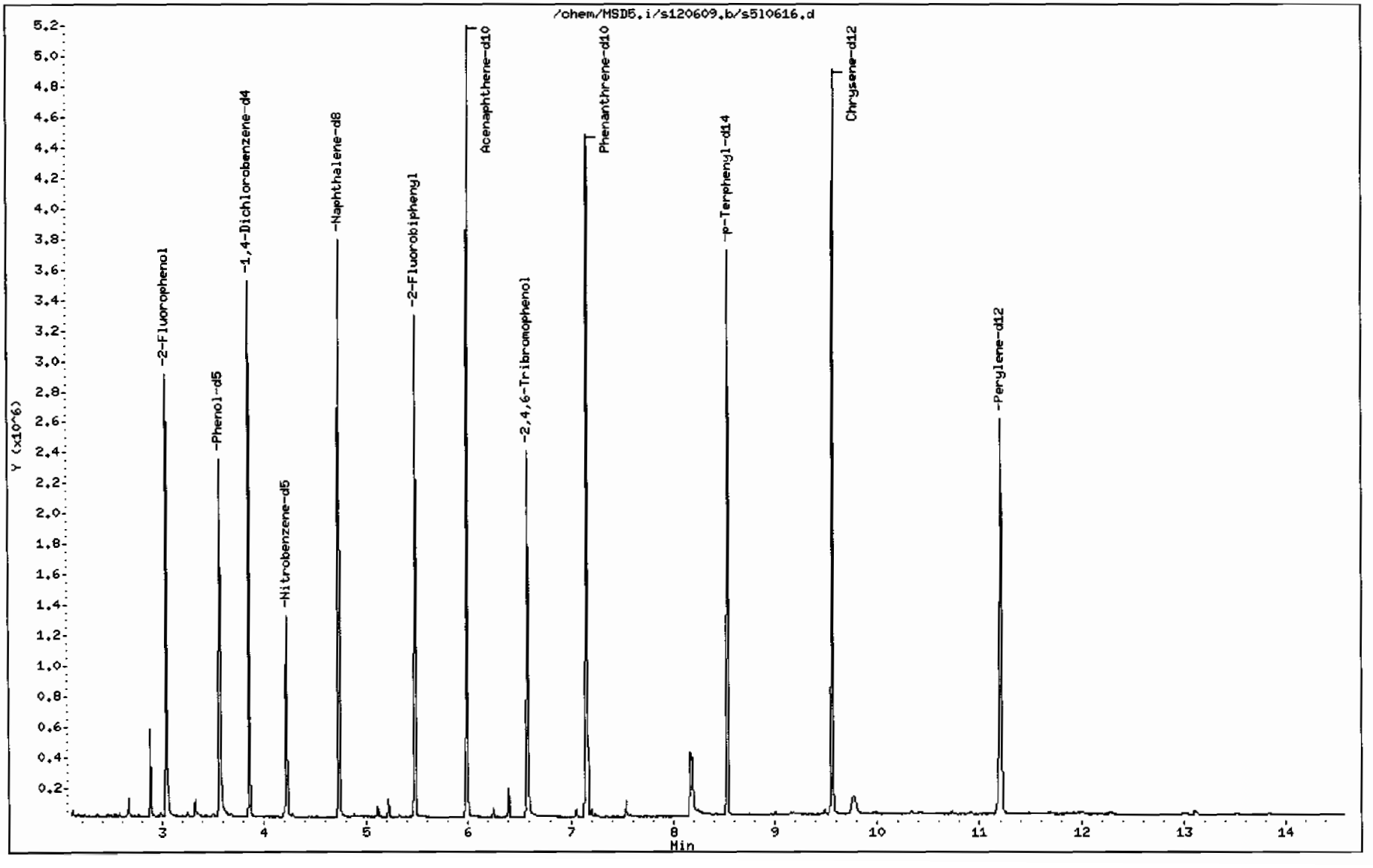

Data File: /chem/MSD5.i/s120609.b/s510616.d

Date : 06-DEC-2009 18:45

Client ID: RE03-09-14129 Instrument: MSD5.i

Sample Info: 1241819009192810011ISVHF11LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	39	C5H12O2	104

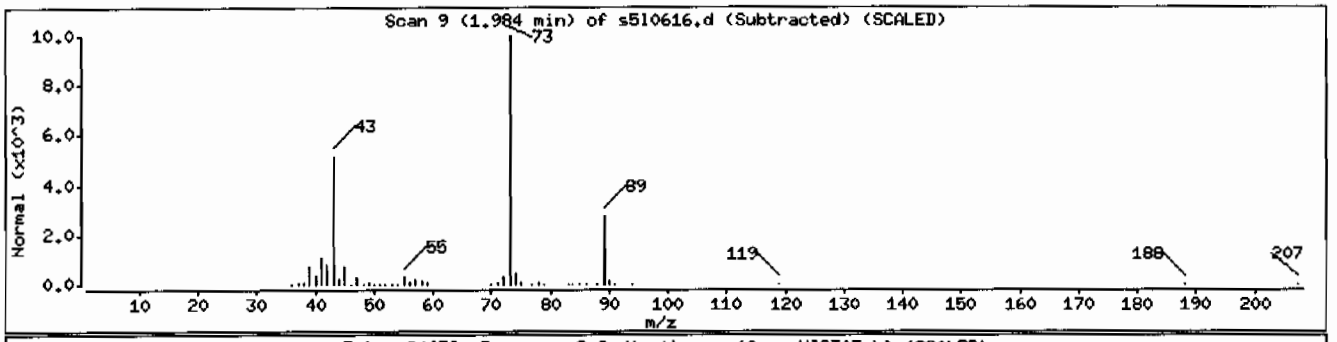

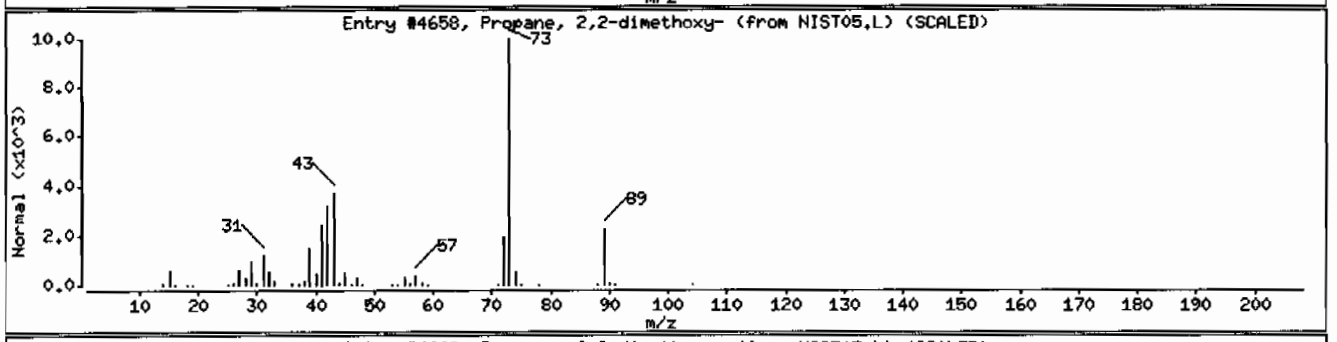

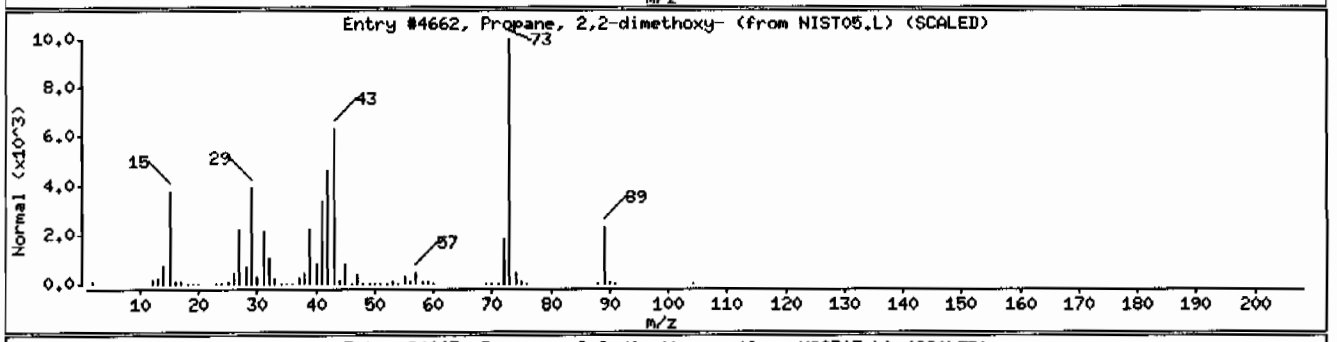

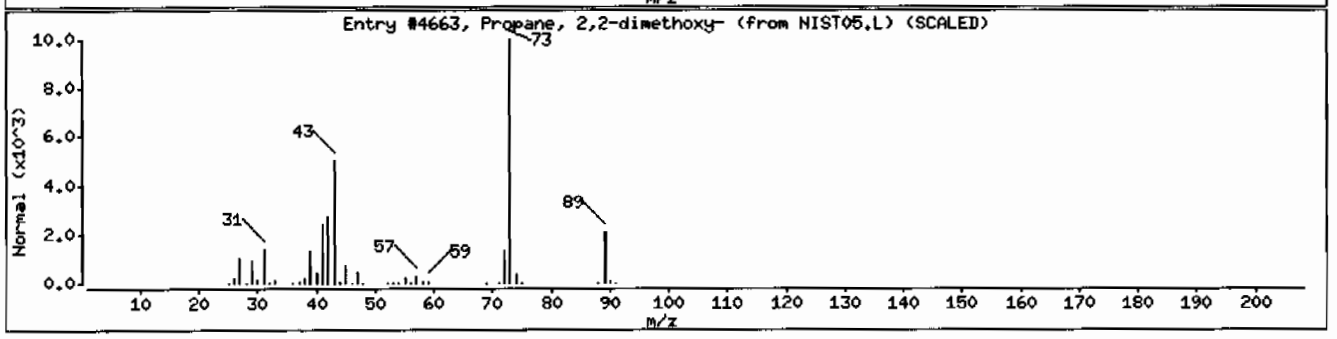

Data File: /chem/MSD5.i/s120609.b/s510616.d

Date : 06-DEC-2009 18:45

Client ID: RE03-09-14129 Instrument: MSD5.i

Sample Info: |2418190091928100|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: RHB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

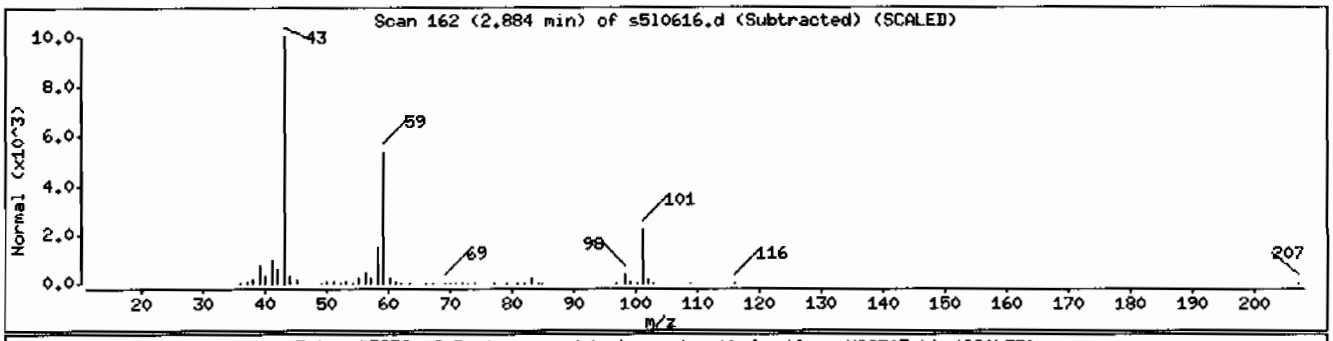

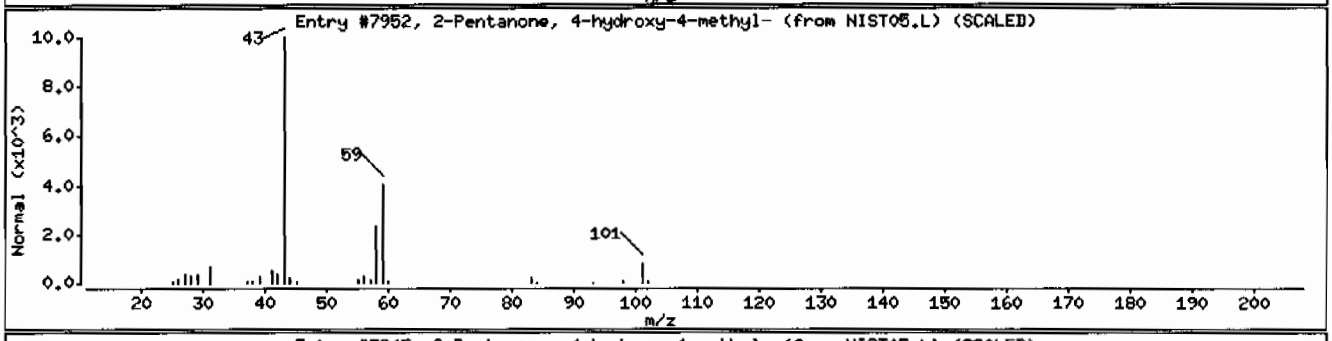

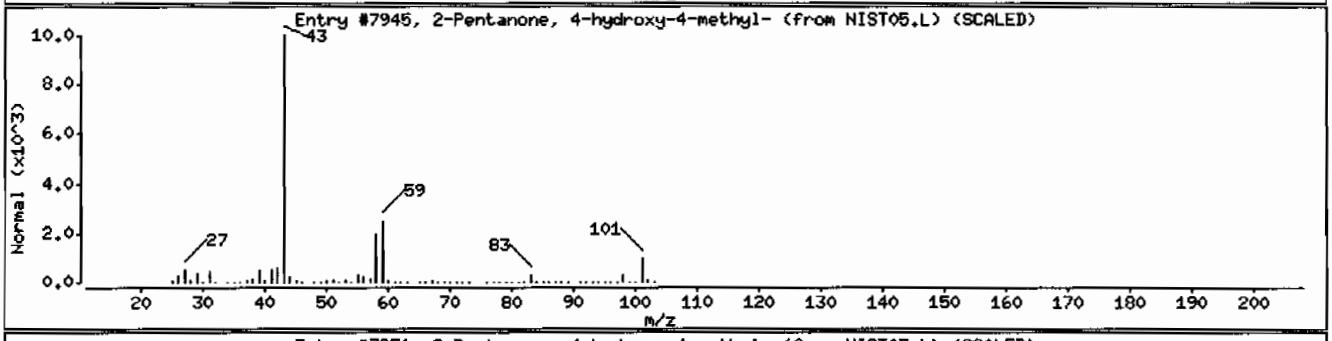

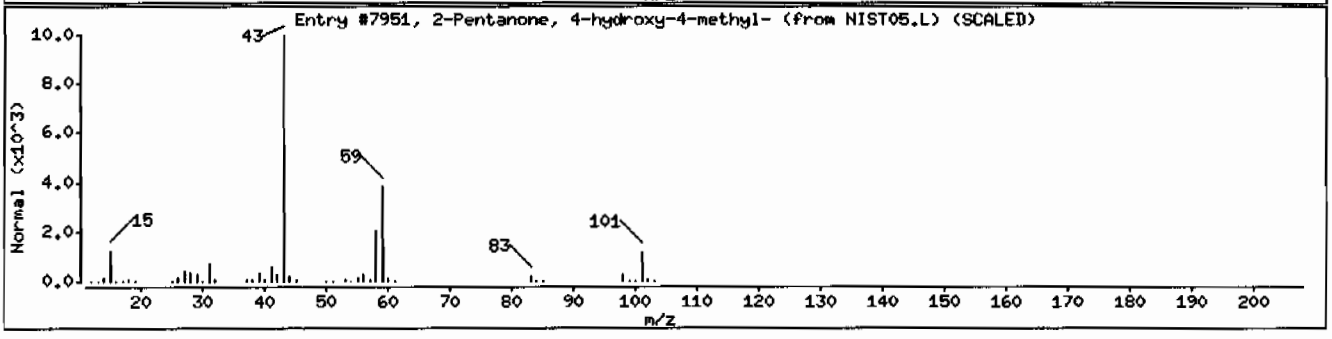

Data File: /chem/MSD5.i/s120609.b/s510616.d

Date : 06-DEC-2009 18:45

Client ID: RE03-09-14129 Instrument: MSD5.i

Sample Info: |2418190091928100|1|SVHF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9,12-Octadecadienoic acid (Z,Z)-	60-33-3	NIST05.L	111993	98	C18H3202	280
9-Octadecenoic acid, (E)-	112-79-8	NIST05.L	113360	95	C18H3402	282
9-Octadecenoic acid, (E)-	112-79-8	NIST05.L	113363	94	C18H3402	282

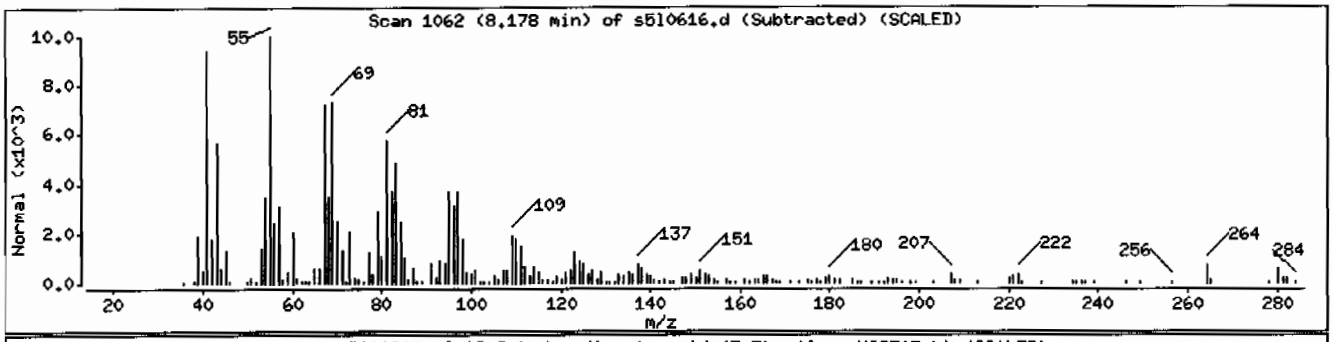

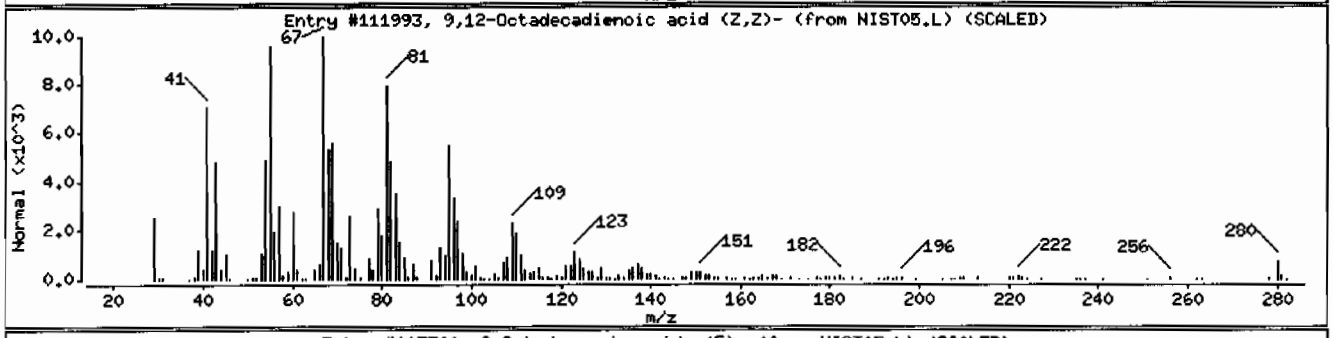

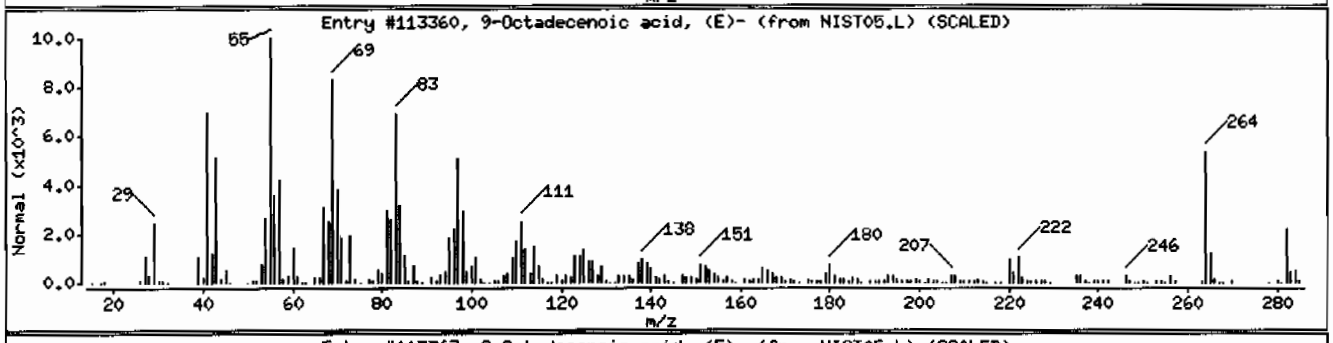

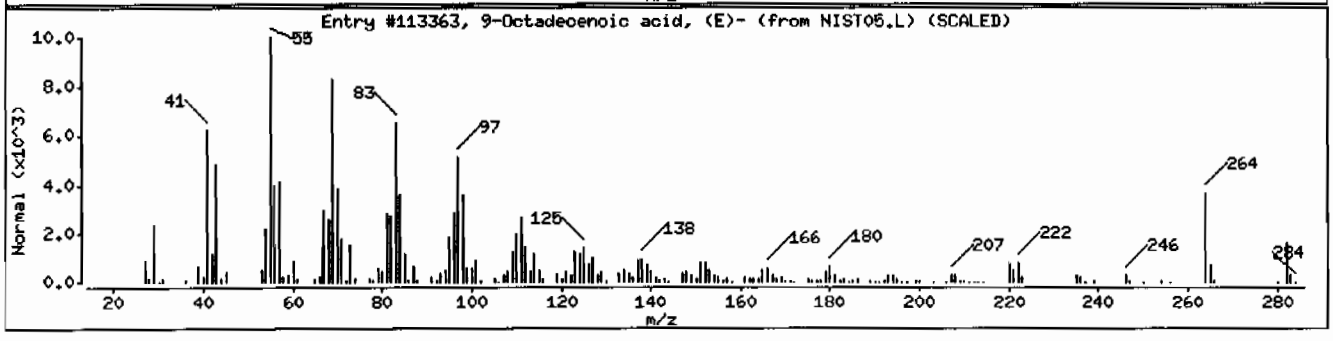

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 06-Dec-2009 11:30

Calibration History

Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Start Cal Date: 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
30-NOV-2009 14:09	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3014.d
Cal Level: 2 , Cal Amount: 10.00000		
01-DEC-2009 12:54	hex	/chem/MSD5.i/s113009.b/s5k3048.d
01-DEC-2009 10:15	pest	/chem/MSD5.i/s113009.b/s5k3041.d
30-NOV-2009 21:28	nev	/chem/MSD5.i/s113009.b/s5k3031.d
30-NOV-2009 18:48	ap12	/chem/MSD5.i/s113009.b/s5k3024.d
30-NOV-2009 14:38	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3015.d
Cal Level: 3 , Cal Amount: 20.00000		
01-DEC-2009 13:18	hex	/chem/MSD5.i/s113009.b/s5k3049.d
01-DEC-2009 10:38	pest	/chem/MSD5.i/s113009.b/s5k3042.d
30-NOV-2009 21:51	nev	/chem/MSD5.i/s113009.b/s5k3032.d
30-NOV-2009 19:10	ap12	/chem/MSD5.i/s113009.b/s5k3025.d
30-NOV-2009 15:06	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3016.d
Cal Level: 4 , Cal Amount: 40.00000		
01-DEC-2009 13:41	hex	/chem/MSD5.i/s113009.b/s5k3050.d
01-DEC-2009 11:00	pest	/chem/MSD5.i/s113009.b/s5k3043.d
30-NOV-2009 22:14	nev	/chem/MSD5.i/s113009.b/s5k3033.d
30-NOV-2009 19:34	ap12	/chem/MSD5.i/s113009.b/s5k3026.d
30-NOV-2009 15:34	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3017.d
Cal Level: 5 , Cal Amount: 50.00000		
01-DEC-2009 14:03	hex	/chem/MSD5.i/s113009.b/s5k3051.d
01-DEC-2009 11:23	pest	/chem/MSD5.i/s113009.b/s5k3044.d
30-NOV-2009 22:38	nev	/chem/MSD5.i/s113009.b/s5k3034.d
30-NOV-2009 19:57	ap12	/chem/MSD5.i/s113009.b/s5k3027.d
30-NOV-2009 16:02	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3018.d
Cal Level: 6 , Cal Amount: 80.00000		
01-DEC-2009 14:25	hex	/chem/MSD5.i/s113009.b/s5k3052.d
01-DEC-2009 11:46	pest	/chem/MSD5.i/s113009.b/s5k3045.d
30-NOV-2009 23:01	nev	/chem/MSD5.i/s113009.b/s5k3035.d
30-NOV-2009 20:20	ap12	/chem/MSD5.i/s113009.b/s5k3028.d
30-NOV-2009 16:31	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3019.d
Cal Level: 7 , Cal Amount: 100.00000		

01-DEC-2009 14:48	hex	/chem/MSD5.i/s113009.b/s5k3053.d
01-DEC-2009 12:09	pest	/chem/MSD5.i/s113009.b/s5k3046.d
30-NOV-2009 23:23	nev	/chem/MSD5.i/s113009.b/s5k3036.d
30-NOV-2009 20:42	ap12	/chem/MSD5.i/s113009.b/s5k3029.d
30-NOV-2009 16:59	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3020.d

Cal Level: 8 , Cal Amount: 120.00000

01-DEC-2009 12:32	pest	/chem/MSD5.i/s113009.b/s5k3047.d
30-NOV-2009 23:46	nev	/chem/MSD5.i/s113009.b/s5k3037.d
30-NOV-2009 21:05	ap12	/chem/MSD5.i/s113009.b/s5k3030.d
30-NOV-2009 17:28	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3021.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

06-DEC-2009 09:44	MEGAIICARE	/chem/MSD5.i/s120609.b/s510602.d

Ccal Level: 4 , Ccal Amount: 40.0

06-DEC-2009 10:12	ap12	/chem/MSD5.i/s120609.b/s510603.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Calibration File Names:
Level 1: /chem/MSD5.i/s113009.b/s5k3014.d
Level 2: /chem/MSD5.i/s113009.b/s5k3048.d
Level 3: /chem/MSD5.i/s113009.b/s5k3049.d
Level 4: /chem/MSD5.i/s113009.b/s5k3050.d
Level 5: /chem/MSD5.i/s113009.b/s5k3051.d
Level 6: /chem/MSD5.i/s113009.b/s5k3052.d
Level 7: /chem/MSD5.i/s113009.b/s5k3053.d
Level 8: /chem/MSD5.i/s113009.b/s5k3047.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.43200	0.48159	0.46738	0.44822	0.47531					
	0.43671	0.47324					AVRG		0.45921		4.34760
2 Pyridine	+++++	0.63985	0.64672	0.62506	0.69334	0.71690					
	0.67003	0.56775					AVRG		0.65138		7.47986
4 Aniline	+++++	0.38715	0.40911	0.40667	0.39891	0.39925					
	0.39855	0.40838					AVRG		0.40115		1.92425
209 Benzaldehyde	+++++	0.75175	0.80370	+++++	+++++	0.73680					
	0.71705	0.69889					AVRG		0.74164		5.39700
6 Phenol	+++++	0.99962	1.09329	1.11449	1.08724	1.08038					
	1.05465	1.08077					AVRG		1.07292		3.43976

GEL Laboratories LLC

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Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.59944	0.61498	0.62541	0.67247	0.65894	0.63803					
	0.62832	0.63351					AVRG		0.63389		3.66603
8 2-Chlorophenol	+++++	0.87217	0.92912	0.93403	0.92801	0.92624					
	0.91350	0.93801					AVRG		0.92015		2.44524
203 n-Decane	+++++	0.88013	0.89146	0.85550	0.84815	0.81672					
	0.77891	0.76359					AVRG		0.83349		5.87400
9 1,3-Dichlorobenzene	+++++	1.09685	1.13817	1.12405	1.11357	1.09144					
	1.06829	1.08058					AVRG		1.10185		2.24200
11 1,4-Dichlorobenzene	+++++	1.11385	1.14638	1.14426	1.12409	1.10651					
	1.09004	1.10462					AVRG		1.11854		1.87546
12 Benzyl alcohol	+++++	0.51602	0.57510	0.61563	0.58809	0.58621					
	0.58334	0.59941					AVRG		0.58054		5.39098
13 1,2-Dichlorobenzene	+++++	1.04255	1.08183	1.08505	1.06637	1.06273					
	1.03252	1.03867					AVRG		1.05853		1.98597
14 bis(2-Chloroisopropyl)ether	+++++	1.03868	1.06626	1.05750	1.03794	0.97107					
	0.95293	0.92855					AVRG		1.00756		5.49466
15 o-Cresol	+++++	0.69067	0.73824	0.77014	0.74119	0.73428					
	0.72745	0.73902					AVRG		0.73443		3.20276

GEL Laboratories LLC

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Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	0.99878	1.06200	+++++	+++++	1.04834					
	1.01728	1.04524					AVRG		1.03433		2.48185
17 N-Nitrosodipropylamine	0.39105	0.46274	0.53774	0.54714	0.48085	0.50719					
	0.46219	0.47357					AVRG		0.48281		10.23361
18 m,p-Cresols	+++++	0.87022	0.92832	0.99766	0.95002	0.92840					
	0.92726	0.94238					AVRG		0.93489		4.03823
19 Hexachloroethane	+++++	0.38940	0.41936	0.42131	0.41952	0.41531					
	0.40832	0.41760					AVRG		0.41297		2.72046
21 Nitrobenzene	+++++	0.24845	0.26680	0.25685	0.24412	0.23043					
	0.21217	0.20803					AVRG		0.23812		9.31912
22 Isophorone	+++++	0.45816	0.49226	0.49029	0.45241	0.41992					
	0.39415	0.38838					AVRG		0.44222		9.62880
23 2-Nitrophenol	+++++	0.11547	0.14223	0.13108	0.12558	0.12127					
	0.11523	0.11724					AVRG		0.12401		7.98047
24 2,4-Dimethylphenol	+++++	0.21966	0.23281	0.23194	0.21573	0.20764					
	0.19429	0.19541					AVRG		0.21392		7.35461
25 bis(2-Chloroethoxy)methane	+++++	0.25854	0.27287	0.27115	0.25218	0.23628					
	0.22333	0.21759					AVRG		0.24742		8.96356

GEL Laboratories LLC

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Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19659	0.21717	0.21714	0.20372	0.19511					
	0.18313	0.18359					AVRG		0.19949		7.05929
27 Benzoic acid	+++++	+++++	0.09002	0.11803	0.10197	0.11586					
	0.10794	0.12814					AVRG		0.11033		12.12819
28 1,2,4-Trichlorobenzene	+++++	0.26481	0.27523	0.26908	0.25466	0.24111					
	0.22459	0.22030					AVRG		0.24997		8.71723
30 Naphthalene	0.81705	0.74573	0.76657	0.72847	0.68863	0.63949					
	0.59297	0.55942					AVRG		0.69229		12.86965
204 alpha-Terpineol	+++++	0.17262	0.18143	0.17832	0.16468	0.15346					
	0.14288	0.13778					AVRG		0.16160		10.68187
31 4-Chloroaniline	+++++	0.26766	0.22783	0.30909	0.29015	0.28897					
	0.27710	0.27967					AVRG		0.27721		9.14686
189 Caprolactam	+++++	0.06063	0.07077	+++++	+++++	0.07699					
	0.07770	0.07957					AVRG		0.07313		10.57301
32 Hexachlorobutadiene	+++++	0.16663	0.17799	0.17401	0.16606	0.15880					
	0.14863	0.14597					AVRG		0.16258		7.45567
33 4-Chloro-3-methylphenol	+++++	0.19010	0.21662	0.21855	0.20067	0.19059					
	0.18078	0.17853					AVRG		0.19655		8.18892

GEL Laboratories LLC

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Quant Method : ISTD
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Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.51678	0.50700	0.52401	0.52107	0.47972	0.44344					
	0.42192	0.40565					AVRG		0.47745		9.97925
35 1-Methylnaphthalene	0.49817	0.48888	0.50948	0.50950	0.46873	0.43532					
	0.40747	0.39405					AVRG		0.46395		9.93014
36 Hexachlorocyclopentadiene	+++++	0.11559	0.14894	0.17638	0.16699	0.17517					
	0.15973	0.18699					AVRG		0.16140		14.65548
208 1,1'-Biphenyl	+++++	1.06821	1.07871	+++++	+++++	1.07139					
	1.04410	1.03663					AVRG		1.05981		1.73080
205 2,3-Dichloroaniline	+++++	0.42334	0.44162	0.48367	0.45837	0.47569					
	0.46389	0.48191					AVRG		0.4612		4.82890
37 2,4,6-Trichlorophenol	+++++	0.24410	0.27355	0.30569	0.28842	0.30698					
	0.30109	0.31371					AVRG		0.29051		8.42918
38 2,4,5-Trichlorophenol	+++++	0.26102	0.29598	0.31509	0.31354	0.30818					
	0.30243	0.32875					AVRG		0.30357		7.06061
40 2-Chloronaphthalene	0.79673	0.82048	0.87010	0.90775	0.85133	0.85068					
	0.82317	0.83198					AVRG		0.84403		4.05738
42 o-Nitroaniline	+++++	0.19115	0.21865	0.24505	0.22880	0.22737					
	0.22383	0.23238					AVRG		0.22389		7.41961

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Quant Method : ISTD
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Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	14483	15051	82754	119707	239651					
	283774	430579					LINR	0.33554	0.19860		0.99002
43 Dimethylphthalate	+++++	0.95484	1.02595	1.06444	0.99695	0.99604					
	0.94535	0.98159					AVRG		0.99502		4.11153
44 2,6-Dinitrotoluene	+++++	0.20821	0.23299	0.24910	0.23478	0.23887					
	0.22604	0.23758					AVRG		0.23251		5.49531
45 Acenaphthylene	1.14802	1.28799	1.36835	1.40207	1.30955	1.28653					
	1.24364	1.23741					AVRG		1.28545		6.16797
47 Acenaphthene	0.74181	0.78832	0.85183	0.88393	0.83890	0.85177					
	0.82987	0.84268					AVRG		0.82864		5.31903
48 2,4-Dinitrophenol	+++++	+++++	21200	54725	74212	150262					
	173409	+++++					LINR	0.32072	0.11919		0.99343
49 Dibenzofuran	+++++	1.18297	1.25042	1.30282	1.21056	1.17947					
	1.14114	1.14741					AVRG		1.20211		4.81916
50 2,4-Dinitrotoluene	+++++	0.25307	0.29824	0.31858	0.30040	0.30633					
	0.29555	0.30981					AVRG		0.29743		7.08057
51 Diethylphthalate	+++++	0.94215	1.02610	1.07432	0.99980	0.98701					
	0.95141	0.95004					AVRG		0.99012		4.86022

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	14071	43969	105849	128396	217824					
	255018	390419					LINR	0.15210	0.16724		0.99652
53 Fluorene	0.89941	0.94917	1.03641	1.08233	1.01112	1.00641					
	0.97983	0.99090					AVRG		0.99445		5.53573
54 4-Chlorophenylphenylether	+++++	0.51413	0.55022	0.58370	0.54287	0.55212					
	0.53675	0.55173					AVRG		0.54736		3.80860
55 2-Methyl-4,6-dinitrophenol	+++++	12837	44459	104894	133773	234249					
	277848	423559					LINR	0.19850	0.09795		0.99570
56 p-Nitroaniline	+++++	0.09524	0.09753	0.09849	0.08778	0.10616					
	0.11333	+++++					AVRG		0.09976		8.91814
133 Diphenylamine	+++++	0.41220	0.39607	0.40064	0.37402	0.38072					
	0.37482	0.41332					AVRG		0.39311		4.27057
58 1,2-Diphenylhydrazine	+++++	0.47390	0.51146	0.53163	0.49408	0.48123					
	0.45859	0.46295					AVRG		0.48769		5.44241
59 Tributylphosphate	+++++	0.93611	1.00727	1.01733	1.06767	1.06421					
	1.07800	1.05488					AVRG		1.03221		4.83912
61 4-Bromophenylphenylether	+++++	0.16555	0.17995	0.19299	0.18038	0.18154					
	0.17572	0.18754					AVRG		0.18052		4.81438

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	100 Level 7	120 Level 8									
63 Hexachlorobenzene	+++++	0.18110	0.19756	0.20396	0.19230	0.19237					
	0.18432	0.19174					AVRG		0.19191		3.99111
207 Atrazine	+++++	0.03457	0.03304	+++++	+++++	0.01580					
	0.01516	0.00441					AVRG		0.02060		62.59737 <-
65 Pentachlorophenol	+++++	17155	54261	133219	158706	275325					
	328732	490942					LINR	0.16286	0.11297		0.99712
206 n-Octadecane	+++++	0.25432	0.27323	0.28870	0.26891	0.26490					
	0.25081	0.24964					AVRG		0.26436		5.33437
68 Phenanthrene	0.73862	0.73226	0.78776	0.80554	0.76127	0.74608					
	0.70950	0.72888					AVRG		0.75124		4.26078
69 Anthracene	0.68052	0.72323	0.79165	0.82251	0.76761	0.74693					
	0.71967	0.72544					AVRG		0.74720		6.05239
72 Di-n-butylphthalate	+++++	0.80580	0.90274	0.94252	0.89139	0.85974					
	0.81610	0.79872					AVRG		0.85957		6.41454
76 Fluoranthene	0.68758	0.79740	0.87718	0.92162	0.85800	0.83122					
	0.80482	0.80275					AVRG		0.82257		8.43347
77 Benzidine	+++++	0.14241	0.11832	+++++	+++++	0.11685					
	0.13749	0.14337					AVRG		0.13169		9.93091

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	100 Level 7	120 Level 8									
79 Pyrene	0.74327	0.79248	0.86122	0.90593	0.82217	0.81621					
	0.77247	0.76811					AVRG		0.81023		6.58630
85 Butylbenzylphthalate	+++++	0.30152	0.35532	0.39574	0.36768	0.37392					
	0.36173	0.36416					AVRG		0.36001		8.01244
89 Benzo(a)anthracene	0.79661	0.75905	0.83143	0.88224	0.81756	0.80052					
	0.77503	0.79063					AVRG		0.80663		4.71092
90 3,3'-Dichlorobenzidine	+++++	0.22472	0.25680	+++++	+++++	0.28651					
	0.28815	0.29645					AVRG		0.27053		10.97312
92 Chrysene	0.71796	0.71455	0.77592	0.80262	0.74759	0.72786					
	0.70016	0.69597					AVRG		0.73533		5.11466
93 bis(2-Ethylhexyl)phthalate	7926	152141	400766	842654	992598	1555489					
	+++++	+++++					LINR	0.01278	0.54227		0.99788
94 Di-n-octylphthalate	+++++	0.69447	0.85556	0.97066	0.89544	0.90662					
	0.87221	0.86997					AVRG		0.86642		9.77684
95 Benzo(b)fluoranthene	0.64856	0.76776	0.86873	0.91742	0.84122	0.88072					
	0.82904	0.95219					AVRG		0.83820		11.32092
96 Benzo(k)fluoranthene	0.75511	0.78301	0.85963	0.94418	0.88393	0.83753					
	0.84838	0.78179					AVRG		0.83669		7.42267

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.49746	0.67779	0.77735	0.83560	0.78424	0.78360					
	0.76362	0.79281					AVRG		0.73906		14.50348
99 Indeno(1,2,3-cd)pyrene	13655	230839	571625	1119329	1485270	2231964					
	2740272	3942157					LINR	0.02754	0.85117		0.99928
100 Dibenzo(a,h)anthracene	11383	194289	484055	941279	1242196	1871982					
	2304325	3322133					LINR	0.02870	0.71627		0.99919
101 Benzo(ghi)perylene	0.45435	0.62075	0.67088	0.67953	0.70274	0.68415					
	0.68870	0.70141					AVRG		0.65031		12.80349
102 1,4-Dioxane	+++++	0.24634	0.28025	+++++	+++++	0.30356					
	0.29319	0.26953					AVRG		0.27857		7.94884
103 Methyl methacrylate	+++++	0.16872	0.16444	+++++	+++++	0.16505					
	0.18086	0.15892					AVRG		0.16760		4.89346
104 Ethyl methacrylate	+++++	0.66031	0.70980	+++++	+++++	0.69504					
	0.68531	0.66714					AVRG		0.68352		2.95664
105 2-Picoline	+++++	1.01746	1.07832	+++++	+++++	1.04828					
	1.03935	1.02355					AVRG		1.04139		2.30595
106 N-Nitrosomethylethylamine	+++++	0.31757	0.35447	+++++	+++++	0.37185					
	0.37790	0.37352					AVRG		0.35906		6.92083

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107 Methyl methanesulfonate	+++++	0.44871	0.47910	+++++	+++++	0.44075					
	0.43643	0.44457					AVRG		0.44991		3.76452
108 N-Nitrosodiethylamine	+++++	0.30410	0.36077	+++++	+++++	0.37459					
	0.37925	0.38070					AVRG		0.35988		8.93633
109 Ethyl Methanesulfonate	+++++	0.52387	0.54987	+++++	+++++	0.53861					
	0.52806	0.54078					AVRG		0.53624		1.93775
110 Pentachloroethane	+++++	0.30723	0.32723	+++++	+++++	0.32393					
	0.32208	0.31995					AVRG		0.32008		2.39449
111 N-Nitrosopyrrolidine	+++++	18119	50578	+++++	+++++	275191					
	347837	418958					LINR	0.09385	0.41052		0.99979
113 N-Nitrosomorpholine	+++++	0.31286	0.38027	+++++	+++++	0.40465					
	0.39989	0.39689					AVRG		0.37891		10.04075
114 o-Toluidine	+++++	1.35701	1.45906	+++++	+++++	1.45255					
	1.43423	1.43439					AVRG		1.42745		2.86402
115 N-Nitrosopiperidine	+++++	0.09506	0.11290	+++++	+++++	0.12040					
	0.12000	0.12173					AVRG		0.11402		9.77130
116 a,a-Dimethylphenethylamine	+++++	67223	221950	+++++	+++++	1304888					
	1645063	1941742					LINR	0.12017	0.55348		0.99966

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
117 Triethylphosphorothioate	+++++	0.16537	0.16522	0.16826	0.17549	0.18113						
	0.18346	0.18351					AVRG		0.17464		4.76002	
118 2,6-Dichlorophenol	+++++	0.17667	0.20374	+++++	+++++	0.21733						
	0.21628	0.22228					AVRG		0.20726		8.88487	
119 Hexachloropropene	+++++	0.09341	0.12175	+++++	+++++	0.12774						
	0.13457	0.13555					AVRG		0.12260		14.06913	
120 p-Phenylenediamine	+++++	0.04451	0.09259	+++++	+++++	0.11802						
	0.14321	0.07722					AVRG		0.09511		39.77786	<-
121 N-Nitrosodi-n-butylamine	+++++	0.12388	0.14468	+++++	+++++	0.14675						
	0.14779	0.14275					AVRG		0.14117		6.98114	
122 Safrole	+++++	0.18511	0.20314	+++++	+++++	0.20383						
	0.19860	0.20325					AVRG		0.19879		3.98688	
123 1,2,4,5-Tetrachlorobenzene	+++++	0.44675	0.47581	+++++	+++++	0.47640						
	0.47142	0.46516					AVRG		0.46711		2.61935	
124 Isosafrole	+++++	0.28246	0.31435	+++++	+++++	0.32006						
	0.31708	0.32066					AVRG		0.31092		5.18056	
125 1,4-Naphthoquinone	+++++	0.26279	0.33670	+++++	+++++	0.28475						
	0.25902	0.21482					AVRG		0.27162		16.33213	<-

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	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.13426	0.16096	0.17529	0.16515	0.17075					
	0.16615	0.17238					AVRG		0.16356		8.43299
127 Pentachlorobenzene	+++++	0.41386	0.44358	+++++	+++++	0.43445					
	0.42287	0.42694					AVRG		0.42834		2.63934
128 1-Naphthylamine	+++++	0.64290	0.71157	+++++	+++++	0.72798					
	0.75065	0.72826					AVRG		0.71227		5.78366
129 2-Naphthylamine	+++++	0.63606	0.67439	+++++	+++++	0.58978					
	0.64536	0.64782					AVRG		0.63868		4.82722
130 2,3,4,6-Tetrachlorophenol	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
131 5-Nitro-o-toluidine	+++++	27455	74724	+++++	+++++	413995					
	505367	634837					LINR	0.10089	0.28578		0.99956
132 Thionazin	+++++	0.13988	0.14775	0.15045	0.15424	0.15690					
	0.16203	0.16237					AVRG		0.15337		5.26573
134 Sulfotepp	+++++	0.11412	0.11494	0.11319	0.11600	0.11480					
	0.11400	0.11009					AVRG		0.11388		1.65743
135 Phorate	+++++	0.28388	0.29681	0.29037	0.30244	0.30088					
	0.30582	0.29054					AVRG		0.29582		2.65683

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	13955	48364	+++++	+++++	268631					
	340694	456398					LINR	0.16614	0.10906		0.99628
137 Phenacetin	+++++	0.17628	0.21001	+++++	+++++	0.23782					
	0.23708	0.23917					AVRG		0.22007		12.41888
138 Diallate	+++++	0.16761	0.18197	+++++	+++++	0.18302					
	0.17779	0.17698					AVRG		0.17747		3.43512
139 Dimethoate	+++++	0.13778	0.14938	0.15610	0.16928	0.17565					
	0.17871	0.17715					AVRG		0.16343		9.72135
140 4-Aminobiphenyl	+++++	0.37135	0.35332	+++++	+++++	0.32358					
	0.31870	0.29146					AVRG		0.33168		9.40668
141 Pentachloronitrobenzene	+++++	0.07139	0.07657	+++++	+++++	0.08321					
	0.08092	0.07832					AVRG		0.07808		5.77895
142 Pronamide	+++++	0.22821	0.24842	+++++	+++++	0.26720					
	0.25993	0.25910					AVRG		0.25257		6.00962
143 Dinoseb	+++++	17592	65243	160618	206017	370757					
	432801	653659					LINR	0.20878	0.15287		0.99661
144 Disulfoton	+++++	0.23435	0.24175	0.24250	0.25185	0.25151					
	0.25868	0.24626					AVRG		0.24670		3.25947

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	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.10756	0.12574	0.13745	0.15086	0.15374					
	0.16380	0.16473					AVRG		0.14341		14.69707
146 4-Nitroquinoline-1-oxide	+++++	0.00937	0.01228	+++++	+++++	0.00993					
	0.00944	0.00861					AVRG		0.00993		14.10180
147 Methapyrilene	+++++	0.23032	0.26350	+++++	+++++	0.25837					
	0.25388	0.25397					AVRG		0.25201		5.05822
148 Isodrin	+++++	0.08985	0.09732	+++++	+++++	0.10370					
	0.10020	0.10192					AVRG		0.09860		5.50608
149 Aramite	+++++	0.03284	0.03952	+++++	+++++	0.04489					
	0.04319	0.04214					AVRG		0.04052		11.63768
150 Kepone	+++++	0.07101	0.07864	+++++	+++++	0.07592					
	0.07559	0.08027					AVRG		0.07629		4.63038
151 p-(Dimethylamino)azobenzene	+++++	0.17522	0.21262	+++++	+++++	0.22053					
	0.21845	0.21324					AVRG		0.20801		8.95997
152 Chlorobenzilate	+++++	0.23225	0.25848	+++++	+++++	0.28615					
	0.27698	0.27112					AVRG		0.26500		7.87735
153 3,3'-Dimethylbenzidine	+++++	0.33926	0.36462	+++++	+++++	0.35940					
	0.37441	0.36902					AVRG		0.36134		3.74367

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
154 Famphur	+++++	0.25103	0.28114	0.28876	0.31048	0.31944						
	0.33910	0.31592					AVRG		0.30084		9.73369	
155 2-Acetylaminofluorene	+++++	47120	145263	+++++	+++++	949702						
	1100767	1503747					LINR	0.14865	0.33609		0.99853	
157 7,12Dimethylbenz(a)anthracene	+++++	0.38032	0.42131	+++++	+++++	0.44350						
	0.44038	0.42979					AVRG		0.42306		6.01820	
158 3-Methylcholanthrene	+++++	0.30375	0.34529	+++++	+++++	0.39857						
	0.39085	0.39392					AVRG		0.36648		11.21865	
26 Phthalic anhydride	+++++	0.07507	0.06934	0.09549	0.09747	0.09550						
	0.08993	0.08635					AVRG		0.08702		12.56366	
173 Carbazole	14837	139367	246691	487385	568160	1090154						
	1254429	+++++					LINR	0.04109	0.39552		0.99187	
174 Hexachlorophene	+++++	435932	2361068	+++++	4538044	4556630						
	4552314	+++++					LINR	9.14609	0.09969		0.99353	
179 Dibenzo(a,e)pyrene	+++++	0.31362	0.35554	0.33118	0.43912	0.41638						
	0.44192	0.45643					AVRG		0.39346		14.89785	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	4343	14231	37456	44264	71290					
	83708	+++++					LINR	0.08539	0.11280		0.99437
191 Parathion	+++++	0.06337	0.07126	0.07805	0.08155	0.08375					
	0.08775	0.08748					AVRG		0.07903		11.34928
192 Methoxychlor	+++++	0.37316	0.43593	0.46907	0.48881	0.49691					
	0.47438	0.46605					AVRG		0.45776		9.18359
210 m-Toluidine	+++++	1.01730	0.95828	1.04153	1.07045	1.03819					
	1.06035	1.06455					AVRG		1.03581		3.74343
211 p-Toluidine	+++++	49683	78529	211799	266816	507067					
	569514	+++++					LINR	0.14181	0.78212		0.99497
212 Cis Diallate	+++++	0.14773	0.16624	+++++	+++++	0.17545					
	0.17147	0.16996					AVRG		0.16617		6.51318
213 Trans Diallate	+++++	0.19719	0.21409	+++++	+++++	0.21532					
	0.20917	0.20821					AVRG		0.20879		3.43512
214 1,4-Dinitrobenzene	+++++	0.12784	0.15121	0.16974	0.15587	0.16620					
	0.16695	0.17540					AVRG		0.15903		10.07655
215 2-Ethoxyethanol	+++++	0.38685	0.41544	0.41160	0.40973	0.41987					
	0.40092	0.36487					AVRG		0.40133		4.83383

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
216 Methylenebis(2-chloroaniline)	+++++	0.09027	0.07877	0.09631	0.10183	0.11537					
	0.11302	+++++					AVRG		0.09926		13.99534
229 2,2'-Dichlorobenzil	+++++	0.40624	0.44915	0.45206	0.46835	0.49924					
	0.50127	0.49121					AVRG		0.46679		7.33567
230 4-Chlorothioanisole	+++++	0.23519	0.25134	0.25866	0.26118	0.27506					
	0.27431	0.27443					AVRG		0.26145		5.67051
231 4-Chlorothiophenol	+++++	33730	109582	208710	270504	591872					
	637096	698168					LINR	0.16729	0.22127		0.99837
232 bis(p-Chlorophenyl)sulfone	+++++	0.27790	0.28817	0.28727	0.29340	0.31372					
	0.31573	0.30820					AVRG		0.29777		4.94706
233 bis(p-Chlorophenyl)disulfide	+++++	0.08649	0.09716	0.09996	0.10104	0.11282					
	0.11321	0.11036					AVRG		0.10301		9.49989
234 Diphenyl disulfide	+++++	0.17703	0.18827	0.19313	0.19397	0.19743					
	0.19934	0.19498					AVRG		0.19202		3.89349
235 Diphenyl sulfide	+++++	0.73815	0.76067	0.76884	0.77583	0.77384					
	0.77835	0.76108					AVRG		0.76525		1.80366
236 Phenyl sulfone	+++++	0.32490	0.33335	0.34401	0.34629	0.34828					
	0.35151	0.34243					AVRG		0.34154		2.72169

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
237 Hydroxymethyl phthalimide	+++++	0.15868	0.13541	0.13994	0.13819	0.13830					
	0.13473	0.14129					AVRG		0.14093		5.78993
238 Phthalic acid	+++++	34594	90147	182251	231472	444665					
	541872	587383					LINR	0.16006	0.18293		0.99675
239 Thiophenol	+++++	0.64619	0.81626	0.89508	0.92244	0.99432					
	1.00016	1.00671					AVRG		0.89731		14.54651
240 bis(Chloromethyl)ether	+++++	0.74313	0.76318	0.75550	0.73293	0.77257					
	0.73038	0.75865					AVRG		0.75091		2.10971
241 Octachlorostyrene	+++++	0.08120	0.08332	0.08290	0.08503	0.08678					
	0.08899	0.08481					AVRG		0.08472		3.05713
M 225 Trichlorophenols	+++++	0.25256	0.28477	0.31039	0.30098	0.30758					
	0.30176	0.32123					AVRG		0.29704		7.57948
M 226 Tetrachlorophenols	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
M 227 Benzo(b,k)fluoranthene	0.70183	0.77538	0.86418	0.93080	0.86257	0.85913					
	0.83871	0.86699					AVRG		0.83745		8.27901
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.77799	0.82940	0.84165	0.83307	0.84646						
	0.82089	0.84901					AVRG		0.82835		2.93507	
$ 5 Phenol-d5	+++++	0.94004	1.02783	1.06321	1.02953	1.04638						
	1.02443	1.06043					AVRG		1.02741		4.04817	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27903	0.29718	0.29088	0.25443	0.23402						
	0.21749	0.21713					AVRG		0.25574		13.28145	
$ 39 2-Fluorobiphenyl	+++++	0.99517	1.04673	1.06867	1.00896	1.00442						
	0.97367	0.97597					AVRG		1.01051		3.50349	
$ 60 2,4,6-Tribromophenol	+++++	0.12029	0.14713	0.16005	0.15035	0.15227						
	0.14829	0.15735					AVRG		0.14796		8.83326	
$ 81 p-Terphenyl-d14	+++++	0.54698	0.59094	0.62904	0.57872	0.57377						
	0.54438	0.54045					AVRG		0.57204		5.54873	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Cal Date : 06-Dec-2009 11:10 jos00786

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.83029	0.83029	0.000	0.23433	60.00000	Averaged
$ 5 Phenol-d5	1.02741	0.99434	0.99434	0.000	-3.21879	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.27844	0.27844	0.000	8.87699	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.03773	1.03773	0.000	2.69384	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.14657	0.14657	0.000	-0.93966	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.62712	0.62712	0.000	9.62917	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.42939	0.42939	0.000	-6.49389	60.00000	Averaged
2 Pyridine	0.65138	0.55949	0.55949	0.000	-14.10583	60.00000	Averaged
4 Aniline	0.40115	0.39878	0.39878	0.000	-0.58986	60.00000	Averaged
6 Phenol	1.07292	1.03238	1.03238	0.001	-3.77875	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.63389	0.62332	0.62332	0.000	-1.66734	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.89132	0.89132	0.000	-3.13291	60.00000	Averaged
203 n-Decane	0.83349	0.87112	0.87112	0.000	4.51494	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.09484	1.09484	0.000	-0.63588	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11853	1.10496	1.10496	0.001	-1.21340	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.05853	1.04676	1.04676	0.000	-1.11250	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	0.99850	0.99850	0.000	-0.89937	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.55960	0.55960	0.000	-3.60740	60.00000	Averaged
15 o-Cresol	0.73443	0.71543	0.71543	0.000	-2.58644	60.00000	Averaged
18 m,p-Cresols	0.93489	0.91075	0.91075	0.000	-2.58249	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.48060	0.48060	0.050	-0.45716	60.00000	Averaged spcc
19 Hexachloroethane	0.41297	0.38700	0.38700	0.000	-6.28851	60.00000	Averaged
21 Nitrobenzene	0.23812	0.24737	0.24737	0.000	3.88288	60.00000	Averaged
22 Isophorone	0.44222	0.44350	0.44350	0.000	0.28843	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.11747	0.11747	0.001	-5.27545	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21392	0.21469	0.21469	0.000	0.35583	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.23888	0.23888	0.000	-3.45098	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.19843	0.19843	0.001	-0.53268	20.00000	Averaged ccc
27 Benzoic acid	0.11033	0.11800	0.11800	0.000	6.95226	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.24504	0.24504	0.000	-1.97055	60.00000	Averaged
30 Naphthalene	0.69229	0.76058	0.76058	0.000	9.86346	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.15093	0.15093	0.000	-6.60421	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.26915	0.26915	0.000	-2.90716	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.16847	0.16847	0.001	3.62286	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19655	0.18982	0.18982	0.001	-3.42299	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.47745	0.54686	0.54686	0.000	14.53758	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s5k3023.d
Analysis Type: WATER
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

Injection Date: 30-NOV-2009 18:20
Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Init. Cal. Times: 14:09 17:28

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.46395	0.51084	0.51084	0.000	10.10698	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16140	0.11816	0.11816	0.050	-26.78720	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.46121	0.43794	0.43794	0.000	-5.04574	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.29051	0.26846	0.26846	0.001	-7.58993	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.30357	0.30531	0.30531	0.000	0.57382	60.00000	Averaged
40 2-Chloronaphthalene	0.84403	0.82711	0.82711	0.000	-2.00427	60.00000	Averaged
42 o-Nitroaniline	0.22389	0.21429	0.21429	0.000	-4.28607	60.00000	Averaged
41 m-Nitroaniline	32.25605	40.00000	0.09351	0.000	-19.35986	60.00000	Linear
43 Dimethylphthalate	0.99502	1.00014	1.00014	0.000	0.51409	60.00000	Averaged
44 2,6-Dinitrotoluene	0.23251	0.22347	0.22347	0.000	-3.88808	60.00000	Averaged
50 2,4-Dinitrotoluene	0.29743	0.29372	0.29372	0.000	-1.24745	60.00000	Averaged
45 Acenaphthylene	1.28545	1.44563	1.44563	0.000	12.46144	60.00000	Averaged
47 Acenaphthene	0.82864	0.86500	0.86500	0.001	4.38855	20.00000	Averaged ccc
48 2,4-Dinitrophenol	31.49171	40.00000	0.05561	0.050	-21.27072	60.00000	Linear spcc
49 Dibenzofuran	1.20211	1.19562	1.19562	0.000	-0.53995	60.00000	Averaged
51 Diethylphthalate	0.99012	1.00550	1.00550	0.000	1.55350	60.00000	Averaged
52 4-Nitrophenol	35.69942	40.00000	0.12382	0.050	-10.75144	60.00000	Linear spcc
53 Fluorene	0.99445	1.07305	1.07305	0.000	7.90438	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54736	0.53200	0.53200	0.000	-2.80637	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	39.60786	40.00000	0.07755	0.000	-0.98036	60.00000	Linear
56 p-Nitroaniline	0.09976	0.09283	0.09283	0.000	-6.94521	60.00000	Averaged
133 Diphenylamine	0.39311	0.36704	0.36704	0.001	-6.63338	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.48769	0.48502	0.48502	0.000	-0.54741	60.00000	Averaged
61 4-Bromophenylphenylether	0.18052	0.17126	0.17126	0.000	-5.13387	60.00000	Averaged
63 Hexachlorobenzene	0.19191	0.18523	0.18523	0.000	-3.47929	60.00000	Averaged
65 Pentachlorophenol	36.05605	40.00000	0.08343	0.001	-9.85987	20.00000	Linear ccc
206 n-Octadecane	0.26436	0.25557	0.25557	0.000	-3.32275	60.00000	Averaged
68 Phenanthrene	0.75124	0.80888	0.80888	0.000	7.67214	60.00000	Averaged
69 Anthracene	0.74720	0.83500	0.83500	0.000	11.75132	60.00000	Averaged
72 Di-n-butylphthalate	0.85957	0.89892	0.89892	0.000	4.57698	60.00000	Averaged
76 Fluoranthene	0.82257	0.93022	0.93022	0.001	13.08693	20.00000	Averaged ccc
79 Pyrene	0.81023	0.89526	0.89526	0.000	10.49463	60.00000	Averaged
85 Butylbenzylphthalate	0.36001	0.36740	0.36740	0.000	2.05224	60.00000	Averaged
89 Benzo(a)anthracene	0.80663	0.86024	0.86024	0.000	6.64603	60.00000	Averaged
92 Chrysene	0.73533	0.80028	0.80028	0.000	8.83303	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	39.93372	40.00000	0.53444	0.000	-0.16569	60.00000	Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s5k3023.d
Analysis Type: WATER
Lab Sample ID: WBN091106-09.3
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

Injection Date: 30-NOV-2009 18:20
Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Init. Cal. Times: 14:09 17:28
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.87303	0.87303	0.001	0.76265	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.92559	0.92559	0.000	10.42552	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.89887	0.89887	0.000	7.43117	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.83326	0.83326	0.001	12.74672	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	42.59286	40.00000	0.88290	0.000	6.48214	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	42.30047	40.00000	0.73690	0.000	5.75119	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.75185	0.75185	0.000	15.61349	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.15432	0.15432	0.000	-5.65249	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
	143 Dinoseb	32.63928	40.00000	0.09282	0.000	-18.40180	60.00000	Linear	
	173 Carbazole	38.13875	40.00000	0.36087	0.000	-4.65311	60.00000	Linear	
	184 p-Benzoquinone	36.94068	40.00000	0.09454	0.000	-7.64830	60.00000	Linear	
	192 Methoxychlor	0.45776	0.42935	0.42935	0.000	-6.20645	60.00000	Averaged	
	211 p-Toluidine	36.08309	40.00000	0.59462	0.000	-9.79228	60.00000	Linear	
	210 m-Toluidine	1.03581	0.92304	0.92304	0.000	-10.88701	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.10069	0.10069	0.000	15.70689	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.28402	0.28402	0.000	-27.81494	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.15861	0.15861	0.000	-0.26496	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.33769	0.33769	0.000	-15.85683	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.08744	0.08744	0.000	-11.91594	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.28689	0.28689	0.000	-3.41833	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.91223	0.91223	0.000	8.92968	60.00000	Averaged	

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Data file : /chem/MSD5.i/s113009.b/s5k3023.d
Lab Smp Id: WBN091106-09.3 Client Smp ID: MEGAICV
Inj Date : 30-NOV-2009 18:20
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-09.3|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 01-Dec-2009 07:52 rmb Quant Type: ISTD
Cal Date : 30-NOV-2009 17:28 Cal File: s5k3021.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	241000	40.0000	
* 29 Naphthalene-d8	136	4.826	4.826	(1.000)	918322	40.0000	
* 46 Acenaphthene-d10	164	6.088	6.088	(1.000)	516156	40.0000	
* 67 Phenanthrene-d10	188	7.268	7.268	(1.000)	970034	40.0000	
* 91 Chrysene-d12	240	9.694	9.694	(1.000)	1047303	40.0000	
* 98 Perylene-d12	264	11.414	11.414	(1.000)	981599	40.0000	
$ 3 2-Fluorophenol	112	3.126	3.126	(0.791)	200101	40.0000	40.1
$ 5 Phenol-d5	99	3.661	3.661	(0.926)	239635	40.0000	38.7
$ 20 Nitrobenzene-d5	82	4.321	4.321	(0.895)	255698	40.0000	43.6
$ 39 2-Fluorobiphenyl	172	5.568	5.568	(0.915)	535633	40.0000	41.1
$ 60 2,4,6-Tribromophenol	329	6.685	6.685	(1.098)	75654	40.0000	39.6
$ 81 p-Terphenyl-d14	244	8.650	8.650	(0.892)	656788	40.0000	43.8
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.419	(0.612)	103482	40.0000	37.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.452	2.452	(0.620)	134838	40.0000	34.4
4 Aniline	66	3.738	3.738	(0.945)	96106	40.0000	39.8
6 Phenol	94	3.670	3.670	(0.928)	248803	40.0000	38.5(Q)
7 bis(2-Chloroethyl) ether	63	3.752	3.752	(0.949)	150220	40.0000	39.3
8 2-Chlorophenol	128	3.820	3.820	(0.966)	214809	40.0000	38.7
203 n-Decane	43	3.800	3.800	(0.961)	209941	40.0000	41.8
9 1,3-Dichlorobenzene	146	3.921	3.921	(0.991)	263857	40.0000	39.7
11 1,4-Dichlorobenzene	146	3.964	3.964	(1.002)	266296	40.0000	39.5
13 1,2-Dichlorobenzene	146	4.070	4.070	(1.029)	252268	40.0000	39.6
14 bis(2-Chloroisopropyl)ether	45	4.099	4.099	(1.037)	240639	40.0000	39.6
12 Benzyl alcohol	108	4.017	4.017	(1.016)	134864	40.0000	38.6
15 o-Cresol	107	4.070	4.070	(1.029)	172419	40.0000	39.0
18 m,p-Cresols	107	4.166	4.166	(1.054)	219491	40.0000	39.0
17 N-Nitrosodipropylamine	70	4.191	4.191	(1.060)	115825	40.0000	39.8(H)
19 Hexachloroethane	117	4.301	4.301	(1.088)	93268	40.0000	37.5
21 Nitrobenzene	77	4.330	4.330	(0.897)	227163	40.0000	41.6
22 Isophorone	82	4.484	4.484	(0.929)	407276	40.0000	40.1
23 2-Nitrophenol	139	4.547	4.547	(0.942)	107877	40.0000	37.9
24 2,4-Dimethylphenol	122	4.537	4.537	(0.940)	197151	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.605	4.605	(0.954)	219371	40.0000	38.6
26 2,4-Dichlorophenol	162	4.706	4.706	(0.975)	182222	40.0000	39.8
27 Benzoic acid	105	4.590	4.590	(0.951)	108359	40.0000	42.8
28 1,2,4-Trichlorobenzene	180	4.773	4.773	(0.989)	225027	40.0000	39.2
30 Naphthalene	128	4.841	4.841	(1.003)	698453	40.0000	43.9
204 alpha-Terpineol	59	4.812	4.812	(0.997)	138598	40.0000	37.4
31 4-Chloroaniline	127	4.841	4.841	(1.003)	247168	40.0000	38.8
32 Hexachlorobutadiene	225	4.908	4.908	(1.017)	154713	40.0000	41.4
33 4-Chloro-3-methylphenol	107	5.163	5.163	(1.070)	174316	40.0000	38.6
34 2-Methylnaphthalene	142	5.322	5.322	(1.103)	502193	40.0000	45.8
35 1-Methylnaphthalene	142	5.399	5.399	(1.119)	469118	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.428	5.428	(0.892)	60991	40.0000	29.3
205 2,3-Dichloroaniline	161	5.520	5.520	(0.907)	226045	40.0000	38.0
37 2,4,6-Trichlorophenol	196	5.510	5.510	(0.905)	138566	40.0000	37.0
38 2,4,5-Trichlorophenol	196	5.539	5.539	(0.910)	157589	40.0000	40.2
40 2-Chloronaphthalene	162	5.678	5.678	(0.933)	426918	40.0000	39.2
42 o-Nitroaniline	65	5.736	5.736	(0.942)	110609	40.0000	38.3
41 m-Nitroaniline	138	6.035	6.035	(0.991)	48268	40.0000	32.2
43 Dimethylphthalate	163	5.842	5.842	(0.960)	516226	40.0000	40.2
44 2,6-Dinitrotoluene	165	5.900	5.900	(0.969)	115345	40.0000	38.4
50 2,4-Dinitrotoluene	165	6.199	6.199	(1.018)	151603	40.0000	39.5
45 Acenaphthylene	152	5.987	5.987	(0.983)	746171	40.0000	45.0
47 Acenaphthene	154	6.112	6.112	(1.004)	446477	40.0000	41.8
48 2,4-Dinitrophenol	184	6.102	6.102	(1.002)	28705	40.0000	31.5
49 Dibenzofuran	168	6.237	6.237	(1.025)	617128	40.0000	39.8
51 Diethylphthalate	149	6.353	6.353	(1.044)	518995	40.0000	40.6
52 4-Nitrophenol	139	6.117	6.117	(1.005)	63912	40.0000	35.7
53 Fluorene	166	6.502	6.502	(1.068)	553863	40.0000	43.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.473	6.473	(1.063)	274594	40.0000	38.9
55 2-Methyl-4,6-dinitrophenol	198	6.512	6.512	(0.896)	75224	40.0000	39.6
56 p-Nitroaniline	138	6.497	6.497	(1.067)	47914	40.0000	37.2
133 Diphenylamine	169	6.564	6.564	(0.903)	356038	40.0000	37.3
58 1,2-Diphenylhydrazine	77	6.598	6.598	(0.908)	470487	40.0000	39.8
61 4-Bromophenylphenylether	248	6.868	6.868	(0.945)	166125	40.0000	37.9
63 Hexachlorobenzene	284	6.940	6.940	(0.955)	179680	40.0000	38.6
65 Pentachlorophenol	266	7.089	7.089	(0.975)	80931	40.0000	36.0
206 n-Octadecane	57	7.075	7.075	(0.973)	247915	40.0000	38.7
68 Phenanthrene	178	7.287	7.287	(1.003)	784638	40.0000	43.1
69 Anthracene	178	7.330	7.330	(1.009)	809979	40.0000	44.7
72 Di-n-butylphthalate	149	7.686	7.686	(1.058)	871980	40.0000	41.8
76 Fluoranthene	202	8.337	8.337	(1.147)	902346	40.0000	45.2
79 Pyrene	202	8.553	8.553	(0.882)	937612	40.0000	44.2
85 Butylbenzylphthalate	149	9.083	9.083	(0.937)	384776	40.0000	40.8
89 Benzo(a)anthracene	228	9.680	9.680	(0.998)	900935	40.0000	42.6
92 Chrysene	228	9.719	9.719	(1.002)	838136	40.0000	43.5
93 bis(2-Ethylhexyl)phthalate	149	9.608	9.608	(0.991)	559723	40.0000	39.9
94 Di-n-octylphthalate	149	10.277	10.277	(0.900)	856961	40.0000	40.3
95 Benzo(b)fluoranthene	252	10.879	10.879	(0.953)	908560	40.0000	44.2(H)
96 Benzo(k)fluoranthene	252	10.918	10.918	(0.957)	882331	40.0000	43.0
97 Benzo(a)pyrene	252	11.332	11.332	(0.993)	817930	40.0000	45.1
99 Indeno(1,2,3-cd)pyrene	276	13.239	13.239	(1.160)	866655	40.0000	42.6
100 Dibenzo(a,h)anthracene	278	13.253	13.253	(1.161)	723343	40.0000	42.3
101 Benzo(ghi)perylene	276	13.797	13.797	(1.209)	738017	40.0000	46.2
126 m-Dinitrobenzene	168	5.881	5.881	(0.966)	79652	40.0000	37.7
130 2,3,4,6-Tetrachlorophenol	232	6.314	6.314	(1.037)	122646	40.0000	36.3
143 Dinoseb	211	7.210	7.210	(0.992)	90043	40.0000	32.6
173 Carbazole	167	7.446	7.446	(1.024)	350056	40.0000	38.1
184 p-Benzoquinone	54	3.435	3.435	(0.868)	22785	40.0000	36.9
192 Methoxychlor	227	9.560	9.560	(0.986)	449656	40.0000	37.5
211 p-Toluidine	106	4.229	4.229	(1.069)	143304	40.0000	36.1
210 m-Toluidine	106	4.253	4.253	(1.075)	222452	40.0000	35.6
26 Phthalic anhydride	104	5.351	5.351	(1.109)	92464	40.0000	46.3
179 Dibenzo(a,e)pyrene	302	18.054	18.054	(1.582)	278791	40.0000	28.9(H)
214 1,4-Dinitrobenzene	75	5.823	5.823	(0.956)	81867	40.0000	39.9
215 2-Ethoxyethanol	59	2.255	2.255	(0.570)	81383	40.0000	33.6
216 Methylenebis(2-chloroaniline)	231	9.622	9.622	(0.993)	91571	40.0000	35.2(Q)
M 225 Trichlorophenols	196				296155	80.0000	77.3
M 226 Tetrachlorophenols	232				122646	40.0000	36.3
M 227 Benzo(b,k)fluoranthene	252				1790891	80.0000	87.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/HSD5.i/s113009.b/s5k3023.d
Date : 30-NOV-2009 18:20
Client ID: MEGAICV
Sample Info: |WBK091106-09,3|40 PPM|1|SVM|1|MEGAICV
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: HSD5.i
Operator: RHB
Column diameter: 0.20

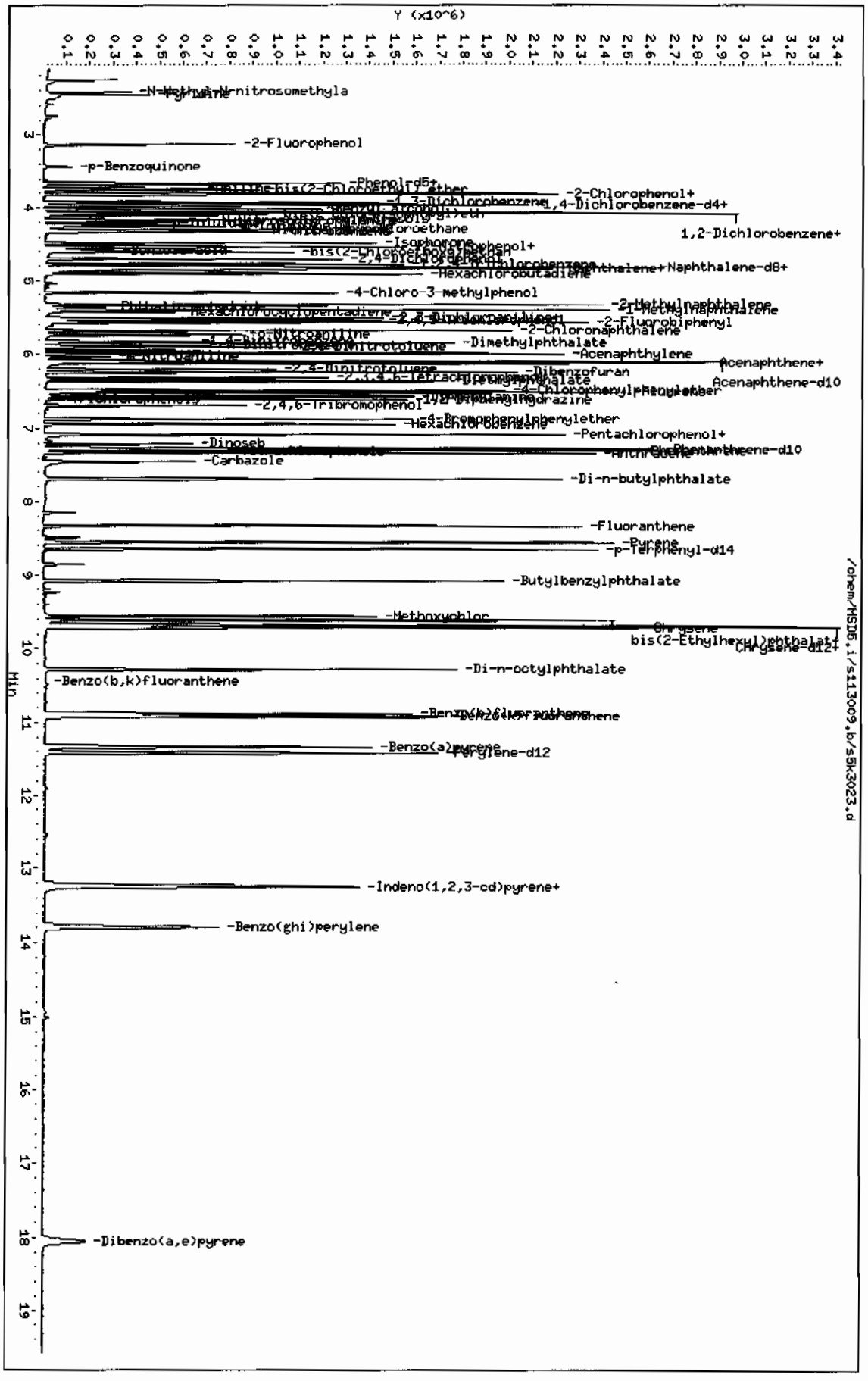

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s5k3038.d
Analysis Type: WATER
Lab Sample ID: WBN091111-08.1
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

Injection Date: 01-DEC-2009 00:10
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.65043	0.65043	0.000	-12.29758	60.00000	Averaged
16 Acetophenone	1.03433	1.03897	1.03897	0.000	0.44885	60.00000	Averaged
189 Caprolactam	0.07313	0.07820	0.07820	0.000	6.93169	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.14668	1.14668	0.000	8.19727	60.00000	Averaged
207 Atrazine	0.02060	0.02454	0.02454	0.000	19.14280	60.00000	Averaged
77 Benzidine	0.13169	0.08089	0.08089	0.000	-38.57488	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.27627	0.27627	0.000	2.12244	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.33600	0.33600	0.000	20.61484	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.19248	0.19248	0.000	14.84568	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.84583	0.84583	0.000	23.74639	60.00000	Averaged
105 2-Picoline	1.04139	1.00530	1.00530	0.000	-3.46598	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.36760	0.36760	0.000	2.37797	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.50459	0.50459	0.000	12.15234	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.35101	0.35101	0.000	-2.46475	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.67398	0.67398	0.000	25.68542	60.00000	Averaged
110 Pentachloroethane	0.32008	0.45290	0.45290	0.000	41.49317	60.00000	Averaged
111 N-Nitrosopyrrolidine	36.47218	40.00000	0.33578	0.000	-8.81956	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.37347	0.37347	0.000	-1.43685	60.00000	Averaged
114 o-Toluidine	1.42745	1.44299	1.44299	0.000	1.08876	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.11246	0.11246	0.000	-1.36442	60.00000	Averaged
116 a,a-Dimethylphenethylamine	38.19678	40.00000	0.46202	0.000	-4.50804	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.21709	0.21709	0.000	4.74185	60.00000	Averaged
119 Hexachloropropene	0.12260	0.18393	0.18393	0.000	50.01830	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.10774	0.10774	0.000	13.27805	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.14117	0.13700	0.13700	0.000	-2.95714	60.00000	Averaged
122 Safrole	0.19879	0.23876	0.23876	0.000	20.10710	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.51426	0.51426	0.000	10.09541	60.00000	Averaged
124 Isosafrole	0.31092	0.42686	0.42686	0.000	37.28900	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.33682	0.33682	0.000	24.00722	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.45613	0.45613	0.000	6.48820	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.70896	0.70896	0.000	-0.46534	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.51413	0.51413	0.000	-19.50189	60.00000	Averaged
131 5-Nitro-o-toluidine	38.89551	40.00000	0.24906	0.000	-2.76124	60.00000	Linear
136 1,3,5-Trinitrobenzene	45.79543	40.00000	0.10675	0.000	14.48858	60.00000	Linear
137 Phenacetin	0.22007	0.24075	0.24075	0.000	9.39579	60.00000	Averaged
138 Diallate	0.17747	0.17603	0.17603	0.000	-0.81534	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s5k3038.d
Analysis Type: WATER
Lab Sample ID: WBN091111-08.1
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

Injection Date: 01-DEC-2009 00:10
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.22410	0.22410	0.000	34.86393	60.00000	Averaged
213 Trans Diallate	0.20879	0.20709	0.20709	0.000	-0.81534	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.31377	0.31377	0.000	-5.40004	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08582	0.08582	0.000	9.90245	60.00000	Averaged
142 Pronamide	0.25257	0.28719	0.28719	0.000	13.70900	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01196	0.01196	0.000	20.41909	60.00000	Averaged
147 Methapyrilene	0.25201	0.29827	0.29827	0.000	18.35726	60.00000	Averaged
148 Isodrin	0.09860	0.09378	0.09378	0.000	-4.88678	60.00000	Averaged
149 Aramite	0.04052	0.04013	0.04013	0.000	-0.95220	60.00000	Averaged
150 Kepone	0.07629	0.06942	0.06942	0.000	-9.00509	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.21652	0.21652	0.000	4.09057	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.26342	0.26342	0.000	-0.59569	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.33149	0.33149	0.000	-8.26293	60.00000	Averaged
155 2-Acetylaminofluorene	38.79550	40.00000	0.27601	0.000	-3.01125	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.43251	0.43251	0.000	2.23307	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.40112	0.40112	0.000	9.45325	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s113009.b/s5k3038.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: AP12ICV
Inj Date : 01-DEC-2009 00:10
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091111-08.1|50 PPM|1|SVM|1|AP12ICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 02-Dec-2009 13:38 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 12:54 Cal File: s5k3048.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.948	3.948	(1.000)	321448	40.0000	
* 29 Naphthalene-d8	136	4.825	4.825	(1.000)	1142641	40.0000	
* 46 Acenaphthene-d10	164	6.084	6.084	(1.000)	698479	40.0000	
* 67 Phenanthrene-d10	188	7.260	7.260	(1.000)	1290991	40.0000	
* 91 Chrysene-d12	240	9.683	9.683	(1.000)	1365925	40.0000	
* 98 Perylene-d12	264	11.407	11.407	(1.000)	1246471	40.0000	
209 Benzaldehyde	77	3.672	3.672	(0.930)	209081	40.0000	35.1
16 Acetophenone	105	4.201	4.201	(1.064)	333975	40.0000	40.2
189 Caprolactam	113	5.095	5.095	(1.056)	89358	40.0000	42.8
208 1,1'-Biphenyl	154	5.648	5.648	(0.928)	800935	40.0000	43.3
207 Atrazine	173	6.954	6.954	(0.958)	31680	40.0000	47.6
77 Benzidine	184	8.419	8.419	(0.869)	110489	40.0000	24.6
90 3,3'-Dichlorobenzidine	252	9.619	9.619	(0.993)	377361	40.0000	40.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.260	2.260	(0.572)	108007	40.0000	48.2
103 Methyl methacrylate	100	2.254	2.254	(0.571)	61872	40.0000	45.9
104 Ethyl methacrylate	69	2.637	2.637	(0.668)	271891	40.0000	49.5
105 2-Picoline	93	2.837	2.837	(0.718)	323151	40.0000	38.6
106 N-Nitrosomethylethylamine	88	2.884	2.884	(0.730)	118164	40.0000	41.0
107 Methyl methanesulfonate	80	3.037	3.037	(0.769)	162199	40.0000	44.9
108 N-Nitrosodiethylamine	102	3.278	3.278	(0.830)	112832	40.0000	39.0
109 Ethyl Methanesulfonate	79	3.431	3.431	(0.869)	216648	40.0000	50.3
110 Pentachloroethane	167	3.778	3.778	(0.957)	145583	40.0000	56.6
111 N-Nitrosopyrrolidine	100	4.190	4.190	(1.061)	107937	40.0000	36.5
113 N-Nitrosomorpholine	56	4.207	4.207	(1.066)	120050	40.0000	39.4
114 o-Toluidine	106	4.231	4.231	(1.071)	463846	40.0000	40.4
115 N-Nitrosopiperidine	114	4.431	4.431	(0.918)	128504	40.0000	39.4
116 a,a-Dimethylphenethylamine	58	4.737	4.737	(0.982)	527921	40.0000	38.2
118 2,6-Dichlorophenol	162	4.866	4.866	(1.009)	248053	40.0000	41.9
119 Hexachloropropene	213	4.895	4.895	(1.015)	210163	40.0000	60.0
120 p-Phenylenediamine	108	5.101	5.101	(1.057)	123106	40.0000	45.3
121 N-Nitrosodi-n-butylamine	84	5.066	5.066	(1.050)	156538	40.0000	38.8(T)
122 Safrole	162	5.237	5.237	(1.085)	272812	40.0000	48.0
123 1,2,4,5-Tetrachlorobenzene	216	5.437	5.437	(0.894)	359203	40.0000	44.0
124 Isosafrole	162	5.607	5.607	(0.922)	298154	40.0000	54.9
125 1,4-Naphthoquinone	158	5.795	5.795	(0.953)	235264	40.0000	49.6
127 Pentachlorobenzene	250	6.201	6.201	(1.019)	318599	40.0000	42.6
128 1-Naphthylamine	143	6.290	6.290	(1.034)	495191	40.0000	39.8
129 2-Naphthylamine	143	6.342	6.342	(1.043)	359107	40.0000	32.2
131 5-Nitro-o-toluidine	152	6.484	6.484	(1.066)	173960	40.0000	38.9
136 1,3,5-Trinitrobenzene	75	6.737	6.737	(0.928)	137808	40.0000	45.8
137 Phenacetin	108	6.778	6.778	(0.934)	310807	40.0000	43.8
138 Diallate	86	6.772	6.772	(0.933)	227250	40.0000	39.7
212 Cis Diallate	86	6.848	6.848	(0.943)	43397	6.00000	8.1(a)
213 Trans Diallate	86	6.772	6.772	(0.933)	227250	34.0000	33.7
140 4-Aminobiphenyl	169	7.072	7.072	(0.974)	405072	40.0000	37.8
141 Pentachloronitrobenzene	237	7.095	7.095	(0.977)	110788	40.0000	44.0
142 Pronamide	173	7.089	7.089	(0.976)	370764	40.0000	45.5
146 4-Nitroquinoline-1-oxide	101	7.936	7.936	(1.093)	15434	40.0000	48.2
147 Methapyrilene	58	7.972	7.972	(1.098)	385063	40.0000	47.3
148 Isodrin	193	8.195	8.195	(1.129)	121070	40.0000	38.0
149 Aramite	185	8.595	8.595	(1.184)	51810	40.0000	39.6
150 Kepone	272	9.183	9.183	(1.265)	89616	40.0000	36.4
151 p-(Dimethylamino)azobenzene	120	8.778	8.778	(0.906)	295751	40.0000	41.6
152 Chlorobenzilate	251	8.807	8.807	(0.909)	359810	40.0000	39.8
153 3,3'-Dimethylbenzidine	212	9.089	9.089	(0.939)	452784	40.0000	36.7
155 2-Acetylaminofluorene	181	9.342	9.342	(0.965)	377007	40.0000	38.8
157 7,12Dimethylbenz(a)anthracene	256	10.848	10.848	(0.951)	539106	40.0000	40.9
158 3-Methylcholanthrene	268	11.824	11.824	(1.037)	499987	40.0000	43.8

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: /chem/MSD5.i/s113009.b/s5k3038.d
Date : 01-DEC-2009 00:10
Client ID: AP121CV
Sample Info: IWBN091111-08,1|50 PPM|1|SVM|1|AP121CV
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

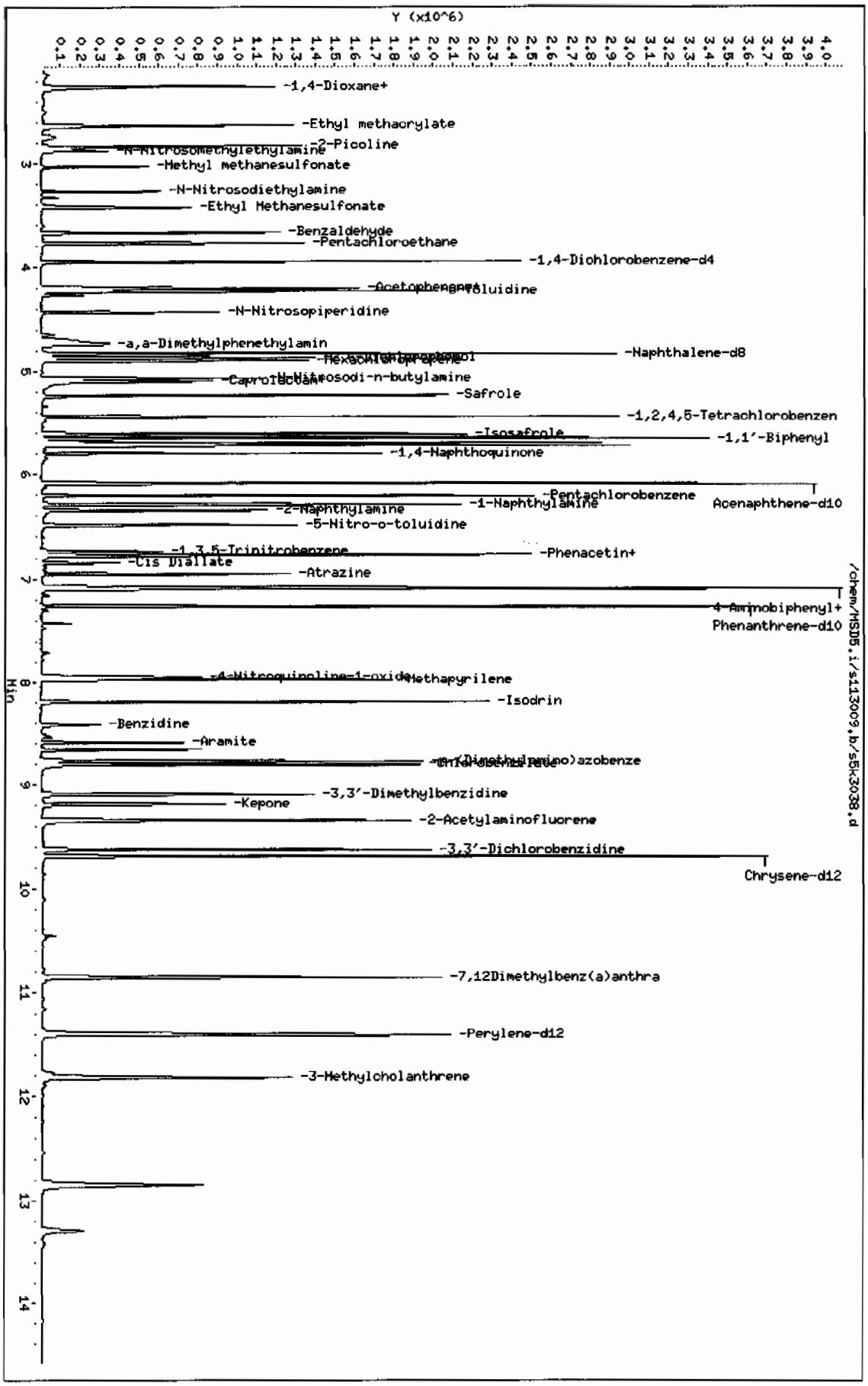

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510602.d
Analysis Type:
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m

Injection Date: 06-DEC-2009 09:44
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	3 2-Fluorophenol	0.82835	0.86008	0.86008	0.000	3.83035	60.00000	Averaged
$	5 Phenol-d5	1.02741	1.07043	1.07043	0.000	4.18754	60.00000	Averaged
$	20 Nitrobenzene-d5	0.25574	0.27546	0.27546	0.000	7.71311	60.00000	Averaged
$	39 2-Fluorobiphenyl	1.01051	1.07111	1.07111	0.000	5.99653	60.00000	Averaged
$	60 2,4,6-Tribromophenol	0.14796	0.15594	0.15594	0.000	5.38835	60.00000	Averaged
$	81 p-Terphenyl-d14	0.57204	0.62991	0.62991	0.000	10.11707	60.00000	Averaged
	1 N-Methyl-N-nitrosomethylami	0.45921	0.52914	0.52914	0.000	15.22979	60.00000	Averaged
	2 Pyridine	0.65138	0.75413	0.75413	0.000	15.77417	60.00000	Averaged
	4 Aniline	0.40115	0.35745	0.35745	0.000	-10.89229	60.00000	Averaged
	6 Phenol	1.07292	1.10603	1.10603	0.001	3.08559	20.00000	Averaged ccc
	7 bis(2-Chloroethyl) ether	0.63389	0.67024	0.67024	0.000	5.73525	60.00000	Averaged
	8 2-Chlorophenol	0.92015	0.95499	0.95499	0.000	3.78586	60.00000	Averaged
	203 n-Decane	0.83349	0.90239	0.90239	0.000	8.26666	60.00000	Averaged
	9 1,3-Dichlorobenzene	1.10185	1.15667	1.15667	0.000	4.97537	60.00000	Averaged
	11 1,4-Dichlorobenzene	1.11854	1.17292	1.17292	0.001	4.86172	20.00000	Averaged ccc
	13 1,2-Dichlorobenzene	1.05853	1.09453	1.09453	0.000	3.40105	60.00000	Averaged
	14 bis(2-Chloroisopropyl)ether	1.00756	1.06351	1.06351	0.000	5.55232	60.00000	Averaged
	12 Benzyl alcohol	0.58054	0.52288	0.52288	0.000	-9.93259	60.00000	Averaged
	15 o-Cresol	0.73443	0.73278	0.73278	0.000	-0.22417	60.00000	Averaged
	18 m,p-Cresols	0.93489	0.95198	0.95198	0.000	1.82768	60.00000	Averaged
	17 N-Nitrosodipropylamine	0.48281	0.61149	0.61149	0.050	26.65163	60.00000	Averaged spcc
	19 Hexachloroethane	0.41297	0.42338	0.42338	0.000	2.51903	60.00000	Averaged
	21 Nitrobenzene	0.23812	0.26983	0.26983	0.000	13.31432	60.00000	Averaged
	22 Isophorone	0.44222	0.47351	0.47351	0.000	7.07487	60.00000	Averaged
	23 2-Nitrophenol	0.12401	0.13445	0.13445	0.001	8.41687	20.00000	Averaged ccc
	24 2,4-Dimethylphenol	0.21392	0.25365	0.25365	0.000	18.56761	60.00000	Averaged
	25 bis(2-Chloroethoxy)methane	0.24742	0.27618	0.27618	0.000	11.62390	60.00000	Averaged
	26 2,4-Dichlorophenol	0.19949	0.23402	0.23402	0.001	17.30962	20.00000	Averaged ccc
	27 Benzoic acid	0.11033	0.11776	0.11776	0.000	6.73797	60.00000	Averaged
	28 1,2,4-Trichlorobenzene	0.24997	0.28562	0.28562	0.000	14.26488	60.00000	Averaged
	30 Naphthalene	0.69229	0.74540	0.74540	0.000	7.67135	60.00000	Averaged
	204 alpha-Terpineol	0.16160	0.18035	0.18035	0.000	11.60636	60.00000	Averaged
	31 4-Chloroaniline	0.27721	0.29361	0.29361	0.000	5.91654	60.00000	Averaged
	32 Hexachlorobutadiene	0.16258	0.18632	0.18632	0.001	14.59819	20.00000	Averaged ccc
	33 4-Chloro-3-methylphenol	0.19655	0.21356	0.21356	0.001	8.65289	20.00000	Averaged ccc
	34 2-Methylnaphthalene	0.47745	0.52327	0.52327	0.000	9.59761	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510602.d
Analysis Type:
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m

Injection Date: 06-DEC-2009 09:44
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.46395	0.51073	0.51073	0.000	10.08172	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.16140	0.17453	0.17453	0.050	8.13507	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.46121	0.46529	0.46529	0.000	0.88473	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.29051	0.30985	0.30985	0.001	6.65876	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.30357	0.34010	0.34010	0.000	12.03220	60.00000	Averaged	
40	2-Chloronaphthalene	0.84403	0.88755	0.88755	0.000	5.15661	60.00000	Averaged	
42	o-Nitroaniline	0.22389	0.22691	0.22691	0.000	1.34696	60.00000	Averaged	
41	m-Nitroaniline	26.24799	40.00000	0.06368	0.000	-34.38002	60.00000	Linear	
43	Dimethylphthalate	0.99502	1.03288	1.03288	0.000	3.80509	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.23251	0.23971	0.23971	0.000	3.09837	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.29743	0.29882	0.29882	0.000	0.47032	60.00000	Averaged	
45	Acenaphthylene	1.28545	1.35222	1.35222	0.000	5.19460	60.00000	Averaged	
47	Acenaphthene	0.82864	0.88535	0.88535	0.001	6.84425	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	40.79616	40.00000	0.08334	0.050	1.99040	60.00000	Linear	spcc
49	Dibenzofuran	1.20211	1.21908	1.21908	0.000	1.41130	60.00000	Averaged	
51	Diethylphthalate	0.99012	0.98831	0.98831	0.000	-0.18219	60.00000	Averaged	
52	4-Nitrophenol	43.80000	40.00000	0.15769	0.050	9.50001	60.00000	Linear	spcc
53	Fluorene	0.99445	1.02920	1.02920	0.000	3.49467	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.54736	0.56048	0.56048	0.000	2.39626	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	38.67099	40.00000	0.07525	0.000	-3.32252	60.00000	Linear	
56	p-Nitroaniline	0.09976	0.10863	0.10863	0.000	8.89677	60.00000	Averaged	
133	Diphenylamine	0.39311	0.35772	0.35772	0.001	-9.00257	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.48769	0.52281	0.52281	0.000	7.20060	60.00000	Averaged	
61	4-Bromophenylphenylether	0.18052	0.19289	0.19289	0.000	6.85077	60.00000	Averaged	
63	Hexachlorobenzene	0.19191	0.20873	0.20873	0.000	8.76409	60.00000	Averaged	
65	Pentachlorophenol	46.22907	40.00000	0.11216	0.001	15.57267	20.00000	Linear	ccc
206	n-Octadecane	0.26436	0.28266	0.28266	0.000	6.92481	60.00000	Averaged	
68	Phenanthrene	0.75124	0.80084	0.80084	0.000	6.60251	60.00000	Averaged	
69	Anthracene	0.74720	0.78882	0.78882	0.000	5.57114	60.00000	Averaged	
72	Di-n-butylphthalate	0.85957	0.90062	0.90062	0.000	4.77558	60.00000	Averaged	
76	Fluoranthene	0.82257	0.88449	0.88449	0.001	7.52691	20.00000	Averaged	ccc
79	Pyrene	0.81023	0.92494	0.92494	0.000	14.15694	60.00000	Averaged	
85	Butylbenzylphthalate	0.36001	0.39572	0.39572	0.000	9.91860	60.00000	Averaged	
89	Benzo(a)anthracene	0.80663	0.86902	0.86902	0.000	7.73428	60.00000	Averaged	
92	Chrysene	0.73533	0.78367	0.78367	0.000	6.57457	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	42.98637	40.00000	0.57583	0.000	7.46592	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510602.d
Analysis Type:
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m

Injection Date: 06-DEC-2009 09:44
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.96958	0.96958	0.001	11.90676	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.89776	0.89776	0.000	7.10476	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.90772	0.90772	0.000	8.48908	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.80894	0.80894	0.001	9.45534	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	40.52800	40.00000	0.83896	0.000	1.31999	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	39.08526	40.00000	0.67933	0.000	-2.28685	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.69888	0.69888	0.000	7.46782	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.16361	0.16361	0.000	0.03041	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.29833	0.29833	0.000	14.03235	60.00000	Averaged	
	143 Dinoseb	37.69995	40.00000	0.11217	0.000	-5.75012	60.00000	Linear	
	173 Carbazole	34.40369	40.00000	0.32394	0.000	-13.99077	60.00000	Linear	
	184 p-Benzoquinone	31.88804	40.00000	0.08029	0.000	-20.27990	60.00000	Linear	
	192 Methoxychlor	0.45776	0.51698	0.51698	0.000	12.93840	60.00000	Averaged	
	211 p-Toluidine	36.89082	40.00000	0.61042	0.000	-7.77296	60.00000	Linear	
	210 m-Toluidine	1.03581	0.77789	0.77789	0.000	-24.90013	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.06839	0.06839	0.000	-21.41004	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.40389	0.40389	0.000	2.65049	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.16966	0.16966	0.000	6.68194	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.41541	0.41541	0.000	3.50901	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.08308	0.08308	0.000	-16.30677	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.32497	0.32497	0.000	9.40452	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.29833	0.29833	0.000	14.03235	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.90274	0.90274	0.000	7.79629	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510602.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 06-DEC-2009 09:44
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.872	3.872	(1.000)	462845	40.0000	
* 29 Naphthalene-d8	136	4.739	4.739	(1.000)	1697703	40.0000	
* 46 Acenaphthene-d10	164	5.996	5.996	(1.000)	976195	40.0000	
* 67 Phenanthrene-d10	188	7.166	7.166	(1.000)	1755344	40.0000	
* 91 Chrysene-d12	240	9.579	9.579	(1.000)	1769476	40.0000	
* 98 Perylene-d12	264	11.225	11.225	(1.000)	1633933	40.0000	
$ 3 2-Fluorophenol	112	3.054	3.054	(0.789)	398085	40.0000	41.5
$ 5 Phenol-d5	99	3.584	3.584	(0.925)	495443	40.0000	41.7
$ 20 Nitrobenzene-d5	82	4.238	4.238	(0.894)	467656	40.0000	43.1
$ 39 2-Fluorobiphenyl	172	5.486	5.486	(0.915)	1045611	40.0000	42.4
$ 60 2,4,6-Tribromophenol	329	6.593	6.593	(1.100)	152223	40.0000	42.2
$ 81 p-Terphenyl-d14	244	8.543	8.543	(0.892)	1114618	40.0000	44.0
1 N-Methyl-N-nitrosomethylamine	74	2.356	2.356	(0.608)	244911	40.0000	46.1
2 Pyridine	79	2.389	2.389	(0.617)	349043	40.0000	46.3
4 Aniline	66	3.656	3.656	(0.944)	165445	40.0000	35.6
6 Phenol	94	3.593	3.593	(0.928)	511919	40.0000	41.2(Q)
7 bis(2-Chloroethyl) ether	63	3.670	3.670	(0.948)	310219	40.0000	42.3
8 2-Chlorophenol	128	3.738	3.738	(0.965)	442011	40.0000	41.5
203 n-Decane	43	3.718	3.718	(0.960)	417669	40.0000	43.3
9 1,3-Dichlorobenzene	146	3.839	3.839	(0.991)	535359	40.0000	42.0
11 1,4-Dichlorobenzene	146	3.882	3.882	(1.002)	542878	40.0000	41.9
13 1,2-Dichlorobenzene	146	3.988	3.988	(1.030)	506599	40.0000	41.4
14 bis(2-Chloroisopropyl)ether	45	4.017	4.017	(1.037)	492239	40.0000	42.2
12 Benzyl alcohol	108	3.940	3.940	(1.017)	242013	40.0000	36.0
15 o-Cresol	107	3.988	3.988	(1.030)	339164	40.0000	39.9
18 m,p-Cresols	107	4.094	4.094	(1.057)	440620	40.0000	40.7
17 N-Nitrosodipropylamine	70	4.113	4.113	(1.062)	283023	40.0000	50.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
19 Hexachloroethane	117	4.219	4.219	(1.090)	195958	40.0000	41.0
21 Nitrobenzene	77	4.248	4.248	(0.896)	458084	40.0000	45.3
22 Isophorone	82	4.407	4.407	(0.930)	803882	40.0000	42.8
23 2-Nitrophenol	139	4.465	4.465	(0.942)	228260	40.0000	43.4
24 2,4-Dimethylphenol	122	4.455	4.455	(0.940)	430615	40.0000	47.4
25 bis(2-Chloroethoxy)methane	93	4.527	4.527	(0.955)	468873	40.0000	44.6
26 2,4-Dichlorophenol	162	4.624	4.624	(0.976)	397302	40.0000	46.9
27 Benzoic acid	105	4.518	4.518	(0.953)	199922	40.0000	42.7
28 1,2,4-Trichlorobenzene	180	4.691	4.691	(0.990)	484906	40.0000	45.7
30 Naphthalene	128	4.758	4.758	(1.004)	1265467	40.0000	43.1
204 alpha-Terpineol	59	4.734	4.734	(0.999)	306186	40.0000	44.6
31 4-Chloroaniline	127	4.758	4.758	(1.004)	498466	40.0000	42.4
32 Hexachlorobutadiene	225	4.821	4.821	(1.017)	316312	40.0000	45.8
33 4-Chloro-3-methylphenol	107	5.086	5.086	(1.073)	362553	40.0000	43.5
34 2-Methylnaphthalene	142	5.240	5.240	(1.106)	888363	40.0000	43.8
35 1-Methylnaphthalene	142	5.312	5.312	(1.121)	867060	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.341	5.341	(0.891)	170373	40.0000	43.2
205 2,3-Dichloroaniline	161	5.437	5.437	(0.907)	454215	40.0000	40.4
37 2,4,6-Trichlorophenol	196	5.428	5.428	(0.905)	302475	40.0000	42.7
38 2,4,5-Trichlorophenol	196	5.457	5.457	(0.910)	332001	40.0000	44.8
40 2-Chloronaphthalene	162	5.592	5.592	(0.933)	866422	40.0000	42.1
42 o-Nitroaniline	65	5.649	5.649	(0.942)	221504	40.0000	40.5
41 m-Nitroaniline	138	5.948	5.948	(0.992)	62168	40.0000	26.2
43 Dimethylphthalate	163	5.760	5.760	(0.961)	1008294	40.0000	41.5
44 2,6-Dinitrotoluene	165	5.813	5.813	(0.969)	234007	40.0000	41.2
50 2,4-Dinitrotoluene	165	6.112	6.112	(1.019)	291711	40.0000	40.2
45 Acenaphthylene	152	5.900	5.900	(0.984)	1320030	40.0000	42.1
47 Acenaphthene	154	6.020	6.020	(1.004)	864277	40.0000	42.7
48 2,4-Dinitrophenol	184	6.020	6.020	(1.004)	81355	40.0000	40.8
49 Dibenzofuran	168	6.145	6.145	(1.025)	1190059	40.0000	40.6
51 Diethylphthalate	149	6.266	6.266	(1.045)	964788	40.0000	39.9
52 4-Nitrophenol	139	6.035	6.035	(1.006)	153938	40.0000	43.8
53 Fluorene	166	6.405	6.405	(1.068)	1004701	40.0000	41.4
54 4-Chlorophenylphenylether	204	6.381	6.381	(1.064)	547133	40.0000	41.0
55 2-Methyl-4,6-dinitrophenol	198	6.420	6.420	(0.896)	132096	40.0000	38.7
56 p-Nitroaniline	138	6.405	6.405	(1.068)	106046	40.0000	43.6
133 Diphenylamine	169	6.473	6.473	(0.903)	627927	40.0000	36.4
58 1,2-Diphenylhydrazine	77	6.506	6.506	(0.908)	917707	40.0000	42.9
61 4-Bromophenylphenylether	248	6.771	6.771	(0.945)	338592	40.0000	42.7
63 Hexachlorobenzene	284	6.839	6.839	(0.954)	366387	40.0000	43.5
65 Pentachlorophenol	266	6.988	6.988	(0.975)	196882	40.0000	46.2
206 n-Octadecane	57	6.978	6.978	(0.974)	496172	40.0000	42.8
68 Phenanthrene	178	7.185	7.185	(1.003)	1405752	40.0000	42.6
69 Anthracene	178	7.229	7.229	(1.009)	1384655	40.0000	42.2
72 Di-n-butylphthalate	149	7.585	7.585	(1.058)	1580905	40.0000	41.9
76 Fluoranthene	202	8.226	8.226	(1.148)	1552577	40.0000	43.0
79 Pyrene	202	8.442	8.442	(0.881)	1636653	40.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
85 Butylbenzylphthalate	149	8.972	8.972	(0.937)	700211	40.0000	44.0
89 Benzo(a)anthracene	228	9.564	9.564	(0.998)	1537712	40.0000	43.1
92 Chrysene	228	9.603	9.603	(1.002)	1386691	40.0000	42.6
93 bis(2-Ethylhexyl)phthalate	149	9.497	9.497	(0.991)	1018911	40.0000	43.0
94 Di-n-octylphthalate	149	10.142	10.142	(0.903)	1584229	40.0000	44.8
95 Benzo(b)fluoranthene	252	10.715	10.715	(0.955)	1466875	40.0000	42.8
96 Benzo(k)fluoranthene	252	10.749	10.749	(0.958)	1483158	40.0000	43.4
97 Benzo(a)pyrene	252	11.148	11.148	(0.993)	1321750	40.0000	43.8
99 Indeno(1,2,3-cd)pyrene	276	12.964	12.964	(1.155)	1370809	40.0000	40.5
100 Dibenzo(a,h)anthracene	278	12.978	12.978	(1.156)	1109978	40.0000	39.1
101 Benzo(ghi)perylene	276	13.498	13.498	(1.202)	1141922	40.0000	43.0
126 m-Dinitrobenzene	168	5.799	5.799	(0.967)	159718	40.0000	40.0
130 2,3,4,6-Tetrachlorophenol	232	6.227	6.227	(1.039)	291226	40.0000	45.6
143 Dinoseb	211	7.113	7.113	(0.993)	196889	40.0000	37.7
173 Carbazole	167	7.344	7.344	(1.025)	568621	40.0000	34.4
184 p-Benzoquinone	54	3.357	3.357	(0.867)	37164	40.0000	31.9
192 Methoxychlor	227	9.449	9.449	(0.986)	914790	40.0000	45.2
211 p-Toluidine	106	4.147	4.147	(1.071)	282528	40.0000	36.9
210 m-Toluidine	106	4.171	4.171	(1.077)	360042	40.0000	30.0
26 Phthalic anhydride	104	5.269	5.269	(1.112)	116104	40.0000	31.4
179 Dibenzo(a,e)pyrene	302	17.543	17.543	(1.563)	659922	40.0000	41.1(H)
214 1,4-Dinitrobenzene	75	5.741	5.741	(0.957)	165618	40.0000	42.7
215 2-Ethoxyethanol	59	2.197	2.197	(0.567)	192270	40.0000	41.4
216 Methylenebis(2-chloroaniline)	231	9.506	9.506	(0.992)	147002	40.0000	33.5(Q)
M 225 Trichlorophenols	196				634476	80.0000	87.5
M 226 Tetrachlorophenols	232				291226	40.0000	45.6
M 227 Benzo(b,k)fluoranthene	252				2950033	80.0000	86.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s120609.b/s510602.d
Date : 06-DEC-2009 09:44
Client ID: MEGACVS
Sample Info: IWBN091106-06,3140 PPM|1|SVM|1|MEGACVS

Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

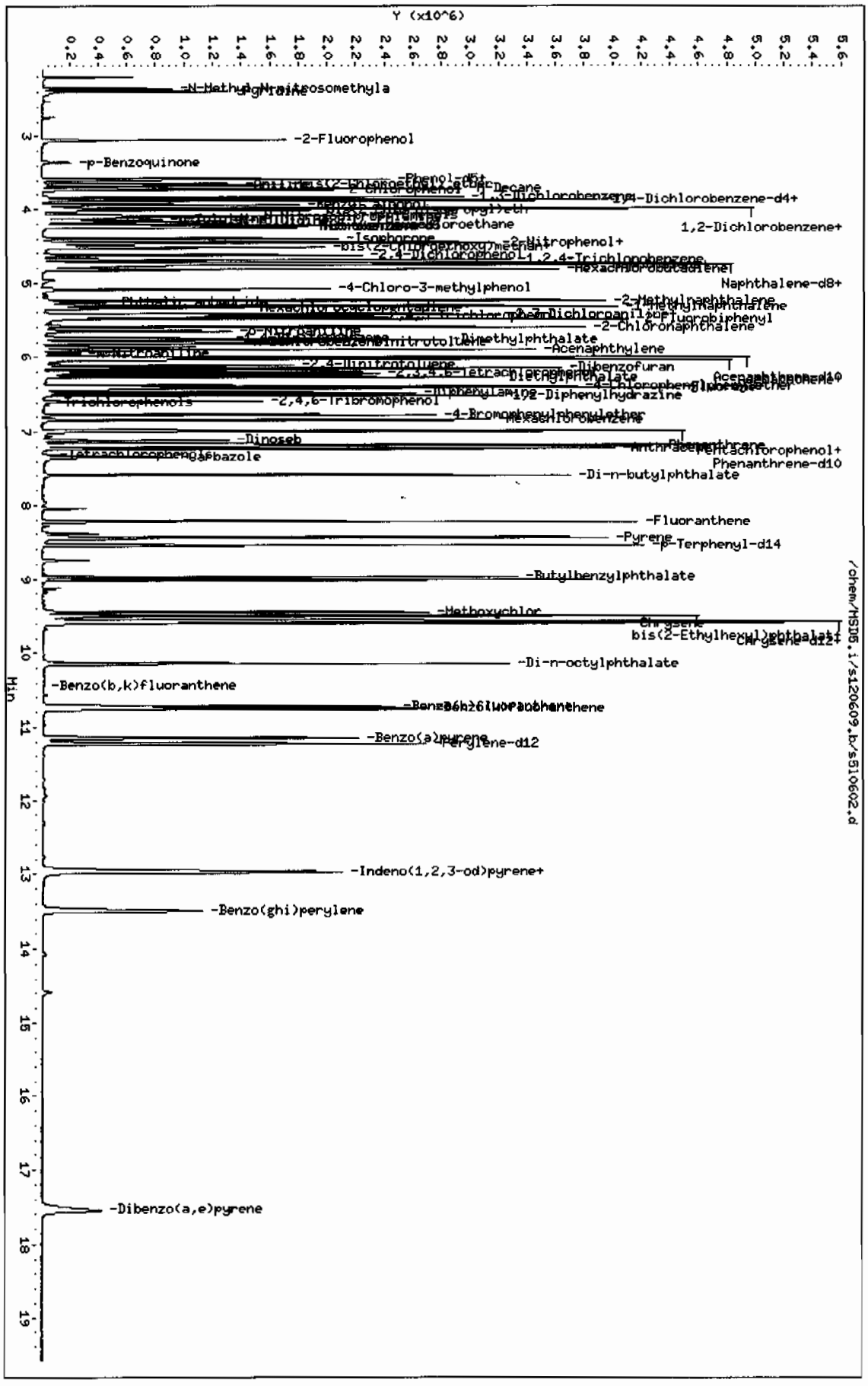

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510603.d
Analysis Type:
Lab Sample ID: WBN091201-03.4 Quant Type: ISTD
Method: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m

Injection Date: 06-DEC-2009 10:12
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.78567	0.78567	0.000	5.93726	60.00000	Averaged
16 Acetophenone	1.03433	1.05350	1.05350	0.000	1.85353	60.00000	Averaged
189 Caprolactam	0.07313	0.07798	0.07798	0.000	6.62083	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.13186	1.13186	0.000	6.79893	60.00000	Averaged
207 Atrazine	0.02060	0.03972	0.03972	0.000	92.84515	60.00000	Averaged <-
77 Benzidine	0.13169	0.06099	0.06099	0.000	-53.68708	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.28001	0.28001	0.000	3.50513	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.31990	0.31990	0.000	14.83623	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.17831	0.17831	0.000	6.39078	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.70366	0.70366	0.000	2.94696	60.00000	Averaged
105 2-Picoline	1.04139	1.07098	1.07098	0.000	2.84152	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.38953	0.38953	0.000	8.48467	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.43975	0.43975	0.000	-2.25905	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.40817	0.40817	0.000	13.41839	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.52582	0.52582	0.000	-1.94219	60.00000	Averaged
110 Pentachloroethane	0.32008	0.32392	0.32392	0.000	1.19901	60.00000	Averaged
111 N-Nitrosopyrrolidine	45.20546	40.00000	0.42541	0.000	13.01365	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.43638	0.43638	0.000	15.16729	60.00000	Averaged
114 o-Toluidine	1.42745	1.43909	1.43909	0.000	0.81584	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.13026	0.13026	0.000	14.24393	60.00000	Averaged
116 a,a-Dimethylphenethylamine	42.98636	40.00000	0.52829	0.000	7.46591	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.23349	0.23349	0.000	12.65382	60.00000	Averaged
119 Hexachloropropene	0.12260	0.11032	0.11032	0.000	-10.01605	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.13840	0.13840	0.000	45.51848	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.14117	0.17137	0.17137	0.000	21.39368	60.00000	Averaged
122 Safrole	0.19879	0.21747	0.21747	0.000	9.40008	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.49864	0.49864	0.000	6.74999	60.00000	Averaged
124 Isosafrole	0.31092	0.33196	0.33196	0.000	6.76642	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.34089	0.34089	0.000	25.50572	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.46307	0.46307	0.000	8.10710	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.75422	0.75422	0.000	5.88962	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.68456	0.68456	0.000	7.18393	60.00000	Averaged
131 5-Nitro-o-toluidine	39.63579	40.00000	0.25434	0.000	-0.91052	60.00000	Linear
136 1,3,5-Trinitrobenzene	36.97359	40.00000	0.08269	0.000	-7.56604	60.00000	Linear
137 Phenacetin	0.22007	0.21813	0.21813	0.000	-0.88363	60.00000	Averaged
138 Diallate	0.17747	0.19692	0.19692	0.000	10.95846	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510603.d
Analysis Type:
Lab Sample ID: WBN091201-03.4
Method: /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m

Injection Date: 06-DEC-2009 10:12
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.19379	0.19379	0.000	16.62511	60.00000	Averaged
213 Trans Diallate	0.20879	0.23167	0.23167	0.000	10.95846	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.31272	0.31272	0.000	-5.71657	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08695	0.08695	0.000	11.35698	60.00000	Averaged
142 Pronamide	0.25257	0.27299	0.27299	0.000	8.08384	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01171	0.01171	0.000	17.95367	60.00000	Averaged
147 Methapyrilene	0.25201	0.22891	0.22891	0.000	-9.16709	60.00000	Averaged
148 Isodrin	0.09860	0.10904	0.10904	0.000	10.58864	60.00000	Averaged
149 Aramite	0.04052	0.04438	0.04438	0.000	9.54138	60.00000	Averaged
150 Kepone	0.07629	0.08505	0.08505	0.000	11.48874	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.23139	0.23139	0.000	11.23747	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.31749	0.31749	0.000	19.80877	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.31350	0.31350	0.000	-13.24107	60.00000	Averaged
155 2-Acetylaminofluorene	40.51855	40.00000	0.29049	0.000	1.29637	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.46563	0.46563	0.000	10.06306	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.39177	0.39177	0.000	6.90058	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510603.d
Lab Smp Id: WBN091201-03.4 Client Smp ID: AP12CVS
Inj Date : 06-DEC-2009 10:12
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091201-03.4|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.866	3.872	(1.000)	450920	40.0000	
* 29 Naphthalene-d8	136	4.737	4.739	(1.000)	1508983	40.0000	
* 46 Acenaphthene-d10	164	5.989	5.996	(1.000)	953644	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1682779	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1546815	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1368091	40.0000	
209 Benzaldehyde	77	3.590	3.590	(0.928)	354275	40.0000	42.4(H)
16 Acetophenone	105	4.119	4.119	(1.065)	475044	40.0000	40.7(H)
189 Caprolactam	113	5.013	5.013	(1.058)	117664	40.0000	42.6(H)
208 1,1'-Biphenyl	154	5.560	5.560	(0.928)	1079396	40.0000	42.7(H)
207 Atrazine	173	6.860	6.860	(0.958)	66839	40.0000	77.1
77 Benzidine	184	8.313	8.313	(0.869)	94338	40.0000	18.5(H)
90 3,3'-Dichlorobenzidine	252	9.501	9.501	(0.993)	433121	40.0000	41.4(H)
102 1,4-Dioxane	88	2.201	2.201	(0.569)	144251	40.0000	45.9(H)
103 Methyl methacrylate	100	2.190	2.190	(0.566)	80403	40.0000	42.6(H)
104 Ethyl methacrylate	69	2.566	2.566	(0.664)	317296	40.0000	41.2(H)
105 2-Picoline	93	2.760	2.760	(0.714)	482928	40.0000	41.1
106 N-Nitrosomethylethylamine	88	2.801	2.801	(0.725)	175645	40.0000	43.4(H)
107 Methyl methanesulfonate	80	2.960	2.960	(0.766)	198292	40.0000	39.1(H)
108 N-Nitrosodiethylamine	102	3.196	3.196	(0.827)	184053	40.0000	45.4(H)
109 Ethyl Methanesulfonate	79	3.354	3.354	(0.868)	237105	40.0000	39.2(H)
110 Pentachloroethane	167	3.690	3.690	(0.954)	146063	40.0000	40.5(H)
111 N-Nitrosopyrrolidine	100	4.107	4.107	(1.062)	191827	40.0000	45.2(H)
113 N-Nitrosomorpholine	56	4.131	4.131	(1.068)	196773	40.0000	46.1(H)
114 o-Toluidine	106	4.148	4.148	(1.073)	648916	40.0000	40.3(H)
115 N-Nitrosopiperidine	114	4.348	4.348	(0.918)	196558	40.0000	45.7(H)
116 a,a-Dimethylphenethylamine	58	4.613	4.613	(0.974)	797183	40.0000	43.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.778	4.778	(1.009)	352326	40.0000	45.1(H)
119 Hexachloropropene	213	4.807	4.807	(1.015)	166476	40.0000	36.0
120 p-Phenylenediamine	108	5.019	5.019	(1.060)	208846	40.0000	58.2
121 N-Nitrosodi-n-butylamine	84	4.984	4.984	(1.052)	258599	40.0000	48.6(TH)
122 Safrole	162	5.148	5.148	(1.087)	328161	40.0000	43.8
123 1,2,4,5-Tetrachlorobenzene	216	5.348	5.348	(0.893)	475523	40.0000	42.7(H)
124 Isosafrole	162	5.519	5.519	(0.921)	316572	40.0000	42.7(H)
125 1,4-Naphthoquinone	158	5.707	5.707	(0.953)	325091	40.0000	50.2(H)
127 Pentachlorobenzene	250	6.107	6.107	(1.020)	441601	40.0000	43.2(H)
128 1-Naphthylamine	143	6.195	6.195	(1.034)	719258	40.0000	42.4(H)
129 2-Naphthylamine	143	6.254	6.254	(1.044)	652831	40.0000	42.9(H)
131 5-Nitro-o-toluidine	152	6.389	6.389	(1.067)	242554	40.0000	39.6(H)
136 1,3,5-Trinitrobenzene	75	6.648	6.648	(0.929)	139153	40.0000	37.0(H)
137 Phenacetin	108	6.684	6.684	(0.933)	367062	40.0000	39.6(H)
138 Diallate	86	6.672	6.672	(0.932)	331378	40.0000	44.4(H)
212 Cis Diallate	86	6.748	6.748	(0.942)	48917	6.00000	7.0(H)
213 Trans Diallate	86	6.672	6.672	(0.932)	331378	34.0000	37.7(H)
140 4-Aminobiphenyl	169	6.978	6.978	(0.975)	526236	40.0000	37.7(H)
141 Pentachloronitrobenzene	237	6.995	6.995	(0.977)	146321	40.0000	44.5
142 Pronamide	173	6.989	6.989	(0.976)	459375	40.0000	43.2(H)
146 4-Nitroquinoline-1-oxide	101	7.825	7.825	(1.093)	19706	40.0000	47.2(H)
147 Methapyrilene	58	7.860	7.860	(1.098)	385198	40.0000	36.3(H)
148 Isodrin	193	8.083	8.083	(1.129)	183489	40.0000	44.2(H)
149 Aramite	185	8.483	8.483	(1.185)	74688	40.0000	43.8(H)
150 Kepone	272	9.066	9.066	(1.266)	143121	40.0000	44.6(H)
151 p-(Dimethylamino)azobenzene	120	8.666	8.666	(0.906)	357913	40.0000	44.5(H)
152 Chlorobenzilate	251	8.695	8.695	(0.909)	491098	40.0000	47.9
153 3,3'-Dimethylbenzidine	212	8.977	8.977	(0.938)	484922	40.0000	34.7(H)
155 2-Acetylaminofluorene	181	9.225	9.225	(0.964)	449328	40.0000	40.5
157 7,12Dimethylbenz(a)anthracene	256	10.677	10.677	(0.952)	637026	40.0000	44.0(H)
158 3-Methylcholanthrene	268	11.607	11.607	(1.035)	535973	40.0000	42.8(H)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s120609.b/s510603.d
Date : 06-DEC-2009 10:12
Client ID: AP12CVS
Sample Info: IWBN091201-03,4|40 PPM|1|SVM11|AP12CVS
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

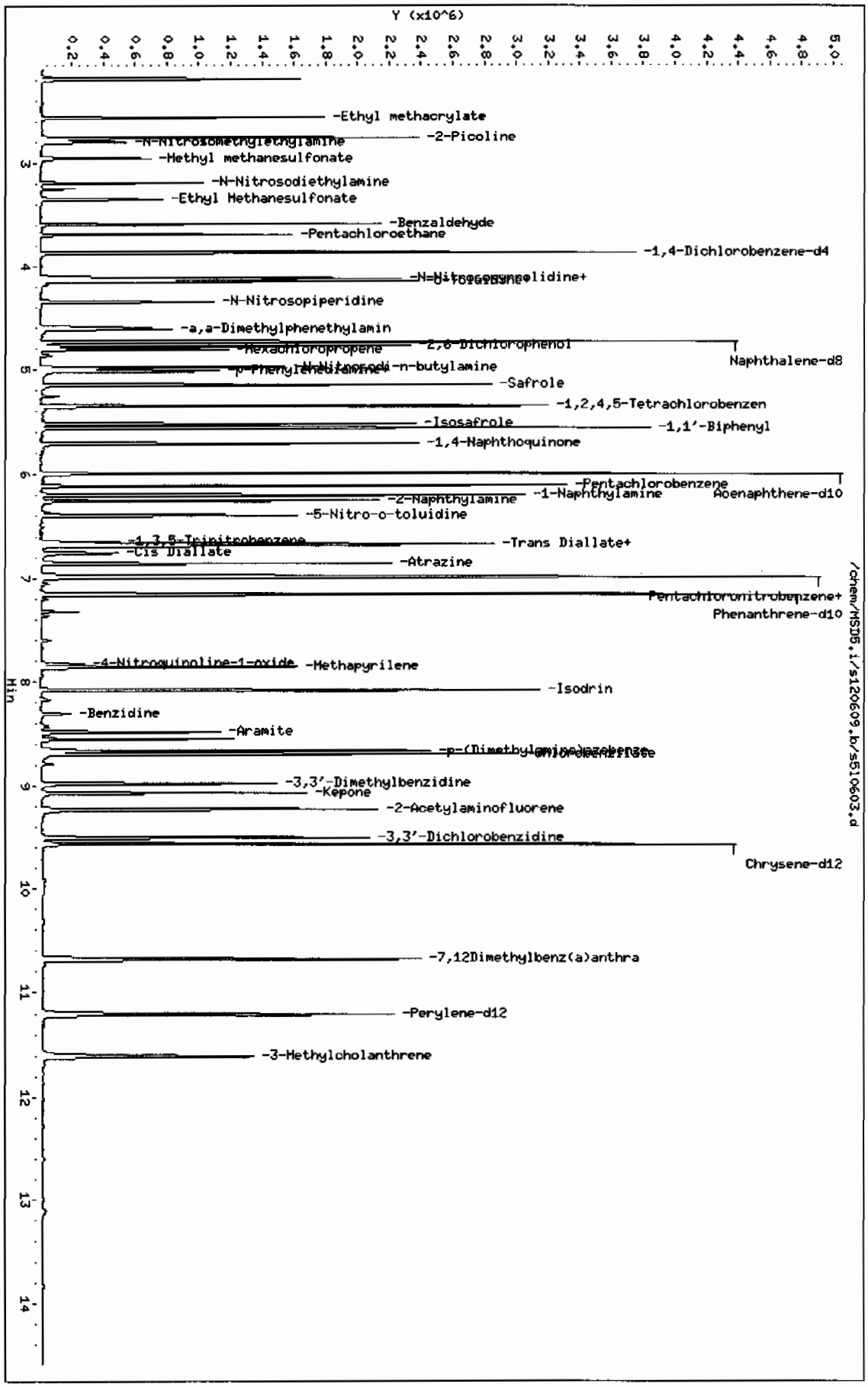

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 09-DEC-2009 15:34
Lab File ID: s510909.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	0.82835	0.77254	0.77254	0.000	-6.73750	60.00000	Averaged	
$	5 Phenol-d5	1.02741	0.95983	0.95983	0.000	-6.57769	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.25574	0.23766	0.23766	0.000	-7.06823	60.00000	Averaged	
$	39 2-Fluorobiphenyl	1.01051	0.98434	0.98434	0.000	-2.58996	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.14796	0.15006	0.15006	0.000	1.41514	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.57204	0.55961	0.55961	0.000	-2.17291	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.45921	0.43611	0.43611	0.000	-5.03022	60.00000	Averaged	
	2 Pyridine	0.65138	0.62264	0.62264	0.000	-4.41108	60.00000	Averaged	
	4 Aniline	0.40115	0.38331	0.38331	0.000	-4.44648	60.00000	Averaged	
	6 Phenol	1.07292	0.99001	0.99001	0.001	-7.72724	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.63389	0.55358	0.55358	0.000	-12.66951	60.00000	Averaged	
	8 2-Chlorophenol	0.92015	0.87197	0.87197	0.000	-5.23674	60.00000	Averaged	
	203 n-Decane	0.83349	0.79770	0.79770	0.000	-4.29378	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.10185	1.07264	1.07264	0.000	-2.65135	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.11854	1.08770	1.08770	0.001	-2.75690	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.05853	1.02489	1.02489	0.000	-3.17782	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	1.00756	0.94581	0.94581	0.000	-6.12864	60.00000	Averaged	
	12 Benzyl alcohol	0.58054	0.53767	0.53767	0.000	-7.38569	60.00000	Averaged	
	15 o-Cresol	0.73443	0.66260	0.66260	0.000	-9.77945	60.00000	Averaged	
	18 m,p-Cresols	0.93489	0.84182	0.84182	0.000	-9.95535	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.48281	0.48392	0.48392	0.050	0.22945	60.00000	Averaged	spcc
	19 Hexachloroethane	0.41297	0.39709	0.39709	0.000	-3.84532	60.00000	Averaged	
	21 Nitrobenzene	0.23812	0.23816	0.23816	0.000	0.01667	60.00000	Averaged	
	22 Isophorone	0.44222	0.43025	0.43025	0.000	-2.70796	60.00000	Averaged	
	23 2-Nitrophenol	0.12401	0.12201	0.12201	0.001	-1.61959	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.21392	0.21229	0.21229	0.000	-0.76290	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.24742	0.25012	0.25012	0.000	1.09055	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.19949	0.21345	0.21345	0.001	6.99472	20.00000	Averaged	ccc
	27 Benzoic acid	0.11033	0.07881	0.07881	0.000	-28.56701	60.00000	Averaged	
	28 1,2,4-Trichlorobenzene	0.24997	0.26327	0.26327	0.000	5.32047	60.00000	Averaged	
	30 Naphthalene	0.69229	0.69707	0.69707	0.000	0.69001	60.00000	Averaged	
	204 alpha-Terpineol	0.16160	0.16121	0.16121	0.000	-0.23919	60.00000	Averaged	
	31 4-Chloroaniline	0.27721	0.29809	0.29809	0.000	7.53144	60.00000	Averaged	
	32 Hexachlorobutadiene	0.16258	0.17247	0.17247	0.001	6.07866	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.19655	0.19629	0.19629	0.001	-0.12988	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.47745	0.48620	0.48620	0.000	1.83346	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510909.d
Analysis Type:
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m

Injection Date: 09-DEC-2009 15:34
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.46395	0.47204	0.47204	0.000	1.74341	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.16140	0.15863	0.15863	0.050	-1.71777	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.46121	0.45100	0.45100	0.000	-2.21393	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.29051	0.28529	0.28529	0.001	-1.79611	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.30357	0.30097	0.30097	0.000	-0.85780	60.00000	Averaged	
40	2-Chloronaphthalene	0.84403	0.80413	0.80413	0.000	-4.72655	60.00000	Averaged	
42	o-Nitroaniline	0.22389	0.20498	0.20498	0.000	-8.44506	60.00000	Averaged	
41	m-Nitroaniline	45.24061	40.00000	0.15798	0.000	13.10152	60.00000	Linear	
43	Dimethylphthalate	0.99502	0.95385	0.95385	0.000	-4.13811	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.23251	0.22111	0.22111	0.000	-4.90090	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.29743	0.28224	0.28224	0.000	-5.10430	60.00000	Averaged	
45	Acenaphthylene	1.28545	1.24740	1.24740	0.000	-2.95966	60.00000	Averaged	
47	Acenaphthene	0.82864	0.80300	0.80300	0.001	-3.09349	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	42.48852	40.00000	0.08838	0.050	6.22130	60.00000	Linear	spcc
49	Dibenzofuran	1.20211	1.13548	1.13548	0.000	-5.54323	60.00000	Averaged	
51	Diethylphthalate	0.99012	0.91459	0.91459	0.000	-7.62775	60.00000	Averaged	
52	4-Nitrophenol	38.98909	40.00000	0.13758	0.050	-2.52729	60.00000	Linear	spcc
53	Fluorene	0.99445	0.96368	0.96368	0.000	-3.09451	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.54736	0.52314	0.52314	0.000	-4.42457	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	38.07077	40.00000	0.07378	0.000	-4.82307	60.00000	Linear	
56	p-Nitroaniline	0.09976	0.11257	0.11257	0.000	12.84243	60.00000	Averaged	
133	Diphenylamine	0.39311	0.40888	0.40888	0.001	4.01193	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.48769	0.46188	0.46188	0.000	-5.29176	60.00000	Averaged	
61	4-Bromophenylphenylether	0.18052	0.17594	0.17594	0.000	-2.53736	60.00000	Averaged	
63	Hexachlorobenzene	0.19191	0.18891	0.18891	0.000	-1.56318	60.00000	Averaged	
65	Pentachlorophenol	40.96901	40.00000	0.09731	0.001	2.42253	20.00000	Linear	ccc
206	n-Octadecane	0.26436	0.25110	0.25110	0.000	-5.01657	60.00000	Averaged	
68	Phenanthrene	0.75124	0.72434	0.72434	0.000	-3.58109	60.00000	Averaged	
69	Anthracene	0.74720	0.72699	0.72699	0.000	-2.70438	60.00000	Averaged	
72	Di-n-butylphthalate	0.85957	0.83160	0.83160	0.000	-3.25474	60.00000	Averaged	
76	Fluoranthene	0.82257	0.83923	0.83923	0.001	2.02557	20.00000	Averaged	ccc
79	Pyrene	0.81023	0.82520	0.82520	0.000	1.84691	60.00000	Averaged	
85	Butylbenzylphthalate	0.36001	0.34437	0.34437	0.000	-4.34386	60.00000	Averaged	
89	Benzo(a)anthracene	0.80663	0.77628	0.77628	0.000	-3.76359	60.00000	Averaged	
92	Chrysene	0.73533	0.71873	0.71873	0.000	-2.25683	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	37.43091	40.00000	0.50051	0.000	-6.42272	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 09-DEC-2009 15:34
Lab File ID: s510909.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.81293	0.81293	0.001	-6.17355	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.80885	0.80885	0.000	-3.50170	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.81921	0.81921	0.000	-2.09031	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.73987	0.73987	0.001	0.11049	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	38.19518	40.00000	0.78932	0.000	-4.51206	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	37.28032	40.00000	0.64701	0.000	-6.79921	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.65821	0.65821	0.000	1.21384	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.15180	0.15180	0.000	-7.19076	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.27048	0.27048	0.000	3.38602	60.00000	Averaged	
	143 Dinoseb	38.12740	40.00000	0.11380	0.000	-4.68149	60.00000	Linear	
	173 Carbazole	38.76893	40.00000	0.36710	0.000	-3.07766	60.00000	Linear	
	184 p-Benzoquinone	20.03517	40.00000	0.04687	0.000	-49.91207	60.00000	Linear	
	192 Methoxychlor	0.45776	0.46832	0.46832	0.000	2.30729	60.00000	Averaged	
	211 p-Toluidine	42.96808	40.00000	0.72925	0.000	7.42020	60.00000	Linear	
	210 m-Toluidine	1.03581	0.99860	0.99860	0.000	-3.59217	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.09679	0.09679	0.000	11.22842	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.37392	0.37392	0.000	-4.96620	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.14399	0.14399	0.000	-9.45985	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.36989	0.36989	0.000	-7.83303	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.09974	0.09974	0.000	0.47962	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.29313	0.29313	0.000	-1.31667	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.27048	0.27048	0.000	3.38602	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.81403	0.81403	0.000	-2.79665	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510909.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 09-DEC-2009 15:34
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 10-Dec-2009 07:20 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.839	3.839	(1.000)	429392	40.0000	
* 29 Naphthalene-d8	136	4.706	4.706	(1.000)	1609729	40.0000	
* 46 Acenaphthene-d10	164	5.958	5.958	(1.000)	955049	40.0000	
* 67 Phenanthrene-d10	188	7.123	7.123	(1.000)	1772272	40.0000	
* 91 Chrysene-d12	240	9.531	9.531	(1.000)	1924317	40.0000	
* 98 Perylene-d12	264	11.153	11.153	(1.000)	1861455	40.0000	
$ 3 2-Fluorophenol	112	3.020	3.020	(0.787)	331724	40.0000	37.3
$ 5 Phenol-d5	99	3.555	3.555	(0.926)	412142	40.0000	37.4
$ 20 Nitrobenzene-d5	82	4.200	4.200	(0.893)	382572	40.0000	37.2
$ 39 2-Fluorobiphenyl	172	5.447	5.447	(0.914)	940094	40.0000	39.0
$ 60 2,4,6-Tribromophenol	329	6.550	6.550	(1.099)	143311	40.0000	40.6
$ 81 p-Terphenyl-d14	244	8.495	8.495	(0.891)	1076868	40.0000	39.1
1 N-Methyl-N-nitrosomethylamine	74	2.322	2.322	(0.605)	187261	40.0000	38.0
2 Pyridine	79	2.351	2.351	(0.612)	267358	40.0000	38.2
4 Aniline	66	3.622	3.622	(0.944)	164590	40.0000	38.2
6 Phenol	94	3.565	3.565	(0.928)	425104	40.0000	36.9(Q)
7 bis(2-Chloroethyl) ether	63	3.642	3.642	(0.949)	237702	40.0000	34.9
8 2-Chlorophenol	128	3.704	3.704	(0.965)	374415	40.0000	37.9
203 n-Decane	43	3.690	3.690	(0.961)	342528	40.0000	38.3
9 1,3-Dichlorobenzene	146	3.805	3.805	(0.991)	460581	40.0000	38.9
11 1,4-Dichlorobenzene	146	3.849	3.849	(1.002)	467049	40.0000	38.9
13 1,2-Dichlorobenzene	146	3.955	3.955	(1.030)	440081	40.0000	38.7
14 bis(2-Chloroisopropyl)ether	45	3.983	3.983	(1.038)	406125	40.0000	37.5
12 Benzyl alcohol	108	3.906	3.906	(1.018)	230870	40.0000	37.0
15 o-Cresol	107	3.955	3.955	(1.030)	284517	40.0000	36.1
18 m,p-Cresols	107	4.060	4.060	(1.058)	361472	40.0000	36.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.080	4.080	(1.063)	207790	40.0000	40.1
19 Hexachloroethane	117	4.181	4.181	(1.089)	170509	40.0000	38.5
21 Nitrobenzene	77	4.215	4.215	(0.896)	383375	40.0000	40.0
22 Isophorone	82	4.369	4.369	(0.928)	692585	40.0000	38.9
23 2-Nitrophenol	139	4.431	4.431	(0.942)	196396	40.0000	39.4
24 2,4-Dimethylphenol	122	4.422	4.422	(0.940)	341734	40.0000	39.7
25 bis(2-Chloroethoxy)methane	93	4.489	4.489	(0.954)	402624	40.0000	40.4
26 2,4-Dichlorophenol	162	4.590	4.590	(0.975)	343590	40.0000	42.8
27 Benzoic acid	105	4.479	4.479	(0.952)	126862	40.0000	28.6
28 1,2,4-Trichlorobenzene	180	4.658	4.658	(0.990)	423788	40.0000	42.1
30 Naphthalene	128	4.720	4.720	(1.003)	1122091	40.0000	40.3
204 alpha-Terpineol	59	4.696	4.696	(0.998)	259506	40.0000	39.9
31 4-Chloroaniline	127	4.735	4.735	(1.006)	479842	40.0000	43.0
32 Hexachlorobutadiene	225	4.788	4.788	(1.017)	277624	40.0000	42.4
33 4-Chloro-3-methylphenol	107	5.048	5.048	(1.073)	315978	40.0000	39.9
34 2-Methylnaphthalene	142	5.202	5.202	(1.105)	782656	40.0000	40.7
35 1-Methylnaphthalene	142	5.274	5.274	(1.121)	759856	40.0000	40.7
36 Hexachlorocyclopentadiene	237	5.303	5.303	(0.890)	151495	40.0000	39.3
205 2,3-Dichloroaniline	161	5.399	5.399	(0.906)	430727	40.0000	39.1
37 2,4,6-Trichlorophenol	196	5.390	5.390	(0.905)	272465	40.0000	39.3
38 2,4,5-Trichlorophenol	196	5.418	5.418	(0.909)	287438	40.0000	39.6
40 2-Chloronaphthalene	162	5.553	5.553	(0.932)	767987	40.0000	38.1
42 o-Nitroaniline	65	5.616	5.616	(0.943)	195768	40.0000	36.6
41 m-Nitroaniline	138	5.910	5.910	(0.992)	150882	40.0000	45.2
43 Dimethylphthalate	163	5.727	5.727	(0.961)	910969	40.0000	38.3
44 2,6-Dinitrotoluene	165	5.780	5.780	(0.970)	211175	40.0000	38.0
50 2,4-Dinitrotoluene	165	6.073	6.073	(1.019)	269557	40.0000	38.0
45 Acenaphthylene	152	5.861	5.861	(0.984)	1191329	40.0000	38.8
47 Acenaphthene	154	5.987	5.987	(1.005)	766909	40.0000	38.8
48 2,4-Dinitrophenol	184	5.982	5.982	(1.004)	84409	40.0000	42.5
49 Dibenzofuran	168	6.107	6.107	(1.025)	1084437	40.0000	37.8
51 Diethylphthalate	149	6.232	6.232	(1.046)	873483	40.0000	36.9
52 4-Nitrophenol	139	6.001	6.001	(1.007)	131393	40.0000	39.0
53 Fluorene	166	6.367	6.367	(1.069)	920357	40.0000	38.8
54 4-Chlorophenylphenylether	204	6.343	6.343	(1.065)	499625	40.0000	38.2
55 2-Methyl-4,6-dinitrophenol	198	6.386	6.386	(0.897)	130765	40.0000	38.1
56 p-Nitroaniline	138	6.367	6.367	(1.069)	107508	40.0000	45.1
133 Diphenylamine	169	6.430	6.430	(0.903)	724655	40.0000	41.6
58 1,2-Diphenylhydrazine	77	6.468	6.468	(0.908)	818583	40.0000	37.9
61 4-Bromophenylphenylether	248	6.728	6.728	(0.945)	311821	40.0000	39.0
63 Hexachlorobenzene	284	6.800	6.800	(0.955)	334796	40.0000	39.4
65 Pentachlorophenol	266	6.950	6.950	(0.976)	172453	40.0000	41.0
206 n-Octadecane	57	6.940	6.940	(0.974)	445010	40.0000	38.0
68 Phenanthrene	178	7.142	7.142	(1.003)	1283724	40.0000	38.6
69 Anthracene	178	7.186	7.186	(1.009)	1288421	40.0000	38.9
72 Di-n-butylphthalate	149	7.547	7.547	(1.059)	1473817	40.0000	38.7
76 Fluoranthene	202	8.182	8.182	(1.149)	1487350	40.0000	40.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	8.394	8.394	(0.881)	1587940	40.0000	40.7
85 Butylbenzylphthalate	149	8.929	8.929	(0.937)	662678	40.0000	38.3
89 Benzo(a)anthracene	228	9.516	9.516	(0.998)	1493800	40.0000	38.5
92 Chrysene	228	9.555	9.555	(1.003)	1383071	40.0000	39.1
93 bis(2-Ethylhexyl)phthalate	149	9.454	9.454	(0.992)	963144	40.0000	37.4
94 Di-n-octylphthalate	149	10.094	10.094	(0.905)	1513231	40.0000	37.5
95 Benzo(b)fluoranthene	252	10.653	10.653	(0.955)	1505644	40.0000	38.6
96 Benzo(k)fluoranthene	252	10.686	10.686	(0.958)	1524914	40.0000	39.2
97 Benzo(a)pyrene	252	11.076	11.076	(0.993)	1377242	40.0000	40.0
99 Indeno(1,2,3-cd)pyrene	276	12.858	12.858	(1.153)	1469288	40.0000	38.2
100 Dibenzo(a,h)anthracene	278	12.873	12.873	(1.154)	1204377	40.0000	37.3
101 Benzo(ghi)perylene	276	13.378	13.378	(1.199)	1225226	40.0000	40.5
126 m-Dinitrobenzene	168	5.765	5.765	(0.968)	144978	40.0000	37.1
130 2,3,4,6-Tetrachlorophenol	232	6.189	6.189	(1.039)	258317	40.0000	41.4
143 Dinoseb	211	7.070	7.070	(0.993)	201683	40.0000	38.1
173 Carbazole	167	7.301	7.301	(1.025)	650603	40.0000	38.8
184 p-Benzoquinone	54	3.324	3.324	(0.866)	20125	40.0000	20.0
192 Methoxychlor	227	9.401	9.401	(0.986)	901194	40.0000	40.9
211 p-Toluidine	106	4.113	4.113	(1.071)	313132	40.0000	43.0
210 m-Toluidine	106	4.138	4.138	(1.078)	428790	40.0000	38.6
26 Phthalic anhydride	104	5.235	5.235	(1.113)	155807	40.0000	44.5
179 Dibenzo(a,e)pyrene	302	17.351	17.351	(1.556)	696030	40.0000	38.0
214 1,4-Dinitrobenzene	75	5.707	5.707	(0.958)	137514	40.0000	36.2
215 2-Ethoxyethanol	59	2.158	2.158	(0.562)	158828	40.0000	36.9
216 Methylenebis(2-chloroaniline)	231	9.463	9.463	(0.993)	191930	40.0000	40.2(Q)
M 225 Trichlorophenols	196				559903	80.0000	78.9
M 226 Tetrachlorophenols	232				258317	40.0000	41.4
M 227 Benzo(b,k)fluoranthene	252				3030558	80.0000	77.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s120909.b/s510909.d
Date : 09-DEC-2009 15:34
Client ID: MEGACVS
Sample Info: IWBK091106-05,3|40 PPM||1|SVM|1|MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

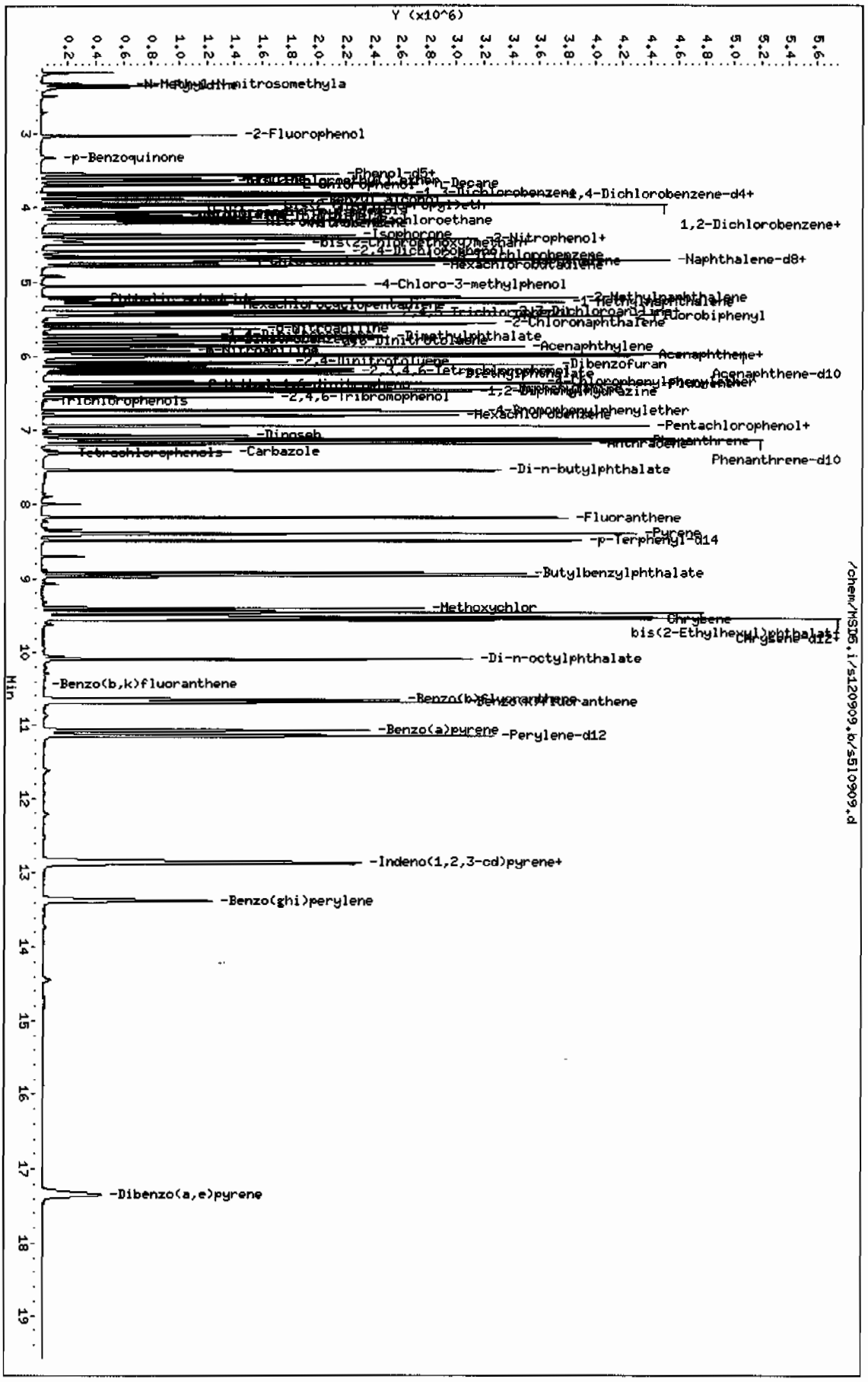

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510910.d
Analysis Type:
Lab Sample ID: WBN091201-03.4
Method: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m

Injection Date: 09-DEC-2009 16:02
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.70443	0.70443	0.000	-5.01710	60.00000	Averaged
16 Acetophenone	1.03433	0.98487	0.98487	0.000	-4.78193	60.00000	Averaged
189 Caprolactam	0.07313	0.07189	0.07189	0.000	-1.70689	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.04423	1.04423	0.000	-1.47033	60.00000	Averaged
207 Atrazine	0.02060	0.03656	0.03656	0.000	77.50225	60.00000	Averaged <-
77 Benzidine	0.13169	0.12301	0.12301	0.000	-6.59180	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.27155	0.27155	0.000	0.37673	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.25977	0.25977	0.000	-6.74900	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.15088	0.15088	0.000	-9.97441	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.64588	0.64588	0.000	-5.50694	60.00000	Averaged
105 2-Picoline	1.04139	0.97241	0.97241	0.000	-6.62413	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.33770	0.33770	0.000	-5.95025	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.39932	0.39932	0.000	-11.24507	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.34340	0.34340	0.000	-4.57925	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.48114	0.48114	0.000	-10.27507	60.00000	Averaged
110 Pentachloroethane	0.32008	0.31646	0.31646	0.000	-1.13097	60.00000	Averaged
111 N-Nitrosopyrrolidine	38.15328	40.00000	0.35304	0.000	-4.61679	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.34587	0.34587	0.000	-8.71900	60.00000	Averaged
114 o-Toluidine	1.42745	1.32681	1.32681	0.000	-7.05038	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.11336	0.11336	0.000	-0.57657	60.00000	Averaged
116 a,a-Dimethylphenethylamine	40.42732	40.00000	0.49288	0.000	1.06831	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.21567	0.21567	0.000	4.05726	60.00000	Averaged
119 Hexachloropropene	0.12260	0.13368	0.13368	0.000	9.03590	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.17744	0.17744	0.000	86.56234	60.00000	Averaged <-
121 N-Nitrosodi-n-butylamine	0.14117	0.13595	0.13595	0.000	-3.69663	60.00000	Averaged
122 Safrole	0.19879	0.20424	0.20424	0.000	2.74625	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.46179	0.46179	0.000	-1.13894	60.00000	Averaged
124 Isosafrole	0.31092	0.30369	0.30369	0.000	-2.32550	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.28116	0.28116	0.000	3.51240	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.43110	0.43110	0.000	0.64526	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.74809	0.74809	0.000	5.02827	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.74418	0.74418	0.000	16.51819	60.00000	Averaged
131 5-Nitro-o-toluidine	39.10636	40.00000	0.25056	0.000	-2.23410	60.00000	Linear
136 1,3,5-Trinitrobenzene	42.94290	40.00000	0.09897	0.000	7.35725	60.00000	Linear
137 Phenacetin	0.22007	0.20770	0.20770	0.000	-5.62401	60.00000	Averaged
138 Diallate	0.17747	0.17192	0.17192	0.000	-3.12865	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510910.d
Analysis Type:
Lab Sample ID: WBN091201-03.4
Method: /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m

Injection Date: 09-DEC-2009 16:02
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.17394	0.17394	0.000	4.67568	60.00000	Averaged
213 Trans Diallate	0.20879	0.20226	0.20226	0.000	-3.12865	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.34139	0.34139	0.000	2.92679	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08180	0.08180	0.000	4.75846	60.00000	Averaged
142 Pronamide	0.25257	0.26260	0.26260	0.000	3.97290	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01210	0.01210	0.000	21.86082	60.00000	Averaged
147 Methapyrilene	0.25201	0.24603	0.24603	0.000	-2.37029	60.00000	Averaged
148 Isodrin	0.09860	0.10048	0.10048	0.000	1.90568	60.00000	Averaged
149 Aramite	0.04052	0.04267	0.04267	0.000	5.31733	60.00000	Averaged
150 Kepone	0.07629	0.07994	0.07994	0.000	4.78648	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.19992	0.19992	0.000	-3.89061	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.26377	0.26377	0.000	-0.46128	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.32944	0.32944	0.000	-8.82896	60.00000	Averaged
155 2-Acetylaminofluorene	39.40792	40.00000	0.28115	0.000	-1.48020	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.40810	0.40810	0.000	-3.53620	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.37032	0.37032	0.000	1.04760	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120909.b/s510910.d
Lab Smp Id: WBN091201-03.4 Client Smp ID: AP12CVS
Inj Date : 09-DEC-2009 16:02
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091201-03.4|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120909.b/MSD5-M8270C-113009.m
Meth Date : 09-Dec-2009 17:44 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.837	3.837	(1.000)	417965	40.0000	
* 29 Naphthalene-d8	136	4.701	4.701	(1.000)	1433241	40.0000	
* 46 Acenaphthene-d10	164	5.954	5.954	(1.000)	933019	40.0000	
* 67 Phenanthrene-d10	188	7.119	7.119	(1.000)	1716854	40.0000	
* 91 Chrysene-d12	240	9.519	9.519	(1.000)	1876351	40.0000	
* 98 Perylene-d12	264	11.142	11.142	(1.000)	1781254	40.0000	
209 Benzaldehyde	77	3.560	3.560	(0.928)	294427	40.0000	38.0
16 Acetophenone	105	4.090	4.090	(1.066)	411640	40.0000	38.1
189 Caprolactam	113	4.978	4.978	(1.059)	103029	40.0000	39.3
208 1,1'-Biphenyl	154	5.525	5.525	(0.928)	974283	40.0000	39.4
207 Atrazine	173	6.825	6.825	(0.959)	62767	40.0000	71.0
77 Benzidine	184	8.266	8.266	(0.868)	230805	40.0000	37.4
90 3,3'-Dichlorobenzidine	252	9.460	9.460	(0.994)	509514	40.0000	40.2
102 1,4-Dioxane	88	2.154	2.154	(0.562)	108576	40.0000	37.3
103 Methyl methacrylate	100	2.149	2.149	(0.560)	63063	40.0000	36.0
104 Ethyl methacrylate	69	2.531	2.531	(0.660)	269955	40.0000	37.8
105 2-Picoline	93	2.725	2.725	(0.710)	406433	40.0000	37.4
106 N-Nitrosomethylethylamine	88	2.772	2.772	(0.722)	141145	40.0000	37.6
107 Methyl methanesulfonate	80	2.931	2.931	(0.764)	166902	40.0000	35.5
108 N-Nitrosodiethylamine	102	3.166	3.166	(0.825)	143530	40.0000	38.2
109 Ethyl Methanesulfonate	79	3.319	3.319	(0.865)	201100	40.0000	35.9
110 Pentachloroethane	167	3.660	3.660	(0.954)	132271	40.0000	39.5
111 N-Nitrosopyrrolidine	100	4.072	4.072	(1.061)	147557	40.0000	38.2
113 N-Nitrosomorpholine	56	4.096	4.096	(1.067)	144563	40.0000	36.5
114 o-Toluidine	106	4.113	4.113	(1.072)	554559	40.0000	37.2
115 N-Nitrosopiperidine	114	4.313	4.313	(0.917)	162473	40.0000	39.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.566	4.566	(0.971)	706419	40.0000	40.4
118 2,6-Dichlorophenol	162	4.743	4.743	(1.009)	309105	40.0000	41.6
119 Hexachloropropene	213	4.772	4.772	(1.015)	191598	40.0000	43.6
120 p-Phenylenediamine	108	4.984	4.984	(1.060)	254312	40.0000	74.6
121 N-Nitrosodi-n-butylamine	84	4.948	4.948	(1.053)	194853	40.0000	38.5(T)
122 Safrole	162	5.113	5.113	(1.088)	292732	40.0000	41.1
123 1,2,4,5-Tetrachlorobenzene	216	5.313	5.313	(0.892)	430857	40.0000	39.5
124 Isosafrole	162	5.484	5.484	(0.921)	283350	40.0000	39.1
125 1,4-Naphthoquinone	158	5.672	5.672	(0.953)	262324	40.0000	41.4
127 Pentachlorobenzene	250	6.072	6.072	(1.020)	402229	40.0000	40.2
128 1-Naphthylamine	143	6.160	6.160	(1.035)	697978	40.0000	42.0
129 2-Naphthylamine	143	6.213	6.213	(1.043)	694335	40.0000	46.6
131 5-Nitro-o-toluidine	152	6.354	6.354	(1.067)	233779	40.0000	39.1
136 1,3,5-Trinitrobenzene	75	6.613	6.613	(0.929)	169914	40.0000	42.9
137 Phenacetin	108	6.648	6.648	(0.934)	356584	40.0000	37.8
138 Diallate	86	6.637	6.637	(0.932)	295165	40.0000	38.7
212 Cis Diallate	86	6.713	6.713	(0.943)	44794	6.00000	6.3
213 Trans Diallate	86	6.637	6.637	(0.932)	295165	34.0000	32.9
140 4-Aminobiphenyl	169	6.936	6.936	(0.974)	586111	40.0000	41.2
141 Pentachloronitrobenzene	237	6.954	6.954	(0.977)	140438	40.0000	41.9
142 Pronamide	173	6.954	6.954	(0.977)	450851	40.0000	41.6
146 4-Nitroquinoline-1-oxide	101	7.784	7.784	(1.093)	20771	40.0000	48.7
147 Methapyrilene	58	7.819	7.819	(1.098)	422405	40.0000	39.0
148 Isodrin	193	8.036	8.036	(1.129)	172506	40.0000	40.8
149 Aramite	185	8.442	8.442	(1.186)	73262	40.0000	42.1
150 Kepone	272	9.019	9.019	(1.267)	137241	40.0000	41.9
151 p-(Dimethylamino)azobenzene	120	8.619	8.619	(0.905)	375118	40.0000	38.4
152 Chlorobenzilate	251	8.648	8.648	(0.909)	494934	40.0000	39.8
153 3,3'-Dimethylbenzidine	212	8.936	8.936	(0.939)	618145	40.0000	36.5
155 2-Acetylaminofluorene	181	9.183	9.183	(0.965)	527544	40.0000	39.4
157 7,12Dimethylbenz(a)anthracene	256	10.619	10.619	(0.953)	726927	40.0000	38.6
158 3-Methylcholanthrene	268	11.530	11.530	(1.035)	659629	40.0000	40.4

QC Flag Legend

T - Target compound detected outside RT window.

Data File: /chem/MSD5.i/s120909.b/s510910.d
Date : 09-DEC-2009 16:02
Client ID: AP12CVS
Sample Info: IWBN091201-03,4140 PPM1I1SVM1I1AP12CVS
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

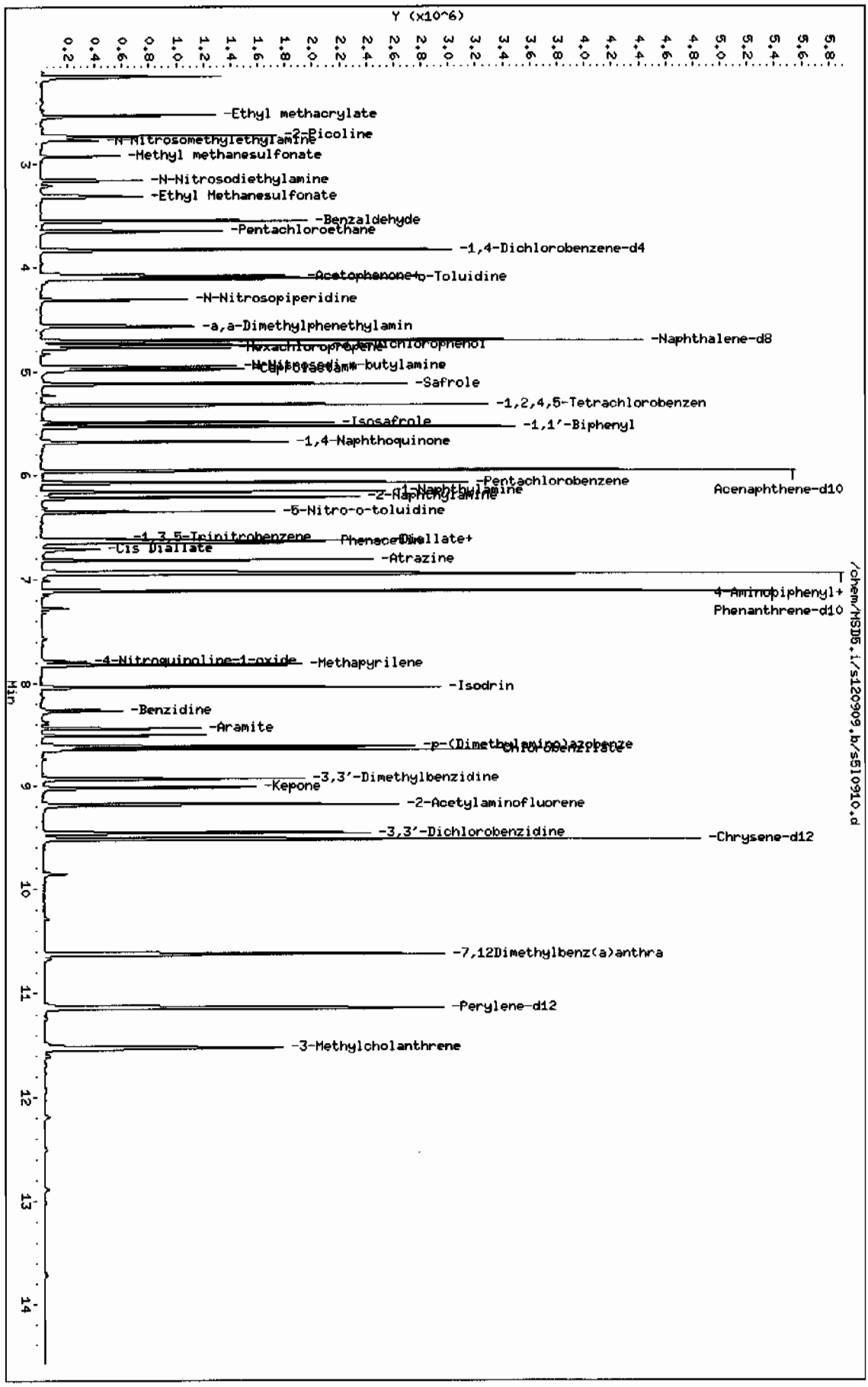

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 11-DEC-2009 13:47
Lab File ID: s511102.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.86777	0.86777	0.000	4.75878	60.00000	Averaged
$ 5 Phenol-d5	1.02741	1.09625	1.09625	0.000	6.70050	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.26779	0.26779	0.000	4.71282	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.09648	1.09648	0.000	8.50723	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.17076	0.17076	0.000	15.40622	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.60223	0.60223	0.000	5.27708	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.45733	0.45733	0.000	-0.40782	60.00000	Averaged
2 Pyridine	0.65138	0.74131	0.74131	0.000	13.80685	60.00000	Averaged
4 Aniline	0.40115	0.43160	0.43160	0.000	7.59050	60.00000	Averaged
6 Phenol	1.07292	1.12394	1.12394	0.001	4.75554	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.63389	0.70056	0.70056	0.000	10.51731	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.95904	0.95904	0.000	4.22615	60.00000	Averaged
203 n-Decane	0.83349	1.18714	1.18714	0.000	42.42908	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.16495	1.16495	0.000	5.72707	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11854	1.20247	1.20247	0.001	7.50429	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.05853	1.12394	1.12394	0.000	6.17918	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	1.43253	1.43253	0.000	42.17787	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.58435	0.58435	0.000	0.65550	60.00000	Averaged
15 o-Cresol	0.73443	0.72312	0.72312	0.000	-1.53948	60.00000	Averaged
18 m,p-Cresols	0.93489	0.95441	0.95441	0.000	2.08769	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.49117	0.49117	0.050	1.73258	60.00000	Averaged spcc
19 Hexachloroethane	0.41297	0.42606	0.42606	0.000	3.16849	60.00000	Averaged
21 Nitrobenzene	0.23812	0.27245	0.27245	0.000	14.41792	60.00000	Averaged
22 Isophorone	0.44222	0.48711	0.48711	0.000	10.15072	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.12421	0.12421	0.001	0.16003	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21392	0.23438	0.23438	0.000	9.56156	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.28171	0.28171	0.000	13.85932	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.23178	0.23178	0.001	16.18378	20.00000	Averaged ccc
27 Benzoic acid	0.11033	0.12255	0.12255	0.000	11.07766	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.28000	0.28000	0.000	12.01579	60.00000	Averaged
30 Naphthalene	0.69229	0.75547	0.75547	0.000	9.12531	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.20167	0.20167	0.000	24.79699	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.30713	0.30713	0.000	10.79173	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.18893	0.18893	0.001	16.20743	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19655	0.21356	0.21356	0.001	8.65439	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.47745	0.53293	0.53293	0.000	11.62020	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s511102.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m

Injection Date: 11-DEC-2009 13:47
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.46395	0.52574	0.52574	0.000	13.31864	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.16140	0.15625	0.15625	0.050	-3.18718	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.46121	0.48779	0.48779	0.000	5.76349	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.29051	0.31511	0.31511	0.001	8.46890	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.30357	0.33458	0.33458	0.000	10.21410	60.00000	Averaged	
40	2-Chloronaphthalene	0.84403	0.89197	0.89197	0.000	5.68029	60.00000	Averaged	
42	o-Nitroaniline	0.22389	0.24361	0.24361	0.000	8.80935	60.00000	Averaged	
41	m-Nitroaniline	37.42289	40.00000	0.11917	0.000	-6.44277	60.00000	Linear	
43	Dimethylphthalate	0.99502	1.06102	1.06102	0.000	6.63309	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.23251	0.23547	0.23547	0.000	1.27462	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.29743	0.29756	0.29756	0.000	0.04562	60.00000	Averaged	
45	Acenaphthylene	1.28545	1.38841	1.38841	0.000	8.01020	60.00000	Averaged	
47	Acenaphthene	0.82864	0.87806	0.87806	0.001	5.96451	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	42.04998	40.00000	0.08708	0.050	5.12494	60.00000	Linear	spcc
49	Dibenzofuran	1.20211	1.29417	1.29417	0.000	7.65762	60.00000	Averaged	
51	Diethylphthalate	0.99012	1.06056	1.06056	0.000	7.11434	60.00000	Averaged	
52	4-Nitrophenol	41.97772	40.00000	0.15007	0.050	4.94430	60.00000	Linear	spcc
53	Fluorene	0.99445	1.07855	1.07855	0.000	8.45689	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.54736	0.57933	0.57933	0.000	5.84116	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	36.09738	40.00000	0.06895	0.000	-9.75655	60.00000	Linear	
56	p-Nitroaniline	0.09976	0.10304	0.10304	0.000	3.29547	60.00000	Averaged	
133	Diphenylamine	0.39311	0.39808	0.39808	0.001	1.26342	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.48769	0.53428	0.53428	0.000	9.55246	60.00000	Averaged	
61	4-Bromophenylphenylether	0.18052	0.19412	0.19412	0.000	7.53195	60.00000	Averaged	
63	Hexachlorobenzene	0.19191	0.20714	0.20714	0.000	7.93606	60.00000	Averaged	
65	Pentachlorophenol	44.78763	40.00000	0.10809	0.001	11.96907	20.00000	Linear	ccc
206	n-Octadecane	0.26436	0.34030	0.34030	0.000	28.72544	60.00000	Averaged	
68	Phenanthrene	0.75124	0.82157	0.82157	0.000	9.36133	60.00000	Averaged	
69	Anthracene	0.74720	0.81078	0.81078	0.000	8.51003	60.00000	Averaged	
72	Di-n-butylphthalate	0.85957	0.95493	0.95493	0.000	11.09377	60.00000	Averaged	
76	Fluoranthene	0.82257	0.92477	0.92477	0.001	12.42431	20.00000	Averaged	ccc
79	Pyrene	0.81023	0.87458	0.87458	0.000	7.94198	60.00000	Averaged	
85	Butylbenzylphthalate	0.36001	0.37113	0.37113	0.000	3.08799	60.00000	Averaged	
89	Benzo(a)anthracene	0.80663	0.82857	0.82857	0.000	2.71937	60.00000	Averaged	
92	Chrysene	0.73533	0.75834	0.75834	0.000	3.12899	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	41.52688	40.00000	0.55604	0.000	3.81720	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s511102.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m

Injection Date: 11-DEC-2009 13:47
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	0.86642	0.94000	0.94000	0.001	8.49219	20.00000	Averaged	ccc
95 Benzo(b)fluoranthene	0.83820	0.92501	0.92501	0.000	10.35611	60.00000	Averaged	
96 Benzo(k)fluoranthene	0.83669	0.86124	0.86124	0.000	2.93326	60.00000	Averaged	
97 Benzo(a)pyrene	0.73906	0.79893	0.79893	0.001	8.10093	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	41.91903	40.00000	0.86856	0.000	4.79757	60.00000	Linear	
100 Dibenzo(a,h)anthracene	41.44043	40.00000	0.72150	0.000	3.60107	60.00000	Linear	
101 Benzo(ghi)perylene	0.65031	0.73344	0.73344	0.000	12.78223	60.00000	Averaged	
126 m-Dinitrobenzene	0.16356	0.16816	0.16816	0.000	2.81002	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.26162	0.29763	0.29763	0.000	13.76523	60.00000	Averaged	
143 Dinoseb	34.44463	40.00000	0.09972	0.000	-13.88842	60.00000	Linear	
173 Carbazole	38.00515	40.00000	0.35955	0.000	-4.98712	60.00000	Linear	
184 p-Benzoquinone	45.34733	40.00000	0.11825	0.000	13.36833	60.00000	Linear	
192 Methoxychlor	0.45776	0.47840	0.47840	0.000	4.50904	60.00000	Averaged	
211 p-Toluidine	37.08254	40.00000	0.61416	0.000	-7.29366	60.00000	Linear	
210 m-Toluidine	1.03581	1.03557	1.03557	0.000	-0.02234	60.00000	Averaged	
26 Phthalic anhydride	0.08702	0.09537	0.09537	0.000	9.59632	60.00000	Averaged	
179 Dibenzo(a,e)pyrene	0.39346	0.41616	0.41616	0.000	5.76945	60.00000	Averaged	
214 1,4-Dinitrobenzene	0.15903	0.16236	0.16236	0.000	2.09156	60.00000	Averaged	
215 2-Ethoxyethanol	0.40133	0.33352	0.33352	0.000	-16.89680	60.00000	Averaged	
216 Methylenebis(2-chloroanilin	0.09926	0.10230	0.10230	0.000	3.05998	60.00000	Averaged	
M 225 Trichlorophenols	0.29704	0.32484	0.32484	0.000	9.36066	60.00000	Averaged	
M 226 Tetrachlorophenols	0.26162	0.29763	0.29763	0.000	13.76523	60.00000	Averaged	
M 227 Benzo(b,k)fluoranthene	0.83745	0.89312	0.89312	0.000	6.64802	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121109.b/s511102.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 11-DEC-2009 13:47
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 07:41 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.791	3.791	(1.000)	254873	40.0000	
* 29 Naphthalene-d8	136	4.658	4.658	(1.000)	967269	40.0000	
* 46 Acenaphthene-d10	164	5.910	5.910	(1.000)	563020	40.0000	
* 67 Phenanthrene-d10	188	7.070	7.070	(1.000)	1065939	40.0000	
* 91 Chrysene-d12	240	9.468	9.468	(1.000)	1203150	40.0000	
* 98 Perylene-d12	264	11.052	11.052	(1.000)	1102321	40.0000	
$ 3 2-Fluorophenol	112	2.977	2.977	(0.785)	221172	40.0000	41.9
$ 5 Phenol-d5	99	3.507	3.507	(0.925)	279404	40.0000	42.7
$ 20 Nitrobenzene-d5	82	4.157	4.157	(0.892)	259026	40.0000	41.9
$ 39 2-Fluorobiphenyl	172	5.399	5.399	(0.914)	617340	40.0000	43.4
$ 60 2,4,6-Tribromophenol	329	6.502	6.502	(1.100)	96140	40.0000	46.2
$ 81 p-Terphenyl-d14	244	8.442	8.442	(0.892)	724570	40.0000	42.1
1 N-Methyl-N-nitrosomethylamine	74	2.274	2.274	(0.600)	116562	40.0000	39.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.303	2.303	(0.607)	188940	40.0000	45.5
4 Aniline	66	3.579	3.579	(0.944)	110002	40.0000	43.0
6 Phenol	94	3.516	3.516	(0.928)	286463	40.0000	41.9(Q)
7 bis(2-Chloroethyl) ether	63	3.593	3.593	(0.948)	178553	40.0000	44.2
8 2-Chlorophenol	128	3.656	3.656	(0.964)	244433	40.0000	41.7
203 n-Decane	43	3.646	3.646	(0.962)	302569	40.0000	57.0
9 1,3-Dichlorobenzene	146	3.757	3.757	(0.991)	296915	40.0000	42.3
11 1,4-Dichlorobenzene	146	3.805	3.805	(1.004)	306478	40.0000	43.0
13 1,2-Dichlorobenzene	146	3.906	3.906	(1.030)	286462	40.0000	42.5
14 bis(2-Chloroisopropyl)ether	45	3.940	3.940	(1.039)	365114	40.0000	56.9
12 Benzyl alcohol	108	3.858	3.858	(1.018)	148935	40.0000	40.3
15 o-Cresol	107	3.911	3.911	(1.032)	184304	40.0000	39.4
18 m,p-Cresols	107	4.012	4.012	(1.058)	243254	40.0000	40.8
17 N-Nitrosodipropylamine	70	4.032	4.032	(1.063)	125187	40.0000	40.7
19 Hexachloroethane	117	4.138	4.138	(1.091)	108591	40.0000	41.3
21 Nitrobenzene	77	4.166	4.166	(0.895)	263536	40.0000	45.8
22 Isophorone	82	4.321	4.321	(0.928)	471170	40.0000	44.1
23 2-Nitrophenol	139	4.383	4.383	(0.941)	120147	40.0000	40.1
24 2,4-Dimethylphenol	122	4.378	4.378	(0.940)	226708	40.0000	43.8
25 bis(2-Chloroethoxy)methane	93	4.446	4.446	(0.954)	272491	40.0000	45.5
26 2,4-Dichlorophenol	162	4.542	4.542	(0.975)	224191	40.0000	46.5
27 Benzoic acid	105	4.426	4.426	(0.950)	118537	40.0000	44.4
28 1,2,4-Trichlorobenzene	180	4.609	4.609	(0.990)	270838	40.0000	44.8
30 Naphthalene	128	4.672	4.672	(1.003)	730738	40.0000	43.6
204 alpha-Terpineol	59	4.648	4.648	(0.998)	195068	40.0000	49.9
31 4-Chloroaniline	127	4.691	4.691	(1.007)	297074	40.0000	44.3
32 Hexachlorobutadiene	225	4.739	4.739	(1.018)	182750	40.0000	46.5
33 4-Chloro-3-methylphenol	107	5.004	5.004	(1.074)	206568	40.0000	43.5
34 2-Methylnaphthalene	142	5.154	5.154	(1.106)	515487	40.0000	44.6
35 1-Methylnaphthalene	142	5.226	5.226	(1.122)	508535	40.0000	45.3
36 Hexachlorocyclopentadiene	237	5.260	5.260	(0.890)	87974	40.0000	38.7
205 2,3-Dichloroaniline	161	5.351	5.351	(0.905)	274637	40.0000	42.3
37 2,4,6-Trichlorophenol	196	5.341	5.341	(0.904)	177413	40.0000	43.4
38 2,4,5-Trichlorophenol	196	5.370	5.370	(0.909)	188374	40.0000	44.1
40 2-Chloronaphthalene	162	5.510	5.510	(0.932)	502197	40.0000	42.3
42 o-Nitroaniline	65	5.568	5.568	(0.942)	137159	40.0000	43.5
41 m-Nitroaniline	138	5.861	5.861	(0.992)	67094	40.0000	37.4
43 Dimethylphthalate	163	5.678	5.678	(0.961)	597376	40.0000	42.6
44 2,6-Dinitrotoluene	165	5.731	5.731	(0.970)	132576	40.0000	40.5
50 2,4-Dinitrotoluene	165	6.025	6.025	(1.020)	167533	40.0000	40.0
45 Acenaphthylene	152	5.813	5.813	(0.984)	781704	40.0000	43.2
47 Acenaphthene	154	5.934	5.934	(1.004)	494367	40.0000	42.4
48 2,4-Dinitrophenol	184	5.934	5.934	(1.004)	49025	40.0000	42.0
49 Dibenzofuran	168	6.059	6.059	(1.025)	728642	40.0000	43.1
51 Diethylphthalate	149	6.179	6.179	(1.046)	597116	40.0000	42.8
52 4-Nitrophenol	139	5.953	5.953	(1.007)	84494	40.0000	42.0
53 Fluorene	166	6.314	6.314	(1.068)	607244	40.0000	43.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.295	6.295	(1.065)	326175	40.0000	42.3
55 2-Methyl-4,6-dinitrophenol	198	6.333	6.333	(0.896)	73498	40.0000	36.1
56 p-Nitroaniline	138	6.319	6.319	(1.069)	58016	40.0000	41.3
133 Diphenylamine	169	6.381	6.381	(0.903)	424329	40.0000	40.5
58 1,2-Diphenylhydrazine	77	6.415	6.415	(0.907)	569507	40.0000	43.8
61 4-Bromophenylphenylether	248	6.680	6.680	(0.945)	206922	40.0000	43.0
63 Hexachlorobenzene	284	6.747	6.747	(0.954)	220796	40.0000	43.2
65 Pentachlorophenol	266	6.897	6.897	(0.975)	115218	40.0000	44.8
206 n-Octadecane	57	6.892	6.892	(0.975)	362734	40.0000	51.5
68 Phenanthrene	178	7.089	7.089	(1.003)	875740	40.0000	43.7
69 Anthracene	178	7.133	7.133	(1.009)	864244	40.0000	43.4
72 Di-n-butylphthalate	149	7.494	7.494	(1.060)	1017901	40.0000	44.4
76 Fluoranthene	202	8.125	8.125	(1.149)	985749	40.0000	45.0
79 Pyrene	202	8.336	8.336	(0.880)	1052252	40.0000	43.2
85 Butylbenzylphthalate	149	8.876	8.876	(0.937)	446520	40.0000	41.2
89 Benzo(a)anthracene	228	9.454	9.454	(0.998)	996893	40.0000	41.1
92 Chrysene	228	9.492	9.492	(1.003)	912393	40.0000	41.2
93 bis(2-Ethylhexyl)phthalate	149	9.401	9.401	(0.993)	669000	40.0000	41.5
94 Di-n-octylphthalate	149	10.027	10.027	(0.907)	1036177	40.0000	43.4
95 Benzo(b)fluoranthene	252	10.566	10.566	(0.956)	1019658	40.0000	44.1
96 Benzo(k)fluoranthene	252	10.600	10.600	(0.959)	949360	40.0000	41.2
97 Benzo(a)pyrene	252	10.980	10.980	(0.993)	880675	40.0000	43.2
99 Indeno(1,2,3-cd)pyrene	276	12.714	12.714	(1.150)	957435	40.0000	41.9
100 Dibenzo(a,h)anthracene	278	12.728	12.728	(1.152)	795327	40.0000	41.4
101 Benzo(ghi)perylene	276	13.224	13.224	(1.196)	808486	40.0000	45.1
126 m-Dinitrobenzene	168	5.717	5.717	(0.967)	94677	40.0000	41.1
130 2,3,4,6-Tetrachlorophenol	232	6.136	6.136	(1.038)	167571	40.0000	45.5
143 Dinoseb	211	7.017	7.017	(0.992)	106300	40.0000	34.4
173 Carbazole	167	7.248	7.248	(1.025)	383257	40.0000	38.0
184 p-Benzoquinone	54	3.280	3.280	(0.865)	30139	40.0000	45.3
192 Methoxychlor	227	9.343	9.343	(0.987)	575584	40.0000	41.8
211 p-Toluidine	106	4.070	4.070	(1.074)	156534	40.0000	37.1
210 m-Toluidine	106	4.094	4.094	(1.080)	263940	40.0000	40.0
26 Phthalic anhydride	104	5.187	5.187	(1.114)	92249	40.0000	43.8
179 Dibenzo(a,e)pyrene	302	17.091	17.091	(1.546)	458739	40.0000	42.3
214 1,4-Dinitrobenzene	75	5.659	5.659	(0.958)	91410	40.0000	40.8
215 2-Ethoxyethanol	59	2.110	2.110	(0.557)	85004	40.0000	33.2
216 Methylenebis(2-chloroaniline)	231	9.401	9.401	(0.993)	123083	40.0000	41.2(Q)
M 225 Trichlorophenols	196				365787	80.0000	87.5
M 226 Tetrachlorophenols	232				167571	40.0000	45.5
M 227 Benzo(b,k)fluoranthene	252				1969018	80.0000	85.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s121109.b/s511102.d
Date : 11-DEC-2009 13:47
Client ID: MEGACVS
Sample Info: IWBN091106-05,3140 PPM11SVM11MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

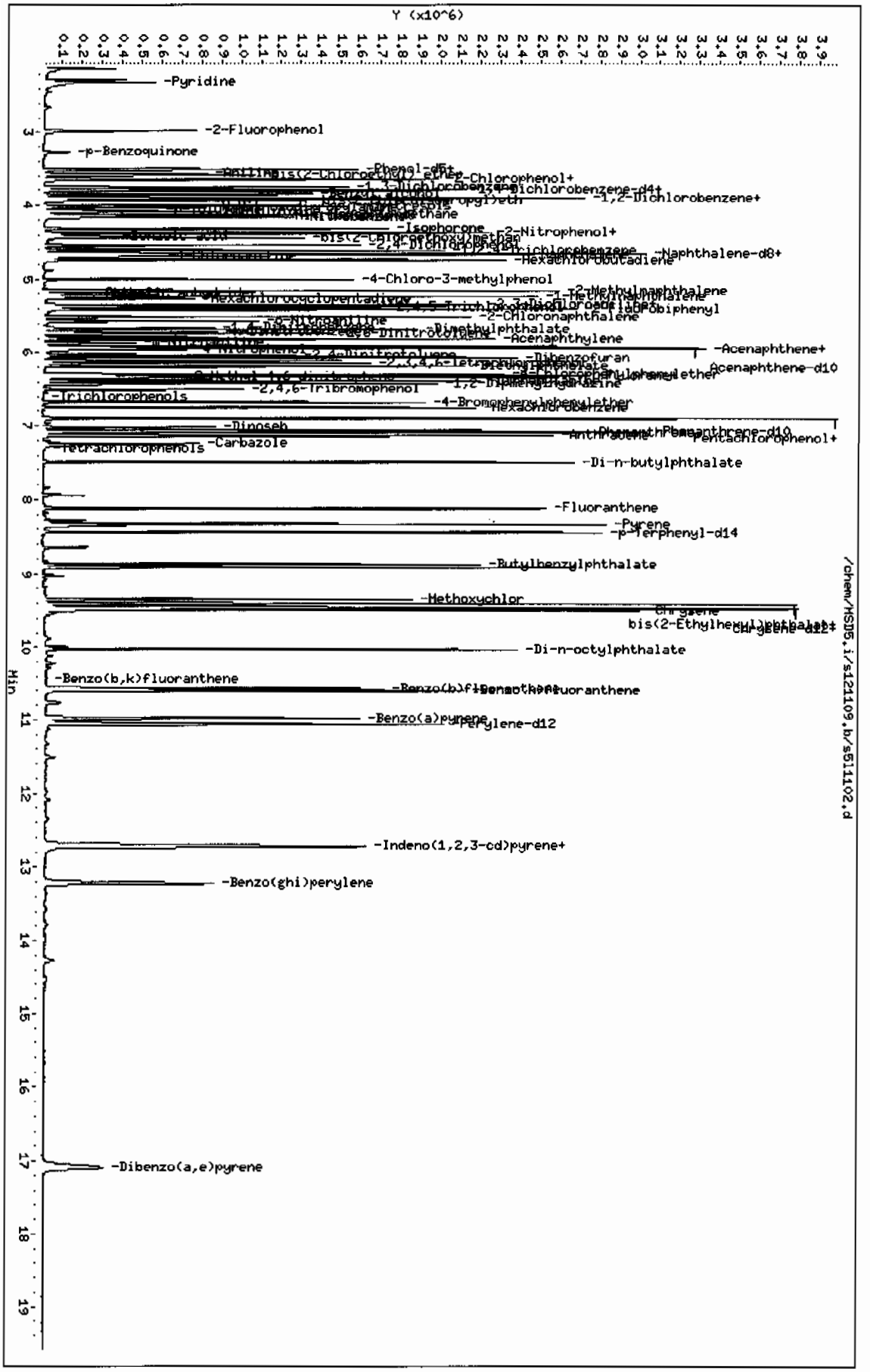

Page 1

Data File: /chem/MSD5.i/s121109.b/s511103.d
Report Date: 11-Dec-2009 14:30

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s511103.d
Analysis Type: WATER
Lab Sample ID: WBN091201-03.4
Method: /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m

Injection Date: 11-DEC-2009 14:15
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.80322	0.80322	0.000	8.30321	60.00000	Averaged
16 Acetophenone	1.03433	1.08453	1.08453	0.000	4.85401	60.00000	Averaged
189 Caprolactam	0.07313	0.07979	0.07979	0.000	9.10448	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.18405	1.18405	0.000	11.72253	60.00000	Averaged
207 Atrazine	0.02060	0.02147	0.02147	0.000	4.24172	60.00000	Averaged
77 Benzidine	0.13169	0.09055	0.09055	0.000	-31.24261	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.27520	0.27520	0.000	1.72600	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.24221	0.24221	0.000	-13.05431	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.13690	0.13690	0.000	-18.31875	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.72012	0.72012	0.000	5.35442	60.00000	Averaged
105 2-Picoline	1.04139	1.07885	1.07885	0.000	3.59699	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.34434	0.34434	0.000	-4.09952	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.45191	0.45191	0.000	0.44286	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.33583	0.33583	0.000	-6.68212	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.53472	0.53472	0.000	-0.28307	60.00000	Averaged
110 Pentachloroethane	0.32008	0.33048	0.33048	0.000	3.24920	60.00000	Averaged
111 N-Nitrosopyrrolidine	38.02581	40.00000	0.35173	0.000	-4.93548	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.43139	0.43139	0.000	13.85113	60.00000	Averaged
114 o-Toluidine	1.42745	1.45201	1.45201	0.000	1.72047	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.12065	0.12065	0.000	5.81786	60.00000	Averaged
116 a,a-Dimethylphenethylamine	40.15653	40.00000	0.48914	0.000	0.39131	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.22938	0.22938	0.000	10.67259	60.00000	Averaged
119 Hexachloropropene	0.12260	0.11969	0.11969	0.000	-2.37441	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.04583	0.04583	0.000	-51.81445	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.14117	0.14588	0.14588	0.000	3.33457	60.00000	Averaged
122 Safrole	0.19879	0.22024	0.22024	0.000	10.79295	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.51074	0.51074	0.000	9.34010	60.00000	Averaged
124 Isosafrole	0.31092	0.33559	0.33559	0.000	7.93444	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.32154	0.32154	0.000	18.38126	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.47789	0.47789	0.000	11.56824	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.71913	0.71913	0.000	0.96245	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.42200	0.42200	0.000	-33.92609	60.00000	Averaged
131 5-Nitro-o-toluidine	40.51011	40.00000	0.26059	0.000	1.27528	60.00000	Linear
136 1,3,5-Trinitrobenzene	41.36989	40.00000	0.09468	0.000	3.42473	60.00000	Linear
137 Phenacetin	0.22007	0.22955	0.22955	0.000	4.30657	60.00000	Averaged
138 Diallate	0.17747	0.19416	0.19416	0.000	9.40089	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 11-DEC-2009 14:15
Lab File ID: s511103.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091201-03.4 Quant Type: ISTD
Method: /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.18536	0.18536	0.000	11.54698	60.00000	Averaged
213 Trans Diallate	0.20879	0.22842	0.22842	0.000	9.40089	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.31379	0.31379	0.000	-5.39292	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.09416	0.09416	0.000	20.58191	60.00000	Averaged
142 Pronamide	0.25257	0.28984	0.28984	0.000	14.75529	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01035	0.01035	0.000	4.28880	60.00000	Averaged
147 Methapyrilene	0.25201	0.24672	0.24672	0.000	-2.09785	60.00000	Averaged
148 Isodrin	0.09860	0.11352	0.11352	0.000	15.13186	60.00000	Averaged
149 Aramite	0.04052	0.04542	0.04542	0.000	12.08671	60.00000	Averaged
150 Kepone	0.07629	0.08089	0.08089	0.000	6.03235	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.22349	0.22349	0.000	7.43924	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.31875	0.31875	0.000	20.28287	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.37142	0.37142	0.000	2.78896	60.00000	Averaged
155 2-Acetylaminofluorene	40.93732	40.00000	0.29400	0.000	2.34330	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.47860	0.47860	0.000	13.12849	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.41777	0.41777	0.000	13.99703	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121109.b/s511103.d
Lab Smp Id: WBN091201-03.4 Client Smp ID: AP12CVS
Inj Date : 11-DEC-2009 14:15
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091201-03.4|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121109.b/MSD5-M8270C-113009.m
Meth Date : 11-Dec-2009 14:30 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	278715	40.0000	
* 29 Naphthalene-d8	136	4.654	4.654	(1.000)	976914	40.0000	
* 46 Acenaphthene-d10	164	5.907	5.907	(1.000)	628698	40.0000	
* 67 Phenanthrene-d10	188	7.066	7.066	(1.000)	1173488	40.0000	
* 91 Chrysene-d12	240	9.460	9.460	(1.000)	1196485	40.0000	
* 98 Perylene-d12	264	11.042	11.042	(1.000)	1076302	40.0000	
209 Benzaldehyde	77	3.513	3.513	(0.927)	223869	40.0000	43.3
16 Acetophenone	105	4.043	4.043	(1.067)	302276	40.0000	41.9(H)
189 Caprolactam	113	4.925	4.925	(1.058)	77950	40.0000	43.6
208 1,1'-Biphenyl	154	5.478	5.478	(0.927)	744407	40.0000	44.7
207 Atrazine	173	6.772	6.772	(0.958)	25195	40.0000	41.7
77 Benzidine	184	8.213	8.213	(0.868)	108336	40.0000	27.5
90 3,3'-Dichlorobenzidine	252	9.401	9.401	(0.994)	329267	40.0000	40.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.107	2.107	(0.556)	67507	40.0000	34.8
103 Methyl methacrylate	100	2.107	2.107	(0.556)	38155	40.0000	32.7
104 Ethyl methacrylate	69	2.490	2.490	(0.657)	200708	40.0000	42.1
105 2-Picoline	93	2.684	2.684	(0.708)	300692	40.0000	41.4
106 N-Nitrosomethylethylamine	88	2.731	2.731	(0.721)	95973	40.0000	38.4
107 Methyl methanesulfonate	80	2.890	2.890	(0.763)	125953	40.0000	40.2
108 N-Nitrosodiethylamine	102	3.119	3.119	(0.823)	93602	40.0000	37.3(H)
109 Ethyl Methanesulfonate	79	3.278	3.278	(0.865)	149035	40.0000	39.9
110 Pentachloroethane	167	3.613	3.613	(0.953)	92111	40.0000	41.3
111 N-Nitrosopyrrolidine	100	4.031	4.031	(1.064)	98032	40.0000	38.0(H)
113 N-Nitrosomorpholine	56	4.048	4.048	(1.068)	120236	40.0000	45.5
114 o-Toluidine	106	4.066	4.066	(1.073)	404696	40.0000	40.7
115 N-Nitrosopiperidine	114	4.266	4.266	(0.917)	117866	40.0000	42.3
116 a,a-Dimethylphenethylamine	58	4.566	4.566	(0.981)	477843	40.0000	40.2
118 2,6-Dichlorophenol	162	4.696	4.696	(1.009)	224084	40.0000	44.3
119 Hexachloropropene	213	4.725	4.725	(1.015)	116929	40.0000	39.0
120 p-Phenylenediamine	108	4.937	4.937	(1.061)	44771	40.0000	19.3
121 N-Nitrosodi-n-butylamine	84	4.901	4.901	(1.053)	142511	40.0000	41.3(TH)
122 Safrole	162	5.066	5.066	(1.088)	215156	40.0000	44.3
123 1,2,4,5-Tetrachlorobenzene	216	5.266	5.266	(0.891)	321099	40.0000	43.7
124 Isosafrole	162	5.437	5.437	(0.920)	210986	40.0000	43.2
125 1,4-Naphthoquinone	158	5.625	5.625	(0.952)	202153	40.0000	47.4
127 Pentachlorobenzene	250	6.025	6.025	(1.020)	300450	40.0000	44.6
128 1-Naphthylamine	143	6.107	6.107	(1.034)	452113	40.0000	40.4
129 2-Naphthylamine	143	6.166	6.166	(1.044)	265312	40.0000	26.4
131 5-Nitro-o-toluidine	152	6.307	6.307	(1.068)	163833	40.0000	40.5
136 1,3,5-Trinitrobenzene	75	6.566	6.566	(0.929)	111105	40.0000	41.4
137 Phenacetin	108	6.601	6.601	(0.934)	269375	40.0000	41.7
138 Diallate	86	6.584	6.584	(0.932)	227843	40.0000	43.8
212 Cis Diallate	86	6.660	6.660	(0.943)	32627	6.00000	6.7(a)
213 Trans Diallate	86	6.584	6.584	(0.932)	227843	34.0000	37.2
140 4-Aminobiphenyl	169	6.884	6.884	(0.974)	368231	40.0000	37.8
141 Pentachloronitrobenzene	237	6.901	6.901	(0.977)	110490	40.0000	48.2
142 Pronamide	173	6.901	6.901	(0.977)	340119	40.0000	45.9
146 4-Nitroquinoline-1-oxide	101	7.731	7.731	(1.094)	12150	40.0000	41.7
147 Methapyrilene	58	7.766	7.766	(1.099)	289524	40.0000	39.2
148 Isodrin	193	7.984	7.984	(1.130)	133213	40.0000	46.0(H)
149 Aramite	185	8.389	8.389	(1.187)	53294	40.0000	44.8
150 Kepone	272	8.960	8.960	(1.268)	94921	40.0000	42.4
151 p-(Dimethylamino)azobenzene	120	8.566	8.566	(0.905)	267398	40.0000	43.0(H)
152 Chlorobenzilate	251	8.595	8.595	(0.909)	381375	40.0000	48.1
153 3,3'-Dimethylbenzidine	212	8.878	8.878	(0.938)	444399	40.0000	41.1
155 2-Acetylaminofluorene	181	9.125	9.125	(0.965)	351772	40.0000	40.9
157 7,12Dimethylbenz(a)anthracene	256	10.536	10.536	(0.954)	515118	40.0000	45.2(H)
158 3-Methylcholanthrene	268	11.430	11.430	(1.035)	449651	40.0000	45.6(H)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s121109.b/s511103.d
Date : 11-DEC-2009 14:15
Client ID: AP12CVS
Sample Info: IWBN091201-03,4140 PPM|1|SVM|1|AP12CVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

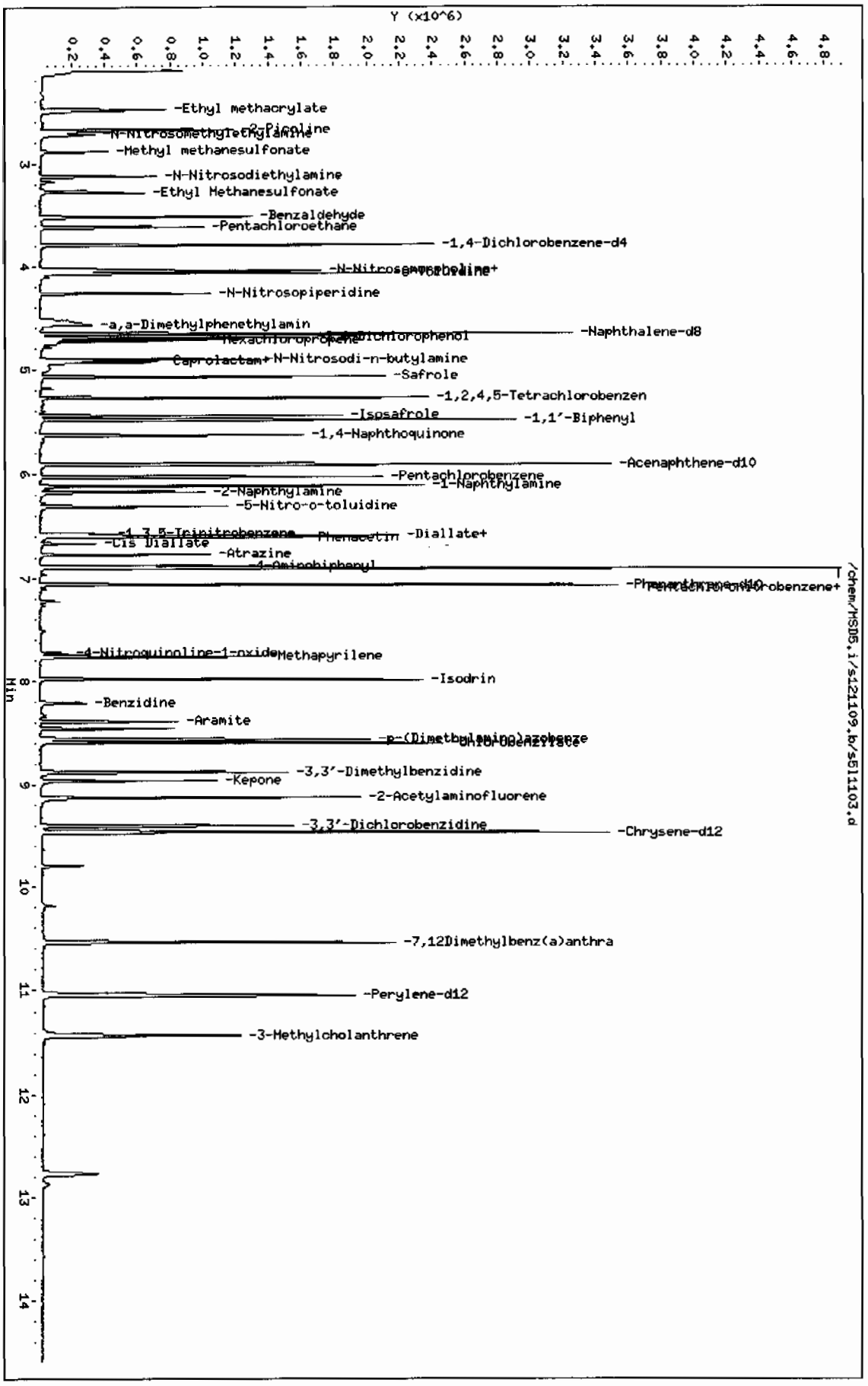

QC Data

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Page 1

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

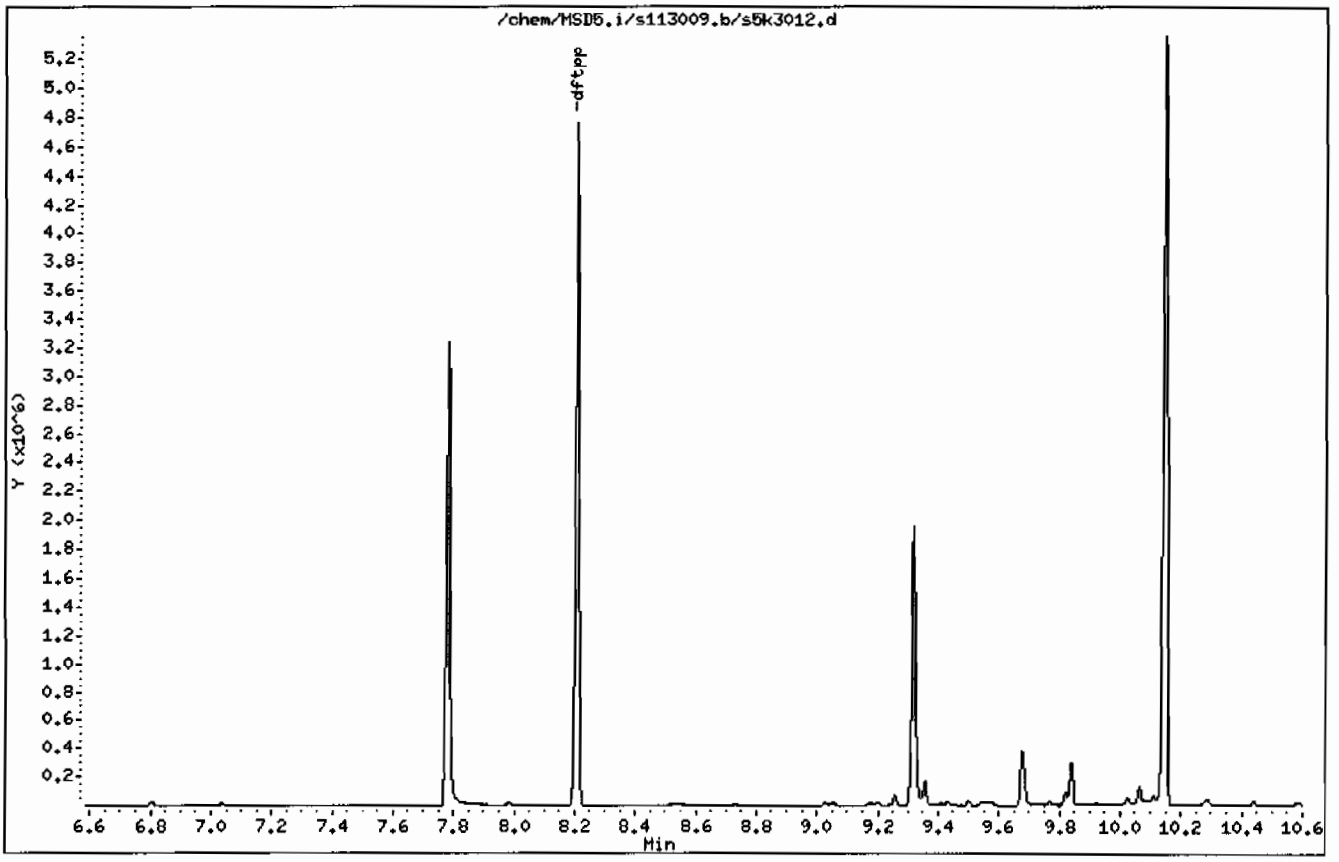

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

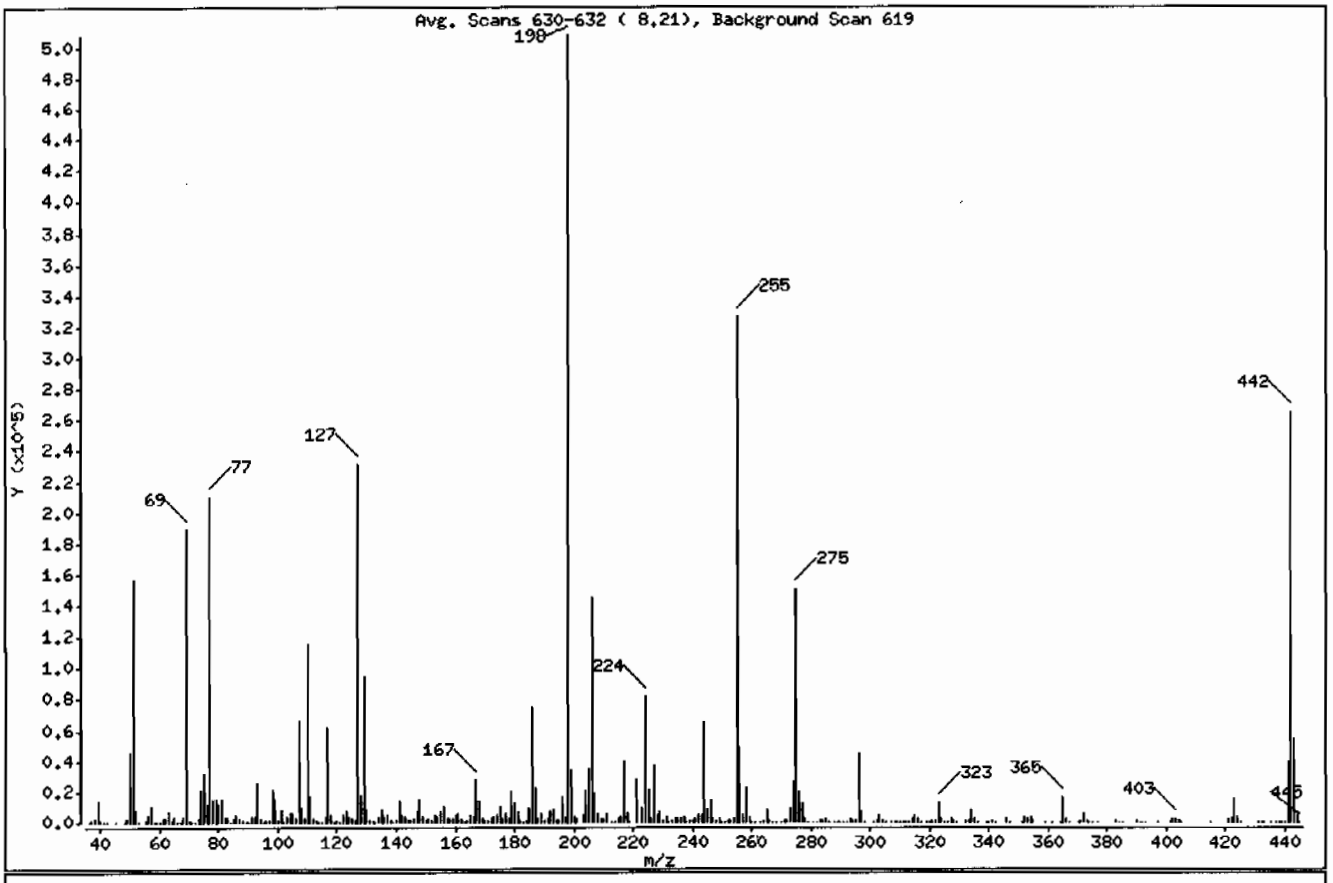

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	30.79
68	Less than 2.00% of mass 69	0.58 (1.57)
69	Mass 69 relative abundance	37.28
70	Less than 2.00% of mass 69	0.19 (0.51)
127	40.00 - 60.00% of mass 198	45.60
197	Less than 1.00% of mass 198	0.70
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	29.60
365	Greater than 1.00% of mass 198	3.10
441	Present, but less than mass 443	7.74
442	Greater than 40.00% of mass 198	52.24
443	17.00 - 23.00% of mass 442	10.70 (20.48)

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	125	126.00	680	213.00	464	307.00	50
37.00	987	127.00	231616	214.00	157	308.00	501
38.00	2716	128.00	17920	215.00	1808	309.00	450
39.00	13632	129.00	94528	216.00	3180	310.00	506
40.00	706	130.00	7593	217.00	39768	311.00	48
41.00	445	131.00	1598	218.00	5515	312.00	106
42.00	45	132.00	1119	219.00	464	313.00	308
45.00	260	133.00	463	221.00	28528	314.00	1959
48.00	107	134.00	3180	223.00	8943	315.00	4843
49.00	1759	135.00	8128	224.00	82288	316.00	2594
50.00	46048	136.00	3126	225.00	21312	317.00	470
51.00	156416	137.00	4122	226.00	2341	319.00	122
52.00	7789	138.00	895	227.00	37768	320.00	161
53.00	334	139.00	564	228.00	5098	321.00	1232
55.00	910	140.00	1328	229.00	7275	322.00	651
56.00	4777	141.00	13534	230.00	1075	323.00	12618
57.00	10418	142.00	4180	231.00	2958	324.00	2388
58.00	476	143.00	3277	232.00	577	325.00	236
59.00	113	144.00	760	233.00	743	326.00	206
60.00	309	145.00	649	234.00	2540	327.00	2542
61.00	2312	146.00	2181	235.00	2704	328.00	1058
62.00	2701	147.00	6737	236.00	1787	329.00	194
63.00	7253	148.00	15544	237.00	2968	332.00	1010
64.00	840	149.00	3108	238.00	525	333.00	1207
65.00	3370	150.00	944	239.00	1657	334.00	8064
66.00	347	151.00	2363	240.00	1214	335.00	1901
67.00	386	152.00	899	241.00	2080	336.00	205
68.00	2964	153.00	4270	242.00	4897	339.00	105
69.00	189376	154.00	3325	243.00	4687	340.00	196
70.00	963	155.00	7175	244.00	65392	341.00	1323
71.00	55	156.00	10369	245.00	8442	342.00	450
72.00	236	157.00	2283	246.00	13909	346.00	2820
73.00	1852	158.00	2547	247.00	2750	347.00	441
74.00	21008	159.00	1763	248.00	604	351.00	300
75.00	31368	160.00	4127	249.00	2266	352.00	3392

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: IWBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8,21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	11187	161.00	6032	250.00	324	353.00	2458
77.00	210112	162.00	1867	251.00	428	354.00	3352
78.00	13990	163.00	483	252.00	693	355.00	682
79.00	15435	164.00	669	253.00	1399	359.00	140
80.00	11406	165.00	5171	254.00	2631	361.00	68
81.00	14908	166.00	3857	255.00	327168	364.00	54
82.00	3682	167.00	27936	256.00	48920	365.00	15765
83.00	3239	168.00	13823	257.00	4149	366.00	2273
84.00	304	169.00	2332	258.00	21704	367.00	171
85.00	2673	170.00	964	259.00	3552	370.00	223
86.00	4546	171.00	1326	260.00	516	371.00	611
87.00	2199	172.00	2399	261.00	573	372.00	5622
88.00	779	173.00	3174	263.00	216	373.00	1163
89.00	404	174.00	5250	264.00	756	374.00	207
90.00	45	175.00	10362	265.00	8624	375.00	45
91.00	3378	176.00	2819	266.00	1292	377.00	57
92.00	3994	177.00	5390	267.00	158	383.00	1213
93.00	26184	178.00	1798	268.00	96	384.00	220
94.00	1810	179.00	20272	270.00	353	385.00	62
95.00	353	180.00	13307	271.00	742	390.00	764
96.00	1108	181.00	6536	272.00	994	391.00	439
97.00	629	182.00	917	273.00	9575	392.00	334
98.00	21264	183.00	578	274.00	27024	393.00	51
99.00	15464	184.00	1707	275.00	150336	397.00	55
100.00	1213	185.00	9598	276.00	20064	401.00	130
101.00	7941	186.00	75040	277.00	13332	402.00	1809
102.00	407	187.00	21824	278.00	2250	403.00	2548
103.00	3032	188.00	2208	279.00	421	404.00	780
104.00	5846	189.00	5334	281.00	219	405.00	122
105.00	5629	190.00	872	282.00	258	415.00	50
106.00	1800	191.00	2140	283.00	1655	421.00	1997
107.00	67056	192.00	6866	284.00	1098	422.00	1842
108.00	9675	193.00	8056	285.00	2171	423.00	15273
109.00	2337	194.00	1522	286.00	558	424.00	3590
110.00	115352	195.00	1001	288.00	235	425.00	219

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	17720	196.00	16896	289.00	389	431.00	58
112.00	2652	197.00	3561	290.00	463	432.00	65
113.00	730	198.00	507968	291.00	366	433.00	52
114.00	171	199.00	33816	292.00	523	435.00	55
115.00	254	200.00	2938	293.00	2767	437.00	294
116.00	3878	201.00	2726	294.00	806	438.00	170
117.00	62200	203.00	4278	295.00	870	439.00	365
118.00	4275	204.00	21168	296.00	44632	440.00	62
119.00	548	205.00	35144	297.00	6459	441.00	39312
120.00	883	206.00	144384	298.00	439	442.00	265344
121.00	352	207.00	19096	301.00	457	443.00	54336
122.00	4776	208.00	5385	302.00	797	444.00	5092
123.00	7064	209.00	2007	303.00	4856	445.00	267
124.00	2977	210.00	2161	304.00	1329		
125.00	2892	211.00	5880	305.00	86		

Data File: /chem/MSD5.i/s120609.b/s510601.d

Page 1

Date : 06-DEC-2009 09:31

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

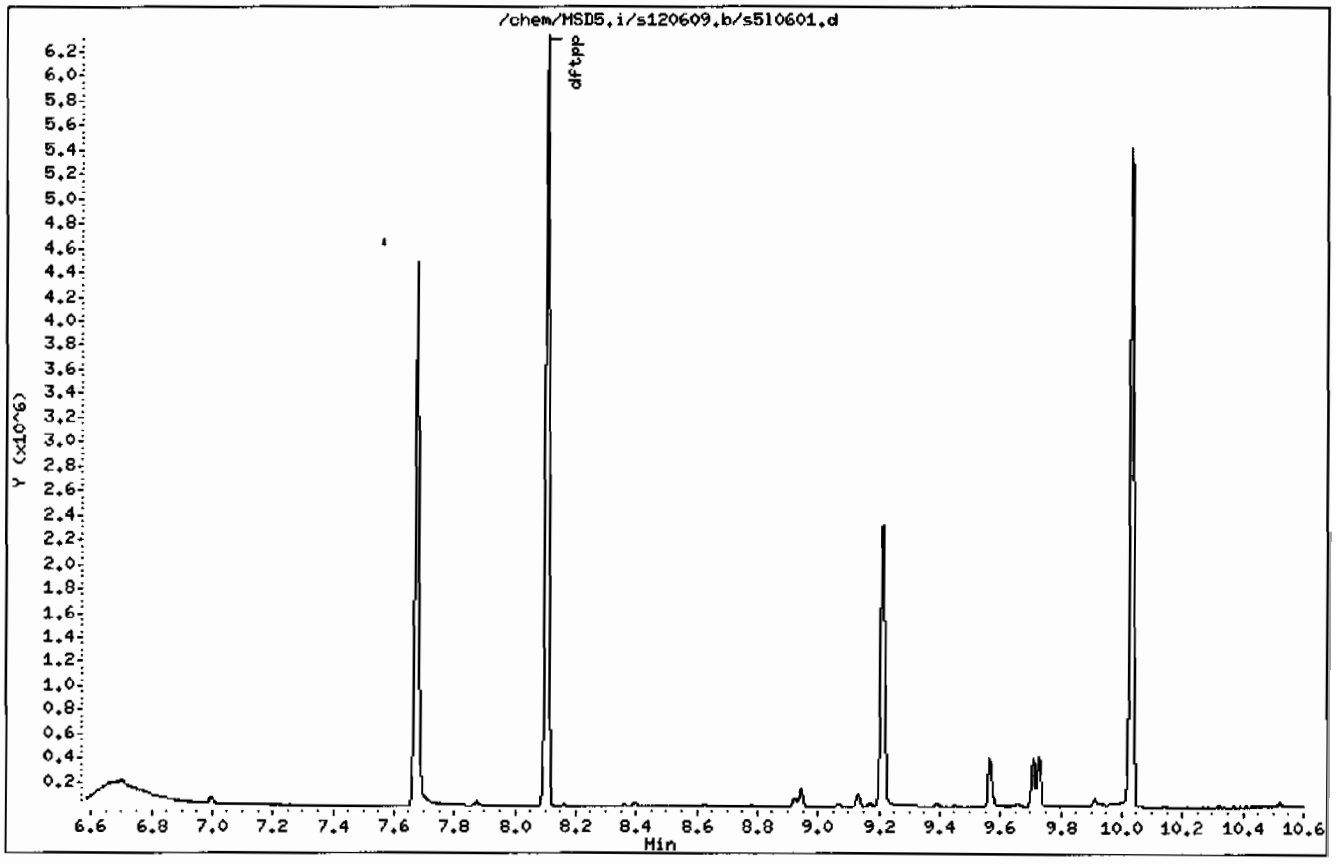

Data File: /chem/MSD5.i/s120609.b/s510601.d

Date : 06-DEC-2009 09:31

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

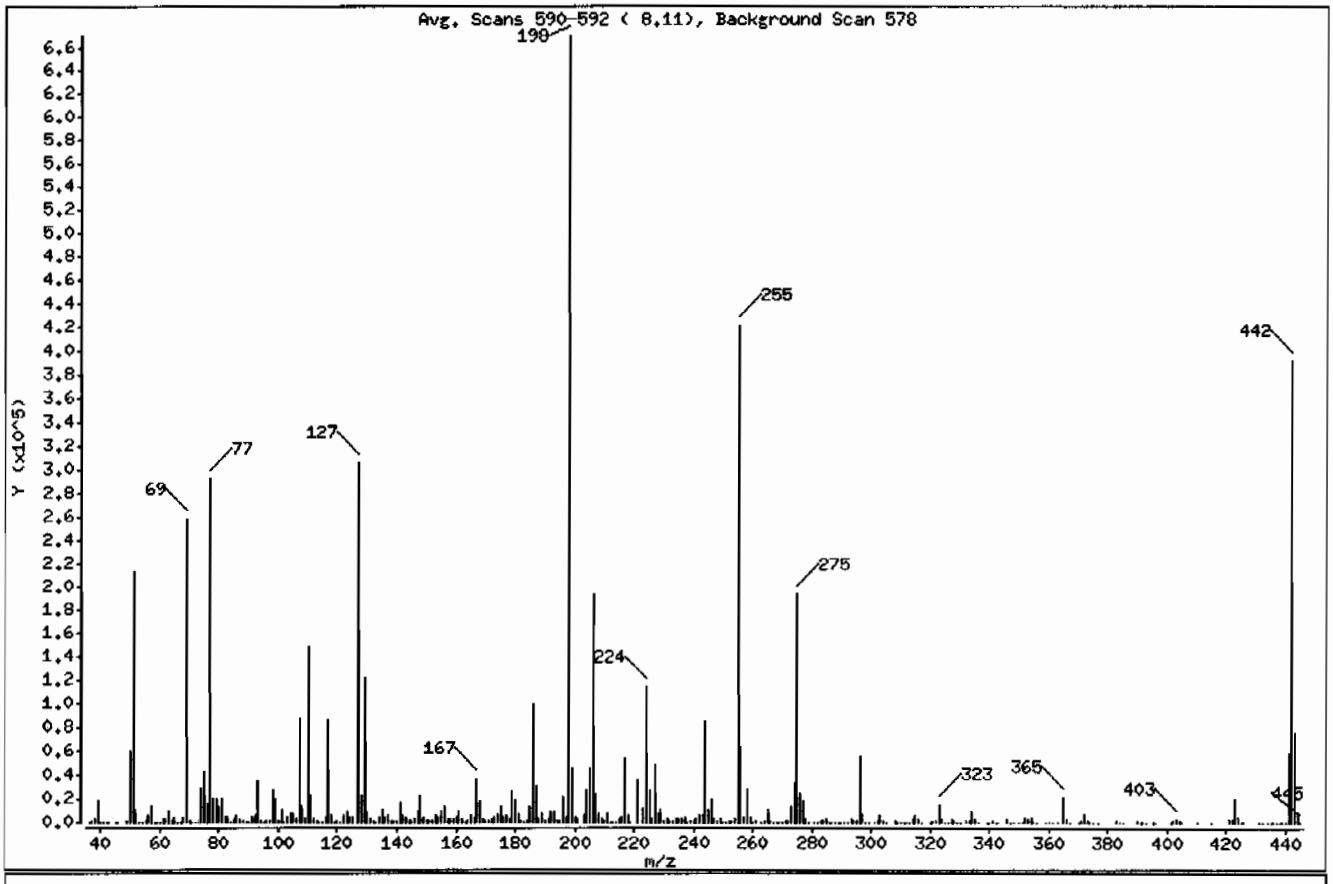

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.05
68	Less than 2.00% of mass 69	0.75 (1.94)
69	Mass 69 relative abundance	38.62
70	Less than 2.00% of mass 69	0.21 (0.53)
127	40.00 - 60.00% of mass 198	45.86
197	Less than 1.00% of mass 198	0.61
199	5.00 - 9.00% of mass 198	6.81
275	10.00 - 30.00% of mass 198	28.87
365	Greater than 1.00% of mass 198	3.16
441	Present, but less than mass 443	8.74
442	Greater than 40.00% of mass 198	58.56
443	17.00 - 23.00% of mass 442	11.23 (19.17)

Data File: /chem/MSD5.i/s120609.b/s510601.d

Date : 06-DEC-2009 09:31

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s510601.d
Spectrum: Avg. Scans 590-592 (8,11), Background Scan 578
Location of Maximum: 198.00
Number of points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	56	128.00	23408	217.00	54488	312.00	132
37.00	1545	129.00	122160	218.00	6904	313.00	538
38.00	3504	130.00	9822	219.00	686	314.00	2560
39.00	18144	131.00	2462	221.00	35704	315.00	6329
40.00	649	132.00	1076	223.00	11894	316.00	3190
41.00	563	133.00	593	224.00	114408	317.00	717
42.00	138	134.00	4081	225.00	27880	320.00	164
43.00	107	135.00	10025	226.00	3380	321.00	1883
45.00	433	136.00	4440	227.00	50032	322.00	854
46.00	42	137.00	5712	228.00	7020	323.00	14685
49.00	1951	138.00	1197	229.00	10689	324.00	2827
50.00	60648	139.00	856	230.00	1415	325.00	371
51.00	214720	140.00	1760	231.00	3643	326.00	286
52.00	10621	141.00	16968	232.00	964	327.00	2837
53.00	355	142.00	5702	233.00	852	328.00	1547
54.00	105	143.00	4073	234.00	2945	329.00	252
55.00	875	144.00	1102	235.00	3350	330.00	50
56.00	6301	145.00	1117	236.00	2376	332.00	1202
57.00	14237	146.00	3490	237.00	3851	333.00	1469
58.00	618	147.00	8921	238.00	540	334.00	9717
59.00	190	148.00	22856	239.00	1813	335.00	2875
60.00	181	149.00	4424	240.00	1602	336.00	173
61.00	3366	150.00	1043	241.00	3189	339.00	350
62.00	3484	151.00	1976	242.00	6106	340.00	244
63.00	9806	152.00	784	243.00	6242	341.00	1662
64.00	1460	153.00	5618	244.00	84984	342.00	491
65.00	4787	154.00	4268	245.00	11037	343.00	44
66.00	362	155.00	9720	246.00	19480	346.00	3711
67.00	330	156.00	13871	247.00	3470	347.00	437
68.00	5007	157.00	2964	248.00	1016	348.00	45
69.00	258752	158.00	3648	249.00	2944	350.00	67
70.00	1382	159.00	2335	250.00	714	351.00	293
71.00	258	160.00	5303	251.00	727	352.00	4535
72.00	84	161.00	8569	252.00	848	353.00	3082
73.00	2264	162.00	2405	253.00	2030	354.00	4529

Data File: /chem/MSD5.i/s120609.b/s510601.d

Date : 06-DEC-2009 09:31

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510601.d

Spectrum: Avg. Scans 590-592 (8.11), Background Scan 578

Location of Maximum: 198.00

Number of points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	29504	163.00	695	254.00	2346	355.00	751
75.00	42536	164.00	1014	255.00	422464	356.00	44
76.00	15328	165.00	6311	256.00	62656	359.00	412
77.00	292480	166.00	4912	257.00	5148	360.00	121
78.00	20664	167.00	37248	258.00	28432	361.00	52
79.00	20048	168.00	18384	259.00	4452	363.00	93
80.00	14112	169.00	2933	260.00	709	365.00	21176
81.00	20680	170.00	1184	261.00	861	366.00	2845
82.00	4904	171.00	2106	263.00	284	367.00	187
83.00	4745	172.00	3681	264.00	831	370.00	478
84.00	518	173.00	4386	265.00	11394	371.00	818
85.00	3662	174.00	7578	266.00	1616	372.00	7180
86.00	6740	175.00	14228	267.00	191	373.00	1756
87.00	2541	176.00	3867	268.00	300	374.00	127
88.00	858	177.00	6732	269.00	50	375.00	44
89.00	489	178.00	2312	270.00	493	377.00	131
90.00	162	179.00	25528	271.00	912	383.00	1501
91.00	4566	180.00	17888	272.00	1034	384.00	504
92.00	5851	181.00	8225	273.00	13786	385.00	68
93.00	35600	182.00	1402	274.00	33744	390.00	944
94.00	2227	183.00	638	275.00	193408	391.00	712
95.00	258	184.00	2177	276.00	24400	392.00	470
96.00	1467	185.00	13223	277.00	17984	393.00	64
97.00	779	186.00	99384	278.00	3039	395.00	48
98.00	27272	187.00	30064	279.00	586	396.00	53
99.00	19800	188.00	3182	281.00	269	401.00	277
100.00	1579	189.00	7090	282.00	445	402.00	2287
101.00	11076	190.00	1112	283.00	2033	403.00	3395
102.00	571	191.00	3306	284.00	1482	404.00	1424
103.00	4079	192.00	8929	285.00	3084	405.00	214
104.00	8124	193.00	9755	286.00	633	410.00	53
105.00	7501	194.00	2117	287.00	52	415.00	137
106.00	2364	195.00	830	288.00	259	421.00	2709
107.00	87168	196.00	21920	289.00	589	422.00	2555
108.00	13615	197.00	4096	290.00	621	423.00	20320

Data File: /chem/MSD5.i/s120609.b/s510601.d

Date : 06-DEC-2009 09:31

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVHF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s510601.d
Spectrum: Avg. Scans 590-592 (8.11), Background Scan 578
Location of Maximum: 198.00
Number of points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
109.00	2753	198.00	670016	291.00	427	424.00	4147
110.00	148032	199.00	45624	292.00	519	425.00	331
111.00	23664	200.00	4187	293.00	3403	426.00	46
112.00	3129	201.00	3422	294.00	889	431.00	171
113.00	1114	203.00	6183	295.00	838	432.00	47
114.00	267	204.00	27112	296.00	54776	434.00	106
115.00	546	205.00	46320	297.00	8270	435.00	91
116.00	5047	206.00	193664	298.00	385	436.00	320
117.00	86656	207.00	25352	299.00	160	437.00	263
118.00	6191	208.00	7082	301.00	713	438.00	325
119.00	751	209.00	2555	302.00	960	439.00	350
120.00	1178	210.00	2230	303.00	5933	440.00	123
121.00	523	211.00	7846	304.00	1523	441.00	58576
122.00	6358	212.00	498	305.00	173	442.00	392384
123.00	9326	213.00	690	308.00	773	443.00	75232
124.00	4201	214.00	308	309.00	463	444.00	7206
125.00	3900	215.00	2506	310.00	660	445.00	250
127.00	307264	216.00	4561	311.00	157		

Data File: /chem/MSD5.i/s120909.b/s510908.d

Page 1

Date : 09-DEC-2009 15:20

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

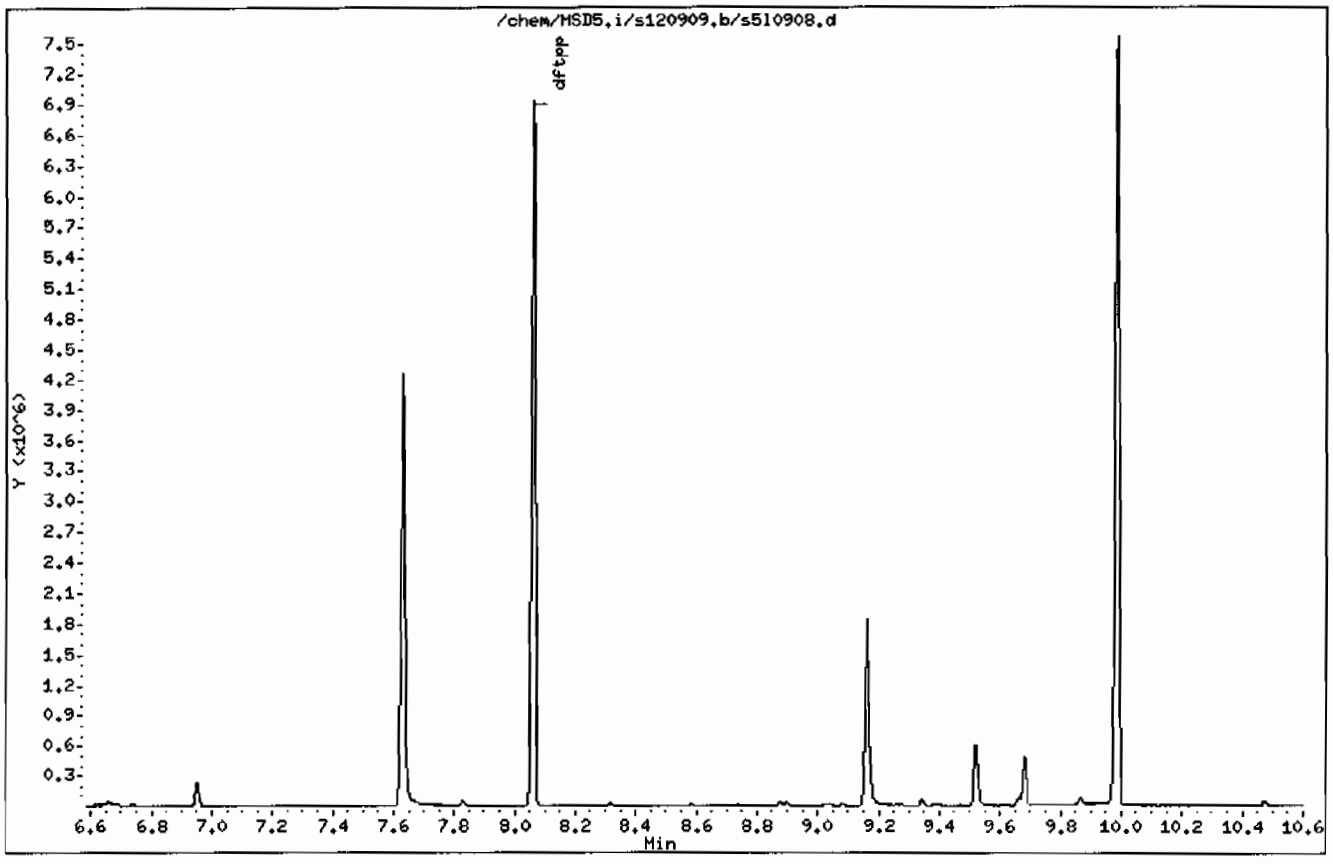

Data File: /chem/MSD5.i/s120909.b/s510908.d

Date : 09-DEC-2009 15:20

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

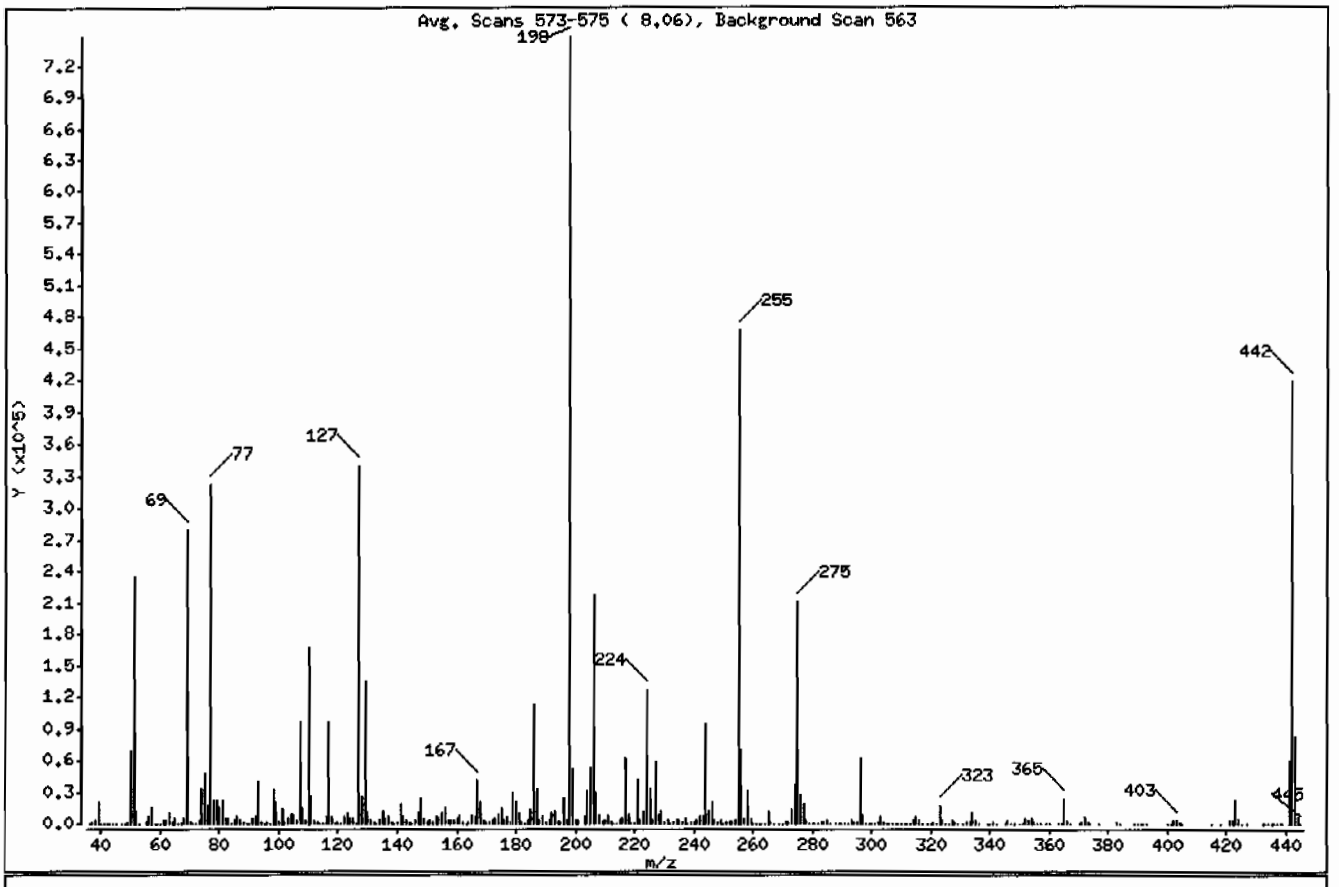

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	31.41
68	Less than 2.00% of mass 69	0.68 (1.81)
69	Mass 69 relative abundance	37.56
70	Less than 2.00% of mass 69	0.23 (0.62)
127	40.00 - 60.00% of mass 198	45.44
197	Less than 1.00% of mass 198	0.41
199	5.00 - 9.00% of mass 198	6.98
275	10.00 - 30.00% of mass 198	28.25
365	Greater than 1.00% of mass 198	3.25
441	Present, but less than mass 443	8.12
442	Greater than 40.00% of mass 198	56.09
443	17.00 - 23.00% of mass 442	10.94 (19.51)

Data File: /chem/MSD5.i/s120909.b/s510908.d

Date : 09-DEC-2009 15:20

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s510908.d
Spectrum: Avg. Scans 573-575 (8.06), Background Scan 563
Location of Maximum: 198.00
Number of points: 357

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	203	128.00	25496	219.00	723	311.00	208
37.00	1260	129.00	136384	220.00	401	312.00	195
38.00	3864	130.00	11560	221.00	40752	313.00	400
39.00	20016	131.00	2639	222.00	2971	314.00	3069
40.00	816	132.00	1064	223.00	12743	315.00	7124
41.00	673	133.00	606	224.00	127288	316.00	3423
42.00	64	134.00	4145	225.00	32864	317.00	624
43.00	167	135.00	11369	226.00	3353	319.00	42
44.00	200	136.00	5046	227.00	57544	320.00	176
45.00	532	137.00	6062	228.00	7782	321.00	2069
47.00	47	138.00	957	229.00	11179	322.00	804
48.00	41	139.00	792	230.00	1578	323.00	17872
49.00	1754	140.00	1813	231.00	4201	324.00	3067
50.00	68776	141.00	19496	232.00	830	325.00	244
51.00	234560	142.00	6355	233.00	862	326.00	271
52.00	12172	143.00	4198	234.00	3693	327.00	3225
53.00	212	144.00	1022	235.00	3913	328.00	1786
55.00	1395	145.00	850	236.00	2502	329.00	280
56.00	6965	146.00	3673	237.00	4569	331.00	75
57.00	14809	147.00	9883	238.00	635	332.00	1391
58.00	698	148.00	24208	239.00	2252	333.00	1822
59.00	213	149.00	4384	240.00	1812	334.00	10623
60.00	329	150.00	1269	241.00	3230	335.00	3075
61.00	3236	151.00	2608	242.00	6541	336.00	319
62.00	3879	152.00	1072	243.00	6471	339.00	227
63.00	10037	153.00	6508	244.00	94896	340.00	200
64.00	1653	154.00	4685	245.00	12157	341.00	2046
65.00	4840	155.00	10567	246.00	20216	342.00	468
66.00	121	156.00	15399	247.00	4146	345.00	56
67.00	482	157.00	2679	248.00	989	346.00	3331
68.00	5090	158.00	3668	249.00	3110	347.00	711
69.00	280448	159.00	2861	250.00	623	348.00	47
70.00	1746	160.00	5878	251.00	972	350.00	174
71.00	239	161.00	8330	252.00	1037	351.00	409
72.00	240	162.00	2431	253.00	2330	352.00	4670

Data File: /chem/MSD5.i/s120909.b/s510908.d

Date : 09-DEC-2009 15:20

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510908.d

Spectrum: Avg. Scans 573-575 (8.06), Background Scan 563

Location of Maximum: 198.00

Number of points: 357

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	2835	163.00	609	254.00	3416	353.00	3098
74.00	32688	164.00	1069	255.00	466944	354.00	4848
75.00	48816	165.00	7877	256.00	70056	355.00	895
76.00	17280	166.00	6247	257.00	5326	356.00	46
77.00	322816	167.00	41528	258.00	30424	357.00	44
78.00	21880	168.00	21096	259.00	4791	359.00	280
79.00	22840	169.00	3297	260.00	763	360.00	53
80.00	15946	170.00	1574	261.00	740	363.00	62
81.00	22568	171.00	2004	262.00	139	364.00	79
82.00	5348	172.00	3588	263.00	326	365.00	24256
83.00	4448	173.00	5047	264.00	840	366.00	3189
84.00	542	174.00	7814	265.00	12613	367.00	212
85.00	3943	175.00	15500	266.00	1780	370.00	470
86.00	7026	176.00	4217	267.00	406	371.00	1117
87.00	2991	177.00	7267	269.00	54	372.00	7599
88.00	1345	178.00	2551	270.00	677	373.00	1838
89.00	547	179.00	30016	271.00	1049	374.00	172
90.00	44	180.00	20656	272.00	1557	377.00	177
91.00	5110	181.00	9765	273.00	14094	383.00	1701
92.00	6069	182.00	1554	274.00	38624	384.00	464
93.00	38720	183.00	813	275.00	210944	389.00	53
94.00	2473	184.00	2741	276.00	27064	390.00	848
95.00	774	185.00	14578	277.00	19480	391.00	667
96.00	1784	186.00	112568	278.00	3312	392.00	403
97.00	715	187.00	33248	279.00	678	393.00	107
98.00	32160	188.00	3610	280.00	65	400.00	75
99.00	20968	189.00	7340	281.00	7	401.00	220
100.00	2182	190.00	1352	282.00	483	402.00	2730
101.00	13392	191.00	3480	283.00	2176	403.00	3346
102.00	1065	192.00	10501	284.00	1509	404.00	1229
103.00	4295	193.00	11410	285.00	3400	405.00	172
104.00	8904	194.00	2425	286.00	574	415.00	88
105.00	8709	195.00	1072	288.00	220	418.00	53
106.00	2591	196.00	23992	289.00	723	421.00	2903
107.00	96448	197.00	3046	290.00	629	422.00	2761

Data File: /chem/MSD5.i/s120909.b/s510908.d

Date : 09-DEC-2009 15:20

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510908.d
Spectrum: Avg. Scans 573-575 (8.06), Background Scan 563
Location of Maximum: 198.00
Number of points: 357

m/z	Y	m/z	Y	m/z	Y	m/z	Y
108.00	14711	198.00	746752	291.00	470	423.00	21904
109.00	2936	199.00	52120	292.00	707	424.00	4623
110.00	166080	200.00	4063	293.00	3975	425.00	583
111.00	26208	201.00	3345	294.00	1072	427.00	185
112.00	3373	203.00	6371	295.00	1437	432.00	168
113.00	1053	204.00	31224	296.00	62432	433.00	141
114.00	393	205.00	52592	297.00	9003	434.00	207
115.00	497	206.00	217920	298.00	760	435.00	264
116.00	6370	207.00	29080	299.00	174	436.00	258
117.00	96400	208.00	8077	300.00	63	437.00	168
118.00	6688	209.00	2458	301.00	821	438.00	396
119.00	828	210.00	3412	302.00	996	439.00	201
120.00	1179	211.00	8557	303.00	7337	441.00	60664
121.00	362	212.00	1344	304.00	1871	442.00	418816
122.00	7330	213.00	753	305.00	299	443.00	81712
123.00	10808	214.00	257	306.00	47	444.00	7645
124.00	5015	215.00	2790	307.00	108	445.00	277
125.00	4638	216.00	4827	308.00	830		
126.00	725	217.00	61896	309.00	641		
127.00	339328	218.00	8025	310.00	709		

Data File: /chem/MSD5.i/s121109.b/s511101.d

Date : 11-DEC-2009 13:34

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

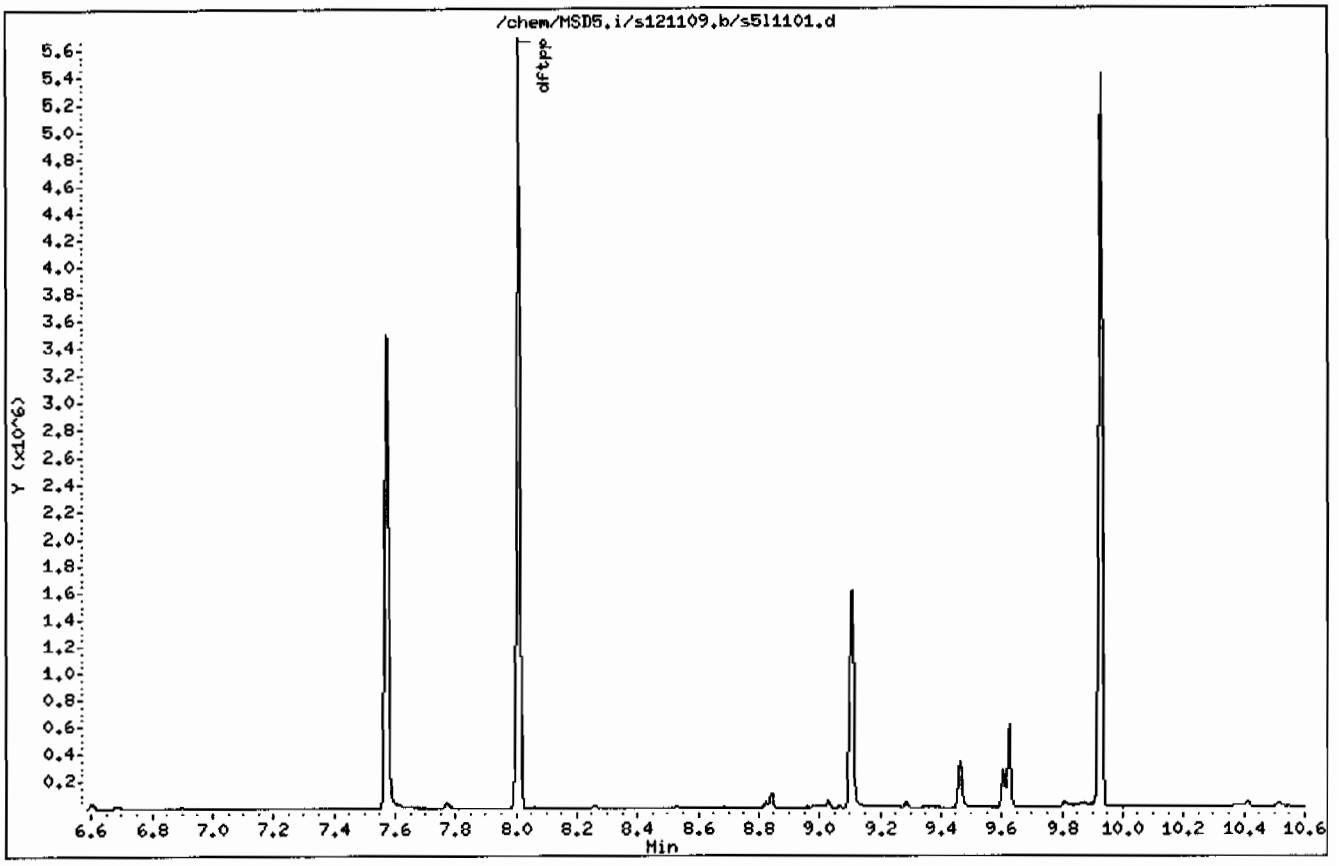

Data File: /chem/HSD5.i/s121109.b/s511101.d

Date : 11-DEC-2009 13:34

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: IWBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

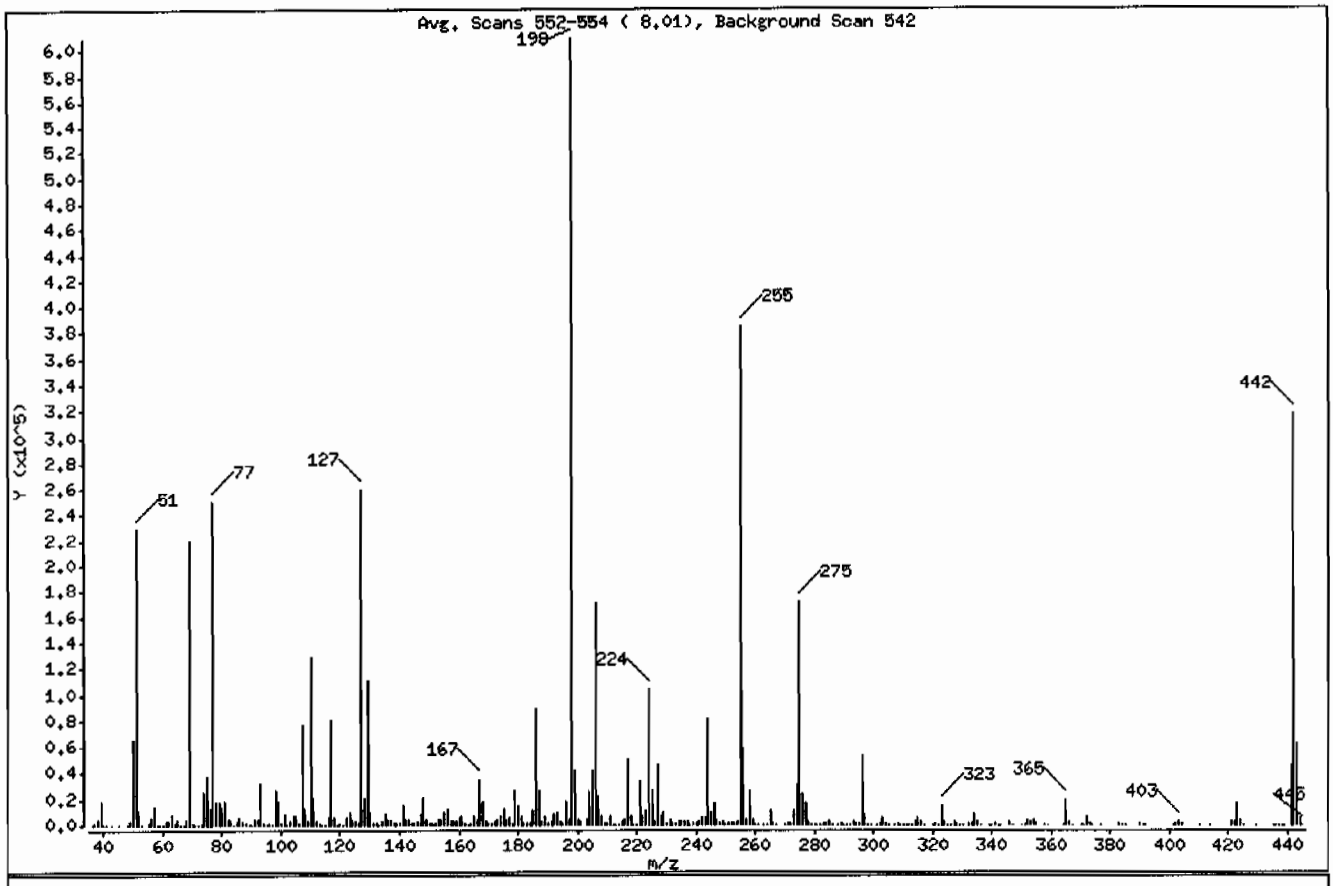

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	37.68
68	Less than 2.00% of mass 69	0.66 (1.83)
69	Mass 69 relative abundance	36.06
70	Less than 2.00% of mass 69	0.20 (0.56)
127	40.00 - 60.00% of mass 198	42.70
197	Less than 1.00% of mass 198	0.58
199	5.00 - 9.00% of mass 198	6.82
275	10.00 - 30.00% of mass 198	28.21
365	Greater than 1.00% of mass 198	3.11
441	Present, but less than mass 443	7.62
442	Greater than 40.00% of mass 198	52.29
443	17.00 - 23.00% of mass 442	10.26 (19.63)

Data File: /chem/MSD5.i/s121109.b/s511101.d

Date : 11-DEC-2009 13:34

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s511101.d
Spectrum: Avg. Scans 552-554 (8.01), Background Scan 542
Location of Maximum: 198.00
Number of points: 339

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	219	126.00	796	212.00	645	302.00	999
37.00	1360	127.00	259904	213.00	563	303.00	6036
38.00	3616	128.00	20504	214.00	193	304.00	1410
39.00	18840	129.00	110768	215.00	2199	305.00	220
40.00	696	130.00	9545	216.00	4039	307.00	46
41.00	182	131.00	1946	217.00	50176	308.00	751
43.00	188	132.00	1135	218.00	6559	309.00	646
45.00	465	133.00	363	219.00	511	310.00	590
48.00	47	134.00	3457	220.00	461	311.00	174
49.00	2165	135.00	8671	221.00	33448	312.00	146
50.00	65424	136.00	3739	222.00	7291	313.00	378
51.00	229376	137.00	4744	223.00	11090	314.00	2293
52.00	10981	138.00	1034	224.00	103224	315.00	5652
53.00	439	139.00	772	225.00	26728	316.00	2902
55.00	1195	140.00	1652	226.00	2606	317.00	485
56.00	6171	141.00	15579	227.00	46472	320.00	163
57.00	13987	142.00	4862	228.00	6315	321.00	1630
58.00	541	143.00	3508	229.00	9318	322.00	687
59.00	218	144.00	979	230.00	1269	323.00	14803
60.00	231	145.00	857	231.00	3805	324.00	2780
61.00	3179	146.00	3060	232.00	740	325.00	197
62.00	3413	147.00	8189	233.00	734	326.00	336
63.00	8748	148.00	20872	234.00	2675	327.00	3040
64.00	1056	149.00	3809	235.00	3271	328.00	1348
65.00	4034	150.00	1228	236.00	2281	329.00	192
66.00	311	151.00	2054	237.00	3326	330.00	63
67.00	377	152.00	1327	238.00	619	332.00	919
68.00	4011	153.00	4732	239.00	1977	333.00	1505
69.00	219520	154.00	3738	240.00	1545	334.00	8983
70.00	1237	155.00	9270	241.00	2700	335.00	2355
71.00	71	156.00	12277	242.00	5473	336.00	319
72.00	54	157.00	2507	243.00	5453	339.00	85
73.00	1808	158.00	2846	244.00	81744	340.00	76
74.00	25672	159.00	2263	245.00	10317	341.00	1725
75.00	37264	160.00	5152	246.00	17272	342.00	349

Data File: /chem/MSD5.i/s121109.b/s511101.d

Date : 11-DEC-2009 13:34

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s511101.d

Spectrum: Avg. Scans 552-554 (8.01), Background Scan 542

Location of Maximum: 198.00

Number of points: 339

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	13044	161.00	7176	247.00	3645	343.00	52
77.00	250816	162.00	1950	248.00	934	346.00	3309
78.00	17896	163.00	538	249.00	2757	347.00	372
79.00	17648	164.00	843	250.00	469	350.00	43
80.00	13423	165.00	6333	251.00	801	351.00	254
81.00	17560	166.00	4627	252.00	762	352.00	3713
82.00	4232	167.00	35480	253.00	1773	353.00	2903
83.00	3563	168.00	17736	254.00	2829	354.00	3890
84.00	375	169.00	2883	255.00	385088	355.00	766
85.00	3017	170.00	1076	256.00	58096	358.00	43
86.00	5838	171.00	1589	257.00	4431	359.00	326
87.00	2674	172.00	2858	258.00	26264	364.00	74
88.00	857	173.00	3721	259.00	4624	365.00	18920
89.00	449	174.00	6768	260.00	571	366.00	3033
90.00	42	175.00	13180	261.00	623	367.00	313
91.00	4116	176.00	3740	263.00	165	370.00	326
92.00	4873	177.00	6220	264.00	486	371.00	632
93.00	32712	178.00	1871	265.00	10782	372.00	6632
94.00	2062	179.00	25896	266.00	1739	373.00	1570
95.00	249	180.00	15936	267.00	286	374.00	166
96.00	1272	181.00	7415	270.00	527	377.00	48
97.00	403	182.00	1328	271.00	824	383.00	1413
98.00	26752	183.00	705	272.00	1172	384.00	574
99.00	18464	184.00	2062	273.00	11717	385.00	238
100.00	1727	185.00	11598	274.00	30776	390.00	937
101.00	9080	186.00	89968	275.00	171712	391.00	603
102.00	493	187.00	26344	276.00	23440	392.00	300
103.00	3434	188.00	2755	277.00	16245	401.00	56
104.00	6787	189.00	6448	278.00	3054	402.00	2012
105.00	6721	190.00	936	279.00	557	403.00	2756
106.00	1887	191.00	2874	280.00	214	404.00	801
107.00	77088	192.00	8223	281.00	201	410.00	45
108.00	12000	193.00	9409	282.00	356	414.00	46
109.00	2151	194.00	2189	283.00	1603	421.00	2408
110.00	129432	195.00	1153	284.00	1351	422.00	2379

Data File: /chem/MSD5.i/s121109.b/s511101.d

Date : 11-DEC-2009 13:34

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s511101.d
Spectrum: Avg. Scans 552-554 (8.01), Background Scan 542
Location of Maximum: 198.00
Number of points: 339

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	20728	196.00	18760	285.00	2462	423.00	16592
112.00	2770	197.00	3512	286.00	506	424.00	3722
113.00	989	198.00	608704	288.00	179	425.00	253
114.00	122	199.00	41504	289.00	735	429.00	59
115.00	288	200.00	3752	290.00	561	435.00	54
116.00	4907	201.00	2957	291.00	270	436.00	114
117.00	80624	203.00	4802	292.00	696	437.00	130
118.00	5479	204.00	25696	293.00	3286	438.00	207
119.00	619	205.00	42136	294.00	797	439.00	156
120.00	956	206.00	171264	295.00	1029	441.00	46400
121.00	329	207.00	22744	296.00	53288	442.00	318272
122.00	5912	208.00	6588	297.00	7929	443.00	62480
123.00	9175	209.00	1943	298.00	434	444.00	5924
124.00	3993	210.00	1883	299.00	47	445.00	302
125.00	3269	211.00	6875	301.00	646		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666			Matrix:	SOIL
Lab Sample ID:	1201984453				
Client Sample:	QC for batch 928098	Client:	LANL010	Project:	QC
Client ID:	MB for batch 928098	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 10:35	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510604.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984453**				
Client Sample:	**QC for batch 928098**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928098**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 10:35**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510604.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.89	221	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.96	312	ug/kg	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984453**				
Client Sample:	**QC for batch 928098**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928098**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 10:35**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510604.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
112-84-5	13-Docosenamide, (Z)-	10.32	144	ug/kg	93	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510604.d
Lab Smp Id: 1201984453 Client Smp ID: SBLK01
Inj Date : 06-DEC-2009 10:35
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984453|928100|1|SVMF|1|MB
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	472490	40.0000	
* 29 Naphthalene-d8	136	4.731	4.739	(1.000)	1634973	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	1011850	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1801911	40.0000	
* 91 Chrysene-d12	240	9.566	9.579	(1.000)	1819932	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1666241	40.0000	
$ 3 2-Fluorophenol	112	3.054	3.054	(0.791)	668279	68.2982	2280
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	803733	66.2273	2210
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.893)	341344	32.6547	1090
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	862418	33.7380	1120
$ 60 2,4,6-Tribromophenol	329	6.584	6.593	(1.099)	268926	71.8498	2390
$ 81 p-Terphenyl-d14	244	8.536	8.543	(0.892)	1240526	47.6633	1590

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510604.d
Lab Smp Id: 1201984453 Client Smp ID: SBLK01
Inj Date : 06-DEC-2009 10:35
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984453|928100|1|SVMF|1|MB
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.860	2760781	40.000
* 91 Chrysene-d12	9.566	4657987	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.890	457741	6.63205514	221	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.960	1089430	9.35536956	312	98	NIST05.L	112657	91
13-Docosenamide, (Z)-					CAS #: 112-84-5		
10.325	502898	4.31858205	144	93	NIST05.L	146308	91

Data File: /chem/MSD5.i/s120609.b/s510604.d

Date : 06-DEC-2009 10:35

Client ID: SBLK01

Sample Info: |1201984453|928100|1|SVMF|1|MB

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

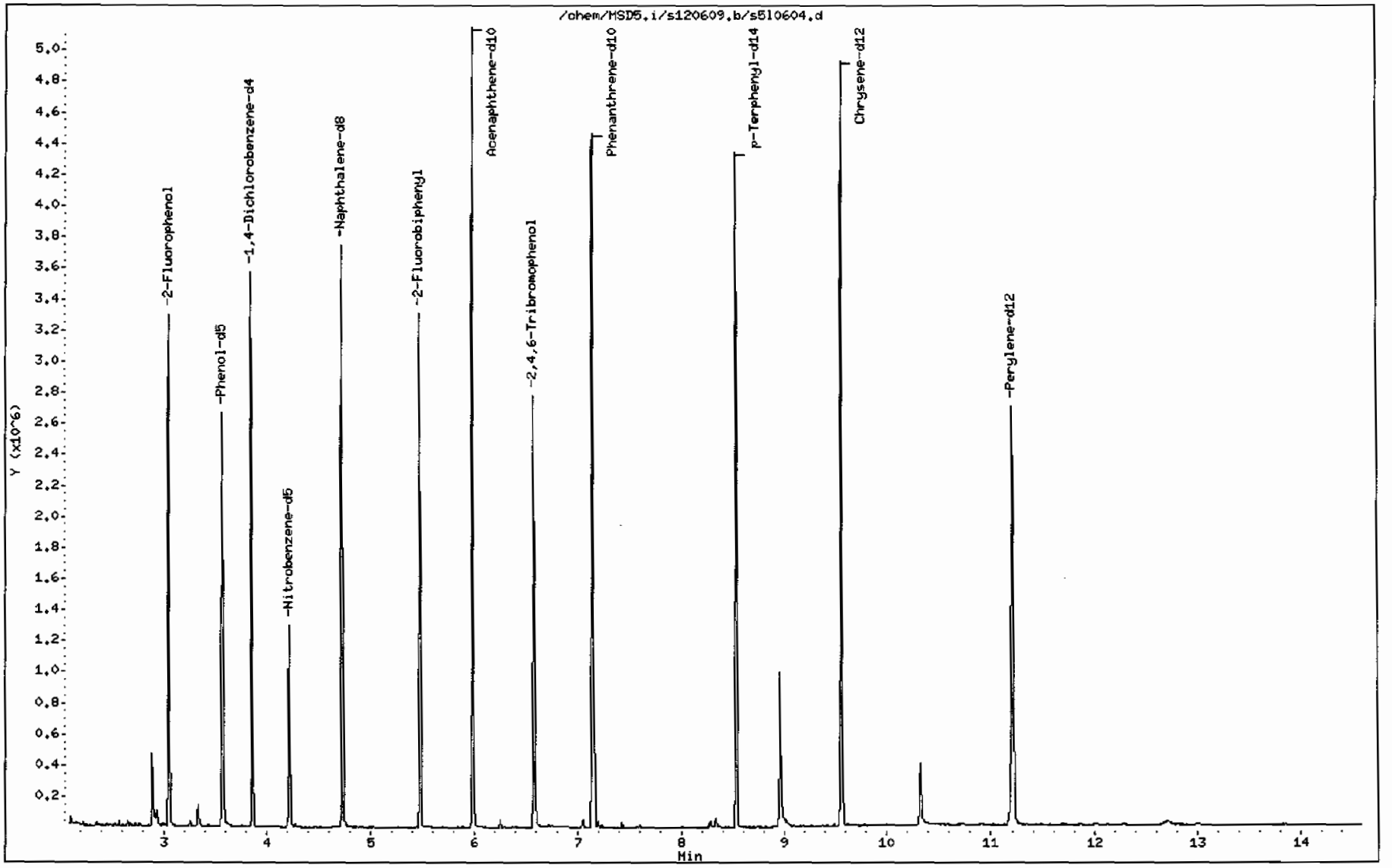

Data File: /chem/MSD5.i/s120609.b/s510604.d

Date : 06-DEC-2009 10:35

Client ID: SBLK01 Instrument: MSD5.i

Sample Info: I120198445319281001ISVHFI1IMB

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

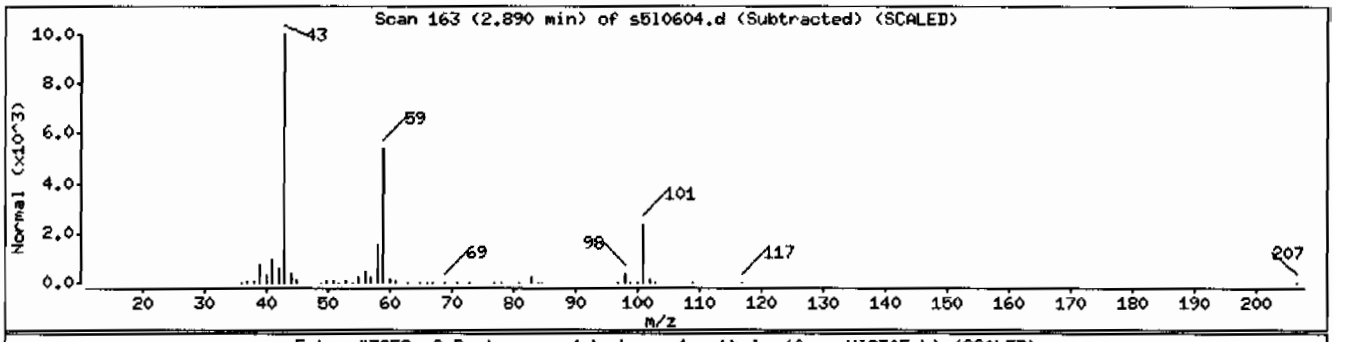

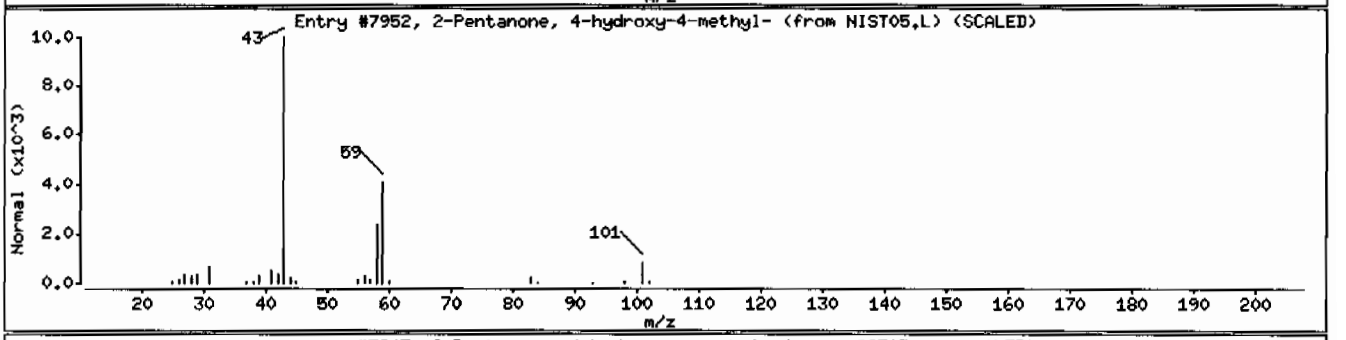

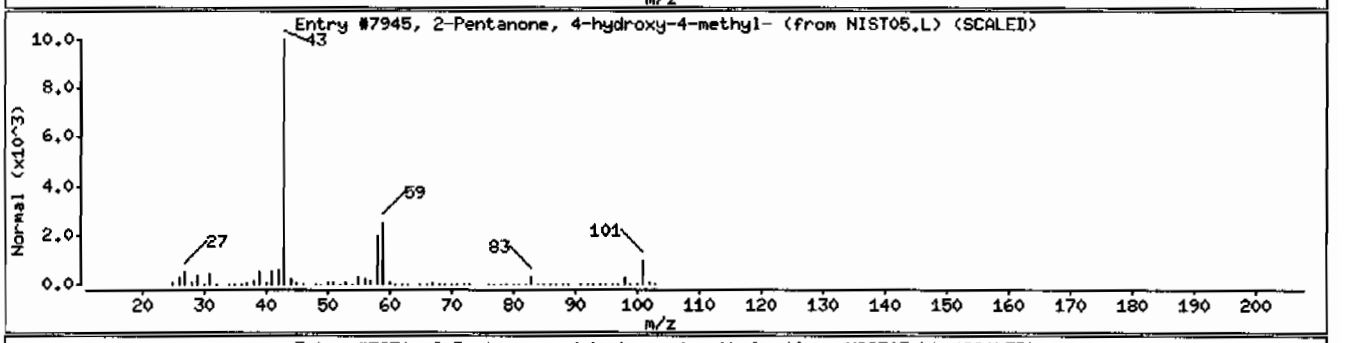

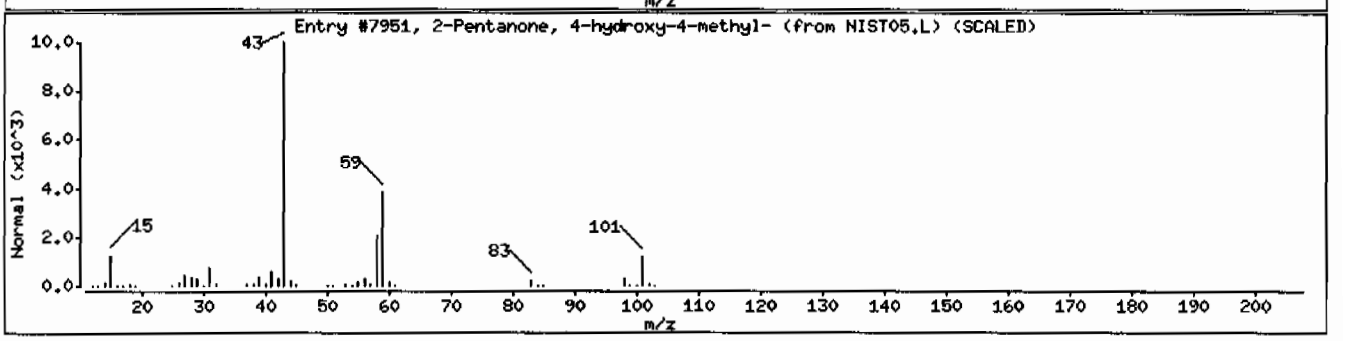

Data File: /chem/MSD5.i/s120609.b/s510604.d

Date : 06-DEC-2009 10:35

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: |1201984453|928100|1|SVMF|1|MB

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	98	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	68	C18H35NO	281
7-Nonenamide	90949-53-4	NIST05.L	26953	53	C9H17NO	155

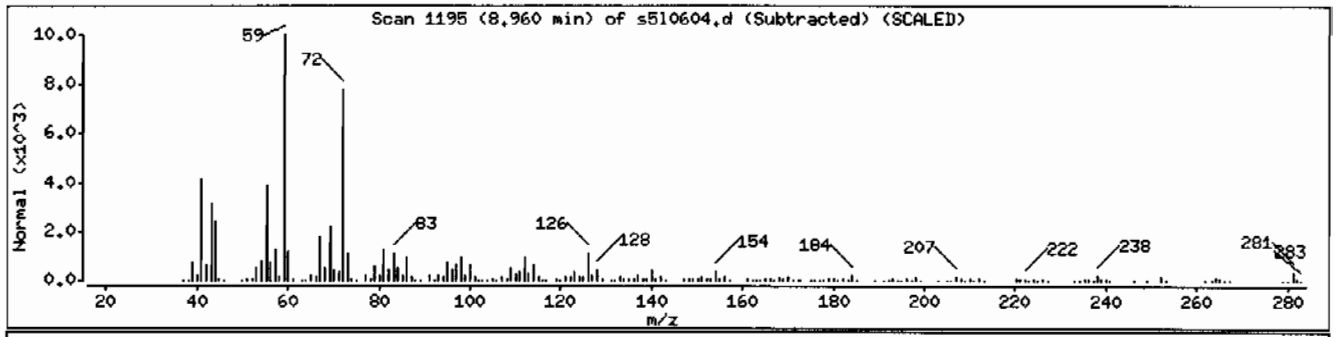

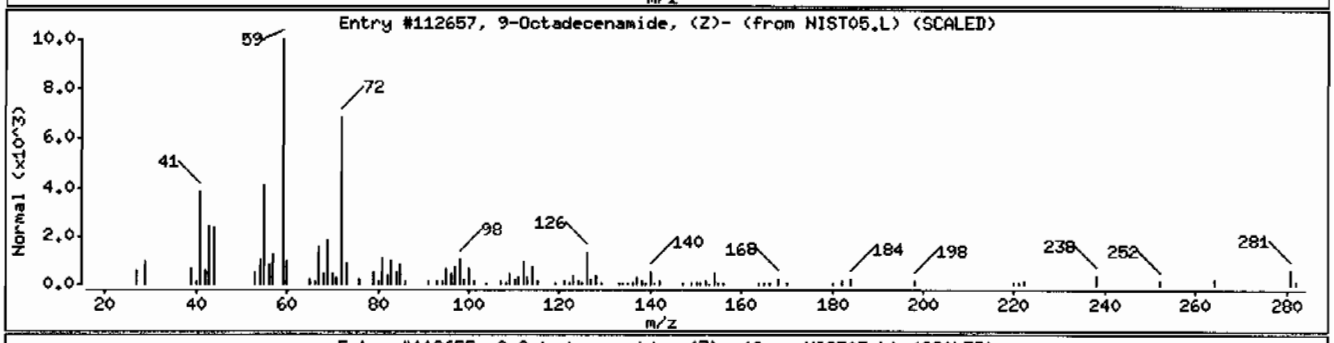

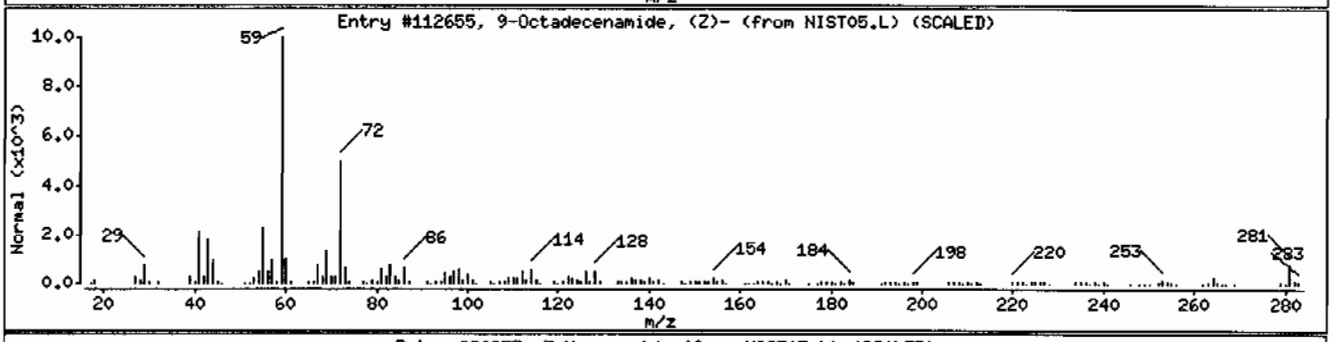

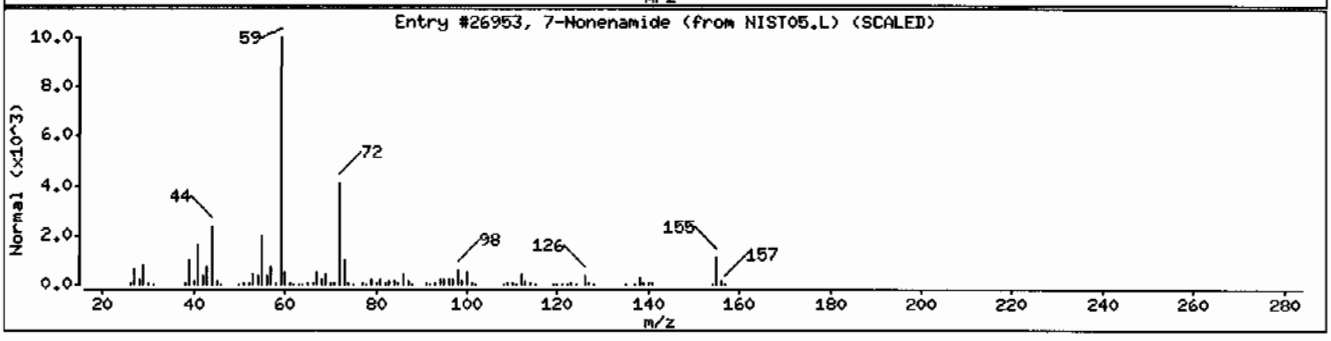

Data File: /chem/MSD5.i/s120609.b/s510604.d

Date : 06-DEC-2009 10:35

Client ID: SBLK01 Instrument: MSD5.i

Sample Info: |1201984453|928100|1|SVMF|1|MB

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	93	C22H43NO	337
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	90	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281

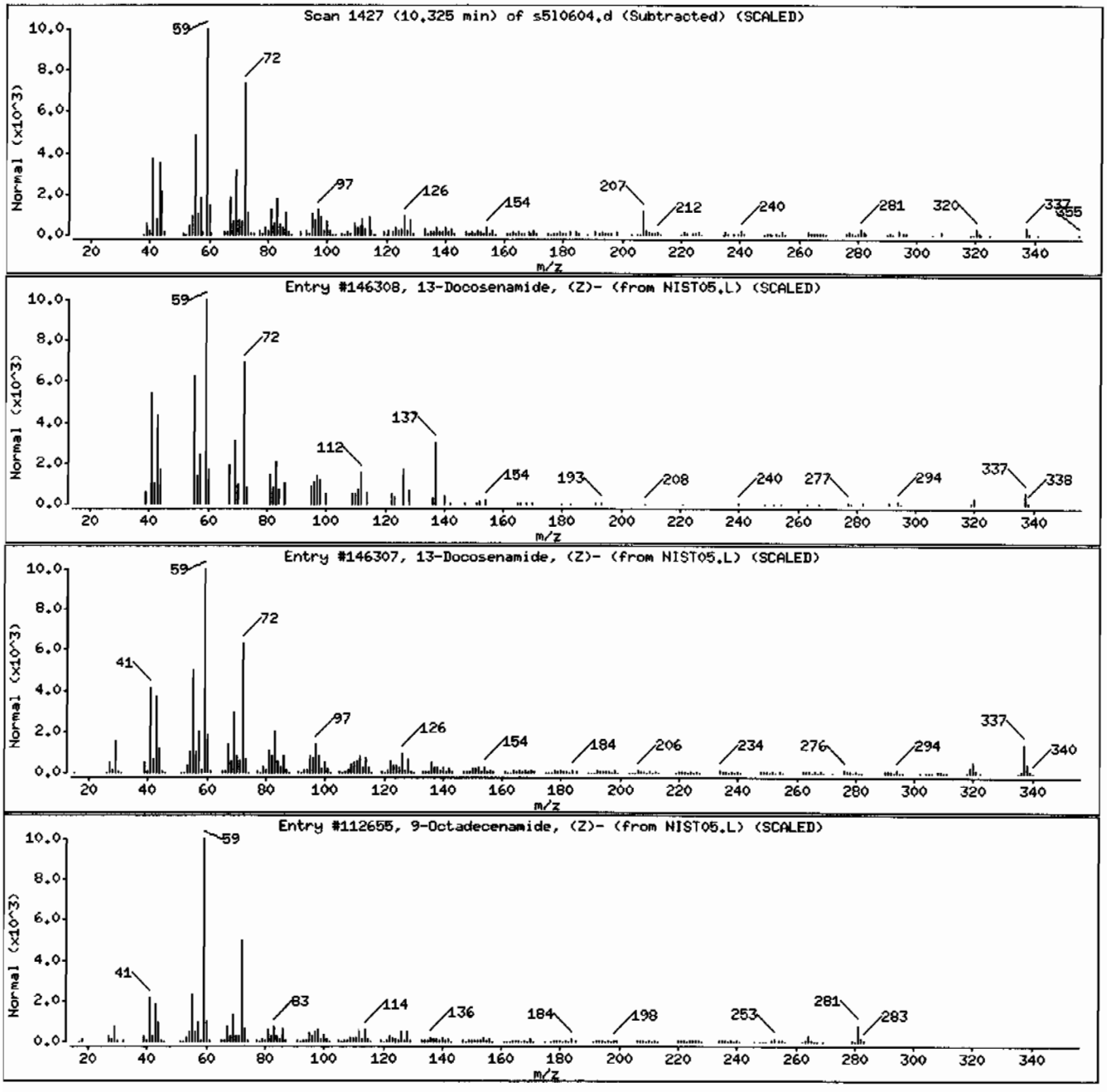

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984454**				
Client Sample:	**QC for batch 928098**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928098**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 10:58**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510605.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1090	ug/kg	66.7	333
108-95-2	Phenol		1090	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1060	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		963	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1330	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1140	ug/kg	66.7	333
83-32-9	Acenaphthene		1160	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1220	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1250	ug/kg	110	333
87-86-5	Pentachlorophenol		1300	ug/kg	83.3	333
129-00-0	Pyrene		1360	ug/kg	10.0	33.3
110-86-1	Pyridine		991	ug/kg	66.7	333
62-53-3	Aniline		1110	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1070	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		960	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1030	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		982	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1120	ug/kg	66.7	333
95-48-7	o-Cresol		1110	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1210	ug/kg	100	333
67-72-1	Hexachloroethane		906	ug/kg	66.7	333
98-95-3	Nitrobenzene		1230	ug/kg	66.7	333
78-59-1	Isophorone		1180	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1100	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1340	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1150	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1200	ug/kg	66.7	333
65-85-0	Benzoic acid		3140	ug/kg	167	667
91-20-3	Naphthalene		1150	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1270	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1120	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1210	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1190	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1180	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1200	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1120	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1080	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1480	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984454**				
Client Sample:	**QC for batch 928098**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928098**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 10:58**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0605.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1200	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1180	ug/kg	33.3	333
208-96-8	Acenaphthylene		1210	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1220	ug/kg	127	667
132-64-9	Dibenzofuran		1360	ug/kg	66.7	333
84-66-2	Diethylphthalate		1180	ug/kg	66.7	333
86-73-7	Fluorene		1180	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1140	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1150	ug/kg	66.7	333
100-01-6	4-Nitroaniline		2080	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1330	ug/kg	66.7	333
122-66-7	Azobenzene		1250	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1230	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1220	ug/kg	66.7	333
85-01-8	Phenanthrene		1250	ug/kg	10.0	33.3
120-12-7	Anthracene		1260	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1290	ug/kg	66.7	333
206-44-0	Fluoranthene		1310	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1400	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1250	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1120	ug/kg	100	333
218-01-9	Chrysene		1260	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1330	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1340	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1350	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1260	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1320	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1240	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1220	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1320	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1100	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510605.d
Lab Smp Id: 1201984454 Client Smp ID: SBLK01LCS
Inj Date : 06-DEC-2009 10:58
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984454|928100|1|SVMF|1|LCS
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	458800	40.0000	
* 29 Naphthalene-d8	136	4.737	4.739	(1.000)	1702602	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	973696	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1743294	40.0000	
* 91 Chrysene-d12	240	9.572	9.579	(1.000)	1748008	40.0000	
* 98 Perylene-d12	264	11.219	11.225	(1.000)	1647651	40.0000	
$ 3 2-Fluorophenol	112	3.054	3.054	(0.791)	650491	68.4640	2280
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	748611	63.5258	2120
$ 20 Nitrobenzene-d5	82	4.231	4.238	(0.893)	392830	36.0874	1200
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	870882	35.4041	1180
$ 60 2,4,6-Tribromophenol	329	6.590	6.593	(1.100)	264298	73.3803	2450
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	1106628	44.2682	1480

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.590	3.593	(0.930)	403241	32.7668	1090(Q)
8 2-Chlorophenol	128	3.731	3.738	(0.966)	335196	31.7597	1060
11 1,4-Dichlorobenzene	146	3.872	3.882	(1.003)	370606	28.8868	963
17 N-Nitrosodipropylamine	70	4.101	4.113	(1.062)	220429	39.8043	1330(Q)
28 1,2,4-Trichlorobenzene	180	4.684	4.691	(0.989)	352398	33.1205	1100
33 4-Chloro-3-methylphenol	107	5.084	5.086	(1.073)	286242	34.2146	1140
47 Acenaphthene	154	6.013	6.020	(1.004)	704100	34.9065	1160
50 2,4-Dinitrotoluene	165	6.107	6.112	(1.020)	264648	36.5533	1220
52 4-Nitrophenol	139	6.037	6.035	(1.008)	127979	37.5203	1250
65 Pentachlorophenol	266	6.990	6.988	(0.976)	160310	39.0753	1300
79 Pyrene	202	8.437	8.442	(0.881)	1441248	40.7048	1360
2 Pyridine	79	2.413	2.389	(0.625)	222023	29.7169	990
4 Aniline	66	3.643	3.656	(0.944)	153759	33.4175	1110
7 bis(2-Chloroethyl) ether	63	3.660	3.670	(0.948)	233063	32.0551	1070
9 1,3-Dichlorobenzene	146	3.831	3.839	(0.992)	363965	28.7988	960
12 Benzyl alcohol	108	3.937	3.940	(1.020)	205006	30.7870	1030
13 1,2-Dichlorobenzene	146	3.978	3.988	(1.030)	357756	29.4659	982
14 bis(2-Chloroisopropyl)ether	45	4.007	4.017	(1.038)	388406	33.6086	1120
15 o-Cresol	107	3.990	3.988	(1.034)	279370	33.1640	1100
18 m,p-Cresols	107	4.084	4.094	(1.058)	388311	36.2121	1210
19 Hexachloroethane	117	4.207	4.219	(1.090)	128790	27.1892	906
21 Nitrobenzene	77	4.243	4.248	(0.896)	374324	36.9314	1230
22 Isophorone	82	4.396	4.407	(0.928)	669087	35.5456	1180
23 2-Nitrophenol	139	4.460	4.465	(0.942)	173910	32.9458	1100
24 2,4-Dimethylphenol	122	4.454	4.455	(0.940)	366010	40.1956	1340
25 bis(2-Chloroethoxy)methane	93	4.519	4.527	(0.954)	363406	34.5066	1150
26 2,4-Dichlorophenol	162	4.619	4.624	(0.975)	306157	36.0550	1200
27 Benzoic acid	105	4.525	4.518	(0.955)	442533	94.2351	3140(Q)
30 Naphthalene	128	4.748	4.758	(1.002)	1016656	34.5010	1150
31 4-Chloroaniline	127	4.766	4.758	(1.006)	450209	38.1550	1270
32 Hexachlorobutadiene	225	4.813	4.821	(1.016)	232425	33.5856	1120
34 2-Methylnaphthalene	142	5.231	5.240	(1.104)	739701	36.3978	1210
36 Hexachlorocyclopentadiene	237	5.337	5.341	(0.891)	140443	35.7470	1190
37 2,4,6-Trichlorophenol	196	5.425	5.428	(0.906)	249956	35.3463	1180
38 2,4,5-Trichlorophenol	196	5.454	5.457	(0.911)	266951	36.1250	1200
40 2-Chloronaphthalene	162	5.590	5.592	(0.933)	690616	33.6137	1120
42 o-Nitroaniline	65	5.643	5.649	(0.942)	176090	32.3100	1080
41 m-Nitroaniline	138	5.937	5.948	(0.991)	150040	44.4571	1480
43 Dimethylphthalate	163	5.748	5.760	(0.960)	875448	36.1439	1200
44 2,6-Dinitrotoluene	165	5.807	5.813	(0.970)	200546	35.4332	1180
45 Acenaphthylene	152	5.890	5.900	(0.983)	1139178	36.4061	1210
48 2,4-Dinitrophenol	184	6.013	6.020	(1.004)	69274	36.7042	1220(Q)
49 Dibenzofuran	168	6.143	6.145	(1.026)	1190256	40.6754	1360
51 Diethylphthalate	149	6.260	6.266	(1.045)	850328	35.2806	1180
53 Fluorene	166	6.401	6.405	(1.069)	858585	35.4681	1180
54 4-Chlorophenylphenylether	204	6.378	6.381	(1.065)	456495	34.2610	1140
55 2-Methyl-4,6-dinitrophenol	198	6.419	6.420	(0.896)	113149	34.4451	1150

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.401	6.405	(1.069)	151274	62.2957	2080
133 Diphenylamine	169	6.466	6.473	(0.903)	684227	39.9367	1330
58 1,2-Diphenylhydrazine	77	6.501	6.506	(0.908)	797372	37.5151	1250
61 4-Bromophenylphenylether	248	6.766	6.771	(0.945)	289407	36.7842	1230
63 Hexachlorobenzene	284	6.837	6.839	(0.955)	305044	36.4720	1220
68 Phenanthrene	178	7.178	7.185	(1.002)	1224029	37.3854	1250
69 Anthracene	178	7.225	7.229	(1.009)	1233659	37.8835	1260
72 Di-n-butylphthalate	149	7.584	7.585	(1.059)	1447251	38.6322	1290
76 Fluoranthene	202	8.219	8.226	(1.148)	1404204	39.1693	1300
85 Butylbenzylphthalate	149	8.966	8.972	(0.937)	660245	41.9671	1400
89 Benzo(a)anthracene	228	9.554	9.564	(0.998)	1325530	37.6036	1250
90 3,3'-Dichlorobenzidine	252	9.507	9.501	(0.993)	396527	33.5413	1120
92 Chrysene	228	9.595	9.603	(1.002)	1212305	37.7265	1260
93 bis(2-Ethylhexyl)phthalate	149	9.495	9.497	(0.992)	936129	40.0147	1330
94 Di-n-octylphthalate	149	10.136	10.142	(0.904)	1434290	40.1887	1340
95 Benzo(b)fluoranthene	252	10.707	10.715	(0.954)	1396303	40.4412	1350
96 Benzo(k)fluoranthene	252	10.742	10.749	(0.958)	1298567	37.6784	1260
97 Benzo(a)pyrene	252	11.136	11.148	(0.993)	1205289	39.5920	1320
99 Indeno(1,2,3-cd)pyrene	276	12.948	12.964	(1.154)	1269326	37.3052	1240
100 Dibenzo(a,h)anthracene	278	12.966	12.978	(1.156)	1043825	36.5272	1220
101 Benzo(ghi)perylene	276	13.483	13.498	(1.202)	1060733	39.5984	1320
1 N-Methyl-N-nitrosomethylamine	74	2.372	2.356	(0.614)	171445	32.5502	1080

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s120609.b/s510605.d
Date : 06-DEC-2009 10:58
Client ID: SBLK01LCS
Sample Info: I120198445419282100|1|SVMF11|LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

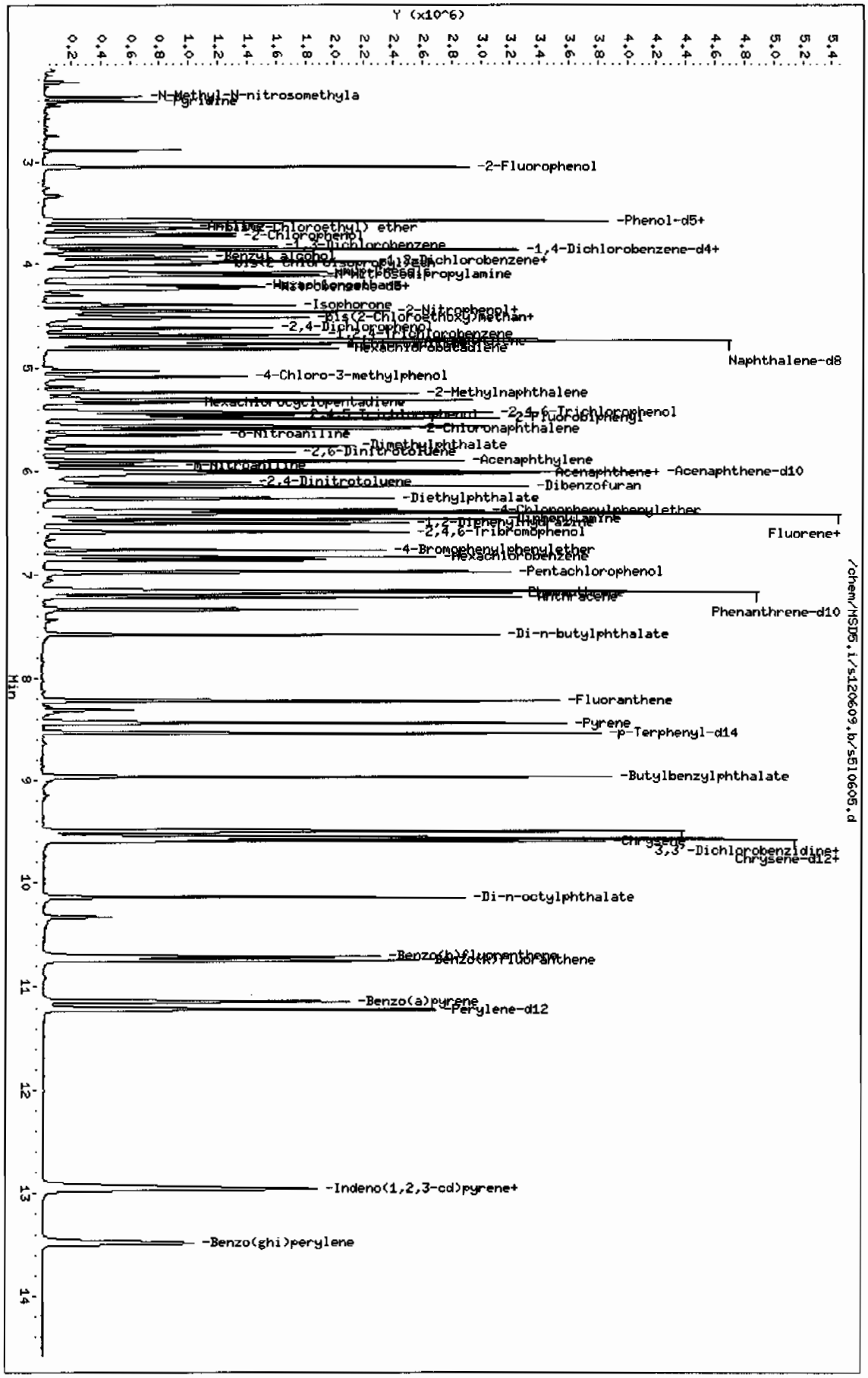

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	1201984455	Date Received:	11/25/2009 09:10	%Moisture:	0
Client Sample:	QC for batch 928098	Client:	LANL010	Project:	QC
Client ID:	RE03-09-14115MS	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928100	Inst:	MSD5.I	Dilution:	1
Run Date:	12/06/2009 11:43	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 09:26	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510607.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1000	ug/kg	66.7	333
108-95-2	Phenol		957	ug/kg	66.7	333
95-57-8	2-Chlorophenol		941	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		907	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1200	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1010	ug/kg	66.7	333
83-32-9	Acenaphthene		1040	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1080	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1070	ug/kg	110	333
87-86-5	Pentachlorophenol		1130	ug/kg	83.3	333
129-00-0	Pyrene		1190	ug/kg	10.0	33.3
110-86-1	Pyridine		807	ug/kg	66.7	333
62-53-3	Aniline		953	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		963	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		903	ug/kg	66.7	333
100-51-6	Benzyl alcohol		884	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		915	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1020	ug/kg	66.7	333
95-48-7	o-Cresol		929	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1090	ug/kg	100	333
67-72-1	Hexachloroethane		857	ug/kg	66.7	333
98-95-3	Nitrobenzene		1140	ug/kg	66.7	333
78-59-1	Isophorone		1080	ug/kg	66.7	333
88-75-5	2-Nitrophenol		996	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1160	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1040	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1040	ug/kg	66.7	333
65-85-0	Benzoic acid		1880	ug/kg	167	667
91-20-3	Naphthalene		1070	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1150	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1030	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1110	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		964	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1030	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1040	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1010	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		962	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1340	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201984455**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
Client Sample:	**QC for batch 928098**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14115MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 11:43**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510607.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1070	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1060	ug/kg	33.3	333
208-96-8	Acenaphthylene		1100	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		886	ug/kg	127	667
132-64-9	Dibenzofuran		1240	ug/kg	66.7	333
84-66-2	Diethylphthalate		1040	ug/kg	66.7	333
86-73-7	Fluorene		1080	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1030	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		917	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1800	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1190	ug/kg	66.7	333
122-66-7	Azobenzene		1130	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1090	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1070	ug/kg	66.7	333
85-01-8	Phenanthrene		1100	ug/kg	10.0	33.3
120-12-7	Anthracene		1120	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1100	ug/kg	66.7	333
206-44-0	Fluoranthene		1120	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1210	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1080	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		964	ug/kg	100	333
218-01-9	Chrysene		1070	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1140	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1190	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1160	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1090	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1130	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1050	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		994	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1110	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1020	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510607.d
Lab Smp Id: 1201984455 Client Smp ID: RE03-09-14115MS
Inj Date : 06-DEC-2009 11:43
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984455|928100|1|SVMF|1|MS_LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 7 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00940	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	476789	40.0000	
* 29 Naphthalene-d8	136	4.737	4.739	(1.000)	1764276	40.0000	
* 46 Acenaphthene-d10	164	5.990	5.996	(1.000)	1033441	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1843671	40.0000	
* 91 Chrysene-d12	240	9.572	9.579	(1.000)	1818453	40.0000	
* 98 Perylene-d12	264	11.213	11.225	(1.000)	1641061	40.0000	
$ 3 2-Fluorophenol	112	3.055	3.054	(0.791)	576838	58.4213	1950
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	684530	55.8964	1860
$ 20 Nitrobenzene-d5	82	4.225	4.238	(0.892)	362545	32.1411	1070
$ 39 2-Fluorobiphenyl	172	5.478	5.486	(0.915)	794849	30.4451	1010
$ 60 2,4,6-Tribromophenol	329	6.590	6.593	(1.100)	239836	62.7392	2090
$ 81 p-Terphenyl-d14	244	8.537	8.543	(0.892)	986635	37.9392	1260

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.590	3.593	(0.930)	366967	28.6942	956(Q)
8 2-Chlorophenol	128	3.725	3.738	(0.965)	309482	28.2169	941
11 1,4-Dichlorobenzene	146	3.872	3.882	(1.003)	362862	27.2161	907
17 N-Nitrosodipropylamine	70	4.101	4.113	(1.062)	207887	36.1232	1200(Q)
28 1,2,4-Trichlorobenzene	180	4.684	4.691	(0.989)	335886	30.4651	1020
33 4-Chloro-3-methylphenol	107	5.084	5.086	(1.073)	262973	30.3345	1010
47 Acenaphthene	154	6.019	6.020	(1.005)	667262	31.1678	1040
50 2,4-Dinitrotoluene	165	6.107	6.112	(1.020)	248011	32.2751	1080
52 4-Nitrophenol	139	6.037	6.035	(1.008)	112456	32.1104	1070
65 Pentachlorophenol	266	6.990	6.988	(0.976)	142960	33.9705	1130
79 Pyrene	202	8.437	8.442	(0.881)	1311645	35.6094	1190
2 Pyridine	79	2.413	2.389	(0.625)	187965	24.2092	807
4 Aniline	66	3.643	3.656	(0.944)	136741	28.5977	953(Q)
7 bis(2-Chloroethyl) ether	63	3.660	3.670	(0.948)	218262	28.8868	963
9 1,3-Dichlorobenzene	146	3.831	3.839	(0.992)	355670	27.0807	903
12 Benzyl alcohol	108	3.931	3.940	(1.018)	183415	26.5054	884
13 1,2-Dichlorobenzene	146	3.978	3.988	(1.030)	346446	27.4578	915
14 bis(2-Chloroisopropyl)ether	45	4.007	4.017	(1.038)	367787	30.6237	1020
15 o-Cresol	107	3.984	3.988	(1.032)	243874	27.8580	929
18 m,p-Cresols	107	4.084	4.094	(1.058)	362902	32.5657	1080
19 Hexachloroethane	117	4.207	4.219	(1.090)	126505	25.6993	857
21 Nitrobenzene	77	4.243	4.248	(0.896)	359234	34.2037	1140
22 Isophorone	82	4.396	4.407	(0.928)	630038	32.3011	1080
23 2-Nitrophenol	139	4.454	4.465	(0.940)	163414	29.8754	996
24 2,4-Dimethylphenol	122	4.454	4.455	(0.940)	328329	34.7970	1160
25 bis(2-Chloroethoxy)methane	93	4.519	4.527	(0.954)	340635	31.2138	1040
26 2,4-Dichlorophenol	162	4.619	4.624	(0.975)	274840	31.2355	1040
27 Benzoic acid	105	4.513	4.518	(0.953)	274027	56.3130	1880(Q)
30 Naphthalene	128	4.749	4.758	(1.002)	978418	32.0427	1070
31 4-Chloroaniline	127	4.766	4.758	(1.006)	422663	34.5683	1150
32 Hexachlorobutadiene	225	4.813	4.821	(1.016)	221914	30.9459	1030
34 2-Methylnaphthalene	142	5.231	5.240	(1.104)	704242	33.4417	1110
36 Hexachlorocyclopentadiene	237	5.337	5.341	(0.891)	120636	28.9305	964
37 2,4,6-Trichlorophenol	196	5.425	5.428	(0.906)	231193	30.8031	1030
38 2,4,5-Trichlorophenol	196	5.454	5.457	(0.911)	245197	31.2630	1040
40 2-Chloronaphthalene	162	5.590	5.592	(0.933)	657814	30.1663	1000
42 o-Nitroaniline	65	5.643	5.649	(0.942)	166959	28.8636	962
41 m-Nitroaniline	138	5.937	5.948	(0.991)	136902	40.1025	1340
43 Dimethylphthalate	163	5.748	5.760	(0.960)	823292	32.0255	1070
44 2,6-Dinitrotoluene	165	5.807	5.813	(0.970)	190582	31.7261	1060
45 Acenaphthylene	152	5.890	5.900	(0.983)	1093257	32.9187	1100
48 2,4-Dinitrophenol	184	6.013	6.020	(1.004)	42384	26.5921	886(Q)
49 Dibenzofuran	168	6.143	6.145	(1.026)	1150705	37.0504	1240
51 Diethylphthalate	149	6.260	6.266	(1.045)	797166	31.1628	1040
53 Fluorene	166	6.401	6.405	(1.069)	829962	32.3036	1080
54 4-Chlorophenylphenylether	204	6.378	6.381	(1.065)	436764	30.8851	1030
55 2-Methyl-4,6-dinitrophenol	198	6.419	6.420	(0.896)	88297	27.4976	917

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.401	6.405	(1.069)	138923	53.9021	1800
133 Diphenylamine	169	6.466	6.473	(0.903)	644260	35.5566	1180
58 1,2-Diphenylhydrazine	77	6.501	6.506	(0.908)	761582	33.8804	1130
61 4-Bromophenylphenylether	248	6.766	6.771	(0.945)	272271	32.7222	1090
63 Hexachlorobenzene	284	6.837	6.839	(0.955)	284259	32.1366	1070
68 Phenanthrene	178	7.178	7.185	(1.002)	1140235	32.9300	1100
69 Anthracene	178	7.225	7.229	(1.009)	1159377	33.6641	1120
72 Di-n-butylphthalate	149	7.584	7.585	(1.059)	1312793	33.1352	1100
76 Fluoranthene	202	8.219	8.226	(1.148)	1274286	33.6101	1120
85 Butylbenzylphthalate	149	8.966	8.972	(0.937)	591680	36.1520	1200
89 Benzo(a)anthracene	228	9.554	9.564	(0.998)	1183000	32.2601	1080
90 3,3'-Dichlorobenzidine	252	9.501	9.501	(0.993)	355671	28.9200	964
92 Chrysene	228	9.595	9.603	(1.002)	1076057	32.1893	1070
93 bis(2-Ethylhexyl)phthalate	149	9.495	9.497	(0.992)	833978	34.3408	1140
94 Di-n-octylphthalate	149	10.136	10.142	(0.904)	1267640	35.6618	1190
95 Benzo(b)fluoranthene	252	10.707	10.715	(0.955)	1193248	34.6989	1160
96 Benzo(k)fluoranthene	252	10.742	10.749	(0.958)	1119222	32.6050	1090
97 Benzo(a)pyrene	252	11.136	11.148	(0.993)	1025446	33.8197	1130
99 Indeno(1,2,3-cd)pyrene	276	12.948	12.964	(1.155)	1059591	31.4445	1050
100 Dibenzo(a,h)anthracene	278	12.960	12.978	(1.156)	842720	29.8257	994
101 Benzo(ghi)perylene	276	13.477	13.498	(1.202)	890954	33.3939	1110
1 N-Methyl-N-nitrosomethylamine	74	2.372	2.356	(0.614)	164731	30.0956	1000

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s120609.b/s510607.d
Date : 06-DEC-2009 11:43
Client ID: RE03-09-14116NS
Sample Info: 1120198445519281001 1SVHF11 1MS_LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

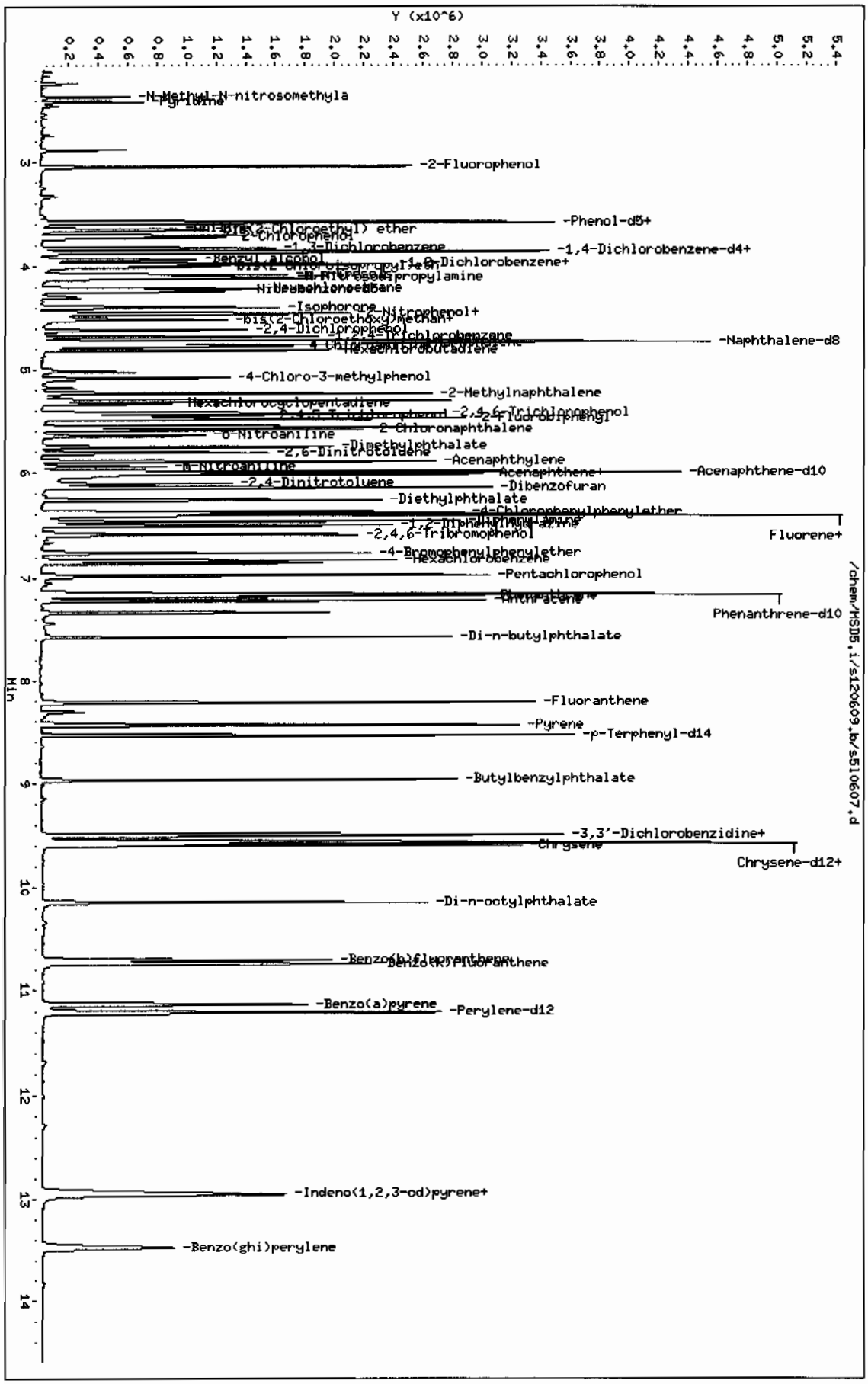

Page 1

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201984456**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
Client Sample:	**QC for batch 928098**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14115MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 15:43**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s510608.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		932	ug/kg	66.5	333
108-95-2	Phenol		886	ug/kg	66.5	333
95-57-8	2-Chlorophenol		864	ug/kg	66.5	333
106-46-7	1,4-Dichlorobenzene		827	ug/kg	66.5	333
621-64-7	N-Nitrosodipropylamine		1100	ug/kg	66.5	333
59-50-7	4-Chloro-3-methylphenol		917	ug/kg	66.5	333
83-32-9	Acenaphthene		941	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		937	ug/kg	33.3	333
100-02-7	4-Nitrophenol		991	ug/kg	110	333
87-86-5	Pentachlorophenol		986	ug/kg	83.1	333
129-00-0	Pyrene		1110	ug/kg	9.98	33.3
110-86-1	Pyridine		793	ug/kg	66.5	333
62-53-3	Aniline		905	ug/kg	99.8	333
111-44-4	bis(2-Chloroethyl) ether		899	ug/kg	66.5	333
541-73-1	1,3-Dichlorobenzene		830	ug/kg	66.5	333
100-51-6	Benzyl alcohol		755	ug/kg	99.8	333
95-50-1	1,2-Dichlorobenzene		853	ug/kg	66.5	333
108-60-1	bis(2-Chloroisopropyl)ether		956	ug/kg	66.5	333
95-48-7	o-Cresol		899	ug/kg	66.5	333
65794-96-9	m,p-Cresols		1010	ug/kg	99.8	333
67-72-1	Hexachloroethane		762	ug/kg	66.5	333
98-95-3	Nitrobenzene		1040	ug/kg	66.5	333
78-59-1	Isophorone		992	ug/kg	66.5	333
88-75-5	2-Nitrophenol		877	ug/kg	66.5	333
105-67-9	2,4-Dimethylphenol		1100	ug/kg	116	333
111-91-1	bis(2-Chloroethoxy)methane		948	ug/kg	66.5	333
120-83-2	2,4-Dichlorophenol		938	ug/kg	66.5	333
65-85-0	Benzoic acid		1650	ug/kg	166	665
91-20-3	Naphthalene		1010	ug/kg	9.98	33.3
106-47-8	4-Chloroaniline		1050	ug/kg	66.5	333
87-68-3	Hexachlorobutadiene		926	ug/kg	66.5	333
91-57-6	2-Methylnaphthalene		1020	ug/kg	6.65	33.3
77-47-4	Hexachlorocyclopentadiene		776	ug/kg	66.5	333
88-06-2	2,4,6-Trichlorophenol		1040	ug/kg	66.5	333
95-95-4	2,4,5-Trichlorophenol		846	ug/kg	66.5	333
91-58-7	2-Chloronaphthalene		912	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		888	ug/kg	66.5	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1160	ug/kg	66.5	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201984456**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
Client Sample:	**QC for batch 928098**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14115MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928100**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/06/2009 15:43**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 09:26**	**Aliquot:**	**30.07 g**	**Final Volume:**	**1 mL**
Data File:	**s510608.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		908	ug/kg	66.5	333
606-20-2	2,6-Dinitrotoluene		860	ug/kg	33.3	333
208-96-8	Acenaphthylene		1000	ug/kg	9.98	33.3
51-28-5	2,4-Dinitrophenol		901	ug/kg	126	665
132-64-9	Dibenzofuran		1130	ug/kg	66.5	333
84-66-2	Diethylphthalate		880	ug/kg	66.5	333
86-73-7	Fluorene		992	ug/kg	9.98	33.3
7005-72-3	4-Chlorophenylphenylether		941	ug/kg	66.5	333
534-52-1	2-Methyl-4,6-dinitrophenol		846	ug/kg	66.5	333
100-01-6	4-Nitroaniline		1540	ug/kg	99.8	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1070	ug/kg	66.5	333
122-66-7	Azobenzene		1060	ug/kg	66.5	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		990	ug/kg	66.5	333
118-74-1	Hexachlorobenzene		1010	ug/kg	66.5	333
85-01-8	Phenanthrene		1040	ug/kg	9.98	33.3
120-12-7	Anthracene		1030	ug/kg	6.65	33.3
84-74-2	Di-n-butylphthalate		1020	ug/kg	66.5	333
206-44-0	Fluoranthene		1060	ug/kg	9.98	33.3
85-68-7	Butylbenzylphthalate		1070	ug/kg	66.5	333
56-55-3	Benzo(a)anthracene		1030	ug/kg	9.98	33.3
91-94-1	3,3'-Dichlorobenzidine		806	ug/kg	99.8	333
218-01-9	Chrysene		1000	ug/kg	9.98	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1040	ug/kg	66.5	333
117-84-0	Di-n-octylphthalate		1080	ug/kg	66.5	333
205-99-2	Benzo(b)fluoranthene		1040	ug/kg	9.98	33.3
207-08-9	Benzo(k)fluoranthene		1080	ug/kg	9.98	33.3
50-32-8	Benzo(a)pyrene		1060	ug/kg	9.98	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1010	ug/kg	9.98	33.3
53-70-3	Dibenzo(a,h)anthracene		987	ug/kg	9.98	33.3
191-24-2	Benzo(ghi)perylene		1080	ug/kg	9.98	33.3
120-82-1	1,2,4-Trichlorobenzene		939	ug/kg	66.5	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120609.b/s510608.d
Lab Smp Id: 1201984456 Client Smp ID: RE03-09-14115MSD
Inj Date : 06-DEC-2009 15:43
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984456|928100|1|SVMF|1|MSD_LANL
Misc Info : |MSD8270_SF|WBN091128-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120609.b/MSD5-M8270C-113009.m
Meth Date : 06-Dec-2009 11:30 jos00786 Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 8 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-666.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	0.00940	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.860	3.872	(1.000)	417008	40.0000	
* 29 Naphthalene-d8	136	4.737	4.739	(1.000)	1560180	40.0000	
* 46 Acenaphthene-d10	164	5.996	5.996	(1.000)	919189	40.0000	
* 67 Phenanthrene-d10	188	7.160	7.166	(1.000)	1659258	40.0000	
* 91 Chrysene-d12	240	9.572	9.579	(1.000)	1642399	40.0000	
* 98 Perylene-d12	264	11.219	11.225	(1.000)	1500941	40.0000	
$ 3 2-Fluorophenol	112	3.049	3.054	(0.790)	517612	59.9383	1990
$ 5 Phenol-d5	99	3.578	3.584	(0.927)	620440	57.9260	1930
$ 20 Nitrobenzene-d5	82	4.231	4.238	(0.893)	329385	33.0213	1100
$ 39 2-Fluorobiphenyl	172	5.484	5.486	(0.915)	724359	31.1937	1040
$ 60 2,4,6-Tribromophenol	329	6.590	6.593	(1.099)	179726	52.8586	1760
$ 81 p-Terphenyl-d14	244	8.542	8.543	(0.892)	870124	37.0456	1230

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.590	3.593	(0.930)	298075	26.6486	886(Q)
8 2-Chlorophenol	128	3.731	3.738	(0.966)	249110	25.9686	864
11 1,4-Dichlorobenzene	146	3.872	3.882	(1.003)	289990	24.8685	827
17 N-Nitrosodipropylamine	70	4.102	4.113	(1.062)	165930	32.9661	1100(Q)
28 1,2,4-Trichlorobenzene	180	4.684	4.691	(0.989)	275163	28.2224	939
33 4-Chloro-3-methylphenol	107	5.084	5.086	(1.073)	211362	27.5705	917
47 Acenaphthene	154	6.019	6.020	(1.004)	538516	28.2806	940
50 2,4-Dinitrotoluene	165	6.107	6.112	(1.019)	192475	28.1612	937
52 4-Nitrophenol	139	6.037	6.035	(1.007)	91135	29.7977	991
65 Pentachlorophenol	266	6.990	6.988	(0.976)	108354	29.6372	986
79 Pyrene	202	8.437	8.442	(0.881)	1111409	33.4076	1110
2 Pyridine	79	2.408	2.389	(0.624)	161916	23.8438	793
4 Aniline	66	3.643	3.656	(0.944)	113749	27.1996	905(Q)
7 bis(2-Chloroethyl) ether	63	3.660	3.670	(0.948)	178606	27.0272	899(Q)
9 1,3-Dichlorobenzene	146	3.825	3.839	(0.991)	286705	24.9592	830
12 Benzyl alcohol	108	3.937	3.940	(1.020)	137457	22.7117	755
13 1,2-Dichlorobenzene	146	3.978	3.988	(1.030)	282916	25.6371	853
14 bis(2-Chloroisopropyl)ether	45	4.007	4.017	(1.038)	301839	28.7355	956
15 o-Cresol	107	3.990	3.988	(1.034)	207060	27.0436	899
18 m,p-Cresols	107	4.084	4.094	(1.058)	295250	30.2931	1010
19 Hexachloroethane	117	4.207	4.219	(1.090)	98623	22.9074	762
21 Nitrobenzene	77	4.243	4.248	(0.896)	290976	31.3289	1040
22 Isophorone	82	4.396	4.407	(0.928)	514360	29.8201	992
23 2-Nitrophenol	139	4.460	4.465	(0.942)	127512	26.3613	877
24 2,4-Dimethylphenol	122	4.454	4.455	(0.940)	275054	32.9642	1100
25 bis(2-Chloroethoxy)methane	93	4.519	4.527	(0.954)	274950	28.4907	948
26 2,4-Dichlorophenol	162	4.619	4.624	(0.975)	219559	28.2171	938
27 Benzoic acid	105	4.507	4.518	(0.952)	213850	49.6953	1650(Q)
30 Naphthalene	128	4.754	4.758	(1.004)	817413	30.2718	1010
31 4-Chloroaniline	127	4.766	4.758	(1.006)	340281	31.4712	1050
32 Hexachlorobutadiene	225	4.819	4.821	(1.017)	176537	27.8386	926
34 2-Methylnaphthalene	142	5.237	5.240	(1.106)	572767	30.7564	1020
36 Hexachlorocyclopentadiene	237	5.337	5.341	(0.890)	86570	23.3415	776
37 2,4,6-Trichlorophenol	196	5.425	5.428	(0.905)	208243	31.1939	1040
38 2,4,5-Trichlorophenol	196	5.454	5.457	(0.910)	177438	25.4357	846
40 2-Chloronaphthalene	162	5.590	5.592	(0.932)	531854	27.4215	912
42 o-Nitroaniline	65	5.648	5.649	(0.942)	137443	26.7144	888
41 m-Nitroaniline	138	5.943	5.948	(0.991)	97630	34.8137	1160
43 Dimethylphthalate	163	5.754	5.760	(0.960)	623996	27.2901	908
44 2,6-Dinitrotoluene	165	5.807	5.813	(0.969)	138223	25.8699	860
45 Acenaphthylene	152	5.896	5.900	(0.983)	892020	30.1979	1000
48 2,4-Dinitrophenol	184	6.013	6.020	(1.003)	39066	27.0916	901(Q)
49 Dibenzofuran	168	6.143	6.145	(1.025)	941487	34.0819	1130
51 Diethylphthalate	149	6.266	6.266	(1.045)	601924	26.4551	880
53 Fluorene	166	6.401	6.405	(1.068)	681744	29.8328	992
54 4-Chlorophenylphenylether	204	6.378	6.381	(1.064)	355971	28.3008	941
55 2-Methyl-4,6-dinitrophenol	198	6.419	6.420	(0.896)	71064	25.4299	846

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.401	6.405	(1.068)	106322	46.3809	1540
133 Diphenylamine	169	6.466	6.473	(0.903)	522552	32.0448	1060
58 1,2-Diphenylhydrazine	77	6.501	6.506	(0.908)	645259	31.8960	1060
61 4-Bromophenylphenylether	248	6.766	6.771	(0.945)	222896	29.7655	990
63 Hexachlorobenzene	284	6.837	6.839	(0.955)	241131	30.2906	1010
68 Phenanthrene	178	7.184	7.185	(1.003)	975713	31.3105	1040
69 Anthracene	178	7.225	7.229	(1.009)	961400	31.0182	1030
72 Di-n-butylphthalate	149	7.584	7.585	(1.059)	1088835	30.5369	1020
76 Fluoranthene	202	8.225	8.226	(1.149)	1088051	31.8876	1060
85 Butylbenzylphthalate	149	8.972	8.972	(0.937)	475754	32.1848	1070
89 Benzo(a)anthracene	228	9.560	9.564	(0.999)	1026607	30.9963	1030
90 3,3'-Dichlorobenzidine	252	9.507	9.501	(0.993)	269164	24.2320	806
92 Chrysene	228	9.595	9.603	(1.002)	912322	30.2168	1000
93 bis(2-Ethylhexyl)phthalate	149	9.495	9.497	(0.992)	687687	31.3968	1040
94 Di-n-octylphthalate	149	10.142	10.142	(0.904)	1052094	32.3611	1080
95 Benzo(b)fluoranthene	252	10.707	10.715	(0.954)	979468	31.1413	1040
96 Benzo(k)fluoranthene	252	10.742	10.749	(0.958)	1015902	32.3580	1080
97 Benzo(a)pyrene	252	11.142	11.148	(0.993)	884028	31.8775	1060
99 Indeno(1,2,3-cd)pyrene	276	12.954	12.964	(1.155)	935992	30.4074	1010
100 Dibenzo(a,h)anthracene	278	12.972	12.978	(1.156)	766964	29.6843	987
101 Benzo(ghi)perylene	276	13.489	13.498	(1.202)	792847	32.4909	1080
1 N-Methyl-N-nitrosomethylamine	74	2.366	2.356	(0.613)	134190	28.0305	932

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s120609.b/s510608.d
Date : 06-DEC-2009 15:43
Client ID: RE03-09-14115MSD
Sample Info: 1120198445619281001|1|SVMF11|MSD_LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

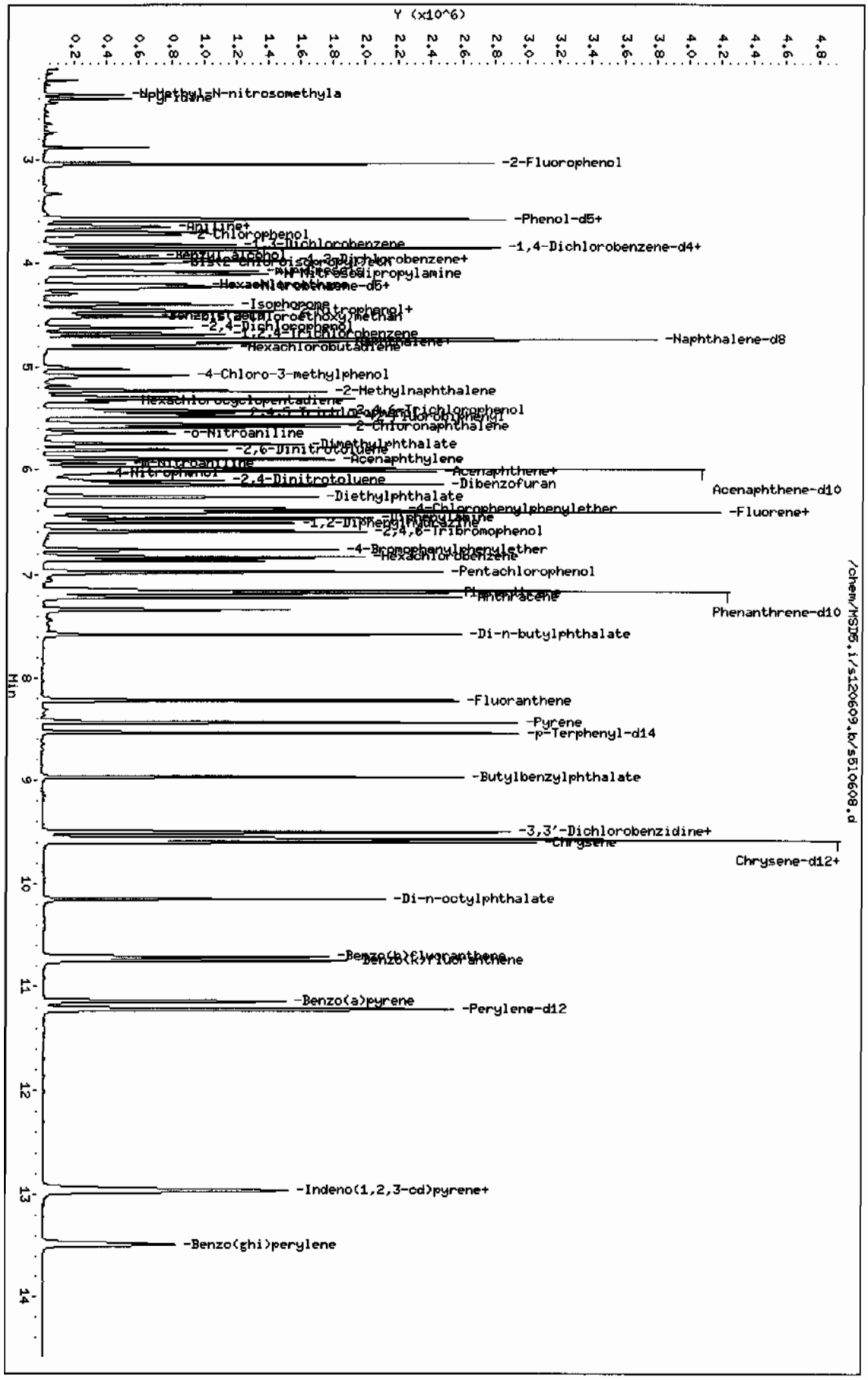

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 928098 **Verified by:** _____

Analyst: Robin Hunt

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984453 MB	02-DEC-2009 09:26:06	30	1	0.03333
1201984454 LCS	02-DEC-2009 09:26:06	30	1	0.03333
241819001	02-DEC-2009 09:26:06	30.03	1	0.0333
1201984455 MS (241819001)	02-DEC-2009 09:26:06	30	1	0.03333
1201984456 MSD (241819001)	02-DEC-2009 09:26:06	30.07	1	0.03326
241819002	02-DEC-2009 09:26:06	30.01	1	0.03332
241819003	02-DEC-2009 09:26:06	30.09	1	0.03323
241819004	02-DEC-2009 09:26:06	30	1	0.03333
241819005	02-DEC-2009 09:26:06	30	1	0.03333
241819006	02-DEC-2009 09:26:06	30	1	0.03333
241819007	02-DEC-2009 09:26:06	30.09	1	0.03323
241819008	02-DEC-2009 09:26:06	30	1	0.03333
241819009	02-DEC-2009 09:26:06	30.06	1	0.03327
241819010	02-DEC-2009 09:26:06	30.05	1	0.03328
241819011	02-DEC-2009 09:26:06	30.01	1	0.03332
241819012	02-DEC-2009 09:26:06	30.01	1	0.03332
241819013	02-DEC-2009 09:26:06	30	1	0.03333
241819014	02-DEC-2009 09:26:06	30	1	0.03333
241819015	02-DEC-2009 09:26:06	30.04	1	0.03329
241819016	02-DEC-2009 09:26:06	30	1	0.03333
241819017	02-DEC-2009 09:26:06	30.09	1	0.03323
241819018	02-DEC-2009 09:26:06	30.02	1	0.03331
241819019	02-DEC-2009 09:26:06	30.03	1	0.0333
241819020	02-DEC-2009 09:26:06	30.07	1	0.03326

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984454	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201984454	BENZIDINE LCS	UE091201-21	1	mL
MS	1201984455	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201984455	BENZIDINE LCS	UE091201-21	1	mL
MSD	1201984456	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201984456	BENZIDINE LCS	UE091201-21	1	mL
SURR	All	BNA for all Surrogate	UE091117-10	1	mL
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Methylene Chloride	1234878-D	150	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Verified By: JAM

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 12/06/2009 METHOD:8270C MSD5-DFTPPx.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s120609.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s510601.d	WBN091128-01	rmb	06-DEC-2009 09:31	50PPM	s120609	1.0	DFTPP	
s510602.d	WBN091106-05.3	RMB	06-DEC-2009 09:44	40 PPM	s120609	1.0	MEGACVS	462845
s510603.d	WBN091201-03.4	RMB	06-DEC-2009 10:12	40 PPM	s120609	1.0	AP12CVS	
s510604.d	1201984453	RMB	06-DEC-2009 10:35	928100	10-666	1.0	MB	
s510605.d	1201984454	RMB	06-DEC-2009 10:58	928100	10-666	1.0	LCS	
s510606.d	241819001	RMB	06-DEC-2009 11:20	928100	10-666	1.0	LANL	
s510607.d	1201984455	RMB	06-DEC-2009 11:43	928100	10-666	1.0	MS_LANL	
s510608.d	1201984456	RMB	06-DEC-2009 15:43	928100	10-666	1.0	MSD_LANL	
s510609.d	241819002	RMB	06-DEC-2009 16:05	928100	10-666	1.0	LANL	
s510610.d	241819003	RMB	06-DEC-2009 16:28	928100	10-666	1.0	LANL	
s510611.d	241819004	RMB	06-DEC-2009 16:51	928100	10-666	1.0	LANL	
s510612.d	241819005	RMB	06-DEC-2009 17:13	928100	10-666	1.0	LANL	
s510613.d	241819006	RMB	06-DEC-2009 17:36	928100	10-666	1.0	LANL	
s510614.d	241819007	RMB	06-DEC-2009 17:59	928100	10-666	1.0	LANL	
s510615.d	241819008	RMB	06-DEC-2009 18:22	928100	10-666	1.0	LANL	
s510616.d	241819009	RMB	06-DEC-2009 18:45	928100	10-666	1.0	LANL	
s510617.d	241819010	RMB	06-DEC-2009 19:08	928100	10-666	1.0	LANL	
s510618.d	241819011	RMB	06-DEC-2009 19:30	928100	10-666	1.0	LANL	
s510619.d	241819012	RMB	06-DEC-2009 19:53	928100	10-666	1.0	LANL	

s510620.d	241819013	RMB	06-DEC-2009 20:16	928100	10-666	1.0	LANL	
s510621.d	241819014	RMB	06-DEC-2009 20:39	928100	10-666	1.0	LANL	
s510622.d	241819015	RMB	06-DEC-2009 21:01	928100	10-666	1.0	LANL	
s510623.d	241819016	RMB	06-DEC-2009 21:24	928100	10-666	1.0	LANL	
s510624.d	241819017	RMB	06-DEC-2009 21:47	928100	10-666	1.0	LANL	DUSE - OUT OF TUNE
s510625.d	241819018	RMB	06-DEC-2009 22:10	928100	10-666	1.0	LANL	DUSE - OUT OF TUNE
s510626.d	241819019	RMB	06-DEC-2009 22:33	928100	10-666	1.0	LANL	DUSE - OUT OF TUNE
s510627.d	241819020	RMB	06-DEC-2009 22:55	928100	10-666	1.0	LANL	DUSE - OUT OF TUNE

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 12/09/2009 METHOD:8270C MSD5-DFTPPx.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091128-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s120909.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s510901.d	WBN091128-01	rmb	09-DEC-2009 08:29	50PPM	s120909	1.0	DFTPP	DUSE - clean IP
s510902-D.d	WBN091128-01	rmb	09-DEC-2009 09:48	50PPM	s120909	1.0	DFTPP	DUSE
s510902.d	WBN091128-01	rmb	09-DEC-2009 09:48	50PPM	s120909	1.0	DFTPP	DUSE
s510903.d	WBN091106-05.3	RMB	09-DEC-2009 10:01	40 PPM	s120909	1.0	MEGACVS	DUSE
s510904.d	WBN091201-03.4	RMB	09-DEC-2009 10:29	40 PPM	s120909	1.0	AP12CVS	DUSE
s510905.d	WBN091128-01	rmb	09-DEC-2009 13:00	50PPM	s120909	1.0	DFTPP	DUSE
s510906.d	WBN091106-05.3	RMB	09-DEC-2009 13:13	40 PPM	s120909	1.0	MEGACVS	DUSE
s510907.d	WBN091201-03.4	RMB	09-DEC-2009 13:42	40 PPM	s120909	1.0	AP12CVS	DUSE - start over
s510908.d	WBN091128-01	rmb	09-DEC-2009 15:20	50PPM	s120909	1.0	DFTPP	
s510909-625.d	WBN091106-05.3	RMB	09-DEC-2009 15:34	40 PPM	s120909	1.0	MEGACVS	429392
s510909.d	WBN091106-05.3	RMB	09-DEC-2009 15:34	40 PPM	s120909	1.0	MEGACVS	429392
s510910-625.d	WBN091201-03.4	RMB	09-DEC-2009 16:02	40 PPM	s120909	1.0	AP12CVS	
s510910.d	WBN091201-03.4	RMB	09-DEC-2009 16:02	40 PPM	s120909	1.0	AP12CVS	
s510911.d	1201990446	RMB	09-DEC-2009 20:02	930618	242433	1.0	SBLK01	
s510912.d	1201990447	RMB	09-DEC-2009 20:26	930618	242433	1.0	SBLK01LCS	No C-77
s510913.d	1201989405	RMB	09-DEC-2009 20:49	930155	242257	1.0	SBLK01	
s510914.d	1201989406	RMB	09-DEC-2009 21:11	930155	242257	1.0	SBLK01LCS	2x DL=s510930
s510915.d	1201985553	RMB	09-DEC-2009 21:34	928555	241933	1.0	SBLK01	
s510916.d	1201985554	RMB	09-DEC-2009 21:57	928555	241933	1.0	SBLK01LCS	

s510917.d	1201985555	RMB	09-DEC-2009 22:20	928555	241933		1.0	SBLK01LCSD	
s510918.d	241819017	RMB	09-DEC-2009 22:43	928100	10-666		1.0	LANL	
s510919.d	241819018	RMB	09-DEC-2009 23:05	928100	10-666		1.0	LANL	
s510920.d	241819019	RMB	09-DEC-2009 23:28	928100	10-666		1.0	LANL	
s510921.d	241819020	RMB	09-DEC-2009 23:51	928100	10-666		1.0	LANL	DUSE - bad injection
s510922.d	241933001	RMB	10-DEC-2009 00:14	928555	241933		1.0	NREA	
s510923.d	241933003	RMB	10-DEC-2009 00:36	928555	241933		1.0	NREA	
s510924.d	242433001	RMB	10-DEC-2009 00:59	930618	242433		1.0	ENCN	
s510925.d	1201990448	RMB	10-DEC-2009 01:22	930618	242433		1.0	MS	No C-77
s510926.d	1201990449	RMB	10-DEC-2009 01:44	930618	242433		1.0	MSD	No C-77
s510927.d	242257001	RMB	10-DEC-2009 02:07	930155	242257		1.0	SWPC	
s510928.d	1201989407	RMB	10-DEC-2009 02:30	930155	242257		1.0	MS	
s510929.d	1201989408	RMB	10-DEC-2009 02:52	930155	242257		1.0	MSD	
s510930.d	1201989406	RMB	10-DEC-2009 07:56	930155	242257		2.0	SBLK01LCSDL	

Instrument Batch: /chem/MSD5.i/s120909.b

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GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 12/11/2009 METHOD:8270C MSD5-DFTPPx.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091208-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s121109.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s511101.d	WBN091128-01	rmb	11-DEC-2009 13:34	50PPM	s121109	1.0	DFTPP	
s511102.d	WBN091106-05.3	RMB	11-DEC-2009 13:47	40 PPM	s121109	1.0	MEGACVS	254873
s511103.d	WBN091201-03.4	RMB	11-DEC-2009 14:15	40 PPM	s121109	1.0	AP12CVS	
s511104-2.d	1201990662	RMB	11-DEC-2009 14:38	930728	10-763	1.0	SBLK01	
s511104-3.d	1201990662	RMB	11-DEC-2009 14:38	930728	10-788	1.0	SBLK01	
s511104-4.d	1201990662	RMB	11-DEC-2009 14:38	930728	10-786	1.0	SBLK01	
s511104.d	1201990662	RMB	11-DEC-2009 14:38	930728	10-759	1.0	SBLK01	
s511105-2.d	1201990663	RMB	11-DEC-2009 15:00	930728	10-763	1.0	SBLK01LCS	
s511105-3.d	1201990663	RMB	11-DEC-2009 15:00	930728	10-788	1.0	SBLK01LCS	
s511105-4.d	1201990663	RMB	11-DEC-2009 15:00	930728	10-786	1.0	SBLK01LCS	
s511105.d	1201990663	RMB	11-DEC-2009 15:00	930728	10-759	1.0	SBLK01LCS	
s511106.d	241819020	RMB	11-DEC-2009 15:23	928100	10-666	1.0	LANL	
s511107.d	242327005	RMB	11-DEC-2009 15:46	930950	10-814	1.0	LANL	
s511108.d	242325002	RMB	11-DEC-2009 16:09	930950	10-813	4.0	LANL	
s511109.d	242163001	RMB	11-DEC-2009 16:31	930728	10-759	1.0	LANL	
s511110.d	242163002	RMB	11-DEC-2009 16:54	930728	10-759	1.0	LANL	
s511111.d	242163003	RMB	11-DEC-2009 17:16	930728	10-759	1.0	LANL	
s511112.d	242163004	RMB	11-DEC-2009 17:39	930728	10-759	1.0	LANL	
s511113.d	242169003	RMB	11-DEC-2009 18:01	930728	10-763	1.0	LANL	

s511114.d	242298001	RMB	11-DEC-2009 18:24	930728	10-788		1.0	LANL
s511115.d	1201990664	RMB	11-DEC-2009 18:47	930728	10-788		1.0	LANL98001MS
s511116.d	1201990665	RMB	11-DEC-2009 19:09	930728	10-788		1.0	LANL98001MSD
s511117.d	242298002	RMB	11-DEC-2009 19:32	930728	10-788		1.0	LANL
s511118.d	242298003	RMB	11-DEC-2009 19:54	930728	10-788		1.0	LANL
s511119.d	242298004	RMB	11-DEC-2009 20:17	930728	10-788		1.0	LANL	DUSE - s611615 passes w/in hold - Fail SS - Rx
s511120.d	242298005	RMB	11-DEC-2009 20:39	930728	10-788		1.0	LANL
s511121.d	242298006	RMB	11-DEC-2009 21:02	930728	10-788		1.0	LANL
s511122.d	242298007	RMB	11-DEC-2009 21:24	930728	10-788		1.0	LANL
s511123.d	242298008	RMB	11-DEC-2009 21:46	930728	10-788		1.0	LANL
s511124.d	242298009	RMB	11-DEC-2009 22:09	930728	10-788		1.0	LANL
s511125.d	242298010	RMB	11-DEC-2009 22:31	930728	10-788		1.0	LANL
s511126.d	242298011	RMB	11-DEC-2009 22:54	930728	10-788		1.0	LANL
s511127.d	242298012	RMB	11-DEC-2009 23:16	930728	10-788		1.0	LANL
s511128.d	242305004	RMB	11-DEC-2009 23:38	930728	10-786		1.0	LANL
s511129.d	242305005	RMB	12-DEC-2009 00:01	930728	10-786		1.0	LANL
s511130.d	242305006	RMB	12-DEC-2009 00:23	930728	10-786		1.0	LANL	DUSE - ues as screen - fail IS

Instrument Batch: /chem/MSD5.i/s121109.b

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GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 11/30/2009 METHOD:8270C MSD5-DFTPP8270D.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3001-D.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3001.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3002.d	instrument blank	RMB	30-NOV-2009 08:11		s113009	1.0		DUSE
s5k3003.d	WBN091106-08	RMB	30-NOV-2009 08:34	1 PPM	s113009	1.0	MEGAICAL001	DUSE
s5k3004.d	WBN091106-07	RMB	30-NOV-2009 09:02	10 PPM	s113009	1.0	MEGAICAL010	DUSE
s5k3005.d	WBN091106-06	RMB	30-NOV-2009 09:30	20 PPM	s113009	1.0	MEGAICAL020	DUSE
s5k3006.d	WBN091106-05.1	RMB	30-NOV-2009 09:58	40 PPM	s113009	1.0	MEGAICAL040	DUSE
s5k3007.d	WBN091106-04	RMB	30-NOV-2009 10:27	50 PPM	s113009	1.0	MEGAICAL050	DUSE
s5k3008.d	WBN091106-03	RMB	30-NOV-2009 10:55	80 PPM	s113009	1.0	MEGAICAL080	DUSE
s5k3009.d	WBN091106-02	RMB	30-NOV-2009 11:24	100 PPM	s113009	1.0	MEGAICAL100	DUSE
s5k3010.d	WBN091106-01	RMB	30-NOV-2009 12:23	120 PPM	s113009	1.0	MEGAICAL120	DUSE
s5k3011.d	instrument blank	RMB	30-NOV-2009 12:51		s113009	1.0		DUSE
s5k3012-D.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3012.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3013.d	instrument blank	RMB	30-NOV-2009 13:46		s113009	1.0		
s5k3014-TEST.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3014.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3015-TEST.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	
s5k3015.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	

s5k3016.d	WBN091106-06	RMB	30-NOV-2009 15:06	20 PPM	s113009		1.0	MEGAICAL020
s5k3017.d	WBN091106-05.1	RMB	30-NOV-2009 15:34	40 PPM	s113009		1.0	MEGAICAL040
s5k3018.d	WBN091106-04	RMB	30-NOV-2009 16:02	50 PPM	s113009		1.0	MEGAICAL050
s5k3019.d	WBN091106-03	RMB	30-NOV-2009 16:31	80 PPM	s113009		1.0	MEGAICAL080
s5k3020.d	WBN091106-02	RMB	30-NOV-2009 16:59	100 PPM	s113009		1.0	MEGAICAL100
s5k3021.d	WBN091106-01	RMB	30-NOV-2009 17:28	120 PPM	s113009		1.0	MEGAICAL120
s5k3022.d	instrument blank	RMB	30-NOV-2009 17:56		s113009		1.0	
s5k3023-625.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 625 - 113009
s5k3023-8270D.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 8270D - 113009
s5k3023-BOE.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - BOE - 113009
s5k3023.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 8270C - 113009
s5k3024-TEST.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009		1.0	AP12ICAL010
s5k3024.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009		1.0	AP12ICAL010
s5k3025.d	WBN091111-02	RMB	30-NOV-2009 19:10	20 PPM	s113009		1.0	AP12ICAL020
s5k3026.d	WBN091111-03.3	RMB	30-NOV-2009 19:34	40 PPM	s113009		1.0	AP12ICAL040
s5k3027.d	WBN091111-04	RMB	30-NOV-2009 19:57	50 PPM	s113009		1.0	AP12ICAL050
s5k3028.d	WBN091111-05	RMB	30-NOV-2009 20:20	80 PPM	s113009		1.0	AP12ICAL080
s5k3029.d	WBN091111-06	RMB	30-NOV-2009 20:42	100 PPM	s113009		1.0	AP12ICAL100
s5k3030.d	WBN091111-07	RMB	30-NOV-2009 21:05	120 PPM	s113009		1.0	AP12ICAL120
s5k3031-TEST.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009		1.0	NEVADAICAL010
s5k3031.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009		1.0	NEVADAICAL010
s5k3032.d	UBN091117-02	RMB	30-NOV-2009 21:51	20 PPM	s113009		1.0	NEVADAICAL020

Instrument Batch: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3033.d	UBN091117-03	RMB	30-NOV-2009 22:14	40 PPM	s113009		1.0	NEVADAICAL040
s5k3034.d	UBN091117-04	RMB	30-NOV-2009 22:38	50 PPM	s113009		1.0	NEVADAICAL050
s5k3035.d	UBN091117-05	RMB	30-NOV-2009 23:01	80 PPM	s113009		1.0	NEVADAICAL080

s5k3036.d	UBN091117-06	RMB	30-NOV-2009 23:23	100 PPM	s113009		1.0	NEVADAICAL100	
s5k3037.d	UBN091117-07	RMB	30-NOV-2009 23:46	120 PPM	s113009		1.0	NEVADAICAL120	
s5k3038-625.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 625 - 113009
s5k3038-8270D.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 8270D - 113009
s5k3038.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 8270C - 113009
Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client		Comments
s5k3039-D.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009		1.0	DFTPP	
s5k3039.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009		1.0	DFTPP	
s5k3040.d	instrument blank	RMB	01-DEC-2009 09:52		s113009		1.0		
s5k3041.d	WBN091029-25	RMB	01-DEC-2009 10:15	10 PPM	s113009		1.0	PESTICAL010	
s5k3042.d	WBN091029-24	RMB	01-DEC-2009 10:38	20 PPM	s113009		1.0	PESTICAL020	
s5k3043.d	WBN091029-23.1	RMB	01-DEC-2009 11:00	40 PPM	s113009		1.0	PESTICAL040	
s5k3044.d	WBN091029-22	RMB	01-DEC-2009 11:23	50 PPM	s113009		1.0	PESTICAL050	
s5k3045.d	WBN091029-21	RMB	01-DEC-2009 11:46	80 PPM	s113009		1.0	PESTICAL080	
s5k3046.d	WBN091029-20	RMB	01-DEC-2009 12:09	100 PPM	s113009		1.0	PESTICAL100	
s5k3047.d	WBN091029-19	RMB	01-DEC-2009 12:32	120 PPM	s113009		1.0	PESTICAL120	
s5k3048-TEST.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009		1.0	HEXICAL500	
s5k3048.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009		1.0	HEXICAL500	
s5k3049.d	WBN091016-15	RMB	01-DEC-2009 13:18	1000 PPM	s113009		1.0	HEXICAL1000	
s5k3050.d	WBN091016-14	RMB	01-DEC-2009 13:41	1250 PPM	s113009		1.0	HEXICAL1250	
s5k3051.d	WBN091016-13	RMB	01-DEC-2009 14:03	1500 PPM	s113009		1.0	HEXICAL1500	
s5k3052.d	WBN091016-12	RMB	01-DEC-2009 14:25	1750 PPM	s113009		1.0	HEXICAL1750	
s5k3053.d	UBN090828-02	RMB	01-DEC-2009 14:48	2000 PPM	s113009		1.0	HEXICAL2000	
s5k3054-625.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 625 - 113009
s5k3054-8270D.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 8270D - 113009
s5k3054.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 8270C - 113009
s5k3055-625.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009		1.0	HEXICV	HEXICV - 625 - 113009

s5k3055-8270D.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV - 8270D - 113009
s5k3055.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV - 8270C - 11300

Instrument Batch: /chem/MSD5.i/s113009.b

GC SEMIVOLATILE DRO ANALYSIS

DRO Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-666

Method/Analysis Information

Procedure:	**Analysis of Diesel Range Organics by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	928271
Prep Batch Number:	928270

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241819001	RE03-09-14115
241819002	RE03-09-14113
241819003	RE03-09-14125
241819004	RE03-09-14123
241819005	RE03-09-14114
241819006	RE03-09-14126
241819007	RE03-09-14117
241819008	RE03-09-14121
241819009	RE03-09-14129
241819010	RE03-09-14120
241819011	RE03-09-14116
241819012	RE03-09-14111
241819013	RE03-09-14119
241819014	RE03-09-14110
241819015	RE03-09-14127
241819016	RE03-09-14118
241819017	RE03-09-14122
241819018	RE03-09-14124

241819019	RE03-09-14112
241819020	RE03-09-14128
1201984915	Method Blank (MB)
1201984916	Laboratory Control Sample (LCS)
1201984917	241819003(RE03-09-14125) Matrix Spike (MS)
1201984918	241819003(RE03-09-14125) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241819003 (RE03-09-14125) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID7.I	Agilent GC FID	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimi Cao **Date:** 12/14/09

Roadmap for LANL 10-666 DRO

This roadmap was analyzed by kev01577 on 12-04-2009, 14:40.
This roadmap was reviewed by jcb on 12-07-2009, 10:41.
This roadmap was packaged by yml on 12-12-2009, 08:05.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid7.i/120309dr/007f0701.d	241819001	03-DEC-2009	18:33	10-666.sub	RE03-09-14115	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/008f0801.d	241819002	03-DEC-2009	19:10	10-666.sub	RE03-09-14113	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/009f0901.d	241819003	03-DEC-2009	19:47	10-666.sub	RE03-09-14125	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/012f1201.d	241819004	03-DEC-2009	21:38	10-666.sub	RE03-09-14123	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/015f1501.d	241819005	03-DEC-2009	23:28	10-666.sub	RE03-09-14114	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/016f1601.d	241819006	04-DEC-2009	00:06	10-666.sub	RE03-09-14126	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/017f1701.d	241819007	04-DEC-2009	00:42	10-666.sub	RE03-09-14117	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/018f1801.d	241819008	04-DEC-2009	01:19	10-666.sub	RE03-09-14121	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/019f1901.d	241819009	04-DEC-2009	01:56	10-666.sub	RE03-09-14129	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/020f2001.d	241819010	04-DEC-2009	02:33	10-666.sub	RE03-09-14120	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/021f2101.d	241819011	04-DEC-2009	03:10	10-666.sub	RE03-09-14116	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/022f2201.d	241819012	04-DEC-2009	03:47	10-666.sub	RE03-09-14111	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/025f2501.d	241819013	04-DEC-2009	05:37	10-666.sub	RE03-09-14119	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/026f2601.d	241819014	04-DEC-2009	06:14	10-666.sub	RE03-09-14110	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/027f2701.d	241819015	04-DEC-2009	06:50	10-666.sub	RE03-09-14127	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/028f2801.d	241819016	04-DEC-2009	07:27	10-666.sub	RE03-09-14118	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/029f2901.d	241819017	04-DEC-2009	08:04	10-666.sub	RE03-09-14122	1.00000	928271	USE

☐	N	/chem/fid7.i/120309dr/030f3001.d	241819018	04-DEC-2009	08:40	10-666.sub	RE03-09-14124	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/031f3101.d	241819019	04-DEC-2009	09:17	10-666.sub	RE03-09-14112	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/032f3201.d	241819020	04-DEC-2009	09:54	10-666.sub	RE03-09-14128	1.00000	928271	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid7.i/120309dr/005f0501.d	1201984915	mb	03-DEC-2009	17:19	10-666.sub	DBLK01	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/006f0601.d	1201984916	lcs	03-DEC-2009	17:56	10-666.sub	DBLK01LCS	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/010f1001.d	1201984917	ms	03-DEC-2009	20:24	10-666.sub	RE03-09-14125MS	1.00000	928271	USE
☐	N	/chem/fid7.i/120309dr/011f1101.d	1201984918	msd	03-DEC-2009	21:01	10-666.sub	RE03-09-14125MSD	1.00000	928271	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14115	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/03/2009 18:33	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	007f0701.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.63	mg/kg	2.15	6.63

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819002	Date Received:	11/25/2009 09:10	%Moisture:	9.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14113	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 19:10	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.37	mg/kg	2.39	7.37

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819003	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14125	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 19:47	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.94	mg/kg	2.26	6.94

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819004	Date Received:	11/25/2009 09:10	%Moisture:	5.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14123	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 21:38	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.05	mg/kg	2.29	7.05

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819005	Date Received:	11/25/2009 09:10	%Moisture:	.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14114	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 23:28	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	015f1501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.70	mg/kg	2.18	6.70

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14126	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 00:06	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	016f1601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		24.8	mg/kg	2.35	7.22

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819007	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14117	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 00:42	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	017f1701.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.23	mg/kg	2.35	7.23

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819008	Date Received:	11/25/2009 09:10	%Moisture:	12.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14121	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 01:19	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	018f1801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		15.4	mg/kg	2.48	7.63

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819009	Date Received:	11/25/2009 09:10	%Moisture:	1.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14129	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 01:56	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	019f1901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.61	mg/kg	2.19	6.75

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10--666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819010	Date Received:	11/25/2009 09:10	%Moisture:	2.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14120	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 02:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	020f2001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.84	mg/kg	2.22	6.84

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819011	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14116	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 03:10	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	021f2101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.54	mg/kg	2.26	6.94

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819012	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14111	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 03:47	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	022f2201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.57	mg/kg	2.46	7.57

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14119	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 05:37	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	025f2501.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.74	mg/kg	2.19	6.74

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819014	Date Received:	11/25/2009 09:10	%Moisture:	3.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14110	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 06:14	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	026f2601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.89	mg/kg	2.24	6.89

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819015	Date Received:	11/25/2009 09:10	%Moisture:	4.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14127	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 06:50	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	027f2701.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.00	mg/kg	2.28	7.00

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819016	Date Received:	11/25/2009 09:10	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14118	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 07:27	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	028f2801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.36	mg/kg	2.39	7.36

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819017	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14122	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 08:04	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	029f2901.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.05	mg/kg	2.29	7.05

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819018	Date Received:	11/25/2009 09:10	%Moisture:	7.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14124	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 08:40	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	030f3001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.21	mg/kg	2.34	7.21

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819019	**Date Received:**	11/25/2009 09:10	**%Moisture:**	11.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14112	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 09:17	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	031f3101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.50	mg/kg	2.44	7.50

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819020	Date Received:	11/25/2009 09:10	%Moisture:	2.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14128	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 09:54	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	032f3201.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.84	mg/kg	2.22	6.84

QUALITY CONTROL SUMMARY

Flame Ionization Detector
Surrogate Recovery Report

SDG Number: 10-666
Matrix Type: SOLID
CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC
1201984915	MB for batch 928270	53
1201984916	LCS for batch 928270	87
241819001	RE03-09-14115	48
241819002	RE03-09-14113	48
241819003	RE03-09-14125	38
1201984917	RE03-09-14125MS	73
1201984918	RE03-09-14125MSD	83
241819004	RE03-09-14123	44
241819005	RE03-09-14114	44
241819006	RE03-09-14126	55
241819007	RE03-09-14117	45
241819008	RE03-09-14121	53
241819009	RE03-09-14129	49
241819010	RE03-09-14120	46
241819011	RE03-09-14116	57
241819012	RE03-09-14111	52
241819013	RE03-09-14119	47
241819014	RE03-09-14110	38
241819015	RE03-09-14127	50
241819016	RE03-09-14118	48
241819017	RE03-09-14122	47
241819018	RE03-09-14124	45
241819019	RE03-09-14112	44
241819020	RE03-09-14128	52

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number: 10-666

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 928270

Matrix: SOIL

Lab Sample ID: 1201984916

Instrument: FID7.I

Analysis Date: 12/03/2009 17:56

Dilution: 1

Analyst: KXR2

Prep Batch ID 928270

Inj. Vol: 1 uL

Batch ID: 928271

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	25.6	77	53-114

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-666**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-14125MS**	**Matrix:**	**S**
Lab Sample ID:	**1201984917**	**%Moisture:**	**4.1**
Instrument:	**FID7.I**	**Analysis Date:**	**12/03/2009 20:24**
Analyst:	**KXR2**	**Prep Batch ID:**	**928270**
Inj. Vol:	**1 uL**	**Batch ID:**	**928271**

Dilution: 1

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	34.6	0.00	U	23.5	68	21-122

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10–666**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**RE03–09–14125MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201984918**	**%Moisture:**	**4.1**
Instrument:	**FID7.I**	**Analysis Date:**	**12/03/2009 21:01**
Analyst:	**KXR2**	**Prep Batch ID:**	**928270**
Inj. Vol:	**1 uL**	**Batch ID:**	**928271**

Dilution: 1

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	34.6	0.00	U	25.6	74	21–122	9	0–30

Method Blank Summary

SDG Number:	10-666	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928270	Instrument ID:	FID7.I	Data File:	005f0501.d
Lab Sample ID:	1201984915	Prep Date:	12/02/2009 20:45	Analyzed:	12/03/09 17:19
Column:	DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 928270	1201984916	006f0601.d	12/03/09	1756
02	RE03-09-14115	241819001	007f0701.d	12/03/09	1833
03	RE03-09-14113	241819002	008f0801.d	12/03/09	1910
04	RE03-09-14125	241819003	009f0901.d	12/03/09	1947
05	RE03-09-14125MS	1201984917	010f1001.d	12/03/09	2024
06	RE03-09-14125MSD	1201984918	011f1101.d	12/03/09	2101
07	RE03-09-14123	241819004	012f1201.d	12/03/09	2138
08	RE03-09-14114	241819005	015f1501.d	12/03/09	2328
09	RE03-09-14126	241819006	016f1601.d	12/04/09	0006
10	RE03-09-14117	241819007	017f1701.d	12/04/09	0042
11	RE03-09-14121	241819008	018f1801.d	12/04/09	0119
12	RE03-09-14129	241819009	019f1901.d	12/04/09	0156
13	RE03-09-14120	241819010	020f2001.d	12/04/09	0233
14	RE03-09-14116	241819011	021f2101.d	12/04/09	0310
15	RE03-09-14111	241819012	022f2201.d	12/04/09	0347
16	RE03-09-14119	241819013	025f2501.d	12/04/09	0537
17	RE03-09-14110	241819014	026f2601.d	12/04/09	0614
18	RE03-09-14127	241819015	027f2701.d	12/04/09	0650
19	RE03-09-14118	241819016	028f2801.d	12/04/09	0727
20	RE03-09-14122	241819017	029f2901.d	12/04/09	0804
21	RE03-09-14124	241819018	030f3001.d	12/04/09	0840
22	RE03-09-14112	241819019	031f3101.d	12/04/09	0917
23	RE03-09-14128	241819020	032f3201.d	12/04/09	0954

SAMPLE DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14115	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/03/2009 18:33	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.19 g	**Final Volume:**	1 mL
Data File:	007f0701.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.63	mg/kg	2.15	6.63

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/007f0701.d
Lab Smp Id: 241819001 Client Smp ID: RE03-09-14115
Inj Date : 03-DEC-2009 18:33
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819001|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weigth of sample extracted (g)
M	0.00940	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.606	13.611	-0.005	243339	9.69272	0.32

Data File: /chem/fid7.i/120309dr/007f0701.d
Date : 03-DEC-2009 18:33
Client ID: RE03-09-14115
Sample Info: |241819001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

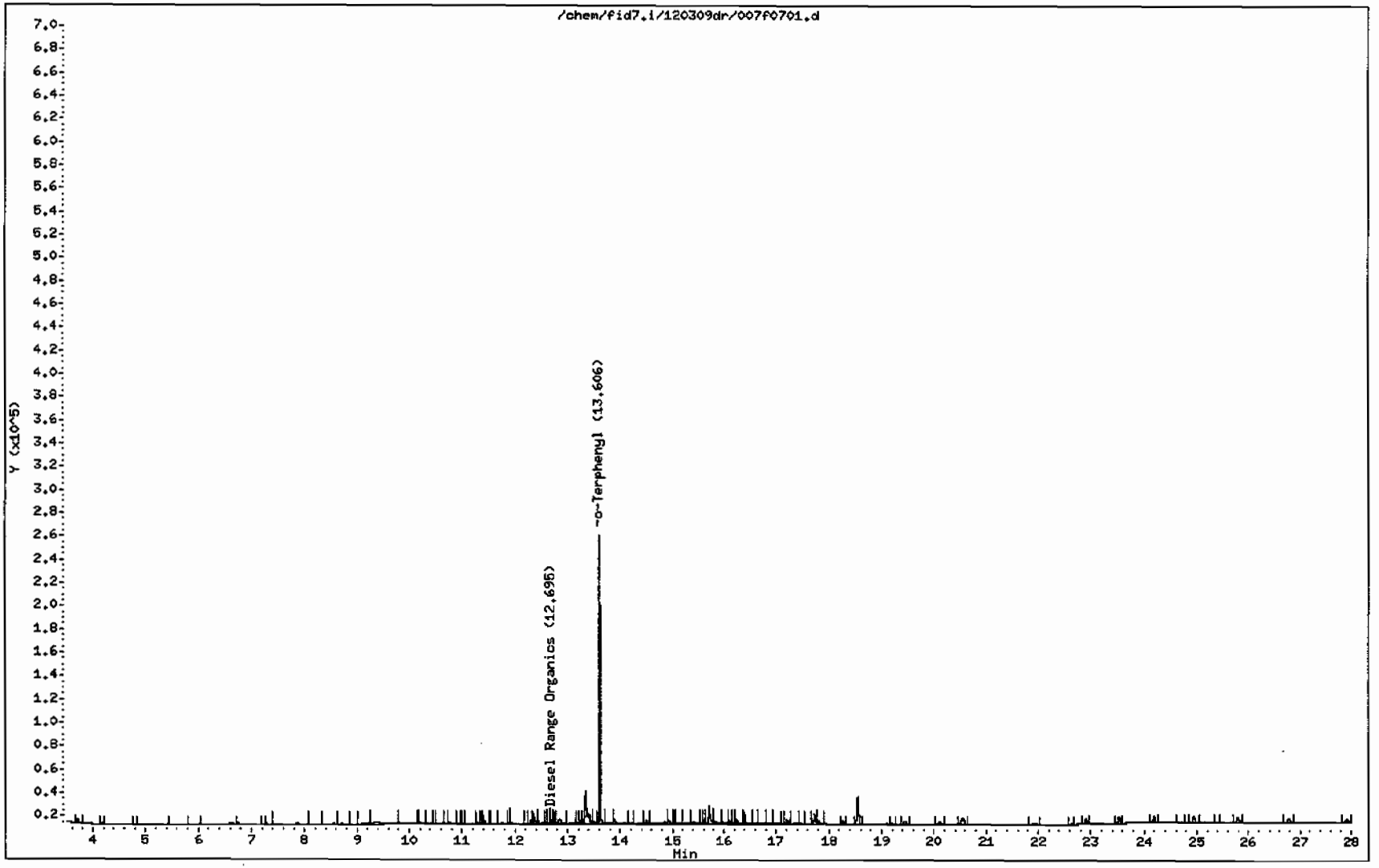

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819002	Date Received:	11/25/2009 09:10	%Moisture:	9.9
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14113	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 19:10	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.37	mg/kg	2.39	7.37

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/008f0801.d
Lab Smp Id: 241819002 Client Smp ID: RE03-09-14113
Inj Date : 03-DEC-2009 19:10
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819002|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weigth of sample extracted (g)
M	9.91220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.606	13.611	-0.005	243298	9.69108	0.36

Data File: /chem/fid7.i/120309dr/008f0801.d
Date : 03-DEC-2009 19:10
Client ID: RE03-09-14113
Sample Info: |241819002|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

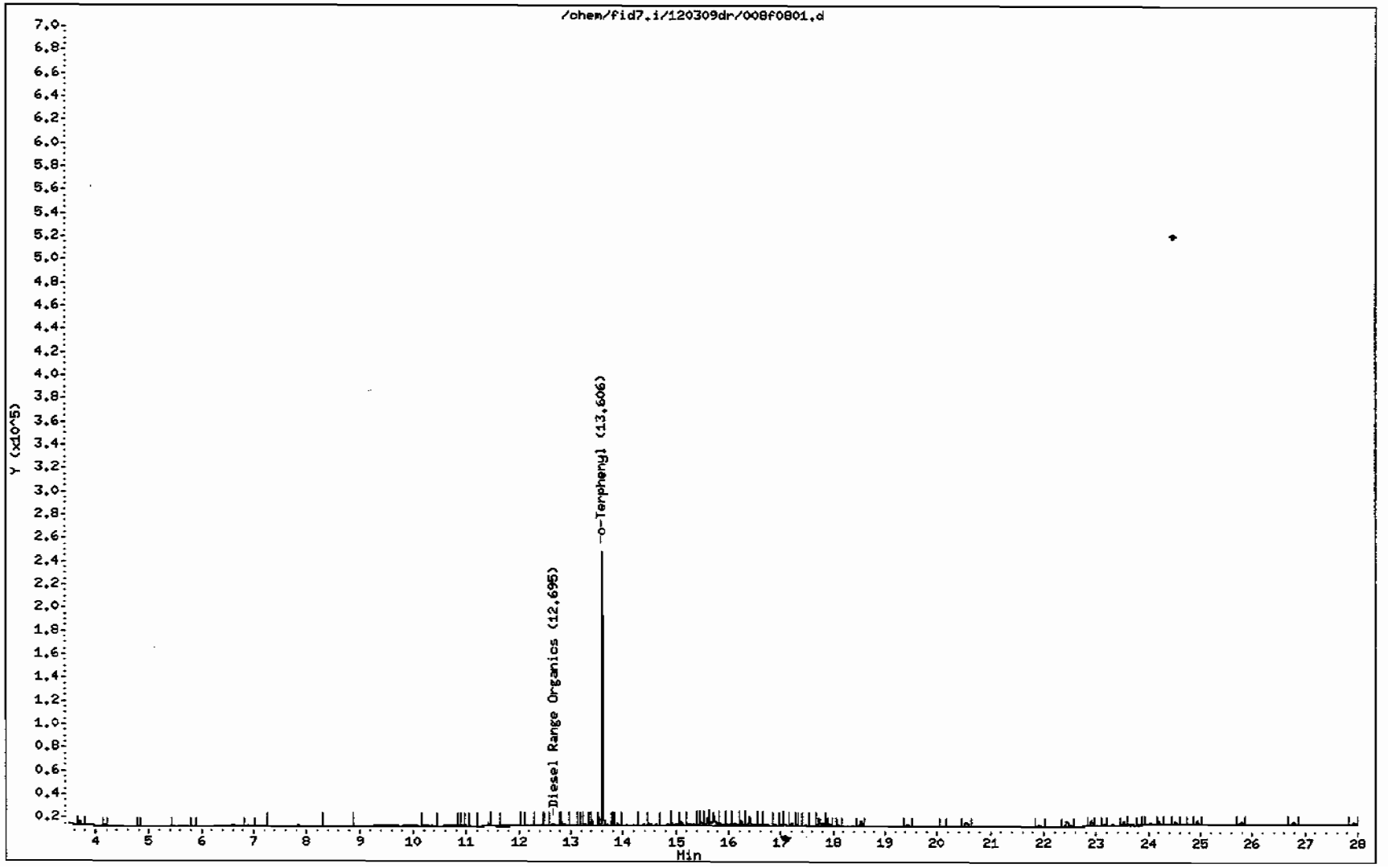

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819003	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14125	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/03/2009 19:47	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	009f0901.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.94	mg/kg	2.26	6.94

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/009f0901.d
Lab Smp Id: 241819003 Client Smp ID: RE03-09-14125
Inj Date : 03-DEC-2009 19:47
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819003|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	4.09250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.606	13.611	-0.005	193067	7.69030	0.27

Data File: /chem/fid7.i/120309dr/009f0901.d
Date : 03-DEC-2009 19:47
Client ID: RE03-09-14125
Sample Info: |241819003111
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

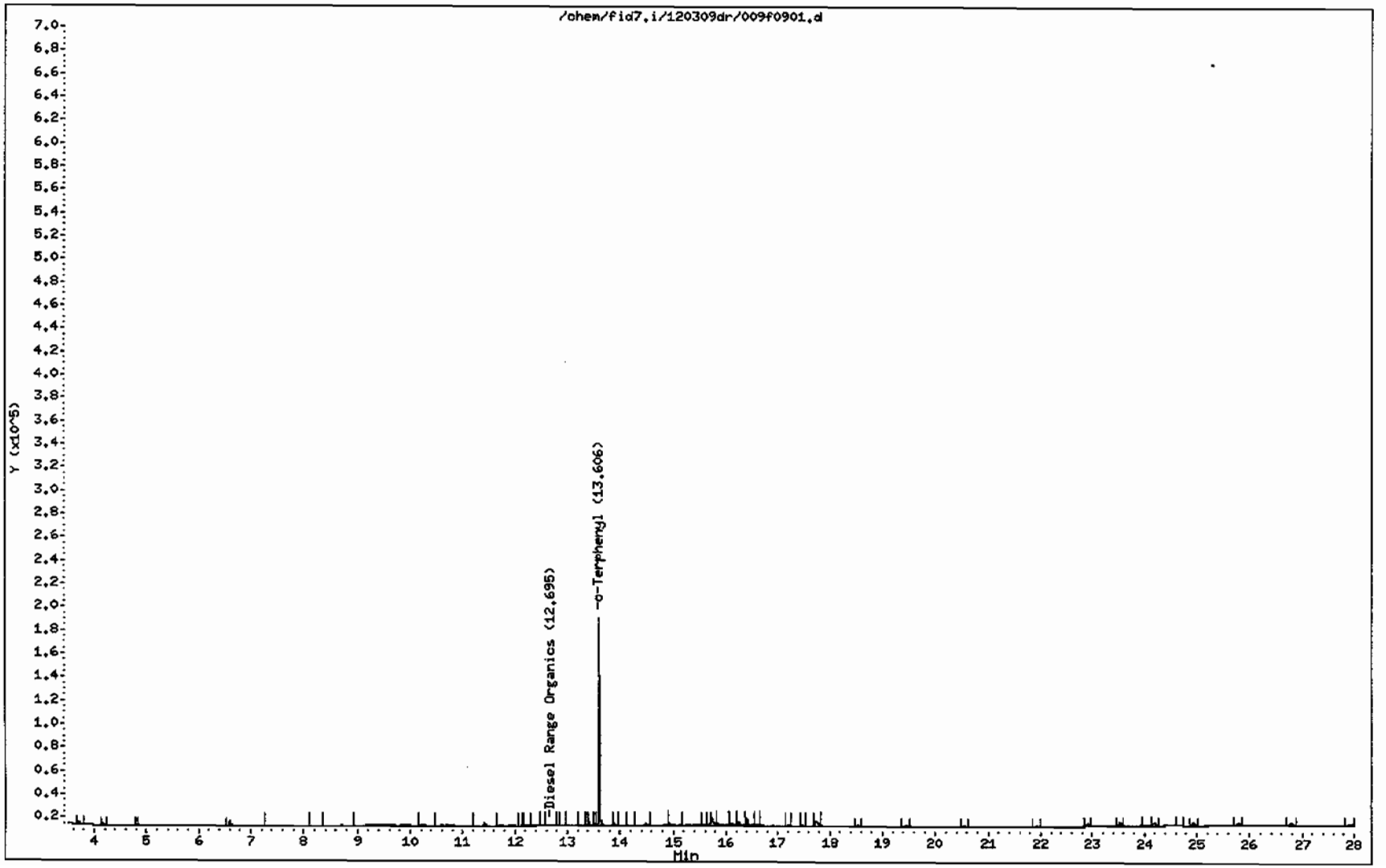

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14123	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/03/2009 21:38	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.05	mg/kg	2.29	7.05

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/012f1201.d
Lab Smp Id: 241819004 Client Smp ID: RE03-09-14123
Inj Date : 03-DEC-2009 21:38
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819004|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	5.53440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	218501	8.70339	0.31

Data File: /chem/fid7.i/120309dr/012f1201.d
Date : 03-DEC-2009 21:38
Client ID: RE03-09-14123
Sample Info: |241819004|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

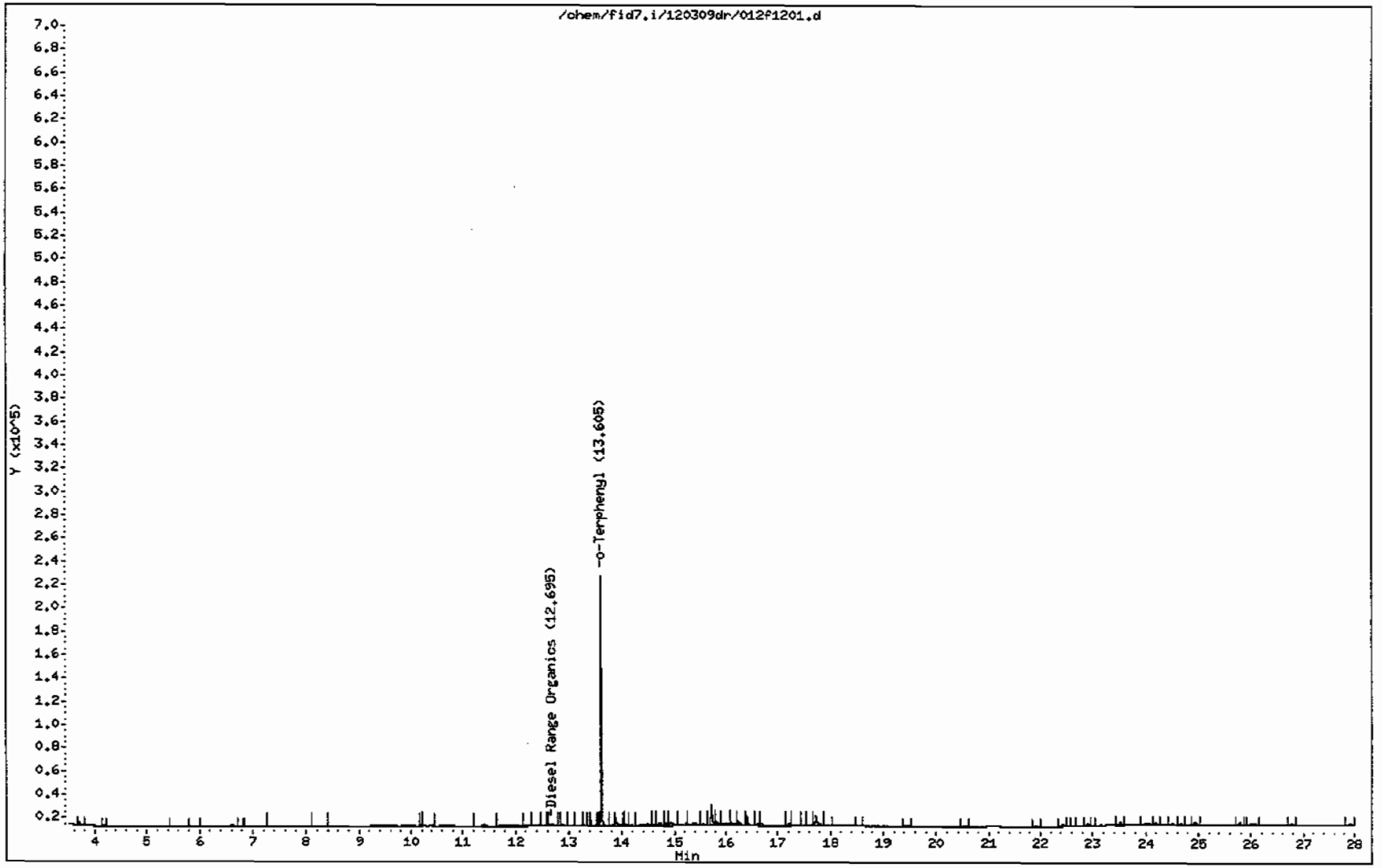

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14114	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.1	**Dilution:**	1
Run Date:	12/03/2009 23:28	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	015f1501.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.70	mg/kg	2.18	6.70

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/015f1501.d
Lab Smp Id: 241819005 Client Smp ID: RE03-09-14114
Inj Date : 03-DEC-2009 23:28
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819005|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weigth of sample extracted (g)
M	0.90840	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	219780	8.75431	0.29

Data File: /chem/fid7.i/120309dr/015f1501.d
Date : 03-DEC-2009 23:28
Client ID: RE03-09-14114
Sample Info: |241819005|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

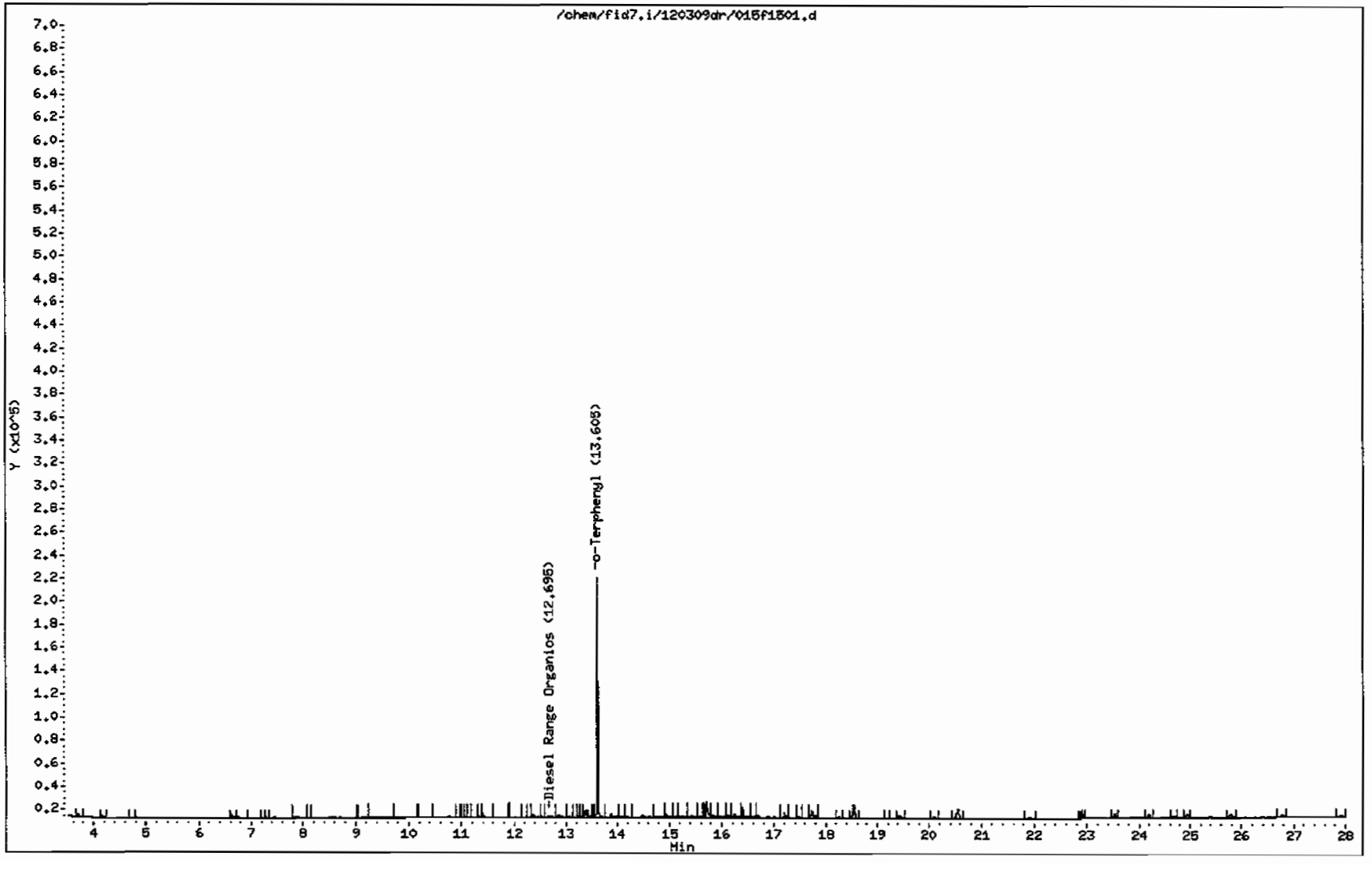

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819006	Date Received:	11/25/2009 09:10	%Moisture:	8.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14126	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 00:06	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	016f1601.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		24.8	mg/kg	2.35	7.22

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/016f1601.d
Lab Smp Id: 241819006 Client Smp ID: RE03-09-14126
Inj Date : 04-DEC-2009 00:06
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819006|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weigth of sample extracted (g)
M	8.21600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501	17.890		9746468	687.672	24.8	
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.605	13.611	-0.006	273856	10.9083	0.39	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/120309dr/016f1601.d
Date : 04-DEC-2009 00:06
Client ID: RE03-09-14126
Sample Info: 1241819006|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

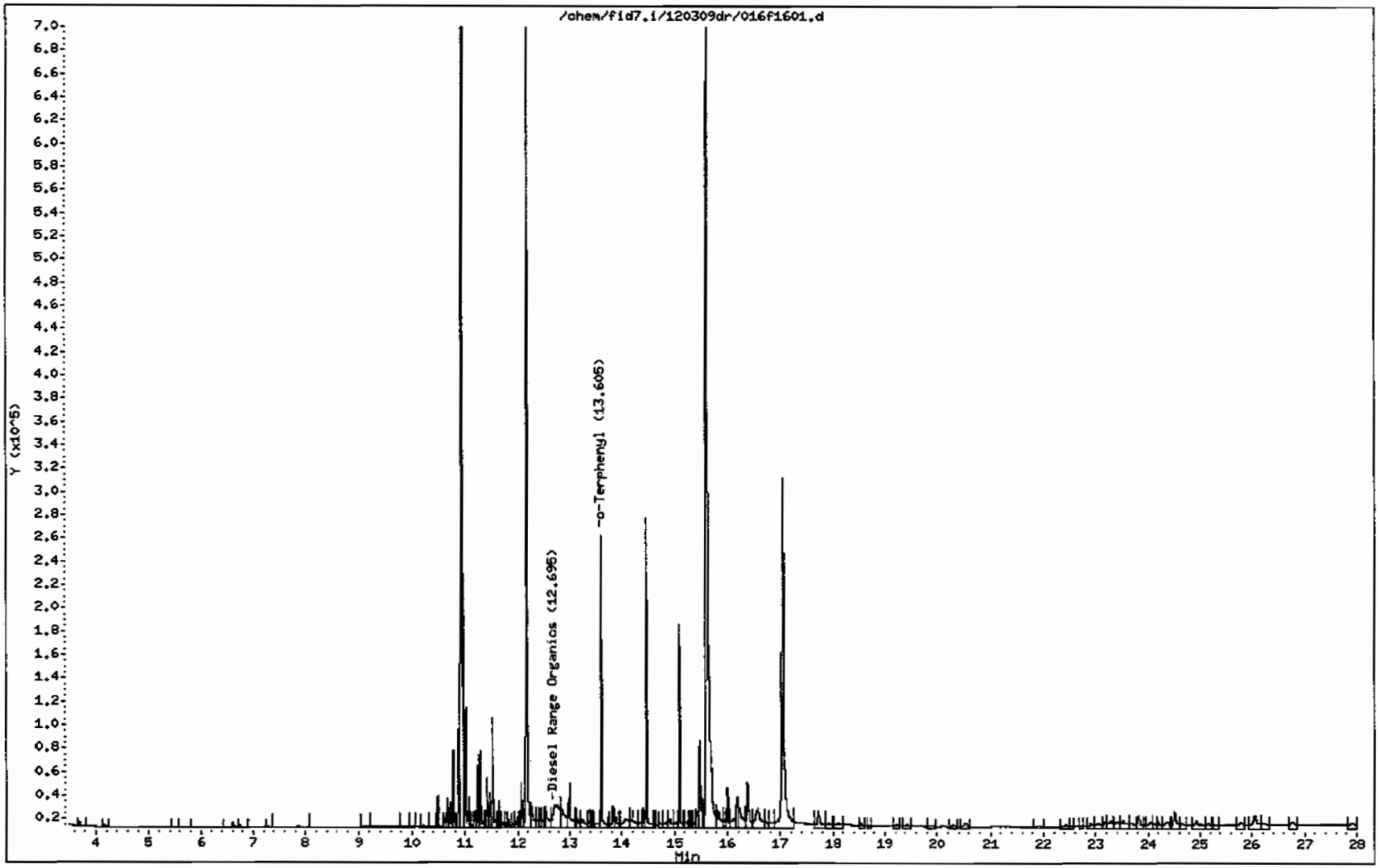

Before KTM 12/4/09

Data File: /chem/fid7.i/120309dr/016f1601.d
Injection Date: 04-DEC-2009 00:06
Instrument: fid7.i
Client Sample ID: RE03-09-14126

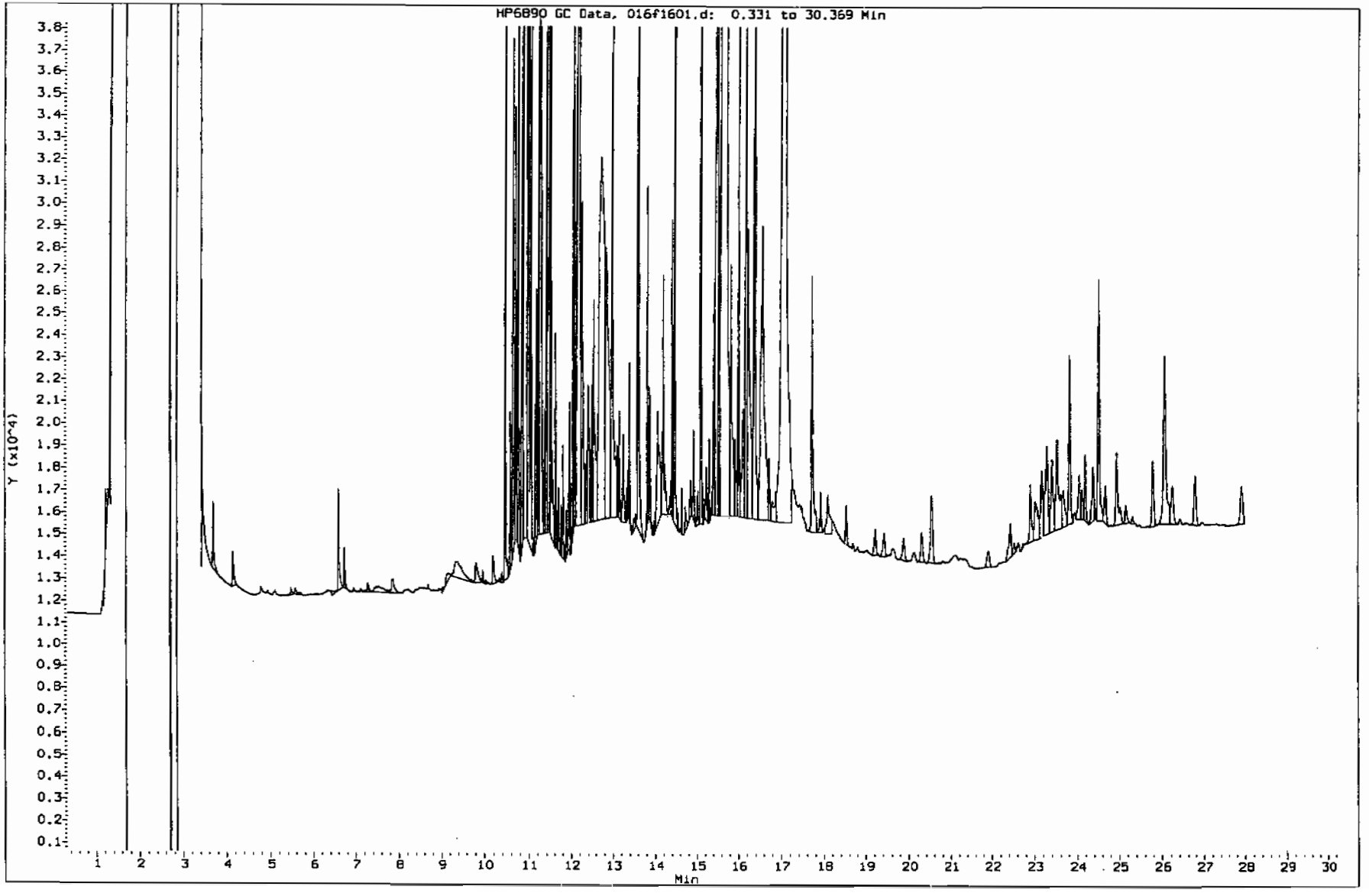

Data File: /chem/fid7.i/120309dr/016f1601.d
Injection Date: 04-DEC-2009 00:06
Instrument: fid7.i
Client Sample ID: RE03-09-14126

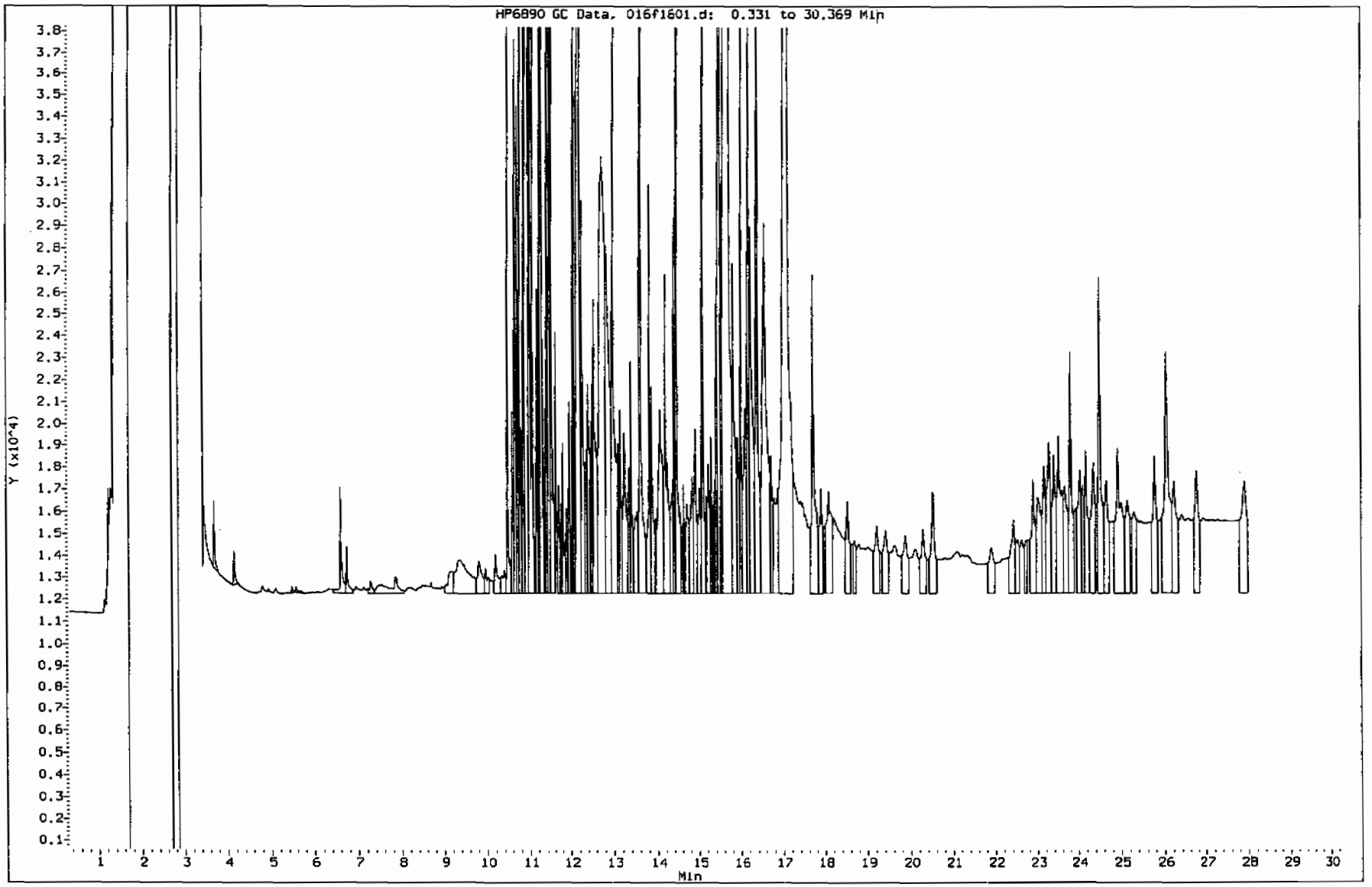

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819007	Date Received:	11/25/2009 09:10	%Moisture:	8.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14117	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 00:42	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.09 g	Final Volume:	1 mL
Data File:	017f1701.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.23	mg/kg	2.35	7.23

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/017f1701.d
Lab Smp Id: 241819007 Client Smp ID: RE03-09-14117
Inj Date : 04-DEC-2009 00:42
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819007|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weigth of sample extracted (g)
M	8.12930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	227670	9.06860	0.33

Data File: /chem/fid7.i/120309dr/017f1701.d

Date : 04-DEC-2009 00:42

Client ID: RE03-09-14117

Sample Info: |241819007|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

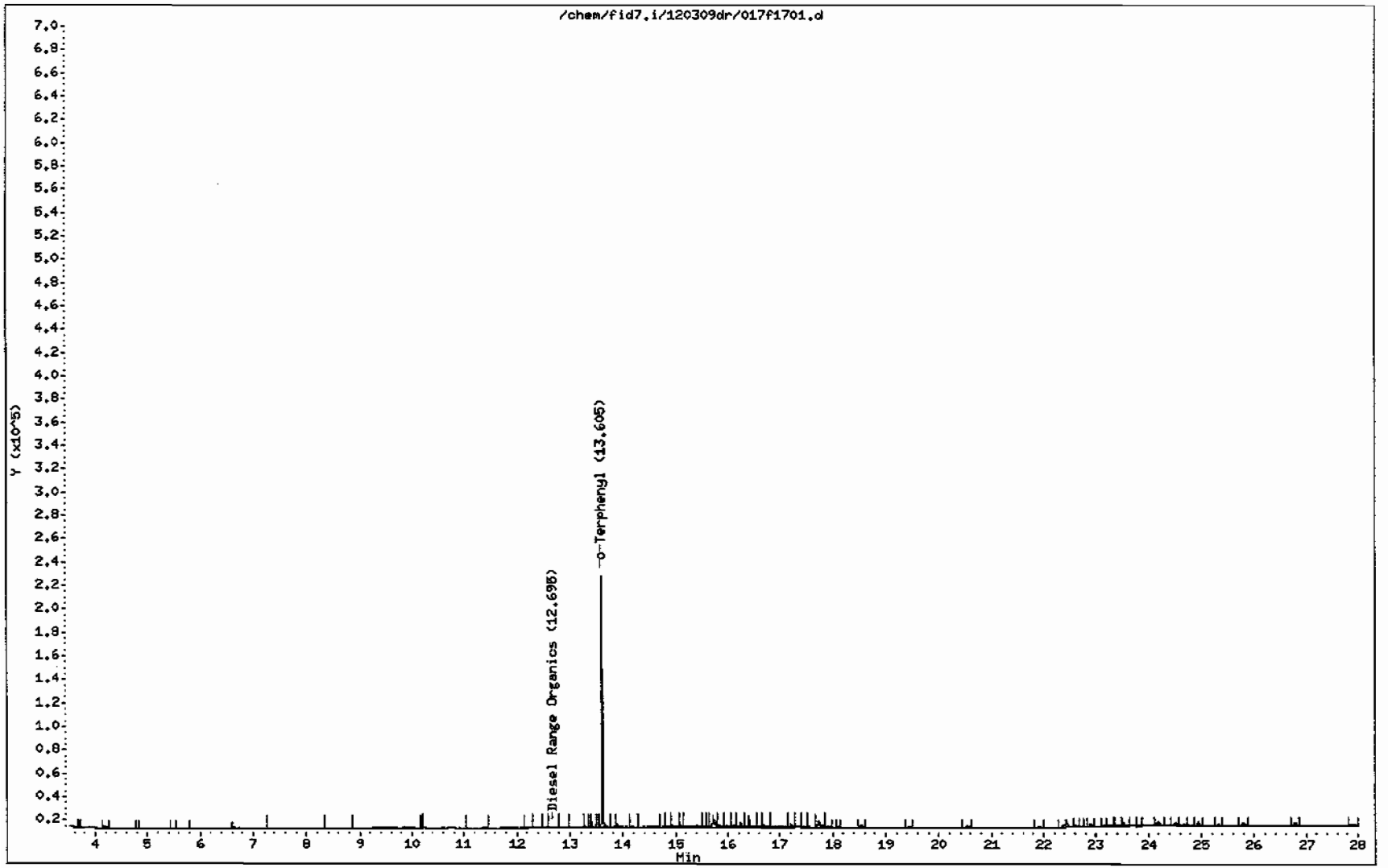

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819008	Date Received:	11/25/2009 09:10	%Moisture:	12.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14121	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 01:19	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	018f1801.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		15.4	mg/kg	2.48	7.63

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/018f1801.d
Lab Smp Id: 241819008 Client Smp ID: RE03-09-14121
Inj Date : 04-DEC-2009 01:19
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819008|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	12.68160	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S	1 Diesel Range Organics					CAS #:	
	7.501- 17.890			5721973	403.720	15.4	
$	2 o-Terphenyl					CAS #: 84-15-1	
	13.606	13.611	-0.005	266960	10.6336	0.40	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/fid7.i/120309dr/018f1801.d
Date : 04-DEC-2009 01:19
Client ID: RE03-09-14121
Sample Info: |241819008|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

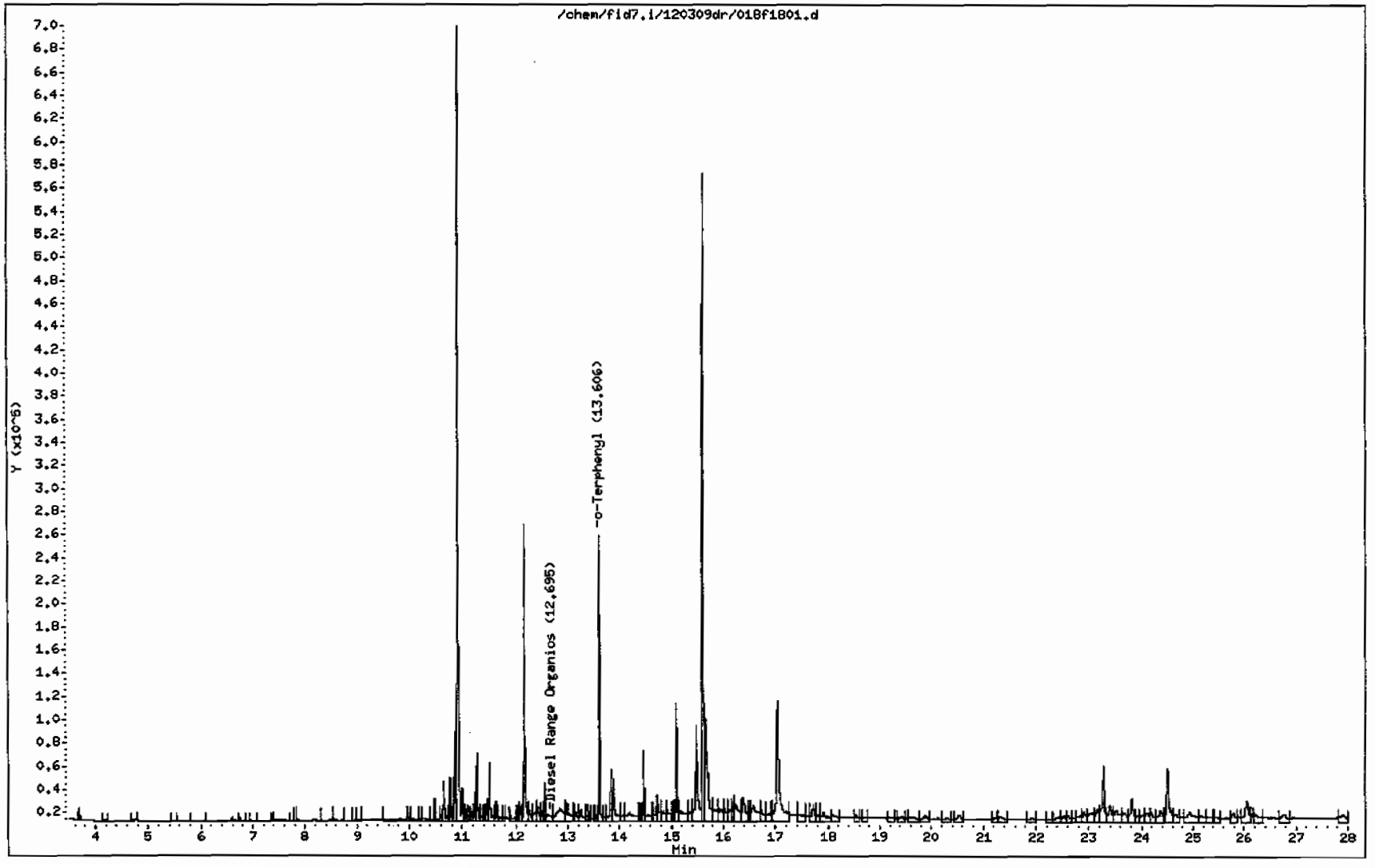

Data File: /chem/fid7.i/120309dr/018f1801.d
Injection Date: 04-DEC-2009 01:19
Instrument: fid7.i
Client Sample ID: RE03-09-14121

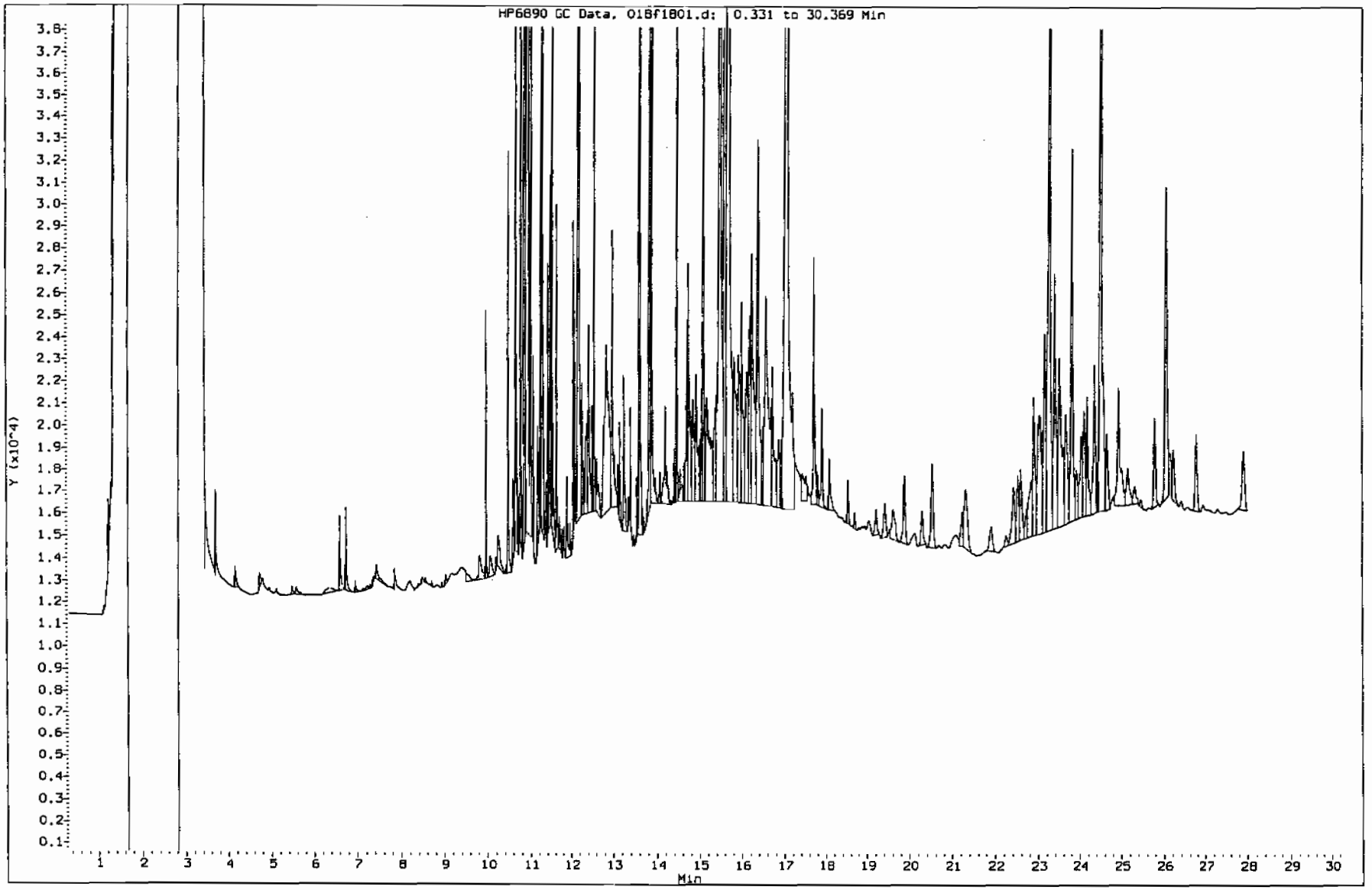

Data File: /chem/fid7.i/120309dr/018f1801.d
Injection Date: 04-DEC-2009 01:19
Instrument: fid7.i
Client Sample ID: RE03-09-14121

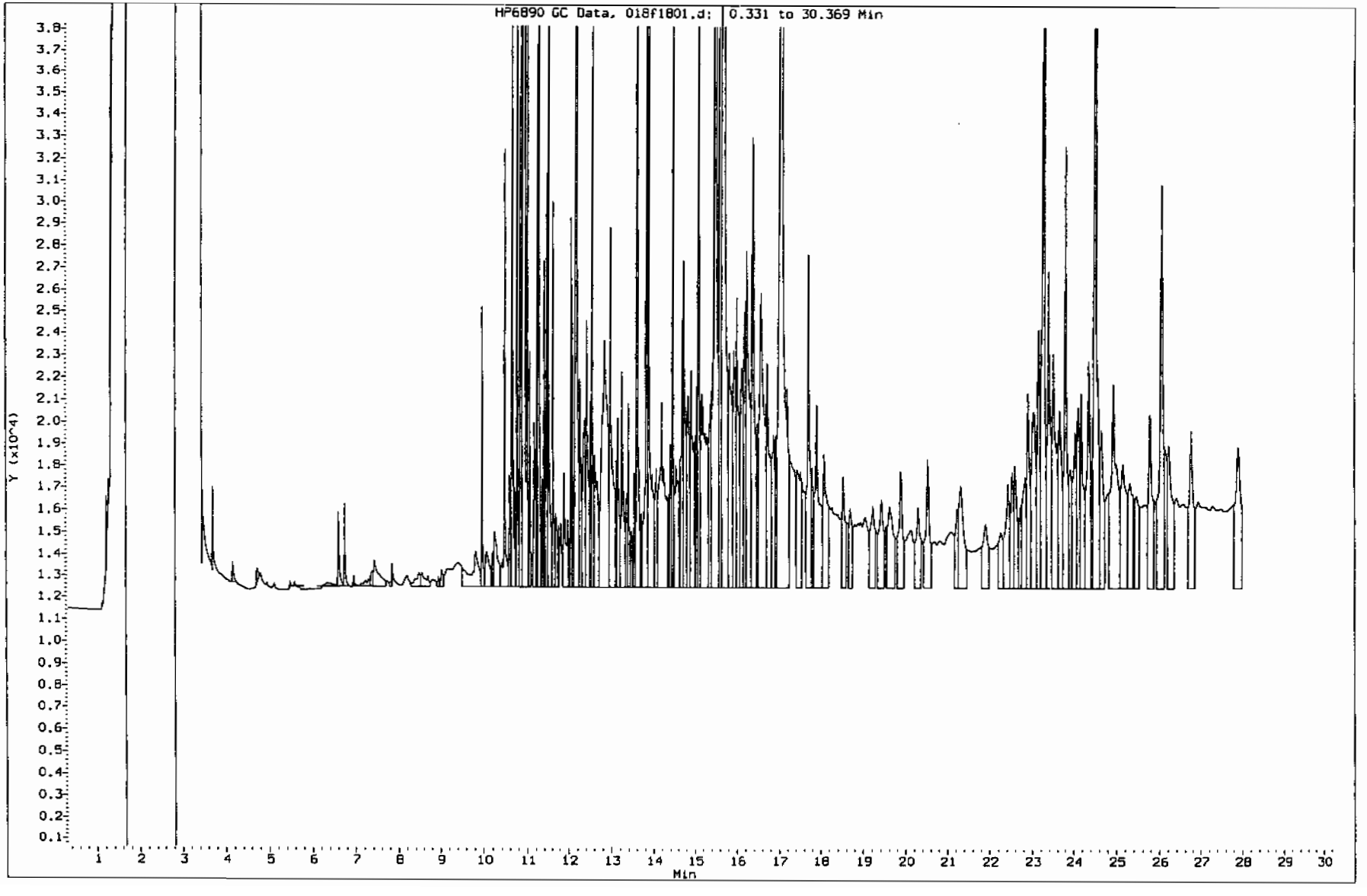

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819009	Date Received:	11/25/2009 09:10	%Moisture:	1.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14129	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 01:56	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	019f1901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	4.61	mg/kg	2.19	6.75

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/019f1901.d
Lab Smp Id: 241819009 Client Smp ID: RE03-09-14129
Inj Date : 04-DEC-2009 01:56
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819009|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weigth of sample extracted (g)
M	1.50880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
$ 1 Diesel Range Organics					CAS #:	
7.501- 17.890			1935609	136.569	4.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.605	13.611	-0.006	244278	9.73012	0.33	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120309dr/019f1901.d
Date : 04-DEC-2009 01:56
Client ID: RE03-09-14129
Sample Info: |241819009|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

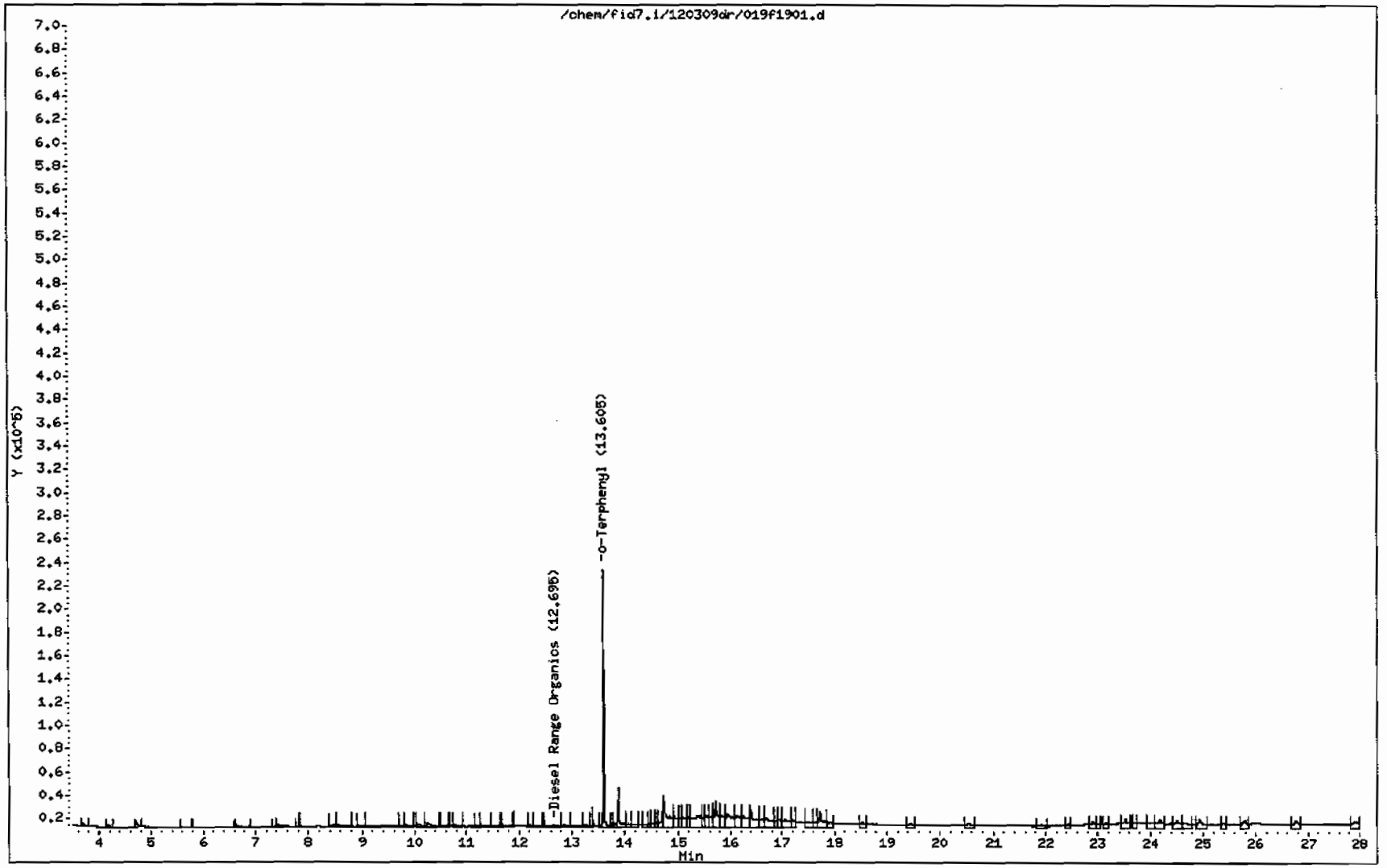

Data File: /chem/fid7.i/120309dr/019f1901.d
Injection Date: 04-DEC-2009 01:56
Instrument: fid7.i
Client Sample ID: RE03-09-14129

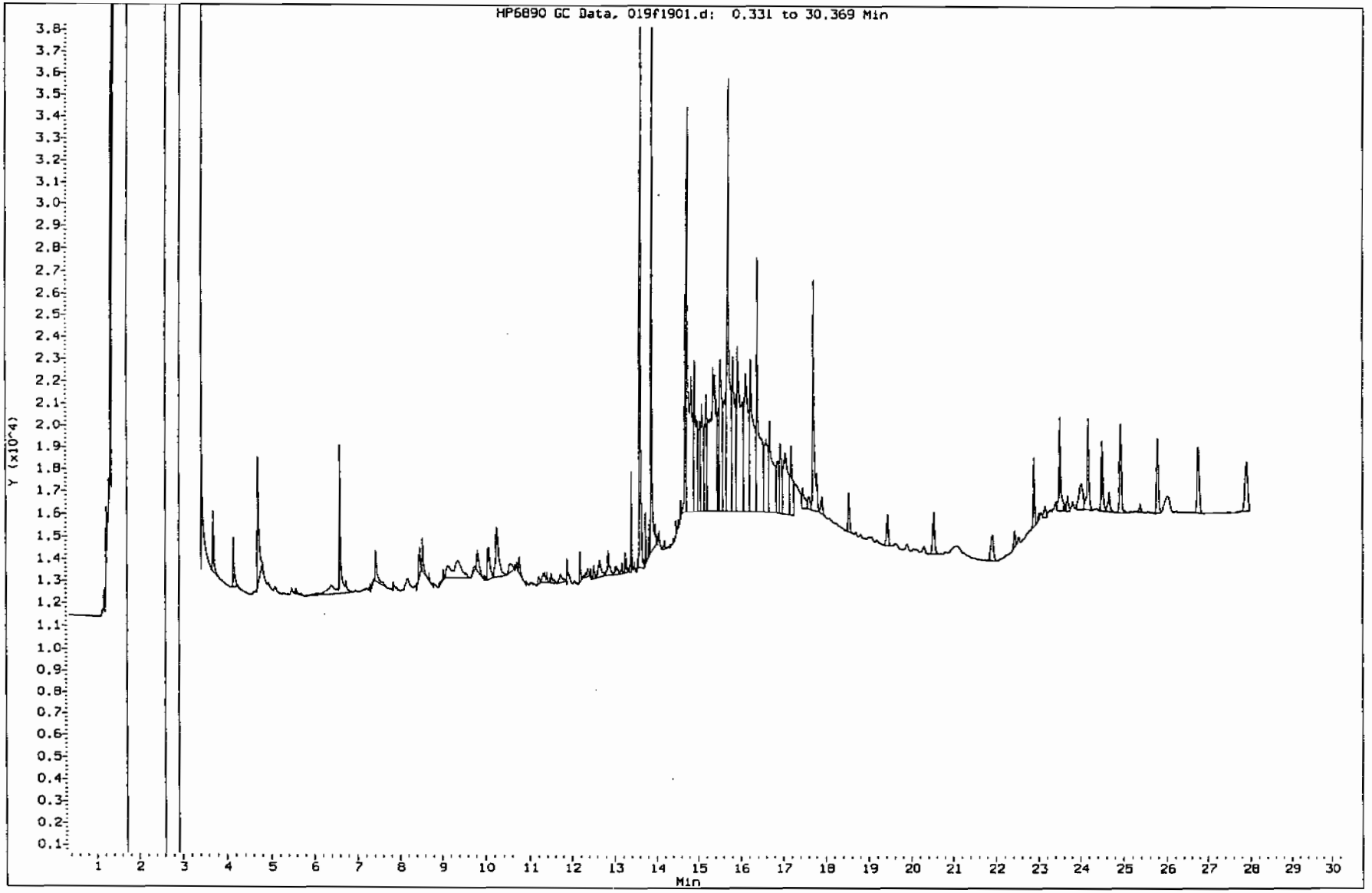

Data File: /chem/fid7.i/120309dr/019f1901.d
Injection Date: 04-DEC-2009 01:56
Instrument: fid7.i
Client Sample ID: RE03-09-14129

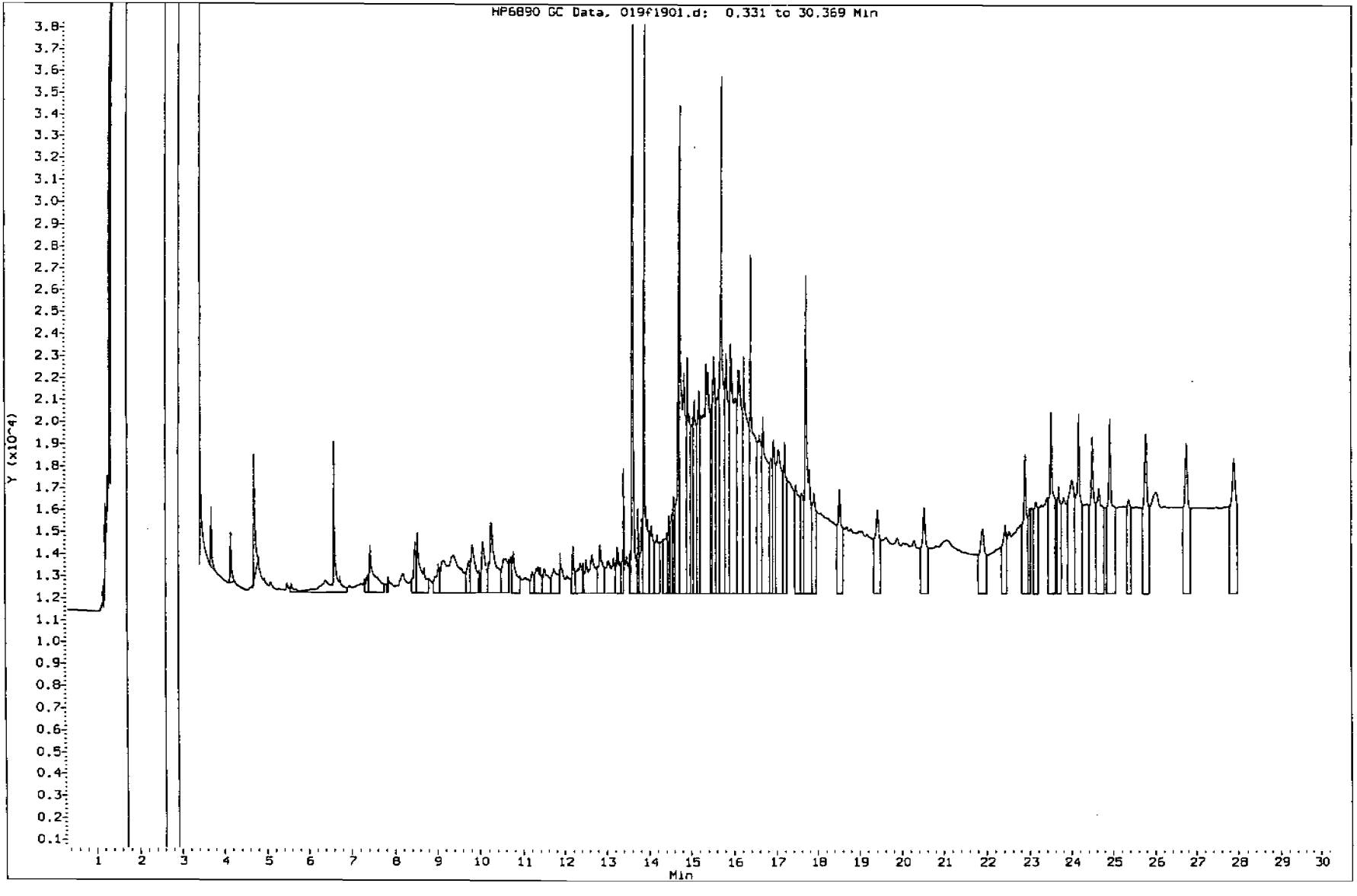

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819010	Date Received:	11/25/2009 09:10	%Moisture:	2.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14120	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 02:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	020f2001.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.84	mg/kg	2.22	6.84

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/020f2001.d
Lab Smp Id: 241819010 Client Smp ID: RE03-09-14120
Inj Date : 04-DEC-2009 02:33
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819010|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weigth of sample extracted (g)
M	2.62750	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	230049	9.16337	0.31

Data File: /chem/fid7.i/120309dr/020f2001.d
Date : 04-DEC-2009 02:33
Client ID: RE03-09-14120
Sample Info: |241819010|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

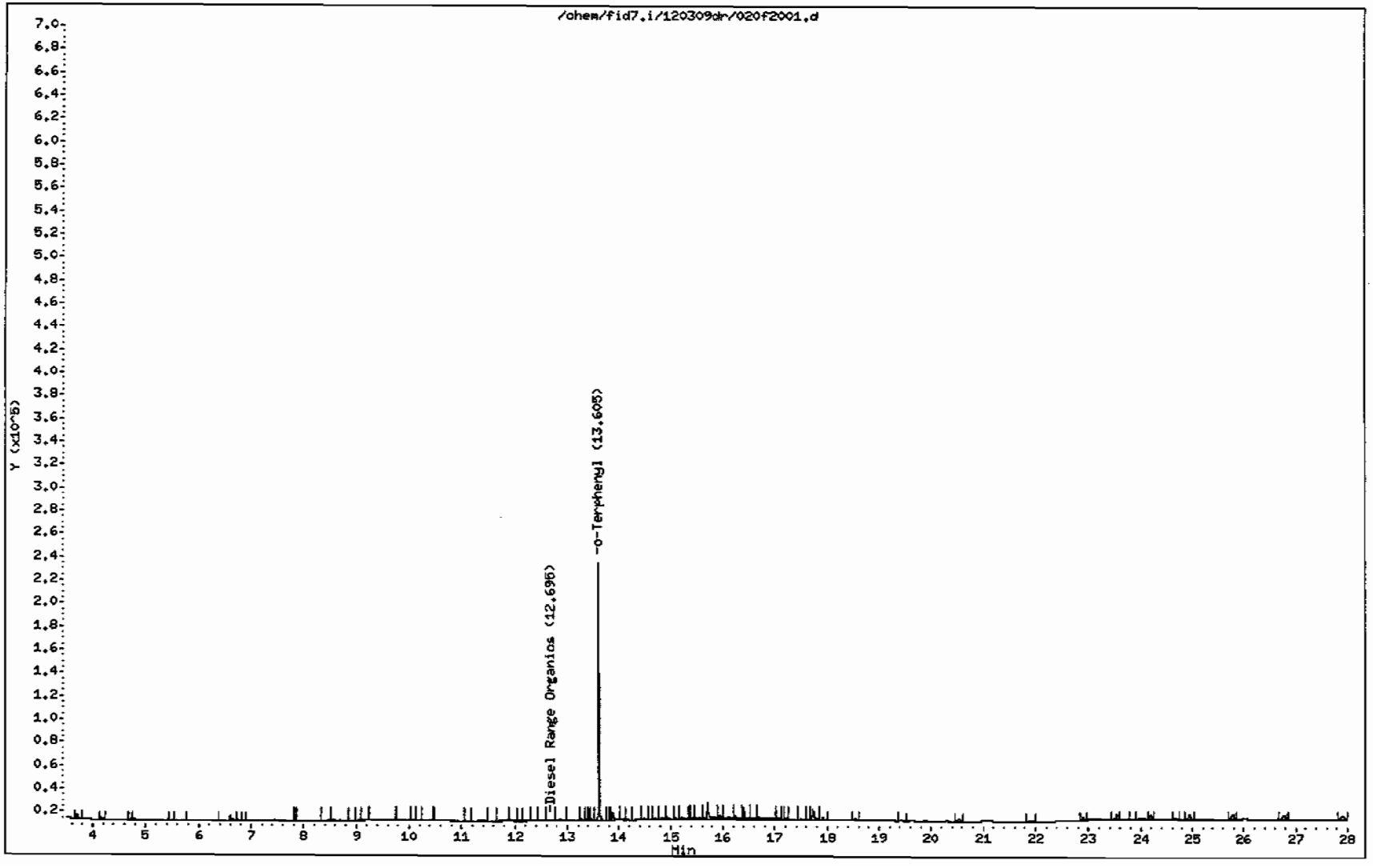

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819011	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14116	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 03:10	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	021f2101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	5.54	mg/kg	2.26	6.94

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/021f2101.d
Lab Smp Id: 241819011 Client Smp ID: RE03-09-14116
Inj Date : 04-DEC-2009 03:10
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819011|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	4.09710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
7.501- 17.890			2260855	159.517	5.5	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
13.605	13.611	-0.006	287373	11.4467	0.40	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid7.i/120309dr/021f2101.d

Date : 04-DEC-2009 03:10

Client ID: RE03-09-14116

Sample Info: |241819011|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

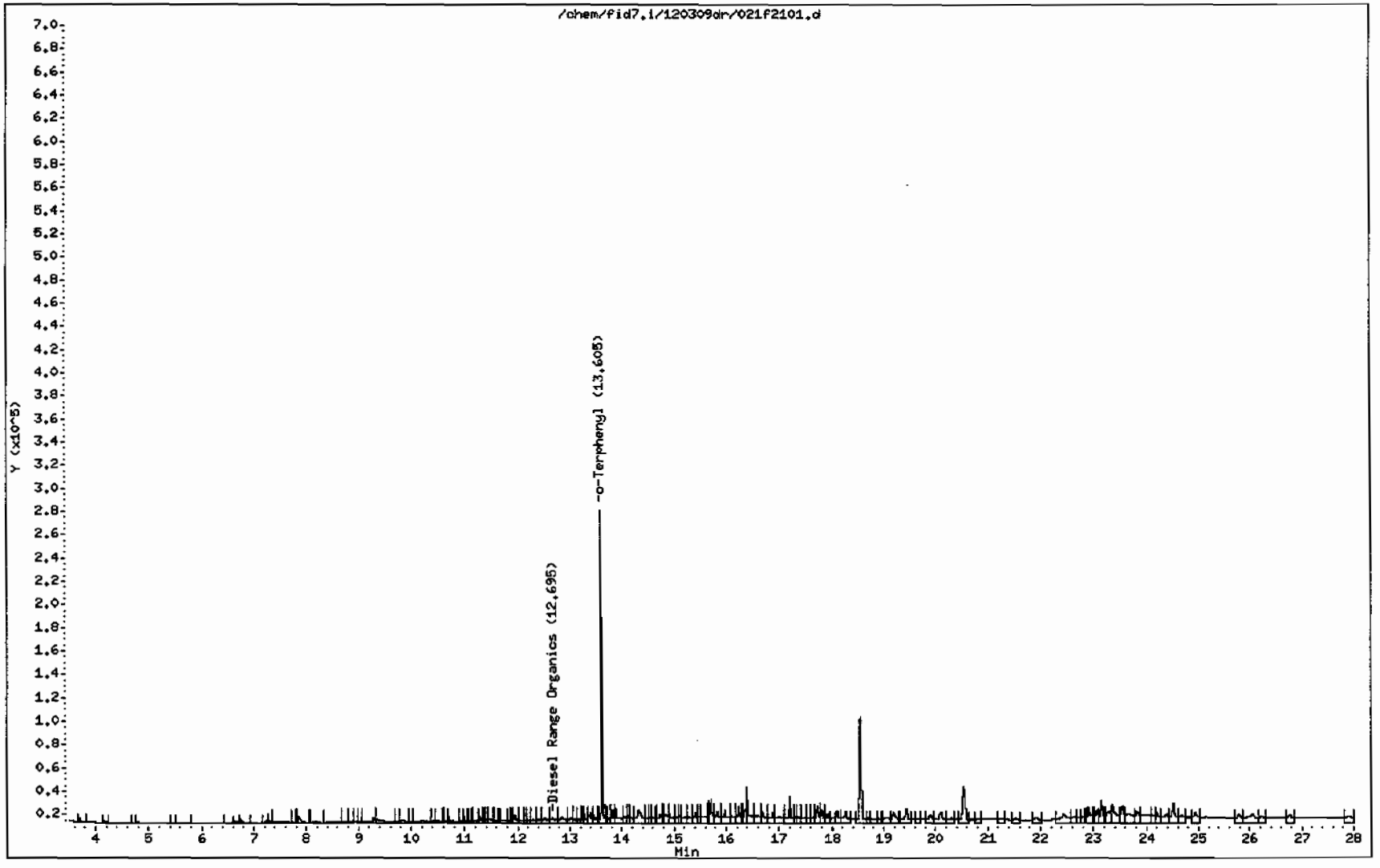

Data File: /chem/fid7.i/120309dr/021f2101.d
Injection Date: 04-DEC-2009 03:10
Instrument: fid7.i
Client Sample ID: RE03-09-14116

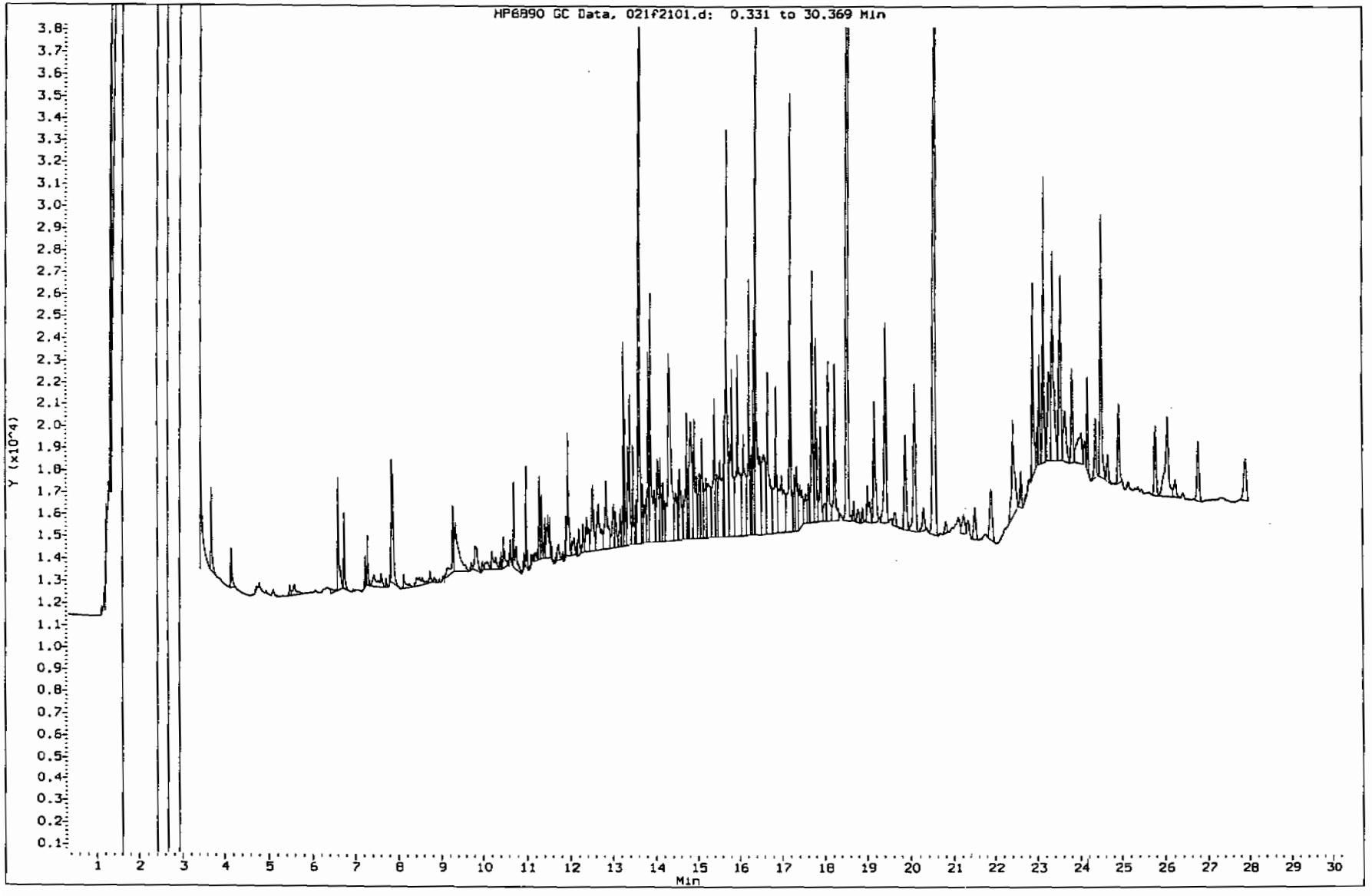

Data File: /chem/fid7.i/120309dr/021f2101.d
Injection Date: 04-DEC-2009 03:10
Instrument: fid7.i
Client Sample ID: RE03-09-14116

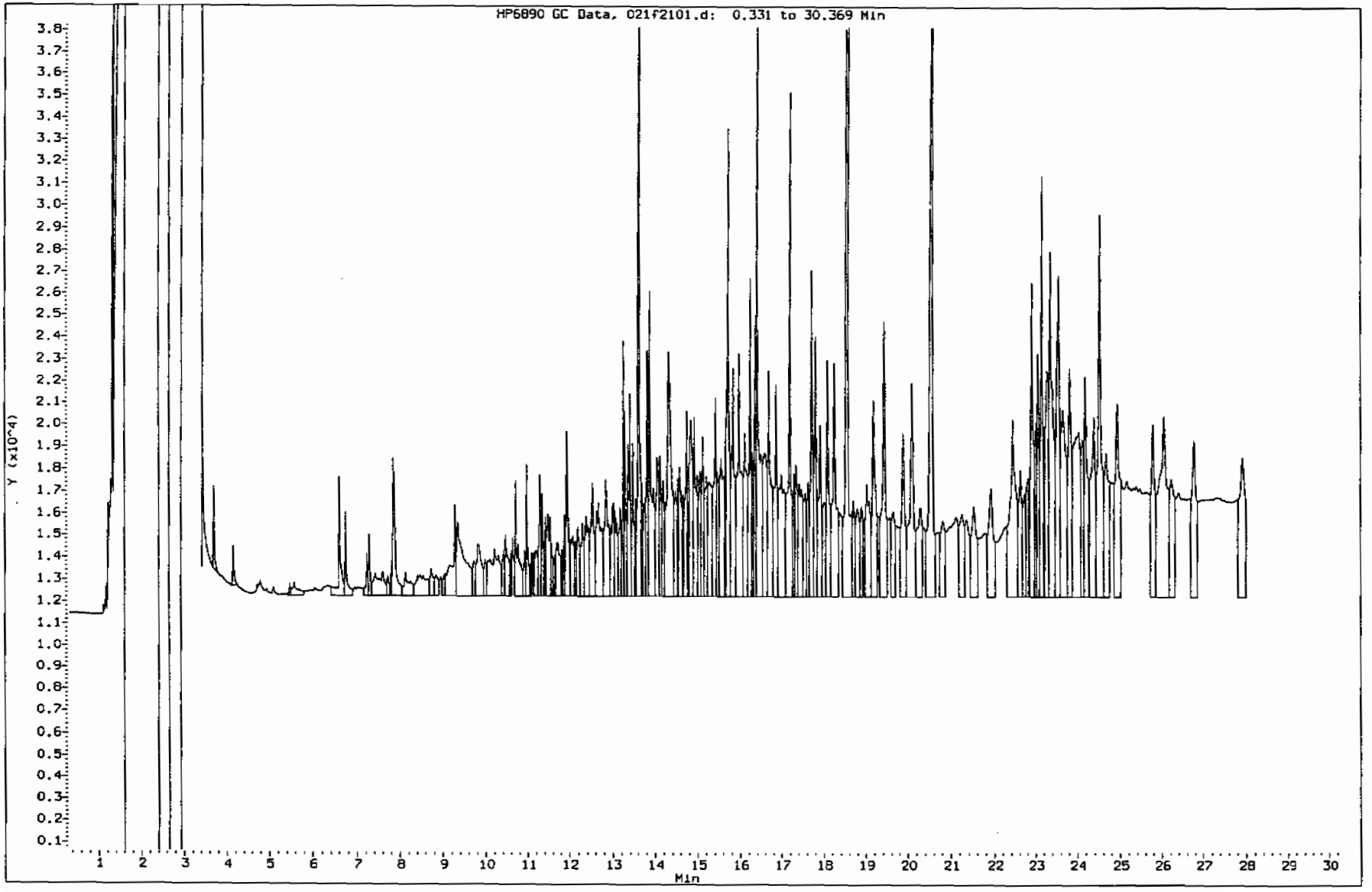

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819012	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14111	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 03:47	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	022f2201.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.57	mg/kg	2.46	7.57

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/022f2201.d
Lab Smp Id: 241819012 Client Smp ID: RE03-09-14111
Inj Date : 04-DEC-2009 03:47
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819012|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weigth of sample extracted (g)
M	12.29440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.606	13.611	-0.005	261391	10.4118	0.39

Data File: /chem/fid7.i/120309dr/022f2201.d

Date : 04-DEC-2009 03:47

Client ID: RE03-09-14111

Sample Info: |241819012|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

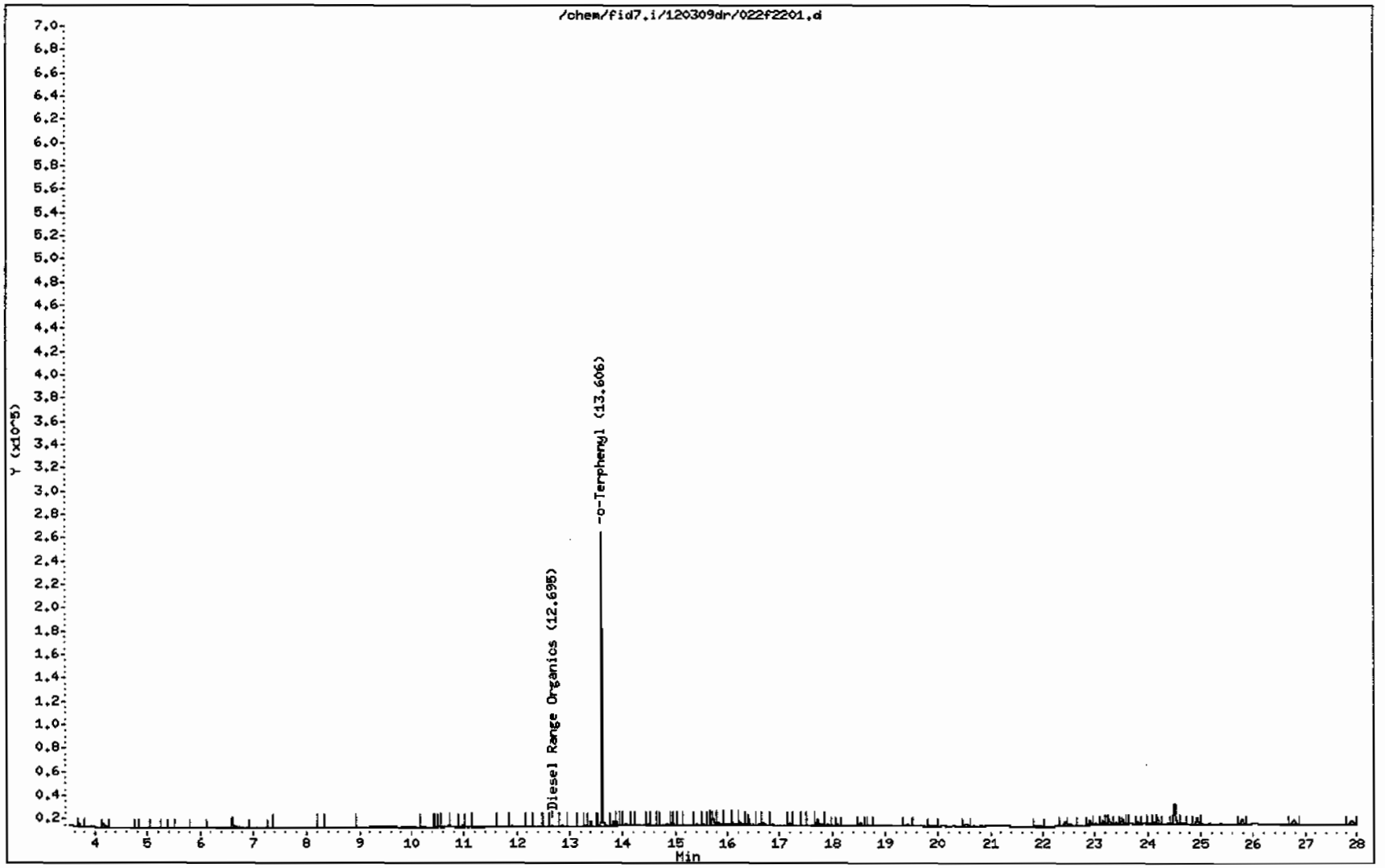

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819013	Date Received:	11/25/2009 09:10	%Moisture:	1.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14119	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 05:37	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	025f2501.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.74	mg/kg	2.19	6.74

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/025f2501.d
Lab Smp Id: 241819013 Client Smp ID: RE03-09-14119
Inj Date : 04-DEC-2009 05:37
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819013|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weigth of sample extracted (g)
M	1.67390	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.604	13.611	-0.007	233773	9.31170	0.31

Data File: /chem/fid7.i/120309dr/025f2501.d

Date : 04-DEC-2009 05:37

Client ID: RE03-09-14119

Sample Info: |2418190131|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

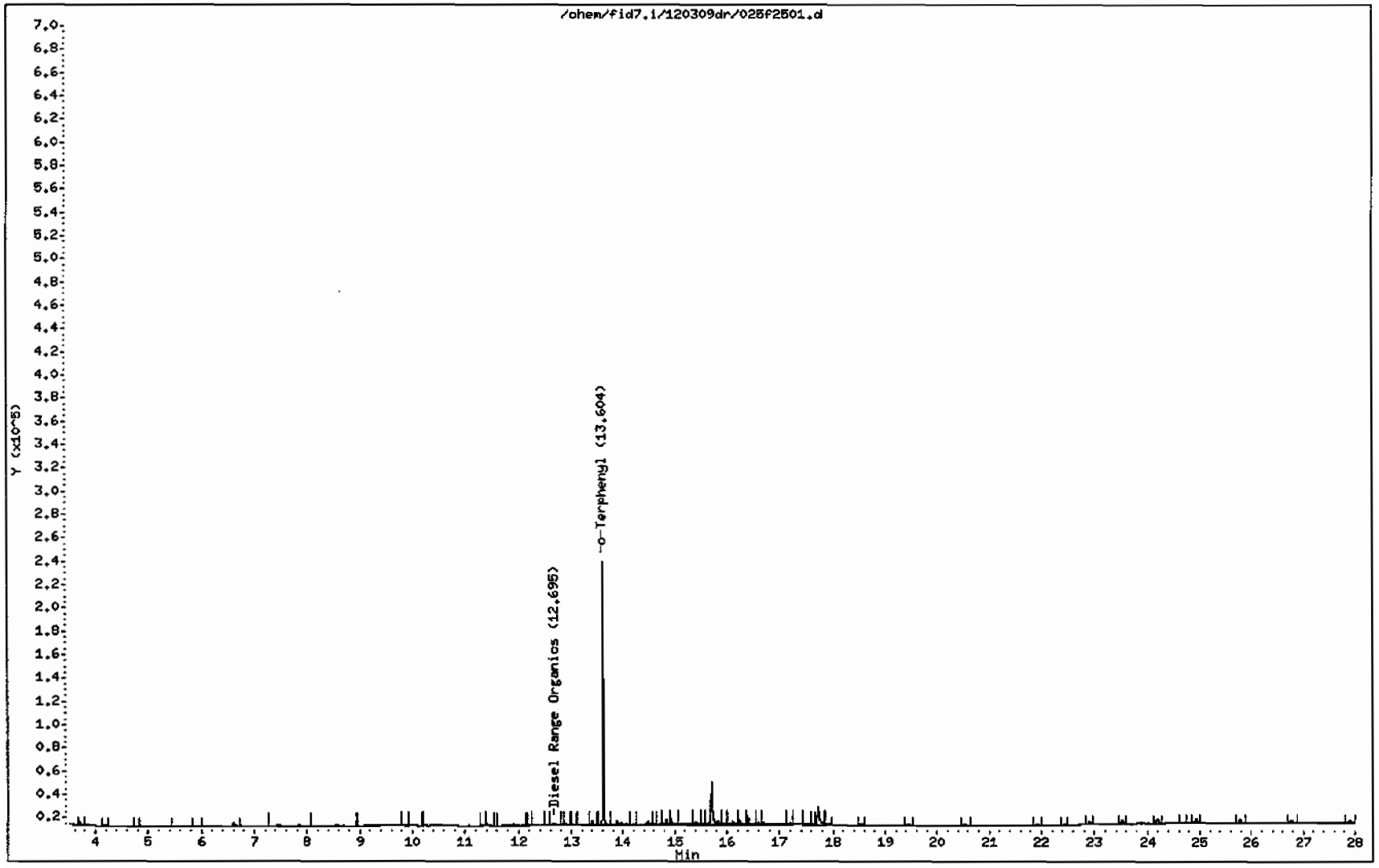

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819014	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14110	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 06:14	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	026f2601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.89	mg/kg	2.24	6.89

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/026f2601.d
Lab Smp Id: 241819014 Client Smp ID: RE03-09-14110
Inj Date : 04-DEC-2009 06:14
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819014|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weigth of sample extracted (g)
M	3.64280	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	191013	7.60848	0.26

Data File: /ohem/fid7.i/120309dr/026f2601.d
Date : 04-DEC-2009 06:14
Client ID: RE03-09-14110
Sample Info: |24181901411|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

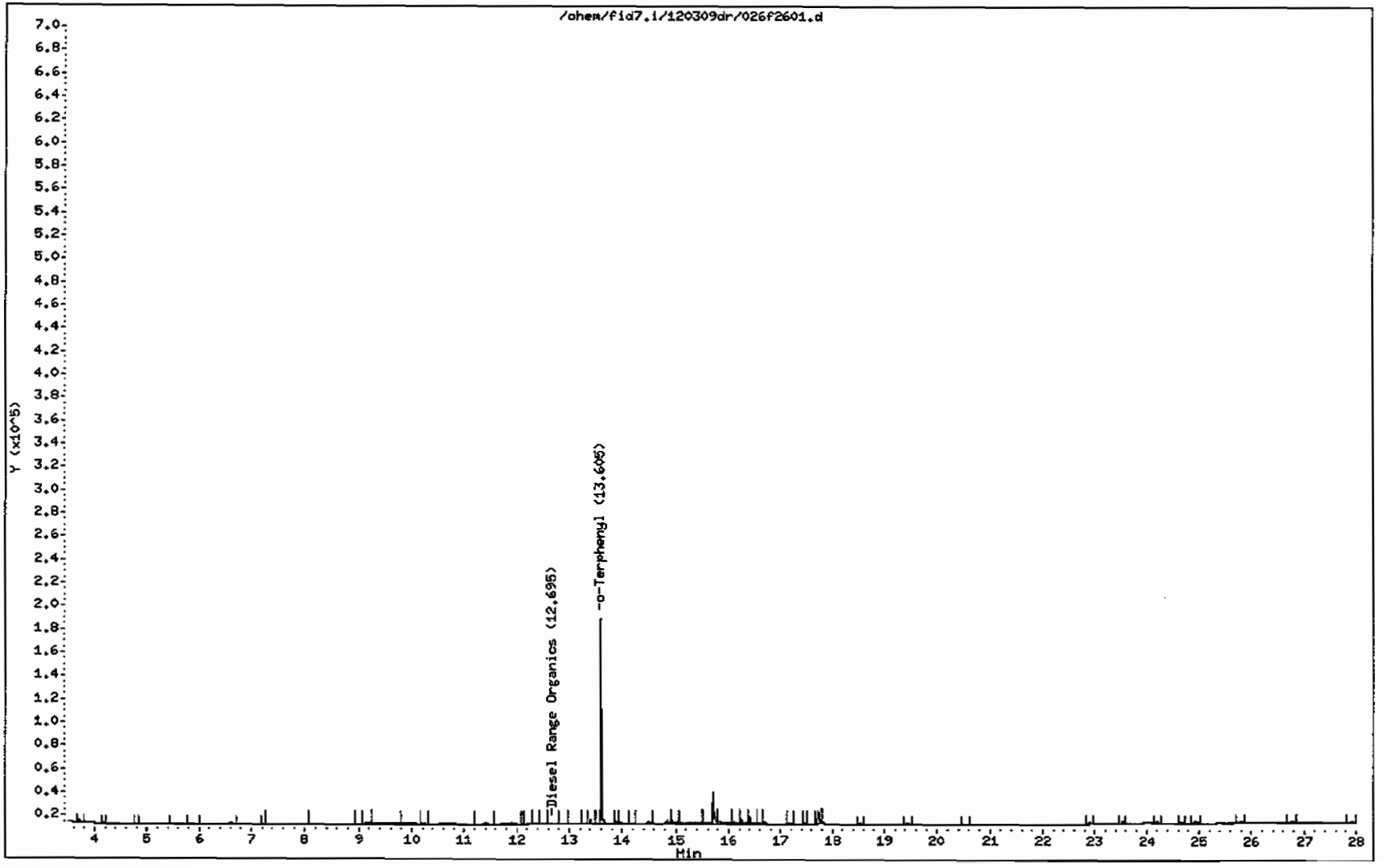

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819015	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14127	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 06:50	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	027f2701.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.00	mg/kg	2.28	7.00

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/027f2701.d
Lab Smp Id: 241819015 Client Smp ID: RE03-09-14127
Inj Date : 04-DEC-2009 06:50
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819015|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weigth of sample extracted (g)
M	4.83030	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	251778	10.0289	0.35

Data File: /chem/fid7.i/120309dr/027f2701.d

Date : 04-DEC-2009 06:50

Client ID: RE03-09-14127

Sample Info: |2418190151|1|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

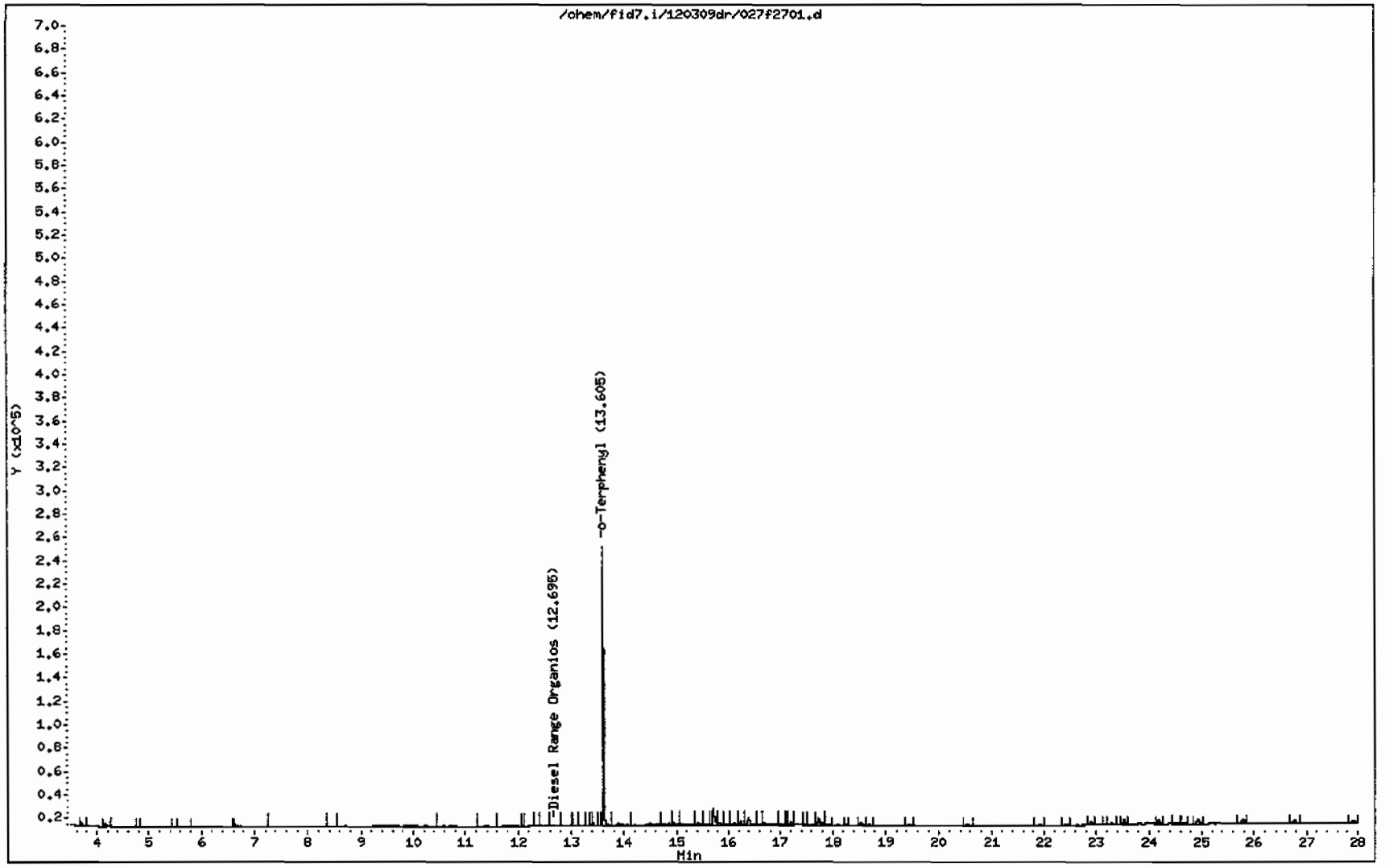

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819016	Date Received:	11/25/2009 09:10	%Moisture:	9.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14118	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 07:27	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	028f2801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.36	mg/kg	2.39	7.36

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/028f2801.d
Lab Smp Id: 241819016 Client Smp ID: RE03-09-14118
Inj Date : 04-DEC-2009 07:27
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819016|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	9.48220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	240555	9.58182	0.35

Data File: /chem/fid7.i/120309dr/028f2801.d
Date : 04-DEC-2009 07:27
Client ID: RE03-09-14118
Sample Info: |241819016|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

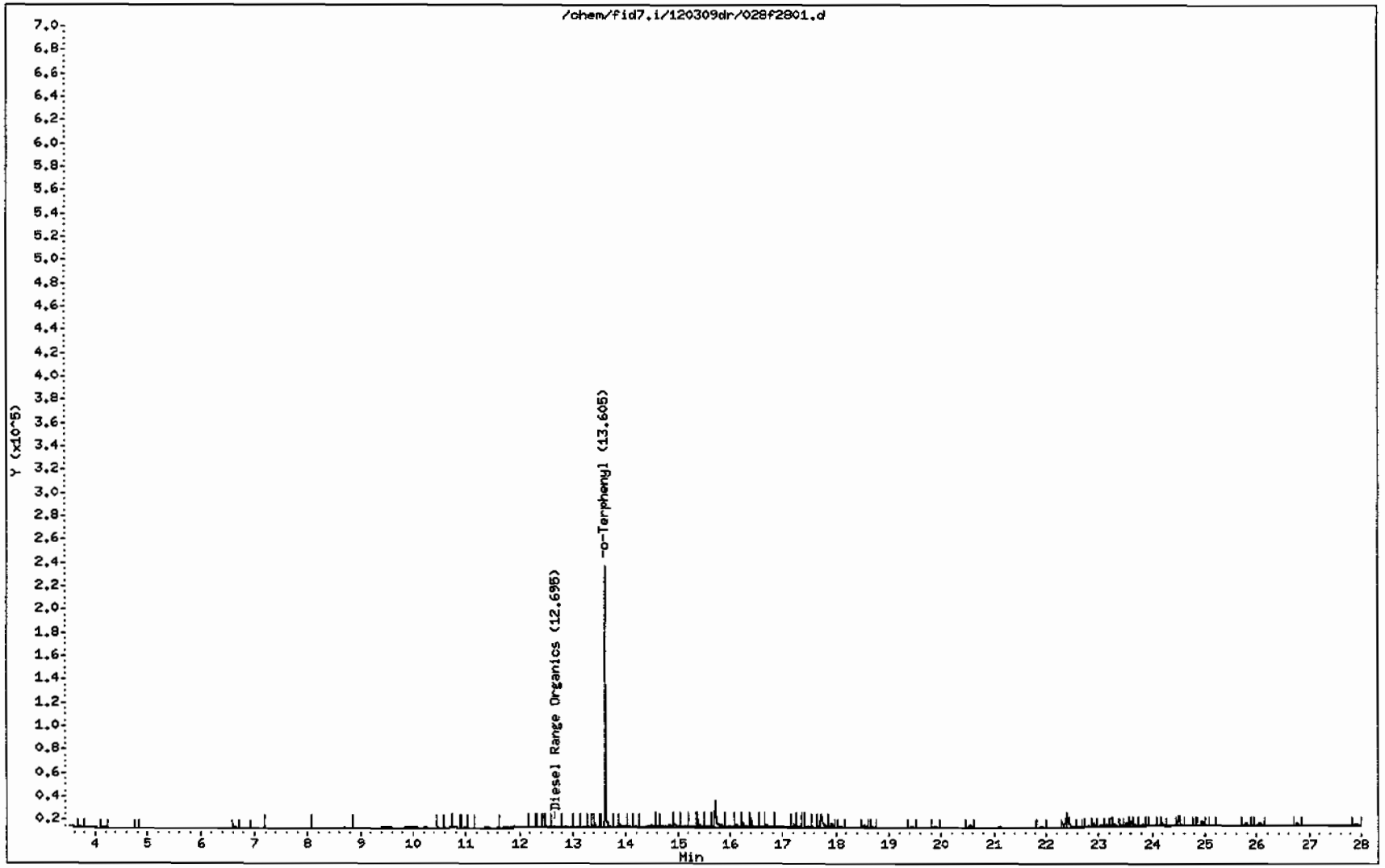

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241819017	Date Received:	11/25/2009 09:10	%Moisture:	5.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14122	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/04/2009 08:04	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	029f2901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.05	mg/kg	2.29	7.05

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/029f2901.d
Lab Smp Id: 241819017 Client Smp ID: RE03-09-14122
Inj Date : 04-DEC-2009 08:04
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819017|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weigth of sample extracted (g)
M	5.64160	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.605	13.611	-0.006	235679	9.38762	0.33

Data File: /chem/fid7.i/120309dr/029f2901.d
Date : 04-DEC-2009 08:04
Client ID: RE03-09-14122
Sample Info: |24181901711|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

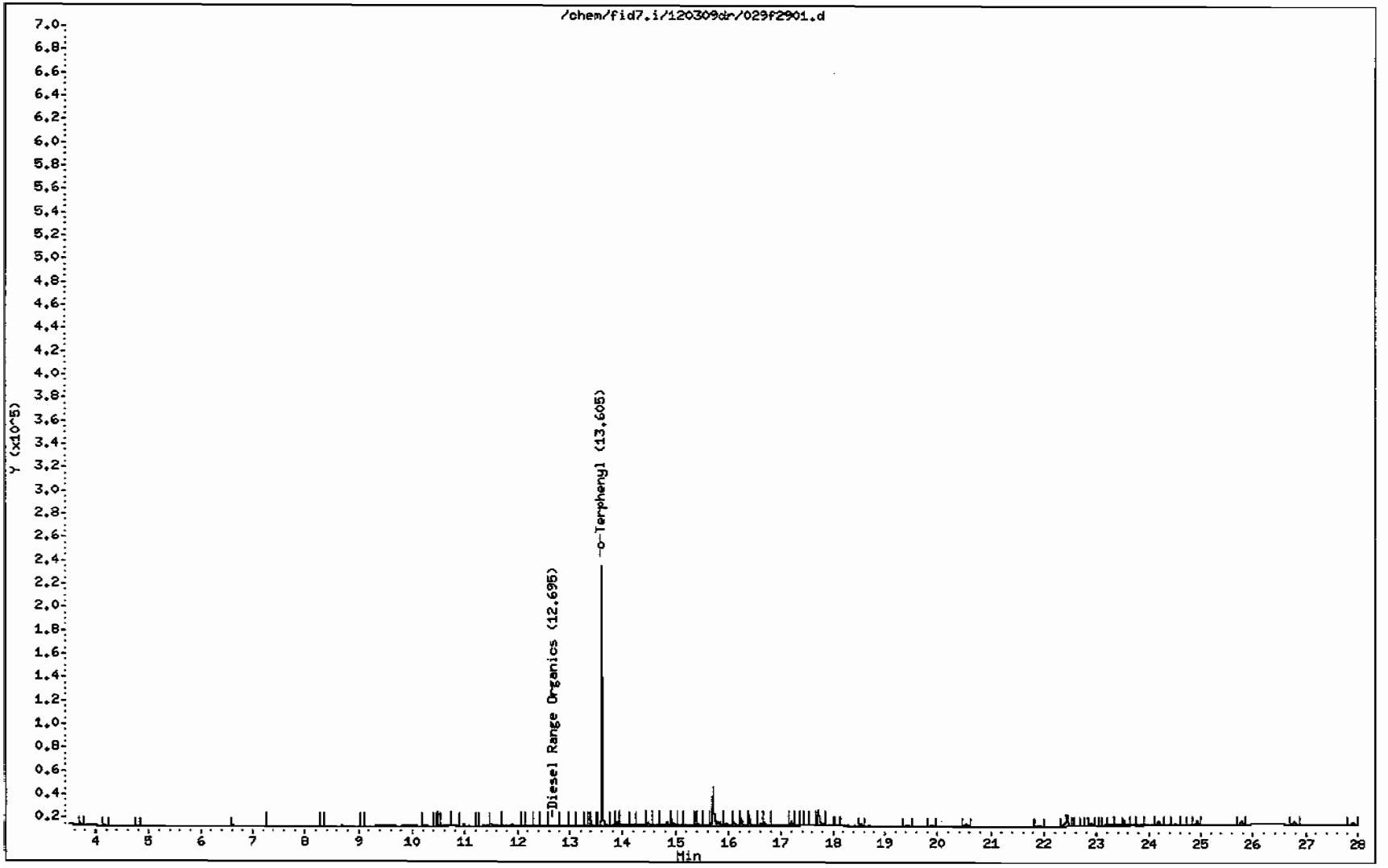

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819018	**Date Received:**	11/25/2009 09:10	**%Moisture:**	7.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14124	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.1	**Dilution:**	1
Run Date:	12/04/2009 08:40	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.11 g	**Final Volume:**	1 mL
Data File:	030f3001.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.21	mg/kg	2.34	7.21

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/030f3001.d
Lab Smp Id: 241819018 Client Smp ID: RE03-09-14124
Inj Date : 04-DEC-2009 08:40
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819018|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weigth of sample extracted (g)
M	7.82910	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.604	13.611	-0.007	224477	8.94143	0.32

Data File: /chem/fid7.i/120309dr/030f3001.d
Date : 04-DEC-2009 08:40
Client ID: RE03-09-14124
Sample Info: |241819018|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

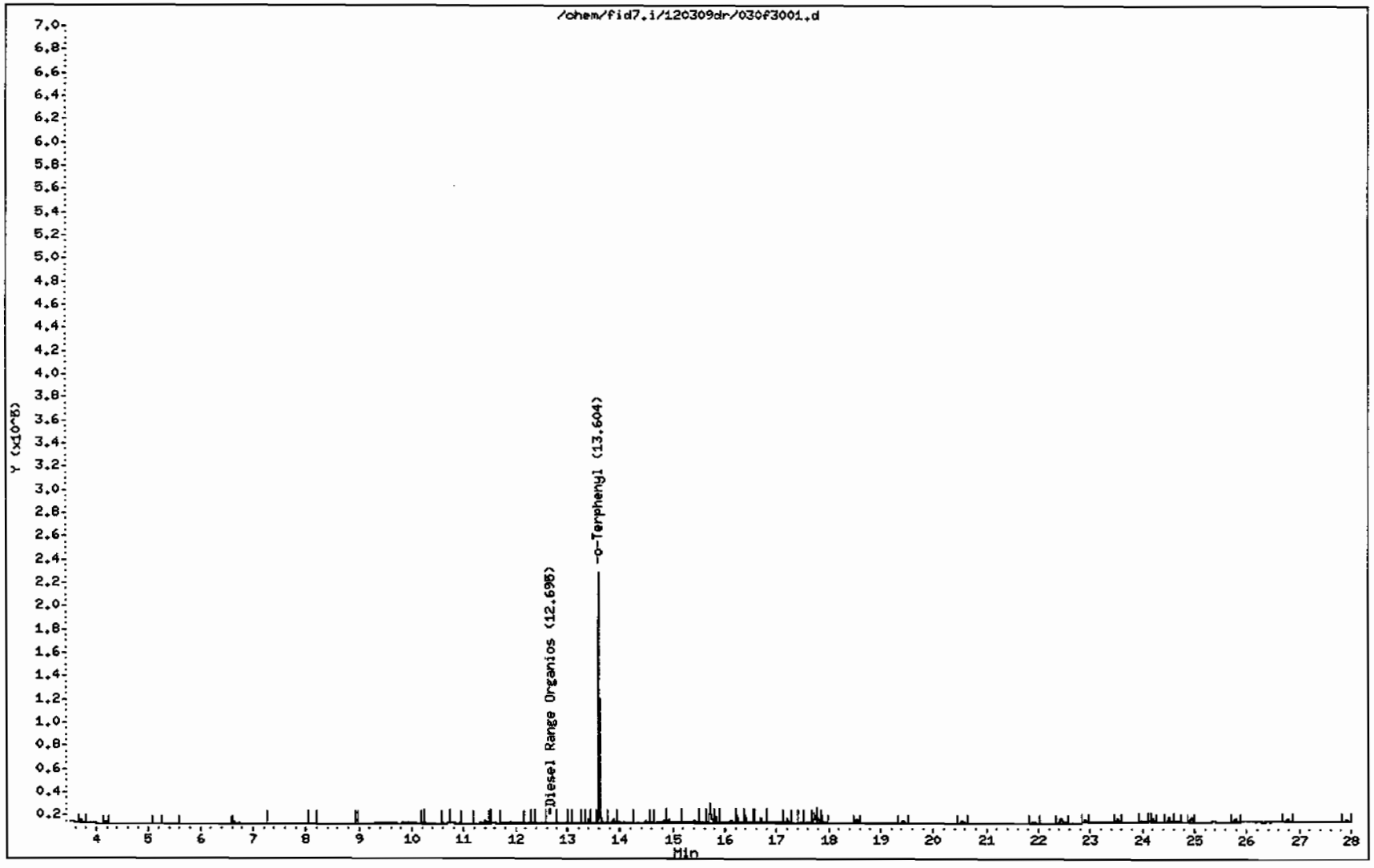

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819019	**Date Received:**	11/25/2009 09:10	**%Moisture:**	11.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14112	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 09:17	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	031f3101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	7.50	mg/kg	2.44	7.50

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/031f3101.d
Lab Smp Id: 241819019 Client Smp ID: RE03-09-14112
Inj Date : 04-DEC-2009 09:17
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819019|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	11.14350	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.604	13.611	-0.007	221526	8.82385	0.33

Data File: /chem/fid7.i/120309dr/031f3101.d
Date : 04-DEC-2009 09:17
Client ID: RE03-09-14112
Sample Info: |241819019|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

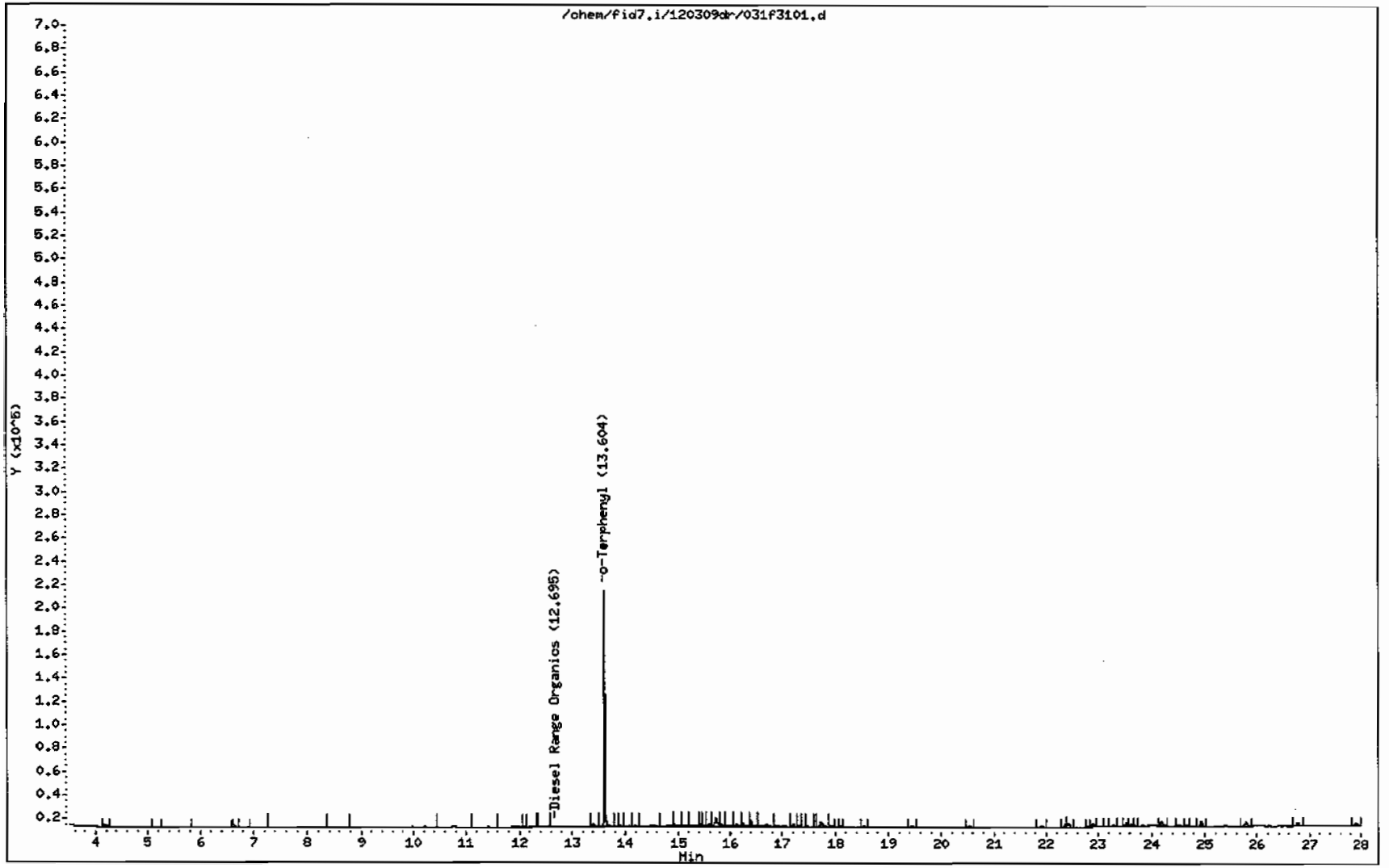

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819020	**Date Received:**	11/25/2009 09:10	**%Moisture:**	2.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14128	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/04/2009 09:54	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30.07 g	**Final Volume:**	1 mL
Data File:	032f3201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.84	mg/kg	2.22	6.84

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/032f3201.d
Lab Smp Id: 241819020 Client Smp ID: RE03-09-14128
Inj Date : 04-DEC-2009 09:54
Operator : KXR2 Inst ID: fid7.i
Smp Info : |241819020|1|
Misc Info : |FIDDRO_S|928271|FIDF|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weigth of sample extracted (g)
M	2.78570	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.604	13.611	-0.007	258848	10.3105	0.35

Data File: /chem/fid7.i/120309dr/032f3201.d
Date : 04-DEC-2009 09:54
Client ID: RE03-09-14128
Sample Info: |241819020|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

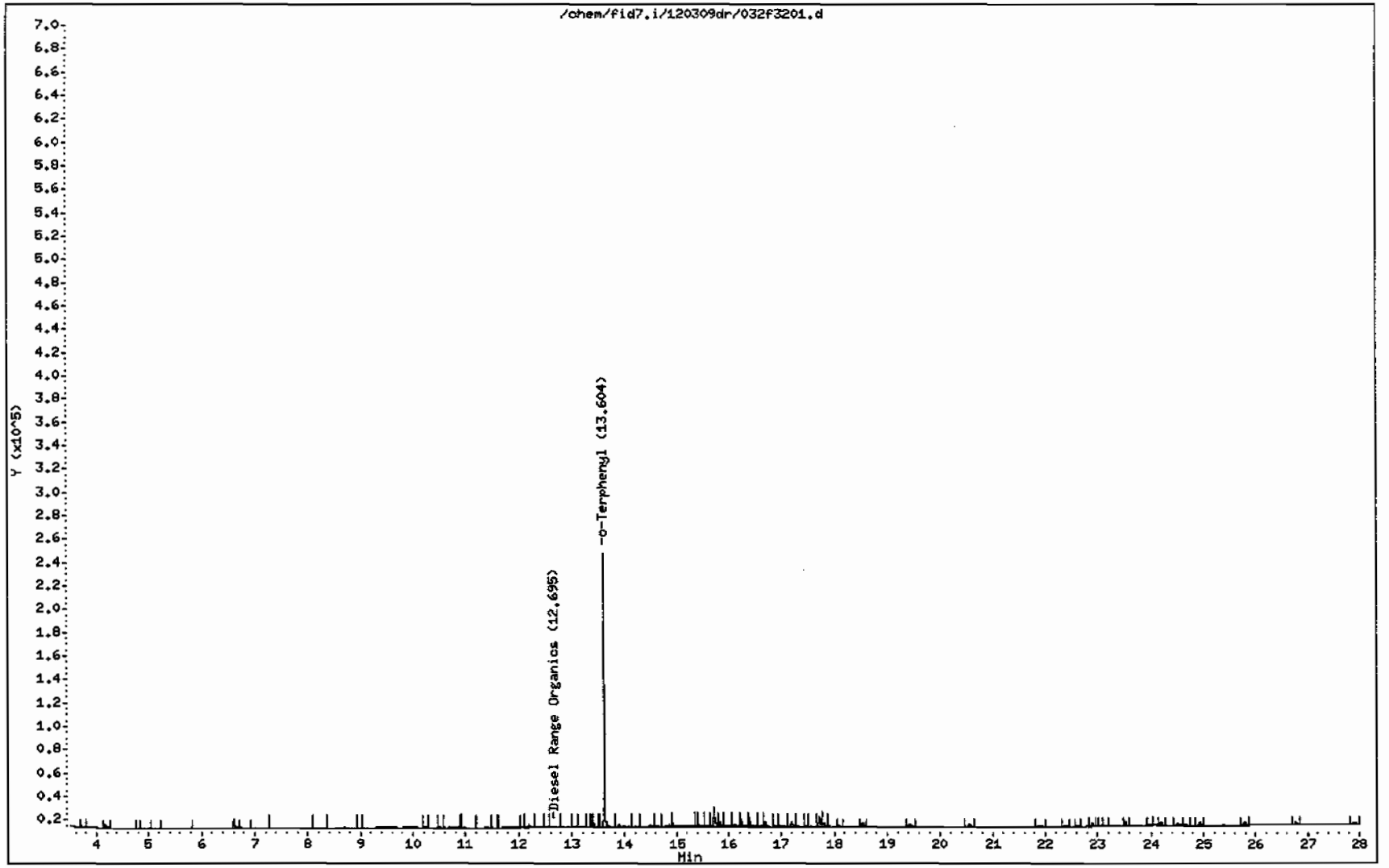

STANDARDS DATA

Report Date: 04-Dec-2009 14:24

Calibration History

Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Start Cal Date: 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
18-NOV-2009 21:40	dro	/chem/fid7.i/111809dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
18-NOV-2009 22:17	dro	/chem/fid7.i/111809dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
18-NOV-2009 22:54	dro	/chem/fid7.i/111809dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
18-NOV-2009 23:31	dro	/chem/fid7.i/111809dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
19-NOV-2009 00:07	dro	/chem/fid7.i/111809dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
04-DEC-2009 10:30	dro	/chem/fid7.i/120309dr/033f3301.d
Ccal Level: 5 , Ccal Amount: 1000		
04-DEC-2009 04:24	dro	/chem/fid7.i/120309dr/023f2301.d
Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 22:15	dro	/chem/fid7.i/120309dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 16:05	dro	/chem/fid7.i/120309dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 13:44 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	100.000000
Initial:End Threshold	50.000000
Initial:Area Threshold	100.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	11.000000
Initial:Negative Peaks	OFF
Initial:Tension	7.000000
5.000:Force Cluster ON	n/a
17.000:Force Cluster OFF	n/a
17.371:Tension	1.000000

	Compound	RT	RT Window	RF
	3 Decane (C10)	7.523	7.493-7.553	
S	1 Diesel Range Organics	12.695	7.501-17.890	1.417e+04
$	2 o-Terphenyl	13.611	13.581-13.641	2.511e+04
	4 Octacosane (C28)	17.852	17.822-17.882	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

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INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-2009 21:40
End Cal Date : 19-NOV-2009 00:07
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Cal Date : 04-Dec-2009 13:44 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid7.i/111809dr/003f0301.d
Level 4: /chem/fid7.i/111809dr/004f0401.d
Level 5: /chem/fid7.i/111809dr/005f0501.d
Level 6: /chem/fid7.i/111809dr/006f0601.d
Level 7: /chem/fid7.i/111809dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	14564	14133	13971	14374	13824	14173	2.108
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	26761	28259	25829	22405	22273	25105	10.638

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: FID7 Calibration Date: 12/03/09 Time: 1605

Lab File ID: 003F0301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	13136.640	0.01	-7.3	15.0
o-Terphenyl	25105.366	23550.838	0.01	-6.2	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: FID7 Calibration Date: 12/03/09 Time: 2215

Lab File ID: 013F1301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14192.329	0.01	0.1	15.0
o-Terphenyl	25105.366	25399.818	0.01	1.2	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: FID7 Calibration Date: 12/04/09 Time: 0424

Lab File ID: 023F2301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14292.112	0.01	0.8	15.0
o-Terphenyl	25105.366	25435.790	0.01	1.3	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: FID7 Calibration Date: 12/04/09 Time: 1030

Lab File ID: 033F3301 Init. Calib. Date(s): 11/18/09 11/19/09

Init. Calib. Times: 2140 0007

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	14173.133	14004.417	0.01	-1.2	15.0
o-Terphenyl	25105.366	24755.686	0.01	-1.4	15.0

FORM VII SV

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/003f0301.d
Lab Smp Id: UFI091118-02 D1 Client Smp ID: DSTD01
Inj Date : 03-DEC-2009 16:05
Operator : KXR2 Inst ID: fid7.i
Smp Info : |UFI091118-02 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	7.501- 17.890			13136639	1000.00		927
$	2 o-Terphenyl						CAS #: 84-15-1
	13.611	13.611	0.000	588770	25.0000		23.4

Data File: /chem/fid7.i/120309dr/003f0301.d
Date : 03-DEC-2009 16:05
Client ID: DSTD01
Sample Info: IUF1091118-02 D1

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

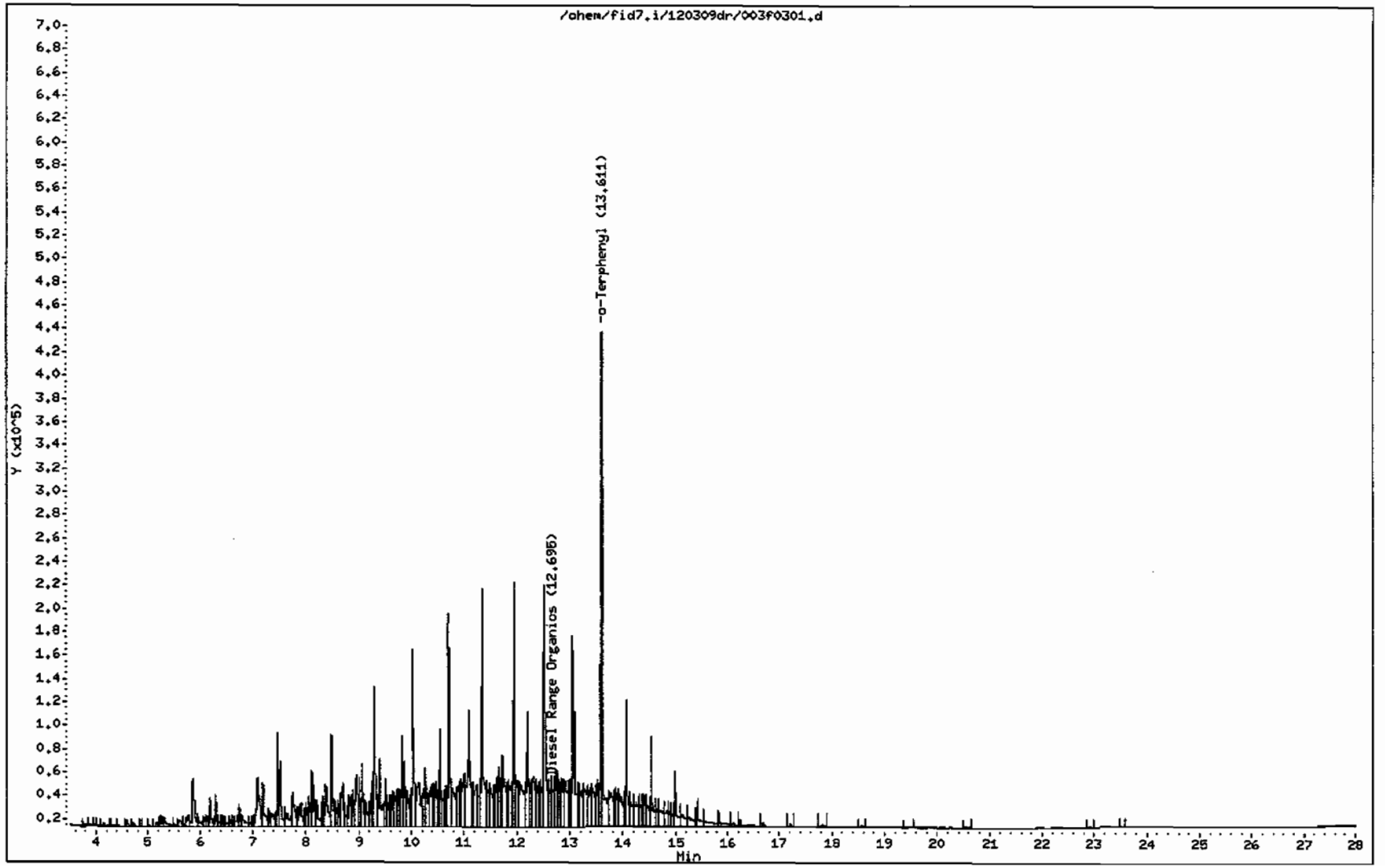

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/013f1301.d
Lab Smp Id: UFI091118-02 D2 Client Smp ID: DSTD02
Inj Date : 03-DEC-2009 22:15
Operator : KXR2 Inst ID: fid7.i
Smp Info : |UFI091118-02 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			14192329	1000.00	1000
$	2 o-Terphenyl					CAS #: 84-15-1
	13.610	13.611	-0.001	634995	25.0000	25.3

Data File: /chem/fid7.i/120309dr/013f1301.d

Date : 03-DEC-2009 22:15

Client ID: DSTD02

Sample Info: IUFI091118-02 D2

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

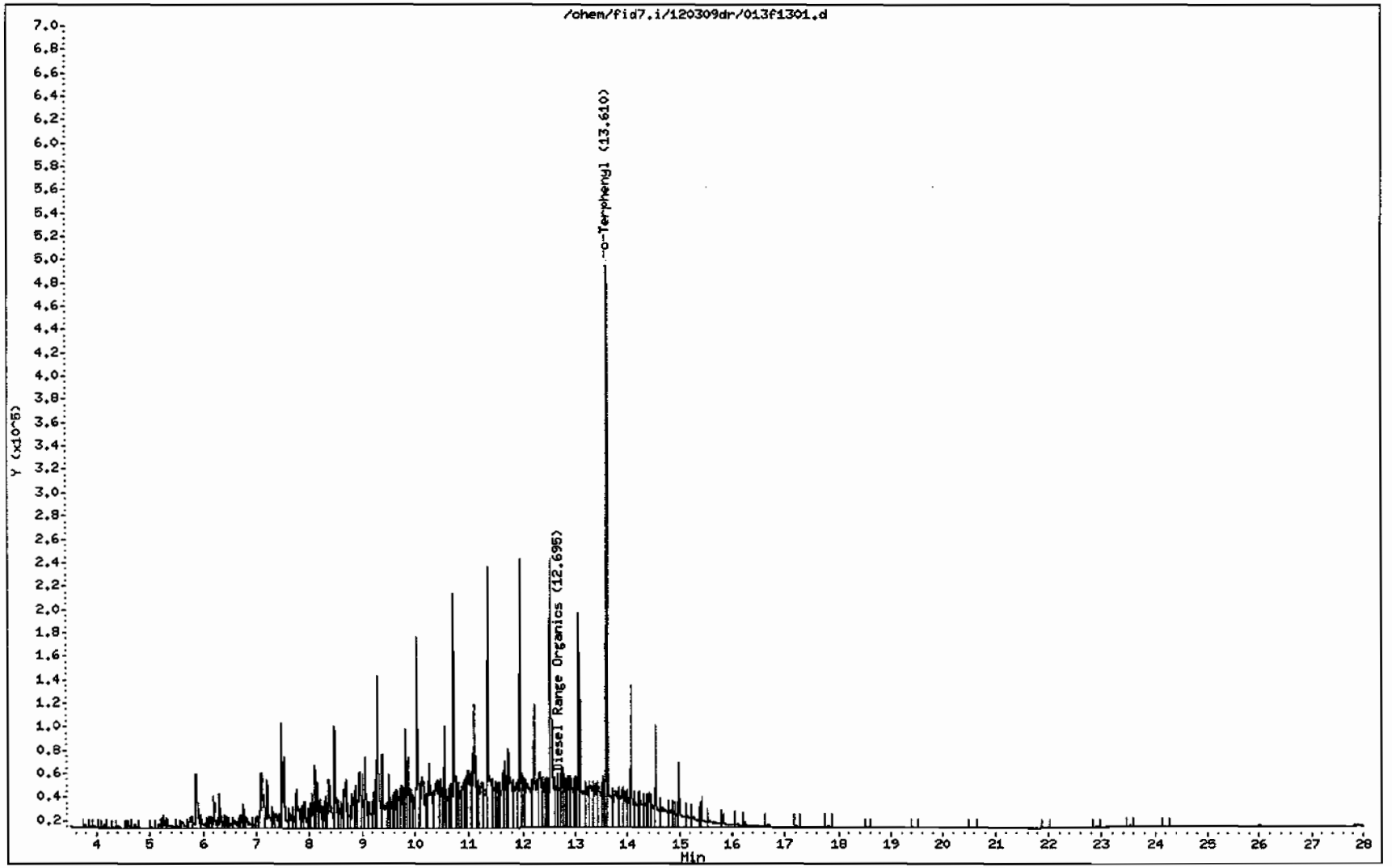

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/023f2301.d
Lab Smp Id: UFI091118-02 D3 Client Smp ID: DSTD03
Inj Date : 04-DEC-2009 04:24
Operator : KXR2 Inst ID: fid7.i
Smp Info : |UFI091118-02 D3
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501	17.890		14292111	1000.00	1010
$	2 o-Terphenyl					CAS #: 84-15-1
	13.610	13.611	-0.001	635894	25.0000	25.3

Data File: /ohem/fid7.i/120309dr/023f2301.d
Date : 04-DEC-2009 04:24
Client ID: DSTD03
Sample Info: IUFI091118-02 D3

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

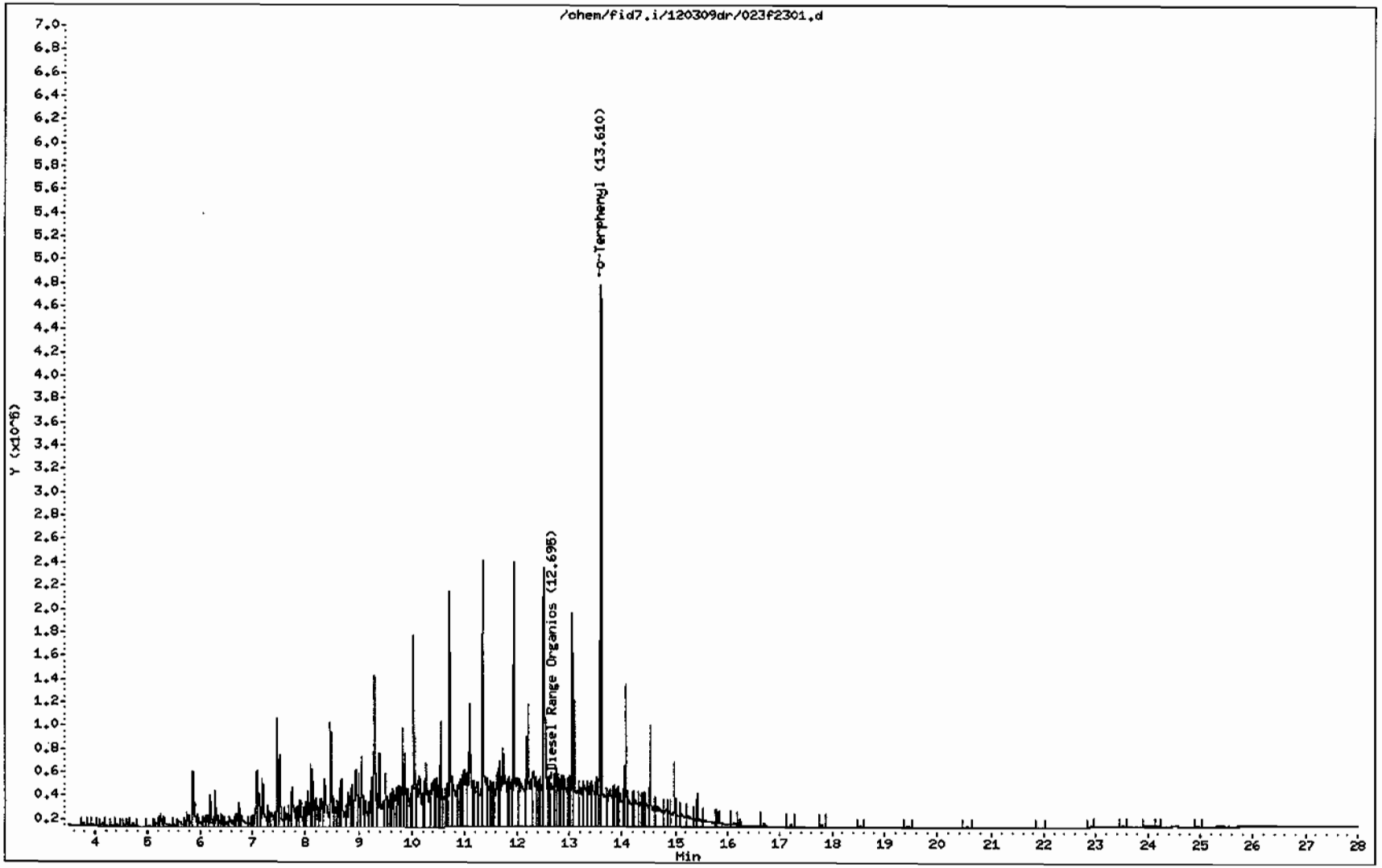

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DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/033f3301.d
Lab Smp Id: UFI091118-02 D4 Client Smp ID: DSTD04
Inj Date : 04-DEC-2009 10:30
Operator : KXR2 Inst ID: fid7.i
Smp Info : |UFI091118-02 D4
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			14004416	1000.00	988
$	2 o-Terphenyl					CAS #: 84-15-1
	13.609	13.611	-0.002	618892	25.0000	24.6

Data File: /chem/fid7.i/120309dr/033f3301.d

Date : 04-DEC-2009 10:30

Client ID: DSTD04

Sample Info: IUFI091118-02 D4

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

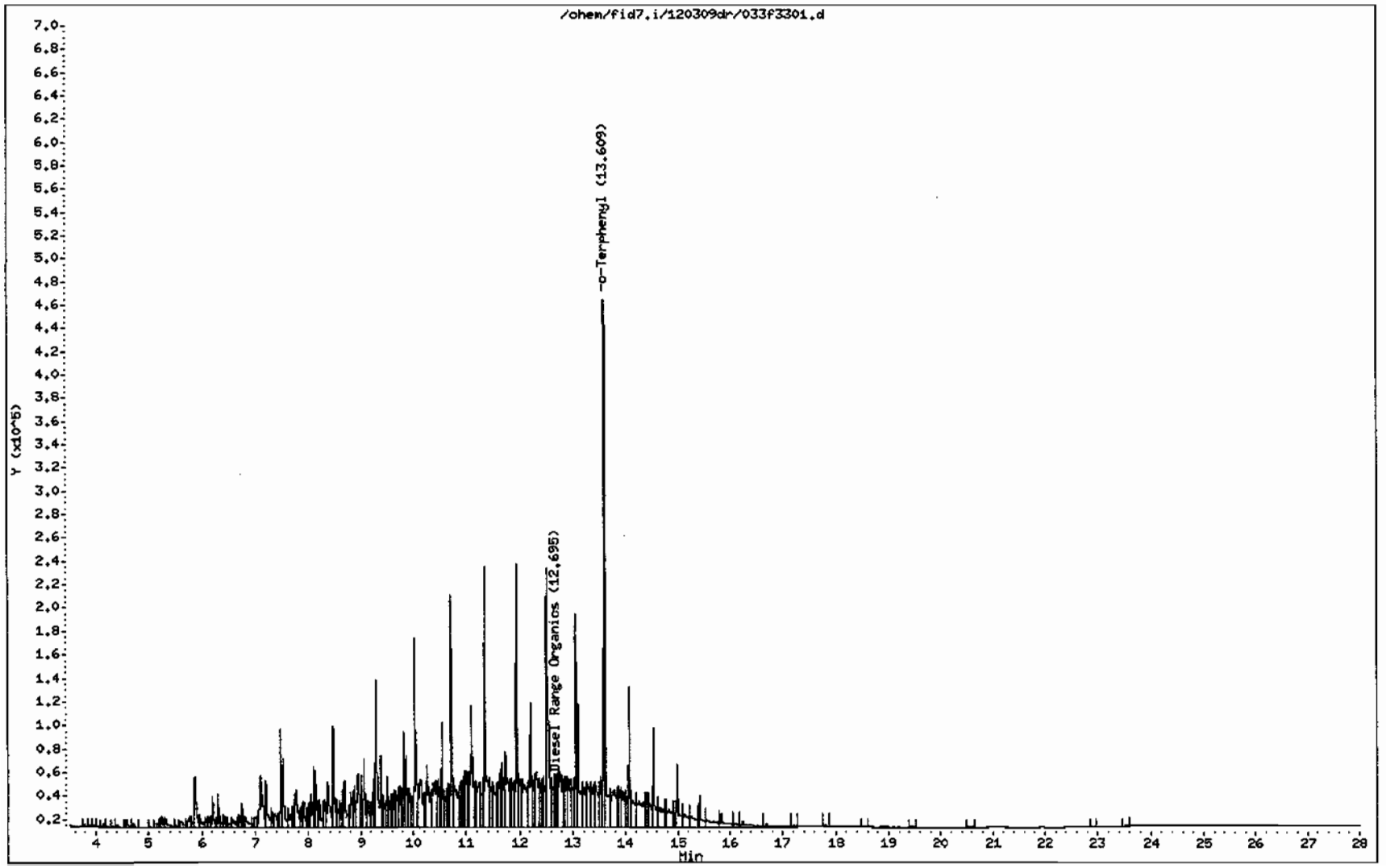

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/18/09	2026	13.61	
02	RTMARKER	UFI091013-03	11/18/09	2103		
03	CSTD01	UFI090827-10	11/18/09	2140	13.61	
04	CSTD02	UFI090827-11	11/18/09	2217	13.61	
05	CSTD03	UFI090827-12	11/18/09	2254	13.62	
06	CSTD04	UFI090827-13	11/18/09	2331	13.63	
07	CSTD05	UFI090827-14	11/19/09	0007	13.64	
08	DSTD01	WFI090928-01	11/19/09	0044	13.62	
09	DIBLK02	WFI090723-06	11/19/09	0121	13.61	
10	ZZZZZ	ZZZZZ	11/19/09	0158	13.61	
11	ZZZZZ	ZZZZZ	11/19/09	0236	13.61	
12	ZZZZZ	ZZZZZ	11/19/09	0313	13.61	
13	ZZZZZ	ZZZZZ	11/19/09	0350	13.61	
14	ZZZZZ	ZZZZZ	11/19/09	0427	13.62	
15	ZZZZZ	ZZZZZ	11/19/09	0504	13.62	
16	ZZZZZ	ZZZZZ	11/19/09	0541	13.61	
17	ZZZZZ	ZZZZZ	11/19/09	0618	13.61	
18	ZZZZZ	ZZZZZ	11/19/09	0655	13.62	
19	ZZZZZ	ZZZZZ	11/19/09	0731	13.62	
20	ZZZZZ	ZZZZZ	11/19/09	0809	13.62	
21	DSTD02	UFI090911-02	11/19/09	0846	13.62	
22	DIBLK03	WFI090723-06	11/19/09	0923	13.62	
23	ZZZZZ	ZZZZZ	11/19/09	1000	13.58*	
24	ZZZZZ	ZZZZZ	11/19/09	1037	13.62	
25	ZZZZZ	ZZZZZ	11/19/09	1114	13.61	
26	ZZZZZ	ZZZZZ	11/19/09	1150	13.61	
27	ZZZZZ	ZZZZZ	11/19/09	1227	13.61	
28	ZZZZZ	ZZZZZ	11/19/09	1304	13.61	
29	ZZZZZ	ZZZZZ	11/19/09	1341	13.61	
30	ZZZZZ	ZZZZZ	11/19/09	1418	13.62	
31	ZZZZZ	ZZZZZ	11/19/09	1455	13.62	
32	ZZZZZ	ZZZZZ	11/19/09	1531	13.62	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	12/03/09	1452	13.61	
02	RTMARKER	UFI091013-03	12/03/09	1528		
03	DSTD01	UFI091118-02	12/03/09	1605	13.61	
04	DIBLK02	WFI091130-06	12/03/09	1642	13.61	
05	DBLK01	1201984915	12/03/09	1719	13.61	
06	DBLK01LCS	1201984916	12/03/09	1756	13.61	
07	RE03-09-14115	241819001	12/03/09	1833	13.61	
08	RE03-09-14113	241819002	12/03/09	1910	13.61	
09	RE03-09-14125	241819003	12/03/09	1947	13.61	
10	RE03-09-14125MS	1201984917	12/03/09	2024	13.61	
11	RE03-09-14125MSD	1201984918	12/03/09	2101	13.61	
12	RE03-09-14123	241819004	12/03/09	2138	13.61	
13	DSTD02	UFI091118-02	12/03/09	2215	13.61	
14	DIBLK03	WFI091130-06	12/03/09	2251	13.61	
15	RE03-09-14114	241819005	12/03/09	2328	13.60	
16	RE03-09-14126	241819006	12/04/09	0006	13.61	
17	RE03-09-14117	241819007	12/04/09	0042	13.61	
18	RE03-09-14121	241819008	12/04/09	0119	13.61	
19	RE03-09-14129	241819009	12/04/09	0156	13.60	
20	RE03-09-14120	241819010	12/04/09	0233	13.60	
21	RE03-09-14116	241819011	12/04/09	0310	13.61	
22	RE03-09-14111	241819012	12/04/09	0347	13.61	
23	DSTD03	UFI091118-02	12/04/09	0424	13.61	
24	DIBLK04	WFI091130-06	12/04/09	0500	13.61	
25	RE03-09-14119	241819013	12/04/09	0537	13.60	
26	RE03-09-14110	241819014	12/04/09	0614	13.60	
27	RE03-09-14127	241819015	12/04/09	0650	13.61	
28	RE03-09-14118	241819016	12/04/09	0727	13.60	
29	RE03-09-14122	241819017	12/04/09	0804	13.60	
30	RE03-09-14124	241819018	12/04/09	0840	13.60	
31	RE03-09-14112	241819019	12/04/09	0917	13.60	
32	RE03-09-14128	241819020	12/04/09	0954	13.60	

S1 = o-Terphenyl

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/19/09

Instrument ID: FID7

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 13.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DSTD04	UFI091118-02	12/04/09	1030	13.61	
02	DIBLK05	WFI091130-06	12/04/09	1107	13.61	
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666			**Matrix:**	SOIL
Lab Sample ID:	1201984915				
Client Sample:	QC for batch 928270	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 928270	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/03/2009 17:19	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	005f0501.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/005f0501.d
Lab Smp Id: 1201984915 Client Smp ID: DBLK01
Inj Date : 03-DEC-2009 17:19
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201984915|1|
Misc Info : |FIDDRO_S|928271|FIDF|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
13.607	13.611	-0.004	267866	10.6697	0.36

Data File: /chem/fid7.i/120309dr/005f0501.d
Date : 03-DEC-2009 17:19
Client ID: DBLK01
Sample Info: |120198491511|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2
Column diameter: 0.25

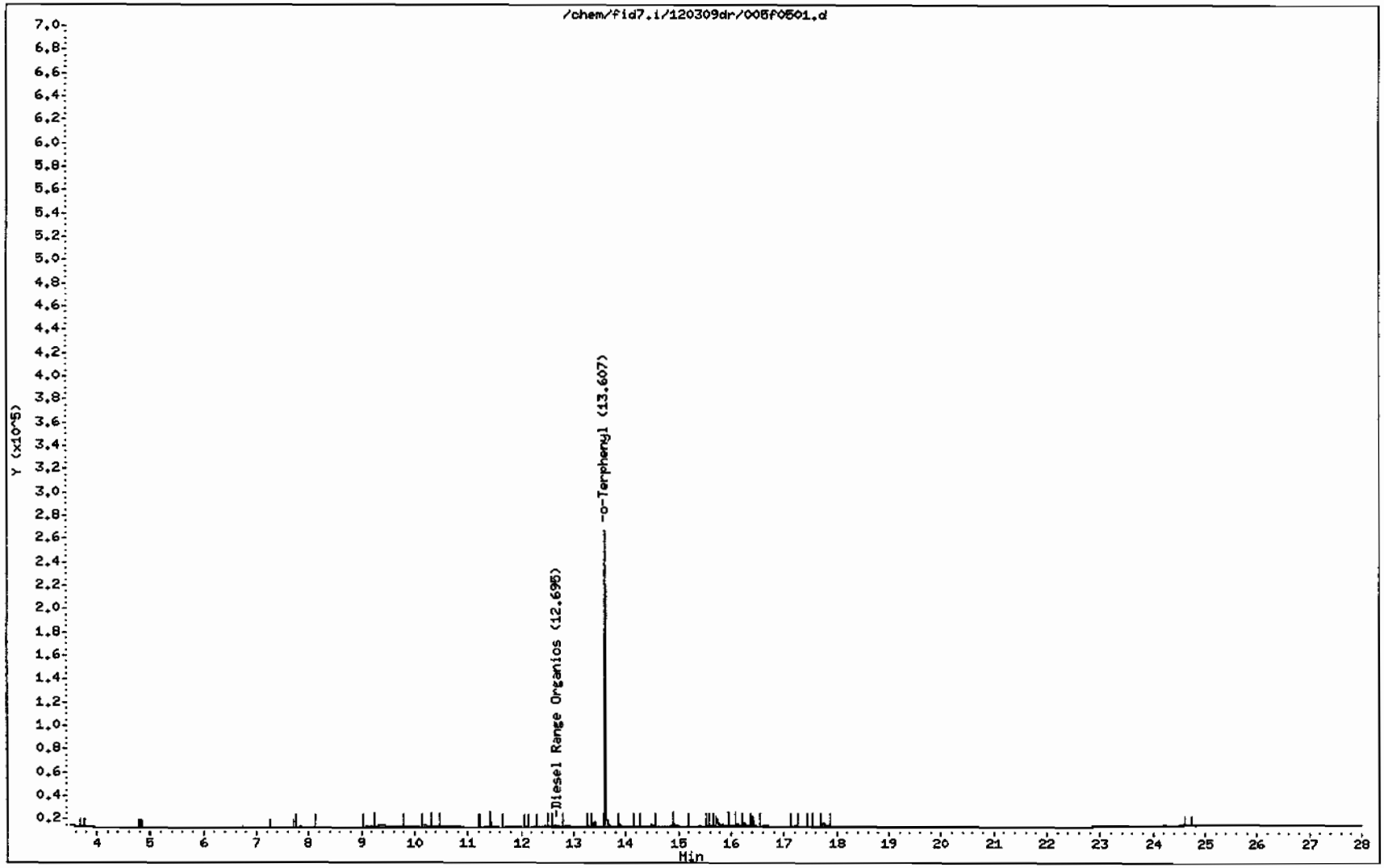

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666			**Matrix:**	SOIL
Lab Sample ID:	1201984916				
Client Sample:	QC for batch 928270	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 928270	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	928271	**Inst:**	FID7.I	**Dilution:**	1
Run Date:	12/03/2009 17:56	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/02/2009 20:45	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	006f0601.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		25.6	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/006f0601.d
Lab Smp Id: 1201984916 Client Smp ID: DBLK01LCS
Inj Date : 03-DEC-2009 17:56
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201984916|1|
Misc Info : |FIDDRO_S|928271|FIDF|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
7.501- 17.890			10864326	766.544	25.6
$ 2 o-Terphenyl					CAS #: 84-15-1
13.608	13.611	-0.003	437762	17.4370	0.58

Data File: /chem/fid7.i/120309dr/006f0601.d
Date : 03-DEC-2009 17:56
Client ID: DBLK01LCS
Sample Info: |120198491611|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid7.i
Operator: KXR2
Column diameter: 0.25

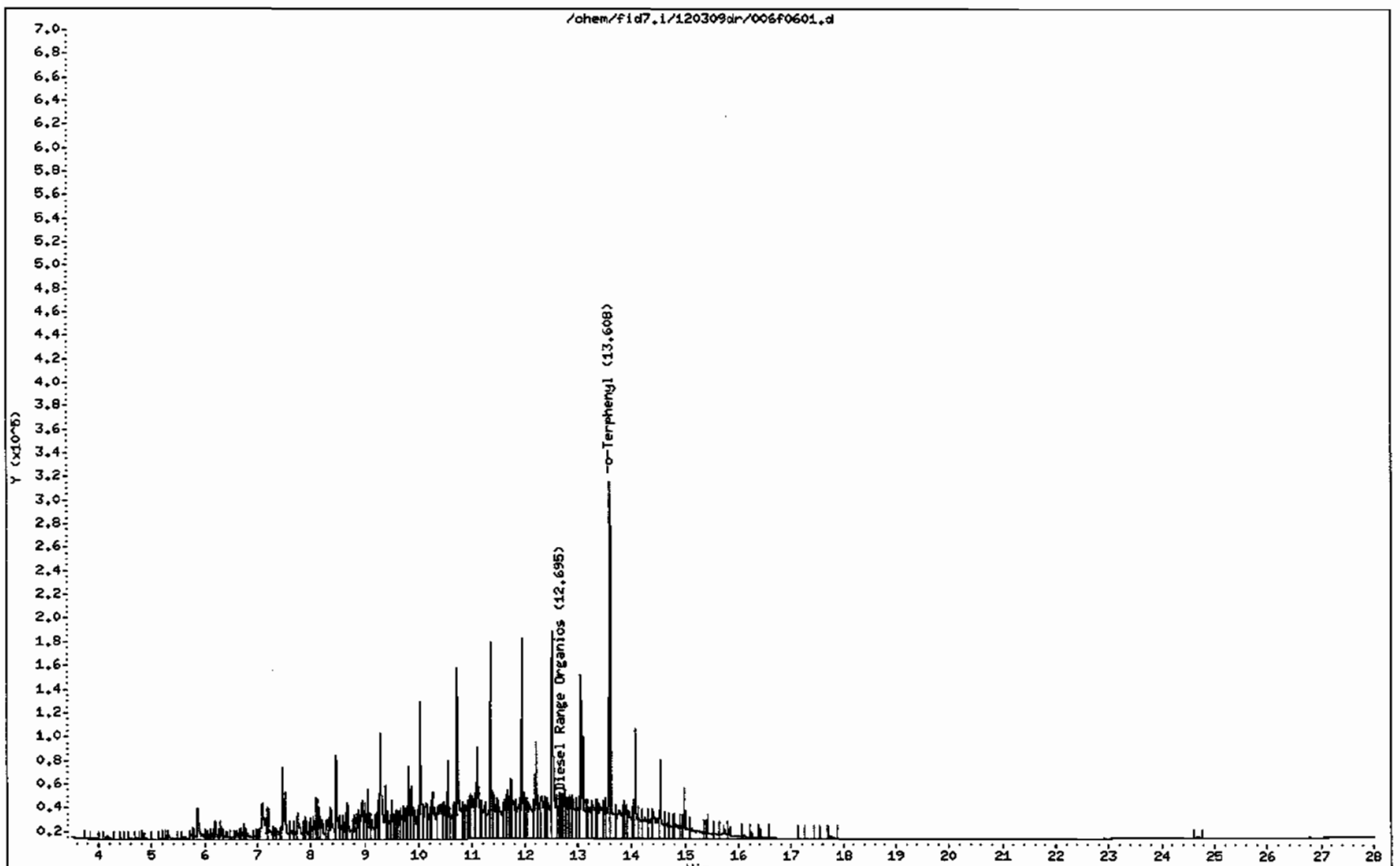

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	1201984917	Date Received:	11/25/2009 09:10	%Moisture:	4.1
Client Sample:	QC for batch 928270	Client:	LANL010	Project:	QC
Client ID:	RE03-09-14125MS	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 20:24	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		23.5	mg/kg	2.25	6.91

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/010f1001.d
Lab Smp Id: 1201984917 Client Smp ID: RE03-09-14125MS
Inj Date : 03-DEC-2009 20:24
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201984917|1|
Misc Info : |FIDDRO_S|928271|FIDF|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	4.09250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
7.501- 17.890			9626217	679.188	23.5
$ 2 o-Terphenyl					CAS #: 84-15-1
13.607	13.611	-0.004	364288	14.5104	0.50

Data File: /chem/fid7.i/120309dr/010f1001.d

Date : 03-DEC-2009 20:24

Client ID: RE03-09-14125MS

Sample Info: |120198491711|

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

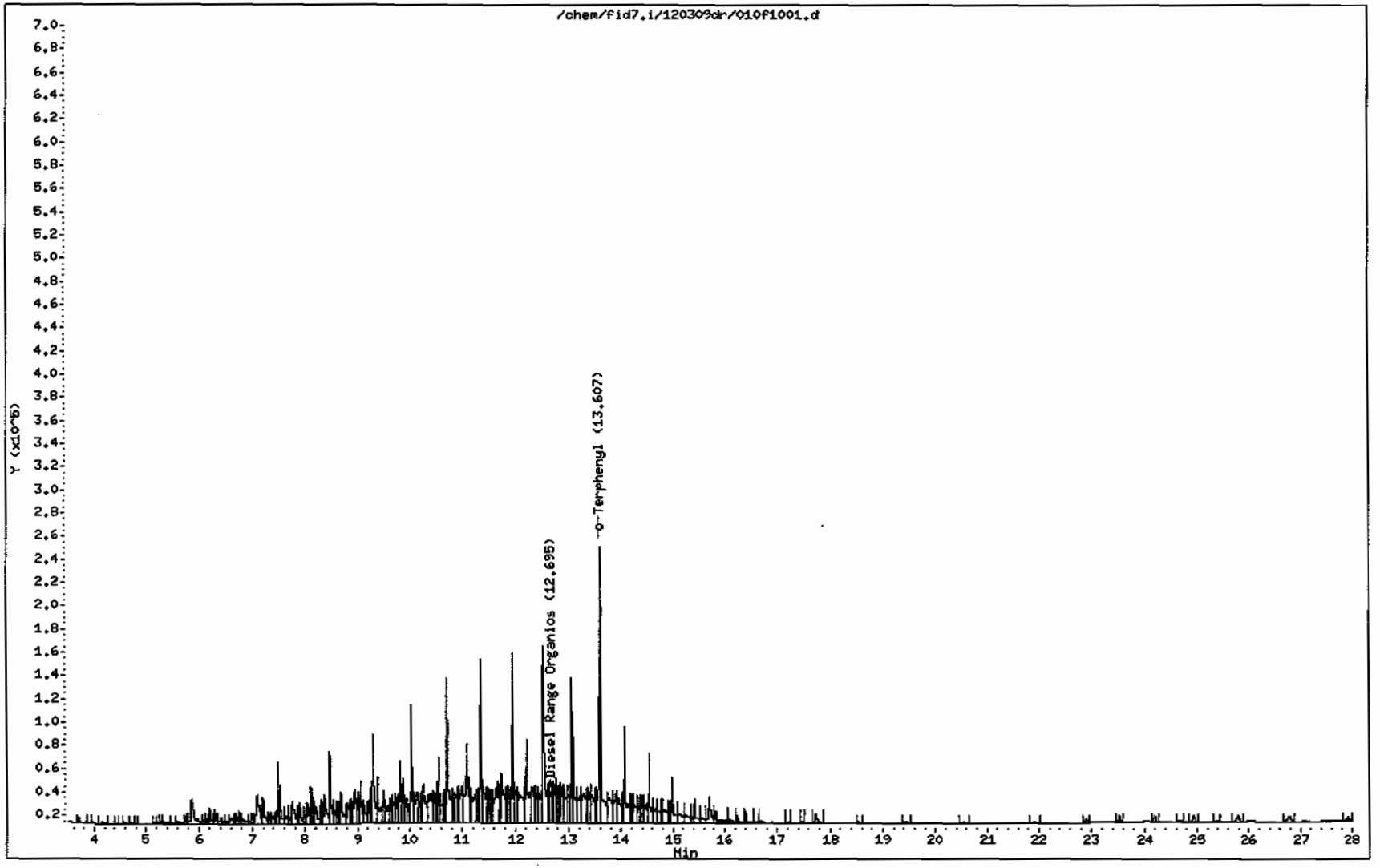

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–666	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	1201984918	Date Received:	11/25/2009 09:10	%Moisture:	4.1
Client Sample:	QC for batch 928270	Client:	LANL010	Project:	QC
Client ID:	RE03–09–14125MSD	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	928271	Inst:	FID7.I	Dilution:	1
Run Date:	12/03/2009 21:01	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/02/2009 20:45	Aliquot:	30.13 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		25.6	mg/kg	2.25	6.92

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid7.i/120309dr/011f1101.d
Lab Smp Id: 1201984918 Client Smp ID: RE03-09-14125MSD
Inj Date : 03-DEC-2009 21:01
Operator : KXR2 Inst ID: fid7.i
Smp Info : |1201984918|1|
Misc Info : |FIDDRO_S|928271|FIDF|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid7.i/120309dr/FID7a.i_b_DRO_111809.m
Meth Date : 04-Dec-2009 13:44 kev01577 Quant Type: ESTD
Cal Date : 19-NOV-2009 00:07 Cal File: 007f0701.d
Als bottle: 11 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weigth of sample extracted (g)
M	4.09250	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S	1 Diesel Range Organics					CAS #:
	7.501- 17.890			10468128	738.590	25.6
$	2 o-Terphenyl					CAS #: 84-15-1
	13.607	13.611	-0.004	416263	16.5806	0.57

Data File: /chem/fid7.i/120309dr/011f1101.d

Date : 03-DEC-2009 21:01

Client ID: RE03-09-14125MSD

Sample Info: !1201984918|1!

Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: fid7.i

Operator: KXR2

Column diameter: 0.25

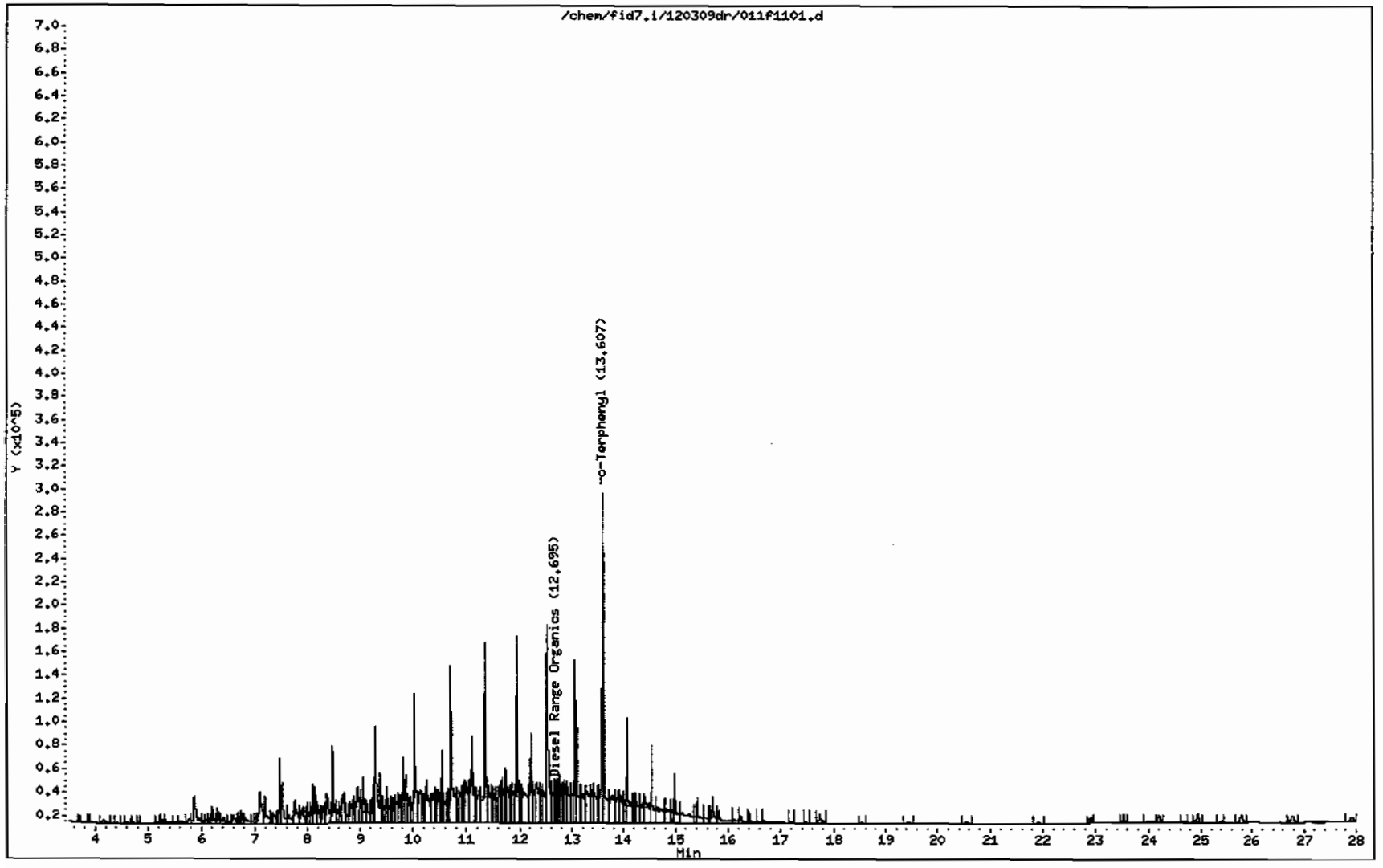

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.i

DATE: 11/20/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111809DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	18-NOV-2009 20:26		SDGa07719	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	18-NOV-2009 21:03		SDGa00208	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	18-NOV-2009 21:40		SDGa07719	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	18-NOV-2009 22:17		SDGa07719	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	18-NOV-2009 22:54		SDGa07719	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	18-NOV-2009 23:31		SDGa07719	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	19-NOV-2009 00:07		SDGa07719	1.0		CAL. LEVEL 5
008f0801.d	WFI090928-01 D1	KXR2	19-NOV-2009 00:44		SDGa07719	1.0		PASSES, SECOND VENDOR ICV
009f0901.d	WFI090723-06 B2	KXR2	19-NOV-2009 01:21		SDGa07719	1.0		CLEAN
010f1001.d	1201974631	KXR2	19-NOV-2009 01:58	923777	10-435	1.0	MB	USE
011f1101.d	1201974632	KXR2	19-NOV-2009 02:36	923777	10-435	1.0	LCS	USE
012f1201.d	240828001	KXR2	19-NOV-2009 03:13	923777	10-435	1.0	LANL	USE
013f1301.d	240828002	KXR2	19-NOV-2009 03:50	923777	10-435	1.0	LANL	USE
014f1401.d	240828003	KXR2	19-NOV-2009 04:27	923777	10-435	1.0	LANL	USE
015f1501.d	240828004	KXR2	19-NOV-2009 05:04	923777	10-435	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	240828005	KXR2	19-NOV-2009 05:41	923777	10-435	1.0	LANL	USE

017f1701.d	240828006	KXR2	19-NOV-2009 06:18	923777	10-435	1.0	LANL	USE
018f1801.d	240828007	KXR2	19-NOV-2009 06:55	923777	10-435	1.0	LANL	USE
019f1901.d	240828008	KXR2	19-NOV-2009 07:31	923777	10-435	1.0	LANL	USE,OVERRANGE RERUN @10X SEE FILE 35
020f2001.d	240828009	KXR2	19-NOV-2009 08:09	923777	10-435	1.0	LANL	USE,SEE FILE 36
021f2101.d	UFI090911-02 D2	KXR2	19-NOV-2009 08:46		SDGa07719	1.0		PASSES
022f2201.d	WFI090723-06 B3	KXR2	19-NOV-2009 09:23		SDGa07719	1.0		CLEAN
023f2301.d	240828010	KXR2	19-NOV-2009 10:00	923777	10-435	20.0	LANL	USE
024f2401.d	240828011	KXR2	19-NOV-2009 10:37	923777	10-435	1.0	LANL	USE
025f2501.d	240865001	KXR2	19-NOV-2009 11:14	923777	10-444	1.0	LANL	USE
026f2601.d	240865002	KXR2	19-NOV-2009 11:50	923777	10-444	1.0	LANL	USE
027f2701.d	240865003	KXR2	19-NOV-2009 12:27	923777	10-444	1.0	LANL	USE
028f2801.d	240866001	KXR2	19-NOV-2009 13:04	923777	10-445	1.0	LANL	USE
029f2901.d	240866002	KXR2	19-NOV-2009 13:41	923777	10-445	1.0	LANL	USE
030f3001.d	241038002	KXR2	19-NOV-2009 14:18	923777	10-462	1.0	LANL	USE
031f3101.d	1201974633	KXR2	19-NOV-2009 14:55	923777	10-462	1.0	MS	USE
032f3201.d	1201974634	KXR2	19-NOV-2009 15:31	923777	10-462	1.0	MSD	USE
033f3301.d	UFI090911-02 D3	KXR2	19-NOV-2009 16:08		SDGa07719	1.0		PASSES
034f3401.d	WFI090723-06 B4	KXR2	19-NOV-2009 16:44		SDGa07719	1.0		CLEAN
035f3501.d	240828008	KXR2	19-NOV-2009 17:21	923777	10-435	10.0	LANL	USE

Instrument Batch: /chem/fid7.i/111809dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	240828009	KXR2	19-NOV-2009 17:59	923777	10-435	1.0	LANL	USE
037f3701.d	UFI091118-01 D4	KXR2	19-NOV-2009 18:36		SDGa07719	1.0		PASSES
038f3801.d	WFI090723-06 B5	KXR2	19-NOV-2009 19:13		SDGa07719	1.0		CLEAN
039f3901.d	1201975287	KXR2	19-NOV-2009 19:49	924008	241212	1.0	MB	USE
040f4001.d	1201975288	KXR2	19-NOV-2009 20:27	924008	241212	1.0	LCS	USE
041f4101.d	1201975292	KXR2	19-NOV-2009 21:04	924008	241212	1.0	LCSD	USE

042f4201.d	241212001	KXR2	19-NOV-2009 21:40	924008	241212		1.0	CONT	USE
043f4301.d	UFI091118-01 D5	KXR2	19-NOV-2009 22:18		SDGa07719		1.0		PASSES
044f4401.d	WFI090723-06 B6	KXR2	19-NOV-2009 22:54		SDGa07719		1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID7.1

DATE: 12/04/2009 METHOD: FID7a.i_b_DRO_111809.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 16 on pg. 16 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-5MS 30m x 0.25mm x 0.25um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:120309DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	03-DEC-2009 14:52		SDGa23193	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	03-DEC-2009 15:28		SDGa23193	1.0		RTMARKER
003f0301.d	UFI091118-02 D1	KXR2	03-DEC-2009 16:05		SDGa23193	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	03-DEC-2009 16:42		SDGa23193	1.0		CLEAN
005f0501.d	1201984915	KXR2	03-DEC-2009 17:19	928271	10-666	1.0	MB	USE
006f0601.d	1201984916	KXR2	03-DEC-2009 17:56	928271	10-666	1.0	LCS	USE
007f0701.d	241819001	KXR2	03-DEC-2009 18:33	928271	10-666	1.0	LANL	USE
008f0801.d	241819002	KXR2	03-DEC-2009 19:10	928271	10-666	1.0	LANL	USE
009f0901.d	241819003	KXR2	03-DEC-2009 19:47	928271	10-666	1.0	LANL	USE
010f1001.d	1201984917	KXR2	03-DEC-2009 20:24	928271	10-666	1.0	MS	USE
011f1101.d	1201984918	KXR2	03-DEC-2009 21:01	928271	10-666	1.0	MSD	USE
012f1201.d	241819004	KXR2	03-DEC-2009 21:38	928271	10-666	1.0	LANL	USE
013f1301.d	UFI091118-02 D2	KXR2	03-DEC-2009 22:15		SDGa23193	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	03-DEC-2009 22:51		SDGa23193	1.0		CLEAN
015f1501.d	241819005	KXR2	03-DEC-2009 23:28	928271	10-666	1.0	LANL	USE

Instrument Batch: /chem/fid7.i/120309dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241819006	KXR2	04-DEC-2009 00:06	928271	10-666	1.0	LANL	USE

017f1701.d	241819007	KXR2	04-DEC-2009 00:42	928271	10-666		1.0	LANL	USE
018f1801.d	241819008	KXR2	04-DEC-2009 01:19	928271	10-666		1.0	LANL	USE
019f1901.d	241819009	KXR2	04-DEC-2009 01:56	928271	10-666		1.0	LANL	USE
020f2001.d	241819010	KXR2	04-DEC-2009 02:33	928271	10-666		1.0	LANL	USE
021f2101.d	241819011	KXR2	04-DEC-2009 03:10	928271	10-666		1.0	LANL	USE
022f2201.d	241819012	KXR2	04-DEC-2009 03:47	928271	10-666		1.0	LANL	USE
023f2301.d	UFI091118-02 D3	KXR2	04-DEC-2009 04:24		SDGa23193		1.0		PASSES
024f2401.d	WFI091130-06 B4	KXR2	04-DEC-2009 05:00		SDGa23193		1.0		CLEAN
025f2501.d	241819013	KXR2	04-DEC-2009 05:37	928271	10-666		1.0	LANL	USE
026f2601.d	241819014	KXR2	04-DEC-2009 06:14	928271	10-666		1.0	LANL	USE
027f2701.d	241819015	KXR2	04-DEC-2009 06:50	928271	10-666		1.0	LANL	USE
028f2801.d	241819016	KXR2	04-DEC-2009 07:27	928271	10-666		1.0	LANL	USE
029f2901.d	241819017	KXR2	04-DEC-2009 08:04	928271	10-666		1.0	LANL	USE
030f3001.d	241819018	KXR2	04-DEC-2009 08:40	928271	10-666		1.0	LANL	USE
031f3101.d	241819019	KXR2	04-DEC-2009 09:17	928271	10-666		1.0	LANL	USE
032f3201.d	241819020	KXR2	04-DEC-2009 09:54	928271	10-666		1.0	LANL	USE
033f3301.d	UFI091118-02 D4	KXR2	04-DEC-2009 10:30		SDGa23193		1.0		PASSES
034f3401.d	WFI091130-06 B5	KXR2	04-DEC-2009 11:07		SDGa23193		1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 928270 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984915 MB	02-DEC-2009 20:45:18	30	1	0.03333
1201984916 LCS	02-DEC-2009 20:45:18	30	1	0.03333
241819001	02-DEC-2009 20:45:18	30.19	1	0.03312
241819002	02-DEC-2009 20:45:18	30.13	1	0.03319
241819003	02-DEC-2009 20:45:18	30.04	1	0.03329
1201984917 MS (241819003)	02-DEC-2009 20:45:18	30.17	1	0.03315
1201984918 MSD (241819003)	02-DEC-2009 20:45:18	30.13	1	0.03319
241819004	02-DEC-2009 20:45:18	30.03	1	0.0333
241819005	02-DEC-2009 20:45:18	30.14	1	0.03318
241819006	02-DEC-2009 20:45:18	30.18	1	0.03313
241819007	02-DEC-2009 20:45:18	30.09	1	0.03323
241819008	02-DEC-2009 20:45:18	30.02	1	0.03331
241819009	02-DEC-2009 20:45:18	30.08	1	0.03324
241819010	02-DEC-2009 20:45:18	30.02	1	0.03331
241819011	02-DEC-2009 20:45:18	30.04	1	0.03329
241819012	02-DEC-2009 20:45:18	30.12	1	0.0332
241819013	02-DEC-2009 20:45:18	30.18	1	0.03313
241819014	02-DEC-2009 20:45:18	30.14	1	0.03318
241819015	02-DEC-2009 20:45:18	30.01	1	0.03332
241819016	02-DEC-2009 20:45:18	30.04	1	0.03329
241819017	02-DEC-2009 20:45:18	30.07	1	0.03326
241819018	02-DEC-2009 20:45:18	30.11	1	0.03321
241819019	02-DEC-2009 20:45:18	30.03	1	0.0333
241819020	02-DEC-2009 20:45:18	30.07	1	0.03326

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984916	TPH DRO LCS	UE091030-08	1	mL
MS	1201984917	TPH DRO LCS	UE091030-08	1	mL
MSD	1201984918	TPH DRO LCS	UE091030-08	1	mL
SURR	All	20 ppm surrogate	WE091121-04	1	mL
REGNT	All	Methylene Chloride	1236611-D	300	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-666

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927189
Prep Batch Number:	927188

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241819001	RE03-09-14115
241819002	RE03-09-14113
241819003	RE03-09-14125
241819004	RE03-09-14123
241819005	RE03-09-14114
241819006	RE03-09-14126
241819007	RE03-09-14117
241819008	RE03-09-14121
241819009	RE03-09-14129
241819010	RE03-09-14120
241819011	RE03-09-14116
241819012	RE03-09-14111
241819013	RE03-09-14119
241819014	RE03-09-14110
241819015	RE03-09-14127
241819016	RE03-09-14118
241819017	RE03-09-14122
241819018	RE03-09-14124

241819019	RE03-09-14112
241819020	RE03-09-14128
1201982309	Method Blank (MB)
1201982312	Laboratory Control Sample (LCS)
1201982310	241819016(RE03-09-14118) Matrix Spike (MS)
1201982311	241819016(RE03-09-14118) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241819016 (RE03-09-14118) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock Date: 12-21-2009

Roadmap for LANL 10-666 PCB

This roadmap was analyzed by yip00818 on 12-05-2009, 11:06.
This roadmap was reviewed by jos00786 on 12-07-2009, 13:56.
This roadmap was packaged by yml on 12-21-2009, 11:35.
This roadmap was validated by yml on 12-21-2009, 13:50.
This roadmap was validated by rob01090 on 12-21-2009, 14:01.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/065f6501.d	241819001	sample	04-DEC-2009	17:46	10-666.sub	RE03-09-14115	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/066f6601.d	241819002	sample	04-DEC-2009	17:58	10-666.sub	RE03-09-14113	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/067f6701.d	241819003	sample	04-DEC-2009	18:11	10-666.sub	RE03-09-14125	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/068f6801.d	241819004	sample	04-DEC-2009	18:24	10-666.sub	RE03-09-14123	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/069f6901.d	241819005	sample	04-DEC-2009	18:36	10-666.sub	RE03-09-14114	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/070f7001.d	241819006	sample	04-DEC-2009	18:49	10-666.sub	RE03-09-14126	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/071f7101.d	241819007	sample	04-DEC-2009	19:02	10-666.sub	RE03-09-14117	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/072f7201.d	241819008	sample	04-DEC-2009	19:14	10-666.sub	RE03-09-14121	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/075f7501.d	241819009	sample	04-DEC-2009	19:52	10-666.sub	RE03-09-14129	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/076f7601.d	241819010	sample	04-DEC-2009	20:05	10-666.sub	RE03-09-14120	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/077f7701.d	241819011	sample	04-DEC-2009	20:17	10-666.sub	RE03-09-14116	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/078f7801.d	241819012	sample	04-DEC-2009	20:30	10-666.sub	RE03-09-14111	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/079f7901.d	241819013	sample	04-DEC-2009	20:43	10-666.sub	RE03-09-14119	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/080f8001.d	241819014	sample	04-DEC-2009	20:55	10-666.sub	RE03-09-14110	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/081f8101.d	241819015	sample	04-DEC-2009	21:08	10-666.sub	RE03-09-14127	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/082f8201.d	241819016	sample	04-DEC-2009	21:20	10-666.sub	RE03-09-14118	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/087f8701.d	241819017	sample	04-DEC-2009	22:19	10-666.sub	RE03-09-14122	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/088f8801.d	241819018	sample	04-DEC-2009	22:32	10-666.sub	RE03-09-14124	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/089f8901.d	241819019	sample	04-DEC-2009	22:44	10-666.sub	RE03-09-14112	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/090f9001.d	241819020	sample	04-DEC-2009	22:57	10-666.sub	RE03-09-14128	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/065b6501.d	241819001	sample	04-DEC-2009	17:46	10-666.sub	RE03-09-14115	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER

☐	N	/chem/ecd1a.i/120409.b/066b6601.d	241819002	sample	04-DEC-2009	17:58	10-666.sub	RE03-09-14113	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/067b6701.d	241819003	sample	04-DEC-2009	18:11	10-666.sub	RE03-09-14125	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/068b6801.d	241819004	sample	04-DEC-2009	18:24	10-666.sub	RE03-09-14123	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/069b6901.d	241819005	sample	04-DEC-2009	18:36	10-666.sub	RE03-09-14114	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/070b7001.d	241819006	sample	04-DEC-2009	18:49	10-666.sub	RE03-09-14126	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/071b7101.d	241819007	sample	04-DEC-2009	19:02	10-666.sub	RE03-09-14117	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/072b7201.d	241819008	sample	04-DEC-2009	19:14	10-666.sub	RE03-09-14121	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/075b7501.d	241819009	sample	04-DEC-2009	19:52	10-666.sub	RE03-09-14129	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/076b7601.d	241819010	sample	04-DEC-2009	20:05	10-666.sub	RE03-09-14120	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/077b7701.d	241819011	sample	04-DEC-2009	20:17	10-666.sub	RE03-09-14116	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/078b7801.d	241819012	sample	04-DEC-2009	20:30	10-666.sub	RE03-09-14111	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/079b7901.d	241819013	sample	04-DEC-2009	20:43	10-666.sub	RE03-09-14119	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/080b8001.d	241819014	sample	04-DEC-2009	20:55	10-666.sub	RE03-09-14110	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/081b8101.d	241819015	sample	04-DEC-2009	21:08	10-666.sub	RE03-09-14127	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/082b8201.d	241819016	sample	04-DEC-2009	21:20	10-666.sub	RE03-09-14118	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/087b8701.d	241819017	sample	04-DEC-2009	22:19	10-666.sub	RE03-09-14122	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/088b8801.d	241819018	sample	04-DEC-2009	22:32	10-666.sub	RE03-09-14124	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER

☐	N	/chem/ecd1a.i/120409.b/089b8901.d	241819019	sample	04-DEC-2009	22:44	10-666.sub	RE03-09-14112	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/090b9001.d	241819020	sample	04-DEC-2009	22:57	10-666.sub	RE03-09-14128	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/063f6301.d	1201982309	mb	04-DEC-2009	17:21	10-666.sub	PBLK01	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/064f6401.d	1201982312	lcs	04-DEC-2009	17:33	10-666.sub	PBLK01LCS	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/083f8301.d	1201982310	ms	04-DEC-2009	21:33	10-666.sub	RE03-09-14118MS	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/084f8401.d	1201982311	msd	04-DEC-2009	21:46	10-666.sub	RE03-09-14118MSD	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/120409.b/063b6301.d	1201982309	mb	04 DEC-2009	17:21	10-666.sub	PBLK01	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/064b6401.d	1201982312	lcs	04 DEC-2009	17:33	10-666.sub	PBLK01LCS	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/083b8301.d	1201982310	ms	04-DEC-2009	21:33	10-666.sub	RE03-09-14118MS	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd1a.i/120409.b/084b8401.d	1201982311	msd	04-DEC-2009	21:46	10-666.sub	RE03-09-14118MSD	1.00000	927189	UPLOAD BOTH COLUMNS, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819014	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14110	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:55	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.44	ug/kg	1.15	3.44	1
11104–28–2	Aroclor–1221	U	3.44	ug/kg	1.15	3.44	1
11141–16–5	Aroclor–1232	U	3.44	ug/kg	1.15	3.44	1
53469–21–9	Aroclor–1242	U	3.44	ug/kg	1.15	3.44	1
12672–29–6	Aroclor–1248	U	3.44	ug/kg	1.15	3.44	1
11097–69–1	Aroclor–1254	U	3.44	ug/kg	1.15	3.44	1
11096–82–5	Aroclor–1260	U	3.44	ug/kg	1.15	3.44	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819012	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14111	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:30	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.08 g	**Final Volume:**	1 mL
Data File:	078f7801.d	**Column:**	1 CLP1	**Level:**	LOW
	078b7801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254	U	3.79	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260	U	3.79	ug/kg	1.26	3.79	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819019**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**11.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14112**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:44**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**089f8901.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	089b8901.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.74	ug/kg	1.25	3.74	1
11104–28–2	Aroclor–1221	U	3.74	ug/kg	1.25	3.74	1
11141–16–5	Aroclor–1232	U	3.74	ug/kg	1.25	3.74	1
53469–21–9	Aroclor–1242	U	3.74	ug/kg	1.25	3.74	1
12672–29–6	Aroclor–1248	U	3.74	ug/kg	1.25	3.74	1
11097–69–1	Aroclor–1254	U	3.74	ug/kg	1.25	3.74	1
11096–82–5	Aroclor–1260	U	3.74	ug/kg	1.25	3.74	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14113	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 17:58	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	066f6601.d	**Column:**	1 CLP1	**Level:**	LOW
	066b6601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.69	ug/kg	1.23	3.69	1
11104-28-2	Aroclor-1221	U	3.69	ug/kg	1.23	3.69	1
11141-16-5	Aroclor-1232	U	3.69	ug/kg	1.23	3.69	1
53469-21-9	Aroclor-1242	U	3.69	ug/kg	1.23	3.69	1
12672-29-6	Aroclor-1248	U	3.69	ug/kg	1.23	3.69	1
11097-69-1	Aroclor-1254	U	3.69	ug/kg	1.23	3.69	1
11096-82-5	Aroclor-1260	U	3.69	ug/kg	1.23	3.69	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14114	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:36	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	069f6901.d	**Column:**	1 CLP1	**Level:**	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.36	ug/kg	1.12	3.36	1
11104–28–2	Aroclor–1221	U	3.36	ug/kg	1.12	3.36	1
11141–16–5	Aroclor–1232	U	3.36	ug/kg	1.12	3.36	1
53469–21–9	Aroclor–1242	U	3.36	ug/kg	1.12	3.36	1
12672–29–6	Aroclor–1248	U	3.36	ug/kg	1.12	3.36	1
11097–69–1	Aroclor–1254	U	3.36	ug/kg	1.12	3.36	1
11096–82–5	Aroclor–1260	U	3.36	ug/kg	1.12	3.36	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14115	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 17:46	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819011**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14116**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:17**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**077f7701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	077b7701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.46	ug/kg	1.15	3.46	1
11104-28-2	Aroclor-1221	U	3.46	ug/kg	1.15	3.46	1
11141-16-5	Aroclor-1232	U	3.46	ug/kg	1.15	3.46	1
53469-21-9	Aroclor-1242	U	3.46	ug/kg	1.15	3.46	1
12672-29-6	Aroclor-1248	U	3.46	ug/kg	1.15	3.46	1
11097-69-1	Aroclor-1254	U	3.46	ug/kg	1.15	3.46	1
11096-82-5	Aroclor-1260	U	3.46	ug/kg	1.15	3.46	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819007	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14117	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 19:02	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.61	ug/kg	1.20	3.61	1
11104–28–2	Aroclor–1221	U	3.61	ug/kg	1.20	3.61	1
11141–16–5	Aroclor–1232	U	3.61	ug/kg	1.20	3.61	1
53469–21–9	Aroclor–1242	U	3.61	ug/kg	1.20	3.61	1
12672–29–6	Aroclor–1248	U	3.61	ug/kg	1.20	3.61	1
11097–69–1	Aroclor–1254	U	3.61	ug/kg	1.20	3.61	1
11096–82–5	Aroclor–1260	U	3.61	ug/kg	1.20	3.61	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14118**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:20**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**082f8201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	082b8201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.66	ug/kg	1.22	3.66	1
11104–28–2	Aroclor–1221	U	3.66	ug/kg	1.22	3.66	1
11141–16–5	Aroclor–1232	U	3.66	ug/kg	1.22	3.66	1
53469–21–9	Aroclor–1242	U	3.66	ug/kg	1.22	3.66	1
12672–29–6	Aroclor–1248	U	3.66	ug/kg	1.22	3.66	1
11097–69–1	Aroclor–1254	U	3.66	ug/kg	1.22	3.66	1
11096–82–5	Aroclor–1260	U	3.66	ug/kg	1.22	3.66	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14119	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:43	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.38	ug/kg	1.12	3.38	1
11104-28-2	Aroclor-1221	U	3.38	ug/kg	1.12	3.38	1
11141-16-5	Aroclor-1232	U	3.38	ug/kg	1.12	3.38	1
53469-21-9	Aroclor-1242	U	3.38	ug/kg	1.12	3.38	1
12672-29-6	Aroclor-1248	U	3.38	ug/kg	1.12	3.38	1
11097-69-1	Aroclor-1254	U	3.38	ug/kg	1.12	3.38	1
11096-82-5	Aroclor-1260	U	3.38	ug/kg	1.12	3.38	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819010	**Date Received:**	11/25/2009 09:10	**%Moisture:**	2.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14120	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:05	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.42	ug/kg	1.14	3.42	1
11104–28–2	Aroclor–1221	U	3.42	ug/kg	1.14	3.42	1
11141–16–5	Aroclor–1232	U	3.42	ug/kg	1.14	3.42	1
53469–21–9	Aroclor–1242	U	3.42	ug/kg	1.14	3.42	1
12672–29–6	Aroclor–1248	U	3.42	ug/kg	1.14	3.42	1
11097–69–1	Aroclor–1254	U	3.42	ug/kg	1.14	3.42	1
11096–82–5	Aroclor–1260	U	3.42	ug/kg	1.14	3.42	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819008	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14121	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.1	**Dilution:**	1
Run Date:	12/04/2009 19:14	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	072f7201.d	**Column:**	1 CLP1	**Level:**	LOW
	072b7201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254	U	3.79	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260	U	3.79	ug/kg	1.26	3.79	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819017**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14122**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:19**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**087f8701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	087b8701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.52	ug/kg	1.17	3.52	1
11104–28–2	Aroclor–1221	U	3.52	ug/kg	1.17	3.52	1
11141–16–5	Aroclor–1232	U	3.52	ug/kg	1.17	3.52	1
53469–21–9	Aroclor–1242	U	3.52	ug/kg	1.17	3.52	1
12672–29–6	Aroclor–1248	U	3.52	ug/kg	1.17	3.52	1
11097–69–1	Aroclor–1254	U	3.52	ug/kg	1.17	3.52	1
11096–82–5	Aroclor–1260	U	3.52	ug/kg	1.17	3.52	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14123	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:24	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	068f6801.d	**Column:**	1 CLP1	**Level:**	LOW
	068b6801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.52	ug/kg	1.17	3.52	1
11104–28–2	Aroclor–1221	U	3.52	ug/kg	1.17	3.52	1
11141–16–5	Aroclor–1232	U	3.52	ug/kg	1.17	3.52	1
53469–21–9	Aroclor–1242	U	3.52	ug/kg	1.17	3.52	1
12672–29–6	Aroclor–1248	U	3.52	ug/kg	1.17	3.52	1
11097–69–1	Aroclor–1254	U	3.52	ug/kg	1.17	3.52	1
11096–82–5	Aroclor–1260	U	3.52	ug/kg	1.17	3.52	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819018	**Date Received:**	11/25/2009 09:10	**%Moisture:**	7.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14124	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 22:32	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	088f8801.d	**Column:**	1 CLP1	**Level:**	LOW
	088b8801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14125**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:11**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**067f6701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	067b6701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.46	ug/kg	1.15	3.46	1
11104–28–2	Aroclor–1221	U	3.46	ug/kg	1.15	3.46	1
11141–16–5	Aroclor–1232	U	3.46	ug/kg	1.15	3.46	1
53469–21–9	Aroclor–1242	U	3.46	ug/kg	1.15	3.46	1
12672–29–6	Aroclor–1248	U	3.46	ug/kg	1.15	3.46	1
11097–69–1	Aroclor–1254	U	3.46	ug/kg	1.15	3.46	1
11096–82–5	Aroclor–1260	U	3.46	ug/kg	1.15	3.46	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14126	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:49	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.63	ug/kg	1.21	3.63	1
11104–28–2	Aroclor–1221	U	3.63	ug/kg	1.21	3.63	1
11141–16–5	Aroclor–1232	U	3.63	ug/kg	1.21	3.63	1
53469–21–9	Aroclor–1242	U	3.63	ug/kg	1.21	3.63	1
12672–29–6	Aroclor–1248	U	3.63	ug/kg	1.21	3.63	1
11097–69–1	Aroclor–1254	U	3.63	ug/kg	1.21	3.63	1
11096–82–5	Aroclor–1260	U	3.63	ug/kg	1.21	3.63	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819015	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14127	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 21:08	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.49	ug/kg	1.16	3.49	1
11104–28–2	Aroclor–1221	U	3.49	ug/kg	1.16	3.49	1
11141–16–5	Aroclor–1232	U	3.49	ug/kg	1.16	3.49	1
53469–21–9	Aroclor–1242	U	3.49	ug/kg	1.16	3.49	1
12672–29–6	Aroclor–1248	U	3.49	ug/kg	1.16	3.49	1
11097–69–1	Aroclor–1254	U	3.49	ug/kg	1.16	3.49	1
11096–82–5	Aroclor–1260	U	3.49	ug/kg	1.16	3.49	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14128**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:57**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**090f9001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	090b9001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.43	ug/kg	1.14	3.43	1
11104–28–2	Aroclor–1221	U	3.43	ug/kg	1.14	3.43	1
11141–16–5	Aroclor–1232	U	3.43	ug/kg	1.14	3.43	1
53469–21–9	Aroclor–1242	U	3.43	ug/kg	1.14	3.43	1
12672–29–6	Aroclor–1248	U	3.43	ug/kg	1.14	3.43	1
11097–69–1	Aroclor–1254	U	3.43	ug/kg	1.14	3.43	1
11096–82–5	Aroclor–1260	U	3.43	ug/kg	1.14	3.43	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819009**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14129**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 19:52**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**075f7501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	075b7501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.38	ug/kg	1.13	3.38	1
11104-28-2	Aroclor-1221	U	3.38	ug/kg	1.13	3.38	1
11141-16-5	Aroclor-1232	U	3.38	ug/kg	1.13	3.38	1
53469-21-9	Aroclor-1242	U	3.38	ug/kg	1.13	3.38	1
12672-29-6	Aroclor-1248	U	3.38	ug/kg	1.13	3.38	1
11097-69-1	Aroclor-1254	U	3.38	ug/kg	1.13	3.38	1
11096-82-5	Aroclor-1260	U	3.38	ug/kg	1.13	3.38	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-666

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201982309	MB for batch 927188	60	60	55	59
1201982312	LCS for batch 927188	66	66	49	68
241819001	RE03-09-14115	62	62	61	66
241819002	RE03-09-14113	59	55	61	64
241819003	RE03-09-14125	69	69	68	69
241819004	RE03-09-14123	72	72	73	74
241819005	RE03-09-14114	65	65	68	70
241819006	RE03-09-14126	68	68	69	73
241819007	RE03-09-14117	102	99	102	106
241819008	RE03-09-14121	64	49	67	67
241819009	RE03-09-14129	63	63	66	68
241819010	RE03-09-14120	63	63	66	67
241819011	RE03-09-14116	66	66	67	66
241819012	RE03-09-14111	66	66	67	69
241819013	RE03-09-14119	63	63	67	69
241819014	RE03-09-14110	63	64	65	67
241819015	RE03-09-14127	67	66	70	72
241819016	RE03-09-14118	67	67	68	69
1201982310	RE03-09-14118MS	71	70	73	75
1201982311	RE03-09-14118MSD	73	72	76	77
241819017	RE03-09-14122	68	68	71	73
241819018	RE03-09-14124	64	64	63	66
241819019	RE03-09-14112	64	64	67	69
241819020	RE03-09-14128	70	70	71	74

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%-105%)
DCB = Decachlorobiphenyl	(33%-115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–666
Client ID: LCS for batch 927188
Lab Sample ID: 1201982312
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 17:33
Dilution: 1
Prep Batch ID: 927188
Batch ID: 927189

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	LCS	Aroclor–1016	33.3	0.0	22.6	68	41–110
11096–82–5	LCS	Aroclor–1260	33.3	0.0	23.2	70	48–110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-666**	**Sample Type:**	**Matrix Spike**
Client ID:	**RE03-09-14118MS**	**Matrix:**	**S**
Lab Sample ID:	**1201982310**	**%Moisture:**	**9.5**
Instrument:	**ECD1A.I**	**Analysis Date:**	**12/04/2009 21:33**
Analyst:	**YS1**	**Prep Batch ID:**	**927188**
Inj. Vol:	**1 uL**	**Batch ID:**	**927189**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	36.8	0.00	U	25.2	68	23-117
11096-82-5	MS	Aroclor-1260	36.8	0.00	U	25.2	68	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-666
Client ID: RE03-09-14118MSD
Lab Sample ID: 1201982311
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 9.5
Analysis Date: 12/04/2009 21:46
Dilution: 1
Prep Batch ID: 927188
Batch ID: 927189

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	36.6	0.00	U	25.8	70	23-117	2	0-30
11096-82-5	MSD Aroclor-1260	36.6	0.00	U	25.7	70	27-116	2	0-30

Method Blank Summary

SDG Number:	10–666	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927188	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	063b6301.d 063f6301.d
Lab Sample ID:	1201982309				
Column:	CLP2 CLP1	Prep Date:	11/29/2009 16:51	Analyzed:	12/04/09 17:21
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927188	1201982312	064f6401.d 064b6401.d	12/04/09	1733
02 RE03–09–14115	241819001	065f6501.d 065b6501.d	12/04/09	1746
03 RE03–09–14113	241819002	066f6601.d 066b6601.d	12/04/09	1758
04 RE03–09–14125	241819003	067f6701.d 067b6701.d	12/04/09	1811
05 RE03–09–14123	241819004	068f6801.d 068b6801.d	12/04/09	1824
06 RE03–09–14114	241819005	069f6901.d 069b6901.d	12/04/09	1836
07 RE03–09–14126	241819006	070f7001.d 070b7001.d	12/04/09	1849
08 RE03–09–14117	241819007	071f7101.d 071b7101.d	12/04/09	1902
09 RE03–09–14121	241819008	072f7201.d 072b7201.d	12/04/09	1914
10 RE03–09–14129	241819009	075f7501.d 075b7501.d	12/04/09	1952
11 RE03–09–14120	241819010	076f7601.d 076b7601.d	12/04/09	2005
12 RE03–09–14116	241819011	077f7701.d 077b7701.d	12/04/09	2017
13 RE03–09–14111	241819012	078f7801.d 078b7801.d	12/04/09	2030
14 RE03–09–14119	241819013	079f7901.d 079b7901.d	12/04/09	2043
15 RE03–09–14110	241819014	080f8001.d 080b8001.d	12/04/09	2055
16 RE03–09–14127	241819015	081f8101.d 081b8101.d	12/04/09	2108
17 RE03–09–14118	241819016	082f8201.d 082b8201.d	12/04/09	2120

Method Blank Summary

SDG Number:	10–666	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927188	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	063b6301.d 063f6301.d
Lab Sample ID:	1201982309				
Column:	CLP2 CLP1	Prep Date:	11/29/2009 16:51	Analyzed:	12/04/09 17:21
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
18	RE03–09–14118MS	1201982310	083f8301.d 083b8301.d	12/04/09	2133
19	RE03–09–14118MSD	1201982311	084f8401.d 084b8401.d	12/04/09	2146
20	RE03–09–14122	241819017	087f8701.d 087b8701.d	12/04/09	2219
21	RE03–09–14124	241819018	088f8801.d 088b8801.d	12/04/09	2232
22	RE03–09–14112	241819019	089f8901.d 089b8901.d	12/04/09	2244
23	RE03–09–14128	241819020	090f9001.d 090b9001.d	12/04/09	2257

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819014	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14110	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:55	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	080f8001.d	**Column:**	1 CLP1	**Level:**	LOW
	080b8001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.44	ug/kg	1.15	3.44	1
11104–28–2	Aroclor–1221	U	3.44	ug/kg	1.15	3.44	1
11141–16–5	Aroclor–1232	U	3.44	ug/kg	1.15	3.44	1
53469–21–9	Aroclor–1242	U	3.44	ug/kg	1.15	3.44	1
12672–29–6	Aroclor–1248	U	3.44	ug/kg	1.15	3.44	1
11097–69–1	Aroclor–1254	U	3.44	ug/kg	1.15	3.44	1
11096–82–5	Aroclor–1260	U	3.44	ug/kg	1.15	3.44	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/080f8001.d
Lab Smp Id: 241819014 Client Smp ID: RE03-09-14110
Inj Date : 04-DEC-2009 20:55
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819014|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14110|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 80
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	3.64280	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	56562644	126.744	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	53382776	130.598	4.5	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/080f8001.d

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Date : 04-DEC-2009 20:55

Client ID: RE03-09-14110

Instrument: ecd1a.i

Sample Info: |241819014|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

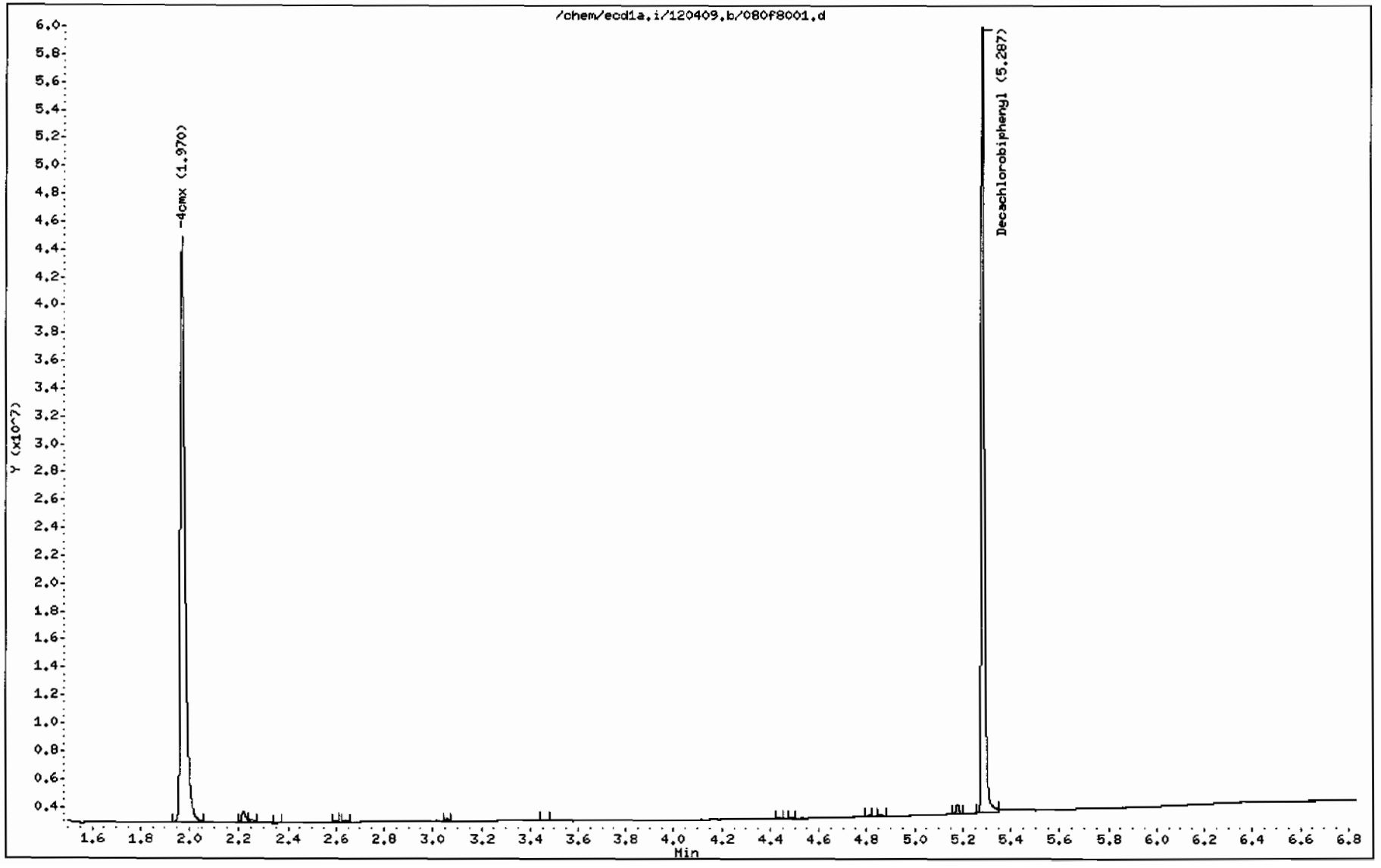

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/080b8001.d
Lab Smp Id: 241819014 Client Smp ID: RE03-09-14110
Inj Date : 04-DEC-2009 20:55
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819014|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14110|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 80
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	3.64280	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	47329981	127.472	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	40327386	134.166	4.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/080b8001.d

Date : 04-DEC-2009 20:55

Client ID: RE03-09-14110

Sample Info: |24181901411|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

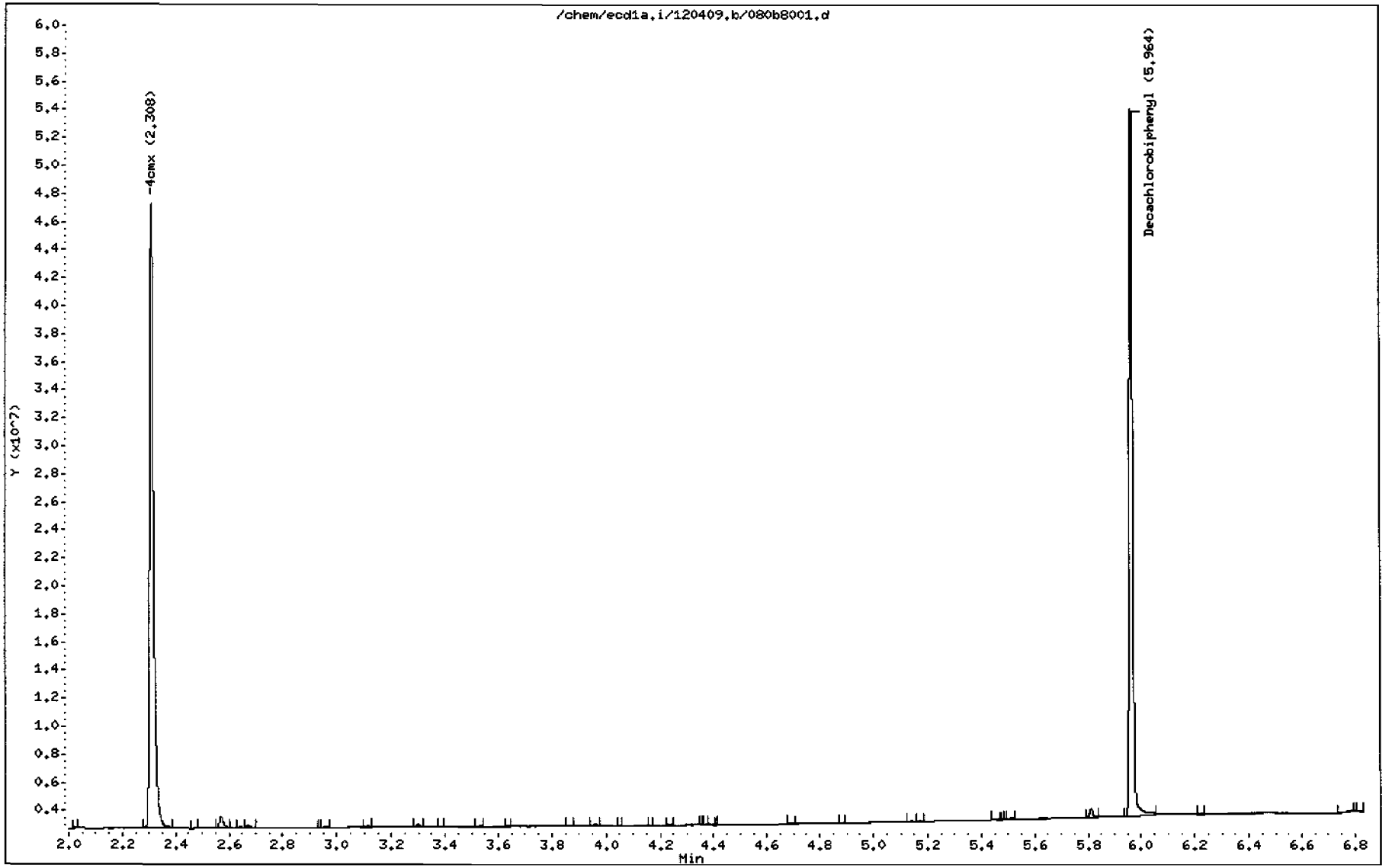

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819012**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**12.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14111**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:30**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.08 g**	**Final Volume:**	**1 mL**
Data File:	**078f7801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	078b7801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.79	ug/kg	1.26	3.79	1
11104-28-2	Aroclor-1221	U	3.79	ug/kg	1.26	3.79	1
11141-16-5	Aroclor-1232	U	3.79	ug/kg	1.26	3.79	1
53469-21-9	Aroclor-1242	U	3.79	ug/kg	1.26	3.79	1
12672-29-6	Aroclor-1248	U	3.79	ug/kg	1.26	3.79	1
11097-69-1	Aroclor-1254	U	3.79	ug/kg	1.26	3.79	1
11096-82-5	Aroclor-1260	U	3.79	ug/kg	1.26	3.79	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/078f7801.d
Lab Smp Id: 241819012 Client Smp ID: RE03-09-14111
Inj Date : 04-DEC-2009 20:30
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819012|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14111|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	12.29440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	59160474	132.565	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	54942620	134.414	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/078f7801.d

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Date : 04-DEC-2009 20:30

Client ID: RE03-09-14111

Instrument: ecd1a.i

Sample Info: |241819012|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

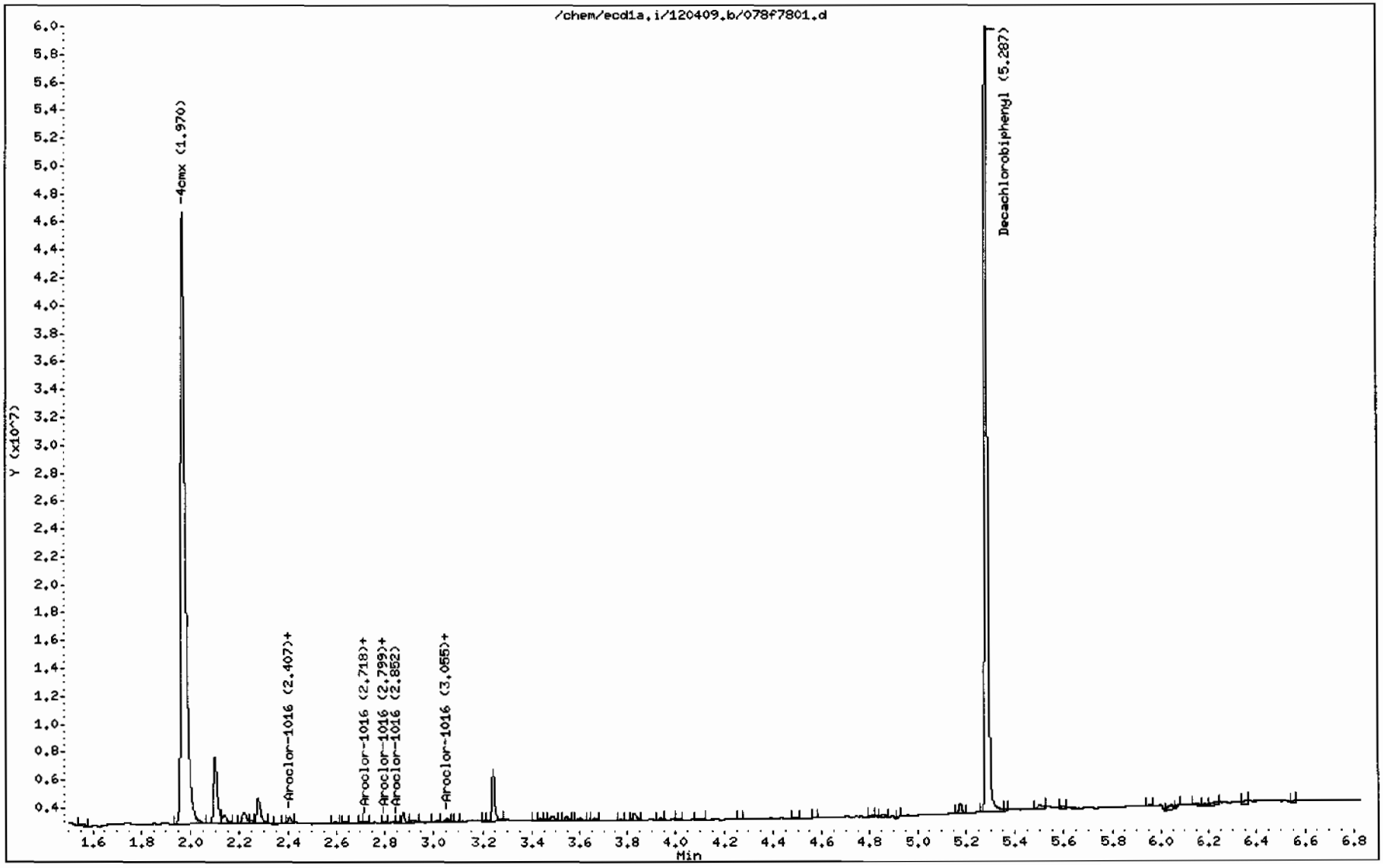

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/078b7801.d
Lab Smp Id: 241819012 Client Smp ID: RE03-09-14111
Inj Date : 04-DEC-2009 20:30
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819012|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14111|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	12.29440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	49337318	132.879	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	41707269	138.757	5.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/078b7801.d
Date : 04-DEC-2009 20:30
Client ID: RE03-09-14111
Sample Info: |241819012|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

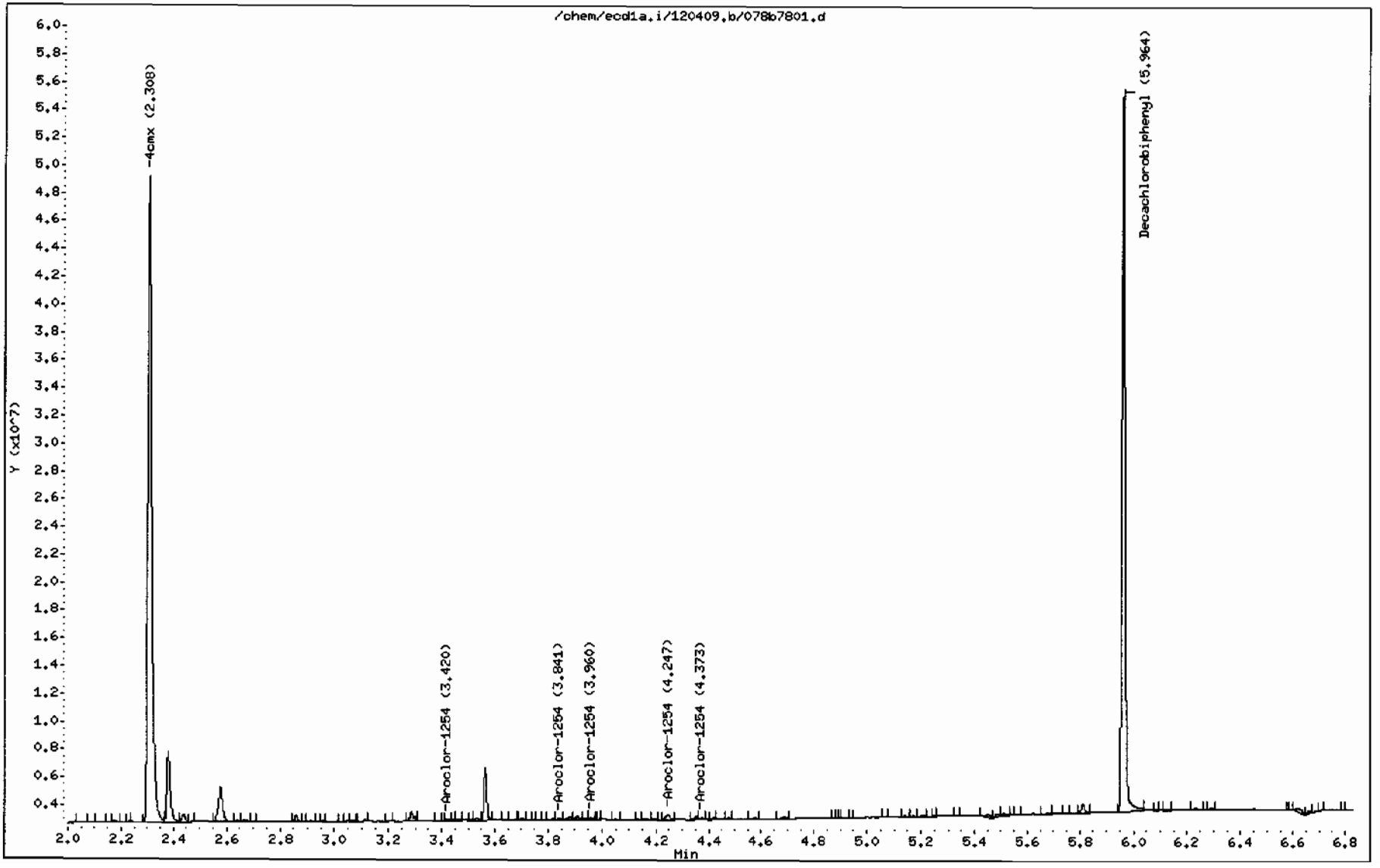

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819019	**Date Received:**	11/25/2009 09:10	**%Moisture:**	11.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14112	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 22:44	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.09 g	**Final Volume:**	1 mL
Data File:	089f8901.d	**Column:**	1 CLP1	**Level:**	LOW
	089b8901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.74	ug/kg	1.25	3.74	1
11104–28–2	Aroclor–1221	U	3.74	ug/kg	1.25	3.74	1
11141–16–5	Aroclor–1232	U	3.74	ug/kg	1.25	3.74	1
53469–21–9	Aroclor–1242	U	3.74	ug/kg	1.25	3.74	1
12672–29–6	Aroclor–1248	U	3.74	ug/kg	1.25	3.74	1
11097–69–1	Aroclor–1254	U	3.74	ug/kg	1.25	3.74	1
11096–82–5	Aroclor–1260	U	3.74	ug/kg	1.25	3.74	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/089f8901.d
Lab Smp Id: 241819019 Client Smp ID: RE03-09-14112
Inj Date : 04-DEC-2009 22:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819019|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14112|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 89
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	11.14350	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.969	1.973	-0.004	56695459	127.042	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	54617311	133.618	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/089f8901.d

Page 1

Date : 04-DEC-2009 22:44

Client ID: RE03-09-14112

Instrument: ecd1a.i

Sample Info: 1241819019|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

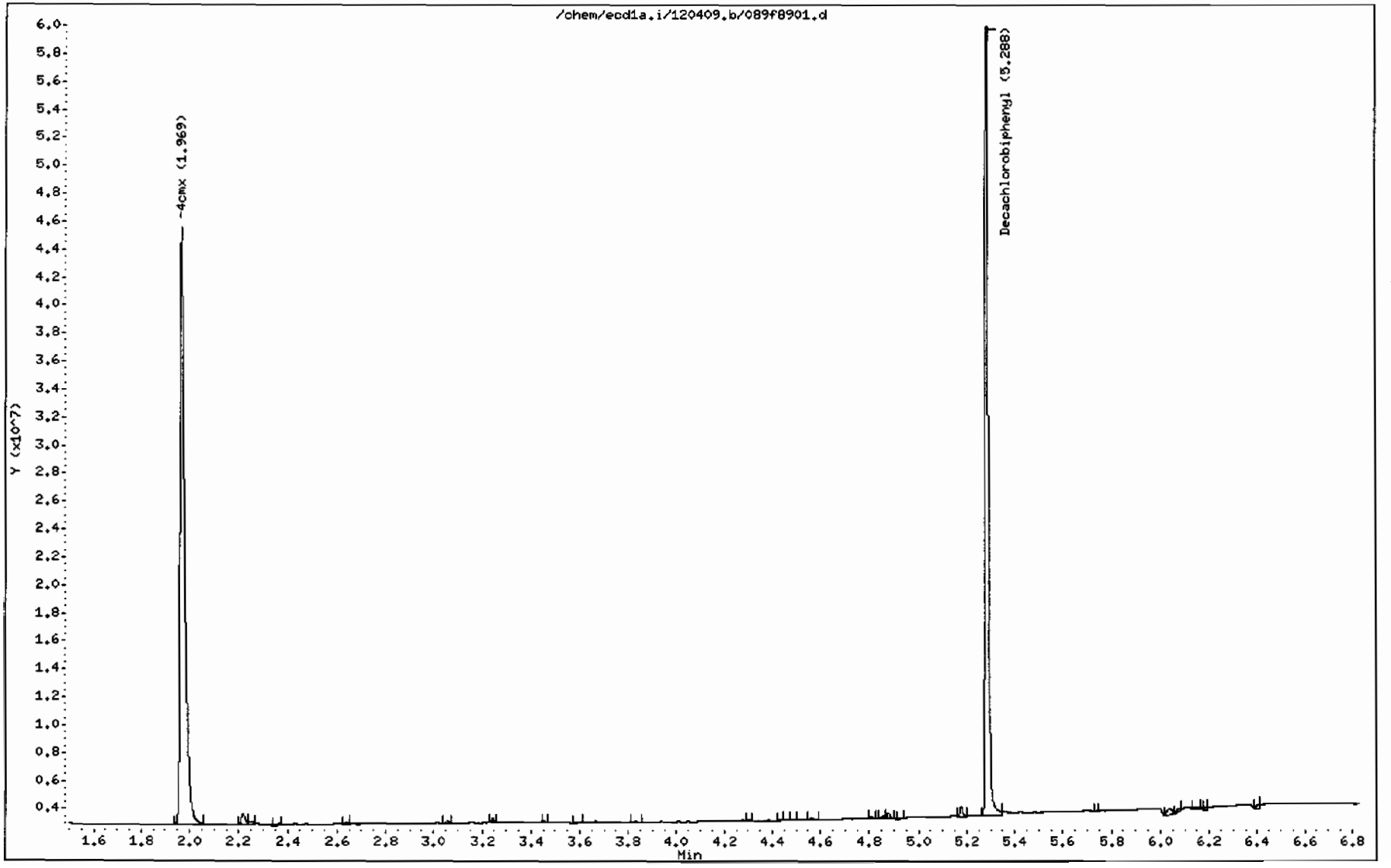

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/089b8901.d
Lab Smp Id: 241819019 Client Smp ID: RE03-09-14112
Inj Date : 04-DEC-2009 22:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819019|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14112|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 89
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	11.14350	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	47484424	127.888	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	41315064	137.452	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/089b8901.d

Page 1

Date : 04-DEC-2009 22:44

Client ID: RE03-09-14112

Instrument: ecd1a.i

Sample Info: |241819019|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

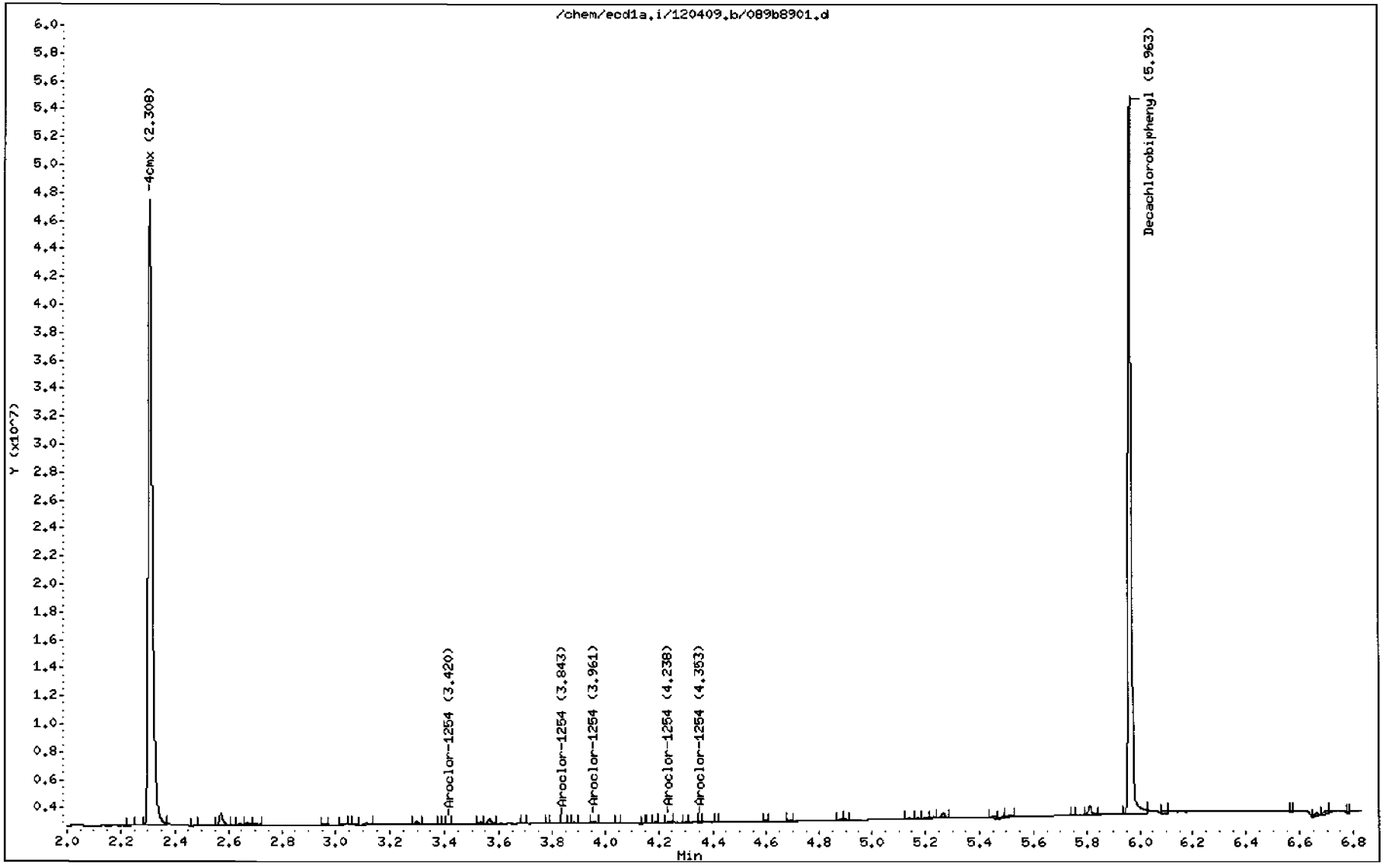

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.9**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14113**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:58**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**066f6601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	066b6601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.69	ug/kg	1.23	3.69	1
11104–28–2	Aroclor–1221	U	3.69	ug/kg	1.23	3.69	1
11141–16–5	Aroclor–1232	U	3.69	ug/kg	1.23	3.69	1
53469–21–9	Aroclor–1242	U	3.69	ug/kg	1.23	3.69	1
12672–29–6	Aroclor–1248	U	3.69	ug/kg	1.23	3.69	1
11097–69–1	Aroclor–1254	U	3.69	ug/kg	1.23	3.69	1
11096–82–5	Aroclor–1260	U	3.69	ug/kg	1.23	3.69	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/066f6601.d
Lab Smp Id: 241819002 Client Smp ID: RE03-09-14113
Inj Date : 04-DEC-2009 17:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819002|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14113|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	9.91220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	52941309	118.630	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	49501124	121.102	4.5	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/066f6601.d

Date : 04-DEC-2009 17:58

Client ID: RE03-09-14113

Sample Info: |241819002|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Page 1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

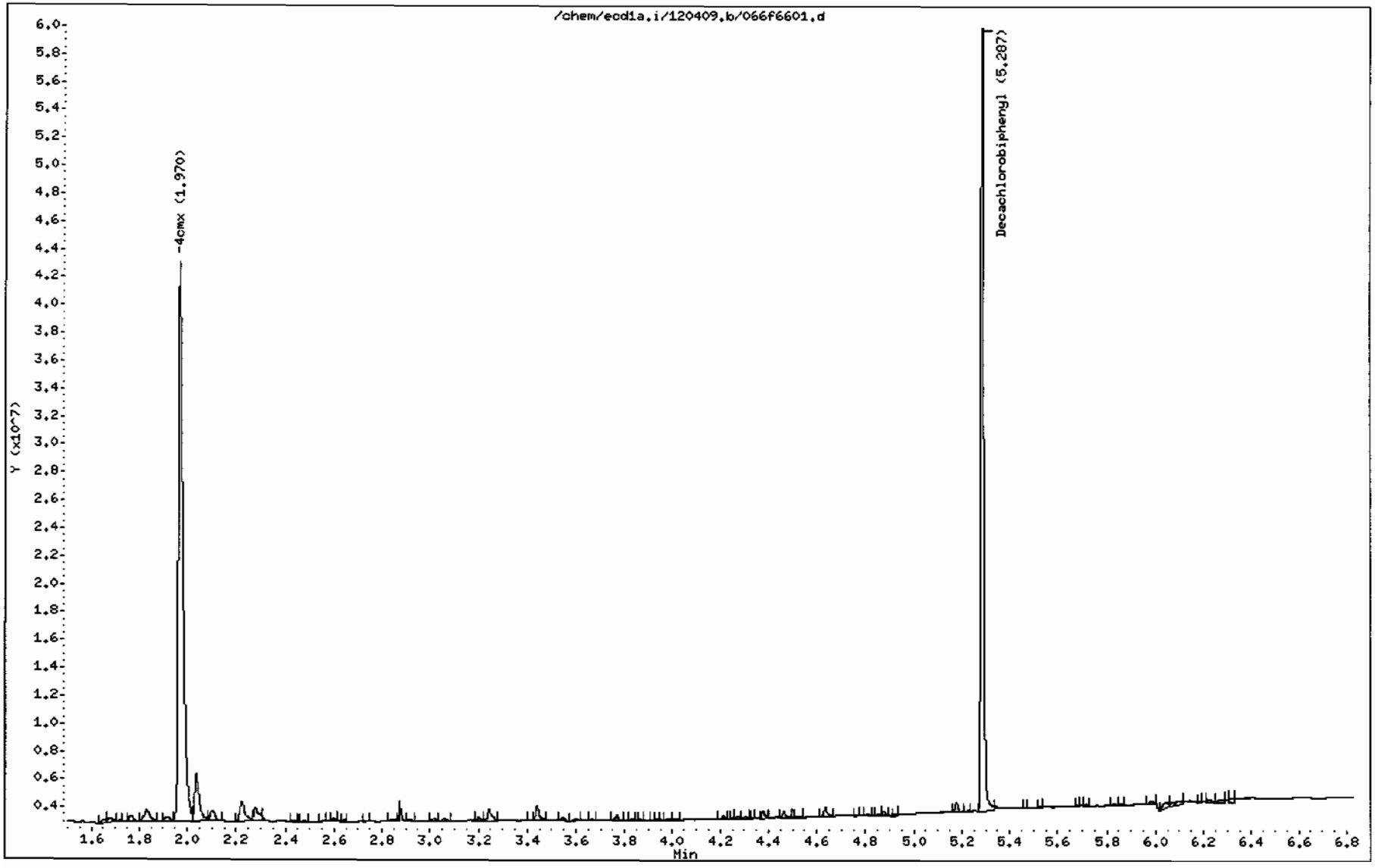

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/066b6601.d
Lab Smp Id: 241819002 Client Smp ID: RE03-09-14113
Inj Date : 04-DEC-2009 17:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819002|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14113|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	9.91220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	40928401	110.231	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	38408901	127.783	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/066b6601.d

Date : 04-DEC-2009 17:58

Client ID: RE03-09-14113

Sample Info: |241819002|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

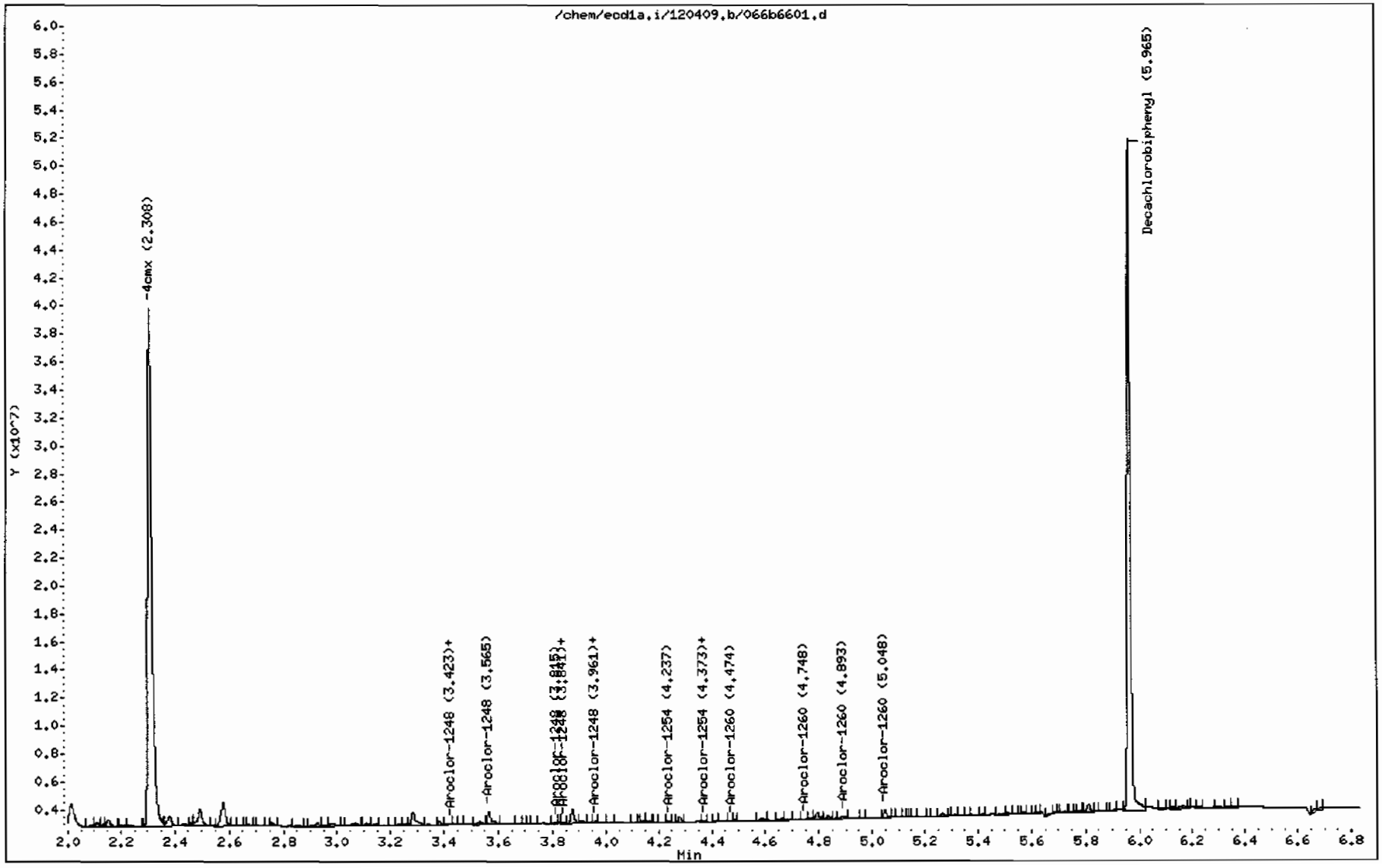

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.9
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14114	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:36	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	069f6901.d	**Column:**	1 CLP1	**Level:**	LOW
	069b6901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.36	ug/kg	1.12	3.36	1
11104–28–2	Aroclor–1221	U	3.36	ug/kg	1.12	3.36	1
11141–16–5	Aroclor–1232	U	3.36	ug/kg	1.12	3.36	1
53469–21–9	Aroclor–1242	U	3.36	ug/kg	1.12	3.36	1
12672–29–6	Aroclor–1248	U	3.36	ug/kg	1.12	3.36	1
11097–69–1	Aroclor–1254	U	3.36	ug/kg	1.12	3.36	1
11096–82–5	Aroclor–1260	U	3.36	ug/kg	1.12	3.36	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/069f6901.d
Lab Smp Id: 241819005 Client Smp ID: RE03-09-14114
Inj Date : 04-DEC-2009 18:36
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819005|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14114|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	0.90840	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	58231348	130.483	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	55923285	136.813	4.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/069f6901.d

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Date : 04-DEC-2009 18:36

Client ID: RE03-09-14114

Instrument: ecd1a.i

Sample Info: 1241819005|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

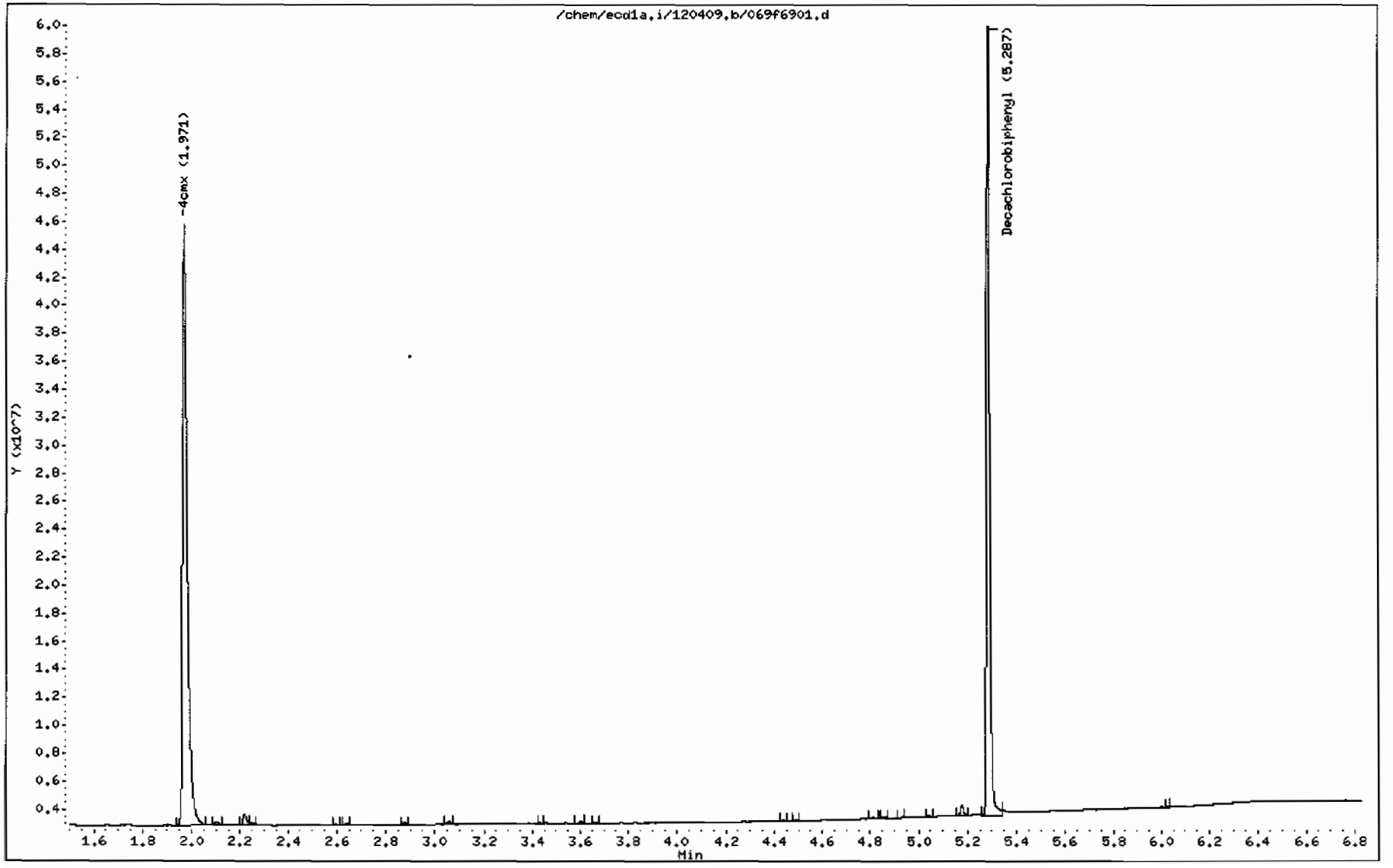

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/069b6901.d
Lab Smp Id: 241819005 Client Smp ID: RE03-09-14114
Inj Date : 04-DEC-2009 18:36
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819005|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14114|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	0.90840	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	48589666	130.865	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	41839552	139.197	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/069b6901.d
Date : 04-DEC-2009 18:36
Client ID: RE03-09-14114
Sample Info: |241819005|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

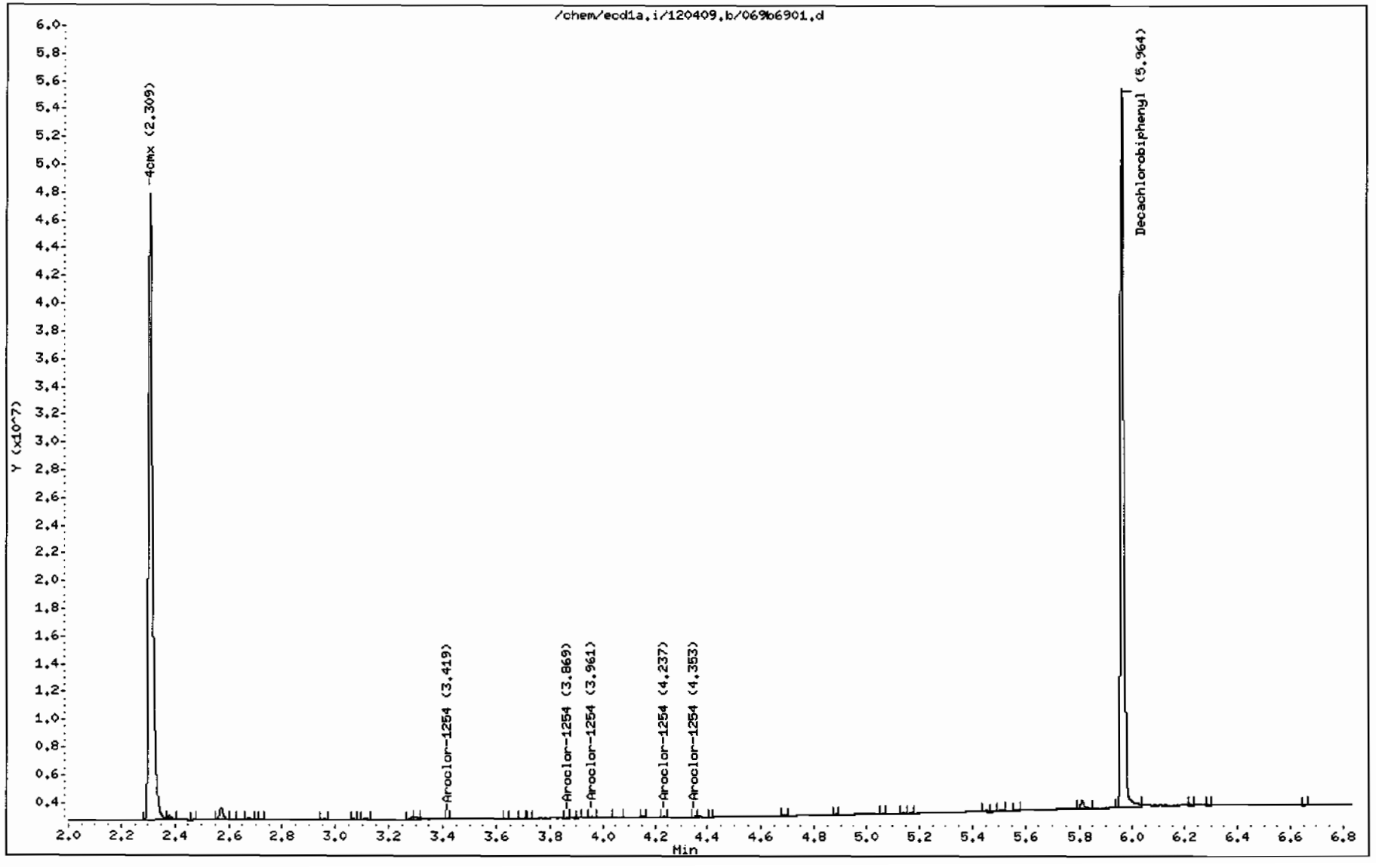

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14115	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 17:46	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	065f6501.d	**Column:**	1 CLP1	**Level:**	LOW
	065b6501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/065f6501.d
Lab Smp Id: 241819001 Client Smp ID: RE03-09-14115
Inj Date : 04-DEC-2009 17:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819001|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14115|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	0.00940	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	55174177	123.633	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	50059849	122.469	4.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/065f6501.d

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Date : 04-DEC-2009 17:46

Client ID: RE03-09-14115

Instrument: ecd1a.i

Sample Info: |24181900|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

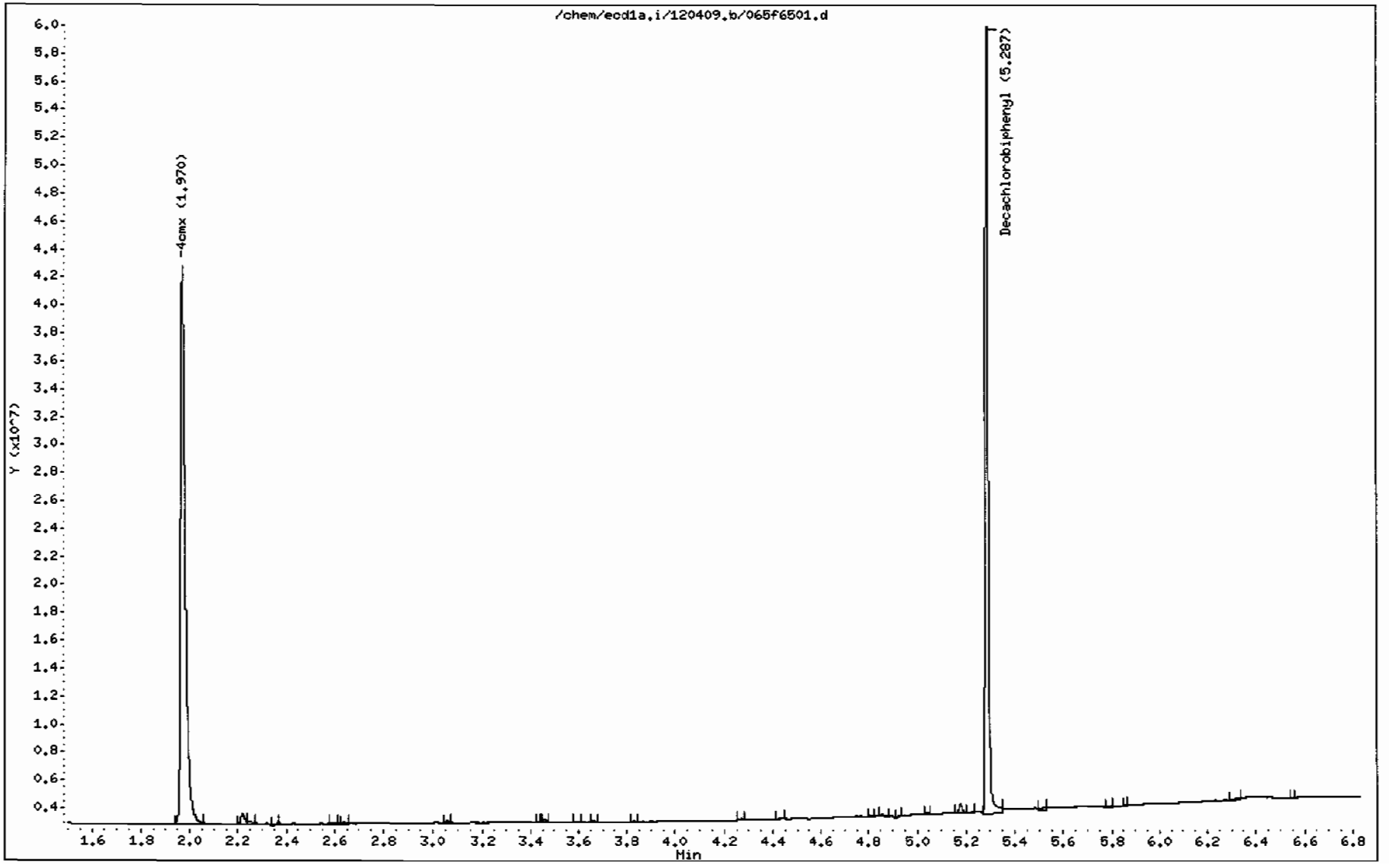

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/065b6501.d
Lab Smp Id: 241819001 Client Smp ID: RE03-09-14115
Inj Date : 04-DEC-2009 17:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819001|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14115|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	0.00940	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	46178136	124.370	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	39734715	132.194	4.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/065b6501.d

Date : 04-DEC-2009 17:46

Client ID: RE03-09-14115

Sample Info: !241819001!1!

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

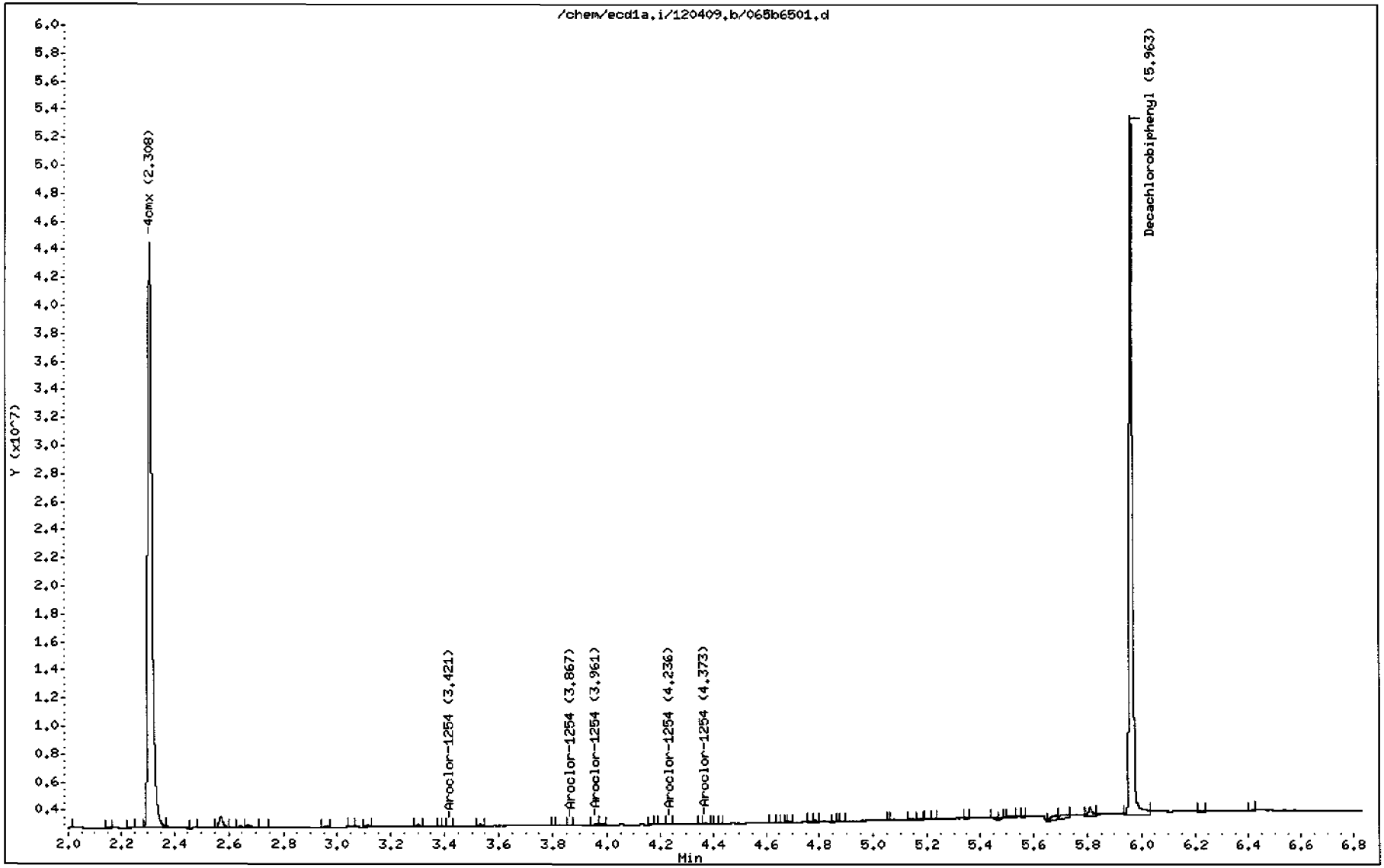

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819011**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14116**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:17**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**077f7701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	077b7701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.46	ug/kg	1.15	3.46	1
11104–28–2	Aroclor–1221	U	3.46	ug/kg	1.15	3.46	1
11141–16–5	Aroclor–1232	U	3.46	ug/kg	1.15	3.46	1
53469–21–9	Aroclor–1242	U	3.46	ug/kg	1.15	3.46	1
12672–29–6	Aroclor–1248	U	3.46	ug/kg	1.15	3.46	1
11097–69–1	Aroclor–1254	U	3.46	ug/kg	1.15	3.46	1
11096–82–5	Aroclor–1260	U	3.46	ug/kg	1.15	3.46	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/077f7701.d
Lab Smp Id: 241819011 Client Smp ID: RE03-09-14116
Inj Date : 04-DEC-2009 20:17
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819011|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14116|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	4.09710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	58549280	131.196	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	54616720	133.617	4.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/077f7701.d

Date : 04-DEC-2009 20:17

Client ID: RE03-09-14116

Sample Info: |24181901|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

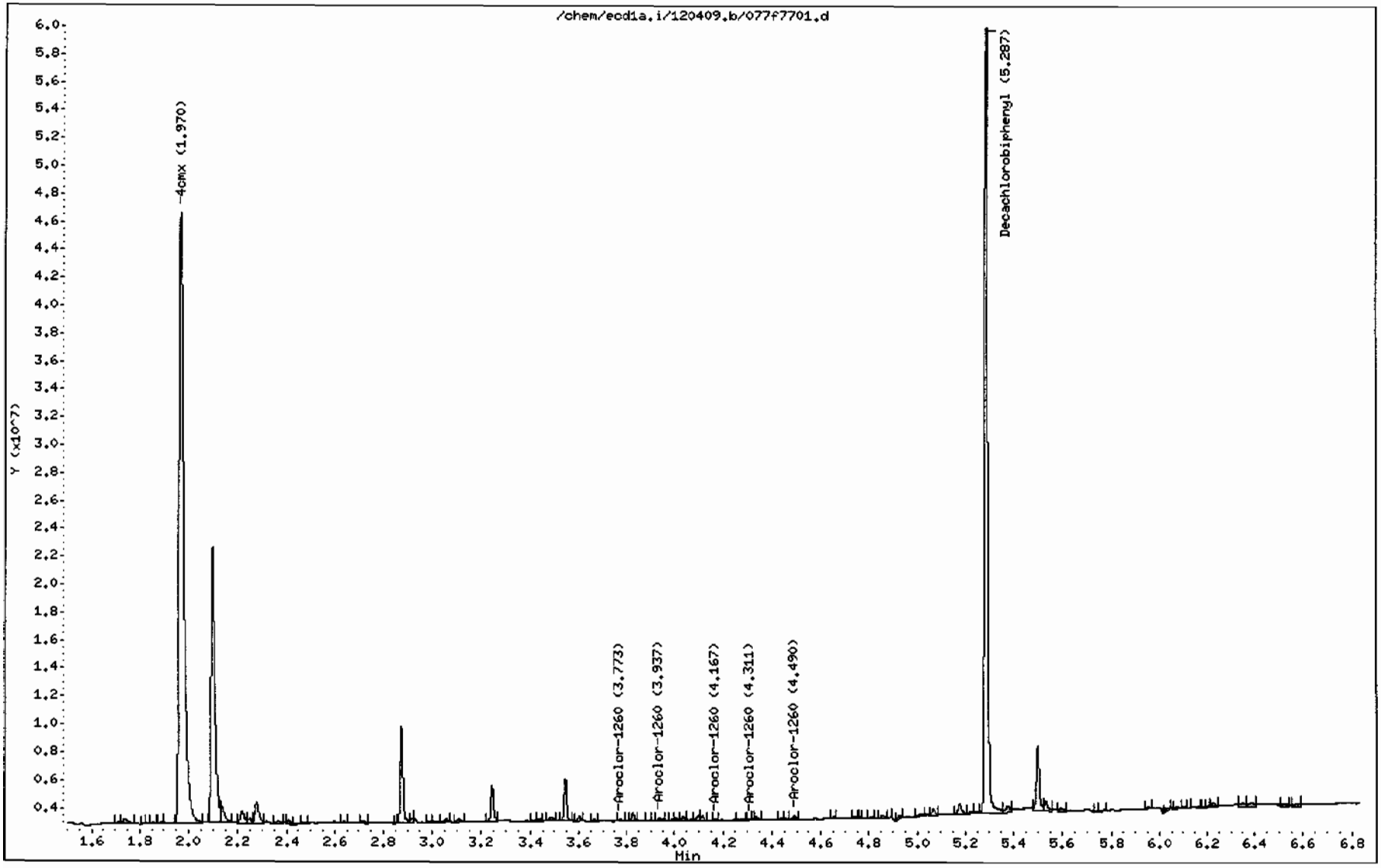

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/077b7701.d
Lab Smp Id: 241819011 Client Smp ID: RE03-09-14116
Inj Date : 04-DEC-2009 20:17
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819011|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14116|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	4.09710	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.307	2.309	-0.002	49103181	132.248	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	39669571	131.977	4.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/077b7701.d
Date : 04-DEC-2009 20:17
Client ID: RE03-09-14116
Sample Info: |241819011|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

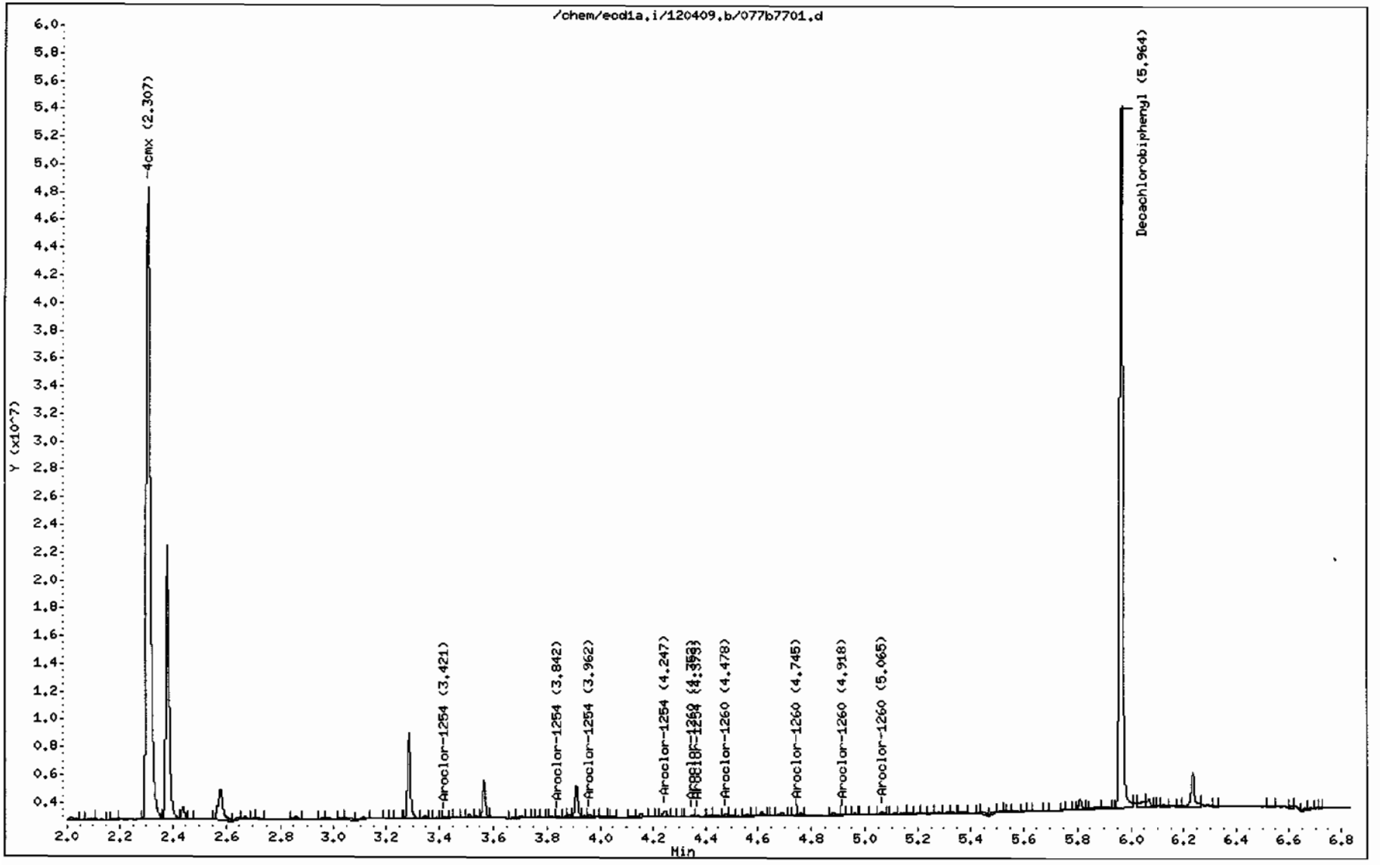

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819007	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14117	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 19:02	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	071f7101.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.61	ug/kg	1.20	3.61	1
11104-28-2	Aroclor-1221	U	3.61	ug/kg	1.20	3.61	1
11141-16-5	Aroclor-1232	U	3.61	ug/kg	1.20	3.61	1
53469-21-9	Aroclor-1242	U	3.61	ug/kg	1.20	3.61	1
12672-29-6	Aroclor-1248	U	3.61	ug/kg	1.20	3.61	1
11097-69-1	Aroclor-1254	U	3.61	ug/kg	1.20	3.61	1
11096-82-5	Aroclor-1260	U	3.61	ug/kg	1.20	3.61	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/071f7101.d
Lab Smp Id: 241819007 Client Smp ID: RE03-09-14117
Inj Date : 04-DEC-2009 19:02
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819007|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14117|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	8.12930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	90789611	203.439	7.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	83419441	204.081	7.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/071f7101.d

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Date : 04-DEC-2009 19:02

Client ID: RE03-09-14117

Instrument: ecd1a.i

Sample Info: |241819007|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

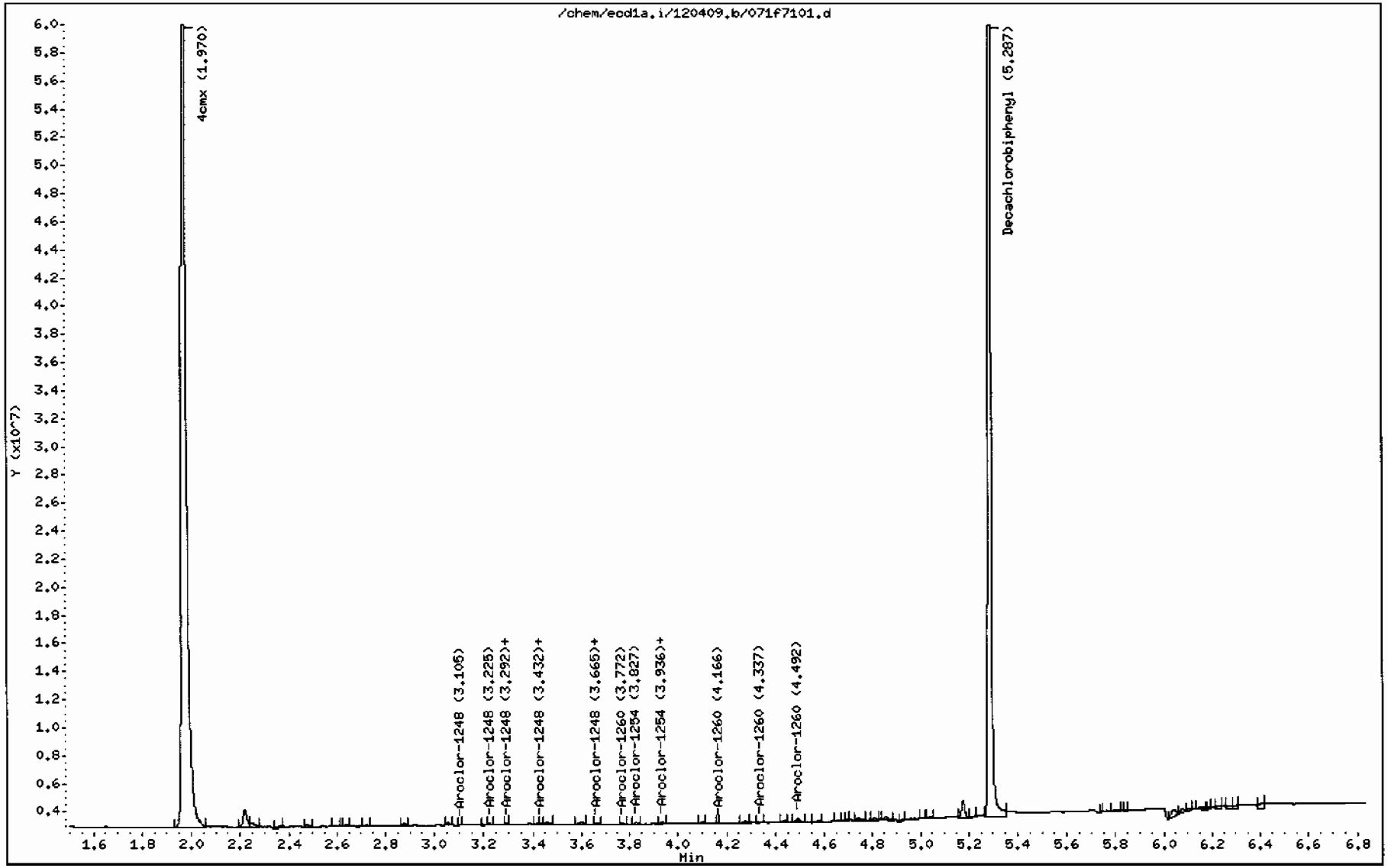

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/071b7101.d
Lab Smp Id: 241819007 Client Smp ID: RE03-09-14117
Inj Date : 04-DEC-2009 19:02
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819007|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14117|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	8.12930	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	73296681	197.408	7.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	63789056	212.221	7.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/071b7101.d

Date : 04-DEC-2009 19:02

Client ID: RE03-09-14117

Sample Info: |241819007|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

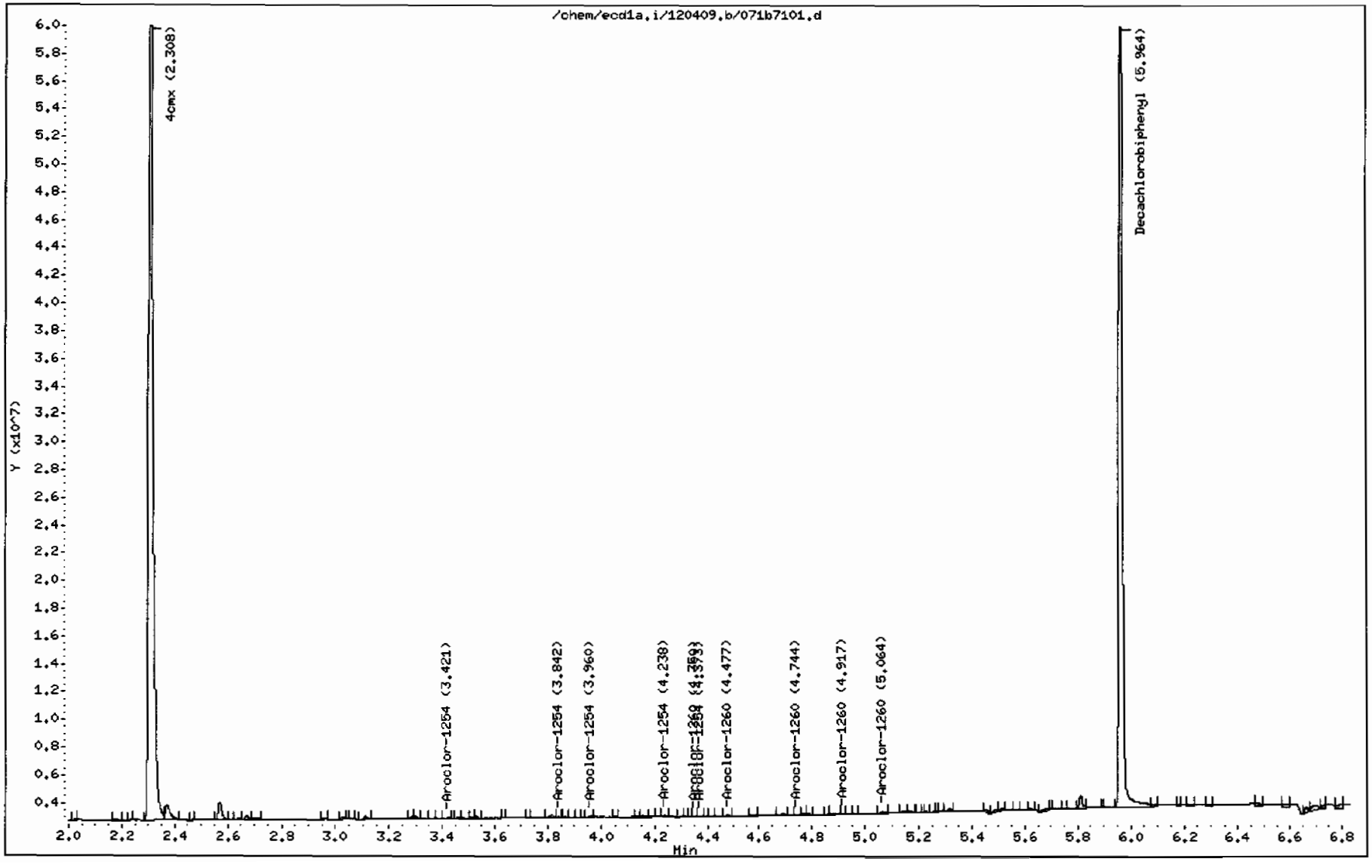

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819016**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**9.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14118**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:20**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**082f8201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	082b8201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.66	ug/kg	1.22	3.66	1
11104–28–2	Aroclor–1221	U	3.66	ug/kg	1.22	3.66	1
11141–16–5	Aroclor–1232	U	3.66	ug/kg	1.22	3.66	1
53469–21–9	Aroclor–1242	U	3.66	ug/kg	1.22	3.66	1
12672–29–6	Aroclor–1248	U	3.66	ug/kg	1.22	3.66	1
11097–69–1	Aroclor–1254	U	3.66	ug/kg	1.22	3.66	1
11096–82–5	Aroclor–1260	U	3.66	ug/kg	1.22	3.66	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/082f8201.d
Lab Smp Id: 241819016 Client Smp ID: RE03-09-14118
Inj Date : 04-DEC-2009 21:20
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819016|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14118|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 82
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	9.48220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	60242999	134.991	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	55518991	135.824	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/082f8201.d

Date : 04-DEC-2009 21:20

Client ID: RE03-09-14118

Sample Info: |241819016|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

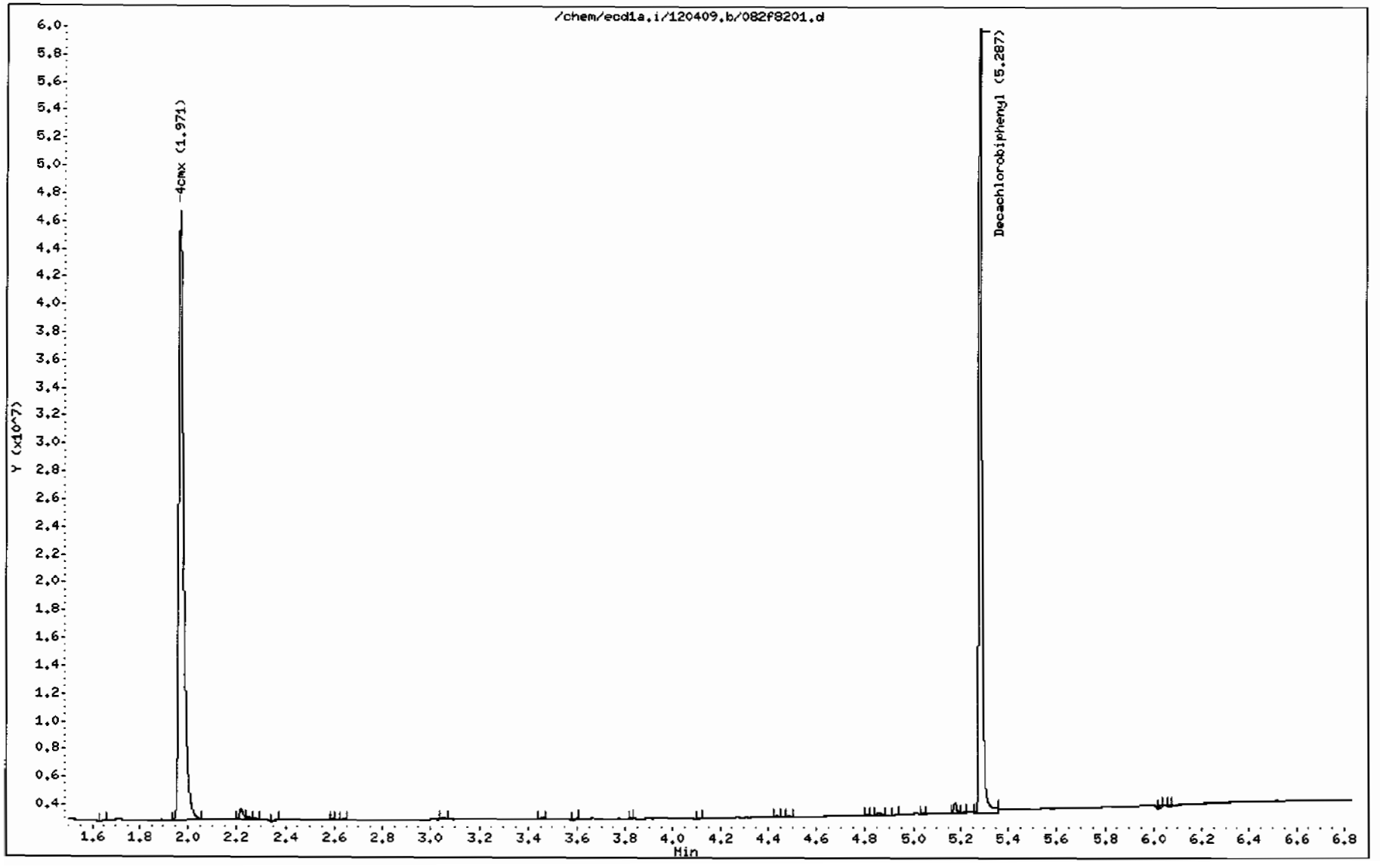

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/082b8201.d
Lab Smp Id: 241819016 Client Smp ID: RE03-09-14118
Inj Date : 04-DEC-2009 21:20
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819016|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14118|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 82
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	9.48220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	50077134	134.871	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	41761726	138.938	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/082b8201.d

Date : 04-DEC-2009 21:20

Client ID: RE03-09-14118

Sample Info: |241819016|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

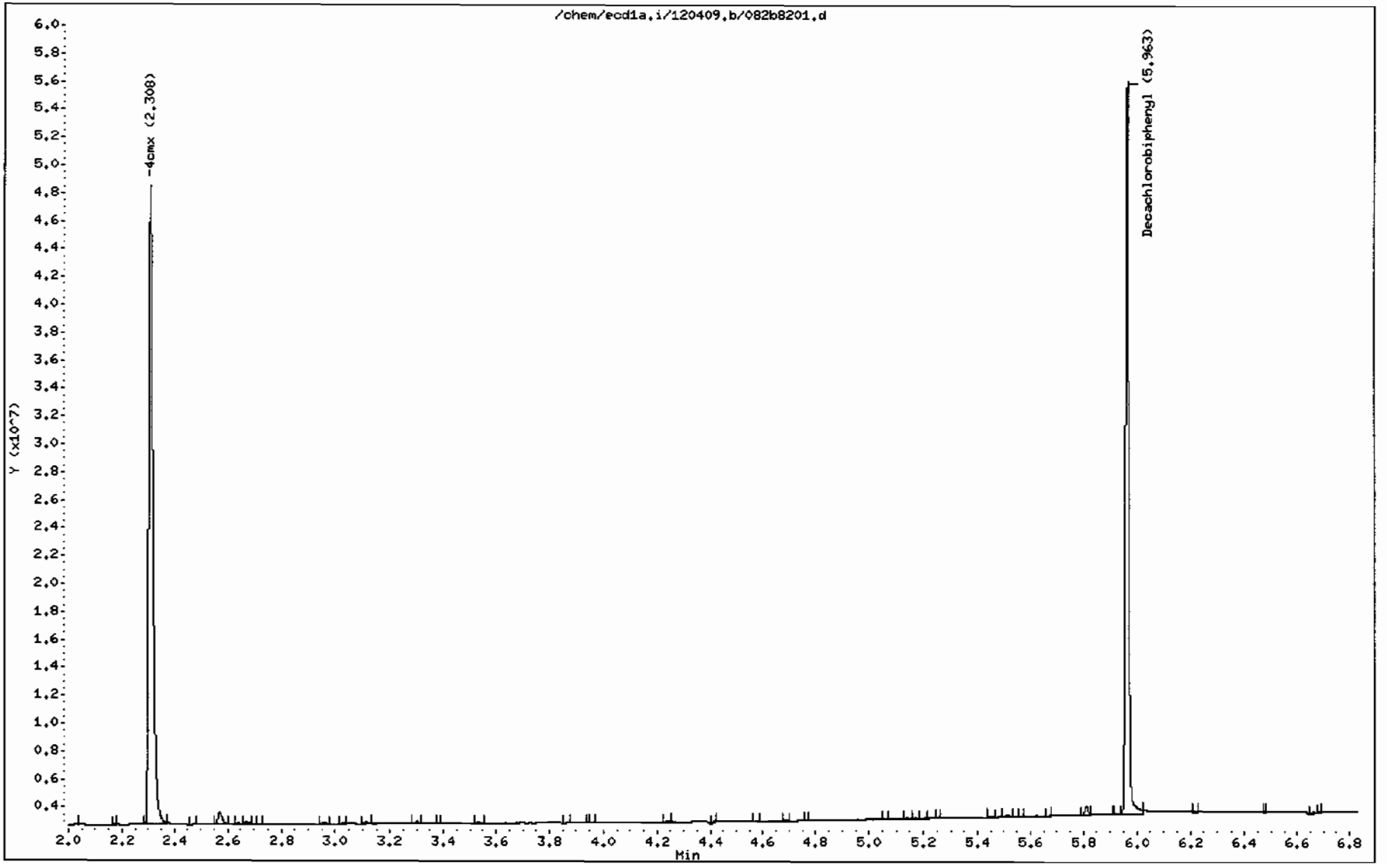

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819013	**Date Received:**	11/25/2009 09:10	**%Moisture:**	1.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14119	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 20:43	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	079f7901.d	**Column:**	1 CLP1	**Level:**	LOW
	079b7901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.38	ug/kg	1.12	3.38	1
11104-28-2	Aroclor-1221	U	3.38	ug/kg	1.12	3.38	1
11141-16-5	Aroclor-1232	U	3.38	ug/kg	1.12	3.38	1
53469-21-9	Aroclor-1242	U	3.38	ug/kg	1.12	3.38	1
12672-29-6	Aroclor-1248	U	3.38	ug/kg	1.12	3.38	1
11097-69-1	Aroclor-1254	U	3.38	ug/kg	1.12	3.38	1
11096-82-5	Aroclor-1260	U	3.38	ug/kg	1.12	3.38	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/079f7901.d
Lab Smp Id: 241819013 Client Smp ID: RE03-09-14119
Inj Date : 04-DEC-2009 20:43
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819013|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14119|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 79
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	1.67390	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	56336860	126.238	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	54708818	133.842	4.5	80.00- 120.00	100.00

Data File: /chem/ecdia.i/120409.b/079f7901.d
Date : 04-DEC-2009 20:43
Client ID: RE03-09-14119
Sample Info: |24181901311|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

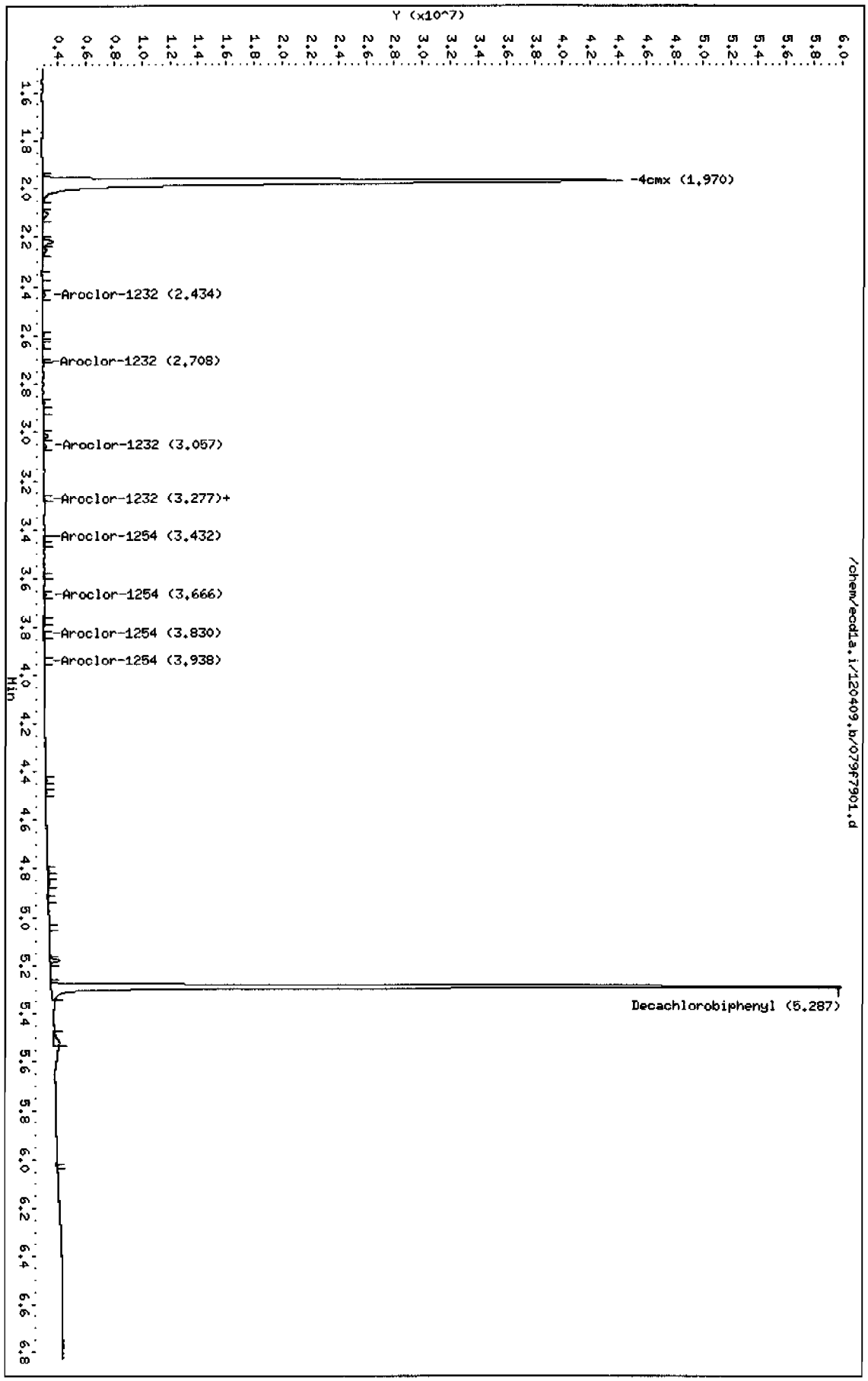

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/079b7901.d
Lab Smp Id: 241819013 Client Smp ID: RE03-09-14119
Inj Date : 04-DEC-2009 20:43
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819013|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14119|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 79
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	1.67390	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	47082636	126.806	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	41648647	138.562	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/079b7901.d
Date : 04-DEC-2009 20:43
Client ID: RE03-09-14119
Sample Info: |241819013|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

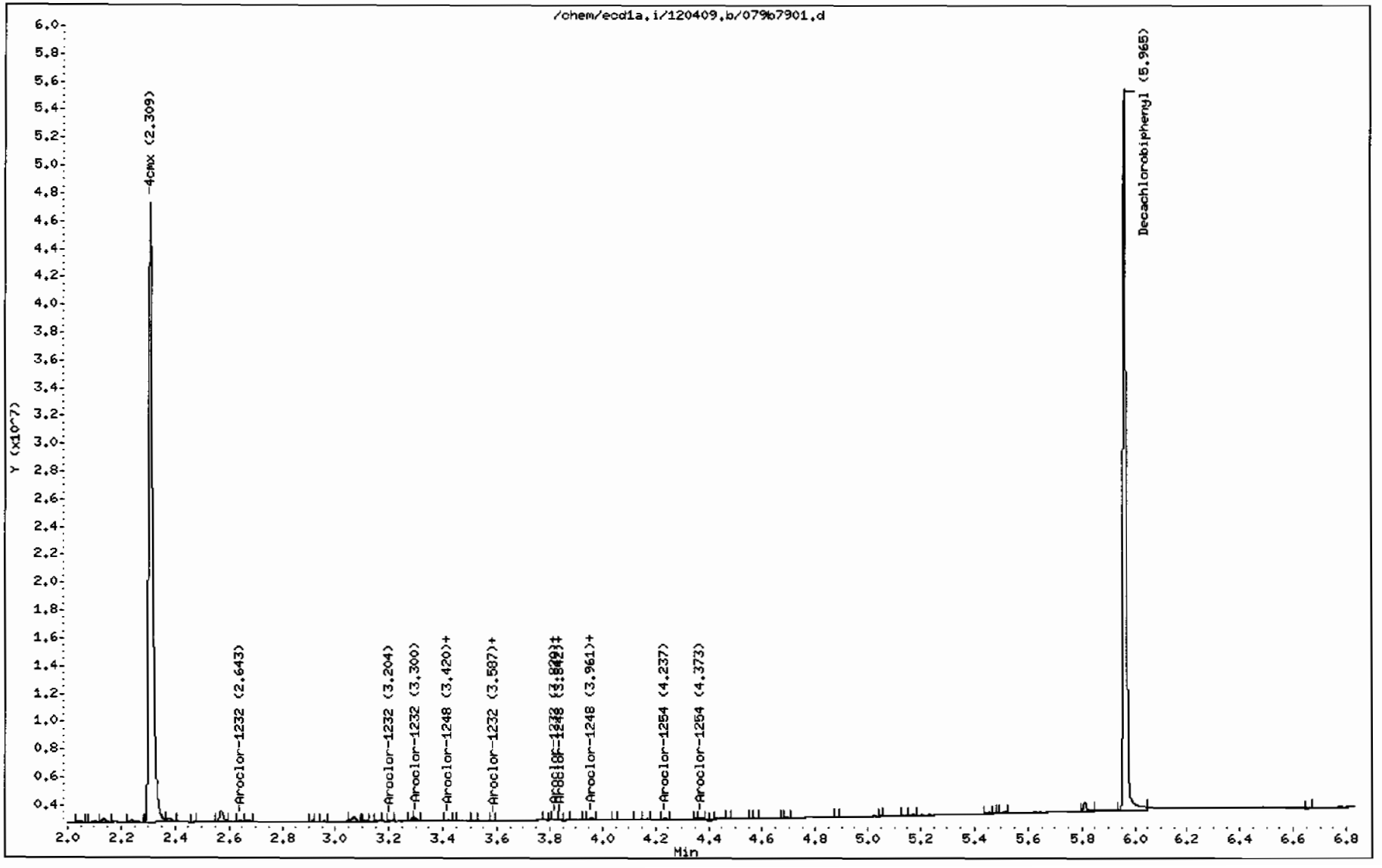

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819010**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.6**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14120**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 20:05**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**076f7601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	076b7601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.42	ug/kg	1.14	3.42	1
11104–28–2	Aroclor–1221	U	3.42	ug/kg	1.14	3.42	1
11141–16–5	Aroclor–1232	U	3.42	ug/kg	1.14	3.42	1
53469–21–9	Aroclor–1242	U	3.42	ug/kg	1.14	3.42	1
12672–29–6	Aroclor–1248	U	3.42	ug/kg	1.14	3.42	1
11097–69–1	Aroclor–1254	U	3.42	ug/kg	1.14	3.42	1
11096–82–5	Aroclor–1260	U	3.42	ug/kg	1.14	3.42	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/076f7601.d
Lab Smp Id: 241819010 Client Smp ID: RE03-09-14120
Inj Date : 04-DEC-2009 20:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819010|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14120|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	2.62750	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	55801872	125.040	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	53717957	131.418	4.5	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/076f7601.d

Date : 04-DEC-2009 20:05

Client ID: RE03-09-14120

Sample Info: |241819010|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

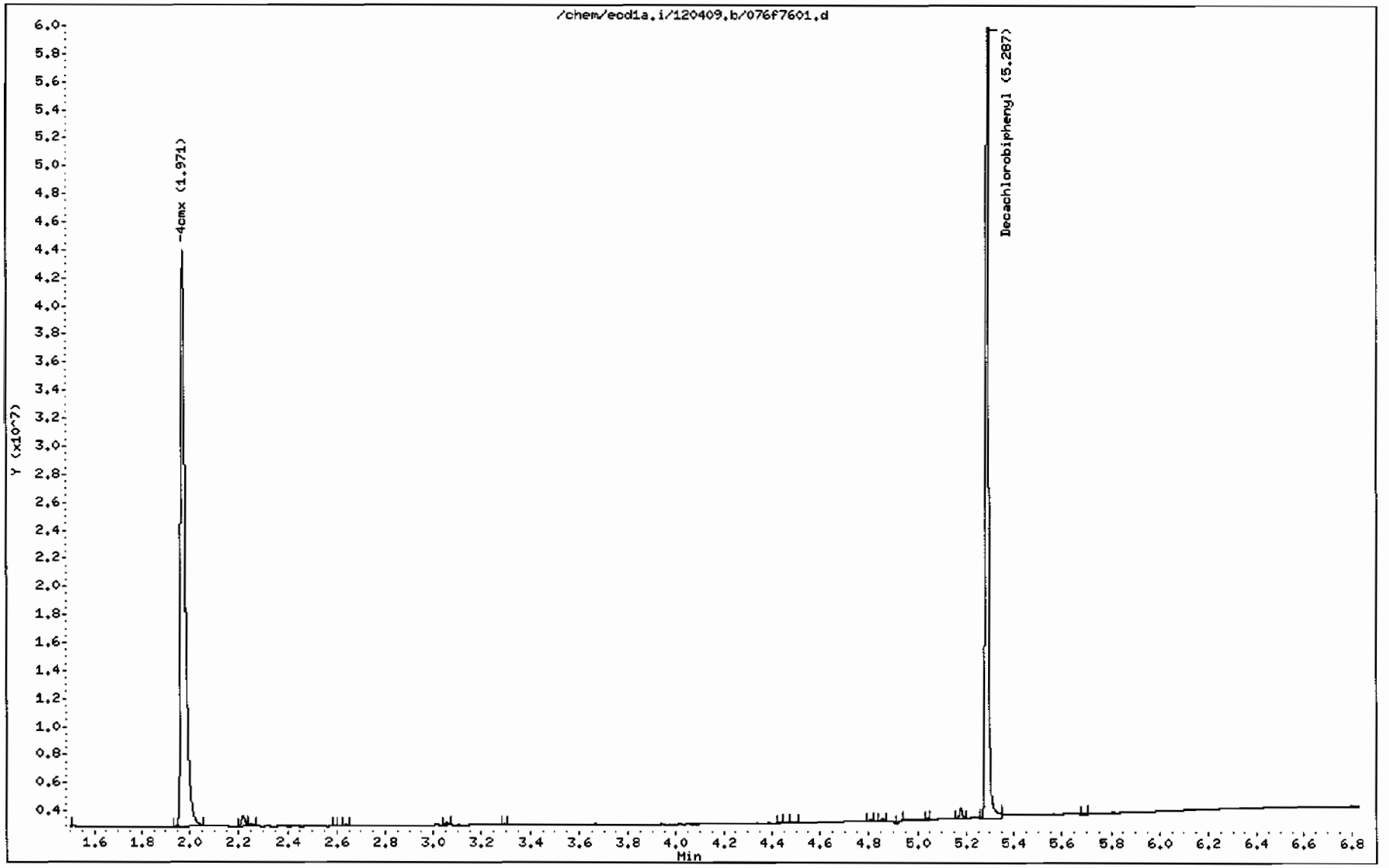

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/076b7601.d
Lab Smp Id: 241819010 Client Smp ID: RE03-09-14120
Inj Date : 04-DEC-2009 20:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819010|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14120|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	2.62750	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	46647347	125.634	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	40285764	134.028	4.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/076b7601.d

Page 1

Date : 04-DEC-2009 20:05

Client ID: RE03-09-14120

Instrument: ecd1a.i

Sample Info: |241819010|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

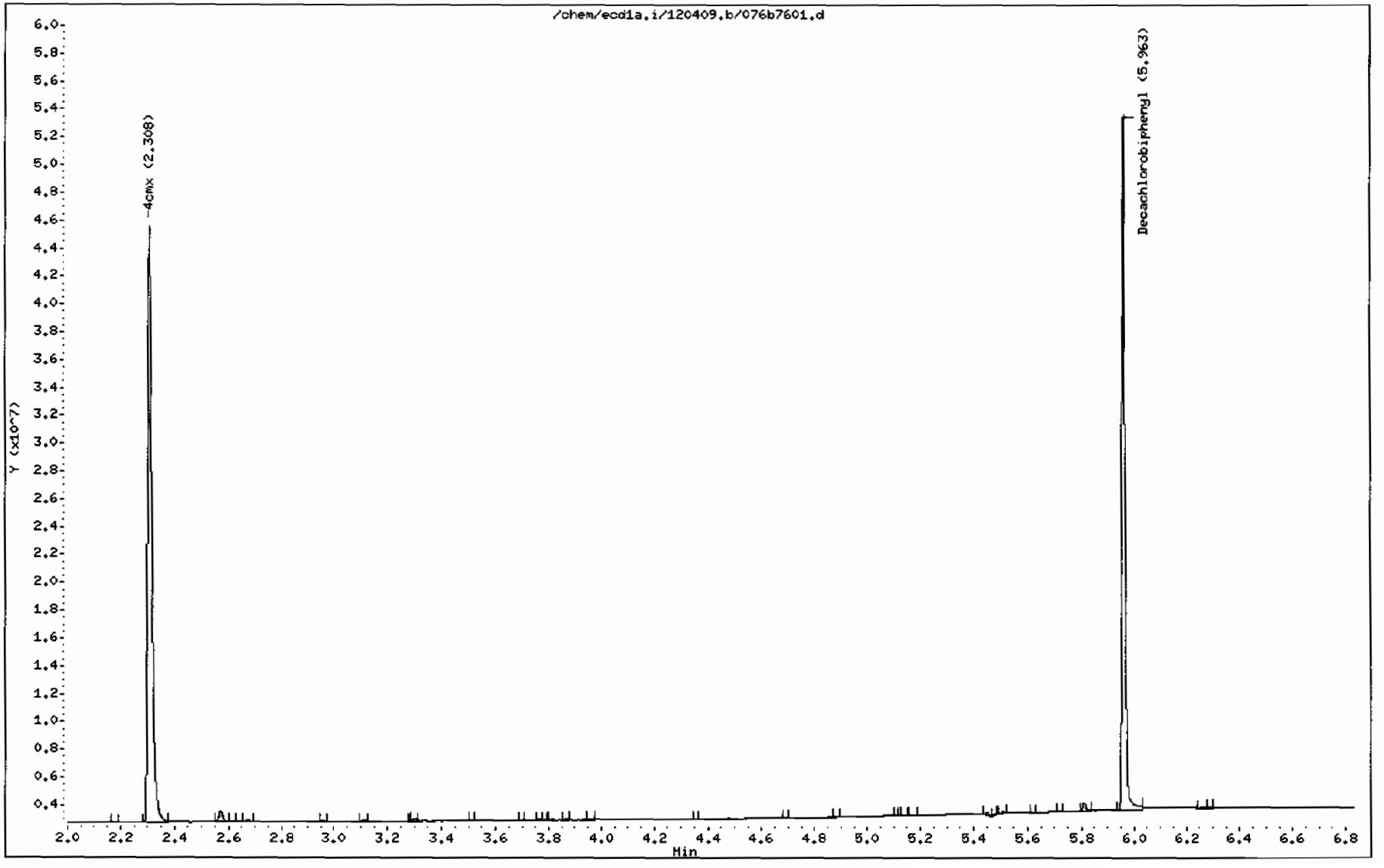

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819008	**Date Received:**	11/25/2009 09:10	**%Moisture:**	12.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14121	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 19:14	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	072f7201.d	**Column:**	1 CLP1	**Level:**	LOW
	072b7201.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.79	ug/kg	1.26	3.79	1
11104–28–2	Aroclor–1221	U	3.79	ug/kg	1.26	3.79	1
11141–16–5	Aroclor–1232	U	3.79	ug/kg	1.26	3.79	1
53469–21–9	Aroclor–1242	U	3.79	ug/kg	1.26	3.79	1
12672–29–6	Aroclor–1248	U	3.79	ug/kg	1.26	3.79	1
11097–69–1	Aroclor–1254	U	3.79	ug/kg	1.26	3.79	1
11096–82–5	Aroclor–1260	U	3.79	ug/kg	1.26	3.79	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/072f7201.d
Lab Smp Id: 241819008 Client Smp ID: RE03-09-14121
Inj Date : 04-DEC-2009 19:14
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819008|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14121|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	12.68160	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	57055331	127.848	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	54538672	133.426	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/072f7201.d

Date : 04-DEC-2009 19:14

Client ID: RE03-09-14121

Sample Info: |241819008|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

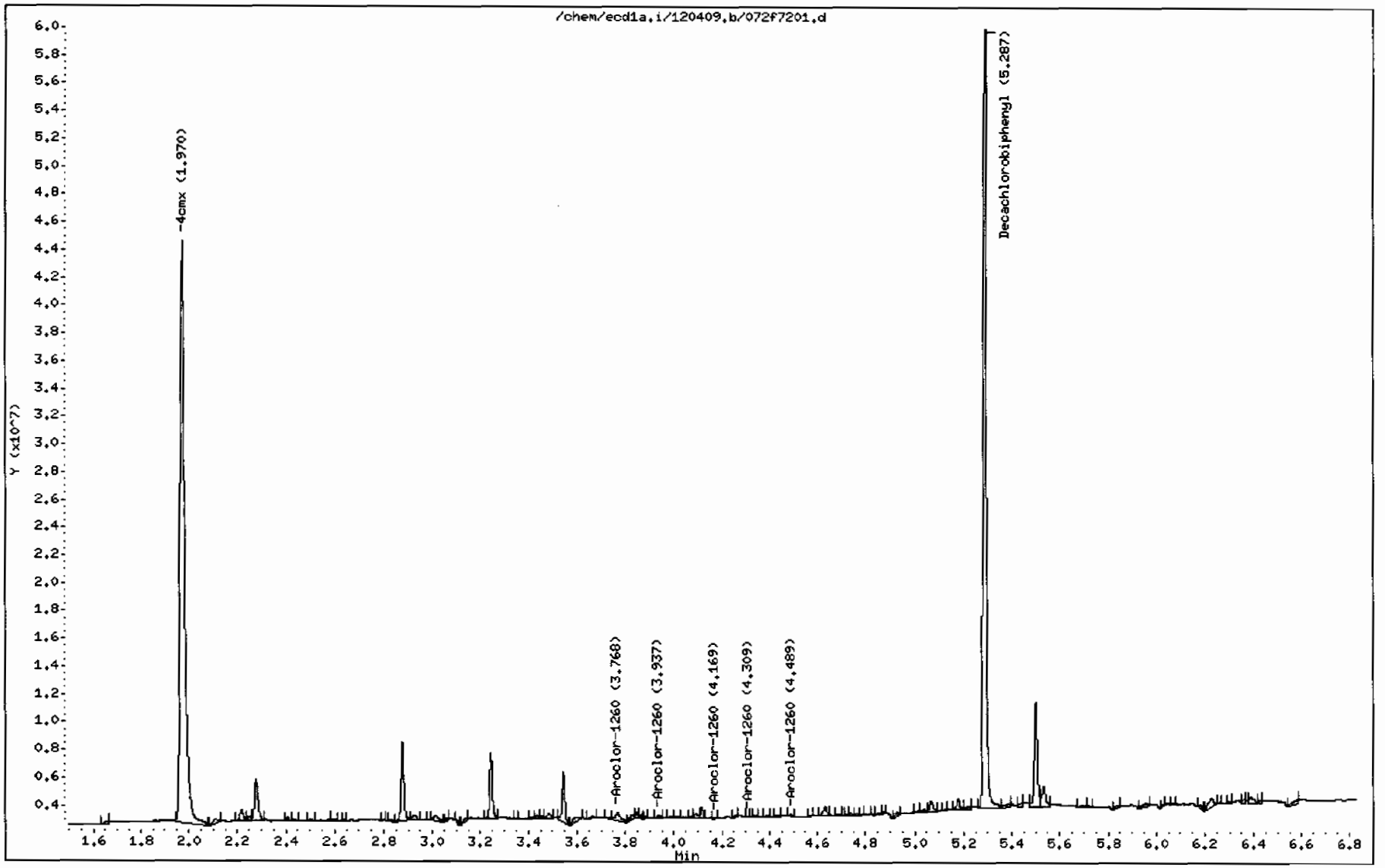

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/072b7201.d
Lab Smp Id: 241819008 Client Smp ID: RE03-09-14121
Inj Date : 04-DEC-2009 19:14
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819008|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14121|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	12.68160	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	36565298	98.4802	3.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	40003127	133.087	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/072b7201.d
Date : 04-DEC-2009 19:14
Client ID: RE03-09-14121
Sample Info: 1241819008111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

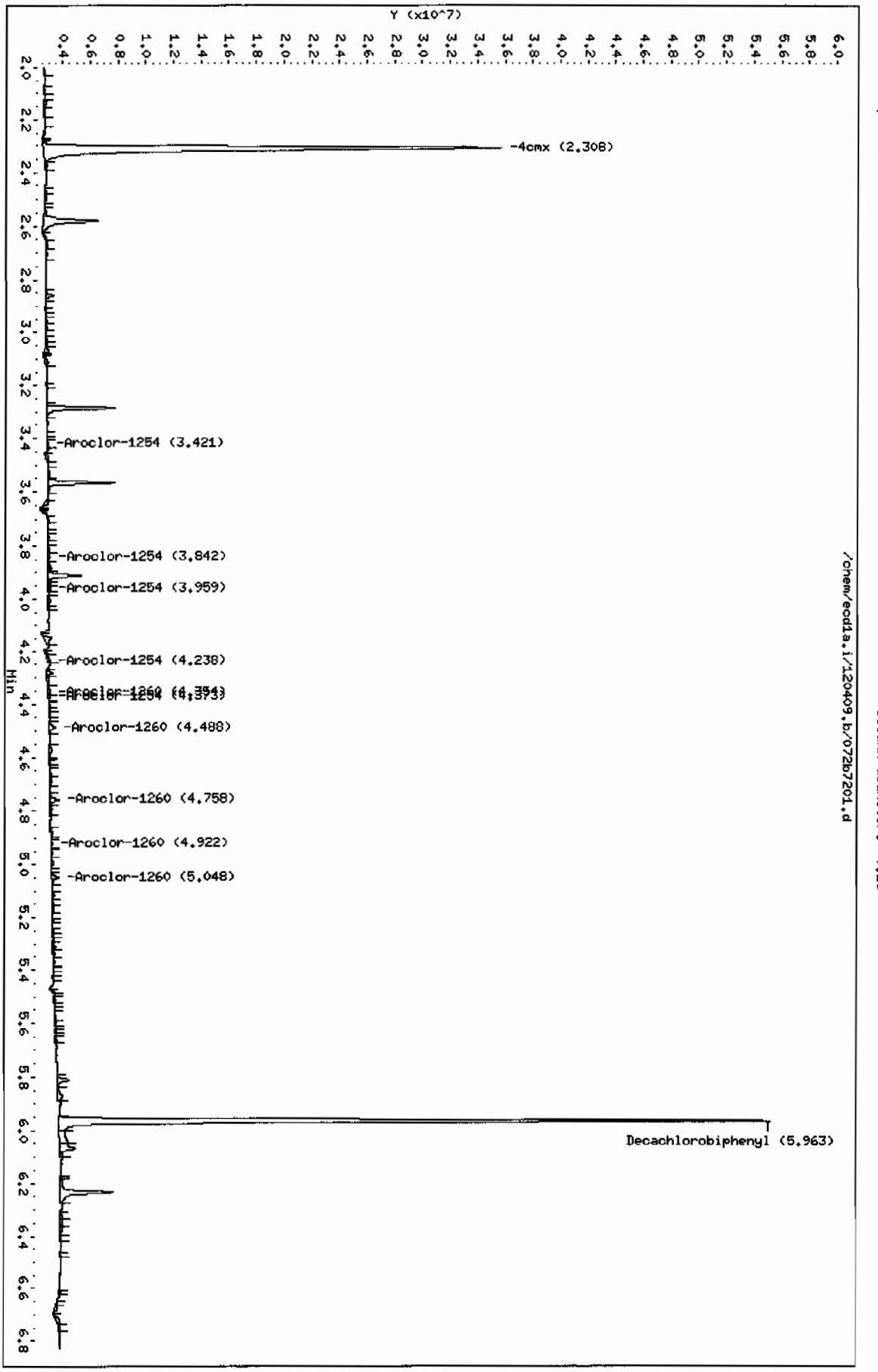

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819017	**Date Received:**	11/25/2009 09:10	**%Moisture:**	5.6
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14122	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 22:19	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	087f8701.d	**Column:**	1 CLP1	**Level:**	LOW
	087b8701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.52	ug/kg	1.17	3.52	1
11104-28-2	Aroclor-1221	U	3.52	ug/kg	1.17	3.52	1
11141-16-5	Aroclor-1232	U	3.52	ug/kg	1.17	3.52	1
53469-21-9	Aroclor-1242	U	3.52	ug/kg	1.17	3.52	1
12672-29-6	Aroclor-1248	U	3.52	ug/kg	1.17	3.52	1
11097-69-1	Aroclor-1254	U	3.52	ug/kg	1.17	3.52	1
11096-82-5	Aroclor-1260	U	3.52	ug/kg	1.17	3.52	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/087f8701.d
Lab Smp Id: 241819017 Client Smp ID: RE03-09-14122
Inj Date : 04-DEC-2009 22:19
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819017|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14122|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 87
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	5.64160	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	60929365	136.529	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	58156814	142.278	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/087f8701.d

Date : 04-DEC-2009 22:19

Client ID: RE03-09-14122

Sample Info: |24181901711|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

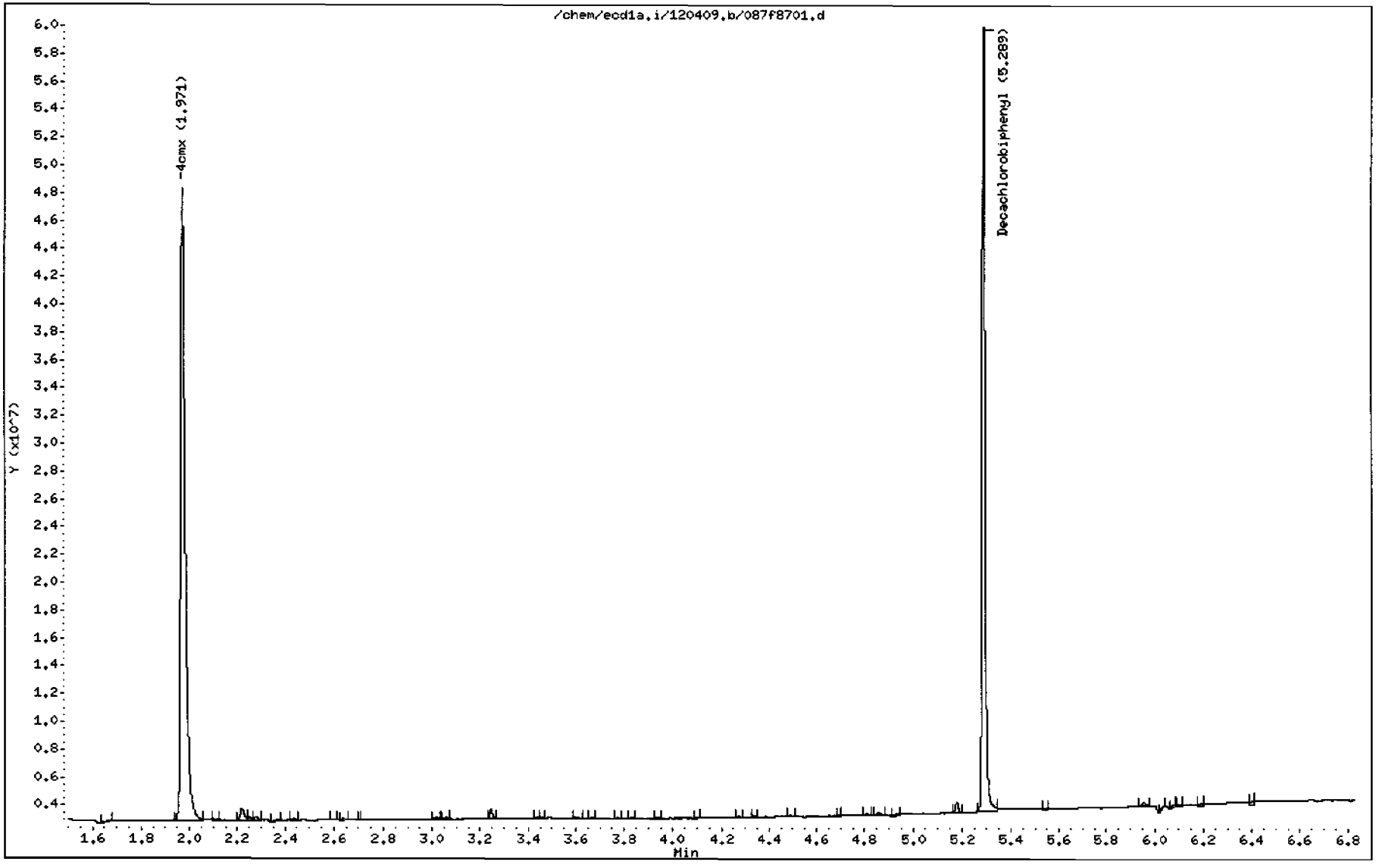

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/087b8701.d
Lab Smp Id: 241819017 Client Smp ID: RE03-09-14122
Inj Date : 04-DEC-2009 22:19
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819017|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14122|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 87
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	5.64160	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	50796489	136.809	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	43937451	146.176	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/087b8701.d
Date : 04-DEC-2009 22:19
Client ID: RE03-09-14122
Sample Info: 1241819017111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

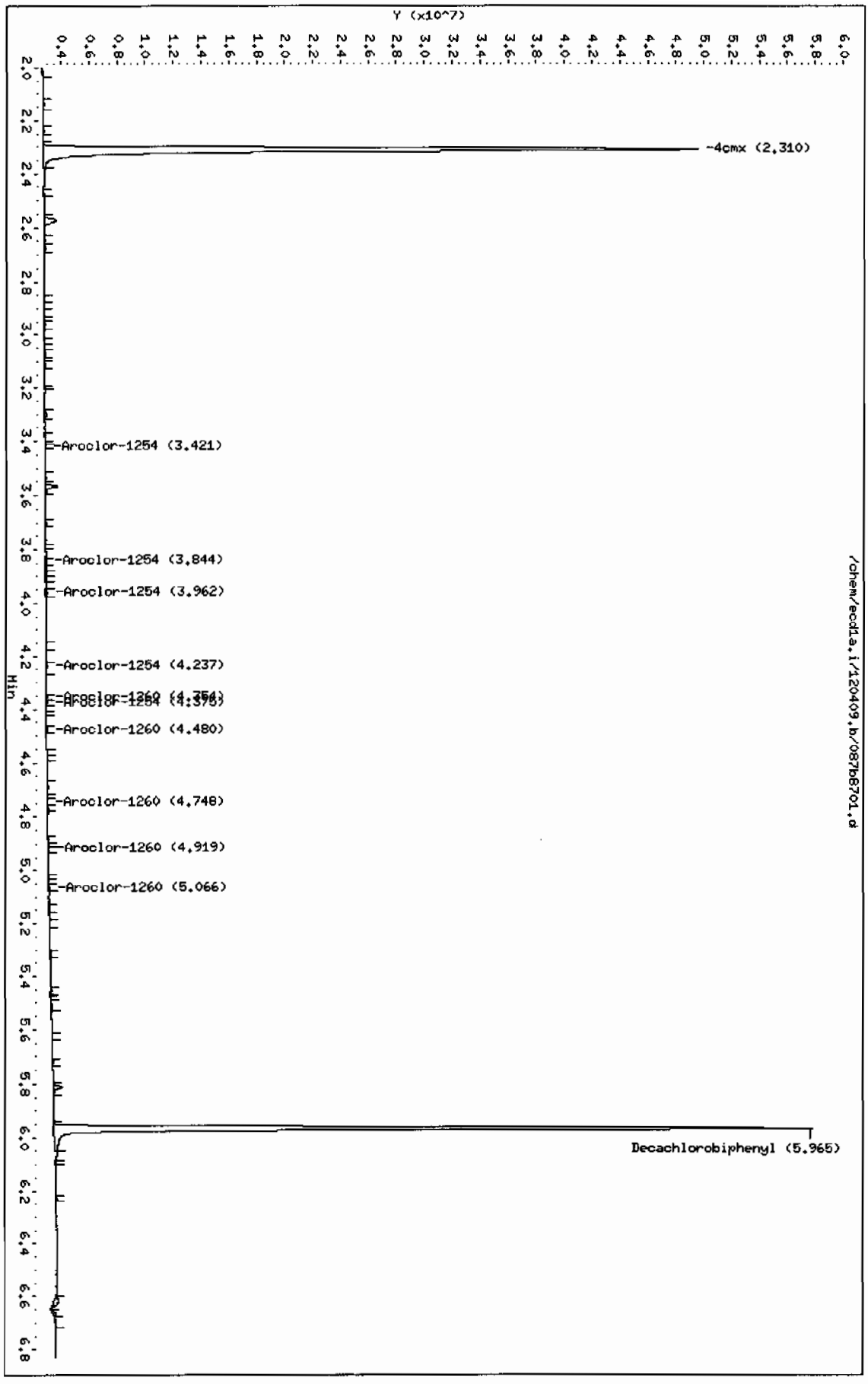

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PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**5.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14123**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:24**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**068f6801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	068b6801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.52	ug/kg	1.17	3.52	1
11104-28-2	Aroclor-1221	U	3.52	ug/kg	1.17	3.52	1
11141-16-5	Aroclor-1232	U	3.52	ug/kg	1.17	3.52	1
53469-21-9	Aroclor-1242	U	3.52	ug/kg	1.17	3.52	1
12672-29-6	Aroclor-1248	U	3.52	ug/kg	1.17	3.52	1
11097-69-1	Aroclor-1254	U	3.52	ug/kg	1.17	3.52	1
11096-82-5	Aroclor-1260	U	3.52	ug/kg	1.17	3.52	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/068f6801.d
Lab Smp Id: 241819004 Client Smp ID: RE03-09-14123
Inj Date : 04-DEC-2009 18:24
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819004|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14123|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 68
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	5.53440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	64010534	143.433	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	59941660	146.644	5.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/068f6801.d

Page 1

Date : 04-DEC-2009 18:24

Client ID: RE03-09-14123

Instrument: ecd1a.i

Sample Info: |241819004|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

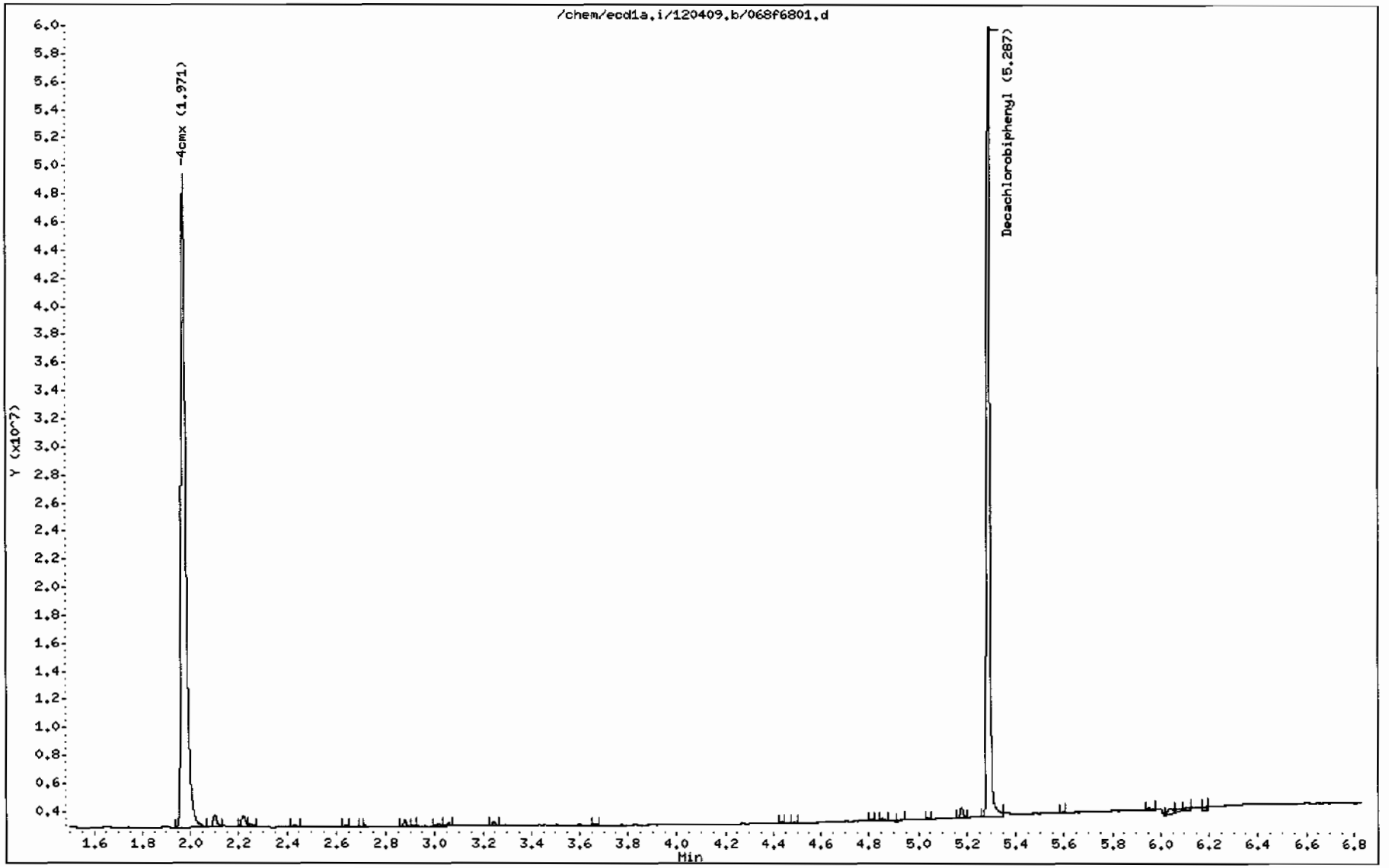

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/068b6801.d
Lab Smp Id: 241819004 Client Smp ID: RE03-09-14123
Inj Date : 04-DEC-2009 18:24
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819004|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14123|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 68
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	5.53440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	53206768	143.300	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	44517160	148.105	5.2	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/068b6801.d
Date : 04-DEC-2009 18:24
Client ID: RE03-09-14123
Sample Info: |241819004|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

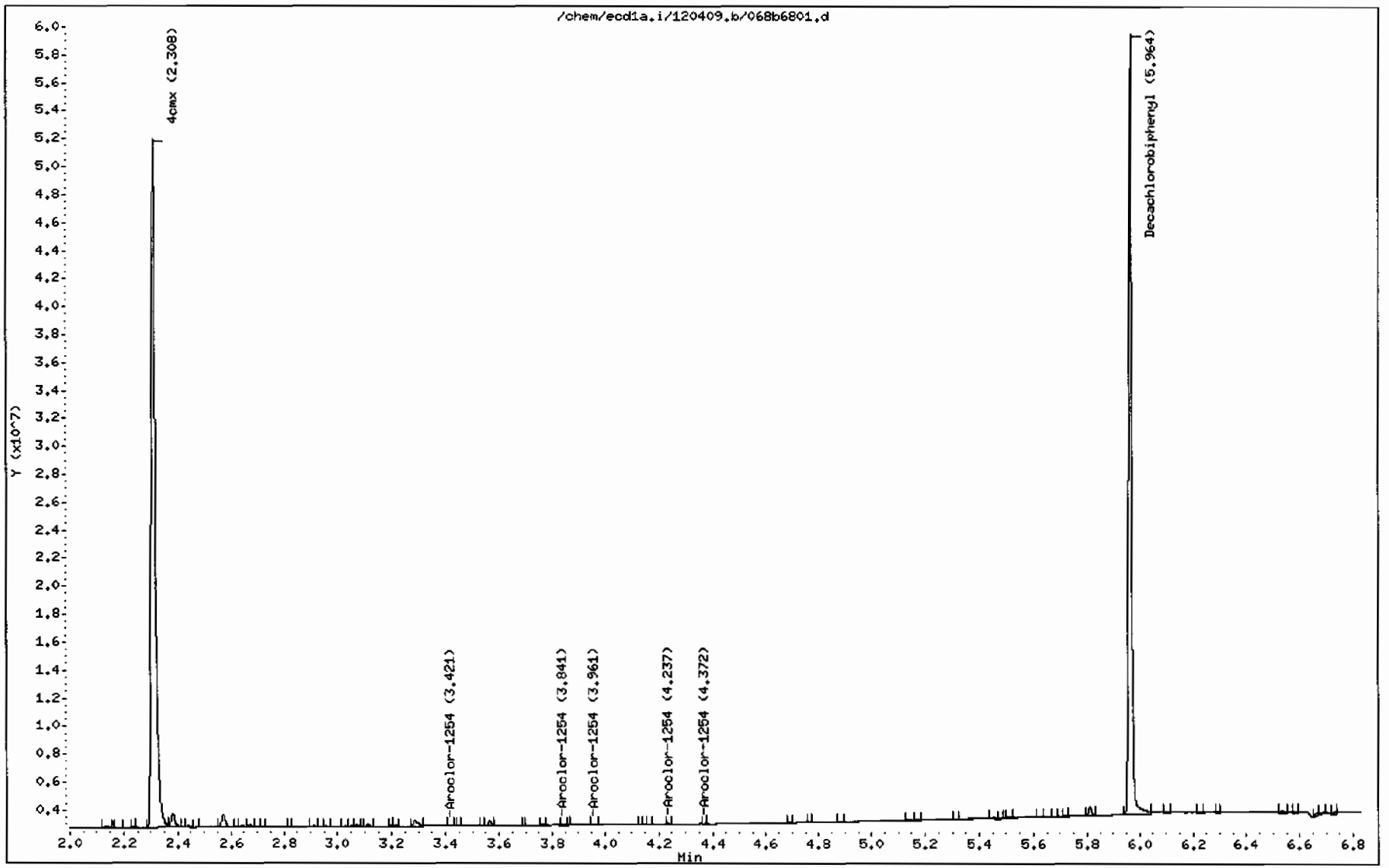

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819018**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**7.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14124**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927189**	**Inst:**	**ECD1A,I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:32**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**088f8801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	088b8801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/088f8801.d
Lab Smp Id: 241819018 Client Smp ID: RE03-09-14124
Inj Date : 04-DEC-2009 22:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819018|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14124|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 88
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.82910	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	57066256	127.873	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	51624448	126.296	4.5	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/088f8801.d

Date : 04-DEC-2009 22:32

Client ID: RE03-09-14124

Sample Info: |24181901811|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

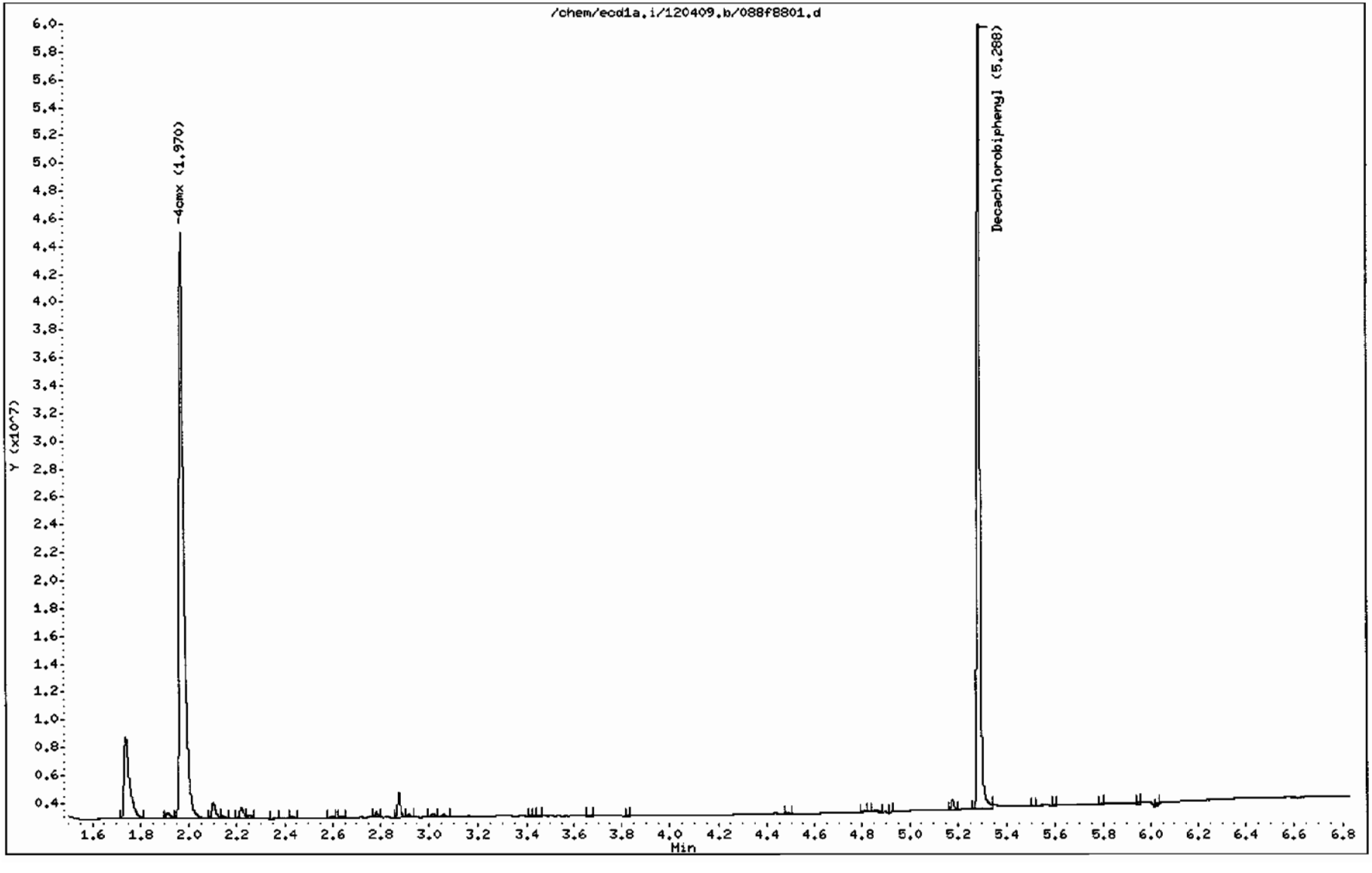

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/088b8801.d
Lab Smp Id: 241819018 Client Smp ID: RE03-09-14124
Inj Date : 04-DEC-2009 22:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819018|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14124|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 88
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.82910	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	47753819	128.614	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	39546403	131.568	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/088b8801.d
Date : 04-DEC-2009 22:32
Client ID: RE03-09-14124
Sample Info: |24181901811|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

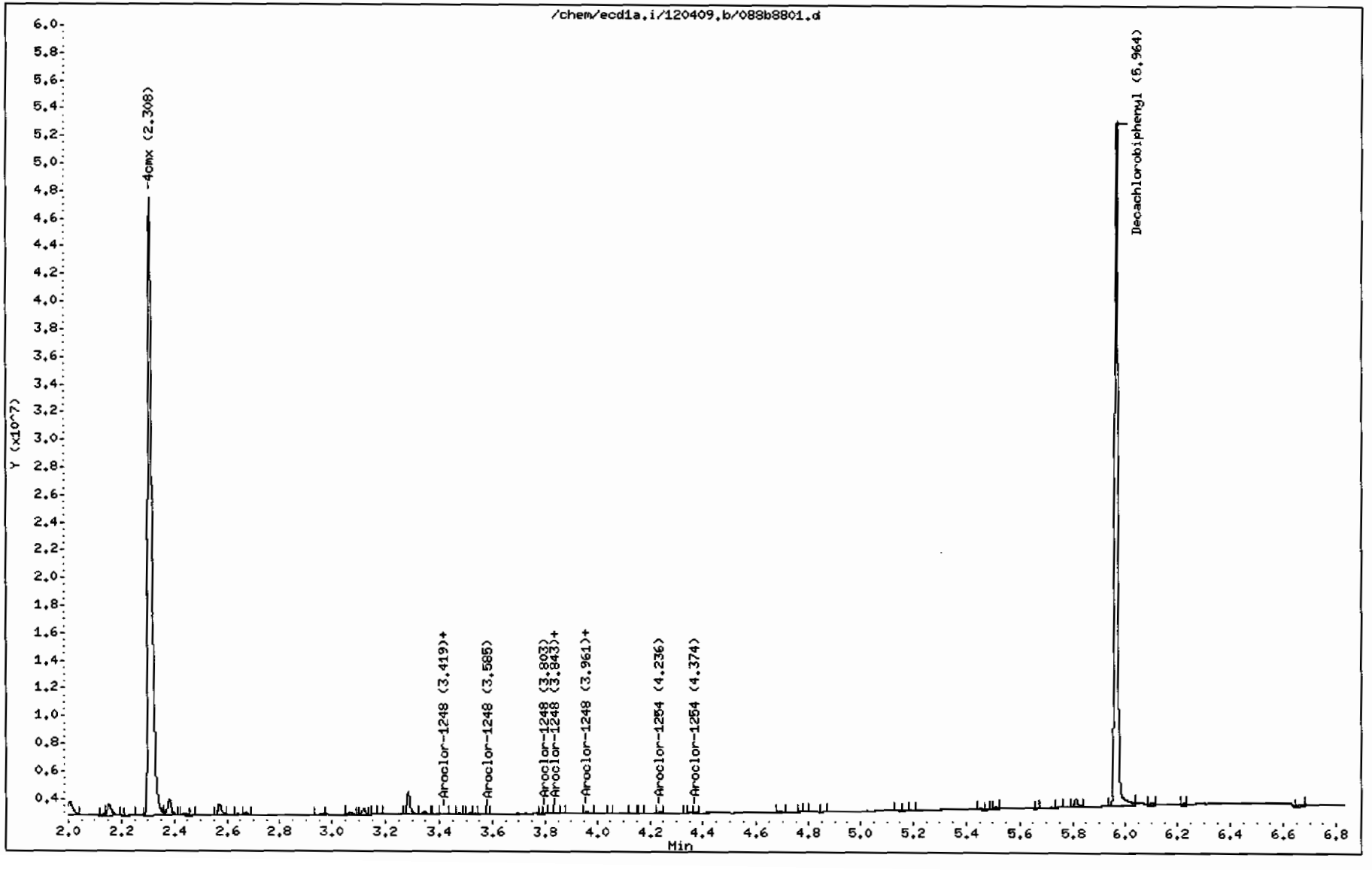

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819003**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14125**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 18:11**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**067f6701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	067b6701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.46	ug/kg	1.15	3.46	1
11104–28–2	Aroclor–1221	U	3.46	ug/kg	1.15	3.46	1
11141–16–5	Aroclor–1232	U	3.46	ug/kg	1.15	3.46	1
53469–21–9	Aroclor–1242	U	3.46	ug/kg	1.15	3.46	1
12672–29–6	Aroclor–1248	U	3.46	ug/kg	1.15	3.46	1
11097–69–1	Aroclor–1254	U	3.46	ug/kg	1.15	3.46	1
11096–82–5	Aroclor–1260	U	3.46	ug/kg	1.15	3.46	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/067f6701.d
Lab Smp Id: 241819003 Client Smp ID: RE03-09-14125
Inj Date : 04-DEC-2009 18:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819003|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14125|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 67
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	4.09250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	61226954	137.196	4.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	55689137	136.240	4.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/067f6701.d

Page 1

Date : 04-DEC-2009 18:11

Client ID: RE03-09-14125

Instrument: ecd1a.i

Sample Info: |24181900311|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

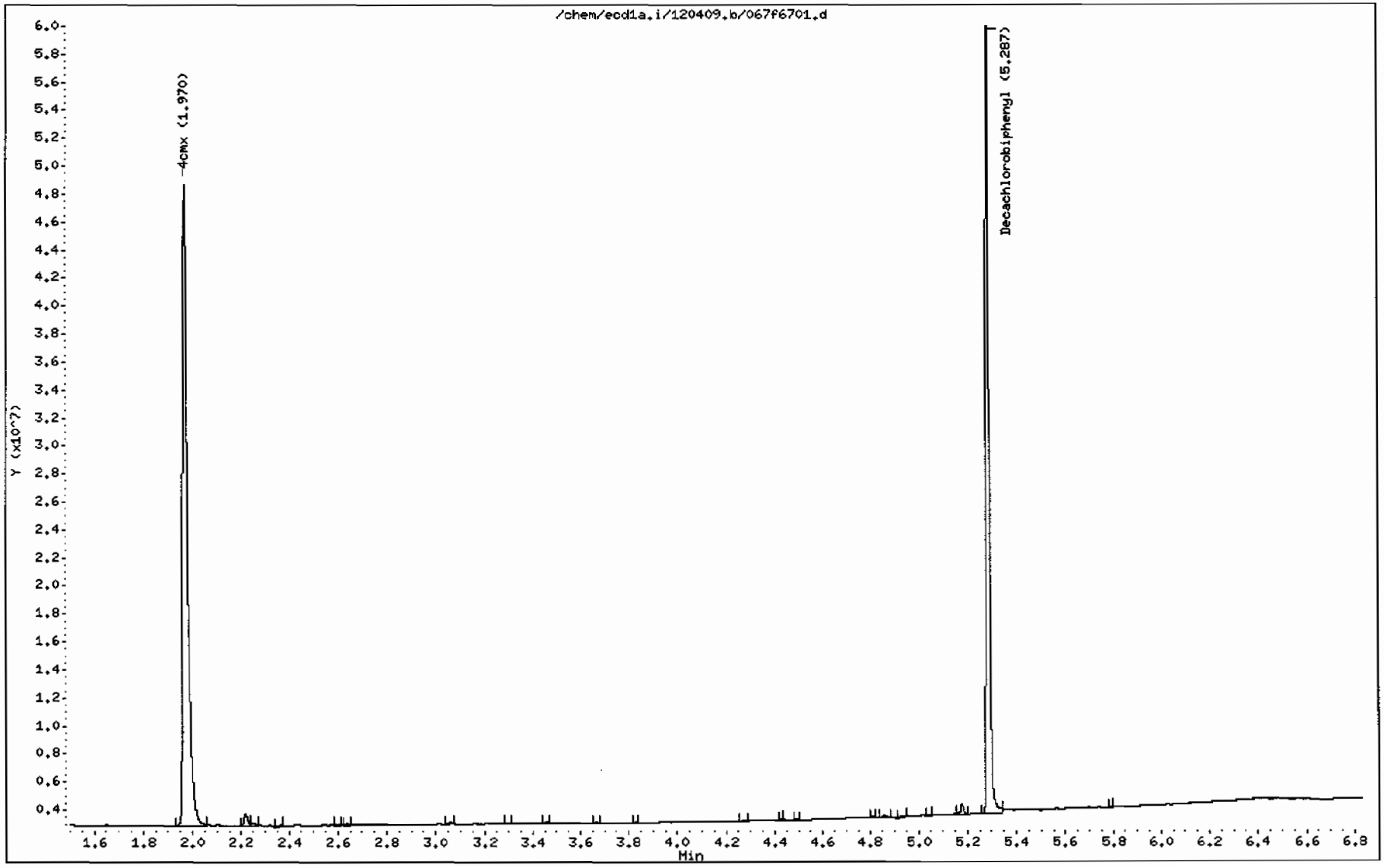

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/067b6701.d
Lab Smp Id: 241819003 Client Smp ID: RE03-09-14125
Inj Date : 04-DEC-2009 18:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819003|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14125|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 67
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	4.09250	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	51041331	137.468	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	41619370	138.464	4.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/067b6701.d

Page 1

Date : 04-DEC-2009 18:11

Client ID: RE03-09-14125

Instrument: ecd1a.i

Sample Info: |241819003|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

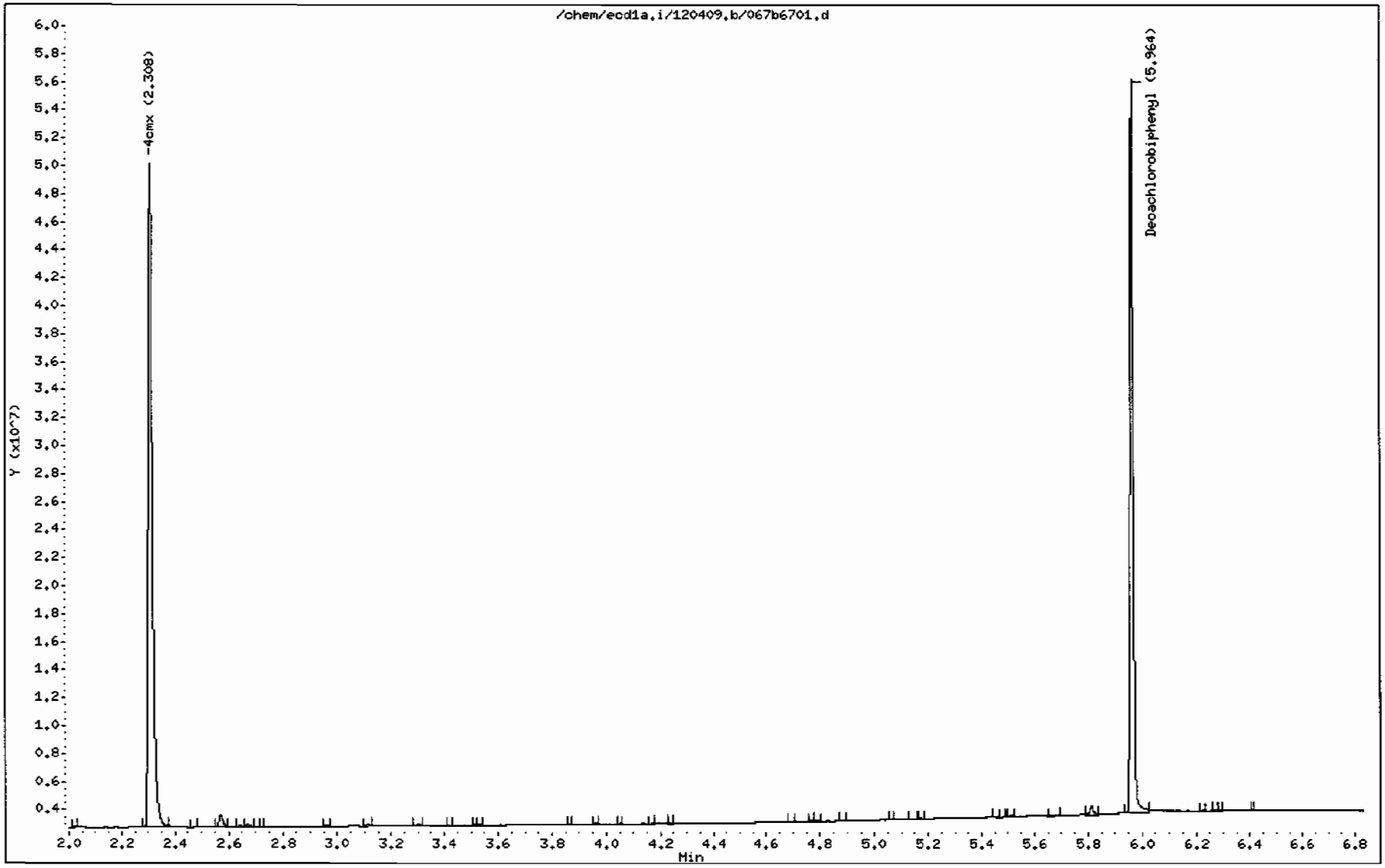

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	8.2
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14126	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 18:49	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	070f7001.d	**Column:**	1 CLP1	**Level:**	LOW
	070b7001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.63	ug/kg	1.21	3.63	1
11104-28-2	Aroclor-1221	U	3.63	ug/kg	1.21	3.63	1
11141-16-5	Aroclor-1232	U	3.63	ug/kg	1.21	3.63	1
53469-21-9	Aroclor-1242	U	3.63	ug/kg	1.21	3.63	1
12672-29-6	Aroclor-1248	U	3.63	ug/kg	1.21	3.63	1
11097-69-1	Aroclor-1254	U	3.63	ug/kg	1.21	3.63	1
11096-82-5	Aroclor-1260	U	3.63	ug/kg	1.21	3.63	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/070f7001.d
Lab Smp Id: 241819006 Client Smp ID: RE03-09-14126
Inj Date : 04-DEC-2009 18:49
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819006|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14126|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 08:58 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	8.21600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	60868564	136.393	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	56578886	138.417	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/070f7001.d

Date : 04-DEC-2009 18:49

Client ID: RE03-09-14126

Sample Info: |2418190061|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

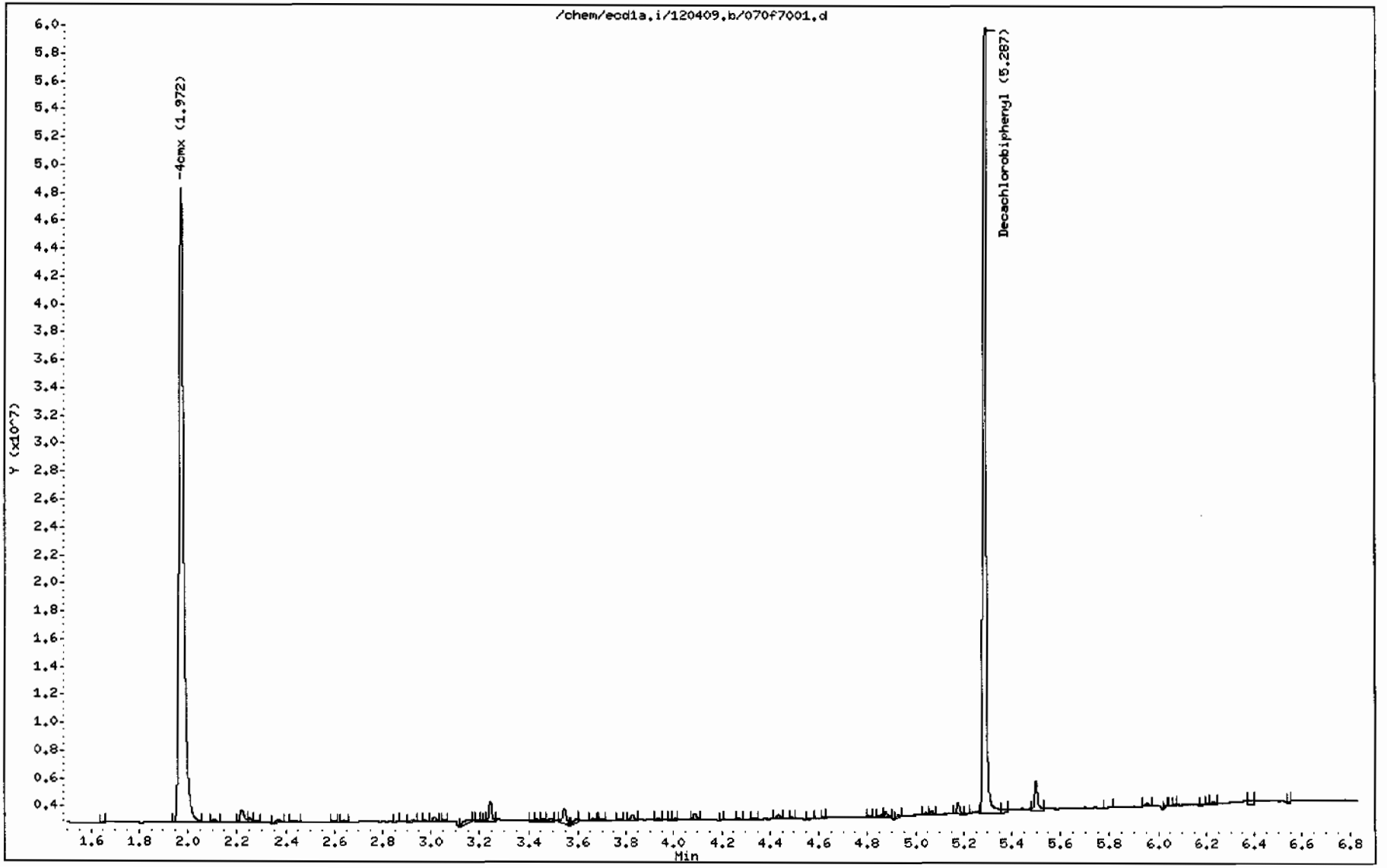

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/070b7001.d
Lab Smp Id: 241819006 Client Smp ID: RE03-09-14126
Inj Date : 04-DEC-2009 18:49
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819006|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14126|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	8.21600	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	50650178	136.415	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	43908300	146.079	5.3	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/070b7001.d

Date : 04-DEC-2009 18:49

Client ID: RE03-09-14126

Sample Info: 1241819006|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

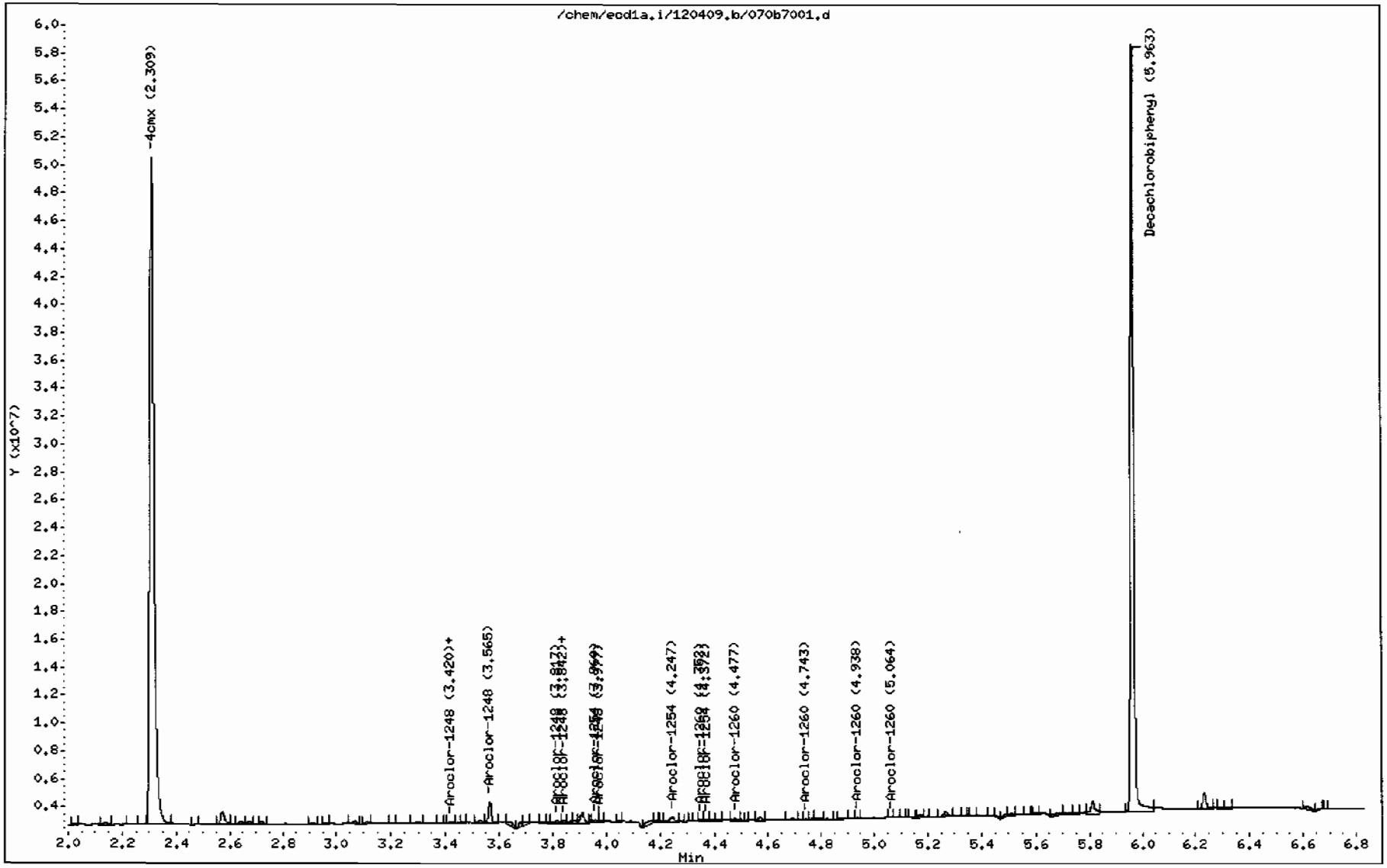

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241819015	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14127	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 21:08	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	081f8101.d	**Column:**	1 CLP1	**Level:**	LOW
	081b8101.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.49	ug/kg	1.16	3.49	1
11104-28-2	Aroclor-1221	U	3.49	ug/kg	1.16	3.49	1
11141-16-5	Aroclor-1232	U	3.49	ug/kg	1.16	3.49	1
53469-21-9	Aroclor-1242	U	3.49	ug/kg	1.16	3.49	1
12672-29-6	Aroclor-1248	U	3.49	ug/kg	1.16	3.49	1
11097-69-1	Aroclor-1254	U	3.49	ug/kg	1.16	3.49	1
11096-82-5	Aroclor-1260	U	3.49	ug/kg	1.16	3.49	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/081f8101.d
Lab Smp Id: 241819015 Client Smp ID: RE03-09-14127
Inj Date : 04-DEC-2009 21:08
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819015|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14127|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	4.83030	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	59488567	133.301	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	57395333	140.415	4.9	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/081f8101.d

Page 1

Date : 04-DEC-2009 21:08

Client ID: RE03-09-14127

Instrument: ecd1a.i

Sample Info: |241819015|1|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

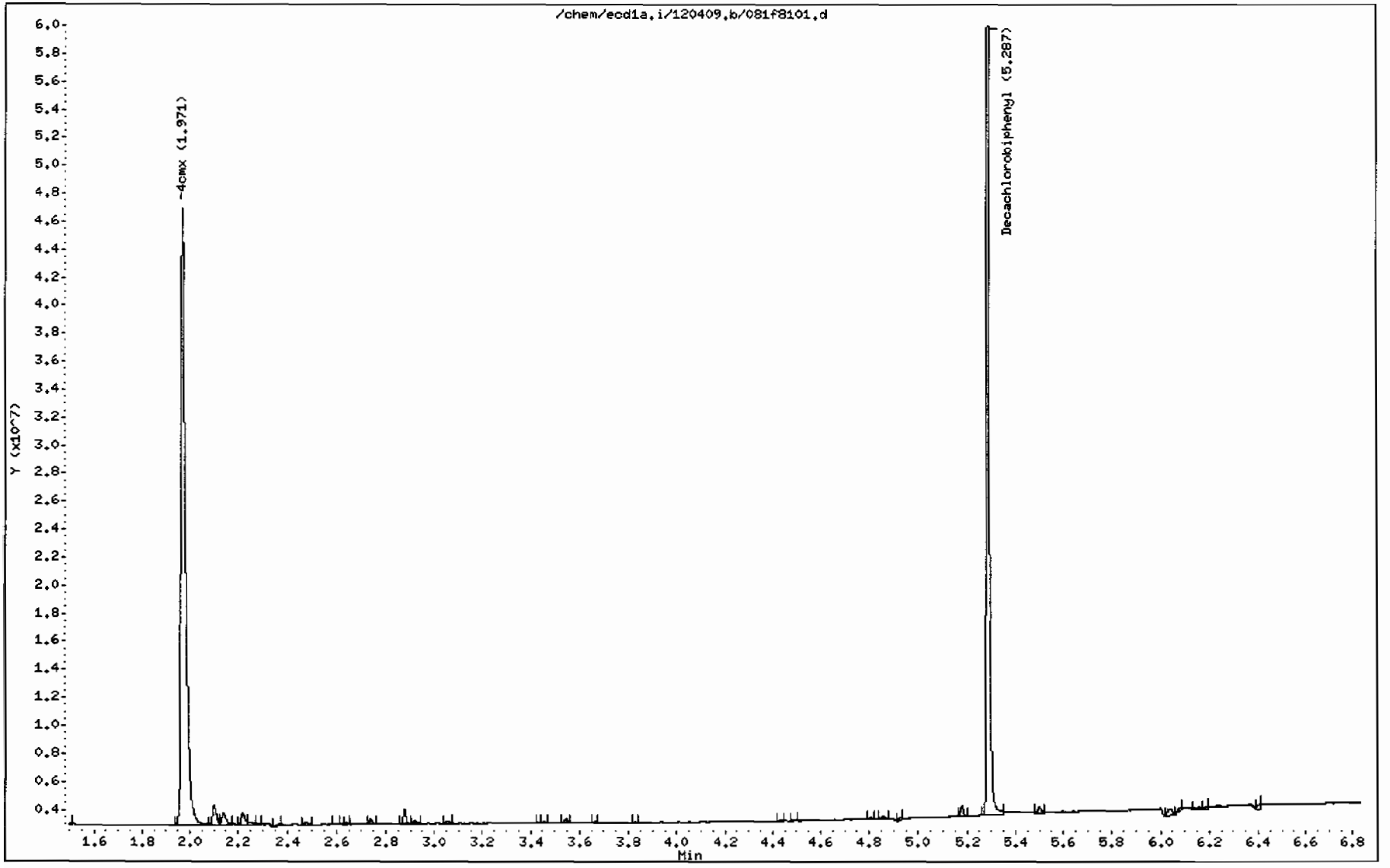

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/081b8101.d
Lab Smp Id: 241819015 Client Smp ID: RE03-09-14127
Inj Date : 04-DEC-2009 21:08
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819015|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14127|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	4.83030	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	49301333	132.782	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	43259137	143.920	5.0	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/081b8101.d
Date : 04-DEC-2009 21:08
Client ID: RE03-09-14127
Sample Info: |2418190151|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

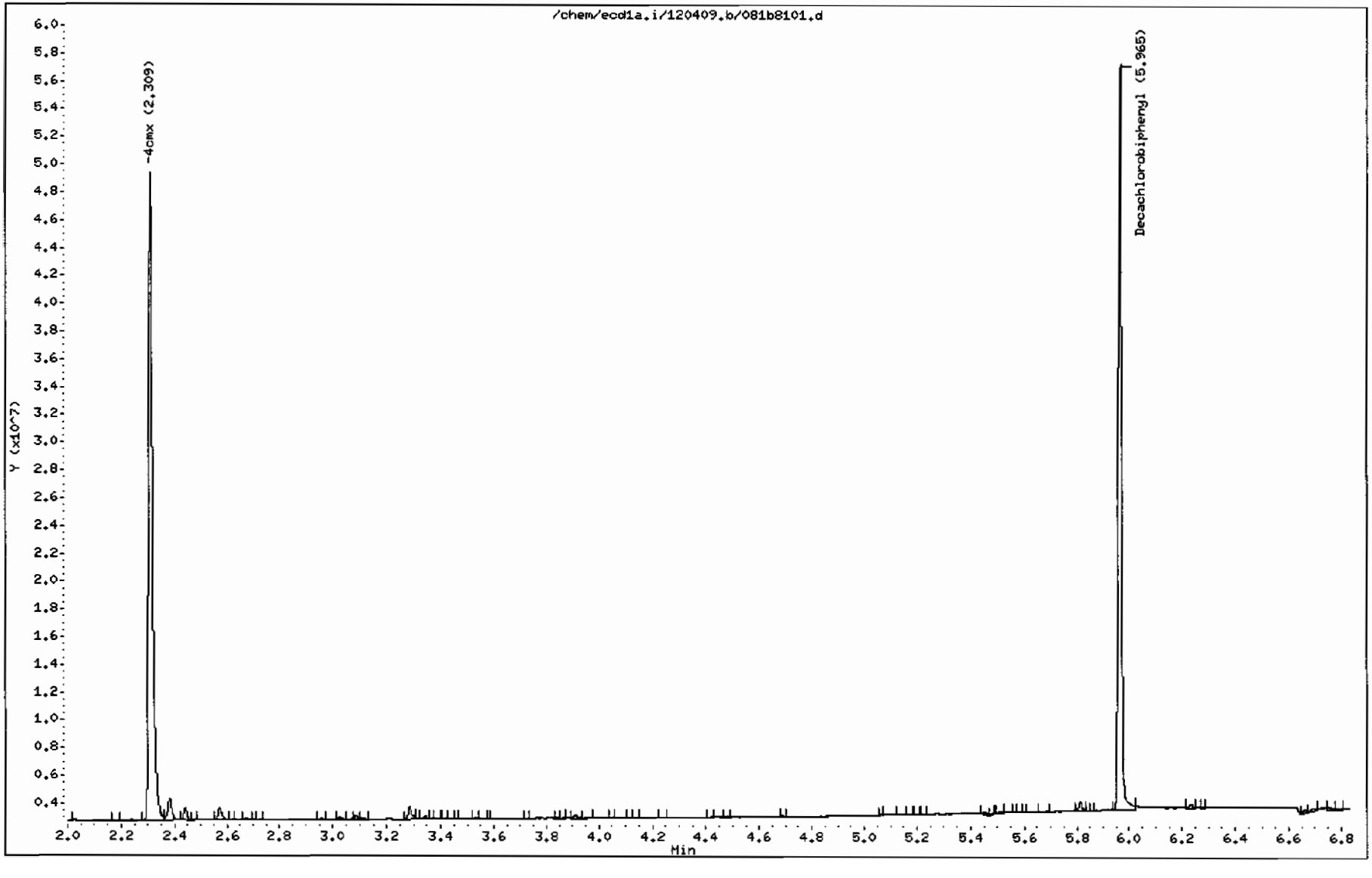

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819020**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**2.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14128**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:57**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**090f9001.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	090b9001.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.43	ug/kg	1.14	3.43	1
11104–28–2	Aroclor–1221	U	3.43	ug/kg	1.14	3.43	1
11141–16–5	Aroclor–1232	U	3.43	ug/kg	1.14	3.43	1
53469–21–9	Aroclor–1242	U	3.43	ug/kg	1.14	3.43	1
12672–29–6	Aroclor–1248	U	3.43	ug/kg	1.14	3.43	1
11097–69–1	Aroclor–1254	U	3.43	ug/kg	1.14	3.43	1
11096–82–5	Aroclor–1260	U	3.43	ug/kg	1.14	3.43	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/090f9001.d
Lab Smp Id: 241819020 Client Smp ID: RE03-09-14128
Inj Date : 04-DEC-2009 22:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819020|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14128|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 90
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	2.78570	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.969	1.973	-0.004	62071494	139.088	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	57889932	141.625	4.8	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/090f9001.d

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Date : 04-DEC-2009 22:57

Client ID: RE03-09-14128

Instrument: ecd1a.i

Sample Info: 1241819020111

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

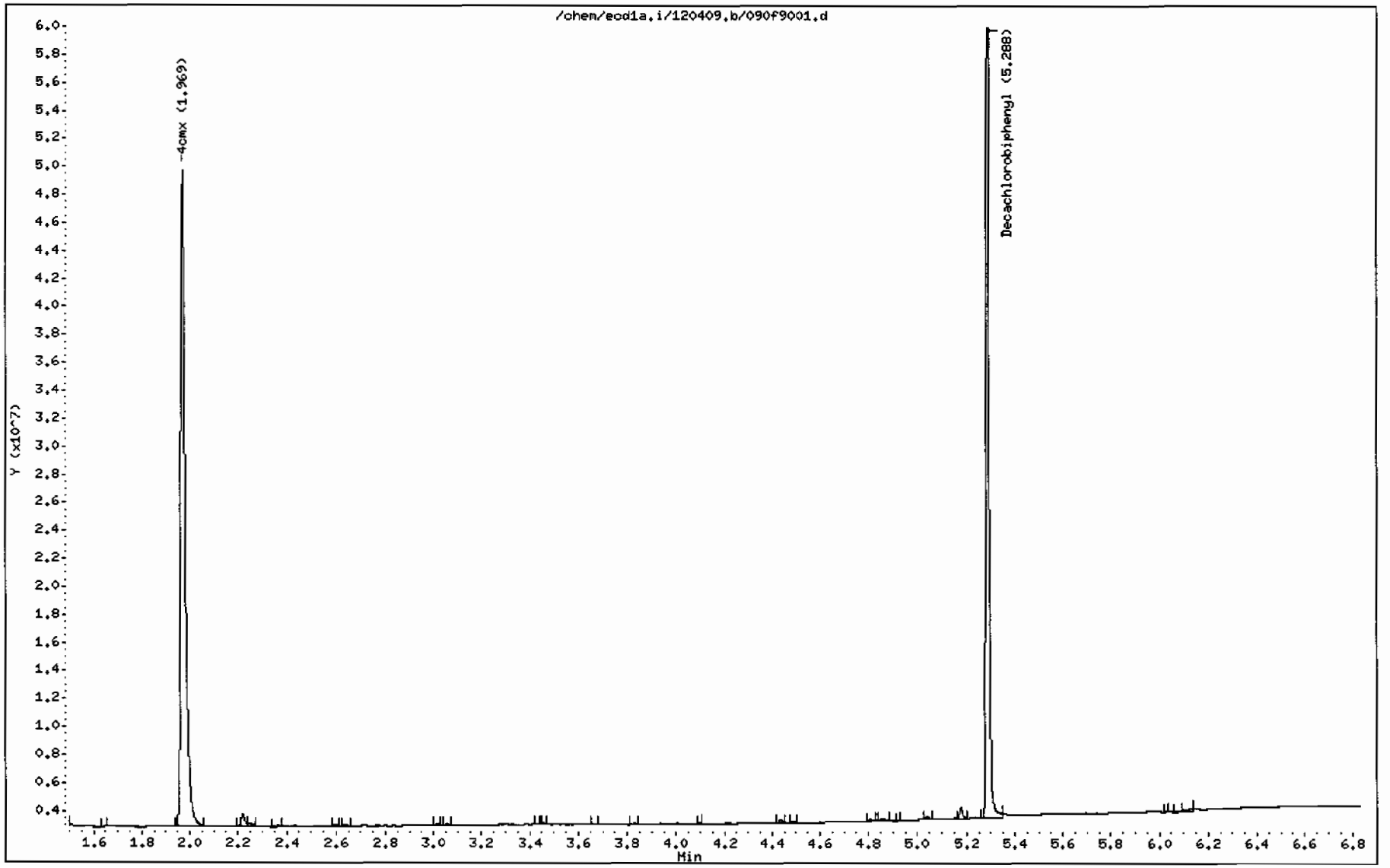

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/090b9001.d
Lab Smp Id: 241819020 Client Smp ID: RE03-09-14128
Inj Date : 04-DEC-2009 22:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819020|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14128|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 90
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	2.78570	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	51717891	139.290	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	44632140	148.488	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/090b9001.d

Date : 04-DEC-2009 22:57

Client ID: RE03-09-14128

Sample Info: |241819020|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

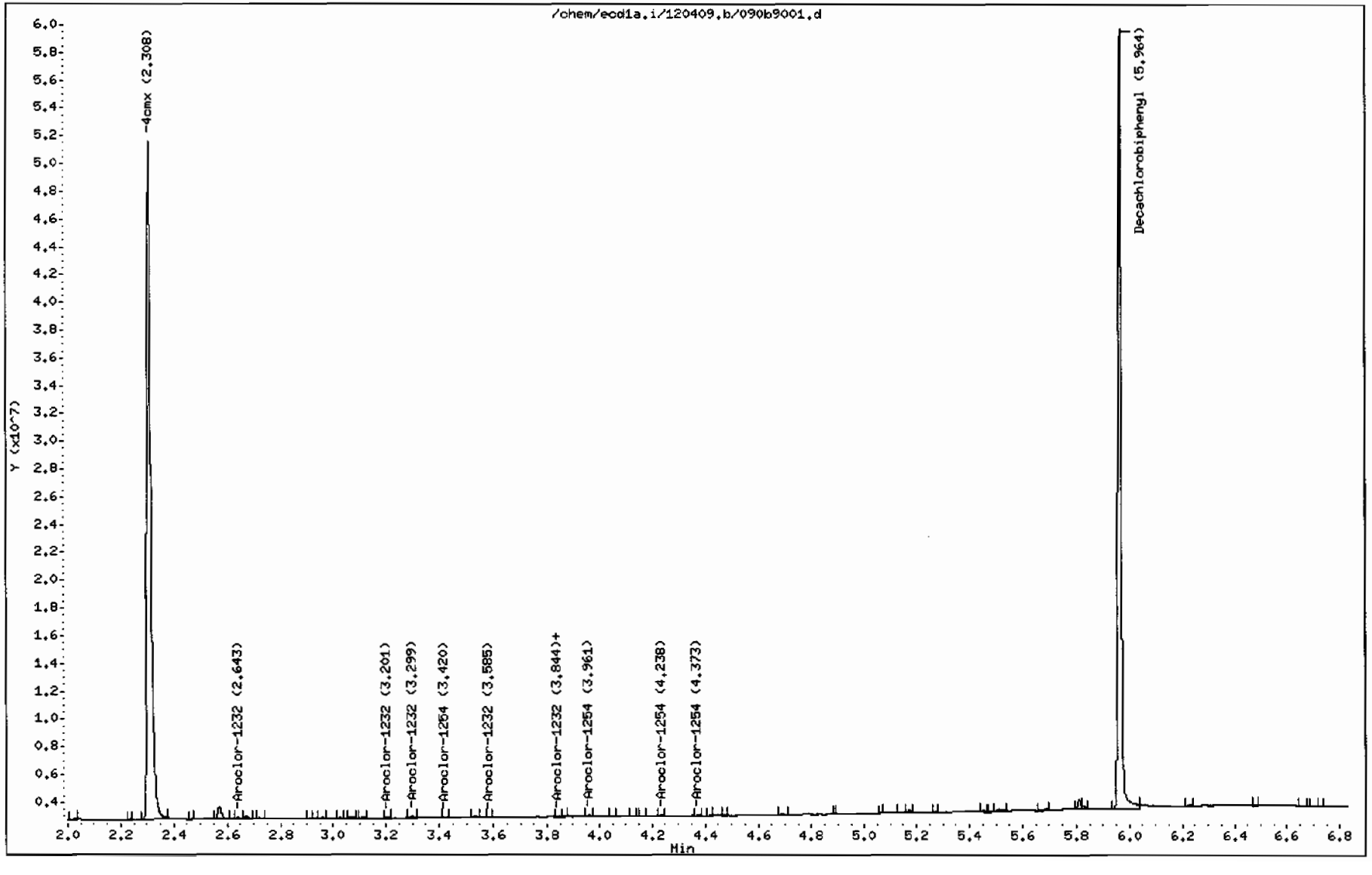

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-666**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241819009**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**1.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14129**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 19:52**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**075f7501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	075b7501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.38	ug/kg	1.13	3.38	1
11104-28-2	Aroclor-1221	U	3.38	ug/kg	1.13	3.38	1
11141-16-5	Aroclor-1232	U	3.38	ug/kg	1.13	3.38	1
53469-21-9	Aroclor-1242	U	3.38	ug/kg	1.13	3.38	1
12672-29-6	Aroclor-1248	U	3.38	ug/kg	1.13	3.38	1
11097-69-1	Aroclor-1254	U	3.38	ug/kg	1.13	3.38	1
11096-82-5	Aroclor-1260	U	3.38	ug/kg	1.13	3.38	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/075f7501.d
Lab Smp Id: 241819009 Client Smp ID: RE03-09-14129
Inj Date : 04-DEC-2009 19:52
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819009|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14129|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	1.50880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	56055206	125.607	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	53782481	131.576	4.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/075f7501.d

Date : 04-DEC-2009 19:52

Client ID: RE03-09-14129

Sample Info: |241819009|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

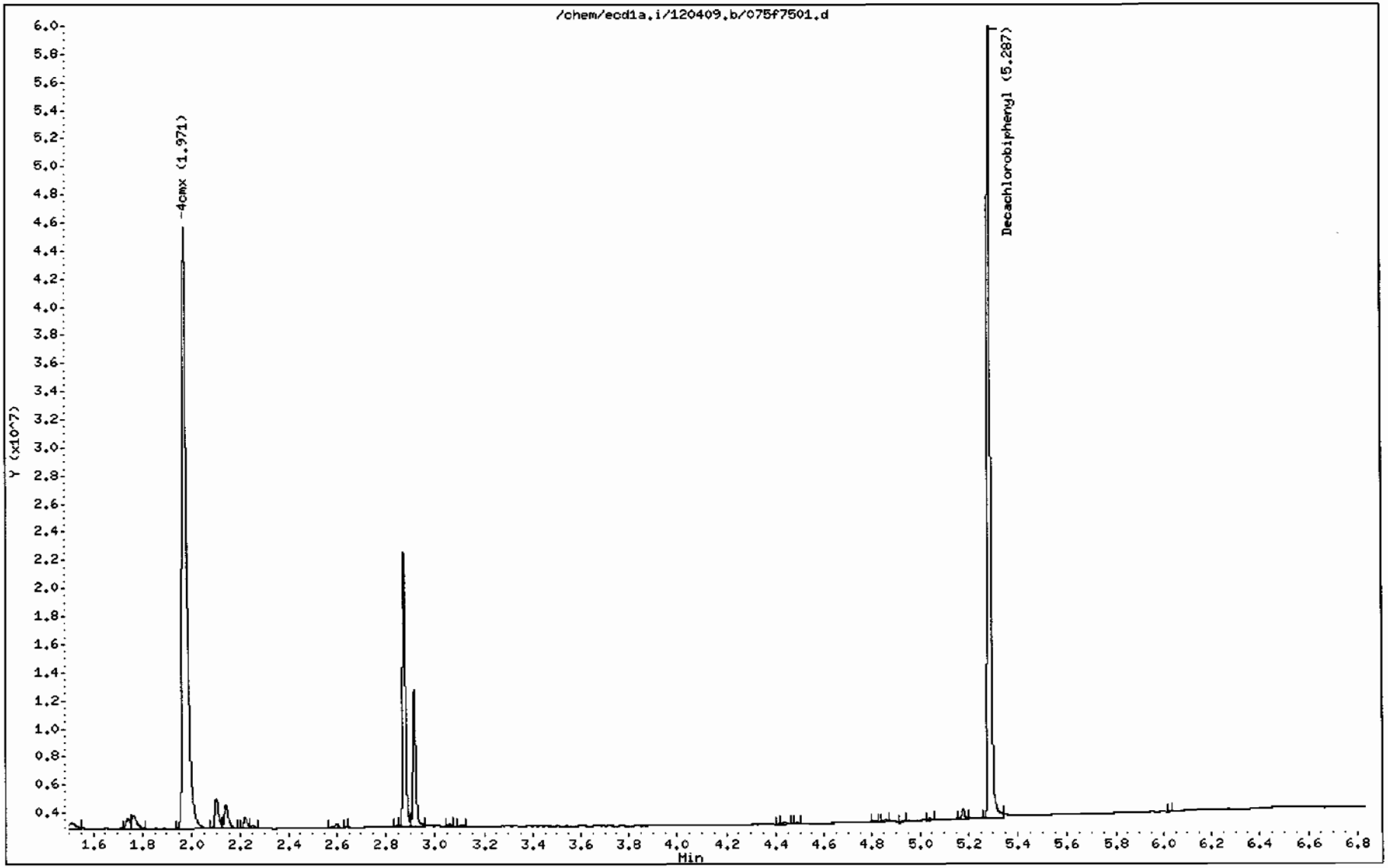

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/075b7501.d
Lab Smp Id: 241819009 Client Smp ID: RE03-09-14129
Inj Date : 04-DEC-2009 19:52
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |241819009|1|
Misc Info : |ECD82P_1SF|927189|SVAF|LANL|SOIL|RE03-09-14129|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	1.50880	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	46885309	126.275	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	40849146	135.902	4.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/075b7501.d

Date : 04-DEC-2009 19:52

Client ID: RE03-09-14129

Sample Info: |241819009|1|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

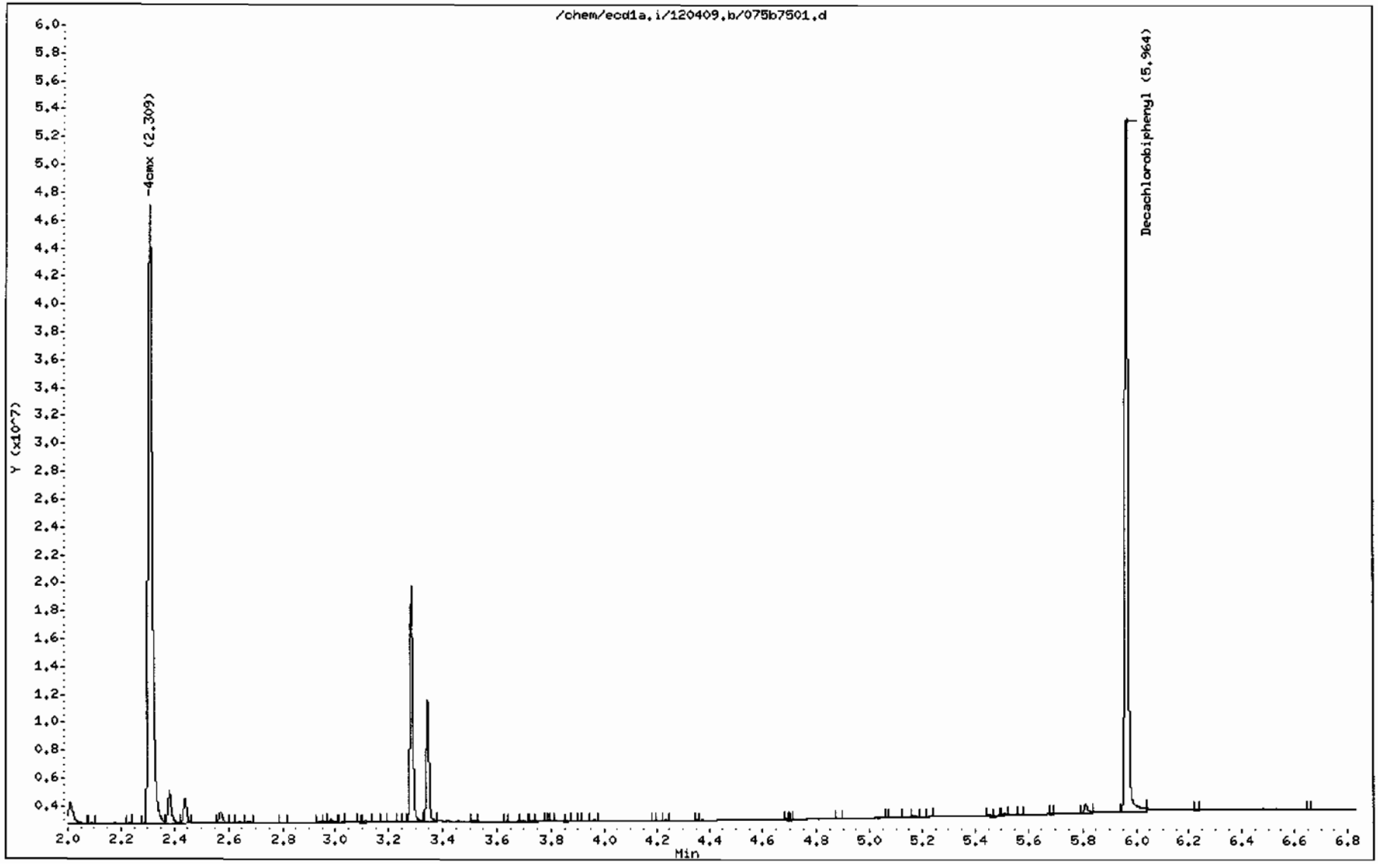

STANDARDS DATA

Report Date: 05-Dec-2009 10:57

Calibration History

Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Start Cal Date: 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010f1001.d
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029f2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023f2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017f1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011f1101.d
Cal Level: 2 , Cal Amount: 200.00000		
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011f1101.d
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030f3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024f2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018f1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012f1201.d
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031f3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025f2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019f1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014f1401.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032f3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026f2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020f2001.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010f1001.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013f1301.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008f0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007f0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006f0601.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013f1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014f1401.d
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033f3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027f2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021f2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:10	AR1660	/chem/ecd1a.i/120409.b/091f9101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:58	AR1660	/chem/ecd1a.i/120409.b/085f8501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:27	AR1660	/chem/ecd1a.i/120409.b/073f7301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:00	PCB	/chem/ecd1a.i/120409.b/061f6101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 16:01	AR1660	/chem/ecd1a.i/120409.b/056f5601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 13:34	AR1660	/chem/ecd1a.i/120409.b/044f4401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 11:07	AR1660	/chem/ecd1a.i/120409.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:33	AR1660	/chem/ecd1a.i/120409.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:13	AR1660	/chem/ecd1a.i/120409.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:57	AR1254	/chem/ecd1a.i/120409.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:47	AR1268	/chem/ecd1a.i/120409.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:36	AR1262	/chem/ecd1a.i/120409.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:26	AR1221	/chem/ecd1a.i/120409.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:15	AR1232	/chem/ecd1a.i/120409.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:05	AR1248	/chem/ecd1a.i/120409.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:54	AR1242	/chem/ecd1a.i/120409.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:33	AR1660	/chem/ecd1a.i/120409.b/002f0201.d

Report Date: 05-Dec-2009 10:57

Calibration History

Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Start Cal Date: 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
10-NOV-2009 12:59	AR1248	/chem/ecd1a.i/111009b.b/029b2901.d
10-NOV-2009 11:55	AR1242	/chem/ecd1a.i/111009b.b/023b2301.d
10-NOV-2009 10:52	AR1254	/chem/ecd1a.i/111009b.b/017b1701.d
10-NOV-2009 09:49	AR1660	/chem/ecd1a.i/111009b.b/011b1101.d
09-NOV-2009 07:06	AR1268	/chem/ecd1a.i/110909.b/010b1001.d
Cal Level: 2 , Cal Amount: 200.00000		
10-NOV-2009 13:09	AR1248	/chem/ecd1a.i/111009b.b/030b3001.d
10-NOV-2009 12:06	AR1242	/chem/ecd1a.i/111009b.b/024b2401.d
10-NOV-2009 11:03	AR1254	/chem/ecd1a.i/111009b.b/018b1801.d
10-NOV-2009 09:59	AR1660	/chem/ecd1a.i/111009b.b/012b1201.d
09-NOV-2009 07:16	AR1268	/chem/ecd1a.i/110909.b/011b1101.d
Cal Level: 3 , Cal Amount: 500.00000		
10-NOV-2009 13:20	AR1248	/chem/ecd1a.i/111009b.b/031b3101.d
10-NOV-2009 12:17	AR1242	/chem/ecd1a.i/111009b.b/025b2501.d
10-NOV-2009 11:13	AR1254	/chem/ecd1a.i/111009b.b/019b1901.d
10-NOV-2009 10:21	AR1660	/chem/ecd1a.i/111009b.b/014b1401.d
09-NOV-2009 07:27	AR1268	/chem/ecd1a.i/110909.b/012b1201.d
Cal Level: 4 , Cal Amount: 1000.00000		
10-NOV-2009 13:30	AR1248	/chem/ecd1a.i/111009b.b/032b3201.d
10-NOV-2009 12:27	AR1242	/chem/ecd1a.i/111009b.b/026b2601.d
10-NOV-2009 11:24	AR1254	/chem/ecd1a.i/111009b.b/020b2001.d
10-NOV-2009 10:10	AR1660	/chem/ecd1a.i/111009b.b/013b1301.d
10-NOV-2009 09:38	DDTANALOGSTD	/chem/ecd1a.i/111009b.b/010b1001.d
10-NOV-2009 09:17	AR1262	/chem/ecd1a.i/111009b.b/008b0801.d
10-NOV-2009 09:07	AR1221	/chem/ecd1a.i/111009b.b/007b0701.d
10-NOV-2009 08:56	AR1232	/chem/ecd1a.i/111009b.b/006b0601.d
09-NOV-2009 07:37	AR1268	/chem/ecd1a.i/110909.b/013b1301.d
Cal Level: 5 , Cal Amount: 4000.00000		
10-NOV-2009 13:41	AR1248	/chem/ecd1a.i/111009b.b/033b3301.d
10-NOV-2009 12:38	AR1242	/chem/ecd1a.i/111009b.b/027b2701.d
10-NOV-2009 11:34	AR1254	/chem/ecd1a.i/111009b.b/021b2101.d
10-NOV-2009 10:31	AR1660	/chem/ecd1a.i/111009b.b/015b1501.d
09-NOV-2009 07:48	AR1268	/chem/ecd1a.i/110909.b/014b1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:58	AR1660	/chem/ecd1a.i/120409.b/085b8501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:00	AR1660	/chem/ecd1a.i/120409.b/061b6101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:10	AR1660	/chem/ecd1a.i/120409.b/091b9101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:27	AR1660	/chem/ecd1a.i/120409.b/073b7301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 16:01	AR1660	/chem/ecd1a.i/120409.b/056b5601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 13:34	AR1660	/chem/ecd1a.i/120409.b/044b4401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 11:07	AR1660	/chem/ecd1a.i/120409.b/032b3201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:33	AR1660	/chem/ecd1a.i/120409.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:13	AR1660	/chem/ecd1a.i/120409.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:57	AR1254	/chem/ecd1a.i/120409.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:47	AR1268	/chem/ecd1a.i/120409.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:36	AR1262	/chem/ecd1a.i/120409.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:26	AR1221	/chem/ecd1a.i/120409.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:15	AR1232	/chem/ecd1a.i/120409.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 06:05	AR1248	/chem/ecd1a.i/120409.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:54	AR1242	/chem/ecd1a.i/120409.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 05:33	AR1660	/chem/ecd1a.i/120409.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 08:33 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.430	2.400-2.460	1.709e+04
	2.719	2.689-2.749	2.124e+04
	2.800	2.770-2.830	1.403e+04
	2.838	2.808-2.868	8.417e+03
	3.049	3.019-3.079	1.079e+04
63 4,4-DDD	3.956	3.936-3.976	4.873e+05
64 4,4-DDE	3.607	3.587-3.627	4.621e+05
62 4,4-DDT	4.119	4.099-4.139	1.399e+05
2 Aroclor-1221	2.084	2.054-2.114	5.950e+03
	2.179	2.148-2.208	3.282e+03
	2.204	2.174-2.234	1.440e+04
3 Aroclor-1232	2.431	2.401-2.461	7.786e+03
	2.720	2.690-2.750	1.025e+04
	2.801	2.771-2.831	6.616e+03
	3.050	3.020-3.080	4.921e+03
	3.305	3.275-3.335	4.520e+03
4 Aroclor-1242	2.430	2.400-2.460	1.503e+04
	2.720	2.690-2.750	1.854e+04
	2.839	2.809-2.869	7.392e+03
	3.050	3.020-3.080	9.592e+03
	3.303	3.273-3.333	9.387e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m

	Compound	RT	RT Window	RF
	5 Aroclor-1248	3.101	3.071-3.131	9.766e+03
		3.253	3.223-3.283	8.699e+03
		3.304	3.274-3.334	1.693e+04
		3.436	3.406-3.466	1.387e+04
		3.668	3.638-3.698	9.663e+03
	6 Aroclor-1254	3.279	3.249-3.309	1.533e+04
		3.435	3.405-3.465	2.093e+04
		3.668	3.638-3.698	2.652e+04
		3.832	3.802-3.862	2.040e+04
		3.940	3.910-3.970	2.023e+04
	7 Aroclor-1260	3.776	3.746-3.806	2.145e+04
		3.938	3.908-3.968	3.220e+04
		4.168	4.138-4.198	2.046e+04
		4.312	4.282-4.342	2.008e+04
		4.491	4.461-4.521	4.630e+04
	8 Aroclor-1262	3.776	3.746-3.806	1.805e+04
		3.939	3.909-3.969	2.434e+04
		4.169	4.139-4.199	3.192e+04
		4.312	4.282-4.342	2.761e+04
		4.491	4.461-4.521	5.903e+04
	9 Aroclor-1268	4.676	4.646-4.706	6.476e+04
		4.700	4.670-4.730	6.428e+04
		4.811	4.781-4.841	4.874e+04
		5.015	4.985-5.045	2.069e+04
		5.180	5.150-5.210	1.402e+05
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.973	1.943-2.003	4.463e+05
$	12 Decachlorobiphenyl	5.289	5.259-5.319	4.088e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 08:33 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.213	3.183-3.243	1.686e+04
	3.296	3.266-3.326	1.154e+04
	3.422	3.392-3.452	6.951e+03
	3.587	3.557-3.617	9.181e+03
	3.663	3.633-3.693	8.509e+03
62 4,4-DDT	4.695	4.675-4.715	8.846e+04
63 4,4-DDE	4.163	4.143-4.183	3.629e+05
64 4,4-DDD	4.509	4.489-4.529	3.599e+05
2 Aroclor-1221	2.509	2.478-2.538	5.108e+03
	2.603	2.574-2.634	3.283e+03
	2.644	2.614-2.674	1.145e+04
3 Aroclor-1232	2.645	2.615-2.675	7.297e+03
	3.213	3.183-3.243	8.233e+03
	3.297	3.267-3.327	5.504e+03
	3.588	3.558-3.618	4.272e+03
	3.822	3.792-3.852	4.143e+03
4 Aroclor-1242	3.212	3.182-3.242	1.482e+04
	3.296	3.266-3.326	1.016e+04
	3.587	3.557-3.617	8.262e+03
	3.663	3.633-3.693	7.732e+03
	3.849	3.819-3.879	9.404e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.422	3.392-3.452	1.037e+04
	3.588	3.558-3.618	1.280e+04
	3.822	3.792-3.852	1.461e+04
	3.849	3.819-3.879	1.623e+04
	3.987	3.957-4.017	1.566e+04
6 Aroclor-1254	3.422	3.392-3.452	8.334e+03
	3.846	3.816-3.876	1.495e+04
	3.962	3.932-3.992	1.638e+04
	4.239	4.209-4.269	2.215e+04
	4.375	4.345-4.405	1.687e+04
7 Aroclor-1260	4.354	4.324-4.384	1.807e+04
	4.479	4.449-4.509	2.216e+04
	4.745	4.715-4.775	1.768e+04
	4.919	4.889-4.949	1.721e+04
	5.067	5.037-5.097	3.863e+04
8 Aroclor-1262	4.480	4.450-4.510	1.838e+04
	4.745	4.715-4.775	2.607e+04
	4.920	4.890-4.950	2.257e+04
	5.066	5.036-5.096	4.615e+04
	5.280	5.250-5.310	3.242e+04
9 Aroclor-1268	5.279	5.249-5.309	5.681e+04
	5.306	5.276-5.336	5.436e+04
	5.456	5.426-5.486	4.114e+04
	5.620	5.590-5.650	1.776e+04
	5.814	5.784-5.844	1.099e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.309	2.279-2.339	3.713e+05
$ 12 Decachlorobiphenyl	5.966	5.936-5.996	3.006e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/110909.b/010f1001.d
Level 2: /chem/ecd1a.i/110909.b/011f1101.d
Level 3: /chem/ecd1a.i/110909.b/012f1201.d
Level 4: /chem/ecd1a.i/111009b.b/032f3201.d
Level 5: /chem/ecd1a.i/110909.b/014f1401.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20658	18482	17001	15583	13722	17089	15.563
(2)	24543	22131	20883	20176	18452	21237	10.722
(3)	16548	15095	13829	12774	11916	14032	13.123
(4)	9698	9043	8332	7728	7282	8417	11.585
(5)	12784	11504	10586	9800	9293	10793	12.897
63 4,4-DDD	+++++	+++++	+++++	487303	+++++	487303	0.000
64 4,4-DDE	+++++	+++++	+++++	462145	+++++	462145	0.000
62 4,4-DDT	+++++	+++++	+++++	139891	+++++	139891	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5950	+++++	5950	0.000
(2)	+++++	+++++	+++++	3282	+++++	3282	0.000
(3)	+++++	+++++	+++++	14405	+++++	14405	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7786	+++++	7786	0.000
(2)	+++++	+++++	+++++	10255	+++++	10255	0.000
(3)	+++++	+++++	+++++	6616	+++++	6616	0.000
(4)	+++++	+++++	+++++	4921	+++++	4921	0.000
(5)	+++++	+++++	+++++	4520	+++++	4520	0.000
4 Aroclor-1242(1)	17412	15553	15178	14343	12670	15031	11.528
(2)	20986	19324	18457	17508	16436	18542	9.380
(3)	8533	7719	7363	6848	6494	7392	10.720
(4)	11366	9954	9518	8750	8373	9592	12.199
(5)	10712	9680	9208	8779	8557	9387	9.120
5 Aroclor-1248(1)	11448	10174	9548	8978	8682	9766	11.261
(2)	10027	9078	8468	8103	7821	8699	10.098
(3)	19335	17548	16321	15814	15622	16928	9.102
(4)	16098	14147	13625	13026	12432	13866	10.125
(5)	11252	10016	9528	9039	8481	9663	10.921

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2009 12:21
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecdla.i/120409.b/ECD1-F-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	17517	15970	14901	14485	13761	15327	9.541
(2)	23476	21771	20197	19941	19266	20930	8.092
(3)	28419	27206	25987	25832	25135	26516	4.901
(4)	21904	21069	19942	19739	19343	20399	5.185
(5)	21473	21181	19923	19591	18991	20232	5.235
7 Aroclor-1260(1)	24604	22318	20876	20266	19173	21447	9.785
(2)	35844	33345	31633	30611	29543	32195	7.686
(3)	22847	21262	20066	19413	18699	20458	7.992
(4)	22180	20845	19753	19032	18598	20082	7.215
(5)	49574	47568	45834	44759	43761	46299	4.992
8 Aroclor-1262(1)	+++++	+++++	+++++	18047	+++++	18047	0.000
(2)	+++++	+++++	+++++	24345	+++++	24345	0.000
(3)	+++++	+++++	+++++	31917	+++++	31917	0.000
(4)	+++++	+++++	+++++	27612	+++++	27612	0.000
(5)	+++++	+++++	+++++	59026	+++++	59026	0.000
9 Aroclor-1268(1)	68327	66126	65237	63266	60847	64761	4.392
(2)	68601	64443	65877	62667	59795	64277	5.158
(3)	52175	49424	49256	47362	45464	48736	5.146
(4)	22181	21170	20804	20096	19178	20686	5.461
(5)	146769	142521	141652	137032	132906	140176	3.807
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	466250	545108	422258	406785	390967	446274	13.887
$ 12 Decachlorobiphenyl	430420	504395	383103	370310	355553	408756	14.772

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/111009b.b/029b2901.d
Level 2: /chem/ecd1a.i/111009b.b/030b3001.d
Level 3: /chem/ecd1a.i/111009b.b/031b3101.d
Level 4: /chem/ecd1a.i/111009b.b/032b3201.d
Level 5: /chem/ecd1a.i/111009b.b/033b3301.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	20143	17832	16713	15449	14165	16860	13.590
(2)	14035	12488	11357	10499	9300	11536	15.783
(3)	8596	7569	6813	6230	5549	6951	17.011
(4)	11079	9913	9060	8322	7528	9181	15.037
(5)	10190	9095	8398	7765	7096	8509	14.067
62 4,4-DDT	+++++	+++++	+++++	88461	+++++	88461	0.000
63 4,4-DDE	+++++	+++++	+++++	362852	+++++	362852	0.000
64 4,4-DDD	+++++	+++++	+++++	359922	+++++	359922	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	5108	+++++	5108	0.000
(2)	+++++	+++++	+++++	3283	+++++	3283	0.000
(3)	+++++	+++++	+++++	11452	+++++	11452	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	7297	+++++	7297	0.000
(2)	+++++	+++++	+++++	8233	+++++	8233	0.000
(3)	+++++	+++++	+++++	5504	+++++	5504	0.000
(4)	+++++	+++++	+++++	4272	+++++	4272	0.000
(5)	+++++	+++++	+++++	4143	+++++	4143	0.000
4 Aroclor-1242(1)	17172	15118	14593	14231	12964	14816	10.382
(2)	12255	10735	10080	9299	8450	10164	14.252
(3)	9734	8902	8100	7577	6997	8262	13.081
(4)	9161	8279	7511	7126	6585	7732	13.052
(5)	11158	9837	9355	8577	8092	9404	12.659
5 Aroclor-1248(1)	12701	11102	10208	9399	8419	10366	15.810
(2)	15478	13606	12645	11722	10563	12803	14.618
(3)	17430	15245	14486	13522	12342	14605	13.123
(4)	19368	17007	16145	14983	13634	16227	13.342
(5)	18762	16275	15487	14453	13334	15662	13.124

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 09-NOV-2009 07:06
End Cal Date : 10-NOV-2009 13:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Cal Date : 04-Dec-2009 08:33 yip00818
Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	10034	8978	8141	7651	6863	8334	14.663
(2)	17568	15909	14674	13904	12711	14953	12.491
(3)	19039	17387	16070	15329	14072	16379	11.670
(4)	24937	23339	21906	20911	19635	22146	9.335
(5)	19077	18105	16810	15765	14609	16873	10.573
7 Aroclor-1260(1)	22503	19003	17476	16529	14825	18067	16.085
(2)	25650	23506	21850	21066	18712	22157	11.763
(3)	20595	18951	17412	16547	14884	17678	12.422
(4)	20138	18349	16944	16067	14572	17214	12.395
(5)	44064	40843	38492	36572	33174	38629	10.709
8 Aroclor-1262(1)	+++++	+++++	+++++	18376	+++++	18376	0.000
(2)	+++++	+++++	+++++	26068	+++++	26068	0.000
(3)	+++++	+++++	+++++	22571	+++++	22571	0.000
(4)	+++++	+++++	+++++	46151	+++++	46151	0.000
(5)	+++++	+++++	+++++	32422	+++++	32422	0.000
9 Aroclor-1268(1)	64233	59607	57611	53879	48726	56811	10.321
(2)	60168	56519	56119	51372	47642	54364	8.990
(3)	46456	42771	41694	38901	35867	41138	9.727
(4)	19817	18449	17847	16818	15872	17760	8.524
(5)	122099	114124	111138	104603	97770	109947	8.427
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	404105	466906	350017	331939	303513	371296	17.462
$ 12 Decachlorobiphenyl	328640	378740	282742	266616	246153	300578	17.707

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0533

Lab File ID: 002F0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	14970.481	0.01	-12.4	15.0
(2)	21236.796	20135.606	0.01	-5.2	15.0
(3)	14032.402	12547.766	0.01	-10.6	15.0
(4)	8416.650	7602.078	0.01	-9.7	15.0
(5)	10793.469	9796.814	0.01	-9.2	15.0
Aroclor-1260	21447.416	20044.215	0.01	-6.5	15.0
(2)	32195.147	30463.079	0.01	-5.4	15.0
(3)	20457.594	19227.240	0.01	-6.0	15.0
(4)	20081.764	19479.682	0.01	-3.0	15.0
(5)	46299.014	45369.023	0.01	-2.0	15.0
4cmx	446273.70	434622.62	0.01	-2.6	15.0
Decachlorobiphenyl	408756.19	397828.40	0.01	-2.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 0533

Lab File ID: 002B0201 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16807.912	0.01	-0.3	15.0
(2)	11535.631	10552.164	0.01	-8.5	15.0
(3)	6951.234	6359.866	0.01	-8.5	15.0
(4)	9180.580	8689.648	0.01	-5.3	15.0
(5)	8508.868	8099.265	0.01	-4.8	15.0
Aroclor-1260	18066.901	17233.768	0.01	-4.6	15.0
(2)	22157.029	21873.356	0.01	-1.3	15.0
(3)	17677.720	17288.221	0.01	-2.2	15.0
(4)	17213.904	17030.080	0.01	-1.1	15.0
(5)	38629.119	39351.006	0.01	1.9	15.0
4cmx	371295.92	364879.64	0.01	-1.7	15.0
Decachlorobiphenyl	300578.33	303887.95	0.01	1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GEL LABORATORIES LLC Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1700

Lab File ID: 061F6101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 103

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16585.829	0.01	-2.9	15.0
(2)	21236.796	21268.253	0.01	0.1	15.0
(3)	14032.402	13312.591	0.01	-5.1	15.0
(4)	8416.650	8116.433	0.01	-3.6	15.0
(5)	10793.469	10365.510	0.01	-4.0	15.0
Aroclor-1260	21447.416	21115.698	0.01	-1.5	15.0
(2)	32195.147	31817.274	0.01	-1.2	15.0
(3)	20457.594	19703.673	0.01	-3.7	15.0
(4)	20081.764	20116.774	0.01	0.2	15.0
(5)	46299.014	46618.762	0.01	0.7	15.0
4cmx	446273.70	434622.62	0.01	-2.6	15.0
Decachlorobiphenyl	408756.19	397828.40	0.01	-2.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GEL LABORATORIES LLC Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1700

Lab File ID: 061B6101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 103

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16701.570	0.01	-0.9	15.0
(2)	11535.631	10974.937	0.01	-4.9	15.0
(3)	6951.234	6528.241	0.01	-6.1	15.0
(4)	9180.580	8767.726	0.01	-4.5	15.0
(5)	8508.868	8075.462	0.01	-5.1	15.0
Aroclor-1260	18066.901	17606.161	0.01	-2.6	15.0
(2)	22157.029	22261.947	0.01	0.5	15.0
(3)	17677.720	17504.600	0.01	-1.0	15.0
(4)	17213.904	17285.472	0.01	0.4	15.0
(5)	38629.119	39770.333	0.01	3.0	15.0
4cmx	371295.92	364879.64	0.01	-1.7	15.0
Decachlorobiphenyl	300578.33	303887.95	0.01	1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1927

Lab File ID: 073F7301 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	15814.205	0.01	-7.5	15.0
(2)	21236.796	19618.784	0.01	-7.6	15.0
(3)	14032.402	12578.602	0.01	-10.4	15.0
(4)	8416.650	7703.622	0.01	-8.5	15.0
(5)	10793.469	9845.987	0.01	-8.8	15.0
Aroclor-1260	21447.416	19829.472	0.01	-7.5	15.0
(2)	32195.147	30046.346	0.01	-6.7	15.0
(3)	20457.594	18797.686	0.01	-8.1	15.0
(4)	20081.764	19168.014	0.01	-4.6	15.0
(5)	46299.014	44565.448	0.01	-3.7	15.0
4cmx	446273.70	447877.23	0.01	0.4	15.0
Decachlorobiphenyl	408756.19	403784.18	0.01	-1.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 1927

Lab File ID: 073B7301 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	15517.288	0.01	-8.0	15.0
(2)	11535.631	10253.719	0.01	-11.1	15.0
(3)	6951.234	5970.991	0.01	-14.1	15.0
(4)	9180.580	8274.998	0.01	-9.9	15.0
(5)	8508.868	7814.675	0.01	-8.2	15.0
Aroclor-1260	18066.901	16816.062	0.01	-6.9	15.0
(2)	22157.029	21107.906	0.01	-4.7	15.0
(3)	17677.720	16874.625	0.01	-4.5	15.0
(4)	17213.904	16683.499	0.01	-3.1	15.0
(5)	38629.119	38336.052	0.01	-0.8	15.0
4cmx	371295.92	373664.32	0.01	0.6	15.0
Decachlorobiphenyl	300578.33	305943.87	0.01	1.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 2158

Lab File ID: 085F8501 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16351.052	0.01	-4.3	15.0
(2)	21236.796	21169.414	0.01	-0.3	15.0
(3)	14032.402	13004.262	0.01	-7.3	15.0
(4)	8416.650	7970.118	0.01	-5.3	15.0
(5)	10793.469	9970.929	0.01	-7.6	15.0
Aroclor-1260	21447.416	20578.756	0.01	-4.0	15.0
(2)	32195.147	31197.305	0.01	-3.1	15.0
(3)	20457.594	19461.706	0.01	-4.9	15.0
(4)	20081.764	19987.516	0.01	-0.5	15.0
(5)	46299.014	46433.413	0.01	0.3	15.0
4cmx	446273.70	463113.41	0.01	3.8	15.0
Decachlorobiphenyl	408756.19	414212.88	0.01	1.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 2158

Lab File ID: 085B8501 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16614.291	0.01	-1.5	15.0
(2)	11535.631	10748.409	0.01	-6.8	15.0
(3)	6951.234	6441.458	0.01	-7.3	15.0
(4)	9180.580	8878.536	0.01	-3.3	15.0
(5)	8508.868	8172.822	0.01	-3.9	15.0
Aroclor-1260	18066.901	17537.948	0.01	-2.9	15.0
(2)	22157.029	22185.555	0.01	0.1	15.0
(3)	17677.720	17545.678	0.01	-0.7	15.0
(4)	17213.904	17482.652	0.01	1.6	15.0
(5)	38629.119	40201.540	0.01	4.1	15.0
4cmx	371295.92	385070.82	0.01	3.7	15.0
Decachlorobiphenyl	300578.33	318080.53	0.01	5.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 2310

Lab File ID: 091F9101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	17089.321	16693.450	0.01	-2.3	15.0
(2)	21236.796	21343.772	0.01	0.5	15.0
(3)	14032.402	13336.521	0.01	-5.0	15.0
(4)	8416.650	8133.466	0.01	-3.4	15.0
(5)	10793.469	10346.494	0.01	-4.1	15.0
Aroclor-1260	21447.416	21437.523	0.01	-0.0	15.0
(2)	32195.147	32479.893	0.01	0.9	15.0
(3)	20457.594	20110.039	0.01	-1.7	15.0
(4)	20081.764	20542.051	0.01	2.3	15.0
(5)	46299.014	47711.357	0.01	3.0	15.0
4cmx	446273.70	461291.45	0.01	3.4	15.0
Decachlorobiphenyl	408756.19	416802.23	0.01	2.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

Instrument ID: ECD1A Calibration Date: 12/04/09 Time: 2310

Lab File ID: 091B9101 Init. Calib. Date(s): 11/10/09 11/10/09

Heated Purge: (Y/N) N Init. Calib. Times: 0949 1031

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16860.477	16805.451	0.01	-0.3	15.0
(2)	11535.631	10884.585	0.01	-5.6	15.0
(3)	6951.234	6335.755	0.01	-8.8	15.0
(4)	9180.580	8779.232	0.01	-4.4	15.0
(5)	8508.868	8201.205	0.01	-3.6	15.0
Aroclor-1260	18066.901	17993.825	0.01	-0.4	15.0
(2)	22157.029	22799.896	0.01	2.9	15.0
(3)	17677.720	18085.403	0.01	2.3	15.0
(4)	17213.904	17925.320	0.01	4.1	15.0
(5)	38629.119	41323.998	0.01	7.0	15.0
4cmx	371295.92	384134.39	0.01	3.4	15.0
Decachlorobiphenyl	300578.33	314343.25	0.01	4.6	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 05:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.973	1.973	0.000	43462262	100.000	97.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	39782840	100.000	97.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.430	2.430	0.000	14970481	1000.00	876	80.00- 120.00	100.00
2.719	2.719	0.000	20135606	1000.00	948	114.50- 154.50	134.50
2.800	2.800	0.000	12547766	1000.00	894	63.82- 103.82	83.82
2.838	2.838	0.000	7602078	1000.00	903	30.78- 70.78	50.78
3.049	3.049	0.000	9796814	1000.00	908	45.44- 85.44	65.44
Average of Peak Amounts =					906		
7 Aroclor-1260					CAS #: 11096-82-5		
3.776	3.776	0.000	20044215	1000.00	934	80.00- 120.00	100.00
3.938	3.938	0.000	30463079	1000.00	946	131.98- 171.98	151.98
4.168	4.168	0.000	19227240	1000.00	940	75.92- 115.92	95.92
4.312	4.312	0.000	19479682	1000.00	970	77.18- 117.18	97.18
4.491	4.491	0.000	45369023	1000.00	980	206.34- 246.34	226.34
Average of Peak Amounts =					954		

Data File: /chem/ecdia.i/120409.b/002f0201.d
Date : 04-DEC-2009 05:33
Client ID: AR166001
Sample Info: IWAR091119-60 01
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

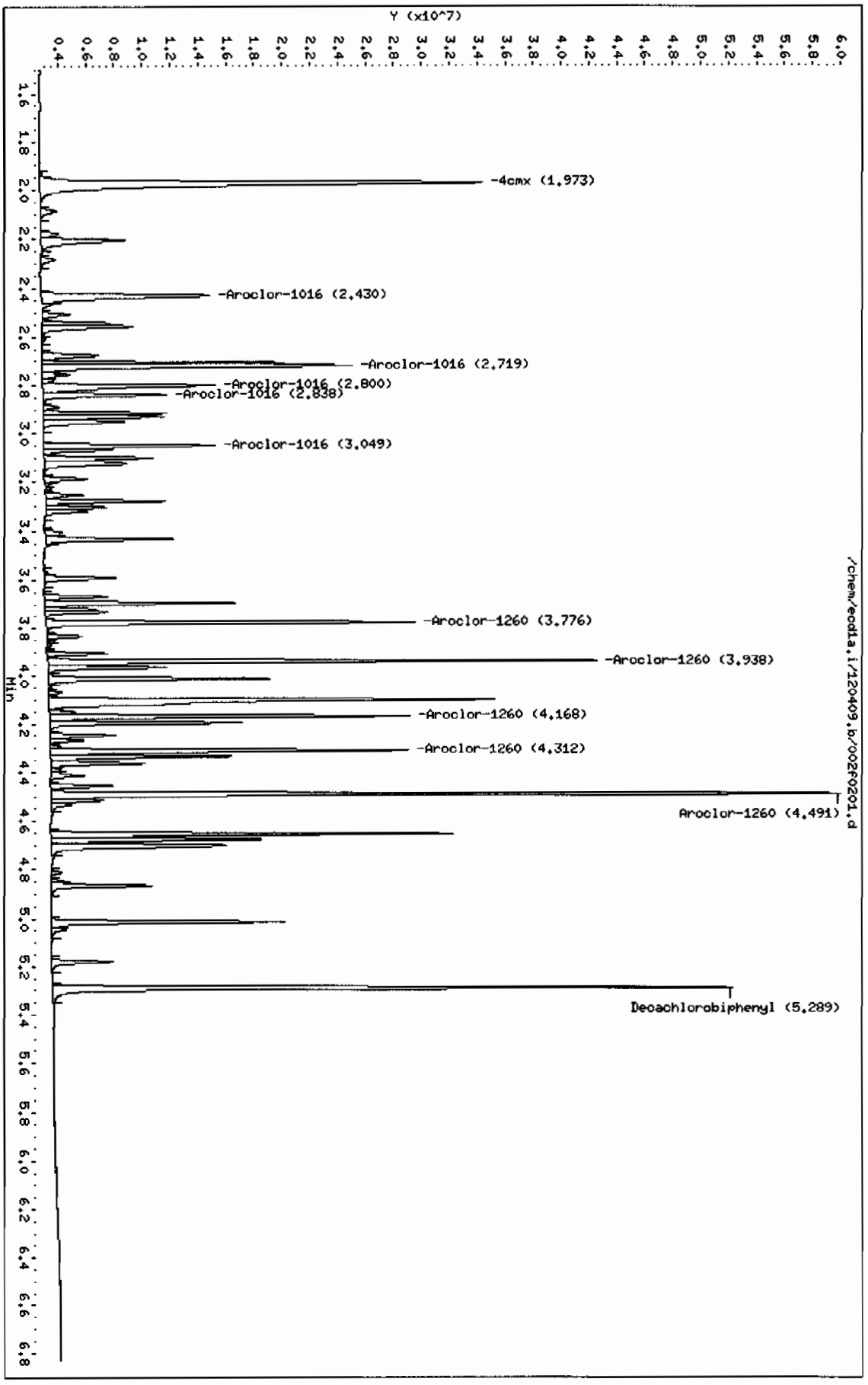

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 05:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:12 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	36487964	100.000	98.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	30388795	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.213	3.213	0.000	16807912	1000.00	997	80.00- 120.00	100.00(M)
3.296	3.296	0.000	10552164	1000.00	915	42.78- 82.78	62.78
3.422	3.422	0.000	6359866	1000.00	915	17.84- 57.84	37.84
3.587	3.587	0.000	8689648	1000.00	946	31.70- 71.70	51.70
3.663	3.663	0.000	8099265	1000.00	952	28.19- 68.19	48.19
Average of Peak Amounts =					945		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	17233768	1000.00	954	80.00- 120.00	100.00
4.479	4.479	0.000	21873356	1000.00	987	106.92- 146.92	126.92
4.745	4.745	0.000	17288221	1000.00	978	80.32- 120.32	100.32
4.919	4.919	0.000	17030080	1000.00	989	78.82- 118.82	98.82
5.067	5.067	0.000	39351006	1000.00	1020	208.34- 248.34	228.34
Average of Peak Amounts =					985		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/002b0201.d
Date : 04-DEC-2009 05:33
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

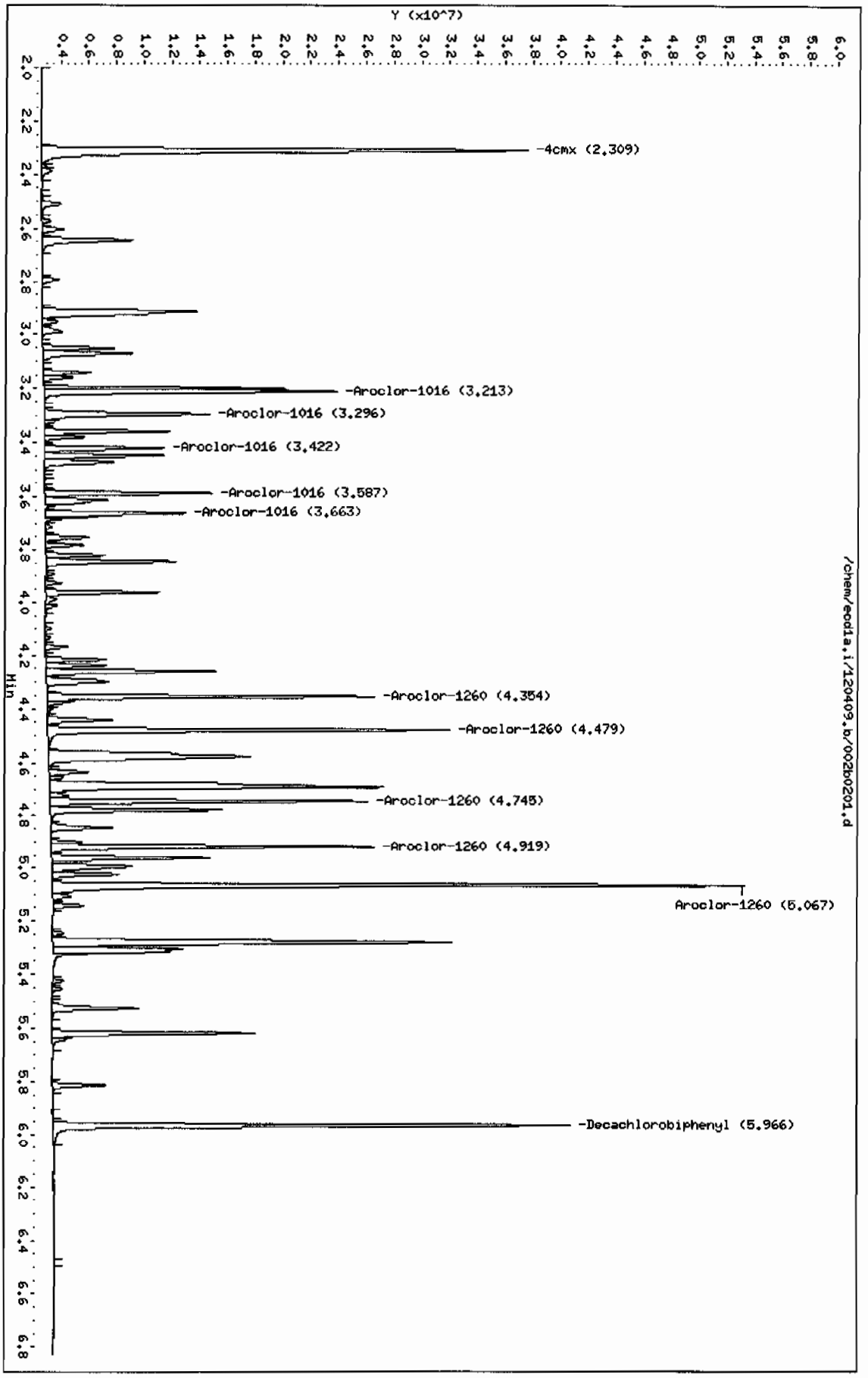

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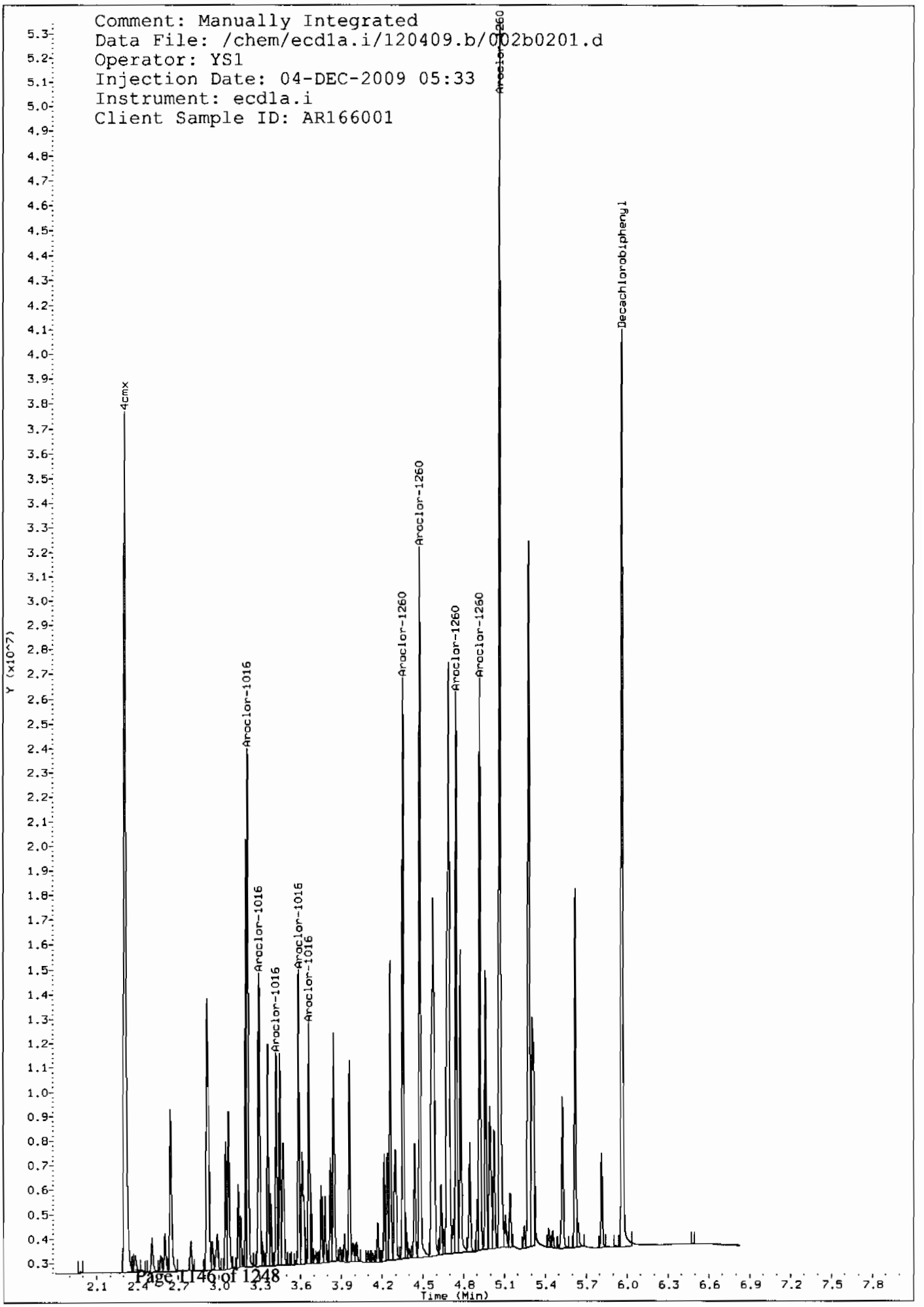
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Operator: YS1
Injection Date: 04-DEC-2009 05:33
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

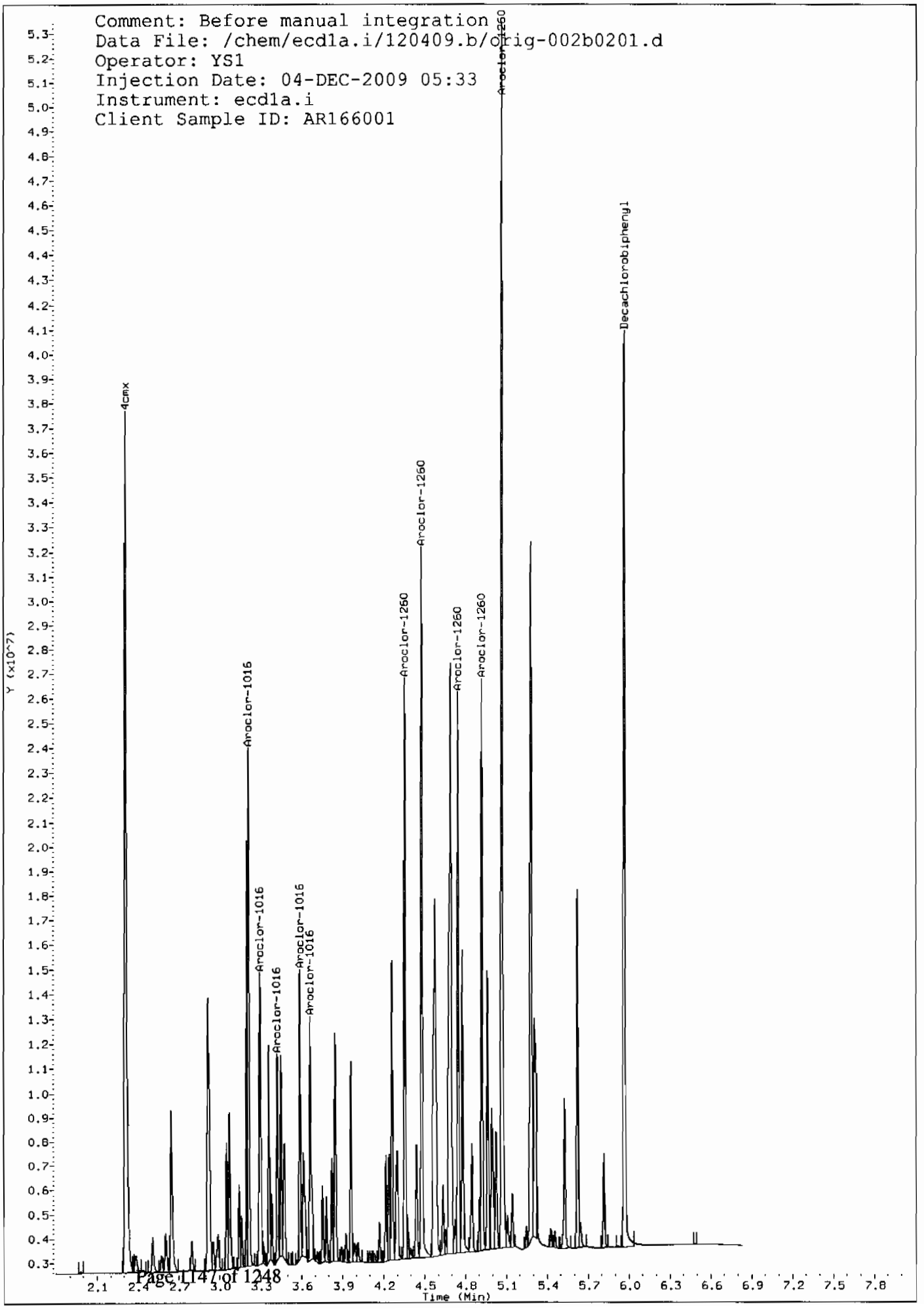
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Operator: YS1
Injection Date: 04-DEC-2009 05:33
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 05:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	49116502	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.289	0.002	45673417	100.000	112	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.430	2.430	0.000	14500573	1000.00	965	80.00- 120.00	100.00
2.720	2.720	0.000	18525391	1000.00	999	107.76- 147.76	127.76
2.839	2.839	0.000	6894623	1000.00	933	27.55- 67.55	47.55
3.050	3.050	0.000	8997367	1000.00	938	42.05- 82.05	62.05
3.303	3.303	0.000	8660029	1000.00	922	39.72- 79.72	59.72
Average of Peak Amounts =					951		

Data File: /chem/ecd1a.i/120409.b/004f0401.d
Date : 04-DEC-2009 05:54
Client ID: AR124201
Sample Info: IWAR091102-42
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

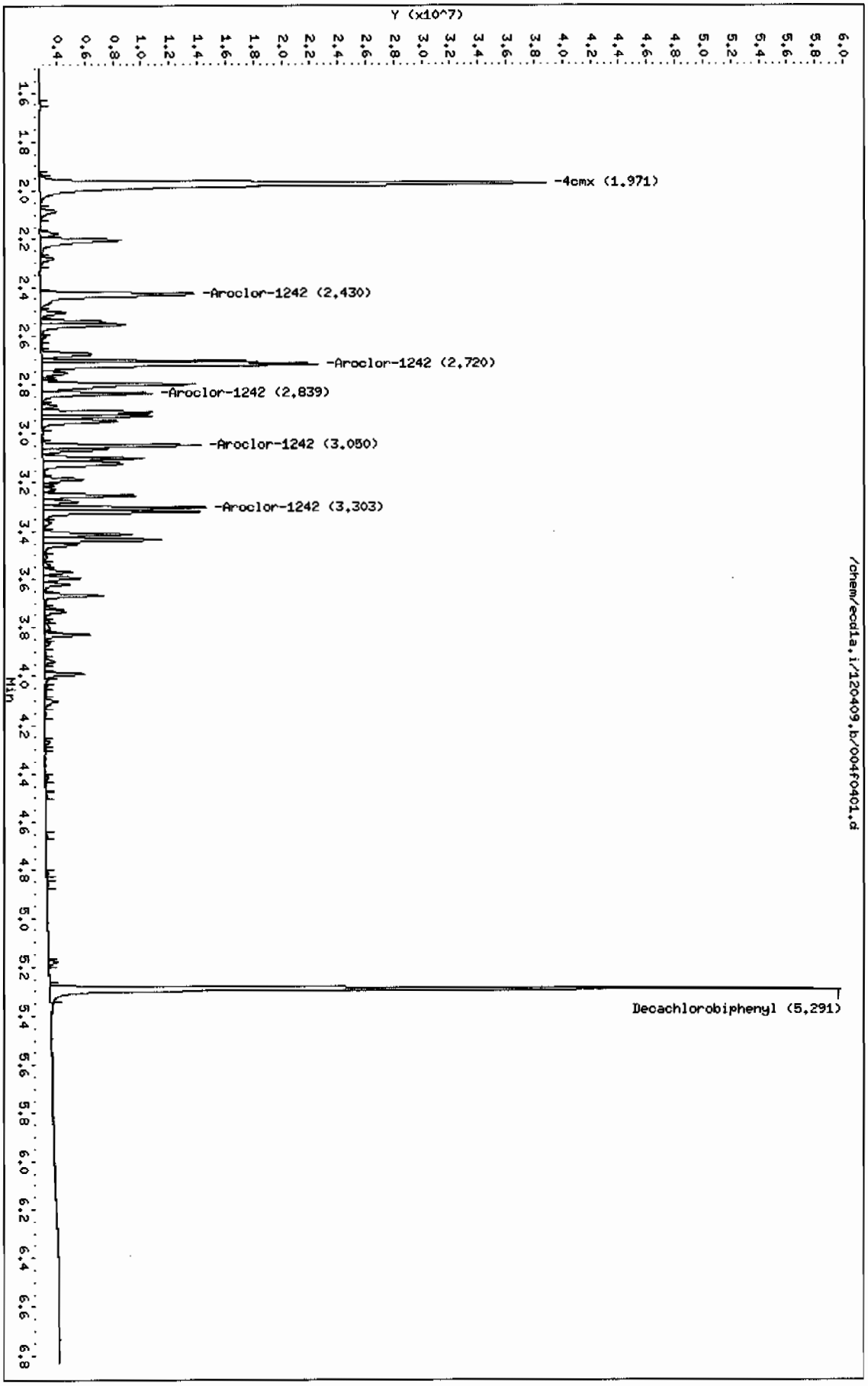

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 05:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	40905353	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	34688267	100.000	115	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.212	3.212	0.000	14364525	1000.00	970	80.00- 120.00	100.00(M)
3.296	3.296	0.000	9453819	1000.00	930	45.81- 85.81	65.81
3.587	3.587	0.000	7886318	1000.00	954	34.90- 74.90	54.90
3.663	3.663	0.000	7489570	1000.00	968	32.14- 72.14	52.14
3.849	3.849	0.000	8915925	1000.00	948	42.07- 82.07	62.07
Average of Peak Amounts =					954		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/004b0401.d
Date : 04-DEC-2009 05:54
Client ID: AR124201
Sample Info: IWAR091102-42
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

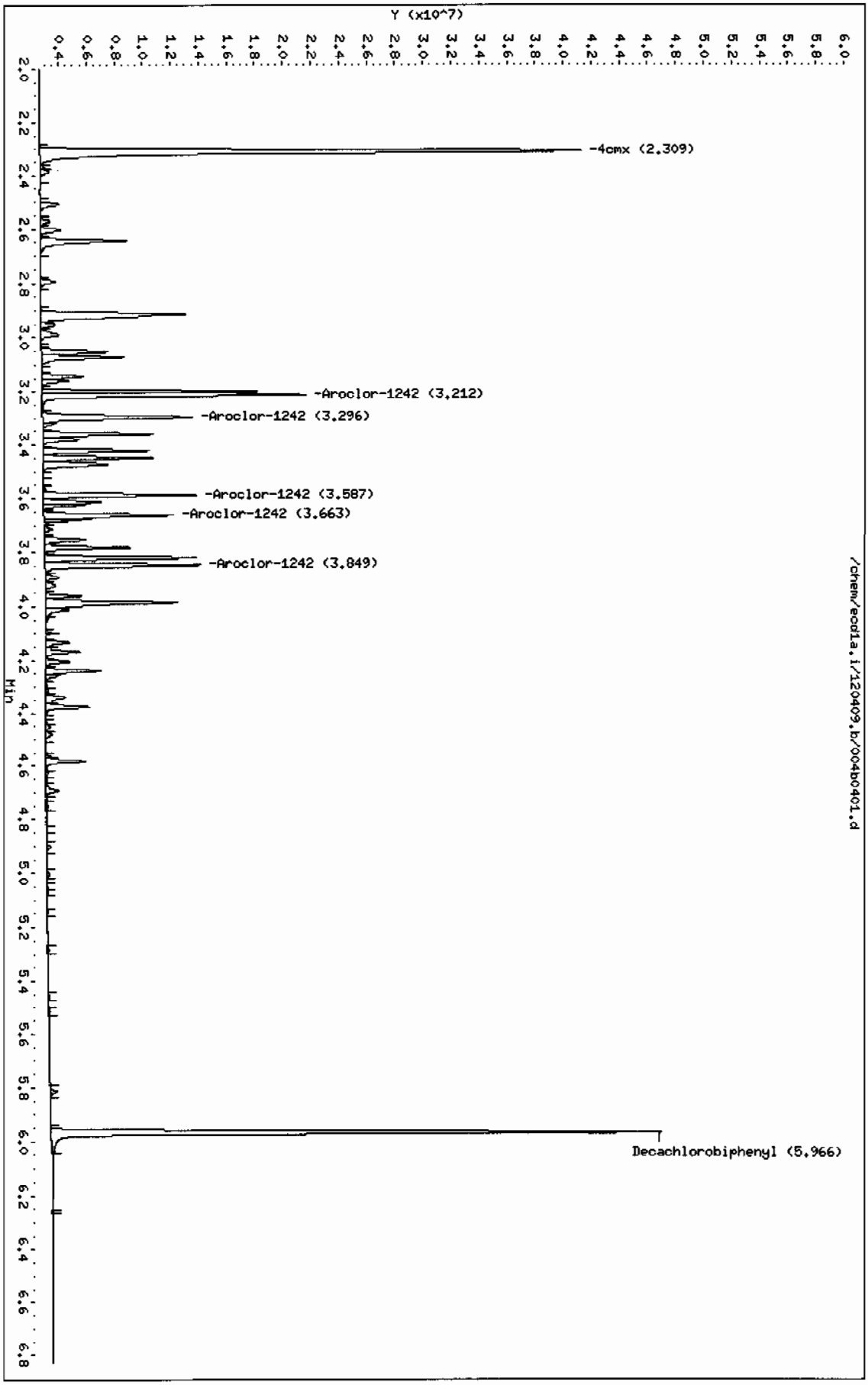

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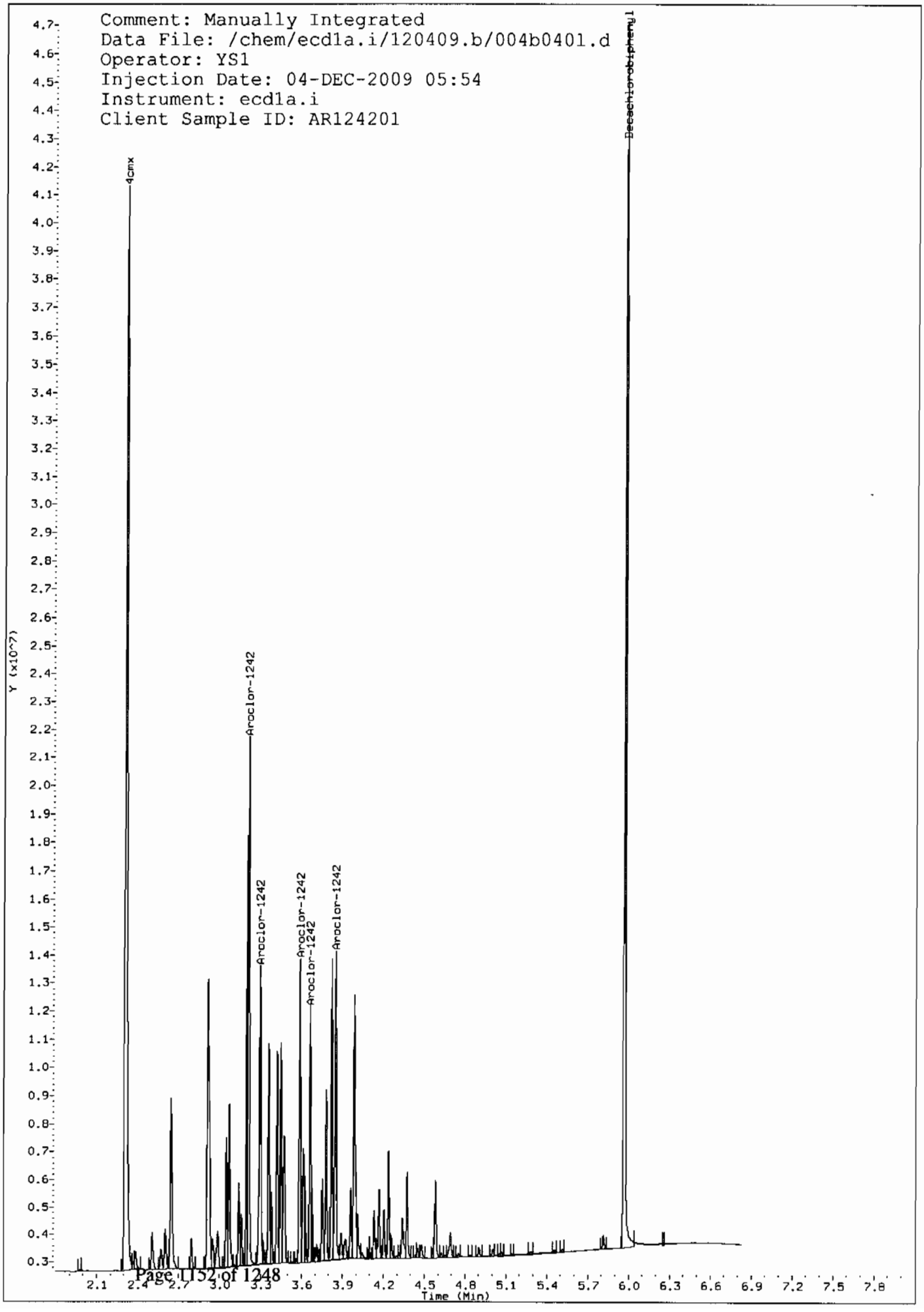
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Data File: /chem/ecd1a.i/120409.b/004b0401.d
Operator: YS1
Injection Date: 04-DEC-2009 05:54
Instrument: ecd1a.i
Client Sample ID: AR124201
4cmx
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Decachlorobiphenyl
Y (x10^7)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-004b04[illegible]1.d
Operator: YS1
Injection Date: 04-DEC-2009 05:54
Instrument: ecd1a.i
Client Sample ID: AR124201

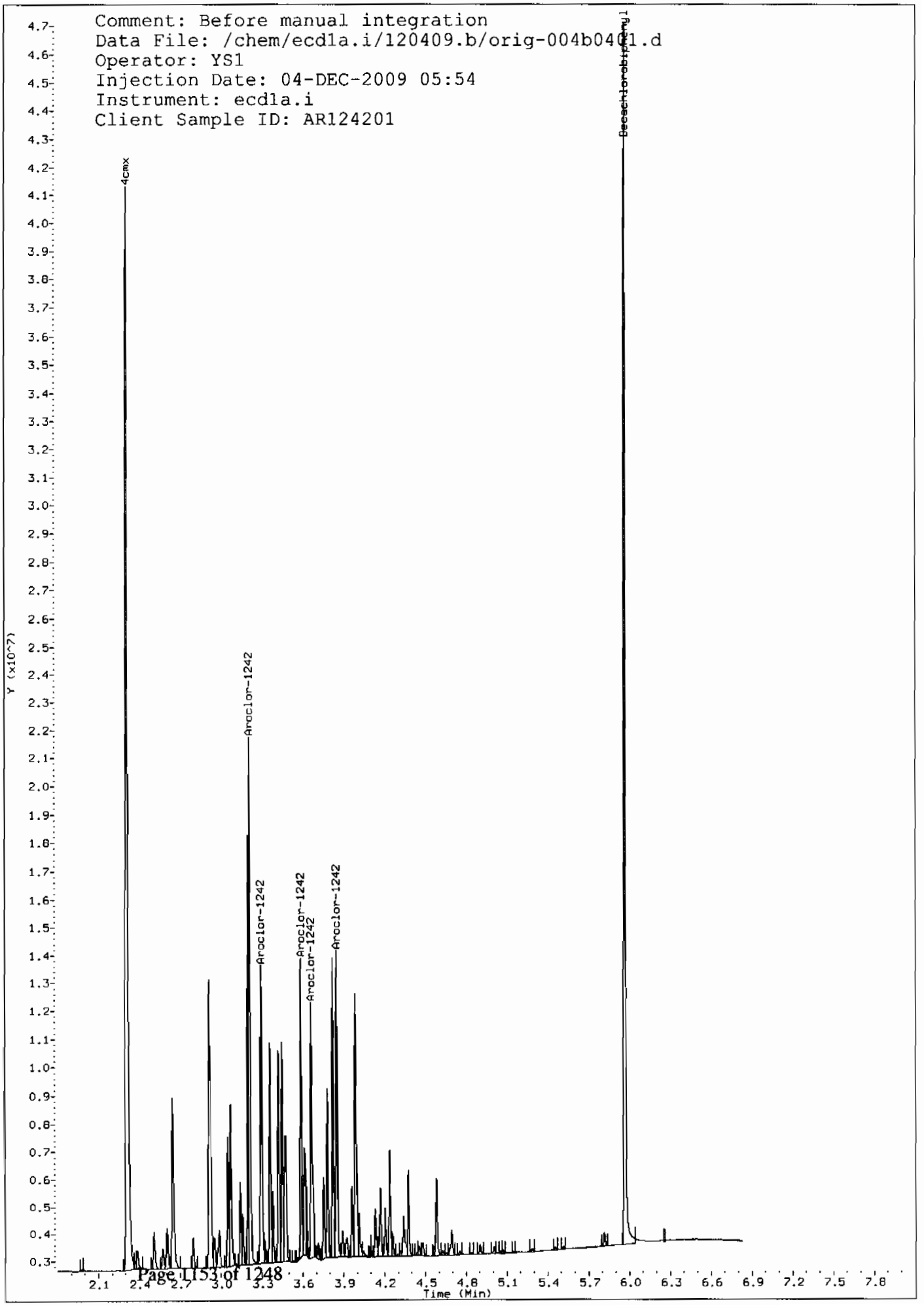

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 06:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	44770020	100.000	100	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	42629135	100.000	104	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.101	3.101	0.000	8676559	1000.00	888	80.00- 120.00	100.00
3.253	3.253	0.000	7580443	1000.00	871	67.37- 107.37	87.37
3.304	3.304	0.000	14957669	1000.00	884	152.39- 192.39	172.39
3.436	3.436	0.000	12123984	1000.00	874	119.73- 159.73	139.73
3.668	3.668	0.000	8392103	1000.00	868	76.72- 116.72	96.72
Average of Peak Amounts =					877		

Data File: /chem/ecd1a.i/120409.b/005f0501.d

Date : 04-DEC-2009 06:05

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

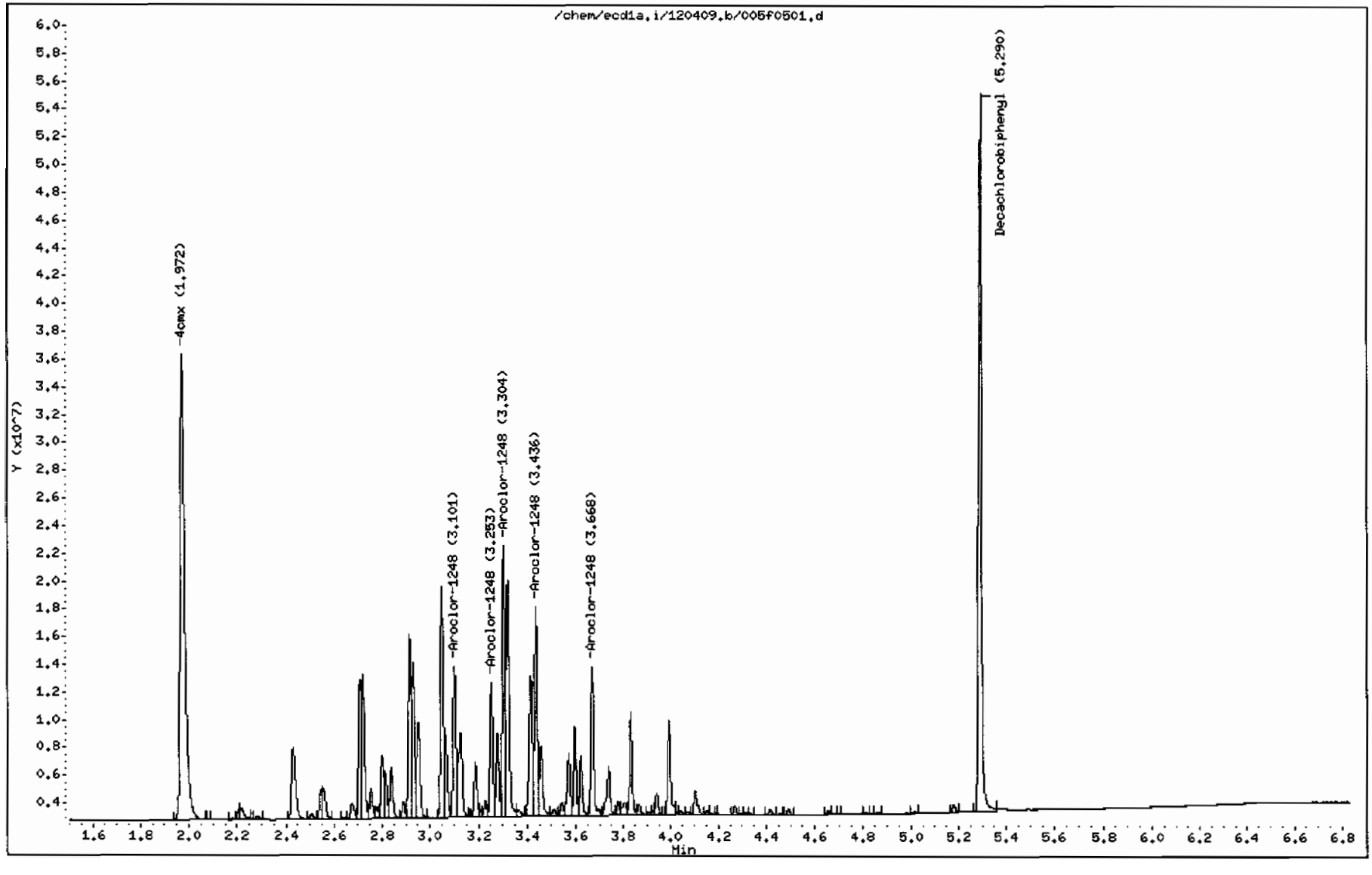

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 06:05
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091027-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37697200	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	32022061	100.000	106	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.422	3.422	0.000	9301057	1000.00	897	80.00- 120.00	100.00
3.588	3.588	0.000	11566108	1000.00	903	104.35- 144.35	124.35
3.822	3.822	0.000	12967440	1000.00	888	119.42- 159.42	139.42
3.849	3.849	0.000	14543667	1000.00	896	136.37- 176.37	156.37
3.987	3.987	0.000	13991089	1000.00	893	130.42- 170.42	150.42
		Average of Peak Amounts =			896		

Data File: /chem/ecd1a.i/120409.b/005b0501.d

Date : 04-DEC-2009 06:05

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

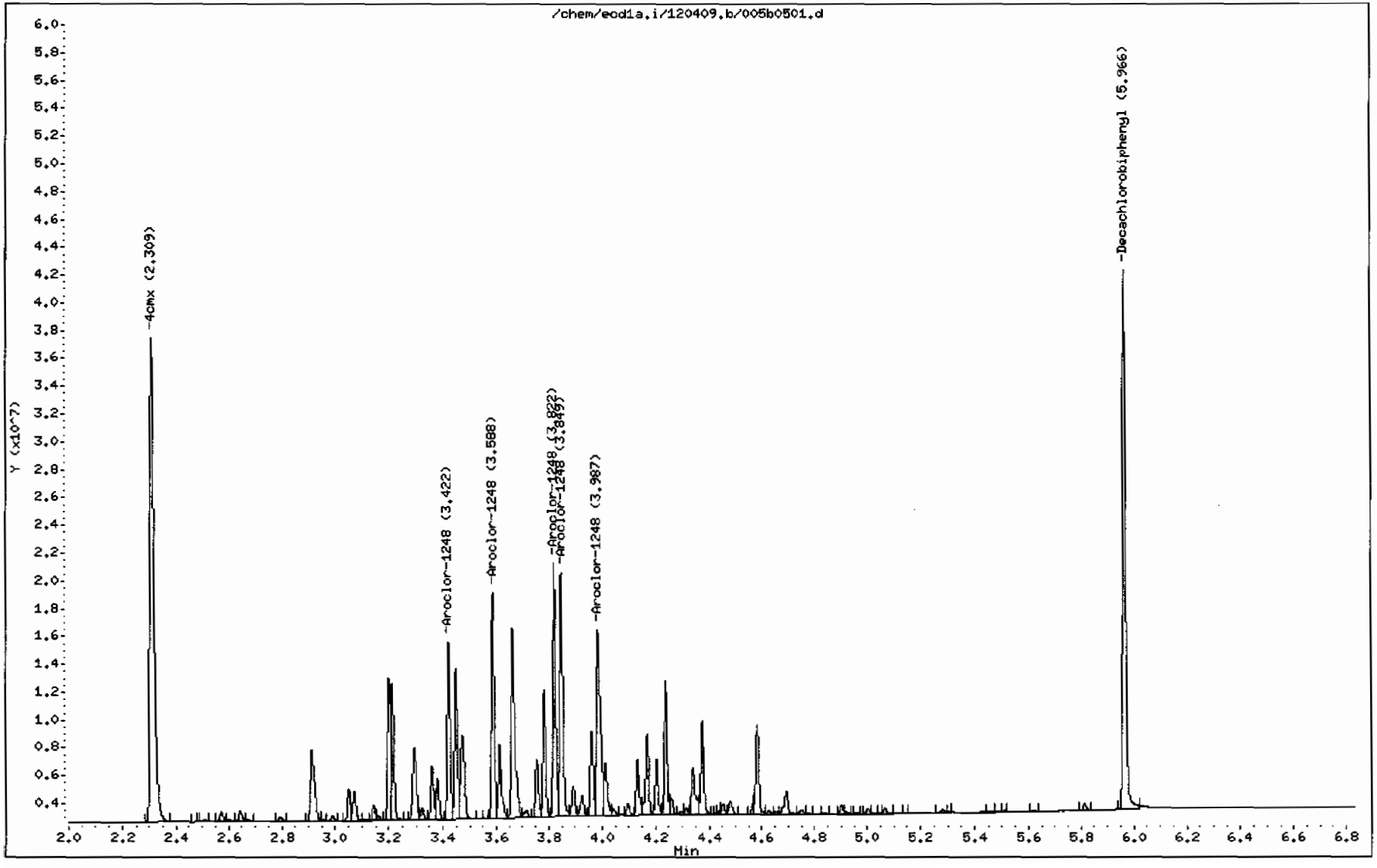

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 06:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	51530881	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	47835549	100.000	117	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.431	2.431	0.000	7153363	1000.00	919	80.00- 120.00	100.00
2.720	2.720	0.000	9314491	1000.00	908	110.21- 150.21	130.21
2.801	2.801	0.000	5975391	1000.00	903	63.53- 103.53	83.53
3.050	3.050	0.000	4433717	1000.00	901	41.98- 81.98	61.98
3.305	3.305	0.000	4066617	1000.00	900	36.85- 76.85	56.85
Average of Peak Amounts =					906		

Data File: /chem/ecd1a.i/120409.b/006f0601.d

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Date : 04-DEC-2009 06:15

Client ID: AR123201

Instrument: ecd1a.i

Sample Info: IWAR090930-32

Operator: YS1

Column phase: CLP1

Column diameter: 0.25

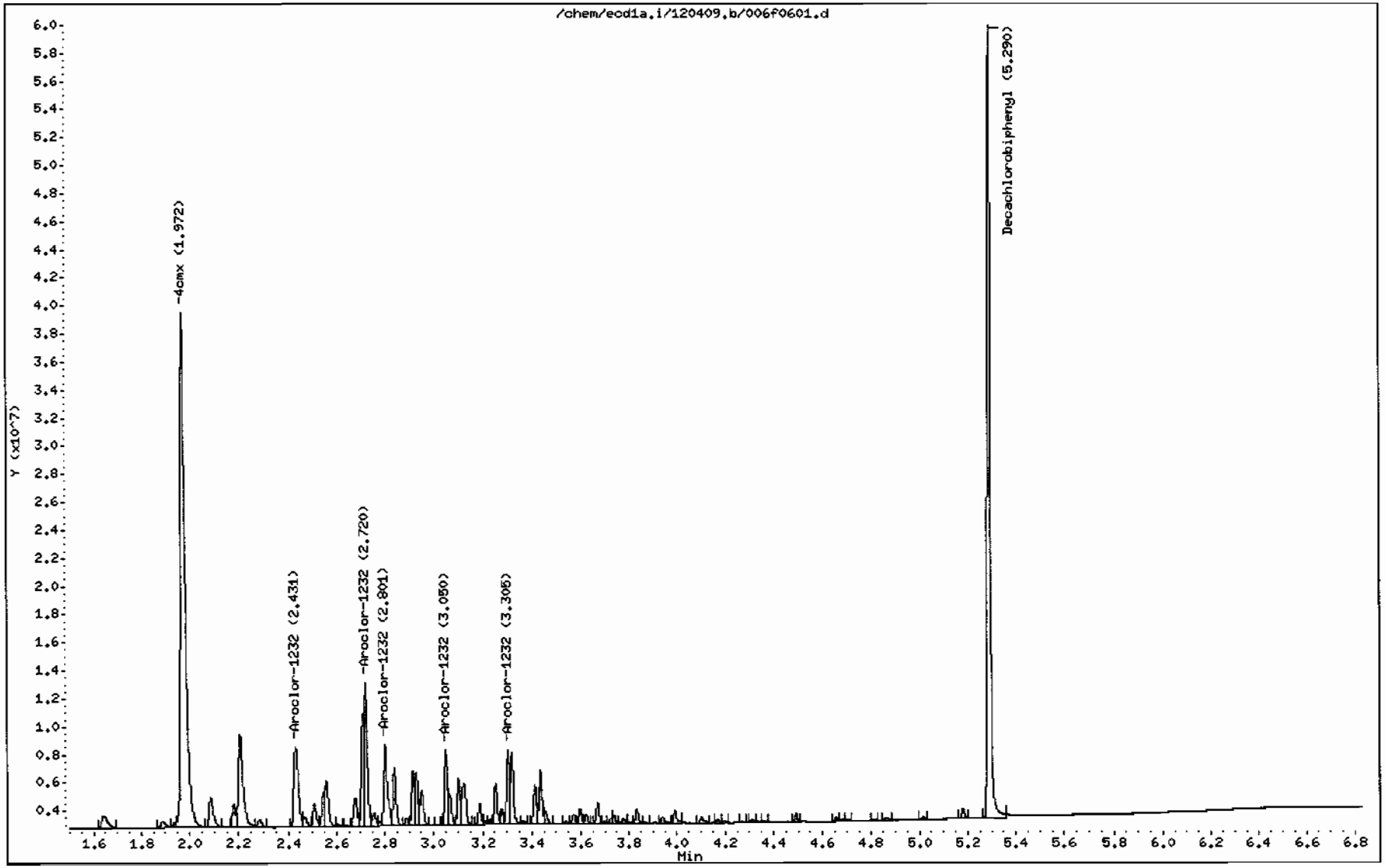

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 06:15
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090930-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	42721319	100.000	115	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	36105328	100.000	120	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.645	2.645	0.000	6884944	1000.00	944	80.00- 120.00	100.00
3.213	3.213	0.000	7655162	1000.00	930	91.19- 131.19	111.19
3.297	3.297	0.000	5114376	1000.00	929	54.28- 94.28	74.28
3.588	3.588	0.000	3872381	1000.00	906	36.24- 76.24	56.24
3.822	3.822	0.000	3796983	1000.00	916	35.15- 75.15	55.15
Average of Peak Amounts =					925		

Data File: /chem/ecd1a.i/120409.b/006b0601.d

Date : 04-DEC-2009 06:15

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

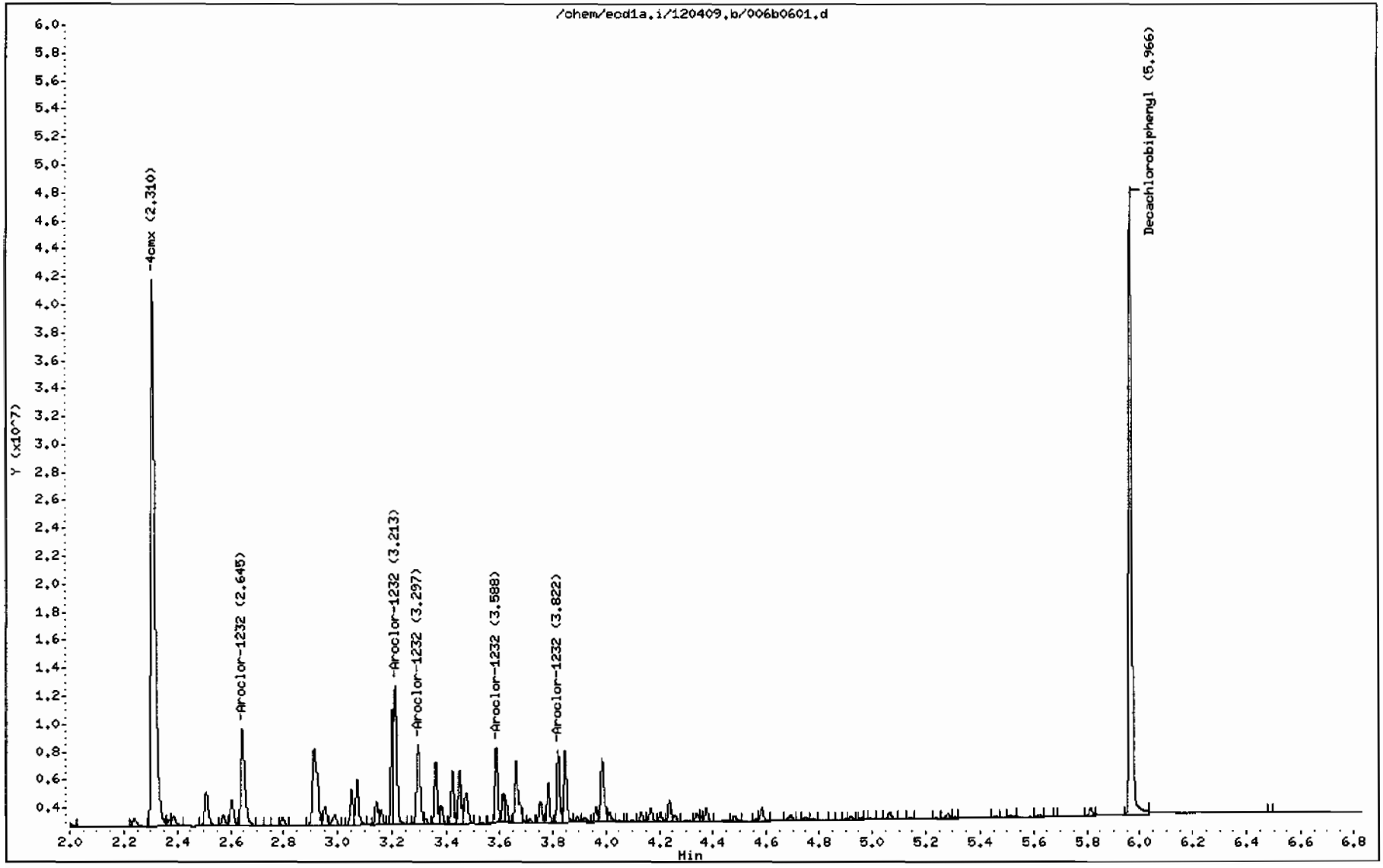

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/007f0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 06:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 06:41 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	40959245	100.000	91.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.291	5.289	0.002	38105593	100.000	93.2	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.084	2.084	0.000	4870864	1000.00	819	80.00- 120.00	100.00
2.179	2.179	0.000	2566454	1000.00	782	32.69- 72.69	52.69
2.204	2.204	0.000	11800443	1000.00	819	222.27- 262.27	242.27
Average of Peak Amounts =					807		

Data File: /chem/ecd1a.i/120409.b/007f0701.d
Date : 04-DEC-2009 06:26
Client ID: AR122101
Sample Info: IWAR090803-21

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

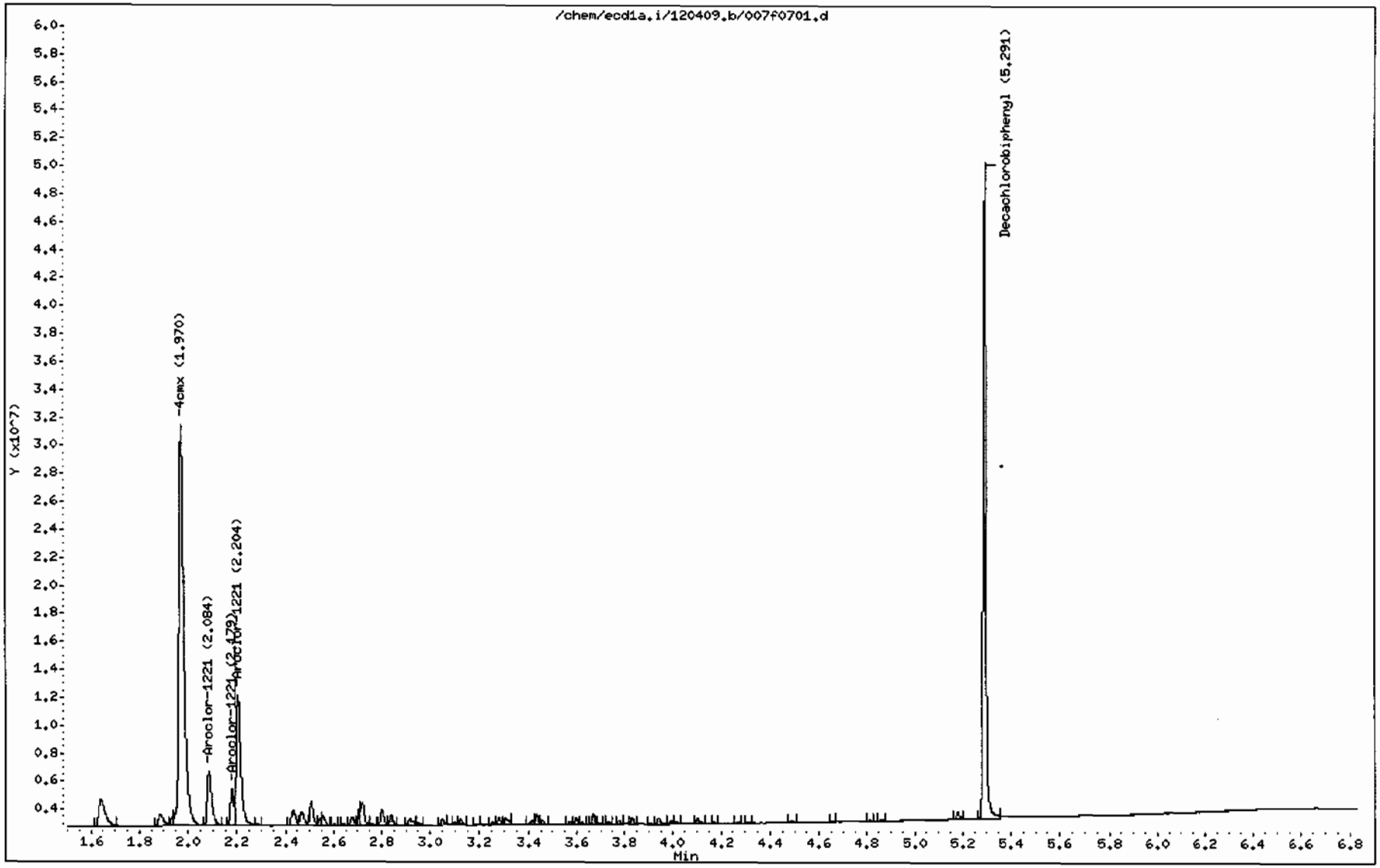

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/007b0701.d
Lab Smp Id: WAR090803-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 06:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR090803-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 06:40 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	33870716	100.000	91.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.966	0.001	29119422	100.000	96.9	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.509	2.509	0.000	4289723	1000.00	840	80.00- 120.00	100.00
2.603	2.603	0.000	2765110	1000.00	842	44.46- 84.46	64.46
2.644	2.644	0.000	9593845	1000.00	838	203.65- 243.65	223.65
Average of Peak Amounts =					840		

Data File: /chem/ecd1a.i/120409.b/007b0701.d

Date : 04-DEC-2009 06:26

Client ID: AR122101

Sample Info: IWAR090803-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

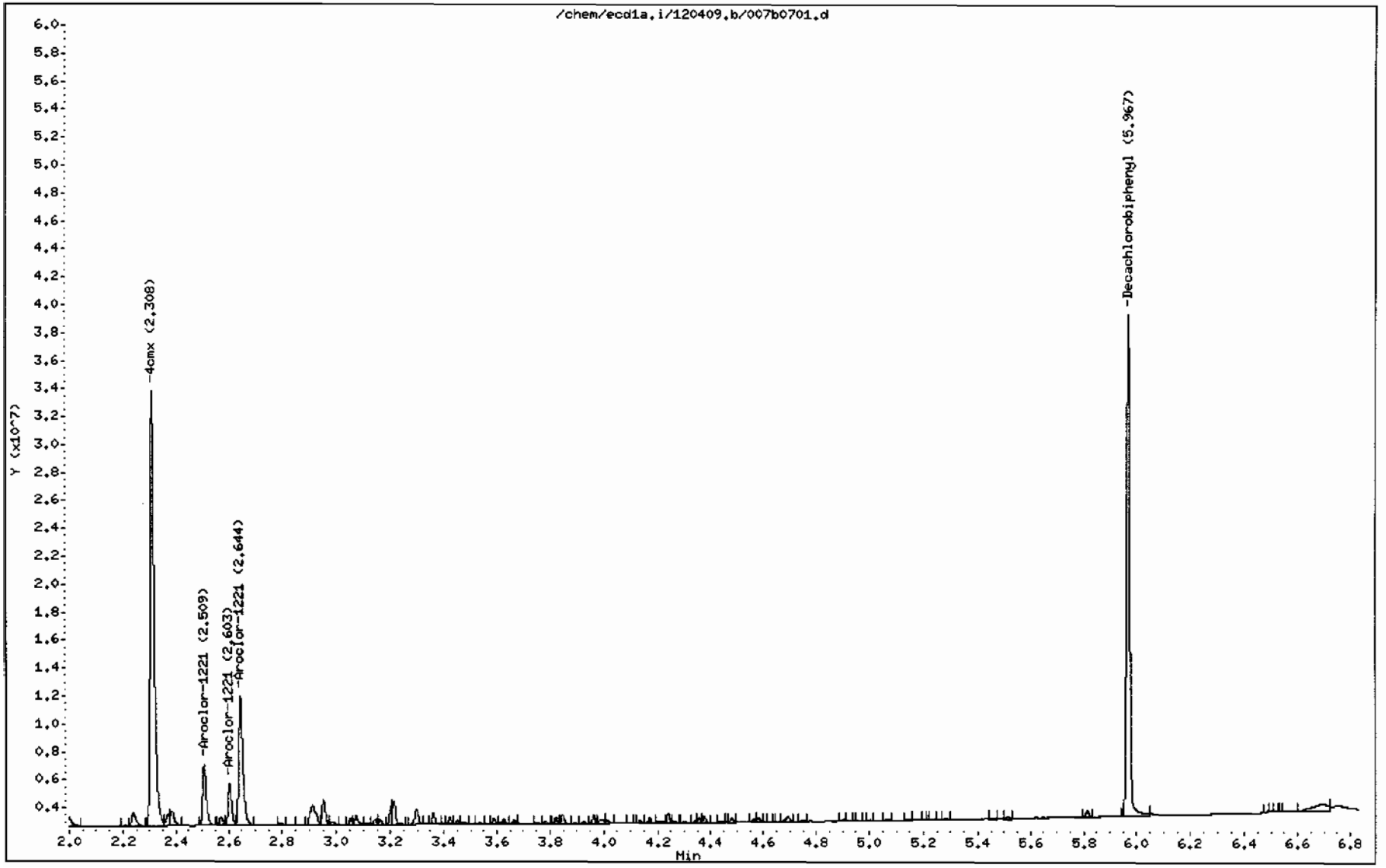

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/010f1001.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 06:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 04-Dec-2009 07:16 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	40296345	100.000	90.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.290	5.289	0.001	37735030	100.000	92.3	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.279	3.279	0.000	12966828	1000.00	846	80.00- 120.00	100.00
3.435	3.435	0.000	17552929	1000.00	839	115.37- 155.37	135.37
3.668	3.668	0.000	23179232	1000.00	874	158.76- 198.76	178.76
3.832	3.832	0.000	17516529	1000.00	859	115.09- 155.09	135.09
3.940	3.940	0.000	17473669	1000.00	864	114.76- 154.76	134.76
			Average of Peak Amounts =		856		

Data File: /chem/ecd1a.i/120409.b/010f1001.d

Date : 04-DEC-2009 06:57

Client ID: AR125401

Sample Info: iWAR091102-54

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

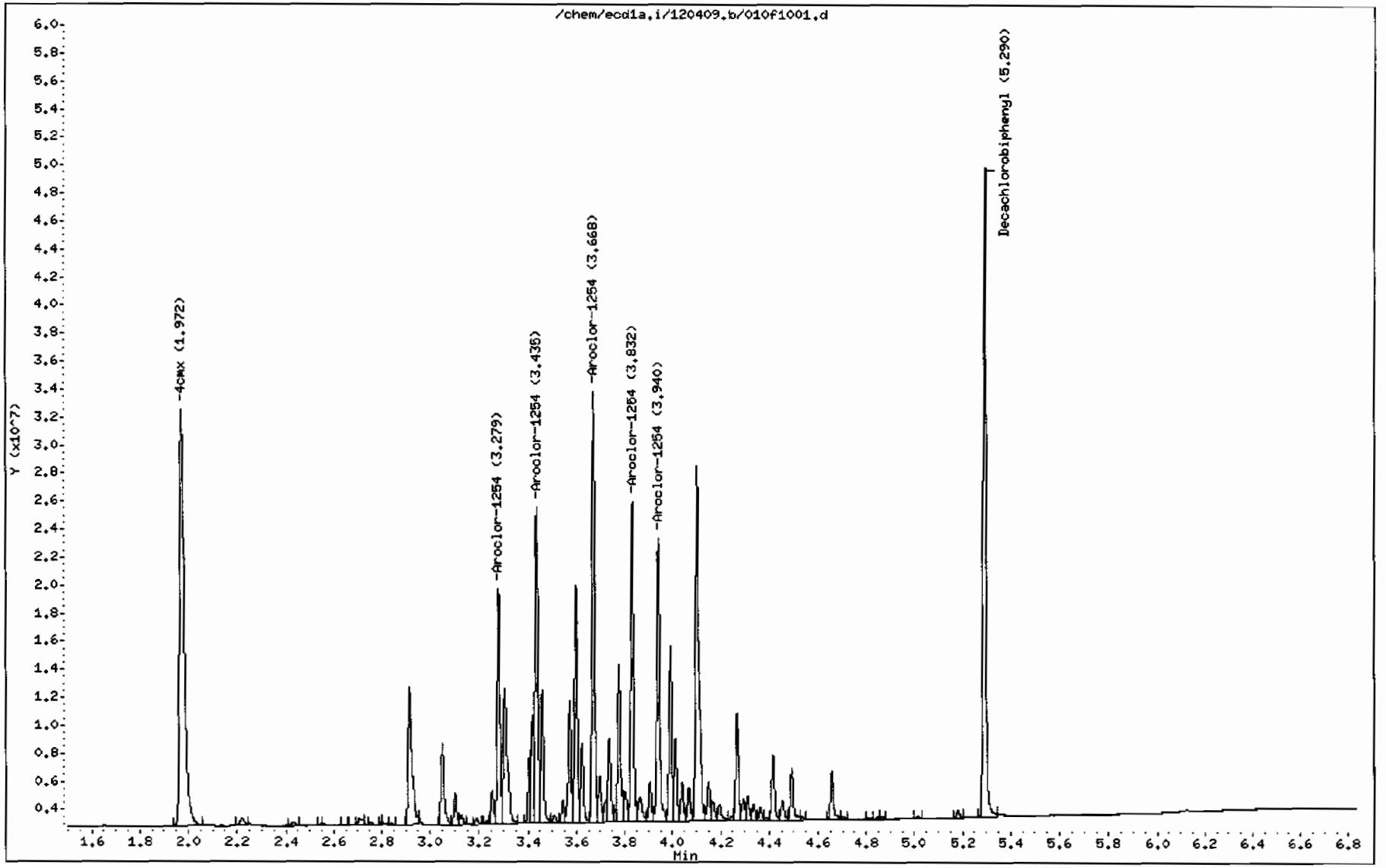

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/010b1001.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 06:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091102-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 04-Dec-2009 07:16 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	34022103	100.000	91.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.966	5.966	0.000	28712047	100.000	95.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.422	3.422	0.000	7024457	1000.00	843	80.00- 120.00	100.00
3.846	3.846	0.000	12758805	1000.00	853	161.63- 201.63	181.63
3.962	3.962	0.000	14156860	1000.00	864	181.54- 221.54	201.54
4.239	4.239	0.000	19672431	1000.00	888	260.06- 300.06	280.06
4.375	4.375	0.000	15136600	1000.00	897	195.48- 235.48	215.48
Average of Peak Amounts =					869		

Data File: /chem/ecd1a.i/120409.b/010b1001.d

Page 1

Date : 04-DEC-2009 06:57

Client ID: AR125401

Instrument: ecd1a.i

Sample Info: IWAR091102-54

Operator: YS1

Column phase: CLP2

Column diameter: 0.25

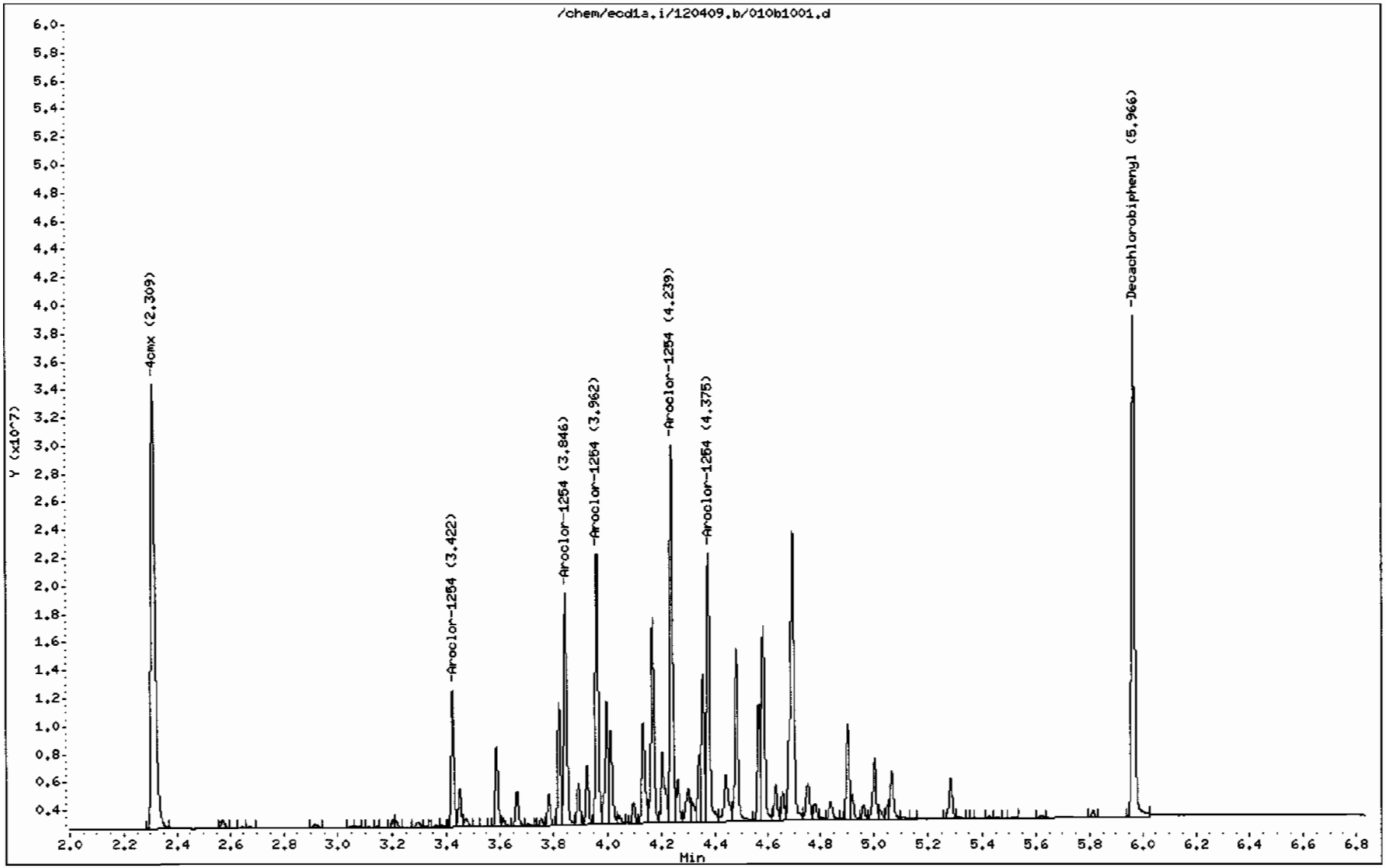

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/061f6101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 61 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	45559685	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.286	5.289	-0.003	39310511	100.000	96.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16585828	1000.00	970	80.00- 120.00	100.00
2.718	2.719	-0.001	21268252	1000.00	1000	107.86- 147.86	128.23
2.799	2.800	-0.001	13312591	1000.00	949	59.89- 99.89	80.26
2.837	2.838	-0.001	8116433	1000.00	964	28.72- 68.72	48.94
3.048	3.049	-0.001	10365509	1000.00	960	41.98- 81.98	62.50
Average of Peak Amounts =					969		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	21115698	1000.00	984	80.00- 120.00	100.00
3.937	3.938	-0.001	31817274	1000.00	988	131.51- 171.51	150.68
4.167	4.168	-0.001	19703672	1000.00	963	73.81- 113.81	93.31
4.309	4.312	-0.003	20116773	1000.00	1000	75.82- 115.82	95.27
4.489	4.491	-0.002	46618762	1000.00	1010	202.56- 242.56	220.78
Average of Peak Amounts =					989		

Data File: /chem/ecd1a.i/120409.b/061f6101.d

Date : 04-DEC-2009 17:00

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

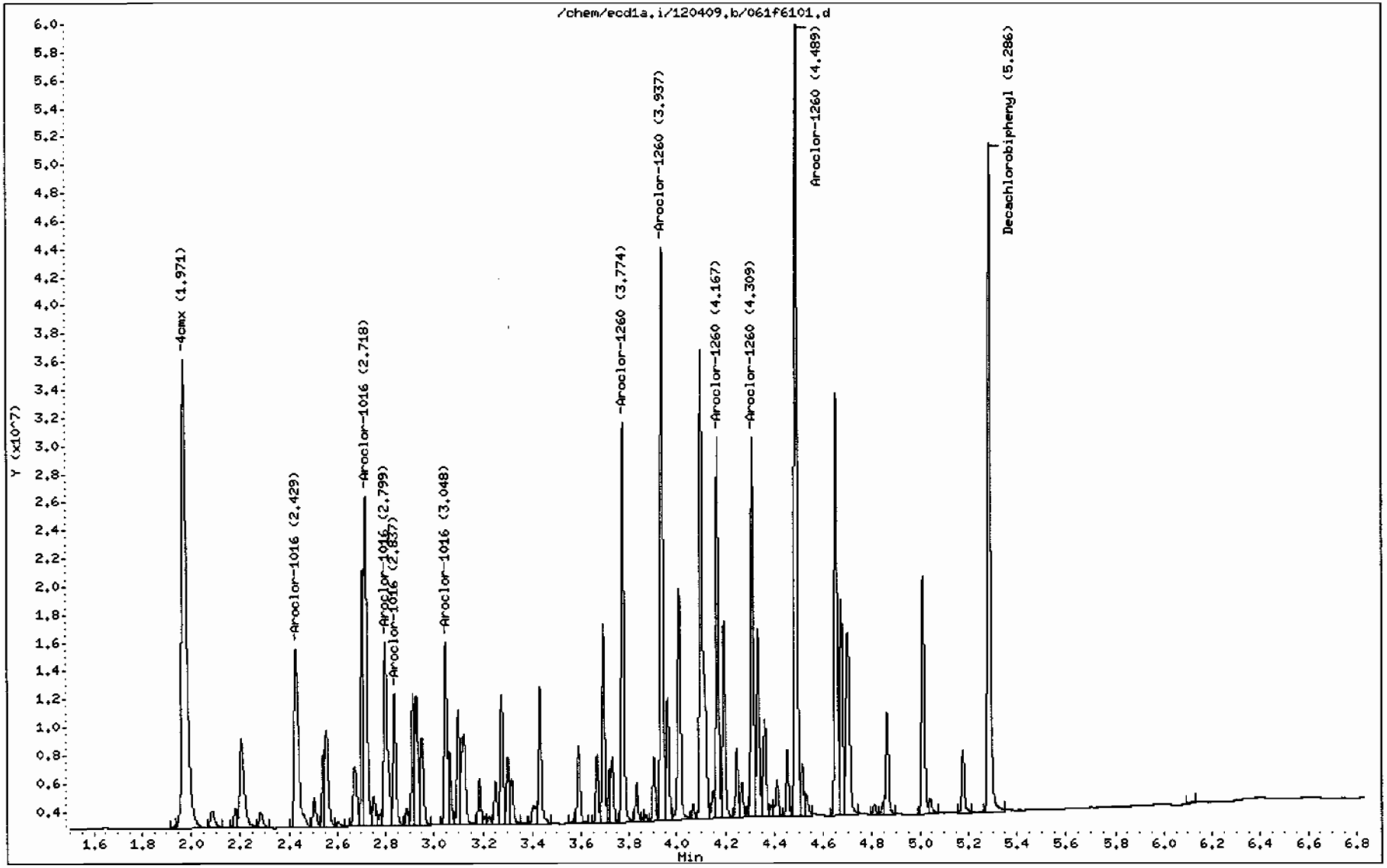

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/061b6101.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 61 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclpl

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	37987664	100.000	102	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	29292450	100.000	97.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16701570	1000.00	990	80.00- 120.00	100.00(M)
3.294	3.296	-0.002	10974937	1000.00	951	45.71- 85.71	65.71
3.420	3.422	-0.002	6528241	1000.00	939	19.09- 59.09	39.09
3.586	3.587	-0.001	8767726	1000.00	955	32.50- 72.50	52.50
3.661	3.663	-0.002	8075462	1000.00	949	28.35- 68.35	48.35
Average of Peak Amounts =					957		
7 Aroclor-1260					CAS #: 11096-82-5		
4.354	4.354	0.000	17606161	1000.00	974	80.00- 120.00	100.00
4.477	4.479	-0.002	22261947	1000.00	1000	106.44- 146.44	126.44
4.744	4.745	-0.001	17504600	1000.00	990	79.42- 119.42	99.42
4.918	4.919	-0.001	17285472	1000.00	1000	78.18- 118.18	98.18
5.064	5.067	-0.003	39770333	1000.00	1030	205.89- 245.89	225.89
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/061b6101.d

Date : 04-DEC-2009 17:00

Client ID: AR166007

Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

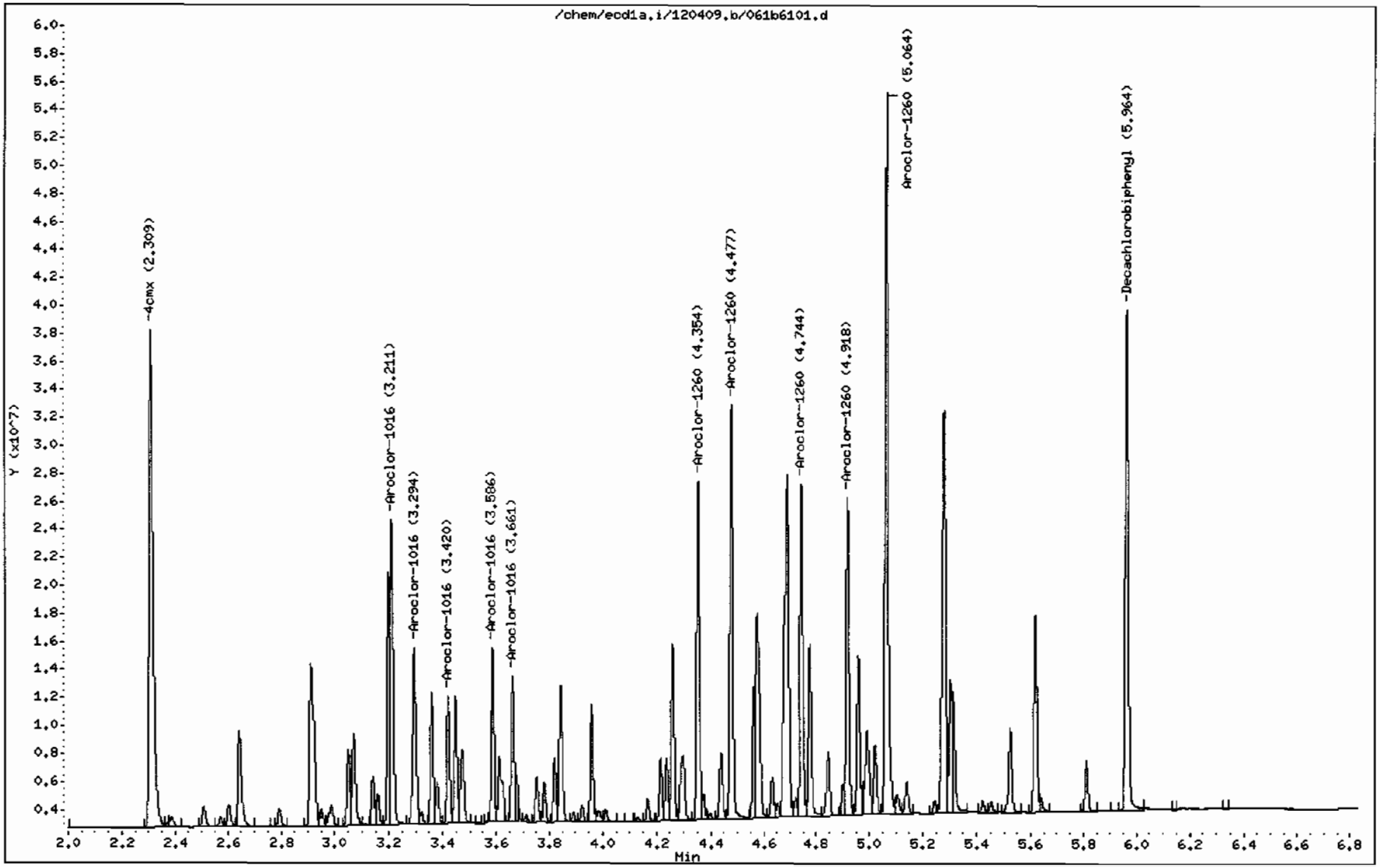

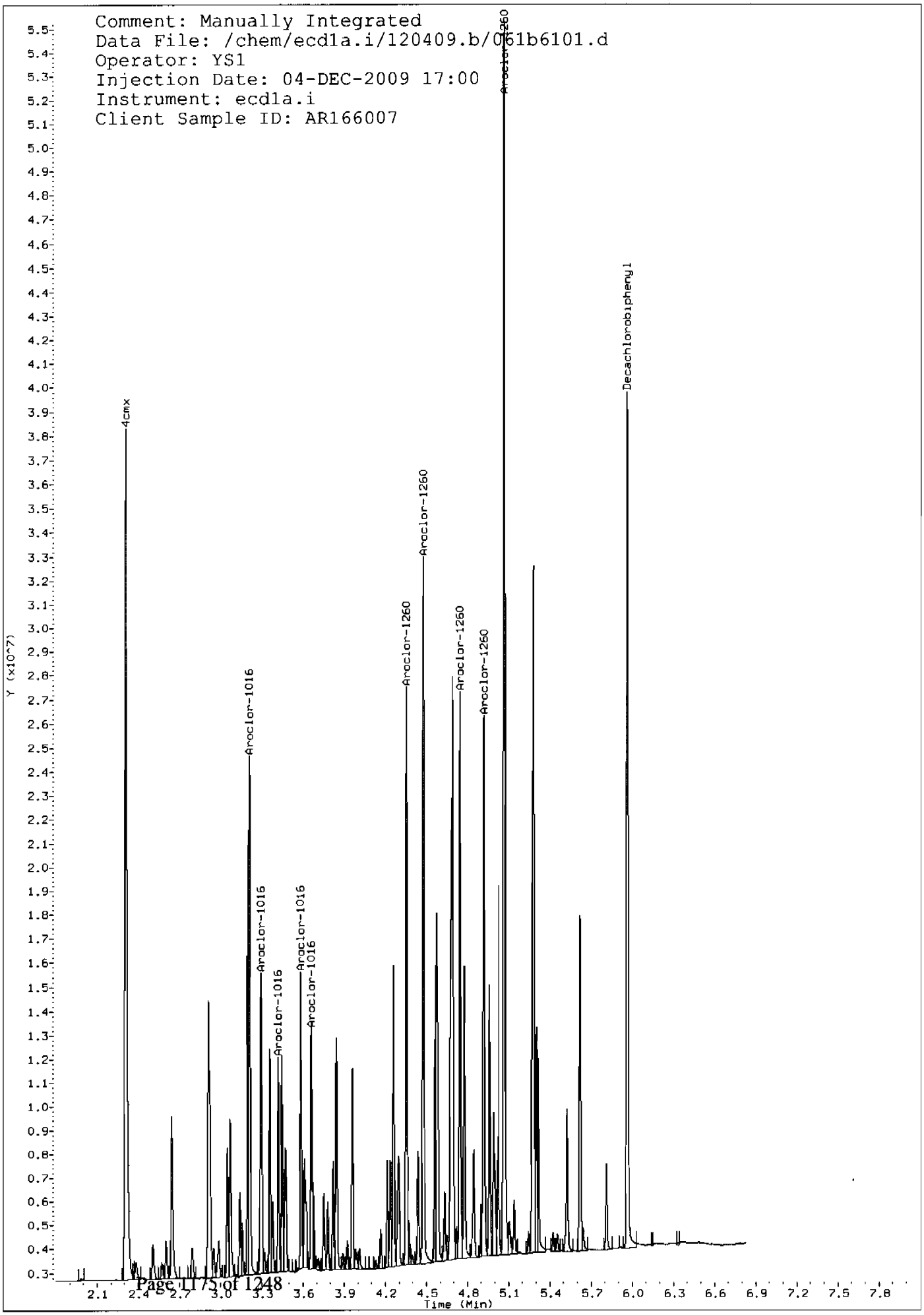
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/0061b6101.d
Operator: YS1
Injection Date: 04-DEC-2009 17:00
Instrument: ecd1a.i
Client Sample ID: AR166007
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

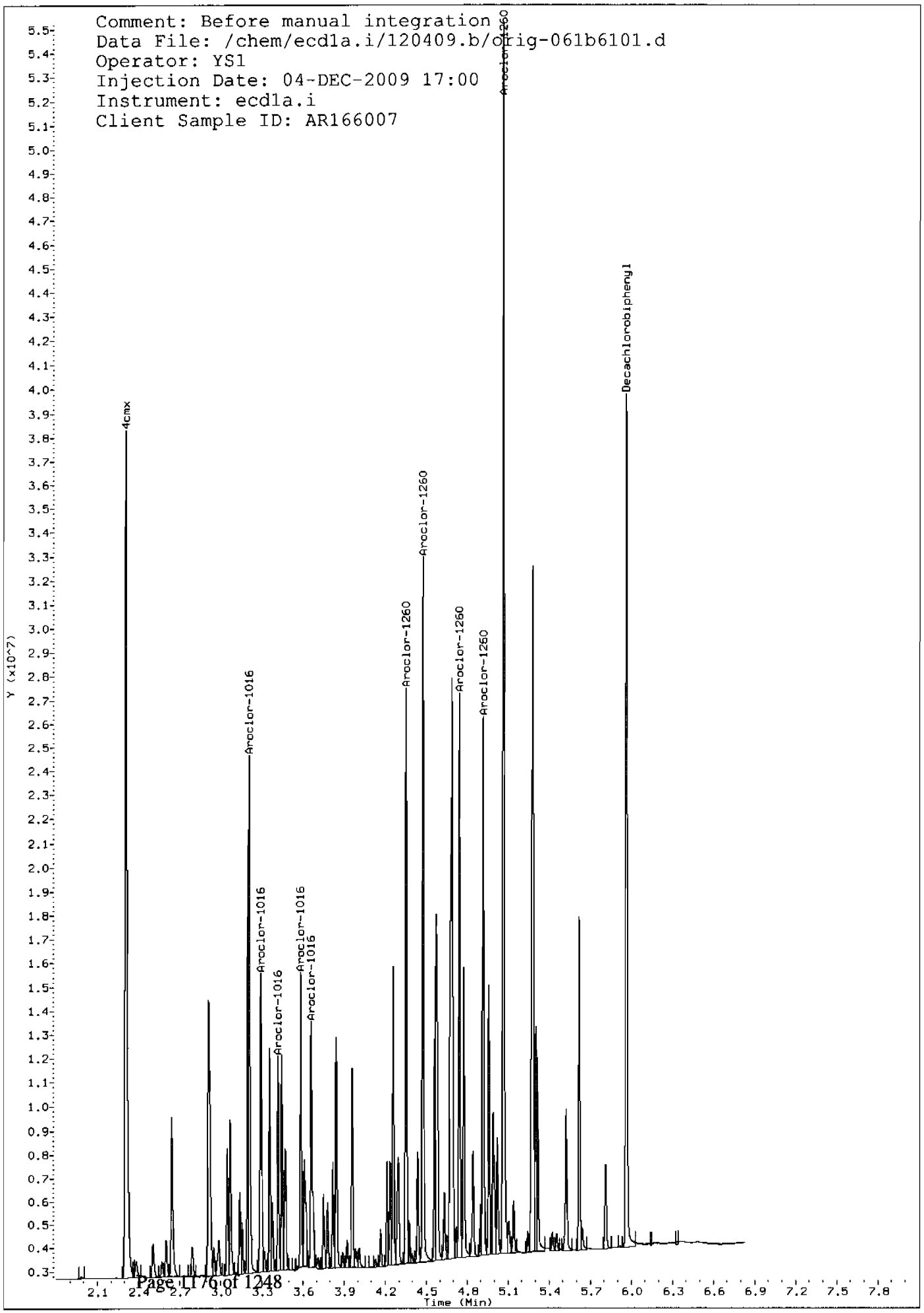
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-061b6101.d
Operator: YS1
Injection Date: 04-DEC-2009 17:00
Instrument: ecd1a.i
Client Sample ID: AR166007
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/073f7301.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 04-DEC-2009 19:27
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 08
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 73 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclpl

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	44787723	100.000	100	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	40378418	100.000	98.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.428	2.430	-0.002	15814204	1000.00	925	80.00- 120.00	100.00
2.717	2.719	-0.002	19618784	1000.00	924	104.06- 144.06	124.06
2.798	2.800	-0.002	12578602	1000.00	896	59.54- 99.54	79.54
2.836	2.838	-0.002	7703621	1000.00	915	28.71- 68.71	48.71
3.047	3.049	-0.002	9845987	1000.00	912	42.26- 82.26	62.26
Average of Peak Amounts =					915		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	19829471	1000.00	924	80.00- 120.00	100.00
3.936	3.938	-0.002	30046345	1000.00	933	131.52- 171.52	151.52
4.167	4.168	-0.001	18797685	1000.00	919	74.80- 114.80	94.80
4.309	4.312	-0.003	19168014	1000.00	954	76.66- 116.66	96.66
4.488	4.491	-0.003	44565447	1000.00	962	204.74- 244.74	224.74
Average of Peak Amounts =					939		

Data File: /chem/ecd1a.i/120409.b/073f7301.d

Date : 04-DEC-2009 19:27

Client ID: AR166008

Sample Info: IWAR091119-60 08

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

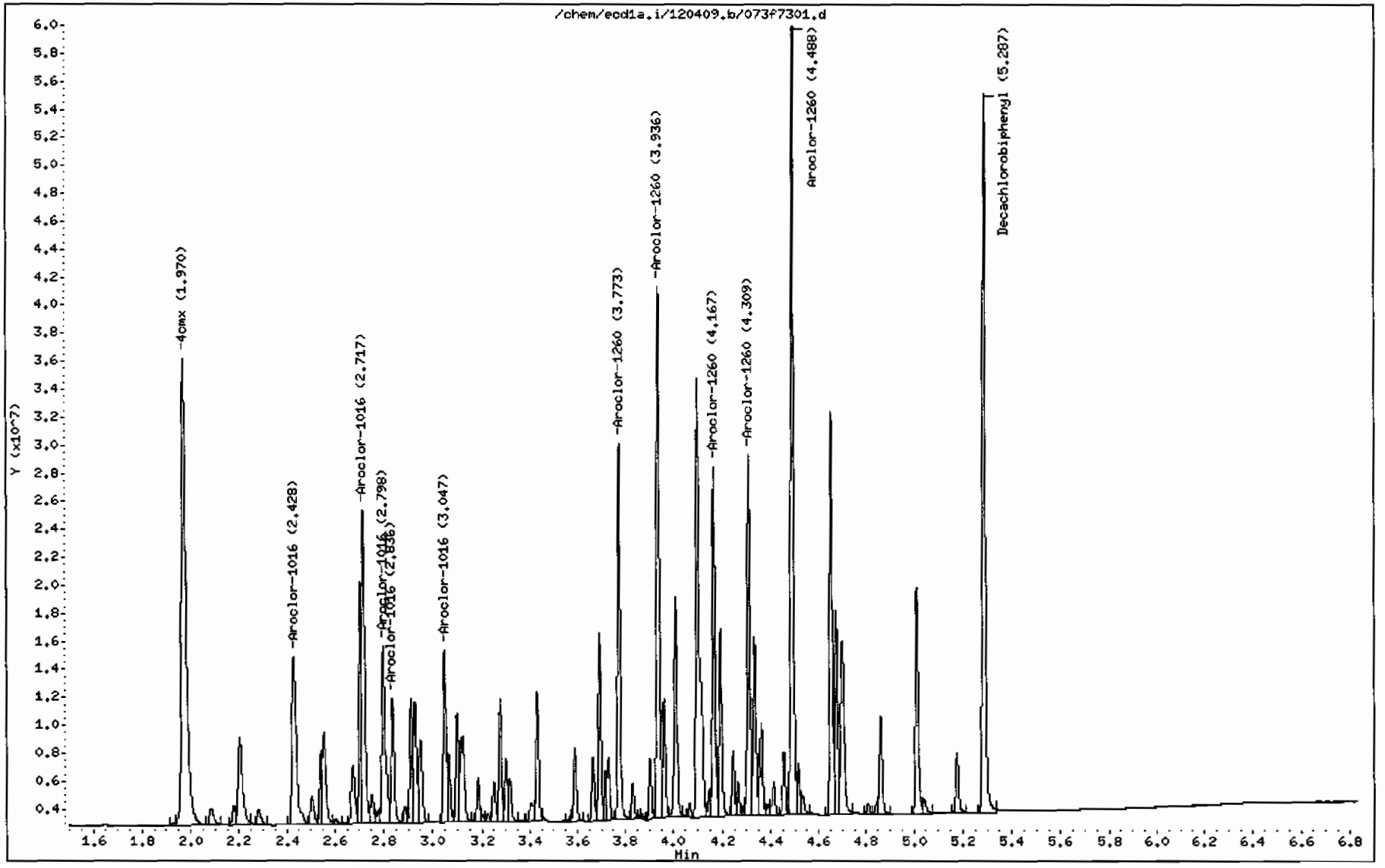

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/073b7301.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 04-DEC-2009 19:27
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 08
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:00 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 73 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	37366432	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	30594387	100.000	102	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	15517287	1000.00	920	80.00- 120.00	100.00
3.294	3.296	-0.002	10253719	1000.00	889	46.08- 86.08	66.08
3.420	3.422	-0.002	5970990	1000.00	859	18.48- 58.48	38.48
3.586	3.587	-0.001	8274997	1000.00	901	33.33- 73.33	53.33
3.661	3.663	-0.002	7814674	1000.00	918	30.36- 70.36	50.36
Average of Peak Amounts =					898		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	16816062	1000.00	931	80.00- 120.00	100.00
4.478	4.479	-0.001	21107906	1000.00	953	105.52- 145.52	125.52
4.743	4.745	-0.002	16874625	1000.00	954	80.35- 120.35	100.35
4.918	4.919	-0.001	16683499	1000.00	969	79.21- 119.21	99.21
5.064	5.067	-0.003	38336051	1000.00	992	207.97- 247.97	227.97
Average of Peak Amounts =					960		

Data File: /chem/ecd1a.i/120409.b/073b7301.d

Date : 04-DEC-2009 19:27

Client ID: AR166008

Sample Info: IWAR091119-60 08

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

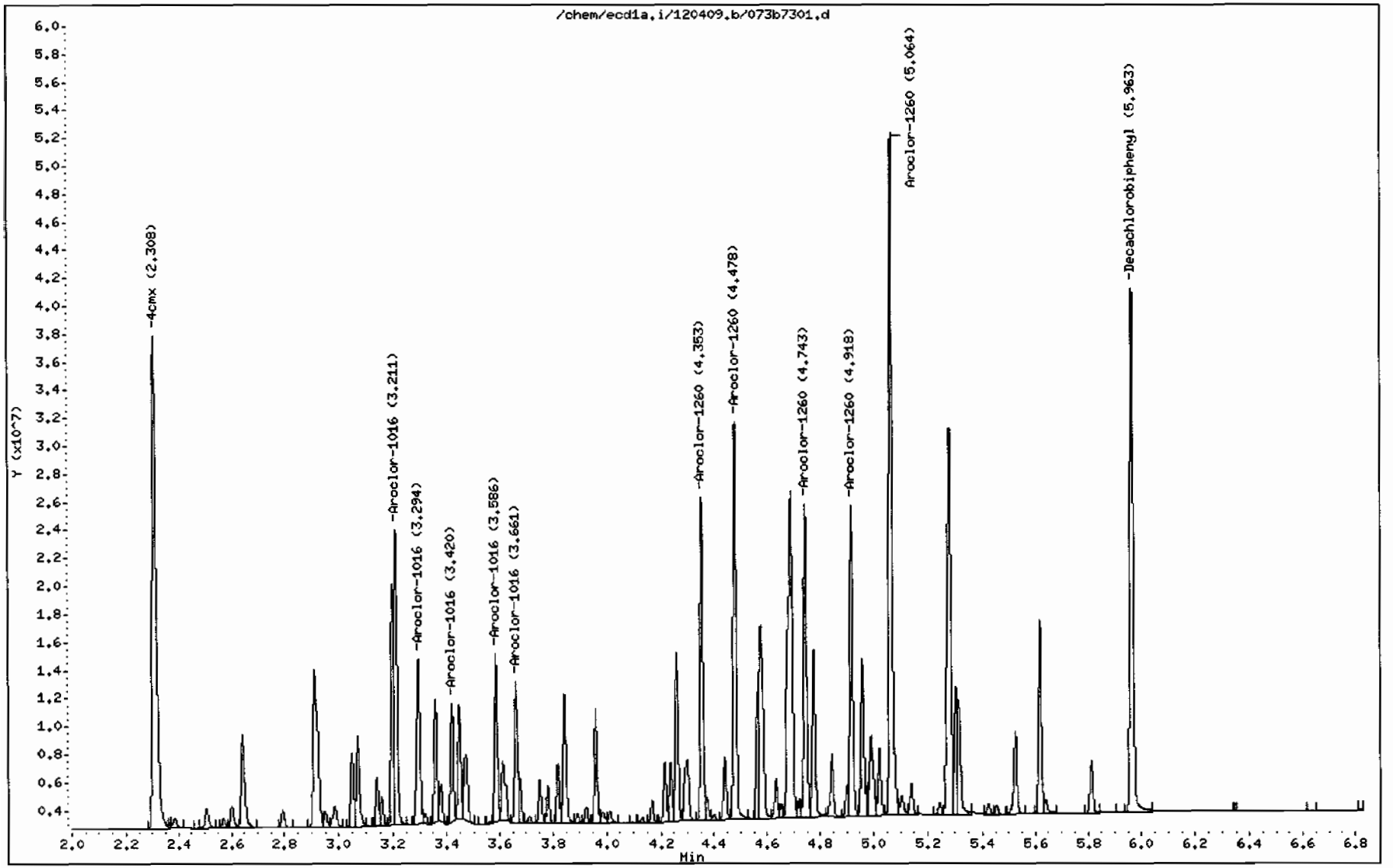

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/085f8501.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 04-DEC-2009 21:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 09
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:02 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 85 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	46311341	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	41421288	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16351052	1000.00	957	80.00- 120.00	100.00
2.718	2.719	-0.001	21169413	1000.00	997	109.47- 149.47	129.47
2.799	2.800	-0.001	13004261	1000.00	927	59.53- 99.53	79.53
2.837	2.838	-0.001	7970117	1000.00	947	28.74- 68.74	48.74
3.047	3.049	-0.002	9970928	1000.00	924	40.98- 80.98	60.98
Average of Peak Amounts =					950		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	20578756	1000.00	959	80.00- 120.00	100.00
3.937	3.938	-0.001	31197305	1000.00	969	131.60- 171.60	151.60
4.167	4.168	-0.001	19461706	1000.00	951	74.57- 114.57	94.57
4.309	4.312	-0.003	19987516	1000.00	995	77.13- 117.13	97.13
4.488	4.491	-0.003	46433412	1000.00	1000	205.64- 245.64	225.64
Average of Peak Amounts =					976		

Data File: /chem/ecdia.i/120409.b/085f8501.d
Date : 04-DEC-2009 21:58
Client ID: AR166009
Sample Info: IWAR091119-60 09

Column phase: CLP1

Instrument: ecdia.i
Operator: YSL
Column diameter: 0.25

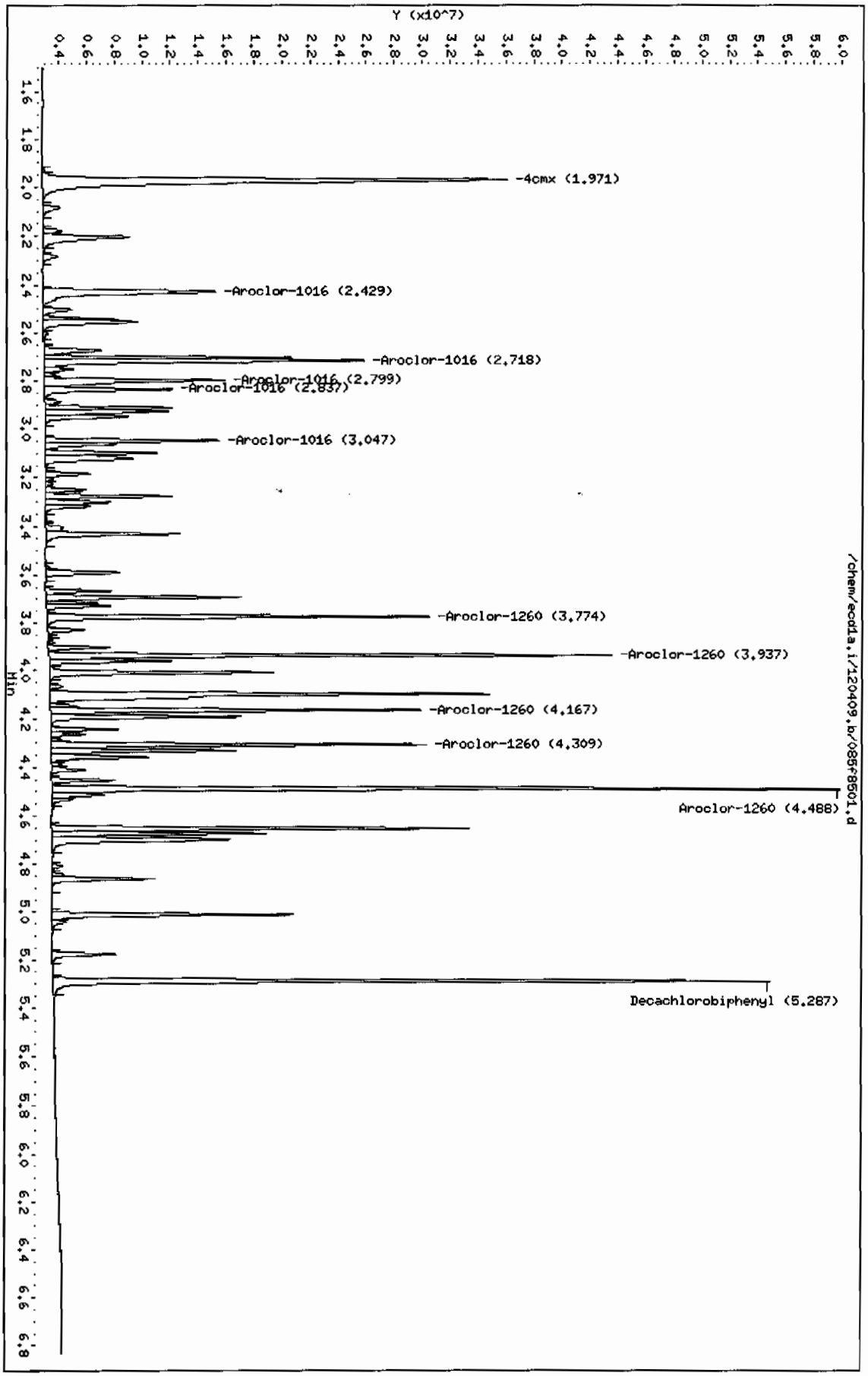

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/085b8501.d
Lab Smp Id: WAR091119-60 09 Client Smp ID: AR166009
Inj Date : 04-DEC-2009 21:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 09
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:45 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 85 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	38507082	100.000	104	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	31808053	100.000	106	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16614291	1000.00	985	80.00- 120.00	100.00(M)
3.295	3.296	-0.001	10748409	1000.00	932	44.69- 84.69	64.69
3.420	3.422	-0.002	6441458	1000.00	927	18.77- 58.77	38.77
3.586	3.587	-0.001	8878536	1000.00	967	33.44- 73.44	53.44
3.662	3.663	-0.001	8172822	1000.00	960	29.19- 69.19	49.19
Average of Peak Amounts =					954		
7 Aroclor-1260					CAS #: 11096-82-5		
4.352	4.354	-0.002	17537948	1000.00	971	80.00- 120.00	100.00
4.477	4.479	-0.002	22185555	1000.00	1000	106.50- 146.50	126.50
4.743	4.745	-0.002	17545678	1000.00	992	80.04- 120.04	100.04
4.917	4.919	-0.002	17482652	1000.00	1020	79.68- 119.68	99.68
5.064	5.067	-0.003	40201540	1000.00	1040	209.23- 249.23	229.23
Average of Peak Amounts =					1e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/085b8501.d
Date : 04-DEC-2009 21:58
Client ID: AR166009
Sample Info: IWAR091119-60 09
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

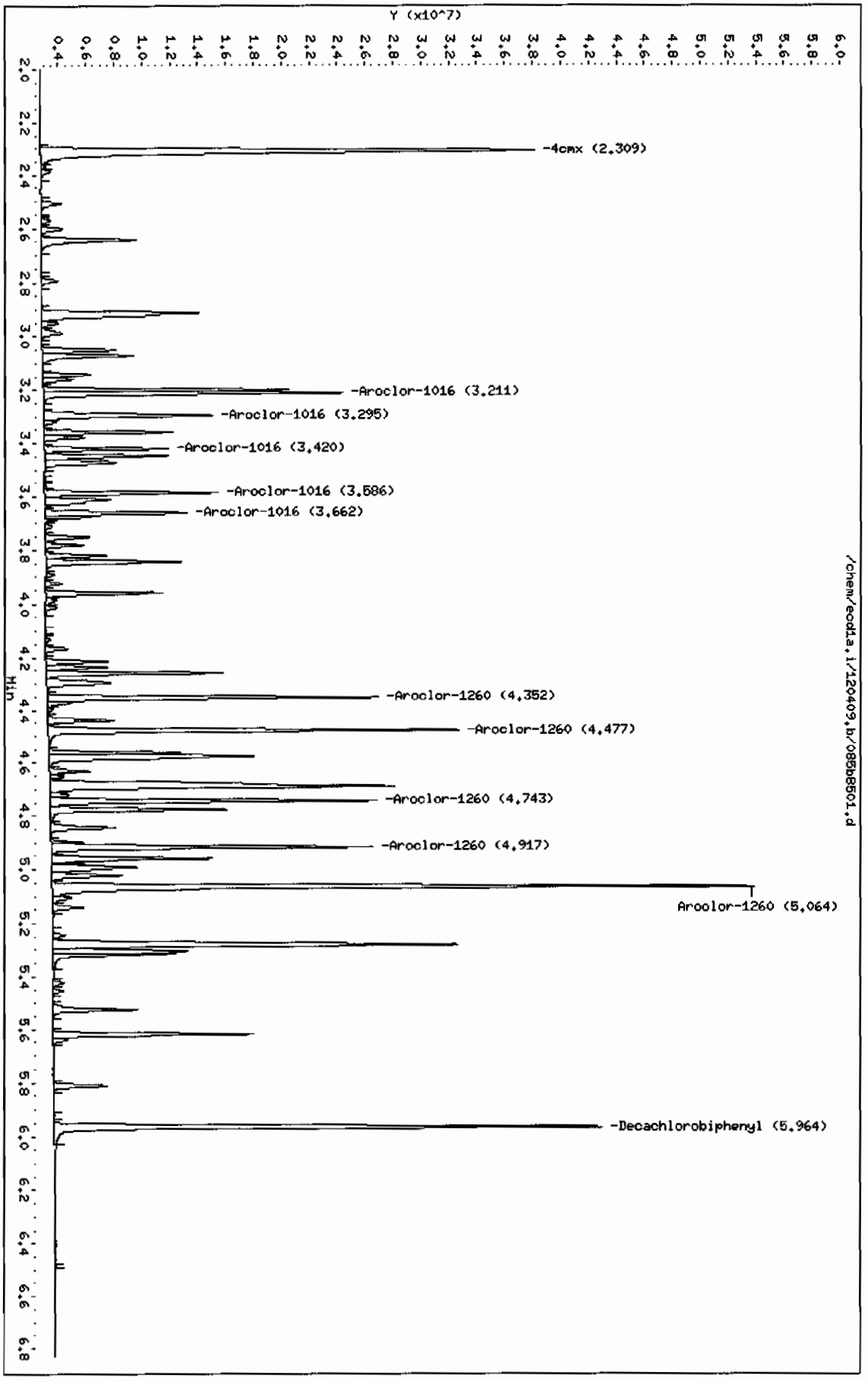

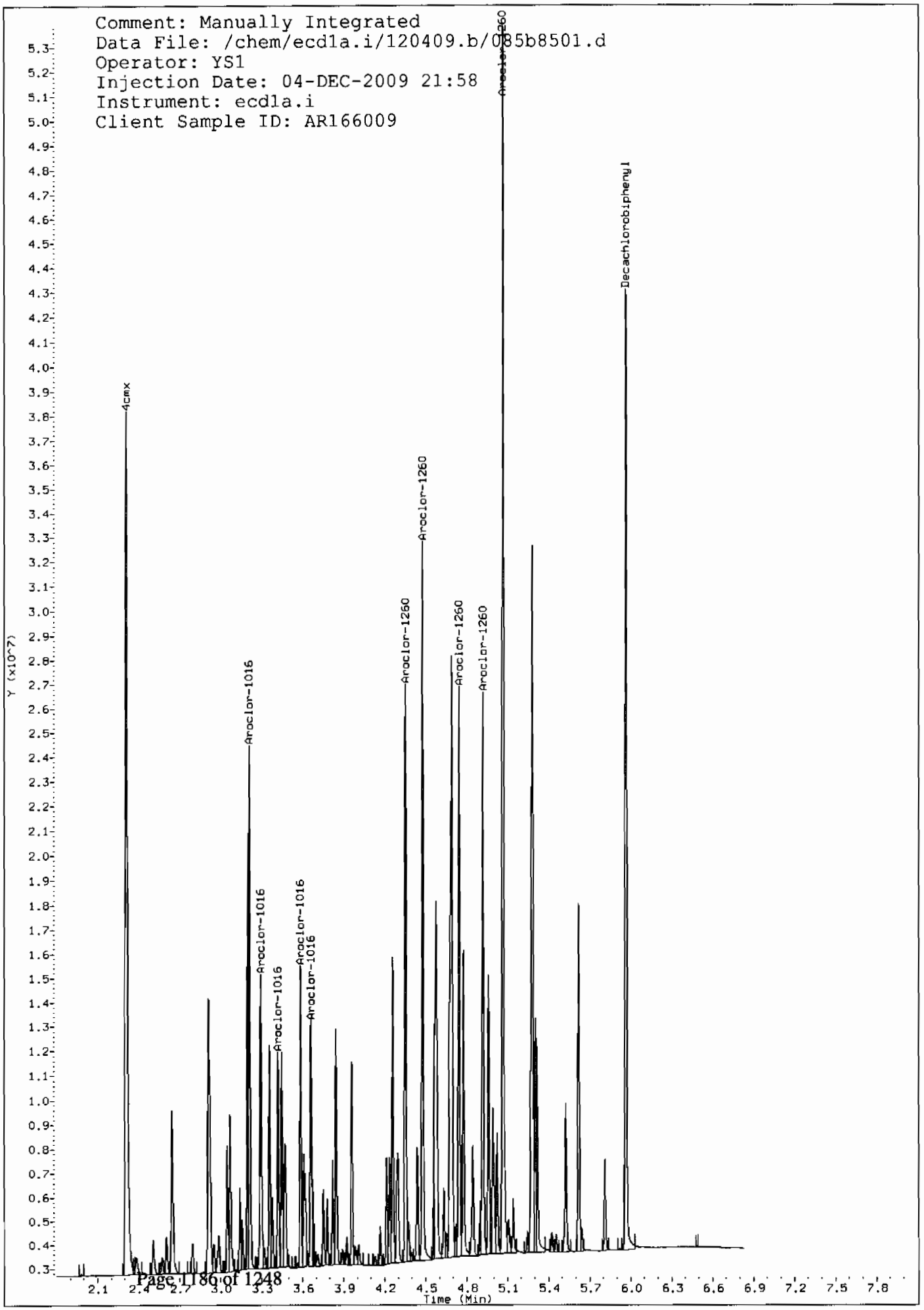
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/085b8501.d
Operator: YS1
Injection Date: 04-DEC-2009 21:58
Instrument: ecd1a.i
Client Sample ID: AR166009
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

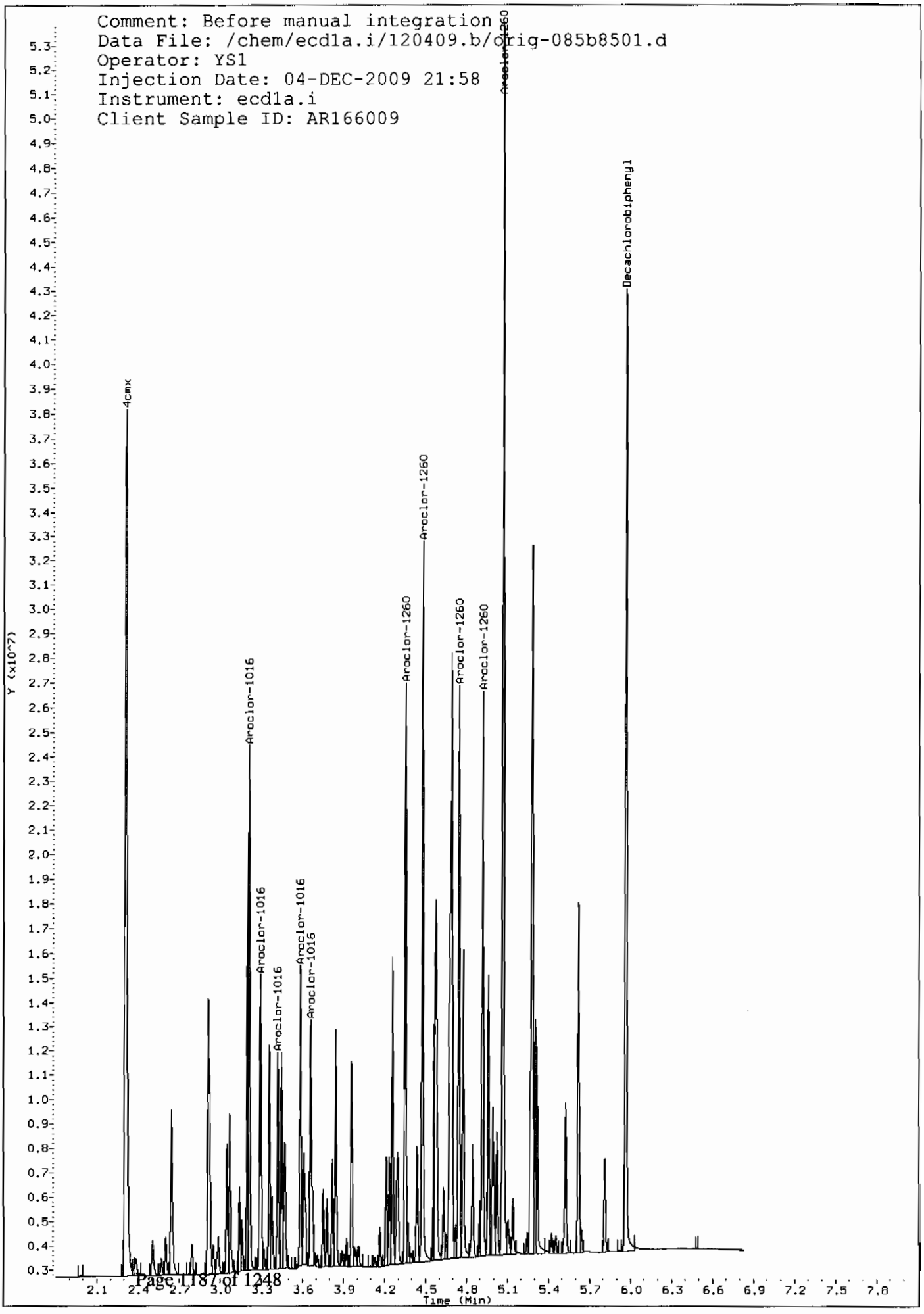
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-085b8501.d
Operator: YS1
Injection Date: 04-DEC-2009 21:58
Instrument: ecd1a.i
Client Sample ID: AR166009
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/091f9101.d
Lab Smp Id: WAR091119-60 10 Client Smp ID: AR166010
Inj Date : 04-DEC-2009 23:10
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 10
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 91 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	46129145	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.288	5.289	-0.001	41680223	100.000	102	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	16693450	1000.00	977	80.00- 120.00	100.00
2.718	2.719	-0.001	21343771	1000.00	1000	107.86- 147.86	127.86
2.798	2.800	-0.002	13336520	1000.00	950	59.89- 99.89	79.89
2.837	2.838	-0.001	8133466	1000.00	966	28.72- 68.72	48.72
3.048	3.049	-0.001	10346493	1000.00	958	41.98- 81.98	61.98
Average of Peak Amounts =					971		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	21437523	1000.00	1000	80.00- 120.00	100.00
3.937	3.938	-0.001	32479892	1000.00	1010	131.51- 171.51	151.51
4.167	4.168	-0.001	20110038	1000.00	983	73.81- 113.81	93.81
4.310	4.312	-0.002	20542050	1000.00	1020	75.82- 115.82	95.82
4.489	4.491	-0.002	47711357	1000.00	1030	202.56- 242.56	222.56
Average of Peak Amounts =					1.01e+03		

Data File: /chem/ecd1a.i/120409.b/091f9101.d

Date : 04-DEC-2009 23:10

Client ID: AR166010

Sample Info: IWAR091119-60 10

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

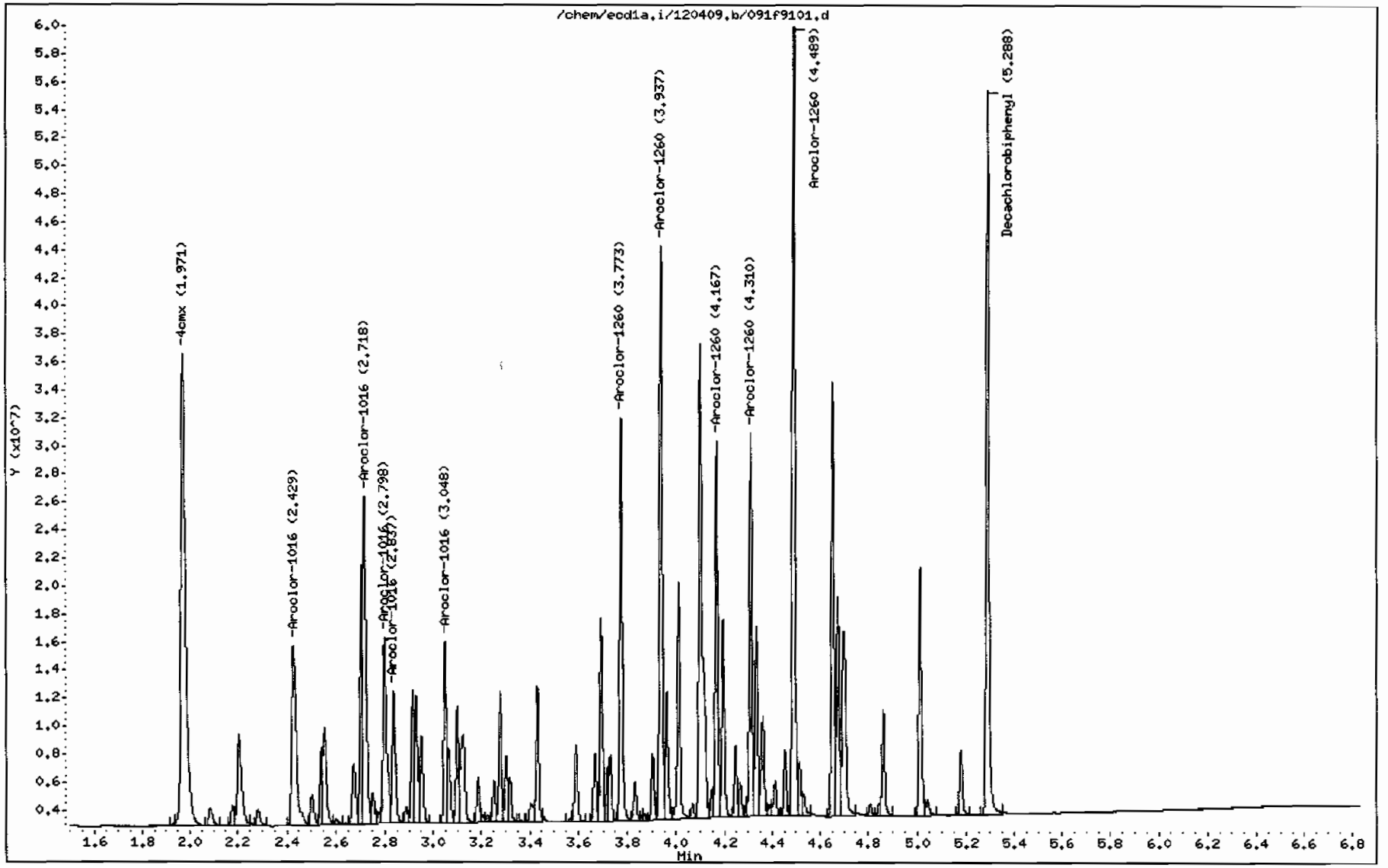

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/091b9101.d
Lab Smp Id: WAR091119-60 10 Client Smp ID: AR166010
Inj Date : 04-DEC-2009 23:10
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091119-60 10
Misc Info :
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 91 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.308	2.309	-0.001	38413439	100.000	103	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	31434325	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	16805450	1000.00	997	80.00- 120.00	100.00
3.294	3.296	-0.002	10884584	1000.00	944	44.77- 84.77	64.77
3.420	3.422	-0.002	6335755	1000.00	911	17.70- 57.70	37.70
3.586	3.587	-0.001	8779231	1000.00	956	32.24- 72.24	52.24
3.662	3.663	-0.001	8201205	1000.00	964	28.80- 68.80	48.80
Average of Peak Amounts =					954		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	17993825	1000.00	996	80.00- 120.00	100.00
4.478	4.479	-0.001	22799895	1000.00	1030	106.71- 146.71	126.71
4.743	4.745	-0.002	18085403	1000.00	1020	80.51- 120.51	100.51
4.918	4.919	-0.001	17925319	1000.00	1040	79.62- 119.62	99.62
5.065	5.067	-0.002	41323997	1000.00	1070	209.66- 249.66	229.66
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd1a.i/120409.b/091b9101.d
Date : 04-DEC-2009 23:10
Client ID: AR166010
Sample Info: IWAR091119-60 10

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

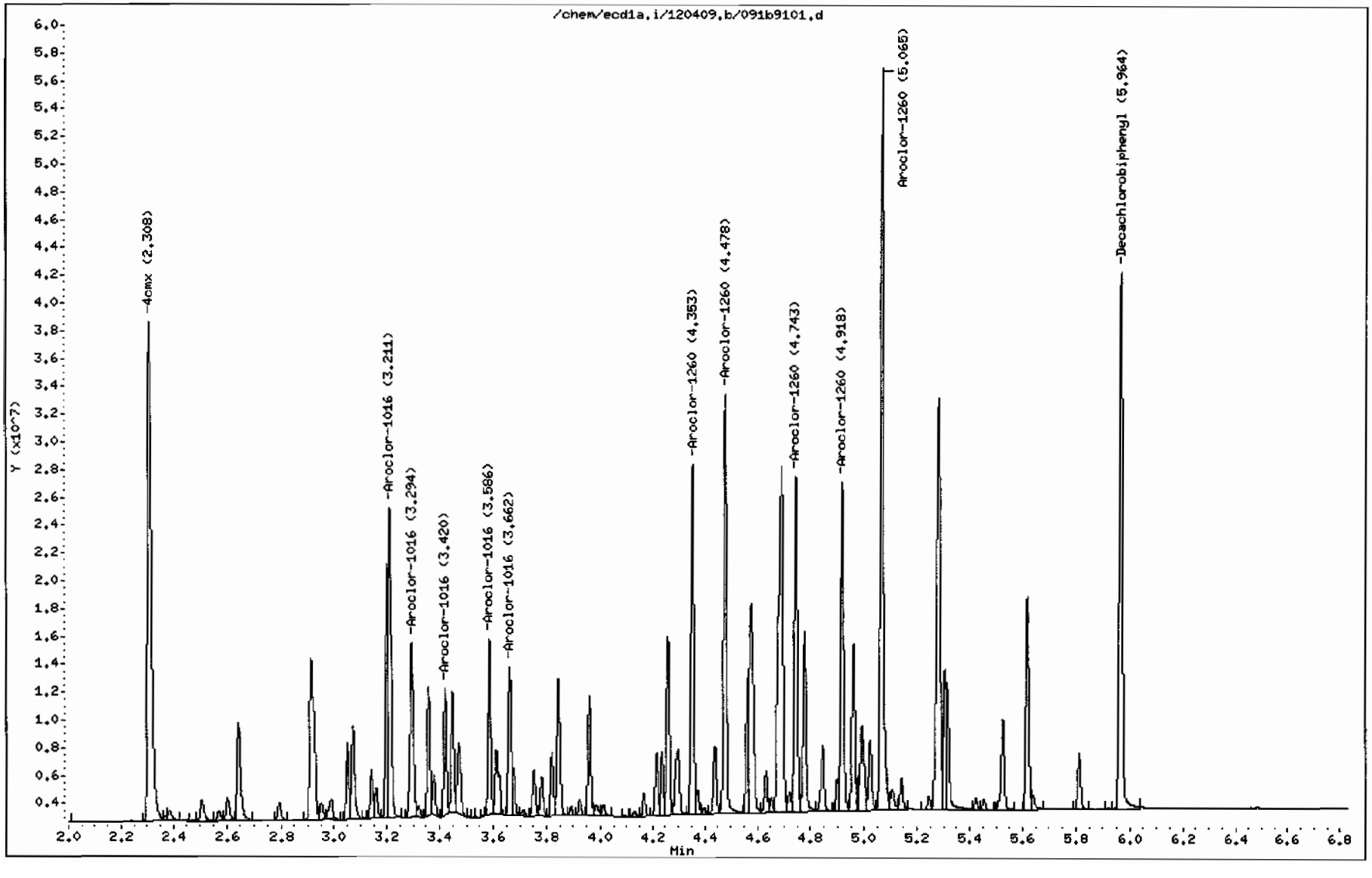

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	1.97	5.29
02	ZZZZZ	ZZZZZ	11/10/09	0814	1.97	5.29
03	ZZZZZ	ZZZZZ	11/10/09	0825	1.98	5.29
04	ZZZZZ	ZZZZZ	11/10/09	0835	1.98	5.29
05	ZZZZZ	ZZZZZ	11/10/09	0846	1.98	5.30
06	AR123201	WAR090930-32	11/10/09	0856	1.98	5.29
07	AR122101	WAR090803-21	11/10/09	0907	1.97	5.30
08	AR126201	WAR090803-62	11/10/09	0917	1.98	5.29
09	AR126801	WAR091106-68	11/10/09	0928	1.98	5.29
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	1.98	5.30
12	AR166002	WAR091110-02	11/10/09	0959	1.98	5.30
13	AR166003	WAR091110-04	11/10/09	1010	1.98	5.30
14	AR166004	WAR091110-03	11/10/09	1021	1.98	5.30
15	AR166005	IAR091102-01	11/10/09	1031	1.98	5.29
16	AR166001	WAR091102-60	11/10/09	1042	1.98	5.30
17	AR125401	WAR091110-05	11/10/09	1052	1.97	5.30
18	AR125402	WAR091110-06	11/10/09	1103	1.98	5.30
19	AR125403	WAR091110-08	11/10/09	1113	1.98	5.29
20	AR125401	WAR091110-08	11/10/09	1124	1.98	5.30
21	AR125405	IAR091027-01	11/10/09	1134	1.98	5.30
22	AR125401	WAR091102-54	11/10/09	1145	1.98	5.30
23	AR124201	WAR091110-09	11/10/09	1155	1.98	5.30
24	AR124202	WAR091110-10	11/10/09	1206	1.98	5.29
25	AR124203	WAR091110-11	11/10/09	1217	1.98	5.30
26	AR124204	WAR091110-12	11/10/09	1227	1.98	5.30
27	AR124205	IAR090914-01	11/10/09	1238	1.98	5.30
28	AR124201	WAR091102-42	11/10/09	1248	1.98	5.30
29	AR124801	WAR091110-13	11/10/09	1259	1.98	5.30
30	AR124802	WAR091110-14	11/10/09	1309	1.98	5.30
31	AR124803	WAR091110-15	11/10/09	1320	1.98	5.29
32	AR124804	WAR091110-16	11/10/09	1330	1.98	5.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.98 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	1.98	5.29
02	AR124801	WAR091027-48	11/10/09	1351	1.98	5.30
03	PIBLK02	WAR090916-99	11/10/09	1402	1.98	5.30
04	ZZZZZ	ZZZZZ	11/10/09	1412	1.98	5.30
05	ZZZZZ	ZZZZZ	11/10/09	1423	1.98	5.30
06	ZZZZZ	ZZZZZ	11/10/09	1433	1.98	5.30
07	ZZZZZ	ZZZZZ	11/10/09	1444	1.98	5.30
08	ZZZZZ	ZZZZZ	11/10/09	1457	1.97	5.30
09	ZZZZZ	ZZZZZ	11/10/09	1509	1.97	5.29
10	ZZZZZ	ZZZZZ	11/10/09	1522	1.97	5.29
11	AR166002	WAR091102-60	11/10/09	1534	1.98	5.29
12	PIBLK003	WAR090916-99	11/10/09	1545	1.98	5.30
13	ZZZZZ	ZZZZZ	11/10/09	1555	1.97	5.30
14	ZZZZZ	ZZZZZ	11/10/09	1608	1.97	5.29
15	ZZZZZ	ZZZZZ	11/10/09	1620	1.98	5.29
16	ZZZZZ	ZZZZZ	11/10/09	1633	1.97	5.29
17	ZZZZZ	ZZZZZ	11/10/09	1645	1.97	5.29
18	ZZZZZ	ZZZZZ	11/10/09	1658	1.98	5.29
19	ZZZZZ	ZZZZZ	11/10/09	1711	1.97	5.29
20	ZZZZZ	ZZZZZ	11/10/09	1723	1.98	5.29
21	ZZZZZ	ZZZZZ	11/10/09	1736	1.97	5.29
22	ZZZZZ	ZZZZZ	11/10/09	1748	1.98	5.29
23	AR166003	WAR091102-60	11/10/09	1801	1.98	5.29
24	PIBLK04	WAR090916-99	11/10/09	1812	1.98	5.30
25	ZZZZZ	ZZZZZ	11/10/09	1822	1.98	5.30
26	ZZZZZ	ZZZZZ	11/10/09	1835	1.98	5.29
27	ZZZZZ	ZZZZZ	11/10/09	1847	1.98	5.29
28	ZZZZZ	ZZZZZ	11/10/09	1900	1.98	5.29
29	ZZZZZ	ZZZZZ	11/10/09	1912	1.98	5.29
30	ZZZZZ	ZZZZZ	11/10/09	1925	1.98	5.29
31	ZZZZZ	ZZZZZ	11/10/09	1938	1.97	5.29
32	ZZZZZ	ZZZZZ	11/10/09	1950	1.98	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/10/09	0802	2.31	5.97
02	ZZZZZ	ZZZZZ	11/10/09	0814	2.31	5.97
03	ZZZZZ	ZZZZZ	11/10/09	0825	2.32	5.97
04	ZZZZZ	ZZZZZ	11/10/09	0835	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	0846	2.31	5.97
06	AR123201	WAR090930-32	11/10/09	0856	2.31	5.97
07	AR122101	WAR090803-21	11/10/09	0907	2.31	5.97
08	AR126201	WAR090803-62	11/10/09	0917	2.31	5.97
09	AR126801	WAR091106-68	11/10/09	0928	2.31	5.97
10	DDTANALOGSTD	WAR091020-DD	11/10/09	0938		
11	AR166001	WAR091110-01	11/10/09	0949	2.31	5.97
12	AR166002	WAR091110-02	11/10/09	0959	2.31	5.97
13	AR166003	WAR091110-04	11/10/09	1010	2.31	5.97
14	AR166004	WAR091110-03	11/10/09	1021	2.31	5.97
15	AR166005	IAR091102-01	11/10/09	1031	2.31	5.97
16	AR166001	WAR091102-60	11/10/09	1042	2.31	5.97
17	AR125401	WAR091110-05	11/10/09	1052	2.31	5.97
18	AR125402	WAR091110-06	11/10/09	1103	2.31	5.97
19	AR125403	WAR091110-08	11/10/09	1113	2.31	5.97
20	AR125401	WAR091110-08	11/10/09	1124	2.32	5.97
21	AR125405	IAR091027-01	11/10/09	1134	2.32	5.97
22	AR125401	WAR091102-54	11/10/09	1145	2.32	5.97
23	AR124201	WAR091110-09	11/10/09	1155	2.32	5.97
24	AR124202	WAR091110-10	11/10/09	1206	2.31	5.97
25	AR124203	WAR091110-11	11/10/09	1217	2.31	5.97
26	AR124204	WAR091110-12	11/10/09	1227	2.32	5.97
27	AR124205	IAR090914-01	11/10/09	1238	2.32	5.97
28	AR124201	WAR091102-42	11/10/09	1248	2.32	5.97
29	AR124801	WAR091110-13	11/10/09	1259	2.31	5.97
30	AR124802	WAR091110-14	11/10/09	1309	2.31	5.97
31	AR124803	WAR091110-15	11/10/09	1320	2.31	5.97
32	AR124804	WAR091110-16	11/10/09	1330	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/10/09	1341	2.31	5.97
02	AR124801	WAR091027-48	11/10/09	1351	2.31	5.97
03	PIBLK02	WAR090916-99	11/10/09	1402	2.31	5.97
04	ZZZZZ	ZZZZZ	11/10/09	1412	2.31	5.97
05	ZZZZZ	ZZZZZ	11/10/09	1423	2.31	5.97
06	ZZZZZ	ZZZZZ	11/10/09	1433	2.31	5.97
07	ZZZZZ	ZZZZZ	11/10/09	1444	2.31	5.97
08	ZZZZZ	ZZZZZ	11/10/09	1457	2.31	5.97
09	ZZZZZ	ZZZZZ	11/10/09	1509	2.31	5.97
10	ZZZZZ	ZZZZZ	11/10/09	1522	2.31	5.97
11	AR166002	WAR091102-60	11/10/09	1534	2.31	5.97
12	PIBLK03	WAR090916-99	11/10/09	1545	2.31	5.97
13	ZZZZZ	ZZZZZ	11/10/09	1555	2.31	5.97
14	ZZZZZ	ZZZZZ	11/10/09	1608	2.31	5.97
15	ZZZZZ	ZZZZZ	11/10/09	1620	2.31	5.97
16	ZZZZZ	ZZZZZ	11/10/09	1633	2.31	5.97
17	ZZZZZ	ZZZZZ	11/10/09	1645	2.31	5.97
18	ZZZZZ	ZZZZZ	11/10/09	1658	2.31	5.97
19	ZZZZZ	ZZZZZ	11/10/09	1711	2.31	5.97
20	ZZZZZ	ZZZZZ	11/10/09	1723	2.31	5.97
21	ZZZZZ	ZZZZZ	11/10/09	1736	2.31	5.97
22	ZZZZZ	ZZZZZ	11/10/09	1748	2.31	5.97
23	AR166003	WAR091102-60	11/10/09	1801	2.31	5.97
24	PIBLK04	WAR090916-99	11/10/09	1812	2.31	5.97
25	ZZZZZ	ZZZZZ	11/10/09	1822	2.31	5.97
26	ZZZZZ	ZZZZZ	11/10/09	1835	2.31	5.97
27	ZZZZZ	ZZZZZ	11/10/09	1847	2.31	5.97
28	ZZZZZ	ZZZZZ	11/10/09	1900	2.31	5.97
29	ZZZZZ	ZZZZZ	11/10/09	1912	2.31	5.97
30	ZZZZZ	ZZZZZ	11/10/09	1925	2.31	5.97
31	ZZZZZ	ZZZZZ	11/10/09	1938	2.31	5.97
32	ZZZZZ	ZZZZZ	11/10/09	1950	2.31	5.97

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0523	1.97	5.29
02	AR166001	WAR091119-60	12/04/09	0533	1.97	5.29
03	ZZZZZ	ZZZZZ	12/04/09	0544	1.97	5.29
04	AR124201	WAR091102-42	12/04/09	0554	1.97	5.29
05	AR124801	WAR091027-48	12/04/09	0605	1.97	5.29
06	AR123201	WAR090930-32	12/04/09	0615	1.97	5.29
07	AR122101	WAR090803-21	12/04/09	0626	1.97	5.29
08	AR126201	WAR090803-62	12/04/09	0636	1.97	5.29
09	AR126801	WAR091106-68	12/04/09	0647	1.97	5.29
10	AR125401	WAR091102-54	12/04/09	0657	1.97	5.29
11	DDTANALOGSTD	WAR091020-DD	12/04/09	0708		
12	PIBLK02	WAR090916-99	12/04/09	0718	1.97	5.29
13	ZZZZZ	ZZZZZ	12/04/09	0729	1.97	5.29
14	ZZZZZ	ZZZZZ	12/04/09	0739	1.97	5.29
15	ZZZZZ	ZZZZZ	12/04/09	0750	1.97	5.29
16	ZZZZZ	ZZZZZ	12/04/09	0800	1.97	5.29
17	AR166002	WAR091119-60	12/04/09	0813	1.97	5.29
18	PIBLK03	WAR090916-99	12/04/09	0823	1.97	5.29
19	ZZZZZ	ZZZZZ	12/04/09	0834	1.97	5.29
20	ZZZZZ	ZZZZZ	12/04/09	0845	1.97	5.29
21	ZZZZZ	ZZZZZ	12/04/09	0855	1.97	5.29
22	ZZZZZ	ZZZZZ	12/04/09	0906	1.97	5.29
23	ZZZZZ	ZZZZZ	12/04/09	0918	1.97	5.29
24	ZZZZZ	ZZZZZ	12/04/09	0931	1.96	5.29
25	ZZZZZ	ZZZZZ	12/04/09	0943	1.97	5.29
26	ZZZZZ	ZZZZZ	12/04/09	0956	1.97	5.29
27	ZZZZZ	ZZZZZ	12/04/09	1008	1.97	5.29
28	ZZZZZ	ZZZZZ	12/04/09	1021	1.97	5.29
29	AR166003	WAR091119-60	12/04/09	1033	1.97	5.29
30	PIBLK04	WAR090916-99	12/04/09	1044	1.97	5.29
31	ZZZZZ	ZZZZZ	12/04/09	1055	1.97	5.29
32	AR166004	WAR091119-60	12/04/09	1107	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK03	WAR090916-99	12/04/09	1118	1.97	5.29
02	ZZZZZ	ZZZZZ	12/04/09	1128	1.97	5.29
03	ZZZZZ	ZZZZZ	12/04/09	1141	1.97	5.29
04	ZZZZZ	ZZZZZ	12/04/09	1153	1.97	5.29
05	ZZZZZ	ZZZZZ	12/04/09	1206	1.97	5.29
06	ZZZZZ	ZZZZZ	12/04/09	1218	1.97	5.29
07	ZZZZZ	ZZZZZ	12/04/09	1231	1.97	5.29
08	ZZZZZ	ZZZZZ	12/04/09	1244	1.97	5.29
09	ZZZZZ	ZZZZZ	12/04/09	1256	1.97	5.29
10	ZZZZZ	ZZZZZ	12/04/09	1309	1.97	5.29
11	ZZZZZ	ZZZZZ	12/04/09	1322	1.97	5.29
12	AR166005	WAR091119-60	12/04/09	1334	1.97	5.29
13	PIBLK06	WAR090916-99	12/04/09	1345	1.97	5.29
14	ZZZZZ	ZZZZZ	12/04/09	1355	1.97	5.29
15	ZZZZZ	ZZZZZ	12/04/09	1408	1.97	5.29
16	ZZZZZ	ZZZZZ	12/04/09	1420	1.97	5.29
17	ZZZZZ	ZZZZZ	12/04/09	1433	1.97	5.29
18	ZZZZZ	ZZZZZ	12/04/09	1445	1.97	5.29
19	ZZZZZ	ZZZZZ	12/04/09	1458	1.97	5.29
20	ZZZZZ	ZZZZZ	12/04/09	1511	1.97	5.29
21	ZZZZZ	ZZZZZ	12/04/09	1523	1.97	5.29
22	ZZZZZ	ZZZZZ	12/04/09	1536	1.97	5.29
23	ZZZZZ	ZZZZZ	12/04/09	1548	1.97	5.29
24	AR166006	WAR091119-60	12/04/09	1601	1.97	5.29
25	PIBLK07	WAR090916-99	12/04/09	1612	1.97	5.29
26	ZZZZZ	ZZZZZ	12/04/09	1622	1.97	5.29
27	ZZZZZ	ZZZZZ	12/04/09	1635	1.97	5.29
28	ZZZZZ	ZZZZZ	12/04/09	1647	1.97	5.29
29	AR166007	WAR091119-60	12/04/09	1700	1.97	5.29
30	PIBLK08	WAR090916-99	12/04/09	1710	1.97	5.29
31	PBLK01	1201982309	12/04/09	1721	1.97	5.29
32	PBLK01LCS	1201982312	12/04/09	1733	1.97	5.29

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.97 DCB: 5.29

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	RE03-09-14115	241819001	12/04/09	1746	1.97	5.29
02	RE03-09-14113	241819002	12/04/09	1758	1.97	5.29
03	RE03-09-14125	241819003	12/04/09	1811	1.97	5.29
04	RE03-09-14123	241819004	12/04/09	1824	1.97	5.29
05	RE03-09-14114	241819005	12/04/09	1836	1.97	5.29
06	RE03-09-14126	241819006	12/04/09	1849	1.97	5.29
07	RE03-09-14117	241819007	12/04/09	1902	1.97	5.29
08	RE03-09-14121	241819008	12/04/09	1914	1.97	5.29
09	AR166008	WAR091119-60	12/04/09	1927	1.97	5.29
10	PIBLK09	WAR090916-99	12/04/09	1939	1.97	5.29
11	RE03-09-14129	241819009	12/04/09	1952	1.97	5.29
12	RE03-09-14120	241819010	12/04/09	2005	1.97	5.29
13	RE03-09-14116	241819011	12/04/09	2017	1.97	5.29
14	RE03-09-14111	241819012	12/04/09	2030	1.97	5.29
15	RE03-09-14119	241819013	12/04/09	2043	1.97	5.29
16	RE03-09-14110	241819014	12/04/09	2055	1.97	5.29
17	RE03-09-14127	241819015	12/04/09	2108	1.97	5.29
18	RE03-09-14118	241819016	12/04/09	2120	1.97	5.29
19	RE03-09-14118MS	1201982310	12/04/09	2133	1.97	5.29
20	RE03-09-14118MSD	1201982311	12/04/09	2146	1.97	5.29
21	AR166009	WAR091119-60	12/04/09	2158	1.97	5.29
22	PIBLK10	WAR090916-99	12/04/09	2209	1.97	5.29
23	RE03-09-14122	241819017	12/04/09	2219	1.97	5.29
24	RE03-09-14124	241819018	12/04/09	2232	1.97	5.29
25	RE03-09-14112	241819019	12/04/09	2244	1.97	5.29
26	RE03-09-14128	241819020	12/04/09	2257	1.97	5.29
27	AR166010	WAR091119-60	12/04/09	2310	1.97	5.29
28	PIBLK11	WAR090916-99	12/04/09	2320	1.97	5.29
29	ZZZZZ	ZZZZZ	12/04/09	2331	1.97	5.29
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0523	2.31	5.96
02	AR166001	WAR091119-60	12/04/09	0533	2.31	5.97
03	ZZZZZ	ZZZZZ	12/04/09	0544	2.31	5.97
04	AR124201	WAR091102-42	12/04/09	0554	2.31	5.97
05	AR124801	WAR091027-48	12/04/09	0605	2.31	5.97
06	AR123201	WAR090930-32	12/04/09	0615	2.31	5.97
07	AR122101	WAR090803-21	12/04/09	0626	2.31	5.97
08	AR126201	WAR090803-62	12/04/09	0636	2.31	5.97
09	AR126801	WAR091106-68	12/04/09	0647	2.31	5.97
10	AR125401	WAR091102-54	12/04/09	0657	2.31	5.97
11	DDTANALOGSTD	WAR091020-DD	12/04/09	0708		
12	PIBLK02	WAR090916-99	12/04/09	0718	2.31	5.97
13	ZZZZZ	ZZZZZ	12/04/09	0729	2.31	5.97
14	ZZZZZ	ZZZZZ	12/04/09	0739	2.31	5.97
15	ZZZZZ	ZZZZZ	12/04/09	0750	2.31	5.97
16	ZZZZZ	ZZZZZ	12/04/09	0800	2.31	5.97
17	AR166002	WAR091119-60	12/04/09	0813	2.31	5.96
18	PIBLK03	WAR090916-99	12/04/09	0823	2.31	5.96
19	ZZZZZ	ZZZZZ	12/04/09	0834	2.31	5.97
20	ZZZZZ	ZZZZZ	12/04/09	0845	2.31	5.97
21	ZZZZZ	ZZZZZ	12/04/09	0855	2.31	5.97
22	ZZZZZ	ZZZZZ	12/04/09	0906	2.31	5.96
23	ZZZZZ	ZZZZZ	12/04/09	0918	2.31	5.96
24	ZZZZZ	ZZZZZ	12/04/09	0931	2.31	5.96
25	ZZZZZ	ZZZZZ	12/04/09	0943	2.31	5.96
26	ZZZZZ	ZZZZZ	12/04/09	0956	2.31	5.96
27	ZZZZZ	ZZZZZ	12/04/09	1008	2.31	5.96
28	ZZZZZ	ZZZZZ	12/04/09	1021	2.31	5.96
29	AR166003	WAR091119-60	12/04/09	1033	2.31	5.96
30	PIBLK04	WAR090916-99	12/04/09	1044	2.31	5.96
31	ZZZZZ	ZZZZZ	12/04/09	1055	2.31	5.96
32	AR166004	WAR091119-60	12/04/09	1107	2.31	5.96

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK05	WAR090916-99	12/04/09	1118	2.31	5.96
02	ZZZZZ	ZZZZZ	12/04/09	1128	2.31	5.97
03	ZZZZZ	ZZZZZ	12/04/09	1141	2.31	5.96
04	ZZZZZ	ZZZZZ	12/04/09	1153	2.31	5.96
05	ZZZZZ	ZZZZZ	12/04/09	1206	2.31	5.96
06	ZZZZZ	ZZZZZ	12/04/09	1218	2.31	5.96
07	ZZZZZ	ZZZZZ	12/04/09	1231	2.31	5.96
08	ZZZZZ	ZZZZZ	12/04/09	1244	2.31	5.96
09	ZZZZZ	ZZZZZ	12/04/09	1256	2.31	5.96
10	ZZZZZ	ZZZZZ	12/04/09	1309	2.31	5.96
11	ZZZZZ	ZZZZZ	12/04/09	1322	2.31	5.96
12	AR166005	WAR091119-60	12/04/09	1334	2.31	5.96
13	PIBLK06	WAR090916-99	12/04/09	1345	2.31	5.96
14	ZZZZZ	ZZZZZ	12/04/09	1355	2.31	5.96
15	ZZZZZ	ZZZZZ	12/04/09	1408	2.31	5.96
16	ZZZZZ	ZZZZZ	12/04/09	1420	2.31	5.96
17	ZZZZZ	ZZZZZ	12/04/09	1433	2.31	5.96
18	ZZZZZ	ZZZZZ	12/04/09	1445	2.31	5.96
19	ZZZZZ	ZZZZZ	12/04/09	1458	2.31	5.96
20	ZZZZZ	ZZZZZ	12/04/09	1511	2.31	5.96
21	ZZZZZ	ZZZZZ	12/04/09	1523	2.31	5.96
22	ZZZZZ	ZZZZZ	12/04/09	1536	2.31	5.96
23	ZZZZZ	ZZZZZ	12/04/09	1548	2.31	5.96
24	AR166006	WAR091119-60	12/04/09	1601	2.31	5.96
25	PIBLK07	WAR090916-99	12/04/09	1612	2.31	5.96
26	ZZZZZ	ZZZZZ	12/04/09	1622	2.31	5.97
27	ZZZZZ	ZZZZZ	12/04/09	1635	2.31	5.96
28	ZZZZZ	ZZZZZ	12/04/09	1647	2.31	5.96
29	AR166007	WAR091119-60	12/04/09	1700	2.31	5.96
30	PIBLK08	WAR090916-99	12/04/09	1710	2.31	5.97
31	PBLK01	1201982309	12/04/09	1721	2.31	5.96
32	PBLK01LCS	1201982312	12/04/09	1733	2.31	5.96

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-666

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/10/09 11/10/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.31 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	RE03-09-14115	241819001	12/04/09	1746	2.31	5.96
02	RE03-09-14113	241819002	12/04/09	1758	2.31	5.96
03	RE03-09-14125	241819003	12/04/09	1811	2.31	5.96
04	RE03-09-14123	241819004	12/04/09	1824	2.31	5.96
05	RE03-09-14114	241819005	12/04/09	1836	2.31	5.96
06	RE03-09-14126	241819006	12/04/09	1849	2.31	5.96
07	RE03-09-14117	241819007	12/04/09	1902	2.31	5.96
08	RE03-09-14121	241819008	12/04/09	1914	2.31	5.96
09	AR166008	WAR091119-60	12/04/09	1927	2.31	5.96
10	PIBLK09	WAR090916-99	12/04/09	1939	2.31	5.96
11	RE03-09-14129	241819009	12/04/09	1952	2.31	5.96
12	RE03-09-14120	241819010	12/04/09	2005	2.31	5.96
13	RE03-09-14116	241819011	12/04/09	2017	2.31	5.96
14	RE03-09-14111	241819012	12/04/09	2030	2.31	5.96
15	RE03-09-14119	241819013	12/04/09	2043	2.31	5.96
16	RE03-09-14110	241819014	12/04/09	2055	2.31	5.96
17	RE03-09-14127	241819015	12/04/09	2108	2.31	5.96
18	RE03-09-14118	241819016	12/04/09	2120	2.31	5.96
19	RE03-09-14118MS	1201982310	12/04/09	2133	2.31	5.96
20	RE03-09-14118MSD	1201982311	12/04/09	2146	2.31	5.96
21	AR166009	WAR091119-60	12/04/09	2158	2.31	5.96
22	PIBLK10	WAR090916-99	12/04/09	2209	2.31	5.96
23	RE03-09-14122	241819017	12/04/09	2219	2.31	5.97
24	RE03-09-14124	241819018	12/04/09	2232	2.31	5.96
25	RE03-09-14112	241819019	12/04/09	2244	2.31	5.96
26	RE03-09-14128	241819020	12/04/09	2257	2.31	5.96
27	AR166010	WAR091119-60	12/04/09	2310	2.31	5.96
28	PIBLK11	WAR090916-99	12/04/09	2320	2.31	5.96
29	ZZZZZ	ZZZZZ	12/04/09	2331	2.31	5.96
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10–666 **Client ID:** LCS for batch 927188

Lab Sample ID: 1201982312

Data File: 064f6401.d **Data File:** 064b6401.d

Inst: ECD1A.I_1 **Inst:** ECD1A.I_2

Column: CLP1 **Column:** CLP2

Analyzed: 04–DEC–09 17:33 **Analyzed:** 04–DEC–09 17:33

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							.895
Column 1	1	2.43	2.4 – 2.46	22.1		ug/kg	
	2	2.72	2.69 – 2.75	21.9		ug/kg	
	3	2.8	2.77 – 2.83	22.7		ug/kg	
	4	2.84	2.81 – 2.87	23.9		ug/kg	
	5	3.05	3.02 – 3.08	22.2		ug/kg	
					22.6		
Column 2	1	3.21	3.18 – 3.24	22.8		ug/kg	
	2	3.3	3.27 – 3.33	22.3		ug/kg	
	3	3.42	3.39 – 3.45	22.2		ug/kg	
	4	3.59	3.56 – 3.62	22		ug/kg	
	5	3.66	3.63 – 3.69	22.5		ug/kg	
					22.4		
Aroclor–1260							17.9
Column 1	1	3.77	3.75 – 3.81	18.5		ug/kg	
	2	3.94	3.91 – 3.97	20.7		ug/kg	
	3	4.17	4.14 – 4.2	23		ug/kg	
	4	4.31	4.28 – 4.34	11.5		ug/kg	
	5	4.49	4.46 – 4.52	23.4		ug/kg	
					19.4		
Column 2	1	4.35	4.32 – 4.38	21.9		ug/kg	
	2	4.48	4.45 – 4.51	24.5		ug/kg	
	3	4.74	4.72 – 4.78	22.5		ug/kg	
	4	4.92	4.89 – 4.95	22.8		ug/kg	
	5	5.06	5.04 – 5.1	24.5		ug/kg	
					23.2		

Identification Summary

SDG Number: 10–666 **Client ID:** RE03–09–14118MS

Lab Sample ID: 1201982310

Data File:	083f8301.d	**Data File:**	083b8301.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 21:33	**Analyzed:**	04–DEC–09 21:33

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							3.95
Column 1	1	2.43	2.4 – 2.46	25.4		ug/kg	
	2	2.72	2.69 – 2.75	26.4		ug/kg	
	3	2.8	2.77 – 2.83	24.6		ug/kg	
	4	2.84	2.81 – 2.87	24.6		ug/kg	
	5	3.05	3.02 – 3.08	25.2		ug/kg	
					25.2		
Column 2	1	3.21	3.18 – 3.24	26.5		ug/kg	
	2	3.29	3.27 – 3.33	26.7		ug/kg	
	3	3.42	3.39 – 3.45	25.7		ug/kg	
	4	3.59	3.56 – 3.62	26.3		ug/kg	
	5	3.66	3.63 – 3.69	26.1		ug/kg	
					26.3		
Aroclor–1260							14.9
Column 1	1	3.77	3.75 – 3.81	12.2		ug/kg	
	2	3.94	3.91 – 3.97	27.9		ug/kg	
	3	4.17	4.14 – 4.2	27.7		ug/kg	
	4	4.31	4.28 – 4.34	29		ug/kg	
	5	4.49	4.46 – 4.52	29.2		ug/kg	
					25.2		
Column 2	1	4.35	4.32 – 4.38	27.7		ug/kg	
	2	4.48	4.45 – 4.51	29.4		ug/kg	
	3	4.74	4.72 – 4.78	29.2		ug/kg	
	4	4.92	4.89 – 4.95	29.4		ug/kg	
	5	5.06	5.04 – 5.1	30.6		ug/kg	
					29.3		

Identification Summary

SDG Number: 10-666 **Client ID:** RE03-09-14118MSD

Lab Sample ID: 1201982311

Data File:	084f8401.d	**Data File:**	084b8401.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04-DEC-09 21:46	**Analyzed:**	04-DEC-09 21:46

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							4.36
Column 1	1	2.43	2.4 – 2.46	25.7		ug/kg	
	2	2.72	2.69 – 2.75	27.2		ug/kg	
	3	2.8	2.77 – 2.83	25		ug/kg	
	4	2.84	2.81 – 2.87	25.1		ug/kg	
	5	3.05	3.02 – 3.08	25.8		ug/kg	
					25.8		
Column 2	1	3.21	3.18 – 3.24	27.3		ug/kg	
	2	3.29	3.27 – 3.33	28.1		ug/kg	
	3	3.42	3.39 – 3.45	26.2		ug/kg	
	4	3.59	3.56 – 3.62	26.6		ug/kg	
	5	3.66	3.63 – 3.69	26.5		ug/kg	
					26.9		
Aroclor-1260							12.7
Column 1	1	3.77	3.75 – 3.81	13.9		ug/kg	
	2	3.94	3.91 – 3.97	28.4		ug/kg	
	3	4.17	4.14 – 4.2	27.9		ug/kg	
	4	4.31	4.28 – 4.34	28.7		ug/kg	
	5	4.49	4.46 – 4.52	29.6		ug/kg	
					25.7		
Column 2	1	4.35	4.32 – 4.38	28.2		ug/kg	
	2	4.48	4.45 – 4.51	29.6		ug/kg	
	3	4.74	4.72 – 4.78	29.4		ug/kg	
	4	4.92	4.89 – 4.95	28.9		ug/kg	
	5	5.06	5.04 – 5.1	29.9		ug/kg	
					29.2		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982309**				
Client Sample:	**QC for batch 927188**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927188**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:21**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**063f6301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	063b6301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/063f6301.d
Lab Smp Id: 1201982309 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 17:21
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982309|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 63 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	53760054	120.464	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.289	5.289	0.000	45067133	110.254	3.7	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/063f6301.d

Date : 04-DEC-2009 17:21

Client ID: PBLK01

Sample Info: |120198230911|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

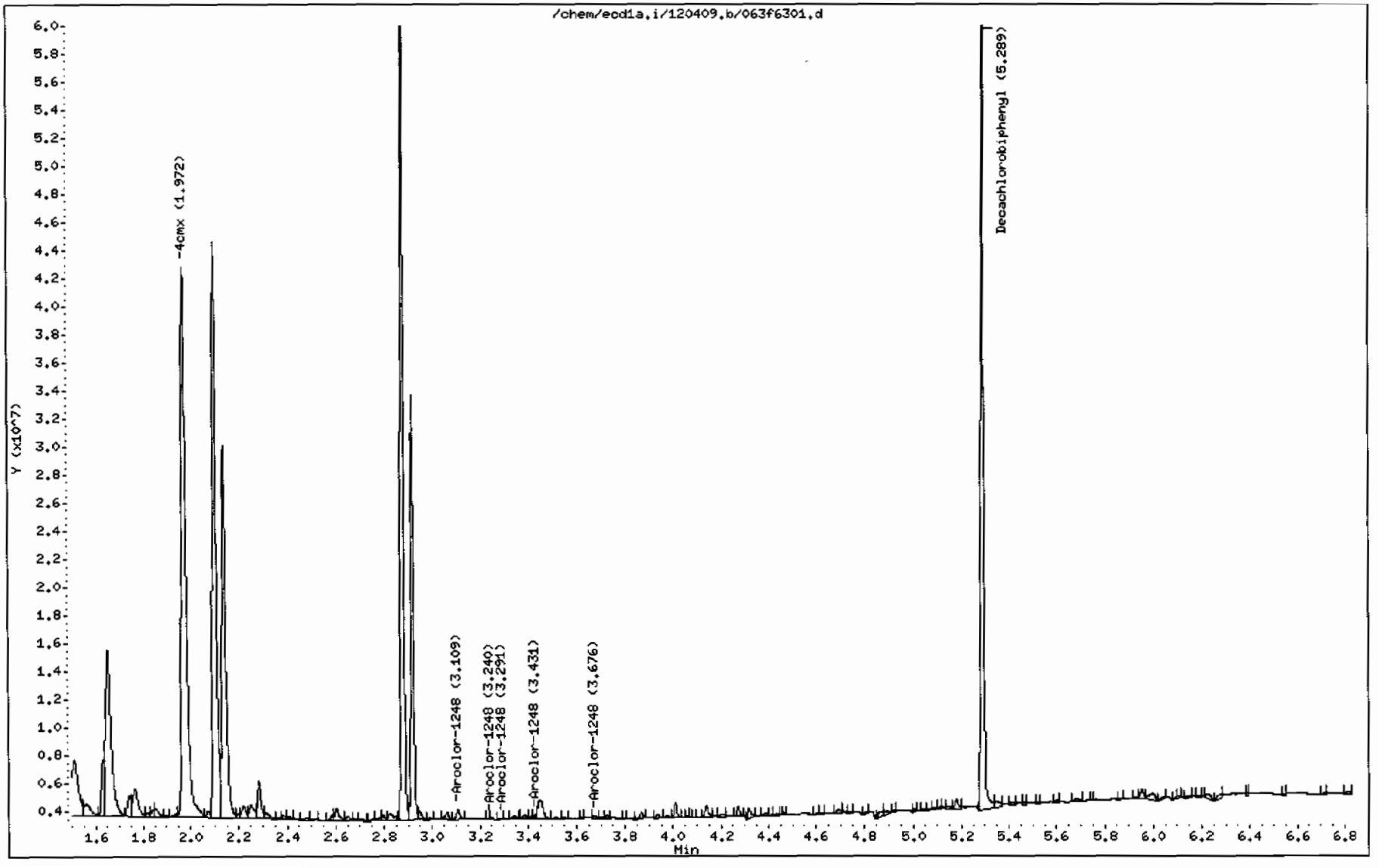

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/063b6301.d
Lab Smp Id: 1201982309 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 17:21
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982309|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 63 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	44607911	120.141	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.965	5.966	-0.001	35581439	118.377	3.9	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/120409.b/063b6301.d
Date : 04-DEC-2009 17:21
Client ID: PBLK01
Sample Info: |120198230911|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

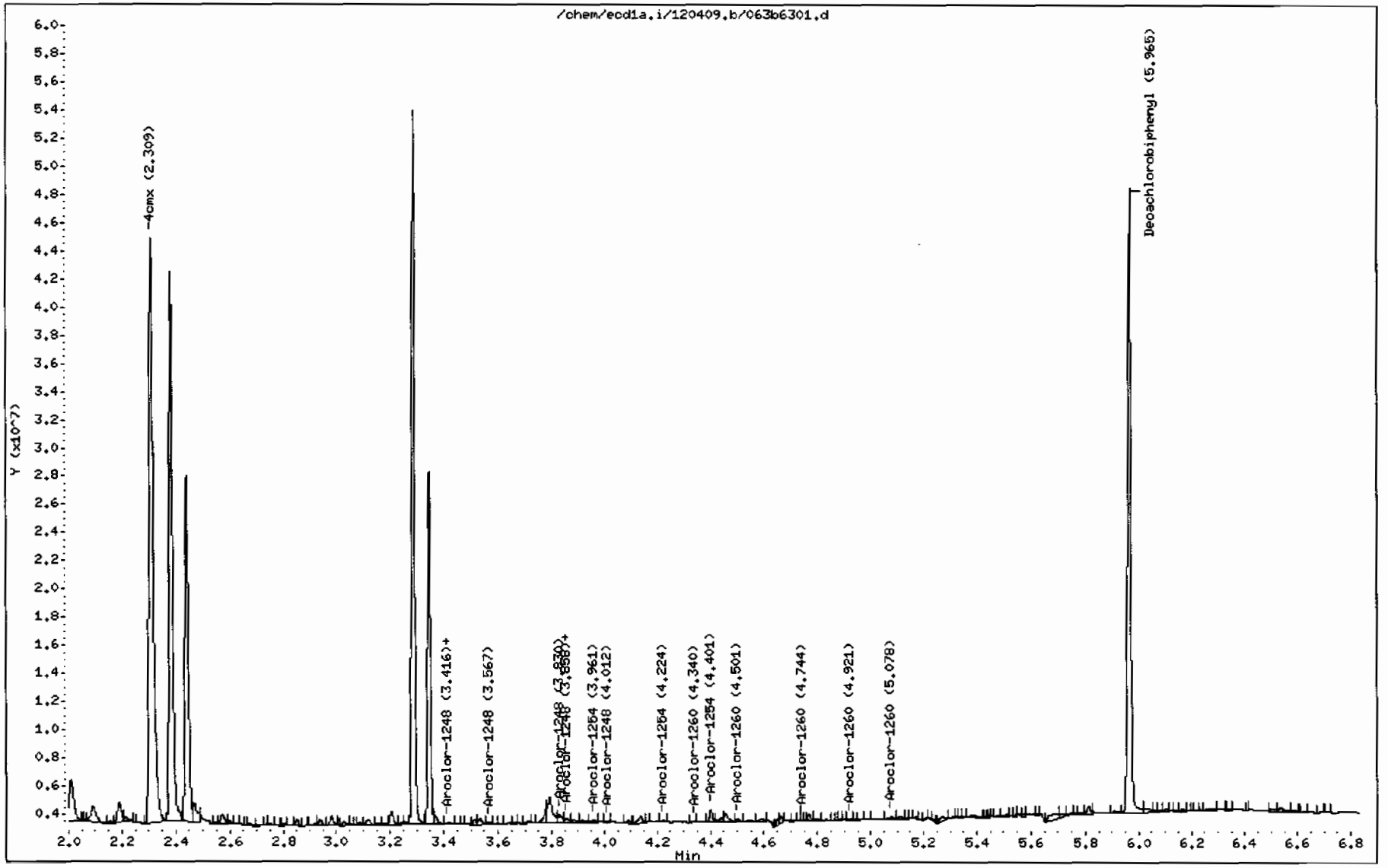

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–666**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201982312**				
Client Sample:	**QC for batch 927188**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927188**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927189**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 17:33**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**11/29/2009 16:51**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**064f6401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	064b6401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		22.6	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260		23.2	ug/kg	1.11	3.33	2

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/064f6401.d
Lab Smp Id: 1201982312 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 17:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982312|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 64 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.972	1.973	-0.001	58730937	131.603	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	40332483	98.6712	3.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.431	2.430	0.001	11309739	661.802	22.1	80.00- 120.00	100.00
2.718	2.719	-0.001	13963315	657.506	21.9	107.86- 147.86	123.46
2.800	2.800	0.000	9565437	681.668	22.7	59.89- 99.89	84.58
2.837	2.838	-0.001	6042036	717.867	23.9	28.72- 68.72	53.42

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.048	3.049	-0.001	7197989	666.884	22.2	41.98- 81.98	63.64
Average of Peak Concentrations =					22.6		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	11915950	555.589	18.5	80.00- 120.00	100.00
3.937	3.938	-0.001	20005085	621.370	20.7	131.51- 171.51	167.88
4.166	4.168	-0.002	14100005	689.231	23.0	73.81- 113.81	118.33
4.310	4.312	-0.002	6951155	346.143	11.5	75.82- 115.82	58.33
4.489	4.491	-0.002	32487079	701.680	23.4	202.56- 242.56	272.64
Average of Peak Concentrations =					19.4		

Data File: /chem/ecd1a.i/120409.b/064f6401.d
Date : 04-DEC-2009 17:33
Client ID: PBLK01LCS
Sample Info: !120198231211!
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

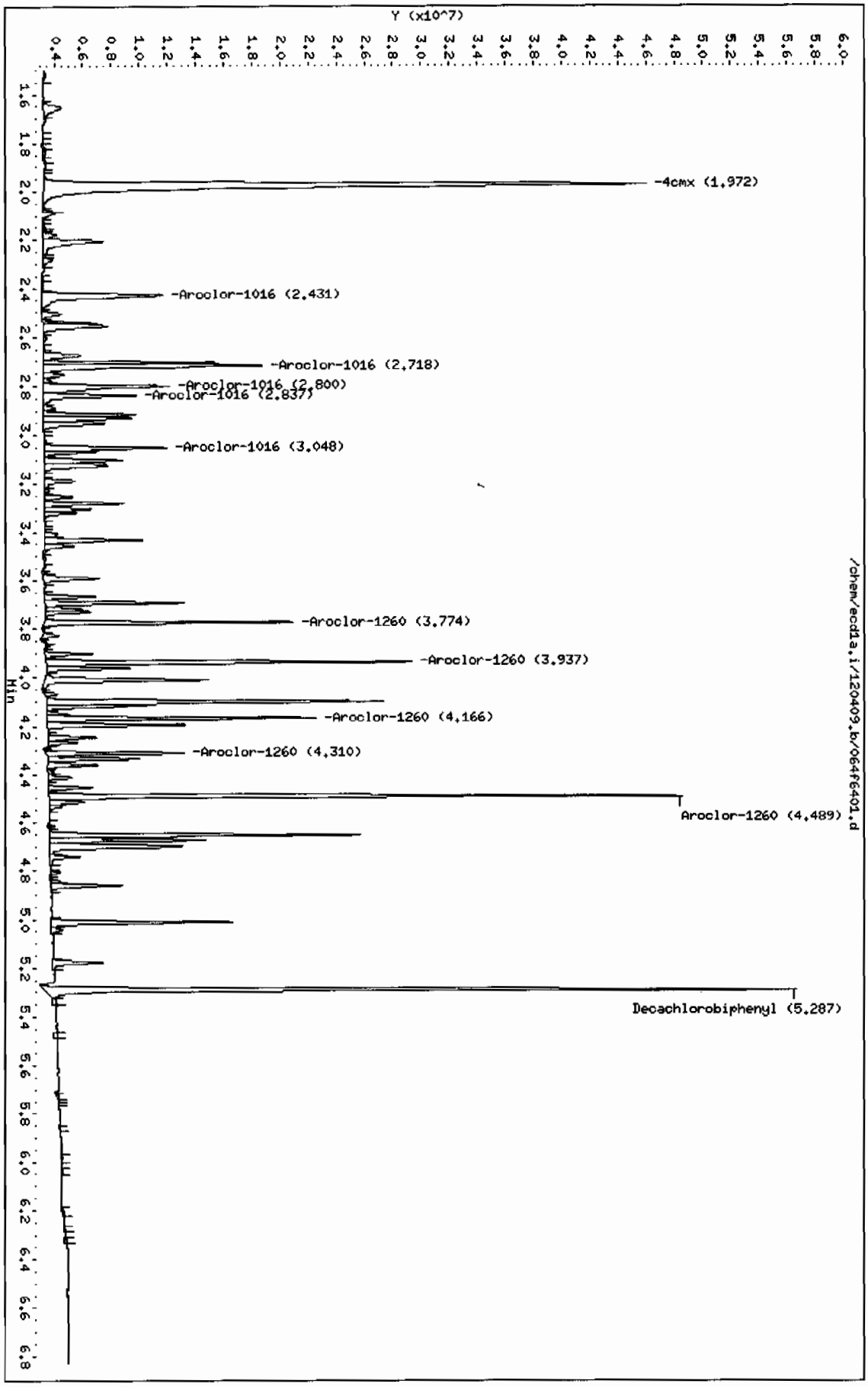

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/064b6401.d
Lab Smp Id: 1201982312 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 17:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982312|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 64 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.310	2.309	0.001	49263210	132.679	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	41071351	136.641	4.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	11536945	684.260	22.8	80.00- 120.00	100.00(M)
3.296	3.296	0.000	7714658	668.768	22.3	45.71- 85.71	66.87
3.421	3.422	-0.001	4638676	667.317	22.2	19.09- 59.09	40.21
3.586	3.587	-0.001	6065237	660.659	22.0	32.50- 72.50	52.57

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.662	3.663	-0.001	5739791	674.566	22.5	28.35- 68.35	49.75
Average of Peak Concentrations =					22.4		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	11847749	655.771	21.8	80.00- 120.00	100.00(M)
4.477	4.479	-0.002	16312685	736.231	24.5	106.44- 146.44	137.69
4.744	4.745	-0.001	11933179	675.041	22.5	79.42- 119.42	100.72
4.918	4.919	-0.001	11795620	685.238	22.8	78.18- 118.18	99.56
5.065	5.067	-0.002	28382962	734.756	24.5	205.89- 245.89	239.56
Average of Peak Concentrations =					23.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/064b6401.d
Date : 04-DEC-2009 17:33
Client ID: PBLK01LCS
Sample Info: |1201982312|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

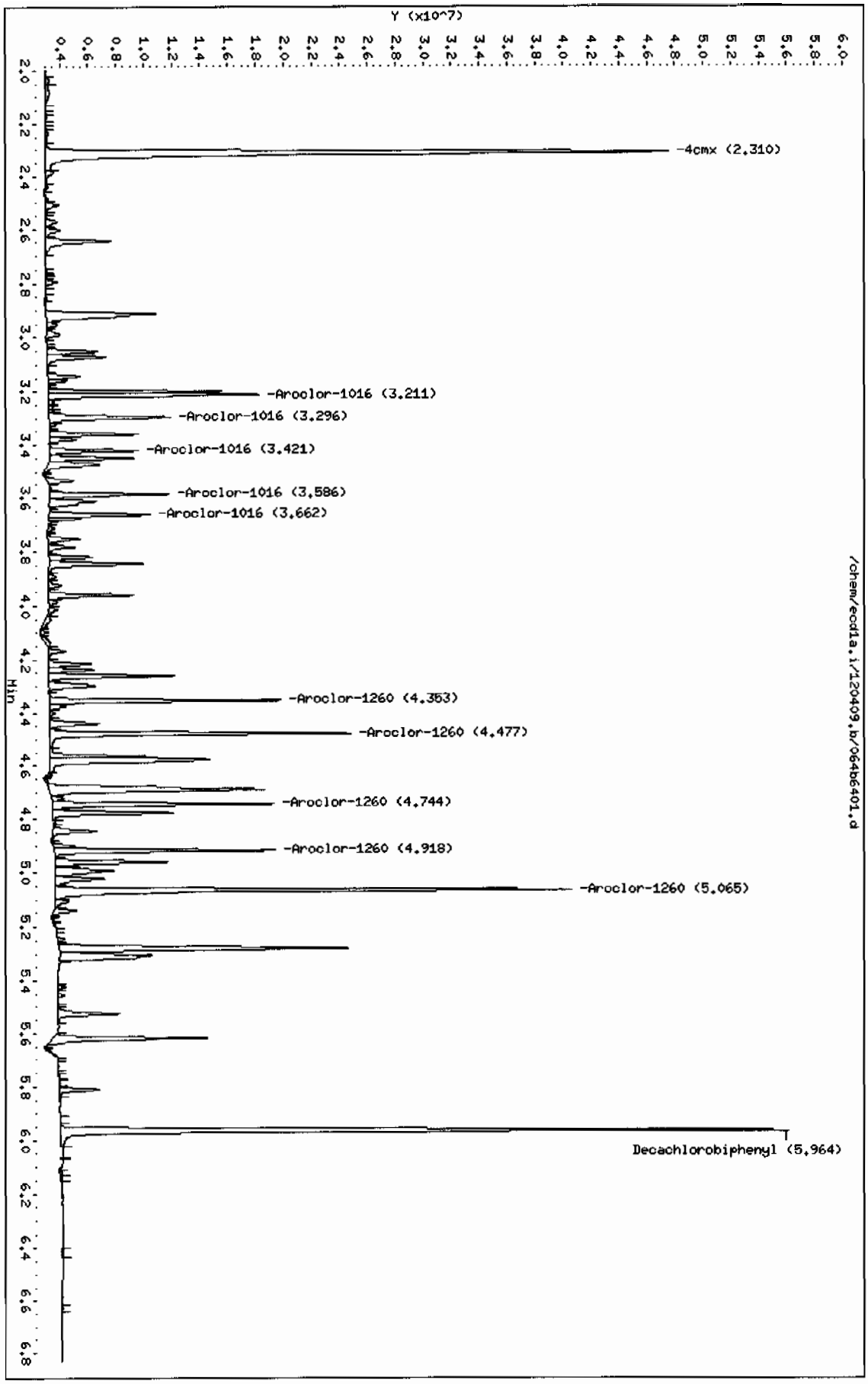

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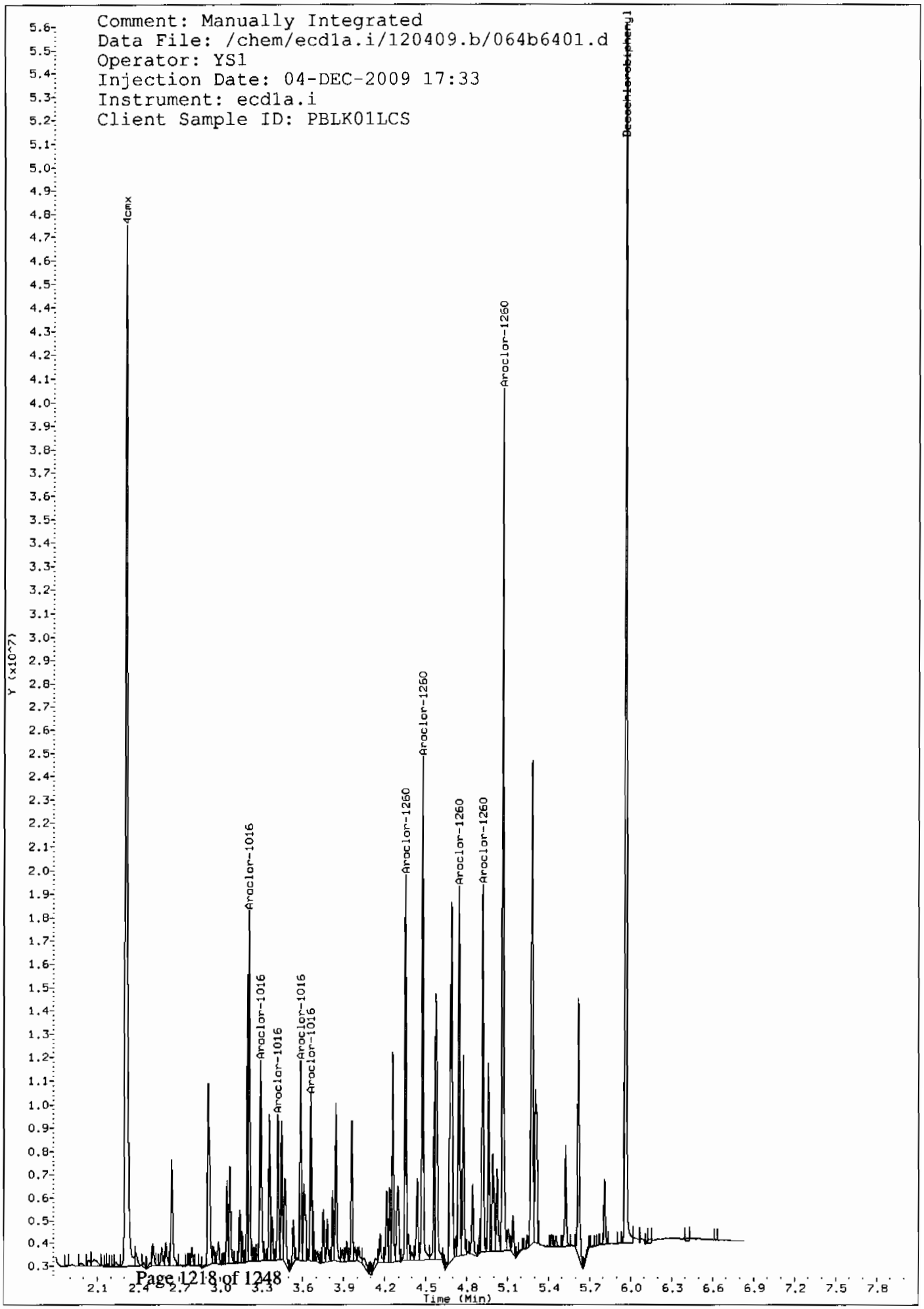
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/064b6401.d
Operator: YS1
Injection Date: 04-DEC-2009 17:33
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

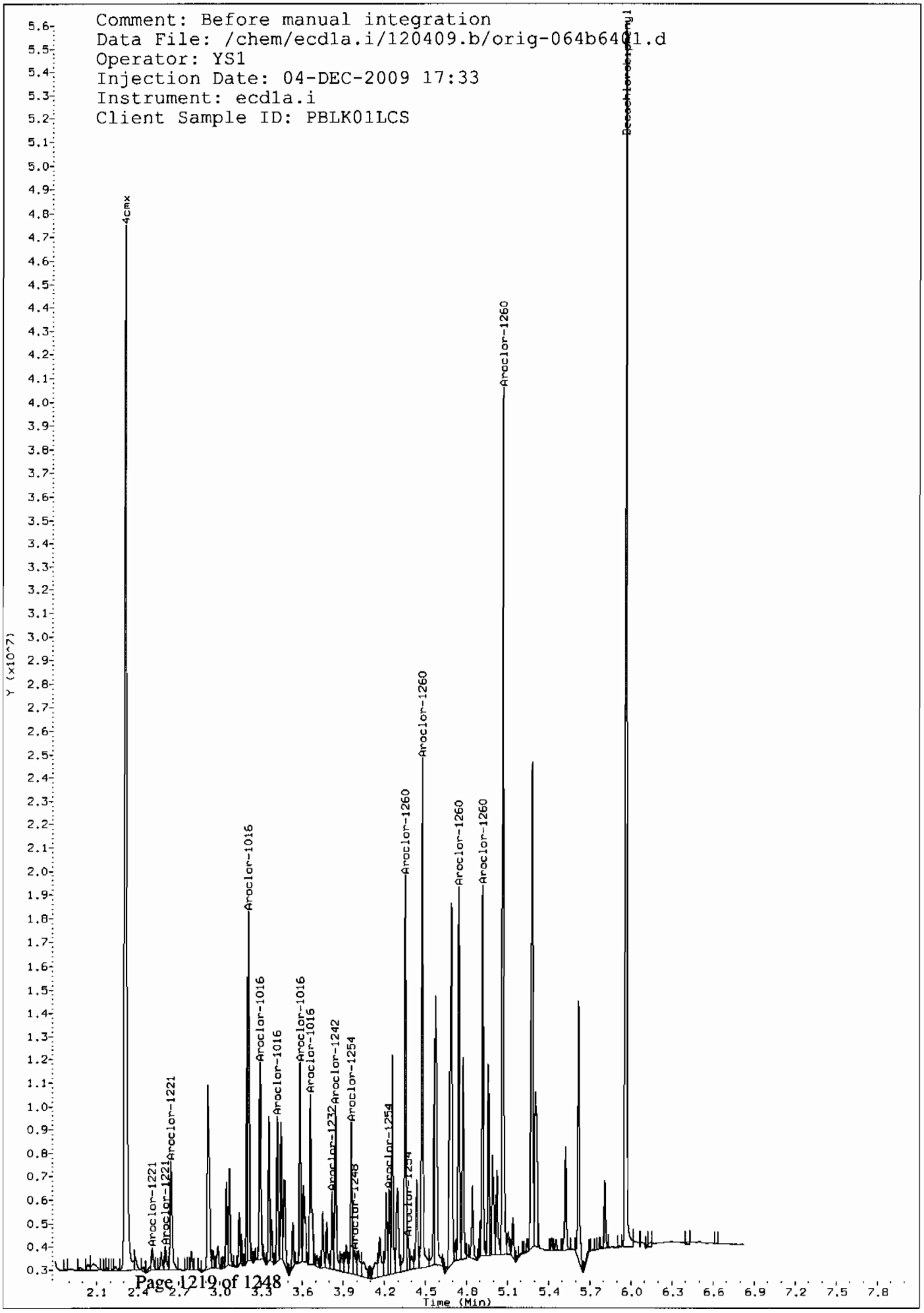
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-064b6401.d
Operator: YS1
Injection Date: 04-DEC-2009 17:33
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
4cmx
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1242
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982310	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.5
Client Sample:	QC for batch 927188	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03–09–14118MS	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 21:33	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.02 g	**Final Volume:**	1 mL
Data File:	083f8301.d	**Column:**	1 CLP1	**Level:**	LOW
	083b8301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		25.2	ug/kg	1.23	3.68	1
11104–28–2	Aroclor–1221	U	3.68	ug/kg	1.23	3.68	1
11141–16–5	Aroclor–1232	U	3.68	ug/kg	1.23	3.68	1
53469–21–9	Aroclor–1242	U	3.68	ug/kg	1.23	3.68	1
12672–29–6	Aroclor–1248	U	3.68	ug/kg	1.23	3.68	1
11097–69–1	Aroclor–1254	U	3.68	ug/kg	1.23	3.68	1
11096–82–5	Aroclor–1260		25.2	ug/kg	1.23	3.68	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/083f8301.d
Lab Smp Id: 1201982310 Client Smp ID: RE03-09-14118MS
Inj Date : 04-DEC-2009 21:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982310|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 83 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	9.48220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.971	1.973	-0.002	63391150	142.045	5.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	60059569	146.932	5.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	11799235	690.445	25.4	80.00- 120.00	100.00
2.717	2.719	-0.002	15251846	718.180	26.4	107.86- 147.86	129.26
2.798	2.800	-0.002	9378260	668.329	24.6	59.89- 99.89	79.48
2.836	2.838	-0.002	5624288	668.234	24.6	28.72- 68.72	47.67

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.047	3.049	-0.002	7397626	685.380	25.2	41.98- 81.98	62.70
			Average of Peak Concentrations =		25.2		
7 Aroclor-1260					CAS #: 11096-82-5		
3.773	3.776	-0.003	7120960	332.019	12.2	80.00- 120.00	100.00
3.936	3.938	-0.002	24430149	758.815	27.9	131.51- 171.51	343.07
4.166	4.168	-0.002	15386610	752.122	27.7	73.81- 113.81	216.07
4.309	4.312	-0.003	15847930	789.170	29.0	75.82- 115.82	222.55
4.488	4.491	-0.003	36752813	793.814	29.2	202.56- 242.56	516.12
			Average of Peak Concentrations =		25.2		

Data File: /chem/ecd1a.i/120409.b/083f8301.d
Date : 04-DEC-2009 21:33
Client ID: RE03-09-14118MS
Sample Info: 1120198231011
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

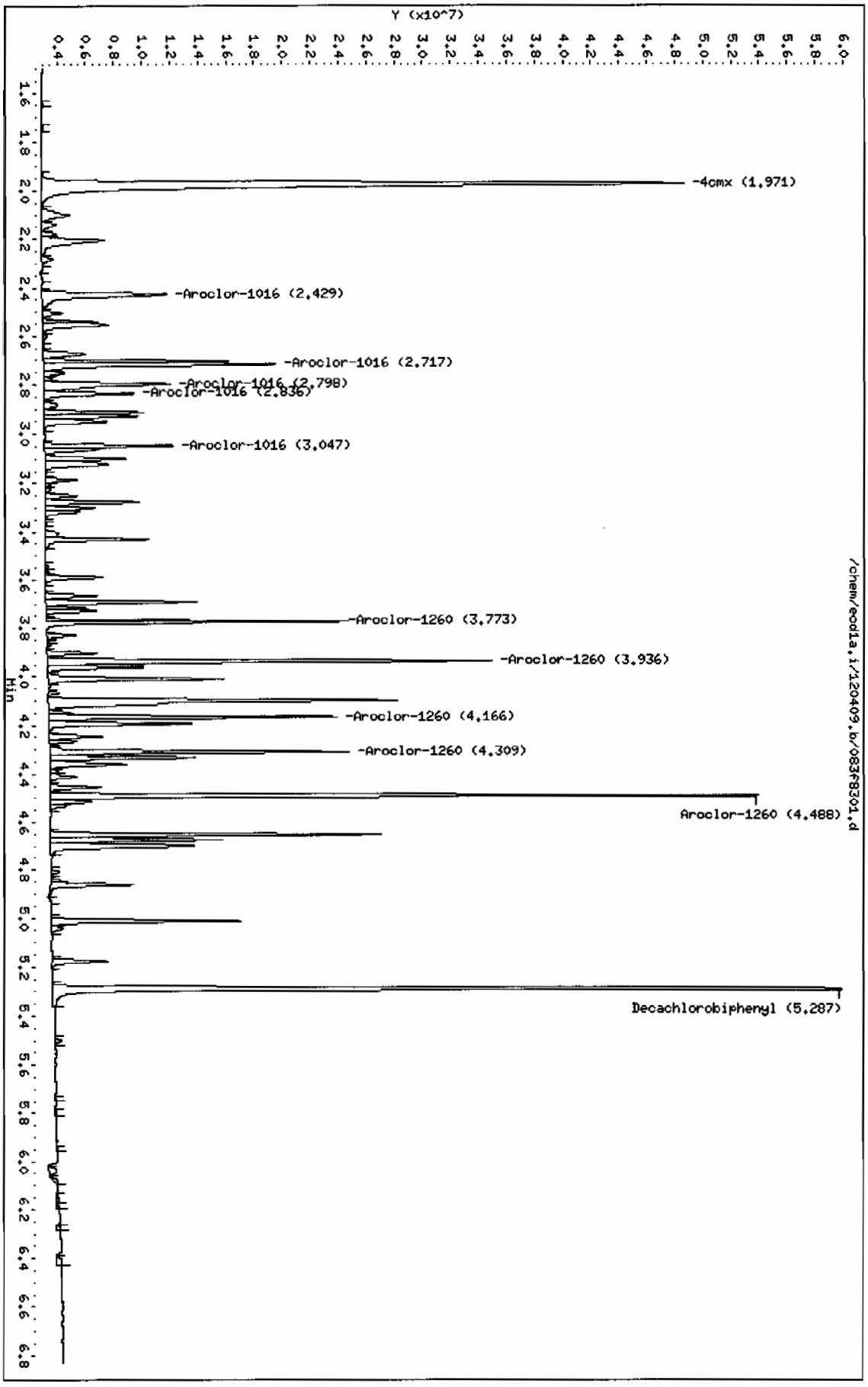

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/083b8301.d
Lab Smp Id: 1201982310 Client Smp ID: RE03-09-14118MS
Inj Date : 04-DEC-2009 21:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982310|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 83 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	9.48220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	51856984	139.665	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.964	5.966	-0.002	45207072	150.400	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.211	3.213	-0.002	12151597	720.715	26.5	80.00- 120.00	100.00(M)
3.294	3.296	-0.002	8356510	724.409	26.6	45.71- 85.71	68.77
3.420	3.422	-0.002	4861896	699.429	25.7	19.09- 59.09	40.01
3.586	3.587	-0.001	6555524	714.064	26.3	32.50- 72.50	53.95

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.661	3.663	-0.002	6043429	710.251	26.1	28.35- 68.35	60.59
Average of Peak Concentrations =					26.2		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	13622334	753.994	27.7	80.00- 120.00	100.00
4.477	4.479	-0.002	17692253	798.494	29.4	106.44- 146.44	129.88
4.743	4.745	-0.002	14015316	792.824	29.2	79.42- 119.42	102.88
4.918	4.919	-0.001	13742122	798.315	29.4	78.18- 118.18	100.88
5.065	5.067	-0.002	32159676	832.524	30.6	205.89- 245.89	236.08
Average of Peak Concentrations =					29.3		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/083b8301.d
Date : 04-DEC-2009 21:33
Client ID: RE03-09-14118MS
Sample Info: !120198231011!
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25

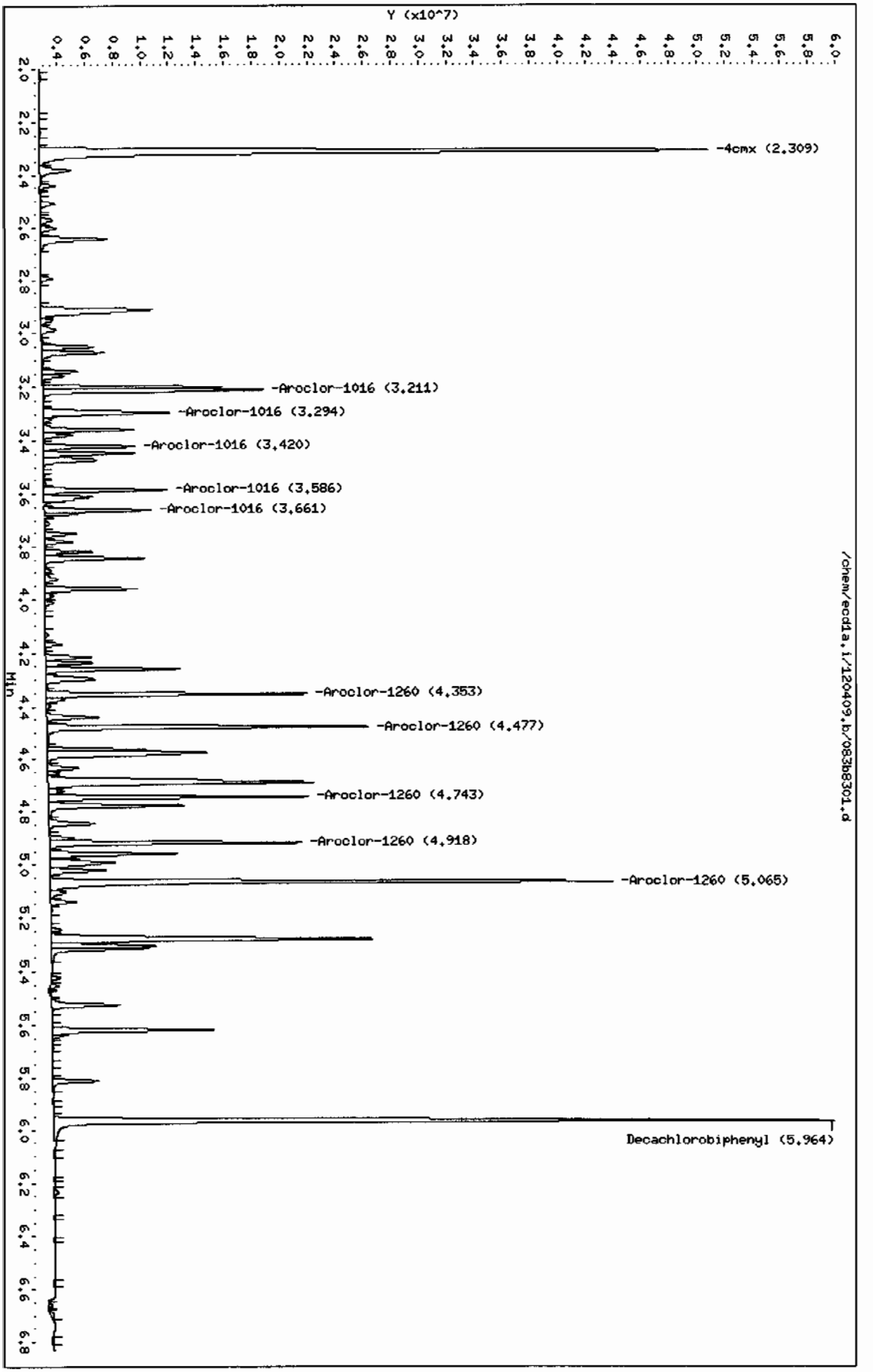

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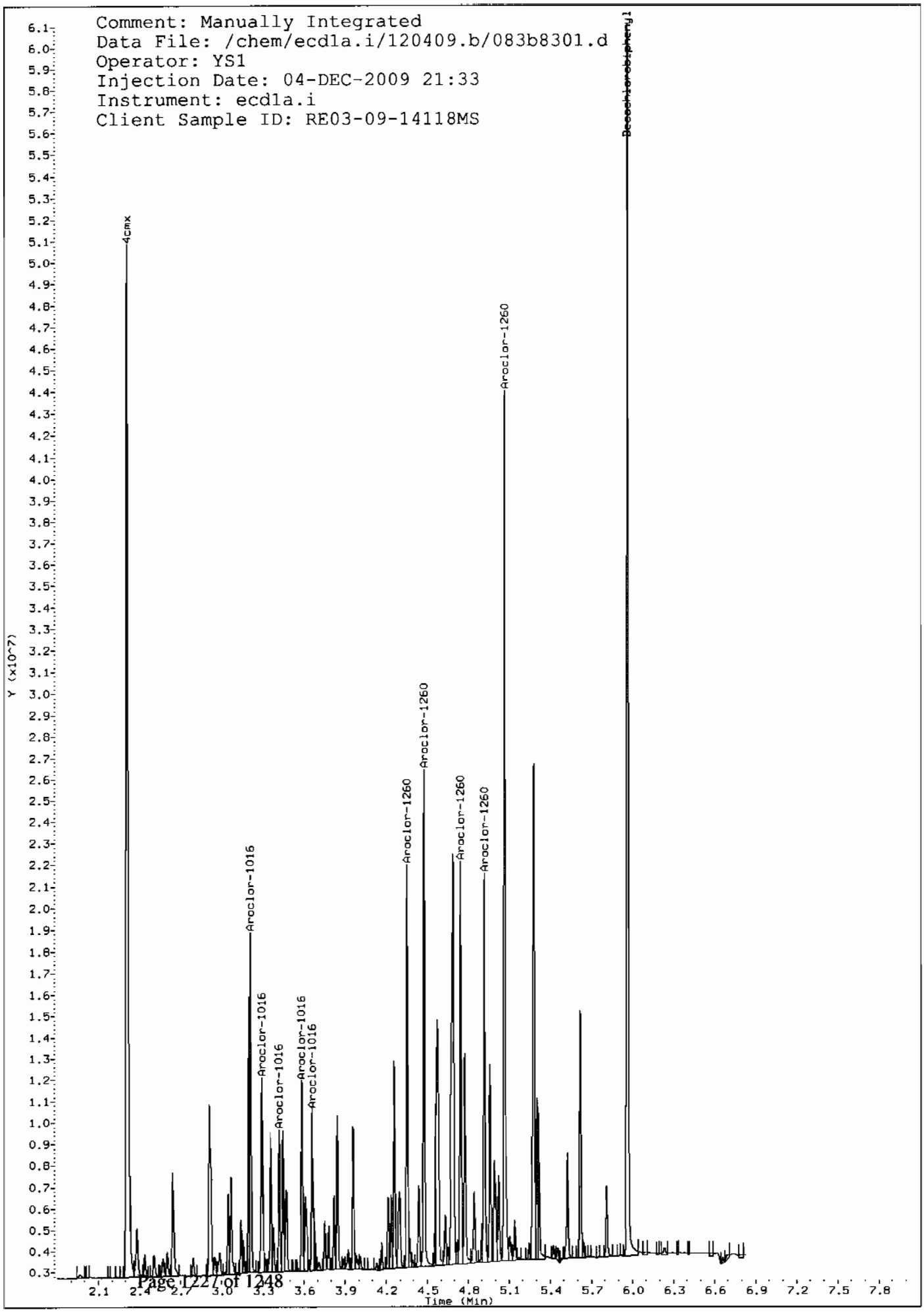
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/083b8301.d
Operator: YS1
Injection Date: 04-DEC-2009 21:33
Instrument: ecd1a.i
Client Sample ID: RE03-09-14118MS
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

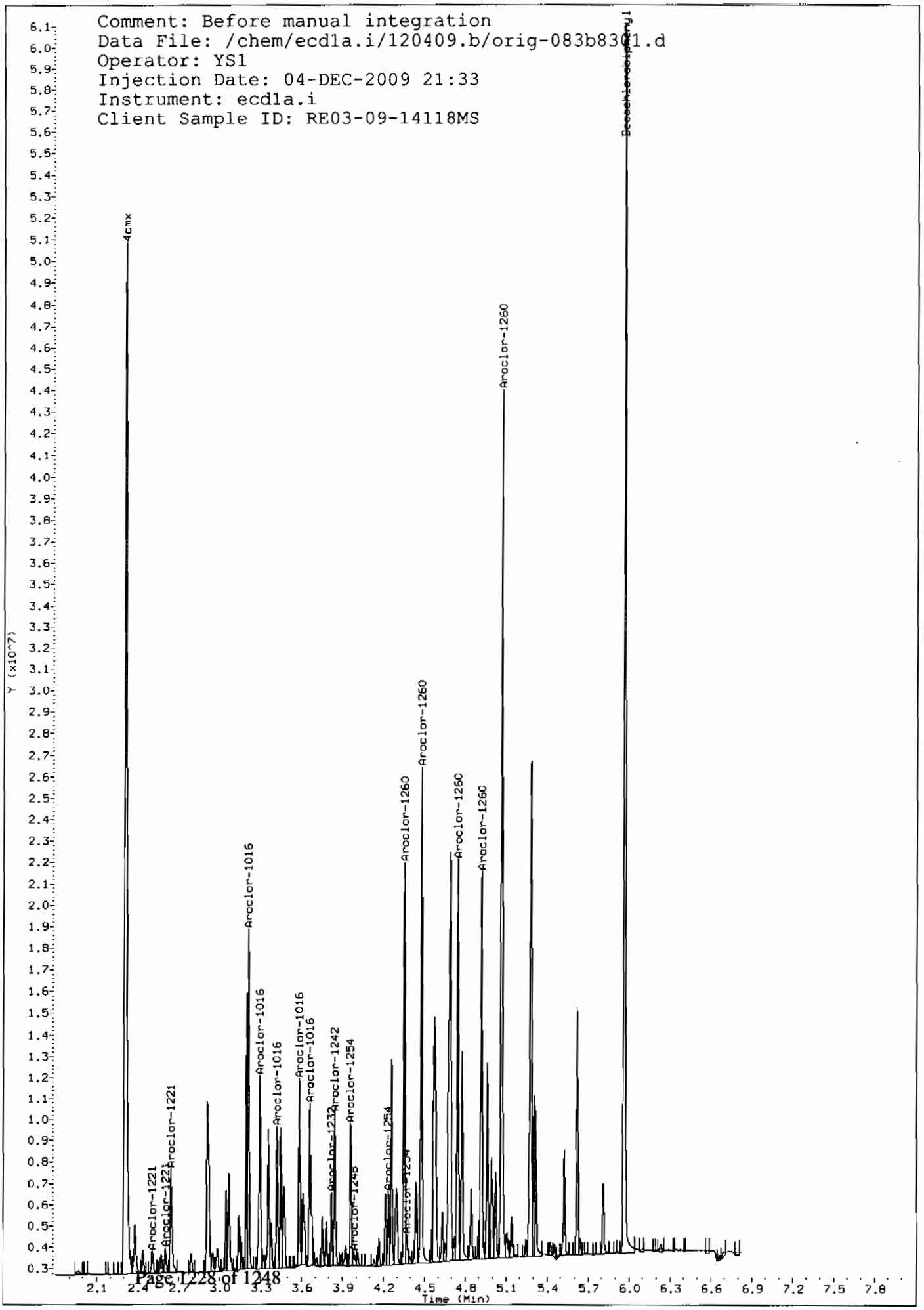
Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-083b8301.d
Operator: YS1
Injection Date: 04-DEC-2009 21:33
Instrument: ecd1a.i
Client Sample ID: RE03-09-14118MS
4cmx
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1242
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-666	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201982311	**Date Received:**	11/25/2009 09:10	**%Moisture:**	9.5
Client Sample:	QC for batch 927188	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14118MSD	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927189	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	12/04/2009 21:46	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	11/29/2009 16:51	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	084f8401.d	**Column:**	1 CLP1	**Level:**	LOW
	084b8401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		25.8	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260		25.7	ug/kg	1.22	3.66	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/084f8401.d
Lab Smp Id: 1201982311 Client Smp ID: RE03-09-14118MSD
Inj Date : 04-DEC-2009 21:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982311|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-F-8082-111009B.m
Meth Date : 05-Dec-2009 09:03 yip00818 Quant Type: ESTD
Cal Date : 09-NOV-2009 07:48 Cal File: 014f1401.d
Als bottle: 84 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	9.48220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.970	1.973	-0.003	64741892	145.072	5.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.287	5.289	-0.002	61826169	151.254	5.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.429	2.430	-0.001	11994364	701.863	25.7	80.00- 120.00	100.00
2.717	2.719	-0.002	15792609	743.644	27.2	107.86- 147.86	131.67
2.798	2.800	-0.002	9593810	683.690	25.0	59.89- 99.89	79.99
2.835	2.838	-0.003	5777840	686.477	25.1	28.72- 68.72	48.17

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.047	3.049	-0.002	7598193	703.962	25.8	41.98- 81.98	63.35
Average of Peak Concentrations =					25.8		
7 Aroclor-1260					CAS #: 11096-82-5		
3.774	3.776	-0.002	8157573	380.352	13.9	80.00- 120.00	100.00
3.936	3.938	-0.002	24923562	774.140	28.4	131.51- 171.51	305.53
4.166	4.168	-0.002	15561663	760.679	27.9	73.81- 113.81	190.76
4.309	4.312	-0.003	15747957	784.192	28.7	75.82- 115.82	193.05
4.489	4.491	-0.002	37394103	807.665	29.6	202.56- 242.56	458.40
Average of Peak Concentrations =					25.7		

Data File: /chem/ecdia.i/120409.b/08478401.d
Date : 04-DEC-2009 21:46
Client ID: RE03-09-14118MSD
Sample Info: 1120198231111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25

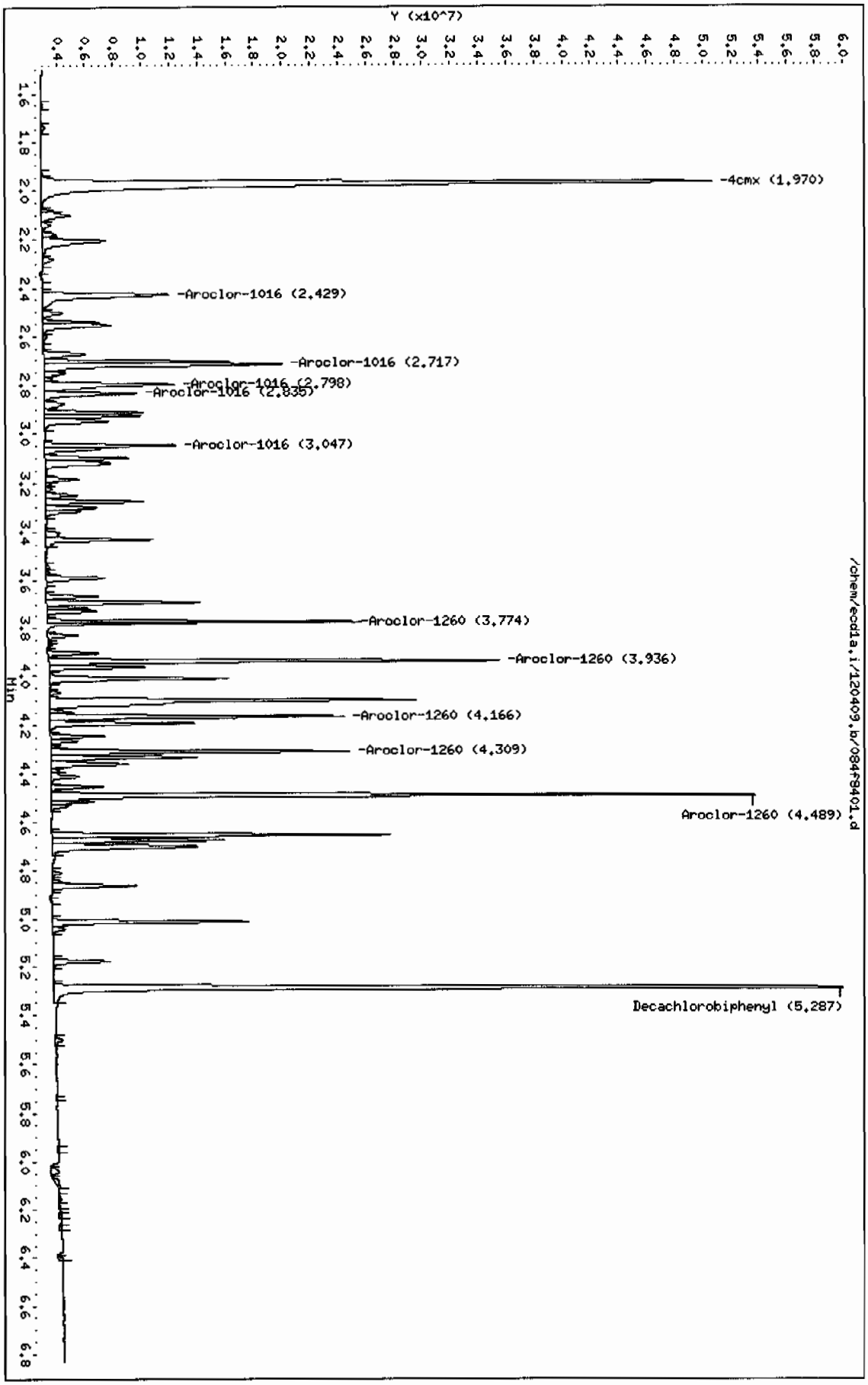

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/120409.b/084b8401.d
Lab Smp Id: 1201982311 Client Smp ID: RE03-09-14118MSD
Inj Date : 04-DEC-2009 21:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1201982311|1|
Misc Info : |ECD82P_1SF|927189|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/120409.b/ECD1-B-8082-111009B.m
Meth Date : 05-Dec-2009 09:13 yip00818 Quant Type: ESTD
Cal Date : 10-NOV-2009 13:41 Cal File: 033b3301.d
Als bottle: 84 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-666.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	9.48220	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.309	2.309	0.000	53460212	143.983	5.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.963	5.966	-0.003	46293971	154.016	5.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.210	3.213	-0.003	12562769	745.102	27.3	80.00- 120.00	100.00(M)
3.294	3.296	-0.002	8837658	766.118	28.1	45.71- 85.71	70.35
3.420	3.422	-0.002	4980525	716.495	26.2	19.09- 59.09	39.65
3.585	3.587	-0.002	6666381	726.139	26.6	32.50- 72.50	53.06

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.661	3.663	-0.002	6149889	722.762	26.5	28.35- 68.35	59.19
Average of Peak Concentrations =					26.9		
7 Aroclor-1260					CAS #: 11096-82-5		
4.353	4.354	-0.001	13900431	769.387	28.2	80.00- 120.00	100.00
4.477	4.479	-0.002	17881453	807.033	29.6	106.44- 146.44	128.64
4.744	4.745	-0.001	14195764	803.031	29.4	79.42- 119.42	102.12
4.918	4.919	-0.001	13567335	788.161	28.9	78.18- 118.18	97.60
5.065	5.067	-0.002	31530439	816.235	29.9	205.89- 245.89	226.83
Average of Peak Concentrations =					29.2		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/120409.b/084b8401.d

Date : 04-DEC-2009 21:46

Client ID: RE03-09-14118MSD

Sample Info: |120198231111|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

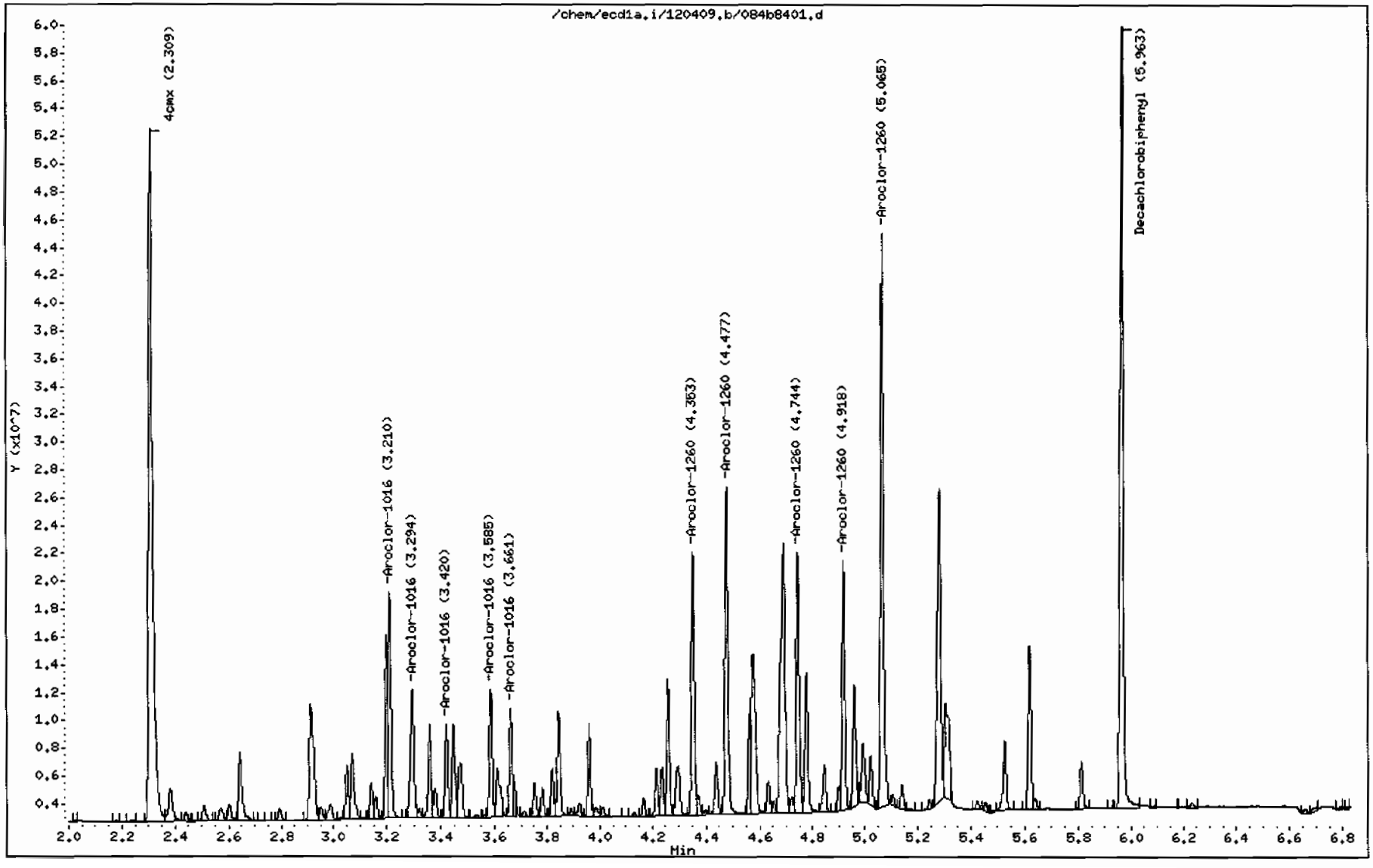

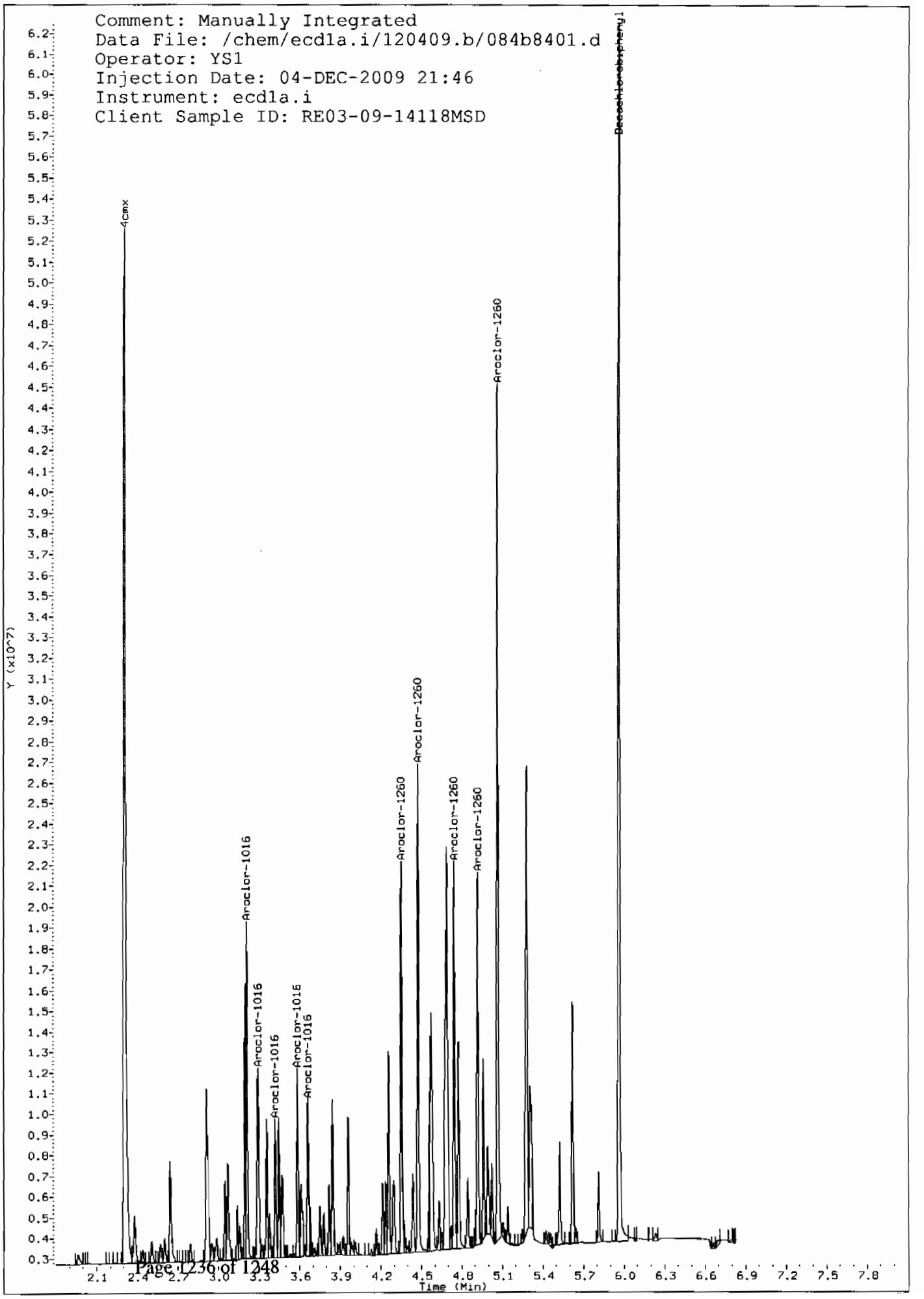
Comment: Manually Integrated
Data File: /chem/ecd1a.i/120409.b/084b8401.d
Operator: YS1
Injection Date: 04-DEC-2009 21:46
Instrument: ecd1a.i
Client Sample ID: RE03-09-14118MSD
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd1a.i/120409.b/orig-084b8401.d
Operator: YS1
Injection Date: 04-DEC-2009 21:46
Instrument: ecd1a.i
Client Sample ID: RE03-09-14118MSD

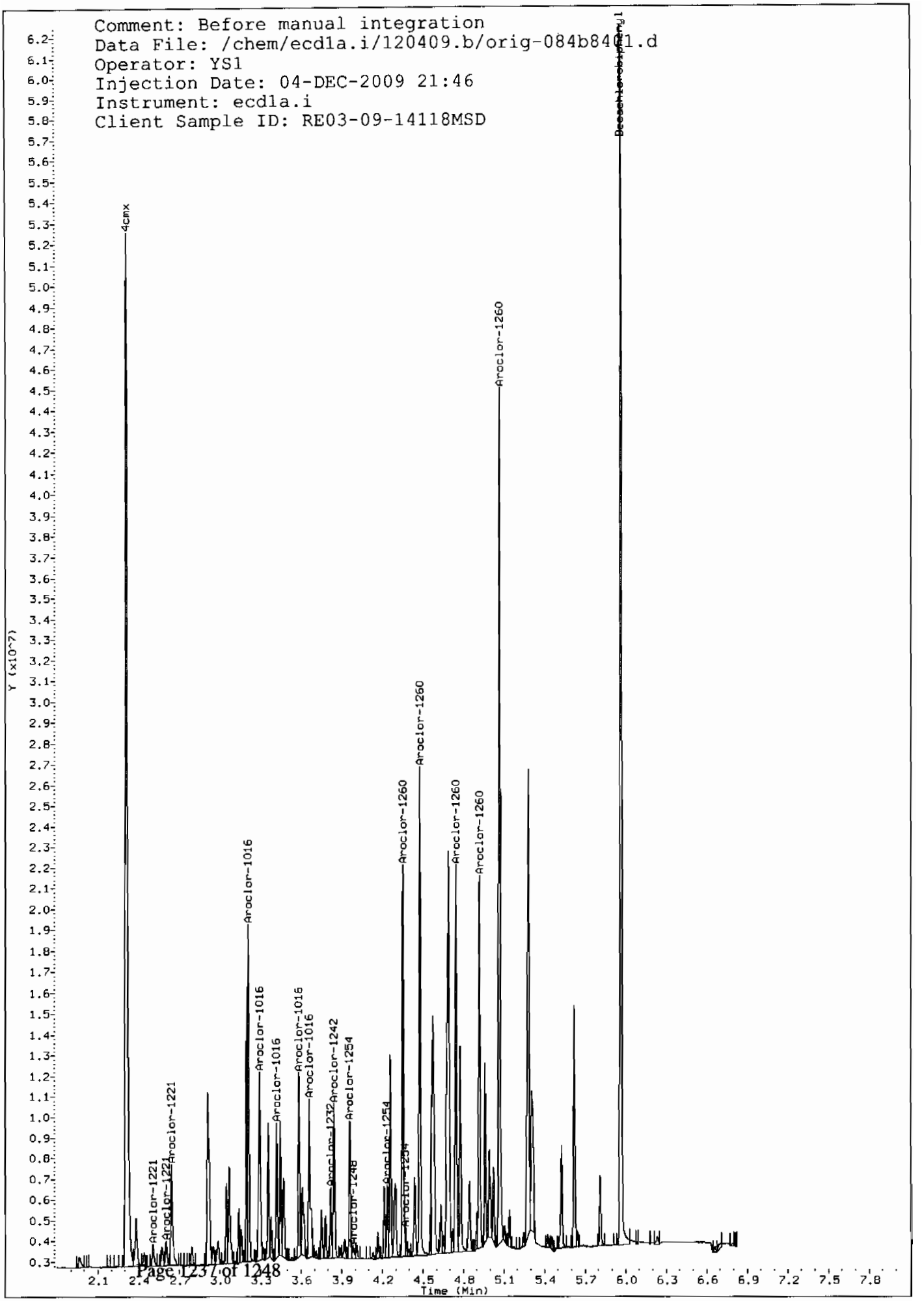

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 11/11/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ600
ALUMINA LOT 1193715-A
COPPER LOT 091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/111009b.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	10-NOV-2009 08:02		111009b	1.0		CLEAN
002f0201.d	WAR091102-60	YS1	10-NOV-2009 08:14		111009b	1.0		DUSE RE-I-CAL
003f0301.d	WAR091102-54	YS1	10-NOV-2009 08:25		111009b	1.0		DUSE RE-I-CAL
004f0401.d	WAR091102-42	YS1	10-NOV-2009 08:35		111009b	1.0		DUSE RE-I-CAL
005f0501.d	WAR091027-48	YS1	10-NOV-2009 08:46		111009b	1.0		DUSE RE-I-CAL
006f0601.d	WAR090930-32	YS1	10-NOV-2009 08:56		111009b	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	10-NOV-2009 09:07		111009b	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	10-NOV-2009 09:17		111009b	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	10-NOV-2009 09:28		111009b	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	YS1	10-NOV-2009 09:38		111009b	1.0		DDT ANALOG STANDARD
011f1101.d	WAR091110-01 60	YS1	10-NOV-2009 09:49		111009b	1.0		AR1660 I-CAL LEVEL 1
012f1201.d	WAR091110-02 60	YS1	10-NOV-2009 09:59		111009b	1.0		AR1660 I-CAL LEVEL 2
013f1301.d	WAR091110-04 60	YS1	10-NOV-2009 10:10		111009b	1.0		AR1660 I-CAL LEVEL 4
014f1401.d	WAR091110-03 60	YS1	10-NOV-2009 10:21		111009b	1.0		AR1660 I-CAL LEVEL 3
015f1501.d	IAR091102-01	YS1	10-NOV-2009 10:31		111009b	1.0		AR1660 I-CAL LEVEL 5

Instrument Batch: /chem/ecd1a.i/111009b.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	WAR091102-60	YS1	10-NOV-2009 10:42		111009b	1.0	PASSED ON BOTH COLUMNS
017f1701.d	WAR091110-05 54	YS1	10-NOV-2009 10:52		111009b	1.0	AR1254 I-CAL LEVEL 1
018f1801.d	WAR091110-06 54	YS1	10-NOV-2009 11:03		111009b	1.0	AR1254 I-CAL LEVEL 2
019f1901.d	WAR091110-07 54	YS1	10-NOV-2009 11:13		111009b	1.0	AR1254 I-CAL LEVEL 3
020f2001.d	WAR091110-08 54	YS1	10-NOV-2009 11:24		111009b	1.0	AR1254 I-CAL LEVEL 4
021f2101.d	IAR091027-01	YS1	10-NOV-2009 11:34		111009b	1.0	AR1254 I-CAL LEVEL 5
022f2201.d	WAR091102-54	YS1	10-NOV-2009 11:45		111009b	1.0	PASSED ON BOTH COLUMNS
023f2301.d	WAR091110-09 42	YS1	10-NOV-2009 11:55		111009b	1.0	AR1242 I-CAL LEVEL 1
024f2401.d	WAR091110-10 42	YS1	10-NOV-2009 12:06		111009b	1.0	AR1242 I-CAL LEVEL 2
025f2501.d	WAR091110-11 42	YS1	10-NOV-2009 12:17		111009b	1.0	AR1242 I-CAL LEVEL 3
026f2601.d	WAR091110-12 42	YS1	10-NOV-2009 12:27		111009b	1.0	AR1242 I-CAL LEVEL 4
027f2701.d	IAR090914-01	YS1	10-NOV-2009 12:38		111009b	1.0	AR1242 I-CAL LEVEL 5
028f2801.d	WAR091102-42	YS1	10-NOV-2009 12:48		111009b	1.0	PASSED ON BOTH COLUMNS
029f2901.d	WAR091110-13 48	YS1	10-NOV-2009 12:59		111009b	1.0	AR1248 I-CAL LEVEL 1
030f3001.d	WAR091110-14 48	YS1	10-NOV-2009 13:09		111009b	1.0	AR1248 I-CAL LEVEL 2
031f3101.d	WAR091110-15 48	YS1	10-NOV-2009 13:20		111009b	1.0	AR1248 I-CAL LEVEL 3
032f3201.d	WAR091110-16 48	YS1	10-NOV-2009 13:30		111009b	1.0	AR1248 I-CAL LEVEL 4
033f3301.d	IAR091027-02	YS1	10-NOV-2009 13:41		111009b	1.0	AR1248 I-CAL LEVEL 5
034f3401.d	WAR091027-48	YS1	10-NOV-2009 13:51		111009b	1.0	PASSED ON BOTH COLUMNS
035f3501.d	WAR090916-99 02	YS1	10-NOV-2009 14:02		111009b	1.0	CLEAN

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201966793	YS1	10-NOV-2009 14:12	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	1201966796	YS1	10-NOV-2009 14:23	920460	EUI-7374	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	1201966797	YS1	10-NOV-2009 14:33	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	240542001	YS1	10-NOV-2009 14:44	920460	EUI-7374	25.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	240610001	YS1	10-NOV-2009 14:57	920460	EUI-7377	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201966794	YS1	10-NOV-2009 15:09	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1201966795	YS1	10-NOV-2009 15:22	920460	EUI-7377	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	WAR091102-60 02	YS1	10-NOV-2009 15:34		111009b	1.0		PASSED ON BOTH COLUMNS
044f4401.d	WAR090916-99 03	YS1	10-NOV-2009 15:45		111009b	1.0		CLEAN
045f4501.d	1201966802	YS1	10-NOV-2009 15:55	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1201966803	YS1	10-NOV-2009 16:08	920468	240151	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	240151001	YS1	10-NOV-2009 16:20	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	1201966804	YS1	10-NOV-2009 16:33	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201966805	YS1	10-NOV-2009 16:45	920468	240151	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	240151002	YS1	10-NOV-2009 16:58	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	240151003	YS1	10-NOV-2009 17:11	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	240151004	YS1	10-NOV-2009 17:23	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	240151005	YS1	10-NOV-2009 17:36	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	240151006	YS1	10-NOV-2009 17:48	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	WAR091102-60 03	YS1	10-NOV-2009 18:01		111009b	1.0		PASSED ON BOTH COLUMNS

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR090916-99 04	YS1	10-NOV-2009 18:12		111009b	1.0		CLEAN
057f5701.d	240151007	YS1	10-NOV-2009 18:22	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	240151008	YS1	10-NOV-2009 18:35	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	240151009	YS1	10-NOV-2009 18:47	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	240151010	YS1	10-NOV-2009 19:00	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	240151011	YS1	10-NOV-2009 19:12	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	240151012	YS1	10-NOV-2009 19:25	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	240151013	YS1	10-NOV-2009 19:38	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	240151014	YS1	10-NOV-2009 19:50	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	240151015	YS1	10-NOV-2009 20:03	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	240151016	YS1	10-NOV-2009 20:15	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	WAR091102-60 04	YS1	10-NOV-2009 20:28		111009b	1.0		PASSED ON BOTH COLUMNS
068f6801.d	WAR090916-99 05	YS1	10-NOV-2009 20:39		111009b	1.0		CLEAN
069f6901.d	240151017	YS1	10-NOV-2009 20:49	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	240151018	YS1	10-NOV-2009 21:02	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	240151019	YS1	10-NOV-2009 21:14	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	240151020	YS1	10-NOV-2009 21:27	920468	240151	5.0	BBES	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091102-60 05	YS1	10-NOV-2009 21:40		111009b	1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 06	YS1	10-NOV-2009 21:50		111009b	1.0		CLEAN
075f7501.d	1201967438	YS1	10-NOV-2009 22:00	920740	111009b	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/111009b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201967439	YS1	10-NOV-2009 22:13	920740	240688	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	240688001	YS1	10-NOV-2009 22:26	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	1201967440	YS1	10-NOV-2009 22:38	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	1201967441	YS1	10-NOV-2009 22:51	920740	240688	10.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	240688002	YS1	10-NOV-2009 23:04	920740	240688	10.0	SOOP	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	WAR091102-60 06	YS1	10-NOV-2009 23:16		111009b	1.0		PASSED ON BOTH COLUMNS
082f8201.d	WAR090916-99 07	YS1	10-NOV-2009 23:27		111009b	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 12/05/2009 METHOD: ECD1-F-8082-111009B.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CZ454
ALUMINA LOT 1230997-A
COPPER LOT 207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/120409.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 01	YS1	04-DEC-2009 05:23		120409	1.0		CLEAN
002f0201.d	WAR091119-60 01	YS1	04-DEC-2009 05:33		120409	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR091102-54	YS1	04-DEC-2009 05:44		120409	1.0		DUSE PASSED RR FILE 10
004f0401.d	WAR091102-42	YS1	04-DEC-2009 05:54		120409	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091027-48	YS1	04-DEC-2009 06:05		120409	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR090930-32	YS1	04-DEC-2009 06:15		120409	1.0		PATTERN ONLY
007f0701.d	WAR090803-21	YS1	04-DEC-2009 06:26		120409	1.0		PATTERN ONLY
008f0801.d	WAR090803-62	YS1	04-DEC-2009 06:36		120409	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	YS1	04-DEC-2009 06:47		120409	1.0		PATTERN ONLY
010f1001.d	WAR091102-54	YS1	04-DEC-2009 06:57		120409	1.0		PASSED ON BOTH COLUMNS
011f1101.d	WAR091020-DDT	YS1	04-DEC-2009 07:08		120409	1.0		DDT ANALOG STANDARD
012f1201.d	WAR090916-99 02	YS1	04-DEC-2009 07:18		120409	1.0		CLEAN
013f1301.d	1201986700	YS1	04-DEC-2009 07:29	929002	120409	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	1201986701	YS1	04-DEC-2009 07:39	929002	241763	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1201986702	YS1	04-DEC-2009 07:50	929002	241763	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	241763005	YS1	04-DEC-2009 08:00	929002	241763	5.0	IMPA	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	WAR091119-60 02	YS1	04-DEC-2009 08:13		120409	1.0		PASSED ON BOTH COLUMNS
018f1801.d	WAR090916-99 03	YS1	04-DEC-2009 08:23		120409	1.0		CLEAN
019f1901.d	1201985520	YS1	04-DEC-2009 08:34	928531	EUI-7402	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	1201985521	YS1	04-DEC-2009 08:45	928531	EUI-7402	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	1201985524	YS1	04-DEC-2009 08:55	928531	EUI-7402	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	241701001	YS1	04-DEC-2009 09:06	928531	EUI-7402	5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	241705001	YS1	04-DEC-2009 09:18	928531	EUI-7403	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	241706001	YS1	04-DEC-2009 09:31	928531	EUI-7404	100.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	241795001	YS1	04-DEC-2009 09:43	928531	EUI-7407	100.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	241797001	YS1	04-DEC-2009 09:56	928531	EUI-7408	5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	1201985522	YS1	04-DEC-2009 10:08	928531	EUI-7408	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	1201985523	YS1	04-DEC-2009 10:21	928531	EUI-7408	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	WAR091119-60 03	YS1	04-DEC-2009 10:33		120409	1.0		PASSED ON BOTH COLUMNS
030f3001.d	WAR090916-99 04	YS1	04-DEC-2009 10:44		120409	1.0		CLEAN
031f3101.d	242027001	YS1	04-DEC-2009 10:55		EUI-7409	1.0	CARE	SURROGATE LOW RE
032f3201.d	WAR091119-60 04	YS1	04-DEC-2009 11:07		120409	1.0		PASSED ON BOTH COLUMNS
033f3301.d	WAR090916-99 05	YS1	04-DEC-2009 11:18		120409	1.0		CLEAN
034f3401.d	1201982139	YS1	04-DEC-2009 11:28	927083	10-604	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	1201982142	YS1	04-DEC-2009 11:41	927083	10-604	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241540001	YS1	04-DEC-2009 11:53	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	241540002	YS1	04-DEC-2009 12:06	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	241540003	YS1	04-DEC-2009 12:18	927083	10-604	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	241540004	YS1	04-DEC-2009 12:31	927083	10-604	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	1201982140	YS1	04-DEC-2009 12:44	927083	AR1660	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1201982141	YS1	04-DEC-2009 12:56	927083	10-604		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	241540005	YS1	04-DEC-2009 13:09	927083	10-604		25.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	241540006	YS1	04-DEC-2009 13:22	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	WAR091119-60 05	YS1	04-DEC-2009 13:34		120409		1.0		PASSED ON BOTH COLUMNS
045f4501.d	WAR090916-99 06	YS1	04-DEC-2009 13:45		120409		1.0		CLEAN
046f4601.d	241540007	YS1	04-DEC-2009 13:55	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	241540008	YS1	04-DEC-2009 14:08	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	241540009	YS1	04-DEC-2009 14:20	927083	10-604		5.0	LANL	DUSE RR 25X
049f4901.d	241540010	YS1	04-DEC-2009 14:33	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	241540011	YS1	04-DEC-2009 14:45	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	241540012	YS1	04-DEC-2009 14:58	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	241540013	YS1	04-DEC-2009 15:11	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	241540014	YS1	04-DEC-2009 15:23	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	241540015	YS1	04-DEC-2009 15:36	927083	10-604		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	241540016	YS1	04-DEC-2009 15:48	927083	10-604		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	WAR091119-60 06	YS1	04-DEC-2009 16:01		120409		1.0		PASSED ON BOTH COLUMNS
057f5701.d	WAR090916-99 07	YS1	04-DEC-2009 16:12		120409		1.0		CLEAN
058f5801.d	241559001	YS1	04-DEC-2009 16:22	927083	10-608-1		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	241559002	YS1	04-DEC-2009 16:35	927083	10-608-1		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	241540009	YS1	04-DEC-2009 16:47	927083	10-604		25.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	WAR091119-60 07	YS1	04-DEC-2009 17:00		120409		1.0		PASSED ON BOTH COLUMNS
062f6201.d	WAR090916-99 08	YS1	04-DEC-2009 17:10		120409		1.0		CLEAN
063f6301.d	1201982309	YS1	04-DEC-2009 17:21	927189	10-666		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1201982312	YS1	04-DEC-2009 17:33	927189	10-666		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	241819001	YS1	04-DEC-2009 17:46	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	241819002	YS1	04-DEC-2009 17:58	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
067f6701.d	241819003	YS1	04-DEC-2009 18:11	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
068f6801.d	241819004	YS1	04-DEC-2009 18:24	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	241819005	YS1	04-DEC-2009 18:36	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	241819006	YS1	04-DEC-2009 18:49	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	241819007	YS1	04-DEC-2009 19:02	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	241819008	YS1	04-DEC-2009 19:14	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	WAR091119-60 08	YS1	04-DEC-2009 19:27		120409		1.0		PASSED ON BOTH COLUMNS
074f7401.d	WAR090916-99 09	YS1	04-DEC-2009 19:39		120409		1.0		CLEAN
075f7501.d	241819009	YS1	04-DEC-2009 19:52	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241819010	YS1	04-DEC-2009 20:05	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	241819011	YS1	04-DEC-2009 20:17	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	241819012	YS1	04-DEC-2009 20:30	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
079f7901.d	241819013	YS1	04-DEC-2009 20:43	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
080f8001.d	241819014	YS1	04-DEC-2009 20:55	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	241819015	YS1	04-DEC-2009 21:08	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
082f8201.d	241819016	YS1	04-DEC-2009 21:20	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	1201982310	YS1	04-DEC-2009 21:33	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	1201982311	YS1	04-DEC-2009 21:46	927189	10-666	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	WAR091119-60 09	YS1	04-DEC-2009 21:58		120409	1.0		PASSED ON BOTH COLUMNS
086f8601.d	WAR090916-99 10	YS1	04-DEC-2009 22:09		120409	1.0		CLEAN
087f8701.d	241819017	YS1	04-DEC-2009 22:19	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	241819018	YS1	04-DEC-2009 22:32	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
089f8901.d	241819019	YS1	04-DEC-2009 22:44	927189	10-666	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

090f9001.d	241819020	YS1	04-DEC-2009 22:57	927189	10-666		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
091f9101.d	WAR091119-60 10	YS1	04-DEC-2009 23:10		120409		1.0		PASSED ON BOTH COLUMNS
092f9201.d	WAR090916-99 11	YS1	04-DEC-2009 23:20		120409		1.0		CLEAN
093f9301.d	1664-4	YS1	04-DEC-2009 23:31		120409		1.0		Screen duse PASSED ON BOTH COLUMNS

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927188 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201982309 MB	29-NOV-2009 16:51:57	30	H2SO4/KMi2		2	9	1	0.03333
1201982312 LCS	29-NOV-2009 16:51:57	30	H2SO4/KMi2		2	9	1	0.03333
241819001	29-NOV-2009 16:51:57	30.02	H2SO4/KMi2		2	9	1	0.03331
241819002	29-NOV-2009 16:51:57	30.05	H2SO4/KMi2		2	9	1	0.03328
241819003	29-NOV-2009 16:51:57	30.13	H2SO4/KMi2		2	9	1	0.03319
241819004	29-NOV-2009 16:51:57	30.05	H2SO4/KMi2		2	9	1	0.03328
241819005	29-NOV-2009 16:51:57	30.04	H2SO4/KMi2		2	9	1	0.03329
241819006	29-NOV-2009 16:51:57	30.02	H2SO4/KMi2		2	9	1	0.03331
241819007	29-NOV-2009 16:51:57	30.15	H2SO4/KMi2		2	9	1	0.03317
241819008	29-NOV-2009 16:51:57	30.18	H2SO4/KMi2		2	9	1	0.03313
241819009	29-NOV-2009 16:51:57	30.03	H2SO4/KMi2		2	9	1	0.0333
241819010	29-NOV-2009 16:51:57	30.02	H2SO4/KMi2		2	9	1	0.03331
241819011	29-NOV-2009 16:51:57	30.17	H2SO4/KMi2		2	9	1	0.03315
241819012	29-NOV-2009 16:51:57	30.08	H2SO4/KMi2		2	9	1	0.03324
241819013	29-NOV-2009 16:51:57	30.12	H2SO4/KMi2		2	9	1	0.0332
241819014	29-NOV-2009 16:51:57	30.18	H2SO4/KMi2		2	9	1	0.03313
241819015	29-NOV-2009 16:51:57	30.12	H2SO4/KMi2		2	9	1	0.0332
241819016	29-NOV-2009 16:51:57	30.17	H2SO4/KMi2		2	9	1	0.03315
1201982310 MS (241819016)	29-NOV-2009 16:51:57	30.02	H2SO4/KMi2		2	9	1	0.03331
1201982311 MSD (241819016)	29-NOV-2009 16:51:57	30.16	H2SO4/KMi2		2	9	1	0.03316
241819017	29-NOV-2009 16:51:57	30.12	H2SO4/KMi2		2	9	1	0.0332
241819018	29-NOV-2009 16:51:57	30.14	H2SO4/KMi2		2	9	1	0.03318
241819019	29-NOV-2009 16:51:57	30.09	H2SO4/KMi2		2	9	1	0.03323
241819020	29-NOV-2009 16:51:57	30.03	H2SO4/KMi2		2	9	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201982312	PCB Laboratory Control	WE091113-07	1	mL
MS	1201982310	PCB Laboratory Control	WE091113-07	1	mL
MSD	1201982311	PCB Laboratory Control	WE091113-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091114-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1233923	30	g

Comments:

Clean up Date: 11/29/09

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL-OA-E-037

Tuesday, November 24, 2009

REQUEST NUMBER: 10-669

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-669

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14130	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
		1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-669

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-10-2759	W	11/23/2009	
	SW-846:6020	1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	
		1	RE03-10-2759	W	11/23/2009	
	SW-846:9012A	1	RE03-09-14130	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
		1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	
		1	RE03-10-2759	W	11/23/2009	

Final Page of REQUEST NUMBER 10-669

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-669

REQUEST NUMBER: 10-669

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14130	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2732	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2733	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2731	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2745	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2745	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2744	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2744	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2757	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2757	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2746	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2746	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2759	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2759	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2758	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2758	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
		11/24/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14130 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt3
TIME COLLECTED (HH:MM)		1240	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R JZJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt3, Pinkish-gray (7.5 YR 6/3)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID = 1.2 ppm

Samples < MDA
background
Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. Shinsky **REVIEWED BY (PRINT)** J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jack (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14290 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	AIR
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	OTHER	
PRS ID:	60-0046 ~~G 09 007~~ JLJ 11-23-09	Ok	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	JLJ 11-23-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Shanks REVIEWED BY (PRINT) J. J

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. J (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14291 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	All+
TIME COLLECTED (HH:MM)		1105	SUB-MEDIA:	OTHER	OK
PRS ID:	~~C-00-007~~ 60-004(b) JWJ 11-23-09	OK	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	~~JWJ 11-23~~ JWJ 11-23-09
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ _____ ~~BOREHOLE DIRECTION:~~ _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
2	1 JWJ 11-23-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14100

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Shando REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2731 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	ALLH	QBt3
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	~~SOIL~~	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~NA~~	HSA
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FD	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~SR~~		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ____ COMPOSITE TIME INTERVAL: ____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ____ BOREHOLE DIRECTION: ____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 5.0ppm
Background:
α 17 dpm
β 1557 ↓

Samples: < MDA

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** J. Jun

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2732 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	~~ALL~~	QB+3
TIME COLLECTED (HH:MM)		1015	SUB-MEDIA:	~~SOIL~~	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	UNK	03-608400	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14115

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.1 ppm
Background:
α 17 dpm
β 1557 ↓
Sample: <MDA

COLLECTED BY (PRINT) M. Sherrod **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J[illegible] (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2733 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	~~ALLH~~	QR+3
TIME COLLECTED (HH:MM)			SUB-MEDIA:	~~SOIL~~	LA
PRS ID:	~~60-004(b), 60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	UNK	03-60R401	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	LA	
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ——— COMPOSITE TIME INTERVAL: ——— WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ——— BOREHOLE DIRECTION: ———

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14120

SAMPLE COMMENTS: LA

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.1 ppm
Background:
α: 17 dpm
β: 1557 L
Samples: L MBA

COLLECTED BY (PRINT) M. Sherdo **REVIEWED BY (PRINT)** J. Jun

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jun (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2744 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		~~0905~~ 0930	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	Ok JW 11-23-09	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	Ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Gauck **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	1650 11-23-09	(Printed Name)	11-23-09 1650
(Signature)		(Signature) [illegible]	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2745 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		~~1085~~ 1015	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608400	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14115

SAMPLE COMMENTS: NA

LOCATION DESC: 46-1

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) [illegible] REVIEWED BY (PRINT) J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature) [illegible]	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2746 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1105	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b)~~,60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	~~03-60~~ 03-60840I	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14120

SAMPLE COMMENTS:

LOCATION DESC: 46)-4

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) H. Black **REVIEWED BY (PRINT)** J. Jud

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jud (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2757 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) H. Shendo

REVIEWED BY (PRINT) J. Jude

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jim Jude	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2758 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1020	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608400	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14115

SAMPLE COMMENTS: NA

LOCATION DESC: 04(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sheppo **REVIEWED BY (PRINT)** J. Jones

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2759 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608401	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14120

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sierra **REVIEWED BY (PRINT)** J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jack (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

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Section I.

REQUEST NUMBER: 10-669 VALIDATION DATE: 01/26/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Mary Donivan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the soil MB, Ba, B, Cu, Mn and Zn were detected. The associated sample results for Cu and the B results for samples -09-14130 and -10-2732 were detects ≤5X the MB concentrations and, thus, were qualified U,I4. The Ba results for samples RE03-10-2732 and -10-2731, and the Zn results for samples -09-14130 and -10-2732 were detects >5X but ≤50X the MB concentrations and, thus, were qualified J,I4a. The B results for samples -10-2733 and -10-2731 were NDs and, thus, were not qualified. All other associated sample results were detects >50X the MB concentrations and, thus, were not qualified, based on professional judgment.

   In the aqueous MB, Sb was detected. The associated sample results were NDs and, thus, were not qualified.

2. In one of the CCBs associated with the aqueous samples, Tl was detected. The associated sample results were NDs and, thus, were not qualified.

3. In the FR blanks, samples -10-2757, -10-2758, and -10-2759, associated with all samples, Al, Ba, Ca, Fe, Mn, Si, Na and Ti were detected. All associated sample results for Na were detects ≤5X the greatest FR blank concentration and, thus, waere qualified U,I4d. All other associated sample results were detects >5X the greatest FR blank concentrations and, thus, were not qualified.

   In FB -10-2744, which was associated with sample -10-2731, and FB -10-2746, which was associated with sample -10-2733, Si was detected. The associated sample results were detects >5X the FB concentrations and, thus, were not qualified.

4. The soil MS %Rs were > the laboratory UAL for Ca, Mg, K and Si. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %Rs were also > the laboratory UAL for Al, Fe, Mn and Ti. However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.

5. It should be noted that the parent samples for all soil and the aqueous Hg matrix QC analyses were LANL samples from

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

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other RNs and that the raw data for the parent samples for ICP-AES and ICP-MS analyses were not included in the data package. It should also be noted that the parent sample for the aqueous ICP-AES matrix QC was an FB, sample -10-2745 and the parent sample for the aqueous ICP-MS matrix QC was a FR blank, sample -10-2757. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 1/27/10

VALIDATOR'S SIGNATURE: Mary N Dessauer DATE: 01/26/2010

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 **Metals Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832001 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14130 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.966

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	458000	ug/Kg		6620	19500	19500	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-36-0	Antimony	953	ug/Kg	U	314	953	953	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-38-2	Arsenic	0.591	mg/kg	J	0.195	0.973	0.973	2	MS	RMJ	12/10/09 21:22	091209-5	928677
7440-39-3	Barium	13600	ug/Kg		97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-41-7	Beryllium	0.294	mg/kg		0.0195	0.0973	0.0973	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-42-8	Boron U,I4	1110	ug/Kg	J	973	4870	4870	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-43-9	Cadmium	487	ug/Kg	U	97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-70-2	Calcium J+,I6b	177000	ug/Kg		7620	23800	23800	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-47-3	Chromium	685	ug/Kg		146	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-48-4	Cobalt	236	ug/Kg	J	146	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-50-8	Copper U,I4	1240	ug/Kg		292	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-89-6	Iron	6340000	ug/Kg		7780	24300	24300	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-92-1	Lead	5370	ug/Kg		243	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-93-2	Lithium	11.7	mg/kg		0.389	1.95	1.95	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7439-95-4	Magnesium J+,I6b	80300	ug/Kg		8100	28600	28600	1	P	HSC	12/18/09 11:47	121809A-1	933564
7439-96-5	Manganese	306000	ug/Kg		195	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-97-6	Mercury	10.1	ug/kg	U	3.43	10.1	10.1	1	AV	JXL1	12/09/09 13:29	120909S1-6	928047
7440-02-0	Nickel	1.36	mg/kg		0.0973	0.389	0.389	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-09-7	Potassium J+,I6b	110000	ug/Kg		6100	23800	23800	1	P	HSC	12/18/09 11:47	121809A-1	933564
7782-49-2	Selenium	0.973	mg/kg	U	0.487	0.973	0.973	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-21-3	Silicon J+,I6b	335000	ug/Kg		1430	9530	9530	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-22-4	Silver	299	ug/Kg	J	97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-23-5	Sodium U,I4d	62000	ug/Kg		6670	23800	23800	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-28-0	Thallium	0.329	mg/kg		0.0584	0.195	0.195	2	MS	BAJ	12/08/09 22:19	091208-3	928677
7440-32-6	Titanium	150000	ug/Kg		97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-61-1	Uranium	0.445	mg/kg		0.0128	0.0389	0.0389	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-62-2	Vanadium	2100	ug/Kg		97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-66-6	Zinc J,I4a	29000	ug/Kg		321	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.595	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1

MAD
01/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832002 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2732 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.72

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	560000	ug/Kg		6820	20100	20100	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-36-0	Antimony	941	ug/Kg	U	310	941	941	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-38-2	Arsenic	0.389	mg/kg	J	0.197	0.983	0.983	2	MS	RMJ	12/10/09 21:28	091209-5	928677
7440-39-3	Barium J,I4a	5860	ug/Kg		100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-41-7	Beryllium	0.178	mg/kg		0.0197	0.0983	0.0983	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-42-8	Boron U,I4	1250	ug/Kg	J	1000	5010	5010	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-43-9	Cadmium	501	ug/Kg	U	100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-70-2	Calcium J+,I6b	473000	ug/Kg		7530	23500	23500	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-47-3	Chromium	841	ug/Kg		150	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-48-4	Cobalt	501	ug/Kg	U	150	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-50-8	Copper U,I4	598	ug/Kg	J	301	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-89-6	Iron	9560000	ug/Kg		8020	25100	25100	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-92-1	Lead	3270	ug/Kg		251	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-93-2	Lithium	7.2	mg/kg		0.393	1.97	1.97	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7439-95-4	Magnesium J+,I6b	1540000	ug/Kg		8000	28200	28200	1	P	HSC	12/18/09 11:51	121809A-1	933564
7439-96-5	Manganese	77100	ug/Kg		201	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-97-6	Mercury	11.9	ug/kg	U	4.04	11.9	11.9	1	AV	JXL1	12/09/09 13:31	120909S1-6	928047
7440-02-0	Nickel	0.601	mg/kg		0.0983	0.393	0.393	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-09-7	Potassium J+,I6b	1120000	ug/Kg		6020	23500	23500	1	P	HSC	12/18/09 11:51	121809A-1	933564
7782-49-2	Selenium	0.983	mg/kg	U	0.492	0.983	0.983	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-21-3	Silicon J+,I6b	592000	ug/Kg		1410	9410	9410	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-22-4	Silver	177	ug/Kg	J	100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-23-5	Sodium U,I4d	191000	ug/Kg		6590	23500	23500	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-28-0	Thallium	0.197	mg/kg	U	0.059	0.197	0.197	2	MS	BAJ	12/08/09 22:24	091208-3	928677
7440-32-6	Titanium	165000	ug/Kg		100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-61-1	Uranium	0.672	mg/kg		0.013	0.0393	0.0393	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-62-2	Vanadium	1810	ug/Kg		100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-66-6	Zinc J,I4a	16100	ug/Kg		331	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.506	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.5	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.51	g	50	mL	12/04/09	BXA1

MAD
01/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832003 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2733 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 96.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	404000	ug/Kg		6900	20300	20300	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-36-0	Antimony	381	ug/Kg	J	321	972	972	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-38-2	Arsenic	0.578	mg/kg	J	0.2	1	1	2	MS	RMJ	12/10/09 21:34	091209-5	928677
7440-39-3	Barium	12300	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-41-7	Beryllium	0.196	mg/kg		0.02	0.1	0.1	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-42-8	Boron	5070	ug/Kg	U	1010	5070	5070	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-43-9	Cadmium	507	ug/Kg	U	101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-70-2	Calcium J+,I6b	241000	ug/Kg		7780	24300	24300	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-47-3	Chromium	956	ug/Kg		152	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-48-4	Cobalt	217	ug/Kg	J	152	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-50-8	Copper U,I4	875	ug/Kg	J	304	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-89-6	Iron	7560000	ug/Kg		8110	25400	25400	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-92-1	Lead	4080	ug/Kg		254	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-93-2	Lithium	8.33	mg/kg		0.401	2	2	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7439-95-4	Magnesium J+,I6b	109000	ug/Kg		8270	29200	29200	1	P	HSC	12/18/09 11:54	121809A-1	933564
7439-96-5	Manganese	245000	ug/Kg		203	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-97-6	Mercury	11.3	ug/kg	U	3.84	11.3	11.3	1	AV	JXL1	12/09/09 13:33	120909S1-6	928047
7440-02-0	Nickel	1.29	mg/kg		0.1	0.401	0.401	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-09-7	Potassium J+,I6b	115000	ug/Kg		6220	24300	24300	1	P	HSC	12/18/09 11:54	121809A-1	933564
7782-49-2	Selenium	1	mg/kg	U	0.501	1	1	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-21-3	Silicon J+,I6b	380000	ug/Kg		1460	9720	9720	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-22-4	Silver	303	ug/Kg	J	101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-23-5	Sodium U,I4d	116000	ug/Kg		6810	24300	24300	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-28-0	Thallium	0.0748	mg/kg	J	0.0601	0.2	0.2	2	MS	BAJ	12/08/09 22:28	091208-3	928677
7440-32-6	Titanium	186000	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-61-1	Uranium	0.483	mg/kg		0.0132	0.0401	0.0401	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-62-2	Vanadium	1830	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-66-6	Zinc	30800	ug/Kg		335	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.551	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.511	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1

MAD
01/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832004 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2731 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	470000	ug/Kg		6900	20300	20300	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-36-0	Antimony	990	ug/Kg	U	327	990	990	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-38-2	Arsenic	0.313	mg/kg	J	0.203	1.01	1.01	2	MS	RMJ	12/10/09 21:40	091209-5	928677
7440-39-3	Barium J,I4a	8770	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-41-7	Beryllium	0.250	mg/kg		0.0203	0.101	0.101	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-42-8	Boron	5070	ug/Kg	U	1010	5070	5070	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-43-9	Cadmium	507	ug/Kg	U	101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-70-2	Calcium J+,I6b	215000	ug/Kg		7920	24700	24700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-47-3	Chromium	979	ug/Kg		152	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-48-4	Cobalt	185	ug/Kg	J	152	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-50-8	Copper U,I4	1020	ug/Kg		304	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-89-6	Iron	5400000	ug/Kg		8120	25400	25400	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-92-1	Lead	4650	ug/Kg		254	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-93-2	Lithium	5.1	mg/kg		0.405	2.03	2.03	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7439-95-4	Magnesium J+,I6b	92100	ug/Kg		8410	29700	29700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7439-96-5	Manganese	202000	ug/Kg		203	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-97-6	Mercury	11.2	ug/kg	U	3.81	11.2	11.2	1	AV	JXL1	12/09/09 13:34	120909S1-6	928047
7440-02-0	Nickel	0.894	mg/kg		0.101	0.405	0.405	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-09-7	Potassium J+,I6b	112000	ug/Kg		6330	24700	24700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7782-49-2	Selenium	1.01	mg/kg	U	0.506	1.01	1.01	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-21-3	Silicon J+,I6b	375000	ug/Kg		1480	9900	9900	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-22-4	Silver	241	ug/Kg	J	101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-23-5	Sodium U,I4d	130000	ug/Kg		6930	24700	24700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-28-0	Thallium	0.203	mg/kg	U	0.0608	0.203	0.203	2	MS	BAJ	12/08/09 22:33	091208-3	928677
7440-32-6	Titanium	95800	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-61-1	Uranium	0.451	mg/kg		0.0134	0.0405	0.0405	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-62-2	Vanadium	1070	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-66-6	Zinc	32200	ug/Kg		335	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.558	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.515	g	50	mL	12/04/09	BXA1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835001 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2745 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:01	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-39-3	Barium	5	ug/L	U*	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 20:49	120909A-1	928625
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/09/09 20:49	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 20:49	120909A-1	928625
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:13	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 20:49	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 20:49	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835002 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2744 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:03	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-39-3	Barium	5	ug/L	U*	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:30	120909A-1	928625
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/09/09 21:30	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:30	120909A-1	928625
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:15	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:30	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-21-3	Silicon	27.8	ug/L	J	25	100	100	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:30	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835003 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2757 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	68.8	ug/L	J	68	200	200	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:10	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-39-3	Barium	1.66	ug/L	J*	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-70-2	Calcium	119	ug/L	J	50	200	200	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:37	120909A-1	928625
7439-89-6	Iron	89.6	ug/L	J	30	100	100	1	P	HSC	12/09/09 21:37	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:37	120909A-1	928625
7439-96-5	Manganese	2.86	ug/L	J	1	5	5	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:17	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:37	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-21-3	Silicon	154	ug/L		25	100	100	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-23-5	Sodium	224	ug/L	J	100	300	300	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-32-6	Titanium	1.74	ug/L	J	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:37	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835004 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2746 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:24	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-39-3	Barium	5	ug/L	U*	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:44	120909A-1	928625
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/09/09 21:44	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:44	120909A-1	928625
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:19	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:44	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-21-3	Silicon	28.2	ug/L	J	25	100	100	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1.	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:44	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835005 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2759 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:27	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-39-3	Barium	2.75	ug/L	J*	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-70-2	Calcium	364	ug/L		50	200	200	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:50	120909A-1	928625
7439-89-6	Iron	45.8	ug/L	J	30	100	100	1	P	HSC	12/09/09 21:50	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:50	120909A-1	928625
7439-96-5	Manganese	2.78	ug/L	J	1	5	5	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:21	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:50	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-21-3	Silicon	146	ug/L		25	100	100	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-23-5	Sodium	471	ug/L		100	300	300	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-32-6	Titanium	1.38	ug/L	J	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:50	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

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METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835006 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2758 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:29	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-39-3	Barium	2.62	ug/L	J*	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-70-2	Calcium	96.2	ug/L	J	50	200	200	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:57	120909A-1	928625
7439-89-6	Iron	55.2	ug/L	J	30	100	100	1	P	HSC	12/09/09 21:57	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:57	120909A-1	928625
7439-96-5	Manganese	1.14	ug/L	J	1	5	5	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:23	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:57	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-21-3	Silicon	82.7	ug/L	J	25	100	100	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-23-5	Sodium	368	ug/L		100	300	300	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:57	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

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DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-669 VALIDATION DATE: 01/27/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Mary Donivan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): total CN only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the ICBs associated with all samples, total CN was detected. The associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the parent samples for all matrix QC analyses were from other LANL RNs. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 1/27/10

VALIDATOR'S SIGNATURE: Mary A. Donivan DATE: 01/27/2010

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

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Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-09-14130	Project:	LANL01004
Sample ID:	241832001	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	<0.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.4	240	ug/kg	1	AXC2 12/03/09	1145	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-10-2732	Project:	LANL01004
Sample ID:	241832002	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	.285%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	63.1	232	ug/kg	1	AXC2 12/03/09	1146	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-10-2733	Project:	LANL01004
Sample ID:	241832003	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	3.53%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.3	240	ug/kg	1	AXC2 12/03/09	1150	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-10-2731	Project:	LANL01004
Sample ID:	241832004	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.12%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.7	241	ug/kg	1	AXC2 12/03/09	1151	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID:	RE03-10-2745	Project:	LANL01004
Sample ID:	241835001	Client ID:	LANL010
Matrix:	W		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1345	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID: RE03-10-2744
Sample ID: 241835002
Matrix: W
Collect Date: 23-NOV-09 12:00
Receive Date: 25-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1346	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
01/27/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID:	RE03-10-2757	Project:	LANL01004
Sample ID:	241835003	Client ID:	LANL010
Matrix:	W		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1347	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
01/27/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID:	RE03-10-2759	Project:	LANL01004
Sample ID:	241835005	Client ID:	LANL010
Matrix:	W		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/02/09	1312	927059	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1534	927058

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
01/27/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID:	RE03-10-2758	Project:	LANL01004
Sample ID:	241835006	Client ID:	LANL010
Matrix:	W		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/02/09	1319	927059	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1534	927058

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
01/27/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID:	RE03-10-2746	Project:	LANL01004
Sample ID:	241835004	Client ID:	LANL010
Matrix:	W		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1348	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MAD
01/27/10

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-669

REQUEST NUMBER: 10-669

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241832, 241835

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14130	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2732	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2733	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2731	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2745	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2745	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2744	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2744	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2757	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2757	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2746	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2746	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2759	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2759	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2758	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2758	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:	Date	Time	Received By:	Date	Time
Printed Name / Signature	11/24/09	1400	Patricia Douse-Dent / P. Douse-Dent	11-25-09	09:10
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By:	Date	Time	Remarks:
Printed Name / Signature			

Tuesday, November 24, 2009

REQUEST NUMBER: 10-669

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-669
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009
TURNAROUND/REPORT DUE: 12/24/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846 6010B	1	RE03-09-14130	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
		1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-669

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-10-2759	W	11/23/2009	
	SW-846:6020	1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	
		1	RE03-10-2759	W	11/23/2009	
	SW-846:9012A	1	RE03-09-14130	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
		1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	
		1	RE03-10-2759	W	11/23/2009	

Final Page of REQUEST NUMBER 10-669

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

December 01, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241832 241835
SDG: 10-669

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 25, 2009, and analyzed for General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-669
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241832 and 241835
SDG: 10-669

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Case Narrative

Case Narrative
for
Oak Ridge National Laboratory (4000077192)
SDG: 240718

December 01, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample Receipt The sample arrived at GEL Laboratories LLC, Charleston, South Carolina on November 10, 2009 for analysis. The sample was delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Sample Identification The laboratory received the following sample:

Laboratory ID	Client ID
240718001	26774.1

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, and data from the following fractions: GC/MS Volatile.

Ann Skradski

Project Manager

Qualifier Definitons

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Chain of Custody

240718

Oak Ridge National Laboratory
Chain of Custody

Data Entry Initials: _____ Date: _____
Verify Initials: _____ Date: _____

COC Number: 26774

Project Manager: J.F.Hughes,ORNL,865-574-6649
Project Id: SW
Frequency: Monthly
Sampling Date (dd/mmm/yy): 09Nov 09

Contract Number: 4000077192
Specimen Type: n/a
Matrix: Water
Sampler Signatures: R Colby

ORNL Charge Number: 318500AC
Lab: GEL

Customer Sample ID	Lab Sample ID	Location	Coll. Method	Sample Time (military)	Filtered	Container	Preservative	Checked pH	Parameters	Methods
26774.1		CRK 99	GRAB	0700	U	3 - 40 mL Vial	4 degC	n/a	VOAs	EPA 8260B

Comments: Note VOA preservative and 7 day Holding Time.

Relinquished By: R Colby	Date/Time: 09 Nov 09 1400	Received By: Michael Arthur	Date/Time: 11/9/09 0855
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: ORNL	SDG/ARCOC/Work Order: 240718
Received By: Ricky Albee	Date Received: 11/9/09

Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?	✓		Maximum Counts Observed*: 40 cpm
Classified Radioactive II or III by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (0 ≤ 6 deg. C)?	✓			Preservation Method: 2oc (ice bags) blue ice / dry ice 17oc (none) other (describe)
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	✓			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?	✓			Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: FedEx 9906 0703 0235- 17oc - Radchem containers
9906 0703 0246 - 2oc - VOA, PCBs, metals containers

PM (or PMA) review: Initials AMB Date 11/10/09

Laboratory Certifications

List of current GEL Certifications as of 01 December 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 FL/NELAP
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

GEL Laboratories LLC

problem solved

P.O. Box 30712~Charleston, S.C. 29417~2040 Savage Road~29407
(843)556~8171~Fax(843)766~1178

Invoice for Analytical Services

Accounts Payable, ORNL
UT Battelle, LLC
PO Box 2308
Oak Ridge, Tennessee 37831~2308

PO: 4000077192

Invoice #:	**196562**
Invoice Date:	**01~DEC~09**
Terms:	**Net 30**
Client:	**Oak Ridge National Laboratory (4000077192)**
Description (Order):	**SW**
Workorder/SDG:	**240718**
Project:	**ORNL00309**
Project Manager:	**Ann Skradski**

GELID: 240718001 **Matrix:** WATER **ClientID:** 26774.1 **Collected:** 09~NOV~09 **Received:** 10~NOV~09

Test	Description	Methods	Turn Days		Charge
VOA8260BLF	8260B TCL Liquid Federal	SW846 8260B	30 Receive		$120.49
				Sample Total:	**$120.49**

Miscellaneous Charge	Description	Charge

Invoice Total: **$120.49**

GC/MS Volatile Analysis

GC/MS Volatile Organics
Oak Ridge National Laboratory (ORNL)
SDG 240718

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B DOE-AL
Prep Method: SW846 5030B
Analytical Batch Number: 922254

Sample Analysis
The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
240718001	26774.1
1201970914	Method Blank (MB)
1201970917	Laboratory Control Sample (LCS)
1201970915	240713001(26780.1) Post Spike (PS)
1201970916	240713001(26780.1) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification
SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information
Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the

independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 240713001 (26780.1) was designated for spike analysis.

Matrix Spike (PS) Recovery Statement
The spike recoveries were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

ORNL015 Oak Ridge National Laboratory (4000077192)

Client SDG: 240718 GEL Work Order: 240718

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 07 DEC 2009 **Title: Data Validator**

Roadmap for ORNL 240718 VOA

This roadmap was analyzed by ACJ on 12-01-2009, 15:58.
This roadmap was reviewed by kel00587 on 12-01-2009, 17:13.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/111209v4/4k411.d	240718001	26774.1	12-NOV-2009	23:03	240718.sub	1	922254	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/111209v4/4k402LO.d	1201970917	LCS	lcs	12-NOV-2009	17:31	all.sub	1	922254	
☐	N	/chem/VOA4.i/111209v4/4k407BO.d	1201970914	BLANK	mb	12-NOV-2009	19:47	all.sub	1	922254	
■	N	/chem/VOA4.i/111209v4/4k414.d	1201970915	26780.1MS	ms	13-NOV-2009	00:24	240713.sub	1	922254	
■	N	/chem/VOA4.i/111209v4/4k415.d	1201970916	26780.1MSD	msd	13-NOV-2009	00:52	240713.sub	1	922254	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	240718	**Date Collected:**	11/09/2009 07:00	**Matrix:**	WATER
Lab Sample ID:	240718001	**Date Received:**	11/10/2009 08:55		
Client Sample:	CRK 99	**Client:**	ORNL015	**Project:**	ORNL00309
Client ID:	26774.1	**Method:**	SW846 8260B DOE-AL	**SOP Ref:**	GL-OA-E-038
Batch ID:	922254	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	11/12/2009 23:03	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	11/12/2009 23:03				
Data File:	4k411.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00	10.0
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00	10.0
74-83-9	Bromomethane	U	1.00	ug/L	0.300	1.00	10.0
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00	10.0
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.300	1.00	10.0
67-64-1	Acetone		35.0	ug/L	3.50	10.0	10.0
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00	10.0
75-09-2	Methylene chloride	U	10.0	ug/L	3.00	10.0	10.0
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00	5.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00	10.0
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00	10.0
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00	10.0
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00	10.0
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.300	1.00	10.0
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00	10.0
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00	10.0
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00	5.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00	10.0
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00	10.0
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00	10.0
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00	10.0
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00	10.0
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00	10.0
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00	10.0
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00	10.0
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.300	1.00	10.0
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00	10.0
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00	10.0
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00	10.0
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00	5.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00	10.0
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00	10.0
540-59-0	1,2-Dichloroethylene (total)	U	1.00	ug/L	0.300	1.00	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.300	1.00	5.00

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 240718

Matrix Type: LIQUID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201970917	LCS for batch 922254	100	88	82
1201970914	MB for batch 922254	92	87	88
240718001	26774.1	92	93	87

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(59%-130%)
TOL	= Toluene-d8	(76%-129%)
BFB	= Bromofluorobenzene	(71%-126%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 240718
Client ID: 26780.1PS
Lab Sample ID: 1201970915
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: WATER
Analysis Date: 11/13/2009 00:24
Prep Batch ID: 922254
Batch ID: 922254
Dilution: 1

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	44.7	89	61-129
71-43-2	PS	Benzene	50.0	0.00	U	44.6	89	66-121
79-01-6	PS	Trichloroethylene	50.0	0.00	U	48.9	98	66-127
108-88-3	PS	Toluene	50.0	0.00	U	46.9	94	65-124
108-90-7	PS	Chlorobenzene	50.0	0.00	U	49.6	99	69-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 240718
Client ID: 26780.1PSD
Lab Sample ID: 1201970916
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: WATER
Analysis Date: 11/13/2009 00:52
Dilution: 1
Prep Batch ID 922254
Batch ID: 922254

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	41.3	83	61-129	8	0-20
71-43-2	PSD	Benzene	50.0	0.00	U	42.1	84	66-121	6	0-20
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	46.1	92	66-127	6	0-20
108-88-3	PSD	Toluene	50.0	0.00	U	44.6	89	65-124	5	0-20
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	46.5	93	69-120	6	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 240718 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 922254 **Matrix:** WATER

Lab Sample ID: 1201970917

Instrument: VOA4.I **Analysis Date:** 11/12/2009 17:31 **Dilution:** 1

Analyst: CDS1 **Prep Batch ID** 922254

Purge Vol: 5 mL **Batch ID:** 922254

CAS No	Parmname		Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	43.6	87	70-128
71-43-2	LCS	Benzene	50.0	0.0	45.3	91	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	48.3	97	76-123
108-88-3	LCS	Toluene	50.0	0.0	48.4	97	74-120
108-90-7	LCS	Chlorobenzene	50.0	0.0	49.6	99	76-120

Method Blank Summary

SDG Number:	240718	Client:	ORNL015	Matrix:	WATER
Client ID:	MB for batch 922254	Instrument ID:	VOA4.I	Data File:	4k407BO.d
Lab Sample ID:	1201970914	Prep Date:	11/12/2009 19:47	Analyzed:	11/12/09 19:47
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 922254	1201970917	4k402LO.d	11/12/09	1731
02 26774.1	240718001	4k411.d	11/12/09	2303

(s12H

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 240718

Lab File ID: 4W101 BFB Injection Date: 08/03/09

Instrument ID: VOA4 BFB Injection Time: 0221

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 60.0% of mass 95	49.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 - 100.0% of mass 95	81.4
175	5.0 - 9.0% of mass 174	5.4 (6.7)1
176	95.0 - 101.0% of mass 174	79.6 (97.8)1
177	5.0 - 9.0% of mass 176	5.4 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0005	W4VM090803-01	4W103	08/03/09	0316
02	VSTD001	W4VM090803-02	4W104	08/03/09	0343
03	VSTD002	W4VM090803-04	4W106	08/03/09	0438
04	VSTD005	W4VM090803-05	4W107	08/03/09	0505
05	VSTD010	W4VM090803-06	4W108	08/03/09	0532
06	VSTD020	W4VM090803-07	4W109	08/03/09	0559
07	VSTD050	W4VM090803-08	4W110	08/03/09	0626
08	VSTD100	W4VM090803-09	4W111	08/03/09	0654
09	SECOND SOURCE	W4VM090803-18	4W122	08/03/09	1151
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 240718

Instrument ID: VOA4.I **Injection Date/Time:** 12-NOV-09 17:04

Column Description: DB-624 **Lab File ID** /111209v4/4k401.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	25
75	30.0 - 60.0% of mass 95	56
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	0.3
174	50.0 - 100.0% of mass 95	73.8
175	5.0 -9.0% of mass 174	6.7
176	95.0 - 101.0% of mass 174	97.7
177	5.0 - 9.0% of mass 176	6.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091112-01	/111209v4/4k402.d	12-NOV-09 17:31
LCS	1201970917	/111209v4/4k402LO.d	12-NOV-09 17:31
BLANK	1201970914	/111209v4/4k407BO.d	12-NOV-09 19:47
26774.1	240718001	/111209v4/4k411.d	12-NOV-09 23:03

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 240718

STD Analysis Time: 12-NOV-09 17:31

Data File: 4k402.d

	Fluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	1149654		10.6		844592		13.8		546153		16.2	
Upper Limit	2299308		11.1		1689184		14.3		1092306		16.7	
Lower Limit	574827		10.1		422296		13.3		273077		15.7	
Sample ID												
BLK01LCS	1149654		10.6		844592		13.8		546153		16.2	
BLK01	1193209		10.6		863345		13.8		471816		16.2	
26774.1	1086548		10.6		727936		13.8		390991		16.2	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 30-Nov-2009 16:17

Calibration History

Method : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Start Cal Date: 03-AUG-2009 03:16
End Cal Date : 03-AUG-2009 10:30

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
03-AUG-2009 07:48	ICALsubS	/chem/VOA4.i/080309v4/4w113.d
03-AUG-2009 03:43	CALsubL+	/chem/VOA4.i/080309v4/4w104.d
Cal Level: 2 , Cal Amount: 2.00000		
03-AUG-2009 08:15	ICALsubS	/chem/VOA4.i/080309v4/4w114.d
03-AUG-2009 04:38	CALsubL+	/chem/VOA4.i/080309v4/4w106.d
Cal Level: 3 , Cal Amount: 5.00000		
03-AUG-2009 08:42	ICALsubS	/chem/VOA4.i/080309v4/4w115.d
03-AUG-2009 05:05	CALsubL+	/chem/VOA4.i/080309v4/4w107.d
Cal Level: 4 , Cal Amount: 10.00000		
03-AUG-2009 09:09	ICALsubS	/chem/VOA4.i/080309v4/4w116.d
03-AUG-2009 05:32	CALsubL+	/chem/VOA4.i/080309v4/4w108.d
Cal Level: 5 , Cal Amount: 20.00000		
03-AUG-2009 09:36	ICALsubS	/chem/VOA4.i/080309v4/4w117.d
03-AUG-2009 05:59	CALsubL+	/chem/VOA4.i/080309v4/4w109.d
Cal Level: 6 , Cal Amount: 50.00000		
03-AUG-2009 10:03	ICALsubS	/chem/VOA4.i/080309v4/4w118.d
03-AUG-2009 06:26	CALsubL+	/chem/VOA4.i/080309v4/4w110.d
Cal Level: 7 , Cal Amount: 100.00000		
03-AUG-2009 10:30	ICALsubS	/chem/VOA4.i/080309v4/4w119.d
03-AUG-2009 06:54	CALsubL+	/chem/VOA4.i/080309v4/4w111.d
Cal Level: 8 , Cal Amount: 200.00000		
03-AUG-2009 03:16	BENZENE+	/chem/VOA4.i/080309v4/4w103.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

```
| Ccal Level: 6 , Ccal Amount: 50.0                                                |
+==================================================================================+
|12-NOV-2009 17:31 |CALsubL+          |/chem/VOA4.i/111209v4/4k402.d                |
+------------------+-----------------+-----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 50.0                                                |
+==================================================================================+
|12-NOV-2009 18:25 |CALsubS+SS        |/chem/VOA4.i/111209v4/4k404.d                |
+------------------+-----------------+-----------------------------------------+
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INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2009 03:16
End Cal Date : 03-AUG-2009 10:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Calibration File Names:
Level 1: /chem/VOA4.i/080309v4/4w113.d
Level 2: /chem/VOA4.i/080309v4/4w114.d
Level 3: /chem/VOA4.i/080309v4/4w115.d
Level 4: /chem/VOA4.i/080309v4/4w116.d
Level 5: /chem/VOA4.i/080309v4/4w117.d
Level 6: /chem/VOA4.i/080309v4/4w118.d
Level 7: /chem/VOA4.i/080309v4/4w119.d
Level 8: /chem/VOA4.i/080309v4/4w103.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	1.05418	0.97511	0.98139	0.94769	0.95123	0.92264					
	0.87690	++++++					AVRG		0.95845		5.72567
M 2 1,2-Dichloroethylene (total)	0.75632	0.71537	0.74266	0.72270	0.73324	0.72524					
	0.71200	++++++					AVRG		0.72965		2.14968
M 135 1,3-Dichloropropylene	0.69169	0.64840	0.65519	0.64385	0.67984	0.67356					
	0.67947	++++++					AVRG		0.66743		2.73046
153 Chlorotrifluoroethylene	31104	68361	140616	280039	774886	1189478					
	1694041	++++++					LINR	0.15371	0.29890		0.99420
154 2-Chloro-1,1,1-trifluoroethan	0.42342	0.41190	0.39086	0.38141	0.39433	0.41446					
	0.39582	++++++					AVRG		0.40174		3.74265

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2009 03:16
End Cal Date : 03-AUG-2009 10:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
3 Dichlorodifluoromethane	0.31607	0.30681	0.34520	0.35289	0.37644	0.37728					
	0.39318	+++++					AVRG		0.35255		9.19844
4 Chloromethane	0.86575	0.84958	0.81374	0.81029	0.85141	0.85944					
	0.91527	+++++					AVRG		0.85221		4.13680
5 Vinyl chloride	0.71999	0.67047	0.66489	0.66456	0.67978	0.67779					
	0.69376	+++++					AVRG		0.68161		2.89282
6 Bromomethane	0.43756	0.40424	0.38546	0.37135	0.37830	0.36733					
	0.38063	+++++					AVRG		0.38927		6.26375
7 Chloroethane	0.44480	0.43786	0.43101	0.42061	0.42213	0.41765					
	0.43290	+++++					AVRG		0.42957		2.31134
8 Trichlorofluoromethane	0.64220	0.62879	0.62818	0.62505	0.63797	0.63982					
	0.64763	+++++					AVRG		0.63566		1.32316
134 Ethyl Ether	0.50098	0.45931	0.46886	0.43809	0.45206	0.44945					
	0.45646	+++++					AVRG		0.46075		4.36008
9 Acrolein	15270	27963	45303	92396	218193	507767					
	+++++	+++++					LINR	-0.00084	0.07198		0.99821
12 Trichlorotrifluoroethane	0.17888	0.17556	0.17260	0.16224	0.16518	0.16403					
	0.16726	+++++					AVRG		0.16939		3.73781

GEL Laboratories LLC

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Start Cal Date : 03-AUG-2009 03:16
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Integrator : HP RTE
Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
10 Acetone	0.54167	0.43628	0.40503	0.36728	0.42523	0.38572					
	0.37175	+++++					AVRG		0.41899		14.31856
11 1,1-Dichloroethylene	0.85432	0.83159	0.83826	0.80792	0.80347	0.82470					
	0.82184	+++++					AVRG		0.82601		2.11835
147 Isopropyl Alcohol	0.04615	0.04648	0.04524	0.04902	0.05010	0.05009					
	0.04609	+++++					AVRG		0.04760		4.34575
13 Iodomethane	0.69323	0.69550	0.69781	0.67790	0.68496	0.67934					
	0.67129	+++++					AVRG		0.68572		1.46904
15 Acetonitrile	0.09935	0.09415	0.09277	0.08706	0.09042	0.08499					
	0.08141	+++++					AVRG		0.09002		6.72577
128 Methyl acetate	0.66197	0.57981	0.48382	0.44948	0.51096	0.48367					
	+++++	+++++					AVRG		0.52829		14.90616
14 Carbon disulfide	1.36183	1.42412	1.47484	1.39771	1.37302	1.35217					
	1.27920	+++++					AVRG		1.38041		4.44289
16 Allyl chloride	0.90289	0.89452	0.92016	0.90630	0.89863	0.86626					
	0.81946	+++++					AVRG		0.88689		3.82585
148 tert-Butyl Alcohol	0.06070	0.05964	0.05958	0.06442	0.06693	0.06436					
	0.05892	+++++					AVRG		0.06208		5.02090

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Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
17 Methylene chloride	+++++	99717	168611	183198	454357	756876					
	1495769	+++++					LINR	-0.12110	0.46853		0.99277
18 Acrylonitrile	0.22045	0.21794	0.21619	0.22913	0.22515	0.21722					
	0.21408	+++++					AVRG		0.22002		2.43087
20 tert-Butyl methyl ether	1.31033	1.48637	1.19967	1.16409	1.20725	1.15027					
	1.14195	+++++					AVRG		1.23713		9.99363
21 trans-1,2-Dichloroethylene	0.71159	0.66687	0.70682	0.69744	0.69703	0.69500					
	0.68343	+++++					AVRG		0.69403		2.15570
23 Vinyl acetate	98614	283903	862907	1720829	3323846	7523947					
	+++++	+++++					LINR	-0.06188	0.99395		0.99734
149 Isopropyl ether	2.19833	2.08876	2.05858	2.04221	2.06758	2.05802					
	1.92809	+++++					AVRG		2.06308		3.84094
22 1,1-Dichloroethane	0.88872	0.85676	0.84877	0.83307	0.84374	0.84145					
	0.82719	+++++					AVRG		0.84853		2.38169
24 2-Chloro-1,3-butadiene	0.81215	0.82037	0.81951	0.81683	0.81948	0.80943					
	0.82638	+++++					AVRG		0.81774		0.68588
150 Ethyl tert-butyl ether	1.63421	1.64341	1.59503	1.62300	1.64628	1.65826					
	1.57777	+++++					AVRG		1.62542		1.79625

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Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
30 2-Butanone	0.52066	0.50963	0.47885	0.43942	0.51455	0.48945					
	0.45747	+++++					AVRG		0.48715		6.27852
26 Ethyl acetate	0.80067	0.68995	0.65597	0.66288	0.63950	0.58595					
	0.54428	+++++					AVRG		0.65417		12.44530
31 cis-1,2-Dichloroethylene	0.80101	0.76387	0.77850	0.74796	0.76945	0.75548					
	0.74057	+++++					AVRG		0.76526		2.65514
25 2,2-Dichloropropane	0.45545	0.39597	0.40766	0.39744	0.39887	0.38775					
	0.37908	+++++					AVRG		0.40317		6.13783
28 Propionitrile	0.09111	0.08320	0.08736	0.09150	0.09182	0.08976					
	0.08802	+++++					AVRG		0.08897		3.45033
27 Methacrylonitrile	0.32690	0.35531	0.35612	0.37846	0.37582	0.35513					
	0.33523	+++++					AVRG		0.35471		5.35536
29 Bromochloromethane	0.22626	0.20926	0.19820	0.19844	0.19796	0.19315					
	0.19671	+++++					AVRG		0.20285		5.64104
32 Chloroform	0.77900	0.71969	0.71229	0.70337	0.72143	0.70998					
	0.69554	+++++					AVRG		0.72019		3.81010
72 Tetrahydrofuran	0.53158	0.47816	0.44777	0.47041	0.46116	0.40830					
	0.40146	+++++					AVRG		0.45698		9.68307

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
36 1,1,1-Trichloroethane	0.53034	0.49932	0.54428	0.51061	0.51974	0.53298					
	0.51651	+++++					AVRG		0.52197		2.89050
19 Isobutyl alcohol	0.02377	0.02278	0.02300	0.02523	0.02597	0.02438					
	0.02349	+++++					AVRG		0.02409		4.88293
129 Cyclohexane	0.93317	0.85885	0.87516	0.83298	0.83171	0.85461					
	0.81422	+++++					AVRG		0.85724		4.56452
34 1,1-Dichloropropene	0.57597	0.55358	0.56070	0.53491	0.54219	0.53922					
	0.52653	+++++					AVRG		0.54759		3.08883
33 Carbon tetrachloride	0.48362	0.48676	0.48768	0.49166	0.48903	0.50148					
	0.49496	+++++					AVRG		0.49074		1.21402
37 1,2-Dichloroethane	0.68938	0.68309	0.67767	0.65136	0.66977	0.65236					
	0.64642	+++++					AVRG		0.66715		2.56943
38 Benzene	1.79417	1.63494	1.63767	1.62415	1.63223	1.58567					
	1.52437	1.75183					AVRG		1.64813		5.25026
151 Methyl tert-amyl ether	1.28401	1.20625	1.22132	1.22630	1.24901	1.26379					
	1.22259	+++++					AVRG		1.23904		2.22408
139 Cyclohexene	0.95244	0.84106	0.88610	0.85508	0.84791	0.84457					
	0.82175	+++++					AVRG		0.86413		5.03057

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Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01960	0.02061	0.02068	0.02011	0.01698	0.02074					
	0.02026	0.01930					AVRG		0.01978		6.28943
39 Trichloroethylene	0.44246	0.38798	0.40499	0.38670	0.40243	0.39618					
	0.38835	+++++					AVRG		0.40130		4.87246
42 Méthyl methacrylate	0.28850	0.29120	0.29836	0.32103	0.32180	0.30574					
	0.29031	+++++					AVRG		0.30242		4.70588
130 Methylcyclohexane	0.72882	0.67464	0.67392	0.64881	0.64836	0.64811					
	0.62885	+++++					AVRG		0.66450		4.90511
41 1,2-Dichloropropane	0.53808	0.51233	0.51471	0.50045	0.51155	0.50346					
	0.50038	+++++					AVRG		0.51157		2.55832
97 1,4-Dioxane	0.00569	0.00499	0.00455	0.00510	0.00488	0.00486					
	0.00486	+++++					AVRG		0.00499		7.03083
43 Dibromomethane	0.28217	0.24802	0.25508	0.25041	0.25921	0.25287					
	0.25455	+++++					AVRG		0.25747		4.44998
45 Bromodichloromethane	0.56190	0.53618	0.54040	0.54096	0.55705	0.56110					
	0.56145	+++++					AVRG		0.55129		2.09296
48 2-Nitropropane	0.15523	0.14304	0.15084	0.17077	0.17693	0.17588					
	0.17572	+++++					AVRG		0.16406		8.55102

GEL Laboratories LLC

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Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
44 2-Chloroethylvinyl ether	0.25945	0.28274	0.27762	0.27415	0.28603	0.27879					
	0.26936	+++++					AVRG		0.27545		3.23290
46 cis-1,3-Dichloropropylene	0.72118	0.68561	0.69727	0.67610	0.70190	0.69500					
	0.69803	+++++					AVRG		0.69644		2.01190
49 4-Methyl-2-pentanone	0.30492	0.30840	0.30317	0.28545	0.30794	0.29202					
	0.27304	+++++					AVRG		0.29642		4.52673
50 Toluene	1.45768	1.29448	1.25227	1.22241	1.23117	1.16860					
	1.10481	+++++					AVRG		1.24735		8.89659
51 Ethyl methacrylate	0.66234	0.72173	0.74108	0.78353	0.78231	0.70044					
	0.62671	+++++					AVRG		0.71688		8.19465
53 trans-1,3-Dichloropropylene	0.84996	0.77620	0.78013	0.77822	0.83359	0.79474					
	0.77925	+++++					AVRG		0.79887		3.79304
54 1,1,2-Trichloroethane	0.44245	0.38432	0.39935	0.38636	0.40044	0.38533					
	0.37757	+++++					AVRG		0.39654		5.51434
55 2-Hexanone	0.86915	0.86489	0.85808	0.78510	0.84228	0.83820					
	0.68347	+++++					AVRG		0.82017		8.11309
52 1,3-Dichloropropane	0.92934	0.85013	0.85187	0.82521	0.84277	0.78365					
	0.74639	+++++					AVRG		0.83277		6.93689

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
56 Tetrachloroethylene	0.48114	0.41208	0.41133	0.38338	0.38287	0.37130					
	0.35769	+++++					AVRG		0.39997		10.22839
57 Dibromochloromethane	0.51193	0.47519	0.48183	0.47429	0.51201	0.50470					
	0.51757	+++++					AVRG		0.49679		3.81182
59 1,2-Dibromoethane	0.49586	0.50829	0.47036	0.47329	0.48572	0.47188					
	0.47022	+++++					AVRG		0.48223		3.10964
152 1-Chlorohexane	0.54555	0.56114	0.50642	0.51435	0.52953	0.54713					
	0.51726	+++++					AVRG		0.53163		3.80098
62 Chlorobenzene	1.49121	1.40066	1.40091	1.36544	1.36660	1.33055					
	1.28766	+++++					AVRG		1.37758		4.64378
60 1,1,1,2-Tetrachloroethane	0.52369	0.51312	0.50075	0.49502	0.50005	0.50019					
	0.49618	+++++					AVRG		0.50414		2.06930
58 Ethylbenzene	2.75203	2.53662	2.52218	2.43483	2.44564	2.31392					
	2.11891	+++++					AVRG		2.44630		8.04213
63 m,p-Xylenes	1.04706	0.96134	0.97206	0.93407	0.93486	0.90675					
	0.85526	+++++					AVRG		0.94449		6.28621
64 o-Xylene	1.06839	1.00265	1.00005	0.97494	0.98397	0.95442					
	0.92016	+++++					AVRG		0.98637		4.66803

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Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
65 Styrene	1.67522	1.61469	1.62958	1.61546	1.68312	1.63944					
	1.55423	+++++					AVRG		1.63025		2.64333
66 Bromoform	0.60789	0.58251	0.62245	0.63083	0.67412	0.70651					
	0.73850	+++++					AVRG		0.65183		8.64164
67 Isopropylbenzene	4.75272	4.39177	4.51111	4.35283	4.29325	4.16691					
	3.85810	+++++					AVRG		4.33238		6.43559
68 cis-1,4-Dichloro-2-butene	0.44641	0.44928	0.46531	0.50996	0.51099	0.49475					
	0.48379	+++++					AVRG		0.48007		5.62681
70 Cyclohexanone	0.03999	0.04198	0.04280	0.04681	0.04791	0.04669					
	+++++	+++++					AVRG		0.04436		7.21481
73 1,1,2,2-Tetrachloroethane	1.38532	1.33499	1.32497	1.27979	1.30955	1.23910					
	1.20263	+++++					AVRG		1.29662		4.74753
69 trans-1,4-Dichloro-2-butene	0.44970	0.45600	0.47117	0.49915	0.50212	0.47894					
	0.46444	+++++					AVRG		0.47450		4.26728
74 1,2,3-Trichloropropane	0.35811	0.32961	0.32278	0.31241	0.31992	0.31204					
	0.30860	+++++					AVRG		0.32335		5.24316
75 Bromobenzene	1.19311	1.09477	1.13212	1.10549	1.09644	1.10065					
	1.09120	+++++					AVRG		1.11625		3.27137

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2009 03:16
End Cal Date : 03-AUG-2009 10:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
76 n-Propylbenzene	5.78477	5.44416	5.50993	5.35896	5.27989	5.03084					
	4.52342	+++++					AVRG		5.27600		7.64140
78 1,3,5-Trimethylbenzene	4.20954	3.88933	4.05793	3.94943	3.86160	3.67836					
	3.37725	+++++					AVRG		3.86049		6.98475
77 2-Chlorotoluene	4.15880	3.93096	3.87601	3.79312	3.71231	3.48625					
	3.22953	+++++					AVRG		3.74100		8.15845
80 4-Chlorotoluene	3.84131	3.52677	3.46676	3.38885	3.38365	3.25566					
	3.03111	+++++					AVRG		3.41344		7.28798
81 tert-Butylbenzene	4.16749	3.70345	3.90553	3.68434	3.66333	3.55121					
	3.32787	+++++					AVRG		3.71475		7.13492
79 1,2,4-Trimethylbenzene	4.72378	4.26864	4.23014	4.06821	4.08581	3.82869					
	3.48600	+++++					AVRG		4.09876		9.37691
82 Pentachloroethane	0.56056	0.54863	0.56745	0.54618	0.56554	0.50558					
	0.49593	+++++					AVRG		0.54141		5.36078
83 sec-Butylbenzene	5.51461	5.10580	5.42199	5.21852	5.19641	4.92825					
	4.33253	+++++					AVRG		5.10259		7.66329
84 4-Isopropyltoluene	4.20541	3.93210	4.09890	4.02846	3.94412	3.82774					
	3.47497	+++++					AVRG		3.93024		5.98314

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2009 03:16
End Cal Date : 03-AUG-2009 10:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
85 1,3-Dichlorobenzene	2.39663	2.18810	2.19457	2.09767	2.10856	2.05449					
	1.94388	+++++					AVRG		2.14056		6.59867
87 1,4-Dichlorobenzene	2.40526	2.18546	2.18137	2.07984	2.10182	2.04183					
	1.93519	+++++					AVRG		2.13297		6.91307
88 Benzyl chloride	1.65806	1.78487	1.92967	2.07992	2.07425	1.86794					
	1.60063	+++++					AVRG		1.85647		10.14415
89 n-Butylbenzene	4.21773	3.98765	4.13923	4.02496	3.99111	3.77056					
	3.36727	+++++					AVRG		3.92836		7.23529
90 1,2-Dichlorobenzene	2.18484	2.05866	2.07464	2.05024	2.05133	1.97313					
	1.86421	+++++					AVRG		2.03672		4.82963
91 bis(2-Chloroisopropyl)ether	0.69292	0.72790	0.78298	0.85413	0.86482	0.80020					
	0.73579	+++++					AVRG		0.77982		8.33696
92 1,2-Dibromo-3-chloropropane	0.20075	0.19378	0.19286	0.18513	0.20836	0.20210					
	0.20207	+++++					AVRG		0.19786		3.90483
93 1,2,4-Trichlorobenzene	1.06142	1.02494	1.03062	1.02694	1.06701	0.98988					
	0.92157	+++++					AVRG		1.01748		4.85856
94 Hexachlorobutadiene	0.77629	0.70875	0.76064	0.72555	0.73511	0.69603					
	0.63489	+++++					AVRG		0.71961		6.47422

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2009 03:16
End Cal Date : 03-AUG-2009 10:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	2.13980	1.99190	2.00540	2.05939	2.20432	2.01687					
	1.88787	+++++					AVRG		2.04365		5.07071
96 1,2,3-Trichlorobenzene	0.75968	0.77333	0.80755	0.80421	0.83713	0.76164					
	0.68112	+++++					AVRG		0.77495		6.45273
$ 138 1,2-Dichloroethane-d4	0.34921	0.35813	0.35302	0.35804	0.37399	0.38308					
	0.35129	+++++					AVRG		0.36096		3.52302
$ 47 Toluene-d8	1.31129	1.30834	1.28928	1.29505	1.29309	1.25255					
	1.23291	+++++					AVRG		1.28321		2.28627
$ 71 Bromofluorobenzene	0.99227	0.99334	0.99186	0.99819	0.98683	0.99608					
	1.01189	+++++					AVRG		0.99578		0.79805

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2009 03:16
End Cal Date : 03-AUG-2009 10:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/111209v4/VOA4-8260-080309.m
Cal Date : 12-Nov-2009 19:45 amj

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-AUG-2009 11:51
Lab File ID: 4w122.d Init. Cal. Date(s): 03-AUG-2009 03-AUG-2009
Analysis Type: WATER Init. Cal. Times: 03:16 10:30
Lab Sample ID: W4VM090803-18 Quant Type: ISTD
Method: /chem/VOA4.i/080309v4/VOA4-8260-080309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.95845	0.99309	0.99309	0.050	3.61415	60.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.72965	0.79728	0.79728	0.050	9.26962	60.00000	Averaged	
M	135 1,3-Dichloropropylene	0.66743	0.71577	0.71577	0.050	7.24283	60.00000	Averaged	
	3 Dichlorodifluoromethane	0.35255	0.36748	0.36748	0.050	4.23264	60.00000	Averaged	
	4 Chloromethane	0.85221	0.91088	0.91088	0.100	6.88405	60.00000	Averaged	spcc
	5 Vinyl chloride	0.68161	0.68556	0.68556	0.050	0.58041	20.00000	Averaged	ccc
	6 Bromomethane	0.38927	0.37721	0.37721	0.050	-3.09692	60.00000	Averaged	
	7 Chloroethane	0.42957	0.42097	0.42097	0.050	-2.00079	60.00000	Averaged	
	8 Trichlorofluoromethane	0.63566	0.64989	0.64989	0.050	2.23783	60.00000	Averaged	
	134 Ethyl Ether	0.46075	0.44862	0.44862	0.001	-2.63263	60.00000	Averaged	
	10 Acetone	0.41899	0.38817	0.38817	0.050	-7.35676	60.00000	Averaged	
	15 Acetonitrile	0.09002	0.08764	0.08764	0.010	-2.64873	60.00000	Averaged	
	11 1,1-Dichloroethylene	0.82601	0.91395	0.91395	0.050	10.64590	20.00000	Averaged	ccc
	128 Methyl acetate	0.52829	0.46645	0.46645	0.010	-11.70578	60.00000	Averaged	
	13 Iodomethane	0.68572	0.78754	0.78754	0.050	14.84881	60.00000	Averaged	
	17 Methylene chloride	51.38033	50.00000	0.53820	0.050	2.76065	60.00000	Linear	
	14 Carbon disulfide	1.38041	1.60944	1.60944	0.050	16.59139	60.00000	Averaged	
	20 tert-Butyl methyl ether	1.23713	1.21154	1.21154	0.050	-2.06890	60.00000	Averaged	
	21 trans-1,2-Dichloroethylene	0.69403	0.75237	0.75237	0.050	8.40720	60.00000	Averaged	
	23 Vinyl acetate	262	250	1.05473	0.010	4.87693	60.00000	Linear	
	22 1,1-Dichloroethane	0.84853	0.92598	0.92598	0.100	9.12737	60.00000	Averaged	spcc
	30 2-Butanone	0.48715	0.49011	0.49011	0.030	0.60816	60.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.76526	0.84219	0.84219	0.050	10.05254	60.00000	Averaged	
	25 2,2-Dichloropropane	0.40317	0.42819	0.42819	0.050	6.20369	60.00000	Averaged	
	32 Chloroform	0.72019	0.77515	0.77515	0.010	7.63127	20.00000	Averaged	ccc
	29 Bromochloromethane	0.20285	0.20192	0.20192	0.010	-0.45928	60.00000	Averaged	
	36 1,1,1-Trichloroethane	0.52197	0.58066	0.58066	0.010	11.24533	60.00000	Averaged	
	129 Cyclohexane	0.85724	0.94791	0.94791	0.010	10.57627	60.00000	Averaged	
	34 1,1-Dichloropropene	0.54759	0.58757	0.58757	0.010	7.30250	60.00000	Averaged	
	131 n-Butyl alcohol	0.01978	0.02050	0.02050	0.001	3.61492	60.00000	Averaged	
	33 Carbon tetrachloride	0.49074	0.53997	0.53997	0.010	10.03145	60.00000	Averaged	
$	138 1,2-Dichloroethane-d4	0.36096	0.38604	0.38604	0.001	6.94660	60.00000	Averaged	
	37 1,2-Dichloroethane	0.66715	0.71274	0.71274	0.010	6.83411	60.00000	Averaged	
	38 Benzene	1.64813	1.70859	1.70859	0.010	3.66873	60.00000	Averaged	
	139 Cyclohexene	0.86413	0.88797	0.88797	0.001	2.75884	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-AUG-2009 11:51
Lab File ID: 4w122.d Init. Cal. Date(s): 03-AUG-2009 03-AUG-2009
Analysis Type: WATER Init. Cal. Times: 03:16 10:30
Lab Sample ID: W4VM090803-18 Quant Type: ISTD
Method: /chem/VOA4.i/080309v4/VOA4-8260-080309.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.40130	0.43014	0.43014	0.010	7.18645	60.00000	Averaged	
	41 1,2-Dichloropropane	0.51157	0.55362	0.55362	0.010	8.22037	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.66450	0.70232	0.70232	0.010	5.69158	60.00000	Averaged	
	45 Bromodichloromethane	0.55129	0.59224	0.59224	0.010	7.42785	60.00000	Averaged	
	43 Dibromomethane	0.25747	0.26457	0.26457	0.010	2.75716	60.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.27545	0.24780	0.24780	0.005	-10.03765	60.00000	Averaged	
	49 4-Methyl-2-pentanone	0.29642	0.29915	0.29915	0.010	0.92039	60.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.69644	0.75107	0.75107	0.010	7.84349	60.00000	Averaged	
$	47 Toluene-d8	1.28321	1.27074	1.27074	0.010	-0.97203	60.00000	Averaged	
	50 Toluene	1.24735	1.27024	1.27024	0.010	1.83577	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.79887	0.84464	0.84464	0.010	5.72904	60.00000	Averaged	
	54 1,1,2-Trichloroethane	0.39654	0.40766	0.40766	0.010	2.80425	60.00000	Averaged	
	55 2-Hexanone	0.82017	0.79594	0.79594	0.010	-2.95403	60.00000	Averaged	
	52 1,3-Dichloropropane	0.83277	0.85488	0.85488	0.010	2.65549	60.00000	Averaged	
	56 Tetrachloroethylene	0.39997	0.39899	0.39899	0.010	-0.24570	60.00000	Averaged	
	57 Dibromochloromethane	0.49679	0.54476	0.54476	0.010	9.65640	60.00000	Averaged	
	59 1,2-Dibromoethane	0.48223	0.49802	0.49802	0.010	3.27389	60.00000	Averaged	
	62 Chlorobenzene	1.37758	1.46350	1.46350	0.300	6.23712	60.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.50414	0.54297	0.54297	0.010	7.70198	60.00000	Averaged	
	58 Ethylbenzene	2.44630	2.52426	2.52426	0.010	3.18674	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.94449	0.97268	0.97268	0.010	2.98541	60.00000	Averaged	
	64 o-Xylene	0.98637	1.03390	1.03390	0.010	4.81889	60.00000	Averaged	
	65 Styrene	1.63025	1.76402	1.76402	0.010	8.20525	60.00000	Averaged	
	66 Bromoform	0.65183	0.70870	0.70870	0.100	8.72462	60.00000	Averaged	spcc
	67 Isopropylbenzene	4.33238	4.42038	4.42038	0.010	2.03124	60.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	1.29662	1.24646	1.24646	0.300	-3.86855	60.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.99578	0.98953	0.98953	0.010	-0.62730	60.00000	Averaged	
	74 1,2,3-Trichloropropane	0.32335	0.31616	0.31616	0.010	-2.22526	60.00000	Averaged	
	75 Bromobenzene	1.11625	1.16563	1.16563	0.010	4.42373	60.00000	Averaged	
	76 n-Propylbenzene	5.27600	5.31487	5.31487	0.010	0.73681	60.00000	Averaged	
	77 2-Chlorotoluene	3.74100	3.82368	3.82368	0.010	2.21021	60.00000	Averaged	
	78 1,3,5-Trimethylbenzene	3.86049	3.91980	3.91980	0.010	1.53634	60.00000	Averaged	
	80 4-Chlorotoluene	3.41344	3.48758	3.48758	0.010	2.17181	60.00000	Averaged	
	81 tert-Butylbenzene	3.71475	3.76315	3.76315	0.010	1.30304	60.00000	Averaged	
	79 1,2,4-Trimethylbenzene	4.09876	4.05738	4.05738	0.010	-1.00954	60.00000	Averaged	
	83 sec-Butylbenzene	5.10259	5.23916	5.23916	0.010	2.67658	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-AUG-2009 11:51
Lab File ID: 4w122.d Init. Cal. Date(s): 03-AUG-2009 03-AUG-2009
Analysis Type: WATER Init. Cal. Times: 03:16 10:30
Lab Sample ID: W4VM090803-18 Quant Type: ISTD
Method: /chem/VOA4.i/080309v4/VOA4-8260-080309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	3.93024	4.00545	4.00545	0.010	1.91361	60.00000	Averaged
85 1,3-Dichlorobenzene	2.14056	2.17538	2.17538	0.010	1.62689	60.00000	Averaged
87 1,4-Dichlorobenzene	2.13297	2.14765	2.14765	0.010	0.68850	60.00000	Averaged
89 n-Butylbenzene	3.92836	3.94185	3.94185	0.010	0.34336	60.00000	Averaged
90 1,2-Dichlorobenzene	2.03672	2.07308	2.07308	0.010	1.78533	60.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.19786	0.19976	0.19976	0.010	0.95925	60.00000	Averaged
93 1,2,4-Trichlorobenzene	1.01748	0.98479	0.98479	0.010	-3.21261	60.00000	Averaged
94 Hexachlorobutadiene	0.71961	0.71290	0.71290	0.010	-0.93148	60.00000	Averaged
95 Naphthalene	2.04365	2.01912	2.01912	0.010	-1.20025	60.00000	Averaged
96 1,2,3-Trichlorobenzene	0.77495	0.79642	0.79642	0.010	2.77006	60.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.72947
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 12-NOV-2009 17:31
Lab File ID: 4k402.d Init. Cal. Date(s): 03-AUG-2009 03-AUG-2009
Analysis Type: WATER Init. Cal. Times: 03:16 10:30
Lab Sample ID: W4VM091112-01 Quant Type: ISTD
Method: /chem/VOA4.i/111209v4/VOA4-8260-080309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.95845	0.95276	0.95276	0.050	-0.59308	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.72965	0.68686	0.68686	0.050	-5.86348	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.66743	0.62722	0.62722	0.050	-6.02440	30.00000	Averaged	
3 Dichlorodifluoromethane	0.35255	0.34536	0.34536	0.050	-2.03987	30.00000	Averaged	
4 Chloromethane	0.85221	0.78159	0.78159	0.100	-8.28705	30.00000	Averaged	spcc
5 Vinyl chloride	0.68161	0.70292	0.70292	0.050	3.12726	20.00000	Averaged	ccc
6 Bromomethane	0.38927	0.38329	0.38329	0.050	-1.53610	30.00000	Averaged	
7 Chloroethane	0.42957	0.37515	0.37515	0.050	-12.66747	30.00000	Averaged	
8 Trichlorofluoromethane	0.63566	0.64115	0.64115	0.050	0.86382	30.00000	Averaged	
134 Ethyl Ether	0.46075	0.34330	0.34330	0.001	-25.48959	30.00000	Averaged	
10 Acetone	0.41899	0.29704	0.29704	0.050	-29.10699	40.00000	Averaged	
15 Acetonitrile	0.09002	0.07153	0.07153	0.010	-20.53765	30.00000	Averaged	
11 1,1-Dichloroethylene	0.82601	0.72013	0.72013	0.050	-12.81847	20.00000	Averaged	ccc
128 Methyl acetate	0.52829	0.37074	0.37074	0.010	-29.82294	40.00000	Averaged	
13 Iodomethane	0.68572	0.57283	0.57283	0.050	-16.46248	30.00000	Averaged	
17 Methylene chloride	41.95345	50.00000	0.44987	0.050	-16.09310	30.00000	Linear	
14 Carbon disulfide	1.38041	1.34190	1.34190	0.050	-2.78996	30.00000	Averaged	
20 tert-Butyl methyl ether	1.23713	1.03271	1.03271	0.050	-16.52426	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.69403	0.65198	0.65198	0.050	-6.05790	30.00000	Averaged	
23 Vinyl acetate	261	250	1.05044	0.010	4.44527	40.00000	Linear	
22 1,1-Dichloroethane	0.84853	0.80976	0.80976	0.100	-4.56888	30.00000	Averaged	spcc
30 2-Butanone	0.48715	0.34332	0.34332	0.030	-29.52394	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.76526	0.72175	0.72175	0.050	-5.68649	30.00000	Averaged	
25 2,2-Dichloropropane	0.40317	0.44487	0.44487	0.050	10.34163	30.00000	Averaged	
32 Chloroform	0.72019	0.73429	0.73429	0.010	1.95815	20.00000	Averaged	ccc
29 Bromochloromethane	0.20285	0.17489	0.17489	0.010	-13.78668	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.52197	0.55997	0.55997	0.010	7.28004	30.00000	Averaged	
129 Cyclohexane	0.85724	0.71660	0.71660	0.010	-16.40628	30.00000	Averaged	
34 1,1-Dichloropropene	0.54759	0.55463	0.55463	0.010	1.28523	30.00000	Averaged	
131 n-Butyl alcohol	0.01978	0.01747	0.01747	0.001	-11.70484	40.00000	Averaged	
33 Carbon tetrachloride	0.49074	0.54366	0.54366	0.010	10.78310	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.36096	0.35928	0.35928	0.001	-0.46600	30.00000	Averaged	
37 1,2-Dichloroethane	0.66715	0.66158	0.66158	0.010	-0.83499	30.00000	Averaged	
38 Benzene	1.64813	1.49395	1.49395	0.010	-9.35464	30.00000	Averaged	
139 Cyclohexene	0.86413	0.77077	0.77077	0.001	-10.80425	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4k402.d
Analysis Type: WATER
Lab Sample ID: W4VM091112-01
Method: /chem/VOA4.i/111209v4/VOA4-8260-080309.m

Injection Date: 12-NOV-2009 17:31
Init. Cal. Date(s): 03-AUG-2009 03-AUG-2009
Init. Cal. Times: 03:16 10:30
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.40130	0.38774	0.38774	0.010	-3.37880	30.00000	Averaged	
	41 1,2-Dichloropropane	0.51157	0.45683	0.45683	0.010	-10.69972	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.66450	0.62063	0.62063	0.010	-6.60246	30.00000	Averaged	
	45 Bromodichloromethane	0.55129	0.55757	0.55757	0.010	1.13940	30.00000	Averaged	
	43 Dibromomethane	0.25747	0.24295	0.24295	0.010	-5.64215	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.27545	0.21716	0.21716	0.005	-21.16315	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.29642	0.26337	0.26337	0.010	-11.14919	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.69644	0.63508	0.63508	0.010	-8.81148	30.00000	Averaged	
$	47 Toluene-d8	1.28321	1.13389	1.13389	0.010	-11.63675	30.00000	Averaged	
	50 Toluene	1.24735	1.20632	1.20632	0.010	-3.28910	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.79887	0.84308	0.84308	0.010	5.53353	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.39654	0.38859	0.38859	0.010	-2.00572	30.00000	Averaged	
	55 2-Hexanone	0.82017	0.73125	0.73125	0.010	-10.84139	40.00000	Averaged	
	52 1,3-Dichloropropane	0.83277	0.82206	0.82206	0.010	-1.28555	30.00000	Averaged	
	56 Tetrachloroethylene	0.39997	0.38217	0.38217	0.010	-4.45157	30.00000	Averaged	
	57 Dibromochloromethane	0.49679	0.52475	0.52475	0.010	5.62937	30.00000	Averaged	
	59 1,2-Dibromoethane	0.48223	0.46006	0.46006	0.010	-4.59757	30.00000	Averaged	
	62 Chlorobenzene	1.37758	1.36741	1.36741	0.300	-0.73839	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.50414	0.53795	0.53795	0.010	6.70589	30.00000	Averaged	
	58 Ethylbenzene	2.44630	2.53417	2.53417	0.010	3.59179	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.94449	0.94565	0.94565	0.010	0.12369	30.00000	Averaged	
	64 o-Xylene	0.98637	0.96699	0.96699	0.010	-1.96511	30.00000	Averaged	
	65 Styrene	1.63025	1.64759	1.64759	0.010	1.06359	30.00000	Averaged	
	66 Bromoform	0.65183	0.62695	0.62695	0.100	-3.81604	30.00000	Averaged	spcc
	67 Isopropylbenzene	4.33238	4.08487	4.08487	0.010	-5.71320	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	1.29662	1.18844	1.18844	0.300	-8.34345	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.99578	0.81581	0.81581	0.010	-18.07324	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.32335	0.29770	0.29770	0.010	-7.93440	30.00000	Averaged	
	75 Bromobenzene	1.11625	1.03607	1.03607	0.010	-7.18358	30.00000	Averaged	
	76 n-Propylbenzene	5.27600	5.36415	5.36415	0.010	1.67091	30.00000	Averaged	
	77 2-Chlorotoluene	3.74100	3.79138	3.79138	0.010	1.34692	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	3.86049	3.86378	3.86378	0.010	0.08517	30.00000	Averaged	
	80 4-Chlorotoluene	3.41344	3.37684	3.37684	0.010	-1.07223	30.00000	Averaged	
	81 tert-Butylbenzene	3.71475	3.61345	3.61345	0.010	-2.72687	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	4.09876	3.99033	3.99033	0.010	-2.64540	30.00000	Averaged	
	83 sec-Butylbenzene	5.10259	5.18579	5.18579	0.010	1.63056	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 12-NOV-2009 17:31
Lab File ID: 4k402.d Init. Cal. Date(s): 03-AUG-2009 03-AUG-2009
Analysis Type: WATER Init. Cal. Times: 03:16 10:30
Lab Sample ID: W4VM091112-01 Quant Type: ISTD
Method: /chem/VOA4.i/111209v4/VOA4-8260-080309.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	3.93024	4.08780	4.08780	0.010	4.00884	30.00000	Averaged
85 1,3-Dichlorobenzene	2.14056	2.11401	2.11401	0.010	-1.24011	30.00000	Averaged
87 1,4-Dichlorobenzene	2.13297	2.11735	2.11735	0.010	-0.73220	30.00000	Averaged
89 n-Butylbenzene	3.92836	4.30519	4.30519	0.010	9.59262	30.00000	Averaged
90 1,2-Dichlorobenzene	2.03672	2.00653	2.00653	0.010	-1.48211	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.19786	0.18944	0.18944	0.010	-4.25987	30.00000	Averaged
93 1,2,4-Trichlorobenzene	1.01748	1.04954	1.04954	0.010	3.15116	30.00000	Averaged
94 Hexachlorobutadiene	0.71961	0.75301	0.75301	0.010	4.64238	30.00000	Averaged
95 Naphthalene	2.04365	1.95321	1.95321	0.010	-4.42534	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.77495	0.81742	0.81742	0.010	5.48069	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.27455
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

QC Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**240718**			**Matrix:**	**WATER**
Lab Sample ID:	**1201970914**				
Client Sample:	**QC for batch 922254**	**Client:**	**ORNL015**	**Project:**	**QC**
Client ID:	**MB for batch 922254**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**922254**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/12/2009 19:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**11/12/2009 19:47**				
Data File:	**4k407BO.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00	10.0
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00	10.0
74-83-9	Bromomethane	U	1.00	ug/L	0.300	1.00	10.0
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00	10.0
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.300	1.00	10.0
67-64-1	Acetone	U	10.0	ug/L	3.50	10.0	10.0
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00	10.0
75-09-2	Methylene chloride	U	10.0	ug/L	3.00	10.0	10.0
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00	5.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00	10.0
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00	10.0
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00	10.0
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00	10.0
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.300	1.00	10.0
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00	10.0
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00	10.0
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00	5.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00	10.0
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00	10.0
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00	10.0
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00	10.0
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00	10.0
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00	10.0
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00	10.0
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00	10.0
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.300	1.00	10.0
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00	10.0
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00	10.0
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00	10.0
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00	5.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00	10.0
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00	10.0
540-59-0	1,2-Dichloroethylene (total)	U	1.00	ug/L	0.300	1.00	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.300	1.00	5.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**240718**			**Matrix:**	**WATER**
Lab Sample ID:	**1201970917**				
Client Sample:	**QC for batch 922254**	**Client:**	**ORNL015**	**Project:**	**QC**
Client ID:	**LCS for batch 922254**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**922254**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**11/12/2009 17:31**	**Analyst:**	**CDS1**	**Purge Vol:**	**5 mL**
Prep Date:	**11/12/2009 17:31**				
Data File:	**4k402LO.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
74-87-3	Chloromethane		45.9	ug/L	0.300	1.00	10.0
75-01-4	Vinyl chloride		51.6	ug/L	0.500	1.00	10.0
74-83-9	Bromomethane		49.2	ug/L	0.300	1.00	10.0
75-00-3	Chloroethane		43.7	ug/L	0.300	1.00	10.0
75-69-4	Trichlorofluoromethane		50.4	ug/L	0.300	1.00	10.0
67-64-1	Acetone		177	ug/L	3.50	10.0	10.0
75-35-4	1,1-Dichloroethylene		43.6	ug/L	0.300	1.00	10.0
75-09-2	Methylene chloride		42.0	ug/L	3.00	10.0	10.0
75-15-0	Carbon disulfide		243	ug/L	1.25	5.00	5.00
75-34-3	1,1-Dichloroethane		47.7	ug/L	0.300	1.00	10.0
78-93-3	2-Butanone		176	ug/L	1.25	5.00	10.0
67-66-3	Chloroform		51.0	ug/L	0.250	1.00	10.0
71-55-6	1,1,1-Trichloroethane		53.6	ug/L	0.325	1.00	10.0
56-23-5	Carbon tetrachloride		55.4	ug/L	0.300	1.00	10.0
107-06-2	1,2-Dichloroethane		49.6	ug/L	0.250	1.00	10.0
71-43-2	Benzene		45.3	ug/L	0.300	1.00	10.0
79-01-6	Trichloroethylene		48.3	ug/L	0.250	1.00	5.00
78-87-5	1,2-Dichloropropane		44.7	ug/L	0.250	1.00	10.0
75-27-4	Bromodichloromethane		50.6	ug/L	0.250	1.00	10.0
108-10-1	4-Methyl-2-pentanone		222	ug/L	1.25	5.00	10.0
10061-01-5	cis-1,3-Dichloropropylene		45.6	ug/L	0.250	1.00	10.0
108-88-3	Toluene		48.4	ug/L	0.250	1.00	10.0
10061-02-6	trans-1,3-Dichloropropylene		52.8	ug/L	0.250	1.00	10.0
79-00-5	1,1,2-Trichloroethane		49.0	ug/L	0.250	1.00	10.0
591-78-6	2-Hexanone		223	ug/L	1.25	5.00	10.0
127-18-4	Tetrachloroethylene		47.8	ug/L	0.300	1.00	10.0
106-93-4	1,2-Dibromoethane		47.7	ug/L	0.250	1.00	10.0
108-90-7	Chlorobenzene		49.6	ug/L	0.250	1.00	10.0
100-41-4	Ethylbenzene		51.8	ug/L	0.250	1.00	10.0
100-42-5	Styrene		50.5	ug/L	0.250	1.00	5.00
75-25-2	Bromoform		48.1	ug/L	0.250	1.00	10.0
79-34-5	1,1,2,2-Tetrachloroethane		45.8	ug/L	0.250	1.00	10.0
540-59-0	1,2-Dichloroethylene (total)		94.1	ug/L	0.300	1.00	5.00
1330-20-7	Xylenes (total)		149	ug/L	0.300	1.00	5.00

Miscellaneous Data

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 8/3/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1682

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 8/3/2009

(See pg. 120 for ICAL Std. Scl. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 080309V4

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM090604-01	1	1	1	
SS	UVM090518-02	1	1	1	
LCS/MS					
BFB	UVM090518-02				1
SHORT					
DHEC					

Purge Amount

5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
3 Aug 2009	02:21	4W101.D	UVM090518-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
3 Aug 2009	02:49	4W102.D	12018----	GEL	BLANK	5ML	1	N/A	2	w	ACJ	N/A	X	
3 Aug 2009	03:16	4W103.D	W4VM090803-01	GEL	VSTD0005	5ML	1	N/A	3	w	ACJ	N/A	O	UVM090603-01C/UVM090709-01C
3 Aug 2009	03:43	4W104.D	W4VM090803-02	GEL	VSTD001	5ML	1	N/A	4	w	ACJ	N/A	O	UVM090603-02C/UVM090709-02C
3 Aug 2009	04:11	4W105.D	W4VM090803-03	GEL	VSTD001	5ML	1	N/A	5	w	ACJ	N/A	X	UVM090603-02C/UVM090709-02C; NOT NEEDED
3 Aug 2009	04:38	4W106.D	W4VM090803-04	GEL	VSTD002	5ML	1	N/A	6	w	ACJ	N/A	O	UVM090603-03C/UVM090709-03C
3 Aug 2009	05:05	4W107.D	W4VM090803-05	GEL	VSTD005	5ML	1	N/A	7	w	ACJ	N/A	O	UVM090603-04C/UVM090709-04C
3 Aug 2009	05:32	4W108.D	W4VM090803-06	GEL	VSTD010	5ML	1	N/A	8	w	ACJ	N/A	O	UVM090603-05C/UVM090709-05C
3 Aug 2009	05:59	4W109.D	W4VM090803-07	GEL	VSTD020	5ML	1	N/A	9	w	ACJ	N/A	O	UVM090603-06C/UVM090709-06C
3 Aug 2009	06:26	4W110.D	W4VM090803-08	GEL	VSTD050	5ML	1	N/A	10	w	ACJ	N/A	O	UVM090603-07C/UVM090709-07C
3 Aug 2009	06:54	4W111.D	W4VM090803-09	GEL	VSTD100	5ML	1	N/A	11	w	ACJ	N/A	O	UVM090603-08C/UVM090709-08C
3 Aug 2009	07:21	4W112.D	12018----	GEL	BLANK	5ML	1	N/A	12	w	ACJ	N/A	X	
3 Aug 2009	07:48	4W113.D	W4VM090803-10	GEL	VSTD005S	5ML	1	N/A	13	w	ACJ	N/A	O	UVM090731-01/UVM090625-01E
3 Aug 2009	08:15	4W114.D	W4VM090803-11	GEL	VSTD010S	5ML	1	N/A	14	w	ACJ	N/A	O	UVM090731-02/UVM090625-02E
3 Aug 2009	08:42	4W115.D	W4VM090803-12	GEL	VSTD025S	5ML	1	N/A	15	w	ACJ	N/A	O	UVM090731-03/UVM090625-03E
3 Aug 2009	09:09	4W116.D	W4VM090803-13	GEL	VSTD050S	5ML	1	N/A	16	w	ACJ	N/A	O	UVM090731-04/UVM090625-04E
3 Aug 2009	09:36	4W117.D	W4VM090803-14	GEL	VSTD100S	5ML	1	N/A	17	w	ACJ	N/A	O	UVM090731-05/UVM090625-05E
3 Aug 2009	10:03	4W118.D	W4VM090803-15	GEL	VSTD250S	5ML	1	N/A	18	w	ACJ	N/A	O	UVM090731-06/UVM090625-06E
3 Aug 2009	10:30	4W119.D	W4VM090803-16	GEL	VSTD500S	5ML	1	N/A	19	w	ACJ	N/A	O	UVM090731-07/UVM090625-07E
3 Aug 2009	10:57	4W120.D	12018----	GEL	BLANK	5ML	1	N/A	20	w	ACJ	N/A	X	
3 Aug 2009	11:24	4W121.D	W4VM090803-17	GEL	ICV	5ML	1	N/A	21	w	ACJ	N/A	X	UVM090708-01D/IVM090730-01
3 Aug 2009	11:51	4W122.D	W4VM090803-18	GEL	ICV	5ML	1	N/A	22	w	ACJ	N/A	O	UVM090624-01D/IVM090730-01
3 Aug 2009	12:19	4W123.D	W4VM090803-19	GEL	SHORTICV	5ML	1	N/A	23	w	ACJ	N/A	O	UVM090701-08B/UVM090624-02D
3 Aug 2009	12:46	4W124.D	12018----	GEL	BLANK	5ML	1	N/A	24	w	ACJ	N/A	X	

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/12/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1871

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 8/3/2009

(See pg. 120 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 111209V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091112-01		5+5		
IS	UVM091020-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS	W4VM091112-01			5+5	
BFB	UVM091020-02				1
SHORT	UVM091023-08A		5	5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
N/A	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/12/2009 17:04	4K401.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/12/2009 17:31	4K402.D	W4VM091112-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091111-01A/IVM091111-01
11/12/2009 17:58	4K403.D	W4VM091112-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	X	UVM091111-01A/IVM091111-01
11/12/2009 18:25	4K404.D	UVM091023-08A	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	
11/12/2009 18:52	4K405.D	UVM091023-08A	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	X	
11/12/2009 19:19	4K406.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
11/12/2009 19:47	4K407.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	0	
11/12/2009 21:41	4K408.D	240726001	ENCN	922255	5ML	1	PH2	8	W	ACJ	N	O	
11/12/2009 22:09	4K409.D	240324002	NFSR	922256	5ML	1	PH2	9	W	ACJ	N	O	
11/12/2009 22:36	4K410.D	240713001	ORNL	922254	5ML	1	PH7	10	W	ACJ	N	O	
11/12/2009 23:03	4K411.D	240718001	ORNL	922254	5ML	1	PH7	11	W	ACJ	N	O	
11/12/2009 23:30	4K412.D	1201970921	NFSR	922256	5ML	1	PH2	12	W	ACJ	N	O	MS 240324002
11/12/2009 23:57	4K413.D	1201970922	NFSR	922256	5ML	1	PH2	13	W	ACJ	N	O	MSD 240324002
11/13/2009 0:24	4K414.D	1201970915	ORNL	922254	5ML	1	PH7	14	W	ACJ	N	O	MS 240713001
11/13/2009 0:52	4K415.D	1201970916	ORNL	922254	5ML	1	PH7	15	W	ACJ	N	O	MSD 240713001
11/13/2009 1:19	4K416.D	12019----	GEL	BLANK	5ML	1	N/A	16	W	ACJ	N/A	X	
11/13/2009 1:47	4K417.D	12019----	GEL	BLANK	5ML	1	N/A	17	W	ACJ	N/A	X	
11/13/2009 2:14	4K418.D	240315001	SWPC	921697	5ML	1	PH2	18	W	ACJ	N	O	
11/13/2009 2:41	4K419.D	240315002	SWPC	921697	5ML	1	PH2	19	W	ACJ	N	O	
11/13/2009 3:08	4K420.D	240315003	SWPC	921697	5ML	1	PH2	20	W	ACJ	N	O	
11/13/2009 3:35	4K421.D	240315004	SWPC	921697	5ML	1	PH2	21	W	ACJ	N	O	
11/13/2009 4:03	4K422.D	1201969672	SWPC	921697	5ML	1	PH2	22	W	ACJ	N	O	MS 240315001
11/13/2009 4:29	4K423.D	1201969673	SWPC	921697	5ML	1	PH2	23	W	ACJ	N	O	MSD 240315001
11/13/2009 4:56	4K424.D	12019----	GEL	BLANK	5ML	1	N/A	24	W	ACJ	N/A	X	
11/13/2009 5:24	4K425.D	12019----	GEL	BLANK	5ML	1	N/A	25	W	ACJ	N/A	X	
11/13/2009 5:51	4K426.D	12019----	GEL	BLANK	5ML	1	N/A	26	W	ACJ	N/A	X	
11/13/2009 6:18	4K427.D	12019----	GEL	BLANK	5ML	1	N/A	27	W	ACJ	N/A	X	
11/13/2009 6:44	4K428.D	12019----	GEL	BLANK	5ML	1	N/A	28	W	ACJ	N/A	X	

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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241832 and 241835
SDG # : 10-669

December 01, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 25, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241832001	RE03-09-14130
241832002	RE03-10-2732
241832003	RE03-10-2733
241832004	RE03-10-2731
241835001	RE03-10-2745
241835002	RE03-10-2744
241835003	RE03-10-2757
241835004	RE03-10-2746
241835005	RE03-10-2759
241835006	RE03-10-2758

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for D Francis

Valerie Davis
Project Manager

List of current GEL Certifications as of 01 December 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-669

REQUEST NUMBER: 10-669

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241832, 241835

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14130	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2732	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2733	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2731	1	POLY	Metals+CN - GEL	Ice	S
RE03-10-2745	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2745	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2744	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2744	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2757	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2757	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2746	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2746	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2759	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2759	1	POLY	TCN	Sodium Hydroxide	W
RE03-10-2758	1	POLY	METALS-GEL	Nitric Acid	W
RE03-10-2758	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/24/09	1400	Patricia Dover-Dent	P. Dover-Dent	11-25-09	09:10
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-669

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-669
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009
TURNAROUND/REPORT DUE: 12/24/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14130	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
		1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-669

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-10-2759	W	11/23/2009	
	SW-846:6020	1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	
		1	RE03-10-2759	W	11/23/2009	
	SW-846:9012A	1	RE03-09-14130	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
		1	RE03-10-2744	W	11/23/2009	
		1	RE03-10-2745	W	11/23/2009	
		1	RE03-10-2746	W	11/23/2009	
		1	RE03-10-2757	W	11/23/2009	
		1	RE03-10-2758	W	11/23/2009	
		1	RE03-10-2759	W	11/23/2009	

Final Page of REQUEST NUMBER 10-669

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client:LANL	**SDG/ARCOC/Work Order:10-669**
Received By:Patricia Dover-Dent	**Date Received:November 25, 2009**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:20 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe
2	Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags **BLUE ICE** dry ice **NONE** other (describe) **2,4-6,14,16**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservative added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No Time on Chain of Custody**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:FED EX #'S

7209 7849 0285 2C
7209 7849 0230 2C
7209 7849 0300 2C
7209 7849 0322 4C
7209 7849 0296 4C
7209 7849 0241 4C
7209 7849 0311 5C
7209 7849 0274 6C
7209 7849 0263 14C
7209 7849 0252 16C

RADIOACTIVE SAMPLES IN THIS COOLER

PM (or PMA) review: Initials GRT Date 11-27-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0285
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156140-434 NAIT V3 09-06

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7849 0230
Mstr# 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NAIT V3 09-06

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0300
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054198D0

4c

FedEx Express

TRK# 0201 7209 7849 0322

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-0171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0296
Matr# 7209 7849 0285 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-0171
REF: 6B010AMR1A015AGWH0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7849 0241
Matr# 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-0171
REF: 6B010AMR1A015AGWL0

5c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0311
Matr# 7209 7849 0300 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-0171
REF: 6B010AMR2A05419GD0

6c

FedEx Express

RADIOACTIVE SAMPLES

3 of 3
MPS# 0263 7209 7849 0274
Matr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 42.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

14c

FedEx Express

2 of 3
MPS# 0263 7209 7849 0263
Mstr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156140-434 Rev V 03-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

16C

FedEx Express

1 of 3
TRK# 0201 7209 7849 0252
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-669

Sample Analysis

Sample ID	Client ID
241832001	RE03-09-14130
241832002	RE03-10-2732
241832003	RE03-10-2733
241832004	RE03-10-2731
1201985642	Method Blank (MB) **ICP**
1201997323	Method Blank (MB) **ICP**
1201985643	Laboratory Control Sample (LCS)
1201997324	Laboratory Control Sample (LCS)
1201985646	241838002(WST03-10-2134L) Serial Dilution (SD)
1201985644	241838002(WST03-10-2134D) Sample Duplicate (DUP)
1201985645	241838002(WST03-10-2134S) Matrix Spike (MS)
1201985647	241838002(WST03-10-2134SD) Matrix Spike Duplicate (MSD)
1201985796	Method Blank (MB) **ICP-MS**
1201985797	Laboratory Control Sample (LCS)
1201985800	241901001(RE03-09-13923L) Serial Dilution (SD)
1201985798	241901001(RE03-09-13923D) Sample Duplicate (DUP)
1201985799	241901001(RE03-09-13923S) Matrix Spike (MS)
1201985801	241901001(RE03-09-13923SD) Matrix Spike Duplicate (MSD)
1201984341	Method Blank (MB) **CVAA**
1201984342	Laboratory Control Sample (LCS)
1201984345	241838002(WST03-10-2134L) Serial Dilution (SD)
1201984343	241838002(WST03-10-2134D) Sample Duplicate (DUP)
1201984344	241838002(WST03-10-2134S) Matrix Spike (MS)
1201984346	241838002(WST03-10-2134SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	928613, 933564, 928677 and 928047
Prep Batch :	928612, 933563, 928676 and 928046
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241838002 (WST03-10-2134)-ICP and CVAA and 241901001 (RE03-09-13923)-ICP-MS.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of calcium, magnesium, potassium and silicon as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of calcium, magnesium, potassium, lithium and nickel as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exceptions of manganese and titanium as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of barium as indicated by the "*" qualifier.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all

initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 768907, 770093 and 772335. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nick Cole A. Elmore **Date:** 12.21.09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832001 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14130 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.966

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	458000	ug/Kg		6620	19500	19500	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-36-0	Antimony	953	ug/Kg	U	314	953	953	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-38-2	Arsenic	0.591	mg/kg	J	0.195	0.973	0.973	2	MS	RMJ	12/10/09 21:22	091209-5	928677
7440-39-3	Barium	13600	ug/Kg		97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-41-7	Beryllium	0.294	mg/kg		0.0195	0.0973	0.0973	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-42-8	Boron	1110	ug/Kg	J	973	4870	4870	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-43-9	Cadmium	487	ug/Kg	U	97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-70-2	Calcium	177000	ug/Kg		7620	23800	23800	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-47-3	Chromium	685	ug/Kg		146	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-48-4	Cobalt	236	ug/Kg	J	146	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-50-8	Copper	1240	ug/Kg		292	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-89-6	Iron	6340000	ug/Kg		7780	24300	24300	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-92-1	Lead	5370	ug/Kg		243	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-93-2	Lithium	11.7	mg/kg		0.389	1.95	1.95	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7439-95-4	Magnesium	80300	ug/Kg		8100	28600	28600	1	P	HSC	12/18/09 11:47	121809A-1	933564
7439-96-5	Manganese	306000	ug/Kg		195	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613
7439-97-6	Mercury	10.1	ug/kg	U	3.43	10.1	10.1	1	AV	JXL1	12/09/09 13:29	120909S1-6	928047
7440-02-0	Nickel	1.36	mg/kg		0.0973	0.389	0.389	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-09-7	Potassium	110000	ug/Kg		6100	23800	23800	1	P	HSC	12/18/09 11:47	121809A-1	933564
7782-49-2	Selenium	0.973	mg/kg	U	0.487	0.973	0.973	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-21-3	Silicon	335000	ug/Kg		1430	9530	9530	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-22-4	Silver	299	ug/Kg	J	97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-23-5	Sodium	62000	ug/Kg		6670	23800	23800	1	P	HSC	12/18/09 11:47	121809A-1	933564
7440-28-0	Thallium	0.329	mg/kg		0.0584	0.195	0.195	2	MS	BAJ	12/08/09 22:19	091208-3	928677
7440-32-6	Titanium	150000	ug/Kg		97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-61-1	Uranium	0.445	mg/kg		0.0128	0.0389	0.0389	2	MS	RMJ	12/07/09 12:21	091206-4	928677
7440-62-2	Vanadium	2100	ug/Kg		97.3	487	487	1	P	HSC	12/11/09 19:38	121109A-2	928613
7440-66-6	Zinc	29000	ug/Kg		321	973	973	1	P	HSC	12/11/09 19:38	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.595	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

933564	933563	SW846 3050B	0.525	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832002 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2732 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.72

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	560000	ug/Kg		6820	20100	20100	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-36-0	Antimony	941	ug/Kg	U	310	941	941	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-38-2	Arsenic	0.389	mg/kg	J	0.197	0.983	0.983	2	MS	RMJ	12/10/09 21:28	091209-5	928677
7440-39-3	Barium	5860	ug/Kg		100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-41-7	Beryllium	0.178	mg/kg		0.0197	0.0983	0.0983	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-42-8	Boron	1250	ug/Kg	J	1000	5010	5010	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-43-9	Cadmium	501	ug/Kg	U	100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-70-2	Calcium	473000	ug/Kg		7530	23500	23500	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-47-3	Chromium	841	ug/Kg		150	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-48-4	Cobalt	501	ug/Kg	U	150	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-50-8	Copper	598	ug/Kg	J	301	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-89-6	Iron	9560000	ug/Kg		8020	25100	25100	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-92-1	Lead	3270	ug/Kg		251	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-93-2	Lithium	7.2	mg/kg		0.393	1.97	1.97	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7439-95-4	Magnesium	1540000	ug/Kg		8000	28200	28200	1	P	HSC	12/18/09 11:51	121809A-1	933564
7439-96-5	Manganese	77100	ug/Kg		201	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613
7439-97-6	Mercury	11.9	ug/kg	U	4.04	11.9	11.9	1	AV	JXL1	12/09/09 13:31	120909S1-6	928047
7440-02-0	Nickel	0.601	mg/kg		0.0983	0.393	0.393	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-09-7	Potassium	1120000	ug/Kg		6020	23500	23500	1	P	HSC	12/18/09 11:51	121809A-1	933564
7782-49-2	Selenium	0.983	mg/kg	U	0.492	0.983	0.983	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-21-3	Silicon	592000	ug/Kg		1410	9410	9410	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-22-4	Silver	177	ug/Kg	J	100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-23-5	Sodium	191000	ug/Kg		6590	23500	23500	1	P	HSC	12/18/09 11:51	121809A-1	933564
7440-28-0	Thallium	0.197	mg/kg	U	0.059	0.197	0.197	2	MS	BAJ	12/08/09 22:24	091208-3	928677
7440-32-6	Titanium	165000	ug/Kg		100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-61-1	Uranium	0.672	mg/kg		0.013	0.0393	0.0393	2	MS	RMJ	12/07/09 12:27	091206-4	928677
7440-62-2	Vanadium	1810	ug/Kg		100	501	501	1	P	HSC	12/11/09 19:45	121109A-2	928613
7440-66-6	Zinc	16100	ug/Kg		331	1000	1000	1	P	HSC	12/11/09 19:45	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.506	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.5	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.51	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933564	933563	SW846 3050B	0.533	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832003 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2733 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 96.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	404000	ug/Kg		6900	20300	20300	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-36-0	Antimony	381	ug/Kg	J	321	972	972	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-38-2	Arsenic	0.578	mg/kg	J	0.2	1	1	2	MS	RMJ	12/10/09 21:34	091209-5	928677
7440-39-3	Barium	12300	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-41-7	Beryllium	0.196	mg/kg		0.02	0.1	0.1	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-42-8	Boron	5070	ug/Kg	U	1010	5070	5070	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-43-9	Cadmium	507	ug/Kg	U	101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-70-2	Calcium	241000	ug/Kg		7780	24300	24300	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-47-3	Chromium	956	ug/Kg		152	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-48-4	Cobalt	217	ug/Kg	J	152	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-50-8	Copper	875	ug/Kg	J	304	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-89-6	Iron	7560000	ug/Kg		8110	25400	25400	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-92-1	Lead	4080	ug/Kg		254	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-93-2	Lithium	8.33	mg/kg		0.401	2	2	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7439-95-4	Magnesium	109000	ug/Kg		8270	29200	29200	1	P	HSC	12/18/09 11:54	121809A-1	933564
7439-96-5	Manganese	245000	ug/Kg		203	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613
7439-97-6	Mercury	11.3	ug/kg	U	3.84	11.3	11.3	1	AV	JXL1	12/09/09 13:33	120909S1-6	928047
7440-02-0	Nickel	1.29	mg/kg		0.1	0.401	0.401	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-09-7	Potassium	115000	ug/Kg		6220	24300	24300	1	P	HSC	12/18/09 11:54	121809A-1	933564
7782-49-2	Selenium	1	mg/kg	U	0.501	1	1	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-21-3	Silicon	380000	ug/Kg		1460	9720	9720	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-22-4	Silver	303	ug/Kg	J	101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-23-5	Sodium	116000	ug/Kg		6810	24300	24300	1	P	HSC	12/18/09 11:54	121809A-1	933564
7440-28-0	Thallium	0.0748	mg/kg	J	0.0601	0.2	0.2	2	MS	BAJ	12/08/09 22:28	091208-3	928677
7440-32-6	Titanium	186000	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-61-1	Uranium	0.483	mg/kg		0.0132	0.0401	0.0401	2	MS	RMJ	12/07/09 12:33	091206-4	928677
7440-62-2	Vanadium	1830	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:52	121109A-2	928613
7440-66-6	Zinc	30800	ug/Kg		335	1010	1010	1	P	HSC	12/11/09 19:52	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.551	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.511	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933564	933563	SW846 3050B	0.533	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241832004 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2731 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	470000	ug/Kg		6900	20300	20300	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-36-0	Antimony	990	ug/Kg	U	327	990	990	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-38-2	Arsenic	0.313	mg/kg	J	0.203	1.01	1.01	2	MS	RMJ	12/10/09 21:40	091209-5	928677
7440-39-3	Barium	8770	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-41-7	Beryllium	0.250	mg/kg		0.0203	0.101	0.101	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-42-8	Boron	5070	ug/Kg	U	1010	5070	5070	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-43-9	Cadmium	507	ug/Kg	U	101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-70-2	Calcium	215000	ug/Kg		7920	24700	24700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-47-3	Chromium	979	ug/Kg		152	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-48-4	Cobalt	185	ug/Kg	J	152	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-50-8	Copper	1020	ug/Kg		304	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-89-6	Iron	5400000	ug/Kg		8120	25400	25400	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-92-1	Lead	4650	ug/Kg		254	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-93-2	Lithium	5.1	mg/kg		0.405	2.03	2.03	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7439-95-4	Magnesium	92100	ug/Kg		8410	29700	29700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7439-96-5	Manganese	202000	ug/Kg		203	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613
7439-97-6	Mercury	11.2	ug/kg	U	3.81	11.2	11.2	1	AV	JXL1	12/09/09 13:34	120909S1-6	928047
7440-02-0	Nickel	0.894	mg/kg		0.101	0.405	0.405	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-09-7	Potassium	112000	ug/Kg		6330	24700	24700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7782-49-2	Selenium	1.01	mg/kg	U	0.506	1.01	1.01	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-21-3	Silicon	375000	ug/Kg		1480	9900	9900	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-22-4	Silver	241	ug/Kg	J	101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-23-5	Sodium	130000	ug/Kg		6930	24700	24700	1	P	HSC	12/18/09 11:58	121809A-1	933564
7440-28-0	Thallium	0.203	mg/kg	U	0.0608	0.203	0.203	2	MS	BAJ	12/08/09 22:33	091208-3	928677
7440-32-6	Titanium	95800	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-61-1	Uranium	0.451	mg/kg		0.0134	0.0405	0.0405	2	MS	RMJ	12/07/09 12:39	091206-4	928677
7440-62-2	Vanadium	1070	ug/Kg		101	507	507	1	P	HSC	12/11/09 19:59	121109A-2	928613
7440-66-6	Zinc	32200	ug/Kg		335	1010	1010	1	P	HSC	12/11/09 19:59	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.558	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.515	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933564	933563	SW846 3050B	0.527	g	50	mL	12/16/09	FGA

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Beryllium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	07–DEC–09 11:10	091206–4
	Lithium	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	07–DEC–09 11:10	091206–4
	Nickel	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	07–DEC–09 11:10	091206–4
	Selenium	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	07–DEC–09 11:10	091206–4
	Uranium	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	07–DEC–09 11:10	091206–4
	Thallium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	08–DEC–09 21:39	091208–3
	Mercury	5.14	ug/L	5	ug/L	102.9	90.0 – 110.0	AV	09–DEC–09 09:59	120909S1–6
	Arsenic	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	10–DEC–09 18:37	091209–5
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Barium	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Boron	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Cadmium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Copper	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Lead	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Silver	263	ug/L	250	ug/L	105.1	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Titanium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Vanadium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Zinc	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Potassium	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Silicon	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Sodium	2560	ug/L	2500	ug/L	102.3	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
CCV01										
	Beryllium	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	07–DEC–09 11:40	091206–4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lithium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	07–DEC–09 11:40	091206–4
	Nickel	50.3	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	07–DEC–09 11:40	091206–4
	Selenium	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	07–DEC–09 11:40	091206–4
	Uranium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	07–DEC–09 11:40	091206–4
	Thallium	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	08–DEC–09 22:01	091208–3
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	09–DEC–09 10:04	120909S1–6
	Arsenic	48.5	ug/L	50	ug/L	97	90.0 – 110.0	MS	10–DEC–09 19:06	091209–5
	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Barium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Boron	526	ug/L	500	ug/L	105.1	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Cadmium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Chromium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Lead	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Titanium	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Zinc	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Antimony	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Potassium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Sodium	10200	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
CCV02										
	Beryllium	52.9	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4
	Lithium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4

METALS
--2a--
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4
	Selenium	48.3	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4
	Uranium	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4
	Thallium	51.9	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	08–DEC–09 22:42	091208–3
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09–DEC–09 10:24	120909S1–6
	Arsenic	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	10–DEC–09 19:24	091209–5
	Aluminum	4510	ug/L	5000	ug/L	90.2	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Barium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Boron	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Cadmium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Chromium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Iron	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Lead	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Manganese	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Silver	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Titanium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Zinc	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Antimony	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	18–DEC–09 03:46	121809A–1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	18–DEC–09 03:46	121809A–1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	18–DEC–09 03:46	121809A–1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	18–DEC–09 03:46	121809A–1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	18–DEC–09 03:46	121809A–1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	18–DEC–09 03:46	121809A–1
CCV03										
	Beryllium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	07–DEC–09 12:50	091206–4
	Lithium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	07–DEC–09 12:50	091206–4
	Nickel	49	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	07–DEC–09 12:50	091206–4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Selenium	46.6	ug/L	50	ug/L	93.2	90.0 – 110.0	MS	07-DEC-09 12:50	091206-4
	Uranium	52.3	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	07-DEC-09 12:50	091206-4
	Thallium	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	08-DEC-09 23:14	091208-3
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	09-DEC-09 10:44	120909S1-6
	Arsenic	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	10-DEC-09 20:05	091209-5
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Barium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Cadmium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Chromium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Copper	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Lead	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Manganese	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Titanium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Antimony	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Silicon	2470	ug/L	2500	ug/L	98.7	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Sodium	10100	ug/L	10000	ug/L	100.8	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
CCV04										
	Beryllium	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	07-DEC-09 13:55	091206-4
	Lithium	47.6	ug/L	50	ug/L	95.2	90.0 – 110.0	MS	07-DEC-09 13:55	091206-4
	Nickel	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	07-DEC-09 13:55	091206-4
	Selenium	45.6	ug/L	50	ug/L	91.2	90.0 – 110.0	MS	07-DEC-09 13:55	091206-4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Uranium	52.1	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	07-DEC-09 13:55	091206-4
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	09-DEC-09 11:04	120909S1-6
	Arsenic	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	10-DEC-09 20:59	091209-5
	Aluminum	4770	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Barium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Chromium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Lead	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Manganese	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Titanium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Antimony	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Magnesium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Silicon	2480	ug/L	2500	ug/L	99.2	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
CCV05										
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09-DEC-09 11:24	120909S1-6
	Arsenic	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	10-DEC-09 21:52	091209-5
	Aluminum	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2
	Boron	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Cobalt	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Copper	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Iron	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Lead	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Manganese	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Titanium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Zinc	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Antimony	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Potassium	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Silicon	2470	ug/L	2500	ug/L	98.9	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Sodium	11100	ug/L	10000	ug/L	111.2	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
CCV06										
	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	09–DEC–09 11:45	120909S1–6
	Arsenic	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	10–DEC–09 22:57	091209–5
	Aluminum	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Barium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Boron	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Cadmium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Copper	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Iron	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Lead	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Manganese	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Silver	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11-DEC-09 14:40	121109A-2
	Vanadium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11-DEC-09 14:40	121109A-2
	Zinc	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11-DEC-09 14:40	121109A-2
	Antimony	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	18-DEC-09 05:50	121809A-1
	Calcium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	18-DEC-09 05:50	121809A-1
	Magnesium	5520	ug/L	5000	ug/L	110.4	90.0 – 110.0	P	18-DEC-09 05:50	121809A-1
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18-DEC-09 05:50	121809A-1
	Silicon	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	18-DEC-09 05:50	121809A-1
	Sodium	10600	ug/L	10000	ug/L	105.5	90.0 – 110.0	P	18-DEC-09 05:50	121809A-1
CCV07										
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	09-DEC-09 12:05	120909S1-6
	Aluminum	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Boron	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Cadmium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Cobalt	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Copper	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Lead	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Silver	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Vanadium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Zinc	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11-DEC-09 15:57	121109A-2
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	18-DEC-09 06:30	121809A-1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	18-DEC-09 06:30	121809A-1
	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	18-DEC-09 06:30	121809A-1
	Potassium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	18-DEC-09 06:30	121809A-1
	Silicon	2520	ug/L	2500	ug/L	100.9	90.0 – 110.0	P	18-DEC-09 06:30	121809A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	10600	ug/L	10000	ug/L	105.8	90.0 – 110.0	P	18-DEC-09 06:30	121809A-1
CCV08										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	09-DEC-09 12:25	120909S1-6
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Barium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Chromium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Copper	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Iron	5280	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Manganese	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Titanium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Magnesium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Potassium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Silicon	2510	ug/L	2500	ug/L	100.5	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Sodium	10400	ug/L	10000	ug/L	104	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
CCV09										
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 – 120.0	AV	09-DEC-09 12:45	120909S1-6
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Barium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Boron	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Cadmium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Chromium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Copper	515	ug/L	500	ug/L	103	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Lead	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Manganese	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Silver	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Titanium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Vanadium	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	11–DEC–09 18:09	121109A–2
	Antimony	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Calcium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Potassium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Silicon	2530	ug/L	2500	ug/L	101.1	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
CCV10										
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	09–DEC–09 13:06	120909S1–6
	Aluminum	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Boron	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Cadmium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Chromium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Iron	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Lead	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Manganese	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Titanium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Antimony	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Calcium	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Potassium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Silicon	2540	ug/L	2500	ug/L	101.5	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
CCV11										
	Mercury	5.08	ug/L	5	ug/L	101.5	80.0 – 120.0	AV	09–DEC–09 13:26	120909S1–6
	Aluminum	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Boron	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Chromium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Copper	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Lead	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Manganese	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Silver	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Titanium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Vanadium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Zinc	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Antimony	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Potassium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Silicon	2540	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Sodium	10200	ug/L	10000	ug/L	102.4	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV12										
	Mercury	5.17	ug/L	5	ug/L	103.3	80.0 – 120.0	AV	09–DEC–09 13:46	120909S1–6
	Aluminum	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Barium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Boron	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Cadmium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Chromium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Cobalt	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Copper	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Iron	5350	ug/L	5000	ug/L	106.9	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Lead	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Silver	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Titanium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Vanadium	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Zinc	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11–DEC–09 20:55	121109A–2
	Antimony	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Potassium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Silicon	2550	ug/L	2500	ug/L	102	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
CCV13										
	Antimony	495	ug/L	500	ug/L	99	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Calcium	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Potassium	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
CCV14										
	Antimony	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Silicon	2540	ug/L	2500	ug/L	101.5	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Sodium	10200	ug/L	10000	ug/L	101.9	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
CCV15										
	Antimony	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Magnesium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Potassium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Silicon	2540	ug/L	2500	ug/L	101.7	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
CCV16										
	Antimony	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Calcium	4830	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Potassium	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
CCV17										
	Antimony	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	18–DEC–09 12:02	121809A–1
	Calcium	4820	ug/L	5000	ug/L	96.4	90.0 – 110.0	P	18–DEC–09 12:02	121809A–1
	Magnesium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	18–DEC–09 12:02	121809A–1
	Potassium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	18–DEC–09 12:02	121809A–1
	Silicon	2440	ug/L	2500	ug/L	97.7	90.0 – 110.0	P	18–DEC–09 12:02	121809A–1
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 – 110.0	P	18–DEC–09 12:02	121809A–1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-669

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.11	ug/L	2	ug/L	105.5	70.0 - 130.0	MS	07-DEC-09 11:22	091206-4
	Beryllium	.462	ug/L	.5	ug/L	92.4	70.0 - 130.0	MS	07-DEC-09 11:22	091206-4
	Uranium	.209	ug/L	.2	ug/L	104.5	70.0 - 130.0	MS	07-DEC-09 11:22	091206-4
	Selenium	5.06	ug/L	5	ug/L	101.1	70.0 - 130.0	MS	07-DEC-09 11:22	091206-4
	Lithium	9.79	ug/L	10	ug/L	97.9	70.0 - 130.0	MS	07-DEC-09 11:22	091206-4
	Thallium	1.26	ug/L	1	ug/L	125.9	70.0 - 130.0	MS	08-DEC-09 21:48	091208-3
	Mercury	.174	ug/L	.2	ug/L	87	70.0 - 130.0	AV	09-DEC-09 10:02	120909S1-6
	Arsenic	5.56	ug/L	5	ug/L	111.2	70.0 - 130.0	MS	10-DEC-09 18:49	091209-5
PQL01										
	Aluminum	226	ug/L	200	ug/L	113	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Iron	130	ug/L	100	ug/L	129.8	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Lead	10.6	ug/L	10	ug/L	106.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Barium	5.03	ug/L	5	ug/L	100.6	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Silver	5.23	ug/L	5	ug/L	104.6	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Manganese	10.3	ug/L	10	ug/L	102.9	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Cadmium	4.97	ug/L	5	ug/L	99.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Cobalt	4.82	ug/L	5	ug/L	96.3	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Vanadium	4.82	ug/L	5	ug/L	96.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Titanium	4.91	ug/L	5	ug/L	98.2	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Boron	49	ug/L	50	ug/L	98	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Zinc	9.96	ug/L	10	ug/L	99.6	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Copper	9.84	ug/L	10	ug/L	98.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Chromium	4.91	ug/L	5	ug/L	98.2	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Magnesium	300	ug/L	300	ug/L	100	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Sodium	305	ug/L	300	ug/L	101.7	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Calcium	178	ug/L	200	ug/L	89.2	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Silicon	100	ug/L	100	ug/L	100.2	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Antimony	9.77	ug/L	10	ug/L	97.7	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Potassium	178	ug/L	150	ug/L	118.6	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-669

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
PQL02										
	Magnesium	282	ug/L	300	ug/L	93.9	70.0 – 130.0	P	18-DEC-09 03:49	121809A-1
	Potassium	185	ug/L	150	ug/L	123.4	70.0 – 130.0	P	18-DEC-09 03:49	121809A-1
	Sodium	312	ug/L	300	ug/L	104	70.0 – 130.0	P	18-DEC-09 03:49	121809A-1
	Calcium	179	ug/L	200	ug/L	89.4	70.0 – 130.0	P	18-DEC-09 03:49	121809A-1
	Silicon	101	ug/L	100	ug/L	100.9	70.0 – 130.0	P	18-DEC-09 03:49	121809A-1
	Antimony	9.54	ug/L	10	ug/L	95.4	70.0 – 130.0	P	18-DEC-09 03:49	121809A-1
PQL03										
	Magnesium	295	ug/L	300	ug/L	98.4	70.0 – 130.0	P	18-DEC-09 04:01	121809A-1
	Antimony	10.8	ug/L	10	ug/L	107.7	70.0 – 130.0	P	18-DEC-09 04:01	121809A-1
	Sodium	304	ug/L	300	ug/L	101.4	70.0 – 130.0	P	18-DEC-09 04:01	121809A-1
	Potassium	184	ug/L	150	ug/L	122.6	70.0 – 130.0	P	18-DEC-09 04:01	121809A-1
	Calcium	180	ug/L	200	ug/L	89.9	70.0 – 130.0	P	18-DEC-09 04:01	121809A-1
	Silicon	99.6	ug/L	100	ug/L	99.6	70.0 – 130.0	P	18-DEC-09 04:01	121809A-1
PQL04										
	Sodium	339	ug/L	300	ug/L	113.1	70.0 – 130.0	P	18-DEC-09 04:42	121809A-1
	Antimony	7.46	ug/L	10	ug/L	74.6	70.0 – 130.0	P	18-DEC-09 04:42	121809A-1
	Calcium	178	ug/L	200	ug/L	88.8	70.0 – 130.0	P	18-DEC-09 04:42	121809A-1
	Magnesium	312	ug/L	300	ug/L	103.9	70.0 – 130.0	P	18-DEC-09 04:42	121809A-1
	Silicon	100	ug/L	100	ug/L	100.1	70.0 – 130.0	P	18-DEC-09 04:42	121809A-1
	Potassium	161	ug/L	150	ug/L	107.5	70.0 – 130.0	P	18-DEC-09 04:42	121809A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	07-DEC-09 11:16	091206-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	07-DEC-09 11:16	091206-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 11:16	091206-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 11:16	091206-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	07-DEC-09 11:16	091206-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	08-DEC-09 21:43	091208-3
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:01	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 18:43	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 11:14	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 11:14	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 11:14	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 02:53	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 02:53	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 02:53	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 02:53	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 02:53	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 02:53	121809A-1
CCB01										
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	07-DEC-09 11:46	091206-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	07-DEC-09 11:46	091206-4

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-669

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 11:46	091206-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 11:46	091206-4
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	07-DEC-09 11:46	091206-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	08-DEC-09 22:06	091208-3
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:06	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 19:12	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 12:00	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:00	121109A-2
	Boron	15.78	+/-50	J	10.0	50.0	SOL	P	11-DEC-09 12:00	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:00	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:00	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:00	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 12:00	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 12:00	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 12:00	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 12:00	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:00	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:00	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:00	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 12:00	121109A-2
	Antimony	3.99	+/-10	J	3.3	10.0	SOL	P	18-DEC-09 03:16	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 03:16	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 03:16	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 03:16	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 03:16	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 03:16	121809A-1
CCB02										
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	07-DEC-09 12:15	091206-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	07-DEC-09 12:15	091206-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 12:15	091206-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 12:15	091206-4

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 12:15	091206–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	08–DEC–09 22:47	091208–3
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:26	120909S1–6
	Arsenic	1.26	+/–5	J	1.0	5.0	SOL	MS	10–DEC–09 19:30	091209–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 12:16	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 12:16	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 12:16	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 12:16	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 12:16	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:16	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 12:16	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 03:53	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 03:53	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 03:53	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 03:53	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 03:53	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 03:53	121809A–1
CCB03										
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	07–DEC–09 12:56	091206–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	07–DEC–09 12:56	091206–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 12:56	091206–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 12:56	091206–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 12:56	091206–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	08–DEC–09 23:18	091208–3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:46	120909S1–6
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	10–DEC–09 20:11	091209–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 12:37	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:37	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 12:37	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:37	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:37	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:37	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 12:37	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 12:37	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 12:37	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:37	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:37	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:37	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:37	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 12:37	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 04:04	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 04:04	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 04:04	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 04:04	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 04:04	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 04:04	121809A–1
CCB04										
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	07–DEC–09 14:01	091206–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	07–DEC–09 14:01	091206–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 14:01	091206–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 14:01	091206–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	07–DEC–09 14:01	091206–4
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 11:06	120909S1–6
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	10–DEC–09 21:04	091209–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 13:09	121109A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 13:09	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 13:09	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 13:09	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 13:09	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 13:09	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 13:09	121109A–2
	Antimony	–3.87	+/–10	J	3.3	10.0	SOL	P	18–DEC–09 04:46	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 04:46	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 04:46	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 04:46	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 04:46	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 04:46	121809A–1
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 11:26	120909S1–6
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	10–DEC–09 21:58	091209–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 13:31	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 13:31	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 13:31	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 13:31	121109A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 13:31	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:31	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:31	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:31	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 13:31	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 05:15	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 05:15	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 05:15	121809A-1
	Potassium	192.14	+/-250	J	64.0	250	SOL	P	18-DEC-09 05:15	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 05:15	121809A-1
	Sodium	450.93	+/-250		70.0	250	SOL	P	18-DEC-09 05:15	121809A-1
CCB06										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 11:46	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 23:03	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 14:47	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 14:47	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 14:47	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 14:47	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 14:47	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 14:47	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 14:47	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 05:54	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 05:54	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 05:54	121809A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 05:54	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 05:54	121809A–1
	Sodium	92.26	+/–250	J	70.0	250	SOL	P	18–DEC–09 05:54	121809A–1
CCB07										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 12:06	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 16:04	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 16:04	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 16:04	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 16:04	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 16:04	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 16:04	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 16:04	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 16:04	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 16:04	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 16:04	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 16:04	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 16:04	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 16:04	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 16:04	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 06:33	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 06:33	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 06:33	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 06:33	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 06:33	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 06:33	121809A–1
CCB08										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 12:27	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 17:15	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 17:15	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 17:15	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 17:15	121109A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-669

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 17:15	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 06:58	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 06:58	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 06:58	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 06:58	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 06:58	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 06:58	121809A-1
CCB09										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 12:47	120909S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 18:16	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 18:16	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 18:16	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 18:16	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 18:16	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 18:16	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 18:16	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 18:16	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 18:16	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 18:16	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 18:16	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 18:16	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 18:16	121109A-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 18:16	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 07:38	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 07:38	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 07:38	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 07:38	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 07:38	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 07:38	121809A–1
CCB10										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 13:07	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 19:18	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 19:18	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 19:18	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 19:18	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 19:18	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 19:18	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 19:18	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 19:18	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 19:18	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 19:18	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 19:18	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 19:18	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 19:18	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 19:18	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 08:18	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 08:18	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 08:18	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 08:18	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 08:18	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 08:18	121809A–1
CCB11										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 13:28	120909S1–6

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 20:13	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 20:13	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 20:13	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 20:13	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 20:13	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 20:13	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 20:13	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 08:50	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 08:50	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 08:50	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 08:50	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 08:50	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 08:50	121809A-1
CCB12										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 13:48	120909S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 21:02	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 21:02	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 21:02	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 21:02	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 21:02	121109A-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 21:02	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 21:02	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 09:12	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 09:12	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 09:12	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 09:12	121809A-1
	Silicon	16.39	+/-100	J	15.0	100	SOL	P	18-DEC-09 09:12	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 09:12	121809A-1
CCB13										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 09:59	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 09:59	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 09:59	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 09:59	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 09:59	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 09:59	121809A-1
CCB14										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 10:37	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 10:37	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 10:37	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 10:37	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 10:37	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 10:37	121809A-1
CCB15										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 11:11	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 11:11	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 11:11	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 11:11	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 11:11	121809A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–669

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 11:11	121809A–1
CCB16										
	Antimony	–4.25	+/–10	J	3.3	10.0	SOL	P	18–DEC–09 11:43	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 11:43	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 11:43	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 11:43	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 11:43	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 11:43	121809A–1
CCB17										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 12:05	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 12:05	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 12:05	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 12:05	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 12:05	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 12:05	121809A–1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-669

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201984341								
	Mercury	3.78	ug/kg	+/-11.132	U	AV	3.78	11.1
1201985642								
	Aluminum	6490	ug/Kg	+/-19083.969	U	P	6490	19100
	Barium	239	ug/Kg	+/-477.099	J	P	95.4	477
	Boron	1220	ug/Kg	+/-4770.992	J	P	954	4770
	Cadmium	95.4	ug/Kg	+/-477.099	U	P	95.4	477
	Chromium	143	ug/Kg	+/-477.099	U	P	143	477
	Cobalt	143	ug/Kg	+/-477.099	U	P	143	477
	Copper	373	ug/Kg	+/-954.198	J	P	286	954
	Iron	7630	ug/Kg	+/-23854.962	U	P	7630	23900
	Lead	239	ug/Kg	+/-954.198	U	P	239	954
	Manganese	227	ug/Kg	+/-954.198	J	P	191	954
	Silver	95.4	ug/Kg	+/-477.099	U	P	95.4	477
	Titanium	95.4	ug/Kg	+/-477.099	U	P	95.4	477
	Vanadium	95.4	ug/Kg	+/-477.099	U	P	95.4	477
	Zinc	602	ug/Kg	+/-954.198	J	P	315	954
1201985796								
	Arsenic	0.197	mg/kg	+/-0.986	U	MS	0.197	0.986
	Beryllium	0.0197	mg/kg	+/-0.099	U	MS	0.0197	0.0986
	Lithium	0.394	mg/kg	+/-1.972	U	MS	0.394	1.97
	Nickel	0.0986	mg/kg	+/-0.394	U	MS	0.0986	0.394
	Selenium	0.493	mg/kg	+/-0.986	U	MS	0.493	0.986
	Thallium	0.0592	mg/kg	+/-0.197	U	MS	0.0592	0.197
	Uranium	0.013	mg/kg	+/-0.039	U	MS	0.013	0.0395
1201997323								
	Antimony	314	ug/Kg	+/-952.381	U	P	314	952
	Calcium	7620	ug/Kg	+/-23809.524	U	P	7620	23800
	Magnesium	8100	ug/Kg	+/-28571.429	U	P	8100	28600
	Potassium	6100	ug/Kg	+/-23809.524	U	P	6100	23800
	Silicon	1430	ug/Kg	+/-9523.81	U	P	1430	9520
	Sodium	6670	ug/Kg	+/-23809.524	U	P	6670	23800

METALS
–4–
Interference Check Sample

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	–1.71	ug/L					18–DEC–09 03:00	121809A–1
	Calcium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	18–DEC–09 03:00	121809A–1
	Magnesium	491000	ug/L	500000	ug/L	98.2	80.0 – 120.0	18–DEC–09 03:00	121809A–1
	Potassium	6.92	ug/L					18–DEC–09 03:00	121809A–1
	Silicon	17.1	ug/L					18–DEC–09 03:00	121809A–1
	Sodium	23.0	ug/L					18–DEC–09 03:00	121809A–1
ICSAB01									
	Antimony	486	ug/L	500	ug/L	97.1	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Calcium	485000	ug/L	500000	ug/L	97.1	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Magnesium	489000	ug/L	500000	ug/L	97.7	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Potassium	5190	ug/L	5000	ug/L	104	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Silicon	5030	ug/L	5000	ug/L	101	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Sodium	5150	ug/L	5000	ug/L	103	80.0 – 120.0	18–DEC–09 03:03	121809A–1

METALS
–4–
Interference Check Sample

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	511000	ug/L	500000	ug/L	102	80.0 – 120.0	11–DEC–09 11:28	121109A–2
	Barium	2.33	ug/L					11–DEC–09 11:28	121109A–2
	Boron	0.452	ug/L					11–DEC–09 11:28	121109A–2
	Cadmium	0.083	ug/L					11–DEC–09 11:28	121109A–2
	Chromium	1.51	ug/L					11–DEC–09 11:28	121109A–2
	Cobalt	–1.55	ug/L					11–DEC–09 11:28	121109A–2
	Copper	3.84	ug/L					11–DEC–09 11:28	121109A–2
	Iron	190000	ug/L	200000	ug/L	95	80.0 – 120.0	11–DEC–09 11:28	121109A–2
	Lead	–0.399	ug/L					11–DEC–09 11:28	121109A–2
	Manganese	10.7	ug/L					11–DEC–09 11:28	121109A–2
	Silver	–0.31	ug/L					11–DEC–09 11:28	121109A–2
	Titanium	–0.379	ug/L					11–DEC–09 11:28	121109A–2
	Vanadium	–0.315	ug/L					11–DEC–09 11:28	121109A–2
	Zinc	–8.01	ug/L					11–DEC–09 11:28	121109A–2
ICSAB01									
	Aluminum	513000	ug/L	500000	ug/L	103	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Barium	497	ug/L	500	ug/L	99.5	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Boron	512	ug/L	500	ug/L	102	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Cadmium	470	ug/L	500	ug/L	93.9	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Chromium	483	ug/L	500	ug/L	96.5	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Cobalt	447	ug/L	500	ug/L	89.4	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Copper	559	ug/L	500	ug/L	112	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Iron	191000	ug/L	200000	ug/L	95.3	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Lead	463	ug/L	500	ug/L	92.7	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Manganese	490	ug/L	500	ug/L	98.1	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Silver	275	ug/L	250	ug/L	110	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Titanium	512	ug/L	500	ug/L	102	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Vanadium	507	ug/L	500	ug/L	101	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Zinc	484	ug/L	500	ug/L	96.7	80.0 – 120.0	11–DEC–09 11:34	121109A–2

METALS
-4-
Interference Check Sample

SDG No: 10-669

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	-0.022	ug/L					08-DEC-09 21:52	091208-3
ICSAB01									
	Thallium	22.9	ug/L	20	ug/L	114	80.0 - 120.0	08-DEC-09 21:57	091208-3

METALS
–4–
Interference Check Sample

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS6

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.053	ug/L					07–DEC–09 11:28	091206–4
	Lithium	0.151	ug/L					07–DEC–09 11:28	091206–4
	Nickel	3.29	ug/L					07–DEC–09 11:28	091206–4
	Selenium	–0.982	ug/L					07–DEC–09 11:28	091206–4
	Uranium	–0.006	ug/L					07–DEC–09 11:28	091206–4
ICSAB01									
	Beryllium	20.5	ug/L	20	ug/L	102	80.0 – 120.0	07–DEC–09 11:34	091206–4
	Lithium	21.3	ug/L	20	ug/L	106	80.0 – 120.0	07–DEC–09 11:34	091206–4
	Nickel	23.1	ug/L	22.7	ug/L	102	80.0 – 120.0	07–DEC–09 11:34	091206–4
	Selenium	21.2	ug/L	20	ug/L	106	80.0 – 120.0	07–DEC–09 11:34	091206–4
	Uranium	22.2	ug/L	20	ug/L	111	80.0 – 120.0	07–DEC–09 11:34	091206–4

METALS
–4–
Interference Check Sample

SDG No: 10–669

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS6

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	–0.912	ug/L					10–DEC–09 18:55	091209–5
ICSAB01									
	Arsenic	21.6	ug/L	20	ug/L	108	80.0 – 120.0	10–DEC–09 19:00	091209–5

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–669 **Client ID** WST03–10–2134S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201984344

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	126		10.2	J	111	105		AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–669 **Client ID** WST03–10–2134SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201984346

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	142		10.2	J	123	107		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–669 **Client ID** WST03–10–2134S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201985645

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/Kg	75–125	46000		838	J	51100	88.3		P
Barium	ug/Kg	75–125	142000		80200		52500	118		P
Boron	ug/Kg	75–125	57900		3060	J	52500	105		P
Cadmium	ug/Kg	75–125	53800		107	U	52500	102		P
Calcium	ug/Kg	75–125	2680000		1480000		511000	235	N	P
Chromium	ug/Kg	75–125	61300		6610		52500	104		P
Cobalt	ug/Kg	75–125	56500		2170		52500	103		P
Copper	ug/Kg	75–125	62700		4920		52500	110		P
Iron	ug/Kg		13100000		10300000		525000	540	N/A	P
Lead	ug/Kg	75–125	64600		8090		52500	108		P
Magnesium	ug/Kg	75–125	2070000		889000		511000	231	N	P
Manganese	ug/Kg		471000		311000		52500	306	N/A	P
Potassium	ug/Kg	75–125	1520000		583000		511000	184	N	P
Silicon	ug/Kg	75–125	1570000		900000		511000	131	N	P
Silver	ug/Kg	75–125	56400		365	J	52500	107		P
Sodium	ug/Kg	75–125	663000		137000		511000	103		P
Titanium	ug/Kg		515000		314000		52500	383	N/A	P
Vanadium	ug/Kg	75–125	68400		11600		52500	108		P
Zinc	ug/Kg	75–125	93700		33400		52500	115		P
Aluminum	ug/Kg		8870000		5410000		525000	659	N/A	P

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-669 **Client ID** WST03-10-2134SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201985647

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		9470000		5410000		521000	779	N/A	P
Antimony	ug/Kg	75-125	47000		838	J	52000	88.8		P
Barium	ug/Kg	75-125	133000		80200		52100	101		P
Boron	ug/Kg	75-125	55800		3060	J	52100	101		P
Cadmium	ug/Kg	75-125	51600		107	U	52100	99.2		P
Calcium	ug/Kg	75-125	2210000		1480000		520000	140	N	P
Chromium	ug/Kg	75-125	59100		6610		52100	101		P
Cobalt	ug/Kg	75-125	52500		2170		52100	96.6		P
Copper	ug/Kg	75-125	60700		4920		52100	107		P
Iron	ug/Kg		10900000		10300000		521000	122	N/A	P
Lead	ug/Kg	75-125	59500		8090		52100	98.8		P
Magnesium	ug/Kg	75-125	1790000		889000		520000	174	N	P
Manganese	ug/Kg		325000		311000		52100	27.2	N/A	P
Potassium	ug/Kg	75-125	1340000		583000		520000	146	N	P
Silicon	ug/Kg	75-125	1470000		900000		520000	110		P
Silver	ug/Kg	75-125	53900		365	J	52100	103		P
Sodium	ug/Kg	75-125	651000		137000		520000	99		P
Titanium	ug/Kg		405000		314000		52100	176	N/A	P
Vanadium	ug/Kg	75-125	65400		11600		52100	103		P
Zinc	ug/Kg	75-125	83800		33400		52100	96.7		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–669 **Client ID** RE03–09–13923S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 81

Sample ID: 241901001 **Spike ID:** 1201985799

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	12		2.36		9.57	100		MS
Beryllium	mg/kg	75–125	6.76		1.17		5.98	93.5		MS
Lithium	mg/kg	75–125	26.3		20.7		5.98	95.2		MS
Nickel	mg/kg	75–125	13.1		7.88		5.98	87.3		MS
Selenium	mg/kg	75–125	2.04		0.599	U	2.39	85.4		MS
Thallium	mg/kg	75–125	13.2		0.719		12	104		MS
Uranium	mg/kg	75–125	6.51		0.491		5.98	101		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–669 **Client ID** RE03–09–13923SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 81

Sample ID: 241901001 **Spike ID:** 1201985801

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	11		2.36		9.59	90.5		MS
Beryllium	mg/kg	75–125	6.31		1.17		5.99	85.8		MS
Lithium	mg/kg	75–125	25.1		20.7		5.99	74.4	N	MS
Nickel	mg/kg	75–125	12		7.88		5.99	68	N	MS
Selenium	mg/kg	75–125	1.86		0.599	U	2.4	77.7		MS
Thallium	mg/kg	75–125	12.3		0.719		12	96.7		MS
Uranium	mg/kg	75–125	6.17		0.491		5.99	94.7		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134D

Sample ID: 241838002 **Duplicate ID:** 1201984343 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–11.4	10.2	J	8.63	J	16.9		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134SD

Sample ID: 1201984344 **Duplicate ID:** 1201984346 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	126		142		11.5		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134D

Sample ID: 241838002 **Duplicate ID:** 1201985644 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	5410000		4610000		16		P
Antimony	ug/Kg	+/–1050	838	J	993	J	16.9		P
Barium	ug/Kg	+/–20%	80200		65500		20.2	*	P
Boron	ug/Kg	+/–5260	3060	J	2490	J	20.7		P
Cadmium	ug/Kg		107	U	105	U			P
Calcium	ug/Kg	+/–20%	1480000		1480000		.552		P
Chromium	ug/Kg	+/–20%	6610		6980		5.48		P
Cobalt	ug/Kg	+/–526	2170		1800		18.6		P
Copper	ug/Kg	+/–1050	4920		4230		15		P
Iron	ug/Kg	+/–20%	10300000		9210000		10.8		P
Lead	ug/Kg	+/–20%	8090		7190		11.7		P
Magnesium	ug/Kg	+/–20%	889000		943000		5.87		P
Manganese	ug/Kg	+/–20%	311000		279000		10.7		P
Potassium	ug/Kg	+/–20%	583000		580000		.499		P
Silicon	ug/Kg	+/–20%	900000		951000		5.46		P
Silver	ug/Kg	+/–526	365	J	310	J	16.4		P
Sodium	ug/Kg	+/–20%	137000		132000		3.92		P
Titanium	ug/Kg	+/–20%	314000		269000		15.5		P
Vanadium	ug/Kg	+/–20%	11600		9560		19.3		P
Zinc	ug/Kg	+/–20%	33400		31300		6.6		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134SD

Sample ID: 1201985645 **Duplicate ID:** 1201985647 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	8870000		9470000		6.54		P
Antimony	ug/Kg	+/–20	46000		47000		2.24		P
Barium	ug/Kg	+/–20	142000		133000		6.64		P
Boron	ug/Kg	+/–20	57900		55800		3.78		P
Cadmium	ug/Kg	+/–20	53800		51600		4.05		P
Calcium	ug/Kg	+/–20	2680000		2210000		19.1		P
Chromium	ug/Kg	+/–20	61300		59100		3.77		P
Cobalt	ug/Kg	+/–20	56500		52500		7.33		P
Copper	ug/Kg	+/–20	62700		60700		3.3		P
Iron	ug/Kg	+/–20	13100000		10900000		18.3		P
Lead	ug/Kg	+/–20	64600		59500		8.24		P
Magnesium	ug/Kg	+/–20	2070000		1790000		14.3		P
Manganese	ug/Kg	+/–20	471000		325000		36.8	*	P
Potassium	ug/Kg	+/–20	1520000		1340000		12.4		P
Silicon	ug/Kg	+/–20	1570000		1470000		6.24		P
Silver	ug/Kg	+/–20	56400		53900		4.51		P
Sodium	ug/Kg	+/–20	663000		651000		1.73		P
Titanium	ug/Kg	+/–20	515000		405000		23.8	*	P
Vanadium	ug/Kg	+/–20	68400		65400		4.62		P
Zinc	ug/Kg	+/–20	93700		83800		11.2		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13923D

Sample ID: 241901001 **Duplicate ID:** 1201985798 **Percent Solids for Dup:** 81

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.2	2.36		2.18		7.91		MS
Beryllium	mg/kg	+/–20%	1.17		1.12		3.95		MS
Lithium	mg/kg	+/–20%	20.7		19.4		6.33		MS
Nickel	mg/kg	+/–20%	7.88		7.11		10.3		MS
Selenium	mg/kg		0.599	U	0.599	U			MS
Thallium	mg/kg	+/–.24	0.719		0.61		16.4		MS
Uranium	mg/kg	+/–20%	0.491		0.493		.39		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13923SD

Sample ID: 1201985799 **Duplicate ID:** 1201985801 **Percent Solids for Dup:** 81

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	12		11		8.14		MS
Beryllium	mg/kg	+/–20	6.76		6.31		6.87		MS
Lithium	mg/kg	+/–20	26.3		25.1		4.81		MS
Nickel	mg/kg	+/–20	13.1		12		9.14		MS
Selenium	mg/kg	+/–20	2.04		1.86		9.28		MS
Thallium	mg/kg	+/–20	13.2		12.3		7.03		MS
Uranium	mg/kg	+/–20	6.51		6.17		5.36		MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10--669

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201984342								
	Mercury	ug/kg	5150	5370		104	71.6–128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-669

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985643								
	Aluminum	ug/Kg	7730000	6710000		86.8	56-144	P
	Barium	ug/Kg	472000	461000		97.7	80-120	P
	Boron	ug/Kg	130000	133000		102	75-125	P
	Cadmium	ug/Kg	117000	117000		99.9	81-120	P
	Chromium	ug/Kg	72800	73500		101	80-120	P
	Cobalt	ug/Kg	82500	78400		95	81-120	P
	Copper	ug/Kg	100000	99600		99.6	81-118	P
	Iron	ug/Kg	14500000	17800000		123	51-149	P
	Lead	ug/Kg	166000	162000		97.3	79-121	P
	Manganese	ug/Kg	374000	355000		94.9	81-119	P
	Silver	ug/Kg	123000	130000		105	66-134	P
	Titanium	ug/Kg	269000	354000		132	39-161	P
	Vanadium	ug/Kg	138000	146000		106	79-121	P
	Zinc	ug/Kg	201000	190000		94.7	80-121	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–669

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985797								
	Arsenic	mg/kg	255	302		119	83–120	MS
	Beryllium	mg/kg	86.4	96.8		112	81.2–126.8	MS
	Lithium	mg/kg	8.01	9.38	J	117	66.7–133.7	MS
	Nickel	mg/kg	101	113		112	83.3–121.4	MS
	Selenium	mg/kg	171	188		110	80.2–125.9	MS
	Thallium	mg/kg	203	242		119	78–123.2	MS
	Uranium	mg/kg	2.12	2.09		98.5	61.9–130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-669

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201997324								
	Antimony	ug/Kg	173000	158000		91.5	71-130	P
	Calcium	ug/Kg	9870000	9440000		95.6	83-117	P
	Magnesium	ug/Kg	4000000	3840000		96.1	79-122	P
	Potassium	ug/Kg	4300000	4050000		94.2	74-127	P
	Silicon	ug/Kg	1210000	1340000		111	10-190	P
	Sodium	ug/Kg	1020000	972000		95.3	74-127	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-669 **Client ID** WST03-10-2134L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241838002 **Serial Dilution ID:** 1201984345

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.171	J	.34	U	100			AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–669 **Client ID** WST03–10–2134L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241838002 **Serial Dilution ID:** 1201985646

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	50700		50500		.394		10	P
Antimony	8.36	J	16.5	U	100			P
Barium	752		780		3.72		10	P
Boron	28.7	J	50	U	100			P
Cadmium	1	U	5	U				P
Calcium	14800		14700		.676		10	P
Chromium	62		63.5		2.42			P
Cobalt	20.4		22.1	J	8.33			P
Copper	46.1		44.6	J	3.36			P
Iron	96300		98000		1.77		10	P
Lead	75.9		71.5		5.8			P
Magnesium	8870		8850		.225		10	P
Manganese	2910		3070		5.33		10	P
Potassium	5810		5950		2.41		10	P
Silicon	8980		9100		1.34		10	P
Silver	3.43	J	5	U	100			P
Sodium	1370		1340		2.55			P
Titanium	2940		3020		2.55		10	P
Vanadium	109		107		2.29		10	P
Zinc	313		316		.958		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-669 **Client ID** RE03-09-13923L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241901001 **Serial Dilution ID:** 1201985800

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	9.82		11.5	J	16.6			MS
Beryllium	4.88		5.3		8.61			MS
Lithium	86.1		91		5.69			MS
Nickel	32.9		37.1		12.8			MS
Selenium	2.5	U	12.5	U				MS
Thallium	3		3.69	J	22.8			MS
Uranium	2.05		2.33		13.7			MS

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–669 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 928612							
1201985642	MB for batch 928612	MB	S	04–DEC–09	.524g	50mL	
1201985643	LCS for batch 928612	LCS	S	04–DEC–09	.51g	50mL	
1201985645	WST03–10–2134S	MS	S	04–DEC–09	.511g	50mL	
1201985647	WST03–10–2134SD	MSD	S	04–DEC–09	.515g	50mL	
1201985644	WST03–10–2134D	DUP	S	04–DEC–09	.51g	50mL	
241832001	RE03–09–14130	SAMPLE	S	04–DEC–09	.514g	50mL	
241832002	RE03–10–2732	SAMPLE	S	04–DEC–09	.5g	50mL	
241832003	RE03–10–2733	SAMPLE	S	04–DEC–09	.511g	50mL	
241832004	RE03–10–2731	SAMPLE	S	04–DEC–09	.514g	50mL	
Batch Number 933563							
1201997323	MB for batch 933563	MB	S	16–DEC–09	.525g	50mL	
1201997324	LCS for batch 933563	LCS	S	16–DEC–09	.503g	50mL	
1201985645	WST03–10–2134S	MS	S	16–DEC–09	.525g	50mL	
1201985647	WST03–10–2134SD	MSD	S	16–DEC–09	.516g	50mL	
1201985644	WST03–10–2134D	DUP	S	16–DEC–09	.511g	50mL	
241832001	RE03–09–14130	SAMPLE	S	16–DEC–09	.525g	50mL	
241832002	RE03–10–2732	SAMPLE	S	16–DEC–09	.533g	50mL	
241832003	RE03–10–2733	SAMPLE	S	16–DEC–09	.533g	50mL	
241832004	RE03–10–2731	SAMPLE	S	16–DEC–09	.527g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-669 **Method Type**: MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928676						
1201985796	MB for batch 928676	MB	S	04-DEC-09	.507g	50mL	
1201985797	LCS for batch 928676	LCS	S	04-DEC-09	.523g	50mL	
1201985799	RE03-09-13923S	MS	S	04-DEC-09	.513g	50mL	
1201985801	RE03-09-13923SD	MSD	S	04-DEC-09	.512g	50mL	
1201985798	RE03-09-13923D	DUP	S	04-DEC-09	.512g	50mL	
241832001	RE03-09-14130	SAMPLE	S	04-DEC-09	.514g	50mL	
241832002	RE03-10-2732	SAMPLE	S	04-DEC-09	.51g	50mL	
241832003	RE03-10-2733	SAMPLE	S	04-DEC-09	.517g	50mL	
241832004	RE03-10-2731	SAMPLE	S	04-DEC-09	.515g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-669 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928046						
1201984341	MB for batch 928046	MB	S	08-DEC-09	.539g	30mL	
1201984342	LCS for batch 928046	LCS	S	08-DEC-09	.203g	30mL	
1201984344	WST03-10-2134S	MS	S	08-DEC-09	.579g	30mL	
1201984346	WST03-10-2134SD	MSD	S	08-DEC-09	.524g	30mL	
1201984343	WST03-10-2134D	DUP	S	08-DEC-09	.563g	30mL	
241832001	RE03-09-14130	SAMPLE	S	08-DEC-09	.595g	30mL	
241832002	RE03-10-2732	SAMPLE	S	08-DEC-09	.506g	30mL	
241832003	RE03-10-2733	SAMPLE	S	08-DEC-09	.551g	30mL	
241832004	RE03-10-2731	SAMPLE	S	08-DEC-09	.558g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–669
Method MS
Data File: 091208–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	21:26																								X				
S10	1	21:30																								X				
S100	1	21:34																								X				
ICV01	1	21:39																								X				
ICB01	1	21:43																								X				
CRDL01	1	21:48																								X				
ICSA01	1	21:52																								X				
ICSAB01	1	21:57																								X				
CCV01	1	22:01																								X				
CCB01	1	22:06																								X				
1201985796	2	22:10																								X				
1201985797	40	22:15																								X				
241832001	2	22:19																								X				
241832002	2	22:24																								X				
241832003	2	22:28																								X				
241832004	2	22:33																								X				
ZZZZZZ	2	22:38																												
CCV02	1	22:42																								X				
CCB02	1	22:47																								X				
ZZZZZZ	2	22:51																												
1201985798	2	22:56																								X				
1201985799	2	23:00																								X				
1201985801	2	23:05																								X				
1201985800	10	23:09																								X				
CCV03	1	23:14																								X				
CCB03	1	23:18																								X				

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS6
Start Date: 07–DEC–09 **End Date:** 07–DEC–09

Client Sdg: 10–669
Method MS
Data File: 091206–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	10:52					X									X				X		X						X		
S10	1	10:58					X									X				X		X						X		
S100	1	11:04					X									X				X		X						X		
ICV01	1	11:10					X									X				X		X						X		
ICB01	1	11:16					X									X				X		X						X		
CRDL01	1	11:22					X									X				X		X						X		
ICSA01	1	11:28					X									X				X		X						X		
ICSAB01	1	11:34					X									X				X		X						X		
CCV01	1	11:40					X									X				X		X						X		
CCB01	1	11:46					X									X				X		X						X		
1201985796	2	11:51					X									X				X		X						X		
1201985797	40	11:57					X													X		X						X		
1201985797	20	12:03														X														
CCV02	1	12:09					X									X				X		X						X		
CCB02	1	12:15					X									X				X		X						X		
241832001	2	12:21					X									X				X		X						X		
241832002	2	12:27					X									X				X		X						X		
241832003	2	12:33					X									X				X		X						X		
241832004	2	12:39					X									X				X		X						X		
ZZZZZZ	2	12:45																												
CCV03	1	12:50					X									X				X		X						X		
CCB03	1	12:56					X									X				X		X						X		
ZZZZZZ	2	13:02																												
1201985798	2	13:08					X									X				X		X						X		
1201985799	2	13:14					X									X				X		X						X		
1201985801	2	13:20					X									X				X		X						X		
1201985800	10	13:26					X									X				X		X						X		
ZZZZZZ	2	13:32																												
ZZZZZZ	2	13:38																												
ZZZZZZ	2	13:44																												
ZZZZZZ	2	13:49																												
CCV04	1	13:55					X									X				X		X						X		
CCB04	1	14:01					X									X				X		X						X		

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS6
Start Date: 10-DEC-09 **End Date:** 10-DEC-09

Client Sdg: 10-669
Method MS
Data File: 091209-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	18:19			X																									
S10	1	18:25			X																									
S100	1	18:31			X																									
ICV01	1	18:37			X																									
ICB01	1	18:43			X																									
CRDL01	1	18:49			X																									
ICSA01	1	18:55			X																									
ICSAB01	1	19:00			X																									
CCV01	1	19:06			X																									
CCB01	1	19:12			X																									
LR01	1	19:18			X																									
CCV02	1	19:24			X																									
CCB02	1	19:30			X																									
ZZZZZZ	1	19:36																												
ZZZZZZ	1	19:42																												
ZZZZZZ	1	19:48																												
ZZZZZZ	1	19:54																												
ZZZZZZ	5	20:00																												
CCV03	1	20:05			X																									
CCB03	1	20:11			X																									
ZZZZZZ	1	20:17																												
ZZZZZZ	1	20:23																												
ZZZZZZ	1	20:29																												
ZZZZZZ	1	20:35																												
ZZZZZZ	1	20:41																												
ZZZZZZ	1	20:47																												
ZZZZZZ	1	20:53																												
CCV04	1	20:59			X																									
CCB04	1	21:04			X																									
1201985796	2	21:10			X																									
1201985797	40	21:16			X																									
241832001	2	21:22			X																									
241832002	2	21:28			X																									
241832003	2	21:34			X																									
241832004	2	21:40			X																									
ZZZZZZ	2	21:46																												
CCV05	1	21:52			X																									
CCB05	1	21:58			X																									
ZZZZZZ	2	22:04																												
1201985798	2	22:09			X																									

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
1201985799	2	22:15			X																								
1201985801	2	22:21			X																								
1201985800	10	22:27			X																								
ZZZZZZ	2	22:33																											
ZZZZZZ	2	22:39																											
ZZZZZZ	2	22:45																											
ZZZZZZ	2	22:51																											
CCV06	1	22:57			X																								
CCB06	1	23:03			X																								

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 11-DEC-09 **End Date:** 11-DEC-09

Client Sdg: 10-669
Method P
Data File: 121109A-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	10:35	X			X		X	X		X	X	X	X	X			X						X			X		X	X
S0.1	1	10:41				X		X	X		X	X	X		X			X						X			X		X	X
S0.5	1	10:48	X			X		X	X		X	X	X		X			X						X			X		X	X
SCAL	1	10:55	X			X		X	X		X	X	X	X	X			X						X			X		X	X
S10	1	11:02	X											X																
ICV01	1	11:07	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ICB01	1	11:14	X			X		X	X		X	X	X	X	X			X						X			X		X	X
PQL01	1	11:21	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ICSA01	1	11:28	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ICSAB01	1	11:34	X			X		X	X		X	X	X	X	X			X						X			X		X	X
LR01	1	11:40	X			X		X	X		X	X	X	X	X			X						X			X		X	X
LR02	1	11:46	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV01	1	11:53	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB01	1	12:00	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV02	1	12:09	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB02	1	12:16	X			X		X	X		X	X	X	X	X			X						X			X		X	X
LR03	1	12:23	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV03	1	12:30	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB03	1	12:37	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	5	12:47																												
ZZZZZZ	5	12:54																												
CCV04	1	13:02	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB04	1	13:09	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV05	1	13:24	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB05	1	13:31	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	13:38																												
ZZZZZZ	2	13:45																												
ZZZZZZ	1	13:52																												
ZZZZZZ	1	13:58																												
ZZZZZZ	1	14:05																												
ZZZZZZ	1	14:12																												
ZZZZZZ	5	14:19																												
ZZZZZZ	1	14:26																												
ZZZZZZ	1	14:33																												
CCV06	1	14:40	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB06	1	14:47	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	14:54																												
ZZZZZZ	1	15:01																												
ZZZZZZ	1	15:08																												
ZZZZZZ	1	15:15																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
ZZZZZZ	1	15:22																												
ZZZZZZ	1	15:29																												
ZZZZZZ	1	15:36																												
ZZZZZZ	1	15:43																												
ZZZZZZ	1	15:50																												
CCV07	1	15:57	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB07	1	16:04	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	16:11																												
ZZZZZZ	1	16:18																												
ZZZZZZ	1	16:25																												
ZZZZZZ	1	16:32																												
ZZZZZZ	1	16:39																												
ZZZZZZ	1	16:46																												
ZZZZZZ	1	16:53																												
ZZZZZZ	1	17:01																												
CCV08	1	17:08	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB08	1	17:15	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	17:21																												
ZZZZZZ	1	17:28																												
ZZZZZZ	1	17:35																												
ZZZZZZ	1	17:42																												
ZZZZZZ	1	17:49																												
ZZZZZZ	5	17:56																												
ZZZZZZ	1	18:02																												
CCV09	1	18:09	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB09	1	18:16	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	18:23																												
ZZZZZZ	1	18:30																												
ZZZZZZ	1	18:37																												
ZZZZZZ	1	18:43																												
ZZZZZZ	1	18:50																												
ZZZZZZ	5	18:57																												
ZZZZZZ	1	19:04																												
CCV10	1	19:11	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB10	1	19:18	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985642	1	19:25	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985643	2	19:31	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241832001	1	19:38	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241832002	1	19:45	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241832003	1	19:52	X			X		X	X		X	X	X	X	X			X						X			X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
241832004	1	19:59	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV11	1	20:06	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB11	1	20:13	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	1	20:20																												
1201985644	1	20:27	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985645	1	20:34	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985647	1	20:41	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985646	5	20:48	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV12	1	20:55	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB12	1	21:02	X			X		X	X		X	X	X	X	X			X						X			X		X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 09-DEC-09 **End Date:** 09-DEC-09

Client Sdg: 10-669
Method AV
Data File: 120909S1-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:49																	X											
S0.2	1	09:51																	X											
S0.5	1	09:52																	X											
S2.0	1	09:54																	X											
S5.0	1	09:56																	X											
S10.0	1	09:57																	X											
ICV01	1	09:59																	X											
ICB01	1	10:01																	X											
CRDL01	1	10:02																	X											
CCV01	1	10:04																	X											
CCB01	1	10:06																	X											
ZZZZZZ	1	10:07																												
ZZZZZZ	1	10:09																												
ZZZZZZ	1	10:11																												
ZZZZZZ	1	10:12																												
ZZZZZZ	1	10:14																												
ZZZZZZ	1	10:16																												
ZZZZZZ	1	10:17																												
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:22																												
CCV02	1	10:24																	X											
CCB02	1	10:26																	X											
ZZZZZZ	5	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	1	10:32																												
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:36																												
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												
ZZZZZZ	1	10:41																												
ZZZZZZ	1	10:42																												
CCV03	1	10:44																	X											
CCB03	1	10:46																	X											
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	5	10:54																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	10:56																										
ZZZZZZ	1	10:58																										
ZZZZZZ	1	10:59																										
ZZZZZZ	1	11:01																										
ZZZZZZ	1	11:03																										
CCV04	1	11:04															X											
CCB04	1	11:06															X											
ZZZZZZ	1	11:08																										
ZZZZZZ	5	11:09																										
ZZZZZZ	1	11:11																										
ZZZZZZ	1	11:13																										
ZZZZZZ	1	11:14																										
ZZZZZZ	1	11:16																										
ZZZZZZ	10	11:18																										
ZZZZZZ	1	11:19																										
ZZZZZZ	1	11:21																										
ZZZZZZ	1	11:23																										
CCV05	1	11:24															X											
CCB05	1	11:26															X											
ZZZZZZ	1	11:28																										
ZZZZZZ	1	11:29																										
ZZZZZZ	1	11:31																										
ZZZZZZ	1	11:33																										
ZZZZZZ	1	11:34																										
ZZZZZZ	1	11:36																										
ZZZZZZ	1	11:38																										
ZZZZZZ	1	11:39																										
ZZZZZZ	1	11:41																										
ZZZZZZ	1	11:43																										
CCV06	1	11:45															X											
CCB06	1	11:46															X											
ZZZZZZ	1	11:48																										
ZZZZZZ	1	11:50																										
ZZZZZZ	5	11:51																										
ZZZZZZ	1	11:53																										
ZZZZZZ	1	11:55																										
ZZZZZZ	1	11:56																										
ZZZZZZ	1	11:58																										
ZZZZZZ	1	12:00																										
ZZZZZZ	1	12:01																										

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	12:03																												
CCV07	1	12:05																	X											
CCB07	1	12:06																	X											
ZZZZZZ	10	12:08																												
ZZZZZZ	1	12:10																												
ZZZZZZ	1	12:11																												
ZZZZZZ	1	12:13																												
ZZZZZZ	1	12:15																												
ZZZZZZ	5	12:17																												
ZZZZZZ	1	12:18																												
ZZZZZZ	1	12:20																												
ZZZZZZ	1	12:22																												
ZZZZZZ	1	12:23																												
CCV08	1	12:25																	X											
CCB08	1	12:27																	X											
ZZZZZZ	1	12:28																												
ZZZZZZ	1	12:30																												
ZZZZZZ	1	12:32																												
ZZZZZZ	10	12:33																												
ZZZZZZ	1	12:35																												
ZZZZZZ	1	12:37																												
ZZZZZZ	1	12:38																												
ZZZZZZ	1	12:40																												
ZZZZZZ	5	12:42																												
ZZZZZZ	1	12:44																												
CCV09	1	12:45																	X											
CCB09	1	12:47																	X											
ZZZZZZ	1	12:49																												
ZZZZZZ	1	12:50																												
ZZZZZZ	1	12:52																												
ZZZZZZ	1	12:54																												
ZZZZZZ	1	12:55																												
ZZZZZZ	1	12:57																												
ZZZZZZ	1	12:59																												
ZZZZZZ	1	13:00																												
ZZZZZZ	1	13:02																												
ZZZZZZ	1	13:04																												
CCV10	1	13:06																	X											
CCB10	1	13:07																	X											
ZZZZZZ	1	13:09																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	13:11																											
ZZZZZZ	1	13:12																											
ZZZZZZ	1	13:14																											
ZZZZZZ	1	13:16																											
ZZZZZZ	1	13:17																											
ZZZZZZ	1	13:19																											
ZZZZZZ	1	13:21																											
1201984341	1	13:23																X											
1201984342	10	13:24																X											
CCV11	1	13:26																X											
CCB11	1	13:28																X											
241832001	1	13:29																X											
241832002	1	13:31																X											
241832003	1	13:33																X											
241832004	1	13:34																X											
ZZZZZZ	1	13:36																											
1201984343	1	13:38																X											
1201984344	1	13:40																X											
1201984346	1	13:41																X											
1201984345	5	13:43																X											
ZZZZZZ	1	13:45																											
CCV12	1	13:46																X											
CCB12	1	13:48																X											

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 18–DEC–09 **End Date:** 18–DEC–09

Client Sdg: 10–669
Method P
Data File: 121809A–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:34		X						X							X				X		X		X					
S0.1	1	02:38		X																	X		X							
S0.5	1	02:41		X						X							X				X		X							
SCAL	1	02:44		X						X							X				X		X		X					
S10	1	02:48								X							X								X					
ICV01	1	02:49		X						X							X				X		X		X					
ICB01	1	02:53		X						X							X				X		X		X					
PQL01	1	02:57		X						X							X				X		X		X					
ICSA01	1	03:00		X						X							X				X		X		X					
ICSAB01	1	03:03		X						X							X				X		X		X					
LR01	1	03:06		X						X							X				X		X		X					
LR02	1	03:09		X						X							X				X		X		X					
CCV01	1	03:12		X						X							X				X		X		X					
CCB01	1	03:16		X						X							X				X		X		X					
2542968001	100	03:24		X						X							X				X		X		X					
ZZZZZZ	100	03:28																												
ZZZZZZ	100	03:31																												
ZZZZZZ	100	03:35																												
ZZZZZZ	100	03:38																												
ZZZZZZ	500	03:42																												
CCV02	1	03:46		X						X							X				X		X		X					
PQL02	1	03:49		X						X							X				X		X		X					
CCB02	1	03:53		X						X							X				X		X		X					
CCV03	1	03:57		X						X							X				X		X		X					
PQL03	1	04:01		X						X							X				X		X		X					
CCB03	1	04:04		X						X							X				X		X		X					
ZZZZZZ	1	04:08																												
ZZZZZZ	1	04:12																												
ZZZZZZ	1	04:15																												
ZZZZZZ	1	04:19																												
ZZZZZZ	1	04:23																												
ZZZZZZ	1	04:27																												
ZZZZZZ	1	04:31																												
ZZZZZZ	5	04:35																												
CCV04	1	04:39		X						X							X				X		X		X					
PQL04	1	04:42		X						X							X				X		X		X					
CCB04	1	04:46		X						X							X				X		X		X					
ZZZZZZ	1	04:50																												
ZZZZZZ	1	04:53																												
ZZZZZZ	1	04:57																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	05:00																										
ZZZZZZ	1	05:04																										
ZZZZZZ	5	05:08																										
CCV05	1	05:12		X						X							X				X		X		X			
CCB05	1	05:15		X						X							X				X		X		X			
ZZZZZZ	1	05:19																										
ZZZZZZ	1	05:23																										
ZZZZZZ	1	05:26																										
ZZZZZZ	1	05:30																										
ZZZZZZ	1	05:34																										
ZZZZZZ	5	05:37																										
ZZZZZZ	1	05:41																										
ZZZZZZ	1	05:45																										
ZZZZZZ	1	05:47																										
CCV06	1	05:50		X						X							X				X		X		X			
CCB06	1	05:54		X						X							X				X		X		X			
ZZZZZZ	1	05:57																										
ZZZZZZ	1	06:01																										
ZZZZZZ	1	06:04																										
ZZZZZZ	1	06:08																										
ZZZZZZ	1	06:12																										
ZZZZZZ	5	06:15																										
ZZZZZZ	1	06:19																										
ZZZZZZ	1	06:22																										
ZZZZZZ	1	06:26																										
CCV07	1	06:30		X						X							X				X		X		X			
CCB07	1	06:33		X						X							X				X		X		X			
CCV08	1	06:55		X						X							X				X		X		X			
CCB08	1	06:58		X						X							X				X		X		X			
ZZZZZZ	1	07:02																										
ZZZZZZ	1	07:06																										
ZZZZZZ	1	07:09																										
ZZZZZZ	1	07:12																										
ZZZZZZ	1	07:16																										
ZZZZZZ	1	07:19																										
ZZZZZZ	5	07:23																										
ZZZZZZ	1	07:27																										
ZZZZZZ	1	07:30																										
CCV09	1	07:34		X						X							X				X		X		X			
CCB09	1	07:38		X						X							X				X		X		X			

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	07:41																												
ZZZZZZ	1	07:45																												
ZZZZZZ	1	07:49																												
ZZZZZZ	1	07:52																												
ZZZZZZ	1	07:56																												
ZZZZZZ	1	08:00																												
ZZZZZZ	1	08:03																												
ZZZZZZ	1	08:07																												
ZZZZZZ	1	08:10																												
CCV10	1	08:14		X						X							X				X		X		X					
CCB10	1	08:18		X						X							X				X		X		X					
ZZZZZZ	1	08:21																												
ZZZZZZ	1	08:25																												
ZZZZZZ	1	08:28																												
ZZZZZZ	1	08:32																												
ZZZZZZ	1	08:35																												
ZZZZZZ	1	08:39																												
ZZZZZZ	5	08:43																												
CCV11	1	08:46		X						X							X				X		X		X					
CCB11	1	08:50		X						X							X				X		X		X					
ZZZZZZ	1	08:53																												
ZZZZZZ	1	08:57																												
ZZZZZZ	1	09:01																												
ZZZZZZ	1	09:04																												
CCV12	1	09:08		X						X							X				X		X		X					
CCB12	1	09:12		X						X							X				X		X		X					
ZZZZZZ	1	09:24																												
ZZZZZZ	1	09:28																												
ZZZZZZ	1	09:31																												
ZZZZZZ	1	09:34																												
ZZZZZZ	1	09:38																												
ZZZZZZ	1	09:41																												
ZZZZZZ	5	09:45																												
ZZZZZZ	1	09:49																												
ZZZZZZ	1	09:51																												
CCV13	1	09:55		X						X							X				X		X		X					
CCB13	1	09:59		X						X							X				X		X		X					
ZZZZZZ	1	10:02																												
ZZZZZZ	1	10:06																												
ZZZZZZ	1	10:10																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	10:13																										
ZZZZZZ	1	10:16																										
ZZZZZZ	1	10:20																										
ZZZZZZ	1	10:23																										
ZZZZZZ	1	10:27																										
ZZZZZZ	1	10:30																										
CCV14	1	10:33		X						X							X				X		X		X				
CCB14	1	10:37		X						X							X				X		X		X				
ZZZZZZ	1	10:40																										
ZZZZZZ	1	10:44																										
ZZZZZZ	1	10:47																										
ZZZZZZ	1	10:51																										
ZZZZZZ	1	10:54																										
ZZZZZZ	1	10:58																										
ZZZZZZ	1	11:01																										
ZZZZZZ	1	11:04																										
CCV15	1	11:08		X						X							X				X		X		X				
CCB15	1	11:11		X						X							X				X		X		X				
1201997323	1	11:15		X						X							X				X		X		X				
1201997324	1	11:19		X						X							X				X		X		X				
ZZZZZZ	1	11:22																										
1201985644	1	11:25		X						X							X				X		X		X				
1201985645	1	11:29		X						X							X				X		X		X				
1201985647	1	11:32		X						X							X				X		X		X				
1201985646	5	11:36		X						X							X				X		X		X				
CCV16	1	11:40		X						X							X				X		X		X				
CCB16	1	11:43		X						X							X				X		X		X				
241832001	1	11:47		X						X							X				X		X		X				
241832002	1	11:51		X						X							X				X		X		X				
241832003	1	11:54		X						X							X				X		X		X				
241832004	1	11:58		X						X							X				X		X		X				
CCV17	1	12:02		X						X							X				X		X		X				
CCB17	1	12:05		X						X							X				X		X		X				

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–669

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-669

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–669

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-669
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-669
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-669
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–669
Effective Dates: 01–NOV–09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	–33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–669

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–669

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS6

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–669

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–669

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

Raw Data

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Analysis Begun

Start Time: 12/18/2009 02:34:42 **Plasma On Time: 12/17/2009 20:21:18**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121609H.SIF
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/18/2009 02:34:44**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	111933.3	111933.3	99.5	%	02:35:25
1	Al 396.153Radial†	236.3	237.5	[0.00]	µg/L	02:35:25
1	Ca 317.933Radial†	505.5	508.0	[0.00]	µg/L	02:35:45
1	Fe 238.204 Radial†	10.3	10.4	[0.00]	µg/L	02:35:45
1	K 766.490 Radial†	661.9	665.1	[0.00]	µg/L	02:35:25
1	Mg 279.077 IEC†	21.3	21.4	[0.00]	µg/L	02:35:45
1	Na 589.592 Radial†	-675.3	-678.6	[0.00]	µg/L	02:35:25
1	Sr 421.552†	-45.9	-46.1	[0.00]	µg/L	02:35:25
1	Sc 361.383	2052346.2	2052346.2	99.786	%	02:36:47
1	Y 371.029	1249951.6	1249951.6	99.808	%	02:36:47
1	Ag 328.068†	-86.6	-86.7	[0.00]	µg/L	02:36:53
1	As 188.979†	4.9	4.9	[0.00]	µg/L	02:37:13
1	B 249.677†	164.3	164.6	[0.00]	µg/L	02:36:53
1	Ba 233.527†	-87.7	-87.9	[0.00]	µg/L	02:37:13
1	Be 313.107†	3594.6	3602.3	[0.00]	µg/L	02:36:53
1	Cd 226.502†	-90.7	-90.9	[0.00]	µg/L	02:37:13
1	Co 228.616†	-71.8	-72.0	[0.00]	µg/L	02:37:13
1	Cr 267.716†	-120.2	-120.5	[0.00]	µg/L	02:36:53
1	Cu 324.752†	3356.6	3363.8	[0.00]	µg/L	02:36:53
1	Mn 257.610†	-222.8	-223.3	[0.00]	µg/L	02:37:13
1	Mo 202.031†	-9.0	-9.0	[0.00]	µg/L	02:37:13
1	Ni 231.604†	296.4	297.0	[0.00]	µg/L	02:37:13
1	P 214.914†	204.5	204.9	[0.00]	µg/L	02:37:13
1	Pb 220.353†	58.5	58.6	[0.00]	µg/L	02:37:13
1	S 181.975 Axial†	24.6	24.7	[0.00]	µg/L	02:37:13
1	Sb 206.836†	18.6	18.6	[0.00]	µg/L	02:37:13
1	Se 196.026†	11.9	11.9	[0.00]	µg/L	02:37:13
1	SiO2†	1975.5	1979.7	[0.00]	µg/L	02:36:53
1	Si 251.611†	343.9	344.6	[0.00]	µg/L	02:37:13
1	Sn 189.927†	20.7	20.7	[0.00]	µg/L	02:37:13
1	Ti 334.940†	669.0	670.4	[0.00]	µg/L	02:36:53
1	Tl 190.801†	-21.5	-21.6	[0.00]	µg/L	02:37:13
1	U 409.014†	615.1	616.4	[0.00]	µg/L	02:36:53
1	V 292.402†	-72.1	-72.3	[0.00]	µg/L	02:36:53
1	Zn 213.857†	553.3	554.5	[0.00]	µg/L	02:37:13
2	Sc RADIAL	113026.6	113026.6	100	%	02:35:51
2	Al 396.153Radial†	240.4	239.2	[0.00]	µg/L	02:35:51
2	Ca 317.933Radial†	486.8	484.4	[0.00]	µg/L	02:36:11
2	Fe 238.204 Radial†	13.1	13.1	[0.00]	µg/L	02:36:11
2	K 766.490 Radial†	732.8	729.3	[0.00]	µg/L	02:35:51
2	Mg 279.077 IEC†	21.1	21.0	[0.00]	µg/L	02:36:11
2	Na 589.592 Radial†	-699.4	-696.1	[0.00]	µg/L	02:35:51
2	Sr 421.552†	-81.0	-80.6	[0.00]	µg/L	02:35:51
2	Sc 361.383	2060012.5	2060012.5	100.16	%	02:37:19
2	Y 371.029	1254105.4	1254105.4	100.14	%	02:37:19
2	Ag 328.068†	5.3	5.3	[0.00]	µg/L	02:37:25
2	As 188.979†	4.7	4.7	[0.00]	µg/L	02:37:45

2	B 249.677†	142.4	142.2	[0.00]	µg/L	02:37:25
2	Ba 233.527†	-78.4	-78.3	[0.00]	µg/L	02:37:45
2	Be 313.107†	3629.4	3623.7	[0.00]	µg/L	02:37:25
2	Cd 226.502†	-107.5	-107.4	[0.00]	µg/L	02:37:45
2	Co 228.616†	-69.8	-69.6	[0.00]	µg/L	02:37:45
2	Cr 267.716†	-106.2	-106.0	[0.00]	µg/L	02:37:25
2	Cu 324.752†	3410.2	3404.8	[0.00]	µg/L	02:37:25
2	Mn 257.610†	-229.3	-228.9	[0.00]	µg/L	02:37:45
2	Mo 202.031†	-10.8	-10.8	[0.00]	µg/L	02:37:45
2	Ni 231.604†	293.4	292.9	[0.00]	µg/L	02:37:45
2	P 214.914†	207.9	207.6	[0.00]	µg/L	02:37:45
2	Pb 220.353†	47.7	47.7	[0.00]	µg/L	02:37:45
2	S 181.975 Axial†	22.1	22.1	[0.00]	µg/L	02:37:45
2	Sb 206.836†	23.9	23.8	[0.00]	µg/L	02:37:45
2	Se 196.026†	19.1	19.0	[0.00]	µg/L	02:37:45
2	SiO2†	1998.3	1995.2	[0.00]	µg/L	02:37:25
2	Si 251.611†	353.4	352.8	[0.00]	µg/L	02:37:45
2	Sn 189.927†	24.3	24.3	[0.00]	µg/L	02:37:45
2	Ti 334.940†	772.0	770.7	[0.00]	µg/L	02:37:25
2	Tl 190.801†	-19.5	-19.4	[0.00]	µg/L	02:37:45
2	U 409.014†	678.5	677.4	[0.00]	µg/L	02:37:25
2	V 292.402†	-83.8	-83.6	[0.00]	µg/L	02:37:25
2	Zn 213.857†	544.0	543.1	[0.00]	µg/L	02:37:45
3	Sc RADIAL	112480.5	112480.5	100	%	02:36:17
3	Al 396.153Radial†	212.8	212.8	[0.00]	µg/L	02:36:17
3	Ca 317.933Radial†	493.9	493.9	[0.00]	µg/L	02:36:37
3	Fe 238.204 Radial†	10.2	10.2	[0.00]	µg/L	02:36:37
3	K 766.490 Radial†	690.1	690.1	[0.00]	µg/L	02:36:17
3	Mg 279.077 IEC†	17.1	17.1	[0.00]	µg/L	02:36:37
3	Na 589.592 Radial†	-737.1	-737.1	[0.00]	µg/L	02:36:17
3	Sr 421.552†	-64.6	-64.6	[0.00]	µg/L	02:36:17
3	Sc 361.383	2057873.5	2057873.5	100.05	%	02:37:51
3	Y 371.029	1253017.5	1253017.5	100.05	%	02:37:51
3	Ag 328.068†	-3.5	-3.5	[0.00]	µg/L	02:37:57
3	As 188.979†	-2.1	-2.1	[0.00]	µg/L	02:38:17
3	B 249.677†	160.3	160.2	[0.00]	µg/L	02:37:57
3	Ba 233.527†	-75.9	-75.9	[0.00]	µg/L	02:38:17
3	Be 313.107†	3610.5	3608.5	[0.00]	µg/L	02:37:57
3	Cd 226.502†	-104.5	-104.4	[0.00]	µg/L	02:38:17
3	Co 228.616†	-73.6	-73.5	[0.00]	µg/L	02:38:17
3	Cr 267.716†	-141.9	-141.8	[0.00]	µg/L	02:37:57
3	Cu 324.752†	3386.2	3384.4	[0.00]	µg/L	02:37:57
3	Mn 257.610†	-215.9	-215.7	[0.00]	µg/L	02:38:17
3	Mo 202.031†	-3.9	-3.9	[0.00]	µg/L	02:38:17
3	Ni 231.604†	308.4	308.3	[0.00]	µg/L	02:38:17
3	P 214.914†	205.6	205.5	[0.00]	µg/L	02:38:17
3	Pb 220.353†	56.1	56.1	[0.00]	µg/L	02:38:17
3	S 181.975 Axial†	25.3	25.3	[0.00]	µg/L	02:38:17
3	Sb 206.836†	19.2	19.2	[0.00]	µg/L	02:38:17
3	Se 196.026†	11.3	11.3	[0.00]	µg/L	02:38:17
3	SiO2†	1971.2	1970.1	[0.00]	µg/L	02:37:57
3	Si 251.611†	351.7	351.5	[0.00]	µg/L	02:38:17
3	Sn 189.927†	22.4	22.3	[0.00]	µg/L	02:38:17
3	Ti 334.940†	715.8	715.4	[0.00]	µg/L	02:37:57
3	Tl 190.801†	-23.3	-23.2	[0.00]	µg/L	02:38:17
3	U 409.014†	744.2	743.8	[0.00]	µg/L	02:37:57
3	V 292.402†	-120.0	-120.0	[0.00]	µg/L	02:37:57
3	Zn 213.857†	553.1	552.8	[0.00]	µg/L	02:38:17

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2056744.1	3955.94	0.19%	100.00	%
Sc RADIAL	112480.1	546.64	0.49%	100	%
Y 371.029	1252358.2	2153.95	0.17%	100.000	%
Ag 328.068†	-28.3	50.80	179.42%	[0.00]	µg/L
Al 396.153Radial†	229.8	14.81	6.44%	[0.00]	µg/L
As 188.979†	2.5	4.00	160.84%	[0.00]	µg/L
B 249.677†	155.7	11.87	7.63%	[0.00]	µg/L
Ba 233.527†	-80.7	6.36	7.88%	[0.00]	µg/L

Be 313.107†	3611.5	10.97	0.30%	[0.00]	µg/L
Ca 317.933Radial†	495.4	11.86	2.39%	[0.00]	µg/L
Cd 226.502†	-100.9	8.77	8.69%	[0.00]	µg/L
Co 228.616†	-71.7	1.95	2.72%	[0.00]	µg/L
Cr 267.716†	-122.8	18.02	14.68%	[0.00]	µg/L
Cu 324.752†	3384.3	20.51	0.61%	[0.00]	µg/L
Fe 238.204 Radial†	11.2	1.61	14.36%	[0.00]	µg/L
K 766.490 Radial†	694.8	32.34	4.65%	[0.00]	µg/L
Mg 279.077 IEC†	19.8	2.40	12.08%	[0.00]	µg/L
Mn 257.610†	-222.6	6.61	2.97%	[0.00]	µg/L
Mo 202.031†	-7.9	3.56	44.98%	[0.00]	µg/L
Na 589.592 Radial†	-703.9	30.01	4.26%	[0.00]	µg/L
Ni 231.604†	299.4	7.94	2.65%	[0.00]	µg/L
P 214.914†	206.0	1.40	0.68%	[0.00]	µg/L
Pb 220.353†	54.1	5.73	10.58%	[0.00]	µg/L
S 181.975 Axial†	24.0	1.71	7.10%	[0.00]	µg/L
Sb 206.836†	20.5	2.85	13.85%	[0.00]	µg/L
Se 196.026†	14.1	4.28	30.36%	[0.00]	µg/L
SiO2†	1981.7	12.64	0.64%	[0.00]	µg/L
Si 251.611†	349.6	4.41	1.26%	[0.00]	µg/L
Sn 189.927†	22.5	1.80	8.02%	[0.00]	µg/L
Sr 421.552†	-63.8	17.25	27.05%	[0.00]	µg/L
Ti 334.940†	718.9	50.24	6.99%	[0.00]	µg/L
Tl 190.801†	-21.4	1.91	8.90%	[0.00]	µg/L
U 409.014†	679.2	63.72	9.38%	[0.00]	µg/L
V 292.402†	-92.0	24.90	27.08%	[0.00]	µg/L
Zn 213.857†	550.2	6.15	1.12%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/18/2009 02:38:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115622.2	115622.2	103	%	02:39:01
1	K 766.490 Radial†	2691.0	1923.1	[1000]	µg/L	02:39:01
1	Sr 421.552†	18558.8	18118.2	[100]	µg/L	02:39:01
1	Sc 361.383	2055514.3	2055514.3	99.940	%	02:39:23
1	Y 371.029	1251166.3	1251166.3	99.905	%	02:39:23
1	Ag 328.068†	11482.0	11517.2	[100]	µg/L	02:39:29
1	As 188.979†	57.9	55.4	[100]	µg/L	02:39:49
1	B 249.677†	2373.3	2219.0	[100]	µg/L	02:39:29
1	Ba 233.527†	3953.1	4036.2	[100]	µg/L	02:39:29
1	Be 313.107†	165026.0	161513.2	[100]	µg/L	02:39:23
1	Cd 226.502†	3823.3	3926.5	[100]	µg/L	02:39:29
1	Co 228.616†	2026.4	2099.3	[100]	µg/L	02:39:49
1	Cr 267.716†	4789.0	4914.7	[100]	µg/L	02:39:29
1	Cu 324.752†	17934.9	14561.3	[100]	µg/L	02:39:29
1	Mn 257.610†	32268.6	32510.6	[100]	µg/L	02:39:29
1	Mo 202.031†	900.1	908.6	[100]	µg/L	02:39:49
1	Ni 231.604†	2224.8	1926.7	[100]	µg/L	02:39:29
1	P 214.914†	432.4	226.7	[500]	µg/L	02:39:49
1	Pb 220.353†	463.5	409.6	[100]	µg/L	02:39:49
1	S 181.975 Axial†	55.9	31.8	[200]	µg/L	02:39:49
1	Sb 206.836†	123.3	102.8	[100]	µg/L	02:39:49
1	Se 196.026†	84.4	70.4	[100]	µg/L	02:39:49
1	SiO2†	7652.5	5675.4	[1069.5]	µg/L	02:39:29
1	Si 251.611†	6926.8	6581.3	[500]	µg/L	02:39:29
1	Sn 189.927†	231.8	209.5	[100]	µg/L	02:39:49
1	Ti 334.940†	45669.6	44978.0	[100]	µg/L	02:39:29
1	Tl 190.801†	49.0	70.5	[100]	µg/L	02:39:49
1	U 409.014†	1712.0	1033.8	[100]	µg/L	02:39:29
1	V 292.402†	8832.7	8930.0	[100]	µg/L	02:39:29
1	Zn 213.857†	4438.7	3891.2	[100]	µg/L	02:39:29
2	Sc RADIAL	115249.4	115249.4	102	%	02:39:07
2	K 766.490 Radial†	2681.7	1922.4	[1000]	µg/L	02:39:07
2	Sr 421.552†	18519.2	18138.0	[100]	µg/L	02:39:07
2	Sc 361.383	2062183.2	2062183.2	100.26	%	02:39:55
2	Y 371.029	1255826.6	1255826.6	100.28	%	02:39:55
2	Ag 328.068†	11492.5	11490.5	[100]	µg/L	02:40:01
2	As 188.979†	57.1	54.5	[100]	µg/L	02:40:21
2	B 249.677†	2373.1	2211.1	[100]	µg/L	02:40:01
2	Ba 233.527†	3982.2	4052.4	[100]	µg/L	02:40:01
2	Be 313.107†	164842.0	160795.7	[100]	µg/L	02:39:55
2	Cd 226.502†	3804.4	3895.2	[100]	µg/L	02:40:01
2	Co 228.616†	2039.1	2105.4	[100]	µg/L	02:40:21
2	Cr 267.716†	4799.2	4909.3	[100]	µg/L	02:40:01
2	Cu 324.752†	18019.7	14587.9	[100]	µg/L	02:40:01
2	Mn 257.610†	32329.9	32467.3	[100]	µg/L	02:40:01
2	Mo 202.031†	898.2	903.7	[100]	µg/L	02:40:21
2	Ni 231.604†	2208.1	1902.9	[100]	µg/L	02:40:01
2	P 214.914†	444.5	237.3	[500]	µg/L	02:40:21
2	Pb 220.353†	462.8	407.4	[100]	µg/L	02:40:21
2	S 181.975 Axial†	59.4	35.2	[200]	µg/L	02:40:21
2	Sb 206.836†	124.0	103.1	[100]	µg/L	02:40:21
2	Se 196.026†	88.9	74.5	[100]	µg/L	02:40:21
2	SiO2†	7632.3	5630.5	[1069.5]	µg/L	02:40:01
2	Si 251.611†	6955.7	6587.7	[500]	µg/L	02:40:01
2	Sn 189.927†	230.0	206.9	[100]	µg/L	02:40:21
2	Ti 334.940†	45653.4	44814.2	[100]	µg/L	02:40:01
2	Tl 190.801†	51.3	72.5	[100]	µg/L	02:40:21
2	U 409.014†	1789.1	1105.2	[100]	µg/L	02:40:01
2	V 292.402†	8941.5	9009.9	[100]	µg/L	02:40:01

2	Zn 213.857†	4433.2	3871.4	[100]	µg/L	02:40:01
3	Sc RADIAL	116357.5	116357.5	103	%	02:39:13
3	K 766.490 Radial†	2663.3	1879.7	[1000]	µg/L	02:39:13
3	Sr 421.552†	18628.3	18071.3	[100]	µg/L	02:39:13
3	Sc 361.383	2063107.8	2063107.8	100.31	%	02:40:28
3	Y 371.029	1255506.0	1255506.0	100.25	%	02:40:28
3	Ag 328.068†	11445.8	11438.8	[100]	µg/L	02:40:33
3	As 188.979†	52.9	50.2	[100]	µg/L	02:40:54
3	B 249.677†	2405.7	2242.6	[100]	µg/L	02:40:33
3	Ba 233.527†	3994.9	4063.2	[100]	µg/L	02:40:33
3	Be 313.107†	165370.1	161248.5	[100]	µg/L	02:40:28
3	Cd 226.502†	3833.4	3922.4	[100]	µg/L	02:40:33
3	Co 228.616†	2042.5	2108.0	[100]	µg/L	02:40:54
3	Cr 267.716†	4762.7	4870.8	[100]	µg/L	02:40:33
3	Cu 324.752†	18011.4	14571.5	[100]	µg/L	02:40:33
3	Mn 257.610†	32411.3	32534.0	[100]	µg/L	02:40:33
3	Mo 202.031†	898.4	903.6	[100]	µg/L	02:40:54
3	Ni 231.604†	2221.2	1914.9	[100]	µg/L	02:40:33
3	P 214.914†	440.5	233.1	[500]	µg/L	02:40:54
3	Pb 220.353†	462.5	407.0	[100]	µg/L	02:40:54
3	S 181.975 Axial†	61.3	37.1	[200]	µg/L	02:40:54
3	Sb 206.836†	125.5	104.5	[100]	µg/L	02:40:54
3	Se 196.026†	82.4	68.1	[100]	µg/L	02:40:54
3	SiO2†	7612.4	5607.3	[1069.5]	µg/L	02:40:33
3	Si 251.611†	6999.4	6628.2	[500]	µg/L	02:40:33
3	Sn 189.927†	231.8	208.7	[100]	µg/L	02:40:54
3	Ti 334.940†	45819.1	44958.9	[100]	µg/L	02:40:33
3	Tl 190.801†	48.8	70.1	[100]	µg/L	02:40:54
3	U 409.014†	1752.1	1067.4	[100]	µg/L	02:40:33
3	V 292.402†	8937.8	9002.2	[100]	µg/L	02:40:33
3	Zn 213.857†	4442.5	3878.6	[100]	µg/L	02:40:33

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2060268.4	4143.06	0.20%	100.17	%
Sc RADIAL	115743.0	563.84	0.49%	103	%
Y 371.029	1254166.3	2603.02	0.21%	100.14	%
Ag 328.068†	11482.2	39.85	0.35%	[100]	µg/L
As 188.979†	53.4	2.79	5.22%	[100]	µg/L
B 249.677†	2224.2	16.36	0.74%	[100]	µg/L
Ba 233.527†	4050.6	13.62	0.34%	[100]	µg/L
Be 313.107†	161185.8	362.82	0.23%	[100]	µg/L
Cd 226.502†	3914.7	17.01	0.43%	[100]	µg/L
Co 228.616†	2104.2	4.45	0.21%	[100]	µg/L
Cr 267.716†	4898.2	23.92	0.49%	[100]	µg/L
Cu 324.752†	14573.6	13.42	0.09%	[100]	µg/L
K 766.490 Radial†	1908.4	24.84	1.30%	[1000]	µg/L
Mn 257.610†	32504.0	33.83	0.10%	[100]	µg/L
Mo 202.031†	905.3	2.86	0.32%	[100]	µg/L
Ni 231.604†	1914.9	11.89	0.62%	[100]	µg/L
P 214.914†	232.4	5.35	2.30%	[500]	µg/L
Pb 220.353†	408.0	1.42	0.35%	[100]	µg/L
S 181.975 Axial†	34.7	2.66	7.67%	[200]	µg/L
Sb 206.836†	103.5	0.91	0.88%	[100]	µg/L
Se 196.026†	71.0	3.27	4.61%	[100]	µg/L
SiO2†	5637.7	34.65	0.61%	[1069.5]	µg/L
Si 251.611†	6599.1	25.43	0.39%	[500]	µg/L
Sn 189.927†	208.4	1.32	0.63%	[100]	µg/L
Sr 421.552†	18109.2	34.23	0.19%	[100]	µg/L
Ti 334.940†	44917.0	89.59	0.20%	[100]	µg/L
Tl 190.801†	71.0	1.32	1.86%	[100]	µg/L
U 409.014†	1068.8	35.72	3.34%	[100]	µg/L
V 292.402†	8980.7	44.10	0.49%	[100]	µg/L
Zn 213.857†	3880.4	10.03	0.26%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/18/2009 02:41:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115848.8	115848.8	103	%	02:41:36
1	Al 396.153Radial†	10331.0	9800.8	[5000]	µg/L	02:41:36
1	Ca 317.933Radial†	13236.7	12356.3	[5000]	µg/L	02:41:56
1	K 766.490 Radial†	10034.5	9047.9	[5000]	µg/L	02:41:36
1	Mg 279.077 IEC†	961.3	913.5	[5000]	µg/L	02:41:56
1	Sr 421.552†	90081.0	87525.3	[500]	µg/L	02:41:36
1	Sc 361.383	2076720.1	2076720.1	100.97	%	02:43:00
1	Y 371.029	1255720.5	1255720.5	100.27	%	02:43:00
1	Ag 328.068†	55550.8	55044.8	[500]	µg/L	02:43:06
1	As 188.979†	262.2	257.2	[500]	µg/L	02:43:26
1	B 249.677†	11333.1	11068.4	[500]	µg/L	02:43:06
1	Ba 233.527†	19714.5	19605.6	[500]	µg/L	02:43:06
1	Be 313.107†	785440.5	774273.8	[500]	µg/L	02:43:00
1	Cd 226.502†	18750.9	18671.4	[500]	µg/L	02:43:06
1	Co 228.616†	10269.6	10242.5	[500]	µg/L	02:43:06
1	Cr 267.716†	23661.6	23556.8	[500]	µg/L	02:43:06
1	Cu 324.752†	74086.1	69989.2	[500]	µg/L	02:43:06
1	Mn 257.610†	155175.5	153905.5	[500]	µg/L	02:43:00
1	Mo 202.031†	4372.0	4337.9	[500]	µg/L	02:43:26
1	Ni 231.604†	9447.2	9057.0	[500]	µg/L	02:43:06
1	P 214.914†	1348.9	1129.9	[2500]	µg/L	02:43:26
1	Pb 220.353†	2014.8	1941.3	[500]	µg/L	02:43:26
1	S 181.975 Axial†	212.8	186.7	[1000]	µg/L	02:43:26
1	Sb 206.836†	521.9	496.4	[500]	µg/L	02:43:26
1	Se 196.026†	356.7	339.2	[500]	µg/L	02:43:26
1	SiO2†	30034.0	27763.4	[5347.5]	µg/L	02:43:06
1	Si 251.611†	33108.4	32440.3	[2500]	µg/L	02:43:06
1	Sn 189.927†	1040.8	1008.3	[500]	µg/L	02:43:26
1	Ti 334.940†	222258.8	219402.0	[500]	µg/L	02:43:00
1	Tl 190.801†	311.3	329.7	[500]	µg/L	02:43:26
1	U 409.014†	5930.8	5194.6	[500]	µg/L	02:43:06
1	V 292.402†	43871.1	43541.0	[500]	µg/L	02:43:06
1	Zn 213.857†	19277.5	18542.0	[500]	µg/L	02:43:06
2	Sc RADIAL	115231.9	115231.9	102	%	02:42:02
2	Al 396.153Radial†	10369.1	9891.6	[5000]	µg/L	02:42:02
2	Ca 317.933Radial†	13261.6	12449.5	[5000]	µg/L	02:42:22
2	K 766.490 Radial†	10043.4	9108.8	[5000]	µg/L	02:42:02
2	Mg 279.077 IEC†	956.4	913.8	[5000]	µg/L	02:42:22
2	Sr 421.552†	90233.5	88142.4	[500]	µg/L	02:42:02
2	Sc 361.383	2056699.0	2056699.0	99.998	%	02:43:33
2	Y 371.029	1244872.8	1244872.8	99.402	%	02:43:33
2	Ag 328.068†	55581.5	55611.0	[500]	µg/L	02:43:39
2	As 188.979†	264.8	262.4	[500]	µg/L	02:44:00
2	B 249.677†	11264.2	11108.7	[500]	µg/L	02:43:39
2	Ba 233.527†	19673.4	19754.5	[500]	µg/L	02:43:39
2	Be 313.107†	784759.2	781164.9	[500]	µg/L	02:43:33
2	Cd 226.502†	18780.1	18881.4	[500]	µg/L	02:43:39
2	Co 228.616†	10277.3	10349.3	[500]	µg/L	02:43:39
2	Cr 267.716†	23626.5	23749.8	[500]	µg/L	02:43:39
2	Cu 324.752†	74093.8	70711.1	[500]	µg/L	02:43:39
2	Mn 257.610†	155352.9	155579.0	[500]	µg/L	02:43:33
2	Mo 202.031†	4393.5	4401.5	[500]	µg/L	02:44:00
2	Ni 231.604†	9451.0	9151.8	[500]	µg/L	02:43:39
2	P 214.914†	1354.2	1148.2	[2500]	µg/L	02:44:00
2	Pb 220.353†	2022.1	1968.1	[500]	µg/L	02:44:00
2	S 181.975 Axial†	218.0	193.9	[1000]	µg/L	02:44:00
2	Sb 206.836†	522.0	501.4	[500]	µg/L	02:44:00
2	Se 196.026†	363.4	349.3	[500]	µg/L	02:44:00
2	SiO2†	30017.9	28036.9	[5347.5]	µg/L	02:43:39

2	Si 251.611†	33069.1	32720.1	[2500]	µg/L	02:43:39
2	Sn 189.927†	1038.1	1015.6	[500]	µg/L	02:44:00
2	Ti 334.940†	222518.5	221804.5	[500]	µg/L	02:43:33
2	Tl 190.801†	308.5	329.9	[500]	µg/L	02:44:00
2	U 409.014†	5876.2	5197.1	[500]	µg/L	02:43:39
2	V 292.402†	43860.0	43952.9	[500]	µg/L	02:43:39
2	Zn 213.857†	19232.6	18682.8	[500]	µg/L	02:43:39
3	Sc RADIAL	116000.4	116000.4	103	%	02:42:28
3	Al 396.153Radial†	10302.5	9760.1	[5000]	µg/L	02:42:28
3	Ca 317.933Radial†	12767.7	11884.7	[5000]	µg/L	02:42:48
3	K 766.490 Radial†	10020.7	9021.7	[5000]	µg/L	02:42:28
3	Mg 279.077 IEC†	921.9	874.1	[5000]	µg/L	02:42:48
3	Sr 421.552†	90025.2	87357.0	[500]	µg/L	02:42:28
3	Sc 361.383	2068573.4	2068573.4	100.58	%	02:44:07
3	Y 371.029	1252864.9	1252864.9	100.04	%	02:44:07
3	Ag 328.068†	55948.5	55656.9	[500]	µg/L	02:44:12
3	As 188.979†	263.1	259.1	[500]	µg/L	02:44:33
3	B 249.677†	11346.8	11126.2	[500]	µg/L	02:44:12
3	Ba 233.527†	19754.2	19721.9	[500]	µg/L	02:44:12
3	Be 313.107†	791423.9	783286.5	[500]	µg/L	02:44:07
3	Cd 226.502†	18928.7	18921.4	[500]	µg/L	02:44:12
3	Co 228.616†	10351.4	10363.9	[500]	µg/L	02:44:12
3	Cr 267.716†	23779.5	23766.2	[500]	µg/L	02:44:12
3	Cu 324.752†	74353.8	70544.3	[500]	µg/L	02:44:12
3	Mn 257.610†	156684.0	156010.6	[500]	µg/L	02:44:07
3	Mo 202.031†	4320.8	4304.0	[500]	µg/L	02:44:33
3	Ni 231.604†	9497.0	9143.3	[500]	µg/L	02:44:12
3	P 214.914†	1333.1	1119.5	[2500]	µg/L	02:44:33
3	Pb 220.353†	1998.1	1932.6	[500]	µg/L	02:44:33
3	S 181.975 Axial†	212.9	187.7	[1000]	µg/L	02:44:33
3	Sb 206.836†	510.0	486.5	[500]	µg/L	02:44:33
3	Se 196.026†	350.6	334.5	[500]	µg/L	02:44:33
3	SiO2†	30300.1	28145.2	[5347.5]	µg/L	02:44:12
3	Si 251.611†	33286.2	32746.2	[2500]	µg/L	02:44:12
3	Sn 189.927†	1019.2	990.9	[500]	µg/L	02:44:33
3	Ti 334.940†	224099.5	222099.1	[500]	µg/L	02:44:07
3	Tl 190.801†	305.2	324.8	[500]	µg/L	02:44:33
3	U 409.014†	6080.1	5366.1	[500]	µg/L	02:44:12
3	V 292.402†	44125.4	43965.1	[500]	µg/L	02:44:12
3	Zn 213.857†	19377.5	18716.5	[500]	µg/L	02:44:12

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2067330.8	10068.20	0.49%	100.51	%
Sc RADIAL	115693.7	407.07	0.35%	103	%
Y 371.029	1251152.8	5622.88	0.45%	99.904	%
Ag 328.068†	55437.6	340.92	0.61%	[500]	µg/L
Al 396.153Radial†	9817.5	67.36	0.69%	[5000]	µg/L
As 188.979†	259.6	2.60	1.00%	[500]	µg/L
B 249.677†	11101.1	29.64	0.27%	[500]	µg/L
Ba 233.527†	19694.0	78.31	0.40%	[500]	µg/L
Be 313.107†	779575.1	4712.00	0.60%	[500]	µg/L
Ca 317.933Radial†	12230.2	302.76	2.48%	[5000]	µg/L
Cd 226.502†	18824.7	134.25	0.71%	[500]	µg/L
Co 228.616†	10318.6	66.27	0.64%	[500]	µg/L
Cr 267.716†	23690.9	116.45	0.49%	[500]	µg/L
Cu 324.752†	70414.8	377.97	0.54%	[500]	µg/L
K 766.490 Radial†	9059.4	44.67	0.49%	[5000]	µg/L
Mg 279.077 IEC†	900.4	22.83	2.54%	[5000]	µg/L
Mn 257.610†	155165.0	1111.96	0.72%	[500]	µg/L
Mo 202.031†	4347.8	49.50	1.14%	[500]	µg/L
Ni 231.604†	9117.4	52.47	0.58%	[500]	µg/L
P 214.914†	1132.6	14.54	1.28%	[2500]	µg/L
Pb 220.353†	1947.3	18.50	0.95%	[500]	µg/L
S 181.975 Axial†	189.4	3.92	2.07%	[1000]	µg/L
Sb 206.836†	494.8	7.58	1.53%	[500]	µg/L
Se 196.026†	341.0	7.59	2.23%	[500]	µg/L
SiO2†	27981.8	196.76	0.70%	[5347.5]	µg/L
Si 251.611†	32635.5	169.58	0.52%	[2500]	µg/L

Sn 189.927†	1004.9	12.69	1.26%	[500] µg/L
Sr 421.552†	87674.9	413.55	0.47%	[500] µg/L
Ti 334.940†	221101.8	1479.45	0.67%	[500] µg/L
Tl 190.801†	328.1	2.87	0.87%	[500] µg/L
U 409.014†	5252.6	98.32	1.87%	[500] µg/L
V 292.402†	43819.7	241.39	0.55%	[500] µg/L
Zn 213.857†	18647.1	92.60	0.50%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/18/2009 02:44:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113958.5	113958.5	101	%	02:45:15
1	Al 396.153Radial†	20456.2	19961.0	[10000]	µg/L	02:45:15
1	Ca 317.933Radial†	26297.3	25460.7	[10000]	µg/L	02:45:36
1	Fe 238.204 Radial†	1957.5	1920.9	[10000]	µg/L	02:45:36
1	K 766.490 Radial†	19446.8	18499.7	[10000]	µg/L	02:45:15
1	Mg 279.077 IEC†	1898.7	1854.2	[10000]	µg/L	02:45:36
1	Na 589.592 Radial†	36445.0	36676.2	[10000]	µg/L	02:45:15
1	Sr 421.552†	179836.5	177567.3	[1000]	µg/L	02:45:15
1	Sc 361.383	2044115.6	2044115.6	99.386	%	02:46:40
1	Y 371.029	1235076.9	1235076.9	98.620	%	02:46:40
1	Ag 328.068†	111750.4	112469.1	[1000]	µg/L	02:46:45
1	As 188.979†	537.3	538.1	[1000]	µg/L	02:47:06
1	B 249.677†	22658.3	22642.6	[1000]	µg/L	02:46:45
1	Ba 233.527†	39654.0	39979.6	[1000]	µg/L	02:46:45
1	Be 313.107†	1576685.5	1582814.7	[1000]	µg/L	02:46:40
1	Cd 226.502†	37558.9	37891.8	[1000]	µg/L	02:46:45
1	Co 228.616†	20655.5	20854.9	[1000]	µg/L	02:46:45
1	Cr 267.716†	47806.1	48224.2	[1000]	µg/L	02:46:45
1	Cu 324.752†	145140.2	142652.6	[1000]	µg/L	02:46:45
1	Mn 257.610†	313458.4	315617.6	[1000]	µg/L	02:46:40
1	Mo 202.031†	8991.0	9054.4	[1000]	µg/L	02:46:45
1	Ni 231.604†	18572.8	18388.2	[1000]	µg/L	02:46:45
1	P 214.914†	2536.6	2346.3	[5000]	µg/L	02:47:06
1	Pb 220.353†	4032.9	4003.7	[1000]	µg/L	02:47:06
1	S 181.975 Axial†	413.5	392.0	[2000]	µg/L	02:47:06
1	Sb 206.836†	1044.3	1030.2	[1000]	µg/L	02:47:06
1	Se 196.026†	710.6	700.9	[1000]	µg/L	02:47:06
1	SiO2†	57742.3	56117.3	[10695]	µg/L	02:46:45
1	Si 251.611†	65310.8	65364.7	[5000]	µg/L	02:46:45
1	Sn 189.927†	2109.5	2100.1	[1000]	µg/L	02:47:06
1	Ti 334.940†	450682.2	452747.6	[1000]	µg/L	02:46:40
1	Tl 190.801†	647.2	672.6	[1000]	µg/L	02:47:06
1	U 409.014†	11316.0	10706.7	[1000]	µg/L	02:46:45
1	V 292.402†	88383.7	89021.7	[1000]	µg/L	02:46:45
1	Zn 213.857†	37710.4	37393.3	[1000]	µg/L	02:46:45
2	Sc RADIAL	115689.4	115689.4	103	%	02:45:41
2	Al 396.153Radial†	20851.7	20043.5	[10000]	µg/L	02:45:41
2	Ca 317.933Radial†	26352.2	25125.7	[10000]	µg/L	02:46:01
2	Fe 238.204 Radial†	1974.9	1908.9	[10000]	µg/L	02:46:01
2	K 766.490 Radial†	19797.9	18553.8	[10000]	µg/L	02:45:41
2	Mg 279.077 IEC†	1900.9	1828.3	[10000]	µg/L	02:46:01
2	Na 589.592 Radial†	37145.5	36819.0	[10000]	µg/L	02:45:41
2	Sr 421.552†	183355.2	178332.5	[1000]	µg/L	02:45:41
2	Sc 361.383	2060569.5	2060569.5	100.19	%	02:47:13
2	Y 371.029	1245012.0	1245012.0	99.413	%	02:47:13
2	Ag 328.068†	112525.1	112344.5	[1000]	µg/L	02:47:18
2	As 188.979†	528.0	524.6	[1000]	µg/L	02:47:39
2	B 249.677†	22875.6	22677.4	[1000]	µg/L	02:47:18
2	Ba 233.527†	40001.1	40007.6	[1000]	µg/L	02:47:18
2	Be 313.107†	1595573.2	1588999.5	[1000]	µg/L	02:47:13
2	Cd 226.502†	37992.7	38023.0	[1000]	µg/L	02:47:18
2	Co 228.616†	20857.3	20890.2	[1000]	µg/L	02:47:18
2	Cr 267.716†	48306.0	48339.1	[1000]	µg/L	02:47:18
2	Cu 324.752†	146449.7	142793.5	[1000]	µg/L	02:47:18
2	Mn 257.610†	317171.6	316805.4	[1000]	µg/L	02:47:13
2	Mo 202.031†	9026.6	9017.8	[1000]	µg/L	02:47:18
2	Ni 231.604†	18720.1	18386.0	[1000]	µg/L	02:47:18
2	P 214.914†	2529.1	2318.4	[5000]	µg/L	02:47:39
2	Pb 220.353†	4037.9	3976.3	[1000]	µg/L	02:47:39

2	S 181.975 Axial†	420.7	395.9	[2000]	µg/L	02:47:39
2	Sb 206.836†	1033.0	1010.6	[1000]	µg/L	02:47:39
2	Se 196.026†	700.7	685.3	[1000]	µg/L	02:47:39
2	SiO2†	58219.8	56130.1	[10695]	µg/L	02:47:18
2	Si 251.611†	65907.3	65435.3	[5000]	µg/L	02:47:18
2	Sn 189.927†	2090.4	2064.0	[1000]	µg/L	02:47:39
2	Ti 334.940†	455664.5	454099.7	[1000]	µg/L	02:47:13
2	Tl 190.801†	640.9	661.1	[1000]	µg/L	02:47:39
2	U 409.014†	11413.4	10713.0	[1000]	µg/L	02:47:18
2	V 292.402†	89276.9	89203.1	[1000]	µg/L	02:47:18
2	Zn 213.857†	38015.3	37394.5	[1000]	µg/L	02:47:18
3	Sc RADIAL	114563.9	114563.9	102	%	02:46:07
3	Al 396.153Radial†	20740.6	20133.5	[10000]	µg/L	02:46:07
3	Ca 317.933Radial†	26374.4	25399.2	[10000]	µg/L	02:46:27
3	Fe 238.204 Radial†	1972.3	1925.2	[10000]	µg/L	02:46:27
3	K 766.490 Radial†	19551.9	18501.4	[10000]	µg/L	02:46:07
3	Mg 279.077 IEC†	1908.8	1854.2	[10000]	µg/L	02:46:27
3	Na 589.592 Radial†	36789.4	36824.1	[10000]	µg/L	02:46:07
3	Sr 421.552†	181445.7	178209.2	[1000]	µg/L	02:46:07
3	Sc 361.383	2053274.5	2053274.5	99.831	%	02:47:46
3	Y 371.029	1241325.7	1241325.7	99.119	%	02:47:46
3	Ag 328.068†	111600.7	111817.6	[1000]	µg/L	02:47:52
3	As 188.979†	516.7	515.1	[1000]	µg/L	02:48:12
3	B 249.677†	22645.6	22528.2	[1000]	µg/L	02:47:52
3	Ba 233.527†	39604.9	39752.5	[1000]	µg/L	02:47:52
3	Be 313.107†	1586898.6	1585968.6	[1000]	µg/L	02:47:46
3	Cd 226.502†	37554.1	37718.5	[1000]	µg/L	02:47:52
3	Co 228.616†	20643.3	20749.9	[1000]	µg/L	02:47:52
3	Cr 267.716†	47818.4	48022.0	[1000]	µg/L	02:47:52
3	Cu 324.752†	144971.8	141832.5	[1000]	µg/L	02:47:52
3	Mn 257.610†	315419.0	316174.6	[1000]	µg/L	02:47:46
3	Mo 202.031†	8994.6	9017.7	[1000]	µg/L	02:47:52
3	Ni 231.604†	18626.1	18358.1	[1000]	µg/L	02:47:52
3	P 214.914†	2474.1	2272.3	[5000]	µg/L	02:48:12
3	Pb 220.353†	3936.1	3888.7	[1000]	µg/L	02:48:12
3	S 181.975 Axial†	412.4	389.0	[2000]	µg/L	02:48:12
3	Sb 206.836†	1014.7	995.9	[1000]	µg/L	02:48:12
3	Se 196.026†	689.1	676.2	[1000]	µg/L	02:48:12
3	SiO2†	57673.0	55788.7	[10695]	µg/L	02:47:52
3	Si 251.611†	65277.7	65038.4	[5000]	µg/L	02:47:52
3	Sn 189.927†	2038.3	2019.3	[1000]	µg/L	02:48:12
3	Ti 334.940†	453287.2	453334.3	[1000]	µg/L	02:47:46
3	Tl 190.801†	635.4	657.9	[1000]	µg/L	02:48:12
3	U 409.014†	11291.8	10631.7	[1000]	µg/L	02:47:52
3	V 292.402†	88411.7	88653.0	[1000]	µg/L	02:47:52
3	Zn 213.857†	37645.0	37158.5	[1000]	µg/L	02:47:52

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2052653.2	8244.53	0.40%	99.801	%
Sc RADIAL	114737.3	878.38	0.77%	102	%
Y 371.029	1240471.5	5022.31	0.40%	99.051	%
Ag 328.068†	112210.4	345.83	0.31%	[1000]	µg/L
Al 396.153Radial†	20046.0	86.32	0.43%	[10000]	µg/L
As 188.979†	525.9	11.59	2.20%	[1000]	µg/L
B 249.677†	22616.0	78.08	0.35%	[1000]	µg/L
Ba 233.527†	39913.2	139.88	0.35%	[1000]	µg/L
Be 313.107†	1585927.6	3092.63	0.20%	[1000]	µg/L
Ca 317.933Radial†	25328.5	178.34	0.70%	[10000]	µg/L
Cd 226.502†	37877.8	152.74	0.40%	[1000]	µg/L
Co 228.616†	20831.7	73.00	0.35%	[1000]	µg/L
Cr 267.716†	48195.1	160.54	0.33%	[1000]	µg/L
Cu 324.752†	142426.2	518.97	0.36%	[1000]	µg/L
Fe 238.204 Radial†	1918.4	8.45	0.44%	[10000]	µg/L
K 766.490 Radial†	18518.3	30.79	0.17%	[10000]	µg/L
Mg 279.077 IEC†	1845.6	14.96	0.81%	[10000]	µg/L
Mn 257.610†	316199.2	594.30	0.19%	[1000]	µg/L
Mo 202.031†	9030.0	21.18	0.23%	[1000]	µg/L
Na 589.592 Radial†	36773.1	83.99	0.23%	[10000]	µg/L

Ni 231.604†	18377.4	16.75	0.09%	[1000]	µg/L
P 214.914†	2312.3	37.35	1.62%	[5000]	µg/L
Pb 220.353†	3956.2	60.07	1.52%	[1000]	µg/L
S 181.975 Axial†	392.3	3.43	0.87%	[2000]	µg/L
Sb 206.836†	1012.2	17.21	1.70%	[1000]	µg/L
Se 196.026†	687.5	12.49	1.82%	[1000]	µg/L
SiO2†	56012.0	193.49	0.35%	[10695]	µg/L
Si 251.611†	65279.4	211.76	0.32%	[5000]	µg/L
Sn 189.927†	2061.1	40.50	1.96%	[1000]	µg/L
Sr 421.552†	178036.3	410.89	0.23%	[1000]	µg/L
Ti 334.940†	453393.8	678.00	0.15%	[1000]	µg/L
Tl 190.801†	663.9	7.73	1.16%	[1000]	µg/L
U 409.014†	10683.8	45.26	0.42%	[1000]	µg/L
V 292.402†	88959.3	280.28	0.32%	[1000]	µg/L
Zn 213.857†	37315.4	135.92	0.36%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/18/2009 02:48:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114030.2	114030.2	101	%	02:48:54
1	Al 396.153Radial†	99804.8	98218.2	[50000]	µg/L	02:48:54
1	Ca 317.933Radial†	127284.3	125058.6	[50000]	µg/L	02:48:54
1	Fe 238.204 Radial†	3883.8	3819.8	[20000]	µg/L	02:48:59
1	Mg 279.077 IEC†	9157.3	9013.0	[50000]	µg/L	02:48:59
1	Na 589.592 Radial†	71583.1	71314.0	[20000]	µg/L	02:48:54
1	Sc 361.383	2065892.8	2065892.8	100.44	%	02:49:33
1	Y 371.029	1239483.0	1239483.0	98.972	%	02:49:33
2	Sc RADIAL	114120.2	114120.2	101	%	02:49:04
2	Al 396.153Radial†	101068.2	99385.9	[50000]	µg/L	02:49:04
2	Ca 317.933Radial†	128949.9	126601.2	[50000]	µg/L	02:49:04
2	Fe 238.204 Radial†	3851.6	3785.0	[20000]	µg/L	02:49:10
2	Mg 279.077 IEC†	9165.1	9013.5	[50000]	µg/L	02:49:10
2	Na 589.592 Radial†	72424.1	72087.2	[20000]	µg/L	02:49:04
2	Sc 361.383	2050241.8	2050241.8	99.684	%	02:49:40
2	Y 371.029	1230369.3	1230369.3	98.244	%	02:49:40
3	Sc RADIAL	114219.7	114219.7	102	%	02:49:15
3	Al 396.153Radial†	100837.5	99071.9	[50000]	µg/L	02:49:15
3	Ca 317.933Radial†	128701.1	126245.6	[50000]	µg/L	02:49:15
3	Fe 238.204 Radial†	3865.3	3795.2	[20000]	µg/L	02:49:21
3	Mg 279.077 IEC†	9150.7	8991.5	[50000]	µg/L	02:49:21
3	Na 589.592 Radial†	72140.9	71746.1	[20000]	µg/L	02:49:15
3	Sc 361.383	2063002.0	2063002.0	100.30	%	02:49:48
3	Y 371.029	1238175.0	1238175.0	98.867	%	02:49:48

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2059712.2	8328.01	0.40%	100.14	%
Sc RADIAL	114123.4	94.78	0.08%	101	%
Y 371.029	1236009.1	4927.83	0.40%	98.695	%
Al 396.153Radial†	98892.0	604.26	0.61%	[50000]	µg/L
Ca 317.933Radial†	125968.5	807.79	0.64%	[50000]	µg/L
Fe 238.204 Radial†	3800.0	17.90	0.47%	[20000]	µg/L
Mg 279.077 IEC†	9006.0	12.58	0.14%	[50000]	µg/L
Na 589.592 Radial†	71715.7	387.48	0.54%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	112.0	0.00000	0.999986	
Al 396.153Radial	3	Lin Thru 0	0.0	1.979	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	0.5246	0.00000	0.999985	
B 249.677	3	Lin Thru 0	0.0	22.53	0.00000	0.999973	
Ba 233.527	3	Lin Thru 0	0.0	39.81	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	1581	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.519	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	37.84	0.00000	0.999992	
Co 228.616	3	Lin Thru 0	0.0	20.79	0.00000	0.999992	
Cr 267.716	3	Lin Thru 0	0.0	48.04	0.00000	0.999976	
Cu 324.752	3	Lin Thru 0	0.0	142.1	0.00000	0.999987	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1904	0.00000	0.999993	
K 766.490 Radial	3	Lin Thru 0	0.0	1.844	0.00000	0.999958	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1803	0.00000	0.999989	
Mn 257.610	3	Lin Thru 0	0.0	315.1	0.00000	0.999968	
Mo 202.031	3	Lin Thru 0	0.0	8.964	0.00000	0.999889	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.604	0.00000	0.999948	

Ni 231.604	3	Lin Thru 0	0.0	18.36	0.00000	0.999988
P 214.914	3	Lin Thru 0	0.0	0.4606	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	3.945	0.00000	0.999976
S 181.975 Axial	3	Lin Thru 0	0.0	0.1946	0.00000	0.999858
Sb 206.836	3	Lin Thru 0	0.0	1.008	0.00000	0.999957
Se 196.026	3	Lin Thru 0	0.0	0.6866	0.00000	0.999990
SiO2	3	Lin Thru 0	0.0	5.237	0.00000	1.000000
Si 251.611	3	Lin Thru 0	0.0	13.06	0.00000	1.000000
Sn 189.927	3	Lin Thru 0	0.0	2.051	0.00000	0.999949
Sr 421.552	3	Lin Thru 0	0.0	177.5	0.00000	0.999980
Ti 334.940	3	Lin Thru 0	0.0	451.1	0.00000	0.999951
Tl 190.801	3	Lin Thru 0	0.0	0.6627	0.00000	0.999969
U 409.014	3	Lin Thru 0	0.0	10.65	0.00000	0.999978
V 292.402	3	Lin Thru 0	0.0	88.70	0.00000	0.999982
Zn 213.857	3	Lin Thru 0	0.0	37.32	0.00000	0.999994

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/18/2009 02:49:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112073.1	112073.1	99.6	%			02:50:31
1	Al 396.153Radial†	10502.5	10310.9	5191.0	µg/L	5191.0	ppb	02:50:31
1	Ca 317.933Radial†	13060.4	12612.4	5006.5	µg/L	5006.5	ppb	02:50:51
1	Fe 238.204 Radial†	989.0	981.4	5172.2	µg/L	5172.2	ppb	02:50:51
1	K 766.490 Radial†	5127.7	4451.5	2413.6	µg/L	2413.6	ppb	02:50:31
1	Mg 279.077 IEC†	963.0	946.7	5256.5	µg/L	5256.5	ppb	02:50:51
1	Na 589.592 Radial†	8545.0	9280.0	2574.8	µg/L	2574.8	ppb	02:50:31
1	Sr 421.552†	93596.9	94000.6	529.50	µg/L	529.50	ppb	02:50:31
1	Sc 361.383	2041394.9	2041394.9	99.254	%			02:51:55
1	Y 371.029	1238031.3	1238031.3	98.856	%			02:51:55
1	Ag 328.068†	28120.8	28360.5	257.11	µg/L	257.11	ppb	02:52:00
1	As 188.979†	256.2	255.6	486.07	µg/L	486.07	ppb	02:52:21
1	B 249.677†	11715.8	11648.2	515.37	µg/L	515.37	ppb	02:52:00
1	Ba 233.527†	19941.9	20172.6	507.72	µg/L	507.72	ppb	02:52:00
1	Be 313.107†	409705.1	409174.2	258.66	µg/L	258.66	ppb	02:51:55
1	Cd 226.502†	18663.5	18904.7	500.04	µg/L	500.04	ppb	02:52:00
1	Co 228.616†	10439.6	10589.8	509.45	µg/L	509.45	ppb	02:52:00
1	Cr 267.716†	23203.1	23500.4	490.35	µg/L	490.35	ppb	02:52:00
1	Cu 324.752†	75106.8	72287.2	509.69	µg/L	509.69	ppb	02:52:00
1	Mn 257.610†	157989.6	159400.2	506.51	µg/L	506.51	ppb	02:51:55
1	Mo 202.031†	4647.9	4690.8	523.51	µg/L	523.51	ppb	02:52:21
1	Ni 231.604†	9222.0	8991.9	489.86	µg/L	489.86	ppb	02:52:00
1	P 214.914†	1377.6	1181.9	2510.8	µg/L	2510.8	ppb	02:52:21
1	Pb 220.353†	2032.5	1993.7	506.21	µg/L	506.21	ppb	02:52:21
1	S 181.975 Axial†	505.4	485.2	2491.4	µg/L	2491.4	ppb	02:52:21
1	Sb 206.836†	509.2	492.5	487.19	µg/L	487.19	ppb	02:52:21
1	Se 196.026†	1792.3	1791.7	2611.9	µg/L	2611.9	ppb	02:52:21
1	SiO2†	56918.7	55365.0	10573	µg/L	10573	ppb	02:52:00
1	Si 251.611†	64250.6	64384.1	4883.3	µg/L	4883.3	ppb	02:52:00
1	Sn 189.927†	1094.1	1079.9	529.26	µg/L	529.26	ppb	02:52:21
1	Ti 334.940†	219592.5	220524.7	488.54	µg/L	488.54	ppb	02:51:55
1	Tl 190.801†	326.6	350.4	531.07	µg/L	531.07	ppb	02:52:21
1	U 409.014†	5755.8	5119.9	479.97	µg/L	479.97	ppb	02:52:00
1	V 292.402†	43738.6	44159.4	502.67	µg/L	502.67	ppb	02:52:00
1	Zn 213.857†	19230.3	18824.8	500.40	µg/L	500.40	ppb	02:52:00
2	Sc RADIAL	113303.1	113303.1	101	%			02:50:57
2	Al 396.153Radial†	10599.3	10292.5	5181.6	µg/L	5181.6	ppb	02:50:57
2	Ca 317.933Radial†	13126.6	12535.9	4976.2	µg/L	4976.2	ppb	02:51:17
2	Fe 238.204 Radial†	998.6	980.2	5165.7	µg/L	5165.7	ppb	02:51:17
2	K 766.490 Radial†	5354.6	4620.9	2505.4	µg/L	2505.4	ppb	02:50:57
2	Mg 279.077 IEC†	958.3	931.5	5172.2	µg/L	5172.2	ppb	02:51:17
2	Na 589.592 Radial†	8568.5	9210.2	2555.5	µg/L	2555.5	ppb	02:50:57
2	Sr 421.552†	95194.1	94566.5	532.69	µg/L	532.69	ppb	02:50:57
2	Sc 361.383	2024904.6	2024904.6	98.452	%			02:52:28
2	Y 371.029	1227501.2	1227501.2	98.015	%			02:52:28
2	Ag 328.068†	28071.4	28541.1	258.74	µg/L	258.74	ppb	02:52:34
2	As 188.979†	257.0	258.6	491.74	µg/L	491.74	ppb	02:52:54
2	B 249.677†	11639.5	11666.8	516.19	µg/L	516.19	ppb	02:52:34
2	Ba 233.527†	19922.2	20316.1	511.33	µg/L	511.33	ppb	02:52:34
2	Be 313.107†	407458.7	410254.0	259.34	µg/L	259.34	ppb	02:52:28
2	Cd 226.502†	18595.6	18988.9	502.27	µg/L	502.27	ppb	02:52:34
2	Co 228.616†	10402.1	10637.4	511.74	µg/L	511.74	ppb	02:52:34
2	Cr 267.716†	23115.0	23601.3	492.46	µg/L	492.46	ppb	02:52:34
2	Cu 324.752†	74782.0	72573.5	511.70	µg/L	511.70	ppb	02:52:34
2	Mn 257.610†	157143.9	159837.4	507.90	µg/L	507.90	ppb	02:52:28
2	Mo 202.031†	4634.7	4715.4	526.26	µg/L	526.26	ppb	02:52:54
2	Ni 231.604†	9236.7	9082.5	494.80	µg/L	494.80	ppb	02:52:34
2	P 214.914†	1369.0	1184.6	2516.5	µg/L	2516.5	ppb	02:52:54
2	Pb 220.353†	2018.5	1996.1	506.83	µg/L	506.83	ppb	02:52:54

2	S 181.975 Axial†	491.9	475.6	2442.2 µg/L	2442.2 ppb	02:52:54
2	Sb 206.836†	518.4	506.0	500.53 µg/L	500.53 ppb	02:52:54
2	Se 196.026†	1796.8	1811.0	2639.9 µg/L	2639.9 ppb	02:52:54
2	SiO2†	56656.5	55565.6	10611 µg/L	10611 ppb	02:52:34
2	Si 251.611†	63994.9	64651.5	4903.4 µg/L	4903.4 ppb	02:52:34
2	Sn 189.927†	1098.8	1093.6	535.91 µg/L	535.91 ppb	02:52:54
2	Ti 334.940†	218641.6	221360.6	490.39 µg/L	490.39 ppb	02:52:28
2	Tl 190.801†	317.6	344.0	521.30 µg/L	521.30 ppb	02:52:54
2	U 409.014†	5688.8	5099.0	478.01 µg/L	478.01 ppb	02:52:34
2	V 292.402†	43629.5	44407.5	505.49 µg/L	505.49 ppb	02:52:34
2	Zn 213.857†	19218.0	18970.0	504.27 µg/L	504.27 ppb	02:52:34
3	Sc RADIAL	113162.5	113162.5	101 %		02:51:23
3	Al 396.153Radial†	10525.3	10232.0	5151.3 µg/L	5151.3 ppb	02:51:23
3	Ca 317.933Radial†	13062.6	12488.4	4957.3 µg/L	4957.3 ppb	02:51:43
3	Fe 238.204 Radial†	987.1	970.0	5112.4 µg/L	5112.4 ppb	02:51:43
3	K 766.490 Radial†	5280.7	4554.0	2469.1 µg/L	2469.1 ppb	02:51:23
3	Mg 279.077 IEC†	958.3	932.6	5178.5 µg/L	5178.5 ppb	02:51:43
3	Na 589.592 Radial†	8519.3	9171.8	2544.8 µg/L	2544.8 ppb	02:51:23
3	Sr 421.552†	94942.9	94434.1	531.94 µg/L	531.94 ppb	02:51:23
3	Sc 361.383	2029438.9	2029438.9	98.672 %		02:53:01
3	Y 371.029	1230066.2	1230066.2	98.220 %		02:53:01
3	Ag 328.068†	28252.0	28660.4	259.83 µg/L	259.83 ppb	02:53:07
3	As 188.979†	254.1	255.0	484.90 µg/L	484.90 ppb	02:53:27
3	B 249.677†	11720.2	11722.2	518.67 µg/L	518.67 ppb	02:53:07
3	Ba 233.527†	20126.9	20478.4	515.41 µg/L	515.41 ppb	02:53:07
3	Be 313.107†	407625.7	409498.6	258.86 µg/L	258.86 ppb	02:53:01
3	Cd 226.502†	18778.1	19131.6	506.05 µg/L	506.05 ppb	02:53:07
3	Co 228.616†	10500.6	10713.6	515.40 µg/L	515.40 ppb	02:53:07
3	Cr 267.716†	23272.5	23708.4	494.70 µg/L	494.70 ppb	02:53:07
3	Cu 324.752†	75356.0	72985.6	514.59 µg/L	514.59 ppb	02:53:07
3	Mn 257.610†	157266.9	159605.5	507.16 µg/L	507.16 ppb	02:53:01
3	Mo 202.031†	4588.3	4658.0	519.84 µg/L	519.84 ppb	02:53:27
3	Ni 231.604†	9253.5	9078.6	494.58 µg/L	494.58 ppb	02:53:07
3	P 214.914†	1356.6	1168.8	2481.7 µg/L	2481.7 ppb	02:53:27
3	Pb 220.353†	2014.0	1987.0	504.49 µg/L	504.49 ppb	02:53:27
3	S 181.975 Axial†	501.0	483.7	2483.9 µg/L	2483.9 ppb	02:53:27
3	Sb 206.836†	513.5	499.9	494.47 µg/L	494.47 ppb	02:53:27
3	Se 196.026†	1780.8	1790.7	2610.4 µg/L	2610.4 ppb	02:53:27
3	SiO2†	57128.1	55915.1	10678 µg/L	10678 ppb	02:53:07
3	Si 251.611†	64496.0	65014.1	4931.8 µg/L	4931.8 ppb	02:53:07
3	Sn 189.927†	1076.5	1068.5	523.67 µg/L	523.67 ppb	02:53:27
3	Ti 334.940†	218640.7	220863.5	489.29 µg/L	489.29 ppb	02:53:01
3	Tl 190.801†	320.3	346.1	524.47 µg/L	524.47 ppb	02:53:27
3	U 409.014†	5808.8	5207.8	488.23 µg/L	488.23 ppb	02:53:07
3	V 292.402†	44027.9	44712.2	508.89 µg/L	508.89 ppb	02:53:07
3	Zn 213.857†	19352.8	19063.0	506.76 µg/L	506.76 ppb	02:53:07

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2031912.8	98.793	%	0.4142				0.42%
Sc RADIAL	112846.2	100	%	0.6				0.60%
Y 371.029	1231866.2	98.364	%	0.4384				0.45%
Ag 328.068†	28520.7	258.56	µg/L	1.367	258.56	ppb	1.367	0.53%
QC value within limits for Ag 328.068 Recovery = 103.43%								
Al 396.153Radial†	10278.5	5174.6	µg/L	20.75	5174.6	ppb	20.75	0.40%
QC value within limits for Al 396.153Radial Recovery = 103.49%								
As 188.979†	256.4	487.57	µg/L	3.660	487.57	ppb	3.660	0.75%
QC value within limits for As 188.979 Recovery = 97.51%								
B 249.677†	11679.1	516.74	µg/L	1.718	516.74	ppb	1.718	0.33%
QC value within limits for B 249.677 Recovery = 103.35%								
Ba 233.527†	20322.4	511.49	µg/L	3.850	511.49	ppb	3.850	0.75%
QC value within limits for Ba 233.527 Recovery = 102.30%								
Be 313.107†	409642.3	258.95	µg/L	0.350	258.95	ppb	0.350	0.14%
QC value within limits for Be 313.107 Recovery = 103.58%								
Ca 317.933Radial†	12545.6	4980.0	µg/L	24.84	4980.0	ppb	24.84	0.50%
QC value within limits for Ca 317.933Radial Recovery = 99.60%								
Cd 226.502†	19008.4	502.79	µg/L	3.040	502.79	ppb	3.040	0.60%
QC value within limits for Cd 226.502 Recovery = 100.56%								
Co 228.616†	10646.9	512.20	µg/L	2.999	512.20	ppb	2.999	0.59%

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   QC value within limits for Co 228.616  Recovery = 102.44%
Cr 267.716†            23603.3      492.50 µg/L        2.173      492.50 ppb        2.173   0.44%
   QC value within limits for Cr 267.716  Recovery = 98.50%
Cu 324.752†            72615.4      511.99 µg/L        2.463      511.99 ppb        2.463   0.48%
   QC value within limits for Cu 324.752  Recovery = 102.40%
Fe 238.204 Radial†       977.2      5150.1 µg/L       32.83     5150.1 ppb       32.83   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.00%
K 766.490 Radial†       4542.1      2462.7 µg/L       46.25     2462.7 ppb       46.25   1.88%
   QC value within limits for K 766.490 Radial  Recovery = 98.51%
Mg 279.077 IEC†          937.0      5202.4 µg/L       46.94     5202.4 ppb       46.94   0.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.05%
Mn 257.610†           159614.4      507.19 µg/L       0.694      507.19 ppb       0.694   0.14%
   QC value within limits for Mn 257.610  Recovery = 101.44%
Mo 202.031†            4688.1      523.20 µg/L       3.219      523.20 ppb       3.219   0.62%
   QC value within limits for Mo 202.031  Recovery = 104.64%
Na 589.592 Radial†     9220.7      2558.4 µg/L       15.21     2558.4 ppb       15.21   0.59%
   QC value within limits for Na 589.592 Radial  Recovery = 102.34%
Ni 231.604†            9051.0      493.08 µg/L       2.789      493.08 ppb       2.789   0.57%
   QC value within limits for Ni 231.604  Recovery = 98.62%
P 214.914†             1178.4      2503.0 µg/L       18.65     2503.0 ppb       18.65   0.75%
   QC value within limits for P 214.914  Recovery = 100.12%
Pb 220.353†            1992.3      505.85 µg/L       1.210      505.85 ppb       1.210   0.24%
   QC value within limits for Pb 220.353  Recovery = 101.17%
S 181.975 Axial†        481.5      2472.5 µg/L       26.47     2472.5 ppb       26.47   1.07%
   QC value within limits for S 181.975 Axial  Recovery = 98.90%
Sb 206.836†             499.5      494.06 µg/L       6.679      494.06 ppb       6.679   1.35%
   QC value within limits for Sb 206.836  Recovery = 98.81%
Se 196.026†            1797.8      2620.7 µg/L       16.66     2620.7 ppb       16.66   0.64%
   QC value within limits for Se 196.026  Recovery = 104.83%
SiO2†                 55615.3       10621 µg/L        53.2       10621 ppb        53.2   0.50%
   QC value within limits for SiO2  Recovery = 99.30%
Si 251.611†           64683.2      4906.2 µg/L       24.36     4906.2 ppb       24.36   0.50%
   QC value within limits for Si 251.611  Recovery = 98.12%
Sn 189.927†            1080.7      529.61 µg/L       6.124      529.61 ppb       6.124   1.16%
   QC value within limits for Sn 189.927  Recovery = 105.92%
Sr 421.552†           94333.7      531.38 µg/L       1.667      531.38 ppb       1.667   0.31%
   QC value within limits for Sr 421.552  Recovery = 106.28%
Ti 334.940†          220916.3      489.40 µg/L       0.933      489.40 ppb       0.933   0.19%
   QC value within limits for Ti 334.940  Recovery = 97.88%
Tl 190.801†             346.8      525.61 µg/L       4.986      525.61 ppb       4.986   0.95%
   QC value within limits for Tl 190.801  Recovery = 105.12%
U 409.014†             5142.2      482.07 µg/L       5.427      482.07 ppb       5.427   1.13%
   QC value within limits for U 409.014  Recovery = 96.41%
V 292.402†            44426.4      505.68 µg/L       3.112      505.68 ppb       3.112   0.62%
   QC value within limits for V 292.402  Recovery = 101.14%
Zn 213.857†           18952.6      503.81 µg/L       3.205      503.81 ppb       3.205   0.64%
   QC value within limits for Zn 213.857  Recovery = 100.76%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/18/2009 02:53:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110159.2	110159.2	97.9	%			02:54:09
1	Al 396.153Radial†	212.5	-12.8	-6.4963	µg/L	-6.4963	ppb	02:54:09
1	Ca 317.933Radial†	428.7	-57.7	-22.890	µg/L	-22.890	ppb	02:54:30
1	Fe 238.204 Radial†	7.3	-3.7	-19.631	µg/L	-19.631	ppb	02:54:30
1	K 766.490 Radial†	666.5	-14.3	-7.7500	µg/L	-7.7500	ppb	02:54:09
1	Mg 279.077 IEC†	15.9	-3.6	-20.044	µg/L	-20.044	ppb	02:54:30
1	Na 589.592 Radial†	-676.1	13.6	3.7765	µg/L	3.7765	ppb	02:54:09
1	Sr 421.552†	77.2	142.6	0.8031	µg/L	0.8031	ppb	02:54:09
1	Sc 361.383	2007570.5	2007570.5	97.609	%			02:55:32
1	Y 371.029	1219230.8	1219230.8	97.355	%			02:55:32
1	Ag 328.068†	85.7	116.1	1.0352	µg/L	1.0352	ppb	02:55:37
1	As 188.979†	1.5	-1.0	-1.8089	µg/L	-1.8089	ppb	02:55:58
1	B 249.677†	152.5	0.5	0.0302	µg/L	0.0302	ppb	02:55:58
1	Ba 233.527†	-78.8	-0.1	-0.0023	µg/L	-0.0023	ppb	02:55:58
1	Be 313.107†	3773.3	254.2	0.1607	µg/L	0.1607	ppb	02:55:37
1	Cd 226.502†	-83.0	15.9	0.4356	µg/L	0.4356	ppb	02:55:58
1	Co 228.616†	-66.6	3.5	0.1704	µg/L	0.1704	ppb	02:55:58
1	Cr 267.716†	-109.4	10.7	0.2229	µg/L	0.2229	ppb	02:55:37
1	Cu 324.752†	3281.1	-22.8	-0.1647	µg/L	-0.1647	ppb	02:55:37
1	Mn 257.610†	-171.3	47.2	0.1472	µg/L	0.1472	ppb	02:55:58
1	Mo 202.031†	-2.6	5.2	0.5800	µg/L	0.5800	ppb	02:55:58
1	Ni 231.604†	302.5	10.5	0.5742	µg/L	0.5742	ppb	02:55:58
1	P 214.914†	203.1	2.1	4.4838	µg/L	4.4838	ppb	02:55:58
1	Pb 220.353†	68.9	16.5	4.1686	µg/L	4.1686	ppb	02:55:58
1	S 181.975 Axial†	21.6	-1.9	-9.9508	µg/L	-9.9508	ppb	02:55:58
1	Sb 206.836†	21.1	1.0	1.0292	µg/L	1.0292	ppb	02:55:58
1	Se 196.026†	14.9	1.2	1.7313	µg/L	1.7313	ppb	02:55:58
1	SiO2†	1984.1	51.0	9.7463	µg/L	9.7463	ppb	02:55:37
1	Si 251.611†	379.3	39.0	2.9824	µg/L	2.9824	ppb	02:55:58
1	Sn 189.927†	21.1	-0.8	-0.4167	µg/L	-0.4167	ppb	02:55:58
1	Ti 334.940†	846.6	148.5	0.3304	µg/L	0.3304	ppb	02:55:37
1	Tl 190.801†	-20.0	1.0	1.4465	µg/L	1.4465	ppb	02:55:58
1	U 409.014†	857.0	198.7	18.668	µg/L	18.668	ppb	02:55:37
1	V 292.402†	-93.7	-4.1	-0.0131	µg/L	-0.0131	ppb	02:55:37
1	Zn 213.857†	545.3	8.5	0.2269	µg/L	0.2269	ppb	02:55:58
2	Sc RADIAL	110505.7	110505.7	98.2	%			02:54:35
2	Al 396.153Radial†	200.5	-25.7	-13.041	µg/L	-13.041	ppb	02:54:35
2	Ca 317.933Radial†	424.2	-63.6	-25.264	µg/L	-25.264	ppb	02:54:56
2	Fe 238.204 Radial†	10.7	-0.3	-1.4548	µg/L	-1.4548	ppb	02:54:56
2	K 766.490 Radial†	741.2	59.6	32.300	µg/L	32.300	ppb	02:54:35
2	Mg 279.077 IEC†	17.2	-2.3	-12.743	µg/L	-12.743	ppb	02:54:56
2	Na 589.592 Radial†	-644.1	48.3	13.394	µg/L	13.394	ppb	02:54:35
2	Sr 421.552†	-5.2	58.5	0.3293	µg/L	0.3293	ppb	02:54:35
2	Sc 361.383	1992128.4	1992128.4	96.858	%			02:56:03
2	Y 371.029	1209681.6	1209681.6	96.592	%			02:56:03
2	Ag 328.068†	6.4	34.9	0.3126	µg/L	0.3126	ppb	02:56:09
2	As 188.979†	1.9	-0.5	-0.9483	µg/L	-0.9483	ppb	02:56:29
2	B 249.677†	161.4	10.9	0.4860	µg/L	0.4860	ppb	02:56:29
2	Ba 233.527†	-71.7	6.6	0.1670	µg/L	0.1670	ppb	02:56:29
2	Be 313.107†	3769.5	280.3	0.1772	µg/L	0.1772	ppb	02:56:09
2	Cd 226.502†	-82.8	15.4	0.4257	µg/L	0.4257	ppb	02:56:29
2	Co 228.616†	-68.9	0.6	0.0290	µg/L	0.0290	ppb	02:56:29
2	Cr 267.716†	-89.4	30.4	0.6338	µg/L	0.6338	ppb	02:56:09
2	Cu 324.752†	3282.8	5.0	0.0348	µg/L	0.0348	ppb	02:56:09
2	Mn 257.610†	-166.0	51.2	0.1623	µg/L	0.1623	ppb	02:56:29
2	Mo 202.031†	1.8	9.8	1.0928	µg/L	1.0928	ppb	02:56:29
2	Ni 231.604†	299.8	10.2	0.5534	µg/L	0.5534	ppb	02:56:29
2	P 214.914†	210.6	11.4	24.763	µg/L	24.763	ppb	02:56:29
2	Pb 220.353†	57.7	5.5	1.3735	µg/L	1.3735	ppb	02:56:29

2	S 181.975 Axial†	22.3	-1.0	-5.0530 µg/L	-5.0530 ppb	02:56:29
2	Sb 206.836†	20.3	0.4	0.3978 µg/L	0.3978 ppb	02:56:29
2	Se 196.026†	7.7	-6.1	-8.9218 µg/L	-8.9218 ppb	02:56:29
2	SiO2†	1957.3	39.1	7.4744 µg/L	7.4744 ppb	02:56:09
2	Si 251.611†	382.8	45.6	3.4089 µg/L	3.4089 ppb	02:56:29
2	Sn 189.927†	24.0	2.3	1.1044 µg/L	1.1044 ppb	02:56:29
2	Ti 334.940†	810.6	118.0	0.2629 µg/L	0.2629 ppb	02:56:09
2	Tl 190.801†	-17.6	3.3	4.9329 µg/L	4.9329 ppb	02:56:29
2	U 409.014†	903.7	253.8	23.830 µg/L	23.830 ppb	02:56:09
2	V 292.402†	-77.9	11.6	0.1763 µg/L	0.1763 ppb	02:56:09
2	Zn 213.857†	550.8	18.5	0.4940 µg/L	0.4940 ppb	02:56:29
3	Sc RADIAL	110146.2	110146.2	97.9 %		02:55:01
3	Al 396.153Radial†	221.4	-3.7	-1.9010 µg/L	-1.9010 ppb	02:55:01
3	Ca 317.933Radial†	414.0	-72.6	-28.837 µg/L	-28.837 ppb	02:55:22
3	Fe 238.204 Radial†	10.5	-0.5	-2.5918 µg/L	-2.5918 ppb	02:55:22
3	K 766.490 Radial†	749.7	70.7	38.345 µg/L	38.345 ppb	02:55:01
3	Mg 279.077 IEC†	16.0	-3.5	-19.193 µg/L	-19.193 ppb	02:55:22
3	Na 589.592 Radial†	-671.0	18.7	5.1904 µg/L	5.1904 ppb	02:55:01
3	Sr 421.552†	-1.5	62.3	0.3507 µg/L	0.3507 ppb	02:55:01
3	Sc 361.383	2014186.5	2014186.5	97.931 %		02:56:35
3	Y 371.029	1223550.1	1223550.1	97.700 %		02:56:35
3	Ag 328.068†	48.9	78.3	0.7011 µg/L	0.7011 ppb	02:56:40
3	As 188.979†	2.1	-0.4	-0.7424 µg/L	-0.7424 ppb	02:57:01
3	B 249.677†	153.8	1.3	0.0593 µg/L	0.0593 ppb	02:57:01
3	Ba 233.527†	-69.5	9.7	0.2436 µg/L	0.2436 ppb	02:57:01
3	Be 313.107†	3673.5	139.6	0.0882 µg/L	0.0882 ppb	02:56:40
3	Cd 226.502†	-90.8	8.2	0.2308 µg/L	0.2308 ppb	02:57:01
3	Co 228.616†	-71.6	-1.4	-0.0674 µg/L	-0.0674 ppb	02:57:01
3	Cr 267.716†	-111.6	8.8	0.1841 µg/L	0.1841 ppb	02:56:40
3	Cu 324.752†	3260.5	-54.9	-0.3867 µg/L	-0.3867 ppb	02:56:40
3	Mn 257.610†	-168.8	50.3	0.1593 µg/L	0.1593 ppb	02:57:01
3	Mo 202.031†	-2.5	5.3	0.5965 µg/L	0.5965 ppb	02:57:01
3	Ni 231.604†	297.0	3.9	0.2103 µg/L	0.2103 ppb	02:57:01
3	P 214.914†	202.8	1.1	2.4456 µg/L	2.4456 ppb	02:57:01
3	Pb 220.353†	57.5	4.6	1.1468 µg/L	1.1468 ppb	02:57:01
3	S 181.975 Axial†	21.7	-1.9	-9.6576 µg/L	-9.6576 ppb	02:57:01
3	Sb 206.836†	18.8	-1.4	-1.3584 µg/L	-1.3584 ppb	02:57:01
3	Se 196.026†	13.6	-0.2	-0.2659 µg/L	-0.2659 ppb	02:57:01
3	SiO2†	1981.2	41.4	7.9096 µg/L	7.9096 ppb	02:56:40
3	Si 251.611†	361.1	19.1	1.3821 µg/L	1.3821 ppb	02:57:01
3	Sn 189.927†	24.2	2.2	1.0735 µg/L	1.0735 ppb	02:57:01
3	Ti 334.940†	869.5	169.0	0.3763 µg/L	0.3763 ppb	02:56:40
3	Tl 190.801†	-15.1	6.0	9.0341 µg/L	9.0341 ppb	02:57:01
3	U 409.014†	858.8	197.8	18.571 µg/L	18.571 ppb	02:56:40
3	V 292.402†	-62.4	28.2	0.3521 µg/L	0.3521 ppb	02:56:40
3	Zn 213.857†	550.7	12.1	0.3254 µg/L	0.3254 ppb	02:57:01

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2004628.5	97.466	%	0.5504				0.56%
Sc RADIAL	110270.4	98.0	%	0.18				0.18%
Y 371.029	1217487.5	97.216	%	0.5667				0.58%
Ag 328.068†	76.4	0.6830	µg/L	0.36161	0.6830	ppb	0.36161	52.95%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.1	-7.1459	µg/L	5.59812	-7.1459	ppb	5.59812	78.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-1.1665	µg/L	0.56578	-1.1665	ppb	0.56578	48.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4.3	0.1918	µg/L	0.25518	0.1918	ppb	0.25518	133.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.4	0.1361	µg/L	0.12580	0.1361	ppb	0.12580	92.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	224.7	0.1420	µg/L	0.04736	0.1420	ppb	0.04736	33.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-64.7	-25.663	µg/L	2.9935	-25.663	ppb	2.9935	11.66%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.2	0.3641	µg/L	0.11551	0.3641	ppb	0.11551	31.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.9	0.0440	µg/L	0.11963	0.0440	ppb	0.11963	272.00%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.7      0.3469 µg/L       0.24921      0.3469 ppb        0.24921  71.83%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -24.2     -0.1722 µg/L       0.21082     -0.1722 ppb        0.21082 122.42%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -7.8924 µg/L      10.18140     -7.8924 ppb       10.18140 129.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          38.7      20.965 µg/L       25.0508      20.965 ppb        25.0508 119.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.1     -17.327 µg/L        3.9922     -17.327 ppb         3.9922  23.04%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                49.6      0.1563 µg/L       0.00801      0.1563 ppb        0.00801   5.13%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.8      0.7564 µg/L       0.29141      0.7564 ppb        0.29141  38.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         26.9      7.4538 µg/L       5.19301      7.4538 ppb        5.19301  69.67%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.2      0.4460 µg/L       0.20434      0.4460 ppb        0.20434  45.82%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.8      10.564 µg/L       12.3387      10.564 ppb        12.3387 116.80%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 8.9      2.2297 µg/L       1.68300      2.2297 ppb        1.68300  75.48%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.6     -8.2205 µg/L       2.74699     -8.2205 ppb        2.74699  33.42%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.0      0.0229 µg/L       1.23717      0.0229 ppb        1.23717 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.7     -2.4855 µg/L       5.66280     -2.4855 ppb        5.66280 227.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      43.9      8.3767 µg/L       1.20583      8.3767 ppb        1.20583  14.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                34.6      2.5911 µg/L       1.06852      2.5911 ppb        1.06852  41.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.5871 µg/L       0.86943      0.5871 ppb        0.86943 148.10%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                87.8      0.4944 µg/L       0.26757      0.4944 ppb        0.26757  54.12%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               145.2      0.3232 µg/L       0.05703      0.3232 ppb        0.05703  17.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.4      5.1379 µg/L       3.79795      5.1379 ppb        3.79795  73.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                216.8      20.356 µg/L        3.0085      20.356 ppb         3.0085  14.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 11.9      0.1717 µg/L       0.18263      0.1717 ppb        0.18263 106.34%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                13.0      0.3488 µg/L       0.13506      0.3488 ppb        0.13506  38.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 02:57:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109670.6	109670.6	97.5	%			02:57:43
1	Al 396.153Radial†	579.7	364.7	183.92	µg/L	183.92	ppb	02:57:43
1	Ca 317.933Radial†	925.4	453.6	180.08	µg/L	180.08	ppb	02:58:04
1	Fe 238.204 Radial†	29.1	18.6	97.895	µg/L	97.895	ppb	02:58:04
1	K 766.490 Radial†	1047.0	378.9	205.46	µg/L	205.46	ppb	02:57:43
1	Mg 279.077 IEC†	73.3	55.4	307.32	µg/L	307.32	ppb	02:58:04
1	Na 589.592 Radial†	384.7	1098.5	304.78	µg/L	304.78	ppb	02:57:43
1	Sr 421.552†	862.3	948.1	5.3409	µg/L	5.3409	ppb	02:57:43
1	Sc 361.383	2020682.7	2020682.7	98.247	%			02:59:06
1	Y 371.029	1230392.5	1230392.5	98.246	%			02:59:06
1	Ag 328.068†	580.5	619.2	5.5741	µg/L	5.5741	ppb	02:59:11
1	As 188.979†	13.3	11.1	21.089	µg/L	21.089	ppb	02:59:32
1	B 249.677†	1277.3	1144.4	50.762	µg/L	50.762	ppb	02:59:11
1	Ba 233.527†	119.1	201.9	5.0818	µg/L	5.0818	ppb	02:59:32
1	Be 313.107†	11549.7	8144.3	5.1500	µg/L	5.1500	ppb	02:59:11
1	Cd 226.502†	88.5	191.0	5.0816	µg/L	5.0816	ppb	02:59:32
1	Co 228.616†	22.8	94.9	4.5785	µg/L	4.5785	ppb	02:59:32
1	Cr 267.716†	102.0	226.6	4.7301	µg/L	4.7301	ppb	02:59:11
1	Cu 324.752†	4685.2	1384.5	9.7617	µg/L	9.7617	ppb	02:59:11
1	Mn 257.610†	2986.4	3262.3	10.365	µg/L	10.365	ppb	02:59:11
1	Mo 202.031†	81.3	90.7	10.123	µg/L	10.123	ppb	02:59:32
1	Ni 231.604†	391.9	99.5	5.4226	µg/L	5.4226	ppb	02:59:32
1	P 214.914†	269.6	68.4	147.50	µg/L	147.50	ppb	02:59:32
1	Pb 220.353†	91.6	39.1	9.9059	µg/L	9.9059	ppb	02:59:32
1	S 181.975 Axial†	34.0	10.5	53.947	µg/L	53.947	ppb	02:59:32
1	Sb 206.836†	23.7	3.6	3.5796	µg/L	3.5796	ppb	02:59:32
1	Se 196.026†	26.4	12.8	18.593	µg/L	18.593	ppb	02:59:32
1	SiO2†	3071.6	1144.8	218.61	µg/L	218.61	ppb	02:59:11
1	Si 251.611†	1652.1	1331.9	101.25	µg/L	101.25	ppb	02:59:32
1	Sn 189.927†	39.2	17.5	8.6411	µg/L	8.6411	ppb	02:59:32
1	Ti 334.940†	2983.4	2317.8	5.1276	µg/L	5.1276	ppb	02:59:11
1	Tl 190.801†	-10.1	11.1	16.753	µg/L	16.753	ppb	02:59:32
1	U 409.014†	1204.9	547.2	51.372	µg/L	51.372	ppb	02:59:11
1	V 292.402†	374.0	472.7	5.4902	µg/L	5.4902	ppb	02:59:11
1	Zn 213.857†	927.3	393.7	10.488	µg/L	10.488	ppb	02:59:32
2	Sc RADIAL	110712.5	110712.5	98.4	%			02:58:09
2	Al 396.153Radial†	594.5	374.2	188.75	µg/L	188.75	ppb	02:58:09
2	Ca 317.933Radial†	930.5	449.9	178.58	µg/L	178.58	ppb	02:58:29
2	Fe 238.204 Radial†	30.8	20.0	105.43	µg/L	105.43	ppb	02:58:29
2	K 766.490 Radial†	1006.9	328.1	177.89	µg/L	177.89	ppb	02:58:09
2	Mg 279.077 IEC†	75.0	56.3	312.49	µg/L	312.49	ppb	02:58:29
2	Na 589.592 Radial†	404.9	1115.3	309.47	µg/L	309.47	ppb	02:58:09
2	Sr 421.552†	890.8	968.8	5.4574	µg/L	5.4574	ppb	02:58:09
2	Sc 361.383	2019005.8	2019005.8	98.165	%			02:59:38
2	Y 371.029	1229319.2	1229319.2	98.160	%			02:59:38
2	Ag 328.068†	495.9	533.4	4.8088	µg/L	4.8088	ppb	02:59:43
2	As 188.979†	17.3	15.2	28.872	µg/L	28.872	ppb	03:00:04
2	B 249.677†	1208.9	1075.8	47.716	µg/L	47.716	ppb	02:59:43
2	Ba 233.527†	128.9	212.0	5.3362	µg/L	5.3362	ppb	03:00:04
2	Be 313.107†	11423.6	8025.7	5.0750	µg/L	5.0750	ppb	02:59:43
2	Cd 226.502†	97.0	199.7	5.3109	µg/L	5.3109	ppb	03:00:04
2	Co 228.616†	22.1	94.3	4.5431	µg/L	4.5431	ppb	03:00:04
2	Cr 267.716†	144.0	269.4	5.6208	µg/L	5.6208	ppb	02:59:43
2	Cu 324.752†	4664.4	1367.3	9.6423	µg/L	9.6423	ppb	02:59:43
2	Mn 257.610†	2994.7	3273.4	10.401	µg/L	10.401	ppb	02:59:43
2	Mo 202.031†	72.9	82.1	9.1688	µg/L	9.1688	ppb	03:00:04
2	Ni 231.604†	402.8	110.9	6.0428	µg/L	6.0428	ppb	03:00:04
2	P 214.914†	281.0	80.3	173.25	µg/L	173.25	ppb	03:00:04
2	Pb 220.353†	90.2	37.8	9.5651	µg/L	9.5651	ppb	03:00:04

2	S 181.975 Axial†	42.7	19.5	99.918 µg/L	99.918 ppb	03:00:04
2	Sb 206.836†	34.2	14.3	14.150 µg/L	14.150 ppb	03:00:04
2	Se 196.026†	29.7	16.1	23.488 µg/L	23.488 ppb	03:00:04
2	SiO2†	3103.0	1179.3	225.21 µg/L	225.21 ppb	02:59:43
2	Si 251.611†	1622.8	1303.5	99.008 µg/L	99.008 ppb	03:00:04
2	Sn 189.927†	43.7	22.0	10.861 µg/L	10.861 ppb	03:00:04
2	Ti 334.940†	3018.4	2356.0	5.2122 µg/L	5.2122 ppb	02:59:43
2	Tl 190.801†	-5.3	16.0	24.217 µg/L	24.217 ppb	03:00:04
2	U 409.014†	1171.2	513.8	48.240 µg/L	48.240 ppb	02:59:43
2	V 292.402†	370.2	469.1	5.4391 µg/L	5.4391 ppb	02:59:43
2	Zn 213.857†	923.6	390.7	10.404 µg/L	10.404 ppb	03:00:04
3	Sc RADIAL	110532.5	110532.5	98.3 %		02:58:35
3	Al 396.153Radial†	599.5	380.2	191.75 µg/L	191.75 ppb	02:58:35
3	Ca 317.933Radial†	924.1	444.9	176.62 µg/L	176.62 ppb	02:58:56
3	Fe 238.204 Radial†	31.2	20.5	107.94 µg/L	107.94 ppb	02:58:56
3	K 766.490 Radial†	955.5	277.4	150.43 µg/L	150.43 ppb	02:58:35
3	Mg 279.077 IEC†	69.1	50.5	280.24 µg/L	280.24 ppb	02:58:56
3	Na 589.592 Radial†	374.9	1085.5	301.18 µg/L	301.18 ppb	02:58:35
3	Sr 421.552†	848.9	927.6	5.2251 µg/L	5.2251 ppb	02:58:35
3	Sc 361.383	2016302.3	2016302.3	98.034 %		03:00:10
3	Y 371.029	1227337.6	1227337.6	98.002 %		03:00:10
3	Ag 328.068†	554.3	593.7	5.3440 µg/L	5.3440 ppb	03:00:16
3	As 188.979†	13.1	10.8	20.619 µg/L	20.619 ppb	03:00:36
3	B 249.677†	1213.3	1081.9	47.985 µg/L	47.985 ppb	03:00:16
3	Ba 233.527†	122.2	205.4	5.1681 µg/L	5.1681 ppb	03:00:36
3	Be 313.107†	11444.9	8063.0	5.0985 µg/L	5.0985 ppb	03:00:16
3	Cd 226.502†	91.8	194.5	5.1733 µg/L	5.1733 ppb	03:00:36
3	Co 228.616†	28.0	100.3	4.8378 µg/L	4.8378 ppb	03:00:36
3	Cr 267.716†	135.9	261.4	5.4529 µg/L	5.4529 ppb	03:00:16
3	Cu 324.752†	4659.8	1369.0	9.6545 µg/L	9.6545 ppb	03:00:16
3	Mn 257.610†	3027.0	3310.4	10.519 µg/L	10.519 ppb	03:00:16
3	Mo 202.031†	88.2	97.9	10.928 µg/L	10.928 ppb	03:00:36
3	Ni 231.604†	392.1	100.6	5.4794 µg/L	5.4794 ppb	03:00:36
3	P 214.914†	276.9	76.5	165.10 µg/L	165.10 ppb	03:00:36
3	Pb 220.353†	104.9	52.8	13.386 µg/L	13.386 ppb	03:00:36
3	S 181.975 Axial†	43.1	20.0	102.54 µg/L	102.54 ppb	03:00:36
3	Sb 206.836†	31.6	11.7	11.582 µg/L	11.582 ppb	03:00:36
3	Se 196.026†	38.7	25.4	37.011 µg/L	37.011 ppb	03:00:36
3	SiO2†	3051.4	1130.9	215.96 µg/L	215.96 ppb	03:00:16
3	Si 251.611†	1636.6	1319.8	100.20 µg/L	100.20 ppb	03:00:36
3	Sn 189.927†	45.2	23.6	11.620 µg/L	11.620 ppb	03:00:36
3	Ti 334.940†	3054.5	2396.9	5.3031 µg/L	5.3031 ppb	03:00:16
3	Tl 190.801†	2.1	23.5	35.541 µg/L	35.541 ppb	03:00:36
3	U 409.014†	1185.8	530.4	49.795 µg/L	49.795 ppb	03:00:16
3	V 292.402†	328.4	426.9	4.9787 µg/L	4.9787 ppb	03:00:16
3	Zn 213.857†	922.2	390.6	10.403 µg/L	10.403 ppb	03:00:36

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2018663.6	98.149	%	0.1075				0.11%
Sc RADIAL	110305.2	98.1	%	0.50				0.50%
Y 371.029	1229016.5	98.136	%	0.1238				0.13%
Ag 328.068†	582.1	5.2423	µg/L	0.39264	5.2423	ppb	0.39264	7.49%
QC value within limits for Ag 328.068 Recovery = 104.85%								
Al 396.153Radial†	373.0	188.14	µg/L	3.946	188.14	ppb	3.946	2.10%
QC value within limits for Al 396.153Radial Recovery = 94.07%								
As 188.979†	12.4	23.527	µg/L	4.6353	23.527	ppb	4.6353	19.70%
QC value within limits for As 188.979 Recovery = 78.42%								
B 249.677†	1100.7	48.821	µg/L	1.6864	48.821	ppb	1.6864	3.45%
QC value within limits for B 249.677 Recovery = 97.64%								
Ba 233.527†	206.4	5.1954	µg/L	0.12941	5.1954	ppb	0.12941	2.49%
QC value within limits for Ba 233.527 Recovery = 103.91%								
Be 313.107†	8077.6	5.1078	µg/L	0.03839	5.1078	ppb	0.03839	0.75%
QC value within limits for Be 313.107 Recovery = 102.16%								
Ca 317.933Radial†	449.5	178.42	µg/L	1.733	178.42	ppb	1.733	0.97%
QC value within limits for Ca 317.933Radial Recovery = 89.21%								
Cd 226.502†	195.1	5.1886	µg/L	0.11543	5.1886	ppb	0.11543	2.22%
QC value within limits for Cd 226.502 Recovery = 103.77%								
Co 228.616†	96.5	4.6531	µg/L	0.16088	4.6531	ppb	0.16088	3.46%

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   QC value within limits for Co 228.616  Recovery = 93.06%
Cr 267.716†              252.5      5.2679 µg/L       0.47331      5.2679 ppb        0.47331   8.98%
   QC value within limits for Cr 267.716  Recovery = 105.36%
Cu 324.752†             1373.6      9.6862 µg/L       0.06573      9.6862 ppb        0.06573   0.68%
   QC value within limits for Cu 324.752  Recovery = 96.86%
Fe 238.204 Radial†        19.7      103.75 µg/L         5.226      103.75 ppb          5.226   5.04%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.75%
K 766.490 Radial†        328.2      177.93 µg/L        27.515      177.93 ppb         27.515  15.46%
   QC value within limits for K 766.490 Radial  Recovery = 118.62%
Mg 279.077 IEC†           54.1      300.01 µg/L        17.320      300.01 ppb         17.320   5.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.00%
Mn 257.610†             3282.0      10.429 µg/L        0.0804      10.429 ppb         0.0804   0.77%
   QC value within limits for Mn 257.610  Recovery = 104.29%
Mo 202.031†               90.3      10.073 µg/L        0.8807      10.073 ppb         0.8807   8.74%
   QC value within limits for Mo 202.031  Recovery = 100.73%
Na 589.592 Radial†      1099.8      305.14 µg/L         4.156      305.14 ppb          4.156   1.36%
   QC value within limits for Na 589.592 Radial  Recovery = 101.71%
Ni 231.604†              103.7      5.6482 µg/L       0.34283      5.6482 ppb        0.34283   6.07%
   QC value within limits for Ni 231.604  Recovery = 112.96%
P 214.914†                75.1      161.95 µg/L        13.157      161.95 ppb         13.157   8.12%
   QC value within limits for P 214.914  Recovery = 107.97%
Pb 220.353†               43.2      10.952 µg/L        2.1146      10.952 ppb         2.1146  19.31%
   QC value within limits for Pb 220.353  Recovery = 109.52%
S 181.975 Axial†          16.6      85.467 µg/L       27.3281      85.467 ppb        27.3281  31.98%
   QC value within limits for S 181.975 Axial  Recovery = 85.47%
Sb 206.836†                9.9      9.7703 µg/L       5.51287      9.7703 ppb        5.51287  56.42%
   QC value within limits for Sb 206.836  Recovery = 97.70%
Se 196.026†               18.1      26.364 µg/L        9.5396      26.364 ppb         9.5396  36.18%
   QC value within limits for Se 196.026  Recovery = 87.88%
SiO2†                   1151.7      219.93 µg/L         4.760      219.93 ppb          4.760   2.16%
   QC value within limits for SiO2  Recovery = 103.25%
Si 251.611†             1318.4      100.15 µg/L         1.120      100.15 ppb          1.120   1.12%
   QC value within limits for Si 251.611  Recovery = 100.15%
Sn 189.927†               21.0      10.374 µg/L        1.5479      10.374 ppb         1.5479  14.92%
   QC value within limits for Sn 189.927  Recovery = 103.74%
Sr 421.552†              948.2      5.3411 µg/L       0.11619      5.3411 ppb        0.11619   2.18%
   QC value within limits for Sr 421.552  Recovery = 106.82%
Ti 334.940†             2356.9      5.2143 µg/L       0.08778      5.2143 ppb        0.08778   1.68%
   QC value within limits for Ti 334.940  Recovery = 104.29%
Tl 190.801†               16.9      25.504 µg/L        9.4597      25.504 ppb         9.4597  37.09%
   QC value within limits for Tl 190.801  Recovery = 127.52%
U 409.014†               530.5      49.802 µg/L        1.5664      49.802 ppb         1.5664   3.15%
   QC value within limits for U 409.014  Recovery = 99.60%
V 292.402†               456.2      5.3026 µg/L       0.28173      5.3026 ppb        0.28173   5.31%
   QC value within limits for V 292.402  Recovery = 106.05%
Zn 213.857†              391.7      10.432 µg/L        0.0490      10.432 ppb         0.0490   0.47%
   QC value within limits for Zn 213.857  Recovery = 104.32%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/18/2009 03:00:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105082.1	105082.1	93.4	%			03:01:27
1	Al 396.153Radial†	960820.1	1028234.1	519650	µg/L	519650	ppb	03:01:21
1	Ca 317.933Radial†	1157144.9	1238114.9	491470	µg/L	491470	ppb	03:01:21
1	Fe 238.204 Radial†	33779.0	36145.9	189870	µg/L	189870	ppb	03:01:27
1	K 766.490 Radial†	640.2	-9.5	-5.1731	µg/L	-5.1731	ppb	03:01:27
1	Mg 279.077 IEC†	82664.0	88463.9	490400	µg/L	490400	ppb	03:01:27
1	Na 589.592 Radial†	-594.8	67.2	18.648	µg/L	18.648	ppb	03:01:27
1	Sr 421.552†	545.7	647.9	3.6493	µg/L	3.6493	ppb	03:01:27
1	Sc 361.383	1871245.0	1871245.0	90.981	%			03:02:00
1	Y 371.029	1122914.4	1122914.4	89.664	%			03:02:00
1	Ag 328.068†	-1914.8	-2076.3	-3.6589	µg/L	-3.6589	ppb	03:02:06
1	As 188.979†	34.2	35.1	-35.279	µg/L	-35.279	ppb	03:02:26
1	B 249.677†	1956.6	1994.9	28.831	µg/L	28.831	ppb	03:02:06
1	Ba 233.527†	138.5	232.9	5.8205	µg/L	5.8205	ppb	03:02:26
1	Be 313.107†	2628.1	-722.9	-0.4668	µg/L	-0.4668	ppb	03:02:06
1	Cd 226.502†	490.2	639.7	2.1876	µg/L	2.1876	ppb	03:02:26
1	Co 228.616†	-94.0	-31.6	-1.6045	µg/L	-1.6045	ppb	03:02:26
1	Cr 267.716†	-224.9	-124.4	-2.6227	µg/L	-2.6227	ppb	03:02:26
1	Cu 324.752†	-1289.9	-4802.1	6.9992	µg/L	6.9992	ppb	03:02:06
1	Mn 257.610†	-2211.8	-2208.4	16.859	µg/L	16.859	ppb	03:02:06
1	Mo 202.031†	-109.4	-112.3	-5.0662	µg/L	-5.0662	ppb	03:02:26
1	Ni 231.604†	252.3	-22.1	-1.2044	µg/L	-1.2044	ppb	03:02:26
1	P 214.914†	212.1	27.1	26.694	µg/L	26.694	ppb	03:02:26
1	Pb 220.353†	-48.0	-106.9	15.827	µg/L	15.827	ppb	03:02:26
1	S 181.975 Axial†	60.1	42.0	117.72	µg/L	117.72	ppb	03:02:26
1	Sb 206.836†	60.5	45.9	-0.4258	µg/L	-0.4258	ppb	03:02:26
1	Se 196.026†	16.6	4.2	5.7054	µg/L	5.7054	ppb	03:02:26
1	SiO2†	1699.0	-114.3	-21.825	µg/L	-21.825	ppb	03:02:26
1	Si 251.611†	426.4	119.0	17.012	µg/L	17.012	ppb	03:02:26
1	Sn 189.927†	-396.0	-457.7	6.3150	µg/L	6.3150	ppb	03:02:26
1	Ti 334.940†	11211.3	11603.8	-1.9145	µg/L	-1.9145	ppb	03:02:06
1	Tl 190.801†	15.7	38.6	-7.2325	µg/L	-7.2325	ppb	03:02:26
1	U 409.014†	594.5	-25.8	-26.230	µg/L	-26.230	ppb	03:02:06
1	V 292.402†	-1211.6	-1239.8	1.4219	µg/L	1.4219	ppb	03:02:06
1	Zn 213.857†	1695.7	1313.6	1.6535	µg/L	1.6535	ppb	03:02:26
2	Sc RADIAL	105611.6	105611.6	93.9	%			03:01:38
2	Al 396.153Radial†	967678.1	1030382.0	520730	µg/L	520730	ppb	03:01:33
2	Ca 317.933Radial†	1165292.7	1240582.9	492450	µg/L	492450	ppb	03:01:33
2	Fe 238.204 Radial†	34094.3	36300.4	190680	µg/L	190680	ppb	03:01:38
2	K 766.490 Radial†	639.4	-13.9	-7.5348	µg/L	-7.5348	ppb	03:01:38
2	Mg 279.077 IEC†	83115.2	88500.9	490600	µg/L	490600	ppb	03:01:38
2	Na 589.592 Radial†	-567.7	99.3	27.546	µg/L	27.546	ppb	03:01:38
2	Sr 421.552†	534.1	632.6	3.5634	µg/L	3.5634	ppb	03:01:38
2	Sc 361.383	1856741.7	1856741.7	90.276	%			03:02:32
2	Y 371.029	1115518.0	1115518.0	89.073	%			03:02:32
2	Ag 328.068†	-1958.2	-2140.8	-4.1710	µg/L	-4.1710	ppb	03:02:38
2	As 188.979†	47.4	50.1	-6.9862	µg/L	-6.9862	ppb	03:02:59
2	B 249.677†	1954.5	2009.4	29.220	µg/L	29.220	ppb	03:02:38
2	Ba 233.527†	133.8	228.9	5.7201	µg/L	5.7201	ppb	03:02:59
2	Be 313.107†	2728.2	-589.5	-0.3825	µg/L	-0.3825	ppb	03:02:38
2	Cd 226.502†	476.1	628.3	1.8202	µg/L	1.8202	ppb	03:02:59
2	Co 228.616†	-90.5	-28.5	-1.4605	µg/L	-1.4605	ppb	03:02:59
2	Cr 267.716†	-209.1	-108.8	-2.2981	µg/L	-2.2981	ppb	03:02:59
2	Cu 324.752†	-1316.5	-4842.6	6.8888	µg/L	6.8888	ppb	03:02:38
2	Mn 257.610†	-2183.2	-2195.7	17.001	µg/L	17.001	ppb	03:02:38
2	Mo 202.031†	-123.0	-128.3	-6.8238	µg/L	-6.8238	ppb	03:02:59
2	Ni 231.604†	261.0	-10.3	-0.5628	µg/L	-0.5628	ppb	03:02:59
2	P 214.914†	211.1	27.9	27.751	µg/L	27.751	ppb	03:02:59
2	Pb 220.353†	-49.0	-108.4	15.538	µg/L	15.538	ppb	03:02:59

2	S 181.975 Axial†	63.2	45.9	137.65	µg/L	137.65 ppb	03:02:59
2	Sb 206.836†	54.1	39.4	-7.0564	µg/L	-7.0564 ppb	03:02:59
2	Se 196.026†	29.7	18.8	27.608	µg/L	27.608 ppb	03:02:59
2	SiO2†	1708.4	-89.2	-17.033	µg/L	-17.033 ppb	03:02:59
2	Si 251.611†	425.1	121.2	17.297	µg/L	17.297 ppb	03:02:59
2	Sn 189.927†	-397.5	-462.8	4.1757	µg/L	4.1757 ppb	03:02:59
2	Ti 334.940†	11270.3	11765.5	-1.6113	µg/L	-1.6113 ppb	03:02:38
2	Tl 190.801†	14.3	37.2	-9.4730	µg/L	-9.4730 ppb	03:02:59
2	U 409.014†	524.3	-98.4	-33.178	µg/L	-33.178 ppb	03:02:38
2	V 292.402†	-1201.8	-1239.2	1.4709	µg/L	1.4709 ppb	03:02:38
2	Zn 213.857†	1682.8	1313.9	1.5651	µg/L	1.5651 ppb	03:02:59
3	Sc RADIAL	105395.1	105395.1	93.7	%		03:01:50
3	Al 396.153Radial†	963653.3	1028203.0	519630	µg/L	519630 ppb	03:01:45
3	Ca 317.933Radial†	1161357.8	1238932.2	491800	µg/L	491800 ppb	03:01:45
3	Fe 238.204 Radial†	34063.5	36342.1	190900	µg/L	190900 ppb	03:01:50
3	K 766.490 Radial†	708.9	61.7	33.456	µg/L	33.456 ppb	03:01:50
3	Mg 279.077 IEC†	83232.2	88807.5	492300	µg/L	492300 ppb	03:01:50
3	Na 589.592 Radial†	-582.9	81.8	22.702	µg/L	22.702 ppb	03:01:50
3	Sr 421.552†	542.0	642.2	3.6176	µg/L	3.6176 ppb	03:01:50
3	Sc 361.383	1856111.4	1856111.4	90.245	%		03:03:05
3	Y 371.029	1115169.1	1115169.1	89.046	%		03:03:05
3	Ag 328.068†	-1993.8	-2181.0	-4.5132	µg/L	-4.5132 ppb	03:03:11
3	As 188.979†	41.2	43.2	-20.063	µg/L	-20.063 ppb	03:03:31
3	B 249.677†	1882.2	1929.9	25.626	µg/L	25.626 ppb	03:03:11
3	Ba 233.527†	128.3	222.9	5.5684	µg/L	5.5684 ppb	03:03:31
3	Be 313.107†	2630.2	-697.0	-0.4506	µg/L	-0.4506 ppb	03:03:11
3	Cd 226.502†	493.7	648.0	2.3232	µg/L	2.3232 ppb	03:03:31
3	Co 228.616†	-96.4	-35.1	-1.7734	µg/L	-1.7734 ppb	03:03:31
3	Cr 267.716†	-193.4	-91.5	-1.9374	µg/L	-1.9374 ppb	03:03:31
3	Cu 324.752†	-1254.5	-4774.4	7.4156	µg/L	7.4156 ppb	03:03:11
3	Mn 257.610†	-2248.9	-2269.4	16.795	µg/L	16.795 ppb	03:03:11
3	Mo 202.031†	-109.8	-113.8	-5.1900	µg/L	-5.1900 ppb	03:03:31
3	Ni 231.604†	273.3	3.4	0.1854	µg/L	0.1854 ppb	03:03:31
3	P 214.914†	217.6	35.2	42.891	µg/L	42.891 ppb	03:03:31
3	Pb 220.353†	-52.7	-112.6	14.380	µg/L	14.380 ppb	03:03:31
3	S 181.975 Axial†	49.2	30.5	58.207	µg/L	58.207 ppb	03:03:31
3	Sb 206.836†	62.6	48.8	2.3384	µg/L	2.3384 ppb	03:03:31
3	Se 196.026†	14.8	2.3	2.8944	µg/L	2.8944 ppb	03:03:31
3	SiO2†	1692.7	-106.0	-20.238	µg/L	-20.238 ppb	03:03:31
3	Si 251.611†	422.8	118.8	16.869	µg/L	16.869 ppb	03:03:31
3	Sn 189.927†	-388.1	-452.5	9.4310	µg/L	9.4310 ppb	03:03:31
3	Ti 334.940†	11360.6	11869.7	-1.3434	µg/L	-1.3434 ppb	03:03:11
3	Tl 190.801†	17.7	41.1	-3.6115	µg/L	-3.6115 ppb	03:03:31
3	U 409.014†	518.3	-104.9	-33.838	µg/L	-33.838 ppb	03:03:11
3	V 292.402†	-1205.0	-1243.3	1.4537	µg/L	1.4537 ppb	03:03:11
3	Zn 213.857†	1702.2	1336.1	2.0851	µg/L	2.0851 ppb	03:03:31

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1861366.0	90.501	%	0.4163				0.46%
Sc RADIAL	105362.9	93.7	%	0.24				0.25%
Y 371.029	1117867.2	89.261	%	0.3493				0.39%
Ag 328.068†	-2132.7	-4.1144	µg/L	0.42992	-4.1144	ppb	0.42992	10.45%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1028939.7	520000	µg/L	631.3	520000	ppb	631.3	0.12%
QC value within limits for Al 396.153Radial Recovery = 104.00%								
As 188.979†	42.8	-20.776	µg/L	14.1599	-20.776	ppb	14.1599	68.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1978.1	27.892	µg/L	1.9725	27.892	ppb	1.9725	7.07%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	228.2	5.7030	µg/L	0.12691	5.7030	ppb	0.12691	2.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-669.8	-0.4333	µg/L	0.04472	-0.4333	ppb	0.04472	10.32%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1239210.0	491910	µg/L	499.1	491910	ppb	499.1	0.10%
QC value within limits for Ca 317.933Radial Recovery = 98.38%								
Cd 226.502†	638.7	2.1103	µg/L	0.26028	2.1103	ppb	0.26028	12.33%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-31.8	-1.6128	µg/L	0.15661	-1.6128	ppb	0.15661	9.71%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -108.2     -2.2861 µg/L      0.34282     -2.2861 ppb       0.34282  15.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4806.4      7.1012 µg/L      0.27783      7.1012 ppb       0.27783   3.91%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    36262.8      190490 µg/L        542.9      190490 ppb         542.9   0.29%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.24%
K 766.490 Radial†        12.8      6.9161 µg/L     23.01463      6.9161 ppb      23.01463 332.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       88590.7      491100 µg/L       1045.7      491100 ppb        1045.7   0.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.22%
Mn 257.610†           -2224.5      16.885 µg/L       0.1056      16.885 ppb        0.1056   0.63%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -118.1     -5.6934 µg/L      0.98098     -5.6934 ppb       0.98098  17.23%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       82.8      22.965 µg/L       4.4547      22.965 ppb        4.4547  19.40%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -9.7     -0.5273 µg/L      0.69556     -0.5273 ppb       0.69556 131.91%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               30.1      32.445 µg/L       9.0619      32.445 ppb        9.0619  27.93%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -109.3      15.248 µg/L       0.7660      15.248 ppb        0.7660   5.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         39.5      104.52 µg/L       41.332      104.52 ppb        41.332  39.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              44.7     -1.7146 µg/L      4.82816     -1.7146 ppb       4.82816 281.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               8.4      12.069 µg/L      13.5300      12.069 ppb       13.5300 112.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -103.2     -19.699 µg/L       2.4410     -19.699 ppb        2.4410  12.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             119.7      17.059 µg/L       0.2175      17.059 ppb        0.2175   1.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -457.6      6.6406 µg/L      2.64274      6.6406 ppb       2.64274  39.80%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             640.9      3.6101 µg/L      0.04342      3.6101 ppb       0.04342   1.20%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11746.3     -1.6231 µg/L      0.28578     -1.6231 ppb       0.28578  17.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              39.0     -6.7723 µg/L      2.95775     -6.7723 ppb       2.95775  43.67%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -76.4     -31.082 µg/L       4.2150     -31.082 ppb        4.2150  13.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1240.8      1.4488 µg/L      0.02484      1.4488 ppb       0.02484   1.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1321.2      1.7679 µg/L      0.27821      1.7679 ppb       0.27821  15.74%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/18/2009 03:03:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106602.5	106602.5	94.8	%			03:04:20
1	Al 396.153Radial†	963195.1	1016071.8	513480	µg/L	513480	ppb	03:04:14
1	Ca 317.933Radial†	1163172.8	1226809.8	486990	µg/L	486990	ppb	03:04:14
1	Fe 238.204 Radial†	33843.1	35697.9	187530	µg/L	187530	ppb	03:04:20
1	K 766.490 Radial†	9690.6	9530.1	5167.2	µg/L	5167.2	ppb	03:04:20
1	Mg 279.077 IEC†	83078.7	87639.5	485840	µg/L	485840	ppb	03:04:20
1	Na 589.592 Radial†	16838.3	18470.7	5124.9	µg/L	5124.9	ppb	03:04:20
1	Sr 421.552†	83714.6	88394.0	497.92	µg/L	497.92	ppb	03:04:20
1	Sc 361.383	1856577.2	1856577.2	90.268	%			03:04:54
1	Y 371.029	1117609.1	1117609.1	89.240	%			03:04:54
1	Ag 328.068†	24283.9	26930.4	258.66	µg/L	258.66	ppb	03:05:00
1	As 188.979†	276.9	304.3	479.35	µg/L	479.35	ppb	03:05:20
1	B 249.677†	12255.4	13421.0	536.70	µg/L	536.70	ppb	03:05:00
1	Ba 233.527†	17454.9	19417.5	488.73	µg/L	488.73	ppb	03:05:00
1	Be 313.107†	341165.8	374337.0	236.61	µg/L	236.61	ppb	03:04:54
1	Cd 226.502†	16096.0	17932.3	460.14	µg/L	460.14	ppb	03:05:00
1	Co 228.616†	7834.1	8750.5	420.80	µg/L	420.80	ppb	03:05:20
1	Cr 267.716†	20255.5	22562.1	470.80	µg/L	470.80	ppb	03:05:00
1	Cu 324.752†	68446.9	72442.2	549.95	µg/L	549.95	ppb	03:05:00
1	Mn 257.610†	129310.5	143474.7	478.90	µg/L	478.90	ppb	03:05:00
1	Mo 202.031†	3736.2	4146.9	470.00	µg/L	470.00	ppb	03:05:20
1	Ni 231.604†	7299.6	7787.2	424.23	µg/L	424.23	ppb	03:05:20
1	P 214.914†	1240.6	1168.3	2448.6	µg/L	2448.6	ppb	03:05:20
1	Pb 220.353†	1588.3	1705.5	474.98	µg/L	474.98	ppb	03:05:20
1	S 181.975 Axial†	507.6	538.3	2668.3	µg/L	2668.3	ppb	03:05:20
1	Sb 206.836†	500.6	534.1	483.45	µg/L	483.45	ppb	03:05:20
1	Se 196.026†	1450.8	1593.2	2319.7	µg/L	2319.7	ppb	03:05:20
1	SiO2†	52819.2	56532.2	10796	µg/L	10796	ppb	03:05:00
1	Si 251.611†	60014.1	66134.9	5026.6	µg/L	5026.6	ppb	03:05:00
1	Sn 189.927†	508.7	541.1	491.06	µg/L	491.06	ppb	03:05:20
1	Ti 334.940†	210792.5	232800.2	488.64	µg/L	488.64	ppb	03:05:00
1	Tl 190.801†	285.9	338.2	448.54	µg/L	448.54	ppb	03:05:20
1	U 409.014†	5256.6	5144.1	459.62	µg/L	459.62	ppb	03:05:00
1	V 292.402†	38916.2	43203.9	506.36	µg/L	506.36	ppb	03:05:00
1	Zn 213.857†	17505.3	18842.5	468.68	µg/L	468.68	ppb	03:05:00
2	Sc RADIAL	107246.4	107246.4	95.3	%			03:04:31
2	Al 396.153Radial†	962620.4	1009367.5	510090	µg/L	510090	ppb	03:04:26
2	Ca 317.933Radial†	1158715.6	1214766.7	482210	µg/L	482210	ppb	03:04:26
2	Fe 238.204 Radial†	34318.1	35981.6	189020	µg/L	189020	ppb	03:04:31
2	K 766.490 Radial†	9741.2	9521.7	5162.6	µg/L	5162.6	ppb	03:04:31
2	Mg 279.077 IEC†	83975.0	88053.2	488130	µg/L	488130	ppb	03:04:31
2	Na 589.592 Radial†	17025.4	18560.1	5149.7	µg/L	5149.7	ppb	03:04:31
2	Sr 421.552†	84642.2	88836.6	500.41	µg/L	500.41	ppb	03:04:31
2	Sc 361.383	1848072.7	1848072.7	89.854	%			03:05:26
2	Y 371.029	1111409.3	1111409.3	88.745	%			03:05:26
2	Ag 328.068†	24359.3	27138.1	260.66	µg/L	260.66	ppb	03:05:32
2	As 188.979†	269.7	297.6	467.15	µg/L	467.15	ppb	03:05:53
2	B 249.677†	12320.8	13556.3	542.24	µg/L	542.24	ppb	03:05:32
2	Ba 233.527†	17473.5	19527.2	491.50	µg/L	491.50	ppb	03:05:32
2	Be 313.107†	343176.4	378314.0	239.12	µg/L	239.12	ppb	03:05:26
2	Cd 226.502†	16134.7	18057.4	463.34	µg/L	463.34	ppb	03:05:32
2	Co 228.616†	7841.9	8799.1	423.14	µg/L	423.14	ppb	03:05:53
2	Cr 267.716†	20352.9	22773.7	475.21	µg/L	475.21	ppb	03:05:32
2	Cu 324.752†	68598.0	72959.3	553.91	µg/L	553.91	ppb	03:05:32
2	Mn 257.610†	129575.0	144428.4	482.11	µg/L	482.11	ppb	03:05:32
2	Mo 202.031†	3746.0	4176.9	473.40	µg/L	473.40	ppb	03:05:53
2	Ni 231.604†	7299.1	7823.8	426.23	µg/L	426.23	ppb	03:05:53
2	P 214.914†	1236.4	1170.0	2448.7	µg/L	2448.7	ppb	03:05:53
2	Pb 220.353†	1581.0	1705.4	474.67	µg/L	474.67	ppb	03:05:53

2	S 181.975 Axial†	498.7	530.9	2630.2 µg/L	2630.2 ppb	03:05:53
2	Sb 206.836†	503.9	540.2	489.98 µg/L	489.98 ppb	03:05:53
2	Se 196.026†	1456.0	1606.3	2338.4 µg/L	2338.4 ppb	03:05:53
2	SiO2†	52879.7	56868.8	10860 µg/L	10860 ppb	03:05:32
2	Si 251.611†	60097.8	66533.9	5057.2 µg/L	5057.2 ppb	03:05:32
2	Sn 189.927†	496.8	530.5	485.46 µg/L	485.46 ppb	03:05:53
2	Ti 334.940†	211106.2	234224.0	492.07 µg/L	492.07 ppb	03:05:32
2	Tl 190.801†	278.2	331.1	438.52 µg/L	438.52 ppb	03:05:53
2	U 409.014†	5212.1	5121.4	457.09 µg/L	457.09 ppb	03:05:32
2	V 292.402†	39120.1	43629.3	511.30 µg/L	511.30 ppb	03:05:32
2	Zn 213.857†	17650.2	19093.0	475.16 µg/L	475.16 ppb	03:05:32
3	Sc RADIAL	106254.6	106254.6	94.5 %		03:04:43
3	Al 396.153Radial†	962908.6	1019096.0	515010 µg/L	515010 ppb	03:04:37
3	Ca 317.933Radial†	1159845.6	1227306.0	487180 µg/L	487180 ppb	03:04:37
3	Fe 238.204 Radial†	34116.9	36104.7	189670 µg/L	189670 ppb	03:04:43
3	K 766.490 Radial†	9776.9	9654.9	5234.9 µg/L	5234.9 ppb	03:04:43
3	Mg 279.077 IEC†	83805.9	88696.3	491700 µg/L	491700 ppb	03:04:43
3	Na 589.592 Radial†	16986.4	18685.5	5184.5 µg/L	5184.5 ppb	03:04:43
3	Sr 421.552†	84442.2	89453.5	503.89 µg/L	503.89 ppb	03:04:43
3	Sc 361.383	1850222.1	1850222.1	89.959 %		03:05:59
3	Y 371.029	1113553.8	1113553.8	88.917 %		03:05:59
3	Ag 328.068†	24108.3	26827.6	257.89 µg/L	257.89 ppb	03:06:05
3	As 188.979†	277.7	306.2	482.71 µg/L	482.71 ppb	03:06:26
3	B 249.677†	12153.2	13354.1	533.06 µg/L	533.06 ppb	03:06:05
3	Ba 233.527†	17278.6	19287.9	485.47 µg/L	485.47 ppb	03:06:05
3	Be 313.107†	340734.2	375155.4	237.13 µg/L	237.13 ppb	03:05:59
3	Cd 226.502†	15972.3	17856.1	457.96 µg/L	457.96 ppb	03:06:05
3	Co 228.616†	7827.3	8772.7	421.88 µg/L	421.88 ppb	03:06:26
3	Cr 267.716†	20083.7	22448.2	468.42 µg/L	468.42 ppb	03:06:05
3	Cu 324.752†	67984.3	72188.3	548.62 µg/L	548.62 ppb	03:06:05
3	Mn 257.610†	128012.6	142524.0	476.15 µg/L	476.15 ppb	03:06:05
3	Mo 202.031†	3733.5	4158.2	471.34 µg/L	471.34 ppb	03:06:26
3	Ni 231.604†	7283.2	7796.8	424.76 µg/L	424.76 ppb	03:06:26
3	P 214.914†	1232.7	1164.3	2438.1 µg/L	2438.1 ppb	03:06:26
3	Pb 220.353†	1559.8	1679.8	468.60 µg/L	468.60 ppb	03:06:26
3	S 181.975 Axial†	508.5	541.2	2682.2 µg/L	2682.2 ppb	03:06:26
3	Sb 206.836†	499.1	534.2	483.60 µg/L	483.60 ppb	03:06:26
3	Se 196.026†	1453.6	1601.7	2331.4 µg/L	2331.4 ppb	03:06:26
3	SiO2†	52282.5	56136.6	10720 µg/L	10720 ppb	03:06:05
3	Si 251.611†	59422.2	65705.3	4993.7 µg/L	4993.7 ppb	03:06:05
3	Sn 189.927†	509.7	544.1	494.02 µg/L	494.02 ppb	03:06:26
3	Ti 334.940†	209119.9	231743.1	486.29 µg/L	486.29 ppb	03:06:05
3	Tl 190.801†	285.9	339.3	450.15 µg/L	450.15 ppb	03:06:26
3	U 409.014†	5173.3	5071.5	452.40 µg/L	452.40 ppb	03:06:05
3	V 292.402†	38623.5	43026.6	504.53 µg/L	504.53 ppb	03:06:05
3	Zn 213.857†	17390.8	18781.7	466.67 µg/L	466.67 ppb	03:06:05

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1851624.0	90.027	%	0.2150				0.24%
Sc RADIAL	106701.2	94.9	%	0.45				0.47%
Y 371.029	1114190.7	88.967	%	0.2514				0.28%
Ag 328.068†	26965.4	259.07	µg/L	1.430	259.07	ppb	1.430	0.55%
QC value within limits for Ag 328.068 Recovery = 103.63%								
Al 396.153Radial†	1014845.1	512860	µg/L	2516.3	512860	ppb	2516.3	0.49%
QC value within limits for Al 396.153Radial Recovery = 102.57%								
As 188.979†	302.7	476.40	µg/L	8.185	476.40	ppb	8.185	1.72%
QC value within limits for As 188.979 Recovery = 95.28%								
B 249.677†	13443.8	537.33	µg/L	4.621	537.33	ppb	4.621	0.86%
QC value within limits for B 249.677 Recovery = 107.47%								
Ba 233.527†	19410.9	488.57	µg/L	3.015	488.57	ppb	3.015	0.62%
QC value within limits for Ba 233.527 Recovery = 97.71%								
Be 313.107†	375935.5	237.62	µg/L	1.328	237.62	ppb	1.328	0.56%
QC value within limits for Be 313.107 Recovery = 95.05%								
Ca 317.933Radial†	1222960.8	485460	µg/L	2818.6	485460	ppb	2818.6	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.09%								
Cd 226.502†	17948.6	460.48	µg/L	2.704	460.48	ppb	2.704	0.59%
QC value within limits for Cd 226.502 Recovery = 92.10%								
Co 228.616†	8774.1	421.94	µg/L	1.169	421.94	ppb	1.169	0.28%

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   QC value within limits for Co 228.616  Recovery = 84.39%
Cr 267.716†            22594.7      471.48 µg/L        3.446      471.48 ppb        3.446   0.73%
   QC value within limits for Cr 267.716  Recovery = 94.30%
Cu 324.752†            72529.9      550.83 µg/L        2.750      550.83 ppb        2.750   0.50%
   QC value within limits for Cu 324.752  Recovery = 110.17%
Fe 238.204 Radial†     35928.1      188740 µg/L       1095.9      188740 ppb       1095.9   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.37%
K 766.490 Radial†       9568.9      5188.2 µg/L        40.46      5188.2 ppb        40.46   0.78%
   QC value within limits for K 766.490 Radial  Recovery = 103.76%
Mg 279.077 IEC†        88129.7      488560 µg/L       2952.3      488560 ppb       2952.3   0.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.71%
Mn 257.610†           143475.7      479.05 µg/L        2.984      479.05 ppb        2.984   0.62%
   QC value within limits for Mn 257.610  Recovery = 95.81%
Mo 202.031†             4160.7      471.58 µg/L        1.713      471.58 ppb        1.713   0.36%
   QC value within limits for Mo 202.031  Recovery = 94.32%
Na 589.592 Radial†     18572.1      5153.1 µg/L        29.95      5153.1 ppb        29.95   0.58%
   QC value within limits for Na 589.592 Radial  Recovery = 103.06%
Ni 231.604†             7802.6      425.07 µg/L        1.035      425.07 ppb        1.035   0.24%
   QC value within limits for Ni 231.604  Recovery = 85.01%
P 214.914†              1167.6      2445.1 µg/L         6.06      2445.1 ppb         6.06   0.25%
   QC value within limits for P 214.914  Recovery = 97.80%
Pb 220.353†             1696.9      472.75 µg/L        3.594      472.75 ppb        3.594   0.76%
   QC value within limits for Pb 220.353  Recovery = 94.55%
S 181.975 Axial†         536.8      2660.2 µg/L        26.95      2660.2 ppb        26.95   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 106.41%
Sb 206.836†              536.2      485.68 µg/L        3.726      485.68 ppb        3.726   0.77%
   QC value within limits for Sb 206.836  Recovery = 97.14%
Se 196.026†             1600.4      2329.8 µg/L         9.40      2329.8 ppb         9.40   0.40%
   QC value within limits for Se 196.026  Recovery = 93.19%
SiO2†                  56512.5       10792 µg/L         70.0       10792 ppb         70.0   0.65%
   QC value within limits for SiO2  Recovery = 100.91%
Si 251.611†            66124.7      5025.8 µg/L        31.76      5025.8 ppb        31.76   0.63%
   QC value within limits for Si 251.611  Recovery = 100.52%
Sn 189.927†              538.6      490.18 µg/L        4.345      490.18 ppb        4.345   0.89%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            88894.7      500.74 µg/L        2.997      500.74 ppb        2.997   0.60%
   QC value within limits for Sr 421.552  Recovery = 100.15%
Ti 334.940†           232922.4      489.00 µg/L        2.906      489.00 ppb        2.906   0.59%
   QC value within limits for Ti 334.940  Recovery = 97.80%
Tl 190.801†              336.2      445.74 µg/L        6.302      445.74 ppb        6.302   1.41%
   QC value within limits for Tl 190.801  Recovery = 89.15%
U 409.014†              5112.3      456.37 µg/L        3.659      456.37 ppb        3.659   0.80%
   QC value within limits for U 409.014  Recovery = 91.27%
V 292.402†             43286.6      507.40 µg/L        3.499      507.40 ppb        3.499   0.69%
   QC value within limits for V 292.402  Recovery = 101.48%
Zn 213.857†            18905.8      470.17 µg/L        4.436      470.17 ppb        4.436   0.94%
   QC value within limits for Zn 213.857  Recovery = 94.03%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/18/2009 03:06:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106697.5	106697.5	94.9	%			03:07:15
1	Al 396.153Radial†	943125.6	994009.7	502350	µg/L	502350	ppb	03:07:10
1	Ca 317.933Radial†	1139824.0	1201102.7	476780	µg/L	476780	ppb	03:07:10
1	Fe 238.204 Radial†	82968.3	87453.6	459390	µg/L	459390	ppb	03:07:15
1	K 766.490 Radial†	603.9	-58.2	-31.550	µg/L	-31.550	ppb	03:07:15
1	Mg 279.077 IEC†	83141.6	87627.7	485360	µg/L	485360	ppb	03:07:15
1	Na 589.592 Radial†	1662396.9	1753196.5	486450	µg/L	486450	ppb	03:07:10
1	Sr 421.552†	905.0	1017.8	5.7334	µg/L	5.7334	ppb	03:07:15
1	Sc 361.383	1806040.8	1806040.8	87.811	%			03:07:52
1	Y 371.029	1075642.8	1075642.8	85.889	%			03:07:52
1	Ag 328.068†	-3775.9	-4271.7	-2.2685	µg/L	-2.2685	ppb	03:07:52
1	As 188.979†	37.3	40.0	-62.851	µg/L	-62.851	ppb	03:08:13
1	B 249.677†	4456.3	4919.2	73.871	µg/L	73.871	ppb	03:07:52
1	Ba 233.527†	271.5	389.9	9.6824	µg/L	9.6824	ppb	03:08:13
1	Be 313.107†	-2108.4	-6012.5	-3.8184	µg/L	-3.8184	ppb	03:07:52
1	Cd 226.502†	1234.2	1506.4	14.546	µg/L	14.546	ppb	03:07:52
1	Co 228.616†	50.7	129.4	6.0842	µg/L	6.0842	ppb	03:08:13
1	Cr 267.716†	-246.2	-157.6	-3.4040	µg/L	-3.4040	ppb	03:08:13
1	Cu 324.752†	-8173.2	-12692.1	9.3817	µg/L	9.3817	ppb	03:07:52
1	Mn 257.610†	-13032.2	-14618.5	11.353	µg/L	11.353	ppb	03:07:52
1	Mo 202.031†	-195.6	-214.9	-5.9171	µg/L	-5.9171	ppb	03:08:13
1	Ni 231.604†	259.4	-4.0	-0.2160	µg/L	-0.2160	ppb	03:08:13
1	P 214.914†	369.5	214.8	116.24	µg/L	116.24	ppb	03:08:13
1	Pb 220.353†	31.9	-17.8	21.391	µg/L	21.391	ppb	03:08:13
1	S 181.975 Axial†	53.7	37.1	52.984	µg/L	52.984	ppb	03:08:13
1	Sb 206.836†	48.2	34.4	-2.3419	µg/L	-2.3419	ppb	03:08:13
1	Se 196.026†	-90.0	-116.6	18.436	µg/L	18.436	ppb	03:08:13
1	SiO2†	1534.2	-234.5	-44.788	µg/L	-44.788	ppb	03:08:13
1	Si 251.611†	-246.9	-630.8	-39.322	µg/L	-39.322	ppb	03:08:13
1	Sn 189.927†	-448.3	-533.0	-2.9884	µg/L	-2.9884	ppb	03:08:13
1	Ti 334.940†	16654.9	18248.0	13.639	µg/L	13.639	ppb	03:07:52
1	Tl 190.801†	6.2	28.5	-20.609	µg/L	-20.609	ppb	03:08:13
1	U 409.014†	136179.4	154403.7	14426	µg/L	14426	ppb	03:07:52
1	V 292.402†	-4203.9	-4695.5	7.8324	µg/L	7.8324	ppb	03:07:52
1	Zn 213.857†	2844.1	2688.8	10.001	µg/L	10.001	ppb	03:08:13
2	Sc RADIAL	106266.2	106266.2	94.5	%			03:07:28
2	Al 396.153Radial†	942329.4	997201.7	503960	µg/L	503960	ppb	03:07:23
2	Ca 317.933Radial†	1138415.1	1204487.8	478130	µg/L	478130	ppb	03:07:23
2	Fe 238.204 Radial†	82995.1	87837.0	461410	µg/L	461410	ppb	03:07:28
2	K 766.490 Radial†	597.4	-62.5	-33.909	µg/L	-33.909	ppb	03:07:28
2	Mg 279.077 IEC†	82991.9	87825.0	486450	µg/L	486450	ppb	03:07:28
2	Na 589.592 Radial†	1663512.5	1761489.4	488750	µg/L	488750	ppb	03:07:23
2	Sr 421.552†	877.9	993.0	5.5935	µg/L	5.5935	ppb	03:07:28
2	Sc 361.383	1807413.3	1807413.3	87.877	%			03:08:20
2	Y 371.029	1076926.1	1076926.1	85.992	%			03:08:20
2	Ag 328.068†	-3828.8	-4328.7	-2.6202	µg/L	-2.6202	ppb	03:08:20
2	As 188.979†	33.8	35.9	-71.081	µg/L	-71.081	ppb	03:08:41
2	B 249.677†	4505.0	4970.8	75.527	µg/L	75.527	ppb	03:08:20
2	Ba 233.527†	252.6	368.1	9.1340	µg/L	9.1340	ppb	03:08:41
2	Be 313.107†	-2039.3	-5932.1	-3.7678	µg/L	-3.7678	ppb	03:08:20
2	Cd 226.502†	1235.8	1507.2	14.442	µg/L	14.442	ppb	03:08:20
2	Co 228.616†	36.8	113.6	5.3190	µg/L	5.3190	ppb	03:08:41
2	Cr 267.716†	-238.3	-148.4	-3.2143	µg/L	-3.2143	ppb	03:08:41
2	Cu 324.752†	-8396.2	-12938.8	8.0788	µg/L	8.0788	ppb	03:08:20
2	Mn 257.610†	-13052.1	-14629.9	11.570	µg/L	11.570	ppb	03:08:20
2	Mo 202.031†	-196.7	-215.9	-5.9529	µg/L	-5.9529	ppb	03:08:41
2	Ni 231.604†	257.8	-6.1	-0.3303	µg/L	-0.3303	ppb	03:08:41
2	P 214.914†	371.2	216.4	118.31	µg/L	118.31	ppb	03:08:41
2	Pb 220.353†	20.7	-30.5	18.237	µg/L	18.237	ppb	03:08:41

2	S 181.975 Axial†	46.8	29.2	12.025 µg/L	12.025 ppb	03:08:41
2	Sb 206.836†	62.0	50.0	13.090 µg/L	13.090 ppb	03:08:41
2	Se 196.026†	-96.8	-124.2	8.5246 µg/L	8.5246 ppb	03:08:41
2	SiO2†	1568.1	-197.3	-37.671 µg/L	-37.671 ppb	03:08:41
2	Si 251.611†	-247.6	-631.4	-39.630 µg/L	-39.630 ppb	03:08:41
2	Sn 189.927†	-437.6	-520.4	3.9081 µg/L	3.9081 ppb	03:08:41
2	Ti 334.940†	16998.6	18624.7	14.399 µg/L	14.399 ppb	03:08:20
2	Tl 190.801†	7.1	29.4	-19.398 µg/L	-19.398 ppb	03:08:41
2	U 409.014†	136683.3	154859.4	14468 µg/L	14468 ppb	03:08:20
2	V 292.402†	-4223.0	-4713.5	7.8619 µg/L	7.8619 ppb	03:08:20
2	Zn 213.857†	2866.5	2711.7	10.375 µg/L	10.375 ppb	03:08:41
3	Sc RADIAL	106248.4	106248.4	94.5 %		03:07:41
3	Al 396.153Radial†	947724.0	1003080.2	506930 µg/L	506930 ppb	03:07:36
3	Ca 317.933Radial†	1146477.4	1213225.2	481590 µg/L	481590 ppb	03:07:36
3	Fe 238.204 Radial†	83302.1	88176.8	463190 µg/L	463190 ppb	03:07:41
3	K 766.490 Radial†	743.1	91.8	49.785 µg/L	49.785 ppb	03:07:41
3	Mg 279.077 IEC†	83447.8	88322.3	489210 µg/L	489210 ppb	03:07:41
3	Na 589.592 Radial†	1667848.4	1766375.2	490100 µg/L	490100 ppb	03:07:36
3	Sr 421.552†	867.1	981.7	5.5301 µg/L	5.5301 ppb	03:07:41
3	Sc 361.383	1797604.9	1797604.9	87.401 %		03:08:48
3	Y 371.029	1070859.7	1070859.7	85.507 %		03:08:48
3	Ag 328.068†	-3792.8	-4311.3	-2.3282 µg/L	-2.3282 ppb	03:08:48
3	As 188.979†	48.3	52.8	-39.695 µg/L	-39.695 ppb	03:09:08
3	B 249.677†	4520.9	5017.0	77.015 µg/L	77.015 ppb	03:08:48
3	Ba 233.527†	253.3	370.5	9.1924 µg/L	9.1924 ppb	03:09:08
3	Be 313.107†	-2016.3	-5918.4	-3.7592 µg/L	-3.7592 ppb	03:08:48
3	Cd 226.502†	1215.8	1491.9	13.920 µg/L	13.920 ppb	03:08:48
3	Co 228.616†	30.9	107.0	4.9985 µg/L	4.9985 ppb	03:09:08
3	Cr 267.716†	-244.7	-157.3	-3.3998 µg/L	-3.3998 ppb	03:09:08
3	Cu 324.752†	-8262.4	-12837.9	9.1721 µg/L	9.1721 ppb	03:08:48
3	Mn 257.610†	-12944.8	-14588.2	11.927 µg/L	11.927 ppb	03:08:48
3	Mo 202.031†	-216.7	-240.0	-8.5697 µg/L	-8.5697 ppb	03:09:08
3	Ni 231.604†	262.4	0.9	0.0465 µg/L	0.0465 ppb	03:09:08
3	P 214.914†	377.8	226.3	138.49 µg/L	138.49 ppb	03:09:08
3	Pb 220.353†	43.6	-4.3	25.099 µg/L	25.099 ppb	03:09:08
3	S 181.975 Axial†	53.3	36.9	51.086 µg/L	51.086 ppb	03:09:08
3	Sb 206.836†	59.1	47.1	9.8208 µg/L	9.8208 ppb	03:09:08
3	Se 196.026†	-87.0	-113.7	24.535 µg/L	24.535 ppb	03:09:08
3	SiO2†	1582.9	-170.6	-32.571 µg/L	-32.571 ppb	03:09:08
3	Si 251.611†	-231.7	-614.8	-38.162 µg/L	-38.162 ppb	03:09:08
3	Sn 189.927†	-443.9	-530.4	0.5630 µg/L	0.5630 ppb	03:09:08
3	Ti 334.940†	16946.6	18670.7	14.306 µg/L	14.306 ppb	03:08:48
3	Tl 190.801†	7.5	30.0	-18.980 µg/L	-18.980 ppb	03:09:08
3	U 409.014†	136212.0	155168.8	14497 µg/L	14497 ppb	03:08:48
3	V 292.402†	-4253.7	-4775.0	7.3433 µg/L	7.3433 ppb	03:08:48
3	Zn 213.857†	2861.1	2723.4	10.420 µg/L	10.420 ppb	03:09:08

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1803686.3	87.696	%	0.2582				0.29%
Sc RADIAL	106404.1	94.6	%	0.23				0.24%
Y 371.029	1074476.2	85.796	%	0.2553				0.30%
Ag 328.068†	-4303.9	-2.4056	µg/L	0.18820	-2.4056	ppb	0.18820	7.82%
Al 396.153Radial†	998097.2	504420	µg/L	2325.3	504420	ppb	2325.3	0.46%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	42.9	-57.875	µg/L	16.2738	-57.875	ppb	16.2738	28.12%
B 249.677†	4969.0	75.471	µg/L	1.5727	75.471	ppb	1.5727	2.08%
Ba 233.527†	376.2	9.3362	µg/L	0.30120	9.3362	ppb	0.30120	3.23%
Be 313.107†	-5954.4	-3.7818	µg/L	0.03197	-3.7818	ppb	0.03197	0.85%
Ca 317.933Radial†	1206271.9	478830	µg/L	2483.0	478830	ppb	2483.0	0.52%
QC value within limits for Ca 317.933Radial Recovery = 95.77%								
Cd 226.502†	1501.9	14.303	µg/L	0.3354	14.303	ppb	0.3354	2.35%
Co 228.616†	116.7	5.4672	µg/L	0.55778	5.4672	ppb	0.55778	10.20%
Cr 267.716†	-154.4	-3.3394	µg/L	0.10831	-3.3394	ppb	0.10831	3.24%
Cu 324.752†	-12822.9	8.8775	µg/L	0.69959	8.8775	ppb	0.69959	7.88%
Fe 238.204 Radial†	87822.5	461330	µg/L	1900.4	461330	ppb	1900.4	0.41%
QC value within limits for Fe 238.204 Radial Recovery = 92.27%								
K 766.490 Radial†	-9.6	-5.2244	µg/L	47.65455	-5.2244	ppb	47.65455	912.16%
Mg 279.077 IEC†	87925.0	487010	µg/L	1982.7	487010	ppb	1982.7	0.41%

QC value within limits for Mg 279.077 IEC Recovery = 97.40%

Mn 257.610†	-14612.2	11.616 µg/L	0.2897	11.616 ppb	0.2897	2.49%
Mo 202.031†	-223.6	-6.8133 µg/L	1.52127	-6.8133 ppb	1.52127	22.33%
Na 589.592 Radial†	1760353.7	488430 µg/L	1848.6	488430 ppb	1848.6	0.38%

QC value within limits for Na 589.592 Radial Recovery = 97.69%

Ni 231.604†	-3.1	-0.1666 µg/L	0.19319	-0.1666 ppb	0.19319	115.98%
P 214.914†	219.2	124.35 µg/L	12.290	124.35 ppb	12.290	9.88%
Pb 220.353†	-17.5	21.575 µg/L	3.4349	21.575 ppb	3.4349	15.92%
S 181.975 Axial†	34.4	38.698 µg/L	23.1193	38.698 ppb	23.1193	59.74%
Sb 206.836†	43.8	6.8562 µg/L	8.13173	6.8562 ppb	8.13173	118.60%
Se 196.026†	-118.2	17.165 µg/L	8.0804	17.165 ppb	8.0804	47.07%
SiO2†	-200.8	-38.344 µg/L	6.1361	-38.344 ppb	6.1361	16.00%
Si 251.611†	-625.6	-39.038 µg/L	0.7741	-39.038 ppb	0.7741	1.98%
Sn 189.927†	-527.9	0.4942 µg/L	3.44877	0.4942 ppb	3.44877	697.80%
Sr 421.552†	997.5	5.6190 µg/L	0.10405	5.6190 ppb	0.10405	1.85%
Ti 334.940†	18514.4	14.114 µg/L	0.4142	14.114 ppb	0.4142	2.93%
Tl 190.801†	29.3	-19.662 µg/L	0.8458	-19.662 ppb	0.8458	4.30%
U 409.014†	154810.7	14464 µg/L	35.8	14464 ppb	35.8	0.25%

QC value within limits for U 409.014 Recovery = 96.42%

V 292.402†	-4728.0	7.6792 µg/L	0.29131	7.6792 ppb	0.29131	3.79%
Zn 213.857†	2708.0	10.265 µg/L	0.2297	10.265 ppb	0.2297	2.24%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/18/2009 03:09:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111887.3	111887.3	99.5	%			03:10:00
1	Al 396.153Radial†	904.7	679.7	-24.452	µg/L	-24.452	ppb	03:10:00
1	Ca 317.933Radial†	768.8	277.5	110.14	µg/L	110.14	ppb	03:10:20
1	Fe 238.204 Radial†	2.6	-8.6	271.11	µg/L	271.11	ppb	03:10:20
1	K 766.490 Radial†	542789.4	544970.3	295480	µg/L	295480	ppb	03:09:54
1	Mg 279.077 IEC†	-34.2	-54.2	-58.865	µg/L	-58.865	ppb	03:10:20
1	Na 589.592 Radial†	-101.9	601.5	166.89	µg/L	166.89	ppb	03:10:00
1	Sr 421.552†	1706285.2	1715388.7	9662.7	µg/L	9662.7	ppb	03:09:54
1	Sc 361.383	2018061.1	2018061.1	98.119	%			03:11:52
1	Y 371.029	1209279.4	1209279.4	96.560	%			03:11:52
1	Ag 328.068†	-7178.5	-7287.7	3.5837	µg/L	3.5837	ppb	03:11:52
1	As 188.979†	5061.1	5155.6	9835.7	µg/L	9835.7	ppb	03:11:57
1	B 249.677†	108665.5	110592.7	4908.5	µg/L	4908.5	ppb	03:11:52
1	Ba 233.527†	565241.5	576157.0	14492	µg/L	14492	ppb	03:11:52
1	Be 313.107†	4485313.7	4567678.4	2885.8	µg/L	2885.8	ppb	03:11:41
1	Cd 226.502†	360538.5	367550.3	9723.3	µg/L	9723.3	ppb	03:11:52
1	Co 228.616†	194888.4	198695.8	9557.3	µg/L	9557.3	ppb	03:11:52
1	Cr 267.716†	1138108.6	1160047.1	24171	µg/L	24171	ppb	03:11:52
1	Cu 324.752†	2870512.1	2922150.9	20559	µg/L	20559	ppb	03:11:52
1	Mn 257.610†	2914248.4	2970332.5	9426.5	µg/L	9426.5	ppb	03:11:52
1	Mo 202.031†	85084.9	86723.8	9674.9	µg/L	9674.9	ppb	03:11:52
1	Ni 231.604†	175426.0	178489.2	9723.8	µg/L	9723.8	ppb	03:11:52
1	P 214.914†	8327.6	8281.3	15678	µg/L	15678	ppb	03:11:57
1	Pb 220.353†	96397.6	98191.3	24891	µg/L	24891	ppb	03:11:52
1	S 181.975 Axial†	9765.1	9928.2	51010	µg/L	51010	ppb	03:11:57
1	Sb 206.836†	9863.5	10032.1	9860.8	µg/L	9860.8	ppb	03:11:57
1	Se 196.026†	6643.1	6756.3	9841.0	µg/L	9841.0	ppb	03:11:57
1	SiO2†	510622.6	518428.7	99001	µg/L	99001	ppb	03:11:52
1	Si 251.611†	591450.7	602438.2	45113	µg/L	45113	ppb	03:11:52
1	Sn 189.927†	20918.0	21296.5	10383	µg/L	10383	ppb	03:11:57
1	Ti 334.940†	4308512.2	4390380.5	9731.7	µg/L	9731.7	ppb	03:11:41
1	Tl 190.801†	6168.7	6308.3	9578.1	µg/L	9578.1	ppb	03:11:57
1	U 409.014†	1784.0	1139.0	106.97	µg/L	106.97	ppb	03:11:52
1	V 292.402†	872250.0	889061.6	10090	µg/L	10090	ppb	03:11:52
1	Zn 213.857†	544892.9	554787.4	14784	µg/L	14784	ppb	03:11:52
2	Sc RADIAL	111969.4	111969.4	99.5	%			03:10:32
2	Al 396.153Radial†	817.0	590.9	-71.580	µg/L	-71.580	ppb	03:10:32
2	Ca 317.933Radial†	706.3	214.0	84.962	µg/L	84.962	ppb	03:10:52
2	Fe 238.204 Radial†	-3.6	-14.8	240.82	µg/L	240.82	ppb	03:10:52
2	K 766.490 Radial†	552286.6	554110.6	300440	µg/L	300440	ppb	03:10:26
2	Mg 279.077 IEC†	-42.4	-62.4	-103.13	µg/L	-103.13	ppb	03:10:52
2	Na 589.592 Radial†	-331.5	370.9	102.92	µg/L	102.92	ppb	03:10:32
2	Sr 421.552†	1741202.4	1749207.4	9853.2	µg/L	9853.2	ppb	03:10:26
2	Sc 361.383	2024215.2	2024215.2	98.418	%			03:12:17
2	Y 371.029	1213136.1	1213136.1	96.868	%			03:12:17
2	Ag 328.068†	-7329.7	-7419.2	2.8986	µg/L	2.8986	ppb	03:12:17
2	As 188.979†	5161.9	5242.4	10001	µg/L	10001	ppb	03:12:22
2	B 249.677†	109893.8	111504.1	4948.9	µg/L	4948.9	ppb	03:12:17
2	Ba 233.527†	570885.9	580140.7	14593	µg/L	14593	ppb	03:12:17
2	Be 313.107†	4569513.7	4639333.7	2931.1	µg/L	2931.1	ppb	03:12:06
2	Cd 226.502†	364355.9	370312.0	9796.4	µg/L	9796.4	ppb	03:12:17
2	Co 228.616†	196903.2	200139.1	9626.6	µg/L	9626.6	ppb	03:12:17
2	Cr 267.716†	1149587.7	1168184.2	24341	µg/L	24341	ppb	03:12:17
2	Cu 324.752†	2899438.0	2942647.3	20703	µg/L	20703	ppb	03:12:17
2	Mn 257.610†	2942755.1	2990267.5	9489.7	µg/L	9489.7	ppb	03:12:17
2	Mo 202.031†	85872.0	87259.8	9734.7	µg/L	9734.7	ppb	03:12:17
2	Ni 231.604†	177085.8	179632.1	9786.0	µg/L	9786.0	ppb	03:12:17
2	P 214.914†	8508.8	8439.6	16008	µg/L	16008	ppb	03:12:22
2	Pb 220.353†	97342.5	98852.6	25058	µg/L	25058	ppb	03:12:17

2	S 181.975 Axial†	9943.8	10079.5	51787 µg/L	51787 ppb	03:12:22
2	Sb 206.836†	10049.3	10190.2	10017 µg/L	10017 ppb	03:12:22
2	Se 196.026†	6735.5	6829.6	9947.7 µg/L	9947.7 ppb	03:12:22
2	SiO2†	515360.7	521660.8	99618 µg/L	99618 ppb	03:12:17
2	Si 251.611†	597240.0	606488.0	45407 µg/L	45407 ppb	03:12:17
2	Sn 189.927†	21378.5	21699.6	10579 µg/L	10579 ppb	03:12:22
2	Ti 334.940†	4387455.3	4457242.3	9879.9 µg/L	9879.9 ppb	03:12:06
2	Tl 190.801†	6276.7	6399.0	9715.9 µg/L	9715.9 ppb	03:12:22
2	U 409.014†	1817.6	1167.6	109.66 µg/L	109.66 ppb	03:12:17
2	V 292.402†	881168.3	895420.6	10162 µg/L	10162 ppb	03:12:17
2	Zn 213.857†	549844.2	558130.0	14873 µg/L	14873 ppb	03:12:17
3	Sc RADIAL	111242.2	111242.2	98.9 %		03:11:04
3	Al 396.153Radial†	815.6	594.8	-67.575 µg/L	-67.575 ppb	03:11:04
3	Ca 317.933Radial†	666.8	178.8	70.981 µg/L	70.981 ppb	03:11:24
3	Fe 238.204 Radial†	-8.0	-19.3	215.33 µg/L	215.33 ppb	03:11:24
3	K 766.490 Radial†	552154.6	557604.3	302330 µg/L	302330 ppb	03:10:58
3	Mg 279.077 IEC†	-39.6	-59.8	-90.012 µg/L	-90.012 ppb	03:11:24
3	Na 589.592 Radial†	-405.6	293.8	81.531 µg/L	81.531 ppb	03:11:04
3	Sr 421.552†	1741255.5	1760696.3	9917.9 µg/L	9917.9 ppb	03:10:58
3	Sc 361.383	2024518.1	2024518.1	98.433 %		03:12:42
3	Y 371.029	1214301.7	1214301.7	96.961 %		03:12:42
3	Ag 328.068†	-7280.9	-7368.5	2.9290 µg/L	2.9290 ppb	03:12:42
3	As 188.979†	5168.4	5248.2	10012 µg/L	10012 ppb	03:12:47
3	B 249.677†	109206.9	110789.5	4917.2 µg/L	4917.2 ppb	03:12:42
3	Ba 233.527†	567959.4	577080.7	14516 µg/L	14516 ppb	03:12:42
3	Be 313.107†	4525940.4	4594372.2	2902.7 µg/L	2902.7 ppb	03:12:31
3	Cd 226.502†	362404.5	368274.1	9742.5 µg/L	9742.5 ppb	03:12:42
3	Co 228.616†	195692.4	198879.1	9566.0 µg/L	9566.0 ppb	03:12:42
3	Cr 267.716†	1142567.2	1160877.2	24188 µg/L	24188 ppb	03:12:42
3	Cu 324.752†	2880479.7	2922946.5	20564 µg/L	20564 ppb	03:12:42
3	Mn 257.610†	2928495.2	2975333.3	9442.3 µg/L	9442.3 ppb	03:12:42
3	Mo 202.031†	85416.3	86783.9	9681.6 µg/L	9681.6 ppb	03:12:42
3	Ni 231.604†	176195.4	178700.7	9735.3 µg/L	9735.3 ppb	03:12:42
3	P 214.914†	8465.0	8393.7	15925 µg/L	15925 ppb	03:12:47
3	Pb 220.353†	96806.1	98293.0	24917 µg/L	24917 ppb	03:12:42
3	S 181.975 Axial†	9913.4	10047.2	51621 µg/L	51621 ppb	03:12:47
3	Sb 206.836†	9997.7	10136.2	9964.3 µg/L	9964.3 ppb	03:12:47
3	Se 196.026†	6746.8	6840.1	9962.9 µg/L	9962.9 ppb	03:12:47
3	SiO2†	512972.9	519156.6	99140 µg/L	99140 ppb	03:12:42
3	Si 251.611†	594367.1	603478.5	45182 µg/L	45182 ppb	03:12:42
3	Sn 189.927†	21296.2	21612.7	10537 µg/L	10537 ppb	03:12:47
3	Ti 334.940†	4347702.8	4416190.0	9789.0 µg/L	9789.0 ppb	03:12:31
3	Tl 190.801†	6271.8	6393.1	9706.4 µg/L	9706.4 ppb	03:12:47
3	U 409.014†	1789.7	1139.0	106.98 µg/L	106.98 ppb	03:12:42
3	V 292.402†	875943.2	889978.3	10101 µg/L	10101 ppb	03:12:42
3	Zn 213.857†	546993.2	555150.0	14794 µg/L	14794 ppb	03:12:42

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2022264.8	98.324	%	0.1772				0.18%
Sc RADIAL	111699.7	99.3	%	0.35				0.36%
Y 371.029	1212239.0	96.797	%	0.2099				0.22%
Ag 328.068†	-7358.5	3.1371	µg/L	0.38705	3.1371	ppb	0.38705	12.34%
Al 396.153Radial†	621.8	-54.536	µg/L	26.1298	-54.536	ppb	26.1298	47.91%
As 188.979†	5215.4	9949.8	µg/L	98.97	9949.8	ppb	98.97	0.99%
QC value within limits for As 188.979 Recovery = 99.50%								
B 249.677†	110962.1	4924.9	µg/L	21.29	4924.9	ppb	21.29	0.43%
QC value within limits for B 249.677 Recovery = 98.50%								
Ba 233.527†	577792.8	14534	µg/L	52.5	14534	ppb	52.5	0.36%
QC value within limits for Ba 233.527 Recovery = 96.89%								
Be 313.107†	4600461.4	2906.5	µg/L	22.88	2906.5	ppb	22.88	0.79%
QC value within limits for Be 313.107 Recovery = 96.88%								
Ca 317.933Radial†	223.4	88.694	µg/L	19.8445	88.694	ppb	19.8445	22.37%
Cd 226.502†	368712.2	9754.1	µg/L	37.88	9754.1	ppb	37.88	0.39%
QC value within limits for Cd 226.502 Recovery = 97.54%								
Co 228.616†	199238.0	9583.3	µg/L	37.71	9583.3	ppb	37.71	0.39%
QC value within limits for Co 228.616 Recovery = 95.83%								
Cr 267.716†	1163036.2	24233	µg/L	93.3	24233	ppb	93.3	0.38%
QC value within limits for Cr 267.716 Recovery = 96.93%								

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Cu 324.752†          2929248.2       20609 µg/L          81.7       20609 ppb          81.7   0.40%
   QC value within limits for Cu 324.752  Recovery = 103.04%
Fe 238.204 Radial†       -14.2      242.42 µg/L        27.928      242.42 ppb        27.928  11.52%
K 766.490 Radial†     552228.4      299420 µg/L        3537.2      299420 ppb        3537.2   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 99.81%
Mg 279.077 IEC†          -58.8     -84.001 µg/L       22.7354     -84.001 ppb       22.7354  27.07%
Mn 257.610†          2978644.4      9452.9 µg/L         32.91      9452.9 ppb         32.91   0.35%
   QC value within limits for Mn 257.610  Recovery = 94.53%
Mo 202.031†            86922.5      9697.1 µg/L         32.76      9697.1 ppb         32.76   0.34%
   QC value within limits for Mo 202.031  Recovery = 96.97%
Na 589.592 Radial†       422.1      117.11 µg/L        44.413      117.11 ppb        44.413  37.92%
Ni 231.604†           178940.7      9748.4 µg/L         33.13      9748.4 ppb         33.13   0.34%
   QC value within limits for Ni 231.604  Recovery = 97.48%
P 214.914†              8371.5      15870 µg/L         171.7       15870 ppb         171.7   1.08%
   QC value within limits for P 214.914  Recovery = 105.80%
Pb 220.353†            98445.6      24955 µg/L          90.3       24955 ppb          90.3   0.36%
   QC value within limits for Pb 220.353  Recovery = 99.82%
S 181.975 Axial†       10018.3      51473 µg/L         409.4       51473 ppb         409.4   0.80%
   QC value within limits for S 181.975 Axial  Recovery = 102.95%
Sb 206.836†            10119.5      9947.5 µg/L         79.64      9947.5 ppb         79.64   0.80%
   QC value within limits for Sb 206.836  Recovery = 99.48%
Se 196.026†             6808.7      9917.2 µg/L         66.46      9917.2 ppb         66.46   0.67%
   QC value within limits for Se 196.026  Recovery = 99.17%
SiO2†                 519748.7      99253 µg/L         323.8       99253 ppb         323.8   0.33%
   QC value within limits for SiO2  Recovery = 92.76%
Si 251.611†           604134.9      45234 µg/L         154.0       45234 ppb         154.0   0.34%
   QC value within limits for Si 251.611  Recovery = 90.47%
Sn 189.927†            21536.3      10500 µg/L         103.4       10500 ppb         103.4   0.98%
   QC value within limits for Sn 189.927  Recovery = 105.00%
Sr 421.552†          1741764.1      9811.2 µg/L        132.67      9811.2 ppb        132.67   1.35%
   QC value within limits for Sr 421.552  Recovery = 98.11%
Ti 334.940†          4421270.9      9800.2 µg/L         74.74      9800.2 ppb         74.74   0.76%
   QC value within limits for Ti 334.940  Recovery = 98.00%
Tl 190.801†             6366.8      9666.8 µg/L         76.93      9666.8 ppb         76.93   0.80%
   QC value within limits for Tl 190.801  Recovery = 96.67%
U 409.014†              1148.5      107.87 µg/L         1.551      107.87 ppb         1.551   1.44%
V 292.402†            891486.8      10118 µg/L          39.0       10118 ppb          39.0   0.39%
   QC value within limits for V 292.402  Recovery = 101.18%
Zn 213.857†           556022.5      14817 µg/L          48.9       14817 ppb          48.9   0.33%
   QC value within limits for Zn 213.857  Recovery = 98.78%
All analyte(s) passed QC.
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Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 03:12:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114633.1	114633.1	102	%			03:13:34
1	Al 396.153Radial†	10448.9	10022.9	5046.5	µg/L	5046.5	ppb	03:13:34
1	Ca 317.933Radial†	13327.2	12581.4	4994.3	µg/L	4994.3	ppb	03:13:55
1	Fe 238.204 Radial†	994.3	964.4	5082.5	µg/L	5082.5	ppb	03:13:55
1	K 766.490 Radial†	10272.1	9384.4	5088.2	µg/L	5088.2	ppb	03:13:34
1	Mg 279.077 IEC†	968.5	930.5	5165.9	µg/L	5165.9	ppb	03:13:55
1	Na 589.592 Radial†	36587.9	36604.7	10156	µg/L	10156	ppb	03:13:34
1	Sr 421.552†	90411.4	88777.0	500.07	µg/L	500.07	ppb	03:13:34
1	Sc 361.383	2072418.5	2072418.5	100.76	%			03:14:58
1	Y 371.029	1255835.6	1255835.6	100.28	%			03:14:58
1	Ag 328.068†	55942.8	55548.0	499.92	µg/L	499.92	ppb	03:15:04
1	As 188.979†	268.7	264.2	502.53	µg/L	502.53	ppb	03:15:24
1	B 249.677†	11464.8	11222.4	496.50	µg/L	496.50	ppb	03:15:04
1	Ba 233.527†	19893.5	19823.8	498.96	µg/L	498.96	ppb	03:15:04
1	Be 313.107†	798687.2	789035.0	498.95	µg/L	498.95	ppb	03:14:58
1	Cd 226.502†	18973.6	18931.0	500.77	µg/L	500.77	ppb	03:15:04
1	Co 228.616†	10394.2	10387.3	499.63	µg/L	499.63	ppb	03:15:04
1	Cr 267.716†	23926.5	23868.3	498.01	µg/L	498.01	ppb	03:15:04
1	Cu 324.752†	75013.7	71062.1	501.05	µg/L	501.05	ppb	03:15:04
1	Mn 257.610†	158267.8	157293.4	499.81	µg/L	499.81	ppb	03:14:58
1	Mo 202.031†	4469.7	4443.8	495.94	µg/L	495.94	ppb	03:15:24
1	Ni 231.604†	9538.2	9166.7	499.39	µg/L	499.39	ppb	03:15:04
1	P 214.914†	1368.4	1152.0	2446.4	µg/L	2446.4	ppb	03:15:24
1	Pb 220.353†	2074.2	2004.4	508.82	µg/L	508.82	ppb	03:15:24
1	S 181.975 Axial†	220.8	195.1	1001.1	µg/L	1001.1	ppb	03:15:24
1	Sb 206.836†	535.6	511.0	505.56	µg/L	505.56	ppb	03:15:24
1	Se 196.026†	365.1	348.2	509.29	µg/L	509.29	ppb	03:15:24
1	SiO2†	30460.9	28248.8	5394.5	µg/L	5394.5	ppb	03:15:04
1	Si 251.611†	33517.7	32914.6	2473.3	µg/L	2473.3	ppb	03:15:04
1	Sn 189.927†	1054.7	1024.3	502.09	µg/L	502.09	ppb	03:15:24
1	Ti 334.940†	227531.3	225091.5	498.66	µg/L	498.66	ppb	03:14:58
1	Tl 190.801†	317.8	336.8	510.63	µg/L	510.63	ppb	03:15:24
1	U 409.014†	6032.2	5307.4	497.60	µg/L	497.60	ppb	03:15:04
1	V 292.402†	44312.7	44069.5	501.49	µg/L	501.49	ppb	03:15:04
1	Zn 213.857†	19540.7	18842.8	500.86	µg/L	500.86	ppb	03:15:04
2	Sc RADIAL	113233.8	113233.8	101	%			03:14:00
2	Al 396.153Radial†	10503.4	10203.7	5137.8	µg/L	5137.8	ppb	03:14:00
2	Ca 317.933Radial†	13321.4	12737.3	5056.1	µg/L	5056.1	ppb	03:14:21
2	Fe 238.204 Radial†	994.0	976.2	5144.5	µg/L	5144.5	ppb	03:14:21
2	K 766.490 Radial†	10239.6	9476.6	5138.1	µg/L	5138.1	ppb	03:14:00
2	Mg 279.077 IEC†	975.1	948.7	5267.2	µg/L	5267.2	ppb	03:14:21
2	Na 589.592 Radial†	36638.4	37098.4	10293	µg/L	10293	ppb	03:14:00
2	Sr 421.552†	90481.6	89943.2	506.64	µg/L	506.64	ppb	03:14:00
2	Sc 361.383	2046520.4	2046520.4	99.503	%			03:15:31
2	Y 371.029	1240511.5	1240511.5	99.054	%			03:15:31
2	Ag 328.068†	55744.1	56050.8	504.44	µg/L	504.44	ppb	03:15:37
2	As 188.979†	265.1	263.9	502.04	µg/L	502.04	ppb	03:15:58
2	B 249.677†	11417.0	11318.3	500.73	µg/L	500.73	ppb	03:15:37
2	Ba 233.527†	19773.2	19952.6	502.20	µg/L	502.20	ppb	03:15:37
2	Be 313.107†	796145.9	796511.6	503.67	µg/L	503.67	ppb	03:15:31
2	Cd 226.502†	18825.7	19020.7	503.14	µg/L	503.14	ppb	03:15:37
2	Co 228.616†	10351.4	10474.9	503.83	µg/L	503.83	ppb	03:15:37
2	Cr 267.716†	23808.7	24050.4	501.81	µg/L	501.81	ppb	03:15:37
2	Cu 324.752†	74592.7	71581.1	504.71	µg/L	504.71	ppb	03:15:37
2	Mn 257.610†	157938.3	158949.9	505.08	µg/L	505.08	ppb	03:15:31
2	Mo 202.031†	4430.9	4460.9	497.86	µg/L	497.86	ppb	03:15:58
2	Ni 231.604†	9475.5	9223.5	502.48	µg/L	502.48	ppb	03:15:37
2	P 214.914†	1355.3	1156.1	2454.9	µg/L	2454.9	ppb	03:15:58
2	Pb 220.353†	2054.2	2010.3	510.34	µg/L	510.34	ppb	03:15:58

2	S 181.975 Axial†	218.6	195.6	1003.6 µg/L	1003.6 ppb	03:15:58
2	Sb 206.836†	524.9	507.0	501.60 µg/L	501.60 ppb	03:15:58
2	Se 196.026†	362.3	350.0	511.99 µg/L	511.99 ppb	03:15:58
2	SiO2†	30273.7	28443.3	5431.6 µg/L	5431.6 ppb	03:15:37
2	Si 251.611†	33385.6	33202.8	2494.9 µg/L	2494.9 ppb	03:15:37
2	Sn 189.927†	1050.7	1033.5	506.66 µg/L	506.66 ppb	03:15:58
2	Ti 334.940†	226776.6	227190.6	503.31 µg/L	503.31 ppb	03:15:31
2	Tl 190.801†	315.4	338.4	513.05 µg/L	513.05 ppb	03:15:58
2	U 409.014†	6024.5	5375.3	503.97 µg/L	503.97 ppb	03:15:37
2	V 292.402†	44043.9	44355.9	504.75 µg/L	504.75 ppb	03:15:37
2	Zn 213.857†	19433.9	18980.8	504.53 µg/L	504.53 ppb	03:15:37
3	Sc RADIAL	115035.5	115035.5	102 %		03:14:26
3	Al 396.153Radial†	10588.2	10123.1	5097.1 µg/L	5097.1 ppb	03:14:26
3	Ca 317.933Radial†	13296.7	12505.8	4964.2 µg/L	4964.2 ppb	03:14:47
3	Fe 238.204 Radial†	996.1	962.8	5074.4 µg/L	5074.4 ppb	03:14:47
3	K 766.490 Radial†	10263.8	9341.0	5064.6 µg/L	5064.6 ppb	03:14:26
3	Mg 279.077 IEC†	966.6	925.3	5137.1 µg/L	5137.1 ppb	03:14:47
3	Na 589.592 Radial†	36945.0	36828.2	10218 µg/L	10218 ppb	03:14:26
3	Sr 421.552†	91205.8	89243.5	502.70 µg/L	502.70 ppb	03:14:26
3	Sc 361.383	2049335.6	2049335.6	99.640 %		03:16:05
3	Y 371.029	1240755.8	1240755.8	99.074 %		03:16:05
3	Ag 328.068†	56363.9	56596.0	509.34 µg/L	509.34 ppb	03:16:10
3	As 188.979†	266.6	265.1	504.19 µg/L	504.19 ppb	03:16:31
3	B 249.677†	11498.3	11384.2	503.68 µg/L	503.68 ppb	03:16:10
3	Ba 233.527†	20054.7	20207.9	508.63 µg/L	508.63 ppb	03:16:10
3	Be 313.107†	796154.1	795420.7	502.98 µg/L	502.98 ppb	03:16:05
3	Cd 226.502†	19039.3	19209.0	508.13 µg/L	508.13 ppb	03:16:10
3	Co 228.616†	10487.4	10597.1	509.71 µg/L	509.71 ppb	03:16:10
3	Cr 267.716†	24220.0	24430.4	509.73 µg/L	509.73 ppb	03:16:10
3	Cu 324.752†	75467.4	72355.9	510.15 µg/L	510.15 ppb	03:16:10
3	Mn 257.610†	158033.8	158827.8	504.68 µg/L	504.68 ppb	03:16:05
3	Mo 202.031†	4438.5	4462.5	498.03 µg/L	498.03 ppb	03:16:31
3	Ni 231.604†	9628.7	9364.1	510.14 µg/L	510.14 ppb	03:16:10
3	P 214.914†	1366.4	1165.3	2474.3 µg/L	2474.3 ppb	03:16:31
3	Pb 220.353†	2055.8	2009.1	510.01 µg/L	510.01 ppb	03:16:31
3	S 181.975 Axial†	218.2	195.0	1000.2 µg/L	1000.2 ppb	03:16:31
3	Sb 206.836†	524.4	505.8	500.35 µg/L	500.35 ppb	03:16:31
3	Se 196.026†	361.9	349.1	510.59 µg/L	510.59 ppb	03:16:31
3	SiO2†	30615.1	28744.1	5489.1 µg/L	5489.1 ppb	03:16:10
3	Si 251.611†	33780.4	33552.8	2521.9 µg/L	2521.9 ppb	03:16:10
3	Sn 189.927†	1045.0	1026.3	503.10 µg/L	503.10 ppb	03:16:31
3	Ti 334.940†	226779.8	226880.8	502.63 µg/L	502.63 ppb	03:16:05
3	Tl 190.801†	312.3	334.8	507.59 µg/L	507.59 ppb	03:16:31
3	U 409.014†	6110.2	5453.0	511.27 µg/L	511.27 ppb	03:16:10
3	V 292.402†	44645.3	44898.7	510.87 µg/L	510.87 ppb	03:16:10
3	Zn 213.857†	19680.2	19201.1	510.39 µg/L	510.39 ppb	03:16:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2056091.5	99.968	%	0.6909				0.69%
Sc RADIAL	114300.8	102	%	0.8				0.83%
Y 371.029	1245701.0	99.468	%	0.7009				0.70%
Ag 328.068†	56064.9	504.56	µg/L	4.713	504.56	ppb	4.713	0.93%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	10116.6	5093.8	µg/L	45.75	5093.8	ppb	45.75	0.90%
QC value within limits for Al 396.153Radial Recovery = 101.88%								
As 188.979†	264.4	502.92	µg/L	1.125	502.92	ppb	1.125	0.22%
QC value within limits for As 188.979 Recovery = 100.58%								
B 249.677†	11308.3	500.30	µg/L	3.610	500.30	ppb	3.610	0.72%
QC value within limits for B 249.677 Recovery = 100.06%								
Ba 233.527†	19994.8	503.26	µg/L	4.921	503.26	ppb	4.921	0.98%
QC value within limits for Ba 233.527 Recovery = 100.65%								
Be 313.107†	793655.8	501.87	µg/L	2.554	501.87	ppb	2.554	0.51%
QC value within limits for Be 313.107 Recovery = 100.37%								
Ca 317.933Radial†	12608.2	5004.9	µg/L	46.85	5004.9	ppb	46.85	0.94%
QC value within limits for Ca 317.933Radial Recovery = 100.10%								
Cd 226.502†	19053.5	504.01	µg/L	3.761	504.01	ppb	3.761	0.75%
QC value within limits for Cd 226.502 Recovery = 100.80%								
Co 228.616†	10486.4	504.39	µg/L	5.064	504.39	ppb	5.064	1.00%

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   QC value within limits for Co 228.616  Recovery = 100.88%
Cr 267.716†            24116.4      503.18 µg/L         5.981      503.18 ppb          5.981   1.19%
   QC value within limits for Cr 267.716  Recovery = 100.64%
Cu 324.752†            71666.3      505.30 µg/L         4.579      505.30 ppb          4.579   0.91%
   QC value within limits for Cu 324.752  Recovery = 101.06%
Fe 238.204 Radial†       967.8      5100.5 µg/L         38.37      5100.5 ppb          38.37   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.01%
K 766.490 Radial†       9400.6      5097.0 µg/L         37.55      5097.0 ppb          37.55   0.74%
   QC value within limits for K 766.490 Radial  Recovery = 101.94%
Mg 279.077 IEC†          934.8      5190.1 µg/L         68.34      5190.1 ppb          68.34   1.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.80%
Mn 257.610†           158357.0      503.19 µg/L         2.932      503.19 ppb          2.932   0.58%
   QC value within limits for Mn 257.610  Recovery = 100.64%
Mo 202.031†             4455.7      497.28 µg/L         1.160      497.28 ppb          1.160   0.23%
   QC value within limits for Mo 202.031  Recovery = 99.46%
Na 589.592 Radial†     36843.8       10223 µg/L          68.6       10223 ppb           68.6   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 102.23%
Ni 231.604†             9251.4      504.00 µg/L         5.537      504.00 ppb          5.537   1.10%
   QC value within limits for Ni 231.604  Recovery = 100.80%
P 214.914†              1157.8      2458.5 µg/L         14.27      2458.5 ppb          14.27   0.58%
   QC value within limits for P 214.914  Recovery = 98.34%
Pb 220.353†             2007.9      509.73 µg/L         0.799      509.73 ppb          0.799   0.16%
   QC value within limits for Pb 220.353  Recovery = 101.95%
S 181.975 Axial†         195.2      1001.6 µg/L          1.78      1001.6 ppb           1.78   0.18%
   QC value within limits for S 181.975 Axial  Recovery = 100.16%
Sb 206.836†              507.9      502.50 µg/L         2.720      502.50 ppb          2.720   0.54%
   QC value within limits for Sb 206.836  Recovery = 100.50%
Se 196.026†              349.1      510.62 µg/L         1.350      510.62 ppb          1.350   0.26%
   QC value within limits for Se 196.026  Recovery = 102.12%
SiO2†                  28478.7      5438.4 µg/L         47.65      5438.4 ppb          47.65   0.88%
   QC value within limits for SiO2  Recovery = 101.70%
Si 251.611†            33223.4      2496.7 µg/L         24.38      2496.7 ppb          24.38   0.98%
   QC value within limits for Si 251.611  Recovery = 99.87%
Sn 189.927†             1028.0      503.95 µg/L         2.400      503.95 ppb          2.400   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.79%
Sr 421.552†            89321.2      503.14 µg/L         3.306      503.14 ppb          3.306   0.66%
   QC value within limits for Sr 421.552  Recovery = 100.63%
Ti 334.940†           226387.6      501.53 µg/L         2.511      501.53 ppb          2.511   0.50%
   QC value within limits for Ti 334.940  Recovery = 100.31%
Tl 190.801†              336.7      510.42 µg/L         2.733      510.42 ppb          2.733   0.54%
   QC value within limits for Tl 190.801  Recovery = 102.08%
U 409.014†              5378.6      504.28 µg/L         6.844      504.28 ppb          6.844   1.36%
   QC value within limits for U 409.014  Recovery = 100.86%
V 292.402†             44441.4      505.70 µg/L         4.764      505.70 ppb          4.764   0.94%
   QC value within limits for V 292.402  Recovery = 101.14%
Zn 213.857†            19008.2      505.26 µg/L         4.809      505.26 ppb          4.809   0.95%
   QC value within limits for Zn 213.857  Recovery = 101.05%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 03:16:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111978.7	111978.7	99.6	%			03:17:12
1	Al 396.153Radial†	201.1	-27.8	-14.075	µg/L	-14.075	ppb	03:17:12
1	Ca 317.933Radial†	481.7	-11.6	-4.5894	µg/L	-4.5894	ppb	03:17:33
1	Fe 238.204 Radial†	12.4	1.2	6.5019	µg/L	6.5019	ppb	03:17:33
1	K 766.490 Radial†	744.3	52.8	28.624	µg/L	28.624	ppb	03:17:12
1	Mg 279.077 IEC†	19.3	-0.4	-2.2236	µg/L	-2.2236	ppb	03:17:33
1	Na 589.592 Radial†	-594.9	106.4	29.512	µg/L	29.512	ppb	03:17:12
1	Sr 421.552†	63.6	127.7	0.7192	µg/L	0.7192	ppb	03:17:12
1	Sc 361.383	2034736.0	2034736.0	98.930	%			03:18:34
1	Y 371.029	1239053.5	1239053.5	98.938	%			03:18:34
1	Ag 328.068†	-33.2	-5.2	-0.0435	µg/L	-0.0435	ppb	03:18:40
1	As 188.979†	8.2	5.9	11.157	µg/L	11.157	ppb	03:19:01
1	B 249.677†	205.8	52.3	2.3188	µg/L	2.3188	ppb	03:18:40
1	Ba 233.527†	-57.4	22.6	0.5693	µg/L	0.5693	ppb	03:19:01
1	Be 313.107†	3864.8	295.1	0.1863	µg/L	0.1863	ppb	03:18:40
1	Cd 226.502†	-53.8	46.5	1.2272	µg/L	1.2272	ppb	03:19:01
1	Co 228.616†	-63.7	7.3	0.3487	µg/L	0.3487	ppb	03:19:01
1	Cr 267.716†	-66.4	55.7	1.1599	µg/L	1.1599	ppb	03:18:40
1	Cu 324.752†	3482.8	136.2	0.9594	µg/L	0.9594	ppb	03:18:40
1	Mn 257.610†	-75.8	146.1	0.4644	µg/L	0.4644	ppb	03:19:01
1	Mo 202.031†	-6.0	1.9	0.2110	µg/L	0.2110	ppb	03:19:01
1	Ni 231.604†	305.2	9.1	0.4937	µg/L	0.4937	ppb	03:19:01
1	P 214.914†	210.4	6.7	14.403	µg/L	14.403	ppb	03:19:01
1	Pb 220.353†	69.8	16.4	4.1690	µg/L	4.1690	ppb	03:19:01
1	S 181.975 Axial†	24.5	0.7	3.5474	µg/L	3.5474	ppb	03:19:01
1	Sb 206.836†	27.3	7.1	7.0385	µg/L	7.0385	ppb	03:19:01
1	Se 196.026†	18.2	4.3	6.1975	µg/L	6.1975	ppb	03:19:01
1	SiO2†	1998.7	38.6	7.3738	µg/L	7.3738	ppb	03:18:40
1	Si 251.611†	396.5	51.1	3.9248	µg/L	3.9248	ppb	03:19:01
1	Sn 189.927†	19.0	-3.2	-1.5677	µg/L	-1.5677	ppb	03:19:01
1	Ti 334.940†	1185.4	479.3	1.0627	µg/L	1.0627	ppb	03:18:40
1	Tl 190.801†	-21.9	-0.7	-1.0384	µg/L	-1.0384	ppb	03:19:01
1	U 409.014†	637.2	-35.1	-3.2988	µg/L	-3.2988	ppb	03:18:40
1	V 292.402†	-54.2	37.1	0.4153	µg/L	0.4153	ppb	03:18:40
1	Zn 213.857†	590.6	46.8	1.2492	µg/L	1.2492	ppb	03:19:01
2	Sc RADIAL	111820.9	111820.9	99.4	%			03:17:38
2	Al 396.153Radial†	241.9	13.5	6.7807	µg/L	6.7807	ppb	03:17:38
2	Ca 317.933Radial†	461.3	-31.4	-12.483	µg/L	-12.483	ppb	03:17:59
2	Fe 238.204 Radial†	12.2	1.0	5.4016	µg/L	5.4016	ppb	03:17:59
2	K 766.490 Radial†	653.8	-37.2	-20.145	µg/L	-20.145	ppb	03:17:38
2	Mg 279.077 IEC†	15.0	-4.8	-26.475	µg/L	-26.475	ppb	03:17:59
2	Na 589.592 Radial†	-691.7	8.2	2.2623	µg/L	2.2623	ppb	03:17:38
2	Sr 421.552†	-28.4	35.2	0.1984	µg/L	0.1984	ppb	03:17:38
2	Sc 361.383	2050897.2	2050897.2	99.716	%			03:19:06
2	Y 371.029	1247948.1	1247948.1	99.648	%			03:19:06
2	Ag 328.068†	-28.2	0.1	0.0046	µg/L	0.0046	ppb	03:19:12
2	As 188.979†	4.7	2.2	4.2460	µg/L	4.2460	ppb	03:19:33
2	B 249.677†	203.4	48.3	2.1423	µg/L	2.1423	ppb	03:19:12
2	Ba 233.527†	-55.4	25.2	0.6330	µg/L	0.6330	ppb	03:19:33
2	Be 313.107†	3883.5	283.0	0.1787	µg/L	0.1787	ppb	03:19:12
2	Cd 226.502†	-63.9	36.8	0.9748	µg/L	0.9748	ppb	03:19:33
2	Co 228.616†	-59.8	11.7	0.5647	µg/L	0.5647	ppb	03:19:33
2	Cr 267.716†	-82.9	39.6	0.8265	µg/L	0.8265	ppb	03:19:12
2	Cu 324.752†	3461.0	86.6	0.6104	µg/L	0.6104	ppb	03:19:12
2	Mn 257.610†	-99.8	122.5	0.3896	µg/L	0.3896	ppb	03:19:33
2	Mo 202.031†	0.0	8.0	0.8875	µg/L	0.8875	ppb	03:19:33
2	Ni 231.604†	308.3	9.8	0.5345	µg/L	0.5345	ppb	03:19:33
2	P 214.914†	215.8	10.5	22.683	µg/L	22.683	ppb	03:19:33
2	Pb 220.353†	78.9	25.0	6.3484	µg/L	6.3484	ppb	03:19:33

2	S 181.975 Axial†	24.6	0.6	3.3414 µg/L	3.3414 ppb		03:19:33
2	Sb 206.836†	20.6	0.1	0.1238 µg/L	0.1238 ppb		03:19:33
2	Se 196.026†	8.3	-5.7	-8.3259 µg/L	-8.3259 ppb		03:19:33
2	SiO2†	2029.3	53.5	10.207 µg/L	10.207 ppb		03:19:12
2	Si 251.611†	391.6	43.1	3.2083 µg/L	3.2083 ppb		03:19:33
2	Sn 189.927†	25.3	2.9	1.3975 µg/L	1.3975 ppb		03:19:33
2	Ti 334.940†	1104.4	388.6	0.8622 µg/L	0.8622 ppb		03:19:12
2	Tl 190.801†	-17.9	3.4	5.1862 µg/L	5.1862 ppb		03:19:33
2	U 409.014†	695.7	18.4	1.7292 µg/L	1.7292 ppb		03:19:12
2	V 292.402†	-46.0	45.9	0.5267 µg/L	0.5267 ppb		03:19:12
2	Zn 213.857†	576.8	28.3	0.7546 µg/L	0.7546 ppb		03:19:33
3	Sc RADIAL	111379.5	111379.5	99.0 %			03:18:04
3	Al 396.153Radial†	210.5	-17.3	-8.7766 µg/L	-8.7766 ppb		03:18:04
3	Ca 317.933Radial†	467.9	-22.9	-9.0931 µg/L	-9.0931 ppb		03:18:24
3	Fe 238.204 Radial†	14.0	2.9	15.302 µg/L	15.302 ppb		03:18:24
3	K 766.490 Radial†	706.4	18.6	10.075 µg/L	10.075 ppb		03:18:04
3	Mg 279.077 IEC†	18.2	-1.4	-7.9693 µg/L	-7.9693 ppb		03:18:24
3	Na 589.592 Radial†	-636.3	61.3	17.017 µg/L	17.017 ppb		03:18:04
3	Sr 421.552†	29.9	94.0	0.5294 µg/L	0.5294 ppb		03:18:04
3	Sc 361.383	2012119.5	2012119.5	97.830 %			03:19:39
3	Y 371.029	1225196.2	1225196.2	97.831 %			03:19:39
3	Ag 328.068†	-45.7	-18.4	-0.1603 µg/L	-0.1603 ppb		03:19:44
3	As 188.979†	4.9	2.6	4.8806 µg/L	4.8806 ppb		03:20:05
3	B 249.677†	192.0	40.5	1.7948 µg/L	1.7948 ppb		03:19:44
3	Ba 233.527†	-59.1	20.3	0.5112 µg/L	0.5112 ppb		03:20:05
3	Be 313.107†	3909.5	384.7	0.2429 µg/L	0.2429 ppb		03:19:44
3	Cd 226.502†	-81.2	17.9	0.4728 µg/L	0.4728 ppb		03:20:05
3	Co 228.616†	-63.4	7.0	0.3349 µg/L	0.3349 ppb		03:20:05
3	Cr 267.716†	-62.1	59.3	1.2362 µg/L	1.2362 ppb		03:19:44
3	Cu 324.752†	3504.6	198.1	1.3967 µg/L	1.3967 ppb		03:19:44
3	Mn 257.610†	-98.8	121.7	0.3880 µg/L	0.3880 ppb		03:20:05
3	Mo 202.031†	2.0	10.0	1.1118 µg/L	1.1118 ppb		03:20:05
3	Ni 231.604†	313.3	20.9	1.1377 µg/L	1.1377 ppb		03:20:05
3	P 214.914†	207.6	6.3	13.421 µg/L	13.421 ppb		03:20:05
3	Pb 220.353†	66.3	13.7	3.4689 µg/L	3.4689 ppb		03:20:05
3	S 181.975 Axial†	21.3	-2.3	-11.588 µg/L	-11.588 ppb		03:20:05
3	Sb 206.836†	24.9	4.9	4.8134 µg/L	4.8134 ppb		03:20:05
3	Se 196.026†	14.0	0.2	0.3333 µg/L	0.3333 ppb		03:20:05
3	SiO2†	2030.0	93.3	17.821 µg/L	17.821 ppb		03:19:44
3	Si 251.611†	396.2	55.3	4.0965 µg/L	4.0965 ppb		03:20:05
3	Sn 189.927†	26.0	4.2	2.0281 µg/L	2.0281 ppb		03:20:05
3	Ti 334.940†	1195.0	502.6	1.1147 µg/L	1.1147 ppb		03:19:44
3	Tl 190.801†	-17.5	3.6	5.3967 µg/L	5.3967 ppb		03:20:05
3	U 409.014†	667.4	3.0	0.2741 µg/L	0.2741 ppb		03:19:44
3	V 292.402†	-48.7	42.2	0.4853 µg/L	0.4853 ppb		03:19:44
3	Zn 213.857†	578.4	41.1	1.0911 µg/L	1.0911 ppb		03:20:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032584.2	98.825	%	0.9470				0.96%
Sc RADIAL	111726.4	99.3	%	0.28				0.28%
Y 371.029	1237399.3	98.806	%	0.9155				0.93%
Ag 328.068†	-7.9	-0.0664	µg/L	0.08482	-0.0664	ppb	0.08482	127.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.5	-5.3568	µg/L	10.84006	-5.3568	ppb	10.84006	202.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.5	6.7613	µg/L	3.82014	6.7613	ppb	3.82014	56.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	47.0	2.0853	µg/L	0.26664	2.0853	ppb	0.26664	12.79%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.7	0.5712	µg/L	0.06094	0.5712	ppb	0.06094	10.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	320.9	0.2026	µg/L	0.03508	0.2026	ppb	0.03508	17.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-22.0	-8.7219	µg/L	3.95991	-8.7219	ppb	3.95991	45.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	33.7	0.8916	µg/L	0.38400	0.8916	ppb	0.38400	43.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	8.7	0.4161	µg/L	0.12891	0.4161	ppb	0.12891	30.98%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              51.6      1.0742 µg/L       0.21789      1.0742 ppb        0.21789  20.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             140.3      0.9888 µg/L       0.39398      0.9888 ppb        0.39398  39.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.7      9.0685 µg/L       5.42631      9.0685 ppb        5.42631  59.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        11.4      6.1844 µg/L      24.61606      6.1844 ppb       24.61606 398.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.2     -12.223 µg/L       12.6729     -12.223 ppb        12.6729 103.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             130.1      0.4140 µg/L       0.04364      0.4140 ppb        0.04364  10.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.6      0.7368 µg/L       0.46892      0.7368 ppb        0.46892  63.65%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       58.6      16.263 µg/L       13.6403      16.263 ppb        13.6403  83.87%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              13.3      0.7220 µg/L       0.36064      0.7220 ppb        0.36064  49.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                7.8      16.836 µg/L        5.0879      16.836 ppb         5.0879  30.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              18.4      4.6621 µg/L       1.50175      4.6621 ppb        1.50175  32.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.3     -1.5664 µg/L       8.67963     -1.5664 ppb        8.67963 554.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.0      3.9919 µg/L       3.52981      3.9919 ppb        3.52981  88.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.4     -0.5983 µg/L       7.30640     -0.5983 ppb        7.30640 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    61.8      11.801 µg/L        5.4028      11.801 ppb         5.4028  45.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              49.9      3.7432 µg/L       0.47111      3.7432 ppb        0.47111  12.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.3      0.6193 µg/L       1.92003      0.6193 ppb        1.92003 310.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              85.6      0.4823 µg/L       0.26355      0.4823 ppb        0.26355  54.64%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             456.9      1.0132 µg/L       0.13334      1.0132 ppb        0.13334  13.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.1      3.1815 µg/L       3.65606      3.1815 ppb        3.65606 114.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -4.6     -0.4318 µg/L       2.58727     -0.4318 ppb        2.58727 599.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               41.7      0.4758 µg/L       0.05630      0.4758 ppb        0.05630  11.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              38.7      1.0316 µg/L       0.25258      1.0316 ppb        0.25258  24.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 03:46:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113927.2	113927.2	101	%			03:46:42
1	Al 396.153Radial†	10279.7	9919.3	4994.2	µg/L	4994.2	ppb	03:46:42
1	Ca 317.933Radial†	13112.5	12450.5	4942.3	µg/L	4942.3	ppb	03:47:02
1	Fe 238.204 Radial†	989.8	966.0	5091.2	µg/L	5091.2	ppb	03:47:02
1	K 766.490 Radial†	9935.8	9114.7	4942.0	µg/L	4942.0	ppb	03:46:42
1	Mg 279.077 IEC†	952.0	920.1	5108.3	µg/L	5108.3	ppb	03:47:02
1	Na 589.592 Radial†	36121.0	36366.1	10090	µg/L	10090	ppb	03:46:42
1	Sr 421.552†	88884.5	87819.3	494.68	µg/L	494.68	ppb	03:46:42
1	Sc 361.383	2053475.1	2053475.1	99.841	%			03:48:05
1	Y 371.029	1243185.3	1243185.3	99.268	%			03:48:05
1	Ag 328.068†	56288.9	56406.8	507.63	µg/L	507.63	ppb	03:48:11
1	As 188.979†	259.7	257.6	490.02	µg/L	490.02	ppb	03:48:31
1	B 249.677†	11455.9	11318.4	500.75	µg/L	500.75	ppb	03:48:11
1	Ba 233.527†	19963.5	20075.9	505.30	µg/L	505.30	ppb	03:48:11
1	Be 313.107†	796231.8	793887.8	502.01	µg/L	502.01	ppb	03:48:05
1	Cd 226.502†	19066.6	19197.9	507.83	µg/L	507.83	ppb	03:48:11
1	Co 228.616†	10412.7	10501.0	505.09	µg/L	505.09	ppb	03:48:11
1	Cr 267.716†	23981.6	24142.6	503.73	µg/L	503.73	ppb	03:48:11
1	Cu 324.752†	74953.3	71688.3	505.46	µg/L	505.46	ppb	03:48:11
1	Mn 257.610†	157751.8	158225.6	502.77	µg/L	502.77	ppb	03:48:05
1	Mo 202.031†	4410.6	4425.5	493.91	µg/L	493.91	ppb	03:48:31
1	Ni 231.604†	9574.7	9290.6	506.13	µg/L	506.13	ppb	03:48:11
1	P 214.914†	1352.0	1148.2	2437.4	µg/L	2437.4	ppb	03:48:31
1	Pb 220.353†	2030.9	1980.0	502.62	µg/L	502.62	ppb	03:48:31
1	S 181.975 Axial†	217.1	193.4	992.26	µg/L	992.26	ppb	03:48:31
1	Sb 206.836†	519.8	500.1	494.73	µg/L	494.73	ppb	03:48:31
1	Se 196.026†	371.6	358.1	523.66	µg/L	523.66	ppb	03:48:31
1	SiO2†	30507.1	28574.0	5456.6	µg/L	5456.6	ppb	03:48:11
1	Si 251.611†	33622.7	33326.6	2504.9	µg/L	2504.9	ppb	03:48:11
1	Sn 189.927†	1044.0	1023.2	501.56	µg/L	501.56	ppb	03:48:31
1	Ti 334.940†	225750.8	225391.3	499.33	µg/L	499.33	ppb	03:48:05
1	Tl 190.801†	305.6	327.5	496.51	µg/L	496.51	ppb	03:48:31
1	U 409.014†	6054.3	5384.7	504.86	µg/L	504.86	ppb	03:48:11
1	V 292.402†	44469.1	44631.8	507.83	µg/L	507.83	ppb	03:48:11
1	Zn 213.857†	19502.9	18983.8	504.60	µg/L	504.60	ppb	03:48:11
2	Sc RADIAL	113882.5	113882.5	101	%			03:47:08
2	Al 396.153Radial†	10363.9	10006.4	5038.2	µg/L	5038.2	ppb	03:47:08
2	Ca 317.933Radial†	13143.0	12485.7	4956.3	µg/L	4956.3	ppb	03:47:28
2	Fe 238.204 Radial†	992.6	969.2	5107.9	µg/L	5107.9	ppb	03:47:28
2	K 766.490 Radial†	10108.8	9289.4	5036.7	µg/L	5036.7	ppb	03:47:08
2	Mg 279.077 IEC†	954.6	923.0	5124.5	µg/L	5124.5	ppb	03:47:28
2	Na 589.592 Radial†	36245.1	36502.7	10128	µg/L	10128	ppb	03:47:08
2	Sr 421.552†	89309.9	88273.9	497.24	µg/L	497.24	ppb	03:47:08
2	Sc 361.383	2034621.2	2034621.2	98.924	%			03:48:38
2	Y 371.029	1232721.4	1232721.4	98.432	%			03:48:38
2	Ag 328.068†	55319.3	55949.1	503.52	µg/L	503.52	ppb	03:48:44
2	As 188.979†	266.8	267.2	508.33	µg/L	508.33	ppb	03:49:05
2	B 249.677†	11185.3	11151.2	493.33	µg/L	493.33	ppb	03:48:44
2	Ba 233.527†	19637.1	19931.3	501.66	µg/L	501.66	ppb	03:48:44
2	Be 313.107†	788746.2	793710.9	501.90	µg/L	501.90	ppb	03:48:38
2	Cd 226.502†	18640.6	18944.2	501.11	µg/L	501.11	ppb	03:48:44
2	Co 228.616†	10232.7	10415.6	500.99	µg/L	500.99	ppb	03:48:44
2	Cr 267.716†	23567.7	23946.7	499.64	µg/L	499.64	ppb	03:48:44
2	Cu 324.752†	73773.6	71191.4	501.96	µg/L	501.96	ppb	03:48:44
2	Mn 257.610†	156476.0	158400.1	503.33	µg/L	503.33	ppb	03:48:38
2	Mo 202.031†	4385.1	4440.6	495.60	µg/L	495.60	ppb	03:49:05
2	Ni 231.604†	9435.4	9238.6	503.30	µg/L	503.30	ppb	03:48:44
2	P 214.914†	1347.5	1156.2	2455.4	µg/L	2455.4	ppb	03:49:05
2	Pb 220.353†	2026.9	1994.8	506.41	µg/L	506.41	ppb	03:49:05

2	S 181.975 Axial†	214.4	192.7	988.56 µg/L	988.56 ppb	03:49:05
2	Sb 206.836†	513.7	498.7	493.37 µg/L	493.37 ppb	03:49:05
2	Se 196.026†	360.3	350.1	512.12 µg/L	512.12 ppb	03:49:05
2	SiO2†	29991.1	28335.5	5411.1 µg/L	5411.1 ppb	03:48:44
2	Si 251.611†	33012.7	33022.0	2481.4 µg/L	2481.4 ppb	03:48:44
2	Sn 189.927†	1040.8	1029.6	504.70 µg/L	504.70 ppb	03:49:05
2	Ti 334.940†	223999.0	225715.7	500.04 µg/L	500.04 ppb	03:48:38
2	Tl 190.801†	312.2	337.0	510.99 µg/L	510.99 ppb	03:49:05
2	U 409.014†	5857.2	5241.6	491.41 µg/L	491.41 ppb	03:48:44
2	V 292.402†	43690.5	44257.5	503.60 µg/L	503.60 ppb	03:48:44
2	Zn 213.857†	19151.1	18809.2	499.94 µg/L	499.94 ppb	03:48:44
3	Sc RADIAL	113273.9	113273.9	101 %		03:47:34
3	Al 396.153Radial†	10271.6	9969.8	5019.6 µg/L	5019.6 ppb	03:47:34
3	Ca 317.933Radial†	13202.0	12614.0	5007.2 µg/L	5007.2 ppb	03:47:54
3	Fe 238.204 Radial†	994.4	976.3	5145.1 µg/L	5145.1 ppb	03:47:54
3	K 766.490 Radial†	9858.4	9094.5	4931.0 µg/L	4931.0 ppb	03:47:34
3	Mg 279.077 IEC†	966.7	940.1	5219.2 µg/L	5219.2 ppb	03:47:54
3	Na 589.592 Radial†	35835.0	36287.8	10068 µg/L	10068 ppb	03:47:34
3	Sr 421.552†	88381.9	87826.3	494.72 µg/L	494.72 ppb	03:47:34
3	Sc 361.383	2028971.2	2028971.2	98.650 %		03:49:12
3	Y 371.029	1228618.1	1228618.1	98.104 %		03:49:12
3	Ag 328.068†	55473.9	56261.5	506.34 µg/L	506.34 ppb	03:49:18
3	As 188.979†	265.3	266.4	506.78 µg/L	506.78 ppb	03:49:38
3	B 249.677†	11294.8	11293.7	499.64 µg/L	499.64 ppb	03:49:18
3	Ba 233.527†	19674.8	20024.8	504.02 µg/L	504.02 ppb	03:49:18
3	Be 313.107†	786144.5	793293.9	501.64 µg/L	501.64 ppb	03:49:12
3	Cd 226.502†	18676.7	19033.3	503.48 µg/L	503.48 ppb	03:49:18
3	Co 228.616†	10276.5	10488.9	504.52 µg/L	504.52 ppb	03:49:18
3	Cr 267.716†	23654.1	24100.6	502.86 µg/L	502.86 ppb	03:49:18
3	Cu 324.752†	74058.9	71688.3	505.47 µg/L	505.47 ppb	03:49:18
3	Mn 257.610†	155886.4	158242.8	502.84 µg/L	502.84 ppb	03:49:12
3	Mo 202.031†	4392.9	4460.9	497.86 µg/L	497.86 ppb	03:49:38
3	Ni 231.604†	9421.7	9251.3	503.99 µg/L	503.99 ppb	03:49:18
3	P 214.914†	1349.3	1161.7	2466.9 µg/L	2466.9 ppb	03:49:38
3	Pb 220.353†	2025.7	1999.3	507.53 µg/L	507.53 ppb	03:49:38
3	S 181.975 Axial†	220.2	199.2	1022.0 µg/L	1022.0 ppb	03:49:38
3	Sb 206.836†	525.4	512.0	506.59 µg/L	506.59 ppb	03:49:38
3	Se 196.026†	364.4	355.3	519.71 µg/L	519.71 ppb	03:49:38
3	SiO2†	30083.7	28513.8	5445.1 µg/L	5445.1 ppb	03:49:18
3	Si 251.611†	33192.0	33296.7	2502.5 µg/L	2502.5 ppb	03:49:18
3	Sn 189.927†	1034.7	1026.4	503.17 µg/L	503.17 ppb	03:49:38
3	Ti 334.940†	223139.6	225475.1	499.51 µg/L	499.51 ppb	03:49:12
3	Tl 190.801†	312.3	338.0	512.43 µg/L	512.43 ppb	03:49:38
3	U 409.014†	6005.7	5408.7	507.10 µg/L	507.10 ppb	03:49:18
3	V 292.402†	43923.0	44616.2	507.69 µg/L	507.69 ppb	03:49:18
3	Zn 213.857†	19230.5	18943.6	503.52 µg/L	503.52 ppb	03:49:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2039022.5	99.138	%	0.6239				0.63%
Sc RADIAL	113694.5	101	%	0.3				0.32%
Y 371.029	1234841.6	98.601	%	0.5998				0.61%
Ag 328.068†	56205.8	505.83	µg/L	2.104	505.83	ppb	2.104	0.42%
QC value within limits for Ag 328.068 Recovery = 101.17%								
Al 396.153Radial†	9965.2	5017.3	µg/L	22.07	5017.3	ppb	22.07	0.44%
QC value within limits for Al 396.153Radial Recovery = 100.35%								
As 188.979†	263.8	501.71	µg/L	10.155	501.71	ppb	10.155	2.02%
QC value within limits for As 188.979 Recovery = 100.34%								
B 249.677†	11254.4	497.91	µg/L	4.005	497.91	ppb	4.005	0.80%
QC value within limits for B 249.677 Recovery = 99.58%								
Ba 233.527†	20010.7	503.66	µg/L	1.847	503.66	ppb	1.847	0.37%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 313.107†	793630.9	501.85	µg/L	0.193	501.85	ppb	0.193	0.04%
QC value within limits for Be 313.107 Recovery = 100.37%								
Ca 317.933Radial†	12516.7	4968.6	µg/L	34.16	4968.6	ppb	34.16	0.69%
QC value within limits for Ca 317.933Radial Recovery = 99.37%								
Cd 226.502†	19058.4	504.14	µg/L	3.408	504.14	ppb	3.408	0.68%
QC value within limits for Cd 226.502 Recovery = 100.83%								
Co 228.616†	10468.5	503.53	µg/L	2.222	503.53	ppb	2.222	0.44%

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   QC value within limits for Co 228.616  Recovery = 100.71%
Cr 267.716†            24063.3      502.08 µg/L         2.153      502.08 ppb          2.153   0.43%
   QC value within limits for Cr 267.716  Recovery = 100.42%
Cu 324.752†            71522.7      504.29 µg/L         2.020      504.29 ppb          2.020   0.40%
   QC value within limits for Cu 324.752  Recovery = 100.86%
Fe 238.204 Radial†       970.5      5114.7 µg/L         27.58      5114.7 ppb          27.58   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.29%
K 766.490 Radial†       9166.2      4969.9 µg/L         58.11      4969.9 ppb          58.11   1.17%
   QC value within limits for K 766.490 Radial  Recovery = 99.40%
Mg 279.077 IEC†          927.7      5150.7 µg/L         59.93      5150.7 ppb          59.93   1.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.01%
Mn 257.610†           158289.5      502.98 µg/L         0.305      502.98 ppb          0.305   0.06%
   QC value within limits for Mn 257.610  Recovery = 100.60%
Mo 202.031†             4442.4      495.79 µg/L         1.983      495.79 ppb          1.983   0.40%
   QC value within limits for Mo 202.031  Recovery = 99.16%
Na 589.592 Radial†     36385.5       10096 µg/L          30.2       10096 ppb           30.2   0.30%
   QC value within limits for Na 589.592 Radial  Recovery = 100.96%
Ni 231.604†             9260.2      504.48 µg/L         1.475      504.48 ppb          1.475   0.29%
   QC value within limits for Ni 231.604  Recovery = 100.90%
P 214.914†              1155.4      2453.2 µg/L         14.86      2453.2 ppb          14.86   0.61%
   QC value within limits for P 214.914  Recovery = 98.13%
Pb 220.353†             1991.4      505.52 µg/L         2.572      505.52 ppb          2.572   0.51%
   QC value within limits for Pb 220.353  Recovery = 101.10%
S 181.975 Axial†         195.1      1000.9 µg/L         18.33      1000.9 ppb          18.33   1.83%
   QC value within limits for S 181.975 Axial  Recovery = 100.09%
Sb 206.836†              503.6      498.23 µg/L         7.271      498.23 ppb          7.271   1.46%
   QC value within limits for Sb 206.836  Recovery = 99.65%
Se 196.026†              354.5      518.50 µg/L         5.865      518.50 ppb          5.865   1.13%
   QC value within limits for Se 196.026  Recovery = 103.70%
SiO2†                  28474.4      5437.6 µg/L         23.68      5437.6 ppb          23.68   0.44%
   QC value within limits for SiO2  Recovery = 101.68%
Si 251.611†            33215.1      2496.3 µg/L         12.95      2496.3 ppb          12.95   0.52%
   QC value within limits for Si 251.611  Recovery = 99.85%
Sn 189.927†             1026.4      503.14 µg/L         1.569      503.14 ppb          1.569   0.31%
   QC value within limits for Sn 189.927  Recovery = 100.63%
Sr 421.552†            87973.2      495.55 µg/L         1.467      495.55 ppb          1.467   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.11%
Ti 334.940†           225527.4      499.63 µg/L         0.373      499.63 ppb          0.373   0.07%
   QC value within limits for Ti 334.940  Recovery = 99.93%
Tl 190.801†              334.2      506.64 µg/L         8.807      506.64 ppb          8.807   1.74%
   QC value within limits for Tl 190.801  Recovery = 101.33%
U 409.014†              5345.0      501.12 µg/L         8.482      501.12 ppb          8.482   1.69%
   QC value within limits for U 409.014  Recovery = 100.22%
V 292.402†             44501.9      506.37 µg/L         2.402      506.37 ppb          2.402   0.47%
   QC value within limits for V 292.402  Recovery = 101.27%
Zn 213.857†            18912.2      502.68 µg/L         2.440      502.68 ppb          2.440   0.49%
   QC value within limits for Zn 213.857  Recovery = 100.54%
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 03:49:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111094.3	111094.3	98.8	%			03:50:22
1	Al 396.153Radial†	614.8	392.6	198.04	µg/L	198.04	ppb	03:50:22
1	Ca 317.933Radial†	932.9	449.1	178.27	µg/L	178.27	ppb	03:50:43
1	Fe 238.204 Radial†	29.1	18.2	95.963	µg/L	95.963	ppb	03:50:43
1	K 766.490 Radial†	1057.5	375.8	203.77	µg/L	203.77	ppb	03:50:22
1	Mg 279.077 IEC†	69.7	50.8	281.69	µg/L	281.69	ppb	03:50:43
1	Na 589.592 Radial†	465.4	1175.2	326.06	µg/L	326.06	ppb	03:50:22
1	Sr 421.552†	847.0	921.3	5.1899	µg/L	5.1899	ppb	03:50:22
1	Sc 361.383	2038146.3	2038146.3	99.096	%			03:51:44
1	Y 371.029	1241543.0	1241543.0	99.136	%			03:51:44
1	Ag 328.068†	589.5	623.2	5.6089	µg/L	5.6089	ppb	03:51:50
1	As 188.979†	18.2	15.9	30.227	µg/L	30.227	ppb	03:52:11
1	B 249.677†	1263.2	1119.0	49.635	µg/L	49.635	ppb	03:51:50
1	Ba 233.527†	122.2	204.0	5.1357	µg/L	5.1357	ppb	03:52:11
1	Be 313.107†	11610.2	8104.6	5.1249	µg/L	5.1249	ppb	03:51:50
1	Cd 226.502†	93.3	195.1	5.1938	µg/L	5.1938	ppb	03:52:11
1	Co 228.616†	33.8	105.8	5.0995	µg/L	5.0995	ppb	03:52:11
1	Cr 267.716†	128.6	252.6	5.2692	µg/L	5.2692	ppb	03:51:50
1	Cu 324.752†	4758.1	1417.2	9.9912	µg/L	9.9912	ppb	03:51:50
1	Mn 257.610†	3094.4	3345.3	10.628	µg/L	10.628	ppb	03:51:50
1	Mo 202.031†	80.0	88.7	9.8959	µg/L	9.8959	ppb	03:52:11
1	Ni 231.604†	392.1	96.3	5.2474	µg/L	5.2474	ppb	03:52:11
1	P 214.914†	274.0	70.5	151.90	µg/L	151.90	ppb	03:52:11
1	Pb 220.353†	99.5	46.3	11.723	µg/L	11.723	ppb	03:52:11
1	S 181.975 Axial†	43.1	19.4	99.803	µg/L	99.803	ppb	03:52:11
1	Sb 206.836†	29.0	8.7	8.6136	µg/L	8.6136	ppb	03:52:11
1	Se 196.026†	41.2	27.4	39.938	µg/L	39.938	ppb	03:52:11
1	SiO2†	3153.2	1200.3	229.21	µg/L	229.21	ppb	03:51:50
1	Si 251.611†	1655.7	1321.2	100.45	µg/L	100.45	ppb	03:52:11
1	Sn 189.927†	38.4	16.3	8.0588	µg/L	8.0588	ppb	03:52:11
1	Ti 334.940†	3101.5	2410.9	5.3340	µg/L	5.3340	ppb	03:51:50
1	Tl 190.801†	-8.2	13.2	19.921	µg/L	19.921	ppb	03:52:11
1	U 409.014†	1265.2	597.5	56.098	µg/L	56.098	ppb	03:51:50
1	V 292.402†	362.6	457.9	5.3292	µg/L	5.3292	ppb	03:51:50
1	Zn 213.857†	924.9	383.2	10.208	µg/L	10.208	ppb	03:52:11
2	Sc RADIAL	111548.5	111548.5	99.2	%			03:50:48
2	Al 396.153Radial†	610.5	385.8	194.58	µg/L	194.58	ppb	03:50:48
2	Ca 317.933Radial†	939.5	451.9	179.40	µg/L	179.40	ppb	03:51:08
2	Fe 238.204 Radial†	30.7	19.8	103.90	µg/L	103.90	ppb	03:51:08
2	K 766.490 Radial†	1072.8	386.9	209.76	µg/L	209.76	ppb	03:50:48
2	Mg 279.077 IEC†	65.8	46.5	257.90	µg/L	257.90	ppb	03:51:08
2	Na 589.592 Radial†	387.1	1094.2	303.61	µg/L	303.61	ppb	03:50:48
2	Sr 421.552†	850.3	921.1	5.1887	µg/L	5.1887	ppb	03:50:48
2	Sc 361.383	2036202.8	2036202.8	99.001	%			03:52:17
2	Y 371.029	1240677.7	1240677.7	99.067	%			03:52:17
2	Ag 328.068†	517.2	550.7	4.9651	µg/L	4.9651	ppb	03:52:22
2	As 188.979†	16.4	14.0	26.718	µg/L	26.718	ppb	03:52:43
2	B 249.677†	1237.2	1093.9	48.520	µg/L	48.520	ppb	03:52:22
2	Ba 233.527†	126.2	208.2	5.2406	µg/L	5.2406	ppb	03:52:43
2	Be 313.107†	11605.5	8111.1	5.1290	µg/L	5.1290	ppb	03:52:22
2	Cd 226.502†	95.8	197.7	5.2555	µg/L	5.2555	ppb	03:52:43
2	Co 228.616†	23.2	95.2	4.5910	µg/L	4.5910	ppb	03:52:43
2	Cr 267.716†	160.1	284.5	5.9350	µg/L	5.9350	ppb	03:52:22
2	Cu 324.752†	4639.7	1302.2	9.1842	µg/L	9.1842	ppb	03:52:22
2	Mn 257.610†	3066.6	3320.2	10.550	µg/L	10.550	ppb	03:52:22
2	Mo 202.031†	83.9	92.6	10.339	µg/L	10.339	ppb	03:52:43
2	Ni 231.604†	385.9	90.4	4.9225	µg/L	4.9225	ppb	03:52:43
2	P 214.914†	280.9	77.7	167.80	µg/L	167.80	ppb	03:52:43
2	Pb 220.353†	108.5	55.5	14.053	µg/L	14.053	ppb	03:52:43

2	S 181.975 Axial†	43.0	19.4	99.730 µg/L	99.730 ppb	03:52:43
2	Sb 206.836†	35.2	15.0	14.881 µg/L	14.881 ppb	03:52:43
2	Se 196.026†	31.6	17.8	25.943 µg/L	25.943 ppb	03:52:43
2	SiO2†	3143.5	1193.6	227.93 µg/L	227.93 ppb	03:52:22
2	Si 251.611†	1677.7	1345.0	102.19 µg/L	102.19 ppb	03:52:43
2	Sn 189.927†	41.7	19.7	9.7036 µg/L	9.7036 ppb	03:52:43
2	Ti 334.940†	3086.7	2398.9	5.3074 µg/L	5.3074 ppb	03:52:22
2	Tl 190.801†	-10.9	10.4	15.759 µg/L	15.759 ppb	03:52:43
2	U 409.014†	1190.5	523.3	49.124 µg/L	49.124 ppb	03:52:22
2	V 292.402†	401.0	497.0	5.7631 µg/L	5.7631 ppb	03:52:22
2	Zn 213.857†	933.7	393.0	10.473 µg/L	10.473 ppb	03:52:43
3	Sc RADIAL	111700.6	111700.6	99.3 %		03:51:14
3	Al 396.153Radial†	594.8	369.2	186.16 µg/L	186.16 ppb	03:51:14
3	Ca 317.933Radial†	938.3	449.5	178.41 µg/L	178.41 ppb	03:51:34
3	Fe 238.204 Radial†	29.3	18.3	96.264 µg/L	96.264 ppb	03:51:34
3	K 766.490 Radial†	949.9	261.7	141.89 µg/L	141.89 ppb	03:51:14
3	Mg 279.077 IEC†	74.4	55.1	305.72 µg/L	305.72 ppb	03:51:34
3	Na 589.592 Radial†	396.2	1102.9	306.02 µg/L	306.02 ppb	03:51:14
3	Sr 421.552†	857.5	927.2	5.2230 µg/L	5.2230 ppb	03:51:14
3	Sc 361.383	2041519.0	2041519.0	99.260 %		03:52:49
3	Y 371.029	1242687.6	1242687.6	99.228 %		03:52:49
3	Ag 328.068†	532.8	565.1	5.0898 µg/L	5.0898 ppb	03:52:54
3	As 188.979†	16.3	13.9	26.521 µg/L	26.521 ppb	03:53:15
3	B 249.677†	1264.7	1118.4	49.609 µg/L	49.609 ppb	03:52:54
3	Ba 233.527†	124.7	206.3	5.1936 µg/L	5.1936 ppb	03:53:15
3	Be 313.107†	11509.5	7983.9	5.0485 µg/L	5.0485 ppb	03:52:54
3	Cd 226.502†	91.1	192.6	5.1279 µg/L	5.1279 ppb	03:53:15
3	Co 228.616†	32.5	104.5	5.0385 µg/L	5.0385 ppb	03:53:15
3	Cr 267.716†	126.9	250.6	5.2285 µg/L	5.2285 ppb	03:52:54
3	Cu 324.752†	4693.2	1343.9	9.4753 µg/L	9.4753 ppb	03:52:54
3	Mn 257.610†	3116.1	3362.0	10.682 µg/L	10.682 ppb	03:52:54
3	Mo 202.031†	87.7	96.3	10.747 µg/L	10.747 ppb	03:53:15
3	Ni 231.604†	383.0	86.5	4.7124 µg/L	4.7124 ppb	03:53:15
3	P 214.914†	277.1	73.2	157.96 µg/L	157.96 ppb	03:53:15
3	Pb 220.353†	107.6	54.2	13.738 µg/L	13.738 ppb	03:53:15
3	S 181.975 Axial†	40.7	16.9	86.936 µg/L	86.936 ppb	03:53:15
3	Sb 206.836†	25.5	5.2	5.1246 µg/L	5.1246 ppb	03:53:15
3	Se 196.026†	34.7	20.9	30.421 µg/L	30.421 ppb	03:53:15
3	SiO2†	3148.8	1190.6	227.36 µg/L	227.36 ppb	03:52:54
3	Si 251.611†	1652.9	1315.6	99.963 µg/L	99.963 ppb	03:53:15
3	Sn 189.927†	42.0	19.8	9.7884 µg/L	9.7884 ppb	03:53:15
3	Ti 334.940†	3060.1	2364.0	5.2301 µg/L	5.2301 ppb	03:52:54
3	Tl 190.801†	-5.1	16.2	24.523 µg/L	24.523 ppb	03:53:15
3	U 409.014†	1259.0	589.1	55.313 µg/L	55.313 ppb	03:52:54
3	V 292.402†	359.9	454.6	5.2969 µg/L	5.2969 ppb	03:52:54
3	Zn 213.857†	933.5	390.3	10.401 µg/L	10.401 ppb	03:53:15

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2038622.7	99.119	%	0.1308				0.13%
Sc RADIAL	111447.8	99.1	%	0.28				0.28%
Y 371.029	1241636.1	99.144	%	0.0805				0.08%
Ag 328.068†	579.7	5.2213	µg/L	0.34141	5.2213	ppb	0.34141	6.54%
QC value within limits for Ag 328.068 Recovery = 104.43%								
Al 396.153Radial†	382.5	192.93	µg/L	6.110	192.93	ppb	6.110	3.17%
QC value within limits for Al 396.153Radial Recovery = 96.46%								
As 188.979†	14.6	27.822	µg/L	2.0850	27.822	ppb	2.0850	7.49%
QC value within limits for As 188.979 Recovery = 92.74%								
B 249.677†	1110.5	49.255	µg/L	0.6361	49.255	ppb	0.6361	1.29%
QC value within limits for B 249.677 Recovery = 98.51%								
Ba 233.527†	206.2	5.1900	µg/L	0.05255	5.1900	ppb	0.05255	1.01%
QC value within limits for Ba 233.527 Recovery = 103.80%								
Be 313.107†	8066.5	5.1008	µg/L	0.04532	5.1008	ppb	0.04532	0.89%
QC value within limits for Be 313.107 Recovery = 102.02%								
Ca 317.933Radial†	450.2	178.69	µg/L	0.613	178.69	ppb	0.613	0.34%
QC value within limits for Ca 317.933Radial Recovery = 89.35%								
Cd 226.502†	195.1	5.1924	µg/L	0.06381	5.1924	ppb	0.06381	1.23%
QC value within limits for Cd 226.502 Recovery = 103.85%								
Co 228.616†	101.8	4.9097	µg/L	0.27763	4.9097	ppb	0.27763	5.65%

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   QC value within limits for Co 228.616  Recovery = 98.19%
Cr 267.716†              262.5      5.4776 µg/L       0.39668      5.4776 ppb        0.39668   7.24%
   QC value within limits for Cr 267.716  Recovery = 109.55%
Cu 324.752†             1354.4      9.5503 µg/L       0.40871      9.5503 ppb        0.40871   4.28%
   QC value within limits for Cu 324.752  Recovery = 95.50%
Fe 238.204 Radial†        18.8      98.710 µg/L        4.5000     98.710 ppb         4.5000   4.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.71%
K 766.490 Radial†        341.5      185.14 µg/L        37.572     185.14 ppb         37.572  20.29%
   QC value within limits for K 766.490 Radial  Recovery = 123.43%
Mg 279.077 IEC†           50.8      281.77 µg/L        23.911     281.77 ppb         23.911   8.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 93.92%
Mn 257.610†             3342.5      10.620 µg/L        0.0663     10.620 ppb         0.0663   0.62%
   QC value within limits for Mn 257.610  Recovery = 106.20%
Mo 202.031†               92.5      10.327 µg/L        0.4258     10.327 ppb         0.4258   4.12%
   QC value within limits for Mo 202.031  Recovery = 103.27%
Na 589.592 Radial†      1124.1      311.90 µg/L        12.325     311.90 ppb         12.325   3.95%
   QC value within limits for Na 589.592 Radial  Recovery = 103.97%
Ni 231.604†               91.1      4.9608 µg/L       0.26956     4.9608 ppb        0.26956   5.43%
   QC value within limits for Ni 231.604  Recovery = 99.22%
P 214.914†                73.8      159.22 µg/L         8.024     159.22 ppb         8.024   5.04%
   QC value within limits for P 214.914  Recovery = 106.15%
Pb 220.353†               52.0      13.171 µg/L        1.2643     13.171 ppb         1.2643   9.60%
   QC value greater than the upper limit for Pb 220.353  Recovery = 131.71%
S 181.975 Axial†          18.6      95.490 µg/L        7.4077     95.490 ppb         7.4077   7.76%
   QC value within limits for S 181.975 Axial  Recovery = 95.49%
Sb 206.836†                9.6      9.5397 µg/L       4.94367     9.5397 ppb        4.94367  51.82%
   QC value within limits for Sb 206.836  Recovery = 95.40%
Se 196.026†               22.1      32.101 µg/L        7.1472     32.101 ppb         7.1472  22.26%
   QC value within limits for Se 196.026  Recovery = 107.00%
SiO2†                   1194.8      228.17 µg/L         0.949     228.17 ppb          0.949   0.42%
   QC value within limits for SiO2  Recovery = 107.12%
Si 251.611†             1327.3      100.87 µg/L         1.173     100.87 ppb          1.173   1.16%
   QC value within limits for Si 251.611  Recovery = 100.87%
Sn 189.927†               18.6      9.1836 µg/L       0.97499     9.1836 ppb        0.97499  10.62%
   QC value within limits for Sn 189.927  Recovery = 91.84%
Sr 421.552†              923.2      5.2005 µg/L       0.01949     5.2005 ppb        0.01949   0.37%
   QC value within limits for Sr 421.552  Recovery = 104.01%
Ti 334.940†             2391.3      5.2905 µg/L       0.05398     5.2905 ppb        0.05398   1.02%
   QC value within limits for Ti 334.940  Recovery = 105.81%
Tl 190.801†               13.3      20.068 µg/L        4.3840     20.068 ppb         4.3840  21.85%
   QC value within limits for Tl 190.801  Recovery = 100.34%
U 409.014†               570.0      53.512 µg/L        3.8201     53.512 ppb         3.8201   7.14%
   QC value within limits for U 409.014  Recovery = 107.02%
V 292.402†               469.8      5.4631 µg/L       0.26035     5.4631 ppb        0.26035   4.77%
   QC value within limits for V 292.402  Recovery = 109.26%
Zn 213.857†              388.9      10.361 µg/L        0.1370     10.361 ppb         0.1370   1.32%
   QC value within limits for Zn 213.857  Recovery = 103.61%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 03:53:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111244.0	111244.0	98.9	%			03:53:58
1	Al 396.153Radial†	197.5	-30.1	-15.244	µg/L	-15.244	ppb	03:53:58
1	Ca 317.933Radial†	425.1	-65.6	-26.039	µg/L	-26.039	ppb	03:54:18
1	Fe 238.204 Radial†	8.5	-2.6	-13.434	µg/L	-13.434	ppb	03:54:18
1	K 766.490 Radial†	641.5	-46.2	-25.035	µg/L	-25.035	ppb	03:53:58
1	Mg 279.077 IEC†	16.5	-3.1	-17.387	µg/L	-17.387	ppb	03:54:18
1	Na 589.592 Radial†	-713.8	-17.8	-4.9340	µg/L	-4.9340	ppb	03:53:58
1	Sr 421.552†	-40.9	22.4	0.1263	µg/L	0.1263	ppb	03:53:58
1	Sc 361.383	2031588.4	2031588.4	98.777	%			03:55:20
1	Y 371.029	1236665.2	1236665.2	98.747	%			03:55:20
1	Ag 328.068†	-41.8	-14.0	-0.1256	µg/L	-0.1256	ppb	03:55:26
1	As 188.979†	5.0	2.6	4.9491	µg/L	4.9491	ppb	03:55:46
1	B 249.677†	163.1	9.5	0.4242	µg/L	0.4242	ppb	03:55:26
1	Ba 233.527†	-80.4	-0.7	-0.0172	µg/L	-0.0172	ppb	03:55:46
1	Be 313.107†	3648.7	82.4	0.0521	µg/L	0.0521	ppb	03:55:26
1	Cd 226.502†	-94.1	5.6	0.1502	µg/L	0.1502	ppb	03:55:46
1	Co 228.616†	-75.2	-4.4	-0.2091	µg/L	-0.2091	ppb	03:55:46
1	Cr 267.716†	-127.5	-6.4	-0.1322	µg/L	-0.1322	ppb	03:55:26
1	Cu 324.752†	3389.4	47.0	0.3279	µg/L	0.3279	ppb	03:55:26
1	Mn 257.610†	-221.5	-1.6	-0.0069	µg/L	-0.0069	ppb	03:55:46
1	Mo 202.031†	-2.6	5.3	0.5879	µg/L	0.5879	ppb	03:55:46
1	Ni 231.604†	293.6	-2.2	-0.1193	µg/L	-0.1193	ppb	03:55:46
1	P 214.914†	211.5	8.1	17.570	µg/L	17.570	ppb	03:55:46
1	Pb 220.353†	65.3	12.0	3.0465	µg/L	3.0465	ppb	03:55:46
1	S 181.975 Axial†	21.8	-1.9	-9.9643	µg/L	-9.9643	ppb	03:55:46
1	Sb 206.836†	16.8	-3.6	-3.5524	µg/L	-3.5524	ppb	03:55:46
1	Se 196.026†	17.8	4.0	5.7664	µg/L	5.7664	ppb	03:55:46
1	SiO2†	1963.5	6.1	1.1670	µg/L	1.1670	ppb	03:55:26
1	Si 251.611†	342.0	-3.4	-0.1961	µg/L	-0.1961	ppb	03:55:46
1	Sn 189.927†	18.7	-3.5	-1.7372	µg/L	-1.7372	ppb	03:55:46
1	Ti 334.940†	704.8	-5.4	-0.0104	µg/L	-0.0104	ppb	03:55:26
1	Tl 190.801†	-22.8	-1.6	-2.4755	µg/L	-2.4755	ppb	03:55:46
1	U 409.014†	678.5	7.7	0.7216	µg/L	0.7216	ppb	03:55:26
1	V 292.402†	-84.8	6.1	0.0731	µg/L	0.0731	ppb	03:55:26
1	Zn 213.857†	539.3	-4.2	-0.1104	µg/L	-0.1104	ppb	03:55:46
2	Sc RADIAL	111179.0	111179.0	98.8	%			03:54:24
2	Al 396.153Radial†	204.4	-23.0	-11.631	µg/L	-11.631	ppb	03:54:24
2	Ca 317.933Radial†	432.0	-58.3	-23.162	µg/L	-23.162	ppb	03:54:44
2	Fe 238.204 Radial†	11.1	0.0	0.0765	µg/L	0.0765	ppb	03:54:44
2	K 766.490 Radial†	724.5	38.2	20.703	µg/L	20.703	ppb	03:54:24
2	Mg 279.077 IEC†	20.3	0.7	3.8132	µg/L	3.8132	ppb	03:54:44
2	Na 589.592 Radial†	-719.0	-23.5	-6.5094	µg/L	-6.5094	ppb	03:54:24
2	Sr 421.552†	-109.7	-47.2	-0.2660	µg/L	-0.2660	ppb	03:54:24
2	Sc 361.383	2052409.6	2052409.6	99.789	%			03:55:52
2	Y 371.029	1248450.0	1248450.0	99.688	%			03:55:52
2	Ag 328.068†	9.8	38.2	0.3412	µg/L	0.3412	ppb	03:55:58
2	As 188.979†	0.7	-1.8	-3.4745	µg/L	-3.4745	ppb	03:56:18
2	B 249.677†	128.1	-27.3	-1.2109	µg/L	-1.2109	ppb	03:55:58
2	Ba 233.527†	-72.7	7.8	0.1956	µg/L	0.1956	ppb	03:56:18
2	Be 313.107†	3638.2	34.4	0.0217	µg/L	0.0217	ppb	03:55:58
2	Cd 226.502†	-83.7	17.0	0.4526	µg/L	0.4526	ppb	03:56:18
2	Co 228.616†	-66.4	5.2	0.2483	µg/L	0.2483	ppb	03:56:18
2	Cr 267.716†	-118.5	4.1	0.0847	µg/L	0.0847	ppb	03:55:58
2	Cu 324.752†	3364.2	-13.0	-0.0914	µg/L	-0.0914	ppb	03:55:58
2	Mn 257.610†	-223.6	-1.4	-0.0044	µg/L	-0.0044	ppb	03:56:18
2	Mo 202.031†	-6.2	1.7	0.1850	µg/L	0.1850	ppb	03:56:18
2	Ni 231.604†	292.9	-5.9	-0.3189	µg/L	-0.3189	ppb	03:56:18
2	P 214.914†	203.7	-1.9	-4.0422	µg/L	-4.0422	ppb	03:56:18
2	Pb 220.353†	64.7	10.7	2.7023	µg/L	2.7023	ppb	03:56:18

2	S 181.975 Axial†	22.8	-1.1	-5.8998 µg/L	-5.8998 ppb	03:56:18
2	Sb 206.836†	27.2	6.7	6.6560 µg/L	6.6560 ppb	03:56:18
2	Se 196.026†	12.8	-1.3	-1.8851 µg/L	-1.8851 ppb	03:56:18
2	SiO2†	2038.6	61.3	11.697 µg/L	11.697 ppb	03:55:58
2	Si 251.611†	357.8	8.9	0.6747 µg/L	0.6747 ppb	03:56:18
2	Sn 189.927†	21.7	-0.7	-0.3291 µg/L	-0.3291 ppb	03:56:18
2	Ti 334.940†	787.0	69.8	0.1560 µg/L	0.1560 ppb	03:55:58
2	Tl 190.801†	-15.1	6.3	9.4451 µg/L	9.4451 ppb	03:56:18
2	U 409.014†	734.2	56.6	5.3120 µg/L	5.3120 ppb	03:55:58
2	V 292.402†	-87.1	4.7	0.0624 µg/L	0.0624 ppb	03:55:58
2	Zn 213.857†	539.0	-10.0	-0.2671 µg/L	-0.2671 ppb	03:56:18
3	Sc RADIAL	111160.1	111160.1	98.8 %		03:54:49
3	Al 396.153Radial†	156.8	-71.1	-35.976 µg/L	-35.976 ppb	03:54:49
3	Ca 317.933Radial†	427.2	-63.1	-25.067 µg/L	-25.067 ppb	03:55:10
3	Fe 238.204 Radial†	8.4	-2.7	-14.000 µg/L	-14.000 ppb	03:55:10
3	K 766.490 Radial†	724.0	37.7	20.461 µg/L	20.461 ppb	03:54:49
3	Mg 279.077 IEC†	10.9	-8.8	-48.594 µg/L	-48.594 ppb	03:55:10
3	Na 589.592 Radial†	-703.9	-8.3	-2.3161 µg/L	-2.3161 ppb	03:54:49
3	Sr 421.552†	-72.5	-9.6	-0.0539 µg/L	-0.0539 ppb	03:54:49
3	Sc 361.383	2041907.0	2041907.0	99.279 %		03:56:24
3	Y 371.029	1242379.5	1242379.5	99.203 %		03:56:24
3	Ag 328.068†	4.9	33.3	0.2956 µg/L	0.2956 ppb	03:56:30
3	As 188.979†	6.1	3.6	6.9521 µg/L	6.9521 ppb	03:56:50
3	B 249.677†	169.3	14.8	0.6624 µg/L	0.6624 ppb	03:56:30
3	Ba 233.527†	-82.1	-2.0	-0.0515 µg/L	-0.0515 ppb	03:56:50
3	Be 313.107†	3638.3	53.2	0.0336 µg/L	0.0336 ppb	03:56:30
3	Cd 226.502†	-92.9	7.4	0.2008 µg/L	0.2008 ppb	03:56:50
3	Co 228.616†	-73.4	-2.2	-0.1048 µg/L	-0.1048 ppb	03:56:50
3	Cr 267.716†	-120.0	1.9	0.0391 µg/L	0.0391 ppb	03:56:30
3	Cu 324.752†	3359.6	-0.3	-0.0053 µg/L	-0.0053 ppb	03:56:30
3	Mn 257.610†	-207.6	13.6	0.0414 µg/L	0.0414 ppb	03:56:50
3	Mo 202.031†	-3.4	4.4	0.4953 µg/L	0.4953 ppb	03:56:50
3	Ni 231.604†	282.4	-14.9	-0.8132 µg/L	-0.8132 ppb	03:56:50
3	P 214.914†	201.8	-2.7	-5.9402 µg/L	-5.9402 ppb	03:56:50
3	Pb 220.353†	67.4	13.8	3.4938 µg/L	3.4938 ppb	03:56:50
3	S 181.975 Axial†	23.8	-0.0	-0.2234 µg/L	-0.2234 ppb	03:56:50
3	Sb 206.836†	20.0	-0.4	-0.3605 µg/L	-0.3605 ppb	03:56:50
3	Se 196.026†	8.4	-5.6	-8.1707 µg/L	-8.1707 ppb	03:56:50
3	SiO2†	1995.2	28.0	5.3489 µg/L	5.3489 ppb	03:56:30
3	Si 251.611†	376.4	29.5	2.3255 µg/L	2.3255 ppb	03:56:50
3	Sn 189.927†	17.9	-4.4	-2.1598 µg/L	-2.1598 ppb	03:56:50
3	Ti 334.940†	755.4	42.0	0.0946 µg/L	0.0946 ppb	03:56:30
3	Tl 190.801†	-19.3	2.0	3.0319 µg/L	3.0319 ppb	03:56:50
3	U 409.014†	766.6	93.0	8.7360 µg/L	8.7360 ppb	03:56:30
3	V 292.402†	-98.0	-6.8	-0.0597 µg/L	-0.0597 ppb	03:56:30
3	Zn 213.857†	542.3	-3.9	-0.0984 µg/L	-0.0984 ppb	03:56:50

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2041968.3	99.282	%	0.5062				0.51%
Sc RADIAL	111194.4	98.9	%	0.04				0.04%
Y 371.029	1242498.2	99.213	%	0.4706				0.47%
Ag 328.068†	19.2	0.1704	µg/L	0.25739	0.1704	ppb	0.25739	151.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-41.4	-20.950	µg/L	13.1373	-20.950	ppb	13.1373	62.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	2.8089	µg/L	5.53297	2.8089	ppb	5.53297	196.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-1.0	-0.0414	µg/L	1.01974	-0.0414	ppb	1.01974	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0423	µg/L	0.13388	0.0423	ppb	0.13388	316.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	56.7	0.0358	µg/L	0.01534	0.0358	ppb	0.01534	42.83%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-62.4	-24.756	µg/L	1.4636	-24.756	ppb	1.4636	5.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.0	0.2679	µg/L	0.16195	0.2679	ppb	0.16195	60.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.5	-0.0219	µg/L	0.23973	-0.0219	ppb	0.23973	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -0.1     -0.0028 µg/L       0.11437     -0.0028 ppb        0.11437 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                11.2      0.0770 µg/L       0.22143      0.0770 ppb        0.22143 287.39%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -9.1191 µg/L       7.96867     -9.1191 ppb        7.96867  87.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†           9.9      5.3761 µg/L      26.33729      5.3761 ppb       26.33729 489.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.7     -20.723 µg/L       26.3622     -20.723 ppb        26.3622 127.21%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 3.5      0.0100 µg/L       0.02717      0.0100 ppb        0.02717 271.35%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4228 µg/L       0.21100      0.4228 ppb        0.21100  49.91%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -16.5     -4.5865 µg/L       2.11812     -4.5865 ppb        2.11812  46.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.7     -0.4171 µg/L       0.35721     -0.4171 ppb        0.35721  85.64%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.2      2.5291 µg/L      13.06006      2.5291 ppb       13.06006 516.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.2      3.0809 µg/L       0.39690      3.0809 ppb        0.39690  12.88%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0     -5.3625 µg/L       4.89263     -5.3625 ppb        4.89263  91.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.9      0.9143 µg/L       5.22225      0.9143 ppb        5.22225 571.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.0     -1.4298 µg/L       6.97972     -1.4298 ppb        6.97972 488.16%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      31.8      6.0710 µg/L       5.30197      6.0710 ppb        5.30197  87.33%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                11.7      0.9347 µg/L       1.28074      0.9347 ppb        1.28074 137.02%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.9     -1.4087 µg/L       0.95858     -1.4087 ppb        0.95858  68.05%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -11.5     -0.0645 µg/L       0.19641     -0.0645 ppb        0.19641 304.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                35.5      0.0800 µg/L       0.08416      0.0800 ppb        0.08416 105.13%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.2      3.3338 µg/L       5.96605      3.3338 ppb        5.96605 178.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 52.4      4.9232 µg/L       4.02130      4.9232 ppb        4.02130  81.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  1.3      0.0253 µg/L       0.07374      0.0253 ppb        0.07374 292.00%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -6.1     -0.1586 µg/L       0.09414     -0.1586 ppb        0.09414  59.34%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 12/18/2009 03:57:38 **Plasma On Time: 12/17/2009 20:21:18**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121609H.SIF
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/18/2009 03:57:40**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113225.2	113225.2	101	%			03:58:14
1	Al 396.153Radial†	10212.2	9915.2	4992.2	µg/L	4992.2	ppb	03:58:14
1	Ca 317.933Radial†	13134.0	12552.1	4982.6	µg/L	4982.6	ppb	03:58:34
1	Fe 238.204 Radial†	990.8	973.1	5128.2	µg/L	5128.2	ppb	03:58:34
1	K 766.490 Radial†	9903.2	9143.1	4957.4	µg/L	4957.4	ppb	03:58:14
1	Mg 279.077 IEC†	950.7	924.6	5133.4	µg/L	5133.4	ppb	03:58:34
1	Na 589.592 Radial†	35684.4	36153.5	10031	µg/L	10031	ppb	03:58:14
1	Sr 421.552†	88051.0	87535.4	493.08	µg/L	493.08	ppb	03:58:14
1	Sc 361.383	2059590.1	2059590.1	100.14	%			03:59:38
1	Y 371.029	1247790.1	1247790.1	99.635	%			03:59:38
1	Ag 328.068†	55549.0	55500.5	499.49	µg/L	499.49	ppb	03:59:43
1	As 188.979†	273.6	270.8	515.07	µg/L	515.07	ppb	04:00:04
1	B 249.677†	11323.6	11152.2	493.37	µg/L	493.37	ppb	03:59:43
1	Ba 233.527†	19728.0	19781.4	497.89	µg/L	497.89	ppb	03:59:43
1	Be 313.107†	800498.4	795780.7	503.21	µg/L	503.21	ppb	03:59:38
1	Cd 226.502†	18801.0	18875.9	499.31	µg/L	499.31	ppb	03:59:43
1	Co 228.616†	10268.1	10325.7	496.66	µg/L	496.66	ppb	03:59:43
1	Cr 267.716†	23705.1	23795.1	496.48	µg/L	496.48	ppb	03:59:43
1	Cu 324.752†	73953.4	70466.9	496.87	µg/L	496.87	ppb	03:59:43
1	Mn 257.610†	158680.5	158683.8	504.23	µg/L	504.23	ppb	03:59:38
1	Mo 202.031†	4414.6	4416.4	492.90	µg/L	492.90	ppb	04:00:04
1	Ni 231.604†	9489.9	9177.4	499.97	µg/L	499.97	ppb	03:59:43
1	P 214.914†	1366.6	1158.7	2461.3	µg/L	2461.3	ppb	04:00:04
1	Pb 220.353†	2040.3	1983.3	503.49	µg/L	503.49	ppb	04:00:04
1	S 181.975 Axial†	218.4	194.0	995.48	µg/L	995.48	ppb	04:00:04
1	Sb 206.836†	524.3	503.0	497.70	µg/L	497.70	ppb	04:00:04
1	Se 196.026†	361.1	346.5	506.81	µg/L	506.81	ppb	04:00:04
1	SiO2†	30172.4	28149.0	5375.4	µg/L	5375.4	ppb	03:59:43
1	Si 251.611†	33199.4	32803.9	2465.1	µg/L	2465.1	ppb	03:59:43
1	Sn 189.927†	1035.4	1011.5	495.89	µg/L	495.89	ppb	04:00:04
1	Ti 334.940†	226194.1	225162.7	498.82	µg/L	498.82	ppb	03:59:38
1	Tl 190.801†	309.1	330.1	500.46	µg/L	500.46	ppb	04:00:04
1	U 409.014†	5972.6	5285.2	495.50	µg/L	495.50	ppb	03:59:43
1	V 292.402†	43935.4	43966.7	500.31	µg/L	500.31	ppb	03:59:43
1	Zn 213.857†	19278.9	18702.1	497.09	µg/L	497.09	ppb	03:59:43
2	Sc RADIAL	113434.0	113434.0	101	%			03:58:40
2	Al 396.153Radial†	10340.8	10024.1	5047.1	µg/L	5047.1	ppb	03:58:40
2	Ca 317.933Radial†	13180.1	12573.8	4991.2	µg/L	4991.2	ppb	03:59:00
2	Fe 238.204 Radial†	994.4	974.8	5137.4	µg/L	5137.4	ppb	03:59:00
2	K 766.490 Radial†	9975.3	9196.6	4986.3	µg/L	4986.3	ppb	03:58:40
2	Mg 279.077 IEC†	950.7	922.9	5123.8	µg/L	5123.8	ppb	03:59:00
2	Na 589.592 Radial†	36123.8	36523.9	10134	µg/L	10134	ppb	03:58:40
2	Sr 421.552†	89326.6	88639.2	499.30	µg/L	499.30	ppb	03:58:40
2	Sc 361.383	2058533.2	2058533.2	100.09	%			04:00:11
2	Y 371.029	1242568.5	1242568.5	99.218	%			04:00:11
2	Ag 328.068†	55604.1	55584.1	500.24	µg/L	500.24	ppb	04:00:17
2	As 188.979†	270.8	268.1	509.96	µg/L	509.96	ppb	04:00:37

2	B 249.677†	11286.6	11121.1	491.98 µg/L	491.98 ppb	04:00:17
2	Ba 233.527†	19711.5	19775.1	497.73 µg/L	497.73 ppb	04:00:17
2	Be 313.107†	799692.1	795385.6	502.96 µg/L	502.96 ppb	04:00:11
2	Cd 226.502†	18779.5	18864.1	498.99 µg/L	498.99 ppb	04:00:17
2	Co 228.616†	10322.9	10385.7	499.55 µg/L	499.55 ppb	04:00:17
2	Cr 267.716†	23746.5	23848.6	497.60 µg/L	497.60 ppb	04:00:17
2	Cu 324.752†	74181.5	70732.7	498.74 µg/L	498.74 ppb	04:00:17
2	Mn 257.610†	158756.1	158840.8	504.73 µg/L	504.73 ppb	04:00:11
2	Mo 202.031†	4436.3	4440.4	495.57 µg/L	495.57 ppb	04:00:37
2	Ni 231.604†	9491.4	9183.8	500.32 µg/L	500.32 ppb	04:00:17
2	P 214.914†	1374.7	1167.5	2480.2 µg/L	2480.2 ppb	04:00:37
2	Pb 220.353†	2045.5	1989.6	505.08 µg/L	505.08 ppb	04:00:37
2	S 181.975 Axial†	215.4	191.1	980.54 µg/L	980.54 ppb	04:00:37
2	Sb 206.836†	526.8	505.8	500.39 µg/L	500.39 ppb	04:00:37
2	Se 196.026†	365.9	351.5	514.12 µg/L	514.12 ppb	04:00:37
2	SiO2†	30231.6	28223.7	5389.7 µg/L	5389.7 ppb	04:00:17
2	Si 251.611†	33271.4	32892.8	2471.6 µg/L	2471.6 ppb	04:00:17
2	Sn 189.927†	1048.8	1025.4	502.64 µg/L	502.64 ppb	04:00:37
2	Ti 334.940†	226450.0	225534.3	499.64 µg/L	499.64 ppb	04:00:11
2	Tl 190.801†	313.1	334.2	506.78 µg/L	506.78 ppb	04:00:37
2	U 409.014†	5974.2	5289.8	495.93 µg/L	495.93 ppb	04:00:17
2	V 292.402†	44015.0	44068.7	501.48 µg/L	501.48 ppb	04:00:17
2	Zn 213.857†	19342.5	18775.5	499.05 µg/L	499.05 ppb	04:00:17
3	Sc RADIAL	113583.8	113583.8	101 %		03:59:06
3	Al 396.153Radial†	10279.6	9949.9	5009.6 µg/L	5009.6 ppb	03:59:06
3	Ca 317.933Radial†	13170.9	12547.5	4980.8 µg/L	4980.8 ppb	03:59:26
3	Fe 238.204 Radial†	1000.2	979.3	5160.5 µg/L	5160.5 ppb	03:59:26
3	K 766.490 Radial†	10025.2	9232.9	5006.0 µg/L	5006.0 ppb	03:59:06
3	Mg 279.077 IEC†	954.6	925.5	5138.2 µg/L	5138.2 ppb	03:59:26
3	Na 589.592 Radial†	35933.8	36288.5	10069 µg/L	10069 ppb	03:59:06
3	Sr 421.552†	88869.7	88069.9	496.09 µg/L	496.09 ppb	03:59:06
3	Sc 361.383	2055803.8	2055803.8	99.954 %		04:00:44
3	Y 371.029	1244049.6	1244049.6	99.337 %		04:00:44
3	Ag 328.068†	55529.9	55583.6	500.23 µg/L	500.23 ppb	04:00:50
3	As 188.979†	268.7	266.3	506.61 µg/L	506.61 ppb	04:01:10
3	B 249.677†	11231.8	11081.2	490.20 µg/L	490.20 ppb	04:00:50
3	Ba 233.527†	19683.9	19773.6	497.69 µg/L	497.69 ppb	04:00:50
3	Be 313.107†	791543.4	788293.9	498.48 µg/L	498.48 ppb	04:00:44
3	Cd 226.502†	18740.0	18849.5	498.61 µg/L	498.61 ppb	04:00:50
3	Co 228.616†	10277.6	10354.0	498.03 µg/L	498.03 ppb	04:00:50
3	Cr 267.716†	23644.4	23778.0	496.12 µg/L	496.12 ppb	04:00:50
3	Cu 324.752†	74053.8	70703.4	498.54 µg/L	498.54 ppb	04:00:50
3	Mn 257.610†	156897.8	157192.2	499.50 µg/L	499.50 ppb	04:00:44
3	Mo 202.031†	4429.3	4439.2	495.44 µg/L	495.44 ppb	04:01:10
3	Ni 231.604†	9462.9	9167.8	499.45 µg/L	499.45 ppb	04:00:50
3	P 214.914†	1363.8	1158.5	2460.6 µg/L	2460.6 ppb	04:01:10
3	Pb 220.353†	2039.6	1986.4	504.26 µg/L	504.26 ppb	04:01:10
3	S 181.975 Axial†	217.6	193.7	993.48 µg/L	993.48 ppb	04:01:10
3	Sb 206.836†	529.9	509.6	504.23 µg/L	504.23 ppb	04:01:10
3	Se 196.026†	367.2	353.3	516.80 µg/L	516.80 ppb	04:01:10
3	SiO2†	30051.0	28083.1	5362.9 µg/L	5362.9 ppb	04:00:50
3	Si 251.611†	33121.7	32787.2	2463.6 µg/L	2463.6 ppb	04:00:50
3	Sn 189.927†	1048.8	1026.8	503.32 µg/L	503.32 ppb	04:01:10
3	Ti 334.940†	224162.7	223546.3	495.23 µg/L	495.23 ppb	04:00:44
3	Tl 190.801†	313.2	334.8	507.50 µg/L	507.50 ppb	04:01:10
3	U 409.014†	6081.2	5404.8	506.73 µg/L	506.73 ppb	04:00:50
3	V 292.402†	43835.2	43947.2	500.13 µg/L	500.13 ppb	04:00:50
3	Zn 213.857†	19270.0	18728.7	497.80 µg/L	497.80 ppb	04:00:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2057975.7	100.06	%	0.095				0.09%
Sc RADIAL	113414.3	101	%	0.2				0.16%
Y 371.029	1244802.7	99.397	%	0.2149				0.22%
Ag 328.068†	55556.1	499.99	µg/L	0.433	499.99	ppb	0.433	0.09%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	9963.1	5016.3	µg/L	28.06	5016.3	ppb	28.06	0.56%
QC value within limits for Al 396.153Radial Recovery = 100.33%								
As 188.979†	268.4	510.55	µg/L	4.260	510.55	ppb	4.260	0.83%

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   QC value within limits for As 188.979  Recovery = 102.11%
B 249.677†            11118.2      491.85 µg/L        1.585      491.85 ppb          1.585   0.32%
   QC value within limits for B 249.677  Recovery = 98.37%
Ba 233.527†           19776.7      497.77 µg/L        0.103      497.77 ppb          0.103   0.02%
   QC value within limits for Ba 233.527  Recovery = 99.55%
Be 313.107†          793153.4      501.55 µg/L        2.664      501.55 ppb          2.664   0.53%
   QC value within limits for Be 313.107  Recovery = 100.31%
Ca 317.933Radial†     12557.8      4984.9 µg/L         5.59      4984.9 ppb           5.59   0.11%
   QC value within limits for Ca 317.933Radial  Recovery = 99.70%
Cd 226.502†           18863.2      498.97 µg/L        0.348      498.97 ppb          0.348   0.07%
   QC value within limits for Cd 226.502  Recovery = 99.79%
Co 228.616†           10355.1      498.08 µg/L        1.446      498.08 ppb          1.446   0.29%
   QC value within limits for Co 228.616  Recovery = 99.62%
Cr 267.716†           23807.2      496.73 µg/L        0.768      496.73 ppb          0.768   0.15%
   QC value within limits for Cr 267.716  Recovery = 99.35%
Cu 324.752†           70634.3      498.05 µg/L        1.028      498.05 ppb          1.028   0.21%
   QC value within limits for Cu 324.752  Recovery = 99.61%
Fe 238.204 Radial†      975.7      5142.0 µg/L        16.66      5142.0 ppb          16.66   0.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.84%
K 766.490 Radial†      9190.9      4983.3 µg/L        24.48      4983.3 ppb          24.48   0.49%
   QC value within limits for K 766.490 Radial  Recovery = 99.67%
Mg 279.077 IEC†         924.3      5131.8 µg/L         7.36      5131.8 ppb           7.36   0.14%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.64%
Mn 257.610†          158238.9      502.82 µg/L        2.886      502.82 ppb          2.886   0.57%
   QC value within limits for Mn 257.610  Recovery = 100.56%
Mo 202.031†            4432.0      494.64 µg/L        1.509      494.64 ppb          1.509   0.31%
   QC value within limits for Mo 202.031  Recovery = 98.93%
Na 589.592 Radial†    36322.0       10078 µg/L         52.0       10078 ppb           52.0   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 100.78%
Ni 231.604†            9176.3      499.91 µg/L        0.438      499.91 ppb          0.438   0.09%
   QC value within limits for Ni 231.604  Recovery = 99.98%
P 214.914†             1161.6      2467.4 µg/L        11.14      2467.4 ppb          11.14   0.45%
   QC value within limits for P 214.914  Recovery = 98.70%
Pb 220.353†            1986.4      504.28 µg/L        0.799      504.28 ppb          0.799   0.16%
   QC value within limits for Pb 220.353  Recovery = 100.86%
S 181.975 Axial†        192.9      989.83 µg/L        8.111      989.83 ppb          8.111   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 98.98%
Sb 206.836†             506.2      500.78 µg/L        3.283      500.78 ppb          3.283   0.66%
   QC value within limits for Sb 206.836  Recovery = 100.16%
Se 196.026†             350.4      512.58 µg/L        5.173      512.58 ppb          5.173   1.01%
   QC value within limits for Se 196.026  Recovery = 102.52%
SiO2†                  28151.9      5376.0 µg/L        13.43      5376.0 ppb          13.43   0.25%
   QC value within limits for SiO2  Recovery = 100.53%
Si 251.611†            32828.0      2466.8 µg/L         4.23      2466.8 ppb           4.23   0.17%
   QC value within limits for Si 251.611  Recovery = 98.67%
Sn 189.927†            1021.2      500.62 µg/L        4.111      500.62 ppb          4.111   0.82%
   QC value within limits for Sn 189.927  Recovery = 100.12%
Sr 421.552†            88081.5      496.16 µg/L        3.109      496.16 ppb          3.109   0.63%
   QC value within limits for Sr 421.552  Recovery = 99.23%
Ti 334.940†           224747.8      497.90 µg/L        2.343      497.90 ppb          2.343   0.47%
   QC value within limits for Ti 334.940  Recovery = 99.58%
Tl 190.801†             333.0      504.91 µg/L        3.874      504.91 ppb          3.874   0.77%
   QC value within limits for Tl 190.801  Recovery = 100.98%
U 409.014†             5326.6      499.39 µg/L        6.360      499.39 ppb          6.360   1.27%
   QC value within limits for U 409.014  Recovery = 99.88%
V 292.402†             43994.2      500.64 µg/L        0.734      500.64 ppb          0.734   0.15%
   QC value within limits for V 292.402  Recovery = 100.13%
Zn 213.857†            18735.5      497.98 µg/L        0.993      497.98 ppb          0.993   0.20%
   QC value within limits for Zn 213.857  Recovery = 99.60%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 04:01:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111731.7	111731.7	99.3	%			04:01:55
1	Al 396.153Radial†	586.8	360.9	182.00	µg/L	182.00	ppb	04:01:55
1	Ca 317.933Radial†	946.4	457.3	181.53	µg/L	181.53	ppb	04:02:15
1	Fe 238.204 Radial†	29.4	18.4	96.915	µg/L	96.915	ppb	04:02:15
1	K 766.490 Radial†	974.6	286.2	155.20	µg/L	155.20	ppb	04:01:55
1	Mg 279.077 IEC†	72.7	53.3	295.85	µg/L	295.85	ppb	04:02:15
1	Na 589.592 Radial†	357.3	1063.6	295.11	µg/L	295.11	ppb	04:01:55
1	Sr 421.552†	846.2	915.6	5.1576	µg/L	5.1576	ppb	04:01:55
1	Sc 361.383	2032203.5	2032203.5	98.807	%			04:03:18
1	Y 371.029	1236025.4	1236025.4	98.696	%			04:03:18
1	Ag 328.068†	524.8	559.4	5.0406	µg/L	5.0406	ppb	04:03:23
1	As 188.979†	19.4	17.2	32.697	µg/L	32.697	ppb	04:03:44
1	B 249.677†	1237.5	1096.7	48.646	µg/L	48.646	ppb	04:03:23
1	Ba 233.527†	122.6	204.8	5.1550	µg/L	5.1550	ppb	04:03:44
1	Be 313.107†	11527.0	8054.7	5.0933	µg/L	5.0933	ppb	04:03:23
1	Cd 226.502†	101.6	203.7	5.4217	µg/L	5.4217	ppb	04:03:44
1	Co 228.616†	36.5	108.7	5.2388	µg/L	5.2388	ppb	04:03:44
1	Cr 267.716†	114.8	238.9	4.9861	µg/L	4.9861	ppb	04:03:23
1	Cu 324.752†	4729.0	1401.8	9.8830	µg/L	9.8830	ppb	04:03:23
1	Mn 257.610†	3036.6	3295.9	10.472	µg/L	10.472	ppb	04:03:23
1	Mo 202.031†	84.1	93.0	10.377	µg/L	10.377	ppb	04:03:44
1	Ni 231.604†	397.6	103.0	5.6100	µg/L	5.6100	ppb	04:03:44
1	P 214.914†	281.7	79.1	170.69	µg/L	170.69	ppb	04:03:44
1	Pb 220.353†	102.6	49.7	12.582	µg/L	12.582	ppb	04:03:44
1	S 181.975 Axial†	39.4	15.8	81.352	µg/L	81.352	ppb	04:03:44
1	Sb 206.836†	30.2	10.0	9.8939	µg/L	9.8939	ppb	04:03:44
1	Se 196.026†	28.4	14.7	21.371	µg/L	21.371	ppb	04:03:44
1	SiO2†	3098.5	1154.3	220.42	µg/L	220.42	ppb	04:03:23
1	Si 251.611†	1650.4	1320.7	100.36	µg/L	100.36	ppb	04:03:44
1	Sn 189.927†	41.5	19.6	9.6450	µg/L	9.6450	ppb	04:03:44
1	Ti 334.940†	3104.0	2422.6	5.3598	µg/L	5.3598	ppb	04:03:23
1	Tl 190.801†	-6.2	15.1	22.841	µg/L	22.841	ppb	04:03:44
1	U 409.014†	1248.2	584.0	54.833	µg/L	54.833	ppb	04:03:23
1	V 292.402†	377.2	473.7	5.5096	µg/L	5.5096	ppb	04:03:23
1	Zn 213.857†	935.5	396.6	10.565	µg/L	10.565	ppb	04:03:44
2	Sc RADIAL	112010.0	112010.0	99.6	%			04:02:21
2	Al 396.153Radial†	594.7	367.4	185.27	µg/L	185.27	ppb	04:02:21
2	Ca 317.933Radial†	942.4	450.9	178.97	µg/L	178.97	ppb	04:02:41
2	Fe 238.204 Radial†	29.7	18.6	97.789	µg/L	97.789	ppb	04:02:41
2	K 766.490 Radial†	1034.7	344.2	186.61	µg/L	186.61	ppb	04:02:21
2	Mg 279.077 IEC†	75.7	56.2	311.66	µg/L	311.66	ppb	04:02:41
2	Na 589.592 Radial†	419.2	1124.9	312.11	µg/L	312.11	ppb	04:02:21
2	Sr 421.552†	852.6	920.0	5.1822	µg/L	5.1822	ppb	04:02:21
2	Sc 361.383	2036893.6	2036893.6	99.035	%			04:03:50
2	Y 371.029	1240537.7	1240537.7	99.056	%			04:03:50
2	Ag 328.068†	514.9	548.2	4.9412	µg/L	4.9412	ppb	04:03:55
2	As 188.979†	12.8	10.5	19.916	µg/L	19.916	ppb	04:04:16
2	B 249.677†	1233.7	1090.0	48.348	µg/L	48.348	ppb	04:03:55
2	Ba 233.527†	126.7	208.6	5.2502	µg/L	5.2502	ppb	04:04:16
2	Be 313.107†	11459.1	7959.3	5.0330	µg/L	5.0330	ppb	04:03:55
2	Cd 226.502†	98.2	200.1	5.3274	µg/L	5.3274	ppb	04:04:16
2	Co 228.616†	37.8	109.9	5.2978	µg/L	5.2978	ppb	04:04:16
2	Cr 267.716†	126.0	250.0	5.2175	µg/L	5.2175	ppb	04:03:55
2	Cu 324.752†	4744.0	1405.9	9.9121	µg/L	9.9121	ppb	04:03:55
2	Mn 257.610†	3027.3	3279.5	10.420	µg/L	10.420	ppb	04:03:55
2	Mo 202.031†	87.3	96.0	10.715	µg/L	10.715	ppb	04:04:16
2	Ni 231.604†	390.3	94.7	5.1602	µg/L	5.1602	ppb	04:04:16
2	P 214.914†	267.8	64.4	138.87	µg/L	138.87	ppb	04:04:16
2	Pb 220.353†	106.3	53.2	13.473	µg/L	13.473	ppb	04:04:16

2	S 181.975 Axial†	38.8	15.1	77.769 µg/L	77.769 ppb	04:04:16
2	Sb 206.836†	33.4	13.2	13.077 µg/L	13.077 ppb	04:04:16
2	Se 196.026†	34.1	20.3	29.529 µg/L	29.529 ppb	04:04:16
2	SiO2†	3116.2	1164.9	222.46 µg/L	222.46 ppb	04:03:55
2	Si 251.611†	1646.0	1312.4	99.681 µg/L	99.681 ppb	04:04:16
2	Sn 189.927†	42.8	20.8	10.246 µg/L	10.246 ppb	04:04:16
2	Ti 334.940†	3055.4	2366.3	5.2350 µg/L	5.2350 ppb	04:03:55
2	Tl 190.801†	-3.5	17.9	27.060 µg/L	27.060 ppb	04:04:16
2	U 409.014†	1300.3	633.8	59.506 µg/L	59.506 ppb	04:03:55
2	V 292.402†	389.9	485.7	5.6544 µg/L	5.6544 ppb	04:03:55
2	Zn 213.857†	940.0	399.0	10.631 µg/L	10.631 ppb	04:04:16
3	Sc RADIAL	111506.6	111506.6	99.1 %		04:02:47
3	Al 396.153Radial†	622.4	398.1	200.78 µg/L	200.78 ppb	04:02:47
3	Ca 317.933Radial†	938.3	451.1	179.05 µg/L	179.05 ppb	04:03:07
3	Fe 238.204 Radial†	29.4	18.5	97.349 µg/L	97.349 ppb	04:03:07
3	K 766.490 Radial†	1072.3	386.8	209.71 µg/L	209.71 ppb	04:02:47
3	Mg 279.077 IEC†	69.3	50.1	278.00 µg/L	278.00 ppb	04:03:07
3	Na 589.592 Radial†	394.2	1101.6	305.65 µg/L	305.65 ppb	04:02:47
3	Sr 421.552†	875.1	946.5	5.3317 µg/L	5.3317 ppb	04:02:47
3	Sc 361.383	2035292.1	2035292.1	98.957 %		04:04:22
3	Y 371.029	1239662.0	1239662.0	98.986 %		04:04:22
3	Ag 328.068†	534.8	568.8	5.1228 µg/L	5.1228 ppb	04:04:27
3	As 188.979†	12.8	10.4	19.787 µg/L	19.787 ppb	04:04:48
3	B 249.677†	1251.7	1109.2	49.200 µg/L	49.200 ppb	04:04:27
3	Ba 233.527†	125.1	207.1	5.2120 µg/L	5.2120 ppb	04:04:48
3	Be 313.107†	11540.4	8050.5	5.0907 µg/L	5.0907 ppb	04:04:27
3	Cd 226.502†	95.6	197.5	5.2573 µg/L	5.2573 ppb	04:04:48
3	Co 228.616†	29.4	101.4	4.8905 µg/L	4.8905 ppb	04:04:48
3	Cr 267.716†	94.8	218.6	4.5616 µg/L	4.5616 ppb	04:04:27
3	Cu 324.752†	4787.3	1453.5	10.247 µg/L	10.247 ppb	04:04:27
3	Mn 257.610†	3060.4	3315.3	10.534 µg/L	10.534 ppb	04:04:27
3	Mo 202.031†	81.9	90.7	10.122 µg/L	10.122 ppb	04:04:48
3	Ni 231.604†	384.4	89.1	4.8523 µg/L	4.8523 ppb	04:04:48
3	P 214.914†	279.4	76.4	164.66 µg/L	164.66 ppb	04:04:48
3	Pb 220.353†	118.7	65.8	16.664 µg/L	16.664 ppb	04:04:48
3	S 181.975 Axial†	38.5	14.9	76.352 µg/L	76.352 ppb	04:04:48
3	Sb 206.836†	29.7	9.4	9.3443 µg/L	9.3443 ppb	04:04:48
3	Se 196.026†	30.3	16.5	23.978 µg/L	23.978 ppb	04:04:48
3	SiO2†	3119.3	1170.5	223.52 µg/L	223.52 ppb	04:04:27
3	Si 251.611†	1631.6	1299.1	98.727 µg/L	98.727 ppb	04:04:48
3	Sn 189.927†	39.9	17.8	8.8048 µg/L	8.8048 ppb	04:04:48
3	Ti 334.940†	3016.0	2328.9	5.1522 µg/L	5.1522 ppb	04:04:27
3	Tl 190.801†	-8.1	13.2	19.944 µg/L	19.944 ppb	04:04:48
3	U 409.014†	1269.8	604.0	56.705 µg/L	56.705 ppb	04:04:27
3	V 292.402†	359.6	455.3	5.3033 µg/L	5.3033 ppb	04:04:27
3	Zn 213.857†	924.4	384.0	10.231 µg/L	10.231 ppb	04:04:48

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2034796.4	98.933	%	0.1159				0.12%
Sc RADIAL	111749.4	99.4	%	0.22				0.23%
Y 371.029	1238741.7	98.913	%	0.1911				0.19%
Ag 328.068†	558.8	5.0349	µg/L	0.09092	5.0349	ppb	0.09092	1.81%
QC value within limits for Ag 328.068 Recovery = 100.70%								
Al 396.153Radial†	375.5	189.35	µg/L	10.034	189.35	ppb	10.034	5.30%
QC value within limits for Al 396.153Radial Recovery = 94.68%								
As 188.979†	12.7	24.133	µg/L	7.4166	24.133	ppb	7.4166	30.73%
QC value within limits for As 188.979 Recovery = 80.44%								
B 249.677†	1098.7	48.731	µg/L	0.4327	48.731	ppb	0.4327	0.89%
QC value within limits for B 249.677 Recovery = 97.46%								
Ba 233.527†	206.8	5.2057	µg/L	0.04791	5.2057	ppb	0.04791	0.92%
QC value within limits for Ba 233.527 Recovery = 104.11%								
Be 313.107†	8021.5	5.0723	µg/L	0.03411	5.0723	ppb	0.03411	0.67%
QC value within limits for Be 313.107 Recovery = 101.45%								
Ca 317.933Radial†	453.1	179.85	µg/L	1.452	179.85	ppb	1.452	0.81%
QC value within limits for Ca 317.933Radial Recovery = 89.93%								
Cd 226.502†	200.4	5.3354	µg/L	0.08251	5.3354	ppb	0.08251	1.55%
QC value within limits for Cd 226.502 Recovery = 106.71%								
Co 228.616†	106.7	5.1424	µg/L	0.22007	5.1424	ppb	0.22007	4.28%

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   QC value within limits for Co 228.616  Recovery = 102.85%
Cr 267.716†              235.8      4.9217 µg/L       0.33264      4.9217 ppb        0.33264   6.76%
   QC value within limits for Cr 267.716  Recovery = 98.43%
Cu 324.752†             1420.4      10.014 µg/L        0.2022      10.014 ppb         0.2022   2.02%
   QC value within limits for Cu 324.752  Recovery = 100.14%
Fe 238.204 Radial†        18.5      97.351 µg/L        0.4373      97.351 ppb         0.4373   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.35%
K 766.490 Radial†        339.1      183.84 µg/L        27.360      183.84 ppb         27.360  14.88%
   QC value within limits for K 766.490 Radial  Recovery = 122.56%
Mg 279.077 IEC†           53.2      295.17 µg/L        16.839      295.17 ppb         16.839   5.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.39%
Mn 257.610†             3296.9      10.475 µg/L        0.0569      10.475 ppb         0.0569   0.54%
   QC value within limits for Mn 257.610  Recovery = 104.75%
Mo 202.031†               93.2      10.405 µg/L        0.2971      10.405 ppb         0.2971   2.86%
   QC value within limits for Mo 202.031  Recovery = 104.05%
Na 589.592 Radial†      1096.7      304.29 µg/L         8.581      304.29 ppb          8.581   2.82%
   QC value within limits for Na 589.592 Radial  Recovery = 101.43%
Ni 231.604†               95.6      5.2075 µg/L       0.38110      5.2075 ppb        0.38110   7.32%
   QC value within limits for Ni 231.604  Recovery = 104.15%
P 214.914†                73.3      158.07 µg/L        16.904      158.07 ppb         16.904  10.69%
   QC value within limits for P 214.914  Recovery = 105.38%
Pb 220.353†               56.2      14.240 µg/L        2.1466      14.240 ppb         2.1466  15.07%
   QC value greater than the upper limit for Pb 220.353  Recovery = 142.40%
S 181.975 Axial†          15.3      78.491 µg/L        2.5769      78.491 ppb         2.5769   3.28%
   QC value within limits for S 181.975 Axial  Recovery = 78.49%
Sb 206.836†               10.9      10.772 µg/L        2.0151      10.772 ppb         2.0151  18.71%
   QC value within limits for Sb 206.836  Recovery = 107.72%
Se 196.026†               17.2      24.959 µg/L        4.1668      24.959 ppb         4.1668  16.69%
   QC value within limits for Se 196.026  Recovery = 83.20%
SiO2†                   1163.2      222.13 µg/L         1.574      222.13 ppb          1.574   0.71%
   QC value within limits for SiO2  Recovery = 104.29%
Si 251.611†             1310.7      99.588 µg/L        0.8189      99.588 ppb         0.8189   0.82%
   QC value within limits for Si 251.611  Recovery = 99.59%
Sn 189.927†               19.4      9.5653 µg/L       0.72404      9.5653 ppb        0.72404   7.57%
   QC value within limits for Sn 189.927  Recovery = 95.65%
Sr 421.552†              927.4      5.2238 µg/L       0.09422      5.2238 ppb        0.09422   1.80%
   QC value within limits for Sr 421.552  Recovery = 104.48%
Ti 334.940†             2372.6      5.2490 µg/L       0.10451      5.2490 ppb        0.10451   1.99%
   QC value within limits for Ti 334.940  Recovery = 104.98%
Tl 190.801†               15.4      23.282 µg/L        3.5783      23.282 ppb         3.5783  15.37%
   QC value within limits for Tl 190.801  Recovery = 116.41%
U 409.014†               607.3      57.015 µg/L        2.3517      57.015 ppb         2.3517   4.12%
   QC value within limits for U 409.014  Recovery = 114.03%
V 292.402†               471.6      5.4891 µg/L       0.17643      5.4891 ppb        0.17643   3.21%
   QC value within limits for V 292.402  Recovery = 109.78%
Zn 213.857†              393.2      10.476 µg/L        0.2143      10.476 ppb         0.2143   2.05%
   QC value within limits for Zn 213.857  Recovery = 104.76%
QC Failed.  Continue with analysis.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 04:04:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112440.9	112440.9	100.0	%			04:05:31
1	Al 396.153Radial†	193.5	-36.2	-18.318	µg/L	-18.318	ppb	04:05:31
1	Ca 317.933Radial†	430.8	-64.5	-25.584	µg/L	-25.584	ppb	04:05:51
1	Fe 238.204 Radial†	9.0	-2.2	-11.287	µg/L	-11.287	ppb	04:05:51
1	K 766.490 Radial†	701.5	6.9	3.7212	µg/L	3.7212	ppb	04:05:31
1	Mg 279.077 IEC†	17.4	-2.4	-13.400	µg/L	-13.400	ppb	04:05:51
1	Na 589.592 Radial†	-714.8	-11.2	-3.0979	µg/L	-3.0979	ppb	04:05:31
1	Sr 421.552†	-74.7	-11.0	-0.0617	µg/L	-0.0617	ppb	04:05:31
1	Sc 361.383	2038676.1	2038676.1	99.122	%			04:06:53
1	Y 371.029	1240980.7	1240980.7	99.092	%			04:06:53
1	Ag 328.068†	-55.3	-27.4	-0.2446	µg/L	-0.2446	ppb	04:06:58
1	As 188.979†	1.1	-1.4	-2.6029	µg/L	-2.6029	ppb	04:07:19
1	B 249.677†	146.6	-7.8	-0.3405	µg/L	-0.3405	ppb	04:06:58
1	Ba 233.527†	-79.3	0.7	0.0182	µg/L	0.0182	ppb	04:07:19
1	Be 313.107†	3639.1	59.8	0.0378	µg/L	0.0378	ppb	04:06:58
1	Cd 226.502†	-97.4	2.7	0.0758	µg/L	0.0758	ppb	04:07:19
1	Co 228.616†	-63.8	7.3	0.3530	µg/L	0.3530	ppb	04:07:19
1	Cr 267.716†	-106.7	15.1	0.3145	µg/L	0.3145	ppb	04:06:58
1	Cu 324.752†	3455.4	101.7	0.7129	µg/L	0.7129	ppb	04:06:58
1	Mn 257.610†	-195.7	25.2	0.0786	µg/L	0.0786	ppb	04:07:19
1	Mo 202.031†	-3.3	4.6	0.5109	µg/L	0.5109	ppb	04:07:19
1	Ni 231.604†	291.5	-5.3	-0.2901	µg/L	-0.2901	ppb	04:07:19
1	P 214.914†	204.5	0.3	0.6666	µg/L	0.6666	ppb	04:07:19
1	Pb 220.353†	56.1	2.5	0.6201	µg/L	0.6201	ppb	04:07:19
1	S 181.975 Axial†	24.4	0.6	3.1634	µg/L	3.1634	ppb	04:07:19
1	Sb 206.836†	24.1	3.8	3.7753	µg/L	3.7753	ppb	04:07:19
1	Se 196.026†	11.6	-2.4	-3.5551	µg/L	-3.5551	ppb	04:07:19
1	SiO2†	1972.7	8.5	1.6295	µg/L	1.6295	ppb	04:06:58
1	Si 251.611†	354.0	7.5	0.5174	µg/L	0.5174	ppb	04:07:19
1	Sn 189.927†	24.3	2.1	1.0176	µg/L	1.0176	ppb	04:07:19
1	Ti 334.940†	758.0	45.8	0.1030	µg/L	0.1030	ppb	04:06:58
1	Tl 190.801†	-20.6	0.7	0.9976	µg/L	0.9976	ppb	04:07:19
1	U 409.014†	743.4	70.8	6.6469	µg/L	6.6469	ppb	04:06:58
1	V 292.402†	-73.0	18.3	0.2199	µg/L	0.2199	ppb	04:06:58
1	Zn 213.857†	544.7	-0.7	-0.0160	µg/L	-0.0160	ppb	04:07:19
2	Sc RADIAL	111514.8	111514.8	99.1	%			04:05:56
2	Al 396.153Radial†	181.0	-47.2	-23.882	µg/L	-23.882	ppb	04:05:56
2	Ca 317.933Radial†	433.0	-58.7	-23.283	µg/L	-23.283	ppb	04:06:17
2	Fe 238.204 Radial†	5.3	-5.9	-30.906	µg/L	-30.906	ppb	04:06:17
2	K 766.490 Radial†	669.9	-19.1	-10.380	µg/L	-10.380	ppb	04:05:56
2	Mg 279.077 IEC†	15.8	-3.9	-21.599	µg/L	-21.599	ppb	04:06:17
2	Na 589.592 Radial†	-722.0	-24.3	-6.7369	µg/L	-6.7369	ppb	04:05:56
2	Sr 421.552†	-19.4	44.2	0.2491	µg/L	0.2491	ppb	04:05:56
2	Sc 361.383	2044956.8	2044956.8	99.427	%			04:07:25
2	Y 371.029	1243594.2	1243594.2	99.300	%			04:07:25
2	Ag 328.068†	-59.8	-31.8	-0.2848	µg/L	-0.2848	ppb	04:07:30
2	As 188.979†	0.2	-2.3	-4.3644	µg/L	-4.3644	ppb	04:07:51
2	B 249.677†	148.6	-6.3	-0.2680	µg/L	-0.2680	ppb	04:07:30
2	Ba 233.527†	-78.6	1.6	0.0416	µg/L	0.0416	ppb	04:07:51
2	Be 313.107†	3674.6	84.3	0.0532	µg/L	0.0532	ppb	04:07:30
2	Cd 226.502†	-85.2	15.2	0.4101	µg/L	0.4101	ppb	04:07:51
2	Co 228.616†	-77.7	-6.4	-0.3089	µg/L	-0.3089	ppb	04:07:51
2	Cr 267.716†	-126.3	-4.3	-0.0887	µg/L	-0.0887	ppb	04:07:30
2	Cu 324.752†	3457.1	92.8	0.6459	µg/L	0.6459	ppb	04:07:30
2	Mn 257.610†	-209.5	12.0	0.0340	µg/L	0.0340	ppb	04:07:51
2	Mo 202.031†	-5.5	2.4	0.2638	µg/L	0.2638	ppb	04:07:51
2	Ni 231.604†	288.9	-8.8	-0.4819	µg/L	-0.4819	ppb	04:07:51
2	P 214.914†	204.4	-0.4	-0.9974	µg/L	-0.9974	ppb	04:07:51
2	Pb 220.353†	66.1	12.4	3.1283	µg/L	3.1283	ppb	04:07:51

2	S 181.975 Axial†	21.6	-2.3	-11.909 µg/L	-11.909 ppb	04:07:51
2	Sb 206.836†	25.5	5.1	5.0283 µg/L	5.0283 ppb	04:07:51
2	Se 196.026†	12.5	-1.5	-2.2561 µg/L	-2.2561 ppb	04:07:51
2	SiO2†	2051.5	81.6	15.586 µg/L	15.586 ppb	04:07:30
2	Si 251.611†	350.9	3.3	0.2881 µg/L	0.2881 ppb	04:07:51
2	Sn 189.927†	19.8	-2.6	-1.2736 µg/L	-1.2736 ppb	04:07:51
2	Ti 334.940†	840.4	126.4	0.2815 µg/L	0.2815 ppb	04:07:30
2	Tl 190.801†	-24.7	-3.4	-5.1321 µg/L	-5.1321 ppb	04:07:51
2	U 409.014†	759.5	84.7	7.9606 µg/L	7.9606 ppb	04:07:30
2	V 292.402†	-69.1	22.5	0.2654 µg/L	0.2654 ppb	04:07:30
2	Zn 213.857†	542.7	-4.4	-0.1113 µg/L	-0.1113 ppb	04:07:51
3	Sc RADIAL	111448.5	111448.5	99.1 %		04:06:22
3	Al 396.153Radial†	197.0	-31.0	-15.666 µg/L	-15.666 ppb	04:06:22
3	Ca 317.933Radial†	430.0	-61.4	-24.382 µg/L	-24.382 ppb	04:06:43
3	Fe 238.204 Radial†	7.6	-3.6	-18.762 µg/L	-18.762 ppb	04:06:43
3	K 766.490 Radial†	721.1	33.0	17.872 µg/L	17.872 ppb	04:06:22
3	Mg 279.077 IEC†	13.1	-6.6	-36.364 µg/L	-36.364 ppb	04:06:43
3	Na 589.592 Radial†	-698.7	-1.2	-0.3411 µg/L	-0.3411 ppb	04:06:22
3	Sr 421.552†	-74.7	-11.6	-0.0655 µg/L	-0.0655 ppb	04:06:22
3	Sc 361.383	2038572.5	2038572.5	99.116 %		04:07:57
3	Y 371.029	1242225.0	1242225.0	99.191 %		04:07:57
3	Ag 328.068†	-53.5	-25.7	-0.2295 µg/L	-0.2295 ppb	04:08:02
3	As 188.979†	5.0	2.6	4.9360 µg/L	4.9360 ppb	04:08:23
3	B 249.677†	159.4	5.1	0.2342 µg/L	0.2342 ppb	04:08:02
3	Ba 233.527†	-76.3	3.7	0.0935 µg/L	0.0935 ppb	04:08:23
3	Be 313.107†	3666.5	87.7	0.0554 µg/L	0.0554 ppb	04:08:02
3	Cd 226.502†	-86.8	13.3	0.3499 µg/L	0.3499 ppb	04:08:23
3	Co 228.616†	-76.0	-4.9	-0.2365 µg/L	-0.2365 ppb	04:08:23
3	Cr 267.716†	-128.7	-7.1	-0.1468 µg/L	-0.1468 ppb	04:08:02
3	Cu 324.752†	3437.8	84.2	0.5882 µg/L	0.5882 ppb	04:08:02
3	Mn 257.610†	-221.3	-0.6	-0.0042 µg/L	-0.0042 ppb	04:08:23
3	Mo 202.031†	-2.6	5.3	0.5858 µg/L	0.5858 ppb	04:08:23
3	Ni 231.604†	290.2	-6.6	-0.3602 µg/L	-0.3602 ppb	04:08:23
3	P 214.914†	207.7	3.5	7.6241 µg/L	7.6241 ppb	04:08:23
3	Pb 220.353†	55.4	1.8	0.4519 µg/L	0.4519 ppb	04:08:23
3	S 181.975 Axial†	24.4	0.6	3.0624 µg/L	3.0624 ppb	04:08:23
3	Sb 206.836†	20.6	0.2	0.2483 µg/L	0.2483 ppb	04:08:23
3	Se 196.026†	13.6	-0.3	-0.4850 µg/L	-0.4850 ppb	04:08:23
3	SiO2†	2025.2	61.5	11.754 µg/L	11.754 ppb	04:08:02
3	Si 251.611†	349.8	3.3	0.2027 µg/L	0.2027 ppb	04:08:23
3	Sn 189.927†	23.4	1.1	0.5317 µg/L	0.5317 ppb	04:08:23
3	Ti 334.940†	817.0	105.4	0.2351 µg/L	0.2351 ppb	04:08:02
3	Tl 190.801†	-21.8	-0.6	-0.8511 µg/L	-0.8511 ppb	04:08:23
3	U 409.014†	625.9	-47.7	-4.4762 µg/L	-4.4762 ppb	04:08:02
3	V 292.402†	-73.8	17.5	0.1928 µg/L	0.1928 ppb	04:08:02
3	Zn 213.857†	532.2	-13.2	-0.3490 µg/L	-0.3490 ppb	04:08:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2040735.1	99.222	%	0.1778				0.18%
Sc RADIAL	111801.4	99.4	%	0.49				0.50%
Y 371.029	1242266.6	99.194	%	0.1044				0.11%
Ag 328.068†	-28.3	-0.2530	µg/L	0.02858	-0.2530	ppb	0.02858	11.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-38.1	-19.289	µg/L	4.1928	-19.289	ppb	4.1928	21.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.6771	µg/L	4.94025	-0.6771	ppb	4.94025	729.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.0	-0.1247	µg/L	0.31300	-0.1247	ppb	0.31300	250.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0511	µg/L	0.03854	0.0511	ppb	0.03854	75.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.3	0.0488	µg/L	0.00959	0.0488	ppb	0.00959	19.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-61.5	-24.416	µg/L	1.1511	-24.416	ppb	1.1511	4.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.4	0.2786	µg/L	0.17817	0.2786	ppb	0.17817	63.95%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.3	-0.0641	µg/L	0.36306	-0.0641	ppb	0.36306	566.11%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.2      0.0263 µg/L       0.25120      0.0263 ppb        0.25120 953.43%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               92.9      0.6490 µg/L       0.06244      0.6490 ppb        0.06244   9.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -3.9     -20.318 µg/L        9.9017     -20.318 ppb         9.9017  48.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          6.9      3.7378 µg/L      14.12617      3.7378 ppb       14.12617 377.93%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.3     -23.788 µg/L       11.6374     -23.788 ppb        11.6374  48.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               12.2      0.0361 µg/L       0.04145      0.0361 ppb        0.04145 114.70%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.1      0.4535 µg/L       0.16851      0.4535 ppb        0.16851  37.16%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -12.2     -3.3920 µg/L       3.20801     -3.3920 ppb        3.20801  94.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -6.9     -0.3774 µg/L       0.09705     -0.3774 ppb        0.09705  25.71%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.1      2.4311 µg/L       4.57361      2.4311 ppb        4.57361 188.13%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.5      1.4001 µg/L       1.49901      1.4001 ppb        1.49901 107.07%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.4     -1.8942 µg/L       8.67281     -1.8942 ppb        8.67281 457.85%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                3.0      3.0173 µg/L       2.47851      3.0173 ppb        2.47851  82.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.4     -2.0987 µg/L       1.54106     -2.0987 ppb        1.54106  73.43%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     50.6      9.6562 µg/L       7.21056      9.6562 ppb        7.21056  74.67%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                4.7      0.3361 µg/L       0.16273      0.3361 ppb        0.16273  48.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.2      0.0919 µg/L       1.20726      0.0919 ppb        1.20726 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                7.2      0.0406 µg/L       0.18053      0.0406 ppb        0.18053 444.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               92.6      0.2065 µg/L       0.09259      0.2065 ppb        0.09259  44.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.1     -1.6619 µg/L       3.14427     -1.6619 ppb        3.14427 189.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                35.9      3.3771 µg/L       6.83282      3.3771 ppb        6.83282 202.33%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.4      0.2260 µg/L       0.03666      0.2260 ppb        0.03666  16.22%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.1     -0.1588 µg/L       0.17150     -0.1588 ppb        0.17150 108.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 04:39:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112993.3	112993.3	100	%			04:39:44
1	Al 396.153Radial†	10308.5	10031.9	5051.0	µg/L	5051.0	ppb	04:39:44
1	Ca 317.933Radial†	13009.8	12455.3	4944.2	µg/L	4944.2	ppb	04:40:05
1	Fe 238.204 Radial†	985.2	969.5	5109.4	µg/L	5109.4	ppb	04:40:05
1	K 766.490 Radial†	10019.8	9279.5	5031.3	µg/L	5031.3	ppb	04:39:44
1	Mg 279.077 IEC†	949.0	924.9	5134.7	µg/L	5134.7	ppb	04:40:05
1	Na 589.592 Radial†	36175.1	36714.7	10187	µg/L	10187	ppb	04:39:44
1	Sr 421.552†	88731.2	88392.0	497.91	µg/L	497.91	ppb	04:39:44
1	Sc 361.383	2039191.5	2039191.5	99.147	%			04:41:08
1	Y 371.029	1235363.7	1235363.7	98.643	%			04:41:08
1	Ag 328.068†	55450.8	55956.4	503.58	µg/L	503.58	ppb	04:41:14
1	As 188.979†	263.5	263.3	500.81	µg/L	500.81	ppb	04:41:34
1	B 249.677†	11157.1	11097.4	490.94	µg/L	490.94	ppb	04:41:14
1	Ba 233.527†	19561.5	19810.6	498.63	µg/L	498.63	ppb	04:41:14
1	Be 313.107†	786500.8	789659.2	499.34	µg/L	499.34	ppb	04:41:08
1	Cd 226.502†	18567.7	18828.4	498.06	µg/L	498.06	ppb	04:41:14
1	Co 228.616†	10187.7	10347.1	497.70	µg/L	497.70	ppb	04:41:14
1	Cr 267.716†	23560.6	23886.1	498.38	µg/L	498.38	ppb	04:41:14
1	Cu 324.752†	73878.4	71130.0	501.53	µg/L	501.53	ppb	04:41:14
1	Mn 257.610†	156127.4	157693.9	501.09	µg/L	501.09	ppb	04:41:08
1	Mo 202.031†	4407.5	4453.4	497.02	µg/L	497.02	ppb	04:41:34
1	Ni 231.604†	9378.1	9159.5	498.99	µg/L	498.99	ppb	04:41:14
1	P 214.914†	1349.5	1155.2	2453.0	µg/L	2453.0	ppb	04:41:34
1	Pb 220.353†	2015.1	1978.3	502.22	µg/L	502.22	ppb	04:41:34
1	S 181.975 Axial†	221.2	199.0	1021.0	µg/L	1021.0	ppb	04:41:34
1	Sb 206.836†	525.7	509.6	504.22	µg/L	504.22	ppb	04:41:34
1	Se 196.026†	358.0	347.0	507.51	µg/L	507.51	ppb	04:41:34
1	SiO2†	29976.4	28252.8	5395.3	µg/L	5395.3	ppb	04:41:14
1	Si 251.611†	32961.3	32895.4	2472.1	µg/L	2472.1	ppb	04:41:14
1	Sn 189.927†	1026.7	1013.1	496.64	µg/L	496.64	ppb	04:41:34
1	Ti 334.940†	223221.8	224424.4	497.18	µg/L	497.18	ppb	04:41:08
1	Tl 190.801†	305.0	329.0	498.90	µg/L	498.90	ppb	04:41:34
1	U 409.014†	5986.7	5359.0	502.43	µg/L	502.43	ppb	04:41:14
1	V 292.402†	43808.8	44277.8	503.86	µg/L	503.86	ppb	04:41:14
1	Zn 213.857†	19147.0	18761.7	498.68	µg/L	498.68	ppb	04:41:14
2	Sc RADIAL	112481.1	112481.1	100	%			04:40:10
2	Al 396.153Radial†	10363.0	10133.0	5102.2	µg/L	5102.2	ppb	04:40:10
2	Ca 317.933Radial†	13046.8	12551.2	4982.3	µg/L	4982.3	ppb	04:40:31
2	Fe 238.204 Radial†	988.9	977.7	5152.5	µg/L	5152.5	ppb	04:40:31
2	K 766.490 Radial†	9980.7	9285.8	5034.7	µg/L	5034.7	ppb	04:40:10
2	Mg 279.077 IEC†	952.8	933.0	5179.7	µg/L	5179.7	ppb	04:40:31
2	Na 589.592 Radial†	36303.3	37006.9	10268	µg/L	10268	ppb	04:40:10
2	Sr 421.552†	88574.2	88637.1	499.29	µg/L	499.29	ppb	04:40:10
2	Sc 361.383	2045235.5	2045235.5	99.440	%			04:41:42
2	Y 371.029	1238335.7	1238335.7	98.880	%			04:41:42
2	Ag 328.068†	55677.9	56019.5	504.15	µg/L	504.15	ppb	04:41:47
2	As 188.979†	258.3	257.3	489.39	µg/L	489.39	ppb	04:42:08
2	B 249.677†	11236.0	11143.5	492.97	µg/L	492.97	ppb	04:41:47
2	Ba 233.527†	19676.8	19868.2	500.08	µg/L	500.08	ppb	04:41:47
2	Be 313.107†	793198.5	794050.3	502.12	µg/L	502.12	ppb	04:41:42
2	Cd 226.502†	18640.3	18846.1	498.52	µg/L	498.52	ppb	04:41:47
2	Co 228.616†	10259.7	10389.2	499.72	µg/L	499.72	ppb	04:41:47
2	Cr 267.716†	23640.1	23895.9	498.59	µg/L	498.59	ppb	04:41:47
2	Cu 324.752†	74292.2	71325.9	502.92	µg/L	502.92	ppb	04:41:47
2	Mn 257.610†	157559.8	158669.0	504.19	µg/L	504.19	ppb	04:41:42
2	Mo 202.031†	4409.5	4442.2	495.77	µg/L	495.77	ppb	04:42:08
2	Ni 231.604†	9413.3	9166.8	499.39	µg/L	499.39	ppb	04:41:47
2	P 214.914†	1358.1	1159.7	2462.8	µg/L	2462.8	ppb	04:42:08
2	Pb 220.353†	2025.4	1982.7	503.32	µg/L	503.32	ppb	04:42:08

2	S 181.975 Axial†	216.7	193.9	994.57 µg/L	994.57 ppb	04:42:08
2	Sb 206.836†	524.4	506.8	501.46 µg/L	501.46 ppb	04:42:08
2	Se 196.026†	358.9	346.8	507.31 µg/L	507.31 ppb	04:42:08
2	SiO2†	30143.2	28331.2	5410.2 µg/L	5410.2 ppb	04:41:47
2	Si 251.611†	33096.5	32933.1	2474.7 µg/L	2474.7 ppb	04:41:47
2	Sn 189.927†	1037.5	1020.9	500.48 µg/L	500.48 ppb	04:42:08
2	Ti 334.940†	225311.1	225860.0	500.36 µg/L	500.36 ppb	04:41:42
2	Tl 190.801†	308.1	331.3	502.30 µg/L	502.30 ppb	04:42:08
2	U 409.014†	6015.4	5370.0	503.46 µg/L	503.46 ppb	04:41:47
2	V 292.402†	43926.8	44265.9	503.72 µg/L	503.72 ppb	04:41:47
2	Zn 213.857†	19223.1	18781.1	499.20 µg/L	499.20 ppb	04:41:47
3	Sc RADIAL	113543.2	113543.2	101 %		04:40:36
3	Al 396.153Radial†	10367.4	10040.5	5055.6 µg/L	5055.6 ppb	04:40:36
3	Ca 317.933Radial†	13114.0	12495.8	4960.3 µg/L	4960.3 ppb	04:40:57
3	Fe 238.204 Radial†	990.1	969.6	5109.8 µg/L	5109.8 ppb	04:40:57
3	K 766.490 Radial†	10041.3	9252.4	5016.6 µg/L	5016.6 ppb	04:40:36
3	Mg 279.077 IEC†	957.9	929.1	5158.2 µg/L	5158.2 ppb	04:40:57
3	Na 589.592 Radial†	36293.6	36657.7	10171 µg/L	10171 ppb	04:40:36
3	Sr 421.552†	88900.5	88132.0	496.44 µg/L	496.44 ppb	04:40:36
3	Sc 361.383	2046115.8	2046115.8	99.483 %		04:42:15
3	Y 371.029	1239632.0	1239632.0	98.984 %		04:42:15
3	Ag 328.068†	55928.8	56247.6	506.20 µg/L	506.20 ppb	04:42:20
3	As 188.979†	259.3	258.1	491.01 µg/L	491.01 ppb	04:42:41
3	B 249.677†	11266.9	11169.7	494.15 µg/L	494.15 ppb	04:42:20
3	Ba 233.527†	19792.6	19976.1	502.79 µg/L	502.79 ppb	04:42:20
3	Be 313.107†	791154.4	791652.5	500.60 µg/L	500.60 ppb	04:42:15
3	Cd 226.502†	18741.7	18939.9	501.01 µg/L	501.01 ppb	04:42:20
3	Co 228.616†	10321.2	10446.5	502.46 µg/L	502.46 ppb	04:42:20
3	Cr 267.716†	23779.4	24025.7	501.29 µg/L	501.29 ppb	04:42:20
3	Cu 324.752†	74591.4	71594.5	504.80 µg/L	504.80 ppb	04:42:20
3	Mn 257.610†	157110.4	158149.1	502.53 µg/L	502.53 ppb	04:42:15
3	Mo 202.031†	4362.6	4393.2	490.31 µg/L	490.31 ppb	04:42:41
3	Ni 231.604†	9508.6	9258.6	504.39 µg/L	504.39 ppb	04:42:20
3	P 214.914†	1340.7	1141.7	2423.4 µg/L	2423.4 ppb	04:42:41
3	Pb 220.353†	2003.7	1960.0	497.54 µg/L	497.54 ppb	04:42:41
3	S 181.975 Axial†	214.5	191.6	982.76 µg/L	982.76 ppb	04:42:41
3	Sb 206.836†	519.5	501.6	496.29 µg/L	496.29 ppb	04:42:41
3	Se 196.026†	360.6	348.4	509.56 µg/L	509.56 ppb	04:42:41
3	SiO2†	30289.4	28465.0	5435.8 µg/L	5435.8 ppb	04:42:20
3	Si 251.611†	33316.8	33140.2	2491.0 µg/L	2491.0 ppb	04:42:20
3	Sn 189.927†	1024.6	1007.5	493.92 µg/L	493.92 ppb	04:42:41
3	Ti 334.940†	224788.7	225237.5	498.98 µg/L	498.98 ppb	04:42:15
3	Tl 190.801†	304.8	327.8	496.99 µg/L	496.99 ppb	04:42:41
3	U 409.014†	6083.7	5436.1	509.68 µg/L	509.68 ppb	04:42:20
3	V 292.402†	44119.4	44440.6	505.66 µg/L	505.66 ppb	04:42:20
3	Zn 213.857†	19331.4	18881.6	501.86 µg/L	501.86 ppb	04:42:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2043514.3	99.357	%	0.1833				0.18%
Sc RADIAL	113005.9	100	%	0.5				0.47%
Y 371.029	1237777.1	98.836	%	0.1747				0.18%
Ag 328.068†	56074.5	504.64	µg/L	1.375	504.64	ppb	1.375	0.27%
QC value within limits for Ag 328.068 Recovery = 100.93%								
Al 396.153Radial†	10068.5	5069.6	µg/L	28.31	5069.6	ppb	28.31	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.39%								
As 188.979†	259.6	493.74	µg/L	6.179	493.74	ppb	6.179	1.25%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	11136.9	492.69	µg/L	1.623	492.69	ppb	1.623	0.33%
QC value within limits for B 249.677 Recovery = 98.54%								
Ba 233.527†	19885.0	500.50	µg/L	2.112	500.50	ppb	2.112	0.42%
QC value within limits for Ba 233.527 Recovery = 100.10%								
Be 313.107†	791787.3	500.69	µg/L	1.390	500.69	ppb	1.390	0.28%
QC value within limits for Be 313.107 Recovery = 100.14%								
Ca 317.933Radial†	12500.8	4962.2	µg/L	19.11	4962.2	ppb	19.11	0.39%
QC value within limits for Ca 317.933Radial Recovery = 99.24%								
Cd 226.502†	18871.5	499.20	µg/L	1.590	499.20	ppb	1.590	0.32%
QC value within limits for Cd 226.502 Recovery = 99.84%								
Co 228.616†	10394.3	499.96	µg/L	2.390	499.96	ppb	2.390	0.48%

```
   QC value within limits for Co 228.616  Recovery = 99.99%
Cr 267.716†            23935.9      499.42 µg/L        1.624      499.42 ppb          1.624   0.33%
   QC value within limits for Cr 267.716  Recovery = 99.88%
Cu 324.752†            71350.2      503.08 µg/L        1.640      503.08 ppb          1.640   0.33%
   QC value within limits for Cu 324.752  Recovery = 100.62%
Fe 238.204 Radial†       972.3      5123.9 µg/L       24.77      5123.9 ppb         24.77   0.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.48%
K 766.490 Radial†       9272.6      5027.5 µg/L        9.61      5027.5 ppb          9.61   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 100.55%
Mg 279.077 IEC†          929.0      5157.5 µg/L       22.49      5157.5 ppb         22.49   0.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.15%
Mn 257.610†           158170.7      502.60 µg/L        1.551      502.60 ppb          1.551   0.31%
   QC value within limits for Mn 257.610  Recovery = 100.52%
Mo 202.031†             4429.6      494.36 µg/L        3.569      494.36 ppb          3.569   0.72%
   QC value within limits for Mo 202.031  Recovery = 98.87%
Na 589.592 Radial†     36793.1       10209 µg/L         52.0       10209 ppb           52.0   0.51%
   QC value within limits for Na 589.592 Radial  Recovery = 102.09%
Ni 231.604†             9195.0      500.93 µg/L        3.010      500.93 ppb          3.010   0.60%
   QC value within limits for Ni 231.604  Recovery = 100.19%
P 214.914†              1152.2      2446.4 µg/L       20.56      2446.4 ppb         20.56   0.84%
   QC value within limits for P 214.914  Recovery = 97.86%
Pb 220.353†             1973.7      501.03 µg/L        3.069      501.03 ppb          3.069   0.61%
   QC value within limits for Pb 220.353  Recovery = 100.21%
S 181.975 Axial†         194.8      999.44 µg/L       19.582      999.44 ppb         19.582   1.96%
   QC value within limits for S 181.975 Axial  Recovery = 99.94%
Sb 206.836†              506.0      500.66 µg/L        4.025      500.66 ppb          4.025   0.80%
   QC value within limits for Sb 206.836  Recovery = 100.13%
Se 196.026†              347.4      508.13 µg/L        1.246      508.13 ppb          1.246   0.25%
   QC value within limits for Se 196.026  Recovery = 101.63%
SiO2†                  28349.7      5413.8 µg/L       20.49      5413.8 ppb         20.49   0.38%
   QC value within limits for SiO2  Recovery = 101.24%
Si 251.611†            32989.5      2479.3 µg/L       10.24      2479.3 ppb         10.24   0.41%
   QC value within limits for Si 251.611  Recovery = 99.17%
Sn 189.927†             1013.8      497.01 µg/L        3.297      497.01 ppb          3.297   0.66%
   QC value within limits for Sn 189.927  Recovery = 99.40%
Sr 421.552†            88387.0      497.88 µg/L        1.423      497.88 ppb          1.423   0.29%
   QC value within limits for Sr 421.552  Recovery = 99.58%
Ti 334.940†           225174.0      498.84 µg/L        1.595      498.84 ppb          1.595   0.32%
   QC value within limits for Ti 334.940  Recovery = 99.77%
Tl 190.801†              329.4      499.40 µg/L        2.687      499.40 ppb          2.687   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.88%
U 409.014†              5388.4      505.19 µg/L        3.919      505.19 ppb          3.919   0.78%
   QC value within limits for U 409.014  Recovery = 101.04%
V 292.402†             44328.1      504.41 µg/L        1.081      504.41 ppb          1.081   0.21%
   QC value within limits for V 292.402  Recovery = 100.88%
Zn 213.857†            18808.2      499.92 µg/L        1.707      499.92 ppb          1.707   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 04:42:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112133.3	112133.3	99.7	%			04:43:24
1	Al 396.153Radial†	617.8	389.9	196.61	µg/L	196.61	ppb	04:43:24
1	Ca 317.933Radial†	945.6	453.1	179.84	µg/L	179.84	ppb	04:43:45
1	Fe 238.204 Radial†	33.1	22.0	115.97	µg/L	115.97	ppb	04:43:45
1	K 766.490 Radial†	977.5	285.6	154.87	µg/L	154.87	ppb	04:43:24
1	Mg 279.077 IEC†	72.8	53.2	295.04	µg/L	295.04	ppb	04:43:45
1	Na 589.592 Radial†	529.1	1234.7	342.57	µg/L	342.57	ppb	04:43:24
1	Sr 421.552†	868.8	935.3	5.2684	µg/L	5.2684	ppb	04:43:24
1	Sc 361.383	2041230.8	2041230.8	99.246	%			04:44:47
1	Y 371.029	1243098.4	1243098.4	99.261	%			04:44:47
1	Ag 328.068†	536.3	568.7	5.1262	µg/L	5.1262	ppb	04:44:52
1	As 188.979†	20.4	18.0	34.326	µg/L	34.326	ppb	04:45:13
1	B 249.677†	1263.9	1117.8	49.577	µg/L	49.577	ppb	04:44:52
1	Ba 233.527†	118.9	200.5	5.0478	µg/L	5.0478	ppb	04:45:13
1	Be 313.107†	11576.7	8053.2	5.0924	µg/L	5.0924	ppb	04:44:52
1	Cd 226.502†	91.1	192.7	5.1287	µg/L	5.1287	ppb	04:45:13
1	Co 228.616†	29.9	101.8	4.9098	µg/L	4.9098	ppb	04:45:13
1	Cr 267.716†	123.8	247.5	5.1657	µg/L	5.1657	ppb	04:44:52
1	Cu 324.752†	4752.1	1403.9	9.9020	µg/L	9.9020	ppb	04:44:52
1	Mn 257.610†	3088.7	3334.8	10.598	µg/L	10.598	ppb	04:44:52
1	Mo 202.031†	88.3	96.9	10.818	µg/L	10.818	ppb	04:45:13
1	Ni 231.604†	375.1	78.5	4.2790	µg/L	4.2790	ppb	04:45:13
1	P 214.914†	274.7	70.8	152.55	µg/L	152.55	ppb	04:45:13
1	Pb 220.353†	103.2	49.8	12.612	µg/L	12.612	ppb	04:45:13
1	S 181.975 Axial†	41.0	17.2	88.519	µg/L	88.519	ppb	04:45:13
1	Sb 206.836†	27.6	7.2	7.1874	µg/L	7.1874	ppb	04:45:13
1	Se 196.026†	38.1	24.3	35.441	µg/L	35.441	ppb	04:45:13
1	SiO2†	3183.1	1225.7	234.06	µg/L	234.06	ppb	04:44:52
1	Si 251.611†	1655.6	1318.6	100.23	µg/L	100.23	ppb	04:45:13
1	Sn 189.927†	39.6	17.5	8.6280	µg/L	8.6280	ppb	04:45:13
1	Ti 334.940†	3028.9	2333.1	5.1614	µg/L	5.1614	ppb	04:44:52
1	Tl 190.801†	-8.1	13.2	19.986	µg/L	19.986	ppb	04:45:13
1	U 409.014†	1297.9	628.6	59.015	µg/L	59.015	ppb	04:44:52
1	V 292.402†	397.0	491.9	5.7261	µg/L	5.7261	ppb	04:44:52
1	Zn 213.857†	924.7	381.5	10.165	µg/L	10.165	ppb	04:45:13
2	Sc RADIAL	112501.3	112501.3	100	%			04:43:50
2	Al 396.153Radial†	589.5	359.5	181.31	µg/L	181.31	ppb	04:43:50
2	Ca 317.933Radial†	941.1	445.5	176.83	µg/L	176.83	ppb	04:44:11
2	Fe 238.204 Radial†	29.4	18.2	95.539	µg/L	95.539	ppb	04:44:11
2	K 766.490 Radial†	993.4	298.3	161.76	µg/L	161.76	ppb	04:43:50
2	Mg 279.077 IEC†	76.7	56.9	315.57	µg/L	315.57	ppb	04:44:11
2	Na 589.592 Radial†	488.0	1191.8	330.68	µg/L	330.68	ppb	04:43:50
2	Sr 421.552†	794.3	857.9	4.8327	µg/L	4.8327	ppb	04:43:50
2	Sc 361.383	2045883.3	2045883.3	99.472	%			04:45:19
2	Y 371.029	1246286.3	1246286.3	99.515	%			04:45:19
2	Ag 328.068†	545.3	576.5	5.1913	µg/L	5.1913	ppb	04:45:25
2	As 188.979†	18.2	15.8	30.101	µg/L	30.101	ppb	04:45:45
2	B 249.677†	1256.7	1107.7	49.134	µg/L	49.134	ppb	04:45:25
2	Ba 233.527†	120.0	201.4	5.0682	µg/L	5.0682	ppb	04:45:45
2	Be 313.107†	11696.1	8146.7	5.1515	µg/L	5.1515	ppb	04:45:25
2	Cd 226.502†	96.2	197.6	5.2575	µg/L	5.2575	ppb	04:45:45
2	Co 228.616†	29.8	101.7	4.9032	µg/L	4.9032	ppb	04:45:45
2	Cr 267.716†	120.1	243.5	5.0796	µg/L	5.0796	ppb	04:45:25
2	Cu 324.752†	4702.4	1343.0	9.4693	µg/L	9.4693	ppb	04:45:25
2	Mn 257.610†	3087.5	3326.6	10.569	µg/L	10.569	ppb	04:45:25
2	Mo 202.031†	82.9	91.2	10.181	µg/L	10.181	ppb	04:45:45
2	Ni 231.604†	388.8	91.5	4.9823	µg/L	4.9823	ppb	04:45:45
2	P 214.914†	280.5	76.0	164.06	µg/L	164.06	ppb	04:45:45
2	Pb 220.353†	98.1	44.5	11.277	µg/L	11.277	ppb	04:45:45

2	S 181.975 Axial†	43.0	19.2	98.694 µg/L	98.694 ppb	04:45:45
2	Sb 206.836†	29.1	8.7	8.6700 µg/L	8.6700 ppb	04:45:45
2	Se 196.026†	36.7	22.8	33.131 µg/L	33.131 ppb	04:45:45
2	SiO2†	3156.9	1192.0	227.63 µg/L	227.63 ppb	04:45:25
2	Si 251.611†	1658.6	1317.8	100.17 µg/L	100.17 ppb	04:45:45
2	Sn 189.927†	39.8	17.6	8.6932 µg/L	8.6932 ppb	04:45:45
2	Ti 334.940†	3080.8	2378.3	5.2617 µg/L	5.2617 ppb	04:45:25
2	Tl 190.801†	-2.8	18.6	28.066 µg/L	28.066 ppb	04:45:45
2	U 409.014†	1251.5	578.9	54.351 µg/L	54.351 ppb	04:45:25
2	V 292.402†	353.2	447.1	5.2068 µg/L	5.2068 ppb	04:45:25
2	Zn 213.857†	935.0	389.8	10.387 µg/L	10.387 ppb	04:45:45
3	Sc RADIAL	110974.7	110974.7	98.7 %		04:44:16
3	Al 396.153Radial†	609.4	387.8	195.61 µg/L	195.61 ppb	04:44:16
3	Ca 317.933Radial†	926.5	443.6	176.10 µg/L	176.10 ppb	04:44:37
3	Fe 238.204 Radial†	27.5	16.7	87.644 µg/L	87.644 ppb	04:44:37
3	K 766.490 Radial†	989.2	307.8	166.88 µg/L	166.88 ppb	04:44:16
3	Mg 279.077 IEC†	77.3	58.5	324.66 µg/L	324.66 ppb	04:44:37
3	Na 589.592 Radial†	531.2	1242.4	344.71 µg/L	344.71 ppb	04:44:16
3	Sr 421.552†	817.5	892.3	5.0264 µg/L	5.0264 ppb	04:44:16
3	Sc 361.383	2051852.5	2051852.5	99.762 %		04:45:51
3	Y 371.029	1249540.9	1249540.9	99.775 %		04:45:51
3	Ag 328.068†	520.4	550.0	4.9517 µg/L	4.9517 ppb	04:45:57
3	As 188.979†	17.4	15.0	28.554 µg/L	28.554 ppb	04:46:17
3	B 249.677†	1285.0	1132.4	50.232 µg/L	50.232 ppb	04:45:57
3	Ba 233.527†	121.9	202.9	5.1057 µg/L	5.1057 ppb	04:46:17
3	Be 313.107†	11635.7	8051.9	5.0916 µg/L	5.0916 ppb	04:45:57
3	Cd 226.502†	89.9	191.0	5.0839 µg/L	5.0839 ppb	04:46:17
3	Co 228.616†	34.4	106.2	5.1191 µg/L	5.1191 ppb	04:46:17
3	Cr 267.716†	115.7	238.7	4.9806 µg/L	4.9806 ppb	04:45:57
3	Cu 324.752†	4744.8	1371.8	9.6704 µg/L	9.6704 ppb	04:45:57
3	Mn 257.610†	3080.3	3310.3	10.517 µg/L	10.517 ppb	04:45:57
3	Mo 202.031†	82.7	90.8	10.137 µg/L	10.137 ppb	04:46:17
3	Ni 231.604†	386.0	87.5	4.7673 µg/L	4.7673 ppb	04:46:17
3	P 214.914†	282.9	77.5	167.31 µg/L	167.31 ppb	04:46:17
3	Pb 220.353†	97.9	44.0	11.133 µg/L	11.133 ppb	04:46:17
3	S 181.975 Axial†	49.1	25.2	129.49 µg/L	129.49 ppb	04:46:17
3	Sb 206.836†	27.1	6.6	6.5112 µg/L	6.5112 ppb	04:46:17
3	Se 196.026†	27.4	13.3	19.368 µg/L	19.368 ppb	04:46:17
3	SiO2†	3118.1	1143.8	218.43 µg/L	218.43 ppb	04:45:57
3	Si 251.611†	1659.0	1313.3	99.875 µg/L	99.875 ppb	04:46:17
3	Sn 189.927†	37.8	15.4	7.6379 µg/L	7.6379 ppb	04:46:17
3	Ti 334.940†	3049.1	2337.5	5.1715 µg/L	5.1715 ppb	04:45:57
3	Tl 190.801†	-7.6	13.8	20.814 µg/L	20.814 ppb	04:46:17
3	U 409.014†	1247.5	571.3	53.640 µg/L	53.640 ppb	04:45:57
3	V 292.402†	333.3	426.1	4.9678 µg/L	4.9678 ppb	04:45:57
3	Zn 213.857†	932.9	385.0	10.258 µg/L	10.258 ppb	04:46:17

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2046322.2	99.493	%	0.2589				0.26%
Sc RADIAL	111869.8	99.5	%	0.71				0.71%
Y 371.029	1246308.5	99.517	%	0.2572				0.26%
Ag 328.068†	565.1	5.0897	µg/L	0.12390	5.0897	ppb	0.12390	2.43%
QC value within limits for Ag 328.068 Recovery = 101.79%								
Al 396.153Radial†	379.1	191.18	µg/L	8.559	191.18	ppb	8.559	4.48%
QC value within limits for Al 396.153Radial Recovery = 95.59%								
As 188.979†	16.3	30.994	µg/L	2.9882	30.994	ppb	2.9882	9.64%
QC value within limits for As 188.979 Recovery = 103.31%								
B 249.677†	1119.3	49.647	µg/L	0.5523	49.647	ppb	0.5523	1.11%
QC value within limits for B 249.677 Recovery = 99.29%								
Ba 233.527†	201.6	5.0739	µg/L	0.02936	5.0739	ppb	0.02936	0.58%
QC value within limits for Ba 233.527 Recovery = 101.48%								
Be 313.107†	8083.9	5.1118	µg/L	0.03436	5.1118	ppb	0.03436	0.67%
QC value within limits for Be 313.107 Recovery = 102.24%								
Ca 317.933Radial†	447.4	177.59	µg/L	1.982	177.59	ppb	1.982	1.12%
QC value within limits for Ca 317.933Radial Recovery = 88.80%								
Cd 226.502†	193.7	5.1567	µg/L	0.09015	5.1567	ppb	0.09015	1.75%
QC value within limits for Cd 226.502 Recovery = 103.13%								
Co 228.616†	103.2	4.9774	µg/L	0.12278	4.9774	ppb	0.12278	2.47%

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   QC value within limits for Co 228.616  Recovery = 99.55%
Cr 267.716†              243.2      5.0753 µg/L       0.09264      5.0753 ppb        0.09264   1.83%
   QC value within limits for Cr 267.716  Recovery = 101.51%
Cu 324.752†             1372.9      9.6806 µg/L       0.21654      9.6806 ppb        0.21654   2.24%
   QC value within limits for Cu 324.752  Recovery = 96.81%
Fe 238.204 Radial†        19.0      99.717 µg/L       14.6172      99.717 ppb        14.6172  14.66%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.72%
K 766.490 Radial†        297.3      161.17 µg/L         6.026      161.17 ppb          6.026   3.74%
   QC value within limits for K 766.490 Radial  Recovery = 107.45%
Mg 279.077 IEC†           56.2      311.76 µg/L        15.177      311.76 ppb         15.177   4.87%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†             3323.9      10.561 µg/L        0.0411      10.561 ppb         0.0411   0.39%
   QC value within limits for Mn 257.610  Recovery = 105.61%
Mo 202.031†               93.0      10.379 µg/L        0.3809      10.379 ppb         0.3809   3.67%
   QC value within limits for Mo 202.031  Recovery = 103.79%
Na 589.592 Radial†      1222.9      339.32 µg/L         7.562      339.32 ppb          7.562   2.23%
   QC value within limits for Na 589.592 Radial  Recovery = 113.11%
Ni 231.604†               85.8      4.6762 µg/L       0.36043      4.6762 ppb        0.36043   7.71%
   QC value within limits for Ni 231.604  Recovery = 93.52%
P 214.914†                74.8      161.31 µg/L         7.753      161.31 ppb          7.753   4.81%
   QC value within limits for P 214.914  Recovery = 107.54%
Pb 220.353†               46.1      11.674 µg/L        0.8158      11.674 ppb         0.8158   6.99%
   QC value within limits for Pb 220.353  Recovery = 116.74%
S 181.975 Axial†          20.6      105.57 µg/L        21.334      105.57 ppb         21.334  20.21%
   QC value within limits for S 181.975 Axial  Recovery = 105.57%
Sb 206.836†                7.5      7.4562 µg/L       1.10419      7.4562 ppb        1.10419  14.81%
   QC value within limits for Sb 206.836  Recovery = 74.56%
Se 196.026†               20.1      29.313 µg/L        8.6901      29.313 ppb         8.6901  29.65%
   QC value within limits for Se 196.026  Recovery = 97.71%
SiO2†                   1187.2      226.71 µg/L         7.854      226.71 ppb          7.854   3.46%
   QC value within limits for SiO2  Recovery = 106.44%
Si 251.611†             1316.6      100.09 µg/L         0.191      100.09 ppb          0.191   0.19%
   QC value within limits for Si 251.611  Recovery = 100.09%
Sn 189.927†               16.8      8.3197 µg/L       0.59135      8.3197 ppb        0.59135   7.11%
   QC value within limits for Sn 189.927  Recovery = 83.20%
Sr 421.552†              895.2      5.0425 µg/L       0.21825      5.0425 ppb        0.21825   4.33%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†             2349.6      5.1982 µg/L       0.05523      5.1982 ppb        0.05523   1.06%
   QC value within limits for Ti 334.940  Recovery = 103.96%
Tl 190.801†               15.2      22.955 µg/L        4.4455      22.955 ppb         4.4455  19.37%
   QC value within limits for Tl 190.801  Recovery = 114.78%
U 409.014†               592.9      55.669 µg/L        2.9195      55.669 ppb         2.9195   5.24%
   QC value within limits for U 409.014  Recovery = 111.34%
V 292.402†               455.0      5.3002 µg/L       0.38769      5.3002 ppb        0.38769   7.31%
   QC value within limits for V 292.402  Recovery = 106.00%
Zn 213.857†              385.5      10.270 µg/L        0.1113      10.270 ppb         0.1113   1.08%
   QC value within limits for Zn 213.857  Recovery = 102.70%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 04:46:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111132.5	111132.5	98.8	%			04:47:00
1	Al 396.153Radial†	173.2	-54.5	-27.561	µg/L	-27.561	ppb	04:47:00
1	Ca 317.933Radial†	415.1	-75.3	-29.896	µg/L	-29.896	ppb	04:47:20
1	Fe 238.204 Radial†	12.2	1.2	6.2193	µg/L	6.2193	ppb	04:47:20
1	K 766.490 Radial†	712.5	26.3	14.246	µg/L	14.246	ppb	04:47:00
1	Mg 279.077 IEC†	16.9	-2.7	-15.222	µg/L	-15.222	ppb	04:47:20
1	Na 589.592 Radial†	-618.4	78.0	21.645	µg/L	21.645	ppb	04:47:00
1	Sr 421.552†	-45.3	17.9	0.1011	µg/L	0.1011	ppb	04:47:00
1	Sc 361.383	2043596.3	2043596.3	99.361	%			04:48:22
1	Y 371.029	1244766.0	1244766.0	99.394	%			04:48:22
1	Ag 328.068†	-27.6	0.5	0.0068	µg/L	0.0068	ppb	04:48:28
1	As 188.979†	-0.1	-2.6	-4.8902	µg/L	-4.8902	ppb	04:48:48
1	B 249.677†	156.7	2.0	0.0870	µg/L	0.0870	ppb	04:48:48
1	Ba 233.527†	-85.6	-5.5	-0.1368	µg/L	-0.1368	ppb	04:48:48
1	Be 313.107†	3651.2	63.2	0.0399	µg/L	0.0399	ppb	04:48:28
1	Cd 226.502†	-102.5	-2.2	-0.0526	µg/L	-0.0526	ppb	04:48:48
1	Co 228.616†	-79.0	-7.7	-0.3709	µg/L	-0.3709	ppb	04:48:48
1	Cr 267.716†	-127.3	-5.4	-0.1116	µg/L	-0.1116	ppb	04:48:28
1	Cu 324.752†	3406.6	44.2	0.3124	µg/L	0.3124	ppb	04:48:28
1	Mn 257.610†	-207.1	14.2	0.0458	µg/L	0.0458	ppb	04:48:48
1	Mo 202.031†	-0.2	7.8	0.8657	µg/L	0.8657	ppb	04:48:48
1	Ni 231.604†	303.5	6.0	0.3277	µg/L	0.3277	ppb	04:48:48
1	P 214.914†	206.3	1.7	3.5538	µg/L	3.5538	ppb	04:48:48
1	Pb 220.353†	69.7	16.0	4.0568	µg/L	4.0568	ppb	04:48:48
1	S 181.975 Axial†	20.4	-3.5	-18.126	µg/L	-18.126	ppb	04:48:48
1	Sb 206.836†	18.0	-2.4	-2.3942	µg/L	-2.3942	ppb	04:48:48
1	Se 196.026†	10.0	-4.0	-5.8076	µg/L	-5.8076	ppb	04:48:48
1	SiO2†	1999.2	30.3	5.7956	µg/L	5.7956	ppb	04:48:28
1	Si 251.611†	363.5	16.2	1.2519	µg/L	1.2519	ppb	04:48:48
1	Sn 189.927†	20.5	-1.8	-0.8735	µg/L	-0.8735	ppb	04:48:48
1	Ti 334.940†	763.3	49.3	0.1111	µg/L	0.1111	ppb	04:48:28
1	Tl 190.801†	-13.2	8.2	12.350	µg/L	12.350	ppb	04:48:48
1	U 409.014†	773.2	98.9	9.2874	µg/L	9.2874	ppb	04:48:28
1	V 292.402†	-71.1	20.4	0.2521	µg/L	0.2521	ppb	04:48:28
1	Zn 213.857†	542.7	-4.0	-0.1088	µg/L	-0.1088	ppb	04:48:48
2	Sc RADIAL	111052.2	111052.2	98.7	%			04:47:26
2	Al 396.153Radial†	155.5	-72.3	-36.571	µg/L	-36.571	ppb	04:47:26
2	Ca 317.933Radial†	429.0	-60.9	-24.179	µg/L	-24.179	ppb	04:47:46
2	Fe 238.204 Radial†	10.4	-0.7	-3.6556	µg/L	-3.6556	ppb	04:47:46
2	K 766.490 Radial†	738.8	53.4	28.964	µg/L	28.964	ppb	04:47:26
2	Mg 279.077 IEC†	12.0	-7.7	-42.509	µg/L	-42.509	ppb	04:47:46
2	Na 589.592 Radial†	-637.7	58.1	16.110	µg/L	16.110	ppb	04:47:26
2	Sr 421.552†	-40.8	22.4	0.1263	µg/L	0.1263	ppb	04:47:26
2	Sc 361.383	2040034.5	2040034.5	99.188	%			04:48:54
2	Y 371.029	1241351.3	1241351.3	99.121	%			04:48:54
2	Ag 328.068†	-47.7	-19.7	-0.1743	µg/L	-0.1743	ppb	04:49:00
2	As 188.979†	3.5	1.1	2.0751	µg/L	2.0751	ppb	04:49:21
2	B 249.677†	140.1	-14.4	-0.6401	µg/L	-0.6401	ppb	04:49:21
2	Ba 233.527†	-72.3	7.8	0.1971	µg/L	0.1971	ppb	04:49:21
2	Be 313.107†	3636.7	55.0	0.0348	µg/L	0.0348	ppb	04:49:00
2	Cd 226.502†	-89.1	11.1	0.2887	µg/L	0.2887	ppb	04:49:21
2	Co 228.616†	-73.1	-2.0	-0.0927	µg/L	-0.0927	ppb	04:49:21
2	Cr 267.716†	-89.0	33.0	0.6876	µg/L	0.6876	ppb	04:49:00
2	Cu 324.752†	3324.3	-32.8	-0.2315	µg/L	-0.2315	ppb	04:49:00
2	Mn 257.610†	-212.4	8.5	0.0266	µg/L	0.0266	ppb	04:49:21
2	Mo 202.031†	-2.6	5.2	0.5851	µg/L	0.5851	ppb	04:49:21
2	Ni 231.604†	274.7	-22.5	-1.2251	µg/L	-1.2251	ppb	04:49:21
2	P 214.914†	211.8	7.5	16.364	µg/L	16.364	ppb	04:49:21
2	Pb 220.353†	66.5	12.9	3.2804	µg/L	3.2804	ppb	04:49:21

2	S 181.975 Axial†	20.8	-3.1	-15.740 µg/L	-15.740 ppb		04:49:21
2	Sb 206.836†	17.5	-2.9	-2.9205 µg/L	-2.9205 ppb		04:49:21
2	Se 196.026†	19.7	5.8	8.3872 µg/L	8.3872 ppb		04:49:21
2	SiO2†	1944.6	-21.1	-4.0292 µg/L	-4.0292 ppb		04:49:00
2	Si 251.611†	351.3	4.5	0.2867 µg/L	0.2867 ppb		04:49:21
2	Sn 189.927†	24.3	2.0	0.9601 µg/L	0.9601 ppb		04:49:21
2	Ti 334.940†	729.3	16.4	0.0376 µg/L	0.0376 ppb		04:49:00
2	Tl 190.801†	-18.8	2.4	3.6937 µg/L	3.6937 ppb		04:49:21
2	U 409.014†	628.2	-45.9	-4.3103 µg/L	-4.3103 ppb		04:49:00
2	V 292.402†	-61.1	30.4	0.3396 µg/L	0.3396 ppb		04:49:00
2	Zn 213.857†	547.5	1.8	0.0569 µg/L	0.0569 ppb		04:49:21
3	Sc RADIAL	113198.0	113198.0	101 %			04:47:51
3	Al 396.153Radial†	215.1	-16.1	-8.1660 µg/L	-8.1660 ppb		04:47:51
3	Ca 317.933Radial†	427.3	-70.8	-28.112 µg/L	-28.112 ppb		04:48:12
3	Fe 238.204 Radial†	9.4	-1.9	-9.8518 µg/L	-9.8518 ppb		04:48:12
3	K 766.490 Radial†	717.9	18.5	10.049 µg/L	10.049 ppb		04:47:51
3	Mg 279.077 IEC†	15.6	-4.3	-24.091 µg/L	-24.091 ppb		04:48:12
3	Na 589.592 Radial†	-672.3	35.9	9.9519 µg/L	9.9519 ppb		04:47:51
3	Sr 421.552†	-40.3	23.7	0.1337 µg/L	0.1337 ppb		04:47:51
3	Sc 361.383	2064037.0	2064037.0	100.35 %			04:49:27
3	Y 371.029	1257007.1	1257007.1	100.37 %			04:49:27
3	Ag 328.068†	-23.9	4.5	0.0412 µg/L	0.0412 ppb		04:49:32
3	As 188.979†	0.8	-1.7	-3.2766 µg/L	-3.2766 ppb		04:49:53
3	B 249.677†	124.3	-31.8	-1.4085 µg/L	-1.4085 ppb		04:49:53
3	Ba 233.527†	-76.0	4.9	0.1236 µg/L	0.1236 ppb		04:49:53
3	Be 313.107†	3672.0	47.5	0.0300 µg/L	0.0300 ppb		04:49:32
3	Cd 226.502†	-89.1	12.1	0.3255 µg/L	0.3255 ppb		04:49:53
3	Co 228.616†	-70.4	1.6	0.0772 µg/L	0.0772 ppb		04:49:53
3	Cr 267.716†	-122.4	0.8	0.0170 µg/L	0.0170 ppb		04:49:32
3	Cu 324.752†	3445.0	48.5	0.3393 µg/L	0.3393 ppb		04:49:32
3	Mn 257.610†	-204.1	19.3	0.0600 µg/L	0.0600 ppb		04:49:53
3	Mo 202.031†	-3.7	4.2	0.4704 µg/L	0.4704 ppb		04:49:53
3	Ni 231.604†	280.2	-20.2	-1.0995 µg/L	-1.0995 ppb		04:49:53
3	P 214.914†	213.3	6.6	14.187 µg/L	14.187 ppb		04:49:53
3	Pb 220.353†	60.8	6.5	1.6413 µg/L	1.6413 ppb		04:49:53
3	S 181.975 Axial†	19.8	-4.3	-22.249 µg/L	-22.249 ppb		04:49:53
3	Sb 206.836†	14.2	-6.4	-6.2998 µg/L	-6.2998 ppb		04:49:53
3	Se 196.026†	5.4	-8.7	-12.644 µg/L	-12.644 ppb		04:49:53
3	SiO2†	2033.5	44.6	8.5253 µg/L	8.5253 ppb		04:49:32
3	Si 251.611†	363.9	13.0	1.0618 µg/L	1.0618 ppb		04:49:53
3	Sn 189.927†	18.1	-4.4	-2.1510 µg/L	-2.1510 ppb		04:49:53
3	Ti 334.940†	745.4	23.9	0.0546 µg/L	0.0546 ppb		04:49:32
3	Tl 190.801†	-24.4	-2.9	-4.3994 µg/L	-4.3994 ppb		04:49:53
3	U 409.014†	783.5	101.5	9.5319 µg/L	9.5319 ppb		04:49:32
3	V 292.402†	-70.4	21.8	0.2633 µg/L	0.2633 ppb		04:49:32
3	Zn 213.857†	545.2	-6.8	-0.1763 µg/L	-0.1763 ppb		04:49:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2049222.6	99.634	%	0.6298				0.63%
Sc RADIAL	111794.2	99.4	%	1.08				1.09%
Y 371.029	1247708.1	99.629	%	0.6573				0.66%
Ag 328.068†	-4.9	-0.0421	µg/L	0.11576	-0.0421	ppb	0.11576	275.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-47.6	-24.099	µg/L	14.5153	-24.099	ppb	14.5153	60.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.1	-2.0306	µg/L	3.64601	-2.0306	ppb	3.64601	179.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-14.7	-0.6539	µg/L	0.74783	-0.6539	ppb	0.74783	114.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.4	0.0613	µg/L	0.17546	0.0613	ppb	0.17546	286.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	55.2	0.0349	µg/L	0.00495	0.0349	ppb	0.00495	14.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.0	-27.396	µg/L	2.9252	-27.396	ppb	2.9252	10.68%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.0	0.1872	µg/L	0.20848	0.1872	ppb	0.20848	111.35%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.7	-0.1288	µg/L	0.22622	-0.1288	ppb	0.22622	175.67%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 9.5      0.1977 µg/L       0.42914      0.1977 ppb        0.42914 217.07%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.0      0.1400 µg/L       0.32209      0.1400 ppb        0.32209 229.98%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -2.4293 µg/L       8.10545     -2.4293 ppb        8.10545 333.65%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          32.7      17.753 µg/L        9.9333      17.753 ppb         9.9333  55.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.9     -27.274 µg/L       13.9191     -27.274 ppb       13.9191  51.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                14.0      0.0441 µg/L       0.01678      0.0441 ppb        0.01678  38.04%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.7      0.6404 µg/L       0.20334      0.6404 ppb        0.20334  31.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.3      15.902 µg/L        5.8494      15.902 ppb         5.8494  36.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -12.2     -0.6656 µg/L       0.86252     -0.6656 ppb        0.86252 129.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.3      11.368 µg/L        6.8544      11.368 ppb         6.8544  60.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.8      2.9928 µg/L       1.23316      2.9928 ppb        1.23316  41.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.6     -18.705 µg/L        3.2931     -18.705 ppb         3.2931  17.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.9     -3.8715 µg/L       2.11937     -3.8715 ppb        2.11937  54.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.3     -3.3549 µg/L      10.72815     -3.3549 ppb       10.72815 319.78%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      18.0      3.4306 µg/L       6.60295      3.4306 ppb        6.60295 192.47%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                11.2      0.8668 µg/L       0.51128      0.8668 ppb        0.51128  58.99%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.4     -0.6881 µg/L       1.56382     -0.6881 ppb        1.56382 227.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                21.4      0.1203 µg/L       0.01710      0.1203 ppb        0.01710  14.21%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                29.9      0.0678 µg/L       0.03845      0.0678 ppb        0.03845  56.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.6      3.8816 µg/L       8.37651      3.8816 ppb        8.37651 215.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 51.5      4.8363 µg/L       7.92219      4.8363 ppb        7.92219 163.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 24.2      0.2850 µg/L       0.04765      0.2850 ppb        0.04765  16.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -3.0     -0.0761 µg/L       0.11999     -0.0761 ppb        0.11999 157.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 05:12:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110928.3	110928.3	98.6	%			05:12:50
1	Al 396.153Radial†	10053.7	9964.5	5017.3	µg/L	5017.3	ppb	05:12:50
1	Ca 317.933Radial†	12906.6	12591.7	4998.3	µg/L	4998.3	ppb	05:13:11
1	Fe 238.204 Radial†	960.0	962.3	5070.9	µg/L	5070.9	ppb	05:13:11
1	K 766.490 Radial†	10152.8	9600.0	5205.1	µg/L	5205.1	ppb	05:12:50
1	Mg 279.077 IEC†	922.9	916.0	5085.3	µg/L	5085.3	ppb	05:13:11
1	Na 589.592 Radial†	39107.8	40358.8	11198	µg/L	11198	ppb	05:12:50
1	Sr 421.552†	86143.4	87412.3	492.39	µg/L	492.39	ppb	05:12:50
1	Sc 361.383	1994002.9	1994002.9	96.949	%			05:14:14
1	Y 371.029	1208577.2	1208577.2	96.504	%			05:14:14
1	Ag 328.068†	53405.7	55114.4	495.99	µg/L	495.99	ppb	05:14:20
1	As 188.979†	250.8	256.2	487.34	µg/L	487.34	ppb	05:14:41
1	B 249.677†	10742.3	10924.6	483.28	µg/L	483.28	ppb	05:14:20
1	Ba 233.527†	18711.2	19380.6	487.81	µg/L	487.81	ppb	05:14:20
1	Be 313.107†	766540.2	787047.9	497.69	µg/L	497.69	ppb	05:14:14
1	Cd 226.502†	17668.7	18325.6	484.75	µg/L	484.75	ppb	05:14:20
1	Co 228.616†	9792.7	10172.5	489.28	µg/L	489.28	ppb	05:14:20
1	Cr 267.716†	22520.6	23352.0	487.24	µg/L	487.24	ppb	05:14:20
1	Cu 324.752†	71406.0	70268.5	495.46	µg/L	495.46	ppb	05:14:20
1	Mn 257.610†	152416.7	157435.2	500.26	µg/L	500.26	ppb	05:14:14
1	Mo 202.031†	4219.6	4360.2	486.63	µg/L	486.63	ppb	05:14:41
1	Ni 231.604†	8980.5	8963.7	488.33	µg/L	488.33	ppb	05:14:20
1	P 214.914†	1310.4	1145.6	2432.8	µg/L	2432.8	ppb	05:14:41
1	Pb 220.353†	1928.9	1935.5	491.34	µg/L	491.34	ppb	05:14:41
1	S 181.975 Axial†	358.1	345.3	1772.5	µg/L	1772.5	ppb	05:14:41
1	Sb 206.836†	503.4	498.6	493.38	µg/L	493.38	ppb	05:14:41
1	Se 196.026†	354.4	351.5	514.06	µg/L	514.06	ppb	05:14:41
1	SiO2†	29013.8	27945.0	5336.5	µg/L	5336.5	ppb	05:14:20
1	Si 251.611†	31838.0	32490.1	2441.5	µg/L	2441.5	ppb	05:14:20
1	Sn 189.927†	983.7	992.2	486.47	µg/L	486.47	ppb	05:14:41
1	Ti 334.940†	218796.1	224961.7	498.37	µg/L	498.37	ppb	05:14:14
1	Tl 190.801†	295.1	325.8	493.98	µg/L	493.98	ppb	05:14:41
1	U 409.014†	5765.0	5267.2	493.82	µg/L	493.82	ppb	05:14:20
1	V 292.402†	41916.2	43327.1	493.05	µg/L	493.05	ppb	05:14:20
1	Zn 213.857†	18341.9	18368.9	488.23	µg/L	488.23	ppb	05:14:20
2	Sc RADIAL	110539.3	110539.3	98.3	%			05:13:16
2	Al 396.153Radial†	10112.8	10060.5	5065.5	µg/L	5065.5	ppb	05:13:16
2	Ca 317.933Radial†	12808.5	12538.0	4977.0	µg/L	4977.0	ppb	05:13:37
2	Fe 238.204 Radial†	956.8	962.4	5072.0	µg/L	5072.0	ppb	05:13:37
2	K 766.490 Radial†	10282.5	9768.2	5296.3	µg/L	5296.3	ppb	05:13:16
2	Mg 279.077 IEC†	931.7	928.2	5153.2	µg/L	5153.2	ppb	05:13:37
2	Na 589.592 Radial†	38692.0	40075.3	11119	µg/L	11119	ppb	05:13:16
2	Sr 421.552†	86894.8	88484.2	498.43	µg/L	498.43	ppb	05:13:16
2	Sc 361.383	1965054.8	1965054.8	95.542	%			05:14:48
2	Y 371.029	1190172.7	1190172.7	95.035	%			05:14:48
2	Ag 328.068†	53739.1	56274.9	506.42	µg/L	506.42	ppb	05:14:53
2	As 188.979†	249.0	258.1	490.89	µg/L	490.89	ppb	05:15:14
2	B 249.677†	10781.0	11128.4	492.33	µg/L	492.33	ppb	05:14:53
2	Ba 233.527†	18790.6	19748.0	497.06	µg/L	497.06	ppb	05:14:53
2	Be 313.107†	756517.2	788204.7	498.42	µg/L	498.42	ppb	05:14:48
2	Cd 226.502†	17731.3	18659.6	493.60	µg/L	493.60	ppb	05:14:53
2	Co 228.616†	9783.1	10311.3	495.97	µg/L	495.97	ppb	05:14:53
2	Cr 267.716†	22618.9	23797.1	496.53	µg/L	496.53	ppb	05:14:53
2	Cu 324.752†	71836.3	71803.8	506.26	µg/L	506.26	ppb	05:14:53
2	Mn 257.610†	150573.7	157822.1	501.49	µg/L	501.49	ppb	05:14:48
2	Mo 202.031†	4231.5	4436.9	495.17	µg/L	495.17	ppb	05:15:14
2	Ni 231.604†	9005.1	9125.9	497.16	µg/L	497.16	ppb	05:14:53
2	P 214.914†	1301.2	1155.9	2454.1	µg/L	2454.1	ppb	05:15:14
2	Pb 220.353†	1945.7	1982.4	503.23	µg/L	503.23	ppb	05:15:14

2	S 181.975 Axial†	344.8	336.9	1729.4 µg/L	1729.4 ppb	05:15:14
2	Sb 206.836†	505.8	508.8	503.45 µg/L	503.45 ppb	05:15:14
2	Se 196.026†	347.2	349.3	510.92 µg/L	510.92 ppb	05:15:14
2	SiO2†	29148.7	28527.1	5447.6 µg/L	5447.6 ppb	05:14:53
2	Si 251.611†	31990.4	33133.4	2490.1 µg/L	2490.1 ppb	05:14:53
2	Sn 189.927†	992.4	1016.2	498.17 µg/L	498.17 ppb	05:15:14
2	Ti 334.940†	216174.6	225542.4	499.66 µg/L	499.66 ppb	05:14:48
2	Tl 190.801†	297.0	332.3	503.83 µg/L	503.83 ppb	05:15:14
2	U 409.014†	5834.6	5427.6	508.89 µg/L	508.89 ppb	05:14:53
2	V 292.402†	42154.7	44213.6	503.13 µg/L	503.13 ppb	05:14:53
2	Zn 213.857†	18454.3	18765.2	498.79 µg/L	498.79 ppb	05:14:53
3	Sc RADIAL	109471.1	109471.1	97.3 %		05:13:42
3	Al 396.153Radial†	10017.7	10063.2	5067.1 µg/L	5067.1 ppb	05:13:42
3	Ca 317.933Radial†	12690.2	12543.6	4979.2 µg/L	4979.2 ppb	05:14:03
3	Fe 238.204 Radial†	949.2	964.0	5080.5 µg/L	5080.5 ppb	05:14:03
3	K 766.490 Radial†	10081.7	9663.9	5239.7 µg/L	5239.7 ppb	05:13:42
3	Mg 279.077 IEC†	921.1	926.6	5144.4 µg/L	5144.4 ppb	05:14:03
3	Na 589.592 Radial†	38073.4	39823.8	11050 µg/L	11050 ppb	05:13:42
3	Sr 421.552†	85843.0	88266.3	497.20 µg/L	497.20 ppb	05:13:42
3	Sc 361.383	1971880.6	1971880.6	95.874 %		05:15:21
3	Y 371.029	1194123.8	1194123.8	95.350 %		05:15:21
3	Ag 328.068†	53903.7	56251.9	506.21 µg/L	506.21 ppb	05:15:27
3	As 188.979†	252.3	260.7	495.79 µg/L	495.79 ppb	05:15:47
3	B 249.677†	10849.4	11160.7	493.76 µg/L	493.76 ppb	05:15:27
3	Ba 233.527†	18905.6	19799.9	498.36 µg/L	498.36 ppb	05:15:27
3	Be 313.107†	759370.2	788439.6	498.57 µg/L	498.57 ppb	05:15:21
3	Cd 226.502†	17797.0	18663.8	493.71 µg/L	493.71 ppb	05:15:27
3	Co 228.616†	9820.5	10314.9	496.13 µg/L	496.13 ppb	05:15:27
3	Cr 267.716†	22786.2	23889.6	498.45 µg/L	498.45 ppb	05:15:27
3	Cu 324.752†	72034.0	71749.8	505.89 µg/L	505.89 ppb	05:15:27
3	Mn 257.610†	151086.2	157811.2	501.46 µg/L	501.46 ppb	05:15:21
3	Mo 202.031†	4200.0	4388.6	489.79 µg/L	489.79 ppb	05:15:47
3	Ni 231.604†	9042.2	9131.9	497.49 µg/L	497.49 ppb	05:15:27
3	P 214.914†	1291.1	1140.7	2421.0 µg/L	2421.0 ppb	05:15:47
3	Pb 220.353†	1918.7	1947.1	494.29 µg/L	494.29 ppb	05:15:47
3	S 181.975 Axial†	325.8	315.8	1621.0 µg/L	1621.0 ppb	05:15:47
3	Sb 206.836†	500.7	501.7	496.32 µg/L	496.32 ppb	05:15:47
3	Se 196.026†	343.3	344.0	503.16 µg/L	503.16 ppb	05:15:47
3	SiO2†	29181.5	28455.7	5434.0 µg/L	5434.0 ppb	05:15:27
3	Si 251.611†	32056.3	33086.2	2486.8 µg/L	2486.8 ppb	05:15:27
3	Sn 189.927†	986.2	1006.2	493.27 µg/L	493.27 ppb	05:15:47
3	Ti 334.940†	216790.6	225401.7	499.35 µg/L	499.35 ppb	05:15:21
3	Tl 190.801†	297.1	331.3	502.34 µg/L	502.34 ppb	05:15:47
3	U 409.014†	5761.9	5330.7	499.78 µg/L	499.78 ppb	05:15:27
3	V 292.402†	42260.6	44171.4	502.60 µg/L	502.60 ppb	05:15:27
3	Zn 213.857†	18525.6	18772.8	498.99 µg/L	498.99 ppb	05:15:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1976979.5	96.122	%	0.7358				0.77%
Sc RADIAL	110312.9	98.1	%	0.67				0.68%
Y 371.029	1197624.5	95.630	%	0.7736				0.81%
Ag 328.068†	55880.4	502.87	µg/L	5.964	502.87	ppb	5.964	1.19%
QC value within limits for Ag 328.068 Recovery = 100.57%								
Al 396.153Radial†	10029.4	5050.0	µg/L	28.28	5050.0	ppb	28.28	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.00%								
As 188.979†	258.3	491.34	µg/L	4.241	491.34	ppb	4.241	0.86%
QC value within limits for As 188.979 Recovery = 98.27%								
B 249.677†	11071.2	489.79	µg/L	5.679	489.79	ppb	5.679	1.16%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	19642.8	494.41	µg/L	5.752	494.41	ppb	5.752	1.16%
QC value within limits for Ba 233.527 Recovery = 98.88%								
Be 313.107†	787897.4	498.23	µg/L	0.471	498.23	ppb	0.471	0.09%
QC value within limits for Be 313.107 Recovery = 99.65%								
Ca 317.933Radial†	12557.8	4984.9	µg/L	11.73	4984.9	ppb	11.73	0.24%
QC value within limits for Ca 317.933Radial Recovery = 99.70%								
Cd 226.502†	18549.6	490.69	µg/L	5.138	490.69	ppb	5.138	1.05%
QC value within limits for Cd 226.502 Recovery = 98.14%								
Co 228.616†	10266.2	493.79	µg/L	3.909	493.79	ppb	3.909	0.79%

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   QC value within limits for Co 228.616  Recovery = 98.76%
Cr 267.716†            23679.6      494.07 µg/L        5.997      494.07 ppb          5.997   1.21%
   QC value within limits for Cr 267.716  Recovery = 98.81%
Cu 324.752†            71274.1      502.54 µg/L        6.130      502.54 ppb          6.130   1.22%
   QC value within limits for Cu 324.752  Recovery = 100.51%
Fe 238.204 Radial†       962.9      5074.5 µg/L         5.29      5074.5 ppb           5.29   0.10%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.49%
K 766.490 Radial†       9677.4      5247.0 µg/L        46.03      5247.0 ppb          46.03   0.88%
   QC value within limits for K 766.490 Radial  Recovery = 104.94%
Mg 279.077 IEC†          923.6      5127.7 µg/L        36.94      5127.7 ppb          36.94   0.72%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.55%
Mn 257.610†           157689.5      501.07 µg/L        0.699      501.07 ppb          0.699   0.14%
   QC value within limits for Mn 257.610  Recovery = 100.21%
Mo 202.031†             4395.2      490.53 µg/L        4.320      490.53 ppb          4.320   0.88%
   QC value within limits for Mo 202.031  Recovery = 98.11%
Na 589.592 Radial†     40086.0       11122 µg/L         74.3       11122 ppb           74.3   0.67%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 111.22%
Ni 231.604†             9073.9      494.33 µg/L        5.199      494.33 ppb          5.199   1.05%
   QC value within limits for Ni 231.604  Recovery = 98.87%
P 214.914†              1147.4      2436.0 µg/L        16.78      2436.0 ppb          16.78   0.69%
   QC value within limits for P 214.914  Recovery = 97.44%
Pb 220.353†             1955.0      496.29 µg/L        6.192      496.29 ppb          6.192   1.25%
   QC value within limits for Pb 220.353  Recovery = 99.26%
S 181.975 Axial†         332.7      1707.7 µg/L        78.09      1707.7 ppb          78.09   4.57%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 170.77%
Sb 206.836†              503.0      497.72 µg/L        5.174      497.72 ppb          5.174   1.04%
   QC value within limits for Sb 206.836  Recovery = 99.54%
Se 196.026†              348.3      509.38 µg/L        5.612      509.38 ppb          5.612   1.10%
   QC value within limits for Se 196.026  Recovery = 101.88%
SiO2†                   28309.3      5406.0 µg/L        60.63      5406.0 ppb          60.63   1.12%
   QC value within limits for SiO2  Recovery = 101.09%
Si 251.611†             32903.3      2472.8 µg/L        27.15      2472.8 ppb          27.15   1.10%
   QC value within limits for Si 251.611  Recovery = 98.91%
Sn 189.927†             1004.9      492.64 µg/L        5.878      492.64 ppb          5.878   1.19%
   QC value within limits for Sn 189.927  Recovery = 98.53%
Sr 421.552†             88054.3      496.00 µg/L        3.191      496.00 ppb          3.191   0.64%
   QC value within limits for Sr 421.552  Recovery = 99.20%
Ti 334.940†            225301.9      499.13 µg/L        0.672      499.13 ppb          0.672   0.13%
   QC value within limits for Ti 334.940  Recovery = 99.83%
Tl 190.801†              329.8      500.05 µg/L        5.308      500.05 ppb          5.308   1.06%
   QC value within limits for Tl 190.801  Recovery = 100.01%
U 409.014†              5341.8      500.83 µg/L        7.588      500.83 ppb          7.588   1.52%
   QC value within limits for U 409.014  Recovery = 100.17%
V 292.402†              43904.0      499.59 µg/L        5.673      499.59 ppb          5.673   1.14%
   QC value within limits for V 292.402  Recovery = 99.92%
Zn 213.857†             18635.6      495.33 µg/L        6.152      495.33 ppb          6.152   1.24%
   QC value within limits for Zn 213.857  Recovery = 99.07%
QC Failed.  Continue with analysis.
```

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 05:15:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106486.4	106486.4	94.7	%			05:16:30
1	Al 396.153Radial†	164.7	-55.9	-28.240	µg/L	-28.240	ppb	05:16:30
1	Ca 317.933Radial†	463.4	-5.9	-2.3519	µg/L	-2.3519	ppb	05:16:51
1	Fe 238.204 Radial†	7.8	-2.9	-15.496	µg/L	-15.496	ppb	05:16:51
1	K 766.490 Radial†	992.3	353.3	191.57	µg/L	191.57	ppb	05:16:30
1	Mg 279.077 IEC†	14.5	-4.5	-25.057	µg/L	-25.057	ppb	05:16:51
1	Na 589.592 Radial†	1031.4	1793.4	497.59	µg/L	497.59	ppb	05:16:30
1	Sr 421.552†	-13.9	49.1	0.2766	µg/L	0.2766	ppb	05:16:30
1	Sc 361.383	1956069.2	1956069.2	95.105	%			05:17:52
1	Y 371.029	1190726.9	1190726.9	95.079	%			05:17:52
1	Ag 328.068†	-17.7	9.7	0.0863	µg/L	0.0863	ppb	05:17:58
1	As 188.979†	1.8	-0.6	-1.0929	µg/L	-1.0929	ppb	05:18:18
1	B 249.677†	168.4	21.4	0.9545	µg/L	0.9545	ppb	05:17:58
1	Ba 233.527†	-70.4	6.7	0.1678	µg/L	0.1678	ppb	05:18:18
1	Be 313.107†	3704.1	283.2	0.1790	µg/L	0.1790	ppb	05:17:58
1	Cd 226.502†	-98.0	-2.2	-0.0516	µg/L	-0.0516	ppb	05:18:18
1	Co 228.616†	-68.5	-0.3	-0.0133	µg/L	-0.0133	ppb	05:18:18
1	Cr 267.716†	-119.2	-2.6	-0.0541	µg/L	-0.0541	ppb	05:17:58
1	Cu 324.752†	3310.4	96.4	0.6752	µg/L	0.6752	ppb	05:17:58
1	Mn 257.610†	-179.4	34.0	0.1059	µg/L	0.1059	ppb	05:18:18
1	Mo 202.031†	-4.7	2.9	0.3258	µg/L	0.3258	ppb	05:18:18
1	Ni 231.604†	285.4	0.7	0.0359	µg/L	0.0359	ppb	05:18:18
1	P 214.914†	209.5	14.3	30.890	µg/L	30.890	ppb	05:18:18
1	Pb 220.353†	57.4	6.3	1.5811	µg/L	1.5811	ppb	05:18:18
1	S 181.975 Axial†	94.9	75.7	389.07	µg/L	389.07	ppb	05:18:18
1	Sb 206.836†	21.4	1.9	1.9186	µg/L	1.9186	ppb	05:18:18
1	Se 196.026†	12.4	-1.0	-1.4826	µg/L	-1.4826	ppb	05:18:18
1	SiO2†	1987.1	107.7	20.559	µg/L	20.559	ppb	05:17:58
1	Si 251.611†	407.2	78.5	5.9416	µg/L	5.9416	ppb	05:18:18
1	Sn 189.927†	20.6	-0.8	-0.3924	µg/L	-0.3924	ppb	05:18:18
1	Ti 334.940†	811.9	134.8	0.2989	µg/L	0.2989	ppb	05:17:58
1	Tl 190.801†	-18.5	2.0	3.0271	µg/L	3.0271	ppb	05:18:18
1	U 409.014†	720.5	78.3	7.3581	µg/L	7.3581	ppb	05:17:58
1	V 292.402†	-76.1	11.9	0.1472	µg/L	0.1472	ppb	05:17:58
1	Zn 213.857†	534.2	11.5	0.3090	µg/L	0.3090	ppb	05:18:18
2	Sc RADIAL	106211.8	106211.8	94.4	%			05:16:56
2	Al 396.153Radial†	175.9	-43.5	-21.993	µg/L	-21.993	ppb	05:16:56
2	Ca 317.933Radial†	441.9	-27.4	-10.885	µg/L	-10.885	ppb	05:17:16
2	Fe 238.204 Radial†	8.7	-1.9	-10.243	µg/L	-10.243	ppb	05:17:16
2	K 766.490 Radial†	1006.7	371.3	201.30	µg/L	201.30	ppb	05:16:56
2	Mg 279.077 IEC†	11.2	-8.0	-44.438	µg/L	-44.438	ppb	05:17:16
2	Na 589.592 Radial†	824.4	1577.0	437.56	µg/L	437.56	ppb	05:16:56
2	Sr 421.552†	-10.2	53.0	0.2987	µg/L	0.2987	ppb	05:16:56
2	Sc 361.383	1962817.7	1962817.7	95.433	%			05:18:24
2	Y 371.029	1193988.9	1193988.9	95.339	%			05:18:24
2	Ag 328.068†	-7.0	21.0	0.1853	µg/L	0.1853	ppb	05:18:30
2	As 188.979†	2.9	0.6	1.1192	µg/L	1.1192	ppb	05:18:50
2	B 249.677†	151.1	2.6	0.1197	µg/L	0.1197	ppb	05:18:30
2	Ba 233.527†	-66.5	11.0	0.2761	µg/L	0.2761	ppb	05:18:50
2	Be 313.107†	3684.8	249.7	0.1578	µg/L	0.1578	ppb	05:18:30
2	Cd 226.502†	-96.7	-0.4	-0.0091	µg/L	-0.0091	ppb	05:18:50
2	Co 228.616†	-74.9	-6.8	-0.3262	µg/L	-0.3262	ppb	05:18:50
2	Cr 267.716†	-121.4	-4.4	-0.0926	µg/L	-0.0926	ppb	05:18:30
2	Cu 324.752†	3332.1	107.2	0.7519	µg/L	0.7519	ppb	05:18:30
2	Mn 257.610†	-165.7	49.0	0.1543	µg/L	0.1543	ppb	05:18:50
2	Mo 202.031†	-4.5	3.2	0.3612	µg/L	0.3612	ppb	05:18:50
2	Ni 231.604†	289.5	3.9	0.2142	µg/L	0.2142	ppb	05:18:50
2	P 214.914†	208.3	12.2	26.465	µg/L	26.465	ppb	05:18:50
2	Pb 220.353†	71.5	20.8	5.2711	µg/L	5.2711	ppb	05:18:50

2	S 181.975 Axial†	90.7	71.0	364.86 µg/L	364.86 ppb	05:18:50
2	Sb 206.836†	20.2	0.6	0.5978 µg/L	0.5978 ppb	05:18:50
2	Se 196.026†	6.5	-7.3	-10.623 µg/L	-10.623 ppb	05:18:50
2	SiO2†	2029.7	145.1	27.710 µg/L	27.710 ppb	05:18:30
2	Si 251.611†	410.4	80.4	6.0367 µg/L	6.0367 ppb	05:18:50
2	Sn 189.927†	22.7	1.4	0.6583 µg/L	0.6583 ppb	05:18:50
2	Ti 334.940†	814.1	134.2	0.2981 µg/L	0.2981 ppb	05:18:30
2	Tl 190.801†	-14.0	6.8	10.216 µg/L	10.216 ppb	05:18:50
2	U 409.014†	659.7	12.0	1.1305 µg/L	1.1305 ppb	05:18:30
2	V 292.402†	-106.7	-19.9	-0.2205 µg/L	-0.2205 ppb	05:18:30
2	Zn 213.857†	527.1	2.2	0.0579 µg/L	0.0579 ppb	05:18:50
3	Sc RADIAL	106409.1	106409.1	94.6 %		05:17:22
3	Al 396.153Radial†	208.8	-9.1	-4.6269 µg/L	-4.6269 ppb	05:17:22
3	Ca 317.933Radial†	450.4	-19.4	-7.6860 µg/L	-7.6860 ppb	05:17:42
3	Fe 238.204 Radial†	10.3	-0.3	-1.6326 µg/L	-1.6326 ppb	05:17:42
3	K 766.490 Radial†	977.6	338.6	183.57 µg/L	183.57 ppb	05:17:22
3	Mg 279.077 IEC†	15.6	-3.3	-18.527 µg/L	-18.527 ppb	05:17:42
3	Na 589.592 Radial†	758.0	1505.2	417.63 µg/L	417.63 ppb	05:17:22
3	Sr 421.552†	-55.1	5.6	0.0314 µg/L	0.0314 ppb	05:17:22
3	Sc 361.383	1961134.5	1961134.5	95.351 %		05:18:56
3	Y 371.029	1194043.2	1194043.2	95.344 %		05:18:56
3	Ag 328.068†	-26.3	0.7	0.0072 µg/L	0.0072 ppb	05:19:02
3	As 188.979†	1.1	-1.3	-2.4914 µg/L	-2.4914 ppb	05:19:22
3	B 249.677†	151.6	3.3	0.1466 µg/L	0.1466 ppb	05:19:02
3	Ba 233.527†	-73.3	3.8	0.0963 µg/L	0.0963 ppb	05:19:22
3	Be 313.107†	3690.3	258.7	0.1635 µg/L	0.1635 ppb	05:19:02
3	Cd 226.502†	-86.4	10.3	0.2695 µg/L	0.2695 ppb	05:19:22
3	Co 228.616†	-84.9	-17.3	-0.8317 µg/L	-0.8317 ppb	05:19:22
3	Cr 267.716†	-74.2	44.9	0.9350 µg/L	0.9350 ppb	05:19:02
3	Cu 324.752†	3296.8	73.2	0.5146 µg/L	0.5146 ppb	05:19:02
3	Mn 257.610†	-161.5	53.3	0.1689 µg/L	0.1689 ppb	05:19:22
3	Mo 202.031†	-2.6	5.2	0.5816 µg/L	0.5816 ppb	05:19:22
3	Ni 231.604†	272.6	-13.6	-0.7387 µg/L	-0.7387 ppb	05:19:22
3	P 214.914†	199.4	3.1	6.6844 µg/L	6.6844 ppb	05:19:22
3	Pb 220.353†	63.6	12.6	3.1918 µg/L	3.1918 ppb	05:19:22
3	S 181.975 Axial†	88.3	68.5	352.12 µg/L	352.12 ppb	05:19:22
3	Sb 206.836†	22.0	2.5	2.4880 µg/L	2.4880 ppb	05:19:22
3	Se 196.026†	14.4	1.0	1.5253 µg/L	1.5253 ppb	05:19:22
3	SiO2†	1980.4	95.2	18.188 µg/L	18.188 ppb	05:19:02
3	Si 251.611†	412.3	82.7	6.2930 µg/L	6.2930 ppb	05:19:22
3	Sn 189.927†	18.9	-2.6	-1.2712 µg/L	-1.2712 ppb	05:19:22
3	Ti 334.940†	831.2	152.8	0.3392 µg/L	0.3392 ppb	05:19:02
3	Tl 190.801†	-16.7	3.9	5.8411 µg/L	5.8411 ppb	05:19:22
3	U 409.014†	611.4	-38.0	-3.5673 µg/L	-3.5673 ppb	05:19:02
3	V 292.402†	-79.7	8.3	0.0922 µg/L	0.0922 ppb	05:19:02
3	Zn 213.857†	531.1	6.9	0.1877 µg/L	0.1877 ppb	05:19:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1960007.1	95.297	%	0.1708				0.18%
Sc RADIAL	106369.1	94.6	%	0.13				0.13%
Y 371.029	1192919.7	95.254	%	0.1516				0.16%
Ag 328.068†	10.5	0.0929	µg/L	0.08923	0.0929	ppb	0.08923	96.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-36.2	-18.287	µg/L	12.2350	-18.287	ppb	12.2350	66.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.8217	µg/L	1.82053	-0.8217	ppb	1.82053	221.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	9.1	0.4069	µg/L	0.47438	0.4069	ppb	0.47438	116.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.2	0.1801	µg/L	0.09050	0.1801	ppb	0.09050	50.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	263.9	0.1668	µg/L	0.01098	0.1668	ppb	0.01098	6.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-17.6	-6.9741	µg/L	4.31065	-6.9741	ppb	4.31065	61.81%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.6	0.0696	µg/L	0.17443	0.0696	ppb	0.17443	250.52%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.1	-0.3904	µg/L	0.41294	-0.3904	ppb	0.41294	105.78%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                12.6      0.2628 µg/L       0.58251      0.2628 ppb        0.58251 221.69%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                92.3      0.6472 µg/L       0.12113      0.6472 ppb        0.12113  18.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -9.1240 µg/L       6.99920     -9.1240 ppb        6.99920  76.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         354.4      192.14 µg/L         8.877      192.14 ppb          8.877   4.62%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -5.3     -29.341 µg/L       13.4765     -29.341 ppb        13.4765  45.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                45.4      0.1431 µg/L       0.03298      0.1431 ppb        0.03298  23.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4229 µg/L       0.13862      0.4229 ppb        0.13862  32.78%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       1625.2      450.93 µg/L        41.623      450.93 ppb         41.623   9.23%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.0     -0.1628 µg/L       0.50661     -0.1628 ppb        0.50661 311.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.9      21.347 µg/L       12.8892      21.347 ppb        12.8892  60.38%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                13.2      3.3480 µg/L       1.84997      3.3480 ppb        1.84997  55.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           71.8      368.68 µg/L        18.772      368.68 ppb         18.772   5.09%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.7      1.6681 µg/L       0.96971      1.6681 ppb        0.96971  58.13%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.4     -3.5267 µg/L       6.32675     -3.5267 ppb        6.32675 179.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     116.0      22.152 µg/L        4.9570      22.152 ppb         4.9570  22.38%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                80.5      6.0905 µg/L       0.18177      6.0905 ppb        0.18177   2.98%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.3351 µg/L       0.96604     -0.3351 ppb        0.96604 288.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                35.9      0.2022 µg/L       0.14834      0.2022 ppb        0.14834  73.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               140.6      0.3121 µg/L       0.02351      0.3121 ppb        0.02351   7.53%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.2      6.3615 µg/L       3.62274      6.3615 ppb        3.62274  56.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 17.5      1.6404 µg/L       5.48051      1.6404 ppb        5.48051 334.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  0.1      0.0063 µg/L       0.19833      0.0063 ppb        0.19833 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 6.8      0.1848 µg/L       0.12559      0.1848 ppb        0.12559  67.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 05:50:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106902.1	106902.1	95.0	%			05:50:56
1	Al 396.153Radial†	10678.3	11005.7	5542.8	µg/L	5542.8	ppb	05:50:56
1	Ca 317.933Radial†	13120.8	13310.0	5283.5	µg/L	5283.5	ppb	05:51:17
1	Fe 238.204 Radial†	972.4	1011.9	5332.6	µg/L	5332.6	ppb	05:51:17
1	K 766.490 Radial†	9761.0	9575.4	5191.8	µg/L	5191.8	ppb	05:50:56
1	Mg 279.077 IEC†	965.2	995.7	5527.7	µg/L	5527.7	ppb	05:51:17
1	Na 589.592 Radial†	35394.6	37945.3	10528	µg/L	10528	ppb	05:50:56
1	Sr 421.552†	85748.5	90286.5	508.58	µg/L	508.58	ppb	05:50:56
1	Sc 361.383	1937977.1	1937977.1	94.225	%			05:52:20
1	Y 371.029	1173517.6	1173517.6	93.705	%			05:52:20
1	Ag 328.068†	53958.3	57293.4	515.60	µg/L	515.60	ppb	05:52:26
1	As 188.979†	258.0	271.3	515.98	µg/L	515.98	ppb	05:52:46
1	B 249.677†	10833.7	11342.0	501.72	µg/L	501.72	ppb	05:52:26
1	Ba 233.527†	18966.2	20209.2	508.66	µg/L	508.66	ppb	05:52:26
1	Be 313.107†	761122.3	804155.4	508.51	µg/L	508.51	ppb	05:52:20
1	Cd 226.502†	17859.4	19054.8	504.05	µg/L	504.05	ppb	05:52:26
1	Co 228.616†	9903.7	10582.4	509.01	µg/L	509.01	ppb	05:52:26
1	Cr 267.716†	22727.3	24242.9	505.83	µg/L	505.83	ppb	05:52:26
1	Cu 324.752†	71963.3	72989.2	514.66	µg/L	514.66	ppb	05:52:26
1	Mn 257.610†	151504.1	161011.5	511.65	µg/L	511.65	ppb	05:52:20
1	Mo 202.031†	4251.1	4519.5	504.41	µg/L	504.41	ppb	05:52:46
1	Ni 231.604†	9092.7	9350.6	509.40	µg/L	509.40	ppb	05:52:26
1	P 214.914†	1312.6	1187.1	2520.9	µg/L	2520.9	ppb	05:52:46
1	Pb 220.353†	1955.9	2021.6	513.23	µg/L	513.23	ppb	05:52:46
1	S 181.975 Axial†	237.9	228.5	1172.4	µg/L	1172.4	ppb	05:52:46
1	Sb 206.836†	503.6	513.9	508.44	µg/L	508.44	ppb	05:52:46
1	Se 196.026†	344.8	351.8	514.61	µg/L	514.61	ppb	05:52:46
1	SiO2†	29052.1	28850.9	5509.5	µg/L	5509.5	ppb	05:52:26
1	Si 251.611†	32002.9	33614.6	2526.0	µg/L	2526.0	ppb	05:52:26
1	Sn 189.927†	1002.3	1041.3	510.57	µg/L	510.57	ppb	05:52:46
1	Ti 334.940†	217104.7	229690.9	508.84	µg/L	508.84	ppb	05:52:20
1	Tl 190.801†	296.9	336.5	510.17	µg/L	510.17	ppb	05:52:46
1	U 409.014†	5907.5	5590.4	524.13	µg/L	524.13	ppb	05:52:26
1	V 292.402†	42396.5	45086.7	513.08	µg/L	513.08	ppb	05:52:26
1	Zn 213.857†	18509.9	19094.1	507.48	µg/L	507.48	ppb	05:52:26
2	Sc RADIAL	107824.3	107824.3	95.9	%			05:51:22
2	Al 396.153Radial†	10560.6	10786.7	5432.3	µg/L	5432.3	ppb	05:51:22
2	Ca 317.933Radial†	13046.4	13114.2	5205.8	µg/L	5205.8	ppb	05:51:43
2	Fe 238.204 Radial†	971.3	1002.1	5280.8	µg/L	5280.8	ppb	05:51:43
2	K 766.490 Radial†	9814.6	9543.6	5174.5	µg/L	5174.5	ppb	05:51:22
2	Mg 279.077 IEC†	970.0	992.1	5507.4	µg/L	5507.4	ppb	05:51:43
2	Na 589.592 Radial†	35769.6	38018.1	10549	µg/L	10549	ppb	05:51:22
2	Sr 421.552†	86640.1	90444.9	509.47	µg/L	509.47	ppb	05:51:22
2	Sc 361.383	1947869.6	1947869.6	94.706	%			05:52:53
2	Y 371.029	1179996.1	1179996.1	94.222	%			05:52:53
2	Ag 328.068†	54430.7	57501.4	517.46	µg/L	517.46	ppb	05:52:59
2	As 188.979†	251.9	263.5	501.10	µg/L	501.10	ppb	05:53:19
2	B 249.677†	10895.3	11348.6	502.03	µg/L	502.03	ppb	05:52:59
2	Ba 233.527†	19096.3	20244.3	509.55	µg/L	509.55	ppb	05:52:59
2	Be 313.107†	762973.1	802007.4	507.15	µg/L	507.15	ppb	05:52:53
2	Cd 226.502†	17988.3	19094.6	505.10	µg/L	505.10	ppb	05:52:59
2	Co 228.616†	9973.7	10602.9	509.99	µg/L	509.99	ppb	05:52:59
2	Cr 267.716†	22922.1	24326.0	507.57	µg/L	507.57	ppb	05:52:59
2	Cu 324.752†	72550.5	73221.4	516.28	µg/L	516.28	ppb	05:52:59
2	Mn 257.610†	151702.9	160404.9	509.71	µg/L	509.71	ppb	05:52:53
2	Mo 202.031†	4254.2	4499.9	502.22	µg/L	502.22	ppb	05:53:19
2	Ni 231.604†	9109.9	9319.7	507.72	µg/L	507.72	ppb	05:52:59
2	P 214.914†	1314.2	1181.7	2508.9	µg/L	2508.9	ppb	05:53:19
2	Pb 220.353†	1948.2	2003.0	508.49	µg/L	508.49	ppb	05:53:19

2	S 181.975 Axial†	238.6	227.9	1169.5 µg/L	1169.5 ppb	05:53:19
2	Sb 206.836†	508.0	515.9	510.38 µg/L	510.38 ppb	05:53:19
2	Se 196.026†	349.1	354.5	518.48 µg/L	518.48 ppb	05:53:19
2	SiO2†	29350.9	29009.8	5539.8 µg/L	5539.8 ppb	05:52:59
2	Si 251.611†	32270.3	33724.4	2534.8 µg/L	2534.8 ppb	05:52:59
2	Sn 189.927†	993.1	1026.1	503.15 µg/L	503.15 ppb	05:53:19
2	Ti 334.940†	217691.5	229140.3	507.62 µg/L	507.62 ppb	05:52:53
2	Tl 190.801†	294.0	331.9	503.17 µg/L	503.17 ppb	05:53:19
2	U 409.014†	5907.2	5558.1	521.11 µg/L	521.11 ppb	05:52:59
2	V 292.402†	42693.0	45171.2	514.01 µg/L	514.01 ppb	05:52:59
2	Zn 213.857†	18696.3	19191.1	510.10 µg/L	510.10 ppb	05:52:59
3	Sc RADIAL	106612.4	106612.4	94.8 %		05:51:48
3	Al 396.153Radial†	10397.3	10739.7	5408.5 µg/L	5408.5 ppb	05:51:48
3	Ca 317.933Radial†	12951.9	13169.3	5227.6 µg/L	5227.6 ppb	05:52:09
3	Fe 238.204 Radial†	969.9	1012.1	5333.4 µg/L	5333.4 ppb	05:52:09
3	K 766.490 Radial†	9764.1	9606.6	5208.7 µg/L	5208.7 ppb	05:51:48
3	Mg 279.077 IEC†	962.5	995.7	5527.2 µg/L	5527.2 ppb	05:52:09
3	Na 589.592 Radial†	35497.1	38154.7	10586 µg/L	10586 ppb	05:51:48
3	Sr 421.552†	85727.1	90509.1	509.83 µg/L	509.83 ppb	05:51:48
3	Sc 361.383	1938192.0	1938192.0	94.236 %		05:53:27
3	Y 371.029	1173788.6	1173788.6	93.726 %		05:53:27
3	Ag 328.068†	54127.1	57466.2	517.16 µg/L	517.16 ppb	05:53:32
3	As 188.979†	259.1	272.5	518.30 µg/L	518.30 ppb	05:53:53
3	B 249.677†	10834.0	11341.0	501.68 µg/L	501.68 ppb	05:53:32
3	Ba 233.527†	18969.4	20210.3	508.69 µg/L	508.69 ppb	05:53:32
3	Be 313.107†	760643.0	803557.2	508.13 µg/L	508.13 ppb	05:53:27
3	Cd 226.502†	17903.2	19099.2	505.22 µg/L	505.22 ppb	05:53:32
3	Co 228.616†	9893.9	10570.8	508.45 µg/L	508.45 ppb	05:53:32
3	Cr 267.716†	22820.0	24338.6	507.83 µg/L	507.83 ppb	05:53:32
3	Cu 324.752†	72387.0	73430.4	517.76 µg/L	517.76 ppb	05:53:32
3	Mn 257.610†	151317.9	160796.1	510.96 µg/L	510.96 ppb	05:53:27
3	Mo 202.031†	4236.6	4503.6	502.63 µg/L	502.63 ppb	05:53:53
3	Ni 231.604†	9072.4	9328.0	508.17 µg/L	508.17 ppb	05:53:32
3	P 214.914†	1301.8	1175.4	2495.0 µg/L	2495.0 ppb	05:53:53
3	Pb 220.353†	1931.8	1995.8	506.66 µg/L	506.66 ppb	05:53:53
3	S 181.975 Axial†	237.8	228.3	1171.5 µg/L	1171.5 ppb	05:53:53
3	Sb 206.836†	500.9	511.0	505.55 µg/L	505.55 ppb	05:53:53
3	Se 196.026†	351.0	358.3	524.10 µg/L	524.10 ppb	05:53:53
3	SiO2†	29219.5	29025.0	5542.7 µg/L	5542.7 ppb	05:53:32
3	Si 251.611†	32183.2	33802.1	2540.6 µg/L	2540.6 ppb	05:53:32
3	Sn 189.927†	991.9	1030.1	505.09 µg/L	505.09 ppb	05:53:53
3	Ti 334.940†	217384.6	229962.3	509.44 µg/L	509.44 ppb	05:53:27
3	Tl 190.801†	298.2	337.9	512.27 µg/L	512.27 ppb	05:53:53
3	U 409.014†	5929.2	5612.6	526.22 µg/L	526.22 ppb	05:53:32
3	V 292.402†	42527.3	45220.5	514.58 µg/L	514.58 ppb	05:53:32
3	Zn 213.857†	18580.2	19166.5	509.43 µg/L	509.43 ppb	05:53:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941346.3	94.389	%	0.2747				0.29%
Sc RADIAL	107112.9	95.2	%	0.56				0.59%
Y 371.029	1175767.4	93.884	%	0.2926				0.31%
Ag 328.068†	57420.3	516.74	µg/L	0.997	516.74	ppb	0.997	0.19%
QC value within limits for Ag 328.068 Recovery = 103.35%								
Al 396.153Radial†	10844.0	5461.2	µg/L	71.69	5461.2	ppb	71.69	1.31%
QC value within limits for Al 396.153Radial Recovery = 109.22%								
As 188.979†	269.1	511.79	µg/L	9.332	511.79	ppb	9.332	1.82%
QC value within limits for As 188.979 Recovery = 102.36%								
B 249.677†	11343.9	501.81	µg/L	0.193	501.81	ppb	0.193	0.04%
QC value within limits for B 249.677 Recovery = 100.36%								
Ba 233.527†	20221.3	508.97	µg/L	0.501	508.97	ppb	0.501	0.10%
QC value within limits for Ba 233.527 Recovery = 101.79%								
Be 313.107†	803240.0	507.93	µg/L	0.701	507.93	ppb	0.701	0.14%
QC value within limits for Be 313.107 Recovery = 101.59%								
Ca 317.933Radial†	13197.8	5238.9	µg/L	40.08	5238.9	ppb	40.08	0.76%
QC value within limits for Ca 317.933Radial Recovery = 104.78%								
Cd 226.502†	19082.9	504.79	µg/L	0.645	504.79	ppb	0.645	0.13%
QC value within limits for Cd 226.502 Recovery = 100.96%								
Co 228.616†	10585.4	509.15	µg/L	0.783	509.15	ppb	0.783	0.15%

```
   QC value within limits for Co 228.616  Recovery = 101.83%
Cr 267.716†            24302.5      507.08 µg/L        1.084      507.08 ppb         1.084   0.21%
   QC value within limits for Cr 267.716  Recovery = 101.42%
Cu 324.752†            73213.7      516.24 µg/L        1.552      516.24 ppb         1.552   0.30%
   QC value within limits for Cu 324.752  Recovery = 103.25%
Fe 238.204 Radial†      1008.7      5315.6 µg/L       30.11      5315.6 ppb        30.11   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.31%
K 766.490 Radial†       9575.2      5191.6 µg/L       17.10      5191.6 ppb        17.10   0.33%
   QC value within limits for K 766.490 Radial  Recovery = 103.83%
Mg 279.077 IEC†          994.5      5520.8 µg/L       11.58      5520.8 ppb        11.58   0.21%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 110.42%
Mn 257.610†           160737.5      510.77 µg/L        0.979      510.77 ppb         0.979   0.19%
   QC value within limits for Mn 257.610  Recovery = 102.15%
Mo 202.031†             4507.7      503.09 µg/L        1.163      503.09 ppb         1.163   0.23%
   QC value within limits for Mo 202.031  Recovery = 100.62%
Na 589.592 Radial†     38039.4       10554 µg/L         29.5       10554 ppb         29.5   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 105.54%
Ni 231.604†             9332.7      508.43 µg/L        0.871      508.43 ppb         0.871   0.17%
   QC value within limits for Ni 231.604  Recovery = 101.69%
P 214.914†              1181.4      2508.3 µg/L       12.94      2508.3 ppb        12.94   0.52%
   QC value within limits for P 214.914  Recovery = 100.33%
Pb 220.353†             2006.8      509.46 µg/L        3.388      509.46 ppb         3.388   0.67%
   QC value within limits for Pb 220.353  Recovery = 101.89%
S 181.975 Axial†         228.2      1171.1 µg/L        1.49      1171.1 ppb         1.49   0.13%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 117.11%
Sb 206.836†              513.6      508.12 µg/L        2.429      508.12 ppb         2.429   0.48%
   QC value within limits for Sb 206.836  Recovery = 101.62%
Se 196.026†              354.9      519.07 µg/L        4.771      519.07 ppb         4.771   0.92%
   QC value within limits for Se 196.026  Recovery = 103.81%
SiO2†                  28961.9      5530.7 µg/L       18.42      5530.7 ppb        18.42   0.33%
   QC value within limits for SiO2  Recovery = 103.43%
Si 251.611†            33713.7      2533.8 µg/L        7.34      2533.8 ppb         7.34   0.29%
   QC value within limits for Si 251.611  Recovery = 101.35%
Sn 189.927†             1032.5      506.27 µg/L        3.852      506.27 ppb         3.852   0.76%
   QC value within limits for Sn 189.927  Recovery = 101.25%
Sr 421.552†            90413.5      509.29 µg/L        0.645      509.29 ppb         0.645   0.13%
   QC value within limits for Sr 421.552  Recovery = 101.86%
Ti 334.940†           229597.8      508.63 µg/L        0.927      508.63 ppb         0.927   0.18%
   QC value within limits for Ti 334.940  Recovery = 101.73%
Tl 190.801†              335.4      508.54 µg/L        4.762      508.54 ppb         4.762   0.94%
   QC value within limits for Tl 190.801  Recovery = 101.71%
U 409.014†              5587.0      523.82 µg/L        2.568      523.82 ppb         2.568   0.49%
   QC value within limits for U 409.014  Recovery = 104.76%
V 292.402†             45159.5      513.89 µg/L        0.757      513.89 ppb         0.757   0.15%
   QC value within limits for V 292.402  Recovery = 102.78%
Zn 213.857†            19150.6      509.00 µg/L        1.357      509.00 ppb         1.357   0.27%
   QC value within limits for Zn 213.857  Recovery = 101.80%
QC Failed.  Continue with analysis.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 05:54:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105233.3	105233.3	93.6	%			05:54:34
1	Al 396.153Radial†	364.1	159.3	80.497	µg/L	80.497	ppb	05:54:34
1	Ca 317.933Radial†	564.6	108.0	42.886	µg/L	42.886	ppb	05:54:54
1	Fe 238.204 Radial†	16.4	6.4	33.426	µg/L	33.426	ppb	05:54:54
1	K 766.490 Radial†	756.8	114.1	61.846	µg/L	61.846	ppb	05:54:34
1	Mg 279.077 IEC†	31.5	13.8	76.643	µg/L	76.643	ppb	05:54:54
1	Na 589.592 Radial†	-345.0	335.2	93.011	µg/L	93.011	ppb	05:54:34
1	Sr 421.552†	-43.6	17.2	0.0970	µg/L	0.0970	ppb	05:54:34
1	Sc 361.383	1937519.7	1937519.7	94.203	%			05:55:56
1	Y 371.029	1180395.0	1180395.0	94.254	%			05:55:56
1	Ag 328.068†	-48.1	-22.7	-0.2002	µg/L	-0.2002	ppb	05:56:02
1	As 188.979†	2.7	0.4	0.7145	µg/L	0.7145	ppb	05:56:22
1	B 249.677†	152.9	6.6	0.2828	µg/L	0.2828	ppb	05:56:22
1	Ba 233.527†	-78.9	-3.1	-0.0767	µg/L	-0.0767	ppb	05:56:22
1	Be 313.107†	3708.0	324.7	0.2053	µg/L	0.2053	ppb	05:56:02
1	Cd 226.502†	-86.6	9.0	0.2402	µg/L	0.2402	ppb	05:56:22
1	Co 228.616†	-74.6	-7.5	-0.3605	µg/L	-0.3605	ppb	05:56:22
1	Cr 267.716†	-103.0	13.4	0.2794	µg/L	0.2794	ppb	05:56:02
1	Cu 324.752†	3168.2	-21.2	-0.1417	µg/L	-0.1417	ppb	05:56:02
1	Mn 257.610†	-183.7	27.7	0.0920	µg/L	0.0920	ppb	05:56:22
1	Mo 202.031†	-2.3	5.5	0.6160	µg/L	0.6160	ppb	05:56:22
1	Ni 231.604†	283.7	1.8	0.0969	µg/L	0.0969	ppb	05:56:22
1	P 214.914†	217.0	24.4	53.006	µg/L	53.006	ppb	05:56:22
1	Pb 220.353†	61.8	11.5	2.9238	µg/L	2.9238	ppb	05:56:22
1	S 181.975 Axial†	47.6	26.5	136.20	µg/L	136.20	ppb	05:56:22
1	Sb 206.836†	19.4	0.0	0.0108	µg/L	0.0108	ppb	05:56:22
1	Se 196.026†	15.0	1.9	2.6964	µg/L	2.6964	ppb	05:56:22
1	SiO2†	1977.1	117.1	22.353	µg/L	22.353	ppb	05:56:02
1	Si 251.611†	368.8	41.9	3.1239	µg/L	3.1239	ppb	05:56:22
1	Sn 189.927†	23.0	2.0	0.9948	µg/L	0.9948	ppb	05:56:22
1	Ti 334.940†	808.5	139.4	0.3065	µg/L	0.3065	ppb	05:56:02
1	Tl 190.801†	-19.6	0.6	0.8882	µg/L	0.8882	ppb	05:56:22
1	U 409.014†	710.1	74.6	6.9990	µg/L	6.9990	ppb	05:56:02
1	V 292.402†	-86.0	0.6	0.0254	µg/L	0.0254	ppb	05:56:02
1	Zn 213.857†	529.2	11.6	0.3061	µg/L	0.3061	ppb	05:56:22
2	Sc RADIAL	105934.7	105934.7	94.2	%			05:55:00
2	Al 396.153Radial†	239.7	24.7	12.440	µg/L	12.440	ppb	05:55:00
2	Ca 317.933Radial†	545.9	84.2	33.408	µg/L	33.408	ppb	05:55:20
2	Fe 238.204 Radial†	15.5	5.3	27.628	µg/L	27.628	ppb	05:55:20
2	K 766.490 Radial†	740.3	91.2	49.422	µg/L	49.422	ppb	05:55:00
2	Mg 279.077 IEC†	26.6	8.4	46.347	µg/L	46.347	ppb	05:55:20
2	Na 589.592 Radial†	-350.1	332.2	92.168	µg/L	92.168	ppb	05:55:00
2	Sr 421.552†	-31.7	30.1	0.1694	µg/L	0.1694	ppb	05:55:00
2	Sc 361.383	1940159.6	1940159.6	94.332	%			05:56:28
2	Y 371.029	1180719.9	1180719.9	94.280	%			05:56:28
2	Ag 328.068†	-18.2	9.0	0.0828	µg/L	0.0828	ppb	05:56:34
2	As 188.979†	4.8	2.6	4.8782	µg/L	4.8782	ppb	05:56:55
2	B 249.677†	151.2	4.5	0.1930	µg/L	0.1930	ppb	05:56:55
2	Ba 233.527†	-85.3	-9.8	-0.2455	µg/L	-0.2455	ppb	05:56:55
2	Be 313.107†	3635.8	242.7	0.1534	µg/L	0.1534	ppb	05:56:34
2	Cd 226.502†	-94.8	0.3	0.0087	µg/L	0.0087	ppb	05:56:55
2	Co 228.616†	-63.2	4.8	0.2306	µg/L	0.2306	ppb	05:56:55
2	Cr 267.716†	-89.1	28.3	0.5897	µg/L	0.5897	ppb	05:56:34
2	Cu 324.752†	3206.9	15.2	0.1131	µg/L	0.1131	ppb	05:56:34
2	Mn 257.610†	-180.0	31.9	0.1046	µg/L	0.1046	ppb	05:56:55
2	Mo 202.031†	2.2	10.2	1.1422	µg/L	1.1422	ppb	05:56:55
2	Ni 231.604†	295.6	14.0	0.7629	µg/L	0.7629	ppb	05:56:55
2	P 214.914†	205.0	11.3	24.484	µg/L	24.484	ppb	05:56:55
2	Pb 220.353†	68.0	18.0	4.5542	µg/L	4.5542	ppb	05:56:55

2	S 181.975 Axial†	50.6	29.6	151.87 µg/L	151.87 ppb	05:56:55
2	Sb 206.836†	22.7	3.5	3.5006 µg/L	3.5006 ppb	05:56:55
2	Se 196.026†	25.3	12.7	18.468 µg/L	18.468 ppb	05:56:55
2	SiO2†	1992.2	130.2	24.867 µg/L	24.867 ppb	05:56:34
2	Si 251.611†	371.1	43.8	3.2454 µg/L	3.2454 ppb	05:56:55
2	Sn 189.927†	24.1	3.0	1.5032 µg/L	1.5032 ppb	05:56:55
2	Ti 334.940†	818.6	148.9	0.3283 µg/L	0.3283 ppb	05:56:34
2	Tl 190.801†	-16.7	3.7	5.5803 µg/L	5.5803 ppb	05:56:55
2	U 409.014†	652.7	12.7	1.1851 µg/L	1.1851 ppb	05:56:34
2	V 292.402†	-83.1	3.8	0.0554 µg/L	0.0554 ppb	05:56:34
2	Zn 213.857†	529.0	10.6	0.2757 µg/L	0.2757 ppb	05:56:55
3	Sc RADIAL	106144.5	106144.5	94.4 %		05:55:26
3	Al 396.153Radial†	249.8	34.9	17.589 µg/L	17.589 ppb	05:55:26
3	Ca 317.933Radial†	534.2	70.7	28.057 µg/L	28.057 ppb	05:55:46
3	Fe 238.204 Radial†	15.7	5.4	28.444 µg/L	28.444 ppb	05:55:46
3	K 766.490 Radial†	722.6	70.8	38.408 µg/L	38.408 ppb	05:55:26
3	Mg 279.077 IEC†	28.6	10.4	57.838 µg/L	57.838 ppb	05:55:46
3	Na 589.592 Radial†	-352.7	330.1	91.597 µg/L	91.597 ppb	05:55:26
3	Sr 421.552†	-70.8	-11.2	-0.0633 µg/L	-0.0633 ppb	05:55:26
3	Sc 361.383	1954045.7	1954045.7	95.007 %		05:57:01
3	Y 371.029	1189661.4	1189661.4	94.994 %		05:57:01
3	Ag 328.068†	-43.7	-17.7	-0.1515 µg/L	-0.1515 ppb	05:57:06
3	As 188.979†	2.9	0.5	1.0110 µg/L	1.0110 ppb	05:57:27
3	B 249.677†	161.5	14.3	0.6262 µg/L	0.6262 ppb	05:57:27
3	Ba 233.527†	-73.8	3.0	0.0754 µg/L	0.0754 ppb	05:57:27
3	Be 313.107†	3734.2	318.9	0.2016 µg/L	0.2016 ppb	05:57:06
3	Cd 226.502†	-91.3	4.8	0.1274 µg/L	0.1274 ppb	05:57:27
3	Co 228.616†	-78.4	-10.8	-0.5196 µg/L	-0.5196 ppb	05:57:27
3	Cr 267.716†	-146.7	-31.7	-0.6579 µg/L	-0.6579 ppb	05:57:06
3	Cu 324.752†	3132.0	-87.7	-0.6112 µg/L	-0.6112 ppb	05:57:06
3	Mn 257.610†	-177.1	36.2	0.1186 µg/L	0.1186 ppb	05:57:27
3	Mo 202.031†	-0.4	7.5	0.8335 µg/L	0.8335 ppb	05:57:27
3	Ni 231.604†	291.9	7.8	0.4273 µg/L	0.4273 ppb	05:57:27
3	P 214.914†	213.2	18.4	40.005 µg/L	40.005 ppb	05:57:27
3	Pb 220.353†	58.1	7.1	1.7916 µg/L	1.7916 ppb	05:57:27
3	S 181.975 Axial†	45.5	23.9	122.71 µg/L	122.71 ppb	05:57:27
3	Sb 206.836†	14.4	-5.4	-5.3330 µg/L	-5.3330 ppb	05:57:27
3	Se 196.026†	15.2	1.9	2.7521 µg/L	2.7521 ppb	05:57:27
3	SiO2†	1954.0	75.0	14.329 µg/L	14.329 ppb	05:57:06
3	Si 251.611†	371.2	41.0	3.1170 µg/L	3.1170 ppb	05:57:27
3	Sn 189.927†	20.5	-0.8	-0.3855 µg/L	-0.3855 ppb	05:57:27
3	Ti 334.940†	818.0	142.2	0.3135 µg/L	0.3135 ppb	05:57:06
3	Tl 190.801†	-19.9	0.4	0.6621 µg/L	0.6621 ppb	05:57:27
3	U 409.014†	668.0	23.9	2.2376 µg/L	2.2376 ppb	05:57:06
3	V 292.402†	-37.0	53.0	0.6097 µg/L	0.6097 ppb	05:57:06
3	Zn 213.857†	542.2	20.5	0.5444 µg/L	0.5444 ppb	05:57:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943908.4	94.514	%	0.4316				0.46%
Sc RADIAL	105770.8	94.0	%	0.42				0.45%
Y 371.029	1183592.1	94.509	%	0.4199				0.44%
Ag 328.068†	-10.5	-0.0896	µg/L	0.15131	-0.0896	ppb	0.15131	168.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	73.0	36.842	µg/L	37.8938	36.842	ppb	37.8938	102.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	2.2012	µg/L	2.32302	2.2012	ppb	2.32302	105.53%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	8.5	0.3673	µg/L	0.22863	0.3673	ppb	0.22863	62.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.3	-0.0823	µg/L	0.16049	-0.0823	ppb	0.16049	195.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	295.5	0.1868	µg/L	0.02894	0.1868	ppb	0.02894	15.49%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	87.6	34.784	µg/L	7.5096	34.784	ppb	7.5096	21.59%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.7	0.1254	µg/L	0.11572	0.1254	ppb	0.11572	92.26%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.5	-0.2165	µg/L	0.39526	-0.2165	ppb	0.39526	182.56%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                3.4      0.0704 µg/L       0.64952      0.0704 ppb        0.64952 922.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -31.2     -0.2133 µg/L       0.36744     -0.2133 ppb        0.36744 172.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         5.7      29.833 µg/L        3.1384      29.833 ppb         3.1384  10.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         92.0      49.892 µg/L       11.7257      49.892 ppb        11.7257  23.50%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           10.9      60.276 µg/L       15.2946      60.276 ppb        15.2946  25.37%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               31.9      0.1050 µg/L       0.01330      0.1050 ppb        0.01330  12.66%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                7.7      0.8639 µg/L       0.26443      0.8639 ppb        0.26443  30.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       332.5      92.259 µg/L        0.7113      92.259 ppb         0.7113   0.77%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                7.9      0.4290 µg/L       0.33300      0.4290 ppb        0.33300  77.61%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                18.0      39.165 µg/L       14.2798      39.165 ppb        14.2798  36.46%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               12.2      3.0899 µg/L       1.38874      3.0899 ppb        1.38874  44.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          26.7      136.92 µg/L        14.595      136.92 ppb         14.595  10.66%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.6     -0.6072 µg/L       4.44911     -0.6072 ppb        4.44911 732.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.5      7.9722 µg/L       9.08970      7.9722 ppb        9.08970 114.02%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    107.4      20.516 µg/L        5.5037      20.516 ppb         5.5037  26.83%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               42.2      3.1621 µg/L       0.07222      3.1621 ppb        0.07222   2.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.4      0.7042 µg/L       0.97735      0.7042 ppb        0.97735 138.80%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               12.0      0.0677 µg/L       0.11906      0.0677 ppb        0.11906 175.92%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              143.5      0.3161 µg/L       0.01110      0.3161 ppb        0.01110   3.51%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.6      2.3769 µg/L       2.77657      2.3769 ppb        2.77657 116.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                37.0      3.4739 µg/L       3.09785      3.4739 ppb        3.09785  89.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.2      0.2302 µg/L       0.32902      0.2302 ppb        0.32902 142.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.3      0.3754 µg/L       0.14715      0.3754 ppb        0.14715  39.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 06:30:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106958.4	106958.4	95.1	%			06:30:38
1	Al 396.153Radial†	10124.3	10417.2	5245.7	µg/L	5245.7	ppb	06:30:38
1	Ca 317.933Radial†	12427.7	12573.8	4991.2	µg/L	4991.2	ppb	06:30:59
1	Fe 238.204 Radial†	940.9	978.2	5155.1	µg/L	5155.1	ppb	06:30:59
1	K 766.490 Radial†	9803.4	9614.7	5213.0	µg/L	5213.0	ppb	06:30:38
1	Mg 279.077 IEC†	918.5	946.1	5252.7	µg/L	5252.7	ppb	06:30:59
1	Na 589.592 Radial†	35443.8	37977.5	10537	µg/L	10537	ppb	06:30:38
1	Sr 421.552†	85629.5	90114.0	507.61	µg/L	507.61	ppb	06:30:38
1	Sc 361.383	1950090.7	1950090.7	94.814	%			06:32:03
1	Y 371.029	1181754.8	1181754.8	94.362	%			06:32:03
1	Ag 328.068†	53887.7	56863.2	511.72	µg/L	511.72	ppb	06:32:08
1	As 188.979†	249.4	260.5	495.58	µg/L	495.58	ppb	06:32:29
1	B 249.677†	10762.5	11195.4	495.28	µg/L	495.28	ppb	06:32:08
1	Ba 233.527†	18829.0	19939.4	501.88	µg/L	501.88	ppb	06:32:08
1	Be 313.107†	758974.9	796872.8	503.90	µg/L	503.90	ppb	06:32:03
1	Cd 226.502†	17629.3	18694.3	494.52	µg/L	494.52	ppb	06:32:08
1	Co 228.616†	9805.7	10413.7	500.89	µg/L	500.89	ppb	06:32:08
1	Cr 267.716†	22631.9	23992.5	500.61	µg/L	500.61	ppb	06:32:08
1	Cu 324.752†	71909.0	72457.5	510.88	µg/L	510.88	ppb	06:32:08
1	Mn 257.610†	151305.2	159803.0	507.79	µg/L	507.79	ppb	06:32:03
1	Mo 202.031†	4216.2	4454.7	497.17	µg/L	497.17	ppb	06:32:29
1	Ni 231.604†	8967.3	9158.3	498.93	µg/L	498.93	ppb	06:32:08
1	P 214.914†	1303.7	1169.0	2482.0	µg/L	2482.0	ppb	06:32:29
1	Pb 220.353†	1927.6	1978.9	502.35	µg/L	502.35	ppb	06:32:29
1	S 181.975 Axial†	223.1	211.2	1083.8	µg/L	1083.8	ppb	06:32:29
1	Sb 206.836†	499.3	506.0	500.69	µg/L	500.69	ppb	06:32:29
1	Se 196.026†	356.2	361.6	528.81	µg/L	528.81	ppb	06:32:29
1	SiO2†	28979.7	28582.9	5458.3	µg/L	5458.3	ppb	06:32:08
1	Si 251.611†	31937.1	33334.2	2505.1	µg/L	2505.1	ppb	06:32:08
1	Sn 189.927†	991.0	1022.7	501.37	µg/L	501.37	ppb	06:32:29
1	Ti 334.940†	217004.4	228153.8	505.45	µg/L	505.45	ppb	06:32:03
1	Tl 190.801†	291.4	328.7	498.51	µg/L	498.51	ppb	06:32:29
1	U 409.014†	5918.1	5562.5	521.54	µg/L	521.54	ppb	06:32:08
1	V 292.402†	42265.4	44668.9	508.30	µg/L	508.30	ppb	06:32:08
1	Zn 213.857†	18455.8	18915.0	502.77	µg/L	502.77	ppb	06:32:08
2	Sc RADIAL	106770.8	106770.8	94.9	%			06:31:04
2	Al 396.153Radial†	10169.1	10483.1	5278.9	µg/L	5278.9	ppb	06:31:04
2	Ca 317.933Radial†	12384.7	12551.6	4982.4	µg/L	4982.4	ppb	06:31:25
2	Fe 238.204 Radial†	946.8	986.3	5197.4	µg/L	5197.4	ppb	06:31:25
2	K 766.490 Radial†	9816.7	9646.8	5230.4	µg/L	5230.4	ppb	06:31:04
2	Mg 279.077 IEC†	924.7	954.3	5297.8	µg/L	5297.8	ppb	06:31:25
2	Na 589.592 Radial†	35888.0	38511.0	10685	µg/L	10685	ppb	06:31:04
2	Sr 421.552†	86226.9	90901.4	512.04	µg/L	512.04	ppb	06:31:04
2	Sc 361.383	1956710.6	1956710.6	95.136	%			06:32:36
2	Y 371.029	1186480.4	1186480.4	94.740	%			06:32:36
2	Ag 328.068†	54276.3	57079.3	513.66	µg/L	513.66	ppb	06:32:41
2	As 188.979†	252.8	263.3	500.75	µg/L	500.75	ppb	06:33:02
2	B 249.677†	10837.6	11236.0	497.06	µg/L	497.06	ppb	06:32:41
2	Ba 233.527†	18985.2	20036.5	504.32	µg/L	504.32	ppb	06:32:41
2	Be 313.107†	764115.0	799567.6	505.60	µg/L	505.60	ppb	06:32:36
2	Cd 226.502†	17828.2	18840.5	498.38	µg/L	498.38	ppb	06:32:41
2	Co 228.616†	9899.9	10477.8	503.97	µg/L	503.97	ppb	06:32:41
2	Cr 267.716†	22783.2	24070.7	502.24	µg/L	502.24	ppb	06:32:41
2	Cu 324.752†	72484.5	72805.9	513.34	µg/L	513.34	ppb	06:32:41
2	Mn 257.610†	152312.8	160322.2	509.44	µg/L	509.44	ppb	06:32:36
2	Mo 202.031†	4242.4	4467.2	498.56	µg/L	498.56	ppb	06:33:02
2	Ni 231.604†	9095.9	9261.6	504.55	µg/L	504.55	ppb	06:32:41
2	P 214.914†	1299.6	1160.0	2462.0	µg/L	2462.0	ppb	06:33:02
2	Pb 220.353†	1918.0	1961.9	498.06	µg/L	498.06	ppb	06:33:02

2	S 181.975 Axial†	225.0	212.5	1090.1 µg/L	1090.1 ppb	06:33:02
2	Sb 206.836†	491.7	496.3	490.99 µg/L	490.99 ppb	06:33:02
2	Se 196.026†	340.4	343.7	502.78 µg/L	502.78 ppb	06:33:02
2	SiO2†	29206.5	28717.9	5484.1 µg/L	5484.1 ppb	06:32:41
2	Si 251.611†	32137.7	33431.0	2512.7 µg/L	2512.7 ppb	06:32:41
2	Sn 189.927†	982.4	1010.1	495.24 µg/L	495.24 ppb	06:33:02
2	Ti 334.940†	218671.9	229132.2	507.62 µg/L	507.62 ppb	06:32:36
2	Tl 190.801†	296.2	332.8	504.62 µg/L	504.62 ppb	06:33:02
2	U 409.014†	5859.3	5479.6	513.75 µg/L	513.75 ppb	06:32:41
2	V 292.402†	42579.2	44848.0	510.32 µg/L	510.32 ppb	06:32:41
2	Zn 213.857†	18543.8	18941.7	503.45 µg/L	503.45 ppb	06:32:41
3	Sc RADIAL	106886.7	106886.7	95.0 %		06:31:30
3	Al 396.153Radial†	10072.3	10369.6	5221.4 µg/L	5221.4 ppb	06:31:30
3	Ca 317.933Radial†	12428.3	12583.2	4995.0 µg/L	4995.0 ppb	06:31:51
3	Fe 238.204 Radial†	952.3	991.0	5222.4 µg/L	5222.4 ppb	06:31:51
3	K 766.490 Radial†	9796.6	9614.4	5212.9 µg/L	5212.9 ppb	06:31:30
3	Mg 279.077 IEC†	928.9	957.7	5317.0 µg/L	5317.0 ppb	06:31:51
3	Na 589.592 Radial†	35373.2	37928.3	10524 µg/L	10524 ppb	06:31:30
3	Sr 421.552†	85661.3	90207.8	508.13 µg/L	508.13 ppb	06:31:30
3	Sc 361.383	1927746.4	1927746.4	93.728 %		06:33:09
3	Y 371.029	1166780.5	1166780.5	93.167 %		06:33:09
3	Ag 328.068†	54248.6	57907.0	521.10 µg/L	521.10 ppb	06:33:15
3	As 188.979†	252.2	266.6	507.01 µg/L	507.01 ppb	06:33:35
3	B 249.677†	10860.2	11431.2	505.72 µg/L	505.72 ppb	06:33:15
3	Ba 233.527†	18998.6	20350.6	512.22 µg/L	512.22 ppb	06:33:15
3	Be 313.107†	750158.3	796744.6	503.82 µg/L	503.82 ppb	06:33:09
3	Cd 226.502†	17815.2	19108.3	505.47 µg/L	505.47 ppb	06:33:15
3	Co 228.616†	9884.0	10617.1	510.68 µg/L	510.68 ppb	06:33:15
3	Cr 267.716†	22774.7	24421.5	509.56 µg/L	509.56 ppb	06:33:15
3	Cu 324.752†	72347.7	73804.6	520.37 µg/L	520.37 ppb	06:33:15
3	Mn 257.610†	149630.9	159866.3	508.00 µg/L	508.00 ppb	06:33:09
3	Mo 202.031†	4215.0	4504.9	502.77 µg/L	502.77 ppb	06:33:35
3	Ni 231.604†	9083.4	9391.8	511.65 µg/L	511.65 ppb	06:33:15
3	P 214.914†	1290.8	1171.2	2485.6 µg/L	2485.6 ppb	06:33:35
3	Pb 220.353†	1921.9	1996.4	506.80 µg/L	506.80 ppb	06:33:35
3	S 181.975 Axial†	223.5	214.4	1100.1 µg/L	1100.1 ppb	06:33:35
3	Sb 206.836†	502.1	515.2	509.70 µg/L	509.70 ppb	06:33:35
3	Se 196.026†	343.4	352.2	515.22 µg/L	515.22 ppb	06:33:35
3	SiO2†	29200.7	29173.1	5571.0 µg/L	5571.0 ppb	06:33:15
3	Si 251.611†	32158.1	33960.3	2553.0 µg/L	2553.0 ppb	06:33:15
3	Sn 189.927†	978.4	1021.4	500.73 µg/L	500.73 ppb	06:33:35
3	Ti 334.940†	215031.4	228701.6	506.66 µg/L	506.66 ppb	06:33:09
3	Tl 190.801†	296.2	337.4	511.58 µg/L	511.58 ppb	06:33:35
3	U 409.014†	5872.8	5586.6	523.79 µg/L	523.79 ppb	06:33:15
3	V 292.402†	42518.6	45455.8	517.22 µg/L	517.22 ppb	06:33:15
3	Zn 213.857†	18593.6	19287.7	512.67 µg/L	512.67 ppb	06:33:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944849.2	94.560	%	0.7379				0.78%
Sc RADIAL	106871.9	95.0	%	0.08				0.09%
Y 371.029	1178338.5	94.090	%	0.8212				0.87%
Ag 328.068†	57283.2	515.49	µg/L	4.955	515.49	ppb	4.955	0.96%
QC value within limits for Ag 328.068 Recovery = 103.10%								
Al 396.153Radial†	10423.3	5248.7	µg/L	28.87	5248.7	ppb	28.87	0.55%
QC value within limits for Al 396.153Radial Recovery = 104.97%								
As 188.979†	263.5	501.11	µg/L	5.726	501.11	ppb	5.726	1.14%
QC value within limits for As 188.979 Recovery = 100.22%								
B 249.677†	11287.6	499.35	µg/L	5.586	499.35	ppb	5.586	1.12%
QC value within limits for B 249.677 Recovery = 99.87%								
Ba 233.527†	20108.8	506.14	µg/L	5.407	506.14	ppb	5.407	1.07%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	797728.3	504.44	µg/L	1.008	504.44	ppb	1.008	0.20%
QC value within limits for Be 313.107 Recovery = 100.89%								
Ca 317.933Radial†	12569.5	4989.5	µg/L	6.45	4989.5	ppb	6.45	0.13%
QC value within limits for Ca 317.933Radial Recovery = 99.79%								
Cd 226.502†	18881.0	499.46	µg/L	5.553	499.46	ppb	5.553	1.11%
QC value within limits for Cd 226.502 Recovery = 99.89%								
Co 228.616†	10502.9	505.18	µg/L	5.005	505.18	ppb	5.005	0.99%

```
   QC value within limits for Co 228.616  Recovery = 101.04%
Cr 267.716†            24161.6      504.14 µg/L        4.767      504.14 ppb          4.767   0.95%
   QC value within limits for Cr 267.716  Recovery = 100.83%
Cu 324.752†            73022.6      514.86 µg/L        4.926      514.86 ppb          4.926   0.96%
   QC value within limits for Cu 324.752  Recovery = 102.97%
Fe 238.204 Radial†       985.1      5191.7 µg/L       34.01      5191.7 ppb         34.01   0.66%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.83%
K 766.490 Radial†       9625.3      5218.8 µg/L       10.09      5218.8 ppb         10.09   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 104.38%
Mg 279.077 IEC†          952.7      5289.2 µg/L       33.03      5289.2 ppb         33.03   0.62%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.78%
Mn 257.610†           159997.2      508.41 µg/L       0.900      508.41 ppb         0.900   0.18%
   QC value within limits for Mn 257.610  Recovery = 101.68%
Mo 202.031†             4475.6      499.50 µg/L       2.919      499.50 ppb         2.919   0.58%
   QC value within limits for Mo 202.031  Recovery = 99.90%
Na 589.592 Radial†     38138.9       10582 µg/L        89.7       10582 ppb          89.7   0.85%
   QC value within limits for Na 589.592 Radial  Recovery = 105.82%
Ni 231.604†             9270.6      505.04 µg/L       6.374      505.04 ppb         6.374   1.26%
   QC value within limits for Ni 231.604  Recovery = 101.01%
P 214.914†              1166.7      2476.5 µg/L       12.67      2476.5 ppb         12.67   0.51%
   QC value within limits for P 214.914  Recovery = 99.06%
Pb 220.353†             1979.1      502.40 µg/L       4.370      502.40 ppb         4.370   0.87%
   QC value within limits for Pb 220.353  Recovery = 100.48%
S 181.975 Axial†         212.7      1091.4 µg/L        8.18      1091.4 ppb          8.18   0.75%
   QC value within limits for S 181.975 Axial  Recovery = 109.14%
Sb 206.836†              505.8      500.46 µg/L       9.357      500.46 ppb         9.357   1.87%
   QC value within limits for Sb 206.836  Recovery = 100.09%
Se 196.026†              352.5      515.60 µg/L      13.017      515.60 ppb        13.017   2.52%
   QC value within limits for Se 196.026  Recovery = 103.12%
SiO2†                   28824.6      5504.5 µg/L       59.04      5504.5 ppb         59.04   1.07%
   QC value within limits for SiO2  Recovery = 102.94%
Si 251.611†             33575.2      2523.6 µg/L       25.72      2523.6 ppb         25.72   1.02%
   QC value within limits for Si 251.611  Recovery = 100.94%
Sn 189.927†             1018.1      499.11 µg/L       3.368      499.11 ppb         3.368   0.67%
   QC value within limits for Sn 189.927  Recovery = 99.82%
Sr 421.552†             90407.7      509.26 µg/L       2.423      509.26 ppb         2.423   0.48%
   QC value within limits for Sr 421.552  Recovery = 101.85%
Ti 334.940†            228662.6      506.57 µg/L       1.087      506.57 ppb         1.087   0.21%
   QC value within limits for Ti 334.940  Recovery = 101.31%
Tl 190.801†              333.0      504.90 µg/L       6.540      504.90 ppb         6.540   1.30%
   QC value within limits for Tl 190.801  Recovery = 100.98%
U 409.014†              5542.9      519.69 µg/L       5.267      519.69 ppb         5.267   1.01%
   QC value within limits for U 409.014  Recovery = 103.94%
V 292.402†              44990.9      511.95 µg/L       4.677      511.95 ppb         4.677   0.91%
   QC value within limits for V 292.402  Recovery = 102.39%
Zn 213.857†             19048.1      506.30 µg/L       5.530      506.30 ppb         5.530   1.09%
   QC value within limits for Zn 213.857  Recovery = 101.26%
All analyte(s) passed QC.
```

Sequence No.: 44
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 06:33:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105634.2	105634.2	93.9	%			06:34:17
1	Al 396.153Radial†	206.9	-9.5	-4.8236	µg/L	-4.8236	ppb	06:34:17
1	Ca 317.933Radial†	394.3	-75.6	-30.013	µg/L	-30.013	ppb	06:34:37
1	Fe 238.204 Radial†	11.7	1.3	6.8501	µg/L	6.8501	ppb	06:34:37
1	K 766.490 Radial†	715.4	66.9	36.265	µg/L	36.265	ppb	06:34:17
1	Mg 279.077 IEC†	16.9	-1.8	-10.230	µg/L	-10.230	ppb	06:34:37
1	Na 589.592 Radial†	-547.2	121.3	33.660	µg/L	33.660	ppb	06:34:17
1	Sr 421.552†	-7.5	55.8	0.3143	µg/L	0.3143	ppb	06:34:17
1	Sc 361.383	1946795.9	1946795.9	94.654	%			06:35:40
1	Y 371.029	1183615.8	1183615.8	94.511	%			06:35:40
1	Ag 328.068†	-109.1	-87.0	-0.7756	µg/L	-0.7756	ppb	06:35:45
1	As 188.979†	-2.2	-4.8	-9.1954	µg/L	-9.1954	ppb	06:36:06
1	B 249.677†	155.6	8.7	0.3841	µg/L	0.3841	ppb	06:36:06
1	Ba 233.527†	-76.4	-0.1	-0.0015	µg/L	-0.0015	ppb	06:36:06
1	Be 313.107†	3779.5	381.5	0.2412	µg/L	0.2412	ppb	06:35:45
1	Cd 226.502†	-92.3	3.4	0.0917	µg/L	0.0917	ppb	06:36:06
1	Co 228.616†	-74.6	-7.1	-0.3399	µg/L	-0.3399	ppb	06:36:06
1	Cr 267.716†	-128.6	-13.1	-0.2720	µg/L	-0.2720	ppb	06:35:45
1	Cu 324.752†	3116.1	-92.2	-0.6471	µg/L	-0.6471	ppb	06:35:45
1	Mn 257.610†	-174.8	38.0	0.1214	µg/L	0.1214	ppb	06:36:06
1	Mo 202.031†	-7.1	0.4	0.0504	µg/L	0.0504	ppb	06:36:06
1	Ni 231.604†	295.6	12.9	0.7042	µg/L	0.7042	ppb	06:36:06
1	P 214.914†	209.5	15.4	33.475	µg/L	33.475	ppb	06:36:06
1	Pb 220.353†	61.8	11.2	2.8272	µg/L	2.8272	ppb	06:36:06
1	S 181.975 Axial†	38.0	16.1	82.525	µg/L	82.525	ppb	06:36:06
1	Sb 206.836†	26.1	7.1	7.0234	µg/L	7.0234	ppb	06:36:06
1	Se 196.026†	15.6	2.4	3.5197	µg/L	3.5197	ppb	06:36:06
1	SiO2†	1925.3	52.4	10.004	µg/L	10.004	ppb	06:35:45
1	Si 251.611†	362.2	33.0	2.4395	µg/L	2.4395	ppb	06:36:06
1	Sn 189.927†	24.5	3.5	1.6896	µg/L	1.6896	ppb	06:36:06
1	Ti 334.940†	812.8	139.9	0.3117	µg/L	0.3117	ppb	06:35:45
1	Tl 190.801†	-24.7	-4.7	-7.1081	µg/L	-7.1081	ppb	06:36:06
1	U 409.014†	680.4	39.6	3.7176	µg/L	3.7176	ppb	06:35:45
1	V 292.402†	-81.0	6.3	0.0784	µg/L	0.0784	ppb	06:35:45
1	Zn 213.857†	547.2	28.0	0.7467	µg/L	0.7467	ppb	06:36:06
2	Sc RADIAL	105019.2	105019.2	93.4	%			06:34:43
2	Al 396.153Radial†	209.4	-5.6	-2.8460	µg/L	-2.8460	ppb	06:34:43
2	Ca 317.933Radial†	404.5	-62.2	-24.688	µg/L	-24.688	ppb	06:35:03
2	Fe 238.204 Radial†	8.7	-1.9	-9.7804	µg/L	-9.7804	ppb	06:35:03
2	K 766.490 Radial†	670.9	23.8	12.883	µg/L	12.883	ppb	06:34:43
2	Mg 279.077 IEC†	11.6	-7.4	-41.254	µg/L	-41.254	ppb	06:35:03
2	Na 589.592 Radial†	-557.4	106.9	29.662	µg/L	29.662	ppb	06:34:43
2	Sr 421.552†	-34.4	27.0	0.1518	µg/L	0.1518	ppb	06:34:43
2	Sc 361.383	1925193.6	1925193.6	93.604	%			06:36:12
2	Y 371.029	1171697.4	1171697.4	93.559	%			06:36:12
2	Ag 328.068†	-31.0	-4.8	-0.0420	µg/L	-0.0420	ppb	06:36:17
2	As 188.979†	3.4	1.1	2.1564	µg/L	2.1564	ppb	06:36:38
2	B 249.677†	159.8	15.1	0.6722	µg/L	0.6722	ppb	06:36:38
2	Ba 233.527†	-77.4	-2.0	-0.0504	µg/L	-0.0504	ppb	06:36:38
2	Be 313.107†	3749.4	394.1	0.2492	µg/L	0.2492	ppb	06:36:17
2	Cd 226.502†	-90.5	4.2	0.1118	µg/L	0.1118	ppb	06:36:38
2	Co 228.616†	-63.6	3.8	0.1819	µg/L	0.1819	ppb	06:36:38
2	Cr 267.716†	-102.3	13.5	0.2808	µg/L	0.2808	ppb	06:36:17
2	Cu 324.752†	3150.8	-18.2	-0.1301	µg/L	-0.1301	ppb	06:36:17
2	Mn 257.610†	-171.7	39.2	0.1231	µg/L	0.1231	ppb	06:36:38
2	Mo 202.031†	-1.9	5.9	0.6564	µg/L	0.6564	ppb	06:36:38
2	Ni 231.604†	278.3	-2.0	-0.1108	µg/L	-0.1108	ppb	06:36:38
2	P 214.914†	205.8	13.8	30.090	µg/L	30.090	ppb	06:36:38
2	Pb 220.353†	62.2	12.3	3.1274	µg/L	3.1274	ppb	06:36:38

2	S 181.975 Axial†	41.2	20.0	102.52	µg/L	102.52 ppb	06:36:38
2	Sb 206.836†	20.4	1.2	1.1998	µg/L	1.1998 ppb	06:36:38
2	Se 196.026†	7.8	-5.7	-8.3360	µg/L	-8.3360 ppb	06:36:38
2	SiO2†	1910.1	58.9	11.250	µg/L	11.250 ppb	06:36:17
2	Si 251.611†	357.7	32.5	2.4369	µg/L	2.4369 ppb	06:36:38
2	Sn 189.927†	22.4	1.5	0.7076	µg/L	0.7076 ppb	06:36:38
2	Ti 334.940†	775.3	109.4	0.2440	µg/L	0.2440 ppb	06:36:17
2	Tl 190.801†	-19.3	0.8	1.1392	µg/L	1.1392 ppb	06:36:38
2	U 409.014†	648.2	13.3	1.2531	µg/L	1.2531 ppb	06:36:17
2	V 292.402†	-66.0	21.4	0.2475	µg/L	0.2475 ppb	06:36:17
2	Zn 213.857†	544.1	31.1	0.8365	µg/L	0.8365 ppb	06:36:38
3	Sc RADIAL	104850.9	104850.9	93.2	%		06:35:09
3	Al 396.153Radial†	180.2	-36.5	-18.464	µg/L	-18.464 ppb	06:35:09
3	Ca 317.933Radial†	396.8	-69.7	-27.675	µg/L	-27.675 ppb	06:35:29
3	Fe 238.204 Radial†	10.5	0.1	0.4325	µg/L	0.4325 ppb	06:35:29
3	K 766.490 Radial†	686.2	41.3	22.401	µg/L	22.401 ppb	06:35:09
3	Mg 279.077 IEC†	13.7	-5.2	-28.601	µg/L	-28.601 ppb	06:35:29
3	Na 589.592 Radial†	-563.5	99.4	27.588	µg/L	27.588 ppb	06:35:09
3	Sr 421.552†	-11.0	52.0	0.2927	µg/L	0.2927 ppb	06:35:09
3	Sc 361.383	1946562.8	1946562.8	94.643	%		06:36:44
3	Y 371.029	1183797.4	1183797.4	94.525	%		06:36:44
3	Ag 328.068†	-44.5	-18.7	-0.1644	µg/L	-0.1644 ppb	06:36:49
3	As 188.979†	3.5	1.2	2.3208	µg/L	2.3208 ppb	06:37:10
3	B 249.677†	160.9	14.3	0.6342	µg/L	0.6342 ppb	06:37:10
3	Ba 233.527†	-74.5	2.0	0.0502	µg/L	0.0502 ppb	06:37:10
3	Be 313.107†	3702.4	300.4	0.1899	µg/L	0.1899 ppb	06:36:49
3	Cd 226.502†	-87.1	8.9	0.2417	µg/L	0.2417 ppb	06:37:10
3	Co 228.616†	-78.8	-11.5	-0.5534	µg/L	-0.5534 ppb	06:37:10
3	Cr 267.716†	-96.4	20.9	0.4356	µg/L	0.4356 ppb	06:36:49
3	Cu 324.752†	3141.1	-65.4	-0.4602	µg/L	-0.4602 ppb	06:36:49
3	Mn 257.610†	-178.5	34.0	0.1080	µg/L	0.1080 ppb	06:37:10
3	Mo 202.031†	-3.0	4.7	0.5274	µg/L	0.5274 ppb	06:37:10
3	Ni 231.604†	281.7	-1.8	-0.0968	µg/L	-0.0968 ppb	06:37:10
3	P 214.914†	210.9	16.9	36.689	µg/L	36.689 ppb	06:37:10
3	Pb 220.353†	60.2	9.5	2.4055	µg/L	2.4055 ppb	06:37:10
3	S 181.975 Axial†	35.3	13.2	67.960	µg/L	67.960 ppb	06:37:10
3	Sb 206.836†	10.9	-9.0	-8.9033	µg/L	-8.9033 ppb	06:37:10
3	Se 196.026†	11.4	-2.1	-2.9972	µg/L	-2.9972 ppb	06:37:10
3	SiO2†	1941.4	69.6	13.287	µg/L	13.287 ppb	06:36:49
3	Si 251.611†	371.3	42.7	3.2689	µg/L	3.2689 ppb	06:37:10
3	Sn 189.927†	19.9	-1.4	-0.7135	µg/L	-0.7135 ppb	06:37:10
3	Ti 334.940†	791.1	117.0	0.2609	µg/L	0.2609 ppb	06:36:49
3	Tl 190.801†	-20.7	-0.4	-0.6659	µg/L	-0.6659 ppb	06:37:10
3	U 409.014†	749.9	113.1	10.622	µg/L	10.622 ppb	06:36:49
3	V 292.402†	-59.2	29.4	0.3529	µg/L	0.3529 ppb	06:36:49
3	Zn 213.857†	544.3	25.0	0.6711	µg/L	0.6711 ppb	06:37:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1939517.5	94.300	%	0.6032				0.64%
Sc RADIAL	105168.1	93.5	%	0.37				0.39%
Y 371.029	1179703.5	94.199	%	0.5537				0.59%
Ag 328.068†	-36.8	-0.3273	µg/L	0.39297	-0.3273	ppb	0.39297	120.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-17.2	-8.7112	µg/L	8.50385	-8.7112	ppb	8.50385	97.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-1.5727	µg/L	6.60192	-1.5727	ppb	6.60192	419.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	12.7	0.5635	µg/L	0.15651	0.5635	ppb	0.15651	27.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.0	-0.0006	µg/L	0.05032	-0.0006	ppb	0.05032	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	358.7	0.2268	µg/L	0.03216	0.2268	ppb	0.03216	14.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.2	-27.459	µg/L	2.6689	-27.459	ppb	2.6689	9.72%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.5	0.1484	µg/L	0.08142	0.1484	ppb	0.08142	54.85%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.9	-0.2371	µg/L	0.37829	-0.2371	ppb	0.37829	159.53%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.1      0.1481 µg/L       0.37199      0.1481 ppb        0.37199 251.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -58.6     -0.4125 µg/L       0.26178     -0.4125 ppb        0.26178  63.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.2     -0.8326 µg/L       8.38712     -0.8326 ppb        8.38712 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          44.0      23.850 µg/L      11.7581      23.850 ppb        11.7581  49.30%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.8     -26.695 µg/L      15.5998     -26.695 ppb        15.5998  58.44%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                37.1      0.1175 µg/L       0.00828      0.1175 ppb        0.00828   7.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.7      0.4114 µg/L       0.31922      0.4114 ppb        0.31922  77.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        109.2      30.303 µg/L        3.0864      30.303 ppb         3.0864  10.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 3.0      0.1656 µg/L       0.46656      0.1656 ppb        0.46656 281.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.4      33.418 µg/L        3.2996      33.418 ppb         3.2996   9.87%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.0      2.7867 µg/L       0.36264      2.7867 ppb        0.36264  13.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           16.4      84.335 µg/L       17.3517      84.335 ppb        17.3517  20.57%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.2     -0.2267 µg/L       8.05859     -0.2267 ppb        8.05859 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -2.6045 µg/L       5.93763     -2.6045 ppb        5.93763 227.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      60.3      11.513 µg/L        1.6576      11.513 ppb         1.6576  14.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                36.1      2.7151 µg/L       0.47963      2.7151 ppb        0.47963  17.67%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.5612 µg/L       1.20822      0.5612 ppb        1.20822 215.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                44.9      0.2529 µg/L       0.08822      0.2529 ppb        0.08822  34.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               122.1      0.2722 µg/L       0.03525      0.2722 ppb        0.03525  12.95%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.5     -2.2116 µg/L       4.33547     -2.2116 ppb        4.33547 196.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 55.3      5.1974 µg/L       4.85647      5.1974 ppb        4.85647  93.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.1      0.2263 µg/L       0.13848      0.2263 ppb        0.13848  61.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                28.0      0.7514 µg/L       0.08282      0.7514 ppb        0.08282  11.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/18/2009 06:55:16
Logged In Analyst: optima
Spectrometer Model: Optima 4300 DV, S/N 077N1030502

Plasma On Time: 12/17/2009 20:21:18
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121809C.sif
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 06:55:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106945.8	106945.8	95.1	%			06:55:52
1	Al 396.153Radial†	10044.5	10334.4	5203.8	µg/L	5203.8	ppb	06:55:52
1	Ca 317.933Radial†	12363.8	12508.2	4965.2	µg/L	4965.2	ppb	06:56:13
1	Fe 238.204 Radial†	946.3	984.0	5185.7	µg/L	5185.7	ppb	06:56:13
1	K 766.490 Radial†	9719.8	9527.9	5166.0	µg/L	5166.0	ppb	06:55:52
1	Mg 279.077 IEC†	913.6	941.0	5224.2	µg/L	5224.2	ppb	06:56:13
1	Na 589.592 Radial†	34929.8	37441.3	10389	µg/L	10389	ppb	06:55:52
1	Sr 421.552†	85564.5	90056.1	507.28	µg/L	507.28	ppb	06:55:52
1	Sc 361.383	1934781.8	1934781.8	94.070	%			06:57:16
1	Y 371.029	1171080.0	1171080.0	93.510	%			06:57:16
1	Ag 328.068†	53582.4	56988.4	512.85	µg/L	512.85	ppb	06:57:22
1	As 188.979†	253.3	266.8	507.45	µg/L	507.45	ppb	06:57:42
1	B 249.677†	10682.2	11199.8	495.46	µg/L	495.46	ppb	06:57:22
1	Ba 233.527†	18798.5	20064.2	505.01	µg/L	505.01	ppb	06:57:22
1	Be 313.107†	753733.3	797634.6	504.38	µg/L	504.38	ppb	06:57:16
1	Cd 226.502†	17655.1	18868.9	499.13	µg/L	499.13	ppb	06:57:22
1	Co 228.616†	9747.0	10433.1	501.83	µg/L	501.83	ppb	06:57:22
1	Cr 267.716†	22508.2	24049.8	501.81	µg/L	501.81	ppb	06:57:22
1	Cu 324.752†	71461.0	72581.3	511.76	µg/L	511.76	ppb	06:57:22
1	Mn 257.610†	150498.5	160208.0	509.08	µg/L	509.08	ppb	06:57:16
1	Mo 202.031†	4205.5	4478.5	499.82	µg/L	499.82	ppb	06:57:42
1	Ni 231.604†	8978.2	9244.7	503.64	µg/L	503.64	ppb	06:57:22
1	P 214.914†	1298.0	1173.9	2492.5	µg/L	2492.5	ppb	06:57:42
1	Pb 220.353†	1932.4	2000.1	507.73	µg/L	507.73	ppb	06:57:42
1	S 181.975 Axial†	216.7	206.3	1058.6	µg/L	1058.6	ppb	06:57:42
1	Sb 206.836†	497.2	508.0	502.66	µg/L	502.66	ppb	06:57:42
1	Se 196.026†	349.3	357.2	522.45	µg/L	522.45	ppb	06:57:42
1	SiO2†	28752.4	28583.2	5458.4	µg/L	5458.4	ppb	06:57:22
1	Si 251.611†	31785.4	33439.4	2513.1	µg/L	2513.1	ppb	06:57:22
1	Sn 189.927†	985.1	1024.8	502.36	µg/L	502.36	ppb	06:57:42
1	Ti 334.940†	215774.0	228656.8	506.56	µg/L	506.56	ppb	06:57:16
1	Tl 190.801†	292.1	331.9	503.36	µg/L	503.36	ppb	06:57:42
1	U 409.014†	5788.7	5474.4	513.26	µg/L	513.26	ppb	06:57:22
1	V 292.402†	42097.2	44842.8	510.27	µg/L	510.27	ppb	06:57:22
1	Zn 213.857†	18407.1	19017.3	505.48	µg/L	505.48	ppb	06:57:22
2	Sc RADIAL	107463.3	107463.3	95.5	%			06:56:18
2	Al 396.153Radial†	10047.5	10286.8	5179.7	µg/L	5179.7	ppb	06:56:18
2	Ca 317.933Radial†	12376.8	12459.1	4945.7	µg/L	4945.7	ppb	06:56:39
2	Fe 238.204 Radial†	941.9	974.7	5136.8	µg/L	5136.8	ppb	06:56:39
2	K 766.490 Radial†	9754.3	9514.8	5158.9	µg/L	5158.9	ppb	06:56:18
2	Mg 279.077 IEC†	919.1	942.1	5230.6	µg/L	5230.6	ppb	06:56:39
2	Na 589.592 Radial†	35095.2	37437.5	10388	µg/L	10388	ppb	06:56:18
2	Sr 421.552†	85730.9	89796.9	505.82	µg/L	505.82	ppb	06:56:18
2	Sc 361.383	1940235.3	1940235.3	94.335	%			06:57:49
2	Y 371.029	1174862.6	1174862.6	93.812	%			06:57:49
2	Ag 328.068†	53778.5	57036.1	513.27	µg/L	513.27	ppb	06:57:55
2	As 188.979†	252.5	265.2	504.37	µg/L	504.37	ppb	06:58:15

2	B 249.677†	10719.7	11207.7	495.83 µg/L	495.83 ppb	06:57:55
2	Ba 233.527†	18814.7	20025.2	504.03 µg/L	504.03 ppb	06:57:55
2	Be 313.107†	753213.8	794831.8	502.61 µg/L	502.61 ppb	06:57:49
2	Cd 226.502†	17721.4	18886.4	499.61 µg/L	499.61 ppb	06:57:55
2	Co 228.616†	9830.4	10492.4	504.68 µg/L	504.68 ppb	06:57:55
2	Cr 267.716†	22623.6	24104.9	502.95 µg/L	502.95 ppb	06:57:55
2	Cu 324.752†	71838.6	72768.1	513.06 µg/L	513.06 ppb	06:57:55
2	Mn 257.610†	150352.3	159603.4	507.15 µg/L	507.15 ppb	06:57:49
2	Mo 202.031†	4209.8	4470.5	498.93 µg/L	498.93 ppb	06:58:15
2	Ni 231.604†	9046.6	9290.5	506.13 µg/L	506.13 ppb	06:57:55
2	P 214.914†	1301.3	1173.5	2491.6 µg/L	2491.6 ppb	06:58:15
2	Pb 220.353†	1928.5	1990.2	505.21 µg/L	505.21 ppb	06:58:15
2	S 181.975 Axial†	216.1	205.1	1052.1 µg/L	1052.1 ppb	06:58:15
2	Sb 206.836†	495.7	504.9	499.57 µg/L	499.57 ppb	06:58:15
2	Se 196.026†	337.7	343.9	502.98 µg/L	502.98 ppb	06:58:15
2	SiO2†	28902.9	28656.8	5472.4 µg/L	5472.4 ppb	06:57:55
2	Si 251.611†	31854.8	33418.0	2511.5 µg/L	2511.5 ppb	06:57:55
2	Sn 189.927†	990.9	1028.0	503.92 µg/L	503.92 ppb	06:58:15
2	Ti 334.940†	215459.3	227678.5	504.40 µg/L	504.40 ppb	06:57:49
2	Tl 190.801†	289.5	328.3	497.85 µg/L	497.85 ppb	06:58:15
2	U 409.014†	5868.8	5542.0	519.61 µg/L	519.61 ppb	06:57:55
2	V 292.402†	42194.2	44819.9	510.01 µg/L	510.01 ppb	06:57:55
2	Zn 213.857†	18434.8	18991.7	504.79 µg/L	504.79 ppb	06:57:55
3	Sc RADIAL	106773.0	106773.0	94.9 %		06:56:44
3	Al 396.153Radial†	10042.0	10348.9	5211.2 µg/L	5211.2 ppb	06:56:44
3	Ca 317.933Radial†	12455.8	12626.1	5012.0 µg/L	5012.0 ppb	06:57:04
3	Fe 238.204 Radial†	948.9	988.4	5208.9 µg/L	5208.9 ppb	06:57:04
3	K 766.490 Radial†	9735.2	9560.7	5183.8 µg/L	5183.8 ppb	06:56:44
3	Mg 279.077 IEC†	907.1	935.7	5194.8 µg/L	5194.8 ppb	06:57:04
3	Na 589.592 Radial†	35014.9	37590.4	10430 µg/L	10430 ppb	06:56:44
3	Sr 421.552†	85619.4	90259.6	508.43 µg/L	508.43 ppb	06:56:44
3	Sc 361.383	1934679.9	1934679.9	94.065 %		06:58:23
3	Y 371.029	1171841.1	1171841.1	93.571 %		06:58:23
3	Ag 328.068†	53604.9	57015.3	513.09 µg/L	513.09 ppb	06:58:28
3	As 188.979†	250.6	264.0	502.10 µg/L	502.10 ppb	06:58:49
3	B 249.677†	10734.6	11256.2	497.95 µg/L	497.95 ppb	06:58:28
3	Ba 233.527†	18778.9	20044.4	504.52 µg/L	504.52 ppb	06:58:28
3	Be 313.107†	756998.9	801148.6	506.60 µg/L	506.60 ppb	06:58:23
3	Cd 226.502†	17679.0	18895.3	499.83 µg/L	499.83 ppb	06:58:28
3	Co 228.616†	9777.9	10466.6	503.43 µg/L	503.43 ppb	06:58:28
3	Cr 267.716†	22628.1	24178.5	504.49 µg/L	504.49 ppb	06:58:28
3	Cu 324.752†	71530.9	72659.7	512.31 µg/L	512.31 ppb	06:58:28
3	Mn 257.610†	151157.8	160917.4	511.33 µg/L	511.33 ppb	06:58:23
3	Mo 202.031†	4194.4	4466.9	498.53 µg/L	498.53 ppb	06:58:49
3	Ni 231.604†	9009.7	9278.7	505.49 µg/L	505.49 ppb	06:58:28
3	P 214.914†	1294.0	1169.6	2483.0 µg/L	2483.0 ppb	06:58:49
3	Pb 220.353†	1919.0	1986.0	504.15 µg/L	504.15 ppb	06:58:49
3	S 181.975 Axial†	219.3	209.1	1072.6 µg/L	1072.6 ppb	06:58:49
3	Sb 206.836†	498.3	509.2	503.75 µg/L	503.75 ppb	06:58:49
3	Se 196.026†	347.9	355.8	520.42 µg/L	520.42 ppb	06:58:49
3	SiO2†	28840.5	28678.5	5476.6 µg/L	5476.6 ppb	06:58:28
3	Si 251.611†	31810.9	33468.3	2515.4 µg/L	2515.4 ppb	06:58:28
3	Sn 189.927†	976.4	1015.6	497.88 µg/L	497.88 ppb	06:58:49
3	Ti 334.940†	216158.2	229077.4	507.49 µg/L	507.49 ppb	06:58:23
3	Tl 190.801†	295.1	335.1	508.14 µg/L	508.14 ppb	06:58:49
3	U 409.014†	5810.0	5497.3	515.41 µg/L	515.41 ppb	06:58:28
3	V 292.402†	42072.4	44818.8	509.99 µg/L	509.99 ppb	06:58:28
3	Zn 213.857†	18433.1	19045.9	506.24 µg/L	506.24 ppb	06:58:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1936565.7	94.157	%	0.1545				0.16%
Sc RADIAL	107060.7	95.2	%	0.32				0.34%
Y 371.029	1172594.6	93.631	%	0.1598				0.17%
Ag 328.068†	57013.3	513.07	µg/L	0.211	513.07	ppb	0.211	0.04%
QC value within limits for Ag 328.068 Recovery = 102.61%								
Al 396.153Radial†	10323.4	5198.2	µg/L	16.44	5198.2	ppb	16.44	0.32%
QC value within limits for Al 396.153Radial Recovery = 103.96%								
As 188.979†	265.3	504.64	µg/L	2.682	504.64	ppb	2.682	0.53%

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   QC value within limits for As 188.979  Recovery = 100.93%
B 249.677†            11221.2      496.41 µg/L        1.346      496.41 ppb        1.346   0.27%
   QC value within limits for B 249.677  Recovery = 99.28%
Ba 233.527†           20044.6      504.52 µg/L        0.490      504.52 ppb        0.490   0.10%
   QC value within limits for Ba 233.527  Recovery = 100.90%
Be 313.107†          797871.7      504.53 µg/L        2.002      504.53 ppb        2.002   0.40%
   QC value within limits for Be 313.107  Recovery = 100.91%
Ca 317.933Radial†     12531.1      4974.3 µg/L       34.07      4974.3 ppb       34.07   0.68%
   QC value within limits for Ca 317.933Radial  Recovery = 99.49%
Cd 226.502†           18883.6      499.52 µg/L        0.357      499.52 ppb        0.357   0.07%
   QC value within limits for Cd 226.502  Recovery = 99.90%
Co 228.616†           10464.0      503.31 µg/L        1.430      503.31 ppb        1.430   0.28%
   QC value within limits for Co 228.616  Recovery = 100.66%
Cr 267.716†           24111.1      503.08 µg/L        1.345      503.08 ppb        1.345   0.27%
   QC value within limits for Cr 267.716  Recovery = 100.62%
Cu 324.752†           72669.7      512.38 µg/L        0.654      512.38 ppb        0.654   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.48%
Fe 238.204 Radial†      982.4      5177.1 µg/L       36.80      5177.1 ppb       36.80   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.54%
K 766.490 Radial†      9534.5      5169.5 µg/L       12.81      5169.5 ppb       12.81   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 103.39%
Mg 279.077 IEC†         939.6      5216.5 µg/L       19.08      5216.5 ppb       19.08   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.33%
Mn 257.610†          160242.9      509.19 µg/L        2.092      509.19 ppb        2.092   0.41%
   QC value within limits for Mn 257.610  Recovery = 101.84%
Mo 202.031†           4472.0      499.10 µg/L        0.661      499.10 ppb        0.661   0.13%
   QC value within limits for Mo 202.031  Recovery = 99.82%
Na 589.592 Radial†    37489.7       10402 µg/L         24.2       10402 ppb         24.2   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 104.02%
Ni 231.604†           9271.3      505.08 µg/L        1.295      505.08 ppb        1.295   0.26%
   QC value within limits for Ni 231.604  Recovery = 101.02%
P 214.914†            1172.3      2489.0 µg/L        5.21      2489.0 ppb         5.21   0.21%
   QC value within limits for P 214.914  Recovery = 99.56%
Pb 220.353†           1992.1      505.70 µg/L        1.836      505.70 ppb        1.836   0.36%
   QC value within limits for Pb 220.353  Recovery = 101.14%
S 181.975 Axial†       206.8      1061.1 µg/L       10.48      1061.1 ppb       10.48   0.99%
   QC value within limits for S 181.975 Axial  Recovery = 106.11%
Sb 206.836†            507.4      501.99 µg/L        2.166      501.99 ppb        2.166   0.43%
   QC value within limits for Sb 206.836  Recovery = 100.40%
Se 196.026†            352.3      515.28 µg/L       10.703      515.28 ppb       10.703   2.08%
   QC value within limits for Se 196.026  Recovery = 103.06%
SiO2†                 28639.5      5469.1 µg/L        9.54      5469.1 ppb        9.54   0.17%
   QC value within limits for SiO2  Recovery = 102.27%
Si 251.611†           33441.9      2513.3 µg/L        2.00      2513.3 ppb        2.00   0.08%
   QC value within limits for Si 251.611  Recovery = 100.53%
Sn 189.927†           1022.8      501.39 µg/L        3.137      501.39 ppb        3.137   0.63%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†           90037.6      507.18 µg/L        1.306      507.18 ppb        1.306   0.26%
   QC value within limits for Sr 421.552  Recovery = 101.44%
Ti 334.940†          228470.9      506.15 µg/L        1.589      506.15 ppb        1.589   0.31%
   QC value within limits for Ti 334.940  Recovery = 101.23%
Tl 190.801†            331.8      503.12 µg/L        5.147      503.12 ppb        5.147   1.02%
   QC value within limits for Tl 190.801  Recovery = 100.62%
U 409.014†            5504.6      516.09 µg/L        3.232      516.09 ppb        3.232   0.63%
   QC value within limits for U 409.014  Recovery = 103.22%
V 292.402†            44827.2      510.09 µg/L        0.154      510.09 ppb        0.154   0.03%
   QC value within limits for V 292.402  Recovery = 102.02%
Zn 213.857†           19018.3      505.50 µg/L        0.726      505.50 ppb        0.726   0.14%
   QC value within limits for Zn 213.857  Recovery = 101.10%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 06:58:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105477.4	105477.4	93.8	%			06:59:31
1	Al 396.153Radial†	199.7	-16.8	-8.5139	µg/L	-8.5139	ppb	06:59:31
1	Ca 317.933Radial†	399.5	-69.5	-27.573	µg/L	-27.573	ppb	06:59:51
1	Fe 238.204 Radial†	6.5	-4.3	-22.702	µg/L	-22.702	ppb	06:59:51
1	K 766.490 Radial†	712.0	64.4	34.937	µg/L	34.937	ppb	06:59:31
1	Mg 279.077 IEC†	12.4	-6.6	-36.446	µg/L	-36.446	ppb	06:59:51
1	Na 589.592 Radial†	-641.5	19.8	5.5067	µg/L	5.5067	ppb	06:59:31
1	Sr 421.552†	-45.8	14.9	0.0839	µg/L	0.0839	ppb	06:59:31
1	Sc 361.383	1950567.4	1950567.4	94.838	%			07:00:54
1	Y 371.029	1186545.2	1186545.2	94.745	%			07:00:54
1	Ag 328.068†	-25.2	1.8	0.0199	µg/L	0.0199	ppb	07:00:59
1	As 188.979†	3.5	1.2	2.2153	µg/L	2.2153	ppb	07:01:20
1	B 249.677†	147.0	-0.7	-0.0260	µg/L	-0.0260	ppb	07:01:20
1	Ba 233.527†	-77.0	-0.5	-0.0109	µg/L	-0.0109	ppb	07:01:20
1	Be 313.107†	3870.5	469.7	0.2970	µg/L	0.2970	ppb	07:00:59
1	Cd 226.502†	-89.0	7.1	0.1934	µg/L	0.1934	ppb	07:01:20
1	Co 228.616†	-76.1	-8.5	-0.4110	µg/L	-0.4110	ppb	07:01:20
1	Cr 267.716†	-123.7	-7.7	-0.1583	µg/L	-0.1583	ppb	07:00:59
1	Cu 324.752†	3193.5	-17.0	-0.1245	µg/L	-0.1245	ppb	07:00:59
1	Mn 257.610†	-185.3	27.3	0.0836	µg/L	0.0836	ppb	07:01:20
1	Mo 202.031†	-5.6	2.0	0.2247	µg/L	0.2247	ppb	07:01:20
1	Ni 231.604†	287.4	3.6	0.1976	µg/L	0.1976	ppb	07:01:20
1	P 214.914†	211.9	17.4	37.853	µg/L	37.853	ppb	07:01:20
1	Pb 220.353†	64.4	13.8	3.4934	µg/L	3.4934	ppb	07:01:20
1	S 181.975 Axial†	35.5	13.3	68.594	µg/L	68.594	ppb	07:01:20
1	Sb 206.836†	16.3	-3.4	-3.3257	µg/L	-3.3257	ppb	07:01:20
1	Se 196.026†	15.1	1.9	2.7226	µg/L	2.7226	ppb	07:01:20
1	SiO2†	1975.1	100.9	19.270	µg/L	19.270	ppb	07:00:59
1	Si 251.611†	352.7	22.3	1.6348	µg/L	1.6348	ppb	07:01:20
1	Sn 189.927†	23.3	2.1	1.0278	µg/L	1.0278	ppb	07:01:20
1	Ti 334.940†	845.5	172.6	0.3842	µg/L	0.3842	ppb	07:00:59
1	Tl 190.801†	-21.6	-1.4	-2.0760	µg/L	-2.0760	ppb	07:01:20
1	U 409.014†	706.8	66.1	6.2103	µg/L	6.2103	ppb	07:00:59
1	V 292.402†	-16.1	75.0	0.8547	µg/L	0.8547	ppb	07:00:59
1	Zn 213.857†	530.3	9.0	0.2446	µg/L	0.2446	ppb	07:01:20
2	Sc RADIAL	104628.2	104628.2	93.0	%			06:59:57
2	Al 396.153Radial†	176.7	-39.8	-20.156	µg/L	-20.156	ppb	06:59:57
2	Ca 317.933Radial†	384.9	-81.7	-32.413	µg/L	-32.413	ppb	07:00:17
2	Fe 238.204 Radial†	10.2	-0.2	-1.2771	µg/L	-1.2771	ppb	07:00:17
2	K 766.490 Radial†	730.0	89.9	48.767	µg/L	48.767	ppb	06:59:57
2	Mg 279.077 IEC†	18.6	0.1	0.6928	µg/L	0.6928	ppb	07:00:17
2	Na 589.592 Radial†	-596.2	63.0	17.478	µg/L	17.478	ppb	06:59:57
2	Sr 421.552†	-55.4	4.2	0.0239	µg/L	0.0239	ppb	06:59:57
2	Sc 361.383	1932770.3	1932770.3	93.972	%			07:01:26
2	Y 371.029	1175769.9	1175769.9	93.884	%			07:01:26
2	Ag 328.068†	-37.6	-11.7	-0.1017	µg/L	-0.1017	ppb	07:01:31
2	As 188.979†	6.1	4.0	7.5633	µg/L	7.5633	ppb	07:01:52
2	B 249.677†	151.5	5.5	0.2446	µg/L	0.2446	ppb	07:01:52
2	Ba 233.527†	-73.4	2.6	0.0656	µg/L	0.0656	ppb	07:01:52
2	Be 313.107†	3632.5	254.1	0.1606	µg/L	0.1606	ppb	07:01:31
2	Cd 226.502†	-97.9	-3.3	-0.0851	µg/L	-0.0851	ppb	07:01:52
2	Co 228.616†	-67.1	0.3	0.0137	µg/L	0.0137	ppb	07:01:52
2	Cr 267.716†	-139.2	-25.4	-0.5272	µg/L	-0.5272	ppb	07:01:31
2	Cu 324.752†	3135.3	-47.9	-0.3370	µg/L	-0.3370	ppb	07:01:31
2	Mn 257.610†	-188.2	22.4	0.0708	µg/L	0.0708	ppb	07:01:52
2	Mo 202.031†	-3.2	4.5	0.5004	µg/L	0.5004	ppb	07:01:52
2	Ni 231.604†	267.6	-14.6	-0.7975	µg/L	-0.7975	ppb	07:01:52
2	P 214.914†	204.0	11.1	24.291	µg/L	24.291	ppb	07:01:52
2	Pb 220.353†	56.7	6.2	1.5785	µg/L	1.5785	ppb	07:01:52

2	S 181.975 Axial†	35.4	13.6	69.997 µg/L	69.997 ppb		07:01:52
2	Sb 206.836†	23.9	4.9	4.8553 µg/L	4.8553 ppb		07:01:52
2	Se 196.026†	8.3	-5.2	-7.6518 µg/L	-7.6518 ppb		07:01:52
2	SiO2†	1945.5	88.6	16.914 µg/L	16.914 ppb		07:01:31
2	Si 251.611†	338.1	10.1	0.6308 µg/L	0.6308 ppb		07:01:52
2	Sn 189.927†	26.6	5.9	2.8455 µg/L	2.8455 ppb		07:01:52
2	Ti 334.940†	763.5	93.6	0.2093 µg/L	0.2093 ppb		07:01:31
2	Tl 190.801†	-24.5	-4.7	-7.0617 µg/L	-7.0617 ppb		07:01:52
2	U 409.014†	666.6	30.1	2.8267 µg/L	2.8267 ppb		07:01:31
2	V 292.402†	-48.3	40.5	0.4647 µg/L	0.4647 ppb		07:01:31
2	Zn 213.857†	524.8	8.3	0.2263 µg/L	0.2263 ppb		07:01:52
3	Sc RADIAL	105590.3	105590.3	93.9 %			07:00:23
3	Al 396.153Radial†	182.7	-35.2	-17.768 µg/L	-17.768 ppb		07:00:23
3	Ca 317.933Radial†	396.7	-72.9	-28.920 µg/L	-28.920 ppb		07:00:43
3	Fe 238.204 Radial†	8.8	-1.8	-9.5354 µg/L	-9.5354 ppb		07:00:43
3	K 766.490 Radial†	746.9	100.7	54.621 µg/L	54.621 ppb		07:00:23
3	Mg 279.077 IEC†	16.7	-2.0	-11.243 µg/L	-11.243 ppb		07:00:43
3	Na 589.592 Radial†	-579.6	86.6	24.015 µg/L	24.015 ppb		07:00:23
3	Sr 421.552†	-70.2	-11.0	-0.0622 µg/L	-0.0622 ppb		07:00:23
3	Sc 361.383	1941750.9	1941750.9	94.409 %			07:01:58
3	Y 371.029	1179520.3	1179520.3	94.184 %			07:01:58
3	Ag 328.068†	-43.3	-17.5	-0.1576 µg/L	-0.1576 ppb		07:02:03
3	As 188.979†	-0.4	-2.9	-5.4643 µg/L	-5.4643 ppb		07:02:24
3	B 249.677†	133.7	-14.1	-0.6228 µg/L	-0.6228 ppb		07:02:24
3	Ba 233.527†	-72.2	4.2	0.1052 µg/L	0.1052 ppb		07:02:24
3	Be 313.107†	3636.9	240.7	0.1522 µg/L	0.1522 ppb		07:02:03
3	Cd 226.502†	-93.9	1.5	0.0392 µg/L	0.0392 ppb		07:02:24
3	Co 228.616†	-72.9	-5.4	-0.2631 µg/L	-0.2631 ppb		07:02:24
3	Cr 267.716†	-94.9	22.2	0.4623 µg/L	0.4623 ppb		07:02:03
3	Cu 324.752†	3162.3	-34.8	-0.2466 µg/L	-0.2466 ppb		07:02:03
3	Mn 257.610†	-191.8	19.5	0.0608 µg/L	0.0608 ppb		07:02:24
3	Mo 202.031†	-10.6	-3.3	-0.3671 µg/L	-0.3671 ppb		07:02:24
3	Ni 231.604†	277.1	-5.9	-0.3199 µg/L	-0.3199 ppb		07:02:24
3	P 214.914†	206.4	12.7	27.562 µg/L	27.562 ppb		07:02:24
3	Pb 220.353†	57.9	7.2	1.8223 µg/L	1.8223 ppb		07:02:24
3	S 181.975 Axial†	37.1	15.3	78.450 µg/L	78.450 ppb		07:02:24
3	Sb 206.836†	16.2	-3.4	-3.3903 µg/L	-3.3903 ppb		07:02:24
3	Se 196.026†	14.2	1.0	1.4190 µg/L	1.4190 ppb		07:02:24
3	SiO2†	1885.3	15.3	2.9244 µg/L	2.9244 ppb		07:02:03
3	Si 251.611†	338.1	8.5	0.6142 µg/L	0.6142 ppb		07:02:24
3	Sn 189.927†	22.1	0.9	0.4320 µg/L	0.4320 ppb		07:02:24
3	Ti 334.940†	742.0	67.1	0.1504 µg/L	0.1504 ppb		07:02:03
3	Tl 190.801†	-19.8	0.5	0.7221 µg/L	0.7221 ppb		07:02:24
3	U 409.014†	634.2	-7.5	-0.7000 µg/L	-0.7000 ppb		07:02:03
3	V 292.402†	-88.5	-1.7	-0.0240 µg/L	-0.0240 ppb		07:02:03
3	Zn 213.857†	528.2	9.3	0.2520 µg/L	0.2520 ppb		07:02:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941696.2	94.406	%	0.4327				0.46%
Sc RADIAL	105232.0	93.6	%	0.47				0.50%
Y 371.029	1180611.8	94.271	%	0.4368				0.46%
Ag 328.068†	-9.2	-0.0798	µg/L	0.09073	-0.0798	ppb	0.09073	113.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-30.6	-15.479	µg/L	6.1491	-15.479	ppb	6.1491	39.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	1.4381	µg/L	6.54851	1.4381	ppb	6.54851	455.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.1	-0.1347	µg/L	0.44380	-0.1347	ppb	0.44380	329.45%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0533	µg/L	0.05905	0.0533	ppb	0.05905	110.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	321.5	0.2033	µg/L	0.08126	0.2033	ppb	0.08126	39.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-74.7	-29.635	µg/L	2.4981	-29.635	ppb	2.4981	8.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.8	0.0491	µg/L	0.13952	0.0491	ppb	0.13952	283.98%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.6	-0.2201	µg/L	0.21559	-0.2201	ppb	0.21559	97.95%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.6     -0.0744 µg/L       0.50006     -0.0744 ppb        0.50006 671.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -33.2     -0.2360 µg/L       0.10664     -0.2360 ppb        0.10664  45.18%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.1     -11.171 µg/L       10.8056     -11.171 ppb        10.8056  96.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        85.0      46.108 µg/L       10.1080      46.108 ppb        10.1080  21.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.8     -15.665 µg/L       18.9603     -15.665 ppb        18.9603 121.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              23.0      0.0717 µg/L       0.01146      0.0717 ppb        0.01146  15.98%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.1      0.1193 µg/L       0.44327      0.1193 ppb        0.44327 371.50%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       56.5      15.667 µg/L        9.3860      15.667 ppb         9.3860  59.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.6     -0.3066 µg/L       0.49767     -0.3066 ppb        0.49767 162.33%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               13.7      29.902 µg/L        7.0774      29.902 ppb         7.0774  23.67%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               9.1      2.2981 µg/L       1.04233      2.2981 ppb        1.04233  45.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         14.1      72.347 µg/L        5.3316      72.347 ppb         5.3316   7.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -0.6     -0.6202 µg/L       4.74205     -0.6202 ppb        4.74205 764.55%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.8     -1.1701 µg/L       5.65107     -1.1701 ppb        5.65107 482.97%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    68.3      13.036 µg/L        8.8359      13.036 ppb         8.8359  67.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              13.6      0.9599 µg/L       0.58449      0.9599 ppb        0.58449  60.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.0      1.4351 µg/L       1.25728      1.4351 ppb        1.25728  87.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               2.7      0.0152 µg/L       0.07343      0.0152 ppb        0.07343 483.34%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             111.1      0.2479 µg/L       0.12165      0.2479 ppb        0.12165  49.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.9     -2.8052 µg/L       3.94280     -2.8052 ppb        3.94280 140.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               29.6      2.7790 µg/L       3.45539      2.7790 ppb        3.45539 124.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               37.9      0.4318 µg/L       0.44027      0.4318 ppb        0.44027 101.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               8.9      0.2410 µg/L       0.01321      0.2410 ppb        0.01321   5.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 07:34:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108426.9	108426.9	96.4	%			07:35:07
1	Al 396.153Radial†	10160.7	10310.7	5191.9	µg/L	5191.9	ppb	07:35:07
1	Ca 317.933Radial†	12371.7	12338.7	4897.9	µg/L	4897.9	ppb	07:35:28
1	Fe 238.204 Radial†	948.4	972.6	5125.9	µg/L	5125.9	ppb	07:35:28
1	K 766.490 Radial†	9790.3	9461.4	5129.9	µg/L	5129.9	ppb	07:35:07
1	Mg 279.077 IEC†	919.5	934.1	5185.9	µg/L	5185.9	ppb	07:35:28
1	Na 589.592 Radial†	35081.2	37096.5	10293	µg/L	10293	ppb	07:35:07
1	Sr 421.552†	85995.3	89273.8	502.87	µg/L	502.87	ppb	07:35:07
1	Sc 361.383	1943880.1	1943880.1	94.512	%			07:36:31
1	Y 371.029	1177912.6	1177912.6	94.056	%			07:36:31
1	Ag 328.068†	54085.1	57253.7	515.21	µg/L	515.21	ppb	07:36:37
1	As 188.979†	248.6	260.6	495.69	µg/L	495.69	ppb	07:36:57
1	B 249.677†	10796.1	11267.3	498.47	µg/L	498.47	ppb	07:36:37
1	Ba 233.527†	18895.7	20073.5	505.25	µg/L	505.25	ppb	07:36:37
1	Be 313.107†	750166.4	790110.4	499.62	µg/L	499.62	ppb	07:36:31
1	Cd 226.502†	17681.9	18809.4	497.57	µg/L	497.57	ppb	07:36:37
1	Co 228.616†	9830.8	10473.4	503.76	µg/L	503.76	ppb	07:36:37
1	Cr 267.716†	22731.2	24173.7	504.39	µg/L	504.39	ppb	07:36:37
1	Cu 324.752†	72230.7	73040.2	514.97	µg/L	514.97	ppb	07:36:37
1	Mn 257.610†	149988.6	158919.7	504.98	µg/L	504.98	ppb	07:36:31
1	Mo 202.031†	4202.9	4454.9	497.18	µg/L	497.18	ppb	07:36:57
1	Ni 231.604†	9001.1	9224.3	502.53	µg/L	502.53	ppb	07:36:37
1	P 214.914†	1292.8	1161.8	2465.9	µg/L	2465.9	ppb	07:36:57
1	Pb 220.353†	1918.0	1975.3	501.43	µg/L	501.43	ppb	07:36:57
1	S 181.975 Axial†	217.2	205.7	1055.5	µg/L	1055.5	ppb	07:36:57
1	Sb 206.836†	497.0	505.3	499.95	µg/L	499.95	ppb	07:36:57
1	Se 196.026†	340.3	346.0	506.11	µg/L	506.11	ppb	07:36:57
1	SiO2†	29458.5	29187.2	5573.7	µg/L	5573.7	ppb	07:36:37
1	Si 251.611†	32421.3	33954.0	2552.8	µg/L	2552.8	ppb	07:36:37
1	Sn 189.927†	982.2	1016.7	498.41	µg/L	498.41	ppb	07:36:57
1	Ti 334.940†	215791.7	227601.9	504.23	µg/L	504.23	ppb	07:36:31
1	Tl 190.801†	290.6	328.9	498.71	µg/L	498.71	ppb	07:36:57
1	U 409.014†	5926.8	5591.7	524.29	µg/L	524.29	ppb	07:36:37
1	V 292.402†	42282.3	44829.2	510.11	µg/L	510.11	ppb	07:36:37
1	Zn 213.857†	18527.0	19052.6	506.44	µg/L	506.44	ppb	07:36:37
2	Sc RADIAL	107319.2	107319.2	95.4	%			07:35:33
2	Al 396.153Radial†	10093.7	10349.3	5211.5	µg/L	5211.5	ppb	07:35:33
2	Ca 317.933Radial†	12329.3	12426.8	4932.8	µg/L	4932.8	ppb	07:35:54
2	Fe 238.204 Radial†	949.8	984.3	5186.7	µg/L	5186.7	ppb	07:35:54
2	K 766.490 Radial†	9685.8	9456.8	5127.4	µg/L	5127.4	ppb	07:35:33
2	Mg 279.077 IEC†	906.1	929.9	5162.4	µg/L	5162.4	ppb	07:35:54
2	Na 589.592 Radial†	35103.1	37495.1	10403	µg/L	10403	ppb	07:35:33
2	Sr 421.552†	85392.1	89562.4	504.50	µg/L	504.50	ppb	07:35:33
2	Sc 361.383	1957099.2	1957099.2	95.155	%			07:37:04
2	Y 371.029	1185312.9	1185312.9	94.646	%			07:37:04
2	Ag 328.068†	53891.6	56663.8	509.92	µg/L	509.92	ppb	07:37:10
2	As 188.979†	255.2	265.7	505.37	µg/L	505.37	ppb	07:37:31
2	B 249.677†	10746.3	11137.8	492.71	µg/L	492.71	ppb	07:37:10
2	Ba 233.527†	18818.1	19856.9	499.80	µg/L	499.80	ppb	07:37:10
2	Be 313.107†	756322.5	791218.9	500.32	µg/L	500.32	ppb	07:37:04
2	Cd 226.502†	17711.4	18714.1	495.03	µg/L	495.03	ppb	07:37:10
2	Co 228.616†	9788.5	10358.6	498.23	µg/L	498.23	ppb	07:37:10
2	Cr 267.716†	22603.6	23877.2	498.20	µg/L	498.20	ppb	07:37:10
2	Cu 324.752†	71903.5	72180.1	508.94	µg/L	508.94	ppb	07:37:10
2	Mn 257.610†	151351.0	159279.6	506.13	µg/L	506.13	ppb	07:37:04
2	Mo 202.031†	4203.6	4425.5	493.91	µg/L	493.91	ppb	07:37:31
2	Ni 231.604†	8999.1	9157.9	498.91	µg/L	498.91	ppb	07:37:10
2	P 214.914†	1293.1	1153.0	2447.3	µg/L	2447.3	ppb	07:37:31
2	Pb 220.353†	1926.9	1970.9	500.33	µg/L	500.33	ppb	07:37:31

2	S 181.975 Axial†	221.2	208.5	1069.5 µg/L	1069.5 ppb	07:37:31
2	Sb 206.836†	502.8	507.8	502.45 µg/L	502.45 ppb	07:37:31
2	Se 196.026†	340.2	343.5	502.44 µg/L	502.44 ppb	07:37:31
2	SiO2†	29245.7	28753.0	5490.8 µg/L	5490.8 ppb	07:37:10
2	Si 251.611†	32194.3	33483.8	2517.0 µg/L	2517.0 ppb	07:37:10
2	Sn 189.927†	978.1	1005.4	492.91 µg/L	492.91 ppb	07:37:31
2	Ti 334.940†	217320.3	227666.2	504.37 µg/L	504.37 ppb	07:37:04
2	Tl 190.801†	291.4	327.6	496.80 µg/L	496.80 ppb	07:37:31
2	U 409.014†	5780.0	5395.1	505.81 µg/L	505.81 ppb	07:37:10
2	V 292.402†	42159.9	44398.4	505.21 µg/L	505.21 ppb	07:37:10
2	Zn 213.857†	18433.2	18821.6	500.27 µg/L	500.27 ppb	07:37:10
3	Sc RADIAL	108101.0	108101.0	96.1 %		07:35:59
3	Al 396.153Radial†	10161.9	10343.7	5208.7 µg/L	5208.7 ppb	07:35:59
3	Ca 317.933Radial†	12389.7	12396.1	4920.7 µg/L	4920.7 ppb	07:36:20
3	Fe 238.204 Radial†	961.6	989.3	5213.5 µg/L	5213.5 ppb	07:36:20
3	K 766.490 Radial†	9814.5	9517.2	5160.2 µg/L	5160.2 ppb	07:35:59
3	Mg 279.077 IEC†	921.1	938.6	5210.7 µg/L	5210.7 ppb	07:36:20
3	Na 589.592 Radial†	35141.4	37268.9	10341 µg/L	10341 ppb	07:35:59
3	Sr 421.552†	86142.1	89695.4	505.25 µg/L	505.25 ppb	07:35:59
3	Sc 361.383	1956426.1	1956426.1	95.122 %		07:37:38
3	Y 371.029	1184365.1	1184365.1	94.571 %		07:37:38
3	Ag 328.068†	53763.0	56548.0	508.89 µg/L	508.89 ppb	07:37:43
3	As 188.979†	255.0	265.6	505.23 µg/L	505.23 ppb	07:38:04
3	B 249.677†	10764.2	11160.5	493.71 µg/L	493.71 ppb	07:37:43
3	Ba 233.527†	18818.6	19864.2	499.98 µg/L	499.98 ppb	07:37:43
3	Be 313.107†	755598.8	790731.5	500.02 µg/L	500.02 ppb	07:37:38
3	Cd 226.502†	17636.1	18641.3	493.11 µg/L	493.11 ppb	07:37:43
3	Co 228.616†	9802.2	10376.6	499.10 µg/L	499.10 ppb	07:37:43
3	Cr 267.716†	22566.2	23846.1	497.55 µg/L	497.55 ppb	07:37:43
3	Cu 324.752†	71907.0	72209.8	509.15 µg/L	509.15 ppb	07:37:43
3	Mn 257.610†	150911.4	158872.2	504.84 µg/L	504.84 ppb	07:37:38
3	Mo 202.031†	4211.8	4435.6	495.04 µg/L	495.04 ppb	07:38:04
3	Ni 231.604†	9017.6	9180.6	500.14 µg/L	500.14 ppb	07:37:43
3	P 214.914†	1306.0	1167.0	2477.6 µg/L	2477.6 ppb	07:38:04
3	Pb 220.353†	1923.9	1968.5	499.71 µg/L	499.71 ppb	07:38:04
3	S 181.975 Axial†	222.7	210.1	1077.8 µg/L	1077.8 ppb	07:38:04
3	Sb 206.836†	495.2	500.1	494.80 µg/L	494.80 ppb	07:38:04
3	Se 196.026†	351.1	355.0	519.20 µg/L	519.20 ppb	07:38:04
3	SiO2†	29228.0	28745.0	5489.3 µg/L	5489.3 ppb	07:37:43
3	Si 251.611†	32162.1	33461.6	2515.2 µg/L	2515.2 ppb	07:37:43
3	Sn 189.927†	982.5	1010.5	495.38 µg/L	495.38 ppb	07:38:04
3	Ti 334.940†	217003.3	227411.5	503.81 µg/L	503.81 ppb	07:37:38
3	Tl 190.801†	288.8	325.0	492.93 µg/L	492.93 ppb	07:38:04
3	U 409.014†	5870.4	5492.2	514.93 µg/L	514.93 ppb	07:37:43
3	V 292.402†	42161.4	44415.2	505.42 µg/L	505.42 ppb	07:37:43
3	Zn 213.857†	18431.9	18826.8	500.40 µg/L	500.40 ppb	07:37:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1952468.5	94.930	%	0.3620				0.38%
Sc RADIAL	107949.0	96.0	%	0.51				0.53%
Y 371.029	1182530.2	94.424	%	0.3215				0.34%
Ag 328.068†	56821.8	511.34	µg/L	3.395	511.34	ppb	3.395	0.66%
QC value within limits for Ag 328.068 Recovery = 102.27%								
Al 396.153Radial†	10334.6	5204.0	µg/L	10.62	5204.0	ppb	10.62	0.20%
QC value within limits for Al 396.153Radial Recovery = 104.08%								
As 188.979†	264.0	502.09	µg/L	5.550	502.09	ppb	5.550	1.11%
QC value within limits for As 188.979 Recovery = 100.42%								
B 249.677†	11188.5	494.96	µg/L	3.081	494.96	ppb	3.081	0.62%
QC value within limits for B 249.677 Recovery = 98.99%								
Ba 233.527†	19931.6	501.68	µg/L	3.095	501.68	ppb	3.095	0.62%
QC value within limits for Ba 233.527 Recovery = 100.34%								
Be 313.107†	790686.9	499.99	µg/L	0.351	499.99	ppb	0.351	0.07%
QC value within limits for Be 313.107 Recovery = 100.00%								
Ca 317.933Radial†	12387.2	4917.1	µg/L	17.75	4917.1	ppb	17.75	0.36%
QC value within limits for Ca 317.933Radial Recovery = 98.34%								
Cd 226.502†	18721.6	495.24	µg/L	2.237	495.24	ppb	2.237	0.45%
QC value within limits for Cd 226.502 Recovery = 99.05%								
Co 228.616†	10402.8	500.36	µg/L	2.973	500.36	ppb	2.973	0.59%

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   QC value within limits for Co 228.616  Recovery = 100.07%
Cr 267.716†            23965.7      500.05 µg/L         3.771      500.05 ppb          3.771   0.75%
   QC value within limits for Cr 267.716  Recovery = 100.01%
Cu 324.752†            72476.7      511.02 µg/L         3.426      511.02 ppb          3.426   0.67%
   QC value within limits for Cu 324.752  Recovery = 102.20%
Fe 238.204 Radial†       982.1      5175.4 µg/L         44.88      5175.4 ppb          44.88   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.51%
K 766.490 Radial†       9478.5      5139.2 µg/L         18.25      5139.2 ppb          18.25   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 102.78%
Mg 279.077 IEC†          934.2      5186.3 µg/L         24.11      5186.3 ppb          24.11   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.73%
Mn 257.610†           159023.8      505.32 µg/L         0.708      505.32 ppb          0.708   0.14%
   QC value within limits for Mn 257.610  Recovery = 101.06%
Mo 202.031†             4438.7      495.38 µg/L         1.661      495.38 ppb          1.661   0.34%
   QC value within limits for Mo 202.031  Recovery = 99.08%
Na 589.592 Radial†     37286.8       10346 µg/L          55.5       10346 ppb           55.5   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 103.46%
Ni 231.604†             9187.6      500.53 µg/L         1.839      500.53 ppb          1.839   0.37%
   QC value within limits for Ni 231.604  Recovery = 100.11%
P 214.914†              1160.6      2463.6 µg/L         15.30      2463.6 ppb          15.30   0.62%
   QC value within limits for P 214.914  Recovery = 98.54%
Pb 220.353†             1971.6      500.49 µg/L         0.869      500.49 ppb          0.869   0.17%
   QC value within limits for Pb 220.353  Recovery = 100.10%
S 181.975 Axial†         208.1      1067.6 µg/L         11.27      1067.6 ppb          11.27   1.06%
   QC value within limits for S 181.975 Axial  Recovery = 106.76%
Sb 206.836†              504.4      499.07 µg/L         3.903      499.07 ppb          3.903   0.78%
   QC value within limits for Sb 206.836  Recovery = 99.81%
Se 196.026†              348.1      509.25 µg/L         8.807      509.25 ppb          8.807   1.73%
   QC value within limits for Se 196.026  Recovery = 101.85%
SiO2†                   28895.1      5517.9 µg/L         48.32      5517.9 ppb          48.32   0.88%
   QC value within limits for SiO2  Recovery = 103.19%
Si 251.611†             33633.1      2528.4 µg/L         21.18      2528.4 ppb          21.18   0.84%
   QC value within limits for Si 251.611  Recovery = 101.13%
Sn 189.927†             1010.9      495.57 µg/L         2.755      495.57 ppb          2.755   0.56%
   QC value within limits for Sn 189.927  Recovery = 99.11%
Sr 421.552†             89510.5      504.21 µg/L         1.214      504.21 ppb          1.214   0.24%
   QC value within limits for Sr 421.552  Recovery = 100.84%
Ti 334.940†            227559.9      504.13 µg/L         0.294      504.13 ppb          0.294   0.06%
   QC value within limits for Ti 334.940  Recovery = 100.83%
Tl 190.801†              327.2      496.15 µg/L         2.945      496.15 ppb          2.945   0.59%
   QC value within limits for Tl 190.801  Recovery = 99.23%
U 409.014†              5493.0      515.01 µg/L         9.240      515.01 ppb          9.240   1.79%
   QC value within limits for U 409.014  Recovery = 103.00%
V 292.402†              44547.6      506.91 µg/L         2.772      506.91 ppb          2.772   0.55%
   QC value within limits for V 292.402  Recovery = 101.38%
Zn 213.857†             18900.3      502.37 µg/L         3.524      502.37 ppb          3.524   0.70%
   QC value within limits for Zn 213.857  Recovery = 100.47%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 07:38:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105823.4	105823.4	94.1	%			07:38:47
1	Al 396.153Radial†	217.3	1.1	0.5826	µg/L	0.5826	ppb	07:38:47
1	Ca 317.933Radial†	399.2	-71.2	-28.247	µg/L	-28.247	ppb	07:39:07
1	Fe 238.204 Radial†	12.9	2.5	12.992	µg/L	12.992	ppb	07:39:07
1	K 766.490 Radial†	734.7	86.1	46.681	µg/L	46.681	ppb	07:38:47
1	Mg 279.077 IEC†	13.5	-5.5	-30.716	µg/L	-30.716	ppb	07:39:07
1	Na 589.592 Radial†	-635.5	28.5	7.8991	µg/L	7.8991	ppb	07:38:47
1	Sr 421.552†	-40.7	20.5	0.1156	µg/L	0.1156	ppb	07:38:47
1	Sc 361.383	1948076.6	1948076.6	94.717	%			07:40:08
1	Y 371.029	1183421.0	1183421.0	94.495	%			07:40:08
1	Ag 328.068†	-81.5	-57.7	-0.5119	µg/L	-0.5119	ppb	07:40:14
1	As 188.979†	2.2	-0.2	-0.3853	µg/L	-0.3853	ppb	07:40:35
1	B 249.677†	171.2	25.1	1.1098	µg/L	1.1098	ppb	07:40:35
1	Ba 233.527†	-78.2	-1.9	-0.0477	µg/L	-0.0477	ppb	07:40:35
1	Be 313.107†	3612.6	202.6	0.1280	µg/L	0.1280	ppb	07:40:14
1	Cd 226.502†	-101.6	-6.3	-0.1606	µg/L	-0.1606	ppb	07:40:35
1	Co 228.616†	-69.6	-1.7	-0.0855	µg/L	-0.0855	ppb	07:40:35
1	Cr 267.716†	-116.4	-0.1	-0.0008	µg/L	-0.0008	ppb	07:40:14
1	Cu 324.752†	3135.4	-74.0	-0.5180	µg/L	-0.5180	ppb	07:40:14
1	Mn 257.610†	-138.3	76.6	0.2448	µg/L	0.2448	ppb	07:40:35
1	Mo 202.031†	-9.9	-2.5	-0.2826	µg/L	-0.2826	ppb	07:40:35
1	Ni 231.604†	276.6	-7.4	-0.4027	µg/L	-0.4027	ppb	07:40:35
1	P 214.914†	211.9	17.7	38.467	µg/L	38.467	ppb	07:40:35
1	Pb 220.353†	65.6	15.1	3.8204	µg/L	3.8204	ppb	07:40:35
1	S 181.975 Axial†	33.2	11.0	56.464	µg/L	56.464	ppb	07:40:35
1	Sb 206.836†	18.5	-1.0	-1.0207	µg/L	-1.0207	ppb	07:40:35
1	Se 196.026†	11.3	-2.1	-3.1090	µg/L	-3.1090	ppb	07:40:35
1	SiO2†	2085.7	220.4	42.081	µg/L	42.081	ppb	07:40:14
1	Si 251.611†	457.7	133.6	10.214	µg/L	10.214	ppb	07:40:35
1	Sn 189.927†	20.9	-0.4	-0.2051	µg/L	-0.2051	ppb	07:40:35
1	Ti 334.940†	852.7	181.4	0.4036	µg/L	0.4036	ppb	07:40:14
1	Tl 190.801†	-20.1	0.2	0.2471	µg/L	0.2471	ppb	07:40:35
1	U 409.014†	762.7	126.1	11.835	µg/L	11.835	ppb	07:40:14
1	V 292.402†	-55.6	33.3	0.3937	µg/L	0.3937	ppb	07:40:14
1	Zn 213.857†	532.7	12.3	0.3312	µg/L	0.3312	ppb	07:40:35
2	Sc RADIAL	105947.7	105947.7	94.2	%			07:39:12
2	Al 396.153Radial†	186.6	-31.7	-16.053	µg/L	-16.053	ppb	07:39:12
2	Ca 317.933Radial†	395.0	-76.1	-30.192	µg/L	-30.192	ppb	07:39:33
2	Fe 238.204 Radial†	11.5	1.0	5.1471	µg/L	5.1471	ppb	07:39:33
2	K 766.490 Radial†	662.4	8.4	4.5367	µg/L	4.5367	ppb	07:39:12
2	Mg 279.077 IEC†	14.5	-4.4	-24.485	µg/L	-24.485	ppb	07:39:33
2	Na 589.592 Radial†	-639.3	25.2	7.0044	µg/L	7.0044	ppb	07:39:12
2	Sr 421.552†	-31.3	30.6	0.1723	µg/L	0.1723	ppb	07:39:12
2	Sc 361.383	1937833.6	1937833.6	94.219	%			07:40:40
2	Y 371.029	1176787.2	1176787.2	93.966	%			07:40:40
2	Ag 328.068†	-80.1	-56.7	-0.5023	µg/L	-0.5023	ppb	07:40:46
2	As 188.979†	-0.3	-2.8	-5.3117	µg/L	-5.3117	ppb	07:41:06
2	B 249.677†	151.7	5.3	0.2327	µg/L	0.2327	ppb	07:41:06
2	Ba 233.527†	-80.0	-4.2	-0.1039	µg/L	-0.1039	ppb	07:41:06
2	Be 313.107†	3605.3	215.0	0.1359	µg/L	0.1359	ppb	07:40:46
2	Cd 226.502†	-90.1	5.3	0.1465	µg/L	0.1465	ppb	07:41:06
2	Co 228.616†	-71.1	-3.7	-0.1802	µg/L	-0.1802	ppb	07:41:06
2	Cr 267.716†	-129.8	-15.0	-0.3114	µg/L	-0.3114	ppb	07:40:46
2	Cu 324.752†	3194.8	6.5	0.0469	µg/L	0.0469	ppb	07:40:46
2	Mn 257.610†	-129.3	85.4	0.2716	µg/L	0.2716	ppb	07:41:06
2	Mo 202.031†	-5.2	2.3	0.2614	µg/L	0.2614	ppb	07:41:06
2	Ni 231.604†	275.4	-7.0	-0.3840	µg/L	-0.3840	ppb	07:41:06
2	P 214.914†	215.0	22.2	48.210	µg/L	48.210	ppb	07:41:06
2	Pb 220.353†	58.3	7.7	1.9527	µg/L	1.9527	ppb	07:41:06

2	S 181.975 Axial†	36.3	14.4	74.145 µg/L	74.145 ppb	07:41:06
2	Sb 206.836†	21.0	1.8	1.7742 µg/L	1.7742 ppb	07:41:06
2	Se 196.026†	14.2	1.0	1.4712 µg/L	1.4712 ppb	07:41:06
2	SiO2†	2029.9	172.8	32.994 µg/L	32.994 ppb	07:40:46
2	Si 251.611†	455.4	133.7	10.209 µg/L	10.209 ppb	07:41:06
2	Sn 189.927†	21.7	0.6	0.2787 µg/L	0.2787 ppb	07:41:06
2	Ti 334.940†	800.4	130.6	0.2913 µg/L	0.2913 ppb	07:40:46
2	Tl 190.801†	-15.9	4.5	6.8548 µg/L	6.8548 ppb	07:41:06
2	U 409.014†	745.4	112.0	10.514 µg/L	10.514 ppb	07:40:46
2	V 292.402†	-39.8	49.7	0.5799 µg/L	0.5799 ppb	07:40:46
2	Zn 213.857†	522.7	4.6	0.1248 µg/L	0.1248 ppb	07:41:06
3	Sc RADIAL	106727.8	106727.8	94.9 %		07:39:38
3	Al 396.153Radial†	236.4	19.3	9.7456 µg/L	9.7456 ppb	07:39:38
3	Ca 317.933Radial†	401.0	-72.8	-28.910 µg/L	-28.910 ppb	07:39:59
3	Fe 238.204 Radial†	8.9	-1.8	-9.5269 µg/L	-9.5269 ppb	07:39:59
3	K 766.490 Radial†	677.7	19.4	10.526 µg/L	10.526 ppb	07:39:38
3	Mg 279.077 IEC†	15.6	-3.4	-18.703 µg/L	-18.703 ppb	07:39:59
3	Na 589.592 Radial†	-636.9	32.7	9.0618 µg/L	9.0618 ppb	07:39:38
3	Sr 421.552†	-64.2	-3.9	-0.0219 µg/L	-0.0219 ppb	07:39:38
3	Sc 361.383	1951593.7	1951593.7	94.888 %		07:41:12
3	Y 371.029	1185614.0	1185614.0	94.671 %		07:41:12
3	Ag 328.068†	-37.9	-11.6	-0.1024 µg/L	-0.1024 ppb	07:41:17
3	As 188.979†	4.9	2.6	5.0218 µg/L	5.0218 ppb	07:41:38
3	B 249.677†	127.1	-21.8	-0.9632 µg/L	-0.9632 ppb	07:41:38
3	Ba 233.527†	-65.3	11.9	0.2995 µg/L	0.2995 ppb	07:41:38
3	Be 313.107†	3685.0	272.1	0.1720 µg/L	0.1720 ppb	07:41:17
3	Cd 226.502†	-94.9	0.9	0.0404 µg/L	0.0404 ppb	07:41:38
3	Co 228.616†	-67.2	0.9	0.0445 µg/L	0.0445 ppb	07:41:38
3	Cr 267.716†	-113.1	3.6	0.0759 µg/L	0.0759 ppb	07:41:17
3	Cu 324.752†	3152.5	-62.0	-0.4380 µg/L	-0.4380 ppb	07:41:17
3	Mn 257.610†	-134.7	80.7	0.2549 µg/L	0.2549 ppb	07:41:38
3	Mo 202.031†	-3.5	4.2	0.4688 µg/L	0.4688 ppb	07:41:38
3	Ni 231.604†	279.5	-4.8	-0.2641 µg/L	-0.2641 ppb	07:41:38
3	P 214.914†	201.4	6.3	13.708 µg/L	13.708 ppb	07:41:38
3	Pb 220.353†	60.8	10.0	2.5169 µg/L	2.5169 ppb	07:41:38
3	S 181.975 Axial†	29.9	7.5	38.310 µg/L	38.310 ppb	07:41:38
3	Sb 206.836†	23.0	3.7	3.6874 µg/L	3.6874 ppb	07:41:38
3	Se 196.026†	6.2	-7.6	-11.007 µg/L	-11.007 ppb	07:41:38
3	SiO2†	2035.4	163.4	31.207 µg/L	31.207 ppb	07:41:17
3	Si 251.611†	476.7	152.7	11.616 µg/L	11.616 ppb	07:41:38
3	Sn 189.927†	24.1	2.9	1.4235 µg/L	1.4235 ppb	07:41:38
3	Ti 334.940†	863.8	191.4	0.4260 µg/L	0.4260 ppb	07:41:17
3	Tl 190.801†	-20.9	-0.6	-0.9330 µg/L	-0.9330 ppb	07:41:38
3	U 409.014†	883.2	251.6	23.630 µg/L	23.630 ppb	07:41:17
3	V 292.402†	-63.5	25.0	0.3230 µg/L	0.3230 ppb	07:41:17
3	Zn 213.857†	530.9	9.3	0.2539 µg/L	0.2539 ppb	07:41:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945834.6	94.608	%	0.3476				0.37%
Sc RADIAL	106166.3	94.4	%	0.44				0.46%
Y 371.029	1181940.8	94.377	%	0.3670				0.39%
Ag 328.068†	-42.0	-0.3722	µg/L	0.23373	-0.3722	ppb	0.23373	62.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.8	-1.9081	µg/L	13.07821	-1.9081	ppb	13.07821	685.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.2251	µg/L	5.16864	-0.2251	ppb	5.16864	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2.9	0.1264	µg/L	1.04060	0.1264	ppb	1.04060	823.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.9	0.0493	µg/L	0.21847	0.0493	ppb	0.21847	443.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	229.9	0.1453	µg/L	0.02344	0.1453	ppb	0.02344	16.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-73.3	-29.116	µg/L	0.9887	-29.116	ppb	0.9887	3.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.1	0.0088	µg/L	0.15596	0.0088	ppb	0.15596	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.5	-0.0737	µg/L	0.11283	-0.0737	ppb	0.11283	153.04%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -3.8     -0.0787 µg/L       0.20510     -0.0787 ppb        0.20510 260.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -43.2     -0.3030 µg/L       0.30570     -0.3030 ppb        0.30570 100.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      2.8708 µg/L      11.43087      2.8708 ppb       11.43087 398.17%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          38.0      20.581 µg/L       22.8006      20.581 ppb        22.8006 110.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.4     -24.635 µg/L        6.0078     -24.635 ppb         6.0078  24.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                80.9      0.2571 µg/L       0.01353      0.2571 ppb        0.01353   5.26%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.3      0.1492 µg/L       0.38810      0.1492 ppb        0.38810 260.11%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         28.8      7.9884 µg/L       1.03163      7.9884 ppb        1.03163  12.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.4     -0.3503 µg/L       0.07521     -0.3503 ppb        0.07521  21.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.4      33.462 µg/L       17.7875      33.462 ppb        17.7875  53.16%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.9      2.7633 µg/L       0.95793      2.7633 ppb        0.95793  34.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           11.0      56.307 µg/L       17.9180      56.307 ppb        17.9180  31.82%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.5      1.4803 µg/L       2.36777      1.4803 ppb        2.36777 159.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.9     -4.2149 µg/L       6.31212     -4.2149 ppb        6.31212 149.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     185.5      35.427 µg/L        5.8311      35.427 ppb         5.8311  16.46%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               140.0      10.680 µg/L        0.8110      10.680 ppb         0.8110   7.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.0      0.4990 µg/L       0.83633      0.4990 ppb        0.83633 167.59%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                15.7      0.0886 µg/L       0.09987      0.0886 ppb        0.09987 112.67%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               167.8      0.3736 µg/L       0.07219      0.3736 ppb        0.07219  19.32%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.4      2.0563 µg/L       4.19734      2.0563 ppb        4.19734 204.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                163.2      15.326 µg/L        7.2210      15.326 ppb         7.2210  47.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 36.0      0.4322 µg/L       0.13272      0.4322 ppb        0.13272  30.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 8.7      0.2366 µg/L       0.10423      0.2366 ppb        0.10423  44.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 08:14:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106636.1	106636.1	94.8	%			08:15:15
1	Al 396.153Radial†	10179.8	10507.8	5291.7	µg/L	5291.7	ppb	08:15:15
1	Ca 317.933Radial†	12435.1	12621.1	5010.0	µg/L	5010.0	ppb	08:15:35
1	Fe 238.204 Radial†	961.0	1002.4	5282.4	µg/L	5282.4	ppb	08:15:35
1	K 766.490 Radial†	9808.1	9650.7	5232.6	µg/L	5232.6	ppb	08:15:15
1	Mg 279.077 IEC†	926.1	957.1	5313.1	µg/L	5313.1	ppb	08:15:35
1	Na 589.592 Radial†	34804.8	37416.2	10382	µg/L	10382	ppb	08:15:15
1	Sr 421.552†	85869.5	90639.1	510.56	µg/L	510.56	ppb	08:15:15
1	Sc 361.383	1960382.6	1960382.6	95.315	%			08:16:38
1	Y 371.029	1186590.5	1186590.5	94.748	%			08:16:38
1	Ag 328.068†	54368.6	57069.4	513.57	µg/L	513.57	ppb	08:16:44
1	As 188.979†	251.3	261.2	496.78	µg/L	496.78	ppb	08:17:05
1	B 249.677†	10816.9	11192.9	495.12	µg/L	495.12	ppb	08:16:44
1	Ba 233.527†	19008.6	20023.6	503.99	µg/L	503.99	ppb	08:16:44
1	Be 313.107†	758104.7	791757.4	500.67	µg/L	500.67	ppb	08:16:38
1	Cd 226.502†	17842.5	18820.4	497.85	µg/L	497.85	ppb	08:16:44
1	Co 228.616†	9890.9	10448.8	502.57	µg/L	502.57	ppb	08:16:44
1	Cr 267.716†	22854.9	24101.1	502.87	µg/L	502.87	ppb	08:16:44
1	Cu 324.752†	72609.9	72794.7	513.28	µg/L	513.28	ppb	08:16:44
1	Mn 257.610†	151498.4	159167.8	505.79	µg/L	505.79	ppb	08:16:38
1	Mo 202.031†	4207.8	4422.5	493.58	µg/L	493.58	ppb	08:17:05
1	Ni 231.604†	9072.7	9219.3	502.25	µg/L	502.25	ppb	08:16:44
1	P 214.914†	1297.9	1155.7	2452.5	µg/L	2452.5	ppb	08:17:05
1	Pb 220.353†	1926.8	1967.4	499.42	µg/L	499.42	ppb	08:17:05
1	S 181.975 Axial†	219.3	206.0	1057.1	µg/L	1057.1	ppb	08:17:05
1	Sb 206.836†	500.8	504.9	499.53	µg/L	499.53	ppb	08:17:05
1	Se 196.026†	341.5	344.1	503.46	µg/L	503.46	ppb	08:17:05
1	SiO2†	29488.5	28956.3	5529.6	µg/L	5529.6	ppb	08:16:44
1	Si 251.611†	32522.2	33771.2	2539.0	µg/L	2539.0	ppb	08:16:44
1	Sn 189.927†	981.0	1006.8	493.62	µg/L	493.62	ppb	08:17:05
1	Ti 334.940†	217576.4	227552.3	504.11	µg/L	504.11	ppb	08:16:38
1	Tl 190.801†	297.3	333.3	505.35	µg/L	505.35	ppb	08:17:05
1	U 409.014†	5917.6	5529.3	518.40	µg/L	518.40	ppb	08:16:44
1	V 292.402†	42552.1	44735.7	509.03	µg/L	509.03	ppb	08:16:44
1	Zn 213.857†	18590.7	18954.3	503.79	µg/L	503.79	ppb	08:16:44
2	Sc RADIAL	108077.7	108077.7	96.1	%			08:15:41
2	Al 396.153Radial†	10222.4	10409.0	5241.6	µg/L	5241.6	ppb	08:15:41
2	Ca 317.933Radial†	12392.9	12402.2	4923.1	µg/L	4923.1	ppb	08:16:01
2	Fe 238.204 Radial†	954.8	982.5	5177.6	µg/L	5177.6	ppb	08:16:01
2	K 766.490 Radial†	9899.7	9608.1	5209.5	µg/L	5209.5	ppb	08:15:41
2	Mg 279.077 IEC†	913.8	931.1	5169.4	µg/L	5169.4	ppb	08:16:01
2	Na 589.592 Radial†	35160.5	37296.6	10348	µg/L	10348	ppb	08:15:41
2	Sr 421.552†	86808.6	90408.5	509.26	µg/L	509.26	ppb	08:15:41
2	Sc 361.383	1954927.8	1954927.8	95.050	%			08:17:12
2	Y 371.029	1183832.8	1183832.8	94.528	%			08:17:12
2	Ag 328.068†	54017.9	56859.6	511.69	µg/L	511.69	ppb	08:17:17
2	As 188.979†	251.5	262.1	498.56	µg/L	498.56	ppb	08:17:38
2	B 249.677†	10811.5	11218.9	496.31	µg/L	496.31	ppb	08:17:17
2	Ba 233.527†	18917.1	19983.0	502.97	µg/L	502.97	ppb	08:17:17
2	Be 313.107†	757399.4	793234.7	501.60	µg/L	501.60	ppb	08:17:12
2	Cd 226.502†	17685.6	18707.6	494.87	µg/L	494.87	ppb	08:17:17
2	Co 228.616†	9840.1	10424.3	501.39	µg/L	501.39	ppb	08:17:17
2	Cr 267.716†	22709.1	24014.6	501.07	µg/L	501.07	ppb	08:17:17
2	Cu 324.752†	72066.3	72435.4	510.73	µg/L	510.73	ppb	08:17:17
2	Mn 257.610†	151570.7	159687.4	507.42	µg/L	507.42	ppb	08:17:12
2	Mo 202.031†	4215.3	4442.8	495.84	µg/L	495.84	ppb	08:17:38
2	Ni 231.604†	9055.2	9227.4	502.69	µg/L	502.69	ppb	08:17:17
2	P 214.914†	1300.9	1162.6	2468.1	µg/L	2468.1	ppb	08:17:38
2	Pb 220.353†	1934.5	1981.2	502.94	µg/L	502.94	ppb	08:17:38

2	S 181.975 Axial†	214.9	202.0	1036.3 µg/L	1036.3 ppb	08:17:38
2	Sb 206.836†	494.0	499.2	493.87 µg/L	493.87 ppb	08:17:38
2	Se 196.026†	340.5	344.1	503.43 µg/L	503.43 ppb	08:17:38
2	SiO2†	29363.7	28911.4	5521.0 µg/L	5521.0 ppb	08:17:17
2	Si 251.611†	32405.9	33744.0	2536.8 µg/L	2536.8 ppb	08:17:17
2	Sn 189.927†	979.1	1007.7	494.00 µg/L	494.00 ppb	08:17:38
2	Ti 334.940†	217301.3	227899.9	504.89 µg/L	504.89 ppb	08:17:12
2	Tl 190.801†	295.5	332.3	503.84 µg/L	503.84 ppb	08:17:38
2	U 409.014†	5835.3	5460.0	511.91 µg/L	511.91 ppb	08:17:17
2	V 292.402†	42365.0	44663.4	508.22 µg/L	508.22 ppb	08:17:17
2	Zn 213.857†	18481.2	18893.6	502.18 µg/L	502.18 ppb	08:17:17
3	Sc RADIAL	107003.3	107003.3	95.1 %		08:16:06
3	Al 396.153Radial†	10050.6	10335.2	5204.4 µg/L	5204.4 ppb	08:16:06
3	Ca 317.933Radial†	12362.2	12499.4	4961.7 µg/L	4961.7 ppb	08:16:27
3	Fe 238.204 Radial†	956.4	994.2	5239.1 µg/L	5239.1 ppb	08:16:27
3	K 766.490 Radial†	9700.9	9502.6	5152.2 µg/L	5152.2 ppb	08:16:06
3	Mg 279.077 IEC†	912.6	939.5	5215.4 µg/L	5215.4 ppb	08:16:27
3	Na 589.592 Radial†	34688.6	37168.0	10313 µg/L	10313 ppb	08:16:06
3	Sr 421.552†	85220.4	89646.0	504.97 µg/L	504.97 ppb	08:16:06
3	Sc 361.383	1963447.0	1963447.0	95.464 %		08:17:45
3	Y 371.029	1188473.7	1188473.7	94.899 %		08:17:45
3	Ag 328.068†	54372.8	56984.7	512.82 µg/L	512.82 ppb	08:17:50
3	As 188.979†	246.2	255.4	485.84 µg/L	485.84 ppb	08:18:11
3	B 249.677†	10890.6	11252.4	497.78 µg/L	497.78 ppb	08:17:50
3	Ba 233.527†	19047.9	20033.6	504.25 µg/L	504.25 ppb	08:17:50
3	Be 313.107†	760193.3	792703.8	501.26 µg/L	501.26 ppb	08:17:45
3	Cd 226.502†	17918.4	18870.8	499.18 µg/L	499.18 ppb	08:17:50
3	Co 228.616†	9923.4	10466.7	503.43 µg/L	503.43 ppb	08:17:50
3	Cr 267.716†	22899.0	24109.9	503.06 µg/L	503.06 ppb	08:17:50
3	Cu 324.752†	72604.9	72670.5	512.40 µg/L	512.40 ppb	08:17:50
3	Mn 257.610†	151870.2	159309.3	506.23 µg/L	506.23 ppb	08:17:45
3	Mo 202.031†	4208.0	4415.9	492.84 µg/L	492.84 ppb	08:18:11
3	Ni 231.604†	9070.8	9202.4	501.33 µg/L	501.33 ppb	08:17:50
3	P 214.914†	1308.6	1164.8	2472.5 µg/L	2472.5 ppb	08:18:11
3	Pb 220.353†	1939.8	1977.9	502.08 µg/L	502.08 ppb	08:18:11
3	S 181.975 Axial†	222.1	208.6	1070.2 µg/L	1070.2 ppb	08:18:11
3	Sb 206.836†	497.2	500.3	494.99 µg/L	494.99 ppb	08:18:11
3	Se 196.026†	347.8	350.2	512.32 µg/L	512.32 ppb	08:18:11
3	SiO2†	29558.7	28981.6	5534.4 µg/L	5534.4 ppb	08:17:50
3	Si 251.611†	32587.1	33785.9	2540.0 µg/L	2540.0 ppb	08:17:50
3	Sn 189.927†	990.9	1015.5	497.85 µg/L	497.85 ppb	08:18:11
3	Ti 334.940†	218041.1	227682.9	504.40 µg/L	504.40 ppb	08:17:45
3	Tl 190.801†	297.0	332.5	504.19 µg/L	504.19 ppb	08:18:11
3	U 409.014†	5932.0	5534.7	518.91 µg/L	518.91 ppb	08:17:50
3	V 292.402†	42726.3	44848.5	510.30 µg/L	510.30 ppb	08:17:50
3	Zn 213.857†	18625.5	18960.3	503.96 µg/L	503.96 ppb	08:17:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1959585.8	95.276	%	0.2098				0.22%
Sc RADIAL	107239.0	95.3	%	0.67				0.70%
Y 371.029	1186299.0	94.725	%	0.1864				0.20%
Ag 328.068†	56971.2	512.69	µg/L	0.950	512.69	ppb	0.950	0.19%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	10417.4	5245.9	µg/L	43.76	5245.9	ppb	43.76	0.83%
QC value within limits for Al 396.153Radial Recovery = 104.92%								
As 188.979†	259.6	493.73	µg/L	6.887	493.73	ppb	6.887	1.39%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	11221.4	496.40	µg/L	1.329	496.40	ppb	1.329	0.27%
QC value within limits for B 249.677 Recovery = 99.28%								
Ba 233.527†	20013.4	503.74	µg/L	0.676	503.74	ppb	0.676	0.13%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	792565.3	501.18	µg/L	0.473	501.18	ppb	0.473	0.09%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	12507.6	4964.9	µg/L	43.53	4964.9	ppb	43.53	0.88%
QC value within limits for Ca 317.933Radial Recovery = 99.30%								
Cd 226.502†	18799.6	497.30	µg/L	2.206	497.30	ppb	2.206	0.44%
QC value within limits for Cd 226.502 Recovery = 99.46%								
Co 228.616†	10446.6	502.46	µg/L	1.020	502.46	ppb	1.020	0.20%

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   QC value within limits for Co 228.616  Recovery = 100.49%
Cr 267.716†            24075.2      502.33 µg/L        1.098      502.33 ppb          1.098   0.22%
   QC value within limits for Cr 267.716  Recovery = 100.47%
Cu 324.752†            72633.5      512.14 µg/L        1.295      512.14 ppb          1.295   0.25%
   QC value within limits for Cu 324.752  Recovery = 102.43%
Fe 238.204 Radial†       993.0      5233.0 µg/L       52.67      5233.0 ppb          52.67   1.01%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.66%
K 766.490 Radial†       9587.1      5198.1 µg/L       41.36      5198.1 ppb          41.36   0.80%
   QC value within limits for K 766.490 Radial  Recovery = 103.96%
Mg 279.077 IEC†          942.6      5232.6 µg/L       73.34      5232.6 ppb          73.34   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.65%
Mn 257.610†           159388.2      506.48 µg/L       0.846      506.48 ppb          0.846   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.30%
Mo 202.031†             4427.1      494.09 µg/L       1.560      494.09 ppb          1.560   0.32%
   QC value within limits for Mo 202.031  Recovery = 98.82%
Na 589.592 Radial†     37293.6       10348 µg/L        34.4       10348 ppb           34.4   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 103.48%
Ni 231.604†             9216.3      502.09 µg/L       0.693      502.09 ppb          0.693   0.14%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              1161.0      2464.4 µg/L       10.50      2464.4 ppb          10.50   0.43%
   QC value within limits for P 214.914  Recovery = 98.57%
Pb 220.353†             1975.5      501.48 µg/L       1.832      501.48 ppb          1.832   0.37%
   QC value within limits for Pb 220.353  Recovery = 100.30%
S 181.975 Axial†         205.5      1054.5 µg/L       17.07      1054.5 ppb          17.07   1.62%
   QC value within limits for S 181.975 Axial  Recovery = 105.45%
Sb 206.836†              501.5      496.13 µg/L       2.994      496.13 ppb          2.994   0.60%
   QC value within limits for Sb 206.836  Recovery = 99.23%
Se 196.026†              346.2      506.40 µg/L       5.128      506.40 ppb          5.128   1.01%
   QC value within limits for Se 196.026  Recovery = 101.28%
SiO2†                  28949.8      5528.4 µg/L        6.79      5528.4 ppb           6.79   0.12%
   QC value within limits for SiO2  Recovery = 103.38%
Si 251.611†            33767.0      2538.6 µg/L        1.61      2538.6 ppb           1.61   0.06%
   QC value within limits for Si 251.611  Recovery = 101.54%
Sn 189.927†             1010.0      495.16 µg/L       2.340      495.16 ppb          2.340   0.47%
   QC value within limits for Sn 189.927  Recovery = 99.03%
Sr 421.552†            90231.2      508.27 µg/L       2.928      508.27 ppb          2.928   0.58%
   QC value within limits for Sr 421.552  Recovery = 101.65%
Ti 334.940†           227711.7      504.47 µg/L       0.392      504.47 ppb          0.392   0.08%
   QC value within limits for Ti 334.940  Recovery = 100.89%
Tl 190.801†              332.7      504.46 µg/L       0.790      504.46 ppb          0.790   0.16%
   QC value within limits for Tl 190.801  Recovery = 100.89%
U 409.014†              5508.0      516.40 µg/L       3.903      516.40 ppb          3.903   0.76%
   QC value within limits for U 409.014  Recovery = 103.28%
V 292.402†             44749.2      509.18 µg/L       1.049      509.18 ppb          1.049   0.21%
   QC value within limits for V 292.402  Recovery = 101.84%
Zn 213.857†            18936.1      503.31 µg/L       0.984      503.31 ppb          0.984   0.20%
   QC value within limits for Zn 213.857  Recovery = 100.66%
All analyte(s) passed QC.
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Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 08:18:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105928.2	105928.2	94.2	%			08:18:53
1	Al 396.153Radial†	201.0	-16.4	-8.3098	µg/L	-8.3098	ppb	08:18:53
1	Ca 317.933Radial†	395.3	-75.7	-30.059	µg/L	-30.059	ppb	08:19:14
1	Fe 238.204 Radial†	13.9	3.6	18.808	µg/L	18.808	ppb	08:19:14
1	K 766.490 Radial†	648.7	-6.0	-3.2491	µg/L	-3.2491	ppb	08:18:53
1	Mg 279.077 IEC†	18.5	-0.1	-0.7973	µg/L	-0.7973	ppb	08:19:14
1	Na 589.592 Radial†	-659.9	3.2	0.8988	µg/L	0.8988	ppb	08:18:53
1	Sr 421.552†	-29.2	32.8	0.1846	µg/L	0.1846	ppb	08:18:53
1	Sc 361.383	1938026.0	1938026.0	94.228	%			08:20:16
1	Y 371.029	1179572.6	1179572.6	94.188	%			08:20:16
1	Ag 328.068†	-54.2	-29.2	-0.2579	µg/L	-0.2579	ppb	08:20:21
1	As 188.979†	-2.0	-4.6	-8.7008	µg/L	-8.7008	ppb	08:20:42
1	B 249.677†	152.7	6.4	0.2764	µg/L	0.2764	ppb	08:20:42
1	Ba 233.527†	-68.0	8.5	0.2137	µg/L	0.2137	ppb	08:20:42
1	Be 313.107†	3620.7	231.0	0.1459	µg/L	0.1459	ppb	08:20:21
1	Cd 226.502†	-96.6	-1.6	-0.0368	µg/L	-0.0368	ppb	08:20:42
1	Co 228.616†	-68.0	-0.5	-0.0225	µg/L	-0.0225	ppb	08:20:42
1	Cr 267.716†	-118.7	-3.2	-0.0660	µg/L	-0.0660	ppb	08:20:21
1	Cu 324.752†	3120.6	-72.6	-0.5067	µg/L	-0.5067	ppb	08:20:21
1	Mn 257.610†	-147.5	66.1	0.2122	µg/L	0.2122	ppb	08:20:42
1	Mo 202.031†	0.0	7.9	0.8870	µg/L	0.8870	ppb	08:20:42
1	Ni 231.604†	290.5	8.8	0.4820	µg/L	0.4820	ppb	08:20:42
1	P 214.914†	211.1	18.1	39.274	µg/L	39.274	ppb	08:20:42
1	Pb 220.353†	62.0	11.6	2.9448	µg/L	2.9448	ppb	08:20:42
1	S 181.975 Axial†	31.6	9.5	48.593	µg/L	48.593	ppb	08:20:42
1	Sb 206.836†	18.0	-1.5	-1.4673	µg/L	-1.4673	ppb	08:20:42
1	Se 196.026†	18.6	5.6	8.2257	µg/L	8.2257	ppb	08:20:42
1	SiO2†	2111.3	258.9	49.446	µg/L	49.446	ppb	08:20:21
1	Si 251.611†	484.3	164.3	12.503	µg/L	12.503	ppb	08:20:42
1	Sn 189.927†	23.8	2.8	1.3440	µg/L	1.3440	ppb	08:20:42
1	Ti 334.940†	885.6	221.0	0.4915	µg/L	0.4915	ppb	08:20:21
1	Tl 190.801†	-18.1	2.2	3.3800	µg/L	3.3800	ppb	08:20:42
1	U 409.014†	727.3	92.6	8.6946	µg/L	8.6946	ppb	08:20:21
1	V 292.402†	-64.7	23.3	0.2843	µg/L	0.2843	ppb	08:20:21
1	Zn 213.857†	526.9	9.0	0.2374	µg/L	0.2374	ppb	08:20:42
2	Sc RADIAL	106040.1	106040.1	94.3	%			08:19:19
2	Al 396.153Radial†	207.9	-9.3	-4.7454	µg/L	-4.7454	ppb	08:19:19
2	Ca 317.933Radial†	395.1	-76.4	-30.312	µg/L	-30.312	ppb	08:19:39
2	Fe 238.204 Radial†	10.5	-0.0	-0.0914	µg/L	-0.0914	ppb	08:19:39
2	K 766.490 Radial†	672.1	18.1	9.7975	µg/L	9.7975	ppb	08:19:19
2	Mg 279.077 IEC†	13.1	-5.9	-32.842	µg/L	-32.842	ppb	08:19:39
2	Na 589.592 Radial†	-610.3	56.6	15.709	µg/L	15.709	ppb	08:19:19
2	Sr 421.552†	-63.1	-3.2	-0.0178	µg/L	-0.0178	ppb	08:19:19
2	Sc 361.383	1940376.0	1940376.0	94.342	%			08:20:48
2	Y 371.029	1181884.3	1181884.3	94.373	%			08:20:48
2	Ag 328.068†	-88.5	-65.4	-0.5771	µg/L	-0.5771	ppb	08:20:53
2	As 188.979†	0.8	-1.7	-3.1516	µg/L	-3.1516	ppb	08:21:14
2	B 249.677†	134.6	-13.0	-0.5776	µg/L	-0.5776	ppb	08:21:14
2	Ba 233.527†	-80.5	-4.7	-0.1148	µg/L	-0.1148	ppb	08:21:14
2	Be 313.107†	3577.3	180.3	0.1139	µg/L	0.1139	ppb	08:20:53
2	Cd 226.502†	-82.7	13.2	0.3567	µg/L	0.3567	ppb	08:21:14
2	Co 228.616†	-69.8	-2.3	-0.1104	µg/L	-0.1104	ppb	08:21:14
2	Cr 267.716†	-104.8	11.6	0.2449	µg/L	0.2449	ppb	08:20:53
2	Cu 324.752†	3168.5	-25.8	-0.1816	µg/L	-0.1816	ppb	08:20:53
2	Mn 257.610†	-150.0	63.6	0.2019	µg/L	0.2019	ppb	08:21:14
2	Mo 202.031†	-0.9	6.9	0.7713	µg/L	0.7713	ppb	08:21:14
2	Ni 231.604†	284.5	2.2	0.1172	µg/L	0.1172	ppb	08:21:14
2	P 214.914†	211.5	18.2	39.415	µg/L	39.415	ppb	08:21:14
2	Pb 220.353†	56.9	6.2	1.5603	µg/L	1.5603	ppb	08:21:14

2	S 181.975 Axial†	33.6	11.6	59.656 µg/L	59.656 ppb	08:21:14
2	Sb 206.836†	17.0	-2.5	-2.4928 µg/L	-2.4928 ppb	08:21:14
2	Se 196.026†	9.6	-3.9	-5.7070 µg/L	-5.7070 ppb	08:21:14
2	SiO2†	2008.2	147.0	28.065 µg/L	28.065 ppb	08:20:53
2	Si 251.611†	458.1	135.9	10.481 µg/L	10.481 ppb	08:21:14
2	Sn 189.927†	15.8	-5.7	-2.7771 µg/L	-2.7771 ppb	08:21:14
2	Ti 334.940†	916.6	252.7	0.5617 µg/L	0.5617 ppb	08:20:53
2	Tl 190.801†	-21.8	-1.7	-2.5972 µg/L	-2.5972 ppb	08:21:14
2	U 409.014†	739.1	104.2	9.7830 µg/L	9.7830 ppb	08:20:53
2	V 292.402†	3.8	96.0	1.1037 µg/L	1.1037 ppb	08:20:53
2	Zn 213.857†	533.5	15.3	0.4101 µg/L	0.4101 ppb	08:21:14
3	Sc RADIAL	106371.7	106371.7	94.6 %		08:19:45
3	Al 396.153Radial†	211.4	-6.2	-3.1802 µg/L	-3.1802 ppb	08:19:45
3	Ca 317.933Radial†	408.1	-64.0	-25.386 µg/L	-25.386 ppb	08:20:05
3	Fe 238.204 Radial†	13.4	2.9	15.419 µg/L	15.419 ppb	08:20:05
3	K 766.490 Radial†	715.6	61.9	33.553 µg/L	33.553 ppb	08:19:45
3	Mg 279.077 IEC†	11.9	-7.3	-40.254 µg/L	-40.254 ppb	08:20:05
3	Na 589.592 Radial†	-651.6	14.9	4.1347 µg/L	4.1347 ppb	08:19:45
3	Sr 421.552†	-41.2	20.3	0.1141 µg/L	0.1141 ppb	08:19:45
3	Sc 361.383	1946402.3	1946402.3	94.635 %		08:21:20
3	Y 371.029	1184827.0	1184827.0	94.608 %		08:21:20
3	Ag 328.068†	-28.4	-1.7	-0.0133 µg/L	-0.0133 ppb	08:21:25
3	As 188.979†	-0.5	-3.0	-5.7726 µg/L	-5.7726 ppb	08:21:46
3	B 249.677†	134.6	-13.4	-0.6013 µg/L	-0.6013 ppb	08:21:46
3	Ba 233.527†	-74.2	2.3	0.0571 µg/L	0.0571 ppb	08:21:46
3	Be 313.107†	3605.8	198.7	0.1256 µg/L	0.1256 ppb	08:21:25
3	Cd 226.502†	-99.9	-4.7	-0.1213 µg/L	-0.1213 ppb	08:21:46
3	Co 228.616†	-70.3	-2.6	-0.1233 µg/L	-0.1233 ppb	08:21:46
3	Cr 267.716†	-111.4	5.1	0.1066 µg/L	0.1066 ppb	08:21:25
3	Cu 324.752†	3145.6	-60.4	-0.4217 µg/L	-0.4217 ppb	08:21:25
3	Mn 257.610†	-141.3	73.3	0.2346 µg/L	0.2346 ppb	08:21:46
3	Mo 202.031†	-0.2	7.7	0.8615 µg/L	0.8615 ppb	08:21:46
3	Ni 231.604†	271.3	-12.8	-0.6947 µg/L	-0.6947 ppb	08:21:46
3	P 214.914†	211.2	17.2	37.396 µg/L	37.396 ppb	08:21:46
3	Pb 220.353†	63.5	13.0	3.2926 µg/L	3.2926 ppb	08:21:46
3	S 181.975 Axial†	32.7	10.5	53.835 µg/L	53.835 ppb	08:21:46
3	Sb 206.836†	18.3	-1.2	-1.1444 µg/L	-1.1444 ppb	08:21:46
3	Se 196.026†	10.6	-2.9	-4.1633 µg/L	-4.1633 ppb	08:21:46
3	SiO2†	2038.3	172.1	32.874 µg/L	32.874 ppb	08:21:25
3	Si 251.611†	475.8	153.1	11.742 µg/L	11.742 ppb	08:21:46
3	Sn 189.927†	18.6	-2.8	-1.3662 µg/L	-1.3662 ppb	08:21:46
3	Ti 334.940†	782.1	107.6	0.2399 µg/L	0.2399 ppb	08:21:25
3	Tl 190.801†	-18.1	2.3	3.4613 µg/L	3.4613 ppb	08:21:46
3	U 409.014†	697.7	58.0	5.4466 µg/L	5.4466 ppb	08:21:25
3	V 292.402†	-73.8	14.0	0.1736 µg/L	0.1736 ppb	08:21:25
3	Zn 213.857†	525.2	4.8	0.1332 µg/L	0.1332 ppb	08:21:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941601.4	94.402	%	0.2101				0.22%
Sc RADIAL	106113.3	94.3	%	0.21				0.22%
Y 371.029	1182094.6	94.390	%	0.2103				0.22%
Ag 328.068†	-32.1	-0.2828	µg/L	0.28272	-0.2828	ppb	0.28272	99.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.6	-5.4118	µg/L	2.62891	-5.4118	ppb	2.62891	48.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.1	-5.8750	µg/L	2.77601	-5.8750	ppb	2.77601	47.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-6.7	-0.3008	µg/L	0.50005	-0.3008	ppb	0.50005	166.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0520	µg/L	0.16429	0.0520	ppb	0.16429	315.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.3	0.1285	µg/L	0.01623	0.1285	ppb	0.01623	12.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-72.0	-28.586	µg/L	2.7738	-28.586	ppb	2.7738	9.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.3	0.0662	µg/L	0.25510	0.0662	ppb	0.25510	385.34%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.8	-0.0854	µg/L	0.05486	-0.0854	ppb	0.05486	64.25%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                4.5      0.0952 µg/L       0.15575      0.0952 ppb        0.15575 163.66%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -52.9     -0.3700 µg/L       0.16864     -0.3700 ppb        0.16864  45.58%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.2      11.379 µg/L       10.0769      11.379 ppb        10.0769  88.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         24.7      13.367 µg/L       18.6590      13.367 ppb        18.6590 139.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.4     -24.631 µg/L       20.9706     -24.631 ppb        20.9706  85.14%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               67.7      0.2162 µg/L       0.01672      0.2162 ppb        0.01672   7.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                7.5      0.8400 µg/L       0.06080      0.8400 ppb        0.06080   7.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        24.9      6.9141 µg/L       7.78635      6.9141 ppb        7.78635 112.62%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -0.6     -0.0318 µg/L       0.60233     -0.0318 ppb        0.60233 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                17.8      38.695 µg/L        1.1272      38.695 ppb         1.1272   2.91%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               10.3      2.5992 µg/L       0.91636      2.5992 ppb        0.91636  35.25%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          10.5      54.028 µg/L        5.5344      54.028 ppb         5.5344  10.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -1.7     -1.7015 µg/L       0.70405     -1.7015 ppb        0.70405  41.38%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.4     -0.5482 µg/L       7.63756     -0.5482 ppb        7.63756 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    192.7      36.795 µg/L       11.2169      36.795 ppb        11.2169  30.49%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              151.1      11.575 µg/L        1.0212      11.575 ppb         1.0212   8.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.9     -0.9331 µg/L       2.09438     -0.9331 ppb        2.09438 224.45%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               16.6      0.0936 µg/L       0.10273      0.0936 ppb        0.10273 109.74%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              193.7      0.4311 µg/L       0.16919      0.4311 ppb        0.16919  39.25%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.9      1.4147 µg/L       3.47466      1.4147 ppb        3.47466 245.61%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                84.9      7.9747 µg/L       2.25605      7.9747 ppb        2.25605  28.29%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                44.4      0.5205 µg/L       0.50805      0.5205 ppb        0.50805  97.61%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                9.7      0.2602 µg/L       0.13987      0.2602 ppb        0.13987  53.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 08:46:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108953.8	108953.8	96.9	%			08:47:17
1	Al 396.153Radial†	10076.3	10172.6	5121.8	µg/L	5121.8	ppb	08:47:17
1	Ca 317.933Radial†	12481.4	12389.9	4918.2	µg/L	4918.2	ppb	08:47:38
1	Fe 238.204 Radial†	965.8	985.8	5195.5	µg/L	5195.5	ppb	08:47:38
1	K 766.490 Radial†	9792.0	9414.0	5104.2	µg/L	5104.2	ppb	08:47:17
1	Mg 279.077 IEC†	926.0	936.1	5197.4	µg/L	5197.4	ppb	08:47:38
1	Na 589.592 Radial†	34431.2	36249.5	10058	µg/L	10058	ppb	08:47:17
1	Sr 421.552†	85744.4	88583.3	498.98	µg/L	498.98	ppb	08:47:17
1	Sc 361.383	1939482.4	1939482.4	94.299	%			08:48:42
1	Y 371.029	1175148.4	1175148.4	93.835	%			08:48:42
1	Ag 328.068†	54233.9	57541.2	517.82	µg/L	517.82	ppb	08:48:47
1	As 188.979†	255.1	268.0	509.77	µg/L	509.77	ppb	08:49:08
1	B 249.677†	10769.8	11265.3	498.36	µg/L	498.36	ppb	08:48:47
1	Ba 233.527†	19054.8	20287.5	510.63	µg/L	510.63	ppb	08:48:47
1	Be 313.107†	755329.0	797384.9	504.22	µg/L	504.22	ppb	08:48:42
1	Cd 226.502†	17900.3	19083.5	504.82	µg/L	504.82	ppb	08:48:47
1	Co 228.616†	9910.6	10581.5	508.97	µg/L	508.97	ppb	08:48:47
1	Cr 267.716†	22847.4	24351.5	508.10	µg/L	508.10	ppb	08:48:47
1	Cu 324.752†	72237.6	73220.8	516.26	µg/L	516.26	ppb	08:48:47
1	Mn 257.610†	151134.2	160494.5	509.99	µg/L	509.99	ppb	08:48:42
1	Mo 202.031†	4259.9	4525.4	505.06	µg/L	505.06	ppb	08:49:08
1	Ni 231.604†	9117.3	9369.1	510.41	µg/L	510.41	ppb	08:48:47
1	P 214.914†	1318.8	1192.6	2532.6	µg/L	2532.6	ppb	08:49:08
1	Pb 220.353†	1955.9	2020.1	512.79	µg/L	512.79	ppb	08:49:08
1	S 181.975 Axial†	219.8	209.1	1072.8	µg/L	1072.8	ppb	08:49:08
1	Sb 206.836†	499.2	508.9	503.46	µg/L	503.46	ppb	08:49:08
1	Se 196.026†	348.1	355.0	519.32	µg/L	519.32	ppb	08:49:08
1	SiO2†	29463.6	29263.3	5588.2	µg/L	5588.2	ppb	08:48:47
1	Si 251.611†	32458.8	34071.6	2561.2	µg/L	2561.2	ppb	08:48:47
1	Sn 189.927†	997.7	1035.5	507.59	µg/L	507.59	ppb	08:49:08
1	Ti 334.940†	216514.8	228886.5	507.07	µg/L	507.07	ppb	08:48:42
1	Tl 190.801†	300.5	340.1	515.58	µg/L	515.58	ppb	08:49:08
1	U 409.014†	5906.7	5584.6	523.61	µg/L	523.61	ppb	08:48:47
1	V 292.402†	42561.7	45227.0	514.65	µg/L	514.65	ppb	08:48:47
1	Zn 213.857†	18548.4	19119.7	508.18	µg/L	508.18	ppb	08:48:47
2	Sc RADIAL	108500.9	108500.9	96.5	%			08:47:43
2	Al 396.153Radial†	10266.9	10413.6	5243.8	µg/L	5243.8	ppb	08:47:43
2	Ca 317.933Radial†	12471.4	12433.3	4935.4	µg/L	4935.4	ppb	08:48:04
2	Fe 238.204 Radial†	959.1	983.0	5180.5	µg/L	5180.5	ppb	08:48:04
2	K 766.490 Radial†	9895.3	9563.4	5185.2	µg/L	5185.2	ppb	08:47:43
2	Mg 279.077 IEC†	923.4	937.4	5204.2	µg/L	5204.2	ppb	08:48:04
2	Na 589.592 Radial†	35227.0	37222.8	10328	µg/L	10328	ppb	08:47:43
2	Sr 421.552†	87204.8	90466.8	509.59	µg/L	509.59	ppb	08:47:43
2	Sc 361.383	1944927.5	1944927.5	94.563	%			08:49:15
2	Y 371.029	1177045.7	1177045.7	93.986	%			08:49:15
2	Ag 328.068†	54051.6	57187.4	514.64	µg/L	514.64	ppb	08:49:20
2	As 188.979†	255.7	267.9	509.69	µg/L	509.69	ppb	08:49:41
2	B 249.677†	10755.0	11217.7	496.25	µg/L	496.25	ppb	08:49:20
2	Ba 233.527†	18919.4	20087.8	505.61	µg/L	505.61	ppb	08:49:20
2	Be 313.107†	757398.1	797330.5	504.19	µg/L	504.19	ppb	08:49:15
2	Cd 226.502†	17757.8	18879.6	499.42	µg/L	499.42	ppb	08:49:20
2	Co 228.616†	9818.6	10454.8	502.86	µg/L	502.86	ppb	08:49:20
2	Cr 267.716†	22722.3	24151.4	503.92	µg/L	503.92	ppb	08:49:20
2	Cu 324.752†	72120.2	72882.2	513.87	µg/L	513.87	ppb	08:49:20
2	Mn 257.610†	151571.9	160508.7	510.03	µg/L	510.03	ppb	08:49:15
2	Mo 202.031†	4220.5	4471.0	498.99	µg/L	498.99	ppb	08:49:41
2	Ni 231.604†	9068.7	9290.6	506.14	µg/L	506.14	ppb	08:49:20
2	P 214.914†	1315.3	1184.9	2516.2	µg/L	2516.2	ppb	08:49:41
2	Pb 220.353†	1955.9	2014.2	511.32	µg/L	511.32	ppb	08:49:41

2	S 181.975 Axial†	215.5	203.9	1045.9 µg/L	1045.9 ppb	08:49:41
2	Sb 206.836†	502.0	510.3	504.89 µg/L	504.89 ppb	08:49:41
2	Se 196.026†	346.4	352.2	515.22 µg/L	515.22 ppb	08:49:41
2	SiO2†	29279.8	28981.5	5534.4 µg/L	5534.4 ppb	08:49:20
2	Si 251.611†	32238.4	33742.2	2536.2 µg/L	2536.2 ppb	08:49:20
2	Sn 189.927†	994.7	1029.4	504.60 µg/L	504.60 ppb	08:49:41
2	Ti 334.940†	217120.6	228884.2	507.07 µg/L	507.07 ppb	08:49:15
2	Tl 190.801†	294.1	332.5	504.16 µg/L	504.16 ppb	08:49:41
2	U 409.014†	5794.8	5448.7	510.85 µg/L	510.85 ppb	08:49:20
2	V 292.402†	42440.7	44972.6	511.72 µg/L	511.72 ppb	08:49:20
2	Zn 213.857†	18546.8	19063.0	506.69 µg/L	506.69 ppb	08:49:20
3	Sc RADIAL	107051.7	107051.7	95.2 %		08:48:09
3	Al 396.153Radial†	10104.3	10386.9	5230.4 µg/L	5230.4 ppb	08:48:09
3	Ca 317.933Radial†	12518.3	12657.6	5024.5 µg/L	5024.5 ppb	08:48:30
3	Fe 238.204 Radial†	961.2	998.8	5263.1 µg/L	5263.1 ppb	08:48:30
3	K 766.490 Radial†	9746.9	9546.3	5176.0 µg/L	5176.0 ppb	08:48:09
3	Mg 279.077 IEC†	923.9	950.9	5278.9 µg/L	5278.9 ppb	08:48:30
3	Na 589.592 Radial†	34802.8	37271.5	10341 µg/L	10341 ppb	08:48:09
3	Sr 421.552†	85653.2	90060.3	507.30 µg/L	507.30 ppb	08:48:09
3	Sc 361.383	1952241.5	1952241.5	94.919 %		08:49:48
3	Y 371.029	1182332.9	1182332.9	94.409 %		08:49:48
3	Ag 328.068†	53688.7	56590.9	509.28 µg/L	509.28 ppb	08:49:54
3	As 188.979†	254.1	265.2	504.43 µg/L	504.43 ppb	08:50:14
3	B 249.677†	10708.8	11126.3	492.17 µg/L	492.17 ppb	08:49:54
3	Ba 233.527†	18826.4	19914.9	501.26 µg/L	501.26 ppb	08:49:54
3	Be 313.107†	759861.6	796925.1	503.93 µg/L	503.93 ppb	08:49:48
3	Cd 226.502†	17663.5	18709.9	494.92 µg/L	494.92 ppb	08:49:54
3	Co 228.616†	9778.5	10373.7	498.96 µg/L	498.96 ppb	08:49:54
3	Cr 267.716†	22575.9	23907.2	498.83 µg/L	498.83 ppb	08:49:54
3	Cu 324.752†	71673.1	72125.5	508.57 µg/L	508.57 ppb	08:49:54
3	Mn 257.610†	152048.2	160409.9	509.73 µg/L	509.73 ppb	08:49:48
3	Mo 202.031†	4224.1	4458.1	497.55 µg/L	497.55 ppb	08:50:14
3	Ni 231.604†	8987.4	9169.1	499.52 µg/L	499.52 ppb	08:49:54
3	P 214.914†	1302.5	1166.2	2476.1 µg/L	2476.1 ppb	08:50:14
3	Pb 220.353†	1938.4	1988.0	504.68 µg/L	504.68 ppb	08:50:14
3	S 181.975 Axial†	218.7	206.4	1058.8 µg/L	1058.8 ppb	08:50:14
3	Sb 206.836†	506.5	513.1	507.71 µg/L	507.71 ppb	08:50:14
3	Se 196.026†	339.4	343.5	502.52 µg/L	502.52 ppb	08:50:14
3	SiO2†	29177.3	28757.5	5491.6 µg/L	5491.6 ppb	08:49:54
3	Si 251.611†	32038.7	33404.1	2510.4 µg/L	2510.4 ppb	08:49:54
3	Sn 189.927†	993.1	1023.8	501.94 µg/L	501.94 ppb	08:50:14
3	Ti 334.940†	217632.3	228563.2	506.35 µg/L	506.35 ppb	08:49:48
3	Tl 190.801†	294.3	331.4	502.60 µg/L	502.60 ppb	08:50:14
3	U 409.014†	5890.1	5526.2	518.11 µg/L	518.11 ppb	08:49:54
3	V 292.402†	42154.3	44502.7	506.43 µg/L	506.43 ppb	08:49:54
3	Zn 213.857†	18388.6	18822.7	500.29 µg/L	500.29 ppb	08:49:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945550.5	94.594	%	0.3113				0.33%
Sc RADIAL	108168.8	96.2	%	0.88				0.92%
Y 371.029	1178175.7	94.077	%	0.2973				0.32%
Ag 328.068†	57106.5	513.91	µg/L	4.315	513.91	ppb	4.315	0.84%
QC value within limits for Ag 328.068 Recovery = 102.78%								
Al 396.153Radial†	10324.4	5198.7	µg/L	66.91	5198.7	ppb	66.91	1.29%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	267.0	507.97	µg/L	3.059	507.97	ppb	3.059	0.60%
QC value within limits for As 188.979 Recovery = 101.59%								
B 249.677†	11203.1	495.60	µg/L	3.146	495.60	ppb	3.146	0.63%
QC value within limits for B 249.677 Recovery = 99.12%								
Ba 233.527†	20096.7	505.83	µg/L	4.692	505.83	ppb	4.692	0.93%
QC value within limits for Ba 233.527 Recovery = 101.17%								
Be 313.107†	797213.5	504.12	µg/L	0.159	504.12	ppb	0.159	0.03%
QC value within limits for Be 313.107 Recovery = 100.82%								
Ca 317.933Radial†	12493.6	4959.4	µg/L	57.04	4959.4	ppb	57.04	1.15%
QC value within limits for Ca 317.933Radial Recovery = 99.19%								
Cd 226.502†	18891.0	499.72	µg/L	4.953	499.72	ppb	4.953	0.99%
QC value within limits for Cd 226.502 Recovery = 99.94%								
Co 228.616†	10470.0	503.60	µg/L	5.047	503.60	ppb	5.047	1.00%

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   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†          24136.7      503.62 µg/L        4.641      503.62 ppb        4.641   0.92%
   QC value within limits for Cr 267.716  Recovery = 100.72%
Cu 324.752†          72742.8      512.90 µg/L        3.937      512.90 ppb        3.937   0.77%
   QC value within limits for Cu 324.752  Recovery = 102.58%
Fe 238.204 Radial†     989.2      5213.0 µg/L        44.01      5213.0 ppb        44.01   0.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.26%
K 766.490 Radial†     9507.9      5155.2 µg/L        44.33      5155.2 ppb        44.33   0.86%
   QC value within limits for K 766.490 Radial  Recovery = 103.10%
Mg 279.077 IEC†        941.5      5226.8 µg/L        45.22      5226.8 ppb        45.22   0.87%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.54%
Mn 257.610†         160471.0      509.92 µg/L        0.164      509.92 ppb        0.164   0.03%
   QC value within limits for Mn 257.610  Recovery = 101.98%
Mo 202.031†          4484.8      500.53 µg/L        3.982      500.53 ppb        3.982   0.80%
   QC value within limits for Mo 202.031  Recovery = 100.11%
Na 589.592 Radial†   36914.6       10242 µg/L        160.0       10242 ppb        160.0   1.56%
   QC value within limits for Na 589.592 Radial  Recovery = 102.42%
Ni 231.604†          9276.3      505.36 µg/L        5.491      505.36 ppb        5.491   1.09%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†           1181.2      2508.3 µg/L        29.07      2508.3 ppb        29.07   1.16%
   QC value within limits for P 214.914  Recovery = 100.33%
Pb 220.353†          2007.4      509.60 µg/L        4.323      509.60 ppb        4.323   0.85%
   QC value within limits for Pb 220.353  Recovery = 101.92%
S 181.975 Axial†      206.4      1059.2 µg/L        13.43      1059.2 ppb        13.43   1.27%
   QC value within limits for S 181.975 Axial  Recovery = 105.92%
Sb 206.836†           510.8      505.35 µg/L        2.161      505.35 ppb        2.161   0.43%
   QC value within limits for Sb 206.836  Recovery = 101.07%
Se 196.026†           350.3      512.35 µg/L        8.759      512.35 ppb        8.759   1.71%
   QC value within limits for Se 196.026  Recovery = 102.47%
SiO2†               29000.8      5538.1 µg/L        48.41      5538.1 ppb        48.41   0.87%
   QC value within limits for SiO2  Recovery = 103.56%
Si 251.611†         33739.3      2535.9 µg/L        25.39      2535.9 ppb        25.39   1.00%
   QC value within limits for Si 251.611  Recovery = 101.44%
Sn 189.927†          1029.6      504.71 µg/L        2.825      504.71 ppb        2.825   0.56%
   QC value within limits for Sn 189.927  Recovery = 100.94%
Sr 421.552†         89703.5      505.29 µg/L        5.583      505.29 ppb        5.583   1.10%
   QC value within limits for Sr 421.552  Recovery = 101.06%
Ti 334.940†        228778.0      506.83 µg/L        0.416      506.83 ppb        0.416   0.08%
   QC value within limits for Ti 334.940  Recovery = 101.37%
Tl 190.801†           334.7      507.44 µg/L        7.085      507.44 ppb        7.085   1.40%
   QC value within limits for Tl 190.801  Recovery = 101.49%
U 409.014†           5519.8      517.52 µg/L        6.400      517.52 ppb        6.400   1.24%
   QC value within limits for U 409.014  Recovery = 103.50%
V 292.402†          44900.8      510.94 µg/L        4.166      510.94 ppb        4.166   0.82%
   QC value within limits for V 292.402  Recovery = 102.19%
Zn 213.857†         19001.8      505.05 µg/L        4.196      505.05 ppb        4.196   0.83%
   QC value within limits for Zn 213.857  Recovery = 101.01%
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 08:50:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106273.5	106273.5	94.5	%			08:50:56
1	Al 396.153Radial†	223.6	6.8	3.4063	µg/L	3.4063	ppb	08:50:56
1	Ca 317.933Radial†	404.2	-67.7	-26.860	µg/L	-26.860	ppb	08:51:16
1	Fe 238.204 Radial†	13.2	2.8	14.556	µg/L	14.556	ppb	08:51:16
1	K 766.490 Radial†	659.5	3.2	1.7395	µg/L	1.7395	ppb	08:50:56
1	Mg 279.077 IEC†	14.2	-4.9	-26.903	µg/L	-26.903	ppb	08:51:16
1	Na 589.592 Radial†	-613.4	54.7	15.172	µg/L	15.172	ppb	08:50:56
1	Sr 421.552†	19.9	84.9	0.4781	µg/L	0.4781	ppb	08:50:56
1	Sc 361.383	1943628.6	1943628.6	94.500	%			08:52:18
1	Y 371.029	1180713.0	1180713.0	94.279	%			08:52:18
1	Ag 328.068†	-102.5	-80.2	-0.7147	µg/L	-0.7147	ppb	08:52:24
1	As 188.979†	-3.2	-5.9	-11.215	µg/L	-11.215	ppb	08:52:44
1	B 249.677†	156.6	10.1	0.4424	µg/L	0.4424	ppb	08:52:44
1	Ba 233.527†	-79.1	-3.0	-0.0752	µg/L	-0.0752	ppb	08:52:44
1	Be 313.107†	3658.4	259.8	0.1643	µg/L	0.1643	ppb	08:52:24
1	Cd 226.502†	-93.7	1.7	0.0545	µg/L	0.0545	ppb	08:52:44
1	Co 228.616†	-66.0	1.9	0.0937	µg/L	0.0937	ppb	08:52:44
1	Cr 267.716†	-109.8	6.6	0.1368	µg/L	0.1368	ppb	08:52:24
1	Cu 324.752†	3111.3	-91.9	-0.6438	µg/L	-0.6438	ppb	08:52:24
1	Mn 257.610†	-165.6	47.4	0.1523	µg/L	0.1523	ppb	08:52:44
1	Mo 202.031†	-0.7	7.1	0.7977	µg/L	0.7977	ppb	08:52:44
1	Ni 231.604†	281.1	-1.9	-0.1032	µg/L	-0.1032	ppb	08:52:44
1	P 214.914†	211.9	18.2	39.711	µg/L	39.711	ppb	08:52:44
1	Pb 220.353†	62.5	12.0	3.0375	µg/L	3.0375	ppb	08:52:44
1	S 181.975 Axial†	25.1	2.5	12.800	µg/L	12.800	ppb	08:52:44
1	Sb 206.836†	20.4	1.1	1.0831	µg/L	1.0831	ppb	08:52:44
1	Se 196.026†	12.3	-1.0	-1.5015	µg/L	-1.5015	ppb	08:52:44
1	SiO2†	2054.1	192.0	36.663	µg/L	36.663	ppb	08:52:24
1	Si 251.611†	491.9	170.9	12.980	µg/L	12.980	ppb	08:52:44
1	Sn 189.927†	25.4	4.4	2.1381	µg/L	2.1381	ppb	08:52:44
1	Ti 334.940†	795.3	122.7	0.2735	µg/L	0.2735	ppb	08:52:24
1	Tl 190.801†	-14.0	6.6	9.9714	µg/L	9.9714	ppb	08:52:44
1	U 409.014†	790.7	157.5	14.784	µg/L	14.784	ppb	08:52:24
1	V 292.402†	-85.5	1.4	0.0470	µg/L	0.0470	ppb	08:52:24
1	Zn 213.857†	534.7	15.7	0.4203	µg/L	0.4203	ppb	08:52:44
2	Sc RADIAL	106051.9	106051.9	94.3	%			08:51:22
2	Al 396.153Radial†	204.8	-12.6	-6.4006	µg/L	-6.4006	ppb	08:51:22
2	Ca 317.933Radial†	402.1	-69.0	-27.385	µg/L	-27.385	ppb	08:51:42
2	Fe 238.204 Radial†	10.2	-0.4	-2.2583	µg/L	-2.2583	ppb	08:51:42
2	K 766.490 Radial†	636.5	-19.8	-10.737	µg/L	-10.737	ppb	08:51:22
2	Mg 279.077 IEC†	13.6	-5.4	-29.880	µg/L	-29.880	ppb	08:51:42
2	Na 589.592 Radial†	-639.6	25.6	7.1035	µg/L	7.1035	ppb	08:51:22
2	Sr 421.552†	-36.6	25.0	0.1406	µg/L	0.1406	ppb	08:51:22
2	Sc 361.383	1950729.9	1950729.9	94.846	%			08:52:50
2	Y 371.029	1185734.0	1185734.0	94.680	%			08:52:50
2	Ag 328.068†	-76.0	-51.8	-0.4622	µg/L	-0.4622	ppb	08:52:55
2	As 188.979†	2.1	-0.3	-0.5988	µg/L	-0.5988	ppb	08:53:16
2	B 249.677†	151.3	3.9	0.1716	µg/L	0.1716	ppb	08:53:16
2	Ba 233.527†	-80.1	-3.7	-0.0938	µg/L	-0.0938	ppb	08:53:16
2	Be 313.107†	3580.7	163.8	0.1034	µg/L	0.1034	ppb	08:52:55
2	Cd 226.502†	-95.0	0.8	0.0316	µg/L	0.0316	ppb	08:53:16
2	Co 228.616†	-64.6	3.6	0.1748	µg/L	0.1748	ppb	08:53:16
2	Cr 267.716†	-89.4	28.5	0.5937	µg/L	0.5937	ppb	08:52:55
2	Cu 324.752†	3176.5	-35.1	-0.2478	µg/L	-0.2478	ppb	08:52:55
2	Mn 257.610†	-154.7	59.5	0.1887	µg/L	0.1887	ppb	08:53:16
2	Mo 202.031†	-3.3	4.5	0.4977	µg/L	0.4977	ppb	08:53:16
2	Ni 231.604†	282.3	-1.8	-0.0974	µg/L	-0.0974	ppb	08:53:16
2	P 214.914†	203.8	8.9	19.385	µg/L	19.385	ppb	08:53:16
2	Pb 220.353†	58.5	7.6	1.9137	µg/L	1.9137	ppb	08:53:16

2	S 181.975 Axial†	33.2	11.0	56.325 µg/L	56.325 ppb		08:53:16
2	Sb 206.836†	18.2	-1.3	-1.2959 µg/L	-1.2959 ppb		08:53:16
2	Se 196.026†	12.5	-1.0	-1.3996 µg/L	-1.3996 ppb		08:53:16
2	SiO2†	2057.5	187.7	35.835 µg/L	35.835 ppb		08:52:55
2	Si 251.611†	476.5	152.8	11.664 µg/L	11.664 ppb		08:53:16
2	Sn 189.927†	22.0	0.8	0.3597 µg/L	0.3597 ppb		08:53:16
2	Ti 334.940†	893.7	223.3	0.4966 µg/L	0.4966 ppb		08:52:55
2	Tl 190.801†	-21.3	-1.0	-1.5650 µg/L	-1.5650 ppb		08:53:16
2	U 409.014†	805.1	169.6	15.932 µg/L	15.932 ppb		08:52:55
2	V 292.402†	-75.5	12.4	0.1684 µg/L	0.1684 ppb		08:52:55
2	Zn 213.857†	530.1	8.7	0.2362 µg/L	0.2362 ppb		08:53:16
3	Sc RADIAL	106508.4	106508.4	94.7 %			08:51:48
3	Al 396.153Radial†	201.8	-16.7	-8.4917 µg/L	-8.4917 ppb		08:51:48
3	Ca 317.933Radial†	400.2	-72.8	-28.884 µg/L	-28.884 ppb		08:52:08
3	Fe 238.204 Radial†	12.0	1.5	7.6192 µg/L	7.6192 ppb		08:52:08
3	K 766.490 Radial†	665.0	7.5	4.0535 µg/L	4.0535 ppb		08:51:48
3	Mg 279.077 IEC†	15.4	-3.6	-19.924 µg/L	-19.924 ppb		08:52:08
3	Na 589.592 Radial†	-633.8	34.5	9.5841 µg/L	9.5841 ppb		08:51:48
3	Sr 421.552†	-60.9	-0.6	-0.0031 µg/L	-0.0031 ppb		08:51:48
3	Sc 361.383	1941399.4	1941399.4	94.392 %			08:53:21
3	Y 371.029	1180781.6	1180781.6	94.285 %			08:53:21
3	Ag 328.068†	-85.5	-62.3	-0.5518 µg/L	-0.5518 ppb		08:53:27
3	As 188.979†	2.0	-0.3	-0.6466 µg/L	-0.6466 ppb		08:53:47
3	B 249.677†	156.8	10.4	0.4591 µg/L	0.4591 ppb		08:53:47
3	Ba 233.527†	-81.2	-5.3	-0.1323 µg/L	-0.1323 ppb		08:53:47
3	Be 313.107†	3589.7	191.5	0.1210 µg/L	0.1210 ppb		08:53:27
3	Cd 226.502†	-99.1	-4.1	-0.0946 µg/L	-0.0946 ppb		08:53:47
3	Co 228.616†	-73.4	-6.1	-0.2916 µg/L	-0.2916 ppb		08:53:47
3	Cr 267.716†	-125.2	-9.9	-0.2041 µg/L	-0.2041 ppb		08:53:27
3	Cu 324.752†	3191.8	-2.9	-0.0187 µg/L	-0.0187 ppb		08:53:27
3	Mn 257.610†	-161.1	52.0	0.1659 µg/L	0.1659 ppb		08:53:47
3	Mo 202.031†	-1.5	6.3	0.7067 µg/L	0.7067 ppb		08:53:47
3	Ni 231.604†	273.7	-9.5	-0.5167 µg/L	-0.5167 ppb		08:53:47
3	P 214.914†	214.0	20.7	44.843 µg/L	44.843 ppb		08:53:47
3	Pb 220.353†	59.3	8.7	2.1792 µg/L	2.1792 ppb		08:53:47
3	S 181.975 Axial†	28.5	6.1	31.558 µg/L	31.558 ppb		08:53:47
3	Sb 206.836†	25.7	6.7	6.6822 µg/L	6.6822 ppb		08:53:47
3	Se 196.026†	5.4	-8.3	-12.152 µg/L	-12.152 ppb		08:53:47
3	SiO2†	2066.5	207.6	39.643 µg/L	39.643 ppb		08:53:27
3	Si 251.611†	482.7	161.8	12.438 µg/L	12.438 ppb		08:53:47
3	Sn 189.927†	17.4	-4.0	-1.9519 µg/L	-1.9519 ppb		08:53:47
3	Ti 334.940†	828.7	159.0	0.3541 µg/L	0.3541 ppb		08:53:27
3	Tl 190.801†	-24.0	-4.0	-6.0782 µg/L	-6.0782 ppb		08:53:47
3	U 409.014†	849.7	220.9	20.745 µg/L	20.745 ppb		08:53:27
3	V 292.402†	-38.0	51.7	0.6216 µg/L	0.6216 ppb		08:53:27
3	Zn 213.857†	529.1	10.4	0.2816 µg/L	0.2816 ppb		08:53:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945252.7	94.579	%	0.2369				0.25%
Sc RADIAL	106277.9	94.5	%	0.20				0.21%
Y 371.029	1182409.5	94.415	%	0.2299				0.24%
Ag 328.068†	-64.8	-0.5762	µg/L	0.12802	-0.5762	ppb	0.12802	22.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.5	-3.8287	µg/L	6.35232	-3.8287	ppb	6.35232	165.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.2	-4.1536	µg/L	6.11573	-4.1536	ppb	6.11573	147.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	8.1	0.3577	µg/L	0.16137	0.3577	ppb	0.16137	45.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.0	-0.1004	µg/L	0.02914	-0.1004	ppb	0.02914	29.01%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	205.1	0.1296	µg/L	0.03130	0.1296	ppb	0.03130	24.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.8	-27.710	µg/L	1.0504	-27.710	ppb	1.0504	3.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.5	-0.0028	µg/L	0.08030	-0.0028	ppb	0.08030	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.2	-0.0077	µg/L	0.24919	-0.0077	ppb	0.24919	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 8.4      0.1755 µg/L       0.40030      0.1755 ppb        0.40030 228.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -43.3     -0.3034 µg/L       0.31623     -0.3034 ppb        0.31623 104.22%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      6.6389 µg/L       8.44989      6.6389 ppb        8.44989 127.28%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -3.0     -1.6480 µg/L       7.95590     -1.6480 ppb        7.95590 482.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.6     -25.569 µg/L        5.1106     -25.569 ppb         5.1106  19.99%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                53.0      0.1690 µg/L       0.01835      0.1690 ppb        0.01835  10.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.0      0.6674 µg/L       0.15382      0.6674 ppb        0.15382  23.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         38.3      10.620 µg/L        4.1330      10.620 ppb         4.1330  38.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.4     -0.2391 µg/L       0.24045     -0.2391 ppb        0.24045 100.57%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.9      34.646 µg/L       13.4633      34.646 ppb        13.4633  38.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 9.4      2.3768 µg/L       0.58737      2.3768 ppb        0.58737  24.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            6.5      33.561 µg/L       21.8319      33.561 ppb        21.8319  65.05%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.2      2.1564 µg/L       4.09591      2.1564 ppb        4.09591 189.94%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.5     -5.0179 µg/L       6.17891     -5.0179 ppb        6.17891 123.14%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     195.7      37.380 µg/L        2.0026      37.380 ppb         2.0026   5.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               161.8      12.361 µg/L        0.6613      12.361 ppb         0.6613   5.35%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.4      0.1819 µg/L       2.05080      0.1819 ppb        2.05080 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                36.4      0.2052 µg/L       0.24701      0.2052 ppb        0.24701 120.38%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               168.4      0.3748 µg/L       0.11296      0.3748 ppb        0.11296  30.14%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.5      0.7761 µg/L       8.27697      0.7761 ppb        8.27697 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                182.7      17.154 µg/L        3.1627      17.154 ppb         3.1627  18.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 21.8      0.2790 µg/L       0.30285      0.2790 ppb        0.30285 108.55%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                11.6      0.3127 µg/L       0.09589      0.3127 ppb        0.09589  30.67%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 38
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 09:08:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107199.1	107199.1	95.3	%			09:09:12
1	Al 396.153Radial†	10137.9	10407.6	5240.8	µg/L	5240.8	ppb	09:09:12
1	Ca 317.933Radial†	12453.4	12571.5	4990.3	µg/L	4990.3	ppb	09:09:32
1	Fe 238.204 Radial†	966.6	1003.0	5285.2	µg/L	5285.2	ppb	09:09:32
1	K 766.490 Radial†	9792.3	9579.9	5194.2	µg/L	5194.2	ppb	09:09:12
1	Mg 279.077 IEC†	914.8	940.0	5218.7	µg/L	5218.7	ppb	09:09:32
1	Na 589.592 Radial†	34720.8	37135.2	10304	µg/L	10304	ppb	09:09:12
1	Sr 421.552†	85778.5	90068.0	507.35	µg/L	507.35	ppb	09:09:12
1	Sc 361.383	1944921.8	1944921.8	94.563	%			09:10:36
1	Y 371.029	1179205.9	1179205.9	94.159	%			09:10:36
1	Ag 328.068†	53690.0	56805.2	511.21	µg/L	511.21	ppb	09:10:42
1	As 188.979†	251.2	263.2	500.62	µg/L	500.62	ppb	09:11:02
1	B 249.677†	10695.2	11154.4	493.41	µg/L	493.41	ppb	09:10:42
1	Ba 233.527†	18852.2	20016.8	503.82	µg/L	503.82	ppb	09:10:42
1	Be 313.107†	755457.0	795280.1	502.89	µg/L	502.89	ppb	09:10:36
1	Cd 226.502†	17672.9	18789.9	497.03	µg/L	497.03	ppb	09:10:42
1	Co 228.616†	9788.1	10422.6	501.32	µg/L	501.32	ppb	09:10:42
1	Cr 267.716†	22643.5	24068.1	502.18	µg/L	502.18	ppb	09:10:42
1	Cu 324.752†	71817.2	72562.0	511.64	µg/L	511.64	ppb	09:10:42
1	Mn 257.610†	150959.4	159861.4	507.99	µg/L	507.99	ppb	09:10:36
1	Mo 202.031†	4211.1	4461.2	497.89	µg/L	497.89	ppb	09:11:02
1	Ni 231.604†	9000.8	9218.9	502.23	µg/L	502.23	ppb	09:10:42
1	P 214.914†	1313.7	1183.2	2512.7	µg/L	2512.7	ppb	09:11:02
1	Pb 220.353†	1933.0	1990.0	505.19	µg/L	505.19	ppb	09:11:02
1	S 181.975 Axial†	211.3	199.4	1022.9	µg/L	1022.9	ppb	09:11:02
1	Sb 206.836†	502.8	511.2	505.76	µg/L	505.76	ppb	09:11:02
1	Se 196.026†	335.7	340.9	498.71	µg/L	498.71	ppb	09:11:02
1	SiO2†	29355.5	29061.6	5549.7	µg/L	5549.7	ppb	09:10:42
1	Si 251.611†	32356.6	33867.3	2545.9	µg/L	2545.9	ppb	09:10:42
1	Sn 189.927†	990.9	1025.4	502.67	µg/L	502.67	ppb	09:11:02
1	Ti 334.940†	216684.0	228423.3	506.04	µg/L	506.04	ppb	09:10:36
1	Tl 190.801†	291.2	329.4	499.50	µg/L	499.50	ppb	09:11:02
1	U 409.014†	5739.3	5390.1	505.32	µg/L	505.32	ppb	09:10:42
1	V 292.402†	42174.1	44690.8	508.54	µg/L	508.54	ppb	09:10:42
1	Zn 213.857†	18397.4	18905.0	502.47	µg/L	502.47	ppb	09:10:42
2	Sc RADIAL	106278.0	106278.0	94.5	%			09:09:38
2	Al 396.153Radial†	10081.6	10440.1	5257.2	µg/L	5257.2	ppb	09:09:38
2	Ca 317.933Radial†	12431.9	12661.9	5026.2	µg/L	5026.2	ppb	09:09:58
2	Fe 238.204 Radial†	961.5	1006.4	5303.2	µg/L	5303.2	ppb	09:09:58
2	K 766.490 Radial†	9680.4	9550.5	5178.2	µg/L	5178.2	ppb	09:09:38
2	Mg 279.077 IEC†	924.0	958.1	5319.1	µg/L	5319.1	ppb	09:09:58
2	Na 589.592 Radial†	34486.4	37202.8	10322	µg/L	10322	ppb	09:09:38
2	Sr 421.552†	85282.7	90323.4	508.79	µg/L	508.79	ppb	09:09:38
2	Sc 361.383	1946465.9	1946465.9	94.638	%			09:11:09
2	Y 371.029	1180269.8	1180269.8	94.244	%			09:11:09
2	Ag 328.068†	54244.5	57346.1	516.07	µg/L	516.07	ppb	09:11:15
2	As 188.979†	257.2	269.3	512.23	µg/L	512.23	ppb	09:11:35
2	B 249.677†	10778.1	11233.0	496.90	µg/L	496.90	ppb	09:11:15
2	Ba 233.527†	18914.9	20067.3	505.09	µg/L	505.09	ppb	09:11:15
2	Be 313.107†	755950.3	795167.6	502.82	µg/L	502.82	ppb	09:11:09
2	Cd 226.502†	17853.7	18966.1	501.69	µg/L	501.69	ppb	09:11:15
2	Co 228.616†	9859.9	10490.2	504.57	µg/L	504.57	ppb	09:11:15
2	Cr 267.716†	22783.9	24197.5	504.89	µg/L	504.89	ppb	09:11:15
2	Cu 324.752†	72292.1	73003.5	514.75	µg/L	514.75	ppb	09:11:15
2	Mn 257.610†	151276.2	160069.4	508.65	µg/L	508.65	ppb	09:11:09
2	Mo 202.031†	4231.6	4479.2	499.91	µg/L	499.91	ppb	09:11:35
2	Ni 231.604†	9037.1	9249.8	503.91	µg/L	503.91	ppb	09:11:15
2	P 214.914†	1307.6	1175.6	2495.8	µg/L	2495.8	ppb	09:11:35
2	Pb 220.353†	1953.9	2010.5	510.37	µg/L	510.37	ppb	09:11:35

2	S 181.975 Axial†	216.5	204.7	1050.1 µg/L	1050.1 ppb	09:11:35
2	Sb 206.836†	497.8	505.4	500.03 µg/L	500.03 ppb	09:11:35
2	Se 196.026†	353.2	359.1	525.30 µg/L	525.30 ppb	09:11:35
2	SiO2†	29587.2	29281.8	5591.8 µg/L	5591.8 ppb	09:11:15
2	Si 251.611†	32616.7	34115.0	2564.9 µg/L	2564.9 ppb	09:11:15
2	Sn 189.927†	987.1	1020.5	500.34 µg/L	500.34 ppb	09:11:35
2	Ti 334.940†	216806.3	228370.7	505.93 µg/L	505.93 ppb	09:11:09
2	Tl 190.801†	293.8	331.9	503.26 µg/L	503.26 ppb	09:11:35
2	U 409.014†	5791.9	5440.9	510.09 µg/L	510.09 ppb	09:11:15
2	V 292.402†	42523.1	45024.3	512.32 µg/L	512.32 ppb	09:11:15
2	Zn 213.857†	18565.7	19067.4	506.81 µg/L	506.81 ppb	09:11:15
3	Sc RADIAL	107553.0	107553.0	95.6 %		09:10:04
3	Al 396.153Radial†	10192.5	10429.6	5252.1 µg/L	5252.1 ppb	09:10:04
3	Ca 317.933Radial†	12404.4	12477.2	4952.9 µg/L	4952.9 ppb	09:10:24
3	Fe 238.204 Radial†	961.5	994.4	5239.8 µg/L	5239.8 ppb	09:10:24
3	K 766.490 Radial†	9808.7	9563.2	5185.1 µg/L	5185.1 ppb	09:10:04
3	Mg 279.077 IEC†	910.3	932.2	5175.3 µg/L	5175.3 ppb	09:10:24
3	Na 589.592 Radial†	34964.3	37270.0	10341 µg/L	10341 ppb	09:10:04
3	Sr 421.552†	86489.4	90515.3	509.87 µg/L	509.87 ppb	09:10:04
3	Sc 361.383	1951079.9	1951079.9	94.863 %		09:11:42
3	Y 371.029	1182285.4	1182285.4	94.405 %		09:11:42
3	Ag 328.068†	53725.4	56663.3	509.93 µg/L	509.93 ppb	09:11:48
3	As 188.979†	253.1	264.3	502.69 µg/L	502.69 ppb	09:12:09
3	B 249.677†	10701.0	11124.8	492.11 µg/L	492.11 ppb	09:11:48
3	Ba 233.527†	18846.2	19947.5	502.07 µg/L	502.07 ppb	09:11:48
3	Be 313.107†	758536.2	796004.5	503.35 µg/L	503.35 ppb	09:11:42
3	Cd 226.502†	17668.2	18726.0	495.35 µg/L	495.35 ppb	09:11:48
3	Co 228.616†	9750.0	10349.7	497.80 µg/L	497.80 ppb	09:11:48
3	Cr 267.716†	22623.1	23971.1	500.16 µg/L	500.16 ppb	09:11:48
3	Cu 324.752†	71837.6	72343.8	510.10 µg/L	510.10 ppb	09:11:48
3	Mn 257.610†	151798.4	160242.0	509.19 µg/L	509.19 ppb	09:11:42
3	Mo 202.031†	4200.3	4435.7	495.05 µg/L	495.05 ppb	09:12:09
3	Ni 231.604†	8995.6	9183.4	500.29 µg/L	500.29 ppb	09:11:48
3	P 214.914†	1302.9	1167.4	2478.6 µg/L	2478.6 ppb	09:12:09
3	Pb 220.353†	1923.8	1973.8	501.07 µg/L	501.07 ppb	09:12:09
3	S 181.975 Axial†	212.7	200.2	1027.0 µg/L	1027.0 ppb	09:12:09
3	Sb 206.836†	501.6	508.2	502.81 µg/L	502.81 ppb	09:12:09
3	Se 196.026†	346.7	351.4	514.05 µg/L	514.05 ppb	09:12:09
3	SiO2†	29309.8	28915.4	5521.8 µg/L	5521.8 ppb	09:11:48
3	Si 251.611†	32354.8	33757.4	2537.7 µg/L	2537.7 ppb	09:11:48
3	Sn 189.927†	986.3	1017.3	498.70 µg/L	498.70 ppb	09:12:09
3	Ti 334.940†	217481.4	228540.7	506.31 µg/L	506.31 ppb	09:11:42
3	Tl 190.801†	289.0	326.0	494.44 µg/L	494.44 ppb	09:12:09
3	U 409.014†	5841.8	5479.0	513.68 µg/L	513.68 ppb	09:11:48
3	V 292.402†	42155.2	44530.1	506.72 µg/L	506.72 ppb	09:11:48
3	Zn 213.857†	18427.1	18874.9	501.69 µg/L	501.69 ppb	09:11:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1947489.2	94.688	%	0.1558				0.16%
Sc RADIAL	107010.0	95.1	%	0.59				0.62%
Y 371.029	1180587.0	94.269	%	0.1249				0.13%
Ag 328.068†	56938.2	512.40	µg/L	3.239	512.40	ppb	3.239	0.63%
QC value within limits for Ag 328.068 Recovery = 102.48%								
Al 396.153Radial†	10425.8	5250.0	µg/L	8.39	5250.0	ppb	8.39	0.16%
QC value within limits for Al 396.153Radial Recovery = 105.00%								
As 188.979†	265.6	505.18	µg/L	6.191	505.18	ppb	6.191	1.23%
QC value within limits for As 188.979 Recovery = 101.04%								
B 249.677†	11170.8	494.14	µg/L	2.473	494.14	ppb	2.473	0.50%
QC value within limits for B 249.677 Recovery = 98.83%								
Ba 233.527†	20010.5	503.66	µg/L	1.516	503.66	ppb	1.516	0.30%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 313.107†	795484.1	503.02	µg/L	0.287	503.02	ppb	0.287	0.06%
QC value within limits for Be 313.107 Recovery = 100.60%								
Ca 317.933Radial†	12570.2	4989.8	µg/L	36.65	4989.8	ppb	36.65	0.73%
QC value within limits for Ca 317.933Radial Recovery = 99.80%								
Cd 226.502†	18827.3	498.02	µg/L	3.285	498.02	ppb	3.285	0.66%
QC value within limits for Cd 226.502 Recovery = 99.60%								
Co 228.616†	10420.9	501.23	µg/L	3.385	501.23	ppb	3.385	0.68%

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   QC value within limits for Co 228.616  Recovery = 100.25%
Cr 267.716†            24078.9      502.41 µg/L        2.371      502.41 ppb          2.371   0.47%
   QC value within limits for Cr 267.716  Recovery = 100.48%
Cu 324.752†            72636.4      512.17 µg/L        2.371      512.17 ppb          2.371   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.43%
Fe 238.204 Radial†      1001.2      5276.1 µg/L       32.69      5276.1 ppb         32.69   0.62%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.52%
K 766.490 Radial†       9564.5      5185.8 µg/L        7.99      5185.8 ppb          7.99   0.15%
   QC value within limits for K 766.490 Radial  Recovery = 103.72%
Mg 279.077 IEC†          943.5      5237.7 µg/L       73.75      5237.7 ppb         73.75   1.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.75%
Mn 257.610†           160057.6      508.61 µg/L        0.602      508.61 ppb          0.602   0.12%
   QC value within limits for Mn 257.610  Recovery = 101.72%
Mo 202.031†            4458.7      497.62 µg/L        2.443      497.62 ppb          2.443   0.49%
   QC value within limits for Mo 202.031  Recovery = 99.52%
Na 589.592 Radial†    37202.7       10322 µg/L       18.7        10322 ppb         18.7   0.18%
   QC value within limits for Na 589.592 Radial  Recovery = 103.22%
Ni 231.604†            9217.3      502.14 µg/L        1.810      502.14 ppb          1.810   0.36%
   QC value within limits for Ni 231.604  Recovery = 100.43%
P 214.914†             1175.4      2495.7 µg/L       17.04      2495.7 ppb         17.04   0.68%
   QC value within limits for P 214.914  Recovery = 99.83%
Pb 220.353†            1991.5      505.55 µg/L        4.662      505.55 ppb          4.662   0.92%
   QC value within limits for Pb 220.353  Recovery = 101.11%
S 181.975 Axial†        201.4      1033.4 µg/L       14.68      1033.4 ppb         14.68   1.42%
   QC value within limits for S 181.975 Axial  Recovery = 103.34%
Sb 206.836†             508.3      502.87 µg/L        2.864      502.87 ppb          2.864   0.57%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†             350.5      512.69 µg/L       13.345      512.69 ppb         13.345   2.60%
   QC value within limits for Se 196.026  Recovery = 102.54%
SiO2†                  29086.3      5554.4 µg/L       35.22      5554.4 ppb         35.22   0.63%
   QC value within limits for SiO2  Recovery = 103.87%
Si 251.611†            33913.2      2549.5 µg/L       13.98      2549.5 ppb         13.98   0.55%
   QC value within limits for Si 251.611  Recovery = 101.98%
Sn 189.927†            1021.1      500.57 µg/L        1.996      500.57 ppb          1.996   0.40%
   QC value within limits for Sn 189.927  Recovery = 100.11%
Sr 421.552†            90302.2      508.67 µg/L        1.264      508.67 ppb          1.264   0.25%
   QC value within limits for Sr 421.552  Recovery = 101.73%
Ti 334.940†           228444.9      506.09 µg/L        0.195      506.09 ppb          0.195   0.04%
   QC value within limits for Ti 334.940  Recovery = 101.22%
Tl 190.801†             329.1      499.07 µg/L        4.426      499.07 ppb          4.426   0.89%
   QC value within limits for Tl 190.801  Recovery = 99.81%
U 409.014†             5436.7      509.70 µg/L        4.192      509.70 ppb          4.192   0.82%
   QC value within limits for U 409.014  Recovery = 101.94%
V 292.402†             44748.4      509.19 µg/L        2.859      509.19 ppb          2.859   0.56%
   QC value within limits for V 292.402  Recovery = 101.84%
Zn 213.857†            18949.1      503.65 µg/L        2.758      503.65 ppb          2.758   0.55%
   QC value within limits for Zn 213.857  Recovery = 100.73%
All analyte(s) passed QC.
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Sequence No.: 39
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 09:12:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105125.0	105125.0	93.5	%			09:12:50
1	Al 396.153Radial†	223.1	8.9	4.4733	µg/L	4.4733	ppb	09:12:50
1	Ca 317.933Radial†	393.7	-74.2	-29.458	µg/L	-29.458	ppb	09:13:10
1	Fe 238.204 Radial†	13.1	2.8	14.855	µg/L	14.855	ppb	09:13:10
1	K 766.490 Radial†	671.2	23.3	12.650	µg/L	12.650	ppb	09:12:50
1	Mg 279.077 IEC†	17.0	-1.7	-9.4232	µg/L	-9.4232	ppb	09:13:10
1	Na 589.592 Radial†	-648.8	9.7	2.7000	µg/L	2.7000	ppb	09:12:50
1	Sr 421.552†	-96.7	-39.7	-0.2234	µg/L	-0.2234	ppb	09:12:50
1	Sc 361.383	1938982.6	1938982.6	94.274	%			09:14:12
1	Y 371.029	1178534.0	1178534.0	94.105	%			09:14:12
1	Ag 328.068†	-98.0	-75.6	-0.6703	µg/L	-0.6703	ppb	09:14:18
1	As 188.979†	5.2	3.0	5.7479	µg/L	5.7479	ppb	09:14:38
1	B 249.677†	152.9	6.5	0.2834	µg/L	0.2834	ppb	09:14:38
1	Ba 233.527†	-63.7	13.1	0.3309	µg/L	0.3309	ppb	09:14:38
1	Be 313.107†	3739.1	354.7	0.2242	µg/L	0.2242	ppb	09:14:18
1	Cd 226.502†	-78.8	17.3	0.4712	µg/L	0.4712	ppb	09:14:38
1	Co 228.616†	-73.1	-5.8	-0.2785	µg/L	-0.2785	ppb	09:14:38
1	Cr 267.716†	-105.3	11.1	0.2321	µg/L	0.2321	ppb	09:14:18
1	Cu 324.752†	3121.4	-73.3	-0.5127	µg/L	-0.5127	ppb	09:14:18
1	Mn 257.610†	-127.1	87.9	0.2807	µg/L	0.2807	ppb	09:14:38
1	Mo 202.031†	-0.8	7.1	0.7886	µg/L	0.7886	ppb	09:14:38
1	Ni 231.604†	276.6	-6.0	-0.3245	µg/L	-0.3245	ppb	09:14:38
1	P 214.914†	212.8	19.8	43.019	µg/L	43.019	ppb	09:14:38
1	Pb 220.353†	68.5	18.5	4.6760	µg/L	4.6760	ppb	09:14:38
1	S 181.975 Axial†	28.4	6.1	31.331	µg/L	31.331	ppb	09:14:38
1	Sb 206.836†	19.9	0.6	0.6076	µg/L	0.6076	ppb	09:14:38
1	Se 196.026†	19.2	6.3	9.2079	µg/L	9.2079	ppb	09:14:38
1	SiO2†	2124.1	271.4	51.829	µg/L	51.829	ppb	09:14:18
1	Si 251.611†	559.2	243.5	18.475	µg/L	18.475	ppb	09:14:38
1	Sn 189.927†	28.5	7.8	3.7749	µg/L	3.7749	ppb	09:14:38
1	Ti 334.940†	846.7	179.3	0.3990	µg/L	0.3990	ppb	09:14:18
1	Tl 190.801†	-19.6	0.6	0.8749	µg/L	0.8749	ppb	09:14:38
1	U 409.014†	851.6	224.1	21.044	µg/L	21.044	ppb	09:14:18
1	V 292.402†	-38.8	50.8	0.6130	µg/L	0.6130	ppb	09:14:18
1	Zn 213.857†	532.3	14.5	0.3901	µg/L	0.3901	ppb	09:14:38
2	Sc RADIAL	105792.8	105792.8	94.1	%			09:13:16
2	Al 396.153Radial†	218.0	1.9	0.9269	µg/L	0.9269	ppb	09:13:16
2	Ca 317.933Radial†	389.6	-81.2	-32.234	µg/L	-32.234	ppb	09:13:36
2	Fe 238.204 Radial†	11.8	1.4	7.2317	µg/L	7.2317	ppb	09:13:36
2	K 766.490 Radial†	675.2	23.0	12.497	µg/L	12.497	ppb	09:13:16
2	Mg 279.077 IEC†	9.5	-9.7	-53.806	µg/L	-53.806	ppb	09:13:36
2	Na 589.592 Radial†	-675.8	-14.6	-4.0603	µg/L	-4.0603	ppb	09:13:16
2	Sr 421.552†	-31.6	30.2	0.1701	µg/L	0.1701	ppb	09:13:16
2	Sc 361.383	1924425.0	1924425.0	93.567	%			09:14:44
2	Y 371.029	1169712.8	1169712.8	93.401	%			09:14:44
2	Ag 328.068†	-87.4	-65.1	-0.5819	µg/L	-0.5819	ppb	09:14:49
2	As 188.979†	-0.0	-2.5	-4.8259	µg/L	-4.8259	ppb	09:15:10
2	B 249.677†	140.3	-5.8	-0.2581	µg/L	-0.2581	ppb	09:15:10
2	Ba 233.527†	-65.8	10.3	0.2589	µg/L	0.2589	ppb	09:15:10
2	Be 313.107†	3736.1	381.5	0.2411	µg/L	0.2411	ppb	09:14:49
2	Cd 226.502†	-82.5	12.7	0.3540	µg/L	0.3540	ppb	09:15:10
2	Co 228.616†	-71.6	-4.8	-0.2299	µg/L	-0.2299	ppb	09:15:10
2	Cr 267.716†	-101.7	14.1	0.2937	µg/L	0.2937	ppb	09:14:49
2	Cu 324.752†	3106.9	-63.8	-0.4472	µg/L	-0.4472	ppb	09:14:49
2	Mn 257.610†	-104.1	111.4	0.3545	µg/L	0.3545	ppb	09:15:10
2	Mo 202.031†	3.6	11.7	1.3067	µg/L	1.3067	ppb	09:15:10
2	Ni 231.604†	278.9	-1.3	-0.0710	µg/L	-0.0710	ppb	09:15:10
2	P 214.914†	215.7	24.5	53.311	µg/L	53.311	ppb	09:15:10
2	Pb 220.353†	63.4	13.7	3.4460	µg/L	3.4460	ppb	09:15:10

2	S 181.975 Axial†	26.5	4.2	21.801 µg/L	21.801 ppb	09:15:10
2	Sb 206.836†	18.4	-0.8	-0.8221 µg/L	-0.8221 ppb	09:15:10
2	Se 196.026†	14.4	1.2	1.8368 µg/L	1.8368 ppb	09:15:10
2	SiO2†	2076.2	237.3	45.322 µg/L	45.322 ppb	09:14:49
2	Si 251.611†	524.8	211.2	15.951 µg/L	15.951 ppb	09:15:10
2	Sn 189.927†	29.7	9.3	4.5048 µg/L	4.5048 ppb	09:15:10
2	Ti 334.940†	931.2	276.4	0.6144 µg/L	0.6144 ppb	09:14:49
2	Tl 190.801†	-22.0	-2.0	-3.0737 µg/L	-3.0737 ppb	09:15:10
2	U 409.014†	891.6	273.7	25.701 µg/L	25.701 ppb	09:14:49
2	V 292.402†	-94.3	-8.8	-0.0483 µg/L	-0.0483 ppb	09:14:49
2	Zn 213.857†	528.8	14.9	0.4022 µg/L	0.4022 ppb	09:15:10
3	Sc RADIAL	105866.6	105866.6	94.1 %		09:13:42
3	Al 396.153Radial†	239.8	25.0	12.608 µg/L	12.608 ppb	09:13:42
3	Ca 317.933Radial†	394.8	-76.0	-30.173 µg/L	-30.173 ppb	09:14:02
3	Fe 238.204 Radial†	10.2	-0.4	-2.1180 µg/L	-2.1180 ppb	09:14:02
3	K 766.490 Radial†	640.9	-13.9	-7.5352 µg/L	-7.5352 ppb	09:13:42
3	Mg 279.077 IEC†	15.9	-3.0	-16.530 µg/L	-16.530 ppb	09:14:02
3	Na 589.592 Radial†	-675.2	-13.5	-3.7417 µg/L	-3.7417 ppb	09:13:42
3	Sr 421.552†	-48.3	12.4	0.0699 µg/L	0.0699 ppb	09:13:42
3	Sc 361.383	1937341.1	1937341.1	94.195 %		09:15:15
3	Y 371.029	1176865.6	1176865.6	93.972 %		09:15:15
3	Ag 328.068†	-108.3	-86.6	-0.7726 µg/L	-0.7726 ppb	09:15:21
3	As 188.979†	2.9	0.6	1.2181 µg/L	1.2181 ppb	09:15:41
3	B 249.677†	139.0	-8.1	-0.3589 µg/L	-0.3589 ppb	09:15:41
3	Ba 233.527†	-71.3	5.0	0.1248 µg/L	0.1248 ppb	09:15:41
3	Be 313.107†	3775.2	396.4	0.2506 µg/L	0.2506 ppb	09:15:21
3	Cd 226.502†	-95.3	-0.3	-0.0026 µg/L	-0.0026 ppb	09:15:41
3	Co 228.616†	-73.5	-6.4	-0.3052 µg/L	-0.3052 ppb	09:15:41
3	Cr 267.716†	-131.0	-16.3	-0.3388 µg/L	-0.3388 ppb	09:15:21
3	Cu 324.752†	3146.2	-44.2	-0.3115 µg/L	-0.3115 ppb	09:15:21
3	Mn 257.610†	-92.8	124.1	0.3936 µg/L	0.3936 ppb	09:15:41
3	Mo 202.031†	-3.0	4.7	0.5275 µg/L	0.5275 ppb	09:15:41
3	Ni 231.604†	271.4	-11.2	-0.6115 µg/L	-0.6115 ppb	09:15:41
3	P 214.914†	213.7	20.9	45.403 µg/L	45.403 ppb	09:15:41
3	Pb 220.353†	64.5	14.3	3.6328 µg/L	3.6328 ppb	09:15:41
3	S 181.975 Axial†	25.6	3.1	16.182 µg/L	16.182 ppb	09:15:41
3	Sb 206.836†	17.1	-2.4	-2.3768 µg/L	-2.3768 ppb	09:15:41
3	Se 196.026†	15.0	1.9	2.7127 µg/L	2.7127 ppb	09:15:41
3	SiO2†	2100.5	248.3	47.418 µg/L	47.418 ppb	09:15:21
3	Si 251.611†	511.2	193.0	14.745 µg/L	14.745 ppb	09:15:41
3	Sn 189.927†	22.0	0.9	0.4515 µg/L	0.4515 ppb	09:15:41
3	Ti 334.940†	863.6	198.0	0.4405 µg/L	0.4405 ppb	09:15:21
3	Tl 190.801†	-22.6	-2.6	-3.8874 µg/L	-3.8874 ppb	09:15:41
3	U 409.014†	731.6	97.5	9.1584 µg/L	9.1584 ppb	09:15:21
3	V 292.402†	-70.1	17.5	0.2158 µg/L	0.2158 ppb	09:15:21
3	Zn 213.857†	538.3	21.3	0.5758 µg/L	0.5758 ppb	09:15:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933582.9	94.012	%	0.3877				0.41%
Sc RADIAL	105594.8	93.9	%	0.36				0.39%
Y 371.029	1175037.5	93.826	%	0.3742				0.40%
Ag 328.068†	-75.8	-0.6750	µg/L	0.09547	-0.6750	ppb	0.09547	14.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.9	6.0029	µg/L	5.98914	6.0029	ppb	5.98914	99.77%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.4	0.7134	µg/L	5.30495	0.7134	ppb	5.30495	743.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-2.5	-0.1112	µg/L	0.34546	-0.1112	ppb	0.34546	310.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.5	0.2382	µg/L	0.10458	0.2382	ppb	0.10458	43.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	377.5	0.2386	µg/L	0.01333	0.2386	ppb	0.01333	5.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-77.1	-30.622	µg/L	1.4410	-30.622	ppb	1.4410	4.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.9	0.2742	µg/L	0.24675	0.2742	ppb	0.24675	89.99%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.7	-0.2712	µg/L	0.03819	-0.2712	ppb	0.03819	14.08%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                3.0      0.0623 µg/L       0.34874      0.0623 ppb        0.34874 559.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -60.4     -0.4238 µg/L       0.10260     -0.4238 ppb        0.10260  24.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.3      6.6562 µg/L       8.50109      6.6562 ppb        8.50109 127.72%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         10.8      5.8705 µg/L      11.60989      5.8705 ppb       11.60989 197.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.8     -26.586 µg/L       23.8388     -26.586 ppb        23.8388  89.67%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              107.8      0.3429 µg/L       0.05734      0.3429 ppb        0.05734  16.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                7.8      0.8743 µg/L       0.39659      0.8743 ppb        0.39659  45.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -6.1     -1.7007 µg/L       3.81441     -1.7007 ppb        3.81441 224.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -6.2     -0.3357 µg/L       0.27044     -0.3357 ppb        0.27044  80.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                21.7      47.244 µg/L        5.3873      47.244 ppb         5.3873  11.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               15.5      3.9183 µg/L       0.66284      3.9183 ppb        0.66284  16.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.5      23.105 µg/L        7.6580      23.105 ppb         7.6580  33.14%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.9     -0.8638 µg/L       1.49262     -0.8638 ppb        1.49262 172.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.1      4.5858 µg/L       4.02678      4.5858 ppb        4.02678  87.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    252.3      48.190 µg/L        3.3214      48.190 ppb         3.3214   6.89%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              215.9      16.390 µg/L        1.9031      16.390 ppb         1.9031  11.61%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                6.0      2.9104 µg/L       2.16053      2.9104 ppb        2.16053  74.24%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                1.0      0.0055 µg/L       0.20448      0.0055 ppb        0.20448 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              217.9      0.4846 µg/L       0.11427      0.4846 ppb        0.11427  23.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.4     -2.0287 µg/L       2.54735     -2.0287 ppb        2.54735 125.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               198.4      18.634 µg/L        8.5304      18.634 ppb         8.5304  45.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.8      0.2602 µg/L       0.33287      0.2602 ppb        0.33287 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               16.9      0.4560 µg/L       0.10387      0.4560 ppb        0.10387  22.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 09:55:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107034.2	107034.2	95.2	%			09:56:11
1	Al 396.153Radial†	9951.4	10227.9	5150.2	µg/L	5150.2	ppb	09:56:11
1	Ca 317.933Radial†	12201.8	12327.1	4893.3	µg/L	4893.3	ppb	09:56:31
1	Fe 238.204 Radial†	961.3	999.0	5264.3	µg/L	5264.3	ppb	09:56:31
1	K 766.490 Radial†	9565.3	9357.1	5073.4	µg/L	5073.4	ppb	09:56:11
1	Mg 279.077 IEC†	898.5	924.4	5131.9	µg/L	5131.9	ppb	09:56:31
1	Na 589.592 Radial†	33950.0	36381.3	10094	µg/L	10094	ppb	09:56:11
1	Sr 421.552†	84720.4	89094.7	501.86	µg/L	501.86	ppb	09:56:11
1	Sc 361.383	1934927.1	1934927.1	94.077	%			09:57:35
1	Y 371.029	1172426.0	1172426.0	93.617	%			09:57:35
1	Ag 328.068†	52986.8	56351.0	507.11	µg/L	507.11	ppb	09:57:40
1	As 188.979†	251.6	265.0	504.07	µg/L	504.07	ppb	09:58:01
1	B 249.677†	10489.2	10993.8	486.29	µg/L	486.29	ppb	09:57:40
1	Ba 233.527†	18509.2	19755.1	497.24	µg/L	497.24	ppb	09:57:40
1	Be 313.107†	745362.2	788676.4	498.72	µg/L	498.72	ppb	09:57:35
1	Cd 226.502†	17289.4	18478.8	488.81	µg/L	488.81	ppb	09:57:40
1	Co 228.616†	9618.9	10296.2	495.24	µg/L	495.24	ppb	09:57:40
1	Cr 267.716†	22220.2	23741.9	495.38	µg/L	495.38	ppb	09:57:40
1	Cu 324.752†	70701.1	71767.9	506.05	µg/L	506.05	ppb	09:57:40
1	Mn 257.610†	149641.4	159285.0	506.16	µg/L	506.16	ppb	09:57:35
1	Mo 202.031†	4149.3	4418.4	493.12	µg/L	493.12	ppb	09:58:01
1	Ni 231.604†	8872.4	9131.5	497.47	µg/L	497.47	ppb	09:57:40
1	P 214.914†	1296.6	1172.2	2489.3	µg/L	2489.3	ppb	09:58:01
1	Pb 220.353†	1900.1	1965.6	498.96	µg/L	498.96	ppb	09:58:01
1	S 181.975 Axial†	208.8	197.9	1015.4	µg/L	1015.4	ppb	09:58:01
1	Sb 206.836†	494.2	504.8	499.46	µg/L	499.46	ppb	09:58:01
1	Se 196.026†	328.1	334.7	489.71	µg/L	489.71	ppb	09:58:01
1	SiO2†	28581.2	28398.9	5423.2	µg/L	5423.2	ppb	09:57:40
1	Si 251.611†	31474.7	33106.6	2488.4	µg/L	2488.4	ppb	09:57:40
1	Sn 189.927†	962.5	1000.7	490.59	µg/L	490.59	ppb	09:58:01
1	Ti 334.940†	213887.3	226634.2	502.08	µg/L	502.08	ppb	09:57:35
1	Tl 190.801†	285.7	325.1	493.09	µg/L	493.09	ppb	09:58:01
1	U 409.014†	5768.6	5452.6	511.19	µg/L	511.19	ppb	09:57:40
1	V 292.402†	41481.7	44185.2	502.81	µg/L	502.81	ppb	09:57:40
1	Zn 213.857†	18105.3	18694.9	496.88	µg/L	496.88	ppb	09:57:40
2	Sc RADIAL	105933.7	105933.7	94.2	%			09:56:37
2	Al 396.153Radial†	9918.4	10301.6	5187.3	µg/L	5187.3	ppb	09:56:37
2	Ca 317.933Radial†	12234.7	12495.3	4960.1	µg/L	4960.1	ppb	09:56:57
2	Fe 238.204 Radial†	962.1	1010.3	5323.8	µg/L	5323.8	ppb	09:56:57
2	K 766.490 Radial†	9620.8	9520.5	5162.0	µg/L	5162.0	ppb	09:56:37
2	Mg 279.077 IEC†	899.6	935.3	5192.6	µg/L	5192.6	ppb	09:56:57
2	Na 589.592 Radial†	33799.4	36592.0	10153	µg/L	10153	ppb	09:56:37
2	Sr 421.552†	84228.1	89496.9	504.13	µg/L	504.13	ppb	09:56:37
2	Sc 361.383	1930795.6	1930795.6	93.876	%			09:58:08
2	Y 371.029	1169518.3	1169518.3	93.385	%			09:58:08
2	Ag 328.068†	53183.1	56680.6	510.08	µg/L	510.08	ppb	09:58:14
2	As 188.979†	250.3	264.1	502.41	µg/L	502.41	ppb	09:58:34
2	B 249.677†	10520.3	11050.8	488.80	µg/L	488.80	ppb	09:58:14
2	Ba 233.527†	18601.4	19895.5	500.77	µg/L	500.77	ppb	09:58:14
2	Be 313.107†	741220.4	785959.8	497.00	µg/L	497.00	ppb	09:58:08
2	Cd 226.502†	17395.0	18630.5	492.82	µg/L	492.82	ppb	09:58:14
2	Co 228.616†	9667.5	10369.8	498.79	µg/L	498.79	ppb	09:58:14
2	Cr 267.716†	22293.8	23870.9	498.07	µg/L	498.07	ppb	09:58:14
2	Cu 324.752†	70962.4	72207.0	509.15	µg/L	509.15	ppb	09:58:14
2	Mn 257.610†	148775.4	158702.8	504.32	µg/L	504.32	ppb	09:58:08
2	Mo 202.031†	4174.6	4454.8	497.19	µg/L	497.19	ppb	09:58:34
2	Ni 231.604†	8876.1	9155.7	498.78	µg/L	498.78	ppb	09:58:14
2	P 214.914†	1294.8	1173.3	2491.2	µg/L	2491.2	ppb	09:58:34
2	Pb 220.353†	1898.6	1968.3	499.68	µg/L	499.68	ppb	09:58:34

2	S 181.975 Axial†	212.5	202.3	1037.8 µg/L	1037.8 ppb	09:58:34
2	Sb 206.836†	492.7	504.2	498.89 µg/L	498.89 ppb	09:58:34
2	Se 196.026†	334.7	342.4	500.99 µg/L	500.99 ppb	09:58:34
2	SiO2†	28660.6	28548.5	5451.7 µg/L	5451.7 ppb	09:58:14
2	Si 251.611†	31645.6	33360.3	2507.6 µg/L	2507.6 ppb	09:58:14
2	Sn 189.927†	967.4	1008.1	494.22 µg/L	494.22 ppb	09:58:34
2	Ti 334.940†	212775.9	225936.8	500.53 µg/L	500.53 ppb	09:58:08
2	Tl 190.801†	293.1	333.7	505.91 µg/L	505.91 ppb	09:58:34
2	U 409.014†	5745.4	5440.9	510.09 µg/L	510.09 ppb	09:58:14
2	V 292.402†	41658.7	44468.1	506.03 µg/L	506.03 ppb	09:58:14
2	Zn 213.857†	18197.2	18834.0	500.59 µg/L	500.59 ppb	09:58:14
3	Sc RADIAL	107600.7	107600.7	95.7 %		09:57:03
3	Al 396.153Radial†	10075.1	10302.2	5187.9 µg/L	5187.9 ppb	09:57:03
3	Ca 317.933Radial†	12194.2	12251.7	4863.4 µg/L	4863.4 ppb	09:57:23
3	Fe 238.204 Radial†	956.8	989.0	5211.8 µg/L	5211.8 ppb	09:57:23
3	K 766.490 Radial†	9684.0	9428.3	5112.0 µg/L	5112.0 ppb	09:57:03
3	Mg 279.077 IEC†	897.9	918.7	5100.4 µg/L	5100.4 ppb	09:57:23
3	Na 589.592 Radial†	34421.8	36686.6	10179 µg/L	10179 ppb	09:57:03
3	Sr 421.552†	85540.9	89483.8	504.06 µg/L	504.06 ppb	09:57:03
3	Sc 361.383	1943496.4	1943496.4	94.494 %		09:58:41
3	Y 371.029	1177687.4	1177687.4	94.038 %		09:58:41
3	Ag 328.068†	53379.9	56518.7	508.62 µg/L	508.62 ppb	09:58:47
3	As 188.979†	242.5	254.1	483.37 µg/L	483.37 ppb	09:59:08
3	B 249.677†	10618.4	11081.4	490.20 µg/L	490.20 ppb	09:58:47
3	Ba 233.527†	18682.7	19852.0	499.67 µg/L	499.67 ppb	09:58:47
3	Be 313.107†	748040.5	788017.3	498.30 µg/L	498.30 ppb	09:58:41
3	Cd 226.502†	17514.4	18635.9	492.97 µg/L	492.97 ppb	09:58:47
3	Co 228.616†	9700.6	10337.5	497.21 µg/L	497.21 ppb	09:58:47
3	Cr 267.716†	22418.7	23847.8	497.59 µg/L	497.59 ppb	09:58:47
3	Cu 324.752†	71220.8	71986.6	507.58 µg/L	507.58 ppb	09:58:47
3	Mn 257.610†	150021.8	158986.2	505.20 µg/L	505.20 ppb	09:58:41
3	Mo 202.031†	4118.9	4366.8	487.37 µg/L	487.37 ppb	09:59:08
3	Ni 231.604†	8910.8	9130.6	497.42 µg/L	497.42 ppb	09:58:47
3	P 214.914†	1283.2	1151.9	2445.0 µg/L	2445.0 ppb	09:59:08
3	Pb 220.353†	1895.6	1952.0	495.50 µg/L	495.50 ppb	09:59:08
3	S 181.975 Axial†	205.7	193.6	993.25 µg/L	993.25 ppb	09:59:08
3	Sb 206.836†	484.7	492.4	487.18 µg/L	487.18 ppb	09:59:08
3	Se 196.026†	332.1	337.4	493.59 µg/L	493.59 ppb	09:59:08
3	SiO2†	28848.0	28547.3	5451.5 µg/L	5451.5 ppb	09:58:47
3	Si 251.611†	31812.0	33316.0	2504.7 µg/L	2504.7 ppb	09:58:47
3	Sn 189.927†	954.6	987.7	484.26 µg/L	484.26 ppb	09:59:08
3	Ti 334.940†	214541.2	226323.7	501.40 µg/L	501.40 ppb	09:58:41
3	Tl 190.801†	285.7	323.8	491.02 µg/L	491.02 ppb	09:59:08
3	U 409.014†	5908.1	5573.1	522.52 µg/L	522.52 ppb	09:58:47
3	V 292.402†	41841.4	44371.4	504.88 µg/L	504.88 ppb	09:58:47
3	Zn 213.857†	18282.7	18797.8	499.64 µg/L	499.64 ppb	09:58:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1936406.4	94.149	%	0.3150				0.33%
Sc RADIAL	106856.2	95.0	%	0.75				0.79%
Y 371.029	1173210.6	93.680	%	0.3306				0.35%
Ag 328.068†	56516.8	508.61	µg/L	1.485	508.61	ppb	1.485	0.29%
QC value within limits for Ag 328.068 Recovery = 101.72%								
Al 396.153Radial†	10277.2	5175.1	µg/L	21.59	5175.1	ppb	21.59	0.42%
QC value within limits for Al 396.153Radial Recovery = 103.50%								
As 188.979†	261.1	496.62	µg/L	11.500	496.62	ppb	11.500	2.32%
QC value within limits for As 188.979 Recovery = 99.32%								
B 249.677†	11042.0	488.43	µg/L	1.979	488.43	ppb	1.979	0.41%
QC value within limits for B 249.677 Recovery = 97.69%								
Ba 233.527†	19834.2	499.23	µg/L	1.808	499.23	ppb	1.808	0.36%
QC value within limits for Ba 233.527 Recovery = 99.85%								
Be 313.107†	787551.2	498.01	µg/L	0.896	498.01	ppb	0.896	0.18%
QC value within limits for Be 313.107 Recovery = 99.60%								
Ca 317.933Radial†	12358.1	4905.6	µg/L	49.51	4905.6	ppb	49.51	1.01%
QC value within limits for Ca 317.933Radial Recovery = 98.11%								
Cd 226.502†	18581.7	491.53	µg/L	2.360	491.53	ppb	2.360	0.48%
QC value within limits for Cd 226.502 Recovery = 98.31%								
Co 228.616†	10334.5	497.08	µg/L	1.780	497.08	ppb	1.780	0.36%

```
   QC value within limits for Co 228.616  Recovery = 99.42%
Cr 267.716†            23820.2      497.01 µg/L        1.435      497.01 ppb          1.435   0.29%
   QC value within limits for Cr 267.716  Recovery = 99.40%
Cu 324.752†            71987.1      507.60 µg/L        1.551      507.60 ppb          1.551   0.31%
   QC value within limits for Cu 324.752  Recovery = 101.52%
Fe 238.204 Radial†       999.5      5266.6 µg/L       56.02      5266.6 ppb          56.02   1.06%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.33%
K 766.490 Radial†       9435.3      5115.8 µg/L       44.41      5115.8 ppb          44.41   0.87%
   QC value within limits for K 766.490 Radial  Recovery = 102.32%
Mg 279.077 IEC†          926.2      5141.6 µg/L       46.88      5141.6 ppb          46.88   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.83%
Mn 257.610†           158991.4      505.23 µg/L       0.920      505.23 ppb          0.920   0.18%
   QC value within limits for Mn 257.610  Recovery = 101.05%
Mo 202.031†             4413.4      492.56 µg/L       4.935      492.56 ppb          4.935   1.00%
   QC value within limits for Mo 202.031  Recovery = 98.51%
Na 589.592 Radial†     36553.3       10142 µg/L        43.4       10142 ppb           43.4   0.43%
   QC value within limits for Na 589.592 Radial  Recovery = 101.42%
Ni 231.604†             9139.3      497.89 µg/L       0.773      497.89 ppb          0.773   0.16%
   QC value within limits for Ni 231.604  Recovery = 99.58%
P 214.914†              1165.8      2475.1 µg/L       26.16      2475.1 ppb          26.16   1.06%
   QC value within limits for P 214.914  Recovery = 99.01%
Pb 220.353†             1962.0      498.05 µg/L       2.240      498.05 ppb          2.240   0.45%
   QC value within limits for Pb 220.353  Recovery = 99.61%
S 181.975 Axial†         197.9      1015.5 µg/L       22.28      1015.5 ppb          22.28   2.19%
   QC value within limits for S 181.975 Axial  Recovery = 101.55%
Sb 206.836†              500.5      495.17 µg/L       6.931      495.17 ppb          6.931   1.40%
   QC value within limits for Sb 206.836  Recovery = 99.03%
Se 196.026†              338.1      494.76 µg/L       5.730      494.76 ppb          5.730   1.16%
   QC value within limits for Se 196.026  Recovery = 98.95%
SiO2†                  28498.2      5442.1 µg/L       16.43      5442.1 ppb          16.43   0.30%
   QC value within limits for SiO2  Recovery = 101.77%
Si 251.611†            33261.0      2500.2 µg/L       10.38      2500.2 ppb          10.38   0.42%
   QC value within limits for Si 251.611  Recovery = 100.01%
Sn 189.927†              998.8      489.69 µg/L       5.041      489.69 ppb          5.041   1.03%
   QC value within limits for Sn 189.927  Recovery = 97.94%
Sr 421.552†            89358.5      503.35 µg/L       1.287      503.35 ppb          1.287   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.67%
Ti 334.940†           226298.2      501.34 µg/L       0.776      501.34 ppb          0.776   0.15%
   QC value within limits for Ti 334.940  Recovery = 100.27%
Tl 190.801†              327.5      496.67 µg/L       8.064      496.67 ppb          8.064   1.62%
   QC value within limits for Tl 190.801  Recovery = 99.33%
U 409.014†              5488.9      514.60 µg/L       6.882      514.60 ppb          6.882   1.34%
   QC value within limits for U 409.014  Recovery = 102.92%
V 292.402†             44341.6      504.58 µg/L       1.633      504.58 ppb          1.633   0.32%
   QC value within limits for V 292.402  Recovery = 100.92%
Zn 213.857†            18775.6      499.04 µg/L       1.927      499.04 ppb          1.927   0.39%
   QC value within limits for Zn 213.857  Recovery = 99.81%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 09:59:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104773.5	104773.5	93.1	%			09:59:49
1	Al 396.153Radial†	242.8	30.9	15.568	µg/L	15.568	ppb	09:59:49
1	Ca 317.933Radial†	394.6	-71.9	-28.524	µg/L	-28.524	ppb	10:00:09
1	Fe 238.204 Radial†	15.0	5.0	26.022	µg/L	26.022	ppb	10:00:09
1	K 766.490 Radial†	580.2	-72.0	-39.046	µg/L	-39.046	ppb	09:59:49
1	Mg 279.077 IEC†	12.0	-6.9	-38.485	µg/L	-38.485	ppb	10:00:09
1	Na 589.592 Radial†	-622.8	35.4	9.8091	µg/L	9.8091	ppb	09:59:49
1	Sr 421.552†	-8.2	55.0	0.3096	µg/L	0.3096	ppb	09:59:49
1	Sc 361.383	1927013.2	1927013.2	93.692	%			10:01:11
1	Y 371.029	1172783.1	1172783.1	93.646	%			10:01:11
1	Ag 328.068†	-85.7	-63.2	-0.5601	µg/L	-0.5601	ppb	10:01:17
1	As 188.979†	0.3	-2.2	-4.1517	µg/L	-4.1517	ppb	10:01:37
1	B 249.677†	141.5	-4.6	-0.2136	µg/L	-0.2136	ppb	10:01:37
1	Ba 233.527†	-70.5	5.4	0.1369	µg/L	0.1369	ppb	10:01:37
1	Be 313.107†	3721.1	360.1	0.2277	µg/L	0.2277	ppb	10:01:17
1	Cd 226.502†	-91.0	3.8	0.1046	µg/L	0.1046	ppb	10:01:37
1	Co 228.616†	-62.8	4.7	0.2262	µg/L	0.2262	ppb	10:01:37
1	Cr 267.716†	-89.1	27.7	0.5767	µg/L	0.5767	ppb	10:01:37
1	Cu 324.752†	3135.5	-37.8	-0.2602	µg/L	-0.2602	ppb	10:01:17
1	Mn 257.610†	-119.3	95.4	0.3059	µg/L	0.3059	ppb	10:01:37
1	Mo 202.031†	0.6	8.6	0.9583	µg/L	0.9583	ppb	10:01:37
1	Ni 231.604†	269.6	-11.6	-0.6341	µg/L	-0.6341	ppb	10:01:37
1	P 214.914†	210.6	18.7	40.692	µg/L	40.692	ppb	10:01:37
1	Pb 220.353†	59.3	9.2	2.3273	µg/L	2.3273	ppb	10:01:37
1	S 181.975 Axial†	25.7	3.4	17.654	µg/L	17.654	ppb	10:01:37
1	Sb 206.836†	23.7	4.8	4.7379	µg/L	4.7379	ppb	10:01:37
1	Se 196.026†	9.4	-4.0	-5.8435	µg/L	-5.8435	ppb	10:01:37
1	SiO2†	2017.6	171.8	32.809	µg/L	32.809	ppb	10:01:17
1	Si 251.611†	412.7	90.8	6.9475	µg/L	6.9475	ppb	10:01:37
1	Sn 189.927†	20.8	-0.3	-0.1510	µg/L	-0.1510	ppb	10:01:37
1	Ti 334.940†	838.6	176.2	0.3921	µg/L	0.3921	ppb	10:01:17
1	Tl 190.801†	-21.8	-1.8	-2.7488	µg/L	-2.7488	ppb	10:01:37
1	U 409.014†	728.2	98.0	9.1978	µg/L	9.1978	ppb	10:01:17
1	V 292.402†	-59.3	28.7	0.3472	µg/L	0.3472	ppb	10:01:17
1	Zn 213.857†	531.3	16.9	0.4555	µg/L	0.4555	ppb	10:01:37
2	Sc RADIAL	105663.4	105663.4	93.9	%			10:00:15
2	Al 396.153Radial†	213.8	-2.2	-1.1507	µg/L	-1.1507	ppb	10:00:15
2	Ca 317.933Radial†	398.6	-71.2	-28.254	µg/L	-28.254	ppb	10:00:35
2	Fe 238.204 Radial†	13.2	2.9	15.194	µg/L	15.194	ppb	10:00:35
2	K 766.490 Radial†	683.3	32.5	17.648	µg/L	17.648	ppb	10:00:15
2	Mg 279.077 IEC†	14.7	-4.2	-23.122	µg/L	-23.122	ppb	10:00:35
2	Na 589.592 Radial†	-642.8	19.6	5.4450	µg/L	5.4450	ppb	10:00:15
2	Sr 421.552†	-39.6	21.6	0.1218	µg/L	0.1218	ppb	10:00:15
2	Sc 361.383	1937661.4	1937661.4	94.210	%			10:01:43
2	Y 371.029	1179396.0	1179396.0	94.174	%			10:01:43
2	Ag 328.068†	-89.4	-66.6	-0.5912	µg/L	-0.5912	ppb	10:01:49
2	As 188.979†	1.8	-0.6	-1.1844	µg/L	-1.1844	ppb	10:02:09
2	B 249.677†	156.6	10.5	0.4633	µg/L	0.4633	ppb	10:02:09
2	Ba 233.527†	-84.2	-8.7	-0.2174	µg/L	-0.2174	ppb	10:02:09
2	Be 313.107†	3711.1	327.6	0.2071	µg/L	0.2071	ppb	10:01:49
2	Cd 226.502†	-89.5	5.9	0.1556	µg/L	0.1556	ppb	10:02:09
2	Co 228.616†	-74.3	-7.1	-0.3430	µg/L	-0.3430	ppb	10:02:09
2	Cr 267.716†	-104.0	12.4	0.2588	µg/L	0.2588	ppb	10:02:09
2	Cu 324.752†	3175.9	-13.2	-0.0895	µg/L	-0.0895	ppb	10:01:49
2	Mn 257.610†	-133.5	80.9	0.2587	µg/L	0.2587	ppb	10:02:09
2	Mo 202.031†	-2.0	5.8	0.6464	µg/L	0.6464	ppb	10:02:09
2	Ni 231.604†	275.6	-6.9	-0.3762	µg/L	-0.3762	ppb	10:02:09
2	P 214.914†	213.9	21.1	45.736	µg/L	45.736	ppb	10:02:09
2	Pb 220.353†	62.8	12.5	3.1775	µg/L	3.1775	ppb	10:02:09

2	S 181.975 Axial†	27.5	5.2	26.676 µg/L	26.676 ppb		10:02:09
2	Sb 206.836†	14.3	-5.4	-5.3276 µg/L	-5.3276 ppb		10:02:09
2	Se 196.026†	3.0	-10.9	-15.841 µg/L	-15.841 ppb		10:02:09
2	SiO2†	1987.3	127.8	24.405 µg/L	24.405 ppb		10:01:49
2	Si 251.611†	384.7	58.7	4.4810 µg/L	4.4810 ppb		10:02:09
2	Sn 189.927†	20.1	-1.1	-0.5509 µg/L	-0.5509 ppb		10:02:09
2	Ti 334.940†	846.2	179.3	0.3990 µg/L	0.3990 ppb		10:01:49
2	Tl 190.801†	-18.4	1.9	2.8127 µg/L	2.8127 ppb		10:02:09
2	U 409.014†	662.8	24.3	2.2795 µg/L	2.2795 ppb		10:01:49
2	V 292.402†	-59.0	29.4	0.3403 µg/L	0.3403 ppb		10:01:49
2	Zn 213.857†	522.5	4.5	0.1210 µg/L	0.1210 ppb		10:02:09
3	Sc RADIAL	105429.6	105429.6	93.7 %			10:00:40
3	Al 396.153Radial†	236.8	22.8	11.517 µg/L	11.517 ppb		10:00:40
3	Ca 317.933Radial†	386.0	-83.7	-33.212 µg/L	-33.212 ppb		10:01:01
3	Fe 238.204 Radial†	12.9	2.6	13.533 µg/L	13.533 ppb		10:01:01
3	K 766.490 Radial†	635.2	-17.1	-9.2919 µg/L	-9.2919 ppb		10:00:40
3	Mg 279.077 IEC†	16.7	-2.0	-11.257 µg/L	-11.257 ppb		10:01:01
3	Na 589.592 Radial†	-656.5	3.5	0.9707 µg/L	0.9707 ppb		10:00:40
3	Sr 421.552†	-73.9	-15.1	-0.0851 µg/L	-0.0851 ppb		10:00:40
3	Sc 361.383	1951055.2	1951055.2	94.861 %			10:02:15
3	Y 371.029	1186776.5	1186776.5	94.763 %			10:02:15
3	Ag 328.068†	-164.3	-144.8	-1.2902 µg/L	-1.2902 ppb		10:02:21
3	As 188.979†	1.4	-1.0	-1.8689 µg/L	-1.8689 ppb		10:02:42
3	B 249.677†	139.7	-8.4	-0.3770 µg/L	-0.3770 ppb		10:02:42
3	Ba 233.527†	-80.0	-3.7	-0.0910 µg/L	-0.0910 ppb		10:02:42
3	Be 313.107†	3574.0	156.1	0.0986 µg/L	0.0986 ppb		10:02:21
3	Cd 226.502†	-85.0	11.3	0.2990 µg/L	0.2990 ppb		10:02:42
3	Co 228.616†	-73.2	-5.4	-0.2604 µg/L	-0.2604 ppb		10:02:42
3	Cr 267.716†	-101.6	15.7	0.3277 µg/L	0.3277 ppb		10:02:42
3	Cu 324.752†	3128.3	-86.6	-0.6062 µg/L	-0.6062 ppb		10:02:21
3	Mn 257.610†	-133.1	82.3	0.2630 µg/L	0.2630 ppb		10:02:42
3	Mo 202.031†	-7.7	-0.2	-0.0244 µg/L	-0.0244 ppb		10:02:42
3	Ni 231.604†	269.0	-15.9	-0.8640 µg/L	-0.8640 ppb		10:02:42
3	P 214.914†	219.3	25.2	54.738 µg/L	54.738 ppb		10:02:42
3	Pb 220.353†	69.9	19.5	4.9506 µg/L	4.9506 ppb		10:02:42
3	S 181.975 Axial†	26.8	4.2	21.712 µg/L	21.712 ppb		10:02:42
3	Sb 206.836†	12.5	-7.3	-7.2839 µg/L	-7.2839 ppb		10:02:42
3	Se 196.026†	11.1	-2.4	-3.5096 µg/L	-3.5096 ppb		10:02:42
3	SiO2†	2011.7	139.0	26.549 µg/L	26.549 ppb		10:02:21
3	Si 251.611†	400.7	72.7	5.5258 µg/L	5.5258 ppb		10:02:42
3	Sn 189.927†	23.2	2.0	0.9652 µg/L	0.9652 ppb		10:02:42
3	Ti 334.940†	828.0	153.9	0.3431 µg/L	0.3431 ppb		10:02:21
3	Tl 190.801†	-17.9	2.6	3.9056 µg/L	3.9056 ppb		10:02:42
3	U 409.014†	666.9	23.8	2.2285 µg/L	2.2285 ppb		10:02:21
3	V 292.402†	-57.7	31.2	0.3559 µg/L	0.3559 ppb		10:02:21
3	Zn 213.857†	520.1	-1.9	-0.0462 µg/L	-0.0462 ppb		10:02:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1938576.6	94.255	%	0.5857				0.62%
Sc RADIAL	105288.8	93.6	%	0.41				0.44%
Y 371.029	1179651.8	94.194	%	0.5590				0.59%
Ag 328.068†	-91.5	-0.8139	µg/L	0.41283	-0.8139	ppb	0.41283	50.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.1	8.6450	µg/L	8.72175	8.6450	ppb	8.72175	100.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-2.4016	µg/L	1.55374	-2.4016	ppb	1.55374	64.69%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-0.8	-0.0424	µg/L	0.44551	-0.0424	ppb	0.44551	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.3	-0.0572	µg/L	0.17956	-0.0572	ppb	0.17956	313.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	281.3	0.1778	µg/L	0.06936	0.1778	ppb	0.06936	39.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-75.6	-29.997	µg/L	2.7879	-29.997	ppb	2.7879	9.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.0	0.1864	µg/L	0.10081	0.1864	ppb	0.10081	54.09%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.6	-0.1257	µg/L	0.30758	-0.1257	ppb	0.30758	244.64%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.6      0.3878 µg/L       0.16726      0.3878 ppb        0.16726  43.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -45.8     -0.3186 µg/L       0.26326     -0.3186 ppb        0.26326  82.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        3.5      18.250 µg/L        6.7821      18.250 ppb         6.7821  37.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -18.9     -10.230 µg/L       28.3584     -10.230 ppb        28.3584 277.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -4.4     -24.288 µg/L       13.6515     -24.288 ppb        13.6515  56.21%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              86.2      0.2759 µg/L       0.02610      0.2759 ppb        0.02610   9.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.7      0.5268 µg/L       0.50218      0.5268 ppb        0.50218  95.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       19.5      5.4082 µg/L       4.41931      5.4082 ppb        4.41931  81.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -11.5     -0.6248 µg/L       0.24401     -0.6248 ppb        0.24401  39.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               21.7      47.056 µg/L        7.1153      47.056 ppb         7.1153  15.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              13.8      3.4851 µg/L       1.33839      3.4851 ppb        1.33839  38.40%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          4.3      22.014 µg/L        4.5185      22.014 ppb         4.5185  20.53%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.6     -2.6245 µg/L       6.45063     -2.6245 ppb        6.45063 245.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.8     -8.3980 µg/L       6.55054     -8.3980 ppb        6.55054  78.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   146.2      27.921 µg/L        4.3669      27.921 ppb         4.3669  15.64%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              74.1      5.6514 µg/L       1.23802      5.6514 ppb        1.23802  21.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.2      0.0878 µg/L       0.78575      0.0878 ppb        0.78575 895.36%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              20.5      0.1154 µg/L       0.19742      0.1154 ppb        0.19742 171.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             169.8      0.3781 µg/L       0.03047      0.3781 ppb        0.03047   8.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.9      1.3232 µg/L       3.56849      1.3232 ppb        3.56849 269.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               48.7      4.5686 µg/L       4.00908      4.5686 ppb        4.00908  87.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               29.7      0.3478 µg/L       0.00779      0.3478 ppb        0.00779   2.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               6.5      0.1768 µg/L       0.25548      0.1768 ppb        0.25548 144.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 10:33:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107036.0	107036.0	95.2	%			10:33:56
1	Al 396.153Radial†	10264.5	10556.8	5316.2	µg/L	5316.2	ppb	10:33:56
1	Ca 317.933Radial†	12330.4	12462.1	4946.9	µg/L	4946.9	ppb	10:34:17
1	Fe 238.204 Radial†	980.3	1019.0	5369.3	µg/L	5369.3	ppb	10:34:17
1	K 766.490 Radial†	9630.1	9425.1	5110.2	µg/L	5110.2	ppb	10:33:56
1	Mg 279.077 IEC†	906.8	933.1	5180.3	µg/L	5180.3	ppb	10:34:17
1	Na 589.592 Radial†	34277.5	36724.8	10190	µg/L	10190	ppb	10:33:56
1	Sr 421.552†	85107.1	89499.7	504.15	µg/L	504.15	ppb	10:33:56
1	Sc 361.383	1926894.3	1926894.3	93.687	%			10:35:20
1	Y 371.029	1166554.9	1166554.9	93.149	%			10:35:20
1	Ag 328.068†	53665.1	57309.8	515.75	µg/L	515.75	ppb	10:35:25
1	As 188.979†	248.9	263.2	500.59	µg/L	500.59	ppb	10:35:46
1	B 249.677†	10670.6	11234.0	496.92	µg/L	496.92	ppb	10:35:25
1	Ba 233.527†	18781.1	20127.4	506.61	µg/L	506.61	ppb	10:35:25
1	Be 313.107†	749703.8	796613.4	503.73	µg/L	503.73	ppb	10:35:20
1	Cd 226.502†	17577.2	18862.5	498.96	µg/L	498.96	ppb	10:35:25
1	Co 228.616†	9724.6	10451.6	502.70	µg/L	502.70	ppb	10:35:25
1	Cr 267.716†	22560.3	24203.3	505.01	µg/L	505.01	ppb	10:35:25
1	Cu 324.752†	71590.1	73030.1	514.96	µg/L	514.96	ppb	10:35:25
1	Mn 257.610†	151911.4	162371.1	515.97	µg/L	515.97	ppb	10:35:20
1	Mo 202.031†	4172.8	4462.0	497.99	µg/L	497.99	ppb	10:35:46
1	Ni 231.604†	8979.2	9284.9	505.82	µg/L	505.82	ppb	10:35:25
1	P 214.914†	1305.3	1187.2	2520.8	µg/L	2520.8	ppb	10:35:46
1	Pb 220.353†	1922.3	1997.7	507.12	µg/L	507.12	ppb	10:35:46
1	S 181.975 Axial†	208.7	198.7	1019.6	µg/L	1019.6	ppb	10:35:46
1	Sb 206.836†	495.5	508.3	502.97	µg/L	502.97	ppb	10:35:46
1	Se 196.026†	342.0	350.9	513.43	µg/L	513.43	ppb	10:35:46
1	SiO2†	28973.1	28943.9	5527.2	µg/L	5527.2	ppb	10:35:25
1	Si 251.611†	31972.1	33777.0	2539.0	µg/L	2539.0	ppb	10:35:25
1	Sn 189.927†	971.2	1014.2	497.22	µg/L	497.22	ppb	10:35:46
1	Ti 334.940†	216621.1	230499.9	510.65	µg/L	510.65	ppb	10:35:20
1	Tl 190.801†	289.6	330.5	501.21	µg/L	501.21	ppb	10:35:46
1	U 409.014†	5866.7	5582.8	523.41	µg/L	523.41	ppb	10:35:25
1	V 292.402†	42061.0	44987.3	511.92	µg/L	511.92	ppb	10:35:25
1	Zn 213.857†	18286.6	18968.8	504.15	µg/L	504.15	ppb	10:35:25
2	Sc RADIAL	107989.3	107989.3	96.0	%			10:34:22
2	Al 396.153Radial†	10301.3	10499.9	5287.4	µg/L	5287.4	ppb	10:34:22
2	Ca 317.933Radial†	12461.9	12484.7	4955.9	µg/L	4955.9	ppb	10:34:43
2	Fe 238.204 Radial†	984.2	1013.9	5342.8	µg/L	5342.8	ppb	10:34:43
2	K 766.490 Radial†	9784.9	9497.0	5149.2	µg/L	5149.2	ppb	10:34:22
2	Mg 279.077 IEC†	919.6	938.0	5207.1	µg/L	5207.1	ppb	10:34:43
2	Na 589.592 Radial†	34565.2	36706.5	10185	µg/L	10185	ppb	10:34:22
2	Sr 421.552†	86625.6	90291.8	508.61	µg/L	508.61	ppb	10:34:22
2	Sc 361.383	1926617.9	1926617.9	93.673	%			10:35:52
2	Y 371.029	1165343.1	1165343.1	93.052	%			10:35:52
2	Ag 328.068†	53477.5	57117.7	514.02	µg/L	514.02	ppb	10:35:57
2	As 188.979†	251.1	265.6	505.13	µg/L	505.13	ppb	10:36:18
2	B 249.677†	10595.2	11155.1	493.43	µg/L	493.43	ppb	10:35:57
2	Ba 233.527†	18765.3	20113.4	506.25	µg/L	506.25	ppb	10:35:57
2	Be 313.107†	745689.5	792442.8	501.10	µg/L	501.10	ppb	10:35:52
2	Cd 226.502†	17493.0	18775.3	496.65	µg/L	496.65	ppb	10:35:57
2	Co 228.616†	9711.0	10438.6	502.08	µg/L	502.08	ppb	10:35:57
2	Cr 267.716†	22469.7	24110.1	503.06	µg/L	503.06	ppb	10:35:57
2	Cu 324.752†	71394.6	72832.3	513.56	µg/L	513.56	ppb	10:35:57
2	Mn 257.610†	150952.1	161370.3	512.79	µg/L	512.79	ppb	10:35:52
2	Mo 202.031†	4177.4	4467.4	498.59	µg/L	498.59	ppb	10:36:18
2	Ni 231.604†	8898.3	9199.9	501.20	µg/L	501.20	ppb	10:35:57
2	P 214.914†	1306.5	1188.8	2524.3	µg/L	2524.3	ppb	10:36:18
2	Pb 220.353†	1908.6	1983.4	503.49	µg/L	503.49	ppb	10:36:18

2	S 181.975 Axial†	208.7	198.7	1019.4 µg/L	1019.4 ppb	10:36:18
2	Sb 206.836†	491.5	504.2	498.83 µg/L	498.83 ppb	10:36:18
2	Se 196.026†	326.1	334.0	488.79 µg/L	488.79 ppb	10:36:18
2	SiO2†	28888.7	28858.2	5510.9 µg/L	5510.9 ppb	10:35:57
2	Si 251.611†	31796.6	33594.6	2525.2 µg/L	2525.2 ppb	10:35:57
2	Sn 189.927†	970.5	1013.6	496.91 µg/L	496.91 ppb	10:36:18
2	Ti 334.940†	215418.0	229248.7	507.88 µg/L	507.88 ppb	10:35:52
2	Tl 190.801†	290.8	331.9	503.26 µg/L	503.26 ppb	10:36:18
2	U 409.014†	5820.2	5534.1	518.83 µg/L	518.83 ppb	10:35:57
2	V 292.402†	41893.7	44815.2	509.97 µg/L	509.97 ppb	10:35:57
2	Zn 213.857†	18243.8	18925.8	503.03 µg/L	503.03 ppb	10:35:57
3	Sc RADIAL	108045.9	108045.9	96.1 %		10:34:48
3	Al 396.153Radial†	10255.5	10446.6	5260.5 µg/L	5260.5 ppb	10:34:48
3	Ca 317.933Radial†	12453.2	12468.8	4949.6 µg/L	4949.6 ppb	10:35:09
3	Fe 238.204 Radial†	986.6	1015.9	5353.4 µg/L	5353.4 ppb	10:35:09
3	K 766.490 Radial†	9770.1	9476.2	5138.0 µg/L	5138.0 ppb	10:34:48
3	Mg 279.077 IEC†	911.9	929.5	5160.0 µg/L	5160.0 ppb	10:35:09
3	Na 589.592 Radial†	34625.0	36750.0	10197 µg/L	10197 ppb	10:34:48
3	Sr 421.552†	86280.4	89885.0	506.32 µg/L	506.32 ppb	10:34:48
3	Sc 361.383	1920586.2	1920586.2	93.380 %		10:36:24
3	Y 371.029	1162251.6	1162251.6	92.805 %		10:36:24
3	Ag 328.068†	53783.5	57624.7	518.58 µg/L	518.58 ppb	10:36:30
3	As 188.979†	242.4	257.1	489.04 µg/L	489.04 ppb	10:36:50
3	B 249.677†	10645.6	11244.6	497.39 µg/L	497.39 ppb	10:36:30
3	Ba 233.527†	18848.7	20265.6	510.08 µg/L	510.08 ppb	10:36:30
3	Be 313.107†	744062.2	793200.1	501.58 µg/L	501.58 ppb	10:36:24
3	Cd 226.502†	17609.6	18958.9	501.51 µg/L	501.51 ppb	10:36:30
3	Co 228.616†	9783.8	10549.2	507.40 µg/L	507.40 ppb	10:36:30
3	Cr 267.716†	22591.8	24316.2	507.36 µg/L	507.36 ppb	10:36:30
3	Cu 324.752†	71859.6	73569.6	518.75 µg/L	518.75 ppb	10:36:30
3	Mn 257.610†	150460.5	161349.9	512.72 µg/L	512.72 ppb	10:36:24
3	Mo 202.031†	4167.5	4470.9	498.98 µg/L	498.98 ppb	10:36:50
3	Ni 231.604†	8989.0	9326.9	508.11 µg/L	508.11 ppb	10:36:30
3	P 214.914†	1293.5	1179.2	2502.9 µg/L	2502.9 ppb	10:36:50
3	Pb 220.353†	1923.2	2005.4	509.07 µg/L	509.07 ppb	10:36:50
3	S 181.975 Axial†	210.5	201.4	1033.4 µg/L	1033.4 ppb	10:36:50
3	Sb 206.836†	493.9	508.4	502.98 µg/L	502.98 ppb	10:36:50
3	Se 196.026†	331.3	340.7	498.56 µg/L	498.56 ppb	10:36:50
3	SiO2†	29125.0	29208.1	5577.7 µg/L	5577.7 ppb	10:36:30
3	Si 251.611†	32019.2	33939.5	2551.4 µg/L	2551.4 ppb	10:36:30
3	Sn 189.927†	975.6	1022.3	501.15 µg/L	501.15 ppb	10:36:50
3	Ti 334.940†	214834.2	229345.7	508.09 µg/L	508.09 ppb	10:36:24
3	Tl 190.801†	297.1	339.6	514.86 µg/L	514.86 ppb	10:36:50
3	U 409.014†	5912.5	5652.4	529.95 µg/L	529.95 ppb	10:36:30
3	V 292.402†	42194.4	45277.6	515.21 µg/L	515.21 ppb	10:36:30
3	Zn 213.857†	18373.2	19125.6	508.34 µg/L	508.34 ppb	10:36:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1924699.5	93.580	%	0.1733				0.19%
Sc RADIAL	107690.4	95.7	%	0.50				0.53%
Y 371.029	1164716.5	93.002	%	0.1772				0.19%
Ag 328.068†	57350.7	516.11	µg/L	2.304	516.11	ppb	2.304	0.45%
QC value within limits for Ag 328.068 Recovery = 103.22%								
Al 396.153Radial†	10501.1	5288.1	µg/L	27.87	5288.1	ppb	27.87	0.53%
QC value within limits for Al 396.153Radial Recovery = 105.76%								
As 188.979†	262.0	498.26	µg/L	8.298	498.26	ppb	8.298	1.67%
QC value within limits for As 188.979 Recovery = 99.65%								
B 249.677†	11211.2	495.91	µg/L	2.166	495.91	ppb	2.166	0.44%
QC value within limits for B 249.677 Recovery = 99.18%								
Ba 233.527†	20168.8	507.65	µg/L	2.118	507.65	ppb	2.118	0.42%
QC value within limits for Ba 233.527 Recovery = 101.53%								
Be 313.107†	794085.5	502.14	µg/L	1.405	502.14	ppb	1.405	0.28%
QC value within limits for Be 313.107 Recovery = 100.43%								
Ca 317.933Radial†	12471.9	4950.8	µg/L	4.62	4950.8	ppb	4.62	0.09%
QC value within limits for Ca 317.933Radial Recovery = 99.02%								
Cd 226.502†	18865.6	499.04	µg/L	2.433	499.04	ppb	2.433	0.49%
QC value within limits for Cd 226.502 Recovery = 99.81%								
Co 228.616†	10479.8	504.06	µg/L	2.908	504.06	ppb	2.908	0.58%

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   QC value within limits for Co 228.616  Recovery = 100.81%
Cr 267.716†            24209.9      505.14 µg/L        2.154      505.14 ppb        2.154   0.43%
   QC value within limits for Cr 267.716  Recovery = 101.03%
Cu 324.752†            73144.0      515.75 µg/L        2.685      515.75 ppb        2.685   0.52%
   QC value within limits for Cu 324.752  Recovery = 103.15%
Fe 238.204 Radial†      1016.3      5355.2 µg/L       13.34      5355.2 ppb       13.34   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.10%
K 766.490 Radial†       9466.1      5132.5 µg/L       20.07      5132.5 ppb       20.07   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 102.65%
Mg 279.077 IEC†          933.5      5182.4 µg/L       23.64      5182.4 ppb       23.64   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.65%
Mn 257.610†           161697.1      513.82 µg/L        1.854      513.82 ppb        1.854   0.36%
   QC value within limits for Mn 257.610  Recovery = 102.76%
Mo 202.031†             4466.8      498.52 µg/L        0.502      498.52 ppb        0.502   0.10%
   QC value within limits for Mo 202.031  Recovery = 99.70%
Na 589.592 Radial†     36727.1       10190 µg/L          6.1       10190 ppb          6.1   0.06%
   QC value within limits for Na 589.592 Radial  Recovery = 101.90%
Ni 231.604†             9270.6      505.04 µg/L        3.524      505.04 ppb        3.524   0.70%
   QC value within limits for Ni 231.604  Recovery = 101.01%
P 214.914†              1185.1      2516.0 µg/L       11.46      2516.0 ppb       11.46   0.46%
   QC value within limits for P 214.914  Recovery = 100.64%
Pb 220.353†             1995.5      506.56 µg/L        2.830      506.56 ppb        2.830   0.56%
   QC value within limits for Pb 220.353  Recovery = 101.31%
S 181.975 Axial†         199.6      1024.1 µg/L        8.01      1024.1 ppb        8.01   0.78%
   QC value within limits for S 181.975 Axial  Recovery = 102.41%
Sb 206.836†              507.0      501.60 µg/L        2.392      501.60 ppb        2.392   0.48%
   QC value within limits for Sb 206.836  Recovery = 100.32%
Se 196.026†              341.9      500.26 µg/L       12.406      500.26 ppb       12.406   2.48%
   QC value within limits for Se 196.026  Recovery = 100.05%
SiO2†                  29003.4      5538.6 µg/L       34.83      5538.6 ppb       34.83   0.63%
   QC value within limits for SiO2  Recovery = 103.57%
Si 251.611†            33770.3      2538.5 µg/L       13.13      2538.5 ppb       13.13   0.52%
   QC value within limits for Si 251.611  Recovery = 101.54%
Sn 189.927†             1016.7      498.43 µg/L        2.360      498.43 ppb        2.360   0.47%
   QC value within limits for Sn 189.927  Recovery = 99.69%
Sr 421.552†            89892.2      506.36 µg/L        2.231      506.36 ppb        2.231   0.44%
   QC value within limits for Sr 421.552  Recovery = 101.27%
Ti 334.940†           229698.1      508.87 µg/L        1.543      508.87 ppb        1.543   0.30%
   QC value within limits for Ti 334.940  Recovery = 101.77%
Tl 190.801†              334.0      506.44 µg/L        7.359      506.44 ppb        7.359   1.45%
   QC value within limits for Tl 190.801  Recovery = 101.29%
U 409.014†              5589.8      524.06 µg/L        5.585      524.06 ppb        5.585   1.07%
   QC value within limits for U 409.014  Recovery = 104.81%
V 292.402†             45026.7      512.36 µg/L        2.646      512.36 ppb        2.646   0.52%
   QC value within limits for V 292.402  Recovery = 102.47%
Zn 213.857†            19006.7      505.17 µg/L        2.798      505.17 ppb        2.798   0.55%
   QC value within limits for Zn 213.857  Recovery = 101.03%
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 10:37:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105456.7	105456.7	93.8	%			10:37:32
1	Al 396.153Radial†	256.6	43.9	22.168	µg/L	22.168	ppb	10:37:32
1	Ca 317.933Radial†	407.0	-61.3	-24.328	µg/L	-24.328	ppb	10:37:53
1	Fe 238.204 Radial†	16.5	6.4	33.738	µg/L	33.738	ppb	10:37:53
1	K 766.490 Radial†	700.8	52.7	28.558	µg/L	28.558	ppb	10:37:32
1	Mg 279.077 IEC†	15.5	-3.3	-18.370	µg/L	-18.370	ppb	10:37:53
1	Na 589.592 Radial†	-653.1	7.4	2.0469	µg/L	2.0469	ppb	10:37:32
1	Sr 421.552†	14.1	78.9	0.4442	µg/L	0.4442	ppb	10:37:32
1	Sc 361.383	1948615.0	1948615.0	94.743	%			10:38:55
1	Y 371.029	1185171.9	1185171.9	94.635	%			10:38:55
1	Ag 328.068†	-118.3	-96.5	-0.8578	µg/L	-0.8578	ppb	10:39:00
1	As 188.979†	0.9	-1.6	-2.9877	µg/L	-2.9877	ppb	10:39:21
1	B 249.677†	148.9	1.5	0.0541	µg/L	0.0541	ppb	10:39:21
1	Ba 233.527†	-73.8	2.7	0.0693	µg/L	0.0693	ppb	10:39:21
1	Be 313.107†	3783.3	381.7	0.2413	µg/L	0.2413	ppb	10:39:00
1	Cd 226.502†	-87.0	9.1	0.2421	µg/L	0.2421	ppb	10:39:21
1	Co 228.616†	-70.1	-2.2	-0.1075	µg/L	-0.1075	ppb	10:39:21
1	Cr 267.716†	-101.7	15.4	0.3207	µg/L	0.3207	ppb	10:39:21
1	Cu 324.752†	3169.7	-38.7	-0.2653	µg/L	-0.2653	ppb	10:39:00
1	Mn 257.610†	-50.1	169.8	0.5430	µg/L	0.5430	ppb	10:39:21
1	Mo 202.031†	-5.9	1.6	0.1846	µg/L	0.1846	ppb	10:39:21
1	Ni 231.604†	276.9	-7.2	-0.3909	µg/L	-0.3909	ppb	10:39:21
1	P 214.914†	209.1	14.7	31.861	µg/L	31.861	ppb	10:39:21
1	Pb 220.353†	63.7	13.2	3.3325	µg/L	3.3325	ppb	10:39:21
1	S 181.975 Axial†	25.9	3.3	16.794	µg/L	16.794	ppb	10:39:21
1	Sb 206.836†	16.6	-3.0	-2.9912	µg/L	-2.9912	ppb	10:39:21
1	Se 196.026†	13.5	0.1	0.1931	µg/L	0.1931	ppb	10:39:21
1	SiO2†	1988.4	117.1	22.354	µg/L	22.354	ppb	10:39:00
1	Si 251.611†	386.6	58.4	4.3842	µg/L	4.3842	ppb	10:39:21
1	Sn 189.927†	24.1	3.0	1.4630	µg/L	1.4630	ppb	10:39:21
1	Ti 334.940†	892.7	223.3	0.4964	µg/L	0.4964	ppb	10:39:00
1	Tl 190.801†	-18.1	2.3	3.5411	µg/L	3.5411	ppb	10:39:21
1	U 409.014†	706.9	66.9	6.2739	µg/L	6.2739	ppb	10:39:00
1	V 292.402†	-69.6	18.6	0.2233	µg/L	0.2233	ppb	10:39:00
1	Zn 213.857†	528.6	7.8	0.2077	µg/L	0.2077	ppb	10:39:21
2	Sc RADIAL	105635.2	105635.2	93.9	%			10:37:58
2	Al 396.153Radial†	251.3	37.8	19.059	µg/L	19.059	ppb	10:37:58
2	Ca 317.933Radial†	412.6	-56.1	-22.275	µg/L	-22.275	ppb	10:38:18
2	Fe 238.204 Radial†	12.9	2.5	13.360	µg/L	13.360	ppb	10:38:18
2	K 766.490 Radial†	689.5	39.3	21.323	µg/L	21.323	ppb	10:37:58
2	Mg 279.077 IEC†	11.2	-7.9	-43.802	µg/L	-43.802	ppb	10:38:18
2	Na 589.592 Radial†	-665.9	-5.1	-1.4279	µg/L	-1.4279	ppb	10:37:58
2	Sr 421.552†	-5.7	57.7	0.3249	µg/L	0.3249	ppb	10:37:58
2	Sc 361.383	1934628.3	1934628.3	94.063	%			10:39:27
2	Y 371.029	1177528.6	1177528.6	94.025	%			10:39:27
2	Ag 328.068†	-145.4	-126.3	-1.1243	µg/L	-1.1243	ppb	10:39:32
2	As 188.979†	-2.8	-5.5	-10.441	µg/L	-10.441	ppb	10:39:53
2	B 249.677†	135.0	-12.2	-0.5452	µg/L	-0.5452	ppb	10:39:53
2	Ba 233.527†	-71.3	4.9	0.1228	µg/L	0.1228	ppb	10:39:53
2	Be 313.107†	3656.2	275.5	0.1741	µg/L	0.1741	ppb	10:39:32
2	Cd 226.502†	-90.1	5.1	0.1349	µg/L	0.1349	ppb	10:39:53
2	Co 228.616†	-69.4	-2.0	-0.0986	µg/L	-0.0986	ppb	10:39:53
2	Cr 267.716†	-114.4	1.1	0.0240	µg/L	0.0240	ppb	10:39:53
2	Cu 324.752†	3130.3	-56.5	-0.3945	µg/L	-0.3945	ppb	10:39:32
2	Mn 257.610†	-49.1	170.5	0.5427	µg/L	0.5427	ppb	10:39:53
2	Mo 202.031†	-3.1	4.7	0.5203	µg/L	0.5203	ppb	10:39:53
2	Ni 231.604†	286.6	5.3	0.2880	µg/L	0.2880	ppb	10:39:53
2	P 214.914†	213.4	20.9	45.501	µg/L	45.501	ppb	10:39:53
2	Pb 220.353†	52.2	1.3	0.3385	µg/L	0.3385	ppb	10:39:53

2	S 181.975 Axial†	23.8	1.2	6.2223 µg/L	6.2223 ppb	10:39:53
2	Sb 206.836†	23.7	4.7	4.6376 µg/L	4.6376 ppb	10:39:53
2	Se 196.026†	12.8	-0.5	-0.7488 µg/L	-0.7488 ppb	10:39:53
2	SiO2†	2020.6	166.5	31.787 µg/L	31.787 ppb	10:39:32
2	Si 251.611†	391.2	66.3	4.9730 µg/L	4.9730 ppb	10:39:53
2	Sn 189.927†	24.3	3.4	1.6482 µg/L	1.6482 ppb	10:39:53
2	Ti 334.940†	947.5	288.5	0.6407 µg/L	0.6407 ppb	10:39:32
2	Tl 190.801†	-21.9	-1.9	-2.8520 µg/L	-2.8520 ppb	10:39:53
2	U 409.014†	667.3	30.3	2.8378 µg/L	2.8378 ppb	10:39:32
2	V 292.402†	-52.9	35.7	0.4116 µg/L	0.4116 ppb	10:39:32
2	Zn 213.857†	536.8	20.5	0.5494 µg/L	0.5494 ppb	10:39:53
3	Sc RADIAL	105111.7	105111.7	93.4 %		10:38:24
3	Al 396.153Radial†	284.2	74.3	37.571 µg/L	37.571 ppb	10:38:24
3	Ca 317.933Radial†	388.5	-79.7	-31.652 µg/L	-31.652 ppb	10:38:44
3	Fe 238.204 Radial†	16.6	6.6	34.398 µg/L	34.398 ppb	10:38:44
3	K 766.490 Radial†	639.5	-10.5	-5.6822 µg/L	-5.6822 ppb	10:38:24
3	Mg 279.077 IEC†	18.9	0.4	2.0033 µg/L	2.0033 ppb	10:38:44
3	Na 589.592 Radial†	-680.0	-23.7	-6.5888 µg/L	-6.5888 ppb	10:38:24
3	Sr 421.552†	-12.7	50.2	0.2826 µg/L	0.2826 ppb	10:38:24
3	Sc 361.383	1948487.9	1948487.9	94.737 %		10:39:59
3	Y 371.029	1186163.3	1186163.3	94.714 %		10:39:59
3	Ag 328.068†	-109.5	-87.3	-0.7753 µg/L	-0.7753 ppb	10:40:05
3	As 188.979†	3.3	1.0	1.8219 µg/L	1.8219 ppb	10:40:25
3	B 249.677†	146.1	-1.5	-0.0760 µg/L	-0.0760 ppb	10:40:25
3	Ba 233.527†	-71.1	5.6	0.1407 µg/L	0.1407 ppb	10:40:25
3	Be 313.107†	3710.2	304.8	0.1927 µg/L	0.1927 ppb	10:40:05
3	Cd 226.502†	-79.2	17.3	0.4603 µg/L	0.4603 ppb	10:40:25
3	Co 228.616†	-78.0	-10.6	-0.5113 µg/L	-0.5113 ppb	10:40:25
3	Cr 267.716†	-111.8	4.7	0.0994 µg/L	0.0994 ppb	10:40:25
3	Cu 324.752†	3136.5	-73.6	-0.5101 µg/L	-0.5101 ppb	10:40:05
3	Mn 257.610†	-53.3	166.4	0.5325 µg/L	0.5325 ppb	10:40:25
3	Mo 202.031†	-6.8	0.8	0.0866 µg/L	0.0866 ppb	10:40:25
3	Ni 231.604†	268.6	-15.8	-0.8633 µg/L	-0.8633 ppb	10:40:25
3	P 214.914†	207.9	13.4	29.204 µg/L	29.204 ppb	10:40:25
3	Pb 220.353†	69.9	19.7	4.9898 µg/L	4.9898 ppb	10:40:25
3	S 181.975 Axial†	25.3	2.6	13.566 µg/L	13.566 ppb	10:40:25
3	Sb 206.836†	17.7	-1.8	-1.8152 µg/L	-1.8152 ppb	10:40:25
3	Se 196.026†	8.6	-5.0	-7.2176 µg/L	-7.2176 ppb	10:40:25
3	SiO2†	2012.2	142.3	27.180 µg/L	27.180 ppb	10:40:05
3	Si 251.611†	384.1	55.8	4.2093 µg/L	4.2093 ppb	10:40:25
3	Sn 189.927†	23.7	2.6	1.2514 µg/L	1.2514 ppb	10:40:25
3	Ti 334.940†	887.8	218.3	0.4857 µg/L	0.4857 ppb	10:40:05
3	Tl 190.801†	-20.8	-0.5	-0.7808 µg/L	-0.7808 ppb	10:40:25
3	U 409.014†	723.6	84.6	7.9346 µg/L	7.9346 ppb	10:40:05
3	V 292.402†	-67.0	21.2	0.2558 µg/L	0.2558 ppb	10:40:05
3	Zn 213.857†	516.8	-4.7	-0.1242 µg/L	-0.1242 ppb	10:40:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943910.4	94.514	%	0.3908				0.41%
Sc RADIAL	105401.2	93.7	%	0.24				0.25%
Y 371.029	1182954.6	94.458	%	0.3773				0.40%
Ag 328.068†	-103.4	-0.9192	µg/L	0.18240	-0.9192	ppb	0.18240	19.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	52.0	26.266	µg/L	9.9129	26.266	ppb	9.9129	37.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-3.8688	µg/L	6.17858	-3.8688	ppb	6.17858	159.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-4.1	-0.1890	µg/L	0.31523	-0.1890	ppb	0.31523	166.76%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.4	0.1109	µg/L	0.03713	0.1109	ppb	0.03713	33.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	320.7	0.2027	µg/L	0.03470	0.2027	ppb	0.03470	17.12%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-65.7	-26.085	µg/L	4.9291	-26.085	ppb	4.9291	18.90%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.5	0.2791	µg/L	0.16580	0.2791	ppb	0.16580	59.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.0	-0.2391	µg/L	0.23572	-0.2391	ppb	0.23572	98.57%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.1      0.1480 µg/L       0.15422      0.1480 ppb        0.15422 104.17%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -56.3     -0.3899 µg/L       0.12244     -0.3899 ppb        0.12244  31.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          5.2      27.165 µg/L       11.9605      27.165 ppb        11.9605  44.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          27.2      14.733 µg/L       18.0462      14.733 ppb        18.0462 122.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.6     -20.056 µg/L       22.9493     -20.056 ppb        22.9493 114.42%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               168.9      0.5394 µg/L       0.00597      0.5394 ppb        0.00597   1.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.4      0.2638 µg/L       0.22746      0.2638 ppb        0.22746  86.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         -7.2     -1.9899 µg/L       4.34516     -1.9899 ppb        4.34516 218.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.9     -0.3221 µg/L       0.57876     -0.3221 ppb        0.57876 179.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 16.3      35.522 µg/L        8.7436      35.522 ppb         8.7436  24.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.4      2.8869 µg/L       2.35742      2.8869 ppb        2.35742  81.66%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.4      12.194 µg/L        5.4177      12.194 ppb         5.4177  44.43%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.1     -0.0563 µg/L       4.10731     -0.0563 ppb        4.10731 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -2.5911 µg/L       4.03427     -2.5911 ppb        4.03427 155.70%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     141.9      27.107 µg/L        4.7168      27.107 ppb         4.7168  17.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                60.2      4.5222 µg/L       0.40010      4.5222 ppb        0.40010   8.85%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      1.4542 µg/L       0.19852      1.4542 ppb        0.19852  13.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                62.2      0.3506 µg/L       0.08384      0.3506 ppb        0.08384  23.91%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               243.4      0.5409 µg/L       0.08656      0.5409 ppb        0.08656  16.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.0     -0.0306 µg/L       3.26189     -0.0306 ppb        3.26189 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 60.6      5.6821 µg/L       2.59942      5.6821 ppb        2.59942  45.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 25.2      0.2969 µg/L       0.10061      0.2969 ppb        0.10061  33.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 7.9      0.2110 µg/L       0.33681      0.2110 ppb        0.33681 159.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 11:08:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107618.4	107618.4	95.7	%			11:08:50
1	Al 396.153Radial†	10050.2	10274.4	5173.4	µg/L	5173.4	ppb	11:08:50
1	Ca 317.933Radial†	12272.9	12331.9	4895.2	µg/L	4895.2	ppb	11:09:10
1	Fe 238.204 Radial†	967.7	1000.2	5270.8	µg/L	5270.8	ppb	11:09:10
1	K 766.490 Radial†	9721.4	9465.8	5132.3	µg/L	5132.3	ppb	11:08:50
1	Mg 279.077 IEC†	908.8	930.0	5163.4	µg/L	5163.4	ppb	11:09:10
1	Na 589.592 Radial†	34023.2	36264.2	10062	µg/L	10062	ppb	11:08:50
1	Sr 421.552†	85596.5	89527.2	504.30	µg/L	504.30	ppb	11:08:50
1	Sc 361.383	1917199.6	1917199.6	93.215	%			11:10:13
1	Y 371.029	1161434.1	1161434.1	92.740	%			11:10:13
1	Ag 328.068†	53323.7	57233.2	515.05	µg/L	515.05	ppb	11:10:18
1	As 188.979†	253.1	269.1	511.82	µg/L	511.82	ppb	11:10:39
1	B 249.677†	10610.8	11227.5	496.66	µg/L	496.66	ppb	11:10:18
1	Ba 233.527†	18734.8	20179.1	507.90	µg/L	507.90	ppb	11:10:18
1	Be 313.107†	748688.9	799571.1	505.61	µg/L	505.61	ppb	11:10:13
1	Cd 226.502†	17597.9	18979.6	502.06	µg/L	502.06	ppb	11:10:18
1	Co 228.616†	9711.1	10489.7	504.54	µg/L	504.54	ppb	11:10:18
1	Cr 267.716†	22450.9	24207.8	505.10	µg/L	505.10	ppb	11:10:18
1	Cu 324.752†	71026.3	72811.7	513.40	µg/L	513.40	ppb	11:10:18
1	Mn 257.610†	151246.2	162477.4	516.29	µg/L	516.29	ppb	11:10:13
1	Mo 202.031†	4179.6	4491.7	501.30	µg/L	501.30	ppb	11:10:39
1	Ni 231.604†	8959.8	9312.5	507.33	µg/L	507.33	ppb	11:10:18
1	P 214.914†	1316.5	1206.3	2562.6	µg/L	2562.6	ppb	11:10:39
1	Pb 220.353†	1932.5	2019.0	512.53	µg/L	512.53	ppb	11:10:39
1	S 181.975 Axial†	208.6	199.7	1024.7	µg/L	1024.7	ppb	11:10:39
1	Sb 206.836†	495.4	510.9	505.51	µg/L	505.51	ppb	11:10:39
1	Se 196.026†	335.7	346.0	506.24	µg/L	506.24	ppb	11:10:39
1	SiO2†	28820.0	28936.0	5525.7	µg/L	5525.7	ppb	11:10:18
1	Si 251.611†	31751.4	33712.8	2533.9	µg/L	2533.9	ppb	11:10:18
1	Sn 189.927†	976.6	1025.2	502.57	µg/L	502.57	ppb	11:10:39
1	Ti 334.940†	215025.2	229957.0	509.45	µg/L	509.45	ppb	11:10:13
1	Tl 190.801†	287.5	329.9	500.29	µg/L	500.29	ppb	11:10:39
1	U 409.014†	5811.9	5555.7	520.88	µg/L	520.88	ppb	11:10:18
1	V 292.402†	41852.6	44990.8	511.97	µg/L	511.97	ppb	11:10:18
1	Zn 213.857†	18256.0	19034.6	505.92	µg/L	505.92	ppb	11:10:18
2	Sc RADIAL	106132.8	106132.8	94.4	%			11:09:16
2	Al 396.153Radial†	9941.7	10306.4	5189.7	µg/L	5189.7	ppb	11:09:16
2	Ca 317.933Radial†	12324.8	12566.5	4988.3	µg/L	4988.3	ppb	11:09:36
2	Fe 238.204 Radial†	965.0	1011.5	5330.1	µg/L	5330.1	ppb	11:09:36
2	K 766.490 Radial†	9650.3	9532.6	5168.6	µg/L	5168.6	ppb	11:09:16
2	Mg 279.077 IEC†	908.9	943.4	5237.3	µg/L	5237.3	ppb	11:09:36
2	Na 589.592 Radial†	33874.5	36604.3	10156	µg/L	10156	ppb	11:09:16
2	Sr 421.552†	84647.3	89773.4	505.69	µg/L	505.69	ppb	11:09:16
2	Sc 361.383	1928639.5	1928639.5	93.771	%			11:10:45
2	Y 371.029	1165407.6	1165407.6	93.057	%			11:10:45
2	Ag 328.068†	53685.1	57279.3	515.49	µg/L	515.49	ppb	11:10:51
2	As 188.979†	243.4	257.1	489.04	µg/L	489.04	ppb	11:11:11
2	B 249.677†	10675.6	11229.0	496.71	µg/L	496.71	ppb	11:10:51
2	Ba 233.527†	18917.6	20254.8	509.81	µg/L	509.81	ppb	11:10:51
2	Be 313.107†	748826.0	794953.2	502.69	µg/L	502.69	ppb	11:10:45
2	Cd 226.502†	17713.1	18990.6	502.35	µg/L	502.35	ppb	11:10:51
2	Co 228.616†	9799.9	10522.5	506.12	µg/L	506.12	ppb	11:10:51
2	Cr 267.716†	22695.9	24326.2	507.57	µg/L	507.57	ppb	11:10:51
2	Cu 324.752†	71617.0	72989.6	514.66	µg/L	514.66	ppb	11:10:51
2	Mn 257.610†	151219.6	161486.6	513.15	µg/L	513.15	ppb	11:10:45
2	Mo 202.031†	4182.6	4468.3	498.69	µg/L	498.69	ppb	11:11:11
2	Ni 231.604†	9028.1	9328.4	508.20	µg/L	508.20	ppb	11:10:51
2	P 214.914†	1308.2	1189.1	2524.9	µg/L	2524.9	ppb	11:11:11
2	Pb 220.353†	1921.4	1994.9	506.41	µg/L	506.41	ppb	11:11:11

2	S 181.975 Axial†	204.4	193.9	994.84 µg/L	994.84 ppb	11:11:11
2	Sb 206.836†	499.8	512.5	507.05 µg/L	507.05 ppb	11:11:11
2	Se 196.026†	334.1	342.2	500.69 µg/L	500.69 ppb	11:11:11
2	SiO2†	29269.7	29232.2	5582.3 µg/L	5582.3 ppb	11:10:51
2	Si 251.611†	32302.1	34098.1	2563.8 µg/L	2563.8 ppb	11:10:51
2	Sn 189.927†	968.2	1010.1	495.23 µg/L	495.23 ppb	11:11:11
2	Ti 334.940†	215103.4	228672.2	506.60 µg/L	506.60 ppb	11:10:45
2	Tl 190.801†	292.8	333.6	505.93 µg/L	505.93 ppb	11:11:11
2	U 409.014†	5889.4	5601.3	525.15 µg/L	525.15 ppb	11:10:51
2	V 292.402†	42279.8	45180.0	514.09 µg/L	514.09 ppb	11:10:51
2	Zn 213.857†	18444.2	19119.2	508.17 µg/L	508.17 ppb	11:10:51
3	Sc RADIAL	106493.6	106493.6	94.7 %		11:09:42
3	Al 396.153Radial†	10021.7	10355.2	5214.5 µg/L	5214.5 ppb	11:09:42
3	Ca 317.933Radial†	12299.3	12495.3	4960.1 µg/L	4960.1 ppb	11:10:02
3	Fe 238.204 Radial†	960.5	1003.3	5286.8 µg/L	5286.8 ppb	11:10:02
3	K 766.490 Radial†	9703.3	9554.0	5180.1 µg/L	5180.1 ppb	11:09:42
3	Mg 279.077 IEC†	909.1	940.4	5220.6 µg/L	5220.6 ppb	11:10:02
3	Na 589.592 Radial†	34109.9	36731.4	10192 µg/L	10192 ppb	11:09:42
3	Sr 421.552†	85379.8	90243.2	508.33 µg/L	508.33 ppb	11:09:42
3	Sc 361.383	1919746.7	1919746.7	93.339 %		11:11:17
3	Y 371.029	1160703.1	1160703.1	92.681 %		11:11:17
3	Ag 328.068†	53306.7	57139.1	514.21 µg/L	514.21 ppb	11:11:23
3	As 188.979†	247.8	263.0	500.21 µg/L	500.21 ppb	11:11:43
3	B 249.677†	10573.3	11172.1	494.20 µg/L	494.20 ppb	11:11:23
3	Ba 233.527†	18707.4	20123.1	506.49 µg/L	506.49 ppb	11:11:23
3	Be 313.107†	749450.6	799321.6	505.45 µg/L	505.45 ppb	11:11:17
3	Cd 226.502†	17554.9	18908.5	500.18 µg/L	500.18 ppb	11:11:23
3	Co 228.616†	9704.6	10468.8	503.53 µg/L	503.53 ppb	11:11:23
3	Cr 267.716†	22501.1	24229.6	505.55 µg/L	505.55 ppb	11:11:23
3	Cu 324.752†	71069.9	72757.3	513.02 µg/L	513.02 ppb	11:11:23
3	Mn 257.610†	151524.0	162559.7	516.55 µg/L	516.55 ppb	11:11:17
3	Mo 202.031†	4138.7	4441.9	495.75 µg/L	495.75 ppb	11:11:43
3	Ni 231.604†	8946.3	9285.4	505.85 µg/L	505.85 ppb	11:11:23
3	P 214.914†	1295.7	1182.2	2510.2 µg/L	2510.2 ppb	11:11:43
3	Pb 220.353†	1913.3	1995.7	506.60 µg/L	506.60 ppb	11:11:43
3	S 181.975 Axial†	205.3	196.0	1005.3 µg/L	1005.3 ppb	11:11:43
3	Sb 206.836†	489.5	503.8	498.49 µg/L	498.49 ppb	11:11:43
3	Se 196.026†	331.0	340.6	498.28 µg/L	498.28 ppb	11:11:43
3	SiO2†	28802.4	28876.1	5514.3 µg/L	5514.3 ppb	11:11:23
3	Si 251.611†	31727.0	33641.5	2528.8 µg/L	2528.8 ppb	11:11:23
3	Sn 189.927†	965.9	1012.4	496.33 µg/L	496.33 ppb	11:11:43
3	Ti 334.940†	215258.7	229901.2	509.32 µg/L	509.32 ppb	11:11:17
3	Tl 190.801†	290.1	332.2	503.77 µg/L	503.77 ppb	11:11:43
3	U 409.014†	5754.3	5485.7	514.30 µg/L	514.30 ppb	11:11:23
3	V 292.402†	41816.5	44892.6	510.81 µg/L	510.81 ppb	11:11:23
3	Zn 213.857†	18324.4	19081.9	507.19 µg/L	507.19 ppb	11:11:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1921861.9	93.442	%	0.2920				0.31%
Sc RADIAL	106748.2	94.9	%	0.69				0.73%
Y 371.029	1162514.9	92.826	%	0.2021				0.22%
Ag 328.068†	57217.2	514.92	µg/L	0.650	514.92	ppb	0.650	0.13%
QC value within limits for Ag 328.068 Recovery = 102.98%								
Al 396.153Radial†	10312.0	5192.5	µg/L	20.68	5192.5	ppb	20.68	0.40%
QC value within limits for Al 396.153Radial Recovery = 103.85%								
As 188.979†	263.1	500.36	µg/L	11.387	500.36	ppb	11.387	2.28%
QC value within limits for As 188.979 Recovery = 100.07%								
B 249.677†	11209.6	495.86	µg/L	1.436	495.86	ppb	1.436	0.29%
QC value within limits for B 249.677 Recovery = 99.17%								
Ba 233.527†	20185.7	508.07	µg/L	1.664	508.07	ppb	1.664	0.33%
QC value within limits for Ba 233.527 Recovery = 101.61%								
Be 313.107†	797948.6	504.58	µg/L	1.642	504.58	ppb	1.642	0.33%
QC value within limits for Be 313.107 Recovery = 100.92%								
Ca 317.933Radial†	12464.6	4947.9	µg/L	47.73	4947.9	ppb	47.73	0.96%
QC value within limits for Ca 317.933Radial Recovery = 98.96%								
Cd 226.502†	18959.6	501.53	µg/L	1.181	501.53	ppb	1.181	0.24%
QC value within limits for Cd 226.502 Recovery = 100.31%								
Co 228.616†	10493.7	504.73	µg/L	1.307	504.73	ppb	1.307	0.26%

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   QC value within limits for Co 228.616  Recovery = 100.95%
Cr 267.716†            24254.5      506.07 µg/L        1.315      506.07 ppb          1.315   0.26%
   QC value within limits for Cr 267.716  Recovery = 101.21%
Cu 324.752†            72852.9      513.69 µg/L        0.861      513.69 ppb          0.861   0.17%
   QC value within limits for Cu 324.752  Recovery = 102.74%
Fe 238.204 Radial†      1005.0      5295.9 µg/L        30.66      5295.9 ppb          30.66   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.92%
K 766.490 Radial†       9517.5      5160.3 µg/L        24.96      5160.3 ppb          24.96   0.48%
   QC value within limits for K 766.490 Radial  Recovery = 103.21%
Mg 279.077 IEC†          937.9      5207.1 µg/L        38.75      5207.1 ppb          38.75   0.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.14%
Mn 257.610†           162174.6      515.33 µg/L        1.892      515.33 ppb          1.892   0.37%
   QC value within limits for Mn 257.610  Recovery = 103.07%
Mo 202.031†             4467.3      498.58 µg/L        2.777      498.58 ppb          2.777   0.56%
   QC value within limits for Mo 202.031  Recovery = 99.72%
Na 589.592 Radial†     36533.3       10137 µg/L         67.0       10137 ppb           67.0   0.66%
   QC value within limits for Na 589.592 Radial  Recovery = 101.37%
Ni 231.604†             9308.8      507.13 µg/L        1.185      507.13 ppb          1.185   0.23%
   QC value within limits for Ni 231.604  Recovery = 101.43%
P 214.914†              1192.6      2532.6 µg/L        27.05      2532.6 ppb          27.05   1.07%
   QC value within limits for P 214.914  Recovery = 101.30%
Pb 220.353†             2003.2      508.51 µg/L        3.479      508.51 ppb          3.479   0.68%
   QC value within limits for Pb 220.353  Recovery = 101.70%
S 181.975 Axial†         196.5      1008.3 µg/L        15.16      1008.3 ppb          15.16   1.50%
   QC value within limits for S 181.975 Axial  Recovery = 100.83%
Sb 206.836†              509.1      503.68 µg/L        4.566      503.68 ppb          4.566   0.91%
   QC value within limits for Sb 206.836  Recovery = 100.74%
Se 196.026†              342.9      501.74 µg/L        4.079      501.74 ppb          4.079   0.81%
   QC value within limits for Se 196.026  Recovery = 100.35%
SiO2†                   29014.8      5540.8 µg/L        36.41      5540.8 ppb          36.41   0.66%
   QC value within limits for SiO2  Recovery = 103.61%
Si 251.611†             33817.4      2542.2 µg/L        18.94      2542.2 ppb          18.94   0.74%
   QC value within limits for Si 251.611  Recovery = 101.69%
Sn 189.927†             1015.9      498.05 µg/L        3.956      498.05 ppb          3.956   0.79%
   QC value within limits for Sn 189.927  Recovery = 99.61%
Sr 421.552†             89847.9      506.11 µg/L        2.049      506.11 ppb          2.049   0.40%
   QC value within limits for Sr 421.552  Recovery = 101.22%
Ti 334.940†            229510.1      508.46 µg/L        1.612      508.46 ppb          1.612   0.32%
   QC value within limits for Ti 334.940  Recovery = 101.69%
Tl 190.801†              331.9      503.33 µg/L        2.847      503.33 ppb          2.847   0.57%
   QC value within limits for Tl 190.801  Recovery = 100.67%
U 409.014†              5547.6      520.11 µg/L        5.466      520.11 ppb          5.466   1.05%
   QC value within limits for U 409.014  Recovery = 104.02%
V 292.402†              45021.2      512.29 µg/L        1.665      512.29 ppb          1.665   0.32%
   QC value within limits for V 292.402  Recovery = 102.46%
Zn 213.857†             19078.6      507.09 µg/L        1.129      507.09 ppb          1.129   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.42%
All analyte(s) passed QC.
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Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 11:11:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104638.5	104638.5	93.0	%			11:12:25
1	Al 396.153Radial†	221.8	8.6	4.3202	µg/L	4.3202	ppb	11:12:25
1	Ca 317.933Radial†	397.9	-67.7	-26.869	µg/L	-26.869	ppb	11:12:45
1	Fe 238.204 Radial†	13.3	3.1	16.205	µg/L	16.205	ppb	11:12:45
1	K 766.490 Radial†	660.6	15.2	8.2488	µg/L	8.2488	ppb	11:12:25
1	Mg 279.077 IEC†	20.0	1.6	9.0439	µg/L	9.0439	ppb	11:12:45
1	Na 589.592 Radial†	-687.2	-34.8	-9.6493	µg/L	-9.6493	ppb	11:12:25
1	Sr 421.552†	-22.8	39.3	0.2215	µg/L	0.2215	ppb	11:12:25
1	Sc 361.383	1899256.4	1899256.4	92.343	%			11:13:47
1	Y 371.029	1153725.2	1153725.2	92.124	%			11:13:47
1	Ag 328.068†	-147.4	-131.4	-1.1690	µg/L	-1.1690	ppb	11:13:52
1	As 188.979†	6.2	4.2	8.0634	µg/L	8.0634	ppb	11:14:13
1	B 249.677†	152.3	9.2	0.4036	µg/L	0.4036	ppb	11:14:13
1	Ba 233.527†	-68.9	6.1	0.1537	µg/L	0.1537	ppb	11:14:13
1	Be 313.107†	3511.4	191.1	0.1207	µg/L	0.1207	ppb	11:13:52
1	Cd 226.502†	-93.8	-0.7	-0.0080	µg/L	-0.0080	ppb	11:14:13
1	Co 228.616†	-79.5	-14.4	-0.6912	µg/L	-0.6912	ppb	11:14:13
1	Cr 267.716†	-98.5	16.1	0.3371	µg/L	0.3371	ppb	11:13:52
1	Cu 324.752†	3115.6	-10.3	-0.0691	µg/L	-0.0691	ppb	11:13:52
1	Mn 257.610†	-149.2	61.0	0.1958	µg/L	0.1958	ppb	11:14:13
1	Mo 202.031†	1.4	9.4	1.0491	µg/L	1.0491	ppb	11:14:13
1	Ni 231.604†	264.8	-12.7	-0.6915	µg/L	-0.6915	ppb	11:14:13
1	P 214.914†	215.1	26.9	58.513	µg/L	58.513	ppb	11:14:13
1	Pb 220.353†	59.5	10.3	2.6090	µg/L	2.6090	ppb	11:14:13
1	S 181.975 Axial†	20.6	-1.7	-8.6567	µg/L	-8.6567	ppb	11:14:13
1	Sb 206.836†	19.2	0.3	0.2615	µg/L	0.2615	ppb	11:14:13
1	Se 196.026†	10.0	-3.2	-4.7170	µg/L	-4.7170	ppb	11:14:13
1	SiO2†	1938.5	117.6	22.452	µg/L	22.452	ppb	11:13:52
1	Si 251.611†	370.4	51.5	3.8618	µg/L	3.8618	ppb	11:14:13
1	Sn 189.927†	23.2	2.6	1.2871	µg/L	1.2871	ppb	11:14:13
1	Ti 334.940†	820.4	169.5	0.3773	µg/L	0.3773	ppb	11:13:52
1	Tl 190.801†	-21.2	-1.6	-2.3812	µg/L	-2.3812	ppb	11:14:13
1	U 409.014†	812.2	200.3	18.806	µg/L	18.806	ppb	11:13:52
1	V 292.402†	-50.3	37.5	0.4621	µg/L	0.4621	ppb	11:13:52
1	Zn 213.857†	519.2	12.1	0.3254	µg/L	0.3254	ppb	11:14:13
2	Sc RADIAL	104779.1	104779.1	93.2	%			11:12:51
2	Al 396.153Radial†	241.9	29.9	15.079	µg/L	15.079	ppb	11:12:51
2	Ca 317.933Radial†	393.0	-73.6	-29.207	µg/L	-29.207	ppb	11:13:11
2	Fe 238.204 Radial†	16.8	6.8	35.725	µg/L	35.725	ppb	11:13:11
2	K 766.490 Radial†	693.5	49.6	26.888	µg/L	26.888	ppb	11:12:51
2	Mg 279.077 IEC†	12.3	-6.6	-36.618	µg/L	-36.618	ppb	11:13:11
2	Na 589.592 Radial†	-698.9	-46.4	-12.864	µg/L	-12.864	ppb	11:12:51
2	Sr 421.552†	-35.4	25.7	0.1449	µg/L	0.1449	ppb	11:12:51
2	Sc 361.383	1900239.3	1900239.3	92.391	%			11:14:19
2	Y 371.029	1155609.3	1155609.3	92.275	%			11:14:19
2	Ag 328.068†	-144.2	-127.8	-1.1348	µg/L	-1.1348	ppb	11:14:24
2	As 188.979†	1.0	-1.4	-2.5961	µg/L	-2.5961	ppb	11:14:45
2	B 249.677†	135.8	-8.7	-0.3963	µg/L	-0.3963	ppb	11:14:45
2	Ba 233.527†	-84.5	-10.7	-0.2688	µg/L	-0.2688	ppb	11:14:45
2	Be 313.107†	3550.3	231.2	0.1462	µg/L	0.1462	ppb	11:14:24
2	Cd 226.502†	-92.3	1.0	0.0375	µg/L	0.0375	ppb	11:14:45
2	Co 228.616†	-70.0	-4.0	-0.1930	µg/L	-0.1930	ppb	11:14:45
2	Cr 267.716†	-114.2	-0.9	-0.0171	µg/L	-0.0171	ppb	11:14:24
2	Cu 324.752†	3102.2	-26.6	-0.1796	µg/L	-0.1796	ppb	11:14:24
2	Mn 257.610†	-149.5	60.8	0.1974	µg/L	0.1974	ppb	11:14:45
2	Mo 202.031†	-0.4	7.5	0.8366	µg/L	0.8366	ppb	11:14:45
2	Ni 231.604†	263.6	-14.1	-0.7660	µg/L	-0.7660	ppb	11:14:45
2	P 214.914†	204.5	15.3	33.242	µg/L	33.242	ppb	11:14:45
2	Pb 220.353†	60.8	11.7	2.9562	µg/L	2.9562	ppb	11:14:45

2	S 181.975 Axial†	27.1	5.3	27.188 µg/L	27.188 ppb	11:14:45
2	Sb 206.836†	20.4	1.5	1.5001 µg/L	1.5001 ppb	11:14:45
2	Se 196.026†	11.1	-2.1	-3.0363 µg/L	-3.0363 ppb	11:14:45
2	SiO2†	1948.9	127.7	24.385 µg/L	24.385 ppb	11:14:24
2	Si 251.611†	333.4	11.2	0.8158 µg/L	0.8158 ppb	11:14:45
2	Sn 189.927†	21.3	0.6	0.2862 µg/L	0.2862 ppb	11:14:45
2	Ti 334.940†	742.2	84.4	0.1888 µg/L	0.1888 ppb	11:14:24
2	Tl 190.801†	-18.5	1.4	2.1507 µg/L	2.1507 ppb	11:14:45
2	U 409.014†	824.2	212.9	19.986 µg/L	19.986 ppb	11:14:24
2	V 292.402†	-40.2	48.4	0.5872 µg/L	0.5872 ppb	11:14:24
2	Zn 213.857†	520.2	12.9	0.3473 µg/L	0.3473 ppb	11:14:45
3	Sc RADIAL	105286.7	105286.7	93.6 %		11:13:17
3	Al 396.153Radial†	277.0	66.1	33.395 µg/L	33.395 ppb	11:13:17
3	Ca 317.933Radial†	409.2	-58.3	-23.153 µg/L	-23.153 ppb	11:13:37
3	Fe 238.204 Radial†	9.7	-0.9	-4.5467 µg/L	-4.5467 ppb	11:13:37
3	K 766.490 Radial†	636.5	-14.9	-8.0831 µg/L	-8.0831 ppb	11:13:17
3	Mg 279.077 IEC†	15.4	-3.4	-18.660 µg/L	-18.660 ppb	11:13:37
3	Na 589.592 Radial†	-649.9	9.6	2.6689 µg/L	2.6689 ppb	11:13:17
3	Sr 421.552†	-81.2	-23.0	-0.1297 µg/L	-0.1297 ppb	11:13:17
3	Sc 361.383	1918953.0	1918953.0	93.301 %		11:14:50
3	Y 371.029	1165783.6	1165783.6	93.087 %		11:14:50
3	Ag 328.068†	-80.1	-57.5	-0.5109 µg/L	-0.5109 ppb	11:14:56
3	As 188.979†	-1.6	-4.2	-7.9126 µg/L	-7.9126 ppb	11:15:16
3	B 249.677†	129.6	-16.8	-0.7438 µg/L	-0.7438 ppb	11:15:16
3	Ba 233.527†	-75.3	-0.0	0.0005 µg/L	0.0005 ppb	11:15:16
3	Be 313.107†	3532.4	174.5	0.1104 µg/L	0.1104 ppb	11:14:56
3	Cd 226.502†	-79.4	15.8	0.4261 µg/L	0.4261 ppb	11:15:16
3	Co 228.616†	-72.3	-5.7	-0.2754 µg/L	-0.2754 ppb	11:15:16
3	Cr 267.716†	-87.7	28.8	0.6005 µg/L	0.6005 ppb	11:14:56
3	Cu 324.752†	3086.4	-76.3	-0.5377 µg/L	-0.5377 ppb	11:14:56
3	Mn 257.610†	-151.8	60.0	0.1898 µg/L	0.1898 ppb	11:15:16
3	Mo 202.031†	-7.1	0.3	0.0323 µg/L	0.0323 ppb	11:15:16
3	Ni 231.604†	266.1	-14.2	-0.7748 µg/L	-0.7748 ppb	11:15:16
3	P 214.914†	223.2	33.2	72.308 µg/L	72.308 ppb	11:15:16
3	Pb 220.353†	65.9	16.5	4.1787 µg/L	4.1787 ppb	11:15:16
3	S 181.975 Axial†	27.6	5.5	28.485 µg/L	28.485 ppb	11:15:16
3	Sb 206.836†	19.7	0.6	0.6153 µg/L	0.6153 ppb	11:15:16
3	Se 196.026†	8.3	-5.2	-7.5222 µg/L	-7.5222 ppb	11:15:16
3	SiO2†	1975.6	135.8	25.928 µg/L	25.928 ppb	11:14:56
3	Si 251.611†	360.0	36.2	2.6911 µg/L	2.6911 ppb	11:15:16
3	Sn 189.927†	24.7	4.1	1.9724 µg/L	1.9724 ppb	11:15:16
3	Ti 334.940†	723.0	56.1	0.1256 µg/L	0.1256 ppb	11:14:56
3	Tl 190.801†	-17.4	2.8	4.2236 µg/L	4.2236 ppb	11:15:16
3	U 409.014†	752.4	127.2	11.949 µg/L	11.949 ppb	11:14:56
3	V 292.402†	-47.5	41.1	0.4825 µg/L	0.4825 ppb	11:14:56
3	Zn 213.857†	515.0	1.8	0.0540 µg/L	0.0540 ppb	11:15:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1906149.6	92.678	%	0.5396				0.58%
Sc RADIAL	104901.4	93.3	%	0.30				0.33%
Y 371.029	1158372.7	92.495	%	0.5180				0.56%
Ag 328.068†	-105.6	-0.9383	µg/L	0.37049	-0.9383	ppb	0.37049	39.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	34.9	17.598	µg/L	14.7002	17.598	ppb	14.7002	83.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.8151	µg/L	8.13556	-0.8151	ppb	8.13556	998.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-5.4	-0.2455	µg/L	0.58840	-0.2455	ppb	0.58840	239.67%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.6	-0.0382	µg/L	0.21385	-0.0382	ppb	0.21385	559.59%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	198.9	0.1258	µg/L	0.01843	0.1258	ppb	0.01843	14.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-66.5	-26.410	µg/L	3.0528	-26.410	ppb	3.0528	11.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.4	0.1519	µg/L	0.23857	0.1519	ppb	0.23857	157.10%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.1	-0.3865	µg/L	0.26706	-0.3865	ppb	0.26706	69.09%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              14.7      0.3068 µg/L       0.30988      0.3068 ppb        0.30988 100.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -37.7     -0.2621 µg/L       0.24498     -0.2621 ppb        0.24498  93.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        3.0      15.795 µg/L       20.1391      15.795 ppb        20.1391 127.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        16.6      9.0179 µg/L      17.49824      9.0179 ppb       17.49824 194.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.8     -15.411 µg/L       23.0034     -15.411 ppb        23.0034 149.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              60.6      0.1943 µg/L       0.00402      0.1943 ppb        0.00402   2.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.7      0.6393 µg/L       0.53634      0.6393 ppb        0.53634  83.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -23.8     -6.6150 µg/L       8.19920     -6.6150 ppb        8.19920 123.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -13.7     -0.7441 µg/L       0.04575     -0.7441 ppb        0.04575   6.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               25.2      54.688 µg/L       19.8122      54.688 ppb        19.8122  36.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              12.9      3.2480 µg/L       0.82454      3.2480 ppb        0.82454  25.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.1      15.672 µg/L       21.0792      15.672 ppb        21.0792 134.50%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               0.8      0.7923 µg/L       0.63797      0.7923 ppb        0.63797  80.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -3.5     -5.0918 µg/L       2.26634     -5.0918 ppb        2.26634  44.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   127.0      24.255 µg/L        1.7419      24.255 ppb         1.7419   7.18%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              33.0      2.4562 µg/L       1.53652      2.4562 ppb        1.53652  62.56%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.4      1.1819 µg/L       0.84796      1.1819 ppb        0.84796  71.75%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              14.0      0.0789 µg/L       0.18466      0.0789 ppb        0.18466 234.06%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             103.3      0.2306 µg/L       0.13096      0.2306 ppb        0.13096  56.80%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.9      1.3310 µg/L       3.37780      1.3310 ppb        3.37780 253.77%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              180.1      16.914 µg/L        4.3400      16.914 ppb         4.3400  25.66%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               42.4      0.5106 µg/L       0.06711      0.5106 ppb        0.06711  13.14%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               8.9      0.2422 µg/L       0.16339      0.2422 ppb        0.16339  67.45%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: 1201997323|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 327
Date Collected: 12/18/2009 11:15:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201997323|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104127.4	104127.4	92.6	%			11:16:02
1	Al 396.153Radial†	186.4	-28.5	-14.435	µg/L	-14.435	ppb	11:16:02
1	Ca 317.933Radial†	403.5	-59.6	-23.644	µg/L	-23.644	ppb	11:16:23
1	Fe 238.204 Radial†	16.1	6.2	32.436	µg/L	32.436	ppb	11:16:23
1	K 766.490 Radial†	716.5	79.1	42.909	µg/L	42.909	ppb	11:16:02
1	Mg 279.077 IEC†	15.5	-3.1	-17.205	µg/L	-17.205	ppb	11:16:23
1	Na 589.592 Radial†	-648.7	3.2	0.8910	µg/L	0.8910	ppb	11:16:02
1	Sr 421.552†	-84.6	-27.6	-0.1556	µg/L	-0.1556	ppb	11:16:02
1	Sc 361.383	1886633.7	1886633.7	91.729	%			11:17:25
1	Y 371.029	1145198.1	1145198.1	91.443	%			11:17:25
1	Ag 328.068†	-75.6	-54.1	-0.4765	µg/L	-0.4765	ppb	11:17:30
1	As 188.979†	-1.2	-3.8	-7.2238	µg/L	-7.2238	ppb	11:17:51
1	B 249.677†	155.3	13.6	0.5917	µg/L	0.5917	ppb	11:17:51
1	Ba 233.527†	-79.3	-5.8	-0.1431	µg/L	-0.1431	ppb	11:17:51
1	Be 313.107†	3614.6	329.1	0.2079	µg/L	0.2079	ppb	11:17:30
1	Cd 226.502†	-92.5	0.0	0.0125	µg/L	0.0125	ppb	11:17:51
1	Co 228.616†	-75.3	-10.3	-0.4971	µg/L	-0.4971	ppb	11:17:51
1	Cr 267.716†	-99.6	14.2	0.2978	µg/L	0.2978	ppb	11:17:30
1	Cu 324.752†	3054.4	-54.5	-0.3762	µg/L	-0.3762	ppb	11:17:30
1	Mn 257.610†	36.2	262.1	0.8358	µg/L	0.8358	ppb	11:17:51
1	Mo 202.031†	0.0	7.9	0.8875	µg/L	0.8875	ppb	11:17:51
1	Ni 231.604†	270.0	-5.0	-0.2748	µg/L	-0.2748	ppb	11:17:51
1	P 214.914†	217.5	31.1	67.622	µg/L	67.622	ppb	11:17:51
1	Pb 220.353†	64.2	15.9	4.0094	µg/L	4.0094	ppb	11:17:51
1	S 181.975 Axial†	31.6	10.4	53.403	µg/L	53.403	ppb	11:17:51
1	Sb 206.836†	23.0	4.5	4.4559	µg/L	4.4559	ppb	11:17:51
1	Se 196.026†	18.1	5.6	8.2270	µg/L	8.2270	ppb	11:17:51
1	SiO2†	2013.7	213.6	40.794	µg/L	40.794	ppb	11:17:30
1	Si 251.611†	452.8	144.0	10.965	µg/L	10.965	ppb	11:17:51
1	Sn 189.927†	20.9	0.3	0.1568	µg/L	0.1568	ppb	11:17:51
1	Ti 334.940†	955.3	322.6	0.7164	µg/L	0.7164	ppb	11:17:30
1	Tl 190.801†	-22.2	-2.8	-4.1721	µg/L	-4.1721	ppb	11:17:51
1	U 409.014†	828.2	223.7	20.999	µg/L	20.999	ppb	11:17:30
1	V 292.402†	-34.1	54.8	0.6609	µg/L	0.6609	ppb	11:17:30
1	Zn 213.857†	596.1	99.7	2.6708	µg/L	2.6708	ppb	11:17:51
2	Sc RADIAL	104523.5	104523.5	92.9	%			11:16:28
2	Al 396.153Radial†	216.6	3.2	1.6369	µg/L	1.6369	ppb	11:16:28
2	Ca 317.933Radial†	393.4	-72.2	-28.640	µg/L	-28.640	ppb	11:16:49
2	Fe 238.204 Radial†	17.5	7.6	40.158	µg/L	40.158	ppb	11:16:49
2	K 766.490 Radial†	722.4	82.5	44.756	µg/L	44.756	ppb	11:16:28
2	Mg 279.077 IEC†	16.5	-2.1	-11.746	µg/L	-11.746	ppb	11:16:49
2	Na 589.592 Radial†	-648.4	6.1	1.6990	µg/L	1.6990	ppb	11:16:28
2	Sr 421.552†	-65.4	-6.6	-0.0371	µg/L	-0.0371	ppb	11:16:28
2	Sc 361.383	1911033.3	1911033.3	92.915	%			11:17:56
2	Y 371.029	1159484.0	1159484.0	92.584	%			11:17:56
2	Ag 328.068†	-130.9	-112.6	-0.9960	µg/L	-0.9960	ppb	11:18:02
2	As 188.979†	5.3	3.2	6.0382	µg/L	6.0382	ppb	11:18:22
2	B 249.677†	146.8	2.3	0.0881	µg/L	0.0881	ppb	11:18:22
2	Ba 233.527†	-78.0	-3.3	-0.0813	µg/L	-0.0813	ppb	11:18:22
2	Be 313.107†	3620.5	285.1	0.1802	µg/L	0.1802	ppb	11:18:02
2	Cd 226.502†	-94.6	-0.9	-0.0129	µg/L	-0.0129	ppb	11:18:22
2	Co 228.616†	-69.9	-3.5	-0.1687	µg/L	-0.1687	ppb	11:18:22
2	Cr 267.716†	-93.6	22.0	0.4610	µg/L	0.4610	ppb	11:18:02
2	Cu 324.752†	3131.3	-14.3	-0.0918	µg/L	-0.0918	ppb	11:18:02
2	Mn 257.610†	53.9	280.7	0.8957	µg/L	0.8957	ppb	11:18:22
2	Mo 202.031†	-6.2	1.3	0.1427	µg/L	0.1427	ppb	11:18:22
2	Ni 231.604†	287.8	10.3	0.5636	µg/L	0.5636	ppb	11:18:22
2	P 214.914†	228.6	40.0	86.781	µg/L	86.781	ppb	11:18:22
2	Pb 220.353†	60.0	10.4	2.6273	µg/L	2.6273	ppb	11:18:22

2	S 181.975 Axial†	25.0	2.8	14.429 µg/L	14.429 ppb	11:18:22
2	Sb 206.836†	23.9	5.1	5.1079 µg/L	5.1079 ppb	11:18:22
2	Se 196.026†	9.2	-4.2	-6.1148 µg/L	-6.1148 ppb	11:18:22
2	SiO2†	2023.3	195.9	37.412 µg/L	37.412 ppb	11:18:02
2	Si 251.611†	446.1	130.5	9.9795 µg/L	9.9795 ppb	11:18:22
2	Sn 189.927†	19.7	-1.3	-0.6251 µg/L	-0.6251 ppb	11:18:22
2	Ti 334.940†	866.5	213.7	0.4752 µg/L	0.4752 ppb	11:18:02
2	Tl 190.801†	-19.0	1.0	1.4499 µg/L	1.4499 ppb	11:18:22
2	U 409.014†	834.6	219.1	20.564 µg/L	20.564 ppb	11:18:02
2	V 292.402†	-5.6	85.9	1.0058 µg/L	1.0058 ppb	11:18:02
2	Zn 213.857†	580.8	74.9	2.0012 µg/L	2.0012 ppb	11:18:22
3	Sc RADIAL	104184.6	104184.6	92.6 %		11:16:54
3	Al 396.153Radial†	204.9	-8.6	-4.3938 µg/L	-4.3938 ppb	11:16:54
3	Ca 317.933Radial†	400.0	-63.6	-25.231 µg/L	-25.231 ppb	11:17:15
3	Fe 238.204 Radial†	18.4	8.7	45.561 µg/L	45.561 ppb	11:17:15
3	K 766.490 Radial†	662.0	19.8	10.762 µg/L	10.762 ppb	11:16:54
3	Mg 279.077 IEC†	15.2	-3.5	-19.299 µg/L	-19.299 ppb	11:17:15
3	Na 589.592 Radial†	-658.9	-7.4	-2.0482 µg/L	-2.0482 ppb	11:16:54
3	Sr 421.552†	-94.5	-38.2	-0.2153 µg/L	-0.2153 ppb	11:16:54
3	Sc 361.383	1917509.1	1917509.1	93.230 %		11:18:28
3	Y 371.029	1164299.2	1164299.2	92.969 %		11:18:28
3	Ag 328.068†	-195.9	-181.9	-1.6150 µg/L	-1.6150 ppb	11:18:34
3	As 188.979†	-0.7	-3.2	-6.1177 µg/L	-6.1177 ppb	11:18:54
3	B 249.677†	138.1	-7.6	-0.3519 µg/L	-0.3519 ppb	11:18:54
3	Ba 233.527†	-68.2	7.5	0.1910 µg/L	0.1910 ppb	11:18:54
3	Be 313.107†	3536.1	181.4	0.1145 µg/L	0.1145 ppb	11:18:34
3	Cd 226.502†	-84.4	10.3	0.2862 µg/L	0.2862 ppb	11:18:54
3	Co 228.616†	-68.3	-1.5	-0.0717 µg/L	-0.0717 ppb	11:18:54
3	Cr 267.716†	-88.6	27.8	0.5796 µg/L	0.5796 ppb	11:18:34
3	Cu 324.752†	3063.2	-98.6	-0.6842 µg/L	-0.6842 ppb	11:18:34
3	Mn 257.610†	46.0	272.0	0.8689 µg/L	0.8689 ppb	11:18:54
3	Mo 202.031†	0.5	8.4	0.9385 µg/L	0.9385 ppb	11:18:54
3	Ni 231.604†	274.6	-4.8	-0.2641 µg/L	-0.2641 ppb	11:18:54
3	P 214.914†	216.2	25.9	56.303 µg/L	56.303 ppb	11:18:54
3	Pb 220.353†	64.0	14.5	3.6585 µg/L	3.6585 ppb	11:18:54
3	S 181.975 Axial†	33.1	11.4	58.777 µg/L	58.777 ppb	11:18:54
3	Sb 206.836†	16.2	-3.1	-3.1003 µg/L	-3.1003 ppb	11:18:54
3	Se 196.026†	6.6	-7.0	-10.162 µg/L	-10.162 ppb	11:18:54
3	SiO2†	2037.0	203.2	38.810 µg/L	38.810 ppb	11:18:34
3	Si 251.611†	467.2	151.4	11.593 µg/L	11.593 ppb	11:18:54
3	Sn 189.927†	19.2	-1.8	-0.8959 µg/L	-0.8959 ppb	11:18:54
3	Ti 334.940†	902.4	249.0	0.5534 µg/L	0.5534 ppb	11:18:34
3	Tl 190.801†	-25.4	-5.8	-8.7975 µg/L	-8.7975 ppb	11:18:54
3	U 409.014†	870.5	254.5	23.893 µg/L	23.893 ppb	11:18:34
3	V 292.402†	-17.3	73.4	0.8763 µg/L	0.8763 ppb	11:18:34
3	Zn 213.857†	588.8	81.4	2.1788 µg/L	2.1788 ppb	11:18:54

Mean Data: 1201997323|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1905058.7	92.625	%	0.7916				0.85%
Sc RADIAL	104278.5	92.7	%	0.19				0.21%
Y 371.029	1156327.1	92.332	%	0.7932				0.86%
Ag 328.068†	-116.2	-1.0292	µg/L	0.56995	-1.0292	ppb	0.56995	55.38%
Al 396.153Radial†	-11.3	-5.7307	µg/L	8.11906	-5.7307	ppb	8.11906	141.68%
As 188.979†	-1.3	-2.4344	µg/L	7.35834	-2.4344	ppb	7.35834	302.26%
B 249.677†	2.7	0.1093	µg/L	0.47214	0.1093	ppb	0.47214	431.92%
Ba 233.527†	-0.5	-0.0111	µg/L	0.17776	-0.0111	ppb	0.17776	>999.9%
Be 313.107†	265.2	0.1675	µg/L	0.04796	0.1675	ppb	0.04796	28.62%
Ca 317.933Radial†	-65.1	-25.839	µg/L	2.5529	-25.839	ppb	2.5529	9.88%
Cd 226.502†	3.1	0.0953	µg/L	0.16583	0.0953	ppb	0.16583	174.07%
Co 228.616†	-5.1	-0.2458	µg/L	0.22296	-0.2458	ppb	0.22296	90.69%
Cr 267.716†	21.3	0.4462	µg/L	0.14147	0.4462	ppb	0.14147	31.71%
Cu 324.752†	-55.8	-0.3840	µg/L	0.29629	-0.3840	ppb	0.29629	77.15%
Fe 238.204 Radial†	7.5	39.385	µg/L	6.5967	39.385	ppb	6.5967	16.75%
K 766.490 Radial†	60.5	32.809	µg/L	19.1158	32.809	ppb	19.1158	58.26%
Mg 279.077 IEC†	-2.9	-16.083	µg/L	3.8995	-16.083	ppb	3.8995	24.25%
Mn 257.610†	271.6	0.8668	µg/L	0.03003	0.8668	ppb	0.03003	3.47%
Mo 202.031†	5.9	0.6562	µg/L	0.44546	0.6562	ppb	0.44546	67.88%
Na 589.592 Radial†	0.7	0.1806	µg/L	1.97204	0.1806	ppb	1.97204	>999.9%

Ni 231.604†	0.2	0.0082 µg/L	0.48101	0.0082 ppb	0.48101	>999.9%
P 214.914†	32.4	70.235 µg/L	15.4065	70.235 ppb	15.4065	21.94%
Pb 220.353†	13.6	3.4317 µg/L	0.71844	3.4317 ppb	0.71844	20.94%
S 181.975 Axial†	8.2	42.203 µg/L	24.2022	42.203 ppb	24.2022	57.35%
Sb 206.836†	2.2	2.1545 µg/L	4.56246	2.1545 ppb	4.56246	211.77%
Se 196.026†	-1.9	-2.6831 µg/L	9.66269	-2.6831 ppb	9.66269	360.13%
SiO2†	204.3	39.005 µg/L	1.6996	39.005 ppb	1.6996	4.36%
Si 251.611†	142.0	10.846 µg/L	0.8135	10.846 ppb	0.8135	7.50%
Sn 189.927†	-0.9	-0.4548 µg/L	0.54664	-0.4548 ppb	0.54664	120.21%
Sr 421.552†	-24.1	-0.1360 µg/L	0.09074	-0.1360 ppb	0.09074	66.72%
Ti 334.940†	261.7	0.5816 µg/L	0.12303	0.5816 ppb	0.12303	21.15%
Tl 190.801†	-2.6	-3.8399 µg/L	5.13177	-3.8399 ppb	5.13177	133.64%
U 409.014†	232.4	21.819 µg/L	1.8093	21.819 ppb	1.8093	8.29%
V 292.402†	71.4	0.8477 µg/L	0.17423	0.8477 ppb	0.17423	20.55%
Zn 213.857†	85.4	2.2836 µg/L	0.34691	2.2836 ppb	0.34691	15.19%

Sequence No.: 34
Sample ID: 1201997324|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 328
Date Collected: 12/18/2009 11:19:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201997324|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106304.0	106304.0	94.5	%			11:19:36
1	Al 396.153Radial†	161477.9	170629.7	86213	µg/L	86213	ppb	11:19:36
1	Ca 317.933Radial†	225179.5	237766.6	94382	µg/L	94382	ppb	11:19:36
1	Fe 238.204 Radial†	35228.2	37263.7	195780	µg/L	195780	ppb	11:19:42
1	K 766.490 Radial†	71309.3	74757.4	40533	µg/L	40533	ppb	11:19:36
1	Mg 279.077 IEC†	6682.5	7050.9	38833	µg/L	38833	ppb	11:19:42
1	Na 589.592 Radial†	32566.0	35162.0	9756.1	µg/L	9756.1	ppb	11:19:36
1	Sr 421.552†	371134.5	392760.6	2212.4	µg/L	2212.4	ppb	11:19:36
1	Sc 361.383	1898174.2	1898174.2	92.290	%			11:20:17
1	Y 371.029	1168235.3	1168235.3	93.283	%			11:20:17
1	Ag 328.068†	29854.7	32377.0	312.86	µg/L	312.86	ppb	11:20:23
1	As 188.979†	524.4	565.7	1049.3	µg/L	1049.3	ppb	11:20:43
1	B 249.677†	31911.7	34421.9	1466.2	µg/L	1466.2	ppb	11:20:23
1	Ba 233.527†	68783.2	74609.9	1876.5	µg/L	1876.5	ppb	11:20:23
1	Be 313.107†	1153525.5	1246277.4	786.35	µg/L	786.35	ppb	11:20:17
1	Cd 226.502†	20701.1	22531.3	581.69	µg/L	581.69	ppb	11:20:23
1	Co 228.616†	17574.8	19114.7	908.97	µg/L	908.97	ppb	11:20:23
1	Cr 267.716†	104198.7	113026.0	2355.6	µg/L	2355.6	ppb	11:20:23
1	Cu 324.752†	242247.4	259099.9	1865.0	µg/L	1865.0	ppb	11:20:23
1	Mn 257.610†	1565430.1	1696425.8	5408.3	µg/L	5408.3	ppb	11:20:17
1	Mo 202.031†	4157.0	4512.2	511.07	µg/L	511.07	ppb	11:20:43
1	Ni 231.604†	22985.5	24606.3	1340.5	µg/L	1340.5	ppb	11:20:23
1	P 214.914†	3597.5	3692.0	7613.5	µg/L	7613.5	ppb	11:20:43
1	Pb 220.353†	3111.5	3317.3	844.98	µg/L	844.98	ppb	11:20:43
1	S 181.975 Axial†	723.1	759.4	3867.2	µg/L	3867.2	ppb	11:20:43
1	Sb 206.836†	1508.1	1613.6	1600.6	µg/L	1600.6	ppb	11:20:43
1	Se 196.026†	1755.5	1888.0	2884.2	µg/L	2884.2	ppb	11:20:43
1	SiO2†	143516.1	153523.5	29317	µg/L	29317	ppb	11:20:23
1	Si 251.611†	165228.4	178681.6	13427	µg/L	13427	ppb	11:20:23
1	Sn 189.927†	1837.0	1968.0	1011.1	µg/L	1011.1	ppb	11:20:43
1	Ti 334.940†	2275126.3	2464467.1	5457.4	µg/L	5457.4	ppb	11:20:17
1	Tl 190.801†	704.0	784.2	1227.0	µg/L	1227.0	ppb	11:20:43
1	U 409.014†	510.8	-125.7	-46.117	µg/L	-46.117	ppb	11:20:23
1	V 292.402†	98401.6	106713.8	1222.5	µg/L	1222.5	ppb	11:20:23
1	Zn 213.857†	200360.4	216548.0	5770.5	µg/L	5770.5	ppb	11:20:23
2	Sc RADIAL	106681.2	106681.2	94.8	%			11:19:48
2	Al 396.153Radial†	162848.5	171470.7	86638	µg/L	86638	ppb	11:19:48
2	Ca 317.933Radial†	227013.9	238858.3	94816	µg/L	94816	ppb	11:19:48
2	Fe 238.204 Radial†	35146.5	37045.7	194630	µg/L	194630	ppb	11:19:53
2	K 766.490 Radial†	71952.1	75168.3	40756	µg/L	40756	ppb	11:19:48
2	Mg 279.077 IEC†	6674.5	7017.5	38649	µg/L	38649	ppb	11:19:53
2	Na 589.592 Radial†	32701.6	35183.1	9762.0	µg/L	9762.0	ppb	11:19:48
2	Sr 421.552†	374034.2	394429.4	2221.8	µg/L	2221.8	ppb	11:19:48
2	Sc 361.383	1906791.5	1906791.5	92.709	%			11:20:50
2	Y 371.029	1174714.6	1174714.6	93.800	%			11:20:50
2	Ag 328.068†	29954.6	32338.6	312.44	µg/L	312.44	ppb	11:20:56
2	As 188.979†	539.4	579.3	1075.6	µg/L	1075.6	ppb	11:21:17
2	B 249.677†	32188.9	34564.6	1472.9	µg/L	1472.9	ppb	11:20:56
2	Ba 233.527†	69301.2	74831.8	1882.1	µg/L	1882.1	ppb	11:20:56
2	Be 313.107†	1166546.1	1254673.3	791.65	µg/L	791.65	ppb	11:20:50
2	Cd 226.502†	20903.7	22648.5	584.87	µg/L	584.87	ppb	11:20:56
2	Co 228.616†	17659.2	19119.7	909.14	µg/L	909.14	ppb	11:20:56
2	Cr 267.716†	104807.3	113172.3	2358.6	µg/L	2358.6	ppb	11:20:56
2	Cu 324.752†	243402.1	259159.3	1865.1	µg/L	1865.1	ppb	11:20:56
2	Mn 257.610†	1583366.5	1708107.1	5445.2	µg/L	5445.2	ppb	11:20:50
2	Mo 202.031†	4187.5	4524.7	512.43	µg/L	512.43	ppb	11:21:17
2	Ni 231.604†	23182.4	24706.1	1346.0	µg/L	1346.0	ppb	11:20:56
2	P 214.914†	3612.1	3690.1	7610.9	µg/L	7610.9	ppb	11:21:17
2	Pb 220.353†	3118.0	3309.0	842.94	µg/L	842.94	ppb	11:21:17

2	S 181.975 Axial†	730.1	763.5	3888.2	µg/L	3888.2	ppb	11:21:17
2	Sb 206.836†	1505.8	1603.7	1590.8	µg/L	1590.8	ppb	11:21:17
2	Se 196.026†	1750.6	1874.1	2863.3	µg/L	2863.3	ppb	11:21:17
2	SiO2†	144526.3	153910.3	29391	µg/L	29391	ppb	11:20:56
2	Si 251.611†	166484.4	179227.3	13468	µg/L	13468	ppb	11:20:56
2	Sn 189.927†	1843.3	1965.8	1009.9	µg/L	1009.9	ppb	11:21:17
2	Ti 334.940†	2299465.5	2479579.6	5490.9	µg/L	5490.9	ppb	11:20:50
2	Tl 190.801†	709.7	787.0	1231.5	µg/L	1231.5	ppb	11:21:17
2	U 409.014†	477.2	-164.5	-49.536	µg/L	-49.536	ppb	11:20:56
2	V 292.402†	99044.8	106925.7	1224.8	µg/L	1224.8	ppb	11:20:56
2	Zn 213.857†	201586.7	216889.6	5779.7	µg/L	5779.7	ppb	11:20:56
3	Sc RADIAL	106695.5	106695.5	94.9	%			11:19:59
3	Al 396.153Radial†	164004.6	172666.5	87242	µg/L	87242	ppb	11:19:59
3	Ca 317.933Radial†	228948.9	240866.3	95613	µg/L	95613	ppb	11:19:59
3	Fe 238.204 Radial†	35117.2	37009.9	194440	µg/L	194440	ppb	11:20:04
3	K 766.490 Radial†	72400.9	75631.4	41007	µg/L	41007	ppb	11:19:59
3	Mg 279.077 IEC†	6654.2	6995.1	38525	µg/L	38525	ppb	11:20:04
3	Na 589.592 Radial†	32880.7	35367.3	9813.1	µg/L	9813.1	ppb	11:19:59
3	Sr 421.552†	376671.1	397156.6	2237.2	µg/L	2237.2	ppb	11:19:59
3	Sc 361.383	1900378.2	1900378.2	92.397	%			11:21:24
3	Y 371.029	1170630.8	1170630.8	93.474	%			11:21:24
3	Ag 328.068†	30145.2	32653.9	315.30	µg/L	315.30	ppb	11:21:30
3	As 188.979†	536.0	577.7	1072.2	µg/L	1072.2	ppb	11:21:50
3	B 249.677†	32361.6	34868.7	1486.5	µg/L	1486.5	ppb	11:21:30
3	Ba 233.527†	69561.3	75365.6	1895.5	µg/L	1895.5	ppb	11:21:30
3	Be 313.107†	1157743.1	1249392.4	788.32	µg/L	788.32	ppb	11:21:24
3	Cd 226.502†	20978.3	22805.3	589.05	µg/L	589.05	ppb	11:21:30
3	Co 228.616†	17783.4	19318.4	918.75	µg/L	918.75	ppb	11:21:30
3	Cr 267.716†	105184.6	113962.1	2375.1	µg/L	2375.1	ppb	11:21:30
3	Cu 324.752†	244090.3	260790.1	1876.6	µg/L	1876.6	ppb	11:21:30
3	Mn 257.610†	1569660.6	1699037.2	5416.4	µg/L	5416.4	ppb	11:21:24
3	Mo 202.031†	4167.2	4518.0	511.67	µg/L	511.67	ppb	11:21:50
3	Ni 231.604†	23308.8	24927.2	1358.0	µg/L	1358.0	ppb	11:21:30
3	P 214.914†	3615.0	3706.5	7645.6	µg/L	7645.6	ppb	11:21:50
3	Pb 220.353†	3123.3	3326.1	847.31	µg/L	847.31	ppb	11:21:50
3	S 181.975 Axial†	727.6	763.5	3888.2	µg/L	3888.2	ppb	11:21:50
3	Sb 206.836†	1495.7	1598.2	1585.1	µg/L	1585.1	ppb	11:21:50
3	Se 196.026†	1758.7	1889.3	2885.4	µg/L	2885.4	ppb	11:21:50
3	SiO2†	144849.8	154786.6	29559	µg/L	29559	ppb	11:21:30
3	Si 251.611†	166626.0	179986.5	13526	µg/L	13526	ppb	11:21:30
3	Sn 189.927†	1853.1	1983.1	1018.5	µg/L	1018.5	ppb	11:21:50
3	Ti 334.940†	2281672.3	2468692.7	5466.7	µg/L	5466.7	ppb	11:21:24
3	Tl 190.801†	700.3	779.4	1219.6	µg/L	1219.6	ppb	11:21:50
3	U 409.014†	585.4	-45.6	-38.316	µg/L	-38.316	ppb	11:21:30
3	V 292.402†	99391.1	107661.1	1233.1	µg/L	1233.1	ppb	11:21:30
3	Zn 213.857†	202295.3	218390.3	5819.9	µg/L	5819.9	ppb	11:21:30

Mean Data: 1201997324|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1901781.3	92.466	%	0.2177				0.24%
Sc RADIAL	106560.2	94.7	%	0.20				0.21%
Y 371.029	1171193.6	93.519	%	0.2616				0.28%
Ag 328.068†	32456.5	313.53	µg/L	1.544	313.53	ppb	1.544	0.49%
Al 396.153Radial†	171589.0	86698	µg/L	517.3	86698	ppb	517.3	0.60%
As 188.979†	574.2	1065.7	µg/L	14.26	1065.7	ppb	14.26	1.34%
B 249.677†	34618.4	1475.2	µg/L	10.32	1475.2	ppb	10.32	0.70%
Ba 233.527†	74935.8	1884.7	µg/L	9.77	1884.7	ppb	9.77	0.52%
Be 313.107†	1250114.3	788.77	µg/L	2.678	788.77	ppb	2.678	0.34%
Ca 317.933Radial†	239163.7	94937	µg/L	624.1	94937	ppb	624.1	0.66%
Cd 226.502†	22661.7	585.20	µg/L	3.694	585.20	ppb	3.694	0.63%
Co 228.616†	19184.2	912.29	µg/L	5.596	912.29	ppb	5.596	0.61%
Cr 267.716†	113386.8	2363.1	µg/L	10.50	2363.1	ppb	10.50	0.44%
Cu 324.752†	259683.1	1868.9	µg/L	6.65	1868.9	ppb	6.65	0.36%
Fe 238.204 Radial†	37106.5	194950	µg/L	721.4	194950	ppb	721.4	0.37%
K 766.490 Radial†	75185.7	40765	µg/L	237.1	40765	ppb	237.1	0.58%
Mg 279.077 IEC†	7021.2	38669	µg/L	154.8	38669	ppb	154.8	0.40%
Mn 257.610†	1701190.0	5423.3	µg/L	19.41	5423.3	ppb	19.41	0.36%
Mo 202.031†	4518.3	511.72	µg/L	0.680	511.72	ppb	0.680	0.13%
Na 589.592 Radial†	35237.5	9777.1	µg/L	31.35	9777.1	ppb	31.35	0.32%

Ni 231.604†	24746.5	1348.2	µg/L	8.95	1348.2	ppb	8.95	0.66%
P 214.914†	3696.2	7623.3	µg/L	19.35	7623.3	ppb	19.35	0.25%
Pb 220.353†	3317.5	845.08	µg/L	2.182	845.08	ppb	2.182	0.26%
S 181.975 Axial†	762.1	3881.2	µg/L	12.12	3881.2	ppb	12.12	0.31%
Sb 206.836†	1605.2	1592.2	µg/L	7.82	1592.2	ppb	7.82	0.49%
Se 196.026†	1883.8	2877.6	µg/L	12.41	2877.6	ppb	12.41	0.43%
SiO2†	154073.5	29422	µg/L	123.6	29422	ppb	123.6	0.42%
Si 251.611†	179298.5	13474	µg/L	49.8	13474	ppb	49.8	0.37%
Sn 189.927†	1972.3	1013.2	µg/L	4.65	1013.2	ppb	4.65	0.46%
Sr 421.552†	394782.2	2223.8	µg/L	12.50	2223.8	ppb	12.50	0.56%
Ti 334.940†	2470913.1	5471.7	µg/L	17.28	5471.7	ppb	17.28	0.32%
Tl 190.801†	783.5	1226.0	µg/L	5.99	1226.0	ppb	5.99	0.49%
U 409.014†	-112.0	-44.657	µg/L	5.7509	-44.657	ppb	5.7509	12.88%
V 292.402†	107100.2	1226.8	µg/L	5.57	1226.8	ppb	5.57	0.45%
Zn 213.857†	217276.0	5790.0	µg/L	26.26	5790.0	ppb	26.26	0.45%

Sequence No.: 36
Sample ID: 1201985644|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 330
Date Collected: 12/18/2009 11:25:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985644|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108188.5	108188.5	96.2	%			11:26:08
1	Al 396.153Radial†	76455.0	79258.0	40055	µg/L	40055	ppb	11:26:08
1	Ca 317.933Radial†	34237.9	35100.6	13933	µg/L	13933	ppb	11:26:28
1	Fe 238.204 Radial†	15239.6	15832.9	83170	µg/L	83170	ppb	11:26:28
1	K 766.490 Radial†	10364.3	10080.6	5465.7	µg/L	5465.7	ppb	11:26:08
1	Mg 279.077 IEC†	1588.8	1632.0	8929.9	µg/L	8929.9	ppb	11:26:28
1	Na 589.592 Radial†	3623.6	4471.2	1240.6	µg/L	1240.6	ppb	11:26:28
1	Sr 421.552†	21038.6	21937.0	123.57	µg/L	123.57	ppb	11:26:08
1	Sc 361.383	1944692.0	1944692.0	94.552	%			11:27:31
1	Y 371.029	1224384.5	1224384.5	97.766	%			11:27:31
1	Ag 328.068†	-962.6	-989.7	-1.6796	µg/L	-1.6796	ppb	11:27:37
1	As 188.979†	7.8	5.7	2.9773	µg/L	2.9773	ppb	11:27:57
1	B 249.677†	1261.6	1178.6	26.159	µg/L	26.159	ppb	11:27:37
1	Ba 233.527†	23444.0	24875.5	624.98	µg/L	624.98	ppb	11:27:37
1	Be 313.107†	12908.0	10040.2	5.4917	µg/L	5.4917	ppb	11:27:37
1	Cd 226.502†	145.2	254.4	0.2934	µg/L	0.2934	ppb	11:27:57
1	Co 228.616†	397.7	492.4	18.866	µg/L	18.866	ppb	11:27:57
1	Cr 267.716†	2061.6	2303.2	48.147	µg/L	48.147	ppb	11:27:57
1	Cu 324.752†	5810.0	2760.4	37.286	µg/L	37.286	ppb	11:27:37
1	Mn 257.610†	726292.6	768363.8	2448.9	µg/L	2448.9	ppb	11:27:31
1	Mo 202.031†	130.1	145.5	19.499	µg/L	19.499	ppb	11:27:57
1	Ni 231.604†	825.2	573.3	31.233	µg/L	31.233	ppb	11:27:57
1	P 214.914†	612.2	441.5	872.25	µg/L	872.25	ppb	11:27:57
1	Pb 220.353†	315.8	279.8	73.431	µg/L	73.431	ppb	11:27:57
1	S 181.975 Axial†	82.4	63.1	310.70	µg/L	310.70	ppb	11:27:57
1	Sb 206.836†	24.7	5.6	12.649	µg/L	12.649	ppb	11:27:57
1	Se 196.026†	-23.2	-38.6	0.2867	µg/L	0.2867	ppb	11:27:57
1	SiO2†	98641.5	102343.5	19544	µg/L	19544	ppb	11:27:37
1	Si 251.611†	112924.9	119081.9	9035.6	µg/L	9035.6	ppb	11:27:37
1	Sn 189.927†	-42.4	-67.2	-18.146	µg/L	-18.146	ppb	11:27:57
1	Ti 334.940†	990988.2	1047369.5	2320.8	µg/L	2320.8	ppb	11:27:31
1	Tl 190.801†	-35.4	-16.0	0.7245	µg/L	0.7245	ppb	11:27:57
1	U 409.014†	363.5	-294.8	-42.884	µg/L	-42.884	ppb	11:27:37
1	V 292.402†	7231.3	7740.0	94.109	µg/L	94.109	ppb	11:27:37
1	Zn 213.857†	10231.7	10271.1	265.90	µg/L	265.90	ppb	11:27:37
2	Sc RADIAL	106808.3	106808.3	95.0	%			11:26:34
2	Al 396.153Radial†	77352.4	81230.2	41051	µg/L	41051	ppb	11:26:34
2	Ca 317.933Radial†	34414.6	35746.7	14190	µg/L	14190	ppb	11:26:54
2	Fe 238.204 Radial†	15331.3	16134.3	84754	µg/L	84754	ppb	11:26:54
2	K 766.490 Radial†	10372.2	10228.1	5545.6	µg/L	5545.6	ppb	11:26:34
2	Mg 279.077 IEC†	1587.4	1651.9	9037.7	µg/L	9037.7	ppb	11:26:54
2	Na 589.592 Radial†	3669.5	4568.3	1267.5	µg/L	1267.5	ppb	11:26:54
2	Sr 421.552†	21272.1	22465.5	126.55	µg/L	126.55	ppb	11:26:34
2	Sc 361.383	1936812.9	1936812.9	94.169	%			11:28:03
2	Y 371.029	1220037.5	1220037.5	97.419	%			11:28:03
2	Ag 328.068†	-1008.4	-1042.5	-2.0252	µg/L	-2.0252	ppb	11:28:09
2	As 188.979†	11.0	9.2	9.2534	µg/L	9.2534	ppb	11:28:29
2	B 249.677†	1268.4	1191.3	26.221	µg/L	26.221	ppb	11:28:09
2	Ba 233.527†	23321.5	24846.3	624.25	µg/L	624.25	ppb	11:28:09
2	Be 313.107†	12780.6	9960.5	5.4401	µg/L	5.4401	ppb	11:28:09
2	Cd 226.502†	150.4	260.6	0.3353	µg/L	0.3353	ppb	11:28:29
2	Co 228.616†	404.3	501.0	19.276	µg/L	19.276	ppb	11:28:29
2	Cr 267.716†	2078.1	2329.6	48.697	µg/L	48.697	ppb	11:28:29
2	Cu 324.752†	5752.8	2724.7	37.375	µg/L	37.375	ppb	11:28:09
2	Mn 257.610†	724259.1	769329.2	2452.2	µg/L	2452.2	ppb	11:28:03
2	Mo 202.031†	130.7	146.7	19.698	µg/L	19.698	ppb	11:28:29
2	Ni 231.604†	824.1	575.7	31.364	µg/L	31.364	ppb	11:28:29
2	P 214.914†	611.0	442.8	873.61	µg/L	873.61	ppb	11:28:29
2	Pb 220.353†	316.8	282.3	74.118	µg/L	74.118	ppb	11:28:29

2	S 181.975 Axial†	81.7	62.7	308.33 µg/L	308.33 ppb	11:28:29
2	Sb 206.836†	19.3	-0.1	7.0198 µg/L	7.0198 ppb	11:28:29
2	Se 196.026†	-21.3	-36.7	4.1855 µg/L	4.1855 ppb	11:28:29
2	SiO2†	98016.3	102104.0	19498 µg/L	19498 ppb	11:28:09
2	Si 251.611†	112321.2	118926.7	9023.5 µg/L	9023.5 ppb	11:28:09
2	Sn 189.927†	-39.6	-64.5	-16.552 µg/L	-16.552 ppb	11:28:29
2	Ti 334.940†	988334.9	1048815.6	2324.0 µg/L	2324.0 ppb	11:28:03
2	Tl 190.801†	-33.0	-13.6	4.3434 µg/L	4.3434 ppb	11:28:29
2	U 409.014†	396.8	-257.8	-39.700 µg/L	-39.700 ppb	11:28:09
2	V 292.402†	7215.2	7753.9	94.402 µg/L	94.402 ppb	11:28:09
2	Zn 213.857†	10169.9	10249.5	265.15 µg/L	265.15 ppb	11:28:09
3	Sc RADIAL	107092.2	107092.2	95.2 %		11:27:00
3	Al 396.153Radial†	77743.7	81425.2	41150 µg/L	41150 ppb	11:27:00
3	Ca 317.933Radial†	34198.4	35423.5	14062 µg/L	14062 ppb	11:27:20
3	Fe 238.204 Radial†	15257.0	16013.4	84119 µg/L	84119 ppb	11:27:20
3	K 766.490 Radial†	10439.0	10269.3	5568.0 µg/L	5568.0 ppb	11:27:00
3	Mg 279.077 IEC†	1584.6	1644.5	8997.6 µg/L	8997.6 ppb	11:27:20
3	Na 589.592 Radial†	3640.5	4527.6	1256.2 µg/L	1256.2 ppb	11:27:20
3	Sr 421.552†	21292.7	22427.7	126.33 µg/L	126.33 ppb	11:27:00
3	Sc 361.383	1927968.9	1927968.9	93.739 %		11:28:35
3	Y 371.029	1214812.2	1214812.2	97.002 %		11:28:35
3	Ag 328.068†	-1006.9	-1045.9	-2.1005 µg/L	-2.1005 ppb	11:28:41
3	As 188.979†	10.1	8.3	7.7391 µg/L	7.7391 ppb	11:29:01
3	B 249.677†	1254.1	1182.2	26.018 µg/L	26.018 ppb	11:28:41
3	Ba 233.527†	23492.4	25142.2	631.68 µg/L	631.68 ppb	11:28:41
3	Be 313.107†	12817.7	10062.3	5.5047 µg/L	5.5047 ppb	11:28:41
3	Cd 226.502†	137.2	247.3	0.0353 µg/L	0.0353 ppb	11:29:01
3	Co 228.616†	392.3	490.2	18.755 µg/L	18.755 ppb	11:29:01
3	Cr 267.716†	2032.8	2291.4	47.904 µg/L	47.904 ppb	11:29:01
3	Cu 324.752†	5847.7	2854.0	38.148 µg/L	38.148 ppb	11:28:41
3	Mn 257.610†	721661.9	770086.7	2454.5 µg/L	2454.5 ppb	11:28:35
3	Mo 202.031†	123.4	139.6	18.876 µg/L	18.876 ppb	11:29:01
3	Ni 231.604†	828.9	584.9	31.864 µg/L	31.864 ppb	11:29:01
3	P 214.914†	604.6	439.0	865.92 µg/L	865.92 ppb	11:29:01
3	Pb 220.353†	296.4	262.1	69.013 µg/L	69.013 ppb	11:29:01
3	S 181.975 Axial†	86.8	68.5	338.27 µg/L	338.27 ppb	11:29:01
3	Sb 206.836†	20.8	1.6	8.7076 µg/L	8.7076 ppb	11:29:01
3	Se 196.026†	-29.0	-45.1	-8.4697 µg/L	-8.4697 ppb	11:29:01
3	SiO2†	98650.2	103257.7	19718 µg/L	19718 ppb	11:28:41
3	Si 251.611†	113044.0	120244.9	9124.6 µg/L	9124.6 ppb	11:28:41
3	Sn 189.927†	-47.1	-72.7	-20.639 µg/L	-20.639 ppb	11:29:01
3	Ti 334.940†	983588.5	1048566.7	2323.5 µg/L	2323.5 ppb	11:28:35
3	Tl 190.801†	-32.7	-13.4	4.6429 µg/L	4.6429 ppb	11:29:01
3	U 409.014†	409.5	-242.3	-38.131 µg/L	-38.131 ppb	11:28:41
3	V 292.402†	7238.4	7813.8	95.023 µg/L	95.023 ppb	11:28:41
3	Zn 213.857†	10217.1	10349.4	267.89 µg/L	267.89 ppb	11:28:41

Mean Data: 1201985644|933564|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1936491.3	94.153	%	0.4068				0.43%
Sc RADIAL	107363.0	95.5	%	0.65				0.68%
Y 371.029	1219744.7	97.396	%	0.3827				0.39%
Ag 328.068†	-1026.1	-1.9351	µg/L	0.22444	-1.9351	ppb	0.22444	11.60%
Al 396.153Radial†	80637.8	40752	µg/L	605.9	40752	ppb	605.9	1.49%
As 188.979†	7.7	6.6566	µg/L	3.27508	6.6566	ppb	3.27508	49.20%
B 249.677†	1184.0	26.133	µg/L	0.1040	26.133	ppb	0.1040	0.40%
Ba 233.527†	24954.7	626.97	µg/L	4.096	626.97	ppb	4.096	0.65%
Be 313.107†	10021.0	5.4788	µg/L	0.03418	5.4788	ppb	0.03418	0.62%
Ca 317.933Radial†	35423.6	14062	µg/L	128.2	14062	ppb	128.2	0.91%
Cd 226.502†	254.1	0.2213	µg/L	0.16244	0.2213	ppb	0.16244	73.39%
Co 228.616†	494.5	18.966	µg/L	0.2743	18.966	ppb	0.2743	1.45%
Cr 267.716†	2308.0	48.250	µg/L	0.4066	48.250	ppb	0.4066	0.84%
Cu 324.752†	2779.7	37.603	µg/L	0.4742	37.603	ppb	0.4742	1.26%
Fe 238.204 Radial†	15993.5	84014	µg/L	796.8	84014	ppb	796.8	0.95%
K 766.490 Radial†	10192.7	5526.4	µg/L	53.79	5526.4	ppb	53.79	0.97%
Mg 279.077 IEC†	1642.8	8988.4	µg/L	54.51	8988.4	ppb	54.51	0.61%
Mn 257.610†	769259.9	2451.8	µg/L	2.81	2451.8	ppb	2.81	0.11%
Mo 202.031†	143.9	19.358	µg/L	0.4292	19.358	ppb	0.4292	2.22%
Na 589.592 Radial†	4522.4	1254.8	µg/L	13.53	1254.8	ppb	13.53	1.08%

Ni 231.604†	578.0	31.487	µg/L	0.3331	31.487	ppb	0.3331	1.06%
P 214.914†	441.1	870.59	µg/L	4.105	870.59	ppb	4.105	0.47%
Pb 220.353†	274.7	72.187	µg/L	2.7700	72.187	ppb	2.7700	3.84%
S 181.975 Axial†	64.8	319.10	µg/L	16.646	319.10	ppb	16.646	5.22%
Sb 206.836†	2.4	9.4588	µg/L	2.88888	9.4588	ppb	2.88888	30.54%
Se 196.026†	-40.1	-1.3325	µg/L	6.48111	-1.3325	ppb	6.48111	486.39%
SiO2†	102568.4	19587	µg/L	116.3	19587	ppb	116.3	0.59%
Si 251.611†	119417.8	9061.2	µg/L	55.23	9061.2	ppb	55.23	0.61%
Sn 189.927†	-68.1	-18.446	µg/L	2.0602	-18.446	ppb	2.0602	11.17%
Sr 421.552†	22276.7	125.48	µg/L	1.661	125.48	ppb	1.661	1.32%
Ti 334.940†	1048250.6	2322.8	µg/L	1.71	2322.8	ppb	1.71	0.07%
Tl 190.801†	-14.4	3.2369	µg/L	2.18097	3.2369	ppb	2.18097	67.38%
U 409.014†	-265.0	-40.238	µg/L	2.4216	-40.238	ppb	2.4216	6.02%
V 292.402†	7769.2	94.511	µg/L	0.4663	94.511	ppb	0.4663	0.49%
Zn 213.857†	10290.0	266.32	µg/L	1.416	266.32	ppb	1.416	0.53%

Sequence No.: 37
Sample ID: 1201985645|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 331
Date Collected: 12/18/2009 11:29:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985645|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107963.2	107963.2	96.0	%			11:29:43
1	Al 396.153Radial†	183110.9	190542.0	96277	µg/L	96277	ppb	11:29:43
1	Ca 317.933Radial†	63666.4	65834.6	26133	µg/L	26133	ppb	11:29:43
1	Fe 238.204 Radial†	21549.9	22440.3	117890	µg/L	117890	ppb	11:30:03
1	K 766.490 Radial†	26836.4	27264.3	14783	µg/L	14783	ppb	11:29:43
1	Mg 279.077 IEC†	3550.7	3679.4	20247	µg/L	20247	ppb	11:30:03
1	Na 589.592 Radial†	21642.6	23252.0	6451.6	µg/L	6451.6	ppb	11:29:43
1	Sr 421.552†	113875.7	118703.8	668.65	µg/L	668.65	ppb	11:29:43
1	Sc 361.383	1937901.8	1937901.8	94.222	%			11:31:09
1	Y 371.029	1244760.8	1244760.8	99.393	%			11:31:09
1	Ag 328.068†	51759.8	54962.2	504.34	µg/L	504.34	ppb	11:31:15
1	As 188.979†	269.2	283.3	527.51	µg/L	527.51	ppb	11:31:35
1	B 249.677†	11866.0	12438.0	514.97	µg/L	514.97	ppb	11:31:15
1	Ba 233.527†	51481.5	54719.3	1375.7	µg/L	1375.7	ppb	11:31:15
1	Be 313.107†	764863.0	808156.9	509.91	µg/L	509.91	ppb	11:31:09
1	Cd 226.502†	17277.6	18438.1	479.05	µg/L	479.05	ppb	11:31:15
1	Co 228.616†	9839.2	10514.3	499.37	µg/L	499.37	ppb	11:31:15
1	Cr 267.716†	25837.4	27544.7	574.79	µg/L	574.79	ppb	11:31:15
1	Cu 324.752†	77162.0	78509.6	577.68	µg/L	577.68	ppb	11:31:15
1	Mn 257.610†	1009486.1	1071615.7	3415.6	µg/L	3415.6	ppb	11:31:09
1	Mo 202.031†	4140.0	4401.8	495.70	µg/L	495.70	ppb	11:31:35
1	Ni 231.604†	9499.1	9782.2	532.92	µg/L	532.92	ppb	11:31:15
1	P 214.914†	936.2	787.6	1548.6	µg/L	1548.6	ppb	11:31:35
1	Pb 220.353†	2156.6	2234.7	573.65	µg/L	573.65	ppb	11:31:35
1	S 181.975 Axial†	1031.9	1071.1	5482.9	µg/L	5482.9	ppb	11:31:35
1	Sb 206.836†	434.7	440.8	445.01	µg/L	445.01	ppb	11:31:35
1	Se 196.026†	280.0	283.1	490.12	µg/L	490.12	ppb	11:31:35
1	SiO2†	166087.3	174291.0	33283	µg/L	33283	ppb	11:31:09
1	Si 251.611†	191074.1	202442.1	15346	µg/L	15346	ppb	11:31:09
1	Sn 189.927†	883.2	914.9	469.73	µg/L	469.73	ppb	11:31:35
1	Ti 334.940†	1506759.9	1598443.3	3541.7	µg/L	3541.7	ppb	11:31:09
1	Tl 190.801†	272.4	310.6	502.85	µg/L	502.85	ppb	11:31:35
1	U 409.014†	5882.9	5564.4	501.17	µg/L	501.17	ppb	11:31:09
1	V 292.402†	50637.9	53835.3	620.79	µg/L	620.79	ppb	11:31:15
1	Zn 213.857†	30745.0	32080.3	842.85	µg/L	842.85	ppb	11:31:15
2	Sc RADIAL	108266.0	108266.0	96.3	%			11:30:09
2	Al 396.153Radial†	185625.0	192620.4	97327	µg/L	97327	ppb	11:30:09
2	Ca 317.933Radial†	64230.0	66234.7	26292	µg/L	26292	ppb	11:30:09
2	Fe 238.204 Radial†	21658.7	22490.5	118160	µg/L	118160	ppb	11:30:29
2	K 766.490 Radial†	27146.6	27508.4	14915	µg/L	14915	ppb	11:30:09
2	Mg 279.077 IEC†	3560.1	3678.9	20243	µg/L	20243	ppb	11:30:29
2	Na 589.592 Radial†	21906.0	23462.6	6510.0	µg/L	6510.0	ppb	11:30:09
2	Sr 421.552†	115323.1	119875.7	675.25	µg/L	675.25	ppb	11:30:09
2	Sc 361.383	1946972.5	1946972.5	94.663	%			11:31:44
2	Y 371.029	1251899.6	1251899.6	99.963	%			11:31:44
2	Ag 328.068†	51551.4	54486.3	500.09	µg/L	500.09	ppb	11:31:49
2	As 188.979†	263.2	275.6	512.85	µg/L	512.85	ppb	11:32:10
2	B 249.677†	11878.0	12392.0	512.85	µg/L	512.85	ppb	11:31:49
2	Ba 233.527†	51544.2	54530.9	1370.9	µg/L	1370.9	ppb	11:31:49
2	Be 313.107†	771921.7	811831.6	512.23	µg/L	512.23	ppb	11:31:44
2	Cd 226.502†	17326.1	18403.8	478.12	µg/L	478.12	ppb	11:31:49
2	Co 228.616†	9828.3	10454.1	496.44	µg/L	496.44	ppb	11:31:49
2	Cr 267.716†	25865.9	27447.0	572.75	µg/L	572.75	ppb	11:31:49
2	Cu 324.752†	77094.8	78057.2	574.55	µg/L	574.55	ppb	11:31:49
2	Mn 257.610†	1018857.7	1076524.2	3431.3	µg/L	3431.3	ppb	11:31:44
2	Mo 202.031†	4125.3	4365.8	491.69	µg/L	491.69	ppb	11:32:10
2	Ni 231.604†	9578.7	9819.3	534.94	µg/L	534.94	ppb	11:31:49
2	P 214.914†	934.7	781.4	1535.4	µg/L	1535.4	ppb	11:32:10
2	Pb 220.353†	2160.9	2228.6	572.20	µg/L	572.20	ppb	11:32:10

2	S 181.975 Axial†	1031.8	1065.9	5455.9 µg/L	5455.9 ppb		11:32:10
2	Sb 206.836†	443.9	448.4	452.58 µg/L	452.58 ppb		11:32:10
2	Se 196.026†	287.0	289.1	499.16 µg/L	499.16 ppb		11:32:10
2	SiO2†	167220.5	174666.9	33355 µg/L	33355 ppb		11:31:44
2	Si 251.611†	192573.8	203081.6	15394 µg/L	15394 ppb		11:31:44
2	Sn 189.927†	889.3	917.0	470.83 µg/L	470.83 ppb		11:32:10
2	Ti 334.940†	1518704.2	1603610.8	3553.1 µg/L	3553.1 ppb		11:31:44
2	Tl 190.801†	260.8	296.9	482.41 µg/L	482.41 ppb		11:32:10
2	U 409.014†	5819.3	5468.2	492.09 µg/L	492.09 ppb		11:31:44
2	V 292.402†	50618.6	53564.5	617.72 µg/L	617.72 ppb		11:31:49
2	Zn 213.857†	30711.1	31892.4	837.79 µg/L	837.79 ppb		11:31:49
3	Sc RADIAL	107832.6	107832.6	95.9 %			11:30:35
3	Al 396.153Radial†	185024.4	192769.0	97402 µg/L	97402 ppb		11:30:35
3	Ca 317.933Radial†	64097.3	66364.4	26344 µg/L	26344 ppb		11:30:35
3	Fe 238.204 Radial†	21552.4	22470.1	118050 µg/L	118050 ppb		11:30:55
3	K 766.490 Radial†	27145.2	27620.2	14976 µg/L	14976 ppb		11:30:35
3	Mg 279.077 IEC†	3542.4	3675.2	20223 µg/L	20223 ppb		11:30:55
3	Na 589.592 Radial†	21773.6	23415.9	6497.0 µg/L	6497.0 ppb		11:30:35
3	Sr 421.552†	114879.7	119894.7	675.36 µg/L	675.36 ppb		11:30:35
3	Sc 361.383	1944208.3	1944208.3	94.528 %			11:32:18
3	Y 371.029	1250526.0	1250526.0	99.854 %			11:32:18
3	Ag 328.068†	52205.8	55255.9	507.01 µg/L	507.01 ppb		11:32:23
3	As 188.979†	254.3	266.5	495.62 µg/L	495.62 ppb		11:32:44
3	B 249.677†	11976.1	12513.6	518.28 µg/L	518.28 ppb		11:32:23
3	Ba 233.527†	52078.9	55174.0	1387.1 µg/L	1387.1 ppb		11:32:23
3	Be 313.107†	769905.3	810857.9	511.62 µg/L	511.62 ppb		11:32:18
3	Cd 226.502†	17558.9	18676.1	485.33 µg/L	485.33 ppb		11:32:23
3	Co 228.616†	9948.9	10596.5	503.30 µg/L	503.30 ppb		11:32:23
3	Cr 267.716†	26152.9	27789.4	579.90 µg/L	579.90 ppb		11:32:23
3	Cu 324.752†	78136.2	79274.6	583.09 µg/L	583.09 ppb		11:32:23
3	Mn 257.610†	1016190.0	1075232.3	3427.1 µg/L	3427.1 ppb		11:32:18
3	Mo 202.031†	4145.3	4393.2	494.74 µg/L	494.74 ppb		11:32:44
3	Ni 231.604†	9618.3	9875.7	538.01 µg/L	538.01 ppb		11:32:23
3	P 214.914†	931.5	779.4	1530.3 µg/L	1530.3 ppb		11:32:44
3	Pb 220.353†	2164.5	2235.7	573.99 µg/L	573.99 ppb		11:32:44
3	S 181.975 Axial†	1035.9	1071.8	5486.6 µg/L	5486.6 ppb		11:32:44
3	Sb 206.836†	443.0	448.1	452.18 µg/L	452.18 ppb		11:32:44
3	Se 196.026†	285.5	287.9	497.30 µg/L	497.30 ppb		11:32:44
3	SiO2†	166458.2	174111.5	33249 µg/L	33249 ppb		11:32:18
3	Si 251.611†	191494.5	202229.0	15329 µg/L	15329 ppb		11:32:18
3	Sn 189.927†	892.8	922.0	473.27 µg/L	473.27 ppb		11:32:44
3	Ti 334.940†	1515809.8	1602829.9	3551.4 µg/L	3551.4 ppb		11:32:18
3	Tl 190.801†	260.1	296.5	481.78 µg/L	481.78 ppb		11:32:44
3	U 409.014†	5790.6	5446.6	490.08 µg/L	490.08 ppb		11:32:18
3	V 292.402†	51267.2	54326.6	626.32 µg/L	626.32 ppb		11:32:23
3	Zn 213.857†	31091.1	32340.5	849.78 µg/L	849.78 ppb		11:32:23

Mean Data: 1201985645|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943027.5	94.471	%	0.2260				0.24%
Sc RADIAL	108020.6	96.0	%	0.20				0.21%
Y 371.029	1249062.2	99.737	%	0.3025				0.30%
Ag 328.068†	54901.5	503.82	µg/L	3.492	503.82	ppb	3.492	0.69%
Al 396.153Radial†	191977.1	97002	µg/L	629.3	97002	ppb	629.3	0.65%
As 188.979†	275.1	511.99	µg/L	15.963	511.99	ppb	15.963	3.12%
B 249.677†	12447.9	515.37	µg/L	2.737	515.37	ppb	2.737	0.53%
Ba 233.527†	54808.1	1377.9	µg/L	8.31	1377.9	ppb	8.31	0.60%
Be 313.107†	810282.1	511.26	µg/L	1.202	511.26	ppb	1.202	0.24%
Ca 317.933Radial†	66144.6	26256	µg/L	109.6	26256	ppb	109.6	0.42%
Cd 226.502†	18506.0	480.83	µg/L	3.919	480.83	ppb	3.919	0.82%
Co 228.616†	10521.7	499.70	µg/L	3.442	499.70	ppb	3.442	0.69%
Cr 267.716†	27593.7	575.82	µg/L	3.682	575.82	ppb	3.682	0.64%
Cu 324.752†	78613.8	578.44	µg/L	4.322	578.44	ppb	4.322	0.75%
Fe 238.204 Radial†	22467.0	118030	µg/L	132.7	118030	ppb	132.7	0.11%
K 766.490 Radial†	27464.3	14891	µg/L	98.7	14891	ppb	98.7	0.66%
Mg 279.077 IEC†	3677.8	20238	µg/L	12.7	20238	ppb	12.7	0.06%
Mn 257.610†	1074457.4	3424.7	µg/L	8.09	3424.7	ppb	8.09	0.24%
Mo 202.031†	4386.9	494.05	µg/L	2.092	494.05	ppb	2.092	0.42%
Na 589.592 Radial†	23376.9	6486.2	µg/L	30.70	6486.2	ppb	30.70	0.47%

Ni 231.604†	9825.7	535.29 µg/L	2.563	535.29 ppb	2.563	0.48%
P 214.914†	782.8	1538.1 µg/L	9.43	1538.1 ppb	9.43	0.61%
Pb 220.353†	2233.0	573.28 µg/L	0.952	573.28 ppb	0.952	0.17%
S 181.975 Axial†	1069.6	5475.1 µg/L	16.74	5475.1 ppb	16.74	0.31%
Sb 206.836†	445.8	449.92 µg/L	4.262	449.92 ppb	4.262	0.95%
Se 196.026†	286.7	495.52 µg/L	4.772	495.52 ppb	4.772	0.96%
SiO2†	174356.5	33296 µg/L	54.1	33296 ppb	54.1	0.16%
Si 251.611†	202584.2	15357 µg/L	34.0	15357 ppb	34.0	0.22%
Sn 189.927†	918.0	471.27 µg/L	1.812	471.27 ppb	1.812	0.38%
Sr 421.552†	119491.4	673.09 µg/L	3.843	673.09 ppb	3.843	0.57%
Ti 334.940†	1601628.0	3548.7 µg/L	6.17	3548.7 ppb	6.17	0.17%
Tl 190.801†	301.3	489.01 µg/L	11.989	489.01 ppb	11.989	2.45%
U 409.014†	5493.1	494.45 µg/L	5.910	494.45 ppb	5.910	1.20%
V 292.402†	53908.8	621.61 µg/L	4.358	621.61 ppb	4.358	0.70%
Zn 213.857†	32104.4	843.47 µg/L	6.019	843.47 ppb	6.019	0.71%

Sequence No.: 38
Sample ID: 1201985647|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 332
Date Collected: 12/18/2009 11:32:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985647|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109275.0	109275.0	97.2	%			11:33:25
1	Al 396.153Radial†	150911.1	155107.6	78369	µg/L	78369	ppb	11:33:25
1	Ca 317.933Radial†	52167.0	53201.7	21119	µg/L	21119	ppb	11:33:25
1	Fe 238.204 Radial†	20443.4	21031.8	110500	µg/L	110500	ppb	11:33:46
1	K 766.490 Radial†	23595.9	23593.1	12792	µg/L	12792	ppb	11:33:25
1	Mg 279.077 IEC†	3065.7	3135.8	17242	µg/L	17242	ppb	11:33:46
1	Na 589.592 Radial†	20985.4	22304.8	6188.7	µg/L	6188.7	ppb	11:33:25
1	Sr 421.552†	109276.8	112545.7	633.96	µg/L	633.96	ppb	11:33:25
1	Sc 361.383	1946069.7	1946069.7	94.619	%			11:34:51
1	Y 371.029	1250839.4	1250839.4	99.879	%			11:34:51
1	Ag 328.068†	52136.5	55129.8	505.23	µg/L	505.23	ppb	11:34:57
1	As 188.979†	264.9	277.4	518.51	µg/L	518.51	ppb	11:35:17
1	B 249.677†	11857.2	12375.8	514.54	µg/L	514.54	ppb	11:34:57
1	Ba 233.527†	48709.1	51559.9	1296.3	µg/L	1296.3	ppb	11:34:57
1	Be 313.107†	765291.5	805202.7	508.01	µg/L	508.01	ppb	11:34:51
1	Cd 226.502†	17547.6	18646.5	485.12	µg/L	485.12	ppb	11:34:57
1	Co 228.616†	10123.8	10771.3	511.53	µg/L	511.53	ppb	11:34:57
1	Cr 267.716†	25477.2	27048.9	564.47	µg/L	564.47	ppb	11:34:57
1	Cu 324.752†	76666.0	77641.7	569.98	µg/L	569.98	ppb	11:34:57
1	Mn 257.610†	1147925.4	1213431.4	3864.8	µg/L	3864.8	ppb	11:34:51
1	Mo 202.031†	4120.6	4362.9	491.06	µg/L	491.06	ppb	11:35:17
1	Ni 231.604†	9514.8	9756.5	531.52	µg/L	531.52	ppb	11:34:57
1	P 214.914†	874.3	718.1	1400.4	µg/L	1400.4	ppb	11:35:17
1	Pb 220.353†	2210.2	2281.8	584.13	µg/L	584.13	ppb	11:35:17
1	S 181.975 Axial†	1033.7	1068.4	5470.4	µg/L	5470.4	ppb	11:35:17
1	Sb 206.836†	446.0	450.8	455.78	µg/L	455.78	ppb	11:35:17
1	Se 196.026†	280.4	282.2	484.28	µg/L	484.28	ppb	11:35:17
1	SiO2†	152920.0	159635.0	30485	µg/L	30485	ppb	11:34:57
1	Si 251.611†	178014.0	187788.1	14221	µg/L	14221	ppb	11:34:51
1	Sn 189.927†	894.1	922.5	470.84	µg/L	470.84	ppb	11:35:17
1	Ti 334.940†	1551286.9	1638790.9	3631.4	µg/L	3631.4	ppb	11:34:51
1	Tl 190.801†	266.2	302.7	493.88	µg/L	493.88	ppb	11:35:17
1	U 409.014†	5813.4	5464.8	493.08	µg/L	493.08	ppb	11:34:51
1	V 292.402†	50541.8	53508.1	616.46	µg/L	616.46	ppb	11:34:57
1	Zn 213.857†	30320.2	31494.4	828.04	µg/L	828.04	ppb	11:34:57
2	Sc RADIAL	108355.9	108355.9	96.3	%			11:33:51
2	Al 396.153Radial†	152359.4	157928.6	79795	µg/L	79795	ppb	11:33:51
2	Ca 317.933Radial†	52454.7	53955.8	21418	µg/L	21418	ppb	11:33:51
2	Fe 238.204 Radial†	20352.4	21115.9	110940	µg/L	110940	ppb	11:34:12
2	K 766.490 Radial†	23798.6	24009.6	13018	µg/L	13018	ppb	11:33:51
2	Mg 279.077 IEC†	3044.3	3140.4	17267	µg/L	17267	ppb	11:34:12
2	Na 589.592 Radial†	21240.2	22752.6	6313.0	µg/L	6313.0	ppb	11:33:51
2	Sr 421.552†	110207.1	114465.5	644.78	µg/L	644.78	ppb	11:33:51
2	Sc 361.383	1947430.8	1947430.8	94.685	%			11:35:25
2	Y 371.029	1252000.1	1252000.1	99.971	%			11:35:25
2	Ag 328.068†	51831.8	54769.6	502.01	µg/L	502.01	ppb	11:35:31
2	As 188.979†	260.5	272.6	509.22	µg/L	509.22	ppb	11:35:51
2	B 249.677†	11744.9	12248.4	508.75	µg/L	508.75	ppb	11:35:31
2	Ba 233.527†	48268.0	51058.0	1283.7	µg/L	1283.7	ppb	11:35:31
2	Be 313.107†	764621.7	803930.0	507.21	µg/L	507.21	ppb	11:35:25
2	Cd 226.502†	17369.3	18445.2	479.77	µg/L	479.77	ppb	11:35:31
2	Co 228.616†	10025.6	10660.0	506.19	µg/L	506.19	ppb	11:35:31
2	Cr 267.716†	25290.2	26832.5	559.95	µg/L	559.95	ppb	11:35:31
2	Cu 324.752†	76162.2	77053.0	565.93	µg/L	565.93	ppb	11:35:31
2	Mn 257.610†	1148041.3	1212705.8	3862.5	µg/L	3862.5	ppb	11:35:25
2	Mo 202.031†	4127.5	4367.1	491.55	µg/L	491.55	ppb	11:35:51
2	Ni 231.604†	9474.8	9707.3	528.84	µg/L	528.84	ppb	11:35:31
2	P 214.914†	878.5	721.9	1409.2	µg/L	1409.2	ppb	11:35:51
2	Pb 220.353†	2215.7	2286.0	585.31	µg/L	585.31	ppb	11:35:51

2	S 181.975 Axial†	1030.2	1064.0	5447.9 µg/L	5447.9 ppb	11:35:51
2	Sb 206.836†	440.4	444.6	449.61 µg/L	449.61 ppb	11:35:51
2	Se 196.026†	291.9	294.2	502.02 µg/L	502.02 ppb	11:35:51
2	SiO2†	151767.0	158304.3	30230 µg/L	30230 ppb	11:35:31
2	Si 251.611†	177240.8	186840.1	14148 µg/L	14148 ppb	11:35:25
2	Sn 189.927†	895.8	923.6	471.53 µg/L	471.53 ppb	11:35:51
2	Ti 334.940†	1550486.6	1636799.7	3626.9 µg/L	3626.9 ppb	11:35:25
2	Tl 190.801†	264.8	301.1	491.31 µg/L	491.31 ppb	11:35:51
2	U 409.014†	5817.5	5464.9	493.01 µg/L	493.01 ppb	11:35:25
2	V 292.402†	50161.1	53068.7	611.54 µg/L	611.54 ppb	11:35:31
2	Zn 213.857†	30129.5	31270.5	822.02 µg/L	822.02 ppb	11:35:31
3	Sc RADIAL	108991.3	108991.3	96.9 %		11:34:17
3	Al 396.153Radial†	152401.0	157049.6	79351 µg/L	79351 ppb	11:34:17
3	Ca 317.933Radial†	52629.0	53818.3	21363 µg/L	21363 ppb	11:34:17
3	Fe 238.204 Radial†	20402.8	21044.7	110560 µg/L	110560 ppb	11:34:38
3	K 766.490 Radial†	23837.4	23905.5	12961 µg/L	12961 ppb	11:34:17
3	Mg 279.077 IEC†	3053.8	3131.8	17220 µg/L	17220 ppb	11:34:38
3	Na 589.592 Radial†	21302.5	22688.3	6295.2 µg/L	6295.2 ppb	11:34:17
3	Sr 421.552†	110240.0	113832.6	641.21 µg/L	641.21 ppb	11:34:17
3	Sc 361.383	1940608.6	1940608.6	94.353 %		11:35:59
3	Y 371.029	1246959.8	1246959.8	99.569 %		11:35:59
3	Ag 328.068†	51561.7	54675.8	501.14 µg/L	501.14 ppb	11:36:05
3	As 188.979†	259.6	272.6	509.25 µg/L	509.25 ppb	11:36:25
3	B 249.677†	11687.5	12231.2	508.10 µg/L	508.10 ppb	11:36:05
3	Ba 233.527†	48034.5	50989.8	1282.0 µg/L	1282.0 ppb	11:36:05
3	Be 313.107†	760384.4	802278.0	506.17 µg/L	506.17 ppb	11:35:59
3	Cd 226.502†	17299.3	18435.4	479.53 µg/L	479.53 ppb	11:36:05
3	Co 228.616†	9996.9	10666.9	506.53 µg/L	506.53 ppb	11:36:05
3	Cr 267.716†	25047.8	26669.6	556.56 µg/L	556.56 ppb	11:36:05
3	Cu 324.752†	75858.9	77014.4	565.58 µg/L	565.58 ppb	11:36:05
3	Mn 257.610†	1142238.6	1210818.3	3856.5 µg/L	3856.5 ppb	11:35:59
3	Mo 202.031†	4131.1	4386.2	493.67 µg/L	493.67 ppb	11:36:25
3	Ni 231.604†	9372.4	9633.9	524.84 µg/L	524.84 ppb	11:36:05
3	P 214.914†	891.7	739.1	1446.9 µg/L	1446.9 ppb	11:36:25
3	Pb 220.353†	2202.2	2279.9	583.73 µg/L	583.73 ppb	11:36:25
3	S 181.975 Axial†	1025.6	1062.9	5442.4 µg/L	5442.4 ppb	11:36:25
3	Sb 206.836†	440.5	446.3	451.31 µg/L	451.31 ppb	11:36:25
3	Se 196.026†	291.6	295.0	502.95 µg/L	502.95 ppb	11:36:25
3	SiO2†	151092.0	158152.4	30201 µg/L	30201 ppb	11:36:05
3	Si 251.611†	176897.5	187134.3	14171 µg/L	14171 ppb	11:35:59
3	Sn 189.927†	898.0	929.3	474.21 µg/L	474.21 ppb	11:36:25
3	Ti 334.940†	1542906.5	1634522.7	3621.9 µg/L	3621.9 ppb	11:35:59
3	Tl 190.801†	260.2	297.2	485.44 µg/L	485.44 ppb	11:36:25
3	U 409.014†	5764.5	5430.3	489.83 µg/L	489.83 ppb	11:35:59
3	V 292.402†	49924.1	53003.8	610.79 µg/L	610.79 ppb	11:36:05
3	Zn 213.857†	29982.2	31226.3	820.89 µg/L	820.89 ppb	11:36:05

Mean Data: 1201985647|933564|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944703.0	94.553	%	0.1755				0.19%
Sc RADIAL	108874.1	96.8	%	0.42				0.43%
Y 371.029	1249933.1	99.806	%	0.2108				0.21%
Ag 328.068†	54858.4	502.79	µg/L	2.154	502.79	ppb	2.154	0.43%
Al 396.153Radial†	156695.3	79172	µg/L	729.5	79172	ppb	729.5	0.92%
As 188.979†	274.2	512.33	µg/L	5.352	512.33	ppb	5.352	1.04%
B 249.677†	12285.2	510.46	µg/L	3.545	510.46	ppb	3.545	0.69%
Ba 233.527†	51202.6	1287.3	µg/L	7.83	1287.3	ppb	7.83	0.61%
Be 313.107†	803803.5	507.13	µg/L	0.926	507.13	ppb	0.926	0.18%
Ca 317.933Radial†	53658.6	21300	µg/L	159.4	21300	ppb	159.4	0.75%
Cd 226.502†	18509.0	481.48	µg/L	3.162	481.48	ppb	3.162	0.66%
Co 228.616†	10699.4	508.08	µg/L	2.989	508.08	ppb	2.989	0.59%
Cr 267.716†	26850.3	560.32	µg/L	3.968	560.32	ppb	3.968	0.71%
Cu 324.752†	77236.4	567.17	µg/L	2.444	567.17	ppb	2.444	0.43%
Fe 238.204 Radial†	21064.1	110670	µg/L	237.8	110670	ppb	237.8	0.21%
K 766.490 Radial†	23836.1	12924	µg/L	117.5	12924	ppb	117.5	0.91%
Mg 279.077 IEC†	3136.0	17243	µg/L	23.6	17243	ppb	23.6	0.14%
Mn 257.610†	1212318.5	3861.3	µg/L	4.28	3861.3	ppb	4.28	0.11%
Mo 202.031†	4372.0	492.09	µg/L	1.385	492.09	ppb	1.385	0.28%
Na 589.592 Radial†	22581.9	6265.6	µg/L	67.18	6265.6	ppb	67.18	1.07%

Ni 231.604†	9699.2	528.40	µg/L	3.362	528.40	ppb	3.362	0.64%
P 214.914†	726.3	1418.8	µg/L	24.70	1418.8	ppb	24.70	1.74%
Pb 220.353†	2282.6	584.39	µg/L	0.819	584.39	ppb	0.819	0.14%
S 181.975 Axial†	1065.1	5453.6	µg/L	14.84	5453.6	ppb	14.84	0.27%
Sb 206.836†	447.2	452.23	µg/L	3.188	452.23	ppb	3.188	0.70%
Se 196.026†	290.5	496.42	µg/L	10.520	496.42	ppb	10.520	2.12%
SiO2†	158697.2	30305	µg/L	155.8	30305	ppb	155.8	0.51%
Si 251.611†	187254.1	14180	µg/L	37.1	14180	ppb	37.1	0.26%
Sn 189.927†	925.1	472.19	µg/L	1.782	472.19	ppb	1.782	0.38%
Sr 421.552†	113614.6	639.98	µg/L	5.511	639.98	ppb	5.511	0.86%
Ti 334.940†	1636704.4	3626.7	µg/L	4.74	3626.7	ppb	4.74	0.13%
Tl 190.801†	300.3	490.21	µg/L	4.329	490.21	ppb	4.329	0.88%
U 409.014†	5453.3	491.97	µg/L	1.857	491.97	ppb	1.857	0.38%
V 292.402†	53193.5	612.93	µg/L	3.078	612.93	ppb	3.078	0.50%
Zn 213.857†	31330.4	823.65	µg/L	3.844	823.65	ppb	3.844	0.47%

Sequence No.: 39
Sample ID: 1201985646|933564|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 333
Date Collected: 12/18/2009 11:36:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985646|933564|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106870.7	106870.7	95.0	%			11:37:07
1	Al 396.153Radial†	15712.8	16307.7	8241.4	µg/L	8241.4	ppb	11:37:07
1	Ca 317.933Radial†	7482.5	7379.8	2929.5	µg/L	2929.5	ppb	11:37:27
1	Fe 238.204 Radial†	3440.0	3609.4	18960	µg/L	18960	ppb	11:37:27
1	K 766.490 Radial†	2765.5	2215.8	1201.4	µg/L	1201.4	ppb	11:37:07
1	Mg 279.077 IEC†	322.3	319.4	1743.6	µg/L	1743.6	ppb	11:37:27
1	Na 589.592 Radial†	245.7	962.5	267.06	µg/L	267.06	ppb	11:37:07
1	Sr 421.552†	4348.7	4640.7	26.141	µg/L	26.141	ppb	11:37:07
1	Sc 361.383	1935463.1	1935463.1	94.103	%			11:38:30
1	Y 371.029	1185757.0	1185757.0	94.682	%			11:38:30
1	Ag 328.068†	-317.5	-309.1	-1.1388	µg/L	-1.1388	ppb	11:38:35
1	As 188.979†	3.1	0.8	-0.2812	µg/L	-0.2812	ppb	11:38:56
1	B 249.677†	436.5	308.2	7.7155	µg/L	7.7155	ppb	11:38:35
1	Ba 233.527†	4955.4	5346.6	134.33	µg/L	134.33	ppb	11:38:35
1	Be 313.107†	5644.5	2386.7	1.3298	µg/L	1.3298	ppb	11:38:35
1	Cd 226.502†	-29.6	69.4	0.3909	µg/L	0.3909	ppb	11:38:56
1	Co 228.616†	24.1	97.3	3.6758	µg/L	3.6758	ppb	11:38:56
1	Cr 267.716†	401.7	549.6	11.483	µg/L	11.483	ppb	11:38:35
1	Cu 324.752†	3650.4	494.8	7.5541	µg/L	7.5541	ppb	11:38:35
1	Mn 257.610†	166073.2	176702.4	563.16	µg/L	563.16	ppb	11:38:30
1	Mo 202.031†	29.5	39.3	5.1241	µg/L	5.1241	ppb	11:38:56
1	Ni 231.604†	384.1	108.8	5.9263	µg/L	5.9263	ppb	11:38:56
1	P 214.914†	294.2	106.7	211.69	µg/L	211.69	ppb	11:38:56
1	Pb 220.353†	127.1	80.9	20.981	µg/L	20.981	ppb	11:38:56
1	S 181.975 Axial†	36.4	14.6	71.991	µg/L	71.991	ppb	11:38:56
1	Sb 206.836†	18.8	-0.6	0.9003	µg/L	0.9003	ppb	11:38:56
1	Se 196.026†	0.5	-13.5	-6.7491	µg/L	-6.7491	ppb	11:38:56
1	SiO2†	21352.0	20708.3	3954.5	µg/L	3954.5	ppb	11:38:35
1	Si 251.611†	22990.2	24081.2	1826.6	µg/L	1826.6	ppb	11:38:35
1	Sn 189.927†	7.8	-14.1	-3.6619	µg/L	-3.6619	ppb	11:38:56
1	Ti 334.940†	207006.1	219258.7	485.85	µg/L	485.85	ppb	11:38:30
1	Tl 190.801†	-21.5	-1.4	3.2519	µg/L	3.2519	ppb	11:38:56
1	U 409.014†	915.0	293.2	24.061	µg/L	24.061	ppb	11:38:30
1	V 292.402†	1441.7	1624.0	19.930	µg/L	19.930	ppb	11:38:35
1	Zn 213.857†	2681.2	2299.0	59.496	µg/L	59.496	ppb	11:38:56
2	Sc RADIAL	106434.5	106434.5	94.6	%			11:37:33
2	Al 396.153Radial†	15687.7	16349.0	8262.2	µg/L	8262.2	ppb	11:37:33
2	Ca 317.933Radial†	7504.5	7435.3	2951.5	µg/L	2951.5	ppb	11:37:53
2	Fe 238.204 Radial†	3452.5	3637.4	19107	µg/L	19107	ppb	11:37:53
2	K 766.490 Radial†	2720.4	2180.1	1182.0	µg/L	1182.0	ppb	11:37:33
2	Mg 279.077 IEC†	329.2	328.1	1791.8	µg/L	1791.8	ppb	11:37:53
2	Na 589.592 Radial†	223.1	939.7	260.72	µg/L	260.72	ppb	11:37:33
2	Sr 421.552†	4315.4	4624.3	26.048	µg/L	26.048	ppb	11:37:33
2	Sc 361.383	1927049.5	1927049.5	93.694	%			11:39:02
2	Y 371.029	1179867.5	1179867.5	94.212	%			11:39:02
2	Ag 328.068†	-326.0	-319.6	-1.2198	µg/L	-1.2198	ppb	11:39:07
2	As 188.979†	3.4	1.1	0.2132	µg/L	0.2132	ppb	11:39:28
2	B 249.677†	392.6	263.3	5.6787	µg/L	5.6787	ppb	11:39:07
2	Ba 233.527†	4967.8	5382.8	135.24	µg/L	135.24	ppb	11:39:07
2	Be 313.107†	5629.3	2396.6	1.3364	µg/L	1.3364	ppb	11:39:07
2	Cd 226.502†	-44.0	53.9	-0.0224	µg/L	-0.0224	ppb	11:39:28
2	Co 228.616†	23.4	96.7	3.6473	µg/L	3.6473	ppb	11:39:28
2	Cr 267.716†	361.2	508.2	10.623	µg/L	10.623	ppb	11:39:07
2	Cu 324.752†	3615.7	474.8	7.4443	µg/L	7.4443	ppb	11:39:07
2	Mn 257.610†	165006.4	176334.4	562.01	µg/L	562.01	ppb	11:39:02
2	Mo 202.031†	29.6	39.5	5.1552	µg/L	5.1552	ppb	11:39:28
2	Ni 231.604†	383.2	109.6	5.9683	µg/L	5.9683	ppb	11:39:28
2	P 214.914†	290.9	104.5	206.95	µg/L	206.95	ppb	11:39:28
2	Pb 220.353†	122.8	76.9	19.950	µg/L	19.950	ppb	11:39:28

2	S 181.975 Axial†	41.7	20.5	102.03 µg/L	102.03 ppb	11:39:28
2	Sb 206.836†	23.6	4.6	6.0780 µg/L	6.0780 ppb	11:39:28
2	Se 196.026†	3.8	-10.1	-1.6365 µg/L	-1.6365 ppb	11:39:28
2	SiO2†	21478.9	20942.8	3999.3 µg/L	3999.3 ppb	11:39:07
2	Si 251.611†	22986.7	24184.1	1834.4 µg/L	1834.4 ppb	11:39:07
2	Sn 189.927†	10.4	-11.3	-2.2591 µg/L	-2.2591 ppb	11:39:28
2	Ti 334.940†	205832.8	218966.9	485.20 µg/L	485.20 ppb	11:39:02
2	Tl 190.801†	-24.7	-4.9	-2.0674 µg/L	-2.0674 ppb	11:39:28
2	U 409.014†	1024.4	414.1	35.390 µg/L	35.390 ppb	11:39:02
2	V 292.402†	1457.9	1648.0	20.231 µg/L	20.231 ppb	11:39:07
2	Zn 213.857†	2693.6	2324.7	60.166 µg/L	60.166 ppb	11:39:28
3	Sc RADIAL	107617.4	107617.4	95.7 %		11:37:59
3	Al 396.153Radial†	15901.7	16390.4	8283.2 µg/L	8283.2 ppb	11:37:59
3	Ca 317.933Radial†	7531.5	7376.3	2928.1 µg/L	2928.1 ppb	11:38:19
3	Fe 238.204 Radial†	3458.8	3603.9	18931 µg/L	18931 ppb	11:38:19
3	K 766.490 Radial†	2758.5	2188.3	1186.5 µg/L	1186.5 ppb	11:37:59
3	Mg 279.077 IEC†	329.8	324.8	1774.0 µg/L	1774.0 ppb	11:38:19
3	Na 589.592 Radial†	266.8	982.8	272.69 µg/L	272.69 ppb	11:37:59
3	Sr 421.552†	4337.6	4597.3	25.896 µg/L	25.896 ppb	11:37:59
3	Sc 361.383	1938812.7	1938812.7	94.266 %		11:39:34
3	Y 371.029	1186548.2	1186548.2	94.745 %		11:39:34
3	Ag 328.068†	-352.3	-345.4	-1.4618 µg/L	-1.4618 ppb	11:39:40
3	As 188.979†	4.8	2.6	3.0775 µg/L	3.0775 ppb	11:40:00
3	B 249.677†	380.2	247.6	5.0352 µg/L	5.0352 ppb	11:39:40
3	Ba 233.527†	4946.6	5328.2	133.87 µg/L	133.87 ppb	11:39:40
3	Be 313.107†	5595.8	2324.7	1.2911 µg/L	1.2911 ppb	11:39:40
3	Cd 226.502†	-39.9	58.6	0.1021 µg/L	0.1021 ppb	11:40:00
3	Co 228.616†	30.1	103.6	3.9815 µg/L	3.9815 ppb	11:40:00
3	Cr 267.716†	379.8	525.7	10.987 µg/L	10.987 ppb	11:39:40
3	Cu 324.752†	3610.4	445.7	7.2024 µg/L	7.2024 ppb	11:39:40
3	Mn 257.610†	166046.8	176369.5	562.10 µg/L	562.10 ppb	11:39:34
3	Mo 202.031†	30.4	40.1	5.2186 µg/L	5.2186 ppb	11:40:00
3	Ni 231.604†	381.1	104.9	5.7128 µg/L	5.7128 ppb	11:40:00
3	P 214.914†	291.4	103.2	204.19 µg/L	204.19 ppb	11:40:00
3	Pb 220.353†	108.9	61.4	16.038 µg/L	16.038 ppb	11:40:00
3	S 181.975 Axial†	38.5	16.8	83.220 µg/L	83.220 ppb	11:40:00
3	Sb 206.836†	18.7	-0.8	0.7424 µg/L	0.7424 ppb	11:40:00
3	Se 196.026†	4.9	-8.9	-0.0185 µg/L	-0.0185 ppb	11:40:00
3	SiO2†	21173.5	20479.7	3910.9 µg/L	3910.9 ppb	11:39:40
3	Si 251.611†	22799.1	23836.2	1807.8 µg/L	1807.8 ppb	11:39:40
3	Sn 189.927†	8.6	-13.3	-3.2728 µg/L	-3.2728 ppb	11:40:00
3	Ti 334.940†	206855.4	218718.9	484.65 µg/L	484.65 ppb	11:39:34
3	Tl 190.801†	-20.1	0.1	5.4734 µg/L	5.4734 ppb	11:40:00
3	U 409.014†	836.7	208.4	16.105 µg/L	16.105 ppb	11:39:34
3	V 292.402†	1493.5	1676.3	20.505 µg/L	20.505 ppb	11:39:40
3	Zn 213.857†	2692.8	2306.4	59.697 µg/L	59.697 ppb	11:40:00

Mean Data: 1201985646|933564|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933775.1	94.021	%	0.2947				0.31%
Sc RADIAL	106974.2	95.1	%	0.53				0.56%
Y 371.029	1184057.6	94.546	%	0.2915				0.31%
Ag 328.068†	-324.7	-1.2735	µg/L	0.16806	-1.2735	ppb	0.16806	13.20%
Al 396.153Radial†	16349.0	8262.2	µg/L	20.90	8262.2	ppb	20.90	0.25%
As 188.979†	1.5	1.0032	µg/L	1.81336	1.0032	ppb	1.81336	180.76%
B 249.677†	273.0	6.1432	µg/L	1.39918	6.1432	ppb	1.39918	22.78%
Ba 233.527†	5352.6	134.48	µg/L	0.698	134.48	ppb	0.698	0.52%
Be 313.107†	2369.3	1.3191	µg/L	0.02448	1.3191	ppb	0.02448	1.86%
Ca 317.933Radial†	7397.2	2936.3	µg/L	13.14	2936.3	ppb	13.14	0.45%
Cd 226.502†	60.6	0.1569	µg/L	0.21203	0.1569	ppb	0.21203	135.16%
Co 228.616†	99.2	3.7682	µg/L	0.18523	3.7682	ppb	0.18523	4.92%
Cr 267.716†	527.8	11.031	µg/L	0.4319	11.031	ppb	0.4319	3.92%
Cu 324.752†	471.8	7.4003	µg/L	0.17992	7.4003	ppb	0.17992	2.43%
Fe 238.204 Radial†	3616.9	19000	µg/L	94.2	19000	ppb	94.2	0.50%
K 766.490 Radial†	2194.7	1190.0	µg/L	10.15	1190.0	ppb	10.15	0.85%
Mg 279.077 IEC†	324.1	1769.8	µg/L	24.36	1769.8	ppb	24.36	1.38%
Mn 257.610†	176468.8	562.42	µg/L	0.640	562.42	ppb	0.640	0.11%
Mo 202.031†	39.6	5.1660	µg/L	0.04812	5.1660	ppb	0.04812	0.93%
Na 589.592 Radial†	961.7	266.82	µg/L	5.984	266.82	ppb	5.984	2.24%

Ni 231.604†	107.7	5.8691 µg/L	0.13704	5.8691 ppb	0.13704	2.33%
P 214.914†	104.8	207.61 µg/L	3.791	207.61 ppb	3.791	1.83%
Pb 220.353†	73.1	18.989 µg/L	2.6077	18.989 ppb	2.6077	13.73%
S 181.975 Axial†	17.3	85.746 µg/L	15.1767	85.746 ppb	15.1767	17.70%
Sb 206.836†	1.1	2.5736 µg/L	3.03594	2.5736 ppb	3.03594	117.97%
Se 196.026†	-10.8	-2.8014 µg/L	3.51324	-2.8014 ppb	3.51324	125.41%
SiO2†	20710.2	3954.9 µg/L	44.21	3954.9 ppb	44.21	1.12%
Si 251.611†	24033.8	1822.9 µg/L	13.66	1822.9 ppb	13.66	0.75%
Sn 189.927†	-12.9	-3.0646 µg/L	0.72418	-3.0646 ppb	0.72418	23.63%
Sr 421.552†	4620.8	26.029 µg/L	0.1234	26.029 ppb	0.1234	0.47%
Ti 334.940†	218981.5	485.23 µg/L	0.599	485.23 ppb	0.599	0.12%
Tl 190.801†	-2.1	2.2193 µg/L	3.87498	2.2193 ppb	3.87498	174.60%
U 409.014†	305.2	25.185 µg/L	9.6918	25.185 ppb	9.6918	38.48%
V 292.402†	1649.4	20.222 µg/L	0.2874	20.222 ppb	0.2874	1.42%
Zn 213.857†	2310.0	59.786 µg/L	0.3438	59.786 ppb	0.3438	0.58%

Sequence No.: 40
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 11:40:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108888.0	108888.0	96.8	%			11:40:49
1	Al 396.153Radial†	9963.9	10062.8	5067.0	µg/L	5067.0	ppb	11:40:49
1	Ca 317.933Radial†	12140.4	12045.4	4781.5	µg/L	4781.5	ppb	11:41:09
1	Fe 238.204 Radial†	960.4	980.8	5168.7	µg/L	5168.7	ppb	11:41:09
1	K 766.490 Radial†	9634.3	9257.3	5019.2	µg/L	5019.2	ppb	11:40:49
1	Mg 279.077 IEC†	900.7	910.5	5055.0	µg/L	5055.0	ppb	11:41:09
1	Na 589.592 Radial†	33654.6	35468.8	9841.3	µg/L	9841.3	ppb	11:40:49
1	Sr 421.552†	85084.9	87955.6	495.45	µg/L	495.45	ppb	11:40:49
1	Sc 361.383	1920952.0	1920952.0	93.398	%			11:42:12
1	Y 371.029	1163002.9	1163002.9	92.865	%			11:42:12
1	Ag 328.068†	52234.9	55955.7	503.57	µg/L	503.57	ppb	11:42:17
1	As 188.979†	244.9	259.7	494.02	µg/L	494.02	ppb	11:42:38
1	B 249.677†	10363.2	10940.1	483.94	µg/L	483.94	ppb	11:42:17
1	Ba 233.527†	18310.8	19685.9	495.49	µg/L	495.49	ppb	11:42:17
1	Be 313.107†	734403.2	782706.6	494.94	µg/L	494.94	ppb	11:42:12
1	Cd 226.502†	17237.7	18557.1	490.88	µg/L	490.88	ppb	11:42:17
1	Co 228.616†	9514.4	10258.7	493.43	µg/L	493.43	ppb	11:42:17
1	Cr 267.716†	21998.0	23675.8	494.00	µg/L	494.00	ppb	11:42:17
1	Cu 324.752†	69990.1	71553.4	504.52	µg/L	504.52	ppb	11:42:17
1	Mn 257.610†	148213.7	158913.5	504.97	µg/L	504.97	ppb	11:42:12
1	Mo 202.031†	4073.6	4369.5	487.66	µg/L	487.66	ppb	11:42:38
1	Ni 231.604†	8760.1	9079.9	494.66	µg/L	494.66	ppb	11:42:17
1	P 214.914†	1284.0	1168.7	2481.9	µg/L	2481.9	ppb	11:42:38
1	Pb 220.353†	1875.0	1953.4	495.88	µg/L	495.88	ppb	11:42:38
1	S 181.975 Axial†	205.2	195.7	1003.9	µg/L	1003.9	ppb	11:42:38
1	Sb 206.836†	479.4	492.8	487.55	µg/L	487.55	ppb	11:42:38
1	Se 196.026†	337.0	346.7	507.22	µg/L	507.22	ppb	11:42:38
1	SiO2†	28031.1	28030.9	5352.9	µg/L	5352.9	ppb	11:42:17
1	Si 251.611†	30793.9	32621.1	2451.6	µg/L	2451.6	ppb	11:42:17
1	Sn 189.927†	949.2	993.9	487.22	µg/L	487.22	ppb	11:42:38
1	Ti 334.940†	209861.2	223977.4	496.20	µg/L	496.20	ppb	11:42:12
1	Tl 190.801†	286.5	328.2	497.68	µg/L	497.68	ppb	11:42:38
1	U 409.014†	5724.7	5450.1	510.98	µg/L	510.98	ppb	11:42:17
1	V 292.402†	41104.7	44102.4	501.83	µg/L	501.83	ppb	11:42:17
1	Zn 213.857†	18043.1	18768.4	498.88	µg/L	498.88	ppb	11:42:17
2	Sc RADIAL	107408.5	107408.5	95.5	%			11:41:15
2	Al 396.153Radial†	9803.3	10036.4	5053.6	µg/L	5053.6	ppb	11:41:15
2	Ca 317.933Radial†	12124.8	12201.8	4843.6	µg/L	4843.6	ppb	11:41:35
2	Fe 238.204 Radial†	954.5	988.4	5208.4	µg/L	5208.4	ppb	11:41:35
2	K 766.490 Radial†	9580.2	9337.7	5062.9	µg/L	5062.9	ppb	11:41:15
2	Mg 279.077 IEC†	900.7	923.4	5126.3	µg/L	5126.3	ppb	11:41:35
2	Na 589.592 Radial†	33359.2	35638.2	9888.3	µg/L	9888.3	ppb	11:41:15
2	Sr 421.552†	84212.6	88252.7	497.12	µg/L	497.12	ppb	11:41:15
2	Sc 361.383	1911669.0	1911669.0	92.946	%			11:42:44
2	Y 371.029	1157089.3	1157089.3	92.393	%			11:42:44
2	Ag 328.068†	52356.4	56358.0	507.19	µg/L	507.19	ppb	11:42:50
2	As 188.979†	248.8	265.2	504.46	µg/L	504.46	ppb	11:43:10
2	B 249.677†	10409.6	11043.9	488.53	µg/L	488.53	ppb	11:42:50
2	Ba 233.527†	18351.6	19825.0	498.99	µg/L	498.99	ppb	11:42:50
2	Be 313.107†	728440.3	780109.5	493.30	µg/L	493.30	ppb	11:42:44
2	Cd 226.502†	17199.5	18605.7	492.17	µg/L	492.17	ppb	11:42:50
2	Co 228.616†	9522.5	10316.9	496.24	µg/L	496.24	ppb	11:42:50
2	Cr 267.716†	22025.2	23819.4	497.00	µg/L	497.00	ppb	11:42:50
2	Cu 324.752†	70155.9	72095.7	508.35	µg/L	508.35	ppb	11:42:50
2	Mn 257.610†	147077.6	158461.8	503.54	µg/L	503.54	ppb	11:42:44
2	Mo 202.031†	4061.8	4377.9	488.60	µg/L	488.60	ppb	11:43:10
2	Ni 231.604†	8761.0	9126.5	497.19	µg/L	497.19	ppb	11:42:50
2	P 214.914†	1281.1	1172.4	2489.3	µg/L	2489.3	ppb	11:43:10
2	Pb 220.353†	1884.0	1972.9	500.79	µg/L	500.79	ppb	11:43:10

2	S 181.975 Axial†	203.0	194.3	996.92 µg/L	996.92 ppb	11:43:10
2	Sb 206.836†	476.4	492.1	486.81 µg/L	486.81 ppb	11:43:10
2	Se 196.026†	335.9	347.3	508.11 µg/L	508.11 ppb	11:43:10
2	SiO2†	28047.8	28194.6	5384.2 µg/L	5384.2 ppb	11:42:50
2	Si 251.611†	30777.7	32763.8	2462.5 µg/L	2462.5 ppb	11:42:50
2	Sn 189.927†	947.2	996.6	488.59 µg/L	488.59 ppb	11:43:10
2	Ti 334.940†	208321.1	223411.6	494.94 µg/L	494.94 ppb	11:42:44
2	Tl 190.801†	285.6	328.7	498.44 µg/L	498.44 ppb	11:43:10
2	U 409.014†	5768.8	5527.4	518.23 µg/L	518.23 ppb	11:42:50
2	V 292.402†	41169.5	44385.8	505.05 µg/L	505.05 ppb	11:42:50
2	Zn 213.857†	18025.5	18843.3	500.86 µg/L	500.86 ppb	11:42:50
3	Sc RADIAL	106908.4	106908.4	95.0 %		11:41:41
3	Al 396.153Radial†	9833.6	10116.3	5094.1 µg/L	5094.1 ppb	11:41:41
3	Ca 317.933Radial†	12148.3	12286.0	4877.0 µg/L	4877.0 ppb	11:42:01
3	Fe 238.204 Radial†	958.6	997.4	5255.6 µg/L	5255.6 ppb	11:42:01
3	K 766.490 Radial†	9573.2	9377.3	5084.3 µg/L	5084.3 ppb	11:41:41
3	Mg 279.077 IEC†	901.1	928.2	5152.9 µg/L	5152.9 ppb	11:42:01
3	Na 589.592 Radial†	33452.9	35900.3	9961.0 µg/L	9961.0 ppb	11:41:41
3	Sr 421.552†	84220.1	88673.1	499.49 µg/L	499.49 ppb	11:41:41
3	Sc 361.383	1923502.9	1923502.9	93.522 %		11:43:16
3	Y 371.029	1164197.3	1164197.3	92.960 %		11:43:16
3	Ag 328.068†	52227.5	55873.6	502.84 µg/L	502.84 ppb	11:43:22
3	As 188.979†	250.5	265.4	504.76 µg/L	504.76 ppb	11:43:42
3	B 249.677†	10412.1	10977.6	485.58 µg/L	485.58 ppb	11:43:22
3	Ba 233.527†	18358.0	19710.3	496.11 µg/L	496.11 ppb	11:43:22
3	Be 313.107†	735765.8	783120.9	495.20 µg/L	495.20 ppb	11:43:16
3	Cd 226.502†	17138.1	18426.2	487.42 µg/L	487.42 ppb	11:43:22
3	Co 228.616†	9512.0	10242.6	492.65 µg/L	492.65 ppb	11:43:22
3	Cr 267.716†	21954.0	23597.5	492.37 µg/L	492.37 ppb	11:43:22
3	Cu 324.752†	70113.1	71585.5	504.77 µg/L	504.77 ppb	11:43:22
3	Mn 257.610†	148789.9	159319.2	506.27 µg/L	506.27 ppb	11:43:16
3	Mo 202.031†	4055.9	4344.8	484.91 µg/L	484.91 ppb	11:43:42
3	Ni 231.604†	8767.7	9075.7	494.43 µg/L	494.43 ppb	11:43:22
3	P 214.914†	1278.2	1160.8	2464.4 µg/L	2464.4 ppb	11:43:42
3	Pb 220.353†	1876.2	1952.1	495.53 µg/L	495.53 ppb	11:43:42
3	S 181.975 Axial†	201.9	191.8	983.95 µg/L	983.95 ppb	11:43:42
3	Sb 206.836†	479.6	492.3	487.06 µg/L	487.06 ppb	11:43:42
3	Se 196.026†	338.2	347.5	508.43 µg/L	508.43 ppb	11:43:42
3	SiO2†	28096.6	28061.2	5358.7 µg/L	5358.7 ppb	11:43:22
3	Si 251.611†	30882.4	32672.0	2455.8 µg/L	2455.8 ppb	11:43:22
3	Sn 189.927†	939.2	981.8	481.37 µg/L	481.37 ppb	11:43:42
3	Ti 334.940†	210234.8	224078.9	496.42 µg/L	496.42 ppb	11:43:16
3	Tl 190.801†	281.6	322.5	489.07 µg/L	489.07 ppb	11:43:42
3	U 409.014†	5718.2	5435.1	509.55 µg/L	509.55 ppb	11:43:22
3	V 292.402†	41117.2	44057.3	501.31 µg/L	501.31 ppb	11:43:22
3	Zn 213.857†	18017.9	18715.8	497.46 µg/L	497.46 ppb	11:43:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1918708.0	93.289	%	0.3028				0.32%
Sc RADIAL	107735.0	95.8	%	0.92				0.96%
Y 371.029	1161429.8	92.739	%	0.3039				0.33%
Ag 328.068†	56062.4	504.53	µg/L	2.328	504.53	ppb	2.328	0.46%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	10071.8	5071.6	µg/L	20.66	5071.6	ppb	20.66	0.41%
QC value within limits for Al 396.153Radial Recovery = 101.43%								
As 188.979†	263.4	501.08	µg/L	6.117	501.08	ppb	6.117	1.22%
QC value within limits for As 188.979 Recovery = 100.22%								
B 249.677†	10987.2	486.02	µg/L	2.329	486.02	ppb	2.329	0.48%
QC value within limits for B 249.677 Recovery = 97.20%								
Ba 233.527†	19740.4	496.86	µg/L	1.869	496.86	ppb	1.869	0.38%
QC value within limits for Ba 233.527 Recovery = 99.37%								
Be 313.107†	781979.0	494.48	µg/L	1.032	494.48	ppb	1.032	0.21%
QC value within limits for Be 313.107 Recovery = 98.90%								
Ca 317.933Radial†	12177.8	4834.0	µg/L	48.46	4834.0	ppb	48.46	1.00%
QC value within limits for Ca 317.933Radial Recovery = 96.68%								
Cd 226.502†	18529.7	490.16	µg/L	2.460	490.16	ppb	2.460	0.50%
QC value within limits for Cd 226.502 Recovery = 98.03%								
Co 228.616†	10272.7	494.10	µg/L	1.887	494.10	ppb	1.887	0.38%

```
   QC value within limits for Co 228.616  Recovery = 98.82%
Cr 267.716†            23697.6      494.46 µg/L        2.347      494.46 ppb         2.347   0.47%
   QC value within limits for Cr 267.716  Recovery = 98.89%
Cu 324.752†            71744.9      505.88 µg/L        2.140      505.88 ppb         2.140   0.42%
   QC value within limits for Cu 324.752  Recovery = 101.18%
Fe 238.204 Radial†       988.9      5210.9 µg/L       43.49      5210.9 ppb        43.49   0.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.22%
K 766.490 Radial†       9324.1      5055.5 µg/L       33.16      5055.5 ppb        33.16   0.66%
   QC value within limits for K 766.490 Radial  Recovery = 101.11%
Mg 279.077 IEC†          920.7      5111.4 µg/L       50.63      5111.4 ppb        50.63   0.99%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.23%
Mn 257.610†           158898.2      504.92 µg/L        1.364      504.92 ppb         1.364   0.27%
   QC value within limits for Mn 257.610  Recovery = 100.98%
Mo 202.031†             4364.1      487.06 µg/L        1.918      487.06 ppb         1.918   0.39%
   QC value within limits for Mo 202.031  Recovery = 97.41%
Na 589.592 Radial†     35669.1      9896.8 µg/L       60.32      9896.8 ppb        60.32   0.61%
   QC value within limits for Na 589.592 Radial  Recovery = 98.97%
Ni 231.604†             9094.0      495.43 µg/L        1.536      495.43 ppb         1.536   0.31%
   QC value within limits for Ni 231.604  Recovery = 99.09%
P 214.914†              1167.3      2478.5 µg/L       12.79      2478.5 ppb        12.79   0.52%
   QC value within limits for P 214.914  Recovery = 99.14%
Pb 220.353†             1959.5      497.40 µg/L        2.941      497.40 ppb         2.941   0.59%
   QC value within limits for Pb 220.353  Recovery = 99.48%
S 181.975 Axial†         193.9      994.93 µg/L       10.135      994.93 ppb        10.135   1.02%
   QC value within limits for S 181.975 Axial  Recovery = 99.49%
Sb 206.836†              492.4      487.14 µg/L        0.377      487.14 ppb         0.377   0.08%
   QC value within limits for Sb 206.836  Recovery = 97.43%
Se 196.026†              347.2      507.92 µg/L        0.626      507.92 ppb         0.626   0.12%
   QC value within limits for Se 196.026  Recovery = 101.58%
SiO2†                  28095.6      5365.2 µg/L       16.63      5365.2 ppb        16.63   0.31%
   QC value within limits for SiO2  Recovery = 100.33%
Si 251.611†            32685.6      2456.6 µg/L        5.50      2456.6 ppb         5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 98.27%
Sn 189.927†              990.8      485.73 µg/L        3.833      485.73 ppb         3.833   0.79%
   QC value within limits for Sn 189.927  Recovery = 97.15%
Sr 421.552†            88293.8      497.35 µg/L        2.031      497.35 ppb         2.031   0.41%
   QC value within limits for Sr 421.552  Recovery = 99.47%
Ti 334.940†           223822.7      495.85 µg/L        0.797      495.85 ppb         0.797   0.16%
   QC value within limits for Ti 334.940  Recovery = 99.17%
Tl 190.801†              326.5      495.06 µg/L        5.203      495.06 ppb         5.203   1.05%
   QC value within limits for Tl 190.801  Recovery = 99.01%
U 409.014†              5470.9      512.92 µg/L        4.653      512.92 ppb         4.653   0.91%
   QC value within limits for U 409.014  Recovery = 102.58%
V 292.402†             44181.8      502.73 µg/L        2.025      502.73 ppb         2.025   0.40%
   QC value within limits for V 292.402  Recovery = 100.55%
Zn 213.857†            18775.9      499.07 µg/L        1.709      499.07 ppb         1.709   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.81%
All analyte(s) passed QC.
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Sequence No.: 41
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 11:43:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106778.8	106778.8	94.9	%			11:44:24
1	Al 396.153Radial†	212.5	-6.0	-3.0389	µg/L	-3.0389	ppb	11:44:24
1	Ca 317.933Radial†	408.0	-65.7	-26.076	µg/L	-26.076	ppb	11:44:45
1	Fe 238.204 Radial†	10.0	-0.7	-3.6746	µg/L	-3.6746	ppb	11:44:45
1	K 766.490 Radial†	687.2	29.1	15.772	µg/L	15.772	ppb	11:44:24
1	Mg 279.077 IEC†	15.1	-3.9	-21.733	µg/L	-21.733	ppb	11:44:45
1	Na 589.592 Radial†	-676.3	-8.5	-2.3566	µg/L	-2.3566	ppb	11:44:24
1	Sr 421.552†	-55.6	5.2	0.0295	µg/L	0.0295	ppb	11:44:24
1	Sc 361.383	1938965.8	1938965.8	94.274	%			11:45:47
1	Y 371.029	1180584.7	1180584.7	94.269	%			11:45:47
1	Ag 328.068†	-123.6	-102.8	-0.9164	µg/L	-0.9164	ppb	11:45:52
1	As 188.979†	3.2	1.0	1.8235	µg/L	1.8235	ppb	11:46:13
1	B 249.677†	136.6	-10.8	-0.4768	µg/L	-0.4768	ppb	11:46:13
1	Ba 233.527†	-75.8	0.2	0.0067	µg/L	0.0067	ppb	11:46:13
1	Be 313.107†	3520.6	123.0	0.0777	µg/L	0.0777	ppb	11:45:52
1	Cd 226.502†	-89.5	6.0	0.1584	µg/L	0.1584	ppb	11:46:13
1	Co 228.616†	-73.1	-5.9	-0.2818	µg/L	-0.2818	ppb	11:46:13
1	Cr 267.716†	-93.2	23.9	0.4981	µg/L	0.4981	ppb	11:46:13
1	Cu 324.752†	3144.0	-49.4	-0.3483	µg/L	-0.3483	ppb	11:45:52
1	Mn 257.610†	-159.5	53.5	0.1693	µg/L	0.1693	ppb	11:46:13
1	Mo 202.031†	-3.5	4.2	0.4636	µg/L	0.4636	ppb	11:46:13
1	Ni 231.604†	275.9	-6.8	-0.3694	µg/L	-0.3694	ppb	11:46:13
1	P 214.914†	218.5	25.8	56.020	µg/L	56.020	ppb	11:46:13
1	Pb 220.353†	75.5	25.9	6.5780	µg/L	6.5780	ppb	11:46:13
1	S 181.975 Axial†	24.8	2.3	11.879	µg/L	11.879	ppb	11:46:13
1	Sb 206.836†	17.6	-1.9	-1.8544	µg/L	-1.8544	ppb	11:46:13
1	Se 196.026†	7.4	-6.2	-9.0382	µg/L	-9.0382	ppb	11:46:13
1	SiO2†	2055.5	198.7	37.950	µg/L	37.950	ppb	11:45:52
1	Si 251.611†	403.4	78.3	5.9948	µg/L	5.9948	ppb	11:46:13
1	Sn 189.927†	20.0	-1.3	-0.6251	µg/L	-0.6251	ppb	11:46:13
1	Ti 334.940†	781.1	109.7	0.2446	µg/L	0.2446	ppb	11:45:52
1	Tl 190.801†	-17.7	2.7	4.0245	µg/L	4.0245	ppb	11:46:13
1	U 409.014†	641.0	0.7	0.0694	µg/L	0.0694	ppb	11:45:52
1	V 292.402†	-64.1	23.9	0.2730	µg/L	0.2730	ppb	11:45:52
1	Zn 213.857†	513.8	-5.1	-0.1340	µg/L	-0.1340	ppb	11:46:13
2	Sc RADIAL	106289.1	106289.1	94.5	%			11:44:50
2	Al 396.153Radial†	186.4	-32.6	-16.511	µg/L	-16.511	ppb	11:44:50
2	Ca 317.933Radial†	405.8	-66.0	-26.210	µg/L	-26.210	ppb	11:45:10
2	Fe 238.204 Radial†	11.3	0.7	3.8481	µg/L	3.8481	ppb	11:45:10
2	K 766.490 Radial†	633.1	-24.9	-13.495	µg/L	-13.495	ppb	11:44:50
2	Mg 279.077 IEC†	11.4	-7.7	-42.919	µg/L	-42.919	ppb	11:45:10
2	Na 589.592 Radial†	-667.3	-2.2	-0.6135	µg/L	-0.6135	ppb	11:44:50
2	Sr 421.552†	-47.9	13.1	0.0739	µg/L	0.0739	ppb	11:44:50
2	Sc 361.383	1953242.1	1953242.1	94.968	%			11:46:19
2	Y 371.029	1189074.3	1189074.3	94.947	%			11:46:19
2	Ag 328.068†	-180.1	-161.3	-1.4372	µg/L	-1.4372	ppb	11:46:24
2	As 188.979†	0.7	-1.7	-3.2383	µg/L	-3.2383	ppb	11:46:45
2	B 249.677†	152.6	4.9	0.2184	µg/L	0.2184	ppb	11:46:45
2	Ba 233.527†	-80.9	-4.5	-0.1129	µg/L	-0.1129	ppb	11:46:45
2	Be 313.107†	3593.7	172.7	0.1091	µg/L	0.1091	ppb	11:46:24
2	Cd 226.502†	-92.6	3.4	0.0910	µg/L	0.0910	ppb	11:46:45
2	Co 228.616†	-79.6	-12.1	-0.5777	µg/L	-0.5777	ppb	11:46:45
2	Cr 267.716†	-97.5	20.1	0.4189	µg/L	0.4189	ppb	11:46:45
2	Cu 324.752†	3141.2	-76.6	-0.5382	µg/L	-0.5382	ppb	11:46:24
2	Mn 257.610†	-149.5	65.2	0.2074	µg/L	0.2074	ppb	11:46:45
2	Mo 202.031†	3.2	11.3	1.2584	µg/L	1.2584	ppb	11:46:45
2	Ni 231.604†	263.6	-21.8	-1.1884	µg/L	-1.1884	ppb	11:46:45
2	P 214.914†	217.4	22.9	49.806	µg/L	49.806	ppb	11:46:45
2	Pb 220.353†	67.0	16.4	4.1599	µg/L	4.1599	ppb	11:46:45

2	S 181.975 Axial†	25.9	3.3	16.741 µg/L	16.741 ppb	11:46:45
2	Sb 206.836†	10.0	-10.0	-9.9184 µg/L	-9.9184 ppb	11:46:45
2	Se 196.026†	13.5	0.1	0.1722 µg/L	0.1722 ppb	11:46:45
2	SiO2†	2028.2	154.0	29.401 µg/L	29.401 ppb	11:46:24
2	Si 251.611†	407.9	79.8	6.1171 µg/L	6.1171 ppb	11:46:45
2	Sn 189.927†	20.0	-1.4	-0.7002 µg/L	-0.7002 ppb	11:46:45
2	Ti 334.940†	771.0	93.0	0.2077 µg/L	0.2077 ppb	11:46:24
2	Tl 190.801†	-19.2	1.2	1.7452 µg/L	1.7452 ppb	11:46:45
2	U 409.014†	697.0	54.7	5.1361 µg/L	5.1361 ppb	11:46:24
2	V 292.402†	-46.6	42.9	0.5009 µg/L	0.5009 ppb	11:46:24
2	Zn 213.857†	509.9	-13.3	-0.3474 µg/L	-0.3474 ppb	11:46:45
3	Sc RADIAL	106583.3	106583.3	94.8 %		11:45:16
3	Al 396.153Radial†	184.9	-34.7	-17.561 µg/L	-17.561 ppb	11:45:16
3	Ca 317.933Radial†	409.9	-62.9	-24.973 µg/L	-24.973 ppb	11:45:36
3	Fe 238.204 Radial†	13.0	2.5	13.246 µg/L	13.246 ppb	11:45:36
3	K 766.490 Radial†	706.0	50.2	27.203 µg/L	27.203 ppb	11:45:16
3	Mg 279.077 IEC†	15.0	-4.0	-22.192 µg/L	-22.192 ppb	11:45:36
3	Na 589.592 Radial†	-693.5	-27.9	-7.7491 µg/L	-7.7491 ppb	11:45:16
3	Sr 421.552†	-44.0	17.3	0.0975 µg/L	0.0975 ppb	11:45:16
3	Sc 361.383	1947815.1	1947815.1	94.704 %		11:46:51
3	Y 371.029	1184783.6	1184783.6	94.604 %		11:46:51
3	Ag 328.068†	-142.7	-122.4	-1.0894 µg/L	-1.0894 ppb	11:46:56
3	As 188.979†	1.8	-0.6	-1.1967 µg/L	-1.1967 ppb	11:47:17
3	B 249.677†	131.9	-16.4	-0.7328 µg/L	-0.7328 ppb	11:47:17
3	Ba 233.527†	-85.4	-9.5	-0.2369 µg/L	-0.2369 ppb	11:47:17
3	Be 313.107†	3542.5	129.1	0.0816 µg/L	0.0816 ppb	11:46:56
3	Cd 226.502†	-96.1	-0.6	-0.0177 µg/L	-0.0177 ppb	11:47:17
3	Co 228.616†	-72.2	-4.5	-0.2165 µg/L	-0.2165 ppb	11:47:17
3	Cr 267.716†	-107.5	9.2	0.1932 µg/L	0.1932 ppb	11:47:17
3	Cu 324.752†	3181.2	-25.2	-0.1746 µg/L	-0.1746 ppb	11:46:56
3	Mn 257.610†	-161.5	52.1	0.1670 µg/L	0.1670 ppb	11:47:17
3	Mo 202.031†	-4.8	2.9	0.3225 µg/L	0.3225 ppb	11:47:17
3	Ni 231.604†	265.5	-19.0	-1.0352 µg/L	-1.0352 ppb	11:47:17
3	P 214.914†	207.0	12.6	27.342 µg/L	27.342 ppb	11:47:17
3	Pb 220.353†	61.2	10.5	2.6672 µg/L	2.6672 ppb	11:47:17
3	S 181.975 Axial†	25.1	2.4	12.391 µg/L	12.391 ppb	11:47:17
3	Sb 206.836†	18.5	-1.0	-0.9708 µg/L	-0.9708 ppb	11:47:17
3	Se 196.026†	14.0	0.7	1.0699 µg/L	1.0699 ppb	11:47:17
3	SiO2†	2045.6	178.3	34.052 µg/L	34.052 ppb	11:46:56
3	Si 251.611†	400.7	73.5	5.6423 µg/L	5.6423 ppb	11:47:17
3	Sn 189.927†	19.2	-2.2	-1.0677 µg/L	-1.0677 ppb	11:47:17
3	Ti 334.940†	780.5	105.2	0.2347 µg/L	0.2347 ppb	11:46:56
3	Tl 190.801†	-15.7	4.9	7.3795 µg/L	7.3795 ppb	11:47:17
3	U 409.014†	657.0	14.5	1.3604 µg/L	1.3604 ppb	11:46:56
3	V 292.402†	-57.2	31.6	0.3614 µg/L	0.3614 ppb	11:46:56
3	Zn 213.857†	517.4	-3.8	-0.0963 µg/L	-0.0963 ppb	11:47:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1946674.3	94.648	%	0.3504				0.37%
Sc RADIAL	106550.4	94.7	%	0.22				0.23%
Y 371.029	1184814.2	94.607	%	0.3390				0.36%
Ag 328.068†	-128.8	-1.1477	µg/L	0.26525	-1.1477	ppb	0.26525	23.11%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-24.4	-12.370	µg/L	8.0984	-12.370	ppb	8.0984	65.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.8705	µg/L	2.54663	-0.8705	ppb	2.54663	292.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-7.4	-0.3304	µg/L	0.49224	-0.3304	ppb	0.49224	148.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.6	-0.1144	µg/L	0.12179	-0.1144	ppb	0.12179	106.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	141.6	0.0895	µg/L	0.01714	0.0895	ppb	0.01714	19.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-64.9	-25.753	µg/L	0.6785	-25.753	ppb	0.6785	2.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.9	0.0772	µg/L	0.08882	0.0772	ppb	0.08882	115.02%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-7.5	-0.3587	µg/L	0.19250	-0.3587	ppb	0.19250	53.67%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.7      0.3701 µg/L       0.15818      0.3701 ppb        0.15818  42.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -50.4     -0.3537 µg/L       0.18189     -0.3537 ppb        0.18189  51.43%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.9      4.4732 µg/L       8.47766      4.4732 ppb        8.47766 189.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          18.1      9.8264 µg/L      20.99029      9.8264 ppb       20.99029 213.61%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -5.2     -28.948 µg/L       12.1012     -28.948 ppb        12.1012  41.80%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                56.9      0.1812 µg/L       0.02268      0.1812 ppb        0.02268  12.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.1      0.6815 µg/L       0.50455      0.6815 ppb        0.50455  74.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -12.9     -3.5731 µg/L       3.72011     -3.5731 ppb        3.72011 104.12%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -15.9     -0.8644 µg/L       0.43542     -0.8644 ppb        0.43542  50.38%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 20.4      44.389 µg/L       15.0867      44.389 ppb        15.0867  33.99%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                17.6      4.4684 µg/L       1.97354      4.4684 ppb        1.97354  44.17%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.7      13.670 µg/L        2.6714      13.670 ppb         2.6714  19.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.3     -4.2478 µg/L       4.93065     -4.2478 ppb        4.93065 116.07%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -2.5987 µg/L       5.59478     -2.5987 ppb        5.59478 215.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     177.0      33.801 µg/L        4.2797      33.801 ppb         4.2797  12.66%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                77.2      5.9181 µg/L       0.24654      5.9181 ppb        0.24654   4.17%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.6     -0.7977 µg/L       0.23685     -0.7977 ppb        0.23685  29.69%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.9      0.0670 µg/L       0.03452      0.0670 ppb        0.03452  51.51%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               102.7      0.2290 µg/L       0.01911      0.2290 ppb        0.01911   8.35%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      4.3831 µg/L       2.83423      4.3831 ppb        2.83423  64.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 23.3      2.1886 µg/L       2.63294      2.1886 ppb        2.63294 120.30%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 32.8      0.3784 µg/L       0.11489      0.3784 ppb        0.11489  30.36%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -7.4     -0.1925 µg/L       0.13542     -0.1925 ppb        0.13542  70.33%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 42
Sample ID: 241832001|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 334
Date Collected: 12/18/2009 11:47:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832001|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106919.8	106919.8	95.1	%			11:48:05
1	Al 396.153Radial†	7137.3	7278.7	3677.7	µg/L	3677.7	ppb	11:48:05
1	Ca 317.933Radial†	4946.1	4707.9	1868.8	µg/L	1868.8	ppb	11:48:25
1	Fe 238.204 Radial†	12657.1	13304.2	69887	µg/L	69887	ppb	11:48:05
1	K 766.490 Radial†	2722.5	2169.2	1176.1	µg/L	1176.1	ppb	11:48:05
1	Mg 279.077 IEC†	182.7	172.4	853.76	µg/L	853.76	ppb	11:48:25
1	Na 589.592 Radial†	1519.0	2301.9	638.68	µg/L	638.68	ppb	11:48:05
1	Sr 421.552†	2728.1	2933.8	16.526	µg/L	16.526	ppb	11:48:05
1	Sc 361.383	1949002.3	1949002.3	94.762	%			11:49:28
1	Y 371.029	1252849.8	1252849.8	100.04	%			11:49:28
1	Ag 328.068†	-827.7	-845.1	-1.8922	µg/L	-1.8922	ppb	11:49:34
1	As 188.979†	15.8	14.2	20.338	µg/L	20.338	ppb	11:49:54
1	B 249.677†	918.0	813.1	14.111	µg/L	14.111	ppb	11:49:34
1	Ba 233.527†	5355.4	5732.2	144.02	µg/L	144.02	ppb	11:49:34
1	Be 313.107†	9754.3	6682.1	3.7083	µg/L	3.7083	ppb	11:49:34
1	Cd 226.502†	117.0	224.4	0.5168	µg/L	0.5168	ppb	11:49:34
1	Co 228.616†	65.3	140.6	3.8851	µg/L	3.8851	ppb	11:49:54
1	Cr 267.716†	100.5	228.8	4.8118	µg/L	4.8118	ppb	11:49:34
1	Cu 324.752†	2971.3	-248.8	13.261	µg/L	13.261	ppb	11:49:34
1	Mn 257.610†	975326.9	1029466.1	3275.8	µg/L	3275.8	ppb	11:49:28
1	Mo 202.031†	172.3	189.7	23.909	µg/L	23.909	ppb	11:49:54
1	Ni 231.604†	449.2	174.6	9.5131	µg/L	9.5131	ppb	11:49:54
1	P 214.914†	473.6	293.8	556.80	µg/L	556.80	ppb	11:49:54
1	Pb 220.353†	273.8	234.8	59.050	µg/L	59.050	ppb	11:49:54
1	S 181.975 Axial†	29.5	7.1	25.948	µg/L	25.948	ppb	11:49:54
1	Sb 206.836†	18.2	-1.3	3.6829	µg/L	3.6829	ppb	11:49:54
1	Se 196.026†	-23.4	-38.8	-7.7237	µg/L	-7.7237	ppb	11:49:54
1	SiO2†	39655.0	39865.4	7612.9	µg/L	7612.9	ppb	11:49:34
1	Si 251.611†	44329.6	46430.6	3505.1	µg/L	3505.1	ppb	11:49:34
1	Sn 189.927†	3.7	-18.6	-0.2711	µg/L	-0.2711	ppb	11:49:54
1	Ti 334.940†	599515.0	631937.6	1400.7	µg/L	1400.7	ppb	11:49:28
1	Tl 190.801†	-30.1	-10.3	7.1749	µg/L	7.1749	ppb	11:49:54
1	U 409.014†	546.0	-103.0	-22.675	µg/L	-22.675	ppb	11:49:28
1	V 292.402†	1651.2	1834.4	26.513	µg/L	26.513	ppb	11:49:34
1	Zn 213.857†	11420.7	11501.9	300.66	µg/L	300.66	ppb	11:49:34
2	Sc RADIAL	107310.8	107310.8	95.4	%			11:48:31
2	Al 396.153Radial†	7245.6	7364.8	3721.2	µg/L	3721.2	ppb	11:48:31
2	Ca 317.933Radial†	4980.5	4724.9	1875.6	µg/L	1875.6	ppb	11:48:51
2	Fe 238.204 Radial†	12822.1	13428.5	70540	µg/L	70540	ppb	11:48:31
2	K 766.490 Radial†	2698.7	2133.8	1157.0	µg/L	1157.0	ppb	11:48:31
2	Mg 279.077 IEC†	181.1	170.0	839.51	µg/L	839.51	ppb	11:48:51
2	Na 589.592 Radial†	1570.4	2349.9	652.02	µg/L	652.02	ppb	11:48:31
2	Sr 421.552†	2715.4	2909.9	16.391	µg/L	16.391	ppb	11:48:31
2	Sc 361.383	1931779.7	1931779.7	93.924	%			11:50:00
2	Y 371.029	1243090.2	1243090.2	99.260	%			11:50:00
2	Ag 328.068†	-795.1	-818.2	-1.5978	µg/L	-1.5978	ppb	11:50:06
2	As 188.979†	15.8	14.3	20.530	µg/L	20.530	ppb	11:50:26
2	B 249.677†	951.6	857.5	15.877	µg/L	15.877	ppb	11:50:06
2	Ba 233.527†	5339.5	5765.6	144.86	µg/L	144.86	ppb	11:50:06
2	Be 313.107†	9596.1	6605.4	3.6570	µg/L	3.6570	ppb	11:50:06
2	Cd 226.502†	100.6	208.0	0.0378	µg/L	0.0378	ppb	11:50:06
2	Co 228.616†	60.8	136.4	3.6672	µg/L	3.6672	ppb	11:50:26
2	Cr 267.716†	100.8	230.1	4.8389	µg/L	4.8389	ppb	11:50:06
2	Cu 324.752†	2925.7	-269.3	13.257	µg/L	13.257	ppb	11:50:06
2	Mn 257.610†	971246.3	1034297.7	3291.3	µg/L	3291.3	ppb	11:50:00
2	Mo 202.031†	165.6	184.2	23.318	µg/L	23.318	ppb	11:50:26
2	Ni 231.604†	466.0	196.8	10.721	µg/L	10.721	ppb	11:50:26
2	P 214.914†	483.9	309.2	589.67	µg/L	589.67	ppb	11:50:26
2	Pb 220.353†	274.0	237.6	59.749	µg/L	59.749	ppb	11:50:26

2	S 181.975 Axial†	30.3	8.2	31.479 µg/L	31.479 ppb	11:50:26
2	Sb 206.836†	16.7	-2.8	2.2729 µg/L	2.2729 ppb	11:50:26
2	Se 196.026†	-16.2	-31.3	3.6855 µg/L	3.6855 ppb	11:50:26
2	SiO2†	39701.9	40288.5	7693.6 µg/L	7693.6 ppb	11:50:06
2	Si 251.611†	44357.9	46877.7	3539.1 µg/L	3539.1 ppb	11:50:06
2	Sn 189.927†	5.3	-16.8	0.6613 µg/L	0.6613 ppb	11:50:26
2	Ti 334.940†	597465.2	635395.6	1408.3 µg/L	1408.3 ppb	11:50:00
2	Tl 190.801†	-34.3	-15.1	0.1023 µg/L	0.1023 ppb	11:50:26
2	U 409.014†	579.9	-61.7	-18.924 µg/L	-18.924 ppb	11:50:00
2	V 292.402†	1665.2	1864.9	26.912 µg/L	26.912 ppb	11:50:06
2	Zn 213.857†	11394.0	11580.9	302.70 µg/L	302.70 ppb	11:50:06
3	Sc RADIAL	108146.3	108146.3	96.1 %		11:48:57
3	Al 396.153Radial†	7344.8	7409.4	3743.7 µg/L	3743.7 ppb	11:48:57
3	Ca 317.933Radial†	4943.2	4645.9	1844.2 µg/L	1844.2 ppb	11:49:17
3	Fe 238.204 Radial†	12951.6	13459.4	70702 µg/L	70702 ppb	11:48:57
3	K 766.490 Radial†	2687.7	2100.6	1138.9 µg/L	1138.9 ppb	11:48:57
3	Mg 279.077 IEC†	181.6	169.1	833.93 µg/L	833.93 ppb	11:49:17
3	Na 589.592 Radial†	1620.7	2389.6	663.02 µg/L	663.02 ppb	11:48:57
3	Sr 421.552†	2772.2	2947.0	16.600 µg/L	16.600 ppb	11:48:57
3	Sc 361.383	1934580.4	1934580.4	94.060 %		11:50:33
3	Y 371.029	1241222.9	1241222.9	99.111 %		11:50:33
3	Ag 328.068†	-794.4	-816.2	-1.5689 µg/L	-1.5689 ppb	11:50:38
3	As 188.979†	9.6	7.7	7.8967 µg/L	7.8967 ppb	11:50:59
3	B 249.677†	885.0	785.2	12.618 µg/L	12.618 ppb	11:50:38
3	Ba 233.527†	5305.1	5720.8	143.73 µg/L	143.73 ppb	11:50:38
3	Be 313.107†	9650.8	6648.7	3.6890 µg/L	3.6890 ppb	11:50:38
3	Cd 226.502†	82.2	188.3	-0.4966 µg/L	-0.4966 ppb	11:50:38
3	Co 228.616†	58.4	133.9	3.5681 µg/L	3.5681 ppb	11:50:59
3	Cr 267.716†	130.8	261.9	5.4998 µg/L	5.4998 ppb	11:50:38
3	Cu 324.752†	2882.9	-319.3	12.940 µg/L	12.940 ppb	11:50:38
3	Mn 257.610†	962588.4	1023595.9	3257.3 µg/L	3257.3 ppb	11:50:33
3	Mo 202.031†	164.9	183.3	23.223 µg/L	23.223 ppb	11:50:59
3	Ni 231.604†	456.7	186.2	10.143 µg/L	10.143 ppb	11:50:59
3	P 214.914†	482.4	306.9	584.44 µg/L	584.44 ppb	11:50:59
3	Pb 220.353†	252.4	214.2	53.809 µg/L	53.809 ppb	11:50:59
3	S 181.975 Axial†	31.1	9.0	35.536 µg/L	35.536 ppb	11:50:59
3	Sb 206.836†	17.1	-2.3	2.6744 µg/L	2.6744 ppb	11:50:59
3	Se 196.026†	-15.4	-30.4	5.0803 µg/L	5.0803 ppb	11:50:59
3	SiO2†	39494.2	40006.5	7639.8 µg/L	7639.8 ppb	11:50:38
3	Si 251.611†	44061.3	46494.0	3510.0 µg/L	3510.0 ppb	11:50:38
3	Sn 189.927†	11.3	-10.4	3.8064 µg/L	3.8064 ppb	11:50:59
3	Ti 334.940†	593124.5	629859.9	1396.0 µg/L	1396.0 ppb	11:50:33
3	Tl 190.801†	-39.6	-20.7	-8.5386 µg/L	-8.5386 ppb	11:50:59
3	U 409.014†	568.3	-75.0	-20.202 µg/L	-20.202 ppb	11:50:33
3	V 292.402†	1652.8	1849.2	26.746 µg/L	26.746 ppb	11:50:38
3	Zn 213.857†	11346.4	11512.7	300.86 µg/L	300.86 ppb	11:50:38

Mean Data: 241832001|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1938454.1	94.249	%	0.4493				0.48%
Sc RADIAL	107459.0	95.5	%	0.56				0.58%
Y 371.029	1245721.0	99.470	%	0.4986				0.50%
Ag 328.068†	-826.5	-1.6863	µg/L	0.17891	-1.6863	ppb	0.17891	10.61%
Al 396.153Radial†	7351.0	3714.2	µg/L	33.59	3714.2	ppb	33.59	0.90%
As 188.979†	12.1	16.255	µg/L	7.2390	16.255	ppb	7.2390	44.53%
B 249.677†	818.6	14.202	µg/L	1.6315	14.202	ppb	1.6315	11.49%
Ba 233.527†	5739.5	144.20	µg/L	0.585	144.20	ppb	0.585	0.41%
Be 313.107†	6645.4	3.6848	µg/L	0.02593	3.6848	ppb	0.02593	0.70%
Ca 317.933Radial†	4692.9	1862.9	µg/L	16.52	1862.9	ppb	16.52	0.89%
Cd 226.502†	206.9	0.0193	µg/L	0.50696	0.0193	ppb	0.50696	>999.9%
Co 228.616†	137.0	3.7068	µg/L	0.16217	3.7068	ppb	0.16217	4.38%
Cr 267.716†	240.3	5.0502	µg/L	0.38964	5.0502	ppb	0.38964	7.72%
Cu 324.752†	-279.1	13.153	µg/L	0.1843	13.153	ppb	0.1843	1.40%
Fe 238.204 Radial†	13397.4	70376	µg/L	431.8	70376	ppb	431.8	0.61%
K 766.490 Radial†	2134.6	1157.3	µg/L	18.61	1157.3	ppb	18.61	1.61%
Mg 279.077 IEC†	170.5	842.40	µg/L	10.225	842.40	ppb	10.225	1.21%
Mn 257.610†	1029119.9	3274.8	µg/L	16.99	3274.8	ppb	16.99	0.52%
Mo 202.031†	185.7	23.484	µg/L	0.3719	23.484	ppb	0.3719	1.58%
Na 589.592 Radial†	2347.1	651.24	µg/L	12.187	651.24	ppb	12.187	1.87%

Ni 231.604†	185.9	10.126	µg/L	0.6043	10.126	ppb	0.6043	5.97%
P 214.914†	303.3	576.97	µg/L	17.665	576.97	ppb	17.665	3.06%
Pb 220.353†	228.9	57.536	µg/L	3.2462	57.536	ppb	3.2462	5.64%
S 181.975 Axial†	8.1	30.987	µg/L	4.8128	30.987	ppb	4.8128	15.53%
Sb 206.836†	-2.2	2.8767	µg/L	0.72642	2.8767	ppb	0.72642	25.25%
Se 196.026†	-33.5	0.3474	µg/L	7.02448	0.3474	ppb	7.02448	>999.9%
SiO2†	40053.5	7648.8	µg/L	41.13	7648.8	ppb	41.13	0.54%
Si 251.611†	46600.8	3518.0	µg/L	18.35	3518.0	ppb	18.35	0.52%
Sn 189.927†	-15.3	1.3989	µg/L	2.13648	1.3989	ppb	2.13648	152.73%
Sr 421.552†	2930.3	16.506	µg/L	0.1059	16.506	ppb	0.1059	0.64%
Ti 334.940†	632397.7	1401.7	µg/L	6.20	1401.7	ppb	6.20	0.44%
Tl 190.801†	-15.3	-0.4205	µg/L	7.86980	-0.4205	ppb	7.86980	>999.9%
U 409.014†	-79.9	-20.600	µg/L	1.9069	-20.600	ppb	1.9069	9.26%
V 292.402†	1849.5	26.724	µg/L	0.2001	26.724	ppb	0.2001	0.75%
Zn 213.857†	11531.8	301.40	µg/L	1.125	301.40	ppb	1.125	0.37%

Sequence No.: 43
Sample ID: 241832002|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 335
Date Collected: 12/18/2009 11:51:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832002|933564|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108624.2	108624.2	96.6	%			11:51:40
1	Al 396.153Radial†	38013.3	39132.8	19774	µg/L	19774	ppb	11:51:40
1	Ca 317.933Radial†	12640.2	12593.5	4999.0	µg/L	4999.0	ppb	11:52:00
1	Fe 238.204 Radial†	18943.8	19605.1	102990	µg/L	102990	ppb	11:52:00
1	K 766.490 Radial†	21718.4	21794.5	11817	µg/L	11817	ppb	11:51:40
1	Mg 279.077 IEC†	2877.9	2960.2	16269	µg/L	16269	ppb	11:52:00
1	Na 589.592 Radial†	6331.9	7260.6	2014.6	µg/L	2014.6	ppb	11:51:40
1	Sr 421.552†	31124.5	32293.1	181.90	µg/L	181.90	ppb	11:51:40
1	Sc 361.383	1959525.8	1959525.8	95.273	%			11:53:04
1	Y 371.029	1315209.5	1315209.5	105.02	%			11:53:04
1	Ag 328.068†	-1613.1	-1664.8	-6.3567	µg/L	-6.3567	ppb	11:53:10
1	As 188.979†	26.1	24.9	36.918	µg/L	36.918	ppb	11:53:30
1	B 249.677†	1424.3	1339.2	27.055	µg/L	27.055	ppb	11:53:10
1	Ba 233.527†	19945.4	21015.6	527.97	µg/L	527.97	ppb	11:53:10
1	Be 313.107†	13564.6	10626.1	5.9926	µg/L	5.9926	ppb	11:53:10
1	Cd 226.502†	173.3	282.8	-0.6389	µg/L	-0.6389	ppb	11:53:30
1	Co 228.616†	95.3	171.8	4.3327	µg/L	4.3327	ppb	11:53:30
1	Cr 267.716†	626.3	780.1	16.372	µg/L	16.372	ppb	11:53:30
1	Cu 324.752†	1516.3	-1792.8	9.5078	µg/L	9.5078	ppb	11:53:10
1	Mn 257.610†	562342.3	590464.5	1886.8	µg/L	1886.8	ppb	11:53:04
1	Mo 202.031†	678.0	719.5	84.314	µg/L	84.314	ppb	11:53:30
1	Ni 231.604†	463.6	187.2	10.197	µg/L	10.197	ppb	11:53:30
1	P 214.914†	1194.1	1047.4	2161.1	µg/L	2161.1	ppb	11:53:30
1	Pb 220.353†	364.4	328.4	84.093	µg/L	84.093	ppb	11:53:30
1	S 181.975 Axial†	96.2	76.9	377.50	µg/L	377.50	ppb	11:53:30
1	Sb 206.836†	7.7	-12.4	-5.7299	µg/L	-5.7299	ppb	11:53:30
1	Se 196.026†	-23.4	-38.7	9.7617	µg/L	9.7617	ppb	11:53:30
1	SiO2†	70148.0	71646.6	13682	µg/L	13682	ppb	11:53:10
1	Si 251.611†	79812.4	83422.5	6313.1	µg/L	6313.1	ppb	11:53:10
1	Sn 189.927†	-14.5	-37.7	-1.8946	µg/L	-1.8946	ppb	11:53:30
1	Ti 334.940†	847322.6	888642.1	1969.5	µg/L	1969.5	ppb	11:53:04
1	Tl 190.801†	-49.6	-30.6	-25.048	µg/L	-25.048	ppb	11:53:30
1	U 409.014†	-1370.1	-2117.3	-217.95	µg/L	-217.95	ppb	11:53:04
1	V 292.402†	4680.3	5004.5	65.057	µg/L	65.057	ppb	11:53:10
1	Zn 213.857†	8622.6	8500.2	216.30	µg/L	216.30	ppb	11:53:10
2	Sc RADIAL	108032.0	108032.0	96.0	%			11:52:06
2	Al 396.153Radial†	38481.3	39836.0	20129	µg/L	20129	ppb	11:52:06
2	Ca 317.933Radial†	12668.6	12694.8	5039.3	µg/L	5039.3	ppb	11:52:26
2	Fe 238.204 Radial†	18966.6	19736.3	103670	µg/L	103670	ppb	11:52:26
2	K 766.490 Radial†	22005.3	22216.5	12046	µg/L	12046	ppb	11:52:06
2	Mg 279.077 IEC†	2883.9	2982.8	16394	µg/L	16394	ppb	11:52:26
2	Na 589.592 Radial†	6379.7	7346.3	2038.3	µg/L	2038.3	ppb	11:52:06
2	Sr 421.552†	31453.2	32812.1	184.83	µg/L	184.83	ppb	11:52:06
2	Sc 361.383	1964480.8	1964480.8	95.514	%			11:53:38
2	Y 371.029	1319120.2	1319120.2	105.33	%			11:53:38
2	Ag 328.068†	-1555.8	-1600.6	-5.7353	µg/L	-5.7353	ppb	11:53:43
2	As 188.979†	31.7	30.8	47.954	µg/L	47.954	ppb	11:54:04
2	B 249.677†	1385.1	1294.4	24.849	µg/L	24.849	ppb	11:53:43
2	Ba 233.527†	19814.8	20826.1	523.21	µg/L	523.21	ppb	11:53:43
2	Be 313.107†	13536.5	10560.8	5.9522	µg/L	5.9522	ppb	11:53:43
2	Cd 226.502†	187.8	297.5	-0.3023	µg/L	-0.3023	ppb	11:54:04
2	Co 228.616†	86.9	162.7	3.8989	µg/L	3.8989	ppb	11:54:04
2	Cr 267.716†	617.1	768.8	16.134	µg/L	16.134	ppb	11:54:04
2	Cu 324.752†	1519.6	-1793.4	9.6519	µg/L	9.6519	ppb	11:53:43
2	Mn 257.610†	563520.1	590208.9	1886.1	µg/L	1886.1	ppb	11:53:38
2	Mo 202.031†	670.5	709.9	83.270	µg/L	83.270	ppb	11:54:04
2	Ni 231.604†	466.5	189.1	10.300	µg/L	10.300	ppb	11:54:04
2	P 214.914†	1188.0	1037.8	2139.6	µg/L	2139.6	ppb	11:54:04
2	Pb 220.353†	364.4	327.4	83.881	µg/L	83.881	ppb	11:54:04

2	S 181.975 Axial†	102.2	83.0	408.69	µg/L	408.69 ppb	11:54:04
2	Sb 206.836†	15.4	-4.4	2.2029	µg/L	2.2029 ppb	11:54:04
2	Se 196.026†	-20.1	-35.2	15.328	µg/L	15.328 ppb	11:54:04
2	SiO2†	69909.2	71210.8	13599	µg/L	13599 ppb	11:53:43
2	Si 251.611†	79628.4	83018.6	6282.2	µg/L	6282.2 ppb	11:53:43
2	Sn 189.927†	-14.3	-37.4	-1.6302	µg/L	-1.6302 ppb	11:54:04
2	Ti 334.940†	848438.3	887566.9	1967.1	µg/L	1967.1 ppb	11:53:38
2	Tl 190.801†	-45.0	-25.7	-17.729	µg/L	-17.729 ppb	11:54:04
2	U 409.014†	-1362.6	-2105.8	-216.99	µg/L	-216.99 ppb	11:53:38
2	V 292.402†	4611.6	4920.1	64.156	µg/L	64.156 ppb	11:53:43
2	Zn 213.857†	8561.0	8413.0	213.88	µg/L	213.88 ppb	11:53:43
3	Sc RADIAL	107730.6	107730.6	95.8	%		11:52:31
3	Al 396.153Radial†	38513.0	39981.1	20202	µg/L	20202 ppb	11:52:31
3	Ca 317.933Radial†	12627.9	12689.2	5037.0	µg/L	5037.0 ppb	11:52:52
3	Fe 238.204 Radial†	18935.4	19759.0	103790	µg/L	103790 ppb	11:52:52
3	K 766.490 Radial†	21859.9	22128.8	11998	µg/L	11998 ppb	11:52:31
3	Mg 279.077 IEC†	2875.3	2982.2	16390	µg/L	16390 ppb	11:52:52
3	Na 589.592 Radial†	6401.3	7387.4	2049.7	µg/L	2049.7 ppb	11:52:31
3	Sr 421.552†	31320.5	32765.2	184.56	µg/L	184.56 ppb	11:52:31
3	Sc 361.383	1958275.4	1958275.4	95.212	%		11:54:11
3	Y 371.029	1314544.0	1314544.0	104.97	%		11:54:11
3	Ag 328.068†	-1600.1	-1652.2	-6.1849	µg/L	-6.1849 ppb	11:54:17
3	As 188.979†	25.3	24.0	35.117	µg/L	35.117 ppb	11:54:37
3	B 249.677†	1407.4	1322.4	26.056	µg/L	26.056 ppb	11:54:17
3	Ba 233.527†	19783.3	20858.8	524.03	µg/L	524.03 ppb	11:54:17
3	Be 313.107†	13520.8	10589.2	5.9717	µg/L	5.9717 ppb	11:54:17
3	Cd 226.502†	184.2	294.4	-0.3926	µg/L	-0.3926 ppb	11:54:37
3	Co 228.616†	84.2	160.1	3.7879	µg/L	3.7879 ppb	11:54:37
3	Cr 267.716†	625.4	779.6	16.359	µg/L	16.359 ppb	11:54:37
3	Cu 324.752†	1519.3	-1788.6	9.7112	µg/L	9.7112 ppb	11:54:17
3	Mn 257.610†	559930.0	588307.8	1880.1	µg/L	1880.1 ppb	11:54:11
3	Mo 202.031†	681.7	723.8	84.831	µg/L	84.831 ppb	11:54:37
3	Ni 231.604†	454.9	178.3	9.7161	µg/L	9.7161 ppb	11:54:37
3	P 214.914†	1187.5	1041.3	2146.9	µg/L	2146.9 ppb	11:54:37
3	Pb 220.353†	352.0	315.6	80.874	µg/L	80.874 ppb	11:54:37
3	S 181.975 Axial†	101.6	82.6	406.70	µg/L	406.70 ppb	11:54:37
3	Sb 206.836†	12.6	-7.3	-0.6951	µg/L	-0.6951 ppb	11:54:37
3	Se 196.026†	-19.4	-34.5	16.396	µg/L	16.396 ppb	11:54:37
3	SiO2†	69871.4	71403.1	13635	µg/L	13635 ppb	11:54:17
3	Si 251.611†	79573.8	83225.3	6298.3	µg/L	6298.3 ppb	11:54:17
3	Sn 189.927†	-19.9	-43.4	-4.5405	µg/L	-4.5405 ppb	11:54:37
3	Ti 334.940†	843903.5	885618.9	1962.8	µg/L	1962.8 ppb	11:54:11
3	Tl 190.801†	-47.1	-28.0	-21.262	µg/L	-21.262 ppb	11:54:37
3	U 409.014†	-1331.9	-2078.1	-214.41	µg/L	-214.41 ppb	11:54:11
3	V 292.402†	4621.7	4946.0	64.473	µg/L	64.473 ppb	11:54:17
3	Zn 213.857†	8528.9	8407.6	213.73	µg/L	213.73 ppb	11:54:17

Mean Data: 241832002|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1960760.7	95.333	%	0.1596				0.17%
Sc RADIAL	108128.9	96.1	%	0.40				0.42%
Y 371.029	1316291.2	105.11	%	0.197				0.19%
Ag 328.068†	-1639.2	-6.0923	µg/L	0.32088	-6.0923	ppb	0.32088	5.27%
Al 396.153Radial†	39650.0	20035	µg/L	229.3	20035	ppb	229.3	1.14%
As 188.979†	26.6	39.997	µg/L	6.9501	39.997	ppb	6.9501	17.38%
B 249.677†	1318.7	25.987	µg/L	1.1044	25.987	ppb	1.1044	4.25%
Ba 233.527†	20900.2	525.07	µg/L	2.546	525.07	ppb	2.546	0.48%
Be 313.107†	10592.0	5.9722	µg/L	0.02023	5.9722	ppb	0.02023	0.34%
Ca 317.933Radial†	12659.2	5025.1	µg/L	22.60	5025.1	ppb	22.60	0.45%
Cd 226.502†	291.5	-0.4446	µg/L	0.17423	-0.4446	ppb	0.17423	39.19%
Co 228.616†	164.9	4.0065	µg/L	0.28786	4.0065	ppb	0.28786	7.18%
Cr 267.716†	776.2	16.288	µg/L	0.1340	16.288	ppb	0.1340	0.82%
Cu 324.752†	-1791.6	9.6236	µg/L	0.10459	9.6236	ppb	0.10459	1.09%
Fe 238.204 Radial†	19700.1	103480	µg/L	436.5	103480	ppb	436.5	0.42%
K 766.490 Radial†	22046.6	11954	µg/L	120.7	11954	ppb	120.7	1.01%
Mg 279.077 IEC†	2975.1	16351	µg/L	70.9	16351	ppb	70.9	0.43%
Mn 257.610†	589660.4	1884.3	µg/L	3.70	1884.3	ppb	3.70	0.20%
Mo 202.031†	717.7	84.138	µg/L	0.7950	84.138	ppb	0.7950	0.94%
Na 589.592 Radial†	7331.5	2034.2	µg/L	17.95	2034.2	ppb	17.95	0.88%

Ni 231.604†	184.9	10.071 µg/L	0.3114	10.071 ppb	0.3114	3.09%
P 214.914†	1042.2	2149.2 µg/L	10.91	2149.2 ppb	10.91	0.51%
Pb 220.353†	323.8	82.949 µg/L	1.8007	82.949 ppb	1.8007	2.17%
S 181.975 Axial†	80.8	397.63 µg/L	17.458	397.63 ppb	17.458	4.39%
Sb 206.836†	-8.1	-1.4073 µg/L	4.01407	-1.4073 ppb	4.01407	285.22%
Se 196.026†	-36.1	13.829 µg/L	3.5622	13.829 ppb	3.5622	25.76%
SiO2†	71420.2	13639 µg/L	41.7	13639 ppb	41.7	0.31%
Si 251.611†	83222.1	6297.9 µg/L	15.47	6297.9 ppb	15.47	0.25%
Sn 189.927†	-39.5	-2.6884 µg/L	1.60939	-2.6884 ppb	1.60939	59.86%
Sr 421.552†	32623.4	183.77 µg/L	1.617	183.77 ppb	1.617	0.88%
Ti 334.940†	887276.0	1966.5 µg/L	3.40	1966.5 ppb	3.40	0.17%
Tl 190.801†	-28.1	-21.346 µg/L	3.6604	-21.346 ppb	3.6604	17.15%
U 409.014†	-2100.4	-216.45 µg/L	1.828	-216.45 ppb	1.828	0.84%
V 292.402†	4956.9	64.562 µg/L	0.4570	64.562 ppb	0.4570	0.71%
Zn 213.857†	8440.3	214.64 µg/L	1.441	214.64 ppb	1.441	0.67%

Sequence No.: 44
Sample ID: 241832003|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 336
Date Collected: 12/18/2009 11:54:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832003|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107879.9	107879.9	95.9	%			11:55:19
1	Al 396.153Radial†	7104.4	7177.5	3626.5	µg/L	3626.5	ppb	11:55:19
1	Ca 317.933Radial†	6447.9	6227.4	2472.0	µg/L	2472.0	ppb	11:55:19
1	Fe 238.204 Radial†	14836.4	15457.8	81200	µg/L	81200	ppb	11:55:19
1	K 766.490 Radial†	2812.1	2237.2	1213.0	µg/L	1213.0	ppb	11:55:19
1	Mg 279.077 IEC†	228.6	218.5	1092.9	µg/L	1092.9	ppb	11:55:40
1	Na 589.592 Radial†	3432.3	4282.6	1188.3	µg/L	1188.3	ppb	11:55:19
1	Sr 421.552†	3393.9	3602.3	20.292	µg/L	20.292	ppb	11:55:19
1	Sc 361.383	1953921.4	1953921.4	95.001	%			11:56:44
1	Y 371.029	1284873.9	1284873.9	102.60	%			11:56:44
1	Ag 328.068†	-1007.1	-1031.7	-2.6790	µg/L	-2.6790	ppb	11:56:49
1	As 188.979†	6.5	4.3	0.9115	µg/L	0.9115	ppb	11:57:10
1	B 249.677†	1017.1	914.9	15.073	µg/L	15.073	ppb	11:56:49
1	Ba 233.527†	5430.9	5797.4	145.65	µg/L	145.65	ppb	11:56:49
1	Be 313.107†	9680.6	6578.5	3.4940	µg/L	3.4940	ppb	11:56:49
1	Cd 226.502†	122.1	229.4	-0.2212	µg/L	-0.2212	ppb	11:56:49
1	Co 228.616†	85.0	161.2	4.0414	µg/L	4.0414	ppb	11:57:10
1	Cr 267.716†	312.6	451.9	9.4501	µg/L	9.4501	ppb	11:56:49
1	Cu 324.752†	2216.8	-1050.8	10.048	µg/L	10.048	ppb	11:56:49
1	Mn 257.610†	857530.3	902879.4	2875.5	µg/L	2875.5	ppb	11:56:44
1	Mo 202.031†	187.8	205.6	26.130	µg/L	26.130	ppb	11:57:10
1	Ni 231.604†	568.8	299.4	16.309	µg/L	16.309	ppb	11:57:10
1	P 214.914†	557.7	381.0	733.83	µg/L	733.83	ppb	11:57:10
1	Pb 220.353†	231.6	189.7	47.469	µg/L	47.469	ppb	11:57:10
1	S 181.975 Axial†	34.0	11.7	48.008	µg/L	48.008	ppb	11:57:10
1	Sb 206.836†	16.4	-3.3	3.1451	µg/L	3.1451	ppb	11:57:10
1	Se 196.026†	-16.0	-31.0	11.648	µg/L	11.648	ppb	11:57:10
1	SiO2†	44099.1	44438.1	8486.1	µg/L	8486.1	ppb	11:56:49
1	Si 251.611†	49432.8	51684.5	3892.7	µg/L	3892.7	ppb	11:56:49
1	Sn 189.927†	18.4	-3.1	8.7883	µg/L	8.7883	ppb	11:57:10
1	Ti 334.940†	773307.0	813282.4	1802.6	µg/L	1802.6	ppb	11:56:44
1	Tl 190.801†	-35.5	-15.9	-0.0883	µg/L	-0.0883	ppb	11:57:10
1	U 409.014†	511.5	-140.8	-28.322	µg/L	-28.322	ppb	11:56:44
1	V 292.402†	1501.4	1672.4	25.616	µg/L	25.616	ppb	11:56:49
1	Zn 213.857†	12577.9	12689.6	331.24	µg/L	331.24	ppb	11:56:49
2	Sc RADIAL	107248.2	107248.2	95.3	%			11:55:45
2	Al 396.153Radial†	7113.2	7230.4	3653.2	µg/L	3653.2	ppb	11:55:45
2	Ca 317.933Radial†	6402.3	6219.2	2468.7	µg/L	2468.7	ppb	11:55:45
2	Fe 238.204 Radial†	14853.5	15566.9	81773	µg/L	81773	ppb	11:55:45
2	K 766.490 Radial†	2737.8	2176.5	1180.1	µg/L	1180.1	ppb	11:55:45
2	Mg 279.077 IEC†	233.9	225.5	1130.6	µg/L	1130.6	ppb	11:56:06
2	Na 589.592 Radial†	3468.2	4341.3	1204.6	µg/L	1204.6	ppb	11:55:45
2	Sr 421.552†	3386.6	3615.6	20.367	µg/L	20.367	ppb	11:55:45
2	Sc 361.383	1947730.1	1947730.1	94.700	%			11:57:18
2	Y 371.029	1280426.1	1280426.1	102.24	%			11:57:18
2	Ag 328.068†	-985.0	-1011.8	-2.4584	µg/L	-2.4584	ppb	11:57:23
2	As 188.979†	12.5	10.7	12.948	µg/L	12.948	ppb	11:57:44
2	B 249.677†	1018.3	919.6	15.100	µg/L	15.100	ppb	11:57:23
2	Ba 233.527†	5349.5	5729.6	143.95	µg/L	143.95	ppb	11:57:23
2	Be 313.107†	9557.6	6481.0	3.4350	µg/L	3.4350	ppb	11:57:23
2	Cd 226.502†	117.5	225.0	-0.3790	µg/L	-0.3790	ppb	11:57:23
2	Co 228.616†	81.1	157.3	3.8669	µg/L	3.8669	ppb	11:57:44
2	Cr 267.716†	299.9	439.4	9.1906	µg/L	9.1906	ppb	11:57:23
2	Cu 324.752†	2210.3	-1050.3	10.175	µg/L	10.175	ppb	11:57:23
2	Mn 257.610†	851890.3	899793.0	2865.8	µg/L	2865.8	ppb	11:57:18
2	Mo 202.031†	182.9	201.1	25.643	µg/L	25.643	ppb	11:57:44
2	Ni 231.604†	550.7	282.2	15.373	µg/L	15.373	ppb	11:57:44
2	P 214.914†	563.3	388.9	750.23	µg/L	750.23	ppb	11:57:44
2	Pb 220.353†	230.9	189.7	47.463	µg/L	47.463	ppb	11:57:44

2	S 181.975 Axial†	33.1	10.9	43.812 µg/L	43.812 ppb	11:57:44
2	Sb 206.836†	19.5	-0.0	6.4066 µg/L	6.4066 ppb	11:57:44
2	Se 196.026†	-25.5	-41.1	-2.6949 µg/L	-2.6949 ppb	11:57:44
2	SiO2†	43766.4	44234.4	8447.2 µg/L	8447.2 ppb	11:57:23
2	Si 251.611†	49005.4	51398.6	3870.9 µg/L	3870.9 ppb	11:57:23
2	Sn 189.927†	24.7	3.6	12.127 µg/L	12.127 ppb	11:57:44
2	Ti 334.940†	767743.0	809994.6	1795.3 µg/L	1795.3 ppb	11:57:18
2	Tl 190.801†	-34.7	-15.3	0.8607 µg/L	0.8607 ppb	11:57:44
2	U 409.014†	592.5	-53.5	-20.233 µg/L	-20.233 ppb	11:57:18
2	V 292.402†	1462.3	1636.1	25.264 µg/L	25.264 ppb	11:57:23
2	Zn 213.857†	12466.8	12614.4	329.17 µg/L	329.17 ppb	11:57:23
3	Sc RADIAL	107360.3	107360.3	95.4 %		11:56:11
3	Al 396.153Radial†	7079.2	7187.0	3631.3 µg/L	3631.3 ppb	11:56:11
3	Ca 317.933Radial†	6441.5	6253.2	2482.2 µg/L	2482.2 ppb	11:56:11
3	Fe 238.204 Radial†	14810.8	15505.9	81452 µg/L	81452 ppb	11:56:11
3	K 766.490 Radial†	2719.3	2154.2	1168.0 µg/L	1168.0 ppb	11:56:11
3	Mg 279.077 IEC†	233.0	224.2	1124.2 µg/L	1124.2 ppb	11:56:31
3	Na 589.592 Radial†	3458.9	4327.8	1200.8 µg/L	1200.8 ppb	11:56:11
3	Sr 421.552†	3396.7	3622.5	20.405 µg/L	20.405 ppb	11:56:11
3	Sc 361.383	1949364.2	1949364.2	94.779 %		11:57:51
3	Y 371.029	1280297.6	1280297.6	102.23 %		11:57:51
3	Ag 328.068†	-953.7	-977.9	-2.1791 µg/L	-2.1791 ppb	11:57:57
3	As 188.979†	14.8	13.1	17.629 µg/L	17.629 ppb	11:58:17
3	B 249.677†	1048.3	950.3	16.565 µg/L	16.565 ppb	11:57:57
3	Ba 233.527†	5481.7	5864.4	147.33 µg/L	147.33 ppb	11:57:57
3	Be 313.107†	9724.2	6648.4	3.5389 µg/L	3.5389 ppb	11:57:57
3	Cd 226.502†	116.3	223.6	-0.3908 µg/L	-0.3908 ppb	11:57:57
3	Co 228.616†	82.4	158.7	3.9233 µg/L	3.9233 ppb	11:58:17
3	Cr 267.716†	312.4	452.3	9.4600 µg/L	9.4600 ppb	11:57:57
3	Cu 324.752†	2202.4	-1060.6	10.034 µg/L	10.034 ppb	11:57:57
3	Mn 257.610†	854044.2	901311.5	2870.6 µg/L	2870.6 ppb	11:57:51
3	Mo 202.031†	189.9	208.3	26.439 µg/L	26.439 ppb	11:58:17
3	Ni 231.604†	555.3	286.5	15.610 µg/L	15.610 ppb	11:58:17
3	P 214.914†	553.7	378.2	727.31 µg/L	727.31 ppb	11:58:17
3	Pb 220.353†	231.4	190.0	47.545 µg/L	47.545 ppb	11:58:17
3	S 181.975 Axial†	31.2	8.9	33.421 µg/L	33.421 ppb	11:58:17
3	Sb 206.836†	15.4	-4.3	2.1935 µg/L	2.1935 ppb	11:58:17
3	Se 196.026†	-27.9	-43.5	-6.4559 µg/L	-6.4559 ppb	11:58:17
3	SiO2†	44849.3	45338.1	8657.9 µg/L	8657.9 ppb	11:57:57
3	Si 251.611†	50286.8	52707.2	3971.0 µg/L	3971.0 ppb	11:57:57
3	Sn 189.927†	20.1	-1.3	9.7200 µg/L	9.7200 ppb	11:58:17
3	Ti 334.940†	770652.0	812384.2	1800.6 µg/L	1800.6 ppb	11:57:51
3	Tl 190.801†	-32.1	-12.4	5.2007 µg/L	5.2007 ppb	11:58:17
3	U 409.014†	572.7	-75.0	-22.191 µg/L	-22.191 ppb	11:57:51
3	V 292.402†	1487.4	1661.3	25.524 µg/L	25.524 ppb	11:57:57
3	Zn 213.857†	12702.5	12852.1	335.57 µg/L	335.57 ppb	11:57:57

Mean Data: 241832003|933564|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1950338.5	94.827	%	0.1560				0.16%
Sc RADIAL	107496.1	95.6	%	0.30				0.31%
Y 371.029	1281865.9	102.36	%	0.208				0.20%
Ag 328.068†	-1007.2	-2.4388	µg/L	0.25052	-2.4388	ppb	0.25052	10.27%
Al 396.153Radial†	7198.3	3637.0	µg/L	14.27	3637.0	ppb	14.27	0.39%
As 188.979†	9.4	10.496	µg/L	8.6243	10.496	ppb	8.6243	82.17%
B 249.677†	928.3	15.579	µg/L	0.8538	15.579	ppb	0.8538	5.48%
Ba 233.527†	5797.1	145.65	µg/L	1.693	145.65	ppb	1.693	1.16%
Be 313.107†	6569.3	3.4893	µg/L	0.05212	3.4893	ppb	0.05212	1.49%
Ca 317.933Radial†	6233.3	2474.3	µg/L	7.05	2474.3	ppb	7.05	0.28%
Cd 226.502†	226.0	-0.3303	µg/L	0.09471	-0.3303	ppb	0.09471	28.67%
Co 228.616†	159.1	3.9438	µg/L	0.08909	3.9438	ppb	0.08909	2.26%
Cr 267.716†	447.9	9.3669	µg/L	0.15278	9.3669	ppb	0.15278	1.63%
Cu 324.752†	-1053.9	10.086	µg/L	0.0776	10.086	ppb	0.0776	0.77%
Fe 238.204 Radial†	15510.2	81475	µg/L	287.2	81475	ppb	287.2	0.35%
K 766.490 Radial†	2189.3	1187.0	µg/L	23.30	1187.0	ppb	23.30	1.96%
Mg 279.077 IEC†	222.7	1115.9	µg/L	20.18	1115.9	ppb	20.18	1.81%
Mn 257.610†	901328.0	2870.6	µg/L	4.86	2870.6	ppb	4.86	0.17%
Mo 202.031†	205.0	26.070	µg/L	0.4012	26.070	ppb	0.4012	1.54%
Na 589.592 Radial†	4317.2	1197.9	µg/L	8.53	1197.9	ppb	8.53	0.71%

Ni 231.604†	289.4	15.764 µg/L	0.4867	15.764 ppb	0.4867	3.09%
P 214.914†	382.7	737.12 µg/L	11.806	737.12 ppb	11.806	1.60%
Pb 220.353†	189.8	47.492 µg/L	0.0455	47.492 ppb	0.0455	0.10%
S 181.975 Axial†	10.5	41.747 µg/L	7.5097	41.747 ppb	7.5097	17.99%
Sb 206.836†	-2.5	3.9150 µg/L	2.20960	3.9150 ppb	2.20960	56.44%
Se 196.026†	-38.5	0.8323 µg/L	9.55328	0.8323 ppb	9.55328	>999.9%
SiO2†	44670.2	8530.4 µg/L	112.16	8530.4 ppb	112.16	1.31%
Si 251.611†	51930.1	3911.5 µg/L	52.66	3911.5 ppb	52.66	1.35%
Sn 189.927†	-0.3	10.212 µg/L	1.7229	10.212 ppb	1.7229	16.87%
Sr 421.552†	3613.5	20.355 µg/L	0.0577	20.355 ppb	0.0577	0.28%
Ti 334.940†	811887.1	1799.5 µg/L	3.77	1799.5 ppb	3.77	0.21%
Tl 190.801†	-14.5	1.9910 µg/L	2.81987	1.9910 ppb	2.81987	141.63%
U 409.014†	-89.8	-23.582 µg/L	4.2202	-23.582 ppb	4.2202	17.90%
V 292.402†	1656.6	25.468 µg/L	0.1828	25.468 ppb	0.1828	0.72%
Zn 213.857†	12718.7	331.99 µg/L	3.266	331.99 ppb	3.266	0.98%

Sequence No.: 45
Sample ID: 241832004|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 337
Date Collected: 12/18/2009 11:58:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832004|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106745.5	106745.5	94.9	%			11:58:59
1	Al 396.153Radial†	8046.2	8248.6	4168.1	µg/L	4168.1	ppb	11:58:59
1	Ca 317.933Radial†	5670.7	5479.9	2175.3	µg/L	2175.3	ppb	11:59:19
1	Fe 238.204 Radial†	10762.2	11329.2	59512	µg/L	59512	ppb	11:58:59
1	K 766.490 Radial†	2594.4	2038.9	1105.5	µg/L	1105.5	ppb	11:58:59
1	Mg 279.077 IEC†	194.9	185.5	941.62	µg/L	941.62	ppb	11:59:19
1	Na 589.592 Radial†	3818.8	4727.9	1311.8	µg/L	1311.8	ppb	11:58:59
1	Sr 421.552†	2907.9	3127.9	17.619	µg/L	17.619	ppb	11:58:59
1	Sc 361.383	1939436.7	1939436.7	94.296	%			12:00:22
1	Y 371.029	1245817.0	1245817.0	99.478	%			12:00:22
1	Ag 328.068†	-727.2	-742.9	-1.8744	µg/L	-1.8744	ppb	12:00:28
1	As 188.979†	12.7	11.0	14.415	µg/L	14.415	ppb	12:00:48
1	B 249.677†	827.0	721.3	13.299	µg/L	13.299	ppb	12:00:28
1	Ba 233.527†	3220.2	3495.6	87.819	µg/L	87.819	ppb	12:00:28
1	Be 313.107†	8057.3	4933.1	2.7803	µg/L	2.7803	ppb	12:00:28
1	Cd 226.502†	70.6	175.8	0.0312	µg/L	0.0312	ppb	12:00:48
1	Co 228.616†	25.4	98.7	2.8584	µg/L	2.8584	ppb	12:00:48
1	Cr 267.716†	274.2	413.5	8.6302	µg/L	8.6302	ppb	12:00:28
1	Cu 324.752†	2841.8	-370.7	10.175	µg/L	10.175	ppb	12:00:28
1	Mn 257.610†	641282.3	680293.1	2166.4	µg/L	2166.4	ppb	12:00:22
1	Mo 202.031†	110.8	125.4	16.334	µg/L	16.334	ppb	12:00:48
1	Ni 231.604†	332.1	52.8	2.8740	µg/L	2.8740	ppb	12:00:48
1	P 214.914†	425.6	245.3	464.30	µg/L	464.30	ppb	12:00:48
1	Pb 220.353†	240.8	201.2	50.679	µg/L	50.679	ppb	12:00:48
1	S 181.975 Axial†	41.0	19.4	90.907	µg/L	90.907	ppb	12:00:48
1	Sb 206.836†	16.0	-3.5	-0.3452	µg/L	-0.3452	ppb	12:00:48
1	Se 196.026†	-12.4	-27.2	1.9403	µg/L	1.9403	ppb	12:00:48
1	SiO2†	41811.8	42359.1	8089.1	µg/L	8089.1	ppb	12:00:28
1	Si 251.611†	46794.5	49275.2	3740.2	µg/L	3740.2	ppb	12:00:28
1	Sn 189.927†	16.6	-4.8	5.2988	µg/L	5.2988	ppb	12:00:48
1	Ti 334.940†	391643.1	414612.9	918.91	µg/L	918.91	ppb	12:00:22
1	Tl 190.801†	-24.3	-4.4	8.2230	µg/L	8.2230	ppb	12:00:48
1	U 409.014†	553.5	-92.2	-19.720	µg/L	-19.720	ppb	12:00:22
1	V 292.402†	708.8	843.6	14.449	µg/L	14.449	ppb	12:00:28
1	Zn 213.857†	12883.4	13112.5	344.95	µg/L	344.95	ppb	12:00:28
2	Sc RADIAL	106814.4	106814.4	95.0	%			11:59:25
2	Al 396.153Radial†	8079.5	8278.2	4183.1	µg/L	4183.1	ppb	11:59:25
2	Ca 317.933Radial†	5662.3	5467.2	2170.2	µg/L	2170.2	ppb	11:59:45
2	Fe 238.204 Radial†	10852.1	11416.5	59971	µg/L	59971	ppb	11:59:25
2	K 766.490 Radial†	2646.2	2091.7	1134.1	µg/L	1134.1	ppb	11:59:25
2	Mg 279.077 IEC†	190.0	180.2	911.43	µg/L	911.43	ppb	11:59:45
2	Na 589.592 Radial†	3793.0	4698.2	1303.6	µg/L	1303.6	ppb	11:59:25
2	Sr 421.552†	2895.8	3113.1	17.536	µg/L	17.536	ppb	11:59:25
2	Sc 361.383	1926607.7	1926607.7	93.673	%			12:00:54
2	Y 371.029	1238077.6	1238077.6	98.860	%			12:00:54
2	Ag 328.068†	-657.2	-673.3	-1.2116	µg/L	-1.2116	ppb	12:01:00
2	As 188.979†	8.7	6.8	6.3354	µg/L	6.3354	ppb	12:01:20
2	B 249.677†	803.8	702.4	12.315	µg/L	12.315	ppb	12:01:00
2	Ba 233.527†	3205.4	3502.6	87.995	µg/L	87.995	ppb	12:01:00
2	Be 313.107†	8064.7	4997.9	2.8201	µg/L	2.8201	ppb	12:01:00
2	Cd 226.502†	68.3	173.8	-0.0596	µg/L	-0.0596	ppb	12:01:20
2	Co 228.616†	27.7	101.2	2.9751	µg/L	2.9751	ppb	12:01:20
2	Cr 267.716†	265.1	405.8	8.4704	µg/L	8.4704	ppb	12:01:00
2	Cu 324.752†	2857.1	-334.3	10.530	µg/L	10.530	ppb	12:01:00
2	Mn 257.610†	638566.8	681922.7	2171.7	µg/L	2171.7	ppb	12:00:54
2	Mo 202.031†	111.8	127.2	16.549	µg/L	16.549	ppb	12:01:20
2	Ni 231.604†	350.4	74.6	4.0654	µg/L	4.0654	ppb	12:01:20
2	P 214.914†	425.4	248.1	469.81	µg/L	469.81	ppb	12:01:20
2	Pb 220.353†	240.9	203.1	51.149	µg/L	51.149	ppb	12:01:20

2	S 181.975 Axial†	37.9	16.5	75.547 µg/L	75.547 ppb	12:01:20
2	Sb 206.836†	18.9	-0.4	2.7994 µg/L	2.7994 ppb	12:01:20
2	Se 196.026†	-12.2	-27.1	2.4368 µg/L	2.4368 ppb	12:01:20
2	SiO2†	42249.4	43121.5	8234.7 µg/L	8234.7 ppb	12:01:00
2	Si 251.611†	47338.3	50186.3	3809.9 µg/L	3809.9 ppb	12:01:00
2	Sn 189.927†	16.9	-4.4	5.5788 µg/L	5.5788 ppb	12:01:20
2	Ti 334.940†	390478.9	416135.7	922.29 µg/L	922.29 ppb	12:00:54
2	Tl 190.801†	-29.9	-10.5	-0.9022 µg/L	-0.9022 ppb	12:01:20
2	U 409.014†	515.2	-129.2	-23.280 µg/L	-23.280 ppb	12:00:54
2	V 292.402†	759.9	903.2	15.154 µg/L	15.154 ppb	12:01:00
2	Zn 213.857†	12906.2	13227.8	347.98 µg/L	347.98 ppb	12:01:00
3	Sc RADIAL	107672.4	107672.4	95.7 %		11:59:51
3	Al 396.153Radial†	8170.4	8305.4	4196.8 µg/L	4196.8 ppb	11:59:51
3	Ca 317.933Radial†	5676.7	5434.7	2157.3 µg/L	2157.3 ppb	12:00:11
3	Fe 238.204 Radial†	10904.7	11380.4	59781 µg/L	59781 ppb	11:59:51
3	K 766.490 Radial†	2689.8	2115.0	1146.8 µg/L	1146.8 ppb	11:59:51
3	Mg 279.077 IEC†	196.3	185.2	939.42 µg/L	939.42 ppb	12:00:11
3	Na 589.592 Radial†	3868.4	4745.0	1316.6 µg/L	1316.6 ppb	11:59:51
3	Sr 421.552†	2943.8	3139.0	17.682 µg/L	17.682 ppb	11:59:51
3	Sc 361.383	1921564.0	1921564.0	93.427 %		12:01:27
3	Y 371.029	1236081.2	1236081.2	98.700 %		12:01:27
3	Ag 328.068†	-730.7	-753.8	-1.9428 µg/L	-1.9428 ppb	12:01:32
3	As 188.979†	4.1	1.9	-2.9226 µg/L	-2.9226 ppb	12:01:53
3	B 249.677†	799.5	700.1	12.272 µg/L	12.272 ppb	12:01:32
3	Ba 233.527†	3186.0	3490.8	87.700 µg/L	87.700 ppb	12:01:32
3	Be 313.107†	8099.6	5057.9	2.8576 µg/L	2.8576 ppb	12:01:32
3	Cd 226.502†	60.0	165.1	-0.2753 µg/L	-0.2753 ppb	12:01:53
3	Co 228.616†	11.5	84.0	2.1431 µg/L	2.1431 ppb	12:01:53
3	Cr 267.716†	268.1	409.7	8.5532 µg/L	8.5532 ppb	12:01:32
3	Cu 324.752†	2915.0	-264.3	10.982 µg/L	10.982 ppb	12:01:32
3	Mn 257.610†	638535.8	683678.8	2177.2 µg/L	2177.2 ppb	12:01:27
3	Mo 202.031†	104.5	119.8	15.709 µg/L	15.709 ppb	12:01:53
3	Ni 231.604†	346.2	71.1	3.8746 µg/L	3.8746 ppb	12:01:53
3	P 214.914†	424.4	248.2	470.24 µg/L	470.24 ppb	12:01:53
3	Pb 220.353†	254.8	218.6	55.074 µg/L	55.074 ppb	12:01:53
3	S 181.975 Axial†	39.6	18.4	85.355 µg/L	85.355 ppb	12:01:53
3	Sb 206.836†	14.6	-5.0	-1.7304 µg/L	-1.7304 ppb	12:01:53
3	Se 196.026†	-10.9	-25.8	4.1799 µg/L	4.1799 ppb	12:01:53
3	SiO2†	42061.6	43039.0	8218.9 µg/L	8218.9 ppb	12:01:32
3	Si 251.611†	47165.4	50133.7	3805.8 µg/L	3805.8 ppb	12:01:32
3	Sn 189.927†	16.6	-4.7	5.4162 µg/L	5.4162 ppb	12:01:53
3	Ti 334.940†	389923.9	416635.8	923.40 µg/L	923.40 ppb	12:01:27
3	Tl 190.801†	-33.0	-13.9	-6.0297 µg/L	-6.0297 ppb	12:01:53
3	U 409.014†	492.2	-152.4	-25.420 µg/L	-25.420 ppb	12:01:27
3	V 292.402†	790.6	938.2	15.524 µg/L	15.524 ppb	12:01:32
3	Zn 213.857†	12837.3	13190.2	347.00 µg/L	347.00 ppb	12:01:32

Mean Data: 241832004|933564|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1929202.8	93.799	%	0.4480				0.48%
Sc RADIAL	107077.4	95.2	%	0.46				0.48%
Y 371.029	1239991.9	99.013	%	0.4106				0.41%
Ag 328.068†	-723.3	-1.6762	µg/L	0.40387	-1.6762	ppb	0.40387	24.09%
Al 396.153Radial†	8277.4	4182.7	µg/L	14.36	4182.7	ppb	14.36	0.34%
As 188.979†	6.6	5.9427	µg/L	8.67571	5.9427	ppb	8.67571	145.99%
B 249.677†	707.9	12.629	µg/L	0.5808	12.629	ppb	0.5808	4.60%
Ba 233.527†	3496.3	87.838	µg/L	0.1483	87.838	ppb	0.1483	0.17%
Be 313.107†	4996.3	2.8194	µg/L	0.03864	2.8194	ppb	0.03864	1.37%
Ca 317.933Radial†	5460.6	2167.6	µg/L	9.26	2167.6	ppb	9.26	0.43%
Cd 226.502†	171.6	-0.1012	µg/L	0.15741	-0.1012	ppb	0.15741	155.47%
Co 228.616†	94.7	2.6589	µg/L	0.45048	2.6589	ppb	0.45048	16.94%
Cr 267.716†	409.7	8.5512	µg/L	0.07991	8.5512	ppb	0.07991	0.93%
Cu 324.752†	-323.1	10.562	µg/L	0.4041	10.562	ppb	0.4041	3.83%
Fe 238.204 Radial†	11375.4	59755	µg/L	230.7	59755	ppb	230.7	0.39%
K 766.490 Radial†	2081.9	1128.8	µg/L	21.15	1128.8	ppb	21.15	1.87%
Mg 279.077 IEC†	183.6	930.82	µg/L	16.829	930.82	ppb	16.829	1.81%
Mn 257.610†	681964.8	2171.8	µg/L	5.39	2171.8	ppb	5.39	0.25%
Mo 202.031†	124.1	16.197	µg/L	0.4366	16.197	ppb	0.4366	2.70%
Na 589.592 Radial†	4723.7	1310.6	µg/L	6.58	1310.6	ppb	6.58	0.50%

Ni 231.604†	66.2	3.6046	µg/L	0.63993	3.6046	ppb	0.63993	17.75%
P 214.914†	247.2	468.11	µg/L	3.314	468.11	ppb	3.314	0.71%
Pb 220.353†	207.6	52.301	µg/L	2.4136	52.301	ppb	2.4136	4.61%
S 181.975 Axial†	18.1	83.936	µg/L	7.7778	83.936	ppb	7.7778	9.27%
Sb 206.836†	-3.0	0.2413	µg/L	2.32117	0.2413	ppb	2.32117	962.01%
Se 196.026†	-26.7	2.8523	µg/L	1.17624	2.8523	ppb	1.17624	41.24%
SiO2†	42839.9	8180.9	µg/L	79.90	8180.9	ppb	79.90	0.98%
Si 251.611†	49865.1	3785.3	µg/L	39.09	3785.3	ppb	39.09	1.03%
Sn 189.927†	-4.6	5.4313	µg/L	0.14065	5.4313	ppb	0.14065	2.59%
Sr 421.552†	3126.7	17.612	µg/L	0.0731	17.612	ppb	0.0731	0.41%
Ti 334.940†	415794.8	921.53	µg/L	2.336	921.53	ppb	2.336	0.25%
Tl 190.801†	-9.6	0.4304	µg/L	7.21918	0.4304	ppb	7.21918	>999.9%
U 409.014†	-124.6	-22.807	µg/L	2.8794	-22.807	ppb	2.8794	12.63%
V 292.402†	895.0	15.042	µg/L	0.5461	15.042	ppb	0.5461	3.63%
Zn 213.857†	13176.8	346.64	µg/L	1.548	346.64	ppb	1.548	0.45%

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 12:02:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108267.8	108267.8	96.3	%			12:02:37
1	Al 396.153Radial†	9887.0	10041.8	5056.5	µg/L	5056.5	ppb	12:02:37
1	Ca 317.933Radial†	12175.8	12154.1	4824.6	µg/L	4824.6	ppb	12:02:58
1	Fe 238.204 Radial†	971.7	998.3	5260.3	µg/L	5260.3	ppb	12:02:58
1	K 766.490 Radial†	9614.5	9293.7	5039.0	µg/L	5039.0	ppb	12:02:37
1	Mg 279.077 IEC†	905.1	920.5	5110.2	µg/L	5110.2	ppb	12:02:58
1	Na 589.592 Radial†	33669.1	35682.9	9900.7	µg/L	9900.7	ppb	12:02:37
1	Sr 421.552†	84960.8	88330.1	497.56	µg/L	497.56	ppb	12:02:37
1	Sc 361.383	1916203.7	1916203.7	93.167	%			12:04:00
1	Y 371.029	1160329.3	1160329.3	92.652	%			12:04:00
1	Ag 328.068†	52190.9	56047.0	504.40	µg/L	504.40	ppb	12:04:06
1	As 188.979†	247.4	263.0	500.34	µg/L	500.34	ppb	12:04:26
1	B 249.677†	10298.9	10898.5	482.06	µg/L	482.06	ppb	12:04:06
1	Ba 233.527†	18323.7	19748.3	497.06	µg/L	497.06	ppb	12:04:06
1	Be 313.107†	729345.5	779226.5	492.74	µg/L	492.74	ppb	12:04:00
1	Cd 226.502†	17170.0	18530.2	490.17	µg/L	490.17	ppb	12:04:06
1	Co 228.616†	9492.1	10260.1	493.49	µg/L	493.49	ppb	12:04:06
1	Cr 267.716†	21987.3	23722.7	494.98	µg/L	494.98	ppb	12:04:06
1	Cu 324.752†	70047.4	71800.6	506.28	µg/L	506.28	ppb	12:04:06
1	Mn 257.610†	147733.7	158791.6	504.59	µg/L	504.59	ppb	12:04:00
1	Mo 202.031†	4037.6	4341.6	484.55	µg/L	484.55	ppb	12:04:26
1	Ni 231.604†	8733.9	9075.1	494.40	µg/L	494.40	ppb	12:04:06
1	P 214.914†	1281.5	1169.5	2483.1	µg/L	2483.1	ppb	12:04:26
1	Pb 220.353†	1876.6	1960.1	497.55	µg/L	497.55	ppb	12:04:26
1	S 181.975 Axial†	199.4	190.0	974.74	µg/L	974.74	ppb	12:04:26
1	Sb 206.836†	477.4	491.9	486.69	µg/L	486.69	ppb	12:04:26
1	Se 196.026†	326.1	335.9	491.45	µg/L	491.45	ppb	12:04:26
1	SiO2†	27913.8	27979.5	5343.1	µg/L	5343.1	ppb	12:04:06
1	Si 251.611†	30699.4	32601.4	2450.4	µg/L	2450.4	ppb	12:04:06
1	Sn 189.927†	936.0	982.2	481.56	µg/L	481.56	ppb	12:04:26
1	Ti 334.940†	208892.8	223494.8	495.13	µg/L	495.13	ppb	12:04:00
1	Tl 190.801†	280.5	322.5	489.02	µg/L	489.02	ppb	12:04:26
1	U 409.014†	5757.0	5500.0	515.64	µg/L	515.64	ppb	12:04:06
1	V 292.402†	41128.6	44237.0	503.34	µg/L	503.34	ppb	12:04:06
1	Zn 213.857†	17971.2	18739.1	498.08	µg/L	498.08	ppb	12:04:06
2	Sc RADIAL	107894.3	107894.3	95.9	%			12:03:03
2	Al 396.153Radial†	9892.6	10083.3	5077.4	µg/L	5077.4	ppb	12:03:03
2	Ca 317.933Radial†	12142.2	12162.8	4828.1	µg/L	4828.1	ppb	12:03:24
2	Fe 238.204 Radial†	968.2	998.2	5259.7	µg/L	5259.7	ppb	12:03:24
2	K 766.490 Radial†	9648.6	9363.9	5077.0	µg/L	5077.0	ppb	12:03:03
2	Mg 279.077 IEC†	898.7	917.1	5091.0	µg/L	5091.0	ppb	12:03:24
2	Na 589.592 Radial†	33676.4	35811.7	9936.4	µg/L	9936.4	ppb	12:03:03
2	Sr 421.552†	84872.1	88543.2	498.76	µg/L	498.76	ppb	12:03:03
2	Sc 361.383	1914034.4	1914034.4	93.061	%			12:04:32
2	Y 371.029	1156506.6	1156506.6	92.346	%			12:04:32
2	Ag 328.068†	52301.7	56229.6	506.04	µg/L	506.04	ppb	12:04:38
2	As 188.979†	243.3	259.0	492.62	µg/L	492.62	ppb	12:04:58
2	B 249.677†	10375.6	10993.5	486.28	µg/L	486.28	ppb	12:04:38
2	Ba 233.527†	18344.0	19792.4	498.18	µg/L	498.18	ppb	12:04:38
2	Be 313.107†	728404.9	779103.1	492.66	µg/L	492.66	ppb	12:04:32
2	Cd 226.502†	17155.6	18535.6	490.31	µg/L	490.31	ppb	12:04:38
2	Co 228.616†	9485.5	10264.4	493.70	µg/L	493.70	ppb	12:04:38
2	Cr 267.716†	22004.9	23768.3	495.93	µg/L	495.93	ppb	12:04:38
2	Cu 324.752†	70233.5	72085.8	508.29	µg/L	508.29	ppb	12:04:38
2	Mn 257.610†	147488.9	158708.3	504.33	µg/L	504.33	ppb	12:04:32
2	Mo 202.031†	4041.4	4350.7	485.56	µg/L	485.56	ppb	12:04:58
2	Ni 231.604†	8781.7	9137.1	497.77	µg/L	497.77	ppb	12:04:38
2	P 214.914†	1268.2	1156.7	2455.1	µg/L	2455.1	ppb	12:04:58
2	Pb 220.353†	1872.9	1958.4	497.13	µg/L	497.13	ppb	12:04:58

2	S 181.975 Axial†	200.7	191.6	982.86 µg/L	982.86 ppb	12:04:58
2	Sb 206.836†	470.3	484.8	479.61 µg/L	479.61 ppb	12:04:58
2	Se 196.026†	324.5	334.6	489.61 µg/L	489.61 ppb	12:04:58
2	SiO2†	27885.7	27983.2	5343.8 µg/L	5343.8 ppb	12:04:38
2	Si 251.611†	30756.3	32699.8	2458.0 µg/L	2458.0 ppb	12:04:38
2	Sn 189.927†	931.4	978.4	479.72 µg/L	479.72 ppb	12:04:58
2	Ti 334.940†	208539.6	223369.4	494.85 µg/L	494.85 ppb	12:04:32
2	Tl 190.801†	287.5	330.4	500.94 µg/L	500.94 ppb	12:04:58
2	U 409.014†	5729.3	5477.3	513.51 µg/L	513.51 ppb	12:04:38
2	V 292.402†	41144.3	44304.0	504.10 µg/L	504.10 ppb	12:04:38
2	Zn 213.857†	18012.0	18804.8	499.82 µg/L	499.82 ppb	12:04:38
3	Sc RADIAL	107926.5	107926.5	96.0 %		12:03:29
3	Al 396.153Radial†	9929.6	10118.8	5095.6 µg/L	5095.6 ppb	12:03:29
3	Ca 317.933Radial†	12104.2	12119.4	4810.9 µg/L	4810.9 ppb	12:03:49
3	Fe 238.204 Radial†	961.6	991.0	5221.9 µg/L	5221.9 ppb	12:03:49
3	K 766.490 Radial†	9587.2	9296.8	5040.7 µg/L	5040.7 ppb	12:03:29
3	Mg 279.077 IEC†	894.7	912.6	5065.9 µg/L	5065.9 ppb	12:03:49
3	Na 589.592 Radial†	33744.8	35872.5	9953.3 µg/L	9953.3 ppb	12:03:29
3	Sr 421.552†	84977.9	88627.1	499.23 µg/L	499.23 ppb	12:03:29
3	Sc 361.383	1927721.4	1927721.4	93.727 %		12:05:05
3	Y 371.029	1165930.3	1165930.3	93.099 %		12:05:05
3	Ag 328.068†	52056.4	55568.9	500.09 µg/L	500.09 ppb	12:05:10
3	As 188.979†	241.9	255.6	486.13 µg/L	486.13 ppb	12:05:31
3	B 249.677†	10275.7	10807.7	478.05 µg/L	478.05 ppb	12:05:10
3	Ba 233.527†	18206.6	19505.9	490.96 µg/L	490.96 ppb	12:05:10
3	Be 313.107†	733579.1	779066.1	492.64 µg/L	492.64 ppb	12:05:05
3	Cd 226.502†	16970.3	18207.0	481.63 µg/L	481.63 ppb	12:05:10
3	Co 228.616†	9454.4	10158.9	488.61 µg/L	488.61 ppb	12:05:10
3	Cr 267.716†	21841.2	23425.8	488.79 µg/L	488.79 ppb	12:05:10
3	Cu 324.752†	69766.4	71051.5	501.00 µg/L	501.00 ppb	12:05:10
3	Mn 257.610†	148504.8	158666.9	504.19 µg/L	504.19 ppb	12:05:05
3	Mo 202.031†	3998.9	4274.4	477.06 µg/L	477.06 ppb	12:05:31
3	Ni 231.604†	8708.4	8991.8	489.86 µg/L	489.86 ppb	12:05:10
3	P 214.914†	1275.5	1154.9	2451.9 µg/L	2451.9 ppb	12:05:31
3	Pb 220.353†	1867.2	1938.1	491.95 µg/L	491.95 ppb	12:05:31
3	S 181.975 Axial†	199.3	188.5	967.20 µg/L	967.20 ppb	12:05:31
3	Sb 206.836†	472.3	483.4	478.26 µg/L	478.26 ppb	12:05:31
3	Se 196.026†	325.9	333.6	488.13 µg/L	488.13 ppb	12:05:31
3	SiO2†	27769.6	27646.6	5279.5 µg/L	5279.5 ppb	12:05:10
3	Si 251.611†	30486.7	32177.5	2418.4 µg/L	2418.4 ppb	12:05:10
3	Sn 189.927†	926.8	966.4	473.83 µg/L	473.83 ppb	12:05:31
3	Ti 334.940†	209912.4	223243.0	494.57 µg/L	494.57 ppb	12:05:05
3	Tl 190.801†	282.0	322.3	488.85 µg/L	488.85 ppb	12:05:31
3	U 409.014†	5808.6	5518.2	517.36 µg/L	517.36 ppb	12:05:10
3	V 292.402†	40878.6	43706.6	497.31 µg/L	497.31 ppb	12:05:10
3	Zn 213.857†	17876.5	18522.8	492.32 µg/L	492.32 ppb	12:05:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1919319.8	93.318	%	0.3577				0.38%
Sc RADIAL	108029.5	96.0	%	0.18				0.19%
Y 371.029	1160922.1	92.699	%	0.3785				0.41%
Ag 328.068†	55948.5	503.51	µg/L	3.074	503.51	ppb	3.074	0.61%
QC value within limits for Ag 328.068 Recovery = 100.70%								
Al 396.153Radial†	10081.3	5076.5	µg/L	19.60	5076.5	ppb	19.60	0.39%
QC value within limits for Al 396.153Radial Recovery = 101.53%								
As 188.979†	259.2	493.03	µg/L	7.114	493.03	ppb	7.114	1.44%
QC value within limits for As 188.979 Recovery = 98.61%								
B 249.677†	10899.9	482.13	µg/L	4.117	482.13	ppb	4.117	0.85%
QC value within limits for B 249.677 Recovery = 96.43%								
Ba 233.527†	19682.2	495.40	µg/L	3.883	495.40	ppb	3.883	0.78%
QC value within limits for Ba 233.527 Recovery = 99.08%								
Be 313.107†	779131.9	492.68	µg/L	0.053	492.68	ppb	0.053	0.01%
QC value within limits for Be 313.107 Recovery = 98.54%								
Ca 317.933Radial†	12145.4	4821.2	µg/L	9.12	4821.2	ppb	9.12	0.19%
QC value within limits for Ca 317.933Radial Recovery = 96.42%								
Cd 226.502†	18424.2	487.37	µg/L	4.973	487.37	ppb	4.973	1.02%
QC value within limits for Cd 226.502 Recovery = 97.47%								
Co 228.616†	10227.8	491.94	µg/L	2.880	491.94	ppb	2.880	0.59%

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   QC value within limits for Co 228.616  Recovery = 98.39%
Cr 267.716†            23638.9      493.23 µg/L        3.880      493.23 ppb          3.880   0.79%
   QC value within limits for Cr 267.716  Recovery = 98.65%
Cu 324.752†            71646.0      505.19 µg/L        3.763      505.19 ppb          3.763   0.74%
   QC value within limits for Cu 324.752  Recovery = 101.04%
Fe 238.204 Radial†       995.8      5247.3 µg/L       22.00      5247.3 ppb         22.00   0.42%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.95%
K 766.490 Radial†       9318.1      5052.3 µg/L       21.48      5052.3 ppb         21.48   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 101.05%
Mg 279.077 IEC†          916.7      5089.0 µg/L       22.20      5089.0 ppb         22.20   0.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.78%
Mn 257.610†           158722.2      504.37 µg/L        0.204      504.37 ppb          0.204   0.04%
   QC value within limits for Mn 257.610  Recovery = 100.87%
Mo 202.031†             4322.2      482.39 µg/L        4.645      482.39 ppb          4.645   0.96%
   QC value within limits for Mo 202.031  Recovery = 96.48%
Na 589.592 Radial†     35789.0      9930.1 µg/L       26.85      9930.1 ppb         26.85   0.27%
   QC value within limits for Na 589.592 Radial  Recovery = 99.30%
Ni 231.604†             9068.0      494.01 µg/L        3.970      494.01 ppb          3.970   0.80%
   QC value within limits for Ni 231.604  Recovery = 98.80%
P 214.914†              1160.4      2463.4 µg/L       17.18      2463.4 ppb         17.18   0.70%
   QC value within limits for P 214.914  Recovery = 98.54%
Pb 220.353†             1952.2      495.54 µg/L        3.121      495.54 ppb          3.121   0.63%
   QC value within limits for Pb 220.353  Recovery = 99.11%
S 181.975 Axial†         190.0      974.94 µg/L        7.832      974.94 ppb          7.832   0.80%
   QC value within limits for S 181.975 Axial  Recovery = 97.49%
Sb 206.836†              486.7      481.52 µg/L        4.527      481.52 ppb          4.527   0.94%
   QC value within limits for Sb 206.836  Recovery = 96.30%
Se 196.026†              334.7      489.73 µg/L        1.665      489.73 ppb          1.665   0.34%
   QC value within limits for Se 196.026  Recovery = 97.95%
SiO2†                  27869.8      5322.1 µg/L       36.91      5322.1 ppb         36.91   0.69%
   QC value within limits for SiO2  Recovery = 99.53%
Si 251.611†            32492.9      2442.3 µg/L       21.02      2442.3 ppb         21.02   0.86%
   QC value within limits for Si 251.611  Recovery = 97.69%
Sn 189.927†              975.7      478.37 µg/L        4.039      478.37 ppb          4.039   0.84%
   QC value within limits for Sn 189.927  Recovery = 95.67%
Sr 421.552†            88500.1      498.51 µg/L        0.862      498.51 ppb          0.862   0.17%
   QC value within limits for Sr 421.552  Recovery = 99.70%
Ti 334.940†           223369.0      494.85 µg/L        0.279      494.85 ppb          0.279   0.06%
   QC value within limits for Ti 334.940  Recovery = 98.97%
Tl 190.801†              325.1      492.94 µg/L        6.935      492.94 ppb          6.935   1.41%
   QC value within limits for Tl 190.801  Recovery = 98.59%
U 409.014†              5498.5      515.50 µg/L        1.926      515.50 ppb          1.926   0.37%
   QC value within limits for U 409.014  Recovery = 103.10%
V 292.402†             44082.5      501.58 µg/L        3.721      501.58 ppb          3.721   0.74%
   QC value within limits for V 292.402  Recovery = 100.32%
Zn 213.857†            18688.9      496.74 µg/L        3.925      496.74 ppb          3.925   0.79%
   QC value within limits for Zn 213.857  Recovery = 99.35%
All analyte(s) passed QC.
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Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 12:05:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106047.0	106047.0	94.3	%			12:06:12
1	Al 396.153Radial†	181.4	-37.4	-18.925	µg/L	-18.925	ppb	12:06:12
1	Ca 317.933Radial†	414.9	-55.4	-21.986	µg/L	-21.986	ppb	12:06:32
1	Fe 238.204 Radial†	13.6	3.2	16.789	µg/L	16.789	ppb	12:06:32
1	K 766.490 Radial†	676.1	22.3	12.089	µg/L	12.089	ppb	12:06:12
1	Mg 279.077 IEC†	15.6	-3.3	-18.519	µg/L	-18.519	ppb	12:06:32
1	Na 589.592 Radial†	-641.0	24.0	6.6623	µg/L	6.6623	ppb	12:06:12
1	Sr 421.552†	-46.1	14.9	0.0841	µg/L	0.0841	ppb	12:06:12
1	Sc 361.383	1922092.6	1922092.6	93.453	%			12:07:34
1	Y 371.029	1168584.1	1168584.1	93.311	%			12:07:34
1	Ag 328.068†	-149.2	-131.4	-1.1682	µg/L	-1.1682	ppb	12:07:40
1	As 188.979†	0.1	-2.4	-4.5082	µg/L	-4.5082	ppb	12:08:00
1	B 249.677†	130.5	-16.1	-0.7188	µg/L	-0.7188	ppb	12:08:00
1	Ba 233.527†	-89.7	-15.3	-0.3825	µg/L	-0.3825	ppb	12:08:00
1	Be 313.107†	3547.8	184.8	0.1169	µg/L	0.1169	ppb	12:07:40
1	Cd 226.502†	-92.5	1.9	0.0592	µg/L	0.0592	ppb	12:08:00
1	Co 228.616†	-74.2	-7.6	-0.3670	µg/L	-0.3670	ppb	12:08:00
1	Cr 267.716†	-114.2	0.6	0.0131	µg/L	0.0131	ppb	12:08:00
1	Cu 324.752†	3159.1	-3.9	-0.0237	µg/L	-0.0237	ppb	12:07:40
1	Mn 257.610†	-146.5	65.8	0.2111	µg/L	0.2111	ppb	12:08:00
1	Mo 202.031†	-3.4	4.3	0.4802	µg/L	0.4802	ppb	12:08:00
1	Ni 231.604†	258.1	-23.2	-1.2630	µg/L	-1.2630	ppb	12:08:00
1	P 214.914†	219.5	28.9	62.823	µg/L	62.823	ppb	12:08:00
1	Pb 220.353†	64.1	14.5	3.6566	µg/L	3.6566	ppb	12:08:00
1	S 181.975 Axial†	23.4	1.0	5.2548	µg/L	5.2548	ppb	12:08:00
1	Sb 206.836†	23.6	4.7	4.6822	µg/L	4.6822	ppb	12:08:00
1	Se 196.026†	9.6	-3.8	-5.5544	µg/L	-5.5544	ppb	12:08:00
1	SiO2†	1984.5	141.8	27.080	µg/L	27.080	ppb	12:07:40
1	Si 251.611†	362.5	38.2	2.8452	µg/L	2.8452	ppb	12:08:00
1	Sn 189.927†	24.3	3.5	1.7109	µg/L	1.7109	ppb	12:08:00
1	Ti 334.940†	729.6	61.9	0.1384	µg/L	0.1384	ppb	12:07:40
1	Tl 190.801†	-16.8	3.4	5.1552	µg/L	5.1552	ppb	12:08:00
1	U 409.014†	796.5	173.1	16.248	µg/L	16.248	ppb	12:07:40
1	V 292.402†	-41.7	47.4	0.5652	µg/L	0.5652	ppb	12:07:40
1	Zn 213.857†	507.5	-7.1	-0.1851	µg/L	-0.1851	ppb	12:08:00
2	Sc RADIAL	105210.2	105210.2	93.5	%			12:06:38
2	Al 396.153Radial†	208.4	-7.0	-3.5513	µg/L	-3.5513	ppb	12:06:38
2	Ca 317.933Radial†	410.8	-56.2	-22.316	µg/L	-22.316	ppb	12:06:59
2	Fe 238.204 Radial†	11.5	1.1	5.7805	µg/L	5.7805	ppb	12:06:59
2	K 766.490 Radial†	557.3	-99.0	-53.682	µg/L	-53.682	ppb	12:06:38
2	Mg 279.077 IEC†	17.3	-1.3	-7.2576	µg/L	-7.2576	ppb	12:06:59
2	Na 589.592 Radial†	-659.1	-0.8	-0.2101	µg/L	-0.2101	ppb	12:06:38
2	Sr 421.552†	-98.3	-41.4	-0.2330	µg/L	-0.2330	ppb	12:06:38
2	Sc 361.383	1925046.6	1925046.6	93.597	%			12:08:06
2	Y 371.029	1170830.2	1170830.2	93.490	%			12:08:06
2	Ag 328.068†	-174.7	-158.3	-1.4106	µg/L	-1.4106	ppb	12:08:11
2	As 188.979†	8.2	6.3	11.935	µg/L	11.935	ppb	12:08:32
2	B 249.677†	131.1	-15.7	-0.6977	µg/L	-0.6977	ppb	12:08:32
2	Ba 233.527†	-86.1	-11.3	-0.2822	µg/L	-0.2822	ppb	12:08:32
2	Be 313.107†	3495.6	123.3	0.0779	µg/L	0.0779	ppb	12:08:11
2	Cd 226.502†	-90.2	4.6	0.1382	µg/L	0.1382	ppb	12:08:32
2	Co 228.616†	-67.4	-0.3	-0.0127	µg/L	-0.0127	ppb	12:08:32
2	Cr 267.716†	-103.0	12.7	0.2652	µg/L	0.2652	ppb	12:08:32
2	Cu 324.752†	3080.1	-93.5	-0.6562	µg/L	-0.6562	ppb	12:08:11
2	Mn 257.610†	-134.6	78.8	0.2508	µg/L	0.2508	ppb	12:08:32
2	Mo 202.031†	-1.0	6.8	0.7611	µg/L	0.7611	ppb	12:08:32
2	Ni 231.604†	266.5	-14.7	-0.8005	µg/L	-0.8005	ppb	12:08:32
2	P 214.914†	221.6	30.8	66.943	µg/L	66.943	ppb	12:08:32
2	Pb 220.353†	75.0	26.0	6.5753	µg/L	6.5753	ppb	12:08:32

2	S 181.975 Axial†	23.2	0.8	4.0179 µg/L	4.0179 ppb	12:08:32
2	Sb 206.836†	18.5	-0.7	-0.7181 µg/L	-0.7181 ppb	12:08:32
2	Se 196.026†	7.2	-6.5	-9.3959 µg/L	-9.3959 ppb	12:08:32
2	SiO2†	2009.6	165.4	31.587 µg/L	31.587 ppb	12:08:11
2	Si 251.611†	351.8	26.2	2.0337 µg/L	2.0337 ppb	12:08:32
2	Sn 189.927†	19.7	-1.4	-0.6686 µg/L	-0.6686 ppb	12:08:32
2	Ti 334.940†	770.7	104.5	0.2329 µg/L	0.2329 ppb	12:08:11
2	Tl 190.801†	-21.8	-1.9	-2.8285 µg/L	-2.8285 ppb	12:08:32
2	U 409.014†	897.7	279.9	26.288 µg/L	26.288 ppb	12:08:11
2	V 292.402†	-46.8	41.9	0.5209 µg/L	0.5209 ppb	12:08:11
2	Zn 213.857†	500.9	-15.0	-0.3976 µg/L	-0.3976 ppb	12:08:32
3	Sc RADIAL	106403.4	106403.4	94.6 %		12:07:04
3	Al 396.153Radial†	197.7	-20.9	-10.565 µg/L	-10.565 ppb	12:07:04
3	Ca 317.933Radial†	409.8	-62.2	-24.698 µg/L	-24.698 ppb	12:07:24
3	Fe 238.204 Radial†	13.7	3.3	17.291 µg/L	17.291 ppb	12:07:24
3	K 766.490 Radial†	600.0	-60.5	-32.828 µg/L	-32.828 ppb	12:07:04
3	Mg 279.077 IEC†	15.7	-3.2	-17.799 µg/L	-17.799 ppb	12:07:24
3	Na 589.592 Radial†	-650.6	16.1	4.4740 µg/L	4.4740 ppb	12:07:04
3	Sr 421.552†	-62.5	-2.3	-0.0127 µg/L	-0.0127 ppb	12:07:04
3	Sc 361.383	1933231.6	1933231.6	93.995 %		12:08:38
3	Y 371.029	1175835.8	1175835.8	93.890 %		12:08:38
3	Ag 328.068†	-138.4	-118.9	-1.0589 µg/L	-1.0589 ppb	12:08:43
3	As 188.979†	-1.1	-3.7	-6.9783 µg/L	-6.9783 ppb	12:09:04
3	B 249.677†	138.0	-8.9	-0.4001 µg/L	-0.4001 ppb	12:09:04
3	Ba 233.527†	-80.1	-4.6	-0.1145 µg/L	-0.1145 ppb	12:09:04
3	Be 313.107†	3508.3	121.0	0.0765 µg/L	0.0765 ppb	12:08:43
3	Cd 226.502†	-89.2	6.0	0.1644 µg/L	0.1644 ppb	12:09:04
3	Co 228.616†	-78.2	-11.5	-0.5512 µg/L	-0.5512 ppb	12:09:04
3	Cr 267.716†	-101.0	15.4	0.3204 µg/L	0.3204 ppb	12:09:04
3	Cu 324.752†	3169.8	-12.0	-0.0807 µg/L	-0.0807 ppb	12:08:43
3	Mn 257.610†	-128.3	86.2	0.2756 µg/L	0.2756 ppb	12:09:04
3	Mo 202.031†	-2.4	5.4	0.6038 µg/L	0.6038 ppb	12:09:04
3	Ni 231.604†	263.1	-19.5	-1.0613 µg/L	-1.0613 ppb	12:09:04
3	P 214.914†	222.1	30.3	65.856 µg/L	65.856 ppb	12:09:04
3	Pb 220.353†	74.1	24.7	6.2567 µg/L	6.2567 ppb	12:09:04
3	S 181.975 Axial†	26.4	4.1	20.914 µg/L	20.914 ppb	12:09:04
3	Sb 206.836†	18.1	-1.3	-1.3179 µg/L	-1.3179 ppb	12:09:04
3	Se 196.026†	12.4	-0.9	-1.3214 µg/L	-1.3214 ppb	12:09:04
3	SiO2†	1955.6	98.8	18.872 µg/L	18.872 ppb	12:08:43
3	Si 251.611†	359.9	33.2	2.4609 µg/L	2.4609 ppb	12:09:04
3	Sn 189.927†	25.2	4.3	2.0948 µg/L	2.0948 ppb	12:09:04
3	Ti 334.940†	747.7	76.6	0.1712 µg/L	0.1712 ppb	12:08:43
3	Tl 190.801†	-16.0	4.4	6.6838 µg/L	6.6838 ppb	12:09:04
3	U 409.014†	771.4	141.4	13.279 µg/L	13.279 ppb	12:08:43
3	V 292.402†	-63.4	24.5	0.3033 µg/L	0.3033 ppb	12:08:43
3	Zn 213.857†	511.7	-5.8	-0.1499 µg/L	-0.1499 ppb	12:09:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1926790.2	93.682	%	0.2806				0.30%
Sc RADIAL	105886.9	94.1	%	0.54				0.58%
Y 371.029	1171750.0	93.563	%	0.2964				0.32%
Ag 328.068†	-136.2	-1.2126	µg/L	0.17996	-1.2126	ppb	0.17996	14.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-21.7	-11.014	µg/L	7.6966	-11.014	ppb	7.6966	69.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.1	0.1494	µg/L	10.28077	0.1494	ppb	10.28077	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-13.5	-0.6056	µg/L	0.17822	-0.6056	ppb	0.17822	29.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-10.4	-0.2597	µg/L	0.13539	-0.2597	ppb	0.13539	52.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	143.0	0.0904	µg/L	0.02292	0.0904	ppb	0.02292	25.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-57.9	-23.000	µg/L	1.4798	-23.000	ppb	1.4798	6.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.1	0.1206	µg/L	0.05477	0.1206	ppb	0.05477	45.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-6.5	-0.3103	µg/L	0.27368	-0.3103	ppb	0.27368	88.19%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 9.5      0.1996 µg/L       0.16381      0.1996 ppb        0.16381  82.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -36.4     -0.2536 µg/L       0.34990     -0.2536 ppb        0.34990 138.00%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.5      13.287 µg/L        6.5055      13.287 ppb         6.5055  48.96%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -45.8     -24.807 µg/L       33.6109     -24.807 ppb        33.6109 135.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.6     -14.525 µg/L        6.3044     -14.525 ppb         6.3044  43.40%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                76.9      0.2458 µg/L       0.03255      0.2458 ppb        0.03255  13.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.5      0.6150 µg/L       0.14081      0.6150 ppb        0.14081  22.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         13.1      3.6421 µg/L       3.51092      3.6421 ppb        3.51092  96.40%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -19.1     -1.0416 µg/L       0.23191     -1.0416 ppb        0.23191  22.26%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 30.0      65.207 µg/L        2.1352      65.207 ppb         2.1352   3.27%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                21.7      5.4962 µg/L       1.60107      5.4962 ppb        1.60107  29.13%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.0      10.062 µg/L        9.4180      10.062 ppb         9.4180  93.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.9      0.8821 µg/L       3.30468      0.8821 ppb        3.30468 374.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.7     -5.4239 µg/L       4.03882     -5.4239 ppb        4.03882  74.46%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     135.3      25.846 µg/L        6.4464      25.846 ppb         6.4464  24.94%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                32.6      2.4466 µg/L       0.40595      2.4466 ppb        0.40595  16.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.2      1.0457 µg/L       1.49700      1.0457 ppb        1.49700 143.16%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -9.6     -0.0539 µg/L       0.16249     -0.0539 ppb        0.16249 301.52%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                81.0      0.1808 µg/L       0.04799      0.1808 ppb        0.04799  26.54%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.0      3.0035 µg/L       5.10817      3.0035 ppb        5.10817 170.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                198.1      18.605 µg/L        6.8171      18.605 ppb         6.8171  36.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 37.9      0.4631 µg/L       0.14016      0.4631 ppb        0.14016  30.26%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -9.3     -0.2442 µg/L       0.13400     -0.2442 ppb        0.13400  54.87%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 121109
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 121109A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/11/2009 12:44:17**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/11/2009 10:35:01**
Analyst: **Data Type: Reprocessed on 12/11/2009 12:45:49**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	867384.7	867384.7	99.939	%	10:38:11
1	Sc Radial	5608.5	5608.5	101	%	10:36:54
1	Y 371.029	729366.4	729366.4	99.988	%	10:38:11
1	Y RADIAL	6113.1	6113.1	101.2	%	10:36:54
1	Ag 328.068†	291.2	291.4	[0.00]	ug/L	10:38:11

1	Al 396.153Radial†	-27.8	-27.7	[0.00]	ug/L	10:36:54
1	As 188.979†	-33.2	-33.2	[0.00]	ug/L	10:38:31
1	B 249.677†	-500.0	-500.3	[0.00]	ug/L	10:38:31
1	Ba 233.527†	-23.0	-23.0	[0.00]	ug/L	10:38:31
1	Be 313.107†	-4673.8	-4676.6	[0.00]	ug/L	10:38:11
1	Ca 317.933Radial†	18.4	18.3	[0.00]	ug/L	10:37:14
1	Cd 226.502†	-195.7	-195.8	[0.00]	ug/L	10:38:31
1	Co 228.616†	-73.5	-73.5	[0.00]	ug/L	10:38:31
1	Cr 267.716†	98.1	98.1	[0.00]	ug/L	10:38:31
1	Cu 324.752†	6710.6	6714.7	[0.00]	ug/L	10:38:11
1	Fe 238.204 Radial†	11.2	11.2	[0.00]	ug/L	10:37:14
1	K 766.490 Radial†	2781.3	2765.0	[0.00]	ug/L	10:36:54
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	10:37:14
1	Mn 257.610†	514.8	515.2	[0.00]	ug/L	10:38:31
1	Mo 202.031†	16.4	16.4	[0.00]	ug/L	10:38:31
1	Na 589.592 Radial†	-1549.4	-1540.3	[0.00]	ug/L	10:36:54
1	Ni 231.604†	92.4	92.4	[0.00]	ug/L	10:38:31
1	P 214.914†	242.5	242.6	[0.00]	ug/L	10:38:31
1	Pb 220.353†	-68.7	-68.7	[0.00]	ug/L	10:38:31
1	S 181.975 Axial†	46.0	46.1	[0.00]	ug/L	10:38:31
1	Sb 206.836†	43.0	43.0	[0.00]	ug/L	10:38:31
1	Se 196.026†	-23.4	-23.4	[0.00]	ug/L	10:38:31
1	Si 251.611†	471.9	472.2	[0.00]	ug/L	10:38:31
1	Sn 189.927†	5.3	5.3	[0.00]	ug/L	10:38:31
1	Sr 421.552†	8.4	8.3	[0.00]	ug/L	10:36:54
1	Ti 334.940†	-1298.5	-1299.3	[0.00]	ug/L	10:38:11
1	Tl 190.801†	-28.3	-28.3	[0.00]	ug/L	10:38:31
1	U 409.014†	-2617.2	-2618.8	[0.00]	ug/L	10:38:11
1	V 292.402†	-1364.9	-1365.7	[0.00]	ug/L	10:38:11
1	Zn 213.857†	737.5	738.0	[0.00]	ug/L	10:38:31
1	SiO2†	543.0	543.4	[0.00]	ug/L	10:39:27
2	Sc 361.383	873164.9	873164.9	100.60	%	10:38:36
2	Sc Radial	5567.4	5567.4	99.9	%	10:37:19
2	Y 371.029	733929.4	733929.4	100.61	%	10:38:36
2	Y RADIAL	6042.1	6042.1	100.0	%	10:37:19
2	Ag 328.068†	268.9	267.3	[0.00]	ug/L	10:38:36
2	Al 396.153Radial†	-36.3	-36.3	[0.00]	ug/L	10:37:19
2	As 188.979†	-30.2	-30.0	[0.00]	ug/L	10:38:56
2	B 249.677†	-501.5	-498.5	[0.00]	ug/L	10:38:56
2	Ba 233.527†	-11.8	-11.7	[0.00]	ug/L	10:38:56
2	Be 313.107†	-4652.0	-4624.1	[0.00]	ug/L	10:38:36
2	Ca 317.933Radial†	14.4	14.4	[0.00]	ug/L	10:37:39
2	Cd 226.502†	-208.8	-207.6	[0.00]	ug/L	10:38:56
2	Co 228.616†	-74.9	-74.4	[0.00]	ug/L	10:38:56
2	Cr 267.716†	76.0	75.5	[0.00]	ug/L	10:38:56
2	Cu 324.752†	6865.2	6823.9	[0.00]	ug/L	10:38:36
2	Fe 238.204 Radial†	8.6	8.6	[0.00]	ug/L	10:37:39
2	K 766.490 Radial†	2732.7	2736.8	[0.00]	ug/L	10:37:19
2	Mg 279.077 IEC†	0.6	0.6	[0.00]	ug/L	10:37:39
2	Mn 257.610†	513.2	510.1	[0.00]	ug/L	10:38:56
2	Mo 202.031†	21.4	21.3	[0.00]	ug/L	10:38:56
2	Na 589.592 Radial†	-1616.8	-1619.2	[0.00]	ug/L	10:37:19
2	Ni 231.604†	82.6	82.1	[0.00]	ug/L	10:38:56
2	P 214.914†	229.0	227.6	[0.00]	ug/L	10:38:56
2	Pb 220.353†	-75.5	-75.1	[0.00]	ug/L	10:38:56
2	S 181.975 Axial†	49.2	48.9	[0.00]	ug/L	10:38:56
2	Sb 206.836†	34.6	34.4	[0.00]	ug/L	10:38:56
2	Se 196.026†	-27.5	-27.3	[0.00]	ug/L	10:38:56
2	Si 251.611†	487.6	484.7	[0.00]	ug/L	10:38:56
2	Sn 189.927†	9.1	9.1	[0.00]	ug/L	10:38:56
2	Sr 421.552†	-10.9	-10.9	[0.00]	ug/L	10:37:19
2	Ti 334.940†	-1175.8	-1168.7	[0.00]	ug/L	10:38:36
2	Tl 190.801†	-31.7	-31.5	[0.00]	ug/L	10:38:56
2	U 409.014†	-2571.7	-2556.3	[0.00]	ug/L	10:38:36
2	V 292.402†	-1358.1	-1349.9	[0.00]	ug/L	10:38:36
2	Zn 213.857†	758.6	754.0	[0.00]	ug/L	10:38:56
2	SiO2†	515.7	512.6	[0.00]	ug/L	10:39:32
3	Sc 361.383	863198.0	863198.0	99.456	%	10:39:02
3	Sc Radial	5551.4	5551.4	99.6	%	10:37:44
3	Y 371.029	725074.5	725074.5	99.399	%	10:39:02
3	Y RADIAL	5962.3	5962.3	98.73	%	10:37:44

3	Ag 328.068†	261.9	263.4	[0.00] ug/L	10:39:02
3	Al 396.153Radial†	-41.8	-41.9	[0.00] ug/L	10:37:44
3	As 188.979†	-30.5	-30.7	[0.00] ug/L	10:39:22
3	B 249.677†	-478.2	-480.8	[0.00] ug/L	10:39:22
3	Ba 233.527†	1.4	1.4	[0.00] ug/L	10:39:22
3	Be 313.107†	-4661.7	-4687.2	[0.00] ug/L	10:39:02
3	Ca 317.933Radial†	18.0	18.0	[0.00] ug/L	10:38:05
3	Cd 226.502†	-192.4	-193.4	[0.00] ug/L	10:39:22
3	Co 228.616†	-72.0	-72.4	[0.00] ug/L	10:39:22
3	Cr 267.716†	84.0	84.5	[0.00] ug/L	10:39:22
3	Cu 324.752†	6698.3	6734.9	[0.00] ug/L	10:39:02
3	Fe 238.204 Radial†	9.9	9.9	[0.00] ug/L	10:38:05
3	K 766.490 Radial†	2704.9	2716.8	[0.00] ug/L	10:37:44
3	Mg 279.077 IEC†	3.2	3.2	[0.00] ug/L	10:38:05
3	Mn 257.610†	532.3	535.3	[0.00] ug/L	10:39:22
3	Mo 202.031†	17.4	17.5	[0.00] ug/L	10:39:22
3	Na 589.592 Radial†	-1496.3	-1502.9	[0.00] ug/L	10:37:44
3	Ni 231.604†	82.9	83.3	[0.00] ug/L	10:39:22
3	P 214.914†	254.4	255.8	[0.00] ug/L	10:39:22
3	Pb 220.353†	-59.8	-60.1	[0.00] ug/L	10:39:22
3	S 181.975 Axial†	52.9	53.2	[0.00] ug/L	10:39:22
3	Sb 206.836†	34.5	34.7	[0.00] ug/L	10:39:22
3	Se 196.026†	-29.5	-29.6	[0.00] ug/L	10:39:22
3	Si 251.611†	485.7	488.4	[0.00] ug/L	10:39:22
3	Sn 189.927†	12.1	12.1	[0.00] ug/L	10:39:22
3	Sr 421.552†	1.9	1.9	[0.00] ug/L	10:37:44
3	Ti 334.940†	-1293.7	-1300.8	[0.00] ug/L	10:39:02
3	Tl 190.801†	-43.7	-43.9	[0.00] ug/L	10:39:22
3	U 409.014†	-2562.9	-2576.9	[0.00] ug/L	10:39:02
3	V 292.402†	-1365.1	-1372.6	[0.00] ug/L	10:39:02
3	Zn 213.857†	765.4	769.6	[0.00] ug/L	10:39:22
3	SiO2†	514.6	517.4	[0.00] ug/L	10:39:37

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	867915.8	5004.66	0.58%	100.00	%
Sc Radial	5575.8	29.49	0.53%	100	%
Y 371.029	729456.7	4428.18	0.61%	100.00	%
Y RADIAL	6039.2	75.46	1.25%	100.0	%
Ag 328.068†	274.0	15.19	5.54%	[0.00]	ug/L
Al 396.153Radial†	-35.3	7.20	20.40%	[0.00]	ug/L
As 188.979†	-31.3	1.70	5.42%	[0.00]	ug/L
B 249.677†	-493.2	10.80	2.19%	[0.00]	ug/L
Ba 233.527†	-11.1	12.19	109.76%	[0.00]	ug/L
Be 313.107†	-4662.6	33.82	0.73%	[0.00]	ug/L
Ca 317.933Radial†	16.9	2.17	12.81%	[0.00]	ug/L
Cd 226.502†	-198.9	7.58	3.81%	[0.00]	ug/L
Co 228.616†	-73.4	1.03	1.40%	[0.00]	ug/L
Cr 267.716†	86.0	11.38	13.22%	[0.00]	ug/L
Cu 324.752†	6757.8	58.13	0.86%	[0.00]	ug/L
Fe 238.204 Radial†	9.9	1.30	13.13%	[0.00]	ug/L
K 766.490 Radial†	2739.5	24.23	0.88%	[0.00]	ug/L
Mg 279.077 IEC†	1.9	1.29	67.77%	[0.00]	ug/L
Mn 257.610†	520.2	13.31	2.56%	[0.00]	ug/L
Mo 202.031†	18.4	2.55	13.83%	[0.00]	ug/L
Na 589.592 Radial†	-1554.1	59.38	3.82%	[0.00]	ug/L
Ni 231.604†	85.9	5.65	6.58%	[0.00]	ug/L
P 214.914†	242.0	14.10	5.83%	[0.00]	ug/L
Pb 220.353†	-68.0	7.50	11.03%	[0.00]	ug/L
S 181.975 Axial†	49.4	3.61	7.31%	[0.00]	ug/L
Sb 206.836†	37.4	4.89	13.08%	[0.00]	ug/L
Se 196.026†	-26.8	3.12	11.65%	[0.00]	ug/L
Si 251.611†	481.7	8.49	1.76%	[0.00]	ug/L
Sn 189.927†	8.8	3.41	38.63%	[0.00]	ug/L
Sr 421.552†	-0.2	9.82	>999.9%	[0.00]	ug/L
Ti 334.940†	-1256.2	75.82	6.04%	[0.00]	ug/L
Tl 190.801†	-34.6	8.24	23.82%	[0.00]	ug/L
U 409.014†	-2584.0	31.88	1.23%	[0.00]	ug/L
V 292.402†	-1362.7	11.62	0.85%	[0.00]	ug/L

Zn 213.857†	753.9	15.79	2.09%	[0.00] ug/L
SiO2†	524.5	16.53	3.15%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/11/2009 10:41:48
Data Type: Reprocessed on 12/11/2009 12:45:50

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	875842.7	875842.7	100.91	%	10:44:12
1	Sc Radial	5490.5	5490.5	98.5	%	10:43:46
1	Y 371.029	731965.3	731965.3	100.34	%	10:44:12
1	Y RADIAL	5960.4	5960.4	98.70	%	10:43:46
1	Ag 328.068†	21744.6	21273.8	[100]	ug/L	10:44:17
1	As 188.979†	217.4	246.7	[100]	ug/L	10:44:37
1	B 249.677†	3900.4	4358.3	[100]	ug/L	10:44:17
1	Ba 233.527†	13083.6	12976.3	[100]	ug/L	10:44:17
1	Be 313.107†	259024.2	261342.5	[100]	ug/L	10:44:12
1	Cd 226.502†	9235.0	9350.4	[100]	ug/L	10:44:17
1	Co 228.616†	4935.1	4963.9	[100]	ug/L	10:44:37
1	Cr 267.716†	9393.3	9222.2	[100]	ug/L	10:44:17
1	Cu 324.752†	39672.7	32555.8	[100]	ug/L	10:44:17
1	K 766.490 Radial†	8407.4	5798.4	[1000]	ug/L	10:43:40
1	Mn 257.610†	91938.6	90586.4	[100]	ug/L	10:44:17
1	Mo 202.031†	1522.8	1490.6	[100]	ug/L	10:44:37
1	Ni 231.604†	4178.8	4055.1	[100]	ug/L	10:44:37
1	P 214.914†	1076.2	824.4	[500]	ug/L	10:44:37
1	Pb 220.353†	785.2	846.1	[100]	ug/L	10:44:37
1	S 181.975 Axial†	185.0	134.0	[200]	ug/L	10:44:37
1	Sb 206.836†	324.9	284.5	[100]	ug/L	10:44:37
1	Se 196.026†	139.6	165.1	[100]	ug/L	10:44:37
1	Si 251.611†	16386.5	15756.4	[500]	ug/L	10:44:17
1	Sn 189.927†	584.6	570.5	[100]	ug/L	10:44:37
1	Sr 421.552†	15716.8	15961.0	[100]	ug/L	10:43:46
1	Ti 334.940†	58684.5	59409.6	[100]	ug/L	10:44:17
1	Tl 190.801†	306.5	338.3	[100]	ug/L	10:44:37
1	U 409.014†	652.2	3230.3	[100]	ug/L	10:44:12
1	V 292.402†	13019.5	14264.4	[100]	ug/L	10:44:17
1	Zn 213.857†	12046.1	11183.3	[100]	ug/L	10:44:17
1	SiO2†	16331.5	15659.2	[1069.5]	ug/L	10:45:44
2	Sc 361.383	876251.3	876251.3	100.96	%	10:44:43
2	Sc Radial	5517.6	5517.6	99.0	%	10:43:56
2	Y 371.029	732181.8	732181.8	100.37	%	10:44:43
2	Y RADIAL	6014.9	6014.9	99.60	%	10:43:56
2	Ag 328.068†	21438.3	20960.3	[100]	ug/L	10:44:48
2	As 188.979†	215.7	244.9	[100]	ug/L	10:45:08
2	B 249.677†	3806.3	4263.3	[100]	ug/L	10:44:48
2	Ba 233.527†	12864.3	12753.0	[100]	ug/L	10:44:48
2	Be 313.107†	258711.3	260912.9	[100]	ug/L	10:44:43
2	Cd 226.502†	9036.0	9149.0	[100]	ug/L	10:44:48
2	Co 228.616†	4922.9	4949.5	[100]	ug/L	10:45:08
2	Cr 267.716†	9233.9	9060.1	[100]	ug/L	10:44:48
2	Cu 324.752†	38791.5	31664.6	[100]	ug/L	10:44:48
2	K 766.490 Radial†	8506.7	5856.8	[1000]	ug/L	10:43:51
2	Mn 257.610†	90655.4	89272.9	[100]	ug/L	10:44:48
2	Mo 202.031†	1526.9	1494.0	[100]	ug/L	10:45:08
2	Ni 231.604†	4185.8	4060.0	[100]	ug/L	10:45:08
2	P 214.914†	1063.0	810.8	[500]	ug/L	10:45:08
2	Pb 220.353†	786.4	846.9	[100]	ug/L	10:45:08
2	S 181.975 Axial†	193.4	142.2	[200]	ug/L	10:45:08
2	Sb 206.836†	328.4	287.9	[100]	ug/L	10:45:08
2	Se 196.026†	143.4	168.9	[100]	ug/L	10:45:08
2	Si 251.611†	16134.8	15499.6	[500]	ug/L	10:44:48
2	Sn 189.927†	595.0	580.5	[100]	ug/L	10:45:08
2	Sr 421.552†	15803.8	15970.6	[100]	ug/L	10:43:56
2	Ti 334.940†	57870.5	58576.2	[100]	ug/L	10:44:48
2	Tl 190.801†	304.5	336.2	[100]	ug/L	10:45:08

2	U 409.014†	865.7	3441.5	[100]	ug/L	10:44:43
2	V 292.402†	12746.3	13987.8	[100]	ug/L	10:44:48
2	Zn 213.857†	11880.2	11013.4	[100]	ug/L	10:44:48
2	SiO2†	16234.1	15555.2	[1069.5]	ug/L	10:45:49
3	Sc 361.383	871070.4	871070.4	100.36	%	10:45:13
3	Sc Radial	5463.9	5463.9	98.0	%	10:44:06
3	Y 371.029	728966.6	728966.6	99.933	%	10:45:13
3	Y RADIAL	5953.0	5953.0	98.57	%	10:44:06
3	Ag 328.068†	21625.9	21273.6	[100]	ug/L	10:45:18
3	As 188.979†	218.8	249.3	[100]	ug/L	10:45:38
3	B 249.677†	3831.9	4311.2	[100]	ug/L	10:45:18
3	Ba 233.527†	13046.8	13010.7	[100]	ug/L	10:45:18
3	Be 313.107†	258070.6	261798.7	[100]	ug/L	10:45:13
3	Cd 226.502†	9135.9	9301.8	[100]	ug/L	10:45:18
3	Co 228.616†	4918.9	4974.6	[100]	ug/L	10:45:38
3	Cr 267.716†	9344.1	9224.2	[100]	ug/L	10:45:18
3	Cu 324.752†	39512.1	32611.2	[100]	ug/L	10:45:18
3	K 766.490 Radial†	8464.4	5898.1	[1000]	ug/L	10:44:01
3	Mn 257.610†	91873.8	91020.9	[100]	ug/L	10:45:18
3	Mo 202.031†	1534.5	1510.6	[100]	ug/L	10:45:38
3	Ni 231.604†	4204.2	4103.0	[100]	ug/L	10:45:38
3	P 214.914†	1070.9	824.9	[500]	ug/L	10:45:38
3	Pb 220.353†	786.1	851.2	[100]	ug/L	10:45:38
3	S 181.975 Axial†	186.1	136.0	[200]	ug/L	10:45:38
3	Sb 206.836†	327.2	288.7	[100]	ug/L	10:45:38
3	Se 196.026†	154.0	180.3	[100]	ug/L	10:45:38
3	Si 251.611†	16375.9	15834.9	[500]	ug/L	10:45:18
3	Sn 189.927†	604.1	593.1	[100]	ug/L	10:45:38
3	Sr 421.552†	15771.1	16094.2	[100]	ug/L	10:44:06
3	Ti 334.940†	58689.0	59732.7	[100]	ug/L	10:45:18
3	Tl 190.801†	303.8	337.3	[100]	ug/L	10:45:38
3	U 409.014†	486.0	3068.3	[100]	ug/L	10:45:13
3	V 292.402†	12958.4	14274.2	[100]	ug/L	10:45:18
3	Zn 213.857†	11966.3	11169.1	[100]	ug/L	10:45:18
3	SiO2†	16008.2	15425.8	[1069.5]	ug/L	10:45:54

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	874388.1	2880.49	0.33%	100.75	%
Sc Radial	5490.7	26.84	0.49%	98.5	%
Y 371.029	731037.9	1797.06	0.25%	100.22	%
Y RADIAL	5976.1	33.76	0.56%	98.96	%
Ag 328.068†	21169.2	180.92	0.85%	[100]	ug/L
As 188.979†	247.0	2.22	0.90%	[100]	ug/L
B 249.677†	4310.9	47.50	1.10%	[100]	ug/L
Ba 233.527†	12913.3	139.90	1.08%	[100]	ug/L
Be 313.107†	261351.4	442.96	0.17%	[100]	ug/L
Cd 226.502†	9267.0	105.10	1.13%	[100]	ug/L
Co 228.616†	4962.6	12.57	0.25%	[100]	ug/L
Cr 267.716†	9168.8	94.20	1.03%	[100]	ug/L
Cu 324.752†	32277.2	531.23	1.65%	[100]	ug/L
K 766.490 Radial†	5851.1	50.10	0.86%	[1000]	ug/L
Mn 257.610†	90293.4	910.10	1.01%	[100]	ug/L
Mo 202.031†	1498.4	10.66	0.71%	[100]	ug/L
Ni 231.604†	4072.7	26.39	0.65%	[100]	ug/L
P 214.914†	820.1	8.01	0.98%	[500]	ug/L
Pb 220.353†	848.1	2.78	0.33%	[100]	ug/L
S 181.975 Axial†	137.4	4.26	3.10%	[200]	ug/L
Sb 206.836†	287.0	2.20	0.77%	[100]	ug/L
Se 196.026†	171.4	7.91	4.62%	[100]	ug/L
Si 251.611†	15697.0	175.35	1.12%	[500]	ug/L
Sn 189.927†	581.4	11.35	1.95%	[100]	ug/L
Sr 421.552†	16008.6	74.27	0.46%	[100]	ug/L
Ti 334.940†	59239.5	596.69	1.01%	[100]	ug/L
Tl 190.801†	337.2	1.06	0.31%	[100]	ug/L
U 409.014†	3246.7	187.14	5.76%	[100]	ug/L
V 292.402†	14175.5	162.60	1.15%	[100]	ug/L
Zn 213.857†	11121.9	94.26	0.85%	[100]	ug/L
SiO2†	15546.7	116.97	0.75%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2009 10:48:04
Data Type: Reprocessed on 12/11/2009 12:45:56

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	862154.4	862154.4	99.336	%	10:51:14
1	Sc Radial	5481.4	5481.4	98.3	%	10:49:57
1	Y 371.029	712144.1	712144.1	97.627	%	10:51:14
1	Y RADIAL	5921.2	5921.2	98.05	%	10:49:57
1	Ag 328.068†	113189.5	113671.8	[500]	ug/L	10:51:19
1	Al 396.153Radial†	7182.3	7341.3	[5000]	ug/L	10:49:57
1	As 188.979†	1282.0	1321.9	[500]	ug/L	10:51:39
1	B 249.677†	23230.2	23878.7	[500]	ug/L	10:51:19
1	Ba 233.527†	67975.9	68441.2	[500]	ug/L	10:51:19
1	Be 313.107†	1405181.5	1419234.3	[500]	ug/L	10:51:14
1	Ca 317.933Radial†	3492.8	3536.1	[5000]	ug/L	10:50:17
1	Cd 226.502†	49155.7	49683.2	[500]	ug/L	10:51:19
1	Co 228.616†	26963.6	27217.2	[500]	ug/L	10:51:19
1	Cr 267.716†	48603.2	48842.0	[500]	ug/L	10:51:19
1	Cu 324.752†	179701.3	174144.3	[500]	ug/L	10:51:19
1	K 766.490 Radial†	32539.6	30360.4	[5000]	ug/L	10:49:57
1	Mg 279.077 IEC†	159.8	160.7	[5000]	ug/L	10:50:17
1	Mn 257.610†	480086.9	482774.9	[500]	ug/L	10:51:14
1	Mo 202.031†	8055.5	8090.9	[500]	ug/L	10:51:39
1	Ni 231.604†	22326.2	22389.5	[500]	ug/L	10:51:19
1	P 214.914†	4773.9	4563.8	[2500]	ug/L	10:51:39
1	Pb 220.353†	4475.4	4573.3	[500]	ug/L	10:51:39
1	S 181.975 Axial†	839.9	796.1	[1000]	ug/L	10:51:39
1	Sb 206.836†	1659.7	1633.4	[500]	ug/L	10:51:39
1	Se 196.026†	882.8	915.5	[500]	ug/L	10:51:39
1	Si 251.611†	87899.1	88004.8	[2500]	ug/L	10:51:19
1	Sn 189.927†	3195.2	3207.7	[500]	ug/L	10:51:39
1	Sr 421.552†	85559.7	87033.4	[500]	ug/L	10:49:57
1	Ti 334.940†	315692.6	319058.5	[500]	ug/L	10:51:19
1	Tl 190.801†	1768.4	1814.8	[500]	ug/L	10:51:39
1	U 409.014†	14815.3	17498.3	[500]	ug/L	10:51:19
1	V 292.402†	74574.4	76435.5	[500]	ug/L	10:51:19
1	Zn 213.857†	60376.0	60025.6	[500]	ug/L	10:51:19
1	SiO2†	86990.1	87046.9	[5347.5]	ug/L	10:52:47
2	Sc 361.383	869710.7	869710.7	100.21	%	10:51:45
2	Sc Radial	5365.2	5365.2	96.2	%	10:50:22
2	Y 371.029	718941.2	718941.2	98.558	%	10:51:45
2	Y RADIAL	5826.9	5826.9	96.48	%	10:50:22
2	Ag 328.068†	113787.1	113278.3	[500]	ug/L	10:51:50
2	Al 396.153Radial†	7081.8	7395.0	[5000]	ug/L	10:50:22
2	As 188.979†	1283.1	1311.8	[500]	ug/L	10:52:10
2	B 249.677†	23348.0	23793.0	[500]	ug/L	10:51:50
2	Ba 233.527†	68259.7	68130.0	[500]	ug/L	10:51:50
2	Be 313.107†	1417482.9	1419220.2	[500]	ug/L	10:51:45
2	Ca 317.933Radial†	3479.3	3599.0	[5000]	ug/L	10:50:42
2	Cd 226.502†	49266.7	49363.9	[500]	ug/L	10:51:50
2	Co 228.616†	27019.5	27037.1	[500]	ug/L	10:51:50
2	Cr 267.716†	48764.9	48578.2	[500]	ug/L	10:51:50
2	Cu 324.752†	180993.9	173862.5	[500]	ug/L	10:51:50
2	K 766.490 Radial†	32284.5	30811.7	[5000]	ug/L	10:50:22
2	Mg 279.077 IEC†	158.5	162.8	[5000]	ug/L	10:50:42
2	Mn 257.610†	482638.4	481122.2	[500]	ug/L	10:51:45
2	Mo 202.031†	8034.1	7999.1	[500]	ug/L	10:52:10
2	Ni 231.604†	22414.2	22282.0	[500]	ug/L	10:51:50
2	P 214.914†	4776.3	4524.5	[2500]	ug/L	10:52:10
2	Pb 220.353†	4468.2	4526.9	[500]	ug/L	10:52:10
2	S 181.975 Axial†	825.9	774.7	[1000]	ug/L	10:52:10
2	Sb 206.836†	1651.7	1610.9	[500]	ug/L	10:52:10

2	Se 196.026†	877.5	902.4	[500]	ug/L	10:52:10
2	Si 251.611†	88332.2	87668.2	[2500]	ug/L	10:51:50
2	Sn 189.927†	3195.2	3179.8	[500]	ug/L	10:52:10
2	Sr 421.552†	83941.4	87235.3	[500]	ug/L	10:50:22
2	Ti 334.940†	317719.6	318320.1	[500]	ug/L	10:51:50
2	Tl 190.801†	1766.5	1797.5	[500]	ug/L	10:52:10
2	U 409.014†	15164.8	17717.5	[500]	ug/L	10:51:50
2	V 292.402†	75076.8	76284.6	[500]	ug/L	10:51:50
2	Zn 213.857†	60583.5	59704.6	[500]	ug/L	10:51:50
2	SiO2†	88381.8	87675.0	[5347.5]	ug/L	10:52:52
3	Sc 361.383	879497.5	879497.5	101.33	%	10:52:16
3	Sc Radial	5472.2	5472.2	98.1	%	10:50:47
3	Y 371.029	727729.6	727729.6	99.763	%	10:52:16
3	Y RADIAL	5921.7	5921.7	98.05	%	10:50:47
3	Ag 328.068†	113888.3	112114.5	[500]	ug/L	10:52:21
3	Al 396.153Radial†	7240.2	7412.5	[5000]	ug/L	10:50:47
3	As 188.979†	1290.5	1304.8	[500]	ug/L	10:52:41
3	B 249.677†	23462.3	23646.5	[500]	ug/L	10:52:21
3	Ba 233.527†	68134.9	67248.8	[500]	ug/L	10:52:21
3	Be 313.107†	1436756.2	1422498.9	[500]	ug/L	10:52:16
3	Ca 317.933Radial†	3445.1	3493.4	[5000]	ug/L	10:51:07
3	Cd 226.502†	49122.3	48674.3	[500]	ug/L	10:52:21
3	Co 228.616†	27027.0	26744.5	[500]	ug/L	10:52:21
3	Cr 267.716†	48752.2	48024.1	[500]	ug/L	10:52:21
3	Cu 324.752†	181069.6	171927.4	[500]	ug/L	10:52:21
3	K 766.490 Radial†	32771.2	30651.6	[5000]	ug/L	10:50:47
3	Mg 279.077 IEC†	155.8	156.8	[5000]	ug/L	10:51:07
3	Mn 257.610†	487896.6	480951.6	[500]	ug/L	10:52:16
3	Mo 202.031†	8036.7	7912.5	[500]	ug/L	10:52:41
3	Ni 231.604†	22306.3	21926.6	[500]	ug/L	10:52:21
3	P 214.914†	4778.5	4473.5	[2500]	ug/L	10:52:41
3	Pb 220.353†	4426.8	4436.5	[500]	ug/L	10:52:41
3	S 181.975 Axial†	816.1	756.0	[1000]	ug/L	10:52:41
3	Sb 206.836†	1659.4	1600.2	[500]	ug/L	10:52:41
3	Se 196.026†	884.8	900.0	[500]	ug/L	10:52:41
3	Si 251.611†	88184.8	86541.8	[2500]	ug/L	10:52:21
3	Sn 189.927†	3185.0	3134.3	[500]	ug/L	10:52:41
3	Sr 421.552†	85571.7	87190.7	[500]	ug/L	10:50:47
3	Ti 334.940†	317393.1	314469.8	[500]	ug/L	10:52:21
3	Tl 190.801†	1768.6	1779.8	[500]	ug/L	10:52:41
3	U 409.014†	15098.8	17484.0	[500]	ug/L	10:52:21
3	V 292.402†	74801.1	75178.8	[500]	ug/L	10:52:21
3	Zn 213.857†	60531.6	58980.6	[500]	ug/L	10:52:21
3	SiO2†	87774.3	86094.0	[5347.5]	ug/L	10:52:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	870454.2	8695.40	1.00%	100.29	%
Sc Radial	5439.6	64.57	1.19%	97.6	%
Y 371.029	719605.0	7813.91	1.09%	98.649	%
Y RADIAL	5889.9	54.59	0.93%	97.53	%
Ag 328.068†	113021.5	809.76	0.72%	[500]	ug/L
Al 396.153Radial†	7382.9	37.08	0.50%	[5000]	ug/L
As 188.979†	1312.8	8.58	0.65%	[500]	ug/L
B 249.677†	23772.7	117.39	0.49%	[500]	ug/L
Ba 233.527†	67940.0	618.48	0.91%	[500]	ug/L
Be 313.107†	1420317.8	1888.90	0.13%	[500]	ug/L
Ca 317.933Radial†	3542.8	53.11	1.50%	[5000]	ug/L
Cd 226.502†	49240.5	515.63	1.05%	[500]	ug/L
Co 228.616†	26999.6	238.58	0.88%	[500]	ug/L
Cr 267.716†	48481.4	417.42	0.86%	[500]	ug/L
Cu 324.752†	173311.4	1206.87	0.70%	[500]	ug/L
K 766.490 Radial†	30607.9	228.83	0.75%	[5000]	ug/L
Mg 279.077 IEC†	160.1	3.01	1.88%	[5000]	ug/L
Mn 257.610†	481616.2	1007.05	0.21%	[500]	ug/L
Mo 202.031†	8000.8	89.21	1.12%	[500]	ug/L
Ni 231.604†	22199.3	242.25	1.09%	[500]	ug/L
P 214.914†	4520.6	45.26	1.00%	[2500]	ug/L
Pb 220.353†	4512.2	69.56	1.54%	[500]	ug/L

S 181.975 Axial†	775.6	20.09	2.59%	[1000]	ug/L
Sb 206.836†	1614.8	16.98	1.05%	[500]	ug/L
Se 196.026†	906.0	8.34	0.92%	[500]	ug/L
Si 251.611†	87404.9	766.17	0.88%	[2500]	ug/L
Sn 189.927†	3173.9	37.08	1.17%	[500]	ug/L
Sr 421.552†	87153.1	106.08	0.12%	[500]	ug/L
Ti 334.940†	317282.8	2463.95	0.78%	[500]	ug/L
Tl 190.801†	1797.4	17.50	0.97%	[500]	ug/L
U 409.014†	17566.6	130.90	0.75%	[500]	ug/L
V 292.402†	75966.3	686.14	0.90%	[500]	ug/L
Zn 213.857†	59570.3	535.28	0.90%	[500]	ug/L
SiO2†	86938.6	796.02	0.92%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/11/2009 10:55:08
Data Type: Reprocessed on 12/11/2009 12:45:57

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	853185.0	853185.0	98.303	%	10:58:24
1	Sc Radial	5453.9	5453.9	97.8	%	10:57:01
1	Y 371.029	706727.3	706727.3	96.884	%	10:58:24
1	Y RADIAL	5894.8	5894.8	97.61	%	10:57:01
1	Ag 328.068†	216668.2	220135.1	[1000]	ug/L	10:58:24
1	Al 396.153Radial†	13864.0	14209.2	[10000]	ug/L	10:57:01
1	As 188.979†	2487.8	2562.1	[1000]	ug/L	10:58:44
1	B 249.677†	45672.0	46953.8	[1000]	ug/L	10:58:24
1	Ba 233.527†	131213.3	133489.8	[1000]	ug/L	10:58:24
1	Be 313.107†	2694496.8	2745681.6	[1000]	ug/L	10:58:19
1	Ca 317.933Radial†	6738.5	6872.2	[10000]	ug/L	10:57:01
1	Cd 226.502†	94285.2	96112.0	[1000]	ug/L	10:58:24
1	Co 228.616†	51927.8	52897.8	[1000]	ug/L	10:58:24
1	Cr 267.716†	93794.4	95327.8	[1000]	ug/L	10:58:24
1	Cu 324.752†	345381.4	344586.8	[1000]	ug/L	10:58:24
1	Fe 238.204 Radial†	1097.6	1112.3	[10000]	ug/L	10:57:21
1	K 766.490 Radial†	60558.7	59172.9	[10000]	ug/L	10:57:01
1	Mg 279.077 IEC†	298.3	303.0	[10000]	ug/L	10:57:21
1	Mn 257.610†	915562.2	930849.8	[1000]	ug/L	10:58:19
1	Mo 202.031†	15288.8	15534.4	[1000]	ug/L	10:58:44
1	Na 589.592 Radial†	29494.4	31707.9	[10000]	ug/L	10:57:01
1	Ni 231.604†	42800.5	43453.5	[1000]	ug/L	10:58:24
1	P 214.914†	8932.9	8845.1	[5000]	ug/L	10:58:44
1	Pb 220.353†	8650.8	8868.2	[1000]	ug/L	10:58:44
1	S 181.975 Axial†	1510.1	1486.8	[2000]	ug/L	10:58:44
1	Sb 206.836†	3111.7	3128.0	[1000]	ug/L	10:58:44
1	Se 196.026†	1704.5	1760.7	[1000]	ug/L	10:58:44
1	Si 251.611†	164115.4	166467.2	[5000]	ug/L	10:58:24
1	Sn 189.927†	6048.0	6143.6	[1000]	ug/L	10:58:44
1	Sr 421.552†	160418.7	164004.8	[1000]	ug/L	10:57:01
1	Ti 334.940†	616360.4	628258.5	[1000]	ug/L	10:58:19
1	Tl 190.801†	3412.4	3505.9	[1000]	ug/L	10:58:44
1	U 409.014†	31688.2	34819.3	[1000]	ug/L	10:58:24
1	V 292.402†	146096.9	149982.1	[1000]	ug/L	10:58:24
1	Zn 213.857†	114549.0	115772.9	[1000]	ug/L	10:58:24
1	SiO2†	162872.7	165160.3	[10695]	ug/L	10:59:54
2	Sc 361.383	845212.1	845212.1	97.384	%	10:58:56
2	Sc Radial	5375.1	5375.1	96.4	%	10:57:26
2	Y 371.029	702106.8	702106.8	96.251	%	10:58:56
2	Y RADIAL	5817.0	5817.0	96.32	%	10:57:26
2	Ag 328.068†	214228.6	219709.1	[1000]	ug/L	10:58:56
2	Al 396.153Radial†	13767.3	14316.5	[10000]	ug/L	10:57:26
2	As 188.979†	2504.5	2603.1	[1000]	ug/L	10:59:16
2	B 249.677†	44921.9	46621.8	[1000]	ug/L	10:58:56
2	Ba 233.527†	129473.4	132962.3	[1000]	ug/L	10:58:56
2	Be 313.107†	2728112.9	2806057.1	[1000]	ug/L	10:58:51
2	Ca 317.933Radial†	6632.8	6863.5	[10000]	ug/L	10:57:26
2	Cd 226.502†	92841.3	95534.1	[1000]	ug/L	10:58:56
2	Co 228.616†	51178.4	52626.6	[1000]	ug/L	10:58:56
2	Cr 267.716†	92627.1	95029.1	[1000]	ug/L	10:58:56
2	Cu 324.752†	341207.0	343614.6	[1000]	ug/L	10:58:56
2	Fe 238.204 Radial†	1089.7	1120.5	[10000]	ug/L	10:57:46
2	K 766.490 Radial†	59733.1	59223.1	[10000]	ug/L	10:57:26
2	Mg 279.077 IEC†	297.7	306.9	[10000]	ug/L	10:57:46
2	Mn 257.610†	925258.4	949592.2	[1000]	ug/L	10:58:51
2	Mo 202.031†	15392.0	15787.0	[1000]	ug/L	10:59:16
2	Na 589.592 Radial†	28816.5	31446.2	[10000]	ug/L	10:57:26
2	Ni 231.604†	42127.9	43173.6	[1000]	ug/L	10:58:56

2	P 214.914†	9025.3	9025.7	[5000]	ug/L	10:59:16
2	Pb 220.353†	8677.8	8978.9	[1000]	ug/L	10:59:16
2	S 181.975 Axial†	1524.6	1516.2	[2000]	ug/L	10:59:16
2	Sb 206.836†	3130.8	3177.5	[1000]	ug/L	10:59:16
2	Se 196.026†	1708.5	1781.2	[1000]	ug/L	10:59:16
2	Si 251.611†	161974.9	165844.1	[5000]	ug/L	10:58:56
2	Sn 189.927†	6084.3	6238.9	[1000]	ug/L	10:59:16
2	Sr 421.552†	157729.9	163617.5	[1000]	ug/L	10:57:26
2	Ti 334.940†	622983.8	640974.4	[1000]	ug/L	10:58:51
2	Tl 190.801†	3442.1	3569.1	[1000]	ug/L	10:59:16
2	U 409.014†	31177.9	34599.3	[1000]	ug/L	10:58:56
2	V 292.402†	144580.6	149827.0	[1000]	ug/L	10:58:56
2	Zn 213.857†	112917.6	115196.9	[1000]	ug/L	10:58:56
2	SiO2†	162491.3	166331.6	[10695]	ug/L	10:59:59
3	Sc 361.383	853864.7	853864.7	98.381	%	10:59:28
3	Sc Radial	5464.8	5464.8	98.0	%	10:57:51
3	Y 371.029	708211.8	708211.8	97.088	%	10:59:28
3	Y RADIAL	5914.4	5914.4	97.93	%	10:57:51
3	Ag 328.068†	216589.6	219879.7	[1000]	ug/L	10:59:28
3	Al 396.153Radial†	13938.9	14257.2	[10000]	ug/L	10:57:51
3	As 188.979†	2508.7	2581.3	[1000]	ug/L	10:59:48
3	B 249.677†	45602.5	46846.2	[1000]	ug/L	10:59:28
3	Ba 233.527†	131477.4	133652.1	[1000]	ug/L	10:59:28
3	Be 313.107†	2717028.2	2766401.9	[1000]	ug/L	10:59:23
3	Ca 317.933Radial†	6728.8	6848.6	[10000]	ug/L	10:57:51
3	Cd 226.502†	94433.2	96186.1	[1000]	ug/L	10:59:28
3	Co 228.616†	52001.9	52931.1	[1000]	ug/L	10:59:28
3	Cr 267.716†	93825.2	95283.1	[1000]	ug/L	10:59:28
3	Cu 324.752†	344619.5	343532.6	[1000]	ug/L	10:59:28
3	Fe 238.204 Radial†	1090.9	1103.2	[10000]	ug/L	10:58:11
3	K 766.490 Radial†	60752.2	59246.2	[10000]	ug/L	10:57:51
3	Mg 279.077 IEC†	298.0	302.1	[10000]	ug/L	10:58:11
3	Mn 257.610†	921996.7	936648.8	[1000]	ug/L	10:59:23
3	Mo 202.031†	15392.5	15627.4	[1000]	ug/L	10:59:48
3	Na 589.592 Radial†	29549.3	31703.5	[10000]	ug/L	10:57:51
3	Ni 231.604†	42734.9	43352.2	[1000]	ug/L	10:59:28
3	P 214.914†	9045.5	8952.4	[5000]	ug/L	10:59:48
3	Pb 220.353†	8686.4	8897.3	[1000]	ug/L	10:59:48
3	S 181.975 Axial†	1538.7	1514.6	[2000]	ug/L	10:59:48
3	Sb 206.836†	3146.0	3160.4	[1000]	ug/L	10:59:48
3	Se 196.026†	1711.8	1766.8	[1000]	ug/L	10:59:48
3	Si 251.611†	164219.2	166439.8	[5000]	ug/L	10:59:28
3	Sn 189.927†	6088.8	6180.2	[1000]	ug/L	10:59:48
3	Sr 421.552†	160324.3	163579.9	[1000]	ug/L	10:57:51
3	Ti 334.940†	620417.6	631883.3	[1000]	ug/L	10:59:23
3	Tl 190.801†	3452.1	3543.5	[1000]	ug/L	10:59:48
3	U 409.014†	31628.3	34732.7	[1000]	ug/L	10:59:28
3	V 292.402†	146327.9	150098.6	[1000]	ug/L	10:59:28
3	Zn 213.857†	114636.0	115768.6	[1000]	ug/L	10:59:28
3	SiO2†	164626.4	166811.0	[10695]	ug/L	11:00:04

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	850753.9	4811.42	0.57%	98.023	%
Sc Radial	5431.3	48.92	0.90%	97.4	%
Y 371.029	705682.0	3183.94	0.45%	96.741	%
Y RADIAL	5875.4	51.52	0.88%	97.29	%
Ag 328.068†	219908.0	214.38	0.10%	[1000]	ug/L
Al 396.153Radial†	14260.9	53.73	0.38%	[10000]	ug/L
As 188.979†	2582.1	20.52	0.79%	[1000]	ug/L
B 249.677†	46807.3	169.38	0.36%	[1000]	ug/L
Ba 233.527†	133368.1	360.63	0.27%	[1000]	ug/L
Be 313.107†	2772713.6	30678.59	1.11%	[1000]	ug/L
Ca 317.933Radial†	6861.4	11.95	0.17%	[10000]	ug/L
Cd 226.502†	95944.1	356.96	0.37%	[1000]	ug/L
Co 228.616†	52818.5	167.02	0.32%	[1000]	ug/L
Cr 267.716†	95213.3	161.08	0.17%	[1000]	ug/L
Cu 324.752†	343911.3	586.41	0.17%	[1000]	ug/L
Fe 238.204 Radial†	1112.0	8.69	0.78%	[10000]	ug/L

K 766.490 Radial†	59214.1	37.52	0.06%	[10000]	ug/L
Mg 279.077 IEC†	304.0	2.54	0.83%	[10000]	ug/L
Mn 257.610†	939030.3	9595.46	1.02%	[1000]	ug/L
Mo 202.031†	15649.6	127.78	0.82%	[1000]	ug/L
Na 589.592 Radial†	31619.2	149.79	0.47%	[10000]	ug/L
Ni 231.604†	43326.4	141.72	0.33%	[1000]	ug/L
P 214.914†	8941.0	90.83	1.02%	[5000]	ug/L
Pb 220.353†	8914.8	57.38	0.64%	[1000]	ug/L
S 181.975 Axial†	1505.8	16.54	1.10%	[2000]	ug/L
Sb 206.836†	3155.3	25.11	0.80%	[1000]	ug/L
Se 196.026†	1769.6	10.54	0.60%	[1000]	ug/L
Si 251.611†	166250.4	352.13	0.21%	[5000]	ug/L
Sn 189.927†	6187.5	48.07	0.78%	[1000]	ug/L
Sr 421.552†	163734.0	235.21	0.14%	[1000]	ug/L
Ti 334.940†	633705.4	6550.82	1.03%	[1000]	ug/L
Tl 190.801†	3539.5	31.82	0.90%	[1000]	ug/L
U 409.014†	34717.1	110.82	0.32%	[1000]	ug/L
V 292.402†	149969.2	136.25	0.09%	[1000]	ug/L
Zn 213.857†	115579.5	331.33	0.29%	[1000]	ug/L
SiO2†	166101.0	849.19	0.51%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/11/2009 11:02:15
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860963.7	860963.7	99.199	%	11:05:26
1	Sc Radial	5387.2	5387.2	96.6	%	11:04:29
1	Y 371.029	709124.8	709124.8	97.213	%	11:05:26
1	Y RADIAL	5822.0	5822.0	96.40	%	11:04:29
1	Al 396.153Radial†	68975.6	71425.6	[50000]	ug/L	11:04:09
1	Ca 317.933Radial†	32653.3	33779.6	[50000]	ug/L	11:04:09
1	Fe 238.204 Radial†	2164.6	2230.5	[20000]	ug/L	11:04:29
1	Mg 279.077 IEC†	1433.3	1481.6	[50000]	ug/L	11:04:29
1	Na 589.592 Radial†	61862.2	65582.1	[20000]	ug/L	11:04:09
2	Sc 361.383	854136.3	854136.3	98.412	%	11:05:32
2	Sc Radial	5350.4	5350.4	96.0	%	11:04:54
2	Y 371.029	702699.8	702699.8	96.332	%	11:05:32
2	Y RADIAL	5769.4	5769.4	95.53	%	11:04:54
2	Al 396.153Radial†	70067.2	73053.7	[50000]	ug/L	11:04:34
2	Ca 317.933Radial†	32982.7	34355.0	[50000]	ug/L	11:04:34
2	Fe 238.204 Radial†	2153.5	2234.3	[20000]	ug/L	11:04:54
2	Mg 279.077 IEC†	1432.1	1490.5	[50000]	ug/L	11:04:54
2	Na 589.592 Radial†	62754.2	66951.5	[20000]	ug/L	11:04:34
3	Sc 361.383	843792.7	843792.7	97.221	%	11:05:38
3	Sc Radial	5364.3	5364.3	96.2	%	11:05:19
3	Y 371.029	695516.3	695516.3	95.347	%	11:05:38
3	Y RADIAL	5786.0	5786.0	95.81	%	11:05:19
3	Al 396.153Radial†	70617.8	73437.3	[50000]	ug/L	11:04:59
3	Ca 317.933Radial†	33303.8	34599.9	[50000]	ug/L	11:04:59
3	Fe 238.204 Radial†	2163.3	2238.8	[20000]	ug/L	11:05:19
3	Mg 279.077 IEC†	1426.7	1481.1	[50000]	ug/L	11:05:19
3	Na 589.592 Radial†	63458.0	67514.1	[20000]	ug/L	11:04:59

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	852964.2	8645.27	1.01%	98.277	%
Sc Radial	5367.3	18.56	0.35%	96.3	%
Y 371.029	702447.0	6807.78	0.97%	96.297	%
Y RADIAL	5792.4	26.90	0.46%	95.91	%
Al 396.153Radial†	72638.9	1068.08	1.47%	[50000]	ug/L
Ca 317.933Radial†	34244.8	421.13	1.23%	[50000]	ug/L
Fe 238.204 Radial†	2234.5	4.14	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1484.4	5.33	0.36%	[50000]	ug/L
Na 589.592 Radial†	66682.5	993.69	1.49%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	221.1	0.00000	0.999932	
Al 396.153Radial	3	Lin Thru 0	0.0	1.452	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	2.590	0.00000	0.999969	
B 249.677	3	Lin Thru 0	0.0	46.92	0.00000	0.999954	
Ba 233.527	3	Lin Thru 0	0.0	133.8	0.00000	0.999967	
Be 313.107	3	Lin Thru 0	0.0	2785	0.00000	0.999938	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6852	0.00000	0.999994	
Cd 226.502	3	Lin Thru 0	0.0	96.42	0.00000	0.999939	
Co 228.616	3	Lin Thru 0	0.0	53.03	0.00000	0.999944	
Cr 267.716	3	Lin Thru 0	0.0	95.53	0.00000	0.999967	
Cu 324.752	3	Lin Thru 0	0.0	344.3	0.00000	0.999979	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1116	0.00000	0.999998	

K 766.490 Radial	3	Lin Thru 0	0.0	5.961	0.00000	0.999909
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0297	0.00000	0.999961
Mn 257.610	3	Lin Thru 0	0.0	943.5	0.00000	0.999940
Mo 202.031	3	Lin Thru 0	0.0	15.71	0.00000	0.999952
Na 589.592 Radia	2	Lin Thru 0	0.0	3.300	0.00000	0.999782
Ni 231.604	3	Lin Thru 0	0.0	43.52	0.00000	0.999935
P 214.914	3	Lin Thru 0	0.0	1.791	0.00000	0.999962
Pb 220.353	3	Lin Thru 0	0.0	8.933	0.00000	0.999978
S 181.975 Axial	3	Lin Thru 0	0.0	0.7569	0.00000	0.999894
Sb 206.836	3	Lin Thru 0	0.0	3.168	0.00000	0.999921
Se 196.026	3	Lin Thru 0	0.0	1.778	0.00000	0.999950
Si 251.611	3	Lin Thru 0	0.0	33.58	0.00000	0.999777
Sn 189.927	3	Lin Thru 0	0.0	6.216	0.00000	0.999930
Sr 421.552	3	Lin Thru 0	0.0	165.8	0.00000	0.999673
Ti 334.940	3	Lin Thru 0	0.0	633.5	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	3.549	0.00000	0.999971
U 409.014	3	Lin Thru 0	0.0	34.78	0.00000	0.999971
V 292.402	3	Lin Thru 0	0.0	150.3	0.00000	0.999974
Zn 213.857	3	Lin Thru 0	0.0	116.3	0.00000	0.999918
SiO2	3	Lin Thru 0	0.0	15.67	0.00000	0.999808

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/11/2009 11:07:49
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874645.6	874645.6	100.78	%			11:10:59
1	Sc Radial	5587.3	5587.3	100	%			11:09:42
1	Y 371.029	728574.2	728574.2	99.879	%			11:10:59
1	Y RADIAL	6058.4	6058.4	100.3	%			11:09:42
1	Ag 328.068†	58053.1	57332.4	262.49	ug/L	262.49	ppb	11:10:59
1	Al 396.153Radial†	7264.0	7284.3	4993.5	ug/L	4993.5	ppb	11:09:42
1	As 188.979†	1218.1	1240.0	483.13	ug/L	483.13	ppb	11:11:20
1	B 249.677†	23759.8	24070.2	511.00	ug/L	511.00	ppb	11:10:59
1	Ba 233.527†	68791.2	68273.0	511.47	ug/L	511.47	ppb	11:10:59
1	Be 313.107†	723572.8	722668.1	260.48	ug/L	260.48	ppb	11:10:59
1	Ca 317.933Radial†	3406.8	3382.8	4937.2	ug/L	4937.2	ppb	11:10:02
1	Cd 226.502†	48503.8	48329.6	501.04	ug/L	501.04	ppb	11:10:59
1	Co 228.616†	26736.9	26604.6	502.05	ug/L	502.05	ppb	11:11:20
1	Cr 267.716†	47283.2	46833.4	491.07	ug/L	491.07	ppb	11:10:59
1	Cu 324.752†	182267.7	174107.5	505.97	ug/L	505.97	ppb	11:10:59
1	Fe 238.204 Radial†	582.9	571.8	5139.0	ug/L	5139.0	ppb	11:10:02
1	K 766.490 Radial†	17719.4	14943.3	2501.7	ug/L	2501.7	ppb	11:09:42
1	Mg 279.077 IEC†	162.2	160.0	5385.9	ug/L	5385.9	ppb	11:10:02
1	Mn 257.610†	487398.0	483127.7	512.44	ug/L	512.44	ppb	11:10:59
1	Mo 202.031†	8653.5	8568.5	545.63	ug/L	545.63	ppb	11:11:20
1	Na 589.592 Radial†	6915.1	8455.0	2562.4	ug/L	2562.4	ppb	11:09:42
1	Ni 231.604†	22000.8	21745.5	499.36	ug/L	499.36	ppb	11:11:20
1	P 214.914†	4771.1	4492.3	2432.3	ug/L	2432.3	ppb	11:11:20
1	Pb 220.353†	4457.3	4491.0	504.37	ug/L	504.37	ppb	11:11:20
1	S 181.975 Axial†	1968.6	1904.0	2514.6	ug/L	2514.6	ppb	11:11:20
1	Sb 206.836†	1636.5	1586.5	510.11	ug/L	510.11	ppb	11:11:20
1	Se 196.026†	4530.0	4521.9	2562.2	ug/L	2562.2	ppb	11:11:20
1	Si 251.611†	163300.9	161562.7	4800.0	ug/L	4800.0	ppb	11:10:59
1	Sn 189.927†	3417.0	3381.9	544.62	ug/L	544.62	ppb	11:11:20
1	Sr 421.552†	89500.9	89316.4	538.64	ug/L	538.64	ppb	11:09:42
1	Ti 334.940†	319392.4	318191.1	502.11	ug/L	502.11	ppb	11:10:59
1	Tl 190.801†	1859.2	1879.5	532.82	ug/L	532.82	ppb	11:11:20
1	U 409.014†	14369.1	16842.5	482.64	ug/L	482.64	ppb	11:10:59
1	V 292.402†	75659.8	76440.4	515.94	ug/L	515.94	ppb	11:10:59
1	Zn 213.857†	60676.5	59455.8	506.97	ug/L	506.97	ppb	11:10:59
1	SiO2†	162240.8	160468.0	10216	ug/L	10216	ppb	11:12:17
2	Sc 361.383	878001.3	878001.3	101.16	%			11:11:26
2	Sc Radial	5467.5	5467.5	98.1	%			11:10:07
2	Y 371.029	730239.8	730239.8	100.11	%			11:11:26
2	Y RADIAL	5921.3	5921.3	98.05	%			11:10:07
2	Ag 328.068†	58405.7	57460.7	263.11	ug/L	263.11	ppb	11:11:26
2	Al 396.153Radial†	7160.7	7337.8	5030.5	ug/L	5030.5	ppb	11:10:07
2	As 188.979†	1203.4	1220.8	475.74	ug/L	475.74	ppb	11:11:46
2	B 249.677†	24050.9	24267.9	515.21	ug/L	515.21	ppb	11:11:26
2	Ba 233.527†	69257.7	68473.2	512.97	ug/L	512.97	ppb	11:11:26
2	Be 313.107†	727003.0	723314.6	260.71	ug/L	260.71	ppb	11:11:26
2	Ca 317.933Radial†	3402.8	3453.3	5040.0	ug/L	5040.0	ppb	11:10:27
2	Cd 226.502†	48761.4	48400.2	501.76	ug/L	501.76	ppb	11:11:26
2	Co 228.616†	26605.2	26373.1	497.67	ug/L	497.67	ppb	11:11:46
2	Cr 267.716†	47507.9	46876.1	491.52	ug/L	491.52	ppb	11:11:26
2	Cu 324.752†	183955.9	175085.0	508.82	ug/L	508.82	ppb	11:11:26
2	Fe 238.204 Radial†	581.1	582.8	5236.6	ug/L	5236.6	ppb	11:10:27
2	K 766.490 Radial†	17421.0	15026.4	2515.6	ug/L	2515.6	ppb	11:10:07
2	Mg 279.077 IEC†	160.2	161.5	5437.4	ug/L	5437.4	ppb	11:10:27
2	Mn 257.610†	490051.8	483902.5	513.27	ug/L	513.27	ppb	11:11:26
2	Mo 202.031†	8613.8	8496.5	541.06	ug/L	541.06	ppb	11:11:46
2	Na 589.592 Radial†	6700.5	8387.3	2541.8	ug/L	2541.8	ppb	11:10:07
2	Ni 231.604†	21861.8	21524.8	494.29	ug/L	494.29	ppb	11:11:46

2	P 214.914†	4761.7	4464.9	2416.4 ug/L	2416.4 ppb		11:11:46
2	Pb 220.353†	4437.6	4454.6	500.29 ug/L	500.29 ppb		11:11:46
2	S 181.975 Axial†	1950.1	1878.3	2480.6 ug/L	2480.6 ppb		11:11:46
2	Sb 206.836†	1631.7	1575.5	506.43 ug/L	506.43 ppb		11:11:46
2	Se 196.026†	4526.8	4501.6	2551.0 ug/L	2551.0 ppb		11:11:46
2	Si 251.611†	164658.6	162285.4	4821.6 ug/L	4821.6 ppb		11:11:26
2	Sn 189.927†	3387.7	3339.9	537.87 ug/L	537.87 ppb		11:11:46
2	Sr 421.552†	87524.2	89257.6	538.29 ug/L	538.29 ppb		11:10:07
2	Ti 334.940†	321061.9	318630.1	502.80 ug/L	502.80 ppb		11:11:26
2	Tl 190.801†	1840.7	1854.1	525.70 ug/L	525.70 ppb		11:11:46
2	U 409.014†	14592.1	17008.4	487.40 ug/L	487.40 ppb		11:11:26
2	V 292.402†	76145.1	76633.1	517.15 ug/L	517.15 ppb		11:11:26
2	Zn 213.857†	61065.8	59610.5	508.32 ug/L	508.32 ppb		11:11:26
2	SiO2†	162458.2	160067.6	10191 ug/L	10191 ppb		11:12:22
3	Sc 361.383	870914.4	870914.4	100.35 %			11:11:52
3	Sc Radial	5417.4	5417.4	97.2 %			11:10:32
3	Y 371.029	722870.7	722870.7	99.097 %			11:11:52
3	Y RADIAL	5860.9	5860.9	97.05 %			11:10:32
3	Ag 328.068†	57902.4	57429.0	262.99 ug/L	262.99 ppb		11:11:52
3	Al 396.153Radial†	7053.3	7294.8	5000.5 ug/L	5000.5 ppb		11:10:32
3	As 188.979†	1214.7	1241.8	483.83 ug/L	483.83 ppb		11:12:12
3	B 249.677†	23877.0	24288.0	515.61 ug/L	515.61 ppb		11:11:52
3	Ba 233.527†	68734.2	68508.7	513.24 ug/L	513.24 ppb		11:11:52
3	Be 313.107†	720723.4	722904.6	260.57 ug/L	260.57 ppb		11:11:52
3	Ca 317.933Radial†	3424.3	3507.5	5119.1 ug/L	5119.1 ppb		11:10:52
3	Cd 226.502†	48419.6	48451.8	502.29 ug/L	502.29 ppb		11:11:52
3	Co 228.616†	26795.1	26776.3	505.30 ug/L	505.30 ppb		11:12:12
3	Cr 267.716†	47171.2	46922.8	492.00 ug/L	492.00 ppb		11:11:52
3	Cu 324.752†	182186.1	174800.9	508.00 ug/L	508.00 ppb		11:11:52
3	Fe 238.204 Radial†	587.6	594.9	5345.6 ug/L	5345.6 ppb		11:10:52
3	K 766.490 Radial†	17277.6	15043.0	2518.4 ug/L	2518.4 ppb		11:10:32
3	Mg 279.077 IEC†	161.6	164.4	5535.9 ug/L	5535.9 ppb		11:10:52
3	Mn 257.610†	487073.8	484876.7	514.32 ug/L	514.32 ppb		11:11:52
3	Mo 202.031†	8691.2	8642.8	550.38 ug/L	550.38 ppb		11:12:12
3	Na 589.592 Radial†	6591.4	8338.2	2527.0 ug/L	2527.0 ppb		11:10:32
3	Ni 231.604†	22035.2	21873.4	502.30 ug/L	502.30 ppb		11:12:12
3	P 214.914†	4774.7	4516.2	2445.2 ug/L	2445.2 ppb		11:12:12
3	Pb 220.353†	4472.6	4525.2	508.20 ug/L	508.20 ppb		11:12:12
3	S 181.975 Axial†	1963.5	1907.3	2519.0 ug/L	2519.0 ppb		11:12:12
3	Sb 206.836†	1653.4	1610.3	517.77 ug/L	517.77 ppb		11:12:12
3	Se 196.026†	4555.5	4566.6	2587.9 ug/L	2587.9 ppb		11:12:12
3	Si 251.611†	163499.9	162455.2	4826.4 ug/L	4826.4 ppb		11:11:52
3	Sn 189.927†	3416.9	3396.3	546.95 ug/L	546.95 ppb		11:12:12
3	Sr 421.552†	86670.2	89203.7	537.96 ug/L	537.96 ppb		11:10:32
3	Ti 334.940†	318502.9	318662.5	502.86 ug/L	502.86 ppb		11:11:52
3	Tl 190.801†	1856.3	1884.5	534.22 ug/L	534.22 ppb		11:12:12
3	U 409.014†	14588.1	17121.9	490.65 ug/L	490.65 ppb		11:11:52
3	V 292.402†	75362.7	76466.0	516.16 ug/L	516.16 ppb		11:11:52
3	Zn 213.857†	60732.2	59769.3	509.62 ug/L	509.62 ppb		11:11:52
3	SiO2†	163681.3	162593.3	10352 ug/L	10352 ppb		11:12:28

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	874520.4	100.76	%	0.408				0.41%
Sc Radial	5490.7	98.5	%	1.57				1.59%
Y 371.029	727228.3	99.695	%	0.5298				0.53%
Y RADIAL	5946.9	98.47	%	1.676				1.70%
Ag 328.068†	57407.4	262.86	ug/L	0.324	262.86	ppb	0.324	0.12%
QC value within limits for Ag 328.068 Recovery = 105.15%								
Al 396.153Radial†	7305.6	5008.1	ug/L	19.66	5008.1	ppb	19.66	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.16%								
As 188.979†	1234.2	480.90	ug/L	4.484	480.90	ppb	4.484	0.93%
QC value within limits for As 188.979 Recovery = 96.18%								
B 249.677†	24208.7	513.94	ug/L	2.553	513.94	ppb	2.553	0.50%
QC value within limits for B 249.677 Recovery = 102.79%								
Ba 233.527†	68418.3	512.56	ug/L	0.954	512.56	ppb	0.954	0.19%
QC value within limits for Ba 233.527 Recovery = 102.51%								
Be 313.107†	722962.4	260.59	ug/L	0.118	260.59	ppb	0.118	0.05%
QC value within limits for Be 313.107 Recovery = 104.23%								

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Ca 317.933Radial†       3447.9      5032.1 ug/L        91.20      5032.1 ppb        91.20   1.81%
   QC value within limits for Ca 317.933Radial  Recovery = 100.64%
Cd 226.502†            48393.9      501.70 ug/L        0.627      501.70 ppb        0.627   0.13%
   QC value within limits for Cd 226.502  Recovery = 100.34%
Co 228.616†            26584.7      501.67 ug/L        3.827      501.67 ppb        3.827   0.76%
   QC value within limits for Co 228.616  Recovery = 100.33%
Cr 267.716†            46877.4      491.53 ug/L        0.469      491.53 ppb        0.469   0.10%
   QC value within limits for Cr 267.716  Recovery = 98.31%
Cu 324.752†           174664.5      507.60 ug/L        1.464      507.60 ppb        1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 101.52%
Fe 238.204 Radial†       583.2      5240.4 ug/L       103.38      5240.4 ppb       103.38   1.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.81%
K 766.490 Radial†      15004.3      2511.9 ug/L         8.96      2511.9 ppb         8.96   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 100.48%
Mg 279.077 IEC†          162.0      5453.1 ug/L        76.21      5453.1 ppb        76.21   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.06%
Mn 257.610†           483968.9      513.35 ug/L        0.938      513.35 ppb        0.938   0.18%
   QC value within limits for Mn 257.610  Recovery = 102.67%
Mo 202.031†             8569.3      545.69 ug/L        4.661      545.69 ppb        4.661   0.85%
   QC value within limits for Mo 202.031  Recovery = 109.14%
Na 589.592 Radial†      8393.5      2543.7 ug/L        17.76      2543.7 ppb        17.76   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 101.75%
Ni 231.604†            21714.6      498.65 ug/L        4.050      498.65 ppb        4.050   0.81%
   QC value within limits for Ni 231.604  Recovery = 99.73%
P 214.914†              4491.2      2431.3 ug/L        14.43      2431.3 ppb        14.43   0.59%
   QC value within limits for P 214.914  Recovery = 97.25%
Pb 220.353†             4490.3      504.29 ug/L        3.953      504.29 ppb        3.953   0.78%
   QC value within limits for Pb 220.353  Recovery = 100.86%
S 181.975 Axial†        1896.6      2504.7 ug/L        21.01      2504.7 ppb        21.01   0.84%
   QC value within limits for S 181.975 Axial  Recovery = 100.19%
Sb 206.836†             1590.8      511.44 ug/L        5.783      511.44 ppb        5.783   1.13%
   QC value within limits for Sb 206.836  Recovery = 102.29%
Se 196.026†             4530.0      2567.0 ug/L        18.93      2567.0 ppb        18.93   0.74%
   QC value within limits for Se 196.026  Recovery = 102.68%
Si 251.611†           162101.1      4816.0 ug/L        14.10      4816.0 ppb        14.10   0.29%
   QC value within limits for Si 251.611  Recovery = 96.32%
Sn 189.927†             3372.7      543.15 ug/L        4.717      543.15 ppb        4.717   0.87%
   QC value within limits for Sn 189.927  Recovery = 108.63%
Sr 421.552†            89259.2      538.30 ug/L        0.341      538.30 ppb        0.341   0.06%
   QC value within limits for Sr 421.552  Recovery = 107.66%
Ti 334.940†           318494.6      502.59 ug/L        0.418      502.59 ppb        0.418   0.08%
   QC value within limits for Ti 334.940  Recovery = 100.52%
Tl 190.801†             1872.7      530.91 ug/L        4.567      530.91 ppb        4.567   0.86%
   QC value within limits for Tl 190.801  Recovery = 106.18%
U 409.014†             16991.0      486.90 ug/L        4.025      486.90 ppb        4.025   0.83%
   QC value within limits for U 409.014  Recovery = 97.38%
V 292.402†             76513.2      516.42 ug/L        0.645      516.42 ppb        0.645   0.12%
   QC value within limits for V 292.402  Recovery = 103.28%
Zn 213.857†            59611.8      508.30 ug/L        1.325      508.30 ppb        1.325   0.26%
   QC value within limits for Zn 213.857  Recovery = 101.66%
SiO2†                 161043.0       10253 ug/L         86.5       10253 ppb         86.5   0.84%
   QC value within limits for SiO2  Recovery = 95.87%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/11/2009 11:14:38
Data Type: Reprocessed on 12/11/2009 12:46:00

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	871028.0	871028.0	100.36	%			11:17:48
1	Sc Radial	5612.3	5612.3	101	%			11:16:31
1	Y 371.029	732501.0	732501.0	100.42	%			11:17:48
1	Y RADIAL	6085.8	6085.8	100.8	%			11:16:31
1	Ag 328.068†	348.8	73.5	0.3353	ug/L	0.3353	ppb	11:17:48
1	Al 396.153Radial†	-12.8	22.6	15.521	ug/L	15.521	ppb	11:16:31
1	As 188.979†	-27.4	3.9	1.5214	ug/L	1.5214	ppb	11:18:08
1	B 249.677†	-289.2	205.0	4.3696	ug/L	4.3696	ppb	11:18:08
1	Ba 233.527†	-12.6	-1.4	-0.0107	ug/L	-0.0107	ppb	11:18:08
1	Be 313.107†	-4511.2	167.5	0.0602	ug/L	0.0602	ppb	11:17:48
1	Ca 317.933Radial†	19.7	2.7	3.9544	ug/L	3.9544	ppb	11:16:51
1	Cd 226.502†	-200.3	-0.7	-0.0070	ug/L	-0.0070	ppb	11:18:08
1	Co 228.616†	-84.2	-10.4	-0.1945	ug/L	-0.1945	ppb	11:18:08
1	Cr 267.716†	88.4	2.1	0.0230	ug/L	0.0230	ppb	11:18:08
1	Cu 324.752†	6779.9	-2.2	-0.0063	ug/L	-0.0063	ppb	11:17:48
1	Fe 238.204 Radial†	9.9	-0.0	-0.0536	ug/L	-0.0536	ppb	11:16:51
1	K 766.490 Radial†	2839.1	81.1	13.610	ug/L	13.610	ppb	11:16:31
1	Mg 279.077 IEC†	4.7	2.8	94.399	ug/L	94.399	ppb	11:16:51
1	Mn 257.610†	522.8	0.8	-0.0009	ug/L	-0.0009	ppb	11:18:08
1	Mo 202.031†	31.5	13.0	0.8243	ug/L	0.8243	ppb	11:18:08
1	Na 589.592 Radial†	-1625.7	-61.0	-18.490	ug/L	-18.490	ppb	11:16:31
1	Ni 231.604†	94.7	8.4	0.1942	ug/L	0.1942	ppb	11:18:08
1	P 214.914†	228.2	-14.7	-8.1967	ug/L	-8.1967	ppb	11:18:08
1	Pb 220.353†	-63.2	5.0	0.5673	ug/L	0.5673	ppb	11:18:08
1	S 181.975 Axial†	48.3	-1.3	-1.7250	ug/L	-1.7250	ppb	11:18:08
1	Sb 206.836†	49.7	12.2	3.8364	ug/L	3.8364	ppb	11:18:08
1	Se 196.026†	-30.8	-3.9	-2.1655	ug/L	-2.1655	ppb	11:18:08
1	Si 251.611†	550.8	67.1	1.9835	ug/L	1.9835	ppb	11:18:08
1	Sn 189.927†	3.0	-5.8	-0.9386	ug/L	-0.9386	ppb	11:18:08
1	Sr 421.552†	-20.8	-20.5	-0.1236	ug/L	-0.1236	ppb	11:16:31
1	Ti 334.940†	-1250.7	10.0	0.0175	ug/L	0.0175	ppb	11:17:48
1	Tl 190.801†	-23.1	11.6	3.2610	ug/L	3.2610	ppb	11:18:08
1	U 409.014†	-2714.8	-121.1	-3.4828	ug/L	-3.4828	ppb	11:17:48
1	V 292.402†	-1376.0	-8.3	-0.0481	ug/L	-0.0481	ppb	11:17:48
1	Zn 213.857†	753.9	-2.6	-0.0268	ug/L	-0.0268	ppb	11:18:08
1	SiO2†	514.4	-11.9	-0.7943	ug/L	-0.7943	ppb	11:19:04
2	Sc 361.383	868979.5	868979.5	100.12	%			11:18:13
2	Sc Radial	5550.9	5550.9	99.6	%			11:16:56
2	Y 371.029	731655.6	731655.6	100.30	%			11:18:13
2	Y RADIAL	6018.6	6018.6	99.66	%			11:16:56
2	Ag 328.068†	291.0	16.6	0.0729	ug/L	0.0729	ppb	11:18:13
2	Al 396.153Radial†	-9.6	25.7	17.661	ug/L	17.661	ppb	11:16:56
2	As 188.979†	-32.4	-1.1	-0.4345	ug/L	-0.4345	ppb	11:18:33
2	B 249.677†	-299.4	194.2	4.1401	ug/L	4.1401	ppb	11:18:33
2	Ba 233.527†	-11.9	-0.8	-0.0064	ug/L	-0.0064	ppb	11:18:33
2	Be 313.107†	-4488.3	179.8	0.0646	ug/L	0.0646	ppb	11:18:13
2	Ca 317.933Radial†	17.4	0.6	0.9006	ug/L	0.9006	ppb	11:17:16
2	Cd 226.502†	-198.1	1.1	0.0125	ug/L	0.0125	ppb	11:18:33
2	Co 228.616†	-81.8	-8.2	-0.1526	ug/L	-0.1526	ppb	11:18:33
2	Cr 267.716†	97.0	10.9	0.1143	ug/L	0.1143	ppb	11:18:33
2	Cu 324.752†	6774.6	8.5	0.0240	ug/L	0.0240	ppb	11:18:13
2	Fe 238.204 Radial†	8.3	-1.6	-14.202	ug/L	-14.202	ppb	11:17:16
2	K 766.490 Radial†	2861.4	134.7	22.618	ug/L	22.618	ppb	11:16:56
2	Mg 279.077 IEC†	4.5	2.6	89.132	ug/L	89.132	ppb	11:17:16
2	Mn 257.610†	557.3	36.5	0.0356	ug/L	0.0356	ppb	11:18:33
2	Mo 202.031†	31.0	12.6	0.8003	ug/L	0.8003	ppb	11:18:33
2	Na 589.592 Radial†	-1655.0	-108.2	-32.804	ug/L	-32.804	ppb	11:16:56
2	Ni 231.604†	91.5	5.5	0.1258	ug/L	0.1258	ppb	11:18:33

2	P 214.914†	235.1	-7.2	-4.0257	ug/L	-4.0257 ppb	11:18:33
2	Pb 220.353†	-70.1	-2.0	-0.2169	ug/L	-0.2169 ppb	11:18:33
2	S 181.975 Axial†	48.6	-0.8	-1.1038	ug/L	-1.1038 ppb	11:18:33
2	Sb 206.836†	24.2	-13.2	-4.1820	ug/L	-4.1820 ppb	11:18:33
2	Se 196.026†	-25.5	1.3	0.6912	ug/L	0.6912 ppb	11:18:33
2	Si 251.611†	542.2	59.8	1.7624	ug/L	1.7624 ppb	11:18:33
2	Sn 189.927†	1.4	-7.5	-1.2016	ug/L	-1.2016 ppb	11:18:33
2	Sr 421.552†	-48.0	-48.0	-0.2897	ug/L	-0.2897 ppb	11:16:56
2	Ti 334.940†	-1247.0	10.8	0.0184	ug/L	0.0184 ppb	11:18:13
2	Tl 190.801†	-32.9	1.7	0.4765	ug/L	0.4765 ppb	11:18:33
2	U 409.014†	-2695.5	-108.2	-3.1097	ug/L	-3.1097 ppb	11:18:13
2	V 292.402†	-1381.9	-17.4	-0.1066	ug/L	-0.1066 ppb	11:18:13
2	Zn 213.857†	749.9	-4.9	-0.0444	ug/L	-0.0444 ppb	11:18:33
2	SiO2†	585.7	60.5	3.8244	ug/L	3.8244 ppb	11:19:09
3	Sc 361.383	873513.7	873513.7	100.64	%		11:18:38
3	Sc Radial	5529.5	5529.5	99.2	%		11:17:21
3	Y 371.029	733605.4	733605.4	100.57	%		11:18:38
3	Y RADIAL	5996.7	5996.7	99.30	%		11:17:21
3	Ag 328.068†	326.3	50.2	0.2326	ug/L	0.2326 ppb	11:18:38
3	Al 396.153Radial†	-32.8	2.3	1.5538	ug/L	1.5538 ppb	11:17:21
3	As 188.979†	-28.7	2.8	1.0687	ug/L	1.0687 ppb	11:18:58
3	B 249.677†	-285.2	209.8	4.4719	ug/L	4.4719 ppb	11:18:58
3	Ba 233.527†	-12.3	-1.1	-0.0082	ug/L	-0.0082 ppb	11:18:58
3	Be 313.107†	-4603.0	89.1	0.0321	ug/L	0.0321 ppb	11:18:38
3	Ca 317.933Radial†	16.9	0.1	0.1833	ug/L	0.1833 ppb	11:17:41
3	Cd 226.502†	-199.6	0.6	0.0061	ug/L	0.0061 ppb	11:18:58
3	Co 228.616†	-76.0	-2.1	-0.0391	ug/L	-0.0391 ppb	11:18:58
3	Cr 267.716†	79.0	-7.6	-0.0771	ug/L	-0.0771 ppb	11:18:58
3	Cu 324.752†	6812.4	10.9	0.0317	ug/L	0.0317 ppb	11:18:38
3	Fe 238.204 Radial†	9.9	0.1	1.1664	ug/L	1.1664 ppb	11:17:41
3	K 766.490 Radial†	2728.0	11.3	1.9062	ug/L	1.9062 ppb	11:17:21
3	Mg 279.077 IEC†	3.0	1.1	38.007	ug/L	38.007 ppb	11:17:41
3	Mn 257.610†	543.0	19.3	0.0199	ug/L	0.0199 ppb	11:18:58
3	Mo 202.031†	19.4	0.8	0.0534	ug/L	0.0534 ppb	11:18:58
3	Na 589.592 Radial†	-1614.2	-73.6	-22.309	ug/L	-22.309 ppb	11:17:21
3	Ni 231.604†	89.0	2.4	0.0563	ug/L	0.0563 ppb	11:18:58
3	P 214.914†	235.9	-7.7	-4.2936	ug/L	-4.2936 ppb	11:18:58
3	Pb 220.353†	-62.0	6.3	0.7110	ug/L	0.7110 ppb	11:18:58
3	S 181.975 Axial†	42.5	-7.2	-9.5340	ug/L	-9.5340 ppb	11:18:58
3	Sb 206.836†	32.1	-5.5	-1.7119	ug/L	-1.7119 ppb	11:18:58
3	Se 196.026†	-31.9	-4.9	-2.7624	ug/L	-2.7624 ppb	11:18:58
3	Si 251.611†	524.2	39.1	1.1628	ug/L	1.1628 ppb	11:18:58
3	Sn 189.927†	12.1	3.2	0.5085	ug/L	0.5085 ppb	11:18:58
3	Sr 421.552†	-25.5	-25.5	-0.1539	ug/L	-0.1539 ppb	11:17:21
3	Ti 334.940†	-1240.4	23.8	0.0402	ug/L	0.0402 ppb	11:18:38
3	Tl 190.801†	-46.1	-11.3	-3.1726	ug/L	-3.1726 ppb	11:18:58
3	U 409.014†	-2816.5	-214.4	-6.1647	ug/L	-6.1647 ppb	11:18:38
3	V 292.402†	-1369.5	2.0	0.0030	ug/L	0.0030 ppb	11:18:38
3	Zn 213.857†	769.9	11.2	0.0941	ug/L	0.0941 ppb	11:18:58
3	SiO2†	579.8	51.6	3.2857	ug/L	3.2857 ppb	11:19:14

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871173.7	100.38	%	0.262				0.26%
Sc Radial	5564.2	99.8	%	0.77				0.77%
Y 371.029	732587.3	100.43	%	0.134				0.13%
Y RADIAL	6033.7	99.91	%	0.768				0.77%
Ag 328.068†	46.8	0.2136	ug/L	0.13224	0.2136	ppb	0.13224	61.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.8	11.578	ug/L	8.7473	11.578	ppb	8.7473	75.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	0.7185	ug/L	1.02385	0.7185	ppb	1.02385	142.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	203.0	4.3272	ug/L	0.16987	4.3272	ppb	0.16987	3.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.1	-0.0084	ug/L	0.00213	-0.0084	ppb	0.00213	25.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.5	0.0523	ug/L	0.01764	0.0523	ppb	0.01764	33.74%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.2      1.6794 ug/L       2.00260      1.6794 ppb        2.00260 119.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                0.3      0.0039 ug/L       0.00993      0.0039 ppb        0.00993 256.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -6.9     -0.1287 ug/L       0.08042     -0.1287 ppb        0.08042  62.47%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.8      0.0201 ug/L       0.09576      0.0201 ppb        0.09576 477.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                5.7      0.0165 ug/L       0.02006      0.0165 ppb        0.02006 121.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.5     -4.3629 ug/L       8.54236     -4.3629 ppb        8.54236 195.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         75.7      12.712 ug/L       10.3853      12.712 ppb        10.3853  81.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      73.846 ug/L       31.1487      73.846 ppb        31.1487  42.18%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.9      0.0182 ug/L       0.01832      0.0182 ppb        0.01832 100.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                8.8      0.5593 ug/L       0.43831      0.5593 ppb        0.43831  78.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -81.0     -24.534 ug/L        7.4119     -24.534 ppb         7.4119  30.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.5      0.1254 ug/L       0.06896      0.1254 ppb        0.06896  54.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.9     -5.5053 ug/L       2.33463     -5.5053 ppb        2.33463  42.41%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.1      0.3538 ug/L       0.49945      0.3538 ppb        0.49945 141.18%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.1     -4.1209 ug/L       4.69812     -4.1209 ppb        4.69812 114.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.2     -0.6858 ug/L       4.10651     -0.6858 ppb        4.10651 598.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.5     -1.4122 ug/L       1.84594     -1.4122 ppb        1.84594 130.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.3      1.6362 ug/L       0.42468      1.6362 ppb        0.42468  25.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.4     -0.5439 ug/L       0.92085     -0.5439 ppb        0.92085 169.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -31.3     -0.1891 ug/L       0.08845     -0.1891 ppb        0.08845  46.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               14.8      0.0254 ug/L       0.01288      0.0254 ppb        0.01288  50.72%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.7      0.1883 ug/L       3.22645      0.1883 ppb        3.22645 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -147.9     -4.2524 ug/L       1.66656     -4.2524 ppb        1.66656  39.19%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -7.9     -0.0506 ug/L       0.05485     -0.0506 ppb        0.05485 108.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                1.2      0.0076 ug/L       0.07540      0.0076 ppb        0.07540 985.80%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     33.4      2.1053 ug/L       2.52552      2.1053 ppb        2.52552 119.96%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/11/2009 11:21:24
Data Type: Reprocessed on 12/11/2009 12:46:01

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	869577.2	869577.2	100.19	%			11:24:35
1	Sc Radial	4842.6	4842.6	86.9	%			11:23:18
1	Y 371.029	732644.8	732644.8	100.44	%			11:24:35
1	Y RADIAL	5290.9	5290.9	87.61	%			11:23:18
1	Ag 328.068†	1484.8	1207.9	5.4853	ug/L	5.4853	ppb	11:24:35
1	Al 396.153Radial†	270.1	346.3	238.07	ug/L	238.07	ppb	11:23:18
1	As 188.979†	45.7	76.9	29.713	ug/L	29.713	ppb	11:24:55
1	B 249.677†	1805.2	2294.9	48.874	ug/L	48.874	ppb	11:24:35
1	Ba 233.527†	656.4	666.2	4.9940	ug/L	4.9940	ppb	11:24:55
1	Be 313.107†	8959.2	13604.7	4.8949	ug/L	4.8949	ppb	11:24:35
1	Ca 317.933Radial†	156.2	162.9	237.79	ug/L	237.79	ppb	11:23:38
1	Cd 226.502†	291.1	489.5	5.0649	ug/L	5.0649	ppb	11:24:55
1	Co 228.616†	188.2	261.3	4.9417	ug/L	4.9417	ppb	11:24:55
1	Cr 267.716†	549.7	462.6	4.8376	ug/L	4.8376	ppb	11:24:55
1	Cu 324.752†	10209.9	3432.6	9.9779	ug/L	9.9779	ppb	11:24:35
1	Fe 238.204 Radial†	23.2	16.8	150.52	ug/L	150.52	ppb	11:23:38
1	K 766.490 Radial†	3786.4	1620.1	271.59	ug/L	271.59	ppb	11:23:18
1	Mg 279.077 IEC†	11.2	11.0	370.57	ug/L	370.57	ppb	11:23:38
1	Mn 257.610†	10186.4	9646.7	10.232	ug/L	10.232	ppb	11:24:35
1	Mo 202.031†	176.0	157.3	10.020	ug/L	10.020	ppb	11:24:55
1	Na 589.592 Radial†	-576.3	890.6	269.91	ug/L	269.91	ppb	11:23:18
1	Ni 231.604†	329.7	243.2	5.5841	ug/L	5.5841	ppb	11:24:55
1	P 214.914†	488.2	245.2	135.36	ug/L	135.36	ppb	11:24:55
1	Pb 220.353†	16.0	83.9	9.4534	ug/L	9.4534	ppb	11:24:55
1	S 181.975 Axial†	123.8	74.2	97.933	ug/L	97.933	ppb	11:24:55
1	Sb 206.836†	67.5	30.0	9.6730	ug/L	9.6730	ppb	11:24:55
1	Se 196.026†	20.2	47.0	26.973	ug/L	26.973	ppb	11:24:55
1	Si 251.611†	3706.6	3217.8	95.552	ug/L	95.552	ppb	11:24:55
1	Sn 189.927†	52.2	43.3	6.9935	ug/L	6.9935	ppb	11:24:55
1	Sr 421.552†	845.7	974.0	5.8722	ug/L	5.8722	ppb	11:23:18
1	Ti 334.940†	1903.6	3156.2	4.9711	ug/L	4.9711	ppb	11:24:35
1	Tl 190.801†	37.1	71.6	20.243	ug/L	20.243	ppb	11:24:55
1	U 409.014†	-899.4	1686.3	48.455	ug/L	48.455	ppb	11:24:35
1	V 292.402†	-670.0	694.0	4.8329	ug/L	4.8329	ppb	11:24:35
1	Zn 213.857†	1936.5	1179.0	10.067	ug/L	10.067	ppb	11:24:55
1	SiO2†	3854.5	3322.7	211.45	ug/L	211.45	ppb	11:25:51
2	Sc 361.383	867433.3	867433.3	99.944	%			11:25:00
2	Sc Radial	5581.3	5581.3	100	%			11:23:43
2	Y 371.029	729901.6	729901.6	100.06	%			11:25:00
2	Y RADIAL	6092.4	6092.4	100.9	%			11:23:43
2	Ag 328.068†	1380.6	1107.4	5.0231	ug/L	5.0231	ppb	11:25:00
2	Al 396.153Radial†	293.4	328.5	225.78	ug/L	225.78	ppb	11:23:43
2	As 188.979†	51.9	83.2	32.155	ug/L	32.155	ppb	11:25:20
2	B 249.677†	1788.5	2282.7	48.616	ug/L	48.616	ppb	11:25:00
2	Ba 233.527†	665.1	676.6	5.0706	ug/L	5.0706	ppb	11:25:20
2	Be 313.107†	9192.1	13859.8	4.9863	ug/L	4.9863	ppb	11:25:00
2	Ca 317.933Radial†	158.3	141.3	206.21	ug/L	206.21	ppb	11:24:03
2	Cd 226.502†	279.4	478.5	4.9534	ug/L	4.9534	ppb	11:25:20
2	Co 228.616†	178.1	251.7	4.7607	ug/L	4.7607	ppb	11:25:20
2	Cr 267.716†	555.4	469.6	4.9105	ug/L	4.9105	ppb	11:25:20
2	Cu 324.752†	10097.0	3344.8	9.7219	ug/L	9.7219	ppb	11:25:00
2	Fe 238.204 Radial†	24.3	14.4	129.38	ug/L	129.38	ppb	11:24:03
2	K 766.490 Radial†	3728.1	984.8	165.00	ug/L	165.00	ppb	11:23:43
2	Mg 279.077 IEC†	10.0	8.1	272.93	ug/L	272.93	ppb	11:24:03
2	Mn 257.610†	10271.6	9757.1	10.349	ug/L	10.349	ppb	11:25:00
2	Mo 202.031†	178.1	159.8	10.178	ug/L	10.178	ppb	11:25:20
2	Na 589.592 Radial†	-538.0	1016.7	308.11	ug/L	308.11	ppb	11:23:43
2	Ni 231.604†	312.7	226.9	5.2112	ug/L	5.2112	ppb	11:25:20

2	P 214.914†	496.2	254.4	140.61	ug/L	140.61 ppb	11:25:20
2	Pb 220.353†	27.1	95.1	10.699	ug/L	10.699 ppb	11:25:20
2	S 181.975 Axial†	124.6	75.3	99.446	ug/L	99.446 ppb	11:25:20
2	Sb 206.836†	73.8	36.5	11.769	ug/L	11.769 ppb	11:25:20
2	Se 196.026†	26.0	52.8	30.186	ug/L	30.186 ppb	11:25:20
2	Si 251.611†	3692.9	3213.2	95.442	ug/L	95.442 ppb	11:25:20
2	Sn 189.927†	66.8	58.0	9.3598	ug/L	9.3598 ppb	11:25:20
2	Sr 421.552†	852.9	852.3	5.1383	ug/L	5.1383 ppb	11:23:43
2	Ti 334.940†	1843.4	3100.7	4.8813	ug/L	4.8813 ppb	11:25:00
2	Tl 190.801†	30.2	64.8	18.334	ug/L	18.334 ppb	11:25:20
2	U 409.014†	-858.9	1724.6	49.557	ug/L	49.557 ppb	11:25:00
2	V 292.402†	-676.1	686.3	4.7869	ug/L	4.7869 ppb	11:25:00
2	Zn 213.857†	1919.3	1166.5	9.9676	ug/L	9.9676 ppb	11:25:20
2	SiO2†	3846.8	3324.4	211.62	ug/L	211.62 ppb	11:25:56
3	Sc 361.383	881014.9	881014.9	101.51	%		11:25:25
3	Sc Radial	5538.1	5538.1	99.3	%		11:24:08
3	Y 371.029	740744.8	740744.8	101.55	%		11:25:25
3	Y RADIAL	6054.5	6054.5	100.3	%		11:24:08
3	Ag 328.068†	1438.5	1143.1	5.1803	ug/L	5.1803 ppb	11:25:25
3	Al 396.153Radial†	274.4	311.6	214.13	ug/L	214.13 ppb	11:24:08
3	As 188.979†	58.8	89.2	34.480	ug/L	34.480 ppb	11:25:45
3	B 249.677†	1856.1	2321.7	49.451	ug/L	49.451 ppb	11:25:25
3	Ba 233.527†	669.2	670.3	5.0232	ug/L	5.0232 ppb	11:25:45
3	Be 313.107†	9258.8	13783.7	4.9590	ug/L	4.9590 ppb	11:25:25
3	Ca 317.933Radial†	153.8	137.9	201.33	ug/L	201.33 ppb	11:24:28
3	Cd 226.502†	277.4	472.2	4.8893	ug/L	4.8893 ppb	11:25:45
3	Co 228.616†	180.1	250.9	4.7470	ug/L	4.7470 ppb	11:25:45
3	Cr 267.716†	571.0	476.5	4.9824	ug/L	4.9824 ppb	11:25:45
3	Cu 324.752†	10294.2	3383.3	9.8327	ug/L	9.8327 ppb	11:25:25
3	Fe 238.204 Radial†	21.9	12.2	109.35	ug/L	109.35 ppb	11:24:28
3	K 766.490 Radial†	3707.0	992.7	166.32	ug/L	166.32 ppb	11:24:08
3	Mg 279.077 IEC†	11.8	10.0	334.97	ug/L	334.97 ppb	11:24:28
3	Mn 257.610†	10367.7	9693.4	10.278	ug/L	10.278 ppb	11:25:25
3	Mo 202.031†	181.2	160.1	10.198	ug/L	10.198 ppb	11:25:45
3	Na 589.592 Radial†	-596.5	953.6	289.00	ug/L	289.00 ppb	11:24:08
3	Ni 231.604†	309.3	218.8	5.0239	ug/L	5.0239 ppb	11:25:45
3	P 214.914†	479.9	230.7	127.35	ug/L	127.35 ppb	11:25:45
3	Pb 220.353†	37.2	104.6	11.769	ug/L	11.769 ppb	11:25:45
3	S 181.975 Axial†	132.5	81.1	107.13	ug/L	107.13 ppb	11:25:45
3	Sb 206.836†	66.0	27.6	8.9622	ug/L	8.9622 ppb	11:25:45
3	Se 196.026†	27.9	54.3	30.951	ug/L	30.951 ppb	11:25:45
3	Si 251.611†	3731.0	3193.8	94.865	ug/L	94.865 ppb	11:25:45
3	Sn 189.927†	61.6	51.8	8.3624	ug/L	8.3624 ppb	11:25:45
3	Sr 421.552†	820.1	825.9	4.9794	ug/L	4.9794 ppb	11:24:08
3	Ti 334.940†	1869.5	3098.0	4.8776	ug/L	4.8776 ppb	11:25:25
3	Tl 190.801†	30.3	64.4	18.212	ug/L	18.212 ppb	11:25:45
3	U 409.014†	-942.7	1655.3	47.568	ug/L	47.568 ppb	11:25:25
3	V 292.402†	-679.5	693.3	4.8348	ug/L	4.8348 ppb	11:25:25
3	Zn 213.857†	1935.7	1153.1	9.8533	ug/L	9.8533 ppb	11:25:45
3	SiO2†	3816.3	3235.1	205.92	ug/L	205.92 ppb	11:26:01

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	872675.2	100.55	%	0.841				0.84%
Sc Radial	5320.7	95.4	%	7.44				7.79%
Y 371.029	734430.4	100.68	%	0.773				0.77%
Y RADIAL	5812.6	96.25	%	7.488				7.78%
Ag 328.068†	1152.8	5.2296	ug/L	0.23498	5.2296	ppb	0.23498	4.49%
QC value within limits for Ag 328.068 Recovery = 104.59%								
Al 396.153Radial†	328.8	225.99	ug/L	11.970	225.99	ppb	11.970	5.30%
QC value within limits for Al 396.153Radial Recovery = 113.00%								
As 188.979†	83.1	32.116	ug/L	2.3836	32.116	ppb	2.3836	7.42%
QC value within limits for As 188.979 Recovery = 107.05%								
B 249.677†	2299.8	48.981	ug/L	0.4272	48.981	ppb	0.4272	0.87%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	671.1	5.0293	ug/L	0.03861	5.0293	ppb	0.03861	0.77%
QC value within limits for Ba 233.527 Recovery = 100.59%								
Be 313.107†	13749.4	4.9468	ug/L	0.04694	4.9468	ppb	0.04694	0.95%
QC value within limits for Be 313.107 Recovery = 98.94%								

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Ca 317.933Radial†        147.4      215.11 ug/L        19.794      215.11 ppb        19.794   9.20%
   QC value within limits for Ca 317.933Radial  Recovery = 107.56%
Cd 226.502†              480.1      4.9692 ug/L       0.08885      4.9692 ppb       0.08885   1.79%
   QC value within limits for Cd 226.502  Recovery = 99.38%
Co 228.616†              254.6      4.8165 ug/L       0.10864      4.8165 ppb       0.10864   2.26%
   QC value within limits for Co 228.616  Recovery = 96.33%
Cr 267.716†              469.6      4.9101 ug/L       0.07240      4.9101 ppb       0.07240   1.47%
   QC value within limits for Cr 267.716  Recovery = 98.20%
Cu 324.752†             3386.9      9.8442 ug/L       0.12836      9.8442 ppb       0.12836   1.30%
   QC value within limits for Cu 324.752  Recovery = 98.44%
Fe 238.204 Radial†        14.5      129.75 ug/L        20.588      129.75 ppb        20.588  15.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.75%
K 766.490 Radial†       1199.2      200.97 ug/L        61.163      200.97 ppb        61.163  30.43%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 133.98%
Mg 279.077 IEC†            9.7      326.16 ug/L        49.410      326.16 ppb        49.410  15.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.72%
Mn 257.610†             9699.1      10.286 ug/L        0.0588      10.286 ppb        0.0588   0.57%
   QC value within limits for Mn 257.610  Recovery = 102.86%
Mo 202.031†              159.1      10.132 ug/L        0.0975      10.132 ppb        0.0975   0.96%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†       953.6      289.00 ug/L        19.101      289.00 ppb        19.101   6.61%
   QC value within limits for Na 589.592 Radial  Recovery = 96.33%
Ni 231.604†              229.6      5.2731 ug/L       0.28518      5.2731 ppb       0.28518   5.41%
   QC value within limits for Ni 231.604  Recovery = 105.46%
P 214.914†               243.5      134.44 ug/L         6.678      134.44 ppb         6.678   4.97%
   QC value within limits for P 214.914  Recovery = 89.63%
Pb 220.353†               94.5      10.641 ug/L        1.1591      10.641 ppb        1.1591  10.89%
   QC value within limits for Pb 220.353  Recovery = 106.41%
S 181.975 Axial†          76.9      101.50 ug/L         4.930      101.50 ppb         4.930   4.86%
   QC value within limits for S 181.975 Axial  Recovery = 101.50%
Sb 206.836†               31.3      10.135 ug/L        1.4595      10.135 ppb        1.4595  14.40%
   QC value within limits for Sb 206.836  Recovery = 101.35%
Se 196.026†               51.4      29.370 ug/L        2.1103      29.370 ppb        2.1103   7.19%
   QC value within limits for Se 196.026  Recovery = 97.90%
Si 251.611†             3208.3      95.286 ug/L        0.3691      95.286 ppb        0.3691   0.39%
   QC value within limits for Si 251.611  Recovery = 95.29%
Sn 189.927†               51.1      8.2386 ug/L       1.18799      8.2386 ppb       1.18799  14.42%
   QC value within limits for Sn 189.927  Recovery = 82.39%
Sr 421.552†              884.1      5.3300 ug/L       0.47629      5.3300 ppb       0.47629   8.94%
   QC value within limits for Sr 421.552  Recovery = 106.60%
Ti 334.940†             3118.3      4.9100 ug/L       0.05293      4.9100 ppb       0.05293   1.08%
   QC value within limits for Ti 334.940  Recovery = 98.20%
Tl 190.801†               66.9      18.930 ug/L        1.1388      18.930 ppb        1.1388   6.02%
   QC value within limits for Tl 190.801  Recovery = 94.65%
U 409.014†              1688.7      48.527 ug/L        0.9963      48.527 ppb        0.9963   2.05%
   QC value within limits for U 409.014  Recovery = 97.05%
V 292.402†               691.2      4.8182 ug/L       0.02710      4.8182 ppb       0.02710   0.56%
   QC value within limits for V 292.402  Recovery = 96.36%
Zn 213.857†             1166.2      9.9626 ug/L       0.10681      9.9626 ppb       0.10681   1.07%
   QC value within limits for Zn 213.857  Recovery = 99.63%
SiO2†                   3294.1      209.67 ug/L         3.241      209.67 ppb         3.241   1.55%
   QC value within limits for SiO2  Recovery = 98.43%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/11/2009 11:28:12
Data Type: Reprocessed on 12/11/2009 12:46:02

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	756993.4	756993.4	87.220	%			11:30:38
1	Sc Radial	4880.9	4880.9	87.5	%			11:30:10
1	Y 371.029	620548.2	620548.2	85.070	%			11:30:38
1	Y RADIAL	5338.7	5338.7	88.40	%			11:30:10
1	Ag 328.068†	-9919.8	-11647.4	1.5150	ug/L	1.5150	ppb	11:30:38
1	Al 396.153Radial†	689990.2	788262.9	542890	ug/L	542890	ppb	11:30:05
1	As 188.979†	-105.2	-89.4	-4.8296	ug/L	-4.8296	ppb	11:30:58
1	B 249.677†	600.4	1181.6	-0.4812	ug/L	-0.4812	ppb	11:30:38
1	Ba 233.527†	-572.8	-645.6	2.3899	ug/L	2.3899	ppb	11:30:58
1	Be 313.107†	-4945.1	-1007.1	-0.4108	ug/L	-0.4108	ppb	11:30:38
1	Ca 317.933Radial†	302719.8	345802.7	504700	ug/L	504700	ppb	11:30:05
1	Cd 226.502†	1418.0	1824.8	-0.4092	ug/L	-0.4092	ppb	11:30:58
1	Co 228.616†	-4.8	68.0	-1.4714	ug/L	-1.4714	ppb	11:30:58
1	Cr 267.716†	-70.1	-166.4	1.7380	ug/L	1.7380	ppb	11:30:58
1	Cu 324.752†	4107.1	-2048.9	3.9153	ug/L	3.9153	ppb	11:30:38
1	Fe 238.204 Radial†	18907.2	21589.2	193420	ug/L	193420	ppb	11:30:10
1	K 766.490 Radial†	2657.0	295.8	66.366	ug/L	66.366	ppb	11:30:05
1	Mg 279.077 IEC†	13012.5	14863.3	499660	ug/L	499660	ppb	11:30:10
1	Mn 257.610†	1219.3	877.7	10.913	ug/L	10.913	ppb	11:30:38
1	Mo 202.031†	-231.7	-284.0	-4.3540	ug/L	-4.3540	ppb	11:30:58
1	Na 589.592 Radial†	-1428.1	-77.3	-23.415	ug/L	-23.415	ppb	11:30:10
1	Ni 231.604†	240.6	189.9	4.3628	ug/L	4.3628	ppb	11:30:58
1	P 214.914†	197.0	-16.2	18.997	ug/L	18.997	ppb	11:30:58
1	Pb 220.353†	-811.3	-862.2	9.3939	ug/L	9.3939	ppb	11:30:58
1	S 181.975 Axial†	76.0	37.7	-56.928	ug/L	-56.928	ppb	11:30:58
1	Sb 206.836†	86.2	61.4	6.2629	ug/L	6.2629	ppb	11:30:58
1	Se 196.026†	-1040.9	-1166.6	19.008	ug/L	19.008	ppb	11:30:58
1	Si 251.611†	466.9	53.5	2.1022	ug/L	2.1022	ppb	11:30:58
1	Sn 189.927†	-357.2	-418.4	-12.019	ug/L	-12.019	ppb	11:30:58
1	Sr 421.552†	575.5	657.7	-0.7113	ug/L	-0.7113	ppb	11:30:10
1	Ti 334.940†	-14931.3	-15862.9	1.2743	ug/L	1.2743	ppb	11:30:38
1	Tl 190.801†	-93.8	-72.9	-5.9073	ug/L	-5.9073	ppb	11:30:58
1	U 409.014†	-1285.6	1110.0	7.5826	ug/L	7.5826	ppb	11:30:38
1	V 292.402†	1155.9	2688.0	-0.4308	ug/L	-0.4308	ppb	11:30:58
1	Zn 213.857†	3322.4	3055.4	-9.3150	ug/L	-9.3150	ppb	11:30:58
1	SiO2†	472.1	16.8	2.1784	ug/L	2.1784	ppb	11:31:54
2	Sc 361.383	748375.7	748375.7	86.227	%			11:31:03
2	Sc Radial	5137.5	5137.5	92.1	%			11:30:21
2	Y 371.029	613588.1	613588.1	84.116	%			11:31:03
2	Y RADIAL	5544.8	5544.8	91.81	%			11:30:21
2	Ag 328.068†	-10027.9	-11903.8	-1.3768	ug/L	-1.3768	ppb	11:31:03
2	Al 396.153Radial†	643630.0	698570.9	481110	ug/L	481110	ppb	11:30:16
2	As 188.979†	-72.9	-53.2	7.9134	ug/L	7.9134	ppb	11:31:23
2	B 249.677†	650.9	1248.1	1.9790	ug/L	1.9790	ppb	11:31:03
2	Ba 233.527†	-566.8	-646.3	2.0929	ug/L	2.0929	ppb	11:31:23
2	Be 313.107†	-5112.7	-1266.8	-0.5041	ug/L	-0.5041	ppb	11:31:03
2	Ca 317.933Radial†	285126.3	309432.5	451610	ug/L	451610	ppb	11:30:16
2	Cd 226.502†	1400.8	1823.5	0.3625	ug/L	0.3625	ppb	11:31:23
2	Co 228.616†	7.3	81.9	-1.0956	ug/L	-1.0956	ppb	11:31:23
2	Cr 267.716†	-95.1	-196.3	1.2811	ug/L	1.2811	ppb	11:31:23
2	Cu 324.752†	4033.3	-2080.2	3.4233	ug/L	3.4233	ppb	11:31:03
2	Fe 238.204 Radial†	19093.0	20711.9	185560	ug/L	185560	ppb	11:30:21
2	K 766.490 Radial†	2667.1	155.0	40.166	ug/L	40.166	ppb	11:30:16
2	Mg 279.077 IEC†	13097.5	14212.9	477790	ug/L	477790	ppb	11:30:21
2	Mn 257.610†	1083.5	736.5	10.386	ug/L	10.386	ppb	11:31:03
2	Mo 202.031†	-226.6	-281.2	-4.7343	ug/L	-4.7343	ppb	11:31:23
2	Na 589.592 Radial†	-1350.8	88.1	26.712	ug/L	26.712	ppb	11:30:21
2	Ni 231.604†	192.9	137.8	3.1652	ug/L	3.1652	ppb	11:31:23

2	P 214.914†	167.9	-47.4	-13.017	ug/L	-13.017 ppb	11:31:23
2	Pb 220.353†	-834.9	-900.3	-8.0877	ug/L	-8.0877 ppb	11:31:23
2	S 181.975 Axial†	68.2	29.7	-55.392	ug/L	-55.392 ppb	11:31:23
2	Sb 206.836†	67.4	40.8	1.3270	ug/L	1.3270 ppb	11:31:23
2	Se 196.026†	-1013.6	-1148.8	-4.2965	ug/L	-4.2965 ppb	11:31:23
2	Si 251.611†	467.8	60.8	2.3247	ug/L	2.3247 ppb	11:31:23
2	Sn 189.927†	-357.8	-423.8	-18.546	ug/L	-18.546 ppb	11:31:23
2	Sr 421.552†	520.6	565.2	-0.7770	ug/L	-0.7770 ppb	11:30:21
2	Ti 334.940†	-14753.1	-15853.5	-1.4837	ug/L	-1.4837 ppb	11:31:03
2	Tl 190.801†	-62.9	-38.4	2.1377	ug/L	2.1377 ppb	11:31:23
2	U 409.014†	-990.6	1435.1	17.919	ug/L	17.919 ppb	11:31:03
2	V 292.402†	1127.3	2670.1	0.1734	ug/L	0.1734 ppb	11:31:23
2	Zn 213.857†	3343.9	3124.2	-7.2162	ug/L	-7.2162 ppb	11:31:23
2	SiO2†	472.1	23.0	2.5906	ug/L	2.5906 ppb	11:31:59
3	Sc 361.383	731671.0	731671.0	84.302	%		11:31:28
3	Sc Radial	5024.3	5024.3	90.1	%		11:30:31
3	Y 371.029	601193.9	601193.9	82.417	%		11:31:28
3	Y RADIAL	5440.1	5440.1	90.08	%		11:30:31
3	Ag 328.068†	-10018.7	-12158.3	-1.0690	ug/L	-1.0690 ppb	11:31:28
3	Al 396.153Radial†	664641.7	737630.5	508020	ug/L	508020 ppb	11:30:26
3	As 188.979†	-72.7	-54.9	8.1410	ug/L	8.1410 ppb	11:31:48
3	B 249.677†	582.2	1183.8	-0.1430	ug/L	-0.1430 ppb	11:31:28
3	Ba 233.527†	-531.7	-619.6	2.5022	ug/L	2.5022 ppb	11:31:48
3	Be 313.107†	-5001.9	-1270.7	-0.5069	ug/L	-0.5069 ppb	11:31:28
3	Ca 317.933Radial†	294034.9	326292.3	476220	ug/L	476220 ppb	11:30:26
3	Cd 226.502†	1410.2	1871.8	0.2962	ug/L	0.2962 ppb	11:31:48
3	Co 228.616†	-32.8	34.5	-2.0714	ug/L	-2.0714 ppb	11:31:48
3	Cr 267.716†	-82.7	-184.1	1.5151	ug/L	1.5151 ppb	11:31:48
3	Cu 324.752†	4076.9	-1921.8	4.1731	ug/L	4.1731 ppb	11:31:28
3	Fe 238.204 Radial†	19243.2	21345.6	191230	ug/L	191230 ppb	11:30:31
3	K 766.490 Radial†	2570.1	112.6	33.988	ug/L	33.988 ppb	11:30:26
3	Mg 279.077 IEC†	13195.9	14642.4	492230	ug/L	492230 ppb	11:30:31
3	Mn 257.610†	1029.6	701.2	10.646	ug/L	10.646 ppb	11:31:28
3	Mo 202.031†	-233.6	-295.5	-5.2381	ug/L	-5.2381 ppb	11:31:48
3	Na 589.592 Radial†	-1340.0	67.0	20.318	ug/L	20.318 ppb	11:30:31
3	Ni 231.604†	214.7	168.8	3.8778	ug/L	3.8778 ppb	11:31:48
3	P 214.914†	163.9	-47.6	-8.7638	ug/L	-8.7638 ppb	11:31:48
3	Pb 220.353†	-816.2	-900.2	-2.5019	ug/L	-2.5019 ppb	11:31:48
3	S 181.975 Axial†	74.1	38.5	-49.071	ug/L	-49.071 ppb	11:31:48
3	Sb 206.836†	58.8	32.3	-2.1131	ug/L	-2.1131 ppb	11:31:48
3	Se 196.026†	-1038.8	-1205.4	-14.715	ug/L	-14.715 ppb	11:31:48
3	Si 251.611†	431.0	29.5	1.4270	ug/L	1.4270 ppb	11:31:48
3	Sn 189.927†	-376.1	-455.0	-20.917	ug/L	-20.917 ppb	11:31:48
3	Sr 421.552†	554.7	615.8	-0.6998	ug/L	-0.6998 ppb	11:30:31
3	Ti 334.940†	-14815.5	-16318.0	-0.9262	ug/L	-0.9262 ppb	11:31:28
3	Tl 190.801†	-106.1	-91.3	-12.048	ug/L	-12.048 ppb	11:31:48
3	U 409.014†	-1449.0	865.2	0.8188	ug/L	0.8188 ppb	11:31:28
3	V 292.402†	1066.8	2628.1	-0.6876	ug/L	-0.6876 ppb	11:31:48
3	Zn 213.857†	3344.7	3213.7	-7.4880	ug/L	-7.4880 ppb	11:31:48
3	SiO2†	364.7	-91.9	-4.6727	ug/L	-4.6727 ppb	11:32:04

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	745680.1	85.916	%	1.4834				1.73%
Sc Radial	5014.2	89.9	%	2.31				2.57%
Y 371.029	611776.7	83.867	%	1.3439				1.60%
Y RADIAL	5441.2	90.10	%	1.707				1.89%
Ag 328.068†	-11903.1	-0.3103	ug/L	1.58818	-0.3103	ppb	1.58818	511.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	741488.1	510670	ug/L	30971.5	510670	ppb	30971.5	6.06%
QC value within limits for Al 396.153Radial Recovery = 102.13%								
As 188.979†	-65.8	3.7416	ug/L	7.42374	3.7416	ppb	7.42374	198.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1204.5	0.4516	ug/L	1.33353	0.4516	ppb	1.33353	295.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-637.1	2.3283	ug/L	0.21149	2.3283	ppb	0.21149	9.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1181.5	-0.4739	ug/L	0.05467	-0.4739	ppb	0.05467	11.53%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     327175.8      477510 ug/L       26564.5      477510 ppb        26564.5   5.56%
   QC value within limits for Ca 317.933Radial  Recovery = 95.50%
Cd 226.502†             1840.0      0.0832 ug/L       0.42771      0.0832 ppb        0.42771 514.38%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.5     -1.5462 ug/L       0.49217     -1.5462 ppb        0.49217  31.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -182.3      1.5114 ug/L       0.22845      1.5114 ppb        0.22845  15.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -2017.0      3.8372 ug/L       0.38095      3.8372 ppb        0.38095   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     21215.6      190070 ug/L        4057.3      190070 ppb         4057.3   2.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.03%
K 766.490 Radial†        187.8      46.840 ug/L       17.1898      46.840 ppb        17.1898  36.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        14572.9      489890 ug/L       11118.2      489890 ppb        11118.2   2.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.98%
Mn 257.610†              771.8      10.648 ug/L        0.2632      10.648 ppb         0.2632   2.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -286.9     -4.7755 ug/L       0.44349     -4.7755 ppb        0.44349   9.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        26.0      7.8718 ug/L      27.28290      7.8718 ppb       27.28290 346.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              165.5      3.8019 ug/L       0.60243      3.8019 ppb        0.60243  15.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -37.1     -0.9278 ug/L      17.38629     -0.9278 ppb       17.38629 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -887.6     -0.3986 ug/L       8.92859     -0.3986 ppb        8.92859 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          35.3     -53.797 ug/L        4.1643     -53.797 ppb         4.1643   7.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               44.9      1.8256 ug/L       4.21020      1.8256 ppb        4.21020 230.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1173.6     -0.0013 ug/L      17.26716     -0.0013 ppb       17.26716 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               47.9      1.9513 ug/L       0.46751      1.9513 ppb        0.46751  23.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -432.4     -17.161 ug/L        4.6077     -17.161 ppb         4.6077  26.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              612.9     -0.7293 ug/L       0.04164     -0.7293 ppb        0.04164   5.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16011.5     -0.3785 ug/L       1.45827     -0.3785 ppb        1.45827 385.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -67.5     -5.2725 ug/L       7.11413     -5.2725 ppb        7.11413 134.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               1136.8      8.7736 ug/L       8.61226      8.7736 ppb        8.61226  98.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               2662.1     -0.3150 ug/L       0.44201     -0.3150 ppb        0.44201 140.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              3131.1     -8.0064 ug/L       1.14141     -8.0064 ppb        1.14141  14.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -17.3      0.0321 ug/L       4.07969      0.0321 ppb        4.07969 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/11/2009 11:34:15
Data Type: Reprocessed on 12/11/2009 12:46:03

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	758951.0	758951.0	87.445	%			11:36:41
1	Sc Radial	4987.2	4987.2	89.4	%			11:36:13
1	Y 371.029	621080.9	621080.9	85.143	%			11:36:41
1	Y RADIAL	5400.8	5400.8	89.43	%			11:36:13
1	Ag 328.068†	42647.1	48496.1	274.60	ug/L	274.60	ppb	11:36:41
1	Al 396.153Radial†	660949.3	738982.6	508930	ug/L	508930	ppb	11:36:08
1	As 188.979†	1049.6	1231.6	508.39	ug/L	508.39	ppb	11:37:01
1	B 249.677†	21526.7	25110.5	508.75	ug/L	508.75	ppb	11:36:41
1	Ba 233.527†	57172.2	65391.7	496.83	ug/L	496.83	ppb	11:36:41
1	Be 313.107†	582917.2	671270.9	242.00	ug/L	242.00	ppb	11:36:41
1	Ca 317.933Radial†	289405.7	323541.3	472210	ug/L	472210	ppb	11:36:08
1	Cd 226.502†	40964.3	47044.6	469.17	ug/L	469.17	ppb	11:36:41
1	Co 228.616†	20702.3	23748.1	445.38	ug/L	445.38	ppb	11:37:01
1	Cr 267.716†	39985.1	45639.8	481.89	ug/L	481.89	ppb	11:36:41
1	Cu 324.752†	171387.9	189236.7	559.36	ug/L	559.36	ppb	11:36:41
1	Fe 238.204 Radial†	19000.6	21233.0	190240	ug/L	190240	ppb	11:36:13
1	K 766.490 Radial†	31877.7	32900.0	5528.6	ug/L	5528.6	ppb	11:36:08
1	Mg 279.077 IEC†	13124.0	14670.8	493200	ug/L	493200	ppb	11:36:13
1	Mn 257.610†	396615.6	453038.6	489.93	ug/L	489.93	ppb	11:36:41
1	Mo 202.031†	6533.4	7453.0	487.78	ug/L	487.78	ppb	11:37:01
1	Na 589.592 Radial†	15252.2	18606.2	5638.8	ug/L	5638.8	ppb	11:36:13
1	Ni 231.604†	17062.5	19426.2	446.10	ug/L	446.10	ppb	11:37:01
1	P 214.914†	4156.3	4511.0	2455.5	ug/L	2455.5	ppb	11:37:01
1	Pb 220.353†	2780.9	3248.2	462.94	ug/L	462.94	ppb	11:37:01
1	S 181.975 Axial†	1860.9	2078.6	2646.2	ug/L	2646.2	ppb	11:37:01
1	Sb 206.836†	1514.6	1694.6	530.20	ug/L	530.20	ppb	11:37:01
1	Se 196.026†	2895.9	3338.4	2540.1	ug/L	2540.1	ppb	11:37:01
1	Si 251.611†	154917.7	176677.9	5250.8	ug/L	5250.8	ppb	11:36:41
1	Sn 189.927†	2316.7	2640.5	476.61	ug/L	476.61	ppb	11:37:01
1	Sr 421.552†	76362.9	85374.7	510.54	ug/L	510.54	ppb	11:36:08
1	Ti 334.940†	268916.2	308781.5	511.62	ug/L	511.62	ppb	11:36:41
1	Tl 190.801†	1350.0	1578.3	461.73	ug/L	461.73	ppb	11:37:01
1	U 409.014†	13317.1	17813.1	487.28	ug/L	487.28	ppb	11:36:41
1	V 292.402†	66843.3	77803.0	506.91	ug/L	506.91	ppb	11:36:41
1	Zn 213.857†	53716.7	60675.1	483.37	ug/L	483.37	ppb	11:36:41
1	SiO2†	156111.1	178000.0	11337	ug/L	11337	ppb	11:37:58
2	Sc 361.383	760073.7	760073.7	87.575	%			11:37:07
2	Sc Radial	5036.8	5036.8	90.3	%			11:36:23
2	Y 371.029	622660.3	622660.3	85.359	%			11:37:07
2	Y RADIAL	5470.1	5470.1	90.58	%			11:36:23
2	Ag 328.068†	42822.9	48624.8	275.06	ug/L	275.06	ppb	11:37:07
2	Al 396.153Radial†	668783.0	740388.7	509890	ug/L	509890	ppb	11:36:18
2	As 188.979†	1057.7	1239.1	511.27	ug/L	511.27	ppb	11:37:27
2	B 249.677†	21772.6	25355.0	514.00	ug/L	514.00	ppb	11:37:07
2	Ba 233.527†	57342.2	65489.2	497.55	ug/L	497.55	ppb	11:37:07
2	Be 313.107†	584422.8	672005.6	242.26	ug/L	242.26	ppb	11:37:07
2	Ca 317.933Radial†	293875.9	325308.4	474790	ug/L	474790	ppb	11:36:18
2	Cd 226.502†	41033.4	47054.3	469.30	ug/L	469.30	ppb	11:37:07
2	Co 228.616†	20775.3	23796.5	446.31	ug/L	446.31	ppb	11:37:27
2	Cr 267.716†	40113.5	45718.9	482.71	ug/L	482.71	ppb	11:37:07
2	Cu 324.752†	171912.4	189546.1	560.25	ug/L	560.25	ppb	11:37:07
2	Fe 238.204 Radial†	19164.0	21205.0	189990	ug/L	189990	ppb	11:36:23
2	K 766.490 Radial†	32285.0	33000.4	5545.3	ug/L	5545.3	ppb	11:36:18
2	Mg 279.077 IEC†	13200.4	14611.1	491190	ug/L	491190	ppb	11:36:23
2	Mn 257.610†	397691.3	453597.1	490.53	ug/L	490.53	ppb	11:37:07
2	Mo 202.031†	6575.2	7489.6	490.09	ug/L	490.09	ppb	11:37:27
2	Na 589.592 Radial†	15268.6	18456.7	5593.5	ug/L	5593.5	ppb	11:36:23
2	Ni 231.604†	17120.7	19463.9	446.97	ug/L	446.97	ppb	11:37:27

2	P 214.914†	4170.4	4520.0	2461.0	ug/L	2461.0 ppb	11:37:27
2	Pb 220.353†	2775.6	3237.4	461.98	ug/L	461.98 ppb	11:37:27
2	S 181.975 Axial†	1850.2	2063.3	2625.7	ug/L	2625.7 ppb	11:37:27
2	Sb 206.836†	1535.4	1715.9	536.97	ug/L	536.97 ppb	11:37:27
2	Se 196.026†	2927.9	3370.1	2557.4	ug/L	2557.4 ppb	11:37:27
2	Si 251.611†	155531.8	177117.5	5263.8	ug/L	5263.8 ppb	11:37:07
2	Sn 189.927†	2340.2	2663.4	480.56	ug/L	480.56 ppb	11:37:27
2	Sr 421.552†	77355.4	85633.9	512.08	ug/L	512.08 ppb	11:36:18
2	Ti 334.940†	269367.0	308842.1	511.85	ug/L	511.85 ppb	11:37:07
2	Tl 190.801†	1353.2	1579.7	462.15	ug/L	462.15 ppb	11:37:27
2	U 409.014†	13457.9	17951.4	491.29	ug/L	491.29 ppb	11:37:07
2	V 292.402†	66938.6	77798.8	506.92	ug/L	506.92 ppb	11:37:07
2	Zn 213.857†	53878.9	60769.5	484.27	ug/L	484.27 ppb	11:37:07
2	SiO2†	154326.5	175698.4	11189	ug/L	11189 ppb	11:38:04
3	Sc 361.383	753121.3	753121.3	86.774	%		11:37:33
3	Sc Radial	4947.8	4947.8	88.7	%		11:36:33
3	Y 371.029	616563.3	616563.3	84.524	%		11:37:33
3	Y RADIAL	5419.6	5419.6	89.74	%		11:36:33
3	Ag 328.068†	42451.5	48648.2	275.53	ug/L	275.53 ppb	11:37:33
3	Al 396.153Radial†	669785.4	754825.5	519840	ug/L	519840 ppb	11:36:28
3	As 188.979†	1063.9	1257.4	518.56	ug/L	518.56 ppb	11:37:53
3	B 249.677†	21521.5	25295.1	512.51	ug/L	512.51 ppb	11:37:33
3	Ba 233.527†	56818.0	65489.6	497.61	ug/L	497.61 ppb	11:37:33
3	Be 313.107†	578443.8	671275.7	242.00	ug/L	242.00 ppb	11:37:33
3	Ca 317.933Radial†	293749.8	331013.8	483110	ug/L	483110 ppb	11:36:28
3	Cd 226.502†	40771.4	47184.9	470.51	ug/L	470.51 ppb	11:37:33
3	Co 228.616†	20701.7	23930.6	448.82	ug/L	448.82 ppb	11:37:53
3	Cr 267.716†	39768.4	45744.0	483.00	ug/L	483.00 ppb	11:37:33
3	Cu 324.752†	169859.6	188992.6	558.72	ug/L	558.72 ppb	11:37:33
3	Fe 238.204 Radial†	18976.5	21375.0	191510	ug/L	191510 ppb	11:36:33
3	K 766.490 Radial†	32308.4	33669.2	5657.9	ug/L	5657.9 ppb	11:36:28
3	Mg 279.077 IEC†	13082.5	14741.0	495550	ug/L	495550 ppb	11:36:33
3	Mn 257.610†	394294.3	453874.5	490.90	ug/L	490.90 ppb	11:37:33
3	Mo 202.031†	6534.9	7512.6	491.66	ug/L	491.66 ppb	11:37:53
3	Na 589.592 Radial†	15175.1	18655.2	5653.6	ug/L	5653.6 ppb	11:36:33
3	Ni 231.604†	17057.9	19572.1	449.45	ug/L	449.45 ppb	11:37:53
3	P 214.914†	4154.4	4545.6	2477.7	ug/L	2477.7 ppb	11:37:53
3	Pb 220.353†	2759.8	3248.5	465.32	ug/L	465.32 ppb	11:37:53
3	S 181.975 Axial†	1869.6	2105.2	2679.0	ug/L	2679.0 ppb	11:37:53
3	Sb 206.836†	1520.7	1715.1	536.53	ug/L	536.53 ppb	11:37:53
3	Se 196.026†	2889.0	3356.2	2555.7	ug/L	2555.7 ppb	11:37:53
3	Si 251.611†	153939.2	176921.7	5257.9	ug/L	5257.9 ppb	11:37:33
3	Sn 189.927†	2327.8	2673.7	483.12	ug/L	483.12 ppb	11:37:53
3	Sr 421.552†	77374.4	87194.4	521.41	ug/L	521.41 ppb	11:36:28
3	Ti 334.940†	267159.7	309137.7	512.75	ug/L	512.75 ppb	11:37:33
3	Tl 190.801†	1350.3	1590.7	465.49	ug/L	465.49 ppb	11:37:53
3	U 409.014†	13410.7	18038.8	493.61	ug/L	493.61 ppb	11:37:33
3	V 292.402†	66385.9	77867.5	507.27	ug/L	507.27 ppb	11:37:33
3	Zn 213.857†	53341.8	60718.6	483.52	ug/L	483.52 ppb	11:37:33
3	SiO2†	156041.1	179301.1	11419	ug/L	11419 ppb	11:38:09

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757382.0	87.264	%	0.4300				0.49%
Sc Radial	4990.6	89.5	%	0.80				0.89%
Y 371.029	620101.5	85.009	%	0.4338				0.51%
Y RADIAL	5430.1	89.92	%	0.593				0.66%
Ag 328.068†	48589.7	275.06	ug/L	0.465	275.06	ppb	0.465	0.17%
QC value within limits for Ag 328.068 Recovery = 110.02%								
Al 396.153Radial†	744732.3	512880	ug/L	6039.4	512880	ppb	6039.4	1.18%
QC value within limits for Al 396.153Radial Recovery = 102.58%								
As 188.979†	1242.7	512.74	ug/L	5.241	512.74	ppb	5.241	1.02%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	25253.5	511.75	ug/L	2.701	511.75	ppb	2.701	0.53%
QC value within limits for B 249.677 Recovery = 102.35%								
Ba 233.527†	65456.8	497.33	ug/L	0.434	497.33	ppb	0.434	0.09%
QC value within limits for Ba 233.527 Recovery = 99.47%								
Be 313.107†	671517.4	242.08	ug/L	0.152	242.08	ppb	0.152	0.06%
QC value within limits for Be 313.107 Recovery = 96.83%								

Ca 317.933Radial†	326621.2	476700 ug/L	5699.8	476700 ppb	5699.8	1.20%
QC value within limits for Ca 317.933Radial Recovery = 95.34%						
Cd 226.502†	47094.6	469.66 ug/L	0.734	469.66 ppb	0.734	0.16%
QC value within limits for Cd 226.502 Recovery = 93.93%						
Co 228.616†	23825.1	446.84 ug/L	1.777	446.84 ppb	1.777	0.40%
QC value within limits for Co 228.616 Recovery = 89.37%						
Cr 267.716†	45700.9	482.54 ug/L	0.577	482.54 ppb	0.577	0.12%
QC value within limits for Cr 267.716 Recovery = 96.51%						
Cu 324.752†	189258.5	559.44 ug/L	0.768	559.44 ppb	0.768	0.14%
QC value within limits for Cu 324.752 Recovery = 111.89%						
Fe 238.204 Radial†	21271.0	190580 ug/L	816.7	190580 ppb	816.7	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 95.29%						
K 766.490 Radial†	33189.9	5577.3 ug/L	70.35	5577.3 ppb	70.35	1.26%
QC value within limits for K 766.490 Radial Recovery = 111.55%						
Mg 279.077 IEC†	14674.3	493310 ug/L	2184.9	493310 ppb	2184.9	0.44%
QC value within limits for Mg 279.077 IEC Recovery = 98.66%						
Mn 257.610†	453503.4	490.45 ug/L	0.489	490.45 ppb	0.489	0.10%
QC value within limits for Mn 257.610 Recovery = 98.09%						
Mo 202.031†	7485.1	489.84 ug/L	1.955	489.84 ppb	1.955	0.40%
QC value within limits for Mo 202.031 Recovery = 97.97%						
Na 589.592 Radial†	18572.7	5628.6 ug/L	31.33	5628.6 ppb	31.33	0.56%
QC value within limits for Na 589.592 Radial Recovery = 112.57%						
Ni 231.604†	19487.4	447.51 ug/L	1.739	447.51 ppb	1.739	0.39%
QC value within limits for Ni 231.604 Recovery = 89.50%						
P 214.914†	4525.5	2464.7 ug/L	11.55	2464.7 ppb	11.55	0.47%
QC value within limits for P 214.914 Recovery = 98.59%						
Pb 220.353†	3244.7	463.41 ug/L	1.722	463.41 ppb	1.722	0.37%
QC value within limits for Pb 220.353 Recovery = 92.68%						
S 181.975 Axial†	2082.4	2650.3 ug/L	26.93	2650.3 ppb	26.93	1.02%
QC value within limits for S 181.975 Axial Recovery = 106.01%						
Sb 206.836†	1708.5	534.57 ug/L	3.789	534.57 ppb	3.789	0.71%
QC value within limits for Sb 206.836 Recovery = 106.91%						
Se 196.026†	3354.9	2551.1 ug/L	9.50	2551.1 ppb	9.50	0.37%
QC value within limits for Se 196.026 Recovery = 102.04%						
Si 251.611†	176905.7	5257.5 ug/L	6.53	5257.5 ppb	6.53	0.12%
QC value within limits for Si 251.611 Recovery = 105.15%						
Sn 189.927†	2659.2	480.10 ug/L	3.278	480.10 ppb	3.278	0.68%
QC value within limits for Sn 189.927 Recovery = 96.02%						
Sr 421.552†	86067.7	514.68 ug/L	5.884	514.68 ppb	5.884	1.14%
QC value within limits for Sr 421.552 Recovery = 102.94%						
Ti 334.940†	308920.4	512.07 ug/L	0.596	512.07 ppb	0.596	0.12%
QC value within limits for Ti 334.940 Recovery = 102.41%						
Tl 190.801†	1582.9	463.12 ug/L	2.059	463.12 ppb	2.059	0.44%
QC value within limits for Tl 190.801 Recovery = 92.62%						
U 409.014†	17934.4	490.73 ug/L	3.200	490.73 ppb	3.200	0.65%
QC value within limits for U 409.014 Recovery = 98.15%						
V 292.402†	77823.1	507.03 ug/L	0.203	507.03 ppb	0.203	0.04%
QC value within limits for V 292.402 Recovery = 101.41%						
Zn 213.857†	60721.1	483.72 ug/L	0.481	483.72 ppb	0.481	0.10%
QC value within limits for Zn 213.857 Recovery = 96.74%						
SiO2†	177666.5	11315 ug/L	116.4	11315 ppb	116.4	1.03%
QC value within limits for SiO2 Recovery = 105.80%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/11/2009 11:40:18
Data Type: Reprocessed on 12/11/2009 12:46:04

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	740552.4	740552.4	85.325	%			11:42:45
1	Sc Radial	4969.6	4969.6	89.1	%			11:42:16
1	Y 371.029	607165.9	607165.9	83.235	%			11:42:45
1	Y RADIAL	5424.0	5424.0	89.81	%			11:42:16
1	Ag 328.068†	-23489.1	-27802.9	-2.8641	ug/L	-2.8641	ppb	11:42:45
1	Al 396.153Radial†	644142.1	722747.2	497770	ug/L	497770	ppb	11:42:11
1	As 188.979†	-201.4	-204.8	-10.167	ug/L	-10.167	ppb	11:43:05
1	B 249.677†	1984.5	2819.0	0.8022	ug/L	0.8022	ppb	11:42:45
1	Ba 233.527†	-1613.5	-1879.9	2.5961	ug/L	2.5961	ppb	11:43:05
1	Be 313.107†	-11598.1	-8930.2	-3.2347	ug/L	-3.2347	ppb	11:42:45
1	Ca 317.933Radial†	284191.5	318839.1	465340	ug/L	465340	ppb	11:42:11
1	Cd 226.502†	3571.9	4385.1	0.8224	ug/L	0.8224	ppb	11:43:05
1	Co 228.616†	194.7	301.7	-0.7620	ug/L	-0.7620	ppb	11:43:05
1	Cr 267.716†	42.7	-36.0	2.9304	ug/L	2.9304	ppb	11:43:05
1	Cu 324.752†	1283.7	-5253.3	7.5286	ug/L	7.5286	ppb	11:42:45
1	Fe 238.204 Radial†	44449.7	49861.6	446710	ug/L	446710	ppb	11:42:16
1	K 766.490 Radial†	3284.2	945.3	-49.160	ug/L	-49.160	ppb	11:42:11
1	Mg 279.077 IEC†	12857.3	14423.7	484660	ug/L	484660	ppb	11:42:16
1	Mn 257.610†	-23452.1	-28005.7	5.8356	ug/L	5.8356	ppb	11:42:45
1	Mo 202.031†	-533.6	-643.7	-9.2781	ug/L	-9.2781	ppb	11:43:05
1	Na 589.592 Radial†	1542374.9	1732061.6	524920	ug/L	524920	ppb	11:42:11
1	Ni 231.604†	297.4	262.6	6.0309	ug/L	6.0309	ppb	11:43:05
1	P 214.914†	601.0	462.3	67.963	ug/L	67.963	ppb	11:43:05
1	Pb 220.353†	-588.5	-621.7	5.3514	ug/L	5.3514	ppb	11:43:05
1	S 181.975 Axial†	129.4	102.3	37.240	ug/L	37.240	ppb	11:43:05
1	Sb 206.836†	52.1	23.7	-1.0104	ug/L	-1.0104	ppb	11:43:05
1	Se 196.026†	-2373.2	-2754.5	-102.71	ug/L	-102.71	ppb	11:43:05
1	Si 251.611†	-568.9	-1148.5	-33.299	ug/L	-33.299	ppb	11:43:05
1	Sn 189.927†	-412.7	-492.5	-24.674	ug/L	-24.674	ppb	11:43:05
1	Sr 421.552†	806.9	905.5	1.1481	ug/L	1.1481	ppb	11:42:16
1	Ti 334.940†	-8809.8	-9068.7	3.4577	ug/L	3.4577	ppb	11:42:45
1	Tl 190.801†	-125.0	-111.9	-18.286	ug/L	-18.286	ppb	11:43:05
1	U 409.014†	434877.4	512253.5	14671	ug/L	14671	ppb	11:42:45
1	V 292.402†	3110.2	5007.9	4.3404	ug/L	4.3404	ppb	11:42:45
1	Zn 213.857†	6282.7	6609.4	-2.4207	ug/L	-2.4207	ppb	11:43:05
1	SiO2†	-560.3	-1181.2	-73.425	ug/L	-73.425	ppb	11:44:02
2	Sc 361.383	731220.0	731220.0	84.250	%			11:43:10
2	Sc Radial	4811.2	4811.2	86.3	%			11:42:27
2	Y 371.029	599802.7	599802.7	82.226	%			11:43:10
2	Y RADIAL	5273.6	5273.6	87.32	%			11:42:27
2	Ag 328.068†	-22989.1	-27560.7	-0.4938	ug/L	-0.4938	ppb	11:43:10
2	Al 396.153Radial†	654324.4	758342.3	522280	ug/L	522280	ppb	11:42:22
2	As 188.979†	-189.0	-193.1	-4.8776	ug/L	-4.8776	ppb	11:43:31
2	B 249.677†	1680.6	2487.9	-6.9076	ug/L	-6.9076	ppb	11:43:10
2	Ba 233.527†	-1578.3	-1862.2	2.9075	ug/L	2.9075	ppb	11:43:31
2	Be 313.107†	-11555.5	-9053.0	-3.2781	ug/L	-3.2781	ppb	11:43:10
2	Ca 317.933Radial†	287901.6	333636.9	486940	ug/L	486940	ppb	11:42:22
2	Cd 226.502†	3576.5	4444.1	0.9420	ug/L	0.9420	ppb	11:43:31
2	Co 228.616†	205.6	317.5	-0.5340	ug/L	-0.5340	ppb	11:43:31
2	Cr 267.716†	39.3	-39.4	2.9922	ug/L	2.9922	ppb	11:43:31
2	Cu 324.752†	1345.1	-5161.3	8.0471	ug/L	8.0471	ppb	11:43:10
2	Fe 238.204 Radial†	43507.1	50411.2	451630	ug/L	451630	ppb	11:42:27
2	K 766.490 Radial†	3352.4	1145.6	-25.351	ug/L	-25.351	ppb	11:42:22
2	Mg 279.077 IEC†	12571.2	14567.0	489470	ug/L	489470	ppb	11:42:27
2	Mn 257.610†	-23090.5	-27927.3	6.3199	ug/L	6.3199	ppb	11:43:10
2	Mo 202.031†	-519.0	-634.4	-8.3347	ug/L	-8.3347	ppb	11:43:31
2	Na 589.592 Radial†	1563595.8	1813630.2	549640	ug/L	549640	ppb	11:42:22
2	Ni 231.604†	306.0	277.3	6.3685	ug/L	6.3685	ppb	11:43:31

2	P 214.914†	575.4	440.9	60.292 ug/L	60.292 ppb	11:43:31
2	Pb 220.353†	-591.1	-633.6	9.1208 ug/L	9.1208 ppb	11:43:31
2	S 181.975 Axial†	121.8	95.2	23.018 ug/L	23.018 ppb	11:43:31
2	Sb 206.836†	70.4	46.2	5.5298 ug/L	5.5298 ppb	11:43:31
2	Se 196.026†	-2383.3	-2802.0	-110.63 ug/L	-110.63 ppb	11:43:31
2	Si 251.611†	-547.0	-1131.0	-32.801 ug/L	-32.801 ppb	11:43:31
2	Sn 189.927†	-404.0	-488.4	-21.688 ug/L	-21.688 ppb	11:43:31
2	Sr 421.552†	781.2	905.6	0.9485 ug/L	0.9485 ppb	11:42:27
2	Ti 334.940†	-8483.5	-8813.2	5.0026 ug/L	5.0026 ppb	11:43:10
2	Tl 190.801†	-107.4	-92.9	-12.247 ug/L	-12.247 ppb	11:43:31
2	U 409.014†	428397.3	511066.8	14637 ug/L	14637 ppb	11:43:10
2	V 292.402†	2914.2	4821.7	2.4034 ug/L	2.4034 ppb	11:43:10
2	Zn 213.857†	6285.7	6707.0	-2.2191 ug/L	-2.2191 ppb	11:43:31
2	SiO2†	-609.5	-1247.9	-77.734 ug/L	-77.734 ppb	11:44:07
3	Sc 361.383	733959.0	733959.0	84.566 %		11:43:36
3	Sc Radial	4847.4	4847.4	86.9 %		11:42:38
3	Y 371.029	603107.7	603107.7	82.679 %		11:43:36
3	Y RADIAL	5267.1	5267.1	87.22 %		11:42:38
3	Ag 328.068†	-23001.8	-27473.9	0.0752 ug/L	0.0752 ppb	11:43:36
3	Al 396.153Radial†	642180.4	738704.7	508760 ug/L	508760 ppb	11:42:33
3	As 188.979†	-201.1	-206.5	-10.095 ug/L	-10.095 ppb	11:43:56
3	B 249.677†	1627.2	2417.4	-8.3983 ug/L	-8.3983 ppb	11:43:36
3	Ba 233.527†	-1605.5	-1887.4	2.7148 ug/L	2.7148 ppb	11:43:56
3	Be 313.107†	-11402.2	-8820.6	-3.1955 ug/L	-3.1955 ppb	11:43:36
3	Ca 317.933Radial†	282744.6	325210.7	474640 ug/L	474640 ppb	11:42:33
3	Cd 226.502†	3580.9	4433.3	0.8396 ug/L	0.8396 ppb	11:43:56
3	Co 228.616†	208.9	320.5	-0.4742 ug/L	-0.4742 ppb	11:43:56
3	Cr 267.716†	-1.4	-87.7	2.4940 ug/L	2.4940 ppb	11:43:56
3	Cu 324.752†	1152.4	-5395.1	7.3634 ug/L	7.3634 ppb	11:43:36
3	Fe 238.204 Radial†	43826.3	50401.4	451550 ug/L	451550 ppb	11:42:38
3	K 766.490 Radial†	3322.7	1082.4	-30.604 ug/L	-30.604 ppb	11:42:33
3	Mg 279.077 IEC†	12659.1	14559.3	489210 ug/L	489210 ppb	11:42:38
3	Mn 257.610†	-23139.4	-27882.8	6.3632 ug/L	6.3632 ppb	11:43:36
3	Mo 202.031†	-519.4	-632.6	-8.2254 ug/L	-8.2254 ppb	11:43:56
3	Na 589.592 Radial†	1537159.2	1769674.9	536320 ug/L	536320 ppb	11:42:33
3	Ni 231.604†	313.0	284.2	6.5265 ug/L	6.5265 ppb	11:43:56
3	P 214.914†	574.5	437.3	53.897 ug/L	53.897 ppb	11:43:56
3	Pb 220.353†	-582.2	-620.5	7.5575 ug/L	7.5575 ppb	11:43:56
3	S 181.975 Axial†	122.3	95.2	25.688 ug/L	25.688 ppb	11:43:56
3	Sb 206.836†	69.5	44.8	5.4590 ug/L	5.4590 ppb	11:43:56
3	Se 196.026†	-2374.6	-2781.2	-101.23 ug/L	-101.23 ppb	11:43:56
3	Si 251.611†	-568.1	-1153.6	-33.468 ug/L	-33.468 ppb	11:43:56
3	Sn 189.927†	-412.6	-496.7	-24.312 ug/L	-24.312 ppb	11:43:56
3	Sr 421.552†	811.0	933.0	1.2279 ug/L	1.2279 ppb	11:42:38
3	Ti 334.940†	-8748.4	-9088.9	3.9399 ug/L	3.9399 ppb	11:43:36
3	Tl 190.801†	-111.6	-97.4	-13.906 ug/L	-13.906 ppb	11:43:56
3	U 409.014†	429086.3	509984.0	14606 ug/L	14606 ppb	11:43:36
3	V 292.402†	2838.4	4719.2	1.6707 ug/L	1.6707 ppb	11:43:36
3	Zn 213.857†	6258.4	6646.8	-2.7197 ug/L	-2.7197 ppb	11:43:56
3	SiO2†	-683.4	-1332.6	-83.127 ug/L	-83.127 ppb	11:44:12

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	735243.8	84.714	%	0.5527				0.65%
Sc Radial	4876.1	87.5	%	1.49				1.70%
Y 371.029	603358.7	82.713	%	0.5056				0.61%
Y RADIAL	5321.5	88.12	%	1.470				1.67%
Ag 328.068†	-27612.5	-1.0942	ug/L	1.55893	-1.0942	ppb	1.55893	142.47%
Al 396.153Radial†	739931.4	509600	ug/L	12279.1	509600	ppb	12279.1	2.41%
QC value within limits for Al 396.153Radial Recovery = 101.92%								
As 188.979†	-201.5	-8.3797	ug/L	3.03311	-8.3797	ppb	3.03311	36.20%
B 249.677†	2574.8	-4.8346	ug/L	4.93817	-4.8346	ppb	4.93817	102.14%
Ba 233.527†	-1876.5	2.7395	ug/L	0.15716	2.7395	ppb	0.15716	5.74%
Be 313.107†	-8934.6	-3.2361	ug/L	0.04133	-3.2361	ppb	0.04133	1.28%
Ca 317.933Radial†	325895.6	475640	ug/L	10833.3	475640	ppb	10833.3	2.28%
QC value within limits for Ca 317.933Radial Recovery = 95.13%								
Cd 226.502†	4420.8	0.8680	ug/L	0.06461	0.8680	ppb	0.06461	7.44%
Co 228.616†	313.2	-0.5900	ug/L	0.15184	-0.5900	ppb	0.15184	25.73%
Cr 267.716†	-54.4	2.8055	ug/L	0.27155	2.8055	ppb	0.27155	9.68%

Cu 324.752†	-5269.9	7.6464	ug/L	0.35675	7.6464	ppb	0.35675	4.67%
Fe 238.204 Radial†	50224.7	449960	ug/L	2817.5	449960	ppb	2817.5	0.63%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.99%								
K 766.490 Radial†	1057.8	-35.039	ug/L	12.5088	-35.039	ppb	12.5088	35.70%
Mg 279.077 IEC†	14516.7	487780	ug/L	2708.0	487780	ppb	2708.0	0.56%
QC value within limits for Mg 279.077 IEC Recovery = 97.56%								
Mn 257.610†	-27938.6	6.1729	ug/L	0.29292	6.1729	ppb	0.29292	4.75%
Mo 202.031†	-636.9	-8.6128	ug/L	0.57883	-8.6128	ppb	0.57883	6.72%
Na 589.592 Radial†	1771788.9	536960	ug/L	12372.5	536960	ppb	12372.5	2.30%
QC value within limits for Na 589.592 Radial Recovery = 107.39%								
Ni 231.604†	274.7	6.3086	ug/L	0.25318	6.3086	ppb	0.25318	4.01%
P 214.914†	446.9	60.717	ug/L	7.0429	60.717	ppb	7.0429	11.60%
Pb 220.353†	-625.3	7.3432	ug/L	1.89385	7.3432	ppb	1.89385	25.79%
S 181.975 Axial†	97.6	28.649	ug/L	7.5591	28.649	ppb	7.5591	26.39%
Sb 206.836†	38.2	3.3262	ug/L	3.75571	3.3262	ppb	3.75571	112.91%
Se 196.026†	-2779.3	-104.85	ug/L	5.054	-104.85	ppb	5.054	4.82%
Si 251.611†	-1144.3	-33.189	ug/L	0.3467	-33.189	ppb	0.3467	1.04%
Sn 189.927†	-492.6	-23.558	ug/L	1.6298	-23.558	ppb	1.6298	6.92%
Sr 421.552†	914.7	1.1082	ug/L	0.14389	1.1082	ppb	0.14389	12.98%
Ti 334.940†	-8990.3	4.1334	ug/L	0.79042	4.1334	ppb	0.79042	19.12%
Tl 190.801†	-100.8	-14.813	ug/L	3.1200	-14.813	ppb	3.1200	21.06%
U 409.014†	511101.5	14638	ug/L	32.9	14638	ppb	32.9	0.23%
QC value within limits for U 409.014 Recovery = 97.59%								
V 292.402†	4849.6	2.8048	ug/L	1.37938	2.8048	ppb	1.37938	49.18%
Zn 213.857†	6654.4	-2.4532	ug/L	0.25188	-2.4532	ppb	0.25188	10.27%
SiO2†	-1253.9	-78.095	ug/L	4.8613	-78.095	ppb	4.8613	6.22%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/11/2009 11:46:21
Data Type: Reprocessed on 12/11/2009 12:46:06

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	837251.0	837251.0	96.467	%			11:49:56
1	Sc Radial	5347.5	5347.5	95.9	%			11:48:19
1	Y 371.029	683255.2	683255.2	93.666	%			11:49:56
1	Y RADIAL	5762.6	5762.6	95.42	%			11:48:19
1	Ag 328.068†	-8049.0	-8617.8	0.3257	ug/L	0.3257	ppb	11:50:01
1	Al 396.153Radial†	621.7	683.6	45.489	ug/L	45.489	ppb	11:48:19
1	As 188.979†	25286.5	26243.9	10217	ug/L	10217	ppb	11:50:01
1	B 249.677†	225772.5	234534.8	4974.0	ug/L	4974.0	ppb	11:49:56
1	Ba 233.527†	1845481.4	1913084.5	14317	ug/L	14317	ppb	11:49:56
1	Be 313.107†	7686962.2	7973164.7	2882.6	ug/L	2882.6	ppb	11:49:50
1	Ca 317.933Radial†	39.3	24.1	35.124	ug/L	35.124	ppb	11:48:39
1	Cd 226.502†	906122.1	939508.4	9750.1	ug/L	9750.1	ppb	11:49:56
1	Co 228.616†	486152.4	504031.5	9507.2	ug/L	9507.2	ppb	11:50:01
1	Cr 267.716†	2213381.5	2294361.9	24034	ug/L	24034	ppb	11:49:56
1	Cu 324.752†	6710633.2	6949656.6	20186	ug/L	20186	ppb	11:49:50
1	Fe 238.204 Radial†	-20.8	-31.6	17.073	ug/L	17.073	ppb	11:48:39
1	K 766.490 Radial†	1732609.8	1803834.1	302550	ug/L	302550	ppb	11:48:14
1	Mg 279.077 IEC†	-4.0	-6.0	-1.3443	ug/L	-1.3443	ppb	11:48:39
1	Mn 257.610†	8551310.9	8863987.9	9394.3	ug/L	9394.3	ppb	11:49:50
1	Mo 202.031†	150610.7	156108.5	9934.2	ug/L	9934.2	ppb	11:50:01
1	Na 589.592 Radial†	-779.4	741.4	224.70	ug/L	224.70	ppb	11:48:19
1	Ni 231.604†	412809.2	427842.6	9825.2	ug/L	9825.2	ppb	11:49:56
1	P 214.914†	33067.1	34036.2	15914	ug/L	15914	ppb	11:50:01
1	Pb 220.353†	211539.7	219355.4	24564	ug/L	24564	ppb	11:50:01
1	S 181.975 Axial†	39022.2	40402.1	53378	ug/L	53378	ppb	11:50:01
1	Sb 206.836†	32817.6	33982.2	10540	ug/L	10540	ppb	11:50:01
1	Se 196.026†	17638.7	18311.5	10332	ug/L	10332	ppb	11:50:01
1	Si 251.611†	1577623.0	1634922.7	48388	ug/L	48388	ppb	11:49:56
1	Sn 189.927†	63790.0	66117.5	10636	ug/L	10636	ppb	11:50:01
1	Sr 421.552†	1570688.8	1637740.6	9877.6	ug/L	9877.6	ppb	11:48:14
1	Ti 334.940†	6094708.6	6319187.5	9965.8	ug/L	9965.8	ppb	11:49:50
1	Tl 190.801†	33633.3	34899.7	9893.2	ug/L	9893.2	ppb	11:50:01
1	U 409.014†	-1295.4	1241.1	-10.671	ug/L	-10.671	ppb	11:50:01
1	V 292.402†	1453895.5	1508508.1	10159	ug/L	10159	ppb	11:49:56
1	Zn 213.857†	1587837.1	1645238.8	14065	ug/L	14065	ppb	11:49:56
1	SiO2†	1596693.8	1654649.3	104940	ug/L	104940	ppb	11:50:49
2	Sc 361.383	842169.8	842169.8	97.034	%			11:50:16
2	Sc Radial	5370.5	5370.5	96.3	%			11:48:49
2	Y 371.029	688325.6	688325.6	94.361	%			11:50:16
2	Y RADIAL	5799.1	5799.1	96.03	%			11:48:49
2	Ag 328.068†	-8067.9	-8588.6	0.4127	ug/L	0.4127	ppb	11:50:21
2	Al 396.153Radial†	619.6	678.6	48.109	ug/L	48.109	ppb	11:48:49
2	As 188.979†	24976.6	25771.4	10035	ug/L	10035	ppb	11:50:21
2	B 249.677†	227113.3	234549.6	4974.7	ug/L	4974.7	ppb	11:50:16
2	Ba 233.527†	1849328.5	1905875.6	14263	ug/L	14263	ppb	11:50:16
2	Be 313.107†	7743416.3	7984803.5	2886.8	ug/L	2886.8	ppb	11:50:10
2	Ca 317.933Radial†	37.1	21.6	31.569	ug/L	31.569	ppb	11:49:09
2	Cd 226.502†	906906.5	934830.6	9701.6	ug/L	9701.6	ppb	11:50:16
2	Co 228.616†	482505.6	497329.7	9380.4	ug/L	9380.4	ppb	11:50:21
2	Cr 267.716†	2219678.0	2287449.9	23962	ug/L	23962	ppb	11:50:16
2	Cu 324.752†	6770226.2	6970441.5	20246	ug/L	20246	ppb	11:50:10
2	Fe 238.204 Radial†	-22.3	-33.0	0.3162	ug/L	0.3162	ppb	11:49:09
2	K 766.490 Radial†	1752650.9	1816897.6	304740	ug/L	304740	ppb	11:48:44
2	Mg 279.077 IEC†	-2.7	-4.8	38.628	ug/L	38.628	ppb	11:49:09
2	Mn 257.610†	8593488.9	8855681.0	9385.5	ug/L	9385.5	ppb	11:50:10
2	Mo 202.031†	149327.0	153873.7	9792.0	ug/L	9792.0	ppb	11:50:21
2	Na 589.592 Radial†	-789.4	734.5	222.61	ug/L	222.61	ppb	11:48:49
2	Ni 231.604†	413677.8	426238.5	9788.4	ug/L	9788.4	ppb	11:50:16

2	P 214.914†	32679.1	33436.1	15567	ug/L	15567	ppb	11:50:21
2	Pb 220.353†	209886.8	216371.2	24230	ug/L	24230	ppb	11:50:21
2	S 181.975 Axial†	38581.7	39711.8	52466	ug/L	52466	ppb	11:50:21
2	Sb 206.836†	32499.6	33455.8	10369	ug/L	10369	ppb	11:50:21
2	Se 196.026†	17411.4	17970.5	10140	ug/L	10140	ppb	11:50:21
2	Si 251.611†	1584599.5	1632560.7	48320	ug/L	48320	ppb	11:50:16
2	Sn 189.927†	63289.6	65215.5	10491	ug/L	10491	ppb	11:50:21
2	Sr 421.552†	1595897.7	1656893.1	9993.2	ug/L	9993.2	ppb	11:48:44
2	Ti 334.940†	6138412.0	6327326.1	9978.7	ug/L	9978.7	ppb	11:50:10
2	Tl 190.801†	33440.6	34497.5	9780.6	ug/L	9780.6	ppb	11:50:21
2	U 409.014†	-1543.1	993.7	-17.644	ug/L	-17.644	ppb	11:50:21
2	V 292.402†	1460677.7	1506694.9	10145	ug/L	10145	ppb	11:50:16
2	Zn 213.857†	1590430.7	1638298.1	14006	ug/L	14006	ppb	11:50:16
2	SiO2†	1605901.9	1654471.6	104930	ug/L	104930	ppb	11:50:56
3	Sc 361.383	837288.5	837288.5	96.471	%			11:50:36
3	Sc Radial	5294.4	5294.4	95.0	%			11:49:20
3	Y 371.029	684764.8	684764.8	93.873	%			11:50:36
3	Y RADIAL	5705.6	5705.6	94.48	%			11:49:20
3	Ag 328.068†	-8049.9	-8618.4	0.2868	ug/L	0.2868	ppb	11:50:41
3	Al 396.153Radial†	638.7	708.0	63.575	ug/L	63.575	ppb	11:49:20
3	As 188.979†	25083.6	26032.4	10135	ug/L	10135	ppb	11:50:41
3	B 249.677†	225219.1	233950.7	4961.7	ug/L	4961.7	ppb	11:50:36
3	Ba 233.527†	1838531.9	1905795.1	14263	ug/L	14263	ppb	11:50:36
3	Be 313.107†	7707648.1	7994250.8	2890.2	ug/L	2890.2	ppb	11:50:29
3	Ca 317.933Radial†	37.4	22.5	32.782	ug/L	32.782	ppb	11:49:40
3	Cd 226.502†	902023.4	935217.7	9705.6	ug/L	9705.6	ppb	11:50:36
3	Co 228.616†	484907.3	502718.3	9482.3	ug/L	9482.3	ppb	11:50:41
3	Cr 267.716†	2209225.0	2289950.7	23988	ug/L	23988	ppb	11:50:36
3	Cu 324.752†	6725933.8	6965205.7	20231	ug/L	20231	ppb	11:50:29
3	Fe 238.204 Radial†	-23.4	-34.5	-10.387	ug/L	-10.387	ppb	11:49:40
3	K 766.490 Radial†	1724455.2	1813374.3	304150	ug/L	304150	ppb	11:49:15
3	Mg 279.077 IEC†	-3.7	-5.8	5.8542	ug/L	5.8542	ppb	11:49:40
3	Mn 257.610†	8548946.0	8861140.0	9391.3	ug/L	9391.3	ppb	11:50:29
3	Mo 202.031†	150164.3	155638.8	9904.3	ug/L	9904.3	ppb	11:50:41
3	Na 589.592 Radial†	-873.1	634.6	192.33	ug/L	192.33	ppb	11:49:20
3	Ni 231.604†	411099.0	426050.8	9784.0	ug/L	9784.0	ppb	11:50:36
3	P 214.914†	32871.0	33831.4	15792	ug/L	15792	ppb	11:50:41
3	Pb 220.353†	210969.1	218754.1	24497	ug/L	24497	ppb	11:50:41
3	S 181.975 Axial†	38817.6	40188.1	53096	ug/L	53096	ppb	11:50:41
3	Sb 206.836†	32632.9	33789.2	10478	ug/L	10478	ppb	11:50:41
3	Se 196.026†	17505.7	18172.8	10254	ug/L	10254	ppb	11:50:41
3	Si 251.611†	1572697.9	1629744.3	48234	ug/L	48234	ppb	11:50:36
3	Sn 189.927†	63614.8	65933.0	10606	ug/L	10606	ppb	11:50:41
3	Sr 421.552†	1564038.8	1647171.2	9934.5	ug/L	9934.5	ppb	11:49:15
3	Ti 334.940†	6103807.6	6328336.6	9980.3	ug/L	9980.3	ppb	11:50:29
3	Tl 190.801†	33596.9	34860.4	9882.4	ug/L	9882.4	ppb	11:50:41
3	U 409.014†	-1533.3	994.6	-17.667	ug/L	-17.667	ppb	11:50:41
3	V 292.402†	1452717.8	1507219.9	10150	ug/L	10150	ppb	11:50:36
3	Zn 213.857†	1581952.4	1639065.2	14013	ug/L	14013	ppb	11:50:36
3	SiO2†	1590163.2	1647805.7	104500	ug/L	104500	ppb	11:51:03

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	838903.1	96.657	%	0.3260				0.34%
Sc Radial	5337.5	95.7	%	0.70				0.73%
Y 371.029	685448.5	93.967	%	0.3569				0.38%
Y RADIAL	5755.8	95.31	%	0.780				0.82%
Ag 328.068†	-8608.3	0.3418	ug/L	0.06447	0.3418	ppb	0.06447	18.86%
Al 396.153Radial†	690.1	52.391	ug/L	9.7738	52.391	ppb	9.7738	18.66%
As 188.979†	26015.9	10129	ug/L	91.3	10129	ppb	91.3	0.90%
QC value within limits for As 188.979 Recovery = 101.29%								
B 249.677†	234345.0	4970.1	ug/L	7.34	4970.1	ppb	7.34	0.15%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	1908251.7	14281	ug/L	31.3	14281	ppb	31.3	0.22%
QC value within limits for Ba 233.527 Recovery = 95.21%								
Be 313.107†	7984073.0	2886.5	ug/L	3.81	2886.5	ppb	3.81	0.13%
QC value within limits for Be 313.107 Recovery = 96.22%								
Ca 317.933Radial†	22.7	33.158	ug/L	1.8072	33.158	ppb	1.8072	5.45%
Cd 226.502†	936518.9	9719.1	ug/L	26.94	9719.1	ppb	26.94	0.28%

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   QC value within limits for Cd 226.502  Recovery = 97.19%
Co 228.616†          501359.9      9456.7 ug/L        67.18      9456.7 ppb         67.18   0.71%
   QC value within limits for Co 228.616  Recovery = 94.57%
Cr 267.716†         2290587.5       23995 ug/L         36.6       23995 ppb          36.6   0.15%
   QC value within limits for Cr 267.716  Recovery = 95.98%
Cu 324.752†         6961767.9       20221 ug/L         31.4       20221 ppb          31.4   0.16%
   QC value within limits for Cu 324.752  Recovery = 101.11%
Fe 238.204 Radial†      -33.0      2.3340 ug/L     13.84073      2.3340 ppb      13.84073 592.99%
K 766.490 Radial†   1811368.7      303810 ug/L       1133.7      303810 ppb        1133.7   0.37%
   QC value within limits for K 766.490 Radial  Recovery = 101.27%
Mg 279.077 IEC†          -5.5      14.379 ug/L      21.3060      14.379 ppb      21.3060 148.17%
Mn 257.610†         8860269.6      9390.4 ug/L         4.47      9390.4 ppb         4.47   0.05%
   QC value within limits for Mn 257.610  Recovery = 93.90%
Mo 202.031†          155207.0      9876.9 ug/L        74.99      9876.9 ppb        74.99   0.76%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†      703.5      213.21 ug/L       18.115      213.21 ppb       18.115   8.50%
Ni 231.604†          426710.6      9799.2 ug/L        22.61      9799.2 ppb        22.61   0.23%
   QC value within limits for Ni 231.604  Recovery = 97.99%
P 214.914†            33767.9       15758 ug/L        175.9       15758 ppb        175.9   1.12%
   QC value within limits for P 214.914  Recovery = 105.05%
Pb 220.353†          218160.3       24430 ug/L        176.9       24430 ppb        176.9   0.72%
   QC value within limits for Pb 220.353  Recovery = 97.72%
S 181.975 Axial†      40100.6       52980 ug/L        466.9       52980 ppb        466.9   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 105.96%
Sb 206.836†           33742.4       10462 ug/L         86.2       10462 ppb         86.2   0.82%
   QC value within limits for Sb 206.836  Recovery = 104.62%
Se 196.026†           18151.6       10242 ug/L         96.7       10242 ppb         96.7   0.94%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†         1632409.3       48314 ug/L         77.2       48314 ppb         77.2   0.16%
   QC value within limits for Si 251.611  Recovery = 96.63%
Sn 189.927†           65755.4       10578 ug/L         76.7       10578 ppb         76.7   0.72%
   QC value within limits for Sn 189.927  Recovery = 105.78%
Sr 421.552†         1647268.3      9935.1 ug/L        57.76      9935.1 ppb        57.76   0.58%
   QC value within limits for Sr 421.552  Recovery = 99.35%
Ti 334.940†         6324950.1      9974.9 ug/L         7.93      9974.9 ppb         7.93   0.08%
   QC value within limits for Ti 334.940  Recovery = 99.75%
Tl 190.801†           34752.5      9852.1 ug/L        62.12      9852.1 ppb        62.12   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             1076.5     -15.327 ug/L       4.0323     -15.327 ppb       4.0323  26.31%
V 292.402†          1507474.3       10151 ug/L          7.1       10151 ppb          7.1   0.07%
   QC value within limits for V 292.402  Recovery = 101.51%
Zn 213.857†         1640867.3       14028 ug/L         32.6       14028 ppb         32.6   0.23%
   QC value within limits for Zn 213.857  Recovery = 93.52%
SiO2†               1652308.8      104790 ug/L        250.2      104790 ppb        250.2   0.24%
   QC value within limits for SiO2  Recovery = 97.94%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 11:53:12
Data Type: Reprocessed on 12/11/2009 12:46:07

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	863964.4	863964.4	99.545	%			11:56:22
1	Sc Radial	5504.0	5504.0	98.7	%			11:55:04
1	Y 371.029	714434.9	714434.9	97.941	%			11:56:22
1	Y RADIAL	5955.5	5955.5	98.61	%			11:55:04
1	Ag 328.068†	111593.8	111830.1	508.99	ug/L	508.99	ppb	11:56:27
1	Al 396.153Radial†	7082.6	7210.2	4944.1	ug/L	4944.1	ppb	11:55:04
1	As 188.979†	1327.3	1364.6	531.23	ug/L	531.23	ppb	11:56:47
1	B 249.677†	24139.7	24743.3	525.33	ug/L	525.33	ppb	11:56:27
1	Ba 233.527†	66828.8	67145.6	503.03	ug/L	503.03	ppb	11:56:27
1	Be 313.107†	1371508.7	1382444.2	497.37	ug/L	497.37	ppb	11:56:22
1	Ca 317.933Radial†	3415.6	3443.2	5025.3	ug/L	5025.3	ppb	11:55:24
1	Cd 226.502†	48442.8	48863.3	506.57	ug/L	506.57	ppb	11:56:27
1	Co 228.616†	26549.5	26744.4	504.59	ug/L	504.59	ppb	11:56:27
1	Cr 267.716†	47819.0	47951.7	502.75	ug/L	502.75	ppb	11:56:27
1	Cu 324.752†	177055.2	171107.1	497.26	ug/L	497.26	ppb	11:56:27
1	Fe 238.204 Radial†	580.6	578.3	5196.7	ug/L	5196.7	ppb	11:55:24
1	K 766.490 Radial†	35101.9	32819.8	5497.4	ug/L	5497.4	ppb	11:55:04
1	Mg 279.077 IEC†	157.0	157.1	5288.6	ug/L	5288.6	ppb	11:55:24
1	Mn 257.610†	468210.9	469832.1	498.36	ug/L	498.36	ppb	11:56:22
1	Mo 202.031†	7925.6	7943.4	505.86	ug/L	505.86	ppb	11:56:47
1	Na 589.592 Radial†	32449.4	34426.4	10433	ug/L	10433	ppb	11:55:04
1	Ni 231.604†	21952.5	21967.0	504.45	ug/L	504.45	ppb	11:56:27
1	P 214.914†	4693.5	4473.0	2422.3	ug/L	2422.3	ppb	11:56:47
1	Pb 220.353†	4391.9	4480.0	503.04	ug/L	503.04	ppb	11:56:47
1	S 181.975 Axial†	829.8	784.2	1035.1	ug/L	1035.1	ppb	11:56:47
1	Sb 206.836†	1666.9	1637.2	524.33	ug/L	524.33	ppb	11:56:47
1	Se 196.026†	864.2	895.0	521.77	ug/L	521.77	ppb	11:56:47
1	Si 251.611†	86606.4	86520.8	2564.7	ug/L	2564.7	ppb	11:56:27
1	Sn 189.927†	3156.9	3162.5	509.33	ug/L	509.33	ppb	11:56:47
1	Sr 421.552†	83999.5	85094.4	513.18	ug/L	513.18	ppb	11:55:04
1	Ti 334.940†	310688.6	313365.8	494.49	ug/L	494.49	ppb	11:56:27
1	Tl 190.801†	1750.4	1792.9	508.30	ug/L	508.30	ppb	11:56:47
1	U 409.014†	14719.6	17370.9	497.80	ug/L	497.80	ppb	11:56:27
1	V 292.402†	73286.6	74984.5	505.70	ug/L	505.70	ppb	11:56:27
1	Zn 213.857†	59525.8	59044.2	503.41	ug/L	503.41	ppb	11:56:27
1	SiO2†	86672.4	86544.3	5497.3	ug/L	5497.3	ppb	11:57:54
2	Sc 361.383	867146.6	867146.6	99.911	%			11:56:53
2	Sc Radial	5452.5	5452.5	97.8	%			11:55:30
2	Y 371.029	716354.7	716354.7	98.204	%			11:56:53
2	Y RADIAL	5873.6	5873.6	97.26	%			11:55:30
2	Ag 328.068†	112371.5	112197.2	510.67	ug/L	510.67	ppb	11:56:58
2	Al 396.153Radial†	7048.5	7243.2	4966.9	ug/L	4966.9	ppb	11:55:30
2	As 188.979†	1324.7	1357.2	528.38	ug/L	528.38	ppb	11:57:18
2	B 249.677†	24316.6	24831.4	527.20	ug/L	527.20	ppb	11:56:58
2	Ba 233.527†	67384.3	67455.2	505.35	ug/L	505.35	ppb	11:56:58
2	Be 313.107†	1375274.0	1381156.7	496.92	ug/L	496.92	ppb	11:56:53
2	Ca 317.933Radial†	3411.4	3471.7	5066.9	ug/L	5066.9	ppb	11:55:50
2	Cd 226.502†	48848.4	49090.6	508.93	ug/L	508.93	ppb	11:56:58
2	Co 228.616†	26707.2	26804.4	505.71	ug/L	505.71	ppb	11:56:58
2	Cr 267.716†	48238.9	48195.7	505.31	ug/L	505.31	ppb	11:56:58
2	Cu 324.752†	178605.9	172006.5	499.88	ug/L	499.88	ppb	11:56:58
2	Fe 238.204 Radial†	580.4	583.6	5244.8	ug/L	5244.8	ppb	11:55:50
2	K 766.490 Radial†	34520.6	32561.4	5454.1	ug/L	5454.1	ppb	11:55:30
2	Mg 279.077 IEC†	159.9	161.6	5440.3	ug/L	5440.3	ppb	11:55:50
2	Mn 257.610†	469700.5	469597.0	498.11	ug/L	498.11	ppb	11:56:53
2	Mo 202.031†	7936.3	7924.9	504.69	ug/L	504.69	ppb	11:57:18
2	Na 589.592 Radial†	31804.2	34077.3	10327	ug/L	10327	ppb	11:55:30
2	Ni 231.604†	22133.8	22067.5	506.76	ug/L	506.76	ppb	11:56:58

2	P 214.914†	4705.8	4467.9	2419.0 ug/L	2419.0 ppb	11:57:18
2	Pb 220.353†	4409.9	4481.8	503.24 ug/L	503.24 ppb	11:57:18
2	S 181.975 Axial†	841.2	792.5	1046.0 ug/L	1046.0 ppb	11:57:18
2	Sb 206.836†	1680.1	1644.2	526.44 ug/L	526.44 ppb	11:57:18
2	Se 196.026†	875.2	902.8	526.32 ug/L	526.32 ppb	11:57:18
2	Si 251.611†	87501.2	87097.1	2581.9 ug/L	2581.9 ppb	11:56:58
2	Sn 189.927†	3165.9	3159.9	508.91 ug/L	508.91 ppb	11:57:18
2	Sr 421.552†	82795.3	84667.2	510.60 ug/L	510.60 ppb	11:55:30
2	Ti 334.940†	313440.0	314974.3	497.03 ug/L	497.03 ppb	11:56:58
2	Tl 190.801†	1737.0	1773.1	502.71 ug/L	502.71 ppb	11:57:18
2	U 409.014†	14815.4	17412.5	498.99 ug/L	498.99 ppb	11:56:58
2	V 292.402†	73939.9	75368.2	508.23 ug/L	508.23 ppb	11:56:58
2	Zn 213.857†	60005.1	59304.4	505.62 ug/L	505.62 ppb	11:56:58
2	SiO2†	85548.6	85100.0	5405.2 ug/L	5405.2 ppb	11:58:00
3	Sc 361.383	865766.7	865766.7	99.752 %		11:57:24
3	Sc Radial	5487.2	5487.2	98.4 %		11:55:55
3	Y 371.029	715205.5	715205.5	98.046 %		11:57:24
3	Y RADIAL	5904.0	5904.0	97.76 %		11:55:55
3	Ag 328.068†	111370.8	111373.2	506.94 ug/L	506.94 ppb	11:57:29
3	Al 396.153Radial†	7047.4	7196.4	4934.6 ug/L	4934.6 ppb	11:55:55
3	As 188.979†	1320.8	1355.3	527.66 ug/L	527.66 ppb	11:57:49
3	B 249.677†	24128.9	24682.0	524.02 ug/L	524.02 ppb	11:57:29
3	Ba 233.527†	66953.3	67130.6	502.91 ug/L	502.91 ppb	11:57:29
3	Be 313.107†	1371679.0	1379746.6	496.41 ug/L	496.41 ppb	11:57:24
3	Ca 317.933Radial†	3432.1	3470.6	5065.2 ug/L	5065.2 ppb	11:56:15
3	Cd 226.502†	48351.6	48670.6	504.57 ug/L	504.57 ppb	11:57:29
3	Co 228.616†	26573.8	26713.2	504.00 ug/L	504.00 ppb	11:57:29
3	Cr 267.716†	47762.2	47794.8	501.11 ug/L	501.11 ppb	11:57:29
3	Cu 324.752†	177287.9	170970.2	496.87 ug/L	496.87 ppb	11:57:29
3	Fe 238.204 Radial†	585.1	584.7	5253.8 ug/L	5253.8 ppb	11:56:15
3	K 766.490 Radial†	34816.4	32638.6	5467.0 ug/L	5467.0 ppb	11:55:55
3	Mg 279.077 IEC†	156.0	156.6	5271.2 ug/L	5271.2 ppb	11:56:15
3	Mn 257.610†	468391.6	469034.1	497.52 ug/L	497.52 ppb	11:57:24
3	Mo 202.031†	7936.6	7937.9	505.51 ug/L	505.51 ppb	11:57:49
3	Na 589.592 Radial†	32093.4	34165.3	10354 ug/L	10354 ppb	11:55:55
3	Ni 231.604†	21970.5	21939.1	503.81 ug/L	503.81 ppb	11:57:29
3	P 214.914†	4712.3	4481.9	2427.3 ug/L	2427.3 ppb	11:57:49
3	Pb 220.353†	4397.4	4476.3	502.62 ug/L	502.62 ppb	11:57:49
3	S 181.975 Axial†	824.6	777.3	1025.9 ug/L	1025.9 ppb	11:57:49
3	Sb 206.836†	1662.7	1629.5	521.92 ug/L	521.92 ppb	11:57:49
3	Se 196.026†	871.9	900.8	525.23 ug/L	525.23 ppb	11:57:49
3	Si 251.611†	86694.0	86427.5	2562.0 ug/L	2562.0 ppb	11:57:29
3	Sn 189.927†	3160.2	3159.2	508.80 ug/L	508.80 ppb	11:57:49
3	Sr 421.552†	83348.7	84693.6	510.76 ug/L	510.76 ppb	11:55:55
3	Ti 334.940†	311161.4	313190.1	494.21 ug/L	494.21 ppb	11:57:29
3	Tl 190.801†	1745.5	1784.4	505.88 ug/L	505.88 ppb	11:57:49
3	U 409.014†	14530.8	17150.9	491.47 ug/L	491.47 ppb	11:57:29
3	V 292.402†	73265.1	74809.7	504.52 ug/L	504.52 ppb	11:57:29
3	Zn 213.857†	59407.5	58801.1	501.32 ug/L	501.32 ppb	11:57:29
3	SiO2†	86760.1	86451.0	5491.4 ug/L	5491.4 ppb	11:58:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865625.9	99.736	%	0.1839				0.18%
Sc Radial	5481.3	98.3	%	0.47				0.48%
Y 371.029	715331.7	98.064	%	0.1324				0.14%
Y RADIAL	5911.0	97.88	%	0.685				0.70%
Ag 328.068†	111800.2	508.87	ug/L	1.869	508.87	ppb	1.869	0.37%
QC value within limits for Ag 328.068 Recovery = 101.77%								
Al 396.153Radial†	7216.6	4948.5	ug/L	16.56	4948.5	ppb	16.56	0.33%
QC value within limits for Al 396.153Radial Recovery = 98.97%								
As 188.979†	1359.0	529.09	ug/L	1.890	529.09	ppb	1.890	0.36%
QC value within limits for As 188.979 Recovery = 105.82%								
B 249.677†	24752.3	525.52	ug/L	1.598	525.52	ppb	1.598	0.30%
QC value within limits for B 249.677 Recovery = 105.10%								
Ba 233.527†	67243.8	503.76	ug/L	1.374	503.76	ppb	1.374	0.27%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	1381115.8	496.90	ug/L	0.485	496.90	ppb	0.485	0.10%
QC value within limits for Be 313.107 Recovery = 99.38%								

Ca 317.933Radial†	3461.8	5052.5 ug/L	23.53	5052.5 ppb	23.53	0.47%
QC value within limits for Ca 317.933Radial Recovery = 101.05%						
Cd 226.502†	48874.8	506.69 ug/L	2.182	506.69 ppb	2.182	0.43%
QC value within limits for Cd 226.502 Recovery = 101.34%						
Co 228.616†	26754.0	504.77 ug/L	0.869	504.77 ppb	0.869	0.17%
QC value within limits for Co 228.616 Recovery = 100.95%						
Cr 267.716†	47980.7	503.06 ug/L	2.117	503.06 ppb	2.117	0.42%
QC value within limits for Cr 267.716 Recovery = 100.61%						
Cu 324.752†	171361.3	498.00 ug/L	1.636	498.00 ppb	1.636	0.33%
QC value within limits for Cu 324.752 Recovery = 99.60%						
Fe 238.204 Radial†	582.2	5231.7 ug/L	30.70	5231.7 ppb	30.70	0.59%
QC value within limits for Fe 238.204 Radial Recovery = 104.63%						
K 766.490 Radial†	32673.3	5472.8 ug/L	22.23	5472.8 ppb	22.23	0.41%
QC value within limits for K 766.490 Radial Recovery = 109.46%						
Mg 279.077 IEC†	158.4	5333.3 ug/L	93.05	5333.3 ppb	93.05	1.74%
QC value within limits for Mg 279.077 IEC Recovery = 106.67%						
Mn 257.610†	469487.8	498.00 ug/L	0.432	498.00 ppb	0.432	0.09%
QC value within limits for Mn 257.610 Recovery = 99.60%						
Mo 202.031†	7935.4	505.35 ug/L	0.601	505.35 ppb	0.601	0.12%
QC value within limits for Mo 202.031 Recovery = 101.07%						
Na 589.592 Radial†	34223.0	10372 ug/L	55.0	10372 ppb	55.0	0.53%
QC value within limits for Na 589.592 Radial Recovery = 103.72%						
Ni 231.604†	21991.2	505.01 ug/L	1.551	505.01 ppb	1.551	0.31%
QC value within limits for Ni 231.604 Recovery = 101.00%						
P 214.914†	4474.3	2422.9 ug/L	4.18	2422.9 ppb	4.18	0.17%
QC value within limits for P 214.914 Recovery = 96.92%						
Pb 220.353†	4479.4	502.97 ug/L	0.318	502.97 ppb	0.318	0.06%
QC value within limits for Pb 220.353 Recovery = 100.59%						
S 181.975 Axial†	784.7	1035.7 ug/L	10.06	1035.7 ppb	10.06	0.97%
QC value within limits for S 181.975 Axial Recovery = 103.57%						
Sb 206.836†	1636.9	524.23 ug/L	2.261	524.23 ppb	2.261	0.43%
QC value within limits for Sb 206.836 Recovery = 104.85%						
Se 196.026†	899.5	524.44 ug/L	2.375	524.44 ppb	2.375	0.45%
QC value within limits for Se 196.026 Recovery = 104.89%						
Si 251.611†	86681.8	2569.5 ug/L	10.82	2569.5 ppb	10.82	0.42%
QC value within limits for Si 251.611 Recovery = 102.78%						
Sn 189.927†	3160.5	509.02 ug/L	0.281	509.02 ppb	0.281	0.06%
QC value within limits for Sn 189.927 Recovery = 101.80%						
Sr 421.552†	84818.4	511.52 ug/L	1.444	511.52 ppb	1.444	0.28%
QC value within limits for Sr 421.552 Recovery = 102.30%						
Ti 334.940†	313843.4	495.24 ug/L	1.551	495.24 ppb	1.551	0.31%
QC value within limits for Ti 334.940 Recovery = 99.05%						
Tl 190.801†	1783.5	505.63 ug/L	2.802	505.63 ppb	2.802	0.55%
QC value within limits for Tl 190.801 Recovery = 101.13%						
U 409.014†	17311.4	496.09 ug/L	4.041	496.09 ppb	4.041	0.81%
QC value within limits for U 409.014 Recovery = 99.22%						
V 292.402†	75054.1	506.15 ug/L	1.900	506.15 ppb	1.900	0.38%
QC value within limits for V 292.402 Recovery = 101.23%						
Zn 213.857†	59049.9	503.45 ug/L	2.152	503.45 ppb	2.152	0.43%
QC value within limits for Zn 213.857 Recovery = 100.69%						
SiO2†	86031.8	5464.7 ug/L	51.56	5464.7 ppb	51.56	0.94%
QC value within limits for SiO2 Recovery = 102.19%						

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:00:14
Data Type: Reprocessed on 12/11/2009 12:46:08

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	899225.0	899225.0	103.61	%			12:03:24
1	Sc Radial	5574.2	5574.2	100.0	%			12:02:07
1	Y 371.029	754915.1	754915.1	103.49	%			12:03:24
1	Y RADIAL	6020.5	6020.5	99.69	%			12:02:07
1	Ag 328.068†	314.4	29.5	0.1304	ug/L	0.1304	ppb	12:03:29
1	Al 396.153Radial†	-17.9	17.4	11.952	ug/L	11.952	ppb	12:02:07
1	As 188.979†	14.4	45.2	17.457	ug/L	17.457	ppb	12:03:49
1	B 249.677†	293.3	776.3	16.543	ug/L	16.543	ppb	12:03:29
1	Ba 233.527†	6.6	17.5	0.1304	ug/L	0.1304	ppb	12:03:49
1	Be 313.107†	-4567.3	254.3	0.0916	ug/L	0.0916	ppb	12:03:29
1	Ca 317.933Radial†	17.6	0.7	1.0760	ug/L	1.0760	ppb	12:02:27
1	Cd 226.502†	-176.2	28.9	0.2995	ug/L	0.2995	ppb	12:03:49
1	Co 228.616†	-65.4	10.4	0.1985	ug/L	0.1985	ppb	12:03:49
1	Cr 267.716†	96.4	7.0	0.0723	ug/L	0.0723	ppb	12:03:49
1	Cu 324.752†	6796.9	-197.6	-0.5739	ug/L	-0.5739	ppb	12:03:29
1	Fe 238.204 Radial†	9.9	0.1	0.4846	ug/L	0.4846	ppb	12:02:27
1	K 766.490 Radial†	4296.7	1558.4	261.42	ug/L	261.42	ppb	12:02:07
1	Mg 279.077 IEC†	0.5	-1.4	-46.595	ug/L	-46.595	ppb	12:02:27
1	Mn 257.610†	514.9	-23.2	-0.0237	ug/L	-0.0237	ppb	12:03:49
1	Mo 202.031†	39.3	19.5	1.2426	ug/L	1.2426	ppb	12:03:49
1	Na 589.592 Radial†	-1274.1	279.7	84.765	ug/L	84.765	ppb	12:02:07
1	Ni 231.604†	98.6	9.2	0.2118	ug/L	0.2118	ppb	12:03:49
1	P 214.914†	223.6	-26.2	-14.556	ug/L	-14.556	ppb	12:03:49
1	Pb 220.353†	-60.4	9.7	1.0905	ug/L	1.0905	ppb	12:03:49
1	S 181.975 Axial†	55.7	4.4	5.8074	ug/L	5.8074	ppb	12:03:49
1	Sb 206.836†	46.7	7.7	2.4698	ug/L	2.4698	ppb	12:03:49
1	Se 196.026†	-35.7	-7.6	-4.2827	ug/L	-4.2827	ppb	12:03:49
1	Si 251.611†	600.7	98.1	2.8129	ug/L	2.8129	ppb	12:03:49
1	Sn 189.927†	9.8	0.6	0.0926	ug/L	0.0926	ppb	12:03:49
1	Sr 421.552†	-31.0	-30.8	-0.1858	ug/L	-0.1858	ppb	12:02:07
1	Ti 334.940†	-1214.4	84.2	0.1318	ug/L	0.1318	ppb	12:03:29
1	Tl 190.801†	-38.3	-2.4	-0.6739	ug/L	-0.6739	ppb	12:03:49
1	U 409.014†	-2588.1	86.0	2.4729	ug/L	2.4729	ppb	12:03:24
1	V 292.402†	-1446.3	-33.2	-0.1995	ug/L	-0.1995	ppb	12:03:29
1	Zn 213.857†	841.2	58.1	0.5003	ug/L	0.5003	ppb	12:03:49
1	SiO2†	574.8	30.3	1.6953	ug/L	1.6953	ppb	12:04:55
2	Sc 361.383	856785.8	856785.8	98.718	%			12:03:54
2	Sc Radial	5655.9	5655.9	101	%			12:02:32
2	Y 371.029	718466.2	718466.2	98.493	%			12:03:54
2	Y RADIAL	6136.2	6136.2	101.6	%			12:02:32
2	Ag 328.068†	299.0	28.8	0.1308	ug/L	0.1308	ppb	12:03:59
2	Al 396.153Radial†	-15.1	20.5	14.040	ug/L	14.040	ppb	12:02:32
2	As 188.979†	11.6	43.0	16.603	ug/L	16.603	ppb	12:04:19
2	B 249.677†	232.0	728.2	15.520	ug/L	15.520	ppb	12:03:59
2	Ba 233.527†	-0.0	11.1	0.0824	ug/L	0.0824	ppb	12:04:19
2	Be 313.107†	-4589.5	13.5	0.0048	ug/L	0.0048	ppb	12:03:59
2	Ca 317.933Radial†	14.3	-2.8	-4.0322	ug/L	-4.0322	ppb	12:02:52
2	Cd 226.502†	-158.9	38.0	0.3951	ug/L	0.3951	ppb	12:04:19
2	Co 228.616†	-77.3	-4.8	-0.0877	ug/L	-0.0877	ppb	12:04:19
2	Cr 267.716†	95.3	10.5	0.1112	ug/L	0.1112	ppb	12:04:19
2	Cu 324.752†	6921.7	253.8	0.7367	ug/L	0.7367	ppb	12:03:59
2	Fe 238.204 Radial†	9.0	-1.0	-8.9708	ug/L	-8.9708	ppb	12:02:52
2	K 766.490 Radial†	4372.5	1571.0	263.54	ug/L	263.54	ppb	12:02:32
2	Mg 279.077 IEC†	-0.8	-2.7	-91.143	ug/L	-91.143	ppb	12:02:52
2	Mn 257.610†	528.4	15.1	0.0168	ug/L	0.0168	ppb	12:04:19
2	Mo 202.031†	38.2	20.3	1.2890	ug/L	1.2890	ppb	12:04:19
2	Na 589.592 Radial†	-1331.0	242.0	73.329	ug/L	73.329	ppb	12:02:32
2	Ni 231.604†	98.9	14.2	0.3272	ug/L	0.3272	ppb	12:04:19

2	P 214.914†	223.3	-15.9	-8.9718	ug/L	-8.9718 ppb	12:04:19
2	Pb 220.353†	-72.0	-5.0	-0.5491	ug/L	-0.5491 ppb	12:04:19
2	S 181.975 Axial†	55.5	6.8	8.9914	ug/L	8.9914 ppb	12:04:19
2	Sb 206.836†	43.2	6.4	2.0316	ug/L	2.0316 ppb	12:04:19
2	Se 196.026†	-27.2	-0.8	-0.4531	ug/L	-0.4531 ppb	12:04:19
2	Si 251.611†	626.0	152.4	4.4304	ug/L	4.4304 ppb	12:04:19
2	Sn 189.927†	7.8	-1.0	-0.1582	ug/L	-0.1582 ppb	12:04:19
2	Sr 421.552†	-48.0	-47.1	-0.2843	ug/L	-0.2843 ppb	12:02:32
2	Ti 334.940†	-1259.2	-19.4	-0.0290	ug/L	-0.0290 ppb	12:03:59
2	Tl 190.801†	-31.3	2.9	0.8168	ug/L	0.8168 ppb	12:04:19
2	U 409.014†	-2693.0	-144.0	-4.1394	ug/L	-4.1394 ppb	12:03:54
2	V 292.402†	-1353.6	-8.4	-0.0465	ug/L	-0.0465 ppb	12:03:59
2	Zn 213.857†	856.0	113.3	0.9754	ug/L	0.9754 ppb	12:04:19
2	SiO2†	577.0	60.1	3.5906	ug/L	3.5906 ppb	12:05:00
3	Sc 361.383	880066.8	880066.8	101.40	%		12:04:25
3	Sc Radial	5379.1	5379.1	96.5	%		12:02:57
3	Y 371.029	738261.2	738261.2	101.21	%		12:04:25
3	Y RADIAL	5820.9	5820.9	96.39	%		12:02:57
3	Ag 328.068†	302.6	24.4	0.1168	ug/L	0.1168 ppb	12:04:30
3	Al 396.153Radial†	-28.2	6.1	4.1223	ug/L	4.1223 ppb	12:02:57
3	As 188.979†	1.7	33.0	12.719	ug/L	12.719 ppb	12:04:50
3	B 249.677†	226.9	716.9	15.276	ug/L	15.276 ppb	12:04:30
3	Ba 233.527†	6.0	17.0	0.1280	ug/L	0.1280 ppb	12:04:50
3	Be 313.107†	-4594.7	131.3	0.0474	ug/L	0.0474 ppb	12:04:30
3	Ca 317.933Radial†	17.6	1.3	1.9409	ug/L	1.9409 ppb	12:03:17
3	Cd 226.502†	-167.9	33.3	0.3435	ug/L	0.3435 ppb	12:04:50
3	Co 228.616†	-74.7	-0.3	-0.0019	ug/L	-0.0019 ppb	12:04:50
3	Cr 267.716†	74.1	-12.9	-0.1349	ug/L	-0.1349 ppb	12:04:50
3	Cu 324.752†	6940.3	86.7	0.2527	ug/L	0.2527 ppb	12:04:30
3	Fe 238.204 Radial†	11.8	2.3	20.828	ug/L	20.828 ppb	12:03:17
3	K 766.490 Radial†	4141.7	1553.6	260.63	ug/L	260.63 ppb	12:02:57
3	Mg 279.077 IEC†	3.6	1.9	62.406	ug/L	62.406 ppb	12:03:17
3	Mn 257.610†	548.2	20.4	0.0226	ug/L	0.0226 ppb	12:04:50
3	Mo 202.031†	40.7	21.7	1.3849	ug/L	1.3849 ppb	12:04:50
3	Na 589.592 Radial†	-1288.7	218.3	66.150	ug/L	66.150 ppb	12:02:57
3	Ni 231.604†	81.3	-5.8	-0.1326	ug/L	-0.1326 ppb	12:04:50
3	P 214.914†	240.1	-5.3	-2.9996	ug/L	-2.9996 ppb	12:04:50
3	Pb 220.353†	-70.5	-1.5	-0.1701	ug/L	-0.1701 ppb	12:04:50
3	S 181.975 Axial†	49.8	-0.3	-0.4468	ug/L	-0.4468 ppb	12:04:50
3	Sb 206.836†	51.7	13.6	4.3256	ug/L	4.3256 ppb	12:04:50
3	Se 196.026†	-19.6	7.5	4.2930	ug/L	4.2930 ppb	12:04:50
3	Si 251.611†	567.3	77.7	2.2042	ug/L	2.2042 ppb	12:04:50
3	Sn 189.927†	9.6	0.6	0.0948	ug/L	0.0948 ppb	12:04:50
3	Sr 421.552†	-13.4	-13.6	-0.0822	ug/L	-0.0822 ppb	12:02:57
3	Ti 334.940†	-1193.7	79.0	0.1244	ug/L	0.1244 ppb	12:04:30
3	Tl 190.801†	-35.3	-0.2	-0.0538	ug/L	-0.0538 ppb	12:04:50
3	U 409.014†	-2587.8	31.9	0.9148	ug/L	0.9148 ppb	12:04:25
3	V 292.402†	-1356.8	24.7	0.1838	ug/L	0.1838 ppb	12:04:30
3	Zn 213.857†	818.6	53.4	0.4561	ug/L	0.4561 ppb	12:04:50
3	SiO2†	591.0	58.4	3.4822	ug/L	3.4822 ppb	12:05:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878692.5	101.24	%	2.449				2.42%
Sc Radial	5536.4	99.3	%	2.55				2.57%
Y 371.029	737214.2	101.06	%	2.501				2.48%
Y RADIAL	5992.5	99.23	%	2.641				2.66%
Ag 328.068†	27.5	0.1260	ug/L	0.00800	0.1260	ppb	0.00800	6.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	10.038	ug/L	5.2286	10.038	ppb	5.2286	52.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	40.4	15.593	ug/L	2.5253	15.593	ppb	2.5253	16.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	740.5	15.779	ug/L	0.6721	15.779	ppb	0.6721	4.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.1136	ug/L	0.02706	0.1136	ppb	0.02706	23.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	133.0	0.0479	ug/L	0.04341	0.0479	ppb	0.04341	90.58%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -0.2     -0.3384 ug/L       3.22799     -0.3384 ppb        3.22799 953.84%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               33.4      0.3460 ug/L       0.04784      0.3460 ppb        0.04784  13.82%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.8      0.0363 ug/L       0.14688      0.0363 ppb        0.14688 404.85%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.5      0.0162 ug/L       0.13233      0.0162 ppb        0.13233 816.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               47.6      0.1385 ug/L       0.66271      0.1385 ppb        0.66271 478.48%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.5      4.1140 ug/L      15.22749      4.1140 ppb       15.22749 370.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       1561.0      261.86 ug/L         1.506      261.86 ppb          1.506   0.58%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.7    -25.111 ug/L       78.9972     -25.111 ppb        78.9972 314.60%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                4.1      0.0052 ug/L       0.02523      0.0052 ppb        0.02523 482.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               20.5      1.3055 ug/L       0.07254      1.3055 ppb        0.07254   5.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       246.6     74.748 ug/L        9.3882     74.748 ppb         9.3882  12.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.9      0.1355 ug/L       0.23922      0.1355 ppb        0.23922 176.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.8     -8.8423 ug/L       5.77912     -8.8423 ppb        5.77912  65.36%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.1      0.1238 ug/L       0.85841      0.1238 ppb        0.85841 693.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           3.6      4.7840 ug/L       4.80157      4.7840 ppb        4.80157 100.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.2      2.9423 ug/L       1.21781      2.9423 ppb        1.21781  41.39%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.3     -0.1476 ug/L       4.29600     -0.1476 ppb        4.29600 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              109.4      3.1492 ug/L       1.15055      3.1492 ppb        1.15055  36.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.1      0.0098 ug/L       0.14543      0.0098 ppb        0.14543 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -30.5     -0.1841 ug/L       0.10103     -0.1841 ppb        0.10103  54.87%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               47.9      0.0757 ug/L       0.09077      0.0757 ppb        0.09077 119.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.1      0.0297 ug/L       0.74885      0.0297 ppb        0.74885 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -8.7     -0.2506 ug/L       3.45672     -0.2506 ppb        3.45672 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -5.7     -0.0207 ug/L       0.19295     -0.0207 ppb        0.19295 931.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               74.9      0.6439 ug/L       0.28788      0.6439 ppb        0.28788  44.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     49.6      2.9227 ug/L       1.06435      2.9227 ppb        1.06435  36.42%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:09:40
Data Type: Reprocessed on 12/11/2009 12:46:09

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	875638.3	875638.3	100.89	%			12:12:50
1	Sc Radial	5429.2	5429.2	97.4	%			12:11:32
1	Y 371.029	723807.3	723807.3	99.226	%			12:12:50
1	Y RADIAL	5896.7	5896.7	97.64	%			12:11:32
1	Ag 328.068†	110582.1	109332.8	497.68	ug/L	497.68	ppb	12:12:55
1	Al 396.153Radial†	7008.0	7232.6	4959.8	ug/L	4959.8	ppb	12:11:32
1	As 188.979†	1277.0	1297.0	505.08	ug/L	505.08	ppb	12:13:15
1	B 249.677†	23016.5	23306.7	494.74	ug/L	494.74	ppb	12:12:55
1	Ba 233.527†	66448.8	65873.9	493.50	ug/L	493.50	ppb	12:12:55
1	Be 313.107†	1392693.8	1385073.8	498.30	ug/L	498.30	ppb	12:12:50
1	Ca 317.933Radial†	3425.4	3501.0	5109.7	ug/L	5109.7	ppb	12:11:52
1	Cd 226.502†	48048.2	47823.4	495.78	ug/L	495.78	ppb	12:12:55
1	Co 228.616†	26374.2	26215.0	494.61	ug/L	494.61	ppb	12:12:55
1	Cr 267.716†	47569.7	47064.2	493.45	ug/L	493.45	ppb	12:12:55
1	Cu 324.752†	175534.7	167228.8	486.00	ug/L	486.00	ppb	12:12:55
1	Fe 238.204 Radial†	578.2	583.9	5247.1	ug/L	5247.1	ppb	12:11:52
1	K 766.490 Radial†	33041.0	31193.5	5224.6	ug/L	5224.6	ppb	12:11:32
1	Mg 279.077 IEC†	153.6	155.9	5246.7	ug/L	5246.7	ppb	12:11:52
1	Mn 257.610†	475093.7	470383.6	498.95	ug/L	498.95	ppb	12:12:50
1	Mo 202.031†	7936.1	7847.7	499.77	ug/L	499.77	ppb	12:13:15
1	Na 589.592 Radial†	31411.3	33813.5	10247	ug/L	10247	ppb	12:11:32
1	Ni 231.604†	21807.3	21529.1	494.39	ug/L	494.39	ppb	12:12:55
1	P 214.914†	4705.5	4422.0	2395.5	ug/L	2395.5	ppb	12:13:15
1	Pb 220.353†	4423.0	4452.0	499.90	ug/L	499.90	ppb	12:13:15
1	S 181.975 Axial†	813.0	756.5	998.44	ug/L	998.44	ppb	12:13:15
1	Sb 206.836†	1660.3	1608.3	515.20	ug/L	515.20	ppb	12:13:15
1	Se 196.026†	867.5	886.7	517.22	ug/L	517.22	ppb	12:13:15
1	Si 251.611†	85830.4	84591.7	2507.5	ug/L	2507.5	ppb	12:12:55
1	Sn 189.927†	3158.9	3122.2	502.85	ug/L	502.85	ppb	12:13:15
1	Sr 421.552†	82692.5	84925.3	512.16	ug/L	512.16	ppb	12:11:32
1	Ti 334.940†	308600.9	307135.5	484.66	ug/L	484.66	ppb	12:12:55
1	Tl 190.801†	1747.6	1766.7	500.92	ug/L	500.92	ppb	12:13:15
1	U 409.014†	14535.8	16991.6	486.91	ug/L	486.91	ppb	12:12:55
1	V 292.402†	72837.9	73558.2	496.11	ug/L	496.11	ppb	12:12:55
1	Zn 213.857†	58972.5	57698.5	491.91	ug/L	491.91	ppb	12:12:55
1	SiO2†	85357.0	84079.8	5340.5	ug/L	5340.5	ppb	12:14:22
2	Sc 361.383	875573.2	875573.2	100.88	%			12:13:21
2	Sc Radial	5960.6	5960.6	107	%			12:11:57
2	Y 371.029	724459.8	724459.8	99.315	%			12:13:21
2	Y RADIAL	6427.7	6427.7	106.4	%			12:11:57
2	Ag 328.068†	111738.3	110487.1	502.78	ug/L	502.78	ppb	12:13:26
2	Al 396.153Radial†	6723.0	6324.3	4334.2	ug/L	4334.2	ppb	12:11:57
2	As 188.979†	1290.9	1310.9	510.41	ug/L	510.41	ppb	12:13:46
2	B 249.677†	23369.6	23658.4	502.28	ug/L	502.28	ppb	12:13:26
2	Ba 233.527†	67099.8	66524.1	498.36	ug/L	498.36	ppb	12:13:26
2	Be 313.107†	1396730.2	1389177.7	499.78	ug/L	499.78	ppb	12:13:21
2	Ca 317.933Radial†	3417.0	3179.6	4640.5	ug/L	4640.5	ppb	12:12:17
2	Cd 226.502†	48317.9	48094.3	498.63	ug/L	498.63	ppb	12:13:26
2	Co 228.616†	26608.6	26449.3	499.03	ug/L	499.03	ppb	12:13:26
2	Cr 267.716†	47929.9	47424.7	497.22	ug/L	497.22	ppb	12:13:26
2	Cu 324.752†	177929.5	169615.6	492.91	ug/L	492.91	ppb	12:13:26
2	Fe 238.204 Radial†	581.1	533.7	4797.4	ug/L	4797.4	ppb	12:12:17
2	K 766.490 Radial†	32020.2	27213.5	4557.4	ug/L	4557.4	ppb	12:11:57
2	Mg 279.077 IEC†	152.9	141.1	4750.6	ug/L	4750.6	ppb	12:12:17
2	Mn 257.610†	474874.7	470201.5	498.72	ug/L	498.72	ppb	12:13:21
2	Mo 202.031†	7963.5	7875.4	501.50	ug/L	501.50	ppb	12:13:46
2	Na 589.592 Radial†	29968.0	29587.5	8966.8	ug/L	8966.8	ppb	12:11:57
2	Ni 231.604†	21971.3	21693.2	498.16	ug/L	498.16	ppb	12:13:26

2	P 214.914†	4711.5	4428.2	2398.0 ug/L	2398.0 ppb	12:13:46
2	Pb 220.353†	4428.3	4457.5	500.41 ug/L	500.41 ppb	12:13:46
2	S 181.975 Axial†	820.7	764.1	1008.6 ug/L	1008.6 ppb	12:13:46
2	Sb 206.836†	1650.6	1598.8	512.15 ug/L	512.15 ppb	12:13:46
2	Se 196.026†	874.7	893.8	519.77 ug/L	519.77 ppb	12:13:46
2	Si 251.611†	86883.9	85642.3	2539.0 ug/L	2539.0 ppb	12:13:26
2	Sn 189.927†	3160.1	3123.7	503.04 ug/L	503.04 ppb	12:13:46
2	Sr 421.552†	78610.6	73536.0	443.47 ug/L	443.47 ppb	12:11:57
2	Ti 334.940†	312119.6	310646.2	490.18 ug/L	490.18 ppb	12:13:26
2	Tl 190.801†	1745.7	1765.0	500.42 ug/L	500.42 ppb	12:13:46
2	U 409.014†	14686.0	17141.6	491.27 ug/L	491.27 ppb	12:13:26
2	V 292.402†	73499.2	74219.2	500.59 ug/L	500.59 ppb	12:13:26
2	Zn 213.857†	59423.7	58150.1	495.82 ug/L	495.82 ppb	12:13:26
2	SiO2†	86519.8	85238.7	5414.9 ug/L	5414.9 ppb	12:14:27
3	Sc 361.383	861169.5	861169.5	99.223 %		12:13:52
3	Sc Radial	6087.9	6087.9	109 %		12:12:22
3	Y 371.029	712398.4	712398.4	97.662 %		12:13:52
3	Y RADIAL	6565.2	6565.2	108.7 %		12:12:22
3	Ag 328.068†	112865.7	113475.9	516.31 ug/L	516.31 ppb	12:13:57
3	Al 396.153Radial†	6721.6	6191.4	4242.3 ug/L	4242.3 ppb	12:12:22
3	As 188.979†	1276.6	1317.9	513.19 ug/L	513.19 ppb	12:14:17
3	B 249.677†	23748.1	24427.3	518.65 ug/L	518.65 ppb	12:13:57
3	Ba 233.527†	67856.0	68398.6	512.39 ug/L	512.39 ppb	12:13:57
3	Be 313.107†	1374575.3	1390006.3	500.11 ug/L	500.11 ppb	12:13:52
3	Ca 317.933Radial†	3396.0	3093.4	4514.8 ug/L	4514.8 ppb	12:12:42
3	Cd 226.502†	49074.6	49657.9	514.87 ug/L	514.87 ppb	12:13:57
3	Co 228.616†	26890.6	27174.7	512.70 ug/L	512.70 ppb	12:13:57
3	Cr 267.716†	48434.3	48727.7	510.88 ug/L	510.88 ppb	12:13:57
3	Cu 324.752†	179617.3	174266.5	506.41 ug/L	506.41 ppb	12:13:57
3	Fe 238.204 Radial†	577.1	518.7	4663.1 ug/L	4663.1 ppb	12:12:42
3	K 766.490 Radial†	32203.3	26754.7	4480.5 ug/L	4480.5 ppb	12:12:22
3	Mg 279.077 IEC†	156.7	141.6	4767.3 ug/L	4767.3 ppb	12:12:42
3	Mn 257.610†	468651.1	471802.3	500.41 ug/L	500.41 ppb	12:13:52
3	Mo 202.031†	7954.1	7998.0	509.30 ug/L	509.30 ppb	12:14:17
3	Na 589.592 Radial†	30250.4	29259.7	8867.4 ug/L	8867.4 ppb	12:12:22
3	Ni 231.604†	22247.5	22335.8	512.92 ug/L	512.92 ppb	12:13:57
3	P 214.914†	4734.4	4529.5	2452.6 ug/L	2452.6 ppb	12:14:17
3	Pb 220.353†	4407.6	4510.2	506.31 ug/L	506.31 ppb	12:14:17
3	S 181.975 Axial†	827.2	784.3	1035.4 ug/L	1035.4 ppb	12:14:17
3	Sb 206.836†	1656.2	1631.8	522.55 ug/L	522.55 ppb	12:14:17
3	Se 196.026†	871.8	905.5	525.93 ug/L	525.93 ppb	12:14:17
3	Si 251.611†	87807.2	88013.3	2609.4 ug/L	2609.4 ppb	12:13:57
3	Sn 189.927†	3156.1	3172.0	510.80 ug/L	510.80 ppb	12:14:17
3	Sr 421.552†	79155.7	72496.9	437.21 ug/L	437.21 ppb	12:12:22
3	Ti 334.940†	315664.1	319393.2	503.97 ug/L	503.97 ppb	12:13:57
3	Tl 190.801†	1759.7	1808.1	512.57 ug/L	512.57 ppb	12:14:17
3	U 409.014†	14688.7	17387.8	498.34 ug/L	498.34 ppb	12:13:57
3	V 292.402†	74374.7	76320.1	514.70 ug/L	514.70 ppb	12:13:57
3	Zn 213.857†	60227.6	59945.6	511.16 ug/L	511.16 ppb	12:13:57
3	SiO2†	85613.7	85760.0	5447.9 ug/L	5447.9 ppb	12:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870793.7	100.33	%	0.960				0.96%
Sc Radial	5825.9	104	%	6.3				6.00%
Y 371.029	720221.8	98.734	%	0.9299				0.94%
Y RADIAL	6296.6	104.3	%	5.85				5.61%
Ag 328.068†	111098.6	505.59	ug/L	9.626	505.59	ppb	9.626	1.90%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	6582.8	4512.1	ug/L	390.42	4512.1	ppb	390.42	8.65%
QC value within limits for Al 396.153Radial Recovery = 90.24%								
As 188.979†	1308.6	509.56	ug/L	4.123	509.56	ppb	4.123	0.81%
QC value within limits for As 188.979 Recovery = 101.91%								
B 249.677†	23797.5	505.22	ug/L	12.224	505.22	ppb	12.224	2.42%
QC value within limits for B 249.677 Recovery = 101.04%								
Ba 233.527†	66932.2	501.42	ug/L	9.807	501.42	ppb	9.807	1.96%
QC value within limits for Ba 233.527 Recovery = 100.28%								
Be 313.107†	1388085.9	499.40	ug/L	0.965	499.40	ppb	0.965	0.19%
QC value within limits for Be 313.107 Recovery = 99.88%								

Ca 317.933Radial†	3258.0	4755.0 ug/L	313.50	4755.0 ppb	313.50	6.59%
QC value within limits for Ca 317.933Radial Recovery = 95.10%						
Cd 226.502†	48525.2	503.10 ug/L	10.300	503.10 ppb	10.300	2.05%
QC value within limits for Cd 226.502 Recovery = 100.62%						
Co 228.616†	26613.0	502.11 ug/L	9.433	502.11 ppb	9.433	1.88%
QC value within limits for Co 228.616 Recovery = 100.42%						
Cr 267.716†	47738.9	500.52 ug/L	9.171	500.52 ppb	9.171	1.83%
QC value within limits for Cr 267.716 Recovery = 100.10%						
Cu 324.752†	170370.3	495.11 ug/L	10.382	495.11 ppb	10.382	2.10%
QC value within limits for Cu 324.752 Recovery = 99.02%						
Fe 238.204 Radial†	545.5	4902.5 ug/L	305.83	4902.5 ppb	305.83	6.24%
QC value within limits for Fe 238.204 Radial Recovery = 98.05%						
K 766.490 Radial†	28387.2	4754.2 ug/L	409.22	4754.2 ppb	409.22	8.61%
QC value within limits for K 766.490 Radial Recovery = 95.08%						
Mg 279.077 IEC†	146.2	4921.6 ug/L	281.71	4921.6 ppb	281.71	5.72%
QC value within limits for Mg 279.077 IEC Recovery = 98.43%						
Mn 257.610†	470795.8	499.36 ug/L	0.913	499.36 ppb	0.913	0.18%
QC value within limits for Mn 257.610 Recovery = 99.87%						
Mo 202.031†	7907.0	503.52 ug/L	5.074	503.52 ppb	5.074	1.01%
QC value within limits for Mo 202.031 Recovery = 100.70%						
Na 589.592 Radial†	30886.9	9360.6 ug/L	769.70	9360.6 ppb	769.70	8.22%
QC value within limits for Na 589.592 Radial Recovery = 93.61%						
Ni 231.604†	21852.7	501.83 ug/L	9.792	501.83 ppb	9.792	1.95%
QC value within limits for Ni 231.604 Recovery = 100.37%						
P 214.914†	4459.9	2415.4 ug/L	32.24	2415.4 ppb	32.24	1.33%
QC value within limits for P 214.914 Recovery = 96.62%						
Pb 220.353†	4473.2	502.21 ug/L	3.560	502.21 ppb	3.560	0.71%
QC value within limits for Pb 220.353 Recovery = 100.44%						
S 181.975 Axial†	768.3	1014.1 ug/L	19.07	1014.1 ppb	19.07	1.88%
QC value within limits for S 181.975 Axial Recovery = 101.41%						
Sb 206.836†	1612.9	516.63 ug/L	5.345	516.63 ppb	5.345	1.03%
QC value within limits for Sb 206.836 Recovery = 103.33%						
Se 196.026†	895.3	520.97 ug/L	4.475	520.97 ppb	4.475	0.86%
QC value within limits for Se 196.026 Recovery = 104.19%						
Si 251.611†	86082.5	2552.0 ug/L	52.21	2552.0 ppb	52.21	2.05%
QC value within limits for Si 251.611 Recovery = 102.08%						
Sn 189.927†	3139.3	505.56 ug/L	4.534	505.56 ppb	4.534	0.90%
QC value within limits for Sn 189.927 Recovery = 101.11%						
Sr 421.552†	76986.1	464.28 ug/L	41.584	464.28 ppb	41.584	8.96%
QC value within limits for Sr 421.552 Recovery = 92.86%						
Ti 334.940†	312391.7	492.94 ug/L	9.944	492.94 ppb	9.944	2.02%
QC value within limits for Ti 334.940 Recovery = 98.59%						
Tl 190.801†	1780.0	504.64 ug/L	6.878	504.64 ppb	6.878	1.36%
QC value within limits for Tl 190.801 Recovery = 100.93%						
U 409.014†	17173.7	492.17 ug/L	5.768	492.17 ppb	5.768	1.17%
QC value within limits for U 409.014 Recovery = 98.43%						
V 292.402†	74699.2	503.80 ug/L	9.699	503.80 ppb	9.699	1.93%
QC value within limits for V 292.402 Recovery = 100.76%						
Zn 213.857†	58598.1	499.63 ug/L	10.179	499.63 ppb	10.179	2.04%
QC value within limits for Zn 213.857 Recovery = 99.93%						
SiO2†	85026.1	5401.1 ug/L	55.01	5401.1 ppb	55.01	1.02%
QC value within limits for SiO2 Recovery = 101.00%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:16:43
Data Type: Reprocessed on 12/11/2009 12:46:10

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	878516.8	878516.8	101.22	%			12:19:52
1	Sc Radial	5246.4	5246.4	94.1	%			12:18:35
1	Y 371.029	738877.4	738877.4	101.29	%			12:19:52
1	Y RADIAL	5741.2	5741.2	95.07	%			12:18:35
1	Ag 328.068†	305.4	27.7	0.1333	ug/L	0.1333	ppb	12:19:52
1	Al 396.153Radial†	-14.2	20.2	13.882	ug/L	13.882	ppb	12:18:35
1	As 188.979†	-18.9	12.7	4.8840	ug/L	4.8840	ppb	12:20:12
1	B 249.677†	-12.7	480.6	10.239	ug/L	10.239	ppb	12:20:12
1	Ba 233.527†	-12.1	-0.8	-0.0053	ug/L	-0.0053	ppb	12:20:12
1	Be 313.107†	-4609.0	109.3	0.0393	ug/L	0.0393	ppb	12:19:52
1	Ca 317.933Radial†	21.3	5.7	8.3750	ug/L	8.3750	ppb	12:18:55
1	Cd 226.502†	-166.1	34.8	0.3581	ug/L	0.3581	ppb	12:20:12
1	Co 228.616†	-73.8	0.5	0.0115	ug/L	0.0115	ppb	12:20:12
1	Cr 267.716†	73.1	-13.8	-0.1441	ug/L	-0.1441	ppb	12:20:12
1	Cu 324.752†	6826.6	-13.7	-0.0383	ug/L	-0.0383	ppb	12:19:52
1	Fe 238.204 Radial†	12.2	3.1	27.577	ug/L	27.577	ppb	12:18:55
1	K 766.490 Radial†	3558.7	1042.6	174.91	ug/L	174.91	ppb	12:18:35
1	Mg 279.077 IEC†	3.9	2.2	73.687	ug/L	73.687	ppb	12:18:55
1	Mn 257.610†	509.3	-17.0	-0.0166	ug/L	-0.0166	ppb	12:20:12
1	Mo 202.031†	30.7	11.9	0.7590	ug/L	0.7590	ppb	12:20:12
1	Na 589.592 Radial†	-1422.0	42.8	12.984	ug/L	12.984	ppb	12:18:35
1	Ni 231.604†	79.2	-7.7	-0.1779	ug/L	-0.1779	ppb	12:20:12
1	P 214.914†	227.9	-16.8	-9.4048	ug/L	-9.4048	ppb	12:20:12
1	Pb 220.353†	-58.5	10.2	1.1427	ug/L	1.1427	ppb	12:20:12
1	S 181.975 Axial†	54.2	4.2	5.5186	ug/L	5.5186	ppb	12:20:12
1	Sb 206.836†	45.0	7.1	2.2641	ug/L	2.2641	ppb	12:20:12
1	Se 196.026†	-25.5	1.6	0.9949	ug/L	0.9949	ppb	12:20:12
1	Si 251.611†	534.3	46.2	1.3013	ug/L	1.3013	ppb	12:20:12
1	Sn 189.927†	13.2	4.2	0.6808	ug/L	0.6808	ppb	12:20:12
1	Sr 421.552†	-6.1	-6.2	-0.0377	ug/L	-0.0377	ppb	12:18:35
1	Ti 334.940†	-1262.3	9.1	0.0146	ug/L	0.0146	ppb	12:19:52
1	Tl 190.801†	-34.3	0.7	0.1981	ug/L	0.1981	ppb	12:20:12
1	U 409.014†	-2594.1	21.2	0.6055	ug/L	0.6055	ppb	12:19:52
1	V 292.402†	-1385.1	-5.6	-0.0278	ug/L	-0.0278	ppb	12:19:52
1	Zn 213.857†	777.0	13.8	0.1149	ug/L	0.1149	ppb	12:20:12
1	SiO2†	508.9	-21.7	-1.5475	ug/L	-1.5475	ppb	12:21:08
2	Sc 361.383	869660.2	869660.2	100.20	%			12:20:17
2	Sc Radial	5600.5	5600.5	100	%			12:19:00
2	Y 371.029	732581.1	732581.1	100.43	%			12:20:17
2	Y RADIAL	6095.4	6095.4	100.9	%			12:19:00
2	Ag 328.068†	253.6	-21.0	-0.0988	ug/L	-0.0988	ppb	12:20:17
2	Al 396.153Radial†	-17.0	18.4	12.629	ug/L	12.629	ppb	12:19:00
2	As 188.979†	-13.8	17.6	6.7688	ug/L	6.7688	ppb	12:20:37
2	B 249.677†	-24.0	469.2	10.001	ug/L	10.001	ppb	12:20:37
2	Ba 233.527†	-3.7	7.4	0.0550	ug/L	0.0550	ppb	12:20:37
2	Be 313.107†	-4553.9	117.8	0.0422	ug/L	0.0422	ppb	12:20:17
2	Ca 317.933Radial†	15.4	-1.6	-2.3484	ug/L	-2.3484	ppb	12:19:20
2	Cd 226.502†	-174.0	25.3	0.2635	ug/L	0.2635	ppb	12:20:37
2	Co 228.616†	-57.8	15.7	0.2990	ug/L	0.2990	ppb	12:20:37
2	Cr 267.716†	89.4	3.2	0.0333	ug/L	0.0333	ppb	12:20:37
2	Cu 324.752†	6852.1	80.5	0.2333	ug/L	0.2333	ppb	12:20:17
2	Fe 238.204 Radial†	8.6	-1.3	-11.614	ug/L	-11.614	ppb	12:19:20
2	K 766.490 Radial†	3590.6	835.2	140.10	ug/L	140.10	ppb	12:19:00
2	Mg 279.077 IEC†	1.5	-0.5	-15.361	ug/L	-15.361	ppb	12:19:20
2	Mn 257.610†	517.5	-3.7	-0.0048	ug/L	-0.0048	ppb	12:20:37
2	Mo 202.031†	30.9	12.4	0.7895	ug/L	0.7895	ppb	12:20:37
2	Na 589.592 Radial†	-1378.6	181.6	55.033	ug/L	55.033	ppb	12:19:00
2	Ni 231.604†	89.1	3.0	0.0682	ug/L	0.0682	ppb	12:20:37

2	P 214.914†	225.0	-17.5	-9.7541 ug/L	-9.7541 ppb	12:20:37
2	Pb 220.353†	-61.1	7.0	0.7929 ug/L	0.7929 ppb	12:20:37
2	S 181.975 Axial†	43.2	-6.3	-8.3044 ug/L	-8.3044 ppb	12:20:37
2	Sb 206.836†	38.4	1.0	0.3394 ug/L	0.3394 ppb	12:20:37
2	Se 196.026†	-25.2	1.7	0.9088 ug/L	0.9088 ppb	12:20:37
2	Si 251.611†	522.4	39.7	1.1172 ug/L	1.1172 ppb	12:20:37
2	Sn 189.927†	16.4	7.5	1.2041 ug/L	1.2041 ppb	12:20:37
2	Sr 421.552†	-13.3	-13.0	-0.0785 ug/L	-0.0785 ppb	12:19:00
2	Ti 334.940†	-1286.3	-27.5	-0.0436 ug/L	-0.0436 ppb	12:20:17
2	Tl 190.801†	-38.6	-4.0	-1.1227 ug/L	-1.1227 ppb	12:20:37
2	U 409.014†	-2583.2	6.0	0.1727 ug/L	0.1727 ppb	12:20:17
2	V 292.402†	-1371.0	-5.6	-0.0240 ug/L	-0.0240 ppb	12:20:17
2	Zn 213.857†	789.8	34.4	0.2969 ug/L	0.2969 ppb	12:20:37
2	SiO2†	538.3	12.7	0.6702 ug/L	0.6702 ppb	12:21:13
3	Sc 361.383	874124.6	874124.6	100.72 %		12:20:43
3	Sc Radial	5577.2	5577.2	100 %		12:19:25
3	Y 371.029	735292.9	735292.9	100.80 %		12:20:43
3	Y RADIAL	6069.2	6069.2	100.5 %		12:19:25
3	Ag 328.068†	287.0	10.9	0.0521 ug/L	0.0521 ppb	12:20:43
3	Al 396.153Radial†	-29.2	6.1	4.1795 ug/L	4.1795 ppb	12:19:25
3	As 188.979†	-18.2	13.3	5.1209 ug/L	5.1209 ppb	12:21:03
3	B 249.677†	-91.2	402.7	8.5816 ug/L	8.5816 ppb	12:21:03
3	Ba 233.527†	-11.0	0.2	0.0011 ug/L	0.0011 ppb	12:21:03
3	Be 313.107†	-4503.8	190.8	0.0688 ug/L	0.0688 ppb	12:20:43
3	Ca 317.933Radial†	9.5	-7.4	-10.864 ug/L	-10.864 ppb	12:19:45
3	Cd 226.502†	-182.9	17.4	0.1803 ug/L	0.1803 ppb	12:21:03
3	Co 228.616†	-82.9	-8.8	-0.1652 ug/L	-0.1652 ppb	12:21:03
3	Cr 267.716†	90.0	3.3	0.0360 ug/L	0.0360 ppb	12:21:03
3	Cu 324.752†	6801.4	-4.8	-0.0139 ug/L	-0.0139 ppb	12:20:43
3	Fe 238.204 Radial†	9.7	-0.2	-1.6037 ug/L	-1.6037 ppb	12:19:45
3	K 766.490 Radial†	3534.0	793.5	133.11 ug/L	133.11 ppb	12:19:25
3	Mg 279.077 IEC†	2.1	0.1	4.8443 ug/L	4.8443 ppb	12:19:45
3	Mn 257.610†	500.5	-23.2	-0.0249 ug/L	-0.0249 ppb	12:21:03
3	Mo 202.031†	29.8	11.2	0.7112 ug/L	0.7112 ppb	12:21:03
3	Na 589.592 Radial†	-1391.4	163.1	49.427 ug/L	49.427 ppb	12:19:25
3	Ni 231.604†	87.3	0.7	0.0161 ug/L	0.0161 ppb	12:21:03
3	P 214.914†	237.0	-6.7	-3.7174 ug/L	-3.7174 ppb	12:21:03
3	Pb 220.353†	-47.4	20.9	2.3410 ug/L	2.3410 ppb	12:21:03
3	S 181.975 Axial†	48.8	-0.9	-1.2359 ug/L	-1.2359 ppb	12:21:03
3	Sb 206.836†	36.7	-1.0	-0.2826 ug/L	-0.2826 ppb	12:21:03
3	Se 196.026†	-23.7	3.3	1.8454 ug/L	1.8454 ppb	12:21:03
3	Si 251.611†	540.5	54.9	1.5760 ug/L	1.5760 ppb	12:21:03
3	Sn 189.927†	13.9	5.0	0.8044 ug/L	0.8044 ppb	12:21:03
3	Sr 421.552†	-21.1	-20.9	-0.1259 ug/L	-0.1259 ppb	12:19:25
3	Ti 334.940†	-1179.6	85.0	0.1353 ug/L	0.1353 ppb	12:20:43
3	Tl 190.801†	-31.4	3.4	0.9565 ug/L	0.9565 ppb	12:21:03
3	U 409.014†	-2735.1	-131.7	-3.7860 ug/L	-3.7860 ppb	12:20:43
3	V 292.402†	-1376.4	-3.9	-0.0231 ug/L	-0.0231 ppb	12:20:43
3	Zn 213.857†	804.2	44.6	0.3838 ug/L	0.3838 ppb	12:21:03
3	SiO2†	544.3	15.9	0.8859 ug/L	0.8859 ppb	12:21:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874100.5	100.71	%	0.510				0.51%
Sc Radial	5474.7	98.2	%	3.55				3.62%
Y 371.029	735583.8	100.84	%	0.433				0.43%
Y RADIAL	5968.6	98.83	%	3.269				3.31%
Ag 328.068†	5.9	0.0289	ug/L	0.11774	0.0289	ppb	0.11774	407.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.9	10.230	ug/L	5.2772	10.230	ppb	5.2772	51.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	14.5	5.5912	ug/L	1.02664	5.5912	ppb	1.02664	18.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	450.8	9.6072	ug/L	0.89611	9.6072	ppb	0.89611	9.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.3	0.0169	ug/L	0.03314	0.0169	ppb	0.03314	195.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	139.3	0.0501	ug/L	0.01626	0.0501	ppb	0.01626	32.45%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.1     -1.6125 ug/L       9.64065     -1.6125 ppb        9.64065 597.87%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                25.8      0.2673 ug/L       0.08895      0.2673 ppb        0.08895  33.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.5      0.0484 ug/L       0.23428      0.0484 ppb        0.23428 483.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -2.4     -0.0249 ug/L       0.10322     -0.0249 ppb        0.10322 414.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.7      0.0603 ug/L       0.15025      0.0603 ppb        0.15025 248.96%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.7863 ug/L      20.36173      4.7863 ppb       20.36173 425.41%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         890.4      149.38 ug/L        22.389      149.38 ppb         22.389  14.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.057 ug/L       46.6852      21.057 ppb        46.6852 221.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -14.6     -0.0154 ug/L       0.01009     -0.0154 ppb        0.01009  65.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                11.8      0.7533 ug/L       0.03947      0.7533 ppb        0.03947   5.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        129.2      39.148 ug/L       22.8314      39.148 ppb        22.8314  58.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.4     -0.0312 ug/L       0.12971     -0.0312 ppb        0.12971 415.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -13.7     -7.6254 ug/L       3.38898     -7.6254 ppb        3.38898  44.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.7      1.4256 ug/L       0.81188      1.4256 ppb        0.81188  56.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0     -1.3406 ug/L       6.91208     -1.3406 ppb        6.91208 515.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7736 ug/L       1.32771      0.7736 ppb        1.32771 171.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.2      1.2497 ug/L       0.51768      1.2497 ppb        0.51768  41.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                46.9      1.3315 ug/L       0.23091      1.3315 ppb        0.23091  17.34%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.8965 ug/L       0.27351      0.8965 ppb        0.27351  30.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -13.4     -0.0807 ug/L       0.04413     -0.0807 ppb        0.04413  54.68%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.2      0.0355 ug/L       0.09123      0.0355 ppb        0.09123 257.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.0      0.0106 ug/L       1.05217      0.0106 ppb        1.05217 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -34.9     -1.0026 ug/L       2.42018     -1.0026 ppb        2.42018 241.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.0     -0.0250 ug/L       0.00250     -0.0250 ppb        0.00250  10.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.9      0.2652 ug/L       0.13722      0.2652 ppb        0.13722  51.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       2.3      0.0029 ug/L       1.34702      0.0029 ppb        1.34702 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/11/2009 12:23:28
Data Type: Reprocessed on 12/11/2009 12:46:11

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	861705.9	861705.9	99.284	%			12:26:39
1	Sc Radial	5356.0	5356.0	96.1	%			12:25:22
1	Y 371.029	718237.7	718237.7	98.462	%			12:26:39
1	Y RADIAL	5821.6	5821.6	96.40	%			12:25:22
1	Ag 328.068†	-25788.0	-26247.8	4.5515	ug/L	4.5515	ppb	12:26:39
1	Al 396.153Radial†	-58.7	-25.8	-16.754	ug/L	-16.754	ppb	12:25:22
1	As 188.979†	-219.6	-189.9	-13.581	ug/L	-13.581	ppb	12:26:59
1	B 249.677†	2608.9	3120.9	15.176	ug/L	15.176	ppb	12:26:39
1	Ba 233.527†	-1736.5	-1737.9	1.4933	ug/L	1.4933	ppb	12:26:39
1	Be 313.107†	-4122.4	510.6	0.1831	ug/L	0.1831	ppb	12:26:39
1	Ca 317.933Radial†	8.8	-7.7	-11.255	ug/L	-11.255	ppb	12:25:42
1	Cd 226.502†	3508.9	3733.1	0.0438	ug/L	0.0438	ppb	12:26:39
1	Co 228.616†	244.3	319.5	0.4449	ug/L	0.4449	ppb	12:26:59
1	Cr 267.716†	-583.7	-673.9	-0.0534	ug/L	-0.0534	ppb	12:26:39
1	Cu 324.752†	453.7	-6300.8	1.4319	ug/L	1.4319	ppb	12:26:39
1	Fe 238.204 Radial†	41486.5	43178.9	386840	ug/L	386840	ppb	12:25:22
1	K 766.490 Radial†	3092.8	480.1	93.208	ug/L	93.208	ppb	12:25:22
1	Mg 279.077 IEC†	15.4	14.1	143.65	ug/L	143.65	ppb	12:25:42
1	Mn 257.610†	-35683.4	-36460.7	-0.0742	ug/L	-0.0742	ppb	12:26:39
1	Mo 202.031†	-356.2	-377.2	3.4378	ug/L	3.4378	ppb	12:26:39
1	Na 589.592 Radial†	-1407.6	88.8	26.914	ug/L	26.914	ppb	12:25:22
1	Ni 231.604†	178.6	93.9	2.1545	ug/L	2.1545	ppb	12:26:59
1	P 214.914†	743.8	507.2	-25.892	ug/L	-25.892	ppb	12:26:59
1	Pb 220.353†	227.0	296.6	1.3987	ug/L	1.3987	ppb	12:26:59
1	S 181.975 Axial†	70.3	21.4	28.312	ug/L	28.312	ppb	12:26:59
1	Sb 206.836†	21.4	-15.9	1.0130	ug/L	1.0130	ppb	12:26:59
1	Se 196.026†	-2056.6	-2044.7	38.448	ug/L	38.448	ppb	12:26:59
1	Si 251.611†	-787.4	-1274.8	-37.562	ug/L	-37.562	ppb	12:26:39
1	Sn 189.927†	-21.3	-30.2	0.3038	ug/L	0.3038	ppb	12:26:59
1	Sr 421.552†	64.7	67.6	0.4076	ug/L	0.4076	ppb	12:25:22
1	Ti 334.940†	-1316.7	-69.9	-0.1365	ug/L	-0.1365	ppb	12:26:39
1	Tl 190.801†	-46.9	-12.7	-3.9619	ug/L	-3.9619	ppb	12:26:59
1	U 409.014†	-376.4	2204.9	14.736	ug/L	14.736	ppb	12:26:39
1	V 292.402†	7414.8	8831.0	-0.2906	ug/L	-0.2906	ppb	12:26:39
1	Zn 213.857†	4916.8	4198.4	-0.8283	ug/L	-0.8283	ppb	12:26:59
1	SiO2†	-780.4	-1310.5	-82.767	ug/L	-82.767	ppb	12:27:57
2	Sc 361.383	860218.2	860218.2	99.113	%			12:27:05
2	Sc Radial	5513.5	5513.5	98.9	%			12:25:47
2	Y 371.029	717273.7	717273.7	98.330	%			12:27:05
2	Y RADIAL	5987.8	5987.8	99.15	%			12:25:47
2	Ag 328.068†	-25878.0	-26383.6	3.2131	ug/L	3.2131	ppb	12:27:05
2	Al 396.153Radial†	-33.1	1.8	2.3584	ug/L	2.3584	ppb	12:25:47
2	As 188.979†	-233.0	-203.8	-19.307	ug/L	-19.307	ppb	12:27:25
2	B 249.677†	2427.4	2942.3	11.675	ug/L	11.675	ppb	12:27:05
2	Ba 233.527†	-1834.7	-1840.0	0.6453	ug/L	0.6453	ppb	12:27:05
2	Be 313.107†	-4135.8	489.8	0.1759	ug/L	0.1759	ppb	12:27:05
2	Ca 317.933Radial†	7.2	-9.6	-14.036	ug/L	-14.036	ppb	12:26:07
2	Cd 226.502†	3495.6	3725.8	0.1960	ug/L	0.1960	ppb	12:27:05
2	Co 228.616†	199.9	275.1	-0.3648	ug/L	-0.3648	ppb	12:27:25
2	Cr 267.716†	-581.4	-672.7	-0.0809	ug/L	-0.0809	ppb	12:27:05
2	Cu 324.752†	320.9	-6434.0	0.9288	ug/L	0.9288	ppb	12:27:05
2	Fe 238.204 Radial†	42455.2	42924.5	384560	ug/L	384560	ppb	12:25:47
2	K 766.490 Radial†	3107.1	402.6	80.127	ug/L	80.127	ppb	12:25:47
2	Mg 279.077 IEC†	12.8	11.1	43.037	ug/L	43.037	ppb	12:26:07
2	Mn 257.610†	-36042.6	-36885.3	-0.7496	ug/L	-0.7496	ppb	12:27:05
2	Mo 202.031†	-385.2	-407.1	1.3735	ug/L	1.3735	ppb	12:27:05
2	Na 589.592 Radial†	-1391.5	147.0	44.541	ug/L	44.541	ppb	12:25:47
2	Ni 231.604†	176.9	92.5	2.1221	ug/L	2.1221	ppb	12:27:25

2	P 214.914†	751.8	516.5	-18.782	ug/L	-18.782	ppb	12:27:25
2	Pb 220.353†	260.1	330.4	5.3728	ug/L	5.3728	ppb	12:27:25
2	S 181.975 Axial†	73.1	24.3	32.140	ug/L	32.140	ppb	12:27:25
2	Sb 206.836†	21.7	-15.5	1.0522	ug/L	1.0522	ppb	12:27:25
2	Se 196.026†	-2057.2	-2048.9	29.075	ug/L	29.075	ppb	12:27:25
2	Si 251.611†	-690.5	-1178.4	-34.651	ug/L	-34.651	ppb	12:27:05
2	Sn 189.927†	-23.0	-32.0	-0.0145	ug/L	-0.0145	ppb	12:27:25
2	Sr 421.552†	111.1	112.5	0.6788	ug/L	0.6788	ppb	12:25:47
2	Ti 334.940†	-1239.0	6.2	-0.0155	ug/L	-0.0155	ppb	12:27:05
2	Tl 190.801†	-45.5	-11.4	-3.5871	ug/L	-3.5871	ppb	12:27:25
2	U 409.014†	-457.8	2122.1	12.643	ug/L	12.643	ppb	12:27:05
2	V 292.402†	7362.4	8791.0	-0.2444	ug/L	-0.2444	ppb	12:27:05
2	Zn 213.857†	4870.6	4160.3	-0.9335	ug/L	-0.9335	ppb	12:27:25
2	SiO2†	-581.7	-1111.4	-69.976	ug/L	-69.976	ppb	12:28:02
3	Sc 361.383	855218.9	855218.9	98.537	%			12:27:31
3	Sc Radial	5682.5	5682.5	102	%			12:26:12
3	Y 371.029	712850.6	712850.6	97.723	%			12:27:31
3	Y RADIAL	6133.6	6133.6	101.6	%			12:26:12
3	Ag 328.068†	-25694.0	-26349.5	-2.5804	ug/L	-2.5804	ppb	12:27:31
3	Al 396.153Radial†	-39.2	-3.2	-1.0218	ug/L	-1.0218	ppb	12:26:12
3	As 188.979†	-227.7	-199.7	-20.616	ug/L	-20.616	ppb	12:27:51
3	B 249.677†	2486.5	3016.7	15.739	ug/L	15.739	ppb	12:27:31
3	Ba 233.527†	-1842.5	-1858.7	-0.1875	ug/L	-0.1875	ppb	12:27:31
3	Be 313.107†	-4027.5	575.4	0.2066	ug/L	0.2066	ppb	12:27:31
3	Ca 317.933Radial†	5.7	-11.3	-16.464	ug/L	-16.464	ppb	12:26:32
3	Cd 226.502†	3457.9	3708.2	1.8822	ug/L	1.8822	ppb	12:27:31
3	Co 228.616†	204.3	280.8	0.0046	ug/L	0.0046	ppb	12:27:51
3	Cr 267.716†	-622.3	-717.5	-0.8845	ug/L	-0.8845	ppb	12:27:31
3	Cu 324.752†	486.8	-6263.8	0.4695	ug/L	0.4695	ppb	12:27:31
3	Fe 238.204 Radial†	41629.6	40838.0	365870	ug/L	365870	ppb	12:26:12
3	K 766.490 Radial†	3141.6	343.1	69.553	ug/L	69.553	ppb	12:26:12
3	Mg 279.077 IEC†	10.9	8.8	-18.363	ug/L	-18.363	ppb	12:26:32
3	Mn 257.610†	-35630.1	-36679.3	-2.3939	ug/L	-2.3939	ppb	12:27:31
3	Mo 202.031†	-403.3	-427.7	-1.2629	ug/L	-1.2629	ppb	12:27:31
3	Na 589.592 Radial†	-1501.4	81.0	24.540	ug/L	24.540	ppb	12:26:12
3	Ni 231.604†	172.6	89.2	2.0466	ug/L	2.0466	ppb	12:27:51
3	P 214.914†	741.7	510.7	-7.0329	ug/L	-7.0329	ppb	12:27:51
3	Pb 220.353†	240.5	312.0	4.8421	ug/L	4.8421	ppb	12:27:51
3	S 181.975 Axial†	62.5	14.0	18.505	ug/L	18.505	ppb	12:27:51
3	Sb 206.836†	35.6	-1.3	5.2054	ug/L	5.2054	ppb	12:27:51
3	Se 196.026†	-2059.5	-2063.3	-36.500	ug/L	-36.500	ppb	12:27:51
3	Si 251.611†	-699.2	-1191.4	-35.013	ug/L	-35.013	ppb	12:27:31
3	Sn 189.927†	-20.5	-29.7	0.1133	ug/L	0.1133	ppb	12:27:51
3	Sr 421.552†	91.2	89.7	0.5413	ug/L	0.5413	ppb	12:26:12
3	Ti 334.940†	-1228.4	9.6	-0.0098	ug/L	-0.0098	ppb	12:27:31
3	Tl 190.801†	-48.5	-14.6	-4.5105	ug/L	-4.5105	ppb	12:27:51
3	U 409.014†	-476.8	2100.1	14.364	ug/L	14.364	ppb	12:27:31
3	V 292.402†	7338.9	8810.5	2.7077	ug/L	2.7077	ppb	12:27:31
3	Zn 213.857†	4894.2	4213.0	1.3067	ug/L	1.3067	ppb	12:27:51
3	SiO2†	-786.8	-1322.9	-83.424	ug/L	-83.424	ppb	12:28:07

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859047.7	98.978	%	0.3915				0.40%
Sc Radial	5517.3	99.0	%	2.93				2.96%
Y 371.029	716120.7	98.172	%	0.3938				0.40%
Y RADIAL	5981.0	99.04	%	2.585				2.61%
Ag 328.068†	-26327.0	1.7281	ug/L	3.79081	1.7281	ppb	3.79081	219.37%
Al 396.153Radial†	-9.1	-5.1393	ug/L	10.20005	-5.1393	ppb	10.20005	198.47%
As 188.979†	-197.8	-17.835	ug/L	3.7414	-17.835	ppb	3.7414	20.98%
B 249.677†	3026.6	14.197	ug/L	2.2019	14.197	ppb	2.2019	15.51%
Ba 233.527†	-1812.2	0.6504	ug/L	0.84043	0.6504	ppb	0.84043	129.22%
Be 313.107†	525.3	0.1886	ug/L	0.01607	0.1886	ppb	0.01607	8.52%
Ca 317.933Radial†	-9.5	-13.918	ug/L	2.6066	-13.918	ppb	2.6066	18.73%
Cd 226.502†	3722.4	0.7073	ug/L	1.02032	0.7073	ppb	1.02032	144.25%
Co 228.616†	291.8	0.0282	ug/L	0.40539	0.0282	ppb	0.40539	>999.9%
Cr 267.716†	-688.0	-0.3396	ug/L	0.47210	-0.3396	ppb	0.47210	139.01%
Cu 324.752†	-6332.9	0.9434	ug/L	0.48134	0.9434	ppb	0.48134	51.02%
Fe 238.204 Radial†	42313.8	379090	ug/L	11507.0	379090	ppb	11507.0	3.04%

K 766.490 Radial†	408.6	80.963	ug/L	11.8498	80.963	ppb	11.8498	14.64%
Mg 279.077 IEC†	11.3	56.108	ug/L	81.7938	56.108	ppb	81.7938	145.78%
Mn 257.610†	-36675.1	-1.0726	ug/L	1.19309	-1.0726	ppb	1.19309	111.24%
Mo 202.031†	-404.0	1.1828	ug/L	2.35610	1.1828	ppb	2.35610	199.20%
Na 589.592 Radial†	105.6	31.999	ug/L	10.9271	31.999	ppb	10.9271	34.15%
Ni 231.604†	91.9	2.1077	ug/L	0.05540	2.1077	ppb	0.05540	2.63%
P 214.914†	511.4	-17.236	ug/L	9.5241	-17.236	ppb	9.5241	55.26%
Pb 220.353†	313.0	3.8712	ug/L	2.15762	3.8712	ppb	2.15762	55.73%
S 181.975 Axial†	19.9	26.319	ug/L	7.0329	26.319	ppb	7.0329	26.72%
Sb 206.836†	-10.9	2.4235	ug/L	2.40924	2.4235	ppb	2.40924	99.41%
Se 196.026†	-2052.3	10.341	ug/L	40.8356	10.341	ppb	40.8356	394.88%
Si 251.611†	-1214.8	-35.742	ug/L	1.5862	-35.742	ppb	1.5862	4.44%
Sn 189.927†	-30.7	0.1342	ug/L	0.16017	0.1342	ppb	0.16017	119.34%
Sr 421.552†	89.9	0.5426	ug/L	0.13561	0.5426	ppb	0.13561	24.99%
Ti 334.940†	-18.1	-0.0539	ug/L	0.07156	-0.0539	ppb	0.07156	132.74%
Tl 190.801†	-12.9	-4.0198	ug/L	0.46438	-4.0198	ppb	0.46438	11.55%
U 409.014†	2142.4	13.914	ug/L	1.1168	13.914	ppb	1.1168	8.03%
V 292.402†	8810.8	0.7242	ug/L	1.71790	0.7242	ppb	1.71790	237.21%
Zn 213.857†	4190.6	-0.1517	ug/L	1.26412	-0.1517	ppb	1.26412	833.32%
SiO2†	-1248.3	-78.722	ug/L	7.5817	-78.722	ppb	7.5817	9.63%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:30:18
Data Type: Reprocessed on 12/11/2009 12:46:12

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874709.1	874709.1	100.78	%			12:33:28
1	Sc Radial	5563.9	5563.9	99.8	%			12:32:10
1	Y 371.029	722977.6	722977.6	99.112	%			12:33:28
1	Y RADIAL	6026.8	6026.8	99.79	%			12:32:10
1	Ag 328.068†	111391.2	110252.1	501.81	ug/L	501.81	ppb	12:33:33
1	Al 396.153Radial†	7064.0	7114.4	4878.3	ug/L	4878.3	ppb	12:32:10
1	As 188.979†	1272.7	1294.1	503.96	ug/L	503.96	ppb	12:33:53
1	B 249.677†	23228.1	23541.0	499.74	ug/L	499.74	ppb	12:33:33
1	Ba 233.527†	66804.5	66296.8	496.67	ug/L	496.67	ppb	12:33:33
1	Be 313.107†	1388852.3	1382728.6	497.47	ug/L	497.47	ppb	12:33:28
1	Ca 317.933Radial†	3365.3	3355.5	4897.4	ug/L	4897.4	ppb	12:32:30
1	Cd 226.502†	48309.9	48133.7	499.01	ug/L	499.01	ppb	12:33:33
1	Co 228.616†	26539.2	26406.5	498.22	ug/L	498.22	ppb	12:33:33
1	Cr 267.716†	47776.1	47319.0	496.12	ug/L	496.12	ppb	12:33:33
1	Cu 324.752†	177379.4	169244.0	491.85	ug/L	491.85	ppb	12:33:33
1	Fe 238.204 Radial†	578.8	570.1	5123.5	ug/L	5123.5	ppb	12:32:30
1	K 766.490 Radial†	32804.6	30134.8	5047.0	ug/L	5047.0	ppb	12:32:10
1	Mg 279.077 IEC†	152.2	150.6	5070.1	ug/L	5070.1	ppb	12:32:30
1	Mn 257.610†	473929.3	469728.5	498.25	ug/L	498.25	ppb	12:33:28
1	Mo 202.031†	7939.6	7859.5	500.52	ug/L	500.52	ppb	12:33:53
1	Na 589.592 Radial†	32525.7	34149.0	10349	ug/L	10349	ppb	12:32:10
1	Ni 231.604†	21887.3	21631.3	496.74	ug/L	496.74	ppb	12:33:33
1	P 214.914†	4726.0	4447.3	2408.7	ug/L	2408.7	ppb	12:33:53
1	Pb 220.353†	4384.0	4417.9	496.08	ug/L	496.08	ppb	12:33:53
1	S 181.975 Axial†	821.4	765.6	1010.5	ug/L	1010.5	ppb	12:33:53
1	Sb 206.836†	1643.6	1593.4	510.43	ug/L	510.43	ppb	12:33:53
1	Se 196.026†	863.8	883.9	515.28	ug/L	515.28	ppb	12:33:53
1	Si 251.611†	86522.9	85369.2	2530.7	ug/L	2530.7	ppb	12:33:33
1	Sn 189.927†	3148.6	3115.3	501.72	ug/L	501.72	ppb	12:33:53
1	Sr 421.552†	84421.0	84600.7	510.20	ug/L	510.20	ppb	12:32:10
1	Ti 334.940†	310984.2	309825.2	488.90	ug/L	488.90	ppb	12:33:33
1	Tl 190.801†	1743.6	1764.7	500.33	ug/L	500.33	ppb	12:33:53
1	U 409.014†	14618.2	17088.7	489.71	ug/L	489.71	ppb	12:33:33
1	V 292.402†	73236.0	74030.0	499.28	ug/L	499.28	ppb	12:33:33
1	Zn 213.857†	59285.0	58070.7	495.10	ug/L	495.10	ppb	12:33:33
1	SiO2†	86443.9	85248.1	5415.2	ug/L	5415.2	ppb	12:35:00
2	Sc 361.383	871455.0	871455.0	100.41	%			12:33:59
2	Sc Radial	5511.6	5511.6	98.8	%			12:32:36
2	Y 371.029	721889.3	721889.3	98.963	%			12:33:59
2	Y RADIAL	5973.0	5973.0	98.90	%			12:32:36
2	Ag 328.068†	111979.3	111250.5	506.37	ug/L	506.37	ppb	12:34:04
2	Al 396.153Radial†	7134.0	7252.3	4973.4	ug/L	4973.4	ppb	12:32:36
2	As 188.979†	1267.8	1293.9	503.94	ug/L	503.94	ppb	12:34:24
2	B 249.677†	23257.8	23656.5	502.18	ug/L	502.18	ppb	12:34:04
2	Ba 233.527†	67214.9	66953.0	501.59	ug/L	501.59	ppb	12:34:04
2	Be 313.107†	1382869.5	1381916.0	497.18	ug/L	497.18	ppb	12:33:59
2	Ca 317.933Radial†	3403.2	3425.9	5000.1	ug/L	5000.1	ppb	12:32:56
2	Cd 226.502†	48455.7	48457.8	502.37	ug/L	502.37	ppb	12:34:04
2	Co 228.616†	26689.7	26654.8	502.88	ug/L	502.88	ppb	12:34:04
2	Cr 267.716†	47985.5	47704.6	500.17	ug/L	500.17	ppb	12:34:04
2	Cu 324.752†	177894.6	170414.3	495.25	ug/L	495.25	ppb	12:34:04
2	Fe 238.204 Radial†	582.6	579.5	5207.7	ug/L	5207.7	ppb	12:32:56
2	K 766.490 Radial†	33027.5	30672.4	5137.1	ug/L	5137.1	ppb	12:32:36
2	Mg 279.077 IEC†	152.2	152.0	5118.7	ug/L	5118.7	ppb	12:32:56
2	Mn 257.610†	470267.0	467837.0	496.25	ug/L	496.25	ppb	12:33:59
2	Mo 202.031†	7879.3	7828.8	498.57	ug/L	498.57	ppb	12:34:24
2	Na 589.592 Radial†	32681.8	34616.4	10491	ug/L	10491	ppb	12:32:36
2	Ni 231.604†	21939.9	21764.8	499.81	ug/L	499.81	ppb	12:34:04

2	P 214.914†	4707.7	4446.5	2407.8	ug/L	2407.8 ppb	12:34:24
2	Pb 220.353†	4386.3	4436.5	498.16	ug/L	498.16 ppb	12:34:24
2	S 181.975 Axial†	812.0	759.3	1002.2	ug/L	1002.2 ppb	12:34:24
2	Sb 206.836†	1641.9	1597.9	511.72	ug/L	511.72 ppb	12:34:24
2	Se 196.026†	864.8	888.1	517.90	ug/L	517.90 ppb	12:34:24
2	Si 251.611†	86976.6	86141.7	2553.7	ug/L	2553.7 ppb	12:34:04
2	Sn 189.927†	3145.1	3123.5	503.05	ug/L	503.05 ppb	12:34:24
2	Sr 421.552†	84743.4	85730.0	517.01	ug/L	517.01 ppb	12:32:36
2	Ti 334.940†	312388.6	312376.2	492.93	ug/L	492.93 ppb	12:34:04
2	Tl 190.801†	1740.7	1768.2	501.32	ug/L	501.32 ppb	12:34:24
2	U 409.014†	14640.0	17164.5	491.87	ug/L	491.87 ppb	12:34:04
2	V 292.402†	73801.7	74864.7	504.79	ug/L	504.79 ppb	12:34:04
2	Zn 213.857†	59575.7	58579.9	499.45	ug/L	499.45 ppb	12:34:04
2	SiO2†	86190.0	85315.5	5419.5	ug/L	5419.5 ppb	12:35:06
3	Sc 361.383	868637.4	868637.4	100.08	%		12:34:30
3	Sc Radial	5484.0	5484.0	98.4	%		12:33:01
3	Y 371.029	718522.2	718522.2	98.501	%		12:34:30
3	Y RADIAL	5942.8	5942.8	98.40	%		12:33:01
3	Ag 328.068†	111539.4	111172.7	506.01	ug/L	506.01 ppb	12:34:35
3	Al 396.153Radial†	6980.7	7132.8	4890.9	ug/L	4890.9 ppb	12:33:01
3	As 188.979†	1269.6	1299.8	506.21	ug/L	506.21 ppb	12:34:55
3	B 249.677†	23148.6	23622.6	501.45	ug/L	501.45 ppb	12:34:35
3	Ba 233.527†	67128.5	67083.9	502.56	ug/L	502.56 ppb	12:34:35
3	Be 313.107†	1381302.3	1384817.6	498.22	ug/L	498.22 ppb	12:34:30
3	Ca 317.933Radial†	3378.4	3418.1	4988.7	ug/L	4988.7 ppb	12:33:21
3	Cd 226.502†	48625.2	48783.7	505.75	ug/L	505.75 ppb	12:34:35
3	Co 228.616†	26670.3	26721.6	504.16	ug/L	504.16 ppb	12:34:35
3	Cr 267.716†	47975.8	47849.9	501.69	ug/L	501.69 ppb	12:34:35
3	Cu 324.752†	176857.8	169953.1	493.91	ug/L	493.91 ppb	12:34:35
3	Fe 238.204 Radial†	575.7	575.5	5171.7	ug/L	5171.7 ppb	12:33:21
3	K 766.490 Radial†	32329.9	30131.5	5046.4	ug/L	5046.4 ppb	12:33:01
3	Mg 279.077 IEC†	157.8	158.5	5336.5	ug/L	5336.5 ppb	12:33:21
3	Mn 257.610†	470878.8	469967.5	498.50	ug/L	498.50 ppb	12:34:30
3	Mo 202.031†	7939.5	7914.5	504.02	ug/L	504.02 ppb	12:34:55
3	Na 589.592 Radial†	31935.8	34024.5	10311	ug/L	10311 ppb	12:33:01
3	Ni 231.604†	22062.0	21957.7	504.24	ug/L	504.24 ppb	12:34:35
3	P 214.914†	4718.4	4472.4	2422.5	ug/L	2422.5 ppb	12:34:55
3	Pb 220.353†	4401.9	4466.3	501.49	ug/L	501.49 ppb	12:34:55
3	S 181.975 Axial†	821.4	771.3	1018.1	ug/L	1018.1 ppb	12:34:55
3	Sb 206.836†	1653.3	1614.5	517.12	ug/L	517.12 ppb	12:34:55
3	Se 196.026†	868.2	894.3	521.29	ug/L	521.29 ppb	12:34:55
3	Si 251.611†	86644.6	86090.9	2552.1	ug/L	2552.1 ppb	12:34:35
3	Sn 189.927†	3156.0	3144.6	506.44	ug/L	506.44 ppb	12:34:55
3	Sr 421.552†	83013.6	84403.4	509.01	ug/L	509.01 ppb	12:33:01
3	Ti 334.940†	311422.2	312419.8	492.99	ug/L	492.99 ppb	12:34:35
3	Tl 190.801†	1738.0	1771.1	502.13	ug/L	502.13 ppb	12:34:55
3	U 409.014†	14591.5	17163.4	491.84	ug/L	491.84 ppb	12:34:35
3	V 292.402†	73520.9	74822.6	504.60	ug/L	504.60 ppb	12:34:35
3	Zn 213.857†	59543.0	58739.7	500.79	ug/L	500.79 ppb	12:34:35
3	SiO2†	86642.0	86045.6	5465.9	ug/L	5465.9 ppb	12:35:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871600.5	100.42	%	0.350				0.35%
Sc Radial	5519.8	99.0	%	0.73				0.74%
Y 371.029	721129.7	98.858	%	0.3184				0.32%
Y RADIAL	5980.8	99.03	%	0.704				0.71%
Ag 328.068†	110891.8	504.73	ug/L	2.535	504.73	ppb	2.535	0.50%
QC value within limits for Ag 328.068 Recovery = 100.95%								
Al 396.153Radial†	7166.5	4914.2	ug/L	51.66	4914.2	ppb	51.66	1.05%
QC value within limits for Al 396.153Radial Recovery = 98.28%								
As 188.979†	1296.0	504.71	ug/L	1.305	504.71	ppb	1.305	0.26%
QC value within limits for As 188.979 Recovery = 100.94%								
B 249.677†	23606.7	501.12	ug/L	1.254	501.12	ppb	1.254	0.25%
QC value within limits for B 249.677 Recovery = 100.22%								
Ba 233.527†	66777.9	500.27	ug/L	3.160	500.27	ppb	3.160	0.63%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 313.107†	1383154.1	497.62	ug/L	0.539	497.62	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 99.52%								

Ca 317.933Radial†	3399.8	4962.1 ug/L	56.32	4962.1 ppb	56.32	1.14%
QC value within limits for Ca 317.933Radial Recovery = 99.24%						
Cd 226.502†	48458.4	502.38 ug/L	3.371	502.38 ppb	3.371	0.67%
QC value within limits for Cd 226.502 Recovery = 100.48%						
Co 228.616†	26594.3	501.75 ug/L	3.128	501.75 ppb	3.128	0.62%
QC value within limits for Co 228.616 Recovery = 100.35%						
Cr 267.716†	47624.5	499.32 ug/L	2.877	499.32 ppb	2.877	0.58%
QC value within limits for Cr 267.716 Recovery = 99.86%						
Cu 324.752†	169870.4	493.67 ug/L	1.714	493.67 ppb	1.714	0.35%
QC value within limits for Cu 324.752 Recovery = 98.73%						
Fe 238.204 Radial†	575.0	5167.6 ug/L	42.23	5167.6 ppb	42.23	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 103.35%						
K 766.490 Radial†	30312.9	5076.8 ug/L	52.21	5076.8 ppb	52.21	1.03%
QC value within limits for K 766.490 Radial Recovery = 101.54%						
Mg 279.077 IEC†	153.7	5175.1 ug/L	141.91	5175.1 ppb	141.91	2.74%
QC value within limits for Mg 279.077 IEC Recovery = 103.50%						
Mn 257.610†	469177.7	497.67 ug/L	1.233	497.67 ppb	1.233	0.25%
QC value within limits for Mn 257.610 Recovery = 99.53%						
Mo 202.031†	7867.6	501.04 ug/L	2.761	501.04 ppb	2.761	0.55%
QC value within limits for Mo 202.031 Recovery = 100.21%						
Na 589.592 Radial†	34263.3	10384 ug/L	94.6	10384 ppb	94.6	0.91%
QC value within limits for Na 589.592 Radial Recovery = 103.84%						
Ni 231.604†	21784.6	500.26 ug/L	3.768	500.26 ppb	3.768	0.75%
QC value within limits for Ni 231.604 Recovery = 100.05%						
P 214.914†	4455.4	2413.0 ug/L	8.23	2413.0 ppb	8.23	0.34%
QC value within limits for P 214.914 Recovery = 96.52%						
Pb 220.353†	4440.2	498.58 ug/L	2.732	498.58 ppb	2.732	0.55%
QC value within limits for Pb 220.353 Recovery = 99.72%						
S 181.975 Axial†	765.4	1010.2 ug/L	7.95	1010.2 ppb	7.95	0.79%
QC value within limits for S 181.975 Axial Recovery = 101.02%						
Sb 206.836†	1601.9	513.09 ug/L	3.551	513.09 ppb	3.551	0.69%
QC value within limits for Sb 206.836 Recovery = 102.62%						
Se 196.026†	888.8	518.16 ug/L	3.012	518.16 ppb	3.012	0.58%
QC value within limits for Se 196.026 Recovery = 103.63%						
Si 251.611†	85867.3	2545.5 ug/L	12.85	2545.5 ppb	12.85	0.50%
QC value within limits for Si 251.611 Recovery = 101.82%						
Sn 189.927†	3127.8	503.74 ug/L	2.435	503.74 ppb	2.435	0.48%
QC value within limits for Sn 189.927 Recovery = 100.75%						
Sr 421.552†	84911.4	512.08 ug/L	4.317	512.08 ppb	4.317	0.84%
QC value within limits for Sr 421.552 Recovery = 102.42%						
Ti 334.940†	311540.4	491.61 ug/L	2.346	491.61 ppb	2.346	0.48%
QC value within limits for Ti 334.940 Recovery = 98.32%						
Tl 190.801†	1768.0	501.26 ug/L	0.902	501.26 ppb	0.902	0.18%
QC value within limits for Tl 190.801 Recovery = 100.25%						
U 409.014†	17138.9	491.14 ug/L	1.239	491.14 ppb	1.239	0.25%
QC value within limits for U 409.014 Recovery = 98.23%						
V 292.402†	74572.4	502.89 ug/L	3.128	502.89 ppb	3.128	0.62%
QC value within limits for V 292.402 Recovery = 100.58%						
Zn 213.857†	58463.4	498.45 ug/L	2.974	498.45 ppb	2.974	0.60%
QC value within limits for Zn 213.857 Recovery = 99.69%						
SiO2†	85536.4	5433.5 ug/L	28.13	5433.5 ppb	28.13	0.52%
QC value within limits for SiO2 Recovery = 101.61%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:37:20
Data Type: Reprocessed on 12/11/2009 12:46:13
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	847568.2	847568.2	97.656	%			12:40:30
1	Sc Radial	5624.4	5624.4	101	%			12:39:13
1	Y 371.029	713720.6	713720.6	97.843	%			12:40:30
1	Y RADIAL	6144.5	6144.5	101.7	%			12:39:13
1	Ag 328.068†	378.1	113.2	0.5160	ug/L	0.5160	ppb	12:40:30
1	Al 396.153Radial†	-18.5	16.9	11.642	ug/L	11.642	ppb	12:39:13
1	As 188.979†	-22.0	8.7	3.3641	ug/L	3.3641	ppb	12:40:50
1	B 249.677†	-169.4	319.7	6.8141	ug/L	6.8141	ppb	12:40:50
1	Ba 233.527†	-26.0	-15.5	-0.1172	ug/L	-0.1172	ppb	12:40:50
1	Be 313.107†	-4472.9	82.3	0.0296	ug/L	0.0296	ppb	12:40:30
1	Ca 317.933Radial†	13.7	-3.3	-4.8029	ug/L	-4.8029	ppb	12:39:33
1	Cd 226.502†	-181.9	12.7	0.1317	ug/L	0.1317	ppb	12:40:50
1	Co 228.616†	-85.9	-14.5	-0.2722	ug/L	-0.2722	ppb	12:40:50
1	Cr 267.716†	63.8	-20.7	-0.2157	ug/L	-0.2157	ppb	12:40:50
1	Cu 324.752†	6713.9	117.3	0.3406	ug/L	0.3406	ppb	12:40:30
1	Fe 238.204 Radial†	10.0	-0.0	-0.1211	ug/L	-0.1211	ppb	12:39:33
1	K 766.490 Radial†	3088.5	322.2	54.063	ug/L	54.063	ppb	12:39:13
1	Mg 279.077 IEC†	2.0	0.1	3.4114	ug/L	3.4114	ppb	12:39:33
1	Mn 257.610†	485.0	-23.5	-0.0250	ug/L	-0.0250	ppb	12:40:50
1	Mo 202.031†	26.8	9.0	0.5714	ug/L	0.5714	ppb	12:40:50
1	Na 589.592 Radial†	-1538.6	28.8	8.7370	ug/L	8.7370	ppb	12:39:13
1	Ni 231.604†	75.9	-8.2	-0.1882	ug/L	-0.1882	ppb	12:40:50
1	P 214.914†	227.6	-9.0	-5.0728	ug/L	-5.0728	ppb	12:40:50
1	Pb 220.353†	-58.9	7.7	0.8665	ug/L	0.8665	ppb	12:40:50
1	S 181.975 Axial†	54.1	6.0	7.9430	ug/L	7.9430	ppb	12:40:50
1	Sb 206.836†	38.0	1.5	0.4847	ug/L	0.4847	ppb	12:40:50
1	Se 196.026†	-33.4	-7.5	-4.1895	ug/L	-4.1895	ppb	12:40:50
1	Si 251.611†	528.4	59.3	1.7391	ug/L	1.7391	ppb	12:40:50
1	Sn 189.927†	7.8	-0.8	-0.1315	ug/L	-0.1315	ppb	12:40:50
1	Sr 421.552†	-51.0	-50.3	-0.3033	ug/L	-0.3033	ppb	12:39:13
1	Ti 334.940†	-1231.0	-4.3	-0.0037	ug/L	-0.0037	ppb	12:40:30
1	Tl 190.801†	-32.0	1.8	0.4998	ug/L	0.4998	ppb	12:40:50
1	U 409.014†	-2775.7	-258.4	-7.4274	ug/L	-7.4274	ppb	12:40:30
1	V 292.402†	-1414.2	-85.5	-0.5746	ug/L	-0.5746	ppb	12:40:30
1	Zn 213.857†	779.8	44.7	0.3849	ug/L	0.3849	ppb	12:40:50
1	SiO2†	535.2	23.5	1.4416	ug/L	1.4416	ppb	12:41:46
2	Sc 361.383	850980.6	850980.6	98.049	%			12:40:55
2	Sc Radial	5226.4	5226.4	93.7	%			12:39:38
2	Y 371.029	716574.3	716574.3	98.234	%			12:40:55
2	Y RADIAL	5690.7	5690.7	94.23	%			12:39:38
2	Ag 328.068†	348.6	81.5	0.3744	ug/L	0.3744	ppb	12:40:55
2	Al 396.153Radial†	-36.8	-3.9	-2.7236	ug/L	-2.7236	ppb	12:39:38
2	As 188.979†	-23.9	6.9	2.6793	ug/L	2.6793	ppb	12:41:15
2	B 249.677†	-177.9	311.8	6.6422	ug/L	6.6422	ppb	12:41:15
2	Ba 233.527†	-10.5	0.4	0.0019	ug/L	0.0019	ppb	12:41:15
2	Be 313.107†	-4484.6	88.8	0.0319	ug/L	0.0319	ppb	12:40:55
2	Ca 317.933Radial†	13.4	-2.6	-3.7376	ug/L	-3.7376	ppb	12:39:58
2	Cd 226.502†	-190.0	5.2	0.0527	ug/L	0.0527	ppb	12:41:15
2	Co 228.616†	-65.8	6.4	0.1208	ug/L	0.1208	ppb	12:41:15
2	Cr 267.716†	81.6	-2.8	-0.0290	ug/L	-0.0290	ppb	12:41:15
2	Cu 324.752†	6807.4	185.0	0.5381	ug/L	0.5381	ppb	12:40:55
2	Fe 238.204 Radial†	10.7	1.5	13.644	ug/L	13.644	ppb	12:39:58
2	K 766.490 Radial†	3279.1	758.8	127.31	ug/L	127.31	ppb	12:39:38
2	Mg 279.077 IEC†	2.5	0.7	24.525	ug/L	24.525	ppb	12:39:58
2	Mn 257.610†	508.2	-1.8	-0.0010	ug/L	-0.0010	ppb	12:41:15
2	Mo 202.031†	24.8	6.9	0.4417	ug/L	0.4417	ppb	12:41:15
2	Na 589.592 Radial†	-1499.3	-45.4	-13.764	ug/L	-13.764	ppb	12:39:38
2	Ni 231.604†	91.9	7.8	0.1795	ug/L	0.1795	ppb	12:41:15

2	P 214.914†	236.7	-0.7	-0.4870	ug/L	-0.4870 ppb	12:41:15
2	Pb 220.353†	-67.3	-0.7	-0.0795	ug/L	-0.0795 ppb	12:41:15
2	S 181.975 Axial†	47.6	-0.8	-1.0703	ug/L	-1.0703 ppb	12:41:15
2	Sb 206.836†	35.8	-0.9	-0.2940	ug/L	-0.2940 ppb	12:41:15
2	Se 196.026†	-15.0	11.5	6.5280	ug/L	6.5280 ppb	12:41:15
2	Si 251.611†	497.0	25.2	0.7024	ug/L	0.7024 ppb	12:41:15
2	Sn 189.927†	2.4	-6.3	-1.0202	ug/L	-1.0202 ppb	12:41:15
2	Sr 421.552†	-16.5	-17.4	-0.1049	ug/L	-0.1049 ppb	12:39:38
2	Ti 334.940†	-1223.0	8.9	0.0158	ug/L	0.0158 ppb	12:40:55
2	Tl 190.801†	-29.5	4.5	1.2547	ug/L	1.2547 ppb	12:41:15
2	U 409.014†	-2678.8	-148.1	-4.2607	ug/L	-4.2607 ppb	12:40:55
2	V 292.402†	-1420.0	-85.5	-0.5724	ug/L	-0.5724 ppb	12:40:55
2	Zn 213.857†	767.0	28.4	0.2403	ug/L	0.2403 ppb	12:41:15
2	SiO2†	543.1	29.4	1.7730	ug/L	1.7730 ppb	12:41:51
3	Sc 361.383	871743.4	871743.4	100.44	%		12:41:20
3	Sc Radial	5613.5	5613.5	101	%		12:40:03
3	Y 371.029	732016.1	732016.1	100.35	%		12:41:20
3	Y RADIAL	6098.6	6098.6	101.0	%		12:40:03
3	Ag 328.068†	321.4	45.9	0.2161	ug/L	0.2161 ppb	12:41:20
3	Al 396.153Radial†	-14.4	21.0	14.465	ug/L	14.465 ppb	12:40:03
3	As 188.979†	-28.8	2.6	0.9995	ug/L	0.9995 ppb	12:41:40
3	B 249.677†	-175.0	319.0	6.7956	ug/L	6.7956 ppb	12:41:40
3	Ba 233.527†	3.9	15.0	0.1125	ug/L	0.1125 ppb	12:41:40
3	Be 313.107†	-4613.2	69.7	0.0249	ug/L	0.0249 ppb	12:41:20
3	Ca 317.933Radial†	14.9	-2.1	-3.0652	ug/L	-3.0652 ppb	12:40:23
3	Cd 226.502†	-191.1	8.7	0.0878	ug/L	0.0878 ppb	12:41:40
3	Co 228.616†	-73.5	0.2	0.0045	ug/L	0.0045 ppb	12:41:40
3	Cr 267.716†	66.6	-19.7	-0.2057	ug/L	-0.2057 ppb	12:41:40
3	Cu 324.752†	6808.2	20.5	0.0606	ug/L	0.0606 ppb	12:41:20
3	Fe 238.204 Radial†	12.3	2.4	21.114	ug/L	21.114 ppb	12:40:23
3	K 766.490 Radial†	3159.7	398.9	66.917	ug/L	66.917 ppb	12:40:03
3	Mg 279.077 IEC†	3.2	1.3	43.185	ug/L	43.185 ppb	12:40:23
3	Mn 257.610†	509.9	-12.5	-0.0119	ug/L	-0.0119 ppb	12:41:40
3	Mo 202.031†	20.7	2.1	0.1378	ug/L	0.1378 ppb	12:41:40
3	Na 589.592 Radial†	-1474.7	89.3	27.067	ug/L	27.067 ppb	12:40:03
3	Ni 231.604†	71.5	-14.8	-0.3389	ug/L	-0.3389 ppb	12:41:40
3	P 214.914†	230.9	-12.2	-6.8179	ug/L	-6.8179 ppb	12:41:40
3	Pb 220.353†	-60.8	7.4	0.8329	ug/L	0.8329 ppb	12:41:40
3	S 181.975 Axial†	52.2	2.6	3.4239	ug/L	3.4239 ppb	12:41:40
3	Sb 206.836†	43.9	6.3	2.0264	ug/L	2.0264 ppb	12:41:40
3	Se 196.026†	-38.8	-11.8	-6.5690	ug/L	-6.5690 ppb	12:41:40
3	Si 251.611†	527.2	43.2	1.2583	ug/L	1.2583 ppb	12:41:40
3	Sn 189.927†	14.2	5.3	0.8595	ug/L	0.8595 ppb	12:41:40
3	Sr 421.552†	-37.7	-37.2	-0.2243	ug/L	-0.2243 ppb	12:40:03
3	Ti 334.940†	-1298.4	-36.4	-0.0565	ug/L	-0.0565 ppb	12:41:20
3	Tl 190.801†	-27.3	7.4	2.0781	ug/L	2.0781 ppb	12:41:40
3	U 409.014†	-2681.9	-86.1	-2.4777	ug/L	-2.4777 ppb	12:41:20
3	V 292.402†	-1391.1	-22.3	-0.1531	ug/L	-0.1531 ppb	12:41:20
3	Zn 213.857†	776.4	19.1	0.1631	ug/L	0.1631 ppb	12:41:40
3	SiO2†	530.9	4.1	0.2003	ug/L	0.2003 ppb	12:41:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856764.1	98.715	%	1.5075				1.53%
Sc Radial	5488.1	98.4	%	4.07				4.13%
Y 371.029	720770.3	98.809	%	1.3494				1.37%
Y RADIAL	5977.9	98.99	%	4.137				4.18%
Ag 328.068†	80.2	0.3689	ug/L	0.15003	0.3689	ppb	0.15003	40.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.3	7.7943	ug/L	9.21744	7.7943	ppb	9.21744	118.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.1	2.3476	ug/L	1.21668	2.3476	ppb	1.21668	51.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	316.8	6.7506	ug/L	0.09438	6.7506	ppb	0.09438	1.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0009	ug/L	0.11484	-0.0009	ppb	0.11484	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.3	0.0288	ug/L	0.00356	0.0288	ppb	0.00356	12.36%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -2.7     -3.8686 ug/L       0.87624     -3.8686 ppb        0.87624  22.65%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.9      0.0907 ug/L       0.03961      0.0907 ppb        0.03961  43.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.6     -0.0490 ug/L       0.20189     -0.0490 ppb        0.20189 412.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -14.4     -0.1501 ug/L       0.10498     -0.1501 ppb        0.10498  69.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               107.6      0.3131 ug/L       0.23993      0.3131 ppb        0.23993  76.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      11.546 ug/L       10.7720      11.546 ppb        10.7720  93.30%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         493.3      82.763 ug/L       39.1107      82.763 ppb        39.1107  47.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      23.707 ug/L       19.8994      23.707 ppb        19.8994  83.94%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -12.6     -0.0127 ug/L       0.01201     -0.0127 ppb        0.01201  94.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.0      0.3837 ug/L       0.22256      0.3837 ppb        0.22256  58.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         24.2      7.3467 ug/L      20.45092      7.3467 ppb       20.45092 278.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.0     -0.1159 ug/L       0.26666     -0.1159 ppb        0.26666 230.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.3     -4.1259 ug/L       3.26994     -4.1259 ppb        3.26994  79.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.8      0.5399 ug/L       0.53675      0.5399 ppb        0.53675  99.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.6      3.4322 ug/L       4.50668      3.4322 ppb        4.50668 131.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7390 ug/L       1.18090      0.7390 ppb        1.18090 159.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.6     -1.4101 ug/L       6.97685     -1.4101 ppb        6.97685 494.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                42.5      1.2332 ug/L       0.51879      1.2332 ppb        0.51879  42.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.6     -0.0974 ug/L       0.94032     -0.0974 ppb        0.94032 965.25%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -35.0     -0.2108 ug/L       0.09986     -0.2108 ppb        0.09986  47.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -10.6     -0.0148 ug/L       0.03737     -0.0148 ppb        0.03737 252.28%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.5      1.2775 ug/L       0.78940      1.2775 ppb        0.78940  61.79%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -164.2     -4.7219 ug/L       2.50685     -4.7219 ppb        2.50685  53.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -64.4     -0.4334 ug/L       0.24273     -0.4334 ppb        0.24273  56.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.7      0.2628 ug/L       0.11259      0.2628 ppb        0.11259  42.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      19.0      1.1383 ug/L       0.82903      1.1383 ppb        0.82903  72.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 13:02:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5959.4	5959.4	107	%			13:03:53
1	Y RADIAL	6433.9	6433.9	106.5	%			13:03:53
1	Al 396.153Radial†	6880.1	6472.5	4436.2	ug/L	4436.2	ppb	13:03:53
1	Ca 317.933Radial†	3391.0	3155.8	4605.9	ug/L	4605.9	ppb	13:04:13
1	Fe 238.204 Radial†	580.6	533.3	4793.9	ug/L	4793.9	ppb	13:04:13
1	K 766.490 Radial†	32130.2	27322.1	4575.4	ug/L	4575.4	ppb	13:03:53
1	Mg 279.077 IEC†	154.9	143.0	4815.3	ug/L	4815.3	ppb	13:04:13
1	Na 589.592 Radial†	31940.4	31438.2	9527.6	ug/L	9527.6	ppb	13:03:53
1	Sr 421.552†	82353.6	77051.8	464.68	ug/L	464.68	ppb	13:03:53
1	Sc 361.383	868304.2	868304.2	100.04	%			13:05:11
1	Y 371.029	718002.5	718002.5	98.430	%			13:05:11
1	Ag 328.068†	111566.0	111242.1	506.20	ug/L	506.20	ppb	13:05:16
1	As 188.979†	1272.4	1303.2	507.45	ug/L	507.45	ppb	13:05:36
1	B 249.677†	23032.5	23515.4	499.22	ug/L	499.22	ppb	13:05:16
1	Ba 233.527†	66943.7	66924.9	501.36	ug/L	501.36	ppb	13:05:16
1	Be 313.107†	1385036.2	1389079.4	499.76	ug/L	499.76	ppb	13:05:11
1	Cd 226.502†	48353.2	48530.5	503.16	ug/L	503.16	ppb	13:05:16
1	Co 228.616†	26620.9	26682.5	503.42	ug/L	503.42	ppb	13:05:16
1	Cr 267.716†	47781.5	47674.1	499.84	ug/L	499.84	ppb	13:05:16
1	Cu 324.752†	177423.8	170586.6	495.73	ug/L	495.73	ppb	13:05:16
1	Mn 257.610†	472521.3	471789.8	500.40	ug/L	500.40	ppb	13:05:11
1	Mo 202.031†	7896.7	7874.7	501.46	ug/L	501.46	ppb	13:05:36
1	Ni 231.604†	21927.6	21831.9	501.35	ug/L	501.35	ppb	13:05:16
1	P 214.914†	4708.4	4464.3	2417.8	ug/L	2417.8	ppb	13:05:36
1	Pb 220.353†	4390.4	4456.4	500.31	ug/L	500.31	ppb	13:05:36
1	S 181.975 Axial†	819.1	769.4	1015.6	ug/L	1015.6	ppb	13:05:36
1	Sb 206.836†	1637.0	1598.9	512.13	ug/L	512.13	ppb	13:05:36
1	Se 196.026†	868.5	894.9	520.39	ug/L	520.39	ppb	13:05:36
1	Si 251.611†	86739.6	86219.0	2556.1	ug/L	2556.1	ppb	13:05:16
1	Sn 189.927†	3142.3	3132.1	504.39	ug/L	504.39	ppb	13:05:36
1	Ti 334.940†	311670.3	312787.2	493.55	ug/L	493.55	ppb	13:05:16
1	Tl 190.801†	1745.1	1778.9	504.35	ug/L	504.35	ppb	13:05:36
1	U 409.014†	14952.8	17530.1	502.44	ug/L	502.44	ppb	13:05:16
1	V 292.402†	73449.6	74779.4	504.34	ug/L	504.34	ppb	13:05:16
1	Zn 213.857†	59419.1	58638.7	500.00	ug/L	500.00	ppb	13:05:16
1	SiO2†	86119.9	85556.9	5435.2	ug/L	5435.2	ppb	13:06:43
2	Sc Radial	5427.5	5427.5	97.3	%			13:04:18
2	Y RADIAL	5846.3	5846.3	96.81	%			13:04:18
2	Al 396.153Radial†	6976.9	7202.8	4939.2	ug/L	4939.2	ppb	13:04:18
2	Ca 317.933Radial†	3369.6	3444.7	5027.6	ug/L	5027.6	ppb	13:04:38
2	Fe 238.204 Radial†	578.6	584.5	5252.6	ug/L	5252.6	ppb	13:04:38
2	K 766.490 Radial†	32118.8	30256.5	5067.3	ug/L	5067.3	ppb	13:04:18
2	Mg 279.077 IEC†	152.0	154.3	5194.1	ug/L	5194.1	ppb	13:04:38
2	Na 589.592 Radial†	32122.3	34553.8	10472	ug/L	10472	ppb	13:04:18
2	Sr 421.552†	83110.6	85380.7	514.91	ug/L	514.91	ppb	13:04:18
2	Sc 361.383	868381.1	868381.1	100.05	%			13:05:42
2	Y 371.029	717381.1	717381.1	98.345	%			13:05:42
2	Ag 328.068†	112619.5	112285.1	511.08	ug/L	511.08	ppb	13:05:47
2	As 188.979†	1257.8	1288.4	501.86	ug/L	501.86	ppb	13:06:07
2	B 249.677†	23342.0	23822.7	505.69	ug/L	505.69	ppb	13:05:47
2	Ba 233.527†	67721.2	67696.0	507.15	ug/L	507.15	ppb	13:05:47
2	Be 313.107†	1385484.5	1389404.7	499.88	ug/L	499.88	ppb	13:05:42
2	Cd 226.502†	48926.1	49098.8	509.01	ug/L	509.01	ppb	13:05:47
2	Co 228.616†	26952.7	27011.7	509.61	ug/L	509.61	ppb	13:05:47
2	Cr 267.716†	48407.5	48295.6	506.36	ug/L	506.36	ppb	13:05:47
2	Cu 324.752†	178880.8	172027.1	499.94	ug/L	499.94	ppb	13:05:47
2	Mn 257.610†	474037.8	473263.6	502.01	ug/L	502.01	ppb	13:05:42
2	Mo 202.031†	7887.5	7864.8	500.86	ug/L	500.86	ppb	13:06:07
2	Ni 231.604†	22264.6	22166.7	509.04	ug/L	509.04	ppb	13:05:47

2	P 214.914†	4697.4	4452.8	2410.5	ug/L	2410.5 ppb	13:06:07
2	Pb 220.353†	4377.4	4443.0	498.88	ug/L	498.88 ppb	13:06:07
2	S 181.975 Axial†	810.4	760.6	1003.9	ug/L	1003.9 ppb	13:06:07
2	Sb 206.836†	1617.5	1579.2	505.76	ug/L	505.76 ppb	13:06:07
2	Se 196.026†	870.1	896.5	522.76	ug/L	522.76 ppb	13:06:07
2	Si 251.611†	87756.7	87227.9	2586.0	ug/L	2586.0 ppb	13:05:47
2	Sn 189.927†	3143.0	3132.5	504.51	ug/L	504.51 ppb	13:06:07
2	Ti 334.940†	314645.2	315732.8	498.22	ug/L	498.22 ppb	13:05:47
2	Tl 190.801†	1726.0	1759.6	498.92	ug/L	498.92 ppb	13:06:07
2	U 409.014†	14759.9	17336.0	496.78	ug/L	496.78 ppb	13:05:47
2	V 292.402†	74164.6	75487.6	508.96	ug/L	508.96 ppb	13:05:47
2	Zn 213.857†	60106.5	59320.4	505.75	ug/L	505.75 ppb	13:05:47
2	SiO2†	85989.9	85419.4	5426.1	ug/L	5426.1 ppb	13:06:48
3	Sc Radial	5434.7	5434.7	97.5	%		13:04:43
3	Y RADIAL	5906.3	5906.3	97.80	%		13:04:43
3	Al 396.153Radial†	6977.6	7194.0	4933.5	ug/L	4933.5 ppb	13:04:43
3	Ca 317.933Radial†	3381.9	3452.7	5039.3	ug/L	5039.3 ppb	13:05:03
3	Fe 238.204 Radial†	573.9	578.9	5202.1	ug/L	5202.1 ppb	13:05:03
3	K 766.490 Radial†	32398.3	30499.8	5108.1	ug/L	5108.1 ppb	13:04:43
3	Mg 279.077 IEC†	158.1	160.3	5397.0	ug/L	5397.0 ppb	13:05:03
3	Na 589.592 Radial†	32068.4	34455.0	10442	ug/L	10442 ppb	13:04:43
3	Sr 421.552†	83420.9	85586.6	516.15	ug/L	516.15 ppb	13:04:43
3	Sc 361.383	875985.1	875985.1	100.93	%		13:06:12
3	Y 371.029	723429.5	723429.5	99.174	%		13:06:12
3	Ag 328.068†	112126.0	110819.1	504.41	ug/L	504.41 ppb	13:06:18
3	As 188.979†	1252.0	1271.7	495.36	ug/L	495.36 ppb	13:06:38
3	B 249.677†	23210.9	23490.3	498.64	ug/L	498.64 ppb	13:06:18
3	Ba 233.527†	67343.9	66734.7	499.95	ug/L	499.95 ppb	13:06:18
3	Be 313.107†	1399333.1	1391105.5	500.48	ug/L	500.48 ppb	13:06:12
3	Cd 226.502†	48639.6	48390.5	501.67	ug/L	501.67 ppb	13:06:18
3	Co 228.616†	26704.2	26531.7	500.55	ug/L	500.55 ppb	13:06:18
3	Cr 267.716†	48090.7	47561.6	498.67	ug/L	498.67 ppb	13:06:18
3	Cu 324.752†	177858.7	169462.5	492.49	ug/L	492.49 ppb	13:06:18
3	Mn 257.610†	477719.8	472799.0	501.50	ug/L	501.50 ppb	13:06:12
3	Mo 202.031†	7834.2	7743.6	493.15	ug/L	493.15 ppb	13:06:38
3	Ni 231.604†	22095.0	21805.5	500.74	ug/L	500.74 ppb	13:06:18
3	P 214.914†	4653.0	4368.1	2364.3	ug/L	2364.3 ppb	13:06:38
3	Pb 220.353†	4359.3	4387.1	492.61	ug/L	492.61 ppb	13:06:38
3	S 181.975 Axial†	806.7	749.9	989.80	ug/L	989.80 ppb	13:06:38
3	Sb 206.836†	1607.0	1554.8	497.90	ug/L	497.90 ppb	13:06:38
3	Se 196.026†	864.5	883.3	515.16	ug/L	515.16 ppb	13:06:38
3	Si 251.611†	87004.1	85720.9	2541.3	ug/L	2541.3 ppb	13:06:18
3	Sn 189.927†	3112.4	3074.9	495.24	ug/L	495.24 ppb	13:06:38
3	Ti 334.940†	312623.4	310999.9	490.76	ug/L	490.76 ppb	13:06:18
3	Tl 190.801†	1725.5	1744.2	494.58	ug/L	494.58 ppb	13:06:38
3	U 409.014†	14588.3	17037.9	488.24	ug/L	488.24 ppb	13:06:18
3	V 292.402†	73779.3	74462.4	502.04	ug/L	502.04 ppb	13:06:18
3	Zn 213.857†	59657.7	58354.3	497.50	ug/L	497.50 ppb	13:06:18
3	SiO2†	86650.3	85327.7	5420.5	ug/L	5420.5 ppb	13:06:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	870890.1	100.34	%	0.508				0.51%
Sc Radial	5607.2	101	%	5.5				5.44%
Y 371.029	719604.4	98.649	%	0.4561				0.46%
Y RADIAL	6062.2	100.4	%	5.35				5.33%
Ag 328.068†	111448.8	507.23	ug/L	3.451	507.23	ppb	3.451	0.68%
QC value within limits for Ag 328.068 Recovery = 101.45%								
Al 396.153Radial†	6956.4	4769.6	ug/L	288.77	4769.6	ppb	288.77	6.05%
QC value within limits for Al 396.153Radial Recovery = 95.39%								
As 188.979†	1287.8	501.56	ug/L	6.050	501.56	ppb	6.050	1.21%
QC value within limits for As 188.979 Recovery = 100.31%								
B 249.677†	23609.5	501.19	ug/L	3.915	501.19	ppb	3.915	0.78%
QC value within limits for B 249.677 Recovery = 100.24%								
Ba 233.527†	67118.5	502.82	ug/L	3.816	502.82	ppb	3.816	0.76%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1389863.2	500.04	ug/L	0.386	500.04	ppb	0.386	0.08%
QC value within limits for Be 313.107 Recovery = 100.01%								
Ca 317.933Radial†	3351.1	4890.9	ug/L	246.91	4890.9	ppb	246.91	5.05%

```
   QC value within limits for Ca 317.933Radial  Recovery = 97.82%
Cd 226.502†            48673.3      504.61 ug/L         3.883      504.61 ppb          3.883   0.77%
   QC value within limits for Cd 226.502  Recovery = 100.92%
Co 228.616†            26741.9      504.53 ug/L         4.628      504.53 ppb          4.628   0.92%
   QC value within limits for Co 228.616  Recovery = 100.91%
Cr 267.716†            47843.8      501.62 ug/L         4.145      501.62 ppb          4.145   0.83%
   QC value within limits for Cr 267.716  Recovery = 100.32%
Cu 324.752†           170692.1      496.05 ug/L         3.736      496.05 ppb          3.736   0.75%
   QC value within limits for Cu 324.752  Recovery = 99.21%
Fe 238.204 Radial†       565.6      5082.9 ug/L        251.53      5082.9 ppb         251.53   4.95%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.66%
K 766.490 Radial†      29359.4      4916.9 ug/L        296.48      4916.9 ppb         296.48   6.03%
   QC value within limits for K 766.490 Radial  Recovery = 98.34%
Mg 279.077 IEC†          152.5      5135.5 ug/L        295.22      5135.5 ppb         295.22   5.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.71%
Mn 257.610†           472617.5      501.30 ug/L         0.819      501.30 ppb          0.819   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.26%
Mo 202.031†             7827.7      498.49 ug/L         4.638      498.49 ppb          4.638   0.93%
   QC value within limits for Mo 202.031  Recovery = 99.70%
Na 589.592 Radial†     33482.3       10147 ug/L         536.7       10147 ppb          536.7   5.29%
   QC value within limits for Na 589.592 Radial  Recovery = 101.47%
Ni 231.604†            21934.7      503.71 ug/L         4.624      503.71 ppb          4.624   0.92%
   QC value within limits for Ni 231.604  Recovery = 100.74%
P 214.914†              4428.4      2397.5 ug/L        29.00      2397.5 ppb         29.00   1.21%
   QC value within limits for P 214.914  Recovery = 95.90%
Pb 220.353†             4428.9      497.27 ug/L         4.095      497.27 ppb          4.095   0.82%
   QC value within limits for Pb 220.353  Recovery = 99.45%
S 181.975 Axial†         760.0      1003.1 ug/L        12.91      1003.1 ppb         12.91   1.29%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1577.6      505.26 ug/L         7.131      505.26 ppb          7.131   1.41%
   QC value within limits for Sb 206.836  Recovery = 101.05%
Se 196.026†              891.6      519.44 ug/L         3.887      519.44 ppb          3.887   0.75%
   QC value within limits for Se 196.026  Recovery = 103.89%
Si 251.611†            86389.3      2561.1 ug/L        22.79      2561.1 ppb         22.79   0.89%
   QC value within limits for Si 251.611  Recovery = 102.45%
Sn 189.927†             3113.2      501.38 ug/L         5.315      501.38 ppb          5.315   1.06%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†            82673.1      498.58 ug/L        29.365      498.58 ppb         29.365   5.89%
   QC value within limits for Sr 421.552  Recovery = 99.72%
Ti 334.940†           313173.3      494.18 ug/L         3.771      494.18 ppb          3.771   0.76%
   QC value within limits for Ti 334.940  Recovery = 98.84%
Tl 190.801†             1760.9      499.28 ug/L         4.891      499.28 ppb          4.891   0.98%
   QC value within limits for Tl 190.801  Recovery = 99.86%
U 409.014†             17301.3      495.82 ug/L         7.149      495.82 ppb          7.149   1.44%
   QC value within limits for U 409.014  Recovery = 99.16%
V 292.402†             74909.8      505.11 ug/L         3.526      505.11 ppb          3.526   0.70%
   QC value within limits for V 292.402  Recovery = 101.02%
Zn 213.857†            58771.1      501.08 ug/L         4.231      501.08 ppb          4.231   0.84%
   QC value within limits for Zn 213.857  Recovery = 100.22%
SiO2†                  85434.7      5427.3 ug/L          7.40      5427.3 ppb           7.40   0.14%
   QC value within limits for SiO2  Recovery = 101.49%
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:09:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5692.7	5692.7	102	%			13:10:56
1	Y RADIAL	6161.1	6161.1	102.0	%			13:10:56
1	Al 396.153Radial†	-4.7	30.7	21.091	ug/L	21.091	ppb	13:10:56
1	Ca 317.933Radial†	14.8	-2.4	-3.5139	ug/L	-3.5139	ppb	13:11:16
1	Fe 238.204 Radial†	10.4	0.3	2.2803	ug/L	2.2803	ppb	13:11:16
1	K 766.490 Radial†	3060.7	258.3	43.330	ug/L	43.330	ppb	13:10:56
1	Mg 279.077 IEC†	1.8	-0.2	-5.6613	ug/L	-5.6613	ppb	13:11:16
1	Na 589.592 Radial†	-1535.5	50.2	15.210	ug/L	15.210	ppb	13:10:56
1	Sr 421.552†	-33.8	-32.9	-0.1981	ug/L	-0.1981	ppb	13:10:56
1	Sc 361.383	871003.4	871003.4	100.36	%			13:12:13
1	Y 371.029	732360.3	732360.3	100.40	%			13:12:13
1	Ag 328.068†	372.0	96.6	0.4413	ug/L	0.4413	ppb	13:12:13
1	As 188.979†	-24.9	6.5	2.4896	ug/L	2.4896	ppb	13:12:33
1	B 249.677†	-214.7	279.3	5.9514	ug/L	5.9514	ppb	13:12:33
1	Ba 233.527†	-16.6	-5.5	-0.0405	ug/L	-0.0405	ppb	13:12:33
1	Be 313.107†	-4604.9	74.1	0.0264	ug/L	0.0264	ppb	13:12:13
1	Cd 226.502†	-198.1	1.5	0.0154	ug/L	0.0154	ppb	13:12:33
1	Co 228.616†	-80.2	-6.4	-0.1176	ug/L	-0.1176	ppb	13:12:33
1	Cr 267.716†	77.2	-9.1	-0.0937	ug/L	-0.0937	ppb	13:12:33
1	Cu 324.752†	6713.5	-68.1	-0.1977	ug/L	-0.1977	ppb	13:12:13
1	Mn 257.610†	529.1	7.1	0.0078	ug/L	0.0078	ppb	13:12:33
1	Mo 202.031†	38.8	20.2	1.2860	ug/L	1.2860	ppb	13:12:33
1	Ni 231.604†	88.0	1.7	0.0399	ug/L	0.0399	ppb	13:12:33
1	P 214.914†	228.1	-14.7	-8.1756	ug/L	-8.1756	ppb	13:12:33
1	Pb 220.353†	-68.0	0.3	0.0364	ug/L	0.0364	ppb	13:12:33
1	S 181.975 Axial†	50.5	0.9	1.1638	ug/L	1.1638	ppb	13:12:33
1	Sb 206.836†	41.3	3.8	1.2370	ug/L	1.2370	ppb	13:12:33
1	Se 196.026†	-22.9	4.0	2.2601	ug/L	2.2601	ppb	13:12:33
1	Si 251.611†	525.7	42.1	1.2169	ug/L	1.2169	ppb	13:12:33
1	Sn 189.927†	10.7	1.8	0.2965	ug/L	0.2965	ppb	13:12:33
1	Ti 334.940†	-1314.7	-53.8	-0.0836	ug/L	-0.0836	ppb	13:12:13
1	Tl 190.801†	-30.7	3.9	1.1088	ug/L	1.1088	ppb	13:12:33
1	U 409.014†	-2705.0	-111.4	-3.2038	ug/L	-3.2038	ppb	13:12:13
1	V 292.402†	-1342.9	24.5	0.1751	ug/L	0.1751	ppb	13:12:13
1	Zn 213.857†	767.1	10.5	0.0901	ug/L	0.0901	ppb	13:12:33
1	SiO2†	529.1	2.8	0.0943	ug/L	0.0943	ppb	13:13:29
2	Sc Radial	5700.2	5700.2	102	%			13:11:21
2	Y RADIAL	6213.4	6213.4	102.9	%			13:11:21
2	Al 396.153Radial†	-10.8	24.8	17.055	ug/L	17.055	ppb	13:11:21
2	Ca 317.933Radial†	15.8	-1.5	-2.1535	ug/L	-2.1535	ppb	13:11:41
2	Fe 238.204 Radial†	9.2	-0.9	-7.6609	ug/L	-7.6609	ppb	13:11:41
2	K 766.490 Radial†	2798.1	-2.5	-0.4269	ug/L	-0.4269	ppb	13:11:21
2	Mg 279.077 IEC†	2.7	0.7	24.628	ug/L	24.628	ppb	13:11:41
2	Na 589.592 Radial†	-1529.9	57.6	17.451	ug/L	17.451	ppb	13:11:21
2	Sr 421.552†	-26.4	-25.6	-0.1543	ug/L	-0.1543	ppb	13:11:21
2	Sc 361.383	872038.6	872038.6	100.48	%			13:12:38
2	Y 371.029	733622.4	733622.4	100.57	%			13:12:38
2	Ag 328.068†	320.6	45.1	0.2030	ug/L	0.2030	ppb	13:12:38
2	As 188.979†	-22.8	8.6	3.2992	ug/L	3.2992	ppb	13:12:58
2	B 249.677†	-230.0	264.3	5.6346	ug/L	5.6346	ppb	13:12:58
2	Ba 233.527†	8.3	19.3	0.1443	ug/L	0.1443	ppb	13:12:58
2	Be 313.107†	-4567.0	117.2	0.0416	ug/L	0.0416	ppb	13:12:38
2	Cd 226.502†	-203.4	-3.5	-0.0359	ug/L	-0.0359	ppb	13:12:58
2	Co 228.616†	-81.0	-7.2	-0.1340	ug/L	-0.1340	ppb	13:12:58
2	Cr 267.716†	99.3	12.8	0.1348	ug/L	0.1348	ppb	13:12:58
2	Cu 324.752†	6802.2	12.2	0.0349	ug/L	0.0349	ppb	13:12:38
2	Mn 257.610†	510.0	-12.5	-0.0145	ug/L	-0.0145	ppb	13:12:58
2	Mo 202.031†	24.2	5.6	0.3573	ug/L	0.3573	ppb	13:12:58
2	Ni 231.604†	86.6	0.3	0.0063	ug/L	0.0063	ppb	13:12:58

2	P 214.914†	234.4	-8.7	-4.8677	ug/L	-4.8677	ppb	13:12:58
2	Pb 220.353†	-70.9	-2.5	-0.2794	ug/L	-0.2794	ppb	13:12:58
2	S 181.975 Axial†	55.4	5.8	7.6105	ug/L	7.6105	ppb	13:12:58
2	Sb 206.836†	44.5	6.9	2.1847	ug/L	2.1847	ppb	13:12:58
2	Se 196.026†	-23.7	3.2	1.7875	ug/L	1.7875	ppb	13:12:58
2	Si 251.611†	536.1	51.8	1.5376	ug/L	1.5376	ppb	13:12:58
2	Sn 189.927†	8.9	0.0	0.0028	ug/L	0.0028	ppb	13:12:58
2	Ti 334.940†	-1408.1	-145.2	-0.2288	ug/L	-0.2288	ppb	13:12:38
2	Tl 190.801†	-33.2	1.6	0.4399	ug/L	0.4399	ppb	13:12:58
2	U 409.014†	-2635.5	-39.1	-1.1224	ug/L	-1.1224	ppb	13:12:38
2	V 292.402†	-1352.5	16.7	0.1158	ug/L	0.1158	ppb	13:12:38
2	Zn 213.857†	763.5	6.0	0.0514	ug/L	0.0514	ppb	13:12:58
2	SiO2†	500.5	-26.3	-1.6927	ug/L	-1.6927	ppb	13:13:34
3	Sc Radial	5765.8	5765.8	103	%			13:11:46
3	Y RADIAL	6256.3	6256.3	103.6	%			13:11:46
3	Al 396.153Radial†	-22.4	13.7	9.4289	ug/L	9.4289	ppb	13:11:46
3	Ca 317.933Radial†	17.9	0.5	0.6607	ug/L	0.6607	ppb	13:12:06
3	Fe 238.204 Radial†	12.7	2.4	21.299	ug/L	21.299	ppb	13:12:06
3	K 766.490 Radial†	2860.1	26.2	4.3980	ug/L	4.3980	ppb	13:11:46
3	Mg 279.077 IEC†	-2.3	-4.1	-138.65	ug/L	-138.65	ppb	13:12:06
3	Na 589.592 Radial†	-1539.2	65.6	19.891	ug/L	19.891	ppb	13:11:46
3	Sr 421.552†	-2.4	-2.1	-0.0129	ug/L	-0.0129	ppb	13:11:46
3	Sc 361.383	872446.7	872446.7	100.52	%			13:13:03
3	Y 371.029	732965.3	732965.3	100.48	%			13:13:03
3	Ag 328.068†	318.3	42.6	0.2025	ug/L	0.2025	ppb	13:13:03
3	As 188.979†	-23.2	8.2	3.1715	ug/L	3.1715	ppb	13:13:23
3	B 249.677†	-263.8	230.8	4.9152	ug/L	4.9152	ppb	13:13:23
3	Ba 233.527†	-9.1	2.0	0.0155	ug/L	0.0155	ppb	13:13:23
3	Be 313.107†	-4495.3	190.6	0.0686	ug/L	0.0686	ppb	13:13:03
3	Cd 226.502†	-207.0	-6.9	-0.0741	ug/L	-0.0741	ppb	13:13:23
3	Co 228.616†	-74.5	-0.7	-0.0138	ug/L	-0.0138	ppb	13:13:23
3	Cr 267.716†	100.0	13.5	0.1427	ug/L	0.1427	ppb	13:13:23
3	Cu 324.752†	6737.6	-55.3	-0.1594	ug/L	-0.1594	ppb	13:13:03
3	Mn 257.610†	521.7	-1.1	0.0035	ug/L	0.0035	ppb	13:13:23
3	Mo 202.031†	19.5	0.9	0.0618	ug/L	0.0618	ppb	13:13:23
3	Ni 231.604†	86.5	0.1	0.0035	ug/L	0.0035	ppb	13:13:23
3	P 214.914†	237.5	-5.8	-3.2263	ug/L	-3.2263	ppb	13:13:23
3	Pb 220.353†	-64.6	3.7	0.4120	ug/L	0.4120	ppb	13:13:23
3	S 181.975 Axial†	48.2	-1.4	-1.9171	ug/L	-1.9171	ppb	13:13:23
3	Sb 206.836†	42.0	4.4	1.3982	ug/L	1.3982	ppb	13:13:23
3	Se 196.026†	-31.6	-4.6	-2.5419	ug/L	-2.5419	ppb	13:13:23
3	Si 251.611†	507.6	23.2	0.6874	ug/L	0.6874	ppb	13:13:23
3	Sn 189.927†	10.5	1.6	0.2586	ug/L	0.2586	ppb	13:13:23
3	Ti 334.940†	-1214.3	48.3	0.0781	ug/L	0.0781	ppb	13:13:03
3	Tl 190.801†	-37.5	-2.7	-0.7700	ug/L	-0.7700	ppb	13:13:23
3	U 409.014†	-2746.4	-148.2	-4.2625	ug/L	-4.2625	ppb	13:13:03
3	V 292.402†	-1394.8	-24.8	-0.1789	ug/L	-0.1789	ppb	13:13:03
3	Zn 213.857†	770.0	12.1	0.1071	ug/L	0.1071	ppb	13:13:23
3	SiO2†	529.8	2.6	0.1564	ug/L	0.1564	ppb	13:13:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871829.6	100.45	%	0.086				0.09%
Sc Radial	5719.6	103	%	0.7				0.70%
Y 371.029	732982.7	100.48	%	0.087				0.09%
Y RADIAL	6210.3	102.8	%	0.79				0.77%
Ag 328.068†	61.4	0.2823	ug/L	0.13775	0.2823	ppb	0.13775	48.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.1	15.858	ug/L	5.9224	15.858	ppb	5.9224	37.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.7	2.9868	ug/L	0.43527	2.9868	ppb	0.43527	14.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	258.1	5.5004	ug/L	0.53096	5.5004	ppb	0.53096	9.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.3	0.0398	ug/L	0.09476	0.0398	ppb	0.09476	238.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.3	0.0456	ug/L	0.02136	0.0456	ppb	0.02136	46.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.1	-1.6689	ug/L	2.12910	-1.6689	ppb	2.12910	127.57%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -3.0     -0.0315 ug/L       0.04492     -0.0315 ppb        0.04492 142.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -4.8     -0.0885 ug/L       0.06521     -0.0885 ppb        0.06521  73.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.7      0.0612 ug/L       0.13427      0.0612 ppb        0.13427 219.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -37.1     -0.1074 ug/L       0.12473     -0.1074 ppb        0.12473 116.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      5.3062 ug/L      14.71531      5.3062 ppb       14.71531 277.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          94.0      15.767 ug/L       23.9916      15.767 ppb        23.9916 152.16%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -39.896 ug/L       86.8579     -39.896 ppb        86.8579 217.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -2.2     -0.0011 ug/L       0.01184     -0.0011 ppb        0.01184 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.9      0.5684 ug/L       0.63883      0.5684 ppb        0.63883 112.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.8      17.517 ug/L        2.3410      17.517 ppb         2.3410  13.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.7      0.0165 ug/L       0.02025      0.0165 ppb        0.02025 122.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -9.8     -5.4232 ug/L       2.52099     -5.4232 ppb        2.52099  46.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.5      0.0564 ug/L       0.34614      0.0564 ppb        0.34614 614.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      2.2858 ug/L       4.86186      2.2858 ppb        4.86186 212.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.0      1.6066 ug/L       0.50705      1.6066 ppb        0.50705  31.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5019 ug/L       2.64660      0.5019 ppb        2.64660 527.33%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                39.0      1.1473 ug/L       0.42932      1.1473 ppb        0.42932  37.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.1860 ug/L       0.15974      0.1860 ppb        0.15974  85.89%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -20.2     -0.1218 ug/L       0.09679     -0.1218 ppb        0.09679  79.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -50.2     -0.0781 ug/L       0.15353     -0.0781 ppb        0.15353 196.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      0.2596 ug/L       0.95230      0.2596 ppb        0.95230 366.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -99.5     -2.8629 ug/L       1.59755     -2.8629 ppb        1.59755  55.80%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  5.5      0.0373 ug/L       0.18959      0.0373 ppb        0.18959 507.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.5      0.0829 ug/L       0.02853      0.0829 ppb        0.02853  34.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -7.0     -0.4806 ug/L       1.05009     -0.4806 ppb        1.05009 218.47%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 12/11/2009 13:24:41 Plasma On Time: 12/7/2009 05:17:52
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\121109A.sif
Batch ID:
Results Data Set: 121109A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/11/2009 13:24:42
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5584.7	5584.7	100	%			13:26:34
1	Y RADIAL	6014.3	6014.3	99.59	%			13:26:34
1	Al 396.153Radial†	7102.9	7126.9	4887.1	ug/L	4887.1	ppb	13:26:34
1	Ca 317.933Radial†	3376.9	3354.7	4896.1	ug/L	4896.1	ppb	13:26:54
1	Fe 238.204 Radial†	568.9	558.1	5016.1	ug/L	5016.1	ppb	13:26:54
1	K 766.490 Radial†	32581.4	29790.0	4989.4	ug/L	4989.4	ppb	13:26:34
1	Mg 279.077 IEC†	152.0	149.9	5045.7	ug/L	5045.7	ppb	13:26:54
1	Na 589.592 Radial†	31162.5	32667.1	9900.1	ug/L	9900.1	ppb	13:26:34
1	Sr 421.552†	82919.5	82787.8	499.27	ug/L	499.27	ppb	13:26:34
1	Sc 361.383	878232.5	878232.5	101.19	%			13:27:52
1	Y 371.029	725784.5	725784.5	99.497	%			13:27:52
1	Ag 328.068†	111857.9	110269.9	501.86	ug/L	501.86	ppb	13:27:57
1	As 188.979†	1263.9	1280.3	498.62	ug/L	498.62	ppb	13:28:17
1	B 249.677†	23090.2	23312.2	494.88	ug/L	494.88	ppb	13:27:57
1	Ba 233.527†	67142.3	66364.6	497.17	ug/L	497.17	ppb	13:27:57
1	Be 313.107†	1378752.5	1367218.9	491.90	ug/L	491.90	ppb	13:27:52
1	Cd 226.502†	48440.8	48070.7	498.37	ug/L	498.37	ppb	13:27:57
1	Co 228.616†	26625.5	26386.1	497.83	ug/L	497.83	ppb	13:27:57
1	Cr 267.716†	47890.8	47242.1	495.31	ug/L	495.31	ppb	13:27:57
1	Cu 324.752†	177617.5	168773.2	490.47	ug/L	490.47	ppb	13:27:57
1	Mn 257.610†	470696.3	464646.9	492.85	ug/L	492.85	ppb	13:27:52
1	Mo 202.031†	7912.8	7801.4	496.81	ug/L	496.81	ppb	13:28:17
1	Ni 231.604†	22004.8	21660.4	497.41	ug/L	497.41	ppb	13:27:57
1	P 214.914†	4714.8	4417.4	2392.3	ug/L	2392.3	ppb	13:28:17
1	Pb 220.353†	4401.0	4417.3	496.00	ug/L	496.00	ppb	13:28:17
1	S 181.975 Axial†	812.3	753.3	994.31	ug/L	994.31	ppb	13:28:17
1	Sb 206.836†	1639.8	1583.2	507.06	ug/L	507.06	ppb	13:28:17
1	Se 196.026†	859.6	876.3	510.64	ug/L	510.64	ppb	13:28:17
1	Si 251.611†	86797.5	85296.1	2528.6	ug/L	2528.6	ppb	13:27:57
1	Sn 189.927†	3138.0	3092.3	498.02	ug/L	498.02	ppb	13:28:17
1	Ti 334.940†	311908.5	309500.7	488.38	ug/L	488.38	ppb	13:27:57
1	Tl 190.801†	1740.3	1754.4	497.41	ug/L	497.41	ppb	13:28:17
1	U 409.014†	14693.6	17105.0	490.19	ug/L	490.19	ppb	13:27:57
1	V 292.402†	73465.3	73965.0	498.81	ug/L	498.81	ppb	13:27:57
1	Zn 213.857†	59549.3	58095.9	495.33	ug/L	495.33	ppb	13:27:57
1	SiO2†	86417.3	84877.7	5391.7	ug/L	5391.7	ppb	13:29:24
2	Sc Radial	5537.3	5537.3	99.3	%			13:26:59
2	Y RADIAL	5945.8	5945.8	98.45	%			13:26:59
2	Al 396.153Radial†	7019.4	7103.4	4870.8	ug/L	4870.8	ppb	13:26:59
2	Ca 317.933Radial†	3402.1	3408.8	4975.1	ug/L	4975.1	ppb	13:27:19
2	Fe 238.204 Radial†	568.8	562.9	5058.6	ug/L	5058.6	ppb	13:27:19
2	K 766.490 Radial†	32189.2	29673.1	4969.8	ug/L	4969.8	ppb	13:26:59
2	Mg 279.077 IEC†	151.7	150.8	5077.8	ug/L	5077.8	ppb	13:27:19
2	Na 589.592 Radial†	30602.9	32369.4	9809.8	ug/L	9809.8	ppb	13:26:59
2	Sr 421.552†	81702.7	82269.8	496.14	ug/L	496.14	ppb	13:26:59
2	Sc 361.383	873262.5	873262.5	100.62	%			13:28:23
2	Y 371.029	721749.2	721749.2	98.943	%			13:28:23

2	Ag 328.068†	110843.8	109891.1	500.15 ug/L	500.15 ppb	13:28:28
2	As 188.979†	1267.3	1290.8	502.68 ug/L	502.68 ppb	13:28:48
2	B 249.677†	22889.2	23242.3	493.38 ug/L	493.38 ppb	13:28:28
2	Ba 233.527†	66633.3	66236.5	496.21 ug/L	496.21 ppb	13:28:28
2	Be 313.107†	1370874.5	1367143.8	491.87 ug/L	491.87 ppb	13:28:23
2	Cd 226.502†	47989.6	47894.7	496.54 ug/L	496.54 ppb	13:28:28
2	Co 228.616†	26424.1	26335.8	496.89 ug/L	496.89 ppb	13:28:28
2	Cr 267.716†	47465.9	47089.3	493.71 ug/L	493.71 ppb	13:28:28
2	Cu 324.752†	175973.8	168138.5	488.63 ug/L	488.63 ppb	13:28:28
2	Mn 257.610†	468396.0	465008.1	493.24 ug/L	493.24 ppb	13:28:23
2	Mo 202.031†	7908.5	7841.6	499.37 ug/L	499.37 ppb	13:28:48
2	Ni 231.604†	21806.3	21586.8	495.72 ug/L	495.72 ppb	13:28:28
2	P 214.914†	4678.0	4407.3	2387.0 ug/L	2387.0 ppb	13:28:48
2	Pb 220.353†	4399.3	4440.3	498.59 ug/L	498.59 ppb	13:28:48
2	S 181.975 Axial†	813.6	759.2	1002.0 ug/L	1002.0 ppb	13:28:48
2	Sb 206.836†	1628.5	1581.1	506.57 ug/L	506.57 ppb	13:28:48
2	Se 196.026†	863.9	885.4	515.93 ug/L	515.93 ppb	13:28:48
2	Si 251.611†	85949.8	84941.9	2518.0 ug/L	2518.0 ppb	13:28:28
2	Sn 189.927†	3136.6	3108.5	500.64 ug/L	500.64 ppb	13:28:48
2	Ti 334.940†	309155.8	308519.2	486.84 ug/L	486.84 ppb	13:28:28
2	Tl 190.801†	1750.7	1774.5	503.08 ug/L	503.08 ppb	13:28:48
2	U 409.014†	14485.8	16981.1	486.63 ug/L	486.63 ppb	13:28:28
2	V 292.402†	72767.0	73684.2	496.97 ug/L	496.97 ppb	13:28:28
2	Zn 213.857†	58962.6	57847.8	493.20 ug/L	493.20 ppb	13:28:28
2	SiO2†	86883.4	85826.9	5452.2 ug/L	5452.2 ppb	13:29:29
3	Sc Radial	5439.0	5439.0	97.5 %		13:27:24
3	Y RADIAL	5906.3	5906.3	97.80 %		13:27:24
3	Al 396.153Radial†	6973.6	7184.2	4926.7 ug/L	4926.7 ppb	13:27:24
3	Ca 317.933Radial†	3371.3	3439.1	5019.4 ug/L	5019.4 ppb	13:27:45
3	Fe 238.204 Radial†	566.0	570.3	5124.8 ug/L	5124.8 ppb	13:27:45
3	K 766.490 Radial†	31991.7	30056.4	5034.1 ug/L	5034.1 ppb	13:27:24
3	Mg 279.077 IEC†	154.5	156.5	5268.9 ug/L	5268.9 ppb	13:27:45
3	Na 589.592 Radial†	30174.7	32487.3	9845.6 ug/L	9845.6 ppb	13:27:24
3	Sr 421.552†	81012.2	83049.0	500.84 ug/L	500.84 ppb	13:27:24
3	Sc 361.383	881292.7	881292.7	101.54 %		13:28:54
3	Y 371.029	728794.8	728794.8	99.909 %		13:28:54
3	Ag 328.068†	110410.6	108460.7	493.69 ug/L	493.69 ppb	13:28:59
3	As 188.979†	1262.4	1274.5	496.33 ug/L	496.33 ppb	13:29:19
3	B 249.677†	22786.5	22933.8	486.82 ug/L	486.82 ppb	13:28:59
3	Ba 233.527†	66290.8	65295.7	489.17 ug/L	489.17 ppb	13:28:59
3	Be 313.107†	1382061.9	1365746.6	491.35 ug/L	491.35 ppb	13:28:54
3	Cd 226.502†	47733.3	47207.7	489.40 ug/L	489.40 ppb	13:28:59
3	Co 228.616†	26230.9	25906.1	488.78 ug/L	488.78 ppb	13:28:59
3	Cr 267.716†	47330.2	46525.8	487.81 ug/L	487.81 ppb	13:28:59
3	Cu 324.752†	175270.6	165852.4	482.00 ug/L	482.00 ppb	13:28:59
3	Mn 257.610†	471375.3	463700.2	491.86 ug/L	491.86 ppb	13:28:54
3	Mo 202.031†	7906.2	7767.7	494.68 ug/L	494.68 ppb	13:29:19
3	Ni 231.604†	21724.0	21308.4	489.33 ug/L	489.33 ppb	13:28:59
3	P 214.914†	4720.5	4406.8	2387.7 ug/L	2387.7 ppb	13:29:19
3	Pb 220.353†	4388.4	4389.8	492.93 ug/L	492.93 ppb	13:29:19
3	S 181.975 Axial†	809.3	747.6	986.80 ug/L	986.80 ppb	13:29:19
3	Sb 206.836†	1633.7	1571.6	503.51 ug/L	503.51 ppb	13:29:19
3	Se 196.026†	864.4	878.0	511.97 ug/L	511.97 ppb	13:29:19
3	Si 251.611†	85631.2	83849.7	2485.6 ug/L	2485.6 ppb	13:28:59
3	Sn 189.927†	3134.2	3077.8	495.70 ug/L	495.70 ppb	13:29:19
3	Ti 334.940†	307876.4	304459.5	480.44 ug/L	480.44 ppb	13:28:59
3	Tl 190.801†	1732.7	1741.0	493.62 ug/L	493.62 ppb	13:29:19
3	U 409.014†	14327.8	16694.3	478.39 ug/L	478.39 ppb	13:28:59
3	V 292.402†	72659.1	72919.0	491.79 ug/L	491.79 ppb	13:28:59
3	Zn 213.857†	58706.5	57061.6	486.48 ug/L	486.48 ppb	13:28:59
3	SiO2†	86081.4	84250.4	5351.8 ug/L	5351.8 ppb	13:29:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	877595.9	101.12	%	0.467				0.46%
Sc Radial	5520.3	99.0	%	1.33				1.35%
Y 371.029	725442.8	99.450	%	0.4846				0.49%
Y RADIAL	5955.5	98.61	%	0.905				0.92%
Ag 328.068†	109540.5	498.57	ug/L	4.309	498.57	ppb	4.309	0.86%

```
   QC value within limits for Ag 328.068  Recovery = 99.71%
Al 396.153Radial†       7138.2      4894.9 ug/L         28.74      4894.9 ppb          28.74   0.59%
   QC value within limits for Al 396.153Radial  Recovery = 97.90%
As 188.979†             1281.9      499.21 ug/L         3.213      499.21 ppb          3.213   0.64%
   QC value within limits for As 188.979  Recovery = 99.84%
B 249.677†             23162.8      491.69 ug/L         4.285      491.69 ppb          4.285   0.87%
   QC value within limits for B 249.677  Recovery = 98.34%
Ba 233.527†            65965.6      494.18 ug/L         4.367      494.18 ppb          4.367   0.88%
   QC value within limits for Ba 233.527  Recovery = 98.84%
Be 313.107†          1366703.1      491.70 ug/L         0.306      491.70 ppb          0.306   0.06%
   QC value within limits for Be 313.107  Recovery = 98.34%
Ca 317.933Radial†       3400.9      4963.5 ug/L         62.44      4963.5 ppb          62.44   1.26%
   QC value within limits for Ca 317.933Radial  Recovery = 99.27%
Cd 226.502†            47724.4      494.77 ug/L         4.737      494.77 ppb          4.737   0.96%
   QC value within limits for Cd 226.502  Recovery = 98.95%
Co 228.616†            26209.4      494.50 ug/L         4.972      494.50 ppb          4.972   1.01%
   QC value within limits for Co 228.616  Recovery = 98.90%
Cr 267.716†            46952.4      492.28 ug/L         3.953      492.28 ppb          3.953   0.80%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           167588.0      487.03 ug/L         4.459      487.03 ppb          4.459   0.92%
   QC value within limits for Cu 324.752  Recovery = 97.41%
Fe 238.204 Radial†       563.8      5066.5 ug/L         54.81      5066.5 ppb          54.81   1.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.33%
K 766.490 Radial†      29839.8      4997.7 ug/L         32.96      4997.7 ppb          32.96   0.66%
   QC value within limits for K 766.490 Radial  Recovery = 99.95%
Mg 279.077 IEC†          152.4      5130.8 ug/L        120.71      5130.8 ppb         120.71   2.35%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.62%
Mn 257.610†           464451.7      492.65 ug/L         0.714      492.65 ppb          0.714   0.14%
   QC value within limits for Mn 257.610  Recovery = 98.53%
Mo 202.031†             7803.6      496.95 ug/L         2.352      496.95 ppb          2.352   0.47%
   QC value within limits for Mo 202.031  Recovery = 99.39%
Na 589.592 Radial†     32507.9      9851.8 ug/L         45.43      9851.8 ppb          45.43   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.52%
Ni 231.604†            21518.5      494.15 ug/L         4.264      494.15 ppb          4.264   0.86%
   QC value within limits for Ni 231.604  Recovery = 98.83%
P 214.914†              4410.5      2389.0 ug/L          2.92      2389.0 ppb           2.92   0.12%
   QC value within limits for P 214.914  Recovery = 95.56%
Pb 220.353†             4415.8      495.84 ug/L         2.831      495.84 ppb          2.831   0.57%
   QC value within limits for Pb 220.353  Recovery = 99.17%
S 181.975 Axial†         753.4      994.38 ug/L         7.617      994.38 ppb          7.617   0.77%
   QC value within limits for S 181.975 Axial  Recovery = 99.44%
Sb 206.836†             1578.6      505.71 ug/L         1.927      505.71 ppb          1.927   0.38%
   QC value within limits for Sb 206.836  Recovery = 101.14%
Se 196.026†              879.9      512.85 ug/L         2.754      512.85 ppb          2.754   0.54%
   QC value within limits for Se 196.026  Recovery = 102.57%
Si 251.611†            84695.9      2510.7 ug/L         22.43      2510.7 ppb          22.43   0.89%
   QC value within limits for Si 251.611  Recovery = 100.43%
Sn 189.927†             3092.9      498.12 ug/L         2.471      498.12 ppb          2.471   0.50%
   QC value within limits for Sn 189.927  Recovery = 99.62%
Sr 421.552†            82702.2      498.75 ug/L         2.392      498.75 ppb          2.392   0.48%
   QC value within limits for Sr 421.552  Recovery = 99.75%
Ti 334.940†           307493.1      485.22 ug/L         4.212      485.22 ppb          4.212   0.87%
   QC value within limits for Ti 334.940  Recovery = 97.04%
Tl 190.801†             1756.6      498.04 ug/L         4.758      498.04 ppb          4.758   0.96%
   QC value within limits for Tl 190.801  Recovery = 99.61%
U 409.014†             16926.8      485.07 ug/L         6.055      485.07 ppb          6.055   1.25%
   QC value within limits for U 409.014  Recovery = 97.01%
V 292.402†             73522.8      495.86 ug/L         3.636      495.86 ppb          3.636   0.73%
   QC value within limits for V 292.402  Recovery = 99.17%
Zn 213.857†            57668.4      491.67 ug/L         4.622      491.67 ppb          4.622   0.94%
   QC value within limits for Zn 213.857  Recovery = 98.33%
SiO2†                  84985.0      5398.6 ug/L         50.58      5398.6 ppb          50.58   0.94%
   QC value within limits for SiO2  Recovery = 100.96%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:31:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5346.3	5346.3	95.9	%			13:33:38
1	Y RADIAL	5800.0	5800.0	96.04	%			13:33:38
1	Al 396.153Radial†	-26.7	7.5	5.1179	ug/L	5.1179	ppb	13:33:38
1	Ca 317.933Radial†	19.3	3.3	4.7457	ug/L	4.7457	ppb	13:33:58
1	Fe 238.204 Radial†	9.2	-0.3	-2.2396	ug/L	-2.2396	ppb	13:33:58
1	K 766.490 Radial†	2879.5	263.6	44.222	ug/L	44.222	ppb	13:33:38
1	Mg 279.077 IEC†	1.5	-0.4	-12.037	ug/L	-12.037	ppb	13:33:58
1	Na 589.592 Radial†	-1520.7	-31.8	-9.6462	ug/L	-9.6462	ppb	13:33:38
1	Sr 421.552†	-22.5	-23.3	-0.1405	ug/L	-0.1405	ppb	13:33:38
1	Sc 361.383	868207.5	868207.5	100.03	%			13:34:54
1	Y 371.029	729184.9	729184.9	99.963	%			13:34:54
1	Ag 328.068†	356.4	82.3	0.3741	ug/L	0.3741	ppb	13:34:54
1	As 188.979†	-26.8	4.5	1.7496	ug/L	1.7496	ppb	13:35:14
1	B 249.677†	-239.3	254.0	5.4127	ug/L	5.4127	ppb	13:35:14
1	Ba 233.527†	-19.8	-8.7	-0.0655	ug/L	-0.0655	ppb	13:35:14
1	Be 313.107†	-4601.7	62.5	0.0224	ug/L	0.0224	ppb	13:34:54
1	Cd 226.502†	-195.7	3.3	0.0341	ug/L	0.0341	ppb	13:35:14
1	Co 228.616†	-69.4	4.0	0.0772	ug/L	0.0772	ppb	13:35:14
1	Cr 267.716†	88.2	2.2	0.0235	ug/L	0.0235	ppb	13:35:14
1	Cu 324.752†	6735.0	-25.1	-0.0732	ug/L	-0.0732	ppb	13:34:54
1	Mn 257.610†	555.9	35.6	0.0377	ug/L	0.0377	ppb	13:35:14
1	Mo 202.031†	23.7	5.3	0.3364	ug/L	0.3364	ppb	13:35:14
1	Ni 231.604†	89.9	3.9	0.0895	ug/L	0.0895	ppb	13:35:14
1	P 214.914†	223.3	-18.8	-10.470	ug/L	-10.470	ppb	13:35:14
1	Pb 220.353†	-67.2	0.8	0.0948	ug/L	0.0948	ppb	13:35:14
1	S 181.975 Axial†	50.8	1.4	1.8759	ug/L	1.8759	ppb	13:35:14
1	Sb 206.836†	42.7	5.3	1.6775	ug/L	1.6775	ppb	13:35:14
1	Se 196.026†	-33.0	-6.2	-3.5157	ug/L	-3.5157	ppb	13:35:14
1	Si 251.611†	519.5	37.5	1.0981	ug/L	1.0981	ppb	13:35:14
1	Sn 189.927†	8.0	-0.9	-0.1417	ug/L	-0.1417	ppb	13:35:14
1	Ti 334.940†	-1257.3	-0.6	0.0009	ug/L	0.0009	ppb	13:34:54
1	Tl 190.801†	-35.7	-1.1	-0.3026	ug/L	-0.3026	ppb	13:35:14
1	U 409.014†	-2711.5	-126.6	-3.6397	ug/L	-3.6397	ppb	13:34:54
1	V 292.402†	-1375.0	-11.8	-0.0809	ug/L	-0.0809	ppb	13:34:54
1	Zn 213.857†	772.7	18.6	0.1597	ug/L	0.1597	ppb	13:35:14
1	SiO2†	539.4	14.8	0.8991	ug/L	0.8991	ppb	13:36:10
2	Sc Radial	5699.5	5699.5	102	%			13:34:03
2	Y RADIAL	6171.4	6171.4	102.2	%			13:34:03
2	Al 396.153Radial†	-32.7	3.3	2.2838	ug/L	2.2838	ppb	13:34:03
2	Ca 317.933Radial†	20.7	3.4	4.9526	ug/L	4.9526	ppb	13:34:23
2	Fe 238.204 Radial†	8.7	-1.4	-12.324	ug/L	-12.324	ppb	13:34:23
2	K 766.490 Radial†	2859.8	58.2	9.7571	ug/L	9.7571	ppb	13:34:03
2	Mg 279.077 IEC†	2.8	0.8	26.593	ug/L	26.593	ppb	13:34:23
2	Na 589.592 Radial†	-1537.4	50.1	15.173	ug/L	15.173	ppb	13:34:03
2	Sr 421.552†	-12.6	-12.1	-0.0728	ug/L	-0.0728	ppb	13:34:03
2	Sc 361.383	867538.8	867538.8	99.957	%			13:35:20
2	Y 371.029	729479.4	729479.4	100.00	%			13:35:20
2	Ag 328.068†	313.4	39.5	0.1791	ug/L	0.1791	ppb	13:35:20
2	As 188.979†	-30.6	0.7	0.2618	ug/L	0.2618	ppb	13:35:40
2	B 249.677†	-212.3	280.8	5.9857	ug/L	5.9857	ppb	13:35:40
2	Ba 233.527†	-14.4	-3.4	-0.0247	ug/L	-0.0247	ppb	13:35:40
2	Be 313.107†	-4514.4	146.2	0.0526	ug/L	0.0526	ppb	13:35:20
2	Cd 226.502†	-208.2	-9.4	-0.0963	ug/L	-0.0963	ppb	13:35:40
2	Co 228.616†	-78.2	-4.8	-0.0888	ug/L	-0.0888	ppb	13:35:40
2	Cr 267.716†	101.7	15.7	0.1661	ug/L	0.1661	ppb	13:35:40
2	Cu 324.752†	6718.7	-36.3	-0.1060	ug/L	-0.1060	ppb	13:35:20
2	Mn 257.610†	509.6	-10.3	-0.0127	ug/L	-0.0127	ppb	13:35:40
2	Mo 202.031†	25.6	7.2	0.4577	ug/L	0.4577	ppb	13:35:40
2	Ni 231.604†	82.4	-3.5	-0.0809	ug/L	-0.0809	ppb	13:35:40

2	P 214.914†	232.5	-9.4	-5.2314 ug/L	-5.2314 ppb	13:35:40
2	Pb 220.353†	-83.3	-15.4	-1.7197 ug/L	-1.7197 ppb	13:35:40
2	S 181.975 Axial†	47.5	-1.9	-2.5385 ug/L	-2.5385 ppb	13:35:40
2	Sb 206.836†	36.1	-1.2	-0.3980 ug/L	-0.3980 ppb	13:35:40
2	Se 196.026†	-29.6	-2.8	-1.5950 ug/L	-1.5950 ppb	13:35:40
2	Si 251.611†	507.2	25.7	0.7571 ug/L	0.7571 ppb	13:35:40
2	Sn 189.927†	4.7	-4.1	-0.6626 ug/L	-0.6626 ppb	13:35:40
2	Ti 334.940†	-1234.4	21.3	0.0353 ug/L	0.0353 ppb	13:35:20
2	Tl 190.801†	-37.6	-3.1	-0.8684 ug/L	-0.8684 ppb	13:35:40
2	U 409.014†	-2705.5	-122.7	-3.5258 ug/L	-3.5258 ppb	13:35:20
2	V 292.402†	-1311.3	50.9	0.3408 ug/L	0.3408 ppb	13:35:20
2	Zn 213.857†	776.7	23.2	0.2006 ug/L	0.2006 ppb	13:35:40
2	SiO2†	527.5	3.3	0.1901 ug/L	0.1901 ppb	13:36:15
3	Sc Radial	5663.2	5663.2	102 %		13:34:28
3	Y RADIAL	6182.8	6182.8	102.4 %		13:34:28
3	Al 396.153Radial†	-31.4	4.4	3.0200 ug/L	3.0200 ppb	13:34:28
3	Ca 317.933Radial†	19.3	2.1	3.1081 ug/L	3.1081 ppb	13:34:48
3	Fe 238.204 Radial†	6.2	-3.8	-33.863 ug/L	-33.863 ppb	13:34:48
3	K 766.490 Radial†	2949.9	164.8	27.646 ug/L	27.646 ppb	13:34:28
3	Mg 279.077 IEC†	3.9	2.0	66.482 ug/L	66.482 ppb	13:34:48
3	Na 589.592 Radial†	-1531.6	46.1	13.984 ug/L	13.984 ppb	13:34:28
3	Sr 421.552†	-45.2	-44.3	-0.2672 ug/L	-0.2672 ppb	13:34:28
3	Sc 361.383	864816.8	864816.8	99.643 %		13:35:45
3	Y 371.029	727738.8	727738.8	99.764 %		13:35:45
3	Ag 328.068†	314.2	41.3	0.1754 ug/L	0.1754 ppb	13:35:45
3	As 188.979†	-28.2	3.0	1.1584 ug/L	1.1584 ppb	13:36:05
3	B 249.677†	-230.7	261.7	5.5816 ug/L	5.5816 ppb	13:36:05
3	Ba 233.527†	-1.7	9.4	0.0686 ug/L	0.0686 ppb	13:36:05
3	Be 313.107†	-4512.8	133.6	0.0479 ug/L	0.0479 ppb	13:35:45
3	Cd 226.502†	-200.3	-2.1	-0.0182 ug/L	-0.0182 ppb	13:36:05
3	Co 228.616†	-76.0	-2.9	-0.0531 ug/L	-0.0531 ppb	13:36:05
3	Cr 267.716†	75.1	-10.7	-0.1123 ug/L	-0.1123 ppb	13:36:05
3	Cu 324.752†	6740.5	6.8	0.0180 ug/L	0.0180 ppb	13:35:45
3	Mn 257.610†	513.3	-5.0	-0.0099 ug/L	-0.0099 ppb	13:36:05
3	Mo 202.031†	19.5	1.1	0.0693 ug/L	0.0693 ppb	13:36:05
3	Ni 231.604†	99.3	13.7	0.3155 ug/L	0.3155 ppb	13:36:05
3	P 214.914†	235.6	-5.5	-3.0759 ug/L	-3.0759 ppb	13:36:05
3	Pb 220.353†	-72.6	-4.9	-0.5475 ug/L	-0.5475 ppb	13:36:05
3	S 181.975 Axial†	55.0	5.8	7.6569 ug/L	7.6569 ppb	13:36:05
3	Sb 206.836†	37.7	0.5	0.1481 ug/L	0.1481 ppb	13:36:05
3	Se 196.026†	-22.4	4.3	2.3375 ug/L	2.3375 ppb	13:36:05
3	Si 251.611†	506.2	26.3	0.7731 ug/L	0.7731 ppb	13:36:05
3	Sn 189.927†	6.1	-2.7	-0.4327 ug/L	-0.4327 ppb	13:36:05
3	Ti 334.940†	-1275.6	-23.9	-0.0375 ug/L	-0.0375 ppb	13:35:45
3	Tl 190.801†	-35.2	-0.8	-0.2183 ug/L	-0.2183 ppb	13:36:05
3	U 409.014†	-2572.5	2.3	0.0706 ug/L	0.0706 ppb	13:35:45
3	V 292.402†	-1376.4	-18.6	-0.1162 ug/L	-0.1162 ppb	13:35:45
3	Zn 213.857†	759.1	8.0	0.0676 ug/L	0.0676 ppb	13:36:05
3	SiO2†	523.7	1.1	0.0517 ug/L	0.0517 ppb	13:36:21

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866854.4	99.878	%	0.2069				0.21%
Sc Radial	5569.7	99.9	%	3.48				3.49%
Y 371.029	728801.0	99.910	%	0.1277				0.13%
Y RADIAL	6051.4	100.2	%	3.61				3.60%
Ag 328.068†	54.3	0.2429	ug/L	0.11369	0.2429	ppb	0.11369	46.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.1	3.4739	ug/L	1.47053	3.4739	ppb	1.47053	42.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	1.0566	ug/L	0.74908	1.0566	ppb	0.74908	70.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	265.5	5.6600	ug/L	0.29445	5.6600	ppb	0.29445	5.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.9	-0.0072	ug/L	0.06878	-0.0072	ppb	0.06878	955.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	114.1	0.0410	ug/L	0.01621	0.0410	ppb	0.01621	39.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.9	4.2688	ug/L	1.01047	4.2688	ppb	1.01047	23.67%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -2.7     -0.0268 ug/L       0.06560     -0.0268 ppb        0.06560 244.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.2     -0.0216 ug/L       0.08741     -0.0216 ppb        0.08741 405.18%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 2.4      0.0258 ug/L       0.13925      0.0258 ppb        0.13925 540.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -18.2     -0.0537 ug/L       0.06423     -0.0537 ppb        0.06423 119.55%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.8     -16.142 ug/L       16.1538     -16.142 ppb        16.1538 100.07%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         162.2      27.208 ug/L       17.2368      27.208 ppb        17.2368  63.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.8      27.013 ug/L       39.2611      27.013 ppb        39.2611 145.34%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 6.8       0.0050 ug/L       0.02833      0.0050 ppb        0.02833 561.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.5       0.2878 ug/L       0.19869      0.2878 ppb        0.19869  69.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         21.5       6.5034 ug/L      13.99861      6.5034 ppb       13.99861 215.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.7       0.1080 ug/L       0.19885      0.1080 ppb        0.19885 184.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -11.2      -6.2590 ug/L       3.80255     -6.2590 ppb        3.80255  60.75%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.5      -0.7241 ug/L       0.92003     -0.7241 ppb        0.92003 127.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.8       2.3314 ug/L       5.11294      2.3314 ppb        5.11294 219.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.5       0.4758 ug/L       1.07586      0.4758 ppb        1.07586 226.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.6      -0.9244 ug/L       2.98365     -0.9244 ppb        2.98365 322.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                29.8       0.8761 ug/L       0.19242      0.8761 ppb        0.19242  21.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.6      -0.4123 ug/L       0.26106     -0.4123 ppb        0.26106  63.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -26.6      -0.1602 ug/L       0.09867     -0.1602 ppb        0.09867  61.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -1.1      -0.0005 ug/L       0.03644     -0.0005 ppb        0.03644 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.6      -0.4631 ug/L       0.35351     -0.4631 ppb        0.35351  76.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -82.3      -2.3650 ug/L       2.11001     -2.3650 ppb        2.11001  89.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  6.8       0.0479 ug/L       0.25428      0.0479 ppb        0.25428 530.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                16.6       0.1427 ug/L       0.06814      0.1427 ppb        0.06814  47.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       6.4       0.3803 ug/L       0.45458      0.3803 ppb        0.45458 119.54%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 14:40:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5433.1	5433.1	97.4	%			14:42:08
1	Y RADIAL	5850.2	5850.2	96.87	%			14:42:08
1	Al 396.153Radial†	7030.4	7250.3	4971.6	ug/L	4971.6	ppb	14:42:08
1	Ca 317.933Radial†	3435.1	3508.4	5120.4	ug/L	5120.4	ppb	14:42:28
1	Fe 238.204 Radial†	584.8	590.3	5304.3	ug/L	5304.3	ppb	14:42:28
1	K 766.490 Radial†	32191.1	30296.6	5074.0	ug/L	5074.0	ppb	14:42:08
1	Mg 279.077 IEC†	156.7	158.9	5350.4	ug/L	5350.4	ppb	14:42:28
1	Na 589.592 Radial†	32196.4	34595.8	10485	ug/L	10485	ppb	14:42:08
1	Sr 421.552†	83672.8	85869.5	517.85	ug/L	517.85	ppb	14:42:08
1	Sc 361.383	860112.6	860112.6	99.101	%			14:43:26
1	Y 371.029	711898.8	711898.8	97.593	%			14:43:26
1	Ag 328.068†	112466.5	113212.8	515.30	ug/L	515.30	ppb	14:43:31
1	As 188.979†	1276.5	1319.4	513.89	ug/L	513.89	ppb	14:43:51
1	B 249.677†	23151.6	23854.8	506.38	ug/L	506.38	ppb	14:43:31
1	Ba 233.527†	67283.9	67905.4	508.72	ug/L	508.72	ppb	14:43:31
1	Be 313.107†	1377691.0	1394852.5	501.85	ug/L	501.85	ppb	14:43:26
1	Cd 226.502†	48592.5	49232.3	510.39	ug/L	510.39	ppb	14:43:31
1	Co 228.616†	26584.5	26899.2	507.49	ug/L	507.49	ppb	14:43:31
1	Cr 267.716†	48093.7	48444.0	507.92	ug/L	507.92	ppb	14:43:31
1	Cu 324.752†	178525.6	173387.4	503.89	ug/L	503.89	ppb	14:43:31
1	Mn 257.610†	469476.0	473215.1	501.96	ug/L	501.96	ppb	14:43:26
1	Mo 202.031†	7942.9	7996.6	509.25	ug/L	509.25	ppb	14:43:51
1	Ni 231.604†	22071.3	22185.6	509.47	ug/L	509.47	ppb	14:43:31
1	P 214.914†	4710.5	4511.2	2442.5	ug/L	2442.5	ppb	14:43:51
1	Pb 220.353†	4413.6	4521.6	507.70	ug/L	507.70	ppb	14:43:51
1	S 181.975 Axial†	821.5	779.6	1029.0	ug/L	1029.0	ppb	14:43:51
1	Sb 206.836†	1638.8	1616.3	517.69	ug/L	517.69	ppb	14:43:51
1	Se 196.026†	873.4	908.1	529.48	ug/L	529.48	ppb	14:43:51
1	Si 251.611†	87136.8	87445.6	2592.3	ug/L	2592.3	ppb	14:43:31
1	Sn 189.927†	3154.6	3174.4	511.25	ug/L	511.25	ppb	14:43:51
1	Ti 334.940†	317196.6	321330.6	507.06	ug/L	507.06	ppb	14:43:26
1	Tl 190.801†	1742.9	1793.3	508.49	ug/L	508.49	ppb	14:43:51
1	U 409.014†	14809.1	17527.4	502.28	ug/L	502.28	ppb	14:43:31
1	V 292.402†	73797.5	75829.7	511.35	ug/L	511.35	ppb	14:43:31
1	Zn 213.857†	59645.7	59433.0	506.70	ug/L	506.70	ppb	14:43:31
1	SiO2†	86310.8	86569.4	5499.1	ug/L	5499.1	ppb	14:44:59
2	Sc Radial	5475.6	5475.6	98.2	%			14:42:33
2	Y RADIAL	5916.3	5916.3	97.97	%			14:42:33
2	Al 396.153Radial†	7067.6	7232.1	4959.3	ug/L	4959.3	ppb	14:42:33
2	Ca 317.933Radial†	3425.1	3470.8	5065.7	ug/L	5065.7	ppb	14:42:53
2	Fe 238.204 Radial†	587.3	588.1	5284.9	ug/L	5284.9	ppb	14:42:53
2	K 766.490 Radial†	32480.5	30335.0	5080.4	ug/L	5080.4	ppb	14:42:33
2	Mg 279.077 IEC†	158.6	159.6	5372.7	ug/L	5372.7	ppb	14:42:53
2	Na 589.592 Radial†	32429.1	34576.3	10479	ug/L	10479	ppb	14:42:33
2	Sr 421.552†	84153.5	85692.8	516.79	ug/L	516.79	ppb	14:42:33
2	Sc 361.383	869074.0	869074.0	100.13	%			14:43:57
2	Y 371.029	719098.2	719098.2	98.580	%			14:43:57
2	Ag 328.068†	112778.1	112353.8	511.40	ug/L	511.40	ppb	14:44:02
2	As 188.979†	1278.4	1308.0	509.51	ug/L	509.51	ppb	14:44:22
2	B 249.677†	23343.2	23805.3	505.33	ug/L	505.33	ppb	14:44:02
2	Ba 233.527†	67602.5	67523.5	505.86	ug/L	505.86	ppb	14:44:02
2	Be 313.107†	1396705.8	1399507.1	503.53	ug/L	503.53	ppb	14:43:57
2	Cd 226.502†	48773.5	48907.4	507.02	ug/L	507.02	ppb	14:44:02
2	Co 228.616†	26811.7	26849.4	506.54	ug/L	506.54	ppb	14:44:02
2	Cr 267.716†	48248.4	48098.0	504.29	ug/L	504.29	ppb	14:44:02
2	Cu 324.752†	179308.0	172311.2	500.76	ug/L	500.76	ppb	14:44:02
2	Mn 257.610†	475105.2	473951.8	502.73	ug/L	502.73	ppb	14:43:57
2	Mo 202.031†	7945.1	7916.1	504.13	ug/L	504.13	ppb	14:44:22
2	Ni 231.604†	22158.7	22043.3	506.20	ug/L	506.20	ppb	14:44:02

2	P 214.914†	4740.2	4491.9	2432.2 ug/L	2432.2 ppb	14:44:22
2	Pb 220.353†	4408.4	4470.5	501.97 ug/L	501.97 ppb	14:44:22
2	S 181.975 Axial†	823.6	773.1	1020.4 ug/L	1020.4 ppb	14:44:22
2	Sb 206.836†	1641.2	1601.6	512.98 ug/L	512.98 ppb	14:44:22
2	Se 196.026†	876.3	902.0	525.97 ug/L	525.97 ppb	14:44:22
2	Si 251.611†	87719.2	87120.6	2582.8 ug/L	2582.8 ppb	14:44:02
2	Sn 189.927†	3168.5	3155.4	508.20 ug/L	508.20 ppb	14:44:22
2	Ti 334.940†	321009.1	321837.5	507.86 ug/L	507.86 ppb	14:43:57
2	Tl 190.801†	1747.3	1779.6	504.65 ug/L	504.65 ppb	14:44:22
2	U 409.014†	14724.5	17288.9	495.43 ug/L	495.43 ppb	14:44:02
2	V 292.402†	74077.5	75341.6	508.02 ug/L	508.02 ppb	14:44:02
2	Zn 213.857†	59964.2	59130.4	504.12 ug/L	504.12 ppb	14:44:02
2	SiO2†	86853.3	86213.1	5476.6 ug/L	5476.6 ppb	14:45:04
3	Sc Radial	5529.8	5529.8	99.2 %		14:42:58
3	Y RADIAL	5922.3	5922.3	98.07 %		14:42:58
3	Al 396.153Radial†	7136.7	7231.3	4958.4 ug/L	4958.4 ppb	14:42:58
3	Ca 317.933Radial†	3405.4	3416.8	4986.7 ug/L	4986.7 ppb	14:43:18
3	Fe 238.204 Radial†	582.3	577.3	5187.7 ug/L	5187.7 ppb	14:43:18
3	K 766.490 Radial†	32653.2	30185.1	5055.3 ug/L	5055.3 ppb	14:42:58
3	Mg 279.077 IEC†	155.1	154.5	5200.4 ug/L	5200.4 ppb	14:43:18
3	Na 589.592 Radial†	32642.1	34467.6	10446 ug/L	10446 ppb	14:42:58
3	Sr 421.552†	84661.9	85365.9	514.82 ug/L	514.82 ppb	14:42:58
3	Sc 361.383	859473.2	859473.2	99.027 %		14:44:28
3	Y 371.029	709608.6	709608.6	97.279 %		14:44:28
3	Ag 328.068†	111995.2	112821.3	513.49 ug/L	513.49 ppb	14:44:33
3	As 188.979†	1273.6	1317.4	513.11 ug/L	513.11 ppb	14:44:53
3	B 249.677†	23217.5	23938.8	508.17 ug/L	508.17 ppb	14:44:33
3	Ba 233.527†	67231.2	67902.8	508.69 ug/L	508.69 ppb	14:44:33
3	Be 313.107†	1381011.4	1399239.7	503.43 ug/L	503.43 ppb	14:44:28
3	Cd 226.502†	48643.5	49320.3	511.32 ug/L	511.32 ppb	14:44:33
3	Co 228.616†	26718.8	27054.7	510.43 ug/L	510.43 ppb	14:44:33
3	Cr 267.716†	47958.8	48343.9	506.86 ug/L	506.86 ppb	14:44:33
3	Cu 324.752†	177442.8	172428.0	501.10 ug/L	501.10 ppb	14:44:33
3	Mn 257.610†	472388.4	476508.5	505.44 ug/L	505.44 ppb	14:44:28
3	Mo 202.031†	7973.7	8033.7	511.60 ug/L	511.60 ppb	14:44:53
3	Ni 231.604†	22015.4	22145.7	508.55 ug/L	508.55 ppb	14:44:33
3	P 214.914†	4749.3	4553.9	2467.0 ug/L	2467.0 ppb	14:44:53
3	Pb 220.353†	4428.0	4539.5	509.72 ug/L	509.72 ppb	14:44:53
3	S 181.975 Axial†	829.2	787.9	1040.0 ug/L	1040.0 ppb	14:44:53
3	Sb 206.836†	1652.6	1631.4	522.61 ug/L	522.61 ppb	14:44:53
3	Se 196.026†	870.7	906.1	528.01 ug/L	528.01 ppb	14:44:53
3	Si 251.611†	87060.3	87433.8	2591.9 ug/L	2591.9 ppb	14:44:33
3	Sn 189.927†	3176.0	3198.4	515.10 ug/L	515.10 ppb	14:44:53
3	Ti 334.940†	318210.1	322592.1	509.04 ug/L	509.04 ppb	14:44:28
3	Tl 190.801†	1764.0	1815.9	514.87 ug/L	514.87 ppb	14:44:53
3	U 409.014†	14697.8	17426.2	499.39 ug/L	499.39 ppb	14:44:33
3	V 292.402†	73503.8	75588.6	509.79 ug/L	509.79 ppb	14:44:33
3	Zn 213.857†	59544.2	59375.2	506.23 ug/L	506.23 ppb	14:44:33
3	SiO2†	88039.4	88379.8	5614.6 ug/L	5614.6 ppb	14:45:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862886.6	99.421	%	0.6185				0.62%
Sc Radial	5479.5	98.3	%	0.87				0.88%
Y 371.029	713535.2	97.817	%	0.6788				0.69%
Y RADIAL	5896.3	97.63	%	0.663				0.68%
Ag 328.068†	112796.0	513.39	ug/L	1.951	513.39	ppb	1.951	0.38%
QC value within limits for Ag 328.068 Recovery = 102.68%								
Al 396.153Radial†	7237.9	4963.1	ug/L	7.37	4963.1	ppb	7.37	0.15%
QC value within limits for Al 396.153Radial Recovery = 99.26%								
As 188.979†	1314.9	512.17	ug/L	2.338	512.17	ppb	2.338	0.46%
QC value within limits for As 188.979 Recovery = 102.43%								
B 249.677†	23866.3	506.63	ug/L	1.440	506.63	ppb	1.440	0.28%
QC value within limits for B 249.677 Recovery = 101.33%								
Ba 233.527†	67777.2	507.76	ug/L	1.644	507.76	ppb	1.644	0.32%
QC value within limits for Ba 233.527 Recovery = 101.55%								
Be 313.107†	1397866.4	502.94	ug/L	0.940	502.94	ppb	0.940	0.19%
QC value within limits for Be 313.107 Recovery = 100.59%								
Ca 317.933Radial†	3465.3	5057.6	ug/L	67.21	5057.6	ppb	67.21	1.33%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.15%
Cd 226.502†            49153.3      509.58 ug/L        2.260      509.58 ppb        2.260   0.44%
   QC value within limits for Cd 226.502  Recovery = 101.92%
Co 228.616†            26934.4      508.15 ug/L        2.028      508.15 ppb        2.028   0.40%
   QC value within limits for Co 228.616  Recovery = 101.63%
Cr 267.716†            48295.3      506.36 ug/L        1.865      506.36 ppb        1.865   0.37%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           172708.9      501.92 ug/L        1.717      501.92 ppb        1.717   0.34%
   QC value within limits for Cu 324.752  Recovery = 100.38%
Fe 238.204 Radial†       585.2      5259.0 ug/L       62.47      5259.0 ppb        62.47   1.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.18%
K 766.490 Radial†      30272.2      5069.9 ug/L       13.06      5069.9 ppb        13.06   0.26%
   QC value within limits for K 766.490 Radial  Recovery = 101.40%
Mg 279.077 IEC†          157.7      5307.9 ug/L       93.70      5307.9 ppb        93.70   1.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.16%
Mn 257.610†           474558.5      503.38 ug/L        1.827      503.38 ppb        1.827   0.36%
   QC value within limits for Mn 257.610  Recovery = 100.68%
Mo 202.031†             7982.1      508.33 ug/L        3.820      508.33 ppb        3.820   0.75%
   QC value within limits for Mo 202.031  Recovery = 101.67%
Na 589.592 Radial†     34546.6       10470 ug/L         20.9       10470 ppb         20.9   0.20%
   QC value within limits for Na 589.592 Radial  Recovery = 104.70%
Ni 231.604†            22124.9      508.08 ug/L        1.687      508.08 ppb        1.687   0.33%
   QC value within limits for Ni 231.604  Recovery = 101.62%
P 214.914†              4519.0      2447.2 ug/L       17.85      2447.2 ppb        17.85   0.73%
   QC value within limits for P 214.914  Recovery = 97.89%
Pb 220.353†             4510.6      506.46 ug/L        4.019      506.46 ppb        4.019   0.79%
   QC value within limits for Pb 220.353  Recovery = 101.29%
S 181.975 Axial†         780.2      1029.8 ug/L        9.83      1029.8 ppb         9.83   0.95%
   QC value within limits for S 181.975 Axial  Recovery = 102.98%
Sb 206.836†             1616.4      517.76 ug/L        4.817      517.76 ppb        4.817   0.93%
   QC value within limits for Sb 206.836  Recovery = 103.55%
Se 196.026†              905.4      527.82 ug/L        1.764      527.82 ppb        1.764   0.33%
   QC value within limits for Se 196.026  Recovery = 105.56%
Si 251.611†            87333.3      2589.0 ug/L        5.42      2589.0 ppb         5.42   0.21%
   QC value within limits for Si 251.611  Recovery = 103.56%
Sn 189.927†             3176.1      511.51 ug/L        3.455      511.51 ppb        3.455   0.68%
   QC value within limits for Sn 189.927  Recovery = 102.30%
Sr 421.552†            85642.7      516.49 ug/L        1.540      516.49 ppb        1.540   0.30%
   QC value within limits for Sr 421.552  Recovery = 103.30%
Ti 334.940†           321920.1      507.99 ug/L        0.999      507.99 ppb        0.999   0.20%
   QC value within limits for Ti 334.940  Recovery = 101.60%
Tl 190.801†             1796.3      509.34 ug/L        5.164      509.34 ppb        5.164   1.01%
   QC value within limits for Tl 190.801  Recovery = 101.87%
U 409.014†             17414.2      499.03 ug/L        3.438      499.03 ppb        3.438   0.69%
   QC value within limits for U 409.014  Recovery = 99.81%
V 292.402†             75586.6      509.72 ug/L        1.666      509.72 ppb        1.666   0.33%
   QC value within limits for V 292.402  Recovery = 101.94%
Zn 213.857†            59312.9      505.68 ug/L        1.372      505.68 ppb        1.372   0.27%
   QC value within limits for Zn 213.857  Recovery = 101.14%
SiO2†                  87054.1      5530.1 ug/L       74.02      5530.1 ppb        74.02   1.34%
   QC value within limits for SiO2  Recovery = 103.41%
All analyte(s) passed QC.
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Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 14:47:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5612.9	5612.9	101	%			14:49:10
1	Y RADIAL	6085.5	6085.5	100.8	%			14:49:10
1	Al 396.153Radial†	-28.8	6.7	4.5403	ug/L	4.5403	ppb	14:49:10
1	Ca 317.933Radial†	12.6	-4.4	-6.4244	ug/L	-6.4244	ppb	14:49:30
1	Fe 238.204 Radial†	9.3	-0.7	-6.1453	ug/L	-6.1453	ppb	14:49:30
1	K 766.490 Radial†	2798.0	40.0	6.7168	ug/L	6.7168	ppb	14:49:10
1	Mg 279.077 IEC†	0.0	-1.9	-63.848	ug/L	-63.848	ppb	14:49:30
1	Na 589.592 Radial†	-1562.7	1.8	0.5478	ug/L	0.5478	ppb	14:49:10
1	Sr 421.552†	-48.7	-48.1	-0.2901	ug/L	-0.2901	ppb	14:49:10
1	Sc 361.383	860909.6	860909.6	99.193	%			14:50:27
1	Y 371.029	724080.5	724080.5	99.263	%			14:50:27
1	Ag 328.068†	373.1	102.1	0.4681	ug/L	0.4681	ppb	14:50:27
1	As 188.979†	-23.2	7.9	3.0593	ug/L	3.0593	ppb	14:50:47
1	B 249.677†	-203.3	288.2	6.1435	ug/L	6.1435	ppb	14:50:47
1	Ba 233.527†	-5.1	6.0	0.0454	ug/L	0.0454	ppb	14:50:47
1	Be 313.107†	-4524.0	101.8	0.0366	ug/L	0.0366	ppb	14:50:27
1	Cd 226.502†	-191.9	5.5	0.0575	ug/L	0.0575	ppb	14:50:47
1	Co 228.616†	-77.2	-4.4	-0.0806	ug/L	-0.0806	ppb	14:50:47
1	Cr 267.716†	79.2	-6.1	-0.0612	ug/L	-0.0612	ppb	14:50:47
1	Cu 324.752†	6800.8	98.3	0.2852	ug/L	0.2852	ppb	14:50:27
1	Mn 257.610†	517.8	1.8	0.0025	ug/L	0.0025	ppb	14:50:47
1	Mo 202.031†	35.9	17.8	1.1335	ug/L	1.1335	ppb	14:50:47
1	Ni 231.604†	81.4	-3.9	-0.0893	ug/L	-0.0893	ppb	14:50:47
1	P 214.914†	222.9	-17.3	-9.7319	ug/L	-9.7319	ppb	14:50:47
1	Pb 220.353†	-55.9	11.7	1.3108	ug/L	1.3108	ppb	14:50:47
1	S 181.975 Axial†	48.3	-0.7	-0.8888	ug/L	-0.8888	ppb	14:50:47
1	Sb 206.836†	47.0	10.0	3.1845	ug/L	3.1845	ppb	14:50:47
1	Se 196.026†	-32.8	-6.2	-3.5194	ug/L	-3.5194	ppb	14:50:47
1	Si 251.611†	580.8	103.7	3.0696	ug/L	3.0696	ppb	14:50:47
1	Sn 189.927†	5.5	-3.3	-0.5244	ug/L	-0.5244	ppb	14:50:47
1	Ti 334.940†	-1228.0	18.3	0.0318	ug/L	0.0318	ppb	14:50:27
1	Tl 190.801†	-36.6	-2.3	-0.6504	ug/L	-0.6504	ppb	14:50:47
1	U 409.014†	-2817.2	-256.1	-7.3616	ug/L	-7.3616	ppb	14:50:27
1	V 292.402†	-1286.3	66.0	0.4405	ug/L	0.4405	ppb	14:50:27
1	Zn 213.857†	810.9	63.7	0.5506	ug/L	0.5506	ppb	14:50:47
1	SiO2†	608.0	88.5	5.6055	ug/L	5.6055	ppb	14:51:43
2	Sc Radial	5496.3	5496.3	98.6	%			14:49:35
2	Y RADIAL	6010.2	6010.2	99.52	%			14:49:35
2	Al 396.153Radial†	-18.7	16.4	11.247	ug/L	11.247	ppb	14:49:35
2	Ca 317.933Radial†	15.9	-0.8	-1.1546	ug/L	-1.1546	ppb	14:49:55
2	Fe 238.204 Radial†	9.1	-0.6	-5.5103	ug/L	-5.5103	ppb	14:49:55
2	K 766.490 Radial†	2935.1	238.0	39.930	ug/L	39.930	ppb	14:49:35
2	Mg 279.077 IEC†	3.0	1.1	37.240	ug/L	37.240	ppb	14:49:55
2	Na 589.592 Radial†	-1482.0	50.8	15.380	ug/L	15.380	ppb	14:49:35
2	Sr 421.552†	-8.0	-7.9	-0.0477	ug/L	-0.0477	ppb	14:49:35
2	Sc 361.383	855903.7	855903.7	98.616	%			14:50:52
2	Y 371.029	719719.2	719719.2	98.665	%			14:50:52
2	Ag 328.068†	438.2	170.3	0.7711	ug/L	0.7711	ppb	14:50:52
2	As 188.979†	-31.8	-0.9	-0.3704	ug/L	-0.3704	ppb	14:51:12
2	B 249.677†	-220.3	269.8	5.7503	ug/L	5.7503	ppb	14:51:12
2	Ba 233.527†	-5.0	6.0	0.0446	ug/L	0.0446	ppb	14:51:12
2	Be 313.107†	-4496.3	103.2	0.0369	ug/L	0.0369	ppb	14:50:52
2	Cd 226.502†	-200.1	-4.0	-0.0408	ug/L	-0.0408	ppb	14:51:12
2	Co 228.616†	-70.6	1.8	0.0362	ug/L	0.0362	ppb	14:51:12
2	Cr 267.716†	76.5	-8.5	-0.0878	ug/L	-0.0878	ppb	14:51:12
2	Cu 324.752†	6798.2	135.7	0.3940	ug/L	0.3940	ppb	14:50:52
2	Mn 257.610†	526.5	13.7	0.0133	ug/L	0.0133	ppb	14:51:12
2	Mo 202.031†	28.1	10.1	0.6396	ug/L	0.6396	ppb	14:51:12
2	Ni 231.604†	106.0	21.5	0.4952	ug/L	0.4952	ppb	14:51:12

2	P 214.914†	234.9	-3.9	-2.2485	ug/L	-2.2485	ppb	14:51:12
2	Pb 220.353†	-60.9	6.2	0.7019	ug/L	0.7019	ppb	14:51:12
2	S 181.975 Axial†	53.8	5.1	6.7393	ug/L	6.7393	ppb	14:51:12
2	Sb 206.836†	36.9	0.0	-0.0045	ug/L	-0.0045	ppb	14:51:12
2	Se 196.026†	-23.6	2.9	1.6024	ug/L	1.6024	ppb	14:51:12
2	Si 251.611†	594.5	121.1	3.5877	ug/L	3.5877	ppb	14:51:12
2	Sn 189.927†	-3.2	-12.0	-1.9376	ug/L	-1.9376	ppb	14:51:12
2	Ti 334.940†	-1272.8	-34.4	-0.0530	ug/L	-0.0530	ppb	14:50:52
2	Tl 190.801†	-36.0	-2.0	-0.5560	ug/L	-0.5560	ppb	14:51:12
2	U 409.014†	-2651.9	-105.1	-3.0210	ug/L	-3.0210	ppb	14:50:52
2	V 292.402†	-1342.3	1.6	0.0155	ug/L	0.0155	ppb	14:50:52
2	Zn 213.857†	787.3	44.5	0.3783	ug/L	0.3783	ppb	14:51:12
2	SiO2†	578.1	61.7	3.9008	ug/L	3.9008	ppb	14:51:48
3	Sc Radial	5536.5	5536.5	99.3	%			14:50:00
3	Y RADIAL	6020.3	6020.3	99.69	%			14:50:00
3	Al 396.153Radial†	-24.1	11.1	7.6025	ug/L	7.6025	ppb	14:50:00
3	Ca 317.933Radial†	14.7	-2.1	-3.0756	ug/L	-3.0756	ppb	14:50:20
3	Fe 238.204 Radial†	7.7	-2.1	-19.008	ug/L	-19.008	ppb	14:50:20
3	K 766.490 Radial†	2849.5	130.2	21.841	ug/L	21.841	ppb	14:50:00
3	Mg 279.077 IEC†	2.9	1.0	34.320	ug/L	34.320	ppb	14:50:20
3	Na 589.592 Radial†	-1501.5	42.0	12.734	ug/L	12.734	ppb	14:50:00
3	Sr 421.552†	-3.5	-3.3	-0.0201	ug/L	-0.0201	ppb	14:50:00
3	Sc 361.383	866507.0	866507.0	99.838	%			14:51:17
3	Y 371.029	727552.5	727552.5	99.739	%			14:51:17
3	Ag 328.068†	347.8	74.4	0.3326	ug/L	0.3326	ppb	14:51:17
3	As 188.979†	-17.5	13.8	5.3142	ug/L	5.3142	ppb	14:51:37
3	B 249.677†	-230.6	262.3	5.5916	ug/L	5.5916	ppb	14:51:37
3	Ba 233.527†	-7.7	3.4	0.0243	ug/L	0.0243	ppb	14:51:37
3	Be 313.107†	-4653.4	1.7	0.0005	ug/L	0.0005	ppb	14:51:17
3	Cd 226.502†	-187.4	11.2	0.1183	ug/L	0.1183	ppb	14:51:37
3	Co 228.616†	-73.5	-0.2	-0.0007	ug/L	-0.0007	ppb	14:51:37
3	Cr 267.716†	62.3	-23.6	-0.2465	ug/L	-0.2465	ppb	14:51:37
3	Cu 324.752†	6777.7	30.8	0.0886	ug/L	0.0886	ppb	14:51:17
3	Mn 257.610†	508.7	-10.6	-0.0138	ug/L	-0.0138	ppb	14:51:37
3	Mo 202.031†	30.4	12.1	0.7669	ug/L	0.7669	ppb	14:51:37
3	Ni 231.604†	86.2	0.4	0.0083	ug/L	0.0083	ppb	14:51:37
3	P 214.914†	239.0	-2.6	-1.4741	ug/L	-1.4741	ppb	14:51:37
3	Pb 220.353†	-73.2	-5.3	-0.5866	ug/L	-0.5866	ppb	14:51:37
3	S 181.975 Axial†	59.1	9.8	12.990	ug/L	12.990	ppb	14:51:37
3	Sb 206.836†	34.3	-3.0	-0.9262	ug/L	-0.9262	ppb	14:51:37
3	Se 196.026†	-25.3	1.5	0.7743	ug/L	0.7743	ppb	14:51:37
3	Si 251.611†	564.3	83.5	2.4667	ug/L	2.4667	ppb	14:51:37
3	Sn 189.927†	9.5	0.7	0.1080	ug/L	0.1080	ppb	14:51:37
3	Ti 334.940†	-1283.5	-29.4	-0.0453	ug/L	-0.0453	ppb	14:51:17
3	Tl 190.801†	-35.4	-0.9	-0.2625	ug/L	-0.2625	ppb	14:51:37
3	U 409.014†	-2667.7	-88.1	-2.5288	ug/L	-2.5288	ppb	14:51:17
3	V 292.402†	-1362.0	-1.5	-0.0001	ug/L	-0.0001	ppb	14:51:17
3	Zn 213.857†	793.3	40.8	0.3511	ug/L	0.3511	ppb	14:51:37
3	SiO2†	574.4	50.9	3.2023	ug/L	3.2023	ppb	14:51:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	861106.8	99.215	%	0.6112				0.62%
Sc Radial	5548.6	99.5	%	1.06				1.07%
Y 371.029	723784.1	99.222	%	0.5381				0.54%
Y RADIAL	6038.7	99.99	%	0.677				0.68%
Ag 328.068†	115.6	0.5239	ug/L	0.22455	0.5239	ppb	0.22455	42.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.4	7.7966	ug/L	3.35753	7.7966	ppb	3.35753	43.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.9	2.6677	ug/L	2.86250	2.6677	ppb	2.86250	107.30%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	273.4	5.8285	ug/L	0.28415	5.8285	ppb	0.28415	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.1	0.0381	ug/L	0.01197	0.0381	ppb	0.01197	31.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	68.9	0.0247	ug/L	0.02094	0.0247	ppb	0.02094	84.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-3.5515	ug/L	2.66695	-3.5515	ppb	2.66695	75.09%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.2      0.0450 ug/L       0.08028      0.0450 ppb        0.08028 178.36%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -0.9     -0.0150 ug/L       0.05968     -0.0150 ppb        0.05968 396.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.7     -0.1319 ug/L       0.10020     -0.1319 ppb        0.10020  75.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                88.3      0.2559 ug/L       0.15481      0.2559 ppb        0.15481  60.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.1    -10.221 ug/L        7.6162    -10.221 ppb         7.6162  74.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         136.1     22.829 ug/L       16.6287     22.829 ppb        16.6287  72.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.1      2.5703 ug/L      57.53886      2.5703 ppb       57.53886 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 1.6      0.0007 ug/L       0.01362      0.0007 ppb        0.01362 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                13.3      0.8467 ug/L       0.25644      0.8467 ppb        0.25644  30.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         31.5      9.5539 ug/L       7.91103      9.5539 ppb        7.91103  82.80%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 6.0      0.1381 ug/L       0.31310      0.1381 ppb        0.31310 226.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -8.0     -4.4848 ug/L       4.56058     -4.4848 ppb        4.56058 101.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.2      0.4753 ug/L       0.96874      0.4753 ppb        0.96874 203.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            4.8      6.2800 ug/L       6.95060      6.2800 ppb        6.95060 110.68%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.4      0.7513 ug/L       2.15701      0.7513 ppb        2.15701 287.11%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.6     -0.3809 ug/L       2.74941     -0.3809 ppb        2.74941 721.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               102.8      3.0414 ug/L       0.56105      3.0414 ppb        0.56105  18.45%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -4.9     -0.7847 ug/L       1.04734     -0.7847 ppb        1.04734 133.47%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -19.8     -0.1193 ug/L       0.14858     -0.1193 ppb        0.14858 124.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.2     -0.0222 ug/L       0.04690     -0.0222 ppb        0.04690 211.56%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.7     -0.4896 ug/L       0.20230     -0.4896 ppb        0.20230  41.32%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -149.7     -4.3038 ug/L       2.65954     -4.3038 ppb        2.65954  61.79%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 22.0      0.1520 ug/L       0.25000      0.1520 ppb        0.25000 164.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                49.6      0.4267 ug/L       0.10819      0.4267 ppb        0.10819  25.36%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      67.1      4.2362 ug/L       1.23621      4.2362 ppb        1.23621  29.18%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 15:57:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5558.6	5558.6	99.7	%			15:59:12
1	Y RADIAL	5971.1	5971.1	98.87	%			15:59:12
1	Al 396.153Radial†	7083.3	7140.5	4896.1	ug/L	4896.1	ppb	15:59:12
1	Ca 317.933Radial†	3430.9	3424.7	4998.3	ug/L	4998.3	ppb	15:59:32
1	Fe 238.204 Radial†	588.3	580.2	5214.1	ug/L	5214.1	ppb	15:59:32
1	K 766.490 Radial†	32544.2	29905.5	5008.5	ug/L	5008.5	ppb	15:59:12
1	Mg 279.077 IEC†	157.3	155.8	5246.5	ug/L	5246.5	ppb	15:59:32
1	Na 589.592 Radial†	32184.8	33838.7	10255	ug/L	10255	ppb	15:59:12
1	Sr 421.552†	84145.3	84406.2	509.03	ug/L	509.03	ppb	15:59:12
1	Sc 361.383	869736.0	869736.0	100.21	%			16:00:29
1	Y 371.029	718165.7	718165.7	98.452	%			16:00:29
1	Ag 328.068†	112428.6	111919.3	509.40	ug/L	509.40	ppb	16:00:35
1	As 188.979†	1276.4	1305.0	508.24	ug/L	508.24	ppb	16:00:55
1	B 249.677†	23207.3	23652.0	502.07	ug/L	502.07	ppb	16:00:35
1	Ba 233.527†	67216.3	67086.7	502.59	ug/L	502.59	ppb	16:00:35
1	Be 313.107†	1391057.6	1392809.1	501.10	ug/L	501.10	ppb	16:00:29
1	Cd 226.502†	48541.0	48638.4	504.24	ug/L	504.24	ppb	16:00:35
1	Co 228.616†	26754.9	26772.3	505.11	ug/L	505.11	ppb	16:00:35
1	Cr 267.716†	47906.4	47720.1	500.33	ug/L	500.33	ppb	16:00:35
1	Cu 324.752†	178862.1	171730.0	499.07	ug/L	499.07	ppb	16:00:35
1	Mn 257.610†	475113.1	473598.6	502.36	ug/L	502.36	ppb	16:00:29
1	Mo 202.031†	7974.3	7939.2	505.60	ug/L	505.60	ppb	16:00:55
1	Ni 231.604†	21958.4	21826.5	501.22	ug/L	501.22	ppb	16:00:35
1	P 214.914†	4733.2	4481.3	2426.6	ug/L	2426.6	ppb	16:00:55
1	Pb 220.353†	4419.8	4478.5	502.86	ug/L	502.86	ppb	16:00:55
1	S 181.975 Axial†	822.4	771.3	1018.1	ug/L	1018.1	ppb	16:00:55
1	Sb 206.836†	1648.1	1607.3	514.89	ug/L	514.89	ppb	16:00:55
1	Se 196.026†	873.3	898.3	523.66	ug/L	523.66	ppb	16:00:55
1	Si 251.611†	87277.4	86613.1	2567.6	ug/L	2567.6	ppb	16:00:35
1	Sn 189.927†	3153.7	3138.3	505.43	ug/L	505.43	ppb	16:00:55
1	Ti 334.940†	313418.1	314018.5	495.52	ug/L	495.52	ppb	16:00:35
1	Tl 190.801†	1743.3	1774.2	503.05	ug/L	503.05	ppb	16:00:55
1	U 409.014†	14827.4	17380.4	498.08	ug/L	498.08	ppb	16:00:35
1	V 292.402†	73812.8	75021.1	505.94	ug/L	505.94	ppb	16:00:35
1	Zn 213.857†	59642.5	58763.8	501.01	ug/L	501.01	ppb	16:00:35
1	SiO2†	88264.4	87555.2	5562.3	ug/L	5562.3	ppb	16:02:02
2	Sc Radial	5504.9	5504.9	98.7	%			15:59:37
2	Y RADIAL	5969.3	5969.3	98.84	%			15:59:37
2	Al 396.153Radial†	7134.7	7261.8	4979.6	ug/L	4979.6	ppb	15:59:37
2	Ca 317.933Radial†	3435.2	3462.5	5053.6	ug/L	5053.6	ppb	15:59:57
2	Fe 238.204 Radial†	574.1	571.6	5136.6	ug/L	5136.6	ppb	15:59:57
2	K 766.490 Radial†	32661.5	30342.4	5081.8	ug/L	5081.8	ppb	15:59:37
2	Mg 279.077 IEC†	155.2	155.3	5229.6	ug/L	5229.6	ppb	15:59:57
2	Na 589.592 Radial†	32263.5	34233.0	10375	ug/L	10375	ppb	15:59:37
2	Sr 421.552†	84579.0	85668.1	516.64	ug/L	516.64	ppb	15:59:37
2	Sc 361.383	869177.5	869177.5	100.15	%			16:01:00
2	Y 371.029	718464.4	718464.4	98.493	%			16:01:00
2	Ag 328.068†	112475.0	112037.7	509.92	ug/L	509.92	ppb	16:01:06
2	As 188.979†	1281.0	1310.4	510.31	ug/L	510.31	ppb	16:01:26
2	B 249.677†	23260.1	23719.5	503.53	ug/L	503.53	ppb	16:01:06
2	Ba 233.527†	67346.4	67259.8	503.88	ug/L	503.88	ppb	16:01:06
2	Be 313.107†	1389305.1	1391951.0	500.79	ug/L	500.79	ppb	16:01:00
2	Cd 226.502†	48549.7	48678.1	504.66	ug/L	504.66	ppb	16:01:06
2	Co 228.616†	26651.6	26686.4	503.50	ug/L	503.50	ppb	16:01:06
2	Cr 267.716†	48051.9	47896.1	502.17	ug/L	502.17	ppb	16:01:06
2	Cu 324.752†	178995.2	171977.5	499.79	ug/L	499.79	ppb	16:01:06
2	Mn 257.610†	474312.1	473103.4	501.82	ug/L	501.82	ppb	16:01:00
2	Mo 202.031†	8011.6	7981.6	508.29	ug/L	508.29	ppb	16:01:26
2	Ni 231.604†	22037.2	21919.2	503.35	ug/L	503.35	ppb	16:01:06

2	P 214.914†	4754.5	4505.6	2440.2 ug/L	2440.2 ppb	16:01:26
2	Pb 220.353†	4443.2	4504.7	505.82 ug/L	505.82 ppb	16:01:26
2	S 181.975 Axial†	829.2	778.6	1027.7 ug/L	1027.7 ppb	16:01:26
2	Sb 206.836†	1646.9	1607.1	514.96 ug/L	514.96 ppb	16:01:26
2	Se 196.026†	876.8	902.3	525.71 ug/L	525.71 ppb	16:01:26
2	Si 251.611†	87347.2	86738.7	2571.3 ug/L	2571.3 ppb	16:01:06
2	Sn 189.927†	3192.2	3178.7	511.94 ug/L	511.94 ppb	16:01:26
2	Ti 334.940†	314049.1	314849.5	496.83 ug/L	496.83 ppb	16:01:06
2	Tl 190.801†	1766.2	1798.2	509.82 ug/L	509.82 ppb	16:01:26
2	U 409.014†	14853.4	17415.8	499.10 ug/L	499.10 ppb	16:01:06
2	V 292.402†	73985.1	75240.4	507.45 ug/L	507.45 ppb	16:01:06
2	Zn 213.857†	59643.9	58803.4	501.35 ug/L	501.35 ppb	16:01:06
2	SiO2†	87705.6	87053.8	5530.0 ug/L	5530.0 ppb	16:02:07
3	Sc Radial	5423.1	5423.1	97.3 %		16:00:02
3	Y RADIAL	5814.6	5814.6	96.28 %		16:00:02
3	Al 396.153Radial†	6992.7	7224.9	4953.8 ug/L	4953.8 ppb	16:00:02
3	Ca 317.933Radial†	3449.0	3529.2	5150.8 ug/L	5150.8 ppb	16:00:22
3	Fe 238.204 Radial†	584.9	591.5	5315.5 ug/L	5315.5 ppb	16:00:22
3	K 766.490 Radial†	32100.7	30265.1	5068.8 ug/L	5068.8 ppb	16:00:02
3	Mg 279.077 IEC†	155.7	158.1	5323.8 ug/L	5323.8 ppb	16:00:22
3	Na 589.592 Radial†	31834.9	34285.5	10391 ug/L	10391 ppb	16:00:02
3	Sr 421.552†	82849.3	85182.5	513.71 ug/L	513.71 ppb	16:00:02
3	Sc 361.383	854224.4	854224.4	98.422 %		16:01:31
3	Y 371.029	706974.9	706974.9	96.918 %		16:01:31
3	Ag 328.068†	112475.0	114003.7	518.90 ug/L	518.90 ppb	16:01:37
3	As 188.979†	1282.6	1334.5	519.71 ug/L	519.71 ppb	16:01:57
3	B 249.677†	23152.0	24016.3	509.80 ug/L	509.80 ppb	16:01:37
3	Ba 233.527†	67522.8	68616.2	514.04 ug/L	514.04 ppb	16:01:37
3	Be 313.107†	1368231.9	1394824.4	501.84 ug/L	501.84 ppb	16:01:31
3	Cd 226.502†	48632.3	49610.7	514.32 ug/L	514.32 ppb	16:01:37
3	Co 228.616†	26855.9	27359.7	516.20 ug/L	516.20 ppb	16:01:37
3	Cr 267.716†	48130.6	48816.0	511.82 ug/L	511.82 ppb	16:01:37
3	Cu 324.752†	178719.2	174825.9	508.07 ug/L	508.07 ppb	16:01:37
3	Mn 257.610†	466387.7	473342.8	502.09 ug/L	502.09 ppb	16:01:31
3	Mo 202.031†	7993.6	8103.3	516.04 ug/L	516.04 ppb	16:01:57
3	Ni 231.604†	22087.8	22355.9	513.38 ug/L	513.38 ppb	16:01:37
3	P 214.914†	4762.0	4596.3	2489.4 ug/L	2489.4 ppb	16:01:57
3	Pb 220.353†	4425.3	4564.2	512.48 ug/L	512.48 ppb	16:01:57
3	S 181.975 Axial†	822.1	785.9	1037.3 ug/L	1037.3 ppb	16:01:57
3	Sb 206.836†	1651.4	1640.5	525.51 ug/L	525.51 ppb	16:01:57
3	Se 196.026†	875.3	916.1	534.05 ug/L	534.05 ppb	16:01:57
3	Si 251.611†	87475.0	88395.3	2620.5 ug/L	2620.5 ppb	16:01:37
3	Sn 189.927†	3163.6	3205.5	516.25 ug/L	516.25 ppb	16:01:57
3	Ti 334.940†	314008.5	320297.6	505.43 ug/L	505.43 ppb	16:01:37
3	Tl 190.801†	1751.4	1814.1	514.27 ug/L	514.27 ppb	16:01:57
3	U 409.014†	14617.9	17436.2	499.65 ug/L	499.65 ppb	16:01:37
3	V 292.402†	73997.9	76546.7	516.21 ug/L	516.21 ppb	16:01:37
3	Zn 213.857†	59798.5	60003.1	511.57 ug/L	511.57 ppb	16:01:37
3	SiO2†	88252.0	89142.1	5663.0 ug/L	5663.0 ppb	16:02:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	864379.3	99.593	%	1.0138				1.02%
Sc Radial	5495.5	98.6	%	1.22				1.24%
Y 371.029	714535.0	97.954	%	0.8978				0.92%
Y RADIAL	5918.3	98.00	%	1.488				1.52%
Ag 328.068†	112653.6	512.74	ug/L	5.341	512.74	ppb	5.341	1.04%
QC value within limits for Ag 328.068 Recovery = 102.55%								
Al 396.153Radial†	7209.1	4943.2	ug/L	42.74	4943.2	ppb	42.74	0.86%
QC value within limits for Al 396.153Radial Recovery = 98.86%								
As 188.979†	1316.6	512.75	ug/L	6.112	512.75	ppb	6.112	1.19%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	23796.0	505.13	ug/L	4.104	505.13	ppb	4.104	0.81%
QC value within limits for B 249.677 Recovery = 101.03%								
Ba 233.527†	67654.2	506.84	ug/L	6.273	506.84	ppb	6.273	1.24%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1393194.8	501.24	ug/L	0.539	501.24	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 100.25%								
Ca 317.933Radial†	3472.1	5067.5	ug/L	77.23	5067.5	ppb	77.23	1.52%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            48975.8      507.74 ug/L         5.703      507.74 ppb          5.703   1.12%
   QC value within limits for Cd 226.502  Recovery = 101.55%
Co 228.616†            26939.5      508.27 ug/L         6.913      508.27 ppb          6.913   1.36%
   QC value within limits for Co 228.616  Recovery = 101.65%
Cr 267.716†            48144.1      504.77 ug/L         6.171      504.77 ppb          6.171   1.22%
   QC value within limits for Cr 267.716  Recovery = 100.95%
Cu 324.752†           172844.5      502.31 ug/L         5.001      502.31 ppb          5.001   1.00%
   QC value within limits for Cu 324.752  Recovery = 100.46%
Fe 238.204 Radial†       581.1      5222.1 ug/L        89.73      5222.1 ppb         89.73   1.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.44%
K 766.490 Radial†      30171.0      5053.0 ug/L        39.11      5053.0 ppb         39.11   0.77%
   QC value within limits for K 766.490 Radial  Recovery = 101.06%
Mg 279.077 IEC†          156.4      5266.6 ug/L        50.23      5266.6 ppb         50.23   0.95%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†           473348.3      502.09 ug/L         0.266      502.09 ppb          0.266   0.05%
   QC value within limits for Mn 257.610  Recovery = 100.42%
Mo 202.031†             8008.0      509.98 ug/L         5.425      509.98 ppb          5.425   1.06%
   QC value within limits for Mo 202.031  Recovery = 102.00%
Na 589.592 Radial†     34119.1       10340 ug/L          74.0       10340 ppb           74.0   0.72%
   QC value within limits for Na 589.592 Radial  Recovery = 103.40%
Ni 231.604†            22033.9      505.99 ug/L         6.492      505.99 ppb          6.492   1.28%
   QC value within limits for Ni 231.604  Recovery = 101.20%
P 214.914†              4527.7      2452.1 ug/L        33.06      2452.1 ppb         33.06   1.35%
   QC value within limits for P 214.914  Recovery = 98.08%
Pb 220.353†             4515.8      507.05 ug/L         4.925      507.05 ppb          4.925   0.97%
   QC value within limits for Pb 220.353  Recovery = 101.41%
S 181.975 Axial†         778.6      1027.7 ug/L         9.61      1027.7 ppb           9.61   0.94%
   QC value within limits for S 181.975 Axial  Recovery = 102.77%
Sb 206.836†             1618.3      518.45 ug/L         6.110      518.45 ppb          6.110   1.18%
   QC value within limits for Sb 206.836  Recovery = 103.69%
Se 196.026†              905.6      527.81 ug/L         5.503      527.81 ppb          5.503   1.04%
   QC value within limits for Se 196.026  Recovery = 105.56%
Si 251.611†            87249.0      2586.5 ug/L        29.51      2586.5 ppb         29.51   1.14%
   QC value within limits for Si 251.611  Recovery = 103.46%
Sn 189.927†             3174.2      511.21 ug/L         5.449      511.21 ppb          5.449   1.07%
   QC value within limits for Sn 189.927  Recovery = 102.24%
Sr 421.552†            85085.6      513.13 ug/L         3.839      513.13 ppb          3.839   0.75%
   QC value within limits for Sr 421.552  Recovery = 102.63%
Ti 334.940†           316388.5      499.26 ug/L         5.385      499.26 ppb          5.385   1.08%
   QC value within limits for Ti 334.940  Recovery = 99.85%
Tl 190.801†             1795.5      509.05 ug/L         5.649      509.05 ppb          5.649   1.11%
   QC value within limits for Tl 190.801  Recovery = 101.81%
U 409.014†             17410.8      498.94 ug/L         0.797      498.94 ppb          0.797   0.16%
   QC value within limits for U 409.014  Recovery = 99.79%
V 292.402†             75602.7      509.87 ug/L         5.548      509.87 ppb          5.548   1.09%
   QC value within limits for V 292.402  Recovery = 101.97%
Zn 213.857†            59190.1      504.64 ug/L         6.002      504.64 ppb          6.002   1.19%
   QC value within limits for Zn 213.857  Recovery = 100.93%
SiO2†                  87917.0      5585.1 ug/L        69.37      5585.1 ppb         69.37   1.24%
   QC value within limits for SiO2  Recovery = 104.44%
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 16:04:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5548.2	5548.2	99.5	%			16:06:14
1	Y RADIAL	6034.4	6034.4	99.92	%			16:06:14
1	Al 396.153Radial†	-6.6	28.6	19.727	ug/L	19.727	ppb	16:06:14
1	Ca 317.933Radial†	21.4	4.6	6.6582	ug/L	6.6582	ppb	16:06:34
1	Fe 238.204 Radial†	8.9	-0.9	-8.1568	ug/L	-8.1568	ppb	16:06:34
1	K 766.490 Radial†	2838.3	112.9	18.939	ug/L	18.939	ppb	16:06:14
1	Mg 279.077 IEC†	-2.7	-4.7	-156.97	ug/L	-156.97	ppb	16:06:34
1	Na 589.592 Radial†	-1557.0	-10.6	-3.2075	ug/L	-3.2075	ppb	16:06:14
1	Sr 421.552†	-37.3	-37.3	-0.2247	ug/L	-0.2247	ppb	16:06:14
1	Sc 361.383	864632.5	864632.5	99.622	%			16:07:31
1	Y 371.029	726006.4	726006.4	99.527	%			16:07:31
1	Ag 328.068†	288.2	15.3	0.0666	ug/L	0.0666	ppb	16:07:31
1	As 188.979†	-25.1	6.1	2.3693	ug/L	2.3693	ppb	16:07:51
1	B 249.677†	-254.9	237.3	5.0591	ug/L	5.0591	ppb	16:07:51
1	Ba 233.527†	-10.7	0.4	0.0021	ug/L	0.0021	ppb	16:07:51
1	Be 313.107†	-4579.0	66.2	0.0236	ug/L	0.0236	ppb	16:07:31
1	Cd 226.502†	-194.6	3.6	0.0384	ug/L	0.0384	ppb	16:07:51
1	Co 228.616†	-80.6	-7.5	-0.1409	ug/L	-0.1409	ppb	16:07:51
1	Cr 267.716†	93.2	7.5	0.0786	ug/L	0.0786	ppb	16:07:51
1	Cu 324.752†	6844.0	112.2	0.3254	ug/L	0.3254	ppb	16:07:31
1	Mn 257.610†	494.5	-23.7	-0.0231	ug/L	-0.0231	ppb	16:07:51
1	Mo 202.031†	14.6	-3.8	-0.2412	ug/L	-0.2412	ppb	16:07:51
1	Ni 231.604†	83.7	-2.0	-0.0451	ug/L	-0.0451	ppb	16:07:51
1	P 214.914†	241.2	0.1	0.0020	ug/L	0.0020	ppb	16:07:51
1	Pb 220.353†	-60.3	7.4	0.8366	ug/L	0.8366	ppb	16:07:51
1	S 181.975 Axial†	53.6	4.4	5.8658	ug/L	5.8658	ppb	16:07:51
1	Sb 206.836†	41.3	4.0	1.2754	ug/L	1.2754	ppb	16:07:51
1	Se 196.026†	-29.2	-2.5	-1.4380	ug/L	-1.4380	ppb	16:07:51
1	Si 251.611†	573.7	94.2	2.8007	ug/L	2.8007	ppb	16:07:51
1	Sn 189.927†	12.5	3.7	0.6031	ug/L	0.6031	ppb	16:07:51
1	Ti 334.940†	-1296.2	-44.9	-0.0699	ug/L	-0.0699	ppb	16:07:31
1	Tl 190.801†	-33.1	1.4	0.3932	ug/L	0.3932	ppb	16:07:51
1	U 409.014†	-2626.7	-52.7	-1.5140	ug/L	-1.5140	ppb	16:07:31
1	V 292.402†	-1400.5	-43.1	-0.2955	ug/L	-0.2955	ppb	16:07:31
1	Zn 213.857†	794.6	43.8	0.3827	ug/L	0.3827	ppb	16:07:51
1	SiO2†	579.5	57.2	3.6417	ug/L	3.6417	ppb	16:08:47
2	Sc Radial	5527.9	5527.9	99.1	%			16:06:39
2	Y RADIAL	6016.9	6016.9	99.63	%			16:06:39
2	Al 396.153Radial†	-21.1	14.0	9.6624	ug/L	9.6624	ppb	16:06:39
2	Ca 317.933Radial†	17.1	0.4	0.5806	ug/L	0.5806	ppb	16:06:59
2	Fe 238.204 Radial†	12.3	2.5	22.169	ug/L	22.169	ppb	16:06:59
2	K 766.490 Radial†	2794.2	78.8	13.236	ug/L	13.236	ppb	16:06:39
2	Mg 279.077 IEC†	3.1	1.2	41.283	ug/L	41.283	ppb	16:06:59
2	Na 589.592 Radial†	-1630.4	-90.4	-27.393	ug/L	-27.393	ppb	16:06:39
2	Sr 421.552†	-40.5	-40.7	-0.2453	ug/L	-0.2453	ppb	16:06:39
2	Sc 361.383	849624.2	849624.2	97.892	%			16:07:56
2	Y 371.029	714603.2	714603.2	97.964	%			16:07:56
2	Ag 328.068†	416.8	151.8	0.6964	ug/L	0.6964	ppb	16:07:56
2	As 188.979†	-33.5	-3.0	-1.1437	ug/L	-1.1437	ppb	16:08:16
2	B 249.677†	-221.1	267.3	5.6944	ug/L	5.6944	ppb	16:08:16
2	Ba 233.527†	-9.1	1.8	0.0137	ug/L	0.0137	ppb	16:08:16
2	Be 313.107†	-4513.5	52.0	0.0183	ug/L	0.0183	ppb	16:07:56
2	Cd 226.502†	-198.9	-4.3	-0.0467	ug/L	-0.0467	ppb	16:08:16
2	Co 228.616†	-76.7	-5.0	-0.0933	ug/L	-0.0933	ppb	16:08:16
2	Cr 267.716†	103.1	19.2	0.2028	ug/L	0.2028	ppb	16:08:16
2	Cu 324.752†	6678.2	64.1	0.1873	ug/L	0.1873	ppb	16:07:56
2	Mn 257.610†	635.2	128.7	0.1378	ug/L	0.1378	ppb	16:08:16
2	Mo 202.031†	19.8	1.8	0.1164	ug/L	0.1164	ppb	16:08:16
2	Ni 231.604†	70.2	-14.2	-0.3263	ug/L	-0.3263	ppb	16:08:16

2	P 214.914†	231.6	-5.5	-3.1134 ug/L	-3.1134 ppb	16:08:16
2	Pb 220.353†	-62.6	4.0	0.4480 ug/L	0.4480 ppb	16:08:16
2	S 181.975 Axial†	53.7	5.5	7.2283 ug/L	7.2283 ppb	16:08:16
2	Sb 206.836†	43.7	7.3	2.2821 ug/L	2.2821 ppb	16:08:16
2	Se 196.026†	-28.7	-2.5	-1.3229 ug/L	-1.3229 ppb	16:08:16
2	Si 251.611†	567.3	97.7	2.9063 ug/L	2.9063 ppb	16:08:16
2	Sn 189.927†	5.1	-3.6	-0.5764 ug/L	-0.5764 ppb	16:08:16
2	Ti 334.940†	-1329.7	-102.0	-0.1589 ug/L	-0.1589 ppb	16:07:56
2	Tl 190.801†	-41.0	-7.4	-2.0701 ug/L	-2.0701 ppb	16:08:16
2	U 409.014†	-2697.0	-171.1	-4.9210 ug/L	-4.9210 ppb	16:07:56
2	V 292.402†	-1384.3	-51.4	-0.3523 ug/L	-0.3523 ppb	16:07:56
2	Zn 213.857†	792.8	56.0	0.4802 ug/L	0.4802 ppb	16:08:16
2	SiO2†	563.2	50.8	3.2340 ug/L	3.2340 ppb	16:08:52
3	Sc Radial	5638.7	5638.7	101 %		16:07:04
3	Y RADIAL	6129.6	6129.6	101.5 %		16:07:04
3	Al 396.153Radial†	-19.9	15.7	10.777 ug/L	10.777 ppb	16:07:04
3	Ca 317.933Radial†	22.4	5.3	7.6677 ug/L	7.6677 ppb	16:07:24
3	Fe 238.204 Radial†	8.8	-1.2	-10.499 ug/L	-10.499 ppb	16:07:24
3	K 766.490 Radial†	2867.9	96.4	16.174 ug/L	16.174 ppb	16:07:04
3	Mg 279.077 IEC†	4.2	2.2	75.544 ug/L	75.544 ppb	16:07:24
3	Na 589.592 Radial†	-1619.8	-47.6	-14.411 ug/L	-14.411 ppb	16:07:04
3	Sr 421.552†	-4.5	-4.2	-0.0257 ug/L	-0.0257 ppb	16:07:04
3	Sc 361.383	858167.6	858167.6	98.877 %		16:08:21
3	Y 371.029	721928.7	721928.7	98.968 %		16:08:21
3	Ag 328.068†	362.6	92.7	0.4118 ug/L	0.4118 ppb	16:08:21
3	As 188.979†	-20.1	11.0	4.2405 ug/L	4.2405 ppb	16:08:42
3	B 249.677†	-283.5	206.4	4.4010 ug/L	4.4010 ppb	16:08:42
3	Ba 233.527†	3.2	14.4	0.1061 ug/L	0.1061 ppb	16:08:42
3	Be 313.107†	-4623.9	-13.8	-0.0051 ug/L	-0.0051 ppb	16:08:21
3	Cd 226.502†	-192.3	4.5	0.0473 ug/L	0.0473 ppb	16:08:42
3	Co 228.616†	-76.2	-3.6	-0.0659 ug/L	-0.0659 ppb	16:08:42
3	Cr 267.716†	76.2	-9.0	-0.0959 ug/L	-0.0959 ppb	16:08:42
3	Cu 324.752†	6783.0	102.3	0.2965 ug/L	0.2965 ppb	16:08:21
3	Mn 257.610†	529.3	15.2	0.0136 ug/L	0.0136 ppb	16:08:42
3	Mo 202.031†	25.9	7.7	0.4911 ug/L	0.4911 ppb	16:08:42
3	Ni 231.604†	87.3	2.4	0.0544 ug/L	0.0544 ppb	16:08:42
3	P 214.914†	228.7	-10.8	-6.0518 ug/L	-6.0518 ppb	16:08:42
3	Pb 220.353†	-85.8	-18.8	-2.0965 ug/L	-2.0965 ppb	16:08:42
3	S 181.975 Axial†	49.7	0.9	1.1292 ug/L	1.1292 ppb	16:08:42
3	Sb 206.836†	36.8	-0.2	-0.0482 ug/L	-0.0482 ppb	16:08:42
3	Se 196.026†	-37.4	-11.1	-6.2580 ug/L	-6.2580 ppb	16:08:42
3	Si 251.611†	563.5	88.2	2.6135 ug/L	2.6135 ppb	16:08:42
3	Sn 189.927†	6.8	-1.9	-0.3105 ug/L	-0.3105 ppb	16:08:42
3	Ti 334.940†	-1279.5	-37.8	-0.0604 ug/L	-0.0604 ppb	16:08:21
3	Tl 190.801†	-37.5	-3.4	-0.9465 ug/L	-0.9465 ppb	16:08:42
3	U 409.014†	-2460.9	95.1	2.7368 ug/L	2.7368 ppb	16:08:21
3	V 292.402†	-1408.3	-61.6	-0.3941 ug/L	-0.3941 ppb	16:08:21
3	Zn 213.857†	794.1	49.2	0.4214 ug/L	0.4214 ppb	16:08:42
3	SiO2†	567.2	49.2	3.1110 ug/L	3.1110 ppb	16:08:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	857474.8	98.797	%	0.8674				0.88%
Sc Radial	5571.6	99.9	%	1.06				1.06%
Y 371.029	720846.1	98.820	%	0.7921				0.80%
Y RADIAL	6060.3	100.4	%	1.00				1.00%
Ag 328.068†	86.6	0.3916	ug/L	0.31539	0.3916	ppb	0.31539	80.54%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	19.4	13.389	ug/L	5.5170	13.389	ppb	5.5170	41.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.7	1.8220	ug/L	2.73353	1.8220	ppb	2.73353	150.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	237.0	5.0515	ug/L	0.64673	5.0515	ppb	0.64673	12.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.5	0.0406	ug/L	0.05695	0.0406	ppb	0.05695	140.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	34.8	0.0123	ug/L	0.01527	0.0123	ppb	0.01527	124.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9689	ug/L	3.83368	4.9689	ppb	3.83368	77.15%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 1.3      0.0130 ug/L       0.05187      0.0130 ppb        0.05187 399.10%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.1000 ug/L       0.03794     -0.1000 ppb        0.03794  37.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.9      0.0618 ug/L       0.15009      0.0618 ppb        0.15009 242.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                92.8      0.2697 ug/L       0.07284      0.2697 ppb        0.07284  27.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.1      1.1711 ug/L      18.22225      1.1711 ppb       18.22225 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          96.0     16.116 ug/L        2.8522     16.116 ppb         2.8522  17.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4    -13.382 ug/L      125.5279    -13.382 ppb       125.5279 938.02%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.0      0.0428 ug/L       0.08431      0.0428 ppb        0.08431 197.02%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.9      0.1221 ug/L       0.36617      0.1221 ppb        0.36617 299.86%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -49.5    -15.004 ug/L       12.1037    -15.004 ppb        12.1037  80.67%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.6     -0.1057 ug/L       0.19743     -0.1057 ppb        0.19743 186.82%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.4     -3.0544 ug/L       3.02731     -3.0544 ppb        3.02731  99.11%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.4     -0.2707 ug/L       1.59316     -0.2707 ppb        1.59316 588.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.6      4.7411 ug/L       3.20133      4.7411 ppb        3.20133  67.52%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.7      1.1698 ug/L       1.16872      1.1698 ppb        1.16872  99.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.4     -3.0063 ug/L       2.81665     -3.0063 ppb        2.81665  93.69%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                93.4      2.7735 ug/L       0.14826      2.7735 ppb        0.14826   5.35%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.6     -0.0946 ug/L       0.61866     -0.0946 ppb        0.61866 654.09%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -27.4     -0.1652 ug/L       0.12129     -0.1652 ppb        0.12129  73.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -61.6     -0.0964 ug/L       0.05435     -0.0964 ppb        0.05435  56.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.1     -0.8745 ug/L       1.23322     -0.8745 ppb        1.23322 141.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -42.9     -1.2327 ug/L       3.83663     -1.2327 ppb        3.83663 311.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -52.0     -0.3473 ug/L       0.04949     -0.3473 ppb        0.04949  14.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                49.7      0.4281 ug/L       0.04910      0.4281 ppb        0.04910  11.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.4      3.3289 ug/L       0.27774      3.3289 ppb        0.27774   8.34%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 17:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5545.8	5545.8	99.5	%			17:10:03
1	Y RADIAL	5973.0	5973.0	98.90	%			17:10:03
1	Al 396.153Radial†	7299.2	7374.0	5056.7	ug/L	5056.7	ppb	17:10:03
1	Ca 317.933Radial†	3474.9	3476.8	5074.4	ug/L	5074.4	ppb	17:10:23
1	Fe 238.204 Radial†	589.1	582.4	5233.4	ug/L	5233.4	ppb	17:10:23
1	K 766.490 Radial†	33057.0	30496.3	5107.6	ug/L	5107.6	ppb	17:10:03
1	Mg 279.077 IEC†	160.6	159.6	5372.2	ug/L	5372.2	ppb	17:10:23
1	Na 589.592 Radial†	32265.0	33993.7	10302	ug/L	10302	ppb	17:10:03
1	Sr 421.552†	85077.8	85538.4	515.86	ug/L	515.86	ppb	17:10:03
1	Sc 361.383	873480.0	873480.0	100.64	%			17:11:22
1	Y 371.029	722647.0	722647.0	99.066	%			17:11:22
1	Ag 328.068†	112725.8	111733.7	508.59	ug/L	508.59	ppb	17:11:22
1	As 188.979†	1284.7	1307.8	509.42	ug/L	509.42	ppb	17:11:42
1	B 249.677†	23215.5	23560.8	500.14	ug/L	500.14	ppb	17:11:22
1	Ba 233.527†	67768.5	67347.9	504.54	ug/L	504.54	ppb	17:11:22
1	Be 313.107†	1406791.2	1402492.3	504.60	ug/L	504.60	ppb	17:11:22
1	Cd 226.502†	48814.6	48702.6	504.90	ug/L	504.90	ppb	17:11:22
1	Co 228.616†	26553.3	26457.6	499.17	ug/L	499.17	ppb	17:11:42
1	Cr 267.716†	48232.9	47839.6	501.59	ug/L	501.59	ppb	17:11:22
1	Cu 324.752†	180837.6	172927.8	502.55	ug/L	502.55	ppb	17:11:22
1	Mn 257.610†	477483.4	473921.6	502.70	ug/L	502.70	ppb	17:11:22
1	Mo 202.031†	8098.1	8028.1	511.25	ug/L	511.25	ppb	17:11:42
1	Ni 231.604†	21964.3	21738.5	499.20	ug/L	499.20	ppb	17:11:42
1	P 214.914†	4776.2	4503.7	2438.6	ug/L	2438.6	ppb	17:11:42
1	Pb 220.353†	4494.2	4533.5	509.06	ug/L	509.06	ppb	17:11:42
1	S 181.975 Axial†	825.9	771.3	1018.0	ug/L	1018.0	ppb	17:11:42
1	Sb 206.836†	1632.8	1585.0	507.97	ug/L	507.97	ppb	17:11:42
1	Se 196.026†	883.8	904.9	527.50	ug/L	527.50	ppb	17:11:42
1	Si 251.611†	87752.8	86712.1	2570.5	ug/L	2570.5	ppb	17:11:22
1	Sn 189.927†	3187.8	3158.6	508.72	ug/L	508.72	ppb	17:11:42
1	Ti 334.940†	322693.5	321894.1	507.96	ug/L	507.96	ppb	17:11:22
1	Tl 190.801†	1778.3	1801.6	510.89	ug/L	510.89	ppb	17:11:42
1	U 409.014†	14099.9	16594.1	475.47	ug/L	475.47	ppb	17:11:22
1	V 292.402†	74235.9	75125.7	506.66	ug/L	506.66	ppb	17:11:22
1	Zn 213.857†	60008.5	58872.3	501.95	ug/L	501.95	ppb	17:11:22
1	SiO2†	88619.4	87530.4	5560.4	ug/L	5560.4	ppb	17:12:43
2	Sc Radial	5463.0	5463.0	98.0	%			17:10:28
2	Y RADIAL	5906.7	5906.7	97.81	%			17:10:28
2	Al 396.153Radial†	7168.5	7351.7	5041.4	ug/L	5041.4	ppb	17:10:28
2	Ca 317.933Radial†	3437.0	3491.1	5095.2	ug/L	5095.2	ppb	17:10:48
2	Fe 238.204 Radial†	580.0	582.0	5230.2	ug/L	5230.2	ppb	17:10:48
2	K 766.490 Radial†	32605.2	30538.6	5114.7	ug/L	5114.7	ppb	17:10:28
2	Mg 279.077 IEC†	152.3	153.5	5167.4	ug/L	5167.4	ppb	17:10:48
2	Na 589.592 Radial†	31607.2	33813.6	10248	ug/L	10248	ppb	17:10:28
2	Sr 421.552†	83627.1	85353.3	514.74	ug/L	514.74	ppb	17:10:28
2	Sc 361.383	872388.4	872388.4	100.52	%			17:11:50
2	Y 371.029	721642.3	721642.3	98.929	%			17:11:50
2	Ag 328.068†	112887.0	112034.2	509.95	ug/L	509.95	ppb	17:11:50
2	As 188.979†	1288.1	1312.8	511.34	ug/L	511.34	ppb	17:12:10
2	B 249.677†	23256.6	23630.6	501.63	ug/L	501.63	ppb	17:11:50
2	Ba 233.527†	67921.7	67584.6	506.31	ug/L	506.31	ppb	17:11:50
2	Be 313.107†	1403602.6	1401069.2	504.09	ug/L	504.09	ppb	17:11:50
2	Cd 226.502†	48909.0	48857.1	506.50	ug/L	506.50	ppb	17:11:50
2	Co 228.616†	26557.1	26494.4	499.86	ug/L	499.86	ppb	17:12:10
2	Cr 267.716†	48281.9	47948.3	502.73	ug/L	502.73	ppb	17:11:50
2	Cu 324.752†	180664.8	172980.7	502.71	ug/L	502.71	ppb	17:11:50
2	Mn 257.610†	477978.3	475007.6	503.85	ug/L	503.85	ppb	17:11:50
2	Mo 202.031†	8089.6	8029.7	511.35	ug/L	511.35	ppb	17:12:10
2	Ni 231.604†	21996.6	21797.8	500.57	ug/L	500.57	ppb	17:12:10

2	P 214.914†	4785.4	4518.8	2447.0 ug/L	2447.0 ppb	17:12:10
2	Pb 220.353†	4476.5	4521.5	507.72 ug/L	507.72 ppb	17:12:10
2	S 181.975 Axial†	821.8	768.2	1013.9 ug/L	1013.9 ppb	17:12:10
2	Sb 206.836†	1661.7	1615.8	517.63 ug/L	517.63 ppb	17:12:10
2	Se 196.026†	869.0	891.4	519.87 ug/L	519.87 ppb	17:12:10
2	Si 251.611†	87904.9	86972.5	2578.2 ug/L	2578.2 ppb	17:11:50
2	Sn 189.927†	3175.0	3149.8	507.30 ug/L	507.30 ppb	17:12:10
2	Ti 334.940†	322604.3	322206.6	508.45 ug/L	508.45 ppb	17:11:50
2	Tl 190.801†	1773.3	1798.8	510.10 ug/L	510.10 ppb	17:12:10
2	U 409.014†	14029.3	16541.4	473.95 ug/L	473.95 ppb	17:11:50
2	V 292.402†	74076.3	75059.3	506.21 ug/L	506.21 ppb	17:11:50
2	Zn 213.857†	60033.7	58972.1	502.81 ug/L	502.81 ppb	17:11:50
2	SiO2†	87360.6	86388.2	5487.5 ug/L	5487.5 ppb	17:12:48
3	Sc Radial	5372.5	5372.5	96.4 %		17:10:53
3	Y RADIAL	5831.4	5831.4	96.56 %		17:10:53
3	Al 396.153Radial†	7114.3	7418.7	5087.6 ug/L	5087.6 ppb	17:10:53
3	Ca 317.933Radial†	3472.1	3586.6	5234.6 ug/L	5234.6 ppb	17:11:13
3	Fe 238.204 Radial†	585.1	597.3	5367.3 ug/L	5367.3 ppb	17:11:13
3	K 766.490 Radial†	32335.7	30819.4	5161.8 ug/L	5161.8 ppb	17:10:53
3	Mg 279.077 IEC†	157.3	161.4	5432.9 ug/L	5432.9 ppb	17:11:13
3	Na 589.592 Radial†	31358.8	34099.2	10334 ug/L	10334 ppb	17:10:53
3	Sr 421.552†	83073.6	86216.4	519.95 ug/L	519.95 ppb	17:10:53
3	Sc 361.383	877526.6	877526.6	101.11 %		17:12:17
3	Y 371.029	724696.9	724696.9	99.347 %		17:12:17
3	Ag 328.068†	113511.6	111994.4	509.81 ug/L	509.81 ppb	17:12:17
3	As 188.979†	1291.4	1308.5	509.73 ug/L	509.73 ppb	17:12:37
3	B 249.677†	23369.2	23606.4	501.09 ug/L	501.09 ppb	17:12:17
3	Ba 233.527†	68501.5	67762.4	507.64 ug/L	507.64 ppb	17:12:17
3	Be 313.107†	1411604.7	1400807.3	504.00 ug/L	504.00 ppb	17:12:17
3	Cd 226.502†	49327.0	48985.7	507.82 ug/L	507.82 ppb	17:12:17
3	Co 228.616†	26732.3	26513.0	500.20 ug/L	500.20 ppb	17:12:37
3	Cr 267.716†	48628.3	48009.7	503.37 ug/L	503.37 ppb	17:12:17
3	Cu 324.752†	182075.7	173323.7	503.71 ug/L	503.71 ppb	17:12:17
3	Mn 257.610†	481503.0	475709.4	504.60 ug/L	504.60 ppb	17:12:17
3	Mo 202.031†	8113.5	8006.2	509.87 ug/L	509.87 ppb	17:12:37
3	Ni 231.604†	22141.8	21813.4	500.92 ug/L	500.92 ppb	17:12:37
3	P 214.914†	4793.1	4498.6	2435.5 ug/L	2435.5 ppb	17:12:37
3	Pb 220.353†	4496.7	4515.5	507.03 ug/L	507.03 ppb	17:12:37
3	S 181.975 Axial†	836.0	777.4	1026.1 ug/L	1026.1 ppb	17:12:37
3	Sb 206.836†	1663.6	1608.0	515.16 ug/L	515.16 ppb	17:12:37
3	Se 196.026†	888.1	905.2	528.08 ug/L	528.08 ppb	17:12:37
3	Si 251.611†	88543.4	87092.0	2581.8 ug/L	2581.8 ppb	17:12:17
3	Sn 189.927†	3203.1	3159.2	508.82 ug/L	508.82 ppb	17:12:37
3	Ti 334.940†	324987.8	322684.8	509.22 ug/L	509.22 ppb	17:12:17
3	Tl 190.801†	1778.8	1793.9	508.74 ug/L	508.74 ppb	17:12:37
3	U 409.014†	14137.6	16566.7	474.66 ug/L	474.66 ppb	17:12:17
3	V 292.402†	74516.6	75063.2	506.20 ug/L	506.20 ppb	17:12:17
3	Zn 213.857†	60534.6	59117.8	504.03 ug/L	504.03 ppb	17:12:17
3	SiO2†	88441.9	86948.8	5523.2 ug/L	5523.2 ppb	17:12:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874465.0	100.75	%	0.312				0.31%
Sc Radial	5460.4	97.9	%	1.55				1.59%
Y 371.029	722995.4	99.114	%	0.2134				0.22%
Y RADIAL	5903.7	97.76	%	1.173				1.20%
Ag 328.068†	111920.8	509.45	ug/L	0.747	509.45	ppb	0.747	0.15%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7381.5	5061.9	ug/L	23.54	5061.9	ppb	23.54	0.47%
QC value within limits for Al 396.153Radial Recovery = 101.24%								
As 188.979†	1309.7	510.16	ug/L	1.028	510.16	ppb	1.028	0.20%
QC value within limits for As 188.979 Recovery = 102.03%								
B 249.677†	23599.3	500.95	ug/L	0.753	500.95	ppb	0.753	0.15%
QC value within limits for B 249.677 Recovery = 100.19%								
Ba 233.527†	67565.0	506.16	ug/L	1.556	506.16	ppb	1.556	0.31%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	1401456.3	504.23	ug/L	0.325	504.23	ppb	0.325	0.06%
QC value within limits for Be 313.107 Recovery = 100.85%								
Ca 317.933Radial†	3518.2	5134.7	ug/L	87.12	5134.7	ppb	87.12	1.70%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.69%
Cd 226.502†            48848.5      506.41 ug/L        1.464      506.41 ppb          1.464   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            26488.3      499.74 ug/L        0.528      499.74 ppb          0.528   0.11%
   QC value within limits for Co 228.616  Recovery = 99.95%
Cr 267.716†            47932.5      502.56 ug/L        0.902      502.56 ppb          0.902   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.51%
Cu 324.752†           173077.4      502.99 ug/L        0.628      502.99 ppb          0.628   0.12%
   QC value within limits for Cu 324.752  Recovery = 100.60%
Fe 238.204 Radial†       587.3      5277.0 ug/L       78.20      5277.0 ppb         78.20   1.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.54%
K 766.490 Radial†      30618.1      5128.0 ug/L       29.43      5128.0 ppb         29.43   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 102.56%
Mg 279.077 IEC†          158.2      5324.2 ug/L      139.13      5324.2 ppb        139.13   2.61%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.48%
Mn 257.610†           474879.5      503.72 ug/L        0.961      503.72 ppb          0.961   0.19%
   QC value within limits for Mn 257.610  Recovery = 100.74%
Mo 202.031†             8021.3      510.82 ug/L        0.830      510.82 ppb          0.830   0.16%
   QC value within limits for Mo 202.031  Recovery = 102.16%
Na 589.592 Radial†     33968.8       10295 ug/L         43.8       10295 ppb           43.8   0.43%
   QC value within limits for Na 589.592 Radial  Recovery = 102.95%
Ni 231.604†            21783.2      500.23 ug/L        0.908      500.23 ppb          0.908   0.18%
   QC value within limits for Ni 231.604  Recovery = 100.05%
P 214.914†              4507.0      2440.4 ug/L         5.97      2440.4 ppb           5.97   0.24%
   QC value within limits for P 214.914  Recovery = 97.61%
Pb 220.353†             4523.5      507.94 ug/L        1.033      507.94 ppb          1.033   0.20%
   QC value within limits for Pb 220.353  Recovery = 101.59%
S 181.975 Axial†         772.3      1019.3 ug/L         6.22      1019.3 ppb           6.22   0.61%
   QC value within limits for S 181.975 Axial  Recovery = 101.93%
Sb 206.836†             1602.9      513.58 ug/L        5.015      513.58 ppb          5.015   0.98%
   QC value within limits for Sb 206.836  Recovery = 102.72%
Se 196.026†              900.5      525.15 ug/L        4.584      525.15 ppb          4.584   0.87%
   QC value within limits for Se 196.026  Recovery = 105.03%
Si 251.611†            86925.5      2576.8 ug/L         5.79      2576.8 ppb           5.79   0.22%
   QC value within limits for Si 251.611  Recovery = 103.07%
Sn 189.927†             3155.9      508.28 ug/L        0.849      508.28 ppb          0.849   0.17%
   QC value within limits for Sn 189.927  Recovery = 101.66%
Sr 421.552†            85702.7      516.85 ug/L        2.740      516.85 ppb          2.740   0.53%
   QC value within limits for Sr 421.552  Recovery = 103.37%
Ti 334.940†           322261.8      508.54 ug/L        0.633      508.54 ppb          0.633   0.12%
   QC value within limits for Ti 334.940  Recovery = 101.71%
Tl 190.801†             1798.1      509.91 ug/L        1.090      509.91 ppb          1.090   0.21%
   QC value within limits for Tl 190.801  Recovery = 101.98%
U 409.014†             16567.4      474.69 ug/L        0.759      474.69 ppb          0.759   0.16%
   QC value within limits for U 409.014  Recovery = 94.94%
V 292.402†             75082.7      506.36 ug/L        0.262      506.36 ppb          0.262   0.05%
   QC value within limits for V 292.402  Recovery = 101.27%
Zn 213.857†            58987.4      502.93 ug/L        1.048      502.93 ppb          1.048   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.59%
SiO2†                  86955.8      5523.7 ug/L        36.45      5523.7 ppb         36.45   0.66%
   QC value within limits for SiO2  Recovery = 103.29%
All analyte(s) passed QC.
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Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 17:15:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5609.6	5609.6	101	%			17:16:54
1	Y RADIAL	6093.4	6093.4	100.9	%			17:16:54
1	Al 396.153Radial†	-31.4	4.1	2.7902	ug/L	2.7902	ppb	17:16:54
1	Ca 317.933Radial†	23.4	6.3	9.2653	ug/L	9.2653	ppb	17:17:14
1	Fe 238.204 Radial†	9.2	-0.7	-6.3809	ug/L	-6.3809	ppb	17:17:14
1	K 766.490 Radial†	2923.7	166.6	27.957	ug/L	27.957	ppb	17:16:54
1	Mg 279.077 IEC†	0.6	-1.3	-43.876	ug/L	-43.876	ppb	17:17:14
1	Na 589.592 Radial†	-1657.3	-93.2	-28.238	ug/L	-28.238	ppb	17:16:54
1	Sr 421.552†	-42.5	-42.0	-0.2534	ug/L	-0.2534	ppb	17:16:54
1	Sc 361.383	868166.3	868166.3	100.03	%			17:18:11
1	Y 371.029	730614.2	730614.2	100.16	%			17:18:11
1	Ag 328.068†	359.5	85.3	0.3852	ug/L	0.3852	ppb	17:18:11
1	As 188.979†	-25.2	6.1	2.3339	ug/L	2.3339	ppb	17:18:31
1	B 249.677†	-286.5	206.8	4.4085	ug/L	4.4085	ppb	17:18:31
1	Ba 233.527†	-11.2	-0.1	-0.0011	ug/L	-0.0011	ppb	17:18:31
1	Be 313.107†	-4666.5	-2.5	-0.0006	ug/L	-0.0006	ppb	17:18:11
1	Cd 226.502†	-193.5	5.5	0.0584	ug/L	0.0584	ppb	17:18:31
1	Co 228.616†	-70.1	3.3	0.0649	ug/L	0.0649	ppb	17:18:31
1	Cr 267.716†	73.1	-13.0	-0.1355	ug/L	-0.1355	ppb	17:18:31
1	Cu 324.752†	6805.7	45.9	0.1329	ug/L	0.1329	ppb	17:18:11
1	Mn 257.610†	555.2	34.9	0.0372	ug/L	0.0372	ppb	17:18:31
1	Mo 202.031†	31.1	12.7	0.8064	ug/L	0.8064	ppb	17:18:31
1	Ni 231.604†	99.7	13.7	0.3147	ug/L	0.3147	ppb	17:18:31
1	P 214.914†	229.7	-12.4	-6.9214	ug/L	-6.9214	ppb	17:18:31
1	Pb 220.353†	-67.2	0.8	0.0908	ug/L	0.0908	ppb	17:18:31
1	S 181.975 Axial†	47.0	-2.5	-3.2610	ug/L	-3.2610	ppb	17:18:31
1	Sb 206.836†	45.1	7.7	2.4528	ug/L	2.4528	ppb	17:18:31
1	Se 196.026†	-32.6	-5.8	-3.2627	ug/L	-3.2627	ppb	17:18:31
1	Si 251.611†	582.1	100.2	2.9613	ug/L	2.9613	ppb	17:18:31
1	Sn 189.927†	10.4	1.5	0.2480	ug/L	0.2480	ppb	17:18:31
1	Ti 334.940†	-1173.5	83.1	0.1324	ug/L	0.1324	ppb	17:18:11
1	Tl 190.801†	-24.9	9.7	2.7329	ug/L	2.7329	ppb	17:18:31
1	U 409.014†	-2641.7	-56.9	-1.6357	ug/L	-1.6357	ppb	17:18:11
1	V 292.402†	-1363.9	-0.8	0.0030	ug/L	0.0030	ppb	17:18:11
1	Zn 213.857†	799.7	45.6	0.3923	ug/L	0.3923	ppb	17:18:31
1	SiO2†	620.8	96.2	6.0871	ug/L	6.0871	ppb	17:19:27
2	Sc Radial	5558.2	5558.2	99.7	%			17:17:19
2	Y RADIAL	6036.1	6036.1	99.95	%			17:17:19
2	Al 396.153Radial†	-14.4	20.9	14.377	ug/L	14.377	ppb	17:17:19
2	Ca 317.933Radial†	20.0	3.1	4.5610	ug/L	4.5610	ppb	17:17:39
2	Fe 238.204 Radial†	10.7	0.9	7.6278	ug/L	7.6278	ppb	17:17:39
2	K 766.490 Radial†	2898.0	167.7	28.149	ug/L	28.149	ppb	17:17:19
2	Mg 279.077 IEC†	0.9	-1.0	-33.881	ug/L	-33.881	ppb	17:17:39
2	Na 589.592 Radial†	-1655.6	-106.7	-32.347	ug/L	-32.347	ppb	17:17:19
2	Sr 421.552†	-33.5	-33.3	-0.2011	ug/L	-0.2011	ppb	17:17:19
2	Sc 361.383	866834.8	866834.8	99.875	%			17:18:36
2	Y 371.029	728507.0	728507.0	99.870	%			17:18:36
2	Ag 328.068†	325.8	52.2	0.2387	ug/L	0.2387	ppb	17:18:36
2	As 188.979†	-19.9	11.4	4.3868	ug/L	4.3868	ppb	17:18:56
2	B 249.677†	-319.2	173.6	3.6982	ug/L	3.6982	ppb	17:18:56
2	Ba 233.527†	3.8	14.9	0.1106	ug/L	0.1106	ppb	17:18:56
2	Be 313.107†	-4565.1	91.9	0.0330	ug/L	0.0330	ppb	17:18:36
2	Cd 226.502†	-218.8	-20.1	-0.2095	ug/L	-0.2095	ppb	17:18:56
2	Co 228.616†	-71.6	1.7	0.0340	ug/L	0.0340	ppb	17:18:56
2	Cr 267.716†	72.4	-13.6	-0.1418	ug/L	-0.1418	ppb	17:18:56
2	Cu 324.752†	6800.8	51.4	0.1497	ug/L	0.1497	ppb	17:18:36
2	Mn 257.610†	560.5	41.1	0.0449	ug/L	0.0449	ppb	17:18:56
2	Mo 202.031†	26.5	8.1	0.5185	ug/L	0.5185	ppb	17:18:56
2	Ni 231.604†	79.6	-6.2	-0.1428	ug/L	-0.1428	ppb	17:18:56

2	P 214.914†	240.5	-1.3	-0.7334	ug/L	-0.7334 ppb	17:18:56
2	Pb 220.353†	-57.9	10.1	1.1296	ug/L	1.1296 ppb	17:18:56
2	S 181.975 Axial†	50.1	0.8	1.0401	ug/L	1.0401 ppb	17:18:56
2	Sb 206.836†	47.1	9.7	3.0859	ug/L	3.0859 ppb	17:18:56
2	Se 196.026†	-25.3	1.4	0.8294	ug/L	0.8294 ppb	17:18:56
2	Si 251.611†	560.3	79.2	2.3415	ug/L	2.3415 ppb	17:18:56
2	Sn 189.927†	8.9	0.1	0.0150	ug/L	0.0150 ppb	17:18:56
2	Ti 334.940†	-1238.7	16.0	0.0267	ug/L	0.0267 ppb	17:18:36
2	Tl 190.801†	-24.7	9.9	2.7779	ug/L	2.7779 ppb	17:18:56
2	U 409.014†	-2669.6	-88.9	-2.5567	ug/L	-2.5567 ppb	17:18:36
2	V 292.402†	-1434.9	-74.0	-0.4916	ug/L	-0.4916 ppb	17:18:36
2	Zn 213.857†	798.0	45.1	0.3895	ug/L	0.3895 ppb	17:18:56
2	SiO2†	602.9	79.2	5.0123	ug/L	5.0123 ppb	17:19:32
3	Sc Radial	5597.3	5597.3	100	%		17:17:44
3	Y RADIAL	6082.5	6082.5	100.7	%		17:17:44
3	Al 396.153Radial†	-17.0	18.3	12.625	ug/L	12.625 ppb	17:17:44
3	Ca 317.933Radial†	20.4	3.4	5.0215	ug/L	5.0215 ppb	17:18:04
3	Fe 238.204 Radial†	9.7	-0.3	-2.4137	ug/L	-2.4137 ppb	17:18:04
3	K 766.490 Radial†	2753.4	3.3	0.5633	ug/L	0.5633 ppb	17:17:44
3	Mg 279.077 IEC†	-2.1	-4.0	-133.66	ug/L	-133.66 ppb	17:18:04
3	Na 589.592 Radial†	-1571.9	-11.8	-3.5616	ug/L	-3.5616 ppb	17:17:44
3	Sr 421.552†	-0.6	-0.4	-0.0023	ug/L	-0.0023 ppb	17:17:44
3	Sc 361.383	855593.0	855593.0	98.580	%		17:19:02
3	Y 371.029	719053.6	719053.6	98.574	%		17:19:02
3	Ag 328.068†	345.1	76.1	0.3495	ug/L	0.3495 ppb	17:19:02
3	As 188.979†	-30.3	0.6	0.2199	ug/L	0.2199 ppb	17:19:22
3	B 249.677†	-311.8	177.0	3.7718	ug/L	3.7718 ppb	17:19:22
3	Ba 233.527†	-8.4	2.6	0.0181	ug/L	0.0181 ppb	17:19:22
3	Be 313.107†	-4493.9	104.0	0.0372	ug/L	0.0372 ppb	17:19:02
3	Cd 226.502†	-196.4	-0.3	-0.0024	ug/L	-0.0024 ppb	17:19:22
3	Co 228.616†	-75.9	-3.6	-0.0669	ug/L	-0.0669 ppb	17:19:22
3	Cr 267.716†	85.2	0.4	0.0062	ug/L	0.0062 ppb	17:19:22
3	Cu 324.752†	6720.6	59.6	0.1729	ug/L	0.1729 ppb	17:19:02
3	Mn 257.610†	550.6	38.3	0.0429	ug/L	0.0429 ppb	17:19:22
3	Mo 202.031†	20.5	2.3	0.1487	ug/L	0.1487 ppb	17:19:22
3	Ni 231.604†	103.1	18.6	0.4277	ug/L	0.4277 ppb	17:19:22
3	P 214.914†	231.9	-6.8	-3.8262	ug/L	-3.8262 ppb	17:19:22
3	Pb 220.353†	-83.1	-16.4	-1.8272	ug/L	-1.8272 ppb	17:19:22
3	S 181.975 Axial†	48.6	-0.1	-0.1872	ug/L	-0.1872 ppb	17:19:22
3	Sb 206.836†	37.3	0.5	0.1325	ug/L	0.1325 ppb	17:19:22
3	Se 196.026†	-23.8	2.6	1.4819	ug/L	1.4819 ppb	17:19:22
3	Si 251.611†	548.9	75.1	2.2363	ug/L	2.2363 ppb	17:19:22
3	Sn 189.927†	3.0	-5.8	-0.9253	ug/L	-0.9253 ppb	17:19:22
3	Ti 334.940†	-1289.7	-52.1	-0.0779	ug/L	-0.0779 ppb	17:19:02
3	Tl 190.801†	-33.2	0.9	0.2532	ug/L	0.2532 ppb	17:19:22
3	U 409.014†	-2861.8	-319.0	-9.1711	ug/L	-9.1711 ppb	17:19:02
3	V 292.402†	-1405.3	-62.9	-0.4365	ug/L	-0.4365 ppb	17:19:02
3	Zn 213.857†	795.5	53.1	0.4585	ug/L	0.4585 ppb	17:19:22
3	SiO2†	582.3	66.2	4.2273	ug/L	4.2273 ppb	17:19:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863531.4	99.495	%	0.7958				0.80%
Sc Radial	5588.3	100	%	0.5				0.48%
Y 371.029	726058.3	99.534	%	0.8441				0.85%
Y RADIAL	6070.7	100.5	%	0.50				0.50%
Ag 328.068†	71.2	0.3245	ug/L	0.07643	0.3245	ppb	0.07643	23.55%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.4	9.9306	ug/L	6.24547	9.9306	ppb	6.24547	62.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.0	2.3135	ug/L	2.08349	2.3135	ppb	2.08349	90.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	185.8	3.9595	ug/L	0.39059	3.9595	ppb	0.39059	9.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.8	0.0425	ug/L	0.05973	0.0425	ppb	0.05973	140.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	64.5	0.0232	ug/L	0.02074	0.0232	ppb	0.02074	89.42%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.3	6.2826	ug/L	2.59333	6.2826	ppb	2.59333	41.28%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -5.0     -0.0512 ug/L       0.14045     -0.0512 ppb        0.14045 274.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0107 ug/L       0.06892      0.0107 ppb        0.06892 645.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -8.7     -0.0903 ug/L       0.08369     -0.0903 ppb        0.08369  92.63%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                52.3      0.1518 ug/L       0.02010      0.1518 ppb        0.02010  13.24%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.0     -0.3889 ug/L       7.22051     -0.3889 ppb        7.22051 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.5      18.890 ug/L       15.8716      18.890 ppb        15.8716  84.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.1     -70.473 ug/L       54.9514     -70.473 ppb        54.9514  77.97%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                38.1      0.0416 ug/L       0.00401      0.0416 ppb        0.00401   9.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.7      0.4912 ug/L       0.32972      0.4912 ppb        0.32972  67.13%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -70.6     -21.382 ug/L       15.5690     -21.382 ppb        15.5690  72.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.7      0.1999 ug/L       0.30205      0.1999 ppb        0.30205 151.13%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.8     -3.8270 ug/L       3.09403     -3.8270 ppb        3.09403  80.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.8     -0.2023 ug/L       1.50005     -0.2023 ppb        1.50005 741.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.6     -0.8027 ug/L       2.21563     -0.8027 ppb        2.21563 276.02%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.0      1.8904 ug/L       1.55496      1.8904 ppb        1.55496  82.26%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.6     -0.3171 ug/L       2.57169     -0.3171 ppb        2.57169 810.93%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                84.9      2.5130 ug/L       0.39179      2.5130 ppb        0.39179  15.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.4     -0.2208 ug/L       0.62115     -0.2208 ppb        0.62115 281.33%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -25.2     -0.1523 ug/L       0.13251     -0.1523 ppb        0.13251  87.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                15.7      0.0270 ug/L       0.10513      0.0270 ppb        0.10513 388.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.8      1.9213 ug/L       1.44483      1.9213 ppb        1.44483  75.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -154.9     -4.4545 ug/L       4.11056     -4.4545 ppb        4.11056  92.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -45.9     -0.3084 ug/L       0.27105     -0.3084 ppb        0.27105  87.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.9      0.4134 ug/L       0.03904      0.4134 ppb        0.03904   9.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      80.5      5.1089 ug/L       0.93366      5.1089 ppb        0.93366  18.28%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 18:09:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5359.6	5359.6	96.1	%			18:11:31
1	Y RADIAL	5804.1	5804.1	96.11	%			18:11:31
1	Al 396.153Radial†	7083.7	7404.8	5076.4	ug/L	5076.4	ppb	18:11:31
1	Ca 317.933Radial†	3448.9	3571.1	5212.0	ug/L	5212.0	ppb	18:11:51
1	Fe 238.204 Radial†	573.3	586.6	5272.9	ug/L	5272.9	ppb	18:11:51
1	K 766.490 Radial†	31985.3	30536.0	5113.8	ug/L	5113.8	ppb	18:11:31
1	Mg 279.077 IEC†	156.2	160.6	5407.9	ug/L	5407.9	ppb	18:11:51
1	Na 589.592 Radial†	30315.8	33092.9	10029	ug/L	10029	ppb	18:11:31
1	Sr 421.552†	81397.2	84680.9	510.68	ug/L	510.68	ppb	18:11:31
1	Sc 361.383	793615.5	793615.5	91.439	%			18:12:49
1	Y 371.029	657064.0	657064.0	90.076	%			18:12:49
1	Ag 328.068†	113713.8	124085.9	564.63	ug/L	564.63	ppb	18:12:54
1	As 188.979†	1250.1	1398.4	544.70	ug/L	544.70	ppb	18:13:14
1	B 249.677†	23423.4	26109.6	554.30	ug/L	554.30	ppb	18:12:54
1	Ba 233.527†	67968.3	74342.8	556.93	ug/L	556.93	ppb	18:12:54
1	Be 313.107†	1430855.5	1569478.5	564.64	ug/L	564.64	ppb	18:12:49
1	Cd 226.502†	48986.6	53771.8	557.51	ug/L	557.51	ppb	18:12:54
1	Co 228.616†	26974.7	29573.6	557.94	ug/L	557.94	ppb	18:12:54
1	Cr 267.716†	48749.4	53227.4	558.06	ug/L	558.06	ppb	18:12:54
1	Cu 324.752†	180674.2	190831.5	554.56	ug/L	554.56	ppb	18:12:54
1	Mn 257.610†	485442.6	530370.8	562.53	ug/L	562.53	ppb	18:12:49
1	Mo 202.031†	7864.8	8582.7	546.55	ug/L	546.55	ppb	18:13:14
1	Ni 231.604†	22305.9	24308.3	558.22	ug/L	558.22	ppb	18:12:54
1	P 214.914†	4657.2	4851.2	2624.8	ug/L	2624.8	ppb	18:13:14
1	Pb 220.353†	4376.8	4854.6	545.05	ug/L	545.05	ppb	18:13:14
1	S 181.975 Axial†	808.0	834.3	1101.2	ug/L	1101.2	ppb	18:13:14
1	Sb 206.836†	1618.7	1732.8	554.70	ug/L	554.70	ppb	18:13:14
1	Se 196.026†	844.6	950.5	553.35	ug/L	553.35	ppb	18:13:14
1	Si 251.611†	88141.9	95912.2	2843.7	ug/L	2843.7	ppb	18:12:54
1	Sn 189.927†	3112.0	3394.5	546.67	ug/L	546.67	ppb	18:13:14
1	Ti 334.940†	316765.8	347678.4	548.62	ug/L	548.62	ppb	18:12:54
1	Tl 190.801†	1728.4	1924.8	545.86	ug/L	545.86	ppb	18:13:14
1	U 409.014†	14847.3	18821.4	539.39	ug/L	539.39	ppb	18:12:54
1	V 292.402†	74860.3	83231.6	561.15	ug/L	561.15	ppb	18:12:54
1	Zn 213.857†	60284.3	65174.4	555.72	ug/L	555.72	ppb	18:12:54
1	SiO2†	87701.0	95387.3	6060.3	ug/L	6060.3	ppb	18:14:21
2	Sc Radial	5462.1	5462.1	98.0	%			18:11:56
2	Y RADIAL	5895.1	5895.1	97.61	%			18:11:56
2	Al 396.153Radial†	7099.6	7282.6	4993.9	ug/L	4993.9	ppb	18:11:56
2	Ca 317.933Radial†	3439.5	3494.2	5099.8	ug/L	5099.8	ppb	18:12:16
2	Fe 238.204 Radial†	575.6	577.7	5191.7	ug/L	5191.7	ppb	18:12:16
2	K 766.490 Radial†	32460.3	30396.1	5091.0	ug/L	5091.0	ppb	18:11:56
2	Mg 279.077 IEC†	156.7	158.0	5320.3	ug/L	5320.3	ppb	18:12:16
2	Na 589.592 Radial†	30824.3	33019.7	10007	ug/L	10007	ppb	18:11:56
2	Sr 421.552†	82424.1	84139.1	507.42	ug/L	507.42	ppb	18:11:56
2	Sc 361.383	875277.5	875277.5	100.85	%			18:13:20
2	Y 371.029	725514.7	725514.7	99.460	%			18:13:20
2	Ag 328.068†	112410.7	111191.3	506.10	ug/L	506.10	ppb	18:13:25
2	As 188.979†	1290.8	1311.3	510.61	ug/L	510.61	ppb	18:13:45
2	B 249.677†	23123.9	23422.6	497.20	ug/L	497.20	ppb	18:13:25
2	Ba 233.527†	67426.9	66870.9	500.97	ug/L	500.97	ppb	18:13:25
2	Be 313.107†	1400066.2	1392953.3	501.14	ug/L	501.14	ppb	18:13:20
2	Cd 226.502†	48617.5	48407.5	501.85	ug/L	501.85	ppb	18:13:25
2	Co 228.616†	26649.8	26499.1	499.97	ug/L	499.97	ppb	18:13:25
2	Cr 267.716†	48306.9	47814.5	501.32	ug/L	501.32	ppb	18:13:25
2	Cu 324.752†	178062.1	169806.6	493.48	ug/L	493.48	ppb	18:13:25
2	Mn 257.610†	475203.4	470686.4	499.27	ug/L	499.27	ppb	18:13:20
2	Mo 202.031†	8046.1	7960.0	506.91	ug/L	506.91	ppb	18:13:45
2	Ni 231.604†	22153.1	21880.8	502.47	ug/L	502.47	ppb	18:13:25

2	P 214.914†	4759.7	4477.6	2425.5 ug/L	2425.5 ppb	18:13:45
2	Pb 220.353†	4451.8	4482.3	503.32 ug/L	503.32 ppb	18:13:45
2	S 181.975 Axial†	830.3	773.9	1021.5 ug/L	1021.5 ppb	18:13:45
2	Sb 206.836†	1640.5	1589.3	509.24 ug/L	509.24 ppb	18:13:45
2	Se 196.026†	869.7	889.2	518.49 ug/L	518.49 ppb	18:13:45
2	Si 251.611†	87181.5	85966.5	2548.3 ug/L	2548.3 ppb	18:13:25
2	Sn 189.927†	3178.2	3142.7	506.15 ug/L	506.15 ppb	18:13:45
2	Ti 334.940†	312768.8	311394.5	491.38 ug/L	491.38 ppb	18:13:25
2	Tl 190.801†	1765.0	1784.7	505.98 ug/L	505.98 ppb	18:13:45
2	U 409.014†	14595.3	17056.6	488.77 ug/L	488.77 ppb	18:13:25
2	V 292.402†	73952.7	74693.4	503.77 ug/L	503.77 ppb	18:13:25
2	Zn 213.857†	59761.3	58504.9	498.78 ug/L	498.78 ppb	18:13:25
2	SiO2†	86075.6	84827.2	5388.0 ug/L	5388.0 ppb	18:14:27
3	Sc Radial	5405.7	5405.7	96.9 %		18:12:22
3	Y RADIAL	5861.3	5861.3	97.05 %		18:12:22
3	Al 396.153Radial†	7160.1	7420.7	5089.0 ug/L	5089.0 ppb	18:12:22
3	Ca 317.933Radial†	3445.2	3536.7	5161.8 ug/L	5161.8 ppb	18:12:42
3	Fe 238.204 Radial†	577.2	585.5	5261.3 ug/L	5261.3 ppb	18:12:42
3	K 766.490 Radial†	32537.2	30821.5	5162.3 ug/L	5162.3 ppb	18:12:22
3	Mg 279.077 IEC†	155.2	158.2	5326.4 ug/L	5326.4 ppb	18:12:42
3	Na 589.592 Radial†	30929.4	33456.8	10139 ug/L	10139 ppb	18:12:22
3	Sr 421.552†	82796.6	85402.2	515.04 ug/L	515.04 ppb	18:12:22
3	Sc 361.383	874245.2	874245.2	100.73 %		18:13:51
3	Y 371.029	723486.0	723486.0	99.181 %		18:13:51
3	Ag 328.068†	112595.5	111506.3	507.55 ug/L	507.55 ppb	18:13:56
3	As 188.979†	1285.1	1307.1	509.02 ug/L	509.02 ppb	18:14:16
3	B 249.677†	23239.1	23564.1	500.20 ug/L	500.20 ppb	18:13:56
3	Ba 233.527†	67615.3	67136.9	502.96 ug/L	502.96 ppb	18:13:56
3	Be 313.107†	1404432.7	1398927.5	503.29 ug/L	503.29 ppb	18:13:51
3	Cd 226.502†	48802.7	48648.4	504.34 ug/L	504.34 ppb	18:13:56
3	Co 228.616†	26810.7	26690.0	503.57 ug/L	503.57 ppb	18:13:56
3	Cr 267.716†	48312.1	47876.3	501.97 ug/L	501.97 ppb	18:13:56
3	Cu 324.752†	178953.5	170900.1	496.66 ug/L	496.66 ppb	18:13:56
3	Mn 257.610†	476911.0	472938.1	501.66 ug/L	501.66 ppb	18:13:51
3	Mo 202.031†	8055.6	7978.9	508.12 ug/L	508.12 ppb	18:14:16
3	Ni 231.604†	22170.7	21924.2	503.47 ug/L	503.47 ppb	18:13:56
3	P 214.914†	4769.6	4493.1	2433.6 ug/L	2433.6 ppb	18:14:16
3	Pb 220.353†	4453.1	4488.8	504.06 ug/L	504.06 ppb	18:14:16
3	S 181.975 Axial†	829.9	774.5	1022.3 ug/L	1022.3 ppb	18:14:16
3	Sb 206.836†	1658.9	1609.5	515.69 ug/L	515.69 ppb	18:14:16
3	Se 196.026†	880.1	900.6	525.13 ug/L	525.13 ppb	18:14:16
3	Si 251.611†	87632.8	86516.7	2564.7 ug/L	2564.7 ppb	18:13:56
3	Sn 189.927†	3198.5	3166.5	509.98 ug/L	509.98 ppb	18:14:16
3	Ti 334.940†	313915.2	312898.7	493.76 ug/L	493.76 ppb	18:13:56
3	Tl 190.801†	1779.7	1801.4	510.69 ug/L	510.69 ppb	18:14:16
3	U 409.014†	14733.4	17210.7	493.19 ug/L	493.19 ppb	18:13:56
3	V 292.402†	74217.0	75042.4	506.10 ug/L	506.10 ppb	18:13:56
3	Zn 213.857†	60135.3	58946.1	502.56 ug/L	502.56 ppb	18:13:56
3	SiO2†	87945.0	86783.9	5512.8 ug/L	5512.8 ppb	18:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	847712.7	97.672	%	5.3983				5.53%
Sc Radial	5409.1	97.0	%	0.92				0.95%
Y 371.029	702021.6	96.239	%	5.3393				5.55%
Y RADIAL	5853.5	96.93	%	0.761				0.79%
Ag 328.068†	115594.5	526.09	ug/L	33.384	526.09	ppb	33.384	6.35%
QC value within limits for Ag 328.068 Recovery = 105.22%								
Al 396.153Radial†	7369.4	5053.1	ug/L	51.63	5053.1	ppb	51.63	1.02%
QC value within limits for Al 396.153Radial Recovery = 101.06%								
As 188.979†	1338.9	521.44	ug/L	20.157	521.44	ppb	20.157	3.87%
QC value within limits for As 188.979 Recovery = 104.29%								
B 249.677†	24365.4	517.23	ug/L	32.139	517.23	ppb	32.139	6.21%
QC value within limits for B 249.677 Recovery = 103.45%								
Ba 233.527†	69450.2	520.29	ug/L	31.749	520.29	ppb	31.749	6.10%
QC value within limits for Ba 233.527 Recovery = 104.06%								
Be 313.107†	1453786.4	523.02	ug/L	36.056	523.02	ppb	36.056	6.89%
QC value within limits for Be 313.107 Recovery = 104.60%								
Ca 317.933Radial†	3534.0	5157.9	ug/L	56.25	5157.9	ppb	56.25	1.09%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.16%
Cd 226.502†            50275.9      521.23 ug/L        31.442      521.23 ppb        31.442   6.03%
   QC value within limits for Cd 226.502  Recovery = 104.25%
Co 228.616†            27587.6      520.49 ug/L        32.476      520.49 ppb        32.476   6.24%
   QC value within limits for Co 228.616  Recovery = 104.10%
Cr 267.716†            49639.4      520.45 ug/L        32.576      520.45 ppb        32.576   6.26%
   QC value within limits for Cr 267.716  Recovery = 104.09%
Cu 324.752†           177179.4      514.90 ug/L        34.379      514.90 ppb        34.379   6.68%
   QC value within limits for Cu 324.752  Recovery = 102.98%
Fe 238.204 Radial†       583.3      5241.9 ug/L         43.91      5241.9 ppb         43.91   0.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.84%
K 766.490 Radial†      30584.5      5122.3 ug/L         36.41      5122.3 ppb         36.41   0.71%
   QC value within limits for K 766.490 Radial  Recovery = 102.45%
Mg 279.077 IEC†          159.0      5351.6 ug/L         48.91      5351.6 ppb         48.91   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.03%
Mn 257.610†           491331.8      521.15 ug/L        35.853      521.15 ppb        35.853   6.88%
   QC value within limits for Mn 257.610  Recovery = 104.23%
Mo 202.031†             8173.9      520.53 ug/L        22.542      520.53 ppb        22.542   4.33%
   QC value within limits for Mo 202.031  Recovery = 104.11%
Na 589.592 Radial†     33189.8       10058 ug/L          70.9       10058 ppb          70.9   0.71%
   QC value within limits for Na 589.592 Radial  Recovery = 100.58%
Ni 231.604†            22704.4      521.39 ug/L        31.900      521.39 ppb        31.900   6.12%
   QC value within limits for Ni 231.604  Recovery = 104.28%
P 214.914†              4607.3      2494.6 ug/L        112.81      2494.6 ppb        112.81   4.52%
   QC value within limits for P 214.914  Recovery = 99.79%
Pb 220.353†             4608.6      517.48 ug/L        23.885      517.48 ppb        23.885   4.62%
   QC value within limits for Pb 220.353  Recovery = 103.50%
S 181.975 Axial†         794.2      1048.3 ug/L         45.80      1048.3 ppb         45.80   4.37%
   QC value within limits for S 181.975 Axial  Recovery = 104.83%
Sb 206.836†             1643.9      526.54 ug/L        24.599      526.54 ppb        24.599   4.67%
   QC value within limits for Sb 206.836  Recovery = 105.31%
Se 196.026†              913.4      532.32 ug/L        18.514      532.32 ppb        18.514   3.48%
   QC value within limits for Se 196.026  Recovery = 106.46%
Si 251.611†            89465.1      2652.2 ug/L        166.04      2652.2 ppb        166.04   6.26%
   QC value within limits for Si 251.611  Recovery = 106.09%
Sn 189.927†             3234.5      520.93 ug/L        22.371      520.93 ppb        22.371   4.29%
   QC value within limits for Sn 189.927  Recovery = 104.19%
Sr 421.552†            84740.7      511.05 ug/L         3.822      511.05 ppb         3.822   0.75%
   QC value within limits for Sr 421.552  Recovery = 102.21%
Ti 334.940†           323990.5      511.25 ug/L        32.380      511.25 ppb        32.380   6.33%
   QC value within limits for Ti 334.940  Recovery = 102.25%
Tl 190.801†             1837.0      520.84 ug/L        21.789      520.84 ppb        21.789   4.18%
   QC value within limits for Tl 190.801  Recovery = 104.17%
U 409.014†             17696.2      507.12 ug/L        28.037      507.12 ppb        28.037   5.53%
   QC value within limits for U 409.014  Recovery = 101.42%
V 292.402†             77655.8      523.67 ug/L        32.475      523.67 ppb        32.475   6.20%
   QC value within limits for V 292.402  Recovery = 104.73%
Zn 213.857†            60875.1      519.02 ug/L        31.835      519.02 ppb        31.835   6.13%
   QC value within limits for Zn 213.857  Recovery = 103.80%
SiO2†                  88999.4      5653.7 ug/L        357.59      5653.7 ppb        357.59   6.32%
   QC value within limits for SiO2  Recovery = 105.73%
All analyte(s) passed QC.
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Sequence No.: 43
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 18:16:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5597.8	5597.8	100	%			18:18:33
1	Y RADIAL	6096.4	6096.4	100.9	%			18:18:33
1	Al 396.153Radial†	-27.0	8.4	5.7546	ug/L	5.7546	ppb	18:18:33
1	Ca 317.933Radial†	19.8	2.8	4.0992	ug/L	4.0992	ppb	18:18:53
1	Fe 238.204 Radial†	9.4	-0.5	-4.5312	ug/L	-4.5312	ppb	18:18:53
1	K 766.490 Radial†	2818.3	67.7	11.367	ug/L	11.367	ppb	18:18:33
1	Mg 279.077 IEC†	1.8	-0.1	-4.9736	ug/L	-4.9736	ppb	18:18:53
1	Na 589.592 Radial†	-1653.9	-93.3	-28.271	ug/L	-28.271	ppb	18:18:33
1	Sr 421.552†	-21.2	-20.9	-0.1260	ug/L	-0.1260	ppb	18:18:33
1	Sc 361.383	863666.6	863666.6	99.510	%			18:19:50
1	Y 371.029	726686.5	726686.5	99.620	%			18:19:50
1	Ag 328.068†	324.2	51.7	0.2360	ug/L	0.2360	ppb	18:19:50
1	As 188.979†	-14.0	17.2	6.6403	ug/L	6.6403	ppb	18:20:10
1	B 249.677†	-315.6	176.1	3.7533	ug/L	3.7533	ppb	18:20:10
1	Ba 233.527†	-3.3	7.8	0.0581	ug/L	0.0581	ppb	18:20:10
1	Be 313.107†	-4512.1	128.3	0.0458	ug/L	0.0458	ppb	18:19:50
1	Cd 226.502†	-205.1	-7.1	-0.0735	ug/L	-0.0735	ppb	18:20:10
1	Co 228.616†	-76.7	-3.6	-0.0669	ug/L	-0.0669	ppb	18:20:10
1	Cr 267.716†	88.6	3.0	0.0327	ug/L	0.0327	ppb	18:20:10
1	Cu 324.752†	6800.5	76.1	0.2209	ug/L	0.2209	ppb	18:19:50
1	Mn 257.610†	508.6	-9.0	-0.0099	ug/L	-0.0099	ppb	18:20:10
1	Mo 202.031†	27.0	8.7	0.5557	ug/L	0.5557	ppb	18:20:10
1	Ni 231.604†	93.1	7.7	0.1761	ug/L	0.1761	ppb	18:20:10
1	P 214.914†	225.5	-15.4	-8.6456	ug/L	-8.6456	ppb	18:20:10
1	Pb 220.353†	-71.3	-3.7	-0.4061	ug/L	-0.4061	ppb	18:20:10
1	S 181.975 Axial†	54.1	5.0	6.5474	ug/L	6.5474	ppb	18:20:10
1	Sb 206.836†	39.3	2.1	0.6742	ug/L	0.6742	ppb	18:20:10
1	Se 196.026†	-39.5	-12.9	-7.2806	ug/L	-7.2806	ppb	18:20:10
1	Si 251.611†	552.9	73.8	2.1880	ug/L	2.1880	ppb	18:20:10
1	Sn 189.927†	3.9	-5.0	-0.7984	ug/L	-0.7984	ppb	18:20:10
1	Ti 334.940†	-1336.5	-86.8	-0.1350	ug/L	-0.1350	ppb	18:19:50
1	Tl 190.801†	-35.6	-1.2	-0.3409	ug/L	-0.3409	ppb	18:20:10
1	U 409.014†	-2720.4	-149.8	-4.3062	ug/L	-4.3062	ppb	18:19:50
1	V 292.402†	-1362.9	-6.9	-0.0456	ug/L	-0.0456	ppb	18:19:50
1	Zn 213.857†	792.3	42.4	0.3636	ug/L	0.3636	ppb	18:20:10
1	SiO2†	553.5	31.8	2.0040	ug/L	2.0040	ppb	18:21:06
2	Sc Radial	5584.6	5584.6	100	%			18:18:58
2	Y RADIAL	6084.8	6084.8	100.8	%			18:18:58
2	Al 396.153Radial†	-30.9	4.5	3.0352	ug/L	3.0352	ppb	18:18:58
2	Ca 317.933Radial†	17.5	0.6	0.8612	ug/L	0.8612	ppb	18:19:18
2	Fe 238.204 Radial†	9.2	-0.7	-6.6645	ug/L	-6.6645	ppb	18:19:18
2	K 766.490 Radial†	2790.0	46.1	7.7416	ug/L	7.7416	ppb	18:18:58
2	Mg 279.077 IEC†	2.3	0.4	11.868	ug/L	11.868	ppb	18:19:18
2	Na 589.592 Radial†	-1624.2	-67.5	-20.463	ug/L	-20.463	ppb	18:18:58
2	Sr 421.552†	-22.6	-22.3	-0.1348	ug/L	-0.1348	ppb	18:18:58
2	Sc 361.383	873176.9	873176.9	100.61	%			18:20:15
2	Y 371.029	735042.2	735042.2	100.77	%			18:20:15
2	Ag 328.068†	376.7	100.4	0.4502	ug/L	0.4502	ppb	18:20:15
2	As 188.979†	-27.0	4.4	1.7070	ug/L	1.7070	ppb	18:20:35
2	B 249.677†	-310.9	184.2	3.9263	ug/L	3.9263	ppb	18:20:35
2	Ba 233.527†	4.5	15.6	0.1165	ug/L	0.1165	ppb	18:20:35
2	Be 313.107†	-4519.3	170.5	0.0615	ug/L	0.0615	ppb	18:20:15
2	Cd 226.502†	-196.2	3.9	0.0411	ug/L	0.0411	ppb	18:20:35
2	Co 228.616†	-89.5	-15.5	-0.2909	ug/L	-0.2909	ppb	18:20:35
2	Cr 267.716†	83.1	-3.4	-0.0366	ug/L	-0.0366	ppb	18:20:35
2	Cu 324.752†	6851.3	52.1	0.1511	ug/L	0.1511	ppb	18:20:15
2	Mn 257.610†	489.3	-33.8	-0.0367	ug/L	-0.0367	ppb	18:20:35
2	Mo 202.031†	30.4	11.8	0.7518	ug/L	0.7518	ppb	18:20:35
2	Ni 231.604†	96.5	10.0	0.2292	ug/L	0.2292	ppb	18:20:35

2	P 214.914†	230.4	-13.0	-7.3027 ug/L	-7.3027 ppb	18:20:35
2	Pb 220.353†	-68.4	0.0	0.0079 ug/L	0.0079 ppb	18:20:35
2	S 181.975 Axial†	49.9	0.2	0.2844 ug/L	0.2844 ppb	18:20:35
2	Sb 206.836†	32.9	-4.7	-1.4774 ug/L	-1.4774 ppb	18:20:35
2	Se 196.026†	-28.0	-1.1	-0.6241 ug/L	-0.6241 ppb	18:20:35
2	Si 251.611†	536.5	51.5	1.5216 ug/L	1.5216 ppb	18:20:35
2	Sn 189.927†	3.8	-5.1	-0.8172 ug/L	-0.8172 ppb	18:20:35
2	Ti 334.940†	-1180.1	83.3	0.1305 ug/L	0.1305 ppb	18:20:15
2	Tl 190.801†	-35.4	-0.6	-0.1649 ug/L	-0.1649 ppb	18:20:35
2	U 409.014†	-2522.5	76.7	2.2066 ug/L	2.2066 ppb	18:20:15
2	V 292.402†	-1369.8	1.2	0.0240 ug/L	0.0240 ppb	18:20:15
2	Zn 213.857†	806.3	47.6	0.4080 ug/L	0.4080 ppb	18:20:35
2	SiO2†	569.1	41.2	2.5994 ug/L	2.5994 ppb	18:21:11
3	Sc Radial	5599.7	5599.7	100 %		18:19:23
3	Y RADIAL	6091.0	6091.0	100.9 %		18:19:23
3	Al 396.153Radial†	-42.0	-6.5	-4.4913 ug/L	-4.4913 ppb	18:19:23
3	Ca 317.933Radial†	15.0	-1.9	-2.8321 ug/L	-2.8321 ppb	18:19:43
3	Fe 238.204 Radial†	10.2	0.3	2.4851 ug/L	2.4851 ppb	18:19:43
3	K 766.490 Radial†	2944.0	191.9	32.206 ug/L	32.206 ppb	18:19:23
3	Mg 279.077 IEC†	2.1	0.2	7.5987 ug/L	7.5987 ppb	18:19:43
3	Na 589.592 Radial†	-1617.7	-56.7	-17.172 ug/L	-17.172 ppb	18:19:23
3	Sr 421.552†	-64.8	-64.3	-0.3876 ug/L	-0.3876 ppb	18:19:23
3	Sc 361.383	860699.8	860699.8	99.169 %		18:20:41
3	Y 371.029	724460.4	724460.4	99.315 %		18:20:41
3	Ag 328.068†	327.5	56.3	0.2559 ug/L	0.2559 ppb	18:20:41
3	As 188.979†	-27.6	3.5	1.3341 ug/L	1.3341 ppb	18:21:01
3	B 249.677†	-309.5	181.1	3.8593 ug/L	3.8593 ppb	18:21:01
3	Ba 233.527†	2.8	14.0	0.1042 ug/L	0.1042 ppb	18:21:01
3	Be 313.107†	-4486.9	138.1	0.0494 ug/L	0.0494 ppb	18:20:41
3	Cd 226.502†	-205.9	-8.7	-0.0906 ug/L	-0.0906 ppb	18:21:01
3	Co 228.616†	-80.0	-7.2	-0.1361 ug/L	-0.1361 ppb	18:21:01
3	Cr 267.716†	82.5	-2.9	-0.0300 ug/L	-0.0300 ppb	18:21:01
3	Cu 324.752†	6717.7	16.2	0.0472 ug/L	0.0472 ppb	18:20:41
3	Mn 257.610†	500.8	-15.2	-0.0160 ug/L	-0.0160 ppb	18:21:01
3	Mo 202.031†	17.6	-0.6	-0.0402 ug/L	-0.0402 ppb	18:21:01
3	Ni 231.604†	93.9	8.7	0.2006 ug/L	0.2006 ppb	18:21:01
3	P 214.914†	228.8	-11.3	-6.3106 ug/L	-6.3106 ppb	18:21:01
3	Pb 220.353†	-61.4	6.1	0.6795 ug/L	0.6795 ppb	18:21:01
3	S 181.975 Axial†	49.9	0.9	1.1521 ug/L	1.1521 ppb	18:21:01
3	Sb 206.836†	32.7	-4.4	-1.3854 ug/L	-1.3854 ppb	18:21:01
3	Se 196.026†	-29.5	-3.0	-1.6620 ug/L	-1.6620 ppb	18:21:01
3	Si 251.611†	537.0	59.7	1.7706 ug/L	1.7706 ppb	18:21:01
3	Sn 189.927†	6.6	-2.2	-0.3536 ug/L	-0.3536 ppb	18:21:01
3	Ti 334.940†	-1296.7	-51.3	-0.0806 ug/L	-0.0806 ppb	18:20:41
3	Tl 190.801†	-36.5	-2.2	-0.6337 ug/L	-0.6337 ppb	18:21:01
3	U 409.014†	-2604.1	-41.9	-1.2061 ug/L	-1.2061 ppb	18:20:41
3	V 292.402†	-1369.4	-18.1	-0.1235 ug/L	-0.1235 ppb	18:20:41
3	Zn 213.857†	786.5	39.3	0.3361 ug/L	0.3361 ppb	18:21:01
3	SiO2†	542.6	22.6	1.4247 ug/L	1.4247 ppb	18:21:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865847.7	99.762	%	0.7510				0.75%
Sc Radial	5594.0	100	%	0.1				0.15%
Y 371.029	728729.7	99.900	%	0.7648				0.77%
Y RADIAL	6090.7	100.9	%	0.10				0.10%
Ag 328.068†	69.5	0.3140	ug/L	0.11835	0.3140	ppb	0.11835	37.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.1	1.4328	ug/L	5.30762	1.4328	ppb	5.30762	370.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.4	3.2271	ug/L	2.96178	3.2271	ppb	2.96178	91.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	180.4	3.8463	ug/L	0.08723	3.8463	ppb	0.08723	2.27%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.5	0.0929	ug/L	0.03076	0.0929	ppb	0.03076	33.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.7	0.0522	ug/L	0.00822	0.0522	ppb	0.00822	15.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.5	0.7094	ug/L	3.46813	0.7094	ppb	3.46813	488.85%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -4.0     -0.0410 ug/L       0.07160     -0.0410 ppb        0.07160 174.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -8.8     -0.1646 ug/L       0.11468     -0.1646 ppb        0.11468  69.67%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -1.1     -0.0113 ug/L       0.03823     -0.0113 ppb        0.03823 338.49%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                48.2      0.1397 ug/L       0.08738      0.1397 ppb        0.08738  62.54%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.3     -2.9035 ug/L       4.78704     -2.9035 ppb        4.78704 164.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         101.9      17.105 ug/L       13.2028      17.105 ppb        13.2028  77.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      4.8310 ug/L       8.75528      4.8310 ppb        8.75528 181.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -19.3     -0.0209 ug/L       0.01405     -0.0209 ppb        0.01405  67.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.6      0.4224 ug/L       0.41246      0.4224 ppb        0.41246  97.64%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -72.5     -21.969 ug/L        5.7009     -21.969 ppb         5.7009  25.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                8.8      0.2020 ug/L       0.02659      0.2020 ppb        0.02659  13.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -13.2     -7.4197 ug/L       1.17188     -7.4197 ppb        1.17188  15.79%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                0.8      0.0938 ug/L       0.54786      0.0938 ppb        0.54786 584.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.0      2.6613 ug/L       3.39333      2.6613 ppb        3.39333 127.51%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.3     -0.7296 ug/L       1.21653     -0.7296 ppb        1.21653 166.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -5.7     -3.1889 ug/L       3.58129     -3.1889 ppb        3.58129 112.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               61.7      1.8267 ug/L       0.33676      1.8267 ppb        0.33676  18.44%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -4.1     -0.6564 ug/L       0.26241     -0.6564 ppb        0.26241  39.98%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -35.8     -0.2161 ug/L       0.14856     -0.2161 ppb        0.14856  68.74%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -18.3     -0.0283 ug/L       0.14024     -0.0283 ppb        0.14024 494.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.4     -0.3799 ug/L       0.23681     -0.3799 ppb        0.23681  62.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -38.3     -1.1019 ug/L       3.25767     -1.1019 ppb        3.25767 295.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -7.9     -0.0483 ug/L       0.07381     -0.0483 ppb        0.07381 152.69%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               43.1      0.3693 ug/L       0.03628      0.3693 ppb        0.03628   9.83%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     31.9      2.0094 ug/L       0.58739      2.0094 ppb        0.58739  29.23%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 51
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 19:11:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5465.2	5465.2	98.0	%			19:13:05
1	Y RADIAL	5925.9	5925.9	98.12	%			19:13:05
1	Al 396.153Radial†	7068.0	7246.2	4969.0	ug/L	4969.0	ppb	19:13:05
1	Ca 317.933Radial†	3449.2	3502.1	5111.2	ug/L	5111.2	ppb	19:13:25
1	Fe 238.204 Radial†	580.9	582.7	5236.4	ug/L	5236.4	ppb	19:13:25
1	K 766.490 Radial†	32244.5	30157.0	5050.7	ug/L	5050.7	ppb	19:13:05
1	Mg 279.077 IEC†	155.2	156.4	5265.9	ug/L	5265.9	ppb	19:13:25
1	Na 589.592 Radial†	31645.9	33840.0	10256	ug/L	10256	ppb	19:13:05
1	Sr 421.552†	83105.7	84786.6	511.32	ug/L	511.32	ppb	19:13:05
1	Sc 361.383	876872.1	876872.1	101.03	%			19:14:23
1	Y 371.029	725494.2	725494.2	99.457	%			19:14:23
1	Ag 328.068†	112987.5	111559.4	507.78	ug/L	507.78	ppb	19:14:28
1	As 188.979†	1285.3	1303.5	507.63	ug/L	507.63	ppb	19:14:48
1	B 249.677†	23247.9	23503.7	498.92	ug/L	498.92	ppb	19:14:28
1	Ba 233.527†	67616.1	66936.6	501.46	ug/L	501.46	ppb	19:14:28
1	Be 313.107†	1403483.0	1393810.6	501.45	ug/L	501.45	ppb	19:14:23
1	Cd 226.502†	48681.4	48383.1	501.59	ug/L	501.59	ppb	19:14:28
1	Co 228.616†	26759.5	26559.6	501.10	ug/L	501.10	ppb	19:14:28
1	Cr 267.716†	48417.8	47837.2	501.55	ug/L	501.55	ppb	19:14:28
1	Cu 324.752†	179359.0	170769.2	496.28	ug/L	496.28	ppb	19:14:28
1	Mn 257.610†	477283.9	471888.8	500.55	ug/L	500.55	ppb	19:14:23
1	Mo 202.031†	8017.6	7917.3	504.20	ug/L	504.20	ppb	19:14:48
1	Ni 231.604†	22189.1	21876.5	502.37	ug/L	502.37	ppb	19:14:28
1	P 214.914†	4757.1	4466.5	2418.8	ug/L	2418.8	ppb	19:14:48
1	Pb 220.353†	4458.3	4480.7	503.12	ug/L	503.12	ppb	19:14:48
1	S 181.975 Axial†	837.8	779.8	1029.3	ug/L	1029.3	ppb	19:14:48
1	Sb 206.836†	1656.4	1602.1	513.23	ug/L	513.23	ppb	19:14:48
1	Se 196.026†	890.2	908.0	529.18	ug/L	529.18	ppb	19:14:48
1	Si 251.611†	87631.3	86254.5	2557.0	ug/L	2557.0	ppb	19:14:28
1	Sn 189.927†	3197.7	3156.2	508.33	ug/L	508.33	ppb	19:14:48
1	Ti 334.940†	314245.0	312291.6	492.80	ug/L	492.80	ppb	19:14:28
1	Tl 190.801†	1765.4	1781.9	505.22	ug/L	505.22	ppb	19:14:48
1	U 409.014†	14736.6	17170.1	492.03	ug/L	492.03	ppb	19:14:28
1	V 292.402†	74219.2	74823.9	504.60	ug/L	504.60	ppb	19:14:28
1	Zn 213.857†	60045.6	58678.4	500.27	ug/L	500.27	ppb	19:14:28
1	SiO2†	87791.0	86369.9	5486.6	ug/L	5486.6	ppb	19:15:55
2	Sc Radial	5564.5	5564.5	99.8	%			19:13:30
2	Y RADIAL	6008.9	6008.9	99.50	%			19:13:30
2	Al 396.153Radial†	7202.3	7252.1	4972.9	ug/L	4972.9	ppb	19:13:30
2	Ca 317.933Radial†	3459.0	3449.1	5033.9	ug/L	5033.9	ppb	19:13:50
2	Fe 238.204 Radial†	587.5	578.8	5201.6	ug/L	5201.6	ppb	19:13:50
2	K 766.490 Radial†	32846.4	30173.2	5053.5	ug/L	5053.5	ppb	19:13:30
2	Mg 279.077 IEC†	159.0	157.4	5300.1	ug/L	5300.1	ppb	19:13:50
2	Na 589.592 Radial†	32168.9	33788.0	10240	ug/L	10240	ppb	19:13:30
2	Sr 421.552†	84621.9	84793.1	511.36	ug/L	511.36	ppb	19:13:30
2	Sc 361.383	877539.8	877539.8	101.11	%			19:14:54
2	Y 371.029	726634.8	726634.8	99.613	%			19:14:54
2	Ag 328.068†	112566.1	111057.5	505.49	ug/L	505.49	ppb	19:14:59
2	As 188.979†	1297.2	1314.3	511.79	ug/L	511.79	ppb	19:15:19
2	B 249.677†	23182.2	23421.2	497.17	ug/L	497.17	ppb	19:14:59
2	Ba 233.527†	67375.4	66647.6	499.30	ug/L	499.30	ppb	19:14:59
2	Be 313.107†	1404668.5	1393926.2	501.49	ug/L	501.49	ppb	19:14:54
2	Cd 226.502†	48586.0	48252.1	500.23	ug/L	500.23	ppb	19:14:59
2	Co 228.616†	26640.0	26421.3	498.51	ug/L	498.51	ppb	19:14:59
2	Cr 267.716†	48254.2	47639.0	499.48	ug/L	499.48	ppb	19:14:59
2	Cu 324.752†	178880.1	170160.5	494.51	ug/L	494.51	ppb	19:14:59
2	Mn 257.610†	476207.6	470464.9	499.03	ug/L	499.03	ppb	19:14:54
2	Mo 202.031†	8078.3	7971.3	507.63	ug/L	507.63	ppb	19:15:19
2	Ni 231.604†	22041.4	21713.7	498.63	ug/L	498.63	ppb	19:14:59

2	P 214.914†	4791.5	4496.9	2436.1 ug/L	2436.1 ppb	19:15:19
2	Pb 220.353†	4473.8	4492.7	504.48 ug/L	504.48 ppb	19:15:19
2	S 181.975 Axial†	832.6	774.1	1021.7 ug/L	1021.7 ppb	19:15:19
2	Sb 206.836†	1649.4	1593.9	510.80 ug/L	510.80 ppb	19:15:19
2	Se 196.026†	887.8	904.8	527.32 ug/L	527.32 ppb	19:15:19
2	Si 251.611†	87172.7	85734.9	2541.4 ug/L	2541.4 ppb	19:14:59
2	Sn 189.927†	3204.0	3160.0	508.93 ug/L	508.93 ppb	19:15:19
2	Ti 334.940†	313727.5	311543.1	491.61 ug/L	491.61 ppb	19:14:59
2	Tl 190.801†	1760.8	1776.1	503.56 ug/L	503.56 ppb	19:15:19
2	U 409.014†	14888.3	17309.1	496.03 ug/L	496.03 ppb	19:14:59
2	V 292.402†	74197.3	74746.3	504.14 ug/L	504.14 ppb	19:14:59
2	Zn 213.857†	59742.0	58332.9	497.33 ug/L	497.33 ppb	19:14:59
2	SiO2†	87299.5	85817.6	5451.2 ug/L	5451.2 ppb	19:16:00
3	Sc Radial	5507.7	5507.7	98.8 %		19:13:55
3	Y RADIAL	5939.6	5939.6	98.35 %		19:13:55
3	Al 396.153Radial†	7132.4	7255.9	4975.5 ug/L	4975.5 ppb	19:13:55
3	Ca 317.933Radial†	3448.7	3474.4	5070.9 ug/L	5070.9 ppb	19:14:15
3	Fe 238.204 Radial†	581.2	578.5	5198.5 ug/L	5198.5 ppb	19:14:15
3	K 766.490 Radial†	32653.6	30317.7	5077.7 ug/L	5077.7 ppb	19:13:55
3	Mg 279.077 IEC†	154.2	154.2	5191.3 ug/L	5191.3 ppb	19:14:15
3	Na 589.592 Radial†	31984.3	33933.8	10284 ug/L	10284 ppb	19:13:55
3	Sr 421.552†	83887.8	84925.0	512.16 ug/L	512.16 ppb	19:13:55
3	Sc 361.383	877027.6	877027.6	101.05 %		19:15:25
3	Y 371.029	725676.8	725676.8	99.482 %		19:15:25
3	Ag 328.068†	112388.2	110946.5	504.99 ug/L	504.99 ppb	19:15:30
3	As 188.979†	1276.4	1294.4	504.11 ug/L	504.11 ppb	19:15:50
3	B 249.677†	23199.7	23451.9	497.82 ug/L	497.82 ppb	19:15:30
3	Ba 233.527†	67196.4	66509.4	498.27 ug/L	498.27 ppb	19:15:30
3	Be 313.107†	1401657.1	1391757.5	500.71 ug/L	500.71 ppb	19:15:25
3	Cd 226.502†	48520.9	48215.7	499.85 ug/L	499.85 ppb	19:15:30
3	Co 228.616†	26694.6	26490.7	499.81 ug/L	499.81 ppb	19:15:30
3	Cr 267.716†	48059.7	47474.4	497.75 ug/L	497.75 ppb	19:15:30
3	Cu 324.752†	178863.3	170247.2	494.76 ug/L	494.76 ppb	19:15:30
3	Mn 257.610†	476020.5	470554.8	499.13 ug/L	499.13 ppb	19:15:25
3	Mo 202.031†	8054.5	7952.4	506.43 ug/L	506.43 ppb	19:15:50
3	Ni 231.604†	21993.9	21679.5	497.85 ug/L	497.85 ppb	19:15:30
3	P 214.914†	4770.2	4478.6	2425.8 ug/L	2425.8 ppb	19:15:50
3	Pb 220.353†	4458.1	4479.8	503.02 ug/L	503.02 ppb	19:15:50
3	S 181.975 Axial†	830.1	772.0	1019.0 ug/L	1019.0 ppb	19:15:50
3	Sb 206.836†	1668.3	1613.6	517.01 ug/L	517.01 ppb	19:15:50
3	Se 196.026†	881.4	899.0	524.06 ug/L	524.06 ppb	19:15:50
3	Si 251.611†	87259.8	85871.5	2545.5 ug/L	2545.5 ppb	19:15:30
3	Sn 189.927†	3196.1	3154.1	507.98 ug/L	507.98 ppb	19:15:50
3	Ti 334.940†	313305.1	311306.3	491.24 ug/L	491.24 ppb	19:15:30
3	Tl 190.801†	1762.0	1778.3	504.18 ug/L	504.18 ppb	19:15:50
3	U 409.014†	14851.5	17281.2	495.23 ug/L	495.23 ppb	19:15:30
3	V 292.402†	74030.8	74624.4	503.31 ug/L	503.31 ppb	19:15:30
3	Zn 213.857†	59731.1	58356.7	497.54 ug/L	497.54 ppb	19:15:30
3	SiO2†	87024.1	85595.5	5437.1 ug/L	5437.1 ppb	19:16:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	877146.5	101.06	%	0.040				0.04%
Sc Radial	5512.5	98.9	%	0.89				0.90%
Y 371.029	725935.2	99.517	%	0.0840				0.08%
Y RADIAL	5958.1	98.66	%	0.737				0.75%
Ag 328.068†	111187.8	506.09	ug/L	1.487	506.09	ppb	1.487	0.29%
QC value within limits for Ag 328.068 Recovery = 101.22%								
Al 396.153Radial†	7251.4	4972.5	ug/L	3.30	4972.5	ppb	3.30	0.07%
QC value within limits for Al 396.153Radial Recovery = 99.45%								
As 188.979†	1304.1	507.84	ug/L	3.842	507.84	ppb	3.842	0.76%
QC value within limits for As 188.979 Recovery = 101.57%								
B 249.677†	23458.9	497.97	ug/L	0.883	497.97	ppb	0.883	0.18%
QC value within limits for B 249.677 Recovery = 99.59%								
Ba 233.527†	66697.9	499.68	ug/L	1.631	499.68	ppb	1.631	0.33%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1393164.7	501.22	ug/L	0.439	501.22	ppb	0.439	0.09%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	3475.2	5072.0	ug/L	38.67	5072.0	ppb	38.67	0.76%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.44%
Cd 226.502†            48283.6      500.56 ug/L         0.912      500.56 ppb          0.912   0.18%
   QC value within limits for Cd 226.502  Recovery = 100.11%
Co 228.616†            26490.5      499.81 ug/L         1.298      499.81 ppb          1.298   0.26%
   QC value within limits for Co 228.616  Recovery = 99.96%
Cr 267.716†            47650.2      499.59 ug/L         1.904      499.59 ppb          1.904   0.38%
   QC value within limits for Cr 267.716  Recovery = 99.92%
Cu 324.752†           170392.3      495.19 ug/L         0.957      495.19 ppb          0.957   0.19%
   QC value within limits for Cu 324.752  Recovery = 99.04%
Fe 238.204 Radial†       580.0      5212.2 ug/L         21.04      5212.2 ppb          21.04   0.40%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.24%
K 766.490 Radial†      30216.0      5060.6 ug/L         14.84      5060.6 ppb          14.84   0.29%
   QC value within limits for K 766.490 Radial  Recovery = 101.21%
Mg 279.077 IEC†          156.0      5252.4 ug/L         55.68      5252.4 ppb          55.68   1.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.05%
Mn 257.610†           470969.5      499.57 ug/L         0.847      499.57 ppb          0.847   0.17%
   QC value within limits for Mn 257.610  Recovery = 99.91%
Mo 202.031†             7947.0      506.09 ug/L         1.743      506.09 ppb          1.743   0.34%
   QC value within limits for Mo 202.031  Recovery = 101.22%
Na 589.592 Radial†     33853.9       10260 ug/L          22.4       10260 ppb           22.4   0.22%
   QC value within limits for Na 589.592 Radial  Recovery = 102.60%
Ni 231.604†            21756.6      499.62 ug/L         2.419      499.62 ppb          2.419   0.48%
   QC value within limits for Ni 231.604  Recovery = 99.92%
P 214.914†              4480.7      2426.9 ug/L          8.70      2426.9 ppb           8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.08%
Pb 220.353†             4484.4      503.54 ug/L         0.812      503.54 ppb          0.812   0.16%
   QC value within limits for Pb 220.353  Recovery = 100.71%
S 181.975 Axial†         775.3      1023.3 ug/L          5.33      1023.3 ppb           5.33   0.52%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†             1603.2      513.68 ug/L         3.127      513.68 ppb          3.127   0.61%
   QC value within limits for Sb 206.836  Recovery = 102.74%
Se 196.026†              903.9      526.85 ug/L         2.595      526.85 ppb          2.595   0.49%
   QC value within limits for Se 196.026  Recovery = 105.37%
Si 251.611†            85953.6      2548.0 ug/L          8.06      2548.0 ppb           8.06   0.32%
   QC value within limits for Si 251.611  Recovery = 101.92%
Sn 189.927†             3156.8      508.41 ug/L         0.477      508.41 ppb          0.477   0.09%
   QC value within limits for Sn 189.927  Recovery = 101.68%
Sr 421.552†            84834.9      511.61 ug/L         0.471      511.61 ppb          0.471   0.09%
   QC value within limits for Sr 421.552  Recovery = 102.32%
Ti 334.940†           311713.7      491.88 ug/L         0.813      491.88 ppb          0.813   0.17%
   QC value within limits for Ti 334.940  Recovery = 98.38%
Tl 190.801†             1778.8      504.32 ug/L         0.839      504.32 ppb          0.839   0.17%
   QC value within limits for Tl 190.801  Recovery = 100.86%
U 409.014†             17253.5      494.43 ug/L         2.120      494.43 ppb          2.120   0.43%
   QC value within limits for U 409.014  Recovery = 98.89%
V 292.402†             74731.5      504.02 ug/L         0.650      504.02 ppb          0.650   0.13%
   QC value within limits for V 292.402  Recovery = 100.80%
Zn 213.857†            58456.0      498.38 ug/L         1.641      498.38 ppb          1.641   0.33%
   QC value within limits for Zn 213.857  Recovery = 99.68%
SiO2†                  85927.7      5458.3 ug/L         25.51      5458.3 ppb          25.51   0.47%
   QC value within limits for SiO2  Recovery = 102.07%
All analyte(s) passed QC.
```

Sequence No.: 52
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 19:18:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5613.6	5613.6	101	%			19:20:07
1	Y RADIAL	6091.5	6091.5	100.9	%			19:20:07
1	Al 396.153Radial†	-15.8	19.6	13.500	ug/L	13.500	ppb	19:20:07
1	Ca 317.933Radial†	21.6	4.5	6.6224	ug/L	6.6224	ppb	19:20:27
1	Fe 238.204 Radial†	7.6	-2.4	-21.138	ug/L	-21.138	ppb	19:20:27
1	K 766.490 Radial†	2882.4	123.4	20.710	ug/L	20.710	ppb	19:20:07
1	Mg 279.077 IEC†	1.3	-0.6	-21.434	ug/L	-21.434	ppb	19:20:27
1	Na 589.592 Radial†	-1609.1	-44.2	-13.383	ug/L	-13.383	ppb	19:20:07
1	Sr 421.552†	-54.5	-53.9	-0.3251	ug/L	-0.3251	ppb	19:20:07
1	Sc 361.383	854544.2	854544.2	98.459	%			19:21:24
1	Y 371.029	718855.1	718855.1	98.547	%			19:21:24
1	Ag 328.068†	354.5	86.1	0.3858	ug/L	0.3858	ppb	19:21:24
1	As 188.979†	-28.0	2.9	1.0992	ug/L	1.0992	ppb	19:21:44
1	B 249.677†	-311.9	176.4	3.7622	ug/L	3.7622	ppb	19:21:44
1	Ba 233.527†	2.2	13.3	0.0987	ug/L	0.0987	ppb	19:21:44
1	Be 313.107†	-4463.1	129.6	0.0463	ug/L	0.0463	ppb	19:21:24
1	Cd 226.502†	-187.6	8.4	0.0891	ug/L	0.0891	ppb	19:21:44
1	Co 228.616†	-67.2	5.2	0.1001	ug/L	0.1001	ppb	19:21:44
1	Cr 267.716†	67.5	-17.5	-0.1824	ug/L	-0.1824	ppb	19:21:44
1	Cu 324.752†	6694.1	41.0	0.1181	ug/L	0.1181	ppb	19:21:24
1	Mn 257.610†	517.5	5.4	0.0041	ug/L	0.0041	ppb	19:21:44
1	Mo 202.031†	23.9	5.8	0.3707	ug/L	0.3707	ppb	19:21:44
1	Ni 231.604†	92.2	7.7	0.1767	ug/L	0.1767	ppb	19:21:44
1	P 214.914†	230.4	-8.0	-4.4918	ug/L	-4.4918	ppb	19:21:44
1	Pb 220.353†	-75.8	-9.0	-1.0000	ug/L	-1.0000	ppb	19:21:44
1	S 181.975 Axial†	47.2	-1.5	-1.9277	ug/L	-1.9277	ppb	19:21:44
1	Sb 206.836†	39.5	2.8	0.8780	ug/L	0.8780	ppb	19:21:44
1	Se 196.026†	-21.0	5.5	3.0058	ug/L	3.0058	ppb	19:21:44
1	Si 251.611†	533.0	59.6	1.7616	ug/L	1.7616	ppb	19:21:44
1	Sn 189.927†	6.4	-2.3	-0.3680	ug/L	-0.3680	ppb	19:21:44
1	Ti 334.940†	-1325.2	-89.7	-0.1396	ug/L	-0.1396	ppb	19:21:24
1	Tl 190.801†	-42.6	-8.7	-2.4608	ug/L	-2.4608	ppb	19:21:44
1	U 409.014†	-2665.4	-123.1	-3.5354	ug/L	-3.5354	ppb	19:21:24
1	V 292.402†	-1328.9	13.0	0.0882	ug/L	0.0882	ppb	19:21:24
1	Zn 213.857†	804.7	63.4	0.5470	ug/L	0.5470	ppb	19:21:44
1	SiO2†	581.7	66.3	4.2078	ug/L	4.2078	ppb	19:22:40
2	Sc Radial	5561.1	5561.1	99.7	%			19:20:32
2	Y RADIAL	6050.4	6050.4	100.2	%			19:20:32
2	Al 396.153Radial†	-8.1	27.2	18.721	ug/L	18.721	ppb	19:20:32
2	Ca 317.933Radial†	17.9	1.0	1.4621	ug/L	1.4621	ppb	19:20:52
2	Fe 238.204 Radial†	7.2	-2.7	-24.311	ug/L	-24.311	ppb	19:20:52
2	K 766.490 Radial†	2867.9	135.9	22.804	ug/L	22.804	ppb	19:20:32
2	Mg 279.077 IEC†	5.1	3.2	108.32	ug/L	108.32	ppb	19:20:52
2	Na 589.592 Radial†	-1598.1	-48.2	-14.600	ug/L	-14.600	ppb	19:20:32
2	Sr 421.552†	-15.9	-15.7	-0.0949	ug/L	-0.0949	ppb	19:20:32
2	Sc 361.383	873508.4	873508.4	100.64	%			19:21:49
2	Y 371.029	734954.0	734954.0	100.75	%			19:21:49
2	Ag 328.068†	417.6	140.9	0.6307	ug/L	0.6307	ppb	19:21:49
2	As 188.979†	-28.6	2.9	1.1173	ug/L	1.1173	ppb	19:22:10
2	B 249.677†	-308.8	186.4	3.9749	ug/L	3.9749	ppb	19:22:10
2	Ba 233.527†	-1.9	9.2	0.0679	ug/L	0.0679	ppb	19:22:10
2	Be 313.107†	-4497.7	193.7	0.0695	ug/L	0.0695	ppb	19:21:49
2	Cd 226.502†	-204.1	-3.9	-0.0379	ug/L	-0.0379	ppb	19:22:10
2	Co 228.616†	-79.4	-5.5	-0.1030	ug/L	-0.1030	ppb	19:22:10
2	Cr 267.716†	77.3	-9.2	-0.0964	ug/L	-0.0964	ppb	19:22:10
2	Cu 324.752†	6813.6	12.1	0.0340	ug/L	0.0340	ppb	19:21:49
2	Mn 257.610†	483.2	-40.1	-0.0469	ug/L	-0.0469	ppb	19:22:10
2	Mo 202.031†	15.1	-3.4	-0.2194	ug/L	-0.2194	ppb	19:22:10
2	Ni 231.604†	90.1	3.6	0.0832	ug/L	0.0832	ppb	19:22:10

2	P 214.914†	223.0	-20.5	-11.439	ug/L	-11.439 ppb	19:22:10
2	Pb 220.353†	-76.4	-8.0	-0.8856	ug/L	-0.8856 ppb	19:22:10
2	S 181.975 Axial†	49.2	-0.5	-0.6773	ug/L	-0.6773 ppb	19:22:10
2	Sb 206.836†	36.4	-1.2	-0.3881	ug/L	-0.3881 ppb	19:22:10
2	Se 196.026†	-24.6	2.3	1.2388	ug/L	1.2388 ppb	19:22:10
2	Si 251.611†	536.8	51.7	1.5371	ug/L	1.5371 ppb	19:22:10
2	Sn 189.927†	4.9	-4.0	-0.6394	ug/L	-0.6394 ppb	19:22:10
2	Ti 334.940†	-1270.9	-6.6	-0.0100	ug/L	-0.0100 ppb	19:21:49
2	Tl 190.801†	-27.3	7.5	2.1065	ug/L	2.1065 ppb	19:22:10
2	U 409.014†	-2621.5	-20.7	-0.5913	ug/L	-0.5913 ppb	19:21:49
2	V 292.402†	-1354.9	16.5	0.1116	ug/L	0.1116 ppb	19:21:49
2	Zn 213.857†	782.0	23.1	0.1971	ug/L	0.1971 ppb	19:22:10
2	SiO2†	558.4	30.4	1.9348	ug/L	1.9348 ppb	19:22:45
3	Sc Radial	5515.1	5515.1	98.9	%		19:20:57
3	Y RADIAL	5993.0	5993.0	99.24	%		19:20:57
3	Al 396.153Radial†	-0.8	34.5	23.774	ug/L	23.774 ppb	19:20:57
3	Ca 317.933Radial†	17.8	1.1	1.5625	ug/L	1.5625 ppb	19:21:18
3	Fe 238.204 Radial†	7.3	-2.5	-22.581	ug/L	-22.581 ppb	19:21:18
3	K 766.490 Radial†	2988.0	281.4	47.223	ug/L	47.223 ppb	19:20:57
3	Mg 279.077 IEC†	0.1	-1.8	-60.464	ug/L	-60.464 ppb	19:21:18
3	Na 589.592 Radial†	-1634.9	-98.7	-29.926	ug/L	-29.926 ppb	19:20:57
3	Sr 421.552†	4.3	4.6	0.0278	ug/L	0.0278 ppb	19:20:57
3	Sc 361.383	862292.5	862292.5	99.352	%		19:22:15
3	Y 371.029	725511.3	725511.3	99.459	%		19:22:15
3	Ag 328.068†	312.2	40.2	0.1797	ug/L	0.1797 ppb	19:22:15
3	As 188.979†	-28.0	3.1	1.1981	ug/L	1.1981 ppb	19:22:35
3	B 249.677†	-308.0	183.2	3.9058	ug/L	3.9058 ppb	19:22:35
3	Ba 233.527†	0.6	11.7	0.0865	ug/L	0.0865 ppb	19:22:35
3	Be 313.107†	-4544.9	88.1	0.0315	ug/L	0.0315 ppb	19:22:15
3	Cd 226.502†	-197.5	0.1	0.0035	ug/L	0.0035 ppb	19:22:35
3	Co 228.616†	-64.7	8.4	0.1586	ug/L	0.1586 ppb	19:22:35
3	Cr 267.716†	78.0	-7.5	-0.0774	ug/L	-0.0774 ppb	19:22:35
3	Cu 324.752†	6768.6	54.9	0.1583	ug/L	0.1583 ppb	19:22:15
3	Mn 257.610†	487.9	-29.1	-0.0320	ug/L	-0.0320 ppb	19:22:35
3	Mo 202.031†	19.6	1.3	0.0837	ug/L	0.0837 ppb	19:22:35
3	Ni 231.604†	90.1	4.7	0.1080	ug/L	0.1080 ppb	19:22:35
3	P 214.914†	215.6	-25.1	-13.992	ug/L	-13.992 ppb	19:22:35
3	Pb 220.353†	-64.4	3.1	0.3565	ug/L	0.3565 ppb	19:22:35
3	S 181.975 Axial†	61.3	12.3	16.195	ug/L	16.195 ppb	19:22:35
3	Sb 206.836†	33.6	-3.5	-1.1123	ug/L	-1.1123 ppb	19:22:35
3	Se 196.026†	-27.5	-0.8	-0.5418	ug/L	-0.5418 ppb	19:22:35
3	Si 251.611†	528.4	50.1	1.4754	ug/L	1.4754 ppb	19:22:35
3	Sn 189.927†	9.5	0.7	0.1112	ug/L	0.1112 ppb	19:22:35
3	Ti 334.940†	-1290.4	-42.6	-0.0639	ug/L	-0.0639 ppb	19:22:15
3	Tl 190.801†	-47.5	-13.2	-3.7272	ug/L	-3.7272 ppb	19:22:35
3	U 409.014†	-2814.7	-249.1	-7.1582	ug/L	-7.1582 ppb	19:22:15
3	V 292.402†	-1386.4	-32.7	-0.2283	ug/L	-0.2283 ppb	19:22:15
3	Zn 213.857†	800.9	52.3	0.4531	ug/L	0.4531 ppb	19:22:35
3	SiO2†	533.6	12.6	0.7640	ug/L	0.7640 ppb	19:22:50

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863448.4	99.485	%	1.0986				1.10%
Sc Radial	5563.3	99.8	%	0.88				0.89%
Y 371.029	726440.1	99.586	%	1.1090				1.11%
Y RADIAL	6045.0	100.1	%	0.82				0.82%
Ag 328.068†	89.0	0.3987	ug/L	0.22575	0.3987	ppb	0.22575	56.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.1	18.665	ug/L	5.1377	18.665	ppb	5.1377	27.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.0	1.1382	ug/L	0.05269	1.1382	ppb	0.05269	4.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	182.0	3.8810	ug/L	0.10852	3.8810	ppb	0.10852	2.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.4	0.0843	ug/L	0.01554	0.0843	ppb	0.01554	18.42%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	137.2	0.0491	ug/L	0.01918	0.0491	ppb	0.01918	39.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.2	3.2157	ug/L	2.95072	3.2157	ppb	2.95072	91.76%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                1.5      0.0182 ug/L       0.06475      0.0182 ppb        0.06475 355.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.7      0.0519 ug/L       0.13729      0.0519 ppb        0.13729 264.47%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -11.4     -0.1187 ug/L       0.05596     -0.1187 ppb        0.05596  47.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               36.0      0.1035 ug/L       0.06343      0.1035 ppb        0.06343  61.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -2.5     -22.677 ug/L        1.5890     -22.677 ppb         1.5890   7.01%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        180.2      30.246 ug/L       14.7400      30.246 ppb        14.7400  48.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.3      8.8080 ug/L      88.36297      8.8080 ppb       88.36297 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -21.3     -0.0250 ug/L       0.02621     -0.0250 ppb        0.02621 105.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                1.3      0.0783 ug/L       0.29511      0.0783 ppb        0.29511 376.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -63.7     -19.303 ug/L        9.2198     -19.303 ppb         9.2198  47.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.3      0.1226 ug/L       0.04845      0.1226 ppb        0.04845  39.50%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -17.9      -9.9744 ug/L      4.91671      -9.9744 ppb        4.91671  49.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -4.6     -0.5097 ug/L       0.75231     -0.5097 ppb        0.75231 147.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           3.4      4.5300 ug/L      10.12144      4.5300 ppb       10.12144 223.43%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.7     -0.2075 ug/L       1.00740     -0.2075 ppb        1.00740 485.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.3      1.2343 ug/L       1.77380      1.2343 ppb        1.77380 143.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               53.8      1.5914 ug/L       0.15060      1.5914 ppb        0.15060   9.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -1.9     -0.2987 ug/L       0.38007     -0.2987 ppb        0.38007 127.22%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -21.7     -0.1307 ug/L       0.17914     -0.1307 ppb        0.17914 137.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -46.3     -0.0712 ug/L       0.06512     -0.0712 ppb        0.06512  91.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -4.8     -1.3605 ug/L       3.06853     -1.3605 ppb        3.06853 225.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -130.9     -3.7616 ug/L       3.28930     -3.7616 ppb        3.28930  87.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -1.1     -0.0095 ug/L       0.18981     -0.0095 ppb        0.18981 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               46.3      0.3991 ug/L       0.18111      0.3991 ppb        0.18111  45.39%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     36.4      2.3022 ug/L       1.75106      2.3022 ppb        1.75106  76.06%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 53
Sample ID: 1201985642|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 12/11/2009 19:25:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985642|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5544.5	5544.5	99.4	%			19:26:53
1	Y RADIAL	6016.5	6016.5	99.62	%			19:26:53
1	Al 396.153Radial†	-3.9	31.4	21.673	ug/L	21.673	ppb	19:26:53
1	Ca 317.933Radial†	2012.8	2007.2	2929.6	ug/L	2929.6	ppb	19:27:13
1	Fe 238.204 Radial†	14.9	5.1	45.559	ug/L	45.559	ppb	19:27:13
1	K 766.490 Radial†	6408.5	3705.1	620.03	ug/L	620.03	ppb	19:26:53
1	Mg 279.077 IEC†	16.6	14.8	498.70	ug/L	498.70	ppb	19:27:13
1	Na 589.592 Radial†	7600.8	9197.8	2787.5	ug/L	2787.5	ppb	19:26:53
1	Sr 421.552†	1401.1	1409.2	8.4724	ug/L	8.4724	ppb	19:26:53
1	Sc 361.383	864872.0	864872.0	99.649	%			19:28:10
1	Y 371.029	722951.3	722951.3	99.108	%			19:28:10
1	Ag 328.068†	271.6	-1.5	-0.0266	ug/L	-0.0266	ppb	19:28:10
1	As 188.979†	-26.7	4.5	1.7520	ug/L	1.7520	ppb	19:28:30
1	B 249.677†	112.5	606.1	12.912	ug/L	12.912	ppb	19:28:30
1	Ba 233.527†	309.4	321.5	2.4053	ug/L	2.4053	ppb	19:28:30
1	Be 313.107†	-4530.7	116.0	0.0418	ug/L	0.0418	ppb	19:28:10
1	Cd 226.502†	-205.7	-7.4	-0.0809	ug/L	-0.0809	ppb	19:28:30
1	Co 228.616†	-84.9	-11.7	-0.2220	ug/L	-0.2220	ppb	19:28:30
1	Cr 267.716†	124.4	38.8	0.4100	ug/L	0.4100	ppb	19:28:30
1	Cu 324.752†	8080.6	1351.2	3.9271	ug/L	3.9271	ppb	19:28:10
1	Mn 257.610†	2769.3	2258.9	2.3893	ug/L	2.3893	ppb	19:28:30
1	Mo 202.031†	10.5	-7.9	-0.4973	ug/L	-0.4973	ppb	19:28:30
1	Ni 231.604†	142.0	56.5	1.2994	ug/L	1.2994	ppb	19:28:30
1	P 214.914†	361.6	120.8	66.715	ug/L	66.715	ppb	19:28:30
1	Pb 220.353†	-70.0	-2.2	-0.2520	ug/L	-0.2520	ppb	19:28:30
1	S 181.975 Axial†	1444.2	1399.9	1849.5	ug/L	1849.5	ppb	19:28:30
1	Sb 206.836†	36.0	-1.3	-0.5170	ug/L	-0.5170	ppb	19:28:30
1	Se 196.026†	-24.7	2.0	1.2462	ug/L	1.2462	ppb	19:28:30
1	Si 251.611†	22184.4	21780.7	648.54	ug/L	648.54	ppb	19:28:10
1	Sn 189.927†	-25.3	-34.2	-5.1977	ug/L	-5.1977	ppb	19:28:30
1	Ti 334.940†	-1212.0	39.9	0.2193	ug/L	0.2193	ppb	19:28:10
1	Tl 190.801†	-39.2	-4.7	-1.3146	ug/L	-1.3146	ppb	19:28:30
1	U 409.014†	-2855.2	-281.2	-8.0912	ug/L	-8.0912	ppb	19:28:10
1	V 292.402†	-1289.2	68.9	0.4400	ug/L	0.4400	ppb	19:28:30
1	Zn 213.857†	1468.8	720.1	6.1602	ug/L	6.1602	ppb	19:28:30
1	SiO2†	22143.3	21696.8	1384.5	ug/L	1384.5	ppb	19:29:26
2	Sc Radial	5532.9	5532.9	99.2	%			19:27:18
2	Y RADIAL	6069.7	6069.7	100.5	%			19:27:18
2	Al 396.153Radial†	-11.3	23.9	16.441	ug/L	16.441	ppb	19:27:18
2	Ca 317.933Radial†	1995.2	1993.8	2909.9	ug/L	2909.9	ppb	19:27:38
2	Fe 238.204 Radial†	17.3	7.6	67.944	ug/L	67.944	ppb	19:27:38
2	K 766.490 Radial†	6351.4	3661.2	612.64	ug/L	612.64	ppb	19:27:18
2	Mg 279.077 IEC†	16.6	14.8	496.87	ug/L	496.87	ppb	19:27:38
2	Na 589.592 Radial†	7739.2	9353.3	2834.6	ug/L	2834.6	ppb	19:27:18
2	Sr 421.552†	1342.0	1352.7	8.1312	ug/L	8.1312	ppb	19:27:18
2	Sc 361.383	865885.7	865885.7	99.766	%			19:28:35
2	Y 371.029	724378.2	724378.2	99.304	%			19:28:35
2	Ag 328.068†	371.9	98.8	0.4285	ug/L	0.4285	ppb	19:28:35
2	As 188.979†	-21.5	9.8	3.7708	ug/L	3.7708	ppb	19:28:55
2	B 249.677†	84.6	578.0	12.309	ug/L	12.309	ppb	19:28:55
2	Ba 233.527†	327.7	339.5	2.5399	ug/L	2.5399	ppb	19:28:55
2	Be 313.107†	-4544.6	107.3	0.0384	ug/L	0.0384	ppb	19:28:35
2	Cd 226.502†	-195.1	3.3	0.0285	ug/L	0.0285	ppb	19:28:55
2	Co 228.616†	-80.8	-7.5	-0.1391	ug/L	-0.1391	ppb	19:28:55
2	Cr 267.716†	114.2	28.4	0.2999	ug/L	0.2999	ppb	19:28:55
2	Cu 324.752†	7989.6	1250.5	3.6358	ug/L	3.6358	ppb	19:28:35
2	Mn 257.610†	2751.9	2238.2	2.3697	ug/L	2.3697	ppb	19:28:55
2	Mo 202.031†	30.9	12.6	0.8054	ug/L	0.8054	ppb	19:28:55
2	Ni 231.604†	131.3	45.7	1.0503	ug/L	1.0503	ppb	19:28:55

2	P 214.914†	360.3	119.1	65.781 ug/L	65.781 ppb	19:28:55
2	Pb 220.353†	-80.7	-12.9	-1.4464 ug/L	-1.4464 ppb	19:28:55
2	S 181.975 Axial†	1445.2	1399.2	1848.6 ug/L	1848.6 ppb	19:28:55
2	Sb 206.836†	35.4	-1.9	-0.6843 ug/L	-0.6843 ppb	19:28:55
2	Se 196.026†	-25.7	1.0	0.8044 ug/L	0.8044 ppb	19:28:55
2	Si 251.611†	22155.5	21725.8	646.88 ug/L	646.88 ppb	19:28:35
2	Sn 189.927†	-26.4	-35.3	-5.3725 ug/L	-5.3725 ppb	19:28:55
2	Ti 334.940†	-1287.6	-34.4	0.0985 ug/L	0.0985 ppb	19:28:35
2	Tl 190.801†	-37.4	-2.9	-0.8018 ug/L	-0.8018 ppb	19:28:55
2	U 409.014†	-2659.8	-82.1	-2.3689 ug/L	-2.3689 ppb	19:28:35
2	V 292.402†	-1337.3	22.3	0.1559 ug/L	0.1559 ppb	19:28:55
2	Zn 213.857†	1506.2	755.9	6.4678 ug/L	6.4678 ppb	19:28:55
2	SiO2†	22017.7	21544.9	1374.7 ug/L	1374.7 ppb	19:29:31
3	Sc Radial	5559.1	5559.1	99.7 %		19:27:43
3	Y RADIAL	5976.7	5976.7	98.97 %		19:27:43
3	Al 396.153Radial†	20.5	55.9	38.467 ug/L	38.467 ppb	19:27:43
3	Ca 317.933Radial†	1992.7	1981.8	2892.4 ug/L	2892.4 ppb	19:28:03
3	Fe 238.204 Radial†	12.6	2.7	24.386 ug/L	24.386 ppb	19:28:03
3	K 766.490 Radial†	6332.6	3612.0	604.40 ug/L	604.40 ppb	19:27:43
3	Mg 279.077 IEC†	19.1	17.3	580.47 ug/L	580.47 ppb	19:28:03
3	Na 589.592 Radial†	7660.0	9237.0	2799.4 ug/L	2799.4 ppb	19:27:43
3	Sr 421.552†	1337.0	1341.2	8.0626 ug/L	8.0626 ppb	19:27:43
3	Sc 361.383	860177.5	860177.5	99.108 %		19:29:01
3	Y 371.029	720061.1	720061.1	98.712 %		19:29:01
3	Ag 328.068†	356.8	86.0	0.3630 ug/L	0.3630 ppb	19:29:01
3	As 188.979†	-30.8	0.3	0.0965 ug/L	0.0965 ppb	19:29:21
3	B 249.677†	116.7	611.0	13.018 ug/L	13.018 ppb	19:29:21
3	Ba 233.527†	328.2	342.2	2.5589 ug/L	2.5589 ppb	19:29:21
3	Be 313.107†	-4452.0	170.6	0.0612 ug/L	0.0612 ppb	19:29:01
3	Cd 226.502†	-197.5	-0.4	-0.0054 ug/L	-0.0054 ppb	19:29:21
3	Co 228.616†	-71.1	1.7	0.0343 ug/L	0.0343 ppb	19:29:21
3	Cr 267.716†	104.8	19.7	0.2096 ug/L	0.2096 ppb	19:29:21
3	Cu 324.752†	8116.0	1431.2	4.1582 ug/L	4.1582 ppb	19:29:01
3	Mn 257.610†	2752.1	2256.7	2.3833 ug/L	2.3833 ppb	19:29:21
3	Mo 202.031†	23.1	4.9	0.3106 ug/L	0.3106 ppb	19:29:21
3	Ni 231.604†	131.4	46.7	1.0723 ug/L	1.0723 ppb	19:29:21
3	P 214.914†	360.2	121.4	67.027 ug/L	67.027 ppb	19:29:21
3	Pb 220.353†	-79.1	-11.8	-1.3215 ug/L	-1.3215 ppb	19:29:21
3	S 181.975 Axial†	1422.8	1386.2	1831.4 ug/L	1831.4 ppb	19:29:21
3	Sb 206.836†	49.1	12.1	3.7428 ug/L	3.7428 ppb	19:29:21
3	Se 196.026†	-23.6	3.0	1.7825 ug/L	1.7825 ppb	19:29:21
3	Si 251.611†	22011.4	21727.7	646.95 ug/L	646.95 ppb	19:29:01
3	Sn 189.927†	-20.7	-29.8	-4.4873 ug/L	-4.4873 ppb	19:29:21
3	Ti 334.940†	-1273.0	-28.2	0.1100 ug/L	0.1100 ppb	19:29:01
3	Tl 190.801†	-28.2	6.1	1.7420 ug/L	1.7420 ppb	19:29:21
3	U 409.014†	-2847.7	-289.4	-8.3225 ug/L	-8.3225 ppb	19:29:01
3	V 292.402†	-1288.5	62.7	0.4146 ug/L	0.4146 ppb	19:29:21
3	Zn 213.857†	1476.2	735.7	6.2943 ug/L	6.2943 ppb	19:29:21
3	SiO2†	22097.6	21771.9	1389.2 ug/L	1389.2 ppb	19:29:36

Mean Data: 1201985642|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863645.1	99.508	%	0.3509				0.35%
Sc Radial	5545.5	99.5	%	0.24				0.24%
Y 371.029	722463.6	99.041	%	0.3015				0.30%
Y RADIAL	6021.0	99.70	%	0.772				0.77%
Ag 328.068†	61.1	0.2550	ug/L	0.24600	0.2550	ppb	0.24600	96.48%
Al 396.153Radial†	37.1	25.527	ug/L	11.5076	25.527	ppb	11.5076	45.08%
As 188.979†	4.9	1.8731	ug/L	1.84012	1.8731	ppb	1.84012	98.24%
B 249.677†	598.4	12.746	ug/L	0.3821	12.746	ppb	0.3821	3.00%
Ba 233.527†	334.4	2.5014	ug/L	0.08373	2.5014	ppb	0.08373	3.35%
Be 313.107†	131.3	0.0471	ug/L	0.01227	0.0471	ppb	0.01227	26.03%
Ca 317.933Radial†	1994.3	2910.6	ug/L	18.59	2910.6	ppb	18.59	0.64%
Cd 226.502†	-1.5	-0.0193	ug/L	0.05598	-0.0193	ppb	0.05598	290.75%
Co 228.616†	-5.8	-0.1089	ug/L	0.13081	-0.1089	ppb	0.13081	120.08%
Cr 267.716†	29.0	0.3065	ug/L	0.10035	0.3065	ppb	0.10035	32.74%
Cu 324.752†	1344.3	3.9070	ug/L	0.26179	3.9070	ppb	0.26179	6.70%
Fe 238.204 Radial†	5.1	45.963	ug/L	21.7816	45.963	ppb	21.7816	47.39%
K 766.490 Radial†	3659.4	612.36	ug/L	7.817	612.36	ppb	7.817	1.28%

Mg 279.077 IEC†	15.6	525.34	ug/L	47.745	525.34	ppb	47.745	9.09%
Mn 257.610†	2251.3	2.3808	ug/L	0.01006	2.3808	ppb	0.01006	0.42%
Mo 202.031†	3.2	0.2062	ug/L	0.65763	0.2062	ppb	0.65763	318.88%
Na 589.592 Radial†	9262.7	2807.2	ug/L	24.52	2807.2	ppb	24.52	0.87%
Ni 231.604†	49.6	1.1407	ug/L	0.13792	1.1407	ppb	0.13792	12.09%
P 214.914†	120.4	66.507	ug/L	0.6487	66.507	ppb	0.6487	0.98%
Pb 220.353†	-9.0	-1.0066	ug/L	0.65653	-1.0066	ppb	0.65653	65.22%
S 181.975 Axial†	1395.1	1843.2	ug/L	10.19	1843.2	ppb	10.19	0.55%
Sb 206.836†	3.0	0.8472	ug/L	2.50908	0.8472	ppb	2.50908	296.17%
Se 196.026†	2.0	1.2777	ug/L	0.48981	1.2777	ppb	0.48981	38.34%
Si 251.611†	21744.7	647.46	ug/L	0.938	647.46	ppb	0.938	0.14%
Sn 189.927†	-33.1	-5.0192	ug/L	0.46882	-5.0192	ppb	0.46882	9.34%
Sr 421.552†	1367.7	8.2221	ug/L	0.21948	8.2221	ppb	0.21948	2.67%
Ti 334.940†	-7.5	0.1426	ug/L	0.06667	0.1426	ppb	0.06667	46.76%
Tl 190.801†	-0.5	-0.1248	ug/L	1.63689	-0.1248	ppb	1.63689	>999.9%
U 409.014†	-217.5	-6.2609	ug/L	3.37256	-6.2609	ppb	3.37256	53.87%
V 292.402†	51.3	0.3368	ug/L	0.15722	0.3368	ppb	0.15722	46.67%
Zn 213.857†	737.2	6.3074	ug/L	0.15423	6.3074	ppb	0.15423	2.45%
SiO2†	21671.2	1382.8	ug/L	7.39	1382.8	ppb	7.39	0.53%

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Sequence No.: 54
Sample ID: 1201985643|928613|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 12/11/2009 19:31:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985643|928613|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5552.9	5552.9	99.6	%			19:34:01
1	Y RADIAL	6360.7	6360.7	105.3	%			19:34:01
1	Al 396.153Radial†	49378.3	49616.7	34154	ug/L	34154	ppb	19:33:40
1	Ca 317.933Radial†	12684.8	12720.1	18565	ug/L	18565	ppb	19:33:40
1	Fe 238.204 Radial†	10061.6	10093.1	90436	ug/L	90436	ppb	19:33:40
1	K 766.490 Radial†	72108.6	69665.7	11670	ug/L	11670	ppb	19:33:40
1	Mg 279.077 IEC†	452.9	452.8	15159	ug/L	15159	ppb	19:34:01
1	Na 589.592 Radial†	11057.8	12657.5	3836.0	ug/L	3836.0	ppb	19:33:40
1	Sr 421.552†	134140.7	134692.7	812.20	ug/L	812.20	ppb	19:33:40
1	Sc 361.383	880247.7	880247.7	101.42	%			19:35:00
1	Y 371.029	775101.3	775101.3	106.26	%			19:35:00
1	Ag 328.068†	141518.5	139261.8	661.57	ug/L	661.57	ppb	19:35:00
1	As 188.979†	3267.6	3253.2	1284.5	ug/L	1284.5	ppb	19:35:20
1	B 249.677†	32291.6	32332.4	676.00	ug/L	676.00	ppb	19:35:00
1	Ba 233.527†	318971.9	314514.4	2355.1	ug/L	2355.1	ppb	19:35:00
1	Be 313.107†	1245276.5	1232493.4	446.11	ug/L	446.11	ppb	19:35:00
1	Cd 226.502†	59131.2	58501.8	598.01	ug/L	598.01	ppb	19:35:00
1	Co 228.616†	21768.6	21537.1	403.03	ug/L	403.03	ppb	19:35:20
1	Cr 267.716†	36160.4	35567.8	375.30	ug/L	375.30	ppb	19:35:00
1	Cu 324.752†	182208.1	172897.6	506.81	ug/L	506.81	ppb	19:35:00
1	Mn 257.610†	1726872.3	1702159.5	1812.7	ug/L	1812.7	ppb	19:35:00
1	Mo 202.031†	6625.0	6513.8	420.93	ug/L	420.93	ppb	19:35:20
1	Ni 231.604†	22096.8	21701.3	498.41	ug/L	498.41	ppb	19:35:20
1	P 214.914†	6863.4	6525.2	3508.9	ug/L	3508.9	ppb	19:35:20
1	Pb 220.353†	7434.0	7397.8	829.00	ug/L	829.00	ppb	19:35:20
1	S 181.975 Axial†	1390.8	1321.9	1739.8	ug/L	1739.8	ppb	19:35:20
1	Sb 206.836†	1674.0	1613.2	515.95	ug/L	515.95	ppb	19:35:20
1	Se 196.026†	1099.2	1110.6	909.10	ug/L	909.10	ppb	19:35:20
1	Si 251.611†	406270.4	400097.0	11904	ug/L	11904	ppb	19:35:00
1	Sn 189.927†	3374.5	3318.4	536.97	ug/L	536.97	ppb	19:35:20
1	Ti 334.940†	1159793.1	1144801.2	1807.9	ug/L	1807.9	ppb	19:35:00
1	Tl 190.801†	3635.8	3619.5	1041.4	ug/L	1041.4	ppb	19:35:20
1	U 409.014†	-7839.6	-5145.7	-160.04	ug/L	-160.04	ppb	19:35:00
1	V 292.402†	113512.2	113284.6	743.85	ug/L	743.85	ppb	19:35:00
1	Zn 213.857†	116954.8	114562.4	972.53	ug/L	972.53	ppb	19:35:00
1	SiO2†	403469.5	397292.6	25330	ug/L	25330	ppb	19:36:20
2	Sc Radial	5588.7	5588.7	100	%			19:34:26
2	Y RADIAL	6384.3	6384.3	105.7	%			19:34:26
2	Al 396.153Radial†	49444.4	49365.7	33981	ug/L	33981	ppb	19:34:06
2	Ca 317.933Radial†	12711.9	12665.7	18485	ug/L	18485	ppb	19:34:06
2	Fe 238.204 Radial†	10103.6	10070.5	90234	ug/L	90234	ppb	19:34:06
2	K 766.490 Radial†	72269.0	69362.7	11620	ug/L	11620	ppb	19:34:06
2	Mg 279.077 IEC†	456.5	453.6	15183	ug/L	15183	ppb	19:34:26
2	Na 589.592 Radial†	11029.6	12558.3	3805.9	ug/L	3805.9	ppb	19:34:06
2	Sr 421.552†	134193.8	133884.5	807.32	ug/L	807.32	ppb	19:34:06
2	Sc 361.383	889418.3	889418.3	102.48	%			19:35:27
2	Y 371.029	783896.0	783896.0	107.46	%			19:35:27
2	Ag 328.068†	142959.5	139229.3	661.35	ug/L	661.35	ppb	19:35:27
2	As 188.979†	3262.9	3215.3	1269.9	ug/L	1269.9	ppb	19:35:47
2	B 249.677†	32711.2	32413.6	677.77	ug/L	677.77	ppb	19:35:27
2	Ba 233.527†	321750.8	313983.3	2351.1	ug/L	2351.1	ppb	19:35:27
2	Be 313.107†	1259170.4	1233391.5	446.43	ug/L	446.43	ppb	19:35:27
2	Cd 226.502†	59560.1	58319.1	596.13	ug/L	596.13	ppb	19:35:27
2	Co 228.616†	21740.9	21288.7	398.34	ug/L	398.34	ppb	19:35:47
2	Cr 267.716†	36456.6	35489.2	374.48	ug/L	374.48	ppb	19:35:27
2	Cu 324.752†	184298.1	173084.7	507.34	ug/L	507.34	ppb	19:35:27
2	Mn 257.610†	1741465.3	1698843.7	1809.2	ug/L	1809.2	ppb	19:35:27
2	Mo 202.031†	6620.5	6442.0	416.35	ug/L	416.35	ppb	19:35:47
2	Ni 231.604†	22072.8	21453.2	492.71	ug/L	492.71	ppb	19:35:47

2	P 214.914†	6878.0	6469.7	3477.7	ug/L	3477.7	ppb	19:35:47
2	Pb 220.353†	7423.2	7311.7	819.33	ug/L	819.33	ppb	19:35:47
2	S 181.975 Axial†	1386.0	1303.1	1714.9	ug/L	1714.9	ppb	19:35:47
2	Sb 206.836†	1677.7	1599.8	511.54	ug/L	511.54	ppb	19:35:47
2	Se 196.026†	1093.2	1093.5	898.83	ug/L	898.83	ppb	19:35:47
2	Si 251.611†	410015.9	399621.6	11890	ug/L	11890	ppb	19:35:27
2	Sn 189.927†	3369.6	3279.3	530.67	ug/L	530.67	ppb	19:35:47
2	Ti 334.940†	1170531.6	1143489.2	1805.8	ug/L	1805.8	ppb	19:35:27
2	Tl 190.801†	3655.5	3601.7	1036.4	ug/L	1036.4	ppb	19:35:47
2	U 409.014†	-7958.9	-5182.5	-161.07	ug/L	-161.07	ppb	19:35:27
2	V 292.402†	114549.2	113142.6	742.87	ug/L	742.87	ppb	19:35:27
2	Zn 213.857†	117980.3	114374.2	970.97	ug/L	970.97	ppb	19:35:27
2	SiO2†	406444.6	396093.9	25254	ug/L	25254	ppb	19:36:26
3	Sc Radial	5541.0	5541.0	99.4	%			19:34:51
3	Y RADIAL	6345.1	6345.1	105.1	%			19:34:51
3	Al 396.153Radial†	49760.1	50107.5	34492	ug/L	34492	ppb	19:34:31
3	Ca 317.933Radial†	12720.5	12783.4	18657	ug/L	18657	ppb	19:34:31
3	Fe 238.204 Radial†	10139.1	10192.8	91330	ug/L	91330	ppb	19:34:31
3	K 766.490 Radial†	72502.4	70217.6	11763	ug/L	11763	ppb	19:34:31
3	Mg 279.077 IEC†	454.2	455.2	15237	ug/L	15237	ppb	19:34:51
3	Na 589.592 Radial†	11158.5	12782.6	3873.9	ug/L	3873.9	ppb	19:34:31
3	Sr 421.552†	134745.9	135591.4	817.61	ug/L	817.61	ppb	19:34:31
3	Sc 361.383	888361.6	888361.6	102.36	%			19:35:54
3	Y 371.029	782482.0	782482.0	107.27	%			19:35:54
3	Ag 328.068†	142913.2	139350.0	662.25	ug/L	662.25	ppb	19:35:54
3	As 188.979†	3269.6	3225.7	1274.1	ug/L	1274.1	ppb	19:36:15
3	B 249.677†	32683.8	32424.8	677.87	ug/L	677.87	ppb	19:35:54
3	Ba 233.527†	321555.5	314166.0	2352.5	ug/L	2352.5	ppb	19:35:54
3	Be 313.107†	1256809.9	1232547.0	446.13	ug/L	446.13	ppb	19:35:54
3	Cd 226.502†	59363.4	58196.1	594.75	ug/L	594.75	ppb	19:35:54
3	Co 228.616†	21692.4	21266.6	397.90	ug/L	397.90	ppb	19:36:15
3	Cr 267.716†	36424.3	35500.0	374.61	ug/L	374.61	ppb	19:35:54
3	Cu 324.752†	184784.8	173774.2	509.40	ug/L	509.40	ppb	19:35:54
3	Mn 257.610†	1740913.7	1700326.3	1810.9	ug/L	1810.9	ppb	19:35:54
3	Mo 202.031†	6629.9	6458.9	417.50	ug/L	417.50	ppb	19:36:15
3	Ni 231.604†	22035.9	21442.8	492.47	ug/L	492.47	ppb	19:36:15
3	P 214.914†	6878.2	6477.8	3481.3	ug/L	3481.3	ppb	19:36:15
3	Pb 220.353†	7450.2	7346.7	823.27	ug/L	823.27	ppb	19:36:15
3	S 181.975 Axial†	1388.2	1306.8	1719.8	ug/L	1719.8	ppb	19:36:15
3	Sb 206.836†	1673.7	1597.8	510.97	ug/L	510.97	ppb	19:36:15
3	Se 196.026†	1096.4	1098.0	904.79	ug/L	904.79	ppb	19:36:15
3	Si 251.611†	410632.8	400700.3	11922	ug/L	11922	ppb	19:35:54
3	Sn 189.927†	3380.8	3294.1	533.09	ug/L	533.09	ppb	19:36:15
3	Ti 334.940†	1170832.1	1145141.5	1808.4	ug/L	1808.4	ppb	19:35:54
3	Tl 190.801†	3645.7	3596.3	1034.9	ug/L	1034.9	ppb	19:36:15
3	U 409.014†	-7891.2	-5125.6	-159.57	ug/L	-159.57	ppb	19:35:54
3	V 292.402†	114584.8	113310.3	743.83	ug/L	743.83	ppb	19:35:54
3	Zn 213.857†	117746.9	114283.1	970.07	ug/L	970.07	ppb	19:35:54
3	SiO2†	409669.5	399716.5	25485	ug/L	25485	ppb	19:36:31

Mean Data: 1201985643|928613|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	886009.2	102.08	%	0.578				0.57%
Sc Radial	5560.9	99.7	%	0.44				0.45%
Y 371.029	780493.1	107.00	%	0.647				0.61%
Y RADIAL	6363.4	105.4	%	0.33				0.31%
Ag 328.068†	139280.4	661.72	ug/L	0.468	661.72	ppb	0.468	0.07%
Al 396.153Radial†	49696.6	34209	ug/L	259.9	34209	ppb	259.9	0.76%
As 188.979†	3231.4	1276.2	ug/L	7.55	1276.2	ppb	7.55	0.59%
B 249.677†	32390.3	677.22	ug/L	1.050	677.22	ppb	1.050	0.16%
Ba 233.527†	314221.2	2352.9	ug/L	2.02	2352.9	ppb	2.02	0.09%
Be 313.107†	1232810.6	446.22	ug/L	0.178	446.22	ppb	0.178	0.04%
Ca 317.933Radial†	12723.1	18569	ug/L	86.0	18569	ppb	86.0	0.46%
Cd 226.502†	58339.0	596.30	ug/L	1.638	596.30	ppb	1.638	0.27%
Co 228.616†	21364.1	399.75	ug/L	2.842	399.75	ppb	2.842	0.71%
Cr 267.716†	35519.0	374.80	ug/L	0.444	374.80	ppb	0.444	0.12%
Cu 324.752†	173252.2	507.85	ug/L	1.369	507.85	ppb	1.369	0.27%
Fe 238.204 Radial†	10118.8	90667	ug/L	583.2	90667	ppb	583.2	0.64%
K 766.490 Radial†	69748.7	11684	ug/L	72.7	11684	ppb	72.7	0.62%

Mg 279.077 IEC†	453.9	15193	ug/L	39.5	15193	ppb	39.5	0.26%
Mn 257.610†	1700443.2	1810.9	ug/L	1.77	1810.9	ppb	1.77	0.10%
Mo 202.031†	6471.6	418.26	ug/L	2.383	418.26	ppb	2.383	0.57%
Na 589.592 Radial†	12666.1	3838.6	ug/L	34.06	3838.6	ppb	34.06	0.89%
Ni 231.604†	21532.4	494.53	ug/L	3.361	494.53	ppb	3.361	0.68%
P 214.914†	6490.9	3489.3	ug/L	17.03	3489.3	ppb	17.03	0.49%
Pb 220.353†	7352.1	823.87	ug/L	4.861	823.87	ppb	4.861	0.59%
S 181.975 Axial†	1310.6	1724.8	ug/L	13.21	1724.8	ppb	13.21	0.77%
Sb 206.836†	1603.6	512.82	ug/L	2.727	512.82	ppb	2.727	0.53%
Se 196.026†	1100.7	904.24	ug/L	5.161	904.24	ppb	5.161	0.57%
Si 251.611†	400139.6	11905	ug/L	16.1	11905	ppb	16.1	0.13%
Sn 189.927†	3297.3	533.57	ug/L	3.176	533.57	ppb	3.176	0.60%
Sr 421.552†	134722.9	812.38	ug/L	5.149	812.38	ppb	5.149	0.63%
Ti 334.940†	1144477.3	1807.4	ug/L	1.38	1807.4	ppb	1.38	0.08%
Tl 190.801†	3605.8	1037.6	ug/L	3.40	1037.6	ppb	3.40	0.33%
U 409.014†	-5151.3	-160.23	ug/L	0.767	-160.23	ppb	0.767	0.48%
V 292.402†	113245.9	743.51	ug/L	0.561	743.51	ppb	0.561	0.08%
Zn 213.857†	114406.6	971.19	ug/L	1.243	971.19	ppb	1.243	0.13%
SiO2†	397701.0	25357	ug/L	117.7	25357	ppb	117.7	0.46%

Sequence No.: 55
Sample ID: 241832001|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 12/11/2009 19:38:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832001|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5703.1	5703.1	102	%			19:40:36
1	Y RADIAL	7725.0	7725.0	127.9	%			19:40:36
1	Al 396.153Radial†	6936.0	6816.4	4693.7	ug/L	4693.7	ppb	19:40:36
1	Ca 317.933Radial†	2229.3	2162.6	3156.3	ug/L	3156.3	ppb	19:40:56
1	Fe 238.204 Radial†	7431.4	7255.6	65003	ug/L	65003	ppb	19:40:36
1	K 766.490 Radial†	14763.2	11693.9	1924.2	ug/L	1924.2	ppb	19:40:36
1	Mg 279.077 IEC†	46.4	43.5	1407.2	ug/L	1407.2	ppb	19:40:56
1	Na 589.592 Radial†	6371.1	7783.0	2358.7	ug/L	2358.7	ppb	19:40:36
1	Sr 421.552†	3539.8	3460.9	20.845	ug/L	20.845	ppb	19:40:36
1	Sc 361.383	893960.8	893960.8	103.00	%			19:41:53
1	Y 371.029	926235.1	926235.1	126.98	%			19:41:53
1	Ag 328.068†	-3746.7	-3911.5	3.2874	ug/L	3.2874	ppb	19:41:58
1	As 188.979†	-43.8	-11.2	18.605	ug/L	18.605	ppb	19:42:19
1	B 249.677†	431.8	912.4	10.805	ug/L	10.805	ppb	19:41:58
1	Ba 233.527†	18821.7	18284.5	139.11	ug/L	139.11	ppb	19:41:58
1	Be 313.107†	-9594.1	-4651.9	1.3609	ug/L	1.3609	ppb	19:41:58
1	Cd 226.502†	416.5	603.3	-0.2336	ug/L	-0.2336	ppb	19:42:19
1	Co 228.616†	282.3	347.5	2.4547	ug/L	2.4547	ppb	19:42:19
1	Cr 267.716†	624.7	520.5	6.7485	ug/L	6.7485	ppb	19:42:19
1	Cu 324.752†	10228.7	3172.9	12.532	ug/L	12.532	ppb	19:41:58
1	Mn 257.610†	3057023.7	2967439.1	3151.4	ug/L	3151.4	ppb	19:41:53
1	Mo 202.031†	308.9	281.5	22.523	ug/L	22.523	ppb	19:42:19
1	Ni 231.604†	651.7	546.8	12.560	ug/L	12.560	ppb	19:42:19
1	P 214.914†	1200.1	923.1	463.14	ug/L	463.14	ppb	19:42:19
1	Pb 220.353†	473.8	528.0	54.859	ug/L	54.859	ppb	19:42:19
1	S 181.975 Axial†	732.5	661.8	873.42	ug/L	873.42	ppb	19:42:19
1	Sb 206.836†	39.4	0.8	-2.6651	ug/L	-2.6651	ppb	19:42:19
1	Se 196.026†	-373.9	-336.2	11.391	ug/L	11.391	ppb	19:42:19
1	Si 251.611†	301869.8	292593.2	8713.7	ug/L	8713.7	ppb	19:41:58
1	Sn 189.927†	11.9	2.7	1.6349	ug/L	1.6349	ppb	19:42:19
1	Ti 334.940†	1005096.6	977070.0	1542.5	ug/L	1542.5	ppb	19:41:53
1	Tl 190.801†	-156.7	-117.6	-2.8451	ug/L	-2.8451	ppb	19:42:19
1	U 409.014†	-11511.8	-8592.4	-255.23	ug/L	-255.23	ppb	19:41:53
1	V 292.402†	3724.3	4978.5	21.346	ug/L	21.346	ppb	19:42:19
1	Zn 213.857†	36915.5	35086.2	295.46	ug/L	295.46	ppb	19:41:58
1	SiO2†	304676.7	295275.7	18845	ug/L	18845	ppb	19:43:26
2	Sc Radial	5569.0	5569.0	99.9	%			19:41:01
2	Y RADIAL	7556.4	7556.4	125.1	%			19:41:01
2	Al 396.153Radial†	6805.6	6849.2	4716.3	ug/L	4716.3	ppb	19:41:01
2	Ca 317.933Radial†	2233.9	2219.7	3239.7	ug/L	3239.7	ppb	19:41:21
2	Fe 238.204 Radial†	7272.0	7270.9	65140	ug/L	65140	ppb	19:41:01
2	K 766.490 Radial†	14426.5	11704.5	1926.0	ug/L	1926.0	ppb	19:41:01
2	Mg 279.077 IEC†	46.5	44.6	1446.0	ug/L	1446.0	ppb	19:41:21
2	Na 589.592 Radial†	6220.6	7782.3	2358.5	ug/L	2358.5	ppb	19:41:01
2	Sr 421.552†	3492.6	3497.0	21.062	ug/L	21.062	ppb	19:41:01
2	Sc 361.383	881377.2	881377.2	101.55	%			19:42:24
2	Y 371.029	915922.3	915922.3	125.56	%			19:42:24
2	Ag 328.068†	-3763.9	-3980.5	3.0202	ug/L	3.0202	ppb	19:42:29
2	As 188.979†	-27.6	4.2	24.533	ug/L	24.533	ppb	19:42:50
2	B 249.677†	453.0	939.3	11.360	ug/L	11.360	ppb	19:42:29
2	Ba 233.527†	18790.1	18514.2	140.83	ug/L	140.83	ppb	19:42:29
2	Be 313.107†	-9749.8	-4938.3	1.2503	ug/L	1.2503	ppb	19:42:29
2	Cd 226.502†	428.7	621.1	-0.0626	ug/L	-0.0626	ppb	19:42:50
2	Co 228.616†	279.9	349.0	2.4892	ug/L	2.4892	ppb	19:42:50
2	Cr 267.716†	671.5	575.2	7.3247	ug/L	7.3247	ppb	19:42:50
2	Cu 324.752†	10209.0	3295.3	12.894	ug/L	12.894	ppb	19:42:29
2	Mn 257.610†	3010339.4	2963842.1	3147.6	ug/L	3147.6	ppb	19:42:24
2	Mo 202.031†	297.7	274.7	22.104	ug/L	22.104	ppb	19:42:50
2	Ni 231.604†	647.8	552.0	12.679	ug/L	12.679	ppb	19:42:50

2	P 214.914†	1204.9	944.5	474.89	ug/L	474.89 ppb	19:42:50
2	Pb 220.353†	473.6	534.4	55.568	ug/L	55.568 ppb	19:42:50
2	S 181.975 Axial†	744.9	684.1	902.93	ug/L	902.93 ppb	19:42:50
2	Sb 206.836†	46.0	7.9	-0.4404	ug/L	-0.4404 ppb	19:42:50
2	Se 196.026†	-364.8	-332.4	13.923	ug/L	13.923 ppb	19:42:50
2	Si 251.611†	302196.3	297099.1	8847.9	ug/L	8847.9 ppb	19:42:29
2	Sn 189.927†	16.4	7.3	2.3813	ug/L	2.3813 ppb	19:42:50
2	Ti 334.940†	988413.9	974574.0	1538.6	ug/L	1538.6 ppb	19:42:24
2	Tl 190.801†	-140.7	-104.0	0.9275	ug/L	0.9275 ppb	19:42:50
2	U 409.014†	-11358.0	-8600.6	-255.48	ug/L	-255.48 ppb	19:42:24
2	V 292.402†	3744.8	5050.4	21.802	ug/L	21.802 ppb	19:42:50
2	Zn 213.857†	36950.3	35632.1	300.15	ug/L	300.15 ppb	19:42:29
2	SiO2†	304147.8	298978.1	19081	ug/L	19081 ppb	19:43:31
3	Sc Radial	5640.6	5640.6	101	%		19:41:26
3	Y RADIAL	7625.0	7625.0	126.3	%		19:41:26
3	Al 396.153Radial†	6894.7	6850.8	4717.5	ug/L	4717.5 ppb	19:41:26
3	Ca 317.933Radial†	2231.3	2188.7	3194.4	ug/L	3194.4 ppb	19:41:46
3	Fe 238.204 Radial†	7377.2	7282.6	65244	ug/L	65244 ppb	19:41:26
3	K 766.490 Radial†	14632.9	11725.2	1929.4	ug/L	1929.4 ppb	19:41:26
3	Mg 279.077 IEC†	46.6	44.2	1429.2	ug/L	1429.2 ppb	19:41:46
3	Na 589.592 Radial†	6321.6	7803.1	2364.8	ug/L	2364.8 ppb	19:41:26
3	Sr 421.552†	3482.4	3442.6	20.734	ug/L	20.734 ppb	19:41:26
3	Sc 361.383	890846.7	890846.7	102.64	%		19:42:55
3	Y 371.029	923636.7	923636.7	126.62	%		19:42:55
3	Ag 328.068†	-3836.2	-4011.4	2.9141	ug/L	2.9141 ppb	19:43:00
3	As 188.979†	-42.6	-10.2	19.024	ug/L	19.024 ppb	19:43:20
3	B 249.677†	492.7	973.2	12.069	ug/L	12.069 ppb	19:43:00
3	Ba 233.527†	18882.5	18407.6	140.04	ug/L	140.04 ppb	19:43:00
3	Be 313.107†	-9709.0	-4796.4	1.3052	ug/L	1.3052 ppb	19:43:00
3	Cd 226.502†	421.8	609.9	-0.1895	ug/L	-0.1895 ppb	19:43:20
3	Co 228.616†	273.9	340.3	2.3186	ug/L	2.3186 ppb	19:43:20
3	Cr 267.716†	651.5	548.7	7.0497	ug/L	7.0497 ppb	19:43:20
3	Cu 324.752†	10334.2	3310.3	12.943	ug/L	12.943 ppb	19:43:00
3	Mn 257.610†	3043610.0	2964745.5	3148.6	ug/L	3148.6 ppb	19:42:55
3	Mo 202.031†	302.4	276.2	22.206	ug/L	22.206 ppb	19:43:20
3	Ni 231.604†	644.4	541.9	12.447	ug/L	12.447 ppb	19:43:20
3	P 214.914†	1201.6	928.6	465.96	ug/L	465.96 ppb	19:43:20
3	Pb 220.353†	473.9	529.6	55.029	ug/L	55.029 ppb	19:43:20
3	S 181.975 Axial†	742.8	674.2	889.86	ug/L	889.86 ppb	19:43:20
3	Sb 206.836†	47.8	9.2	-0.0161	ug/L	-0.0161 ppb	19:43:20
3	Se 196.026†	-376.6	-340.1	9.9159	ug/L	9.9159 ppb	19:43:20
3	Si 251.611†	303921.5	295616.7	8803.7	ug/L	8803.7 ppb	19:43:00
3	Sn 189.927†	16.3	7.0	2.3347	ug/L	2.3347 ppb	19:43:20
3	Ti 334.940†	1000338.9	975845.8	1540.6	ug/L	1540.6 ppb	19:42:55
3	Tl 190.801†	-154.2	-115.6	-2.3292	ug/L	-2.3292 ppb	19:43:20
3	U 409.014†	-11499.6	-8619.6	-256.04	ug/L	-256.04 ppb	19:42:55
3	V 292.402†	3777.6	5043.0	21.735	ug/L	21.735 ppb	19:43:20
3	Zn 213.857†	37242.3	35529.8	299.26	ug/L	299.26 ppb	19:43:00
3	SiO2†	301299.5	293019.4	18701	ug/L	18701 ppb	19:43:37

Mean Data: 241832001|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888728.2	102.40	%	0.755				0.74%
Sc Radial	5637.6	101	%	1.2				1.19%
Y 371.029	921931.4	126.39	%	0.735				0.58%
Y RADIAL	7635.5	126.4	%	1.40				1.11%
Ag 328.068†	-3967.8	3.0739	ug/L	0.19235	3.0739	ppb	0.19235	6.26%
Al 396.153Radial†	6838.8	4709.2	ug/L	13.39	4709.2	ppb	13.39	0.28%
As 188.979†	-5.8	20.720	ug/L	3.3083	20.720	ppb	3.3083	15.97%
B 249.677†	941.7	11.411	ug/L	0.6337	11.411	ppb	0.6337	5.55%
Ba 233.527†	18402.1	139.99	ug/L	0.862	139.99	ppb	0.862	0.62%
Be 313.107†	-4795.5	1.3055	ug/L	0.05528	1.3055	ppb	0.05528	4.23%
Ca 317.933Radial†	2190.3	3196.8	ug/L	41.75	3196.8	ppb	41.75	1.31%
Cd 226.502†	611.4	-0.1619	ug/L	0.08875	-0.1619	ppb	0.08875	54.81%
Co 228.616†	345.6	2.4208	ug/L	0.09022	2.4208	ppb	0.09022	3.73%
Cr 267.716†	548.1	7.0410	ug/L	0.28822	7.0410	ppb	0.28822	4.09%
Cu 324.752†	3259.5	12.790	ug/L	0.2248	12.790	ppb	0.2248	1.76%
Fe 238.204 Radial†	7269.7	65129	ug/L	121.1	65129	ppb	121.1	0.19%
K 766.490 Radial†	11707.9	1926.5	ug/L	2.68	1926.5	ppb	2.68	0.14%

Mg 279.077 IEC†	44.1	1427.5	ug/L	19.43	1427.5	ppb	19.43	1.36%
Mn 257.610†	2965342.2	3149.2	ug/L	1.97	3149.2	ppb	1.97	0.06%
Mo 202.031†	277.5	22.278	ug/L	0.2186	22.278	ppb	0.2186	0.98%
Na 589.592 Radial†	7789.4	2360.7	ug/L	3.58	2360.7	ppb	3.58	0.15%
Ni 231.604†	546.9	12.562	ug/L	0.1160	12.562	ppb	0.1160	0.92%
P 214.914†	932.1	467.99	ug/L	6.132	467.99	ppb	6.132	1.31%
Pb 220.353†	530.7	55.152	ug/L	0.3700	55.152	ppb	0.3700	0.67%
S 181.975 Axial†	673.4	888.74	ug/L	14.785	888.74	ppb	14.785	1.66%
Sb 206.836†	6.0	-1.0405	ug/L	1.42284	-1.0405	ppb	1.42284	136.74%
Se 196.026†	-336.2	11.743	ug/L	2.0265	11.743	ppb	2.0265	17.26%
Si 251.611†	295103.0	8788.4	ug/L	68.40	8788.4	ppb	68.40	0.78%
Sn 189.927†	5.7	2.1170	ug/L	0.41816	2.1170	ppb	0.41816	19.75%
Sr 421.552†	3466.9	20.880	ug/L	0.1668	20.880	ppb	0.1668	0.80%
Ti 334.940†	975830.0	1540.5	ug/L	1.97	1540.5	ppb	1.97	0.13%
Tl 190.801†	-112.4	-1.4156	ug/L	2.04552	-1.4156	ppb	2.04552	144.50%
U 409.014†	-8604.2	-255.58	ug/L	0.416	-255.58	ppb	0.416	0.16%
V 292.402†	5024.0	21.628	ug/L	0.2461	21.628	ppb	0.2461	1.14%
Zn 213.857†	35416.0	298.29	ug/L	2.486	298.29	ppb	2.486	0.83%
SiO2†	295757.7	18876	ug/L	192.0	18876	ppb	192.0	1.02%

Sequence No.: 56
Sample ID: 241832002|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 12/11/2009 19:45:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832002|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5480.2	5480.2	98.3	%			19:47:41
1	Y RADIAL	7499.2	7499.2	124.2	%			19:47:41
1	Al 396.153Radial†	7949.9	8123.9	5593.6	ug/L	5593.6	ppb	19:47:41
1	Ca 317.933Radial†	1882.2	1898.2	2770.4	ug/L	2770.4	ppb	19:48:01
1	Fe 238.204 Radial†	10472.2	10644.9	95368	ug/L	95368	ppb	19:47:41
1	K 766.490 Radial†	14034.8	11539.9	1929.1	ug/L	1929.1	ppb	19:47:41
1	Mg 279.077 IEC†	55.7	54.8	1760.7	ug/L	1760.7	ppb	19:48:01
1	Na 589.592 Radial†	6284.9	7948.7	2408.9	ug/L	2408.9	ppb	19:47:41
1	Sr 421.552†	3779.1	3845.2	23.166	ug/L	23.166	ppb	19:47:41
1	Sc 361.383	879579.8	879579.8	101.34	%			19:48:58
1	Y 371.029	915461.0	915461.0	125.50	%			19:48:58
1	Ag 328.068†	-6191.3	-6383.3	1.8413	ug/L	1.8413	ppb	19:48:58
1	As 188.979†	-49.5	-17.6	21.671	ug/L	21.671	ppb	19:49:18
1	B 249.677†	718.8	1202.5	12.964	ug/L	12.964	ppb	19:48:58
1	Ba 233.527†	7376.6	7289.8	58.084	ug/L	58.084	ppb	19:49:18
1	Be 313.107†	-13750.6	-8905.6	0.0305	ug/L	0.0305	ppb	19:48:58
1	Cd 226.502†	712.4	901.9	-0.1780	ug/L	-0.1780	ppb	19:49:18
1	Co 228.616†	150.4	221.8	-0.5622	ug/L	-0.5622	ppb	19:49:18
1	Cr 267.716†	718.7	623.2	8.3917	ug/L	8.3917	ppb	19:49:18
1	Cu 324.752†	7277.5	423.1	6.0939	ug/L	6.0939	ppb	19:48:58
1	Mn 257.610†	726836.7	716678.0	769.03	ug/L	769.03	ppb	19:48:58
1	Mo 202.031†	525.2	499.8	38.569	ug/L	38.569	ppb	19:49:18
1	Ni 231.604†	294.4	204.5	4.6974	ug/L	4.6974	ppb	19:49:18
1	P 214.914†	1139.3	882.1	417.38	ug/L	417.38	ppb	19:49:18
1	Pb 220.353†	281.6	345.9	32.221	ug/L	32.221	ppb	19:49:18
1	S 181.975 Axial†	875.3	814.3	1074.7	ug/L	1074.7	ppb	19:49:18
1	Sb 206.836†	41.0	3.1	-1.4307	ug/L	-1.4307	ppb	19:49:18
1	Se 196.026†	-538.1	-504.1	10.393	ug/L	10.393	ppb	19:49:18
1	Si 251.611†	327336.6	322514.1	9604.6	ug/L	9604.6	ppb	19:48:58
1	Sn 189.927†	27.6	18.4	4.5270	ug/L	4.5270	ppb	19:49:18
1	Ti 334.940†	1053283.8	1040572.6	1642.7	ug/L	1642.7	ppb	19:48:58
1	Tl 190.801†	-112.8	-76.8	-4.5207	ug/L	-4.5207	ppb	19:49:18
1	U 409.014†	-13833.6	-11066.1	-330.17	ug/L	-330.17	ppb	19:48:58
1	V 292.402†	3867.4	5178.8	18.018	ug/L	18.018	ppb	19:49:18
1	Zn 213.857†	20739.5	19710.6	160.35	ug/L	160.35	ppb	19:48:58
1	SiO2†	323651.7	318835.3	20348	ug/L	20348	ppb	19:50:15
2	Sc Radial	5616.9	5616.9	101	%			19:48:06
2	Y RADIAL	7632.1	7632.1	126.4	%			19:48:06
2	Al 396.153Radial†	8125.4	8101.2	5578.0	ug/L	5578.0	ppb	19:48:06
2	Ca 317.933Radial†	1882.1	1851.4	2702.1	ug/L	2702.1	ppb	19:48:26
2	Fe 238.204 Radial†	10721.7	10633.2	95263	ug/L	95263	ppb	19:48:06
2	K 766.490 Radial†	14342.3	11497.7	1922.0	ug/L	1922.0	ppb	19:48:06
2	Mg 279.077 IEC†	53.5	51.2	1640.7	ug/L	1640.7	ppb	19:48:26
2	Na 589.592 Radial†	6515.4	8021.8	2431.1	ug/L	2431.1	ppb	19:48:06
2	Sr 421.552†	3856.8	3828.7	23.067	ug/L	23.067	ppb	19:48:06
2	Sc 361.383	881532.7	881532.7	101.57	%			19:49:24
2	Y 371.029	918134.6	918134.6	125.87	%			19:49:24
2	Ag 328.068†	-6249.0	-6426.5	1.6108	ug/L	1.6108	ppb	19:49:24
2	As 188.979†	-54.6	-22.4	19.782	ug/L	19.782	ppb	19:49:44
2	B 249.677†	691.7	1174.3	12.376	ug/L	12.376	ppb	19:49:24
2	Ba 233.527†	7450.1	7346.1	58.501	ug/L	58.501	ppb	19:49:44
2	Be 313.107†	-13908.0	-9030.5	-0.0125	ug/L	-0.0125	ppb	19:49:24
2	Cd 226.502†	701.7	889.8	-0.2928	ug/L	-0.2928	ppb	19:49:44
2	Co 228.616†	161.1	232.0	-0.3686	ug/L	-0.3686	ppb	19:49:44
2	Cr 267.716†	709.8	612.8	8.2803	ug/L	8.2803	ppb	19:49:44
2	Cu 324.752†	7256.8	386.8	5.9831	ug/L	5.9831	ppb	19:49:24
2	Mn 257.610†	728105.5	716338.4	768.67	ug/L	768.67	ppb	19:49:24
2	Mo 202.031†	537.8	511.1	39.282	ug/L	39.282	ppb	19:49:44
2	Ni 231.604†	282.8	192.5	4.4206	ug/L	4.4206	ppb	19:49:44

2	P 214.914†	1155.6	895.7	425.05 ug/L	425.05 ppb	19:49:44
2	Pb 220.353†	276.4	340.1	31.581 ug/L	31.581 ppb	19:49:44
2	S 181.975 Axial†	887.7	824.5	1088.3 ug/L	1088.3 ppb	19:49:44
2	Sb 206.836†	37.1	-0.9	-2.6525 ug/L	-2.6525 ppb	19:49:44
2	Se 196.026†	-545.9	-510.6	6.4155 ug/L	6.4155 ppb	19:49:44
2	Si 251.611†	327892.9	322346.3	9599.6 ug/L	9599.6 ppb	19:49:24
2	Sn 189.927†	28.7	19.5	4.6883 ug/L	4.6883 ppb	19:49:44
2	Ti 334.940†	1056220.4	1041161.4	1643.7 ug/L	1643.7 ppb	19:49:24
2	Tl 190.801†	-118.7	-82.3	-6.0691 ug/L	-6.0691 ppb	19:49:44
2	U 409.014†	-13734.9	-10938.8	-326.49 ug/L	-326.49 ppb	19:49:24
2	V 292.402†	3900.0	5202.5	18.206 ug/L	18.206 ppb	19:49:44
2	Zn 213.857†	20711.1	19637.3	159.74 ug/L	159.74 ppb	19:49:24
2	SiO2†	324538.0	319000.5	20359 ug/L	20359 ppb	19:50:20
3	Sc Radial	5509.0	5509.0	98.8 %		19:48:31
3	Y RADIAL	7482.8	7482.8	123.9 %		19:48:31
3	Al 396.153Radial†	7985.9	8118.0	5589.6 ug/L	5589.6 ppb	19:48:31
3	Ca 317.933Radial†	1883.8	1889.8	2758.1 ug/L	2758.1 ppb	19:48:51
3	Fe 238.204 Radial†	10513.5	10631.1	95244 ug/L	95244 ppb	19:48:31
3	K 766.490 Radial†	14048.8	11479.7	1919.0 ug/L	1919.0 ppb	19:48:31
3	Mg 279.077 IEC†	55.1	53.9	1731.4 ug/L	1731.4 ppb	19:48:51
3	Na 589.592 Radial†	6336.7	7967.7	2414.7 ug/L	2414.7 ppb	19:48:31
3	Sr 421.552†	3778.7	3824.8	23.043 ug/L	23.043 ppb	19:48:31
3	Sc 361.383	878846.9	878846.9	101.26 %		19:49:50
3	Y 371.029	914808.2	914808.2	125.41 %		19:49:50
3	Ag 328.068†	-6175.0	-6372.3	1.8521 ug/L	1.8521 ppb	19:49:50
3	As 188.979†	-50.0	-18.0	21.459 ug/L	21.459 ppb	19:50:10
3	B 249.677†	674.2	1159.0	12.053 ug/L	12.053 ppb	19:49:50
3	Ba 233.527†	7454.6	7373.0	58.701 ug/L	58.701 ppb	19:50:10
3	Be 313.107†	-13802.6	-8968.3	0.0065 ug/L	0.0065 ppb	19:49:50
3	Cd 226.502†	688.5	878.9	-0.4040 ug/L	-0.4040 ppb	19:50:10
3	Co 228.616†	161.9	233.3	-0.3406 ug/L	-0.3406 ppb	19:50:10
3	Cr 267.716†	728.0	632.9	8.4912 ug/L	8.4912 ppb	19:50:10
3	Cu 324.752†	7177.1	330.0	5.8170 ug/L	5.8170 ppb	19:49:50
3	Mn 257.610†	726834.2	717273.7	769.65 ug/L	769.65 ppb	19:49:50
3	Mo 202.031†	534.3	509.2	39.163 ug/L	39.163 ppb	19:50:10
3	Ni 231.604†	293.6	204.0	4.6844 ug/L	4.6844 ppb	19:50:10
3	P 214.914†	1150.1	893.8	424.04 ug/L	424.04 ppb	19:50:10
3	Pb 220.353†	296.5	360.8	33.899 ug/L	33.899 ppb	19:50:10
3	S 181.975 Axial†	893.7	833.2	1099.7 ug/L	1099.7 ppb	19:50:10
3	Sb 206.836†	42.9	5.0	-0.7882 ug/L	-0.7882 ppb	19:50:10
3	Se 196.026†	-540.8	-507.3	8.2468 ug/L	8.2468 ppb	19:50:10
3	Si 251.611†	327124.4	322573.9	9606.3 ug/L	9606.3 ppb	19:49:50
3	Sn 189.927†	39.3	30.0	6.3902 ug/L	6.3902 ppb	19:50:10
3	Ti 334.940†	1051929.4	1040101.9	1642.0 ug/L	1642.0 ppb	19:49:50
3	Tl 190.801†	-119.4	-83.4	-6.3850 ug/L	-6.3850 ppb	19:50:10
3	U 409.014†	-13846.3	-11090.1	-330.84 ug/L	-330.84 ppb	19:49:50
3	V 292.402†	3851.5	5166.3	17.961 ug/L	17.961 ppb	19:50:10
3	Zn 213.857†	20707.4	19696.0	160.24 ug/L	160.24 ppb	19:49:50
3	SiO2†	324401.5	319842.2	20412 ug/L	20412 ppb	19:50:26

Mean Data: 241832002|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	879986.4	101.39	%	0.160				0.16%
Sc Radial	5535.4	99.3	%	1.29				1.30%
Y 371.029	916134.6	125.59	%	0.242				0.19%
Y RADIAL	7538.1	124.8	%	1.36				1.09%
Ag 328.068†	-6394.0	1.7681	ug/L	0.13633	1.7681	ppb	0.13633	7.71%
Al 396.153Radial†	8114.4	5587.1	ug/L	8.13	5587.1	ppb	8.13	0.15%
As 188.979†	-19.3	20.970	ug/L	1.0350	20.970	ppb	1.0350	4.94%
B 249.677†	1178.6	12.464	ug/L	0.4619	12.464	ppb	0.4619	3.71%
Ba 233.527†	7336.3	58.429	ug/L	0.3147	58.429	ppb	0.3147	0.54%
Be 313.107†	-8968.1	0.0082	ug/L	0.02156	0.0082	ppb	0.02156	263.14%
Ca 317.933Radial†	1879.8	2743.5	ug/L	36.36	2743.5	ppb	36.36	1.33%
Cd 226.502†	890.2	-0.2916	ug/L	0.11298	-0.2916	ppb	0.11298	38.74%
Co 228.616†	229.1	-0.4238	ug/L	0.12071	-0.4238	ppb	0.12071	28.48%
Cr 267.716†	623.0	8.3877	ug/L	0.10553	8.3877	ppb	0.10553	1.26%
Cu 324.752†	380.0	5.9647	ug/L	0.13933	5.9647	ppb	0.13933	2.34%
Fe 238.204 Radial†	10636.4	95292	ug/L	66.6	95292	ppb	66.6	0.07%
K 766.490 Radial†	11505.8	1923.4	ug/L	5.19	1923.4	ppb	5.19	0.27%

Mg 279.077 IEC†	53.3	1710.9	ug/L	62.58	1710.9	ppb	62.58	3.66%
Mn 257.610†	716763.4	769.12	ug/L	0.499	769.12	ppb	0.499	0.06%
Mo 202.031†	506.7	39.005	ug/L	0.3818	39.005	ppb	0.3818	0.98%
Na 589.592 Radial†	7979.4	2418.2	ug/L	11.49	2418.2	ppb	11.49	0.48%
Ni 231.604†	200.3	4.6008	ug/L	0.15623	4.6008	ppb	0.15623	3.40%
P 214.914†	890.5	422.16	ug/L	4.170	422.16	ppb	4.170	0.99%
Pb 220.353†	348.9	32.567	ug/L	1.1975	32.567	ppb	1.1975	3.68%
S 181.975 Axial†	824.0	1087.6	ug/L	12.52	1087.6	ppb	12.52	1.15%
Sb 206.836†	2.4	-1.6238	ug/L	0.94704	-1.6238	ppb	0.94704	58.32%
Se 196.026†	-507.4	8.3518	ug/L	1.99078	8.3518	ppb	1.99078	23.84%
Si 251.611†	322478.1	9603.5	ug/L	3.52	9603.5	ppb	3.52	0.04%
Sn 189.927†	22.6	5.2018	ug/L	1.03232	5.2018	ppb	1.03232	19.85%
Sr 421.552†	3832.9	23.092	ug/L	0.0652	23.092	ppb	0.0652	0.28%
Ti 334.940†	1040612.0	1642.8	ug/L	0.84	1642.8	ppb	0.84	0.05%
Tl 190.801†	-80.8	-5.6583	ug/L	0.99774	-5.6583	ppb	0.99774	17.63%
U 409.014†	-11031.7	-329.17	ug/L	2.340	-329.17	ppb	2.340	0.71%
V 292.402†	5182.6	18.062	ug/L	0.1278	18.062	ppb	0.1278	0.71%
Zn 213.857†	19681.3	160.11	ug/L	0.327	160.11	ppb	0.327	0.20%
SiO2†	319226.0	20373	ug/L	34.5	20373	ppb	34.5	0.17%

Sequence No.: 57
Sample ID: 241832003|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 12/11/2009 19:52:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832003|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5528.5	5528.5	99.2	%			19:54:29
1	Y RADIAL	7754.6	7754.6	128.4	%			19:54:29
1	Al 396.153Radial†	5688.0	5771.9	3974.3	ug/L	3974.3	ppb	19:54:29
1	Ca 317.933Radial†	2609.7	2615.1	3816.7	ug/L	3816.7	ppb	19:54:49
1	Fe 238.204 Radial†	8243.1	8303.7	74393	ug/L	74393	ppb	19:54:29
1	K 766.490 Radial†	13772.1	11150.3	1842.1	ug/L	1842.1	ppb	19:54:29
1	Mg 279.077 IEC†	51.7	50.2	1625.1	ug/L	1625.1	ppb	19:54:49
1	Na 589.592 Radial†	7561.7	9180.5	2782.2	ug/L	2782.2	ppb	19:54:29
1	Sr 421.552†	3679.6	3711.3	22.348	ug/L	22.348	ppb	19:54:29
1	Sc 361.383	879282.4	879282.4	101.31	%			19:55:47
1	Y 371.029	951629.2	951629.2	130.46	%			19:55:47
1	Ag 328.068†	-4467.1	-4683.4	2.7935	ug/L	2.7935	ppb	19:55:52
1	As 188.979†	-58.3	-26.2	16.725	ug/L	16.725	ppb	19:56:12
1	B 249.677†	321.7	810.7	7.3903	ug/L	7.3903	ppb	19:55:52
1	Ba 233.527†	16123.3	15926.0	121.83	ug/L	121.83	ppb	19:55:52
1	Be 313.107†	-12558.2	-7733.3	0.8331	ug/L	0.8331	ppb	19:55:52
1	Cd 226.502†	510.2	702.5	-0.1419	ug/L	-0.1419	ppb	19:56:12
1	Co 228.616†	309.8	379.2	2.2902	ug/L	2.2902	ppb	19:56:12
1	Cr 267.716†	836.6	739.8	9.2187	ug/L	9.2187	ppb	19:56:12
1	Cu 324.752†	8574.8	1706.1	8.7505	ug/L	8.7505	ppb	19:55:52
1	Mn 257.610†	2300189.5	2269934.5	2413.1	ug/L	2413.1	ppb	19:55:47
1	Mo 202.031†	342.2	319.3	25.599	ug/L	25.599	ppb	19:56:12
1	Ni 231.604†	740.3	644.8	14.812	ug/L	14.812	ppb	19:56:12
1	P 214.914†	1572.9	1310.5	672.41	ug/L	672.41	ppb	19:56:12
1	Pb 220.353†	349.5	413.0	41.060	ug/L	41.060	ppb	19:56:12
1	S 181.975 Axial†	759.2	700.0	924.06	ug/L	924.06	ppb	19:56:12
1	Sb 206.836†	55.7	17.6	2.1712	ug/L	2.1712	ppb	19:56:12
1	Se 196.026†	-417.5	-385.3	12.534	ug/L	12.534	ppb	19:56:12
1	Si 251.611†	308426.0	303957.3	9052.1	ug/L	9052.1	ppb	19:55:52
1	Sn 189.927†	74.5	64.7	11.801	ug/L	11.801	ppb	19:56:12
1	Ti 334.940†	1177544.1	1163578.1	1836.9	ug/L	1836.9	ppb	19:55:47
1	Tl 190.801†	-160.7	-124.1	-6.7635	ug/L	-6.7635	ppb	19:56:12
1	U 409.014†	-12340.0	-9596.4	-285.28	ug/L	-285.28	ppb	19:55:47
1	V 292.402†	3455.3	4773.4	18.211	ug/L	18.211	ppb	19:56:12
1	Zn 213.857†	37476.3	36238.0	304.46	ug/L	304.46	ppb	19:55:52
1	SiO2†	313002.8	308432.1	19684	ug/L	19684	ppb	19:57:19
2	Sc Radial	5487.2	5487.2	98.4	%			19:54:54
2	Y RADIAL	7728.8	7728.8	128.0	%			19:54:54
2	Al 396.153Radial†	5672.0	5798.8	3992.9	ug/L	3992.9	ppb	19:54:54
2	Ca 317.933Radial†	2626.8	2652.3	3871.1	ug/L	3871.1	ppb	19:55:14
2	Fe 238.204 Radial†	8200.8	8323.3	74569	ug/L	74569	ppb	19:54:54
2	K 766.490 Radial†	13661.1	11142.0	1840.7	ug/L	1840.7	ppb	19:54:54
2	Mg 279.077 IEC†	51.1	50.1	1619.8	ug/L	1619.8	ppb	19:55:14
2	Na 589.592 Radial†	7561.9	9238.1	2799.7	ug/L	2799.7	ppb	19:54:54
2	Sr 421.552†	3631.6	3690.4	22.222	ug/L	22.222	ppb	19:54:54
2	Sc 361.383	888287.9	888287.9	102.35	%			19:56:18
2	Y 371.029	960303.8	960303.8	131.65	%			19:56:18
2	Ag 328.068†	-4459.3	-4631.1	3.0863	ug/L	3.0863	ppb	19:56:23
2	As 188.979†	-44.9	-12.6	22.026	ug/L	22.026	ppb	19:56:43
2	B 249.677†	333.7	819.2	7.5489	ug/L	7.5489	ppb	19:56:23
2	Ba 233.527†	16204.1	15843.6	121.22	ug/L	121.22	ppb	19:56:23
2	Be 313.107†	-12597.1	-7645.6	0.8669	ug/L	0.8669	ppb	19:56:23
2	Cd 226.502†	513.1	700.3	-0.1830	ug/L	-0.1830	ppb	19:56:43
2	Co 228.616†	299.1	365.7	2.0268	ug/L	2.0268	ppb	19:56:43
2	Cr 267.716†	883.5	777.2	9.6141	ug/L	9.6141	ppb	19:56:43
2	Cu 324.752†	8507.5	1554.5	8.3191	ug/L	8.3191	ppb	19:56:23
2	Mn 257.610†	2327040.9	2273152.1	2416.6	ug/L	2416.6	ppb	19:56:18
2	Mo 202.031†	332.3	306.2	24.777	ug/L	24.777	ppb	19:56:43
2	Ni 231.604†	737.2	634.3	14.572	ug/L	14.572	ppb	19:56:43

2	P 214.914†	1599.7	1321.0	678.20	ug/L	678.20 ppb	19:56:43
2	Pb 220.353†	358.8	418.6	41.678	ug/L	41.678 ppb	19:56:43
2	S 181.975 Axial†	771.3	704.2	929.65	ug/L	929.65 ppb	19:56:43
2	Sb 206.836†	39.6	1.3	-3.0510	ug/L	-3.0510 ppb	19:56:43
2	Se 196.026†	-427.7	-391.1	9.7953	ug/L	9.7953 ppb	19:56:43
2	Si 251.611†	309995.5	302404.3	9005.8	ug/L	9005.8 ppb	19:56:23
2	Sn 189.927†	63.3	53.0	9.9213	ug/L	9.9213 ppb	19:56:43
2	Ti 334.940†	1190366.8	1164323.0	1838.1	ug/L	1838.1 ppb	19:56:18
2	Tl 190.801†	-158.4	-120.2	-5.6295	ug/L	-5.6295 ppb	19:56:43
2	U 409.014†	-12531.6	-9660.2	-287.13	ug/L	-287.13 ppb	19:56:18
2	V 292.402†	3456.7	4740.2	17.947	ug/L	17.947 ppb	19:56:43
2	Zn 213.857†	37651.4	36034.0	302.69	ug/L	302.69 ppb	19:56:23
2	SiO2†	315372.7	307615.4	19632	ug/L	19632 ppb	19:57:25
3	Sc Radial	5567.5	5567.5	99.9	%		19:55:20
3	Y RADIAL	7826.8	7826.8	129.6	%		19:55:20
3	Al 396.153Radial†	5728.1	5771.9	3974.3	ug/L	3974.3 ppb	19:55:20
3	Ca 317.933Radial†	2621.4	2608.4	3806.9	ug/L	3806.9 ppb	19:55:40
3	Fe 238.204 Radial†	8315.9	8318.4	74525	ug/L	74525 ppb	19:55:20
3	K 766.490 Radial†	13814.7	11095.7	1832.8	ug/L	1832.8 ppb	19:55:20
3	Mg 279.077 IEC†	51.9	50.0	1619.0	ug/L	1619.0 ppb	19:55:40
3	Na 589.592 Radial†	7815.8	9381.5	2843.2	ug/L	2843.2 ppb	19:55:20
3	Sr 421.552†	3696.5	3702.2	22.294	ug/L	22.294 ppb	19:55:20
3	Sc 361.383	879545.1	879545.1	101.34	%		19:56:49
3	Y 371.029	950505.8	950505.8	130.30	%		19:56:49
3	Ag 328.068†	-4413.5	-4629.2	3.0819	ug/L	3.0819 ppb	19:56:54
3	As 188.979†	-48.4	-16.5	20.527	ug/L	20.527 ppb	19:57:14
3	B 249.677†	389.9	878.0	8.8061	ug/L	8.8061 ppb	19:56:54
3	Ba 233.527†	16012.2	15811.6	120.98	ug/L	120.98 ppb	19:56:54
3	Be 313.107†	-12268.9	-7444.1	0.9411	ug/L	0.9411 ppb	19:56:54
3	Cd 226.502†	498.7	691.1	-0.2737	ug/L	-0.2737 ppb	19:57:14
3	Co 228.616†	300.3	369.7	2.1038	ug/L	2.1038 ppb	19:57:14
3	Cr 267.716†	859.1	761.7	9.4507	ug/L	9.4507 ppb	19:57:14
3	Cu 324.752†	8594.8	1723.3	8.8070	ug/L	8.8070 ppb	19:56:54
3	Mn 257.610†	2305154.5	2274155.8	2417.6	ug/L	2417.6 ppb	19:56:49
3	Mo 202.031†	337.4	314.5	25.301	ug/L	25.301 ppb	19:57:14
3	Ni 231.604†	741.0	645.2	14.822	ug/L	14.822 ppb	19:57:14
3	P 214.914†	1577.9	1315.0	674.82	ug/L	674.82 ppb	19:57:14
3	Pb 220.353†	321.8	385.5	37.973	ug/L	37.973 ppb	19:57:14
3	S 181.975 Axial†	770.8	711.2	938.84	ug/L	938.84 ppb	19:57:14
3	Sb 206.836†	45.4	7.4	-1.1034	ug/L	-1.1034 ppb	19:57:14
3	Se 196.026†	-402.0	-369.9	21.602	ug/L	21.602 ppb	19:57:14
3	Si 251.611†	306464.0	301930.2	8991.7	ug/L	8991.7 ppb	19:56:54
3	Sn 189.927†	66.1	56.4	10.467	ug/L	10.467 ppb	19:57:14
3	Ti 334.940†	1179256.7	1164920.9	1839.0	ug/L	1839.0 ppb	19:56:49
3	Tl 190.801†	-145.5	-109.0	-2.4643	ug/L	-2.4643 ppb	19:57:14
3	U 409.014†	-12406.8	-9658.8	-287.09	ug/L	-287.09 ppb	19:56:49
3	V 292.402†	3439.8	4757.0	18.072	ug/L	18.072 ppb	19:57:14
3	Zn 213.857†	37262.8	36016.3	302.54	ug/L	302.54 ppb	19:56:54
3	SiO2†	317179.5	312461.3	19942	ug/L	19942 ppb	19:57:30

Mean Data: 241832003|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882371.8	101.67	%	0.591				0.58%
Sc Radial	5527.7	99.1	%	0.72				0.73%
Y 371.029	954146.3	130.80	%	0.735				0.56%
Y RADIAL	7770.1	128.7	%	0.84				0.65%
Ag 328.068†	-4647.9	2.9872	ug/L	0.16780	2.9872	ppb	0.16780	5.62%
Al 396.153Radial†	5780.9	3980.5	ug/L	10.72	3980.5	ppb	10.72	0.27%
As 188.979†	-18.4	19.760	ug/L	2.7324	19.760	ppb	2.7324	13.83%
B 249.677†	836.0	7.9151	ug/L	0.77565	7.9151	ppb	0.77565	9.80%
Ba 233.527†	15860.4	121.34	ug/L	0.438	121.34	ppb	0.438	0.36%
Be 313.107†	-7607.7	0.8804	ug/L	0.05525	0.8804	ppb	0.05525	6.28%
Ca 317.933Radial†	2625.3	3831.6	ug/L	34.55	3831.6	ppb	34.55	0.90%
Cd 226.502†	698.0	-0.1995	ug/L	0.06745	-0.1995	ppb	0.06745	33.80%
Co 228.616†	371.5	2.1403	ug/L	0.13543	2.1403	ppb	0.13543	6.33%
Cr 267.716†	759.6	9.4279	ug/L	0.19868	9.4279	ppb	0.19868	2.11%
Cu 324.752†	1661.3	8.6255	ug/L	0.26691	8.6255	ppb	0.26691	3.09%
Fe 238.204 Radial†	8315.1	74495	ug/L	91.6	74495	ppb	91.6	0.12%
K 766.490 Radial†	11129.3	1838.5	ug/L	4.97	1838.5	ppb	4.97	0.27%

Mg 279.077 IEC†	50.1	1621.3	ug/L	3.34	1621.3	ppb	3.34	0.21%
Mn 257.610†	2272414.1	2415.8	ug/L	2.35	2415.8	ppb	2.35	0.10%
Mo 202.031†	313.4	25.226	ug/L	0.4159	25.226	ppb	0.4159	1.65%
Na 589.592 Radial†	9266.7	2808.4	ug/L	31.37	2808.4	ppb	31.37	1.12%
Ni 231.604†	641.5	14.735	ug/L	0.1417	14.735	ppb	0.1417	0.96%
P 214.914†	1315.5	675.15	ug/L	2.905	675.15	ppb	2.905	0.43%
Pb 220.353†	405.7	40.237	ug/L	1.9849	40.237	ppb	1.9849	4.93%
S 181.975 Axial†	705.2	930.85	ug/L	7.461	930.85	ppb	7.461	0.80%
Sb 206.836†	8.8	-0.6611	ug/L	2.63903	-0.6611	ppb	2.63903	399.20%
Se 196.026†	-382.1	14.644	ug/L	6.1797	14.644	ppb	6.1797	42.20%
Si 251.611†	302763.9	9016.5	ug/L	31.57	9016.5	ppb	31.57	0.35%
Sn 189.927†	58.0	10.730	ug/L	0.9669	10.730	ppb	0.9669	9.01%
Sr 421.552†	3701.3	22.288	ug/L	0.0634	22.288	ppb	0.0634	0.28%
Ti 334.940†	1164274.0	1838.0	ug/L	1.06	1838.0	ppb	1.06	0.06%
Tl 190.801†	-117.7	-4.9525	ug/L	2.22812	-4.9525	ppb	2.22812	44.99%
U 409.014†	-9638.5	-286.50	ug/L	1.058	-286.50	ppb	1.058	0.37%
V 292.402†	4756.9	18.077	ug/L	0.1324	18.077	ppb	0.1324	0.73%
Zn 213.857†	36096.1	303.23	ug/L	1.067	303.23	ppb	1.067	0.35%
SiO2†	309503.0	19753	ug/L	165.6	19753	ppb	165.6	0.84%

Sequence No.: 58
Sample ID: 241832004|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 12/11/2009 19:59:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241832004|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5538.7	5538.7	99.3	%			20:01:33
1	Y RADIAL	7375.6	7375.6	122.1	%			20:01:33
1	Al 396.153Radial†	6667.0	6746.9	4646.2	ug/L	4646.2	ppb	20:01:33
1	Ca 317.933Radial†	4418.7	4431.3	6467.5	ug/L	6467.5	ppb	20:01:33
1	Fe 238.204 Radial†	5918.7	5948.4	53292	ug/L	53292	ppb	20:01:33
1	K 766.490 Radial†	13292.3	10641.7	1761.0	ug/L	1761.0	ppb	20:01:33
1	Mg 279.077 IEC†	45.6	44.0	1435.1	ug/L	1435.1	ppb	20:01:53
1	Na 589.592 Radial†	7696.1	9301.7	2819.0	ug/L	2819.0	ppb	20:01:33
1	Sr 421.552†	3808.5	3834.2	23.065	ug/L	23.065	ppb	20:01:33
1	Sc 361.383	887356.8	887356.8	102.24	%			20:02:51
1	Y 371.029	906524.8	906524.8	124.27	%			20:02:51
1	Ag 328.068†	-3043.7	-3251.0	2.4276	ug/L	2.4276	ppb	20:02:56
1	As 188.979†	-31.8	0.2	16.192	ug/L	16.192	ppb	20:03:16
1	B 249.677†	270.4	757.7	9.0663	ug/L	9.0663	ppb	20:02:56
1	Ba 233.527†	11584.7	11342.0	86.769	ug/L	86.769	ppb	20:02:56
1	Be 313.107†	-7377.5	-2553.2	0.9371	ug/L	0.9371	ppb	20:02:56
1	Cd 226.502†	285.8	478.5	-0.3614	ug/L	-0.3614	ppb	20:03:16
1	Co 228.616†	173.6	243.2	1.8844	ug/L	1.8844	ppb	20:03:16
1	Cr 267.716†	924.7	818.4	9.6270	ug/L	9.6270	ppb	20:03:16
1	Cu 324.752†	9435.4	2470.9	9.8954	ug/L	9.8954	ppb	20:02:56
1	Mn 257.610†	1918925.5	1876363.8	1993.9	ug/L	1993.9	ppb	20:02:51
1	Mo 202.031†	192.8	170.1	14.606	ug/L	14.606	ppb	20:03:16
1	Ni 231.604†	371.7	277.7	6.3772	ug/L	6.3772	ppb	20:03:16
1	P 214.914†	1068.8	803.3	405.96	ug/L	405.96	ppb	20:03:16
1	Pb 220.353†	389.6	449.0	46.957	ug/L	46.957	ppb	20:03:16
1	S 181.975 Axial†	798.7	731.8	965.90	ug/L	965.90	ppb	20:03:16
1	Sb 206.836†	47.4	9.0	1.0609	ug/L	1.0609	ppb	20:03:16
1	Se 196.026†	-324.0	-290.1	1.3078	ug/L	1.3078	ppb	20:03:16
1	Si 251.611†	299675.4	292628.1	8714.9	ug/L	8714.9	ppb	20:02:56
1	Sn 189.927†	0.4	-8.4	0.0322	ug/L	0.0322	ppb	20:03:16
1	Ti 334.940†	609681.8	597580.6	943.66	ug/L	943.66	ppb	20:02:51
1	Tl 190.801†	-123.4	-86.1	-5.3046	ug/L	-5.3046	ppb	20:03:16
1	U 409.014†	-10558.9	-7743.5	-229.35	ug/L	-229.35	ppb	20:02:51
1	V 292.402†	1683.6	3009.4	10.631	ug/L	10.631	ppb	20:03:16
1	Zn 213.857†	39206.7	37593.8	318.20	ug/L	318.20	ppb	20:02:56
1	SiO2†	304101.6	296914.6	18950	ug/L	18950	ppb	20:04:24
2	Sc Radial	5503.7	5503.7	98.7	%			20:01:59
2	Y RADIAL	7316.3	7316.3	121.1	%			20:01:59
2	Al 396.153Radial†	6608.9	6730.8	4635.1	ug/L	4635.1	ppb	20:01:59
2	Ca 317.933Radial†	4373.7	4414.1	6442.3	ug/L	6442.3	ppb	20:01:59
2	Fe 238.204 Radial†	5884.2	5951.4	53318	ug/L	53318	ppb	20:01:59
2	K 766.490 Radial†	13390.0	10825.8	1791.9	ug/L	1791.9	ppb	20:01:59
2	Mg 279.077 IEC†	39.2	37.8	1226.0	ug/L	1226.0	ppb	20:02:19
2	Na 589.592 Radial†	7656.4	9310.9	2821.8	ug/L	2821.8	ppb	20:01:59
2	Sr 421.552†	3805.8	3855.9	23.196	ug/L	23.196	ppb	20:01:59
2	Sc 361.383	889174.5	889174.5	102.45	%			20:03:22
2	Y 371.029	907519.8	907519.8	124.41	%			20:03:22
2	Ag 328.068†	-3015.0	-3216.9	2.5924	ug/L	2.5924	ppb	20:03:27
2	As 188.979†	-32.2	-0.1	16.099	ug/L	16.099	ppb	20:03:47
2	B 249.677†	205.9	694.2	7.7102	ug/L	7.7102	ppb	20:03:27
2	Ba 233.527†	11529.7	11265.2	86.196	ug/L	86.196	ppb	20:03:27
2	Be 313.107†	-7417.8	-2577.8	0.9297	ug/L	0.9297	ppb	20:03:27
2	Cd 226.502†	298.2	490.0	-0.2442	ug/L	-0.2442	ppb	20:03:47
2	Co 228.616†	171.4	240.8	1.8377	ug/L	1.8377	ppb	20:03:47
2	Cr 267.716†	944.7	836.1	9.8134	ug/L	9.8134	ppb	20:03:47
2	Cu 324.752†	9541.6	2555.6	10.143	ug/L	10.143	ppb	20:03:27
2	Mn 257.610†	1923608.3	1877097.9	1994.7	ug/L	1994.7	ppb	20:03:22
2	Mo 202.031†	200.3	177.1	15.051	ug/L	15.051	ppb	20:03:47
2	Ni 231.604†	360.5	265.9	6.1075	ug/L	6.1075	ppb	20:03:47

2	P 214.914†	1054.4	787.2	396.85	ug/L	396.85	ppb	20:03:47
2	Pb 220.353†	382.5	441.4	46.091	ug/L	46.091	ppb	20:03:47
2	S 181.975 Axial†	818.1	749.1	988.78	ug/L	988.78	ppb	20:03:47
2	Sb 206.836†	34.4	-3.8	-3.0461	ug/L	-3.0461	ppb	20:03:47
2	Se 196.026†	-303.5	-269.5	12.979	ug/L	12.979	ppb	20:03:47
2	Si 251.611†	299315.8	291677.9	8686.6	ug/L	8686.6	ppb	20:03:27
2	Sn 189.927†	-22.7	-31.0	-3.6096	ug/L	-3.6096	ppb	20:03:47
2	Ti 334.940†	611378.2	598017.4	944.35	ug/L	944.35	ppb	20:03:22
2	Tl 190.801†	-113.4	-76.1	-2.4884	ug/L	-2.4884	ppb	20:03:47
2	U 409.014†	-10647.7	-7809.2	-231.24	ug/L	-231.24	ppb	20:03:22
2	V 292.402†	1700.8	3022.8	10.713	ug/L	10.713	ppb	20:03:47
2	Zn 213.857†	39160.0	37469.9	317.14	ug/L	317.14	ppb	20:03:27
2	SiO2†	306930.7	299068.0	19087	ug/L	19087	ppb	20:04:29
3	Sc Radial	5574.3	5574.3	100.0	%			20:02:24
3	Y RADIAL	7382.2	7382.2	122.2	%			20:02:24
3	Al 396.153Radial†	6659.4	6696.5	4611.5	ug/L	4611.5	ppb	20:02:24
3	Ca 317.933Radial†	4409.1	4393.3	6412.0	ug/L	6412.0	ppb	20:02:24
3	Fe 238.204 Radial†	5935.5	5927.2	53102	ug/L	53102	ppb	20:02:24
3	K 766.490 Radial†	13452.1	10716.1	1773.4	ug/L	1773.4	ppb	20:02:24
3	Mg 279.077 IEC†	42.3	40.4	1314.1	ug/L	1314.1	ppb	20:02:44
3	Na 589.592 Radial†	7790.8	9346.9	2832.7	ug/L	2832.7	ppb	20:02:24
3	Sr 421.552†	3798.9	3800.1	22.860	ug/L	22.860	ppb	20:02:24
3	Sc 361.383	888117.4	888117.4	102.33	%			20:03:53
3	Y 371.029	905196.8	905196.8	124.09	%			20:03:53
3	Ag 328.068†	-3107.2	-3310.6	2.0984	ug/L	2.0984	ppb	20:03:58
3	As 188.979†	-29.3	2.7	17.140	ug/L	17.140	ppb	20:04:18
3	B 249.677†	167.0	656.5	6.9341	ug/L	6.9341	ppb	20:03:58
3	Ba 233.527†	11551.3	11299.6	86.445	ug/L	86.445	ppb	20:03:58
3	Be 313.107†	-7381.5	-2550.9	0.9406	ug/L	0.9406	ppb	20:03:58
3	Cd 226.502†	280.0	472.6	-0.4035	ug/L	-0.4035	ppb	20:04:18
3	Co 228.616†	166.6	236.3	1.7539	ug/L	1.7539	ppb	20:04:18
3	Cr 267.716†	912.7	805.9	9.4926	ug/L	9.4926	ppb	20:04:18
3	Cu 324.752†	9509.0	2534.8	10.071	ug/L	10.071	ppb	20:03:58
3	Mn 257.610†	1924885.7	1880581.1	1998.4	ug/L	1998.4	ppb	20:03:53
3	Mo 202.031†	195.8	173.0	14.774	ug/L	14.774	ppb	20:04:18
3	Ni 231.604†	383.6	288.9	6.6356	ug/L	6.6356	ppb	20:04:18
3	P 214.914†	1056.4	790.4	398.82	ug/L	398.82	ppb	20:04:18
3	Pb 220.353†	366.7	426.4	44.428	ug/L	44.428	ppb	20:04:18
3	S 181.975 Axial†	792.2	724.8	956.68	ug/L	956.68	ppb	20:04:18
3	Sb 206.836†	42.6	4.2	-0.4828	ug/L	-0.4828	ppb	20:04:18
3	Se 196.026†	-305.9	-272.1	10.807	ug/L	10.807	ppb	20:04:18
3	Si 251.611†	299401.1	292109.1	8699.4	ug/L	8699.4	ppb	20:03:58
3	Sn 189.927†	-12.4	-20.9	-1.9859	ug/L	-1.9859	ppb	20:04:18
3	Ti 334.940†	611060.0	598416.8	944.98	ug/L	944.98	ppb	20:03:53
3	Tl 190.801†	-121.8	-84.4	-4.7990	ug/L	-4.7990	ppb	20:04:18
3	U 409.014†	-10609.5	-7784.2	-230.50	ug/L	-230.50	ppb	20:03:53
3	V 292.402†	1644.6	2969.9	10.393	ug/L	10.393	ppb	20:04:18
3	Zn 213.857†	39194.2	37548.9	317.83	ug/L	317.83	ppb	20:03:58
3	SiO2†	304241.4	296796.5	18942	ug/L	18942	ppb	20:04:34

Mean Data: 241832004|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888216.2	102.34	%	0.105				0.10%
Sc Radial	5538.9	99.3	%	0.63				0.64%
Y 371.029	906413.8	124.26	%	0.160				0.13%
Y RADIAL	7358.0	121.8	%	0.60				0.49%
Ag 328.068†	-3259.5	2.3728	ug/L	0.25150	2.3728	ppb	0.25150	10.60%
Al 396.153Radial†	6724.7	4630.9	ug/L	17.75	4630.9	ppb	17.75	0.38%
As 188.979†	0.9	16.477	ug/L	0.5759	16.477	ppb	0.5759	3.49%
B 249.677†	702.8	7.9035	ug/L	1.07918	7.9035	ppb	1.07918	13.65%
Ba 233.527†	11302.3	86.470	ug/L	0.2874	86.470	ppb	0.2874	0.33%
Be 313.107†	-2560.7	0.9358	ug/L	0.00557	0.9358	ppb	0.00557	0.59%
Ca 317.933Radial†	4412.9	6440.6	ug/L	27.78	6440.6	ppb	27.78	0.43%
Cd 226.502†	480.4	-0.3364	ug/L	0.08252	-0.3364	ppb	0.08252	24.53%
Co 228.616†	240.1	1.8253	ug/L	0.06617	1.8253	ppb	0.06617	3.62%
Cr 267.716†	820.2	9.6443	ug/L	0.16108	9.6443	ppb	0.16108	1.67%
Cu 324.752†	2520.4	10.037	ug/L	0.1274	10.037	ppb	0.1274	1.27%
Fe 238.204 Radial†	5942.3	53237	ug/L	118.2	53237	ppb	118.2	0.22%
K 766.490 Radial†	10727.9	1775.5	ug/L	15.54	1775.5	ppb	15.54	0.88%

Mg 279.077 IEC†	40.8	1325.1	ug/L	104.98	1325.1	ppb	104.98	7.92%
Mn 257.610†	1878014.3	1995.7	ug/L	2.38	1995.7	ppb	2.38	0.12%
Mo 202.031†	173.4	14.810	ug/L	0.2249	14.810	ppb	0.2249	1.52%
Na 589.592 Radial†	9319.8	2824.5	ug/L	7.25	2824.5	ppb	7.25	0.26%
Ni 231.604†	277.5	6.3734	ug/L	0.26407	6.3734	ppb	0.26407	4.14%
P 214.914†	793.6	400.54	ug/L	4.792	400.54	ppb	4.792	1.20%
Pb 220.353†	438.9	45.825	ug/L	1.2853	45.825	ppb	1.2853	2.80%
S 181.975 Axial†	735.2	970.45	ug/L	16.526	970.45	ppb	16.526	1.70%
Sb 206.836†	3.1	-0.8227	ug/L	2.07444	-0.8227	ppb	2.07444	252.16%
Se 196.026†	-277.2	8.3648	ug/L	6.20727	8.3648	ppb	6.20727	74.21%
Si 251.611†	292138.4	8700.3	ug/L	14.17	8700.3	ppb	14.17	0.16%
Sn 189.927†	-20.1	-1.8545	ug/L	1.82447	-1.8545	ppb	1.82447	98.38%
Sr 421.552†	3830.1	23.040	ug/L	0.1694	23.040	ppb	0.1694	0.74%
Ti 334.940†	598004.9	944.33	ug/L	0.659	944.33	ppb	0.659	0.07%
Tl 190.801†	-82.2	-4.1973	ug/L	1.50141	-4.1973	ppb	1.50141	35.77%
U 409.014†	-7779.0	-230.36	ug/L	0.952	-230.36	ppb	0.952	0.41%
V 292.402†	3000.7	10.579	ug/L	0.1661	10.579	ppb	0.1661	1.57%
Zn 213.857†	37537.5	317.72	ug/L	0.538	317.72	ppb	0.538	0.17%
SiO2†	297593.0	18993	ug/L	81.6	18993	ppb	81.6	0.43%

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Sequence No.: 59
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 20:06:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5804.7	5804.7	104	%			20:08:37
1	Y RADIAL	6274.5	6274.5	103.9	%			20:08:37
1	Al 396.153Radial†	7143.8	6897.3	4728.7	ug/L	4728.7	ppb	20:08:37
1	Ca 317.933Radial†	3462.2	3308.7	4829.1	ug/L	4829.1	ppb	20:08:57
1	Fe 238.204 Radial†	580.8	548.0	4925.3	ug/L	4925.3	ppb	20:08:57
1	K 766.490 Radial†	32762.9	28731.1	4811.7	ug/L	4811.7	ppb	20:08:37
1	Mg 279.077 IEC†	158.8	150.6	5071.5	ug/L	5071.5	ppb	20:08:57
1	Na 589.592 Radial†	31535.1	31845.5	9651.1	ug/L	9651.1	ppb	20:08:37
1	Sr 421.552†	83189.5	79908.6	481.91	ug/L	481.91	ppb	20:08:37
1	Sc 361.383	886278.6	886278.6	102.12	%			20:09:55
1	Y 371.029	734828.2	734828.2	100.74	%			20:09:55
1	Ag 328.068†	113599.4	110971.8	505.03	ug/L	505.03	ppb	20:10:00
1	As 188.979†	1301.7	1306.0	508.56	ug/L	508.56	ppb	20:10:20
1	B 249.677†	23431.5	23439.2	497.59	ug/L	497.59	ppb	20:10:00
1	Ba 233.527†	68320.5	66916.1	501.30	ug/L	501.30	ppb	20:10:00
1	Be 313.107†	1437156.3	1412042.5	508.00	ug/L	508.00	ppb	20:09:55
1	Cd 226.502†	49460.6	48634.7	504.23	ug/L	504.23	ppb	20:10:00
1	Co 228.616†	27062.3	26575.0	501.41	ug/L	501.41	ppb	20:10:00
1	Cr 267.716†	48904.9	47805.6	501.22	ug/L	501.22	ppb	20:10:00
1	Cu 324.752†	180389.7	169894.4	493.73	ug/L	493.73	ppb	20:10:00
1	Mn 257.610†	486070.5	475479.4	504.32	ug/L	504.32	ppb	20:09:55
1	Mo 202.031†	8123.8	7937.1	505.44	ug/L	505.44	ppb	20:10:20
1	Ni 231.604†	22388.6	21838.8	501.51	ug/L	501.51	ppb	20:10:00
1	P 214.914†	4830.6	4488.5	2431.7	ug/L	2431.7	ppb	20:10:20
1	Pb 220.353†	4534.5	4508.5	506.21	ug/L	506.21	ppb	20:10:20
1	S 181.975 Axial†	838.3	771.6	1018.4	ug/L	1018.4	ppb	20:10:20
1	Sb 206.836†	1671.8	1599.8	512.55	ug/L	512.55	ppb	20:10:20
1	Se 196.026†	899.1	907.2	527.79	ug/L	527.79	ppb	20:10:20
1	Si 251.611†	88419.7	86106.0	2552.6	ug/L	2552.6	ppb	20:10:00
1	Sn 189.927†	3237.8	3161.9	509.21	ug/L	509.21	ppb	20:10:20
1	Ti 334.940†	316432.7	311132.8	490.96	ug/L	490.96	ppb	20:10:00
1	Tl 190.801†	1792.3	1789.7	507.41	ug/L	507.41	ppb	20:10:20
1	U 409.014†	14589.8	16871.5	483.48	ug/L	483.48	ppb	20:10:00
1	V 292.402†	74932.6	74742.8	504.10	ug/L	504.10	ppb	20:10:00
1	Zn 213.857†	60671.2	58660.3	500.16	ug/L	500.16	ppb	20:10:00
1	SiO2†	88040.4	85691.9	5443.4	ug/L	5443.4	ppb	20:11:27
2	Sc Radial	5286.6	5286.6	94.8	%			20:09:02
2	Y RADIAL	5715.4	5715.4	94.64	%			20:09:02
2	Al 396.153Radial†	7042.4	7462.9	5117.9	ug/L	5117.9	ppb	20:09:02
2	Ca 317.933Radial†	3500.7	3675.3	5364.1	ug/L	5364.1	ppb	20:09:22
2	Fe 238.204 Radial†	586.8	609.0	5471.8	ug/L	5471.8	ppb	20:09:22
2	K 766.490 Radial†	31823.4	30824.5	5162.6	ug/L	5162.6	ppb	20:09:02
2	Mg 279.077 IEC†	162.5	169.5	5706.0	ug/L	5706.0	ppb	20:09:22
2	Na 589.592 Radial†	30747.1	33983.0	10299	ug/L	10299	ppb	20:09:02
2	Sr 421.552†	81628.8	86093.7	519.20	ug/L	519.20	ppb	20:09:02
2	Sc 361.383	875854.5	875854.5	100.91	%			20:10:26
2	Y 371.029	724872.0	724872.0	99.371	%			20:10:26
2	Ag 328.068†	114633.7	113320.6	515.85	ug/L	515.85	ppb	20:10:31
2	As 188.979†	1315.7	1335.1	519.92	ug/L	519.92	ppb	20:10:51
2	B 249.677†	23760.8	24038.6	510.26	ug/L	510.26	ppb	20:10:31
2	Ba 233.527†	68789.8	68177.4	510.76	ug/L	510.76	ppb	20:10:31
2	Be 313.107†	1423381.3	1415142.6	509.13	ug/L	509.13	ppb	20:10:26
2	Cd 226.502†	49936.4	49682.7	515.05	ug/L	515.05	ppb	20:10:31
2	Co 228.616†	27293.3	27119.4	511.66	ug/L	511.66	ppb	20:10:31
2	Cr 267.716†	49313.9	48780.8	511.45	ug/L	511.45	ppb	20:10:31
2	Cu 324.752†	181676.5	173271.9	503.56	ug/L	503.56	ppb	20:10:31
2	Mn 257.610†	482948.8	478051.3	507.09	ug/L	507.09	ppb	20:10:26
2	Mo 202.031†	8113.0	8021.0	510.82	ug/L	510.82	ppb	20:10:51
2	Ni 231.604†	22681.2	22389.7	514.16	ug/L	514.16	ppb	20:10:31

2	P 214.914†	4837.0	4551.1	2464.8	ug/L	2464.8 ppb	20:10:51
2	Pb 220.353†	4538.7	4565.5	512.64	ug/L	512.64 ppb	20:10:51
2	S 181.975 Axial†	847.7	790.6	1043.5	ug/L	1043.5 ppb	20:10:51
2	Sb 206.836†	1680.2	1627.6	521.31	ug/L	521.31 ppb	20:10:51
2	Se 196.026†	888.0	906.7	529.27	ug/L	529.27 ppb	20:10:51
2	Si 251.611†	89139.8	87850.1	2604.3	ug/L	2604.3 ppb	20:10:31
2	Sn 189.927†	3238.8	3200.6	515.50	ug/L	515.50 ppb	20:10:51
2	Ti 334.940†	319117.8	317481.6	501.00	ug/L	501.00 ppb	20:10:31
2	Tl 190.801†	1786.4	1804.8	511.69	ug/L	511.69 ppb	20:10:51
2	U 409.014†	14765.0	17215.1	493.27	ug/L	493.27 ppb	20:10:31
2	V 292.402†	75455.6	76134.4	513.37	ug/L	513.37 ppb	20:10:31
2	Zn 213.857†	61101.1	59793.4	509.74	ug/L	509.74 ppb	20:10:31
2	SiO2†	87353.8	86037.6	5465.0	ug/L	5465.0 ppb	20:11:32
3	Sc Radial	5387.9	5387.9	96.6	%		20:09:28
3	Y RADIAL	5837.9	5837.9	96.67	%		20:09:28
3	Al 396.153Radial†	7113.9	7397.3	5072.8	ug/L	5072.8 ppb	20:09:28
3	Ca 317.933Radial†	3437.8	3540.8	5167.7	ug/L	5167.7 ppb	20:09:48
3	Fe 238.204 Radial†	578.7	589.0	5292.7	ug/L	5292.7 ppb	20:09:48
3	K 766.490 Radial†	32314.8	30702.1	5142.2	ug/L	5142.2 ppb	20:09:28
3	Mg 279.077 IEC†	158.5	162.2	5459.0	ug/L	5459.0 ppb	20:09:48
3	Na 589.592 Radial†	30928.5	33561.2	10171	ug/L	10171 ppb	20:09:28
3	Sr 421.552†	82433.0	85307.8	514.47	ug/L	514.47 ppb	20:09:28
3	Sc 361.383	870851.0	870851.0	100.34	%		20:10:57
3	Y 371.029	720926.2	720926.2	98.831	%		20:10:57
3	Ag 328.068†	113356.4	112700.3	512.98	ug/L	512.98 ppb	20:11:02
3	As 188.979†	1290.1	1317.0	512.91	ug/L	512.91 ppb	20:11:22
3	B 249.677†	23451.7	23865.8	506.61	ug/L	506.61 ppb	20:11:02
3	Ba 233.527†	68009.7	67791.6	507.87	ug/L	507.87 ppb	20:11:02
3	Be 313.107†	1411646.7	1411551.5	507.83	ug/L	507.83 ppb	20:10:57
3	Cd 226.502†	49171.0	49204.2	510.10	ug/L	510.10 ppb	20:11:02
3	Co 228.616†	26902.3	26885.1	507.25	ug/L	507.25 ppb	20:11:02
3	Cr 267.716†	48683.7	48433.6	507.81	ug/L	507.81 ppb	20:11:02
3	Cu 324.752†	179880.0	172515.9	501.36	ug/L	501.36 ppb	20:11:02
3	Mn 257.610†	478370.0	476237.5	505.16	ug/L	505.16 ppb	20:10:57
3	Mo 202.031†	8058.1	8012.5	510.27	ug/L	510.27 ppb	20:11:22
3	Ni 231.604†	22335.4	22174.2	509.21	ug/L	509.21 ppb	20:11:02
3	P 214.914†	4783.1	4524.9	2450.6	ug/L	2450.6 ppb	20:11:22
3	Pb 220.353†	4482.8	4535.7	509.30	ug/L	509.30 ppb	20:11:22
3	S 181.975 Axial†	832.0	779.8	1029.3	ug/L	1029.3 ppb	20:11:22
3	Sb 206.836†	1660.1	1617.1	518.01	ug/L	518.01 ppb	20:11:22
3	Se 196.026†	886.0	909.8	530.44	ug/L	530.44 ppb	20:11:22
3	Si 251.611†	87986.1	87207.8	2585.2	ug/L	2585.2 ppb	20:11:02
3	Sn 189.927†	3194.3	3174.7	511.30	ug/L	511.30 ppb	20:11:22
3	Ti 334.940†	315458.0	315651.0	498.10	ug/L	498.10 ppb	20:11:02
3	Tl 190.801†	1770.7	1799.3	510.14	ug/L	510.14 ppb	20:11:22
3	U 409.014†	14730.9	17265.3	494.74	ug/L	494.74 ppb	20:11:02
3	V 292.402†	74648.0	75759.2	510.90	ug/L	510.90 ppb	20:11:02
3	Zn 213.857†	60443.7	59486.1	507.16	ug/L	507.16 ppb	20:11:02
3	SiO2†	87890.1	87069.5	5530.9	ug/L	5530.9 ppb	20:11:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877661.4	101.12	%	0.907				0.90%
Sc Radial	5493.1	98.5	%	4.92				5.00%
Y 371.029	726875.4	99.646	%	0.9821				0.99%
Y RADIAL	5942.6	98.40	%	4.867				4.95%
Ag 328.068†	112330.9	511.29	ug/L	5.605	511.29	ppb	5.605	1.10%
QC value within limits for Ag 328.068 Recovery = 102.26%								
Al 396.153Radial†	7252.5	4973.1	ug/L	212.91	4973.1	ppb	212.91	4.28%
QC value within limits for Al 396.153Radial Recovery = 99.46%								
As 188.979†	1319.4	513.79	ug/L	5.732	513.79	ppb	5.732	1.12%
QC value within limits for As 188.979 Recovery = 102.76%								
B 249.677†	23781.2	504.82	ug/L	6.526	504.82	ppb	6.526	1.29%
QC value within limits for B 249.677 Recovery = 100.96%								
Ba 233.527†	67628.4	506.64	ug/L	4.850	506.64	ppb	4.850	0.96%
QC value within limits for Ba 233.527 Recovery = 101.33%								
Be 313.107†	1412912.2	508.32	ug/L	0.706	508.32	ppb	0.706	0.14%
QC value within limits for Be 313.107 Recovery = 101.66%								
Ca 317.933Radial†	3508.3	5120.3	ug/L	270.64	5120.3	ppb	270.64	5.29%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.41%
Cd 226.502†            49173.9      509.79 ug/L         5.418      509.79 ppb          5.418   1.06%
   QC value within limits for Cd 226.502  Recovery = 101.96%
Co 228.616†            26859.8      506.77 ug/L         5.142      506.77 ppb          5.142   1.01%
   QC value within limits for Co 228.616  Recovery = 101.35%
Cr 267.716†            48340.0      506.83 ug/L         5.186      506.83 ppb          5.186   1.02%
   QC value within limits for Cr 267.716  Recovery = 101.37%
Cu 324.752†           171894.1      499.55 ug/L         5.163      499.55 ppb          5.163   1.03%
   QC value within limits for Cu 324.752  Recovery = 99.91%
Fe 238.204 Radial†       582.0      5229.9 ug/L        278.57      5229.9 ppb         278.57   5.33%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.60%
K 766.490 Radial†      30085.9      5038.8 ug/L        196.96      5038.8 ppb         196.96   3.91%
   QC value within limits for K 766.490 Radial  Recovery = 100.78%
Mg 279.077 IEC†          160.8      5412.2 ug/L        319.84      5412.2 ppb         319.84   5.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.24%
Mn 257.610†           476589.4      505.52 ug/L         1.420      505.52 ppb          1.420   0.28%
   QC value within limits for Mn 257.610  Recovery = 101.10%
Mo 202.031†             7990.2      508.84 ug/L         2.960      508.84 ppb          2.960   0.58%
   QC value within limits for Mo 202.031  Recovery = 101.77%
Na 589.592 Radial†     33129.9       10040 ug/L         343.1       10040 ppb          343.1   3.42%
   QC value within limits for Na 589.592 Radial  Recovery = 100.40%
Ni 231.604†            22134.2      508.29 ug/L         6.375      508.29 ppb          6.375   1.25%
   QC value within limits for Ni 231.604  Recovery = 101.66%
P 214.914†              4521.5      2449.0 ug/L        16.64      2449.0 ppb         16.64   0.68%
   QC value within limits for P 214.914  Recovery = 97.96%
Pb 220.353†             4536.6      509.38 ug/L         3.216      509.38 ppb          3.216   0.63%
   QC value within limits for Pb 220.353  Recovery = 101.88%
S 181.975 Axial†         780.7      1030.4 ug/L        12.57      1030.4 ppb         12.57   1.22%
   QC value within limits for S 181.975 Axial  Recovery = 103.04%
Sb 206.836†             1614.8      517.29 ug/L         4.423      517.29 ppb          4.423   0.86%
   QC value within limits for Sb 206.836  Recovery = 103.46%
Se 196.026†              907.9      529.17 ug/L         1.329      529.17 ppb          1.329   0.25%
   QC value within limits for Se 196.026  Recovery = 105.83%
Si 251.611†            87054.6      2580.7 ug/L        26.15      2580.7 ppb         26.15   1.01%
   QC value within limits for Si 251.611  Recovery = 103.23%
Sn 189.927†             3179.1      512.00 ug/L         3.201      512.00 ppb          3.201   0.63%
   QC value within limits for Sn 189.927  Recovery = 102.40%
Sr 421.552†            83770.0      505.19 ug/L        20.305      505.19 ppb         20.305   4.02%
   QC value within limits for Sr 421.552  Recovery = 101.04%
Ti 334.940†           314755.1      496.69 ug/L         5.168      496.69 ppb          5.168   1.04%
   QC value within limits for Ti 334.940  Recovery = 99.34%
Tl 190.801†             1797.9      509.74 ug/L         2.166      509.74 ppb          2.166   0.42%
   QC value within limits for Tl 190.801  Recovery = 101.95%
U 409.014†             17117.3      490.50 ug/L         6.122      490.50 ppb          6.122   1.25%
   QC value within limits for U 409.014  Recovery = 98.10%
V 292.402†             75545.5      509.46 ug/L         4.800      509.46 ppb          4.800   0.94%
   QC value within limits for V 292.402  Recovery = 101.89%
Zn 213.857†            59313.3      505.69 ug/L         4.957      505.69 ppb          4.957   0.98%
   QC value within limits for Zn 213.857  Recovery = 101.14%
SiO2†                  86266.3      5479.8 ug/L        45.58      5479.8 ppb         45.58   0.83%
   QC value within limits for SiO2  Recovery = 102.47%
All analyte(s) passed QC.
```

Sequence No.: 60
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 20:13:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5511.1	5511.1	98.8	%			20:15:39
1	Y RADIAL	5982.6	5982.6	99.06	%			20:15:39
1	Al 396.153Radial†	-19.5	15.6	10.738	ug/L	10.738	ppb	20:15:39
1	Ca 317.933Radial†	21.2	4.5	6.5979	ug/L	6.5979	ppb	20:15:59
1	Fe 238.204 Radial†	10.5	0.7	6.1864	ug/L	6.1864	ppb	20:15:59
1	K 766.490 Radial†	2806.6	100.0	16.792	ug/L	16.792	ppb	20:15:39
1	Mg 279.077 IEC†	1.6	-0.3	-8.4614	ug/L	-8.4614	ppb	20:15:59
1	Na 589.592 Radial†	-1628.9	-93.9	-28.452	ug/L	-28.452	ppb	20:15:39
1	Sr 421.552†	-15.7	-15.7	-0.0948	ug/L	-0.0948	ppb	20:15:39
1	Sc 361.383	858813.1	858813.1	98.951	%			20:16:56
1	Y 371.029	723042.4	723042.4	99.121	%			20:16:56
1	Ag 328.068†	479.8	210.9	0.9612	ug/L	0.9612	ppb	20:16:56
1	As 188.979†	-32.5	-1.5	-0.5987	ug/L	-0.5987	ppb	20:17:16
1	B 249.677†	-304.5	185.5	3.9529	ug/L	3.9529	ppb	20:17:16
1	Ba 233.527†	-18.2	-7.3	-0.0560	ug/L	-0.0560	ppb	20:17:16
1	Be 313.107†	-4395.7	220.3	0.0790	ug/L	0.0790	ppb	20:16:56
1	Cd 226.502†	-201.4	-4.6	-0.0481	ug/L	-0.0481	ppb	20:17:16
1	Co 228.616†	-77.6	-5.0	-0.0929	ug/L	-0.0929	ppb	20:17:16
1	Cr 267.716†	85.5	0.4	0.0064	ug/L	0.0064	ppb	20:17:16
1	Cu 324.752†	6775.0	89.0	0.2587	ug/L	0.2587	ppb	20:16:56
1	Mn 257.610†	525.0	10.4	0.0118	ug/L	0.0118	ppb	20:17:16
1	Mo 202.031†	24.1	5.9	0.3785	ug/L	0.3785	ppb	20:17:16
1	Ni 231.604†	94.9	10.0	0.2300	ug/L	0.2300	ppb	20:17:16
1	P 214.914†	220.5	-19.2	-10.744	ug/L	-10.744	ppb	20:17:16
1	Pb 220.353†	-58.4	9.0	1.0071	ug/L	1.0071	ppb	20:17:16
1	S 181.975 Axial†	50.7	1.8	2.3833	ug/L	2.3833	ppb	20:17:16
1	Sb 206.836†	42.9	6.0	1.8878	ug/L	1.8878	ppb	20:17:16
1	Se 196.026†	-22.2	4.4	2.5025	ug/L	2.5025	ppb	20:17:16
1	Si 251.611†	558.3	82.5	2.4447	ug/L	2.4447	ppb	20:17:16
1	Sn 189.927†	9.2	0.5	0.0822	ug/L	0.0822	ppb	20:17:16
1	Ti 334.940†	-1280.0	-37.4	-0.0544	ug/L	-0.0544	ppb	20:16:56
1	Tl 190.801†	-28.6	5.6	1.5898	ug/L	1.5898	ppb	20:17:16
1	U 409.014†	-2884.3	-330.9	-9.5145	ug/L	-9.5145	ppb	20:16:56
1	V 292.402†	-1445.9	-98.5	-0.6693	ug/L	-0.6693	ppb	20:16:56
1	Zn 213.857†	807.5	62.2	0.5327	ug/L	0.5327	ppb	20:17:16
1	SiO2†	578.8	60.5	3.8324	ug/L	3.8324	ppb	20:18:12
2	Sc Radial	5528.3	5528.3	99.1	%			20:16:04
2	Y RADIAL	6051.3	6051.3	100.2	%			20:16:04
2	Al 396.153Radial†	-14.5	20.7	14.240	ug/L	14.240	ppb	20:16:04
2	Ca 317.933Radial†	19.3	2.5	3.7032	ug/L	3.7032	ppb	20:16:24
2	Fe 238.204 Radial†	12.0	2.2	20.027	ug/L	20.027	ppb	20:16:24
2	K 766.490 Radial†	2793.5	77.9	13.083	ug/L	13.083	ppb	20:16:04
2	Mg 279.077 IEC†	1.4	-0.5	-16.594	ug/L	-16.594	ppb	20:16:24
2	Na 589.592 Radial†	-1572.0	-31.3	-9.4940	ug/L	-9.4940	ppb	20:16:04
2	Sr 421.552†	-12.0	-11.9	-0.0715	ug/L	-0.0715	ppb	20:16:04
2	Sc 361.383	867544.9	867544.9	99.957	%			20:17:21
2	Y 371.029	730116.0	730116.0	100.09	%			20:17:21
2	Ag 328.068†	372.8	98.9	0.4530	ug/L	0.4530	ppb	20:17:21
2	As 188.979†	-25.3	6.0	2.3144	ug/L	2.3144	ppb	20:17:41
2	B 249.677†	-312.6	180.5	3.8435	ug/L	3.8435	ppb	20:17:41
2	Ba 233.527†	-4.5	6.6	0.0484	ug/L	0.0484	ppb	20:17:41
2	Be 313.107†	-4475.6	185.1	0.0663	ug/L	0.0663	ppb	20:17:21
2	Cd 226.502†	-181.9	17.0	0.1741	ug/L	0.1741	ppb	20:17:41
2	Co 228.616†	-70.2	3.2	0.0618	ug/L	0.0618	ppb	20:17:41
2	Cr 267.716†	89.1	3.1	0.0324	ug/L	0.0324	ppb	20:17:41
2	Cu 324.752†	6737.2	-17.8	-0.0506	ug/L	-0.0506	ppb	20:17:21
2	Mn 257.610†	521.9	2.0	0.0044	ug/L	0.0044	ppb	20:17:41
2	Mo 202.031†	28.1	9.6	0.6153	ug/L	0.6153	ppb	20:17:41
2	Ni 231.604†	103.9	18.0	0.4125	ug/L	0.4125	ppb	20:17:41

2	P 214.914†	234.7	-7.3	-4.0769 ug/L	-4.0769 ppb		20:17:41
2	Pb 220.353†	-78.8	-10.9	-1.2151 ug/L	-1.2151 ppb		20:17:41
2	S 181.975 Axial†	53.4	4.0	5.3264 ug/L	5.3264 ppb		20:17:41
2	Sb 206.836†	24.3	-13.0	-4.1253 ug/L	-4.1253 ppb		20:17:41
2	Se 196.026†	-32.7	-5.9	-3.2636 ug/L	-3.2636 ppb		20:17:41
2	Si 251.611†	549.5	68.0	2.0149 ug/L	2.0149 ppb		20:17:41
2	Sn 189.927†	1.6	-7.3	-1.1695 ug/L	-1.1695 ppb		20:17:41
2	Ti 334.940†	-1321.4	-65.7	-0.1027 ug/L	-0.1027 ppb		20:17:21
2	Tl 190.801†	-20.5	14.1	3.9622 ug/L	3.9622 ppb		20:17:41
2	U 409.014†	-2653.1	-70.2	-2.0206 ug/L	-2.0206 ppb		20:17:21
2	V 292.402†	-1460.0	-97.9	-0.6500 ug/L	-0.6500 ppb		20:17:21
2	Zn 213.857†	801.2	47.7	0.4067 ug/L	0.4067 ppb		20:17:41
2	SiO2†	566.2	42.0	2.6569 ug/L	2.6569 ppb		20:18:17
3	Sc Radial	5483.1	5483.1	98.3 %			20:16:29
3	Y RADIAL	5983.2	5983.2	99.07 %			20:16:29
3	Al 396.153Radial†	-11.5	23.6	16.270 ug/L	16.270 ppb		20:16:29
3	Ca 317.933Radial†	24.3	7.8	11.338 ug/L	11.338 ppb		20:16:49
3	Fe 238.204 Radial†	8.5	-1.3	-11.353 ug/L	-11.353 ppb		20:16:49
3	K 766.490 Radial†	2865.5	174.4	29.272 ug/L	29.272 ppb		20:16:29
3	Mg 279.077 IEC†	1.4	-0.5	-16.017 ug/L	-16.017 ppb		20:16:49
3	Na 589.592 Radial†	-1629.6	-103.0	-31.219 ug/L	-31.219 ppb		20:16:29
3	Sr 421.552†	-32.0	-32.3	-0.1951 ug/L	-0.1951 ppb		20:16:29
3	Sc 361.383	870966.7	870966.7	100.35 %			20:17:47
3	Y 371.029	732621.8	732621.8	100.43 %			20:17:47
3	Ag 328.068†	379.1	103.8	0.4689 ug/L	0.4689 ppb		20:17:47
3	As 188.979†	-25.8	5.6	2.1389 ug/L	2.1389 ppb		20:18:07
3	B 249.677†	-317.2	177.1	3.7749 ug/L	3.7749 ppb		20:18:07
3	Ba 233.527†	-15.1	-3.9	-0.0303 ug/L	-0.0303 ppb		20:18:07
3	Be 313.107†	-4532.6	145.9	0.0524 ug/L	0.0524 ppb		20:17:47
3	Cd 226.502†	-209.0	-9.3	-0.0952 ug/L	-0.0952 ppb		20:18:07
3	Co 228.616†	-68.8	4.9	0.0926 ug/L	0.0926 ppb		20:18:07
3	Cr 267.716†	64.6	-21.6	-0.2253 ug/L	-0.2253 ppb		20:18:07
3	Cu 324.752†	6727.2	-54.2	-0.1580 ug/L	-0.1580 ppb		20:17:47
3	Mn 257.610†	527.4	5.4	0.0048 ug/L	0.0048 ppb		20:18:07
3	Mo 202.031†	19.3	0.8	0.0497 ug/L	0.0497 ppb		20:18:07
3	Ni 231.604†	87.2	1.0	0.0220 ug/L	0.0220 ppb		20:18:07
3	P 214.914†	224.3	-18.5	-10.283 ug/L	-10.283 ppb		20:18:07
3	Pb 220.353†	-72.4	-4.1	-0.4594 ug/L	-0.4594 ppb		20:18:07
3	S 181.975 Axial†	45.8	-3.7	-4.9367 ug/L	-4.9367 ppb		20:18:07
3	Sb 206.836†	33.4	-4.1	-1.2795 ug/L	-1.2795 ppb		20:18:07
3	Se 196.026†	-29.3	-2.4	-1.3833 ug/L	-1.3833 ppb		20:18:07
3	Si 251.611†	551.4	67.7	2.0039 ug/L	2.0039 ppb		20:18:07
3	Sn 189.927†	13.4	4.6	0.7333 ug/L	0.7333 ppb		20:18:07
3	Ti 334.940†	-1270.1	-9.4	-0.0121 ug/L	-0.0121 ppb		20:17:47
3	Tl 190.801†	-42.3	-7.6	-2.1405 ug/L	-2.1405 ppb		20:18:07
3	U 409.014†	-2750.3	-156.6	-4.5018 ug/L	-4.5018 ppb		20:17:47
3	V 292.402†	-1391.4	-23.8	-0.1651 ug/L	-0.1651 ppb		20:17:47
3	Zn 213.857†	804.9	48.3	0.4169 ug/L	0.4169 ppb		20:18:07
3	SiO2†	573.7	47.2	2.9846 ug/L	2.9846 ppb		20:18:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865774.9	99.753	%	0.7221				0.72%
Sc Radial	5507.5	98.8	%	0.41				0.41%
Y 371.029	728593.4	99.882	%	0.6810				0.68%
Y RADIAL	6005.7	99.45	%	0.653				0.66%
Ag 328.068†	137.9	0.6277	ug/L	0.28896	0.6277	ppb	0.28896	46.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	20.0	13.749	ug/L	2.7986	13.749	ppb	2.7986	20.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.3	1.2849	ug/L	1.63359	1.2849	ppb	1.63359	127.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	181.0	3.8571	ug/L	0.08975	3.8571	ppb	0.08975	2.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.6	-0.0126	ug/L	0.05441	-0.0126	ppb	0.05441	431.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	183.8	0.0659	ug/L	0.01331	0.0659	ppb	0.01331	20.21%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.9	7.2129	ug/L	3.85416	7.2129	ppb	3.85416	53.43%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                1.0      0.0102 ug/L       0.14383      0.0102 ppb        0.14383 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.0      0.0205 ug/L       0.09936      0.0205 ppb        0.09936 484.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -6.0     -0.0622 ug/L       0.14187     -0.0622 ppb        0.14187 228.19%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                5.7      0.0167 ug/L       0.21637      0.0167 ppb        0.21637 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.6      4.9535 ug/L      15.72644      4.9535 ppb       15.72644 317.48%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        117.4      19.716 ug/L        8.4812      19.716 ppb         8.4812  43.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.4     -13.691 ug/L        4.5380     -13.691 ppb         4.5380  33.15%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                5.9      0.0070 ug/L       0.00414      0.0070 ppb        0.00414  59.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.5      0.3479 ug/L       0.28403      0.3479 ppb        0.28403  81.65%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -76.1     -23.055 ug/L       11.8253     -23.055 ppb        11.8253  51.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.6      0.2215 ug/L       0.19538      0.2215 ppb        0.19538  88.20%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.0      -8.3680 ug/L      3.72337      -8.3680 ppb        3.72337  44.50%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.0      -0.2225 ug/L      1.12984      -0.2225 ppb        1.12984 507.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.7      0.9243 ug/L       5.28482      0.9243 ppb        5.28482 571.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.7      -1.1723 ug/L      3.00797      -1.1723 ppb        3.00797 256.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.3      -0.7148 ug/L      2.94057      -0.7148 ppb        2.94057 411.39%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               72.7      2.1545 ug/L       0.25139      2.1545 ppb        0.25139  11.67%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.7      -0.1180 ug/L      0.96709      -0.1180 ppb        0.96709 819.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -20.0      -0.1205 ug/L      0.06565      -0.1205 ppb        0.06565  54.50%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -37.5      -0.0564 ug/L      0.04530      -0.0564 ppb        0.04530  80.29%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                4.0      1.1372 ug/L       3.07642      1.1372 ppb        3.07642 270.54%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -185.9      -5.3456 ug/L      3.81754      -5.3456 ppb        3.81754  71.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -73.4      -0.4948 ug/L      0.28568      -0.4948 ppb        0.28568  57.73%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               52.7      0.4521 ug/L       0.06998      0.4521 ppb        0.06998  15.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     49.9      3.1580 ug/L       0.60661      3.1580 ppb        0.60661  19.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 62
Sample ID: 1201985644|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 12/11/2009 20:27:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985644|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5772.4	5772.4	104	%			20:29:30
1	Y RADIAL	7484.6	7484.6	123.9	%			20:29:30
1	Al 396.153Radial†	63054.2	60941.8	41971	ug/L	41971	ppb	20:29:30
1	Ca 317.933Radial†	11322.9	10920.3	15938	ug/L	15938	ppb	20:29:30
1	Fe 238.204 Radial†	9720.7	9379.7	84034	ug/L	84034	ppb	20:29:30
1	K 766.490 Radial†	41974.5	37805.2	6314.5	ug/L	6314.5	ppb	20:29:30
1	Mg 279.077 IEC†	288.9	277.1	9248.1	ug/L	9248.1	ppb	20:29:50
1	Na 589.592 Radial†	12055.7	13199.1	4000.1	ug/L	4000.1	ppb	20:29:30
1	Sr 421.552†	21555.2	20821.2	125.43	ug/L	125.43	ppb	20:29:30
1	Sc 361.383	883546.5	883546.5	101.80	%			20:30:48
1	Y 371.029	881492.8	881492.8	120.84	%			20:30:48
1	Ag 328.068†	-5413.8	-5592.0	1.8375	ug/L	1.8375	ppb	20:30:53
1	As 188.979†	-49.0	-16.9	27.900	ug/L	27.900	ppb	20:31:13
1	B 249.677†	1185.7	1657.9	24.124	ug/L	24.124	ppb	20:30:53
1	Ba 233.527†	84003.4	82528.4	620.01	ug/L	620.01	ppb	20:30:53
1	Be 313.107†	-6945.2	-2159.8	4.2485	ug/L	4.2485	ppb	20:30:53
1	Cd 226.502†	647.1	834.6	0.2786	ug/L	0.2786	ppb	20:31:13
1	Co 228.616†	1191.2	1243.6	17.117	ug/L	17.117	ppb	20:31:13
1	Cr 267.716†	6358.8	6160.2	66.251	ug/L	66.251	ppb	20:30:53
1	Cu 324.752†	19335.3	12235.4	39.825	ug/L	39.825	ppb	20:30:53
1	Mn 257.610†	2544477.5	2498943.6	2656.7	ug/L	2656.7	ppb	20:30:48
1	Mo 202.031†	297.5	273.8	23.385	ug/L	23.385	ppb	20:31:13
1	Ni 231.604†	1761.1	1644.0	37.763	ug/L	37.763	ppb	20:31:13
1	P 214.914†	1862.5	1587.5	826.96	ug/L	826.96	ppb	20:31:13
1	Pb 220.353†	546.8	605.1	70.271	ug/L	70.271	ppb	20:31:13
1	S 181.975 Axial†	1716.7	1636.9	2154.4	ug/L	2154.4	ppb	20:31:13
1	Sb 206.836†	58.9	20.5	-1.4878	ug/L	-1.4878	ppb	20:31:13
1	Se 196.026†	-513.3	-477.4	-4.0264	ug/L	-4.0264	ppb	20:31:13
1	Si 251.611†	701194.1	688307.7	20498	ug/L	20498	ppb	20:30:48
1	Sn 189.927†	-79.2	-86.7	-11.141	ug/L	-11.141	ppb	20:31:13
1	Ti 334.940†	1647272.2	1619386.9	2557.0	ug/L	2557.0	ppb	20:30:48
1	Tl 190.801†	-183.9	-146.1	-5.2306	ug/L	-5.2306	ppb	20:31:13
1	U 409.014†	-11124.5	-8343.7	-250.58	ug/L	-250.58	ppb	20:30:48
1	V 292.402†	14941.0	16039.4	91.091	ug/L	91.091	ppb	20:30:53
1	Zn 213.857†	36888.0	35481.6	296.59	ug/L	296.59	ppb	20:30:53
1	SiO2†	694469.4	681659.3	43504	ug/L	43504	ppb	20:32:21
2	Sc Radial	5534.0	5534.0	99.3	%			20:29:55
2	Y RADIAL	7224.6	7224.6	119.6	%			20:29:55
2	Al 396.153Radial†	64808.0	65333.0	44995	ug/L	44995	ppb	20:29:55
2	Ca 317.933Radial†	11617.3	11688.1	17059	ug/L	17059	ppb	20:29:55
2	Fe 238.204 Radial†	9975.2	10040.6	89955	ug/L	89955	ppb	20:29:55
2	K 766.490 Radial†	42931.5	40516.3	6769.7	ug/L	6769.7	ppb	20:29:55
2	Mg 279.077 IEC†	292.2	292.5	9760.3	ug/L	9760.3	ppb	20:30:15
2	Na 589.592 Radial†	12273.0	13919.9	4218.6	ug/L	4218.6	ppb	20:29:55
2	Sr 421.552†	22187.0	22354.9	134.67	ug/L	134.67	ppb	20:29:55
2	Sc 361.383	882108.0	882108.0	101.64	%			20:31:19
2	Y 371.029	879979.1	879979.1	120.63	%			20:31:19
2	Ag 328.068†	-5466.6	-5652.7	3.4341	ug/L	3.4341	ppb	20:31:24
2	As 188.979†	-50.0	-17.9	28.380	ug/L	28.380	ppb	20:31:44
2	B 249.677†	1191.8	1665.8	23.506	ug/L	23.506	ppb	20:31:24
2	Ba 233.527†	84312.9	82967.5	623.51	ug/L	623.51	ppb	20:31:24
2	Be 313.107†	-6984.3	-2209.3	4.2257	ug/L	4.2257	ppb	20:31:24
2	Cd 226.502†	673.6	861.7	-0.0329	ug/L	-0.0329	ppb	20:31:44
2	Co 228.616†	1201.5	1255.6	17.267	ug/L	17.267	ppb	20:31:44
2	Cr 267.716†	6338.9	6150.9	66.260	ug/L	66.260	ppb	20:31:24
2	Cu 324.752†	19365.7	12296.3	40.305	ug/L	40.305	ppb	20:31:24
2	Mn 257.610†	2538962.7	2497593.4	2655.8	ug/L	2655.8	ppb	20:31:19
2	Mo 202.031†	299.9	276.6	23.984	ug/L	23.984	ppb	20:31:44
2	Ni 231.604†	1693.6	1580.4	36.300	ug/L	36.300	ppb	20:31:44

2	P 214.914†	1863.7	1591.7	825.52	ug/L	825.52 ppb	20:31:44
2	Pb 220.353†	532.4	591.8	68.975	ug/L	68.975 ppb	20:31:44
2	S 181.975 Axial†	1718.6	1641.6	2160.0	ug/L	2160.0 ppb	20:31:44
2	Sb 206.836†	67.8	29.4	1.3405	ug/L	1.3405 ppb	20:31:44
2	Se 196.026†	-518.7	-483.6	11.164	ug/L	11.164 ppb	20:31:44
2	Si 251.611†	699464.6	687729.3	20481	ug/L	20481 ppb	20:31:19
2	Sn 189.927†	-82.0	-89.5	-11.397	ug/L	-11.397 ppb	20:31:44
2	Ti 334.940†	1642945.9	1617769.0	2554.5	ug/L	2554.5 ppb	20:31:19
2	Tl 190.801†	-168.3	-131.0	-0.9384	ug/L	-0.9384 ppb	20:31:44
2	U 409.014†	-11184.7	-8420.7	-253.54	ug/L	-253.54 ppb	20:31:19
2	V 292.402†	14958.8	16080.9	90.479	ug/L	90.479 ppb	20:31:24
2	Zn 213.857†	36947.7	35599.4	297.03	ug/L	297.03 ppb	20:31:24
2	SiO2†	694061.3	682370.2	43549	ug/L	43549 ppb	20:32:27
3	Sc Radial	5506.3	5506.3	98.8	%		20:30:20
3	Y RADIAL	7217.5	7217.5	119.5	%		20:30:20
3	Al 396.153Radial†	63724.1	64563.6	44465	ug/L	44465 ppb	20:30:20
3	Ca 317.933Radial†	11422.9	11550.2	16857	ug/L	16857 ppb	20:30:20
3	Fe 238.204 Radial†	9795.3	9909.0	88775	ug/L	88775 ppb	20:30:20
3	K 766.490 Radial†	42276.6	40070.6	6694.9	ug/L	6694.9 ppb	20:30:20
3	Mg 279.077 IEC†	294.1	295.9	9875.6	ug/L	9875.6 ppb	20:30:40
3	Na 589.592 Radial†	12033.5	13739.5	4163.9	ug/L	4163.9 ppb	20:30:20
3	Sr 421.552†	21723.5	21997.8	132.52	ug/L	132.52 ppb	20:30:20
3	Sc 361.383	882879.0	882879.0	101.72	%		20:31:50
3	Y 371.029	881512.6	881512.6	120.85	%		20:31:50
3	Ag 328.068†	-5357.7	-5540.9	3.5692	ug/L	3.5692 ppb	20:31:55
3	As 188.979†	-40.6	-8.6	31.749	ug/L	31.749 ppb	20:32:15
3	B 249.677†	1178.9	1652.1	23.372	ug/L	23.372 ppb	20:31:55
3	Ba 233.527†	84599.2	83176.5	625.03	ug/L	625.03 ppb	20:31:55
3	Be 313.107†	-7087.6	-2304.9	4.1818	ug/L	4.1818 ppb	20:31:55
3	Cd 226.502†	673.4	860.9	0.0776	ug/L	0.0776 ppb	20:32:15
3	Co 228.616†	1186.8	1240.1	17.001	ug/L	17.001 ppb	20:32:15
3	Cr 267.716†	6385.8	6191.5	66.666	ug/L	66.666 ppb	20:31:55
3	Cu 324.752†	19531.9	12443.0	40.671	ug/L	40.671 ppb	20:31:55
3	Mn 257.610†	2532872.2	2489424.6	2647.0	ug/L	2647.0 ppb	20:31:50
3	Mo 202.031†	288.3	265.0	23.161	ug/L	23.161 ppb	20:32:15
3	Ni 231.604†	1733.1	1617.8	37.160	ug/L	37.160 ppb	20:32:15
3	P 214.914†	1844.4	1571.1	814.71	ug/L	814.71 ppb	20:32:15
3	Pb 220.353†	505.7	565.2	65.970	ug/L	65.970 ppb	20:32:15
3	S 181.975 Axial†	1712.4	1634.0	2150.0	ug/L	2150.0 ppb	20:32:15
3	Sb 206.836†	47.0	8.9	-5.1389	ug/L	-5.1389 ppb	20:32:15
3	Se 196.026†	-528.0	-492.2	2.5942	ug/L	2.5942 ppb	20:32:15
3	Si 251.611†	698101.3	685788.0	20423	ug/L	20423 ppb	20:31:50
3	Sn 189.927†	-78.3	-85.8	-10.841	ug/L	-10.841 ppb	20:32:15
3	Ti 334.940†	1641233.4	1614673.7	2549.6	ug/L	2549.6 ppb	20:31:50
3	Tl 190.801†	-172.8	-135.3	-2.2530	ug/L	-2.2530 ppb	20:32:15
3	U 409.014†	-11162.5	-8389.3	-252.49	ug/L	-252.49 ppb	20:31:50
3	V 292.402†	15072.7	16179.9	91.317	ug/L	91.317 ppb	20:31:55
3	Zn 213.857†	37115.1	35732.2	298.27	ug/L	298.27 ppb	20:31:55
3	SiO2†	699620.4	687238.7	43860	ug/L	43860 ppb	20:32:33

Mean Data: 1201985644|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882844.5	101.72	%	0.083				0.08%
Sc Radial	5604.2	101	%	2.6				2.61%
Y 371.029	880994.8	120.77	%	0.121				0.10%
Y RADIAL	7308.9	121.0	%	2.52				2.08%
Ag 328.068†	-5595.2	2.9469	ug/L	0.96320	2.9469	ppb	0.96320	32.68%
Al 396.153Radial†	63612.8	43810	ug/L	1615.0	43810	ppb	1615.0	3.69%
As 188.979†	-14.5	29.343	ug/L	2.0976	29.343	ppb	2.0976	7.15%
B 249.677†	1658.6	23.667	ug/L	0.4014	23.667	ppb	0.4014	1.70%
Ba 233.527†	82890.8	622.85	ug/L	2.575	622.85	ppb	2.575	0.41%
Be 313.107†	-2224.6	4.2187	ug/L	0.03392	4.2187	ppb	0.03392	0.80%
Ca 317.933Radial†	11386.2	16618	ug/L	597.4	16618	ppb	597.4	3.59%
Cd 226.502†	852.4	0.1078	ug/L	0.15796	0.1078	ppb	0.15796	146.58%
Co 228.616†	1246.4	17.128	ug/L	0.1335	17.128	ppb	0.1335	0.78%
Cr 267.716†	6167.6	66.392	ug/L	0.2368	66.392	ppb	0.2368	0.36%
Cu 324.752†	12324.9	40.267	ug/L	0.4238	40.267	ppb	0.4238	1.05%
Fe 238.204 Radial†	9776.5	87588	ug/L	3134.1	87588	ppb	3134.1	3.58%
K 766.490 Radial†	39464.0	6593.0	ug/L	244.13	6593.0	ppb	244.13	3.70%

Mg 279.077 IEC†	288.5	9628.0	ug/L	334.01	9628.0	ppb	334.01	3.47%
Mn 257.610†	2495320.5	2653.2	ug/L	5.33	2653.2	ppb	5.33	0.20%
Mo 202.031†	271.8	23.510	ug/L	0.4256	23.510	ppb	0.4256	1.81%
Na 589.592 Radial†	13619.5	4127.5	ug/L	113.66	4127.5	ppb	113.66	2.75%
Ni 231.604†	1614.1	37.074	ug/L	0.7355	37.074	ppb	0.7355	1.98%
P 214.914†	1583.4	822.39	ug/L	6.697	822.39	ppb	6.697	0.81%
Pb 220.353†	587.3	68.405	ug/L	2.2065	68.405	ppb	2.2065	3.23%
S 181.975 Axial†	1637.5	2154.8	ug/L	5.00	2154.8	ppb	5.00	0.23%
Sb 206.836†	19.6	-1.7621	ug/L	3.24843	-1.7621	ppb	3.24843	184.35%
Se 196.026†	-484.4	3.2438	ug/L	7.61574	3.2438	ppb	7.61574	234.78%
Si 251.611†	687275.0	20467	ug/L	39.3	20467	ppb	39.3	0.19%
Sn 189.927†	-87.3	-11.126	ug/L	0.2785	-11.126	ppb	0.2785	2.50%
Sr 421.552†	21724.7	130.87	ug/L	4.835	130.87	ppb	4.835	3.69%
Ti 334.940†	1617276.5	2553.7	ug/L	3.76	2553.7	ppb	3.76	0.15%
Tl 190.801†	-137.5	-2.8073	ug/L	2.19912	-2.8073	ppb	2.19912	78.33%
U 409.014†	-8384.6	-252.21	ug/L	1.501	-252.21	ppb	1.501	0.59%
V 292.402†	16100.1	90.962	ug/L	0.4334	90.962	ppb	0.4334	0.48%
Zn 213.857†	35604.4	297.30	ug/L	0.874	297.30	ppb	0.874	0.29%
SiO2†	683756.0	43637	ug/L	193.8	43637	ppb	193.8	0.44%

Sequence No.: 63
Sample ID: 1201985645|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 12/11/2009 20:34:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985645|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5596.0	5596.0	100	%			20:36:57
1	Y RADIAL	7824.8	7824.8	129.6	%			20:36:37
1	Al 396.153Radial†	120357.9	119957.8	82594	ug/L	82594	ppb	20:36:37
1	Ca 317.933Radial†	16261.3	16185.5	23623	ug/L	23623	ppb	20:36:37
1	Fe 238.204 Radial†	13723.5	13664.0	122430	ug/L	122430	ppb	20:36:37
1	K 766.490 Radial†	88710.7	85650.2	14324	ug/L	14324	ppb	20:36:37
1	Mg 279.077 IEC†	557.9	553.9	18534	ug/L	18534	ppb	20:36:57
1	Na 589.592 Radial†	30330.8	31775.2	9629.8	ug/L	9629.8	ppb	20:36:37
1	Sr 421.552†	113262.2	112852.7	680.43	ug/L	680.43	ppb	20:36:37
1	Sc 361.383	858655.5	858655.5	98.933	%			20:38:01
1	Y 371.029	917207.4	917207.4	125.74	%			20:37:56
1	Ag 328.068†	108855.8	109755.8	537.54	ug/L	537.54	ppb	20:38:01
1	As 188.979†	1216.9	1261.3	546.48	ug/L	546.48	ppb	20:38:21
1	B 249.677†	26074.8	26849.2	554.56	ug/L	554.56	ppb	20:38:01
1	Ba 233.527†	178986.2	180927.6	1357.9	ug/L	1357.9	ppb	20:38:01
1	Be 313.107†	1452514.2	1472841.7	538.51	ug/L	538.51	ppb	20:37:56
1	Cd 226.502†	50062.4	50801.2	514.98	ug/L	514.98	ppb	20:38:01
1	Co 228.616†	28499.1	28879.9	534.20	ug/L	534.20	ppb	20:38:21
1	Cr 267.716†	55109.1	55617.4	585.48	ug/L	585.48	ppb	20:38:01
1	Cu 324.752†	208407.5	203897.3	598.48	ug/L	598.48	ppb	20:38:01
1	Mn 257.610†	4183354.2	4227950.1	4492.8	ug/L	4492.8	ppb	20:37:56
1	Mo 202.031†	8154.4	8224.0	532.03	ug/L	532.03	ppb	20:38:21
1	Ni 231.604†	23643.3	23812.3	546.83	ug/L	546.83	ppb	20:38:21
1	P 214.914†	3607.0	3403.9	1742.0	ug/L	1742.0	ppb	20:38:21
1	Pb 220.353†	5252.8	5377.4	611.27	ug/L	611.27	ppb	20:38:21
1	S 181.975 Axial†	5674.9	5686.7	7496.9	ug/L	7496.9	ppb	20:38:21
1	Sb 206.836†	1589.4	1569.1	489.50	ug/L	489.50	ppb	20:38:21
1	Se 196.026†	217.6	246.7	528.99	ug/L	528.99	ppb	20:38:21
1	Si 251.611†	886009.4	895083.0	26644	ug/L	26644	ppb	20:37:56
1	Sn 189.927†	3169.2	3194.5	518.02	ug/L	518.02	ppb	20:38:21
1	Ti 334.940†	3075582.6	3110008.0	4909.8	ug/L	4909.8	ppb	20:37:56
1	Tl 190.801†	1551.6	1602.9	513.50	ug/L	513.50	ppb	20:38:21
1	U 409.014†	5437.8	8080.5	215.79	ug/L	215.79	ppb	20:38:01
1	V 292.402†	98252.0	100674.3	653.95	ug/L	653.95	ppb	20:38:01
1	Zn 213.857†	105864.0	106251.8	897.45	ug/L	897.45	ppb	20:38:01
1	SiO2†	891730.8	900823.4	57464	ug/L	57464	ppb	20:39:32
2	Sc Radial	5308.5	5308.5	95.2	%			20:37:23
2	Y RADIAL	7648.9	7648.9	126.7	%			20:37:03
2	Al 396.153Radial†	120598.5	126705.7	87241	ug/L	87241	ppb	20:37:03
2	Ca 317.933Radial†	16247.1	17048.2	24882	ug/L	24882	ppb	20:37:03
2	Fe 238.204 Radial†	13665.8	14344.0	128520	ug/L	128520	ppb	20:37:03
2	K 766.490 Radial†	88813.5	90545.5	15146	ug/L	15146	ppb	20:37:03
2	Mg 279.077 IEC†	571.3	598.1	20015	ug/L	20015	ppb	20:37:23
2	Na 589.592 Radial†	30358.4	33441.0	10135	ug/L	10135	ppb	20:37:03
2	Sr 421.552†	113366.4	119074.4	717.94	ug/L	717.94	ppb	20:37:03
2	Sc 361.383	859471.5	859471.5	99.027	%			20:38:34
2	Y 371.029	916227.8	916227.8	125.60	%			20:38:28
2	Ag 328.068†	108757.4	109551.9	538.53	ug/L	538.53	ppb	20:38:34
2	As 188.979†	1230.0	1273.4	551.99	ug/L	551.99	ppb	20:38:54
2	B 249.677†	26011.7	26760.5	551.85	ug/L	551.85	ppb	20:38:34
2	Ba 233.527†	178685.3	180452.0	1354.6	ug/L	1354.6	ppb	20:38:34
2	Be 313.107†	1449551.8	1468456.3	536.92	ug/L	536.92	ppb	20:38:28
2	Cd 226.502†	49907.6	50596.9	512.25	ug/L	512.25	ppb	20:38:34
2	Co 228.616†	28738.7	29094.5	538.19	ug/L	538.19	ppb	20:38:54
2	Cr 267.716†	55116.0	55571.5	585.10	ug/L	585.10	ppb	20:38:34
2	Cu 324.752†	208515.6	203806.4	598.53	ug/L	598.53	ppb	20:38:34
2	Mn 257.610†	4176273.9	4216785.8	4481.5	ug/L	4481.5	ppb	20:38:28
2	Mo 202.031†	8226.0	8288.4	536.56	ug/L	536.56	ppb	20:38:54
2	Ni 231.604†	23842.2	23990.5	550.92	ug/L	550.92	ppb	20:38:54

2	P 214.914†	3653.8	3447.6	1763.1	ug/L	1763.1 ppb	20:38:54
2	Pb 220.353†	5285.3	5405.2	614.94	ug/L	614.94 ppb	20:38:54
2	S 181.975 Axial†	5722.1	5728.9	7551.7	ug/L	7551.7 ppb	20:38:54
2	Sb 206.836†	1602.1	1580.5	493.26	ug/L	493.26 ppb	20:38:54
2	Se 196.026†	210.2	239.0	544.10	ug/L	544.10 ppb	20:38:54
2	Si 251.611†	886230.0	894455.5	26625	ug/L	26625 ppb	20:38:28
2	Sn 189.927†	3195.6	3218.1	522.04	ug/L	522.04 ppb	20:38:54
2	Ti 334.940†	3071906.7	3103344.6	4899.3	ug/L	4899.3 ppb	20:38:28
2	Tl 190.801†	1565.0	1614.9	516.85	ug/L	516.85 ppb	20:38:54
2	U 409.014†	5566.8	8205.5	218.62	ug/L	218.62 ppb	20:38:34
2	V 292.402†	98116.4	100443.1	651.59	ug/L	651.59 ppb	20:38:34
2	Zn 213.857†	105435.8	105717.9	892.20	ug/L	892.20 ppb	20:38:34
2	SiO2†	899672.0	907986.8	57920	ug/L	57920 ppb	20:39:38
3	Sc Radial	5529.7	5529.7	99.2	%		20:37:48
3	Y RADIAL	7532.0	7532.0	124.7	%		20:37:28
3	Al 396.153Radial†	120394.2	121432.4	83609	ug/L	83609 ppb	20:37:28
3	Ca 317.933Radial†	16190.2	16308.2	23802	ug/L	23802 ppb	20:37:28
3	Fe 238.204 Radial†	13661.5	13765.4	123340	ug/L	123340 ppb	20:37:28
3	K 766.490 Radial†	88626.4	86625.1	14487	ug/L	14487 ppb	20:37:28
3	Mg 279.077 IEC†	565.5	568.3	19017	ug/L	19017 ppb	20:37:48
3	Na 589.592 Radial†	30246.7	32052.8	9713.9	ug/L	9713.9 ppb	20:37:28
3	Sr 421.552†	112902.4	113843.1	686.40	ug/L	686.40 ppb	20:37:28
3	Sc 361.383	849346.3	849346.3	97.860	%		20:39:06
3	Y 371.029	909753.5	909753.5	124.72	%		20:39:01
3	Ag 328.068†	107071.8	109138.7	535.03	ug/L	535.03 ppb	20:39:06
3	As 188.979†	1194.0	1251.4	542.74	ug/L	542.74 ppb	20:39:26
3	B 249.677†	25565.1	26617.3	549.47	ug/L	549.47 ppb	20:39:06
3	Ba 233.527†	176050.4	179910.6	1350.4	ug/L	1350.4 ppb	20:39:06
3	Be 313.107†	1437273.9	1473360.1	538.69	ug/L	538.69 ppb	20:39:01
3	Cd 226.502†	49037.0	50308.1	509.78	ug/L	509.78 ppb	20:39:06
3	Co 228.616†	28579.2	29277.5	541.71	ug/L	541.71 ppb	20:39:26
3	Cr 267.716†	54280.1	55380.8	583.01	ug/L	583.01 ppb	20:39:06
3	Cu 324.752†	205483.2	203217.9	596.56	ug/L	596.56 ppb	20:39:06
3	Mn 257.610†	4132656.7	4222490.1	4487.1	ug/L	4487.1 ppb	20:39:01
3	Mo 202.031†	8195.8	8356.6	540.54	ug/L	540.54 ppb	20:39:26
3	Ni 231.604†	23730.6	24163.5	554.89	ug/L	554.89 ppb	20:39:26
3	P 214.914†	3596.3	3432.8	1758.2	ug/L	1758.2 ppb	20:39:26
3	Pb 220.353†	5286.2	5469.8	621.79	ug/L	621.79 ppb	20:39:26
3	S 181.975 Axial†	5700.7	5776.0	7614.7	ug/L	7614.7 ppb	20:39:26
3	Sb 206.836†	1584.1	1581.4	493.75	ug/L	493.75 ppb	20:39:26
3	Se 196.026†	203.1	234.3	524.97	ug/L	524.97 ppb	20:39:26
3	Si 251.611†	877551.2	896255.6	26678	ug/L	26678 ppb	20:39:01
3	Sn 189.927†	3183.6	3244.4	526.07	ug/L	526.07 ppb	20:39:26
3	Ti 334.940†	3040108.1	3107831.1	4906.4	ug/L	4906.4 ppb	20:39:01
3	Tl 190.801†	1551.8	1620.3	518.33	ug/L	518.33 ppb	20:39:26
3	U 409.014†	5358.3	8059.4	215.08	ug/L	215.08 ppb	20:39:06
3	V 292.402†	96757.7	100235.8	651.03	ug/L	651.03 ppb	20:39:06
3	Zn 213.857†	103785.2	105300.4	889.12	ug/L	889.12 ppb	20:39:06
3	SiO2†	891025.3	909981.6	58048	ug/L	58048 ppb	20:39:44

Mean Data: 1201985645|928613|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	855824.4	98.607	%	0.6481				0.66%
Sc Radial	5478.1	98.2	%	2.70				2.75%
Y 371.029	914396.2	125.35	%	0.555				0.44%
Y RADIAL	7668.5	127.0	%	2.44				1.92%
Ag 328.068†	109482.1	537.03	ug/L	1.807	537.03	ppb	1.807	0.34%
Al 396.153Radial†	122698.6	84481	ug/L	2443.3	84481	ppb	2443.3	2.89%
As 188.979†	1262.1	547.07	ug/L	4.653	547.07	ppb	4.653	0.85%
B 249.677†	26742.3	551.96	ug/L	2.543	551.96	ppb	2.543	0.46%
Ba 233.527†	180430.1	1354.3	ug/L	3.80	1354.3	ppb	3.80	0.28%
Be 313.107†	1471552.7	538.04	ug/L	0.977	538.04	ppb	0.977	0.18%
Ca 317.933Radial†	16514.0	24102	ug/L	681.1	24102	ppb	681.1	2.83%
Cd 226.502†	50568.7	512.34	ug/L	2.601	512.34	ppb	2.601	0.51%
Co 228.616†	29083.9	538.04	ug/L	3.759	538.04	ppb	3.759	0.70%
Cr 267.716†	55523.3	584.53	ug/L	1.328	584.53	ppb	1.328	0.23%
Cu 324.752†	203640.5	597.86	ug/L	1.126	597.86	ppb	1.126	0.19%
Fe 238.204 Radial†	13924.5	124770	ug/L	3286.6	124770	ppb	3286.6	2.63%
K 766.490 Radial†	87606.9	14652	ug/L	435.0	14652	ppb	435.0	2.97%

Mg 279.077 IEC†	573.5	19188	ug/L	755.2	19188	ppb	755.2	3.94%
Mn 257.610†	4222408.7	4487.1	ug/L	5.63	4487.1	ppb	5.63	0.13%
Mo 202.031†	8289.6	536.38	ug/L	4.256	536.38	ppb	4.256	0.79%
Na 589.592 Radial†	32423.0	9826.1	ug/L	270.47	9826.1	ppb	270.47	2.75%
Ni 231.604†	23988.8	550.88	ug/L	4.032	550.88	ppb	4.032	0.73%
P 214.914†	3428.1	1754.4	ug/L	11.07	1754.4	ppb	11.07	0.63%
Pb 220.353†	5417.5	616.00	ug/L	5.337	616.00	ppb	5.337	0.87%
S 181.975 Axial†	5730.5	7554.4	ug/L	58.90	7554.4	ppb	58.90	0.78%
Sb 206.836†	1577.0	492.17	ug/L	2.324	492.17	ppb	2.324	0.47%
Se 196.026†	240.0	532.69	ug/L	10.086	532.69	ppb	10.086	1.89%
Si 251.611†	895264.7	26649	ug/L	27.3	26649	ppb	27.3	0.10%
Sn 189.927†	3219.0	522.04	ug/L	4.025	522.04	ppb	4.025	0.77%
Sr 421.552†	115256.7	694.92	ug/L	20.156	694.92	ppb	20.156	2.90%
Ti 334.940†	3107061.2	4905.2	ug/L	5.33	4905.2	ppb	5.33	0.11%
Tl 190.801†	1612.7	516.23	ug/L	2.479	516.23	ppb	2.479	0.48%
U 409.014†	8115.1	216.50	ug/L	1.874	216.50	ppb	1.874	0.87%
V 292.402†	100451.1	652.19	ug/L	1.549	652.19	ppb	1.549	0.24%
Zn 213.857†	105756.7	892.92	ug/L	4.215	892.92	ppb	4.215	0.47%
SiO2†	906263.9	57811	ug/L	307.1	57811	ppb	307.1	0.53%

Sequence No.: 64
Sample ID: 1201985647|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 12/11/2009 20:41:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985647|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5502.7	5502.7	98.7	%			20:44:08
1	Y RADIAL	7232.8	7232.8	119.8	%			20:44:08
1	Al 396.153Radial†	130961.8	132735.6	91395	ug/L	91395	ppb	20:43:48
1	Ca 317.933Radial†	15625.0	15815.5	23083	ug/L	23083	ppb	20:43:48
1	Fe 238.204 Radial†	11639.9	11784.5	105590	ug/L	105590	ppb	20:43:48
1	K 766.490 Radial†	89924.8	88379.0	14799	ug/L	14799	ppb	20:43:48
1	Mg 279.077 IEC†	566.1	571.7	19146	ug/L	19146	ppb	20:44:08
1	Na 589.592 Radial†	30182.9	32137.7	9739.6	ug/L	9739.6	ppb	20:43:48
1	Sr 421.552†	112627.4	114122.7	688.09	ug/L	688.09	ppb	20:43:48
1	Sc 361.383	875116.3	875116.3	100.83	%			20:45:07
1	Y 371.029	888208.3	888208.3	121.76	%			20:45:07
1	Ag 328.068†	107779.3	106618.4	517.87	ug/L	517.87	ppb	20:45:07
1	As 188.979†	1227.7	1248.9	530.57	ug/L	530.57	ppb	20:45:27
1	B 249.677†	25524.5	25807.7	534.68	ug/L	534.68	ppb	20:45:07
1	Ba 233.527†	172013.7	170609.5	1280.2	ug/L	1280.2	ppb	20:45:07
1	Be 313.107†	1449222.0	1441960.4	525.43	ug/L	525.43	ppb	20:45:07
1	Cd 226.502†	49178.9	48973.2	497.70	ug/L	497.70	ppb	20:45:07
1	Co 228.616†	27322.0	27170.7	504.30	ug/L	504.30	ppb	20:45:27
1	Cr 267.716†	54513.3	53978.8	567.97	ug/L	567.97	ppb	20:45:07
1	Cu 324.752†	207227.6	198764.7	582.72	ug/L	582.72	ppb	20:45:07
1	Mn 257.610†	2962510.9	2937615.2	3123.5	ug/L	3123.5	ppb	20:45:07
1	Mo 202.031†	8081.9	7997.0	516.39	ug/L	516.39	ppb	20:45:27
1	Ni 231.604†	23561.7	23281.9	534.66	ug/L	534.66	ppb	20:45:27
1	P 214.914†	3019.6	2752.7	1397.2	ug/L	1397.2	ppb	20:45:27
1	Pb 220.353†	4977.7	5004.7	572.89	ug/L	572.89	ppb	20:45:27
1	S 181.975 Axial†	5701.8	5605.4	7387.8	ug/L	7387.8	ppb	20:45:27
1	Sb 206.836†	1577.9	1527.5	478.50	ug/L	478.50	ppb	20:45:27
1	Se 196.026†	334.6	358.6	541.48	ug/L	541.48	ppb	20:45:27
1	Si 251.611†	940282.9	932064.5	27745	ug/L	27745	ppb	20:45:07
1	Sn 189.927†	3171.8	3136.8	508.46	ug/L	508.46	ppb	20:45:27
1	Ti 334.940†	2486589.2	2467385.7	3895.4	ug/L	3895.4	ppb	20:45:07
1	Tl 190.801†	1586.2	1607.7	499.54	ug/L	499.54	ppb	20:45:27
1	U 409.014†	6324.7	8856.6	240.26	ug/L	240.26	ppb	20:45:07
1	V 292.402†	95687.8	96263.3	628.13	ug/L	628.13	ppb	20:45:07
1	Zn 213.857†	96986.2	95434.3	806.08	ug/L	806.08	ppb	20:45:07
1	SiO2†	952873.8	944509.1	60253	ug/L	60253	ppb	20:46:28
2	Sc Radial	5522.2	5522.2	99.0	%			20:44:33
2	Y RADIAL	7264.5	7264.5	120.3	%			20:44:33
2	Al 396.153Radial†	130801.1	132104.9	90960	ug/L	90960	ppb	20:44:13
2	Ca 317.933Radial†	15588.8	15723.1	22948	ug/L	22948	ppb	20:44:13
2	Fe 238.204 Radial†	11565.7	11667.9	104550	ug/L	104550	ppb	20:44:13
2	K 766.490 Radial†	89845.3	87977.0	14732	ug/L	14732	ppb	20:44:13
2	Mg 279.077 IEC†	565.8	569.4	19068	ug/L	19068	ppb	20:44:33
2	Na 589.592 Radial†	30001.2	31846.3	9651.3	ug/L	9651.3	ppb	20:44:13
2	Sr 421.552†	112401.6	113491.8	684.29	ug/L	684.29	ppb	20:44:13
2	Sc 361.383	875499.7	875499.7	100.87	%			20:45:35
2	Y 371.029	889277.7	889277.7	121.91	%			20:45:35
2	Ag 328.068†	107897.0	106688.3	517.84	ug/L	517.84	ppb	20:45:35
2	As 188.979†	1249.8	1270.3	538.64	ug/L	538.64	ppb	20:45:55
2	B 249.677†	25701.9	25972.5	538.32	ug/L	538.32	ppb	20:45:35
2	Ba 233.527†	171402.4	169928.7	1275.0	ug/L	1275.0	ppb	20:45:35
2	Be 313.107†	1446913.4	1439042.4	524.37	ug/L	524.37	ppb	20:45:35
2	Cd 226.502†	48856.7	48632.5	494.27	ug/L	494.27	ppb	20:45:35
2	Co 228.616†	27393.7	27229.9	505.44	ug/L	505.44	ppb	20:45:55
2	Cr 267.716†	54453.6	53895.9	567.07	ug/L	567.07	ppb	20:45:35
2	Cu 324.752†	207756.8	199199.3	583.93	ug/L	583.93	ppb	20:45:35
2	Mn 257.610†	2955669.1	2929546.0	3114.9	ug/L	3114.9	ppb	20:45:35
2	Mo 202.031†	8112.6	8023.9	518.03	ug/L	518.03	ppb	20:45:55
2	Ni 231.604†	23607.7	23317.2	535.47	ug/L	535.47	ppb	20:45:55

2	P 214.914†	3015.9	2747.7	1395.0 ug/L	1395.0 ppb	20:45:55
2	Pb 220.353†	4960.6	4985.6	570.74 ug/L	570.74 ppb	20:45:55
2	S 181.975 Axial†	5708.8	5609.9	7393.9 ug/L	7393.9 ppb	20:45:55
2	Sb 206.836†	1578.0	1527.0	478.47 ug/L	478.47 ppb	20:45:55
2	Se 196.026†	340.0	363.9	541.15 ug/L	541.15 ppb	20:45:55
2	Si 251.611†	940791.5	932160.4	27748 ug/L	27748 ppb	20:45:35
2	Sn 189.927†	3202.0	3165.4	513.04 ug/L	513.04 ppb	20:45:55
2	Ti 334.940†	2485015.0	2464745.3	3891.3 ug/L	3891.3 ppb	20:45:35
2	Tl 190.801†	1611.2	1631.8	506.22 ug/L	506.22 ppb	20:45:55
2	U 409.014†	6630.9	9157.4	249.04 ug/L	249.04 ppb	20:45:35
2	V 292.402†	95517.3	96052.7	626.93 ug/L	626.93 ppb	20:45:35
2	Zn 213.857†	96764.5	95172.5	803.93 ug/L	803.93 ppb	20:45:35
2	SiO2†	949534.5	940784.9	60015 ug/L	60015 ppb	20:46:34
3	Sc Radial	5491.2	5491.2	98.5 %		20:44:59
3	Y RADIAL	7228.4	7228.4	119.7 %		20:44:59
3	Al 396.153Radial†	129177.0	131200.7	90338 ug/L	90338 ppb	20:44:38
3	Ca 317.933Radial†	15373.9	15593.7	22759 ug/L	22759 ppb	20:44:38
3	Fe 238.204 Radial†	11412.6	11578.4	103750 ug/L	103750 ppb	20:44:38
3	K 766.490 Radial†	88886.5	87515.2	14654 ug/L	14654 ppb	20:44:38
3	Mg 279.077 IEC†	569.7	576.5	19309 ug/L	19309 ppb	20:44:59
3	Na 589.592 Radial†	29691.7	31702.9	9607.9 ug/L	9607.9 ppb	20:44:38
3	Sr 421.552†	111091.3	112801.6	680.13 ug/L	680.13 ppb	20:44:38
3	Sc 361.383	878194.6	878194.6	101.18 %		20:46:02
3	Y 371.029	893518.6	893518.6	122.49 %		20:46:02
3	Ag 328.068†	107942.0	106404.6	516.31 ug/L	516.31 ppb	20:46:02
3	As 188.979†	1242.0	1258.8	534.07 ug/L	534.07 ppb	20:46:22
3	B 249.677†	25566.6	25760.6	533.93 ug/L	533.93 ppb	20:46:02
3	Ba 233.527†	172139.1	170135.5	1276.5 ug/L	1276.5 ppb	20:46:02
3	Be 313.107†	1455350.3	1442979.0	525.78 ug/L	525.78 ppb	20:46:02
3	Cd 226.502†	49121.7	48745.7	495.52 ug/L	495.52 ppb	20:46:02
3	Co 228.616†	27291.8	27045.8	501.98 ug/L	501.98 ppb	20:46:22
3	Cr 267.716†	54606.9	53881.7	566.92 ug/L	566.92 ppb	20:46:02
3	Cu 324.752†	207847.2	198656.6	582.31 ug/L	582.31 ppb	20:46:02
3	Mn 257.610†	2964992.2	2929768.6	3115.0 ug/L	3115.0 ppb	20:46:02
3	Mo 202.031†	8096.4	7983.3	515.39 ug/L	515.39 ppb	20:46:22
3	Ni 231.604†	23537.6	23176.2	532.23 ug/L	532.23 ppb	20:46:22
3	P 214.914†	3010.2	2732.9	1387.3 ug/L	1387.3 ppb	20:46:22
3	Pb 220.353†	4982.3	4992.0	571.37 ug/L	571.37 ppb	20:46:22
3	S 181.975 Axial†	5692.6	5576.6	7349.9 ug/L	7349.9 ppb	20:46:22
3	Sb 206.836†	1585.2	1529.3	479.08 ug/L	479.08 ppb	20:46:22
3	Se 196.026†	323.0	346.0	528.52 ug/L	528.52 ppb	20:46:22
3	Si 251.611†	943269.6	931747.5	27736 ug/L	27736 ppb	20:46:02
3	Sn 189.927†	3188.3	3142.1	509.26 ug/L	509.26 ppb	20:46:22
3	Ti 334.940†	2492408.1	2464492.3	3890.9 ug/L	3890.9 ppb	20:46:02
3	Tl 190.801†	1588.7	1604.7	498.60 ug/L	498.60 ppb	20:46:22
3	U 409.014†	6303.3	8813.5	239.25 ug/L	239.25 ppb	20:46:02
3	V 292.402†	95934.7	96174.6	627.82 ug/L	627.82 ppb	20:46:02
3	Zn 213.857†	96959.7	95071.0	803.15 ug/L	803.15 ppb	20:46:02
3	SiO2†	948758.9	937129.8	59782 ug/L	59782 ppb	20:46:40

Mean Data: 1201985647|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	876270.2	100.96	%	0.193				0.19%
Sc Radial	5505.4	98.7	%	0.28				0.28%
Y 371.029	890334.9	122.05	%	0.385				0.32%
Y RADIAL	7241.9	119.9	%	0.33				0.27%
Ag 328.068†	106570.4	517.34	ug/L	0.888	517.34	ppb	0.888	0.17%
Al 396.153Radial†	132013.7	90898	ug/L	531.3	90898	ppb	531.3	0.58%
As 188.979†	1259.3	534.43	ug/L	4.044	534.43	ppb	4.044	0.76%
B 249.677†	25846.9	535.64	ug/L	2.353	535.64	ppb	2.353	0.44%
Ba 233.527†	170224.6	1277.2	ug/L	2.63	1277.2	ppb	2.63	0.21%
Be 313.107†	1441327.3	525.20	ug/L	0.735	525.20	ppb	0.735	0.14%
Ca 317.933Radial†	15710.8	22930	ug/L	162.6	22930	ppb	162.6	0.71%
Cd 226.502†	48783.8	495.83	ug/L	1.735	495.83	ppb	1.735	0.35%
Co 228.616†	27148.8	503.91	ug/L	1.765	503.91	ppb	1.765	0.35%
Cr 267.716†	53918.8	567.32	ug/L	0.566	567.32	ppb	0.566	0.10%
Cu 324.752†	198873.5	582.98	ug/L	0.841	582.98	ppb	0.841	0.14%
Fe 238.204 Radial†	11677.0	104630	ug/L	925.9	104630	ppb	925.9	0.88%
K 766.490 Radial†	87957.1	14728	ug/L	72.5	14728	ppb	72.5	0.49%

Mg 279.077 IEC†	572.5	19174	ug/L	123.2	19174	ppb	123.2	0.64%
Mn 257.610†	2932309.9	3117.8	ug/L	4.95	3117.8	ppb	4.95	0.16%
Mo 202.031†	8001.4	516.61	ug/L	1.335	516.61	ppb	1.335	0.26%
Na 589.592 Radial†	31895.6	9666.3	ug/L	67.15	9666.3	ppb	67.15	0.69%
Ni 231.604†	23258.4	534.12	ug/L	1.685	534.12	ppb	1.685	0.32%
P 214.914†	2744.4	1393.2	ug/L	5.18	1393.2	ppb	5.18	0.37%
Pb 220.353†	4994.1	571.67	ug/L	1.103	571.67	ppb	1.103	0.19%
S 181.975 Axial†	5597.3	7377.2	ug/L	23.83	7377.2	ppb	23.83	0.32%
Sb 206.836†	1527.9	478.68	ug/L	0.347	478.68	ppb	0.347	0.07%
Se 196.026†	356.2	537.05	ug/L	7.388	537.05	ppb	7.388	1.38%
Si 251.611†	931990.8	27743	ug/L	6.4	27743	ppb	6.4	0.02%
Sn 189.927†	3148.1	510.25	ug/L	2.443	510.25	ppb	2.443	0.48%
Sr 421.552†	113472.0	684.17	ug/L	3.984	684.17	ppb	3.984	0.58%
Ti 334.940†	2465541.1	3892.5	ug/L	2.54	3892.5	ppb	2.54	0.07%
Tl 190.801†	1614.7	501.45	ug/L	4.159	501.45	ppb	4.159	0.83%
U 409.014†	8942.5	242.85	ug/L	5.384	242.85	ppb	5.384	2.22%
V 292.402†	96163.5	627.63	ug/L	0.621	627.63	ppb	0.621	0.10%
Zn 213.857†	95225.9	804.39	ug/L	1.522	804.39	ppb	1.522	0.19%
SiO2†	940807.9	60016	ug/L	235.4	60016	ppb	235.4	0.39%

Sequence No.: 65
Sample ID: 1201985646|928613|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 12/11/2009 20:48:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985646|928613|5

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5702.1	5702.1	102	%			20:50:45
1	Y RADIAL	6375.3	6375.3	105.6	%			20:50:45
1	Al 396.153Radial†	14882.9	14588.5	10047	ug/L	10047	ppb	20:50:45
1	Ca 317.933Radial†	2597.1	2522.6	3681.8	ug/L	3681.8	ppb	20:51:05
1	Fe 238.204 Radial†	2223.6	2164.4	19391	ug/L	19391	ppb	20:51:05
1	K 766.490 Radial†	12003.6	8998.0	1503.2	ug/L	1503.2	ppb	20:50:45
1	Mg 279.077 IEC†	68.0	64.6	2155.8	ug/L	2155.8	ppb	20:51:05
1	Na 589.592 Radial†	1319.0	2843.9	861.88	ug/L	861.88	ppb	20:50:45
1	Sr 421.552†	5447.9	5327.4	32.097	ug/L	32.097	ppb	20:50:45
1	Sc 361.383	876160.4	876160.4	100.95	%			20:52:02
1	Y 371.029	758973.7	758973.7	104.05	%			20:52:02
1	Ag 328.068†	-1017.8	-1282.2	0.4576	ug/L	0.4576	ppb	20:52:02
1	As 188.979†	-29.3	2.2	8.9179	ug/L	8.9179	ppb	20:52:22
1	B 249.677†	75.0	567.6	9.5073	ug/L	9.5073	ppb	20:52:02
1	Ba 233.527†	20944.1	20758.1	155.88	ug/L	155.88	ppb	20:52:02
1	Be 313.107†	-5382.8	-669.5	0.9450	ug/L	0.9450	ppb	20:52:02
1	Cd 226.502†	-5.7	193.3	0.0722	ug/L	0.0722	ppb	20:52:22
1	Co 228.616†	250.7	321.7	4.5819	ug/L	4.5819	ppb	20:52:22
1	Cr 267.716†	1272.2	1174.2	12.698	ug/L	12.698	ppb	20:52:22
1	Cu 324.752†	9563.9	2716.0	8.8782	ug/L	8.8782	ppb	20:52:02
1	Mn 257.610†	583076.3	577069.4	613.49	ug/L	613.49	ppb	20:52:02
1	Mo 202.031†	68.2	49.1	4.5027	ug/L	4.5027	ppb	20:52:22
1	Ni 231.604†	497.1	406.5	9.3362	ug/L	9.3362	ppb	20:52:22
1	P 214.914†	627.6	379.7	198.42	ug/L	198.42	ppb	20:52:22
1	Pb 220.353†	56.2	123.6	14.502	ug/L	14.502	ppb	20:52:22
1	S 181.975 Axial†	403.6	350.4	461.00	ug/L	461.00	ppb	20:52:22
1	Sb 206.836†	38.6	0.8	-1.6164	ug/L	-1.6164	ppb	20:52:22
1	Se 196.026†	-134.9	-106.9	0.9773	ug/L	0.9773	ppb	20:52:22
1	Si 251.611†	142959.8	141132.9	4203.0	ug/L	4203.0	ppb	20:52:02
1	Sn 189.927†	-28.7	-37.2	-5.3428	ug/L	-5.3428	ppb	20:52:22
1	Ti 334.940†	384450.8	382089.4	603.30	ug/L	603.30	ppb	20:52:02
1	Tl 190.801†	-61.0	-25.9	1.1048	ug/L	1.1048	ppb	20:52:22
1	U 409.014†	-4351.9	-1726.9	-52.113	ug/L	-52.113	ppb	20:52:02
1	V 292.402†	2428.9	3768.8	21.455	ug/L	21.455	ppb	20:52:22
1	Zn 213.857†	8395.8	7563.0	63.062	ug/L	63.062	ppb	20:52:22
1	SiO2†	142685.8	140818.7	8987.0	ug/L	8987.0	ppb	20:53:19
2	Sc Radial	5742.8	5742.8	103	%			20:51:10
2	Y RADIAL	6417.2	6417.2	106.3	%			20:51:10
2	Al 396.153Radial†	14936.6	14537.5	10012	ug/L	10012	ppb	20:51:10
2	Ca 317.933Radial†	2595.5	2503.1	3653.3	ug/L	3653.3	ppb	20:51:30
2	Fe 238.204 Radial†	2228.7	2154.0	19298	ug/L	19298	ppb	20:51:30
2	K 766.490 Radial†	12098.5	9007.2	1504.7	ug/L	1504.7	ppb	20:51:10
2	Mg 279.077 IEC†	69.0	65.1	2172.3	ug/L	2172.3	ppb	20:51:30
2	Na 589.592 Radial†	1297.0	2813.4	852.62	ug/L	852.62	ppb	20:51:10
2	Sr 421.552†	5478.5	5319.4	32.049	ug/L	32.049	ppb	20:51:10
2	Sc 361.383	880758.7	880758.7	101.48	%			20:52:28
2	Y 371.029	762837.0	762837.0	104.58	%			20:52:28
2	Ag 328.068†	-925.3	-1185.8	0.8660	ug/L	0.8660	ppb	20:52:28
2	As 188.979†	-29.6	2.2	8.8699	ug/L	8.8699	ppb	20:52:48
2	B 249.677†	69.9	562.1	9.4048	ug/L	9.4048	ppb	20:52:28
2	Ba 233.527†	21037.0	20741.4	155.75	ug/L	155.75	ppb	20:52:28
2	Be 313.107†	-5459.9	-717.7	0.9290	ug/L	0.9290	ppb	20:52:28
2	Cd 226.502†	-1.3	197.6	0.1263	ug/L	0.1263	ppb	20:52:48
2	Co 228.616†	235.2	305.2	4.2722	ug/L	4.2722	ppb	20:52:48
2	Cr 267.716†	1275.9	1171.3	12.666	ug/L	12.666	ppb	20:52:48
2	Cu 324.752†	9599.7	2701.9	8.8324	ug/L	8.8324	ppb	20:52:28
2	Mn 257.610†	586009.7	576944.6	613.35	ug/L	613.35	ppb	20:52:28
2	Mo 202.031†	81.5	61.9	5.3081	ug/L	5.3081	ppb	20:52:48
2	Ni 231.604†	485.0	392.0	9.0029	ug/L	9.0029	ppb	20:52:48

2	P 214.914†	639.8	388.5	203.39	ug/L	203.39 ppb	20:52:48
2	Pb 220.353†	49.5	116.8	13.736	ug/L	13.736 ppb	20:52:48
2	S 181.975 Axial†	402.1	346.8	456.27	ug/L	456.27 ppb	20:52:48
2	Sb 206.836†	32.5	-5.3	-3.5500	ug/L	-3.5500 ppb	20:52:48
2	Se 196.026†	-132.9	-104.1	2.2334	ug/L	2.2334 ppb	20:52:48
2	Si 251.611†	143890.9	141311.0	4208.3	ug/L	4208.3 ppb	20:52:28
2	Sn 189.927†	-28.5	-37.0	-5.3044	ug/L	-5.3044 ppb	20:52:48
2	Ti 334.940†	386889.9	382504.7	603.96	ug/L	603.96 ppb	20:52:28
2	Tl 190.801†	-66.5	-30.9	-0.3075	ug/L	-0.3075 ppb	20:52:48
2	U 409.014†	-4465.0	-1815.9	-54.660	ug/L	-54.660 ppb	20:52:28
2	V 292.402†	2409.7	3737.3	21.265	ug/L	21.265 ppb	20:52:48
2	Zn 213.857†	8428.9	7552.1	62.979	ug/L	62.979 ppb	20:52:48
2	SiO2†	143204.5	140591.9	8972.5	ug/L	8972.5 ppb	20:53:24
3	Sc Radial	5548.4	5548.4	99.5	%		20:51:35
3	Y RADIAL	6243.5	6243.5	103.4	%		20:51:35
3	Al 396.153Radial†	14625.2	14732.5	10146	ug/L	10146 ppb	20:51:35
3	Ca 317.933Radial†	2612.0	2608.0	3806.4	ug/L	3806.4 ppb	20:51:55
3	Fe 238.204 Radial†	2243.5	2244.7	20111	ug/L	20111 ppb	20:51:55
3	K 766.490 Radial†	11961.7	9281.1	1550.7	ug/L	1550.7 ppb	20:51:35
3	Mg 279.077 IEC†	71.4	69.8	2330.9	ug/L	2330.9 ppb	20:51:55
3	Na 589.592 Radial†	1179.6	2739.6	830.25	ug/L	830.25 ppb	20:51:35
3	Sr 421.552†	5330.1	5356.6	32.272	ug/L	32.272 ppb	20:51:35
3	Sc 361.383	871588.2	871588.2	100.42	%		20:52:53
3	Y 371.029	756352.3	756352.3	103.69	%		20:52:53
3	Ag 328.068†	-970.1	-1240.1	0.8777	ug/L	0.8777 ppb	20:52:53
3	As 188.979†	-32.0	-0.6	7.9143	ug/L	7.9143 ppb	20:53:13
3	B 249.677†	50.3	543.3	8.8949	ug/L	8.8949 ppb	20:52:53
3	Ba 233.527†	20729.6	20653.4	155.12	ug/L	155.12 ppb	20:52:53
3	Be 313.107†	-5408.8	-723.4	0.9229	ug/L	0.9229 ppb	20:52:53
3	Cd 226.502†	-8.0	191.0	-0.0236	ug/L	-0.0236 ppb	20:53:13
3	Co 228.616†	239.6	312.0	4.3926	ug/L	4.3926 ppb	20:53:13
3	Cr 267.716†	1280.0	1188.6	12.862	ug/L	12.862 ppb	20:53:13
3	Cu 324.752†	9545.0	2746.9	9.0046	ug/L	9.0046 ppb	20:52:53
3	Mn 257.610†	578658.6	575700.3	612.11	ug/L	612.11 ppb	20:52:53
3	Mo 202.031†	77.5	58.7	5.1641	ug/L	5.1641 ppb	20:53:13
3	Ni 231.604†	495.8	407.8	9.3660	ug/L	9.3660 ppb	20:53:13
3	P 214.914†	619.7	375.1	195.29	ug/L	195.29 ppb	20:53:13
3	Pb 220.353†	56.9	124.6	14.577	ug/L	14.577 ppb	20:53:13
3	S 181.975 Axial†	407.4	356.3	468.70	ug/L	468.70 ppb	20:53:13
3	Sb 206.836†	36.8	-0.7	-2.0948	ug/L	-2.0948 ppb	20:53:13
3	Se 196.026†	-136.1	-108.7	2.1720	ug/L	2.1720 ppb	20:53:13
3	Si 251.611†	141661.9	140583.3	4186.6	ug/L	4186.6 ppb	20:52:53
3	Sn 189.927†	-27.7	-36.4	-5.1911	ug/L	-5.1911 ppb	20:53:13
3	Ti 334.940†	381555.7	381204.3	601.91	ug/L	601.91 ppb	20:52:53
3	Tl 190.801†	-67.8	-32.9	-0.8838	ug/L	-0.8838 ppb	20:53:13
3	U 409.014†	-4422.9	-1820.2	-54.887	ug/L	-54.887 ppb	20:52:53
3	V 292.402†	2409.7	3762.2	21.311	ug/L	21.311 ppb	20:53:13
3	Zn 213.857†	8413.2	7623.9	63.511	ug/L	63.511 ppb	20:53:13
3	SiO2†	143517.7	142388.6	9087.1	ug/L	9087.1 ppb	20:53:29

Mean Data: 1201985646|928613|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	876169.1	100.95	%	0.528				0.52%
Sc Radial	5664.4	102	%	1.8				1.81%
Y 371.029	759387.7	104.10	%	0.447				0.43%
Y RADIAL	6345.3	105.1	%	1.50				1.43%
Ag 328.068†	-1236.0	0.7338	ug/L	0.23922	0.7338	ppb	0.23922	32.60%
Al 396.153Radial†	14619.5	10068	ug/L	69.7	10068	ppb	69.7	0.69%
As 188.979†	1.3	8.5674	ug/L	0.56611	8.5674	ppb	0.56611	6.61%
B 249.677†	557.7	9.2690	ug/L	0.32798	9.2690	ppb	0.32798	3.54%
Ba 233.527†	20717.6	155.59	ug/L	0.404	155.59	ppb	0.404	0.26%
Be 313.107†	-703.6	0.9323	ug/L	0.01141	0.9323	ppb	0.01141	1.22%
Ca 317.933Radial†	2544.6	3713.8	ug/L	81.41	3713.8	ppb	81.41	2.19%
Cd 226.502†	194.0	0.0583	ug/L	0.07594	0.0583	ppb	0.07594	130.24%
Co 228.616†	313.0	4.4156	ug/L	0.15610	4.4156	ppb	0.15610	3.54%
Cr 267.716†	1178.0	12.742	ug/L	0.1051	12.742	ppb	0.1051	0.83%
Cu 324.752†	2721.6	8.9051	ug/L	0.08916	8.9051	ppb	0.08916	1.00%
Fe 238.204 Radial†	2187.7	19600	ug/L	444.7	19600	ppb	444.7	2.27%
K 766.490 Radial†	9095.4	1519.5	ug/L	27.02	1519.5	ppb	27.02	1.78%

Mg 279.077 IEC†	66.5	2219.6	ug/L	96.69	2219.6	ppb	96.69	4.36%
Mn 257.610†	576571.4	612.98	ug/L	0.761	612.98	ppb	0.761	0.12%
Mo 202.031†	56.6	4.9916	ug/L	0.42952	4.9916	ppb	0.42952	8.60%
Na 589.592 Radial†	2799.0	848.25	ug/L	16.264	848.25	ppb	16.264	1.92%
Ni 231.604†	402.1	9.2351	ug/L	0.20158	9.2351	ppb	0.20158	2.18%
P 214.914†	381.1	199.03	ug/L	4.086	199.03	ppb	4.086	2.05%
Pb 220.353†	121.7	14.272	ug/L	0.4656	14.272	ppb	0.4656	3.26%
S 181.975 Axial†	351.2	461.99	ug/L	6.276	461.99	ppb	6.276	1.36%
Sb 206.836†	-1.7	-2.4204	ug/L	1.00706	-2.4204	ppb	1.00706	41.61%
Se 196.026†	-106.6	1.7942	ug/L	0.70817	1.7942	ppb	0.70817	39.47%
Si 251.611†	141009.0	4199.3	ug/L	11.31	4199.3	ppb	11.31	0.27%
Sn 189.927†	-36.9	-5.2794	ug/L	0.07889	-5.2794	ppb	0.07889	1.49%
Sr 421.552†	5334.5	32.139	ug/L	0.1175	32.139	ppb	0.1175	0.37%
Ti 334.940†	381932.8	603.06	ug/L	1.044	603.06	ppb	1.044	0.17%
Tl 190.801†	-29.9	-0.0288	ug/L	1.02315	-0.0288	ppb	1.02315	>999.9%
U 409.014†	-1787.7	-53.887	ug/L	1.5400	-53.887	ppb	1.5400	2.86%
V 292.402†	3756.1	21.344	ug/L	0.0990	21.344	ppb	0.0990	0.46%
Zn 213.857†	7579.6	63.184	ug/L	0.2861	63.184	ppb	0.2861	0.45%
SiO2†	141266.4	9015.5	ug/L	62.43	9015.5	ppb	62.43	0.69%

Sequence No.: 66
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 20:55:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5257.3	5257.3	94.3	%			20:57:31
1	Y RADIAL	5654.3	5654.3	93.63	%			20:57:31
1	Al 396.153Radial†	7002.3	7461.8	5117.1	ug/L	5117.1	ppb	20:57:31
1	Ca 317.933Radial†	3476.2	3669.8	5356.1	ug/L	5356.1	ppb	20:57:51
1	Fe 238.204 Radial†	582.1	607.4	5458.1	ug/L	5458.1	ppb	20:57:51
1	K 766.490 Radial†	31669.8	30848.6	5166.7	ug/L	5166.7	ppb	20:57:31
1	Mg 279.077 IEC†	158.1	165.7	5578.9	ug/L	5578.9	ppb	20:57:51
1	Na 589.592 Radial†	30277.2	33665.3	10203	ug/L	10203	ppb	20:57:31
1	Sr 421.552†	80566.5	85447.0	515.30	ug/L	515.30	ppb	20:57:31
1	Sc 361.383	875223.3	875223.3	100.84	%			20:58:49
1	Y 371.029	723325.1	723325.1	99.159	%			20:58:49
1	Ag 328.068†	113733.2	112509.6	512.16	ug/L	512.16	ppb	20:58:54
1	As 188.979†	1325.0	1345.2	523.80	ug/L	523.80	ppb	20:59:14
1	B 249.677†	23468.8	23766.1	504.46	ug/L	504.46	ppb	20:58:54
1	Ba 233.527†	68302.9	67743.8	507.51	ug/L	507.51	ppb	20:58:54
1	Be 313.107†	1425787.0	1418545.3	510.34	ug/L	510.34	ppb	20:58:49
1	Cd 226.502†	49523.5	49309.0	511.17	ug/L	511.17	ppb	20:58:54
1	Co 228.616†	27149.1	26995.9	509.34	ug/L	509.34	ppb	20:58:54
1	Cr 267.716†	48932.4	48437.8	507.85	ug/L	507.85	ppb	20:58:54
1	Cu 324.752†	180530.4	172265.2	500.64	ug/L	500.64	ppb	20:58:54
1	Mn 257.610†	484091.7	479529.7	508.66	ug/L	508.66	ppb	20:58:49
1	Mo 202.031†	8133.2	8046.9	512.46	ug/L	512.46	ppb	20:59:14
1	Ni 231.604†	22426.5	22153.3	508.73	ug/L	508.73	ppb	20:58:54
1	P 214.914†	4849.4	4566.9	2474.2	ug/L	2474.2	ppb	20:59:14
1	Pb 220.353†	4546.2	4576.2	513.84	ug/L	513.84	ppb	20:59:14
1	S 181.975 Axial†	837.5	781.1	1031.0	ug/L	1031.0	ppb	20:59:14
1	Sb 206.836†	1687.4	1636.0	524.12	ug/L	524.12	ppb	20:59:14
1	Se 196.026†	903.6	922.9	538.32	ug/L	538.32	ppb	20:59:14
1	Si 251.611†	89212.4	87985.8	2608.3	ug/L	2608.3	ppb	20:58:54
1	Sn 189.927†	3251.2	3215.2	517.84	ug/L	517.84	ppb	20:59:14
1	Ti 334.940†	316665.7	315278.0	497.52	ug/L	497.52	ppb	20:58:54
1	Tl 190.801†	1801.1	1820.6	516.15	ug/L	516.15	ppb	20:59:14
1	U 409.014†	14843.2	17303.3	495.82	ug/L	495.82	ppb	20:58:54
1	V 292.402†	74853.0	75590.8	509.79	ug/L	509.79	ppb	20:58:54
1	Zn 213.857†	60785.9	59524.5	507.47	ug/L	507.47	ppb	20:58:54
1	SiO2†	89310.9	88040.8	5592.8	ug/L	5592.8	ppb	21:00:21
2	Sc Radial	5442.4	5442.4	97.6	%			20:57:56
2	Y RADIAL	5862.9	5862.9	97.08	%			20:57:56
2	Al 396.153Radial†	7169.5	7380.5	5060.9	ug/L	5060.9	ppb	20:57:56
2	Ca 317.933Radial†	3459.1	3526.9	5147.5	ug/L	5147.5	ppb	20:58:16
2	Fe 238.204 Radial†	582.7	587.1	5276.2	ug/L	5276.2	ppb	20:58:16
2	K 766.490 Radial†	32547.4	30605.5	5126.0	ug/L	5126.0	ppb	20:57:56
2	Mg 279.077 IEC†	157.1	159.1	5355.5	ug/L	5355.5	ppb	20:58:16
2	Na 589.592 Radial†	31117.8	33434.5	10133	ug/L	10133	ppb	20:57:56
2	Sr 421.552†	82928.9	84961.3	512.38	ug/L	512.38	ppb	20:57:56
2	Sc 361.383	869818.6	869818.6	100.22	%			20:59:20
2	Y 371.029	720055.7	720055.7	98.711	%			20:59:20
2	Ag 328.068†	115289.2	114763.0	522.34	ug/L	522.34	ppb	20:59:25
2	As 188.979†	1306.6	1335.0	519.93	ug/L	519.93	ppb	20:59:45
2	B 249.677†	24013.7	24454.4	519.13	ug/L	519.13	ppb	20:59:25
2	Ba 233.527†	69218.5	69078.2	517.50	ug/L	517.50	ppb	20:59:25
2	Be 313.107†	1418087.2	1419647.6	510.76	ug/L	510.76	ppb	20:59:20
2	Cd 226.502†	50020.2	50109.7	519.50	ug/L	519.50	ppb	20:59:25
2	Co 228.616†	27425.9	27439.4	517.70	ug/L	517.70	ppb	20:59:25
2	Cr 267.716†	49506.1	49311.8	517.02	ug/L	517.02	ppb	20:59:25
2	Cu 324.752†	183460.1	176301.0	512.35	ug/L	512.35	ppb	20:59:25
2	Mn 257.610†	480040.9	478470.6	507.52	ug/L	507.52	ppb	20:59:20
2	Mo 202.031†	8145.3	8109.1	516.41	ug/L	516.41	ppb	20:59:45
2	Ni 231.604†	22699.0	22563.4	518.15	ug/L	518.15	ppb	20:59:25

2	P 214.914†	4858.2	4605.5	2494.0 ug/L	2494.0 ppb	20:59:45
2	Pb 220.353†	4525.2	4583.3	514.63 ug/L	514.63 ppb	20:59:45
2	S 181.975 Axial†	846.0	794.7	1048.9 ug/L	1048.9 ppb	20:59:45
2	Sb 206.836†	1672.8	1631.8	522.72 ug/L	522.72 ppb	20:59:45
2	Se 196.026†	893.7	918.6	535.32 ug/L	535.32 ppb	20:59:45
2	Si 251.611†	90577.3	89897.4	2665.2 ug/L	2665.2 ppb	20:59:25
2	Sn 189.927†	3253.0	3237.1	521.34 ug/L	521.34 ppb	20:59:45
2	Ti 334.940†	321425.0	321978.1	508.08 ug/L	508.08 ppb	20:59:25
2	Tl 190.801†	1801.9	1832.5	519.51 ug/L	519.51 ppb	20:59:45
2	U 409.014†	14967.0	17518.2	502.00 ug/L	502.00 ppb	20:59:25
2	V 292.402†	76121.3	77317.5	521.35 ug/L	521.35 ppb	20:59:25
2	Zn 213.857†	61535.8	60647.3	517.08 ug/L	517.08 ppb	20:59:25
2	SiO2†	89586.8	88866.3	5645.3 ug/L	5645.3 ppb	21:00:27
3	Sc Radial	5424.2	5424.2	97.3 %		20:58:22
3	Y RADIAL	5832.1	5832.1	96.57 %		20:58:22
3	Al 396.153Radial†	7174.6	7410.4	5081.9 ug/L	5081.9 ppb	20:58:22
3	Ca 317.933Radial†	3484.1	3564.6	5202.5 ug/L	5202.5 ppb	20:58:42
3	Fe 238.204 Radial†	584.0	590.5	5306.2 ug/L	5306.2 ppb	20:58:42
3	K 766.490 Radial†	32581.8	30752.7	5150.6 ug/L	5150.6 ppb	20:58:22
3	Mg 279.077 IEC†	160.5	163.1	5491.4 ug/L	5491.4 ppb	20:58:42
3	Na 589.592 Radial†	31259.2	33686.8	10209 ug/L	10209 ppb	20:58:22
3	Sr 421.552†	82894.5	85211.2	513.88 ug/L	513.88 ppb	20:58:22
3	Sc 361.383	878551.1	878551.1	101.23 %		20:59:51
3	Y 371.029	726876.0	726876.0	99.646 %		20:59:51
3	Ag 328.068†	115503.9	113831.6	518.12 ug/L	518.12 ppb	20:59:56
3	As 188.979†	1303.2	1318.7	513.61 ug/L	513.61 ppb	21:00:16
3	B 249.677†	24032.6	24234.9	514.46 ug/L	514.46 ppb	20:59:56
3	Ba 233.527†	69580.0	68748.8	515.03 ug/L	515.03 ppb	20:59:56
3	Be 313.107†	1433123.8	1420437.8	511.04 ug/L	511.04 ppb	20:59:51
3	Cd 226.502†	50442.8	50031.1	518.68 ug/L	518.68 ppb	20:59:56
3	Co 228.616†	27613.1	27352.3	516.04 ug/L	516.04 ppb	20:59:56
3	Cr 267.716†	49692.1	49004.6	513.79 ug/L	513.79 ppb	20:59:56
3	Cu 324.752†	183653.8	174672.7	507.62 ug/L	507.62 ppb	20:59:56
3	Mn 257.610†	485167.2	478773.8	507.85 ug/L	507.85 ppb	20:59:51
3	Mo 202.031†	8111.7	7995.1	509.16 ug/L	509.16 ppb	21:00:16
3	Ni 231.604†	22800.1	22438.2	515.27 ug/L	515.27 ppb	20:59:56
3	P 214.914†	4852.2	4551.5	2464.5 ug/L	2464.5 ppb	21:00:16
3	Pb 220.353†	4519.7	4533.0	509.00 ug/L	509.00 ppb	21:00:16
3	S 181.975 Axial†	845.3	785.6	1037.0 ug/L	1037.0 ppb	21:00:16
3	Sb 206.836†	1681.6	1623.8	520.01 ug/L	520.01 ppb	21:00:16
3	Se 196.026†	909.5	925.3	539.19 ug/L	539.19 ppb	21:00:16
3	Si 251.611†	90815.8	89234.7	2645.6 ug/L	2645.6 ppb	20:59:56
3	Sn 189.927†	3239.9	3191.9	514.07 ug/L	514.07 ppb	21:00:16
3	Ti 334.940†	322135.6	319492.2	504.16 ug/L	504.16 ppb	20:59:56
3	Tl 190.801†	1798.7	1811.5	513.58 ug/L	513.58 ppb	21:00:16
3	U 409.014†	15082.7	17484.1	501.02 ug/L	501.02 ppb	20:59:56
3	V 292.402†	76196.3	76636.6	516.72 ug/L	516.72 ppb	20:59:56
3	Zn 213.857†	61809.6	60307.5	514.17 ug/L	514.17 ppb	20:59:56
3	SiO2†	89653.3	88043.5	5593.1 ug/L	5593.1 ppb	21:00:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	874531.0	100.76	%	0.508				0.50%
Sc Radial	5374.6	96.4	%	1.83				1.90%
Y 371.029	723418.9	99.172	%	0.4676				0.47%
Y RADIAL	5783.1	95.76	%	1.865				1.95%
Ag 328.068†	113701.4	517.54	ug/L	5.114	517.54	ppb	5.114	0.99%
QC value within limits for Ag 328.068 Recovery = 103.51%								
Al 396.153Radial†	7417.6	5086.6	ug/L	28.39	5086.6	ppb	28.39	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.73%								
As 188.979†	1333.0	519.12	ug/L	5.147	519.12	ppb	5.147	0.99%
QC value within limits for As 188.979 Recovery = 103.82%								
B 249.677†	24151.8	512.68	ug/L	7.495	512.68	ppb	7.495	1.46%
QC value within limits for B 249.677 Recovery = 102.54%								
Ba 233.527†	68523.6	513.35	ug/L	5.203	513.35	ppb	5.203	1.01%
QC value within limits for Ba 233.527 Recovery = 102.67%								
Be 313.107†	1419543.6	510.71	ug/L	0.349	510.71	ppb	0.349	0.07%
QC value within limits for Be 313.107 Recovery = 102.14%								
Ca 317.933Radial†	3587.1	5235.4	ug/L	108.11	5235.4	ppb	108.11	2.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 104.71%
Cd 226.502†            49816.6      516.45 ug/L         4.590      516.45 ppb          4.590   0.89%
   QC value within limits for Cd 226.502  Recovery = 103.29%
Co 228.616†            27262.5      514.36 ug/L         4.424      514.36 ppb          4.424   0.86%
   QC value within limits for Co 228.616  Recovery = 102.87%
Cr 267.716†            48918.0      512.89 ug/L         4.649      512.89 ppb          4.649   0.91%
   QC value within limits for Cr 267.716  Recovery = 102.58%
Cu 324.752†           174413.0      506.87 ug/L         5.893      506.87 ppb          5.893   1.16%
   QC value within limits for Cu 324.752  Recovery = 101.37%
Fe 238.204 Radial†       595.0      5346.8 ug/L        97.53      5346.8 ppb         97.53   1.82%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.94%
K 766.490 Radial†      30735.6      5147.8 ug/L        20.51      5147.8 ppb         20.51   0.40%
   QC value within limits for K 766.490 Radial  Recovery = 102.96%
Mg 279.077 IEC†          162.6      5475.2 ug/L       112.56      5475.2 ppb        112.56   2.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.50%
Mn 257.610†           478924.7      508.01 ug/L         0.586      508.01 ppb          0.586   0.12%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             8050.4      512.68 ug/L         3.630      512.68 ppb          3.630   0.71%
   QC value within limits for Mo 202.031  Recovery = 102.54%
Na 589.592 Radial†     33595.6       10181 ug/L        42.4        10181 ppb           42.4   0.42%
   QC value within limits for Na 589.592 Radial  Recovery = 101.81%
Ni 231.604†            22385.0      514.05 ug/L         4.825      514.05 ppb          4.825   0.94%
   QC value within limits for Ni 231.604  Recovery = 102.81%
P 214.914†              4574.6      2477.6 ug/L        15.06      2477.6 ppb         15.06   0.61%
   QC value within limits for P 214.914  Recovery = 99.10%
Pb 220.353†             4564.2      512.49 ug/L         3.051      512.49 ppb          3.051   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.50%
S 181.975 Axial†         787.1      1039.0 ug/L         9.15      1039.0 ppb          9.15   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 103.90%
Sb 206.836†             1630.5      522.28 ug/L         2.090      522.28 ppb          2.090   0.40%
   QC value within limits for Sb 206.836  Recovery = 104.46%
Se 196.026†              922.3      537.61 ug/L         2.030      537.61 ppb          2.030   0.38%
   QC value within limits for Se 196.026  Recovery = 107.52%
Si 251.611†            89039.3      2639.7 ug/L        28.89      2639.7 ppb         28.89   1.09%
   QC value within limits for Si 251.611  Recovery = 105.59%
Sn 189.927†             3214.7      517.75 ug/L         3.635      517.75 ppb          3.635   0.70%
   QC value within limits for Sn 189.927  Recovery = 103.55%
Sr 421.552†            85206.5      513.85 ug/L         1.464      513.85 ppb          1.464   0.28%
   QC value within limits for Sr 421.552  Recovery = 102.77%
Ti 334.940†           318916.1      503.25 ug/L         5.337      503.25 ppb          5.337   1.06%
   QC value within limits for Ti 334.940  Recovery = 100.65%
Tl 190.801†             1821.6      516.41 ug/L         2.976      516.41 ppb          2.976   0.58%
   QC value within limits for Tl 190.801  Recovery = 103.28%
U 409.014†             17435.2      499.61 ug/L         3.324      499.61 ppb          3.324   0.67%
   QC value within limits for U 409.014  Recovery = 99.92%
V 292.402†             76515.0      515.96 ug/L         5.821      515.96 ppb          5.821   1.13%
   QC value within limits for V 292.402  Recovery = 103.19%
Zn 213.857†            60159.8      512.91 ug/L         4.928      512.91 ppb          4.928   0.96%
   QC value within limits for Zn 213.857  Recovery = 102.58%
SiO2†                  88316.9      5610.4 ug/L        30.24      5610.4 ppb         30.24   0.54%
   QC value within limits for SiO2  Recovery = 104.92%
All analyte(s) passed QC.
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Sequence No.: 67
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 21:02:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5540.5	5540.5	99.4	%			21:04:34
1	Y RADIAL	6034.9	6034.9	99.93	%			21:04:34
1	Al 396.153Radial†	-11.4	23.9	16.411	ug/L	16.411	ppb	21:04:34
1	Ca 317.933Radial†	18.2	1.4	2.0169	ug/L	2.0169	ppb	21:04:54
1	Fe 238.204 Radial†	8.1	-1.7	-15.135	ug/L	-15.135	ppb	21:04:54
1	K 766.490 Radial†	2796.1	74.4	12.499	ug/L	12.499	ppb	21:04:34
1	Mg 279.077 IEC†	1.0	-0.9	-29.639	ug/L	-29.639	ppb	21:04:54
1	Na 589.592 Radial†	-1698.1	-154.8	-46.906	ug/L	-46.906	ppb	21:04:34
1	Sr 421.552†	-27.8	-27.8	-0.1676	ug/L	-0.1676	ppb	21:04:34
1	Sc 361.383	854897.5	854897.5	98.500	%			21:05:50
1	Y 371.029	724416.7	724416.7	99.309	%			21:05:50
1	Ag 328.068†	496.5	230.0	1.0427	ug/L	1.0427	ppb	21:05:50
1	As 188.979†	-23.7	7.2	2.7807	ug/L	2.7807	ppb	21:06:10
1	B 249.677†	-273.3	215.8	4.6003	ug/L	4.6003	ppb	21:06:10
1	Ba 233.527†	-8.2	2.7	0.0193	ug/L	0.0193	ppb	21:06:10
1	Be 313.107†	-4410.4	185.0	0.0663	ug/L	0.0663	ppb	21:05:50
1	Cd 226.502†	-211.3	-15.6	-0.1601	ug/L	-0.1601	ppb	21:06:10
1	Co 228.616†	-70.6	1.7	0.0344	ug/L	0.0344	ppb	21:06:10
1	Cr 267.716†	91.3	6.6	0.0717	ug/L	0.0717	ppb	21:06:10
1	Cu 324.752†	6711.0	55.3	0.1598	ug/L	0.1598	ppb	21:05:50
1	Mn 257.610†	515.1	2.8	0.0020	ug/L	0.0020	ppb	21:06:10
1	Mo 202.031†	25.4	7.4	0.4705	ug/L	0.4705	ppb	21:06:10
1	Ni 231.604†	101.6	17.2	0.3947	ug/L	0.3947	ppb	21:06:10
1	P 214.914†	231.5	-7.0	-3.9544	ug/L	-3.9544	ppb	21:06:10
1	Pb 220.353†	-72.4	-5.5	-0.6088	ug/L	-0.6088	ppb	21:06:10
1	S 181.975 Axial†	52.8	4.2	5.6033	ug/L	5.6033	ppb	21:06:10
1	Sb 206.836†	42.4	5.7	1.7677	ug/L	1.7677	ppb	21:06:10
1	Se 196.026†	-26.4	0.0	-0.0422	ug/L	-0.0422	ppb	21:06:10
1	Si 251.611†	1060.6	595.0	17.715	ug/L	17.715	ppb	21:06:10
1	Sn 189.927†	-1.0	-9.9	-1.5912	ug/L	-1.5912	ppb	21:06:10
1	Ti 334.940†	-1287.1	-50.5	-0.0755	ug/L	-0.0755	ppb	21:05:50
1	Tl 190.801†	-33.1	1.0	0.2792	ug/L	0.2792	ppb	21:06:10
1	U 409.014†	-2869.3	-329.0	-9.4561	ug/L	-9.4561	ppb	21:05:50
1	V 292.402†	-1377.0	-35.3	-0.2446	ug/L	-0.2446	ppb	21:05:50
1	Zn 213.857†	803.6	62.0	0.5332	ug/L	0.5332	ppb	21:06:10
1	SiO2†	940.4	430.2	27.445	ug/L	27.445	ppb	21:07:06
2	Sc Radial	5485.7	5485.7	98.4	%			21:04:59
2	Y RADIAL	5931.0	5931.0	98.21	%			21:04:59
2	Al 396.153Radial†	-28.6	6.3	4.3106	ug/L	4.3106	ppb	21:04:59
2	Ca 317.933Radial†	13.8	-2.8	-4.1496	ug/L	-4.1496	ppb	21:05:19
2	Fe 238.204 Radial†	11.9	2.2	19.729	ug/L	19.729	ppb	21:05:19
2	K 766.490 Radial†	2899.6	207.7	34.864	ug/L	34.864	ppb	21:04:59
2	Mg 279.077 IEC†	-0.0	-1.9	-64.220	ug/L	-64.220	ppb	21:05:19
2	Na 589.592 Radial†	-1669.8	-143.1	-43.369	ug/L	-43.369	ppb	21:04:59
2	Sr 421.552†	-16.5	-16.6	-0.0999	ug/L	-0.0999	ppb	21:04:59
2	Sc 361.383	855488.9	855488.9	98.568	%			21:06:16
2	Y 371.029	727405.6	727405.6	99.719	%			21:06:16
2	Ag 328.068†	384.5	116.1	0.5333	ug/L	0.5333	ppb	21:06:16
2	As 188.979†	-20.9	10.0	3.8780	ug/L	3.8780	ppb	21:06:36
2	B 249.677†	-234.8	255.0	5.4317	ug/L	5.4317	ppb	21:06:36
2	Ba 233.527†	-0.6	10.5	0.0781	ug/L	0.0781	ppb	21:06:36
2	Be 313.107†	-4499.6	97.7	0.0351	ug/L	0.0351	ppb	21:06:16
2	Cd 226.502†	-195.7	0.4	0.0023	ug/L	0.0023	ppb	21:06:36
2	Co 228.616†	-74.7	-2.3	-0.0424	ug/L	-0.0424	ppb	21:06:36
2	Cr 267.716†	77.9	-7.0	-0.0727	ug/L	-0.0727	ppb	21:06:36
2	Cu 324.752†	6774.7	115.3	0.3359	ug/L	0.3359	ppb	21:06:16
2	Mn 257.610†	527.1	14.6	0.0187	ug/L	0.0187	ppb	21:06:36
2	Mo 202.031†	24.7	6.6	0.4216	ug/L	0.4216	ppb	21:06:36
2	Ni 231.604†	119.3	35.1	0.8068	ug/L	0.8068	ppb	21:06:36

2	P 214.914†	222.2	-16.6	-9.3584	ug/L	-9.3584 ppb	21:06:36
2	Pb 220.353†	-71.1	-4.1	-0.4595	ug/L	-0.4595 ppb	21:06:36
2	S 181.975 Axial†	46.2	-2.5	-3.3534	ug/L	-3.3534 ppb	21:06:36
2	Sb 206.836†	27.5	-9.5	-3.0016	ug/L	-3.0016 ppb	21:06:36
2	Se 196.026†	-28.7	-2.4	-1.2634	ug/L	-1.2634 ppb	21:06:36
2	Si 251.611†	2053.6	1601.6	47.686	ug/L	47.686 ppb	21:06:36
2	Sn 189.927†	5.7	-3.1	-0.4974	ug/L	-0.4974 ppb	21:06:36
2	Ti 334.940†	-1238.7	-0.4	0.0013	ug/L	0.0013 ppb	21:06:16
2	Tl 190.801†	-36.1	-2.1	-0.5809	ug/L	-0.5809 ppb	21:06:36
2	U 409.014†	-2717.3	-172.8	-4.9700	ug/L	-4.9700 ppb	21:06:16
2	V 292.402†	-1432.8	-90.9	-0.6127	ug/L	-0.6127 ppb	21:06:16
2	Zn 213.857†	810.1	68.0	0.5801	ug/L	0.5801 ppb	21:06:36
2	SiO2†	935.2	424.3	27.046	ug/L	27.046 ppb	21:07:11
3	Sc Radial	5631.3	5631.3	101	%		21:05:24
3	Y RADIAL	6140.2	6140.2	101.7	%		21:05:24
3	Al 396.153Radial†	-13.0	22.5	15.473	ug/L	15.473 ppb	21:05:24
3	Ca 317.933Radial†	20.4	3.3	4.8463	ug/L	4.8463 ppb	21:05:44
3	Fe 238.204 Radial†	10.2	0.2	2.1526	ug/L	2.1526 ppb	21:05:44
3	K 766.490 Radial†	2861.7	93.9	15.768	ug/L	15.768 ppb	21:05:24
3	Mg 279.077 IEC†	-0.7	-2.6	-89.079	ug/L	-89.079 ppb	21:05:44
3	Na 589.592 Radial†	-1606.6	-36.6	-11.101	ug/L	-11.101 ppb	21:05:24
3	Sr 421.552†	-4.8	-4.5	-0.0271	ug/L	-0.0271 ppb	21:05:24
3	Sc 361.383	855590.7	855590.7	98.580	%		21:06:41
3	Y 371.029	725965.5	725965.5	99.521	%		21:06:41
3	Ag 328.068†	347.8	78.7	0.3664	ug/L	0.3664 ppb	21:06:41
3	As 188.979†	-21.9	9.1	3.4992	ug/L	3.4992 ppb	21:07:01
3	B 249.677†	-262.5	226.9	4.8352	ug/L	4.8352 ppb	21:07:01
3	Ba 233.527†	-1.8	9.3	0.0691	ug/L	0.0691 ppb	21:07:01
3	Be 313.107†	-4548.3	48.9	0.0175	ug/L	0.0175 ppb	21:06:41
3	Cd 226.502†	-209.0	-13.1	-0.1359	ug/L	-0.1359 ppb	21:07:01
3	Co 228.616†	-71.5	0.9	0.0177	ug/L	0.0177 ppb	21:07:01
3	Cr 267.716†	99.6	15.0	0.1611	ug/L	0.1611 ppb	21:07:01
3	Cu 324.752†	6743.3	82.6	0.2401	ug/L	0.2401 ppb	21:06:41
3	Mn 257.610†	532.0	19.5	0.0225	ug/L	0.0225 ppb	21:07:01
3	Mo 202.031†	21.3	3.1	0.2000	ug/L	0.2000 ppb	21:07:01
3	Ni 231.604†	85.6	0.9	0.0205	ug/L	0.0205 ppb	21:07:01
3	P 214.914†	217.1	-21.8	-12.192	ug/L	-12.192 ppb	21:07:01
3	Pb 220.353†	-57.8	9.4	1.0549	ug/L	1.0549 ppb	21:07:01
3	S 181.975 Axial†	49.5	0.8	1.0121	ug/L	1.0121 ppb	21:07:01
3	Sb 206.836†	38.3	1.5	0.4808	ug/L	0.4808 ppb	21:07:01
3	Se 196.026†	-23.0	3.4	1.9456	ug/L	1.9456 ppb	21:07:01
3	Si 251.611†	975.9	508.2	15.125	ug/L	15.125 ppb	21:07:01
3	Sn 189.927†	13.5	4.9	0.7894	ug/L	0.7894 ppb	21:07:01
3	Ti 334.940†	-1267.4	-29.4	-0.0408	ug/L	-0.0408 ppb	21:06:41
3	Tl 190.801†	-38.9	-4.9	-1.3867	ug/L	-1.3867 ppb	21:07:01
3	U 409.014†	-2970.1	-428.9	-12.331	ug/L	-12.331 ppb	21:06:41
3	V 292.402†	-1378.8	-36.0	-0.2627	ug/L	-0.2627 ppb	21:06:41
3	Zn 213.857†	807.0	64.8	0.5596	ug/L	0.5596 ppb	21:07:01
3	SiO2†	942.7	431.8	27.536	ug/L	27.536 ppb	21:07:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	855325.7	98.549	%	0.0431				0.04%
Sc Radial	5552.5	99.6	%	1.32				1.32%
Y 371.029	725929.3	99.516	%	0.2049				0.21%
Y RADIAL	6035.4	99.94	%	1.732				1.73%
Ag 328.068†	141.6	0.6474	ug/L	0.35232	0.6474	ppb	0.35232	54.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.5	12.065	ug/L	6.7316	12.065	ppb	6.7316	55.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.3860	ug/L	0.55734	3.3860	ppb	0.55734	16.46%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	232.6	4.9558	ug/L	0.42863	4.9558	ppb	0.42863	8.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.5	0.0555	ug/L	0.03169	0.0555	ppb	0.03169	57.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	110.5	0.0396	ug/L	0.02473	0.0396	ppb	0.02473	62.44%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.6	0.9045	ug/L	4.59993	0.9045	ppb	4.59993	508.53%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -9.4     -0.0979 ug/L       0.08761     -0.0979 ppb        0.08761  89.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.1      0.0032 ug/L       0.04039      0.0032 ppb        0.04039 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.9      0.0534 ug/L       0.11796      0.0534 ppb        0.11796 221.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                84.4      0.2453 ug/L       0.08815      0.2453 ppb        0.08815  35.94%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.3      2.2490 ug/L      17.43193      2.2490 ppb       17.43193 775.10%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         125.3      21.043 ug/L       12.0800      21.043 ppb        12.0800  57.41%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.8     -60.979 ug/L       29.8524     -60.979 ppb        29.8524  48.95%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                12.3      0.0144 ug/L       0.01093      0.0144 ppb        0.01093  75.98%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.7      0.3640 ug/L       0.14413      0.3640 ppb        0.14413  39.60%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -111.5     -33.792 ug/L       19.7303     -33.792 ppb        19.7303  58.39%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                17.7      0.4073 ug/L       0.39330      0.4073 ppb        0.39330  96.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.1     -8.5015 ug/L       4.18497     -8.5015 ppb        4.18497  49.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -0.1     -0.0045 ug/L       0.92049     -0.0045 ppb        0.92049 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.8      1.0874 ug/L       4.47882      1.0874 ppb        4.47882 411.90%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.8     -0.2511 ug/L       2.46744     -0.2511 ppb        2.46744 982.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.4      0.2134 ug/L       1.61967      0.2134 ppb        1.61967 759.15%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               901.6      26.842 ug/L       18.0977      26.842 ppb        18.0977  67.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.7     -0.4331 ug/L       1.19165     -0.4331 ppb        1.19165 275.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -16.3     -0.0982 ug/L       0.07026     -0.0982 ppb        0.07026  71.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -26.8     -0.0383 ug/L       0.03846     -0.0383 ppb        0.03846 100.43%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.0     -0.5628 ug/L       0.83307     -0.5628 ppb        0.83307 148.02%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -310.2     -8.9192 ug/L       3.70996     -8.9192 ppb        3.70996  41.60%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -54.0     -0.3733 ug/L       0.20749     -0.3733 ppb        0.20749  55.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                64.9      0.5577 ug/L       0.02351      0.5577 ppb        0.02351   4.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     428.8      27.342 ug/L        0.2607      27.342 ppb         0.2607   0.95%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 08, 2009 12:14:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1420
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	7284.7	7284.658	173.033	2.4
	Mg	24.0	60061.7	60061.712	2059.059	3.4
	Co	58.9	158942.6	158942.583	1686.378	1.1
	Rh	102.9	311119.2	311119.217	1716.347	0.6
	In	114.9	405143.7	405143.712	1793.513	0.4
	Pb	208.0	250960.4	250960.382	2944.999	1.2
⌈>	Ba	137.9	382380.2	382380.208	5414.019	1.4
⌊	Ba++	69.0	8329.3	0.022	0.000	1.4
⌈>	Ce	139.9	466717.1	466717.070	5925.086	1.3
⌊	CeO	155.9	12652.4	0.027	0.000	1.6
	Bkgd	220.0	22.6	22.600	3.209	14.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.8	7387.6
Co	59	15	6.8	162601.5
In	115	15	7.5	393283.0

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2060	0.660
Be	9.0	9.0	2042	2070	0.677
Mg	24.0	24.0	5679	2080	0.685
Mg	25.0	25.0	5919	2075	0.643
Mg	26.0	26.0	6187	2070	0.701
Co	58.9	58.9	14182	2110	0.663
Rh	102.9	102.9	24876	2160	0.666
In	114.9	114.9	27790	2180	0.661
Ce	139.9	139.9	33862	2195	0.685
Pb	206.0	206.0	49948	2290	0.674
Pb	207.0	207.0	50147	2260	0.631
Pb	208.0	208.0	50451	2280	0.677
U	238.1	238.1	57727	2285	0.720

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 21:26:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Blank.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		604976	
[	Tl	205		ug/L		2504	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Simple Linear	
Tl	205	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175					
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 21:30:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		606936	606935.547
⌊	Tl	205	10.000	ug/L	1.700	255469	0.417

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 21:34:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		592859	592859.053
⌊	Tl	205	99.765	ug/L	0.305	1998561	3.367

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 21:39:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		603349	603348.561
⌊	Tl	205	52.021	ug/L	0.605	1061726	1.756

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		99.7			
⌊	Tl	205	104.042				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 21:43:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		624617	624617.193
⌊	Tl	205	0.058	ug/L	5.951	3816	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		103.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 21:48:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		616815	616814.640
	Tl	205	1.259	ug/L	1.100	28767	0.043

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		102.0			
	Tl	205	125.933				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 21:52:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		531724	531724.265
⌊	Tl	205	-0.022	ug/L	11.360	1802	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		87.9			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 21:57:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		540486	540485.511
	Tl	205	22.895	ug/L	1.123	419849	0.773

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		89.3			
	Tl	205	114.473				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 22:01:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		593974	593973.642
	Tl	205	52.832	ug/L	1.743	1061489	1.783

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.2			
	Tl	205	105.665				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 22:06:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		615080	615079.717
	Tl	205	0.067	ug/L	5.282	3932	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		101.7			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985796
Sample Date/Time: Tuesday, December 08, 2009 22:10:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928677|2|ba|
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985796.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		631402	631401.605
⌊	Tl	205	0.005	ug/L	33.389	2727	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		104.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985797
Sample Date/Time: Tuesday, December 08, 2009 22:15:28
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928677|40|ba|
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985797.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		606122	606122.305
⌊	Tl	205	63.162	ug/L	1.615	1294333	2.132

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241832001
Sample Date/Time: Tuesday, December 08, 2009 22:19:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241832001.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		683761	683761.042
	Tl	205	1.689	ug/L	2.340	41785	0.057

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		113.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241832002
Sample Date/Time: Tuesday, December 08, 2009 22:24:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241832002.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		687426	687425.503
	Tl	205	0.134	ug/L	1.425	5963	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		113.6			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241832003
Sample Date/Time: Tuesday, December 08, 2009 22:28:58
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241832003.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		715376	715376.275
⌊	Tl	205	0.373	ug/L	2.942	11969	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		118.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241832004
Sample Date/Time: Tuesday, December 08, 2009 22:33:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241832004.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		675565	675565.247
⌊	Tl	205	0.175	ug/L	6.156	6773	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		111.7			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 22:42:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		603909	603908.578
	Tl	205	51.862	ug/L	1.129	1059480	1.750

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.8			
	Tl	205	103.723				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 22:47:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		598207	598207.357
⌊	Tl	205	0.046	ug/L	1.597	3413	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.9			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985798
Sample Date/Time: Tuesday, December 08, 2009 22:56:06
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985798.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		627941	627940.995
	Tl	205	2.544	ug/L	1.365	56507	0.086

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		103.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985799
Sample Date/Time: Tuesday, December 08, 2009 23:00:36
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985799.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		618204	618203.710
⌊	Tl	205	55.185	ug/L	0.781	1153896	1.862

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		102.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985801
Sample Date/Time: Tuesday, December 08, 2009 23:05:07
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928677|2|ba|
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985801.200

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		618865	618864.515
⌊	Tl	205	51.335	ug/L	1.234	1074723	1.733

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		102.3			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985800
Sample Date/Time: Tuesday, December 08, 2009 23:09:38
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928677|10|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985800.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		613242	613241.613
⌊	Tl	205	0.737	ug/L	2.595	17785	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		101.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 23:14:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		601637	601636.763
⌊	Tl	205	**52.130**	ug/L	1.479	1060891	1.759

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		99.4			
⌊	Tl	205	104.259				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 23:18:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		605841	605841.474
⌊	Tl	205	0.108	ug/L	1.316	4715	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.1			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #6 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Sunday, December 06, 2009 23:04:58
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\091119\Sample.846
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5345.4	5345.400	99.349	1.9
	Mg	24.0	47013.2	47013.236	391.376	0.8
	Co	58.9	65836.8	65836.774	756.429	1.1
	Rh	102.9	114744.0	114744.034	1479.892	1.3
	In	114.9	120459.4	120459.422	1780.502	1.5
	Pb	208.0	56369.6	56369.599	411.784	0.7
⌈>	Ba	137.9	103549.7	103549.682	1790.311	1.7
⌊	Ba++	69.0	4633.1	0.045	0.001	2.2
⌈>	Ce	139.9	138742.4	138742.403	2155.251	1.6
⌊	CeO	155.9	3793.0	0.027	0.000	1.3
	Bkgd	220.0	12.0	12.000	1.275	10.6

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
12.50	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	10.8	7201.5
Co	59	25	11.5	97042.5
In	115	25	12.8	141289.6

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	585	2080	0.656
Be	9.0	9.0	2037	2080	0.667
Mg	24.0	24.0	5692	2120	0.658
Mg	25.0	25.0	5899	2080	0.643
Mg	26.0	26.0	6189	2120	0.673
Co	58.9	58.9	14162	2170	0.642
Rh	102.9	102.9	24850	2230	0.694
In	114.9	114.9	27779	2260	0.681
Ce	139.9	140.0	33864	2280	0.739
Pb	206.0	206.0	49936	2430	0.650
Pb	207.0	207.0	50159	2385	0.687
Pb	208.0	208.0	50439	2430	0.706
U	238.1	238.0	57726	2470	0.700

Report Date/Time: Sunday, December 06, 2009 23:02:56

ICPMS#6 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 07, 2009 10:52:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\Blank.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		55	
	Be	9		ug/L		10	
	B	11		ug/L		424	
	Na	23		ug/L		48755	
	Mg	24		ug/L		8003	
	Al	27		ug/L		12005	
	P	31		ug/L		7542	
	K	39		ug/L		488901	
	Ca	43		ug/L		932	
>	Sc	45		ug/L		1540419	
	V	51		ug/L		11040	
	Cr	52		ug/L		-934	
	Cr	53		ug/L		167507	
	Mn	55		ug/L		1023	
	Fe	57		ug/L		5346	
	Co	59		ug/L		219	
	Ni	60		ug/L		99	
	Cu	63		ug/L		1627	
	Cu	65		ug/L		775	
	Zn	66		ug/L		355	
	Zn	67		ug/L		18151	
	Zn	68		ug/L		1441	
>	Ge	74		ug/L		286765	
	As	75		ug/L		104	
	Se	77		ug/L		5686	
	Se	82		ug/L		-36	
	Kr	83		ug/L		106	
	Sr	88		ug/L		202	
	Y	89		ug/L		45	
	Ag	107		ug/L		49	
	Cd	111		ug/L		20	
	Cd	114		ug/L		32	
>	In	115		ug/L		148892	
	Sn	120		ug/L		244	
	Sb	121		ug/L		456	
	Sb	123		ug/L		338	
	Ba	135		ug/L		27	
	Ba	137		ug/L		32	
	Ho	165		ug/L		32	
>	Lu	175		ug/L		155801	
	Tl	205		ug/L		4016	
	Pb	208		ug/L		403	
	Bi	209		ug/L		20	
	U	238		ug/L		161	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Linear Thru Zero	1.0000
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Simple Linear	
Bi	209	Simple Linear	
U	238	Simple Linear	

Sample ID: Blank

Report Date/Time: Monday, December 07, 2009 10:55:31

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Monday, December 07, 2009 10:55:31

ICPMS#6 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 07, 2009 10:58:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\Standard 1.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.143	20324	0.013
	Be	9	10.000	ug/L	1.142	5480	0.004
	B	11	20.000	ug/L	4.632	9781	0.006
	Na	23	1000.000	ug/L	11.436	2879277	1.859
	Mg	24	1000.000	ug/L	2.197	1904715	1.244
	Al	27	1000.000	ug/L	5.755	2446500	1.598
	P	31	1000.000	ug/L	0.747	223655	0.142
	K	39	1000.000	ug/L	4.430	3186219	1.773
	Ca	43	1000.000	ug/L	0.818	11398	0.007
>	Sc	45		ug/L		1524479	1524479.244
	V	51	10.000	ug/L	5.451	59517	0.032
	Cr	52	10.000	ug/L	0.285	40670	0.027
	Cr	53		ug/L		160982	-0.003
	Mn	55	10.000	ug/L	1.446	65305	0.042
	Fe	57	1000.000	ug/L	1.445	127839	0.080
	Co	59	10.000	ug/L	1.513	44641	0.029
	Ni	60	10.000	ug/L	1.817	9426	0.006
	Cu	63		ug/L		22130	0.013
	Cu	65	10.000	ug/L	0.348	10597	0.006
	Zn	66	10.000	ug/L	1.062	7259	0.024
	Zn	67		ug/L		17450	-0.002
	Zn	68		ug/L		6443	0.018
>	Ge	74		ug/L		283010	283010.142
	As	75	10.000	ug/L	1.535	7462	0.026
	Se	77		ug/L		5633	0.000
	Se	82	10.000	ug/L	7.059	664	0.002
	Kr	83		ug/L		95	-0.000
	Sr	88	10.000	ug/L	2.262	84346	0.574
	Y	89		ug/L		53	0.000
	Ag	107	10.000	ug/L	0.936	30757	0.209
	Cd	111	10.000	ug/L	0.322	7107	0.048
	Cd	114		ug/L		16369	0.111
>	In	115		ug/L		146620	146620.344
	Sn	120	10.000	ug/L	1.746	29489	0.200
	Sb	121	10.000	ug/L	4.526	25151	0.168
	Sb	123		ug/L		19206	0.129
	Ba	135		ug/L		6720	0.043
	Ba	137	10.000	ug/L	0.947	11723	0.076
	Ho	165		ug/L		26	-0.000
>	Lu	175		ug/L		154611	154611.482
	Tl	205	10.000	ug/L	3.399	41601	0.243
	Pb	208	10.000	ug/L	1.251	72238	0.465
	Bi	209		ug/L		31	0.000
	U	238	10.000	ug/L	1.575	72187	0.466

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, December 07, 2009 11:04:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\Standard 2.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.043**	**ug/L**	1.489	203217	0.139
	Be	9	**100.019**	**ug/L**	2.601	53497	0.037
	B	11	**200.087**	**ug/L**	2.864	94355	0.064
	Na	23	**10004.355**	**ug/L**	8.224	28458007	19.440
	Mg	24	**10010.622**	**ug/L**	2.261	20386662	13.935
	Al	27	**9997.290**	**ug/L**	6.012	22745517	15.550
	P	31	**9991.041**	**ug/L**	1.939	1909025	1.300
	K	39	**10012.484**	**ug/L**	4.381	30130142	20.286
	Ca	43	**10000.461**	**ug/L**	1.289	101855	0.069
>	Sc	45		**ug/L**		1462654	1462653.752
	V	51	**99.997**	**ug/L**	1.631	474922	0.318
	Cr	52	**99.998**	**ug/L**	1.140	397192	0.272
	Cr	53		**ug/L**		185508	0.018
	Mn	55	**99.967**	**ug/L**	1.306	598079	0.408
	Fe	57	**9993.554**	**ug/L**	0.714	1108861	0.755
	Co	59	**99.991**	**ug/L**	1.149	422612	0.289
	Ni	60	**99.980**	**ug/L**	0.843	87842	0.060
	Cu	63		**ug/L**		197798	0.134
	Cu	65	**99.997**	**ug/L**	1.994	94722	0.064
	Zn	66	**99.946**	**ug/L**	0.909	62772	0.231
	Zn	67		**ug/L**		26049	0.033
	Zn	68		**ug/L**		48021	0.173
>	Ge	74		**ug/L**		269827	269826.992
	As	75	**100.056**	**ug/L**	0.834	74447	0.276
	Se	77		**ug/L**		9546	0.016
	Se	82	**99.975**	**ug/L**	1.668	6470	0.024
	Kr	83		**ug/L**		110	0.000
	Sr	88	**99.978**	**ug/L**	0.841	778769	5.612
	Y	89		**ug/L**		126	0.001
	Ag	107	**99.993**	**ug/L**	2.116	288480	2.080
	Cd	111	**100.031**	**ug/L**	1.037	69262	0.499
	Cd	114		**ug/L**		155771	1.122
>	In	115		**ug/L**		138748	138747.524
	Sn	120	**100.014**	**ug/L**	1.457	280968	2.024
	Sb	121	**100.073**	**ug/L**	3.949	252694	1.820
	Sb	123		**ug/L**		192656	1.387
	Ba	135		**ug/L**		65026	0.436
	Ba	137	**100.016**	**ug/L**	2.700	114723	0.769
	Ho	165		**ug/L**		27	-0.000
>	Lu	175		**ug/L**		149233	149232.874
	Tl	205	**100.078**	**ug/L**	3.107	398099	2.643
	Pb	208	**99.972**	**ug/L**	1.892	674938	4.521
	Bi	209		**ug/L**		93	0.000
	U	238	**99.957**	**ug/L**	2.339	666449	4.467

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, December 07, 2009 11:10:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtlmozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 1.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.253**	**ug/L**	0.737	102616	0.070
	Be	9	**52.821**	**ug/L**	1.879	28397	0.019
	B	11	**110.199**	**ug/L**	1.999	52409	0.035
	Na	23	**5179.545**	**ug/L**	6.376	14837658	10.065
	Mg	24	**4853.119**	**ug/L**	5.294	9933597	6.756
	Al	27	**5661.858**	**ug/L**	11.919	12965416	8.807
	P	31	**5369.806**	**ug/L**	1.325	1034383	0.699
	K	39	**4831.159**	**ug/L**	3.821	14849239	9.788
	Ca	43	**5100.573**	**ug/L**	0.985	52641	0.035
>	Sc	45		**ug/L**		1469748	1469748.397
	V	51	**51.696**	**ug/L**	0.830	251827	0.164
	Cr	52	**53.084**	**ug/L**	1.541	211456	0.144
	Cr	53		**ug/L**		176681	0.011
	Mn	55	**52.181**	**ug/L**	0.650	314220	0.213
	Fe	57	**5186.501**	**ug/L**	1.503	580740	0.392
	Co	59	**50.452**	**ug/L**	0.822	214391	0.146
	Ni	60	**51.883**	**ug/L**	0.962	45852	0.031
	Cu	63		**ug/L**		103351	0.069
	Cu	65	**51.559**	**ug/L**	1.117	49442	0.033
	Zn	66	**47.735**	**ug/L**	1.043	30877	0.111
	Zn	67		**ug/L**		22637	0.019
	Zn	68		**ug/L**		24372	0.083
>	Ge	74		**ug/L**		276269	276269.237
	As	75	**45.966**	**ug/L**	1.106	35072	0.127
	Se	77		**ug/L**		7376	0.007
	Se	82	**48.441**	**ug/L**	2.124	3192	0.012
	Kr	83		**ug/L**		104	0.000
	Sr	88	**48.647**	**ug/L**	1.878	395262	2.731
	Y	89		**ug/L**		64	0.000
	Ag	107	**49.776**	**ug/L**	0.742	149811	1.035
	Cd	111	**47.314**	**ug/L**	1.909	34167	0.236
	Cd	114		**ug/L**		78230	0.541
>	In	115		**ug/L**		144661	144660.921
	Sn	120	**49.518**	**ug/L**	1.629	145187	1.002
	Sb	121	**48.792**	**ug/L**	1.299	128764	0.887
	Sb	123		**ug/L**		98574	0.679
	Ba	135		**ug/L**		33049	0.214
	Ba	137	**48.026**	**ug/L**	1.748	56881	0.369
	Ho	165		**ug/L**		44	0.000
>	Lu	175		**ug/L**		153976	153976.281
	Tl	205	**49.491**	**ug/L**	1.217	205209	1.307
	Pb	208	**50.852**	**ug/L**	1.782	354510	2.300
	Bi	209		**ug/L**		42	0.000
	U	238	**53.485**	**ug/L**	1.715	368111	2.390

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 1

Report Date/Time: Monday, December 07, 2009 11:13:07

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.506				
	Be	9	105.642				
	B	11	110.199				
	Na	23	103.591				
	Mg	24	97.062				
	Al	27	112.116				
	P	31	107.396				
	K	39	96.623				
	Ca	43	102.011				
>	Sc	45		95.4			
	V	51	103.392				
	Cr	52	106.169				
	Cr	53					
	Mn	55	104.363				
	Fe	57	103.730				
	Co	59	100.903				
	Ni	60	103.767				
	Cu	63					
	Cu	65	103.118				
	Zn	66	95.469				
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75	91.931				
	Se	77					
	Se	82	96.882				
	Kr	83					
	Sr	88	97.294				
	Y	89					
	Ag	107	99.552				
	Cd	111	94.628				
	Cd	114					
>	In	115		97.2			
	Sn	120	99.036				
	Sb	121	97.585				
	Sb	123					
	Ba	135					
	Ba	137	96.051				
	Ho	165					
>	Lu	175		98.8			
	Tl	205	98.982				
	Pb	208	101.705				
	Bi	209					
	U	238	106.969				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	B	11	ICV is out of limits (+/- 10%)
QC Std 1	Al	27	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 1

Report Date/Time: Monday, December 07, 2009 11:13:07

ICPMS#6 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, December 07, 2009 11:16:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 2.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.017**	**ug/L**	10.502	89	0.000
	Be	9	**0.003**	**ug/L**	351.461	11	0.000
	B	11	**1.605**	**ug/L**	16.940	1190	0.001
	Na	23	**1.865**	**ug/L**	183.690	53101	0.004
	Mg	24	**-0.076**	**ug/L**	1279.133	7669	-0.000
	Al	27	**-0.173**	**ug/L**	783.680	11338	-0.000
	P	31	**0.327**	**ug/L**	702.144	7436	0.000
	K	39	**-3.157**	**ug/L**	218.619	468228	-0.006
	Ca	43	**-2.271**	**ug/L**	181.266	887	-0.000
>	Sc	45		**ug/L**		1505474	1505473.674
	V	51	**-0.095**	**ug/L**	330.521	10342	-0.000
	Cr	52	**-0.062**	**ug/L**	18.853	-1168	-0.000
	Cr	53		**ug/L**		157169	-0.004
	Mn	55	**-0.001**	**ug/L**	567.286	996	-0.000
	Fe	57	**1.396**	**ug/L**	15.251	5384	0.000
	Co	59	**0.009**	**ug/L**	35.795	252	0.000
	Ni	60	**0.010**	**ug/L**	43.875	106	0.000
	Cu	63		**ug/L**		1617	0.000
	Cu	65	**0.012**	**ug/L**	1017.414	770	0.000
	Zn	66	**-0.055**	**ug/L**	21.179	313	-0.000
	Zn	67		**ug/L**		17071	-0.003
	Zn	68		**ug/L**		1327	-0.000
>	Ge	74		**ug/L**		281871	281870.866
	As	75	**0.240**	**ug/L**	142.426	287	0.001
	Se	77		**ug/L**		5227	-0.001
	Se	82	**0.124**	**ug/L**	91.420	-27	0.000
	Kr	83		**ug/L**		98	-0.000
	Sr	88	**0.002**	**ug/L**	81.030	215	0.000
	Y	89		**ug/L**		44	-0.000
	Ag	107	**0.004**	**ug/L**	83.049	59	0.000
	Cd	111	**0.004**	**ug/L**	85.075	23	0.000
	Cd	114		**ug/L**		39	0.000
>	In	115		**ug/L**		145535	145535.398
	Sn	120	**0.038**	**ug/L**	25.109	350	0.001
	Sb	121	**0.692**	**ug/L**	24.288	2276	0.013
	Sb	123		**ug/L**		1764	0.010
	Ba	135		**ug/L**		25	-0.000
	Ba	137	**0.009**	**ug/L**	27.995	42	0.000
	Ho	165		**ug/L**		26	-0.000
>	Lu	175		**ug/L**		153508	153507.644
	Tl	205	**0.837**	**ug/L**	15.179	7353	0.022
	Pb	208	**-0.001**	**ug/L**	393.793	393	-0.000
	Bi	209		**ug/L**		20	-0.000
	U	238	**0.045**	**ug/L**	11.818	465	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, December 07, 2009 11:22:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 3.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**9.791**	**ug/L**	2.051	20477	0.014
	Be	9	**0.462**	**ug/L**	6.478	264	0.000
	B	11	**14.891**	**ug/L**	3.168	7596	0.005
	Na	23	**350.274**	**ug/L**	12.304	1070726	0.681
	Mg	24	**22.431**	**ug/L**	19.878	54774	0.031
	Al	27	**44.676**	**ug/L**	11.587	116141	0.069
	P	31	**49.850**	**ug/L**	1.446	17101	0.006
	K	39	**379.558**	**ug/L**	10.169	1631321	0.769
	Ca	43	**193.696**	**ug/L**	4.009	2918	0.001
>	Sc	45		**ug/L**		1502252	1502252.060
	V	51	**9.422**	**ug/L**	2.616	55709	0.030
	Cr	52	**9.821**	**ug/L**	2.635	39241	0.027
	Cr	53		**ug/L**		153688	-0.006
	Mn	55	**5.221**	**ug/L**	0.598	33028	0.021
	Fe	57	**101.585**	**ug/L**	4.313	16735	0.008
	Co	59	**0.964**	**ug/L**	4.227	4394	0.003
	Ni	60	**2.109**	**ug/L**	1.842	1997	0.001
	Cu	63		**ug/L**		3035	0.001
	Cu	65	**0.708**	**ug/L**	3.018	1440	0.000
	Zn	66	**10.334**	**ug/L**	3.020	7074	0.024
	Zn	67		**ug/L**		16866	-0.003
	Zn	68		**ug/L**		6181	0.017
>	Ge	74		**ug/L**		281161	281160.679
	As	75	**4.998**	**ug/L**	5.344	3970	0.014
	Se	77		**ug/L**		5133	-0.002
	Se	82	**5.056**	**ug/L**	3.713	308	0.001
	Kr	83		**ug/L**		98	-0.000
	Sr	88	**9.960**	**ug/L**	1.620	82943	0.559
	Y	89		**ug/L**		35	-0.000
	Ag	107	**0.899**	**ug/L**	4.122	2815	0.019
	Cd	111	**0.955**	**ug/L**	6.327	725	0.005
	Cd	114		**ug/L**		1601	0.011
>	In	115		**ug/L**		147993	147993.300
	Sn	120	**4.506**	**ug/L**	1.534	13736	0.091
	Sb	121	**2.482**	**ug/L**	4.147	7134	0.045
	Sb	123		**ug/L**		5383	0.034
	Ba	135		**ug/L**		1312	0.008
	Ba	137	**1.847**	**ug/L**	2.711	2239	0.014
	Ho	165		**ug/L**		26	-0.000
>	Lu	175		**ug/L**		155495	155494.654
	Tl	205	**0.920**	**ug/L**	5.415	7783	0.024
	Pb	208	**1.996**	**ug/L**	2.003	14438	0.090
	Bi	209		**ug/L**		24	0.000
	U	238	**0.209**	**ug/L**	3.088	1612	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 3
Report Date/Time: Monday, December 07, 2009 11:24:57

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.912				
	Be	9	92.459				
	B	11	99.274				
	Na	23	140.110				
	Mg	24	149.541				
	Al	27	148.919				
	P	31	99.699				
	K	39	126.519				
	Ca	43	96.848				
>	Sc	45		97.5			
	V	51	94.220				
	Cr	52	98.207				
	Cr	53					
	Mn	55	104.412				
	Fe	57	101.585				
	Co	59	96.354				
	Ni	60	105.437				
	Cu	63					
	Cu	65	70.844				
	Zn	66	103.344				
	Zn	67					
	Zn	68					
>	Ge	74		98.0			
	As	75	99.957				
	Se	77					
	Se	82	101.111				
	Kr	83					
	Sr	88	99.598				
	Y	89					
	Ag	107	89.883				
	Cd	111	95.479				
	Cd	114					
>	In	115		99.4			
	Sn	120	90.117				
	Sb	121	82.743				
	Sb	123					
	Ba	135					
	Ba	137	92.334				
	Ho	165					
>	Lu	175		99.8			
	Tl	205	91.955				
	Pb	208	99.803				
	Bi	209					
	U	238	104.500				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Na	23	CRDL is out of limits
QC Std 3	Mg	24	CRDL is out of limits
QC Std 3	Al	27	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, December 07, 2009 11:28:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 4.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.151**	**ug/L**	24.941	336	0.000
	Be	9	**0.053**	**ug/L**	18.183	35	0.000
	B	11	**0.941**	**ug/L**	4.639	793	0.000
	Na	23	**86092.409**	**ug/L**	4.429	229828160	167.290
	Mg	24	**82903.706**	**ug/L**	6.732	158493229	115.407
	Al	27	**97376.906**	**ug/L**	6.647	208012942	151.462
	P	31	**63949.543**	**ug/L**	1.825	11437209	8.324
	K	39	**83435.102**	**ug/L**	3.142	232666854	169.049
	Ca	43	**86884.784**	**ug/L**	0.630	824747	0.600
>	Sc	45		**ug/L**		1373606	1373605.751
	V	51	**-0.767**	**ug/L**	31.410	6494	-0.002
	Cr	52	**2.855**	**ug/L**	4.539	9836	0.008
	Cr	53		**ug/L**		118264	-0.023
	Mn	55	**5.639**	**ug/L**	2.083	32541	0.023
	Fe	57	**53409.635**	**ug/L**	0.877	5544379	4.033
	Co	59	**0.334**	**ug/L**	3.691	1522	0.001
	Ni	60	**3.285**	**ug/L**	2.856	2796	0.002
	Cu	63		**ug/L**		8523	0.005
	Cu	65	**5.055**	**ug/L**	0.941	5154	0.003
	Zn	66	**4.518**	**ug/L**	3.643	2977	0.010
	Zn	67		**ug/L**		14401	-0.007
	Zn	68		**ug/L**		1562	0.001
>	Ge	74		**ug/L**		254461	254461.421
	As	75	**-0.179**	**ug/L**	287.265	-33	-0.000
	Se	77		**ug/L**		5760	0.003
	Se	82	**-0.982**	**ug/L**	28.910	-92	-0.000
	Kr	83		**ug/L**		208	0.000
	Sr	88	**1.168**	**ug/L**	1.602	8742	0.066
	Y	89		**ug/L**		308	0.002
	Ag	107	**0.392**	**ug/L**	37.262	1115	0.008
	Cd	111	**1.525**	**ug/L**	36.410	1017	0.008
	Cd	114		**ug/L**		5242	0.040
>	In	115		**ug/L**		130631	130630.973
	Sn	120	**0.104**	**ug/L**	3.311	490	0.002
	Sb	121	**0.170**	**ug/L**	20.172	805	0.003
	Sb	123		**ug/L**		608	0.002
	Ba	135		**ug/L**		413	0.003
	Ba	137	**0.593**	**ug/L**	1.010	687	0.005
	Ho	165		**ug/L**		347	0.002
>	Lu	175		**ug/L**		144375	144375.169
	Tl	205	**-0.229**	**ug/L**	11.208	2849	-0.006
	Pb	208	**0.174**	**ug/L**	2.355	1510	0.008
	Bi	209		**ug/L**		215	0.001
	U	238	**-0.006**	**ug/L**	23.973	109	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 4

Report Date/Time: Monday, December 07, 2009 11:30:51

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23	86.092				
|	Mg	24	82.904				
|	Al	27	97.377				
|	P	31	63.950				
|	K	39	83.435				
|	Ca	43	86.885				
|>	Sc	45			89.2		
|	V	51					
|	Cr	52	77.161				
|	Cr	53					
|	Mn	55	97.222				
|	Fe	57	53.410				
|	Co	59	133.724				
|	Ni	60	121.655				
|	Cu	63					
⌊	Cu	65	174.314				
⌈	Zn	66	125.491				
|	Zn	67					
|	Zn	68					
|>	Ge	74			88.7		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	97.357				
|	Y	89					
|	Ag	107					
|	Cd	111	381.217				
|	Cd	114					
|>	In	115			87.7		
|	Sn	120					
|	Sb	121	169.941				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	88.487				
|	Ho	165					
|>	Lu	175			92.7		
|	Tl	205					
|	Pb	208	87.057				
|	Bi	209					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	P	31	ICSA is out of limits
QC Std 4	Fe	57	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, December 07, 2009 11:34:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 5.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.271**	**ug/L**	2.079	39505	0.030
	Be	9	**20.474**	**ug/L**	1.872	10011	0.007
	B	11	**20.645**	**ug/L**	3.493	9223	0.007
	Na	23	**92536.553**	**ug/L**	5.513	240215874	179.812
	Mg	24	**84986.870**	**ug/L**	0.516	158075041	118.307
	Al	27	**107636.791**	**ug/L**	2.195	223679978	167.420
	P	31	**67413.525**	**ug/L**	0.414	11729238	8.774
	K	39	**90155.073**	**ug/L**	3.485	244408112	182.664
	Ca	43	**90436.206**	**ug/L**	0.481	834942	0.624
>	Sc	45		**ug/L**		1336050	1336049.777
	V	51	**21.818**	**ug/L**	1.898	102132	0.069
	Cr	52	**24.540**	**ug/L**	1.131	88425	0.067
	Cr	53		**ug/L**		123638	-0.016
	Mn	55	**27.172**	**ug/L**	0.313	149160	0.111
	Fe	57	**54993.605**	**ug/L**	0.818	5552912	4.153
	Co	59	**20.554**	**ug/L**	0.841	79517	0.059
	Ni	60	**23.059**	**ug/L**	1.643	18571	0.014
	Cu	63		**ug/L**		42901	0.031
	Cu	65	**24.910**	**ug/L**	1.702	22065	0.016
	Zn	66	**24.108**	**ug/L**	0.356	14120	0.056
	Zn	67		**ug/L**		15692	0.000
	Zn	68		**ug/L**		9731	0.034
>	Ge	74		**ug/L**		247462	247462.448
	As	75	**21.513**	**ug/L**	0.918	14751	0.059
	Se	77		**ug/L**		6679	0.007
	Se	82	**21.227**	**ug/L**	4.462	1236	0.005
	Kr	83		**ug/L**		210	0.000
	Sr	88	**22.913**	**ug/L**	1.164	165929	1.286
	Y	89		**ug/L**		289	0.002
	Ag	107	**19.226**	**ug/L**	1.127	51581	0.400
	Cd	111	**20.423**	**ug/L**	1.352	13151	0.102
	Cd	114		**ug/L**		34529	0.268
>	In	115		**ug/L**		128880	128880.159
	Sn	120	**20.355**	**ug/L**	1.108	53293	0.412
	Sb	121	**20.811**	**ug/L**	2.954	49146	0.378
	Sb	123		**ug/L**		38000	0.293
	Ba	135		**ug/L**		12772	0.091
	Ba	137	**20.640**	**ug/L**	0.997	22150	0.159
	Ho	165		**ug/L**		332	0.002
>	Lu	175		**ug/L**		139426	139425.521
	Tl	205	**16.389**	**ug/L**	5.308	63920	0.433
	Pb	208	**19.917**	**ug/L**	0.964	125941	0.901
	Bi	209		**ug/L**		317	0.002
	U	238	**22.167**	**ug/L**	2.136	138247	0.991

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	106.353				
	Be	9	102.369				
	B	11	103.223				
	Na	23	92.537				
	Mg	24	84.987				
	Al	27	107.637				
	P	31	67.414				
	K	39	90.155				
	Ca	43	90.436				
>	Sc	45		86.7			
	V	51	109.088				
	Cr	52	103.542				
	Cr	53					
	Mn	55	105.319				
	Fe	57	54.994				
	Co	59	101.503				
	Ni	60	101.580				
	Cu	63					
	Cu	65	108.775				
	Zn	66	102.152				
	Zn	67					
	Zn	68					
>	Ge	74		86.3			
	As	75	107.565				
	Se	77					
	Se	82	106.133				
	Kr	83					
	Sr	88	108.080				
	Y	89					
	Ag	107	96.128				
	Cd	111	100.114				
	Cd	114					
>	In	115		86.6			
	Sn	120	101.773				
	Sb	121	103.539				
	Sb	123					
	Ba	135					
	Ba	137	99.856				
	Ho	165					
>	Lu	175		89.5			
	Tl	205	81.947				
	Pb	208	98.600				
	Bi	209					
	U	238	110.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	P	31	ICSAB is out of limits
QC Std 5	Fe	57	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 11:40:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.473**	**ug/L**	1.539	102565	0.071
	Be	9	**51.943**	**ug/L**	0.764	27255	0.019
	B	11	**107.227**	**ug/L**	1.135	49781	0.034
	Na	23	**5051.494**	**ug/L**	4.355	14120798	9.816
	Mg	24	**4815.696**	**ug/L**	2.279	9623223	6.704
	Al	27	**5433.779**	**ug/L**	4.510	12130746	8.452
	P	31	**5296.668**	**ug/L**	1.603	995747	0.689
	K	39	**4422.012**	**ug/L**	2.589	13306040	8.959
	Ca	43	**4957.622**	**ug/L**	1.399	49959	0.034
>	Sc	45		**ug/L**		1434260	1434260.329
	V	51	**52.024**	**ug/L**	1.359	247214	0.165
	Cr	52	**52.821**	**ug/L**	0.878	205338	0.144
	Cr	53		**ug/L**		167413	0.008
	Mn	55	**51.616**	**ug/L**	1.285	303292	0.211
	Fe	57	**5236.336**	**ug/L**	0.812	572113	0.395
	Co	59	**50.253**	**ug/L**	1.946	208383	0.145
	Ni	60	**50.323**	**ug/L**	2.679	43401	0.030
	Cu	63		**ug/L**		98255	0.067
	Cu	65	**50.474**	**ug/L**	1.687	47248	0.032
	Zn	66	**47.509**	**ug/L**	2.153	29640	0.110
	Zn	67		**ug/L**		21711	0.018
	Zn	68		**ug/L**		23414	0.083
>	Ge	74		**ug/L**		266515	266514.694
	As	75	**45.295**	**ug/L**	2.887	33330	0.125
	Se	77		**ug/L**		7363	0.008
	Se	82	**48.255**	**ug/L**	2.195	3066	0.012
	Kr	83		**ug/L**		81	-0.000
	Sr	88	**48.539**	**ug/L**	0.987	382058	2.725
	Y	89		**ug/L**		70	0.000
	Ag	107	**49.903**	**ug/L**	2.116	145502	1.038
	Cd	111	**47.476**	**ug/L**	0.820	33218	0.237
	Cd	114		**ug/L**		76699	0.547
>	In	115		**ug/L**		140146	140145.806
	Sn	120	**48.844**	**ug/L**	1.656	138747	0.988
	Sb	121	**47.732**	**ug/L**	4.011	122042	0.868
	Sb	123		**ug/L**		93940	0.668
	Ba	135		**ug/L**		31853	0.210
	Ba	137	**47.313**	**ug/L**	1.575	55274	0.364
	Ho	165		**ug/L**		37	0.000
>	Lu	175		**ug/L**		151895	151894.830
	Tl	205	**49.073**	**ug/L**	2.030	200727	1.296
	Pb	208	**49.885**	**ug/L**	0.906	343074	2.256
	Bi	209		**ug/L**		35	0.000
	U	238	**52.799**	**ug/L**	0.935	358540	2.359

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.947				
	Be	9	103.887				
	B	11	107.227				
	Na	23	101.030				
	Mg	24	96.314				
	Al	27	107.600				
	P	31	105.933				
	K	39	88.440				
	Ca	43	99.152				
>	Sc	45		93.1			
	V	51	104.049				
	Cr	52	105.643				
	Cr	53					
	Mn	55	103.233				
	Fe	57	104.727				
	Co	59	100.505				
	Ni	60	100.647				
	Cu	63					
	Cu	65	100.948				
	Zn	66	95.018				
	Zn	67					
	Zn	68					
>	Ge	74		92.9			
	As	75	90.590				
	Se	77					
	Se	82	96.509				
	Kr	83					
	Sr	88	97.077				
	Y	89					
	Ag	107	99.807				
	Cd	111	94.952				
	Cd	114					
>	In	115		94.1			
	Sn	120	97.688				
	Sb	121	95.463				
	Sb	123					
	Ba	135					
	Ba	137	94.626				
	Ho	165					
>	Lu	175		97.5			
	Tl	205	98.147				
	Pb	208	99.770				
	Bi	209					
	U	238	105.599				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 11:46:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	**ug/L**	18.259	107	0.000
	Be	9	**0.004**	**ug/L**	152.864	12	0.000
	B	11	**1.062**	**ug/L**	29.932	912	0.000
	Na	23	**3.426**	**ug/L**	73.360	56781	0.007
	Mg	24	**-0.333**	**ug/L**	17.117	7002	-0.000
	Al	27	**1.795**	**ug/L**	34.548	15675	0.003
	P	31	**-0.636**	**ug/L**	100.676	7126	-0.000
	K	39	**8.342**	**ug/L**	140.531	494783	0.017
	Ca	43	**-5.075**	**ug/L**	84.701	843	-0.000
>	Sc	45		**ug/L**		1480233	1480232.648
	V	51	**0.432**	**ug/L**	26.885	12636	0.001
	Cr	52	**0.044**	**ug/L**	76.551	-721	0.000
	Cr	53		**ug/L**		151451	-0.006
	Mn	55	**-0.002**	**ug/L**	257.718	973	-0.000
	Fe	57	**3.828**	**ug/L**	22.802	5564	0.000
	Co	59	**-0.003**	**ug/L**	53.066	196	-0.000
	Ni	60	**0.004**	**ug/L**	395.841	99	0.000
	Cu	63		**ug/L**		1168	-0.000
	Cu	65	**-0.181**	**ug/L**	23.974	573	-0.000
	Zn	66	**-0.001**	**ug/L**	1357.781	341	-0.000
	Zn	67		**ug/L**		16724	-0.003
	Zn	68		**ug/L**		1256	-0.000
>	Ge	74		**ug/L**		275204	275203.764
	As	75	**0.301**	**ug/L**	156.431	327	0.001
	Se	77		**ug/L**		5345	-0.000
	Se	82	**0.105**	**ug/L**	166.624	-27	0.000
	Kr	83		**ug/L**		98	-0.000
	Sr	88	**0.002**	**ug/L**	61.359	214	0.000
	Y	89		**ug/L**		40	-0.000
	Ag	107	**0.006**	**ug/L**	102.946	64	0.000
	Cd	111	**-0.004**	**ug/L**	263.804	16	-0.000
	Cd	114		**ug/L**		46	0.000
>	In	115		**ug/L**		143614	143613.962
	Sn	120	**0.017**	**ug/L**	16.493	285	0.000
	Sb	121	**0.510**	**ug/L**	23.735	1772	0.009
	Sb	123		**ug/L**		1381	0.007
	Ba	135		**ug/L**		32	0.000
	Ba	137	**0.003**	**ug/L**	288.526	34	0.000
	Ho	165		**ug/L**		25	-0.000
>	Lu	175		**ug/L**		151807	151807.243
	Tl	205	**0.619**	**ug/L**	27.263	6390	0.016
	Pb	208	**-0.003**	**ug/L**	49.387	373	-0.000
	Bi	209		**ug/L**		19	-0.000
	U	238	**0.039**	**ug/L**	27.942	423	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Monday, December 07, 2009 11:48:35

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.1			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.4			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985796
Sample Date/Time: Monday, December 07, 2009 11:51:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928677|2|rm|
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985796.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.154**	**ug/L**	8.516	394	0.000
	Be	9	**0.011**	**ug/L**	74.104	16	0.000
	B	11	**3.292**	**ug/L**	2.409	2099	0.001
	Na	23	**810.576**	**ug/L**	8.900	2529300	1.575
	Mg	24	**221.176**	**ug/L**	8.707	493069	0.308
	Al	27	**14.221**	**ug/L**	16.742	47078	0.022
	P	31	**40.879**	**ug/L**	2.528	16093	0.005
	K	39	**222.648**	**ug/L**	1.140	1210547	0.451
	Ca	43	**818.270**	**ug/L**	0.350	9851	0.006
>	Sc	45		**ug/L**		1575175	1575175.345
	V	51	**0.272**	**ug/L**	225.367	12625	0.001
	Cr	52	**0.622**	**ug/L**	9.231	1709	0.002
	Cr	53		**ug/L**		108022	-0.040
	Mn	55	**0.686**	**ug/L**	0.781	5457	0.003
	Fe	57	**21.283**	**ug/L**	6.691	8000	0.002
	Co	59	**0.011**	**ug/L**	29.759	275	0.000
	Ni	60	**0.248**	**ug/L**	4.863	336	0.000
	Cu	63		**ug/L**		4267	0.002
	Cu	65	**1.297**	**ug/L**	3.740	2106	0.001
	Zn	66	**3.347**	**ug/L**	1.517	2621	0.008
	Zn	67		**ug/L**		11235	-0.025
	Zn	68		**ug/L**		2655	0.004
>	Ge	74		**ug/L**		291638	291637.673
	As	75	**-0.075**	**ug/L**	582.684	45	-0.000
	Se	77		**ug/L**		3385	-0.008
	Se	82	**0.125**	**ug/L**	279.019	-27	0.000
	Kr	83		**ug/L**		89	-0.000
	Sr	88	**2.454**	**ug/L**	0.916	21327	0.138
	Y	89		**ug/L**		112	0.000
	Ag	107	**0.006**	**ug/L**	65.412	70	0.000
	Cd	111	**0.026**	**ug/L**	47.240	40	0.000
	Cd	114		**ug/L**		67	0.000
>	In	115		**ug/L**		153293	153293.323
	Sn	120	**0.156**	**ug/L**	4.323	735	0.003
	Sb	121	**0.069**	**ug/L**	18.464	663	0.001
	Sb	123		**ug/L**		521	0.001
	Ba	135		**ug/L**		540	0.003
	Ba	137	**0.715**	**ug/L**	4.452	934	0.005
	Ho	165		**ug/L**		25	-0.000
>	Lu	175		**ug/L**		164038	164038.326
	Tl	205	**0.602**	**ug/L**	22.351	6842	0.016
	Pb	208	**0.115**	**ug/L**	7.175	1277	0.005
	Bi	209		**ug/L**		49	0.000
	U	238	**0.063**	**ug/L**	10.713	628	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985797
Sample Date/Time: Monday, December 07, 2009 11:57:50
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928677|40|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985797.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.335**	**ug/L**	2.649	4864	0.003
	Be	9	**25.320**	**ug/L**	1.465	13744	0.009
	B	11	**39.244**	**ug/L**	3.946	19099	0.013
	Na	23	**276.951**	**ug/L**	11.720	844752	0.538
	Mg	24	**849.557**	**ug/L**	7.800	1762597	1.183
	Al	27	**2878.276**	**ug/L**	5.510	6650822	4.477
	P	31	**215.720**	**ug/L**	2.711	48910	0.028
	K	39	**635.312**	**ug/L**	8.475	2379547	1.287
	Ca	43	**1046.917**	**ug/L**	1.100	11619	0.007
>	Sc	45		**ug/L**		1483393	1483393.185
	V	51	**38.996**	**ug/L**	1.646	194323	0.124
	Cr	52	**20.250**	**ug/L**	0.539	80866	0.055
	Cr	53		**ug/L**		133653	-0.019
	Mn	55	**101.578**	**ug/L**	0.375	616405	0.415
	Fe	57	**3140.821**	**ug/L**	0.084	356992	0.237
	Co	59	**23.905**	**ug/L**	0.614	102640	0.069
	Ni	60	**29.556**	**ug/L**	1.426	26405	0.018
	Cu	63		**ug/L**		56706	0.037
	Cu	65	**27.838**	**ug/L**	2.086	27290	0.018
	Zn	66	**56.102**	**ug/L**	0.561	35751	0.130
	Zn	67		**ug/L**		19307	0.008
	Zn	68		**ug/L**		29465	0.103
>	Ge	74		**ug/L**		272633	272632.782
	As	75	**68.385**	**ug/L**	0.355	51444	0.188
	Se	77		**ug/L**		6589	0.004
	Se	82	**49.180**	**ug/L**	2.908	3198	0.012
	Kr	83		**ug/L**		87	-0.000
	Sr	88	**47.188**	**ug/L**	0.606	379658	2.649
	Y	89		**ug/L**		34588	0.241
	Ag	107	**12.672**	**ug/L**	0.550	37801	0.264
	Cd	111	**34.031**	**ug/L**	2.223	24344	0.170
	Cd	114		**ug/L**		56108	0.391
>	In	115		**ug/L**		143248	143247.665
	Sn	120	**14.926**	**ug/L**	0.632	43502	0.302
	Sb	121	**3.529**	**ug/L**	0.152	9630	0.064
	Sb	123		**ug/L**		7309	0.049
	Ba	135		**ug/L**		87767	0.579
	Ba	137	**131.420**	**ug/L**	1.020	153117	1.010
	Ho	165		**ug/L**		1346	0.009
>	Lu	175		**ug/L**		151521	151520.834
	Tl	205	**51.815**	**ug/L**	7.434	211176	1.368
	Pb	208	**48.095**	**ug/L**	0.814	329973	2.175
	Bi	209		**ug/L**		492	0.003
	U	238	**0.546**	**ug/L**	2.217	3854	0.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985797
Sample Date/Time: Monday, December 07, 2009 12:03:43
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928677|20|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985797.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.907**	**ug/L**	0.909	9718	0.007
	Be	9	**53.275**	**ug/L**	2.018	27648	0.019
	B	11	**82.550**	**ug/L**	3.296	37995	0.027
	Na	23	**570.546**	**ug/L**	5.145	1617830	1.109
	Mg	24	**1828.419**	**ug/L**	8.931	3616672	2.545
	Al	27	**5816.620**	**ug/L**	0.439	12847442	9.047
	P	31	**431.719**	**ug/L**	2.637	86662	0.056
	K	39	**1344.132**	**ug/L**	8.905	4312592	2.723
	Ca	43	**2101.071**	**ug/L**	0.692	21439	0.015
>	Sc	45		**ug/L**		1418790	1418789.869
	V	51	**79.806**	**ug/L**	1.196	369727	0.253
	Cr	52	**41.200**	**ug/L**	0.735	158250	0.112
	Cr	53		**ug/L**		137345	-0.012
	Mn	55	**199.478**	**ug/L**	0.505	1156850	0.815
	Fe	57	**6383.250**	**ug/L**	0.618	688824	0.482
	Co	59	**48.703**	**ug/L**	1.096	199786	0.141
	Ni	60	**59.451**	**ug/L**	2.018	50703	0.036
	Cu	63		**ug/L**		108250	0.075
	Cu	65	**57.043**	**ug/L**	1.307	52728	0.037
	Zn	66	**115.515**	**ug/L**	0.812	69553	0.267
	Zn	67		**ug/L**		24954	0.033
	Zn	68		**ug/L**		55547	0.210
>	Ge	74		**ug/L**		258844	258844.223
	As	75	**140.116**	**ug/L**	1.293	99975	0.386
	Se	77		**ug/L**		8689	0.014
	Se	82	**97.995**	**ug/L**	1.945	6082	0.024
	Kr	83		**ug/L**		97	0.000
	Sr	88	**93.336**	**ug/L**	2.756	712791	5.240
	Y	89		**ug/L**		66489	0.488
	Ag	107	**25.912**	**ug/L**	2.007	73356	0.539
	Cd	111	**70.131**	**ug/L**	2.923	47609	0.350
	Cd	114		**ug/L**		110773	0.814
>	In	115		**ug/L**		136072	136071.784
	Sn	120	**30.605**	**ug/L**	2.248	84461	0.619
	Sb	121	**7.237**	**ug/L**	1.067	18320	0.132
	Sb	123		**ug/L**		14138	0.102
	Ba	135		**ug/L**		171485	1.161
	Ba	137	**262.536**	**ug/L**	0.720	298193	2.018
	Ho	165		**ug/L**		2601	0.017
>	Lu	175		**ug/L**		147740	147739.530
	Tl	205	**111.147**	**ug/L**	7.210	437242	2.935
	Pb	208	**96.040**	**ug/L**	0.376	642086	4.343
	Bi	209		**ug/L**		980	0.007
	U	238	**1.091**	**ug/L**	1.536	7356	0.049

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			92.1		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			90.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			94.8		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 12:09:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.151**	**ug/L**	0.274	102025	0.072
	Be	9	**52.930**	**ug/L**	1.168	27264	0.019
	B	11	**109.978**	**ug/L**	2.352	50114	0.035
	Na	23	**5464.375**	**ug/L**	7.875	14991513	10.618
	Mg	24	**5088.728**	**ug/L**	10.350	9982603	7.084
	Al	27	**5614.457**	**ug/L**	8.890	12306233	8.733
	P	31	**5393.722**	**ug/L**	1.479	995364	0.702
	K	39	**5324.600**	**ug/L**	14.138	15626234	10.788
	Ca	43	**5079.134**	**ug/L**	1.879	50227	0.035
>	Sc	45		**ug/L**		1408117	1408116.630
	V	51	**51.937**	**ug/L**	0.747	242341	0.165
	Cr	52	**53.158**	**ug/L**	0.800	202901	0.145
	Cr	53		**ug/L**		162810	0.007
	Mn	55	**52.042**	**ug/L**	0.851	300218	0.213
	Fe	57	**5283.015**	**ug/L**	1.306	566639	0.399
	Co	59	**50.291**	**ug/L**	1.337	204740	0.145
	Ni	60	**50.258**	**ug/L**	2.772	42557	0.030
	Cu	63		**ug/L**		97450	0.068
	Cu	65	**51.124**	**ug/L**	0.104	46978	0.033
	Zn	66	**48.363**	**ug/L**	0.419	29440	0.112
	Zn	67		**ug/L**		20710	0.016
	Zn	68		**ug/L**		23048	0.084
>	Ge	74		**ug/L**		260024	260023.538
	As	75	**46.003**	**ug/L**	0.167	33038	0.127
	Se	77		**ug/L**		7150	0.008
	Se	82	**48.344**	**ug/L**	1.835	2998	0.012
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**48.469**	**ug/L**	1.207	373193	2.721
	Y	89		**ug/L**		63	0.000
	Ag	107	**50.429**	**ug/L**	1.964	143828	1.049
	Cd	111	**46.654**	**ug/L**	0.955	31934	0.233
	Cd	114		**ug/L**		74737	0.545
>	In	115		**ug/L**		137096	137095.553
	Sn	120	**50.008**	**ug/L**	0.627	138963	1.012
	Sb	121	**47.999**	**ug/L**	2.635	120062	0.873
	Sb	123		**ug/L**		92253	0.671
	Ba	135		**ug/L**		31234	0.211
	Ba	137	**48.143**	**ug/L**	1.558	54835	0.370
	Ho	165		**ug/L**		33	0.000
>	Lu	175		**ug/L**		148094	148094.175
	Tl	205	**51.892**	**ug/L**	1.718	206768	1.370
	Pb	208	**50.570**	**ug/L**	0.481	339083	2.287
	Bi	209		**ug/L**		51	0.000
	U	238	**53.786**	**ug/L**	0.804	356082	2.403

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.302				
	Be	9	105.860				
	B	11	109.978				
	Na	23	109.287				
	Mg	24	101.775				
	Al	27	111.177				
	P	31	107.874				
	K	39	106.492				
	Ca	43	101.583				
>	Sc	45		91.4			
	V	51	103.874				
	Cr	52	106.316				
	Cr	53					
	Mn	55	104.085				
	Fe	57	105.660				
	Co	59	100.582				
	Ni	60	100.515				
	Cu	63					
	Cu	65	102.249				
	Zn	66	96.726				
	Zn	67					
	Zn	68					
>	Ge	74		90.7			
	As	75	92.006				
	Se	77					
	Se	82	96.688				
	Kr	83					
	Sr	88	96.937				
	Y	89					
	Ag	107	100.859				
	Cd	111	93.308				
	Cd	114					
>	In	115		92.1			
	Sn	120	100.015				
	Sb	121	95.998				
	Sb	123					
	Ba	135					
	Ba	137	96.287				
	Ho	165					
>	Lu	175		95.1			
	Tl	205	103.784				
	Pb	208	101.140				
	Bi	209					
	U	238	107.573				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 12:15:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.016**	**ug/L**	28.203	84	0.000
	Be	9	**0.005**	**ug/L**	99.636	12	0.000
	B	11	**1.331**	**ug/L**	15.177	1020	0.000
	Na	23	**2.390**	**ug/L**	128.774	52766	0.005
	Mg	24	**0.388**	**ug/L**	188.576	8336	0.001
	Al	27	**-1.021**	**ug/L**	117.729	9003	-0.002
	P	31	**-1.212**	**ug/L**	142.358	6881	-0.000
	K	39	**1.510**	**ug/L**	60.902	465461	0.003
	Ca	43	**-6.684**	**ug/L**	44.252	812	-0.000
>	Sc	45		**ug/L**		1452603	1452603.126
	V	51	**-0.255**	**ug/L**	86.860	9237	-0.001
	Cr	52	**0.045**	**ug/L**	52.745	-703	0.000
	Cr	53		**ug/L**		148013	-0.007
	Mn	55	**0.002**	**ug/L**	75.777	975	0.000
	Fe	57	**1.152**	**ug/L**	48.857	5168	0.000
	Co	59	**0.003**	**ug/L**	252.387	217	0.000
	Ni	60	**0.006**	**ug/L**	202.304	99	0.000
	Cu	63		**ug/L**		1116	-0.000
	Cu	65	**-0.173**	**ug/L**	8.093	570	-0.000
	Zn	66	**-0.034**	**ug/L**	19.956	307	-0.000
	Zn	67		**ug/L**		15980	-0.003
	Zn	68		**ug/L**		1233	-0.000
>	Ge	74		**ug/L**		264844	264844.095
	As	75	**0.287**	**ug/L**	176.050	302	0.001
	Se	77		**ug/L**		5184	-0.000
	Se	82	**0.074**	**ug/L**	257.288	-28	0.000
	Kr	83		**ug/L**		94	-0.000
	Sr	88	**0.001**	**ug/L**	228.598	195	0.000
	Y	89		**ug/L**		43	0.000
	Ag	107	**0.003**	**ug/L**	34.490	56	0.000
	Cd	111	**-0.003**	**ug/L**	298.457	16	-0.000
	Cd	114		**ug/L**		38	0.000
>	In	115		**ug/L**		139727	139727.128
	Sn	120	**0.022**	**ug/L**	1.185	290	0.000
	Sb	121	**0.515**	**ug/L**	25.004	1736	0.009
	Sb	123		**ug/L**		1353	0.007
	Ba	135		**ug/L**		30	0.000
	Ba	137	**0.003**	**ug/L**	154.569	34	0.000
	Ho	165		**ug/L**		25	-0.000
>	Lu	175		**ug/L**		149320	149320.209
	Tl	205	**1.427**	**ug/L**	14.330	9483	0.038
	Pb	208	**-0.004**	**ug/L**	29.612	358	-0.000
	Bi	209		**ug/L**		23	0.000
	U	238	**0.036**	**ug/L**	19.768	392	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.8			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Tl	205	CCB is out of limits (+-/ PQL)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 241832001
Sample Date/Time: Monday, December 07, 2009 12:21:25
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rm|
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\241832001.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**60.299**	**ug/L**	1.646	127479	0.084
	Be	9	**1.510**	**ug/L**	3.101	850	0.001
	B	11	**3.904**	**ug/L**	2.758	2326	0.001
	Na	23	**1668.871**	**ug/L**	17.974	4982518	3.243
	Mg	24	**877.644**	**ug/L**	13.067	1868143	1.222
	Al	27	**4297.431**	**ug/L**	9.537	10181214	6.684
	P	31	**393.230**	**ug/L**	0.341	85345	0.051
	K	39	**1329.282**	**ug/L**	4.404	4582382	2.693
	Ca	43	**1730.423**	**ug/L**	1.484	19101	0.012
>	Sc	45		**ug/L**		1521875	1521874.715
	V	51	**9.312**	**ug/L**	3.431	55913	0.030
	Cr	52	**2.603**	**ug/L**	4.672	9857	0.007
	Cr	53		**ug/L**		99324	-0.043
	Mn	55	**856.060**	**ug/L**	0.988	5321835	3.496
	Fe	57	**14793.011**	**ug/L**	0.861	1705365	1.117
	Co	59	**1.973**	**ug/L**	3.436	8889	0.006
	Ni	60	**7.010**	**ug/L**	1.287	6501	0.004
	Cu	63		**ug/L**		14523	0.008
	Cu	65	**6.637**	**ug/L**	3.156	7258	0.004
	Zn	66	**129.556**	**ug/L**	0.523	83571	0.300
	Zn	67		**ug/L**		23449	0.021
	Zn	68		**ug/L**		62039	0.219
>	Ge	74		**ug/L**		277436	277436.240
	As	75	**2.800**	**ug/L**	8.338	2239	0.008
	Se	77		**ug/L**		3167	-0.008
	Se	82	**1.430**	**ug/L**	28.327	61	0.000
	Kr	83		**ug/L**		196	0.000
	Sr	88	**11.935**	**ug/L**	1.583	100340	0.670
	Y	89		**ug/L**		874360	5.850
	Ag	107	**0.169**	**ug/L**	4.399	574	0.004
	Cd	111	**0.929**	**ug/L**	5.307	713	0.005
	Cd	114		**ug/L**		236	0.001
>	In	115		**ug/L**		149467	149466.593
	Sn	120	**2.032**	**ug/L**	0.831	6392	0.041
	Sb	121	**0.139**	**ug/L**	11.693	836	0.003
	Sb	123		**ug/L**		674	0.002
	Ba	135		**ug/L**		54570	0.325
	Ba	137	**74.082**	**ug/L**	0.762	95574	0.570
	Ho	165		**ug/L**		33082	0.197
>	Lu	175		**ug/L**		167766	167766.048
	Tl	205	**2.514**	**ug/L**	5.539	15464	0.066
	Pb	208	**23.032**	**ug/L**	1.303	175195	1.042
	Bi	209		**ug/L**		2105	0.012
	U	238	**2.285**	**ug/L**	0.954	17302	0.102

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.8			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 241832002
Sample Date/Time: Monday, December 07, 2009 12:27:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\241832002.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**36.622**	**ug/L**	0.431	79639	0.051
	Be	9	**0.903**	**ug/L**	7.433	527	0.000
	B	11	**5.896**	**ug/L**	2.800	3393	0.002
	Na	23	**1716.722**	**ug/L**	13.287	5266557	3.336
	Mg	24	**1471.784**	**ug/L**	2.603	3214820	2.049
	Al	27	**6704.748**	**ug/L**	3.659	16327695	10.429
	P	31	**364.897**	**ug/L**	1.777	81975	0.047
	K	39	**1601.022**	**ug/L**	5.976	5571162	3.244
	Ca	43	**1665.193**	**ug/L**	1.087	18938	0.011
>	Sc	45		**ug/L**		1564871	1564871.171
	V	51	**8.883**	**ug/L**	9.256	55331	0.028
	Cr	52	**5.728**	**ug/L**	1.559	23452	0.016
	Cr	53		**ug/L**		93512	-0.049
	Mn	55	**105.969**	**ug/L**	1.292	678259	0.433
	Fe	57	**12468.818**	**ug/L**	29.258	1481766	0.942
	Co	59	**0.683**	**ug/L**	1.963	3307	0.002
	Ni	60	**3.057**	**ug/L**	1.312	2971	0.002
	Cu	63		**ug/L**		8644	0.004
	Cu	65	**3.462**	**ug/L**	1.057	4269	0.002
	Zn	66	**30.765**	**ug/L**	0.437	20097	0.071
	Zn	67		**ug/L**		12640	-0.018
	Zn	68		**ug/L**		15729	0.052
>	Ge	74		**ug/L**		277310	277310.470
	As	75	**1.911**	**ug/L**	18.193	1560	0.005
	Se	77		**ug/L**		3076	-0.009
	Se	82	**2.412**	**ug/L**	8.011	127	0.001
	Kr	83		**ug/L**		205	0.000
	Sr	88	**16.671**	**ug/L**	1.085	139623	0.936
	Y	89		**ug/L**		927264	6.223
	Ag	107	**0.144**	**ug/L**	12.032	496	0.003
	Cd	111	**0.936**	**ug/L**	6.075	716	0.005
	Cd	114		**ug/L**		120	0.001
>	In	115		**ug/L**		148986	148986.348
	Sn	120	**1.243**	**ug/L**	1.658	3992	0.025
	Sb	121	**0.033**	**ug/L**	44.093	547	0.001
	Sb	123		**ug/L**		413	0.000
	Ba	135		**ug/L**		23803	0.141
	Ba	137	**32.382**	**ug/L**	2.860	42145	0.249
	Ho	165		**ug/L**		39485	0.233
>	Lu	175		**ug/L**		169223	169222.942
	Tl	205	**0.733**	**ug/L**	14.287	7641	0.019
	Pb	208	**6.542**	**ug/L**	2.534	50494	0.296
	Bi	209		**ug/L**		2374	0.014
	U	238	**3.418**	**ug/L**	2.416	26019	0.153

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.6			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 241832003
Sample Date/Time: Monday, December 07, 2009 12:33:14
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\241832003.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**41.570**	**ug/L**	2.534	89307	0.058
	Be	9	**0.978**	**ug/L**	3.903	563	0.000
	B	11	**3.418**	**ug/L**	6.091	2123	0.001
	Na	23	**1814.658**	**ug/L**	3.878	5501566	3.526
	Mg	24	**857.700**	**ug/L**	1.531	1854343	1.194
	Al	27	**3430.024**	**ug/L**	2.099	8262651	5.335
	P	31	**346.631**	**ug/L**	1.654	77333	0.045
	K	39	**1441.723**	**ug/L**	7.176	5009999	2.921
	Ca	43	**1707.986**	**ug/L**	1.999	19172	0.012
>	Sc	45		**ug/L**		1546436	1546435.700
	V	51	**3.615**	**ug/L**	10.076	28841	0.011
	Cr	52	**4.028**	**ug/L**	1.006	16016	0.011
	Cr	53		**ug/L**		92337	-0.049
	Mn	55	**511.085**	**ug/L**	2.276	3229088	2.087
	Fe	57	**11826.715**	**ug/L**	0.794	1386531	0.893
	Co	59	**1.487**	**ug/L**	2.401	6859	0.004
	Ni	60	**6.415**	**ug/L**	1.406	6052	0.004
	Cu	63		**ug/L**		8691	0.005
	Cu	65	**3.693**	**ug/L**	0.131	4449	0.002
	Zn	66	**116.855**	**ug/L**	2.604	74788	0.271
	Zn	67		**ug/L**		21040	0.013
	Zn	68		**ug/L**		55287	0.196
>	Ge	74		**ug/L**		275195	275194.550
	As	75	**2.888**	**ug/L**	5.114	2289	0.008
	Se	77		**ug/L**		2969	-0.009
	Se	82	**1.705**	**ug/L**	4.844	79	0.000
	Kr	83		**ug/L**		201	0.000
	Sr	88	**11.686**	**ug/L**	0.992	98660	0.656
	Y	89		**ug/L**		981995	6.542
	Ag	107	**0.108**	**ug/L**	7.549	385	0.002
	Cd	111	**0.924**	**ug/L**	10.494	711	0.005
	Cd	114		**ug/L**		163	0.001
>	In	115		**ug/L**		150088	150087.913
	Sn	120	**2.485**	**ug/L**	1.382	7793	0.050
	Sb	121	**0.052**	**ug/L**	6.529	602	0.001
	Sb	123		**ug/L**		474	0.001
	Ba	135		**ug/L**		40090	0.234
	Ba	137	**52.810**	**ug/L**	1.229	69482	0.406
	Ho	165		**ug/L**		35937	0.210
>	Lu	175		**ug/L**		171069	171069.247
	Tl	205	**0.585**	**ug/L**	16.598	7055	0.015
	Pb	208	**13.933**	**ug/L**	0.699	108237	0.630
	Bi	209		**ug/L**		867	0.005
	U	238	**2.408**	**ug/L**	1.688	18580	0.108

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.4			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.8			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 241832004
Sample Date/Time: Monday, December 07, 2009 12:39:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\241832004.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**25.175**	**ug/L**	30.905	45388	0.035
	Be	9	**1.235**	**ug/L**	26.333	600	0.000
	B	11	**5.342**	**ug/L**	34.872	2586	0.002
	Na	23	**2654.566**	**ug/L**	28.252	6766216	5.158
	Mg	24	**1114.919**	**ug/L**	26.731	2035399	1.552
	Al	27	**5413.905**	**ug/L**	33.457	10883163	8.421
	P	31	**325.303**	**ug/L**	32.529	61459	0.042
	K	39	**1698.409**	**ug/L**	29.054	4914224	3.441
	Ca	43	**2326.950**	**ug/L**	31.314	21649	0.016
>	Sc	45		**ug/L**		1369988	1369988.159
	V	51	**4.304**	**ug/L**	43.206	27157	0.014
	Cr	52	**8.699**	**ug/L**	29.547	29956	0.024
	Cr	53		**ug/L**		93984	-0.037
	Mn	55	**528.173**	**ug/L**	30.708	2799630	2.157
	Fe	57	**11177.736**	**ug/L**	30.268	1100798	0.844
	Co	59	**1.547**	**ug/L**	29.911	6002	0.004
	Ni	60	**4.414**	**ug/L**	31.934	3517	0.003
	Cu	63		**ug/L**		11150	0.008
	Cu	65	**5.806**	**ug/L**	33.566	5506	0.004
	Zn	66	**119.871**	**ug/L**	1.633	77577	0.278
	Zn	67		**ug/L**		21039	0.012
	Zn	68		**ug/L**		57562	0.202
>	Ge	74		**ug/L**		278306	278305.978
	As	75	**1.690**	**ug/L**	18.546	1396	0.005
	Se	77		**ug/L**		2970	-0.009
	Se	82	**1.740**	**ug/L**	18.810	82	0.000
	Kr	83		**ug/L**		162	0.000
	Sr	88	**11.389**	**ug/L**	0.872	95726	0.639
	Y	89		**ug/L**		778763	5.212
	Ag	107	**0.167**	**ug/L**	4.860	568	0.003
	Cd	111	**0.962**	**ug/L**	7.341	737	0.005
	Cd	114		**ug/L**		104	0.000
>	In	115		**ug/L**		149411	149411.444
	Sn	120	**1.557**	**ug/L**	1.433	4953	0.032
	Sb	121	**-0.007**	**ug/L**	96.722	440	-0.000
	Sb	123		**ug/L**		351	0.000
	Ba	135		**ug/L**		32263	0.191
	Ba	137	**43.486**	**ug/L**	0.136	56443	0.334
	Ho	165		**ug/L**		29595	0.175
>	Lu	175		**ug/L**		168737	168737.027
	Tl	205	**0.061**	**ug/L**	50.989	4623	0.002
	Pb	208	**22.253**	**ug/L**	1.084	170251	1.006
	Bi	209		**ug/L**		2114	0.012
	U	238	**2.227**	**ug/L**	1.976	16962	0.099

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.9			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 12:50:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.463**	**ug/L**	0.533	109105	0.071
	Be	9	**50.883**	**ug/L**	1.576	28402	0.019
	B	11	**104.257**	**ug/L**	1.930	51505	0.033
	Na	23	**4814.074**	**ug/L**	4.164	14325374	9.354
	Mg	24	**4548.283**	**ug/L**	9.384	9672230	6.332
	Al	27	**5843.788**	**ug/L**	9.499	13887094	9.090
	P	31	**5104.586**	**ug/L**	1.425	1021245	0.664
	K	39	**4310.568**	**ug/L**	9.684	13813245	8.734
	Ca	43	**4922.649**	**ug/L**	1.180	52779	0.034
>	Sc	45		**ug/L**		1525945	1525945.342
	V	51	**48.728**	**ug/L**	0.582	247064	0.155
	Cr	52	**50.522**	**ug/L**	1.041	208919	0.138
	Cr	53		**ug/L**		162928	-0.002
	Mn	55	**50.580**	**ug/L**	0.957	316254	0.207
	Fe	57	**5088.612**	**ug/L**	0.552	591690	0.384
	Co	59	**49.052**	**ug/L**	0.541	216425	0.142
	Ni	60	**48.963**	**ug/L**	0.792	44933	0.029
	Cu	63		**ug/L**		103099	0.067
	Cu	65	**49.806**	**ug/L**	0.699	49615	0.032
	Zn	66	**46.874**	**ug/L**	1.555	30704	0.109
	Zn	67		**ug/L**		20007	0.008
	Zn	68		**ug/L**		23914	0.080
>	Ge	74		**ug/L**		279725	279725.165
	As	75	**44.351**	**ug/L**	1.821	34263	0.122
	Se	77		**ug/L**		7608	0.007
	Se	82	**46.586**	**ug/L**	1.548	3106	0.011
	Kr	83		**ug/L**		90	-0.000
	Sr	88	**48.979**	**ug/L**	2.110	396583	2.749
	Y	89		**ug/L**		108	0.000
	Ag	107	**49.778**	**ug/L**	2.822	149285	1.035
	Cd	111	**47.674**	**ug/L**	2.151	34319	0.238
	Cd	114		**ug/L**		77947	0.540
>	In	115		**ug/L**		144222	144222.242
	Sn	120	**49.436**	**ug/L**	2.117	144465	1.000
	Sb	121	**47.096**	**ug/L**	4.923	123833	0.856
	Sb	123		**ug/L**		94750	0.655
	Ba	135		**ug/L**		32402	0.209
	Ba	137	**48.079**	**ug/L**	2.874	57304	0.370
	Ho	165		**ug/L**		38	0.000
>	Lu	175		**ug/L**		155025	155024.536
	Tl	205	**46.763**	**ug/L**	3.653	195311	1.235
	Pb	208	**49.673**	**ug/L**	2.090	348547	2.246
	Bi	209		**ug/L**		61	0.000
	U	238	**52.341**	**ug/L**	2.197	362594	2.339

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.927				
	Be	9	101.766				
	B	11	104.257				
	Na	23	96.281				
	Mg	24	90.966				
	Al	27	115.719				
	P	31	102.092				
	K	39	86.211				
	Ca	43	98.453				
>	Sc	45		99.1			
	V	51	97.455				
	Cr	52	101.044				
	Cr	53					
	Mn	55	101.159				
	Fe	57	101.772				
	Co	59	98.105				
	Ni	60	97.927				
	Cu	63					
	Cu	65	99.612				
	Zn	66	93.749				
	Zn	67					
	Zn	68					
>	Ge	74		97.5			
	As	75	88.701				
	Se	77					
	Se	82	93.172				
	Kr	83					
	Sr	88	97.957				
	Y	89					
	Ag	107	99.557				
	Cd	111	95.349				
	Cd	114					
>	In	115		96.9			
	Sn	120	98.872				
	Sb	121	94.193				
	Sb	123					
	Ba	135					
	Ba	137	96.157				
	Ho	165					
>	Lu	175		99.5			
	Tl	205	93.526				
	Pb	208	99.345				
	Bi	209					
	U	238	104.681				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)
QC Std 6	As	75	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 12:56:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.023**	**ug/L**	21.776	106	0.000
	Be	9	**0.005**	**ug/L**	156.617	13	0.000
	B	11	**0.998**	**ug/L**	30.386	924	0.000
	Na	23	**1.770**	**ug/L**	173.113	54439	0.003
	Mg	24	**0.588**	**ug/L**	161.856	9336	0.001
	Al	27	**1.900**	**ug/L**	64.093	16677	0.003
	P	31	**-1.653**	**ug/L**	72.810	7264	-0.000
	K	39	**-9.159**	**ug/L**	110.964	463764	-0.019
	Ca	43	**-11.486**	**ug/L**	49.130	816	-0.000
>	Sc	45		**ug/L**		1551864	1551864.099
	V	51	**0.208**	**ug/L**	374.667	12150	0.001
	Cr	52	**0.380**	**ug/L**	13.324	663	0.001
	Cr	53		**ug/L**		149347	-0.013
	Mn	55	**0.040**	**ug/L**	11.923	1287	0.000
	Fe	57	**1.335**	**ug/L**	56.633	5542	0.000
	Co	59	**0.003**	**ug/L**	126.685	235	0.000
	Ni	60	**-0.008**	**ug/L**	184.770	92	-0.000
	Cu	63		**ug/L**		2375	0.000
	Cu	65	**0.383**	**ug/L**	164.541	1162	0.000
	Zn	66	**0.049**	**ug/L**	234.144	386	0.000
	Zn	67		**ug/L**		15662	-0.008
	Zn	68		**ug/L**		1204	-0.001
>	Ge	74		**ug/L**		284870	284869.564
	As	75	**0.345**	**ug/L**	113.698	373	0.001
	Se	77		**ug/L**		5638	-0.000
	Se	82	**0.218**	**ug/L**	93.631	-20	0.000
	Kr	83		**ug/L**		89	-0.000
	Sr	88	**0.003**	**ug/L**	77.518	225	0.000
	Y	89		**ug/L**		52	0.000
	Ag	107	**0.004**	**ug/L**	39.278	60	0.000
	Cd	111	**-0.004**	**ug/L**	233.608	17	-0.000
	Cd	114		**ug/L**		35	0.000
>	In	115		**ug/L**		148206	148205.775
	Sn	120	**0.015**	**ug/L**	68.273	288	0.000
	Sb	121	**0.501**	**ug/L**	23.258	1806	0.009
	Sb	123		**ug/L**		1328	0.007
	Ba	135		**ug/L**		28	0.000
	Ba	137	**0.011**	**ug/L**	49.520	46	0.000
	Ho	165		**ug/L**		31	-0.000
>	Lu	175		**ug/L**		157904	157903.520
	Tl	205	**0.164**	**ug/L**	57.898	4757	0.004
	Pb	208	**0.018**	**ug/L**	124.079	541	0.001
	Bi	209		**ug/L**		19	-0.000
	U	238	**0.032**	**ug/L**	22.215	391	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985798
Sample Date/Time: Monday, December 07, 2009 13:08:37
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985798.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.838**	**ug/L**	2.440	177449	0.112
	Be	9	**4.690**	**ug/L**	0.338	2721	0.002
	B	11	**22.858**	**ug/L**	2.494	12037	0.007
	Na	23	**1529.700**	**ug/L**	0.988	4747510	2.972
	Mg	24	**10499.100**	**ug/L**	2.055	23104884	14.615
	Al	27	**85104.657**	**ug/L**	10.559	209239878	132.373
	P	31	**450.507**	**ug/L**	1.917	100409	0.059
	K	39	**9816.959**	**ug/L**	6.595	31943130	19.890
	Ca	43	**9800.904**	**ug/L**	1.283	107887	0.068
>	Sc	45		**ug/L**		1580399	1580399.079
	V	51	**73.029**	**ug/L**	0.676	377827	0.232
	Cr	52	**42.538**	**ug/L**	0.440	182029	0.116
	Cr	53		**ug/L**		104041	-0.043
	Mn	55	**364.635**	**ug/L**	0.365	2354617	1.489
	Fe	57	**30680.566**	**ug/L**	1.493	3667152	2.317
	Co	59	**11.352**	**ug/L**	1.536	52043	0.033
	Ni	60	**29.652**	**ug/L**	0.617	28223	0.018
	Cu	63		**ug/L**		85643	0.053
	Cu	65	**40.189**	**ug/L**	2.510	41615	0.026
	Zn	66	**151.226**	**ug/L**	1.781	96663	0.350
	Zn	67		**ug/L**		25590	0.030
	Zn	68		**ug/L**		75154	0.268
>	Ge	74		**ug/L**		275148	275148.343
	As	75	**8.122**	**ug/L**	4.308	6253	0.022
	Se	77		**ug/L**		2850	-0.009
	Se	82	**-0.248**	**ug/L**	175.817	-51	-0.000
	Kr	83		**ug/L**		297	0.001
	Sr	88	**85.250**	**ug/L**	1.867	709351	4.786
	Y	89		**ug/L**		818324	5.522
	Ag	107	**0.599**	**ug/L**	2.949	1894	0.012
	Cd	111	**2.061**	**ug/L**	11.103	1542	0.010
	Cd	114		**ug/L**		336	0.002
>	In	115		**ug/L**		148199	148199.101
	Sn	120	**2.478**	**ug/L**	2.256	7674	0.050
	Sb	121	**0.040**	**ug/L**	39.632	563	0.001
	Sb	123		**ug/L**		446	0.001
	Ba	135		**ug/L**		174845	1.066
	Ba	137	**239.210**	**ug/L**	1.220	301564	1.839
	Ho	165		**ug/L**		30415	0.185
>	Lu	175		**ug/L**		163982	163981.840
	Tl	205	**1.750**	**ug/L**	3.604	11804	0.046
	Pb	208	**74.545**	**ug/L**	0.409	553244	3.371
	Bi	209		**ug/L**		7160	0.044
	U	238	**2.056**	**ug/L**	0.939	15238	0.092

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985799
Sample Date/Time: Monday, December 07, 2009 13:14:30
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtlmozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985799.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**110.098**	**ug/L**	1.160	242063	0.153
	Be	9	**28.263**	**ug/L**	3.192	16370	0.010
	B	11	**72.736**	**ug/L**	1.713	37408	0.023
	Na	23	**2342.964**	**ug/L**	5.626	7254830	4.553
	Mg	24	**12471.074**	**ug/L**	3.437	27495857	17.361
	Al	27	**92456.117**	**ug/L**	6.925	227549547	143.808
	P	31	**1426.032**	**ug/L**	0.646	301575	0.186
	K	39	**11339.163**	**ug/L**	3.987	36864099	22.974
	Ca	43	**10190.211**	**ug/L**	0.473	112330	0.070
>	Sc	45		**ug/L**		1583058	1583057.679
	V	51	**106.030**	**ug/L**	1.494	544355	0.337
	Cr	52	**67.579**	**ug/L**	0.663	290238	0.184
	Cr	53		**ug/L**		115128	-0.036
	Mn	55	**528.542**	**ug/L**	1.745	3417892	2.159
	Fe	57	**32131.090**	**ug/L**	1.798	3846211	2.426
	Co	59	**38.331**	**ug/L**	0.422	175499	0.111
	Ni	60	**54.749**	**ug/L**	0.976	52111	0.033
	Cu	63		**ug/L**		135642	0.085
	Cu	65	**64.845**	**ug/L**	1.265	66773	0.042
	Zn	66	**176.981**	**ug/L**	1.420	112179	0.410
	Zn	67		**ug/L**		28533	0.041
	Zn	68		**ug/L**		87407	0.315
>	Ge	74		**ug/L**		272920	272919.694
	As	75	**43.527**	**ug/L**	0.032	32815	0.120
	Se	77		**ug/L**		3123	-0.008
	Se	82	**8.543**	**ug/L**	6.407	528	0.002
	Kr	83		**ug/L**		293	0.001
	Sr	88	**114.556**	**ug/L**	2.118	930934	6.431
	Y	89		**ug/L**		845797	5.844
	Ag	107	**23.820**	**ug/L**	3.288	71735	0.495
	Cd	111	**7.451**	**ug/L**	1.057	5401	0.037
	Cd	114		**ug/L**		8086	0.056
>	In	115		**ug/L**		144770	144769.750
	Sn	120	**15.793**	**ug/L**	1.442	46496	0.320
	Sb	121	**14.209**	**ug/L**	0.589	37842	0.258
	Sb	123		**ug/L**		28903	0.197
	Ba	135		**ug/L**		214577	1.320
	Ba	137	**298.311**	**ug/L**	1.873	372819	2.293
	Ho	165		**ug/L**		32108	0.197
>	Lu	175		**ug/L**		162569	162568.511
	Tl	205	**44.115**	**ug/L**	5.347	193559	1.165
	Pb	208	**170.474**	**ug/L**	2.012	1253570	7.710
	Bi	209		**ug/L**		6997	0.043
	U	238	**27.199**	**ug/L**	2.198	197703	1.215

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.8			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985801
Sample Date/Time: Monday, December 07, 2009 13:20:24
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985801.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**104.722**	**ug/L**	1.264	227780	0.145
	Be	9	**26.335**	**ug/L**	1.323	15093	0.010
	B	11	**69.315**	**ug/L**	2.349	35290	0.022
	Na	23	**2330.112**	**ug/L**	9.549	7138172	4.528
	Mg	24	**10448.720**	**ug/L**	6.599	22791243	14.545
	Al	27	**87843.913**	**ug/L**	8.819	213958865	136.634
	P	31	**1363.937**	**ug/L**	1.399	285682	0.178
	K	39	**10835.725**	**ug/L**	7.657	34878445	21.954
	Ca	43	**9582.109**	**ug/L**	0.648	104542	0.066
>	Sc	45		**ug/L**		1566028	1566027.551
	V	51	**96.013**	**ug/L**	1.256	488680	0.305
	Cr	52	**63.056**	**ug/L**	1.628	267835	0.172
	Cr	53		**ug/L**		113209	-0.036
	Mn	55	**426.037**	**ug/L**	0.166	2725950	1.740
	Fe	57	**29894.947**	**ug/L**	0.556	3540829	2.258
	Co	59	**35.569**	**ug/L**	0.366	161118	0.103
	Ni	60	**49.866**	**ug/L**	0.708	46962	0.030
	Cu	63		**ug/L**		120866	0.076
	Cu	65	**57.388**	**ug/L**	0.111	58551	0.037
	Zn	66	**165.430**	**ug/L**	1.645	103893	0.383
	Zn	67		**ug/L**		27220	0.037
	Zn	68		**ug/L**		80916	0.294
>	Ge	74		**ug/L**		270405	270404.591
	As	75	**41.513**	**ug/L**	1.315	31009	0.114
	Se	77		**ug/L**		3265	-0.008
	Se	82	**7.770**	**ug/L**	6.500	473	0.002
	Kr	83		**ug/L**		272	0.001
	Sr	88	**104.078**	**ug/L**	0.317	843641	5.843
	Y	89		**ug/L**		788506	5.462
	Ag	107	**22.141**	**ug/L**	1.601	66521	0.460
	Cd	111	**6.983**	**ug/L**	1.769	5049	0.035
	Cd	114		**ug/L**		7471	0.052
>	In	115		**ug/L**		144362	144362.276
	Sn	120	**15.724**	**ug/L**	0.699	46174	0.318
	Sb	121	**11.949**	**ug/L**	1.201	31808	0.217
	Sb	123		**ug/L**		24300	0.166
	Ba	135		**ug/L**		201279	1.255
	Ba	137	**281.792**	**ug/L**	1.106	347445	2.166
	Ho	165		**ug/L**		29514	0.184
>	Lu	175		**ug/L**		160366	160365.692
	Tl	205	**42.586**	**ug/L**	5.923	184437	1.125
	Pb	208	**161.385**	**ug/L**	0.944	1170879	7.299
	Bi	209		**ug/L**		6258	0.039
	U	238	**25.729**	**ug/L**	0.560	184531	1.150

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.9			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985800
Sample Date/Time: Monday, December 07, 2009 13:26:19
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928677|10|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985800.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**18.222**	ug/L	4.290	37715	0.025
	Be	9	**1.063**	ug/L	6.177	588	0.000
	B	11	**5.853**	ug/L	1.979	3208	0.002
	Na	23	**509.631**	ug/L	2.859	1521670	0.990
	Mg	24	**2297.352**	ug/L	8.872	4766689	3.198
	Al	27	**20122.479**	ug/L	5.528	46623590	31.299
	P	31	**101.405**	ug/L	3.444	26937	0.013
	K	39	**2090.220**	ug/L	8.305	6778473	4.235
	Ca	43	**2100.164**	ug/L	1.387	22487	0.014
>	Sc	45		ug/L		1488782	1488781.960
	V	51	**17.448**	ug/L	3.363	93142	0.055
	Cr	52	**9.473**	ug/L	3.230	37481	0.026
	Cr	53		ug/L		110208	-0.035
	Mn	55	**205.127**	ug/L	1.179	1248230	0.838
	Fe	57	**12263.926**	ug/L	0.739	1383946	0.926
	Co	59	**3.903**	ug/L	1.343	16994	0.011
	Ni	60	**7.424**	ug/L	1.441	6728	0.004
	Cu	63		ug/L		19147	0.012
	Cu	65	**8.900**	ug/L	1.612	9265	0.006
	Zn	66	**33.771**	ug/L	1.038	21565	0.078
	Zn	67		ug/L		15005	-0.008
	Zn	68		ug/L		17509	0.059
>	Ge	74		ug/L		271518	271518.301
	As	75	**2.268**	ug/L	4.145	1795	0.006
	Se	77		ug/L		3745	-0.006
	Se	82	**0.423**	ug/L	15.556	-6	0.000
	Kr	83		ug/L		121	0.000
	Sr	88	**20.011**	ug/L	1.508	158782	1.123
	Y	89		ug/L		192246	1.361
	Ag	107	**0.096**	ug/L	3.331	330	0.002
	Cd	111	**0.416**	ug/L	8.024	312	0.002
	Cd	114		ug/L		101	0.001
>	In	115		ug/L		141185	141184.564
	Sn	120	**0.612**	ug/L	3.476	1979	0.012
	Sb	121	**-0.044**	ug/L	13.115	321	-0.001
	Sb	123		ug/L		259	-0.000
	Ba	135		ug/L		40445	0.271
	Ba	137	**62.112**	ug/L	1.334	71206	0.477
	Ho	165		ug/L		6729	0.045
>	Lu	175		ug/L		149088	149087.897
	Tl	205	**1.555**	ug/L	14.236	9968	0.041
	Pb	208	**22.111**	ug/L	1.676	149452	1.000
	Bi	209		ug/L		1448	0.010
	U	238	**0.466**	ug/L	0.771	3261	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 13:55:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.585**	**ug/L**	3.024	101714	0.066
	Be	9	**49.343**	**ug/L**	1.303	27773	0.018
	B	11	**106.395**	**ug/L**	1.135	52995	0.034
	Na	23	**5663.845**	**ug/L**	20.296	16988240	11.006
	Mg	24	**4703.465**	**ug/L**	7.343	10085517	6.548
	Al	27	**5758.693**	**ug/L**	4.845	13791239	8.957
	P	31	**5227.863**	**ug/L**	1.235	1054471	0.680
	K	39	**4080.273**	**ug/L**	1.760	13208916	8.267
	Ca	43	**4916.790**	**ug/L**	1.527	53159	0.034
>	Sc	45		**ug/L**		1538674	1538674.137
	V	51	**50.717**	**ug/L**	2.569	258813	0.161
	Cr	52	**51.545**	**ug/L**	2.121	214932	0.140
	Cr	53		**ug/L**		158741	-0.006
	Mn	55	**50.493**	**ug/L**	0.089	318333	0.206
	Fe	57	**5040.925**	**ug/L**	1.110	591056	0.381
	Co	59	**47.962**	**ug/L**	0.687	213382	0.139
	Ni	60	**48.467**	**ug/L**	0.468	44850	0.029
	Cu	63		**ug/L**		101577	0.065
	Cu	65	**49.036**	**ug/L**	0.616	49268	0.032
	Zn	66	**47.257**	**ug/L**	0.267	31140	0.109
	Zn	67		**ug/L**		19783	0.007
	Zn	68		**ug/L**		24075	0.081
>	Ge	74		**ug/L**		281403	281403.004
	As	75	**43.957**	**ug/L**	0.624	34169	0.121
	Se	77		**ug/L**		7652	0.007
	Se	82	**45.599**	**ug/L**	2.715	3058	0.011
	Kr	83		**ug/L**		91	-0.000
	Sr	88	**48.965**	**ug/L**	1.237	394188	2.749
	Y	89		**ug/L**		104	0.000
	Ag	107	**49.988**	**ug/L**	0.794	149074	1.040
	Cd	111	**47.561**	**ug/L**	2.489	34038	0.237
	Cd	114		**ug/L**		76343	0.532
>	In	115		**ug/L**		143351	143350.921
	Sn	120	**48.763**	**ug/L**	0.368	141687	0.987
	Sb	121	**46.883**	**ug/L**	3.683	122597	0.852
	Sb	123		**ug/L**		92266	0.642
	Ba	135		**ug/L**		32074	0.211
	Ba	137	**48.393**	**ug/L**	1.717	56512	0.372
	Ho	165		**ug/L**		42	0.000
>	Lu	175		**ug/L**		151850	151850.127
	Tl	205	**46.464**	**ug/L**	2.642	190174	1.227
	Pb	208	**49.521**	**ug/L**	0.942	340453	2.240
	Bi	209		**ug/L**		57	0.000
	U	238	**52.049**	**ug/L**	0.386	353329	2.326

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	95.169				
	Be	9	98.685				
	B	11	106.395				
	Na	23	113.277				
	Mg	24	94.069				
	Al	27	114.034				
	P	31	104.557				
	K	39	81.605				
	Ca	43	98.336				
>	Sc	45		99.9			
	V	51	101.435				
	Cr	52	103.091				
	Cr	53					
	Mn	55	100.986				
	Fe	57	100.818				
	Co	59	95.925				
	Ni	60	96.934				
	Cu	63					
	Cu	65	98.072				
	Zn	66	94.514				
	Zn	67					
	Zn	68					
>	Ge	74		98.1			
	As	75	87.914				
	Se	77					
	Se	82	91.197				
	Kr	83					
	Sr	88	97.930				
	Y	89					
	Ag	107	99.976				
	Cd	111	95.123				
	Cd	114					
>	In	115		96.3			
	Sn	120	97.526				
	Sb	121	93.766				
	Sb	123					
	Ba	135					
	Ba	137	96.785				
	Ho	165					
>	Lu	175		97.5			
	Tl	205	92.927				
	Pb	208	99.042				
	Bi	209					
	U	238	104.098				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)
QC Std 6	As	75	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 6

Report Date/Time: Monday, December 07, 2009 13:58:17

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 14:01:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.061**	ug/L	15.131	192	0.000
	Be	9	**0.000**	ug/L	3154.052	10	0.000
	B	11	**1.019**	ug/L	23.333	952	0.000
	Na	23	**5.473**	ug/L	48.873	66824	0.011
	Mg	24	**2.786**	ug/L	115.702	14342	0.004
	Al	27	**8.432**	ug/L	67.628	33043	0.013
	P	31	**0.585**	ug/L	202.973	7856	0.000
	K	39	**-16.942**	ug/L	32.193	447233	-0.034
	Ca	43	**-13.012**	ug/L	17.439	814	-0.000
>	Sc	45		ug/L		1579990	1579990.003
	V	51	**0.682**	ug/L	104.425	14748	0.002
	Cr	52	**0.712**	ug/L	5.721	2105	0.002
	Cr	53		ug/L		145018	-0.017
	Mn	55	**0.212**	ug/L	41.171	2420	0.001
	Fe	57	**4.968**	ug/L	73.083	6077	0.000
	Co	59	**0.002**	ug/L	199.836	233	0.000
	Ni	60	**0.006**	ug/L	137.081	107	0.000
	Cu	63		ug/L		4106	0.002
	Cu	65	**1.175**	ug/L	89.386	1989	0.001
	Zn	66	**0.129**	ug/L	69.056	443	0.000
	Zn	67		ug/L		15200	-0.010
	Zn	68		ug/L		1187	-0.001
>	Ge	74		ug/L		287787	287787.255
	As	75	**0.458**	ug/L	71.811	468	0.001
	Se	77		ug/L		5653	-0.000
	Se	82	**0.221**	ug/L	47.458	-20	0.000
	Kr	83		ug/L		85	-0.000
	Sr	88	**0.012**	ug/L	76.628	294	0.001
	Y	89		ug/L		120	0.001
	Ag	107	**0.004**	ug/L	12.457	61	0.000
	Cd	111	**0.005**	ug/L	315.931	23	0.000
	Cd	114		ug/L		35	0.000
>	In	115		ug/L		146506	146506.488
	Sn	120	**0.026**	ug/L	49.363	318	0.001
	Sb	121	**0.459**	ug/L	24.800	1670	0.008
	Sb	123		ug/L		1276	0.006
	Ba	135		ug/L		69	0.000
	Ba	137	**0.058**	ug/L	47.725	99	0.000
	Ho	165		ug/L		28	-0.000
>	Lu	175		ug/L		153173	153173.039
	Tl	205	**0.198**	ug/L	64.524	4747	0.005
	Pb	208	**0.045**	ug/L	63.513	705	0.002
	Bi	209		ug/L		16	-0.000
	U	238	**0.032**	ug/L	39.039	375	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Cu	65	CCB is out of limits (+-/ PQL)

QC Action

QC Action Line: Continue

ICPMS #6 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, December 10, 2009 02:00:05
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\091119\Sample.904
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	2413.8	2413.804	101.847	4.2
	Mg	24.0	20972.0	20971.984	216.581	1.0
	Co	58.9	28702.4	28702.406	218.806	0.8
	Rh	102.9	49944.6	49944.559	435.310	0.9
	In	114.9	55233.0	55232.970	256.443	0.5
	Pb	208.0	29497.6	29497.625	318.665	1.1
⌈>	Ba	137.9	51282.9	51282.890	481.544	0.9
⌊	Ba++	69.0	1758.8	0.034	0.001	2.6
⌈>	Ce	139.9	67493.5	67493.471	560.139	0.8
⌊	CeO	155.9	1425.4	0.021	0.000	1.5
	Bkgd	220.0	5.8	5.800	1.304	22.5

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
12.50	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	10.8	3582.8
Co	59	25	11.8	41417.6
In	115	25	12.8	64179.5

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	590	2080	0.650
Be	9.0	9.0	2038	2080	0.660
Mg	24.0	24.0	5696	2120	0.692
Mg	25.0	25.0	5891	2080	0.674
Mg	26.0	26.0	6193	2120	0.671
Co	58.9	58.9	14166	2170	0.636
Rh	102.9	102.9	24846	2230	0.689
In	114.9	114.9	27788	2260	0.692
Ce	139.9	139.9	33848	2280	0.745
Pb	206.0	206.0	49936	2430	0.673
Pb	207.0	207.0	50171	2385	0.700
Pb	208.0	208.0	50439	2430	0.720
U	238.1	238.1	57738	2470	0.710

Report Date/Time: Thursday, December 10, 2009 01:58:48

ICPMS#6 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, December 10, 2009 18:19:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\Blank.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		126	
	Be	9		ug/L		6	
	B	11		ug/L		561	
	Na	23		ug/L		14341	
	Mg	24		ug/L		5668	
	Al	27		ug/L		6668	
	P	31		ug/L		4625	
	K	39		ug/L		231196	
	Ca	43		ug/L		225	
>	Sc	45		ug/L		889805	
	V	51		ug/L		-284	
	Cr	52		ug/L		1821	
	Cr	53		ug/L		44006	
	Mn	55		ug/L		729	
	Fe	57		ug/L		2396	
	Co	59		ug/L		72	
	Ni	60		ug/L		143	
	Cu	63		ug/L		117	
	Cu	65		ug/L		62	
	Zn	66		ug/L		1784	
	Zn	67		ug/L		8202	
	Zn	68		ug/L		1807	
>	Ge	74		ug/L		131527	
	As	75		ug/L		80	
	Se	77		ug/L		1480	
	Se	82		ug/L		-11	
	Kr	83		ug/L		29	
	Sr	88		ug/L		212	
	Y	89		ug/L		26	
	Ag	107		ug/L		20	
	Cd	111		ug/L		16	
	Cd	114		ug/L		15	
>	In	115		ug/L		78793	
	Sn	120		ug/L		83	
	Sb	121		ug/L		573	
	Sb	123		ug/L		443	
	Ba	135		ug/L		15	
	Ba	137		ug/L		20	
	Ho	165		ug/L		13	
>	Lu	175		ug/L		109895	
	Tl	205		ug/L		1317	
	Pb	208		ug/L		227	
	Bi	209		ug/L		8	
	U	238		ug/L		102	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Thursday, December 10, 2009 18:22:18

ICPMS#6 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, December 10, 2009 18:25:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\Standard 1.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	0.490	14482	0.017
	Be	9	10.000	ug/L	1.877	3995	0.005
	B	11	20.000	ug/L	3.401	8845	0.010
	Na	23	1000.000	ug/L	5.378	2437552	2.789
	Mg	24	1000.000	ug/L	3.533	1663607	1.908
	Al	27	1000.000	ug/L	3.139	1937414	2.223
	P	31	1000.000	ug/L	1.285	112425	0.124
	K	39	1000.000	ug/L	9.823	2169169	2.238
	Ca	43	1000.000	ug/L	2.233	4861	0.005
>	Sc	45		ug/L		868820	868820.175
	V	51	10.000	ug/L	4.422	22685	0.026
	Cr	52	10.000	ug/L	1.111	21075	0.022
	Cr	53		ug/L		46090	0.004
	Mn	55	10.000	ug/L	1.948	28794	0.032
	Fe	57	1000.000	ug/L	0.282	57270	0.063
	Co	59	10.000	ug/L	0.872	20433	0.023
	Ni	60	10.000	ug/L	1.242	4272	0.005
	Cu	63		ug/L		9314	0.011
	Cu	65	10.000	ug/L	2.249	4464	0.005
	Zn	66	10.000	ug/L	2.204	4240	0.019
	Zn	67		ug/L		8883	0.007
	Zn	68		ug/L		3670	0.015
>	Ge	74		ug/L		128421	128421.294
	As	75	10.000	ug/L	4.745	3085	0.023
	Se	77		ug/L		1675	0.002
	Se	82	10.000	ug/L	8.764	304	0.002
	Kr	83		ug/L		27	-0.000
	Sr	88	10.000	ug/L	1.314	35998	0.463
	Y	89		ug/L		21	-0.000
	Ag	107	10.000	ug/L	0.369	15083	0.195
	Cd	111	10.000	ug/L	1.341	3812	0.049
	Cd	114		ug/L		8332	0.108
>	In	115		ug/L		77263	77263.183
	Sn	120	10.000	ug/L	1.620	14766	0.190
	Sb	121	10.000	ug/L	5.424	12138	0.150
	Sb	123		ug/L		9360	0.116
	Ba	135		ug/L		3423	0.031
	Ba	137	10.000	ug/L	1.601	5954	0.055
	Ho	165		ug/L		12	-0.000
>	Lu	175		ug/L		108249	108248.695
	Tl	205	10.000	ug/L	2.649	27982	0.247
	Pb	208	10.000	ug/L	0.511	44466	0.409
	Bi	209		ug/L		8	-0.000
	U	238	10.000	ug/L	0.337	47072	0.434

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, December 10, 2009 18:31:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\Standard 2.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.040**	**ug/L**	1.188	140438	0.172
	Be	9	**100.006**	**ug/L**	1.139	37615	0.046
	B	11	**200.026**	**ug/L**	2.785	79318	0.097
	Na	23	**10003.222**	**ug/L**	1.992	23499040	28.832
	Mg	24	**10009.014**	**ug/L**	3.232	17105398	20.994
	Al	27	**10015.035**	**ug/L**	1.948	21342401	26.200
	P	31	**9996.194**	**ug/L**	1.278	978348	1.196
	K	39	**10013.270**	**ug/L**	4.496	21245314	25.835
	Ca	43	**10001.688**	**ug/L**	1.637	44462	0.054
>	Sc	45		**ug/L**		814530	814530.467
	V	51	**100.001**	**ug/L**	1.085	215118	0.264
	Cr	52	**99.999**	**ug/L**	1.449	182371	0.222
	Cr	53		**ug/L**		60713	0.025
	Mn	55	**99.996**	**ug/L**	1.157	262854	0.322
	Fe	57	**9999.503**	**ug/L**	1.336	514516	0.629
	Co	59	**100.024**	**ug/L**	0.887	195678	0.240
	Ni	60	**100.024**	**ug/L**	1.292	39842	0.049
	Cu	63		**ug/L**		86447	0.106
	Cu	65	**99.996**	**ug/L**	0.574	41165	0.050
	Zn	66	**100.103**	**ug/L**	0.983	27682	0.217
	Zn	67		**ug/L**		12587	0.043
	Zn	68		**ug/L**		20615	0.158
>	Ge	74		**ug/L**		120040	120039.529
	As	75	**100.076**	**ug/L**	0.855	30510	0.254
	Se	77		**ug/L**		3634	0.019
	Se	82	**100.029**	**ug/L**	1.056	3025	0.025
	Kr	83		**ug/L**		34	0.000
	Sr	88	**99.990**	**ug/L**	0.840	337922	4.585
	Y	89		**ug/L**		55	0.000
	Ag	107	**99.993**	**ug/L**	0.215	142621	1.936
	Cd	111	**100.004**	**ug/L**	1.715	36369	0.494
	Cd	114		**ug/L**		80724	1.096
>	In	115		**ug/L**		73659	73659.113
	Sn	120	**100.012**	**ug/L**	0.847	141822	1.924
	Sb	121	**100.080**	**ug/L**	2.020	120560	1.630
	Sb	123		**ug/L**		92563	1.251
	Ba	135		**ug/L**		32810	0.319
	Ba	137	**100.010**	**ug/L**	1.365	57009	0.554
	Ho	165		**ug/L**		12	-0.000
>	Lu	175		**ug/L**		102924	102924.159
	Tl	205	**100.047**	**ug/L**	0.369	267757	2.590
	Pb	208	**99.995**	**ug/L**	0.459	418680	4.066
	Bi	209		**ug/L**		37	0.000
	U	238	**99.995**	**ug/L**	1.057	444644	4.319

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Thursday, December 10, 2009 18:34:01

ICPMS#6 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, December 10, 2009 18:37:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 1.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.152**	**ug/L**	0.540	71155	0.086
	Be	9	**52.685**	**ug/L**	0.332	20015	0.024
	B	11	**104.588**	**ug/L**	1.785	42136	0.051
	Na	23	**5368.919**	**ug/L**	3.382	12739702	15.475
	Mg	24	**4672.000**	**ug/L**	2.339	8064603	9.799
	Al	27	**5025.401**	**ug/L**	5.165	10816958	13.147
	P	31	**5227.676**	**ug/L**	0.743	518741	0.626
	K	39	**4820.573**	**ug/L**	2.083	10442934	12.438
	Ca	43	**4981.082**	**ug/L**	0.293	22468	0.027
>	Sc	45		**ug/L**		822489	822489.398
	V	51	**51.106**	**ug/L**	1.855	110895	0.135
	Cr	52	**52.457**	**ug/L**	1.087	97415	0.116
	Cr	53		**ug/L**		48843	0.010
	Mn	55	**52.475**	**ug/L**	0.573	139624	0.169
	Fe	57	**5062.440**	**ug/L**	0.835	264163	0.318
	Co	59	**50.734**	**ug/L**	1.089	100262	0.122
	Ni	60	**51.729**	**ug/L**	0.959	20872	0.025
	Cu	63		**ug/L**		46203	0.056
	Cu	65	**52.972**	**ug/L**	0.443	22048	0.027
	Zn	66	**54.676**	**ug/L**	1.294	16274	0.119
	Zn	67		**ug/L**		9797	0.017
	Zn	68		**ug/L**		12306	0.086
>	Ge	74		**ug/L**		123179	123179.035
	As	75	**48.467**	**ug/L**	1.086	15202	0.123
	Se	77		**ug/L**		2456	0.009
	Se	82	**52.342**	**ug/L**	2.304	1619	0.013
	Kr	83		**ug/L**		32	0.000
	Sr	88	**50.381**	**ug/L**	1.336	171903	2.310
	Y	89		**ug/L**		32	0.000
	Ag	107	**51.284**	**ug/L**	0.532	73816	0.993
	Cd	111	**50.587**	**ug/L**	0.967	18571	0.250
	Cd	114		**ug/L**		42083	0.566
>	In	115		**ug/L**		74326	74325.661
	Sn	120	**52.539**	**ug/L**	0.931	75218	1.011
	Sb	121	**51.615**	**ug/L**	5.121	62993	0.840
	Sb	123		**ug/L**		48980	0.654
	Ba	135		**ug/L**		16948	0.162
	Ba	137	**51.063**	**ug/L**	0.546	29478	0.283
	Ho	165		**ug/L**		20	0.000
>	Lu	175		**ug/L**		104210	104210.452
	Tl	205	**48.408**	**ug/L**	1.715	131805	1.253
	Pb	208	**51.913**	**ug/L**	0.567	220168	2.111
	Bi	209		**ug/L**		18	0.000
	U	238	**54.203**	**ug/L**	0.751	244063	2.341

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 1
Report Date/Time: Thursday, December 10, 2009 18:39:52

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.304				
	Be	9	105.369				
	B	11	104.588				
	Na	23	107.378				
	Mg	24	93.440				
	Al	27	99.513				
	P	31	104.554				
	K	39	96.411				
	Ca	43	99.622				
>	Sc	45		92.4			
	V	51	102.213				
	Cr	52	104.915				
	Cr	53					
	Mn	55	104.949				
	Fe	57	101.249				
	Co	59	101.467				
	Ni	60	103.458				
	Cu	63					
	Cu	65	105.944				
	Zn	66	109.351				
	Zn	67					
	Zn	68					
>	Ge	74		93.7			
	As	75	96.935				
	Se	77					
	Se	82	104.685				
	Kr	83					
	Sr	88	100.763				
	Y	89					
	Ag	107	102.568				
	Cd	111	101.174				
	Cd	114					
>	In	115		94.3			
	Sn	120	105.078				
	Sb	121	103.230				
	Sb	123					
	Ba	135					
	Ba	137	102.126				
	Ho	165					
>	Lu	175		94.8			
	Tl	205	96.816				
	Pb	208	103.826				
	Bi	209					
	U	238	108.407				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, December 10, 2009 18:39:52

ICPMS#6 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, December 10, 2009 18:43:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 2.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.011**	**ug/L**	54.280	136	0.000
	Be	9	**0.005**	**ug/L**	90.289	8	0.000
	B	11	**1.739**	**ug/L**	15.613	1250	0.001
	Na	23	**2.037**	**ug/L**	151.193	18680	0.006
	Mg	24	**-1.165**	**ug/L**	28.560	3334	-0.002
	Al	27	**-0.463**	**ug/L**	149.786	5334	-0.001
	P	31	**0.866**	**ug/L**	119.202	4504	0.000
	K	39	**5.572**	**ug/L**	65.787	232884	0.014
	Ca	43	**4.526**	**ug/L**	131.279	236	0.000
>	Sc	45		**ug/L**		849406	849406.255
	V	51	**0.288**	**ug/L**	172.107	371	0.001
	Cr	52	**-0.021**	**ug/L**	305.505	1699	-0.000
	Cr	53		**ug/L**		42118	0.000
	Mn	55	**-0.043**	**ug/L**	1.315	579	-0.000
	Fe	57	**1.302**	**ug/L**	195.855	2356	0.000
	Co	59	**0.010**	**ug/L**	40.227	89	0.000
	Ni	60	**-0.001**	**ug/L**	3179.332	136	-0.000
	Cu	63		**ug/L**		103	-0.000
	Cu	65	**0.014**	**ug/L**	81.174	65	0.000
	Zn	66	**-0.055**	**ug/L**	222.971	1686	-0.000
	Zn	67		**ug/L**		8119	0.002
	Zn	68		**ug/L**		1751	0.000
>	Ge	74		**ug/L**		125404	125404.287
	As	75	**-0.326**	**ug/L**	216.617	-28	-0.001
	Se	77		**ug/L**		1371	-0.000
	Se	82	**0.088**	**ug/L**	242.017	-8	0.000
	Kr	83		**ug/L**		31	0.000
	Sr	88	**-0.001**	**ug/L**	213.172	201	-0.000
	Y	89		**ug/L**		24	-0.000
	Ag	107	**0.011**	**ug/L**	9.594	36	0.000
	Cd	111	**-0.018**	**ug/L**	38.628	9	-0.000
	Cd	114		**ug/L**		15	0.000
>	In	115		**ug/L**		76308	76307.595
	Sn	120	**0.067**	**ug/L**	13.325	178	0.001
	Sb	121	**0.769**	**ug/L**	16.458	1511	0.013
	Sb	123		**ug/L**		1201	0.010
	Ba	135		**ug/L**		13	-0.000
	Ba	137	**0.006**	**ug/L**	158.015	23	0.000
	Ho	165		**ug/L**		11	-0.000
>	Lu	175		**ug/L**		105982	105981.757
	Tl	205	**0.762**	**ug/L**	13.194	3363	0.020
	Pb	208	**0.001**	**ug/L**	286.382	224	0.000
	Bi	209		**ug/L**		7	-0.000
	U	238	**0.048**	**ug/L**	17.623	317	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.5			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.4			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, December 10, 2009 18:49:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 3.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.101**	**ug/L**	1.605	16627	0.019
	Be	9	**0.594**	**ug/L**	8.758	243	0.000
	B	11	**16.678**	**ug/L**	1.618	7511	0.008
	Na	23	**292.552**	**ug/L**	8.379	741853	0.843
	Mg	24	**13.727**	**ug/L**	12.428	30366	0.029
	Al	27	**34.291**	**ug/L**	16.409	83916	0.090
	P	31	**62.465**	**ug/L**	2.235	10941	0.007
	K	39	**309.337**	**ug/L**	3.755	913299	0.798
	Ca	43	**226.935**	**ug/L**	6.483	1283	0.001
>	Sc	45		**ug/L**		863357	863356.672
	V	51	**10.570**	**ug/L**	4.038	23856	0.028
	Cr	52	**10.943**	**ug/L**	1.271	22729	0.024
	Cr	53		**ug/L**		46533	0.004
	Mn	55	**5.736**	**ug/L**	0.231	16650	0.018
	Fe	57	**112.682**	**ug/L**	2.842	8445	0.007
	Co	59	**1.101**	**ug/L**	3.000	2352	0.003
	Ni	60	**2.194**	**ug/L**	3.348	1062	0.001
	Cu	63		**ug/L**		1157	0.001
	Cu	65	**1.114**	**ug/L**	1.723	545	0.001
	Zn	66	**10.620**	**ug/L**	2.474	4597	0.023
	Zn	67		**ug/L**		9104	0.010
	Zn	68		**ug/L**		3911	0.017
>	Ge	74		**ug/L**		125608	125607.710
	As	75	**5.558**	**ug/L**	9.877	1845	0.014
	Se	77		**ug/L**		1614	0.002
	Se	82	**5.760**	**ug/L**	7.513	172	0.001
	Kr	83		**ug/L**		28	-0.000
	Sr	88	**11.301**	**ug/L**	0.522	39956	0.518
	Y	89		**ug/L**		49	0.000
	Ag	107	**1.017**	**ug/L**	1.201	1529	0.020
	Cd	111	**1.111**	**ug/L**	4.943	436	0.005
	Cd	114		**ug/L**		955	0.012
>	In	115		**ug/L**		76703	76703.241
	Sn	120	**5.422**	**ug/L**	3.245	8083	0.104
	Sb	121	**3.243**	**ug/L**	4.258	4608	0.053
	Sb	123		**ug/L**		3556	0.041
	Ba	135		**ug/L**		761	0.007
	Ba	137	**2.160**	**ug/L**	2.650	1303	0.012
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		107350	107349.650
	Tl	205	**1.362**	**ug/L**	1.139	5070	0.035
	Pb	208	**2.221**	**ug/L**	2.287	9912	0.090
	Bi	209		**ug/L**		9	0.000
	U	238	**0.249**	**ug/L**	5.261	1253	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	111.009				
	Be	9	118.855				
	B	11	111.189				
	Na	23	117.021				
	Mg	24	91.516				
	Al	27	114.302				
	P	31	124.931				
	K	39	103.112				
	Ca	43	113.467				
>	Sc	45		97.0			
	V	51	105.695				
	Cr	52	109.428				
	Cr	53					
	Mn	55	114.720				
	Fe	57	112.682				
	Co	59	110.090				
	Ni	60	109.709				
	Cu	63					
	Cu	65	111.419				
	Zn	66	106.204				
	Zn	67					
	Zn	68					
>	Ge	74		95.5			
	As	75	111.151				
	Se	77					
	Se	82	115.202				
	Kr	83					
	Sr	88	113.013				
	Y	89					
	Ag	107	101.675				
	Cd	111	111.148				
	Cd	114					
>	In	115		97.3			
	Sn	120	108.446				
	Sb	121	108.111				
	Sb	123					
	Ba	135					
	Ba	137	108.016				
	Ho	165					
>	Lu	175		97.7			
	Tl	205	136.181				
	Pb	208	111.035				
	Bi	209					
	U	238	124.382				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Tl	205	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, December 10, 2009 18:55:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 4.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.156**	**ug/L**	31.136	324	0.000
	Be	9	**0.064**	**ug/L**	25.094	29	0.000
	B	11	**0.957**	**ug/L**	2.551	865	0.000
	Na	23	**100058.929**	**ug/L**	1.470	228168101	288.397
	Mg	24	**91506.901**	**ug/L**	3.015	151813016	191.932
	Al	27	**97679.748**	**ug/L**	7.336	202116775	255.532
	P	31	**95274.949**	**ug/L**	3.672	9019826	11.400
	K	39	**92473.669**	**ug/L**	3.118	188907374	238.593
	Ca	43	**93827.137**	**ug/L**	2.111	403461	0.510
>	Sc	45		**ug/L**		791239	791239.043
	V	51	**0.392**	**ug/L**	47.594	572	0.001
	Cr	52	**2.710**	**ug/L**	5.989	6374	0.006
	Cr	53		**ug/L**		37349	-0.002
	Mn	55	**5.749**	**ug/L**	2.204	15288	0.019
	Fe	57	**94118.294**	**ug/L**	2.722	4685564	5.921
	Co	59	**0.413**	**ug/L**	2.470	849	0.001
	Ni	60	**3.929**	**ug/L**	4.820	1642	0.002
	Cu	63		**ug/L**		3920	0.005
	Cu	65	**7.161**	**ug/L**	1.806	2915	0.004
	Zn	66	**5.783**	**ug/L**	4.210	2990	0.013
	Zn	67		**ug/L**		7977	0.007
	Zn	68		**ug/L**		1568	-0.000
>	Ge	74		**ug/L**		114533	114533.448
	As	75	**-0.912**	**ug/L**	107.666	-195	-0.002
	Se	77		**ug/L**		2055	0.007
	Se	82	**-2.597**	**ug/L**	21.081	-85	-0.001
	Kr	83		**ug/L**		126	0.001
	Sr	88	**1.223**	**ug/L**	2.524	4147	0.056
	Y	89		**ug/L**		140	0.002
	Ag	107	**0.556**	**ug/L**	40.009	780	0.011
	Cd	111	**1.810**	**ug/L**	44.289	646	0.009
	Cd	114		**ug/L**		3262	0.046
>	In	115		**ug/L**		70582	70582.043
	Sn	120	**0.135**	**ug/L**	10.667	257	0.003
	Sb	121	**-0.050**	**ug/L**	114.608	455	-0.001
	Sb	123		**ug/L**		369	-0.000
	Ba	135		**ug/L**		239	0.002
	Ba	137	**0.691**	**ug/L**	3.017	385	0.004
	Ho	165		**ug/L**		223	0.002
>	Lu	175		**ug/L**		96133	96133.050
	Tl	205	**0.222**	**ug/L**	7.939	1705	0.006
	Pb	208	**0.196**	**ug/L**	7.061	964	0.008
	Bi	209		**ug/L**		137	0.001
	U	238	**-0.003**	**ug/L**	35.560	79	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	100.059				
	Mg	24	91.507				
	Al	27	97.680				
	P	31	95.275				
	K	39	92.474				
	Ca	43	93.827				
>	Sc	45			88.9		
	V	51					
	Cr	52	73.254				
	Cr	53					
	Mn	55	99.118				
	Fe	57	94.118				
	Co	59	165.244				
	Ni	60	145.536				
	Cu	63					
	Cu	65	246.928				
	Zn	66	160.625				
	Zn	67					
	Zn	68					
>	Ge	74			87.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	101.876				
	Y	89					
	Ag	107					
	Cd	111	452.551				
	Cd	114					
>	In	115			89.6		
	Sn	120					
	Sb	121	-50.390				
	Sb	123					
	Ba	135					
	Ba	137	103.084				
	Ho	165					
>	Lu	175			87.5		
	Tl	205					
	Pb	208	97.985				
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, December 10, 2009 19:00:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 5.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**19.007**	**ug/L**	0.404	26111	0.033
|	Be	9	**19.035**	**ug/L**	1.263	6987	0.009
|	B	11	**19.485**	**ug/L**	1.718	7988	0.009
|	Na	23	**96823.172**	**ug/L**	1.681	221649013	279.071
|	Mg	24	**91412.541**	**ug/L**	6.419	152258215	191.734
|	Al	27	**92639.037**	**ug/L**	5.271	192505628	242.345
|	P	31	**93951.547**	**ug/L**	1.217	8932296	11.242
|	K	39	**89771.558**	**ug/L**	1.392	184171158	231.621
|	Ca	43	**91081.983**	**ug/L**	0.525	393264	0.495
|>	Sc	45		**ug/L**		794234	794233.507
|	V	51	**22.456**	**ug/L**	2.650	46910	0.059
|	Cr	52	**24.128**	**ug/L**	0.465	44147	0.054
|	Cr	53		**ug/L**		40764	0.002
|	Mn	55	**26.933**	**ug/L**	0.768	69517	0.087
|	Fe	57	**92620.870**	**ug/L**	1.084	4629865	5.827
|	Co	59	**20.690**	**ug/L**	0.237	39522	0.050
|	Ni	60	**23.518**	**ug/L**	1.083	9233	0.011
|	Cu	63		**ug/L**		20180	0.025
⌊	Cu	65	**26.437**	**ug/L**	0.708	10653	0.013
⌈	Zn	66	**25.860**	**ug/L**	3.308	7934	0.056
|	Zn	67		**ug/L**		8893	0.016
|	Zn	68		**ug/L**		5288	0.033
|>	Ge	74		**ug/L**		113949	113949.162
|	As	75	**21.595**	**ug/L**	1.487	6304	0.055
|	Se	77		**ug/L**		2483	0.011
|	Se	82	**21.295**	**ug/L**	3.325	604	0.005
⌊	Kr	83		**ug/L**		112	0.001
⌈	Sr	88	**24.185**	**ug/L**	0.325	78907	1.109
|	Y	89		**ug/L**		137	0.002
|	Ag	107	**19.443**	**ug/L**	0.508	26738	0.376
|	Cd	111	**21.111**	**ug/L**	0.520	7410	0.104
|	Cd	114		**ug/L**		19183	0.270
|>	In	115		**ug/L**		70980	70979.967
|	Sn	120	**21.230**	**ug/L**	0.795	29070	0.408
|	Sb	121	**21.870**	**ug/L**	1.031	25793	0.356
⌊	Sb	123		**ug/L**		20104	0.278
⌈	Ba	135		**ug/L**		6905	0.071
|	Ba	137	**22.566**	**ug/L**	0.416	12065	0.125
|	Ho	165		**ug/L**		215	0.002
|>	Lu	175		**ug/L**		96432	96432.051
|	Tl	205	**16.450**	**ug/L**	5.006	42196	0.426
|	Pb	208	**21.264**	**ug/L**	0.207	83570	0.865
|	Bi	209		**ug/L**		195	0.002
⌊	U	238	**23.244**	**ug/L**	0.893	96899	1.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 5

Report Date/Time: Thursday, December 10, 2009 19:03:29

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	95.033				
	Be	9	95.177				
	B	11	97.424				
	Na	23	96.823				
	Mg	24	91.413				
	Al	27	92.639				
	P	31	93.952				
	K	39	89.772				
	Ca	43	91.082				
>	Sc	45		89.3			
	V	51	112.279				
	Cr	52	101.805				
	Cr	53					
	Mn	55	104.391				
	Fe	57	92.621				
	Co	59	102.173				
	Ni	60	103.602				
	Cu	63					
	Cu	65	115.446				
	Zn	66	109.576				
	Zn	67					
	Zn	68					
>	Ge	74		86.6			
	As	75	107.977				
	Se	77					
	Se	82	106.475				
	Kr	83					
	Sr	88	114.078				
	Y	89					
	Ag	107	97.217				
	Cd	111	103.487				
	Cd	114					
>	In	115		90.1			
	Sn	120	106.151				
	Sb	121	108.805				
	Sb	123					
	Ba	135					
	Ba	137	109.172				
	Ho	165					
>	Lu	175		87.7			
	Tl	205	82.252				
	Pb	208	105.265				
	Bi	209					
	U	238	116.221				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Thursday, December 10, 2009 19:03:29

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 19:06:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 6.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.082**	**ug/L**	1.265	68016	0.085
	Be	9	**50.793**	**ug/L**	0.856	18846	0.023
	B	11	**100.538**	**ug/L**	2.806	39577	0.049
	Na	23	**5128.003**	**ug/L**	6.478	11882176	14.780
	Mg	24	**4628.448**	**ug/L**	4.585	7804903	9.708
	Al	27	**4989.490**	**ug/L**	6.548	10490108	13.053
	P	31	**5247.844**	**ug/L**	1.590	508574	0.628
	K	39	**4819.645**	**ug/L**	1.441	10197666	12.435
	Ca	43	**4909.686**	**ug/L**	2.722	21630	0.027
>	Sc	45		**ug/L**		803350	803350.351
	V	51	**50.714**	**ug/L**	1.178	107474	0.134
	Cr	52	**52.917**	**ug/L**	1.538	95962	0.117
	Cr	53		**ug/L**		47999	0.010
	Mn	55	**52.295**	**ug/L**	0.735	135906	0.168
	Fe	57	**5074.652**	**ug/L**	0.699	258627	0.319
	Co	59	**51.094**	**ug/L**	1.512	98617	0.123
	Ni	60	**52.697**	**ug/L**	1.134	20765	0.026
	Cu	63		**ug/L**		46279	0.057
	Cu	65	**54.364**	**ug/L**	0.549	22099	0.027
	Zn	66	**55.270**	**ug/L**	1.233	16184	0.120
	Zn	67		**ug/L**		9843	0.019
	Zn	68		**ug/L**		12185	0.087
>	Ge	74		**ug/L**		121316	121316.205
	As	75	**48.510**	**ug/L**	2.000	14984	0.123
	Se	77		**ug/L**		2442	0.009
	Se	82	**53.723**	**ug/L**	2.562	1637	0.014
	Kr	83		**ug/L**		28	0.000
	Sr	88	**51.018**	**ug/L**	1.147	170636	2.339
	Y	89		**ug/L**		45	0.000
	Ag	107	**52.139**	**ug/L**	1.075	73562	1.009
	Cd	111	**50.844**	**ug/L**	1.296	18297	0.251
	Cd	114		**ug/L**		41371	0.568
>	In	115		**ug/L**		72864	72863.564
	Sn	120	**53.145**	**ug/L**	2.115	74568	1.023
	Sb	121	**51.062**	**ug/L**	5.805	61080	0.831
	Sb	123		**ug/L**		47145	0.642
	Ba	135		**ug/L**		16768	0.166
	Ba	137	**52.146**	**ug/L**	1.197	29230	0.289
	Ho	165		**ug/L**		21	0.000
>	Lu	175		**ug/L**		101193	101193.183
	Tl	205	**48.469**	**ug/L**	1.798	128145	1.255
	Pb	208	**52.737**	**ug/L**	0.523	217183	2.144
	Bi	209		**ug/L**		17	0.000
	U	238	**54.357**	**ug/L**	1.003	237662	2.348

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Thursday, December 10, 2009 19:09:22

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.164				
	Be	9	101.587				
	B	11	100.538				
	Na	23	102.560				
	Mg	24	92.569				
	Al	27	98.802				
	P	31	104.957				
	K	39	96.393				
	Ca	43	98.194				
>	Sc	45		90.3			
	V	51	101.427				
	Cr	52	105.834				
	Cr	53					
	Mn	55	104.591				
	Fe	57	101.493				
	Co	59	102.189				
	Ni	60	105.394				
	Cu	63					
	Cu	65	108.728				
	Zn	66	110.541				
	Zn	67					
	Zn	68					
>	Ge	74		92.2			
	As	75	97.020				
	Se	77					
	Se	82	107.446				
	Kr	83					
	Sr	88	102.035				
	Y	89					
	Ag	107	104.277				
	Cd	111	101.687				
	Cd	114					
>	In	115		92.5			
	Sn	120	106.290				
	Sb	121	102.125				
	Sb	123					
	Ba	135					
	Ba	137	104.292				
	Ho	165					
>	Lu	175		92.1			
	Tl	205	96.938				
	Pb	208	105.474				
	Bi	209					
	U	238	108.714				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Zn	66	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 19:12:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 7.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.035**	**ug/L**	16.324	168	0.000
	Be	9	**0.004**	**ug/L**	110.358	7	0.000
	B	11	**1.303**	**ug/L**	28.161	1053	0.001
	Na	23	**5.345**	**ug/L**	26.187	26358	0.015
	Mg	24	**1.341**	**ug/L**	66.253	7669	0.003
	Al	27	**3.855**	**ug/L**	77.449	14675	0.010
	P	31	**-1.438**	**ug/L**	17.745	4200	-0.000
	K	39	**15.819**	**ug/L**	54.946	251196	0.041
	Ca	43	**9.580**	**ug/L**	74.942	255	0.000
>	Sc	45		**ug/L**		835725	835725.206
	V	51	**0.660**	**ug/L**	111.290	1199	0.002
	Cr	52	**0.139**	**ug/L**	24.650	1969	0.000
	Cr	53		**ug/L**		41881	0.001
	Mn	55	**-0.089**	**ug/L**	5.606	445	-0.000
	Fe	57	**9.268**	**ug/L**	7.766	2738	0.001
	Co	59	**0.003**	**ug/L**	253.170	74	0.000
	Ni	60	**0.010**	**ug/L**	133.068	139	0.000
	Cu	63		**ug/L**		102	-0.000
	Cu	65	**0.018**	**ug/L**	91.561	65	0.000
	Zn	66	**0.187**	**ug/L**	65.167	1734	0.000
	Zn	67		**ug/L**		8177	0.004
	Zn	68		**ug/L**		1741	0.000
>	Ge	74		**ug/L**		124107	124106.995
	As	75	**-0.564**	**ug/L**	133.596	-101	-0.001
	Se	77		**ug/L**		1332	-0.001
	Se	82	**-0.075**	**ug/L**	24.226	-13	-0.000
	Kr	83		**ug/L**		36	0.000
	Sr	88	**-0.007**	**ug/L**	101.815	181	-0.000
	Y	89		**ug/L**		13	-0.000
	Ag	107	**0.007**	**ug/L**	48.338	30	0.000
	Cd	111	**-0.017**	**ug/L**	33.762	9	-0.000
	Cd	114		**ug/L**		20	0.000
>	In	115		**ug/L**		75727	75727.356
	Sn	120	**0.060**	**ug/L**	15.626	167	0.001
	Sb	121	**0.290**	**ug/L**	41.072	907	0.005
	Sb	123		**ug/L**		699	0.004
	Ba	135		**ug/L**		10	-0.000
	Ba	137	**0.010**	**ug/L**	113.835	25	0.000
	Ho	165		**ug/L**		11	-0.000
>	Lu	175		**ug/L**		105000	105000.179
	Tl	205	**0.769**	**ug/L**	16.716	3349	0.020
	Pb	208	**-0.001**	**ug/L**	108.611	212	-0.000
	Bi	209		**ug/L**		9	0.000
	U	238	**0.038**	**ug/L**	31.907	270	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.9			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, December 10, 2009 19:15:19

ICPMS#6 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, December 10, 2009 19:18:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 10.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**970.579**	**ug/L**	1.541	1201412	1.672
	Be	9	**1001.405**	**ug/L**	0.276	332307	0.462
	B	11	**0.461**	**ug/L**	29.410	613	0.000
	Na	23	**53350.505**	**ug/L**	2.791	110521293	153.771
	Mg	24	**50215.607**	**ug/L**	6.977	75683908	105.325
	Al	27	**51655.919**	**ug/L**	6.123	97100856	135.133
	P	31	**22949.144**	**ug/L**	0.436	1977084	2.746
	K	39	**49965.200**	**ug/L**	1.250	92829841	128.916
	Ca	43	**50430.115**	**ug/L**	0.398	197100	0.274
>	Sc	45		**ug/L**		718645	718645.195
	V	51	**881.639**	**ug/L**	0.089	1675277	2.331
	Cr	52	**920.430**	**ug/L**	0.363	1469177	2.042
	Cr	53		**ug/L**		233591	0.276
	Mn	55	**996.528**	**ug/L**	1.027	2306112	3.208
	Fe	57	**48194.172**	**ug/L**	7.383	2180943	3.032
	Co	59	**870.322**	**ug/L**	0.534	1501911	2.090
	Ni	60	**969.195**	**ug/L**	0.135	339644	0.472
	Cu	63		**ug/L**		698094	0.971
	Cu	65	**945.351**	**ug/L**	0.546	342960	0.477
	Zn	66	**2339.933**	**ug/L**	0.592	538856	5.074
	Zn	67		**ug/L**		99701	0.879
	Zn	68		**ug/L**		393279	3.699
>	Ge	74		**ug/L**		105923	105923.319
	As	75	**940.588**	**ug/L**	1.292	252499	2.383
	Se	77		**ug/L**		12023	0.102
	Se	82	**507.298**	**ug/L**	0.695	13572	0.128
	Kr	83		**ug/L**		58	0.000
	Sr	88	**1046.495**	**ug/L**	1.368	3099960	47.987
	Y	89		**ug/L**		125	0.002
	Ag	107	**259.883**	**ug/L**	0.831	325047	5.032
	Cd	111	**970.270**	**ug/L**	1.567	309352	4.789
	Cd	114		**ug/L**		682550	10.566
>	In	115		**ug/L**		64601	64601.202
	Sn	120	**1003.637**	**ug/L**	1.227	1247502	19.311
	Sb	121	**277.671**	**ug/L**	0.795	292557	4.522
	Sb	123		**ug/L**		229353	3.545
	Ba	135		**ug/L**		296203	3.230
	Ba	137	**1003.208**	**ug/L**	0.882	509361	5.554
	Ho	165		**ug/L**		70	0.001
>	Lu	175		**ug/L**		91716	91716.445
	Tl	205	**462.480**	**ug/L**	2.723	1098678	11.971
	Pb	208	**4865.238**	**ug/L**	1.816	18139382	197.815
	Bi	209		**ug/L**		435	0.005
	U	238	**5173.433**	**ug/L**	2.486	20489078	223.458

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.058				
	Be	9	100.141				
	B	11					
	Na	23	106.701				
	Mg	24	100.431				
	Al	27	103.312				
	P	31	91.797				
	K	39	99.930				
	Ca	43	100.860				
>	Sc	45		80.8			
	V	51	88.164				
	Cr	52	92.043				
	Cr	53					
	Mn	55	99.653				
	Fe	57	96.388				
	Co	59	87.032				
	Ni	60	96.920				
	Cu	63					
	Cu	65	94.535				
	Zn	66	93.597				
	Zn	67					
	Zn	68					
>	Ge	74		80.5			
	As	75	94.059				
	Se	77					
	Se	82	101.460				
	Kr	83					
	Sr	88	104.650				
	Y	89					
	Ag	107	103.953				
	Cd	111	97.027				
	Cd	114					
>	In	115		82.0			
	Sn	120	100.364				
	Sb	121	111.068				
	Sb	123					
	Ba	135					
	Ba	137	100.321				
	Ho	165					
>	Lu	175		83.5			
	Tl	205	92.496				
	Pb	208	97.305				
	Bi	209					
	U	238	103.469				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	V	51	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Sb	121	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, December 10, 2009 19:24:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 11.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.281**	**ug/L**	1.226	67607	0.085
	Be	9	**52.041**	**ug/L**	0.529	19115	0.024
	B	11	**103.871**	**ug/L**	2.975	40466	0.050
	Na	23	**5010.033**	**ug/L**	3.891	11496053	14.440
	Mg	24	**4724.838**	**ug/L**	1.912	7886059	9.910
	Al	27	**5102.227**	**ug/L**	4.292	10620406	13.348
	P	31	**5344.454**	**ug/L**	0.380	512678	0.639
	K	39	**4787.901**	**ug/L**	3.918	10030630	12.353
	Ca	43	**4912.699**	**ug/L**	0.128	21429	0.027
>	Sc	45		**ug/L**		795241	795240.979
	V	51	**53.079**	**ug/L**	0.727	111372	0.140
	Cr	52	**53.844**	**ug/L**	0.882	96638	0.119
	Cr	53		**ug/L**		48743	0.012
	Mn	55	**53.033**	**ug/L**	0.527	136427	0.171
	Fe	57	**5159.775**	**ug/L**	0.629	260282	0.325
	Co	59	**51.797**	**ug/L**	0.095	98971	0.124
	Ni	60	**53.049**	**ug/L**	0.633	20693	0.026
	Cu	63		**ug/L**		45906	0.058
	Cu	65	**54.873**	**ug/L**	0.935	22081	0.028
	Zn	66	**54.967**	**ug/L**	1.092	16054	0.119
	Zn	67		**ug/L**		10019	0.020
	Zn	68		**ug/L**		12169	0.087
>	Ge	74		**ug/L**		120928	120927.874
	As	75	**51.645**	**ug/L**	0.543	15899	0.131
	Se	77		**ug/L**		2369	0.008
	Se	82	**54.885**	**ug/L**	1.737	1667	0.014
	Kr	83		**ug/L**		36	0.000
	Sr	88	**50.752**	**ug/L**	1.082	170937	2.327
	Y	89		**ug/L**		38	0.000
	Ag	107	**52.495**	**ug/L**	0.491	74589	1.016
	Cd	111	**51.472**	**ug/L**	1.225	18652	0.254
	Cd	114		**ug/L**		42579	0.580
>	In	115		**ug/L**		73370	73370.491
	Sn	120	**53.864**	**ug/L**	1.079	76113	1.036
	Sb	121	**52.739**	**ug/L**	3.873	63528	0.859
	Sb	123		**ug/L**		49314	0.667
	Ba	135		**ug/L**		16762	0.165
	Ba	137	**52.555**	**ug/L**	1.503	29611	0.291
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		101711	101710.842
	Tl	205	**53.280**	**ug/L**	0.443	141491	1.379
	Pb	208	**53.625**	**ug/L**	0.649	221960	2.180
	Bi	209		**ug/L**		18	0.000
	U	238	**55.863**	**ug/L**	0.297	245508	2.413

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 11

Report Date/Time: Thursday, December 10, 2009 19:27:03

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.562				
	Be	9	104.083				
	B	11	103.871				
	Na	23	100.201				
	Mg	24	94.497				
	Al	27	101.034				
	P	31	106.889				
	K	39	95.758				
	Ca	43	98.254				
>	Sc	45		89.4			
	V	51	106.159				
	Cr	52	107.688				
	Cr	53					
	Mn	55	106.065				
	Fe	57	103.196				
	Co	59	103.593				
	Ni	60	106.098				
	Cu	63					
	Cu	65	109.745				
	Zn	66	109.934				
	Zn	67					
	Zn	68					
>	Ge	74		91.9			
	As	75	103.289				
	Se	77					
	Se	82	109.770				
	Kr	83					
	Sr	88	101.504				
	Y	89					
	Ag	107	104.990				
	Cd	111	102.943				
	Cd	114					
>	In	115		93.1			
	Sn	120	107.728				
	Sb	121	105.477				
	Sb	123					
	Ba	135					
	Ba	137	105.111				
	Ho	165					
>	Lu	175		92.6			
	Tl	205	106.561				
	Pb	208	107.249				
	Bi	209					
	U	238	111.726				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, December 10, 2009 19:30:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 12.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.077**	**ug/L**	15.303	228	0.000
	Be	9	**0.024**	**ug/L**	47.910	15	0.000
	B	11	**1.287**	**ug/L**	28.842	1044	0.001
	Na	23	**3.165**	**ug/L**	83.688	21016	0.009
	Mg	24	**0.978**	**ug/L**	160.333	7002	0.002
	Al	27	**1.860**	**ug/L**	99.639	10337	0.005
	P	31	**-1.556**	**ug/L**	86.865	4181	-0.000
	K	39	**2.157**	**ug/L**	132.105	221370	0.006
	Ca	43	**10.650**	**ug/L**	76.499	259	0.000
>	Sc	45		**ug/L**		833970	833969.873
	V	51	**0.006**	**ug/L**	10349.343	-241	0.000
	Cr	52	**0.128**	**ug/L**	48.640	1945	0.000
	Cr	53		**ug/L**		41764	0.001
	Mn	55	**-0.060**	**ug/L**	26.040	521	-0.000
	Fe	57	**4.806**	**ug/L**	55.131	2497	0.000
	Co	59	**0.045**	**ug/L**	5.905	158	0.000
	Ni	60	**0.008**	**ug/L**	212.836	138	0.000
	Cu	63		**ug/L**		140	0.000
	Cu	65	**0.060**	**ug/L**	41.552	83	0.000
	Zn	66	**0.131**	**ug/L**	165.927	1723	0.000
	Zn	67		**ug/L**		8241	0.004
	Zn	68		**ug/L**		1754	0.000
>	Ge	74		**ug/L**		124386	124386.080
	As	75	**1.263**	**ug/L**	37.242	474	0.003
	Se	77		**ug/L**		1365	-0.000
	Se	82	**0.012**	**ug/L**	1448.357	-10	0.000
	Kr	83		**ug/L**		33	0.000
	Sr	88	**0.010**	**ug/L**	56.714	242	0.000
	Y	89		**ug/L**		18	-0.000
	Ag	107	**0.015**	**ug/L**	24.971	42	0.000
	Cd	111	**0.020**	**ug/L**	79.766	23	0.000
	Cd	114		**ug/L**		30	0.000
>	In	115		**ug/L**		76368	76368.179
	Sn	120	**0.131**	**ug/L**	8.881	273	0.003
	Sb	121	**0.692**	**ug/L**	21.117	1416	0.011
	Sb	123		**ug/L**		1123	0.009
	Ba	135		**ug/L**		14	-0.000
	Ba	137	**0.026**	**ug/L**	17.639	34	0.000
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		105900	105900.130
	Tl	205	**2.115**	**ug/L**	10.535	7069	0.055
	Pb	208	**0.084**	**ug/L**	11.273	580	0.003
	Bi	209		**ug/L**		7	-0.000
	U	238	**0.395**	**ug/L**	6.806	1903	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.4			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Tl	205	CCB is out of limits (+/- PQL)
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 20:05:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 8.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.258**	**ug/L**	1.615	70298	0.085
	Be	9	**51.672**	**ug/L**	1.971	19743	0.024
	B	11	**99.899**	**ug/L**	3.100	40503	0.048
	Na	23	**5080.389**	**ug/L**	4.906	12130906	14.643
	Mg	24	**4536.232**	**ug/L**	1.931	7876784	9.515
	Al	27	**4918.662**	**ug/L**	1.459	10653533	12.867
	P	31	**5237.085**	**ug/L**	0.606	522744	0.627
	K	39	**4940.905**	**ug/L**	4.921	10760092	12.748
	Ca	43	**4903.678**	**ug/L**	2.135	22251	0.027
>	Sc	45		**ug/L**		827368	827367.756
	V	51	**52.234**	**ug/L**	0.605	114024	0.138
	Cr	52	**53.163**	**ug/L**	0.108	99292	0.118
	Cr	53		**ug/L**		49034	0.010
	Mn	55	**52.406**	**ug/L**	1.578	140249	0.169
	Fe	57	**5085.205**	**ug/L**	0.576	266904	0.320
	Co	59	**50.693**	**ug/L**	0.252	100779	0.122
	Ni	60	**52.503**	**ug/L**	0.669	21308	0.026
	Cu	63		**ug/L**		47061	0.057
	Cu	65	**53.474**	**ug/L**	0.926	22387	0.027
	Zn	66	**55.321**	**ug/L**	0.300	16533	0.120
	Zn	67		**ug/L**		9848	0.017
	Zn	68		**ug/L**		12363	0.086
>	Ge	74		**ug/L**		123822	123821.681
	As	75	**49.952**	**ug/L**	1.135	15747	0.127
	Se	77		**ug/L**		2504	0.009
	Se	82	**53.631**	**ug/L**	3.232	1668	0.014
	Kr	83		**ug/L**		32	0.000
	Sr	88	**50.646**	**ug/L**	1.085	175633	2.322
	Y	89		**ug/L**		163	0.002
	Ag	107	**52.172**	**ug/L**	1.241	76324	1.010
	Cd	111	**50.849**	**ug/L**	2.548	18969	0.251
	Cd	114		**ug/L**		42977	0.569
>	In	115		**ug/L**		75550	75550.024
	Sn	120	**52.606**	**ug/L**	1.964	76532	1.012
	Sb	121	**51.251**	**ug/L**	6.608	63556	0.835
	Sb	123		**ug/L**		49159	0.646
	Ba	135		**ug/L**		17262	0.164
	Ba	137	**52.016**	**ug/L**	1.329	30265	0.288
	Ho	165		**ug/L**		24	0.000
>	Lu	175		**ug/L**		105039	105039.497
	Tl	205	**47.645**	**ug/L**	1.623	130784	1.233
	Pb	208	**52.437**	**ug/L**	1.070	224157	2.132
	Bi	209		**ug/L**		23	0.000
	U	238	**54.066**	**ug/L**	0.606	245398	2.335

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.515				
	Be	9	103.344				
	B	11	99.899				
	Na	23	101.608				
	Mg	24	90.725				
	Al	27	97.399				
	P	31	104.742				
	K	39	98.818				
	Ca	43	98.074				
>	Sc	45		93.0			
	V	51	104.468				
	Cr	52	106.326				
	Cr	53					
	Mn	55	104.812				
	Fe	57	101.704				
	Co	59	101.386				
	Ni	60	105.006				
	Cu	63					
	Cu	65	106.947				
	Zn	66	110.643				
	Zn	67					
	Zn	68					
>	Ge	74		94.1			
	As	75	99.903				
	Se	77					
	Se	82	107.263				
	Kr	83					
	Sr	88	101.291				
	Y	89					
	Ag	107	104.344				
	Cd	111	101.699				
	Cd	114					
>	In	115		95.9			
	Sn	120	105.212				
	Sb	121	102.502				
	Sb	123					
	Ba	135					
	Ba	137	104.032				
	Ho	165					
>	Lu	175		95.6			
	Tl	205	95.290				
	Pb	208	104.874				
	Bi	209					
	U	238	108.133				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Zn	66	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 20:11:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 9.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	**ug/L**	75.677	133	0.000
	Be	9	**0.002**	**ug/L**	214.499	7	0.000
	B	11	**1.334**	**ug/L**	24.214	1066	0.001
	Na	23	**4.520**	**ug/L**	26.586	24354	0.013
	Mg	24	**-0.190**	**ug/L**	1487.469	5001	-0.000
	Al	27	**1.398**	**ug/L**	130.311	9337	0.004
	P	31	**-2.291**	**ug/L**	32.578	4115	-0.000
	K	39	**6.386**	**ug/L**	69.136	230852	0.016
	Ca	43	**9.458**	**ug/L**	53.145	255	0.000
>	Sc	45		**ug/L**		835632	835631.571
	V	51	**0.088**	**ug/L**	566.942	-71	0.000
	Cr	52	**0.086**	**ug/L**	32.325	1870	0.000
	Cr	53		**ug/L**		41760	0.001
	Mn	55	**-0.091**	**ug/L**	5.491	439	-0.000
	Fe	57	**3.738**	**ug/L**	38.051	2447	0.000
	Co	59	**0.015**	**ug/L**	58.913	98	0.000
	Ni	60	**0.006**	**ug/L**	621.525	137	0.000
	Cu	63		**ug/L**		110	-0.000
	Cu	65	**-0.007**	**ug/L**	286.603	55	-0.000
	Zn	66	**0.062**	**ug/L**	73.607	1717	0.000
	Zn	67		**ug/L**		8030	0.002
	Zn	68		**ug/L**		1762	0.000
>	Ge	74		**ug/L**		125343	125342.726
	As	75	**0.451**	**ug/L**	28.052	220	0.001
	Se	77		**ug/L**		1338	-0.001
	Se	82	**0.195**	**ug/L**	43.166	-4	0.000
	Kr	83		**ug/L**		26	-0.000
	Sr	88	**-0.007**	**ug/L**	62.001	184	-0.000
	Y	89		**ug/L**		23	-0.000
	Ag	107	**0.009**	**ug/L**	98.095	32	0.000
	Cd	111	**-0.026**	**ug/L**	58.972	6	-0.000
	Cd	114		**ug/L**		22	0.000
>	In	115		**ug/L**		77027	77027.344
	Sn	120	**0.066**	**ug/L**	25.656	179	0.001
	Sb	121	**0.478**	**ug/L**	25.719	1160	0.008
	Sb	123		**ug/L**		881	0.006
	Ba	135		**ug/L**		14	-0.000
	Ba	137	**0.000**	**ug/L**	3944.708	19	0.000
	Ho	165		**ug/L**		11	-0.000
>	Lu	175		**ug/L**		105869	105869.231
	Tl	205	**0.488**	**ug/L**	21.645	2608	0.013
	Pb	208	**0.014**	**ug/L**	8.059	277	0.001
	Bi	209		**ug/L**		13	0.000
	U	238	**0.052**	**ug/L**	17.779	337	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.9			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 20:59:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 6.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.483**	**ug/L**	1.191	70598	0.085
	Be	9	**51.999**	**ug/L**	1.032	19863	0.024
	B	11	**100.724**	**ug/L**	1.616	40825	0.049
	Na	23	**5005.844**	**ug/L**	1.378	11946135	14.428
	Mg	24	**4842.825**	**ug/L**	4.260	8407777	10.158
	Al	27	**4880.030**	**ug/L**	1.489	10565195	12.766
	P	31	**5245.087**	**ug/L**	0.367	523347	0.628
	K	39	**4597.537**	**ug/L**	3.182	10024287	11.862
	Ca	43	**4925.108**	**ug/L**	0.850	22341	0.027
>	Sc	45		**ug/L**		827051	827051.029
	V	51	**52.755**	**ug/L**	0.234	115117	0.140
	Cr	52	**53.168**	**ug/L**	0.359	99264	0.118
	Cr	53		**ug/L**		46425	0.007
	Mn	55	**52.172**	**ug/L**	0.394	139589	0.168
	Fe	57	**5072.718**	**ug/L**	0.640	266157	0.319
	Co	59	**50.790**	**ug/L**	0.937	100932	0.122
	Ni	60	**52.125**	**ug/L**	1.343	21149	0.025
	Cu	63		**ug/L**		47157	0.057
	Cu	65	**53.745**	**ug/L**	0.937	22494	0.027
	Zn	66	**56.619**	**ug/L**	0.494	16799	0.123
	Zn	67		**ug/L**		9130	0.012
	Zn	68		**ug/L**		12495	0.088
>	Ge	74		**ug/L**		123216	123215.685
	As	75	**49.336**	**ug/L**	0.858	15479	0.125
	Se	77		**ug/L**		2441	0.009
	Se	82	**53.603**	**ug/L**	1.842	1659	0.014
	Kr	83		**ug/L**		29	0.000
	Sr	88	**50.668**	**ug/L**	0.498	174482	2.323
	Y	89		**ug/L**		35	0.000
	Ag	107	**51.488**	**ug/L**	1.023	74800	0.997
	Cd	111	**50.495**	**ug/L**	1.485	18708	0.249
	Cd	114		**ug/L**		43219	0.576
>	In	115		**ug/L**		75014	75014.058
	Sn	120	**52.974**	**ug/L**	0.922	76533	1.019
	Sb	121	**50.863**	**ug/L**	5.468	62652	0.828
	Sb	123		**ug/L**		48856	0.646
	Ba	135		**ug/L**		16888	0.161
	Ba	137	**51.795**	**ug/L**	0.563	30143	0.287
	Ho	165		**ug/L**		24	0.000
>	Lu	175		**ug/L**		105052	105051.571
	Tl	205	**47.456**	**ug/L**	0.428	130296	1.228
	Pb	208	**53.112**	**ug/L**	0.464	227076	2.159
	Bi	209		**ug/L**		98	0.001
	U	238	**54.377**	**ug/L**	0.793	246841	2.349

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Thursday, December 10, 2009 21:01:30

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.967				
	Be	9	103.999				
	B	11	100.724				
	Na	23	100.117				
	Mg	24	96.856				
	Al	27	96.634				
	P	31	104.902				
	K	39	91.951				
	Ca	43	98.502				
>	Sc	45		92.9			
	V	51	105.510				
	Cr	52	106.335				
	Cr	53					
	Mn	55	104.343				
	Fe	57	101.454				
	Co	59	101.580				
	Ni	60	104.250				
	Cu	63					
	Cu	65	107.491				
	Zn	66	113.238				
	Zn	67					
	Zn	68					
>	Ge	74		93.7			
	As	75	98.671				
	Se	77					
	Se	82	107.207				
	Kr	83					
	Sr	88	101.336				
	Y	89					
	Ag	107	102.975				
	Cd	111	100.990				
	Cd	114					
>	In	115		95.2			
	Sn	120	105.948				
	Sb	121	101.725				
	Sb	123					
	Ba	135					
	Ba	137	103.589				
	Ho	165					
>	Lu	175		95.6			
	Tl	205	94.913				
	Pb	208	106.224				
	Bi	209					
	U	238	108.753				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Zn	66	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 21:04:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 7.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.012	ug/L	68.667	101	-0.000
	Be	9	0.003	ug/L	165.889	7	0.000
	B	11	1.262	ug/L	28.780	1033	0.001
	Na	23	4.533	ug/L	29.267	24354	0.013
	Mg	24	-0.943	ug/L	31.502	3667	-0.002
	Al	27	0.824	ug/L	209.963	8003	0.002
	P	31	-0.440	ug/L	233.977	4288	-0.000
	K	39	6.387	ug/L	124.299	230522	0.016
	Ca	43	6.710	ug/L	51.622	241	0.000
>	Sc	45		ug/L		833590	833589.958
	V	51	0.028	ug/L	963.931	-212	0.000
	Cr	52	0.087	ug/L	38.721	1867	0.000
	Cr	53		ug/L		40697	-0.001
	Mn	55	-0.090	ug/L	14.422	441	-0.000
	Fe	57	4.746	ug/L	29.258	2493	0.000
	Co	59	0.012	ug/L	72.413	91	0.000
	Ni	60	-0.006	ug/L	237.996	132	-0.000
	Cu	63		ug/L		98	-0.000
	Cu	65	0.004	ug/L	115.458	59	0.000
	Zn	66	0.533	ug/L	39.220	1832	0.001
	Zn	67		ug/L		7697	-0.001
	Zn	68		ug/L		1811	0.001
>	Ge	74		ug/L		124460	124460.392
	As	75	0.221	ug/L	32.044	146	0.001
	Se	77		ug/L		1325	-0.001
	Se	82	0.172	ug/L	77.542	-5	0.000
	Kr	83		ug/L		29	0.000
	Sr	88	-0.004	ug/L	88.873	190	-0.000
	Y	89		ug/L		18	-0.000
	Ag	107	0.004	ug/L	65.924	25	0.000
	Cd	111	-0.027	ug/L	40.655	5	-0.000
	Cd	114		ug/L		18	0.000
>	In	115		ug/L		76053	76052.706
	Sn	120	0.076	ug/L	21.221	191	0.001
	Sb	121	0.490	ug/L	35.468	1158	0.008
	Sb	123		ug/L		886	0.006
	Ba	135		ug/L		13	-0.000
	Ba	137	0.001	ug/L	299.263	20	0.000
	Ho	165		ug/L		13	0.000
>	Lu	175		ug/L		105304	105303.766
	Tl	205	0.301	ug/L	31.865	2081	0.008
	Pb	208	0.009	ug/L	37.399	256	0.000
	Bi	209		ug/L		28	0.000
	U	238	0.061	ug/L	21.120	373	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.8			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985796
Sample Date/Time: Thursday, December 10, 2009 21:10:59
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928677|2|rm|
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985796.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.141**	ug/L	10.444	320	0.000
	Be	9	**0.011**	ug/L	40.929	10	0.000
	B	11	**3.954**	ug/L	0.810	2121	0.002
	Na	23	**955.929**	ug/L	3.494	2312002	2.755
	Mg	24	**173.067**	ug/L	8.084	307962	0.363
	Al	27	**92.535**	ug/L	6.893	208177	0.242
	P	31	**73.372**	ug/L	4.098	11659	0.009
	K	39	**201.866**	ug/L	7.331	651203	0.521
	Ca	43	**992.429**	ug/L	2.283	4709	0.005
>	Sc	45		ug/L		834093	834092.601
	V	51	**0.453**	ug/L	29.883	732	0.001
	Cr	52	**0.665**	ug/L	5.582	2937	0.001
	Cr	53		ug/L		30511	-0.013
	Mn	55	**1.078**	ug/L	0.532	3577	0.003
	Fe	57	**38.861**	ug/L	7.215	4285	0.002
	Co	59	**0.033**	ug/L	14.238	134	0.000
	Ni	60	**0.257**	ug/L	7.078	239	0.000
	Cu	63		ug/L		2202	0.003
	Cu	65	**2.393**	ug/L	3.292	1065	0.001
	Zn	66	**0.085**	ug/L	238.325	1691	0.000
	Zn	67		ug/L		5498	-0.018
	Zn	68		ug/L		1631	-0.000
>	Ge	74		ug/L		123001	123000.814
	As	75	**-0.319**	ug/L	106.661	-24	-0.001
	Se	77		ug/L		913	-0.004
	Se	82	**0.451**	ug/L	43.499	4	0.000
	Kr	83		ug/L		22	-0.000
	Sr	88	**2.793**	ug/L	1.680	9937	0.128
	Y	89		ug/L		54	0.000
	Ag	107	**0.018**	ug/L	16.293	46	0.000
	Cd	111	**0.014**	ug/L	216.149	21	0.000
	Cd	114		ug/L		34	0.000
>	In	115		ug/L		76008	76007.528
	Sn	120	**0.347**	ug/L	4.381	586	0.007
	Sb	121	**0.018**	ug/L	369.967	574	0.000
	Sb	123		ug/L		463	0.000
	Ba	135		ug/L		304	0.003
	Ba	137	**0.893**	ug/L	3.085	546	0.005
	Ho	165		ug/L		12	-0.000
>	Lu	175		ug/L		106513	106513.014
	Tl	205	**0.478**	ug/L	21.123	2593	0.012
	Pb	208	**0.188**	ug/L	5.868	1034	0.008
	Bi	209		ug/L		62	0.001
	U	238	**0.090**	ug/L	3.015	512	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.7		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			93.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.9		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985797
Sample Date/Time: Thursday, December 10, 2009 21:16:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928677|40|rmj
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985797.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.563**	**ug/L**	0.908	3765	0.004
	Be	9	**28.552**	**ug/L**	0.890	10903	0.013
	B	11	**43.285**	**ug/L**	2.076	17831	0.021
	Na	23	**216.922**	**ug/L**	10.577	530052	0.625
	Mg	24	**896.697**	**ug/L**	2.694	1559776	1.881
	Al	27	**3132.743**	**ug/L**	6.066	6779922	8.195
	P	31	**239.227**	**ug/L**	0.691	27956	0.029
	K	39	**796.860**	**ug/L**	7.181	1914031	2.056
	Ca	43	**1157.361**	**ug/L**	1.219	5407	0.006
>	Sc	45		**ug/L**		826539	826538.957
	V	51	**43.425**	**ug/L**	1.854	94653	0.115
	Cr	52	**22.383**	**ug/L**	1.002	42742	0.050
	Cr	53		**ug/L**		42763	0.002
	Mn	55	**115.723**	**ug/L**	1.191	308611	0.373
	Fe	57	**3498.743**	**ug/L**	0.509	184155	0.220
	Co	59	**26.673**	**ug/L**	1.513	53003	0.064
	Ni	60	**33.091**	**ug/L**	1.407	13466	0.016
	Cu	63		**ug/L**		28199	0.034
	Cu	65	**31.808**	**ug/L**	2.063	13327	0.016
	Zn	66	**61.246**	**ug/L**	1.278	17930	0.133
	Zn	67		**ug/L**		10186	0.021
	Zn	68		**ug/L**		14140	0.102
>	Ge	74		**ug/L**		122502	122502.240
	As	75	**79.085**	**ug/L**	0.987	24623	0.200
	Se	77		**ug/L**		2572	0.010
	Se	82	**56.767**	**ug/L**	1.627	1748	0.014
	Kr	83		**ug/L**		22	-0.000
	Sr	88	**53.133**	**ug/L**	1.058	181782	2.436
	Y	89		**ug/L**		16579	0.222
	Ag	107	**14.601**	**ug/L**	0.776	21087	0.283
	Cd	111	**39.243**	**ug/L**	1.565	14449	0.194
	Cd	114		**ug/L**		33145	0.445
>	In	115		**ug/L**		74538	74537.992
	Sn	120	**17.269**	**ug/L**	2.464	24836	0.332
	Sb	121	**3.945**	**ug/L**	0.693	5330	0.064
	Sb	123		**ug/L**		4183	0.051
	Ba	135		**ug/L**		50202	0.478
	Ba	137	**151.104**	**ug/L**	1.365	87932	0.837
	Ho	165		**ug/L**		930	0.009
>	Lu	175		**ug/L**		105095	105094.913
	Tl	205	**49.437**	**ug/L**	8.333	135644	1.280
	Pb	208	**54.086**	**ug/L**	0.761	231317	2.199
	Bi	209		**ug/L**		330	0.003
	U	238	**0.597**	**ug/L**	1.762	2808	0.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			92.9		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			93.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.6		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 241832001
Sample Date/Time: Thursday, December 10, 2009 21:22:44
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\241832001.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**65.421**	ug/L	1.070	93734	0.113
	Be	9	**1.605**	ug/L	2.131	622	0.001
	B	11	**4.508**	ug/L	3.497	2336	0.002
	Na	23	**1657.369**	ug/L	5.369	3982045	4.777
	Mg	24	**823.485**	ug/L	5.928	1440242	1.727
	Al	27	**4205.649**	ug/L	5.597	9147374	11.002
	P	31	**432.013**	ug/L	0.718	47273	0.052
	K	39	**1662.389**	ug/L	4.913	3780516	4.289
	Ca	43	**1954.254**	ug/L	1.039	9034	0.011
>	Sc	45		ug/L		830921	830921.027
	V	51	**10.505**	ug/L	4.792	22815	0.028
	Cr	52	**2.504**	ug/L	1.532	6317	0.006
	Cr	53		ug/L		28778	-0.015
	Mn	55	**1623.126**	ug/L	0.564	4342774	5.226
	Fe	57	**16872.710**	ug/L	0.913	884226	1.061
	Co	59	**2.163**	ug/L	0.132	4384	0.005
	Ni	60	**7.540**	ug/L	0.921	3188	0.004
	Cu	63		ug/L		7046	0.008
	Cu	65	**8.283**	ug/L	1.038	3531	0.004
	Zn	66	**144.349**	ug/L	1.033	38604	0.313
	Zn	67		ug/L		11097	0.032
	Zn	68		ug/L		28338	0.226
>	Ge	74		ug/L		118212	118211.922
	As	75	**3.035**	ug/L	11.429	981	0.008
	Se	77		ug/L		895	-0.004
	Se	82	**1.079**	ug/L	18.431	22	0.000
	Kr	83		ug/L		67	0.000
	Sr	88	**13.520**	ug/L	0.910	46297	0.620
	Y	89		ug/L		417529	5.615
	Ag	107	**0.159**	ug/L	4.260	248	0.003
	Cd	111	**0.991**	ug/L	4.324	379	0.005
	Cd	114		ug/L		120	0.001
>	In	115		ug/L		74359	74359.193
	Sn	120	**2.473**	ug/L	1.763	3617	0.048
	Sb	121	**-0.036**	ug/L	45.188	497	-0.001
	Sb	123		ug/L		415	-0.000
	Ba	135		ug/L		30229	0.271
	Ba	137	**85.730**	ug/L	1.444	52939	0.475
	Ho	165		ug/L		22627	0.203
>	Lu	175		ug/L		111508	111508.319
	Tl	205	**5.099**	ug/L	15.958	16066	0.132
	Pb	208	**25.984**	ug/L	0.415	118036	1.057
	Bi	209		ug/L		1464	0.013
	U	238	**2.545**	ug/L	1.040	12360	0.110

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.4		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			89.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.5		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEt	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 241832002
Sample Date/Time: Thursday, December 10, 2009 21:28:38
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rm|
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\241832002.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**39.919**	**ug/L**	0.428	56055	0.069
	Be	9	**1.044**	**ug/L**	1.711	398	0.000
	B	11	**6.462**	**ug/L**	5.521	3056	0.003
	Na	23	**1919.984**	**ug/L**	4.099	4515037	5.534
	Mg	24	**1650.299**	**ug/L**	1.197	2821915	3.461
	Al	27	**7189.879**	**ug/L**	5.661	15306724	18.809
	P	31	**412.165**	**ug/L**	1.835	44355	0.049
	K	39	**1957.354**	**ug/L**	4.708	4319683	5.050
	Ca	43	**1920.905**	**ug/L**	3.931	8697	0.010
>	Sc	45		**ug/L**		813692	813691.570
	V	51	**11.075**	**ug/L**	3.987	23576	0.029
	Cr	52	**6.217**	**ug/L**	1.779	12890	0.014
	Cr	53		**ug/L**		27658	-0.015
	Mn	55	**122.836**	**ug/L**	0.819	322435	0.395
	Fe	57	**20615.326**	**ug/L**	1.299	1057413	1.297
	Co	59	**0.803**	**ug/L**	2.026	1635	0.002
	Ni	60	**3.340**	**ug/L**	0.761	1456	0.002
	Cu	63		**ug/L**		4152	0.005
	Cu	65	**5.066**	**ug/L**	1.493	2137	0.003
	Zn	66	**31.597**	**ug/L**	0.890	9630	0.069
	Zn	67		**ug/L**		6380	-0.008
	Zn	68		**ug/L**		7375	0.049
>	Ge	74		**ug/L**		117315	117315.246
	As	75	**1.976**	**ug/L**	31.373	660	0.005
	Se	77		**ug/L**		834	-0.004
	Se	82	**1.946**	**ug/L**	41.906	48	0.000
	Kr	83		**ug/L**		69	0.000
	Sr	88	**19.299**	**ug/L**	1.544	64605	0.885
	Y	89		**ug/L**		447837	6.153
	Ag	107	**0.141**	**ug/L**	16.796	218	0.003
	Cd	111	**1.078**	**ug/L**	7.119	402	0.005
	Cd	114		**ug/L**		70	0.001
>	In	115		**ug/L**		72789	72788.912
	Sn	120	**1.583**	**ug/L**	1.919	2293	0.030
	Sb	121	**-0.090**	**ug/L**	8.950	422	-0.001
	Sb	123		**ug/L**		323	-0.001
	Ba	135		**ug/L**		13239	0.121
	Ba	137	**38.433**	**ug/L**	0.796	23208	0.213
	Ho	165		**ug/L**		26803	0.246
>	Lu	175		**ug/L**		108981	108980.873
	Tl	205	**1.588**	**ug/L**	15.087	5789	0.041
	Pb	208	**7.658**	**ug/L**	0.200	34160	0.311
	Bi	209		**ug/L**		1594	0.015
	U	238	**3.799**	**ug/L**	0.793	17987	0.164

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.4		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			89.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.2		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 241832003
Sample Date/Time: Thursday, December 10, 2009 21:34:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\241832003.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.924**	**ug/L**	0.749	61941	0.077
	Be	9	**1.138**	**ug/L**	3.406	426	0.001
	B	11	**3.909**	**ug/L**	0.495	2015	0.002
	Na	23	**2189.358**	**ug/L**	8.350	5055136	6.310
	Mg	24	**730.529**	**ug/L**	3.281	1229409	1.532
	Al	27	**3743.728**	**ug/L**	7.563	7833350	9.794
	P	31	**392.174**	**ug/L**	0.796	41653	0.047
	K	39	**1681.319**	**ug/L**	9.124	3674796	4.338
	Ca	43	**1935.364**	**ug/L**	1.407	8606	0.011
>	Sc	45		**ug/L**		799113	799113.398
	V	51	**4.926**	**ug/L**	1.224	10154	0.013
	Cr	52	**4.208**	**ug/L**	1.313	9097	0.009
	Cr	53		**ug/L**		27069	-0.016
	Mn	55	**1006.889**	**ug/L**	0.348	2591086	3.242
	Fe	57	**13594.168**	**ug/L**	0.521	685562	0.855
	Co	59	**1.705**	**ug/L**	1.156	3337	0.004
	Ni	60	**7.242**	**ug/L**	2.204	2950	0.004
	Cu	63		**ug/L**		4247	0.005
	Cu	65	**4.973**	**ug/L**	3.151	2061	0.003
	Zn	66	**130.306**	**ug/L**	0.450	34135	0.283
	Zn	67		**ug/L**		10007	0.024
	Zn	68		**ug/L**		24998	0.203
>	Ge	74		**ug/L**		115273	115273.026
	As	75	**2.883**	**ug/L**	8.977	912	0.007
	Se	77		**ug/L**		832	-0.004
	Se	82	**1.339**	**ug/L**	49.293	29	0.000
	Kr	83		**ug/L**		70	0.000
	Sr	88	**13.466**	**ug/L**	0.920	44620	0.617
	Y	89		**ug/L**		458273	6.369
	Ag	107	**0.118**	**ug/L**	1.127	183	0.002
	Cd	111	**1.122**	**ug/L**	3.784	413	0.006
	Cd	114		**ug/L**		92	0.001
>	In	115		**ug/L**		71949	71949.423
	Sn	120	**3.063**	**ug/L**	1.381	4316	0.059
	Sb	121	**-0.033**	**ug/L**	77.923	485	-0.001
	Sb	123		**ug/L**		354	-0.001
	Ba	135		**ug/L**		21917	0.204
	Ba	137	**64.612**	**ug/L**	0.919	38407	0.358
	Ho	165		**ug/L**		23884	0.222
>	Lu	175		**ug/L**		107319	107318.675
	Tl	205	**1.094**	**ug/L**	5.056	4325	0.028
	Pb	208	**16.393**	**ug/L**	0.716	71751	0.667
	Bi	209		**ug/L**		557	0.005
	U	238	**2.751**	**ug/L**	1.927	12850	0.119

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			89.8		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			87.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			91.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.7		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEtMn		55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 241832004
Sample Date/Time: Thursday, December 10, 2009 21:40:25
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\241832004.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**17.920**	**ug/L**	61.133	25906	0.031
	Be	9	**0.971**	**ug/L**	62.892	381	0.000
	B	11	**3.792**	**ug/L**	75.970	2078	0.002
	Na	23	**1925.502**	**ug/L**	61.194	4650062	5.550
	Mg	24	**654.508**	**ug/L**	62.070	1150698	1.373
	Al	27	**3679.240**	**ug/L**	59.724	8071862	9.625
	P	31	**241.712**	**ug/L**	57.777	29215	0.029
	K	39	**1412.800**	**ug/L**	62.455	3281521	3.645
	Ca	43	**1766.427**	**ug/L**	61.691	8244	0.010
>	Sc	45		**ug/L**		941571	941571.239
	V	51	**3.644**	**ug/L**	29.621	8276	0.010
	Cr	52	**6.023**	**ug/L**	70.211	12877	0.013
	Cr	53		**ug/L**		27872	-0.018
	Mn	55	**670.608**	**ug/L**	63.751	1793878	2.159
	Fe	57	**8325.045**	**ug/L**	61.224	439812	0.524
	Co	59	**1.183**	**ug/L**	63.061	2439	0.003
	Ni	60	**3.264**	**ug/L**	65.380	1468	0.002
	Cu	63		**ug/L**		4358	0.005
	Cu	65	**5.174**	**ug/L**	62.909	2238	0.003
	Zn	66	**105.134**	**ug/L**	66.623	29369	0.228
	Zn	67		**ug/L**		9047	0.010
	Zn	68		**ug/L**		21427	0.162
>	Ge	74		**ug/L**		140867	140866.738
	As	75	**1.544**	**ug/L**	50.187	582	0.004
	Se	77		**ug/L**		805	-0.005
	Se	82	**1.059**	**ug/L**	50.643	24	0.000
	Kr	83		**ug/L**		92	0.000
	Sr	88	**10.156**	**ug/L**	60.742	35140	0.466
	Y	89		**ug/L**		295133	3.933
	Ag	107	**0.141**	**ug/L**	73.538	221	0.003
	Cd	111	**0.898**	**ug/L**	63.154	349	0.004
	Cd	114		**ug/L**		52	0.000
>	In	115		**ug/L**		83210	83209.724
	Sn	120	**1.531**	**ug/L**	64.836	2279	0.029
	Sb	121	**-0.146**	**ug/L**	70.086	384	-0.002
	Sb	123		**ug/L**		306	-0.002
	Ba	135		**ug/L**		14128	0.129
	Ba	137	**40.617**	**ug/L**	61.571	24705	0.225
	Ho	165		**ug/L**		15638	0.143
>	Lu	175		**ug/L**		117759	117758.608
	Tl	205	**0.383**	**ug/L**	129.563	2413	0.010
	Pb	208	**19.786**	**ug/L**	63.328	88364	0.804
	Bi	209		**ug/L**		1107	0.010
	U	238	**1.952**	**ug/L**	62.912	9349	0.084

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.8			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		105.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.2			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 21:52:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 8.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.893**	**ug/L**	1.130	68923	0.086
	Be	9	**53.305**	**ug/L**	1.522	19714	0.025
	B	11	**103.493**	**ug/L**	2.015	40601	0.050
	Na	23	**5066.444**	**ug/L**	3.601	11706881	14.603
	Mg	24	**4821.955**	**ug/L**	0.993	8104021	10.114
	Al	27	**5122.739**	**ug/L**	7.284	10735245	13.401
	P	31	**5377.728**	**ug/L**	1.206	519410	0.643
	K	39	**4719.936**	**ug/L**	3.655	9960855	12.178
	Ca	43	**4994.470**	**ug/L**	0.866	21933	0.027
>	Sc	45		**ug/L**		800771	800770.858
	V	51	**53.529**	**ug/L**	0.706	113095	0.142
	Cr	52	**54.204**	**ug/L**	1.572	97946	0.120
	Cr	53		**ug/L**		47129	0.009
	Mn	55	**53.272**	**ug/L**	1.662	137985	0.172
	Fe	57	**5144.747**	**ug/L**	1.247	261323	0.324
	Co	59	**51.191**	**ug/L**	1.679	98490	0.123
	Ni	60	**52.818**	**ug/L**	1.466	20746	0.026
	Cu	63		**ug/L**		45826	0.057
	Cu	65	**55.120**	**ug/L**	0.794	22334	0.028
	Zn	66	**55.817**	**ug/L**	1.511	16221	0.121
	Zn	67		**ug/L**		9323	0.015
	Zn	68		**ug/L**		12385	0.089
>	Ge	74		**ug/L**		120512	120512.060
	As	75	**50.181**	**ug/L**	0.464	15397	0.127
	Se	77		**ug/L**		2467	0.009
	Se	82	**53.956**	**ug/L**	0.890	1633	0.014
	Kr	83		**ug/L**		35	0.000
	Sr	88	**51.200**	**ug/L**	0.557	171898	2.348
	Y	89		**ug/L**		199	0.002
	Ag	107	**53.287**	**ug/L**	0.896	75469	1.032
	Cd	111	**52.492**	**ug/L**	0.183	18961	0.259
	Cd	114		**ug/L**		42682	0.583
>	In	115		**ug/L**		73132	73132.336
	Sn	120	**53.923**	**ug/L**	0.467	75955	1.038
	Sb	121	**52.689**	**ug/L**	4.424	63270	0.858
	Sb	123		**ug/L**		48967	0.664
	Ba	135		**ug/L**		16901	0.167
	Ba	137	**53.353**	**ug/L**	1.433	29969	0.295
	Ho	165		**ug/L**		26	0.000
>	Lu	175		**ug/L**		101412	101412.413
	Tl	205	**47.639**	**ug/L**	0.352	126265	1.233
	Pb	208	**53.825**	**ug/L**	1.323	222120	2.188
	Bi	209		**ug/L**		38	0.000
	U	238	**55.221**	**ug/L**	0.441	241979	2.385

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 8

Report Date/Time: Thursday, December 10, 2009 21:54:45

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	99.785				
	Be	9	106.610				
	B	11	103.493				
	Na	23	101.329				
	Mg	24	96.439				
	Al	27	101.440				
	P	31	107.555				
	K	39	94.399				
	Ca	43	99.889				
>	Sc	45		90.0			
	V	51	107.057				
	Cr	52	108.408				
	Cr	53					
	Mn	55	106.544				
	Fe	57	102.895				
	Co	59	102.383				
	Ni	60	105.635				
	Cu	63					
	Cu	65	110.241				
	Zn	66	111.634				
	Zn	67					
	Zn	68					
>	Ge	74		91.6			
	As	75	100.362				
	Se	77					
	Se	82	107.911				
	Kr	83					
	Sr	88	102.399				
	Y	89					
	Ag	107	106.574				
	Cd	111	104.984				
	Cd	114					
>	In	115		92.8			
	Sn	120	107.846				
	Sb	121	105.377				
	Sb	123					
	Ba	135					
	Ba	137	106.706				
	Ho	165					
>	Lu	175		92.3			
	Tl	205	95.277				
	Pb	208	107.650				
	Bi	209					
	U	238	110.442				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Cu	65	CCV is out of limits (+/- 10%)
QC Std 8	Zn	66	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 8

Report Date/Time: Thursday, December 10, 2009 21:54:45

ICPMS#6 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 21:58:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 9.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.014	ug/L	64.102	97	-0.000
	Be	9	0.003	ug/L	309.312	7	0.000
	B	11	1.274	ug/L	22.199	1030	0.001
	Na	23	1.269	ug/L	41.541	16343	0.004
	Mg	24	-0.931	ug/L	154.376	3667	-0.002
	Al	27	1.144	ug/L	101.169	8669	0.003
	P	31	-1.967	ug/L	26.694	4103	-0.000
	K	39	4.545	ug/L	146.289	224419	0.012
	Ca	43	6.567	ug/L	120.476	239	0.000
>	Sc	45		ug/L		826729	826729.427
	V	51	0.065	ug/L	350.351	-119	0.000
	Cr	52	0.147	ug/L	29.012	1961	0.000
	Cr	53		ug/L		40897	0.000
	Mn	55	-0.032	ug/L	30.095	591	-0.000
	Fe	57	4.733	ug/L	21.898	2472	0.000
	Co	59	0.009	ug/L	29.935	84	0.000
	Ni	60	-0.032	ug/L	47.357	120	-0.000
	Cu	63		ug/L		81	-0.000
	Cu	65	0.008	ug/L	235.017	61	0.000
	Zn	66	0.071	ug/L	177.708	1695	0.000
	Zn	67		ug/L		7869	0.001
	Zn	68		ug/L		1728	0.000
>	Ge	74		ug/L		123536	123536.085
	As	75	-0.271	ug/L	82.747	-10	-0.001
	Se	77		ug/L		1325	-0.001
	Se	82	-0.119	ug/L	17.512	-14	-0.000
	Kr	83		ug/L		34	0.000
	Sr	88	-0.004	ug/L	60.646	192	-0.000
	Y	89		ug/L		34	0.000
	Ag	107	0.008	ug/L	45.167	32	0.000
	Cd	111	-0.022	ug/L	42.393	7	-0.000
	Cd	114		ug/L		16	0.000
>	In	115		ug/L		75970	75970.251
	Sn	120	0.053	ug/L	16.754	157	0.001
	Sb	121	0.512	ug/L	16.978	1186	0.008
	Sb	123		ug/L		914	0.006
	Ba	135		ug/L		17	0.000
	Ba	137	0.005	ug/L	124.458	22	0.000
	Ho	165		ug/L		13	0.000
>	Lu	175		ug/L		105206	105206.358
	Tl	205	0.514	ug/L	23.787	2662	0.013
	Pb	208	0.001	ug/L	311.165	223	0.000
	Bi	209		ug/L		12	0.000
	U	238	0.043	ug/L	16.066	293	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.9			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985798
Sample Date/Time: Thursday, December 10, 2009 22:09:59
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985798.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.084**	**ug/L**	1.552	109708	0.138
	Be	9	**4.963**	**ug/L**	2.972	1826	0.002
	B	11	**23.420**	**ug/L**	3.046	9506	0.011
	Na	23	**1689.514**	**ug/L**	5.865	3882553	4.870
	Mg	24	**10869.237**	**ug/L**	3.215	18123328	22.798
	Al	27	**84902.537**	**ug/L**	1.835	176534163	222.107
	P	31	**476.158**	**ug/L**	0.175	49408	0.057
	K	39	**11313.580**	**ug/L**	4.360	23410441	29.190
	Ca	43	**10640.754**	**ug/L**	1.236	46146	0.058
>	Sc	45		**ug/L**		794696	794696.478
	V	51	**83.582**	**ug/L**	0.853	175390	0.221
	Cr	52	**47.592**	**ug/L**	1.226	85542	0.106
	Cr	53		**ug/L**		35300	-0.005
	Mn	55	**664.434**	**ug/L**	0.888	1700492	2.139
	Fe	57	**59557.224**	**ug/L**	0.657	2979709	3.747
	Co	59	**12.854**	**ug/L**	1.480	24591	0.031
	Ni	60	**34.607**	**ug/L**	1.755	13533	0.017
	Cu	63		**ug/L**		38786	0.049
	Cu	65	**47.496**	**ug/L**	2.435	19104	0.024
	Zn	66	**167.921**	**ug/L**	0.540	42934	0.364
	Zn	67		**ug/L**		12230	0.045
	Zn	68		**ug/L**		32356	0.271
>	Ge	74		**ug/L**		113680	113680.007
	As	75	**9.075**	**ug/L**	4.855	2684	0.023
	Se	77		**ug/L**		856	-0.004
	Se	82	**-2.110**	**ug/L**	9.272	-70	-0.001
	Kr	83		**ug/L**		158	0.001
	Sr	88	**97.767**	**ug/L**	1.282	326174	4.483
	Y	89		**ug/L**		375788	5.168
	Ag	107	**0.767**	**ug/L**	4.039	1099	0.015
	Cd	111	**2.778**	**ug/L**	9.175	1012	0.014
	Cd	114		**ug/L**		177	0.002
>	In	115		**ug/L**		72717	72716.563
	Sn	120	**2.918**	**ug/L**	3.237	4158	0.056
	Sb	121	**-0.065**	**ug/L**	28.358	452	-0.001
	Sb	123		**ug/L**		327	-0.001
	Ba	135		**ug/L**		93765	0.903
	Ba	137	**284.099**	**ug/L**	1.204	163403	1.573
	Ho	165		**ug/L**		19820	0.191
>	Lu	175		**ug/L**		103880	103880.359
	Tl	205	**2.209**	**ug/L**	1.740	7185	0.057
	Pb	208	**84.734**	**ug/L**	0.945	358094	3.445
	Bi	209		**ug/L**		4482	0.043
	U	238	**2.277**	**ug/L**	0.635	10315	0.098

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985799
Sample Date/Time: Thursday, December 10, 2009 22:15:53
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985799.224

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**111.648**	**ug/L**	0.333	150632	0.192
	Be	9	**30.393**	**ug/L**	0.614	10991	0.014
	B	11	**76.334**	**ug/L**	2.075	29405	0.037
	Na	23	**2478.338**	**ug/L**	3.202	5604711	7.143
	Mg	24	**12738.060**	**ug/L**	6.882	20924375	26.718
	Al	27	**89863.661**	**ug/L**	1.582	184025204	235.085
	P	31	**1507.412**	**ug/L**	0.479	145264	0.180
	K	39	**12695.736**	**ug/L**	2.072	25846209	32.756
	Ca	43	**11448.755**	**ug/L**	0.673	48894	0.062
>	Sc	45		**ug/L**		782801	782800.664
	V	51	**121.931**	**ug/L**	0.871	252151	0.322
	Cr	52	**77.429**	**ug/L**	0.357	136091	0.172
	Cr	53		**ug/L**		40687	0.003
	Mn	55	**1040.079**	**ug/L**	0.689	2621847	3.348
	Fe	57	**63518.077**	**ug/L**	0.989	3130214	3.996
	Co	59	**44.473**	**ug/L**	1.273	83652	0.107
	Ni	60	**64.184**	**ug/L**	1.060	24617	0.031
	Cu	63		**ug/L**		62756	0.080
	Cu	65	**77.240**	**ug/L**	0.299	30573	0.039
	Zn	66	**199.789**	**ug/L**	0.767	49758	0.433
	Zn	67		**ug/L**		13319	0.057
	Zn	68		**ug/L**		37328	0.321
>	Ge	74		**ug/L**		111375	111374.593
	As	75	**50.027**	**ug/L**	0.734	14187	0.127
	Se	77		**ug/L**		1049	-0.002
	Se	82	**6.148**	**ug/L**	3.934	164	0.002
	Kr	83		**ug/L**		175	0.001
	Sr	88	**133.469**	**ug/L**	0.746	434363	6.120
	Y	89		**ug/L**		389797	5.494
	Ag	107	**27.016**	**ug/L**	0.591	37125	0.523
	Cd	111	**9.260**	**ug/L**	2.218	3257	0.046
	Cd	114		**ug/L**		4409	0.062
>	In	115		**ug/L**		70942	70941.788
	Sn	120	**18.046**	**ug/L**	0.569	24708	0.347
	Sb	121	**16.696**	**ug/L**	1.197	19803	0.272
	Sb	123		**ug/L**		15423	0.212
	Ba	135		**ug/L**		113616	1.113
	Ba	137	**351.892**	**ug/L**	0.590	198936	1.948
	Ho	165		**ug/L**		20624	0.202
>	Lu	175		**ug/L**		102107	102106.976
	Tl	205	**42.848**	**ug/L**	8.168	114410	1.109
	Pb	208	**198.215**	**ug/L**	0.778	823081	8.059
	Bi	209		**ug/L**		4472	0.044
	U	238	**30.476**	**ug/L**	0.404	134501	1.316

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.0			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		92.9			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985801
Sample Date/Time: Thursday, December 10, 2009 22:21:46
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928677|2|rm|
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985801.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**107.005**	**ug/L**	1.755	143489	0.184
	Be	9	**28.329**	**ug/L**	1.381	10183	0.013
	B	11	**70.356**	**ug/L**	2.422	26975	0.034
	Na	23	**2525.574**	**ug/L**	9.460	5675776	7.279
	Mg	24	**11637.053**	**ug/L**	4.895	18995177	24.408
	Al	27	**83189.018**	**ug/L**	8.280	169325802	217.624
	P	31	**1450.561**	**ug/L**	0.795	139083	0.174
	K	39	**12235.611**	**ug/L**	1.766	24763646	31.569
	Ca	43	**10527.798**	**ug/L**	1.603	44702	0.057
>	Sc	45		**ug/L**		778029	778029.148
	V	51	**109.247**	**ug/L**	0.661	224525	0.289
	Cr	52	**69.983**	**ug/L**	0.765	122408	0.155
	Cr	53		**ug/L**		40014	0.002
	Mn	55	**773.297**	**ug/L**	0.272	1937599	2.490
	Fe	57	**58270.134**	**ug/L**	1.163	2854215	3.666
	Co	59	**41.195**	**ug/L**	0.800	77024	0.099
	Ni	60	**57.187**	**ug/L**	1.085	21815	0.028
	Cu	63		**ug/L**		55551	0.071
	Cu	65	**69.053**	**ug/L**	0.312	27171	0.035
	Zn	66	**184.482**	**ug/L**	0.199	46507	0.400
	Zn	67		**ug/L**		12809	0.052
	Zn	68		**ug/L**		35050	0.298
>	Ge	74		**ug/L**		112446	112445.930
	As	75	**46.025**	**ug/L**	1.742	13182	0.117
	Se	77		**ug/L**		1000	-0.002
	Se	82	**6.696**	**ug/L**	25.061	181	0.002
	Kr	83		**ug/L**		149	0.001
	Sr	88	**119.104**	**ug/L**	0.655	388038	5.462
	Y	89		**ug/L**		360501	5.076
	Ag	107	**25.331**	**ug/L**	1.388	34845	0.490
	Cd	111	**8.099**	**ug/L**	4.126	2853	0.040
	Cd	114		**ug/L**		4026	0.057
>	In	115		**ug/L**		71015	71014.997
	Sn	120	**18.073**	**ug/L**	1.444	24768	0.348
	Sb	121	**13.728**	**ug/L**	1.951	16392	0.224
	Sb	123		**ug/L**		12684	0.173
	Ba	135		**ug/L**		107545	1.058
	Ba	137	**335.489**	**ug/L**	0.832	188810	1.857
	Ho	165		**ug/L**		19040	0.187
>	Lu	175		**ug/L**		101645	101644.672
	Tl	205	**43.045**	**ug/L**	5.290	114463	1.114
	Pb	208	**184.767**	**ug/L**	0.706	763811	7.512
	Bi	209		**ug/L**		4027	0.040
	U	238	**28.630**	**ug/L**	0.965	125791	1.237

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		87.4			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		92.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985800
Sample Date/Time: Thursday, December 10, 2009 22:27:39
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928677|10|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985800.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.396**	**ug/L**	0.544	25664	0.033
	Be	9	**1.175**	**ug/L**	2.807	420	0.001
	B	11	**6.249**	**ug/L**	6.293	2795	0.003
	Na	23	**392.504**	**ug/L**	3.607	877857	1.131
	Mg	24	**2316.263**	**ug/L**	1.438	3721589	4.858
	Al	27	**17511.833**	**ug/L**	5.793	35052420	45.811
	P	31	**115.685**	**ug/L**	2.762	14567	0.014
	K	39	**2363.016**	**ug/L**	1.169	4863079	6.097
	Ca	43	**2222.853**	**ug/L**	1.927	9434	0.012
>	Sc	45		**ug/L**		765045	765044.556
	V	51	**18.733**	**ug/L**	0.379	37655	0.050
	Cr	52	**10.039**	**ug/L**	0.400	18607	0.022
	Cr	53		**ug/L**		34898	-0.004
	Mn	55	**230.135**	**ug/L**	0.605	567446	0.741
	Fe	57	**13709.659**	**ug/L**	0.771	661903	0.862
	Co	59	**4.279**	**ug/L**	0.810	7923	0.010
	Ni	60	**8.227**	**ug/L**	2.061	3191	0.004
	Cu	63		**ug/L**		8573	0.011
	Cu	65	**10.813**	**ug/L**	0.730	4228	0.005
	Zn	66	**33.780**	**ug/L**	0.498	9886	0.073
	Zn	67		**ug/L**		7908	0.007
	Zn	68		**ug/L**		7694	0.054
>	Ge	74		**ug/L**		113877	113877.214
	As	75	**2.287**	**ug/L**	17.559	729	0.006
	Se	77		**ug/L**		1031	-0.002
	Se	82	**-0.126**	**ug/L**	221.891	-13	-0.000
	Kr	83		**ug/L**		47	0.000
	Sr	88	**20.986**	**ug/L**	0.385	67951	0.962
	Y	89		**ug/L**		83572	1.187
	Ag	107	**0.119**	**ug/L**	5.433	181	0.002
	Cd	111	**0.476**	**ug/L**	8.704	180	0.002
	Cd	114		**ug/L**		52	0.001
>	In	115		**ug/L**		70414	70414.380
	Sn	120	**0.752**	**ug/L**	0.840	1093	0.014
	Sb	121	**-0.170**	**ug/L**	11.984	317	-0.003
	Sb	123		**ug/L**		270	-0.002
	Ba	135		**ug/L**		21182	0.214
	Ba	137	**68.031**	**ug/L**	0.419	37264	0.377
	Ho	165		**ug/L**		4443	0.045
>	Lu	175		**ug/L**		98894	98893.786
	Tl	205	**2.929**	**ug/L**	11.473	8688	0.076
	Pb	208	**24.135**	**ug/L**	0.645	97247	0.981
	Bi	209		**ug/L**		929	0.009
	U	238	**0.494**	**ug/L**	2.743	2203	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			86.0		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			86.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			89.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			90.0		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 22:57:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 6.231

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.449**	**ug/L**	0.643	65558	0.089
	Be	9	**54.110**	**ug/L**	1.382	18461	0.025
	B	11	**104.920**	**ug/L**	3.261	37959	0.051
	Na	23	**5079.878**	**ug/L**	6.570	10825667	14.642
	Mg	24	**4682.640**	**ug/L**	5.734	7262316	9.822
	Al	27	**4939.497**	**ug/L**	3.159	9549311	12.922
	P	31	**5365.389**	**ug/L**	0.938	478060	0.642
	K	39	**4680.869**	**ug/L**	6.285	9110873	12.077
	Ca	43	**4831.809**	**ug/L**	1.898	19579	0.026
>	Sc	45		**ug/L**		738705	738704.628
	V	51	**53.298**	**ug/L**	1.680	103875	0.141
	Cr	52	**53.631**	**ug/L**	0.272	89419	0.119
	Cr	53		**ug/L**		45836	0.013
	Mn	55	**52.274**	**ug/L**	0.966	124917	0.168
	Fe	57	**5105.248**	**ug/L**	0.920	239233	0.321
	Co	59	**51.231**	**ug/L**	0.557	90931	0.123
	Ni	60	**52.723**	**ug/L**	0.289	19104	0.026
	Cu	63		**ug/L**		42755	0.058
	Cu	65	**54.249**	**ug/L**	0.870	20279	0.027
	Zn	66	**54.172**	**ug/L**	2.643	14676	0.117
	Zn	67		**ug/L**		9372	0.021
	Zn	68		**ug/L**		11190	0.086
>	Ge	74		**ug/L**		112024	112024.377
	As	75	**48.463**	**ug/L**	0.960	13824	0.123
	Se	77		**ug/L**		2250	0.009
	Se	82	**51.525**	**ug/L**	4.015	1450	0.013
	Kr	83		**ug/L**		27	0.000
	Sr	88	**49.102**	**ug/L**	0.612	154437	2.252
	Y	89		**ug/L**		48	0.000
	Ag	107	**51.906**	**ug/L**	0.231	68865	1.005
	Cd	111	**51.154**	**ug/L**	0.518	17310	0.252
	Cd	114		**ug/L**		38969	0.569
>	In	115		**ug/L**		68510	68509.607
	Sn	120	**52.827**	**ug/L**	0.963	69704	1.016
	Sb	121	**51.234**	**ug/L**	5.257	57634	0.834
	Sb	123		**ug/L**		44424	0.643
	Ba	135		**ug/L**		15257	0.159
	Ba	137	**51.058**	**ug/L**	0.740	27067	0.283
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		95698	95698.500
	Tl	205	**47.627**	**ug/L**	1.383	119098	1.233
	Pb	208	**53.397**	**ug/L**	0.449	207952	2.171
	Bi	209		**ug/L**		21	0.000
	U	238	**55.039**	**ug/L**	1.268	227566	2.377

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.897				
	Be	9	108.221				
	B	11	104.920				
	Na	23	101.598				
	Mg	24	93.653				
	Al	27	97.812				
	P	31	107.308				
	K	39	93.617				
	Ca	43	96.636				
>	Sc	45		83.0			
	V	51	106.595				
	Cr	52	107.262				
	Cr	53					
	Mn	55	104.547				
	Fe	57	102.105				
	Co	59	102.463				
	Ni	60	105.447				
	Cu	63					
	Cu	65	108.498				
	Zn	66	108.344				
	Zn	67					
	Zn	68					
>	Ge	74		85.2			
	As	75	96.925				
	Se	77					
	Se	82	103.050				
	Kr	83					
	Sr	88	98.204				
	Y	89					
	Ag	107	103.812				
	Cd	111	102.309				
	Cd	114					
>	In	115		86.9			
	Sn	120	105.654				
	Sb	121	102.469				
	Sb	123					
	Ba	135					
	Ba	137	102.117				
	Ho	165					
>	Lu	175		87.1			
	Tl	205	95.253				
	Pb	208	106.793				
	Bi	209					
	U	238	110.078				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 23:03:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 7.232

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.011**	**ug/L**	29.589	91	-0.000
	Be	9	**-0.001**	**ug/L**	783.940	5	-0.000
	B	11	**1.254**	**ug/L**	29.877	929	0.001
	Na	23	**2.113**	**ug/L**	34.704	16676	0.006
	Mg	24	**-1.347**	**ug/L**	71.511	2667	-0.003
	Al	27	**0.696**	**ug/L**	217.620	7002	0.002
	P	31	**-3.367**	**ug/L**	19.637	3602	-0.000
	K	39	**6.379**	**ug/L**	187.304	207508	0.016
	Ca	43	**5.028**	**ug/L**	131.386	211	0.000
>	Sc	45		**ug/L**		751139	751139.062
	V	51	**-0.250**	**ug/L**	78.043	-736	-0.001
	Cr	52	**0.322**	**ug/L**	24.726	2073	0.001
	Cr	53		**ug/L**		36876	-0.000
	Mn	55	**0.005**	**ug/L**	94.031	628	0.000
	Fe	57	**-2.288**	**ug/L**	53.937	1915	-0.000
	Co	59	**0.010**	**ug/L**	25.716	79	0.000
	Ni	60	**0.009**	**ug/L**	552.283	124	0.000
	Cu	63		**ug/L**		82	-0.000
	Cu	65	**-0.012**	**ug/L**	142.816	48	-0.000
	Zn	66	**-0.096**	**ug/L**	117.903	1479	-0.000
	Zn	67		**ug/L**		7207	0.003
	Zn	68		**ug/L**		1589	0.001
>	Ge	74		**ug/L**		110737	110736.974
	As	75	**-0.024**	**ug/L**	1334.610	61	-0.000
	Se	77		**ug/L**		1182	-0.001
	Se	82	**0.189**	**ug/L**	85.548	-4	0.000
	Kr	83		**ug/L**		27	0.000
	Sr	88	**-0.005**	**ug/L**	68.705	169	-0.000
	Y	89		**ug/L**		22	-0.000
	Ag	107	**0.013**	**ug/L**	48.929	35	0.000
	Cd	111	**-0.007**	**ug/L**	200.288	11	-0.000
	Cd	114		**ug/L**		14	0.000
>	In	115		**ug/L**		68289	68288.545
	Sn	120	**0.069**	**ug/L**	25.626	162	0.001
	Sb	121	**0.495**	**ug/L**	26.414	1047	0.008
	Sb	123		**ug/L**		787	0.006
	Ba	135		**ug/L**		17	0.000
	Ba	137	**0.015**	**ug/L**	80.323	25	0.000
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		95687	95686.680
	Tl	205	**0.584**	**ug/L**	14.645	2593	0.015
	Pb	208	**0.003**	**ug/L**	119.598	210	0.000
	Bi	209		**ug/L**		3	-0.000
	U	238	**0.042**	**ug/L**	22.536	262	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			84.4		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			84.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			86.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			87.1		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, December 10, 2009 23:05:36

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120909S1.SIF
Batch ID:
Results Data Set: 120909S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: SOIL **Method Last Saved: 12/7/2009 16:18:28**
Method Description: 7471A, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/9/2009 09:48:12**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	09:49:02	Yes
2		[0.00]	0.0001	0.0005	0.0001	09:49:32	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	12.71				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/9/2009 09:49:51**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0027	0.0120	0.0028	09:50:41	Yes
2		[0.2]	0.0026	0.0113	0.0027	09:51:11	Yes
Mean:		[0.2]	0.0026				
SD:		0.0	0.0001				
%RSD:		0.0	1.99				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01311 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/9/2009 09:51:30**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0067	0.0287	0.0068	09:52:21	Yes
2		[0.5]	0.0066	0.0286	0.0067	09:52:51	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.38				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999975 Slope: 0.01333 Intercept: -0.00002

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/9/2009 09:53:11**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0262	0.1118	0.0263	09:54:02	Yes
2		[2.0]	0.0260	0.1114	0.0261	09:54:32	Yes
Mean:		[2.0]	0.0261				
SD:		0.0	0.0001				
%RSD:		0.0	0.46				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999984 Slope: 0.01303 Intercept: 0.00005

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/9/2009 09:54:52**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0637	0.2711	0.0638	09:55:43	Yes
2		[5.0]	0.0635	0.2705	0.0636	09:56:13	Yes
Mean:		[5.0]	0.0636				
SD:		0.0	0.0002				
%RSD:		0.0	0.25				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999945 Slope: 0.01271 Intercept: 0.00022

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/9/2009 09:56:33**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1239	0.5296	0.1240	09:57:23	Yes
2		[10.0]	0.1237	0.5263	0.1238	09:57:53	Yes
Mean:		[10.0]	0.1238				
SD:		0.0	0.0002				
%RSD:		0.0	0.13				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

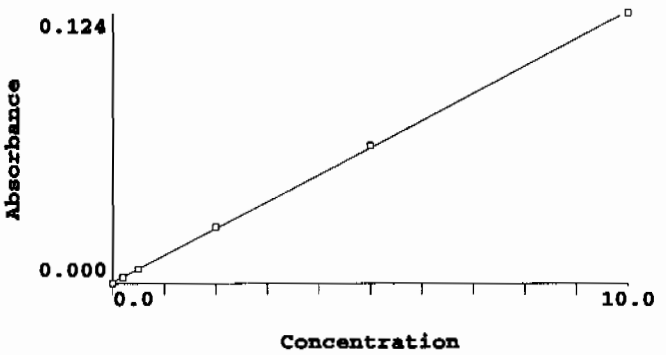

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.046	0.00	12.7
S0.2	0.0026	0.2	0.165	0.00	2.0
S0.5	0.0067	0.5	0.491	0.00	0.4
S2.0	0.0261	2.0	2.059	0.00	0.5

S5.0	0.0636	5.0	5.084	0.00	0.2
S10.0	0.1238	10.0	9.947	0.00	0.1

Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/9/2009 09:58:12**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.135	5.135	0.0642	0.2745	0.0643	09:59:03	Yes
2	5.151	5.151	0.0644	0.2738	0.0645	09:59:33	Yes
Mean:	5.143	5.143	0.0643				
SD:	0.012	0.012	0.0001				
%RSD:	0.225	0.225	0.22				

QC value within limits for Hg 253.7 Recovery = 102.86%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/9/2009 09:59:53**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0006	0.0002	10:00:44	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	10:01:14	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.240	3.240	18.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/9/2009 10:01:33**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.175	0.175	0.0027	0.0126	0.0028	10:02:24	Yes
2	0.172	0.172	0.0027	0.0120	0.0028	10:02:54	Yes
Mean:	0.174	0.174	0.0027				
SD:	0.002	0.002	0.0000				
%RSD:	1.238	1.238	0.98				

QC value within limits for Hg 253.7 Recovery = 86.79%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:03:14**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.169	5.169	0.0646	0.2746	0.0647	10:04:04	Yes
2	5.106	5.106	0.0638	0.2718	0.0639	10:04:34	Yes
Mean:	5.138	5.138	0.0642				
SD:	0.044	0.044	0.0005				
%RSD:	0.863	0.863	0.86				

QC value within limits for Hg 253.7 Recovery = 102.75%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 10:04:53
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	10:05:44	Yes
2	-0.037	-0.037	0.0001	0.0011	0.0002	10:06:14	Yes
Mean:	-0.039	-0.039	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.870	4.870	23.91				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201987684|929435|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 12/9/2009 10:06:33
Data Type: Original

Replicate Data: 1201987684|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0004	0.0002	10:07:25	Yes
2	-0.036	-0.036	0.0001	0.0010	0.0002	10:07:55	Yes
Mean:	-0.037	-0.037	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.673	5.673	23.16				

Sequence No.: 13
Sample ID: 1201987685|929435|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 12/9/2009 10:08:15
Data Type: Original

Replicate Data: 1201987685|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.112	2.112	0.0267	0.1144	0.0268	10:09:07	Yes
2	2.119	2.119	0.0268	0.1137	0.0269	10:09:37	Yes
Mean:	2.116	2.116	0.0268				
SD:	0.005	0.005	0.0001				
%RSD:	0.233	0.233	0.23				

Sequence No.: 14
Sample ID: 242156001|929435|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 12/9/2009 10:09:57
Data Type: Original

Replicate Data: 242156001|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0010	0.0043	0.0011	10:10:48	Yes
2	0.031	0.031	0.0010	0.0042	0.0011	10:11:18	Yes
Mean:	0.032	0.032	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	3.102	3.102	1.26				

Sequence No.: 15
Sample ID: 242156002|929435|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 12/9/2009 10:11:37
Data Type: Original

Replicate Data: 242156002|929435|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1201987687|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.348	2.348	0.0297	0.1272	0.0298	10:20:46	Yes
2	2.347	2.347	0.0296	0.1275	0.0297	10:21:16	Yes
Mean:	2.347	2.347	0.0297				
SD:	0.001	0.001	0.0000				
%RSD:	0.025	0.025	0.02				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1201987688|929435|1 **Date Collected: 12/9/2009 10:21:35**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987688|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.257	2.257	0.0285	0.1224	0.0286	10:22:26	Yes
2	2.268	2.268	0.0287	0.1224	0.0288	10:22:56	Yes
Mean:	2.263	2.263	0.0286				
SD:	0.008	0.008	0.0001				
%RSD:	0.348	0.348	0.34				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:23:15**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.127	5.127	0.0641	0.2745	0.0642	10:24:06	Yes
2	5.094	5.094	0.0637	0.2725	0.0638	10:24:36	Yes
Mean:	5.110	5.110	0.0639				
SD:	0.023	0.023	0.0003				
%RSD:	0.453	0.453	0.45				

QC value within limits for Hg 253.7 Recovery = 102.21%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 10:24:55**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0006	0.0002	10:25:45	Yes
2	-0.039	-0.039	0.0001	0.0010	0.0002	10:26:15	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.855	2.855	18.17				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 1201987689|929435|5 **Date Collected: 12/9/2009 10:26:35**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987689|929435|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0005	0.0026	0.0006	10:27:26	Yes
2	-0.004	-0.004	0.0005	0.0027	0.0006	10:27:56	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0060	0.0262	0.0061	10:35:50	Yes
2	0.436	0.436	0.0060	0.0257	0.0061	10:36:20	Yes
Mean:	0.438	0.438	0.0060				
SD:	0.003	0.003	0.0000				
%RSD:	0.627	0.627	0.57				

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 242316002|929460|1 **Date Collected: 12/9/2009 10:36:39**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316002|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.465	0.465	0.0063	0.0277	0.0064	10:37:29	Yes
2	0.458	0.458	0.0062	0.0268	0.0063	10:37:59	Yes
Mean:	0.461	0.461	0.0063				
SD:	0.005	0.005	0.0001				
%RSD:	1.087	1.087	0.99				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 242316003|929460|1 **Date Collected: 12/9/2009 10:38:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316003|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0020	0.0087	0.0021	10:39:09	Yes
2	0.112	0.112	0.0020	0.0089	0.0021	10:39:39	Yes
Mean:	0.112	0.112	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.186	0.186	0.13				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 242316004|929460|1 **Date Collected: 12/9/2009 10:39:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316004|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.205	0.205	0.0031	0.0138	0.0032	10:40:49	Yes
2	0.207	0.207	0.0031	0.0139	0.0032	10:41:19	Yes
Mean:	0.206	0.206	0.0031				
SD:	0.002	0.002	0.0000				
%RSD:	0.731	0.731	0.60				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 242316005|929460|1 **Date Collected: 12/9/2009 10:41:38**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316005|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.224	0.224	0.0033	0.0144	0.0034	10:42:29	Yes
2	0.224	0.224	0.0033	0.0146	0.0034	10:42:59	Yes
Mean:	0.224	0.224	0.0033				
SD:	0.000	0.000	0.0000				
%RSD:	0.058	0.058	0.05				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:43:18**

Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.162	5.162	0.0645	0.2762	0.0646	10:44:09	Yes
2	5.116	5.116	0.0640	0.2741	0.0641	10:44:39	Yes
Mean:	5.139	5.139	0.0642				
SD:	0.032	0.032	0.0004				
%RSD:	0.623	0.623	0.62				

QC value within limits for Hg 253.7 Recovery = 102.78%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 10:44:58**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0006	0.0002	10:45:49	Yes
2	-0.038	-0.038	0.0001	0.0013	0.0002	10:46:19	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.882	6.882	40.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 242316006|929460|1 **Date Collected: 12/9/2009 10:46:38**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316006|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.072	0.072	0.0015	0.0067	0.0016	10:47:29	Yes
2	0.072	0.072	0.0015	0.0065	0.0016	10:47:59	Yes
Mean:	0.072	0.072	0.0015				
SD:	0.000	0.000	0.0000				
%RSD:	0.079	0.079	0.05				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 1201987743|929460|1 **Date Collected: 12/9/2009 10:48:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987743|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.074	0.074	0.0015	0.0068	0.0016	10:49:09	Yes
2	0.075	0.075	0.0015	0.0066	0.0016	10:49:39	Yes
Mean:	0.074	0.074	0.0015				
SD:	0.001	0.001	0.0000				
%RSD:	1.300	1.300	0.80				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 1201987744|929460|1 **Date Collected: 12/9/2009 10:49:59**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987744|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.168	2.168	0.0274	0.1171	0.0275	10:50:50	Yes

Replicate Data: 242333001|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.590	0.590	0.0079	0.0340	0.0080	10:59:16	Yes
2	0.588	0.588	0.0079	0.0343	0.0080	10:59:46	Yes
Mean:	0.589	0.589	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.238	0.238	0.22				

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1201989931|930397|1 **Date Collected: 12/9/2009 11:00:05**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201989931|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.600	0.600	0.0080	0.0349	0.0081	11:00:56	Yes
2	0.593	0.593	0.0079	0.0361	0.0080	11:01:26	Yes
Mean:	0.596	0.596	0.0080				
SD:	0.005	0.005	0.0001				
%RSD:	0.770	0.770	0.71				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 1201989932|930397|1 **Date Collected: 12/9/2009 11:01:46**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201989932|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.604	2.604	0.0328	0.1408	0.0329	11:02:37	Yes
2	2.596	2.596	0.0327	0.1394	0.0328	11:03:07	Yes
Mean:	2.600	2.600	0.0328				
SD:	0.006	0.006	0.0001				
%RSD:	0.218	0.218	0.21				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 11:03:26**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.222	5.222	0.0653	0.2784	0.0654	11:04:16	Yes
2	5.172	5.172	0.0647	0.2761	0.0648	11:04:46	Yes
Mean:	5.197	5.197	0.0650				
SD:	0.035	0.035	0.0004				
%RSD:	0.676	0.676	0.67				

QC value within limits for Hg 253.7 Recovery = 103.94%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 11:05:05**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	11:05:55	Yes
2	-0.042	-0.042	0.0001	0.0005	0.0001	11:06:25	Yes
Mean:	-0.042	-0.042	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.206	0.206	2.18				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 241916003|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.594	0.594	0.0079	0.0339	0.0080	11:22:44	Yes
2	0.593	0.593	0.0079	0.0338	0.0080	11:23:14	Yes
Mean:	0.594	0.594	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.089	0.089	0.08				

Sequence No.: 58
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/9/2009 11:23:34
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.106	5.106	0.0638	0.2734	0.0639	11:24:24	Yes
2	5.118	5.118	0.0640	0.2723	0.0641	11:24:54	Yes
Mean:	5.112	5.112	0.0639				
SD:	0.008	0.008	0.0001				
%RSD:	0.165	0.165	0.16				

QC value within limits for Hg 253.7 Recovery = 102.25%
All analyte(s) passed QC.

Sequence No.: 59
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 11:25:12
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0004	0.0002	11:26:03	Yes
2	-0.040	-0.040	0.0001	0.0006	0.0002	11:26:33	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.305	1.305	9.29				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60
Sample ID: 241916004|928035|1
Analyst: JXL1
Autosampler Location: 52
Date Collected: 12/9/2009 11:26:52
Data Type: Original

Replicate Data: 241916004|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.181	1.181	0.0152	0.0653	0.0153	11:27:43	Yes
2	1.177	1.177	0.0152	0.0648	0.0153	11:28:13	Yes
Mean:	1.179	1.179	0.0152				
SD:	0.003	0.003	0.0000				
%RSD:	0.234	0.234	0.22				

Sequence No.: 61
Sample ID: 241916005|928035|1
Analyst: JXL1
Autosampler Location: 53
Date Collected: 12/9/2009 11:28:33
Data Type: Original

Replicate Data: 241916005|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.319	0.319	0.0045	0.0197	0.0046	11:29:24	Yes
2	0.330	0.330	0.0047	0.0212	0.0048	11:29:54	Yes
Mean:	0.324	0.324	0.0046				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.299	0.299	0.0043	0.0186	0.0044	11:37:48	Yes
2	0.303	0.303	0.0043	0.0187	0.0044	11:38:18	Yes
Mean:	0.301	0.301	0.0043				
SD:	0.003	0.003	0.0000				
%RSD:	1.073	1.073	0.93				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 241916011|928035|1 **Date Collected: 12/9/2009 11:38:37**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241916011|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.415	0.415	0.0057	0.0244	0.0058	11:39:29	Yes
2	0.407	0.407	0.0056	0.0240	0.0057	11:39:58	Yes
Mean:	0.411	0.411	0.0057				
SD:	0.005	0.005	0.0001				
%RSD:	1.278	1.278	1.15				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241922001|928035|1 **Date Collected: 12/9/2009 11:40:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241922001|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.036	1.036	0.0134	0.0569	0.0135	11:41:10	Yes
2	1.030	1.030	0.0133	0.0567	0.0134	11:41:40	Yes
Mean:	1.033	1.033	0.0134				
SD:	0.004	0.004	0.0001				
%RSD:	0.401	0.401	0.38				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201984320|928035|1 **Date Collected: 12/9/2009 11:42:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984320|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.236	1.236	0.0159	0.0671	0.0160	11:42:51	Yes
2	1.223	1.223	0.0157	0.0666	0.0158	11:43:21	Yes
Mean:	1.230	1.230	0.0158				
SD:	0.009	0.009	0.0001				
%RSD:	0.759	0.759	0.73				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 11:43:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.170	5.170	0.0646	0.2729	0.0647	11:44:32	Yes
2	5.127	5.127	0.0641	0.2716	0.0642	11:45:02	Yes
Mean:	5.148	5.148	0.0644				
SD:	0.030	0.030	0.0004				
%RSD:	0.587	0.587	0.58				

QC value within limits for Hg 253.7 Recovery = 102.97%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:

Date Collected: 12/9/2009 11:45:21
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0004	0.0002	11:46:11	Yes
2	-0.044	-0.044	0.0000	0.0001	0.0001	11:46:41	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.281	2.281	28.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 1201984321|928035|1
Analyst: JXL1

Autosampler Location: 62
Date Collected: 12/9/2009 11:47:01
Data Type: Original

Replicate Data: 1201984321|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.129	3.129	0.0393	0.1671	0.0394	11:47:52	Yes
2	3.115	3.115	0.0392	0.1665	0.0393	11:48:22	Yes
Mean:	3.122	3.122	0.0393				
SD:	0.010	0.010	0.0001				
%RSD:	0.316	0.316	0.31				

Sequence No.: 73
Sample ID: 1201984323|928035|1
Analyst: JXL1

Autosampler Location: 63
Date Collected: 12/9/2009 11:48:42
Data Type: Original

Replicate Data: 1201984323|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.118	3.118	0.0392	0.1666	0.0393	11:49:33	Yes
2	3.100	3.100	0.0390	0.1662	0.0391	11:50:03	Yes
Mean:	3.109	3.109	0.0391				
SD:	0.013	0.013	0.0002				
%RSD:	0.411	0.411	0.40				

Sequence No.: 74
Sample ID: 1201984322|928035|5
Analyst: JXL1

Autosampler Location: 64
Date Collected: 12/9/2009 11:50:23
Data Type: Original

Replicate Data: 1201984322|928035|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.177	0.177	0.0028	0.0119	0.0029	11:51:15	Yes
2	0.179	0.179	0.0028	0.0120	0.0029	11:51:44	Yes
Mean:	0.178	0.178	0.0028				
SD:	0.001	0.001	0.0000				
%RSD:	0.738	0.738	0.59				

Sequence No.: 75
Sample ID: 241922002|928035|1
Analyst: JXL1

Autosampler Location: 65
Date Collected: 12/9/2009 11:52:04
Data Type: Original

Replicate Data: 241922002|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.961	0.961	0.0125	0.0531	0.0126	11:52:56	Yes
2	0.958	0.958	0.0124	0.0531	0.0125	11:53:26	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.261	0.261	0.0038	0.0167	0.0039	12:01:21	Yes
2	0.255	0.255	0.0037	0.0163	0.0038	12:01:51	Yes
Mean:	0.258	0.258	0.0038				
SD:	0.004	0.004	0.0001				
%RSD:	1.643	1.643	1.39				

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201981594|926816|1 **Date Collected: 12/9/2009 12:02:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981594|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:02	Yes
2	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:32	Yes
Mean:	-0.044	-0.044	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.850	0.850	14.48				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:03:52**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.113	5.113	0.0639	0.2744	0.0640	12:04:42	Yes
2	5.098	5.098	0.0637	0.2741	0.0638	12:05:12	Yes
Mean:	5.106	5.106	0.0638				
SD:	0.011	0.011	0.0001				
%RSD:	0.206	0.206	0.20				

QC value within limits for Hg 253.7 Recovery = 102.12%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:05:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	12:06:21	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	12:06:51	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.638	2.638	23.77				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201981595|926816|10 **Date Collected: 12/9/2009 12:07:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981595|926816|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.982	3.982	0.0499	0.2127	0.0500	12:08:02	Yes
2	3.961	3.961	0.0497	0.2123	0.0498	12:08:32	Yes
Mean:	3.972	3.972	0.0498				
SD:	0.014	0.014	0.0002				
%RSD:	0.362	0.362	0.36				

2	0.042	0.042	0.0011	0.0049	0.0012	12:17:00	Yes
Mean:	0.041	0.041	0.0011				
SD:	0.001	0.001	0.0000				
%RSD:	1.821	1.821	0.86				

==========

Sequence No.: 90 **Autosampler Location: 78**
Sample ID: 241711002|926816|1 **Date Collected: 12/9/2009 12:17:20**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711002|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.294	0.294	0.0042	0.0184	0.0043	12:18:12	Yes
2	0.294	0.294	0.0042	0.0185	0.0043	12:18:42	Yes
Mean:	0.294	0.294	0.0042				
SD:	0.000	0.000	0.0000				
%RSD:	0.024	0.024	0.02				

==========

Sequence No.: 91 **Autosampler Location: 79**
Sample ID: 241711003|926816|1 **Date Collected: 12/9/2009 12:19:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711003|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.272	0.272	0.0039	0.0174	0.0040	12:19:53	Yes
2	0.270	0.270	0.0039	0.0168	0.0040	12:20:23	Yes
Mean:	0.271	0.271	0.0039				
SD:	0.002	0.002	0.0000				
%RSD:	0.579	0.579	0.49				

==========

Sequence No.: 92 **Autosampler Location: 80**
Sample ID: 241711004|926816|1 **Date Collected: 12/9/2009 12:20:43**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711004|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.492	0.492	0.0067	0.0293	0.0068	12:21:34	Yes
2	0.488	0.488	0.0066	0.0290	0.0067	12:22:04	Yes
Mean:	0.490	0.490	0.0066				
SD:	0.003	0.003	0.0000				
%RSD:	0.610	0.610	0.56				

==========

Sequence No.: 93 **Autosampler Location: 81**
Sample ID: 241711005|926816|1 **Date Collected: 12/9/2009 12:22:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711005|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.296	0.296	0.0042	0.0187	0.0043	12:23:15	Yes
2	0.294	0.294	0.0042	0.0187	0.0043	12:23:45	Yes
Mean:	0.295	0.295	0.0042				
SD:	0.002	0.002	0.0000				
%RSD:	0.527	0.527	0.46				

==========

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:24:05**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.115	5.115	0.0639	0.2767	0.0640	12:24:55	Yes
2	5.089	5.089	0.0636	0.2752	0.0637	12:25:25	Yes
Mean:	5.102	5.102	0.0638				
SD:	0.019	0.019	0.0002				
%RSD:	0.372	0.372	0.37				

QC value within limits for Hg 253.7 Recovery = 102.04%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:25:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0007	0.0002	12:26:35	Yes
2	-0.043	-0.043	0.0000	0.0006	0.0001	12:27:05	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.813	1.813	18.79				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 241711006|926816|1 **Date Collected: 12/9/2009 12:27:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711006|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.327	0.327	0.0046	0.0204	0.0047	12:28:16	Yes
2	0.323	0.323	0.0046	0.0203	0.0047	12:28:46	Yes
Mean:	0.325	0.325	0.0046				
SD:	0.003	0.003	0.0000				
%RSD:	0.902	0.902	0.79				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 241711007|926816|1 **Date Collected: 12/9/2009 12:29:06**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711007|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.383	0.383	0.0053	0.0230	0.0054	12:29:57	Yes
2	0.380	0.380	0.0053	0.0228	0.0054	12:30:27	Yes
Mean:	0.381	0.381	0.0053				
SD:	0.002	0.002	0.0000				
%RSD:	0.416	0.416	0.37				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 1201984335|928044|1 **Date Collected: 12/9/2009 12:30:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984335|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	12:31:38	Yes
2	-0.041	-0.041	0.0001	0.0004	0.0002	12:32:08	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.000	0.000	0.0000				

1	2.129	2.129	0.0269	0.1157	0.0270	12:40:08	Yes
2	2.117	2.117	0.0268	0.1153	0.0269	12:40:38	Yes
Mean:	2.123	2.123	0.0269				
SD:	0.008	0.008	0.0001				
%RSD:	0.400	0.400	0.39				

==========

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 1201984339|928044|5 **Date Collected: 12/9/2009 12:40:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984339|928044|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	0.0001	0.0007	0.0002	12:41:50	Yes
2	-0.035	-0.035	0.0001	0.0009	0.0002	12:42:20	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.977	3.977	13.36				

==========

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 241825002|928044|1 **Date Collected: 12/9/2009 12:42:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825002|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.273	0.273	0.0040	0.0173	0.0041	12:43:32	Yes
2	0.274	0.274	0.0040	0.0176	0.0041	12:44:02	Yes
Mean:	0.274	0.274	0.0040				
SD:	0.000	0.000	0.0000				
%RSD:	0.084	0.084	0.07				

==========

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:44:22**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.112	5.112	0.0639	0.2765	0.0640	12:45:12	Yes
2	5.069	5.069	0.0634	0.2743	0.0635	12:45:42	Yes
Mean:	5.091	5.091	0.0636				
SD:	0.030	0.030	0.0004				
%RSD:	0.591	0.591	0.59				

QC value within limits for Hg 253.7 Recovery = 101.81%
All analyte(s) passed QC.

==========

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:46:01**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0009	0.0002	12:46:51	Yes
2	-0.043	-0.043	0.0000	0.0004	0.0001	12:47:21	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.460	5.460	43.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.192	0.192	0.0030	0.0131	0.0031	13:03:51	Yes
2	0.190	0.190	0.0029	0.0129	0.0030	13:04:21	Yes
Mean:	0.191	0.191	0.0029				
SD:	0.002	0.002	0.0000				
%RSD:	0.902	0.902	0.73				

==========

Sequence No.: 118 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:04:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.116	5.116	0.0640	0.2787	0.0641	13:05:32	Yes
2	5.095	5.095	0.0637	0.2773	0.0638	13:06:02	Yes
Mean:	5.105	5.105	0.0638				
SD:	0.015	0.015	0.0002				
%RSD:	0.299	0.299	0.30				

QC value within limits for Hg 253.7 Recovery = 102.11%
All analyte(s) passed QC.

==========

Sequence No.: 119 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:06:21**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0001	0.0001	13:07:12	Yes
2	-0.043	-0.043	0.0000	0.0006	0.0001	13:07:42	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.114	1.114	14.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 120 **Autosampler Location: 102**
Sample ID: 241825013|928044|1 **Date Collected: 12/9/2009 13:08:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825013|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.061	0.061	0.0013	0.0060	0.0014	13:08:53	Yes
2	0.065	0.065	0.0014	0.0067	0.0015	13:09:23	Yes
Mean:	0.063	0.063	0.0014				
SD:	0.003	0.003	0.0000				
%RSD:	4.456	4.456	2.57				

==========

Sequence No.: 121 **Autosampler Location: 103**
Sample ID: 241825014|928044|1 **Date Collected: 12/9/2009 13:09:44**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825014|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0005	0.0027	0.0006	13:10:35	Yes
2	-0.005	-0.005	0.0005	0.0023	0.0006	13:11:05	Yes
Mean:	-0.005	-0.005	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	15.90	15.90	1.73				

Mean:	0.361	0.361	0.0050
SD:	0.003	0.003	0.0000
%RSD:	0.759	0.759	0.67

==========

Sequence No.: 127 **Autosampler Location: 109**
Sample ID: 241825020|928044|1 **Date Collected: 12/9/2009 13:19:57**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825020|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.149	0.149	0.0024	0.0109	0.0025	13:20:49	Yes
2	0.151	0.151	0.0024	0.0113	0.0025	13:21:19	Yes
Mean:	0.150	0.150	0.0024				
SD:	0.002	0.002	0.0000				
%RSD:	1.179	1.179	0.90				

==========

Sequence No.: 128 **Autosampler Location: 110**
Sample ID: 1201984341|928047|1 **Date Collected: 12/9/2009 13:21:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984341|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0000	0.0003	0.0001	13:22:32	Yes
2	-0.045	-0.045	0.0000	0.0004	0.0001	13:23:02	Yes
Mean:	-0.045	-0.045	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.018	0.018	0.87				

==========

Sequence No.: 129 **Autosampler Location: 111**
Sample ID: 1201984342|928047|10 **Date Collected: 12/9/2009 13:23:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984342|928047|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.643	3.643	0.0457	0.1987	0.0458	13:24:15	Yes
2	3.623	3.623	0.0455	0.1973	0.0456	13:24:45	Yes
Mean:	3.633	3.633	0.0456				
SD:	0.014	0.014	0.0002				
%RSD:	0.377	0.377	0.37				

==========

Sequence No.: 130 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:25:05**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.104	5.104	0.0638	0.2784	0.0639	13:25:56	Yes
2	5.049	5.049	0.0631	0.2769	0.0632	13:26:25	Yes
Mean:	5.076	5.076	0.0635				
SD:	0.039	0.039	0.0005				
%RSD:	0.770	0.770	0.76				

QC value within limits for Hg 253.7 Recovery = 101.53%
All analyte(s) passed QC.

==========

Sequence No.: 131 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:26:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	0.0000	0.0004	0.0001	13:27:35	Yes
2	-0.043	-0.043	0.0000	0.0004	0.0001	13:28:05	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.424	1.424	20.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 132 Autosampler Location: 112
Sample ID: 241832001|928047|1 Date Collected: 12/9/2009 13:28:24
Analyst: JXL1 Data Type: Original

Replicate Data: 241832001|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	0.0004	0.0020	0.0005	13:29:16	Yes
2	-0.013	-0.013	0.0004	0.0019	0.0005	13:29:46	Yes
Mean:	-0.013	-0.013	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.360	6.360	2.40				

Sequence No.: 133 Autosampler Location: 113
Sample ID: 241832002|928047|1 Date Collected: 12/9/2009 13:30:06
Analyst: JXL1 Data Type: Original

Replicate Data: 241832002|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0004	0.0023	0.0005	13:30:58	Yes
2	-0.012	-0.012	0.0004	0.0021	0.0005	13:31:28	Yes
Mean:	-0.012	-0.012	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.516	6.516	2.22				

Sequence No.: 134 Autosampler Location: 114
Sample ID: 241832003|928047|1 Date Collected: 12/9/2009 13:31:49
Analyst: JXL1 Data Type: Original

Replicate Data: 241832003|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	0.0005	0.0025	0.0006	13:32:41	Yes
2	-0.006	-0.006	0.0005	0.0025	0.0006	13:33:11	Yes
Mean:	-0.007	-0.007	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	8.206	8.206	1.38				

Sequence No.: 135 Autosampler Location: 115
Sample ID: 241832004|928047|1 Date Collected: 12/9/2009 13:33:32
Analyst: JXL1 Data Type: Original

Replicate Data: 241832004|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	0.0003	0.0019	0.0004	13:34:24	Yes
2	-0.024	-0.024	0.0003	0.0014	0.0004	13:34:54	Yes
Mean:	-0.022	-0.022	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	13.54	13.54	11.99				

Sequence No.: 136
Sample ID: 241838002|928047|1
Analyst: JXL1
Autosampler Location: 116
Date Collected: 12/9/2009 13:35:15
Data Type: Original

Replicate Data: 241838002|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.171	0.171	0.0027	0.0119	0.0028	13:36:06	Yes
2	0.172	0.172	0.0027	0.0122	0.0028	13:36:36	Yes
Mean:	0.171	0.171	0.0027				
SD:	0.001	0.001	0.0000				
%RSD:	0.333	0.333	0.26				

Sequence No.: 137
Sample ID: 1201984343|928047|1
Analyst: JXL1
Autosampler Location: 117
Date Collected: 12/9/2009 13:36:57
Data Type: Original

Replicate Data: 1201984343|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.153	0.153	0.0025	0.0113	0.0026	13:37:49	Yes
2	0.150	0.150	0.0024	0.0109	0.0025	13:38:19	Yes
Mean:	0.151	0.151	0.0024				
SD:	0.002	0.002	0.0000				
%RSD:	1.284	1.284	0.98				

Sequence No.: 138
Sample ID: 1201984344|928047|1
Analyst: JXL1
Autosampler Location: 118
Date Collected: 12/9/2009 13:38:39
Data Type: Original

Replicate Data: 1201984344|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.274	2.274	0.0288	0.1252	0.0288	13:39:31	Yes
2	2.277	2.277	0.0288	0.1243	0.0289	13:40:01	Yes
Mean:	2.276	2.276	0.0288				
SD:	0.002	0.002	0.0000				
%RSD:	0.087	0.087	0.08				

Sequence No.: 139
Sample ID: 1201984346|928047|1
Analyst: JXL1
Autosampler Location: 119
Date Collected: 12/9/2009 13:40:22
Data Type: Original

Replicate Data: 1201984346|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.322	2.322	0.0293	0.1254	0.0294	13:41:13	Yes
2	2.301	2.301	0.0291	0.1249	0.0292	13:41:43	Yes
Mean:	2.311	2.311	0.0292				
SD:	0.015	0.015	0.0002				
%RSD:	0.645	0.645	0.63				

Sequence No.: 140
Sample ID: 1201984345|928047|5
Analyst: JXL1
Autosampler Location: 120
Date Collected: 12/9/2009 13:42:04
Data Type: Original

Replicate Data: 1201984345|928047|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0006	0.0030	0.0007	13:42:56	Yes

2	0.001	0.001	0.0006	0.0030	0.0007	13:43:26	Yes
Mean:	0.001	0.001	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	35.70	35.70	0.96				

==========

Sequence No.: 141 **Autosampler Location: 121**
Sample ID: 1201984358|928056|1 **Date Collected: 12/9/2009 13:43:46**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984358|928056|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0000	0.0006	0.0001	13:44:38	Yes
2	-0.044	-0.044	0.0000	0.0006	0.0001	13:45:08	Yes
Mean:	-0.044	-0.044	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.785	1.785	33.26				

==========

Sequence No.: 142 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:45:29**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.159	5.159	0.0645	0.2794	0.0646	13:46:19	Yes
2	5.173	5.173	0.0647	0.2776	0.0648	13:46:49	Yes
Mean:	5.166	5.166	0.0646				
SD:	0.009	0.009	0.0001				
%RSD:	0.183	0.183	0.18				

QC value within limits for Hg 253.7 Recovery = 103.32%
All analyte(s) passed QC.

==========

Sequence No.: 143 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:47:08**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0006	0.0001	13:47:58	Yes
2	-0.042	-0.042	0.0001	0.0007	0.0002	13:48:28	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.451	1.451	14.10				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 144 **Autosampler Location: 122**
Sample ID: 1201984359|928056|10 **Date Collected: 12/9/2009 13:48:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984359|928056|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.800	3.800	0.0477	0.2066	0.0478	13:49:39	Yes
2	3.773	3.773	0.0473	0.2054	0.0474	13:50:09	Yes
Mean:	3.787	3.787	0.0475				
SD:	0.019	0.019	0.0002				
%RSD:	0.496	0.496	0.49				

==========

Sequence No.: 145 **Autosampler Location: 123**

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 928676

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985797	UI647733-01	.523	g
MS	1201985799	UI090611-A	.5	mL
MS	1201985799	UI090611-B	.5	mL
MSD	1201985801	UI090611-A	.5	mL
MSD	1201985801	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985796		SW846 3050B	04-DEC-2009 19:14	0.507 g	50 mL	98.61933	SOIL
LCS	1201985797		SW846 3050B	04-DEC-2009 19:14	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241832001		SW846 3050B	04-DEC-2009 19:14	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241832002		SW846 3050B	04-DEC-2009 19:14	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241832003		SW846 3050B	04-DEC-2009 19:14	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241832004		SW846 3050B	04-DEC-2009 19:14	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241838002		SW846 3050B	04-DEC-2009 19:14	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241901001		SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
DUP	1201985798	241901001	SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
MS	1201985799	241901001	SW846 3050B	04-DEC-2009 19:14	0.513 g	50 mL	97.46589	SOIL
MSD	1201985801	241901001	SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
SDILT	1201985800	241901001	SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241901002		SW846 3050B	04-DEC-2009 19:14	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241901003		SW846 3050B	04-DEC-2009 19:14	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241901004		SW846 3050B	04-DEC-2009 19:14	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241901005		SW846 3050B	04-DEC-2009 19:14	0.501 g	50 mL	99.8004	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: sample#241832001 is a clumpy, rich, brown soil with small rocks.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 928612

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985643	UI647735	.51	g
MS	1201985645	UI091119-01	.25	mL
MS	1201985645	UI091119-06	.25	mL
MSD	1201985647	UI091119-01	.25	mL
MSD	1201985647	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985642		SW846 3050B	04-DEC-2009 19:17	0.524 g	50 mL	95.41985	SOIL
LCS	1201985643		SW846 3050B	04-DEC-2009 19:17	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241832001		SW846 3050B	04-DEC-2009 19:17	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241832002		SW846 3050B	04-DEC-2009 19:17	0.5 g	50 mL	100	SOIL
SAMPLE	241832003		SW846 3050B	04-DEC-2009 19:17	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241832004		SW846 3050B	04-DEC-2009 19:17	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241838002		SW846 3050B	04-DEC-2009 19:17	0.503 g	50 mL	99.40358	SOIL
DUP	1201985644	241838002	SW846 3050B	04-DEC-2009 19:17	0.51 g	50 mL	98.03922	SOIL
MS	1201985645	241838002	SW846 3050B	04-DEC-2009 19:17	0.511 g	50 mL	97.84736	SOIL
MSD	1201985647	241838002	SW846 3050B	04-DEC-2009 19:17	0.515 g	50 mL	97.08738	SOIL
SDILT	1201985646	241838002	SW846 3050B	04-DEC-2009 19:17	0.503 g	50 mL	99.40358	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments: sample#241832001 is a rich, brown soil with artifacts.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 933563

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201997324	UI062540-I	.503	g
MS	1201985645	UI091124-01	.25	mL
MS	1201985645	UI091124-06	.25	mL
MSD	1201985647	UI091124-01	.25	mL
MSD	1201985647	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201997323		SW846 3050B	16-DEC-2009 13:30	0.525 g	50 mL	95.2381	SOIL
LCS	1201997324		SW846 3050B	16-DEC-2009 13:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241832001		SW846 3050B	16-DEC-2009 13:30	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241832002		SW846 3050B	16-DEC-2009 13:30	0.533 g	50 mL	93.80863	SOIL
SAMPLE	241832003		SW846 3050B	16-DEC-2009 13:30	0.533 g	50 mL	93.80863	SOIL
SAMPLE	241832004		SW846 3050B	16-DEC-2009 13:30	0.527 g	50 mL	94.87666	SOIL
SAMPLE	241838002		SW846 3050B	16-DEC-2009 13:30	0.535 g	50 mL	93.45794	SOIL
DUP	1201985644	241838002	SW846 3050B	16-DEC-2009 13:30	0.511 g	50 mL	97.84736	SOIL
MS	1201985645	241838002	SW846 3050B	16-DEC-2009 13:30	0.525 g	50 mL	95.2381	SOIL
MSD	1201985647	241838002	SW846 3050B	16-DEC-2009 13:30	0.516 g	50 mL	96.89922	SOIL
SDILT	1201985646	241838002	SW846 3050B	16-DEC-2009 13:30	0.535 g	50 mL	93.45794	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments Brown,medium soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 928046

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201984342	UI031809A	.203	g
MS	1201984344	WHG091208-14	.3	mL
MSD	1201984346	WHG091208-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201984341		SW846 7471A Prep	08-DEC-2009 12:40	0.539 g	30 mL	55.65863	SOIL
LCS	1201984342		SW846 7471A Prep	08-DEC-2009 12:40	0.203 g	30 mL	147.78325	SOIL
SAMPLE	241832001		SW846 7471A Prep	08-DEC-2009 12:40	0.595 g	30 mL	50.42017	SOIL
SAMPLE	241832002		SW846 7471A Prep	08-DEC-2009 12:40	0.506 g	30 mL	59.28854	SOIL
SAMPLE	241832003		SW846 7471A Prep	08-DEC-2009 12:40	0.551 g	30 mL	54.44646	SOIL
SAMPLE	241832004		SW846 7471A Prep	08-DEC-2009 12:40	0.558 g	30 mL	53.76344	SOIL
SAMPLE	241838002		SW846 7471A Prep	08-DEC-2009 12:40	0.538 g	30 mL	55.76208	SOIL
DUP	1201984343	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.563 g	30 mL	53.28597	SOIL
MS	1201984344	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.579 g	30 mL	51.81347	SOIL
MSD	1201984346	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.524 g	30 mL	57.25191	SOIL
SDILT	1201984345	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.538 g	30 mL	55.76208	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091208-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091208-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091208-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091208-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091208-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091208-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments: Sample 241838002 is a rocky brown soil.
Digestion Start Date: 08-DEC-09 12:40
Digestion End Date: 08-DEC-09 13:10

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
928677	See Below		

Potentially affected work order(s)(SDG): 241832(10-669),241838(10-670),241901(10-689)

Application Issues:

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MSD/PSD: QC 1201985801MSD	The matrix spike duplicate recovery failed outside of the control limits for Li and Ni due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Rose Jenkins 11-DEC-09

Data Validator/Group Leader:

Samantha Jacobs 14-DEC-09

NCR Report No.: 770093
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
928613	See Below		

Potentially affected work order(s)(SDG): 241832(10-669),241838(10-670)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201985644DUP 2. Failed RPD for MS/MSD, or PS/PSD: QC 1201985647MSD	1. The sample and sample duplicate % RPD failed outside the control limits for barium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese and titanium due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 16-DEC-09

Data Validator/Group Leader:

Louise Smith 16-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
18-DEC-09	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
933564	See Below		

Potentially affected work order(s)(SDG): 241832(10-669),241838(10-670)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201985645MS 2. Failed Recovery for MSD/PSD: QC 1201985647MSD	1. The matrix spike recovery failed outside of the control limits for calcium,magnesium,potassium and silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike duplicate recovery failed outside of the control limits for calcium,magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 19-DEC-09

Data Validator/Group Leader:

Jamie Johnson 19-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-09 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI647735 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7730 mg/kg	Antimony	60.6 mg/kg
Arsenic	257 mg/kg	Barium	472 mg/kg
Beryllium	88.4 mg/kg	Boron	130 mg/kg
Cadmium	117 mg/kg	Calcium	3640 mg/kg
Chromium	72.8 mg/kg	Cobalt	82.5 mg/kg

Analyte	Concentration	Analyte	Concentration
Copper	100 mg/kg	Iron	14500 mg/kg
Lead	166 mg/kg	Magnesium	3000 mg/kg
Manganese	374 mg/kg	Mercury	4.18 mg/kg
Molybdenum	82.7 mg/kg	Nickel	103 mg/kg
Phosphorous	690 mg/kg	Potassium	2410 mg/kg
Selenium	173 mg/kg	Silica	3896 mg/kg
Silicon	1818 mg/kg	Silver	123 mg/kg
Sodium	574 mg/kg	Strontium	160 mg/kg
Sulfur	200 mg/kg	Thallium	194 mg/kg
Tin	107 mg/kg	Titanium	269 mg/kg
Vanadium	138 mg/kg	Zinc	201 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091208-01 **Opened:** 08-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 08-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 09-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091208-02 **Opened:** 08-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 09-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091208-07 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Standard Logbook

Serial ID: WHG091208-08 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091208-09 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091208-10 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091208-11 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Standard Logbook

Serial ID: WHG091208-12 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091208-14 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091211-42 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091211-43 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091211-44 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091211-45 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091211-46 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091211-47 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091218-43 **Opened:** 18-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WMS091206-04AB **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Name: ICPMS Cal Standard 10 **Received:** 06-DEC-09
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091206-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091206-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091206-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091206-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091206-04B **Opened:** 06-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl- 1235248
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS091206-05B **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Name: ICPMS ICV **Received:** 06-DEC-09
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091206-06B **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Name: ICPMS CRDL **Received:** 06-DEC-09
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091206-07B **Opened:** 06-DEC-09 **Lot Number :** 1010773
Name: ICPMS ICSA **Received:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091206-08B **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Name: ICPMS ICSAB **Received:** 06-DEC-09
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091208-04 **Opened:** 08-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091208-04A **Opened:** 08-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091208-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091208-05 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091208-06 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 08-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091208-07 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 08-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091208-08
Name: ICPMS ICSAB
Type: Working
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Opened: 08-DEC-09
Received: 08-DEC-09
Expires: 09-DEC-09

Balance Id : 40245216
Pipet Id : 1758088
Solvent : 2%HNO3/1%HCl - 1238829

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091209-04AB **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS Cal Standard 10 **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091209-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091209-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091209-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS091209-04B **Opened:** 09-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl- 1238829
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS091209-05B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS ICV **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091209-06B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS CRDL **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS091209-07B **Opened:** 09-DEC-09 **Lot Number :** 1010773
Name: ICPMS ICSA **Received:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091209-08B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS ICSAB **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091209-70B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS LINEAR RANGE ST **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242318 **Opened:** 14-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 20-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-669-1

Sample Analysis

Sample ID	Client ID
241835001	RE03-10-2745
241835002	RE03-10-2744
241835003	RE03-10-2757
241835004	RE03-10-2746
241835005	RE03-10-2759
241835006	RE03-10-2758
1201985666	Method Blank (MB) **ICP**
1201985667	Laboratory Control Sample (LCS)
1201985670	241835001(RE03-10-2745L) Serial Dilution (SD)
1201985668	241835001(RE03-10-2745D) Sample Duplicate (DUP)
1201985669	241835001(RE03-10-2745S) Matrix Spike (MS)
1201985732	Method Blank (MB) **ICP-MS**
1201985733	Laboratory Control Sample (LCS)
1201985736	241835003(RE03-10-2757L) Serial Dilution (SD)
1201985734	241835003(RE03-10-2757D) Sample Duplicate (DUP)
1201985735	241835003(RE03-10-2757S) Matrix Spike (MS)
1201984328	Method Blank (MB) **CVAA**
1201984329	Laboratory Control Sample (LCS)
1201984333	241923001(RE16-10-297L) Serial Dilution (SD)
1201984330	241923001(RE16-10-297D) Sample Duplicate (DUP)
1201984331	241923001(RE16-10-297S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch: 928625, 928653 and 928040
Prep Batch : 928624, 928652 and 928039

Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241835001 (RE03-10-2745)-ICP, 241835003 (RE03-10-2757)-ICP-MS and 241923001 (RE16-10-297)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of barium as indicated by the "*" qualifier.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nick Cole Elmore **Date:** 12.21.09

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835001 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2745 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:01	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-39-3	Barium	5	ug/L	U*	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 20:49	120909A-1	928625
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/09/09 20:49	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 20:49	120909A-1	928625
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:13	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 20:49	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-21-3	Silicon	100	ug/L	U	25	100	100	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:00	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 20:49	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 20:49	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835002 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2744 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:03	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-39-3	Barium	5	ug/L	U*	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:30	120909A-1	928625
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/09/09 21:30	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:30	120909A-1	928625
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:15	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:30	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-21-3	Silicon	27.8	ug/L	J	25	100	100	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:06	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:30	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:30	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835003 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2757 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	68.8	ug/L	J	68	200	200	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:10	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-39-3	Barium	1.66	ug/L	J*	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-70-2	Calcium	119	ug/L	J	50	200	200	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:37	120909A-1	928625
7439-89-6	Iron	89.6	ug/L	J	30	100	100	1	P	HSC	12/09/09 21:37	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:37	120909A-1	928625
7439-96-5	Manganese	2.86	ug/L	J	1	5	5	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:17	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:37	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-21-3	Silicon	154	ug/L		25	100	100	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-23-5	Sodium	224	ug/L	J	100	300	300	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-32-6	Titanium	1.74	ug/L	J	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:25	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:37	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:37	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835004 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2746 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:24	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-39-3	Barium	5	ug/L	U*	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:44	120909A-1	928625
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	12/09/09 21:44	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:44	120909A-1	928625
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:19	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:44	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-21-3	Silicon	28.2	ug/L	J	25	100	100	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:49	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:44	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:44	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835005 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2759 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:27	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-39-3	Barium	2.75	ug/L	J*	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-70-2	Calcium	364	ug/L		50	200	200	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:50	120909A-1	928625
7439-89-6	Iron	45.8	ug/L	J	30	100	100	1	P	HSC	12/09/09 21:50	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:50	120909A-1	928625
7439-96-5	Manganese	2.78	ug/L	J	1	5	5	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXLJ	12/08/09 14:21	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:50	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-21-3	Silicon	146	ug/L		25	100	100	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-23-5	Sodium	471	ug/L		100	300	300	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-32-6	Titanium	1.38	ug/L	J	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 07:56	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:50	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:50	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-669-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241835006 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-10-2758 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/09/09 08:29	091208-3	928653
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-39-3	Barium	2.62	ug/L	J*	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-42-8	Boron	50	ug/L	U	15	50	50	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-70-2	Calcium	96.2	ug/L	J	50	200	200	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	12/09/09 21:57	120909A-1	928625
7439-89-6	Iron	55.2	ug/L	J	30	100	100	1	P	HSC	12/09/09 21:57	120909A-1	928625
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7439-93-2	Lithium	10	ug/L	U	2	10	10	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	12/09/09 21:57	120909A-1	928625
7439-96-5	Manganese	1.14	ug/L	J	1	5	5	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/08/09 14:23	100809W4-4	928040
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-09-7	Potassium	150	ug/L	U	50	150	150	1	P	HSC	12/09/09 21:57	120909A-1	928625
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-21-3	Silicon	82.7	ug/L	J	25	100	100	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-23-5	Sodium	368	ug/L		100	300	300	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-32-6	Titanium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/08/09 08:02	091207-2	928653
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	12/09/09 21:57	120909A-1	928625
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	12/09/09 21:57	120909A-1	928625

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928040	928039	SW846 7470A Prep	20	mL	20	mL	12/07/09	TXB3
928625	928624	SW846 3005A	50	mL	50	mL	12/05/09	BCD1
928653	928652	SW846 3005A	50	mL	50	mL	12/05/09	BCD1

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Beryllium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	08-DEC-09 04:02	091207-2
	Cadmium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	08-DEC-09 04:02	091207-2
	Lead	53.1	ug/L	50	ug/L	106.2	90.0 – 110.0	MS	08-DEC-09 04:02	091207-2
	Lithium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	08-DEC-09 04:02	091207-2
	Manganese	53.2	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	08-DEC-09 04:02	091207-2
	Thallium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	08-DEC-09 04:02	091207-2
	Uranium	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	08-DEC-09 04:02	091207-2
	Mercury	4.9	ug/L	5	ug/L	98	90.0 – 110.0	AV	08-DEC-09 10:04	100809W4-4
	Antimony	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	09-DEC-09 07:40	091208-3
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Arsenic	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Boron	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Calcium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Iron	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Magnesium	5360	ug/L	5000	ug/L	107.2	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Nickel	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Potassium	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Selenium	2520	ug/L	2500	ug/L	101	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Silicon	4750	ug/L	5000	ug/L	95	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Silver	260	ug/L	250	ug/L	104.1	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Sodium	2390	ug/L	2500	ug/L	95.7	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Titanium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09-DEC-09 08:43	120909A-1
CCV01										
	Beryllium	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	08-DEC-09 04:33	091207-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	49.2	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	08-DEC-09 04:33	091207-2
	Lead	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	08-DEC-09 04:33	091207-2
	Lithium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	08-DEC-09 04:33	091207-2
	Manganese	54.3	ug/L	50	ug/L	108.5	90.0 – 110.0	MS	08-DEC-09 04:33	091207-2
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	08-DEC-09 04:33	091207-2
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	08-DEC-09 04:33	091207-2
	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	08-DEC-09 10:10	100809W4-4
	Antimony	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	09-DEC-09 07:51	091208-3
	Aluminum	4870	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Arsenic	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Barium	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Boron	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Calcium	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Cobalt	485	ug/L	500	ug/L	97	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Copper	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Iron	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Magnesium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Nickel	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Selenium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Silicon	2430	ug/L	2500	ug/L	97.2	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Sodium	9640	ug/L	10000	ug/L	96.4	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Titanium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	09-DEC-09 09:43	120909A-1
CCV02										
	Beryllium	53.5	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	08-DEC-09 04:51	091207-2
	Cadmium	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	08-DEC-09 04:51	091207-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	53.9	ug/L	50	ug/L	107.8	90.0 – 110.0	MS	08–DEC–09 04:51	091207–2
	Lithium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	08–DEC–09 04:51	091207–2
	Manganese	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	08–DEC–09 04:51	091207–2
	Thallium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	08–DEC–09 04:51	091207–2
	Uranium	53.2	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	08–DEC–09 04:51	091207–2
	Mercury	4.98	ug/L	5	ug/L	99.6	80.0 – 120.0	AV	08–DEC–09 10:33	100809W4–4
	Antimony	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	09–DEC–09 08:05	091208–3
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Boron	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Cobalt	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Copper	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Magnesium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Nickel	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Potassium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Selenium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Silicon	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Sodium	10100	ug/L	10000	ug/L	100.7	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Titanium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Vanadium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 10:11	120909A–1
CCV03										
	Beryllium	52.1	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	08–DEC–09 05:47	091207–2
	Cadmium	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	08–DEC–09 05:47	091207–2
	Lead	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	08–DEC–09 05:47	091207–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lithium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	08-DEC-09 05:47	091207-2
	Manganese	50.6	ug/L	50	ug/L	101.1	90.0 - 110.0	MS	08-DEC-09 05:47	091207-2
	Thallium	50.7	ug/L	50	ug/L	101.5	90.0 - 110.0	MS	08-DEC-09 05:47	091207-2
	Uranium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	08-DEC-09 05:47	091207-2
	Mercury	4.98	ug/L	5	ug/L	99.6	80.0 - 120.0	AV	08-DEC-09 10:56	100809W4-4
	Antimony	51.7	ug/L	50	ug/L	103.4	90.0 - 110.0	MS	09-DEC-09 08:20	091208-3
	Aluminum	4890	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Arsenic	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Barium	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Boron	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Copper	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Magnesium	5170	ug/L	5000	ug/L	103.4	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Nickel	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Potassium	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Selenium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Silicon	2470	ug/L	2500	ug/L	99	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Sodium	10300	ug/L	10000	ug/L	103.4	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Titanium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	09-DEC-09 11:31	120909A-1
CCV04										
	Beryllium	53.8	ug/L	50	ug/L	107.7	90.0 - 110.0	MS	08-DEC-09 06:29	091207-2
	Cadmium	49.2	ug/L	50	ug/L	98.4	90.0 - 110.0	MS	08-DEC-09 06:29	091207-2
	Lead	52.8	ug/L	50	ug/L	105.6	90.0 - 110.0	MS	08-DEC-09 06:29	091207-2
	Lithium	52.8	ug/L	50	ug/L	105.6	90.0 - 110.0	MS	08-DEC-09 06:29	091207-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	08–DEC–09 06:29	091207–2
	Thallium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	08–DEC–09 06:29	091207–2
	Uranium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	08–DEC–09 06:29	091207–2
	Mercury	4.95	ug/L	5	ug/L	99	80.0 – 120.0	AV	08–DEC–09 11:19	100809W4–4
	Antimony	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	09–DEC–09 08:32	091208–3
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Arsenic	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Barium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Boron	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Chromium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Cobalt	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Copper	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Nickel	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Potassium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Selenium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Silicon	2430	ug/L	2500	ug/L	97.4	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Titanium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Vanadium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	09–DEC–09 12:40	120909A–1
CCV05										
	Beryllium	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	08–DEC–09 07:12	091207–2
	Cadmium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	08–DEC–09 07:12	091207–2
	Lead	53.1	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	08–DEC–09 07:12	091207–2
	Lithium	53.9	ug/L	50	ug/L	107.7	90.0 – 110.0	MS	08–DEC–09 07:12	091207–2
	Manganese	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	08–DEC–09 07:12	091207–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	51.2	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	08-DEC-09 07:12	091207-2
	Uranium	52.8	ug/L	50	ug/L	105.5	90.0 - 110.0	MS	08-DEC-09 07:12	091207-2
	Mercury	4.92	ug/L	5	ug/L	98.4	80.0 - 120.0	AV	08-DEC-09 11:42	100809W4-4
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Arsenic	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Barium	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Boron	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Cobalt	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Copper	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Iron	5240	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Magnesium	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Selenium	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Silicon	2460	ug/L	2500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Sodium	10800	ug/L	10000	ug/L	108.1	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Titanium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Vanadium	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	09-DEC-09 13:21	120909A-1
CCV06										
	Beryllium	52	ug/L	50	ug/L	104.1	90.0 - 110.0	MS	08-DEC-09 08:08	091207-2
	Cadmium	49	ug/L	50	ug/L	98.1	90.0 - 110.0	MS	08-DEC-09 08:08	091207-2
	Lead	52.8	ug/L	50	ug/L	105.6	90.0 - 110.0	MS	08-DEC-09 08:08	091207-2
	Lithium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	08-DEC-09 08:08	091207-2
	Manganese	51.5	ug/L	50	ug/L	103	90.0 - 110.0	MS	08-DEC-09 08:08	091207-2
	Thallium	49.4	ug/L	50	ug/L	98.8	90.0 - 110.0	MS	08-DEC-09 08:08	091207-2
	Uranium	51.6	ug/L	50	ug/L	103.2	90.0 - 110.0	MS	08-DEC-09 08:08	091207-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Mercury	4.93	ug/L	5	ug/L	98.5	80.0 - 120.0	AV	08-DEC-09 12:05	100809W4-4
	Aluminum	4820	ug/L	5000	ug/L	96.3	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Arsenic	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Boron	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Chromium	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Cobalt	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Copper	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Iron	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Magnesium	5260	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Nickel	500	ug/L	500	ug/L	100	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Selenium	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Silicon	2500	ug/L	2500	ug/L	100.2	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Silver	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Sodium	11100	ug/L	10000	ug/L	110.7	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Titanium	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
	Zinc	495	ug/L	500	ug/L	99	90.0 - 110.0	P	09-DEC-09 14:37	120909A-1
CCV07										
	Mercury	4.95	ug/L	5	ug/L	99	80.0 - 120.0	AV	08-DEC-09 12:28	100809W4-4
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1
	Arsenic	495	ug/L	500	ug/L	99	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1
	Barium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1
	Boron	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1
	Calcium	5060	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1
	Chromium	495	ug/L	500	ug/L	99	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1
	Copper	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	09-DEC-09 15:48	120909A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Nickel	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Selenium	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Silicon	2500	ug/L	2500	ug/L	99.8	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Sodium	10500	ug/L	10000	ug/L	104.6	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Titanium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
	Zinc	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09-DEC-09 15:48	120909A-1
CCV08										
	Mercury	4.98	ug/L	5	ug/L	99.5	80.0 – 120.0	AV	08-DEC-09 12:52	100809W4-4
	Aluminum	4860	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Arsenic	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Boron	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Copper	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Nickel	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Selenium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Silver	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Sodium	10100	ug/L	10000	ug/L	101.1	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1
	Titanium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	09-DEC-09 16:58	120909A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1
	Zinc	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 16:58	120909A–1
CCV09										
	Mercury	4.9	ug/L	5	ug/L	98	80.0 – 120.0	AV	08–DEC–09 13:15	100809W4–4
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Arsenic	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Boron	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Calcium	4880	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Chromium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Cobalt	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Copper	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Magnesium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Nickel	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Selenium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Silicon	2470	ug/L	2500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Sodium	9990	ug/L	10000	ug/L	99.9	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Titanium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	09–DEC–09 18:08	120909A–1
CCV10										
	Mercury	5	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	08–DEC–09 13:38	100809W4–4
	Aluminum	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Arsenic	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Boron	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1
	Calcium	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	09–DEC–09 19:18	120909A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Cobalt	495	ug/L	500	ug/L	99	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Iron	5160	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Magnesium	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Nickel	495	ug/L	500	ug/L	99	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Selenium	518	ug/L	500	ug/L	103.5	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Silicon	2480	ug/L	2500	ug/L	99.1	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Silver	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Sodium	10100	ug/L	10000	ug/L	101.5	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Titanium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Vanadium	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
	Zinc	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	09-DEC-09 19:18	120909A-1
CCV11										
	Mercury	5	ug/L	5	ug/L	100.1	80.0 - 120.0	AV	08-DEC-09 14:02	100809W4-4
	Aluminum	4920	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Barium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Boron	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Calcium	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Chromium	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Cobalt	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Copper	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Nickel	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Potassium	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Selenium	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1
	Silicon	2490	ug/L	2500	ug/L	99.5	90.0 - 110.0	P	09-DEC-09 20:21	120909A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Sodium	10200	ug/L	10000	ug/L	102.3	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Titanium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
	Zinc	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 20:21	120909A–1
CCV12										
	Mercury	5.02	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	08–DEC–09 14:25	100809W4–4
	Aluminum	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Arsenic	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Boron	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Cobalt	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Nickel	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Potassium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Selenium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Silicon	2470	ug/L	2500	ug/L	99	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Silver	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Sodium	10300	ug/L	10000	ug/L	102.5	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Titanium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
	Zinc	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	09–DEC–09 21:16	120909A–1
CCV13										
	Mercury	4.97	ug/L	5	ug/L	99.4	80.0 – 120.0	AV	08–DEC–09 14:49	100809W4–4
	Aluminum	4860	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Arsenic	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Boron	485	ug/L	500	ug/L	97	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Calcium	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Cobalt	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Copper	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Nickel	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Potassium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Selenium	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Silicon	2470	ug/L	2500	ug/L	98.7	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Sodium	10200	ug/L	10000	ug/L	101.9	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Titanium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Vanadium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1
	Zinc	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	09–DEC–09 22:04	120909A–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Lead	2.27	ug/L	2	ug/L	113.7	70.0 – 130.0	MS	08–DEC–09 04:14	091207–2
	Manganese	5.93	ug/L	5	ug/L	118.6	70.0 – 130.0	MS	08–DEC–09 04:14	091207–2
	Thallium	1.21	ug/L	1	ug/L	121.4	70.0 – 130.0	MS	08–DEC–09 04:14	091207–2
	Cadmium	1.06	ug/L	1	ug/L	105.7	70.0 – 130.0	MS	08–DEC–09 04:14	091207–2
	Lithium	10.8	ug/L	10	ug/L	108	70.0 – 130.0	MS	08–DEC–09 04:14	091207–2
	Uranium	.234	ug/L	.2	ug/L	117	70.0 – 130.0	MS	08–DEC–09 04:14	091207–2
	Beryllium	.531	ug/L	.5	ug/L	106.2	70.0 – 130.0	MS	08–DEC–09 04:14	091207–2
	Mercury	.164	ug/L	.2	ug/L	82	70.0 – 130.0	AV	08–DEC–09 10:08	100809W4–4
	Antimony	2.77	ug/L	3	ug/L	92.2	70.0 – 130.0	MS	09–DEC–09 07:44	091208–3
PQL01										
	Aluminum	200	ug/L	200	ug/L	99.8	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Iron	130	ug/L	100	ug/L	129.5	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Magnesium	349	ug/L	300	ug/L	116.2	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Nickel	5.22	ug/L	5	ug/L	104.4	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Potassium	157	ug/L	150	ug/L	104.4	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Silver	5.49	ug/L	5	ug/L	109.8	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Sodium	281	ug/L	300	ug/L	93.6	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Arsenic	28.7	ug/L	30	ug/L	95.5	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Barium	4.98	ug/L	5	ug/L	99.6	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Chromium	4.56	ug/L	5	ug/L	91.1	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Cobalt	4.91	ug/L	5	ug/L	98.1	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Copper	9.93	ug/L	10	ug/L	99.3	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Vanadium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Zinc	8.32	ug/L	10	ug/L	83.2	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Calcium	202	ug/L	200	ug/L	100.9	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Selenium	29.7	ug/L	30	ug/L	98.9	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Boron	51.3	ug/L	50	ug/L	102.6	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Silicon	91.7	ug/L	100	ug/L	91.7	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1
	Titanium	5.48	ug/L	5	ug/L	109.5	70.0 – 130.0	P	09–DEC–09 08:57	120909A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–669–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–DEC–09 04:08	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–DEC–09 04:08	091207–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–DEC–09 04:08	091207–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	08–DEC–09 04:08	091207–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–DEC–09 04:08	091207–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–DEC–09 04:08	091207–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	08–DEC–09 04:08	091207–2
	Mercury	–0.082	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:06	100809W4–4
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	09–DEC–09 07:42	091208–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	09–DEC–09 08:50	120909A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 08:50	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 08:50	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 08:50	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 08:50	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	09–DEC–09 08:50	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	09–DEC–09 08:50	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 08:50	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	09–DEC–09 08:50	120909A–1
CCB01										
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–DEC–09 04:39	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–DEC–09 04:39	091207–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-669-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	08-DEC-09 04:39	091207-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	08-DEC-09 04:39	091207-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	08-DEC-09 04:39	091207-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	08-DEC-09 04:39	091207-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	08-DEC-09 04:39	091207-2
	Mercury	-0.077	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 10:12	100809W4-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	09-DEC-09 07:54	091208-3
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	09-DEC-09 09:50	120909A-1
	Arsenic	6.72	+/-30	J	5.0	30.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	09-DEC-09 09:50	120909A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	09-DEC-09 09:50	120909A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	09-DEC-09 09:50	120909A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Potassium	67.0	+/-150	J	50.0	150	LIQ	P	09-DEC-09 09:50	120909A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	09-DEC-09 09:50	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	09-DEC-09 09:50	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 09:50	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	09-DEC-09 09:50	120909A-1
CCB02										
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	08-DEC-09 04:57	091207-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	08-DEC-09 04:57	091207-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	08-DEC-09 04:57	091207-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	08-DEC-09 04:57	091207-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–DEC–09 04:57	091207–2
	Thallium	0.393	+/–1	J	0.3	1.0	LIQ	MS	08–DEC–09 04:57	091207–2
	Uranium	0.12	+/–.2	J	0.05	0.2	LIQ	MS	08–DEC–09 04:57	091207–2
	Mercury	–0.068	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:35	100809W4–4
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	09–DEC–09 08:08	091208–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	09–DEC–09 10:18	120909A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 10:18	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 10:18	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 10:18	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 10:18	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	09–DEC–09 10:18	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	09–DEC–09 10:18	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 10:18	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	09–DEC–09 10:18	120909A–1
CCB03										
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–DEC–09 05:53	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–DEC–09 05:53	091207–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–DEC–09 05:53	091207–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	08–DEC–09 05:53	091207–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–DEC–09 05:53	091207–2
	Thallium	0.304	+/–1	J	0.3	1.0	LIQ	MS	08–DEC–09 05:53	091207–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	08–DEC–09 05:53	091207–2
	Mercury	–0.068	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 10:58	100809W4–4
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	09–DEC–09 08:22	091208–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	09–DEC–09 11:38	120909A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 11:38	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 11:38	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 11:38	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 11:38	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	09–DEC–09 11:38	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	09–DEC–09 11:38	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 11:38	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	09–DEC–09 11:38	120909A–1
CCB04										
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–DEC–09 06:35	091207–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–DEC–09 06:35	091207–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–DEC–09 06:35	091207–2
	Lithium	2.0	+/–10	U	2.0	10.0	LIQ	MS	08–DEC–09 06:35	091207–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–DEC–09 06:35	091207–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–DEC–09 06:35	091207–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	08–DEC–09 06:35	091207–2
	Mercury	–0.073	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 11:21	100809W4–4

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-669-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	09-DEC-09 08:34	091208-3
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	09-DEC-09 12:47	120909A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	09-DEC-09 12:47	120909A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	09-DEC-09 12:47	120909A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	09-DEC-09 12:47	120909A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	09-DEC-09 12:47	120909A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	09-DEC-09 12:47	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	09-DEC-09 12:47	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 12:47	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	09-DEC-09 12:47	120909A-1
CCB05										
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	08-DEC-09 07:19	091207-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	08-DEC-09 07:19	091207-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	08-DEC-09 07:19	091207-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	08-DEC-09 07:19	091207-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	08-DEC-09 07:19	091207-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	08-DEC-09 07:19	091207-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	08-DEC-09 07:19	091207-2
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-DEC-09 11:44	100809W4-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	09-DEC-09 13:28	120909A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 13:28	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-669-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	09-DEC-09 13:28	120909A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	09-DEC-09 13:28	120909A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	09-DEC-09 13:28	120909A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	09-DEC-09 13:28	120909A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	09-DEC-09 13:28	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	09-DEC-09 13:28	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 13:28	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	09-DEC-09 13:28	120909A-1
CCB06										
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	08-DEC-09 08:14	091207-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	08-DEC-09 08:14	091207-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	08-DEC-09 08:14	091207-2
	Lithium	2.0	+/-10	U	2.0	10.0	LIQ	MS	08-DEC-09 08:14	091207-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	08-DEC-09 08:14	091207-2
	Thallium	0.537	+/-1	J	0.3	1.0	LIQ	MS	08-DEC-09 08:14	091207-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	08-DEC-09 08:14	091207-2
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-DEC-09 12:07	100809W4-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	09-DEC-09 14:44	120909A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	09-DEC-09 14:44	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-669-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	09-DEC-09 14:44	120909A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	09-DEC-09 14:44	120909A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	09-DEC-09 14:44	120909A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	09-DEC-09 14:44	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	09-DEC-09 14:44	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 14:44	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	09-DEC-09 14:44	120909A-1
CCB07										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-DEC-09 12:30	100809W4-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	09-DEC-09 15:55	120909A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	09-DEC-09 15:55	120909A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	09-DEC-09 15:55	120909A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	09-DEC-09 15:55	120909A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	09-DEC-09 15:55	120909A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 15:55	120909A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	09-DEC-09 15:55	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 15:55	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	100	+/–300	U	100	300	LIQ	P	09–DEC–09 15:55	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 15:55	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 15:55	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	09–DEC–09 15:55	120909A–1
CCB08										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 12:54	100809W4–4
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	09–DEC–09 17:05	120909A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 17:05	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 17:05	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 17:05	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 17:05	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	09–DEC–09 17:05	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	09–DEC–09 17:05	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 17:05	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	09–DEC–09 17:05	120909A–1
CCB09										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–DEC–09 13:17	100809W4–4
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	09–DEC–09 18:15	120909A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 18:15	120909A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–669–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 18:15	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 18:15	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 18:15	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 18:15	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	09–DEC–09 18:15	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	09–DEC–09 18:15	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 18:15	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	09–DEC–09 18:15	120909A–1
CCB10										
	Mercury	–0.075	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 13:40	100809W4–4
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	09–DEC–09 19:25	120909A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 19:25	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 19:25	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 19:25	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 19:25	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 19:25	120909A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	09–DEC–09 19:25	120909A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-669-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 19:25	120909A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	09-DEC-09 19:25	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 19:25	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 19:25	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	09-DEC-09 19:25	120909A-1
CCB11										
	Mercury	-0.07	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 14:04	100809W4-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	09-DEC-09 20:28	120909A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Boron	15.0	+/-50	U	15.0	50.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	09-DEC-09 20:28	120909A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	09-DEC-09 20:28	120909A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	09-DEC-09 20:28	120909A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	09-DEC-09 20:28	120909A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	09-DEC-09 20:28	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	09-DEC-09 20:28	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 20:28	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	09-DEC-09 20:28	120909A-1
CCB12										
	Mercury	-0.075	+/-.2	J	0.066	0.2	LIQ	AV	08-DEC-09 14:27	100809W4-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	09-DEC-09 21:23	120909A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	09-DEC-09 21:23	120909A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 21:23	120909A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–669–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 21:23	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 21:23	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 21:23	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 21:23	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Silicon	25.0	+/–100	U	25.0	100	LIQ	P	09–DEC–09 21:23	120909A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	09–DEC–09 21:23	120909A–1
	Titanium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 21:23	120909A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	09–DEC–09 21:23	120909A–1
CCB13										
	Mercury	–0.076	+/–.2	J	0.066	0.2	LIQ	AV	08–DEC–09 14:51	100809W4–4
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	09–DEC–09 22:11	120909A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 22:11	120909A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 22:11	120909A–1
	Boron	15.0	+/–50	U	15.0	50.0	LIQ	P	09–DEC–09 22:11	120909A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	09–DEC–09 22:11	120909A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 22:11	120909A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	09–DEC–09 22:11	120909A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	09–DEC–09 22:11	120909A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	09–DEC–09 22:11	120909A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	09–DEC–09 22:11	120909A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	09–DEC–09 22:11	120909A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	09–DEC–09 22:11	120909A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	09–DEC–09 22:11	120909A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-669-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silicon	25.0	+/-100	U	25.0	100	LIQ	P	09-DEC-09 22:11	120909A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 22:11	120909A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	09-DEC-09 22:11	120909A-1
	Titanium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 22:11	120909A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	09-DEC-09 22:11	120909A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	09-DEC-09 22:11	120909A-1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–669–1
Contract: LANL01004
Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201984328								
	Mercury	–0.098	ug/L	+/–0.2	J	AV	0.066	0.2
1201985666								
	Barium	1	ug/L	+/–5.0	U	P	1	5
	Boron	15	ug/L	+/–50.0	U	P	15	50
	Calcium	50	ug/L	+/–200	U	P	50	200
	Chromium	1	ug/L	+/–5.0	U	P	1	5
	Cobalt	1	ug/L	+/–5.0	U	P	1	5
	Copper	3	ug/L	+/–10.0	U	P	3	10
	Iron	30	ug/L	+/–100	U	P	30	100
	Magnesium	85	ug/L	+/–300	U	P	85	300
	Nickel	1.5	ug/L	+/–5.0	U	P	1.5	5
	Potassium	50	ug/L	+/–150	U	P	50	150
	Selenium	5	ug/L	+/–30.0	U	P	5	30
	Silicon	25	ug/L	+/–100	U	P	25	100
	Silver	1	ug/L	+/–5.0	U	P	1	5
	Sodium	100	ug/L	+/–300	U	P	100	300
	Titanium	1	ug/L	+/–5.0	U	P	1	5
	Vanadium	1	ug/L	+/–5.0	U	P	1	5
	Zinc	3.3	ug/L	+/–10.0	U	P	3.3	10
	Arsenic	5	ug/L	+/–30.0	U	P	5	30
	Aluminum	68	ug/L	+/–200	U	P	68	200
1201985732								
	Antimony	0.5	ug/L	+/–3.0	U	MS	0.5	3
	Beryllium	0.1	ug/L	+/–0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/–1.0	U	MS	0.11	1
	Lead	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Lithium	2	ug/L	+/–10.0	U	MS	2	10
	Manganese	1	ug/L	+/–5.0	U	MS	1	5
	Thallium	0.3	ug/L	+/–1.0	U	MS	0.3	1
	Uranium	0.05	ug/L	+/–0.2	U	MS	0.05	0.2

METALS
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Interference Check Sample

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	512000	ug/L	500000	ug/L	102	80.0 – 120.0	09–DEC–09 09:04	120909A–1
	Arsenic	–1.42	ug/L					09–DEC–09 09:04	120909A–1
	Barium	3.04	ug/L					09–DEC–09 09:04	120909A–1
	Boron	2.69	ug/L					09–DEC–09 09:04	120909A–1
	Calcium	472000	ug/L	500000	ug/L	94.4	80.0 – 120.0	09–DEC–09 09:04	120909A–1
	Chromium	1.09	ug/L					09–DEC–09 09:04	120909A–1
	Cobalt	–1.46	ug/L					09–DEC–09 09:04	120909A–1
	Copper	4.33	ug/L					09–DEC–09 09:04	120909A–1
	Iron	187000	ug/L	200000	ug/L	93.3	80.0 – 120.0	09–DEC–09 09:04	120909A–1
	Magnesium	489000	ug/L	500000	ug/L	97.8	80.0 – 120.0	09–DEC–09 09:04	120909A–1
	Nickel	3.53	ug/L					09–DEC–09 09:04	120909A–1
	Potassium	57.5	ug/L					09–DEC–09 09:04	120909A–1
	Selenium	0.0013	ug/L					09–DEC–09 09:04	120909A–1
	Silicon	1.13	ug/L					09–DEC–09 09:04	120909A–1
	Silver	–0.165	ug/L					09–DEC–09 09:04	120909A–1
	Sodium	30.2	ug/L					09–DEC–09 09:04	120909A–1
	Titanium	–2.41	ug/L					09–DEC–09 09:04	120909A–1
	Vanadium	–0.36	ug/L					09–DEC–09 09:04	120909A–1
	Zinc	–8.08	ug/L					09–DEC–09 09:04	120909A–1
ICSAB01									
	Aluminum	516000	ug/L	500000	ug/L	103	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Arsenic	501	ug/L	500	ug/L	100	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Barium	489	ug/L	500	ug/L	97.8	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Boron	508	ug/L	500	ug/L	102	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Calcium	478000	ug/L	500000	ug/L	95.7	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Chromium	475	ug/L	500	ug/L	95.1	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Cobalt	436	ug/L	500	ug/L	87.2	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Copper	552	ug/L	500	ug/L	110	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Iron	190000	ug/L	200000	ug/L	94.8	80.0 – 120.0	09–DEC–09 09:10	120909A–1

METALS
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Interference Check Sample

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Nickel	439	ug/L	500	ug/L	87.8	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Potassium	5590	ug/L	5000	ug/L	112	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Selenium	2510	ug/L	2500	ug/L	100	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Silicon	5180	ug/L	5000	ug/L	104	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Silver	273	ug/L	250	ug/L	109	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Sodium	5700	ug/L	5000	ug/L	114	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Titanium	515	ug/L	500	ug/L	103	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Vanadium	499	ug/L	500	ug/L	99.9	80.0 – 120.0	09–DEC–09 09:10	120909A–1
	Zinc	478	ug/L	500	ug/L	95.6	80.0 – 120.0	09–DEC–09 09:10	120909A–1

METALS
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Interference Check Sample

SDG No: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.037	ug/L					08–DEC–09 04:20	091207–2
	Cadmium	0.521	ug/L					08–DEC–09 04:20	091207–2
	Lead	0.173	ug/L					08–DEC–09 04:20	091207–2
	Lithium	0.086	ug/L					08–DEC–09 04:20	091207–2
	Manganese	6.36	ug/L					08–DEC–09 04:20	091207–2
	Thallium	–0.018	ug/L					08–DEC–09 04:20	091207–2
	Uranium	–0.015	ug/L					08–DEC–09 04:20	091207–2
ICSAB01									
	Beryllium	20.1	ug/L	20	ug/L	100	80.0 – 120.0	08–DEC–09 04:26	091207–2
	Cadmium	20.5	ug/L	20.4	ug/L	101	80.0 – 120.0	08–DEC–09 04:26	091207–2
	Lead	21.9	ug/L	20.5	ug/L	107	80.0 – 120.0	08–DEC–09 04:26	091207–2
	Lithium	20.8	ug/L	20	ug/L	104	80.0 – 120.0	08–DEC–09 04:26	091207–2
	Manganese	29.3	ug/L	25.8	ug/L	114	80.0 – 120.0	08–DEC–09 04:26	091207–2
	Thallium	21.9	ug/L	20	ug/L	110	80.0 – 120.0	08–DEC–09 04:26	091207–2
	Uranium	23.9	ug/L	20	ug/L	120	80.0 – 120.0	08–DEC–09 04:26	091207–2

METALS
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Interference Check Sample

SDG No: 10-669-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.139	ug/L					09-DEC-09 07:47	091208-3
ICSAB01									
	Antimony	21.3	ug/L	20.1	ug/L	106	80.0 - 120.0	09-DEC-09 07:49	091208-3

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-669-1 **Client ID** RE16-10-297S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241923001 **Spike ID:** 1201984331

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	1.89		0.066	U	2	94.5		AV

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-669-1 **Client ID** RE03-10-2745S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241835001 **Spike ID:** 1201985669

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5020		68	U	5000	100		P
Arsenic	ug/L	75-125	501		5	U	500	100		P
Barium	ug/L	75-125	509		1	U	500	102		P
Boron	ug/L	75-125	491		15	U	500	97		P
Calcium	ug/L	75-125	5040		50	U	5000	100		P
Chromium	ug/L	75-125	495		1	U	500	99		P
Cobalt	ug/L	75-125	488		1	U	500	97.7		P
Copper	ug/L	75-125	501		3	U	500	100		P
Iron	ug/L	75-125	5110		30	U	5000	102		P
Magnesium	ug/L	75-125	5210		85	U	5000	104		P
Nickel	ug/L	75-125	498		1.5	U	500	99.5		P
Potassium	ug/L	75-125	5090		50	U	5000	102		P
Selenium	ug/L	75-125	512		5	U	500	102		P
Silicon	ug/L	75-125	4960		25	U	5000	98.6		P
Silver	ug/L	75-125	505		1	U	500	101		P
Sodium	ug/L	75-125	5210		100	U	5000	104		P
Titanium	ug/L	75-125	516		1	U	500	103		P
Vanadium	ug/L	75-125	505		1	U	500	101		P
Zinc	ug/L	75-125	491		3.3	U	500	98.3		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–669–1 **Client ID** RE03–10–2757S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 241835003 **Spike ID:** 1201985735

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	213		1	U	200	107		MS
Beryllium	ug/L	75–125	55.7		0.1	U	50	111		MS
Cadmium	ug/L	75–125	10.9		0.11	U	10	109		MS
Lead	ug/L	75–125	42.8		0.5	U	40	107		MS
Lithium	ug/L	75–125	53.6		2	U	50	107		MS
Manganese	ug/L	75–125	52.7		2.86	J	50	99.6		MS
Thallium	ug/L	75–125	92.6		0.3	U	100	92.6		MS
Uranium	ug/L	75–125	52		0.05	U	50	104		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE16–10–297D

Sample ID: 241923001 **Duplicate ID:** 1201984330 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–2745D

Sample ID: 241835001 **Duplicate ID:** 1201985668 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L	+/–5	0.185	U	5.43		187	*	P
Boron	ug/L		15	U	15	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L		50	U	50	U			P
Selenium	ug/L		5	U	5	U			P
Silicon	ug/L		25	U	26.5	J	200		P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L		100	U	100	U			P
Titanium	ug/L		1	U	1	U			P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		3.3	U	3.3	U			P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–669–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE03–10–2757D

Sample ID: 241835003 **Duplicate ID:** 1201985734 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Lithium	ug/L		2	U	2	U			MS
Manganese	ug/L	+/–5	2.86	J	2.45	J	15.6		MS
Thallium	ug/L		0.3	U	0.3	U			MS
Uranium	ug/L		0.05	U	0.05	U			MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10-669-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201984329								
	Mercury	ug/L	2	1.9		94.8	80-120	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-669-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985667								
	Aluminum	ug/L	5000	5100		102	80-120	P
	Arsenic	ug/L	500	515		103	80-120	P
	Barium	ug/L	500	522		104	80-120	P
	Boron	ug/L	500	504		101	80-120	P
	Calcium	ug/L	5000	5150		103	80-120	P
	Chromium	ug/L	500	506		101	80-120	P
	Cobalt	ug/L	500	501		100	80-120	P
	Copper	ug/L	500	511		102	80-120	P
	Iron	ug/L	5000	5330		107	80-120	P
	Magnesium	ug/L	5000	5390		108	80-120	P
	Nickel	ug/L	500	510		102	80-120	P
	Potassium	ug/L	5000	5190		104	80-120	P
	Selenium	ug/L	500	533		107	80-120	P
	Silicon	ug/L	5000	5050		101	80-120	P
	Silver	ug/L	500	517		103	80-120	P
	Sodium	ug/L	5000	5510		110	80-120	P
	Titanium	ug/L	500	527		105	80-120	P
	Vanadium	ug/L	500	515		103	80-120	P
	Zinc	ug/L	500	505		101	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-669-1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985733								
	Antimony	ug/L	50	55.1		110	80-120	MS
	Beryllium	ug/L	50	55.4		111	80-120	MS
	Cadmium	ug/L	50	51.3		103	80-120	MS
	Lead	ug/L	50	53.6		107	80-120	MS
	Lithium	ug/L	50	53.8		108	80-120	MS
	Manganese	ug/L	50	51		102	80-120	MS
	Thallium	ug/L	50	50.2		100	80-120	MS
	Uranium	ug/L	50	52.3		105	80-120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-669-1 **Client ID** RE16-10-297L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241923001 **Serial Dilution ID:** 1201984333

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-669-1 **Client ID** RE03-10-2745L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241835001 **Serial Dilution ID:** 1201985670

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Boron	15	U	75	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silicon	25	U	125	U				P
Silver	1	U	5	U				P
Sodium	100	U	500	U				P
Titanium	1	U	5	U				P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-669-1 **Client ID** RE03-10-2757L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 241835003 **Serial Dilution ID:** 1201985736

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Lithium	2	U	10	U				MS
Manganese	2.86	J	5	U	100			MS
Thallium	.3	U	4.91	J				MS
Uranium	.05	U	.25	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-669-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928624						
1201985666	MB for batch 928624	MB	W	05-DEC-09	50mL	50mL	
1201985667	LCS for batch 928624	LCS	W	05-DEC-09	50mL	50mL	
1201985669	RE03-10-2745S	MS	W	05-DEC-09	50mL	50mL	
1201985668	RE03-10-2745D	DUP	W	05-DEC-09	50mL	50mL	
241835001	RE03-10-2745	SAMPLE	W	05-DEC-09	50mL	50mL	
241835002	RE03-10-2744	SAMPLE	W	05-DEC-09	50mL	50mL	
241835003	RE03-10-2757	SAMPLE	W	05-DEC-09	50mL	50mL	
241835004	RE03-10-2746	SAMPLE	W	05-DEC-09	50mL	50mL	
241835005	RE03-10-2759	SAMPLE	W	05-DEC-09	50mL	50mL	
241835006	RE03-10-2758	SAMPLE	W	05-DEC-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-669-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928652						
1201985732	MB for batch 928652	MB	W	05-DEC-09	50mL	50mL	
1201985733	LCS for batch 928652	LCS	W	05-DEC-09	50mL	50mL	
1201985735	RE03-10-2757S	MS	W	05-DEC-09	50mL	50mL	
1201985734	RE03-10-2757D	DUP	W	05-DEC-09	50mL	50mL	
241835001	RE03-10-2745	SAMPLE	W	05-DEC-09	50mL	50mL	
241835002	RE03-10-2744	SAMPLE	W	05-DEC-09	50mL	50mL	
241835003	RE03-10-2757	SAMPLE	W	05-DEC-09	50mL	50mL	
241835004	RE03-10-2746	SAMPLE	W	05-DEC-09	50mL	50mL	
241835005	RE03-10-2759	SAMPLE	W	05-DEC-09	50mL	50mL	
241835006	RE03-10-2758	SAMPLE	W	05-DEC-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-669-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 928039							
1201984328	MB for batch 928039	MB	W	07-DEC-09	20mL	20mL	
1201984329	LCS for batch 928039	LCS	W	07-DEC-09	20mL	20mL	
1201984331	RE16-10-297S	MS	W	07-DEC-09	20mL	20mL	
1201984330	RE16-10-297D	DUP	W	07-DEC-09	20mL	20mL	
241835001	RE03-10-2745	SAMPLE	W	07-DEC-09	20mL	20mL	
241835002	RE03-10-2744	SAMPLE	W	07-DEC-09	20mL	20mL	
241835003	RE03-10-2757	SAMPLE	W	07-DEC-09	20mL	20mL	
241835004	RE03-10-2746	SAMPLE	W	07-DEC-09	20mL	20mL	
241835005	RE03-10-2759	SAMPLE	W	07-DEC-09	20mL	20mL	
241835006	RE03-10-2758	SAMPLE	W	07-DEC-09	20mL	20mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–669–1
Method MS
Data File: 091207–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	03:44					X		X						X	X		X								X		X		
S10	1	03:50					X		X						X	X		X								X		X		
S100	1	03:56					X		X						X	X		X								X		X		
ICV01	1	04:02					X		X						X	X		X								X		X		
ICB01	1	04:08					X		X						X	X		X								X		X		
CRDL01	1	04:14					X		X						X	X		X								X		X		
ICSA01	1	04:20					X		X						X	X		X								X		X		
ICSAB01	1	04:26					X		X						X	X		X								X		X		
CCV01	1	04:33					X		X						X	X		X								X		X		
CCB01	1	04:39					X		X						X	X		X								X		X		
LR01	1	04:45					X		X						X	X		X								X		X		
CCV02	1	04:51					X		X						X	X		X								X		X		
CCB02	1	04:57					X		X						X	X		X								X		X		
ZZZZZZ	1	05:03																												
ZZZZZZ	1	05:09																												
ZZZZZZ	1	05:16																												
ZZZZZZ	1	05:22																												
ZZZZZZ	1	05:28																												
ZZZZZZ	5	05:34																												
ZZZZZZ	1	05:40																												
CCV03	1	05:47					X		X						X	X		X								X		X		
CCB03	1	05:53					X		X						X	X		X								X		X		
ZZZZZZ	1	05:59																												
ZZZZZZ	1	06:05																												
ZZZZZZ	1	06:11																												
ZZZZZZ	5	06:17																												
ZZZZZZ	1	06:23																												
CCV04	1	06:29					X		X						X	X		X								X		X		
CCB04	1	06:35					X		X						X	X		X								X		X		
1201985732	1	06:42					X		X						X	X		X								X		X		
1201985733	1	06:48					X		X						X	X		X								X		X		
ZZZZZZ	1	06:54																												
241835001	1	07:00					X		X						X	X		X								X		X		
241835002	1	07:06					X		X						X	X		X								X		X		
CCV05	1	07:12					X		X						X	X		X								X		X		
CCB05	1	07:19					X		X						X	X		X								X		X		
241835003	1	07:25					X		X						X	X		X								X		X		
1201985734	1	07:31					X		X						X	X		X								X		X		
1201985735	1	07:37					X		X						X	X		X								X		X		
1201985736	5	07:43					X		X						X	X		X								X		X		

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
241835004	1	07:49					X		X						X	X		X								X		X		
241835005	1	07:56					X		X						X	X		X								X		X		
241835006	1	08:02					X		X						X	X		X								X		X		
CCV06	1	08:08					X		X						X	X		X								X		X		
CCB06	1	08:14					X		X						X	X		X								X		X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 09-DEC-09 **End Date:** 09-DEC-09

Client Sdg: 10-669-1
Method MS
Data File: 091208-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	07:33		X																										
S10	1	07:35		X																										
S100	1	07:37		X																										
ICV01	1	07:40		X																										
ICB01	1	07:42		X																										
CRDL01	1	07:44		X																										
ICSA01	1	07:47		X																										
ICSAB01	1	07:49		X																										
CCV01	1	07:51		X																										
CCB01	1	07:54		X																										
1201985732	1	07:56		X																										
1201985733	1	07:58		X																										
241835001	1	08:01		X																										
241835002	1	08:03		X																										
CCV02	1	08:05		X																										
CCB02	1	08:08		X																										
241835003	1	08:10		X																										
1201985734	1	08:13		X																										
1201985735	1	08:15		X																										
1201985736	5	08:17		X																										
CCV03	1	08:20		X																										
CCB03	1	08:22		X																										
241835004	1	08:24		X																										
241835005	1	08:27		X																										
241835006	1	08:29		X																										
CCV04	1	08:32		X																										
CCB04	1	08:34		X																										

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 09-DEC-09 **End Date:** 09-DEC-09

Client Sdg: 10-669-1
Method P
Data File: 120909A-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	08:10	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S0.1	1	08:17			X	X		X			X	X	X							X	X	X	X	X			X		X	X
S0.5	1	08:23	X		X	X		X		X	X	X	X				X			X	X	X	X	X			X		X	X
SCAL	1	08:31	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
S10	1	08:38	X							X				X			X								X					
ICV01	1	08:43	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICB01	1	08:50	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
PQL01	1	08:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSA01	1	09:04	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ICSAB01	1	09:10	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR01	1	09:16	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR02	1	09:22	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	09:29																												
ZZZZZZ	1	09:36																												
CCV01	1	09:43	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB01	1	09:50	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR03	1	09:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
LR04	1	10:03	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV02	1	10:11	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB02	1	10:18	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:43																												
ZZZZZZ	1	10:50																												
ZZZZZZ	1	10:57																												
ZZZZZZ	1	11:04																												
ZZZZZZ	1	11:11																												
ZZZZZZ	1	11:17																												
ZZZZZZ	5	11:24																												
CCV03	1	11:31	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB03	1	11:38	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	11:45																												
ZZZZZZ	1	11:53																												
ZZZZZZ	1	11:59																												
ZZZZZZ	5	12:06																												
ZZZZZZ	5	12:13																												
ZZZZZZ	5	12:20																												
ZZZZZZ	5	12:27																												
ZZZZZZ	25	12:33																												
CCV04	1	12:40	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB04	1	12:47	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
CCV05	1	13:21	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB05	1	13:28	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	13:34																												
ZZZZZZ	1	13:41																												
ZZZZZZ	1	13:48																												
ZZZZZZ	1	13:55																												
ZZZZZZ	1	14:02																												
ZZZZZZ	1	14:09																												
ZZZZZZ	5	14:16																												
ZZZZZZ	1	14:23																												
ZZZZZZ	1	14:30																												
CCV06	1	14:37	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB06	1	14:44	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	14:51																												
ZZZZZZ	1	14:58																												
ZZZZZZ	1	15:05																												
ZZZZZZ	1	15:12																												
ZZZZZZ	1	15:19																												
ZZZZZZ	1	15:26																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:41																												
CCV07	1	15:48	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB07	1	15:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:02																												
ZZZZZZ	1	16:08																												
ZZZZZZ	1	16:15																												
ZZZZZZ	1	16:22																												
ZZZZZZ	1	16:29																												
ZZZZZZ	1	16:37																												
ZZZZZZ	5	16:44																												
ZZZZZZ	1	16:51																												
CCV08	1	16:58	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB08	1	17:05	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	17:12																												
ZZZZZZ	1	17:18																												
ZZZZZZ	1	17:25																												
ZZZZZZ	1	17:32																												
ZZZZZZ	1	17:39																												
ZZZZZZ	1	17:46																												
ZZZZZZ	1	17:53																												

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	18:01																												
CCV09	1	18:08	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB09	1	18:15	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	18:21																												
ZZZZZZ	1	18:28																												
ZZZZZZ	1	18:35																												
ZZZZZZ	1	18:42																												
ZZZZZZ	1	18:49																												
ZZZZZZ	1	18:57																												
ZZZZZZ	1	19:04																												
ZZZZZZ	1	19:11																												
CCV10	1	19:18	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB10	1	19:25	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
ZZZZZZ	1	19:31																												
ZZZZZZ	1	19:39																												
ZZZZZZ	1	19:46																												
ZZZZZZ	1	19:53																												
ZZZZZZ	1	20:00																												
ZZZZZZ	5	20:07																												
ZZZZZZ	1	20:14																												
CCV11	1	20:21	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB11	1	20:28	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201985666	1	20:35	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201985667	1	20:42	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241835001	1	20:49	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201985668	1	20:55	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201985669	1	21:02	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
1201985670	5	21:09	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV12	1	21:16	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB12	1	21:23	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241835002	1	21:30	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241835003	1	21:37	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241835004	1	21:44	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241835005	1	21:50	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
241835006	1	21:57	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCV13	1	22:04	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X
CCB13	1	22:11	X		X	X		X		X	X	X	X	X			X			X	X	X	X	X	X		X		X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–669–1
Method AV
Data File: 100809W4–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:52																	X											
S0.2	1	09:54																	X											
S0.5	1	09:56																	X											
S2.0	1	09:58																	X											
S5.0	1	10:00																	X											
S10.0	1	10:02																	X											
ICV01	1	10:04																	X											
ICB01	1	10:06																	X											
CRDL01	1	10:08																	X											
CCV01	1	10:10																	X											
CCB01	1	10:12																	X											
ZZZZZZ	1	10:14																												
ZZZZZZ	1	10:15																												
ZZZZZZ	1	10:17																												
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	5	10:23																												
ZZZZZZ	1	10:25																												
ZZZZZZ	1	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
CCV02	1	10:33																	X											
CCB02	1	10:35																	X											
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												
ZZZZZZ	1	10:40																												
ZZZZZZ	1	10:42																												
ZZZZZZ	1	10:44																												
ZZZZZZ	5	10:46																												
ZZZZZZ	1	10:48																												
ZZZZZZ	1	10:50																												
ZZZZZZ	1	10:52																												
ZZZZZZ	1	10:54																												
CCV03	1	10:56																	X											
CCB03	1	10:58																	X											
ZZZZZZ	1	11:00																												
ZZZZZZ	5	11:02																												
ZZZZZZ	1	11:03																												
ZZZZZZ	1	11:05																												
ZZZZZZ	1	11:07																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:09																											
ZZZZZZ	1	11:11																											
ZZZZZZ	1	11:13																											
ZZZZZZ	5	11:15																											
ZZZZZZ	1	11:17																											
CCV04	1	11:19															X												
CCB04	1	11:21															X												
ZZZZZZ	1	11:23																											
ZZZZZZ	1	11:25																											
ZZZZZZ	1	11:27																											
ZZZZZZ	1	11:29																											
ZZZZZZ	5	11:30																											
ZZZZZZ	1	11:32																											
ZZZZZZ	1	11:34																											
ZZZZZZ	1	11:36																											
ZZZZZZ	1	11:38																											
ZZZZZZ	1	11:40																											
CCV05	1	11:42															X												
CCB05	1	11:44															X												
ZZZZZZ	1	11:46																											
ZZZZZZ	5	11:48																											
ZZZZZZ	1	11:50																											
ZZZZZZ	1	11:52																											
ZZZZZZ	1	11:54																											
ZZZZZZ	1	11:56																											
ZZZZZZ	1	11:57																											
ZZZZZZ	1	11:59																											
ZZZZZZ	1	12:01																											
ZZZZZZ	1	12:03																											
CCV06	1	12:05															X												
CCB06	1	12:07															X												
ZZZZZZ	1	12:09																											
ZZZZZZ	1	12:11																											
ZZZZZZ	1	12:13																											
ZZZZZZ	1	12:15																											
ZZZZZZ	1	12:17																											
ZZZZZZ	1	12:19																											
ZZZZZZ	5	12:21																											
ZZZZZZ	1	12:23																											
ZZZZZZ	1	12:25																											

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	12:27																												
CCV07	1	12:28																	X											
CCB07	1	12:30																	X											
ZZZZZZ	1	12:32																												
ZZZZZZ	1	12:34																												
ZZZZZZ	1	12:36																												
ZZZZZZ	1	12:38																												
ZZZZZZ	1	12:40																												
ZZZZZZ	1	12:42																												
ZZZZZZ	1	12:44																												
ZZZZZZ	1	12:46																												
ZZZZZZ	1	12:48																												
ZZZZZZ	1	12:50																												
CCV08	1	12:52																	X											
CCB08	1	12:54																	X											
ZZZZZZ	1	12:56																												
ZZZZZZ	5	12:57																												
ZZZZZZ	1	12:59																												
ZZZZZZ	1	13:01																												
ZZZZZZ	1	13:03																												
ZZZZZZ	1	13:05																												
ZZZZZZ	1	13:07																												
ZZZZZZ	1	13:09																												
ZZZZZZ	1	13:11																												
ZZZZZZ	1	13:13																												
CCV09	1	13:15																	X											
CCB09	1	13:17																	X											
ZZZZZZ	1	13:19																												
ZZZZZZ	1	13:21																												
ZZZZZZ	1	13:23																												
ZZZZZZ	1	13:25																												
ZZZZZZ	1	13:27																												
ZZZZZZ	1	13:29																												
ZZZZZZ	1	13:31																												
ZZZZZZ	1	13:32																												
ZZZZZZ	1	13:34																												
ZZZZZZ	1	13:36																												
CCV10	1	13:38																	X											
CCB10	1	13:40																	X											
ZZZZZZ	1	13:42																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	5	13:44																										
ZZZZZZ	1	13:46																										
ZZZZZZ	1	13:48																										
ZZZZZZ	1	13:50																										
ZZZZZZ	1	13:52																										
ZZZZZZ	1	13:54																										
ZZZZZZ	1	13:56																										
ZZZZZZ	1	13:58																										
ZZZZZZ	1	14:00																										
CCV11	1	14:02															X											
CCB11	1	14:04															X											
ZZZZZZ	5	14:06																										
ZZZZZZ	1	14:08																										
1201984328	1	14:09															X											
1201984329	1	14:11															X											
241835001	1	14:13															X											
241835002	1	14:15															X											
241835003	1	14:17															X											
241835004	1	14:19															X											
241835005	1	14:21															X											
241835006	1	14:23															X											
CCV12	1	14:25															X											
CCB12	1	14:27															X											
ZZZZZZ	1	14:29																										
ZZZZZZ	1	14:31																										
ZZZZZZ	1	14:33																										
ZZZZZZ	1	14:35																										
1201984330	1	14:37															X											
1201984331	1	14:39															X											
1201984333	5	14:41															X											
ZZZZZZ	1	14:43																										
ZZZZZZ	1	14:45																										
ZZZZZZ	1	14:47																										
CCV13	1	14:49															X											
CCB13	1	14:51															X											

Standards

METALS
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Instrument Detection Limits

SDG NO. 10-669-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-669-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–669–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	15.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silicon	251.611	25.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–669–1
Effective Dates: 01–NOV–09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	–0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-669-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–669–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10-669-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Boron	20	5000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silicon	20	50000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Titanium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

Raw Data

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 120909
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 120909A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/9/2009 10:30:28**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/9/2009 08:10:12**
Analyst: **Data Type: Reprocessed on 12/9/2009 10:32:11**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	881145.1	881145.1	99.568	%	08:13:21
1	Sc Radial	5712.8	5712.8	101	%	08:12:05
1	Y 371.029	737967.2	737967.2	99.447	%	08:13:21
1	Y RADIAL	6224.1	6224.1	101.1	%	08:12:05
1	Ag 328.068†	293.6	294.9	[0.00]	ug/L	08:13:21

1	Al 396.153Radial†	-21.8	-21.6	[0.00]	ug/L	08:12:25
1	As 188.979†	-24.7	-24.8	[0.00]	ug/L	08:13:41
1	B 249.677†	-515.2	-517.4	[0.00]	ug/L	08:13:41
1	Ba 233.527†	-17.3	-17.4	[0.00]	ug/L	08:13:41
1	Be 313.107†	-5302.3	-5325.3	[0.00]	ug/L	08:13:21
1	Ca 317.933Radial†	15.6	15.5	[0.00]	ug/L	08:12:25
1	Cd 226.502†	-183.7	-184.5	[0.00]	ug/L	08:13:41
1	Co 228.616†	-69.8	-70.1	[0.00]	ug/L	08:13:41
1	Cr 267.716†	96.3	96.7	[0.00]	ug/L	08:13:41
1	Cu 324.752†	6732.9	6762.1	[0.00]	ug/L	08:13:21
1	Fe 238.204 Radial†	5.2	5.2	[0.00]	ug/L	08:12:25
1	K 766.490 Radial†	2115.2	2096.9	[0.00]	ug/L	08:12:05
1	Mg 279.077 IEC†	1.5	1.5	[0.00]	ug/L	08:12:25
1	Mn 257.610†	417.4	419.2	[0.00]	ug/L	08:13:41
1	Mo 202.031†	22.7	22.8	[0.00]	ug/L	08:13:41
1	Na 589.592 Radial†	-635.2	-629.7	[0.00]	ug/L	08:12:05
1	Ni 231.604†	79.5	79.9	[0.00]	ug/L	08:13:41
1	P 214.914†	222.8	223.8	[0.00]	ug/L	08:13:41
1	Pb 220.353†	-47.1	-47.3	[0.00]	ug/L	08:13:41
1	S 181.975 Axial†	45.8	46.0	[0.00]	ug/L	08:13:41
1	Sb 206.836†	23.0	23.1	[0.00]	ug/L	08:13:41
1	Se 196.026†	-26.5	-26.6	[0.00]	ug/L	08:13:41
1	Si 251.611†	570.2	572.6	[0.00]	ug/L	08:13:41
1	Sn 189.927†	2.0	2.0	[0.00]	ug/L	08:13:41
1	Sr 421.552†	-3.7	-3.7	[0.00]	ug/L	08:12:05
1	Ti 334.940†	-960.4	-964.5	[0.00]	ug/L	08:13:21
1	Tl 190.801†	-39.2	-39.4	[0.00]	ug/L	08:13:41
1	U 409.014†	-1974.7	-1983.3	[0.00]	ug/L	08:13:21
1	V 292.402†	-1254.3	-1259.7	[0.00]	ug/L	08:13:21
1	Zn 213.857†	800.9	804.4	[0.00]	ug/L	08:13:41
1	SiO2†	475.1	477.1	[0.00]	ug/L	08:14:52
2	Sc 361.383	888195.9	888195.9	100.36	%	08:13:47
2	Sc Radial	5655.8	5655.8	99.9	%	08:12:30
2	Y 371.029	745171.0	745171.0	100.42	%	08:13:47
2	Y RADIAL	6147.2	6147.2	99.81	%	08:12:30
2	Ag 328.068†	168.6	168.0	[0.00]	ug/L	08:13:47
2	Al 396.153Radial†	-15.8	-15.8	[0.00]	ug/L	08:12:50
2	As 188.979†	-29.1	-29.0	[0.00]	ug/L	08:14:07
2	B 249.677†	-536.1	-534.2	[0.00]	ug/L	08:14:07
2	Ba 233.527†	-13.6	-13.5	[0.00]	ug/L	08:14:07
2	Be 313.107†	-5391.5	-5371.9	[0.00]	ug/L	08:13:47
2	Ca 317.933Radial†	16.6	16.6	[0.00]	ug/L	08:12:50
2	Cd 226.502†	-185.1	-184.4	[0.00]	ug/L	08:14:07
2	Co 228.616†	-74.7	-74.4	[0.00]	ug/L	08:14:07
2	Cr 267.716†	74.6	74.4	[0.00]	ug/L	08:14:07
2	Cu 324.752†	6764.2	6739.7	[0.00]	ug/L	08:13:47
2	Fe 238.204 Radial†	7.2	7.2	[0.00]	ug/L	08:12:50
2	K 766.490 Radial†	2143.7	2146.5	[0.00]	ug/L	08:12:30
2	Mg 279.077 IEC†	0.4	0.4	[0.00]	ug/L	08:12:50
2	Mn 257.610†	398.6	397.1	[0.00]	ug/L	08:14:07
2	Mo 202.031†	21.1	21.0	[0.00]	ug/L	08:14:07
2	Na 589.592 Radial†	-615.4	-616.2	[0.00]	ug/L	08:12:30
2	Ni 231.604†	68.6	68.3	[0.00]	ug/L	08:14:07
2	P 214.914†	215.1	214.3	[0.00]	ug/L	08:14:07
2	Pb 220.353†	-48.8	-48.6	[0.00]	ug/L	08:14:07
2	S 181.975 Axial†	38.9	38.8	[0.00]	ug/L	08:14:07
2	Sb 206.836†	30.5	30.4	[0.00]	ug/L	08:14:07
2	Se 196.026†	-20.3	-20.2	[0.00]	ug/L	08:14:07
2	Si 251.611†	478.0	476.3	[0.00]	ug/L	08:14:07
2	Sn 189.927†	1.5	1.5	[0.00]	ug/L	08:14:07
2	Sr 421.552†	12.4	12.4	[0.00]	ug/L	08:12:30
2	Ti 334.940†	-938.2	-934.8	[0.00]	ug/L	08:13:47
2	Tl 190.801†	-37.7	-37.6	[0.00]	ug/L	08:14:07
2	U 409.014†	-1867.0	-1860.2	[0.00]	ug/L	08:13:47
2	V 292.402†	-1298.6	-1293.9	[0.00]	ug/L	08:13:47
2	Zn 213.857†	816.9	813.9	[0.00]	ug/L	08:14:07
2	SiO2†	492.0	490.3	[0.00]	ug/L	08:15:12
3	Sc 361.383	885576.2	885576.2	100.07	%	08:14:12
3	Sc Radial	5621.4	5621.4	99.3	%	08:12:55
3	Y 371.029	743077.5	743077.5	100.14	%	08:14:12
3	Y RADIAL	6104.9	6104.9	99.13	%	08:12:55

3	Ag 328.068†	220.0	219.8	[0.00] ug/L	08:14:12
3	Al 396.153Radial†	-23.4	-23.6	[0.00] ug/L	08:13:15
3	As 188.979†	-33.8	-33.8	[0.00] ug/L	08:14:32
3	B 249.677†	-520.3	-520.0	[0.00] ug/L	08:14:32
3	Ba 233.527†	-5.2	-5.2	[0.00] ug/L	08:14:32
3	Be 313.107†	-5267.1	-5263.5	[0.00] ug/L	08:14:12
3	Ca 317.933Radial†	20.8	21.0	[0.00] ug/L	08:13:15
3	Cd 226.502†	-194.8	-194.6	[0.00] ug/L	08:14:32
3	Co 228.616†	-70.8	-70.7	[0.00] ug/L	08:14:32
3	Cr 267.716†	89.9	89.8	[0.00] ug/L	08:14:32
3	Cu 324.752†	6808.8	6804.1	[0.00] ug/L	08:14:12
3	Fe 238.204 Radial†	5.7	5.7	[0.00] ug/L	08:13:15
3	K 766.490 Radial†	2250.7	2267.5	[0.00] ug/L	08:12:55
3	Mg 279.077 IEC†	3.3	3.3	[0.00] ug/L	08:13:15
3	Mn 257.610†	394.2	393.9	[0.00] ug/L	08:14:32
3	Mo 202.031†	16.3	16.2	[0.00] ug/L	08:14:32
3	Na 589.592 Radial†	-597.5	-602.0	[0.00] ug/L	08:12:55
3	Ni 231.604†	62.2	62.2	[0.00] ug/L	08:14:32
3	P 214.914†	221.9	221.8	[0.00] ug/L	08:14:32
3	Pb 220.353†	-61.8	-61.7	[0.00] ug/L	08:14:32
3	S 181.975 Axial†	39.6	39.6	[0.00] ug/L	08:14:32
3	Sb 206.836†	35.3	35.3	[0.00] ug/L	08:14:32
3	Se 196.026†	-23.5	-23.5	[0.00] ug/L	08:14:32
3	Si 251.611†	475.5	475.1	[0.00] ug/L	08:14:32
3	Sn 189.927†	9.4	9.4	[0.00] ug/L	08:14:32
3	Sr 421.552†	1.5	1.5	[0.00] ug/L	08:12:55
3	Ti 334.940†	-996.4	-995.7	[0.00] ug/L	08:14:12
3	Tl 190.801†	-33.6	-33.6	[0.00] ug/L	08:14:32
3	U 409.014†	-2044.4	-2043.0	[0.00] ug/L	08:14:12
3	V 292.402†	-1336.8	-1335.8	[0.00] ug/L	08:14:12
3	Zn 213.857†	804.0	803.5	[0.00] ug/L	08:14:32
3	SiO2†	499.4	499.1	[0.00] ug/L	08:15:32

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	884972.4	3563.94	0.40%	100.00	%
Sc Radial	5663.3	46.19	0.82%	100	%
Y 371.029	742071.9	3705.68	0.50%	100.00	%
Y RADIAL	6158.7	60.42	0.98%	100.0	%
Ag 328.068†	227.6	63.78	28.02%	[0.00]	ug/L
Al 396.153Radial†	-20.3	4.06	19.97%	[0.00]	ug/L
As 188.979†	-29.2	4.46	15.27%	[0.00]	ug/L
B 249.677†	-523.9	9.03	1.72%	[0.00]	ug/L
Ba 233.527†	-12.0	6.24	51.89%	[0.00]	ug/L
Be 313.107†	-5320.2	54.40	1.02%	[0.00]	ug/L
Ca 317.933Radial†	17.7	2.91	16.44%	[0.00]	ug/L
Cd 226.502†	-187.8	5.89	3.14%	[0.00]	ug/L
Co 228.616†	-71.7	2.34	3.26%	[0.00]	ug/L
Cr 267.716†	87.0	11.43	13.15%	[0.00]	ug/L
Cu 324.752†	6768.6	32.71	0.48%	[0.00]	ug/L
Fe 238.204 Radial†	6.0	1.02	16.96%	[0.00]	ug/L
K 766.490 Radial†	2170.3	87.73	4.04%	[0.00]	ug/L
Mg 279.077 IEC†	1.8	1.48	84.32%	[0.00]	ug/L
Mn 257.610†	403.4	13.77	3.41%	[0.00]	ug/L
Mo 202.031†	20.0	3.37	16.86%	[0.00]	ug/L
Na 589.592 Radial†	-616.0	13.86	2.25%	[0.00]	ug/L
Ni 231.604†	70.1	8.98	12.80%	[0.00]	ug/L
P 214.914†	220.0	5.00	2.27%	[0.00]	ug/L
Pb 220.353†	-52.5	7.99	15.21%	[0.00]	ug/L
S 181.975 Axial†	41.5	3.95	9.53%	[0.00]	ug/L
Sb 206.836†	29.6	6.13	20.71%	[0.00]	ug/L
Se 196.026†	-23.4	3.18	13.58%	[0.00]	ug/L
Si 251.611†	508.0	55.98	11.02%	[0.00]	ug/L
Sn 189.927†	4.3	4.41	103.33%	[0.00]	ug/L
Sr 421.552†	3.4	8.23	240.79%	[0.00]	ug/L
Ti 334.940†	-965.0	30.47	3.16%	[0.00]	ug/L
Tl 190.801†	-36.9	2.97	8.05%	[0.00]	ug/L
U 409.014†	-1962.2	93.24	4.75%	[0.00]	ug/L
V 292.402†	-1296.5	38.13	2.94%	[0.00]	ug/L

Zn 213.857†	807.3	5.79	0.72%	[0.00] ug/L
SiO2†	488.8	11.06	2.26%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/9/2009 08:17:43
Data Type: Reprocessed on 12/9/2009 10:32:13

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	915606.8	915606.8	103.46	%	08:20:07
1	Sc Radial	5337.0	5337.0	94.2	%	08:19:41
1	Y 371.029	763081.0	763081.0	102.83	%	08:20:07
1	Y RADIAL	5831.6	5831.6	94.69	%	08:19:41
1	Ag 328.068†	22161.7	21192.6	[100]	ug/L	08:20:12
1	As 188.979†	207.1	229.4	[100]	ug/L	08:20:32
1	B 249.677†	4002.0	4392.0	[100]	ug/L	08:20:12
1	Ba 233.527†	13564.0	13122.2	[100]	ug/L	08:20:12
1	Be 313.107†	254917.7	251708.9	[100]	ug/L	08:20:07
1	Cd 226.502†	9233.5	9112.4	[100]	ug/L	08:20:12
1	Co 228.616†	4967.8	4873.4	[100]	ug/L	08:20:32
1	Cr 267.716†	9596.1	9188.1	[100]	ug/L	08:20:12
1	Cu 324.752†	41626.8	33465.4	[100]	ug/L	08:20:12
1	K 766.490 Radial†	7987.7	6305.9	[1000]	ug/L	08:19:36
1	Mn 257.610†	95038.4	91455.2	[100]	ug/L	08:20:12
1	Mo 202.031†	1541.1	1469.5	[100]	ug/L	08:20:32
1	Ni 231.604†	4194.9	3984.4	[100]	ug/L	08:20:32
1	P 214.914†	1036.1	781.5	[500]	ug/L	08:20:32
1	Pb 220.353†	813.8	839.1	[100]	ug/L	08:20:32
1	S 181.975 Axial†	170.2	123.1	[200]	ug/L	08:20:32
1	Sb 206.836†	331.0	290.3	[100]	ug/L	08:20:32
1	Se 196.026†	135.3	154.3	[100]	ug/L	08:20:32
1	Si 251.611†	16988.8	15912.3	[500]	ug/L	08:20:12
1	Sn 189.927†	583.2	559.5	[100]	ug/L	08:20:32
1	Sr 421.552†	15114.5	16035.4	[100]	ug/L	08:19:41
1	Ti 334.940†	62021.0	60910.9	[100]	ug/L	08:20:12
1	Tl 190.801†	314.9	341.2	[100]	ug/L	08:20:32
1	U 409.014†	1340.0	3257.4	[100]	ug/L	08:20:12
1	V 292.402†	13721.3	14558.7	[100]	ug/L	08:20:12
1	Zn 213.857†	12043.1	10832.9	[100]	ug/L	08:20:12
1	SiO2†	16434.1	15395.5	[1069.5]	ug/L	08:21:39
2	Sc 361.383	900223.3	900223.3	101.72	%	08:20:38
2	Sc Radial	5743.1	5743.1	101	%	08:19:51
2	Y 371.029	750252.5	750252.5	101.10	%	08:20:38
2	Y RADIAL	6209.4	6209.4	100.8	%	08:19:51
2	Ag 328.068†	21711.3	21115.9	[100]	ug/L	08:20:43
2	As 188.979†	208.5	234.1	[100]	ug/L	08:21:03
2	B 249.677†	3895.0	4352.9	[100]	ug/L	08:20:43
2	Ba 233.527†	13261.4	13048.8	[100]	ug/L	08:20:43
2	Be 313.107†	258852.8	259787.7	[100]	ug/L	08:20:38
2	Cd 226.502†	9026.6	9061.5	[100]	ug/L	08:20:43
2	Co 228.616†	4991.7	4978.9	[100]	ug/L	08:21:03
2	Cr 267.716†	9375.7	9129.9	[100]	ug/L	08:20:43
2	Cu 324.752†	40530.5	33075.2	[100]	ug/L	08:20:43
2	K 766.490 Radial†	7752.9	5474.8	[1000]	ug/L	08:19:46
2	Mn 257.610†	92417.4	90448.3	[100]	ug/L	08:20:43
2	Mo 202.031†	1544.4	1498.2	[100]	ug/L	08:21:03
2	Ni 231.604†	4238.1	4096.2	[100]	ug/L	08:21:03
2	P 214.914†	1039.7	802.2	[500]	ug/L	08:21:03
2	Pb 220.353†	799.1	838.1	[100]	ug/L	08:21:03
2	S 181.975 Axial†	168.2	123.9	[200]	ug/L	08:21:03
2	Sb 206.836†	333.8	298.5	[100]	ug/L	08:21:03
2	Se 196.026†	139.2	160.3	[100]	ug/L	08:21:03
2	Si 251.611†	16401.5	15615.6	[500]	ug/L	08:20:43
2	Sn 189.927†	584.1	569.9	[100]	ug/L	08:21:03
2	Sr 421.552†	15040.1	14827.7	[100]	ug/L	08:19:51
2	Ti 334.940†	60191.0	60136.4	[100]	ug/L	08:20:43
2	Tl 190.801†	300.7	332.5	[100]	ug/L	08:21:03

2	U 409.014†	1180.4	3122.6	[100]	ug/L	08:20:43
2	V 292.402†	13324.1	14394.9	[100]	ug/L	08:20:43
2	Zn 213.857†	11685.5	10680.3	[100]	ug/L	08:20:43
2	SiO2†	16279.4	15514.8	[1069.5]	ug/L	08:21:44
3	Sc 361.383	895201.6	895201.6	101.16	%	08:21:08
3	Sc Radial	5702.1	5702.1	101	%	08:20:01
3	Y 371.029	746415.6	746415.6	100.59	%	08:21:08
3	Y RADIAL	6190.6	6190.6	100.5	%	08:20:01
3	Ag 328.068†	21753.4	21277.2	[100]	ug/L	08:21:13
3	As 188.979†	221.0	247.7	[100]	ug/L	08:21:33
3	B 249.677†	3919.0	4398.1	[100]	ug/L	08:21:13
3	Ba 233.527†	13184.2	13045.6	[100]	ug/L	08:21:13
3	Be 313.107†	258647.0	261011.7	[100]	ug/L	08:21:08
3	Cd 226.502†	8997.0	9082.1	[100]	ug/L	08:21:13
3	Co 228.616†	4993.3	5008.0	[100]	ug/L	08:21:33
3	Cr 267.716†	9391.6	9197.3	[100]	ug/L	08:21:13
3	Cu 324.752†	41071.5	33833.6	[100]	ug/L	08:21:13
3	K 766.490 Radial†	7638.8	5416.6	[1000]	ug/L	08:19:56
3	Mn 257.610†	92630.0	91168.1	[100]	ug/L	08:21:13
3	Mo 202.031†	1533.1	1495.6	[100]	ug/L	08:21:33
3	Ni 231.604†	4215.0	4096.7	[100]	ug/L	08:21:33
3	P 214.914†	1041.5	809.6	[500]	ug/L	08:21:33
3	Pb 220.353†	791.9	835.3	[100]	ug/L	08:21:33
3	S 181.975 Axial†	165.1	121.7	[200]	ug/L	08:21:33
3	Sb 206.836†	327.5	294.1	[100]	ug/L	08:21:33
3	Se 196.026†	134.7	156.6	[100]	ug/L	08:21:33
3	Si 251.611†	16478.1	15781.8	[500]	ug/L	08:21:13
3	Sn 189.927†	578.0	567.1	[100]	ug/L	08:21:33
3	Sr 421.552†	15083.5	14977.5	[100]	ug/L	08:20:01
3	Ti 334.940†	60410.1	60684.9	[100]	ug/L	08:21:13
3	Tl 190.801†	315.9	349.1	[100]	ug/L	08:21:33
3	U 409.014†	1408.7	3354.8	[100]	ug/L	08:21:13
3	V 292.402†	13290.3	14434.9	[100]	ug/L	08:21:13
3	Zn 213.857†	11746.4	10804.9	[100]	ug/L	08:21:13
3	SiO2†	16488.6	15811.4	[1069.5]	ug/L	08:21:49

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	903677.2	10632.00	1.18%	102.11	%
Sc Radial	5594.1	223.60	4.00%	98.8	%
Y 371.029	753249.7	8727.64	1.16%	101.51	%
Y RADIAL	6077.2	212.91	3.50%	98.68	%
Ag 328.068†	21195.2	80.70	0.38%	[100]	ug/L
As 188.979†	237.1	9.48	4.00%	[100]	ug/L
B 249.677†	4381.0	24.52	0.56%	[100]	ug/L
Ba 233.527†	13072.2	43.32	0.33%	[100]	ug/L
Be 313.107†	257502.8	5054.82	1.96%	[100]	ug/L
Cd 226.502†	9085.3	25.57	0.28%	[100]	ug/L
Co 228.616†	4953.4	70.84	1.43%	[100]	ug/L
Cr 267.716†	9171.8	36.54	0.40%	[100]	ug/L
Cu 324.752†	33458.1	379.24	1.13%	[100]	ug/L
K 766.490 Radial†	5732.4	497.48	8.68%	[1000]	ug/L
Mn 257.610†	91023.9	518.69	0.57%	[100]	ug/L
Mo 202.031†	1487.8	15.86	1.07%	[100]	ug/L
Ni 231.604†	4059.1	64.66	1.59%	[100]	ug/L
P 214.914†	797.8	14.56	1.82%	[500]	ug/L
Pb 220.353†	837.5	1.95	0.23%	[100]	ug/L
S 181.975 Axial†	122.9	1.09	0.89%	[200]	ug/L
Sb 206.836†	294.3	4.09	1.39%	[100]	ug/L
Se 196.026†	157.1	3.06	1.95%	[100]	ug/L
Si 251.611†	15769.9	148.71	0.94%	[500]	ug/L
Sn 189.927†	565.5	5.41	0.96%	[100]	ug/L
Sr 421.552†	15280.2	658.29	4.31%	[100]	ug/L
Ti 334.940†	60577.4	398.30	0.66%	[100]	ug/L
Tl 190.801†	340.9	8.33	2.44%	[100]	ug/L
U 409.014†	3244.9	116.62	3.59%	[100]	ug/L
V 292.402†	14462.8	85.40	0.59%	[100]	ug/L
Zn 213.857†	10772.7	81.22	0.75%	[100]	ug/L
SiO2†	15573.9	214.18	1.38%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2009 08:23:59
Data Type: Reprocessed on 12/9/2009 10:32:18

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	904434.8	904434.8	102.20	%	08:27:09
1	Sc Radial	5397.2	5397.2	95.3	%	08:25:51
1	Y 371.029	745813.4	745813.4	100.50	%	08:27:09
1	Y RADIAL	5821.5	5821.5	94.52	%	08:25:51
1	Ag 328.068†	110747.4	108136.6	[500]	ug/L	08:27:14
1	Al 396.153Radial†	6353.8	6687.4	[5000]	ug/L	08:25:51
1	As 188.979†	1184.6	1188.3	[500]	ug/L	08:27:34
1	B 249.677†	22269.5	22314.1	[500]	ug/L	08:27:14
1	Ba 233.527†	65708.8	64306.9	[500]	ug/L	08:27:14
1	Be 313.107†	1322017.1	1298889.0	[500]	ug/L	08:27:09
1	Ca 317.933Radial†	3266.8	3410.2	[5000]	ug/L	08:26:12
1	Cd 226.502†	45906.7	45106.7	[500]	ug/L	08:27:14
1	Co 228.616†	25668.9	25188.3	[500]	ug/L	08:27:14
1	Cr 267.716†	46222.9	45141.3	[500]	ug/L	08:27:14
1	Cu 324.752†	177131.3	166550.9	[500]	ug/L	08:27:14
1	K 766.490 Radial†	28650.1	27892.3	[5000]	ug/L	08:25:51
1	Mg 279.077 IEC†	135.5	140.4	[5000]	ug/L	08:26:12
1	Mn 257.610†	455958.3	445743.2	[500]	ug/L	08:27:09
1	Mo 202.031†	7796.0	7608.2	[500]	ug/L	08:27:34
1	Ni 231.604†	21161.1	20635.6	[500]	ug/L	08:27:14
1	P 214.914†	4385.5	4071.2	[2500]	ug/L	08:27:34
1	Pb 220.353†	4210.4	4172.3	[500]	ug/L	08:27:34
1	S 181.975 Axial†	737.8	680.4	[1000]	ug/L	08:27:34
1	Sb 206.836†	1594.1	1530.2	[500]	ug/L	08:27:34
1	Se 196.026†	815.7	821.6	[500]	ug/L	08:27:34
1	Si 251.611†	82827.2	80536.9	[2500]	ug/L	08:27:14
1	Sn 189.927†	3011.7	2942.6	[500]	ug/L	08:27:34
1	Sr 421.552†	73249.6	76857.5	[500]	ug/L	08:25:51
1	Ti 334.940†	312876.3	307108.6	[500]	ug/L	08:27:14
1	Tl 190.801†	1706.2	1706.3	[500]	ug/L	08:27:34
1	U 409.014†	15802.6	17424.7	[500]	ug/L	08:27:14
1	V 292.402†	72068.0	71813.7	[500]	ug/L	08:27:14
1	Zn 213.857†	56449.9	54427.9	[500]	ug/L	08:27:14
1	SiO2†	82752.8	80483.2	[5347.5]	ug/L	08:28:41
2	Sc 361.383	891526.1	891526.1	100.74	%	08:27:40
2	Sc Radial	5732.8	5732.8	101	%	08:26:17
2	Y 371.029	734672.0	734672.0	99.003	%	08:27:40
2	Y RADIAL	6169.8	6169.8	100.2	%	08:26:17
2	Ag 328.068†	108767.6	107740.4	[500]	ug/L	08:27:45
2	Al 396.153Radial†	6574.1	6514.8	[5000]	ug/L	08:26:17
2	As 188.979†	1189.1	1209.5	[500]	ug/L	08:28:05
2	B 249.677†	21903.5	22266.3	[500]	ug/L	08:27:45
2	Ba 233.527†	64546.4	64083.9	[500]	ug/L	08:27:45
2	Be 313.107†	1325989.4	1321562.2	[500]	ug/L	08:27:40
2	Ca 317.933Radial†	3244.1	3187.1	[5000]	ug/L	08:26:37
2	Cd 226.502†	45217.0	45072.4	[500]	ug/L	08:27:45
2	Co 228.616†	25322.9	25208.5	[500]	ug/L	08:27:45
2	Cr 267.716†	45599.0	45176.8	[500]	ug/L	08:27:45
2	Cu 324.752†	173851.2	165804.6	[500]	ug/L	08:27:45
2	K 766.490 Radial†	29550.8	27022.3	[5000]	ug/L	08:26:17
2	Mg 279.077 IEC†	136.9	133.4	[5000]	ug/L	08:26:37
2	Mn 257.610†	457085.2	453321.7	[500]	ug/L	08:27:40
2	Mo 202.031†	7806.1	7728.8	[500]	ug/L	08:28:05
2	Ni 231.604†	20894.9	20671.1	[500]	ug/L	08:27:45
2	P 214.914†	4394.4	4142.2	[2500]	ug/L	08:28:05
2	Pb 220.353†	4208.4	4230.0	[500]	ug/L	08:28:05
2	S 181.975 Axial†	739.1	692.2	[1000]	ug/L	08:28:05
2	Sb 206.836†	1589.3	1548.1	[500]	ug/L	08:28:05

2	Se 196.026†	818.1	835.5	[500]	ug/L	08:28:05
2	Si 251.611†	81408.0	80301.6	[2500]	ug/L	08:27:45
2	Sn 189.927†	3012.0	2985.6	[500]	ug/L	08:28:05
2	Sr 421.552†	75683.5	74762.5	[500]	ug/L	08:26:17
2	Ti 334.940†	307362.6	306068.2	[500]	ug/L	08:27:45
2	Tl 190.801†	1709.1	1733.4	[500]	ug/L	08:28:05
2	U 409.014†	15520.9	17369.0	[500]	ug/L	08:27:45
2	V 292.402†	71037.8	71812.1	[500]	ug/L	08:27:45
2	Zn 213.857†	55598.1	54382.2	[500]	ug/L	08:27:45
2	SiO2†	83026.8	81927.6	[5347.5]	ug/L	08:28:47
3	Sc 361.383	899136.3	899136.3	101.60	%	08:28:11
3	Sc Radial	5706.9	5706.9	101	%	08:26:42
3	Y 371.029	741948.7	741948.7	99.983	%	08:28:11
3	Y RADIAL	6177.1	6177.1	100.3	%	08:26:42
3	Ag 328.068†	109406.8	107455.7	[500]	ug/L	08:28:16
3	Al 396.153Radial†	6511.0	6481.7	[5000]	ug/L	08:26:42
3	As 188.979†	1195.7	1206.1	[500]	ug/L	08:28:36
3	B 249.677†	22048.7	22225.2	[500]	ug/L	08:28:16
3	Ba 233.527†	65054.9	64042.1	[500]	ug/L	08:28:16
3	Be 313.107†	1337323.5	1321577.1	[500]	ug/L	08:28:11
3	Ca 317.933Radial†	3245.6	3203.1	[5000]	ug/L	08:27:02
3	Cd 226.502†	45520.2	44991.0	[500]	ug/L	08:28:16
3	Co 228.616†	25427.5	25098.7	[500]	ug/L	08:28:16
3	Cr 267.716†	45999.4	45187.8	[500]	ug/L	08:28:16
3	Cu 324.752†	174872.4	165349.0	[500]	ug/L	08:28:16
3	K 766.490 Radial†	29635.6	27239.3	[5000]	ug/L	08:26:42
3	Mg 279.077 IEC†	137.9	135.1	[5000]	ug/L	08:27:02
3	Mn 257.610†	459261.8	451623.7	[500]	ug/L	08:28:11
3	Mo 202.031†	7805.6	7662.7	[500]	ug/L	08:28:36
3	Ni 231.604†	21024.4	20623.1	[500]	ug/L	08:28:16
3	P 214.914†	4384.9	4095.8	[2500]	ug/L	08:28:36
3	Pb 220.353†	4201.2	4187.5	[500]	ug/L	08:28:36
3	S 181.975 Axial†	733.3	680.3	[1000]	ug/L	08:28:36
3	Sb 206.836†	1586.5	1531.9	[500]	ug/L	08:28:36
3	Se 196.026†	808.2	819.0	[500]	ug/L	08:28:36
3	Si 251.611†	81886.6	80088.6	[2500]	ug/L	08:28:16
3	Sn 189.927†	3013.3	2961.6	[500]	ug/L	08:28:36
3	Sr 421.552†	75338.5	74760.6	[500]	ug/L	08:26:42
3	Ti 334.940†	309552.3	305641.0	[500]	ug/L	08:28:16
3	Tl 190.801†	1699.9	1710.0	[500]	ug/L	08:28:36
3	U 409.014†	15597.8	17314.3	[500]	ug/L	08:28:16
3	V 292.402†	71536.7	71706.3	[500]	ug/L	08:28:16
3	Zn 213.857†	55938.2	54249.7	[500]	ug/L	08:28:16
3	SiO2†	82872.9	81078.6	[5347.5]	ug/L	08:28:52

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	898365.7	6488.79	0.72%	101.51	%
Sc Radial	5612.3	186.71	3.33%	99.1	%
Y 371.029	740811.3	5657.11	0.76%	99.830	%
Y RADIAL	6056.1	203.26	3.36%	98.33	%
Ag 328.068†	107777.6	341.95	0.32%	[500]	ug/L
Al 396.153Radial†	6561.3	110.45	1.68%	[5000]	ug/L
As 188.979†	1201.3	11.39	0.95%	[500]	ug/L
B 249.677†	22268.6	44.51	0.20%	[500]	ug/L
Ba 233.527†	64144.3	142.34	0.22%	[500]	ug/L
Be 313.107†	1314009.5	13094.70	1.00%	[500]	ug/L
Ca 317.933Radial†	3266.8	124.44	3.81%	[5000]	ug/L
Cd 226.502†	45056.7	59.44	0.13%	[500]	ug/L
Co 228.616†	25165.2	58.44	0.23%	[500]	ug/L
Cr 267.716†	45168.6	24.29	0.05%	[500]	ug/L
Cu 324.752†	165901.5	606.79	0.37%	[500]	ug/L
K 766.490 Radial†	27384.6	452.85	1.65%	[5000]	ug/L
Mg 279.077 IEC†	136.3	3.65	2.68%	[5000]	ug/L
Mn 257.610†	450229.5	3976.95	0.88%	[500]	ug/L
Mo 202.031†	7666.6	60.36	0.79%	[500]	ug/L
Ni 231.604†	20643.3	24.94	0.12%	[500]	ug/L
P 214.914†	4103.1	36.05	0.88%	[2500]	ug/L
Pb 220.353†	4196.6	29.89	0.71%	[500]	ug/L

S 181.975 Axial†	684.3	6.82	1.00%	[1000]	ug/L
Sb 206.836†	1536.7	9.88	0.64%	[500]	ug/L
Se 196.026†	825.4	8.91	1.08%	[500]	ug/L
Si 251.611†	80309.0	224.22	0.28%	[2500]	ug/L
Sn 189.927†	2963.3	21.57	0.73%	[500]	ug/L
Sr 421.552†	75460.2	1210.12	1.60%	[500]	ug/L
Ti 334.940†	306272.6	754.85	0.25%	[500]	ug/L
Tl 190.801†	1716.6	14.68	0.86%	[500]	ug/L
U 409.014†	17369.3	55.20	0.32%	[500]	ug/L
V 292.402†	71777.4	61.55	0.09%	[500]	ug/L
Zn 213.857†	54353.3	92.53	0.17%	[500]	ug/L
SiO2†	81163.1	725.88	0.89%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/9/2009 08:31:02
Data Type: Reprocessed on 12/9/2009 10:32:19

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	850251.5	850251.5	96.077	%	08:34:18
1	Sc Radial	5533.5	5533.5	97.7	%	08:32:55
1	Y 371.029	701415.8	701415.8	94.521	%	08:34:18
1	Y RADIAL	6014.0	6014.0	97.65	%	08:32:55
1	Ag 328.068†	212503.6	220953.8	[1000]	ug/L	08:34:18
1	Al 396.153Radial†	13115.4	13443.4	[10000]	ug/L	08:32:55
1	As 188.979†	2381.3	2507.8	[1000]	ug/L	08:34:39
1	B 249.677†	44947.2	47306.5	[1000]	ug/L	08:34:18
1	Ba 233.527†	130054.0	135377.0	[1000]	ug/L	08:34:18
1	Be 313.107†	2668005.7	2782276.6	[1000]	ug/L	08:34:13
1	Ca 317.933Radial†	6484.0	6618.4	[10000]	ug/L	08:32:55
1	Cd 226.502†	90844.2	94741.8	[1000]	ug/L	08:34:18
1	Co 228.616†	50910.3	53061.1	[1000]	ug/L	08:34:18
1	Cr 267.716†	91753.4	95413.3	[1000]	ug/L	08:34:18
1	Cu 324.752†	346853.3	354248.8	[1000]	ug/L	08:34:18
1	Fe 238.204 Radial†	961.1	977.6	[10000]	ug/L	08:33:15
1	K 766.490 Radial†	56384.8	55537.2	[10000]	ug/L	08:32:55
1	Mg 279.077 IEC†	266.6	271.1	[10000]	ug/L	08:33:15
1	Mn 257.610†	915289.7	952263.1	[1000]	ug/L	08:34:13
1	Mo 202.031†	15078.9	15674.7	[1000]	ug/L	08:34:39
1	Na 589.592 Radial†	23620.3	24790.4	[10000]	ug/L	08:32:55
1	Ni 231.604†	41597.5	43226.0	[1000]	ug/L	08:34:18
1	P 214.914†	8503.1	8630.4	[5000]	ug/L	08:34:39
1	Pb 220.353†	8383.2	8778.1	[1000]	ug/L	08:34:39
1	S 181.975 Axial†	1377.9	1392.6	[2000]	ug/L	08:34:39
1	Sb 206.836†	3049.5	3144.4	[1000]	ug/L	08:34:39
1	Se 196.026†	1618.5	1708.1	[1000]	ug/L	08:34:39
1	Si 251.611†	161724.8	167820.9	[5000]	ug/L	08:34:18
1	Sn 189.927†	5789.0	6021.1	[1000]	ug/L	08:34:39
1	Sr 421.552†	144955.4	148352.3	[1000]	ug/L	08:32:55
1	Ti 334.940†	607181.7	632941.6	[1000]	ug/L	08:34:18
1	Tl 190.801†	3388.0	3563.2	[1000]	ug/L	08:34:39
1	U 409.014†	33553.3	36885.7	[1000]	ug/L	08:34:18
1	V 292.402†	145285.4	152514.7	[1000]	ug/L	08:34:18
1	Zn 213.857†	110499.0	114204.0	[1000]	ug/L	08:34:18
1	SiO2†	160588.3	166657.3	[10695]	ug/L	08:35:47
2	Sc 361.383	876826.0	876826.0	99.079	%	08:34:50
2	Sc Radial	5769.1	5769.1	102	%	08:33:20
2	Y 371.029	725945.2	725945.2	97.827	%	08:34:50
2	Y RADIAL	6233.8	6233.8	101.2	%	08:33:20
2	Ag 328.068†	211821.3	213561.7	[1000]	ug/L	08:34:50
2	Al 396.153Radial†	13223.3	13001.2	[10000]	ug/L	08:33:20
2	As 188.979†	2383.7	2435.1	[1000]	ug/L	08:35:10
2	B 249.677†	44853.4	45794.0	[1000]	ug/L	08:34:50
2	Ba 233.527†	129340.2	130553.9	[1000]	ug/L	08:34:50
2	Be 313.107†	2640831.9	2670687.5	[1000]	ug/L	08:34:44
2	Ca 317.933Radial†	6545.8	6408.1	[10000]	ug/L	08:33:20
2	Cd 226.502†	90370.0	91397.4	[1000]	ug/L	08:34:50
2	Co 228.616†	50520.5	51061.6	[1000]	ug/L	08:34:50
2	Cr 267.716†	91349.0	92110.7	[1000]	ug/L	08:34:50
2	Cu 324.752†	345284.8	341724.1	[1000]	ug/L	08:34:50
2	Fe 238.204 Radial†	965.7	942.0	[10000]	ug/L	08:33:40
2	K 766.490 Radial†	56969.8	53754.9	[10000]	ug/L	08:33:20
2	Mg 279.077 IEC†	263.9	257.3	[10000]	ug/L	08:33:40
2	Mn 257.610†	904052.2	912048.1	[1000]	ug/L	08:34:44
2	Mo 202.031†	15064.1	15184.0	[1000]	ug/L	08:35:10
2	Na 589.592 Radial†	23815.7	23995.0	[10000]	ug/L	08:33:20
2	Ni 231.604†	41490.8	41806.2	[1000]	ug/L	08:34:50

2	P 214.914†	8521.8	8381.0	[5000]	ug/L	08:35:10
2	Pb 220.353†	8346.4	8476.5	[1000]	ug/L	08:35:10
2	S 181.975 Axial†	1382.2	1353.5	[2000]	ug/L	08:35:10
2	Sb 206.836†	3047.9	3046.6	[1000]	ug/L	08:35:10
2	Se 196.026†	1624.6	1663.1	[1000]	ug/L	08:35:10
2	Si 251.611†	160771.4	161757.0	[5000]	ug/L	08:34:50
2	Sn 189.927†	5776.1	5825.5	[1000]	ug/L	08:35:10
2	Sr 421.552†	146272.8	143587.4	[1000]	ug/L	08:33:20
2	Ti 334.940†	604367.5	610947.6	[1000]	ug/L	08:34:50
2	Tl 190.801†	3400.0	3468.4	[1000]	ug/L	08:35:10
2	U 409.014†	33305.7	35577.3	[1000]	ug/L	08:34:50
2	V 292.402†	144462.0	147100.6	[1000]	ug/L	08:34:50
2	Zn 213.857†	109920.3	110134.2	[1000]	ug/L	08:34:50
2	SiO2†	160175.3	161174.6	[10695]	ug/L	08:35:52
3	Sc 361.383	872930.7	872930.7	98.639	%	08:35:21
3	Sc Radial	5474.2	5474.2	96.7	%	08:33:46
3	Y 371.029	721425.0	721425.0	97.218	%	08:35:21
3	Y RADIAL	5944.1	5944.1	96.52	%	08:33:46
3	Ag 328.068†	212333.5	215034.9	[1000]	ug/L	08:35:21
3	Al 396.153Radial†	13175.8	13651.4	[10000]	ug/L	08:33:46
3	As 188.979†	2386.3	2448.5	[1000]	ug/L	08:35:42
3	B 249.677†	45175.6	46322.6	[1000]	ug/L	08:35:21
3	Ba 233.527†	129824.3	131627.2	[1000]	ug/L	08:35:21
3	Be 313.107†	2629626.7	2671221.4	[1000]	ug/L	08:35:16
3	Ca 317.933Radial†	6502.5	6709.5	[10000]	ug/L	08:33:46
3	Cd 226.502†	90539.7	91976.5	[1000]	ug/L	08:35:21
3	Co 228.616†	50628.1	51398.3	[1000]	ug/L	08:35:21
3	Cr 267.716†	91620.2	92797.1	[1000]	ug/L	08:35:21
3	Cu 324.752†	346849.9	344865.9	[1000]	ug/L	08:35:21
3	Fe 238.204 Radial†	967.0	994.4	[10000]	ug/L	08:34:06
3	K 766.490 Radial†	56413.8	56193.0	[10000]	ug/L	08:33:46
3	Mg 279.077 IEC†	268.9	276.4	[10000]	ug/L	08:34:06
3	Mn 257.610†	899357.4	911360.2	[1000]	ug/L	08:35:16
3	Mo 202.031†	15037.0	15224.5	[1000]	ug/L	08:35:42
3	Na 589.592 Radial†	23657.5	25090.9	[10000]	ug/L	08:33:46
3	Ni 231.604†	41585.6	42089.2	[1000]	ug/L	08:35:21
3	P 214.914†	8511.2	8408.6	[5000]	ug/L	08:35:42
3	Pb 220.353†	8367.1	8535.0	[1000]	ug/L	08:35:42
3	S 181.975 Axial†	1383.1	1360.7	[2000]	ug/L	08:35:42
3	Sb 206.836†	3050.9	3063.4	[1000]	ug/L	08:35:42
3	Se 196.026†	1636.4	1682.4	[1000]	ug/L	08:35:42
3	Si 251.611†	161444.9	163163.9	[5000]	ug/L	08:35:21
3	Sn 189.927†	5806.5	5882.4	[1000]	ug/L	08:35:42
3	Sr 421.552†	145221.8	150236.7	[1000]	ug/L	08:33:46
3	Ti 334.940†	606384.0	615713.8	[1000]	ug/L	08:35:21
3	Tl 190.801†	3395.9	3479.6	[1000]	ug/L	08:35:42
3	U 409.014†	33383.6	35806.3	[1000]	ug/L	08:35:21
3	V 292.402†	145043.8	148341.1	[1000]	ug/L	08:35:21
3	Zn 213.857†	110326.9	111041.6	[1000]	ug/L	08:35:21
3	SiO2†	161376.9	163114.2	[10695]	ug/L	08:35:58

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	866669.4	14351.09	1.66%	97.932	%
Sc Radial	5592.3	156.00	2.79%	98.7	%
Y 371.029	716262.0	13054.32	1.82%	96.522	%
Y RADIAL	6064.0	151.18	2.49%	98.46	%
Ag 328.068†	216516.8	3912.52	1.81%	[1000]	ug/L
Al 396.153Radial†	13365.3	332.06	2.48%	[10000]	ug/L
As 188.979†	2463.8	38.69	1.57%	[1000]	ug/L
B 249.677†	46474.4	767.60	1.65%	[1000]	ug/L
Ba 233.527†	132519.3	2532.28	1.91%	[1000]	ug/L
Be 313.107†	2708061.8	64272.46	2.37%	[1000]	ug/L
Ca 317.933Radial†	6578.7	154.56	2.35%	[10000]	ug/L
Cd 226.502†	92705.2	1787.31	1.93%	[1000]	ug/L
Co 228.616†	51840.3	1070.50	2.06%	[1000]	ug/L
Cr 267.716†	93440.4	1742.72	1.87%	[1000]	ug/L
Cu 324.752†	346946.3	6516.33	1.88%	[1000]	ug/L
Fe 238.204 Radial†	971.3	26.76	2.76%	[10000]	ug/L

K 766.490 Radial†	55161.7	1261.67	2.29%	[10000]	ug/L
Mg 279.077 IEC†	268.3	9.87	3.68%	[10000]	ug/L
Mn 257.610†	925223.8	23419.23	2.53%	[1000]	ug/L
Mo 202.031†	15361.1	272.34	1.77%	[1000]	ug/L
Na 589.592 Radial†	24625.4	566.30	2.30%	[10000]	ug/L
Ni 231.604†	42373.8	751.50	1.77%	[1000]	ug/L
P 214.914†	8473.3	136.72	1.61%	[5000]	ug/L
Pb 220.353†	8596.5	159.94	1.86%	[1000]	ug/L
S 181.975 Axial†	1369.0	20.82	1.52%	[2000]	ug/L
Sb 206.836†	3084.8	52.28	1.69%	[1000]	ug/L
Se 196.026†	1684.6	22.56	1.34%	[1000]	ug/L
Si 251.611†	164247.3	3173.79	1.93%	[5000]	ug/L
Sn 189.927†	5909.7	100.64	1.70%	[1000]	ug/L
Sr 421.552†	147392.1	3427.10	2.33%	[1000]	ug/L
Ti 334.940†	619867.7	11570.45	1.87%	[1000]	ug/L
Tl 190.801†	3503.7	51.77	1.48%	[1000]	ug/L
U 409.014†	36089.8	698.72	1.94%	[1000]	ug/L
V 292.402†	149318.8	2836.39	1.90%	[1000]	ug/L
Zn 213.857†	111793.3	2136.49	1.91%	[1000]	ug/L
SiO2†	163648.7	2780.16	1.70%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/9/2009 08:38:08
Data Type: Reprocessed on 12/9/2009 10:32:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860444.2	860444.2	97.228	%	08:41:19
1	Sc Radial	5563.2	5563.2	98.2	%	08:40:22
1	Y 371.029	705763.8	705763.8	95.107	%	08:41:19
1	Y RADIAL	5976.4	5976.4	97.04	%	08:40:22
1	Al 396.153Radial†	64915.4	66104.8	[50000]	ug/L	08:40:02
1	Ca 317.933Radial†	31391.5	31939.2	[50000]	ug/L	08:40:02
1	Fe 238.204 Radial†	1937.0	1965.8	[20000]	ug/L	08:40:22
1	Mg 279.077 IEC†	1300.4	1322.0	[50000]	ug/L	08:40:22
1	Na 589.592 Radial†	51369.4	52910.5	[20000]	ug/L	08:40:02
2	Sc 361.383	865149.4	865149.4	97.760	%	08:41:24
2	Sc Radial	5442.2	5442.2	96.1	%	08:40:47
2	Y 371.029	708522.0	708522.0	95.479	%	08:41:24
2	Y RADIAL	5843.9	5843.9	94.89	%	08:40:47
2	Al 396.153Radial†	65821.3	68516.6	[50000]	ug/L	08:40:27
2	Ca 317.933Radial†	31762.2	33035.3	[50000]	ug/L	08:40:27
2	Fe 238.204 Radial†	1937.0	2009.7	[20000]	ug/L	08:40:47
2	Mg 279.077 IEC†	1297.3	1348.3	[50000]	ug/L	08:40:47
2	Na 589.592 Radial†	52102.0	54835.3	[20000]	ug/L	08:40:27
3	Sc 361.383	870309.3	870309.3	98.343	%	08:41:30
3	Sc Radial	5484.6	5484.6	96.8	%	08:41:12
3	Y 371.029	713259.8	713259.8	96.117	%	08:41:30
3	Y RADIAL	5873.4	5873.4	95.37	%	08:41:12
3	Al 396.153Radial†	66266.7	68446.0	[50000]	ug/L	08:40:52
3	Ca 317.933Radial†	32068.2	33095.3	[50000]	ug/L	08:40:52
3	Fe 238.204 Radial†	1958.1	2015.8	[20000]	ug/L	08:41:12
3	Mg 279.077 IEC†	1316.2	1357.3	[50000]	ug/L	08:41:12
3	Na 589.592 Radial†	52525.2	54852.4	[20000]	ug/L	08:40:52

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	865300.9	4934.29	0.57%	97.777	%
Sc Radial	5496.7	61.38	1.12%	97.1	%
Y 371.029	709181.8	3791.32	0.53%	95.568	%
Y RADIAL	5897.9	69.54	1.18%	95.77	%
Al 396.153Radial†	67689.1	1372.53	2.03%	[50000]	ug/L
Ca 317.933Radial†	32689.9	650.87	1.99%	[50000]	ug/L
Fe 238.204 Radial†	1997.1	27.27	1.37%	[20000]	ug/L
Mg 279.077 IEC†	1342.5	18.31	1.36%	[50000]	ug/L
Na 589.592 Radial†	54199.4	1116.28	2.06%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	216.3	0.00000	0.999997	
Al 396.153Radial	3	Lin Thru 0	0.0	1.353	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	2.451	0.00000	0.999946	
B 249.677	3	Lin Thru 0	0.0	46.07	0.00000	0.999850	
Ba 233.527	3	Lin Thru 0	0.0	131.7	0.00000	0.999918	
Be 313.107	3	Lin Thru 0	0.0	2691	0.00000	0.999922	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6539	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	92.18	0.00000	0.999936	
Co 228.616	3	Lin Thru 0	0.0	51.52	0.00000	0.999926	
Cr 267.716	3	Lin Thru 0	0.0	92.81	0.00000	0.999911	
Cu 324.752	3	Lin Thru 0	0.0	343.8	0.00000	0.999843	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0993	0.00000	0.999940	

K 766.490 Radial	3	Lin Thru 0	0.0	5.510	0.00000	0.999989
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0269	0.00000	0.999999
Mn 257.610	3	Lin Thru 0	0.0	920.2	0.00000	0.999942
Mo 202.031	3	Lin Thru 0	0.0	15.35	0.00000	0.999996
Na 589.592 Radia	2	Lin Thru 0	0.0	2.660	0.00000	0.999309
Ni 231.604	3	Lin Thru 0	0.0	42.14	0.00000	0.999942
P 214.914	3	Lin Thru 0	0.0	1.683	0.00000	0.999909
Pb 220.353	3	Lin Thru 0	0.0	8.554	0.00000	0.999953
S 181.975 Axial	3	Lin Thru 0	0.0	0.6839	0.00000	0.999959
Sb 206.836	3	Lin Thru 0	0.0	3.081	0.00000	0.999991
Se 196.026	3	Lin Thru 0	0.0	1.677	0.00000	0.999952
Si 251.611	3	Lin Thru 0	0.0	32.70	0.00000	0.999956
Sn 189.927	3	Lin Thru 0	0.0	5.911	0.00000	0.999992
Sr 421.552	3	Lin Thru 0	0.0	148.1	0.00000	0.999951
Ti 334.940	3	Lin Thru 0	0.0	618.3	0.00000	0.999987
Tl 190.801	3	Lin Thru 0	0.0	3.489	0.00000	0.999965
U 409.014	3	Lin Thru 0	0.0	35.79	0.00000	0.999852
V 292.402	3	Lin Thru 0	0.0	148.1	0.00000	0.999878
Zn 213.857	3	Lin Thru 0	0.0	111.1	0.00000	0.999935
SiO2	3	Lin Thru 0	0.0	15.27	0.00000	0.999986

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/9/2009 08:43:41
Data Type: Reprocessed on 12/9/2009 10:32:20

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899143.1	899143.1	101.60	%			08:46:51
1	Sc Radial	5755.3	5755.3	102	%			08:45:34
1	Y 371.029	745083.4	745083.4	100.41	%			08:46:51
1	Y RADIAL	6211.5	6211.5	100.9	%			08:45:34
1	Ag 328.068†	56632.9	55512.7	259.75	ug/L	259.75	ppb	08:46:51
1	Al 396.153Radial†	6818.1	6729.6	4951.6	ug/L	4951.6	ppb	08:45:34
1	As 188.979†	1135.6	1146.9	472.32	ug/L	472.32	ppb	08:47:11
1	B 249.677†	23247.5	23405.0	506.12	ug/L	506.12	ppb	08:46:51
1	Ba 233.527†	67271.4	66223.2	504.28	ug/L	504.28	ppb	08:46:51
1	Be 313.107†	695042.6	689408.8	257.18	ug/L	257.18	ppb	08:46:51
1	Ca 317.933Radial†	3308.0	3237.5	4950.6	ug/L	4950.6	ppb	08:45:54
1	Cd 226.502†	45903.3	45367.7	492.00	ug/L	492.00	ppb	08:46:51
1	Co 228.616†	25866.2	25530.3	495.84	ug/L	495.84	ppb	08:47:11
1	Cr 267.716†	45516.9	44712.6	482.58	ug/L	482.58	ppb	08:46:51
1	Cu 324.752†	180623.3	171008.0	497.60	ug/L	497.60	ppb	08:46:51
1	Fe 238.204 Radial†	515.8	501.5	5065.9	ug/L	5065.9	ppb	08:45:54
1	K 766.490 Radial†	16132.4	13704.5	2482.0	ug/L	2482.0	ppb	08:45:34
1	Mg 279.077 IEC†	147.3	143.2	5338.3	ug/L	5338.3	ppb	08:45:54
1	Mn 257.610†	473453.9	465588.7	506.37	ug/L	506.37	ppb	08:46:51
1	Mo 202.031†	8477.5	8323.9	542.58	ug/L	542.58	ppb	08:47:11
1	Na 589.592 Radial†	5744.7	6268.9	2356.3	ug/L	2356.3	ppb	08:45:34
1	Ni 231.604†	21194.2	20790.0	492.99	ug/L	492.99	ppb	08:47:11
1	P 214.914†	4454.0	4163.9	2399.0	ug/L	2399.0	ppb	08:47:11
1	Pb 220.353†	4241.1	4226.8	495.74	ug/L	495.74	ppb	08:47:11
1	S 181.975 Axial†	1765.6	1696.3	2479.4	ug/L	2479.4	ppb	08:47:11
1	Sb 206.836†	1591.5	1536.8	508.08	ug/L	508.08	ppb	08:47:11
1	Se 196.026†	4216.6	4173.6	2506.7	ug/L	2506.7	ppb	08:47:11
1	Si 251.611†	158477.4	155471.8	4743.2	ug/L	4743.2	ppb	08:46:51
1	Sn 189.927†	3253.6	3198.1	541.63	ug/L	541.63	ppb	08:47:11
1	Sr 421.552†	80003.9	78722.8	531.38	ug/L	531.38	ppb	08:45:34
1	Ti 334.940†	317575.3	313535.2	506.97	ug/L	506.97	ppb	08:46:51
1	Tl 190.801†	1811.6	1819.9	524.93	ug/L	524.93	ppb	08:47:11
1	U 409.014†	15263.7	16985.4	472.98	ug/L	472.98	ppb	08:46:51
1	V 292.402†	74003.4	74133.6	507.71	ug/L	507.71	ppb	08:46:51
1	Zn 213.857†	57517.5	55803.7	497.65	ug/L	497.65	ppb	08:46:51
1	SiO2†	158528.2	155540.9	10159	ug/L	10159	ppb	08:48:09
2	Sc 361.383	900929.8	900929.8	101.80	%			08:47:17
2	Sc Radial	5526.2	5526.2	97.6	%			08:45:59
2	Y 371.029	747790.7	747790.7	100.77	%			08:47:17
2	Y RADIAL	5987.0	5987.0	97.21	%			08:45:59
2	Ag 328.068†	56755.1	55522.2	259.83	ug/L	259.83	ppb	08:47:17
2	Al 396.153Radial†	6648.7	6834.0	5028.9	ug/L	5028.9	ppb	08:45:59
2	As 188.979†	1138.7	1147.8	472.69	ug/L	472.69	ppb	08:47:38
2	B 249.677†	23267.4	23379.2	505.54	ug/L	505.54	ppb	08:47:17
2	Ba 233.527†	67420.8	66238.6	504.40	ug/L	504.40	ppb	08:47:17
2	Be 313.107†	696988.5	689963.5	257.38	ug/L	257.38	ppb	08:47:17
2	Ca 317.933Radial†	3262.6	3325.9	5085.8	ug/L	5085.8	ppb	08:46:19
2	Cd 226.502†	45961.1	45334.9	491.63	ug/L	491.63	ppb	08:47:17
2	Co 228.616†	25875.1	25488.6	495.02	ug/L	495.02	ppb	08:47:38
2	Cr 267.716†	45637.8	44742.5	482.90	ug/L	482.90	ppb	08:47:17
2	Cu 324.752†	181032.7	171057.5	497.75	ug/L	497.75	ppb	08:47:17
2	Fe 238.204 Radial†	507.2	513.7	5188.5	ug/L	5188.5	ppb	08:46:19
2	K 766.490 Radial†	15882.2	14106.0	2554.8	ug/L	2554.8	ppb	08:45:59
2	Mg 279.077 IEC†	144.7	146.5	5463.2	ug/L	5463.2	ppb	08:46:19
2	Mn 257.610†	473926.8	465129.1	505.88	ug/L	505.88	ppb	08:47:17
2	Mo 202.031†	8455.1	8285.4	540.07	ug/L	540.07	ppb	08:47:38
2	Na 589.592 Radial†	5656.1	6412.4	2410.3	ug/L	2410.3	ppb	08:45:59
2	Ni 231.604†	21190.5	20745.1	491.93	ug/L	491.93	ppb	08:47:38

2	P 214.914†	4449.0	4150.2	2390.7	ug/L	2390.7 ppb	08:47:38
2	Pb 220.353†	4244.7	4222.1	495.20	ug/L	495.20 ppb	08:47:38
2	S 181.975 Axial†	1768.7	1695.9	2478.8	ug/L	2478.8 ppb	08:47:38
2	Sb 206.836†	1584.1	1526.4	504.59	ug/L	504.59 ppb	08:47:38
2	Se 196.026†	4230.6	4179.1	2510.4	ug/L	2510.4 ppb	08:47:38
2	Si 251.611†	158592.9	155275.9	4737.3	ug/L	4737.3 ppb	08:47:17
2	Sn 189.927†	3239.3	3177.6	538.18	ug/L	538.18 ppb	08:47:38
2	Sr 421.552†	77858.2	79787.0	538.56	ug/L	538.56 ppb	08:45:59
2	Ti 334.940†	318127.1	313457.4	506.85	ug/L	506.85 ppb	08:47:17
2	Tl 190.801†	1807.6	1812.4	522.78	ug/L	522.78 ppb	08:47:38
2	U 409.014†	15446.1	17134.7	477.14	ug/L	477.14 ppb	08:47:17
2	V 292.402†	74257.6	74238.8	508.38	ug/L	508.38 ppb	08:47:17
2	Zn 213.857†	57541.4	55714.9	496.85	ug/L	496.85 ppb	08:47:17
2	SiO2†	160259.5	156932.1	10251	ug/L	10251 ppb	08:48:14
3	Sc 361.383	892907.1	892907.1	100.90	%		08:47:44
3	Sc Radial	5572.6	5572.6	98.4	%		08:46:24
3	Y 371.029	740826.1	740826.1	99.832	%		08:47:44
3	Y RADIAL	6045.8	6045.8	98.17	%		08:46:24
3	Ag 328.068†	56455.6	55726.3	260.76	ug/L	260.76 ppb	08:47:44
3	Al 396.153Radial†	6733.8	6863.8	5050.6	ug/L	5050.6 ppb	08:46:24
3	As 188.979†	1138.0	1157.1	476.47	ug/L	476.47 ppb	08:48:04
3	B 249.677†	23201.0	23518.7	508.56	ug/L	508.56 ppb	08:47:44
3	Ba 233.527†	67082.8	66498.7	506.38	ug/L	506.38 ppb	08:47:44
3	Be 313.107†	692991.5	692153.6	258.20	ug/L	258.20 ppb	08:47:44
3	Ca 317.933Radial†	3266.2	3301.7	5048.9	ug/L	5048.9 ppb	08:46:44
3	Cd 226.502†	45892.6	45672.6	495.30	ug/L	495.30 ppb	08:47:44
3	Co 228.616†	26031.4	25871.8	502.48	ug/L	502.48 ppb	08:48:04
3	Cr 267.716†	45399.9	44909.5	484.71	ug/L	484.71 ppb	08:47:44
3	Cu 324.752†	179963.6	171595.7	499.31	ug/L	499.31 ppb	08:47:44
3	Fe 238.204 Radial†	503.9	506.1	5111.6	ug/L	5111.6 ppb	08:46:44
3	K 766.490 Radial†	16069.5	14161.0	2564.8	ug/L	2564.8 ppb	08:46:24
3	Mg 279.077 IEC†	140.9	141.4	5273.9	ug/L	5273.9 ppb	08:46:44
3	Mn 257.610†	471754.2	467158.6	508.09	ug/L	508.09 ppb	08:47:44
3	Mo 202.031†	8505.1	8409.6	548.16	ug/L	548.16 ppb	08:48:04
3	Na 589.592 Radial†	5701.6	6410.4	2409.5	ug/L	2409.5 ppb	08:46:24
3	Ni 231.604†	21331.0	21071.3	499.66	ug/L	499.66 ppb	08:48:04
3	P 214.914†	4494.3	4234.4	2440.7	ug/L	2440.7 ppb	08:48:04
3	Pb 220.353†	4273.3	4287.9	502.92	ug/L	502.92 ppb	08:48:04
3	S 181.975 Axial†	1777.7	1720.4	2514.6	ug/L	2514.6 ppb	08:48:04
3	Sb 206.836†	1606.7	1562.8	516.70	ug/L	516.70 ppb	08:48:04
3	Se 196.026†	4269.7	4255.2	2555.6	ug/L	2555.6 ppb	08:48:04
3	Si 251.611†	158021.7	156109.4	4762.6	ug/L	4762.6 ppb	08:47:44
3	Sn 189.927†	3261.6	3228.3	546.75	ug/L	546.75 ppb	08:48:04
3	Sr 421.552†	78802.8	80082.9	540.56	ug/L	540.56 ppb	08:46:24
3	Ti 334.940†	316188.4	314343.7	508.28	ug/L	508.28 ppb	08:47:44
3	Tl 190.801†	1831.5	1852.0	534.12	ug/L	534.12 ppb	08:48:04
3	U 409.014†	15219.2	17046.2	474.67	ug/L	474.67 ppb	08:47:44
3	V 292.402†	73844.6	74484.8	510.15	ug/L	510.15 ppb	08:47:44
3	Zn 213.857†	57412.5	56095.0	500.23	ug/L	500.23 ppb	08:47:44
3	SiO2†	157396.8	155509.3	10157	ug/L	10157 ppb	08:48:20

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	897660.0	101.43	%	0.476				0.47%
Sc Radial	5618.0	99.2	%	2.14				2.16%
Y 371.029	744566.7	100.34	%	0.473				0.47%
Y RADIAL	6081.4	98.74	%	1.890				1.91%
Ag 328.068†	55587.1	260.12	ug/L	0.561	260.12	ppb	0.561	0.22%
QC value within limits for Ag 328.068 Recovery = 104.05%								
Al 396.153Radial†	6809.1	5010.4	ug/L	52.04	5010.4	ppb	52.04	1.04%
QC value within limits for Al 396.153Radial Recovery = 100.21%								
As 188.979†	1150.6	473.82	ug/L	2.297	473.82	ppb	2.297	0.48%
QC value within limits for As 188.979 Recovery = 94.76%								
B 249.677†	23434.3	506.74	ug/L	1.604	506.74	ppb	1.604	0.32%
QC value within limits for B 249.677 Recovery = 101.35%								
Ba 233.527†	66320.2	505.02	ug/L	1.178	505.02	ppb	1.178	0.23%
QC value within limits for Ba 233.527 Recovery = 101.00%								
Be 313.107†	690508.6	257.58	ug/L	0.541	257.58	ppb	0.541	0.21%
QC value within limits for Be 313.107 Recovery = 103.03%								

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Ca 317.933Radial†       3288.3      5028.4 ug/L        69.89      5028.4 ppb          69.89   1.39%
   QC value within limits for Ca 317.933Radial  Recovery = 100.57%
Cd 226.502†            45458.4      492.98 ug/L        2.025      492.98 ppb          2.025   0.41%
   QC value within limits for Cd 226.502  Recovery = 98.60%
Co 228.616†            25630.2      497.78 ug/L        4.090      497.78 ppb          4.090   0.82%
   QC value within limits for Co 228.616  Recovery = 99.56%
Cr 267.716†            44788.2      483.40 ug/L        1.145      483.40 ppb          1.145   0.24%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†           171220.4      498.22 ug/L        0.948      498.22 ppb          0.948   0.19%
   QC value within limits for Cu 324.752  Recovery = 99.64%
Fe 238.204 Radial†       507.1      5122.0 ug/L        62.00      5122.0 ppb          62.00   1.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.44%
K 766.490 Radial†      13990.5      2533.9 ug/L        45.22      2533.9 ppb          45.22   1.78%
   QC value within limits for K 766.490 Radial  Recovery = 101.36%
Mg 279.077 IEC†          143.7      5358.5 ug/L        96.24      5358.5 ppb          96.24   1.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.17%
Mn 257.610†           465958.8      506.78 ug/L        1.156      506.78 ppb          1.156   0.23%
   QC value within limits for Mn 257.610  Recovery = 101.36%
Mo 202.031†             8339.6      543.60 ug/L        4.138      543.60 ppb          4.138   0.76%
   QC value within limits for Mo 202.031  Recovery = 108.72%
Na 589.592 Radial†      6363.9      2392.0 ug/L        30.94      2392.0 ppb          30.94   1.29%
   QC value within limits for Na 589.592 Radial  Recovery = 95.68%
Ni 231.604†            20868.8      494.86 ug/L        4.193      494.86 ppb          4.193   0.85%
   QC value within limits for Ni 231.604  Recovery = 98.97%
P 214.914†              4182.8      2410.2 ug/L        26.77      2410.2 ppb          26.77   1.11%
   QC value within limits for P 214.914  Recovery = 96.41%
Pb 220.353†             4245.6      497.95 ug/L        4.310      497.95 ppb          4.310   0.87%
   QC value within limits for Pb 220.353  Recovery = 99.59%
S 181.975 Axial†        1704.2      2490.9 ug/L        20.51      2490.9 ppb          20.51   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 99.64%
Sb 206.836†             1542.0      509.79 ug/L        6.233      509.79 ppb          6.233   1.22%
   QC value within limits for Sb 206.836  Recovery = 101.96%
Se 196.026†             4202.7      2524.2 ug/L        27.20      2524.2 ppb          27.20   1.08%
   QC value within limits for Se 196.026  Recovery = 100.97%
Si 251.611†           155619.0      4747.7 ug/L        13.24      4747.7 ppb          13.24   0.28%
   QC value within limits for Si 251.611  Recovery = 94.95%
Sn 189.927†             3201.3      542.19 ug/L        4.315      542.19 ppb          4.315   0.80%
   QC value within limits for Sn 189.927  Recovery = 108.44%
Sr 421.552†            79530.9      536.83 ug/L        4.828      536.83 ppb          4.828   0.90%
   QC value within limits for Sr 421.552  Recovery = 107.37%
Ti 334.940†           313778.8      507.37 ug/L        0.794      507.37 ppb          0.794   0.16%
   QC value within limits for Ti 334.940  Recovery = 101.47%
Tl 190.801†             1828.1      527.28 ug/L        6.020      527.28 ppb          6.020   1.14%
   QC value within limits for Tl 190.801  Recovery = 105.46%
U 409.014†             17055.4      474.93 ug/L        2.090      474.93 ppb          2.090   0.44%
   QC value within limits for U 409.014  Recovery = 94.99%
V 292.402†             74285.7      508.75 ug/L        1.263      508.75 ppb          1.263   0.25%
   QC value within limits for V 292.402  Recovery = 101.75%
Zn 213.857†            55871.2      498.24 ug/L        1.766      498.24 ppb          1.766   0.35%
   QC value within limits for Zn 213.857  Recovery = 99.65%
SiO2†                 155994.1       10189 ug/L         53.3       10189 ppb           53.3   0.52%
   QC value within limits for SiO2  Recovery = 95.27%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/9/2009 08:50:30
Data Type: Reprocessed on 12/9/2009 10:32:22

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	885039.3	885039.3	100.01	%			08:53:40
1	Sc Radial	6007.8	6007.8	106	%			08:52:23
1	Y 371.029	743826.3	743826.3	100.24	%			08:53:40
1	Y RADIAL	6510.4	6510.4	105.7	%			08:52:23
1	Ag 328.068†	220.0	-7.6	-0.0265	ug/L	-0.0265	ppb	08:53:40
1	Al 396.153Radial†	-24.9	-3.1	-2.2915	ug/L	-2.2915	ppb	08:52:43
1	As 188.979†	-24.6	4.6	1.8821	ug/L	1.8821	ppb	08:54:00
1	B 249.677†	-224.5	299.4	6.4983	ug/L	6.4983	ppb	08:54:00
1	Ba 233.527†	-23.4	-11.4	-0.0848	ug/L	-0.0848	ppb	08:54:00
1	Be 313.107†	-5243.3	77.4	0.0283	ug/L	0.0283	ppb	08:53:40
1	Ca 317.933Radial†	18.8	0.0	0.0108	ug/L	0.0108	ppb	08:52:43
1	Cd 226.502†	-163.5	24.3	0.2632	ug/L	0.2632	ppb	08:54:00
1	Co 228.616†	-75.4	-3.6	-0.0698	ug/L	-0.0698	ppb	08:54:00
1	Cr 267.716†	75.3	-11.7	-0.1233	ug/L	-0.1233	ppb	08:54:00
1	Cu 324.752†	6855.2	86.1	0.2507	ug/L	0.2507	ppb	08:53:40
1	Fe 238.204 Radial†	7.2	0.7	7.2006	ug/L	7.2006	ppb	08:52:43
1	K 766.490 Radial†	2180.9	-114.5	-20.779	ug/L	-20.779	ppb	08:52:23
1	Mg 279.077 IEC†	1.3	-0.6	-21.220	ug/L	-21.220	ppb	08:52:43
1	Mn 257.610†	412.7	9.3	0.0112	ug/L	0.0112	ppb	08:54:00
1	Mo 202.031†	20.4	0.4	0.0294	ug/L	0.0294	ppb	08:54:00
1	Na 589.592 Radial†	-632.0	20.2	7.6089	ug/L	7.6089	ppb	08:52:23
1	Ni 231.604†	83.6	13.5	0.3200	ug/L	0.3200	ppb	08:54:00
1	P 214.914†	206.1	-13.9	-8.3010	ug/L	-8.3010	ppb	08:54:00
1	Pb 220.353†	-33.4	19.2	2.2424	ug/L	2.2424	ppb	08:54:00
1	S 181.975 Axial†	38.2	-3.3	-4.7613	ug/L	-4.7613	ppb	08:54:00
1	Sb 206.836†	34.3	4.7	1.5120	ug/L	1.5120	ppb	08:54:00
1	Se 196.026†	-29.9	-6.5	-3.8251	ug/L	-3.8251	ppb	08:54:00
1	Si 251.611†	459.2	-48.9	-1.4872	ug/L	-1.4872	ppb	08:54:00
1	Sn 189.927†	0.8	-3.4	-0.5799	ug/L	-0.5799	ppb	08:54:00
1	Sr 421.552†	17.2	12.8	0.0865	ug/L	0.0865	ppb	08:52:23
1	Ti 334.940†	-1119.0	-153.9	-0.2468	ug/L	-0.2468	ppb	08:53:40
1	Tl 190.801†	-22.7	14.2	4.0585	ug/L	4.0585	ppb	08:54:00
1	U 409.014†	-2134.0	-171.6	-4.7958	ug/L	-4.7958	ppb	08:53:40
1	V 292.402†	-1205.4	91.1	0.6051	ug/L	0.6051	ppb	08:53:40
1	Zn 213.857†	940.6	133.2	1.1963	ug/L	1.1963	ppb	08:54:00
1	SiO2†	476.1	-12.8	-0.8192	ug/L	-0.8192	ppb	08:54:56
2	Sc 361.383	884186.2	884186.2	99.911	%			08:54:05
2	Sc Radial	5598.7	5598.7	98.9	%			08:52:48
2	Y 371.029	743197.1	743197.1	100.15	%			08:54:05
2	Y RADIAL	6093.1	6093.1	98.93	%			08:52:48
2	Ag 328.068†	347.5	120.3	0.5593	ug/L	0.5593	ppb	08:54:05
2	Al 396.153Radial†	-26.2	-6.2	-4.5398	ug/L	-4.5398	ppb	08:53:08
2	As 188.979†	-18.3	10.9	4.4392	ug/L	4.4392	ppb	08:54:25
2	B 249.677†	-211.2	312.4	6.7796	ug/L	6.7796	ppb	08:54:25
2	Ba 233.527†	-17.8	-5.7	-0.0442	ug/L	-0.0442	ppb	08:54:25
2	Be 313.107†	-5176.8	138.8	0.0514	ug/L	0.0514	ppb	08:54:05
2	Ca 317.933Radial†	19.1	1.6	2.4285	ug/L	2.4285	ppb	08:53:08
2	Cd 226.502†	-164.7	23.0	0.2483	ug/L	0.2483	ppb	08:54:25
2	Co 228.616†	-69.8	1.9	0.0363	ug/L	0.0363	ppb	08:54:25
2	Cr 267.716†	71.7	-15.2	-0.1644	ug/L	-0.1644	ppb	08:54:25
2	Cu 324.752†	6794.8	32.2	0.0945	ug/L	0.0945	ppb	08:54:05
2	Fe 238.204 Radial†	7.5	1.5	15.338	ug/L	15.338	ppb	08:53:08
2	K 766.490 Radial†	2238.8	94.3	17.130	ug/L	17.130	ppb	08:52:48
2	Mg 279.077 IEC†	1.1	-0.7	-25.524	ug/L	-25.524	ppb	08:53:08
2	Mn 257.610†	412.1	9.0	0.0118	ug/L	0.0118	ppb	08:54:25
2	Mo 202.031†	17.1	-2.8	-0.1835	ug/L	-0.1835	ppb	08:54:25
2	Na 589.592 Radial†	-665.5	-57.2	-21.494	ug/L	-21.494	ppb	08:52:48
2	Ni 231.604†	83.6	13.5	0.3209	ug/L	0.3209	ppb	08:54:25

2	P 214.914†	199.9	-19.9	-11.852	ug/L	-11.852	ppb	08:54:25
2	Pb 220.353†	-52.6	-0.1	-0.0194	ug/L	-0.0194	ppb	08:54:25
2	S 181.975 Axial†	41.9	0.5	0.7238	ug/L	0.7238	ppb	08:54:25
2	Sb 206.836†	32.0	2.4	0.8056	ug/L	0.8056	ppb	08:54:25
2	Se 196.026†	-26.3	-2.9	-1.6864	ug/L	-1.6864	ppb	08:54:25
2	Si 251.611†	483.1	-24.5	-0.7548	ug/L	-0.7548	ppb	08:54:25
2	Sn 189.927†	8.1	3.8	0.6470	ug/L	0.6470	ppb	08:54:25
2	Sr 421.552†	9.6	6.3	0.0423	ug/L	0.0423	ppb	08:52:48
2	Ti 334.940†	-1018.8	-54.7	-0.0879	ug/L	-0.0879	ppb	08:54:05
2	Tl 190.801†	-32.8	4.0	1.1521	ug/L	1.1521	ppb	08:54:25
2	U 409.014†	-1984.7	-24.2	-0.6790	ug/L	-0.6790	ppb	08:54:05
2	V 292.402†	-1373.3	-78.1	-0.5337	ug/L	-0.5337	ppb	08:54:05
2	Zn 213.857†	924.7	118.3	1.0616	ug/L	1.0616	ppb	08:54:25
2	SiO2†	497.5	9.1	0.5882	ug/L	0.5882	ppb	08:55:01
3	Sc 361.383	880642.4	880642.4	99.511	%			08:54:30
3	Sc Radial	5554.9	5554.9	98.1	%			08:53:13
3	Y 371.029	740637.9	740637.9	99.807	%			08:54:30
3	Y RADIAL	6040.2	6040.2	98.08	%			08:53:13
3	Ag 328.068†	199.9	-26.6	-0.1242	ug/L	-0.1242	ppb	08:54:30
3	Al 396.153Radial†	-25.2	-5.3	-3.9345	ug/L	-3.9345	ppb	08:53:33
3	As 188.979†	-18.3	10.8	4.4225	ug/L	4.4225	ppb	08:54:51
3	B 249.677†	-202.0	320.9	6.9648	ug/L	6.9648	ppb	08:54:51
3	Ba 233.527†	-10.4	1.6	0.0114	ug/L	0.0114	ppb	08:54:51
3	Be 313.107†	-5210.3	84.4	0.0315	ug/L	0.0315	ppb	08:54:30
3	Ca 317.933Radial†	17.7	0.3	0.4667	ug/L	0.4667	ppb	08:53:33
3	Cd 226.502†	-163.1	24.0	0.2605	ug/L	0.2605	ppb	08:54:51
3	Co 228.616†	-66.1	5.4	0.1030	ug/L	0.1030	ppb	08:54:51
3	Cr 267.716†	75.8	-10.8	-0.1169	ug/L	-0.1169	ppb	08:54:51
3	Cu 324.752†	6867.1	132.2	0.3845	ug/L	0.3845	ppb	08:54:30
3	Fe 238.204 Radial†	5.8	-0.1	-1.1921	ug/L	-1.1921	ppb	08:53:33
3	K 766.490 Radial†	2207.8	80.7	14.635	ug/L	14.635	ppb	08:53:13
3	Mg 279.077 IEC†	2.1	0.3	12.561	ug/L	12.561	ppb	08:53:33
3	Mn 257.610†	406.6	5.2	0.0053	ug/L	0.0053	ppb	08:54:51
3	Mo 202.031†	13.2	-6.8	-0.4408	ug/L	-0.4408	ppb	08:54:51
3	Na 589.592 Radial†	-602.7	1.5	0.5493	ug/L	0.5493	ppb	08:53:13
3	Ni 231.604†	83.5	13.8	0.3265	ug/L	0.3265	ppb	08:54:51
3	P 214.914†	195.4	-23.6	-14.059	ug/L	-14.059	ppb	08:54:51
3	Pb 220.353†	-65.5	-13.3	-1.5534	ug/L	-1.5534	ppb	08:54:51
3	S 181.975 Axial†	44.3	3.1	4.4794	ug/L	4.4794	ppb	08:54:51
3	Sb 206.836†	38.2	8.8	2.8570	ug/L	2.8570	ppb	08:54:51
3	Se 196.026†	-24.4	-1.0	-0.6240	ug/L	-0.6240	ppb	08:54:51
3	Si 251.611†	485.7	-19.9	-0.6080	ug/L	-0.6080	ppb	08:54:51
3	Sn 189.927†	6.6	2.4	0.4063	ug/L	0.4063	ppb	08:54:51
3	Sr 421.552†	15.9	12.8	0.0863	ug/L	0.0863	ppb	08:53:13
3	Ti 334.940†	-921.1	39.4	0.0639	ug/L	0.0639	ppb	08:54:30
3	Tl 190.801†	-27.3	9.4	2.6959	ug/L	2.6959	ppb	08:54:51
3	U 409.014†	-1968.7	-16.2	-0.4536	ug/L	-0.4536	ppb	08:54:30
3	V 292.402†	-1329.2	-39.3	-0.2718	ug/L	-0.2718	ppb	08:54:30
3	Zn 213.857†	928.1	125.4	1.1255	ug/L	1.1255	ppb	08:54:51
3	SiO2†	478.8	-7.7	-0.5018	ug/L	-0.5018	ppb	08:55:06

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883289.3	99.810	%	0.2635				0.26%
Sc Radial	5720.5	101	%	4.4				4.37%
Y 371.029	742553.8	100.06	%	0.228				0.23%
Y RADIAL	6214.6	100.9	%	4.18				4.14%
Ag 328.068†	28.7	0.1362	ug/L	0.36969	0.1362	ppb	0.36969	271.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.9	-3.5886	ug/L	1.16340	-3.5886	ppb	1.16340	32.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.5813	ug/L	1.47158	3.5813	ppb	1.47158	41.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	310.9	6.7476	ug/L	0.23493	6.7476	ppb	0.23493	3.48%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.2	-0.0392	ug/L	0.04829	-0.0392	ppb	0.04829	123.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	100.2	0.0370	ug/L	0.01254	0.0370	ppb	0.01254	33.84%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          0.6      0.9687 ug/L       1.28460      0.9687 ppb        1.28460 132.62%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               23.8      0.2573 ug/L       0.00793      0.2573 ppb        0.00793   3.08%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.2      0.0232 ug/L       0.08712      0.0232 ppb        0.08712 376.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -12.6     -0.1349 ug/L       0.02582     -0.1349 ppb        0.02582  19.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               83.5      0.2432 ug/L       0.14514      0.2432 ppb        0.14514  59.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.7      7.1156 ug/L       8.26554      7.1156 ppb        8.26554 116.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         20.2      3.6621 ug/L      21.20314      3.6621 ppb       21.20314 578.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.3    -11.394 ug/L       20.8573     -11.394 ppb        20.8573 183.05%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                7.8      0.0094 ug/L       0.00359      0.0094 ppb        0.00359  38.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -3.1     -0.1983 ug/L       0.23544     -0.1983 ppb        0.23544 118.74%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -11.8     -4.4452 ug/L      15.18056     -4.4452 ppb       15.18056 341.51%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               13.6      0.3225 ug/L       0.00351      0.3225 ppb        0.00351   1.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -19.1    -11.404 ug/L        2.9048     -11.404 ppb         2.9048  25.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.9      0.2232 ug/L       1.90946      0.2232 ppb        1.90946 855.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.1      0.1473 ug/L       4.64729      0.1473 ppb        4.64729 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                5.3      1.7249 ug/L       1.04211      1.7249 ppb        1.04211  60.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.5     -2.0452 ug/L       1.63044     -2.0452 ppb        1.63044  79.72%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.1     -0.9500 ug/L       0.47099     -0.9500 ppb        0.47099  49.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.9      0.1578 ug/L       0.65011      0.1578 ppb        0.65011 412.03%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.6      0.0717 ug/L       0.02547      0.0717 ppb        0.02547  35.50%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -56.4     -0.0903 ug/L       0.15535     -0.0903 ppb        0.15535 172.11%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                9.2      2.6355 ug/L       1.45412      2.6355 ppb        1.45412  55.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -70.7     -1.9761 ug/L       2.44454     -1.9761 ppb        2.44454 123.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -8.7     -0.0668 ug/L       0.59642     -0.0668 ppb        0.59642 892.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              125.6      1.1278 ug/L       0.06737      1.1278 ppb        0.06737   5.97%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -3.8     -0.2443 ug/L       0.73817     -0.2443 ppb        0.73817 302.22%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/9/2009 08:57:17
Data Type: Reprocessed on 12/9/2009 10:32:23

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	896476.4	896476.4	101.30	%			09:00:27
1	Sc Radial	5639.9	5639.9	99.6	%			08:59:10
1	Y 371.029	751861.8	751861.8	101.32	%			09:00:27
1	Y RADIAL	6141.4	6141.4	99.72	%			08:59:10
1	Ag 328.068†	1439.7	1193.6	5.5275	ug/L	5.5275	ppb	09:00:27
1	Al 396.153Radial†	258.9	280.3	206.82	ug/L	206.82	ppb	08:59:10
1	As 188.979†	43.4	72.1	29.441	ug/L	29.441	ppb	09:00:47
1	B 249.677†	1840.1	2340.3	50.773	ug/L	50.773	ppb	09:00:27
1	Ba 233.527†	636.6	640.5	4.8797	ug/L	4.8797	ppb	09:00:47
1	Be 313.107†	7816.4	13036.3	4.8572	ug/L	4.8572	ppb	09:00:27
1	Ca 317.933Radial†	148.1	131.0	200.36	ug/L	200.36	ppb	08:59:30
1	Cd 226.502†	296.0	480.1	5.2002	ug/L	5.2002	ppb	09:00:47
1	Co 228.616†	183.3	252.7	4.9146	ug/L	4.9146	ppb	09:00:47
1	Cr 267.716†	516.6	423.0	4.5517	ug/L	4.5517	ppb	09:00:47
1	Cu 324.752†	10374.0	3472.2	10.104	ug/L	10.104	ppb	09:00:27
1	Fe 238.204 Radial†	17.3	11.4	114.69	ug/L	114.69	ppb	08:59:30
1	K 766.490 Radial†	2975.0	817.0	148.06	ug/L	148.06	ppb	08:59:10
1	Mg 279.077 IEC†	11.4	9.7	362.42	ug/L	362.42	ppb	08:59:30
1	Mn 257.610†	9934.1	9403.2	10.223	ug/L	10.223	ppb	09:00:27
1	Mo 202.031†	170.3	148.1	9.6541	ug/L	9.6541	ppb	09:00:47
1	Na 589.592 Radial†	174.3	790.9	297.29	ug/L	297.29	ppb	08:59:10
1	Ni 231.604†	301.4	227.5	5.3940	ug/L	5.3940	ppb	09:00:47
1	P 214.914†	459.7	233.8	137.40	ug/L	137.40	ppb	09:00:47
1	Pb 220.353†	28.5	80.6	9.4798	ug/L	9.4798	ppb	09:00:47
1	S 181.975 Axial†	109.5	66.6	97.367	ug/L	97.367	ppb	09:00:47
1	Sb 206.836†	59.8	29.5	9.8092	ug/L	9.8092	ppb	09:00:47
1	Se 196.026†	26.7	49.8	30.127	ug/L	30.127	ppb	09:00:47
1	Si 251.611†	3572.6	3018.7	92.084	ug/L	92.084	ppb	09:00:47
1	Sn 189.927†	59.2	54.2	9.1911	ug/L	9.1911	ppb	09:00:47
1	Sr 421.552†	742.0	741.7	5.0050	ug/L	5.0050	ppb	08:59:10
1	Ti 334.940†	3181.4	4105.6	6.6263	ug/L	6.6263	ppb	09:00:27
1	Tl 190.801†	30.0	66.5	19.130	ug/L	19.130	ppb	09:00:47
1	U 409.014†	-119.8	1844.0	51.494	ug/L	51.494	ppb	09:00:27
1	V 292.402†	-576.7	727.2	5.1283	ug/L	5.1283	ppb	09:00:27
1	Zn 213.857†	1760.6	930.7	8.3039	ug/L	8.3039	ppb	09:00:47
1	SiO2†	3702.5	3166.1	206.79	ug/L	206.79	ppb	09:01:43
2	Sc 361.383	889696.1	889696.1	100.53	%			09:00:52
2	Sc Radial	5497.7	5497.7	97.1	%			08:59:35
2	Y 371.029	748074.5	748074.5	100.81	%			09:00:52
2	Y RADIAL	6002.9	6002.9	97.47	%			08:59:35
2	Ag 328.068†	1455.6	1220.3	5.6550	ug/L	5.6550	ppb	09:00:52
2	Al 396.153Radial†	248.9	276.7	204.18	ug/L	204.18	ppb	08:59:35
2	As 188.979†	44.9	73.9	30.185	ug/L	30.185	ppb	09:01:12
2	B 249.677†	1849.6	2363.6	51.275	ug/L	51.275	ppb	09:00:52
2	Ba 233.527†	663.8	672.3	5.1222	ug/L	5.1222	ppb	09:01:12
2	Be 313.107†	7969.5	13247.4	4.9325	ug/L	4.9325	ppb	09:00:52
2	Ca 317.933Radial†	145.2	131.9	201.65	ug/L	201.65	ppb	08:59:55
2	Cd 226.502†	261.6	448.1	4.8505	ug/L	4.8505	ppb	09:01:12
2	Co 228.616†	183.3	254.1	4.9439	ug/L	4.9439	ppb	09:01:12
2	Cr 267.716†	517.0	427.3	4.5977	ug/L	4.5977	ppb	09:01:12
2	Cu 324.752†	10333.8	3510.3	10.216	ug/L	10.216	ppb	09:00:52
2	Fe 238.204 Radial†	19.2	13.7	138.17	ug/L	138.17	ppb	08:59:55
2	K 766.490 Radial†	2995.5	915.5	165.94	ug/L	165.94	ppb	08:59:35
2	Mg 279.077 IEC†	13.0	11.6	433.28	ug/L	433.28	ppb	08:59:55
2	Mn 257.610†	9913.7	9457.7	10.284	ug/L	10.284	ppb	09:00:52
2	Mo 202.031†	163.1	142.2	9.2742	ug/L	9.2742	ppb	09:01:12
2	Na 589.592 Radial†	94.1	712.9	267.96	ug/L	267.96	ppb	08:59:35
2	Ni 231.604†	294.4	222.8	5.2825	ug/L	5.2825	ppb	09:01:12

2	P 214.914†	452.6	230.2	135.23 ug/L	135.23 ppb	09:01:12
2	Pb 220.353†	38.2	90.5	10.632 ug/L	10.632 ppb	09:01:12
2	S 181.975 Axial†	106.4	64.4	94.079 ug/L	94.079 ppb	09:01:12
2	Sb 206.836†	59.8	29.8	9.9548 ug/L	9.9548 ppb	09:01:12
2	Se 196.026†	20.7	44.0	26.718 ug/L	26.718 ppb	09:01:12
2	Si 251.611†	3576.5	3049.5	93.021 ug/L	93.021 ppb	09:01:12
2	Sn 189.927†	67.2	62.5	10.603 ug/L	10.603 ppb	09:01:12
2	Sr 421.552†	704.7	722.5	4.8754 ug/L	4.8754 ppb	08:59:35
2	Ti 334.940†	2138.6	3092.3	4.9858 ug/L	4.9858 ppb	09:00:52
2	Tl 190.801†	33.8	70.5	20.262 ug/L	20.262 ppb	09:01:12
2	U 409.014†	5.4	1967.6	54.945 ug/L	54.945 ppb	09:00:52
2	V 292.402†	-579.5	720.1	5.0813 ug/L	5.0813 ppb	09:00:52
2	Zn 213.857†	1770.3	953.6	8.5058 ug/L	8.5058 ppb	09:01:12
2	SiO2†	3692.8	3184.3	207.98 ug/L	207.98 ppb	09:01:48
3	Sc 361.383	911746.6	911746.6	103.03 %		09:01:18
3	Sc Radial	5691.2	5691.2	100 %		09:00:00
3	Y 371.029	767276.2	767276.2	103.40 %		09:01:18
3	Y RADIAL	6175.4	6175.4	100.3 %		09:00:00
3	Ag 328.068†	1410.1	1141.1	5.2890 ug/L	5.2890 ppb	09:01:18
3	Al 396.153Radial†	235.7	254.9	188.05 ug/L	188.05 ppb	09:00:00
3	As 188.979†	36.4	64.5	26.352 ug/L	26.352 ppb	09:01:38
3	B 249.677†	1919.5	2386.9	51.782 ug/L	51.782 ppb	09:01:18
3	Ba 233.527†	656.1	648.9	4.9443 ug/L	4.9443 ppb	09:01:38
3	Be 313.107†	7943.6	13030.6	4.8515 ug/L	4.8515 ppb	09:01:18
3	Ca 317.933Radial†	151.4	132.9	203.27 ug/L	203.27 ppb	09:00:20
3	Cd 226.502†	277.2	456.9	4.9462 ug/L	4.9462 ppb	09:01:38
3	Co 228.616†	183.2	249.6	4.8573 ug/L	4.8573 ppb	09:01:38
3	Cr 267.716†	522.0	419.7	4.5162 ug/L	4.5162 ppb	09:01:38
3	Cu 324.752†	10328.2	3256.2	9.4770 ug/L	9.4770 ppb	09:01:18
3	Fe 238.204 Radial†	19.6	13.5	135.71 ug/L	135.71 ppb	09:00:20
3	K 766.490 Radial†	3044.5	859.3	155.74 ug/L	155.74 ppb	09:00:00
3	Mg 279.077 IEC†	8.5	6.7	250.23 ug/L	250.23 ppb	09:00:20
3	Mn 257.610†	9907.6	9213.2	10.021 ug/L	10.021 ppb	09:01:18
3	Mo 202.031†	165.5	140.7	9.1734 ug/L	9.1734 ppb	09:01:38
3	Na 589.592 Radial†	122.1	737.5	277.19 ug/L	277.19 ppb	09:00:00
3	Ni 231.604†	288.7	210.1	4.9830 ug/L	4.9830 ppb	09:01:38
3	P 214.914†	457.7	224.3	131.83 ug/L	131.83 ppb	09:01:38
3	Pb 220.353†	43.7	94.9	11.145 ug/L	11.145 ppb	09:01:38
3	S 181.975 Axial†	115.0	70.1	102.50 ug/L	102.50 ppb	09:01:38
3	Sb 206.836†	64.7	33.2	11.050 ug/L	11.050 ppb	09:01:38
3	Se 196.026†	30.6	53.1	32.145 ug/L	32.145 ppb	09:01:38
3	Si 251.611†	3564.3	2951.6	90.034 ug/L	90.034 ppb	09:01:38
3	Sn 189.927†	65.4	59.2	10.032 ug/L	10.032 ppb	09:01:38
3	Sr 421.552†	738.1	731.0	4.9331 ug/L	4.9331 ppb	09:00:00
3	Ti 334.940†	2081.2	2985.1	4.8129 ug/L	4.8129 ppb	09:01:18
3	Tl 190.801†	28.3	64.3	18.493 ug/L	18.493 ppb	09:01:38
3	U 409.014†	-9.5	1953.0	54.537 ug/L	54.537 ppb	09:01:18
3	V 292.402†	-574.5	738.8	5.2022 ug/L	5.2022 ppb	09:01:18
3	Zn 213.857†	1772.2	912.9	8.1486 ug/L	8.1486 ppb	09:01:38
3	SiO2†	3724.3	3126.1	204.18 ug/L	204.18 ppb	09:01:53

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899306.4	101.62	%	1.276				1.26%
Sc Radial	5609.6	99.1	%	1.77				1.79%
Y 371.029	755737.5	101.84	%	1.371				1.35%
Y RADIAL	6106.6	99.15	%	1.484				1.50%
Ag 328.068†	1185.0	5.4905	ug/L	0.18581	5.4905	ppb	0.18581	3.38%
QC value within limits for Ag 328.068 Recovery = 109.81%								
Al 396.153Radial†	270.7	199.68	ug/L	10.163	199.68	ppb	10.163	5.09%
QC value within limits for Al 396.153Radial Recovery = 99.84%								
As 188.979†	70.2	28.659	ug/L	2.0326	28.659	ppb	2.0326	7.09%
QC value within limits for As 188.979 Recovery = 95.53%								
B 249.677†	2363.6	51.277	ug/L	0.5046	51.277	ppb	0.5046	0.98%
QC value within limits for B 249.677 Recovery = 102.55%								
Ba 233.527†	653.9	4.9821	ug/L	0.12557	4.9821	ppb	0.12557	2.52%
QC value within limits for Ba 233.527 Recovery = 99.64%								
Be 313.107†	13104.8	4.8804	ug/L	0.04516	4.8804	ppb	0.04516	0.93%
QC value within limits for Be 313.107 Recovery = 97.61%								

Ca 317.933Radial†	131.9	201.76 ug/L	1.457	201.76 ppb	1.457	0.72%
QC value within limits for Ca 317.933Radial Recovery = 100.88%						
Cd 226.502†	461.7	4.9990 ug/L	0.18071	4.9990 ppb	0.18071	3.61%
QC value within limits for Cd 226.502 Recovery = 99.98%						
Co 228.616†	252.1	4.9053 ug/L	0.04406	4.9053 ppb	0.04406	0.90%
QC value within limits for Co 228.616 Recovery = 98.11%						
Cr 267.716†	423.4	4.5552 ug/L	0.04086	4.5552 ppb	0.04086	0.90%
QC value within limits for Cr 267.716 Recovery = 91.10%						
Cu 324.752†	3412.9	9.9323 ug/L	0.39829	9.9323 ppb	0.39829	4.01%
QC value within limits for Cu 324.752 Recovery = 99.32%						
Fe 238.204 Radial†	12.8	129.52 ug/L	12.901	129.52 ppb	12.901	9.96%
QC value within limits for Fe 238.204 Radial Recovery = 129.52%						
K 766.490 Radial†	863.9	156.58 ug/L	8.970	156.58 ppb	8.970	5.73%
QC value within limits for K 766.490 Radial Recovery = 104.39%						
Mg 279.077 IEC†	9.4	348.64 ug/L	92.297	348.64 ppb	92.297	26.47%
QC value within limits for Mg 279.077 IEC Recovery = 116.21%						
Mn 257.610†	9358.0	10.176 ug/L	0.1375	10.176 ppb	0.1375	1.35%
QC value within limits for Mn 257.610 Recovery = 101.76%						
Mo 202.031†	143.7	9.3672 ug/L	0.25349	9.3672 ppb	0.25349	2.71%
QC value within limits for Mo 202.031 Recovery = 93.67%						
Na 589.592 Radial†	747.1	280.82 ug/L	14.998	280.82 ppb	14.998	5.34%
QC value within limits for Na 589.592 Radial Recovery = 93.61%						
Ni 231.604†	220.1	5.2199 ug/L	0.21252	5.2199 ppb	0.21252	4.07%
QC value within limits for Ni 231.604 Recovery = 104.40%						
P 214.914†	229.4	134.82 ug/L	2.807	134.82 ppb	2.807	2.08%
QC value within limits for P 214.914 Recovery = 89.88%						
Pb 220.353†	88.7	10.419 ug/L	0.8528	10.419 ppb	0.8528	8.19%
QC value within limits for Pb 220.353 Recovery = 104.19%						
S 181.975 Axial†	67.0	97.983 ug/L	4.2452	97.983 ppb	4.2452	4.33%
QC value within limits for S 181.975 Axial Recovery = 97.98%						
Sb 206.836†	30.8	10.271 ug/L	0.6785	10.271 ppb	0.6785	6.61%
QC value within limits for Sb 206.836 Recovery = 102.71%						
Se 196.026†	49.0	29.663 ug/L	2.7433	29.663 ppb	2.7433	9.25%
QC value within limits for Se 196.026 Recovery = 98.88%						
Si 251.611†	3006.6	91.713 ug/L	1.5276	91.713 ppb	1.5276	1.67%
QC value within limits for Si 251.611 Recovery = 91.71%						
Sn 189.927†	58.6	9.9422 ug/L	0.71035	9.9422 ppb	0.71035	7.14%
QC value within limits for Sn 189.927 Recovery = 99.42%						
Sr 421.552†	731.7	4.9378 ug/L	0.06490	4.9378 ppb	0.06490	1.31%
QC value within limits for Sr 421.552 Recovery = 98.76%						
Ti 334.940†	3394.3	5.4750 ug/L	1.00080	5.4750 ppb	1.00080	18.28%
QC value within limits for Ti 334.940 Recovery = 109.50%						
Tl 190.801†	67.1	19.295 ug/L	0.8963	19.295 ppb	0.8963	4.65%
QC value within limits for Tl 190.801 Recovery = 96.47%						
U 409.014†	1921.5	53.659 ug/L	1.8853	53.659 ppb	1.8853	3.51%
QC value within limits for U 409.014 Recovery = 107.32%						
V 292.402†	728.7	5.1373 ug/L	0.06097	5.1373 ppb	0.06097	1.19%
QC value within limits for V 292.402 Recovery = 102.75%						
Zn 213.857†	932.4	8.3194 ug/L	0.17911	8.3194 ppb	0.17911	2.15%
QC value within limits for Zn 213.857 Recovery = 83.19%						
SiO2†	3158.9	206.32 ug/L	1.943	206.32 ppb	1.943	0.94%
QC value within limits for SiO2 Recovery = 96.86%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/9/2009 09:04:05
Data Type: Reprocessed on 12/9/2009 10:32:24

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	766943.3	766943.3	86.663	%			09:06:31
1	Sc Radial	5161.3	5161.3	91.1	%			09:06:04
1	Y 371.029	627463.9	627463.9	84.556	%			09:06:31
1	Y RADIAL	5628.8	5628.8	91.40	%			09:06:04
1	Ag 328.068†	-9591.5	-11295.2	0.4346	ug/L	0.4346	ppb	09:06:31
1	Al 396.153Radial†	635373.7	697200.9	515400	ug/L	515400	ppb	09:05:59
1	As 188.979†	-79.1	-62.1	3.3536	ug/L	3.3536	ppb	09:06:51
1	B 249.677†	563.8	1174.4	0.6643	ug/L	0.6643	ppb	09:06:31
1	Ba 233.527†	-440.7	-496.5	3.2085	ug/L	3.2085	ppb	09:06:51
1	Be 313.107†	-5691.8	-1247.5	-0.5174	ug/L	-0.5174	ppb	09:06:31
1	Ca 317.933Radial†	282566.8	310036.2	474100	ug/L	474100	ppb	09:05:59
1	Cd 226.502†	1440.2	1849.6	1.3590	ug/L	1.3590	ppb	09:06:51
1	Co 228.616†	-29.5	37.7	-1.9298	ug/L	-1.9298	ppb	09:06:51
1	Cr 267.716†	-117.5	-222.5	0.9709	ug/L	0.9709	ppb	09:06:51
1	Cu 324.752†	4309.8	-1795.6	4.3244	ug/L	4.3244	ppb	09:06:31
1	Fe 238.204 Radial†	16943.3	18585.4	187140	ug/L	187140	ppb	09:06:04
1	K 766.490 Radial†	2130.7	167.7	46.717	ug/L	46.717	ppb	09:06:04
1	Mg 279.077 IEC†	11941.9	13101.8	487730	ug/L	487730	ppb	09:06:04
1	Mn 257.610†	575.1	260.2	9.8617	ug/L	9.8617	ppb	09:06:31
1	Mo 202.031†	-243.6	-301.0	-6.3338	ug/L	-6.3338	ppb	09:06:51
1	Na 589.592 Radial†	-477.6	91.9	34.544	ug/L	34.544	ppb	09:06:04
1	Ni 231.604†	200.7	161.4	3.8298	ug/L	3.8298	ppb	09:06:51
1	P 214.914†	155.6	-40.4	-0.3493	ug/L	-0.3493	ppb	09:06:51
1	Pb 220.353†	-752.7	-816.0	4.8633	ug/L	4.8633	ppb	09:06:51
1	S 181.975 Axial†	82.4	53.6	-22.981	ug/L	-22.981	ppb	09:06:51
1	Sb 206.836†	51.5	29.8	-2.8372	ug/L	-2.8372	ppb	09:06:51
1	Se 196.026†	-952.6	-1075.7	6.8174	ug/L	6.8174	ppb	09:06:51
1	Si 251.611†	456.2	18.4	1.1083	ug/L	1.1083	ppb	09:06:51
1	Sn 189.927†	-350.0	-408.2	-17.045	ug/L	-17.045	ppb	09:06:51
1	Sr 421.552†	523.9	571.5	-0.5365	ug/L	-0.5365	ppb	09:06:04
1	Ti 334.940†	-15509.4	-16931.2	-2.6642	ug/L	-2.6642	ppb	09:06:31
1	Tl 190.801†	-86.9	-63.4	-4.3006	ug/L	-4.3006	ppb	09:06:51
1	U 409.014†	-890.5	934.7	2.5732	ug/L	2.5732	ppb	09:06:31
1	V 292.402†	1061.3	2521.1	-0.6421	ug/L	-0.6421	ppb	09:06:51
1	Zn 213.857†	3253.7	2947.1	-8.0725	ug/L	-8.0725	ppb	09:06:51
1	SiO2†	664.6	278.1	19.399	ug/L	19.399	ppb	09:07:47
2	Sc 361.383	764245.3	764245.3	86.358	%			09:06:56
2	Sc Radial	5162.4	5162.4	91.2	%			09:06:14
2	Y 371.029	624372.6	624372.6	84.139	%			09:06:56
2	Y RADIAL	5563.1	5563.1	90.33	%			09:06:14
2	Ag 328.068†	-9701.4	-11461.5	-0.6081	ug/L	-0.6081	ppb	09:06:56
2	Al 396.153Radial†	630403.1	691597.3	511260	ug/L	511260	ppb	09:06:09
2	As 188.979†	-96.0	-81.9	-4.8844	ug/L	-4.8844	ppb	09:07:16
2	B 249.677†	717.6	1354.8	4.7079	ug/L	4.7079	ppb	09:06:56
2	Ba 233.527†	-465.6	-527.1	2.9406	ug/L	2.9406	ppb	09:07:16
2	Be 313.107†	-5728.6	-1313.3	-0.5410	ug/L	-0.5410	ppb	09:06:56
2	Ca 317.933Radial†	281090.2	308349.3	471520	ug/L	471520	ppb	09:06:09
2	Cd 226.502†	1414.8	1826.2	1.2008	ug/L	1.2008	ppb	09:07:16
2	Co 228.616†	-0.8	70.8	-1.2709	ug/L	-1.2709	ppb	09:07:16
2	Cr 267.716†	-87.2	-188.0	1.3244	ug/L	1.3244	ppb	09:07:16
2	Cu 324.752†	4253.3	-1843.4	4.1359	ug/L	4.1359	ppb	09:06:56
2	Fe 238.204 Radial†	16859.4	18489.4	186180	ug/L	186180	ppb	09:06:14
2	K 766.490 Radial†	2153.5	192.2	50.834	ug/L	50.834	ppb	09:06:14
2	Mg 279.077 IEC†	11966.3	13125.7	488620	ug/L	488620	ppb	09:06:14
2	Mn 257.610†	536.7	218.0	9.7029	ug/L	9.7029	ppb	09:06:56
2	Mo 202.031†	-225.5	-281.1	-5.1062	ug/L	-5.1062	ppb	09:07:16
2	Na 589.592 Radial†	-525.6	39.4	14.807	ug/L	14.807	ppb	09:06:14
2	Ni 231.604†	191.8	152.0	3.6067	ug/L	3.6067	ppb	09:07:16

2	P 214.914†	186.0	-4.6	20.288	ug/L	20.288 ppb	09:07:16
2	Pb 220.353†	-733.3	-796.5	6.2948	ug/L	6.2948 ppb	09:07:16
2	S 181.975 Axial†	77.0	47.7	-30.838	ug/L	-30.838 ppb	09:07:16
2	Sb 206.836†	58.0	37.6	-0.2059	ug/L	-0.2059 ppb	09:07:16
2	Se 196.026†	-961.5	-1089.9	-5.1919	ug/L	-5.1919 ppb	09:07:16
2	Si 251.611†	472.5	39.1	1.7195	ug/L	1.7195 ppb	09:07:16
2	Sn 189.927†	-351.8	-411.6	-17.908	ug/L	-17.908 ppb	09:07:16
2	Sr 421.552†	511.6	557.9	-0.6046	ug/L	-0.6046 ppb	09:06:14
2	Ti 334.940†	-15217.0	-16655.7	-2.3559	ug/L	-2.3559 ppb	09:06:56
2	Tl 190.801†	-74.8	-49.7	-0.5025	ug/L	-0.5025 ppb	09:07:16
2	U 409.014†	-703.0	1148.1	8.6579	ug/L	8.6579 ppb	09:06:56
2	V 292.402†	1097.2	2567.0	-0.1353	ug/L	-0.1353 ppb	09:07:16
2	Zn 213.857†	3249.4	2955.4	-7.9349	ug/L	-7.9349 ppb	09:07:16
2	SiO2†	433.3	13.0	1.9883	ug/L	1.9883 ppb	09:07:52
3	Sc 361.383	767298.0	767298.0	86.703	%		09:07:21
3	Sc Radial	5118.2	5118.2	90.4	%		09:06:24
3	Y 371.029	626529.7	626529.7	84.430	%		09:07:21
3	Y RADIAL	5591.8	5591.8	90.79	%		09:06:24
3	Ag 328.068†	-9719.7	-11437.9	-0.3226	ug/L	-0.3226 ppb	09:07:21
3	Al 396.153Radial†	621881.8	688142.3	508710	ug/L	508710 ppb	09:06:19
3	As 188.979†	-91.9	-76.8	-2.7216	ug/L	-2.7216 ppb	09:07:42
3	B 249.677†	642.6	1265.1	2.6882	ug/L	2.6882 ppb	09:07:21
3	Ba 233.527†	-467.0	-526.6	2.9636	ug/L	2.9636 ppb	09:07:42
3	Be 313.107†	-5860.9	-1439.5	-0.5875	ug/L	-0.5875 ppb	09:07:21
3	Ca 317.933Radial†	278239.3	307858.4	470770	ug/L	470770 ppb	09:06:19
3	Cd 226.502†	1473.5	1887.3	1.8105	ug/L	1.8105 ppb	09:07:42
3	Co 228.616†	4.0	76.4	-1.1731	ug/L	-1.1731 ppb	09:07:42
3	Cr 267.716†	-115.6	-220.3	0.9845	ug/L	0.9845 ppb	09:07:42
3	Cu 324.752†	4378.8	-1718.3	4.5270	ug/L	4.5270 ppb	09:07:21
3	Fe 238.204 Radial†	16762.7	18542.2	186710	ug/L	186710 ppb	09:06:24
3	K 766.490 Radial†	2256.8	326.9	74.991	ug/L	74.991 ppb	09:06:24
3	Mg 279.077 IEC†	11908.3	13175.0	490450	ug/L	490450 ppb	09:06:24
3	Mn 257.610†	624.1	316.4	9.8287	ug/L	9.8287 ppb	09:07:21
3	Mo 202.031†	-233.3	-289.1	-5.5891	ug/L	-5.5891 ppb	09:07:42
3	Na 589.592 Radial†	-457.6	109.6	41.195	ug/L	41.195 ppb	09:06:24
3	Ni 231.604†	176.2	133.1	3.1573	ug/L	3.1573 ppb	09:07:42
3	P 214.914†	175.4	-17.7	11.206	ug/L	11.206 ppb	09:07:42
3	Pb 220.353†	-744.4	-806.0	4.5657	ug/L	4.5657 ppb	09:07:42
3	S 181.975 Axial†	70.1	39.4	-42.497	ug/L	-42.497 ppb	09:07:42
3	Sb 206.836†	64.3	44.5	2.1615	ug/L	2.1615 ppb	09:07:42
3	Se 196.026†	-961.9	-1086.0	-1.6214	ug/L	-1.6214 ppb	09:07:42
3	Si 251.611†	441.3	1.0	0.5480	ug/L	0.5480 ppb	09:07:42
3	Sn 189.927†	-341.3	-397.9	-15.662	ug/L	-15.662 ppb	09:07:42
3	Sr 421.552†	510.7	561.7	-0.5719	ug/L	-0.5719 ppb	09:06:24
3	Ti 334.940†	-15170.6	-16532.2	-2.1967	ug/L	-2.1967 ppb	09:07:21
3	Tl 190.801†	-68.0	-41.5	1.7765	ug/L	1.7765 ppb	09:07:42
3	U 409.014†	-596.4	1274.3	12.118	ug/L	12.118 ppb	09:07:21
3	V 292.402†	1085.2	2548.1	-0.3030	ug/L	-0.3030 ppb	09:07:42
3	Zn 213.857†	3243.0	2933.1	-8.2463	ug/L	-8.2463 ppb	09:07:42
3	SiO2†	432.8	10.4	1.8063	ug/L	1.8063 ppb	09:07:57

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	766162.2	86.575	%	0.1887				0.22%
Sc Radial	5147.3	90.9	%	0.45				0.49%
Y 371.029	626122.1	84.375	%	0.2136				0.25%
Y RADIAL	5594.6	90.84	%	0.535				0.59%
Ag 328.068†	-11398.2	-0.1654	ug/L	0.53884	-0.1654	ppb	0.53884	325.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	692313.5	511790	ug/L	3379.6	511790	ppb	3379.6	0.66%
QC value within limits for Al 396.153Radial Recovery = 102.36%								
As 188.979†	-73.6	-1.4174	ug/L	4.27106	-1.4174	ppb	4.27106	301.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1264.8	2.6868	ug/L	2.02176	2.6868	ppb	2.02176	75.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-516.7	3.0375	ug/L	0.14849	3.0375	ppb	0.14849	4.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1333.4	-0.5486	ug/L	0.03565	-0.5486	ppb	0.03565	6.50%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     308747.9      472130 ug/L        1746.8      472130 ppb        1746.8   0.37%
   QC value within limits for Ca 317.933Radial  Recovery = 94.43%
Cd 226.502†             1854.4      1.4568 ug/L       0.31637      1.4568 ppb       0.31637  21.72%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.6     -1.4580 ug/L       0.41157     -1.4580 ppb       0.41157  28.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -210.2      1.0933 ug/L       0.20027      1.0933 ppb       0.20027  18.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -1785.8      4.3291 ug/L       0.19559      4.3291 ppb       0.19559   4.52%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     18539.0      186680 ug/L         484.3      186680 ppb         484.3   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.34%
K 766.490 Radial†        228.9      57.514 ug/L       15.2747      57.514 ppb       15.2747  26.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        13134.2      488940 ug/L        1388.6      488940 ppb        1388.6   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.79%
Mn 257.610†              264.9      9.7978 ug/L       0.08380      9.7978 ppb       0.08380   0.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -290.4     -5.6764 ug/L       0.61843     -5.6764 ppb       0.61843  10.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        80.3      30.182 ug/L       13.7241      30.182 ppb       13.7241  45.47%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              148.9      3.5313 ug/L       0.34251      3.5313 ppb       0.34251   9.70%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -20.9      10.382 ug/L       10.3435      10.382 ppb       10.3435  99.63%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -806.2      5.2413 ug/L       0.92442      5.2413 ppb       0.92442  17.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          46.9     -32.105 ug/L        9.8196     -32.105 ppb        9.8196  30.59%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               37.3     -0.2938 ug/L       2.50051     -0.2938 ppb       2.50051 851.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1083.9      0.0013 ug/L       6.16695      0.0013 ppb       6.16695 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               19.5      1.1253 ug/L       0.58594      1.1253 ppb       0.58594  52.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -405.9     -16.872 ug/L        1.1328     -16.872 ppb        1.1328   6.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              563.7     -0.5710 ug/L       0.03408     -0.5710 ppb       0.03408   5.97%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16706.4     -2.4056 ug/L       0.23766     -2.4056 ppb       0.23766   9.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -51.6     -1.0089 ug/L       3.07003     -1.0089 ppb       3.07003 304.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1119.1      7.7830 ug/L       4.83222      7.7830 ppb       4.83222  62.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2545.4     -0.3602 ug/L       0.25817     -0.3602 ppb       0.25817  71.68%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             2945.2     -8.0845 ug/L       0.15604     -8.0845 ppb       0.15604   1.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    100.5      7.7312 ug/L      10.10504      7.7312 ppb      10.10504 130.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/9/2009 09:10:08
Data Type: Reprocessed on 12/9/2009 10:32:25

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	780445.9	780445.9	88.189	%			09:12:34
1	Sc Radial	5114.4	5114.4	90.3	%			09:12:06
1	Y 371.029	635832.4	635832.4	85.683	%			09:12:34
1	Y RADIAL	5537.7	5537.7	89.92	%			09:12:06
1	Ag 328.068†	41866.3	47245.9	273.54	ug/L	273.54	ppb	09:12:34
1	Al 396.153Radial†	630325.8	698004.9	515980	ug/L	515980	ppb	09:12:01
1	As 188.979†	991.3	1153.3	503.46	ug/L	503.46	ppb	09:12:54
1	B 249.677†	21231.0	24598.3	507.60	ug/L	507.60	ppb	09:12:34
1	Ba 233.527†	55815.1	63302.6	488.99	ug/L	488.99	ppb	09:12:34
1	Be 313.107†	562241.9	642864.2	239.85	ug/L	239.85	ppb	09:12:34
1	Ca 317.933Radial†	282747.7	313080.0	478750	ug/L	478750	ppb	09:12:01
1	Cd 226.502†	39025.0	44439.6	463.38	ug/L	463.38	ppb	09:12:34
1	Co 228.616†	19801.1	22524.9	434.70	ug/L	434.70	ppb	09:12:54
1	Cr 267.716†	38642.3	43730.8	475.32	ug/L	475.32	ppb	09:12:34
1	Cu 324.752†	170780.1	186884.3	553.22	ug/L	553.22	ppb	09:12:34
1	Fe 238.204 Radial†	17064.7	18890.4	190230	ug/L	190230	ppb	09:12:06
1	K 766.490 Radial†	29740.0	30762.0	5592.1	ug/L	5592.1	ppb	09:12:01
1	Mg 279.077 IEC†	11973.4	13256.8	493510	ug/L	493510	ppb	09:12:06
1	Mn 257.610†	384453.9	435541.1	483.09	ug/L	483.09	ppb	09:12:34
1	Mo 202.031†	6369.3	7202.4	482.65	ug/L	482.65	ppb	09:12:54
1	Na 589.592 Radial†	13215.3	15249.8	5731.9	ug/L	5731.9	ppb	09:12:06
1	Ni 231.604†	16373.4	18496.2	438.60	ug/L	438.60	ppb	09:12:54
1	P 214.914†	3863.7	4161.2	2412.2	ug/L	2412.2	ppb	09:12:54
1	Pb 220.353†	2656.6	3064.9	459.19	ug/L	459.19	ppb	09:12:54
1	S 181.975 Axial†	1676.8	1859.9	2618.2	ug/L	2618.2	ppb	09:12:54
1	Sb 206.836†	1446.8	1611.0	517.85	ug/L	517.85	ppb	09:12:54
1	Se 196.026†	2709.8	3096.2	2505.7	ug/L	2505.7	ppb	09:12:54
1	Si 251.611†	150356.9	169986.4	5187.8	ug/L	5187.8	ppb	09:12:34
1	Sn 189.927†	2207.7	2499.1	475.32	ug/L	475.32	ppb	09:12:54
1	Sr 421.552†	71827.2	79533.6	532.46	ug/L	532.46	ppb	09:12:01
1	Ti 334.940†	267261.3	304021.1	516.29	ug/L	516.29	ppb	09:12:34
1	Tl 190.801†	1322.9	1537.0	457.80	ug/L	457.80	ppb	09:12:54
1	U 409.014†	14007.6	17845.8	473.75	ug/L	473.75	ppb	09:12:34
1	V 292.402†	65551.7	75627.6	499.67	ug/L	499.67	ppb	09:12:34
1	Zn 213.857†	51418.0	57497.2	478.79	ug/L	478.79	ppb	09:12:34
1	SiO2†	149270.3	168773.5	11027	ug/L	11027	ppb	09:13:52
2	Sc 361.383	775696.5	775696.5	87.652	%			09:13:00
2	Sc Radial	5138.5	5138.5	90.7	%			09:12:16
2	Y 371.029	633790.1	633790.1	85.408	%			09:13:00
2	Y RADIAL	5552.8	5552.8	90.16	%			09:12:16
2	Ag 328.068†	41631.8	47269.1	273.46	ug/L	273.46	ppb	09:13:00
2	Al 396.153Radial†	635086.3	699975.6	517430	ug/L	517430	ppb	09:12:11
2	As 188.979†	986.8	1155.0	504.07	ug/L	504.07	ppb	09:13:20
2	B 249.677†	21119.8	24618.9	508.12	ug/L	508.12	ppb	09:13:00
2	Ba 233.527†	55464.4	63290.0	488.87	ug/L	488.87	ppb	09:13:00
2	Be 313.107†	558868.7	642919.3	239.87	ug/L	239.87	ppb	09:13:00
2	Ca 317.933Radial†	284423.5	313457.4	479330	ug/L	479330	ppb	09:12:11
2	Cd 226.502†	38722.8	44365.7	462.64	ug/L	462.64	ppb	09:13:00
2	Co 228.616†	19762.0	22617.7	436.52	ug/L	436.52	ppb	09:13:20
2	Cr 267.716†	38399.3	43721.8	475.22	ug/L	475.22	ppb	09:13:00
2	Cu 324.752†	169147.6	186207.5	551.22	ug/L	551.22	ppb	09:13:00
2	Fe 238.204 Radial†	17094.8	18834.9	189670	ug/L	189670	ppb	09:12:16
2	K 766.490 Radial†	29861.5	30741.4	5588.5	ug/L	5588.5	ppb	09:12:11
2	Mg 279.077 IEC†	12022.3	13248.6	493200	ug/L	493200	ppb	09:12:16
2	Mn 257.610†	381195.7	434493.1	481.90	ug/L	481.90	ppb	09:13:00
2	Mo 202.031†	6387.5	7267.4	486.84	ug/L	486.84	ppb	09:13:20
2	Na 589.592 Radial†	13168.6	15129.7	5686.8	ug/L	5686.8	ppb	09:12:16
2	Ni 231.604†	16304.0	18530.7	439.42	ug/L	439.42	ppb	09:13:20

2	P 214.914†	3843.7	4165.2	2415.9	ug/L	2415.9 ppb	09:13:20
2	Pb 220.353†	2660.5	3087.9	462.25	ug/L	462.25 ppb	09:13:20
2	S 181.975 Axial†	1648.1	1838.8	2587.0	ug/L	2587.0 ppb	09:13:20
2	Sb 206.836†	1446.5	1620.6	521.00	ug/L	521.00 ppb	09:13:20
2	Se 196.026†	2712.6	3118.2	2517.3	ug/L	2517.3 ppb	09:13:20
2	Si 251.611†	149037.3	169524.8	5173.6	ug/L	5173.6 ppb	09:13:00
2	Sn 189.927†	2190.0	2494.2	474.55	ug/L	474.55 ppb	09:13:20
2	Sr 421.552†	72301.3	79682.9	533.46	ug/L	533.46 ppb	09:12:11
2	Ti 334.940†	264911.8	303196.2	514.99	ug/L	514.99 ppb	09:13:00
2	Tl 190.801†	1308.5	1529.7	455.73	ug/L	455.73 ppb	09:13:20
2	U 409.014†	13749.8	17649.0	468.32	ug/L	468.32 ppb	09:13:00
2	V 292.402†	65041.7	75500.9	498.94	ug/L	498.94 ppb	09:13:00
2	Zn 213.857†	50996.0	57372.8	477.73	ug/L	477.73 ppb	09:13:00
2	SiO2†	149212.3	169743.7	11091	ug/L	11091 ppb	09:13:57
3	Sc 361.383	781218.8	781218.8	88.276	%		09:13:26
3	Sc Radial	5178.3	5178.3	91.4	%		09:12:27
3	Y 371.029	637300.9	637300.9	85.881	%		09:13:26
3	Y RADIAL	5577.3	5577.3	90.56	%		09:12:27
3	Ag 328.068†	41948.8	47292.5	273.33	ug/L	273.33 ppb	09:13:26
3	Al 396.153Radial†	637978.3	697749.6	515790	ug/L	515790 ppb	09:12:22
3	As 188.979†	975.4	1134.2	495.43	ug/L	495.43 ppb	09:13:46
3	B 249.677†	21255.5	24602.4	507.87	ug/L	507.87 ppb	09:13:26
3	Ba 233.527†	55834.0	63261.3	488.62	ug/L	488.62 ppb	09:13:26
3	Be 313.107†	563317.0	643451.4	240.06	ug/L	240.06 ppb	09:13:26
3	Ca 317.933Radial†	285215.9	311910.6	476960	ug/L	476960 ppb	09:12:22
3	Cd 226.502†	39066.4	44442.6	463.55	ug/L	463.55 ppb	09:13:26
3	Co 228.616†	19878.9	22590.7	436.01	ug/L	436.01 ppb	09:13:46
3	Cr 267.716†	38681.8	43732.2	475.31	ug/L	475.31 ppb	09:13:26
3	Cu 324.752†	170015.5	185826.6	550.07	ug/L	550.07 ppb	09:13:26
3	Fe 238.204 Radial†	17150.0	18750.2	188820	ug/L	188820 ppb	09:12:27
3	K 766.490 Radial†	30111.2	30761.1	5592.1	ug/L	5592.1 ppb	09:12:22
3	Mg 279.077 IEC†	12021.1	13145.2	489350	ug/L	489350 ppb	09:12:27
3	Mn 257.610†	383873.4	434452.2	481.85	ug/L	481.85 ppb	09:13:26
3	Mo 202.031†	6399.7	7229.7	484.33	ug/L	484.33 ppb	09:13:46
3	Na 589.592 Radial†	13269.8	15128.5	5686.4	ug/L	5686.4 ppb	09:12:27
3	Ni 231.604†	16386.9	18493.1	438.53	ug/L	438.53 ppb	09:13:46
3	P 214.914†	3884.9	4180.9	2425.5	ug/L	2425.5 ppb	09:13:46
3	Pb 220.353†	2672.5	3080.0	461.03	ug/L	461.03 ppb	09:13:46
3	S 181.975 Axial†	1677.0	1858.3	2615.7	ug/L	2615.7 ppb	09:13:46
3	Sb 206.836†	1483.5	1650.9	530.81	ug/L	530.81 ppb	09:13:46
3	Se 196.026†	2703.6	3086.2	2495.4	ug/L	2495.4 ppb	09:13:46
3	Si 251.611†	150003.2	169417.1	5170.4	ug/L	5170.4 ppb	09:13:26
3	Sn 189.927†	2201.7	2489.9	473.55	ug/L	473.55 ppb	09:13:46
3	Sr 421.552†	72639.7	79439.4	531.84	ug/L	531.84 ppb	09:12:22
3	Ti 334.940†	266461.0	302814.7	514.25	ug/L	514.25 ppb	09:13:26
3	Tl 190.801†	1325.4	1538.3	458.16	ug/L	458.16 ppb	09:13:46
3	U 409.014†	13866.4	17670.2	469.02	ug/L	469.02 ppb	09:13:26
3	V 292.402†	65552.9	75555.5	499.32	ug/L	499.32 ppb	09:13:26
3	Zn 213.857†	51255.7	57255.7	476.90	ug/L	476.90 ppb	09:13:26
3	SiO2†	149513.2	168881.2	11034	ug/L	11034 ppb	09:14:02

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	779120.4	88.039	%	0.3379				0.38%
Sc Radial	5143.7	90.8	%	0.57				0.63%
Y 371.029	635641.1	85.658	%	0.2376				0.28%
Y RADIAL	5555.9	90.21	%	0.324				0.36%
Ag 328.068†	47269.2	273.45	ug/L	0.104	273.45	ppb	0.104	0.04%
QC value within limits for Ag 328.068 Recovery = 109.38%								
Al 396.153Radial†	698576.7	516400	ug/L	900.4	516400	ppb	900.4	0.17%
QC value within limits for Al 396.153Radial Recovery = 103.28%								
As 188.979†	1147.5	500.99	ug/L	4.823	500.99	ppb	4.823	0.96%
QC value within limits for As 188.979 Recovery = 100.20%								
B 249.677†	24606.5	507.87	ug/L	0.258	507.87	ppb	0.258	0.05%
QC value within limits for B 249.677 Recovery = 101.57%								
Ba 233.527†	63284.6	488.82	ug/L	0.187	488.82	ppb	0.187	0.04%
QC value within limits for Ba 233.527 Recovery = 97.76%								
Be 313.107†	643078.3	239.93	ug/L	0.119	239.93	ppb	0.119	0.05%
QC value within limits for Be 313.107 Recovery = 95.97%								

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Ca 317.933Radial†     312816.0      478350 ug/L        1233.3      478350 ppb         1233.3   0.26%
   QC value within limits for Ca 317.933Radial  Recovery = 95.67%
Cd 226.502†            44416.0      463.19 ug/L         0.488      463.19 ppb          0.488   0.11%
   QC value within limits for Cd 226.502  Recovery = 92.64%
Co 228.616†            22577.8      435.74 ug/L         0.940      435.74 ppb          0.940   0.22%
   QC value within limits for Co 228.616  Recovery = 87.15%
Cr 267.716†            43728.2      475.28 ug/L         0.059      475.28 ppb          0.059   0.01%
   QC value within limits for Cr 267.716  Recovery = 95.06%
Cu 324.752†           186306.1      551.50 ug/L         1.593      551.50 ppb          1.593   0.29%
   QC value within limits for Cu 324.752  Recovery = 110.30%
Fe 238.204 Radial†     18825.2      189570 ug/L         710.8      189570 ppb          710.8   0.37%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.79%
K 766.490 Radial†      30754.8      5590.9 ug/L          2.08      5590.9 ppb           2.08   0.04%
   QC value within limits for K 766.490 Radial  Recovery = 111.82%
Mg 279.077 IEC†        13216.9      492020 ug/L        2315.9      492020 ppb         2315.9   0.47%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.40%
Mn 257.610†           434828.8      482.28 ug/L         0.704      482.28 ppb          0.704   0.15%
   QC value within limits for Mn 257.610  Recovery = 96.46%
Mo 202.031†             7233.1      484.61 ug/L         2.110      484.61 ppb          2.110   0.44%
   QC value within limits for Mo 202.031  Recovery = 96.92%
Na 589.592 Radial†     15169.3      5701.7 ug/L         26.18      5701.7 ppb          26.18   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 114.03%
Ni 231.604†            18506.6      438.85 ug/L         0.495      438.85 ppb          0.495   0.11%
   QC value within limits for Ni 231.604  Recovery = 87.77%
P 214.914†              4169.1      2417.9 ug/L          6.84      2417.9 ppb           6.84   0.28%
   QC value within limits for P 214.914  Recovery = 96.71%
Pb 220.353†             3077.6      460.82 ug/L         1.542      460.82 ppb          1.542   0.33%
   QC value within limits for Pb 220.353  Recovery = 92.16%
S 181.975 Axial†        1852.3      2607.0 ug/L         17.35      2607.0 ppb          17.35   0.67%
   QC value within limits for S 181.975 Axial  Recovery = 104.28%
Sb 206.836†             1627.5      523.22 ug/L         6.758      523.22 ppb          6.758   1.29%
   QC value within limits for Sb 206.836  Recovery = 104.64%
Se 196.026†             3100.2      2506.1 ug/L         11.00      2506.1 ppb          11.00   0.44%
   QC value within limits for Se 196.026  Recovery = 100.24%
Si 251.611†           169642.8      5177.3 ug/L          9.27      5177.3 ppb           9.27   0.18%
   QC value within limits for Si 251.611  Recovery = 103.55%
Sn 189.927†             2494.4      474.47 ug/L         0.883      474.47 ppb          0.883   0.19%
   QC value within limits for Sn 189.927  Recovery = 94.89%
Sr 421.552†            79552.0      532.59 ug/L         0.818      532.59 ppb          0.818   0.15%
   QC value within limits for Sr 421.552  Recovery = 106.52%
Ti 334.940†           303344.0      515.18 ug/L         1.034      515.18 ppb          1.034   0.20%
   QC value within limits for Ti 334.940  Recovery = 103.04%
Tl 190.801†             1535.0      457.23 ug/L         1.309      457.23 ppb          1.309   0.29%
   QC value within limits for Tl 190.801  Recovery = 91.45%
U 409.014†             17721.7      470.36 ug/L         2.954      470.36 ppb          2.954   0.63%
   QC value within limits for U 409.014  Recovery = 94.07%
V 292.402†             75561.3      499.31 ug/L         0.363      499.31 ppb          0.363   0.07%
   QC value within limits for V 292.402  Recovery = 99.86%
Zn 213.857†            57375.3      477.80 ug/L         0.948      477.80 ppb          0.948   0.20%
   QC value within limits for Zn 213.857  Recovery = 95.56%
SiO2†                 169132.8       11051 ug/L          34.7       11051 ppb           34.7   0.31%
   QC value within limits for SiO2  Recovery = 103.33%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/9/2009 09:16:12
Data Type: Reprocessed on 12/9/2009 10:32:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	763793.8	763793.8	86.307	%			09:18:38
1	Sc Radial	5036.5	5036.5	88.9	%			09:18:10
1	Y 371.029	625631.0	625631.0	84.309	%			09:18:38
1	Y RADIAL	5462.4	5462.4	88.69	%			09:18:10
1	Ag 328.068†	-22623.6	-26440.5	-2.4851	ug/L	-2.4851	ppb	09:18:38
1	Al 396.153Radial†	612350.3	688582.2	509030	ug/L	509030	ppb	09:18:05
1	As 188.979†	-205.0	-208.4	-17.747	ug/L	-17.747	ppb	09:18:58
1	B 249.677†	1673.4	2462.8	-4.4154	ug/L	-4.4154	ppb	09:18:38
1	Ba 233.527†	-1280.7	-1471.9	5.0617	ug/L	5.0617	ppb	09:18:58
1	Be 313.107†	-12272.9	-8899.8	-3.3362	ug/L	-3.3362	ppb	09:18:38
1	Ca 317.933Radial†	272811.8	306747.5	469070	ug/L	469070	ppb	09:18:05
1	Cd 226.502†	3628.2	4391.6	4.0431	ug/L	4.0431	ppb	09:18:58
1	Co 228.616†	214.5	320.3	-0.0771	ug/L	-0.0771	ppb	09:18:58
1	Cr 267.716†	32.6	-49.2	2.6890	ug/L	2.6890	ppb	09:18:58
1	Cu 324.752†	1614.1	-4898.5	8.0026	ug/L	8.0026	ppb	09:18:38
1	Fe 238.204 Radial†	38525.8	43314.6	436150	ug/L	436150	ppb	09:18:10
1	K 766.490 Radial†	4725.2	3143.0	369.49	ug/L	369.49	ppb	09:18:10
1	Mg 279.077 IEC†	11576.1	13015.1	484290	ug/L	484290	ppb	09:18:10
1	Mn 257.610†	-23673.7	-27833.0	4.2239	ug/L	4.2239	ppb	09:18:38
1	Mo 202.031†	-506.0	-606.3	-8.5555	ug/L	-8.5555	ppb	09:18:58
1	Na 589.592 Radial†	1209136.0	1360237.8	511270	ug/L	511270	ppb	09:18:05
1	Ni 231.604†	266.7	238.8	5.6635	ug/L	5.6635	ppb	09:18:58
1	P 214.914†	534.1	398.9	59.048	ug/L	59.048	ppb	09:18:58
1	Pb 220.353†	-498.0	-524.4	17.040	ug/L	17.040	ppb	09:18:58
1	S 181.975 Axial†	105.9	81.2	18.595	ug/L	18.595	ppb	09:18:58
1	Sb 206.836†	53.7	32.6	1.7192	ug/L	1.7192	ppb	09:18:58
1	Se 196.026†	-2237.2	-2568.7	-122.29	ug/L	-122.29	ppb	09:18:58
1	Si 251.611†	-528.9	-1120.9	-33.552	ug/L	-33.552	ppb	09:18:58
1	Sn 189.927†	-375.4	-439.2	-19.491	ug/L	-19.491	ppb	09:18:58
1	Sr 421.552†	749.4	839.2	1.3173	ug/L	1.3173	ppb	09:18:10
1	Ti 334.940†	-8730.6	-9150.7	3.3150	ug/L	3.3150	ppb	09:18:38
1	Tl 190.801†	-114.2	-95.4	-13.795	ug/L	-13.795	ppb	09:18:58
1	U 409.014†	442887.7	515115.6	14337	ug/L	14337	ppb	09:18:38
1	V 292.402†	2549.7	4250.6	0.6803	ug/L	0.6803	ppb	09:18:58
1	Zn 213.857†	6483.0	6704.3	2.0653	ug/L	2.0653	ppb	09:18:58
1	SiO2†	-535.5	-1109.3	-71.070	ug/L	-71.070	ppb	09:19:55
2	Sc 361.383	752540.0	752540.0	85.035	%			09:19:04
2	Sc Radial	5004.3	5004.3	88.4	%			09:18:21
2	Y 371.029	616389.8	616389.8	83.063	%			09:19:04
2	Y RADIAL	5509.4	5509.4	89.46	%			09:18:21
2	Ag 328.068†	-22360.4	-26523.0	-1.9431	ug/L	-1.9431	ppb	09:19:04
2	Al 396.153Radial†	625834.9	708278.4	523590	ug/L	523590	ppb	09:18:16
2	As 188.979†	-193.6	-198.5	-13.190	ug/L	-13.190	ppb	09:19:24
2	B 249.677†	1627.5	2437.7	-5.4032	ug/L	-5.4032	ppb	09:19:04
2	Ba 233.527†	-1330.7	-1552.9	4.5717	ug/L	4.5717	ppb	09:19:24
2	Be 313.107†	-12185.2	-9009.3	-3.3768	ug/L	-3.3768	ppb	09:19:04
2	Ca 317.933Radial†	278076.2	314681.4	481200	ug/L	481200	ppb	09:18:16
2	Cd 226.502†	3667.6	4500.9	4.8957	ug/L	4.8957	ppb	09:19:24
2	Co 228.616†	229.0	341.0	0.2719	ug/L	0.2719	ppb	09:19:24
2	Cr 267.716†	78.5	5.3	3.3505	ug/L	3.3505	ppb	09:19:24
2	Cu 324.752†	1555.8	-4939.1	8.0547	ug/L	8.0547	ppb	09:19:04
2	Fe 238.204 Radial†	38572.1	43646.1	439490	ug/L	439490	ppb	09:18:21
2	K 766.490 Radial†	4818.1	3282.4	389.26	ug/L	389.26	ppb	09:18:21
2	Mg 279.077 IEC†	11577.0	13099.9	487440	ug/L	487440	ppb	09:18:21
2	Mn 257.610†	-23155.3	-27633.6	4.7147	ug/L	4.7147	ppb	09:19:04
2	Mo 202.031†	-517.7	-628.8	-9.7851	ug/L	-9.7851	ppb	09:19:24
2	Na 589.592 Radial†	1234729.5	1397960.7	525450	ug/L	525450	ppb	09:18:16
2	Ni 231.604†	301.7	284.7	6.7502	ug/L	6.7502	ppb	09:19:24

2	P 214.914†	553.7	431.2	80.461 ug/L	80.461 ppb	09:19:24
2	Pb 220.353†	-497.8	-532.9	19.042 ug/L	19.042 ppb	09:19:24
2	S 181.975 Axial†	92.1	66.8	-5.3200 ug/L	-5.3200 ppb	09:19:24
2	Sb 206.836†	69.9	52.6	7.7971 ug/L	7.7971 ppb	09:19:24
2	Se 196.026†	-2285.9	-2664.7	-167.18 ug/L	-167.18 ppb	09:19:24
2	Si 251.611†	-502.7	-1099.1	-32.867 ug/L	-32.867 ppb	09:19:24
2	Sn 189.927†	-376.2	-446.7	-19.443 ug/L	-19.443 ppb	09:19:24
2	Sr 421.552†	750.5	845.9	1.2503 ug/L	1.2503 ppb	09:18:21
2	Ti 334.940†	-8569.2	-9112.2	4.0286 ug/L	4.0286 ppb	09:19:04
2	Tl 190.801†	-95.5	-75.4	-7.6618 ug/L	-7.6618 ppb	09:19:24
2	U 409.014†	435064.2	513589.1	14294 ug/L	14294 ppb	09:19:04
2	V 292.402†	2602.1	4356.5	0.8542 ug/L	0.8542 ppb	09:19:24
2	Zn 213.857†	6474.1	6806.1	2.5476 ug/L	2.5476 ppb	09:19:24
2	SiO2†	-591.2	-1184.1	-75.918 ug/L	-75.918 ppb	09:20:00
3	Sc 361.383	757512.2	757512.2	85.597 %		09:19:30
3	Sc Radial	5109.7	5109.7	90.2 %		09:18:31
3	Y 371.029	619781.3	619781.3	83.520 %		09:19:30
3	Y RADIAL	5556.0	5556.0	90.21 %		09:18:31
3	Ag 328.068†	-22684.0	-26728.4	-3.9162 ug/L	-3.9162 ppb	09:19:30
3	Al 396.153Radial†	610370.7	676525.8	500120 ug/L	500120 ppb	09:18:26
3	As 188.979†	-196.5	-200.3	-14.576 ug/L	-14.576 ppb	09:19:50
3	B 249.677†	1758.4	2578.2	-1.8195 ug/L	-1.8195 ppb	09:19:30
3	Ba 233.527†	-1312.5	-1521.3	4.6611 ug/L	4.6611 ppb	09:19:50
3	Be 313.107†	-12269.1	-9013.3	-3.3776 ug/L	-3.3776 ppb	09:19:30
3	Ca 317.933Radial†	271617.6	301030.2	460330 ug/L	460330 ppb	09:18:26
3	Cd 226.502†	3616.2	4412.5	4.3385 ug/L	4.3385 ppb	09:19:50
3	Co 228.616†	213.7	321.4	-0.0448 ug/L	-0.0448 ppb	09:19:50
3	Cr 267.716†	61.5	-15.1	3.0404 ug/L	3.0404 ppb	09:19:50
3	Cu 324.752†	1610.8	-4886.8	8.0014 ug/L	8.0014 ppb	09:19:30
3	Fe 238.204 Radial†	39023.8	43246.1	435460 ug/L	435460 ppb	09:18:31
3	K 766.490 Radial†	4896.4	3256.6	394.83 ug/L	394.83 ppb	09:18:31
3	Mg 279.077 IEC†	11676.6	12940.1	481490 ug/L	481490 ppb	09:18:31
3	Mn 257.610†	-23282.4	-27603.3	4.4568 ug/L	4.4568 ppb	09:19:30
3	Mo 202.031†	-489.2	-591.5	-7.6426 ug/L	-7.6426 ppb	09:19:50
3	Na 589.592 Radial†	1199637.3	1330236.1	500000 ug/L	500000 ppb	09:18:26
3	Ni 231.604†	292.0	271.0	6.4257 ug/L	6.4257 ppb	09:19:50
3	P 214.914†	573.8	450.4	87.128 ug/L	87.128 ppb	09:19:50
3	Pb 220.353†	-520.3	-555.3	11.493 ug/L	11.493 ppb	09:19:50
3	S 181.975 Axial†	97.8	72.8	8.0967 ug/L	8.0967 ppb	09:19:50
3	Sb 206.836†	51.4	30.5	1.2334 ug/L	1.2334 ppb	09:19:50
3	Se 196.026†	-2285.5	-2646.7	-172.18 ug/L	-172.18 ppb	09:19:50
3	Si 251.611†	-506.1	-1099.2	-32.905 ug/L	-32.905 ppb	09:19:50
3	Sn 189.927†	-387.2	-456.6	-23.362 ug/L	-23.362 ppb	09:19:50
3	Sr 421.552†	747.3	824.9	1.3016 ug/L	1.3016 ppb	09:18:31
3	Ti 334.940†	-8457.1	-8915.0	3.2352 ug/L	3.2352 ppb	09:19:30
3	Tl 190.801†	-105.6	-86.5	-11.468 ug/L	-11.468 ppb	09:19:50
3	U 409.014†	439572.3	515497.6	14347 ug/L	14347 ppb	09:19:30
3	V 292.402†	2550.6	4276.3	0.9291 ug/L	0.9291 ppb	09:19:50
3	Zn 213.857†	6453.4	6732.0	2.4709 ug/L	2.4709 ppb	09:19:50
3	SiO2†	-475.8	-1044.7	-66.870 ug/L	-66.870 ppb	09:20:05

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757948.7	85.647	%	0.6373				0.74%
Sc Radial	5050.2	89.2	%	0.95				1.07%
Y 371.029	620600.7	83.631	%	0.6300				0.75%
Y RADIAL	5509.3	89.46	%	0.760				0.85%
Ag 328.068†	-26564.0	-2.7814	ug/L	1.01938	-2.7814	ppb	1.01938	36.65%
Al 396.153Radial†	691128.8	510920	ug/L	11849.2	510920	ppb	11849.2	2.32%
QC value within limits for Al 396.153Radial Recovery = 102.18%								
As 188.979†	-202.4	-15.171	ug/L	2.3361	-15.171	ppb	2.3361	15.40%
B 249.677†	2492.9	-3.8794	ug/L	1.85099	-3.8794	ppb	1.85099	47.71%
Ba 233.527†	-1515.3	4.7648	ug/L	0.26096	4.7648	ppb	0.26096	5.48%
Be 313.107†	-8974.1	-3.3635	ug/L	0.02368	-3.3635	ppb	0.02368	0.70%
Ca 317.933Radial†	307486.4	470200	ug/L	10483.3	470200	ppb	10483.3	2.23%
QC value within limits for Ca 317.933Radial Recovery = 94.04%								
Cd 226.502†	4435.0	4.4258	ug/L	0.43292	4.4258	ppb	0.43292	9.78%
Co 228.616†	327.6	0.0500	ug/L	0.19286	0.0500	ppb	0.19286	385.54%
Cr 267.716†	-19.7	3.0266	ug/L	0.33097	3.0266	ppb	0.33097	10.94%

Cu 324.752†	-4908.1	8.0196	ug/L	0.03044	8.0196	ppb	0.03044	0.38%
Fe 238.204 Radial†	43402.3	437030	ug/L	2153.8	437030	ppb	2153.8	0.49%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.41%								
K 766.490 Radial†	3227.4	384.53	ug/L	13.318	384.53	ppb	13.318	3.46%
Mg 279.077 IEC†	13018.4	484410	ug/L	2976.0	484410	ppb	2976.0	0.61%
QC value within limits for Mg 279.077 IEC Recovery = 96.88%								
Mn 257.610†	-27690.0	4.4652	ug/L	0.24550	4.4652	ppb	0.24550	5.50%
Mo 202.031†	-608.9	-8.6611	ug/L	1.07513	-8.6611	ppb	1.07513	12.41%
Na 589.592 Radial†	1362811.5	512240	ug/L	12755.4	512240	ppb	12755.4	2.49%
QC value within limits for Na 589.592 Radial Recovery = 102.45%								
Ni 231.604†	264.8	6.2798	ug/L	0.55785	6.2798	ppb	0.55785	8.88%
P 214.914†	426.8	75.545	ug/L	14.6710	75.545	ppb	14.6710	19.42%
Pb 220.353†	-537.5	15.858	ug/L	3.9109	15.858	ppb	3.9109	24.66%
S 181.975 Axial†	73.6	7.1239	ug/L	11.98708	7.1239	ppb	11.98708	168.27%
Sb 206.836†	38.6	3.5832	ug/L	3.65740	3.5832	ppb	3.65740	102.07%
Se 196.026†	-2626.7	-153.88	ug/L	27.475	-153.88	ppb	27.475	17.85%
Si 251.611†	-1106.4	-33.108	ug/L	0.3852	-33.108	ppb	0.3852	1.16%
Sn 189.927†	-447.5	-20.765	ug/L	2.2491	-20.765	ppb	2.2491	10.83%
Sr 421.552†	836.7	1.2897	ug/L	0.03506	1.2897	ppb	0.03506	2.72%
Ti 334.940†	-9059.3	3.5263	ug/L	0.43690	3.5263	ppb	0.43690	12.39%
Tl 190.801†	-85.8	-10.975	ug/L	3.0965	-10.975	ppb	3.0965	28.21%
U 409.014†	514734.1	14326	ug/L	28.5	14326	ppb	28.5	0.20%
QC value within limits for U 409.014 Recovery = 95.51%								
V 292.402†	4294.5	0.8212	ug/L	0.12765	0.8212	ppb	0.12765	15.54%
Zn 213.857†	6747.4	2.3613	ug/L	0.25918	2.3613	ppb	0.25918	10.98%
SiO2†	-1112.7	-71.286	ug/L	4.5278	-71.286	ppb	4.5278	6.35%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/9/2009 09:22:15
Data Type: Reprocessed on 12/9/2009 10:32:27

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	867325.0	867325.0	98.006	%			09:25:50
1	Sc Radial	5544.9	5544.9	97.9	%			09:24:13
1	Y 371.029	706892.5	706892.5	95.259	%			09:25:50
1	Y RADIAL	5940.1	5940.1	96.45	%			09:24:13
1	Ag 328.068†	-7523.4	-7904.0	2.0207	ug/L	2.0207	ppb	09:25:55
1	Al 396.153Radial†	617.2	650.7	63.318	ug/L	63.318	ppb	09:24:13
1	As 188.979†	23642.1	24152.3	9938.6	ug/L	9938.6	ppb	09:25:55
1	B 249.677†	221355.9	226383.6	4890.5	ug/L	4890.5	ppb	09:25:50
1	Ba 233.527†	1360252.9	1387941.8	10564	ug/L	10564	ppb	09:25:50
1	Be 313.107†	7468179.0	7625453.3	2853.3	ug/L	2853.3	ppb	09:25:44
1	Ca 317.933Radial†	35.6	18.7	28.537	ug/L	28.537	ppb	09:24:33
1	Cd 226.502†	862126.7	879856.2	9551.6	ug/L	9551.6	ppb	09:25:50
1	Co 228.616†	468823.1	478433.9	9286.0	ug/L	9286.0	ppb	09:25:55
1	Cr 267.716†	2142447.0	2185952.1	23570	ug/L	23570	ppb	09:25:50
1	Cu 324.752†	6705690.7	6835361.9	19879	ug/L	19879	ppb	09:25:44
1	Fe 238.204 Radial†	-18.8	-25.2	38.706	ug/L	38.706	ppb	09:24:33
1	K 766.490 Radial†	1602148.0	1634203.9	296500	ug/L	296500	ppb	09:24:08
1	Mg 279.077 IEC†	-4.4	-6.3	-36.702	ug/L	-36.702	ppb	09:24:33
1	Mn 257.610†	8321385.3	8490296.0	9226.6	ug/L	9226.6	ppb	09:25:44
1	Mo 202.031†	146819.2	149786.6	9757.0	ug/L	9757.0	ppb	09:25:55
1	Na 589.592 Radial†	139.1	758.0	284.91	ug/L	284.91	ppb	09:24:13
1	Ni 231.604†	397646.3	405667.1	9619.8	ug/L	9619.8	ppb	09:25:50
1	P 214.914†	30925.9	31335.2	15572	ug/L	15572	ppb	09:25:55
1	Pb 220.353†	196436.0	200485.4	23445	ug/L	23445	ppb	09:25:55
1	S 181.975 Axial†	34416.4	35075.2	51288	ug/L	51288	ppb	09:25:55
1	Sb 206.836†	31654.7	32269.2	10288	ug/L	10288	ppb	09:25:55
1	Se 196.026†	16507.2	16866.5	10088	ug/L	10088	ppb	09:25:55
1	Si 251.611†	1523978.6	1554478.8	47244	ug/L	47244	ppb	09:25:50
1	Sn 189.927†	60430.6	61655.9	10431	ug/L	10431	ppb	09:25:55
1	Sr 421.552†	1415036.5	1445262.1	9756.4	ug/L	9756.4	ppb	09:24:08
1	Ti 334.940†	6077176.8	6201793.4	10022	ug/L	10022	ppb	09:25:44
1	Tl 190.801†	32675.7	33377.4	9627.5	ug/L	9627.5	ppb	09:25:55
1	U 409.014†	-795.6	1150.4	-13.323	ug/L	-13.323	ppb	09:25:55
1	V 292.402†	1427957.0	1458307.9	9963.5	ug/L	9963.5	ppb	09:25:50
1	Zn 213.857†	1517160.0	1547222.2	13835	ug/L	13835	ppb	09:25:50
1	SiO2†	1518071.3	1548470.5	100740	ug/L	100740	ppb	09:26:43
2	Sc 361.383	866044.1	866044.1	97.861	%			09:26:10
2	Sc Radial	5569.9	5569.9	98.3	%			09:24:43
2	Y 371.029	704578.8	704578.8	94.948	%			09:26:10
2	Y RADIAL	5950.7	5950.7	96.62	%			09:24:43
2	Ag 328.068†	-7530.9	-7923.0	1.9331	ug/L	1.9331	ppb	09:26:15
2	Al 396.153Radial†	574.7	604.7	29.417	ug/L	29.417	ppb	09:24:43
2	As 188.979†	23599.4	24144.4	9935.1	ug/L	9935.1	ppb	09:26:15
2	B 249.677†	221672.2	227040.9	4904.8	ug/L	4904.8	ppb	09:26:10
2	Ba 233.527†	1358565.2	1388270.0	10566	ug/L	10566	ppb	09:26:10
2	Be 313.107†	7440005.0	7607934.0	2846.7	ug/L	2846.7	ppb	09:26:03
2	Ca 317.933Radial†	35.7	18.6	28.494	ug/L	28.494	ppb	09:25:03
2	Cd 226.502†	861453.4	880469.2	9558.2	ug/L	9558.2	ppb	09:26:10
2	Co 228.616†	467836.6	478133.4	9280.2	ug/L	9280.2	ppb	09:26:15
2	Cr 267.716†	2141059.7	2187767.7	23590	ug/L	23590	ppb	09:26:10
2	Cu 324.752†	6671124.4	6810159.8	19806	ug/L	19806	ppb	09:26:03
2	Fe 238.204 Radial†	-21.3	-27.7	13.481	ug/L	13.481	ppb	09:25:03
2	K 766.490 Radial†	1625834.8	1650946.0	299540	ug/L	299540	ppb	09:24:38
2	Mg 279.077 IEC†	-6.2	-8.0	-101.98	ug/L	-101.98	ppb	09:25:03
2	Mn 257.610†	8299437.9	8480427.1	9215.9	ug/L	9215.9	ppb	09:26:03
2	Mo 202.031†	146563.2	149746.4	9754.4	ug/L	9754.4	ppb	09:26:15
2	Na 589.592 Radial†	99.2	716.9	269.45	ug/L	269.45	ppb	09:24:43
2	Ni 231.604†	397468.1	406085.0	9629.7	ug/L	9629.7	ppb	09:26:10

2	P 214.914†	30769.9	31222.4	15517	ug/L	15517 ppb	09:26:15
2	Pb 220.353†	196381.4	200726.0	23473	ug/L	23473 ppb	09:26:15
2	S 181.975 Axial†	34262.7	34970.1	51134	ug/L	51134 ppb	09:26:15
2	Sb 206.836†	31620.7	32282.2	10292	ug/L	10292 ppb	09:26:15
2	Se 196.026†	16474.4	16857.9	10083	ug/L	10083 ppb	09:26:15
2	Si 251.611†	1522772.8	1555546.5	47275	ug/L	47275 ppb	09:26:10
2	Sn 189.927†	60510.9	61829.2	10460	ug/L	10460 ppb	09:26:15
2	Sr 421.552†	1435353.3	1459435.2	9852.1	ug/L	9852.1 ppb	09:24:38
2	Ti 334.940†	6049605.8	6182791.1	9991.3	ug/L	9991.3 ppb	09:26:03
2	Tl 190.801†	32590.6	33339.8	9616.4	ug/L	9616.4 ppb	09:26:15
2	U 409.014†	-893.2	1049.4	-16.178	ug/L	-16.178 ppb	09:26:15
2	V 292.402†	1426061.1	1458525.5	9965.0	ug/L	9965.0 ppb	09:26:10
2	Zn 213.857†	1516284.3	1548616.9	13848	ug/L	13848 ppb	09:26:10
2	SiO2†	1536175.4	1569261.2	102100	ug/L	102100 ppb	09:26:50
3	Sc 361.383	866098.1	866098.1	97.867	%		09:26:30
3	Sc Radial	5547.1	5547.1	97.9	%		09:25:14
3	Y 371.029	705507.1	705507.1	95.073	%		09:26:30
3	Y RADIAL	5954.2	5954.2	96.68	%		09:25:14
3	Ag 328.068†	-7546.1	-7938.1	1.8621	ug/L	1.8621 ppb	09:26:35
3	Al 396.153Radial†	588.4	621.1	37.989	ug/L	37.989 ppb	09:25:14
3	As 188.979†	23907.2	24457.4	10062	ug/L	10062 ppb	09:26:35
3	B 249.677†	221004.5	226344.6	4889.4	ug/L	4889.4 ppb	09:26:30
3	Ba 233.527†	1357439.2	1387033.0	10557	ug/L	10557 ppb	09:26:30
3	Be 313.107†	7354407.1	7519996.7	2813.8	ug/L	2813.8 ppb	09:26:23
3	Ca 317.933Radial†	37.2	20.2	30.949	ug/L	30.949 ppb	09:25:34
3	Cd 226.502†	860569.2	879510.8	9547.8	ug/L	9547.8 ppb	09:26:30
3	Co 228.616†	471689.0	482040.0	9356.4	ug/L	9356.4 ppb	09:26:35
3	Cr 267.716†	2140617.3	2187179.2	23583	ug/L	23583 ppb	09:26:30
3	Cu 324.752†	6579330.7	6715940.7	19532	ug/L	19532 ppb	09:26:23
3	Fe 238.204 Radial†	-18.9	-25.3	40.404	ug/L	40.404 ppb	09:25:34
3	K 766.490 Radial†	1595804.6	1627059.5	295210	ug/L	295210 ppb	09:25:09
3	Mg 279.077 IEC†	-4.4	-6.2	-31.546	ug/L	-31.546 ppb	09:25:34
3	Mn 257.610†	8223078.7	8401875.0	9130.6	ug/L	9130.6 ppb	09:26:23
3	Mo 202.031†	147803.6	151004.6	9836.3	ug/L	9836.3 ppb	09:26:35
3	Na 589.592 Radial†	-8.0	607.8	228.46	ug/L	228.46 ppb	09:25:14
3	Ni 231.604†	396993.2	405574.5	9617.6	ug/L	9617.6 ppb	09:26:30
3	P 214.914†	31020.1	31476.1	15713	ug/L	15713 ppb	09:26:35
3	Pb 220.353†	197558.6	201916.4	23613	ug/L	23613 ppb	09:26:35
3	S 181.975 Axial†	34609.5	35322.2	51649	ug/L	51649 ppb	09:26:35
3	Sb 206.836†	31916.8	32582.7	10393	ug/L	10393 ppb	09:26:35
3	Se 196.026†	16623.9	17009.7	10174	ug/L	10174 ppb	09:26:35
3	Si 251.611†	1520420.3	1553045.8	47199	ug/L	47199 ppb	09:26:30
3	Sn 189.927†	60867.3	62189.5	10521	ug/L	10521 ppb	09:26:35
3	Sr 421.552†	1408462.0	1437959.8	9707.1	ug/L	9707.1 ppb	09:25:09
3	Ti 334.940†	5989689.3	6121183.3	9891.7	ug/L	9891.7 ppb	09:26:23
3	Tl 190.801†	32850.9	33603.6	9690.4	ug/L	9690.4 ppb	09:26:35
3	U 409.014†	-696.7	1250.3	-10.557	ug/L	-10.557 ppb	09:26:35
3	V 292.402†	1425986.3	1458358.3	9965.1	ug/L	9965.1 ppb	09:26:30
3	Zn 213.857†	1513091.8	1545258.2	13818	ug/L	13818 ppb	09:26:30
3	SiO2†	1528564.5	1561386.6	101580	ug/L	101580 ppb	09:26:57

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866489.1	97.911	%	0.0819				0.08%
Sc Radial	5554.0	98.1	%	0.24				0.25%
Y 371.029	705659.5	95.093	%	0.1569				0.17%
Y RADIAL	5948.3	96.58	%	0.120				0.12%
Ag 328.068†	-7921.7	1.9386	ug/L	0.07944	1.9386	ppb	0.07944	4.10%
Al 396.153Radial†	625.5	43.575	ug/L	17.6273	43.575	ppb	17.6273	40.45%
As 188.979†	24251.4	9978.5	ug/L	72.21	9978.5	ppb	72.21	0.72%
QC value within limits for As 188.979 Recovery = 99.78%								
B 249.677†	226589.7	4894.9	ug/L	8.56	4894.9	ppb	8.56	0.17%
QC value within limits for B 249.677 Recovery = 97.90%								
Ba 233.527†	1387748.3	10562	ug/L	4.9	10562	ppb	4.9	0.05%
QC value less than the lower limit for Ba 233.527 Recovery = 70.41%								
Be 313.107†	7584461.4	2837.9	ug/L	21.13	2837.9	ppb	21.13	0.74%
QC value within limits for Be 313.107 Recovery = 94.60%								
Ca 317.933Radial†	19.2	29.327	ug/L	1.4053	29.327	ppb	1.4053	4.79%
Cd 226.502†	879945.4	9552.5	ug/L	5.27	9552.5	ppb	5.27	0.06%

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   QC value within limits for Cd 226.502  Recovery = 95.53%
Co 228.616†          479535.8      9307.5 ug/L        42.45      9307.5 ppb         42.45   0.46%
   QC value within limits for Co 228.616  Recovery = 93.08%
Cr 267.716†         2186966.3       23581 ug/L         10.0       23581 ppb          10.0   0.04%
   QC value within limits for Cr 267.716  Recovery = 94.32%
Cu 324.752†         6787154.2       19739 ug/L        183.1       19739 ppb         183.1   0.93%
   QC value within limits for Cu 324.752  Recovery = 98.70%
Fe 238.204 Radial†      -26.1      30.864 ug/L      15.0776      30.864 ppb       15.0776  48.85%
K 766.490 Radial†   1637403.1      297090 ug/L       2224.5      297090 ppb        2224.5   0.75%
   QC value within limits for K 766.490 Radial  Recovery = 99.03%
Mg 279.077 IEC†          -6.8     -56.741 ug/L      39.2592     -56.741 ppb       39.2592  69.19%
Mn 257.610†         8457532.7      9191.0 ug/L        52.65      9191.0 ppb         52.65   0.57%
   QC value within limits for Mn 257.610  Recovery = 91.91%
Mo 202.031†          150179.2      9782.6 ug/L        46.58      9782.6 ppb         46.58   0.48%
   QC value within limits for Mo 202.031  Recovery = 97.83%
Na 589.592 Radial†      694.2      260.94 ug/L       29.168      260.94 ppb        29.168  11.18%
Ni 231.604†          405775.5      9622.4 ug/L        6.47      9622.4 ppb          6.47   0.07%
   QC value within limits for Ni 231.604  Recovery = 96.22%
P 214.914†            31344.6       15601 ug/L       100.8       15601 ppb         100.8   0.65%
   QC value within limits for P 214.914  Recovery = 104.00%
Pb 220.353†          201042.6       23510 ug/L        89.8       23510 ppb          89.8   0.38%
   QC value within limits for Pb 220.353  Recovery = 94.04%
S 181.975 Axial†      35122.5       51357 ug/L       264.3       51357 ppb         264.3   0.51%
   QC value within limits for S 181.975 Axial  Recovery = 102.71%
Sb 206.836†           32378.0       10324 ug/L        59.5       10324 ppb          59.5   0.58%
   QC value within limits for Sb 206.836  Recovery = 103.24%
Se 196.026†           16911.3       10115 ug/L        51.0       10115 ppb          51.0   0.50%
   QC value within limits for Se 196.026  Recovery = 101.15%
Si 251.611†         1554357.0       47239 ug/L        38.5       47239 ppb          38.5   0.08%
   QC value within limits for Si 251.611  Recovery = 94.48%
Sn 189.927†           61891.5       10471 ug/L        46.1       10471 ppb          46.1   0.44%
   QC value within limits for Sn 189.927  Recovery = 104.71%
Sr 421.552†         1447552.3      9771.8 ug/L        73.71      9771.8 ppb         73.71   0.75%
   QC value within limits for Sr 421.552  Recovery = 97.72%
Ti 334.940†         6168589.3      9968.4 ug/L        68.16      9968.4 ppb         68.16   0.68%
   QC value within limits for Ti 334.940  Recovery = 99.68%
Tl 190.801†           33440.3      9644.8 ug/L        39.90      9644.8 ppb         39.90   0.41%
   QC value within limits for Tl 190.801  Recovery = 96.45%
U 409.014†             1150.0     -13.353 ug/L       2.8107     -13.353 ppb        2.8107  21.05%
V 292.402†          1458397.2      9964.5 ug/L        0.89      9964.5 ppb          0.89   0.01%
   QC value within limits for V 292.402  Recovery = 99.65%
Zn 213.857†         1547032.5       13834 ug/L        15.0       13834 ppb          15.0   0.11%
   QC value within limits for Zn 213.857  Recovery = 92.22%
SiO2†               1559706.1      101470 ug/L       686.1      101470 ppb         686.1   0.68%
   QC value within limits for SiO2  Recovery = 94.84%
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 09:43:20
Data Type: Reprocessed on 12/9/2009 10:32:31

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	910696.2	910696.2	102.91	%			09:46:30
1	Sc Radial	5714.3	5714.3	101	%			09:45:13
1	Y 371.029	751846.8	751846.8	101.32	%			09:46:30
1	Y RADIAL	6150.6	6150.6	99.87	%			09:45:13
1	Ag 328.068†	110405.9	107059.7	497.97	ug/L	497.97	ppb	09:46:35
1	Al 396.153Radial†	6700.1	6660.7	4902.8	ug/L	4902.8	ppb	09:45:13
1	As 188.979†	1210.7	1205.7	496.24	ug/L	496.24	ppb	09:46:55
1	B 249.677†	22934.9	22810.9	493.26	ug/L	493.26	ppb	09:46:35
1	Ba 233.527†	65619.0	63777.5	485.66	ug/L	485.66	ppb	09:46:35
1	Be 313.107†	1335598.1	1303192.5	485.22	ug/L	485.22	ppb	09:46:30
1	Ca 317.933Radial†	3256.0	3209.3	4907.6	ug/L	4907.6	ppb	09:45:33
1	Cd 226.502†	46127.0	45011.9	488.14	ug/L	488.14	ppb	09:46:35
1	Co 228.616†	25714.1	25059.5	486.60	ug/L	486.60	ppb	09:46:35
1	Cr 267.716†	46284.7	44890.4	484.46	ug/L	484.46	ppb	09:46:35
1	Cu 324.752†	176586.6	164830.1	479.63	ug/L	479.63	ppb	09:46:35
1	Fe 238.204 Radial†	501.5	491.0	4958.9	ug/L	4958.9	ppb	09:45:33
1	K 766.490 Radial†	30258.9	27818.9	5040.4	ug/L	5040.4	ppb	09:45:13
1	Mg 279.077 IEC†	139.7	136.7	5096.6	ug/L	5096.6	ppb	09:45:33
1	Mn 257.610†	459115.9	445744.1	484.80	ug/L	484.80	ppb	09:46:30
1	Mo 202.031†	7823.7	7582.7	494.28	ug/L	494.28	ppb	09:46:55
1	Na 589.592 Radial†	25561.1	25949.2	9753.6	ug/L	9753.6	ppb	09:45:13
1	Ni 231.604†	21225.4	20555.8	487.44	ug/L	487.44	ppb	09:46:35
1	P 214.914†	4429.4	4084.3	2354.1	ug/L	2354.1	ppb	09:46:55
1	Pb 220.353†	4206.8	4140.5	485.55	ug/L	485.55	ppb	09:46:55
1	S 181.975 Axial†	740.9	678.5	991.15	ug/L	991.15	ppb	09:46:55
1	Sb 206.836†	1602.1	1527.2	503.04	ug/L	503.04	ppb	09:46:55
1	Se 196.026†	821.5	821.8	507.45	ug/L	507.45	ppb	09:46:55
1	Si 251.611†	82828.4	79980.8	2434.4	ug/L	2434.4	ppb	09:46:35
1	Sn 189.927†	3010.1	2920.9	494.72	ug/L	494.72	ppb	09:46:55
1	Sr 421.552†	75843.1	75163.6	507.35	ug/L	507.35	ppb	09:45:13
1	Ti 334.940†	312104.3	304253.5	491.95	ug/L	491.95	ppb	09:46:35
1	Tl 190.801†	1725.1	1713.3	494.20	ug/L	494.20	ppb	09:46:55
1	U 409.014†	15879.6	17393.2	484.39	ug/L	484.39	ppb	09:46:35
1	V 292.402†	72323.0	71576.6	489.81	ug/L	489.81	ppb	09:46:35
1	Zn 213.857†	56574.5	54169.2	483.02	ug/L	483.02	ppb	09:46:35
1	SiO2†	81869.3	79068.0	5151.9	ug/L	5151.9	ppb	09:48:03
2	Sc 361.383	904058.2	904058.2	102.16	%			09:47:01
2	Sc Radial	5729.4	5729.4	101	%			09:45:38
2	Y 371.029	745786.4	745786.4	100.50	%			09:47:01
2	Y RADIAL	6175.9	6175.9	100.3	%			09:45:38
2	Ag 328.068†	109423.8	106886.2	497.15	ug/L	497.15	ppb	09:47:06
2	Al 396.153Radial†	6614.7	6558.8	4827.5	ug/L	4827.5	ppb	09:45:38
2	As 188.979†	1189.4	1193.5	491.26	ug/L	491.26	ppb	09:47:26
2	B 249.677†	22706.7	22751.2	491.97	ug/L	491.97	ppb	09:47:06
2	Ba 233.527†	64985.0	63625.1	484.50	ug/L	484.50	ppb	09:47:06
2	Be 313.107†	1324099.1	1301465.9	484.58	ug/L	484.58	ppb	09:47:01
2	Ca 317.933Radial†	3240.8	3185.7	4871.5	ug/L	4871.5	ppb	09:45:58
2	Cd 226.502†	45575.0	44800.7	485.86	ug/L	485.86	ppb	09:47:06
2	Co 228.616†	25488.7	25022.3	485.87	ug/L	485.87	ppb	09:47:06
2	Cr 267.716†	45934.6	44877.9	484.32	ug/L	484.32	ppb	09:47:06
2	Cu 324.752†	175131.0	164665.1	479.15	ug/L	479.15	ppb	09:47:06
2	Fe 238.204 Radial†	498.5	486.7	4916.1	ug/L	4916.1	ppb	09:45:58
2	K 766.490 Radial†	30025.1	27508.5	4984.1	ug/L	4984.1	ppb	09:45:38
2	Mg 279.077 IEC†	138.7	135.4	5046.4	ug/L	5046.4	ppb	09:45:58
2	Mn 257.610†	456255.1	446219.6	485.32	ug/L	485.32	ppb	09:47:01
2	Mo 202.031†	7714.2	7531.3	490.93	ug/L	490.93	ppb	09:47:26
2	Na 589.592 Radial†	25179.1	25504.6	9586.5	ug/L	9586.5	ppb	09:45:38
2	Ni 231.604†	21058.3	20543.6	487.15	ug/L	487.15	ppb	09:47:06

2	P 214.914†	4333.4	4021.9	2317.0 ug/L	2317.0 ppb	09:47:26
2	Pb 220.353†	4157.8	4122.6	483.43 ug/L	483.43 ppb	09:47:26
2	S 181.975 Axial†	729.4	672.6	982.47 ug/L	982.47 ppb	09:47:26
2	Sb 206.836†	1582.8	1519.8	500.51 ug/L	500.51 ppb	09:47:26
2	Se 196.026†	810.1	816.4	504.11 ug/L	504.11 ppb	09:47:26
2	Si 251.611†	82145.1	79902.9	2432.1 ug/L	2432.1 ppb	09:47:06
2	Sn 189.927†	2971.9	2904.8	492.01 ug/L	492.01 ppb	09:47:26
2	Sr 421.552†	74820.3	73953.8	499.19 ug/L	499.19 ppb	09:45:38
2	Ti 334.940†	309543.5	303973.7	491.50 ug/L	491.50 ppb	09:47:06
2	Tl 190.801†	1694.9	1695.9	489.24 ug/L	489.24 ppb	09:47:26
2	U 409.014†	15674.2	17305.5	481.94 ug/L	481.94 ppb	09:47:06
2	V 292.402†	71451.9	71239.9	487.49 ug/L	487.49 ppb	09:47:06
2	Zn 213.857†	56121.6	54129.5	482.67 ug/L	482.67 ppb	09:47:06
2	SiO2†	83418.2	81168.3	5289.6 ug/L	5289.6 ppb	09:48:08
3	Sc 361.383	913585.2	913585.2	103.23 %		09:47:32
3	Sc Radial	5645.2	5645.2	99.7 %		09:46:03
3	Y 371.029	753100.0	753100.0	101.49 %		09:47:32
3	Y RADIAL	6103.0	6103.0	99.10 %		09:46:03
3	Ag 328.068†	110300.8	106618.6	495.95 ug/L	495.95 ppb	09:47:37
3	Al 396.153Radial†	6567.5	6609.0	4864.7 ug/L	4864.7 ppb	09:46:03
3	As 188.979†	1201.7	1193.3	491.18 ug/L	491.18 ppb	09:47:57
3	B 249.677†	22946.7	22751.9	491.98 ug/L	491.98 ppb	09:47:37
3	Ba 233.527†	65486.7	63447.7	483.15 ug/L	483.15 ppb	09:47:37
3	Be 313.107†	1327487.0	1291231.3	480.78 ug/L	480.78 ppb	09:47:32
3	Ca 317.933Radial†	3252.9	3245.7	4963.3 ug/L	4963.3 ppb	09:46:23
3	Cd 226.502†	45883.1	44633.9	484.03 ug/L	484.03 ppb	09:47:37
3	Co 228.616†	25566.4	24837.4	482.28 ug/L	482.28 ppb	09:47:37
3	Cr 267.716†	46141.4	44609.3	481.43 ug/L	481.43 ppb	09:47:37
3	Cu 324.752†	176552.5	164254.4	477.96 ug/L	477.96 ppb	09:47:37
3	Fe 238.204 Radial†	504.4	500.0	5050.3 ug/L	5050.3 ppb	09:46:23
3	K 766.490 Radial†	29830.3	27756.1	5029.1 ug/L	5029.1 ppb	09:46:03
3	Mg 279.077 IEC†	139.3	137.9	5142.4 ug/L	5142.4 ppb	09:46:23
3	Mn 257.610†	457214.1	442491.1	481.28 ug/L	481.28 ppb	09:47:32
3	Mo 202.031†	7772.2	7508.8	489.48 ug/L	489.48 ppb	09:47:57
3	Na 589.592 Radial†	24785.3	25481.1	9577.6 ug/L	9577.6 ppb	09:46:03
3	Ni 231.604†	21097.1	20366.2	482.95 ug/L	482.95 ppb	09:47:37
3	P 214.914†	4364.1	4007.4	2308.5 ug/L	2308.5 ppb	09:47:57
3	Pb 220.353†	4174.7	4096.5	480.38 ug/L	480.38 ppb	09:47:57
3	S 181.975 Axial†	735.7	671.1	980.40 ug/L	980.40 ppb	09:47:57
3	Sb 206.836†	1593.5	1514.0	498.62 ug/L	498.62 ppb	09:47:57
3	Se 196.026†	818.4	816.2	504.42 ug/L	504.42 ppb	09:47:57
3	Si 251.611†	82678.8	79581.3	2422.3 ug/L	2422.3 ppb	09:47:37
3	Sn 189.927†	2989.9	2892.0	489.85 ug/L	489.85 ppb	09:47:57
3	Sr 421.552†	74076.5	74311.6	501.60 ug/L	501.60 ppb	09:46:03
3	Ti 334.940†	312067.0	303258.3	490.35 ug/L	490.35 ppb	09:47:37
3	Tl 190.801†	1683.9	1668.0	481.22 ug/L	481.22 ppb	09:47:57
3	U 409.014†	15771.8	17240.0	480.10 ug/L	480.10 ppb	09:47:37
3	V 292.402†	72008.5	71049.8	486.17 ug/L	486.17 ppb	09:47:37
3	Zn 213.857†	56282.4	53712.4	478.93 ug/L	478.93 ppb	09:47:37
3	SiO2†	82661.7	79583.9	5185.9 ug/L	5185.9 ppb	09:48:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	909446.6	102.77	%	0.552				0.54%
Sc Radial	5696.3	101	%	0.8				0.79%
Y 371.029	750244.4	101.10	%	0.527				0.52%
Y RADIAL	6143.2	99.75	%	0.601				0.60%
Ag 328.068†	106854.8	497.02	ug/L	1.016	497.02	ppb	1.016	0.20%
QC value within limits for Ag 328.068 Recovery = 99.40%								
Al 396.153Radial†	6609.5	4865.0	ug/L	37.62	4865.0	ppb	37.62	0.77%
QC value within limits for Al 396.153Radial Recovery = 97.30%								
As 188.979†	1197.5	492.89	ug/L	2.900	492.89	ppb	2.900	0.59%
QC value within limits for As 188.979 Recovery = 98.58%								
B 249.677†	22771.3	492.40	ug/L	0.742	492.40	ppb	0.742	0.15%
QC value within limits for B 249.677 Recovery = 98.48%								
Ba 233.527†	63616.8	484.44	ug/L	1.256	484.44	ppb	1.256	0.26%
QC value within limits for Ba 233.527 Recovery = 96.89%								
Be 313.107†	1298629.9	483.53	ug/L	2.404	483.53	ppb	2.404	0.50%
QC value within limits for Be 313.107 Recovery = 96.71%								

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Ca 317.933Radial†       3213.6      4914.1 ug/L         46.22      4914.1 ppb          46.22   0.94%
   QC value within limits for Ca 317.933Radial  Recovery = 98.28%
Cd 226.502†            44815.5      486.01 ug/L         2.061      486.01 ppb          2.061   0.42%
   QC value within limits for Cd 226.502  Recovery = 97.20%
Co 228.616†            24973.1      484.92 ug/L         2.313      484.92 ppb          2.313   0.48%
   QC value within limits for Co 228.616  Recovery = 96.98%
Cr 267.716†            44792.5      483.40 ug/L         1.712      483.40 ppb          1.712   0.35%
   QC value within limits for Cr 267.716  Recovery = 96.68%
Cu 324.752†           164583.2      478.91 ug/L         0.859      478.91 ppb          0.859   0.18%
   QC value within limits for Cu 324.752  Recovery = 95.78%
Fe 238.204 Radial†       492.6      4975.1 ug/L         68.56      4975.1 ppb          68.56   1.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.50%
K 766.490 Radial†      27694.5      5017.9 ug/L         29.77      5017.9 ppb          29.77   0.59%
   QC value within limits for K 766.490 Radial  Recovery = 100.36%
Mg 279.077 IEC†          136.7      5095.1 ug/L         48.03      5095.1 ppb          48.03   0.94%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.90%
Mn 257.610†           444818.3      483.80 ug/L         2.199      483.80 ppb          2.199   0.45%
   QC value within limits for Mn 257.610  Recovery = 96.76%
Mo 202.031†             7540.9      491.56 ug/L         2.465      491.56 ppb          2.465   0.50%
   QC value within limits for Mo 202.031  Recovery = 98.31%
Na 589.592 Radial†     25645.0      9639.2 ug/L         99.14      9639.2 ppb          99.14   1.03%
   QC value within limits for Na 589.592 Radial  Recovery = 96.39%
Ni 231.604†            20488.5      485.85 ug/L         2.516      485.85 ppb          2.516   0.52%
   QC value within limits for Ni 231.604  Recovery = 97.17%
P 214.914†              4037.9      2326.5 ug/L         24.22      2326.5 ppb          24.22   1.04%
   QC value within limits for P 214.914  Recovery = 93.06%
Pb 220.353†             4119.9      483.12 ug/L         2.601      483.12 ppb          2.601   0.54%
   QC value within limits for Pb 220.353  Recovery = 96.62%
S 181.975 Axial†         674.1      984.67 ug/L         5.702      984.67 ppb          5.702   0.58%
   QC value within limits for S 181.975 Axial  Recovery = 98.47%
Sb 206.836†             1520.3      500.72 ug/L         2.220      500.72 ppb          2.220   0.44%
   QC value within limits for Sb 206.836  Recovery = 100.14%
Se 196.026†              818.1      505.33 ug/L         1.849      505.33 ppb          1.849   0.37%
   QC value within limits for Se 196.026  Recovery = 101.07%
Si 251.611†            79821.7      2429.6 ug/L          6.44      2429.6 ppb           6.44   0.26%
   QC value within limits for Si 251.611  Recovery = 97.19%
Sn 189.927†             2905.9      492.19 ug/L         2.442      492.19 ppb          2.442   0.50%
   QC value within limits for Sn 189.927  Recovery = 98.44%
Sr 421.552†            74476.3      502.71 ug/L         4.195      502.71 ppb          4.195   0.83%
   QC value within limits for Sr 421.552  Recovery = 100.54%
Ti 334.940†           303828.5      491.26 ug/L         0.827      491.26 ppb          0.827   0.17%
   QC value within limits for Ti 334.940  Recovery = 98.25%
Tl 190.801†             1692.4      488.22 ug/L         6.552      488.22 ppb          6.552   1.34%
   QC value within limits for Tl 190.801  Recovery = 97.64%
U 409.014†             17312.9      482.14 ug/L         2.150      482.14 ppb          2.150   0.45%
   QC value within limits for U 409.014  Recovery = 96.43%
V 292.402†             71288.8      487.82 ug/L         1.844      487.82 ppb          1.844   0.38%
   QC value within limits for V 292.402  Recovery = 97.56%
Zn 213.857†            54003.7      481.54 ug/L         2.267      481.54 ppb          2.267   0.47%
   QC value within limits for Zn 213.857  Recovery = 96.31%
SiO2†                  79940.1      5209.1 ug/L         71.74      5209.1 ppb          71.74   1.38%
   QC value within limits for SiO2  Recovery = 97.41%
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 09:50:23
Data Type: Reprocessed on 12/9/2009 10:32:32

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	883487.1	883487.1	99.832	%			09:53:33
1	Sc Radial	5780.6	5780.6	102	%			09:52:16
1	Y 371.029	742503.0	742503.0	100.06	%			09:53:33
1	Y RADIAL	6319.3	6319.3	102.6	%			09:52:16
1	Ag 328.068†	300.6	73.6	0.3412	ug/L	0.3412	ppb	09:53:33
1	Al 396.153Radial†	-15.3	5.4	3.9593	ug/L	3.9593	ppb	09:52:36
1	As 188.979†	-13.6	15.6	6.3379	ug/L	6.3379	ppb	09:53:53
1	B 249.677†	154.7	678.8	14.735	ug/L	14.735	ppb	09:53:53
1	Ba 233.527†	-5.5	6.5	0.0495	ug/L	0.0495	ppb	09:53:53
1	Be 313.107†	-5163.9	147.7	0.0546	ug/L	0.0546	ppb	09:53:33
1	Ca 317.933Radial†	17.0	-1.0	-1.5997	ug/L	-1.5997	ppb	09:52:36
1	Cd 226.502†	-155.4	32.2	0.3494	ug/L	0.3494	ppb	09:53:53
1	Co 228.616†	-70.3	1.3	0.0275	ug/L	0.0275	ppb	09:53:53
1	Cr 267.716†	57.3	-29.6	-0.3184	ug/L	-0.3184	ppb	09:53:53
1	Cu 324.752†	6871.1	114.0	0.3317	ug/L	0.3317	ppb	09:53:33
1	Fe 238.204 Radial†	6.4	0.2	2.0231	ug/L	2.0231	ppb	09:52:36
1	K 766.490 Radial†	2626.6	403.0	73.133	ug/L	73.133	ppb	09:52:16
1	Mg 279.077 IEC†	1.5	-0.3	-9.8264	ug/L	-9.8264	ppb	09:52:36
1	Mn 257.610†	402.6	-0.1	0.0003	ug/L	0.0003	ppb	09:53:53
1	Mo 202.031†	28.5	8.5	0.5556	ug/L	0.5556	ppb	09:53:53
1	Na 589.592 Radial†	-557.2	70.1	26.355	ug/L	26.355	ppb	09:52:16
1	Ni 231.604†	82.1	12.1	0.2868	ug/L	0.2868	ppb	09:53:53
1	P 214.914†	219.8	0.2	0.0528	ug/L	0.0528	ppb	09:53:53
1	Pb 220.353†	-56.5	-4.0	-0.4713	ug/L	-0.4713	ppb	09:53:53
1	S 181.975 Axial†	44.9	3.6	5.1910	ug/L	5.1910	ppb	09:53:53
1	Sb 206.836†	52.1	22.6	7.3665	ug/L	7.3665	ppb	09:53:53
1	Se 196.026†	-22.0	1.4	0.8373	ug/L	0.8373	ppb	09:53:53
1	Si 251.611†	513.2	6.1	0.1511	ug/L	0.1511	ppb	09:53:53
1	Sn 189.927†	6.1	1.8	0.3061	ug/L	0.3061	ppb	09:53:53
1	Sr 421.552†	-10.8	-14.0	-0.0943	ug/L	-0.0943	ppb	09:52:16
1	Ti 334.940†	-1046.4	-83.1	-0.1344	ug/L	-0.1344	ppb	09:53:33
1	Tl 190.801†	-28.5	8.3	2.3736	ug/L	2.3736	ppb	09:53:53
1	U 409.014†	-1960.2	-1.4	-0.0375	ug/L	-0.0375	ppb	09:53:33
1	V 292.402†	-1278.7	15.6	0.1130	ug/L	0.1130	ppb	09:53:33
1	Zn 213.857†	689.1	-117.0	-1.0549	ug/L	-1.0549	ppb	09:53:53
1	SiO2†	552.8	64.9	4.1704	ug/L	4.1704	ppb	09:54:49
2	Sc 361.383	884739.8	884739.8	99.974	%			09:53:58
2	Sc Radial	5764.0	5764.0	102	%			09:52:41
2	Y 371.029	742644.3	742644.3	100.08	%			09:53:58
2	Y RADIAL	6265.5	6265.5	101.7	%			09:52:41
2	Ag 328.068†	300.2	72.7	0.3397	ug/L	0.3397	ppb	09:53:58
2	Al 396.153Radial†	-19.5	1.2	0.8344	ug/L	0.8344	ppb	09:53:01
2	As 188.979†	-13.4	15.8	6.4281	ug/L	6.4281	ppb	09:54:18
2	B 249.677†	129.7	653.5	14.185	ug/L	14.185	ppb	09:54:18
2	Ba 233.527†	-24.2	-12.1	-0.0918	ug/L	-0.0918	ppb	09:54:18
2	Be 313.107†	-5215.7	103.1	0.0380	ug/L	0.0380	ppb	09:53:58
2	Ca 317.933Radial†	14.9	-3.0	-4.6310	ug/L	-4.6310	ppb	09:53:01
2	Cd 226.502†	-148.1	39.7	0.4296	ug/L	0.4296	ppb	09:54:18
2	Co 228.616†	-70.0	1.7	0.0348	ug/L	0.0348	ppb	09:54:18
2	Cr 267.716†	72.1	-14.9	-0.1599	ug/L	-0.1599	ppb	09:54:18
2	Cu 324.752†	6864.6	97.8	0.2849	ug/L	0.2849	ppb	09:53:58
2	Fe 238.204 Radial†	7.2	1.0	10.224	ug/L	10.224	ppb	09:53:01
2	K 766.490 Radial†	2593.8	378.2	68.622	ug/L	68.622	ppb	09:52:41
2	Mg 279.077 IEC†	1.9	0.1	4.5790	ug/L	4.5790	ppb	09:53:01
2	Mn 257.610†	422.1	18.8	0.0213	ug/L	0.0213	ppb	09:54:18
2	Mo 202.031†	31.0	11.0	0.7187	ug/L	0.7187	ppb	09:54:18
2	Na 589.592 Radial†	-535.9	89.4	33.593	ug/L	33.593	ppb	09:52:41
2	Ni 231.604†	84.6	14.5	0.3432	ug/L	0.3432	ppb	09:54:18

2	P 214.914†	222.2	2.3	1.3036	ug/L	1.3036	ppb	09:54:18
2	Pb 220.353†	-48.3	4.3	0.4997	ug/L	0.4997	ppb	09:54:18
2	S 181.975 Axial†	35.4	-6.0	-8.7915	ug/L	-8.7915	ppb	09:54:18
2	Sb 206.836†	49.5	20.0	6.5211	ug/L	6.5211	ppb	09:54:18
2	Se 196.026†	-17.3	6.1	3.6975	ug/L	3.6975	ppb	09:54:18
2	Si 251.611†	503.4	-4.5	-0.1782	ug/L	-0.1782	ppb	09:54:18
2	Sn 189.927†	12.4	8.2	1.3837	ug/L	1.3837	ppb	09:54:18
2	Sr 421.552†	-27.1	-30.1	-0.2029	ug/L	-0.2029	ppb	09:52:41
2	Ti 334.940†	-1080.5	-115.7	-0.1873	ug/L	-0.1873	ppb	09:53:58
2	Tl 190.801†	-32.4	4.4	1.2673	ug/L	1.2673	ppb	09:54:18
2	U 409.014†	-1967.4	-5.7	-0.1603	ug/L	-0.1603	ppb	09:53:58
2	V 292.402†	-1289.8	6.4	0.0517	ug/L	0.0517	ppb	09:53:58
2	Zn 213.857†	701.1	-106.0	-0.9576	ug/L	-0.9576	ppb	09:54:18
2	SiO2†	506.6	17.9	1.0831	ug/L	1.0831	ppb	09:54:54
3	Sc 361.383	887271.0	887271.0	100.26	%			09:54:24
3	Sc Radial	5784.6	5784.6	102	%			09:53:06
3	Y 371.029	744463.2	744463.2	100.32	%			09:54:24
3	Y RADIAL	6304.1	6304.1	102.4	%			09:53:06
3	Ag 328.068†	243.1	14.9	0.0755	ug/L	0.0755	ppb	09:54:24
3	Al 396.153Radial†	-26.2	-5.3	-3.9397	ug/L	-3.9397	ppb	09:53:26
3	As 188.979†	-11.1	18.1	7.3933	ug/L	7.3933	ppb	09:54:44
3	B 249.677†	106.2	629.8	13.670	ug/L	13.670	ppb	09:54:44
3	Ba 233.527†	2.1	14.1	0.1077	ug/L	0.1077	ppb	09:54:44
3	Be 313.107†	-5267.2	66.7	0.0249	ug/L	0.0249	ppb	09:54:24
3	Ca 317.933Radial†	17.9	-0.1	-0.1892	ug/L	-0.1892	ppb	09:53:26
3	Cd 226.502†	-155.1	33.1	0.3583	ug/L	0.3583	ppb	09:54:44
3	Co 228.616†	-67.9	4.0	0.0786	ug/L	0.0786	ppb	09:54:44
3	Cr 267.716†	84.9	-2.3	-0.0233	ug/L	-0.0233	ppb	09:54:44
3	Cu 324.752†	6925.6	139.0	0.4049	ug/L	0.4049	ppb	09:54:24
3	Fe 238.204 Radial†	7.4	1.2	12.352	ug/L	12.352	ppb	09:53:26
3	K 766.490 Radial†	2550.2	326.5	59.239	ug/L	59.239	ppb	09:53:06
3	Mg 279.077 IEC†	-1.3	-3.0	-113.52	ug/L	-113.52	ppb	09:53:26
3	Mn 257.610†	415.8	11.3	0.0157	ug/L	0.0157	ppb	09:54:44
3	Mo 202.031†	24.3	4.3	0.2789	ug/L	0.2789	ppb	09:54:44
3	Na 589.592 Radial†	-562.9	64.9	24.394	ug/L	24.394	ppb	09:53:06
3	Ni 231.604†	89.0	18.7	0.4434	ug/L	0.4434	ppb	09:54:44
3	P 214.914†	222.4	1.9	1.0543	ug/L	1.0543	ppb	09:54:44
3	Pb 220.353†	-60.5	-7.8	-0.9111	ug/L	-0.9111	ppb	09:54:44
3	S 181.975 Axial†	43.6	2.0	2.9267	ug/L	2.9267	ppb	09:54:44
3	Sb 206.836†	45.8	16.1	5.2510	ug/L	5.2510	ppb	09:54:44
3	Se 196.026†	-22.4	1.1	0.6700	ug/L	0.6700	ppb	09:54:44
3	Si 251.611†	494.9	-14.4	-0.4691	ug/L	-0.4691	ppb	09:54:44
3	Sn 189.927†	13.0	8.7	1.4763	ug/L	1.4763	ppb	09:54:44
3	Sr 421.552†	-8.5	-11.8	-0.0795	ug/L	-0.0795	ppb	09:53:06
3	Ti 334.940†	-918.1	49.3	0.0809	ug/L	0.0809	ppb	09:54:24
3	Tl 190.801†	-25.4	11.5	3.2959	ug/L	3.2959	ppb	09:54:44
3	U 409.014†	-2059.3	-91.8	-2.5658	ug/L	-2.5658	ppb	09:54:24
3	V 292.402†	-1282.9	16.9	0.1084	ug/L	0.1084	ppb	09:54:24
3	Zn 213.857†	688.0	-121.0	-1.0895	ug/L	-1.0895	ppb	09:54:44
3	SiO2†	559.7	69.4	4.4787	ug/L	4.4787	ppb	09:54:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885166.0	100.02	%	0.218				0.22%
Sc Radial	5776.4	102	%	0.2				0.19%
Y 371.029	743203.5	100.15	%	0.147				0.15%
Y RADIAL	6296.3	102.2	%	0.45				0.44%
Ag 328.068†	53.7	0.2521	ug/L	0.15298	0.2521	ppb	0.15298	60.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.2847	ug/L	3.97809	0.2847	ppb	3.97809	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	16.5	6.7198	ug/L	0.58506	6.7198	ppb	0.58506	8.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	654.1	14.196	ug/L	0.5326	14.196	ppb	0.5326	3.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.8	0.0218	ug/L	0.10259	0.0218	ppb	0.10259	470.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	105.8	0.0392	ug/L	0.01487	0.0392	ppb	0.01487	37.98%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.4     -2.1400 ug/L       2.26967     -2.1400 ppb        2.26967 106.06%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                35.0      0.3791 ug/L       0.04397      0.3791 ppb        0.04397  11.60%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.3      0.0470 ug/L       0.02766      0.0470 ppb        0.02766  58.90%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -15.6     -0.1672 ug/L       0.14766     -0.1672 ppb        0.14766  88.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               116.9      0.3405 ug/L       0.06050      0.3405 ppb        0.06050  17.77%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.8      8.1998 ug/L       5.45386      8.1998 ppb        5.45386  66.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         369.2      66.998 ug/L        7.0880      66.998 ppb         7.0880  10.58%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.1     -39.588 ug/L       64.4280     -39.588 ppb        64.4280 162.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.0      0.0124 ug/L       0.01089      0.0124 ppb        0.01089  87.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.9      0.5177 ug/L       0.22238      0.5177 ppb        0.22238  42.95%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         74.8      28.114 ug/L        4.8453      28.114 ppb         4.8453  17.23%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.1      0.3578 ug/L       0.07931      0.3578 ppb        0.07931  22.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.4      0.8036 ug/L       0.66205      0.8036 ppb        0.66205  82.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.5     -0.2943 ug/L       0.72189     -0.2943 ppb        0.72189 245.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.2246 ug/L       7.50507     -0.2246 ppb        7.50507 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                19.6      6.3795 ug/L       1.06484      6.3795 ppb        1.06484  16.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.9      1.7349 ug/L       1.70167      1.7349 ppb        1.70167  98.08%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                -4.3     -0.1654 ug/L       0.31028     -0.1654 ppb        0.31028 187.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.2      1.0554 ug/L       0.65051      1.0554 ppb        0.65051  61.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -18.6     -0.1256 ug/L       0.06737     -0.1256 ppb        0.06737  53.66%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -49.8     -0.0803 ug/L       0.14204     -0.0803 ppb        0.14204 176.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.1      2.3123 ug/L       1.01567      2.3123 ppb        1.01567  43.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.9     -0.9212 ug/L       1.42557     -0.9212 ppb        1.42557 154.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 12.9      0.0910 ug/L       0.03411      0.0910 ppb        0.03411  37.48%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -114.7     -1.0340 ug/L       0.06840     -1.0340 ppb        0.06840   6.61%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      50.7      3.2441 ug/L       1.87777      3.2441 ppb        1.87777  57.88%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 12/9/2009 09:57:09
Data Type: Reprocessed on 12/9/2009 10:32:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	887319.3	887319.3	100.27	%			10:00:20
1	Sc Radial	5605.4	5605.4	99.0	%			09:59:02
1	Y 371.029	738820.1	738820.1	99.562	%			10:00:20
1	Y RADIAL	6070.3	6070.3	98.56	%			09:59:02
1	Ag 328.068†	-25507.1	-25667.2	0.4653	ug/L	0.4653	ppb	10:00:20
1	Al 396.153Radial†	-53.3	-33.5	-23.660	ug/L	-23.660	ppb	09:59:02
1	As 188.979†	-212.3	-182.5	-16.747	ug/L	-16.747	ppb	10:00:40
1	B 249.677†	2542.2	3059.3	16.807	ug/L	16.807	ppb	10:00:20
1	Ba 233.527†	-1747.2	-1730.6	0.8462	ug/L	0.8462	ppb	10:00:20
1	Be 313.107†	-5195.5	138.5	0.0511	ug/L	0.0511	ppb	10:00:20
1	Ca 317.933Radial†	19.0	1.5	2.2325	ug/L	2.2325	ppb	09:59:22
1	Cd 226.502†	3562.1	3740.5	3.2119	ug/L	3.2119	ppb	10:00:20
1	Co 228.616†	213.6	284.8	0.1277	ug/L	0.1277	ppb	10:00:40
1	Cr 267.716†	-567.9	-653.3	-0.2725	ug/L	-0.2725	ppb	10:00:20
1	Cu 324.752†	432.3	-6337.5	0.6363	ug/L	0.6363	ppb	10:00:20
1	Fe 238.204 Radial†	36747.7	37121.7	373790	ug/L	373790	ppb	09:59:02
1	K 766.490 Radial†	2101.5	-47.1	3.7100	ug/L	3.7100	ppb	09:59:02
1	Mg 279.077 IEC†	11.5	9.8	45.122	ug/L	45.122	ppb	09:59:22
1	Mn 257.610†	-36408.4	-36715.6	-2.6309	ug/L	-2.6309	ppb	10:00:20
1	Mo 202.031†	-385.1	-404.1	0.1946	ug/L	0.1946	ppb	10:00:20
1	Na 589.592 Radial†	-562.7	47.4	17.835	ug/L	17.835	ppb	09:59:02
1	Ni 231.604†	177.0	106.4	2.5217	ug/L	2.5217	ppb	10:00:40
1	P 214.914†	725.0	503.2	0.4044	ug/L	0.4044	ppb	10:00:40
1	Pb 220.353†	238.6	290.5	3.2201	ug/L	3.2201	ppb	10:00:40
1	S 181.975 Axial†	47.1	5.5	8.0097	ug/L	8.0097	ppb	10:00:40
1	Sb 206.836†	11.4	-18.2	-0.1644	ug/L	-0.1644	ppb	10:00:40
1	Se 196.026†	-1992.6	-1963.8	-27.011	ug/L	-27.011	ppb	10:00:40
1	Si 251.611†	-727.5	-1233.6	-37.252	ug/L	-37.252	ppb	10:00:20
1	Sn 189.927†	-24.8	-29.0	0.0868	ug/L	0.0868	ppb	10:00:40
1	Sr 421.552†	25.0	21.8	0.1474	ug/L	0.1474	ppb	09:59:02
1	Ti 334.940†	-1084.3	-116.4	-0.2084	ug/L	-0.2084	ppb	10:00:20
1	Tl 190.801†	-47.3	-10.3	-3.3433	ug/L	-3.3433	ppb	10:00:40
1	U 409.014†	-115.4	1847.1	4.5916	ug/L	4.5916	ppb	10:00:20
1	V 292.402†	7058.1	8335.9	-0.8511	ug/L	-0.8511	ppb	10:00:20
1	Zn 213.857†	4904.2	4083.9	1.0474	ug/L	1.0474	ppb	10:00:40
1	SiO2†	-785.5	-1272.2	-82.275	ug/L	-82.275	ppb	10:01:37
2	Sc 361.383	936084.1	936084.1	105.78	%			10:00:46
2	Sc Radial	5571.4	5571.4	98.4	%			09:59:27
2	Y 371.029	777476.7	777476.7	104.77	%			10:00:46
2	Y RADIAL	6035.2	6035.2	97.99	%			09:59:27
2	Ag 328.068†	-24782.0	-23656.4	10.021	ug/L	10.021	ppb	10:00:46
2	Al 396.153Radial†	-49.3	-29.8	-21.007	ug/L	-21.007	ppb	09:59:27
2	As 188.979†	-227.8	-186.2	-18.093	ug/L	-18.093	ppb	10:01:06
2	B 249.677†	2566.3	2950.1	14.324	ug/L	14.324	ppb	10:00:46
2	Ba 233.527†	-1715.2	-1609.5	1.7908	ug/L	1.7908	ppb	10:00:46
2	Be 313.107†	-5181.6	421.5	0.1568	ug/L	0.1568	ppb	10:00:46
2	Ca 317.933Radial†	21.1	3.8	5.7622	ug/L	5.7622	ppb	09:59:47
2	Cd 226.502†	3450.8	3450.2	-0.0229	ug/L	-0.0229	ppb	10:00:46
2	Co 228.616†	217.5	277.4	-0.0230	ug/L	-0.0230	ppb	10:01:06
2	Cr 267.716†	-513.8	-572.7	0.6063	ug/L	0.6063	ppb	10:00:46
2	Cu 324.752†	495.0	-6300.6	0.7868	ug/L	0.7868	ppb	10:00:46
2	Fe 238.204 Radial†	36608.0	37205.9	374640	ug/L	374640	ppb	09:59:27
2	K 766.490 Radial†	2214.3	80.6	26.877	ug/L	26.877	ppb	09:59:27
2	Mg 279.077 IEC†	9.1	7.5	-40.941	ug/L	-40.941	ppb	09:59:47
2	Mn 257.610†	-35425.9	-33895.0	0.5204	ug/L	0.5204	ppb	10:00:46
2	Mo 202.031†	-371.1	-370.9	2.4170	ug/L	2.4170	ppb	10:00:46
2	Na 589.592 Radial†	-555.0	51.8	19.455	ug/L	19.455	ppb	09:59:27
2	Ni 231.604†	160.3	81.4	1.9289	ug/L	1.9289	ppb	10:01:06

2	P 214.914†	709.0	450.3	-31.693	ug/L	-31.693 ppb	10:01:06
2	Pb 220.353†	240.7	280.1	1.9397	ug/L	1.9397 ppb	10:01:06
2	S 181.975 Axial†	62.7	17.8	26.101	ug/L	26.101 ppb	10:01:06
2	Sb 206.836†	16.3	-14.2	1.1751	ug/L	1.1751 ppb	10:01:06
2	Se 196.026†	-1976.4	-1845.0	46.457	ug/L	46.457 ppb	10:01:06
2	Si 251.611†	-694.7	-1164.8	-35.194	ug/L	-35.194 ppb	10:00:46
2	Sn 189.927†	-26.3	-29.1	0.0788	ug/L	0.0788 ppb	10:01:06
2	Sr 421.552†	45.6	42.9	0.2897	ug/L	0.2897 ppb	09:59:27
2	Ti 334.940†	-959.2	58.2	0.0736	ug/L	0.0736 ppb	10:00:46
2	Tl 190.801†	-41.2	-2.1	-0.9645	ug/L	-0.9645 ppb	10:01:06
2	U 409.014†	-108.2	1859.9	4.8410	ug/L	4.8410 ppb	10:00:46
2	V 292.402†	7016.3	7929.6	-3.6938	ug/L	-3.6938 ppb	10:00:46
2	Zn 213.857†	4863.0	3790.2	-1.6697	ug/L	-1.6697 ppb	10:01:06
2	SiO2†	-750.0	-1197.9	-77.508	ug/L	-77.508 ppb	10:01:42
3	Sc 361.383	879120.8	879120.8	99.339	%		10:01:12
3	Sc Radial	5736.5	5736.5	101	%		09:59:52
3	Y 371.029	730593.9	730593.9	98.453	%		10:01:12
3	Y RADIAL	6234.5	6234.5	101.2	%		09:59:52
3	Ag 328.068†	-25461.6	-25858.7	-2.5167	ug/L	-2.5167 ppb	10:01:12
3	Al 396.153Radial†	-33.0	-12.2	-7.9618	ug/L	-7.9618 ppb	09:59:52
3	As 188.979†	-215.8	-188.0	-20.019	ug/L	-20.019 ppb	10:01:32
3	B 249.677†	2628.4	3169.8	20.082	ug/L	20.082 ppb	10:01:12
3	Ba 233.527†	-1639.6	-1638.5	1.3026	ug/L	1.3026 ppb	10:01:12
3	Be 313.107†	-5245.7	39.6	0.0144	ug/L	0.0144 ppb	10:01:12
3	Ca 317.933Radial†	15.5	-2.4	-3.6204	ug/L	-3.6204 ppb	10:00:12
3	Cd 226.502†	3567.6	3779.2	4.2922	ug/L	4.2922 ppb	10:01:12
3	Co 228.616†	217.9	291.1	0.3481	ug/L	0.3481 ppb	10:01:32
3	Cr 267.716†	-576.3	-667.1	-0.5364	ug/L	-0.5364 ppb	10:01:12
3	Cu 324.752†	487.2	-6278.2	0.4716	ug/L	0.4716 ppb	10:01:12
3	Fe 238.204 Radial†	36942.5	36465.4	367180	ug/L	367180 ppb	09:59:52
3	K 766.490 Radial†	2115.6	-81.7	-2.7680	ug/L	-2.7680 ppb	09:59:52
3	Mg 279.077 IEC†	14.4	12.4	147.83	ug/L	147.83 ppb	10:00:12
3	Mn 257.610†	-36324.2	-36969.4	-3.5676	ug/L	-3.5676 ppb	10:01:12
3	Mo 202.031†	-358.8	-381.1	1.2190	ug/L	1.2190 ppb	10:01:12
3	Na 589.592 Radial†	-557.1	65.9	24.782	ug/L	24.782 ppb	09:59:52
3	Ni 231.604†	163.8	94.7	2.2442	ug/L	2.2442 ppb	10:01:32
3	P 214.914†	716.7	501.5	4.6905	ug/L	4.6905 ppb	10:01:32
3	Pb 220.353†	226.2	280.2	2.5693	ug/L	2.5693 ppb	10:01:32
3	S 181.975 Axial†	59.8	18.7	27.371	ug/L	27.371 ppb	10:01:32
3	Sb 206.836†	25.9	-3.6	4.4954	ug/L	4.4954 ppb	10:01:32
3	Se 196.026†	-1979.5	-1969.2	-50.424	ug/L	-50.424 ppb	10:01:32
3	Si 251.611†	-703.8	-1216.5	-36.752	ug/L	-36.752 ppb	10:01:12
3	Sn 189.927†	-31.1	-35.6	-1.1147	ug/L	-1.1147 ppb	10:01:32
3	Sr 421.552†	45.7	41.7	0.2812	ug/L	0.2812 ppb	09:59:52
3	Ti 334.940†	-1068.5	-110.6	-0.1981	ug/L	-0.1981 ppb	10:01:12
3	Tl 190.801†	-58.9	-22.5	-6.8342	ug/L	-6.8342 ppb	10:01:32
3	U 409.014†	-208.2	1752.5	2.7815	ug/L	2.7815 ppb	10:01:12
3	V 292.402†	7139.6	8483.6	1.1693	ug/L	1.1693 ppb	10:01:12
3	Zn 213.857†	4917.4	4142.9	2.2071	ug/L	2.2071 ppb	10:01:32
3	SiO2†	-764.6	-1258.5	-81.423	ug/L	-81.423 ppb	10:01:47

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900841.4	101.79	%	3.480				3.42%
Sc Radial	5637.8	99.5	%	1.54				1.55%
Y 371.029	748963.5	100.93	%	3.373				3.34%
Y RADIAL	6113.4	99.26	%	1.728				1.74%
Ag 328.068†	-25060.8	2.6565	ug/L	6.54972	2.6565	ppb	6.54972	246.56%
Al 396.153Radial†	-25.2	-17.543	ug/L	8.4031	-17.543	ppb	8.4031	47.90%
As 188.979†	-185.6	-18.286	ug/L	1.6449	-18.286	ppb	1.6449	8.99%
B 249.677†	3059.7	17.071	ug/L	2.8882	17.071	ppb	2.8882	16.92%
Ba 233.527†	-1659.5	1.3132	ug/L	0.47241	1.3132	ppb	0.47241	35.97%
Be 313.107†	199.9	0.0741	ug/L	0.07396	0.0741	ppb	0.07396	99.84%
Ca 317.933Radial†	1.0	1.4581	ug/L	4.73901	1.4581	ppb	4.73901	325.02%
Cd 226.502†	3656.7	2.4937	ug/L	2.24541	2.4937	ppb	2.24541	90.04%
Co 228.616†	284.4	0.1509	ug/L	0.18663	0.1509	ppb	0.18663	123.67%
Cr 267.716†	-631.1	-0.0675	ug/L	0.59827	-0.0675	ppb	0.59827	885.82%
Cu 324.752†	-6305.5	0.6316	ug/L	0.15766	0.6316	ppb	0.15766	24.96%
Fe 238.204 Radial†	36931.0	371870	ug/L	4082.4	371870	ppb	4082.4	1.10%

K 766.490 Radial†	-16.1	9.2731	ug/L	15.58594	9.2731	ppb	15.58594 168.08%
Mg 279.077 IEC†	9.9	50.671	ug/L	94.5094	50.671	ppb	94.5094 186.51%
Mn 257.610†	-35860.0	-1.8927	ug/L	2.14164	-1.8927	ppb	2.14164 113.15%
Mo 202.031†	-385.4	1.2769	ug/L	1.11230	1.2769	ppb	1.11230 87.11%
Na 589.592 Radial†	55.0	20.691	ug/L	3.6346	20.691	ppb	3.6346 17.57%
Ni 231.604†	94.2	2.2316	ug/L	0.29660	2.2316	ppb	0.29660 13.29%
P 214.914†	485.0	-8.8661	ug/L	19.88462	-8.8661	ppb	19.88462 224.28%
Pb 220.353†	283.6	2.5764	ug/L	0.64025	2.5764	ppb	0.64025 24.85%
S 181.975 Axial†	14.0	20.494	ug/L	10.8304	20.494	ppb	10.8304 52.85%
Sb 206.836†	-12.0	1.8354	ug/L	2.39901	1.8354	ppb	2.39901 130.71%
Se 196.026†	-1926.0	-10.326	ug/L	50.5497	-10.326	ppb	50.5497 489.54%
Si 251.611†	-1205.0	-36.399	ug/L	1.0735	-36.399	ppb	1.0735 2.95%
Sn 189.927†	-31.2	-0.3163	ug/L	0.69139	-0.3163	ppb	0.69139 218.56%
Sr 421.552†	35.5	0.2394	ug/L	0.07983	0.2394	ppb	0.07983 33.34%
Ti 334.940†	-56.3	-0.1110	ug/L	0.15992	-0.1110	ppb	0.15992 144.10%
Tl 190.801†	-11.6	-3.7140	ug/L	2.95237	-3.7140	ppb	2.95237 79.49%
U 409.014†	1819.9	4.0714	ug/L	1.12397	4.0714	ppb	1.12397 27.61%
V 292.402†	8249.7	-1.1252	ug/L	2.44315	-1.1252	ppb	2.44315 217.13%
Zn 213.857†	4005.7	0.5283	ug/L	1.98985	0.5283	ppb	1.98985 376.67%
SiO2†	-1242.9	-80.402	ug/L	2.5425	-80.402	ppb	2.5425 3.16%

Sequence No.: 18
Sample ID: LR2
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/9/2009 10:03:58
Data Type: Reprocessed on 12/9/2009 10:32:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	911921.9	911921.9	103.05	%			10:07:09
1	Sc Radial	5737.0	5737.0	101	%			10:05:52
1	Y 371.029	765966.6	765966.6	103.22	%			10:07:09
1	Y RADIAL	6214.8	6214.8	100.9	%			10:05:52
1	Ag 328.068†	348.9	111.0	0.5170	ug/L	0.5170	ppb	10:07:14
1	Al 396.153Radial†	-6.8	13.6	10.067	ug/L	10.067	ppb	10:05:52
1	As 188.979†	-9.9	19.6	8.0099	ug/L	8.0099	ppb	10:07:34
1	B 249.677†	-142.2	385.8	8.3865	ug/L	8.3865	ppb	10:07:34
1	Ba 233.527†	1328395.7	1289150.4	9791.1	ug/L	9791.1	ppb	10:07:09
1	Be 313.107†	-5235.7	239.2	0.0888	ug/L	0.0888	ppb	10:07:14
1	Ca 317.933Radial†	35.2	17.1	26.123	ug/L	26.123	ppb	10:06:12
1	Cd 226.502†	-140.8	51.2	0.5561	ug/L	0.5561	ppb	10:07:34
1	Co 228.616†	-316.7	-235.6	-0.1719	ug/L	-0.1719	ppb	10:07:34
1	Cr 267.716†	85.5	-4.0	-0.0417	ug/L	-0.0417	ppb	10:07:34
1	Cu 324.752†	6919.7	-53.4	-0.1555	ug/L	-0.1555	ppb	10:07:14
1	Fe 238.204 Radial†	6.1	-0.0	-0.4234	ug/L	-0.4234	ppb	10:06:12
1	K 766.490 Radial†	2390.1	189.1	34.319	ug/L	34.319	ppb	10:05:52
1	Mg 279.077 IEC†	2.0	0.2	8.1529	ug/L	8.1529	ppb	10:06:12
1	Mn 257.610†	416.2	0.5	0.0003	ug/L	0.0003	ppb	10:07:34
1	Mo 202.031†	22.0	1.4	0.0888	ug/L	0.0888	ppb	10:07:34
1	Na 589.592 Radial†	-579.3	44.1	16.594	ug/L	16.594	ppb	10:05:52
1	Ni 231.604†	99.8	26.8	0.6383	ug/L	0.6383	ppb	10:07:34
1	P 214.914†	210.8	-15.4	-9.0917	ug/L	-9.0917	ppb	10:07:34
1	Pb 220.353†	-53.0	1.2	0.1376	ug/L	0.1376	ppb	10:07:34
1	S 181.975 Axial†	40.5	-2.2	-3.1619	ug/L	-3.1619	ppb	10:07:34
1	Sb 206.836†	37.1	6.4	2.1078	ug/L	2.1078	ppb	10:07:34
1	Se 196.026†	-14.9	9.0	5.3573	ug/L	5.3573	ppb	10:07:34
1	Si 251.611†	471.7	-50.3	-1.5536	ug/L	-1.5536	ppb	10:07:34
1	Sn 189.927†	9.0	4.5	0.7588	ug/L	0.7588	ppb	10:07:34
1	Sr 421.552†	-16.0	-19.3	-0.1302	ug/L	-0.1302	ppb	10:05:52
1	Ti 334.940†	-1043.1	-47.3	-0.0734	ug/L	-0.0734	ppb	10:07:14
1	Tl 190.801†	-28.9	8.8	2.5596	ug/L	2.5596	ppb	10:07:34
1	U 409.014†	-2160.2	-134.2	-3.7479	ug/L	-3.7479	ppb	10:07:09
1	V 292.402†	-1302.4	32.6	0.2144	ug/L	0.2144	ppb	10:07:14
1	Zn 213.857†	828.6	-3.2	-0.0329	ug/L	-0.0329	ppb	10:07:34
1	SiO2†	495.3	-8.2	-0.5689	ug/L	-0.5689	ppb	10:08:40
2	Sc 361.383	906063.3	906063.3	102.38	%			10:07:39
2	Sc Radial	5826.9	5826.9	103	%			10:06:17
2	Y 371.029	760076.9	760076.9	102.43	%			10:07:39
2	Y RADIAL	6340.6	6340.6	103.0	%			10:06:17
2	Ag 328.068†	379.1	142.7	0.6702	ug/L	0.6702	ppb	10:07:44
2	Al 396.153Radial†	-25.1	-4.0	-2.9620	ug/L	-2.9620	ppb	10:06:17
2	As 188.979†	-23.5	6.3	2.5583	ug/L	2.5583	ppb	10:08:04
2	B 249.677†	-151.1	376.3	8.1768	ug/L	8.1768	ppb	10:08:04
2	Ba 233.527†	1330239.4	1299286.8	9868.1	ug/L	9868.1	ppb	10:07:39
2	Be 313.107†	-5299.5	144.1	0.0534	ug/L	0.0534	ppb	10:07:44
2	Ca 317.933Radial†	33.3	14.7	22.471	ug/L	22.471	ppb	10:06:37
2	Cd 226.502†	-159.3	32.2	0.3488	ug/L	0.3488	ppb	10:08:04
2	Co 228.616†	-302.8	-224.0	0.0854	ug/L	0.0854	ppb	10:08:04
2	Cr 267.716†	102.3	13.0	0.1427	ug/L	0.1427	ppb	10:08:04
2	Cu 324.752†	6853.3	-74.8	-0.2171	ug/L	-0.2171	ppb	10:07:44
2	Fe 238.204 Radial†	7.4	1.2	11.833	ug/L	11.833	ppb	10:06:37
2	K 766.490 Radial†	2542.9	301.2	54.660	ug/L	54.660	ppb	10:06:17
2	Mg 279.077 IEC†	3.1	1.2	45.853	ug/L	45.853	ppb	10:06:37
2	Mn 257.610†	424.1	10.8	0.0121	ug/L	0.0121	ppb	10:08:04
2	Mo 202.031†	9.2	-11.0	-0.7181	ug/L	-0.7181	ppb	10:08:04
2	Na 589.592 Radial†	-622.3	11.1	4.1905	ug/L	4.1905	ppb	10:06:17
2	Ni 231.604†	85.2	13.1	0.3137	ug/L	0.3137	ppb	10:08:04

2	P 214.914†	210.4	-14.4	-8.5541	ug/L	-8.5541 ppb	10:08:04
2	Pb 220.353†	-46.3	7.3	0.8501	ug/L	0.8501 ppb	10:08:04
2	S 181.975 Axial†	49.8	7.1	10.427	ug/L	10.427 ppb	10:08:04
2	Sb 206.836†	38.2	7.7	2.4973	ug/L	2.4973 ppb	10:08:04
2	Se 196.026†	-30.7	-6.5	-3.8387	ug/L	-3.8387 ppb	10:08:04
2	Si 251.611†	469.2	-49.7	-1.5269	ug/L	-1.5269 ppb	10:08:04
2	Sn 189.927†	4.9	0.5	0.0935	ug/L	0.0935 ppb	10:08:04
2	Sr 421.552†	-9.2	-12.4	-0.0837	ug/L	-0.0837 ppb	10:06:17
2	Ti 334.940†	-1028.1	-39.1	-0.0590	ug/L	-0.0590 ppb	10:07:44
2	Tl 190.801†	-30.2	7.4	2.1299	ug/L	2.1299 ppb	10:08:04
2	U 409.014†	-2270.8	-255.8	-7.1473	ug/L	-7.1473 ppb	10:07:39
2	V 292.402†	-1291.0	35.5	0.2146	ug/L	0.2146 ppb	10:07:44
2	Zn 213.857†	834.7	8.0	0.0679	ug/L	0.0679 ppb	10:08:04
2	SiO2†	462.7	-36.9	-2.4319	ug/L	-2.4319 ppb	10:08:45
3	Sc 361.383	899417.1	899417.1	101.63	%		10:08:09
3	Sc Radial	5782.9	5782.9	102	%		10:06:42
3	Y 371.029	755364.8	755364.8	101.79	%		10:08:09
3	Y RADIAL	6284.5	6284.5	102.0	%		10:06:42
3	Ag 328.068†	291.0	58.7	0.2871	ug/L	0.2871 ppb	10:08:14
3	Al 396.153Radial†	-11.6	9.0	6.6395	ug/L	6.6395 ppb	10:06:42
3	As 188.979†	-10.5	18.8	7.6829	ug/L	7.6829 ppb	10:08:35
3	B 249.677†	-146.1	380.1	8.2595	ug/L	8.2595 ppb	10:08:35
3	Ba 233.527†	1320540.7	1299344.7	9868.5	ug/L	9868.5 ppb	10:08:09
3	Be 313.107†	-5272.3	132.6	0.0494	ug/L	0.0494 ppb	10:08:14
3	Ca 317.933Radial†	40.4	21.9	33.423	ug/L	33.423 ppb	10:07:02
3	Cd 226.502†	-149.8	40.5	0.4373	ug/L	0.4373 ppb	10:08:35
3	Co 228.616†	-326.9	-249.9	-0.4160	ug/L	-0.4160 ppb	10:08:35
3	Cr 267.716†	88.5	0.1	0.0055	ug/L	0.0055 ppb	10:08:35
3	Cu 324.752†	7060.6	178.6	0.5204	ug/L	0.5204 ppb	10:08:14
3	Fe 238.204 Radial†	8.1	1.9	19.094	ug/L	19.094 ppb	10:07:02
3	K 766.490 Radial†	2495.9	274.0	49.718	ug/L	49.718 ppb	10:06:42
3	Mg 279.077 IEC†	-1.2	-3.0	-110.26	ug/L	-110.26 ppb	10:07:02
3	Mn 257.610†	412.7	2.6	0.0068	ug/L	0.0068 ppb	10:08:35
3	Mo 202.031†	20.1	-0.2	-0.0110	ug/L	-0.0110 ppb	10:08:35
3	Na 589.592 Radial†	-562.9	64.7	24.325	ug/L	24.325 ppb	10:06:42
3	Ni 231.604†	73.0	1.8	0.0447	ug/L	0.0447 ppb	10:08:35
3	P 214.914†	207.6	-15.6	-9.3830	ug/L	-9.3830 ppb	10:08:35
3	Pb 220.353†	-52.0	1.4	0.1642	ug/L	0.1642 ppb	10:08:35
3	S 181.975 Axial†	33.5	-8.5	-12.393	ug/L	-12.393 ppb	10:08:35
3	Sb 206.836†	36.1	5.9	1.9358	ug/L	1.9358 ppb	10:08:35
3	Se 196.026†	-22.6	1.2	0.7890	ug/L	0.7890 ppb	10:08:35
3	Si 251.611†	487.0	-28.9	-0.9015	ug/L	-0.9015 ppb	10:08:35
3	Sn 189.927†	8.9	4.4	0.7546	ug/L	0.7546 ppb	10:08:35
3	Sr 421.552†	-21.7	-24.6	-0.1666	ug/L	-0.1666 ppb	10:06:42
3	Ti 334.940†	-937.1	43.0	0.0759	ug/L	0.0759 ppb	10:08:14
3	Tl 190.801†	-26.7	10.6	3.0509	ug/L	3.0509 ppb	10:08:35
3	U 409.014†	-2375.5	-375.1	-10.483	ug/L	-10.483 ppb	10:08:09
3	V 292.402†	-1273.9	43.1	0.2646	ug/L	0.2646 ppb	10:08:14
3	Zn 213.857†	835.6	14.9	0.1349	ug/L	0.1349 ppb	10:08:35
3	SiO2†	494.1	-2.6	-0.2146	ug/L	-0.2146 ppb	10:08:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905800.7	102.35	%	0.707				0.69%
Sc Radial	5782.3	102	%	0.8				0.78%
Y 371.029	760469.4	102.48	%	0.716				0.70%
Y RADIAL	6280.0	102.0	%	1.02				1.00%
Ag 328.068†	104.1	0.4914	ug/L	0.19283	0.4914	ppb	0.19283	39.24%
Al 396.153Radial†	6.2	4.5814	ug/L	6.75373	4.5814	ppb	6.75373	147.42%
As 188.979†	14.9	6.0837	ug/L	3.05744	6.0837	ppb	3.05744	50.26%
B 249.677†	380.7	8.2742	ug/L	0.10562	8.2742	ppb	0.10562	1.28%
Ba 233.527†	1295927.3	9842.6	ug/L	44.58	9842.6	ppb	44.58	0.45%
Be 313.107†	172.0	0.0639	ug/L	0.02165	0.0639	ppb	0.02165	33.91%
Ca 317.933Radial†	17.9	27.339	ug/L	5.5762	27.339	ppb	5.5762	20.40%
Cd 226.502†	41.3	0.4474	ug/L	0.10399	0.4474	ppb	0.10399	23.24%
Co 228.616†	-236.5	-0.1675	ug/L	0.25071	-0.1675	ppb	0.25071	149.68%
Cr 267.716†	3.0	0.0355	ug/L	0.09578	0.0355	ppb	0.09578	269.54%
Cu 324.752†	16.8	0.0493	ug/L	0.40915	0.0493	ppb	0.40915	830.05%
Fe 238.204 Radial†	1.0	10.168	ug/L	9.8646	10.168	ppb	9.8646	97.02%

K 766.490 Radial†	254.8	46.232	ug/L	10.6088	46.232	ppb	10.6088 22.95%
Mg 279.077 IEC†	-0.5	-18.751	ug/L	81.4590	-18.751	ppb	81.4590 434.43%
Mn 257.610†	4.6	0.0064	ug/L	0.00587	0.0064	ppb	0.00587 91.59%
Mo 202.031†	-3.3	-0.2134	ug/L	0.43988	-0.2134	ppb	0.43988 206.09%
Na 589.592 Radial†	40.0	15.036	ug/L	10.1571	15.036	ppb	10.1571 67.55%
Ni 231.604†	13.9	0.3322	ug/L	0.29722	0.3322	ppb	0.29722 89.47%
P 214.914†	-15.2	-9.0096	ug/L	0.42051	-9.0096	ppb	0.42051 4.67%
Pb 220.353†	3.3	0.3840	ug/L	0.40392	0.3840	ppb	0.40392 105.20%
S 181.975 Axial†	-1.2	-1.7093	ug/L	11.47907	-1.7093	ppb	11.47907 671.58%
Sb 206.836†	6.7	2.1803	ug/L	0.28766	2.1803	ppb	0.28766 13.19%
Se 196.026†	1.2	0.7692	ug/L	4.59805	0.7692	ppb	4.59805 597.76%
Si 251.611†	-43.0	-1.3274	ug/L	0.36903	-1.3274	ppb	0.36903 27.80%
Sn 189.927†	3.1	0.5356	ug/L	0.38286	0.5356	ppb	0.38286 71.48%
Sr 421.552†	-18.8	-0.1269	ug/L	0.04153	-0.1269	ppb	0.04153 32.73%
Ti 334.940†	-14.5	-0.0188	ug/L	0.08237	-0.0188	ppb	0.08237 437.29%
Tl 190.801†	8.9	2.5801	ug/L	0.46085	2.5801	ppb	0.46085 17.86%
U 409.014†	-255.0	-7.1262	ug/L	3.36777	-7.1262	ppb	3.36777 47.26%
V 292.402†	37.0	0.2312	ug/L	0.02892	0.2312	ppb	0.02892 12.51%
Zn 213.857†	6.6	0.0567	ug/L	0.08447	0.0567	ppb	0.08447 149.06%
SiO2†	-15.9	-1.0718	ug/L	1.19115	-1.0718	ppb	1.19115 111.14%

Sequence No.: 19
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 10:11:01
Data Type: Reprocessed on 12/9/2009 10:32:35

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	905387.0	905387.0	102.31	%			10:14:10
1	Sc Radial	5757.4	5757.4	102	%			10:12:53
1	Y 371.029	747390.8	747390.8	100.72	%			10:14:10
1	Y RADIAL	6187.6	6187.6	100.5	%			10:12:53
1	Ag 328.068†	109631.7	106932.1	497.41	ug/L	497.41	ppb	10:14:15
1	Al 396.153Radial†	6657.5	6569.1	4835.1	ug/L	4835.1	ppb	10:12:53
1	As 188.979†	1187.1	1189.5	489.65	ug/L	489.65	ppb	10:14:35
1	B 249.677†	22332.3	22352.6	483.30	ug/L	483.30	ppb	10:14:15
1	Ba 233.527†	65192.2	63734.3	485.33	ug/L	485.33	ppb	10:14:15
1	Be 313.107†	1327773.7	1303155.4	485.21	ug/L	485.21	ppb	10:14:10
1	Ca 317.933Radial†	3278.0	3206.8	4903.7	ug/L	4903.7	ppb	10:13:13
1	Cd 226.502†	45822.7	44977.4	487.76	ug/L	487.76	ppb	10:14:15
1	Co 228.616†	25503.1	24999.8	485.44	ug/L	485.44	ppb	10:14:15
1	Cr 267.716†	46047.7	44922.5	484.81	ug/L	484.81	ppb	10:14:15
1	Cu 324.752†	175594.6	164866.7	479.74	ug/L	479.74	ppb	10:14:15
1	Fe 238.204 Radial†	516.0	501.5	5065.1	ug/L	5065.1	ppb	10:13:13
1	K 766.490 Radial†	29983.5	27323.4	4950.3	ug/L	4950.3	ppb	10:12:53
1	Mg 279.077 IEC†	142.6	138.5	5162.5	ug/L	5162.5	ppb	10:13:13
1	Mn 257.610†	455894.8	445211.9	484.23	ug/L	484.23	ppb	10:14:10
1	Mo 202.031†	7765.2	7570.1	493.47	ug/L	493.47	ppb	10:14:35
1	Na 589.592 Radial†	26492.5	26675.7	10027	ug/L	10027	ppb	10:12:53
1	Ni 231.604†	21105.9	20559.9	487.54	ug/L	487.54	ppb	10:14:15
1	P 214.914†	4367.2	4048.8	2332.9	ug/L	2332.9	ppb	10:14:35
1	Pb 220.353†	4216.4	4173.9	489.42	ug/L	489.42	ppb	10:14:35
1	S 181.975 Axial†	734.7	676.6	988.45	ug/L	988.45	ppb	10:14:35
1	Sb 206.836†	1573.9	1508.8	497.10	ug/L	497.10	ppb	10:14:35
1	Se 196.026†	816.1	821.1	507.39	ug/L	507.39	ppb	10:14:35
1	Si 251.611†	82345.1	79980.4	2434.5	ug/L	2434.5	ppb	10:14:15
1	Sn 189.927†	3008.2	2936.1	497.31	ug/L	497.31	ppb	10:14:35
1	Sr 421.552†	76890.1	75630.6	510.51	ug/L	510.51	ppb	10:12:53
1	Ti 334.940†	310381.6	304348.1	492.10	ug/L	492.10	ppb	10:14:15
1	Tl 190.801†	1701.0	1699.5	490.26	ug/L	490.26	ppb	10:14:35
1	U 409.014†	15621.5	17231.5	479.85	ug/L	479.85	ppb	10:14:15
1	V 292.402†	71824.9	71501.9	489.27	ug/L	489.27	ppb	10:14:15
1	Zn 213.857†	56177.1	54103.1	482.42	ug/L	482.42	ppb	10:14:15
1	SiO2†	83150.8	80787.1	5264.6	ug/L	5264.6	ppb	10:15:43
2	Sc 361.383	900981.4	900981.4	101.81	%			10:14:41
2	Sc Radial	5822.1	5822.1	103	%			10:13:18
2	Y 371.029	741943.7	741943.7	99.983	%			10:14:41
2	Y RADIAL	6300.2	6300.2	102.3	%			10:13:18
2	Ag 328.068†	110964.8	108765.6	505.87	ug/L	505.87	ppb	10:14:46
2	Al 396.153Radial†	6739.5	6576.0	4839.9	ug/L	4839.9	ppb	10:13:18
2	As 188.979†	1198.2	1206.1	496.45	ug/L	496.45	ppb	10:15:06
2	B 249.677†	22648.0	22769.4	492.34	ug/L	492.34	ppb	10:14:46
2	Ba 233.527†	65913.6	64754.4	493.09	ug/L	493.09	ppb	10:14:46
2	Be 313.107†	1335877.3	1317461.1	490.54	ug/L	490.54	ppb	10:14:41
2	Ca 317.933Radial†	3249.3	3142.9	4806.1	ug/L	4806.1	ppb	10:13:38
2	Cd 226.502†	46173.7	45541.1	493.89	ug/L	493.89	ppb	10:14:46
2	Co 228.616†	25838.6	25451.2	494.20	ug/L	494.20	ppb	10:14:46
2	Cr 267.716†	46509.9	45596.5	492.08	ug/L	492.08	ppb	10:14:46
2	Cu 324.752†	177549.4	167626.0	487.76	ug/L	487.76	ppb	10:14:46
2	Fe 238.204 Radial†	508.6	488.7	4936.8	ug/L	4936.8	ppb	10:13:38
2	K 766.490 Radial†	30180.6	27187.0	4925.5	ug/L	4925.5	ppb	10:13:18
2	Mg 279.077 IEC†	141.6	135.9	5067.8	ug/L	5067.8	ppb	10:13:38
2	Mn 257.610†	460073.3	451495.1	491.05	ug/L	491.05	ppb	10:14:41
2	Mo 202.031†	7819.8	7660.9	499.37	ug/L	499.37	ppb	10:15:06
2	Na 589.592 Radial†	26816.2	26700.7	10036	ug/L	10036	ppb	10:13:18
2	Ni 231.604†	21261.3	20813.4	493.55	ug/L	493.55	ppb	10:14:46

2	P 214.914†	4413.6	4115.2	2371.2 ug/L	2371.2 ppb	10:15:06
2	Pb 220.353†	4213.2	4190.9	491.43 ug/L	491.43 ppb	10:15:06
2	S 181.975 Axial†	726.6	672.2	981.93 ug/L	981.93 ppb	10:15:06
2	Sb 206.836†	1593.6	1535.6	505.86 ug/L	505.86 ppb	10:15:06
2	Se 196.026†	819.3	828.2	511.21 ug/L	511.21 ppb	10:15:06
2	Si 251.611†	83107.3	81122.6	2469.3 ug/L	2469.3 ppb	10:14:46
2	Sn 189.927†	3035.2	2977.0	504.20 ug/L	504.20 ppb	10:15:06
2	Sr 421.552†	77983.9	75853.3	512.01 ug/L	512.01 ppb	10:13:18
2	Ti 334.940†	313586.0	308979.1	499.58 ug/L	499.58 ppb	10:14:46
2	Tl 190.801†	1703.9	1710.5	493.45 ug/L	493.45 ppb	10:15:06
2	U 409.014†	15887.9	17567.8	489.25 ug/L	489.25 ppb	10:14:46
2	V 292.402†	72477.5	72486.2	496.02 ug/L	496.02 ppb	10:14:46
2	Zn 213.857†	56772.8	54956.8	490.06 ug/L	490.06 ppb	10:14:46
2	SiO2†	82463.9	80509.8	5246.1 ug/L	5246.1 ppb	10:15:48
3	Sc 361.383	895885.9	895885.9	101.23 %		10:15:12
3	Sc Radial	5571.4	5571.4	98.4 %		10:13:43
3	Y 371.029	738996.2	738996.2	99.586 %		10:15:12
3	Y RADIAL	6031.2	6031.2	97.93 %		10:13:43
3	Ag 328.068†	110847.1	109269.2	508.31 ug/L	508.31 ppb	10:15:17
3	Al 396.153Radial†	6614.1	6743.7	4963.8 ug/L	4963.8 ppb	10:13:43
3	As 188.979†	1205.7	1220.2	502.29 ug/L	502.29 ppb	10:15:37
3	B 249.677†	22742.3	22989.1	497.06 ug/L	497.06 ppb	10:15:17
3	Ba 233.527†	65729.4	64940.7	494.53 ug/L	494.53 ppb	10:15:17
3	Be 313.107†	1330697.2	1319807.1	491.42 ug/L	491.42 ppb	10:15:12
3	Ca 317.933Radial†	3306.3	3343.2	5112.3 ug/L	5112.3 ppb	10:14:03
3	Cd 226.502†	46027.7	45654.8	495.09 ug/L	495.09 ppb	10:15:17
3	Co 228.616†	25740.0	25498.2	495.10 ug/L	495.10 ppb	10:15:17
3	Cr 267.716†	46474.5	45821.4	494.51 ug/L	494.51 ppb	10:15:17
3	Cu 324.752†	178128.2	169189.6	492.32 ug/L	492.32 ppb	10:15:17
3	Fe 238.204 Radial†	519.4	521.9	5271.2 ug/L	5271.2 ppb	10:14:03
3	K 766.490 Radial†	29664.0	27983.4	5070.0 ug/L	5070.0 ppb	10:13:43
3	Mg 279.077 IEC†	138.9	139.5	5199.4 ug/L	5199.4 ppb	10:14:03
3	Mn 257.610†	457963.5	451981.2	491.61 ug/L	491.61 ppb	10:15:12
3	Mo 202.031†	7783.7	7668.9	499.92 ug/L	499.92 ppb	10:15:37
3	Na 589.592 Radial†	25978.9	27023.8	10157 ug/L	10157 ppb	10:13:43
3	Ni 231.604†	21267.2	20938.0	496.50 ug/L	496.50 ppb	10:15:17
3	P 214.914†	4365.7	4092.6	2356.8 ug/L	2356.8 ppb	10:15:37
3	Pb 220.353†	4186.5	4188.0	491.10 ug/L	491.10 ppb	10:15:37
3	S 181.975 Axial†	726.6	676.3	987.95 ug/L	987.95 ppb	10:15:37
3	Sb 206.836†	1579.5	1530.7	504.14 ug/L	504.14 ppb	10:15:37
3	Se 196.026†	828.6	841.9	520.46 ug/L	520.46 ppb	10:15:37
3	Si 251.611†	83053.4	81533.7	2481.8 ug/L	2481.8 ppb	10:15:17
3	Sn 189.927†	2996.8	2956.0	500.69 ug/L	500.69 ppb	10:15:37
3	Sr 421.552†	76276.7	77532.7	523.34 ug/L	523.34 ppb	10:13:43
3	Ti 334.940†	313907.0	311048.1	502.94 ug/L	502.94 ppb	10:15:17
3	Tl 190.801†	1704.9	1721.0	496.49 ug/L	496.49 ppb	10:15:37
3	U 409.014†	15975.5	17743.0	494.10 ug/L	494.10 ppb	10:15:17
3	V 292.402†	72457.4	72871.2	498.59 ug/L	498.59 ppb	10:15:17
3	Zn 213.857†	56687.5	55189.7	492.10 ug/L	492.10 ppb	10:15:17
3	SiO2†	81855.0	80369.1	5236.8 ug/L	5236.8 ppb	10:15:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900751.4	101.78	%	0.537				0.53%
Sc Radial	5717.0	101	%	2.3				2.28%
Y 371.029	742776.9	100.10	%	0.574				0.57%
Y RADIAL	6173.0	100.2	%	2.19				2.19%
Ag 328.068†	108322.3	503.86	ug/L	5.716	503.86	ppb	5.716	1.13%
QC value within limits for Ag 328.068 Recovery = 100.77%								
Al 396.153Radial†	6629.6	4879.6	ug/L	72.99	4879.6	ppb	72.99	1.50%
QC value within limits for Al 396.153Radial Recovery = 97.59%								
As 188.979†	1205.3	496.13	ug/L	6.327	496.13	ppb	6.327	1.28%
QC value within limits for As 188.979 Recovery = 99.23%								
B 249.677†	22703.7	490.90	ug/L	6.994	490.90	ppb	6.994	1.42%
QC value within limits for B 249.677 Recovery = 98.18%								
Ba 233.527†	64476.5	490.98	ug/L	4.945	490.98	ppb	4.945	1.01%
QC value within limits for Ba 233.527 Recovery = 98.20%								
Be 313.107†	1313474.5	489.06	ug/L	3.360	489.06	ppb	3.360	0.69%
QC value within limits for Be 313.107 Recovery = 97.81%								

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Ca 317.933Radial†        3231.0      4940.7 ug/L        156.41      4940.7 ppb        156.41   3.17%
   QC value within limits for Ca 317.933Radial  Recovery = 98.81%
Cd 226.502†             45391.1      492.25 ug/L         3.934      492.25 ppb         3.934   0.80%
   QC value within limits for Cd 226.502  Recovery = 98.45%
Co 228.616†             25316.4      491.58 ug/L         5.339      491.58 ppb         5.339   1.09%
   QC value within limits for Co 228.616  Recovery = 98.32%
Cr 267.716†             45446.8      490.46 ug/L         5.048      490.46 ppb         5.048   1.03%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†            167227.4      486.61 ug/L         6.370      486.61 ppb         6.370   1.31%
   QC value within limits for Cu 324.752  Recovery = 97.32%
Fe 238.204 Radial†        504.1      5091.0 ug/L        168.71      5091.0 ppb        168.71   3.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.82%
K 766.490 Radial†       27498.0      4982.0 ug/L         77.25      4982.0 ppb         77.25   1.55%
   QC value within limits for K 766.490 Radial  Recovery = 99.64%
Mg 279.077 IEC†           138.0      5143.2 ug/L         67.85      5143.2 ppb         67.85   1.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.86%
Mn 257.610†            449562.8      488.96 ug/L         4.107      488.96 ppb         4.107   0.84%
   QC value within limits for Mn 257.610  Recovery = 97.79%
Mo 202.031†             7633.3      497.59 ug/L         3.578      497.59 ppb         3.578   0.72%
   QC value within limits for Mo 202.031  Recovery = 99.52%
Na 589.592 Radial†      26800.1       10073 ug/L          73.0       10073 ppb          73.0   0.72%
   QC value within limits for Na 589.592 Radial  Recovery = 100.73%
Ni 231.604†             20770.4      492.53 ug/L         4.569      492.53 ppb         4.569   0.93%
   QC value within limits for Ni 231.604  Recovery = 98.51%
P 214.914†               4085.5      2353.6 ug/L         19.38      2353.6 ppb         19.38   0.82%
   QC value within limits for P 214.914  Recovery = 94.14%
Pb 220.353†              4184.3      490.65 ug/L         1.076      490.65 ppb         1.076   0.22%
   QC value within limits for Pb 220.353  Recovery = 98.13%
S 181.975 Axial†          675.0      986.11 ug/L         3.629      986.11 ppb         3.629   0.37%
   QC value within limits for S 181.975 Axial  Recovery = 98.61%
Sb 206.836†              1525.0      502.37 ug/L         4.643      502.37 ppb         4.643   0.92%
   QC value within limits for Sb 206.836  Recovery = 100.47%
Se 196.026†               830.4      513.02 ug/L         6.716      513.02 ppb         6.716   1.31%
   QC value within limits for Se 196.026  Recovery = 102.60%
Si 251.611†             80878.9      2461.9 ug/L         24.53      2461.9 ppb         24.53   1.00%
   QC value within limits for Si 251.611  Recovery = 98.47%
Sn 189.927†              2956.4      500.73 ug/L         3.450      500.73 ppb         3.450   0.69%
   QC value within limits for Sn 189.927  Recovery = 100.15%
Sr 421.552†             76338.9      515.29 ug/L         7.018      515.29 ppb         7.018   1.36%
   QC value within limits for Sr 421.552  Recovery = 103.06%
Ti 334.940†            308125.1      498.21 ug/L         5.548      498.21 ppb         5.548   1.11%
   QC value within limits for Ti 334.940  Recovery = 99.64%
Tl 190.801†              1710.4      493.40 ug/L         3.111      493.40 ppb         3.111   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.68%
U 409.014†              17514.1      487.74 ug/L         7.244      487.74 ppb         7.244   1.49%
   QC value within limits for U 409.014  Recovery = 97.55%
V 292.402†              72286.4      494.63 ug/L         4.813      494.63 ppb         4.813   0.97%
   QC value within limits for V 292.402  Recovery = 98.93%
Zn 213.857†             54749.9      488.19 ug/L         5.105      488.19 ppb         5.105   1.05%
   QC value within limits for Zn 213.857  Recovery = 97.64%
SiO2†                   80555.3      5249.2 ug/L         14.11      5249.2 ppb         14.11   0.27%
   QC value within limits for SiO2  Recovery = 98.16%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 10:18:03
Data Type: Reprocessed on 12/9/2009 10:32:36

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	934147.0	934147.0	105.56	%			10:21:12
1	Sc Radial	5920.6	5920.6	105	%			10:19:56
1	Y 371.029	791293.4	791293.4	106.63	%			10:21:12
1	Y RADIAL	6437.5	6437.5	104.5	%			10:19:56
1	Ag 328.068†	421.0	171.3	0.7872	ug/L	0.7872	ppb	10:21:12
1	Al 396.153Radial†	-8.6	12.1	8.9030	ug/L	8.9030	ppb	10:19:56
1	As 188.979†	-17.8	12.3	5.0171	ug/L	5.0171	ppb	10:21:32
1	B 249.677†	-62.1	465.0	10.096	ug/L	10.096	ppb	10:21:32
1	Ba 233.527†	-5.4	6.9	0.0531	ug/L	0.0531	ppb	10:21:32
1	Be 313.107†	-5196.0	397.8	0.1478	ug/L	0.1478	ppb	10:21:12
1	Ca 317.933Radial†	19.8	1.3	1.9325	ug/L	1.9325	ppb	10:20:16
1	Cd 226.502†	-166.7	29.9	0.3269	ug/L	0.3269	ppb	10:21:32
1	Co 228.616†	-65.1	10.1	0.1971	ug/L	0.1971	ppb	10:21:32
1	Cr 267.716†	85.1	-6.3	-0.0676	ug/L	-0.0676	ppb	10:21:32
1	Cu 324.752†	6827.0	-301.0	-0.8766	ug/L	-0.8766	ppb	10:21:12
1	Fe 238.204 Radial†	4.2	-2.0	-20.618	ug/L	-20.618	ppb	10:20:16
1	K 766.490 Radial†	2447.9	171.3	31.087	ug/L	31.087	ppb	10:19:56
1	Mg 279.077 IEC†	-1.1	-2.8	-104.47	ug/L	-104.47	ppb	10:20:16
1	Mn 257.610†	388.9	-35.0	-0.0381	ug/L	-0.0381	ppb	10:21:32
1	Mo 202.031†	31.0	9.4	0.6115	ug/L	0.6115	ppb	10:21:32
1	Na 589.592 Radial†	-619.7	23.1	8.6971	ug/L	8.6971	ppb	10:19:56
1	Ni 231.604†	83.9	9.4	0.2220	ug/L	0.2220	ppb	10:21:32
1	P 214.914†	213.0	-18.2	-10.626	ug/L	-10.626	ppb	10:21:32
1	Pb 220.353†	-56.2	-0.7	-0.0787	ug/L	-0.0787	ppb	10:21:32
1	S 181.975 Axial†	46.1	2.2	3.2409	ug/L	3.2409	ppb	10:21:32
1	Sb 206.836†	41.5	9.7	3.1886	ug/L	3.1886	ppb	10:21:32
1	Se 196.026†	-23.4	1.3	0.7164	ug/L	0.7164	ppb	10:21:32
1	Si 251.611†	504.9	-29.7	-0.9326	ug/L	-0.9326	ppb	10:21:32
1	Sn 189.927†	10.0	5.2	0.8852	ug/L	0.8852	ppb	10:21:32
1	Sr 421.552†	21.4	17.0	0.1150	ug/L	0.1150	ppb	10:19:56
1	Ti 334.940†	-1027.4	-8.3	-0.0135	ug/L	-0.0135	ppb	10:21:12
1	Tl 190.801†	-30.7	7.7	2.2179	ug/L	2.2179	ppb	10:21:32
1	U 409.014†	-2052.9	17.4	0.4878	ug/L	0.4878	ppb	10:21:12
1	V 292.402†	-1278.4	85.4	0.5869	ug/L	0.5869	ppb	10:21:12
1	Zn 213.857†	652.4	-189.2	-1.6973	ug/L	-1.6973	ppb	10:21:32
1	SiO2†	464.4	-48.9	-3.2545	ug/L	-3.2545	ppb	10:22:28
2	Sc 361.383	894600.3	894600.3	101.09	%			10:21:38
2	Sc Radial	6090.2	6090.2	108	%			10:20:21
2	Y 371.029	750601.0	750601.0	101.15	%			10:21:38
2	Y RADIAL	6649.1	6649.1	108.0	%			10:20:21
2	Ag 328.068†	333.6	102.4	0.4806	ug/L	0.4806	ppb	10:21:38
2	Al 396.153Radial†	-47.4	-23.7	-17.563	ug/L	-17.563	ppb	10:20:21
2	As 188.979†	-16.3	13.1	5.3524	ug/L	5.3524	ppb	10:21:58
2	B 249.677†	-87.8	437.0	9.4827	ug/L	9.4827	ppb	10:21:58
2	Ba 233.527†	-13.3	-1.1	-0.0074	ug/L	-0.0074	ppb	10:21:58
2	Be 313.107†	-5298.5	78.7	0.0291	ug/L	0.0291	ppb	10:21:38
2	Ca 317.933Radial†	18.5	-0.4	-0.6880	ug/L	-0.6880	ppb	10:20:41
2	Cd 226.502†	-174.3	15.4	0.1653	ug/L	0.1653	ppb	10:21:58
2	Co 228.616†	-58.6	13.7	0.2674	ug/L	0.2674	ppb	10:21:58
2	Cr 267.716†	84.0	-3.9	-0.0414	ug/L	-0.0414	ppb	10:21:58
2	Cu 324.752†	6911.1	68.0	0.1989	ug/L	0.1989	ppb	10:21:38
2	Fe 238.204 Radial†	8.6	2.0	19.673	ug/L	19.673	ppb	10:20:41
2	K 766.490 Radial†	2359.2	23.5	4.2593	ug/L	4.2593	ppb	10:20:21
2	Mg 279.077 IEC†	3.8	1.8	66.983	ug/L	66.983	ppb	10:20:41
2	Mn 257.610†	408.3	0.5	0.0012	ug/L	0.0012	ppb	10:21:58
2	Mo 202.031†	24.5	4.2	0.2770	ug/L	0.2770	ppb	10:21:58
2	Na 589.592 Radial†	-583.6	73.3	27.543	ug/L	27.543	ppb	10:20:21
2	Ni 231.604†	83.0	12.0	0.2853	ug/L	0.2853	ppb	10:21:58

2	P 214.914†	215.2	-7.1	-4.2613	ug/L	-4.2613	ppb	10:21:58
2	Pb 220.353†	-50.5	2.6	0.2953	ug/L	0.2953	ppb	10:21:58
2	S 181.975 Axial†	42.4	0.5	0.6666	ug/L	0.6666	ppb	10:21:58
2	Sb 206.836†	35.2	5.2	1.7253	ug/L	1.7253	ppb	10:21:58
2	Se 196.026†	-25.1	-1.4	-0.7648	ug/L	-0.7648	ppb	10:21:58
2	Si 251.611†	492.4	-20.9	-0.6482	ug/L	-0.6482	ppb	10:21:58
2	Sn 189.927†	10.9	6.5	1.0992	ug/L	1.0992	ppb	10:21:58
2	Sr 421.552†	-9.5	-12.2	-0.0824	ug/L	-0.0824	ppb	10:20:21
2	Ti 334.940†	-1021.5	-45.5	-0.0733	ug/L	-0.0733	ppb	10:21:38
2	Tl 190.801†	-35.6	1.6	0.4669	ug/L	0.4669	ppb	10:21:58
2	U 409.014†	-2010.7	-26.9	-0.7549	ug/L	-0.7549	ppb	10:21:38
2	V 292.402†	-1301.0	9.4	0.0649	ug/L	0.0649	ppb	10:21:38
2	Zn 213.857†	657.5	-156.8	-1.4170	ug/L	-1.4170	ppb	10:21:58
2	SiO2†	509.5	15.2	0.9772	ug/L	0.9772	ppb	10:22:33
3	Sc 361.383	892413.2	892413.2	100.84	%			10:22:03
3	Sc Radial	5597.0	5597.0	98.8	%			10:20:46
3	Y 371.029	750328.3	750328.3	101.11	%			10:22:03
3	Y RADIAL	6124.2	6124.2	99.44	%			10:20:46
3	Ag 328.068†	288.2	58.2	0.2707	ug/L	0.2707	ppb	10:22:03
3	Al 396.153Radial†	1.0	21.4	15.808	ug/L	15.808	ppb	10:20:46
3	As 188.979†	-21.2	8.2	3.3419	ug/L	3.3419	ppb	10:22:23
3	B 249.677†	-79.0	445.5	9.6700	ug/L	9.6700	ppb	10:22:23
3	Ba 233.527†	-12.8	-0.7	-0.0043	ug/L	-0.0043	ppb	10:22:23
3	Be 313.107†	-5201.9	161.7	0.0598	ug/L	0.0598	ppb	10:22:03
3	Ca 317.933Radial†	21.8	4.3	6.6107	ug/L	6.6107	ppb	10:21:06
3	Cd 226.502†	-177.8	11.5	0.1246	ug/L	0.1246	ppb	10:22:23
3	Co 228.616†	-67.9	4.5	0.0856	ug/L	0.0856	ppb	10:22:23
3	Cr 267.716†	69.6	-18.0	-0.1935	ug/L	-0.1935	ppb	10:22:23
3	Cu 324.752†	6854.4	28.6	0.0835	ug/L	0.0835	ppb	10:22:03
3	Fe 238.204 Radial†	6.6	0.7	6.6005	ug/L	6.6005	ppb	10:21:06
3	K 766.490 Radial†	2350.0	207.5	37.659	ug/L	37.659	ppb	10:20:46
3	Mg 279.077 IEC†	-1.0	-2.7	-102.07	ug/L	-102.07	ppb	10:21:06
3	Mn 257.610†	408.3	1.5	0.0041	ug/L	0.0041	ppb	10:22:23
3	Mo 202.031†	13.7	-6.4	-0.4166	ug/L	-0.4166	ppb	10:22:23
3	Na 589.592 Radial†	-598.7	10.2	3.8362	ug/L	3.8362	ppb	10:20:46
3	Ni 231.604†	93.0	22.1	0.5247	ug/L	0.5247	ppb	10:22:23
3	P 214.914†	207.3	-14.4	-8.5749	ug/L	-8.5749	ppb	10:22:23
3	Pb 220.353†	-47.1	5.8	0.6838	ug/L	0.6838	ppb	10:22:23
3	S 181.975 Axial†	38.3	-3.4	-5.0466	ug/L	-5.0466	ppb	10:22:23
3	Sb 206.836†	42.2	12.3	3.9740	ug/L	3.9740	ppb	10:22:23
3	Se 196.026†	-24.1	-0.4	-0.2276	ug/L	-0.2276	ppb	10:22:23
3	Si 251.611†	467.2	-44.7	-1.3716	ug/L	-1.3716	ppb	10:22:23
3	Sn 189.927†	4.2	-0.1	-0.0099	ug/L	-0.0099	ppb	10:22:23
3	Sr 421.552†	-24.6	-28.3	-0.1913	ug/L	-0.1913	ppb	10:20:46
3	Ti 334.940†	-1068.3	-94.4	-0.1530	ug/L	-0.1530	ppb	10:22:03
3	Tl 190.801†	-26.5	10.6	3.0234	ug/L	3.0234	ppb	10:22:23
3	U 409.014†	-1921.0	57.2	1.5988	ug/L	1.5988	ppb	10:22:03
3	V 292.402†	-1275.4	31.7	0.2082	ug/L	0.2082	ppb	10:22:03
3	Zn 213.857†	648.0	-164.7	-1.4826	ug/L	-1.4826	ppb	10:22:23
3	SiO2†	463.4	-29.3	-1.9307	ug/L	-1.9307	ppb	10:22:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907053.5	102.50	%	2.654				2.59%
Sc Radial	5869.3	104	%	4.4				4.27%
Y 371.029	764074.2	102.96	%	3.177				3.09%
Y RADIAL	6403.6	104.0	%	4.29				4.12%
Ag 328.068†	110.6	0.5128	ug/L	0.25976	0.5128	ppb	0.25976	50.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.2	2.3827	ug/L	17.61549	2.3827	ppb	17.61549	739.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	11.2	4.5705	ug/L	1.07713	4.5705	ppb	1.07713	23.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	449.2	9.7496	ug/L	0.31434	9.7496	ppb	0.31434	3.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0138	ug/L	0.03406	0.0138	ppb	0.03406	246.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	212.7	0.0789	ug/L	0.06160	0.0789	ppb	0.06160	78.08%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.7      2.6184 ug/L       3.69740      2.6184 ppb        3.69740 141.21%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               18.9      0.2056 ug/L       0.10702      0.2056 ppb        0.10702  52.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                9.4      0.1834 ug/L       0.09167      0.1834 ppb        0.09167  50.00%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -9.4     -0.1008 ug/L       0.08132     -0.1008 ppb        0.08132  80.64%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -68.1     -0.1981 ug/L       0.59043     -0.1981 ppb        0.59043 298.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.2      1.8854 ug/L      20.55520      1.8854 ppb       20.55520 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        134.1     24.335 ug/L       17.6941     24.335 ppb        17.6941  72.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.2    -46.518 ug/L       98.3017    -46.518 ppb        98.3017 211.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -11.0     -0.0109 ug/L       0.02361     -0.0109 ppb        0.02361 216.20%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.4      0.1573 ug/L       0.52444      0.1573 ppb        0.52444 333.37%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        35.5     13.359 ug/L       12.5220     13.359 ppb        12.5220  93.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.5      0.3440 ug/L       0.15968      0.3440 ppb        0.15968  46.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -13.2     -7.8207 ug/L       3.24871     -7.8207 ppb        3.24871  41.54%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                2.6      0.3001 ug/L       0.38126      0.3001 ppb        0.38126 127.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.3     -0.3797 ug/L       4.24167     -0.3797 ppb        4.24167 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.1      2.9626 ug/L       1.14121      2.9626 ppb        1.14121  38.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.2     -0.0920 ug/L       0.74986     -0.0920 ppb        0.74986 815.09%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -31.8     -0.9841 ug/L       0.36446     -0.9841 ppb        0.36446  37.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                3.9      0.6582 ug/L       0.58840      0.6582 ppb        0.58840  89.40%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -7.8     -0.0529 ug/L       0.15525     -0.0529 ppb        0.15525 293.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -49.4     -0.0799 ug/L       0.06999     -0.0799 ppb        0.06999  87.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.6      1.9027 ug/L       1.30704      1.9027 ppb        1.30704  68.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                15.9      0.4439 ug/L       1.17743      0.4439 ppb        1.17743 265.26%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                42.2      0.2866 ug/L       0.26970      0.2866 ppb        0.26970  94.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -170.2     -1.5323 ug/L       0.14659     -1.5323 ppb        0.14659   9.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -21.0     -1.4027 ug/L       2.16473     -1.4027 ppb        2.16473 154.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 11:31:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5695.9	5695.9	101	%			11:33:47
1	Y RADIAL	6145.4	6145.4	99.78	%			11:33:47
1	Al 396.153Radial†	6664.7	6647.0	4892.3	ug/L	4892.3	ppb	11:33:47
1	Ca 317.933Radial†	3296.2	3259.7	4984.6	ug/L	4984.6	ppb	11:34:07
1	Fe 238.204 Radial†	517.4	508.5	5135.3	ug/L	5135.3	ppb	11:34:07
1	K 766.490 Radial†	29981.1	27639.5	5007.4	ug/L	5007.4	ppb	11:33:47
1	Mg 279.077 IEC†	142.9	140.3	5232.1	ug/L	5232.1	ppb	11:34:07
1	Na 589.592 Radial†	27169.3	27630.0	10385	ug/L	10385	ppb	11:33:47
1	Sr 421.552†	78007.2	77558.1	523.52	ug/L	523.52	ppb	11:33:47
1	Sc 361.383	893907.0	893907.0	101.01	%			11:35:04
1	Y 371.029	737277.9	737277.9	99.354	%			11:35:04
1	Ag 328.068†	109313.6	107993.4	502.35	ug/L	502.35	ppb	11:35:10
1	As 188.979†	1185.7	1203.1	495.24	ug/L	495.24	ppb	11:35:30
1	B 249.677†	22124.3	22427.0	484.89	ug/L	484.89	ppb	11:35:10
1	Ba 233.527†	65087.3	64448.8	490.77	ug/L	490.77	ppb	11:35:10
1	Be 313.107†	1332185.1	1324190.2	493.04	ug/L	493.04	ppb	11:35:04
1	Cd 226.502†	45574.4	45306.8	491.33	ug/L	491.33	ppb	11:35:10
1	Co 228.616†	25514.4	25331.1	491.87	ug/L	491.87	ppb	11:35:10
1	Cr 267.716†	45842.2	45297.0	488.85	ug/L	488.85	ppb	11:35:10
1	Cu 324.752†	175181.1	166661.5	484.96	ug/L	484.96	ppb	11:35:10
1	Mn 257.610†	459814.9	454815.6	494.68	ug/L	494.68	ppb	11:35:04
1	Mo 202.031†	7793.8	7695.9	501.67	ug/L	501.67	ppb	11:35:30
1	Ni 231.604†	20991.5	20711.6	491.13	ug/L	491.13	ppb	11:35:10
1	P 214.914†	4398.9	4135.0	2383.3	ug/L	2383.3	ppb	11:35:30
1	Pb 220.353†	4205.1	4215.6	494.32	ug/L	494.32	ppb	11:35:30
1	S 181.975 Axial†	728.6	679.8	993.12	ug/L	993.12	ppb	11:35:30
1	Sb 206.836†	1588.8	1543.3	508.51	ug/L	508.51	ppb	11:35:30
1	Se 196.026†	807.9	823.3	508.92	ug/L	508.92	ppb	11:35:30
1	Si 251.611†	82498.0	81165.4	2470.5	ug/L	2470.5	ppb	11:35:10
1	Sn 189.927†	3017.5	2983.1	505.26	ug/L	505.26	ppb	11:35:30
1	Ti 334.940†	310092.3	307958.0	497.94	ug/L	497.94	ppb	11:35:10
1	Tl 190.801†	1708.2	1728.0	498.49	ug/L	498.49	ppb	11:35:30
1	U 409.014†	15720.7	17525.7	488.06	ug/L	488.06	ppb	11:35:10
1	V 292.402†	71444.1	72026.5	492.93	ug/L	492.93	ppb	11:35:10
1	Zn 213.857†	55861.9	54496.3	485.92	ug/L	485.92	ppb	11:35:10
1	SiO2†	83421.9	82099.3	5350.1	ug/L	5350.1	ppb	11:36:37
2	Sc Radial	5645.1	5645.1	99.7	%			11:34:12
2	Y RADIAL	6072.6	6072.6	98.60	%			11:34:12
2	Al 396.153Radial†	6603.0	6644.6	4890.5	ug/L	4890.5	ppb	11:34:12
2	Ca 317.933Radial†	3295.4	3288.3	5028.4	ug/L	5028.4	ppb	11:34:32
2	Fe 238.204 Radial†	521.6	517.2	5223.6	ug/L	5223.6	ppb	11:34:32
2	K 766.490 Radial†	29684.4	27609.9	5002.1	ug/L	5002.1	ppb	11:34:12
2	Mg 279.077 IEC†	140.2	138.9	5178.6	ug/L	5178.6	ppb	11:34:32
2	Na 589.592 Radial†	26740.4	27442.7	10315	ug/L	10315	ppb	11:34:12
2	Sr 421.552†	76785.3	77029.7	519.95	ug/L	519.95	ppb	11:34:12
2	Sc 361.383	893485.7	893485.7	100.96	%			11:35:35
2	Y 371.029	737607.6	737607.6	99.398	%			11:35:35
2	Ag 328.068†	109180.3	107912.5	502.01	ug/L	502.01	ppb	11:35:41
2	As 188.979†	1189.4	1207.3	496.96	ug/L	496.96	ppb	11:36:01
2	B 249.677†	22102.6	22415.9	484.63	ug/L	484.63	ppb	11:35:41
2	Ba 233.527†	65107.2	64498.9	491.16	ug/L	491.16	ppb	11:35:41
2	Be 313.107†	1333991.5	1326601.3	493.94	ug/L	493.94	ppb	11:35:35
2	Cd 226.502†	45642.6	45395.5	492.28	ug/L	492.28	ppb	11:35:41
2	Co 228.616†	25494.7	25323.5	491.72	ug/L	491.72	ppb	11:35:41
2	Cr 267.716†	45905.3	45380.9	489.75	ug/L	489.75	ppb	11:35:41
2	Cu 324.752†	175196.0	166758.1	485.25	ug/L	485.25	ppb	11:35:41
2	Mn 257.610†	459798.5	455014.1	494.90	ug/L	494.90	ppb	11:35:35
2	Mo 202.031†	7791.3	7697.0	501.75	ug/L	501.75	ppb	11:36:01
2	Ni 231.604†	21003.8	20733.6	491.66	ug/L	491.66	ppb	11:35:41

2	P 214.914†	4392.7	4130.9	2380.7 ug/L	2380.7 ppb	11:36:01
2	Pb 220.353†	4184.1	4196.7	492.11 ug/L	492.11 ppb	11:36:01
2	S 181.975 Axial†	740.8	692.3	1011.3 ug/L	1011.3 ppb	11:36:01
2	Sb 206.836†	1594.0	1549.2	510.40 ug/L	510.40 ppb	11:36:01
2	Se 196.026†	813.9	829.6	512.94 ug/L	512.94 ppb	11:36:01
2	Si 251.611†	82303.5	81011.3	2465.8 ug/L	2465.8 ppb	11:35:41
2	Sn 189.927†	3019.2	2986.2	505.79 ug/L	505.79 ppb	11:36:01
2	Ti 334.940†	310607.0	308612.5	499.00 ug/L	499.00 ppb	11:35:41
2	Tl 190.801†	1693.6	1714.3	494.57 ug/L	494.57 ppb	11:36:01
2	U 409.014†	15612.2	17425.6	485.25 ug/L	485.25 ppb	11:35:41
2	V 292.402†	71468.0	72083.5	493.29 ug/L	493.29 ppb	11:35:41
2	Zn 213.857†	55862.1	54522.6	486.14 ug/L	486.14 ppb	11:35:41
2	SiO2†	82826.4	81548.4	5314.0 ug/L	5314.0 ppb	11:36:42
3	Sc Radial	5667.4	5667.4	100 %		11:34:37
3	Y RADIAL	6109.4	6109.4	99.20 %		11:34:37
3	Al 396.153Radial†	6607.2	6622.8	4874.4 ug/L	4874.4 ppb	11:34:37
3	Ca 317.933Radial†	3285.2	3265.1	4992.9 ug/L	4992.9 ppb	11:34:57
3	Fe 238.204 Radial†	516.6	510.2	5152.9 ug/L	5152.9 ppb	11:34:57
3	K 766.490 Radial†	29831.2	27639.7	5007.5 ug/L	5007.5 ppb	11:34:37
3	Mg 279.077 IEC†	138.7	136.8	5100.4 ug/L	5100.4 ppb	11:34:57
3	Na 589.592 Radial†	26893.4	27490.2	10333 ug/L	10333 ppb	11:34:37
3	Sr 421.552†	77277.3	77218.9	521.23 ug/L	521.23 ppb	11:34:37
3	Sc 361.383	895133.7	895133.7	101.15 %		11:36:06
3	Y 371.029	737987.3	737987.3	99.450 %		11:36:06
3	Ag 328.068†	110156.4	108678.4	505.53 ug/L	505.53 ppb	11:36:12
3	As 188.979†	1177.3	1193.1	491.21 ug/L	491.21 ppb	11:36:32
3	B 249.677†	22347.7	22617.9	489.02 ug/L	489.02 ppb	11:36:12
3	Ba 233.527†	65636.8	64903.7	494.23 ug/L	494.23 ppb	11:36:12
3	Be 313.107†	1334695.5	1324864.6	493.30 ug/L	493.30 ppb	11:36:06
3	Cd 226.502†	46026.0	45691.3	495.50 ug/L	495.50 ppb	11:36:12
3	Co 228.616†	25720.3	25500.1	495.15 ug/L	495.15 ppb	11:36:12
3	Cr 267.716†	46265.4	45653.2	492.69 ug/L	492.69 ppb	11:36:12
3	Cu 324.752†	176742.0	167967.0	488.76 ug/L	488.76 ppb	11:36:12
3	Mn 257.610†	461685.7	456041.4	496.01 ug/L	496.01 ppb	11:36:06
3	Mo 202.031†	7810.7	7702.1	502.07 ug/L	502.07 ppb	11:36:32
3	Ni 231.604†	21167.1	20856.7	494.58 ug/L	494.58 ppb	11:36:12
3	P 214.914†	4397.3	4127.4	2378.2 ug/L	2378.2 ppb	11:36:32
3	Pb 220.353†	4207.8	4212.6	493.97 ug/L	493.97 ppb	11:36:32
3	S 181.975 Axial†	736.8	687.0	1003.5 ug/L	1003.5 ppb	11:36:32
3	Sb 206.836†	1600.3	1552.5	511.39 ug/L	511.39 ppb	11:36:32
3	Se 196.026†	818.2	832.3	514.38 ug/L	514.38 ppb	11:36:32
3	Si 251.611†	83154.0	81702.0	2486.9 ug/L	2486.9 ppb	11:36:12
3	Sn 189.927†	3016.1	2977.6	504.33 ug/L	504.33 ppb	11:36:32
3	Ti 334.940†	312886.1	310299.3	501.73 ug/L	501.73 ppb	11:36:12
3	Tl 190.801†	1695.7	1713.3	494.30 ug/L	494.30 ppb	11:36:32
3	U 409.014†	15822.6	17605.2	490.27 ug/L	490.27 ppb	11:36:12
3	V 292.402†	71977.8	72457.2	495.83 ug/L	495.83 ppb	11:36:12
3	Zn 213.857†	56342.7	54895.9	489.49 ug/L	489.49 ppb	11:36:12
3	SiO2†	82994.6	81563.7	5315.0 ug/L	5315.0 ppb	11:36:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	894175.5	101.04	%	0.097				0.10%
Sc Radial	5669.5	100	%	0.4				0.45%
Y 371.029	737624.3	99.401	%	0.0478				0.05%
Y RADIAL	6109.1	99.19	%	0.591				0.60%
Ag 328.068†	108194.8	503.29	ug/L	1.944	503.29	ppb	1.944	0.39%
QC value within limits for Ag 328.068 Recovery = 100.66%								
Al 396.153Radial†	6638.1	4885.7	ug/L	9.84	4885.7	ppb	9.84	0.20%
QC value within limits for Al 396.153Radial Recovery = 97.71%								
As 188.979†	1201.2	494.47	ug/L	2.952	494.47	ppb	2.952	0.60%
QC value within limits for As 188.979 Recovery = 98.89%								
B 249.677†	22486.9	486.18	ug/L	2.462	486.18	ppb	2.462	0.51%
QC value within limits for B 249.677 Recovery = 97.24%								
Ba 233.527†	64617.1	492.05	ug/L	1.898	492.05	ppb	1.898	0.39%
QC value within limits for Ba 233.527 Recovery = 98.41%								
Be 313.107†	1325218.7	493.42	ug/L	0.462	493.42	ppb	0.462	0.09%
QC value within limits for Be 313.107 Recovery = 98.68%								
Ca 317.933Radial†	3271.0	5002.0	ug/L	23.23	5002.0	ppb	23.23	0.46%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.04%
Cd 226.502†            45464.5      493.04 ug/L         2.186      493.04 ppb          2.186   0.44%
   QC value within limits for Cd 226.502  Recovery = 98.61%
Co 228.616†            25384.9      492.91 ug/L         1.935      492.91 ppb          1.935   0.39%
   QC value within limits for Co 228.616  Recovery = 98.58%
Cr 267.716†            45443.7      490.43 ug/L         2.009      490.43 ppb          2.009   0.41%
   QC value within limits for Cr 267.716  Recovery = 98.09%
Cu 324.752†           167128.9      486.32 ug/L         2.115      486.32 ppb          2.115   0.43%
   QC value within limits for Cu 324.752  Recovery = 97.26%
Fe 238.204 Radial†       512.0      5170.6 ug/L        46.73      5170.6 ppb         46.73   0.90%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.41%
K 766.490 Radial†      27629.7      5005.7 ug/L         3.09      5005.7 ppb          3.09   0.06%
   QC value within limits for K 766.490 Radial  Recovery = 100.11%
Mg 279.077 IEC†          138.7      5170.4 ug/L        66.21      5170.4 ppb         66.21   1.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.41%
Mn 257.610†           455290.4      495.20 ug/L         0.715      495.20 ppb          0.715   0.14%
   QC value within limits for Mn 257.610  Recovery = 99.04%
Mo 202.031†             7698.3      501.83 ug/L         0.214      501.83 ppb          0.214   0.04%
   QC value within limits for Mo 202.031  Recovery = 100.37%
Na 589.592 Radial†     27521.0       10344 ug/L         36.6       10344 ppb          36.6   0.35%
   QC value within limits for Na 589.592 Radial  Recovery = 103.44%
Ni 231.604†            20767.3      492.46 ug/L         1.855      492.46 ppb          1.855   0.38%
   QC value within limits for Ni 231.604  Recovery = 98.49%
P 214.914†              4131.1      2380.7 ug/L         2.58      2380.7 ppb          2.58   0.11%
   QC value within limits for P 214.914  Recovery = 95.23%
Pb 220.353†             4208.3      493.47 ug/L         1.186      493.47 ppb          1.186   0.24%
   QC value within limits for Pb 220.353  Recovery = 98.69%
S 181.975 Axial†         686.4      1002.7 ug/L         9.13      1002.7 ppb          9.13   0.91%
   QC value within limits for S 181.975 Axial  Recovery = 100.27%
Sb 206.836†             1548.4      510.10 ug/L         1.464      510.10 ppb          1.464   0.29%
   QC value within limits for Sb 206.836  Recovery = 102.02%
Se 196.026†              828.4      512.08 ug/L         2.832      512.08 ppb          2.832   0.55%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†            81292.9      2474.4 ug/L        11.09      2474.4 ppb         11.09   0.45%
   QC value within limits for Si 251.611  Recovery = 98.98%
Sn 189.927†             2982.3      505.13 ug/L         0.735      505.13 ppb          0.735   0.15%
   QC value within limits for Sn 189.927  Recovery = 101.03%
Sr 421.552†            77268.9      521.56 ug/L         1.807      521.56 ppb          1.807   0.35%
   QC value within limits for Sr 421.552  Recovery = 104.31%
Ti 334.940†           308956.6      499.56 ug/L         1.952      499.56 ppb          1.952   0.39%
   QC value within limits for Ti 334.940  Recovery = 99.91%
Tl 190.801†             1718.5      495.78 ug/L         2.343      495.78 ppb          2.343   0.47%
   QC value within limits for Tl 190.801  Recovery = 99.16%
U 409.014†             17518.8      487.86 ug/L         2.516      487.86 ppb          2.516   0.52%
   QC value within limits for U 409.014  Recovery = 97.57%
V 292.402†             72189.1      494.02 ug/L         1.583      494.02 ppb          1.583   0.32%
   QC value within limits for V 292.402  Recovery = 98.80%
Zn 213.857†            54638.2      487.18 ug/L         2.000      487.18 ppb          2.000   0.41%
   QC value within limits for Zn 213.857  Recovery = 97.44%
SiO2†                  81737.1      5326.4 ug/L        20.55      5326.4 ppb         20.55   0.39%
   QC value within limits for SiO2  Recovery = 99.60%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 11:38:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4980.8	4980.8	87.9	%			11:40:50
1	Y RADIAL	5415.5	5415.5	87.93	%			11:40:50
1	Al 396.153Radial†	-23.7	-6.6	-4.8811	ug/L	-4.8811	ppb	11:41:10
1	Ca 317.933Radial†	18.4	3.3	4.9714	ug/L	4.9714	ppb	11:41:10
1	Fe 238.204 Radial†	6.9	1.8	17.809	ug/L	17.809	ppb	11:41:10
1	K 766.490 Radial†	2271.9	412.9	74.951	ug/L	74.951	ppb	11:40:50
1	Mg 279.077 IEC†	1.9	0.4	13.110	ug/L	13.110	ppb	11:41:10
1	Na 589.592 Radial†	-586.9	-51.4	-19.304	ug/L	-19.304	ppb	11:40:50
1	Sr 421.552†	19.5	18.7	0.1262	ug/L	0.1262	ppb	11:40:50
1	Sc 361.383	892845.1	892845.1	100.89	%			11:42:06
1	Y 371.029	748327.2	748327.2	100.84	%			11:42:06
1	Ag 328.068†	313.4	83.0	0.4006	ug/L	0.4006	ppb	11:42:12
1	As 188.979†	-22.7	6.7	2.7447	ug/L	2.7447	ppb	11:42:32
1	B 249.677†	-228.5	297.4	6.4531	ug/L	6.4531	ppb	11:42:32
1	Ba 233.527†	-30.6	-18.3	-0.1377	ug/L	-0.1377	ppb	11:42:32
1	Be 313.107†	-5299.6	67.3	0.0251	ug/L	0.0251	ppb	11:42:12
1	Cd 226.502†	-169.8	19.5	0.2101	ug/L	0.2101	ppb	11:42:32
1	Co 228.616†	-79.2	-6.8	-0.1304	ug/L	-0.1304	ppb	11:42:32
1	Cr 267.716†	68.0	-19.6	-0.2063	ug/L	-0.2063	ppb	11:42:32
1	Cu 324.752†	6819.5	-9.2	-0.0259	ug/L	-0.0259	ppb	11:42:12
1	Mn 257.610†	409.1	2.0	0.0037	ug/L	0.0037	ppb	11:42:32
1	Mo 202.031†	26.4	6.2	0.4021	ug/L	0.4021	ppb	11:42:32
1	Ni 231.604†	95.1	24.1	0.5725	ug/L	0.5725	ppb	11:42:32
1	P 214.914†	215.0	-6.9	-4.0931	ug/L	-4.0931	ppb	11:42:32
1	Pb 220.353†	-48.8	4.2	0.4906	ug/L	0.4906	ppb	11:42:32
1	S 181.975 Axial†	36.2	-5.6	-8.2082	ug/L	-8.2082	ppb	11:42:32
1	Sb 206.836†	24.8	-5.0	-1.6028	ug/L	-1.6028	ppb	11:42:32
1	Se 196.026†	-27.2	-3.5	-2.0278	ug/L	-2.0278	ppb	11:42:32
1	Si 251.611†	773.1	258.2	7.8654	ug/L	7.8654	ppb	11:42:32
1	Sn 189.927†	5.7	1.4	0.2361	ug/L	0.2361	ppb	11:42:32
1	Ti 334.940†	-951.8	21.7	0.0405	ug/L	0.0405	ppb	11:42:12
1	Tl 190.801†	-31.3	5.8	1.6741	ug/L	1.6741	ppb	11:42:32
1	U 409.014†	-2402.2	-418.9	-11.705	ug/L	-11.705	ppb	11:42:12
1	V 292.402†	-1270.3	37.3	0.2327	ug/L	0.2327	ppb	11:42:12
1	Zn 213.857†	655.1	-157.9	-1.4265	ug/L	-1.4265	ppb	11:42:32
1	SiO2†	757.1	261.6	17.055	ug/L	17.055	ppb	11:43:37
2	Sc Radial	5956.2	5956.2	105	%			11:41:15
2	Y RADIAL	6441.8	6441.8	104.6	%			11:41:15
2	Al 396.153Radial†	-14.9	6.2	4.5536	ug/L	4.5536	ppb	11:41:35
2	Ca 317.933Radial†	20.6	1.9	2.9000	ug/L	2.9000	ppb	11:41:35
2	Fe 238.204 Radial†	5.5	-0.8	-8.4169	ug/L	-8.4169	ppb	11:41:35
2	K 766.490 Radial†	2141.6	-134.0	-24.340	ug/L	-24.340	ppb	11:41:15
2	Mg 279.077 IEC†	-0.1	-1.8	-68.060	ug/L	-68.060	ppb	11:41:35
2	Na 589.592 Radial†	-502.9	137.8	51.789	ug/L	51.789	ppb	11:41:15
2	Sr 421.552†	34.2	29.1	0.1965	ug/L	0.1965	ppb	11:41:15
2	Sc 361.383	911727.2	911727.2	103.02	%			11:42:37
2	Y 371.029	763518.3	763518.3	102.89	%			11:42:37
2	Ag 328.068†	294.5	58.3	0.2777	ug/L	0.2777	ppb	11:42:42
2	As 188.979†	-23.9	6.0	2.4491	ug/L	2.4491	ppb	11:43:02
2	B 249.677†	-222.8	307.6	6.6783	ug/L	6.6783	ppb	11:43:02
2	Ba 233.527†	-39.5	-26.3	-0.1994	ug/L	-0.1994	ppb	11:43:02
2	Be 313.107†	-5269.7	205.2	0.0765	ug/L	0.0765	ppb	11:42:42
2	Cd 226.502†	-175.0	17.9	0.1956	ug/L	0.1956	ppb	11:43:02
2	Co 228.616†	-65.8	7.9	0.1542	ug/L	0.1542	ppb	11:43:02
2	Cr 267.716†	81.8	-7.5	-0.0771	ug/L	-0.0771	ppb	11:43:02
2	Cu 324.752†	6913.2	-58.3	-0.1699	ug/L	-0.1699	ppb	11:42:42
2	Mn 257.610†	405.3	-10.0	-0.0104	ug/L	-0.0104	ppb	11:43:02
2	Mo 202.031†	28.5	7.7	0.5000	ug/L	0.5000	ppb	11:43:02
2	Ni 231.604†	84.9	12.3	0.2921	ug/L	0.2921	ppb	11:43:02

2	P 214.914†	226.9	0.3	0.2099 ug/L	0.2099 ppb	11:43:02
2	Pb 220.353†	-55.0	-0.8	-0.0938 ug/L	-0.0938 ppb	11:43:02
2	S 181.975 Axial†	42.2	-0.5	-0.6911 ug/L	-0.6911 ppb	11:43:02
2	Sb 206.836†	35.1	4.5	1.4885 ug/L	1.4885 ppb	11:43:02
2	Se 196.026†	-22.7	1.4	0.8072 ug/L	0.8072 ppb	11:43:02
2	Si 251.611†	729.1	199.7	6.1042 ug/L	6.1042 ppb	11:43:02
2	Sn 189.927†	10.6	6.0	1.0155 ug/L	1.0155 ppb	11:43:02
2	Ti 334.940†	-930.9	61.5	0.1044 ug/L	0.1044 ppb	11:42:42
2	Tl 190.801†	-26.1	11.5	3.3063 ug/L	3.3063 ppb	11:43:02
2	U 409.014†	-2419.3	-386.1	-10.786 ug/L	-10.786 ppb	11:42:42
2	V 292.402†	-1271.6	62.2	0.4057 ug/L	0.4057 ppb	11:42:42
2	Zn 213.857†	667.7	-159.2	-1.4305 ug/L	-1.4305 ppb	11:43:02
2	SiO2†	754.4	243.5	15.935 ug/L	15.935 ppb	11:43:42
3	Sc Radial	5738.2	5738.2	101 %		11:41:40
3	Y RADIAL	6269.4	6269.4	101.8 %		11:41:40
3	Al 396.153Radial†	-8.0	12.4	9.1826 ug/L	9.1826 ppb	11:42:00
3	Ca 317.933Radial†	23.4	5.4	8.3221 ug/L	8.3221 ppb	11:42:00
3	Fe 238.204 Radial†	6.0	-0.1	-0.8655 ug/L	-0.8655 ppb	11:42:00
3	K 766.490 Radial†	2222.6	23.3	4.2106 ug/L	4.2106 ppb	11:41:40
3	Mg 279.077 IEC†	2.2	0.4	15.387 ug/L	15.387 ppb	11:42:00
3	Na 589.592 Radial†	-544.4	78.7	29.563 ug/L	29.563 ppb	11:41:40
3	Sr 421.552†	-0.5	-3.9	-0.0262 ug/L	-0.0262 ppb	11:41:40
3	Sc 361.383	897162.0	897162.0	101.38 %		11:43:07
3	Y 371.029	750910.6	750910.6	101.19 %		11:43:07
3	Ag 328.068†	311.0	79.2	0.3732 ug/L	0.3732 ppb	11:43:12
3	As 188.979†	-18.7	10.8	4.4035 ug/L	4.4035 ppb	11:43:32
3	B 249.677†	-264.9	262.5	5.6981 ug/L	5.6981 ppb	11:43:32
3	Ba 233.527†	-12.5	-0.3	-0.0019 ug/L	-0.0019 ppb	11:43:32
3	Be 313.107†	-5409.8	-16.0	-0.0060 ug/L	-0.0060 ppb	11:43:12
3	Cd 226.502†	-180.7	9.6	0.1043 ug/L	0.1043 ppb	11:43:32
3	Co 228.616†	-63.3	9.3	0.1804 ug/L	0.1804 ppb	11:43:32
3	Cr 267.716†	63.7	-24.2	-0.2575 ug/L	-0.2575 ppb	11:43:32
3	Cu 324.752†	6904.1	41.6	0.1210 ug/L	0.1210 ppb	11:43:12
3	Mn 257.610†	419.6	10.5	0.0110 ug/L	0.0110 ppb	11:43:32
3	Mo 202.031†	21.8	1.5	0.0995 ug/L	0.0995 ppb	11:43:32
3	Ni 231.604†	81.2	10.0	0.2367 ug/L	0.2367 ppb	11:43:32
3	P 214.914†	224.6	1.6	0.9206 ug/L	0.9206 ppb	11:43:32
3	Pb 220.353†	-67.4	-13.9	-1.6279 ug/L	-1.6279 ppb	11:43:32
3	S 181.975 Axial†	34.5	-7.4	-10.864 ug/L	-10.864 ppb	11:43:32
3	Sb 206.836†	31.9	1.9	0.6099 ug/L	0.6099 ppb	11:43:32
3	Se 196.026†	-23.8	-0.1	-0.0373 ug/L	-0.0373 ppb	11:43:32
3	Si 251.611†	733.6	215.6	6.5924 ug/L	6.5924 ppb	11:43:32
3	Sn 189.927†	3.5	-0.8	-0.1333 ug/L	-0.1333 ppb	11:43:32
3	Ti 334.940†	-993.7	-15.2	-0.0206 ug/L	-0.0206 ppb	11:43:12
3	Tl 190.801†	-38.5	-1.1	-0.3256 ug/L	-0.3256 ppb	11:43:32
3	U 409.014†	-2269.8	-276.8	-7.7322 ug/L	-7.7322 ppb	11:43:12
3	V 292.402†	-1277.6	36.2	0.2316 ug/L	0.2316 ppb	11:43:12
3	Zn 213.857†	670.1	-146.3	-1.3183 ug/L	-1.3183 ppb	11:43:32
3	SiO2†	743.2	244.2	15.988 ug/L	15.988 ppb	11:43:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	900578.1	101.76	%	1.118				1.10%
Sc Radial	5558.4	98.1	%	9.04				9.21%
Y 371.029	754252.0	101.64	%	1.095				1.08%
Y RADIAL	6042.2	98.11	%	8.923				9.09%
Ag 328.068†	73.5	0.3505	ug/L	0.06450	0.3505	ppb	0.06450	18.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.0	2.9517	ug/L	7.16741	2.9517	ppb	7.16741	242.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.8	3.1991	ug/L	1.05344	3.1991	ppb	1.05344	32.93%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	289.2	6.2765	ug/L	0.51342	6.2765	ppb	0.51342	8.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.0	-0.1130	ug/L	0.10106	-0.1130	ppb	0.10106	89.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	85.5	0.0318	ug/L	0.04164	0.0318	ppb	0.04164	130.74%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3978	ug/L	2.73609	5.3978	ppb	2.73609	50.69%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.7      0.1700 ug/L       0.05739      0.1700 ppb        0.05739  33.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.5      0.0680 ug/L       0.17238      0.0680 ppb        0.17238 253.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.1     -0.1803 ug/L       0.09297     -0.1803 ppb        0.09297  51.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -8.6     -0.0250 ug/L       0.14547     -0.0250 ppb        0.14547 582.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.3      2.8422 ug/L      13.50029      2.8422 ppb       13.50029 475.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         100.7      18.274 ug/L       51.1174      18.274 ppb        51.1174 279.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4     -13.188 ug/L       47.5348     -13.188 ppb        47.5348 360.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 0.8      0.0014 ug/L       0.01091      0.0014 ppb        0.01091 761.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.1      0.3339 ug/L       0.20875      0.3339 ppb        0.20875  62.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         55.0      20.683 ug/L       36.3688      20.683 ppb        36.3688 175.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.5      0.3671 ug/L       0.18004      0.3671 ppb        0.18004  49.04%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.7     -0.9875 ug/L       2.71287     -0.9875 ppb        2.71287 274.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.5     -0.4104 ug/L       1.09414     -0.4104 ppb        1.09414 266.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.5     -6.5877 ug/L       5.27637     -6.5877 ppb        5.27637  80.09%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.5      0.1652 ug/L       1.59295      0.1652 ppb        1.59295 964.31%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.7     -0.4193 ug/L       1.45559     -0.4193 ppb        1.45559 347.12%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               224.5      6.8540 ug/L       0.90924      6.8540 ppb        0.90924  13.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.2      0.3727 ug/L       0.58646      0.3727 ppb        0.58646 157.34%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                14.7      0.0989 ug/L       0.11385      0.0989 ppb        0.11385 115.16%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.7      0.0414 ug/L       0.06251      0.0414 ppb        0.06251 150.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.4      1.5516 ug/L       1.81908      1.5516 ppb        1.81908 117.24%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -360.6     -10.074 ug/L        2.0798     -10.074 ppb         2.0798  20.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 45.3      0.2900 ug/L       0.10021      0.2900 ppb        0.10021  34.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -154.5     -1.3918 ug/L       0.06366     -1.3918 ppb        0.06366   4.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     249.8      16.326 ug/L        0.6321      16.326 ppb         0.6321   3.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 12:40:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5623.4	5623.4	99.3	%			12:42:34
1	Y RADIAL	6077.8	6077.8	98.69	%			12:42:34
1	Al 396.153Radial†	6513.5	6580.2	4843.3	ug/L	4843.3	ppb	12:42:34
1	Ca 317.933Radial†	3257.6	3263.1	4989.8	ug/L	4989.8	ppb	12:42:54
1	Fe 238.204 Radial†	505.2	502.7	5077.6	ug/L	5077.6	ppb	12:42:54
1	K 766.490 Radial†	29555.9	27595.6	4999.8	ug/L	4999.8	ppb	12:42:34
1	Mg 279.077 IEC†	139.8	139.0	5183.2	ug/L	5183.2	ppb	12:42:54
1	Na 589.592 Radial†	25670.0	26468.4	9948.7	ug/L	9948.7	ppb	12:42:34
1	Sr 421.552†	75185.9	75716.8	511.09	ug/L	511.09	ppb	12:42:34
1	Sc 361.383	903498.7	903498.7	102.09	%			12:43:52
1	Y 371.029	744787.9	744787.9	100.37	%			12:43:52
1	Ag 328.068†	110161.8	107675.3	500.85	ug/L	500.85	ppb	12:43:57
1	As 188.979†	1172.3	1177.5	484.78	ug/L	484.78	ppb	12:44:17
1	B 249.677†	22188.6	22257.5	481.22	ug/L	481.22	ppb	12:43:57
1	Ba 233.527†	65645.2	64311.2	489.72	ug/L	489.72	ppb	12:43:57
1	Be 313.107†	1318453.3	1296738.5	482.83	ug/L	482.83	ppb	12:43:52
1	Cd 226.502†	46250.3	45489.8	493.32	ug/L	493.32	ppb	12:43:57
1	Co 228.616†	25747.3	25291.1	491.08	ug/L	491.08	ppb	12:43:57
1	Cr 267.716†	46385.2	45347.1	489.38	ug/L	489.38	ppb	12:43:57
1	Cu 324.752†	175722.3	165350.4	481.15	ug/L	481.15	ppb	12:43:57
1	Mn 257.610†	455771.8	446022.8	485.12	ug/L	485.12	ppb	12:43:52
1	Mo 202.031†	7721.2	7542.9	491.70	ug/L	491.70	ppb	12:44:17
1	Ni 231.604†	21195.8	20691.1	490.65	ug/L	490.65	ppb	12:43:57
1	P 214.914†	4342.3	4033.3	2323.4	ug/L	2323.4	ppb	12:44:17
1	Pb 220.353†	4173.4	4140.3	485.50	ug/L	485.50	ppb	12:44:17
1	S 181.975 Axial†	727.4	671.0	980.23	ug/L	980.23	ppb	12:44:17
1	Sb 206.836†	1584.4	1522.3	501.26	ug/L	501.26	ppb	12:44:17
1	Se 196.026†	802.4	809.4	500.42	ug/L	500.42	ppb	12:44:17
1	Si 251.611†	82681.3	80477.9	2449.7	ug/L	2449.7	ppb	12:43:57
1	Sn 189.927†	2981.0	2915.6	493.83	ug/L	493.83	ppb	12:44:17
1	Ti 334.940†	311817.6	306388.8	495.41	ug/L	495.41	ppb	12:43:57
1	Tl 190.801†	1681.7	1684.0	485.82	ug/L	485.82	ppb	12:44:17
1	U 409.014†	15806.2	17444.3	485.79	ug/L	485.79	ppb	12:43:57
1	V 292.402†	71937.4	71758.8	490.98	ug/L	490.98	ppb	12:43:57
1	Zn 213.857†	56469.8	54504.6	486.00	ug/L	486.00	ppb	12:43:57
1	SiO2†	81805.1	79638.8	5189.4	ug/L	5189.4	ppb	12:45:24
2	Sc Radial	5743.6	5743.6	101	%			12:42:59
2	Y RADIAL	6228.6	6228.6	101.1	%			12:42:59
2	Al 396.153Radial†	6551.0	6479.8	4769.1	ug/L	4769.1	ppb	12:42:59
2	Ca 317.933Radial†	3239.4	3176.4	4857.3	ug/L	4857.3	ppb	12:43:19
2	Fe 238.204 Radial†	501.7	488.6	4935.3	ug/L	4935.3	ppb	12:43:19
2	K 766.490 Radial†	29650.2	27065.4	4903.6	ug/L	4903.6	ppb	12:42:59
2	Mg 279.077 IEC†	140.2	136.5	5089.2	ug/L	5089.2	ppb	12:43:19
2	Na 589.592 Radial†	25780.5	26036.0	9786.2	ug/L	9786.2	ppb	12:42:59
2	Sr 421.552†	75852.1	74788.2	504.82	ug/L	504.82	ppb	12:42:59
2	Sc 361.383	899867.3	899867.3	101.68	%			12:44:23
2	Y 371.029	742925.5	742925.5	100.12	%			12:44:23
2	Ag 328.068†	108320.2	106299.7	494.43	ug/L	494.43	ppb	12:44:28
2	As 188.979†	1173.2	1183.0	486.92	ug/L	486.92	ppb	12:44:48
2	B 249.677†	21762.2	21925.9	474.06	ug/L	474.06	ppb	12:44:28
2	Ba 233.527†	64286.9	63234.8	481.53	ug/L	481.53	ppb	12:44:28
2	Be 313.107†	1313584.3	1297161.7	482.97	ug/L	482.97	ppb	12:44:23
2	Cd 226.502†	45106.5	44547.8	483.11	ug/L	483.11	ppb	12:44:28
2	Co 228.616†	25148.4	24803.9	481.64	ug/L	481.64	ppb	12:44:28
2	Cr 267.716†	45515.5	44675.1	482.13	ug/L	482.13	ppb	12:44:28
2	Cu 324.752†	172526.6	162902.2	474.02	ug/L	474.02	ppb	12:44:28
2	Mn 257.610†	453581.6	445670.3	484.72	ug/L	484.72	ppb	12:44:23
2	Mo 202.031†	7703.1	7555.6	492.52	ug/L	492.52	ppb	12:44:48
2	Ni 231.604†	20757.0	20343.3	482.40	ug/L	482.40	ppb	12:44:28

2	P 214.914†	4336.2	4044.4	2331.2 ug/L	2331.2 ppb	12:44:48
2	Pb 220.353†	4157.5	4141.2	485.61 ug/L	485.61 ppb	12:44:48
2	S 181.975 Axial†	723.3	669.8	978.48 ug/L	978.48 ppb	12:44:48
2	Sb 206.836†	1561.9	1506.4	496.31 ug/L	496.31 ppb	12:44:48
2	Se 196.026†	801.3	811.5	501.24 ug/L	501.24 ppb	12:44:48
2	Si 251.611†	81032.0	79182.8	2410.1 ug/L	2410.1 ppb	12:44:28
2	Sn 189.927†	2973.9	2920.5	494.65 ug/L	494.65 ppb	12:44:48
2	Ti 334.940†	305984.4	301884.6	488.12 ug/L	488.12 ppb	12:44:28
2	Tl 190.801†	1683.0	1692.0	488.10 ug/L	488.10 ppb	12:44:48
2	U 409.014†	15508.3	17213.8	479.38 ug/L	479.38 ppb	12:44:28
2	V 292.402†	70802.1	70926.7	485.40 ug/L	485.40 ppb	12:44:28
2	Zn 213.857†	55316.4	53593.5	477.89 ug/L	477.89 ppb	12:44:28
2	SiO2†	81973.0	80127.4	5221.4 ug/L	5221.4 ppb	12:45:29
3	Sc Radial	5696.3	5696.3	101 %		12:43:24
3	Y RADIAL	6125.3	6125.3	99.46 %		12:43:24
3	Al 396.153Radial†	6521.7	6504.3	4787.1 ug/L	4787.1 ppb	12:43:24
3	Ca 317.933Radial†	3284.9	3248.2	4967.1 ug/L	4967.1 ppb	12:43:44
3	Fe 238.204 Radial†	512.6	503.6	5086.3 ug/L	5086.3 ppb	12:43:44
3	K 766.490 Radial†	29631.7	27289.9	4944.3 ug/L	4944.3 ppb	12:43:24
3	Mg 279.077 IEC†	138.1	135.6	5054.2 ug/L	5054.2 ppb	12:43:44
3	Na 589.592 Radial†	25615.0	26082.7	9803.7 ug/L	9803.7 ppb	12:43:24
3	Sr 421.552†	75260.6	74821.6	505.04 ug/L	505.04 ppb	12:43:24
3	Sc 361.383	894001.1	894001.1	101.02 %		12:44:54
3	Y 371.029	739096.7	739096.7	99.599 %		12:44:54
3	Ag 328.068†	108862.3	107535.3	500.21 ug/L	500.21 ppb	12:44:59
3	As 188.979†	1163.5	1181.0	486.19 ug/L	486.19 ppb	12:45:19
3	B 249.677†	21982.2	22284.0	481.80 ug/L	481.80 ppb	12:44:59
3	Ba 233.527†	64624.5	63983.9	487.24 ug/L	487.24 ppb	12:44:59
3	Be 313.107†	1309109.3	1301208.5	484.49 ug/L	484.49 ppb	12:44:54
3	Cd 226.502†	45419.6	45148.7	489.62 ug/L	489.62 ppb	12:44:59
3	Co 228.616†	25349.0	25164.7	488.64 ug/L	488.64 ppb	12:44:59
3	Cr 267.716†	45712.0	45163.4	487.41 ug/L	487.41 ppb	12:44:59
3	Cu 324.752†	173656.7	165134.3	480.52 ug/L	480.52 ppb	12:44:59
3	Mn 257.610†	450513.2	445559.9	484.62 ug/L	484.62 ppb	12:44:54
3	Mo 202.031†	7706.4	7608.6	495.98 ug/L	495.98 ppb	12:45:19
3	Ni 231.604†	20950.4	20668.7	490.12 ug/L	490.12 ppb	12:44:59
3	P 214.914†	4339.3	4075.5	2348.6 ug/L	2348.6 ppb	12:45:19
3	Pb 220.353†	4118.7	4129.7	484.25 ug/L	484.25 ppb	12:45:19
3	S 181.975 Axial†	730.4	681.6	995.70 ug/L	995.70 ppb	12:45:19
3	Sb 206.836†	1571.6	1526.1	502.70 ug/L	502.70 ppb	12:45:19
3	Se 196.026†	812.2	827.5	511.24 ug/L	511.24 ppb	12:45:19
3	Si 251.611†	81584.8	80252.9	2442.8 ug/L	2442.8 ppb	12:44:59
3	Sn 189.927†	2977.7	2943.3	498.53 ug/L	498.53 ppb	12:45:19
3	Ti 334.940†	308067.8	305921.5	494.65 ug/L	494.65 ppb	12:44:59
3	Tl 190.801†	1678.7	1698.6	489.99 ug/L	489.99 ppb	12:45:19
3	U 409.014†	15681.2	17485.0	486.93 ug/L	486.93 ppb	12:44:59
3	V 292.402†	71263.8	71840.6	491.60 ug/L	491.60 ppb	12:44:59
3	Zn 213.857†	55564.5	54196.1	483.24 ug/L	483.24 ppb	12:44:59
3	SiO2†	82256.0	80936.4	5274.2 ug/L	5274.2 ppb	12:45:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899122.4	101.60	%	0.542				0.53%
Sc Radial	5687.8	100	%	1.1				1.07%
Y 371.029	742270.0	100.03	%	0.391				0.39%
Y RADIAL	6143.9	99.76	%	1.252				1.25%
Ag 328.068†	107170.1	498.50	ug/L	3.536	498.50	ppb	3.536	0.71%
QC value within limits for Ag 328.068 Recovery = 99.70%								
Al 396.153Radial†	6521.4	4799.8	ug/L	38.72	4799.8	ppb	38.72	0.81%
QC value within limits for Al 396.153Radial Recovery = 96.00%								
As 188.979†	1180.5	485.96	ug/L	1.090	485.96	ppb	1.090	0.22%
QC value within limits for As 188.979 Recovery = 97.19%								
B 249.677†	22155.8	479.03	ug/L	4.309	479.03	ppb	4.309	0.90%
QC value within limits for B 249.677 Recovery = 95.81%								
Ba 233.527†	63843.3	486.16	ug/L	4.201	486.16	ppb	4.201	0.86%
QC value within limits for Ba 233.527 Recovery = 97.23%								
Be 313.107†	1298369.6	483.43	ug/L	0.920	483.43	ppb	0.920	0.19%
QC value within limits for Be 313.107 Recovery = 96.69%								
Ca 317.933Radial†	3229.2	4938.0	ug/L	70.86	4938.0	ppb	70.86	1.43%

```
   QC value within limits for Ca 317.933Radial  Recovery = 98.76%
Cd 226.502†            45062.1      488.68 ug/L         5.169      488.68 ppb          5.169   1.06%
   QC value within limits for Cd 226.502  Recovery = 97.74%
Co 228.616†            25086.6      487.12 ug/L         4.898      487.12 ppb          4.898   1.01%
   QC value within limits for Co 228.616  Recovery = 97.42%
Cr 267.716†            45061.9      486.31 ug/L         3.748      486.31 ppb          3.748   0.77%
   QC value within limits for Cr 267.716  Recovery = 97.26%
Cu 324.752†           164462.3      478.56 ug/L         3.946      478.56 ppb          3.946   0.82%
   QC value within limits for Cu 324.752  Recovery = 95.71%
Fe 238.204 Radial†       498.3      5033.0 ug/L         84.79      5033.0 ppb          84.79   1.68%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.66%
K 766.490 Radial†      27317.0      4949.2 ug/L         48.26      4949.2 ppb          48.26   0.98%
   QC value within limits for K 766.490 Radial  Recovery = 98.98%
Mg 279.077 IEC†          137.0      5108.9 ug/L         66.72      5108.9 ppb          66.72   1.31%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.18%
Mn 257.610†           445751.0      484.82 ug/L         0.264      484.82 ppb          0.264   0.05%
   QC value within limits for Mn 257.610  Recovery = 96.96%
Mo 202.031†             7569.0      493.40 ug/L         2.271      493.40 ppb          2.271   0.46%
   QC value within limits for Mo 202.031  Recovery = 98.68%
Na 589.592 Radial†     26195.7      9846.2 ug/L         89.20      9846.2 ppb          89.20   0.91%
   QC value within limits for Na 589.592 Radial  Recovery = 98.46%
Ni 231.604†            20567.7      487.72 ug/L         4.616      487.72 ppb          4.616   0.95%
   QC value within limits for Ni 231.604  Recovery = 97.54%
P 214.914†              4051.1      2334.4 ug/L         12.89      2334.4 ppb          12.89   0.55%
   QC value within limits for P 214.914  Recovery = 93.38%
Pb 220.353†             4137.1      485.12 ug/L         0.754      485.12 ppb          0.754   0.16%
   QC value within limits for Pb 220.353  Recovery = 97.02%
S 181.975 Axial†         674.1      984.80 ug/L         9.475      984.80 ppb          9.475   0.96%
   QC value within limits for S 181.975 Axial  Recovery = 98.48%
Sb 206.836†             1518.3      500.09 ug/L         3.353      500.09 ppb          3.353   0.67%
   QC value within limits for Sb 206.836  Recovery = 100.02%
Se 196.026†              816.1      504.30 ug/L         6.029      504.30 ppb          6.029   1.20%
   QC value within limits for Se 196.026  Recovery = 100.86%
Si 251.611†            79971.2      2434.2 ug/L         21.14      2434.2 ppb          21.14   0.87%
   QC value within limits for Si 251.611  Recovery = 97.37%
Sn 189.927†             2926.4      495.67 ug/L         2.510      495.67 ppb          2.510   0.51%
   QC value within limits for Sn 189.927  Recovery = 99.13%
Sr 421.552†            75108.9      506.98 ug/L         3.555      506.98 ppb          3.555   0.70%
   QC value within limits for Sr 421.552  Recovery = 101.40%
Ti 334.940†           304731.7      492.72 ug/L         4.006      492.72 ppb          4.006   0.81%
   QC value within limits for Ti 334.940  Recovery = 98.54%
Tl 190.801†             1691.5      487.97 ug/L         2.087      487.97 ppb          2.087   0.43%
   QC value within limits for Tl 190.801  Recovery = 97.59%
U 409.014†             17381.0      484.03 ug/L         4.069      484.03 ppb          4.069   0.84%
   QC value within limits for U 409.014  Recovery = 96.81%
V 292.402†             71508.7      489.32 ug/L         3.417      489.32 ppb          3.417   0.70%
   QC value within limits for V 292.402  Recovery = 97.86%
Zn 213.857†            54098.0      482.38 ug/L         4.127      482.38 ppb          4.127   0.86%
   QC value within limits for Zn 213.857  Recovery = 96.48%
SiO2†                  80234.2      5228.4 ug/L         42.83      5228.4 ppb          42.83   0.82%
   QC value within limits for SiO2  Recovery = 97.77%
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 12:47:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5770.6	5770.6	102	%			12:49:37
1	Y RADIAL	6247.3	6247.3	101.4	%			12:49:37
1	Al 396.153Radial†	-15.7	4.9	3.6504	ug/L	3.6504	ppb	12:49:37
1	Ca 317.933Radial†	23.4	5.3	8.0852	ug/L	8.0852	ppb	12:49:57
1	Fe 238.204 Radial†	6.6	0.5	4.9431	ug/L	4.9431	ppb	12:49:57
1	K 766.490 Radial†	2236.1	24.3	4.3858	ug/L	4.3858	ppb	12:49:37
1	Mg 279.077 IEC†	1.1	-0.7	-24.705	ug/L	-24.705	ppb	12:49:57
1	Na 589.592 Radial†	-512.2	113.3	42.580	ug/L	42.580	ppb	12:49:37
1	Sr 421.552†	16.5	12.8	0.0864	ug/L	0.0864	ppb	12:49:37
1	Sc 361.383	903607.9	903607.9	102.11	%			12:50:54
1	Y 371.029	758651.9	758651.9	102.23	%			12:50:54
1	Ag 328.068†	321.7	87.4	0.4137	ug/L	0.4137	ppb	12:50:59
1	As 188.979†	-24.5	5.2	2.1305	ug/L	2.1305	ppb	12:51:19
1	B 249.677†	-324.9	205.7	4.4635	ug/L	4.4635	ppb	12:51:19
1	Ba 233.527†	-23.2	-10.7	-0.0808	ug/L	-0.0808	ppb	12:51:19
1	Be 313.107†	-5275.4	153.6	0.0570	ug/L	0.0570	ppb	12:50:59
1	Cd 226.502†	-176.2	15.3	0.1657	ug/L	0.1657	ppb	12:51:19
1	Co 228.616†	-68.6	4.5	0.0883	ug/L	0.0883	ppb	12:51:19
1	Cr 267.716†	70.1	-18.3	-0.1945	ug/L	-0.1945	ppb	12:51:19
1	Cu 324.752†	6814.2	-95.0	-0.2760	ug/L	-0.2760	ppb	12:50:59
1	Mn 257.610†	426.9	14.7	0.0169	ug/L	0.0169	ppb	12:51:19
1	Mo 202.031†	20.0	-0.5	-0.0291	ug/L	-0.0291	ppb	12:51:19
1	Ni 231.604†	86.7	14.8	0.3514	ug/L	0.3514	ppb	12:51:19
1	P 214.914†	219.6	-4.9	-2.8430	ug/L	-2.8430	ppb	12:51:19
1	Pb 220.353†	-61.0	-7.2	-0.8404	ug/L	-0.8404	ppb	12:51:19
1	S 181.975 Axial†	40.2	-2.1	-3.0921	ug/L	-3.0921	ppb	12:51:19
1	Sb 206.836†	37.3	7.0	2.2897	ug/L	2.2897	ppb	12:51:19
1	Se 196.026†	-22.0	1.9	1.1622	ug/L	1.1622	ppb	12:51:19
1	Si 251.611†	561.6	42.0	1.2796	ug/L	1.2796	ppb	12:51:19
1	Sn 189.927†	14.0	9.4	1.5962	ug/L	1.5962	ppb	12:51:19
1	Ti 334.940†	-1024.8	-38.6	-0.0580	ug/L	-0.0580	ppb	12:50:59
1	Tl 190.801†	-31.1	6.4	1.8306	ug/L	1.8306	ppb	12:51:19
1	U 409.014†	-2328.2	-318.0	-8.8850	ug/L	-8.8850	ppb	12:50:59
1	V 292.402†	-1307.7	15.7	0.0874	ug/L	0.0874	ppb	12:50:59
1	Zn 213.857†	684.0	-137.4	-1.2379	ug/L	-1.2379	ppb	12:51:19
1	SiO2†	583.2	82.3	5.3773	ug/L	5.3773	ppb	12:52:25
2	Sc Radial	5947.3	5947.3	105	%			12:50:02
2	Y RADIAL	6456.8	6456.8	104.8	%			12:50:02
2	Al 396.153Radial†	-32.3	-10.4	-7.7205	ug/L	-7.7205	ppb	12:50:02
2	Ca 317.933Radial†	21.1	2.4	3.6745	ug/L	3.6745	ppb	12:50:22
2	Fe 238.204 Radial†	5.7	-0.6	-5.8945	ug/L	-5.8945	ppb	12:50:22
2	K 766.490 Radial†	2245.8	-31.7	-5.7758	ug/L	-5.7758	ppb	12:50:02
2	Mg 279.077 IEC†	2.1	0.2	9.0627	ug/L	9.0627	ppb	12:50:22
2	Na 589.592 Radial†	-531.3	110.1	41.375	ug/L	41.375	ppb	12:50:02
2	Sr 421.552†	5.6	1.9	0.0129	ug/L	0.0129	ppb	12:50:02
2	Sc 361.383	902742.4	902742.4	102.01	%			12:51:24
2	Y 371.029	759404.3	759404.3	102.34	%			12:51:24
2	Ag 328.068†	346.0	111.6	0.5223	ug/L	0.5223	ppb	12:51:29
2	As 188.979†	-22.2	7.4	3.0285	ug/L	3.0285	ppb	12:51:49
2	B 249.677†	-328.8	201.5	4.3752	ug/L	4.3752	ppb	12:51:49
2	Ba 233.527†	-6.2	5.9	0.0454	ug/L	0.0454	ppb	12:51:49
2	Be 313.107†	-5161.4	260.4	0.0969	ug/L	0.0969	ppb	12:51:29
2	Cd 226.502†	-172.2	19.1	0.2077	ug/L	0.2077	ppb	12:51:49
2	Co 228.616†	-66.0	7.1	0.1369	ug/L	0.1369	ppb	12:51:49
2	Cr 267.716†	85.3	-3.3	-0.0325	ug/L	-0.0325	ppb	12:51:49
2	Cu 324.752†	6839.0	-64.3	-0.1872	ug/L	-0.1872	ppb	12:51:29
2	Mn 257.610†	425.1	13.3	0.0137	ug/L	0.0137	ppb	12:51:49
2	Mo 202.031†	18.8	-1.6	-0.1019	ug/L	-0.1019	ppb	12:51:49
2	Ni 231.604†	86.9	15.1	0.3580	ug/L	0.3580	ppb	12:51:49

2	P 214.914†	218.3	-6.0	-3.5159 ug/L	-3.5159 ppb	12:51:49
2	Pb 220.353†	-63.2	-9.4	-1.1028 ug/L	-1.1028 ppb	12:51:49
2	S 181.975 Axial†	40.0	-2.2	-3.2455 ug/L	-3.2455 ppb	12:51:49
2	Sb 206.836†	34.5	4.2	1.3767 ug/L	1.3767 ppb	12:51:49
2	Se 196.026†	-13.2	10.5	6.2668 ug/L	6.2668 ppb	12:51:49
2	Si 251.611†	566.4	47.3	1.4461 ug/L	1.4461 ppb	12:51:49
2	Sn 189.927†	11.1	6.6	1.1238 ug/L	1.1238 ppb	12:51:49
2	Ti 334.940†	-936.3	47.1	0.0803 ug/L	0.0803 ppb	12:51:29
2	Tl 190.801†	-38.3	-0.7	-0.1910 ug/L	-0.1910 ppb	12:51:49
2	U 409.014†	-2322.0	-314.1	-8.7753 ug/L	-8.7753 ppb	12:51:29
2	V 292.402†	-1290.0	31.9	0.1978 ug/L	0.1978 ppb	12:51:29
2	Zn 213.857†	693.4	-127.5	-1.1490 ug/L	-1.1490 ppb	12:51:49
2	SiO2†	559.2	59.3	3.8854 ug/L	3.8854 ppb	12:52:30
3	Sc Radial	5936.1	5936.1	105 %		12:50:27
3	Y RADIAL	6451.1	6451.1	104.7 %		12:50:27
3	Al 396.153Radial†	-39.5	-17.4	-12.855 ug/L	-12.855 ppb	12:50:27
3	Ca 317.933Radial†	21.6	2.9	4.4388 ug/L	4.4388 ppb	12:50:47
3	Fe 238.204 Radial†	4.8	-1.5	-14.777 ug/L	-14.777 ppb	12:50:47
3	K 766.490 Radial†	2169.1	-100.9	-18.336 ug/L	-18.336 ppb	12:50:27
3	Mg 279.077 IEC†	3.5	1.6	58.379 ug/L	58.379 ppb	12:50:47
3	Na 589.592 Radial†	-498.0	140.9	52.948 ug/L	52.948 ppb	12:50:27
3	Sr 421.552†	43.1	37.7	0.2543 ug/L	0.2543 ppb	12:50:27
3	Sc 361.383	902267.9	902267.9	101.95 %		12:51:54
3	Y 371.029	757493.1	757493.1	102.08 %		12:51:54
3	Ag 328.068†	288.3	55.2	0.2557 ug/L	0.2557 ppb	12:51:59
3	As 188.979†	-22.2	7.4	3.0155 ug/L	3.0155 ppb	12:52:19
3	B 249.677†	-300.9	228.8	4.9675 ug/L	4.9675 ppb	12:52:19
3	Ba 233.527†	-19.3	-6.9	-0.0538 ug/L	-0.0538 ppb	12:52:19
3	Be 313.107†	-5234.1	186.5	0.0693 ug/L	0.0693 ppb	12:51:59
3	Cd 226.502†	-166.1	24.9	0.2716 ug/L	0.2716 ppb	12:52:19
3	Co 228.616†	-72.5	0.6	0.0123 ug/L	0.0123 ppb	12:52:19
3	Cr 267.716†	72.3	-16.0	-0.1713 ug/L	-0.1713 ppb	12:52:19
3	Cu 324.752†	6853.0	-47.0	-0.1374 ug/L	-0.1374 ppb	12:51:59
3	Mn 257.610†	425.2	13.6	0.0122 ug/L	0.0122 ppb	12:52:19
3	Mo 202.031†	17.3	-3.0	-0.1965 ug/L	-0.1965 ppb	12:52:19
3	Ni 231.604†	86.4	14.7	0.3477 ug/L	0.3477 ppb	12:52:19
3	P 214.914†	211.9	-12.2	-7.1623 ug/L	-7.1623 ppb	12:52:19
3	Pb 220.353†	-72.3	-18.4	-2.1486 ug/L	-2.1486 ppb	12:52:19
3	S 181.975 Axial†	48.2	5.8	8.5533 ug/L	8.5533 ppb	12:52:19
3	Sb 206.836†	33.2	3.0	1.0038 ug/L	1.0038 ppb	12:52:19
3	Se 196.026†	-20.5	3.4	1.9682 ug/L	1.9682 ppb	12:52:19
3	Si 251.611†	587.3	68.0	2.0842 ug/L	2.0842 ppb	12:52:19
3	Sn 189.927†	16.3	11.7	1.9755 ug/L	1.9755 ppb	12:52:19
3	Ti 334.940†	-975.1	8.7	0.0175 ug/L	0.0175 ppb	12:51:59
3	Tl 190.801†	-24.9	12.4	3.5624 ug/L	3.5624 ppb	12:52:19
3	U 409.014†	-2261.6	-256.1	-7.1533 ug/L	-7.1533 ppb	12:51:59
3	V 292.402†	-1357.5	-35.0	-0.2495 ug/L	-0.2495 ppb	12:51:59
3	Zn 213.857†	671.3	-148.8	-1.3417 ug/L	-1.3417 ppb	12:52:19
3	SiO2†	591.0	90.8	5.9537 ug/L	5.9537 ppb	12:52:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902872.8	102.02	%	0.077				0.08%
Sc Radial	5884.7	104	%	1.7				1.68%
Y 371.029	758516.4	102.22	%	0.130				0.13%
Y RADIAL	6385.1	103.7	%	1.94				1.87%
Ag 328.068†	84.7	0.3973	ug/L	0.13403	0.3973	ppb	0.13403	33.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.6	-5.6417	ug/L	8.44680	-5.6417	ppb	8.44680	149.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.7	2.7248	ug/L	0.51476	2.7248	ppb	0.51476	18.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	212.0	4.6021	ug/L	0.31951	4.6021	ppb	0.31951	6.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.9	-0.0297	ug/L	0.06646	-0.0297	ppb	0.06646	223.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	200.2	0.0744	ug/L	0.02046	0.0744	ppb	0.02046	27.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.5	5.3995	ug/L	2.35706	5.3995	ppb	2.35706	43.65%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              19.7      0.2150 ug/L       0.05331      0.2150 ppb        0.05331  24.79%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               4.1      0.0792 ug/L       0.06278      0.0792 ppb        0.06278  79.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -12.6     -0.1327 ug/L       0.08759     -0.1327 ppb        0.08759  65.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -68.7     -0.2002 ug/L       0.07021     -0.2002 ppb        0.07021  35.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.5     -5.2429 ug/L       9.87632     -5.2429 ppb        9.87632 188.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -36.1     -6.5755 ug/L      11.38212     -6.5755 ppb       11.38212 173.10%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.4      14.246 ug/L       41.7838      14.246 ppb        41.7838 293.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              13.9      0.0143 ug/L       0.00241      0.0143 ppb        0.00241  16.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.7     -0.1092 ug/L       0.08390     -0.1092 ppb        0.08390  76.87%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      121.4      45.635 ug/L        6.3625      45.635 ppb         6.3625  13.94%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              14.9      0.3524 ug/L       0.00521      0.3524 ppb        0.00521   1.48%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -7.7     -4.5071 ug/L       2.32395     -4.5071 ppb        2.32395  51.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -11.7     -1.3639 ug/L       0.69208     -1.3639 ppb        0.69208  50.74%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.5      0.7386 ug/L       6.76817      0.7386 ppb        6.76817 916.41%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.7      1.5567 ug/L       0.66160      1.5567 ppb        0.66160  42.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               5.3      3.1324 ug/L       2.74421      3.1324 ppb        2.74421  87.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              52.4      1.6033 ug/L       0.42469      1.6033 ppb        0.42469  26.49%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               9.2      1.5652 ug/L       0.42666      1.5652 ppb        0.42666  27.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              17.5      0.1179 ug/L       0.12372      0.1179 ppb        0.12372 104.96%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               5.7      0.0133 ug/L       0.06926      0.0133 ppb        0.06926 522.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               6.1      1.7340 ug/L       1.87860      1.7340 ppb        1.87860 108.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -296.1     -8.2712 ug/L       0.96965     -8.2712 ppb        0.96965  11.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                4.2      0.0119 ug/L       0.23303      0.0119 ppb        0.23303 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -137.9     -1.2429 ug/L       0.09644     -1.2429 ppb        0.09644   7.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    77.5      5.0721 ug/L       1.06739      5.0721 ppb        1.06739  21.04%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/9/2009 13:20:59 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\120909.sif
Batch ID:
Results Data Set: 120909A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:21:00**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5577.7	5577.7	98.5	%			13:22:52
1	Y RADIAL	6013.6	6013.6	97.64	%			13:22:52
1	Al 396.153Radial†	6381.3	6499.6	4783.4	ug/L	4783.4	ppb	13:22:52
1	Ca 317.933Radial†	3258.9	3291.3	5032.9	ug/L	5032.9	ppb	13:23:12
1	Fe 238.204 Radial†	522.0	524.0	5291.7	ug/L	5291.7	ppb	13:23:12
1	K 766.490 Radial†	29007.7	27283.0	4942.6	ug/L	4942.6	ppb	13:22:52
1	Mg 279.077 IEC†	144.0	144.4	5383.5	ug/L	5383.5	ppb	13:23:12
1	Na 589.592 Radial†	27412.0	28449.0	10693	ug/L	10693	ppb	13:22:52
1	Sr 421.552†	77124.5	78305.8	528.56	ug/L	528.56	ppb	13:22:52
1	Sc 361.383	886145.5	886145.5	100.13	%			13:24:09
1	Y 371.029	731929.5	731929.5	98.633	%			13:24:09
1	Ag 328.068†	108953.1	108581.3	505.12	ug/L	505.12	ppb	13:24:14
1	As 188.979†	1162.4	1190.1	489.97	ug/L	489.97	ppb	13:24:34
1	B 249.677†	21768.2	22263.3	481.31	ug/L	481.31	ppb	13:24:14
1	Ba 233.527†	64644.9	64571.3	491.71	ug/L	491.71	ppb	13:24:14
1	Be 313.107†	1308085.4	1311673.9	488.39	ug/L	488.39	ppb	13:24:09
1	Cd 226.502†	45371.9	45499.7	493.41	ug/L	493.41	ppb	13:24:14
1	Co 228.616†	25310.3	25348.6	492.20	ug/L	492.20	ppb	13:24:14
1	Cr 267.716†	45696.7	45549.2	491.57	ug/L	491.57	ppb	13:24:14
1	Cu 324.752†	173962.3	166963.3	485.85	ug/L	485.85	ppb	13:24:14
1	Mn 257.610†	452274.8	451272.6	490.84	ug/L	490.84	ppb	13:24:09
1	Mo 202.031†	7697.9	7667.7	499.84	ug/L	499.84	ppb	13:24:34
1	Ni 231.604†	20936.8	20838.9	494.16	ug/L	494.16	ppb	13:24:14
1	P 214.914†	4337.7	4112.0	2369.3	ug/L	2369.3	ppb	13:24:34
1	Pb 220.353†	4124.2	4171.3	489.11	ug/L	489.11	ppb	13:24:34
1	S 181.975 Axial†	719.0	676.6	988.32	ug/L	988.32	ppb	13:24:34
1	Sb 206.836†	1557.3	1525.6	502.57	ug/L	502.57	ppb	13:24:34
1	Se 196.026†	796.1	818.4	506.50	ug/L	506.50	ppb	13:24:34
1	Si 251.611†	81555.2	80939.2	2463.7	ug/L	2463.7	ppb	13:24:14
1	Sn 189.927†	2960.0	2951.9	499.98	ug/L	499.98	ppb	13:24:34
1	Ti 334.940†	308036.7	308594.0	498.97	ug/L	498.97	ppb	13:24:14
1	Tl 190.801†	1667.2	1701.8	490.97	ug/L	490.97	ppb	13:24:34
1	U 409.014†	15776.3	17717.6	493.39	ug/L	493.39	ppb	13:24:14
1	V 292.402†	71265.2	72467.4	495.86	ug/L	495.86	ppb	13:24:14
1	Zn 213.857†	55565.7	54684.9	487.57	ug/L	487.57	ppb	13:24:14
1	SiO2†	80532.8	79937.4	5208.7	ug/L	5208.7	ppb	13:25:42
2	Sc Radial	5650.9	5650.9	99.8	%			13:23:17
2	Y RADIAL	6064.5	6064.5	98.47	%			13:23:17
2	Al 396.153Radial†	6488.9	6523.6	4801.2	ug/L	4801.2	ppb	13:23:17
2	Ca 317.933Radial†	3247.0	3236.5	4949.1	ug/L	4949.1	ppb	13:23:37
2	Fe 238.204 Radial†	517.0	512.1	5172.0	ug/L	5172.0	ppb	13:23:37
2	K 766.490 Radial†	29834.0	27729.5	5023.6	ug/L	5023.6	ppb	13:23:17
2	Mg 279.077 IEC†	139.9	138.5	5161.7	ug/L	5161.7	ppb	13:23:37
2	Na 589.592 Radial†	28176.9	28855.0	10846	ug/L	10846	ppb	13:23:17
2	Sr 421.552†	78681.1	78851.2	532.25	ug/L	532.25	ppb	13:23:17
2	Sc 361.383	884256.8	884256.8	99.919	%			13:24:40
2	Y 371.029	731963.0	731963.0	98.638	%			13:24:40

2	Ag 328.068†	108311.9	108172.0	503.19 ug/L	503.19 ppb	13:24:45
2	As 188.979†	1153.3	1183.5	487.24 ug/L	487.24 ppb	13:25:05
2	B 249.677†	21663.1	22204.5	480.05 ug/L	480.05 ppb	13:24:45
2	Ba 233.527†	64241.1	64305.1	489.69 ug/L	489.69 ppb	13:24:45
2	Be 313.107†	1307541.7	1313920.1	489.22 ug/L	489.22 ppb	13:24:40
2	Cd 226.502†	45242.2	45466.7	493.06 ug/L	493.06 ppb	13:24:45
2	Co 228.616†	25195.6	25287.7	491.02 ug/L	491.02 ppb	13:24:45
2	Cr 267.716†	45611.9	45561.8	491.70 ug/L	491.70 ppb	13:24:45
2	Cu 324.752†	172791.8	166163.0	483.51 ug/L	483.51 ppb	13:24:45
2	Mn 257.610†	450775.0	450736.3	490.25 ug/L	490.25 ppb	13:24:40
2	Mo 202.031†	7650.5	7636.7	497.82 ug/L	497.82 ppb	13:25:05
2	Ni 231.604†	20819.6	20766.3	492.43 ug/L	492.43 ppb	13:24:45
2	P 214.914†	4286.6	4070.1	2344.8 ug/L	2344.8 ppb	13:25:05
2	Pb 220.353†	4111.6	4167.5	488.67 ug/L	488.67 ppb	13:25:05
2	S 181.975 Axial†	719.5	678.6	991.32 ug/L	991.32 ppb	13:25:05
2	Sb 206.836†	1564.7	1536.4	505.98 ug/L	505.98 ppb	13:25:05
2	Se 196.026†	786.3	810.4	501.33 ug/L	501.33 ppb	13:25:05
2	Si 251.611†	81015.8	80573.4	2452.5 ug/L	2452.5 ppb	13:24:45
2	Sn 189.927†	2940.6	2938.7	497.75 ug/L	497.75 ppb	13:25:05
2	Ti 334.940†	306404.5	307617.4	497.39 ug/L	497.39 ppb	13:24:45
2	Tl 190.801†	1670.2	1708.4	492.85 ug/L	492.85 ppb	13:25:05
2	U 409.014†	15616.5	17591.3	489.88 ug/L	489.88 ppb	13:24:45
2	V 292.402†	70955.2	72309.1	494.78 ug/L	494.78 ppb	13:24:45
2	Zn 213.857†	55309.8	54547.3	486.37 ug/L	486.37 ppb	13:24:45
2	SiO2†	81100.5	80677.4	5257.1 ug/L	5257.1 ppb	13:25:47
3	Sc Radial	5569.3	5569.3	98.3 %		13:23:42
3	Y RADIAL	6009.1	6009.1	97.57 %		13:23:42
3	Al 396.153Radial†	6416.4	6545.0	4816.8 ug/L	4816.8 ppb	13:23:42
3	Ca 317.933Radial†	3261.6	3298.9	5044.6 ug/L	5044.6 ppb	13:24:02
3	Fe 238.204 Radial†	516.7	519.3	5245.0 ug/L	5245.0 ppb	13:24:02
3	K 766.490 Radial†	29322.9	27647.6	5008.7 ug/L	5008.7 ppb	13:23:42
3	Mg 279.077 IEC†	137.5	138.1	5147.0 ug/L	5147.0 ppb	13:24:02
3	Na 589.592 Radial†	27863.7	28950.0	10881 ug/L	10881 ppb	13:23:42
3	Sr 421.552†	77812.6	79122.7	534.08 ug/L	534.08 ppb	13:23:42
3	Sc 361.383	881861.1	881861.1	99.648 %		13:25:11
3	Y 371.029	728544.8	728544.8	98.177 %		13:25:11
3	Ag 328.068†	108175.0	108329.1	503.94 ug/L	503.94 ppb	13:25:16
3	As 188.979†	1169.3	1202.6	495.07 ug/L	495.07 ppb	13:25:36
3	B 249.677†	21697.3	22297.7	482.07 ug/L	482.07 ppb	13:25:16
3	Ba 233.527†	64148.3	64386.6	490.31 ug/L	490.31 ppb	13:25:16
3	Be 313.107†	1302364.8	1312279.8	488.61 ug/L	488.61 ppb	13:25:11
3	Cd 226.502†	45025.4	45372.1	492.03 ug/L	492.03 ppb	13:25:16
3	Co 228.616†	25128.2	25288.6	491.06 ug/L	491.06 ppb	13:25:16
3	Cr 267.716†	45566.0	45639.8	492.55 ug/L	492.55 ppb	13:25:16
3	Cu 324.752†	172648.0	166488.4	484.47 ug/L	484.47 ppb	13:25:16
3	Mn 257.610†	450049.7	451234.1	490.80 ug/L	490.80 ppb	13:25:11
3	Mo 202.031†	7737.8	7745.1	504.88 ug/L	504.88 ppb	13:25:36
3	Ni 231.604†	20775.5	20778.7	492.73 ug/L	492.73 ppb	13:25:16
3	P 214.914†	4346.2	4141.6	2387.2 ug/L	2387.2 ppb	13:25:36
3	Pb 220.353†	4173.4	4240.7	497.24 ug/L	497.24 ppb	13:25:36
3	S 181.975 Axial†	728.8	689.9	1007.8 ug/L	1007.8 ppb	13:25:36
3	Sb 206.836†	1575.8	1551.7	511.23 ug/L	511.23 ppb	13:25:36
3	Se 196.026†	815.1	841.4	520.08 ug/L	520.08 ppb	13:25:36
3	Si 251.611†	80889.1	80666.5	2455.2 ug/L	2455.2 ppb	13:25:16
3	Sn 189.927†	2982.2	2988.5	506.17 ug/L	506.17 ppb	13:25:36
3	Ti 334.940†	305834.3	307878.3	497.81 ug/L	497.81 ppb	13:25:16
3	Tl 190.801†	1672.8	1715.6	494.90 ug/L	494.90 ppb	13:25:36
3	U 409.014†	15663.1	17680.5	492.36 ug/L	492.36 ppb	13:25:16
3	V 292.402†	70837.5	72383.9	495.37 ug/L	495.37 ppb	13:25:16
3	Zn 213.857†	55274.0	54661.7	487.39 ug/L	487.39 ppb	13:25:16
3	SiO2†	81635.1	81434.2	5306.4 ug/L	5306.4 ppb	13:25:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	884087.8	99.900	%	0.2426				0.24%
Sc Radial	5599.3	98.9	%	0.79				0.80%
Y 371.029	730812.4	98.483	%	0.2647				0.27%
Y RADIAL	6029.1	97.89	%	0.499				0.51%
Ag 328.068†	108360.8	504.08	ug/L	0.973	504.08	ppb	0.973	0.19%

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   QC value within limits for Ag 328.068  Recovery = 100.82%
Al 396.153Radial†       6522.8      4800.5 ug/L        16.69      4800.5 ppb        16.69   0.35%
   QC value within limits for Al 396.153Radial  Recovery = 96.01%
As 188.979†             1192.1      490.76 ug/L        3.972      490.76 ppb        3.972   0.81%
   QC value within limits for As 188.979  Recovery = 98.15%
B 249.677†             22255.1      481.14 ug/L        1.017      481.14 ppb        1.017   0.21%
   QC value within limits for B 249.677  Recovery = 96.23%
Ba 233.527†            64421.0      490.57 ug/L        1.039      490.57 ppb        1.039   0.21%
   QC value within limits for Ba 233.527  Recovery = 98.11%
Be 313.107†          1312624.6      488.74 ug/L        0.430      488.74 ppb        0.430   0.09%
   QC value within limits for Be 313.107  Recovery = 97.75%
Ca 317.933Radial†       3275.6      5008.9 ug/L        52.09      5008.9 ppb        52.09   1.04%
   QC value within limits for Ca 317.933Radial  Recovery = 100.18%
Cd 226.502†            45446.2      492.83 ug/L        0.718      492.83 ppb        0.718   0.15%
   QC value within limits for Cd 226.502  Recovery = 98.57%
Co 228.616†            25308.3      491.43 ug/L        0.673      491.43 ppb        0.673   0.14%
   QC value within limits for Co 228.616  Recovery = 98.29%
Cr 267.716†            45583.6      491.94 ug/L        0.528      491.94 ppb        0.528   0.11%
   QC value within limits for Cr 267.716  Recovery = 98.39%
Cu 324.752†           166538.3      484.61 ug/L        1.174      484.61 ppb        1.174   0.24%
   QC value within limits for Cu 324.752  Recovery = 96.92%
Fe 238.204 Radial†       518.5      5236.2 ug/L        60.31      5236.2 ppb        60.31   1.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.72%
K 766.490 Radial†      27553.4      4991.7 ug/L        43.11      4991.7 ppb        43.11   0.86%
   QC value within limits for K 766.490 Radial  Recovery = 99.83%
Mg 279.077 IEC†          140.3      5230.7 ug/L       132.55      5230.7 ppb       132.55   2.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.61%
Mn 257.610†           451081.0      490.63 ug/L        0.329      490.63 ppb        0.329   0.07%
   QC value within limits for Mn 257.610  Recovery = 98.13%
Mo 202.031†            7683.2      500.85 ug/L        3.636      500.85 ppb        3.636   0.73%
   QC value within limits for Mo 202.031  Recovery = 100.17%
Na 589.592 Radial†     28751.3       10807 ug/L        100.0       10807 ppb        100.0   0.93%
   QC value within limits for Na 589.592 Radial  Recovery = 108.07%
Ni 231.604†            20794.7      493.11 ug/L        0.921      493.11 ppb        0.921   0.19%
   QC value within limits for Ni 231.604  Recovery = 98.62%
P 214.914†              4107.9      2367.1 ug/L        21.28      2367.1 ppb        21.28   0.90%
   QC value within limits for P 214.914  Recovery = 94.68%
Pb 220.353†             4193.2      491.67 ug/L        4.827      491.67 ppb        4.827   0.98%
   QC value within limits for Pb 220.353  Recovery = 98.33%
S 181.975 Axial†         681.7      995.81 ug/L       10.489      995.81 ppb       10.489   1.05%
   QC value within limits for S 181.975 Axial  Recovery = 99.58%
Sb 206.836†             1537.9      506.59 ug/L        4.363      506.59 ppb        4.363   0.86%
   QC value within limits for Sb 206.836  Recovery = 101.32%
Se 196.026†              823.4      509.30 ug/L        9.686      509.30 ppb        9.686   1.90%
   QC value within limits for Se 196.026  Recovery = 101.86%
Si 251.611†            80726.4      2457.1 ug/L         5.83      2457.1 ppb         5.83   0.24%
   QC value within limits for Si 251.611  Recovery = 98.29%
Sn 189.927†             2959.7      501.30 ug/L        4.364      501.30 ppb        4.364   0.87%
   QC value within limits for Sn 189.927  Recovery = 100.26%
Sr 421.552†            78759.9      531.63 ug/L        2.809      531.63 ppb        2.809   0.53%
   QC value within limits for Sr 421.552  Recovery = 106.33%
Ti 334.940†           308029.9      498.06 ug/L        0.819      498.06 ppb        0.819   0.16%
   QC value within limits for Ti 334.940  Recovery = 99.61%
Tl 190.801†             1708.6      492.91 ug/L        1.968      492.91 ppb        1.968   0.40%
   QC value within limits for Tl 190.801  Recovery = 98.58%
U 409.014†             17663.1      491.88 ug/L        1.806      491.88 ppb        1.806   0.37%
   QC value within limits for U 409.014  Recovery = 98.38%
V 292.402†             72386.8      495.34 ug/L        0.546      495.34 ppb        0.546   0.11%
   QC value within limits for V 292.402  Recovery = 99.07%
Zn 213.857†            54631.3      487.11 ug/L        0.649      487.11 ppb        0.649   0.13%
   QC value within limits for Zn 213.857  Recovery = 97.42%
SiO2†                  80683.0      5257.4 ug/L        48.87      5257.4 ppb        48.87   0.93%
   QC value within limits for SiO2  Recovery = 98.32%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 13:28:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5718.8	5718.8	101	%			13:29:55
1	Y RADIAL	6196.7	6196.7	100.6	%			13:29:55
1	Al 396.153Radial†	-12.7	7.8	5.7644	ug/L	5.7644	ppb	13:30:15
1	Ca 317.933Radial†	21.2	3.3	4.9907	ug/L	4.9907	ppb	13:30:15
1	Fe 238.204 Radial†	5.6	-0.4	-4.4720	ug/L	-4.4720	ppb	13:30:15
1	K 766.490 Radial†	2210.3	18.6	3.3609	ug/L	3.3609	ppb	13:29:55
1	Mg 279.077 IEC†	0.4	-1.4	-51.353	ug/L	-51.353	ppb	13:30:15
1	Na 589.592 Radial†	-562.5	58.9	22.155	ug/L	22.155	ppb	13:29:55
1	Sr 421.552†	9.8	6.3	0.0422	ug/L	0.0422	ppb	13:29:55
1	Sc 361.383	879460.3	879460.3	99.377	%			13:31:12
1	Y 371.029	739972.4	739972.4	99.717	%			13:31:12
1	Ag 328.068†	288.4	62.7	0.2866	ug/L	0.2866	ppb	13:31:12
1	As 188.979†	-30.0	-0.9	-0.3851	ug/L	-0.3851	ppb	13:31:32
1	B 249.677†	-324.5	197.3	4.2839	ug/L	4.2839	ppb	13:31:32
1	Ba 233.527†	1.5	13.5	0.1026	ug/L	0.1026	ppb	13:31:32
1	Be 313.107†	-5156.3	131.7	0.0490	ug/L	0.0490	ppb	13:31:12
1	Cd 226.502†	-170.5	16.3	0.1771	ug/L	0.1771	ppb	13:31:32
1	Co 228.616†	-75.4	-4.1	-0.0806	ug/L	-0.0806	ppb	13:31:32
1	Cr 267.716†	81.8	-4.7	-0.0508	ug/L	-0.0508	ppb	13:31:32
1	Cu 324.752†	6752.2	25.9	0.0750	ug/L	0.0750	ppb	13:31:12
1	Mn 257.610†	401.4	0.5	0.0010	ug/L	0.0010	ppb	13:31:32
1	Mo 202.031†	18.7	-1.2	-0.0754	ug/L	-0.0754	ppb	13:31:32
1	Ni 231.604†	80.0	10.4	0.2472	ug/L	0.2472	ppb	13:31:32
1	P 214.914†	216.3	-2.3	-1.3648	ug/L	-1.3648	ppb	13:31:32
1	Pb 220.353†	-68.2	-16.0	-1.8733	ug/L	-1.8733	ppb	13:31:32
1	S 181.975 Axial†	47.8	6.6	9.7139	ug/L	9.7139	ppb	13:31:32
1	Sb 206.836†	46.6	17.3	5.6070	ug/L	5.6070	ppb	13:31:32
1	Se 196.026†	-31.3	-8.0	-4.7890	ug/L	-4.7890	ppb	13:31:32
1	Si 251.611†	478.5	-26.6	-0.8120	ug/L	-0.8120	ppb	13:31:32
1	Sn 189.927†	4.4	0.2	0.0305	ug/L	0.0305	ppb	13:31:32
1	Ti 334.940†	-946.9	12.2	0.0190	ug/L	0.0190	ppb	13:31:12
1	Tl 190.801†	-24.9	11.8	3.3745	ug/L	3.3745	ppb	13:31:32
1	U 409.014†	-1860.5	90.0	2.5153	ug/L	2.5153	ppb	13:31:12
1	V 292.402†	-1266.2	22.3	0.1541	ug/L	0.1541	ppb	13:31:12
1	Zn 213.857†	676.5	-126.6	-1.1383	ug/L	-1.1383	ppb	13:31:32
1	SiO2†	514.7	29.1	1.9082	ug/L	1.9082	ppb	13:32:28
2	Sc Radial	5853.6	5853.6	103	%			13:30:20
2	Y RADIAL	6325.2	6325.2	102.7	%			13:30:20
2	Al 396.153Radial†	-31.4	-10.0	-7.4234	ug/L	-7.4234	ppb	13:30:40
2	Ca 317.933Radial†	18.7	0.4	0.6140	ug/L	0.6140	ppb	13:30:40
2	Fe 238.204 Radial†	6.4	0.2	1.7371	ug/L	1.7371	ppb	13:30:40
2	K 766.490 Radial†	2191.8	-49.7	-9.0386	ug/L	-9.0386	ppb	13:30:20
2	Mg 279.077 IEC†	2.9	1.0	38.845	ug/L	38.845	ppb	13:30:40
2	Na 589.592 Radial†	-513.9	118.8	44.658	ug/L	44.658	ppb	13:30:20
2	Sr 421.552†	10.3	6.5	0.0440	ug/L	0.0440	ppb	13:30:20
2	Sc 361.383	878021.6	878021.6	99.215	%			13:31:37
2	Y 371.029	739560.7	739560.7	99.662	%			13:31:37
2	Ag 328.068†	350.3	125.5	0.5806	ug/L	0.5806	ppb	13:31:37
2	As 188.979†	-26.3	2.7	1.0924	ug/L	1.0924	ppb	13:31:57
2	B 249.677†	-326.5	194.8	4.2286	ug/L	4.2286	ppb	13:31:57
2	Ba 233.527†	-7.8	4.2	0.0323	ug/L	0.0323	ppb	13:31:57
2	Be 313.107†	-5111.5	168.3	0.0624	ug/L	0.0624	ppb	13:31:37
2	Cd 226.502†	-190.0	-3.6	-0.0393	ug/L	-0.0393	ppb	13:31:57
2	Co 228.616†	-78.9	-7.7	-0.1488	ug/L	-0.1488	ppb	13:31:57
2	Cr 267.716†	86.1	-0.1	-0.0016	ug/L	-0.0016	ppb	13:31:57
2	Cu 324.752†	6778.9	63.9	0.1860	ug/L	0.1860	ppb	13:31:37
2	Mn 257.610†	411.6	11.4	0.0118	ug/L	0.0118	ppb	13:31:57
2	Mo 202.031†	25.9	6.1	0.4001	ug/L	0.4001	ppb	13:31:57
2	Ni 231.604†	80.7	11.3	0.2671	ug/L	0.2671	ppb	13:31:57

2	P 214.914†	213.7	-4.6	-2.7716	ug/L	-2.7716 ppb	13:31:57
2	Pb 220.353†	-63.9	-11.9	-1.3873	ug/L	-1.3873 ppb	13:31:57
2	S 181.975 Axial†	44.8	3.7	5.4299	ug/L	5.4299 ppb	13:31:57
2	Sb 206.836†	35.6	6.3	2.0494	ug/L	2.0494 ppb	13:31:57
2	Se 196.026†	-10.9	12.4	7.4152	ug/L	7.4152 ppb	13:31:57
2	Si 251.611†	496.0	-8.1	-0.2494	ug/L	-0.2494 ppb	13:31:57
2	Sn 189.927†	1.6	-2.6	-0.4474	ug/L	-0.4474 ppb	13:31:57
2	Ti 334.940†	-1010.3	-53.2	-0.0866	ug/L	-0.0866 ppb	13:31:37
2	Tl 190.801†	-28.8	7.8	2.2376	ug/L	2.2376 ppb	13:31:57
2	U 409.014†	-1906.4	40.7	1.1361	ug/L	1.1361 ppb	13:31:37
2	V 292.402†	-1258.2	28.3	0.1995	ug/L	0.1995 ppb	13:31:37
2	Zn 213.857†	676.1	-125.8	-1.1352	ug/L	-1.1352 ppb	13:31:57
2	SiO2†	498.9	14.0	0.9130	ug/L	0.9130 ppb	13:32:33
3	Sc Radial	5700.0	5700.0	101	%		13:30:45
3	Y RADIAL	6168.5	6168.5	100.2	%		13:30:45
3	Al 396.153Radial†	-30.5	-9.9	-7.3845	ug/L	-7.3845 ppb	13:31:05
3	Ca 317.933Radial†	19.2	1.4	2.0964	ug/L	2.0964 ppb	13:31:05
3	Fe 238.204 Radial†	6.9	0.9	8.6701	ug/L	8.6701 ppb	13:31:05
3	K 766.490 Radial†	2202.2	17.8	3.2054	ug/L	3.2054 ppb	13:30:45
3	Mg 279.077 IEC†	2.6	0.9	32.628	ug/L	32.628 ppb	13:31:05
3	Na 589.592 Radial†	-503.7	115.5	43.408	ug/L	43.408 ppb	13:30:45
3	Sr 421.552†	24.9	21.3	0.1437	ug/L	0.1437 ppb	13:30:45
3	Sc 361.383	889153.8	889153.8	100.47	%		13:32:02
3	Y 371.029	747454.4	747454.4	100.73	%		13:32:02
3	Ag 328.068†	268.9	40.0	0.1842	ug/L	0.1842 ppb	13:32:02
3	As 188.979†	-32.5	-3.2	-1.2905	ug/L	-1.2905 ppb	13:32:22
3	B 249.677†	-360.5	165.0	3.5809	ug/L	3.5809 ppb	13:32:22
3	Ba 233.527†	-12.8	-0.7	-0.0046	ug/L	-0.0046 ppb	13:32:22
3	Be 313.107†	-5194.1	150.6	0.0559	ug/L	0.0559 ppb	13:32:02
3	Cd 226.502†	-176.0	12.6	0.1361	ug/L	0.1361 ppb	13:32:22
3	Co 228.616†	-77.4	-5.3	-0.1007	ug/L	-0.1007 ppb	13:32:22
3	Cr 267.716†	74.9	-12.4	-0.1350	ug/L	-0.1350 ppb	13:32:22
3	Cu 324.752†	6980.6	179.1	0.5212	ug/L	0.5212 ppb	13:32:02
3	Mn 257.610†	409.0	3.6	0.0042	ug/L	0.0042 ppb	13:32:22
3	Mo 202.031†	34.2	14.1	0.9163	ug/L	0.9163 ppb	13:32:22
3	Ni 231.604†	74.4	4.0	0.0944	ug/L	0.0944 ppb	13:32:22
3	P 214.914†	218.2	-2.8	-1.7331	ug/L	-1.7331 ppb	13:32:22
3	Pb 220.353†	-54.7	-1.9	-0.2173	ug/L	-0.2173 ppb	13:32:22
3	S 181.975 Axial†	35.4	-6.3	-9.1480	ug/L	-9.1480 ppb	13:32:22
3	Sb 206.836†	29.9	0.2	0.0903	ug/L	0.0903 ppb	13:32:22
3	Se 196.026†	-8.3	15.2	9.0844	ug/L	9.0844 ppb	13:32:22
3	Si 251.611†	497.0	-13.4	-0.4279	ug/L	-0.4279 ppb	13:32:22
3	Sn 189.927†	8.2	3.9	0.6537	ug/L	0.6537 ppb	13:32:22
3	Ti 334.940†	-978.3	-8.7	-0.0159	ug/L	-0.0159 ppb	13:32:02
3	Tl 190.801†	-35.0	2.0	0.5709	ug/L	0.5709 ppb	13:32:22
3	U 409.014†	-1804.0	166.7	4.6555	ug/L	4.6555 ppb	13:32:02
3	V 292.402†	-1289.6	13.0	0.1093	ug/L	0.1093 ppb	13:32:02
3	Zn 213.857†	680.3	-130.2	-1.1745	ug/L	-1.1745 ppb	13:32:22
3	SiO2†	522.0	30.7	1.9679	ug/L	1.9679 ppb	13:32:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882211.9	99.688	%	0.6842				0.69%
Sc Radial	5757.5	102	%	1.5				1.46%
Y 371.029	742329.2	100.03	%	0.599				0.60%
Y RADIAL	6230.1	101.2	%	1.36				1.34%
Ag 328.068†	76.1	0.3505	ug/L	0.20574	0.3505	ppb	0.20574	58.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.1	-3.0145	ug/L	7.60279	-3.0145	ppb	7.60279	252.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.1944	ug/L	1.20281	-0.1944	ppb	1.20281	618.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	185.7	4.0311	ug/L	0.39091	4.0311	ppb	0.39091	9.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.7	0.0434	ug/L	0.05448	0.0434	ppb	0.05448	125.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	150.2	0.0557	ug/L	0.00670	0.0557	ppb	0.00670	12.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.7	2.5670	ug/L	2.22596	2.5670	ppb	2.22596	86.71%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.4      0.0913 ug/L       0.11495      0.0913 ppb        0.11495 125.85%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.7     -0.1101 ug/L       0.03504     -0.1101 ppb        0.03504  31.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -5.7     -0.0624 ug/L       0.06745     -0.0624 ppb        0.06745 108.03%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                89.6      0.2607 ug/L       0.23234      0.2607 ppb        0.23234  89.11%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.2      1.9784 ug/L       6.57437      1.9784 ppb        6.57437 332.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -4.5     -0.8241 ug/L       7.11440     -0.8241 ppb        7.11440 863.31%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      6.7068 ug/L      50.37747      6.7068 ppb       50.37747 751.14%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 5.2      0.0057 ug/L       0.00555      0.0057 ppb        0.00555  97.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.3      0.4137 ug/L       0.49594      0.4137 ppb        0.49594 119.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         97.7     36.740 ug/L       12.6467     36.740 ppb        12.6467  34.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.5      0.2029 ug/L       0.09450      0.2029 ppb        0.09450  46.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.2     -1.9565 ug/L       0.72954     -1.9565 ppb        0.72954  37.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -9.9     -1.1593 ug/L       0.85119     -1.1593 ppb        0.85119  73.42%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.4      1.9986 ug/L       9.88803      1.9986 ppb        9.88803 494.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.9      2.5823 ug/L       2.79666      2.5823 ppb        2.79666 108.30%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 6.5      3.9036 ug/L       7.57407      3.9036 ppb        7.57407 194.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -16.0     -0.4964 ug/L       0.28748     -0.4964 ppb        0.28748  57.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.5      0.0789 ug/L       0.55213      0.0789 ppb        0.55213 699.42%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.4      0.0766 ug/L       0.05808      0.0766 ppb        0.05808  75.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -16.6     -0.0278 ug/L       0.05378     -0.0278 ppb        0.05378 193.15%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 7.2      2.0610 ug/L       1.41008      2.0610 ppb        1.41008  68.42%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 99.1      2.7690 ug/L       1.77336      2.7690 ppb        1.77336  64.04%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 21.2      0.1543 ug/L       0.04511      0.1543 ppb        0.04511  29.23%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -127.5     -1.1493 ug/L       0.02186     -1.1493 ppb        0.02186   1.90%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      24.6      1.5964 ug/L       0.59259      1.5964 ppb        0.59259  37.12%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 14:37:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5628.9	5628.9	99.4	%			14:39:37
1	Y RADIAL	6023.9	6023.9	97.81	%			14:39:37
1	Al 396.153Radial†	6504.0	6564.1	4830.8	ug/L	4830.8	ppb	14:39:37
1	Ca 317.933Radial†	3267.8	3270.1	5000.6	ug/L	5000.6	ppb	14:39:57
1	Fe 238.204 Radial†	531.3	528.5	5337.2	ug/L	5337.2	ppb	14:39:57
1	K 766.490 Radial†	29511.0	27521.4	4985.7	ug/L	4985.7	ppb	14:39:37
1	Mg 279.077 IEC†	143.3	142.4	5308.9	ug/L	5308.9	ppb	14:39:57
1	Na 589.592 Radial†	28758.7	29550.7	11107	ug/L	11107	ppb	14:39:37
1	Sr 421.552†	78844.0	79323.4	535.43	ug/L	535.43	ppb	14:39:37
1	Sc 361.383	878416.8	878416.8	99.259	%			14:40:54
1	Y 371.029	726466.3	726466.3	97.897	%			14:40:54
1	Ag 328.068†	109820.5	110412.5	513.63	ug/L	513.63	ppb	14:40:59
1	As 188.979†	1168.9	1206.9	496.89	ug/L	496.89	ppb	14:41:19
1	B 249.677†	22087.3	22776.0	492.41	ug/L	492.41	ppb	14:40:59
1	Ba 233.527†	65011.9	65509.1	498.86	ug/L	498.86	ppb	14:40:59
1	Be 313.107†	1301912.2	1316948.5	490.36	ug/L	490.36	ppb	14:40:54
1	Cd 226.502†	45773.6	46303.1	502.12	ug/L	502.12	ppb	14:40:59
1	Co 228.616†	25491.5	25753.5	500.06	ug/L	500.06	ppb	14:40:59
1	Cr 267.716†	46100.1	46357.2	500.29	ug/L	500.29	ppb	14:40:59
1	Cu 324.752†	175282.7	169822.2	494.17	ug/L	494.17	ppb	14:40:59
1	Mn 257.610†	449592.0	452543.9	492.23	ug/L	492.23	ppb	14:40:54
1	Mo 202.031†	7725.8	7763.5	506.09	ug/L	506.09	ppb	14:41:19
1	Ni 231.604†	21065.4	21152.5	501.59	ug/L	501.59	ppb	14:40:59
1	P 214.914†	4359.5	4172.1	2403.7	ug/L	2403.7	ppb	14:41:19
1	Pb 220.353†	4147.2	4230.7	496.06	ug/L	496.06	ppb	14:41:19
1	S 181.975 Axial†	726.8	690.7	1009.1	ug/L	1009.1	ppb	14:41:19
1	Sb 206.836†	1563.9	1545.9	509.20	ug/L	509.20	ppb	14:41:19
1	Se 196.026†	803.7	833.1	515.42	ug/L	515.42	ppb	14:41:19
1	Si 251.611†	82492.7	82600.3	2514.3	ug/L	2514.3	ppb	14:40:59
1	Sn 189.927†	2975.4	2993.3	506.99	ug/L	506.99	ppb	14:41:19
1	Ti 334.940†	310462.8	313744.8	507.29	ug/L	507.29	ppb	14:40:59
1	Tl 190.801†	1677.6	1727.0	498.20	ug/L	498.20	ppb	14:41:19
1	U 409.014†	15864.8	17945.4	499.73	ug/L	499.73	ppb	14:40:59
1	V 292.402†	71775.3	73607.4	503.64	ug/L	503.64	ppb	14:40:59
1	Zn 213.857†	56135.7	55747.4	497.07	ug/L	497.07	ppb	14:40:59
1	SiO2†	82112.0	82236.0	5358.9	ug/L	5358.9	ppb	14:42:27
2	Sc Radial	5708.1	5708.1	101	%			14:40:02
2	Y RADIAL	6145.7	6145.7	99.79	%			14:40:02
2	Al 396.153Radial†	6552.0	6521.0	4799.2	ug/L	4799.2	ppb	14:40:02
2	Ca 317.933Radial†	3271.6	3228.3	4936.6	ug/L	4936.6	ppb	14:40:22
2	Fe 238.204 Radial†	526.5	516.4	5215.2	ug/L	5215.2	ppb	14:40:22
2	K 766.490 Radial†	29873.2	27468.7	4976.2	ug/L	4976.2	ppb	14:40:02
2	Mg 279.077 IEC†	144.1	141.2	5264.3	ug/L	5264.3	ppb	14:40:22
2	Na 589.592 Radial†	29018.9	29407.4	11053	ug/L	11053	ppb	14:40:02
2	Sr 421.552†	79987.4	79356.9	535.66	ug/L	535.66	ppb	14:40:02
2	Sc 361.383	889104.1	889104.1	100.47	%			14:41:25
2	Y 371.029	733716.0	733716.0	98.874	%			14:41:25
2	Ag 328.068†	111043.7	110300.1	513.06	ug/L	513.06	ppb	14:41:30
2	As 188.979†	1185.9	1209.6	497.98	ug/L	497.98	ppb	14:41:50
2	B 249.677†	22330.0	22750.1	491.87	ug/L	491.87	ppb	14:41:30
2	Ba 233.527†	65635.2	65342.2	497.58	ug/L	497.58	ppb	14:41:30
2	Be 313.107†	1315226.1	1314434.3	489.43	ug/L	489.43	ppb	14:41:25
2	Cd 226.502†	46196.9	46170.0	500.69	ug/L	500.69	ppb	14:41:30
2	Co 228.616†	25782.7	25734.7	499.68	ug/L	499.68	ppb	14:41:30
2	Cr 267.716†	46520.0	46216.8	498.77	ug/L	498.77	ppb	14:41:30
2	Cu 324.752†	177464.1	169870.7	494.30	ug/L	494.30	ppb	14:41:30
2	Mn 257.610†	455552.9	453032.5	492.74	ug/L	492.74	ppb	14:41:25
2	Mo 202.031†	7733.5	7677.6	500.48	ug/L	500.48	ppb	14:41:50
2	Ni 231.604†	21200.8	21032.1	498.74	ug/L	498.74	ppb	14:41:30

2	P 214.914†	4384.3	4144.0	2387.0 ug/L	2387.0 ppb	14:41:50
2	Pb 220.353†	4162.1	4195.3	491.92 ug/L	491.92 ppb	14:41:50
2	S 181.975 Axial†	728.8	683.9	999.06 ug/L	999.06 ppb	14:41:50
2	Sb 206.836†	1578.2	1541.2	507.52 ug/L	507.52 ppb	14:41:50
2	Se 196.026†	805.4	825.1	510.21 ug/L	510.21 ppb	14:41:50
2	Si 251.611†	83397.3	82501.7	2511.4 ug/L	2511.4 ppb	14:41:30
2	Sn 189.927†	2988.5	2970.3	503.09 ug/L	503.09 ppb	14:41:50
2	Ti 334.940†	313603.1	313110.8	506.26 ug/L	506.26 ppb	14:41:30
2	Tl 190.801†	1687.6	1716.6	495.21 ug/L	495.21 ppb	14:41:50
2	U 409.014†	16232.7	18119.4	504.62 ug/L	504.62 ppb	14:41:30
2	V 292.402†	72537.9	73497.3	502.85 ug/L	502.85 ppb	14:41:30
2	Zn 213.857†	56662.1	55591.5	495.70 ug/L	495.70 ppb	14:41:30
2	SiO2†	82556.1	81683.6	5322.9 ug/L	5322.9 ppb	14:42:32
3	Sc Radial	5682.9	5682.9	100 %		14:40:27
3	Y RADIAL	6138.7	6138.7	99.67 %		14:40:27
3	Al 396.153Radial†	6547.4	6545.2	4816.9 ug/L	4816.9 ppb	14:40:27
3	Ca 317.933Radial†	3278.9	3249.9	4969.7 ug/L	4969.7 ppb	14:40:47
3	Fe 238.204 Radial†	528.6	520.7	5259.3 ug/L	5259.3 ppb	14:40:47
3	K 766.490 Radial†	29815.9	27543.1	4989.7 ug/L	4989.7 ppb	14:40:27
3	Mg 279.077 IEC†	142.3	140.0	5219.3 ug/L	5219.3 ppb	14:40:47
3	Na 589.592 Radial†	28859.3	29376.0	11042 ug/L	11042 ppb	14:40:27
3	Sr 421.552†	79601.6	79324.5	535.44 ug/L	535.44 ppb	14:40:27
3	Sc 361.383	883781.0	883781.0	99.865 %		14:41:56
3	Y 371.029	729627.7	729627.7	98.323 %		14:41:56
3	Ag 328.068†	109567.0	109487.2	509.31 ug/L	509.31 ppb	14:42:01
3	As 188.979†	1171.2	1202.0	494.86 ug/L	494.86 ppb	14:42:21
3	B 249.677†	22125.0	22678.6	490.32 ug/L	490.32 ppb	14:42:01
3	Ba 233.527†	64897.9	64997.4	494.96 ug/L	494.96 ppb	14:42:01
3	Be 313.107†	1306191.3	1313272.3	488.99 ug/L	488.99 ppb	14:41:56
3	Cd 226.502†	45710.8	45960.3	498.41 ug/L	498.41 ppb	14:42:01
3	Co 228.616†	25499.7	25605.8	497.21 ug/L	497.21 ppb	14:42:01
3	Cr 267.716†	46071.4	46046.5	496.93 ug/L	496.93 ppb	14:42:01
3	Cu 324.752†	174648.2	168115.0	489.20 ug/L	489.20 ppb	14:42:01
3	Mn 257.610†	453035.1	453242.4	492.98 ug/L	492.98 ppb	14:41:56
3	Mo 202.031†	7768.7	7759.2	505.80 ug/L	505.80 ppb	14:42:21
3	Ni 231.604†	21093.4	21051.7	499.20 ug/L	499.20 ppb	14:42:01
3	P 214.914†	4371.0	4156.9	2395.6 ug/L	2395.6 ppb	14:42:21
3	Pb 220.353†	4177.3	4235.5	496.63 ug/L	496.63 ppb	14:42:21
3	S 181.975 Axial†	721.4	680.9	994.67 ug/L	994.67 ppb	14:42:21
3	Sb 206.836†	1576.4	1548.9	510.28 ug/L	510.28 ppb	14:42:21
3	Se 196.026†	810.9	835.4	516.53 ug/L	516.53 ppb	14:42:21
3	Si 251.611†	82130.5	81733.2	2487.8 ug/L	2487.8 ppb	14:42:01
3	Sn 189.927†	3002.6	3002.4	508.53 ug/L	508.53 ppb	14:42:21
3	Ti 334.940†	309455.0	310837.2	502.59 ug/L	502.59 ppb	14:42:01
3	Tl 190.801†	1660.7	1699.8	490.38 ug/L	490.38 ppb	14:42:21
3	U 409.014†	15871.7	17855.3	497.23 ug/L	497.23 ppb	14:42:01
3	V 292.402†	71519.0	72911.9	498.95 ug/L	498.95 ppb	14:42:01
3	Zn 213.857†	56009.3	55277.6	492.88 ug/L	492.88 ppb	14:42:01
3	SiO2†	81604.0	81225.2	5292.7 ug/L	5292.7 ppb	14:42:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883767.3	99.864	%	0.6038				0.60%
Sc Radial	5673.3	100	%	0.7				0.71%
Y 371.029	729936.7	98.365	%	0.4898				0.50%
Y RADIAL	6102.8	99.09	%	1.111				1.12%
Ag 328.068†	110066.6	512.00	ug/L	2.348	512.00	ppb	2.348	0.46%
QC value within limits for Ag 328.068 Recovery = 102.40%								
Al 396.153Radial†	6543.5	4815.7	ug/L	15.86	4815.7	ppb	15.86	0.33%
QC value within limits for Al 396.153Radial Recovery = 96.31%								
As 188.979†	1206.2	496.58	ug/L	1.584	496.58	ppb	1.584	0.32%
QC value within limits for As 188.979 Recovery = 99.32%								
B 249.677†	22734.9	491.53	ug/L	1.087	491.53	ppb	1.087	0.22%
QC value within limits for B 249.677 Recovery = 98.31%								
Ba 233.527†	65282.9	497.13	ug/L	1.988	497.13	ppb	1.988	0.40%
QC value within limits for Ba 233.527 Recovery = 99.43%								
Be 313.107†	1314885.1	489.59	ug/L	0.702	489.59	ppb	0.702	0.14%
QC value within limits for Be 313.107 Recovery = 97.92%								
Ca 317.933Radial†	3249.5	4969.0	ug/L	32.01	4969.0	ppb	32.01	0.64%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.38%
Cd 226.502†            46144.4      500.41 ug/L        1.872      500.41 ppb        1.872   0.37%
   QC value within limits for Cd 226.502  Recovery = 100.08%
Co 228.616†            25698.0      498.98 ug/L        1.552      498.98 ppb        1.552   0.31%
   QC value within limits for Co 228.616  Recovery = 99.80%
Cr 267.716†            46206.9      498.66 ug/L        1.681      498.66 ppb        1.681   0.34%
   QC value within limits for Cr 267.716  Recovery = 99.73%
Cu 324.752†           169269.3      492.55 ug/L        2.909      492.55 ppb        2.909   0.59%
   QC value within limits for Cu 324.752  Recovery = 98.51%
Fe 238.204 Radial†       521.9      5270.6 ug/L       61.77      5270.6 ppb       61.77   1.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.41%
K 766.490 Radial†      27511.1      4983.9 ug/L        6.96      4983.9 ppb        6.96   0.14%
   QC value within limits for K 766.490 Radial  Recovery = 99.68%
Mg 279.077 IEC†          141.2      5264.2 ug/L       44.82      5264.2 ppb       44.82   0.85%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.28%
Mn 257.610†           452939.6      492.65 ug/L        0.385      492.65 ppb        0.385   0.08%
   QC value within limits for Mn 257.610  Recovery = 98.53%
Mo 202.031†             7733.4      504.12 ug/L        3.156      504.12 ppb        3.156   0.63%
   QC value within limits for Mo 202.031  Recovery = 100.82%
Na 589.592 Radial†     29444.7       11067 ug/L       35.0        11067 ppb       35.0   0.32%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 110.67%
Ni 231.604†            21078.8      499.84 ug/L        1.533      499.84 ppb        1.533   0.31%
   QC value within limits for Ni 231.604  Recovery = 99.97%
P 214.914†              4157.7      2395.4 ug/L        8.33      2395.4 ppb        8.33   0.35%
   QC value within limits for P 214.914  Recovery = 95.82%
Pb 220.353†             4220.5      494.87 ug/L        2.573      494.87 ppb        2.573   0.52%
   QC value within limits for Pb 220.353  Recovery = 98.97%
S 181.975 Axial†         685.2      1000.9 ug/L        7.38      1000.9 ppb        7.38   0.74%
   QC value within limits for S 181.975 Axial  Recovery = 100.09%
Sb 206.836†             1545.4      509.00 ug/L        1.387      509.00 ppb        1.387   0.27%
   QC value within limits for Sb 206.836  Recovery = 101.80%
Se 196.026†              831.2      514.06 ug/L        3.375      514.06 ppb        3.375   0.66%
   QC value within limits for Se 196.026  Recovery = 102.81%
Si 251.611†            82278.4      2504.5 ug/L       14.55      2504.5 ppb       14.55   0.58%
   QC value within limits for Si 251.611  Recovery = 100.18%
Sn 189.927†             2988.7      506.20 ug/L        2.802      506.20 ppb        2.802   0.55%
   QC value within limits for Sn 189.927  Recovery = 101.24%
Sr 421.552†            79334.9      535.51 ug/L        0.129      535.51 ppb        0.129   0.02%
   QC value within limits for Sr 421.552  Recovery = 107.10%
Ti 334.940†           312564.3      505.38 ug/L        2.471      505.38 ppb        2.471   0.49%
   QC value within limits for Ti 334.940  Recovery = 101.08%
Tl 190.801†             1714.5      494.60 ug/L        3.943      494.60 ppb        3.943   0.80%
   QC value within limits for Tl 190.801  Recovery = 98.92%
U 409.014†             17973.4      500.53 ug/L        3.754      500.53 ppb        3.754   0.75%
   QC value within limits for U 409.014  Recovery = 100.11%
V 292.402†             73338.9      501.81 ug/L        2.509      501.81 ppb        2.509   0.50%
   QC value within limits for V 292.402  Recovery = 100.36%
Zn 213.857†            55538.8      495.22 ug/L        2.139      495.22 ppb        2.139   0.43%
   QC value within limits for Zn 213.857  Recovery = 99.04%
SiO2†                  81714.9      5324.8 ug/L       33.13      5324.8 ppb       33.13   0.62%
   QC value within limits for SiO2  Recovery = 99.58%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 14:44:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5617.2	5617.2	99.2	%			14:46:39
1	Y RADIAL	6081.7	6081.7	98.75	%			14:46:39
1	Al 396.153Radial†	-20.2	-0.1	-0.0557	ug/L	-0.0557	ppb	14:46:59
1	Ca 317.933Radial†	26.9	9.4	14.400	ug/L	14.400	ppb	14:46:59
1	Fe 238.204 Radial†	10.2	4.2	42.751	ug/L	42.751	ppb	14:46:59
1	K 766.490 Radial†	2303.9	152.6	27.677	ug/L	27.677	ppb	14:46:39
1	Mg 279.077 IEC†	3.2	1.4	53.567	ug/L	53.567	ppb	14:46:59
1	Na 589.592 Radial†	-560.1	51.2	19.252	ug/L	19.252	ppb	14:46:39
1	Sr 421.552†	1.6	-1.8	-0.0124	ug/L	-0.0124	ppb	14:46:39
1	Sc 361.383	878169.0	878169.0	99.231	%			14:47:56
1	Y 371.029	738234.7	738234.7	99.483	%			14:47:56
1	Ag 328.068†	243.2	17.5	0.0968	ug/L	0.0968	ppb	14:47:56
1	As 188.979†	-32.6	-3.6	-1.4823	ug/L	-1.4823	ppb	14:48:16
1	B 249.677†	-332.6	188.7	4.0893	ug/L	4.0893	ppb	14:48:16
1	Ba 233.527†	-22.4	-10.6	-0.0791	ug/L	-0.0791	ppb	14:48:16
1	Be 313.107†	-5204.6	75.3	0.0278	ug/L	0.0278	ppb	14:47:56
1	Cd 226.502†	-179.1	7.4	0.0757	ug/L	0.0757	ppb	14:48:16
1	Co 228.616†	-67.7	3.5	0.0685	ug/L	0.0685	ppb	14:48:16
1	Cr 267.716†	72.0	-14.4	-0.1539	ug/L	-0.1539	ppb	14:48:16
1	Cu 324.752†	6843.6	128.0	0.3745	ug/L	0.3745	ppb	14:47:56
1	Mn 257.610†	442.1	42.1	0.0490	ug/L	0.0490	ppb	14:48:16
1	Mo 202.031†	22.0	2.2	0.1458	ug/L	0.1458	ppb	14:48:16
1	Ni 231.604†	75.4	5.8	0.1387	ug/L	0.1387	ppb	14:48:16
1	P 214.914†	214.8	-3.5	-2.1464	ug/L	-2.1464	ppb	14:48:16
1	Pb 220.353†	-44.2	8.0	0.9269	ug/L	0.9269	ppb	14:48:16
1	S 181.975 Axial†	38.6	-2.6	-3.7638	ug/L	-3.7638	ppb	14:48:16
1	Sb 206.836†	28.1	-1.3	-0.3866	ug/L	-0.3866	ppb	14:48:16
1	Se 196.026†	-14.7	8.6	5.2523	ug/L	5.2523	ppb	14:48:16
1	Si 251.611†	557.6	53.9	1.6293	ug/L	1.6293	ppb	14:48:16
1	Sn 189.927†	16.0	11.8	2.0009	ug/L	2.0009	ppb	14:48:16
1	Ti 334.940†	-1006.8	-49.6	-0.0776	ug/L	-0.0776	ppb	14:47:56
1	Tl 190.801†	-28.8	7.8	2.2400	ug/L	2.2400	ppb	14:48:16
1	U 409.014†	-2093.6	-147.6	-4.1288	ug/L	-4.1288	ppb	14:47:56
1	V 292.402†	-1321.4	-35.2	-0.2485	ug/L	-0.2485	ppb	14:47:56
1	Zn 213.857†	688.2	-113.8	-1.0307	ug/L	-1.0307	ppb	14:48:16
1	SiO2†	562.3	77.8	5.0560	ug/L	5.0560	ppb	14:49:12
2	Sc Radial	5724.4	5724.4	101	%			14:47:04
2	Y RADIAL	6188.2	6188.2	100.5	%			14:47:04
2	Al 396.153Radial†	-19.9	0.7	0.5156	ug/L	0.5156	ppb	14:47:24
2	Ca 317.933Radial†	26.3	8.3	12.743	ug/L	12.743	ppb	14:47:24
2	Fe 238.204 Radial†	7.1	1.0	9.8598	ug/L	9.8598	ppb	14:47:24
2	K 766.490 Radial†	2222.1	28.1	5.0836	ug/L	5.0836	ppb	14:47:04
2	Mg 279.077 IEC†	1.7	-0.0	-1.5553	ug/L	-1.5553	ppb	14:47:24
2	Na 589.592 Radial†	-521.6	99.9	37.556	ug/L	37.556	ppb	14:47:04
2	Sr 421.552†	-27.1	-30.3	-0.2045	ug/L	-0.2045	ppb	14:47:04
2	Sc 361.383	881734.1	881734.1	99.634	%			14:48:21
2	Y 371.029	740753.2	740753.2	99.822	%			14:48:21
2	Ag 328.068†	234.9	8.1	0.0406	ug/L	0.0406	ppb	14:48:21
2	As 188.979†	-28.4	0.7	0.2922	ug/L	0.2922	ppb	14:48:41
2	B 249.677†	-318.7	204.0	4.4272	ug/L	4.4272	ppb	14:48:41
2	Ba 233.527†	-16.8	-4.9	-0.0377	ug/L	-0.0377	ppb	14:48:41
2	Be 313.107†	-5247.5	53.4	0.0199	ug/L	0.0199	ppb	14:48:21
2	Cd 226.502†	-177.3	9.9	0.1061	ug/L	0.1061	ppb	14:48:41
2	Co 228.616†	-68.3	3.2	0.0609	ug/L	0.0609	ppb	14:48:41
2	Cr 267.716†	76.4	-10.3	-0.1111	ug/L	-0.1111	ppb	14:48:41
2	Cu 324.752†	6812.4	68.8	0.2006	ug/L	0.2006	ppb	14:48:21
2	Mn 257.610†	439.6	37.8	0.0421	ug/L	0.0421	ppb	14:48:41
2	Mo 202.031†	15.7	-4.2	-0.2722	ug/L	-0.2722	ppb	14:48:41
2	Ni 231.604†	56.7	-13.2	-0.3135	ug/L	-0.3135	ppb	14:48:41

2	P 214.914†	222.4	3.2	1.8949	ug/L	1.8949 ppb	14:48:41
2	Pb 220.353†	-64.8	-12.5	-1.4636	ug/L	-1.4636 ppb	14:48:41
2	S 181.975 Axial†	42.5	1.2	1.7427	ug/L	1.7427 ppb	14:48:41
2	Sb 206.836†	33.6	4.2	1.3546	ug/L	1.3546 ppb	14:48:41
2	Se 196.026†	-24.6	-1.3	-0.7163	ug/L	-0.7163 ppb	14:48:41
2	Si 251.611†	528.2	22.1	0.6792	ug/L	0.6792 ppb	14:48:41
2	Sn 189.927†	6.8	2.5	0.4324	ug/L	0.4324 ppb	14:48:41
2	Ti 334.940†	-940.4	21.1	0.0359	ug/L	0.0359 ppb	14:48:21
2	Tl 190.801†	-25.8	10.9	3.1314	ug/L	3.1314 ppb	14:48:41
2	U 409.014†	-2037.8	-83.1	-2.3216	ug/L	-2.3216 ppb	14:48:21
2	V 292.402†	-1367.4	-75.9	-0.5226	ug/L	-0.5226 ppb	14:48:21
2	Zn 213.857†	709.2	-95.5	-0.8585	ug/L	-0.8585 ppb	14:48:41
2	SiO2†	511.6	24.7	1.6180	ug/L	1.6180 ppb	14:49:17
3	Sc Radial	5778.2	5778.2	102	%		14:47:29
3	Y RADIAL	6280.8	6280.8	102.0	%		14:47:29
3	Al 396.153Radial†	-18.9	1.8	1.3351	ug/L	1.3351 ppb	14:47:49
3	Ca 317.933Radial†	25.5	7.3	11.171	ug/L	11.171 ppb	14:47:49
3	Fe 238.204 Radial†	5.2	-0.9	-9.4074	ug/L	-9.4074 ppb	14:47:49
3	K 766.490 Radial†	2225.7	11.2	2.0239	ug/L	2.0239 ppb	14:47:29
3	Mg 279.077 IEC†	2.1	0.3	11.108	ug/L	11.108 ppb	14:47:49
3	Na 589.592 Radial†	-593.8	34.0	12.769	ug/L	12.769 ppb	14:47:29
3	Sr 421.552†	31.5	27.4	0.1850	ug/L	0.1850 ppb	14:47:29
3	Sc 361.383	874375.2	874375.2	98.803	%		14:48:47
3	Y 371.029	733626.8	733626.8	98.862	%		14:48:47
3	Ag 328.068†	291.3	67.2	0.3070	ug/L	0.3070 ppb	14:48:47
3	As 188.979†	-18.7	10.3	4.1998	ug/L	4.1998 ppb	14:49:07
3	B 249.677†	-345.5	174.1	3.7810	ug/L	3.7810 ppb	14:49:07
3	Ba 233.527†	-24.3	-12.6	-0.0960	ug/L	-0.0960 ppb	14:49:07
3	Be 313.107†	-5207.7	49.4	0.0183	ug/L	0.0183 ppb	14:48:47
3	Cd 226.502†	-173.9	11.8	0.1294	ug/L	0.1294 ppb	14:49:07
3	Co 228.616†	-69.3	1.6	0.0311	ug/L	0.0311 ppb	14:49:07
3	Cr 267.716†	77.7	-8.3	-0.0898	ug/L	-0.0898 ppb	14:49:07
3	Cu 324.752†	6884.1	198.8	0.5778	ug/L	0.5778 ppb	14:48:47
3	Mn 257.610†	466.4	68.7	0.0735	ug/L	0.0735 ppb	14:49:07
3	Mo 202.031†	23.4	3.7	0.2390	ug/L	0.2390 ppb	14:49:07
3	Ni 231.604†	71.6	2.3	0.0555	ug/L	0.0555 ppb	14:49:07
3	P 214.914†	222.4	5.1	2.9632	ug/L	2.9632 ppb	14:49:07
3	Pb 220.353†	-70.9	-19.2	-2.2463	ug/L	-2.2463 ppb	14:49:07
3	S 181.975 Axial†	41.6	0.6	0.8907	ug/L	0.8907 ppb	14:49:07
3	Sb 206.836†	20.8	-8.6	-2.7433	ug/L	-2.7433 ppb	14:49:07
3	Se 196.026†	-25.9	-2.8	-1.6938	ug/L	-1.6938 ppb	14:49:07
3	Si 251.611†	529.7	28.1	0.8501	ug/L	0.8501 ppb	14:49:07
3	Sn 189.927†	12.4	8.3	1.3974	ug/L	1.3974 ppb	14:49:07
3	Ti 334.940†	-968.2	-14.9	-0.0240	ug/L	-0.0240 ppb	14:48:47
3	Tl 190.801†	-37.0	-0.6	-0.1850	ug/L	-0.1850 ppb	14:49:07
3	U 409.014†	-1899.2	40.0	1.1180	ug/L	1.1180 ppb	14:48:47
3	V 292.402†	-1273.5	7.5	0.0581	ug/L	0.0581 ppb	14:48:47
3	Zn 213.857†	693.1	-105.8	-0.9522	ug/L	-0.9522 ppb	14:49:07
3	SiO2†	558.6	76.5	4.9909	ug/L	4.9909 ppb	14:49:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878092.8	99.223	%	0.4158				0.42%
Sc Radial	5706.6	101	%	1.4				1.44%
Y 371.029	737538.2	99.389	%	0.4870				0.49%
Y RADIAL	6183.6	100.4	%	1.62				1.61%
Ag 328.068†	31.0	0.1481	ug/L	0.14042	0.1481	ppb	0.14042	94.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.8	0.5983	ug/L	0.69908	0.5983	ppb	0.69908	116.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.5	1.0032	ug/L	2.90704	1.0032	ppb	2.90704	289.77%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	188.9	4.0992	ug/L	0.32322	4.0992	ppb	0.32322	7.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-9.3	-0.0709	ug/L	0.02996	-0.0709	ppb	0.02996	42.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	59.4	0.0220	ug/L	0.00510	0.0220	ppb	0.00510	23.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.4	12.771	ug/L	1.6144	12.771	ppb	1.6144	12.64%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                9.7      0.1037 ug/L       0.02694      0.1037 ppb        0.02694  25.97%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                2.8      0.0535 ug/L       0.01976      0.0535 ppb        0.01976  36.95%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -11.0     -0.1182 ug/L       0.03265     -0.1182 ppb        0.03265  27.61%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              131.9      0.3843 ug/L       0.18881      0.3843 ppb        0.18881  49.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.4      14.401 ug/L       26.3738      14.401 ppb        26.3738 183.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         64.0      11.595 ug/L       14.0115      11.595 ppb        14.0115 120.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.6      21.040 ug/L       28.8718      21.040 ppb        28.8718 137.22%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               49.5       0.0549 ug/L       0.01648      0.0549 ppb        0.01648  30.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                0.6       0.0375 ug/L       0.27224      0.0375 ppb        0.27224 725.38%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        61.7      23.193 ug/L       12.8548      23.193 ppb        12.8548  55.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -1.7      -0.0398 ug/L       0.24071     -0.0398 ppb        0.24071 605.18%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.6       0.9039 ug/L       2.69508      0.9039 ppb        2.69508 298.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -7.9      -0.9277 ug/L       1.65309     -0.9277 ppb        1.65309 178.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.3      -0.3768 ug/L       2.96397     -0.3768 ppb        2.96397 786.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -1.9      -0.5918 ug/L       2.05663     -0.5918 ppb        2.05663 347.53%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                1.5       0.9474 ug/L       3.76006      0.9474 ppb        3.76006 396.88%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               34.7       1.0529 ug/L       0.50650      1.0529 ppb        0.50650  48.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                7.5       1.2769 ug/L       0.79118      1.2769 ppb        0.79118  61.96%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -1.6      -0.0106 ug/L       0.19477     -0.0106 ppb        0.19477 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -14.5      -0.0219 ug/L       0.05676     -0.0219 ppb        0.05676 259.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.0       1.7288 ug/L       1.71627      1.7288 ppb        1.71627  99.27%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -63.6      -1.7774 ug/L       2.66538     -1.7774 ppb        2.66538 149.96%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -34.5      -0.2377 ug/L       0.29052     -0.2377 ppb        0.29052 122.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -105.0      -0.9471 ug/L       0.08622     -0.9471 ppb        0.08622   9.10%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     59.7       3.8883 ug/L       1.96643      3.8883 ppb        1.96643  50.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 15:48:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5688.3	5688.3	100	%			15:50:08
1	Y RADIAL	6094.7	6094.7	98.96	%			15:50:08
1	Al 396.153Radial†	6614.2	6605.5	4861.4	ug/L	4861.4	ppb	15:50:08
1	Ca 317.933Radial†	3298.8	3266.6	4995.2	ug/L	4995.2	ppb	15:50:28
1	Fe 238.204 Radial†	527.7	519.3	5245.1	ug/L	5245.1	ppb	15:50:28
1	K 766.490 Radial†	29948.4	27646.8	5008.7	ug/L	5008.7	ppb	15:50:08
1	Mg 279.077 IEC†	140.8	138.4	5158.7	ug/L	5158.7	ppb	15:50:28
1	Na 589.592 Radial†	27456.3	27951.8	10506	ug/L	10506	ppb	15:50:08
1	Sr 421.552†	77753.9	77409.4	522.51	ug/L	522.51	ppb	15:50:08
1	Sc 361.383	880780.7	880780.7	99.526	%			15:51:25
1	Y 371.029	726716.8	726716.8	97.931	%			15:51:25
1	Ag 328.068†	109293.3	109585.8	509.77	ug/L	509.77	ppb	15:51:30
1	As 188.979†	1173.9	1208.7	497.59	ug/L	497.59	ppb	15:51:51
1	B 249.677†	21923.0	22551.2	487.55	ug/L	487.55	ppb	15:51:30
1	Ba 233.527†	65124.0	65446.0	498.36	ug/L	498.36	ppb	15:51:30
1	Be 313.107†	1310120.0	1321675.3	492.11	ug/L	492.11	ppb	15:51:25
1	Cd 226.502†	45768.8	46174.5	500.74	ug/L	500.74	ppb	15:51:30
1	Co 228.616†	25547.9	25741.2	499.84	ug/L	499.84	ppb	15:51:30
1	Cr 267.716†	45880.6	46012.0	496.56	ug/L	496.56	ppb	15:51:30
1	Cu 324.752†	174566.9	168629.0	490.69	ug/L	490.69	ppb	15:51:30
1	Mn 257.610†	452982.9	454735.2	494.60	ug/L	494.60	ppb	15:51:25
1	Mo 202.031†	7765.2	7782.2	507.30	ug/L	507.30	ppb	15:51:51
1	Ni 231.604†	21040.0	21070.0	499.63	ug/L	499.63	ppb	15:51:30
1	P 214.914†	4404.5	4205.5	2424.3	ug/L	2424.3	ppb	15:51:51
1	Pb 220.353†	4174.5	4246.9	497.98	ug/L	497.98	ppb	15:51:51
1	S 181.975 Axial†	742.5	704.6	1029.3	ug/L	1029.3	ppb	15:51:51
1	Sb 206.836†	1581.7	1559.6	513.82	ug/L	513.82	ppb	15:51:51
1	Se 196.026†	817.7	845.0	522.23	ug/L	522.23	ppb	15:51:51
1	Si 251.611†	82282.5	82166.0	2501.0	ug/L	2501.0	ppb	15:51:30
1	Sn 189.927†	3010.1	3020.2	511.54	ug/L	511.54	ppb	15:51:51
1	Ti 334.940†	309173.9	311610.4	503.85	ug/L	503.85	ppb	15:51:30
1	Tl 190.801†	1695.4	1740.3	502.01	ug/L	502.01	ppb	15:51:51
1	U 409.014†	15586.5	17622.9	490.74	ug/L	490.74	ppb	15:51:30
1	V 292.402†	71409.7	73046.0	499.87	ug/L	499.87	ppb	15:51:30
1	Zn 213.857†	55966.5	55425.6	494.21	ug/L	494.21	ppb	15:51:30
1	SiO2†	82704.5	82609.3	5383.2	ug/L	5383.2	ppb	15:52:58
2	Sc Radial	5608.9	5608.9	99.0	%			15:50:33
2	Y RADIAL	5976.5	5976.5	97.04	%			15:50:33
2	Al 396.153Radial†	6510.2	6593.7	4852.9	ug/L	4852.9	ppb	15:50:33
2	Ca 317.933Radial†	3302.7	3317.1	5072.4	ug/L	5072.4	ppb	15:50:53
2	Fe 238.204 Radial†	524.4	523.5	5287.0	ug/L	5287.0	ppb	15:50:53
2	K 766.490 Radial†	29599.8	27716.8	5021.4	ug/L	5021.4	ppb	15:50:33
2	Mg 279.077 IEC†	142.0	141.7	5280.8	ug/L	5280.8	ppb	15:50:53
2	Na 589.592 Radial†	26882.7	27759.6	10434	ug/L	10434	ppb	15:50:33
2	Sr 421.552†	76338.0	77075.5	520.26	ug/L	520.26	ppb	15:50:33
2	Sc 361.383	894640.7	894640.7	101.09	%			15:51:56
2	Y 371.029	736864.2	736864.2	99.298	%			15:51:56
2	Ag 328.068†	109482.9	108072.2	502.76	ug/L	502.76	ppb	15:52:01
2	As 188.979†	1181.9	1198.4	493.34	ug/L	493.34	ppb	15:52:22
2	B 249.677†	22083.5	22368.7	483.59	ug/L	483.59	ppb	15:52:01
2	Ba 233.527†	65489.4	64793.7	493.40	ug/L	493.40	ppb	15:52:01
2	Be 313.107†	1329997.5	1320944.6	491.83	ug/L	491.83	ppb	15:51:56
2	Cd 226.502†	46153.7	45842.7	497.13	ug/L	497.13	ppb	15:52:01
2	Co 228.616†	25771.4	25564.6	496.40	ug/L	496.40	ppb	15:52:01
2	Cr 267.716†	46132.7	45547.2	491.55	ug/L	491.55	ppb	15:52:01
2	Cu 324.752†	174967.9	166308.3	483.94	ug/L	483.94	ppb	15:52:01
2	Mn 257.610†	461002.3	455616.9	495.56	ug/L	495.56	ppb	15:51:56
2	Mo 202.031†	7792.9	7688.7	501.21	ug/L	501.21	ppb	15:52:22
2	Ni 231.604†	21104.6	20806.4	493.38	ug/L	493.38	ppb	15:52:01

2	P 214.914†	4434.4	4166.5	2402.1 ug/L	2402.1 ppb	15:52:22
2	Pb 220.353†	4185.6	4192.9	491.65 ug/L	491.65 ppb	15:52:22
2	S 181.975 Axial†	742.9	693.4	1013.0 ug/L	1013.0 ppb	15:52:22
2	Sb 206.836†	1588.0	1541.2	507.73 ug/L	507.73 ppb	15:52:22
2	Se 196.026†	825.4	839.9	519.32 ug/L	519.32 ppb	15:52:22
2	Si 251.611†	82690.8	81289.1	2474.3 ug/L	2474.3 ppb	15:52:01
2	Sn 189.927†	3018.0	2981.1	504.93 ug/L	504.93 ppb	15:52:22
2	Ti 334.940†	310619.8	308228.0	498.38 ug/L	498.38 ppb	15:52:01
2	Tl 190.801†	1690.5	1709.1	493.05 ug/L	493.05 ppb	15:52:22
2	U 409.014†	15755.9	17547.8	488.65 ug/L	488.65 ppb	15:52:01
2	V 292.402†	71705.2	72226.7	494.25 ug/L	494.25 ppb	15:52:01
2	Zn 213.857†	56309.8	54894.0	489.46 ug/L	489.46 ppb	15:52:01
2	SiO2†	81916.7	80542.6	5248.1 ug/L	5248.1 ppb	15:53:03
3	Sc Radial	5600.3	5600.3	98.9 %		15:50:58
3	Y RADIAL	5967.8	5967.8	96.90 %		15:50:58
3	Al 396.153Radial†	6466.7	6559.8	4827.9 ug/L	4827.9 ppb	15:50:58
3	Ca 317.933Radial†	3314.3	3333.9	5098.1 ug/L	5098.1 ppb	15:51:18
3	Fe 238.204 Radial†	526.1	525.9	5311.7 ug/L	5311.7 ppb	15:51:18
3	K 766.490 Radial†	29457.4	27618.5	5003.6 ug/L	5003.6 ppb	15:50:58
3	Mg 279.077 IEC†	140.7	140.6	5239.7 ug/L	5239.7 ppb	15:51:18
3	Na 589.592 Radial†	26857.1	27775.2	10440 ug/L	10440 ppb	15:50:58
3	Sr 421.552†	76298.9	77153.8	520.79 ug/L	520.79 ppb	15:50:58
3	Sc 361.383	889983.2	889983.2	100.57 %		15:52:27
3	Y 371.029	732793.2	732793.2	98.750 %		15:52:27
3	Ag 328.068†	110767.4	109916.2	511.32 ug/L	511.32 ppb	15:52:32
3	As 188.979†	1176.9	1199.5	493.87 ug/L	493.87 ppb	15:52:52
3	B 249.677†	22442.8	22840.3	493.81 ug/L	493.81 ppb	15:52:32
3	Ba 233.527†	66021.6	65661.9	500.01 ug/L	500.01 ppb	15:52:32
3	Be 313.107†	1319580.9	1317471.6	490.56 ug/L	490.56 ppb	15:52:27
3	Cd 226.502†	46361.7	46288.5	501.97 ug/L	501.97 ppb	15:52:32
3	Co 228.616†	25908.4	25834.3	501.62 ug/L	501.62 ppb	15:52:32
3	Cr 267.716†	46403.6	46055.4	497.03 ug/L	497.03 ppb	15:52:32
3	Cu 324.752†	177557.0	169788.7	494.07 ug/L	494.07 ppb	15:52:32
3	Mn 257.610†	458591.2	455605.8	495.55 ug/L	495.55 ppb	15:52:27
3	Mo 202.031†	7739.7	7676.1	500.39 ug/L	500.39 ppb	15:52:52
3	Ni 231.604†	21260.4	21070.6	499.65 ug/L	499.65 ppb	15:52:32
3	P 214.914†	4377.6	4133.0	2380.5 ug/L	2380.5 ppb	15:52:52
3	Pb 220.353†	4171.8	4200.9	492.57 ug/L	492.57 ppb	15:52:52
3	S 181.975 Axial†	735.1	689.5	1007.3 ug/L	1007.3 ppb	15:52:52
3	Sb 206.836†	1587.9	1549.4	510.22 ug/L	510.22 ppb	15:52:52
3	Se 196.026†	814.3	833.2	515.35 ug/L	515.35 ppb	15:52:52
3	Si 251.611†	83437.6	82459.8	2510.1 ug/L	2510.1 ppb	15:52:32
3	Sn 189.927†	2995.6	2974.5	503.82 ug/L	503.82 ppb	15:52:52
3	Ti 334.940†	314122.7	313319.2	506.61 ug/L	506.61 ppb	15:52:32
3	Tl 190.801†	1670.9	1698.4	490.00 ug/L	490.00 ppb	15:52:52
3	U 409.014†	15999.2	17871.3	497.67 ug/L	497.67 ppb	15:52:32
3	V 292.402†	72318.8	73208.1	500.86 ug/L	500.86 ppb	15:52:32
3	Zn 213.857†	56785.7	55658.7	496.29 ug/L	496.29 ppb	15:52:32
3	SiO2†	83246.5	82288.9	5362.6 ug/L	5362.6 ppb	15:53:08

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888468.2	100.40	%	0.797				0.79%
Sc Radial	5632.5	99.5	%	0.86				0.86%
Y 371.029	732124.7	98.660	%	0.6882				0.70%
Y RADIAL	6013.0	97.63	%	1.151				1.18%
Ag 328.068†	109191.4	507.95	ug/L	4.557	507.95	ppb	4.557	0.90%
QC value within limits for Ag 328.068 Recovery = 101.59%								
Al 396.153Radial†	6586.3	4847.4	ug/L	17.43	4847.4	ppb	17.43	0.36%
QC value within limits for Al 396.153Radial Recovery = 96.95%								
As 188.979†	1202.2	494.93	ug/L	2.319	494.93	ppb	2.319	0.47%
QC value within limits for As 188.979 Recovery = 98.99%								
B 249.677†	22586.7	488.32	ug/L	5.153	488.32	ppb	5.153	1.06%
QC value within limits for B 249.677 Recovery = 97.66%								
Ba 233.527†	65300.5	497.26	ug/L	3.441	497.26	ppb	3.441	0.69%
QC value within limits for Ba 233.527 Recovery = 99.45%								
Be 313.107†	1320030.5	491.50	ug/L	0.829	491.50	ppb	0.829	0.17%
QC value within limits for Be 313.107 Recovery = 98.30%								
Ca 317.933Radial†	3305.9	5055.3	ug/L	53.56	5055.3	ppb	53.56	1.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.11%
Cd 226.502†            46101.9      499.94 ug/L         2.514      499.94 ppb          2.514   0.50%
   QC value within limits for Cd 226.502  Recovery = 99.99%
Co 228.616†            25713.4      499.29 ug/L         2.650      499.29 ppb          2.650   0.53%
   QC value within limits for Co 228.616  Recovery = 99.86%
Cr 267.716†            45871.5      495.05 ug/L         3.040      495.05 ppb          3.040   0.61%
   QC value within limits for Cr 267.716  Recovery = 99.01%
Cu 324.752†           168242.0      489.57 ug/L         5.154      489.57 ppb          5.154   1.05%
   QC value within limits for Cu 324.752  Recovery = 97.91%
Fe 238.204 Radial†       522.9      5281.3 ug/L        33.68      5281.3 ppb         33.68   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.63%
K 766.490 Radial†      27660.7      5011.2 ug/L         9.19      5011.2 ppb          9.19   0.18%
   QC value within limits for K 766.490 Radial  Recovery = 100.22%
Mg 279.077 IEC†          140.2      5226.4 ug/L        62.09      5226.4 ppb         62.09   1.19%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.53%
Mn 257.610†           455319.3      495.24 ug/L         0.552      495.24 ppb          0.552   0.11%
   QC value within limits for Mn 257.610  Recovery = 99.05%
Mo 202.031†             7715.6      502.97 ug/L         3.772      502.97 ppb          3.772   0.75%
   QC value within limits for Mo 202.031  Recovery = 100.59%
Na 589.592 Radial†     27828.9       10460 ug/L        40.1        10460 ppb         40.1   0.38%
   QC value within limits for Na 589.592 Radial  Recovery = 104.60%
Ni 231.604†            20982.3      497.55 ug/L         3.614      497.55 ppb          3.614   0.73%
   QC value within limits for Ni 231.604  Recovery = 99.51%
P 214.914†              4168.4      2402.3 ug/L        21.91      2402.3 ppb         21.91   0.91%
   QC value within limits for P 214.914  Recovery = 96.09%
Pb 220.353†             4213.6      494.07 ug/L         3.418      494.07 ppb          3.418   0.69%
   QC value within limits for Pb 220.353  Recovery = 98.81%
S 181.975 Axial†         695.8      1016.5 ug/L        11.41      1016.5 ppb         11.41   1.12%
   QC value within limits for S 181.975 Axial  Recovery = 101.65%
Sb 206.836†             1550.1      510.59 ug/L         3.062      510.59 ppb          3.062   0.60%
   QC value within limits for Sb 206.836  Recovery = 102.12%
Se 196.026†              839.4      518.97 ug/L         3.454      518.97 ppb          3.454   0.67%
   QC value within limits for Se 196.026  Recovery = 103.79%
Si 251.611†            81971.6      2495.2 ug/L        18.62      2495.2 ppb         18.62   0.75%
   QC value within limits for Si 251.611  Recovery = 99.81%
Sn 189.927†             2991.9      506.76 ug/L         4.173      506.76 ppb          4.173   0.82%
   QC value within limits for Sn 189.927  Recovery = 101.35%
Sr 421.552†            77212.9      521.19 ug/L         1.179      521.19 ppb          1.179   0.23%
   QC value within limits for Sr 421.552  Recovery = 104.24%
Ti 334.940†           311052.5      502.95 ug/L         4.188      502.95 ppb          4.188   0.83%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             1715.9      495.02 ug/L         6.241      495.02 ppb          6.241   1.26%
   QC value within limits for Tl 190.801  Recovery = 99.00%
U 409.014†             17680.6      492.36 ug/L         4.723      492.36 ppb          4.723   0.96%
   QC value within limits for U 409.014  Recovery = 98.47%
V 292.402†             72826.9      498.33 ug/L         3.566      498.33 ppb          3.566   0.72%
   QC value within limits for V 292.402  Recovery = 99.67%
Zn 213.857†            55326.1      493.32 ug/L         3.499      493.32 ppb          3.499   0.71%
   QC value within limits for Zn 213.857  Recovery = 98.66%
SiO2†                  81813.6      5331.3 ug/L        72.76      5331.3 ppb         72.76   1.36%
   QC value within limits for SiO2  Recovery = 99.70%
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 15:55:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5736.3	5736.3	101	%			15:57:11
1	Y RADIAL	6222.8	6222.8	101.0	%			15:57:11
1	Al 396.153Radial†	-14.0	6.6	4.8199	ug/L	4.8199	ppb	15:57:11
1	Ca 317.933Radial†	25.7	7.7	11.815	ug/L	11.815	ppb	15:57:31
1	Fe 238.204 Radial†	7.2	1.1	11.050	ug/L	11.050	ppb	15:57:31
1	K 766.490 Radial†	2436.4	235.1	42.663	ug/L	42.663	ppb	15:57:11
1	Mg 279.077 IEC†	0.9	-0.9	-33.099	ug/L	-33.099	ppb	15:57:31
1	Na 589.592 Radial†	-548.0	75.0	28.178	ug/L	28.178	ppb	15:57:11
1	Sr 421.552†	-3.8	-7.2	-0.0485	ug/L	-0.0485	ppb	15:57:11
1	Sc 361.383	880318.4	880318.4	99.474	%			15:58:28
1	Y 371.029	739070.7	739070.7	99.596	%			15:58:28
1	Ag 328.068†	256.1	29.8	0.1428	ug/L	0.1428	ppb	15:58:28
1	As 188.979†	-29.1	-0.0	-0.0228	ug/L	-0.0228	ppb	15:58:48
1	B 249.677†	-325.0	197.1	4.2774	ug/L	4.2774	ppb	15:58:48
1	Ba 233.527†	-11.2	0.7	0.0066	ug/L	0.0066	ppb	15:58:48
1	Be 313.107†	-5164.7	128.3	0.0472	ug/L	0.0472	ppb	15:58:28
1	Cd 226.502†	-186.0	0.9	0.0081	ug/L	0.0081	ppb	15:58:48
1	Co 228.616†	-72.5	-1.1	-0.0194	ug/L	-0.0194	ppb	15:58:48
1	Cr 267.716†	89.2	2.7	0.0301	ug/L	0.0301	ppb	15:58:48
1	Cu 324.752†	6691.9	-41.4	-0.1198	ug/L	-0.1198	ppb	15:58:28
1	Mn 257.610†	470.1	69.2	0.0769	ug/L	0.0769	ppb	15:58:48
1	Mo 202.031†	29.3	9.5	0.6179	ug/L	0.6179	ppb	15:58:48
1	Ni 231.604†	62.7	-7.1	-0.1686	ug/L	-0.1686	ppb	15:58:48
1	P 214.914†	220.1	1.3	0.7535	ug/L	0.7535	ppb	15:58:48
1	Pb 220.353†	-62.0	-9.8	-1.1429	ug/L	-1.1429	ppb	15:58:48
1	S 181.975 Axial†	36.6	-4.7	-6.8634	ug/L	-6.8634	ppb	15:58:48
1	Sb 206.836†	38.7	9.3	3.0095	ug/L	3.0095	ppb	15:58:48
1	Se 196.026†	-25.3	-2.0	-1.1577	ug/L	-1.1577	ppb	15:58:48
1	Si 251.611†	511.4	6.1	0.1658	ug/L	0.1658	ppb	15:58:48
1	Sn 189.927†	-3.3	-7.6	-1.2842	ug/L	-1.2842	ppb	15:58:48
1	Ti 334.940†	-1114.9	-155.8	-0.2511	ug/L	-0.2511	ppb	15:58:28
1	Tl 190.801†	-33.8	2.9	0.8171	ug/L	0.8171	ppb	15:58:48
1	U 409.014†	-1969.4	-17.6	-0.4931	ug/L	-0.4931	ppb	15:58:28
1	V 292.402†	-1250.1	39.8	0.2744	ug/L	0.2744	ppb	15:58:28
1	Zn 213.857†	716.4	-87.1	-0.7821	ug/L	-0.7821	ppb	15:58:48
1	SiO2†	552.5	66.6	4.3135	ug/L	4.3135	ppb	15:59:44
2	Sc Radial	5681.5	5681.5	100	%			15:57:36
2	Y RADIAL	6150.9	6150.9	99.87	%			15:57:36
2	Al 396.153Radial†	-6.2	14.2	10.488	ug/L	10.488	ppb	15:57:36
2	Ca 317.933Radial†	27.2	9.5	14.462	ug/L	14.462	ppb	15:57:56
2	Fe 238.204 Radial†	8.2	2.1	21.343	ug/L	21.343	ppb	15:57:56
2	K 766.490 Radial†	2481.5	303.3	55.037	ug/L	55.037	ppb	15:57:36
2	Mg 279.077 IEC†	0.7	-1.1	-39.959	ug/L	-39.959	ppb	15:57:56
2	Na 589.592 Radial†	-576.1	41.7	15.681	ug/L	15.681	ppb	15:57:36
2	Sr 421.552†	2.9	-0.5	-0.0036	ug/L	-0.0036	ppb	15:57:36
2	Sc 361.383	884257.6	884257.6	99.919	%			15:58:53
2	Y 371.029	742534.6	742534.6	100.06	%			15:58:53
2	Ag 328.068†	357.0	129.7	0.6048	ug/L	0.6048	ppb	15:58:53
2	As 188.979†	-29.9	-0.8	-0.3074	ug/L	-0.3074	ppb	15:59:13
2	B 249.677†	-359.9	163.6	3.5491	ug/L	3.5491	ppb	15:59:13
2	Ba 233.527†	-5.5	6.5	0.0510	ug/L	0.0510	ppb	15:59:13
2	Be 313.107†	-5200.5	115.5	0.0429	ug/L	0.0429	ppb	15:58:53
2	Cd 226.502†	-164.5	23.2	0.2493	ug/L	0.2493	ppb	15:59:13
2	Co 228.616†	-69.7	1.9	0.0375	ug/L	0.0375	ppb	15:59:13
2	Cr 267.716†	92.3	5.4	0.0577	ug/L	0.0577	ppb	15:59:13
2	Cu 324.752†	6805.2	42.1	0.1234	ug/L	0.1234	ppb	15:58:53
2	Mn 257.610†	490.3	87.3	0.0977	ug/L	0.0977	ppb	15:59:13
2	Mo 202.031†	20.1	0.2	0.0119	ug/L	0.0119	ppb	15:59:13
2	Ni 231.604†	80.3	10.2	0.2432	ug/L	0.2432	ppb	15:59:13

2	P 214.914†	217.3	-2.5	-1.5332 ug/L	-1.5332 ppb	15:59:13
2	Pb 220.353†	-68.2	-15.7	-1.8378 ug/L	-1.8378 ppb	15:59:13
2	S 181.975 Axial†	50.1	8.7	12.672 ug/L	12.672 ppb	15:59:13
2	Sb 206.836†	33.2	3.7	1.1829 ug/L	1.1829 ppb	15:59:13
2	Se 196.026†	-25.5	-2.1	-1.1894 ug/L	-1.1894 ppb	15:59:13
2	Si 251.611†	510.8	3.1	0.0789 ug/L	0.0789 ppb	15:59:13
2	Sn 189.927†	2.4	-1.9	-0.3220 ug/L	-0.3220 ppb	15:59:13
2	Ti 334.940†	-970.6	-6.4	-0.0109 ug/L	-0.0109 ppb	15:58:53
2	Tl 190.801†	-32.3	4.6	1.3047 ug/L	1.3047 ppb	15:59:13
2	U 409.014†	-1851.1	109.6	3.0599 ug/L	3.0599 ppb	15:58:53
2	V 292.402†	-1249.1	46.4	0.3150 ug/L	0.3150 ppb	15:58:53
2	Zn 213.857†	707.3	-99.4	-0.8966 ug/L	-0.8966 ppb	15:59:13
2	SiO2†	514.6	26.2	1.6770 ug/L	1.6770 ppb	15:59:49
3	Sc Radial	5794.8	5794.8	102 %		15:58:01
3	Y RADIAL	6252.1	6252.1	101.5 %		15:58:01
3	Al 396.153Radial†	-23.8	-2.9	-2.1533 ug/L	-2.1533 ppb	15:58:01
3	Ca 317.933Radial†	26.8	8.5	12.934 ug/L	12.934 ppb	15:58:21
3	Fe 238.204 Radial†	7.2	1.0	10.317 ug/L	10.317 ppb	15:58:21
3	K 766.490 Radial†	2375.8	151.6	27.511 ug/L	27.511 ppb	15:58:01
3	Mg 279.077 IEC†	2.0	0.2	8.5764 ug/L	8.5764 ppb	15:58:21
3	Na 589.592 Radial†	-578.2	50.8	19.111 ug/L	19.111 ppb	15:58:01
3	Sr 421.552†	-33.8	-36.5	-0.2463 ug/L	-0.2463 ppb	15:58:01
3	Sc 361.383	884817.6	884817.6	99.983 %		15:59:19
3	Y 371.029	743069.9	743069.9	100.13 %		15:59:19
3	Ag 328.068†	405.2	177.7	0.8231 ug/L	0.8231 ppb	15:59:19
3	As 188.979†	-25.3	3.9	1.5730 ug/L	1.5730 ppb	15:59:39
3	B 249.677†	-333.3	190.5	4.1335 ug/L	4.1335 ppb	15:59:39
3	Ba 233.527†	-14.0	-2.0	-0.0150 ug/L	-0.0150 ppb	15:59:39
3	Be 313.107†	-5330.9	-11.6	-0.0045 ug/L	-0.0045 ppb	15:59:19
3	Cd 226.502†	-180.2	7.6	0.0815 ug/L	0.0815 ppb	15:59:39
3	Co 228.616†	-67.0	4.8	0.0928 ug/L	0.0928 ppb	15:59:39
3	Cr 267.716†	79.4	-7.6	-0.0818 ug/L	-0.0818 ppb	15:59:39
3	Cu 324.752†	6773.5	6.0	0.0180 ug/L	0.0180 ppb	15:59:19
3	Mn 257.610†	488.2	84.9	0.0931 ug/L	0.0931 ppb	15:59:39
3	Mo 202.031†	22.8	2.9	0.1869 ug/L	0.1869 ppb	15:59:39
3	Ni 231.604†	71.7	1.6	0.0380 ug/L	0.0380 ppb	15:59:39
3	P 214.914†	222.6	2.7	1.5472 ug/L	1.5472 ppb	15:59:39
3	Pb 220.353†	-61.8	-9.2	-1.0815 ug/L	-1.0815 ppb	15:59:39
3	S 181.975 Axial†	44.1	2.6	3.8120 ug/L	3.8120 ppb	15:59:39
3	Sb 206.836†	39.1	9.5	3.0785 ug/L	3.0785 ppb	15:59:39
3	Se 196.026†	-25.1	-1.6	-0.9459 ug/L	-0.9459 ppb	15:59:39
3	Si 251.611†	531.9	23.9	0.7236 ug/L	0.7236 ppb	15:59:39
3	Sn 189.927†	-2.4	-6.6	-1.1193 ug/L	-1.1193 ppb	15:59:39
3	Ti 334.940†	-1023.7	-58.9	-0.0950 ug/L	-0.0950 ppb	15:59:19
3	Tl 190.801†	-32.9	4.0	1.1425 ug/L	1.1425 ppb	15:59:39
3	U 409.014†	-1926.3	35.6	0.9928 ug/L	0.9928 ppb	15:59:19
3	V 292.402†	-1314.4	-18.2	-0.1192 ug/L	-0.1192 ppb	15:59:19
3	Zn 213.857†	697.9	-109.2	-0.9840 ug/L	-0.9840 ppb	15:59:39
3	SiO2†	527.0	38.3	2.4870 ug/L	2.4870 ppb	15:59:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883131.2	99.792	%	0.2771				0.28%
Sc Radial	5737.5	101	%	1.0				0.99%
Y 371.029	741558.4	99.931	%	0.2926				0.29%
Y RADIAL	6208.6	100.8	%	0.85				0.84%
Ag 328.068†	112.4	0.5236	ug/L	0.34737	0.5236	ppb	0.34737	66.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.9	4.3850	ug/L	6.33199	4.3850	ppb	6.33199	144.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.0	0.4142	ug/L	1.01353	0.4142	ppb	1.01353	244.67%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	183.8	3.9867	ug/L	0.38571	3.9867	ppb	0.38571	9.67%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.8	0.0142	ug/L	0.03367	0.0142	ppb	0.03367	236.96%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.4	0.0285	ug/L	0.02869	0.0285	ppb	0.02869	100.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.5	13.071	ug/L	1.3288	13.071	ppb	1.3288	10.17%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                10.5      0.1130 ug/L       0.12361      0.1130 ppb        0.12361 109.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.9      0.0369 ug/L       0.05612      0.0369 ppb        0.05612 151.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 0.2      0.0020 ug/L       0.07389      0.0020 ppb        0.07389 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                 2.2      0.0072 ug/L       0.12196      0.0072 ppb        0.12196 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.4     14.237 ug/L        6.1647     14.237 ppb         6.1647  43.30%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         230.0     41.737 ug/L       13.7863     41.737 ppb        13.7863  33.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.6    -21.494 ug/L       26.2666    -21.494 ppb        26.2666 122.20%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                80.5      0.0893 ug/L       0.01093      0.0893 ppb        0.01093  12.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.2      0.2722 ug/L       0.31187      0.2722 ppb        0.31187 114.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         55.8     20.990 ug/L        6.4566     20.990 ppb         6.4566  30.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 1.6      0.0375 ug/L       0.20589      0.0375 ppb        0.20589 548.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  0.5      0.2558 ug/L       1.59937      0.2558 ppb        1.59937 625.19%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -11.6     -1.3541 ug/L       0.42003     -1.3541 ppb        0.42003  31.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.2      3.2069 ug/L       9.78181      3.2069 ppb        9.78181 305.02%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.5      2.4237 ug/L       1.07509      2.4237 ppb        1.07509  44.36%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.9     -1.0977 ug/L       0.13242     -1.0977 ppb        0.13242  12.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                11.1      0.3227 ug/L       0.34984      0.3227 ppb        0.34984 108.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -5.4     -0.9085 ug/L       0.51460     -0.9085 ppb        0.51460  56.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -14.7     -0.0995 ug/L       0.12913     -0.0995 ppb        0.12913 129.83%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -73.7     -0.1190 ug/L       0.12188     -0.1190 ppb        0.12188 102.42%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.8      1.0881 ug/L       0.24831      1.0881 ppb        0.24831  22.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 42.5      1.1865 ug/L       1.78441      1.1865 ppb        1.78441 150.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 22.7      0.1567 ug/L       0.23986      0.1567 ppb        0.23986 153.04%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -98.6     -0.8876 ug/L       0.10125     -0.8876 ppb        0.10125  11.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      43.7      2.8258 ug/L       1.35056      2.8258 ppb        1.35056  47.79%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/9/2009 16:58:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5686.1	5686.1	100	%			17:00:20
1	Y RADIAL	6160.9	6160.9	100.0	%			17:00:20
1	Al 396.153Radial†	6590.7	6584.6	4845.9	ug/L	4845.9	ppb	17:00:20
1	Ca 317.933Radial†	3242.6	3212.0	4911.6	ug/L	4911.6	ppb	17:00:41
1	Fe 238.204 Radial†	503.3	495.2	5002.4	ug/L	5002.4	ppb	17:00:41
1	K 766.490 Radial†	29887.5	27597.6	5000.0	ug/L	5000.0	ppb	17:00:20
1	Mg 279.077 IEC†	140.9	138.6	5167.3	ug/L	5167.3	ppb	17:00:41
1	Na 589.592 Radial†	26350.0	26860.6	10096	ug/L	10096	ppb	17:00:20
1	Sr 421.552†	76480.4	76171.0	514.15	ug/L	514.15	ppb	17:00:20
1	Sc 361.383	879477.5	879477.5	99.379	%			17:01:38
1	Y 371.029	723573.2	723573.2	97.507	%			17:01:38
1	Ag 328.068†	110108.5	110568.9	514.24	ug/L	514.24	ppb	17:01:43
1	As 188.979†	1186.8	1223.4	503.61	ug/L	503.61	ppb	17:02:03
1	B 249.677†	22297.9	22961.1	496.47	ug/L	496.47	ppb	17:01:43
1	Ba 233.527†	65554.2	65975.8	502.39	ug/L	502.39	ppb	17:01:43
1	Be 313.107†	1307085.5	1320572.2	491.72	ug/L	491.72	ppb	17:01:38
1	Cd 226.502†	46001.1	46476.3	504.04	ug/L	504.04	ppb	17:01:43
1	Co 228.616†	25741.3	25973.9	504.35	ug/L	504.35	ppb	17:01:43
1	Cr 267.716†	46049.8	46250.5	499.13	ug/L	499.13	ppb	17:01:43
1	Cu 324.752†	176620.9	170955.8	497.44	ug/L	497.44	ppb	17:01:43
1	Mn 257.610†	454784.6	457222.7	497.28	ug/L	497.28	ppb	17:01:38
1	Mo 202.031†	7771.9	7800.4	508.47	ug/L	508.47	ppb	17:02:03
1	Ni 231.604†	21128.8	21190.7	502.50	ug/L	502.50	ppb	17:01:43
1	P 214.914†	4400.6	4208.1	2424.9	ug/L	2424.9	ppb	17:02:03
1	Pb 220.353†	4189.6	4268.3	500.50	ug/L	500.50	ppb	17:02:03
1	S 181.975 Axial†	734.2	697.4	1018.7	ug/L	1018.7	ppb	17:02:03
1	Sb 206.836†	1590.6	1570.9	517.45	ug/L	517.45	ppb	17:02:03
1	Se 196.026†	805.8	834.2	515.07	ug/L	515.07	ppb	17:02:03
1	Si 251.611†	82951.1	82961.3	2525.3	ug/L	2525.3	ppb	17:01:43
1	Sn 189.927†	3002.3	3016.8	510.95	ug/L	510.95	ppb	17:02:03
1	Ti 334.940†	312523.4	315441.1	510.03	ug/L	510.03	ppb	17:01:43
1	Tl 190.801†	1702.6	1750.1	504.85	ug/L	504.85	ppb	17:02:03
1	U 409.014†	15952.3	18014.2	501.70	ug/L	501.70	ppb	17:01:43
1	V 292.402†	71829.2	73574.4	503.50	ug/L	503.50	ppb	17:01:43
1	Zn 213.857†	56410.4	55955.6	498.97	ug/L	498.97	ppb	17:01:43
1	SiO2†	81324.8	81344.1	5300.3	ug/L	5300.3	ppb	17:03:11
2	Sc Radial	5752.6	5752.6	102	%			17:00:46
2	Y RADIAL	6208.9	6208.9	100.8	%			17:00:46
2	Al 396.153Radial†	6636.9	6554.3	4823.9	ug/L	4823.9	ppb	17:00:46
2	Ca 317.933Radial†	3293.3	3224.5	4930.8	ug/L	4930.8	ppb	17:01:06
2	Fe 238.204 Radial†	512.1	498.2	5032.1	ug/L	5032.1	ppb	17:01:06
2	K 766.490 Radial†	30089.8	27452.8	4973.7	ug/L	4973.7	ppb	17:00:46
2	Mg 279.077 IEC†	142.1	138.2	5150.9	ug/L	5150.9	ppb	17:01:06
2	Na 589.592 Radial†	26398.5	26604.9	10000	ug/L	10000	ppb	17:00:46
2	Sr 421.552†	76855.7	75660.1	510.70	ug/L	510.70	ppb	17:00:46
2	Sc 361.383	892186.3	892186.3	100.82	%			17:02:09
2	Y 371.029	735477.5	735477.5	99.111	%			17:02:09
2	Ag 328.068†	111001.1	109876.0	511.04	ug/L	511.04	ppb	17:02:14
2	As 188.979†	1168.2	1188.0	489.14	ug/L	489.14	ppb	17:02:34
2	B 249.677†	22507.7	22849.6	494.05	ug/L	494.05	ppb	17:02:14
2	Ba 233.527†	66088.9	65566.5	499.27	ug/L	499.27	ppb	17:02:14
2	Be 313.107†	1324579.0	1319189.2	491.20	ug/L	491.20	ppb	17:02:09
2	Cd 226.502†	46343.0	46156.1	500.56	ug/L	500.56	ppb	17:02:14
2	Co 228.616†	25919.6	25781.8	500.60	ug/L	500.60	ppb	17:02:14
2	Cr 267.716†	46445.8	45983.3	496.25	ug/L	496.25	ppb	17:02:14
2	Cu 324.752†	178283.7	170073.5	494.88	ug/L	494.88	ppb	17:02:14
2	Mn 257.610†	459569.3	455450.0	495.36	ug/L	495.36	ppb	17:02:09
2	Mo 202.031†	7743.0	7660.4	499.35	ug/L	499.35	ppb	17:02:34
2	Ni 231.604†	21295.1	21052.8	499.23	ug/L	499.23	ppb	17:02:14

2	P 214.914†	4365.8	4110.6	2367.2 ug/L	2367.2 ppb	17:02:34
2	Pb 220.353†	4158.3	4177.2	489.81 ug/L	489.81 ppb	17:02:34
2	S 181.975 Axial†	737.5	690.0	1008.0 ug/L	1008.0 ppb	17:02:34
2	Sb 206.836†	1574.8	1532.4	504.62 ug/L	504.62 ppb	17:02:34
2	Se 196.026†	811.2	828.1	511.46 ug/L	511.46 ppb	17:02:34
2	Si 251.611†	83521.2	82337.9	2506.5 ug/L	2506.5 ppb	17:02:14
2	Sn 189.927†	2976.2	2947.8	499.29 ug/L	499.29 ppb	17:02:34
2	Ti 334.940†	315167.2	313583.9	507.03 ug/L	507.03 ppb	17:02:14
2	Tl 190.801†	1695.0	1718.2	495.69 ug/L	495.69 ppb	17:02:34
2	U 409.014†	16218.3	18049.3	502.68 ug/L	502.68 ppb	17:02:14
2	V 292.402†	72470.8	73181.3	500.72 ug/L	500.72 ppb	17:02:14
2	Zn 213.857†	56814.1	55547.4	495.32 ug/L	495.32 ppb	17:02:14
2	SiO2†	81500.3	80352.5	5235.8 ug/L	5235.8 ppb	17:03:16
3	Sc Radial	5656.8	5656.8	99.9 %		17:01:11
3	Y RADIAL	6109.0	6109.0	99.19 %		17:01:11
3	Al 396.153Radial†	6644.3	6672.3	4911.0 ug/L	4911.0 ppb	17:01:11
3	Ca 317.933Radial†	3290.2	3276.3	5010.0 ug/L	5010.0 ppb	17:01:31
3	Fe 238.204 Radial†	511.2	505.7	5108.1 ug/L	5108.1 ppb	17:01:31
3	K 766.490 Radial†	30074.4	27938.7	5061.8 ug/L	5061.8 ppb	17:01:11
3	Mg 279.077 IEC†	141.2	139.6	5203.8 ug/L	5203.8 ppb	17:01:31
3	Na 589.592 Radial†	26546.3	27192.8	10221 ug/L	10221 ppb	17:01:11
3	Sr 421.552†	77093.1	77178.3	520.95 ug/L	520.95 ppb	17:01:11
3	Sc 361.383	884866.2	884866.2	99.988 %		17:02:40
3	Y 371.029	730101.7	730101.7	98.387 %		17:02:40
3	Ag 328.068†	108430.6	108216.0	503.37 ug/L	503.37 ppb	17:02:45
3	As 188.979†	1176.9	1206.2	496.52 ug/L	496.52 ppb	17:03:05
3	B 249.677†	21898.6	22425.1	484.85 ug/L	484.85 ppb	17:02:45
3	Ba 233.527†	64698.2	64718.0	492.82 ug/L	492.82 ppb	17:02:45
3	Be 313.107†	1316354.5	1321832.8	492.16 ug/L	492.16 ppb	17:02:40
3	Cd 226.502†	45459.3	45652.6	495.08 ug/L	495.08 ppb	17:02:45
3	Co 228.616†	25306.9	25381.7	492.86 ug/L	492.86 ppb	17:02:45
3	Cr 267.716†	45508.6	45427.1	490.25 ug/L	490.25 ppb	17:02:45
3	Cu 324.752†	173265.5	166517.7	484.54 ug/L	484.54 ppb	17:02:45
3	Mn 257.610†	456140.2	455791.5	495.73 ug/L	495.73 ppb	17:02:40
3	Mo 202.031†	7718.4	7699.3	501.89 ug/L	501.89 ppb	17:03:05
3	Ni 231.604†	20934.7	20867.1	494.82 ug/L	494.82 ppb	17:02:45
3	P 214.914†	4370.4	4151.0	2392.8 ug/L	2392.8 ppb	17:03:05
3	Pb 220.353†	4154.6	4207.7	493.40 ug/L	493.40 ppb	17:03:05
3	S 181.975 Axial†	736.0	694.7	1014.8 ug/L	1014.8 ppb	17:03:05
3	Sb 206.836†	1568.7	1539.3	507.10 ug/L	507.10 ppb	17:03:05
3	Se 196.026†	810.2	833.7	515.07 ug/L	515.07 ppb	17:03:05
3	Si 251.611†	81546.3	81048.0	2466.9 ug/L	2466.9 ppb	17:02:45
3	Sn 189.927†	2968.3	2964.4	502.10 ug/L	502.10 ppb	17:03:05
3	Ti 334.940†	307199.3	308201.2	498.34 ug/L	498.34 ppb	17:02:45
3	Tl 190.801†	1707.8	1744.9	503.34 ug/L	503.34 ppb	17:03:05
3	U 409.014†	15489.3	17453.3	486.03 ug/L	486.03 ppb	17:02:45
3	V 292.402†	70737.9	72042.9	493.04 ug/L	493.04 ppb	17:02:45
3	Zn 213.857†	55699.1	54898.5	489.51 ug/L	489.51 ppb	17:02:45
3	SiO2†	82282.7	81803.8	5330.7 ug/L	5330.7 ppb	17:03:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885510.0	100.06	%	0.721				0.72%
Sc Radial	5698.5	101	%	0.9				0.86%
Y 371.029	729717.4	98.335	%	0.8034				0.82%
Y RADIAL	6159.6	100.0	%	0.81				0.81%
Ag 328.068†	109553.7	509.55	ug/L	5.587	509.55	ppb	5.587	1.10%
QC value within limits for Ag 328.068 Recovery = 101.91%								
Al 396.153Radial†	6603.7	4860.3	ug/L	45.28	4860.3	ppb	45.28	0.93%
QC value within limits for Al 396.153Radial Recovery = 97.21%								
As 188.979†	1205.9	496.42	ug/L	7.239	496.42	ppb	7.239	1.46%
QC value within limits for As 188.979 Recovery = 99.28%								
B 249.677†	22745.3	491.79	ug/L	6.131	491.79	ppb	6.131	1.25%
QC value within limits for B 249.677 Recovery = 98.36%								
Ba 233.527†	65420.1	498.16	ug/L	4.883	498.16	ppb	4.883	0.98%
QC value within limits for Ba 233.527 Recovery = 99.63%								
Be 313.107†	1320531.4	491.69	ug/L	0.483	491.69	ppb	0.483	0.10%
QC value within limits for Be 313.107 Recovery = 98.34%								
Ca 317.933Radial†	3237.6	4950.8	ug/L	52.15	4950.8	ppb	52.15	1.05%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.02%
Cd 226.502†            46095.0      499.89 ug/L         4.513      499.89 ppb          4.513   0.90%
   QC value within limits for Cd 226.502  Recovery = 99.98%
Co 228.616†            25712.5      499.27 ug/L         5.859      499.27 ppb          5.859   1.17%
   QC value within limits for Co 228.616  Recovery = 99.85%
Cr 267.716†            45887.0      495.21 ug/L         4.532      495.21 ppb          4.532   0.92%
   QC value within limits for Cr 267.716  Recovery = 99.04%
Cu 324.752†           169182.3      492.29 ug/L         6.830      492.29 ppb          6.830   1.39%
   QC value within limits for Cu 324.752  Recovery = 98.46%
Fe 238.204 Radial†       499.7      5047.5 ug/L         54.54      5047.5 ppb          54.54   1.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.95%
K 766.490 Radial†      27663.0      5011.8 ug/L         45.23      5011.8 ppb          45.23   0.90%
   QC value within limits for K 766.490 Radial  Recovery = 100.24%
Mg 279.077 IEC†          138.8      5174.0 ug/L         27.06      5174.0 ppb          27.06   0.52%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.48%
Mn 257.610†           456154.7      496.12 ug/L         1.019      496.12 ppb          1.019   0.21%
   QC value within limits for Mn 257.610  Recovery = 99.22%
Mo 202.031†             7720.0      503.24 ug/L         4.707      503.24 ppb          4.707   0.94%
   QC value within limits for Mo 202.031  Recovery = 100.65%
Na 589.592 Radial†     26886.1       10106 ug/L         110.8       10106 ppb          110.8   1.10%
   QC value within limits for Na 589.592 Radial  Recovery = 101.06%
Ni 231.604†            21036.9      498.85 ug/L         3.850      498.85 ppb          3.850   0.77%
   QC value within limits for Ni 231.604  Recovery = 99.77%
P 214.914†              4156.6      2395.0 ug/L         28.93      2395.0 ppb          28.93   1.21%
   QC value within limits for P 214.914  Recovery = 95.80%
Pb 220.353†             4217.7      494.57 ug/L         5.437      494.57 ppb          5.437   1.10%
   QC value within limits for Pb 220.353  Recovery = 98.91%
S 181.975 Axial†         694.0      1013.8 ug/L          5.42      1013.8 ppb           5.42   0.53%
   QC value within limits for S 181.975 Axial  Recovery = 101.38%
Sb 206.836†             1547.5      509.73 ug/L         6.805      509.73 ppb          6.805   1.34%
   QC value within limits for Sb 206.836  Recovery = 101.95%
Se 196.026†              832.0      513.87 ug/L         2.083      513.87 ppb          2.083   0.41%
   QC value within limits for Se 196.026  Recovery = 102.77%
Si 251.611†            82115.8      2499.6 ug/L         29.80      2499.6 ppb          29.80   1.19%
   QC value within limits for Si 251.611  Recovery = 99.98%
Sn 189.927†             2976.3      504.11 ug/L         6.085      504.11 ppb          6.085   1.21%
   QC value within limits for Sn 189.927  Recovery = 100.82%
Sr 421.552†            76336.5      515.27 ug/L         5.214      515.27 ppb          5.214   1.01%
   QC value within limits for Sr 421.552  Recovery = 103.05%
Ti 334.940†           312408.7      505.13 ug/L         6.073      505.13 ppb          6.073   1.20%
   QC value within limits for Ti 334.940  Recovery = 101.03%
Tl 190.801†             1737.7      501.29 ug/L         4.909      501.29 ppb          4.909   0.98%
   QC value within limits for Tl 190.801  Recovery = 100.26%
U 409.014†             17838.9      496.81 ug/L         9.341      496.81 ppb          9.341   1.88%
   QC value within limits for U 409.014  Recovery = 99.36%
V 292.402†             72932.9      499.09 ug/L         5.419      499.09 ppb          5.419   1.09%
   QC value within limits for V 292.402  Recovery = 99.82%
Zn 213.857†            55467.2      494.60 ug/L         4.770      494.60 ppb          4.770   0.96%
   QC value within limits for Zn 213.857  Recovery = 98.92%
SiO2†                  81166.8      5289.0 ug/L         48.44      5289.0 ppb          48.44   0.92%
   QC value within limits for SiO2  Recovery = 98.91%
All analyte(s) passed QC.
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Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/9/2009 17:05:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5750.8	5750.8	102	%			17:07:23
1	Y RADIAL	6248.7	6248.7	101.5	%			17:07:23
1	Al 396.153Radial†	-25.1	-4.4	-3.2178	ug/L	-3.2178	ppb	17:07:43
1	Ca 317.933Radial†	28.2	10.1	15.396	ug/L	15.396	ppb	17:07:43
1	Fe 238.204 Radial†	6.2	0.1	0.9011	ug/L	0.9011	ppb	17:07:43
1	K 766.490 Radial†	2202.4	-1.4	-0.2700	ug/L	-0.2700	ppb	17:07:23
1	Mg 279.077 IEC†	3.2	1.4	53.239	ug/L	53.239	ppb	17:07:43
1	Na 589.592 Radial†	-535.0	89.1	33.506	ug/L	33.506	ppb	17:07:23
1	Sr 421.552†	-6.3	-9.6	-0.0652	ug/L	-0.0652	ppb	17:07:23
1	Sc 361.383	880364.0	880364.0	99.479	%			17:08:40
1	Y 371.029	738207.6	738207.6	99.479	%			17:08:40
1	Ag 328.068†	284.6	58.5	0.2679	ug/L	0.2679	ppb	17:08:40
1	As 188.979†	-21.3	7.8	3.1741	ug/L	3.1741	ppb	17:09:00
1	B 249.677†	-262.8	259.7	5.6373	ug/L	5.6373	ppb	17:09:00
1	Ba 233.527†	-31.9	-20.1	-0.1531	ug/L	-0.1531	ppb	17:09:00
1	Be 313.107†	-5299.7	-7.2	-0.0030	ug/L	-0.0030	ppb	17:08:40
1	Cd 226.502†	-171.1	15.9	0.1722	ug/L	0.1722	ppb	17:09:00
1	Co 228.616†	-72.9	-1.6	-0.0308	ug/L	-0.0308	ppb	17:09:00
1	Cr 267.716†	97.5	11.0	0.1178	ug/L	0.1178	ppb	17:09:00
1	Cu 324.752†	6818.7	85.8	0.2495	ug/L	0.2495	ppb	17:08:40
1	Mn 257.610†	492.5	91.7	0.0987	ug/L	0.0987	ppb	17:09:00
1	Mo 202.031†	18.0	-1.9	-0.1253	ug/L	-0.1253	ppb	17:09:00
1	Ni 231.604†	71.9	2.2	0.0516	ug/L	0.0516	ppb	17:09:00
1	P 214.914†	229.4	10.6	6.2730	ug/L	6.2730	ppb	17:09:00
1	Pb 220.353†	-64.0	-11.8	-1.3777	ug/L	-1.3777	ppb	17:09:00
1	S 181.975 Axial†	40.8	-0.5	-0.7308	ug/L	-0.7308	ppb	17:09:00
1	Sb 206.836†	32.4	3.0	0.9770	ug/L	0.9770	ppb	17:09:00
1	Se 196.026†	-27.1	-3.8	-2.2433	ug/L	-2.2433	ppb	17:09:00
1	Si 251.611†	519.5	14.3	0.4341	ug/L	0.4341	ppb	17:09:00
1	Sn 189.927†	12.0	7.8	1.3198	ug/L	1.3198	ppb	17:09:00
1	Ti 334.940†	-1054.9	-95.4	-0.1544	ug/L	-0.1544	ppb	17:08:40
1	Tl 190.801†	-38.3	-1.6	-0.4635	ug/L	-0.4635	ppb	17:09:00
1	U 409.014†	-1881.3	71.1	1.9853	ug/L	1.9853	ppb	17:08:40
1	V 292.402†	-1322.3	-32.7	-0.2178	ug/L	-0.2178	ppb	17:08:40
1	Zn 213.857†	714.7	-88.8	-0.8018	ug/L	-0.8018	ppb	17:09:00
1	SiO2†	556.0	70.1	4.5884	ug/L	4.5884	ppb	17:09:56
2	Sc Radial	5599.3	5599.3	98.9	%			17:07:48
2	Y RADIAL	6113.4	6113.4	99.26	%			17:07:48
2	Al 396.153Radial†	-15.3	4.9	3.6033	ug/L	3.6033	ppb	17:08:08
2	Ca 317.933Radial†	28.6	11.2	17.157	ug/L	17.157	ppb	17:08:08
2	Fe 238.204 Radial†	6.0	0.1	0.5520	ug/L	0.5520	ppb	17:08:08
2	K 766.490 Radial†	2209.3	64.3	11.657	ug/L	11.657	ppb	17:07:48
2	Mg 279.077 IEC†	-1.5	-3.3	-121.90	ug/L	-121.90	ppb	17:08:08
2	Na 589.592 Radial†	-535.6	74.2	27.906	ug/L	27.906	ppb	17:07:48
2	Sr 421.552†	20.9	17.7	0.1196	ug/L	0.1196	ppb	17:07:48
2	Sc 361.383	896229.3	896229.3	101.27	%			17:09:05
2	Y 371.029	752284.0	752284.0	101.38	%			17:09:05
2	Ag 328.068†	259.8	29.0	0.1358	ug/L	0.1358	ppb	17:09:05
2	As 188.979†	-34.2	-4.6	-1.8751	ug/L	-1.8751	ppb	17:09:25
2	B 249.677†	-268.5	258.7	5.6164	ug/L	5.6164	ppb	17:09:25
2	Ba 233.527†	-20.4	-8.1	-0.0613	ug/L	-0.0613	ppb	17:09:25
2	Be 313.107†	-5241.8	144.3	0.0537	ug/L	0.0537	ppb	17:09:05
2	Cd 226.502†	-188.9	1.3	0.0148	ug/L	0.0148	ppb	17:09:25
2	Co 228.616†	-72.0	0.6	0.0121	ug/L	0.0121	ppb	17:09:25
2	Cr 267.716†	91.7	3.6	0.0398	ug/L	0.0398	ppb	17:09:25
2	Cu 324.752†	6916.8	61.3	0.1782	ug/L	0.1782	ppb	17:09:05
2	Mn 257.610†	471.0	61.6	0.0693	ug/L	0.0693	ppb	17:09:25
2	Mo 202.031†	19.2	-1.1	-0.0693	ug/L	-0.0693	ppb	17:09:25
2	Ni 231.604†	87.2	16.0	0.3793	ug/L	0.3793	ppb	17:09:25

2	P 214.914†	229.3	6.4	3.7949	ug/L	3.7949 ppb	17:09:25
2	Pb 220.353†	-52.4	0.8	0.0950	ug/L	0.0950 ppb	17:09:25
2	S 181.975 Axial†	48.5	6.5	9.4329	ug/L	9.4329 ppb	17:09:25
2	Sb 206.836†	23.3	-6.6	-2.1418	ug/L	-2.1418 ppb	17:09:25
2	Se 196.026†	-24.7	-1.0	-0.5841	ug/L	-0.5841 ppb	17:09:25
2	Si 251.611†	527.5	12.9	0.3895	ug/L	0.3895 ppb	17:09:25
2	Sn 189.927†	8.6	4.2	0.7148	ug/L	0.7148 ppb	17:09:25
2	Ti 334.940†	-948.8	28.2	0.0469	ug/L	0.0469 ppb	17:09:05
2	Tl 190.801†	-40.4	-3.0	-0.8679	ug/L	-0.8679 ppb	17:09:25
2	U 409.014†	-2028.6	-40.9	-1.1432	ug/L	-1.1432 ppb	17:09:05
2	V 292.402†	-1283.9	28.7	0.1879	ug/L	0.1879 ppb	17:09:05
2	Zn 213.857†	725.2	-91.2	-0.8192	ug/L	-0.8192 ppb	17:09:25
2	SiO2†	542.9	47.2	3.0824	ug/L	3.0824 ppb	17:10:01
3	Sc Radial	5783.8	5783.8	102	%		17:08:13
3	Y RADIAL	6295.7	6295.7	102.2	%		17:08:13
3	Al 396.153Radial†	-23.3	-2.5	-1.8339	ug/L	-1.8339 ppb	17:08:33
3	Ca 317.933Radial†	27.4	9.1	13.915	ug/L	13.915 ppb	17:08:33
3	Fe 238.204 Radial†	5.2	-1.0	-9.8928	ug/L	-9.8928 ppb	17:08:33
3	K 766.490 Radial†	2287.3	69.3	12.566	ug/L	12.566 ppb	17:08:13
3	Mg 279.077 IEC†	1.8	0.0	1.1961	ug/L	1.1961 ppb	17:08:33
3	Na 589.592 Radial†	-535.3	91.8	34.508	ug/L	34.508 ppb	17:08:13
3	Sr 421.552†	-40.2	-42.8	-0.2892	ug/L	-0.2892 ppb	17:08:13
3	Sc 361.383	886769.5	886769.5	100.20	%		17:09:30
3	Y 371.029	744105.1	744105.1	100.27	%		17:09:30
3	Ag 328.068†	320.2	92.0	0.4208	ug/L	0.4208 ppb	17:09:30
3	As 188.979†	-20.4	8.8	3.5963	ug/L	3.5963 ppb	17:09:50
3	B 249.677†	-300.6	223.9	4.8621	ug/L	4.8621 ppb	17:09:50
3	Ba 233.527†	-23.8	-11.7	-0.0893	ug/L	-0.0893 ppb	17:09:50
3	Be 313.107†	-5272.9	58.1	0.0213	ug/L	0.0213 ppb	17:09:30
3	Cd 226.502†	-176.3	11.9	0.1307	ug/L	0.1307 ppb	17:09:50
3	Co 228.616†	-80.9	-9.0	-0.1729	ug/L	-0.1729 ppb	17:09:50
3	Cr 267.716†	68.6	-18.5	-0.1999	ug/L	-0.1999 ppb	17:09:50
3	Cu 324.752†	6823.7	41.3	0.1195	ug/L	0.1195 ppb	17:09:30
3	Mn 257.610†	461.8	57.4	0.0614	ug/L	0.0614 ppb	17:09:50
3	Mo 202.031†	25.0	4.9	0.3193	ug/L	0.3193 ppb	17:09:50
3	Ni 231.604†	76.6	6.3	0.1498	ug/L	0.1498 ppb	17:09:50
3	P 214.914†	216.5	-3.9	-2.3337	ug/L	-2.3337 ppb	17:09:50
3	Pb 220.353†	-40.5	12.1	1.4182	ug/L	1.4182 ppb	17:09:50
3	S 181.975 Axial†	44.6	3.0	4.4442	ug/L	4.4442 ppb	17:09:50
3	Sb 206.836†	33.2	3.5	1.1731	ug/L	1.1731 ppb	17:09:50
3	Se 196.026†	-26.5	-3.0	-1.8106	ug/L	-1.8106 ppb	17:09:50
3	Si 251.611†	532.9	23.8	0.7147	ug/L	0.7147 ppb	17:09:50
3	Sn 189.927†	9.4	5.1	0.8664	ug/L	0.8664 ppb	17:09:50
3	Ti 334.940†	-1068.6	-101.4	-0.1637	ug/L	-0.1637 ppb	17:09:30
3	Tl 190.801†	-35.9	1.0	0.2994	ug/L	0.2994 ppb	17:09:50
3	U 409.014†	-1931.2	34.9	0.9762	ug/L	0.9762 ppb	17:09:30
3	V 292.402†	-1313.5	-14.4	-0.0889	ug/L	-0.0889 ppb	17:09:30
3	Zn 213.857†	706.2	-102.5	-0.9220	ug/L	-0.9220 ppb	17:09:50
3	SiO2†	551.0	61.0	3.9700	ug/L	3.9700 ppb	17:10:06

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	887787.6	100.32	%	0.902				0.90%
Sc Radial	5711.3	101	%	1.7				1.72%
Y 371.029	744865.5	100.38	%	0.953				0.95%
Y RADIAL	6219.3	101.0	%	1.54				1.52%
Ag 328.068†	59.8	0.2748	ug/L	0.14265	0.2748	ppb	0.14265	51.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.7	-0.4828	ug/L	3.60570	-0.4828	ppb	3.60570	746.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.0	1.6318	ug/L	3.04437	1.6318	ppb	3.04437	186.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	247.5	5.3719	ug/L	0.44166	5.3719	ppb	0.44166	8.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-13.3	-0.1012	ug/L	0.04702	-0.1012	ppb	0.04702	46.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	65.0	0.0240	ug/L	0.02845	0.0240	ppb	0.02845	118.60%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.1	15.489	ug/L	1.6228	15.489	ppb	1.6228	10.48%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.7      0.1059 ug/L       0.08156      0.1059 ppb        0.08156  77.02%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -3.3     -0.0639 ug/L       0.09681     -0.0639 ppb        0.09681 151.62%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -1.3     -0.0141 ug/L       0.16557     -0.0141 ppb        0.16557 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                62.8      0.1824 ug/L       0.06513      0.1824 ppb        0.06513  35.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.3     -2.8132 ug/L       6.13359     -2.8132 ppb        6.13359 218.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          44.1      7.9844 ug/L       7.16297      7.9844 ppb        7.16297  89.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.6    -22.490 ug/L       89.9418    -22.490 ppb        89.9418 399.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                70.2      0.0765 ug/L       0.01966      0.0765 ppb        0.01966  25.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.6      0.0416 ug/L       0.24212      0.0416 ppb        0.24212 582.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         85.1     31.973 ug/L        3.5577     31.973 ppb         3.5577  11.13%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.2      0.1936 ug/L       0.16818      0.1936 ppb        0.16818  86.89%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.4      2.5781 ug/L       4.43051      2.5781 ppb        4.43051 171.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.4      0.0452 ug/L       1.39862      0.0452 ppb        1.39862 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.0      4.3821 ug/L       5.08211      4.3821 ppb        5.08211 115.97%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.0      0.0028 ug/L       1.85987      0.0028 ppb        1.85987 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.6     -1.5460 ug/L       0.86068     -1.5460 ppb        0.86068  55.67%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                17.0      0.5128 ug/L       0.17628      0.5128 ppb        0.17628  34.38%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.7      0.9670 ug/L       0.31482      0.9670 ppb        0.31482  32.56%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -11.6     -0.0783 ug/L       0.20470     -0.0783 ppb        0.20470 261.57%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -56.2     -0.0904 ug/L       0.11899     -0.0904 ppb        0.11899 131.67%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.2     -0.3440 ug/L       0.59272     -0.3440 ppb        0.59272 172.29%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 21.7      0.6061 ug/L       1.59676      0.6061 ppb        1.59676 263.45%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -6.1     -0.0396 ug/L       0.20728     -0.0396 ppb        0.20728 523.53%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -94.2     -0.8477 ug/L       0.06494     -0.8477 ppb        0.06494   7.66%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      59.5      3.8803 ug/L       0.75704      3.8803 ppb        0.75704  19.51%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 18:08:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5717.1	5717.1	101	%			18:10:02
1	Y RADIAL	6179.8	6179.8	100.3	%			18:10:02
1	Al 396.153Radial†	6648.9	6606.7	4862.6	ug/L	4862.6	ppb	18:10:02
1	Ca 317.933Radial†	3253.7	3205.4	4901.6	ug/L	4901.6	ppb	18:10:22
1	Fe 238.204 Radial†	508.6	497.8	5028.2	ug/L	5028.2	ppb	18:10:22
1	K 766.490 Radial†	30013.4	27560.9	4993.4	ug/L	4993.4	ppb	18:10:02
1	Mg 279.077 IEC†	138.2	135.1	5037.4	ug/L	5037.4	ppb	18:10:22
1	Na 589.592 Radial†	26333.8	26702.1	10037	ug/L	10037	ppb	18:10:02
1	Sr 421.552†	77009.9	76282.3	514.91	ug/L	514.91	ppb	18:10:02
1	Sc 361.383	893956.9	893956.9	101.02	%			18:11:19
1	Y 371.029	737769.8	737769.8	99.420	%			18:11:19
1	Ag 328.068†	109735.7	108405.3	504.21	ug/L	504.21	ppb	18:11:24
1	As 188.979†	1183.1	1200.4	494.14	ug/L	494.14	ppb	18:11:44
1	B 249.677†	22071.6	22373.6	483.74	ug/L	483.74	ppb	18:11:24
1	Ba 233.527†	65183.3	64540.2	491.46	ug/L	491.46	ppb	18:11:24
1	Be 313.107†	1311647.6	1303785.4	485.46	ug/L	485.46	ppb	18:11:19
1	Cd 226.502†	45718.6	45446.9	492.86	ug/L	492.86	ppb	18:11:24
1	Co 228.616†	25519.9	25335.2	491.95	ug/L	491.95	ppb	18:11:24
1	Cr 267.716†	45814.2	45266.8	488.52	ug/L	488.52	ppb	18:11:24
1	Cu 324.752†	175809.2	167273.6	486.74	ug/L	486.74	ppb	18:11:24
1	Mn 257.610†	453764.2	448800.3	488.13	ug/L	488.13	ppb	18:11:19
1	Mo 202.031†	7766.4	7668.3	499.87	ug/L	499.87	ppb	18:11:44
1	Ni 231.604†	20994.4	20713.2	491.17	ug/L	491.17	ppb	18:11:24
1	P 214.914†	4379.6	4115.6	2371.5	ug/L	2371.5	ppb	18:11:44
1	Pb 220.353†	4185.4	4195.9	492.01	ug/L	492.01	ppb	18:11:44
1	S 181.975 Axial†	732.7	683.9	999.06	ug/L	999.06	ppb	18:11:44
1	Sb 206.836†	1589.1	1543.5	508.46	ug/L	508.46	ppb	18:11:44
1	Se 196.026†	809.2	824.5	509.33	ug/L	509.33	ppb	18:11:44
1	Si 251.611†	82201.5	80867.4	2461.5	ug/L	2461.5	ppb	18:11:24
1	Sn 189.927†	2991.7	2957.4	500.90	ug/L	500.90	ppb	18:11:44
1	Ti 334.940†	310711.8	308554.0	498.90	ug/L	498.90	ppb	18:11:24
1	Tl 190.801†	1680.0	1700.0	490.43	ug/L	490.43	ppb	18:11:44
1	U 409.014†	16032.2	17833.2	496.66	ug/L	496.66	ppb	18:11:24
1	V 292.402†	71521.1	72098.8	493.42	ug/L	493.42	ppb	18:11:24
1	Zn 213.857†	56086.9	54715.9	487.91	ug/L	487.91	ppb	18:11:24
1	SiO2†	81856.5	80545.0	5248.4	ug/L	5248.4	ppb	18:12:52
2	Sc Radial	5755.9	5755.9	102	%			18:10:27
2	Y RADIAL	6188.5	6188.5	100.5	%			18:10:27
2	Al 396.153Radial†	6682.7	6595.6	4854.3	ug/L	4854.3	ppb	18:10:27
2	Ca 317.933Radial†	3265.2	3195.0	4885.6	ug/L	4885.6	ppb	18:10:47
2	Fe 238.204 Radial†	505.1	490.9	4959.0	ug/L	4959.0	ppb	18:10:47
2	K 766.490 Radial†	30021.0	27367.9	4958.4	ug/L	4958.4	ppb	18:10:27
2	Mg 279.077 IEC†	137.9	133.9	4992.0	ug/L	4992.0	ppb	18:10:47
2	Na 589.592 Radial†	26354.3	26546.3	9978.0	ug/L	9978.0	ppb	18:10:27
2	Sr 421.552†	76777.1	75538.8	509.89	ug/L	509.89	ppb	18:10:27
2	Sc 361.383	891157.5	891157.5	100.70	%			18:11:50
2	Y 371.029	735614.7	735614.7	99.130	%			18:11:50
2	Ag 328.068†	109533.2	108545.4	504.85	ug/L	504.85	ppb	18:11:55
2	As 188.979†	1174.6	1195.7	492.19	ug/L	492.19	ppb	18:12:15
2	B 249.677†	22030.6	22401.6	484.35	ug/L	484.35	ppb	18:11:55
2	Ba 233.527†	65198.7	64758.2	493.12	ug/L	493.12	ppb	18:11:55
2	Be 313.107†	1312192.2	1308405.2	487.17	ug/L	487.17	ppb	18:11:50
2	Cd 226.502†	45886.6	45755.9	496.22	ug/L	496.22	ppb	18:11:55
2	Co 228.616†	25596.1	25490.2	494.96	ug/L	494.96	ppb	18:11:55
2	Cr 267.716†	45932.9	45527.1	491.33	ug/L	491.33	ppb	18:11:55
2	Cu 324.752†	174960.0	166977.1	485.87	ug/L	485.87	ppb	18:11:55
2	Mn 257.610†	453068.8	449520.9	488.91	ug/L	488.91	ppb	18:11:50
2	Mo 202.031†	7750.2	7676.4	500.39	ug/L	500.39	ppb	18:12:15
2	Ni 231.604†	21052.1	20835.9	494.08	ug/L	494.08	ppb	18:11:55

2	P 214.914†	4393.2	4142.7	2387.9 ug/L	2387.9 ppb	18:12:15
2	Pb 220.353†	4167.4	4191.1	491.46 ug/L	491.46 ppb	18:12:15
2	S 181.975 Axial†	737.8	691.2	1009.7 ug/L	1009.7 ppb	18:12:15
2	Sb 206.836†	1581.5	1540.9	507.62 ug/L	507.62 ppb	18:12:15
2	Se 196.026†	800.6	818.5	505.55 ug/L	505.55 ppb	18:12:15
2	Si 251.611†	82171.8	81093.5	2468.4 ug/L	2468.4 ppb	18:11:55
2	Sn 189.927†	3001.5	2976.4	504.11 ug/L	504.11 ppb	18:12:15
2	Ti 334.940†	309939.2	308753.0	499.22 ug/L	499.22 ppb	18:11:55
2	Tl 190.801†	1678.6	1703.8	491.53 ug/L	491.53 ppb	18:12:15
2	U 409.014†	15620.1	17473.8	486.62 ug/L	486.62 ppb	18:11:55
2	V 292.402†	71428.1	72228.8	494.29 ug/L	494.29 ppb	18:11:55
2	Zn 213.857†	56139.9	54943.0	489.94 ug/L	489.94 ppb	18:11:55
2	SiO2†	82203.2	81143.9	5287.6 ug/L	5287.6 ppb	18:12:57
3	Sc Radial	5776.6	5776.6	102 %		18:10:52
3	Y RADIAL	6172.7	6172.7	100.2 %		18:10:52
3	Al 396.153Radial†	6664.5	6554.2	4823.8 ug/L	4823.8 ppb	18:10:52
3	Ca 317.933Radial†	3245.9	3164.6	4839.2 ug/L	4839.2 ppb	18:11:12
3	Fe 238.204 Radial†	503.9	488.0	4929.7 ug/L	4929.7 ppb	18:11:12
3	K 766.490 Radial†	30126.8	27365.9	4958.0 ug/L	4958.0 ppb	18:10:52
3	Mg 279.077 IEC†	137.5	133.1	4962.1 ug/L	4962.1 ppb	18:11:12
3	Na 589.592 Radial†	26396.0	26494.5	9958.5 ug/L	9958.5 ppb	18:10:52
3	Sr 421.552†	77218.6	75701.5	510.99 ug/L	510.99 ppb	18:10:52
3	Sc 361.383	893247.4	893247.4	100.94 %		18:12:21
3	Y 371.029	735515.1	735515.1	99.116 %		18:12:21
3	Ag 328.068†	109535.3	108293.0	503.67 ug/L	503.67 ppb	18:12:26
3	As 188.979†	1183.0	1201.3	494.49 ug/L	494.49 ppb	18:12:46
3	B 249.677†	22057.2	22376.7	483.82 ug/L	483.82 ppb	18:12:26
3	Ba 233.527†	65293.7	64700.8	492.68 ug/L	492.68 ppb	18:12:26
3	Be 313.107†	1312173.0	1305337.2	486.03 ug/L	486.03 ppb	18:12:21
3	Cd 226.502†	45819.0	45582.4	494.34 ug/L	494.34 ppb	18:12:26
3	Co 228.616†	25566.2	25401.1	493.23 ug/L	493.23 ppb	18:12:26
3	Cr 267.716†	45836.0	45324.4	489.14 ug/L	489.14 ppb	18:12:26
3	Cu 324.752†	175328.6	166935.7	485.75 ug/L	485.75 ppb	18:12:26
3	Mn 257.610†	455290.5	450669.3	490.15 ug/L	490.15 ppb	18:12:21
3	Mo 202.031†	7748.5	7656.7	499.10 ug/L	499.10 ppb	18:12:46
3	Ni 231.604†	21020.1	20755.3	492.17 ug/L	492.17 ppb	18:12:26
3	P 214.914†	4362.7	4102.4	2363.9 ug/L	2363.9 ppb	18:12:46
3	Pb 220.353†	4172.2	4186.1	490.88 ug/L	490.88 ppb	18:12:46
3	S 181.975 Axial†	729.9	681.7	995.81 ug/L	995.81 ppb	18:12:46
3	Sb 206.836†	1604.2	1559.8	513.70 ug/L	513.70 ppb	18:12:46
3	Se 196.026†	817.3	833.2	514.18 ug/L	514.18 ppb	18:12:46
3	Si 251.611†	82366.6	81095.5	2468.5 ug/L	2468.5 ppb	18:12:26
3	Sn 189.927†	2991.6	2959.6	501.27 ug/L	501.27 ppb	18:12:46
3	Ti 334.940†	310557.1	308645.2	499.04 ug/L	499.04 ppb	18:12:26
3	Tl 190.801†	1687.6	1708.8	492.97 ug/L	492.97 ppb	18:12:46
3	U 409.014†	15798.6	17614.4	490.56 ug/L	490.56 ppb	18:12:26
3	V 292.402†	71478.0	72112.3	493.50 ug/L	493.50 ppb	18:12:26
3	Zn 213.857†	56139.5	54812.1	488.78 ug/L	488.78 ppb	18:12:26
3	SiO2†	82144.3	80894.5	5271.3 ug/L	5271.3 ppb	18:13:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892787.3	100.88	%	0.164				0.16%
Sc Radial	5749.9	102	%	0.5				0.53%
Y 371.029	736299.9	99.222	%	0.1717				0.17%
Y RADIAL	6180.3	100.4	%	0.13				0.13%
Ag 328.068†	108414.6	504.25	ug/L	0.592	504.25	ppb	0.592	0.12%
QC value within limits for Ag 328.068 Recovery = 100.85%								
Al 396.153Radial†	6585.5	4846.9	ug/L	20.45	4846.9	ppb	20.45	0.42%
QC value within limits for Al 396.153Radial Recovery = 96.94%								
As 188.979†	1199.1	493.61	ug/L	1.235	493.61	ppb	1.235	0.25%
QC value within limits for As 188.979 Recovery = 98.72%								
B 249.677†	22384.0	483.97	ug/L	0.331	483.97	ppb	0.331	0.07%
QC value within limits for B 249.677 Recovery = 96.79%								
Ba 233.527†	64666.4	492.42	ug/L	0.858	492.42	ppb	0.858	0.17%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	1305842.6	486.22	ug/L	0.874	486.22	ppb	0.874	0.18%
QC value within limits for Be 313.107 Recovery = 97.24%								
Ca 317.933Radial†	3188.3	4875.5	ug/L	32.41	4875.5	ppb	32.41	0.66%

```
   QC value within limits for Ca 317.933Radial  Recovery = 97.51%
Cd 226.502†            45595.1      494.47 ug/L         1.685      494.47 ppb          1.685   0.34%
   QC value within limits for Cd 226.502  Recovery = 98.89%
Co 228.616†            25408.9      493.38 ug/L         1.511      493.38 ppb          1.511   0.31%
   QC value within limits for Co 228.616  Recovery = 98.68%
Cr 267.716†            45372.8      489.66 ug/L         1.475      489.66 ppb          1.475   0.30%
   QC value within limits for Cr 267.716  Recovery = 97.93%
Cu 324.752†           167062.1      486.12 ug/L         0.539      486.12 ppb          0.539   0.11%
   QC value within limits for Cu 324.752  Recovery = 97.22%
Fe 238.204 Radial†       492.3      4972.3 ug/L         50.59      4972.3 ppb          50.59   1.02%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.45%
K 766.490 Radial†      27431.6      4970.0 ug/L         20.32      4970.0 ppb          20.32   0.41%
   QC value within limits for K 766.490 Radial  Recovery = 99.40%
Mg 279.077 IEC†          134.0      4997.1 ug/L         37.90      4997.1 ppb          37.90   0.76%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.94%
Mn 257.610†           449663.5      489.06 ug/L         1.020      489.06 ppb          1.020   0.21%
   QC value within limits for Mn 257.610  Recovery = 97.81%
Mo 202.031†             7667.2      499.79 ug/L         0.646      499.79 ppb          0.646   0.13%
   QC value within limits for Mo 202.031  Recovery = 99.96%
Na 589.592 Radial†     26581.0      9991.0 ug/L         40.62      9991.0 ppb          40.62   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 99.91%
Ni 231.604†            20768.1      492.48 ug/L         1.478      492.48 ppb          1.478   0.30%
   QC value within limits for Ni 231.604  Recovery = 98.50%
P 214.914†              4120.2      2374.4 ug/L         12.25      2374.4 ppb          12.25   0.52%
   QC value within limits for P 214.914  Recovery = 94.98%
Pb 220.353†             4191.0      491.45 ug/L         0.569      491.45 ppb          0.569   0.12%
   QC value within limits for Pb 220.353  Recovery = 98.29%
S 181.975 Axial†         685.6      1001.5 ug/L          7.26      1001.5 ppb           7.26   0.72%
   QC value within limits for S 181.975 Axial  Recovery = 100.15%
Sb 206.836†             1548.1      509.92 ug/L         3.296      509.92 ppb          3.296   0.65%
   QC value within limits for Sb 206.836  Recovery = 101.98%
Se 196.026†              825.4      509.68 ug/L         4.326      509.68 ppb          4.326   0.85%
   QC value within limits for Se 196.026  Recovery = 101.94%
Si 251.611†            81018.8      2466.1 ug/L          4.02      2466.1 ppb           4.02   0.16%
   QC value within limits for Si 251.611  Recovery = 98.64%
Sn 189.927†             2964.5      502.09 ug/L         1.760      502.09 ppb          1.760   0.35%
   QC value within limits for Sn 189.927  Recovery = 100.42%
Sr 421.552†            75840.8      511.93 ug/L         2.638      511.93 ppb          2.638   0.52%
   QC value within limits for Sr 421.552  Recovery = 102.39%
Ti 334.940†           308650.7      499.06 ug/L         0.162      499.06 ppb          0.162   0.03%
   QC value within limits for Ti 334.940  Recovery = 99.81%
Tl 190.801†             1704.2      491.64 ug/L         1.274      491.64 ppb          1.274   0.26%
   QC value within limits for Tl 190.801  Recovery = 98.33%
U 409.014†             17640.5      491.28 ug/L         5.058      491.28 ppb          5.058   1.03%
   QC value within limits for U 409.014  Recovery = 98.26%
V 292.402†             72146.6      493.74 ug/L         0.483      493.74 ppb          0.483   0.10%
   QC value within limits for V 292.402  Recovery = 98.75%
Zn 213.857†            54823.7      488.87 ug/L         1.020      488.87 ppb          1.020   0.21%
   QC value within limits for Zn 213.857  Recovery = 97.77%
SiO2†                  80861.1      5269.1 ug/L         19.70      5269.1 ppb          19.70   0.37%
   QC value within limits for SiO2  Recovery = 98.53%
All analyte(s) passed QC.
```

Sequence No.: 43
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 18:15:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5709.7	5709.7	101	%			18:17:03
1	Y RADIAL	6217.6	6217.6	101.0	%			18:17:03
1	Al 396.153Radial†	-23.0	-2.5	-1.8682	ug/L	-1.8682	ppb	18:17:03
1	Ca 317.933Radial†	24.6	6.7	10.305	ug/L	10.305	ppb	18:17:23
1	Fe 238.204 Radial†	7.9	1.8	17.966	ug/L	17.966	ppb	18:17:23
1	K 766.490 Radial†	2296.3	107.4	19.478	ug/L	19.478	ppb	18:17:03
1	Mg 279.077 IEC†	3.0	1.2	44.599	ug/L	44.599	ppb	18:17:23
1	Na 589.592 Radial†	-562.1	58.4	21.969	ug/L	21.969	ppb	18:17:03
1	Sr 421.552†	1.1	-2.3	-0.0158	ug/L	-0.0158	ppb	18:17:03
1	Sc 361.383	893574.8	893574.8	100.97	%			18:18:20
1	Y 371.029	749991.9	749991.9	101.07	%			18:18:20
1	Ag 328.068†	207.5	-22.1	-0.0996	ug/L	-0.0996	ppb	18:18:20
1	As 188.979†	-21.2	8.2	3.3461	ug/L	3.3461	ppb	18:18:40
1	B 249.677†	-327.7	199.3	4.3248	ug/L	4.3248	ppb	18:18:40
1	Ba 233.527†	-24.6	-12.4	-0.0926	ug/L	-0.0926	ppb	18:18:40
1	Be 313.107†	-5303.3	68.0	0.0250	ug/L	0.0250	ppb	18:18:20
1	Cd 226.502†	-170.4	19.1	0.2055	ug/L	0.2055	ppb	18:18:40
1	Co 228.616†	-83.3	-10.8	-0.2084	ug/L	-0.2084	ppb	18:18:40
1	Cr 267.716†	60.5	-27.1	-0.2925	ug/L	-0.2925	ppb	18:18:40
1	Cu 324.752†	6869.2	34.5	0.1012	ug/L	0.1012	ppb	18:18:20
1	Mn 257.610†	495.7	87.5	0.0961	ug/L	0.0961	ppb	18:18:40
1	Mo 202.031†	24.6	4.4	0.2870	ug/L	0.2870	ppb	18:18:40
1	Ni 231.604†	67.8	-3.0	-0.0704	ug/L	-0.0704	ppb	18:18:40
1	P 214.914†	209.4	-12.5	-7.4692	ug/L	-7.4692	ppb	18:18:40
1	Pb 220.353†	-51.9	1.2	0.1333	ug/L	0.1333	ppb	18:18:40
1	S 181.975 Axial†	43.9	2.0	2.8912	ug/L	2.8912	ppb	18:18:40
1	Sb 206.836†	45.5	15.5	5.0376	ug/L	5.0376	ppb	18:18:40
1	Se 196.026†	-22.5	1.2	0.7437	ug/L	0.7437	ppb	18:18:40
1	Si 251.611†	487.3	-25.4	-0.7907	ug/L	-0.7907	ppb	18:18:40
1	Sn 189.927†	5.9	1.6	0.2680	ug/L	0.2680	ppb	18:18:40
1	Ti 334.940†	-1049.6	-74.5	-0.1218	ug/L	-0.1218	ppb	18:18:20
1	Tl 190.801†	-41.7	-4.5	-1.2792	ug/L	-1.2792	ppb	18:18:40
1	U 409.014†	-1814.1	165.5	4.6223	ug/L	4.6223	ppb	18:18:20
1	V 292.402†	-1270.8	38.0	0.2678	ug/L	0.2678	ppb	18:18:20
1	Zn 213.857†	695.3	-118.6	-1.0702	ug/L	-1.0702	ppb	18:18:40
1	SiO2†	512.1	18.3	1.1719	ug/L	1.1719	ppb	18:19:36
2	Sc Radial	5789.8	5789.8	102	%			18:17:28
2	Y RADIAL	6289.2	6289.2	102.1	%			18:17:28
2	Al 396.153Radial†	-19.5	1.3	0.9184	ug/L	0.9184	ppb	18:17:28
2	Ca 317.933Radial†	22.6	4.4	6.6703	ug/L	6.6703	ppb	18:17:48
2	Fe 238.204 Radial†	5.8	-0.3	-3.3184	ug/L	-3.3184	ppb	18:17:48
2	K 766.490 Radial†	2321.4	100.4	18.207	ug/L	18.207	ppb	18:17:28
2	Mg 279.077 IEC†	1.3	-0.5	-19.789	ug/L	-19.789	ppb	18:17:48
2	Na 589.592 Radial†	-577.8	50.8	19.083	ug/L	19.083	ppb	18:17:28
2	Sr 421.552†	-10.6	-13.7	-0.0929	ug/L	-0.0929	ppb	18:17:28
2	Sc 361.383	880983.8	880983.8	99.549	%			18:18:45
2	Y 371.029	739490.2	739490.2	99.652	%			18:18:45
2	Ag 328.068†	187.7	-39.0	-0.1798	ug/L	-0.1798	ppb	18:18:45
2	As 188.979†	-28.2	0.9	0.3548	ug/L	0.3548	ppb	18:19:05
2	B 249.677†	-337.6	184.8	4.0105	ug/L	4.0105	ppb	18:19:05
2	Ba 233.527†	-23.0	-11.1	-0.0834	ug/L	-0.0834	ppb	18:19:05
2	Be 313.107†	-5245.8	50.7	0.0185	ug/L	0.0185	ppb	18:18:45
2	Cd 226.502†	-166.9	20.1	0.2188	ug/L	0.2188	ppb	18:19:05
2	Co 228.616†	-64.4	7.0	0.1391	ug/L	0.1391	ppb	18:19:05
2	Cr 267.716†	94.3	7.7	0.0841	ug/L	0.0841	ppb	18:19:05
2	Cu 324.752†	6814.5	76.7	0.2230	ug/L	0.2230	ppb	18:18:45
2	Mn 257.610†	535.3	134.3	0.1460	ug/L	0.1460	ppb	18:19:05
2	Mo 202.031†	31.2	11.4	0.7398	ug/L	0.7398	ppb	18:19:05
2	Ni 231.604†	72.7	2.9	0.0679	ug/L	0.0679	ppb	18:19:05

2	P 214.914†	219.2	0.2	0.1177 ug/L	0.1177 ppb	18:19:05
2	Pb 220.353†	-57.8	-5.5	-0.6464 ug/L	-0.6464 ppb	18:19:05
2	S 181.975 Axial†	38.7	-2.6	-3.7352 ug/L	-3.7352 ppb	18:19:05
2	Sb 206.836†	31.3	1.8	0.6070 ug/L	0.6070 ppb	18:19:05
2	Se 196.026†	-21.1	2.3	1.3426 ug/L	1.3426 ppb	18:19:05
2	Si 251.611†	490.8	-15.0	-0.4793 ug/L	-0.4793 ppb	18:19:05
2	Sn 189.927†	6.2	1.9	0.3255 ug/L	0.3255 ppb	18:19:05
2	Ti 334.940†	-1073.4	-113.3	-0.1829 ug/L	-0.1829 ppb	18:18:45
2	Tl 190.801†	-34.3	2.4	0.6803 ug/L	0.6803 ppb	18:19:05
2	U 409.014†	-1950.7	2.6	0.0731 ug/L	0.0731 ppb	18:18:45
2	V 292.402†	-1217.2	73.7	0.5086 ug/L	0.5086 ppb	18:18:45
2	Zn 213.857†	696.2	-107.9	-0.9708 ug/L	-0.9708 ppb	18:19:05
2	SiO2†	499.7	13.1	0.8164 ug/L	0.8164 ppb	18:19:41
3	Sc Radial	5827.7	5827.7	103 %		18:17:53
3	Y RADIAL	6300.4	6300.4	102.3 %		18:17:53
3	Al 396.153Radial†	-35.7	-14.3	-10.594 ug/L	-10.594 ppb	18:17:53
3	Ca 317.933Radial†	22.6	4.2	6.4913 ug/L	6.4913 ppb	18:18:13
3	Fe 238.204 Radial†	7.6	1.3	13.586 ug/L	13.586 ppb	18:18:13
3	K 766.490 Radial†	2295.4	60.3	10.936 ug/L	10.936 ppb	18:17:53
3	Mg 279.077 IEC†	1.1	-0.7	-26.175 ug/L	-26.175 ppb	18:18:13
3	Na 589.592 Radial†	-574.5	57.6	21.661 ug/L	21.661 ppb	18:17:53
3	Sr 421.552†	-5.3	-8.6	-0.0582 ug/L	-0.0582 ppb	18:17:53
3	Sc 361.383	891387.7	891387.7	100.72 %		18:19:10
3	Y 371.029	747805.5	747805.5	100.77 %		18:19:10
3	Ag 328.068†	265.5	36.0	0.1686 ug/L	0.1686 ppb	18:19:10
3	As 188.979†	-21.5	7.8	3.2026 ug/L	3.2026 ppb	18:19:30
3	B 249.677†	-382.9	143.7	3.1172 ug/L	3.1172 ppb	18:19:30
3	Ba 233.527†	-8.9	3.2	0.0244 ug/L	0.0244 ppb	18:19:30
3	Be 313.107†	-5324.4	34.2	0.0128 ug/L	0.0128 ppb	18:19:10
3	Cd 226.502†	-183.9	5.2	0.0553 ug/L	0.0553 ppb	18:19:30
3	Co 228.616†	-64.2	8.0	0.1556 ug/L	0.1556 ppb	18:19:30
3	Cr 267.716†	67.9	-19.6	-0.2114 ug/L	-0.2114 ppb	18:19:30
3	Cu 324.752†	6833.5	15.7	0.0464 ug/L	0.0464 ppb	18:19:10
3	Mn 257.610†	528.5	121.3	0.1337 ug/L	0.1337 ppb	18:19:30
3	Mo 202.031†	19.9	-0.3	-0.0154 ug/L	-0.0154 ppb	18:19:30
3	Ni 231.604†	64.3	-6.3	-0.1490 ug/L	-0.1490 ppb	18:19:30
3	P 214.914†	223.8	2.2	1.3167 ug/L	1.3167 ppb	18:19:30
3	Pb 220.353†	-72.1	-19.0	-2.2280 ug/L	-2.2280 ppb	18:19:30
3	S 181.975 Axial†	45.1	3.3	4.8980 ug/L	4.8980 ppb	18:19:30
3	Sb 206.836†	33.5	3.7	1.2095 ug/L	1.2095 ppb	18:19:30
3	Se 196.026†	-20.0	3.6	2.2051 ug/L	2.2051 ppb	18:19:30
3	Si 251.611†	513.3	1.6	0.0412 ug/L	0.0412 ppb	18:19:30
3	Sn 189.927†	9.9	5.6	0.9441 ug/L	0.9441 ppb	18:19:30
3	Ti 334.940†	-954.9	17.0	0.0269 ug/L	0.0269 ppb	18:19:10
3	Tl 190.801†	-43.6	-6.4	-1.8301 ug/L	-1.8301 ppb	18:19:30
3	U 409.014†	-1894.4	81.4	2.2740 ug/L	2.2740 ppb	18:19:10
3	V 292.402†	-1317.6	-11.6	-0.0768 ug/L	-0.0768 ppb	18:19:10
3	Zn 213.857†	676.5	-135.7	-1.2202 ug/L	-1.2202 ppb	18:19:30
3	SiO2†	500.2	7.7	0.4927 ug/L	0.4927 ppb	18:19:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888648.8	100.42	%	0.760				0.76%
Sc Radial	5775.7	102	%	1.1				1.04%
Y 371.029	745762.6	100.50	%	0.747				0.74%
Y RADIAL	6269.1	101.8	%	0.73				0.72%
Ag 328.068†	-8.4	-0.0369	ug/L	0.18245	-0.0369	ppb	0.18245	494.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.2	-3.8480	ug/L	6.00611	-3.8480	ppb	6.00611	156.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.6	2.3012	ug/L	1.68714	2.3012	ppb	1.68714	73.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	175.9	3.8175	ug/L	0.62652	3.8175	ppb	0.62652	16.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.8	-0.0505	ug/L	0.06506	-0.0505	ppb	0.06506	128.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	51.0	0.0188	ug/L	0.00614	0.0188	ppb	0.00614	32.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.1	7.8224	ug/L	2.15228	7.8224	ppb	2.15228	27.51%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.8      0.1599 ug/L       0.09081      0.1599 ppb        0.09081  56.80%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.4      0.0288 ug/L       0.20556      0.0288 ppb        0.20556 714.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -13.0     -0.1399 ug/L       0.19821     -0.1399 ppb        0.19821 141.67%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                42.3      0.1235 ug/L       0.09041      0.1235 ppb        0.09041  73.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.9      9.4113 ug/L      11.23969      9.4113 ppb       11.23969 119.43%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          89.4      16.207 ug/L        4.6088      16.207 ppb         4.6088  28.44%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.0     -0.4548 ug/L      39.14850     -0.4548 ppb       39.14850 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               114.4      0.1253 ug/L       0.02600      0.1253 ppb        0.02600  20.75%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.2      0.3372 ug/L       0.38008      0.3372 ppb        0.38008 112.73%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         55.6      20.905 ug/L        1.5852      20.905 ppb         1.5852   7.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -2.1     -0.0505 ug/L       0.10983     -0.0505 ppb        0.10983 217.51%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.3     -2.0116 ug/L       4.76432     -2.0116 ppb        4.76432 236.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.8     -0.9137 ug/L       1.20313     -0.9137 ppb        1.20313 131.68%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.9      1.3513 ug/L       4.51793      1.3513 ppb        4.51793 334.33%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.0      2.2847 ug/L       2.40302      2.2847 ppb        2.40302 105.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.3      1.4305 ug/L       0.73466      1.4305 ppb        0.73466  51.36%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -13.0     -0.4096 ug/L       0.42030     -0.4096 ppb        0.42030 102.62%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      0.5125 ug/L       0.37488      0.5125 ppb        0.37488  73.14%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -8.2     -0.0556 ug/L       0.03862     -0.0556 ppb        0.03862  69.45%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -56.9     -0.0926 ug/L       0.10790     -0.0926 ppb        0.10790 116.51%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.8     -0.8097 ug/L       1.31943     -0.8097 ppb        1.31943 162.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 83.2      2.3231 ug/L       2.27499      2.3231 ppb        2.27499  97.93%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 33.4      0.2332 ug/L       0.29426      0.2332 ppb        0.29426 126.18%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -120.7     -1.0871 ug/L       0.12559     -1.0871 ppb        0.12559  11.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      13.1      0.8270 ug/L       0.33976      0.8270 ppb        0.33976  41.08%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 52
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 19:18:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5584.3	5584.3	98.6	%			19:19:59
1	Y RADIAL	6042.3	6042.3	98.11	%			19:19:59
1	Al 396.153Radial†	6589.2	6702.8	4933.7	ug/L	4933.7	ppb	19:19:59
1	Ca 317.933Radial†	3285.3	3314.1	5067.8	ug/L	5067.8	ppb	19:20:19
1	Fe 238.204 Radial†	510.6	511.8	5168.9	ug/L	5168.9	ppb	19:20:19
1	K 766.490 Radial†	29407.3	27653.4	5010.1	ug/L	5010.1	ppb	19:19:59
1	Mg 279.077 IEC†	140.3	140.6	5240.0	ug/L	5240.0	ppb	19:20:19
1	Na 589.592 Radial†	26185.3	27172.0	10213	ug/L	10213	ppb	19:19:59
1	Sr 421.552†	75720.1	76788.9	518.32	ug/L	518.32	ppb	19:19:59
1	Sc 361.383	896540.3	896540.3	101.31	%			19:21:16
1	Y 371.029	739324.9	739324.9	99.630	%			19:21:16
1	Ag 328.068†	110430.1	108777.7	505.99	ug/L	505.99	ppb	19:21:21
1	As 188.979†	1185.3	1199.2	493.69	ug/L	493.69	ppb	19:21:41
1	B 249.677†	22197.2	22434.6	485.04	ug/L	485.04	ppb	19:21:21
1	Ba 233.527†	65623.7	64789.0	493.36	ug/L	493.36	ppb	19:21:21
1	Be 313.107†	1323323.4	1311568.9	488.35	ug/L	488.35	ppb	19:21:16
1	Cd 226.502†	46084.7	45677.9	495.35	ug/L	495.35	ppb	19:21:21
1	Co 228.616†	25699.9	25440.1	493.98	ug/L	493.98	ppb	19:21:21
1	Cr 267.716†	46231.4	45547.9	491.56	ug/L	491.56	ppb	19:21:21
1	Cu 324.752†	176364.5	167320.3	486.88	ug/L	486.88	ppb	19:21:21
1	Mn 257.610†	457039.7	450739.2	490.25	ug/L	490.25	ppb	19:21:16
1	Mo 202.031†	7772.4	7652.1	498.82	ug/L	498.82	ppb	19:21:41
1	Ni 231.604†	21209.3	20865.5	494.79	ug/L	494.79	ppb	19:21:21
1	P 214.914†	4389.9	4113.3	2370.0	ug/L	2370.0	ppb	19:21:41
1	Pb 220.353†	4170.6	4169.3	488.91	ug/L	488.91	ppb	19:21:41
1	S 181.975 Axial†	728.4	677.5	989.72	ug/L	989.72	ppb	19:21:41
1	Sb 206.836†	1582.7	1532.7	504.81	ug/L	504.81	ppb	19:21:41
1	Se 196.026†	814.0	827.0	511.23	ug/L	511.23	ppb	19:21:41
1	Si 251.611†	82757.2	81181.4	2471.1	ug/L	2471.1	ppb	19:21:21
1	Sn 189.927†	2988.3	2945.5	498.90	ug/L	498.90	ppb	19:21:41
1	Ti 334.940†	312320.0	309255.2	500.04	ug/L	500.04	ppb	19:21:21
1	Tl 190.801†	1692.8	1707.8	492.68	ug/L	492.68	ppb	19:21:41
1	U 409.014†	15805.1	17563.3	489.10	ug/L	489.10	ppb	19:21:21
1	V 292.402†	72045.3	72412.2	495.48	ug/L	495.48	ppb	19:21:21
1	Zn 213.857†	56545.1	55008.2	490.49	ug/L	490.49	ppb	19:21:21
1	SiO2†	82213.5	80663.9	5256.2	ug/L	5256.2	ppb	19:22:49
2	Sc Radial	5611.5	5611.5	99.1	%			19:20:24
2	Y RADIAL	6067.9	6067.9	98.53	%			19:20:24
2	Al 396.153Radial†	6519.9	6600.4	4857.7	ug/L	4857.7	ppb	19:20:24
2	Ca 317.933Radial†	3281.8	3294.3	5037.6	ug/L	5037.6	ppb	19:20:44
2	Fe 238.204 Radial†	505.8	504.4	5094.7	ug/L	5094.7	ppb	19:20:44
2	K 766.490 Radial†	29250.8	27350.5	4955.2	ug/L	4955.2	ppb	19:20:24
2	Mg 279.077 IEC†	142.8	142.3	5306.1	ug/L	5306.1	ppb	19:20:44
2	Na 589.592 Radial†	25955.8	26811.3	10078	ug/L	10078	ppb	19:20:24
2	Sr 421.552†	75156.5	75846.7	511.96	ug/L	511.96	ppb	19:20:24
2	Sc 361.383	888638.0	888638.0	100.41	%			19:21:47
2	Y 371.029	734723.7	734723.7	99.010	%			19:21:47
2	Ag 328.068†	109631.9	108952.0	506.78	ug/L	506.78	ppb	19:21:52
2	As 188.979†	1187.6	1211.9	498.87	ug/L	498.87	ppb	19:22:12
2	B 249.677†	22021.2	22454.2	485.47	ug/L	485.47	ppb	19:21:52
2	Ba 233.527†	65034.7	64778.4	493.28	ug/L	493.28	ppb	19:21:52
2	Be 313.107†	1315065.7	1314961.2	489.61	ug/L	489.61	ppb	19:21:47
2	Cd 226.502†	45686.8	45686.1	495.45	ug/L	495.45	ppb	19:21:52
2	Co 228.616†	25554.3	25520.7	495.55	ug/L	495.55	ppb	19:21:52
2	Cr 267.716†	45952.8	45676.3	492.94	ug/L	492.94	ppb	19:21:52
2	Cu 324.752†	175508.0	168015.4	488.90	ug/L	488.90	ppb	19:21:52
2	Mn 257.610†	453296.3	451023.1	490.55	ug/L	490.55	ppb	19:21:47
2	Mo 202.031†	7789.0	7736.8	504.33	ug/L	504.33	ppb	19:22:12
2	Ni 231.604†	21011.2	20854.4	494.52	ug/L	494.52	ppb	19:21:52

2	P 214.914†	4410.8	4172.6	2405.0 ug/L	2405.0 ppb	19:22:12
2	Pb 220.353†	4195.1	4230.4	496.05 ug/L	496.05 ppb	19:22:12
2	S 181.975 Axial†	743.6	699.1	1021.3 ug/L	1021.3 ppb	19:22:12
2	Sb 206.836†	1590.4	1554.2	511.98 ug/L	511.98 ppb	19:22:12
2	Se 196.026†	822.5	842.6	520.32 ug/L	520.32 ppb	19:22:12
2	Si 251.611†	82215.5	81368.4	2476.7 ug/L	2476.7 ppb	19:21:52
2	Sn 189.927†	2991.8	2975.2	503.92 ug/L	503.92 ppb	19:22:12
2	Ti 334.940†	310248.7	309933.9	501.14 ug/L	501.14 ppb	19:21:52
2	Tl 190.801†	1708.2	1738.0	501.34 ug/L	501.34 ppb	19:22:12
2	U 409.014†	15827.1	17724.0	493.59 ug/L	493.59 ppb	19:21:52
2	V 292.402†	71606.4	72607.6	496.90 ug/L	496.90 ppb	19:21:52
2	Zn 213.857†	56128.3	55089.5	491.23 ug/L	491.23 ppb	19:21:52
2	SiO2†	82471.1	81642.1	5320.1 ug/L	5320.1 ppb	19:22:54
3	Sc Radial	5562.9	5562.9	98.2 %		19:20:49
3	Y RADIAL	6032.7	6032.7	97.95 %		19:20:49
3	Al 396.153Radial†	6505.6	6643.5	4889.7 ug/L	4889.7 ppb	19:20:49
3	Ca 317.933Radial†	3287.8	3329.5	5091.4 ug/L	5091.4 ppb	19:21:09
3	Fe 238.204 Radial†	512.4	515.7	5208.1 ug/L	5208.1 ppb	19:21:09
3	K 766.490 Radial†	29289.8	27648.5	5009.2 ug/L	5009.2 ppb	19:20:49
3	Mg 279.077 IEC†	138.6	139.4	5195.9 ug/L	5195.9 ppb	19:21:09
3	Na 589.592 Radial†	25915.8	26999.9	10148 ug/L	10148 ppb	19:20:49
3	Sr 421.552†	74874.1	76223.1	514.50 ug/L	514.50 ppb	19:20:49
3	Sc 361.383	896516.4	896516.4	101.30 %		19:22:18
3	Y 371.029	740280.6	740280.6	99.759 %		19:22:18
3	Ag 328.068†	110735.7	109082.3	507.42 ug/L	507.42 ppb	19:22:23
3	As 188.979†	1188.3	1202.2	494.92 ug/L	494.92 ppb	19:22:43
3	B 249.677†	22423.1	22658.2	489.89 ug/L	489.89 ppb	19:22:23
3	Ba 233.527†	65790.2	64955.1	494.63 ug/L	494.63 ppb	19:22:23
3	Be 313.107†	1329267.4	1317471.2	490.55 ug/L	490.55 ppb	19:22:18
3	Cd 226.502†	46161.4	45754.8	496.18 ug/L	496.18 ppb	19:22:23
3	Co 228.616†	25810.3	25549.7	496.11 ug/L	496.11 ppb	19:22:23
3	Cr 267.716†	46373.0	45688.9	493.08 ug/L	493.08 ppb	19:22:23
3	Cu 324.752†	177648.9	168592.8	490.58 ug/L	490.58 ppb	19:22:23
3	Mn 257.610†	458076.7	451774.9	491.38 ug/L	491.38 ppb	19:22:18
3	Mo 202.031†	7809.9	7689.4	501.25 ug/L	501.25 ppb	19:22:43
3	Ni 231.604†	21232.6	20889.1	495.34 ug/L	495.34 ppb	19:22:23
3	P 214.914†	4414.3	4137.5	2383.8 ug/L	2383.8 ppb	19:22:43
3	Pb 220.353†	4202.5	4201.0	492.60 ug/L	492.60 ppb	19:22:43
3	S 181.975 Axial†	743.0	691.9	1010.8 ug/L	1010.8 ppb	19:22:43
3	Sb 206.836†	1597.5	1547.3	509.61 ug/L	509.61 ppb	19:22:43
3	Se 196.026†	830.7	843.4	521.17 ug/L	521.17 ppb	19:22:43
3	Si 251.611†	83279.2	81698.8	2486.9 ug/L	2486.9 ppb	19:22:23
3	Sn 189.927†	3002.3	2959.3	501.25 ug/L	501.25 ppb	19:22:43
3	Ti 334.940†	313525.7	310453.6	501.98 ug/L	501.98 ppb	19:22:23
3	Tl 190.801†	1706.7	1721.6	496.63 ug/L	496.63 ppb	19:22:43
3	U 409.014†	16028.1	17783.9	495.25 ug/L	495.25 ppb	19:22:23
3	V 292.402†	72331.9	72697.0	497.44 ug/L	497.44 ppb	19:22:23
3	Zn 213.857†	56783.5	55245.0	492.61 ug/L	492.61 ppb	19:22:23
3	SiO2†	81806.6	80264.4	5230.0 ug/L	5230.0 ppb	19:22:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	893898.3	101.01	%	0.515				0.51%
Sc Radial	5586.2	98.6	%	0.43				0.44%
Y 371.029	738109.7	99.466	%	0.4004				0.40%
Y RADIAL	6047.6	98.20	%	0.295				0.30%
Ag 328.068†	108937.3	506.73	ug/L	0.713	506.73	ppb	0.713	0.14%
QC value within limits for Ag 328.068 Recovery = 101.35%								
Al 396.153Radial†	6648.9	4893.7	ug/L	38.15	4893.7	ppb	38.15	0.78%
QC value within limits for Al 396.153Radial Recovery = 97.87%								
As 188.979†	1204.5	495.83	ug/L	2.704	495.83	ppb	2.704	0.55%
QC value within limits for As 188.979 Recovery = 99.17%								
B 249.677†	22515.7	486.80	ug/L	2.681	486.80	ppb	2.681	0.55%
QC value within limits for B 249.677 Recovery = 97.36%								
Ba 233.527†	64840.8	493.76	ug/L	0.756	493.76	ppb	0.756	0.15%
QC value within limits for Ba 233.527 Recovery = 98.75%								
Be 313.107†	1314667.1	489.50	ug/L	1.103	489.50	ppb	1.103	0.23%
QC value within limits for Be 313.107 Recovery = 97.90%								
Ca 317.933Radial†	3312.7	5065.6	ug/L	26.97	5065.6	ppb	26.97	0.53%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.31%
Cd 226.502†            45706.3      495.66 ug/L         0.454      495.66 ppb          0.454   0.09%
   QC value within limits for Cd 226.502  Recovery = 99.13%
Co 228.616†            25503.5      495.21 ug/L         1.105      495.21 ppb          1.105   0.22%
   QC value within limits for Co 228.616  Recovery = 99.04%
Cr 267.716†            45637.7      492.52 ug/L         0.841      492.52 ppb          0.841   0.17%
   QC value within limits for Cr 267.716  Recovery = 98.50%
Cu 324.752†           167976.1      488.79 ug/L         1.854      488.79 ppb          1.854   0.38%
   QC value within limits for Cu 324.752  Recovery = 97.76%
Fe 238.204 Radial†       510.6      5157.2 ug/L        57.63      5157.2 ppb         57.63   1.12%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.14%
K 766.490 Radial†      27550.8      4991.5 ug/L        31.46      4991.5 ppb         31.46   0.63%
   QC value within limits for K 766.490 Radial  Recovery = 99.83%
Mg 279.077 IEC†          140.8      5247.3 ug/L        55.46      5247.3 ppb         55.46   1.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.95%
Mn 257.610†           451179.0      490.73 ug/L         0.585      490.73 ppb          0.585   0.12%
   QC value within limits for Mn 257.610  Recovery = 98.15%
Mo 202.031†             7692.8      501.47 ug/L         2.762      501.47 ppb          2.762   0.55%
   QC value within limits for Mo 202.031  Recovery = 100.29%
Na 589.592 Radial†     26994.4       10146 ug/L          67.8       10146 ppb           67.8   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 101.46%
Ni 231.604†            20869.7      494.88 ug/L         0.420      494.88 ppb          0.420   0.08%
   QC value within limits for Ni 231.604  Recovery = 98.98%
P 214.914†              4141.2      2386.3 ug/L        17.65      2386.3 ppb         17.65   0.74%
   QC value within limits for P 214.914  Recovery = 95.45%
Pb 220.353†             4200.2      492.52 ug/L         3.572      492.52 ppb          3.572   0.73%
   QC value within limits for Pb 220.353  Recovery = 98.50%
S 181.975 Axial†         689.5      1007.3 ug/L        16.07      1007.3 ppb         16.07   1.60%
   QC value within limits for S 181.975 Axial  Recovery = 100.73%
Sb 206.836†             1544.7      508.80 ug/L         3.655      508.80 ppb          3.655   0.72%
   QC value within limits for Sb 206.836  Recovery = 101.76%
Se 196.026†              837.7      517.58 ug/L         5.509      517.58 ppb          5.509   1.06%
   QC value within limits for Se 196.026  Recovery = 103.52%
Si 251.611†            81416.2      2478.2 ug/L         8.00      2478.2 ppb          8.00   0.32%
   QC value within limits for Si 251.611  Recovery = 99.13%
Sn 189.927†             2960.0      501.36 ug/L         2.512      501.36 ppb          2.512   0.50%
   QC value within limits for Sn 189.927  Recovery = 100.27%
Sr 421.552†            76286.2      514.93 ug/L         3.201      514.93 ppb          3.201   0.62%
   QC value within limits for Sr 421.552  Recovery = 102.99%
Ti 334.940†           309880.9      501.05 ug/L         0.971      501.05 ppb          0.971   0.19%
   QC value within limits for Ti 334.940  Recovery = 100.21%
Tl 190.801†             1722.5      496.88 ug/L         4.333      496.88 ppb          4.333   0.87%
   QC value within limits for Tl 190.801  Recovery = 99.38%
U 409.014†             17690.4      492.65 ug/L         3.184      492.65 ppb          3.184   0.65%
   QC value within limits for U 409.014  Recovery = 98.53%
V 292.402†             72572.2      496.61 ug/L         1.012      496.61 ppb          1.012   0.20%
   QC value within limits for V 292.402  Recovery = 99.32%
Zn 213.857†            55114.2      491.44 ug/L         1.077      491.44 ppb          1.077   0.22%
   QC value within limits for Zn 213.857  Recovery = 98.29%
SiO2†                  80856.8      5268.8 ug/L        46.35      5268.8 ppb         46.35   0.88%
   QC value within limits for SiO2  Recovery = 98.53%
All analyte(s) passed QC.
```

Sequence No.: 53
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 19:25:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5641.8	5641.8	99.6	%			19:27:00
1	Y RADIAL	6146.6	6146.6	99.80	%			19:27:00
1	Al 396.153Radial†	-31.4	-11.2	-8.3136	ug/L	-8.3136	ppb	19:27:00
1	Ca 317.933Radial†	24.8	7.2	10.951	ug/L	10.951	ppb	19:27:20
1	Fe 238.204 Radial†	7.6	1.6	15.999	ug/L	15.999	ppb	19:27:20
1	K 766.490 Radial†	2251.1	89.3	16.206	ug/L	16.206	ppb	19:27:00
1	Mg 279.077 IEC†	3.3	1.6	59.143	ug/L	59.143	ppb	19:27:20
1	Na 589.592 Radial†	-586.0	27.7	10.417	ug/L	10.417	ppb	19:27:00
1	Sr 421.552†	15.8	12.5	0.0842	ug/L	0.0842	ppb	19:27:00
1	Sc 361.383	886271.2	886271.2	100.15	%			19:28:17
1	Y 371.029	744404.2	744404.2	100.31	%			19:28:17
1	Ag 328.068†	300.3	72.3	0.3378	ug/L	0.3378	ppb	19:28:17
1	As 188.979†	-19.8	9.5	3.8708	ug/L	3.8708	ppb	19:28:37
1	B 249.677†	-356.9	167.5	3.6344	ug/L	3.6344	ppb	19:28:37
1	Ba 233.527†	-12.4	-0.4	-0.0024	ug/L	-0.0024	ppb	19:28:37
1	Be 313.107†	-5236.1	91.8	0.0340	ug/L	0.0340	ppb	19:28:17
1	Cd 226.502†	-167.7	20.4	0.2201	ug/L	0.2201	ppb	19:28:37
1	Co 228.616†	-81.9	-10.1	-0.1953	ug/L	-0.1953	ppb	19:28:37
1	Cr 267.716†	87.6	0.5	0.0054	ug/L	0.0054	ppb	19:28:37
1	Cu 324.752†	6804.2	25.6	0.0754	ug/L	0.0754	ppb	19:28:17
1	Mn 257.610†	536.6	132.4	0.1444	ug/L	0.1444	ppb	19:28:37
1	Mo 202.031†	22.9	2.9	0.1902	ug/L	0.1902	ppb	19:28:37
1	Ni 231.604†	77.1	6.9	0.1627	ug/L	0.1627	ppb	19:28:37
1	P 214.914†	223.1	2.8	1.6323	ug/L	1.6323	ppb	19:28:37
1	Pb 220.353†	-52.9	-0.3	-0.0321	ug/L	-0.0321	ppb	19:28:37
1	S 181.975 Axial†	39.2	-2.4	-3.4574	ug/L	-3.4574	ppb	19:28:37
1	Sb 206.836†	34.8	5.1	1.6397	ug/L	1.6397	ppb	19:28:37
1	Se 196.026†	-24.2	-0.7	-0.3672	ug/L	-0.3672	ppb	19:28:37
1	Si 251.611†	493.5	-15.2	-0.4686	ug/L	-0.4686	ppb	19:28:37
1	Sn 189.927†	-6.0	-10.3	-1.7344	ug/L	-1.7344	ppb	19:28:37
1	Ti 334.940†	-990.8	-24.3	-0.0393	ug/L	-0.0393	ppb	19:28:17
1	Tl 190.801†	-30.6	6.3	1.8066	ug/L	1.8066	ppb	19:28:37
1	U 409.014†	-1918.2	46.8	1.3051	ug/L	1.3051	ppb	19:28:17
1	V 292.402†	-1309.1	-10.7	-0.0679	ug/L	-0.0679	ppb	19:28:17
1	Zn 213.857†	693.9	-114.4	-1.0341	ug/L	-1.0341	ppb	19:28:37
1	SiO2†	470.8	-18.7	-1.2307	ug/L	-1.2307	ppb	19:29:33
2	Sc Radial	5759.5	5759.5	102	%			19:27:25
2	Y RADIAL	6231.6	6231.6	101.2	%			19:27:25
2	Al 396.153Radial†	-17.3	3.3	2.4089	ug/L	2.4089	ppb	19:27:25
2	Ca 317.933Radial†	22.9	4.9	7.4285	ug/L	7.4285	ppb	19:27:46
2	Fe 238.204 Radial†	8.0	1.9	18.650	ug/L	18.650	ppb	19:27:46
2	K 766.490 Radial†	2279.1	70.8	12.831	ug/L	12.831	ppb	19:27:25
2	Mg 279.077 IEC†	1.9	0.1	5.1277	ug/L	5.1277	ppb	19:27:46
2	Na 589.592 Radial†	-553.0	72.2	27.138	ug/L	27.138	ppb	19:27:25
2	Sr 421.552†	-21.9	-24.9	-0.1683	ug/L	-0.1683	ppb	19:27:25
2	Sc 361.383	887722.3	887722.3	100.31	%			19:28:43
2	Y 371.029	745789.6	745789.6	100.50	%			19:28:43
2	Ag 328.068†	217.8	-10.4	-0.0415	ug/L	-0.0415	ppb	19:28:43
2	As 188.979†	-21.8	7.5	3.0641	ug/L	3.0641	ppb	19:29:03
2	B 249.677†	-355.5	169.4	3.6752	ug/L	3.6752	ppb	19:29:03
2	Ba 233.527†	-15.2	-3.2	-0.0230	ug/L	-0.0230	ppb	19:29:03
2	Be 313.107†	-5253.7	82.8	0.0306	ug/L	0.0306	ppb	19:28:43
2	Cd 226.502†	-184.3	4.1	0.0430	ug/L	0.0430	ppb	19:29:03
2	Co 228.616†	-66.8	5.1	0.1006	ug/L	0.1006	ppb	19:29:03
2	Cr 267.716†	73.7	-13.5	-0.1444	ug/L	-0.1444	ppb	19:29:03
2	Cu 324.752†	6898.2	108.2	0.3156	ug/L	0.3156	ppb	19:28:43
2	Mn 257.610†	531.8	126.8	0.1395	ug/L	0.1395	ppb	19:29:03
2	Mo 202.031†	27.2	7.1	0.4649	ug/L	0.4649	ppb	19:29:03
2	Ni 231.604†	77.0	6.6	0.1572	ug/L	0.1572	ppb	19:29:03

2	P 214.914†	215.1	-5.5	-3.3489 ug/L	-3.3489 ppb	19:29:03
2	Pb 220.353†	-68.4	-15.6	-1.8255 ug/L	-1.8255 ppb	19:29:03
2	S 181.975 Axial†	48.6	7.0	10.204 ug/L	10.204 ppb	19:29:03
2	Sb 206.836†	37.7	8.0	2.6346 ug/L	2.6346 ppb	19:29:03
2	Se 196.026†	-20.7	2.8	1.7145 ug/L	1.7145 ppb	19:29:03
2	Si 251.611†	493.3	-16.3	-0.5128 ug/L	-0.5128 ppb	19:29:03
2	Sn 189.927†	9.6	5.3	0.8974 ug/L	0.8974 ppb	19:29:03
2	Ti 334.940†	-1014.6	-46.4	-0.0745 ug/L	-0.0745 ppb	19:28:43
2	Tl 190.801†	-31.9	5.0	1.4437 ug/L	1.4437 ppb	19:29:03
2	U 409.014†	-1974.4	-6.1	-0.1726 ug/L	-0.1726 ppb	19:28:43
2	V 292.402†	-1276.0	24.4	0.1688 ug/L	0.1688 ppb	19:28:43
2	Zn 213.857†	696.2	-113.2	-1.0219 ug/L	-1.0219 ppb	19:29:03
2	SiO2†	510.8	20.4	1.3006 ug/L	1.3006 ppb	19:29:38
3	Sc Radial	5815.1	5815.1	103 %		19:27:51
3	Y RADIAL	6309.9	6309.9	102.5 %		19:27:51
3	Al 396.153Radial†	-11.4	9.2	6.8077 ug/L	6.8077 ppb	19:27:51
3	Ca 317.933Radial†	23.0	4.7	7.1202 ug/L	7.1202 ppb	19:28:11
3	Fe 238.204 Radial†	8.3	2.1	21.103 ug/L	21.103 ppb	19:28:11
3	K 766.490 Radial†	2474.1	239.2	43.407 ug/L	43.407 ppb	19:27:51
3	Mg 279.077 IEC†	0.3	-1.5	-56.106 ug/L	-56.106 ppb	19:28:11
3	Na 589.592 Radial†	-559.8	70.8	26.618 ug/L	26.618 ppb	19:27:51
3	Sr 421.552†	-16.1	-19.1	-0.1290 ug/L	-0.1290 ppb	19:27:51
3	Sc 361.383	901355.2	901355.2	101.85 %		19:29:08
3	Y 371.029	755841.4	755841.4	101.86 %		19:29:08
3	Ag 328.068†	265.1	32.7	0.1543 ug/L	0.1543 ppb	19:29:08
3	As 188.979†	-32.7	-2.9	-1.1827 ug/L	-1.1827 ppb	19:29:28
3	B 249.677†	-368.6	162.0	3.5131 ug/L	3.5131 ppb	19:29:28
3	Ba 233.527†	3.9	15.9	0.1209 ug/L	0.1209 ppb	19:29:28
3	Be 313.107†	-5305.1	111.6	0.0416 ug/L	0.0416 ppb	19:29:08
3	Cd 226.502†	-203.2	-11.6	-0.1278 ug/L	-0.1278 ppb	19:29:28
3	Co 228.616†	-70.1	2.9	0.0571 ug/L	0.0571 ppb	19:29:28
3	Cr 267.716†	55.8	-32.2	-0.3479 ug/L	-0.3479 ppb	19:29:28
3	Cu 324.752†	6920.5	26.1	0.0769 ug/L	0.0769 ppb	19:29:08
3	Mn 257.610†	499.9	87.4	0.0981 ug/L	0.0981 ppb	19:29:28
3	Mo 202.031†	23.1	2.7	0.1757 ug/L	0.1757 ppb	19:29:28
3	Ni 231.604†	104.3	32.3	0.7655 ug/L	0.7655 ppb	19:29:28
3	P 214.914†	212.1	-11.7	-6.9825 ug/L	-6.9825 ppb	19:29:28
3	Pb 220.353†	-59.1	-5.4	-0.6352 ug/L	-0.6352 ppb	19:29:28
3	S 181.975 Axial†	43.8	1.5	2.2133 ug/L	2.2133 ppb	19:29:28
3	Sb 206.836†	41.0	10.6	3.4548 ug/L	3.4548 ppb	19:29:28
3	Se 196.026†	-29.4	-5.4	-3.1518 ug/L	-3.1518 ppb	19:29:28
3	Si 251.611†	498.6	-18.4	-0.5810 ug/L	-0.5810 ppb	19:29:28
3	Sn 189.927†	3.3	-1.1	-0.1779 ug/L	-0.1779 ppb	19:29:28
3	Ti 334.940†	-933.0	49.0	0.0783 ug/L	0.0783 ppb	19:29:08
3	Tl 190.801†	-41.2	-3.6	-1.0289 ug/L	-1.0289 ppb	19:29:28
3	U 409.014†	-1883.1	113.3	3.1640 ug/L	3.1640 ppb	19:29:08
3	V 292.402†	-1343.2	-22.3	-0.1461 ug/L	-0.1461 ppb	19:29:08
3	Zn 213.857†	694.3	-125.6	-1.1349 ug/L	-1.1349 ppb	19:29:28
3	SiO2†	506.2	8.1	0.4954 ug/L	0.4954 ppb	19:29:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891782.9	100.77	%	0.940				0.93%
Sc Radial	5738.8	101	%	1.6				1.54%
Y 371.029	748678.4	100.89	%	0.841				0.83%
Y RADIAL	6229.4	101.1	%	1.33				1.31%
Ag 328.068†	31.5	0.1502	ug/L	0.18970	0.1502	ppb	0.18970	126.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.3010	ug/L	7.77795	0.3010	ppb	7.77795	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.7	1.9174	ug/L	2.71489	1.9174	ppb	2.71489	141.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	166.3	3.6076	ug/L	0.08432	3.6076	ppb	0.08432	2.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.1	0.0318	ug/L	0.07782	0.0318	ppb	0.07782	244.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	95.4	0.0354	ug/L	0.00563	0.0354	ppb	0.00563	15.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.6	8.4999	ug/L	2.12837	8.4999	ppb	2.12837	25.04%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.3      0.0451 ug/L       0.17396      0.0451 ppb        0.17396 385.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -0.7     -0.0125 ug/L       0.15978     -0.0125 ppb        0.15978 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -15.0     -0.1623 ug/L       0.17734     -0.1623 ppb        0.17734 109.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                53.3      0.1560 ug/L       0.13826      0.1560 ppb        0.13826  88.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      18.584 ug/L        2.5526      18.584 ppb         2.5526  13.74%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         133.1      24.148 ug/L       16.7640      24.148 ppb        16.7640  69.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.1      2.7213 ug/L      57.66209      2.7213 ppb       57.66209 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               115.5      0.1273 ug/L       0.02543      0.1273 ppb        0.02543  19.97%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.2      0.2769 ug/L       0.16295      0.2769 ppb        0.16295  58.84%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         56.9      21.391 ug/L        9.5072      21.391 ppb         9.5072  44.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.2      0.3618 ug/L       0.34959      0.3618 ppb        0.34959  96.63%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.8     -2.8997 ug/L       4.32492     -2.8997 ppb        4.32492 149.15%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.1     -0.8309 ug/L       0.91255     -0.8309 ppb        0.91255 109.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.0      2.9866 ug/L       6.86342      2.9866 ppb        6.86342 229.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.9      2.5764 ug/L       0.90893      2.5764 ppb        0.90893  35.28%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.1     -0.6015 ug/L       2.44164     -0.6015 ppb        2.44164 405.93%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -16.6     -0.5208 ug/L       0.05663     -0.5208 ppb        0.05663  10.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.0     -0.3383 ug/L       1.32319     -0.3383 ppb        1.32319 391.10%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -10.5     -0.0710 ug/L       0.13584     -0.0710 ppb        0.13584 191.25%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -7.3     -0.0119 ug/L       0.08001     -0.0119 ppb        0.08001 674.70%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.6      0.7405 ug/L       1.54306      0.7405 ppb        1.54306 208.39%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 51.3      1.4322 ug/L       1.67195      1.4322 ppb        1.67195 116.74%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -2.8     -0.0151 ug/L       0.16394     -0.0151 ppb        0.16394 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -117.7     -1.0636 ug/L       0.06201     -1.0636 ppb        0.06201   5.83%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       3.3      0.1884 ug/L       1.29328      0.1884 ppb        1.29328 686.37%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 61
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 20:21:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5751.0	5751.0	102	%			20:23:20
1	Y RADIAL	6179.7	6179.7	100.3	%			20:23:20
1	Al 396.153Radial†	6766.9	6684.1	4919.5	ug/L	4919.5	ppb	20:23:20
1	Ca 317.933Radial†	3270.3	3202.7	4897.5	ug/L	4897.5	ppb	20:23:40
1	Fe 238.204 Radial†	514.5	500.6	5056.4	ug/L	5056.4	ppb	20:23:40
1	K 766.490 Radial†	30347.2	27714.3	5021.1	ug/L	5021.1	ppb	20:23:20
1	Mg 279.077 IEC†	140.7	136.8	5101.4	ug/L	5101.4	ppb	20:23:40
1	Na 589.592 Radial†	27055.9	27259.5	10246	ug/L	10246	ppb	20:23:20
1	Sr 421.552†	77921.7	76730.6	517.93	ug/L	517.93	ppb	20:23:20
1	Sc 361.383	885496.8	885496.8	100.06	%			20:24:38
1	Y 371.029	729699.6	729699.6	98.333	%			20:24:38
1	Ag 328.068†	108846.1	108554.0	504.93	ug/L	504.93	ppb	20:24:43
1	As 188.979†	1191.9	1220.5	502.32	ug/L	502.32	ppb	20:25:03
1	B 249.677†	21907.5	22418.3	484.70	ug/L	484.70	ppb	20:24:43
1	Ba 233.527†	64934.4	64908.0	494.26	ug/L	494.26	ppb	20:24:43
1	Be 313.107†	1323753.5	1328289.7	494.56	ug/L	494.56	ppb	20:24:38
1	Cd 226.502†	45672.5	45833.3	497.05	ug/L	497.05	ppb	20:24:43
1	Co 228.616†	25434.9	25491.6	495.00	ug/L	495.00	ppb	20:24:43
1	Cr 267.716†	45758.7	45644.6	492.60	ug/L	492.60	ppb	20:24:43
1	Cu 324.752†	173843.2	166971.6	485.86	ug/L	485.86	ppb	20:24:43
1	Mn 257.610†	457805.1	457130.6	497.19	ug/L	497.19	ppb	20:24:38
1	Mo 202.031†	7810.0	7785.4	507.49	ug/L	507.49	ppb	20:25:03
1	Ni 231.604†	21014.8	20932.2	496.37	ug/L	496.37	ppb	20:24:43
1	P 214.914†	4415.7	4193.1	2417.8	ug/L	2417.8	ppb	20:25:03
1	Pb 220.353†	4204.9	4255.0	498.95	ug/L	498.95	ppb	20:25:03
1	S 181.975 Axial†	734.0	692.1	1011.0	ug/L	1011.0	ppb	20:25:03
1	Sb 206.836†	1584.0	1553.5	511.95	ug/L	511.95	ppb	20:25:03
1	Se 196.026†	828.2	851.2	525.34	ug/L	525.34	ppb	20:25:03
1	Si 251.611†	81857.8	81301.3	2474.6	ug/L	2474.6	ppb	20:24:43
1	Sn 189.927†	3026.6	3020.6	511.59	ug/L	511.59	ppb	20:25:03
1	Ti 334.940†	308078.7	308861.3	499.40	ug/L	499.40	ppb	20:24:43
1	Tl 190.801†	1690.5	1726.3	498.01	ug/L	498.01	ppb	20:25:03
1	U 409.014†	15567.7	17520.7	487.92	ug/L	487.92	ppb	20:24:43
1	V 292.402†	71141.9	72396.3	495.51	ug/L	495.51	ppb	20:24:43
1	Zn 213.857†	56065.2	55224.7	492.45	ug/L	492.45	ppb	20:24:43
1	SiO2†	82696.9	82159.1	5353.7	ug/L	5353.7	ppb	20:26:10
2	Sc Radial	5601.7	5601.7	98.9	%			20:23:45
2	Y RADIAL	6022.6	6022.6	97.79	%			20:23:45
2	Al 396.153Radial†	6576.3	6669.0	4908.4	ug/L	4908.4	ppb	20:23:45
2	Ca 317.933Radial†	3279.7	3298.1	5043.4	ug/L	5043.4	ppb	20:24:05
2	Fe 238.204 Radial†	512.1	511.7	5168.6	ug/L	5168.6	ppb	20:24:05
2	K 766.490 Radial†	29664.6	27820.9	5040.4	ug/L	5040.4	ppb	20:23:45
2	Mg 279.077 IEC†	140.4	140.2	5224.8	ug/L	5224.8	ppb	20:24:05
2	Na 589.592 Radial†	26362.2	27268.3	10249	ug/L	10249	ppb	20:23:45
2	Sr 421.552†	75986.6	76819.7	518.53	ug/L	518.53	ppb	20:23:45
2	Sc 361.383	883060.7	883060.7	99.784	%			20:25:09
2	Y 371.029	727196.2	727196.2	97.995	%			20:25:09
2	Ag 328.068†	109023.7	109032.1	507.17	ug/L	507.17	ppb	20:25:14
2	As 188.979†	1184.5	1216.3	500.63	ug/L	500.63	ppb	20:25:34
2	B 249.677†	21969.1	22540.6	487.34	ug/L	487.34	ppb	20:25:14
2	Ba 233.527†	64749.2	64901.4	494.22	ug/L	494.22	ppb	20:25:14
2	Be 313.107†	1320305.8	1328484.2	494.64	ug/L	494.64	ppb	20:25:09
2	Cd 226.502†	45491.5	45777.8	496.44	ug/L	496.44	ppb	20:25:14
2	Co 228.616†	25417.2	25543.9	496.01	ug/L	496.01	ppb	20:25:14
2	Cr 267.716†	45704.0	45715.9	493.36	ug/L	493.36	ppb	20:25:14
2	Cu 324.752†	174510.5	168119.7	489.21	ug/L	489.21	ppb	20:25:14
2	Mn 257.610†	456506.8	457091.7	497.15	ug/L	497.15	ppb	20:25:09
2	Mo 202.031†	7756.6	7753.3	505.41	ug/L	505.41	ppb	20:25:34
2	Ni 231.604†	20941.4	20916.7	496.00	ug/L	496.00	ppb	20:25:14

2	P 214.914†	4376.9	4166.5	2401.3 ug/L	2401.3 ppb	20:25:34
2	Pb 220.353†	4170.0	4231.6	496.20 ug/L	496.20 ppb	20:25:34
2	S 181.975 Axial†	735.6	695.7	1016.3 ug/L	1016.3 ppb	20:25:34
2	Sb 206.836†	1575.0	1548.9	510.32 ug/L	510.32 ppb	20:25:34
2	Se 196.026†	807.9	833.1	514.91 ug/L	514.91 ppb	20:25:34
2	Si 251.611†	81740.4	81409.3	2477.9 ug/L	2477.9 ppb	20:25:14
2	Sn 189.927†	2997.0	2999.2	507.99 ug/L	507.99 ppb	20:25:34
2	Ti 334.940†	308054.3	309686.2	500.74 ug/L	500.74 ppb	20:25:14
2	Tl 190.801†	1686.7	1727.2	498.27 ug/L	498.27 ppb	20:25:34
2	U 409.014†	15823.1	17819.5	496.25 ug/L	496.25 ppb	20:25:14
2	V 292.402†	71041.0	72491.3	496.12 ug/L	496.12 ppb	20:25:14
2	Zn 213.857†	55900.7	55214.4	492.34 ug/L	492.34 ppb	20:25:14
2	SiO2†	83275.5	82967.0	5406.7 ug/L	5406.7 ppb	20:26:15
3	Sc Radial	5586.3	5586.3	98.6 %		20:24:10
3	Y RADIAL	6023.6	6023.6	97.81 %		20:24:10
3	Al 396.153Radial†	6606.3	6717.8	4944.5 ug/L	4944.5 ppb	20:24:10
3	Ca 317.933Radial†	3290.6	3318.3	5074.2 ug/L	5074.2 ppb	20:24:31
3	Fe 238.204 Radial†	512.4	513.5	5186.0 ug/L	5186.0 ppb	20:24:31
3	K 766.490 Radial†	29736.4	27976.3	5068.7 ug/L	5068.7 ppb	20:24:10
3	Mg 279.077 IEC†	139.6	139.8	5210.0 ug/L	5210.0 ppb	20:24:31
3	Na 589.592 Radial†	26134.9	27111.4	10190 ug/L	10190 ppb	20:24:10
3	Sr 421.552†	75703.2	76744.2	518.02 ug/L	518.02 ppb	20:24:10
3	Sc 361.383	887529.7	887529.7	100.29 %		20:25:40
3	Y 371.029	732100.4	732100.4	98.656 %		20:25:40
3	Ag 328.068†	110722.0	110175.4	512.48 ug/L	512.48 ppb	20:25:45
3	As 188.979†	1196.1	1221.9	502.99 ug/L	502.99 ppb	20:26:05
3	B 249.677†	22495.1	22954.2	496.30 ug/L	496.30 ppb	20:25:45
3	Ba 233.527†	65745.8	65568.4	499.30 ug/L	499.30 ppb	20:25:45
3	Be 313.107†	1325523.4	1327024.3	494.11 ug/L	494.11 ppb	20:25:40
3	Cd 226.502†	46221.6	46276.2	501.85 ug/L	501.85 ppb	20:25:45
3	Co 228.616†	25819.4	25816.8	501.29 ug/L	501.29 ppb	20:25:45
3	Cr 267.716†	46322.8	46102.4	497.54 ug/L	497.54 ppb	20:25:45
3	Cu 324.752†	177746.1	170465.3	496.03 ug/L	496.03 ppb	20:25:45
3	Mn 257.610†	456668.7	454949.5	494.83 ug/L	494.83 ppb	20:25:40
3	Mo 202.031†	7790.2	7747.8	505.05 ug/L	505.05 ppb	20:26:05
3	Ni 231.604†	21220.8	21089.5	500.10 ug/L	500.10 ppb	20:25:45
3	P 214.914†	4397.7	4165.1	2399.4 ug/L	2399.4 ppb	20:26:05
3	Pb 220.353†	4209.8	4250.2	498.37 ug/L	498.37 ppb	20:26:05
3	S 181.975 Axial†	728.7	685.2	1000.9 ug/L	1000.9 ppb	20:26:05
3	Sb 206.836†	1596.6	1562.4	514.55 ug/L	514.55 ppb	20:26:05
3	Se 196.026†	809.9	831.0	513.72 ug/L	513.72 ppb	20:26:05
3	Si 251.611†	83228.2	82480.4	2510.7 ug/L	2510.7 ppb	20:25:45
3	Sn 189.927†	2999.8	2986.9	505.91 ug/L	505.91 ppb	20:26:05
3	Ti 334.940†	313230.3	313292.8	506.57 ug/L	506.57 ppb	20:25:45
3	Tl 190.801†	1692.4	1724.4	497.47 ug/L	497.47 ppb	20:26:05
3	U 409.014†	16027.6	17943.6	499.71 ug/L	499.71 ppb	20:25:45
3	V 292.402†	72349.2	73437.3	502.50 ug/L	502.50 ppb	20:25:45
3	Zn 213.857†	56827.2	55856.2	498.08 ug/L	498.08 ppb	20:25:45
3	SiO2†	83136.6	82408.2	5370.1 ug/L	5370.1 ppb	20:26:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	885362.4	100.04	%	0.253				0.25%
Sc Radial	5646.3	99.7	%	1.61				1.61%
Y 371.029	729665.4	98.328	%	0.3305				0.34%
Y RADIAL	6075.3	98.65	%	1.468				1.49%
Ag 328.068†	109253.8	508.19	ug/L	3.879	508.19	ppb	3.879	0.76%
QC value within limits for Ag 328.068 Recovery = 101.64%								
Al 396.153Radial†	6690.3	4924.1	ug/L	18.49	4924.1	ppb	18.49	0.38%
QC value within limits for Al 396.153Radial Recovery = 98.48%								
As 188.979†	1219.5	501.98	ug/L	1.213	501.98	ppb	1.213	0.24%
QC value within limits for As 188.979 Recovery = 100.40%								
B 249.677†	22637.7	489.45	ug/L	6.080	489.45	ppb	6.080	1.24%
QC value within limits for B 249.677 Recovery = 97.89%								
Ba 233.527†	65125.9	495.93	ug/L	2.921	495.93	ppb	2.921	0.59%
QC value within limits for Ba 233.527 Recovery = 99.19%								
Be 313.107†	1327932.8	494.44	ug/L	0.287	494.44	ppb	0.287	0.06%
QC value within limits for Be 313.107 Recovery = 98.89%								
Ca 317.933Radial†	3273.0	5005.0	ug/L	94.40	5005.0	ppb	94.40	1.89%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.10%
Cd 226.502†            45962.5      498.44 ug/L         2.961      498.44 ppb          2.961   0.59%
   QC value within limits for Cd 226.502  Recovery = 99.69%
Co 228.616†            25617.4      497.43 ug/L         3.378      497.43 ppb          3.378   0.68%
   QC value within limits for Co 228.616  Recovery = 99.49%
Cr 267.716†            45821.0      494.50 ug/L         2.660      494.50 ppb          2.660   0.54%
   QC value within limits for Cr 267.716  Recovery = 98.90%
Cu 324.752†           168518.9      490.36 ug/L         5.182      490.36 ppb          5.182   1.06%
   QC value within limits for Cu 324.752  Recovery = 98.07%
Fe 238.204 Radial†       508.6      5137.0 ug/L        70.32      5137.0 ppb         70.32   1.37%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.74%
K 766.490 Radial†      27837.2      5043.4 ug/L        23.93      5043.4 ppb         23.93   0.47%
   QC value within limits for K 766.490 Radial  Recovery = 100.87%
Mg 279.077 IEC†          138.9      5178.7 ug/L        67.40      5178.7 ppb         67.40   1.30%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.57%
Mn 257.610†           456390.6      496.39 ug/L         1.353      496.39 ppb          1.353   0.27%
   QC value within limits for Mn 257.610  Recovery = 99.28%
Mo 202.031†             7762.2      505.99 ug/L         1.318      505.99 ppb          1.318   0.26%
   QC value within limits for Mo 202.031  Recovery = 101.20%
Na 589.592 Radial†     27213.1       10229 ug/L          33.1       10229 ppb           33.1   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 102.29%
Ni 231.604†            20979.5      497.49 ug/L         2.267      497.49 ppb          2.267   0.46%
   QC value within limits for Ni 231.604  Recovery = 99.50%
P 214.914†              4174.9      2406.2 ug/L        10.14      2406.2 ppb         10.14   0.42%
   QC value within limits for P 214.914  Recovery = 96.25%
Pb 220.353†             4245.6      497.84 ug/L         1.450      497.84 ppb          1.450   0.29%
   QC value within limits for Pb 220.353  Recovery = 99.57%
S 181.975 Axial†         691.0      1009.4 ug/L         7.84      1009.4 ppb          7.84   0.78%
   QC value within limits for S 181.975 Axial  Recovery = 100.94%
Sb 206.836†             1554.9      512.27 ug/L         2.136      512.27 ppb          2.136   0.42%
   QC value within limits for Sb 206.836  Recovery = 102.45%
Se 196.026†              838.4      517.99 ug/L         6.394      517.99 ppb          6.394   1.23%
   QC value within limits for Se 196.026  Recovery = 103.60%
Si 251.611†            81730.3      2487.7 ug/L        19.95      2487.7 ppb         19.95   0.80%
   QC value within limits for Si 251.611  Recovery = 99.51%
Sn 189.927†             3002.2      508.49 ug/L         2.872      508.49 ppb          2.872   0.56%
   QC value within limits for Sn 189.927  Recovery = 101.70%
Sr 421.552†            76764.8      518.16 ug/L         0.323      518.16 ppb          0.323   0.06%
   QC value within limits for Sr 421.552  Recovery = 103.63%
Ti 334.940†           310613.4      502.23 ug/L         3.812      502.23 ppb          3.812   0.76%
   QC value within limits for Ti 334.940  Recovery = 100.45%
Tl 190.801†             1726.0      497.91 ug/L         0.409      497.91 ppb          0.409   0.08%
   QC value within limits for Tl 190.801  Recovery = 99.58%
U 409.014†             17761.3      494.63 ug/L         6.061      494.63 ppb          6.061   1.23%
   QC value within limits for U 409.014  Recovery = 98.93%
V 292.402†             72775.0      498.05 ug/L         3.870      498.05 ppb          3.870   0.78%
   QC value within limits for V 292.402  Recovery = 99.61%
Zn 213.857†            55431.8      494.29 ug/L         3.282      494.29 ppb          3.282   0.66%
   QC value within limits for Zn 213.857  Recovery = 98.86%
SiO2†                  82511.4      5376.8 ug/L        27.13      5376.8 ppb         27.13   0.50%
   QC value within limits for SiO2  Recovery = 100.55%
All analyte(s) passed QC.
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Sequence No.: 62
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 20:28:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5725.6	5725.6	101	%			20:30:22
1	Y RADIAL	6263.4	6263.4	101.7	%			20:30:22
1	Al 396.153Radial†	-7.4	13.0	9.6152	ug/L	9.6152	ppb	20:30:22
1	Ca 317.933Radial†	21.6	3.7	5.6475	ug/L	5.6475	ppb	20:30:42
1	Fe 238.204 Radial†	5.8	-0.3	-3.0203	ug/L	-3.0203	ppb	20:30:42
1	K 766.490 Radial†	2439.8	243.0	44.094	ug/L	44.094	ppb	20:30:22
1	Mg 279.077 IEC†	2.7	0.9	33.942	ug/L	33.942	ppb	20:30:42
1	Na 589.592 Radial†	-588.5	33.8	12.711	ug/L	12.711	ppb	20:30:22
1	Sr 421.552†	10.7	7.1	0.0480	ug/L	0.0480	ppb	20:30:22
1	Sc 361.383	878490.1	878490.1	99.268	%			20:31:39
1	Y 371.029	736008.6	736008.6	99.183	%			20:31:39
1	Ag 328.068†	274.6	49.1	0.2241	ug/L	0.2241	ppb	20:31:39
1	As 188.979†	-20.0	9.0	3.6724	ug/L	3.6724	ppb	20:31:59
1	B 249.677†	-261.8	260.1	5.6474	ug/L	5.6474	ppb	20:31:59
1	Ba 233.527†	-8.0	4.0	0.0295	ug/L	0.0295	ppb	20:31:59
1	Be 313.107†	-5265.2	16.2	0.0060	ug/L	0.0060	ppb	20:31:39
1	Cd 226.502†	-177.3	9.2	0.1002	ug/L	0.1002	ppb	20:31:59
1	Co 228.616†	-72.5	-1.2	-0.0231	ug/L	-0.0231	ppb	20:31:59
1	Cr 267.716†	66.6	-19.8	-0.2145	ug/L	-0.2145	ppb	20:31:59
1	Cu 324.752†	6766.2	47.5	0.1380	ug/L	0.1380	ppb	20:31:39
1	Mn 257.610†	589.9	190.9	0.2065	ug/L	0.2065	ppb	20:31:59
1	Mo 202.031†	23.6	3.8	0.2482	ug/L	0.2482	ppb	20:31:59
1	Ni 231.604†	59.8	-9.9	-0.2350	ug/L	-0.2350	ppb	20:31:59
1	P 214.914†	220.4	2.0	1.2012	ug/L	1.2012	ppb	20:31:59
1	Pb 220.353†	-48.1	4.1	0.4785	ug/L	0.4785	ppb	20:31:59
1	S 181.975 Axial†	42.4	1.2	1.8003	ug/L	1.8003	ppb	20:31:59
1	Sb 206.836†	32.5	3.2	1.0407	ug/L	1.0407	ppb	20:31:59
1	Se 196.026†	-19.1	4.2	2.4986	ug/L	2.4986	ppb	20:31:59
1	Si 251.611†	525.8	21.6	0.6421	ug/L	0.6421	ppb	20:31:59
1	Sn 189.927†	4.8	0.6	0.0948	ug/L	0.0948	ppb	20:31:59
1	Ti 334.940†	-970.5	-12.6	-0.0206	ug/L	-0.0206	ppb	20:31:39
1	Tl 190.801†	-26.0	10.7	3.0633	ug/L	3.0633	ppb	20:31:59
1	U 409.014†	-1899.9	48.3	1.3500	ug/L	1.3500	ppb	20:31:39
1	V 292.402†	-1310.0	-23.2	-0.1493	ug/L	-0.1493	ppb	20:31:39
1	Zn 213.857†	681.0	-121.2	-1.0904	ug/L	-1.0904	ppb	20:31:59
1	SiO2†	550.9	66.1	4.2873	ug/L	4.2873	ppb	20:32:55
2	Sc Radial	5703.0	5703.0	101	%			20:30:47
2	Y RADIAL	6180.9	6180.9	100.4	%			20:30:47
2	Al 396.153Radial†	-8.6	11.8	8.7023	ug/L	8.7023	ppb	20:30:47
2	Ca 317.933Radial†	22.0	4.2	6.3568	ug/L	6.3568	ppb	20:31:08
2	Fe 238.204 Radial†	7.2	1.1	11.534	ug/L	11.534	ppb	20:31:08
2	K 766.490 Radial†	2354.6	167.9	30.468	ug/L	30.468	ppb	20:30:47
2	Mg 279.077 IEC†	1.9	0.1	4.2837	ug/L	4.2837	ppb	20:31:08
2	Na 589.592 Radial†	-576.6	43.4	16.303	ug/L	16.303	ppb	20:30:47
2	Sr 421.552†	26.3	22.7	0.1533	ug/L	0.1533	ppb	20:30:47
2	Sc 361.383	879375.8	879375.8	99.368	%			20:32:05
2	Y 371.029	737736.9	737736.9	99.416	%			20:32:05
2	Ag 328.068†	315.1	89.5	0.4219	ug/L	0.4219	ppb	20:32:05
2	As 188.979†	-19.7	9.4	3.8311	ug/L	3.8311	ppb	20:32:25
2	B 249.677†	-256.3	266.0	5.7724	ug/L	5.7724	ppb	20:32:25
2	Ba 233.527†	2.9	14.9	0.1142	ug/L	0.1142	ppb	20:32:25
2	Be 313.107†	-5205.5	81.7	0.0302	ug/L	0.0302	ppb	20:32:05
2	Cd 226.502†	-167.1	19.6	0.2123	ug/L	0.2123	ppb	20:32:25
2	Co 228.616†	-85.0	-13.8	-0.2670	ug/L	-0.2670	ppb	20:32:25
2	Cr 267.716†	82.9	-3.5	-0.0360	ug/L	-0.0360	ppb	20:32:25
2	Cu 324.752†	6891.1	166.3	0.4843	ug/L	0.4843	ppb	20:32:05
2	Mn 257.610†	567.1	167.3	0.1828	ug/L	0.1828	ppb	20:32:25
2	Mo 202.031†	23.6	3.7	0.2431	ug/L	0.2431	ppb	20:32:25
2	Ni 231.604†	96.9	27.4	0.6491	ug/L	0.6491	ppb	20:32:25

2	P 214.914†	228.1	9.6	5.6003	ug/L	5.6003 ppb	20:32:25
2	Pb 220.353†	-54.6	-2.4	-0.2839	ug/L	-0.2839 ppb	20:32:25
2	S 181.975 Axial†	43.5	2.3	3.3359	ug/L	3.3359 ppb	20:32:25
2	Sb 206.836†	27.6	-1.8	-0.5681	ug/L	-0.5681 ppb	20:32:25
2	Se 196.026†	-23.5	-0.2	-0.0620	ug/L	-0.0620 ppb	20:32:25
2	Si 251.611†	536.6	32.0	0.9639	ug/L	0.9639 ppb	20:32:25
2	Sn 189.927†	7.9	3.6	0.6149	ug/L	0.6149 ppb	20:32:25
2	Ti 334.940†	-1000.9	-42.3	-0.0661	ug/L	-0.0661 ppb	20:32:05
2	Tl 190.801†	-25.8	10.9	3.1200	ug/L	3.1200 ppb	20:32:25
2	U 409.014†	-2106.1	-157.3	-4.3955	ug/L	-4.3955 ppb	20:32:05
2	V 292.402†	-1263.0	25.4	0.1648	ug/L	0.1648 ppb	20:32:05
2	Zn 213.857†	690.4	-112.4	-1.0175	ug/L	-1.0175 ppb	20:32:25
2	SiO2†	526.4	40.9	2.6450	ug/L	2.6450 ppb	20:33:00
3	Sc Radial	5826.1	5826.1	103	%		20:31:13
3	Y RADIAL	6369.9	6369.9	103.4	%		20:31:13
3	Al 396.153Radial†	-17.1	3.7	2.7378	ug/L	2.7378 ppb	20:31:13
3	Ca 317.933Radial†	17.0	-1.2	-1.8516	ug/L	-1.8516 ppb	20:31:33
3	Fe 238.204 Radial†	6.9	0.7	6.8301	ug/L	6.8301 ppb	20:31:33
3	K 766.490 Radial†	2450.8	212.1	38.488	ug/L	38.488 ppb	20:31:13
3	Mg 279.077 IEC†	-1.1	-2.8	-103.80	ug/L	-103.80 ppb	20:31:33
3	Na 589.592 Radial†	-615.0	18.2	6.8340	ug/L	6.8340 ppb	20:31:13
3	Sr 421.552†	-3.6	-6.9	-0.0466	ug/L	-0.0466 ppb	20:31:13
3	Sc 361.383	879002.4	879002.4	99.325	%		20:32:30
3	Y 371.029	737638.1	737638.1	99.403	%		20:32:30
3	Ag 328.068†	273.4	47.7	0.2220	ug/L	0.2220 ppb	20:32:30
3	As 188.979†	-19.7	9.4	3.8239	ug/L	3.8239 ppb	20:32:50
3	B 249.677†	-272.8	249.2	5.4084	ug/L	5.4084 ppb	20:32:50
3	Ba 233.527†	-9.8	2.1	0.0159	ug/L	0.0159 ppb	20:32:50
3	Be 313.107†	-5173.7	111.4	0.0414	ug/L	0.0414 ppb	20:32:30
3	Cd 226.502†	-171.6	15.0	0.1625	ug/L	0.1625 ppb	20:32:50
3	Co 228.616†	-61.0	10.4	0.2022	ug/L	0.2022 ppb	20:32:50
3	Cr 267.716†	56.8	-29.8	-0.3208	ug/L	-0.3208 ppb	20:32:50
3	Cu 324.752†	6781.5	58.9	0.1715	ug/L	0.1715 ppb	20:32:30
3	Mn 257.610†	528.2	128.3	0.1421	ug/L	0.1421 ppb	20:32:50
3	Mo 202.031†	24.7	4.9	0.3197	ug/L	0.3197 ppb	20:32:50
3	Ni 231.604†	81.9	12.4	0.2932	ug/L	0.2932 ppb	20:32:50
3	P 214.914†	217.8	-0.7	-0.4186	ug/L	-0.4186 ppb	20:32:50
3	Pb 220.353†	-54.7	-2.5	-0.2900	ug/L	-0.2900 ppb	20:32:50
3	S 181.975 Axial†	43.4	2.3	3.3256	ug/L	3.3256 ppb	20:32:50
3	Sb 206.836†	35.6	6.2	2.0420	ug/L	2.0420 ppb	20:32:50
3	Se 196.026†	-21.3	2.0	1.2388	ug/L	1.2388 ppb	20:32:50
3	Si 251.611†	518.2	13.7	0.4004	ug/L	0.4004 ppb	20:32:50
3	Sn 189.927†	4.6	0.4	0.0671	ug/L	0.0671 ppb	20:32:50
3	Ti 334.940†	-950.1	8.4	0.0137	ug/L	0.0137 ppb	20:32:30
3	Tl 190.801†	-34.7	2.0	0.5600	ug/L	0.5600 ppb	20:32:50
3	U 409.014†	-1955.8	-6.9	-0.1934	ug/L	-0.1934 ppb	20:32:30
3	V 292.402†	-1324.2	-36.7	-0.2469	ug/L	-0.2469 ppb	20:32:30
3	Zn 213.857†	706.8	-95.6	-0.8596	ug/L	-0.8596 ppb	20:32:50
3	SiO2†	569.3	84.3	5.4823	ug/L	5.4823 ppb	20:33:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878956.1	99.320	%	0.0502				0.05%
Sc Radial	5751.6	102	%	1.2				1.14%
Y 371.029	737127.9	99.334	%	0.1308				0.13%
Y RADIAL	6271.4	101.8	%	1.54				1.51%
Ag 328.068†	62.1	0.2893	ug/L	0.11478	0.2893	ppb	0.11478	39.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.5	7.0184	ug/L	3.73514	7.0184	ppb	3.73514	53.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	9.3	3.7758	ug/L	0.08962	3.7758	ppb	0.08962	2.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	258.4	5.6094	ug/L	0.18495	5.6094	ppb	0.18495	3.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.0	0.0532	ug/L	0.05328	0.0532	ppb	0.05328	100.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	69.7	0.0259	ug/L	0.01812	0.0259	ppb	0.01812	70.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.2	3.3842	ug/L	4.54817	3.3842	ppb	4.54817	134.39%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.6      0.1583 ug/L       0.05619      0.1583 ppb        0.05619  35.49%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.6     -0.0293 ug/L       0.23469     -0.0293 ppb        0.23469 800.49%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.7     -0.1905 ug/L       0.14394     -0.1905 ppb        0.14394  75.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                90.9      0.2646 ug/L       0.19096      0.2646 ppb        0.19096  72.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      5.1147 ug/L       7.42731      5.1147 ppb        7.42731 145.22%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         207.7      37.683 ug/L        6.8484      37.683 ppb         6.8484  18.17%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.6     -21.857 ug/L       72.4939     -21.857 ppb        72.4939 331.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               162.1      0.1771 ug/L       0.03258      0.1771 ppb        0.03258  18.39%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.1      0.2703 ug/L       0.04282      0.2703 ppb        0.04282  15.84%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         31.8      11.949 ug/L        4.7802      11.949 ppb         4.7802  40.00%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.9      0.2358 ug/L       0.44484      0.2358 ppb        0.44484 188.66%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  3.6      2.1277 ug/L       3.11455      2.1277 ppb        3.11455 146.38%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -0.3     -0.0318 ug/L       0.44197     -0.0318 ppb        0.44197 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.9      2.8206 ug/L       0.88363      2.8206 ppb        0.88363  31.33%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.5      0.8382 ug/L       1.31678      0.8382 ppb        1.31678 157.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.0      1.2252 ug/L       1.28036      1.2252 ppb        1.28036 104.50%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                22.5      0.6688 ug/L       0.28270      0.6688 ppb        0.28270  42.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.5      0.2589 ug/L       0.30857      0.2589 ppb        0.30857 119.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 7.6      0.0516 ug/L       0.10001      0.0516 ppb        0.10001 193.96%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.5     -0.0243 ug/L       0.04004     -0.0243 ppb        0.04004 164.56%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 7.8      2.2478 ug/L       1.46195      2.2478 ppb        1.46195  65.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -38.6     -1.0797 ug/L       2.97351     -1.0797 ppb        2.97351 275.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -11.5     -0.0771 ug/L       0.21511     -0.0771 ppb        0.21511 278.94%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -109.8     -0.9892 ug/L       0.11798     -0.9892 ppb        0.11798  11.93%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      63.8      4.1382 ug/L       1.42452      4.1382 ppb        1.42452  34.42%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 63
Sample ID: 1201985666|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 12/9/2009 20:35:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985666|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5889.5	5889.5	104	%			20:37:08
1	Y RADIAL	6380.6	6380.6	103.6	%			20:37:08
1	Al 396.153Radial†	-15.5	5.5	4.0395	ug/L	4.0395	ppb	20:37:08
1	Ca 317.933Radial†	30.7	11.8	18.102	ug/L	18.102	ppb	20:37:28
1	Fe 238.204 Radial†	7.0	0.7	7.4901	ug/L	7.4901	ppb	20:37:28
1	K 766.490 Radial†	2294.4	36.0	6.5146	ug/L	6.5146	ppb	20:37:08
1	Mg 279.077 IEC†	2.1	0.3	11.385	ug/L	11.385	ppb	20:37:28
1	Na 589.592 Radial†	-513.7	122.0	45.839	ug/L	45.839	ppb	20:37:08
1	Sr 421.552†	-9.4	-12.5	-0.0844	ug/L	-0.0844	ppb	20:37:08
1	Sc 361.383	908960.0	908960.0	102.71	%			20:38:25
1	Y 371.029	760634.4	760634.4	102.50	%			20:38:25
1	Ag 328.068†	248.1	14.0	0.0704	ug/L	0.0704	ppb	20:38:30
1	As 188.979†	-24.6	5.3	2.1573	ug/L	2.1573	ppb	20:38:50
1	B 249.677†	-318.6	213.7	4.6375	ug/L	4.6375	ppb	20:38:50
1	Ba 233.527†	-18.5	-6.0	-0.0454	ug/L	-0.0454	ppb	20:38:50
1	Be 313.107†	-5333.3	127.6	0.0477	ug/L	0.0477	ppb	20:38:30
1	Cd 226.502†	-189.6	3.2	0.0341	ug/L	0.0341	ppb	20:38:50
1	Co 228.616†	-70.2	3.4	0.0666	ug/L	0.0666	ppb	20:38:50
1	Cr 267.716†	85.1	-4.1	-0.0431	ug/L	-0.0431	ppb	20:38:50
1	Cu 324.752†	6980.1	27.2	0.0795	ug/L	0.0795	ppb	20:38:30
1	Mn 257.610†	598.4	179.2	0.1953	ug/L	0.1953	ppb	20:38:50
1	Mo 202.031†	22.4	1.8	0.1209	ug/L	0.1209	ppb	20:38:50
1	Ni 231.604†	83.8	11.5	0.2726	ug/L	0.2726	ppb	20:38:50
1	P 214.914†	219.0	-6.8	-4.0407	ug/L	-4.0407	ppb	20:38:50
1	Pb 220.353†	-55.9	-1.9	-0.2162	ug/L	-0.2162	ppb	20:38:50
1	S 181.975 Axial†	47.3	4.6	6.6558	ug/L	6.6558	ppb	20:38:50
1	Sb 206.836†	27.1	-3.2	-1.0415	ug/L	-1.0415	ppb	20:38:50
1	Se 196.026†	-28.7	-4.5	-2.6589	ug/L	-2.6589	ppb	20:38:50
1	Si 251.611†	758.7	230.7	7.0504	ug/L	7.0504	ppb	20:38:50
1	Sn 189.927†	5.0	0.6	0.1024	ug/L	0.1024	ppb	20:38:50
1	Ti 334.940†	-892.4	96.2	0.1587	ug/L	0.1587	ppb	20:38:30
1	Tl 190.801†	-25.4	12.2	3.4894	ug/L	3.4894	ppb	20:38:50
1	U 409.014†	-2193.4	-173.3	-4.8428	ug/L	-4.8428	ppb	20:38:25
1	V 292.402†	-1353.4	-21.2	-0.1519	ug/L	-0.1519	ppb	20:38:30
1	Zn 213.857†	832.6	3.4	0.0272	ug/L	0.0272	ppb	20:38:50
1	SiO2†	739.5	231.2	15.128	ug/L	15.128	ppb	20:39:56
2	Sc Radial	5849.4	5849.4	103	%			20:37:33
2	Y RADIAL	6351.4	6351.4	103.1	%			20:37:33
2	Al 396.153Radial†	-46.9	-25.1	-18.521	ug/L	-18.521	ppb	20:37:33
2	Ca 317.933Radial†	32.7	13.9	21.330	ug/L	21.330	ppb	20:37:53
2	Fe 238.204 Radial†	8.6	2.3	23.608	ug/L	23.608	ppb	20:37:53
2	K 766.490 Radial†	2263.9	21.6	3.9057	ug/L	3.9057	ppb	20:37:33
2	Mg 279.077 IEC†	0.7	-1.0	-38.721	ug/L	-38.721	ppb	20:37:53
2	Na 589.592 Radial†	-555.9	77.8	29.237	ug/L	29.237	ppb	20:37:33
2	Sr 421.552†	-14.8	-17.7	-0.1199	ug/L	-0.1199	ppb	20:37:33
2	Sc 361.383	913999.4	913999.4	103.28	%			20:38:55
2	Y 371.029	764401.4	764401.4	103.01	%			20:38:55
2	Ag 328.068†	258.6	22.8	0.1175	ug/L	0.1175	ppb	20:39:00
2	As 188.979†	-15.8	13.9	5.6786	ug/L	5.6786	ppb	20:39:20
2	B 249.677†	-343.5	191.3	4.1483	ug/L	4.1483	ppb	20:39:20
2	Ba 233.527†	-12.3	0.1	0.0023	ug/L	0.0023	ppb	20:39:20
2	Be 313.107†	-5382.4	108.8	0.0406	ug/L	0.0406	ppb	20:39:00
2	Cd 226.502†	-175.1	18.3	0.1959	ug/L	0.1959	ppb	20:39:20
2	Co 228.616†	-66.7	7.1	0.1379	ug/L	0.1379	ppb	20:39:20
2	Cr 267.716†	72.7	-16.6	-0.1767	ug/L	-0.1767	ppb	20:39:20
2	Cu 324.752†	7003.8	12.8	0.0383	ug/L	0.0383	ppb	20:39:00
2	Mn 257.610†	639.1	215.4	0.2372	ug/L	0.2372	ppb	20:39:20
2	Mo 202.031†	21.4	0.8	0.0520	ug/L	0.0520	ppb	20:39:20
2	Ni 231.604†	88.6	15.7	0.3716	ug/L	0.3716	ppb	20:39:20

2	P 214.914†	216.1	-10.7	-6.4149	ug/L	-6.4149	ppb	20:39:20
2	Pb 220.353†	-55.8	-1.5	-0.1787	ug/L	-0.1787	ppb	20:39:20
2	S 181.975 Axial†	44.5	1.6	2.3092	ug/L	2.3092	ppb	20:39:20
2	Sb 206.836†	34.0	3.3	1.0813	ug/L	1.0813	ppb	20:39:20
2	Se 196.026†	-30.5	-6.1	-3.5482	ug/L	-3.5482	ppb	20:39:20
2	Si 251.611†	747.4	215.7	6.5946	ug/L	6.5946	ppb	20:39:20
2	Sn 189.927†	4.7	0.2	0.0424	ug/L	0.0424	ppb	20:39:20
2	Ti 334.940†	-942.6	52.3	0.0877	ug/L	0.0877	ppb	20:39:00
2	Tl 190.801†	-40.9	-2.7	-0.7793	ug/L	-0.7793	ppb	20:39:20
2	U 409.014†	-2180.6	-149.2	-4.1716	ug/L	-4.1716	ppb	20:38:55
2	V 292.402†	-1291.2	46.3	0.3005	ug/L	0.3005	ppb	20:39:00
2	Zn 213.857†	837.3	3.4	0.0272	ug/L	0.0272	ppb	20:39:20
2	SiO2†	775.4	262.0	17.151	ug/L	17.151	ppb	20:40:01
3	Sc Radial	5785.8	5785.8	102	%			20:37:58
3	Y RADIAL	6289.4	6289.4	102.1	%			20:37:58
3	Al 396.153Radial†	-32.4	-11.4	-8.4284	ug/L	-8.4284	ppb	20:37:58
3	Ca 317.933Radial†	28.5	10.2	15.570	ug/L	15.570	ppb	20:38:18
3	Fe 238.204 Radial†	6.1	-0.1	-0.5875	ug/L	-0.5875	ppb	20:38:18
3	K 766.490 Radial†	2264.6	46.3	8.3945	ug/L	8.3945	ppb	20:37:58
3	Mg 279.077 IEC†	0.6	-1.2	-43.224	ug/L	-43.224	ppb	20:38:18
3	Na 589.592 Radial†	-580.2	48.0	18.056	ug/L	18.056	ppb	20:37:58
3	Sr 421.552†	34.3	30.2	0.2036	ug/L	0.2036	ppb	20:37:58
3	Sc 361.383	912189.2	912189.2	103.08	%			20:39:26
3	Y 371.029	763327.2	763327.2	102.86	%			20:39:26
3	Ag 328.068†	307.0	70.3	0.3278	ug/L	0.3278	ppb	20:39:31
3	As 188.979†	-21.4	8.4	3.4366	ug/L	3.4366	ppb	20:39:51
3	B 249.677†	-317.3	216.0	4.6888	ug/L	4.6888	ppb	20:39:51
3	Ba 233.527†	-19.3	-6.7	-0.0509	ug/L	-0.0509	ppb	20:39:51
3	Be 313.107†	-5289.4	188.7	0.0703	ug/L	0.0703	ppb	20:39:31
3	Cd 226.502†	-178.3	14.8	0.1612	ug/L	0.1612	ppb	20:39:51
3	Co 228.616†	-75.7	-1.7	-0.0321	ug/L	-0.0321	ppb	20:39:51
3	Cr 267.716†	93.0	3.2	0.0362	ug/L	0.0362	ppb	20:39:51
3	Cu 324.752†	7000.5	22.9	0.0667	ug/L	0.0667	ppb	20:39:31
3	Mn 257.610†	618.9	197.0	0.2148	ug/L	0.2148	ppb	20:39:51
3	Mo 202.031†	24.0	3.3	0.2141	ug/L	0.2141	ppb	20:39:51
3	Ni 231.604†	79.7	7.2	0.1699	ug/L	0.1699	ppb	20:39:51
3	P 214.914†	220.7	-5.9	-3.5170	ug/L	-3.5170	ppb	20:39:51
3	Pb 220.353†	-58.4	-4.1	-0.4799	ug/L	-0.4799	ppb	20:39:51
3	S 181.975 Axial†	48.2	5.3	7.7534	ug/L	7.7534	ppb	20:39:51
3	Sb 206.836†	33.0	2.4	0.7510	ug/L	0.7510	ppb	20:39:51
3	Se 196.026†	-27.9	-3.6	-2.1566	ug/L	-2.1566	ppb	20:39:51
3	Si 251.611†	714.7	185.4	5.6688	ug/L	5.6688	ppb	20:39:51
3	Sn 189.927†	-7.3	-11.3	-1.9164	ug/L	-1.9164	ppb	20:39:51
3	Ti 334.940†	-939.5	53.5	0.0888	ug/L	0.0888	ppb	20:39:31
3	Tl 190.801†	-27.2	10.5	3.0004	ug/L	3.0004	ppb	20:39:51
3	U 409.014†	-2143.4	-117.3	-3.2764	ug/L	-3.2764	ppb	20:39:26
3	V 292.402†	-1323.4	12.5	0.0803	ug/L	0.0803	ppb	20:39:31
3	Zn 213.857†	831.7	-0.4	-0.0032	ug/L	-0.0032	ppb	20:39:51
3	SiO2†	763.4	251.8	16.486	ug/L	16.486	ppb	20:40:06

Mean Data: 1201985666|928625|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911716.2	103.02	%	0.288				0.28%
Sc Radial	5841.6	103	%	0.9				0.89%
Y 371.029	762787.7	102.79	%	0.262				0.25%
Y RADIAL	6340.5	103.0	%	0.76				0.73%
Ag 328.068†	35.7	0.1719	ug/L	0.13703	0.1719	ppb	0.13703	79.72%
Al 396.153Radial†	-10.3	-7.6368	ug/L	11.30124	-7.6368	ppb	11.30124	147.98%
As 188.979†	9.2	3.7575	ug/L	1.78243	3.7575	ppb	1.78243	47.44%
B 249.677†	207.0	4.4915	ug/L	0.29838	4.4915	ppb	0.29838	6.64%
Ba 233.527†	-4.2	-0.0313	ug/L	0.02929	-0.0313	ppb	0.02929	93.47%
Be 313.107†	141.7	0.0529	ug/L	0.01551	0.0529	ppb	0.01551	29.33%
Ca 317.933Radial†	12.0	18.334	ug/L	2.8866	18.334	ppb	2.8866	15.74%
Cd 226.502†	12.1	0.1304	ug/L	0.08519	0.1304	ppb	0.08519	65.32%
Co 228.616†	3.0	0.0575	ug/L	0.08536	0.0575	ppb	0.08536	148.47%
Cr 267.716†	-5.8	-0.0612	ug/L	0.10758	-0.0612	ppb	0.10758	175.70%
Cu 324.752†	21.0	0.0615	ug/L	0.02106	0.0615	ppb	0.02106	34.24%
Fe 238.204 Radial†	1.0	10.170	ug/L	12.3182	10.170	ppb	12.3182	121.12%
K 766.490 Radial†	34.7	6.2716	ug/L	2.25426	6.2716	ppb	2.25426	35.94%

Mg 279.077 IEC†	-0.6	-23.520	ug/L	30.3125	-23.520	ppb	30.3125 128.88%
Mn 257.610†	197.2	0.2158	ug/L	0.02096	0.2158	ppb	0.02096 9.72%
Mo 202.031†	2.0	0.1290	ug/L	0.08135	0.1290	ppb	0.08135 63.06%
Na 589.592 Radial†	82.6	31.044	ug/L	13.9792	31.044	ppb	13.9792 45.03%
Ni 231.604†	11.4	0.2713	ug/L	0.10087	0.2713	ppb	0.10087 37.17%
P 214.914†	-7.8	-4.6575	ug/L	1.54429	-4.6575	ppb	1.54429 33.16%
Pb 220.353†	-2.5	-0.2916	ug/L	0.16416	-0.2916	ppb	0.16416 56.30%
S 181.975 Axial†	3.8	5.5728	ug/L	2.87912	5.5728	ppb	2.87912 51.66%
Sb 206.836†	0.8	0.2636	ug/L	1.14224	0.2636	ppb	1.14224 433.29%
Se 196.026†	-4.7	-2.7879	ug/L	0.70473	-2.7879	ppb	0.70473 25.28%
Si 251.611†	210.6	6.4379	ug/L	0.70402	6.4379	ppb	0.70402 10.94%
Sn 189.927†	-3.5	-0.5905	ug/L	1.14864	-0.5905	ppb	1.14864 194.51%
Sr 421.552†	-0.0	-0.0003	ug/L	0.17742	-0.0003	ppb	0.17742 >999.9%
Ti 334.940†	67.4	0.1117	ug/L	0.04067	0.1117	ppb	0.04067 36.40%
Tl 190.801†	6.6	1.9035	ug/L	2.33620	1.9035	ppb	2.33620 122.73%
U 409.014†	-146.6	-4.0969	ug/L	0.78583	-4.0969	ppb	0.78583 19.18%
V 292.402†	12.5	0.0763	ug/L	0.22621	0.0763	ppb	0.22621 296.39%
Zn 213.857†	2.1	0.0171	ug/L	0.01754	0.0171	ppb	0.01754 102.68%
SiO2†	248.3	16.255	ug/L	1.0309	16.255	ppb	1.0309 6.34%

Sequence No.: 64
Sample ID: 1201985667|928625|7
Analyst: HSC
Initial Sample Wt:
Dilution:

12/10/09

Autosampler Location: 87
Date Collected: 12/9/2009 20:42:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985667|928625|7

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5761.2	5761.2	102	%			20:44:11
1	Y RADIAL	6223.5	6223.5	101.1	%			20:44:11
1	Al 396.153Radial†	7042.2	6943.0	5110.5	ug/L	5110.5	ppb	20:44:11
1	Ca 317.933Radial†	3470.0	3393.3	5189.0	ug/L	5189.0	ppb	20:44:31
1	Fe 238.204 Radial†	547.7	532.4	5376.8	ug/L	5376.8	ppb	20:44:31
1	K 766.490 Radial†	31469.0	28764.3	5213.5	ug/L	5213.5	ppb	20:44:11
1	Mg 279.077 IEC†	149.2	144.9	5402.6	ug/L	5402.6	ppb	20:44:31
1	Na 589.592 Radial†	14383.2	14754.9	5546.0	ug/L	5546.0	ppb	20:44:11
1	Sr 421.552†	82614.7	81208.3	548.16	ug/L	548.16	ppb	20:44:11
1	Sc 361.383	908259.9	908259.9	102.63	%			20:45:30
1	Y 371.029	748846.5	748846.5	100.91	%			20:45:30
1	Ag 328.068†	114391.8	111231.3	517.46	ug/L	517.46	ppb	20:45:30
1	As 188.979†	1262.3	1259.1	518.37	ug/L	518.37	ppb	20:45:50
1	B 249.677†	23345.0	23270.3	503.13	ug/L	503.13	ppb	20:45:30
1	Ba 233.527†	70326.6	68535.4	521.87	ug/L	521.87	ppb	20:45:30
1	Be 313.107†	1403333.1	1372672.3	511.11	ug/L	511.11	ppb	20:45:30
1	Cd 226.502†	48435.1	47381.0	513.82	ug/L	513.82	ppb	20:45:30
1	Co 228.616†	26599.2	25989.0	504.62	ug/L	504.62	ppb	20:45:50
1	Cr 267.716†	48223.1	46899.7	506.15	ug/L	506.15	ppb	20:45:30
1	Cu 324.752†	187335.9	175764.0	511.45	ug/L	511.45	ppb	20:45:30
1	Mn 257.610†	486211.9	473342.1	514.83	ug/L	514.83	ppb	20:45:30
1	Mo 202.031†	8142.0	7913.2	515.84	ug/L	515.84	ppb	20:45:50
1	Ni 231.604†	22305.9	21663.8	513.72	ug/L	513.72	ppb	20:45:50
1	P 214.914†	1280.8	1028.0	533.56	ug/L	533.56	ppb	20:45:50
1	Pb 220.353†	4515.2	4452.0	522.00	ug/L	522.00	ppb	20:45:50
1	S 181.975 Axial†	3765.6	3627.6	5303.4	ug/L	5303.4	ppb	20:45:50
1	Sb 206.836†	1715.3	1641.7	540.85	ug/L	540.85	ppb	20:45:50
1	Se 196.026†	867.2	868.4	536.63	ug/L	536.63	ppb	20:45:50
1	Si 251.611†	170388.8	165512.1	5049.9	ug/L	5049.9	ppb	20:45:30
1	Sn 189.927†	3261.4	3173.5	537.50	ug/L	537.50	ppb	20:45:50
1	Ti 334.940†	333417.2	325833.5	526.85	ug/L	526.85	ppb	20:45:30
1	Tl 190.801†	1809.0	1799.5	519.22	ug/L	519.22	ppb	20:45:50
1	U 409.014†	16746.3	18279.1	509.04	ug/L	509.04	ppb	20:45:30
1	V 292.402†	75948.9	75298.1	515.18	ug/L	515.18	ppb	20:45:30
1	Zn 213.857†	58996.1	56676.2	505.32	ug/L	505.32	ppb	20:45:30
1	SiO2†	170607.6	165744.4	10827	ug/L	10827	ppb	20:46:50
2	Sc Radial	5789.8	5789.8	102	%			20:44:36
2	Y RADIAL	6251.8	6251.8	101.5	%			20:44:36
2	Al 396.153Radial†	7058.2	6924.4	5097.0	ug/L	5097.0	ppb	20:44:36
2	Ca 317.933Radial†	3457.0	3363.8	5143.9	ug/L	5143.9	ppb	20:44:56
2	Fe 238.204 Radial†	541.5	523.6	5288.0	ug/L	5288.0	ppb	20:44:56
2	K 766.490 Radial†	31554.9	28695.4	5201.0	ug/L	5201.0	ppb	20:44:36
2	Mg 279.077 IEC†	150.4	145.4	5419.0	ug/L	5419.0	ppb	20:44:56
2	Na 589.592 Radial†	14343.8	14646.5	5505.2	ug/L	5505.2	ppb	20:44:36
2	Sr 421.552†	82696.6	80886.9	545.99	ug/L	545.99	ppb	20:44:36
2	Sc 361.383	908869.3	908869.3	102.70	%			20:45:57
2	Y 371.029	749850.8	749850.8	101.05	%			20:45:57
2	Ag 328.068†	114638.7	111396.9	518.19	ug/L	518.19	ppb	20:45:57
2	As 188.979†	1242.8	1239.3	510.28	ug/L	510.28	ppb	20:46:17
2	B 249.677†	23509.6	23415.3	506.31	ug/L	506.31	ppb	20:45:57
2	Ba 233.527†	70244.4	68409.5	520.91	ug/L	520.91	ppb	20:45:57
2	Be 313.107†	1403937.3	1372343.8	510.99	ug/L	510.99	ppb	20:45:57
2	Cd 226.502†	48379.6	47295.4	512.89	ug/L	512.89	ppb	20:45:57
2	Co 228.616†	26200.4	25583.3	496.73	ug/L	496.73	ppb	20:46:17
2	Cr 267.716†	48255.0	46899.2	506.14	ug/L	506.14	ppb	20:45:57
2	Cu 324.752†	187567.2	175866.9	511.74	ug/L	511.74	ppb	20:45:57
2	Mn 257.610†	485852.5	472674.6	514.09	ug/L	514.09	ppb	20:45:57
2	Mo 202.031†	8042.9	7811.4	509.21	ug/L	509.21	ppb	20:46:17
2	Ni 231.604†	21943.6	21296.6	505.01	ug/L	505.01	ppb	20:46:17

2	P 214.914†	1253.2	1000.3	517.04	ug/L	517.04 ppb	20:46:17
2	Pb 220.353†	4436.5	4372.3	512.68	ug/L	512.68 ppb	20:46:17
2	S 181.975 Axial†	3684.2	3545.8	5183.8	ug/L	5183.8 ppb	20:46:17
2	Sb 206.836†	1670.5	1597.0	526.10	ug/L	526.10 ppb	20:46:17
2	Se 196.026†	853.3	854.3	527.96	ug/L	527.96 ppb	20:46:17
2	Si 251.611†	170531.6	165539.8	5050.9	ug/L	5050.9 ppb	20:45:57
2	Sn 189.927†	3227.8	3138.7	531.60	ug/L	531.60 ppb	20:46:17
2	Ti 334.940†	333649.5	325841.9	526.86	ug/L	526.86 ppb	20:45:57
2	Tl 190.801†	1795.6	1785.2	515.16	ug/L	515.16 ppb	20:46:17
2	U 409.014†	16933.1	18450.1	513.83	ug/L	513.83 ppb	20:45:57
2	V 292.402†	75932.7	75232.7	514.67	ug/L	514.67 ppb	20:45:57
2	Zn 213.857†	58865.0	56509.9	503.89	ug/L	503.89 ppb	20:45:57
2	SiO2†	171625.3	166624.0	10884	ug/L	10884 ppb	20:46:56
3	Sc Radial	5852.4	5852.4	103	%		20:45:01
3	Y RADIAL	6296.3	6296.3	102.2	%		20:45:01
3	Al 396.153Radial†	7134.3	6924.1	5096.7	ug/L	5096.7 ppb	20:45:01
3	Ca 317.933Radial†	3467.1	3337.4	5103.4	ug/L	5103.4 ppb	20:45:21
3	Fe 238.204 Radial†	551.1	527.3	5325.3	ug/L	5325.3 ppb	20:45:21
3	K 766.490 Radial†	31720.3	28525.0	5170.1	ug/L	5170.1 ppb	20:45:01
3	Mg 279.077 IEC†	149.9	143.3	5340.9	ug/L	5340.9 ppb	20:45:21
3	Na 589.592 Radial†	14434.6	14584.2	5481.8	ug/L	5481.8 ppb	20:45:01
3	Sr 421.552†	83225.9	80533.2	543.60	ug/L	543.60 ppb	20:45:01
3	Sc 361.383	905422.3	905422.3	102.31	%		20:46:25
3	Y 371.029	746948.3	746948.3	100.66	%		20:46:25
3	Ag 328.068†	113827.6	111029.1	516.51	ug/L	516.51 ppb	20:46:25
3	As 188.979†	1251.3	1252.3	515.55	ug/L	515.55 ppb	20:46:45
3	B 249.677†	23264.5	23262.9	502.98	ug/L	502.98 ppb	20:46:25
3	Ba 233.527†	70159.6	68587.0	522.26	ug/L	522.26 ppb	20:46:25
3	Be 313.107†	1400546.8	1374234.2	511.69	ug/L	511.69 ppb	20:46:25
3	Cd 226.502†	48388.5	47483.4	514.93	ug/L	514.93 ppb	20:46:25
3	Co 228.616†	26344.9	25821.7	501.37	ug/L	501.37 ppb	20:46:45
3	Cr 267.716†	48020.5	46848.9	505.60	ug/L	505.60 ppb	20:46:25
3	Cu 324.752†	186051.0	175080.2	509.46	ug/L	509.46 ppb	20:46:25
3	Mn 257.610†	484920.2	473564.4	515.07	ug/L	515.07 ppb	20:46:25
3	Mo 202.031†	8054.9	7852.9	511.91	ug/L	511.91 ppb	20:46:45
3	Ni 231.604†	22096.9	21527.7	510.49	ug/L	510.49 ppb	20:46:45
3	P 214.914†	1252.5	1004.3	519.81	ug/L	519.81 ppb	20:46:45
3	Pb 220.353†	4456.0	4407.9	516.84	ug/L	516.84 ppb	20:46:45
3	S 181.975 Axial†	3729.2	3603.5	5268.0	ug/L	5268.0 ppb	20:46:45
3	Sb 206.836†	1693.8	1625.9	535.62	ug/L	535.62 ppb	20:46:45
3	Se 196.026†	858.4	862.5	532.94	ug/L	532.94 ppb	20:46:45
3	Si 251.611†	169719.0	165377.7	5045.9	ug/L	5045.9 ppb	20:46:25
3	Sn 189.927†	3240.2	3162.8	535.67	ug/L	535.67 ppb	20:46:45
3	Ti 334.940†	331930.3	325398.3	526.14	ug/L	526.14 ppb	20:46:25
3	Tl 190.801†	1812.9	1808.8	521.89	ug/L	521.89 ppb	20:46:45
3	U 409.014†	16751.3	18335.2	510.62	ug/L	510.62 ppb	20:46:25
3	V 292.402†	75628.3	75216.7	514.59	ug/L	514.59 ppb	20:46:25
3	Zn 213.857†	58795.0	56659.8	505.21	ug/L	505.21 ppb	20:46:25
3	SiO2†	170070.4	165740.4	10826	ug/L	10826 ppb	20:47:01

1/12/10 [illegible]

Mean Data: 1201985667|928625|7

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907517.2	102.55	%	0.208				0.20%
Sc Radial	5801.1	102	%	0.8				0.80%
Y 371.029	748548.5	100.87	%	0.199				0.20%
Y RADIAL	6257.2	101.6	%	0.60				0.59%
Ag 328.068†	111219.1	517.39	ug/L	0.845	517.39	ppb	0.845	0.16%
Al 396.153Radial†	6930.5	5101.4	ug/L	7.86	5101.4	ppb	7.86	0.15%
As 188.979†	1250.2	514.73	ug/L	4.108	514.73	ppb	4.108	0.80%
B 249.677†	23316.2	504.14	ug/L	1.879	504.14	ppb	1.879	0.37%
Ba 233.527†	68510.6	521.68	ug/L	0.695	521.68	ppb	0.695	0.13%
Be 313.107†	1373083.4	511.26	ug/L	0.375	511.26	ppb	0.375	0.07%
Ca 317.933Radial†	3364.8	5145.4	ug/L	42.80	5145.4	ppb	42.80	0.83%
Cd 226.502†	47386.6	513.88	ug/L	1.021	513.88	ppb	1.021	0.20%
Co 228.616†	25798.0	500.91	ug/L	3.966	500.91	ppb	3.966	0.79%
Cr 267.716†	46882.6	505.97	ug/L	0.315	505.97	ppb	0.315	0.06%
Cu 324.752†	175570.4	510.88	ug/L	1.243	510.88	ppb	1.243	0.24%
Fe 238.204 Radial†	527.8	5330.0	ug/L	44.59	5330.0	ppb	44.59	0.84%
K 766.490 Radial†	28661.6	5194.9	ug/L	22.34	5194.9	ppb	22.34	0.43%

Mg 279.077 IEC†	144.5	5387.5	ug/L	41.19	5387.5	ppb	41.19	0.76%
Mn 257.610†	473193.7	514.66	ug/L	0.507	514.66	ppb	0.507	0.10%
Mo 202.031†	7859.2	512.32	ug/L	3.338	512.32	ppb	3.338	0.65%
Na 589.592 Radial†	14661.9	5511.0	ug/L	32.48	5511.0	ppb	32.48	0.59%
Ni 231.604†	21496.0	509.74	ug/L	4.403	509.74	ppb	4.403	0.86%
P 214.914†	1010.8	523.47	ug/L	8.848	523.47	ppb	8.848	1.69%
Pb 220.353†	4410.7	517.17	ug/L	4.671	517.17	ppb	4.671	0.90%
S 181.975 Axial†	3592.3	5251.7	ug/L	61.43	5251.7	ppb	61.43	1.17%
Sb 206.836†	1621.5	534.19	ug/L	7.480	534.19	ppb	7.480	1.40%
Se 196.026†	861.7	532.51	ug/L	4.349	532.51	ppb	4.349	0.82%
Si 251.611†	165476.5	5048.9	ug/L	2.65	5048.9	ppb	2.65	0.05%
Sn 189.927†	3158.3	534.92	ug/L	3.022	534.92	ppb	3.022	0.56%
Sr 421.552†	80876.1	545.91	ug/L	2.279	545.91	ppb	2.279	0.42%
Ti 334.940†	325691.2	526.61	ug/L	0.412	526.61	ppb	0.412	0.08%
Tl 190.801†	1797.8	518.76	ug/L	3.391	518.76	ppb	3.391	0.65%
U 409.014†	18354.8	511.16	ug/L	2.440	511.16	ppb	2.440	0.48%
V 292.402†	75249.2	514.81	ug/L	0.323	514.81	ppb	0.323	0.06%
Zn 213.857†	56615.3	504.81	ug/L	0.795	504.81	ppb	0.795	0.16%
SiO2†	166036.3	10846	ug/L	33.4	10846	ppb	33.4	0.31%

Sequence No.: 65
Sample ID: 241835001|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 12/9/2009 20:49:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241835001|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5970.0	5970.0	105	%			20:51:05
1	Y RADIAL	6438.7	6438.7	104.5	%			20:51:05
1	Al 396.153Radial†	-16.9	4.3	3.1471	ug/L	3.1471	ppb	20:51:25
1	Ca 317.933Radial†	42.8	22.9	35.018	ug/L	35.018	ppb	20:51:25
1	Fe 238.204 Radial†	5.5	-0.8	-8.1805	ug/L	-8.1805	ppb	20:51:25
1	K 766.490 Radial†	2313.6	24.5	4.4202	ug/L	4.4202	ppb	20:51:05
1	Mg 279.077 IEC†	1.4	-0.4	-16.649	ug/L	-16.649	ppb	20:51:25
1	Na 589.592 Radial†	-571.4	73.9	27.769	ug/L	27.769	ppb	20:51:05
1	Sr 421.552†	40.5	35.0	0.2359	ug/L	0.2359	ppb	20:51:05
1	Sc 361.383	908634.8	908634.8	102.67	%			20:52:22
1	Y 371.029	761909.9	761909.9	102.67	%			20:52:22
1	Ag 328.068†	251.7	17.6	0.0773	ug/L	0.0773	ppb	20:52:22
1	As 188.979†	-22.9	6.9	2.7966	ug/L	2.7966	ppb	20:52:42
1	B 249.677†	-250.9	279.5	6.0681	ug/L	6.0681	ppb	20:52:42
1	Ba 233.527†	9.3	21.1	0.1614	ug/L	0.1614	ppb	20:52:42
1	Be 313.107†	-5295.8	162.4	0.0607	ug/L	0.0607	ppb	20:52:22
1	Cd 226.502†	-181.3	11.2	0.1228	ug/L	0.1228	ppb	20:52:42
1	Co 228.616†	-63.9	9.5	0.1847	ug/L	0.1847	ppb	20:52:42
1	Cr 267.716†	79.9	-9.1	-0.0985	ug/L	-0.0985	ppb	20:52:42
1	Cu 324.752†	7023.5	71.9	0.2088	ug/L	0.2088	ppb	20:52:22
1	Mn 257.610†	649.8	229.4	0.2488	ug/L	0.2488	ppb	20:52:42
1	Mo 202.031†	25.3	4.7	0.3025	ug/L	0.3025	ppb	20:52:42
1	Ni 231.604†	87.5	15.1	0.3593	ug/L	0.3593	ppb	20:52:42
1	P 214.914†	225.4	-0.4	-0.2930	ug/L	-0.2930	ppb	20:52:42
1	Pb 220.353†	-69.0	-14.7	-1.7129	ug/L	-1.7129	ppb	20:52:42
1	S 181.975 Axial†	50.2	7.5	10.901	ug/L	10.901	ppb	20:52:42
1	Sb 206.836†	40.4	9.8	3.1716	ug/L	3.1716	ppb	20:52:42
1	Se 196.026†	-26.8	-2.7	-1.6280	ug/L	-1.6280	ppb	20:52:42
1	Si 251.611†	1330.3	787.6	24.084	ug/L	24.084	ppb	20:52:42
1	Sn 189.927†	1.9	-2.4	-0.4083	ug/L	-0.4083	ppb	20:52:42
1	Ti 334.940†	-868.8	118.9	0.1921	ug/L	0.1921	ppb	20:52:22
1	Tl 190.801†	-37.2	0.7	0.1884	ug/L	0.1884	ppb	20:52:42
1	U 409.014†	-1849.9	160.5	4.4843	ug/L	4.4843	ppb	20:52:22
1	V 292.402†	-1213.8	114.3	0.7852	ug/L	0.7852	ppb	20:52:22
1	Zn 213.857†	800.0	-28.1	-0.2542	ug/L	-0.2542	ppb	20:52:42
1	SiO2†	1400.3	875.0	57.288	ug/L	57.288	ppb	20:53:38
2	Sc Radial	5950.8	5950.8	105	%			20:51:30
2	Y RADIAL	6456.4	6456.4	104.8	%			20:51:30
2	Al 396.153Radial†	-15.6	5.5	4.0251	ug/L	4.0251	ppb	20:51:50
2	Ca 317.933Radial†	39.3	19.7	30.063	ug/L	30.063	ppb	20:51:50
2	Fe 238.204 Radial†	7.0	0.6	6.2688	ug/L	6.2688	ppb	20:51:50
2	K 766.490 Radial†	2296.9	15.6	2.8236	ug/L	2.8236	ppb	20:51:30
2	Mg 279.077 IEC†	1.8	-0.1	-2.3920	ug/L	-2.3920	ppb	20:51:50
2	Na 589.592 Radial†	-561.2	81.8	30.762	ug/L	30.762	ppb	20:51:30
2	Sr 421.552†	-17.4	-20.0	-0.1350	ug/L	-0.1350	ppb	20:51:30
2	Sc 361.383	908590.4	908590.4	102.67	%			20:52:47
2	Y 371.029	762295.7	762295.7	102.73	%			20:52:47
2	Ag 328.068†	191.3	-41.3	-0.1938	ug/L	-0.1938	ppb	20:52:47
2	As 188.979†	-28.1	1.9	0.7568	ug/L	0.7568	ppb	20:53:07
2	B 249.677†	-225.7	304.1	6.5990	ug/L	6.5990	ppb	20:53:07
2	Ba 233.527†	10.7	22.5	0.1727	ug/L	0.1727	ppb	20:53:07
2	Be 313.107†	-5316.6	141.9	0.0531	ug/L	0.0531	ppb	20:52:47
2	Cd 226.502†	-163.4	28.6	0.3102	ug/L	0.3102	ppb	20:53:07
2	Co 228.616†	-68.4	5.1	0.1006	ug/L	0.1006	ppb	20:53:07
2	Cr 267.716†	71.4	-17.4	-0.1889	ug/L	-0.1889	ppb	20:53:07
2	Cu 324.752†	6915.4	-33.1	-0.0958	ug/L	-0.0958	ppb	20:52:47
2	Mn 257.610†	649.0	228.7	0.2493	ug/L	0.2493	ppb	20:53:07
2	Mo 202.031†	32.3	11.5	0.7465	ug/L	0.7465	ppb	20:53:07
2	Ni 231.604†	78.4	6.2	0.1476	ug/L	0.1476	ppb	20:53:07

2	P 214.914†	225.3	-0.5	-0.2800 ug/L	-0.2800 ppb	20:53:07
2	Pb 220.353†	-63.3	-9.2	-1.0675 ug/L	-1.0675 ppb	20:53:07
2	S 181.975 Axial†	44.0	1.4	2.0946 ug/L	2.0946 ppb	20:53:07
2	Sb 206.836†	31.1	0.7	0.2571 ug/L	0.2571 ppb	20:53:07
2	Se 196.026†	-24.4	-0.3	-0.1632 ug/L	-0.1632 ppb	20:53:07
2	Si 251.611†	1325.1	782.6	23.920 ug/L	23.920 ppb	20:53:07
2	Sn 189.927†	10.3	5.8	0.9850 ug/L	0.9850 ppb	20:53:07
2	Ti 334.940†	-864.2	123.3	0.1973 ug/L	0.1973 ppb	20:52:47
2	Tl 190.801†	-29.6	8.0	2.2872 ug/L	2.2872 ppb	20:53:07
2	U 409.014†	-1701.6	304.8	8.5166 ug/L	8.5166 ppb	20:52:47
2	V 292.402†	-1222.0	106.3	0.7435 ug/L	0.7435 ppb	20:52:47
2	Zn 213.857†	809.4	-18.9	-0.1716 ug/L	-0.1716 ppb	20:53:07
2	SiO2†	1379.1	854.5	55.916 ug/L	55.916 ppb	20:53:43
3	Sc Radial	5948.8	5948.8	105 %		20:51:55
3	Y RADIAL	6417.0	6417.0	104.2 %		20:51:55
3	Al 396.153Radial†	-24.0	-2.5	-1.8581 ug/L	-1.8581 ppb	20:52:15
3	Ca 317.933Radial†	43.0	23.2	35.533 ug/L	35.533 ppb	20:52:15
3	Fe 238.204 Radial†	8.1	1.7	17.232 ug/L	17.232 ppb	20:52:15
3	K 766.490 Radial†	2257.9	-20.7	-3.7796 ug/L	-3.7796 ppb	20:51:55
3	Mg 279.077 IEC†	4.5	2.6	95.866 ug/L	95.866 ppb	20:52:15
3	Na 589.592 Radial†	-577.4	66.3	24.925 ug/L	24.925 ppb	20:51:55
3	Sr 421.552†	-2.3	-5.6	-0.0380 ug/L	-0.0380 ppb	20:51:55
3	Sc 361.383	905608.0	905608.0	102.33 %		20:53:12
3	Y 371.029	760107.8	760107.8	102.43 %		20:53:12
3	Ag 328.068†	281.0	47.0	0.2185 ug/L	0.2185 ppb	20:53:12
3	As 188.979†	-29.4	0.5	0.2048 ug/L	0.2048 ppb	20:53:32
3	B 249.677†	-264.0	265.9	5.7684 ug/L	5.7684 ppb	20:53:32
3	Ba 233.527†	17.1	28.8	0.2197 ug/L	0.2197 ppb	20:53:32
3	Be 313.107†	-5220.4	218.8	0.0817 ug/L	0.0817 ppb	20:53:12
3	Cd 226.502†	-179.3	12.7	0.1358 ug/L	0.1358 ppb	20:53:32
3	Co 228.616†	-71.1	2.3	0.0456 ug/L	0.0456 ppb	20:53:32
3	Cr 267.716†	79.1	-9.7	-0.1056 ug/L	-0.1056 ppb	20:53:32
3	Cu 324.752†	6943.4	16.5	0.0489 ug/L	0.0489 ppb	20:53:12
3	Mn 257.610†	672.9	254.1	0.2761 ug/L	0.2761 ppb	20:53:32
3	Mo 202.031†	27.6	7.0	0.4565 ug/L	0.4565 ppb	20:53:32
3	Ni 231.604†	86.1	14.0	0.3323 ug/L	0.3323 ppb	20:53:32
3	P 214.914†	226.9	1.7	0.9878 ug/L	0.9878 ppb	20:53:32
3	Pb 220.353†	-63.6	-9.6	-1.1247 ug/L	-1.1247 ppb	20:53:32
3	S 181.975 Axial†	41.2	-1.2	-1.8173 ug/L	-1.8173 ppb	20:53:32
3	Sb 206.836†	36.0	5.5	1.7879 ug/L	1.7879 ppb	20:53:32
3	Se 196.026†	-20.4	3.5	2.1194 ug/L	2.1194 ppb	20:53:32
3	Si 251.611†	1353.7	814.8	24.919 ug/L	24.919 ppb	20:53:32
3	Sn 189.927†	-2.2	-6.4	-1.0775 ug/L	-1.0775 ppb	20:53:32
3	Ti 334.940†	-858.0	126.6	0.2042 ug/L	0.2042 ppb	20:53:12
3	Tl 190.801†	-32.6	5.0	1.4278 ug/L	1.4278 ppb	20:53:32
3	U 409.014†	-1813.7	189.8	5.2997 ug/L	5.2997 ppb	20:53:12
3	V 292.402†	-1296.6	29.5	0.2151 ug/L	0.2151 ppb	20:53:12
3	Zn 213.857†	805.3	-20.3	-0.1896 ug/L	-0.1896 ppb	20:53:32
3	SiO2†	1390.1	869.6	56.935 ug/L	56.935 ppb	20:53:48

Mean Data: 241835001|928625|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907611.1	102.56	%	0.196				0.19%
Sc Radial	5956.5	105	%	0.2				0.20%
Y 371.029	761437.8	102.61	%	0.157				0.15%
Y RADIAL	6437.4	104.5	%	0.32				0.31%
Ag 328.068†	7.8	0.0340	ug/L	0.20955	0.0340	ppb	0.20955	616.07%
Al 396.153Radial†	2.4	1.7714	ug/L	3.17374	1.7714	ppb	3.17374	179.17%
As 188.979†	3.1	1.2527	ug/L	1.36523	1.2527	ppb	1.36523	108.98%
B 249.677†	283.1	6.1452	ug/L	0.42064	6.1452	ppb	0.42064	6.85%
Ba 233.527†	24.1	0.1846	ug/L	0.03093	0.1846	ppb	0.03093	16.76%
Be 313.107†	174.3	0.0652	ug/L	0.01481	0.0652	ppb	0.01481	22.72%
Ca 317.933Radial†	21.9	33.538	ug/L	3.0207	33.538	ppb	3.0207	9.01%
Cd 226.502†	17.5	0.1896	ug/L	0.10465	0.1896	ppb	0.10465	55.19%
Co 228.616†	5.6	0.1103	ug/L	0.07008	0.1103	ppb	0.07008	63.52%
Cr 267.716†	-12.1	-0.1310	ug/L	0.05028	-0.1310	ppb	0.05028	38.38%
Cu 324.752†	18.5	0.0540	ug/L	0.15236	0.0540	ppb	0.15236	282.33%
Fe 238.204 Radial†	0.5	5.1069	ug/L	12.74624	5.1069	ppb	12.74624	249.59%
K 766.490 Radial†	6.5	1.1547	ug/L	4.34720	1.1547	ppb	4.34720	376.47%

Mg 279.077 IEC†	0.7	25.608	ug/L	61.2610	25.608	ppb	61.2610 239.22%
Mn 257.610†	237.4	0.2581	ug/L	0.01564	0.2581	ppb	0.01564 6.06%
Mo 202.031†	7.7	0.5018	ug/L	0.22541	0.5018	ppb	0.22541 44.92%
Na 589.592 Radial†	74.0	27.819	ug/L	2.9188	27.819	ppb	2.9188 10.49%
Ni 231.604†	11.8	0.2797	ug/L	0.11522	0.2797	ppb	0.11522 41.19%
P 214.914†	0.3	0.1383	ug/L	0.73570	0.1383	ppb	0.73570 532.05%
Pb 220.353†	-11.1	-1.3017	ug/L	0.35724	-1.3017	ppb	0.35724 27.44%
S 181.975 Axial†	2.5	3.7261	ug/L	6.51423	3.7261	ppb	6.51423 174.83%
Sb 206.836†	5.3	1.7389	ug/L	1.45788	1.7389	ppb	1.45788 83.84%
Se 196.026†	0.2	0.1094	ug/L	1.88847	0.1094	ppb	1.88847 >999.9%
Si 251.611†	795.0	24.307	ug/L	0.5354	24.307	ppb	0.5354 2.20%
Sn 189.927†	-1.0	-0.1669	ug/L	1.05224	-0.1669	ppb	1.05224 630.47%
Sr 421.552†	3.2	0.0210	ug/L	0.19237	0.0210	ppb	0.19237 917.13%
Ti 334.940†	122.9	0.1979	ug/L	0.00608	0.1979	ppb	0.00608 3.07%
Tl 190.801†	4.5	1.3011	ug/L	1.05512	1.3011	ppb	1.05512 81.09%
U 409.014†	218.4	6.1002	ug/L	2.13201	6.1002	ppb	2.13201 34.95%
V 292.402†	83.3	0.5813	ug/L	0.31780	0.5813	ppb	0.31780 54.67%
Zn 213.857†	-22.4	-0.2051	ug/L	0.04346	-0.2051	ppb	0.04346 21.19%
SiO2†	866.4	56.713	ug/L	0.7123	56.713	ppb	0.7123 1.26%

Sequence No.: 66
Sample ID: 1201985668|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 12/9/2009 20:55:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985668|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5981.2	5981.2	106	%			20:57:52
1	Y RADIAL	6448.6	6448.6	104.7	%			20:57:52
1	Al 396.153Radial†	-23.1	-1.6	-1.1632	ug/L	-1.1632	ppb	20:57:52
1	Ca 317.933Radial†	47.5	27.3	41.761	ug/L	41.761	ppb	20:58:12
1	Fe 238.204 Radial†	7.7	1.2	12.325	ug/L	12.325	ppb	20:58:12
1	K 766.490 Radial†	2394.8	97.3	17.623	ug/L	17.623	ppb	20:57:52
1	Mg 279.077 IEC†	-0.4	-2.1	-79.828	ug/L	-79.828	ppb	20:58:12
1	Na 589.592 Radial†	-515.0	128.3	48.234	ug/L	48.234	ppb	20:57:52
1	Sr 421.552†	50.0	43.9	0.2960	ug/L	0.2960	ppb	20:57:52
1	Sc 361.383	906052.2	906052.2	102.38	%			20:59:08
1	Y 371.029	758989.1	758989.1	102.28	%			20:59:08
1	Ag 328.068†	305.2	70.5	0.3279	ug/L	0.3279	ppb	20:59:08
1	As 188.979†	-25.3	4.5	1.8390	ug/L	1.8390	ppb	20:59:29
1	B 249.677†	-355.1	177.1	3.8418	ug/L	3.8418	ppb	20:59:29
1	Ba 233.527†	718.6	713.9	5.4230	ug/L	5.4230	ppb	20:59:29
1	Be 313.107†	-5279.6	163.4	0.0610	ug/L	0.0610	ppb	20:59:08
1	Cd 226.502†	-178.9	13.1	0.1420	ug/L	0.1420	ppb	20:59:29
1	Co 228.616†	-73.6	-0.1	-0.0006	ug/L	-0.0006	ppb	20:59:29
1	Cr 267.716†	93.3	4.2	0.0446	ug/L	0.0446	ppb	20:59:29
1	Cu 324.752†	7006.7	75.1	0.2190	ug/L	0.2190	ppb	20:59:08
1	Mn 257.610†	739.4	318.8	0.3491	ug/L	0.3491	ppb	20:59:29
1	Mo 202.031†	17.6	-2.8	-0.1837	ug/L	-0.1837	ppb	20:59:29
1	Ni 231.604†	126.4	53.4	1.2667	ug/L	1.2667	ppb	20:59:29
1	P 214.914†	227.8	2.5	1.4468	ug/L	1.4468	ppb	20:59:29
1	Pb 220.353†	-58.3	-4.4	-0.5185	ug/L	-0.5185	ppb	20:59:29
1	S 181.975 Axial†	47.3	4.7	6.8728	ug/L	6.8728	ppb	20:59:29
1	Sb 206.836†	44.1	13.5	4.3546	ug/L	4.3546	ppb	20:59:29
1	Se 196.026†	-24.3	-0.3	-0.1455	ug/L	-0.1455	ppb	20:59:29
1	Si 251.611†	1399.3	858.7	26.264	ug/L	26.264	ppb	20:59:29
1	Sn 189.927†	1.4	-2.9	-0.4852	ug/L	-0.4852	ppb	20:59:29
1	Ti 334.940†	-911.8	74.4	0.1212	ug/L	0.1212	ppb	20:59:08
1	Tl 190.801†	-34.0	3.6	1.0342	ug/L	1.0342	ppb	20:59:29
1	U 409.014†	-1902.6	103.9	2.9006	ug/L	2.9006	ppb	20:59:08
1	V 292.402†	-1293.4	33.2	0.2233	ug/L	0.2233	ppb	20:59:08
1	Zn 213.857†	790.6	-35.0	-0.3219	ug/L	-0.3219	ppb	20:59:29
1	SiO2†	1447.5	925.0	60.568	ug/L	60.568	ppb	21:00:24
2	Sc Radial	5962.2	5962.2	105	%			20:58:17
2	Y RADIAL	6473.4	6473.4	105.1	%			20:58:17
2	Al 396.153Radial†	-14.4	6.6	4.9247	ug/L	4.9247	ppb	20:58:17
2	Ca 317.933Radial†	41.1	21.3	32.624	ug/L	32.624	ppb	20:58:37
2	Fe 238.204 Radial†	9.0	2.6	25.740	ug/L	25.740	ppb	20:58:37
2	K 766.490 Radial†	2200.5	-80.1	-14.573	ug/L	-14.573	ppb	20:58:17
2	Mg 279.077 IEC†	1.1	-0.7	-26.977	ug/L	-26.977	ppb	20:58:37
2	Na 589.592 Radial†	-489.7	150.8	56.698	ug/L	56.698	ppb	20:58:17
2	Sr 421.552†	56.2	50.0	0.3372	ug/L	0.3372	ppb	20:58:17
2	Sc 361.383	896703.4	896703.4	101.33	%			20:59:34
2	Y 371.029	751032.2	751032.2	101.21	%			20:59:34
2	Ag 328.068†	282.6	51.3	0.2412	ug/L	0.2412	ppb	20:59:34
2	As 188.979†	-27.0	2.6	1.0649	ug/L	1.0649	ppb	20:59:54
2	B 249.677†	-334.5	193.8	4.2023	ug/L	4.2023	ppb	20:59:54
2	Ba 233.527†	723.0	725.5	5.5123	ug/L	5.5123	ppb	20:59:54
2	Be 313.107†	-5261.2	127.9	0.0478	ug/L	0.0478	ppb	20:59:34
2	Cd 226.502†	-176.2	14.0	0.1501	ug/L	0.1501	ppb	20:59:54
2	Co 228.616†	-64.5	8.1	0.1586	ug/L	0.1586	ppb	20:59:54
2	Cr 267.716†	77.3	-10.7	-0.1164	ug/L	-0.1164	ppb	20:59:54
2	Cu 324.752†	6859.2	0.9	0.0038	ug/L	0.0038	ppb	20:59:34
2	Mn 257.610†	700.1	287.5	0.3156	ug/L	0.3156	ppb	20:59:54
2	Mo 202.031†	15.8	-4.4	-0.2860	ug/L	-0.2860	ppb	20:59:54
2	Ni 231.604†	140.9	69.0	1.6367	ug/L	1.6367	ppb	20:59:54

2	P 214.914†	223.0	0.1	0.0223	ug/L	0.0223	ppb	20:59:54
2	Pb 220.353†	-63.4	-10.0	-1.1714	ug/L	-1.1714	ppb	20:59:54
2	S 181.975 Axial†	47.2	5.1	7.4828	ug/L	7.4828	ppb	20:59:54
2	Sb 206.836†	36.6	6.5	2.1062	ug/L	2.1062	ppb	20:59:54
2	Se 196.026†	-19.3	4.4	2.6928	ug/L	2.6928	ppb	20:59:54
2	Si 251.611†	1400.5	874.2	26.748	ug/L	26.748	ppb	20:59:54
2	Sn 189.927†	1.9	-2.4	-0.3963	ug/L	-0.3963	ppb	20:59:54
2	Ti 334.940†	-894.3	82.5	0.1322	ug/L	0.1322	ppb	20:59:34
2	Tl 190.801†	-34.5	2.8	0.7965	ug/L	0.7965	ppb	20:59:54
2	U 409.014†	-1750.3	234.8	6.5568	ug/L	6.5568	ppb	20:59:34
2	V 292.402†	-1247.9	64.9	0.4423	ug/L	0.4423	ppb	20:59:34
2	Zn 213.857†	811.6	-6.3	-0.0685	ug/L	-0.0685	ppb	20:59:54
2	SiO2†	1384.8	877.9	57.512	ug/L	57.512	ppb	21:00:29
3	Sc Radial	5923.4	5923.4	105	%			20:58:42
3	Y RADIAL	6376.1	6376.1	103.5	%			20:58:42
3	Al 396.153Radial†	-9.6	11.2	8.2415	ug/L	8.2415	ppb	20:58:42
3	Ca 317.933Radial†	49.7	29.8	45.626	ug/L	45.626	ppb	20:59:02
3	Fe 238.204 Radial†	8.1	1.7	16.863	ug/L	16.863	ppb	20:59:02
3	K 766.490 Radial†	2299.5	28.2	5.0926	ug/L	5.0926	ppb	20:58:42
3	Mg 279.077 IEC†	1.2	-0.6	-23.465	ug/L	-23.465	ppb	20:59:02
3	Na 589.592 Radial†	-534.7	104.7	39.372	ug/L	39.372	ppb	20:58:42
3	Sr 421.552†	59.9	53.8	0.3630	ug/L	0.3630	ppb	20:58:42
3	Sc 361.383	908256.6	908256.6	102.63	%			20:59:59
3	Y 371.029	762551.5	762551.5	102.76	%			20:59:59
3	Ag 328.068†	293.5	58.4	0.2758	ug/L	0.2758	ppb	20:59:59
3	As 188.979†	-21.8	7.9	3.2348	ug/L	3.2348	ppb	21:00:19
3	B 249.677†	-329.2	203.1	4.4066	ug/L	4.4066	ppb	21:00:19
3	Ba 233.527†	709.9	703.7	5.3471	ug/L	5.3471	ppb	21:00:19
3	Be 313.107†	-5223.4	230.7	0.0862	ug/L	0.0862	ppb	20:59:59
3	Cd 226.502†	-183.3	9.2	0.0990	ug/L	0.0990	ppb	21:00:19
3	Co 228.616†	-71.4	2.2	0.0445	ug/L	0.0445	ppb	21:00:19
3	Cr 267.716†	77.1	-11.8	-0.1263	ug/L	-0.1263	ppb	21:00:19
3	Cu 324.752†	6812.8	-130.5	-0.3786	ug/L	-0.3786	ppb	20:59:59
3	Mn 257.610†	724.0	302.0	0.3303	ug/L	0.3303	ppb	21:00:19
3	Mo 202.031†	22.4	1.8	0.1181	ug/L	0.1181	ppb	21:00:19
3	Ni 231.604†	126.4	53.0	1.2575	ug/L	1.2575	ppb	21:00:19
3	P 214.914†	234.2	8.3	4.9574	ug/L	4.9574	ppb	21:00:19
3	Pb 220.353†	-61.9	-7.8	-0.9123	ug/L	-0.9123	ppb	21:00:19
3	S 181.975 Axial†	50.4	7.7	11.187	ug/L	11.187	ppb	21:00:19
3	Sb 206.836†	28.1	-2.2	-0.7229	ug/L	-0.7229	ppb	21:00:19
3	Se 196.026†	-17.6	6.3	3.8050	ug/L	3.8050	ppb	21:00:19
3	Si 251.611†	1413.6	869.3	26.588	ug/L	26.588	ppb	21:00:19
3	Sn 189.927†	0.8	-3.5	-0.5880	ug/L	-0.5880	ppb	21:00:19
3	Ti 334.940†	-832.6	153.8	0.2500	ug/L	0.2500	ppb	20:59:59
3	Tl 190.801†	-31.4	6.3	1.8062	ug/L	1.8062	ppb	21:00:19
3	U 409.014†	-1914.8	96.5	2.6940	ug/L	2.6940	ppb	20:59:59
3	V 292.402†	-1202.2	125.1	0.8482	ug/L	0.8482	ppb	20:59:59
3	Zn 213.857†	801.5	-26.3	-0.2453	ug/L	-0.2453	ppb	21:00:19
3	SiO2†	1435.2	909.6	59.558	ug/L	59.558	ppb	21:00:35

Mean Data: 1201985668|928625|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903670.8	102.11	%	0.693				0.68%
Sc Radial	5955.6	105	%	0.5				0.49%
Y 371.029	757524.3	102.08	%	0.795				0.78%
Y RADIAL	6432.7	104.4	%	0.82				0.79%
Ag 328.068†	60.1	0.2816	ug/L	0.04363	0.2816	ppb	0.04363	15.49%
Al 396.153Radial†	5.4	4.0010	ug/L	4.76990	4.0010	ppb	4.76990	119.22%
As 188.979†	5.0	2.0462	ug/L	1.09971	2.0462	ppb	1.09971	53.74%
B 249.677†	191.3	4.1502	ug/L	0.28597	4.1502	ppb	0.28597	6.89%
Ba 233.527†	714.4	5.4275	ug/L	0.08270	5.4275	ppb	0.08270	1.52%
Be 313.107†	174.0	0.0650	ug/L	0.01954	0.0650	ppb	0.01954	30.06%
Ca 317.933Radial†	26.2	40.004	ug/L	6.6771	40.004	ppb	6.6771	16.69%
Cd 226.502†	12.1	0.1304	ug/L	0.02744	0.1304	ppb	0.02744	21.05%
Co 228.616†	3.4	0.0675	ug/L	0.08209	0.0675	ppb	0.08209	121.59%
Cr 267.716†	-6.1	-0.0660	ug/L	0.09595	-0.0660	ppb	0.09595	145.31%
Cu 324.752†	-18.2	-0.0520	ug/L	0.30268	-0.0520	ppb	0.30268	582.57%
Fe 238.204 Radial†	1.8	18.309	ug/L	6.8236	18.309	ppb	6.8236	37.27%
K 766.490 Radial†	15.1	2.7144	ug/L	16.22927	2.7144	ppb	16.22927	597.90%

Mg 279.077 IEC†	-1.2	-43.423	ug/L	31.5761	-43.423	ppb	31.5761	72.72%
Mn 257.610†	302.8	0.3317	ug/L	0.01683	0.3317	ppb	0.01683	5.07%
Mo 202.031†	-1.8	-0.1172	ug/L	0.21012	-0.1172	ppb	0.21012	179.30%
Na 589.592 Radial†	128.0	48.101	ug/L	8.6639	48.101	ppb	8.6639	18.01%
Ni 231.604†	58.5	1.3870	ug/L	0.21628	1.3870	ppb	0.21628	15.59%
P 214.914†	3.6	2.1422	ug/L	2.53995	2.1422	ppb	2.53995	118.57%
Pb 220.353†	-7.4	-0.8674	ug/L	0.32877	-0.8674	ppb	0.32877	37.90%
S 181.975 Axial†	5.8	8.5142	ug/L	2.33475	8.5142	ppb	2.33475	27.42%
Sb 206.836†	5.9	1.9127	ug/L	2.54431	1.9127	ppb	2.54431	133.02%
Se 196.026†	3.5	2.1174	ug/L	2.03712	2.1174	ppb	2.03712	96.21%
Si 251.611†	867.4	26.533	ug/L	0.2465	26.533	ppb	0.2465	0.93%
Sn 189.927†	-2.9	-0.4898	ug/L	0.09593	-0.4898	ppb	0.09593	19.58%
Sr 421.552†	49.2	0.3320	ug/L	0.03379	0.3320	ppb	0.03379	10.18%
Ti 334.940†	103.6	0.1678	ug/L	0.07138	0.1678	ppb	0.07138	42.54%
Tl 190.801†	4.2	1.2123	ug/L	0.52789	1.2123	ppb	0.52789	43.54%
U 409.014†	145.1	4.0505	ug/L	2.17303	4.0505	ppb	2.17303	53.65%
V 292.402†	74.4	0.5046	ug/L	0.31705	0.5046	ppb	0.31705	62.83%
Zn 213.857†	-22.5	-0.2119	ug/L	0.12992	-0.2119	ppb	0.12992	61.32%
SiO2†	904.1	59.213	ug/L	1.5569	59.213	ppb	1.5569	2.63%

Sequence No.: 67
Sample ID: 1201985669|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 12/9/2009 21:02:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985669|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5830.5	5830.5	103	%			21:04:39
1	Y RADIAL	6266.9	6266.9	101.8	%			21:04:39
1	Al 396.153Radial†	6992.1	6811.9	5014.3	ug/L	5014.3	ppb	21:04:39
1	Ca 317.933Radial†	3408.9	3293.5	5036.3	ug/L	5036.3	ppb	21:04:59
1	Fe 238.204 Radial†	527.8	506.6	5116.9	ug/L	5116.9	ppb	21:04:59
1	K 766.490 Radial†	31212.2	28146.8	5101.7	ug/L	5101.7	ppb	21:04:39
1	Mg 279.077 IEC†	146.2	140.3	5229.5	ug/L	5229.5	ppb	21:04:59
1	Na 589.592 Radial†	13727.4	13949.7	5243.3	ug/L	5243.3	ppb	21:04:39
1	Sr 421.552†	80453.3	78142.7	527.46	ug/L	527.46	ppb	21:04:39
1	Sc 361.383	913640.5	913640.5	103.24	%			21:05:58
1	Y 371.029	753085.0	753085.0	101.48	%			21:05:58
1	Ag 328.068†	112416.5	108661.6	505.47	ug/L	505.47	ppb	21:05:58
1	As 188.979†	1216.3	1207.3	497.12	ug/L	497.12	ppb	21:06:18
1	B 249.677†	22899.3	22704.6	490.93	ug/L	490.93	ppb	21:05:58
1	Ba 233.527†	69182.2	67023.5	510.35	ug/L	510.35	ppb	21:05:58
1	Be 313.107†	1377981.3	1340063.4	498.97	ug/L	498.97	ppb	21:05:58
1	Cd 226.502†	47651.5	46344.2	502.59	ug/L	502.59	ppb	21:05:58
1	Co 228.616†	25869.0	25129.0	487.91	ug/L	487.91	ppb	21:06:18
1	Cr 267.716†	47507.9	45930.3	495.69	ug/L	495.69	ppb	21:05:58
1	Cu 324.752†	184298.6	171747.1	499.75	ug/L	499.75	ppb	21:05:58
1	Mn 257.610†	479075.6	463639.8	504.26	ug/L	504.26	ppb	21:05:58
1	Mo 202.031†	7921.0	7652.4	498.84	ug/L	498.84	ppb	21:06:18
1	Ni 231.604†	21673.2	20923.1	496.16	ug/L	496.16	ppb	21:06:18
1	P 214.914†	1237.4	978.6	506.12	ug/L	506.12	ppb	21:06:18
1	Pb 220.353†	4378.8	4293.9	503.49	ug/L	503.49	ppb	21:06:18
1	S 181.975 Axial†	3631.2	3475.8	5081.3	ug/L	5081.3	ppb	21:06:18
1	Sb 206.836†	1651.7	1570.3	517.34	ug/L	517.34	ppb	21:06:18
1	Se 196.026†	831.8	829.1	512.38	ug/L	512.38	ppb	21:06:18
1	Si 251.611†	168291.7	162503.1	4958.2	ug/L	4958.2	ppb	21:05:58
1	Sn 189.927†	3207.6	3102.7	525.49	ug/L	525.49	ppb	21:06:18
1	Ti 334.940†	328370.3	319031.8	515.85	ug/L	515.85	ppb	21:05:58
1	Tl 190.801†	1756.7	1738.4	501.67	ug/L	501.67	ppb	21:06:18
1	U 409.014†	16432.2	17878.8	497.91	ug/L	497.91	ppb	21:05:58
1	V 292.402†	74764.4	73714.9	504.28	ug/L	504.28	ppb	21:05:58
1	Zn 213.857†	57726.7	55108.1	491.37	ug/L	491.37	ppb	21:05:58
1	SiO2†	169576.6	163766.8	10698	ug/L	10698	ppb	21:07:18
2	Sc Radial	5902.9	5902.9	104	%			21:05:04
2	Y RADIAL	6331.9	6331.9	102.8	%			21:05:04
2	Al 396.153Radial†	7044.5	6778.9	4989.9	ug/L	4989.9	ppb	21:05:04
2	Ca 317.933Radial†	3415.7	3259.4	4984.2	ug/L	4984.2	ppb	21:05:24
2	Fe 238.204 Radial†	526.3	498.9	5038.7	ug/L	5038.7	ppb	21:05:24
2	K 766.490 Radial†	31449.2	28002.4	5075.5	ug/L	5075.5	ppb	21:05:04
2	Mg 279.077 IEC†	146.1	138.4	5158.8	ug/L	5158.8	ppb	21:05:24
2	Na 589.592 Radial†	13689.9	13750.2	5168.3	ug/L	5168.3	ppb	21:05:04
2	Sr 421.552†	80674.0	77396.0	522.42	ug/L	522.42	ppb	21:05:04
2	Sc 361.383	913161.7	913161.7	103.19	%			21:06:25
2	Y 371.029	752705.7	752705.7	101.43	%			21:06:25
2	Ag 328.068†	112283.2	108589.5	505.11	ug/L	505.11	ppb	21:06:25
2	As 188.979†	1229.9	1221.1	502.74	ug/L	502.74	ppb	21:06:45
2	B 249.677†	22838.3	22657.1	489.90	ug/L	489.90	ppb	21:06:25
2	Ba 233.527†	69050.1	66930.6	509.64	ug/L	509.64	ppb	21:06:25
2	Be 313.107†	1374244.5	1337141.9	497.89	ug/L	497.89	ppb	21:06:25
2	Cd 226.502†	47440.3	46163.7	500.64	ug/L	500.64	ppb	21:06:25
2	Co 228.616†	25913.1	25184.9	489.00	ug/L	489.00	ppb	21:06:45
2	Cr 267.716†	47361.6	45812.6	494.42	ug/L	494.42	ppb	21:06:25
2	Cu 324.752†	184477.7	172014.3	500.53	ug/L	500.53	ppb	21:06:25
2	Mn 257.610†	478858.2	463672.5	504.29	ug/L	504.29	ppb	21:06:25
2	Mo 202.031†	7944.3	7679.1	500.57	ug/L	500.57	ppb	21:06:45
2	Ni 231.604†	21769.1	21027.0	498.62	ug/L	498.62	ppb	21:06:45

2	P 214.914†	1249.7	991.1	513.46	ug/L	513.46 ppb	21:06:45
2	Pb 220.353†	4380.9	4298.2	504.00	ug/L	504.00 ppb	21:06:45
2	S 181.975 Axial†	3652.4	3498.2	5114.2	ug/L	5114.2 ppb	21:06:45
2	Sb 206.836†	1659.9	1579.0	520.21	ug/L	520.21 ppb	21:06:45
2	Se 196.026†	825.3	823.3	508.65	ug/L	508.65 ppb	21:06:45
2	Si 251.611†	168204.9	162504.4	4958.3	ug/L	4958.3 ppb	21:06:25
2	Sn 189.927†	3188.7	3086.0	522.67	ug/L	522.67 ppb	21:06:45
2	Ti 334.940†	328489.2	319313.8	516.30	ug/L	516.30 ppb	21:06:25
2	Tl 190.801†	1773.2	1755.3	506.50	ug/L	506.50 ppb	21:06:45
2	U 409.014†	16431.3	17886.3	498.13	ug/L	498.13 ppb	21:06:25
2	V 292.402†	74830.5	73817.0	505.01	ug/L	505.01 ppb	21:06:25
2	Zn 213.857†	57769.0	55178.4	492.00	ug/L	492.00 ppb	21:06:25
2	SiO2†	169292.9	163578.0	10685	ug/L	10685 ppb	21:07:24
3	Sc Radial	5788.5	5788.5	102	%		21:05:29
3	Y RADIAL	6259.6	6259.6	101.6	%		21:05:29
3	Al 396.153Radial†	6986.3	6855.5	5046.5	ug/L	5046.5 ppb	21:05:29
3	Ca 317.933Radial†	3434.9	3342.9	5111.9	ug/L	5111.9 ppb	21:05:49
3	Fe 238.204 Radial†	530.3	512.8	5179.1	ug/L	5179.1 ppb	21:05:49
3	K 766.490 Radial†	30948.7	28108.9	5094.8	ug/L	5094.8 ppb	21:05:29
3	Mg 279.077 IEC†	145.8	140.9	5251.0	ug/L	5251.0 ppb	21:05:49
3	Na 589.592 Radial†	13594.2	13916.1	5230.7	ug/L	5230.7 ppb	21:05:29
3	Sr 421.552†	79704.5	77977.0	526.34	ug/L	526.34 ppb	21:05:29
3	Sc 361.383	914936.3	914936.3	103.39	%		21:06:53
3	Y 371.029	756090.0	756090.0	101.89	%		21:06:53
3	Ag 328.068†	112480.2	108568.9	505.06	ug/L	505.06 ppb	21:06:53
3	As 188.979†	1234.4	1223.2	503.60	ug/L	503.60 ppb	21:07:13
3	B 249.677†	22986.2	22757.3	492.06	ug/L	492.06 ppb	21:06:53
3	Ba 233.527†	69021.0	66772.6	508.45	ug/L	508.45 ppb	21:06:53
3	Be 313.107†	1379840.4	1339971.3	498.94	ug/L	498.94 ppb	21:06:53
3	Cd 226.502†	47320.9	45959.0	498.40	ug/L	498.40 ppb	21:06:53
3	Co 228.616†	25926.4	25149.0	488.30	ug/L	488.30 ppb	21:07:13
3	Cr 267.716†	47529.7	45886.2	495.21	ug/L	495.21 ppb	21:06:53
3	Cu 324.752†	185397.3	172557.0	502.11	ug/L	502.11 ppb	21:06:53
3	Mn 257.610†	478103.9	462042.8	502.53	ug/L	502.53 ppb	21:06:53
3	Mo 202.031†	7960.2	7679.5	500.61	ug/L	500.61 ppb	21:07:13
3	Ni 231.604†	21798.8	21014.8	498.33	ug/L	498.33 ppb	21:07:13
3	P 214.914†	1232.4	972.0	501.76	ug/L	501.76 ppb	21:07:13
3	Pb 220.353†	4401.9	4310.2	505.40	ug/L	505.40 ppb	21:07:13
3	S 181.975 Axial†	3643.0	3482.2	5090.8	ug/L	5090.8 ppb	21:07:13
3	Sb 206.836†	1666.6	1582.4	521.28	ug/L	521.28 ppb	21:07:13
3	Se 196.026†	837.5	833.5	515.17	ug/L	515.17 ppb	21:07:13
3	Si 251.611†	168360.4	162338.6	4953.2	ug/L	4953.2 ppb	21:06:53
3	Sn 189.927†	3192.8	3084.0	522.34	ug/L	522.34 ppb	21:07:13
3	Ti 334.940†	328908.0	319101.4	515.97	ug/L	515.97 ppb	21:06:53
3	Tl 190.801†	1769.4	1748.3	504.50	ug/L	504.50 ppb	21:07:13
3	U 409.014†	16441.3	17865.0	497.52	ug/L	497.52 ppb	21:06:53
3	V 292.402†	74893.7	73737.4	504.45	ug/L	504.45 ppb	21:06:53
3	Zn 213.857†	57711.1	55013.8	490.50	ug/L	490.50 ppb	21:06:53
3	SiO2†	169808.5	163758.5	10697	ug/L	10697 ppb	21:07:29

Mean Data: 1201985669|928625|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	913912.8	103.27	%	0.104				0.10%
Sc Radial	5840.7	103	%	1.0				0.99%
Y 371.029	753960.3	101.60	%	0.250				0.25%
Y RADIAL	6286.1	102.1	%	0.65				0.63%
Ag 328.068†	108606.6	505.21	ug/L	0.222	505.21	ppb	0.222	0.04%
Al 396.153Radial†	6815.4	5016.9	ug/L	28.40	5016.9	ppb	28.40	0.57%
As 188.979†	1217.2	501.15	ug/L	3.517	501.15	ppb	3.517	0.70%
B 249.677†	22706.3	490.96	ug/L	1.079	490.96	ppb	1.079	0.22%
Ba 233.527†	66908.9	509.48	ug/L	0.962	509.48	ppb	0.962	0.19%
Be 313.107†	1339058.8	498.60	ug/L	0.617	498.60	ppb	0.617	0.12%
Ca 317.933Radial†	3298.6	5044.1	ug/L	64.21	5044.1	ppb	64.21	1.27%
Cd 226.502†	46155.6	500.54	ug/L	2.093	500.54	ppb	2.093	0.42%
Co 228.616†	25154.3	488.41	ug/L	0.552	488.41	ppb	0.552	0.11%
Cr 267.716†	45876.3	495.11	ug/L	0.641	495.11	ppb	0.641	0.13%
Cu 324.752†	172106.1	500.80	ug/L	1.202	500.80	ppb	1.202	0.24%
Fe 238.204 Radial†	506.1	5111.6	ug/L	70.37	5111.6	ppb	70.37	1.38%
K 766.490 Radial†	28086.0	5090.7	ug/L	13.57	5090.7	ppb	13.57	0.27%

Mg 279.077 IEC†	139.8	5213.1	ug/L	48.21	5213.1	ppb	48.21	0.92%
Mn 257.610†	463118.4	503.70	ug/L	1.007	503.70	ppb	1.007	0.20%
Mo 202.031†	7670.3	500.00	ug/L	1.010	500.00	ppb	1.010	0.20%
Na 589.592 Radial†	13872.0	5214.1	ug/L	40.14	5214.1	ppb	40.14	0.77%
Ni 231.604†	20988.3	497.70	ug/L	1.347	497.70	ppb	1.347	0.27%
P 214.914†	980.6	507.11	ug/L	5.915	507.11	ppb	5.915	1.17%
Pb 220.353†	4300.8	504.30	ug/L	0.991	504.30	ppb	0.991	0.20%
S 181.975 Axial†	3485.4	5095.4	ug/L	16.90	5095.4	ppb	16.90	0.33%
Sb 206.836†	1577.2	519.61	ug/L	2.037	519.61	ppb	2.037	0.39%
Se 196.026†	828.6	512.07	ug/L	3.270	512.07	ppb	3.270	0.64%
Si 251.611†	162448.7	4956.6	ug/L	2.92	4956.6	ppb	2.92	0.06%
Sn 189.927†	3090.9	523.50	ug/L	1.732	523.50	ppb	1.732	0.33%
Sr 421.552†	77838.6	525.41	ug/L	2.647	525.41	ppb	2.647	0.50%
Ti 334.940†	319149.0	516.04	ug/L	0.236	516.04	ppb	0.236	0.05%
Tl 190.801†	1747.3	504.22	ug/L	2.428	504.22	ppb	2.428	0.48%
U 409.014†	17876.7	497.85	ug/L	0.310	497.85	ppb	0.310	0.06%
V 292.402†	73756.4	504.58	ug/L	0.379	504.58	ppb	0.379	0.08%
Zn 213.857†	55100.1	491.29	ug/L	0.752	491.29	ppb	0.752	0.15%
SiO2†	163701.1	10694	ug/L	7.0	10694	ppb	7.0	0.07%

Sequence No.: 68
Sample ID: 1201985667|928625|5
Analyst: HSC
Initial Sample Wt: 70 12/10/09 HR
Dilution:

Autosampler Location: 91
Date Collected: 12/9/2009 21:09:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985667|928625|5 70

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5817.6	5817.6	103	%			21:11:33
1	Y RADIAL	6280.4	6280.4	102.0	%			21:11:33
1	Al 396.153Radial†	-20.1	0.8	0.5653	ug/L	0.5653	ppb	21:11:33
1	Ca 317.933Radial†	30.9	12.4	18.965	ug/L	18.965	ppb	21:11:53
1	Fe 238.204 Radial†	7.6	1.4	13.839	ug/L	13.839	ppb	21:11:53
1	K 766.490 Radial†	2237.9	8.2	1.4901	ug/L	1.4901	ppb	21:11:33
1	Mg 279.077 IEC†	0.4	-1.4	-51.721	ug/L	-51.721	ppb	21:11:53
1	Na 589.592 Radial†	-622.8	9.7	3.6288	ug/L	3.6288	ppb	21:11:33
1	Sr 421.552†	-9.8	-13.0	-0.0877	ug/L	-0.0877	ppb	21:11:33
1	Sc 361.383	888323.9	888323.9	100.38	%			21:12:50
1	Y 371.029	744244.7	744244.7	100.29	%			21:12:50
1	Ag 328.068†	196.7	-31.6	-0.1440	ug/L	-0.1440	ppb	21:12:50
1	As 188.979†	-30.8	-1.5	-0.6112	ug/L	-0.6112	ppb	21:13:10
1	B 249.677†	-291.1	233.9	5.0739	ug/L	5.0739	ppb	21:13:10
1	Ba 233.527†	-14.9	-2.9	-0.0214	ug/L	-0.0214	ppb	21:13:10
1	Be 313.107†	-5250.9	89.2	0.0330	ug/L	0.0330	ppb	21:12:50
1	Cd 226.502†	-175.0	13.5	0.1450	ug/L	0.1450	ppb	21:13:10
1	Co 228.616†	-58.5	13.4	0.2609	ug/L	0.2609	ppb	21:13:10
1	Cr 267.716†	84.2	-3.1	-0.0342	ug/L	-0.0342	ppb	21:13:10
1	Cu 324.752†	6892.0	97.4	0.2839	ug/L	0.2839	ppb	21:12:50
1	Mn 257.610†	527.9	122.5	0.1355	ug/L	0.1355	ppb	21:13:10
1	Mo 202.031†	19.6	-0.5	-0.0287	ug/L	-0.0287	ppb	21:13:10
1	Ni 231.604†	95.8	25.3	0.6005	ug/L	0.6005	ppb	21:13:10
1	P 214.914†	220.4	-0.4	-0.2730	ug/L	-0.2730	ppb	21:13:10
1	Pb 220.353†	-58.3	-5.5	-0.6485	ug/L	-0.6485	ppb	21:13:10
1	S 181.975 Axial†	42.9	1.2	1.8098	ug/L	1.8098	ppb	21:13:10
1	Sb 206.836†	29.7	-0.0	-0.0026	ug/L	-0.0026	ppb	21:13:10
1	Se 196.026†	-27.5	-4.0	-2.3256	ug/L	-2.3256	ppb	21:13:10
1	Si 251.611†	640.9	130.4	3.9873	ug/L	3.9873	ppb	21:13:10
1	Sn 189.927†	8.7	4.4	0.7533	ug/L	0.7533	ppb	21:13:10
1	Ti 334.940†	-1021.0	-52.1	-0.0842	ug/L	-0.0842	ppb	21:12:50
1	Tl 190.801†	-34.5	2.5	0.7140	ug/L	0.7140	ppb	21:13:10
1	U 409.014†	-1900.5	68.8	1.9205	ug/L	1.9205	ppb	21:12:50
1	V 292.402†	-1310.8	-9.4	-0.0632	ug/L	-0.0632	ppb	21:12:50
1	Zn 213.857†	821.7	11.3	0.0979	ug/L	0.0979	ppb	21:13:10
1	SiO2†	656.1	164.8	10.787	ug/L	10.787	ppb	21:14:06
2	Sc Radial	5724.1	5724.1	101	%			21:11:58
2	Y RADIAL	6206.1	6206.1	100.8	%			21:11:58
2	Al 396.153Radial†	-15.2	5.3	3.9427	ug/L	3.9427	ppb	21:11:58
2	Ca 317.933Radial†	34.5	16.4	25.149	ug/L	25.149	ppb	21:12:18
2	Fe 238.204 Radial†	7.7	1.6	15.919	ug/L	15.919	ppb	21:12:18
2	K 766.490 Radial†	2229.6	35.7	6.4577	ug/L	6.4577	ppb	21:11:58
2	Mg 279.077 IEC†	2.1	0.3	12.629	ug/L	12.629	ppb	21:12:18
2	Na 589.592 Radial†	-549.0	72.8	27.350	ug/L	27.350	ppb	21:11:58
2	Sr 421.552†	-22.6	-25.8	-0.1745	ug/L	-0.1745	ppb	21:11:58
2	Sc 361.383	887375.8	887375.8	100.27	%			21:13:15
2	Y 371.029	743840.5	743840.5	100.24	%			21:13:15
2	Ag 328.068†	257.7	29.5	0.1407	ug/L	0.1407	ppb	21:13:15
2	As 188.979†	-21.8	7.4	3.0381	ug/L	3.0381	ppb	21:13:35
2	B 249.677†	-278.4	246.2	5.3427	ug/L	5.3427	ppb	21:13:35
2	Ba 233.527†	2.1	14.1	0.1087	ug/L	0.1087	ppb	21:13:35
2	Be 313.107†	-5358.7	-24.0	-0.0090	ug/L	-0.0090	ppb	21:13:15
2	Cd 226.502†	-177.1	11.2	0.1203	ug/L	0.1203	ppb	21:13:35
2	Co 228.616†	-70.5	1.5	0.0289	ug/L	0.0289	ppb	21:13:35
2	Cr 267.716†	92.6	5.4	0.0588	ug/L	0.0588	ppb	21:13:35
2	Cu 324.752†	6977.6	190.0	0.5534	ug/L	0.5534	ppb	21:13:15
2	Mn 257.610†	504.5	99.7	0.1097	ug/L	0.1097	ppb	21:13:35
2	Mo 202.031†	21.4	1.4	0.0892	ug/L	0.0892	ppb	21:13:35
2	Ni 231.604†	88.5	18.1	0.4298	ug/L	0.4298	ppb	21:13:35

2	P 214.914†	229.0	8.4	4.9115 ug/L	4.9115 ppb		21:13:35
2	Pb 220.353†	-48.3	4.4	0.5117 ug/L	0.5117 ppb		21:13:35
2	S 181.975 Axial†	40.3	-1.3	-1.8543 ug/L	-1.8543 ppb		21:13:35
2	Sb 206.836†	29.2	-0.5	-0.1531 ug/L	-0.1531 ppb		21:13:35
2	Se 196.026†	-26.7	-3.2	-1.8651 ug/L	-1.8651 ppb		21:13:35
2	Si 251.611†	633.9	124.2	3.7946 ug/L	3.7946 ppb		21:13:35
2	Sn 189.927†	5.4	1.1	0.1926 ug/L	0.1926 ppb		21:13:35
2	Ti 334.940†	-983.4	-15.8	-0.0251 ug/L	-0.0251 ppb		21:13:15
2	Tl 190.801†	-37.3	-0.4	-0.1050 ug/L	-0.1050 ppb		21:13:35
2	U 409.014†	-1896.6	70.7	1.9744 ug/L	1.9744 ppb		21:13:15
2	V 292.402†	-1244.2	55.7	0.3788 ug/L	0.3788 ppb		21:13:15
2	Zn 213.857†	820.0	10.5	0.0894 ug/L	0.0894 ppb		21:13:35
2	SiO2†	682.3	191.7	12.542 ug/L	12.542 ppb		21:14:11
3	Sc Radial	5713.9	5713.9	101 %			21:12:23
3	Y RADIAL	6262.4	6262.4	101.7 %			21:12:23
3	Al 396.153Radial†	-22.4	-1.9	-1.3669 ug/L	-1.3669 ppb		21:12:23
3	Ca 317.933Radial†	38.6	20.6	31.468 ug/L	31.468 ppb		21:12:43
3	Fe 238.204 Radial†	5.1	-1.0	-9.5901 ug/L	-9.5901 ppb		21:12:43
3	K 766.490 Radial†	2297.7	107.1	19.414 ug/L	19.414 ppb		21:12:23
3	Mg 279.077 IEC†	0.4	-1.4	-51.564 ug/L	-51.564 ppb		21:12:43
3	Na 589.592 Radial†	-572.1	48.9	18.374 ug/L	18.374 ppb		21:12:23
3	Sr 421.552†	-13.5	-16.8	-0.1138 ug/L	-0.1138 ppb		21:12:23
3	Sc 361.383	884476.2	884476.2	99.944 %			21:13:40
3	Y 371.029	742286.2	742286.2	100.03 %			21:13:40
3	Ag 328.068†	268.4	40.9	0.1862 ug/L	0.1862 ppb		21:13:40
3	As 188.979†	-29.1	0.1	0.0486 ug/L	0.0486 ppb		21:14:00
3	B 249.677†	-253.9	269.8	5.8575 ug/L	5.8575 ppb		21:14:00
3	Ba 233.527†	3.0	15.0	0.1140 ug/L	0.1140 ppb		21:14:00
3	Be 313.107†	-5110.5	206.8	0.0769 ug/L	0.0769 ppb		21:13:40
3	Cd 226.502†	-174.5	13.3	0.1449 ug/L	0.1449 ppb		21:14:00
3	Co 228.616†	-77.9	-6.2	-0.1204 ug/L	-0.1204 ppb		21:14:00
3	Cr 267.716†	75.9	-11.0	-0.1185 ug/L	-0.1185 ppb		21:14:00
3	Cu 324.752†	6720.0	-44.9	-0.1311 ug/L	-0.1311 ppb		21:13:40
3	Mn 257.610†	543.2	140.1	0.1522 ug/L	0.1522 ppb		21:14:00
3	Mo 202.031†	16.0	-3.9	-0.2576 ug/L	-0.2576 ppb		21:14:00
3	Ni 231.604†	79.2	9.1	0.2160 ug/L	0.2160 ppb		21:14:00
3	P 214.914†	220.6	0.8	0.5042 ug/L	0.5042 ppb		21:14:00
3	Pb 220.353†	-66.7	-14.2	-1.6577 ug/L	-1.6577 ppb		21:14:00
3	S 181.975 Axial†	45.5	4.1	5.9905 ug/L	5.9905 ppb		21:14:00
3	Sb 206.836†	31.4	1.8	0.5898 ug/L	0.5898 ppb		21:14:00
3	Se 196.026†	-30.1	-6.6	-3.9851 ug/L	-3.9851 ppb		21:14:00
3	Si 251.611†	657.0	149.3	4.5645 ug/L	4.5645 ppb		21:14:00
3	Sn 189.927†	6.2	1.9	0.3257 ug/L	0.3257 ppb		21:14:00
3	Ti 334.940†	-964.8	-0.3	0.0010 ug/L	0.0010 ppb		21:13:40
3	Tl 190.801†	-33.8	3.0	0.8643 ug/L	0.8643 ppb		21:14:00
3	U 409.014†	-1943.2	17.9	0.5003 ug/L	0.5003 ppb		21:13:40
3	V 292.402†	-1261.1	34.6	0.2315 ug/L	0.2315 ppb		21:13:40
3	Zn 213.857†	817.1	10.2	0.0936 ug/L	0.0936 ppb		21:14:00
3	SiO2†	647.9	159.4	10.432 ug/L	10.432 ppb		21:14:16

10 12/10/09 DR

Mean Data: 1201985669|928625|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	886725.3	100.20	%	0.227				0.23%
Sc Radial	5751.9	102	%	1.0				0.99%
Y 371.029	743457.2	100.19	%	0.139				0.14%
Y RADIAL	6249.6	101.5	%	0.63				0.62%
Ag 328.068†	12.9	0.0610	ug/L	0.17893	0.0610	ppb	0.17893	293.52%
Al 396.153Radial†	1.4	1.0470	ug/L	2.68735	1.0470	ppb	2.68735	256.67%
As 188.979†	2.0	0.8251	ug/L	1.94462	0.8251	ppb	1.94462	235.67%
B 249.677†	250.0	5.4247	ug/L	0.39817	5.4247	ppb	0.39817	7.34%
Ba 233.527†	8.7	0.0671	ug/L	0.07666	0.0671	ppb	0.07666	114.28%
Be 313.107†	90.7	0.0336	ug/L	0.04291	0.0336	ppb	0.04291	127.61%
Ca 317.933Radial†	16.5	25.194	ug/L	6.2516	25.194	ppb	6.2516	24.81%
Cd 226.502†	12.6	0.1367	ug/L	0.01424	0.1367	ppb	0.01424	10.42%
Co 228.616†	2.9	0.0565	ug/L	0.19216	0.0565	ppb	0.19216	340.38%
Cr 267.716†	-2.9	-0.0313	ug/L	0.08866	-0.0313	ppb	0.08866	283.08%
Cu 324.752†	80.8	0.2354	ug/L	0.34483	0.2354	ppb	0.34483	146.47%
Fe 238.204 Radial†	0.7	6.7224	ug/L	14.16529	6.7224	ppb	14.16529	210.72%
K 766.490 Radial†	50.3	9.1207	ug/L	9.25408	9.1207	ppb	9.25408	101.46%

Mg 279.077 IEC†	-0.8	-30.219	ug/L	37.1076	-30.219	ppb	37.1076 122.80%
Mn 257.610†	120.8	0.1325	ug/L	0.02142	0.1325	ppb	0.02142 16.17%
Mo 202.031†	-1.0	-0.0657	ug/L	0.17633	-0.0657	ppb	0.17633 268.44%
Na 589.592 Radial†	43.8	16.451	ug/L	11.9769	16.451	ppb	11.9769 72.80%
Ni 231.604†	17.5	0.4154	ug/L	0.19266	0.4154	ppb	0.19266 46.38%
P 214.914†	2.9	1.7142	ug/L	2.79605	1.7142	ppb	2.79605 163.11%
Pb 220.353†	-5.1	-0.5982	ug/L	1.08560	-0.5982	ppb	1.08560 181.49%
S 181.975 Axial†	1.4	1.9820	ug/L	3.92521	1.9820	ppb	3.92521 198.04%
Sb 206.836†	0.4	0.1447	ug/L	0.39271	0.1447	ppb	0.39271 271.38%
Se 196.026†	-4.6	-2.7253	ug/L	1.11510	-2.7253	ppb	1.11510 40.92%
Si 251.611†	134.7	4.1155	ug/L	0.40063	4.1155	ppb	0.40063 9.73%
Sn 189.927†	2.5	0.4239	ug/L	0.29297	0.4239	ppb	0.29297 69.12%
Sr 421.552†	-18.5	-0.1253	ug/L	0.04453	-0.1253	ppb	0.04453 35.53%
Ti 334.940†	-22.7	-0.0361	ug/L	0.04364	-0.0361	ppb	0.04364 120.93%
Tl 190.801†	1.7	0.4911	ug/L	0.52169	0.4911	ppb	0.52169 106.23%
U 409.014†	52.5	1.4651	ug/L	0.83595	1.4651	ppb	0.83595 57.06%
V 292.402†	27.0	0.1824	ug/L	0.22507	0.1824	ppb	0.22507 123.42%
Zn 213.857†	10.7	0.0936	ug/L	0.00421	0.0936	ppb	0.00421 4.49%
SiO2†	172.0	11.254	ug/L	1.1298	11.254	ppb	1.1298 10.04%

Sequence No.: 69
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 21:16:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5647.9	5647.9	99.7	%			21:18:18
1	Y RADIAL	6106.6	6106.6	99.15	%			21:18:18
1	Al 396.153Radial†	6639.3	6677.7	4914.9	ug/L	4914.9	ppb	21:18:18
1	Ca 317.933Radial†	3268.0	3259.2	4983.9	ug/L	4983.9	ppb	21:18:38
1	Fe 238.204 Radial†	512.2	507.6	5126.6	ug/L	5126.6	ppb	21:18:38
1	K 766.490 Radial†	29935.2	27846.6	5045.1	ug/L	5045.1	ppb	21:18:18
1	Mg 279.077 IEC†	140.4	139.0	5183.7	ug/L	5183.7	ppb	21:18:38
1	Na 589.592 Radial†	26686.3	27375.1	10290	ug/L	10290	ppb	21:18:18
1	Sr 421.552†	77041.2	77248.0	521.42	ug/L	521.42	ppb	21:18:18
1	Sc 361.383	892884.8	892884.8	100.89	%			21:19:36
1	Y 371.029	737462.7	737462.7	99.379	%			21:19:36
1	Ag 328.068†	110521.4	109314.5	508.47	ug/L	508.47	ppb	21:19:41
1	As 188.979†	1200.1	1218.7	501.64	ug/L	501.64	ppb	21:20:01
1	B 249.677†	22393.0	22718.4	491.20	ug/L	491.20	ppb	21:19:41
1	Ba 233.527†	65783.7	65212.8	496.59	ug/L	496.59	ppb	21:19:41
1	Be 313.107†	1327756.6	1321310.7	491.98	ug/L	491.98	ppb	21:19:36
1	Cd 226.502†	46332.8	46110.1	500.05	ug/L	500.05	ppb	21:19:41
1	Co 228.616†	25734.1	25577.8	496.66	ug/L	496.66	ppb	21:19:41
1	Cr 267.716†	46429.2	45930.8	495.69	ug/L	495.69	ppb	21:19:41
1	Cu 324.752†	176754.6	168419.6	490.08	ug/L	490.08	ppb	21:19:41
1	Mn 257.610†	457659.5	453200.4	492.92	ug/L	492.92	ppb	21:19:36
1	Mo 202.031†	7828.1	7738.7	504.46	ug/L	504.46	ppb	21:20:01
1	Ni 231.604†	21282.7	21024.0	498.54	ug/L	498.54	ppb	21:19:41
1	P 214.914†	4417.9	4158.8	2396.6	ug/L	2396.6	ppb	21:20:01
1	Pb 220.353†	4199.6	4214.9	494.26	ug/L	494.26	ppb	21:20:01
1	S 181.975 Axial†	729.6	681.7	995.75	ug/L	995.75	ppb	21:20:01
1	Sb 206.836†	1596.8	1553.0	511.54	ug/L	511.54	ppb	21:20:01
1	Se 196.026†	813.9	830.1	512.98	ug/L	512.98	ppb	21:20:01
1	Si 251.611†	82976.9	81733.5	2487.8	ug/L	2487.8	ppb	21:19:41
1	Sn 189.927†	3013.9	2982.9	505.23	ug/L	505.23	ppb	21:20:01
1	Ti 334.940†	312347.0	310544.1	502.12	ug/L	502.12	ppb	21:19:41
1	Tl 190.801†	1708.3	1730.1	499.07	ug/L	499.07	ppb	21:20:01
1	U 409.014†	15797.6	17619.8	490.67	ug/L	490.67	ppb	21:19:41
1	V 292.402†	72238.3	72894.6	498.82	ug/L	498.82	ppb	21:19:41
1	Zn 213.857†	56724.9	55415.0	494.13	ug/L	494.13	ppb	21:19:41
1	SiO2†	82859.0	81635.9	5319.6	ug/L	5319.6	ppb	21:21:08
2	Sc Radial	5655.2	5655.2	99.9	%			21:18:43
2	Y RADIAL	6145.3	6145.3	99.78	%			21:18:43
2	Al 396.153Radial†	6648.2	6678.1	4915.2	ug/L	4915.2	ppb	21:18:43
2	Ca 317.933Radial†	3263.7	3250.7	4970.9	ug/L	4970.9	ppb	21:19:03
2	Fe 238.204 Radial†	508.5	503.2	5082.2	ug/L	5082.2	ppb	21:19:03
2	K 766.490 Radial†	29991.6	27864.6	5048.4	ug/L	5048.4	ppb	21:18:43
2	Mg 279.077 IEC†	140.0	138.4	5159.6	ug/L	5159.6	ppb	21:19:03
2	Na 589.592 Radial†	26553.6	27207.9	10227	ug/L	10227	ppb	21:18:43
2	Sr 421.552†	76919.7	77027.4	519.93	ug/L	519.93	ppb	21:18:43
2	Sc 361.383	888615.2	888615.2	100.41	%			21:20:07
2	Y 371.029	732497.7	732497.7	98.710	%			21:20:07
2	Ag 328.068†	108993.3	108318.9	503.84	ug/L	503.84	ppb	21:20:12
2	As 188.979†	1189.7	1214.0	499.69	ug/L	499.69	ppb	21:20:32
2	B 249.677†	22048.8	22482.2	486.09	ug/L	486.09	ppb	21:20:12
2	Ba 233.527†	64854.6	64600.8	491.93	ug/L	491.93	ppb	21:20:12
2	Be 313.107†	1322089.7	1321990.1	492.22	ug/L	492.22	ppb	21:20:07
2	Cd 226.502†	45643.7	45644.4	495.00	ug/L	495.00	ppb	21:20:12
2	Co 228.616†	25431.7	25399.2	493.20	ug/L	493.20	ppb	21:20:12
2	Cr 267.716†	45729.8	45455.3	490.55	ug/L	490.55	ppb	21:20:12
2	Cu 324.752†	174407.3	166923.6	485.72	ug/L	485.72	ppb	21:20:12
2	Mn 257.610†	456128.9	453855.6	493.63	ug/L	493.63	ppb	21:20:07
2	Mo 202.031†	7785.4	7733.5	504.12	ug/L	504.12	ppb	21:20:32
2	Ni 231.604†	20970.5	20814.4	493.57	ug/L	493.57	ppb	21:20:12

2	P 214.914†	4407.1	4169.1	2403.5 ug/L	2403.5 ppb	21:20:32
2	Pb 220.353†	4177.7	4213.2	494.05 ug/L	494.05 ppb	21:20:32
2	S 181.975 Axial†	727.1	682.6	997.18 ug/L	997.18 ppb	21:20:32
2	Sb 206.836†	1594.9	1558.8	513.53 ug/L	513.53 ppb	21:20:32
2	Se 196.026†	820.0	840.1	518.81 ug/L	518.81 ppb	21:20:32
2	Si 251.611†	81858.5	81014.9	2465.9 ug/L	2465.9 ppb	21:20:12
2	Sn 189.927†	2998.7	2982.1	505.10 ug/L	505.10 ppb	21:20:32
2	Ti 334.940†	308241.4	307942.8	497.92 ug/L	497.92 ppb	21:20:12
2	Tl 190.801†	1688.9	1718.8	495.84 ug/L	495.84 ppb	21:20:32
2	U 409.014†	15723.1	17620.9	490.72 ug/L	490.72 ppb	21:20:12
2	V 292.402†	71196.8	72201.4	494.15 ug/L	494.15 ppb	21:20:12
2	Zn 213.857†	56011.9	54975.0	490.21 ug/L	490.21 ppb	21:20:12
2	SiO2†	81560.6	80737.4	5260.8 ug/L	5260.8 ppb	21:21:13
3	Sc Radial	5552.2	5552.2	98.0 %		21:19:08
3	Y RADIAL	6003.1	6003.1	97.47 %		21:19:08
3	Al 396.153Radial†	6533.9	6685.1	4920.6 ug/L	4920.6 ppb	21:19:08
3	Ca 317.933Radial†	3289.2	3337.4	5103.4 ug/L	5103.4 ppb	21:19:28
3	Fe 238.204 Radial†	511.4	515.6	5207.4 ug/L	5207.4 ppb	21:19:28
3	K 766.490 Radial†	29533.8	27954.9	5064.8 ug/L	5064.8 ppb	21:19:08
3	Mg 279.077 IEC†	141.6	142.6	5317.6 ug/L	5317.6 ppb	21:19:28
3	Na 589.592 Radial†	26091.8	27230.2	10235 ug/L	10235 ppb	21:19:08
3	Sr 421.552†	75439.3	76946.3	519.39 ug/L	519.39 ppb	21:19:08
3	Sc 361.383	893642.1	893642.1	100.98 %		21:20:38
3	Y 371.029	737015.0	737015.0	99.319 %		21:20:38
3	Ag 328.068†	109763.3	108470.8	504.59 ug/L	504.59 ppb	21:20:43
3	As 188.979†	1177.2	1195.0	491.96 ug/L	491.96 ppb	21:21:03
3	B 249.677†	22213.3	22521.7	486.93 ug/L	486.93 ppb	21:20:43
3	Ba 233.527†	65320.5	64698.8	492.68 ug/L	492.68 ppb	21:20:43
3	Be 313.107†	1327808.5	1320247.0	491.57 ug/L	491.57 ppb	21:20:38
3	Cd 226.502†	45987.1	45728.8	495.90 ug/L	495.90 ppb	21:20:43
3	Co 228.616†	25601.1	25424.5	493.68 ug/L	493.68 ppb	21:20:43
3	Cr 267.716†	46002.9	45469.7	490.71 ug/L	490.71 ppb	21:20:43
3	Cu 324.752†	176061.8	167585.1	487.65 ug/L	487.65 ppb	21:20:43
3	Mn 257.610†	457555.0	452712.6	492.40 ug/L	492.40 ppb	21:20:38
3	Mo 202.031†	7750.2	7655.0	499.01 ug/L	499.01 ppb	21:21:03
3	Ni 231.604†	21111.0	20836.1	494.09 ug/L	494.09 ppb	21:20:43
3	P 214.914†	4378.0	4115.5	2371.2 ug/L	2371.2 ppb	21:21:03
3	Pb 220.353†	4191.4	4203.3	492.88 ug/L	492.88 ppb	21:21:03
3	S 181.975 Axial†	729.4	680.8	994.56 ug/L	994.56 ppb	21:21:03
3	Sb 206.836†	1589.7	1544.7	508.81 ug/L	508.81 ppb	21:21:03
3	Se 196.026†	810.5	826.1	510.84 ug/L	510.84 ppb	21:21:03
3	Si 251.611†	82458.9	81150.9	2470.1 ug/L	2470.1 ppb	21:20:43
3	Sn 189.927†	3003.4	2970.0	503.05 ug/L	503.05 ppb	21:21:03
3	Ti 334.940†	310938.2	308886.6	499.45 ug/L	499.45 ppb	21:20:43
3	Tl 190.801†	1689.2	1709.7	493.22 ug/L	493.22 ppb	21:21:03
3	U 409.014†	15684.2	17494.2	487.16 ug/L	487.16 ppb	21:20:43
3	V 292.402†	71787.9	72388.0	495.32 ug/L	495.32 ppb	21:20:43
3	Zn 213.857†	56359.5	55005.5	490.46 ug/L	490.46 ppb	21:20:43
3	SiO2†	82318.3	81030.8	5280.2 ug/L	5280.2 ppb	21:21:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	891714.0	100.76	%	0.306				0.30%
Sc Radial	5618.4	99.2	%	1.02				1.02%
Y 371.029	735658.5	99.136	%	0.3701				0.37%
Y RADIAL	6085.0	98.80	%	1.194				1.21%
Ag 328.068†	108701.4	505.63	ug/L	2.488	505.63	ppb	2.488	0.49%
QC value within limits for Ag 328.068 Recovery = 101.13%								
Al 396.153Radial†	6680.3	4916.9	ug/L	3.19	4916.9	ppb	3.19	0.06%
QC value within limits for Al 396.153Radial Recovery = 98.34%								
As 188.979†	1209.2	497.76	ug/L	5.120	497.76	ppb	5.120	1.03%
QC value within limits for As 188.979 Recovery = 99.55%								
B 249.677†	22574.1	488.07	ug/L	2.742	488.07	ppb	2.742	0.56%
QC value within limits for B 249.677 Recovery = 97.61%								
Ba 233.527†	64837.4	493.73	ug/L	2.502	493.73	ppb	2.502	0.51%
QC value within limits for Ba 233.527 Recovery = 98.75%								
Be 313.107†	1321182.6	491.92	ug/L	0.326	491.92	ppb	0.326	0.07%
QC value within limits for Be 313.107 Recovery = 98.38%								
Ca 317.933Radial†	3282.4	5019.4	ug/L	73.05	5019.4	ppb	73.05	1.46%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.39%
Cd 226.502†            45827.8      496.98 ug/L         2.693      496.98 ppb          2.693   0.54%
   QC value within limits for Cd 226.502  Recovery = 99.40%
Co 228.616†            25467.1      494.51 ug/L         1.875      494.51 ppb          1.875   0.38%
   QC value within limits for Co 228.616  Recovery = 98.90%
Cr 267.716†            45618.6      492.32 ug/L         2.918      492.32 ppb          2.918   0.59%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           167642.8      487.82 ug/L         2.181      487.82 ppb          2.181   0.45%
   QC value within limits for Cu 324.752  Recovery = 97.56%
Fe 238.204 Radial†       508.8      5138.7 ug/L         63.50      5138.7 ppb          63.50   1.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.77%
K 766.490 Radial†      27888.7      5052.8 ug/L         10.52      5052.8 ppb          10.52   0.21%
   QC value within limits for K 766.490 Radial  Recovery = 101.06%
Mg 279.077 IEC†          140.0      5220.3 ug/L         85.11      5220.3 ppb          85.11   1.63%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.41%
Mn 257.610†           453256.2      492.98 ug/L         0.619      492.98 ppb          0.619   0.13%
   QC value within limits for Mn 257.610  Recovery = 98.60%
Mo 202.031†             7709.1      502.53 ug/L         3.052      502.53 ppb          3.052   0.61%
   QC value within limits for Mo 202.031  Recovery = 100.51%
Na 589.592 Radial†     27271.1       10250 ug/L          34.1       10250 ppb           34.1   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 102.50%
Ni 231.604†            20891.5      495.40 ug/L         2.734      495.40 ppb          2.734   0.55%
   QC value within limits for Ni 231.604  Recovery = 99.08%
P 214.914†              4147.8      2390.4 ug/L         16.98      2390.4 ppb          16.98   0.71%
   QC value within limits for P 214.914  Recovery = 95.62%
Pb 220.353†             4210.5      493.73 ug/L         0.745      493.73 ppb          0.745   0.15%
   QC value within limits for Pb 220.353  Recovery = 98.75%
S 181.975 Axial†         681.7      995.83 ug/L         1.313      995.83 ppb          1.313   0.13%
   QC value within limits for S 181.975 Axial  Recovery = 99.58%
Sb 206.836†             1552.2      511.29 ug/L         2.371      511.29 ppb          2.371   0.46%
   QC value within limits for Sb 206.836  Recovery = 102.26%
Se 196.026†              832.1      514.21 ug/L         4.126      514.21 ppb          4.126   0.80%
   QC value within limits for Se 196.026  Recovery = 102.84%
Si 251.611†            81299.8      2474.6 ug/L         11.66      2474.6 ppb          11.66   0.47%
   QC value within limits for Si 251.611  Recovery = 98.98%
Sn 189.927†             2978.4      504.46 ug/L         1.219      504.46 ppb          1.219   0.24%
   QC value within limits for Sn 189.927  Recovery = 100.89%
Sr 421.552†            77073.9      520.25 ug/L         1.054      520.25 ppb          1.054   0.20%
   QC value within limits for Sr 421.552  Recovery = 104.05%
Ti 334.940†           309124.5      499.83 ug/L         2.128      499.83 ppb          2.128   0.43%
   QC value within limits for Ti 334.940  Recovery = 99.97%
Tl 190.801†             1719.5      496.04 ug/L         2.929      496.04 ppb          2.929   0.59%
   QC value within limits for Tl 190.801  Recovery = 99.21%
U 409.014†             17578.3      489.52 ug/L         2.039      489.52 ppb          2.039   0.42%
   QC value within limits for U 409.014  Recovery = 97.90%
V 292.402†             72494.7      496.10 ug/L         2.432      496.10 ppb          2.432   0.49%
   QC value within limits for V 292.402  Recovery = 99.22%
Zn 213.857†            55131.8      491.60 ug/L         2.192      491.60 ppb          2.192   0.45%
   QC value within limits for Zn 213.857  Recovery = 98.32%
SiO2†                  81134.7      5286.9 ug/L         29.97      5286.9 ppb          29.97   0.57%
   QC value within limits for SiO2  Recovery = 98.87%
All analyte(s) passed QC.
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Sequence No.: 70
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 21:23:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5632.3	5632.3	99.5	%			21:25:20
1	Y RADIAL	6162.4	6162.4	100.1	%			21:25:20
1	Al 396.153Radial†	23.8	44.3	32.699	ug/L	32.699	ppb	21:25:20
1	Ca 317.933Radial†	25.2	7.7	11.755	ug/L	11.755	ppb	21:25:40
1	Fe 238.204 Radial†	6.1	0.1	1.2351	ug/L	1.2351	ppb	21:25:40
1	K 766.490 Radial†	2337.0	179.6	32.588	ug/L	32.588	ppb	21:25:20
1	Mg 279.077 IEC†	3.0	1.2	46.542	ug/L	46.542	ppb	21:25:40
1	Na 589.592 Radial†	-603.7	9.0	3.3749	ug/L	3.3749	ppb	21:25:20
1	Sr 421.552†	13.1	9.8	0.0658	ug/L	0.0658	ppb	21:25:20
1	Sc 361.383	912717.9	912717.9	103.14	%			21:26:37
1	Y 371.029	764283.2	764283.2	102.99	%			21:26:37
1	Ag 328.068†	376.3	137.3	0.6491	ug/L	0.6491	ppb	21:26:42
1	As 188.979†	-22.9	7.0	2.8424	ug/L	2.8424	ppb	21:27:02
1	B 249.677†	-250.4	281.1	6.1023	ug/L	6.1023	ppb	21:27:02
1	Ba 233.527†	-26.0	-13.2	-0.0983	ug/L	-0.0983	ppb	21:27:02
1	Be 313.107†	-5285.0	195.9	0.0729	ug/L	0.0729	ppb	21:26:42
1	Cd 226.502†	-183.5	9.9	0.1080	ug/L	0.1080	ppb	21:27:02
1	Co 228.616†	-81.8	-7.5	-0.1455	ug/L	-0.1455	ppb	21:27:02
1	Cr 267.716†	83.6	-5.9	-0.0578	ug/L	-0.0578	ppb	21:27:02
1	Cu 324.752†	6850.0	-126.9	-0.3691	ug/L	-0.3691	ppb	21:26:42
1	Mn 257.610†	478.8	60.8	0.0653	ug/L	0.0653	ppb	21:27:02
1	Mo 202.031†	27.5	6.7	0.4359	ug/L	0.4359	ppb	21:27:02
1	Ni 231.604†	93.4	20.5	0.4861	ug/L	0.4861	ppb	21:27:02
1	P 214.914†	218.4	-8.2	-4.8388	ug/L	-4.8388	ppb	21:27:02
1	Pb 220.353†	-61.1	-6.7	-0.7788	ug/L	-0.7788	ppb	21:27:02
1	S 181.975 Axial†	44.5	1.6	2.3837	ug/L	2.3837	ppb	21:27:02
1	Sb 206.836†	34.5	3.8	1.2488	ug/L	1.2488	ppb	21:27:02
1	Se 196.026†	-26.5	-2.3	-1.3392	ug/L	-1.3392	ppb	21:27:02
1	Si 251.611†	500.1	-23.1	-0.7233	ug/L	-0.7233	ppb	21:27:02
1	Sn 189.927†	0.1	-4.2	-0.7061	ug/L	-0.7061	ppb	21:27:02
1	Ti 334.940†	-965.1	29.3	0.0538	ug/L	0.0538	ppb	21:26:42
1	Tl 190.801†	-30.3	7.5	2.1439	ug/L	2.1439	ppb	21:27:02
1	U 409.014†	-2508.5	-470.1	-13.133	ug/L	-13.133	ppb	21:26:42
1	V 292.402†	-1221.5	112.1	0.7386	ug/L	0.7386	ppb	21:26:42
1	Zn 213.857†	688.2	-140.0	-1.2640	ug/L	-1.2640	ppb	21:27:02
1	SiO2†	509.5	5.2	0.3055	ug/L	0.3055	ppb	21:28:08
2	Sc Radial	5785.9	5785.9	102	%			21:25:45
2	Y RADIAL	6290.8	6290.8	102.1	%			21:25:45
2	Al 396.153Radial†	-25.5	-4.6	-3.3946	ug/L	-3.3946	ppb	21:25:45
2	Ca 317.933Radial†	28.7	10.4	15.927	ug/L	15.927	ppb	21:26:05
2	Fe 238.204 Radial†	7.1	0.9	9.5092	ug/L	9.5092	ppb	21:26:05
2	K 766.490 Radial†	2168.3	-47.9	-8.7037	ug/L	-8.7037	ppb	21:25:45
2	Mg 279.077 IEC†	0.3	-1.4	-53.056	ug/L	-53.056	ppb	21:26:05
2	Na 589.592 Radial†	-610.4	18.5	6.9518	ug/L	6.9518	ppb	21:25:45
2	Sr 421.552†	0.8	-2.7	-0.0182	ug/L	-0.0182	ppb	21:25:45
2	Sc 361.383	922354.0	922354.0	104.22	%			21:27:07
2	Y 371.029	771287.1	771287.1	103.94	%			21:27:07
2	Ag 328.068†	383.0	139.9	0.6569	ug/L	0.6569	ppb	21:27:12
2	As 188.979†	-18.3	11.7	4.7654	ug/L	4.7654	ppb	21:27:32
2	B 249.677†	-275.3	259.7	5.6371	ug/L	5.6371	ppb	21:27:32
2	Ba 233.527†	-19.3	-6.5	-0.0479	ug/L	-0.0479	ppb	21:27:32
2	Be 313.107†	-5292.1	242.7	0.0900	ug/L	0.0900	ppb	21:27:12
2	Cd 226.502†	-174.6	20.3	0.2196	ug/L	0.2196	ppb	21:27:32
2	Co 228.616†	-77.5	-2.6	-0.0501	ug/L	-0.0501	ppb	21:27:32
2	Cr 267.716†	70.8	-19.0	-0.2017	ug/L	-0.2017	ppb	21:27:32
2	Cu 324.752†	6830.1	-215.3	-0.6258	ug/L	-0.6258	ppb	21:27:12
2	Mn 257.610†	505.5	81.6	0.0906	ug/L	0.0906	ppb	21:27:32
2	Mo 202.031†	18.1	-2.6	-0.1694	ug/L	-0.1694	ppb	21:27:32
2	Ni 231.604†	90.9	17.1	0.4064	ug/L	0.4064	ppb	21:27:32

2	P 214.914†	229.1	-0.1	0.0208 ug/L	0.0208 ppb	21:27:32
2	Pb 220.353†	-56.6	-1.8	-0.2087 ug/L	-0.2087 ppb	21:27:32
2	S 181.975 Axial†	49.3	5.9	8.5871 ug/L	8.5871 ppb	21:27:32
2	Sb 206.836†	42.7	11.4	3.7073 ug/L	3.7073 ppb	21:27:32
2	Se 196.026†	-25.8	-1.3	-0.7387 ug/L	-0.7387 ppb	21:27:32
2	Si 251.611†	481.1	-46.4	-1.4169 ug/L	-1.4169 ppb	21:27:32
2	Sn 189.927†	11.9	7.2	1.2160 ug/L	1.2160 ppb	21:27:32
2	Ti 334.940†	-1060.6	-52.6	-0.0812 ug/L	-0.0812 ppb	21:27:12
2	Tl 190.801†	-40.9	-2.3	-0.6727 ug/L	-0.6727 ppb	21:27:32
2	U 409.014†	-2294.7	-239.5	-6.6931 ug/L	-6.6931 ppb	21:27:12
2	V 292.402†	-1289.5	59.2	0.3817 ug/L	0.3817 ppb	21:27:12
2	Zn 213.857†	680.5	-154.4	-1.3900 ug/L	-1.3900 ppb	21:27:32
2	SiO2†	497.9	-11.1	-0.7230 ug/L	-0.7230 ppb	21:28:13
3	Sc Radial	5772.2	5772.2	102 %		21:26:10
3	Y RADIAL	6294.5	6294.5	102.2 %		21:26:10
3	Al 396.153Radial†	-26.3	-5.4	-4.0242 ug/L	-4.0242 ppb	21:26:10
3	Ca 317.933Radial†	27.4	9.2	14.072 ug/L	14.072 ppb	21:26:30
3	Fe 238.204 Radial†	5.3	-0.8	-7.8442 ug/L	-7.8442 ppb	21:26:30
3	K 766.490 Radial†	2311.4	97.6	17.699 ug/L	17.699 ppb	21:26:10
3	Mg 279.077 IEC†	1.7	-0.1	-4.8429 ug/L	-4.8429 ppb	21:26:30
3	Na 589.592 Radial†	-588.3	38.8	14.572 ug/L	14.572 ppb	21:26:10
3	Sr 421.552†	9.6	6.0	0.0407 ug/L	0.0407 ppb	21:26:10
3	Sc 361.383	911407.4	911407.4	102.99 %		21:27:37
3	Y 371.029	764115.5	764115.5	102.97 %		21:27:37
3	Ag 328.068†	431.3	191.2	0.8919 ug/L	0.8919 ppb	21:27:42
3	As 188.979†	-21.9	7.9	3.2293 ug/L	3.2293 ppb	21:28:02
3	B 249.677†	-258.8	272.6	5.9169 ug/L	5.9169 ppb	21:28:02
3	Ba 233.527†	-9.2	3.1	0.0249 ug/L	0.0249 ppb	21:28:02
3	Be 313.107†	-5189.4	281.4	0.1047 ug/L	0.1047 ppb	21:27:42
3	Cd 226.502†	-179.6	13.5	0.1472 ug/L	0.1472 ppb	21:28:02
3	Co 228.616†	-61.1	12.4	0.2422 ug/L	0.2422 ppb	21:28:02
3	Cr 267.716†	60.5	-28.3	-0.3005 ug/L	-0.3005 ppb	21:28:02
3	Cu 324.752†	6866.0	-101.8	-0.2966 ug/L	-0.2966 ppb	21:27:42
3	Mn 257.610†	496.7	78.9	0.0850 ug/L	0.0850 ppb	21:28:02
3	Mo 202.031†	26.0	5.2	0.3409 ug/L	0.3409 ppb	21:28:02
3	Ni 231.604†	82.2	9.7	0.2297 ug/L	0.2297 ppb	21:28:02
3	P 214.914†	220.8	-5.6	-3.2365 ug/L	-3.2365 ppb	21:28:02
3	Pb 220.353†	-54.9	-0.7	-0.0867 ug/L	-0.0867 ppb	21:28:02
3	S 181.975 Axial†	40.3	-2.4	-3.4510 ug/L	-3.4510 ppb	21:28:02
3	Sb 206.836†	27.2	-3.2	-1.0180 ug/L	-1.0180 ppb	21:28:02
3	Se 196.026†	-25.2	-1.0	-0.6295 ug/L	-0.6295 ppb	21:28:02
3	Si 251.611†	481.2	-40.8	-1.2630 ug/L	-1.2630 ppb	21:28:02
3	Sn 189.927†	10.5	6.0	1.0107 ug/L	1.0107 ppb	21:28:02
3	Ti 334.940†	-955.3	37.5	0.0655 ug/L	0.0655 ppb	21:27:42
3	Tl 190.801†	-36.0	1.9	0.5533 ug/L	0.5533 ppb	21:28:02
3	U 409.014†	-2359.7	-329.1	-9.1938 ug/L	-9.1938 ppb	21:27:42
3	V 292.402†	-1223.6	108.4	0.7200 ug/L	0.7200 ppb	21:27:42
3	Zn 213.857†	687.3	-139.9	-1.2587 ug/L	-1.2587 ppb	21:28:02
3	SiO2†	475.1	-27.5	-1.8346 ug/L	-1.8346 ppb	21:28:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	915493.1	103.45	%	0.675				0.65%
Sc Radial	5730.1	101	%	1.5				1.48%
Y 371.029	766561.9	103.30	%	0.552				0.53%
Y RADIAL	6249.3	101.5	%	1.22				1.20%
Ag 328.068†	156.1	0.7326	ug/L	0.13797	0.7326	ppb	0.13797	18.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.4	8.4268	ug/L	21.02283	8.4268	ppb	21.02283	249.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.9	3.6124	ug/L	1.01713	3.6124	ppb	1.01713	28.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	271.1	5.8854	ug/L	0.23416	5.8854	ppb	0.23416	3.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.5	-0.0404	ug/L	0.06194	-0.0404	ppb	0.06194	153.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	240.0	0.0892	ug/L	0.01591	0.0892	ppb	0.01591	17.84%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.1	13.918	ug/L	2.0905	13.918	ppb	2.0905	15.02%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.6      0.1583 ug/L       0.05664      0.1583 ppb        0.05664  35.79%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.8      0.0155 ug/L       0.20200      0.0155 ppb        0.20200 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -17.7     -0.1867 ug/L       0.12205     -0.1867 ppb        0.12205  65.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -148.0     -0.4305 ug/L       0.17299     -0.4305 ppb        0.17299  40.19%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.1      0.9667 ug/L       8.67983      0.9667 ppb        8.67983 897.88%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          76.4     13.861 ug/L       20.9117     13.861 ppb        20.9117 150.87%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.1     -3.7856 ug/L      49.80713     -3.7856 ppb       49.80713 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                73.8      0.0803 ug/L       0.01326      0.0803 ppb        0.01326  16.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.1      0.2025 ug/L       0.32556      0.2025 ppb        0.32556 160.80%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         22.1      8.2995 ug/L       5.71876      8.2995 ppb        5.71876  68.90%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                15.8      0.3741 ug/L       0.13120      0.3741 ppb        0.13120  35.07%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.7     -2.6848 ug/L       2.47630     -2.6848 ppb        2.47630  92.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.1     -0.3581 ug/L       0.36945     -0.3581 ppb        0.36945 103.18%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      2.5066 ug/L       6.01998      2.5066 ppb        6.01998 240.16%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.0      1.3127 ug/L       2.36327      1.3127 ppb        2.36327 180.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.5     -0.9025 ug/L       0.38211     -0.9025 ppb        0.38211  42.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -36.8     -1.1344 ug/L       0.36429     -1.1344 ppb        0.36429  32.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      0.5069 ug/L       1.05549      0.5069 ppb        1.05549 208.24%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 4.4      0.0294 ug/L       0.04312      0.0294 ppb        0.04312 146.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 4.7      0.0127 ug/L       0.08153      0.0127 ppb        0.08153 641.95%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.4      0.6749 ug/L       1.41224      0.6749 ppb        1.41224 209.26%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -346.2     -9.6734 ug/L       3.24676     -9.6734 ppb        3.24676  33.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                93.3      0.6134 ug/L       0.20088      0.6134 ppb        0.20088  32.75%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -144.8     -1.3042 ug/L       0.07436     -1.3042 ppb        0.07436   5.70%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -11.1     -0.7507 ug/L       1.07035     -0.7507 ppb        1.07035 142.58%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 71
Sample ID: 241835002|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 12/9/2009 21:30:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241835002|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5902.1	5902.1	104	%			21:32:20
1	Y RADIAL	6418.7	6418.7	104.2	%			21:32:20
1	Al 396.153Radial†	-24.6	-3.2	-2.3914	ug/L	-2.3914	ppb	21:32:20
1	Ca 317.933Radial†	39.5	20.3	30.971	ug/L	30.971	ppb	21:32:40
1	Fe 238.204 Radial†	7.8	1.5	14.853	ug/L	14.853	ppb	21:32:40
1	K 766.490 Radial†	2130.6	-125.9	-22.867	ug/L	-22.867	ppb	21:32:20
1	Mg 279.077 IEC†	2.9	1.0	36.806	ug/L	36.806	ppb	21:32:40
1	Na 589.592 Radial†	-559.7	78.9	29.674	ug/L	29.674	ppb	21:32:20
1	Sr 421.552†	23.1	18.8	0.1266	ug/L	0.1266	ppb	21:32:20
1	Sc 361.383	900123.4	900123.4	101.71	%			21:33:37
1	Y 371.029	754068.1	754068.1	101.62	%			21:33:37
1	Ag 328.068†	353.2	119.6	0.5555	ug/L	0.5555	ppb	21:33:37
1	As 188.979†	-30.6	-0.9	-0.3513	ug/L	-0.3513	ppb	21:33:57
1	B 249.677†	-311.6	217.5	4.7198	ug/L	4.7198	ppb	21:33:57
1	Ba 233.527†	31.6	43.0	0.3263	ug/L	0.3263	ppb	21:33:57
1	Be 313.107†	-5298.1	111.3	0.0417	ug/L	0.0417	ppb	21:33:37
1	Cd 226.502†	-186.0	4.9	0.0523	ug/L	0.0523	ppb	21:33:57
1	Co 228.616†	-65.1	7.7	0.1498	ug/L	0.1498	ppb	21:33:57
1	Cr 267.716†	80.4	-8.0	-0.0865	ug/L	-0.0865	ppb	21:33:57
1	Cu 324.752†	6875.4	-9.0	-0.0253	ug/L	-0.0253	ppb	21:33:37
1	Mn 257.610†	637.9	223.8	0.2440	ug/L	0.2440	ppb	21:33:57
1	Mo 202.031†	22.0	1.6	0.1069	ug/L	0.1069	ppb	21:33:57
1	Ni 231.604†	81.3	9.8	0.2319	ug/L	0.2319	ppb	21:33:57
1	P 214.914†	218.2	-5.4	-3.2432	ug/L	-3.2432	ppb	21:33:57
1	Pb 220.353†	-47.9	5.4	0.6326	ug/L	0.6326	ppb	21:33:57
1	S 181.975 Axial†	52.7	10.3	15.123	ug/L	15.123	ppb	21:33:57
1	Sb 206.836†	37.2	7.0	2.2780	ug/L	2.2780	ppb	21:33:57
1	Se 196.026†	-20.3	3.5	2.1291	ug/L	2.1291	ppb	21:33:57
1	Si 251.611†	1428.1	896.1	27.412	ug/L	27.412	ppb	21:33:57
1	Sn 189.927†	5.3	0.9	0.1564	ug/L	0.1564	ppb	21:33:57
1	Ti 334.940†	-879.3	100.5	0.1643	ug/L	0.1643	ppb	21:33:37
1	Tl 190.801†	-33.8	3.6	1.0303	ug/L	1.0303	ppb	21:33:57
1	U 409.014†	-2006.7	-10.7	-0.3011	ug/L	-0.3011	ppb	21:33:37
1	V 292.402†	-1401.2	-81.1	-0.5480	ug/L	-0.5480	ppb	21:33:37
1	Zn 213.857†	793.7	-26.9	-0.2465	ug/L	-0.2465	ppb	21:33:57
1	SiO2†	1446.7	933.5	61.144	ug/L	61.144	ppb	21:34:53
2	Sc Radial	5793.6	5793.6	102	%			21:32:45
2	Y RADIAL	6333.0	6333.0	102.8	%			21:32:45
2	Al 396.153Radial†	-11.9	8.7	6.3946	ug/L	6.3946	ppb	21:32:45
2	Ca 317.933Radial†	36.7	18.2	27.821	ug/L	27.821	ppb	21:33:05
2	Fe 238.204 Radial†	7.9	1.7	16.619	ug/L	16.619	ppb	21:33:05
2	K 766.490 Radial†	2178.1	-41.1	-7.4782	ug/L	-7.4782	ppb	21:32:45
2	Mg 279.077 IEC†	3.5	1.7	63.783	ug/L	63.783	ppb	21:33:05
2	Na 589.592 Radial†	-588.9	40.3	15.139	ug/L	15.139	ppb	21:32:45
2	Sr 421.552†	3.5	0.0	-0.0002	ug/L	-0.0002	ppb	21:32:45
2	Sc 361.383	886729.1	886729.1	100.20	%			21:34:02
2	Y 371.029	742410.1	742410.1	100.05	%			21:34:02
2	Ag 328.068†	290.9	62.7	0.2944	ug/L	0.2944	ppb	21:34:02
2	As 188.979†	-27.6	1.7	0.6986	ug/L	0.6986	ppb	21:34:23
2	B 249.677†	-302.3	222.2	4.8199	ug/L	4.8199	ppb	21:34:23
2	Ba 233.527†	19.2	31.2	0.2377	ug/L	0.2377	ppb	21:34:23
2	Be 313.107†	-5283.2	47.5	0.0180	ug/L	0.0180	ppb	21:34:02
2	Cd 226.502†	-195.3	-7.0	-0.0778	ug/L	-0.0778	ppb	21:34:23
2	Co 228.616†	-64.0	7.9	0.1527	ug/L	0.1527	ppb	21:34:23
2	Cr 267.716†	77.7	-9.4	-0.1014	ug/L	-0.1014	ppb	21:34:23
2	Cu 324.752†	6903.1	120.8	0.3520	ug/L	0.3520	ppb	21:34:02
2	Mn 257.610†	665.8	261.1	0.2842	ug/L	0.2842	ppb	21:34:23
2	Mo 202.031†	23.4	3.4	0.2215	ug/L	0.2215	ppb	21:34:23
2	Ni 231.604†	83.8	13.6	0.3215	ug/L	0.3215	ppb	21:34:23

2	P 214.914†	236.1	15.7	9.2492	ug/L	9.2492 ppb	21:34:23
2	Pb 220.353†	-64.2	-11.5	-1.3454	ug/L	-1.3454 ppb	21:34:23
2	S 181.975 Axial†	43.5	2.0	2.8846	ug/L	2.8846 ppb	21:34:23
2	Sb 206.836†	37.8	8.1	2.6318	ug/L	2.6318 ppb	21:34:23
2	Se 196.026†	-26.6	-3.1	-1.7950	ug/L	-1.7950 ppb	21:34:23
2	Si 251.611†	1445.3	934.4	28.578	ug/L	28.578 ppb	21:34:23
2	Sn 189.927†	2.3	-2.0	-0.3301	ug/L	-0.3301 ppb	21:34:23
2	Ti 334.940†	-855.4	111.3	0.1809	ug/L	0.1809 ppb	21:34:02
2	Tl 190.801†	-27.3	9.6	2.7476	ug/L	2.7476 ppb	21:34:23
2	U 409.014†	-1916.9	49.1	1.3685	ug/L	1.3685 ppb	21:34:02
2	V 292.402†	-1272.7	26.3	0.1821	ug/L	0.1821 ppb	21:34:02
2	Zn 213.857†	776.5	-32.3	-0.2969	ug/L	-0.2969 ppb	21:34:23
2	SiO2†	1452.1	960.4	62.890	ug/L	62.890 ppb	21:34:58
3	Sc Radial	5857.7	5857.7	103	%		21:33:10
3	Y RADIAL	6376.0	6376.0	103.5	%		21:33:10
3	Al 396.153Radial†	-32.9	-11.5	-8.4966	ug/L	-8.4966 ppb	21:33:10
3	Ca 317.933Radial†	37.1	18.2	27.788	ug/L	27.788 ppb	21:33:31
3	Fe 238.204 Radial†	6.6	0.4	3.5826	ug/L	3.5826 ppb	21:33:31
3	K 766.490 Radial†	2233.5	-10.9	-1.9977	ug/L	-1.9977 ppb	21:33:10
3	Mg 279.077 IEC†	1.0	-0.8	-28.731	ug/L	-28.731 ppb	21:33:31
3	Na 589.592 Radial†	-573.8	61.2	23.005	ug/L	23.005 ppb	21:33:10
3	Sr 421.552†	33.1	28.6	0.1925	ug/L	0.1925 ppb	21:33:10
3	Sc 361.383	897321.1	897321.1	101.40	%		21:34:28
3	Y 371.029	751784.8	751784.8	101.31	%		21:34:28
3	Ag 328.068†	198.8	-31.5	-0.1465	ug/L	-0.1465 ppb	21:34:28
3	As 188.979†	-32.6	-3.0	-1.2192	ug/L	-1.2192 ppb	21:34:48
3	B 249.677†	-328.6	199.7	4.3351	ug/L	4.3351 ppb	21:34:48
3	Ba 233.527†	30.1	41.7	0.3172	ug/L	0.3172 ppb	21:34:48
3	Be 313.107†	-5248.2	144.3	0.0543	ug/L	0.0543 ppb	21:34:28
3	Cd 226.502†	-169.6	20.5	0.2226	ug/L	0.2226 ppb	21:34:48
3	Co 228.616†	-68.0	4.7	0.0898	ug/L	0.0898 ppb	21:34:48
3	Cr 267.716†	81.9	-6.2	-0.0672	ug/L	-0.0672 ppb	21:34:48
3	Cu 324.752†	6850.1	-12.8	-0.0370	ug/L	-0.0370 ppb	21:34:28
3	Mn 257.610†	645.2	232.9	0.2539	ug/L	0.2539 ppb	21:34:48
3	Mo 202.031†	20.3	0.1	0.0047	ug/L	0.0047 ppb	21:34:48
3	Ni 231.604†	81.0	9.7	0.2312	ug/L	0.2312 ppb	21:34:48
3	P 214.914†	222.7	-0.3	-0.1976	ug/L	-0.1976 ppb	21:34:48
3	Pb 220.353†	-59.9	-6.6	-0.7690	ug/L	-0.7690 ppb	21:34:48
3	S 181.975 Axial†	47.5	5.4	7.8299	ug/L	7.8299 ppb	21:34:48
3	Sb 206.836†	30.4	0.4	0.1085	ug/L	0.1085 ppb	21:34:48
3	Se 196.026†	-26.6	-2.8	-1.6498	ug/L	-1.6498 ppb	21:34:48
3	Si 251.611†	1422.3	894.7	27.366	ug/L	27.366 ppb	21:34:48
3	Sn 189.927†	1.0	-3.3	-0.5561	ug/L	-0.5561 ppb	21:34:48
3	Ti 334.940†	-758.5	217.0	0.3512	ug/L	0.3512 ppb	21:34:28
3	Tl 190.801†	-30.6	6.6	1.9077	ug/L	1.9077 ppb	21:34:48
3	U 409.014†	-1884.0	104.1	2.9068	ug/L	2.9068 ppb	21:34:28
3	V 292.402†	-1272.6	41.4	0.2838	ug/L	0.2838 ppb	21:34:28
3	Zn 213.857†	790.3	-27.9	-0.2518	ug/L	-0.2518 ppb	21:34:48
3	SiO2†	1453.3	944.5	61.852	ug/L	61.852 ppb	21:35:03

Mean Data: 241835002|928625|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894724.6	101.10	%	0.798				0.79%
Sc Radial	5851.1	103	%	1.0				0.93%
Y 371.029	749421.0	100.99	%	0.833				0.82%
Y RADIAL	6375.9	103.5	%	0.70				0.67%
Ag 328.068†	50.3	0.2345	ug/L	0.35480	0.2345	ppb	0.35480	151.32%
Al 396.153Radial†	-2.0	-1.4978	ug/L	7.48571	-1.4978	ppb	7.48571	499.78%
As 188.979†	-0.7	-0.2907	ug/L	0.96035	-0.2907	ppb	0.96035	330.38%
B 249.677†	213.2	4.6250	ug/L	0.25593	4.6250	ppb	0.25593	5.53%
Ba 233.527†	38.6	0.2937	ug/L	0.04873	0.2937	ppb	0.04873	16.59%
Be 313.107†	101.0	0.0380	ug/L	0.01842	0.0380	ppb	0.01842	48.46%
Ca 317.933Radial†	18.9	28.860	ug/L	1.8284	28.860	ppb	1.8284	6.34%
Cd 226.502†	6.1	0.0657	ug/L	0.15069	0.0657	ppb	0.15069	229.37%
Co 228.616†	6.7	0.1307	ug/L	0.03551	0.1307	ppb	0.03551	27.16%
Cr 267.716†	-7.9	-0.0850	ug/L	0.01718	-0.0850	ppb	0.01718	20.21%
Cu 324.752†	33.0	0.0966	ug/L	0.22130	0.0966	ppb	0.22130	229.11%
Fe 238.204 Radial†	1.2	11.685	ug/L	7.0722	11.685	ppb	7.0722	60.52%
K 766.490 Radial†	-59.3	-10.781	ug/L	10.8198	-10.781	ppb	10.8198	100.36%

Mg 279.077 IEC†	0.6	23.953	ug/L	47.5771	23.953	ppb	47.5771 198.63%
Mn 257.610†	239.2	0.2607	ug/L	0.02096	0.2607	ppb	0.02096 8.04%
Mo 202.031†	1.7	0.1110	ug/L	0.10844	0.1110	ppb	0.10844 97.66%
Na 589.592 Radial†	60.1	22.606	ug/L	7.2754	22.606	ppb	7.2754 32.18%
Ni 231.604†	11.0	0.2616	ug/L	0.05195	0.2616	ppb	0.05195 19.86%
P 214.914†	3.3	1.9361	ug/L	6.51379	1.9361	ppb	6.51379 336.43%
Pb 220.353†	-4.2	-0.4939	ug/L	1.01728	-0.4939	ppb	1.01728 205.95%
S 181.975 Axial†	5.9	8.6127	ug/L	6.15680	8.6127	ppb	6.15680 71.49%
Sb 206.836†	5.2	1.6728	ug/L	1.36622	1.6728	ppb	1.36622 81.67%
Se 196.026†	-0.8	-0.4386	ug/L	2.22486	-0.4386	ppb	2.22486 507.32%
Si 251.611†	908.4	27.786	ug/L	0.6869	27.786	ppb	0.6869 2.47%
Sn 189.927†	-1.5	-0.2433	ug/L	0.36408	-0.2433	ppb	0.36408 149.66%
Sr 421.552†	15.8	0.1063	ug/L	0.09791	0.1063	ppb	0.09791 92.12%
Ti 334.940†	142.9	0.2321	ug/L	0.10341	0.2321	ppb	0.10341 44.55%
Tl 190.801†	6.6	1.8952	ug/L	0.85871	1.8952	ppb	0.85871 45.31%
U 409.014†	47.5	1.3247	ug/L	1.60439	1.3247	ppb	1.60439 121.11%
V 292.402†	-4.5	-0.0274	ug/L	0.45375	-0.0274	ppb	0.45375 >999.9%
Zn 213.857†	-29.0	-0.2650	ug/L	0.02768	-0.2650	ppb	0.02768 10.44%
SiO2†	946.1	61.962	ug/L	0.8780	61.962	ppb	0.8780 1.42%

Sequence No.: 72
Sample ID: 241835003|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 12/9/2009 21:37:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241835003|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5810.8	5810.8	103	%			21:39:08
1	Y RADIAL	6283.5	6283.5	102.0	%			21:39:08
1	Al 396.153Radial†	68.9	87.5	64.684	ug/L	64.684	ppb	21:39:28
1	Ca 317.933Radial†	98.2	78.0	119.23	ug/L	119.23	ppb	21:39:28
1	Fe 238.204 Radial†	14.7	8.3	83.179	ug/L	83.179	ppb	21:39:28
1	K 766.490 Radial†	2341.8	112.1	20.214	ug/L	20.214	ppb	21:39:08
1	Mg 279.077 IEC†	0.8	-1.0	-36.421	ug/L	-36.421	ppb	21:39:28
1	Na 589.592 Radial†	-4.9	611.2	229.73	ug/L	229.73	ppb	21:39:08
1	Sr 421.552†	95.9	90.1	0.6071	ug/L	0.6071	ppb	21:39:08
1	Sc 361.383	907487.0	907487.0	102.54	%			21:40:24
1	Y 371.029	761322.0	761322.0	102.59	%			21:40:24
1	Ag 328.068†	216.2	-16.7	-0.0562	ug/L	-0.0562	ppb	21:40:24
1	As 188.979†	-17.2	12.4	5.0938	ug/L	5.0938	ppb	21:40:45
1	B 249.677†	-353.3	179.3	3.8815	ug/L	3.8815	ppb	21:40:45
1	Ba 233.527†	210.8	217.6	1.6561	ug/L	1.6561	ppb	21:40:45
1	Be 313.107†	-5326.6	125.8	0.0502	ug/L	0.0502	ppb	21:40:24
1	Cd 226.502†	-174.7	17.5	0.1817	ug/L	0.1817	ppb	21:40:45
1	Co 228.616†	-68.7	4.8	0.0880	ug/L	0.0880	ppb	21:40:45
1	Cr 267.716†	106.0	16.4	0.1766	ug/L	0.1766	ppb	21:40:45
1	Cu 324.752†	7338.2	387.5	1.1311	ug/L	1.1311	ppb	21:40:24
1	Mn 257.610†	2699.8	2229.4	2.4318	ug/L	2.4318	ppb	21:40:45
1	Mo 202.031†	19.3	-1.2	-0.0735	ug/L	-0.0735	ppb	21:40:45
1	Ni 231.604†	93.7	21.3	0.5042	ug/L	0.5042	ppb	21:40:45
1	P 214.914†	235.2	9.4	5.3625	ug/L	5.3625	ppb	21:40:45
1	Pb 220.353†	-55.7	-1.8	-0.2034	ug/L	-0.2034	ppb	21:40:45
1	S 181.975 Axial†	54.6	11.7	17.164	ug/L	17.164	ppb	21:40:45
1	Sb 206.836†	31.8	1.4	0.4618	ug/L	0.4618	ppb	21:40:45
1	Se 196.026†	-26.6	-2.5	-1.2363	ug/L	-1.2363	ppb	21:40:45
1	Si 251.611†	5683.7	5034.7	153.98	ug/L	153.98	ppb	21:40:24
1	Sn 189.927†	6.1	1.7	0.2939	ug/L	0.2939	ppb	21:40:45
1	Ti 334.940†	135.8	1097.4	1.7787	ug/L	1.7787	ppb	21:40:24
1	Tl 190.801†	-31.4	6.2	1.8151	ug/L	1.8151	ppb	21:40:45
1	U 409.014†	-1815.3	191.9	5.3512	ug/L	5.3512	ppb	21:40:24
1	V 292.402†	-1294.6	34.0	0.2232	ug/L	0.2232	ppb	21:40:24
1	Zn 213.857†	898.4	68.9	0.6084	ug/L	0.6084	ppb	21:40:45
1	SiO2†	5639.9	5011.2	328.14	ug/L	328.14	ppb	21:41:41
2	Sc Radial	5840.2	5840.2	103	%			21:39:33
2	Y RADIAL	6377.9	6377.9	103.6	%			21:39:33
2	Al 396.153Radial†	83.4	101.2	74.854	ug/L	74.854	ppb	21:39:53
2	Ca 317.933Radial†	95.2	74.6	114.05	ug/L	114.05	ppb	21:39:53
2	Fe 238.204 Radial†	17.5	10.9	109.71	ug/L	109.71	ppb	21:39:53
2	K 766.490 Radial†	2323.0	82.3	14.808	ug/L	14.808	ppb	21:39:33
2	Mg 279.077 IEC†	2.7	0.9	32.839	ug/L	32.839	ppb	21:39:53
2	Na 589.592 Radial†	-7.9	608.3	228.65	ug/L	228.65	ppb	21:39:33
2	Sr 421.552†	49.1	44.2	0.2971	ug/L	0.2971	ppb	21:39:33
2	Sc 361.383	899923.5	899923.5	101.69	%			21:40:50
2	Y 371.029	754258.7	754258.7	101.64	%			21:40:50
2	Ag 328.068†	284.0	51.7	0.2695	ug/L	0.2695	ppb	21:40:50
2	As 188.979†	-13.4	16.0	6.5537	ug/L	6.5537	ppb	21:41:10
2	B 249.677†	-342.7	186.8	4.0403	ug/L	4.0403	ppb	21:41:10
2	Ba 233.527†	211.9	220.4	1.6786	ug/L	1.6786	ppb	21:41:10
2	Be 313.107†	-5289.1	119.0	0.0474	ug/L	0.0474	ppb	21:40:50
2	Cd 226.502†	-173.9	16.8	0.1717	ug/L	0.1717	ppb	21:41:10
2	Co 228.616†	-68.5	4.3	0.0793	ug/L	0.0793	ppb	21:41:10
2	Cr 267.716†	63.3	-24.8	-0.2657	ug/L	-0.2657	ppb	21:41:10
2	Cu 324.752†	7214.5	326.0	0.9538	ug/L	0.9538	ppb	21:40:50
2	Mn 257.610†	2641.3	2194.0	2.3946	ug/L	2.3946	ppb	21:41:10
2	Mo 202.031†	14.4	-5.8	-0.3705	ug/L	-0.3705	ppb	21:41:10
2	Ni 231.604†	107.5	35.6	0.8448	ug/L	0.8448	ppb	21:41:10

2	P 214.914†	230.0	6.3	3.4903	ug/L	3.4903 ppb	21:41:10
2	Pb 220.353†	-57.0	-3.5	-0.4030	ug/L	-0.4030 ppb	21:41:10
2	S 181.975 Axial†	52.9	10.6	15.471	ug/L	15.471 ppb	21:41:10
2	Sb 206.836†	31.6	1.5	0.4632	ug/L	0.4632 ppb	21:41:10
2	Se 196.026†	-27.9	-4.0	-2.0247	ug/L	-2.0247 ppb	21:41:10
2	Si 251.611†	5617.6	5016.3	153.43	ug/L	153.43 ppb	21:40:50
2	Sn 189.927†	-2.4	-6.6	-1.1075	ug/L	-1.1075 ppb	21:41:10
2	Ti 334.940†	29.7	994.2	1.6120	ug/L	1.6120 ppb	21:40:50
2	Tl 190.801†	-31.0	6.4	1.8482	ug/L	1.8482 ppb	21:41:10
2	U 409.014†	-1827.0	165.5	4.6108	ug/L	4.6108 ppb	21:40:50
2	V 292.402†	-1270.1	47.4	0.3063	ug/L	0.3063 ppb	21:40:50
2	Zn 213.857†	921.7	99.1	0.8737	ug/L	0.8737 ppb	21:41:10
2	SiO2†	5683.8	5100.5	334.01	ug/L	334.01 ppb	21:41:46
3	Sc Radial	5861.4	5861.4	103	%		21:39:58
3	Y RADIAL	6347.5	6347.5	103.1	%		21:39:58
3	Al 396.153Radial†	72.4	90.3	66.774	ug/L	66.774 ppb	21:40:18
3	Ca 317.933Radial†	102.4	81.3	124.25	ug/L	124.25 ppb	21:40:18
3	Fe 238.204 Radial†	14.0	7.5	75.857	ug/L	75.857 ppb	21:40:18
3	K 766.490 Radial†	2413.0	161.2	29.126	ug/L	29.126 ppb	21:39:58
3	Mg 279.077 IEC†	1.2	-0.6	-22.539	ug/L	-22.539 ppb	21:40:18
3	Na 589.592 Radial†	-50.1	567.5	213.32	ug/L	213.32 ppb	21:39:58
3	Sr 421.552†	65.4	59.7	0.4022	ug/L	0.4022 ppb	21:39:58
3	Sc 361.383	900607.6	900607.6	101.77	%		21:41:15
3	Y 371.029	755329.2	755329.2	101.79	%		21:41:15
3	Ag 328.068†	375.1	141.0	0.6773	ug/L	0.6773 ppb	21:41:15
3	As 188.979†	-24.1	5.6	2.2970	ug/L	2.2970 ppb	21:41:35
3	B 249.677†	-357.2	172.9	3.7420	ug/L	3.7420 ppb	21:41:35
3	Ba 233.527†	208.6	217.0	1.6521	ug/L	1.6521 ppb	21:41:35
3	Be 313.107†	-5335.7	77.2	0.0322	ug/L	0.0322 ppb	21:41:15
3	Cd 226.502†	-175.0	15.9	0.1653	ug/L	0.1653 ppb	21:41:35
3	Co 228.616†	-63.5	9.4	0.1771	ug/L	0.1771 ppb	21:41:35
3	Cr 267.716†	84.9	-3.6	-0.0357	ug/L	-0.0357 ppb	21:41:35
3	Cu 324.752†	7259.4	364.7	1.0646	ug/L	1.0646 ppb	21:41:15
3	Mn 257.610†	2664.5	2214.8	2.4149	ug/L	2.4149 ppb	21:41:35
3	Mo 202.031†	18.2	-2.1	-0.1321	ug/L	-0.1321 ppb	21:41:35
3	Ni 231.604†	101.2	29.3	0.6950	ug/L	0.6950 ppb	21:41:35
3	P 214.914†	220.7	-3.1	-2.0231	ug/L	-2.0231 ppb	21:41:35
3	Pb 220.353†	-41.0	12.2	1.4393	ug/L	1.4393 ppb	21:41:35
3	S 181.975 Axial†	50.2	7.9	11.520	ug/L	11.520 ppb	21:41:35
3	Sb 206.836†	36.5	6.3	2.0253	ug/L	2.0253 ppb	21:41:35
3	Se 196.026†	-23.3	0.5	0.5640	ug/L	0.5640 ppb	21:41:35
3	Si 251.611†	5622.2	5016.6	153.43	ug/L	153.43 ppb	21:41:15
3	Sn 189.927†	5.0	0.6	0.1191	ug/L	0.1191 ppb	21:41:35
3	Ti 334.940†	156.0	1118.3	1.8155	ug/L	1.8155 ppb	21:41:15
3	Tl 190.801†	-33.3	4.1	1.2033	ug/L	1.2033 ppb	21:41:35
3	U 409.014†	-2023.1	-25.8	-0.7293	ug/L	-0.7293 ppb	21:41:15
3	V 292.402†	-1229.7	88.2	0.5777	ug/L	0.5777 ppb	21:41:15
3	Zn 213.857†	915.1	91.9	0.8147	ug/L	0.8147 ppb	21:41:35
3	SiO2†	5640.3	5053.5	330.91	ug/L	330.91 ppb	21:41:51

Mean Data: 241835003|928625|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902672.7	102.00	%	0.473				0.46%
Sc Radial	5837.5	103	%	0.4				0.44%
Y 371.029	756970.0	102.01	%	0.513				0.50%
Y RADIAL	6336.3	102.9	%	0.78				0.76%
Ag 328.068†	58.7	0.2969	ug/L	0.36755	0.2969	ppb	0.36755	123.81%
Al 396.153Radial†	93.0	68.771	ug/L	5.3710	68.771	ppb	5.3710	7.81%
As 188.979†	11.3	4.6482	ug/L	2.16307	4.6482	ppb	2.16307	46.54%
B 249.677†	179.7	3.8879	ug/L	0.14926	3.8879	ppb	0.14926	3.84%
Ba 233.527†	218.3	1.6622	ug/L	0.01426	1.6622	ppb	0.01426	0.86%
Be 313.107†	107.4	0.0433	ug/L	0.00967	0.0433	ppb	0.00967	22.34%
Ca 317.933Radial†	77.9	119.18	ug/L	5.097	119.18	ppb	5.097	4.28%
Cd 226.502†	16.7	0.1729	ug/L	0.00825	0.1729	ppb	0.00825	4.77%
Co 228.616†	6.2	0.1148	ug/L	0.05416	0.1148	ppb	0.05416	47.18%
Cr 267.716†	-4.0	-0.0416	ug/L	0.22121	-0.0416	ppb	0.22121	531.44%
Cu 324.752†	359.4	1.0498	ug/L	0.08957	1.0498	ppb	0.08957	8.53%
Fe 238.204 Radial†	8.9	89.584	ug/L	17.8139	89.584	ppb	17.8139	19.89%
K 766.490 Radial†	118.5	21.383	ug/L	7.2305	21.383	ppb	7.2305	33.81%

Mg 279.077 IEC†	-0.2	-8.7071	ug/L	36.64373	-8.7071	ppb	36.64373 420.85%
Mn 257.610†	2212.8	2.4138	ug/L	0.01859	2.4138	ppb	0.01859 0.77%
Mo 202.031†	-3.0	-0.1920	ug/L	0.15731	-0.1920	ppb	0.15731 81.93%
Na 589.592 Radial†	595.7	223.90	ug/L	9.181	223.90	ppb	9.181 4.10%
Ni 231.604†	28.7	0.6813	ug/L	0.17068	0.6813	ppb	0.17068 25.05%
P 214.914†	4.2	2.2765	ug/L	3.83949	2.2765	ppb	3.83949 168.66%
Pb 220.353†	2.3	0.2776	ug/L	1.01099	0.2776	ppb	1.01099 364.18%
S 181.975 Axial†	10.1	14.718	ug/L	2.8965	14.718	ppb	2.8965 19.68%
Sb 206.836†	3.1	0.9834	ug/L	0.90225	0.9834	ppb	0.90225 91.74%
Se 196.026†	-2.0	-0.8990	ug/L	1.32693	-0.8990	ppb	1.32693 147.60%
Si 251.611†	5022.5	153.61	ug/L	0.319	153.61	ppb	0.319 0.21%
Sn 189.927†	-1.4	-0.2315	ug/L	0.76364	-0.2315	ppb	0.76364 329.86%
Sr 421.552†	64.7	0.4355	ug/L	0.15765	0.4355	ppb	0.15765 36.20%
Ti 334.940†	1070.0	1.7354	ug/L	0.10848	1.7354	ppb	0.10848 6.25%
Tl 190.801†	5.6	1.6222	ug/L	0.36318	1.6222	ppb	0.36318 22.39%
U 409.014†	110.6	3.0776	ug/L	3.31755	3.0776	ppb	3.31755 107.80%
V 292.402†	56.5	0.3691	ug/L	0.18542	0.3691	ppb	0.18542 50.24%
Zn 213.857†	86.6	0.7656	ug/L	0.13931	0.7656	ppb	0.13931 18.20%
SiO2†	5055.1	331.02	ug/L	2.939	331.02	ppb	2.939 0.89%

Sequence No.: 73
Sample ID: 241835004|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 12/9/2009 21:44:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241835004|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5932.1	5932.1	105	%			21:45:55
1	Y RADIAL	6432.4	6432.4	104.4	%			21:45:55
1	Al 396.153Radial†	0.7	21.0	15.550	ug/L	15.550	ppb	21:46:15
1	Ca 317.933Radial†	40.9	21.3	32.600	ug/L	32.600	ppb	21:46:15
1	Fe 238.204 Radial†	5.4	-0.9	-8.6445	ug/L	-8.6445	ppb	21:46:15
1	K 766.490 Radial†	2280.6	7.0	1.2504	ug/L	1.2504	ppb	21:45:55
1	Mg 279.077 IEC†	3.9	2.0	74.292	ug/L	74.292	ppb	21:46:15
1	Na 589.592 Radial†	-582.0	60.3	22.678	ug/L	22.678	ppb	21:45:55
1	Sr 421.552†	37.6	32.5	0.2190	ug/L	0.2190	ppb	21:45:55
1	Sc 361.383	895511.7	895511.7	101.19	%			21:47:12
1	Y 371.029	752151.9	752151.9	101.36	%			21:47:12
1	Ag 328.068†	292.6	61.6	0.2796	ug/L	0.2796	ppb	21:47:12
1	As 188.979†	-21.0	8.4	3.4348	ug/L	3.4348	ppb	21:47:32
1	B 249.677†	-366.4	161.8	3.5125	ug/L	3.5125	ppb	21:47:32
1	Ba 233.527†	9.9	21.8	0.1659	ug/L	0.1659	ppb	21:47:32
1	Be 313.107†	-5199.2	182.2	0.0679	ug/L	0.0679	ppb	21:47:12
1	Cd 226.502†	-188.3	1.7	0.0198	ug/L	0.0198	ppb	21:47:32
1	Co 228.616†	-70.0	2.6	0.0514	ug/L	0.0514	ppb	21:47:32
1	Cr 267.716†	80.7	-7.2	-0.0787	ug/L	-0.0787	ppb	21:47:32
1	Cu 324.752†	6830.8	-18.2	-0.0534	ug/L	-0.0534	ppb	21:47:12
1	Mn 257.610†	603.5	193.0	0.2075	ug/L	0.2075	ppb	21:47:32
1	Mo 202.031†	23.4	3.1	0.2017	ug/L	0.2017	ppb	21:47:32
1	Ni 231.604†	70.3	-0.7	-0.0157	ug/L	-0.0157	ppb	21:47:32
1	P 214.914†	217.5	-5.0	-2.9446	ug/L	-2.9446	ppb	21:47:32
1	Pb 220.353†	-57.7	-4.5	-0.5210	ug/L	-0.5210	ppb	21:47:32
1	S 181.975 Axial†	48.2	6.1	8.9426	ug/L	8.9426	ppb	21:47:32
1	Sb 206.836†	28.1	-1.8	-0.5983	ug/L	-0.5983	ppb	21:47:32
1	Se 196.026†	-24.3	-0.6	-0.3727	ug/L	-0.3727	ppb	21:47:32
1	Si 251.611†	1455.0	929.9	28.439	ug/L	28.439	ppb	21:47:32
1	Sn 189.927†	1.4	-2.9	-0.4875	ug/L	-0.4875	ppb	21:47:32
1	Ti 334.940†	-913.4	62.4	0.1009	ug/L	0.1009	ppb	21:47:12
1	Tl 190.801†	-36.0	1.3	0.3747	ug/L	0.3747	ppb	21:47:32
1	U 409.014†	-1838.4	145.4	4.0647	ug/L	4.0647	ppb	21:47:12
1	V 292.402†	-1248.8	62.4	0.4350	ug/L	0.4350	ppb	21:47:12
1	Zn 213.857†	780.1	-36.4	-0.3289	ug/L	-0.3289	ppb	21:47:32
1	SiO2†	1497.4	991.0	64.889	ug/L	64.889	ppb	21:48:28
2	Sc Radial	5933.9	5933.9	105	%			21:46:20
2	Y RADIAL	6437.0	6437.0	104.5	%			21:46:20
2	Al 396.153Radial†	-11.3	9.6	7.0925	ug/L	7.0925	ppb	21:46:40
2	Ca 317.933Radial†	40.6	21.1	32.206	ug/L	32.206	ppb	21:46:40
2	Fe 238.204 Radial†	7.6	1.2	11.986	ug/L	11.986	ppb	21:46:40
2	K 766.490 Radial†	2228.2	-43.7	-7.9343	ug/L	-7.9343	ppb	21:46:20
2	Mg 279.077 IEC†	0.9	-0.9	-31.959	ug/L	-31.959	ppb	21:46:40
2	Na 589.592 Radial†	-633.7	11.2	4.2081	ug/L	4.2081	ppb	21:46:20
2	Sr 421.552†	17.9	13.6	0.0917	ug/L	0.0917	ppb	21:46:20
2	Sc 361.383	906073.7	906073.7	102.38	%			21:47:37
2	Y 371.029	759602.7	759602.7	102.36	%			21:47:37
2	Ag 328.068†	281.1	47.0	0.2224	ug/L	0.2224	ppb	21:47:37
2	As 188.979†	-16.9	12.7	5.1987	ug/L	5.1987	ppb	21:47:57
2	B 249.677†	-383.7	149.1	3.2346	ug/L	3.2346	ppb	21:47:57
2	Ba 233.527†	-6.8	5.4	0.0416	ug/L	0.0416	ppb	21:47:57
2	Be 313.107†	-5226.2	215.7	0.0805	ug/L	0.0805	ppb	21:47:37
2	Cd 226.502†	-196.8	-4.3	-0.0483	ug/L	-0.0483	ppb	21:47:57
2	Co 228.616†	-67.9	5.4	0.1046	ug/L	0.1046	ppb	21:47:57
2	Cr 267.716†	79.3	-9.6	-0.1020	ug/L	-0.1020	ppb	21:47:57
2	Cu 324.752†	6812.3	-115.0	-0.3339	ug/L	-0.3339	ppb	21:47:37
2	Mn 257.610†	604.0	186.5	0.2045	ug/L	0.2045	ppb	21:47:57
2	Mo 202.031†	18.8	-1.7	-0.1067	ug/L	-0.1067	ppb	21:47:57
2	Ni 231.604†	75.5	3.6	0.0857	ug/L	0.0857	ppb	21:47:57

2	P 214.914†	215.4	-9.5	-5.6306	ug/L	-5.6306 ppb	21:47:57
2	Pb 220.353†	-52.5	1.3	0.1523	ug/L	0.1523 ppb	21:47:57
2	S 181.975 Axial†	43.7	1.2	1.8052	ug/L	1.8052 ppb	21:47:57
2	Sb 206.836†	38.8	8.3	2.6652	ug/L	2.6652 ppb	21:47:57
2	Se 196.026†	-22.1	1.9	1.1515	ug/L	1.1515 ppb	21:47:57
2	Si 251.611†	1453.9	912.0	27.902	ug/L	27.902 ppb	21:47:57
2	Sn 189.927†	-1.6	-5.8	-0.9768	ug/L	-0.9768 ppb	21:47:57
2	Ti 334.940†	-884.3	101.3	0.1666	ug/L	0.1666 ppb	21:47:37
2	Tl 190.801†	-28.2	9.3	2.6803	ug/L	2.6803 ppb	21:47:57
2	U 409.014†	-2095.5	-84.6	-2.3637	ug/L	-2.3637 ppb	21:47:37
2	V 292.402†	-1327.6	-0.2	-0.0105	ug/L	-0.0105 ppb	21:47:37
2	Zn 213.857†	773.0	-52.2	-0.4701	ug/L	-0.4701 ppb	21:47:57
2	SiO2†	1497.1	973.4	63.757	ug/L	63.757 ppb	21:48:33
3	Sc Radial	5980.1	5980.1	106	%		21:46:45
3	Y RADIAL	6493.4	6493.4	105.4	%		21:46:45
3	Al 396.153Radial†	-0.3	20.1	14.824	ug/L	14.824 ppb	21:47:05
3	Ca 317.933Radial†	38.4	18.7	28.605	ug/L	28.605 ppb	21:47:05
3	Fe 238.204 Radial†	7.4	1.0	10.305	ug/L	10.305 ppb	21:47:05
3	K 766.490 Radial†	2205.4	-81.7	-14.846	ug/L	-14.846 ppb	21:46:45
3	Mg 279.077 IEC†	2.5	0.6	20.979	ug/L	20.979 ppb	21:47:05
3	Na 589.592 Radial†	-606.4	41.7	15.682	ug/L	15.682 ppb	21:46:45
3	Sr 421.552†	27.0	22.2	0.1493	ug/L	0.1493 ppb	21:46:45
3	Sc 361.383	895478.4	895478.4	101.19	%		21:48:03
3	Y 371.029	750854.7	750854.7	101.18	%		21:48:03
3	Ag 328.068†	259.8	29.1	0.1336	ug/L	0.1336 ppb	21:48:03
3	As 188.979†	-26.0	3.5	1.4160	ug/L	1.4160 ppb	21:48:23
3	B 249.677†	-351.6	176.4	3.8269	ug/L	3.8269 ppb	21:48:23
3	Ba 233.527†	-0.6	11.4	0.0882	ug/L	0.0882 ppb	21:48:23
3	Be 313.107†	-5221.0	160.4	0.0599	ug/L	0.0599 ppb	21:48:03
3	Cd 226.502†	-192.8	-2.7	-0.0299	ug/L	-0.0299 ppb	21:48:23
3	Co 228.616†	-66.5	6.0	0.1166	ug/L	0.1166 ppb	21:48:23
3	Cr 267.716†	97.7	9.6	0.1017	ug/L	0.1017 ppb	21:48:23
3	Cu 324.752†	6876.0	26.7	0.0782	ug/L	0.0782 ppb	21:48:03
3	Mn 257.610†	623.1	212.4	0.2314	ug/L	0.2314 ppb	21:48:23
3	Mo 202.031†	21.7	1.4	0.0927	ug/L	0.0927 ppb	21:48:23
3	Ni 231.604†	84.6	13.5	0.3211	ug/L	0.3211 ppb	21:48:23
3	P 214.914†	221.9	-0.7	-0.4306	ug/L	-0.4306 ppb	21:48:23
3	Pb 220.353†	-59.9	-6.7	-0.7797	ug/L	-0.7797 ppb	21:48:23
3	S 181.975 Axial†	50.3	8.2	12.053	ug/L	12.053 ppb	21:48:23
3	Sb 206.836†	34.7	4.6	1.4937	ug/L	1.4937 ppb	21:48:23
3	Se 196.026†	-17.1	6.6	3.9477	ug/L	3.9477 ppb	21:48:23
3	Si 251.611†	1447.9	922.9	28.233	ug/L	28.233 ppb	21:48:23
3	Sn 189.927†	-0.1	-4.3	-0.7328	ug/L	-0.7328 ppb	21:48:23
3	Ti 334.940†	-882.6	92.8	0.1486	ug/L	0.1486 ppb	21:48:03
3	Tl 190.801†	-30.1	7.1	2.0329	ug/L	2.0329 ppb	21:48:23
3	U 409.014†	-1742.3	240.3	6.7133	ug/L	6.7133 ppb	21:48:03
3	V 292.402†	-1244.3	66.8	0.4638	ug/L	0.4638 ppb	21:48:03
3	Zn 213.857†	780.2	-36.2	-0.3295	ug/L	-0.3295 ppb	21:48:23
3	SiO2†	1522.8	1016.1	66.549	ug/L	66.549 ppb	21:48:38

Mean Data: 241835004|928625|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899021.2	101.59	%	0.690				0.68%
Sc Radial	5948.7	105	%	0.5				0.46%
Y 371.029	754203.1	101.63	%	0.636				0.63%
Y RADIAL	6454.2	104.8	%	0.55				0.53%
Ag 328.068†	45.9	0.2119	ug/L	0.07357	0.2119	ppb	0.07357	34.72%
Al 396.153Radial†	16.9	12.489	ug/L	4.6875	12.489	ppb	4.6875	37.53%
As 188.979†	8.2	3.3498	ug/L	1.89278	3.3498	ppb	1.89278	56.50%
B 249.677†	162.4	3.5247	ug/L	0.29634	3.5247	ppb	0.29634	8.41%
Ba 233.527†	12.9	0.0986	ug/L	0.06279	0.0986	ppb	0.06279	63.69%
Be 313.107†	186.1	0.0694	ug/L	0.01036	0.0694	ppb	0.01036	14.93%
Ca 317.933Radial†	20.4	31.137	ug/L	2.2019	31.137	ppb	2.2019	7.07%
Cd 226.502†	-1.8	-0.0195	ug/L	0.03524	-0.0195	ppb	0.03524	181.17%
Co 228.616†	4.7	0.0909	ug/L	0.03471	0.0909	ppb	0.03471	38.20%
Cr 267.716†	-2.4	-0.0263	ug/L	0.11150	-0.0263	ppb	0.11150	423.86%
Cu 324.752†	-35.5	-0.1030	ug/L	0.21046	-0.1030	ppb	0.21046	204.26%
Fe 238.204 Radial†	0.5	4.5489	ug/L	11.45665	4.5489	ppb	11.45665	251.86%
K 766.490 Radial†	-39.5	-7.1766	ug/L	8.07485	-7.1766	ppb	8.07485	112.52%

Mg 279.077 IEC†	0.6	21.104	ug/L	53.1257	21.104	ppb	53.1257 251.74%
Mn 257.610†	197.3	0.2145	ug/L	0.01475	0.2145	ppb	0.01475 6.88%
Mo 202.031†	1.0	0.0626	ug/L	0.15641	0.0626	ppb	0.15641 250.01%
Na 589.592 Radial†	37.8	14.189	ug/L	9.3252	14.189	ppb	9.3252 65.72%
Ni 231.604†	5.5	0.1304	ug/L	0.17276	0.1304	ppb	0.17276 132.51%
P 214.914†	-5.1	-3.0020	ug/L	2.60049	-3.0020	ppb	2.60049 86.63%
Pb 220.353†	-3.3	-0.3828	ug/L	0.48110	-0.3828	ppb	0.48110 125.68%
S 181.975 Axial†	5.2	7.6004	ug/L	5.25425	7.6004	ppb	5.25425 69.13%
Sb 206.836†	3.7	1.1869	ug/L	1.65326	1.1869	ppb	1.65326 139.30%
Se 196.026†	2.6	1.5755	ug/L	2.19123	1.5755	ppb	2.19123 139.08%
Si 251.611†	921.6	28.191	ug/L	0.2711	28.191	ppb	0.2711 0.96%
Sn 189.927†	-4.3	-0.7324	ug/L	0.24465	-0.7324	ppb	0.24465 33.41%
Sr 421.552†	22.8	0.1533	ug/L	0.06372	0.1533	ppb	0.06372 41.56%
Ti 334.940†	85.5	0.1387	ug/L	0.03397	0.1387	ppb	0.03397 24.49%
Tl 190.801†	5.9	1.6960	ug/L	1.18919	1.6960	ppb	1.18919 70.12%
U 409.014†	100.4	2.8048	ug/L	4.66780	2.8048	ppb	4.66780 166.42%
V 292.402†	43.0	0.2961	ug/L	0.26587	0.2961	ppb	0.26587 89.79%
Zn 213.857†	-41.6	-0.3762	ug/L	0.08137	-0.3762	ppb	0.08137 21.63%
SiO2†	993.5	65.065	ug/L	1.4042	65.065	ppb	1.4042 2.16%

Sequence No.: 74
Sample ID: 241835005|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 12/9/2009 21:50:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241835005|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5993.2	5993.2	106	%			21:52:42
1	Y RADIAL	6483.0	6483.0	105.3	%			21:52:42
1	Al 396.153Radial†	29.2	47.9	35.427	ug/L	35.427	ppb	21:52:42
1	Ca 317.933Radial†	270.2	237.6	363.32	ug/L	363.32	ppb	21:53:02
1	Fe 238.204 Radial†	10.7	4.1	40.951	ug/L	40.951	ppb	21:53:02
1	K 766.490 Radial†	2434.4	130.2	23.353	ug/L	23.353	ppb	21:52:42
1	Mg 279.077 IEC†	2.8	0.9	33.048	ug/L	33.048	ppb	21:53:02
1	Na 589.592 Radial†	661.7	1241.3	466.55	ug/L	466.55	ppb	21:52:42
1	Sr 421.552†	236.8	220.4	1.4844	ug/L	1.4844	ppb	21:52:42
1	Sc 361.383	900517.9	900517.9	101.76	%			21:53:59
1	Y 371.029	754922.1	754922.1	101.73	%			21:53:59
1	Ag 328.068†	233.9	2.3	0.0190	ug/L	0.0190	ppb	21:53:59
1	As 188.979†	-27.7	2.0	0.8208	ug/L	0.8208	ppb	21:54:19
1	B 249.677†	-376.6	153.7	3.3306	ug/L	3.3306	ppb	21:54:19
1	Ba 233.527†	355.9	361.8	2.7501	ug/L	2.7501	ppb	21:54:19
1	Be 313.107†	-5276.8	134.5	0.0525	ug/L	0.0525	ppb	21:53:59
1	Cd 226.502†	-179.2	11.7	0.1231	ug/L	0.1231	ppb	21:54:19
1	Co 228.616†	-59.6	13.2	0.2551	ug/L	0.2551	ppb	21:54:19
1	Cr 267.716†	75.6	-12.7	-0.1357	ug/L	-0.1357	ppb	21:54:19
1	Cu 324.752†	7029.6	139.6	0.4082	ug/L	0.4082	ppb	21:53:59
1	Mn 257.610†	2856.9	2404.1	2.6161	ug/L	2.6161	ppb	21:54:19
1	Mo 202.031†	26.9	6.5	0.4250	ug/L	0.4250	ppb	21:54:19
1	Ni 231.604†	91.4	19.7	0.4665	ug/L	0.4665	ppb	21:54:19
1	P 214.914†	237.2	13.2	7.7382	ug/L	7.7382	ppb	21:54:19
1	Pb 220.353†	-61.4	-7.8	-0.9016	ug/L	-0.9016	ppb	21:54:19
1	S 181.975 Axial†	79.2	36.4	53.183	ug/L	53.183	ppb	21:54:19
1	Sb 206.836†	37.4	7.1	2.3153	ug/L	2.3153	ppb	21:54:19
1	Se 196.026†	-18.4	5.4	3.3268	ug/L	3.3268	ppb	21:54:19
1	Si 251.611†	5404.5	4803.1	146.89	ug/L	146.89	ppb	21:53:59
1	Sn 189.927†	1.7	-2.6	-0.4086	ug/L	-0.4086	ppb	21:54:19
1	Ti 334.940†	-178.6	789.5	1.2953	ug/L	1.2953	ppb	21:53:59
1	Tl 190.801†	-32.9	4.5	1.3238	ug/L	1.3238	ppb	21:54:19
1	U 409.014†	-1950.7	45.2	1.2575	ug/L	1.2575	ppb	21:53:59
1	V 292.402†	-1258.6	59.6	0.4038	ug/L	0.4038	ppb	21:53:59
1	Zn 213.857†	883.3	60.8	0.5385	ug/L	0.5385	ppb	21:54:19
1	SiO2†	5478.5	4895.1	320.52	ug/L	320.52	ppb	21:55:15
2	Sc Radial	6047.6	6047.6	107	%			21:53:07
2	Y RADIAL	6532.1	6532.1	106.1	%			21:53:07
2	Al 396.153Radial†	80.1	95.4	70.496	ug/L	70.496	ppb	21:53:07
2	Ca 317.933Radial†	269.5	234.7	358.92	ug/L	358.92	ppb	21:53:27
2	Fe 238.204 Radial†	10.1	3.5	34.848	ug/L	34.848	ppb	21:53:27
2	K 766.490 Radial†	2461.2	134.5	24.146	ug/L	24.146	ppb	21:53:07
2	Mg 279.077 IEC†	2.1	0.2	6.6338	ug/L	6.6338	ppb	21:53:27
2	Na 589.592 Radial†	701.9	1273.3	478.58	ug/L	478.58	ppb	21:53:07
2	Sr 421.552†	241.9	223.1	1.5029	ug/L	1.5029	ppb	21:53:07
2	Sc 361.383	908827.0	908827.0	102.70	%			21:54:24
2	Y 371.029	761602.1	761602.1	102.63	%			21:54:24
2	Ag 328.068†	335.1	98.8	0.4618	ug/L	0.4618	ppb	21:54:24
2	As 188.979†	-23.9	6.0	2.4566	ug/L	2.4566	ppb	21:54:44
2	B 249.677†	-393.0	141.2	3.0592	ug/L	3.0592	ppb	21:54:44
2	Ba 233.527†	350.0	352.9	2.6831	ug/L	2.6831	ppb	21:54:44
2	Be 313.107†	-5342.9	117.6	0.0464	ug/L	0.0464	ppb	21:54:24
2	Cd 226.502†	-178.0	14.5	0.1537	ug/L	0.1537	ppb	21:54:44
2	Co 228.616†	-71.9	1.8	0.0326	ug/L	0.0326	ppb	21:54:44
2	Cr 267.716†	91.8	2.4	0.0262	ug/L	0.0262	ppb	21:54:44
2	Cu 324.752†	7005.2	52.7	0.1549	ug/L	0.1549	ppb	21:54:24
2	Mn 257.610†	2834.8	2357.0	2.5647	ug/L	2.5647	ppb	21:54:44
2	Mo 202.031†	22.2	1.6	0.1094	ug/L	0.1094	ppb	21:54:44
2	Ni 231.604†	89.8	17.3	0.4113	ug/L	0.4113	ppb	21:54:44

2	P 214.914†	225.9	0.0	-0.0349	ug/L	-0.0349	ppb	21:54:44
2	Pb 220.353†	-49.5	4.3	0.5200	ug/L	0.5200	ppb	21:54:44
2	S 181.975 Axial†	71.7	28.4	41.490	ug/L	41.490	ppb	21:54:44
2	Sb 206.836†	30.5	0.1	0.0215	ug/L	0.0215	ppb	21:54:44
2	Se 196.026†	-25.1	-1.0	-0.4559	ug/L	-0.4559	ppb	21:54:44
2	Si 251.611†	5443.1	4792.2	146.56	ug/L	146.56	ppb	21:54:24
2	Sn 189.927†	1.6	-2.7	-0.4198	ug/L	-0.4198	ppb	21:54:44
2	Ti 334.940†	-109.6	858.3	1.4049	ug/L	1.4049	ppb	21:54:24
2	Tl 190.801†	-25.0	12.5	3.6206	ug/L	3.6206	ppb	21:54:44
2	U 409.014†	-1851.3	159.5	4.4511	ug/L	4.4511	ppb	21:54:24
2	V 292.402†	-1206.9	121.2	0.8218	ug/L	0.8218	ppb	21:54:24
2	Zn 213.857†	882.3	51.9	0.4601	ug/L	0.4601	ppb	21:54:44
2	SiO2†	5509.7	4876.3	319.30	ug/L	319.30	ppb	21:55:20
3	Sc Radial	5970.0	5970.0	105	%			21:53:32
3	Y RADIAL	6475.4	6475.4	105.1	%			21:53:32
3	Al 396.153Radial†	59.0	76.3	56.387	ug/L	56.387	ppb	21:53:32
3	Ca 317.933Radial†	273.0	241.2	368.90	ug/L	368.90	ppb	21:53:52
3	Fe 238.204 Radial†	12.8	6.1	61.498	ug/L	61.498	ppb	21:53:52
3	K 766.490 Radial†	2352.6	61.4	10.881	ug/L	10.881	ppb	21:53:32
3	Mg 279.077 IEC†	1.6	-0.3	-10.369	ug/L	-10.369	ppb	21:53:52
3	Na 589.592 Radial†	660.5	1242.6	467.04	ug/L	467.04	ppb	21:53:32
3	Sr 421.552†	245.7	229.7	1.5470	ug/L	1.5470	ppb	21:53:32
3	Sc 361.383	907098.5	907098.5	102.50	%			21:54:49
3	Y 371.029	760204.7	760204.7	102.44	%			21:54:49
3	Ag 328.068†	195.1	-37.2	-0.1574	ug/L	-0.1574	ppb	21:54:49
3	As 188.979†	-26.6	3.2	1.3403	ug/L	1.3403	ppb	21:55:09
3	B 249.677†	-411.8	122.1	2.6421	ug/L	2.6421	ppb	21:55:09
3	Ba 233.527†	367.4	370.4	2.8158	ug/L	2.8158	ppb	21:55:09
3	Be 313.107†	-5320.4	129.6	0.0509	ug/L	0.0509	ppb	21:54:49
3	Cd 226.502†	-192.6	-0.1	-0.0070	ug/L	-0.0070	ppb	21:55:09
3	Co 228.616†	-68.2	5.2	0.1000	ug/L	0.1000	ppb	21:55:09
3	Cr 267.716†	93.3	4.0	0.0447	ug/L	0.0447	ppb	21:55:09
3	Cu 324.752†	7042.8	102.4	0.3009	ug/L	0.3009	ppb	21:54:49
3	Mn 257.610†	2867.6	2394.2	2.6082	ug/L	2.6082	ppb	21:55:09
3	Mo 202.031†	26.7	6.1	0.4008	ug/L	0.4008	ppb	21:55:09
3	Ni 231.604†	83.1	10.9	0.2597	ug/L	0.2597	ppb	21:55:09
3	P 214.914†	228.7	3.1	1.7620	ug/L	1.7620	ppb	21:55:09
3	Pb 220.353†	-44.8	8.8	1.0380	ug/L	1.0380	ppb	21:55:09
3	S 181.975 Axial†	73.2	29.9	43.709	ug/L	43.709	ppb	21:55:09
3	Sb 206.836†	30.2	-0.2	-0.0713	ug/L	-0.0713	ppb	21:55:09
3	Se 196.026†	-23.5	0.5	0.4984	ug/L	0.4984	ppb	21:55:09
3	Si 251.611†	5404.2	4764.4	145.72	ug/L	145.72	ppb	21:54:49
3	Sn 189.927†	-4.5	-8.6	-1.4186	ug/L	-1.4186	ppb	21:55:09
3	Ti 334.940†	-90.2	877.0	1.4380	ug/L	1.4380	ppb	21:54:49
3	Tl 190.801†	-30.5	7.1	2.0547	ug/L	2.0547	ppb	21:55:09
3	U 409.014†	-2038.8	-26.9	-0.7599	ug/L	-0.7599	ppb	21:54:49
3	V 292.402†	-1329.9	-1.0	-0.0137	ug/L	-0.0137	ppb	21:54:49
3	Zn 213.857†	885.1	56.2	0.4982	ug/L	0.4982	ppb	21:55:09
3	SiO2†	5571.0	4946.3	323.89	ug/L	323.89	ppb	21:55:25

Mean Data: 241835005|928625|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	905481.1	102.32	%	0.495				0.48%
Sc Radial	6003.6	106	%	0.7				0.66%
Y 371.029	758909.6	102.27	%	0.475				0.46%
Y RADIAL	6496.9	105.5	%	0.50				0.47%
Ag 328.068†	21.3	0.1078	ug/L	0.31904	0.1078	ppb	0.31904	296.00%
Al 396.153Radial†	73.2	54.103	ug/L	17.6458	54.103	ppb	17.6458	32.61%
As 188.979†	3.7	1.5392	ug/L	0.83585	1.5392	ppb	0.83585	54.30%
B 249.677†	139.0	3.0107	ug/L	0.34681	3.0107	ppb	0.34681	11.52%
Ba 233.527†	361.7	2.7496	ug/L	0.06635	2.7496	ppb	0.06635	2.41%
Be 313.107†	127.2	0.0500	ug/L	0.00316	0.0500	ppb	0.00316	6.33%
Ca 317.933Radial†	237.9	363.72	ug/L	5.004	363.72	ppb	5.004	1.38%
Cd 226.502†	8.7	0.0899	ug/L	0.08531	0.0899	ppb	0.08531	94.86%
Co 228.616†	6.7	0.1292	ug/L	0.11413	0.1292	ppb	0.11413	88.30%
Cr 267.716†	-2.1	-0.0216	ug/L	0.09926	-0.0216	ppb	0.09926	459.19%
Cu 324.752†	98.2	0.2880	ug/L	0.12712	0.2880	ppb	0.12712	44.14%
Fe 238.204 Radial†	4.5	45.766	ug/L	13.9621	45.766	ppb	13.9621	30.51%
K 766.490 Radial†	108.7	19.460	ug/L	7.4401	19.460	ppb	7.4401	38.23%

Mg 279.077 IEC†	0.3	9.7710	ug/L	21.87753	9.7710	ppb	21.87753 223.90%
Mn 257.610†	2385.1	2.5964	ug/L	0.02766	2.5964	ppb	0.02766 1.07%
Mo 202.031†	4.7	0.3117	ug/L	0.17562	0.3117	ppb	0.17562 56.34%
Na 589.592 Radial†	1252.4	470.72	ug/L	6.807	470.72	ppb	6.807 1.45%
Ni 231.604†	16.0	0.3791	ug/L	0.10704	0.3791	ppb	0.10704 28.23%
P 214.914†	5.4	3.1551	ug/L	4.06947	3.1551	ppb	4.06947 128.98%
Pb 220.353†	1.8	0.2188	ug/L	1.00425	0.2188	ppb	1.00425 458.97%
S 181.975 Axial†	31.6	46.127	ug/L	6.2105	46.127	ppb	6.2105 13.46%
Sb 206.836†	2.4	0.7552	ug/L	1.35191	0.7552	ppb	1.35191 179.02%
Se 196.026†	1.6	1.1231	ug/L	1.96719	1.1231	ppb	1.96719 175.15%
Si 251.611†	4786.6	146.39	ug/L	0.607	146.39	ppb	0.607 0.41%
Sn 189.927†	-4.7	-0.7490	ug/L	0.57991	-0.7490	ppb	0.57991 77.42%
Sr 421.552†	224.4	1.5114	ug/L	0.03215	1.5114	ppb	0.03215 2.13%
Ti 334.940†	841.6	1.3794	ug/L	0.07465	1.3794	ppb	0.07465 5.41%
Tl 190.801†	8.1	2.3330	ug/L	1.17344	2.3330	ppb	1.17344 50.30%
U 409.014†	59.2	1.6496	ug/L	2.62756	1.6496	ppb	2.62756 159.29%
V 292.402†	59.9	0.4039	ug/L	0.41774	0.4039	ppb	0.41774 103.42%
Zn 213.857†	56.3	0.4990	ug/L	0.03920	0.4990	ppb	0.03920 7.86%
SiO2†	4905.9	321.23	ug/L	2.377	321.23	ppb	2.377 0.74%

Sequence No.: 75
Sample ID: 241835006|928625|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 12/9/2009 21:57:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241835006|928625|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5832.9	5832.9	103	%			21:59:29
1	Y RADIAL	6304.8	6304.8	102.4	%			21:59:29
1	Al 396.153Radial†	14.2	34.1	25.209	ug/L	25.209	ppb	21:59:49
1	Ca 317.933Radial†	81.2	61.1	93.444	ug/L	93.444	ppb	21:59:49
1	Fe 238.204 Radial†	11.8	5.4	54.532	ug/L	54.532	ppb	21:59:49
1	K 766.490 Radial†	2236.9	1.6	0.1083	ug/L	0.1083	ppb	21:59:29
1	Mg 279.077 IEC†	1.3	-0.5	-20.071	ug/L	-20.071	ppb	21:59:49
1	Na 589.592 Radial†	370.0	975.2	366.54	ug/L	366.54	ppb	21:59:29
1	Sr 421.552†	49.7	44.8	0.3016	ug/L	0.3016	ppb	21:59:29
1	Sc 361.383	896974.6	896974.6	101.36	%			22:00:46
1	Y 371.029	753220.8	753220.8	101.50	%			22:00:46
1	Ag 328.068†	295.0	63.5	0.3113	ug/L	0.3113	ppb	22:00:46
1	As 188.979†	-31.3	-1.6	-0.6533	ug/L	-0.6533	ppb	22:01:06
1	B 249.677†	-414.1	115.3	2.4960	ug/L	2.4960	ppb	22:01:06
1	Ba 233.527†	325.6	333.2	2.5329	ug/L	2.5329	ppb	22:01:06
1	Be 313.107†	-5289.3	101.8	0.0394	ug/L	0.0394	ppb	22:00:46
1	Cd 226.502†	-176.4	13.8	0.1445	ug/L	0.1445	ppb	22:01:06
1	Co 228.616†	-65.1	7.6	0.1460	ug/L	0.1460	ppb	22:01:06
1	Cr 267.716†	85.7	-2.5	-0.0249	ug/L	-0.0249	ppb	22:01:06
1	Cu 324.752†	7027.1	164.4	0.4809	ug/L	0.4809	ppb	22:00:46
1	Mn 257.610†	1395.7	973.6	1.0639	ug/L	1.0639	ppb	22:01:06
1	Mo 202.031†	24.2	3.9	0.2551	ug/L	0.2551	ppb	22:01:06
1	Ni 231.604†	99.4	28.0	0.6632	ug/L	0.6632	ppb	22:01:06
1	P 214.914†	222.4	-0.6	-0.4572	ug/L	-0.4572	ppb	22:01:06
1	Pb 220.353†	-54.1	-0.8	-0.0925	ug/L	-0.0925	ppb	22:01:06
1	S 181.975 Axial†	50.9	8.8	12.834	ug/L	12.834	ppb	22:01:06
1	Sb 206.836†	32.1	2.1	0.6844	ug/L	0.6844	ppb	22:01:06
1	Se 196.026†	-29.6	-5.7	-3.2453	ug/L	-3.2453	ppb	22:01:06
1	Si 251.611†	3249.3	2697.8	82.510	ug/L	82.510	ppb	22:01:06
1	Sn 189.927†	3.1	-1.2	-0.1871	ug/L	-0.1871	ppb	22:01:06
1	Ti 334.940†	-464.3	506.9	0.8256	ug/L	0.8256	ppb	22:00:46
1	Tl 190.801†	-36.6	0.8	0.2319	ug/L	0.2319	ppb	22:01:06
1	U 409.014†	-2064.4	-74.6	-2.0923	ug/L	-2.0923	ppb	22:00:46
1	V 292.402†	-1318.7	-4.6	-0.0412	ug/L	-0.0412	ppb	22:00:46
1	Zn 213.857†	815.1	-3.1	-0.0374	ug/L	-0.0374	ppb	22:01:06
1	SiO2†	3407.6	2873.1	188.14	ug/L	188.14	ppb	22:02:02
2	Sc Radial	5915.8	5915.8	104	%			21:59:54
2	Y RADIAL	6396.9	6396.9	103.9	%			21:59:54
2	Al 396.153Radial†	31.1	50.1	37.015	ug/L	37.015	ppb	22:00:14
2	Ca 317.933Radial†	86.0	64.6	98.823	ug/L	98.823	ppb	22:00:14
2	Fe 238.204 Radial†	11.3	4.8	48.225	ug/L	48.225	ppb	22:00:14
2	K 766.490 Radial†	2232.0	-33.5	-6.2672	ug/L	-6.2672	ppb	21:59:54
2	Mg 279.077 IEC†	1.6	-0.2	-8.6655	ug/L	-8.6655	ppb	22:00:14
2	Na 589.592 Radial†	378.8	978.6	367.82	ug/L	367.82	ppb	21:59:54
2	Sr 421.552†	90.9	83.6	0.5637	ug/L	0.5637	ppb	21:59:54
2	Sc 361.383	893668.2	893668.2	100.98	%			22:01:11
2	Y 371.029	748105.9	748105.9	100.81	%			22:01:11
2	Ag 328.068†	286.7	56.3	0.2733	ug/L	0.2733	ppb	22:01:11
2	As 188.979†	-24.6	4.8	1.9773	ug/L	1.9773	ppb	22:01:31
2	B 249.677†	-421.9	106.1	2.2962	ug/L	2.2962	ppb	22:01:31
2	Ba 233.527†	343.3	352.0	2.6759	ug/L	2.6759	ppb	22:01:31
2	Be 313.107†	-5282.7	88.9	0.0348	ug/L	0.0348	ppb	22:01:11
2	Cd 226.502†	-185.8	3.8	0.0371	ug/L	0.0371	ppb	22:01:31
2	Co 228.616†	-62.8	9.5	0.1843	ug/L	0.1843	ppb	22:01:31
2	Cr 267.716†	69.7	-17.9	-0.1926	ug/L	-0.1926	ppb	22:01:31
2	Cu 324.752†	6982.8	146.2	0.4276	ug/L	0.4276	ppb	22:01:11
2	Mn 257.610†	1402.4	985.3	1.0757	ug/L	1.0757	ppb	22:01:31
2	Mo 202.031†	21.6	1.4	0.0948	ug/L	0.0948	ppb	22:01:31
2	Ni 231.604†	86.1	15.1	0.3589	ug/L	0.3589	ppb	22:01:31

2	P 214.914†	226.3	4.1	2.3395	ug/L	2.3395 ppb	22:01:31
2	Pb 220.353†	-61.5	-8.4	-0.9784	ug/L	-0.9784 ppb	22:01:31
2	S 181.975 Axial†	48.0	6.1	8.8787	ug/L	8.8787 ppb	22:01:31
2	Sb 206.836†	30.6	0.7	0.2329	ug/L	0.2329 ppb	22:01:31
2	Se 196.026†	-21.5	2.2	1.4625	ug/L	1.4625 ppb	22:01:31
2	Si 251.611†	3282.2	2742.2	83.874	ug/L	83.874 ppb	22:01:31
2	Sn 189.927†	2.6	-1.7	-0.2726	ug/L	-0.2726 ppb	22:01:31
2	Ti 334.940†	-422.5	546.6	0.8882	ug/L	0.8882 ppb	22:01:11
2	Tl 190.801†	-34.2	3.0	0.8621	ug/L	0.8621 ppb	22:01:31
2	U 409.014†	-1897.5	83.2	2.3183	ug/L	2.3183 ppb	22:01:11
2	V 292.402†	-1270.4	38.4	0.2566	ug/L	0.2566 ppb	22:01:11
2	Zn 213.857†	814.0	-1.2	-0.0176	ug/L	-0.0176 ppb	22:01:31
2	SiO2†	3456.1	2933.7	192.11	ug/L	192.11 ppb	22:02:07
3	Sc Radial	5937.0	5937.0	105	%		22:00:19
3	Y RADIAL	6404.8	6404.8	104.0	%		22:00:19
3	Al 396.153Radial†	25.4	44.5	32.935	ug/L	32.935 ppb	22:00:39
3	Ca 317.933Radial†	84.6	63.0	96.363	ug/L	96.363 ppb	22:00:39
3	Fe 238.204 Radial†	12.9	6.2	62.918	ug/L	62.918 ppb	22:00:39
3	K 766.490 Radial†	2262.8	-11.8	-2.3191	ug/L	-2.3191 ppb	22:00:19
3	Mg 279.077 IEC†	-3.6	-5.2	-192.12	ug/L	-192.12 ppb	22:00:39
3	Na 589.592 Radial†	383.4	981.7	368.99	ug/L	368.99 ppb	22:00:19
3	Sr 421.552†	78.6	71.5	0.4820	ug/L	0.4820 ppb	22:00:19
3	Sc 361.383	899713.6	899713.6	101.67	%		22:01:36
3	Y 371.029	753076.2	753076.2	101.48	%		22:01:36
3	Ag 328.068†	290.2	57.9	0.2882	ug/L	0.2882 ppb	22:01:36
3	As 188.979†	-24.5	5.1	2.0851	ug/L	2.0851 ppb	22:01:56
3	B 249.677†	-413.1	117.6	2.5431	ug/L	2.5431 ppb	22:01:56
3	Ba 233.527†	343.2	349.6	2.6585	ug/L	2.6585 ppb	22:01:56
3	Be 313.107†	-5327.1	80.4	0.0314	ug/L	0.0314 ppb	22:01:36
3	Cd 226.502†	-199.8	-8.7	-0.1003	ug/L	-0.1003 ppb	22:01:56
3	Co 228.616†	-58.5	14.3	0.2745	ug/L	0.2745 ppb	22:01:56
3	Cr 267.716†	88.9	0.5	0.0069	ug/L	0.0069 ppb	22:01:56
3	Cu 324.752†	7021.6	137.9	0.4042	ug/L	0.4042 ppb	22:01:36
3	Mn 257.610†	1404.1	977.7	1.0723	ug/L	1.0723 ppb	22:01:56
3	Mo 202.031†	16.3	-4.0	-0.2558	ug/L	-0.2558 ppb	22:01:56
3	Ni 231.604†	87.3	15.7	0.3728	ug/L	0.3728 ppb	22:01:56
3	P 214.914†	227.9	4.2	2.3772	ug/L	2.3772 ppb	22:01:56
3	Pb 220.353†	-52.4	1.0	0.1171	ug/L	0.1171 ppb	22:01:56
3	S 181.975 Axial†	52.9	10.5	15.419	ug/L	15.419 ppb	22:01:56
3	Sb 206.836†	25.2	-4.8	-1.5515	ug/L	-1.5515 ppb	22:01:56
3	Se 196.026†	-23.8	0.1	0.2294	ug/L	0.2294 ppb	22:01:56
3	Si 251.611†	3235.2	2674.1	81.794	ug/L	81.794 ppb	22:01:56
3	Sn 189.927†	7.6	3.2	0.5552	ug/L	0.5552 ppb	22:01:56
3	Ti 334.940†	-484.5	488.5	0.7952	ug/L	0.7952 ppb	22:01:36
3	Tl 190.801†	-37.3	0.2	0.0578	ug/L	0.0578 ppb	22:01:56
3	U 409.014†	-2003.5	-8.5	-0.2466	ug/L	-0.2466 ppb	22:01:36
3	V 292.402†	-1253.2	63.9	0.4121	ug/L	0.4121 ppb	22:01:36
3	Zn 213.857†	807.2	-13.3	-0.1216	ug/L	-0.1216 ppb	22:01:56
3	SiO2†	3318.8	2775.6	181.77	ug/L	181.77 ppb	22:02:12

Mean Data: 241835006|928625|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	896785.5	101.33	%	0.342				0.34%
Sc Radial	5895.2	104	%	1.0				0.93%
Y 371.029	751467.6	101.27	%	0.392				0.39%
Y RADIAL	6368.8	103.4	%	0.90				0.87%
Ag 328.068†	59.2	0.2909	ug/L	0.01914	0.2909	ppb	0.01914	6.58%
Al 396.153Radial†	42.9	31.719	ug/L	5.9963	31.719	ppb	5.9963	18.90%
As 188.979†	2.8	1.1364	ug/L	1.55083	1.1364	ppb	1.55083	136.47%
B 249.677†	113.0	2.4451	ug/L	0.13109	2.4451	ppb	0.13109	5.36%
Ba 233.527†	345.0	2.6224	ug/L	0.07802	2.6224	ppb	0.07802	2.98%
Be 313.107†	90.4	0.0352	ug/L	0.00401	0.0352	ppb	0.00401	11.40%
Ca 317.933Radial†	62.9	96.210	ug/L	2.6928	96.210	ppb	2.6928	2.80%
Cd 226.502†	3.0	0.0271	ug/L	0.12268	0.0271	ppb	0.12268	452.27%
Co 228.616†	10.5	0.2016	ug/L	0.06598	0.2016	ppb	0.06598	32.73%
Cr 267.716†	-6.6	-0.0702	ug/L	0.10719	-0.0702	ppb	0.10719	152.70%
Cu 324.752†	149.5	0.4376	ug/L	0.03929	0.4376	ppb	0.03929	8.98%
Fe 238.204 Radial†	5.5	55.225	ug/L	7.3706	55.225	ppb	7.3706	13.35%
K 766.490 Radial†	-14.6	-2.8260	ug/L	3.21785	-2.8260	ppb	3.21785	113.87%

Mg 279.077 IEC†	-2.0	-73.619	ug/L	102.7839	-73.619	ppb	102.7839 139.62%
Mn 257.610†	978.9	1.0706	ug/L	0.00610	1.0706	ppb	0.00610 0.57%
Mo 202.031†	0.4	0.0314	ug/L	0.26126	0.0314	ppb	0.26126 832.96%
Na 589.592 Radial†	978.5	367.78	ug/L	1.222	367.78	ppb	1.222 0.33%
Ni 231.604†	19.6	0.4650	ug/L	0.17183	0.4650	ppb	0.17183 36.96%
P 214.914†	2.6	1.4198	ug/L	1.62569	1.4198	ppb	1.62569 114.50%
Pb 220.353†	-2.7	-0.3179	ug/L	0.58151	-0.3179	ppb	0.58151 182.90%
S 181.975 Axial†	8.5	12.377	ug/L	3.2940	12.377	ppb	3.2940 26.61%
Sb 206.836†	-0.7	-0.2114	ug/L	1.18230	-0.2114	ppb	1.18230 559.25%
Se 196.026†	-1.2	-0.5178	ug/L	2.44120	-0.5178	ppb	2.44120 471.46%
Si 251.611†	2704.7	82.726	ug/L	1.0570	82.726	ppb	1.0570 1.28%
Sn 189.927†	0.1	0.0318	ug/L	0.45527	0.0318	ppb	0.45527 >999.9%
Sr 421.552†	66.7	0.4491	ug/L	0.13409	0.4491	ppb	0.13409 29.86%
Ti 334.940†	514.0	0.8364	ug/L	0.04743	0.8364	ppb	0.04743 5.67%
Tl 190.801†	1.3	0.3839	ug/L	0.42315	0.3839	ppb	0.42315 110.21%
U 409.014†	-0.0	-0.0069	ug/L	2.21503	-0.0069	ppb	2.21503 >999.9%
V 292.402†	32.5	0.2092	ug/L	0.23031	0.2092	ppb	0.23031 110.11%
Zn 213.857†	-5.8	-0.0589	ug/L	0.05523	-0.0589	ppb	0.05523 93.83%
SiO2†	2860.8	187.34	ug/L	5.218	187.34	ppb	5.218 2.79%

Sequence No.: 76
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/9/2009 22:04:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5696.5	5696.5	101	%			22:06:15
1	Y RADIAL	6171.7	6171.7	100.2	%			22:06:15
1	Al 396.153Radial†	6648.0	6629.6	4879.3	ug/L	4879.3	ppb	22:06:15
1	Ca 317.933Radial†	3272.8	3236.1	4948.5	ug/L	4948.5	ppb	22:06:35
1	Fe 238.204 Radial†	511.7	502.7	5077.7	ug/L	5077.7	ppb	22:06:35
1	K 766.490 Radial†	29654.1	27311.2	4948.0	ug/L	4948.0	ppb	22:06:15
1	Mg 279.077 IEC†	141.2	138.6	5168.6	ug/L	5168.6	ppb	22:06:35
1	Na 589.592 Radial†	26727.4	27187.8	10219	ug/L	10219	ppb	22:06:15
1	Sr 421.552†	76489.3	76040.6	513.27	ug/L	513.27	ppb	22:06:15
1	Sc 361.383	888838.6	888838.6	100.44	%			22:07:32
1	Y 371.029	733797.3	733797.3	98.885	%			22:07:32
1	Ag 328.068†	109392.2	108688.8	505.56	ug/L	505.56	ppb	22:07:38
1	As 188.979†	1187.7	1211.7	498.76	ug/L	498.76	ppb	22:07:58
1	B 249.677†	21986.8	22415.1	484.63	ug/L	484.63	ppb	22:07:38
1	Ba 233.527†	65136.9	64865.6	493.94	ug/L	493.94	ppb	22:07:38
1	Be 313.107†	1316927.4	1316519.4	490.19	ug/L	490.19	ppb	22:07:32
1	Cd 226.502†	45831.1	45819.6	496.90	ug/L	496.90	ppb	22:07:38
1	Co 228.616†	25517.5	25478.2	494.73	ug/L	494.73	ppb	22:07:38
1	Cr 267.716†	46043.0	45755.8	493.80	ug/L	493.80	ppb	22:07:38
1	Cu 324.752†	174577.5	167049.5	486.09	ug/L	486.09	ppb	22:07:38
1	Mn 257.610†	453104.2	450730.0	490.23	ug/L	490.23	ppb	22:07:32
1	Mo 202.031†	7789.3	7735.5	504.24	ug/L	504.24	ppb	22:07:58
1	Ni 231.604†	21052.2	20890.5	495.38	ug/L	495.38	ppb	22:07:38
1	P 214.914†	4409.0	4169.9	2403.9	ug/L	2403.9	ppb	22:07:58
1	Pb 220.353†	4203.5	4237.8	496.92	ug/L	496.92	ppb	22:07:58
1	S 181.975 Axial†	727.7	683.1	997.85	ug/L	997.85	ppb	22:07:58
1	Sb 206.836†	1591.4	1554.9	512.21	ug/L	512.21	ppb	22:07:58
1	Se 196.026†	819.6	839.5	518.42	ug/L	518.42	ppb	22:07:58
1	Si 251.611†	82079.5	81214.5	2472.0	ug/L	2472.0	ppb	22:07:38
1	Sn 189.927†	3006.7	2989.3	506.31	ug/L	506.31	ppb	22:07:58
1	Ti 334.940†	309089.7	308710.3	499.16	ug/L	499.16	ppb	22:07:38
1	Tl 190.801†	1689.2	1718.7	495.80	ug/L	495.80	ppb	22:07:58
1	U 409.014†	15614.1	17508.4	487.57	ug/L	487.57	ppb	22:07:38
1	V 292.402†	71647.1	72631.9	497.05	ug/L	497.05	ppb	22:07:38
1	Zn 213.857†	56132.0	55080.6	491.15	ug/L	491.15	ppb	22:07:38
1	SiO2†	82674.3	81825.8	5332.1	ug/L	5332.1	ppb	22:09:05
2	Sc Radial	5690.0	5690.0	100	%			22:06:40
2	Y RADIAL	6139.2	6139.2	99.68	%			22:06:40
2	Al 396.153Radial†	6624.8	6614.1	4868.2	ug/L	4868.2	ppb	22:06:40
2	Ca 317.933Radial†	3270.2	3237.1	4950.1	ug/L	4950.1	ppb	22:07:00
2	Fe 238.204 Radial†	507.7	499.3	5043.3	ug/L	5043.3	ppb	22:07:00
2	K 766.490 Radial†	29803.0	27492.9	4980.9	ug/L	4980.9	ppb	22:06:40
2	Mg 279.077 IEC†	142.6	140.2	5226.7	ug/L	5226.7	ppb	22:07:00
2	Na 589.592 Radial†	26724.8	27215.3	10229	ug/L	10229	ppb	22:06:40
2	Sr 421.552†	76611.9	76249.0	514.68	ug/L	514.68	ppb	22:06:40
2	Sc 361.383	902079.3	902079.3	101.93	%			22:08:03
2	Y 371.029	743443.4	743443.4	100.18	%			22:08:03
2	Ag 328.068†	110427.2	108105.5	502.84	ug/L	502.84	ppb	22:08:09
2	As 188.979†	1185.5	1192.3	490.81	ug/L	490.81	ppb	22:08:29
2	B 249.677†	22260.2	22361.9	483.48	ug/L	483.48	ppb	22:08:09
2	Ba 233.527†	65972.1	64733.0	492.93	ug/L	492.93	ppb	22:08:09
2	Be 313.107†	1339026.1	1318953.2	491.09	ug/L	491.09	ppb	22:08:03
2	Cd 226.502†	46392.5	45700.6	495.61	ug/L	495.61	ppb	22:08:09
2	Co 228.616†	25847.3	25428.9	493.76	ug/L	493.76	ppb	22:08:09
2	Cr 267.716†	46420.7	45453.4	490.53	ug/L	490.53	ppb	22:08:09
2	Cu 324.752†	176309.6	166197.4	483.61	ug/L	483.61	ppb	22:08:09
2	Mn 257.610†	461656.5	452498.3	492.15	ug/L	492.15	ppb	22:08:03
2	Mo 202.031†	7761.5	7594.3	495.05	ug/L	495.05	ppb	22:08:29
2	Ni 231.604†	21321.0	20846.6	494.34	ug/L	494.34	ppb	22:08:09

2	P 214.914†	4391.1	4087.9	2355.5 ug/L	2355.5 ppb	22:08:29
2	Pb 220.353†	4195.5	4168.4	488.80 ug/L	488.80 ppb	22:08:29
2	S 181.975 Axial†	726.7	671.5	980.92 ug/L	980.92 ppb	22:08:29
2	Sb 206.836†	1587.3	1527.5	503.07 ug/L	503.07 ppb	22:08:29
2	Se 196.026†	817.4	825.4	509.86 ug/L	509.86 ppb	22:08:29
2	Si 251.611†	83014.8	80932.5	2463.5 ug/L	2463.5 ppb	22:08:09
2	Sn 189.927†	3001.5	2940.3	498.02 ug/L	498.02 ppb	22:08:29
2	Ti 334.940†	312721.8	307756.4	497.61 ug/L	497.61 ppb	22:08:09
2	Tl 190.801†	1689.8	1694.6	488.89 ug/L	488.89 ppb	22:08:29
2	U 409.014†	15834.1	17496.0	487.23 ug/L	487.23 ppb	22:08:09
2	V 292.402†	72213.3	72140.3	493.61 ug/L	493.61 ppb	22:08:09
2	Zn 213.857†	56869.4	54983.7	490.29 ug/L	490.29 ppb	22:08:09
2	SiO2†	83041.4	80977.8	5277.0 ug/L	5277.0 ppb	22:09:10
3	Sc Radial	5762.8	5762.8	102 %		22:07:05
3	Y RADIAL	6176.2	6176.2	100.3 %		22:07:05
3	Al 396.153Radial†	6664.3	6569.6	4835.0 ug/L	4835.0 ppb	22:07:05
3	Ca 317.933Radial†	3263.4	3189.4	4877.2 ug/L	4877.2 ppb	22:07:25
3	Fe 238.204 Radial†	509.5	494.6	4996.4 ug/L	4996.4 ppb	22:07:25
3	K 766.490 Radial†	29850.5	27165.0	4921.5 ug/L	4921.5 ppb	22:07:05
3	Mg 279.077 IEC†	138.2	134.0	4997.1 ug/L	4997.1 ppb	22:07:25
3	Na 589.592 Radial†	26773.9	26927.8	10121 ug/L	10121 ppb	22:07:05
3	Sr 421.552†	77064.5	75730.9	511.18 ug/L	511.18 ppb	22:07:05
3	Sc 361.383	893621.8	893621.8	100.98 %		22:08:34
3	Y 371.029	736950.4	736950.4	99.310 %		22:08:34
3	Ag 328.068†	109614.4	108325.9	503.85 ug/L	503.85 ppb	22:08:40
3	As 188.979†	1195.8	1213.5	499.45 ug/L	499.45 ppb	22:09:00
3	B 249.677†	22177.9	22487.1	486.20 ug/L	486.20 ppb	22:08:40
3	Ba 233.527†	65218.5	64599.3	491.91 ug/L	491.91 ppb	22:08:40
3	Be 313.107†	1331089.9	1323526.4	492.79 ug/L	492.79 ppb	22:08:34
3	Cd 226.502†	45828.3	45572.6	494.23 ug/L	494.23 ppb	22:08:40
3	Co 228.616†	25626.7	25450.4	494.19 ug/L	494.19 ppb	22:08:40
3	Cr 267.716†	46064.2	45531.4	491.37 ug/L	491.37 ppb	22:08:40
3	Cu 324.752†	175601.1	167132.8	486.33 ug/L	486.33 ppb	22:08:40
3	Mn 257.610†	459496.6	454645.7	494.48 ug/L	494.48 ppb	22:08:34
3	Mo 202.031†	7800.9	7705.4	502.28 ug/L	502.28 ppb	22:09:00
3	Ni 231.604†	21061.0	20787.0	492.92 ug/L	492.92 ppb	22:08:40
3	P 214.914†	4392.8	4130.4	2380.4 ug/L	2380.4 ppb	22:09:00
3	Pb 220.353†	4194.1	4206.0	493.20 ug/L	493.20 ppb	22:09:00
3	S 181.975 Axial†	728.8	680.3	993.76 ug/L	993.76 ppb	22:09:00
3	Sb 206.836†	1588.3	1543.3	508.48 ug/L	508.48 ppb	22:09:00
3	Se 196.026†	819.9	835.4	515.73 ug/L	515.73 ppb	22:09:00
3	Si 251.611†	82370.1	81064.8	2467.5 ug/L	2467.5 ppb	22:08:40
3	Sn 189.927†	3023.3	2989.8	506.38 ug/L	506.38 ppb	22:09:00
3	Ti 334.940†	309877.7	307843.4	497.75 ug/L	497.75 ppb	22:08:40
3	Tl 190.801†	1696.3	1716.7	495.23 ug/L	495.23 ppb	22:09:00
3	U 409.014†	15804.5	17613.7	490.53 ug/L	490.53 ppb	22:08:40
3	V 292.402†	71616.6	72219.9	494.26 ug/L	494.26 ppb	22:08:40
3	Zn 213.857†	56253.6	54901.9	489.57 ug/L	489.57 ppb	22:08:40
3	SiO2†	82930.5	81639.0	5320.0 ug/L	5320.0 ppb	22:09:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894846.5	101.12	%	0.758				0.75%
Sc Radial	5716.4	101	%	0.7				0.70%
Y 371.029	738063.7	99.460	%	0.6628				0.67%
Y RADIAL	6162.4	100.1	%	0.33				0.33%
Ag 328.068†	108373.4	504.08	ug/L	1.376	504.08	ppb	1.376	0.27%
QC value within limits for Ag 328.068 Recovery = 100.82%								
Al 396.153Radial†	6604.4	4860.9	ug/L	23.05	4860.9	ppb	23.05	0.47%
QC value within limits for Al 396.153Radial Recovery = 97.22%								
As 188.979†	1205.8	496.34	ug/L	4.800	496.34	ppb	4.800	0.97%
QC value within limits for As 188.979 Recovery = 99.27%								
B 249.677†	22421.4	484.77	ug/L	1.366	484.77	ppb	1.366	0.28%
QC value within limits for B 249.677 Recovery = 96.95%								
Ba 233.527†	64732.6	492.93	ug/L	1.016	492.93	ppb	1.016	0.21%
QC value within limits for Ba 233.527 Recovery = 98.59%								
Be 313.107†	1319666.4	491.36	ug/L	1.321	491.36	ppb	1.321	0.27%
QC value within limits for Be 313.107 Recovery = 98.27%								
Ca 317.933Radial†	3220.9	4925.3	ug/L	41.67	4925.3	ppb	41.67	0.85%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.51%
Cd 226.502†            45697.6      495.58 ug/L         1.337      495.58 ppb          1.337   0.27%
   QC value within limits for Cd 226.502  Recovery = 99.12%
Co 228.616†            25452.5      494.23 ug/L         0.489      494.23 ppb          0.489   0.10%
   QC value within limits for Co 228.616  Recovery = 98.85%
Cr 267.716†            45580.2      491.90 ug/L         1.695      491.90 ppb          1.695   0.34%
   QC value within limits for Cr 267.716  Recovery = 98.38%
Cu 324.752†           166793.2      485.34 ug/L         1.505      485.34 ppb          1.505   0.31%
   QC value within limits for Cu 324.752  Recovery = 97.07%
Fe 238.204 Radial†       498.9      5039.1 ug/L        40.82      5039.1 ppb         40.82   0.81%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.78%
K 766.490 Radial†      27323.0      4950.1 ug/L        29.78      4950.1 ppb         29.78   0.60%
   QC value within limits for K 766.490 Radial  Recovery = 99.00%
Mg 279.077 IEC†          137.6      5130.8 ug/L       119.38      5130.8 ppb        119.38   2.33%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.62%
Mn 257.610†           452624.7      492.29 ug/L         2.129      492.29 ppb          2.129   0.43%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             7678.4      500.52 ug/L         4.842      500.52 ppb          4.842   0.97%
   QC value within limits for Mo 202.031  Recovery = 100.10%
Na 589.592 Radial†     27110.3       10190 ug/L          59.6       10190 ppb           59.6   0.59%
   QC value within limits for Na 589.592 Radial  Recovery = 101.90%
Ni 231.604†            20841.4      494.21 ug/L         1.232      494.21 ppb          1.232   0.25%
   QC value within limits for Ni 231.604  Recovery = 98.84%
P 214.914†              4129.4      2379.9 ug/L        24.22      2379.9 ppb         24.22   1.02%
   QC value within limits for P 214.914  Recovery = 95.20%
Pb 220.353†             4204.1      492.98 ug/L         4.066      492.98 ppb          4.066   0.82%
   QC value within limits for Pb 220.353  Recovery = 98.60%
S 181.975 Axial†         678.3      990.84 ug/L         8.836      990.84 ppb          8.836   0.89%
   QC value within limits for S 181.975 Axial  Recovery = 99.08%
Sb 206.836†             1541.9      507.92 ug/L         4.595      507.92 ppb          4.595   0.90%
   QC value within limits for Sb 206.836  Recovery = 101.58%
Se 196.026†              833.4      514.67 ug/L         4.377      514.67 ppb          4.377   0.85%
   QC value within limits for Se 196.026  Recovery = 102.93%
Si 251.611†            81070.6      2467.7 ug/L          4.23      2467.7 ppb          4.23   0.17%
   QC value within limits for Si 251.611  Recovery = 98.71%
Sn 189.927†             2973.1      503.57 ug/L         4.806      503.57 ppb          4.806   0.95%
   QC value within limits for Sn 189.927  Recovery = 100.71%
Sr 421.552†            76006.8      513.05 ug/L         1.759      513.05 ppb          1.759   0.34%
   QC value within limits for Sr 421.552  Recovery = 102.61%
Ti 334.940†           308103.4      498.17 ug/L         0.854      498.17 ppb          0.854   0.17%
   QC value within limits for Ti 334.940  Recovery = 99.63%
Tl 190.801†             1710.0      493.31 ug/L         3.832      493.31 ppb          3.832   0.78%
   QC value within limits for Tl 190.801  Recovery = 98.66%
U 409.014†             17539.4      488.44 ug/L         1.813      488.44 ppb          1.813   0.37%
   QC value within limits for U 409.014  Recovery = 97.69%
V 292.402†             72330.7      494.98 ug/L         1.829      494.98 ppb          1.829   0.37%
   QC value within limits for V 292.402  Recovery = 99.00%
Zn 213.857†            54988.7      490.34 ug/L         0.791      490.34 ppb          0.791   0.16%
   QC value within limits for Zn 213.857  Recovery = 98.07%
SiO2†                  81480.9      5309.7 ug/L        28.98      5309.7 ppb         28.98   0.55%
   QC value within limits for SiO2  Recovery = 99.29%
All analyte(s) passed QC.
```

Sequence No.: 77
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/9/2009 22:11:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5772.9	5772.9	102	%			22:13:17
1	Y RADIAL	6299.7	6299.7	102.3	%			22:13:17
1	Al 396.153Radial†	5.8	26.0	19.223	ug/L	19.223	ppb	22:13:17
1	Ca 317.933Radial†	20.4	2.3	3.4956	ug/L	3.4956	ppb	22:13:37
1	Fe 238.204 Radial†	5.6	-0.5	-5.2452	ug/L	-5.2452	ppb	22:13:37
1	K 766.490 Radial†	2268.3	55.0	9.9810	ug/L	9.9810	ppb	22:13:17
1	Mg 279.077 IEC†	1.8	-0.0	-1.4498	ug/L	-1.4498	ppb	22:13:37
1	Na 589.592 Radial†	-621.2	6.6	2.4722	ug/L	2.4722	ppb	22:13:17
1	Sr 421.552†	4.1	0.6	0.0039	ug/L	0.0039	ppb	22:13:17
1	Sc 361.383	850747.6	850747.6	96.133	%			22:14:34
1	Y 371.029	714644.3	714644.3	96.304	%			22:14:34
1	Ag 328.068†	240.0	22.1	0.1000	ug/L	0.1000	ppb	22:14:34
1	As 188.979†	-30.1	-2.1	-0.8511	ug/L	-0.8511	ppb	22:14:54
1	B 249.677†	-289.6	222.6	4.8330	ug/L	4.8330	ppb	22:14:54
1	Ba 233.527†	-17.0	-5.6	-0.0434	ug/L	-0.0434	ppb	22:14:54
1	Be 313.107†	-5082.2	33.6	0.0122	ug/L	0.0122	ppb	22:14:34
1	Cd 226.502†	-182.2	-1.7	-0.0174	ug/L	-0.0174	ppb	22:14:54
1	Co 228.616†	-72.0	-3.1	-0.0588	ug/L	-0.0588	ppb	22:14:54
1	Cr 267.716†	66.8	-17.5	-0.1888	ug/L	-0.1888	ppb	22:14:54
1	Cu 324.752†	6826.5	332.5	0.9668	ug/L	0.9668	ppb	22:14:34
1	Mn 257.610†	470.0	85.5	0.0924	ug/L	0.0924	ppb	22:14:54
1	Mo 202.031†	28.7	9.9	0.6448	ug/L	0.6448	ppb	22:14:54
1	Ni 231.604†	82.0	15.1	0.3593	ug/L	0.3593	ppb	22:14:54
1	P 214.914†	206.9	-4.7	-2.9284	ug/L	-2.9284	ppb	22:14:54
1	Pb 220.353†	-50.7	-0.2	-0.0192	ug/L	-0.0192	ppb	22:14:54
1	S 181.975 Axial†	44.8	5.1	7.4480	ug/L	7.4480	ppb	22:14:54
1	Sb 206.836†	31.4	3.1	1.0433	ug/L	1.0433	ppb	22:14:54
1	Se 196.026†	-18.4	4.4	2.5844	ug/L	2.5844	ppb	22:14:54
1	Si 251.611†	476.8	-12.1	-0.3885	ug/L	-0.3885	ppb	22:14:54
1	Sn 189.927†	12.7	8.9	1.5068	ug/L	1.5068	ppb	22:14:54
1	Ti 334.940†	-998.3	-73.4	-0.1183	ug/L	-0.1183	ppb	22:14:34
1	Tl 190.801†	-30.2	5.5	1.5694	ug/L	1.5694	ppb	22:14:54
1	U 409.014†	-1904.3	-18.7	-0.5211	ug/L	-0.5211	ppb	22:14:34
1	V 292.402†	-1277.9	-32.9	-0.2127	ug/L	-0.2127	ppb	22:14:34
1	Zn 213.857†	696.2	-83.0	-0.7499	ug/L	-0.7499	ppb	22:14:54
1	SiO2†	457.4	-13.1	-0.8972	ug/L	-0.8972	ppb	22:15:50
2	Sc Radial	5779.6	5779.6	102	%			22:13:42
2	Y RADIAL	6244.1	6244.1	101.4	%			22:13:42
2	Al 396.153Radial†	-16.6	4.1	2.9900	ug/L	2.9900	ppb	22:13:42
2	Ca 317.933Radial†	19.3	1.3	1.9242	ug/L	1.9242	ppb	22:14:02
2	Fe 238.204 Radial†	6.3	0.1	1.2613	ug/L	1.2613	ppb	22:14:02
2	K 766.490 Radial†	2194.0	-20.4	-3.7017	ug/L	-3.7017	ppb	22:13:42
2	Mg 279.077 IEC†	3.1	1.3	48.779	ug/L	48.779	ppb	22:14:02
2	Na 589.592 Radial†	-645.9	-17.0	-6.3771	ug/L	-6.3771	ppb	22:13:42
2	Sr 421.552†	-23.8	-26.8	-0.1808	ug/L	-0.1808	ppb	22:13:42
2	Sc 361.383	907092.4	907092.4	102.50	%			22:14:59
2	Y 371.029	762404.9	762404.9	102.74	%			22:14:59
2	Ag 328.068†	243.4	9.9	0.0473	ug/L	0.0473	ppb	22:14:59
2	As 188.979†	-24.8	5.0	2.0309	ug/L	2.0309	ppb	22:15:19
2	B 249.677†	-317.9	213.7	4.6392	ug/L	4.6392	ppb	22:15:19
2	Ba 233.527†	-4.0	8.1	0.0620	ug/L	0.0620	ppb	22:15:19
2	Be 313.107†	-5281.1	167.9	0.0623	ug/L	0.0623	ppb	22:14:59
2	Cd 226.502†	-179.0	13.2	0.1438	ug/L	0.1438	ppb	22:15:19
2	Co 228.616†	-71.8	1.7	0.0349	ug/L	0.0349	ppb	22:15:19
2	Cr 267.716†	84.9	-4.1	-0.0435	ug/L	-0.0435	ppb	22:15:19
2	Cu 324.752†	6910.3	-26.8	-0.0780	ug/L	-0.0780	ppb	22:14:59
2	Mn 257.610†	476.7	61.7	0.0662	ug/L	0.0662	ppb	22:15:19
2	Mo 202.031†	30.7	10.0	0.6511	ug/L	0.6511	ppb	22:15:19
2	Ni 231.604†	87.4	15.2	0.3598	ug/L	0.3598	ppb	22:15:19

2	P 214.914†	224.1	-1.4	-0.8078	ug/L	-0.8078 ppb	22:15:19
2	Pb 220.353†	-37.7	15.8	1.8449	ug/L	1.8449 ppb	22:15:19
2	S 181.975 Axial†	40.2	-2.3	-3.3508	ug/L	-3.3508 ppb	22:15:19
2	Sb 206.836†	39.8	9.2	3.0029	ug/L	3.0029 ppb	22:15:19
2	Se 196.026†	-24.5	-0.5	-0.2821	ug/L	-0.2821 ppb	22:15:19
2	Si 251.611†	507.6	-12.8	-0.3987	ug/L	-0.3987 ppb	22:15:19
2	Sn 189.927†	1.5	-2.8	-0.4793	ug/L	-0.4793 ppb	22:15:19
2	Ti 334.940†	-1032.2	-42.0	-0.0676	ug/L	-0.0676 ppb	22:14:59
2	Tl 190.801†	-35.1	2.6	0.7416	ug/L	0.7416 ppb	22:15:19
2	U 409.014†	-2034.1	-22.4	-0.6247	ug/L	-0.6247 ppb	22:14:59
2	V 292.402†	-1297.1	31.0	0.2182	ug/L	0.2182 ppb	22:14:59
2	Zn 213.857†	683.1	-140.9	-1.2712	ug/L	-1.2712 ppb	22:15:19
2	SiO2†	491.4	-9.4	-0.6367	ug/L	-0.6367 ppb	22:15:55
3	Sc Radial	5761.8	5761.8	102	%		22:14:07
3	Y RADIAL	6246.1	6246.1	101.4	%		22:14:07
3	Al 396.153Radial†	-11.0	9.6	7.0573	ug/L	7.0573 ppb	22:14:07
3	Ca 317.933Radial†	18.0	-0.0	-0.0087	ug/L	-0.0087 ppb	22:14:27
3	Fe 238.204 Radial†	6.7	0.5	5.1234	ug/L	5.1234 ppb	22:14:27
3	K 766.490 Radial†	2168.6	-38.8	-7.0425	ug/L	-7.0425 ppb	22:14:07
3	Mg 279.077 IEC†	3.2	1.4	52.523	ug/L	52.523 ppb	22:14:27
3	Na 589.592 Radial†	-609.3	17.1	6.4317	ug/L	6.4317 ppb	22:14:07
3	Sr 421.552†	-4.7	-8.1	-0.0545	ug/L	-0.0545 ppb	22:14:07
3	Sc 361.383	886739.6	886739.6	100.20	%		22:15:24
3	Y 371.029	744240.2	744240.2	100.29	%		22:15:24
3	Ag 328.068†	403.3	174.9	0.8103	ug/L	0.8103 ppb	22:15:24
3	As 188.979†	-25.9	3.3	1.3542	ug/L	1.3542 ppb	22:15:44
3	B 249.677†	-329.3	195.2	4.2367	ug/L	4.2367 ppb	22:15:44
3	Ba 233.527†	-13.0	-1.0	-0.0075	ug/L	-0.0075 ppb	22:15:44
3	Be 313.107†	-5267.0	63.8	0.0235	ug/L	0.0235 ppb	22:15:24
3	Cd 226.502†	-171.4	16.7	0.1815	ug/L	0.1815 ppb	22:15:44
3	Co 228.616†	-66.9	5.0	0.0973	ug/L	0.0973 ppb	22:15:44
3	Cr 267.716†	71.9	-15.3	-0.1643	ug/L	-0.1643 ppb	22:15:44
3	Cu 324.752†	6764.3	-17.8	-0.0516	ug/L	-0.0516 ppb	22:15:24
3	Mn 257.610†	492.5	88.1	0.0953	ug/L	0.0953 ppb	22:15:44
3	Mo 202.031†	22.8	2.8	0.1807	ug/L	0.1807 ppb	22:15:44
3	Ni 231.604†	93.8	23.5	0.5579	ug/L	0.5579 ppb	22:15:44
3	P 214.914†	214.7	-5.7	-3.3948	ug/L	-3.3948 ppb	22:15:44
3	Pb 220.353†	-62.6	-9.9	-1.1609	ug/L	-1.1609 ppb	22:15:44
3	S 181.975 Axial†	48.4	6.8	9.9728	ug/L	9.9728 ppb	22:15:44
3	Sb 206.836†	37.3	7.6	2.4641	ug/L	2.4641 ppb	22:15:44
3	Se 196.026†	-21.6	1.9	1.1508	ug/L	1.1508 ppb	22:15:44
3	Si 251.611†	483.1	-25.8	-0.7866	ug/L	-0.7866 ppb	22:15:44
3	Sn 189.927†	-4.0	-8.2	-1.3895	ug/L	-1.3895 ppb	22:15:44
3	Ti 334.940†	-1021.4	-54.3	-0.0876	ug/L	-0.0876 ppb	22:15:24
3	Tl 190.801†	-31.1	5.8	1.6642	ug/L	1.6642 ppb	22:15:44
3	U 409.014†	-1982.3	-16.2	-0.4528	ug/L	-0.4528 ppb	22:15:24
3	V 292.402†	-1308.3	-9.2	-0.0601	ug/L	-0.0601 ppb	22:15:24
3	Zn 213.857†	685.9	-122.7	-1.1099	ug/L	-1.1099 ppb	22:15:44
3	SiO2†	491.7	1.9	0.1327	ug/L	0.1327 ppb	22:16:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881526.5	99.611	%	3.2240				3.24%
Sc Radial	5771.4	102	%	0.2				0.16%
Y 371.029	740429.8	99.779	%	3.2486				3.26%
Y RADIAL	6263.3	101.7	%	0.51				0.50%
Ag 328.068†	68.9	0.3192	ug/L	0.42614	0.3192	ppb	0.42614	133.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.2	9.7568	ug/L	8.44650	9.7568	ppb	8.44650	86.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.1	0.8447	ug/L	1.50707	0.8447	ppb	1.50707	178.42%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	210.5	4.5696	ug/L	0.30419	4.5696	ppb	0.30419	6.66%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.5	0.0037	ug/L	0.05359	0.0037	ppb	0.05359	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	88.4	0.0327	ug/L	0.02624	0.0327	ppb	0.02624	80.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.2	1.8037	ug/L	1.75524	1.8037	ppb	1.75524	97.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.4      0.1026 ug/L       0.10565      0.1026 ppb        0.10565 102.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.2      0.0245 ug/L       0.07859      0.0245 ppb        0.07859 321.26%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.3     -0.1322 ug/L       0.07780     -0.1322 ppb        0.07780  58.84%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                95.9      0.2790 ug/L       0.59576      0.2790 ppb        0.59576 213.50%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.0      0.3798 ug/L       5.24018      0.3798 ppb        5.24018 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -1.4     -0.2544 ug/L       9.02015     -0.2544 ppb        9.02015 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.9      33.284 ug/L      30.1385      33.284 ppb        30.1385  90.55%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                78.4      0.0846 ug/L       0.01601      0.0846 ppb        0.01601  18.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.6      0.4922 ug/L       0.26979      0.4922 ppb        0.26979  54.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†          2.2      0.8423 ug/L       6.55807      0.8423 ppb        6.55807 778.62%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                17.9      0.4257 ug/L       0.11456      0.4257 ppb        0.11456  26.91%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.9     -2.3770 ug/L       1.37886     -2.3770 ppb        1.37886  58.01%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.9      0.2216 ug/L       1.51728      0.2216 ppb        1.51728 684.76%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.2      4.6900 ug/L       7.07704      4.6900 ppb        7.07704 150.90%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.7      2.1701 ug/L       1.01236      2.1701 ppb        1.01236  46.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.9      1.1510 ug/L       1.43323      1.1510 ppb        1.43323 124.52%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -16.9     -0.5246 ug/L       0.22695     -0.5246 ppb        0.22695  43.26%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.1207 ug/L       1.48107     -0.1207 ppb        1.48107 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -11.4     -0.0772 ug/L       0.09441     -0.0772 ppb        0.09441 122.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -56.6     -0.0911 ug/L       0.02555     -0.0911 ppb        0.02555  28.03%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.6      1.3250 ug/L       0.50754      1.3250 ppb        0.50754  38.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -19.1     -0.5328 ug/L       0.08656     -0.5328 ppb        0.08656  16.24%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -3.7     -0.0182 ug/L       0.21850     -0.0182 ppb        0.21850 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -115.5     -1.0437 ug/L       0.26689     -1.0437 ppb        0.26689  25.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -6.9     -0.4671 ug/L       0.53547     -0.4671 ppb        0.53547 114.65%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, December 07, 2009 18:08:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1416
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5792.2	5792.174	47.680	0.8
	Mg	24.0	51312.8	51312.793	311.105	0.6
	Co	58.9	104991.6	104991.633	1073.307	1.0
	Rh	102.9	197321.7	197321.652	1275.464	0.6
	In	114.9	283136.0	283136.040	2435.359	0.9
	Pb	208.0	190760.9	190760.913	2085.603	1.1
⌈>	Ba	137.9	277644.2	277644.185	2333.519	0.8
⌊	Ba++	69.0	5120.7	0.018	0.000	2.2
⌈>	Ce	139.9	334832.9	334832.867	2459.124	0.7
⌊	CeO	155.9	8352.1	0.025	0.001	3.4
	Bkgd	220.0	16.5	16.500	3.984	24.1

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	6.3	5990.9
Co	59	11	6.3	98720.9
In	115	11	6.8	285928.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	593	2060	0.634
Be	9.0	9.0	2044	2070	0.662
Mg	24.0	24.0	5697	2080	0.650
Mg	25.0	25.0	5925	2075	0.626
Mg	26.0	25.9	6179	2070	0.686
Co	58.9	58.9	14188	2110	0.635
Rh	102.9	102.9	24873	2160	0.647
In	114.9	114.9	27787	2180	0.640
Ce	139.9	139.9	33871	2195	0.670
Pb	206.0	206.0	49948	2290	0.634
Pb	207.0	207.0	50159	2260	0.625
Pb	208.0	208.0	50451	2280	0.667
U	238.1	238.0	57722	2285	0.696

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 03:44:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Blank.495

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		77	
	Be	9		ug/L		22	
	B	11		ug/L		3032	
	Na	23		ug/L		92970	
	Mg	24		ug/L		8002	
	Al	27		ug/L		13674	
	P	31		ug/L		11062	
	K	39		ug/L		637648	
	Ca	43		ug/L		387	
>	Sc	45		ug/L		1081181	
	Ti	47		ug/L		444	
	V	51		ug/L		11410	
	Cr	52		ug/L		-1888	
	Cr	53		ug/L		111281	
	Mn	55		ug/L		1497	
	Fe	57		ug/L		6458	
	Co	59		ug/L		246	
	Ni	60		ug/L		166	
	Cu	63		ug/L		243	
	Cu	65		ug/L		130	
	Zn	66		ug/L		506	
	Zn	67		ug/L		16224	
	Zn	68		ug/L		2050	
>	Ge	74		ug/L		565338	
	As	75		ug/L		67	
	Se	77		ug/L		6244	
	Se	82		ug/L		2	
	Kr	83		ug/L		117	
	Sr	88		ug/L		571	
	Y	89		ug/L	...	79	
	Mo	98		ug/L		228	
	Ag	107		ug/L		125	
	Cd	111		ug/L		64	
	Cd	114		ug/L		103	
>	In	115		ug/L		366052	
	Sn	120		ug/L		929	
	Sb	121		ug/L		1450	
	Sb	123		ug/L		1134	
	Ba	135		ug/L		78	
	Ba	137		ug/L		111	
	Ho	165		ug/L		57	
>	Lu	175		ug/L		531776	
	Tl	205		ug/L		3409	
	Pb	208		ug/L		1597	
	Bi	209		ug/L		205	
	Th	232		ug/L		6136	
	U	238		ug/L		1035	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 03:50:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Standard 1.496

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.478	26589	0.025
	Be	9	10.000	ug/L	2.361	5579	0.005
	B	11	20.000	ug/L	6.737	14689	0.011
	Na	23	1000.000	ug/L	9.213	5424892	4.944
	Mg	24	1000.000	ug/L	3.273	3795935	3.512
	Al	27	1000.000	ug/L	4.084	6315421	5.847
	P	31	1000.000	ug/L	0.814	346013	0.311
	K	39	1000.000	ug/L	7.605	7360956	6.236
	Ca	43	1000.000	ug/L	3.205	17948	0.016
>	Sc	45		ug/L		1078302	1078302.341
	Ti	47	10.000	ug/L	2.429	9356	0.008
	V	51	10.000	ug/L	9.372	103736	0.086
	Cr	52	10.000	ug/L	1.117	69362	0.066
	Cr	53		ug/L		114683	0.003
	Mn	55	10.000	ug/L	2.297	118667	0.109
	Fe	57	1000.000	ug/L	2.676	237796	0.215
	Co	59	10.000	ug/L	1.424	87312	0.081
	Ni	60	10.000	ug/L	1.243	18492	0.017
	Cu	63		ug/L		45158	0.042
	Cu	65	10.000	ug/L	1.332	23021	0.021
	Zn	66	10.000	ug/L	1.588	16608	0.029
	Zn	67		ug/L		18107	0.003
	Zn	68		ug/L		13358	0.020
>	Ge	74		ug/L		563788	563787.674
	As	75	10.000	ug/L	1.039	15175	0.027
	Se	77		ug/L		7218	0.002
	Se	82	10.000	ug/L	2.712	1645	0.003
	Kr	83		ug/L		119	0.000
	Sr	88	10.000	ug/L	0.715	197453	0.538
	Y	89		ug/L		98	0.000
	Mo	98	10.000	ug/L	1.768	41530	0.113
	Ag	107	10.000	ug/L	0.852	74625	0.203
	Cd	111	10.000	ug/L	1.732	18117	0.049
	Cd	114		ug/L		44097	0.120
>	In	115		ug/L		366268	366267.809
	Sn	120	10.000	ug/L	1.901	79457	0.214
	Sb	121	10.000	ug/L	11.545	55635	0.148
	Sb	123		ug/L		43625	0.116
	Ba	135		ug/L		20763	0.039
	Ba	137	10.000	ug/L	1.500	36030	0.068
	Ho	165		ug/L		51	-0.000
>	Lu	175		ug/L		525794	525793.784
	Tl	205	10.000	ug/L	1.386	208779	0.391
	Pb	208	10.000	ug/L	0.303	313384	0.593
	Bi	209		ug/L		230	0.000
	Th	232	10.000	ug/L	1.100	345083	0.645
	U	238	10.000	ug/L	1.091	366144	0.694

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 03:56:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\Standard 2.497

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.029**	**ug/L**	2.114	264838	0.253
	Be	9	**99.981**	**ug/L**	0.920	52894	0.051
	B	11	**200.094**	**ug/L**	0.286	121670	0.114
	Na	23	**10001.067**	**ug/L**	2.501	52313201	49.978
	Mg	24	**10003.704**	**ug/L**	4.956	38133418	36.488
	Al	27	**9989.718**	**ug/L**	8.239	55374047	52.962
	P	31	**9993.086**	**ug/L**	1.154	3044866	2.904
	K	39	**10002.419**	**ug/L**	6.257	67426084	63.921
	Ca	43	**9998.029**	**ug/L**	1.312	167287	0.160
>	Sc	45		**ug/L**		1044913	1044912.607
	Ti	47	**99.980**	**ug/L**	1.815	85063	0.081
	V	51	**99.949**	**ug/L**	0.134	863057	0.815
	Cr	52	**99.969**	**ug/L**	0.533	667734	0.641
	Cr	53		**ug/L**		176825	0.066
	Mn	55	**99.947**	**ug/L**	1.273	1078990	1.031
	Fe	57	**9984.479**	**ug/L**	0.677	1944432	1.855
	Co	59	**99.937**	**ug/L**	1.922	793830	0.759
	Ni	60	**99.986**	**ug/L**	1.216	175231	0.168
	Cu	63		**ug/L**		417430	0.399
	Cu	65	**99.971**	**ug/L**	2.045	215536	0.206
	Zn	66	**99.956**	**ug/L**	1.802	150970	0.274
	Zn	67		**ug/L**		39898	0.044
	Zn	68		**ug/L**		110231	0.197
>	Ge	74		**ug/L**		550057	550056.983
	As	75	**100.001**	**ug/L**	1.946	147634	0.268
	Se	77		**ug/L**		17232	0.020
	Se	82	**100.005**	**ug/L**	1.871	16117	0.029
	Kr	83		**ug/L**		132	0.000
	Sr	88	**99.881**	**ug/L**	1.634	1689897	4.799
	Y	89		**ug/L**		237	0.000
	Mo	98	**100.017**	**ug/L**	1.112	404187	1.147
	Ag	107	**99.943**	**ug/L**	1.404	677445	1.924
	Cd	111	**100.007**	**ug/L**	1.547	174809	0.496
	Cd	114		**ug/L**		414030	1.176
>	In	115		**ug/L**		352097	352097.251
	Sn	120	**99.959**	**ug/L**	0.244	725846	2.059
	Sb	121	**100.066**	**ug/L**	9.544	559745	1.587
	Sb	123		**ug/L**		444703	1.261
	Ba	135		**ug/L**		195929	0.383
	Ba	137	**99.977**	**ug/L**	2.338	341358	0.668
	Ho	165		**ug/L**		62	0.000
>	Lu	175		**ug/L**		511311	511310.728
	Tl	205	**99.820**	**ug/L**	2.252	1692129	3.304
	Pb	208	**99.900**	**ug/L**	1.672	2753904	5.384
	Bi	209		**ug/L**		405	0.000
	Th	232	**99.940**	**ug/L**	2.409	3112985	6.078
	U	238	**99.867**	**ug/L**	1.933	3129502	6.120

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 04:02:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 1.498

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.097**	ug/L	2.627	132552	0.127
	Be	9	**52.085**	ug/L	1.415	27548	0.026
	B	11	**103.168**	ug/L	2.802	64087	0.059
	Na	23	**4847.757**	ug/L	5.442	25375807	24.226
	Mg	24	**4737.759**	ug/L	8.550	18049104	17.281
	Al	27	**5119.103**	ug/L	5.351	28341047	27.140
	P	31	**4833.030**	ug/L	1.566	1476877	1.404
	K	39	**4861.511**	ug/L	5.924	33052002	31.068
	Ca	43	**4999.178**	ug/L	1.485	83764	0.080
>	Sc	45		ug/L		1044107	1044107.011
	Ti	47	**50.399**	ug/L	1.259	43064	0.041
	V	51	**51.802**	ug/L	1.964	452257	0.423
	Cr	52	**51.995**	ug/L	2.908	346092	0.333
	Cr	53		ug/L		139028	0.030
	Mn	55	**53.146**	ug/L	0.271	574005	0.548
	Fe	57	**5497.965**	ug/L	0.048	1072713	1.021
	Co	59	**51.762**	ug/L	2.727	410863	0.393
	Ni	60	**51.594**	ug/L	0.363	90426	0.086
	Cu	63		ug/L		222747	0.213
	Cu	65	**51.664**	ug/L	0.847	111367	0.107
	Zn	66	**50.382**	ug/L	2.031	76747	0.138
	Zn	67		ug/L		27147	0.020
	Zn	68		ug/L		57083	0.100
>	Ge	74		ug/L		553102	553101.839
	As	75	**47.490**	ug/L	3.942	70528	0.127
	Se	77		ug/L		11394	0.010
	Se	82	**48.725**	ug/L	1.057	7898	0.014
	Kr	83		ug/L		145	0.000
	Sr	88	**52.420**	ug/L	2.279	893890	2.518
	Y	89		ug/L		104	0.000
	Mo	98	**49.245**	ug/L	0.938	200655	0.565
	Ag	107	**50.933**	ug/L	3.657	347876	0.980
	Cd	111	**49.894**	ug/L	1.120	87912	0.248
	Cd	114		ug/L		209981	0.592
>	In	115		ug/L		354775	354775.292
	Sn	120	**53.011**	ug/L	1.600	388243	1.092
	Sb	121	**54.204**	ug/L	3.102	306450	0.860
	Sb	123		ug/L		243271	0.682
	Ba	135		ug/L		99690	0.192
	Ba	137	**50.347**	ug/L	2.409	174362	0.336
	Ho	165		ug/L		105	0.000
>	Lu	175		ug/L		518509	518508.816
	Tl	205	**51.196**	ug/L	1.186	881777	1.694
	Pb	208	**53.094**	ug/L	2.454	1484758	2.861
	Bi	209		ug/L		296	0.000
	Th	232	**49.802**	ug/L	1.629	1576213	3.029
	U	238	**52.131**	ug/L	2.215	1656961	3.195

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.194				
	Be	9	104.170				
	B	11	103.168				
	Na	23	96.955				
	Mg	24	94.755				
	Al	27	101.368				
	P	31	96.661				
	K	39	97.230				
	Ca	43	99.984				
>	Sc	45		96.6			
	Ti	47	100.797				
	V	51	103.604				
	Cr	52	103.990				
	Cr	53					
	Mn	55	106.292				
	Fe	57	109.959				
	Co	59	103.524				
	Ni	60	103.189				
	Cu	63					
	Cu	65	103.328				
	Zn	66	100.765				
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75	94.980				
	Se	77					
	Se	82	97.450				
	Kr	83					
	Sr	88	104.841				
	Y	89					
	Mo	98	98.490				
	Ag	107	101.866				
	Cd	111	99.787				
	Cd	114					
>	In	115		96.9			
	Sn	120	106.023				
	Sb	121	108.409				
	Sb	123					
	Ba	135					
	Ba	137	100.693				
	Ho	165					
>	Lu	175		97.5			
	Tl	205	102.392				
	Pb	208	106.188				
	Bi	209					
	Th	232	99.605				
	U	238	104.262				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 04:08:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 2.499

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.000**	ug/L	1107.631	76	0.000
	Be	9	**-0.008**	ug/L	108.319	17	-0.000
	B	11	**3.481**	ug/L	25.174	5083	0.002
	Na	23	**-1.038**	ug/L	119.205	85925	-0.005
	Mg	24	**0.106**	ug/L	1054.402	8336	0.000
	Al	27	**0.505**	ug/L	101.180	16343	0.003
	P	31	**-0.978**	ug/L	179.314	10578	-0.000
	K	39	**-8.812**	ug/L	100.713	567098	-0.056
	Ca	43	**-0.507**	ug/L	682.120	371	-0.000
>	Sc	45		ug/L		1064125	1064125.138
	Ti	47	**0.065**	ug/L	71.106	493	0.000
	V	51	**-0.184**	ug/L	292.597	9639	-0.001
	Cr	52	**0.057**	ug/L	52.921	-1470	0.000
	Cr	53		ug/L		100781	-0.008
	Mn	55	**-0.003**	ug/L	64.204	1442	-0.000
	Fe	57	**0.362**	ug/L	280.546	6426	0.000
	Co	59	**0.009**	ug/L	37.070	313	0.000
	Ni	60	**0.003**	ug/L	94.140	168	0.000
	Cu	63		ug/L		271	0.000
	Cu	65	**0.009**	ug/L	23.681	148	0.000
	Zn	66	**-0.017**	ug/L	23.045	472	-0.000
	Zn	67		ug/L		14655	-0.002
	Zn	68		ug/L		1856	-0.000
>	Ge	74		ug/L		556146	556146.038
	As	75	**-0.153**	ug/L	73.246	-162	-0.000
	Se	77		ug/L		5575	-0.001
	Se	82	**-0.098**	ug/L	27.744	-14	-0.000
	Kr	83		ug/L		123	0.000
	Sr	88	**0.001**	ug/L	303.954	580	0.000
	Y	89		ug/L		74	-0.000
	Mo	98	**0.101**	ug/L	26.568	649	0.001
	Ag	107	**0.003**	ug/L	13.603	144	0.000
	Cd	111	**0.004**	ug/L	159.315	71	0.000
	Cd	114		ug/L		105	0.000
>	In	115		ug/L		365486	365486.435
	Sn	120	**0.439**	ug/L	17.607	4235	0.009
	Sb	121	**1.646**	ug/L	23.571	10993	0.026
	Sb	123		ug/L		8572	0.020
	Ba	135		ug/L		72	-0.000
	Ba	137	**0.006**	ug/L	68.548	129	0.000
	Ho	165		ug/L		64	0.000
>	Lu	175		ug/L		522025	522025.238
	Tl	205	**0.276**	ug/L	18.692	8112	0.009
	Pb	208	**0.001**	ug/L	221.640	1593	0.000
	Bi	209		ug/L		202	0.000
	Th	232	**0.662**	ug/L	21.379	27037	0.040
	U	238	**0.019**	ug/L	28.253	1625	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 04:14:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 3.500

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.801**	**ug/L**	1.220	28992	0.027
	Be	9	**0.531**	**ug/L**	5.628	305	0.000
	B	11	**15.391**	**ug/L**	4.345	12198	0.009
	Na	23	**240.731**	**ug/L**	1.771	1362757	1.203
	Mg	24	**13.214**	**ug/L**	2.646	58788	0.048
	Al	27	**33.675**	**ug/L**	2.480	202087	0.179
	P	31	**53.964**	**ug/L**	7.471	27379	0.016
	K	39	**305.350**	**ug/L**	7.428	2685475	1.951
	Ca	43	**212.443**	**ug/L**	5.151	3963	0.003
>	Sc	45		**ug/L**		1057006	1057005.829
	Ti	47	**8.566**	**ug/L**	3.360	7767	0.007
	V	51	**11.249**	**ug/L**	8.454	108045	0.092
	Cr	52	**10.968**	**ug/L**	3.698	72433	0.070
	Cr	53		**ug/L**		112565	0.004
	Mn	55	**5.930**	**ug/L**	3.040	66110	0.061
	Fe	57	**127.847**	**ug/L**	7.115	31394	0.024
	Co	59	**1.133**	**ug/L**	2.743	9337	0.009
	Ni	60	**2.190**	**ug/L**	3.092	4040	0.004
	Cu	63		**ug/L**		5247	0.005
	Cu	65	**1.117**	**ug/L**	5.386	2561	0.002
	Zn	66	**10.956**	**ug/L**	0.694	17472	0.030
	Zn	67		**ug/L**		17917	0.003
	Zn	68		**ug/L**		13964	0.021
>	Ge	74		**ug/L**		565817	565816.975
	As	75	**5.131**	**ug/L**	7.482	7854	0.014
	Se	77		**ug/L**		6352	0.000
	Se	82	**5.109**	**ug/L**	6.331	849	0.001
	Kr	83		**ug/L**		122	0.000
	Sr	88	**11.949**	**ug/L**	2.360	210706	0.574
	Y	89		**ug/L**		70	-0.000
	Mo	98	**0.509**	**ug/L**	0.717	2366	0.006
	Ag	107	**1.067**	**ug/L**	0.802	7648	0.021
	Cd	111	**1.057**	**ug/L**	2.304	1985	0.005
	Cd	114		**ug/L**		4713	0.013
>	In	115		**ug/L**		366090	366090.343
	Sn	120	**5.563**	**ug/L**	1.880	42871	0.115
	Sb	121	**3.228**	**ug/L**	7.336	20183	0.051
	Sb	123		**ug/L**		16048	0.041
	Ba	135		**ug/L**		4251	0.008
	Ba	137	**2.112**	**ug/L**	2.311	7515	0.014
	Ho	165		**ug/L**		62	0.000
>	Lu	175		**ug/L**		525353	525352.991
	Tl	205	**1.214**	**ug/L**	2.970	24461	0.040
	Pb	208	**2.274**	**ug/L**	3.475	65936	0.123
	Bi	209		**ug/L**		209	0.000
	Th	232	**1.305**	**ug/L**	2.811	47737	0.079
	U	238	**0.234**	**ug/L**	3.891	8549	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	108.008				
	Be	9	106.165				
	B	11	102.604				
	Na	23	96.292				
	Mg	24	88.095				
	Al	27	112.250				
	P	31	107.927				
	K	39	101.783				
	Ca	43	106.221				
>	Sc	45		97.8			
	Ti	47	85.659				
	V	51	112.487				
	Cr	52	109.681				
	Cr	53					
	Mn	55	118.596				
	Fe	57	127.847				
	Co	59	113.286				
	Ni	60	109.485				
	Cu	63					
	Cu	65	111.732				
	Zn	66	109.557				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75	102.613				
	Se	77					
	Se	82	102.184				
	Kr	83					
	Sr	88	119.494				
	Y	89					
	Mo	98	101.833				
	Ag	107	106.748				
	Cd	111	105.715				
	Cd	114					
>	In	115		100.0			
	Sn	120	111.257				
	Sb	121	107.592				
	Sb	123					
	Ba	135					
	Ba	137	105.604				
	Ho	165					
>	Lu	175		98.8			
	Tl	205	121.353				
	Pb	208	113.717				
	Bi	209					
	Th	232	130.493				
	U	238	116.938				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Th	232	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 04:20:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 4.501

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.086**	**ug/L**	13.516	280	0.000
	Be	9	**0.037**	**ug/L**	42.220	38	0.000
	B	11	**0.058**	**ug/L**	238.088	2744	0.000
	Na	23	**95592.037**	**ug/L**	4.740	461709548	477.698
	Mg	24	**93739.258**	**ug/L**	3.230	330489621	341.913
	Al	27	**94247.761**	**ug/L**	9.592	482379162	499.668
	P	31	**94241.866**	**ug/L**	2.851	26475068	27.386
	K	39	**S**	**ug/L**	S	S	S
	Ca	43	**91052.852**	**ug/L**	1.884	1406388	1.455
>	Sc	45		**ug/L**		966784	966783.800
	Ti	47	**1395.173**	**ug/L**	1.428	1092953	1.130
	V	51	**0.085**	**ug/L**	173.029	10851	0.001
	Cr	52	**2.936**	**ug/L**	4.382	16495	0.019
	Cr	53		**ug/L**		85564	-0.014
	Mn	55	**6.355**	**ug/L**	1.972	64713	0.066
	Fe	57	**120018.723**	**ug/L**	0.528	21562816	22.297
	Co	59	**0.373**	**ug/L**	3.771	2960	0.003
	Ni	60	**3.124**	**ug/L**	2.562	5209	0.005
	Cu	63		**ug/L**		16442	0.017
	Cu	65	**5.321**	**ug/L**	3.988	10719	0.011
	Zn	66	**4.306**	**ug/L**	1.852	6618	0.012
	Zn	67		**ug/L**		13321	-0.003
	Zn	68		**ug/L**		2811	0.002
>	Ge	74		**ug/L**		521883	521882.874
	As	75	**-0.185**	**ug/L**	99.885	-196	-0.000
	Se	77		**ug/L**		7741	0.004
	Se	82	**-1.229**	**ug/L**	24.333	-186	-0.000
	Kr	83		**ug/L**		417	0.001
	Sr	88	**1.290**	**ug/L**	3.228	21314	0.062
	Y	89		**ug/L**		610	0.002
	Mo	98	**2012.183**	**ug/L**	1.951	7748411	23.084
	Ag	107	**0.074**	**ug/L**	14.715	589	0.001
	Cd	111	**0.521**	**ug/L**	12.406	926	0.003
	Cd	114		**ug/L**		13138	0.039
>	In	115		**ug/L**		335705	335704.943
	Sn	120	**0.266**	**ug/L**	9.141	2688	0.005
	Sb	121	**0.380**	**ug/L**	25.373	3350	0.006
	Sb	123		**ug/L**		2627	0.005
	Ba	135		**ug/L**		1313	0.003
	Ba	137	**0.711**	**ug/L**	1.099	2335	0.005
	Ho	165		**ug/L**		1217	0.002
>	Lu	175		**ug/L**		470974	470973.609
	Tl	205	**-0.018**	**ug/L**	54.187	2746	-0.001
	Pb	208	**0.173**	**ug/L**	0.850	5814	0.009
	Bi	209		**ug/L**		1095	0.002
	Th	232	**0.618**	**ug/L**	36.598	23080	0.038
	U	238	**-0.015**	**ug/L**	4.327	477	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	95.592				
	Mg	24	93.739				
	Al	27	94.248				
	P	31	94.242				
	K	39	S				
	Ca	43	91.053				
>	Sc	45		89.4			
	Ti	47	69.759				
	V	51					
	Cr	52	79.359				
	Cr	53					
	Mn	55	109.566				
	Fe	57	120.019				
	Co	59	149.133				
	Ni	60	115.717				
	Cu	63					
	Cu	65	183.488				
	Zn	66	119.622				
	Zn	67					
	Zn	68					
>	Ge	74		92.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	107.459				
	Y	89					
	Mo	98	100.609				
	Ag	107					
	Cd	111	130.319				
	Cd	114					
>	In	115		91.7			
	Sn	120					
	Sb	121	380.217				
	Sb	123					
	Ba	135					
	Ba	137	106.175				
	Ho	165					
>	Lu	175		88.6			
	Tl	205					
	Pb	208	86.668				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	K	39	ICSA is out of limits
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Fe	57	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 04:26:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 5.502

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.843**	ug/L	0.206	49591	0.053
	Be	9	**20.086**	ug/L	0.976	9554	0.010
	B	11	**17.370**	ug/L	0.846	11882	0.010
	Na	23	**101072.352**	ug/L	7.001	473681724	505.085
	Mg	24	**94014.873**	ug/L	2.979	321634670	342.918
	Al	27	**101529.064**	ug/L	1.405	504906662	538.271
	P	31	**95245.318**	ug/L	1.654	25966953	27.678
	K	39	**S**	ug/L	S	S	S
	Ca	43	**91532.692**	ug/L	2.150	1371829	1.462
>	Sc	45		ug/L		937930	937930.355
	Ti	47	**1414.387**	ug/L	0.498	1075180	1.146
	V	51	**22.929**	ug/L	3.559	185326	0.187
	Cr	52	**25.228**	ug/L	0.872	150030	0.162
	Cr	53		ug/L		97339	0.001
	Mn	55	**29.322**	ug/L	1.542	285087	0.303
	Fe	57	**123210.074**	ug/L	1.250	21475310	22.890
	Co	59	**21.995**	ug/L	0.939	156989	0.167
	Ni	60	**23.486**	ug/L	0.607	37056	0.039
	Cu	63		ug/L		91084	0.097
	Cu	65	**24.715**	ug/L	0.836	47922	0.051
	Zn	66	**22.844**	ug/L	1.310	32672	0.063
	Zn	67		ug/L		17066	0.004
	Zn	68		ug/L		22084	0.039
>	Ge	74		ug/L		515226	515226.474
	As	75	**20.492**	ug/L	4.805	28378	0.055
	Se	77		ug/L		9905	0.008
	Se	82	**18.277**	ug/L	3.555	2760	0.005
	Kr	83		ug/L		384	0.001
	Sr	88	**25.265**	ug/L	1.022	401672	1.214
	Y	89		ug/L		627	0.002
	Mo	98	**2045.326**	ug/L	1.248	7754087	23.464
	Ag	107	**19.192**	ug/L	0.479	122208	0.369
	Cd	111	**20.529**	ug/L	1.833	33727	0.102
	Cd	114		ug/L		90781	0.274
>	In	115		ug/L		330486	330486.041
	Sn	120	**21.671**	ug/L	1.897	148340	0.446
	Sb	121	**23.787**	ug/L	1.978	125969	0.377
	Sb	123		ug/L		98188	0.294
	Ba	135		ug/L		39678	0.083
	Ba	137	**21.922**	ug/L	1.216	69558	0.146
	Ho	165		ug/L		1210	0.002
>	Lu	175		ug/L		474547	474547.157
	Tl	205	**21.937**	ug/L	2.060	347603	0.726
	Pb	208	**21.871**	ug/L	0.587	560789	1.179
	Bi	209		ug/L		1520	0.003
	Th	232	**22.896**	ug/L	2.645	666274	1.392
	U	238	**23.929**	ug/L	0.311	696776	1.466

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	104.217				
	Be	9	100.432				
	B	11	86.850				
	Na	23	101.072				
	Mg	24	94.015				
	Al	27	101.529				
	P	31	95.245				
	K	39	S				
	Ca	43	91.533				
>	Sc	45		86.8			
	Ti	47	70.719				
	V	51	114.644				
	Cr	52	106.447				
	Cr	53					
	Mn	55	113.651				
	Fe	57	123.210				
	Co	59	108.620				
	Ni	60	103.462				
	Cu	63					
	Cu	65	107.928				
	Zn	66	96.797				
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75	102.458				
	Se	77					
	Se	82	91.385				
	Kr	83					
	Sr	88	119.173				
	Y	89					
	Mo	98	102.266				
	Ag	107	95.962				
	Cd	111	100.632				
	Cd	114					
>	In	115		90.3			
	Sn	120	108.356				
	Sb	121	118.344				
	Sb	123					
	Ba	135					
	Ba	137	106.056				
	Ho	165					
>	Lu	175		89.2			
	Tl	205	109.687				
	Pb	208	108.274				
	Bi	209					
	Th	232	114.479				
	U	238	119.643				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	K	39	ICSAB is out of limits
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	Fe	57	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 04:33:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.503

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.005**	ug/L	1.825	125630	0.129
	Be	9	**52.833**	ug/L	1.485	26005	0.027
	B	11	**96.525**	ug/L	4.095	56005	0.055
	Na	23	**4830.898**	ug/L	8.563	23553954	24.141
	Mg	24	**5124.119**	ug/L	2.507	18174073	18.690
	Al	27	**5017.224**	ug/L	7.448	25870290	26.600
	P	31	**4770.548**	ug/L	1.105	1357149	1.386
	K	39	**4852.078**	ug/L	4.165	30701637	31.008
	Ca	43	**4942.133**	ug/L	1.237	77091	0.079
>	Sc	45		ug/L		971867	971866.732
	Ti	47	**53.660**	ug/L	2.610	42645	0.043
	V	51	**52.750**	ug/L	1.360	428462	0.430
	Cr	52	**52.845**	ug/L	1.594	327483	0.339
	Cr	53		ug/L		130556	0.031
	Mn	55	**54.255**	ug/L	1.404	545375	0.560
	Fe	57	**5620.284**	ug/L	1.237	1020512	1.044
	Co	59	**52.773**	ug/L	2.557	389942	0.401
	Ni	60	**52.511**	ug/L	1.361	85658	0.088
	Cu	63		ug/L		214338	0.220
	Cu	65	**52.958**	ug/L	1.555	106253	0.109
	Zn	66	**49.934**	ug/L	1.012	74094	0.137
	Zn	67		ug/L		24809	0.017
	Zn	68		ug/L		54308	0.097
>	Ge	74		ug/L		538635	538635.464
	As	75	**47.725**	ug/L	1.898	69032	0.128
	Se	77		ug/L		10877	0.009
	Se	82	**48.612**	ug/L	1.329	7673	0.014
	Kr	83		ug/L		118	0.000
	Sr	88	**51.054**	ug/L	0.455	860640	2.453
	Y	89		ug/L		154	0.000
	Mo	98	**49.288**	ug/L	1.617	198485	0.565
	Ag	107	**50.495**	ug/L	0.694	340967	0.972
	Cd	111	**49.158**	ug/L	1.535	85609	0.244
	Cd	114		ug/L		203404	0.580
>	In	115		ug/L		350673	350672.542
	Sn	120	**50.165**	ug/L	0.757	363216	1.033
	Sb	121	**51.653**	ug/L	5.560	288509	0.819
	Sb	123		ug/L		229648	0.652
	Ba	135		ug/L		96458	0.182
	Ba	137	**48.686**	ug/L	2.362	171874	0.325
	Ho	165		ug/L		113	0.000
>	Lu	175		ug/L		528539	528538.651
	Tl	205	**50.574**	ug/L	2.400	887816	1.674
	Pb	208	**52.030**	ug/L	2.075	1483250	2.804
	Bi	209		ug/L		333	0.000
	Th	232	**49.578**	ug/L	2.166	1599340	3.015
	U	238	**52.079**	ug/L	2.432	1687306	3.191

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.009				
	Be	9	105.667				
	B	11	96.525				
	Na	23	96.618				
	Mg	24	102.482				
	Al	27	99.351				
	P	31	95.411				
	K	39	97.042				
	Ca	43	98.843				
>	Sc	45		89.9			
	Ti	47	107.321				
	V	51	105.500				
	Cr	52	105.691				
	Cr	53					
	Mn	55	108.510				
	Fe	57	112.406				
	Co	59	105.545				
	Ni	60	105.022				
	Cu	63					
	Cu	65	105.917				
	Zn	66	99.869				
	Zn	67					
	Zn	68					
>	Ge	74		95.3			
	As	75	95.450				
	Se	77					
	Se	82	97.224				
	Kr	83					
	Sr	88	102.107				
	Y	89					
	Mo	98	98.576				
	Ag	107	100.989				
	Cd	111	98.316				
	Cd	114					
>	In	115		95.8			
	Sn	120	100.331				
	Sb	121	103.307				
	Sb	123					
	Ba	135					
	Ba	137	97.372				
	Ho	165					
>	Lu	175		99.4			
	Tl	205	101.147				
	Pb	208	104.060				
	Bi	209					
	Th	232	99.157				
	U	238	104.158				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Fe	57	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 04:39:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.504

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.008**	**ug/L**	36.366	90	0.000
	Be	9	**0.007**	**ug/L**	114.822	24	0.000
	B	11	**1.041**	**ug/L**	62.253	3360	0.001
	Na	23	**1.791**	**ug/L**	45.988	93975	0.009
	Mg	24	**-0.095**	**ug/L**	758.720	7002	-0.000
	Al	27	**0.661**	**ug/L**	95.301	16009	0.004
	P	31	**0.033**	**ug/L**	5570.945	10135	0.000
	K	39	**-6.460**	**ug/L**	114.803	542833	-0.041
	Ca	43	**1.214**	**ug/L**	166.049	373	0.000
>	Sc	45		**ug/L**		989933	989932.986
	Ti	47	**0.985**	**ug/L**	7.329	1196	0.001
	V	51	**0.076**	**ug/L**	325.192	11051	0.001
	Cr	52	**-0.023**	**ug/L**	48.457	-1873	-0.000
	Cr	53		**ug/L**		95500	-0.006
	Mn	55	**-0.013**	**ug/L**	26.323	1236	-0.000
	Fe	57	**4.240**	**ug/L**	39.000	6691	0.001
	Co	59	**0.004**	**ug/L**	60.770	256	0.000
	Ni	60	**0.005**	**ug/L**	86.847	160	0.000
	Cu	63		**ug/L**		255	0.000
	Cu	65	**0.026**	**ug/L**	44.316	173	0.000
	Zn	66	**0.006**	**ug/L**	409.362	499	0.000
	Zn	67		**ug/L**		13401	-0.004
	Zn	68		**ug/L**		1606	-0.001
>	Ge	74		**ug/L**		547269	547268.583
	As	75	**-0.167**	**ug/L**	93.335	-181	-0.000
	Se	77		**ug/L**		5212	-0.002
	Se	82	**-0.017**	**ug/L**	770.305	-1	-0.000
	Kr	83		**ug/L**		111	-0.000
	Sr	88	**0.004**	**ug/L**	9.475	615	0.000
	Y	89		**ug/L**		68	-0.000
	Mo	98	**0.252**	**ug/L**	19.651	1241	0.003
	Ag	107	**0.004**	**ug/L**	12.855	148	0.000
	Cd	111	**-0.003**	**ug/L**	281.238	56	-0.000
	Cd	114		**ug/L**		130	0.000
>	In	115		**ug/L**		354115	354115.006
	Sn	120	**0.354**	**ug/L**	25.060	3480	0.007
	Sb	121	**0.991**	**ug/L**	29.296	6960	0.016
	Sb	123		**ug/L**		5618	0.013
	Ba	135		**ug/L**		70	-0.000
	Ba	137	**0.005**	**ug/L**	169.389	128	0.000
	Ho	165		**ug/L**		55	-0.000
>	Lu	175		**ug/L**		532198	532198.227
	Tl	205	**0.265**	**ug/L**	28.157	8084	0.009
	Pb	208	**0.003**	**ug/L**	45.008	1683	0.000
	Bi	209		**ug/L**		192	-0.000
	Th	232	**0.378**	**ug/L**	30.359	18370	0.023
	U	238	**0.015**	**ug/L**	23.644	1514	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 08, 2009 04:45:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 10.505

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1020.052**	ug/L	0.543	2477085	2.584
	Be	9	**955.372**	ug/L	2.169	463436	0.484
	B	11	**-0.732**	ug/L	8.384	2290	-0.000
	Na	23	**48323.786**	ug/L	6.941	231505436	241.487
	Mg	24	**49283.706**	ug/L	5.101	172243078	179.762
	Al	27	**48804.173**	ug/L	6.033	247947831	258.742
	P	31	**24438.797**	ug/L	4.066	6814965	7.102
	K	39	**53193.048**	ug/L	3.826	326406879	339.934
	Ca	43	**47782.141**	ug/L	2.774	731980	0.763
>	Sc	45		ug/L		958619	958619.127
	Ti	47	**49.998**	ug/L	2.125	39233	0.041
	V	51	**1007.496**	ug/L	4.214	7886292	8.219
	Cr	52	**985.612**	ug/L	3.343	6052443	6.318
	Cr	53		ug/L		799963	0.732
	Mn	55	**971.898**	ug/L	3.087	9611803	10.028
	Fe	57	**61585.561**	ug/L	4.466	10969176	11.441
	Co	59	**948.028**	ug/L	3.772	6904153	7.205
	Ni	60	**865.017**	ug/L	3.077	1389221	1.449
	Cu	63		ug/L		3611390	3.768
	Cu	65	**820.571**	ug/L	1.609	1622114	1.692
	Zn	66	**2350.462**	ug/L	2.783	3363310	6.433
	Zn	67		ug/L		520187	0.966
	Zn	68		ug/L		1987659	3.798
>	Ge	74		ug/L		522838	522837.958
	As	75	**851.005**	ug/L	1.934	1193708	2.283
	Se	77		ug/L		59818	0.103
	Se	82	**461.895**	ug/L	2.096	70740	0.135
	Kr	83		ug/L		239	0.000
	Sr	88	**1096.966**	ug/L	3.772	16544189	52.701
	Y	89		ug/L		545	0.002
	Mo	98	**1121.747**	ug/L	4.156	4040164	12.869
	Ag	107	**238.388**	ug/L	2.546	1440837	4.589
	Cd	111	**877.569**	ug/L	2.063	1367651	4.356
	Cd	114		ug/L		3588811	11.431
>	In	115		ug/L		314054	314054.254
	Sn	120	**1029.002**	ug/L	3.824	6654136	21.195
	Sb	121	**238.155**	ug/L	11.936	1185841	3.777
	Sb	123		ug/L		954169	3.039
	Ba	135		ug/L		1598308	3.277
	Ba	137	**968.940**	ug/L	2.527	3154946	6.470
	Ho	165		ug/L		388	0.001
>	Lu	175		ug/L		487741	487740.754
	Tl	205	**487.932**	ug/L	2.396	7878319	16.149
	Pb	208	**4709.540**	ug/L	2.718	123768192	253.814
	Bi	209		ug/L		3386	0.007
	Th	232	**2468.431**	ug/L	2.795	73210570	150.125
	U	238	**5108.490**	ug/L	3.791	152640546	313.051

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.005				
	Be	9	95.537				
	B	11					
	Na	23	96.648				
	Mg	24	98.567				
	Al	27	97.608				
	P	31	97.755				
	K	39	106.386				
	Ca	43	95.564				
>	Sc	45			88.7		
	Ti	47					
	V	51	100.750				
	Cr	52	98.561				
	Cr	53					
	Mn	55	97.190				
	Fe	57	123.171				
	Co	59	94.803				
	Ni	60	86.502				
	Cu	63					
	Cu	65	82.057				
	Zn	66	94.018				
	Zn	67					
	Zn	68					
>	Ge	74			92.5		
	As	75	85.101				
	Se	77					
	Se	82	92.379				
	Kr	83					
	Sr	88	109.697				
	Y	89					
	Mo	98	112.175				
	Ag	107	95.355				
	Cd	111	87.757				
	Cd	114					
>	In	115			85.8		
	Sn	120	102.900				
	Sb	121	95.262				
	Sb	123					
	Ba	135					
	Ba	137	96.894				
	Ho	165					
>	Lu	175			91.7		
	Tl	205	97.586				
	Pb	208	94.191				
	Bi	209					
	Th	232	98.737				
	U	238	102.170				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Cd	111	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 08, 2009 04:51:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 11.506

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.380**	**ug/L**	2.355	131476	0.130
	Be	9	**53.544**	**ug/L**	2.151	27378	0.027
	B	11	**98.981**	**ug/L**	2.105	59583	0.056
	Na	23	**5245.982**	**ug/L**	8.740	26546998	26.216
	Mg	24	**5199.312**	**ug/L**	8.648	19138120	18.964
	Al	27	**5024.020**	**ug/L**	6.754	26887660	26.636
	P	31	**4864.598**	**ug/L**	1.632	1437623	1.414
	K	39	**4984.213**	**ug/L**	0.277	32758206	31.852
	Ca	43	**4979.294**	**ug/L**	1.717	80681	0.080
>	Sc	45		**ug/L**		1009784	1009784.237
	Ti	47	**50.255**	**ug/L**	0.970	41525	0.041
	V	51	**52.698**	**ug/L**	3.622	444598	0.430
	Cr	52	**52.978**	**ug/L**	2.922	341045	0.340
	Cr	53		**ug/L**		133380	0.029
	Mn	55	**54.110**	**ug/L**	1.222	565100	0.558
	Fe	57	**5575.735**	**ug/L**	3.935	1051555	1.036
	Co	59	**51.767**	**ug/L**	1.729	397420	0.393
	Ni	60	**52.236**	**ug/L**	3.229	88521	0.088
	Cu	63		**ug/L**		219698	0.217
	Cu	65	**52.725**	**ug/L**	1.271	109905	0.109
	Zn	66	**51.149**	**ug/L**	3.020	76327	0.140
	Zn	67		**ug/L**		26306	0.020
	Zn	68		**ug/L**		56305	0.100
>	Ge	74		**ug/L**		541836	541835.553
	As	75	**48.441**	**ug/L**	1.267	70480	0.130
	Se	77		**ug/L**		10931	0.009
	Se	82	**49.757**	**ug/L**	0.833	7900	0.015
	Kr	83		**ug/L**		116	0.000
	Sr	88	**53.596**	**ug/L**	1.535	889930	2.575
	Y	89		**ug/L**		94	0.000
	Mo	98	**50.649**	**ug/L**	2.830	200908	0.581
	Ag	107	**52.206**	**ug/L**	1.985	347225	1.005
	Cd	111	**50.653**	**ug/L**	2.386	86900	0.251
	Cd	114		**ug/L**		208703	0.604
>	In	115		**ug/L**		345443	345443.174
	Sn	120	**59.240**	**ug/L**	3.528	422302	1.220
	Sb	121	**60.050**	**ug/L**	1.616	330318	0.952
	Sb	123		**ug/L**		261881	0.755
	Ba	135		**ug/L**		97807	0.191
	Ba	137	**49.788**	**ug/L**	1.421	170529	0.332
	Ho	165		**ug/L**		104	0.000
>	Lu	175		**ug/L**		512727	512727.207
	Tl	205	**52.385**	**ug/L**	1.591	892138	1.734
	Pb	208	**53.899**	**ug/L**	2.638	1490495	2.905
	Bi	209		**ug/L**		294	0.000
	Th	232	**54.307**	**ug/L**	3.388	1698821	3.303
	U	238	**53.172**	**ug/L**	2.702	1671218	3.258

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.761				
	Be	9	107.087				
	B	11	98.981				
	Na	23	104.920				
	Mg	24	103.986				
	Al	27	99.486				
	P	31	97.292				
	K	39	99.684				
	Ca	43	99.586				
>	Sc	45		93.4			
	Ti	47	100.510				
	V	51	105.396				
	Cr	52	105.956				
	Cr	53					
	Mn	55	108.219				
	Fe	57	111.515				
	Co	59	103.534				
	Ni	60	104.472				
	Cu	63					
	Cu	65	105.450				
	Zn	66	102.299				
	Zn	67					
	Zn	68					
>	Ge	74		95.8			
	As	75	96.882				
	Se	77					
	Se	82	99.515				
	Kr	83					
	Sr	88	107.192				
	Y	89					
	Mo	98	101.299				
	Ag	107	104.411				
	Cd	111	101.307				
	Cd	114					
>	In	115		94.4			
	Sn	120	118.480				
	Sb	121	120.100				
	Sb	123					
	Ba	135					
	Ba	137	99.576				
	Ho	165					
>	Lu	175		96.4			
	Tl	205	104.770				
	Pb	208	107.799				
	Bi	209					
	Th	232	108.613				
	U	238	106.343				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Fe	57	CCV is out of limits (+/- 10%)
QC Std 11	Sn	120	CCV is out of limits (+/- 10%)
QC Std 11	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 08, 2009 04:57:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 12.507

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.025	ug/L	17.394	137	0.000
	Be	9	0.011	ug/L	11.885	26	0.000
	B	11	0.521	ug/L	98.326	3149	0.000
	Na	23	0.542	ug/L	549.229	89954	0.003
	Mg	24	1.142	ug/L	149.136	11672	0.004
	Al	27	1.332	ug/L	46.299	20014	0.007
	P	31	-1.376	ug/L	47.827	9976	-0.000
	K	39	-2.728	ug/L	324.282	580992	-0.017
	Ca	43	0.005	ug/L	36885.805	363	0.000
>	Sc	45		ug/L		1014937	1014937.024
	Ti	47	0.200	ug/L	13.446	582	0.000
	V	51	-0.009	ug/L	4429.535	10610	-0.000
	Cr	52	0.095	ug/L	71.229	-1149	0.001
	Cr	53		ug/L		93025	-0.011
	Mn	55	0.011	ug/L	36.054	1520	0.000
	Fe	57	1.740	ug/L	33.233	6391	0.000
	Co	59	0.050	ug/L	8.395	616	0.000
	Ni	60	0.021	ug/L	18.243	192	0.000
	Cu	63		ug/L		413	0.000
	Cu	65	0.049	ug/L	16.457	225	0.000
	Zn	66	0.014	ug/L	103.904	510	0.000
	Zn	67		ug/L		13605	-0.004
	Zn	68		ug/L		1693	-0.001
>	Ge	74		ug/L		545045	545044.973
	As	75	-0.029	ug/L	352.638	21	-0.000
	Se	77		ug/L		5143	-0.002
	Se	82	-0.066	ug/L	118.082	-9	-0.000
	Kr	83		ug/L		119	0.000
	Sr	88	0.011	ug/L	5.066	750	0.001
	Y	89		ug/L		66	-0.000
	Mo	98	0.244	ug/L	13.798	1233	0.003
	Ag	107	0.007	ug/L	12.206	174	0.000
	Cd	111	0.011	ug/L	80.573	82	0.000
	Cd	114		ug/L		132	0.000
>	In	115		ug/L		359664	359664.397
	Sn	120	2.057	ug/L	7.460	16158	0.042
	Sb	121	2.536	ug/L	16.185	15897	0.040
	Sb	123		ug/L		12458	0.032
	Ba	135		ug/L		124	0.000
	Ba	137	0.024	ug/L	11.086	191	0.000
	Ho	165		ug/L		66	0.000
>	Lu	175		ug/L		519021	519021.378
	Tl	205	0.393	ug/L	12.963	10083	0.013
	Pb	208	0.042	ug/L	3.287	2739	0.002
	Bi	209		ug/L		191	-0.000
	Th	232	1.134	ug/L	14.573	41834	0.069
	U	238	0.120	ug/L	5.443	4827	0.007

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Th	232	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 05:47:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.515

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.390**	ug/L	2.412	129599	0.130
	Be	9	**52.062**	ug/L	2.986	26233	0.026
	B	11	**97.311**	ug/L	5.853	57741	0.055
	Na	23	**4853.950**	ug/L	7.538	24204616	24.256
	Mg	24	**4929.549**	ug/L	5.271	17888429	17.980
	Al	27	**4876.813**	ug/L	5.297	25724951	25.855
	P	31	**4636.990**	ug/L	2.236	1351022	1.347
	K	39	**4773.584**	ug/L	8.126	30995433	30.506
	Ca	43	**4773.389**	ug/L	2.303	76240	0.076
>	Sc	45		ug/L		995373	995373.075
	Ti	47	**47.954**	ug/L	3.004	39062	0.039
	V	51	**49.557**	ug/L	3.564	412663	0.404
	Cr	52	**49.764**	ug/L	3.405	315563	0.319
	Cr	53		ug/L		142756	0.040
	Mn	55	**50.563**	ug/L	2.738	520429	0.522
	Fe	57	**5255.708**	ug/L	4.100	977110	0.976
	Co	59	**49.790**	ug/L	4.155	376574	0.378
	Ni	60	**49.530**	ug/L	2.376	82741	0.083
	Cu	63		ug/L		203666	0.204
	Cu	65	**49.713**	ug/L	3.222	102113	0.103
	Zn	66	**50.399**	ug/L	1.863	71479	0.138
	Zn	67		ug/L		27717	0.025
	Zn	68		ug/L		52727	0.099
>	Ge	74		ug/L		514918	514918.209
	As	75	**46.919**	ug/L	0.947	64884	0.126
	Se	77		ug/L		11668	0.012
	Se	82	**49.046**	ug/L	2.316	7399	0.014
	Kr	83		ug/L		117	0.000
	Sr	88	**51.263**	ug/L	2.080	829546	2.463
	Y	89		ug/L		160	0.000
	Mo	98	**48.149**	ug/L	2.444	186137	0.552
	Ag	107	**49.930**	ug/L	2.191	323642	0.961
	Cd	111	**48.825**	ug/L	2.017	81631	0.242
	Cd	114		ug/L		197265	0.586
>	In	115		ug/L		336693	336692.899
	Sn	120	**51.232**	ug/L	2.957	356090	1.055
	Sb	121	**51.466**	ug/L	5.138	276174	0.816
	Sb	123		ug/L		219646	0.649
	Ba	135		ug/L		92727	0.179
	Ba	137	**47.186**	ug/L	2.051	162856	0.315
	Ho	165		ug/L		105	0.000
>	Lu	175		ug/L		516592	516591.845
	Tl	205	**50.737**	ug/L	2.564	870791	1.679
	Pb	208	**52.283**	ug/L	1.114	1457136	2.818
	Bi	209		ug/L		259	0.000
	Th	232	**48.906**	ug/L	2.378	1542356	2.974
	U	238	**52.021**	ug/L	1.588	1647743	3.188

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.779				
	Be	9	104.123				
	B	11	97.311				
	Na	23	97.079				
	Mg	24	98.591				
	Al	27	96.571				
	P	31	92.740				
	K	39	95.472				
	Ca	43	95.468				
>	Sc	45		92.1			
	Ti	47	95.908				
	V	51	99.113				
	Cr	52	99.529				
	Cr	53					
	Mn	55	101.126				
	Fe	57	105.114				
	Co	59	99.580				
	Ni	60	99.060				
	Cu	63					
	Cu	65	99.426				
	Zn	66	100.798				
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75	93.837				
	Se	77					
	Se	82	98.091				
	Kr	83					
	Sr	88	102.525				
	Y	89					
	Mo	98	96.297				
	Ag	107	99.860				
	Cd	111	97.650				
	Cd	114					
>	In	115		92.0			
	Sn	120	102.465				
	Sb	121	102.932				
	Sb	123					
	Ba	135					
	Ba	137	94.371				
	Ho	165					
>	Lu	175		97.1			
	Tl	205	101.474				
	Pb	208	104.567				
	Bi	209					
	Th	232	97.812				
	U	238	104.043				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 05:53:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.516

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.015	ug/L	21.944	107	0.000
	Be	9	0.007	ug/L	143.312	24	0.000
	B	11	0.624	ug/L	72.179	3097	0.000
	Na	23	0.004	ug/L	18024.048	84248	0.000
	Mg	24	0.199	ug/L	471.601	8003	0.001
	Al	27	1.014	ug/L	43.247	17678	0.005
	P	31	-2.119	ug/L	56.183	9420	-0.001
	K	39	-5.492	ug/L	37.017	543488	-0.035
	Ca	43	0.304	ug/L	820.646	355	0.000
>	Sc	45		ug/L		979655	979654.742
	Ti	47	0.079	ug/L	56.277	465	0.000
	V	51	-0.200	ug/L	227.660	8724	-0.002
	Cr	52	0.024	ug/L	171.884	-1559	0.000
	Cr	53		ug/L		100540	-0.000
	Mn	55	0.007	ug/L	64.154	1428	0.000
	Fe	57	1.328	ug/L	74.641	6091	0.000
	Co	59	0.015	ug/L	30.747	333	0.000
	Ni	60	0.012	ug/L	24.252	170	0.000
	Cu	63		ug/L		234	0.000
	Cu	65	0.009	ug/L	32.131	136	0.000
	Zn	66	0.014	ug/L	123.312	491	0.000
	Zn	67		ug/L		15032	-0.000
	Zn	68		ug/L		1850	-0.000
>	Ge	74		ug/L		526286	526286.198
	As	75	-0.156	ug/L	141.511	-156	-0.000
	Se	77		ug/L		5714	-0.000
	Se	82	-0.114	ug/L	95.062	-16	-0.000
	Kr	83		ug/L		115	0.000
	Sr	88	0.002	ug/L	111.146	576	0.000
	Y	89		ug/L		76	0.000
	Mo	98	0.077	ug/L	32.784	521	0.001
	Ag	107	0.004	ug/L	23.924	142	0.000
	Cd	111	-0.001	ug/L	272.799	59	-0.000
	Cd	114		ug/L		117	0.000
>	In	115		ug/L		345378	345377.750
	Sn	120	0.296	ug/L	18.447	2983	0.006
	Sb	121	0.938	ug/L	29.567	6507	0.015
	Sb	123		ug/L		5213	0.012
	Ba	135		ug/L		73	-0.000
	Ba	137	0.002	ug/L	45.973	113	0.000
	Ho	165		ug/L		62	0.000
>	Lu	175		ug/L		516176	516176.357
	Tl	205	0.304	ug/L	16.706	8500	0.010
	Pb	208	0.009	ug/L	13.492	1798	0.000
	Bi	209		ug/L		152	-0.000
	Th	232	0.619	ug/L	24.725	25433	0.038
	U	238	0.020	ug/L	15.670	1639	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		90.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 06:29:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.522

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.799**	**ug/L**	2.551	128545	0.134
	Be	9	**53.840**	**ug/L**	2.123	26191	0.027
	B	11	**97.989**	**ug/L**	3.001	56141	0.056
	Na	23	**5321.378**	**ug/L**	6.332	25636071	26.592
	Mg	24	**4789.429**	**ug/L**	5.682	16783792	17.469
	Al	27	**5419.750**	**ug/L**	9.578	27614354	28.734
	P	31	**4781.819**	**ug/L**	2.354	1344446	1.390
	K	39	**4791.659**	**ug/L**	10.447	29967148	30.621
	Ca	43	**4928.410**	**ug/L**	3.740	75966	0.079
>	Sc	45		**ug/L**		960584	960584.260
	Ti	47	**50.138**	**ug/L**	0.868	39413	0.041
	V	51	**52.296**	**ug/L**	3.166	419891	0.427
	Cr	52	**52.286**	**ug/L**	1.832	320220	0.335
	Cr	53		**ug/L**		141058	0.044
	Mn	55	**52.696**	**ug/L**	0.556	523633	0.544
	Fe	57	**5484.408**	**ug/L**	0.705	984442	1.019
	Co	59	**51.284**	**ug/L**	2.131	374576	0.390
	Ni	60	**50.878**	**ug/L**	3.549	82026	0.085
	Cu	63		**ug/L**		203797	0.212
	Cu	65	**51.333**	**ug/L**	0.336	101806	0.106
	Zn	66	**50.389**	**ug/L**	1.823	71013	0.138
	Zn	67		**ug/L**		27579	0.025
	Zn	68		**ug/L**		52494	0.099
>	Ge	74		**ug/L**		511696	511695.578
	As	75	**47.176**	**ug/L**	1.318	64819	0.127
	Se	77		**ug/L**		11668	0.012
	Se	82	**49.311**	**ug/L**	2.657	7392	0.014
	Kr	83		**ug/L**		122	0.000
	Sr	88	**51.368**	**ug/L**	1.381	829445	2.468
	Y	89		**ug/L**		155	0.000
	Mo	98	**48.090**	**ug/L**	3.437	185485	0.552
	Ag	107	**50.313**	**ug/L**	0.962	325440	0.969
	Cd	111	**49.179**	**ug/L**	1.339	82049	0.244
	Cd	114		**ug/L**		196507	0.585
>	In	115		**ug/L**		335931	335931.242
	Sn	120	**51.166**	**ug/L**	3.189	354784	1.054
	Sb	121	**51.711**	**ug/L**	7.004	276648	0.820
	Sb	123		**ug/L**		218558	0.648
	Ba	135		**ug/L**		93879	0.184
	Ba	137	**47.500**	**ug/L**	0.288	161700	0.317
	Ho	165		**ug/L**		97	0.000
>	Lu	175		**ug/L**		509507	509507.155
	Tl	205	**51.260**	**ug/L**	0.128	867682	1.697
	Pb	208	**52.788**	**ug/L**	0.119	1451037	2.845
	Bi	209		**ug/L**		263	0.000
	Th	232	**49.277**	**ug/L**	1.604	1532814	2.997
	U	238	**52.029**	**ug/L**	1.963	1625430	3.188

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.598				
	Be	9	107.679				
	B	11	97.989				
	Na	23	106.428				
	Mg	24	95.789				
	Al	27	107.322				
	P	31	95.636				
	K	39	95.833				
	Ca	43	98.568				
>	Sc	45		88.8			
	Ti	47	100.277				
	V	51	104.592				
	Cr	52	104.571				
	Cr	53					
	Mn	55	105.393				
	Fe	57	109.688				
	Co	59	102.569				
	Ni	60	101.755				
	Cu	63					
	Cu	65	102.666				
	Zn	66	100.778				
	Zn	67					
	Zn	68					
>	Ge	74		90.5			
	As	75	94.351				
	Se	77					
	Se	82	98.622				
	Kr	83					
	Sr	88	102.736				
	Y	89					
	Mo	98	96.179				
	Ag	107	100.626				
	Cd	111	98.358				
	Cd	114					
>	In	115		91.8			
	Sn	120	102.331				
	Sb	121	103.421				
	Sb	123					
	Ba	135					
	Ba	137	95.000				
	Ho	165					
>	Lu	175		95.8			
	Tl	205	102.520				
	Pb	208	105.575				
	Bi	209					
	Th	232	98.554				
	U	238	104.058				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 06:35:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.523

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	ug/L	21.892	108	0.000
	Be	9	**0.002**	ug/L	343.933	21	0.000
	B	11	**0.414**	ug/L	100.567	2977	0.000
	Na	23	**0.155**	ug/L	128.466	84918	0.001
	Mg	24	**0.678**	ug/L	17.331	9670	0.002
	Al	27	**0.646**	ug/L	177.286	15676	0.003
	P	31	**-0.901**	ug/L	30.279	9757	-0.000
	K	39	**-6.380**	ug/L	31.519	537254	-0.041
	Ca	43	**-1.457**	ug/L	53.385	327	-0.000
>	Sc	45		ug/L		978655	978655.417
	Ti	47	**0.066**	ug/L	43.124	454	0.000
	V	51	**-0.034**	ug/L	373.344	10056	-0.000
	Cr	52	**0.032**	ug/L	83.799	-1508	0.000
	Cr	53		ug/L		98535	-0.002
	Mn	55	**-0.001**	ug/L	476.401	1346	-0.000
	Fe	57	**1.232**	ug/L	41.664	6069	0.000
	Co	59	**0.009**	ug/L	25.798	289	0.000
	Ni	60	**0.007**	ug/L	56.227	162	0.000
	Cu	63		ug/L		245	0.000
	Cu	65	**0.009**	ug/L	75.559	135	0.000
	Zn	66	**0.008**	ug/L	241.457	479	0.000
	Zn	67		ug/L		15026	0.000
	Zn	68		ug/L		1862	-0.000
>	Ge	74		ug/L		522660	522659.624
	As	75	**-0.294**	ug/L	30.202	-350	-0.001
	Se	77		ug/L		5675	-0.000
	Se	82	**-0.144**	ug/L	92.132	-20	-0.000
	Kr	83		ug/L		121	0.000
	Sr	88	**0.003**	ug/L	28.581	585	0.000
	Y	89		ug/L		74	-0.000
	Mo	98	**0.082**	ug/L	26.499	537	0.001
	Ag	107	**0.003**	ug/L	57.363	136	0.000
	Cd	111	**0.002**	ug/L	104.329	64	0.000
	Cd	114		ug/L		107	0.000
>	In	115		ug/L		344580	344580.243
	Sn	120	**0.268**	ug/L	22.061	2778	0.006
	Sb	121	**0.937**	ug/L	32.096	6478	0.015
	Sb	123		ug/L		5071	0.012
	Ba	135		ug/L		62	-0.000
	Ba	137	**0.002**	ug/L	276.116	114	0.000
	Ho	165		ug/L		54	-0.000
>	Lu	175		ug/L		516313	516313.130
	Tl	205	**0.284**	ug/L	26.291	8163	0.009
	Pb	208	**0.007**	ug/L	23.072	1744	0.000
	Bi	209		ug/L		148	-0.000
	Th	232	**0.558**	ug/L	31.107	23456	0.034
	U	238	**0.020**	ug/L	28.269	1621	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		90.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985732
Sample Date/Time: Tuesday, December 08, 2009 06:42:04
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201985732.524

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.018**	ug/L	19.710	111	0.000
	Be	9	**-0.014**	ug/L	7.109	13	-0.000
	B	11	**-1.445**	ug/L	7.065	1898	-0.001
	Na	23	**3.499**	ug/L	44.688	99010	0.017
	Mg	24	**0.072**	ug/L	832.305	7335	0.000
	Al	27	**0.697**	ug/L	90.517	15676	0.004
	P	31	**-12.547**	ug/L	3.785	6302	-0.004
	K	39	**0.539**	ug/L	324.657	567741	0.003
	Ca	43	**19.418**	ug/L	9.982	639	0.000
>	Sc	45		ug/L		956784	956783.898
	Ti	47	**0.260**	ug/L	24.857	595	0.000
	V	51	**-0.460**	ug/L	104.180	6548	-0.004
	Cr	52	**-0.505**	ug/L	16.187	-4762	-0.003
	Cr	53		ug/L		195695	0.102
	Mn	55	**0.135**	ug/L	9.603	2660	0.001
	Fe	57	**3.845**	ug/L	17.903	6397	0.001
	Co	59	**0.004**	ug/L	71.267	245	0.000
	Ni	60	**0.054**	ug/L	13.855	233	0.000
	Cu	63		ug/L		553	0.000
	Cu	65	**0.102**	ug/L	6.050	316	0.000
	Zn	66	**1.613**	ug/L	4.158	2687	0.004
	Zn	67		ug/L		39160	0.049
	Zn	68		ug/L		4723	0.006
>	Ge	74		ug/L		505985	505984.715
	As	75	**-0.890**	ug/L	51.153	-1142	-0.002
	Se	77		ug/L		13356	0.015
	Se	82	**-0.091**	ug/L	157.956	-12	-0.000
	Kr	83		ug/L		117	0.000
	Sr	88	**0.034**	ug/L	6.686	1052	0.002
	Y	89		ug/L		76	0.000
	Mo	98	**-0.010**	ug/L	21.876	168	-0.000
	Ag	107	**-0.005**	ug/L	30.922	82	-0.000
	Cd	111	**-0.010**	ug/L	33.367	42	-0.000
	Cd	114		ug/L		41	-0.000
>	In	115		ug/L		329354	329354.366
	Sn	120	**0.264**	ug/L	22.470	2632	0.005
	Sb	121	**0.136**	ug/L	33.210	2017	0.002
	Sb	123		ug/L		1708	0.002
	Ba	135		ug/L		117	0.000
	Ba	137	**0.024**	ug/L	16.412	185	0.000
	Ho	165		ug/L		46	-0.000
>	Lu	175		ug/L		501687	501686.785
	Tl	205	**0.006**	ug/L	85.856	3317	0.000
	Pb	208	**-0.009**	ug/L	28.049	1261	-0.000
	Bi	209		ug/L		271	0.000
	Th	232	**0.154**	ug/L	32.368	10503	0.009
	U	238	**-0.024**	ug/L	3.102	237	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			88.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			89.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			94.3		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985733
Sample Date/Time: Tuesday, December 08, 2009 06:48:14
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201985733.525

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.800**	ug/L	1.878	131277	0.136
	Be	9	**55.422**	ug/L	3.502	27016	0.028
	B	11	**102.666**	ug/L	0.503	58838	0.058
	Na	23	**2025.789**	ug/L	7.469	9833125	10.123
	Mg	24	**1991.007**	ug/L	5.641	6996036	7.262
	Al	27	**2013.062**	ug/L	4.673	10289526	10.673
	P	31	**2094.576**	ug/L	1.399	595813	0.609
	K	39	**2038.993**	ug/L	4.072	13117513	13.030
	Ca	43	**2010.192**	ug/L	0.773	31265	0.032
>	Sc	45		ug/L		962793	962792.521
	Ti	47	**43.740**	ug/L	1.986	34507	0.035
	V	51	**48.763**	ug/L	2.570	393260	0.398
	Cr	52	**49.740**	ug/L	1.600	305244	0.319
	Cr	53		ug/L		234157	0.140
	Mn	55	**50.968**	ug/L	1.594	507598	0.526
	Fe	57	**2267.550**	ug/L	0.981	411317	0.421
	Co	59	**51.744**	ug/L	2.057	378816	0.393
	Ni	60	**51.674**	ug/L	1.957	83499	0.087
	Cu	63		ug/L		205363	0.213
	Cu	65	**52.435**	ug/L	3.510	104192	0.108
	Zn	66	**64.592**	ug/L	1.219	89773	0.177
	Zn	67		ug/L		55415	0.081
	Zn	68		ug/L		65756	0.127
>	Ge	74		ug/L		505293	505293.444
	As	75	**50.210**	ug/L	2.470	68119	0.135
	Se	77		ug/L		19031	0.027
	Se	82	**54.762**	ug/L	0.499	8108	0.016
	Kr	83		ug/L		141	0.000
	Sr	88	**52.403**	ug/L	1.469	833622	2.518
	Y	89		ug/L		115	0.000
	Mo	98	**48.048**	ug/L	1.133	182599	0.551
	Ag	107	**51.624**	ug/L	0.357	328963	0.994
	Cd	111	**51.292**	ug/L	0.513	84297	0.255
	Cd	114		ug/L		200441	0.605
>	In	115		ug/L		330908	330908.028
	Sn	120	**52.697**	ug/L	2.179	360050	1.085
	Sb	121	**57.472**	ug/L	2.312	302874	0.911
	Sb	123		ug/L		240227	0.723
	Ba	135		ug/L		90508	0.179
	Ba	137	**47.068**	ug/L	2.277	158643	0.314
	Ho	165		ug/L		92	0.000
>	Lu	175		ug/L		504500	504499.797
	Tl	205	**50.154**	ug/L	3.050	840738	1.660
	Pb	208	**53.601**	ug/L	1.545	1458839	2.889
	Bi	209		ug/L		1160139	2.299
	Th	232	**49.112**	ug/L	2.156	1512841	2.987
	U	238	**52.316**	ug/L	1.565	1618294	3.206

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835001
Sample Date/Time: Tuesday, December 08, 2009 07:00:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241835001.527

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.019**	**ug/L**	39.763	113	0.000
	Be	9	**-0.014**	**ug/L**	78.055	12	-0.000
	B	11	**-0.453**	**ug/L**	81.762	2389	-0.000
	Na	23	**-1.865**	**ug/L**	7.434	71847	-0.009
	Mg	24	**-0.268**	**ug/L**	437.880	6002	-0.001
	Al	27	**4.078**	**ug/L**	38.281	32037	0.022
	P	31	**-9.231**	**ug/L**	12.742	7075	-0.003
	K	39	**1.430**	**ug/L**	540.970	560827	0.009
	Ca	43	**36.996**	**ug/L**	11.752	889	0.001
>	Sc	45		**ug/L**		937208	937208.098
	Ti	47	**0.290**	**ug/L**	3.502	605	0.000
	V	51	**0.563**	**ug/L**	259.839	14213	0.005
	Cr	52	**0.282**	**ug/L**	23.967	56	0.002
	Cr	53		**ug/L**		209443	0.121
	Mn	55	**0.298**	**ug/L**	2.967	4180	0.003
	Fe	57	**5.905**	**ug/L**	15.815	6626	0.001
	Co	59	**0.001**	**ug/L**	150.832	223	0.000
	Ni	60	**0.067**	**ug/L**	35.442	248	0.000
	Cu	63		**ug/L**		600	0.000
	Cu	65	**0.100**	**ug/L**	9.346	306	0.000
	Zn	66	**1.144**	**ug/L**	6.402	1978	0.003
	Zn	67		**ug/L**		40806	0.054
	Zn	68		**ug/L**		4363	0.005
>	Ge	74		**ug/L**		491610	491609.617
	As	75	**-0.772**	**ug/L**	59.730	-965	-0.002
	Se	77		**ug/L**		17002	0.024
	Se	82	**-0.146**	**ug/L**	59.437	-19	-0.000
	Kr	83		**ug/L**		119	0.000
	Sr	88	**0.140**	**ug/L**	1.464	2682	0.007
	Y	89		**ug/L**		121	0.000
	Mo	98	**-0.013**	**ug/L**	40.173	154	-0.000
	Ag	107	**-0.007**	**ug/L**	15.271	65	-0.000
	Cd	111	**-0.013**	**ug/L**	73.019	36	-0.000
	Cd	114		**ug/L**		52	-0.000
>	In	115		**ug/L**		323313	323313.095
	Sn	120	**0.070**	**ug/L**	4.588	1287	0.001
	Sb	121	**-0.036**	**ug/L**	21.265	1096	-0.001
	Sb	123		**ug/L**		943	-0.000
	Ba	135		**ug/L**		368	0.001
	Ba	137	**0.160**	**ug/L**	3.815	650	0.001
	Ho	165		**ug/L**		54	-0.000
>	Lu	175		**ug/L**		509304	509303.954
	Tl	205	**0.111**	**ug/L**	6.157	5144	0.004
	Pb	208	**0.010**	**ug/L**	22.511	1795	0.001
	Bi	209		**ug/L**		218	0.000
	Th	232	**0.082**	**ug/L**	30.952	8430	0.005
	U	238	**-0.025**	**ug/L**	0.918	203	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		86.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835002
Sample Date/Time: Tuesday, December 08, 2009 07:06:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241835002.528

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.028**	ug/L	19.086	137	0.000
	Be	9	**-0.021**	ug/L	35.335	9	-0.000
	B	11	**-1.857**	ug/L	1.162	1690	-0.001
	Na	23	**20.738**	ug/L	20.684	182835	0.104
	Mg	24	**0.056**	ug/L	1199.298	7335	0.000
	Al	27	**5.449**	ug/L	16.961	40056	0.029
	P	31	**-9.834**	ug/L	18.194	7114	-0.003
	K	39	**-2.205**	ug/L	301.216	555982	-0.014
	Ca	43	**41.933**	ug/L	6.640	993	0.001
>	Sc	45		ug/L		966032	966032.225
	Ti	47	**0.331**	ug/L	2.786	656	0.000
	V	51	**-0.481**	ug/L	179.053	6306	-0.004
	Cr	52	**-0.018**	ug/L	143.782	-1799	-0.000
	Cr	53		ug/L		216479	0.121
	Mn	55	**0.313**	ug/L	7.448	4450	0.003
	Fe	57	**7.876**	ug/L	23.958	7178	0.001
	Co	59	**0.000**	ug/L	689470.663	220	0.000
	Ni	60	**0.105**	ug/L	12.118	317	0.000
	Cu	63		ug/L		867	0.001
	Cu	65	**0.166**	ug/L	4.215	447	0.000
	Zn	66	**1.685**	ug/L	3.753	2759	0.005
	Zn	67		ug/L		43212	0.058
	Zn	68		ug/L		5025	0.006
>	Ge	74		ug/L		501094	501093.796
	As	75	**-1.063**	ug/L	31.128	-1371	-0.003
	Se	77		ug/L		16738	0.022
	Se	82	**-0.202**	ug/L	43.709	-28	-0.000
	Kr	83		ug/L		129	0.000
	Sr	88	**0.174**	ug/L	4.125	3249	0.008
	Y	89		ug/L		148	0.000
	Mo	98	**-0.022**	ug/L	10.827	122	-0.000
	Ag	107	**-0.001**	ug/L	239.246	108	-0.000
	Cd	111	**-0.021**	ug/L	9.016	24	-0.000
	Cd	114		ug/L		44	-0.000
>	In	115		ug/L		328320	328320.499
	Sn	120	**0.091**	ug/L	6.578	1447	0.002
	Sb	121	**-0.106**	ug/L	1.521	749	-0.002
	Sb	123		ug/L		722	-0.001
	Ba	135		ug/L		409	0.001
	Ba	137	**0.173**	ug/L	7.330	683	0.001
	Ho	165		ug/L		54	0.000
>	Lu	175		ug/L		502400	502400.228
	Tl	205	**0.015**	ug/L	9.209	3471	0.000
	Pb	208	**0.014**	ug/L	10.819	1897	0.001
	Bi	209		ug/L		541	0.001
	Th	232	**-0.008**	ug/L	125.790	5553	-0.000
	U	238	**-0.025**	ug/L	1.902	201	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 07:12:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 8.529

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.868**	ug/L	0.458	133130	0.136
	Be	9	**54.122**	ug/L	1.357	26730	0.027
	B	11	**98.759**	ug/L	2.958	57419	0.056
	Na	23	**4816.939**	ug/L	7.775	23553954	24.072
	Mg	24	**4764.809**	ug/L	8.169	16944466	17.380
	Al	27	**4553.427**	ug/L	4.253	23544870	24.141
	P	31	**4740.084**	ug/L	1.397	1352986	1.377
	K	39	**4880.563**	ug/L	6.710	30995433	31.190
	Ca	43	**4858.990**	ug/L	2.128	76037	0.078
>	Sc	45		ug/L		975101	975101.223
	Ti	47	**49.303**	ug/L	1.226	39349	0.040
	V	51	**50.976**	ug/L	2.723	415723	0.416
	Cr	52	**51.210**	ug/L	1.658	318327	0.328
	Cr	53		ug/L		145223	0.046
	Mn	55	**52.321**	ug/L	1.149	527728	0.540
	Fe	57	**5439.072**	ug/L	1.783	991071	1.010
	Co	59	**51.099**	ug/L	1.271	378850	0.388
	Ni	60	**50.427**	ug/L	2.130	82532	0.084
	Cu	63		ug/L		204887	0.210
	Cu	65	**50.961**	ug/L	2.856	102592	0.105
	Zn	66	**50.773**	ug/L	1.667	72107	0.139
	Zn	67		ug/L		28201	0.026
	Zn	68		ug/L		53303	0.100
>	Ge	74		ug/L		515598	515598.024
	As	75	**47.232**	ug/L	0.922	65397	0.127
	Se	77		ug/L		11875	0.012
	Se	82	**48.391**	ug/L	1.532	7311	0.014
	Kr	83		ug/L		124	0.000
	Sr	88	**51.643**	ug/L	1.517	838497	2.481
	Y	89		ug/L		169	0.000
	Mo	98	**48.092**	ug/L	2.893	186507	0.552
	Ag	107	**49.945**	ug/L	2.911	324747	0.961
	Cd	111	**48.974**	ug/L	1.384	82149	0.243
	Cd	114		ug/L		196027	0.580
>	In	115		ug/L		337776	337775.690
	Sn	120	**51.221**	ug/L	4.467	357018	1.055
	Sb	121	**51.535**	ug/L	6.821	277235	0.817
	Sb	123		ug/L		218699	0.645
	Ba	135		ug/L		92976	0.184
	Ba	137	**48.063**	ug/L	0.730	162143	0.321
	Ho	165		ug/L		102	0.000
>	Lu	175		ug/L		504911	504910.585
	Tl	205	**51.154**	ug/L	1.468	858047	1.693
	Pb	208	**53.058**	ug/L	0.589	1445286	2.859
	Bi	209		ug/L		229	0.000
	Th	232	**49.552**	ug/L	1.469	1527435	3.014
	U	238	**52.768**	ug/L	1.350	1633660	3.234

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	107.735				
	Be	9	108.244				
	B	11	98.759				
	Na	23	96.339				
	Mg	24	95.296				
	Al	27	90.167				
	P	31	94.802				
	K	39	97.611				
	Ca	43	97.180				
>	Sc	45		90.2			
	Ti	47	98.606				
	V	51	101.952				
	Cr	52	102.419				
	Cr	53					
	Mn	55	104.642				
	Fe	57	108.781				
	Co	59	102.199				
	Ni	60	100.854				
	Cu	63					
	Cu	65	101.922				
	Zn	66	101.547				
	Zn	67					
	Zn	68					
>	Ge	74		91.2			
	As	75	94.463				
	Se	77					
	Se	82	96.782				
	Kr	83					
	Sr	88	103.287				
	Y	89					
	Mo	98	96.184				
	Ag	107	99.891				
	Cd	111	97.947				
	Cd	114					
>	In	115		92.3			
	Sn	120	102.441				
	Sb	121	103.069				
	Sb	123					
	Ba	135					
	Ba	137	96.125				
	Ho	165					
>	Lu	175		94.9			
	Tl	205	102.307				
	Pb	208	106.116				
	Bi	209					
	Th	232	99.105				
	U	238	105.536				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 07:19:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 9.530

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.009**	ug/L	36.470	93	0.000
	Be	9	**-0.005**	ug/L	161.679	18	-0.000
	B	11	**-0.062**	ug/L	569.886	2757	-0.000
	Na	23	**-1.201**	ug/L	238.113	79559	-0.006
	Mg	24	**0.355**	ug/L	267.230	8670	0.001
	Al	27	**1.658**	ug/L	56.973	21350	0.009
	P	31	**-1.330**	ug/L	70.807	9798	-0.000
	K	39	**-5.984**	ug/L	110.939	549065	-0.038
	Ca	43	**-1.467**	ug/L	33.917	333	-0.000
>	Sc	45		ug/L		995251	995251.045
	Ti	47	**0.082**	ug/L	62.273	475	0.000
	V	51	**0.155**	ug/L	241.200	11744	0.001
	Cr	52	**0.067**	ug/L	56.032	-1308	0.000
	Cr	53		ug/L		101055	-0.001
	Mn	55	**-0.001**	ug/L	44.042	1367	-0.000
	Fe	57	**1.497**	ug/L	79.686	6220	0.000
	Co	59	**0.009**	ug/L	51.619	292	0.000
	Ni	60	**0.009**	ug/L	108.915	168	0.000
	Cu	63		ug/L		253	0.000
	Cu	65	**0.009**	ug/L	22.426	138	0.000
	Zn	66	**0.030**	ug/L	11.294	513	0.000
	Zn	67		ug/L		15048	-0.000
	Zn	68		ug/L		1904	0.000
>	Ge	74		ug/L		524873	524872.783
	As	75	**-0.259**	ug/L	58.361	-302	-0.001
	Se	77		ug/L		5750	-0.000
	Se	82	**-0.273**	ug/L	8.909	-40	-0.000
	Kr	83		ug/L		136	0.000
	Sr	88	**-0.000**	ug/L	938.753	537	-0.000
	Y	89		ug/L		65	-0.000
	Mo	98	**0.071**	ug/L	32.204	500	0.001
	Ag	107	**0.004**	ug/L	27.583	148	0.000
	Cd	111	**-0.001**	ug/L	443.248	59	-0.000
	Cd	114		ug/L		111	0.000
>	In	115		ug/L		347508	347508.141
	Sn	120	**0.266**	ug/L	22.867	2788	0.005
	Sb	121	**0.910**	ug/L	32.688	6388	0.014
	Sb	123		ug/L		5126	0.012
	Ba	135		ug/L		66	-0.000
	Ba	137	**0.003**	ug/L	129.882	117	0.000
	Ho	165		ug/L		56	0.000
>	Lu	175		ug/L		517847	517846.761
	Tl	205	**0.256**	ug/L	30.712	7699	0.008
	Pb	208	**0.009**	ug/L	6.640	1802	0.000
	Bi	209		ug/L		127	-0.000
	Th	232	**0.596**	ug/L	29.895	24730	0.036
	U	238	**0.018**	ug/L	20.830	1572	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			92.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835003
Sample Date/Time: Tuesday, December 08, 2009 07:25:14
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241835003.531

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.126**	ug/L	2.708	383	0.000
	Be	9	**-0.009**	ug/L	75.002	16	-0.000
	B	11	**-1.548**	ug/L	12.999	1884	-0.001
	Na	23	**218.966**	ug/L	10.349	1154383	1.094
	Mg	24	**12.471**	ug/L	7.554	51761	0.045
	Al	27	**79.276**	ug/L	4.602	423524	0.420
	P	31	**-6.584**	ug/L	36.815	8145	-0.002
	K	39	**36.502**	ug/L	17.278	805455	0.233
	Ca	43	**121.525**	ug/L	1.117	2250	0.002
>	Sc	45		ug/L		978580	978579.677
	Ti	47	**1.632**	ug/L	1.634	1696	0.001
	V	51	**-0.634**	ug/L	121.722	5219	-0.005
	Cr	52	**-0.203**	ug/L	55.204	-2977	-0.001
	Cr	53		ug/L		199467	0.101
	Mn	55	**2.863**	ug/L	1.396	30265	0.030
	Fe	57	**107.212**	ug/L	3.499	25336	0.020
	Co	59	**0.026**	ug/L	16.947	414	0.000
	Ni	60	**0.145**	ug/L	11.778	388	0.000
	Cu	63		ug/L		2513	0.002
	Cu	65	**0.572**	ug/L	4.531	1271	0.001
	Zn	66	**3.230**	ug/L	1.824	4971	0.009
	Zn	67		ug/L		40191	0.050
	Zn	68		ug/L		6277	0.009
>	Ge	74		ug/L		510694	510693.604
	As	75	**-0.938**	ug/L	27.150	-1225	-0.003
	Se	77		ug/L		14048	0.016
	Se	82	**-0.220**	ug/L	24.606	-31	-0.000
	Kr	83		ug/L		132	0.000
	Sr	88	**0.577**	ug/L	2.308	9805	0.028
	Y	89		ug/L		1705	0.005
	Mo	98	**0.028**	ug/L	5.850	316	0.000
	Ag	107	**0.007**	ug/L	17.949	160	0.000
	Cd	111	**-0.008**	ug/L	54.081	45	-0.000
	Cd	114		ug/L		58	-0.000
>	In	115		ug/L		335070	335069.884
	Sn	120	**0.265**	ug/L	20.371	2679	0.005
	Sb	121	**0.140**	ug/L	33.220	2073	0.002
	Sb	123		ug/L		1665	0.002
	Ba	135		ug/L		2428	0.005
	Ba	137	**1.250**	ug/L	0.649	4304	0.008
	Ho	165		ug/L		145	0.000
>	Lu	175		ug/L		503094	503094.150
	Tl	205	**-0.005**	ug/L	127.387	3138	-0.000
	Pb	208	**0.117**	ug/L	4.519	4689	0.006
	Bi	209		ug/L		340	0.000
	Th	232	**0.223**	ug/L	25.247	12623	0.014
	U	238	**-0.015**	ug/L	4.799	520	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		90.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985734
Sample Date/Time: Tuesday, December 08, 2009 07:31:23
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201985734.532

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.102**	ug/L	10.840	327	0.000
	Be	9	**-0.012**	ug/L	60.281	14	-0.000
	B	11	**-2.341**	ug/L	2.796	1469	-0.001
	Na	23	**207.467**	ug/L	4.541	1118931	1.037
	Mg	24	**12.124**	ug/L	15.933	51427	0.044
	Al	27	**61.304**	ug/L	16.967	335964	0.325
	P	31	**-7.863**	ug/L	8.169	7913	-0.002
	K	39	**28.541**	ug/L	33.112	770000	0.182
	Ca	43	**118.710**	ug/L	2.526	2246	0.002
>	Sc	45		ug/L		996135	996134.715
	Ti	47	**1.182**	ug/L	5.879	1362	0.001
	V	51	**0.267**	ug/L	106.949	12673	0.002
	Cr	52	**-0.282**	ug/L	15.916	-3539	-0.002
	Cr	53		ug/L		210374	0.108
	Mn	55	**2.449**	ug/L	2.741	26548	0.025
	Fe	57	**77.014**	ug/L	3.645	20196	0.014
	Co	59	**0.019**	ug/L	11.287	367	0.000
	Ni	60	**0.119**	ug/L	16.280	351	0.000
	Cu	63		ug/L		2525	0.002
	Cu	65	**0.561**	ug/L	1.432	1272	0.001
	Zn	66	**2.933**	ug/L	1.857	4559	0.008
	Zn	67		ug/L		44047	0.058
	Zn	68		ug/L		6301	0.009
>	Ge	74		ug/L		510917	510916.941
	As	75	**-0.709**	ug/L	13.758	-912	-0.002
	Se	77		ug/L		14537	0.017
	Se	82	**-0.220**	ug/L	45.691	-31	-0.000
	Kr	83		ug/L		130	0.000
	Sr	88	**0.541**	ug/L	2.448	9300	0.026
	Y	89		ug/L		1501	0.004
	Mo	98	**0.002**	ug/L	233.423	220	0.000
	Ag	107	**0.004**	ug/L	8.161	139	0.000
	Cd	111	**-0.012**	ug/L	38.098	39	-0.000
	Cd	114		ug/L		63	-0.000
>	In	115		ug/L		337641	337641.035
	Sn	120	**0.086**	ug/L	5.081	1454	0.002
	Sb	121	**-0.052**	ug/L	31.784	1062	-0.001
	Sb	123		ug/L		900	-0.000
	Ba	135		ug/L		2233	0.004
	Ba	137	**1.163**	ug/L	0.673	4020	0.008
	Ho	165		ug/L		139	0.000
>	Lu	175		ug/L		504363	504362.921
	Tl	205	**-0.047**	ug/L	6.469	2445	-0.002
	Pb	208	**0.103**	ug/L	2.103	4317	0.006
	Bi	209		ug/L		441	0.000
	Th	232	**0.051**	ug/L	38.941	7402	0.003
	U	238	**-0.018**	ug/L	2.955	413	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			92.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			90.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			94.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985735
Sample Date/Time: Tuesday, December 08, 2009 07:37:33
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201985735.533

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.644**	ug/L	3.175	134016	0.136
	Be	9	**55.718**	ug/L	2.096	27819	0.028
	B	11	**102.387**	ug/L	2.348	60086	0.058
	Na	23	**2121.389**	ug/L	1.930	10538686	10.601
	Mg	24	**2007.751**	ug/L	4.798	7225890	7.323
	Al	27	**1970.699**	ug/L	6.340	10319048	10.448
	P	31	**2052.416**	ug/L	3.595	597970	0.596
	K	39	**1924.110**	ug/L	3.626	12699773	12.296
	Ca	43	**2100.947**	ug/L	2.284	33444	0.034
>	Sc	45		ug/L		986183	986182.976
	Ti	47	**44.227**	ug/L	2.686	35724	0.036
	V	51	**48.587**	ug/L	1.704	401240	0.396
	Cr	52	**50.201**	ug/L	2.535	315479	0.322
	Cr	53		ug/L		239109	0.140
	Mn	55	**52.676**	ug/L	2.063	537183	0.544
	Fe	57	**2343.555**	ug/L	0.948	435330	0.435
	Co	59	**51.445**	ug/L	0.591	385773	0.391
	Ni	60	**50.709**	ug/L	1.839	83921	0.085
	Cu	63		ug/L		206074	0.209
	Cu	65	**50.542**	ug/L	2.243	102870	0.104
	Zn	66	**55.234**	ug/L	2.093	77670	0.151
	Zn	67		ug/L		54706	0.078
	Zn	68		ug/L		58301	0.111
>	Ge	74		ug/L		510729	510729.057
	As	75	**78.396**	ug/L	0.784	107483	0.210
	Se	77		ug/L		16573	0.021
	Se	82	**21.042**	ug/L	1.906	3150	0.006
	Kr	83		ug/L		130	0.000
	Sr	88	**54.135**	ug/L	1.783	858527	2.601
	Y	89		ug/L		1544	0.004
	Mo	98	**49.332**	ug/L	2.456	186902	0.566
	Ag	107	**52.275**	ug/L	1.537	332105	1.006
	Cd	111	**10.854**	ug/L	3.215	17827	0.054
	Cd	114		ug/L		40508	0.123
>	In	115		ug/L		329971	329970.848
	Sn	120	**54.118**	ug/L	2.090	368593	1.115
	Sb	121	**222.705**	ug/L	2.561	1166412	3.532
	Sb	123		ug/L		938715	2.842
	Ba	135		ug/L		94122	0.184
	Ba	137	**49.165**	ug/L	1.606	167566	0.328
	Ho	165		ug/L		416	0.001
>	Lu	175		ug/L		510125	510124.915
	Tl	205	**92.615**	ug/L	3.335	1566648	3.065
	Pb	208	**42.770**	ug/L	1.177	1177280	2.305
	Bi	209		ug/L		769	0.001
	Th	232	**50.196**	ug/L	3.082	1563009	3.053
	U	238	**52.036**	ug/L	0.992	1627559	3.189

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			90.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985736
Sample Date/Time: Tuesday, December 08, 2009 07:43:44
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928653|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\1201985736.534

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	ug/L	48.925	109	0.000
	Be	9	**-0.016**	ug/L	16.646	12	-0.000
	B	11	**-0.261**	ug/L	198.138	2656	-0.000
	Na	23	**33.699**	ug/L	12.384	253912	0.168
	Mg	24	**1.260**	ug/L	52.863	12005	0.005
	Al	27	**14.218**	ug/L	7.782	87938	0.075
	P	31	**-3.301**	ug/L	52.051	9254	-0.001
	K	39	**-0.451**	ug/L	827.870	586136	-0.003
	Ca	43	**23.067**	ug/L	8.942	725	0.000
>	Sc	45		ug/L		998485	998484.977
	Ti	47	**0.359**	ug/L	17.334	701	0.000
	V	51	**0.536**	ug/L	91.219	14940	0.004
	Cr	52	**-0.068**	ug/L	51.018	-2174	-0.000
	Cr	53		ug/L		127275	0.025
	Mn	55	**0.541**	ug/L	4.684	6953	0.006
	Fe	57	**19.252**	ug/L	1.978	9535	0.004
	Co	59	**-0.002**	ug/L	116.095	209	-0.000
	Ni	60	**0.030**	ug/L	28.918	204	0.000
	Cu	63		ug/L		704	0.000
	Cu	65	**0.112**	ug/L	18.338	351	0.000
	Zn	66	**0.651**	ug/L	0.645	1396	0.002
	Zn	67		ug/L		20792	0.011
	Zn	68		ug/L		2905	0.002
>	Ge	74		ug/L		521296	521296.476
	As	75	**-0.463**	ug/L	46.743	-584	-0.001
	Se	77		ug/L		7615	0.004
	Se	82	**-0.191**	ug/L	20.713	-27	-0.000
	Kr	83		ug/L		123	0.000
	Sr	88	**0.100**	ug/L	5.205	2187	0.005
	Y	89		ug/L		399	0.001
	Mo	98	**0.037**	ug/L	50.109	360	0.000
	Ag	107	**-0.009**	ug/L	4.773	58	-0.000
	Cd	111	**-0.022**	ug/L	7.130	23	-0.000
	Cd	114		ug/L		53	-0.000
>	In	115		ug/L		344004	344004.065
	Sn	120	**0.017**	ug/L	97.333	990	0.000
	Sb	121	**0.532**	ug/L	23.376	4266	0.008
	Sb	123		ug/L		3466	0.007
	Ba	135		ug/L		607	0.001
	Ba	137	**0.281**	ug/L	2.178	1067	0.002
	Ho	165		ug/L		77	0.000
>	Lu	175		ug/L		511461	511461.424
	Tl	205	**0.982**	ug/L	22.037	19898	0.032
	Pb	208	**0.013**	ug/L	12.678	1892	0.001
	Bi	209		ug/L		171	-0.000
	Th	232	**0.281**	ug/L	29.791	14629	0.017
	U	238	**-0.014**	ug/L	31.424	566	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		92.4			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		92.2			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		94.0			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		96.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835004
Sample Date/Time: Tuesday, December 08, 2009 07:49:55
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241835004.535

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.013**	ug/L	55.469	101	0.000
	Be	9	**-0.019**	ug/L	5.552	11	-0.000
	B	11	**-1.850**	ug/L	7.907	1717	-0.001
	Na	23	**5.843**	ug/L	17.646	112777	0.029
	Mg	24	**0.304**	ug/L	101.479	8336	0.001
	Al	27	**2.502**	ug/L	55.526	25357	0.013
	P	31	**-9.471**	ug/L	7.391	7324	-0.003
	K	39	**9.025**	ug/L	59.506	633777	0.058
	Ca	43	**38.353**	ug/L	1.466	950	0.001
>	Sc	45		ug/L		978998	978997.957
	Ti	47	**0.312**	ug/L	1.508	650	0.000
	V	51	**0.424**	ug/L	222.679	13743	0.003
	Cr	52	**-0.309**	ug/L	32.447	-3655	-0.002
	Cr	53		ug/L		202080	0.104
	Mn	55	**0.256**	ug/L	3.962	3941	0.003
	Fe	57	**8.522**	ug/L	8.233	7397	0.002
	Co	59	**0.000**	ug/L	522.923	225	0.000
	Ni	60	**0.055**	ug/L	30.804	240	0.000
	Cu	63		ug/L		802	0.001
	Cu	65	**0.134**	ug/L	8.601	388	0.000
	Zn	66	**1.726**	ug/L	2.540	2895	0.005
	Zn	67		ug/L		41776	0.052
	Zn	68		ug/L		5003	0.006
>	Ge	74		ug/L		515213	515212.733
	As	75	**-0.877**	ug/L	48.003	-1149	-0.002
	Se	77		ug/L		13991	0.016
	Se	82	**-0.151**	ug/L	33.806	-21	-0.000
	Kr	83		ug/L		117	0.000
	Sr	88	**0.147**	ug/L	3.237	2935	0.007
	Y	89		ug/L		152	0.000
	Mo	98	**-0.014**	ug/L	13.947	158	-0.000
	Ag	107	**-0.002**	ug/L	88.036	104	-0.000
	Cd	111	**-0.023**	ug/L	18.769	21	-0.000
	Cd	114		ug/L		38	-0.000
>	In	115		ug/L		340192	340191.788
	Sn	120	**0.068**	ug/L	7.785	1337	0.001
	Sb	121	**0.053**	ug/L	28.257	1634	0.001
	Sb	123		ug/L		1364	0.001
	Ba	135		ug/L		336	0.001
	Ba	137	**0.148**	ug/L	6.160	616	0.001
	Ho	165		ug/L		62	0.000
>	Lu	175		ug/L		515527	515526.557
	Tl	205	**0.232**	ug/L	5.221	7258	0.008
	Pb	208	**0.008**	ug/L	16.972	1772	0.000
	Bi	209		ug/L		281	0.000
	Th	232	**0.100**	ug/L	37.610	9088	0.006
	U	238	**-0.024**	ug/L	1.462	252	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		90.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835005
Sample Date/Time: Tuesday, December 08, 2009 07:56:07
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241835005.536

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.080**	**ug/L**	3.737	272	0.000
	Be	9	**-0.011**	**ug/L**	28.730	15	-0.000
	B	11	**-2.443**	**ug/L**	2.923	1408	-0.001
	Na	23	**428.298**	**ug/L**	4.653	2212250	2.140
	Mg	24	**10.868**	**ug/L**	12.974	46744	0.040
	Al	27	**42.894**	**ug/L**	13.324	238666	0.227
	P	31	**-7.768**	**ug/L**	10.833	7925	-0.002
	K	39	**50.458**	**ug/L**	43.347	905864	0.322
	Ca	43	**366.507**	**ug/L**	0.984	6176	0.006
>	Sc	45		**ug/L**		993918	993917.850
	Ti	47	**1.270**	**ug/L**	3.408	1431	0.001
	V	51	**-0.082**	**ug/L**	1351.128	9884	-0.001
	Cr	52	**-0.229**	**ug/L**	36.797	-3193	-0.001
	Cr	53		**ug/L**		209182	0.108
	Mn	55	**2.780**	**ug/L**	2.951	29882	0.029
	Fe	57	**69.613**	**ug/L**	2.780	18790	0.013
	Co	59	**0.014**	**ug/L**	15.055	329	0.000
	Ni	60	**0.131**	**ug/L**	4.959	370	0.000
	Cu	63		**ug/L**		1998	0.002
	Cu	65	**0.422**	**ug/L**	1.468	984	0.001
	Zn	66	**2.238**	**ug/L**	2.786	3641	0.006
	Zn	67		**ug/L**		45036	0.058
	Zn	68		**ug/L**		5759	0.007
>	Ge	74		**ug/L**		518616	518615.507
	As	75	**-0.893**	**ug/L**	95.820	-1185	-0.002
	Se	77		**ug/L**		14281	0.016
	Se	82	**-0.141**	**ug/L**	86.093	-19	-0.000
	Kr	83		**ug/L**		125	0.000
	Sr	88	**1.586**	**ug/L**	0.969	26433	0.076
	Y	89		**ug/L**		1455	0.004
	Mo	98	**0.003**	**ug/L**	241.345	222	0.000
	Ag	107	**0.002**	**ug/L**	62.168	131	0.000
	Cd	111	**-0.015**	**ug/L**	6.599	34	-0.000
	Cd	114		**ug/L**		65	-0.000
>	In	115		**ug/L**		339920	339920.006
	Sn	120	**0.071**	**ug/L**	5.923	1361	0.001
	Sb	121	**-0.064**	**ug/L**	9.006	1001	-0.001
	Sb	123		**ug/L**		878	-0.001
	Ba	135		**ug/L**		1758	0.003
	Ba	137	**0.844**	**ug/L**	1.818	2996	0.006
	Ho	165		**ug/L**		127	0.000
>	Lu	175		**ug/L**		513035	513034.884
	Tl	205	**0.058**	**ug/L**	26.366	4275	0.002
	Pb	208	**0.053**	**ug/L**	7.041	3013	0.003
	Bi	209		**ug/L**		302	0.000
	Th	232	**0.021**	**ug/L**	91.066	6576	0.001
	U	238	**-0.018**	**ug/L**	3.267	427	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			91.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.5		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835006
Sample Date/Time: Tuesday, December 08, 2009 08:02:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\241835006.537

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.046**	ug/L	8.629	185	0.000
	Be	9	**-0.012**	ug/L	13.865	14	-0.000
	B	11	**-2.807**	ug/L	0.596	1203	-0.002
	Na	23	**320.655**	ug/L	5.819	1678817	1.602
	Mg	24	**5.835**	ug/L	45.913	28698	0.021
	Al	27	**32.874**	ug/L	22.861	185564	0.174
	P	31	**-8.993**	ug/L	17.277	7564	-0.003
	K	39	**20.882**	ug/L	30.658	717941	0.133
	Ca	43	**106.834**	ug/L	4.818	2050	0.002
>	Sc	45		ug/L		993783	993783.198
	Ti	47	**0.730**	ug/L	3.741	996	0.001
	V	51	**-0.452**	ug/L	338.021	6604	-0.004
	Cr	52	**-0.315**	ug/L	17.405	-3749	-0.002
	Cr	53		ug/L		208189	0.107
	Mn	55	**1.141**	ug/L	3.747	13064	0.012
	Fe	57	**52.977**	ug/L	3.621	15711	0.010
	Co	59	**0.010**	ug/L	11.982	301	0.000
	Ni	60	**0.251**	ug/L	7.495	570	0.000
	Cu	63		ug/L		2608	0.002
	Cu	65	**0.585**	ug/L	1.232	1318	0.001
	Zn	66	**1.908**	ug/L	0.600	3163	0.005
	Zn	67		ug/L		44546	0.057
	Zn	68		ug/L		5349	0.007
>	Ge	74		ug/L		517146	517146.086
	As	75	**-1.027**	ug/L	20.925	-1363	-0.003
	Se	77		ug/L		14067	0.016
	Se	82	**-0.102**	ug/L	152.372	-13	-0.000
	Kr	83		ug/L		124	0.000
	Sr	88	**0.447**	ug/L	1.531	7918	0.021
	Y	89		ug/L		737	0.002
	Mo	98	**-0.003**	ug/L	60.530	201	-0.000
	Ag	107	**-0.004**	ug/L	37.464	93	-0.000
	Cd	111	**-0.020**	ug/L	41.897	26	-0.000
	Cd	114		ug/L		65	-0.000
>	In	115		ug/L		343447	343446.967
	Sn	120	**0.089**	ug/L	12.525	1499	0.002
	Sb	121	**-0.103**	ug/L	7.545	797	-0.002
	Sb	123		ug/L		708	-0.001
	Ba	135		ug/L		818	0.001
	Ba	137	**0.369**	ug/L	4.645	1375	0.002
	Ho	165		ug/L		101	0.000
>	Lu	175		ug/L		514625	514625.307
	Tl	205	**0.003**	ug/L	94.093	3356	0.000
	Pb	208	**0.049**	ug/L	6.720	2892	0.003
	Bi	209		ug/L		454	0.000
	Th	232	**-0.043**	ug/L	22.312	4583	-0.003
	U	238	**-0.021**	ug/L	1.025	343	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			91.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			91.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 08:08:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 6.538

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.410**	**ug/L**	3.248	132244	0.130
	Be	9	**52.043**	**ug/L**	1.015	26752	0.026
	B	11	**95.807**	**ug/L**	3.077	58055	0.054
	Na	23	**5296.112**	**ug/L**	5.066	26937395	26.466
	Mg	24	**4752.767**	**ug/L**	13.154	17584933	17.336
	Al	27	**4535.419**	**ug/L**	4.521	24416902	24.045
	P	31	**4691.578**	**ug/L**	2.375	1393884	1.363
	K	39	**4619.812**	**ug/L**	4.912	30554739	29.523
	Ca	43	**4877.322**	**ug/L**	1.074	79450	0.078
>	Sc	45		**ug/L**		1014919	1014918.587
	Ti	47	**48.572**	**ug/L**	0.874	40354	0.039
	V	51	**51.040**	**ug/L**	1.866	433262	0.416
	Cr	52	**50.807**	**ug/L**	2.486	328681	0.326
	Cr	53		**ug/L**		146920	0.042
	Mn	55	**51.488**	**ug/L**	1.128	540602	0.531
	Fe	57	**5330.285**	**ug/L**	1.231	1011196	0.990
	Co	59	**50.383**	**ug/L**	0.980	388830	0.383
	Ni	60	**49.912**	**ug/L**	2.377	85034	0.084
	Cu	63		**ug/L**		211230	0.208
	Cu	65	**50.529**	**ug/L**	1.000	105879	0.104
	Zn	66	**49.835**	**ug/L**	1.139	73010	0.136
	Zn	67		**ug/L**		28784	0.025
	Zn	68		**ug/L**		54360	0.099
>	Ge	74		**ug/L**		531830	531830.255
	As	75	**46.613**	**ug/L**	2.129	66569	0.125
	Se	77		**ug/L**		11449	0.010
	Se	82	**48.873**	**ug/L**	0.869	7616	0.014
	Kr	83		**ug/L**		139	0.000
	Sr	88	**51.137**	**ug/L**	0.801	849833	2.457
	Y	89		**ug/L**		163	0.000
	Mo	98	**48.515**	**ug/L**	2.708	192591	0.557
	Ag	107	**50.211**	**ug/L**	2.534	334191	0.967
	Cd	111	**49.024**	**ug/L**	2.614	84159	0.243
	Cd	114		**ug/L**		200664	0.580
>	In	115		**ug/L**		345706	345705.576
	Sn	120	**50.860**	**ug/L**	1.986	362980	1.048
	Sb	121	**50.818**	**ug/L**	5.697	279958	0.806
	Sb	123		**ug/L**		221114	0.637
	Ba	135		**ug/L**		94555	0.184
	Ba	137	**48.583**	**ug/L**	1.975	166630	0.324
	Ho	165		**ug/L**		94	0.000
>	Lu	175		**ug/L**		513413	513412.715
	Tl	205	**49.390**	**ug/L**	3.171	842449	1.635
	Pb	208	**52.789**	**ug/L**	1.322	1462084	2.845
	Bi	209		**ug/L**		244	0.000
	Th	232	**48.318**	**ug/L**	3.118	1514390	2.939
	U	238	**51.605**	**ug/L**	0.702	1624567	3.162

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.820				
	Be	9	104.086				
	B	11	95.807				
	Na	23	105.922				
	Mg	24	95.055				
	Al	27	89.810				
	P	31	93.832				
	K	39	92.396				
	Ca	43	97.546				
>	Sc	45		93.9			
	Ti	47	97.145				
	V	51	102.080				
	Cr	52	101.613				
	Cr	53					
	Mn	55	102.976				
	Fe	57	106.606				
	Co	59	100.767				
	Ni	60	99.825				
	Cu	63					
	Cu	65	101.057				
	Zn	66	99.670				
	Zn	67					
	Zn	68					
>	Ge	74		94.1			
	As	75	93.226				
	Se	77					
	Se	82	97.746				
	Kr	83					
	Sr	88	102.274				
	Y	89					
	Mo	98	97.030				
	Ag	107	100.421				
	Cd	111	98.049				
	Cd	114					
>	In	115		94.4			
	Sn	120	101.719				
	Sb	121	101.637				
	Sb	123					
	Ba	135					
	Ba	137	97.167				
	Ho	165					
>	Lu	175		96.5			
	Tl	205	98.781				
	Pb	208	105.579				
	Bi	209					
	Th	232	96.636				
	U	238	103.210				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 08:14:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091206\QC Std 7.539

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.004	ug/L	60.433	81	0.000
	Be	9	0.004	ug/L	351.069	22	0.000
	B	11	-0.467	ug/L	94.610	2522	-0.000
	Na	23	-1.472	ug/L	233.493	78221	-0.007
	Mg	24	-0.194	ug/L	318.809	6668	-0.001
	Al	27	0.975	ug/L	63.669	17678	0.005
	P	31	-2.575	ug/L	70.185	9423	-0.001
	K	39	-9.586	ug/L	63.818	524824	-0.061
	Ca	43	-1.463	ug/L	86.613	332	-0.000
>	Sc	45		ug/L		993576	993575.996
	Ti	47	0.112	ug/L	7.305	499	0.000
	V	51	-0.054	ug/L	558.394	10049	-0.000
	Cr	52	0.014	ug/L	201.456	-1643	0.000
	Cr	53		ug/L		98136	-0.004
	Mn	55	-0.006	ug/L	22.812	1315	-0.000
	Fe	57	1.409	ug/L	13.531	6195	0.000
	Co	59	0.004	ug/L	43.046	259	0.000
	Ni	60	0.006	ug/L	55.466	162	0.000
	Cu	63		ug/L		5117	0.005
	Cu	65	0.006	ug/L	48.462	131	0.000
	Zn	66	0.026	ug/L	24.827	509	0.000
	Zn	67		ug/L		14769	-0.001
	Zn	68		ug/L		1920	0.000
>	Ge	74		ug/L		526522	526522.004
	As	75	-0.247	ug/L	10.852	-286	-0.001
	Se	77		ug/L		5383	-0.001
	Se	82	-0.118	ug/L	54.494	-16	-0.000
	Kr	83		ug/L		125	0.000
	Sr	88	0.002	ug/L	119.738	576	0.000
	Y	89		ug/L		78	0.000
	Mo	98	0.074	ug/L	45.123	518	0.001
	Ag	107	0.004	ug/L	26.773	149	0.000
	Cd	111	0.001	ug/L	721.388	63	0.000
	Cd	114		ug/L		113	0.000
>	In	115		ug/L		351594	351594.126
	Sn	120	0.263	ug/L	25.406	2791	0.005
	Sb	121	0.922	ug/L	34.052	6523	0.015
	Sb	123		ug/L		5225	0.012
	Ba	135		ug/L		61	-0.000
	Ba	137	-0.003	ug/L	138.019	99	-0.000
	Ho	165		ug/L		51	-0.000
>	Lu	175		ug/L		521644	521643.732
	Tl	205	0.537	ug/L	24.410	12595	0.018
	Pb	208	0.007	ug/L	30.423	1756	0.000
	Bi	209		ug/L		125	-0.000
	Th	232	0.583	ug/L	31.438	24470	0.035
	U	238	0.018	ug/L	21.640	1602	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 08, 2009 12:14:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1420
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	7284.7	7284.658	173.033	2.4
	Mg	24.0	60061.7	60061.712	2059.059	3.4
	Co	58.9	158942.6	158942.583	1686.378	1.1
	Rh	102.9	311119.2	311119.217	1716.347	0.6
	In	114.9	405143.7	405143.712	1793.513	0.4
	Pb	208.0	250960.4	250960.382	2944.999	1.2
⌈>	Ba	137.9	382380.2	382380.208	5414.019	1.4
⌊	Ba++	69.0	8329.3	0.022	0.000	1.4
⌈>	Ce	139.9	466717.1	466717.070	5925.086	1.3
⌊	CeO	155.9	12652.4	0.027	0.000	1.6
	Bkgd	220.0	22.6	22.600	3.209	14.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.8	7387.6
Co	59	15	6.8	162601.5
In	115	15	7.5	393283.0

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2060	0.660
Be	9.0	9.0	2042	2070	0.677
Mg	24.0	24.0	5679	2080	0.685
Mg	25.0	25.0	5919	2075	0.643
Mg	26.0	26.0	6187	2070	0.701
Co	58.9	58.9	14182	2110	0.663
Rh	102.9	102.9	24876	2160	0.666
In	114.9	114.9	27790	2180	0.661
Ce	139.9	139.9	33862	2195	0.685
Pb	206.0	206.0	49948	2290	0.674
Pb	207.0	207.0	50147	2260	0.631
Pb	208.0	208.0	50451	2280	0.677
U	238.1	238.1	57727	2285	0.720

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, December 09, 2009 07:33:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\Blank.329

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		294156	
	Sb	121		ug/L		1014	
	Sb	123		ug/L		817	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115					
|	Sb	121					
[	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, December 09, 2009 07:35:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.330

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		272557	272556.690
	Sb	121	**10.000**	ug/L	13.834	46406	0.168
	Sb	123		ug/L		36390	0.132

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115					
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, December 09, 2009 07:37:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.331

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		261335	261335.281
	Sb	121	100.062	ug/L	11.803	466869	1.792
	Sb	123		ug/L		371250	1.425

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115					
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, December 09, 2009 07:40:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.332

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		261661	261660.765
	Sb	121	51.835	ug/L	11.676	242581	0.928
	Sb	123		ug/L		193298	0.740

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	In	115		89.0			
|	Sb	121	103.671				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, December 09, 2009 07:42:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.333

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		248782	248781.897
	Sb	121	**0.261**	ug/L	17.377	2011	0.005
	Sb	123		ug/L		1632	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		84.6			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, December 09, 2009 07:44:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.334

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		250837	250837.216
	Sb	121	2.767	ug/L	10.819	13256	0.050
	Sb	123		ug/L		10454	0.039

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	In	115		85.3			
|	Sb	121	92.226				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, December 09, 2009 07:47:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.335

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		302040	302040.402
|	Sb	121	**0.139**	ug/L	28.147	1785	0.002
⌊	Sb	123		ug/L		1450	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		102.7			
	Sb	121	138.885				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, December 09, 2009 07:49:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.336

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		313048	313047.568
	Sb	121	**21.286**	ug/L	10.817	120003	0.381
	Sb	123		ug/L		96085	0.305

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		106.4			
	Sb	121	105.899				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 09, 2009 07:51:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.337

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		301341	301340.990
	Sb	121	50.612	ug/L	13.923	272300	0.906
	Sb	123		ug/L		218561	0.727

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		102.4			
	Sb	121	101.223				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 09, 2009 07:54:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.338

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		272691	272690.503
	Sb	121	0.103	ug/L	21.936	1439	0.002
	Sb	123		ug/L		1164	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		92.7			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985732
Sample Date/Time: Wednesday, December 09, 2009 07:56:28
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\1201985732.339

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		254868	254868.137
|	Sb	121	**0.116**	ug/L	27.608	1403	0.002
⌊	Sb	123		ug/L		1110	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		86.6			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985733
Sample Date/Time: Wednesday, December 09, 2009 07:58:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\1201985733.340

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		250029	250028.567
	Sb	121	**55.144**	ug/L	12.674	246337	0.987
	Sb	123		ug/L		197003	0.790

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		85.0			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835001
Sample Date/Time: Wednesday, December 09, 2009 08:01:16
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\241835001.341

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		243979	243978.693
	Sb	121	0.022	ug/L	79.711	935	0.000
	Sb	123		ug/L		729	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		82.9			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835002
Sample Date/Time: Wednesday, December 09, 2009 08:03:38
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\241835002.342

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		242012	242011.558
	Sb	121	-0.013	ug/L	175.722	773	-0.000
	Sb	123		ug/L		626	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		82.3			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 08:05:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.343

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		254872	254872.083
	Sb	121	50.311	ug/L	13.828	228993	0.901
	Sb	123		ug/L		183189	0.720

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		86.6			
	Sb	121	100.622				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 08:08:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.344

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		238907	238906.683
|	Sb	121	0.073	ug/L	49.073	1126	0.001
⌊	Sb	123		ug/L		939	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		81.2			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835003
Sample Date/Time: Wednesday, December 09, 2009 08:10:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\241835003.345

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		**ug/L**		212434	212433.886
	Sb	121	**0.104**	**ug/L**	59.970	1098	0.002
	Sb	123		**ug/L**		823	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		72.2			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985734
Sample Date/Time: Wednesday, December 09, 2009 08:13:03
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\1201985734.346

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		241181	241180.981
	Sb	121	0.013	ug/L	209.957	884	0.000
	Sb	123		ug/L		651	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		82.0			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985735
Sample Date/Time: Wednesday, December 09, 2009 08:15:26
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\1201985735.347

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		246469	246468.861
	Sb	121	**213.179**	ug/L	12.164	936839	3.817
	Sb	123		ug/L		744292	3.028

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		83.8			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985736
Sample Date/Time: Wednesday, December 09, 2009 08:17:50
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928653|5|ba|
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\1201985736.348

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		242414	242414.462
	Sb	121	-0.067	ug/L	10.298	544	-0.001
	Sb	123		ug/L		425	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		82.4			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, December 09, 2009 08:20:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.349

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		256511	256511.452
|	Sb	121	51.684	ug/L	15.293	236116	0.926
⌊	Sb	123		ug/L		185021	0.725

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		87.2			
	Sb	121	103.368				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, December 09, 2009 08:22:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.350

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		244560	244560.474
	Sb	121	0.059	ug/L	62.522	1097	0.001
	Sb	123		ug/L		875	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		83.1			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835004
Sample Date/Time: Wednesday, December 09, 2009 08:24:55
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\241835004.351

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		244057	244056.556
	Sb	121	0.027	ug/L	56.311	956	0.000
	Sb	123		ug/L		805	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		83.0			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835005
Sample Date/Time: Wednesday, December 09, 2009 08:27:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\241835005.352

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		245273	245273.432
	Sb	121	-0.016	ug/L	119.953	774	-0.000
	Sb	123		ug/L		626	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		83.4			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241835006
Sample Date/Time: Wednesday, December 09, 2009 08:29:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928653|1|baj
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\241835006.353

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		248275	248275.042
	Sb	121	-0.034	ug/L	57.734	701	-0.001
	Sb	123		ug/L		552	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		84.4			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 09, 2009 08:32:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.354

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		**ug/L**		265318	265317.530
	Sb	121	**51.232**	**ug/L**	12.661	242675	0.917
	Sb	123		**ug/L**		192157	0.726

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	In	115		90.2			
|	Sb	121	102.464				
⌊	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 09, 2009 08:34:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.355

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		257771	257770.650
	Sb	121	0.066	ug/L	35.206	1189	0.001
	Sb	123		ug/L		931	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		87.6			
	Sb	121					
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Analysis Begun

Logged In Analyst: Administrator
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\120809W1.SIF
Batch ID:
Results Data Set: 100809W4
Results Library: C:\data-AA\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank
Date Collected: 12/8/2009 09:51:17
Analyst:
Data Type: Original

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0021	0.0004	09:52:17	Yes
2		[0.00]	0.0003	0.0001	0.0003	09:52:52	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0001				
%RSD:		0.00	34.40				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: S0.2
Date Collected: 12/8/2009 09:53:10
Analyst:
Data Type: Original

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0029	0.0136	0.0032	09:54:11	Yes
2		[0.2]	0.0028	0.0136	0.0032	09:54:46	Yes
Mean:		[0.2]	0.0028				
SD:		0.0	0.0000				
%RSD:		0.0	0.41				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01424 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: S0.5
Date Collected: 12/8/2009 09:55:05
Analyst:
Data Type: Original

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0067	0.0304	0.0070	09:56:06	Yes
2		[0.5]	0.0067	0.0305	0.0070	09:56:41	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.27				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999513 Slope: 0.01328 Intercept: 0.00007

Sequence No.: 4
Autosampler Location: 4
Sample ID: S2.0
Date Collected: 12/8/2009 09:57:00
Analyst:
Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[2.0]	0.0231	0.1034	0.0234	09:58:02	Yes
2	[2.0]	0.0232	0.1045	0.0236	09:58:37	Yes
Mean:	[2.0]	0.0232				
SD:	0.0	0.0001				
%RSD:	0.0	0.47				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999245 Slope: 0.01141 Intercept: 0.00046

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/8/2009 09:58:57**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0650	0.2803	0.0653	09:59:59	Yes
2		[5.0]	0.0648	0.2800	0.0651	10:00:33	Yes
Mean:		[5.0]	0.0649				
SD:		0.0	0.0001				
%RSD:		0.0	0.22				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.998857 Slope: 0.01287 Intercept: -0.00032

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/8/2009 10:00:54**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1157	0.5157	0.1161	10:01:54	Yes
2		[10.0]	0.1154	0.5121	0.1157	10:02:29	Yes
Mean:		[10.0]	0.1155				
SD:		0.0	0.0002				
%RSD:		0.0	0.21				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.998206 Slope: 0.01170 Intercept: 0.00101

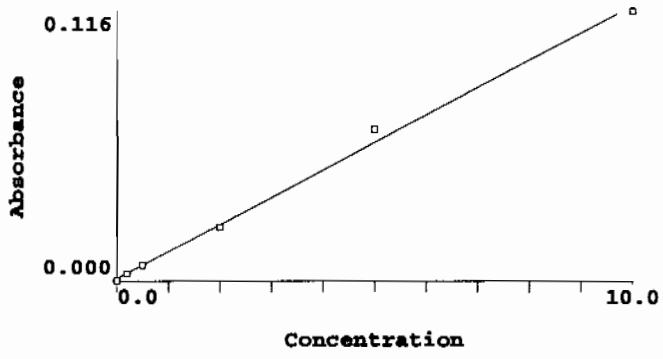

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.087	0.00	34.4
S0.2	0.0028	0.2	0.157	0.00	0.4
S0.5	0.0067	0.5	0.483	0.00	0.3
S2.0	0.0232	2.0	1.893	0.00	0.5
S5.0	0.0649	5.0	5.462	0.00	0.2
S10.0	0.1155	10.0	9.792	0.00	0.2

Correlation Coef.: 0.998206 Slope: 0.01170 Intercept: 0.00101

Sequence No.: 7
Sample ID: ICV
Analyst:

Autosampler Location: 9
Date Collected: 12/8/2009 10:02:47
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.908	4.908	0.0584	0.2621	0.0588	10:03:49	Yes
2	4.889	4.889	0.0582	0.2585	0.0585	10:04:23	Yes
Mean:	4.898	4.898	0.0583				
SD:	0.013	0.013	0.0002				
%RSD:	0.274	0.274	0.27				

QC value within limits for Hg 253.7 Recovery = 97.96%
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICB
Analyst:

Autosampler Location: 10
Date Collected: 12/8/2009 10:04:43
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.078	-0.078	0.0001	0.0028	0.0004	10:05:44	Yes
2	-0.085	-0.085	0.0000	0.0013	0.0004	10:06:19	Yes
Mean:	-0.082	-0.082	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	6.033	6.033	96.64				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CRDL
Analyst:

Autosampler Location: 11
Date Collected: 12/8/2009 10:06:39
Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0028	0.0141	0.0031	10:07:40	Yes
2	0.178	0.178	0.0031	0.0145	0.0034	10:08:15	Yes
Mean:	0.164	0.164	0.0029				
SD:	0.020	0.020	0.0002				
%RSD:	11.93	11.93	7.81				

QC value within limits for Hg 253.7 Recovery = 82.25%
All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 12/8/2009 10:08:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.017	5.017	0.0597	0.2649	0.0600	10:09:35	Yes
2	4.963	4.963	0.0591	0.2620	0.0594	10:10:10	Yes
Mean:	4.990	4.990	0.0594				
SD:	0.038	0.038	0.0004				
%RSD:	0.766	0.766	0.75				

QC value within limits for Hg 253.7 Recovery = 99.79%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 12/8/2009 10:10:29
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.079	-0.079	0.0001	0.0015	0.0004	10:11:30	Yes
2	-0.074	-0.074	0.0001	0.0018	0.0005	10:12:05	Yes
Mean:	-0.077	-0.077	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.972	3.972	30.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 1201986021|928785|1 **Date Collected: 12/8/2009 10:12:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986021|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0001	0.0007	0.0003	10:13:27	Yes
2	-0.091	-0.091	-0.0000	0.0008	0.0003	10:14:01	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.191	1.191	21.88				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 1201986022|928785|1 **Date Collected: 12/8/2009 10:14:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986022|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.979	1.979	0.0242	0.1085	0.0245	10:15:24	Yes
2	1.990	1.990	0.0243	0.1086	0.0246	10:15:58	Yes
Mean:	1.985	1.985	0.0242				
SD:	0.008	0.008	0.0001				
%RSD:	0.401	0.401	0.38				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 241837002|928785|1 **Date Collected: 12/8/2009 10:16:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241837002|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0000	0.0009	0.0003	10:17:19	Yes
2	-0.085	-0.085	0.0000	0.0015	0.0004	10:17:54	Yes
Mean:	-0.087	-0.087	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.672	2.672	>999.9%				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 1201986023|928785|1 **Date Collected: 12/8/2009 10:18:13**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201986023|928785|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.088	-0.088	-0.0000	0.0011	0.0003	10:19:13	Yes
2	-0.083	-0.083	0.0000	0.0017	0.0004	10:19:49	Yes
Mean:	-0.086	-0.086	0.0000				
SD:	0.004	0.004	0.0000				

1	-0.082	-0.082	0.0001	0.0017	0.0004	10:28:47	Yes
2	-0.112	-0.112	-0.0003	-0.0036	0.0000	10:29:22	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.021	0.021	0.0002				
%RSD:	21.75	21.75	199.27				

==========

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 241842007|928788|1 **Date Collected: 12/8/2009 10:29:41**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241842007|928788|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0008	0.0002	10:30:42	Yes
2	-0.095	-0.095	-0.0001	0.0009	0.0003	10:31:17	Yes
Mean:	-0.095	-0.095	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.401	0.401	4.72				

==========

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 10:31:37**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.999	4.999	0.0595	0.2653	0.0598	10:32:37	Yes
2	4.964	4.964	0.0591	0.2626	0.0594	10:33:12	Yes
Mean:	4.981	4.981	0.0593				
SD:	0.025	0.025	0.0003				
%RSD:	0.505	0.505	0.50				

QC value within limits for Hg 253.7 Recovery = 99.63%
All analyte(s) passed QC.

==========

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:33:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.069	-0.069	0.0002	0.0021	0.0005	10:34:32	Yes
2	-0.067	-0.067	0.0002	0.0021	0.0006	10:35:07	Yes
Mean:	-0.068	-0.068	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	2.056	2.056	7.55				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 241842011|928788|1 **Date Collected: 12/8/2009 10:35:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241842011|928788|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0012	0.0068	0.0015	10:36:27	Yes
2	0.017	0.017	0.0012	0.0069	0.0016	10:37:03	Yes
Mean:	0.015	0.015	0.0012				
SD:	0.003	0.003	0.0000				
%RSD:	16.97	16.97	2.52				

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SD:	0.001	0.001	0.0000
%RSD:	0.597	0.597	7.43

Sequence No.: 30
Sample ID: 1201988770|929941|1
Analyst: JXL1
Autosampler Location: 28
Date Collected: 12/8/2009 10:47:04
Data Type: Original

Replicate Data: 1201988770|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0001	0.0010	0.0003	10:48:04	Yes
2	-0.090	-0.090	-0.0000	0.0015	0.0003	10:48:39	Yes
Mean:	-0.091	-0.091	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.150	2.150	42.41				

Sequence No.: 31
Sample ID: 1201988771|929941|1
Analyst: JXL1
Autosampler Location: 29
Date Collected: 12/8/2009 10:48:58
Data Type: Original

Replicate Data: 1201988771|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.983	1.983	0.0242	0.1076	0.0245	10:49:59	Yes
2	1.972	1.972	0.0241	0.1073	0.0244	10:50:34	Yes
Mean:	1.977	1.977	0.0241				
SD:	0.008	0.008	0.0001				
%RSD:	0.398	0.398	0.38				

Sequence No.: 32
Sample ID: 242276001|929941|1
Analyst: JXL1
Autosampler Location: 30
Date Collected: 12/8/2009 10:50:53
Data Type: Original

Replicate Data: 242276001|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0005	0.0002	10:51:54	Yes
2	-0.094	-0.094	-0.0001	0.0011	0.0003	10:52:29	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	3.765	3.765	35.93				

Sequence No.: 33
Sample ID: 1201988772|929941|1
Analyst: JXL1
Autosampler Location: 31
Date Collected: 12/8/2009 10:52:48
Data Type: Original

Replicate Data: 1201988772|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0013	0.0002	10:53:48	Yes
2	-0.096	-0.096	-0.0001	0.0009	0.0002	10:54:23	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.089	0.089	0.93				

Sequence No.: 34
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/8/2009 10:54:43
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.974	4.974	0.0592	0.2626	0.0595	10:55:43	Yes
2	4.983	4.983	0.0593	0.2623	0.0596	10:56:18	Yes
Mean:	4.978	4.978	0.0592				
SD:	0.007	0.007	0.0001				
%RSD:	0.137	0.137	0.13				

QC value within limits for Hg 253.7 Recovery = 99.57%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 10:56:37**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.067	-0.067	0.0002	0.0024	0.0006	10:57:38	Yes
2	-0.069	-0.069	0.0002	0.0022	0.0006	10:58:13	Yes
Mean:	-0.068	-0.068	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.428	1.428	5.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 1201988773|929941|1 **Date Collected: 12/8/2009 10:58:32**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988773|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.000	2.000	0.0244	0.1089	0.0247	10:59:33	Yes
2	1.994	1.994	0.0243	0.1090	0.0247	11:00:08	Yes
Mean:	1.997	1.997	0.0244				
SD:	0.004	0.004	0.0000				
%RSD:	0.209	0.209	0.20				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 1201988774|929941|5 **Date Collected: 12/8/2009 11:00:28**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988774|929941|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0014	0.0002	11:01:29	Yes
2	-0.095	-0.095	-0.0001	0.0008	0.0002	11:02:03	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.698	0.698	7.33				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 242276002|929941|1 **Date Collected: 12/8/2009 11:02:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242276002|929941|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.057	-0.057	0.0003	0.0040	0.0007	11:03:24	Yes
2	-0.094	-0.094	-0.0001	0.0009	0.0003	11:03:59	Yes
Mean:	-0.076	-0.076	0.0001				
SD:	0.026	0.026	0.0003				
%RSD:	34.26	34.26	233.10				

Mean:	1.794	1.794	0.0220
SD:	0.006	0.006	0.0001
%RSD:	0.312	0.312	0.30

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1201987593|929389|5 **Date Collected: 12/8/2009 11:14:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987593|929389|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0008	0.0003	11:15:01	Yes
2	-0.090	-0.090	-0.0000	0.0010	0.0003	11:15:35	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.256	3.256	59.12				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 1201985288|928451|1 **Date Collected: 12/8/2009 11:15:55**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985288|928451|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.084	-0.084	0.0000	0.0015	0.0004	11:16:56	Yes
2	-0.077	-0.077	0.0001	0.0021	0.0005	11:17:31	Yes
Mean:	-0.081	-0.081	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	6.330	6.330	86.01				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 11:17:50**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.953	4.953	0.0589	0.2614	0.0593	11:18:51	Yes
2	4.947	4.947	0.0589	0.2617	0.0592	11:19:26	Yes
Mean:	4.950	4.950	0.0589				
SD:	0.004	0.004	0.0000				
%RSD:	0.085	0.085	0.08				

QC value within limits for Hg 253.7 Recovery = 98.99%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 11:19:45**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0001	-0.0012	0.0003	11:20:46	Yes
2	-0.053	-0.053	0.0004	0.0043	0.0007	11:21:20	Yes
Mean:	-0.073	-0.073	0.0002				
SD:	0.028	0.028	0.0003				
%RSD:	37.89	37.89	194.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 48 **Autosampler Location: 42**
Sample ID: 1201985289|928451|1 **Date Collected: 12/8/2009 11:21:40**

2	-0.084	-0.084	0.0000	0.0019	0.0004	11:40:40	Yes
Mean:	-0.084	-0.084	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.816	0.816	25.85				

==========

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 11:41:00**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.922	4.922	0.0586	0.2622	0.0589	11:42:00	Yes
2	4.913	4.913	0.0585	0.2597	0.0588	11:42:35	Yes
Mean:	4.918	4.918	0.0585				
SD:	0.007	0.007	0.0001				
%RSD:	0.133	0.133	0.13				

QC value within limits for Hg 253.7 Recovery = 98.35%
All analyte(s) passed QC.

==========

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 11:42:54**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0003	0.0028	0.0007	11:43:55	Yes
2	-0.053	-0.053	0.0004	0.0035	0.0007	11:44:30	Yes
Mean:	-0.056	-0.056	0.0004				
SD:	0.004	0.004	0.0001				
%RSD:	7.737	7.737	13.95				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 1201987596|929392|1 **Date Collected: 12/8/2009 11:44:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987596|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0007	0.0002	11:45:50	Yes
2	-0.102	-0.102	-0.0002	0.0006	0.0002	11:46:25	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	1.805	1.805	13.41				

==========

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 1201987599|929392|5 **Date Collected: 12/8/2009 11:46:45**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987599|929392|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.073	-0.073	0.0002	0.0046	0.0005	11:47:46	Yes
2	-0.068	-0.068	0.0002	0.0039	0.0006	11:48:20	Yes
Mean:	-0.070	-0.070	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	4.907	4.907	21.03				

==========

Sequence No.: 62 **Autosampler Location: 54**

%RSD:	0.697	0.697	5.27

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Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 241089015|929392|1 **Date Collected: 12/8/2009 11:58:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089015|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0015	0.0002	11:59:20	Yes
2	-0.097	-0.097	-0.0001	0.0009	0.0002	11:59:55	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.126	1.126	11.70				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241089016|929392|1 **Date Collected: 12/8/2009 12:00:15**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089016|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0008	0.0002	12:01:16	Yes
2	-0.100	-0.100	-0.0002	0.0010	0.0002	12:01:52	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	0.973	0.973	7.14				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 241089017|929392|1 **Date Collected: 12/8/2009 12:02:12**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089017|929392|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0012	0.0002	12:03:14	Yes
2	-0.099	-0.099	-0.0001	0.0009	0.0002	12:03:48	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.564	1.564	13.46				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 12:04:09**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.920	4.920	0.0586	0.2608	0.0589	12:05:09	Yes
2	4.929	4.929	0.0587	0.2616	0.0590	12:05:44	Yes
Mean:	4.925	4.925	0.0586				
SD:	0.006	0.006	0.0001				
%RSD:	0.129	0.129	0.13				

QC value within limits for Hg 253.7 Recovery = 98.50%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:06:03**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	0.0004	0.0038	0.0008	12:07:04	Yes
2	-0.049	-0.049	0.0004	0.0034	0.0008	12:07:39	Yes
Mean:	-0.049	-0.049	0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.062	0.062	0.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 72 **Autosampler Location: 62**
Sample ID: 1201985228|929400|1 **Date Collected: 12/8/2009 12:07:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201985228|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0007	0.0002	12:08:59	Yes
2	-0.096	-0.096	-0.0001	0.0013	0.0002	12:09:34	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.030	3.030	25.19				

==========

Sequence No.: 73 **Autosampler Location: 63**
Sample ID: 1201987600|929400|1 **Date Collected: 12/8/2009 12:09:54**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987600|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0006	0.0002	12:10:55	Yes
2	-0.097	-0.097	-0.0001	0.0011	0.0002	12:11:30	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.028	2.028	17.43				

==========

Sequence No.: 74 **Autosampler Location: 64**
Sample ID: 1201987601|929400|1 **Date Collected: 12/8/2009 12:11:50**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987601|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.905	1.905	0.0233	0.1045	0.0236	12:12:51	Yes
2	1.916	1.916	0.0234	0.1047	0.0238	12:13:27	Yes
Mean:	1.911	1.911	0.0234				
SD:	0.008	0.008	0.0001				
%RSD:	0.403	0.403	0.39				

==========

Sequence No.: 75 **Autosampler Location: 65**
Sample ID: 241089018|929400|1 **Date Collected: 12/8/2009 12:13:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089018|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0001	0.0010	0.0002	12:14:48	Yes
2	-0.098	-0.098	-0.0001	-0.0000	0.0002	12:15:23	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.563	1.563	15.04				

==========

SD:	0.000	0.000	0.0000
%RSD:	0.309	0.309	2.36

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 241089021|929400|1 **Date Collected: 12/8/2009 12:25:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089021|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	12:26:26	Yes
2	-0.099	-0.099	-0.0001	0.0009	0.0002	12:27:00	Yes
Mean:	-0.101	-0.101	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.186	2.186	15.74				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 12:27:20**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.967	4.967	0.0591	0.2642	0.0594	12:28:21	Yes
2	4.936	4.936	0.0588	0.2620	0.0591	12:28:56	Yes
Mean:	4.951	4.951	0.0589				
SD:	0.021	0.021	0.0002				
%RSD:	0.429	0.429	0.42				

QC value within limits for Hg 253.7 Recovery = 99.03%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:29:15**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	0.0006	0.0042	0.0010	12:30:16	Yes
2	-0.036	-0.036	0.0006	0.0041	0.0009	12:30:51	Yes
Mean:	-0.035	-0.035	0.0006				
SD:	0.002	0.002	0.0000				
%RSD:	5.377	5.377	3.59				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 241089022|929400|1 **Date Collected: 12/8/2009 12:31:10**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241089022|929400|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0003	0.0002	12:32:12	Yes
2	-0.102	-0.102	-0.0002	0.0006	0.0002	12:32:46	Yes
Mean:	-0.102	-0.102	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.377	0.377	2.57				

==========

Sequence No.: 85 **Autosampler Location: 73**
Sample ID: 241089023|929400|1 **Date Collected: 12/8/2009 12:33:07**
Analyst: JXL1 **Data Type: Original**

Sequence No.: 90
Sample ID: 1201988783|929949|1
Analyst: JXL1
Autosampler Location: 78
Date Collected: 12/8/2009 12:42:49
Data Type: Original

Replicate Data: 1201988783|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0006	0.0002	12:43:51	Yes
2	-0.099	-0.099	-0.0001	0.0006	0.0002	12:44:26	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.440	1.440	11.01				

Sequence No.: 91
Sample ID: 1201988784|929949|1
Analyst: JXL1
Autosampler Location: 79
Date Collected: 12/8/2009 12:44:46
Data Type: Original

Replicate Data: 1201988784|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.918	1.918	0.0235	0.1063	0.0238	12:45:48	Yes
2	1.934	1.934	0.0236	0.1057	0.0240	12:46:23	Yes
Mean:	1.926	1.926	0.0235				
SD:	0.011	0.011	0.0001				
%RSD:	0.581	0.581	0.56				

Sequence No.: 92
Sample ID: 241087014|929949|1
Analyst: JXL1
Autosampler Location: 80
Date Collected: 12/8/2009 12:46:43
Data Type: Original

Replicate Data: 241087014|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0009	0.0003	12:47:44	Yes
2	-0.098	-0.098	-0.0001	0.0010	0.0002	12:48:19	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.544	2.544	25.85				

Sequence No.: 93
Sample ID: 1201985216|929949|1
Analyst: JXL1
Autosampler Location: 81
Date Collected: 12/8/2009 12:48:39
Data Type: Original

Replicate Data: 1201985216|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.000	1.000	0.0127	0.0577	0.0131	12:49:40	Yes
2	1.001	1.001	0.0127	0.0576	0.0131	12:50:15	Yes
Mean:	1.001	1.001	0.0127				
SD:	0.000	0.000	0.0000				
%RSD:	0.044	0.044	0.04				

Sequence No.: 94
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/8/2009 12:50:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.992	4.992	0.0594	0.2644	0.0597	12:51:36	Yes
2	4.958	4.958	0.0590	0.2616	0.0593	12:52:11	Yes

Mean:	4.975	4.975	0.0592
SD:	0.024	0.024	0.0003
%RSD:	0.486	0.486	0.48

QC value within limits for Hg 253.7 Recovery = 99.50%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 12:52:30**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0005	0.0034	0.0009	12:53:31	Yes
2	-0.037	-0.037	0.0006	0.0043	0.0009	12:54:06	Yes
Mean:	-0.040	-0.040	0.0006				
SD:	0.003	0.003	0.0000				
%RSD:	7.817	7.817	6.57				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 1201988785|929949|1 **Date Collected: 12/8/2009 12:54:25**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988785|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0004	0.0002	12:55:27	Yes
2	-0.099	-0.099	-0.0001	0.0006	0.0002	12:56:02	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.119	1.119	8.47				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 1201988787|929949|5 **Date Collected: 12/8/2009 12:56:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988787|929949|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0005	0.0002	12:57:23	Yes
2	-0.099	-0.099	-0.0001	0.0007	0.0002	12:57:58	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.678	0.678	5.35				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 241087015|929949|1 **Date Collected: 12/8/2009 12:58:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241087015|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0006	0.0002	12:59:20	Yes
2	-0.099	-0.099	-0.0001	0.0005	0.0002	12:59:55	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.431	0.431	3.30				

Sequence No.: 99 **Autosampler Location: 85**
Sample ID: 241087016|929949|1 **Date Collected: 12/8/2009 13:00:15**

Sequence No.: 104 Autosampler Location: 90
Sample ID: 241087021|929949|1 Date Collected: 12/8/2009 13:10:00
Analyst: JXL1 Data Type: Original

Replicate Data: 241087021|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0010	0.0002	13:11:01	Yes
2	-0.101	-0.101	-0.0002	0.0005	0.0002	13:11:36	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.974	2.974	23.41				

Sequence No.: 105 Autosampler Location: 91
Sample ID: 241087022|929949|1 Date Collected: 12/8/2009 13:11:56
Analyst: JXL1 Data Type: Original

Replicate Data: 241087022|929949|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0010	0.0002	13:12:58	Yes
2	-0.098	-0.098	-0.0001	0.0009	0.0002	13:13:33	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.266	2.266	21.61				

Sequence No.: 106 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/8/2009 13:13:53
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.939	4.939	0.0588	0.2596	0.0591	13:14:53	Yes
2	4.859	4.859	0.0578	0.2573	0.0582	13:15:28	Yes
Mean:	4.899	4.899	0.0583				
SD:	0.056	0.056	0.0007				
%RSD:	1.153	1.153	1.13				

QC value within limits for Hg 253.7 Recovery = 97.99%
All analyte(s) passed QC.

Sequence No.: 107 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/8/2009 13:15:47
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0006	0.0038	0.0009	13:16:48	Yes
2	-0.041	-0.041	0.0005	0.0037	0.0009	13:17:23	Yes
Mean:	-0.040	-0.040	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	3.294	3.294	2.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 108 Autosampler Location: 92
Sample ID: 241087023|929949|1 Date Collected: 12/8/2009 13:17:42
Analyst: JXL1 Data Type: Original

%RSD: 1.025 1.025 8.78

==========

Sequence No.: 118 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/8/2009 13:37:13**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.987	4.987	0.0593	0.2617	0.0597	13:38:14	Yes
2	5.002	5.002	0.0595	0.2611	0.0599	13:38:48	Yes
Mean:	4.995	4.995	0.0594				
SD:	0.011	0.011	0.0001				
%RSD:	0.219	0.219	0.22				

QC value within limits for Hg 253.7 Recovery = 99.89%
All analyte(s) passed QC.

==========

Sequence No.: 119 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/8/2009 13:39:07**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.076	-0.076	0.0001	0.0018	0.0005	13:40:08	Yes
2	-0.073	-0.073	0.0002	0.0024	0.0005	13:40:43	Yes
Mean:	-0.075	-0.075	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.229	2.229	13.71				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 120 **Autosampler Location: 102**
Sample ID: 1201978981|925641|1 **Date Collected: 12/8/2009 13:41:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978981|925641|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.889	1.889	0.0231	0.1042	0.0235	13:42:04	Yes
2	1.888	1.888	0.0231	0.1039	0.0234	13:42:39	Yes
Mean:	1.888	1.888	0.0231				
SD:	0.001	0.001	0.0000				
%RSD:	0.055	0.055	0.05				

==========

Sequence No.: 121 **Autosampler Location: 103**
Sample ID: 1201978982|925641|5 **Date Collected: 12/8/2009 13:42:59**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201978982|925641|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0002	0.0004	0.0002	13:44:01	Yes
2	-0.098	-0.098	-0.0001	0.0007	0.0002	13:44:36	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	2.523	2.523	19.36				

==========

Sequence No.: 122 **Autosampler Location: 104**
Sample ID: 241614002|925641|1 **Date Collected: 12/8/2009 13:44:56**
Analyst: JXL1 **Data Type: Original**

Sequence No.: 127
Sample ID: 241713001|926820|1
Analyst: JXL1
Autosampler Location: 109
Date Collected: 12/8/2009 13:54:43
Data Type: Original

Replicate Data: 241713001|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0008	0.0002	13:55:45	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	13:56:20	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.082	1.082	8.50				

Sequence No.: 128
Sample ID: 1201981602|926820|1
Analyst: JXL1
Autosampler Location: 110
Date Collected: 12/8/2009 13:56:40
Data Type: Original

Replicate Data: 1201981602|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0006	0.0002	13:57:43	Yes
2	-0.097	-0.097	-0.0001	0.0010	0.0002	13:58:17	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.655	2.655	21.44				

Sequence No.: 129
Sample ID: 1201981603|926820|1
Analyst: JXL1
Autosampler Location: 111
Date Collected: 12/8/2009 13:58:38
Data Type: Original

Replicate Data: 1201981603|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.897	1.897	0.0232	0.1055	0.0235	13:59:40	Yes
2	1.900	1.900	0.0232	0.1056	0.0236	14:00:15	Yes
Mean:	1.898	1.898	0.0232				
SD:	0.002	0.002	0.0000				
%RSD:	0.090	0.090	0.09				

Sequence No.: 130
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/8/2009 14:00:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.027	5.027	0.0598	0.2648	0.0601	14:01:36	Yes
2	4.978	4.978	0.0592	0.2637	0.0596	14:02:12	Yes
Mean:	5.003	5.003	0.0595				
SD:	0.034	0.034	0.0004				
%RSD:	0.681	0.681	0.67				

QC value within limits for Hg 253.7 Recovery = 100.05%
All analyte(s) passed QC.

Sequence No.: 131
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/8/2009 14:02:31
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.072	-0.072	0.0002	0.0024	0.0005	14:03:31	Yes

2	-0.069	-0.069	0.0002	0.0029	0.0005	14:04:06	Yes
Mean:	-0.070	-0.070	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.444	2.444	10.56				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 132 **Autosampler Location: 112**
Sample ID: 1201981607|926820|5 **Date Collected: 12/8/2009 14:04:26**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981607|926820|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0007	0.0002	14:05:28	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	14:06:02	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.263	0.263	2.00				

==========

Sequence No.: 133 **Autosampler Location: 113**
Sample ID: 241713002|926820|1 **Date Collected: 12/8/2009 14:06:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241713002|926820|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0001	0.0008	0.0002	14:07:25	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	14:08:00	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.492	1.492	12.03				

==========

Sequence No.: 134 **Autosampler Location: 114**
Sample ID: 1201984328|928040|1 **Date Collected: 12/8/2009 14:08:21**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984328|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0007	0.0002	14:09:23	Yes
2	-0.097	-0.097	-0.0001	0.0008	0.0002	14:09:58	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.134	1.134	9.97				

==========

Sequence No.: 135 **Autosampler Location: 115**
Sample ID: 1201984329|928040|1 **Date Collected: 12/8/2009 14:10:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984329|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.894	1.894	0.0232	0.1045	0.0235	14:11:20	Yes
2	1.896	1.896	0.0232	0.1046	0.0235	14:11:56	Yes
Mean:	1.895	1.895	0.0232				
SD:	0.001	0.001	0.0000				
%RSD:	0.063	0.063	0.06				

==========

Sequence No.: 136 **Autosampler Location: 116**
Sample ID: 241835001|928040|1 **Date Collected: 12/8/2009 14:12:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241835001|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0007	0.0002	14:13:19	Yes
2	-0.097	-0.097	-0.0001	0.0010	0.0002	14:13:54	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.018	0.018	0.17				

Sequence No.: 137 Autosampler Location: 117
Sample ID: 241835002|928040|1 Date Collected: 12/8/2009 14:14:15
Analyst: JXL1 Data Type: Original

Replicate Data: 241835002|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0001	0.0012	0.0002	14:15:17	Yes
2	-0.098	-0.098	-0.0001	0.0011	0.0002	14:15:52	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.950	0.950	8.63				

Sequence No.: 138 Autosampler Location: 118
Sample ID: 241835003|928040|1 Date Collected: 12/8/2009 14:16:12
Analyst: JXL1 Data Type: Original

Replicate Data: 241835003|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0001	0.0010	0.0002	14:17:14	Yes
2	-0.089	-0.089	-0.0000	0.0015	0.0003	14:17:50	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	5.107	5.107	91.93				

Sequence No.: 139 Autosampler Location: 119
Sample ID: 241835004|928040|1 Date Collected: 12/8/2009 14:18:10
Analyst: JXL1 Data Type: Original

Replicate Data: 241835004|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0008	0.0003	14:19:12	Yes
2	-0.091	-0.091	-0.0001	0.0012	0.0003	14:19:47	Yes
Mean:	-0.092	-0.092	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.817	1.817	29.73				

Sequence No.: 140 Autosampler Location: 120
Sample ID: 241835005|928040|1 Date Collected: 12/8/2009 14:20:08
Analyst: JXL1 Data Type: Original

Replicate Data: 241835005|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0007	0.0002	14:21:10	Yes
2	-0.101	-0.101	-0.0002	0.0005	0.0002	14:21:45	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	0.605	0.605	4.43				

Sequence No.: 141
Sample ID: 241835006|928040|1
Analyst: JXL1

Autosampler Location: 121
Date Collected: 12/8/2009 14:22:06
Data Type: Original

Replicate Data: 241835006|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0001	0.0009	0.0002	14:23:08	Yes
2	-0.098	-0.098	-0.0001	0.0009	0.0002	14:23:43	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.783	0.783	6.32				

Sequence No.: 142
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 12/8/2009 14:24:03
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.026	5.026	0.0598	0.2669	0.0601	14:25:04	Yes
2	5.006	5.006	0.0596	0.2658	0.0599	14:25:39	Yes
Mean:	5.016	5.016	0.0597				
SD:	0.014	0.014	0.0002				
%RSD:	0.285	0.285	0.28				

QC value within limits for Hg 253.7 Recovery = 100.32%
All analyte(s) passed QC.

Sequence No.: 143
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 12/8/2009 14:25:58
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.074	-0.074	0.0001	0.0018	0.0005	14:26:59	Yes
2	-0.075	-0.075	0.0001	0.0018	0.0005	14:27:33	Yes
Mean:	-0.075	-0.075	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.007	1.007	6.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 144
Sample ID: 241902001|928040|1
Analyst: JXL1

Autosampler Location: 122
Date Collected: 12/8/2009 14:27:53
Data Type: Original

Replicate Data: 241902001|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0001	0.0009	0.0002	14:28:55	Yes
2	-0.095	-0.095	-0.0001	0.0011	0.0002	14:29:30	Yes
Mean:	-0.097	-0.097	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	1.643	1.643	16.07				

Sequence No.: 145
Sample ID: 241902002|928040|1
Analyst: JXL1

Autosampler Location: 123
Date Collected: 12/8/2009 14:29:50
Data Type: Original

Replicate Data: 241902002|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0009	0.0002	14:30:53	Yes
2	-0.101	-0.101	-0.0002	0.0008	0.0002	14:31:28	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.441	1.441	10.98				

==========

Sequence No.: 146 **Autosampler Location: 124**
Sample ID: 241917001|928040|1 **Date Collected: 12/8/2009 14:31:48**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241917001|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0006	0.0002	14:32:51	Yes
2	-0.096	-0.096	-0.0001	0.0010	0.0002	14:33:25	Yes
Mean:	-0.098	-0.098	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.635	2.635	22.36				

==========

Sequence No.: 147 **Autosampler Location: 125**
Sample ID: 241923001|928040|1 **Date Collected: 12/8/2009 14:33:46**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241923001|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	0.0008	0.0002	14:34:48	Yes
2	-0.100	-0.100	-0.0002	0.0006	0.0002	14:35:24	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.311	0.311	2.39				

==========

Sequence No.: 148 **Autosampler Location: 126**
Sample ID: 1201984330|928040|1 **Date Collected: 12/8/2009 14:35:45**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984330|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0001	0.0009	0.0002	14:36:47	Yes
2	-0.100	-0.100	-0.0002	0.0008	0.0002	14:37:22	Yes
Mean:	-0.099	-0.099	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.015	1.015	8.16				

==========

Sequence No.: 149 **Autosampler Location: 127**
Sample ID: 1201984331|928040|1 **Date Collected: 12/8/2009 14:37:42**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984331|928040|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.903	1.903	0.0233	0.1066	0.0236	14:38:45	Yes
2	1.878	1.878	0.0230	0.1052	0.0233	14:39:19	Yes
Mean:	1.890	1.890	0.0231				
SD:	0.017	0.017	0.0002				
%RSD:	0.911	0.911	0.87				

==========

Sequence No.: 150 **Autosampler Location: 128**
Sample ID: 1201984333|928040|5 **Date Collected: 12/8/2009 14:39:40**

Analyst: JXL1 Data Type: Original

Replicate Data: 1201984333|928040|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0001	0.0007	0.0002	14:40:43	Yes
2	-0.101	-0.101	-0.0002	0.0009	0.0002	14:41:17	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.293	1.293	9.46				

Sequence No.: 151 Autosampler Location: 129
Sample ID: 1201987626|929411|1 Date Collected: 12/8/2009 14:41:38
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987626|929411|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0002	0.0005	0.0002	14:42:40	Yes
2	-0.103	-0.103	-0.0002	0.0002	0.0001	14:43:15	Yes
Mean:	-0.102	-0.102	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.399	1.399	9.11				

Sequence No.: 152 Autosampler Location: 130
Sample ID: 1201987627|929411|1 Date Collected: 12/8/2009 14:43:36
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987627|929411|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.898	1.898	0.0232	0.1053	0.0236	14:44:38	Yes
2	1.883	1.883	0.0230	0.1040	0.0234	14:45:13	Yes
Mean:	1.891	1.891	0.0231				
SD:	0.011	0.011	0.0001				
%RSD:	0.583	0.583	0.56				

Sequence No.: 153 Autosampler Location: 131
Sample ID: 242200002|929411|1 Date Collected: 12/8/2009 14:45:34
Analyst: JXL1 Data Type: Original

Replicate Data: 242200002|929411|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0005	0.0002	14:46:36	Yes
2	-0.101	-0.101	-0.0002	0.0005	0.0002	14:47:11	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	0.700	0.700	5.23				

Sequence No.: 154 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/8/2009 14:47:32
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.981	4.981	0.0593	0.2648	0.0596	14:48:32	Yes
2	4.960	4.960	0.0590	0.2625	0.0594	14:49:06	Yes
Mean:	4.971	4.971	0.0592				
SD:	0.015	0.015	0.0002				
%RSD:	0.306	0.306	0.30				

QC value within limits for Hg 253.7 Recovery = 99.41%
All analyte(s) passed QC.

Sequence No.: 155
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/8/2009 14:49:26
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.074	-0.074	0.0002	0.0020	0.0005	14:50:26	Yes
2	-0.078	-0.078	0.0001	0.0016	0.0004	14:51:01	Yes
Mean:	-0.076	-0.076	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	3.606	3.606	24.71				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 156
Sample ID: 1201987628|929411|1
Analyst: JXL1
Autosampler Location: 132
Date Collected: 12/8/2009 14:51:21
Data Type: Original

Replicate Data: 1201987628|929411|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0001	0.0010	0.0003	14:52:23	Yes
2	-0.097	-0.097	-0.0001	0.0006	0.0002	14:52:58	Yes
Mean:	-0.095	-0.095	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.477	2.477	27.01				

Sequence No.: 157
Sample ID: 1201987629|929411|1
Analyst: JXL1
Autosampler Location: 133
Date Collected: 12/8/2009 14:53:18
Data Type: Original

Replicate Data: 1201987629|929411|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.841	1.841	0.0225	0.1040	0.0229	14:54:21	Yes
2	1.833	1.833	0.0225	0.1018	0.0228	14:54:55	Yes
Mean:	1.837	1.837	0.0225				
SD:	0.005	0.005	0.0001				
%RSD:	0.298	0.298	0.28				

Sequence No.: 158
Sample ID: 1201987630|929411|5
Analyst: JXL1
Autosampler Location: 134
Date Collected: 12/8/2009 14:55:16
Data Type: Original

Replicate Data: 1201987630|929411|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0002	0.0005	0.0002	14:56:18	Yes
2	-0.101	-0.101	-0.0002	0.0004	0.0002	14:56:54	Yes
Mean:	-0.100	-0.100	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.037	1.037	7.60				

Sequence No.: 159
Sample ID: 1201986511|929414|1
Analyst: JXL1
Autosampler Location: 135
Date Collected: 12/8/2009 14:57:15
Data Type: Original

Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 928039

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201984329	WHG091207-13	.2	mL
MS	1201984331	WHG091207-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201984328		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
LCS	1201984329		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241835001		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241835002		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241835003		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241835004		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241835005		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241835006		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241902001		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241902002		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241917001		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	241923001		SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
DUP	1201984330	241923001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
MS	1201984331	241923001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER
SDILT	1201984333	241923001	SW846 7470A Prep	07-DEC-2009 12:10	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1213711-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1236359-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091207-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091207-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091207-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091207-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091207-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091207-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments: Digestion Start Date: 07-DEC-09 12:10
Digestion End Date: 07-DEC-09 14:10

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 928624

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985667	UI091124-01	.25	mL
LCS	1201985667	UI091124-06	.25	mL
MS	1201985669	UI091124-01	.25	mL
MS	1201985669	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985666		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
LCS	1201985667		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
SAMPLE	241835001		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
DUP	1201985668	241835001	SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
MS	1201985669	241835001	SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
SDILT	1201985670	241835001	SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
SAMPLE	241835002		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
SAMPLE	241835003		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
SAMPLE	241835004		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
SAMPLE	241835005		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER
SAMPLE	241835006		SW846 3005A	05-DEC-2009 12:54	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1238343	2.5 mL	HYDROCHLORIC ACID
1238345	1 mL	Nitric Acid CONC.

Comments:

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 928652

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985733	UI091124-A00	.5	mL
LCS	1201985733	UI091124-B	.5	mL
MS	1201985735	UI090930-A	.5	mL
MS	1201985735	UI090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985732		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
LCS	1201985733		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
SAMPLE	241816001		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	241835001		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
SAMPLE	241835002		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
SAMPLE	241835003		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
DUP	1201985734	241835003	SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
MS	1201985735	241835003	SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
SDILT	1201985736	241835003	SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
SAMPLE	241835004		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
SAMPLE	241835005		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER
SAMPLE	241835006		SW846 3005A	05-DEC-2009 13:19	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1238343	2.5 mL	HYDROCHLORIC ACID
1238345	1 mL	Nitric Acid CONC.

Comments

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID:	UI090701-09	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #1	**Received:**	01-JUL-09	**Catalog Number :**	160044-09-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016477
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				

Description: ICPMS CRDL Master Soln #1

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID:	UI090701-10	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #2	**Received:**	01-JUL-09	**Catalog Number :**	160044-08-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016476
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				

Description: ICPMS CRDL Soln #2

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID:	UI090701-40	**Opened:**	01-JUL-09	**Amount :**	500 mL
Name:	TRACE ICP Stock PQL St	**Received:**	30-JUN-09	**Catalog Number :**	160543-01-03
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016475
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3+TrHF
Supplier:	02si				

Description: TRACE ICP Stock PQL Standard

Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Carnello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-A00 **Opened:** 24-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 24-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091124-B **Opened:** 24-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 24-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091125-48 **Opened:** 25-NOV-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 25-NOV-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-09 **Lot Number :** 1017724
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091126-40 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091126-41 **Opened:** 26-NOV-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-NOV-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-NOV-10 **Lot Number :** 1017958
Employee: Helen Carnello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091207-01 **Opened:** 07-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 07-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 08-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091207-02 **Opened:** 07-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 08-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091207-01 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG091207-02 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091207-03 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091207-04 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG091207-05 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG091207-06 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091207-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091207-13 **Opened:** 07-DEC-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 07-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 13-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091209-42 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091209-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091209-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091209-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091209-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091209-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091209-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091209-43 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091209-44 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091209-45 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091209-46 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091209-47 **Opened:** 09-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 10-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS091207-04 **Opened:** 07-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 07-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091207-04A **Opened:** 07-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091207-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091207-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091207-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091207-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091207-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091207-05 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 07-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091207-07 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 07-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 08-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-08 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091207-70 **Opened:** 07-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 07-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 08-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091208-04 **Opened:** 08-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091208-04A **Opened:** 08-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091208-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091208-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091208-05 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091208-06 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 08-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091208-07 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 08-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091208-08 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 08-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Standard Logbook

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Standard Logbook

Serial ID:	1239193	**Opened:**	07-DEC-09	**Amount :**	20 L
Name:	B-ICP-RINSE SOLN	**Received:**	07-DEC-09	**Lot Number :**	H04040+G34050
Type:	Reagent/Solvent	**Expires:**	13-DEC-09	**Solvent :**	3%HCL+1%HNO3

Employee: Helen Camello

Supplier: GEL

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-669

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	927057	**Method:**	SW846 9012A
Prep Batch :	927056	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241832001	RE03-09-14130
241832002	RE03-10-2732
241832003	RE03-10-2733
241832004	RE03-10-2731
1201982097	Method Blank (MB)
1201982098	241711006(RE03-09-13909) Sample Duplicate (DUP)
1201982099	241711006(RE03-09-13909) Matrix Spike (MS)
1201982100	241711006(RE03-09-13909) Matrix Spike Duplicate (MSD)
1201982101	Laboratory Control Sample (LCS)
1201982530	241913002(WST49-10-5433) Sample Duplicate (DUP)
1201982531	241913002(WST49-10-5433) Matrix Spike (MS)
1201982532	241913002(WST49-10-5433) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241711006 (RE03-09-13909) and 241913002 (WST49-10-5433).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery falls outside of the client specified acceptance limits due to matrix interference. 1201982099 (RE03-09-13909).

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery falls outside of the client specified acceptance limits due to matrix interference: 1201982100 (RE03-09-13909).

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201982098 (RE03-09-13909).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201982101 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 765699 1201982099 (RE03-09-13909) and 1201982100 (RE03-09-13909).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 21Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-669 GEL Work Order: 241832

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-09-14130	Project:	LANL01004
Sample ID:	241832001	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	<0.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.4	240	ug/kg	1	AXC2 12/03/09	1145	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-10-2732	Project:	LANL01004
Sample ID:	241832002	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	.285%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	63.1	232	ug/kg	1	AXC2 12/03/09	1146	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-10-2733	Project:	LANL01004
Sample ID:	241832003	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	3.53%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.3	240	ug/kg	1	AXC2 12/03/09	1150	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-669

Client Sample ID:	RE03-10-2731	Project:	LANL01004
Sample ID:	241832004	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.12%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	65.7	241	ug/kg	1	AXC2 12/03/09	1151	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 5, 2009

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241832

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 927057											
QC1201982098 241711006 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	12/03/09 11:39
QC1201982530 241913002 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				12/03/09 11:54
QC1201982101 LCS											
Cyanide, Total	67900				54500	ug/kg		80.3	(46%-145%)		12/03/09 11:38
QC1201982097 MB											
Cyanide, Total				U	250	ug/kg					12/03/09 11:33
QC1201982099 241711006 MS											
Cyanide, Total	5530	U	ND		3030	ug/kg		54.8	(50%-130%)		12/03/09 11:40
QC1201982531 241913002 MS											
Cyanide, Total	5070	U	ND		4430	ug/kg		87.3	(50%-130%)		12/03/09 11:54
QC1201982100 241711006 MSD											
Cyanide, Total	5120	U	ND		3640	ug/kg	18.3	71.1	(0%-30%)		12/03/09 11:41
QC1201982532 241913002 MSD											
Cyanide, Total	4790	U	ND		5130	ug/kg	14.7	107	(0%-30%)		12/03/09 11:55

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: 241832

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 05-DEC-2009 10:56

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-669**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**03-DEC-2009 10:55:18**	**OM_12-3-2009_10-47-23**	**147**	**150**	**98**	**(90%-110%)**	**Yes**
CCV	03-DEC-2009 11:22:00	OM_12-3-2009_10-47-23	98.2	100	98	(90%-110%)	Yes
CCV	03-DEC-2009 11:34:26	OM_12-3-2009_10-47-23	98.7	100	99	(90%-110%)	Yes
CCV	03-DEC-2009 11:46:56	OM_12-3-2009_10-47-23	97.9	100	98	(90%-110%)	Yes
CCV	03-DEC-2009 11:59:26	OM_12-3-2009_10-47-23	98	100	98	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**03-DEC-2009 10:57:08**	**OM_12-3-2009_10-47-23**	**2.2**	**5**	**Yes**
CCB	03-DEC-2009 11:23:51	OM_12-3-2009_10-47-23	1	5	Yes
CCB	03-DEC-2009 11:36:16	OM_12-3-2009_10-47-23	0.32	5	Yes
CCB	03-DEC-2009 11:48:48	OM_12-3-2009_10-47-23	1.4	5	Yes
CCB	03-DEC-2009 12:01:15	OM_12-3-2009_10-47-23	0.487	5	Yes

Cyanide, Total

Prep LogBook

Analyst: SXJ1 Verified by:_____

Batch: 927056

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982101	URF1200957-01	.25	g
MS	1201982099	URF1184831-02	.025	mL
MS	1201982531	URF1184831-02	.025	mL
MSD	1201982100	URF1184831-02	.025	mL
MSD	1201982532	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201982097		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
LCS	1201982101		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.25 g	25 mL	100	SOIL
SAMPLE	241711006		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.51 g	25 mL	49.01961	SOIL
DUP	1201982098	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
MS	1201982099	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
MSD	1201982100	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241711007		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241773001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.59 g	25 mL	42.37288	MISC SOLID
SAMPLE	241797001		SW846 9010C Distillation	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOLID
SAMPLE	241832001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241832002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241832003		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241832004		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241838002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241913002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
DUP	1201982530	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
MS	1201982531	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
MSD	1201982532	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241916001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241916002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916003		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	241916004		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	241916005		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241916006		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241916007		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916008		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916009		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	241916010		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091202-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/3/2009 10:48:08	OM_12-3-2009_10-47-23
150 ppb		1	axc2	12/3/2009 10:49:00	OM_12-3-2009_10-47-23
100 ppb		1	axc2	12/3/2009 10:49:53	OM_12-3-2009_10-47-23
50 ppb		1	axc2	12/3/2009 10:50:46	OM_12-3-2009_10-47-23
10 ppb		1	axc2	12/3/2009 10:51:39	OM_12-3-2009_10-47-23
CRDL 5.0 ppb		1	axc2	12/3/2009 10:52:33	OM_12-3-2009_10-47-23
ICAL-00		1	axc2	12/3/2009 10:53:27	OM_12-3-2009_10-47-23
ICV		1	axc2	12/3/2009 10:55:18	OM_12-3-2009_10-47-23
ICB		1	axc2	12/3/2009 10:57:08	OM_12-3-2009_10-47-23
CRDL		1	axc2	12/3/2009 10:58:58	OM_12-3-2009_10-47-23
1201979071	925673	1	axc2	12/3/2009 11:00:47	OM_12-3-2009_10-47-23
1201979078*	925673	25	axc2	12/3/2009 11:01:41	OM_12-3-2009_10-47-23
241611008	925673	1	axc2	12/3/2009 11:02:34	OM_12-3-2009_10-47-23
1201979072	925673	1	axc2	12/3/2009 11:03:27	OM_12-3-2009_10-47-23
1201979074	925673	1	axc2	12/3/2009 11:04:20	OM_12-3-2009_10-47-23
1201979076	925673	1	axc2	12/3/2009 11:05:13	OM_12-3-2009_10-47-23
1201979078	925673	25	axc2	12/3/2009 11:06:06	OM_12-3-2009_10-47-23
241611009	925673	1	axc2	12/3/2009 11:06:58	OM_12-3-2009_10-47-23
1201979073	925673	1	axc2	12/3/2009 11:07:51	OM_12-3-2009_10-47-23
1201979075	925673	1	axc2	12/3/2009 11:08:43	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:09:36	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:11:26	OM_12-3-2009_10-47-23
1201979077	925673	1	axc2	12/3/2009 11:13:15	OM_12-3-2009_10-47-23
241613001	925673	1	axc2	12/3/2009 11:14:07	OM_12-3-2009_10-47-23
241613002	925673	1	axc2	12/3/2009 11:14:59	OM_12-3-2009_10-47-23
241613003	925673	1	axc2	12/3/2009 11:15:50	OM_12-3-2009_10-47-23
241613004	925673	1	axc2	12/3/2009 11:16:43	OM_12-3-2009_10-47-23
241613005	925673	1	axc2	12/3/2009 11:17:34	OM_12-3-2009_10-47-23
241613006	925673	1	axc2	12/3/2009 11:18:28	OM_12-3-2009_10-47-23
241613007	925673	1	axc2	12/3/2009 11:19:21	OM_12-3-2009_10-47-23
241613008	925673	1	axc2	12/3/2009 11:20:15	OM_12-3-2009_10-47-23
241613009	925673	1	axc2	12/3/2009 11:21:08	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:22:00	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:23:51	OM_12-3-2009_10-47-23
241613010	925673	1	axc2	12/3/2009 11:25:41	OM_12-3-2009_10-47-23
241613011	925673	1	axc2	12/3/2009 11:26:34	OM_12-3-2009_10-47-23
241613012	925673	1	axc2	12/3/2009 11:27:27	OM_12-3-2009_10-47-23
241613013	925673	1	axc2	12/3/2009 11:28:20	OM_12-3-2009_10-47-23
241613014	925673	1	axc2	12/3/2009 11:29:12	OM_12-3-2009_10-47-23
241613015	925673	1	axc2	12/3/2009 11:30:05	OM_12-3-2009_10-47-23
241613016	925673	1	axc2	12/3/2009 11:30:57	OM_12-3-2009_10-47-23
241613017	925673	1	axc2	12/3/2009 11:31:49	OM_12-3-2009_10-47-23
241613018	925673	1	axc2	12/3/2009 11:32:41	OM_12-3-2009_10-47-23
1201982097	927057	1	axc2	12/3/2009 11:33:33	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:34:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:36:16	OM_12-3-2009_10-47-23
1201982101	927057	25	axc2	12/3/2009 11:38:04	OM_12-3-2009_10-47-23
241711006	927057	1	axc2	12/3/2009 11:38:59	OM_12-3-2009_10-47-23
1201982098	927057	1	axc2	12/3/2009 11:39:52	OM_12-3-2009_10-47-23
1201982099	927057	1	axc2	12/3/2009 11:40:45	OM_12-3-2009_10-47-23
1201982100	927057	1	axc2	12/3/2009 11:41:39	OM_12-3-2009_10-47-23
241711007	927057	1	axc2	12/3/2009 11:42:32	OM_12-3-2009_10-47-23
241773001	927057	1	axc2	12/3/2009 11:43:25	OM_12-3-2009_10-47-23
241797001	927057	1	axc2	12/3/2009 11:44:19	OM_12-3-2009_10-47-23
241832001	927057	1	axc2	12/3/2009 11:45:12	OM_12-3-2009_10-47-23
241832002	927057	1	axc2	12/3/2009 11:46:04	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:46:56	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:48:48	OM_12-3-2009_10-47-23

241832003	927057	1	axc2	12/3/2009	11:50:36	OM_12-3-2009_10-47-23
241832004	927057	1	axc2	12/3/2009	11:51:28	OM_12-3-2009_10-47-23
241838002	927057	1	axc2	12/3/2009	11:52:21	OM_12-3-2009_10-47-23
241913002	927057	1	axc2	12/3/2009	11:53:12	OM_12-3-2009_10-47-23
1201982530	927057	1	axc2	12/3/2009	11:54:05	OM_12-3-2009_10-47-23
1201982531	927057	1	axc2	12/3/2009	11:54:57	OM_12-3-2009_10-47-23
1201982532	927057	1	axc2	12/3/2009	11:55:51	OM_12-3-2009_10-47-23
241916001	927057	1	axc2	12/3/2009	11:56:45	OM_12-3-2009_10-47-23
241916002	927057	1	axc2	12/3/2009	11:57:39	OM_12-3-2009_10-47-23
241916003	927057	1	axc2	12/3/2009	11:58:32	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	11:59:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:01:15	OM_12-3-2009_10-47-23
241916004	927057	1	axc2	12/3/2009	12:03:04	OM_12-3-2009_10-47-23
241916005	927057	1	axc2	12/3/2009	12:03:58	OM_12-3-2009_10-47-23
241916006	927057	1	axc2	12/3/2009	12:04:51	OM_12-3-2009_10-47-23
241916007	927057	1	axc2	12/3/2009	12:05:44	OM_12-3-2009_10-47-23
241916008	927057	1	axc2	12/3/2009	12:06:37	OM_12-3-2009_10-47-23
241916009	927057	1	axc2	12/3/2009	12:07:30	OM_12-3-2009_10-47-23
241916010	927057	1	axc2	12/3/2009	12:08:23	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	12:09:15	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:11:05	OM_12-3-2009_10-47-23

Author: axc2 Date : 12/3/2009

Original Run Filename: OM_12-3-2009_10-47-23.OMN created 12/3/2009 10:47:23
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-3-2009_10-47-23.OMN last modified 12/3/2009 12:12:10
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091203-01	1	S1	200	7.99	12/3/2009@10:48:08			200 ppb
WCN091203-02	1	S2	150	6.19	12/3/2009@10:49:00			150 ppb
WCN091203-03	1	S3	100	4.24	12/3/2009@10:49:53			100 ppb
WCN091203-04	1	S4	50.0	2.09	12/3/2009@10:50:46			50 ppb
WCN091203-05	1	S5	10.0	0.592	12/3/2009@10:51:39			10 ppb
WCN091203-06	1	S6	5.00	0.278	12/3/2009@10:52:33			CRDL 5.0 ppb
WCN091203-08	1	S7	0.00	0.0373	12/3/2009@10:53:27			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99957 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091203-07	1	S8	147	6.01	12/3/2009@10:55:18			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091203-08	1	S7	2.20	0.208	12/3/2009@10:57:08			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091203-06	1	S6	4.06	0.283	12/3/2009@10:58:58			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.06 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.06 > 2.50					
		Message	Pass					
		Action	None					
1201979071|925673|MB	1	1	-1.68	0.0532	12/3/2009@11:00:47			
1201979078||LCS	1	2	11.7	0.589	12/3/2009@11:01:41		25.00	
241611008	1	3	-0.599	0.0965	12/3/2009@11:02:34			
1201979072||DUP	1	4	-0.795	0.0887	12/3/2009@11:03:27			
1201979074||MS	1	5	70.9	2.95	12/3/2009@11:04:20			
1201979076||MSD	1	6	80.6	3.34	12/3/2009@11:05:13			
1201979078||LCS	1	2	25.5	1.14	12/3/2009@11:06:06		25.00	
241611009	1	7	17.4	0.817	12/3/2009@11:06:58			
1201979073||DUP	1	8	5.46	0.339	12/3/2009@11:07:51			
1201979075||MS	1	9	88.6	3.66	12/3/2009@11:08:43			
WCN091203-03	1	S3	101	4.15	12/3/2009@11:09:36			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.7 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.780	0.152	12/3/2009@11:11:26			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	0.780 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	0.780 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979077||MSD	1	10	82.7	3.43	12/3/2009@11:13:15			
241613001	1	11	0.938	0.158	12/3/2009@11:14:07			
241613002	1	12	-1.31	0.0680	12/3/2009@11:14:59			
241613003	1	13	-0.466	0.102	12/3/2009@11:15:50			
241613004	1	14	-1.77	0.0499	12/3/2009@11:16:43			
241613005	1	15	-2.01	0.0401	12/3/2009@11:17:34			
241613006	1	16	-1.04	0.0791	12/3/2009@11:18:28			
241613007	1	17	-3.14	-0.00502	12/3/2009@11:19:21			
241613008	1	18	-1.19	0.0728	12/3/2009@11:20:15			
241613009	1	19	-1.89	0.0448	12/3/2009@11:21:08			
WCN091203-03	1	S3	98.2	4.05	12/3/2009@11:22:00			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.00	0.161	12/3/2009@11:23:51			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	1.00 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	1.00 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241613010	1	20	-1.14	0.0750	12/3/2009@11:25:41			
241613011	1	21	-1.02	0.0798	12/3/2009@11:26:34			
241613012	1	22	-1.37	0.0656	12/3/2009@11:27:27			
241613013	1	23	-1.94	0.0429	12/3/2009@11:28:20			
241613014	1	24	-1.11	0.0762	12/3/2009@11:29:12			
241613015	1	25	-1.39	0.0648	12/3/2009@11:30:05			
241613016	1	26	-2.32	0.0277	12/3/2009@11:30:57			
241613017	1	27	-1.67	0.0537	12/3/2009@11:31:49			
241613018	1	28	-1.71	0.0522	12/3/2009@11:32:41			
1201982097|927057|MB	1	29	-2.09	0.0369	12/3/2009@11:33:33			
WCN091203-03	1	S3	98.7	4.07	12/3/2009@11:34:26			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.320	0.133	12/3/2009@11:36:16			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	0.320 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.320 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982101||LCS	1	30	21.8	0.993	12/3/2009@11:38:04		25.00	
241711006	1	31	-0.519	0.0997	12/3/2009@11:38:59			
1201982098||DUP	1	32	-1.52	0.0599	12/3/2009@11:39:52			
1201982099||MS	1	33	54.8	2.31	12/3/2009@11:40:45			
1201982100||MSD	1	34	71.1	2.96	12/3/2009@11:41:39			
241711007	1	35	3.43	0.258	12/3/2009@11:42:32			
241773001	1	36	-0.499	0.101	12/3/2009@11:43:25			
241797001	1	37	14.2	0.686	12/3/2009@11:44:19			
241832001	1	38	-1.40	0.0644	12/3/2009@11:45:12			
241832002	1	39	-1.84	0.0467	12/3/2009@11:46:04			
WCN091203-03	1	S3	97.9	4.04	12/3/2009@11:46:56			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.40	0.177	12/3/2009@11:48:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.40 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.40 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241832003	1	40	-1.85	0.0466	12/3/2009@11:50:36			
241832004	1	41	-2.42	0.0238	12/3/2009@11:51:28			
241838002	1	42	-1.55	0.0586	12/3/2009@11:52:21			
241913002	1	43	-1.87	0.0457	12/3/2009@11:53:12			
1201982530||DUP	1	44	-2.04	0.0388	12/3/2009@11:54:05			
1201982531||MS	1	45	87.3	3.61	12/3/2009@11:54:57			
1201982532||MSD	1	46	107	4.40	12/3/2009@11:55:51			
241916001	1	47	4.73	0.309	12/3/2009@11:56:45			
241916002	1	48	-1.83	0.0471	12/3/2009@11:57:39			
241916003	1	49	-0.985	0.0811	12/3/2009@11:58:32			
WCN091203-03	1	S3	98.0	4.04	12/3/2009@11:59:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.487	0.140	12/3/2009@12:01:15			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.487 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.487 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241916004	1	50	0.626	0.145	12/3/2009@12:03:04			
241916005	1	51	1.13	0.166	12/3/2009@12:03:58			
241916006	1	52	0.169	0.127	12/3/2009@12:04:51			
241916007	1	53	1.78	0.192	12/3/2009@12:05:44			
241916008	1	54	-0.0502	0.118	12/3/2009@12:06:37			
241916009	1	55	1.36	0.175	12/3/2009@12:07:30			
241916010	1	56	2.34	0.214	12/3/2009@12:08:23			
WCN091203-03	1	S3	97.4	4.02	12/3/2009@12:09:15			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.892	0.156	12/3/2009@12:11:05			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.892 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.892 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-3-2009_10-47-23.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 12/3/2009

Channel 1: Current View

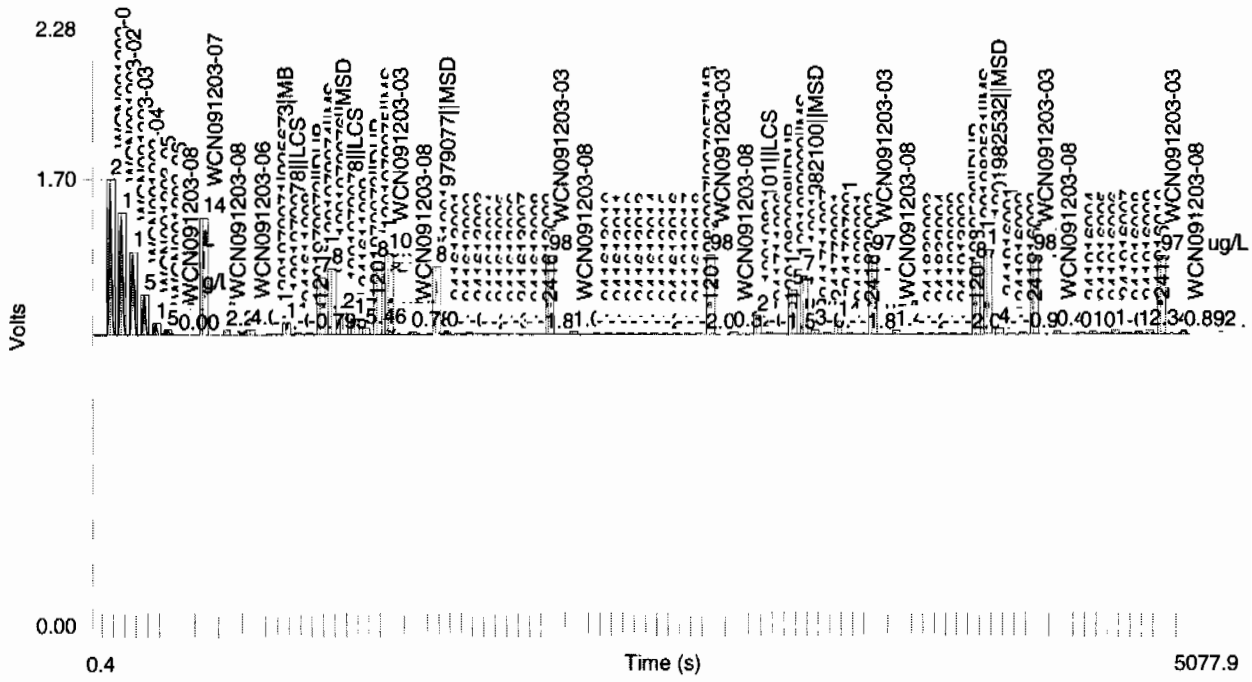

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.99	0.588	1.5	12/3/2009	10:49:12
2	150	1	6.19	0.459	-1.3	12/3/2009	10:50:04
3	100	1	4.24	0.313	-3.1	12/3/2009	10:50:56
4	50.0	1	2.09	0.153	1.3	12/3/2009	10:51:49
5	10.0	1	0.592	0.0436	-13.4	12/3/2009	10:52:42
6	5.00	1	0.278	0.0191	14.0	12/3/2009	10:53:36
7	0.00	1	0.0373	6.20e-4		12/3/2009	10:54:30

Figure 1: TCYANIDE

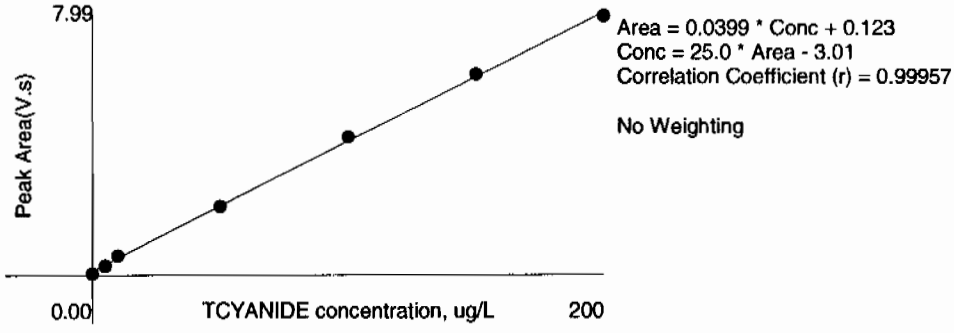

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
04-DEC-09			
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
	SW846 9012A	%Null%	
Batch ID:	**Sample Numbers:**		
927057	1201982099, 1201982100		

Potentially affected work order(s)(SDG): 241711(10-649),241773,241797(EUI-7408),241832(10-669),241838(10-670),241913(10-695),241916(10-697)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed recovery for MS/MSD: QC 1201982099MS QC 1201982100MSD	1. The spike recovery falls outside of the client specified acceptance limits due to matrix interference. The Matrix spike duplicate verified the result with a passing RPD.

Originator's Name:

Ashley Earl 04-DEC-09

Data Validator/Group Leader:

Elzbieta Szulc 04-DEC-09

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-669-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	925671 and 927059	**Method:**	SW846 9012A
Prep Batch :	925670 and 927058	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241835001	RE03-10-2745
241835002	RE03-10-2744
241835003	RE03-10-2757
241835004	RE03-10-2746
241835005	RE03-10-2759
241835006	RE03-10-2758
1201979063	Method Blank (MB)
1201979065	241713001(RE03-10-7042) Sample Duplicate (DUP)
1201979067	241713001(RE03-10-7042) Matrix Spike (MS)
1201979069	241713001(RE03-10-7042) Matrix Spike Duplicate (MSD)
1201979070	Laboratory Control Sample (LCS)
1201982102	Method Blank (MB)
1201982103	241813005(CAWA-10-5475) Sample Duplicate (DUP)
1201982104	241835005(RE03-10-2759) Sample Duplicate (DUP)
1201982107	241813005(CAWA-10-5475) Matrix Spike (MS)
1201982108	241835005(RE03-10-2759) Matrix Spike (MS)
1201982111	241813005(CAWA-10-5475) Matrix Spike Duplicate (MSD)
1201982112	241835005(RE03-10-2759) Matrix Spike Duplicate (MSD)
1201982115	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 241713001 (RE03-10-7042)- Batch 925671, 241813005 (CAWA-10-5475) and 241835005 (RE03-10-2759)- Batch 927059.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201979065 (RE03-10-7042)- Batch 925671, 1201982104 (RE03-10-2759) and 241835005 (RE03-10-2759)- Batch 927059. One or more of the values for the sample and/or duplicate are less than 5 times the Practical Quantitation Limit (PQL), and the difference is within one PQL value; therefore, the RPD is not applicable. 1201982103 (CAWA-10-5475)- Batch 927059.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The following samples were re-analyzed due to instrument failure: 1201979063 (MB)- Batch 925671. The following samples were re-analyzed due to CCV failure: 1201982103 (CAWA-10-5475), 1201982104 (RE03-10-2759), 1201982107 (CAWA-10-5475), 1201982111 (CAWA-10-5475) and 241835005 (RE03-10-2759)- Batch 927059.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 21Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-669-1 GEL Work Order: 241835

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID: RE03-10-2745
Sample ID: 241835001
Matrix: W
Collect Date: 23-NOV-09 12:00
Receive Date: 25-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1345	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID:	RE03-10-2744	Project:	LANL01004
Sample ID:	241835002	Client ID:	LANL010
Matrix:	W		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis Federal											
SW9012A Cyanide, Total "As Received"											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	12/01/09	1346	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID: RE03-10-2757
Sample ID: 241835003
Matrix: W
Collect Date: 23-NOV-09 12:00
Receive Date: 25-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1347	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID: RE03-10-2759
Sample ID: 241835005
Matrix: W
Collect Date: 23-NOV-09 12:00
Receive Date: 25-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/02/09	1312	927059	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1534	927058

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID:	RE03-10-2758	Project:	LANL01004
Sample ID:	241835006	Client ID:	LANL010
Matrix:	W		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/02/09	1319	927059	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/01/09	1534	927058

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 4, 2009

Client SDG: 10-669-1

Client Sample ID: RE03-10-2746
Sample ID: 241835004
Matrix: W
Collect Date: 23-NOV-09 12:00
Receive Date: 25-NOV-09
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/01/09	1348	925671	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	11/30/09	1650	925670

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 4, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241835

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 925671										
QC1201979065 241713001 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A			AXC2	12/01/09 13:41
QC1201979070 LCS										
Cyanide, Total	50.0			53.1	ug/L		106	(90%-110%)		12/01/09 13:17
QC1201979063 MB										
Cyanide, Total			U	5.00	ug/L					12/01/09 13:17
QC1201979067 241713001 MS										
Cyanide, Total	100 U	ND		109	ug/L		109	(60%-127%)		12/01/09 13:42
QC1201979069 241713001 MSD										
Cyanide, Total	100 U	ND		112	ug/L	2.71	112	(0%-20%)		12/01/09 13:43
Batch 927059										
QC1201982103 241813005 DUP										
Cyanide, Total	J	2.58		5.05	ug/L	64.7 ^		(+/-5.00)	AXC2	12/02/09 13:09
QC1201982104 241835005 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A				12/02/09 13:13
QC1201982115 LCS										
Cyanide, Total	50.0			47.1	ug/L		94.2	(90%-110%)		12/02/09 10:53
QC1201982102 MB										
Cyanide, Total			U	5.00	ug/L					12/02/09 10:52
QC1201982107 241813005 MS										
Cyanide, Total	100 J	2.58		102	ug/L		99.4	(60%-127%)		12/02/09 13:10
QC1201982108 241835005 MS										
Cyanide, Total	100 U	ND		101	ug/L		100	(60%-127%)		12/02/09 13:17
QC1201982111 241813005 MSD										
Cyanide, Total	100 J	2.58		102	ug/L	0.00	99.4	(0%-20%)		12/02/09 13:11
QC1201982112 241835005 MSD										
Cyanide, Total	100 U	ND		104	ug/L	2.93	103	(0%-20%)		12/02/09 13:18

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value

QC Summary

Workorder: 241835

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

H	Analytical holding time was exceeded
J	Value is estimated
M	Matrix Related Failure
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 04-DEC-2009 09:16

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-669-1

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**01-DEC-2009 13:10:42**	**OM_12-1-2009_13-00-11**	**153**	**150**	**102**	**(90%-110%)**	**Yes**
CCV	01-DEC-2009 13:25:01	OM_12-1-2009_13-00-11	105	100	105	(90%-110%)	Yes
CCV	01-DEC-2009 13:37:25	OM_12-1-2009_13-00-11	104	100	104	(90%-110%)	Yes
CCV	01-DEC-2009 13:49:49	OM_12-1-2009_13-00-11	105	100	105	(90%-110%)	Yes
ICV	**02-DEC-2009 10:47:21**	**OM_12-2-2009_10-36-52**	**156**	**150**	**104**	**(90%-110%)**	**Yes**
CCV	02-DEC-2009 11:01:38	OM_12-2-2009_10-36-52	104	100	104	(90%-110%)	Yes
ICV	**02-DEC-2009 12:59:54**	**OM_12-2-2009_12-51-59**	**149**	**150**	**99**	**(90%-110%)**	**Yes**
CCV	02-DEC-2009 13:14:09	OM_12-2-2009_12-51-59	104	100	104	(90%-110%)	Yes
CCV	02-DEC-2009 13:26:32	OM_12-2-2009_12-51-59	106	100	106	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**01-DEC-2009 13:12:32**	**OM_12-1-2009_13-00-11**	**3.43**	**5**	**Yes**
CCB	01-DEC-2009 13:26:51	OM_12-1-2009_13-00-11	1.78	5	Yes
CCB	01-DEC-2009 13:39:15	OM_12-1-2009_13-00-11	0.953	5	Yes
CCB	01-DEC-2009 13:51:40	OM_12-1-2009_13-00-11	1.78	5	Yes
ICB	**02-DEC-2009 10:49:11**	**OM_12-2-2009_10-36-52**	**2.54**	**5**	**Yes**
CCB	02-DEC-2009 11:03:28	OM_12-2-2009_10-36-52	1.39	5	Yes
ICB	**02-DEC-2009 13:01:45**	**OM_12-2-2009_12-51-59**	**2.2**	**5**	**Yes**
CCB	02-DEC-2009 13:16:00	OM_12-2-2009_12-51-59	0.768	5	Yes
CCB	02-DEC-2009 13:28:22	OM_12-2-2009_12-51-59	0.426	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 925670

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201979070	URF1184831-02	.0125	mL
MS	1201979066	URF1184831-02	.025	mL
MS	1201979067	URF1184831-02	.025	mL
MSD	1201979068	URF1184831-02	.025	mL
MSD	1201979069	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201979063		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
LCS	1201979070		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607001		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201979064	241607001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
MS	1201979066	241607001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201979068	241607001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607002		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607003		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607004		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607005		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607006		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607007		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607008		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607009		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607010		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607011		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607012		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241607013		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241702007		EPA 335.4	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241713001		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
DUP	1201979065	241713001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
MS	1201979067	241713001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
MSD	1201979069	241713001	SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241713002		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835001		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835002		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835003		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER
SAMPLE	241835004		SW846 9010B Prep	30-NOV-2009 16:50	>12	25 mL	25 mL	1	WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
090731-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN091130-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1174846-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1174824-C	1.25 mL	Bismuth Nitrate Solution	

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 927058

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982115	URF1184831-02	.0125	mL
MS	1201982107	URF1184831-02	.025	mL
MS	1201982108	URF1184831-02	.025	mL
MS	1201982109	URF1184831-02	.025	mL
MS	1201982110	URF1184831-02	.025	mL
MSD	1201982111	URF1184831-02	.025	mL
MSD	1201982112	URF1184831-02	.025	mL
MSD	1201982113	URF1184831-02	.025	mL
MSD	1201982114	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201982102		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
LCS	1201982115		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241779001		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241779002		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201982105	241779002	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
MS	1201982109	241779002	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201982113	241779002	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241779003		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241779004		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241781004		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WASTE WATER
DUP	1201982106	241781004	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WASTE WATER
MS	1201982110	241781004	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WASTE WATER
MSD	1201982114	241781004	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	241793001		SW846 9010C Distillation	01-DEC-2009 15:34	>12	25 mL	25 mL	1	MISC LIQUID
SAMPLE	241813005		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
DUP	1201982103	241813005	EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
MS	1201982107	241813005	EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
MSD	1201982111	241813005	EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241835005		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
DUP	1201982104	241835005	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
MS	1201982108	241835005	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
MSD	1201982112	241835005	SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241835006		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241848004		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 927058

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982115	URF1184831-02	.0125	mL
MS	1201982107	URF1184831-02	.025	mL
MS	1201982108	URF1184831-02	.025	mL
MS	1201982109	URF1184831-02	.025	mL
MS	1201982110	URF1184831-02	.025	mL
MSD	1201982111	URF1184831-02	.025	mL
MSD	1201982112	URF1184831-02	.025	mL
MSD	1201982113	URF1184831-02	.025	mL
MSD	1201982114	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
SAMPLE	241848005		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241848006		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	241898001		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241898002		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241898003		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241898004		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241902001		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241902002		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241917001		SW846 9010B Prep	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER
SAMPLE	241919001		EPA 335.4	01-DEC-2009 15:34	>12	25 mL	25 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091201-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/1/2009 13:03:33	OM_12-1-2009_13-00-11
150 ppb		1	axc2	12/1/2009 13:04:25	OM_12-1-2009_13-00-11
100 ppb		1	axc2	12/1/2009 13:05:17	OM_12-1-2009_13-00-11
50 ppb		1	axc2	12/1/2009 13:06:10	OM_12-1-2009_13-00-11
10 ppb		1	axc2	12/1/2009 13:07:03	OM_12-1-2009_13-00-11
CRDL 5.0 ppb		1	axc2	12/1/2009 13:07:57	OM_12-1-2009_13-00-11
ICAL-00		1	axc2	12/1/2009 13:08:52	OM_12-1-2009_13-00-11
ICV		1	axc2	12/1/2009 13:10:42	OM_12-1-2009_13-00-11
ICB		1	axc2	12/1/2009 13:12:32	OM_12-1-2009_13-00-11
CRDL		1	axc2	12/1/2009 13:14:22	OM_12-1-2009_13-00-11
1201979063*	925671	1	axc2	12/1/2009 13:16:12	OM_12-1-2009_13-00-11
1201979070	925671	1	axc2	12/1/2009 13:17:05	OM_12-1-2009_13-00-11
1201979063	925671	1	axc2	12/1/2009 13:17:58	OM_12-1-2009_13-00-11
241607001	925671	1	axc2	12/1/2009 13:18:52	OM_12-1-2009_13-00-11
1201979064	925671	1	axc2	12/1/2009 13:19:45	OM_12-1-2009_13-00-11
1201979066	925671	1	axc2	12/1/2009 13:20:38	OM_12-1-2009_13-00-11
1201979068	925671	1	axc2	12/1/2009 13:21:30	OM_12-1-2009_13-00-11
241607002	925671	1	axc2	12/1/2009 13:22:23	OM_12-1-2009_13-00-11
241607003	925671	1	axc2	12/1/2009 13:23:16	OM_12-1-2009_13-00-11
241607004	925671	1	axc2	12/1/2009 13:24:08	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:25:01	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:26:51	OM_12-1-2009_13-00-11
241607005	925671	1	axc2	12/1/2009 13:28:39	OM_12-1-2009_13-00-11
241607006	925671	1	axc2	12/1/2009 13:29:31	OM_12-1-2009_13-00-11
241607007	925671	1	axc2	12/1/2009 13:30:23	OM_12-1-2009_13-00-11
241607008	925671	1	axc2	12/1/2009 13:31:15	OM_12-1-2009_13-00-11
241607009	925671	1	axc2	12/1/2009 13:32:07	OM_12-1-2009_13-00-11
241607010	925671	1	axc2	12/1/2009 13:32:59	OM_12-1-2009_13-00-11
241607011	925671	1	axc2	12/1/2009 13:33:53	OM_12-1-2009_13-00-11
241607012	925671	1	axc2	12/1/2009 13:34:46	OM_12-1-2009_13-00-11
241607013	925671	1	axc2	12/1/2009 13:35:39	OM_12-1-2009_13-00-11
241702007	925671	1	axc2	12/1/2009 13:36:33	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:37:25	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:39:15	OM_12-1-2009_13-00-11
241713001	925671	1	axc2	12/1/2009 13:41:05	OM_12-1-2009_13-00-11
1201979065	925671	1	axc2	12/1/2009 13:41:57	OM_12-1-2009_13-00-11
1201979067	925671	1	axc2	12/1/2009 13:42:51	OM_12-1-2009_13-00-11
1201979069	925671	1	axc2	12/1/2009 13:43:43	OM_12-1-2009_13-00-11
241713002	925671	1	axc2	12/1/2009 13:44:36	OM_12-1-2009_13-00-11
241835001	925671	1	axc2	12/1/2009 13:45:28	OM_12-1-2009_13-00-11
241835002	925671	1	axc2	12/1/2009 13:46:21	OM_12-1-2009_13-00-11
241835003	925671	1	axc2	12/1/2009 13:47:13	OM_12-1-2009_13-00-11
241835004	925671	1	axc2	12/1/2009 13:48:05	OM_12-1-2009_13-00-11
1201980988	926535	1	axc2	12/1/2009 13:48:57	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 13:49:49	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 13:51:40	OM_12-1-2009_13-00-11
1201980995	926535	25	axc2	12/1/2009 13:53:27	OM_12-1-2009_13-00-11
241697003	926535	1	axc2	12/1/2009 13:54:22	OM_12-1-2009_13-00-11
241697004	926535	1	axc2	12/1/2009 13:55:16	OM_12-1-2009_13-00-11
241711001	926535	1	axc2	12/1/2009 13:56:09	OM_12-1-2009_13-00-11
241711002	926535	1	axc2	12/1/2009 13:57:02	OM_12-1-2009_13-00-11
241711003	926535	1	axc2	12/1/2009 13:57:56	OM_12-1-2009_13-00-11
241711004	926535	1	axc2	12/1/2009 13:58:49	OM_12-1-2009_13-00-11
241711005	926535	1	axc2	12/1/2009 13:59:42	OM_12-1-2009_13-00-11
241714002	926535	1	axc2	12/1/2009 14:00:35	OM_12-1-2009_13-00-11
1201980989	926535	1	axc2	12/1/2009 14:01:28	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009 14:02:20	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009 14:04:10	OM_12-1-2009_13-00-11

1201980991	926535	1	axc2	12/1/2009	14:05:59	OM_12-1-2009_13-00-11
1201980993	926535	1	axc2	12/1/2009	14:06:52	OM_12-1-2009_13-00-11
241718001	926535	1	axc2	12/1/2009	14:07:44	OM_12-1-2009_13-00-11
1201980990	926535	1	axc2	12/1/2009	14:08:36	OM_12-1-2009_13-00-11
1201980992	926535	1	axc2	12/1/2009	14:09:29	OM_12-1-2009_13-00-11
1201980994*	926535	1	axc2	12/1/2009	14:10:20	OM_12-1-2009_13-00-11
241728002	926535	1	axc2	12/1/2009	14:11:14	OM_12-1-2009_13-00-11
241756001	926535	1	axc2	12/1/2009	14:12:09	OM_12-1-2009_13-00-11
241756002	926535	1	axc2	12/1/2009	14:13:03	OM_12-1-2009_13-00-11
241756003	926535	1	axc2	12/1/2009	14:13:56	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:14:48	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:16:39	OM_12-1-2009_13-00-11
1201980994	926535	1	axc2	12/1/2009	14:18:28	OM_12-1-2009_13-00-11
241756004	926535	1	axc2	12/1/2009	14:19:21	OM_12-1-2009_13-00-11
241756005	926535	1	axc2	12/1/2009	14:20:15	OM_12-1-2009_13-00-11
241756006	926535	1	axc2	12/1/2009	14:21:08	OM_12-1-2009_13-00-11
241756007	926535	1	axc2	12/1/2009	14:22:01	OM_12-1-2009_13-00-11
241756008	926535	1	axc2	12/1/2009	14:22:54	OM_12-1-2009_13-00-11
241756009	926535	1	axc2	12/1/2009	14:23:47	OM_12-1-2009_13-00-11
241756010	926535	1	axc2	12/1/2009	14:24:40	OM_12-1-2009_13-00-11
1201983851	927798	1	axc2	12/1/2009	14:25:32	OM_12-1-2009_13-00-11
1201983855	927798	1	axc2	12/1/2009	14:26:24	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:27:17	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:29:07	OM_12-1-2009_13-00-11
240971001	927798	1	axc2	12/1/2009	14:30:56	OM_12-1-2009_13-00-11
241923001	927798	1	axc2	12/1/2009	14:31:47	OM_12-1-2009_13-00-11
1201983852	927798	1	axc2	12/1/2009	14:32:42	OM_12-1-2009_13-00-11
1201983853	927798	1	axc2	12/1/2009	14:33:36	OM_12-1-2009_13-00-11
1201983854	927798	1	axc2	12/1/2009	14:34:30	OM_12-1-2009_13-00-11
CCV		1	axc2	12/1/2009	14:35:22	OM_12-1-2009_13-00-11
CCB		1	axc2	12/1/2009	14:37:13	OM_12-1-2009_13-00-11

Author: axc2 Date : 12/2/2009

Original Run Filename: OM_12-1-2009_13-00-11.OMN created 12/1/2009 13:00:11
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-1-2009_13-00-11.OMN last modified 12/1/2009 14:38:18
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091201-01	1	S1	200	7.16	12/1/2009@13:03:33			200 ppb
WCN091201-02	1	S2	150	5.43	12/1/2009@13:04:25			150 ppb
WCN091201-03	1	S3	100	3.55	12/1/2009@13:05:17			100 ppb
WCN091201-04	1	S4	50.0	1.86	12/1/2009@13:06:10			50 ppb
WCN091201-05	1	S5	10.0	0.523	12/1/2009@13:07:03			10 ppb
WCN091201-06	1	S6	5.00	0.254	12/1/2009@13:07:57			CRDL 5.0 ppb
WCN091201-08	1	S7	0.00	0.0388	12/1/2009@13:08:52			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99983 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091201-07	1	S8	153	5.50	12/1/2009@13:10:42			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091201-08	1	S7	3.43	0.208	12/1/2009@13:12:32			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	3.43 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.43 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091201-06	1	S6	4.97	0.262	12/1/2009@13:14:22			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.97 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.97 > 2.50					
		Message	Pass					
		Action	None					
1201979063|925671|MB	1	1	595	21.1	12/1/2009@13:16:12			
1201979070||LCS	1	2	53.1	1.96	12/1/2009@13:17:05			
1201979063|925671|MB	1	1	-0.00784	0.0860	12/1/2009@13:17:58			
241607001	1	3	-1.63	0.0287	12/1/2009@13:18:52			
1201979064||DUP	1	4	-1.90	0.0191	12/1/2009@13:19:45			
1201979066||MS	1	5	107	3.89	12/1/2009@13:20:38			
1201979068||MSD	1	6	109	3.93	12/1/2009@13:21:30			
241607002	1	7	0.166	0.0922	12/1/2009@13:22:23			
241607003	1	8	-1.43	0.0358	12/1/2009@13:23:16			
241607004	1	9	-2.91	-0.0166	12/1/2009@13:24:08			
WCN091201-03	1	S3	105	3.80	12/1/2009@13:25:01			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	4.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.78	0.149	12/1/2009@13:26:51			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	1.78 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.78 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241607005	1	10	-2.82	-0.0135	12/1/2009@13:28:39			
241607006	1	11	-1.80	0.0228	12/1/2009@13:29:31			
241607007	1	12	-1.84	0.0213	12/1/2009@13:30:23			
241607008	1	13	-2.59	-0.00515	12/1/2009@13:31:15			
241607009	1	14	-3.10	-0.0235	12/1/2009@13:32:07			
241607010	1	15	-2.46	-7.16e-4	12/1/2009@13:32:59			
241607011	1	16	-2.36	0.00287	12/1/2009@13:33:53			
241607012	1	17	-2.53	-0.00327	12/1/2009@13:34:46			
241607013	1	18	-1.77	0.0238	12/1/2009@13:35:39			
241702007	1	19	-0.216	0.0787	12/1/2009@13:36:33			
WCN091201-03	1	S3	104	3.78	12/1/2009@13:37:25			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	0.953	0.120	12/1/2009@13:39:15			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	0.953 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	0.953 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241713001	1	20	-1.26	0.0418	12/1/2009@13:41:05			
1201979065||DUP	1	21	-1.91	0.0186	12/1/2009@13:41:57			
1201979067||MS	1	22	109	3.95	12/1/2009@13:42:51			
1201979069||MSD	1	23	112	4.05	12/1/2009@13:43:43			
241713002	1	24	0.877	0.117	12/1/2009@13:44:36			
241835001	1	25	-1.56	0.0311	12/1/2009@13:45:28			
241835002	1	26	-1.93	0.0181	12/1/2009@13:46:21			
241835003	1	27	-2.44	-3.77e-5	12/1/2009@13:47:13			
241835004	1	28	-2.45	-2.86e-4	12/1/2009@13:48:05			
1201980988|926535|MB	1	29	-1.68	0.0268	12/1/2009@13:48:57			
WCN091201-03	1	S3	105	3.82	12/1/2009@13:49:49			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.78	0.149	12/1/2009@13:51:40			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	1.78 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.78 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201980995||LCS	1	30	23.2	0.908	12/1/2009@13:53:27		25.00	
241697003	1	31	-0.298	0.0758	12/1/2009@13:54:22			
241697004	1	32	-0.407	0.0719	12/1/2009@13:55:16			
241711001	1	33	-0.863	0.0558	12/1/2009@13:56:09			
241711002	1	34	0.191	0.0931	12/1/2009@13:57:02			
241711003	1	35	-0.124	0.0819	12/1/2009@13:57:56			
241711004	1	36	-0.622	0.0643	12/1/2009@13:58:49			
241711005	1	37	0.169	0.0923	12/1/2009@13:59:42			
241714002	1	38	-1.37	0.0379	12/1/2009@14:00:35			
1201980989||DUP	1	39	-1.55	0.0314	12/1/2009@14:01:28			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:02:20			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.74	0.148	12/1/2009@14:04:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201980991||MS	1	40	101	3.68	12/1/2009@14:05:59			
1201980993||MSD	1	41	105	3.80	12/1/2009@14:06:52			
241718001	1	42	0.649	0.109	12/1/2009@14:07:44			
1201980990||DUP	1	43	-1.18	0.0444	12/1/2009@14:08:36			
1201980992||MS	1	44	103	3.75	12/1/2009@14:09:29			
1201980994||MSD	1	45	62.9	2.31	12/1/2009@14:10:20			
241728002	1	46	0.0647	0.0886	12/1/2009@14:11:14			
241756001	1	47	-1.78	0.0234	12/1/2009@14:12:09			
241756002	1	48	-1.24	0.0423	12/1/2009@14:13:03			
241756003	1	49	-2.56	-0.00415	12/1/2009@14:13:56			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:14:48			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.74	0.148	12/1/2009@14:16:39			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1201980994||MSD	1	45	103	3.74	12/1/2009@14:18:28			
241756004	1	50	1.85	0.152	12/1/2009@14:19:21			
241756005	1	51	-1.44	0.0355	12/1/2009@14:20:15			
241756006	1	52	-1.86	0.0205	12/1/2009@14:21:08			
241756007	1	53	-1.36	0.0381	12/1/2009@14:22:01			
241756008	1	54	-1.79	0.0230	12/1/2009@14:22:54			
241756009	1	55	-2.03	0.0145	12/1/2009@14:23:47			
241756010	1	56	-1.52	0.0324	12/1/2009@14:24:40			
1201983851|927798|MB	1	57	-1.88	0.0199	12/1/2009@14:25:32			
1201983855||LCS	1	58	53.6	1.98	12/1/2009@14:26:24			
WCN091201-03	1	S3	106	3.84	12/1/2009@14:27:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	2.22	0.165	12/1/2009@14:29:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.22 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.22 > -5.00					
		Message	CCB Passed					
		Action	Continue					
240971001	1	59	27.8	1.07	12/1/2009@14:30:56			
241923001	1	60	-0.470	0.0697	12/1/2009@14:31:47			
1201983852||DUP	1	61	-1.85	0.0210	12/1/2009@14:32:42			
1201983853||MS	1	62	108	3.90	12/1/2009@14:33:36			
1201983854||MSD	1	63	110	3.97	12/1/2009@14:34:30			
WCN091201-03	1	S3	109	3.94	12/1/2009@14:35:22			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091201-08	1	S7	1.42	0.137	12/1/2009@14:37:13			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.42 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.42 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-1-2009_13-00-11.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A

Author: axc2

Date : 12/2/2009

Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

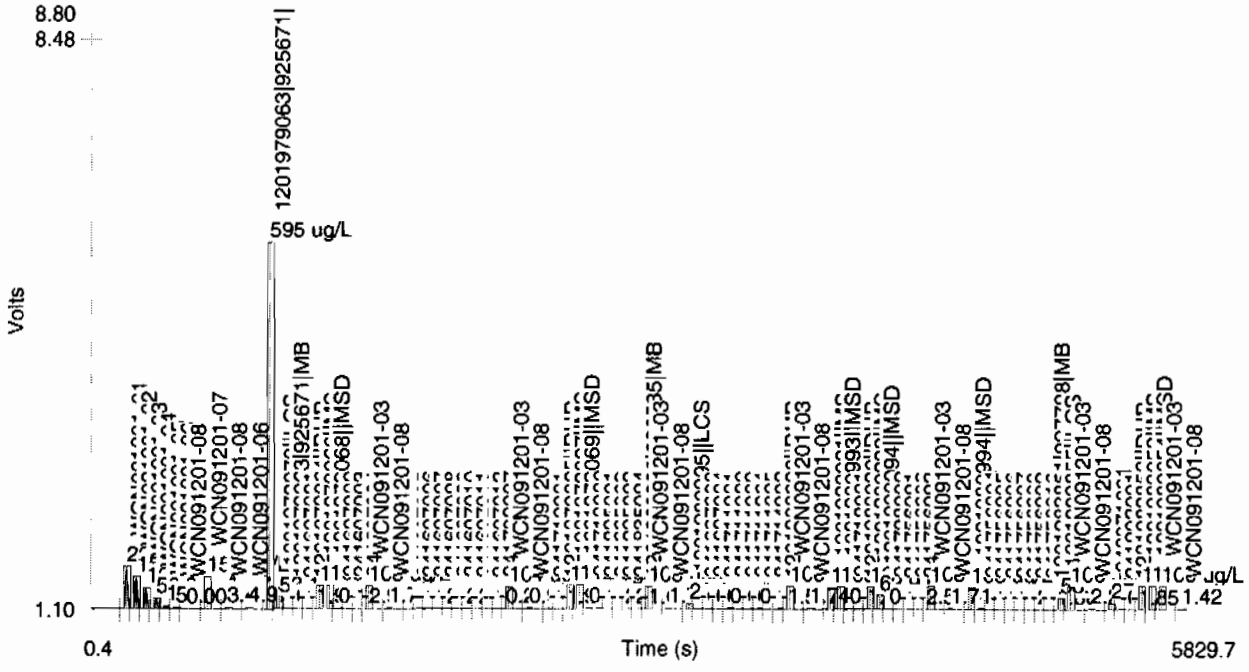

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.16	0.545	0.0	12/1/2009	13:04:36
2	150	1	5.43	0.414	-0.8	12/1/2009	13:05:28
3	100	1	3.55	0.271	2.0	12/1/2009	13:06:20
4	50.0	1	1.86	0.141	-0.4	12/1/2009	13:07:13
5	10.0	1	0.523	0.0389	-18.7	12/1/2009	13:08:06
6	5.00	1	0.254	0.0176	3.9	12/1/2009	13:09:00
7	0.00	1	0.0388	0.00121		12/1/2009	13:09:54

Author: axc2

Date : 12/2/2009

Figure 1: TCYANIDE

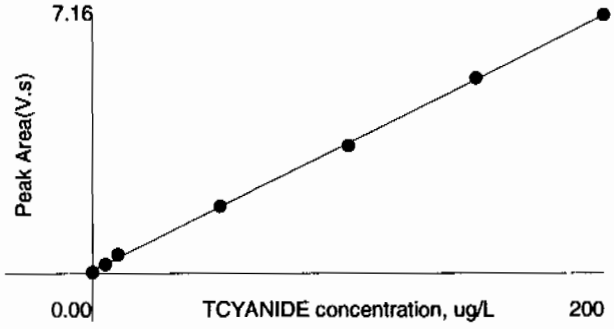

Area = 0.0354 * Conc + 0.0872
Conc = 28.3 * Area - 2.44
Correlation Coefficient (r) = 0.99983

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/2/2009 10:40:12	OM_12-2-2009_10-36-52
150 ppb		1	axc2	12/2/2009 10:41:04	OM_12-2-2009_10-36-52
100 ppb		1	axc2	12/2/2009 10:41:57	OM_12-2-2009_10-36-52
50 ppb		1	axc2	12/2/2009 10:42:49	OM_12-2-2009_10-36-52
10 ppb		1	axc2	12/2/2009 10:43:43	OM_12-2-2009_10-36-52
CRDL 5.0 ppb		1	axc2	12/2/2009 10:44:37	OM_12-2-2009_10-36-52
ICAL-00		1	axc2	12/2/2009 10:45:31	OM_12-2-2009_10-36-52
ICV		1	axc2	12/2/2009 10:47:21	OM_12-2-2009_10-36-52
ICB		1	axc2	12/2/2009 10:49:11	OM_12-2-2009_10-36-52
CRDL		1	axc2	12/2/2009 10:51:00	OM_12-2-2009_10-36-52
1201982102	927059	1	axc2	12/2/2009 10:52:50	OM_12-2-2009_10-36-52
1201982115	927059	1	axc2	12/2/2009 10:53:43	OM_12-2-2009_10-36-52
241779001	927059	1	axc2	12/2/2009 10:54:36	OM_12-2-2009_10-36-52
241779002	927059	1	axc2	12/2/2009 10:55:29	OM_12-2-2009_10-36-52
1201982105	927059	1	axc2	12/2/2009 10:56:22	OM_12-2-2009_10-36-52
1201982109	927059	1	axc2	12/2/2009 10:57:15	OM_12-2-2009_10-36-52
1201982113	927059	1	axc2	12/2/2009 10:58:08	OM_12-2-2009_10-36-52
241779003	927059	1	axc2	12/2/2009 10:59:00	OM_12-2-2009_10-36-52
241779004	927059	1	axc2	12/2/2009 10:59:53	OM_12-2-2009_10-36-52
241781004	927059	1	axc2	12/2/2009 11:00:46	OM_12-2-2009_10-36-52
CCV		1	axc2	12/2/2009 11:01:38	OM_12-2-2009_10-36-52
CCB		1	axc2	12/2/2009 11:03:28	OM_12-2-2009_10-36-52
1201982106*	927059	1	axc2	12/2/2009 11:05:16	OM_12-2-2009_10-36-52
1201982110*	927059	1	axc2	12/2/2009 11:06:08	OM_12-2-2009_10-36-52
1201982114*	927059	1	axc2	12/2/2009 11:07:00	OM_12-2-2009_10-36-52
241793001*	927059	1	axc2	12/2/2009 11:07:51	OM_12-2-2009_10-36-52
241813005*	927059	1	axc2	12/2/2009 11:08:43	OM_12-2-2009_10-36-52
1201982103*	927059	1	axc2	12/2/2009 11:09:36	OM_12-2-2009_10-36-52
1201982107*	927059	1	axc2	12/2/2009 11:10:31	OM_12-2-2009_10-36-52
1201982111*	927059	1	axc2	12/2/2009 11:11:24	OM_12-2-2009_10-36-52
241835005*	927059	1	axc2	12/2/2009 11:12:17	OM_12-2-2009_10-36-52
1201982104*	927059	1	axc2	12/2/2009 11:13:11	OM_12-2-2009_10-36-52
CCV		1	axc2	12/2/2009 11:14:03	OM_12-2-2009_10-36-52

Author: axc2 Date : 12/2/2009

Original Run Filename: OM_12-2-2009_10-36-52.OMN created 12/2/2009 10:36:52
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-2-2009_10-36-52.OMN last modified 12/2/2009 11:15:07
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091202-01	1	S1	200	7.21	12/2/2009@10:40:12			200 ppb
WCN091202-02	1	S2	150	5.51	12/2/2009@10:41:04			150 ppb
WCN091202-03	1	S3	100	3.55	12/2/2009@10:41:57			100 ppb
WCN091202-04	1	S4	50.0	1.88	12/2/2009@10:42:49			50 ppb
WCN091202-05	1	S5	10.0	0.549	12/2/2009@10:43:43			10 ppb
WCN091202-06	1	S6	5.00	0.242	12/2/2009@10:44:37			CRDL 5.0 ppb
WCN091202-08	1	S7	0.00	0.00	12/2/2009@10:45:31			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99963 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091202-07	1	S8	156	5.64	12/2/2009@10:47:21			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	3.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091202-08	1	S7	2.54	0.166	12/2/2009@10:49:11			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.54 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.54 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091201-06	1	S6	4.62	0.240	12/2/2009@10:51:00			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.62 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.62 > 2.50					
		Message	Pass					
		Action	None					
1201982102|927059|MB	1	1	-1.40	0.0248	12/2/2009@10:52:50			
1201982115||LCS	1	2	47.1	1.76	12/2/2009@10:53:43			
241779001	1	3	-0.337	0.0627	12/2/2009@10:54:36			
241779002	1	4	-1.30	0.0283	12/2/2009@10:55:29			
1201982105||DUP	1	5	-1.87	0.00798	12/2/2009@10:56:22			
1201982109||MS	1	6	61.5	2.27	12/2/2009@10:57:15			
1201982113||MSD	1	7	66.8	2.46	12/2/2009@10:58:08			
241779003	1	8	1.09	0.114	12/2/2009@10:59:00			
241779004	1	9	-2.03	0.00231	12/2/2009@10:59:53			
241781004	1	10	14.2	0.582	12/2/2009@11:00:46			
WCN091202-03	1	S3	104	3.81	12/2/2009@11:01:38			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.5 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	1.39	0.124	12/2/2009@11:03:28			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.39 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.39 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982106||DUP	1	11	7.54	0.345	12/2/2009@11:05:16			
1201982110||MS	1	12	120	4.36	12/2/2009@11:06:08			
1201982114||MSD	1	13	123	4.48	12/2/2009@11:07:00			
241793001	1	14	243	8.78	12/2/2009@11:07:51			
241813005	1	15	8.20	0.368	12/2/2009@11:08:43			
1201982103||DUP	1	16	6.76	0.316	12/2/2009@11:09:36			
1201982107||MS	1	17	110	4.00	12/2/2009@11:10:31			
1201982111||MSD	1	18	110	3.99	12/2/2009@11:11:24			
241835005	1	19	1.94	0.144	12/2/2009@11:12:17			
1201982104||DUP	1	20	-1.26	0.0298	12/2/2009@11:13:11			
WCN091202-03	1	S3	114	4.16	12/2/2009@11:14:03			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	14.2 > 10.0					
		Message	CCV Failed					
		Action	Stop Run					
DQM Test: < - Percent Relative Difference								
		Result:	14.2 > 10.0					
		Message	CCV Passed					
		Action	Continue					

Analyte Properties Table for OM_12-2-2009_10-36-52.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 12/2/2009

Channel 1: Current View

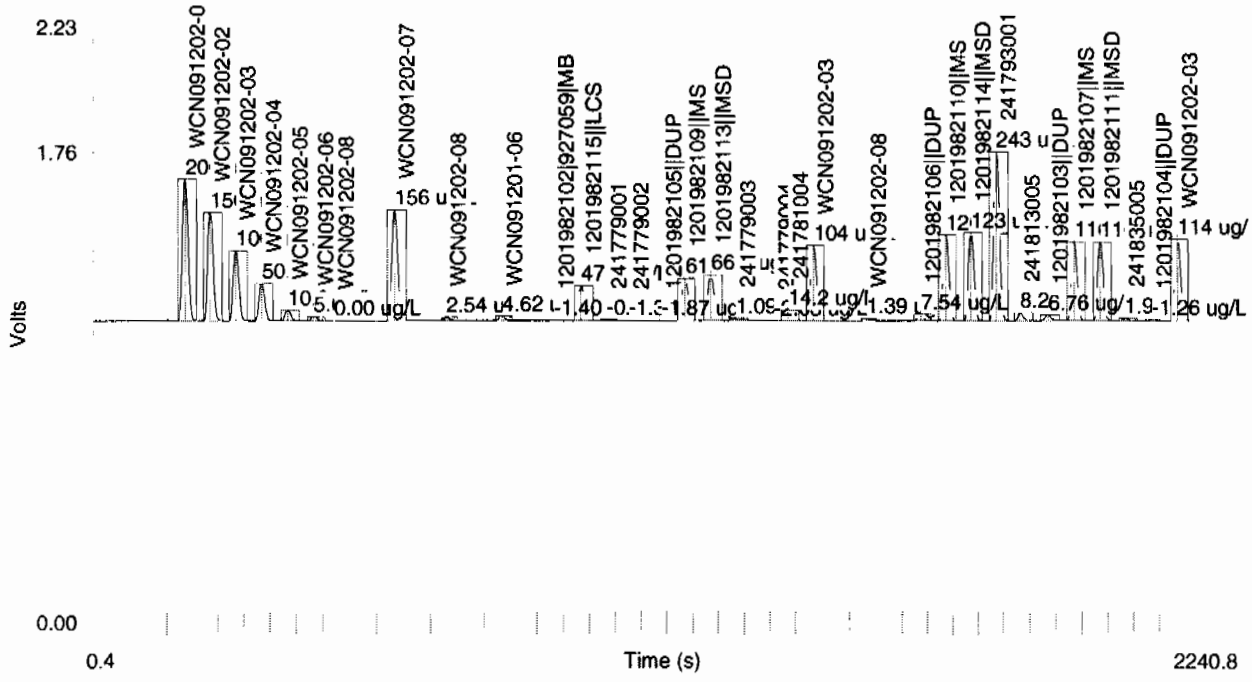

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.21	0.534	0.2	12/2/2009	10:41:15
2	150	1	5.51	0.409	-1.4	12/2/2009	10:42:07
3	100	1	3.55	0.263	2.7	12/2/2009	10:42:59
4	50.0	1	1.88	0.140	-0.8	12/2/2009	10:43:52
5	10.0	1	0.549	0.0391	-26.4	12/2/2009	10:44:45
6	5.00	1	0.242	0.0161	5.1	12/2/2009	10:45:39
7	0.00	1	0.00	-0.00289		12/2/2009	10:46:33

Figure 1: TCYANIDE

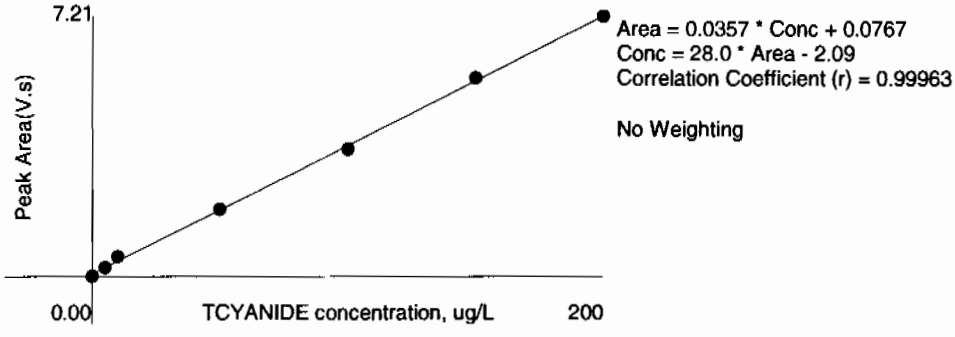

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/2/2009 12:52:45	OM_12-2-2009_12-51-59
150 ppb		1	axc2	12/2/2009 12:53:37	OM_12-2-2009_12-51-59
100 ppb		1	axc2	12/2/2009 12:54:29	OM_12-2-2009_12-51-59
50 ppb		1	axc2	12/2/2009 12:55:22	OM_12-2-2009_12-51-59
10 ppb		1	axc2	12/2/2009 12:56:15	OM_12-2-2009_12-51-59
CRDL 5.0 ppb		1	axc2	12/2/2009 12:57:09	OM_12-2-2009_12-51-59
ICAL-00		1	axc2	12/2/2009 12:58:03	OM_12-2-2009_12-51-59
ICV		1	axc2	12/2/2009 12:59:54	OM_12-2-2009_12-51-59
ICB		1	axc2	12/2/2009 13:01:45	OM_12-2-2009_12-51-59
CRDL		1	axc2	12/2/2009 13:03:34	OM_12-2-2009_12-51-59
1201982106	927059	1	axc2	12/2/2009 13:05:23	OM_12-2-2009_12-51-59
1201982110	927059	1	axc2	12/2/2009 13:06:15	OM_12-2-2009_12-51-59
1201982114	927059	1	axc2	12/2/2009 13:07:06	OM_12-2-2009_12-51-59
241793001	927059	2	axc2	12/2/2009 13:07:58	OM_12-2-2009_12-51-59
241813005	927059	1	axc2	12/2/2009 13:08:50	OM_12-2-2009_12-51-59
1201982103	927059	1	axc2	12/2/2009 13:09:44	OM_12-2-2009_12-51-59
1201982107	927059	1	axc2	12/2/2009 13:10:37	OM_12-2-2009_12-51-59
1201982111	927059	1	axc2	12/2/2009 13:11:30	OM_12-2-2009_12-51-59
241835005	927059	1	axc2	12/2/2009 13:12:24	OM_12-2-2009_12-51-59
1201982104	927059	1	axc2	12/2/2009 13:13:17	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:14:09	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:16:00	OM_12-2-2009_12-51-59
1201982108	927059	1	axc2	12/2/2009 13:17:48	OM_12-2-2009_12-51-59
1201982112	927059	1	axc2	12/2/2009 13:18:41	OM_12-2-2009_12-51-59
241835006	927059	1	axc2	12/2/2009 13:19:34	OM_12-2-2009_12-51-59
241848004*	927059	1	axc2	12/2/2009 13:20:26	OM_12-2-2009_12-51-59
241848005	927059	1	axc2	12/2/2009 13:21:19	OM_12-2-2009_12-51-59
241848006	927059	1	axc2	12/2/2009 13:22:11	OM_12-2-2009_12-51-59
241898001	927059	1	axc2	12/2/2009 13:23:03	OM_12-2-2009_12-51-59
241898002	927059	1	axc2	12/2/2009 13:23:55	OM_12-2-2009_12-51-59
241898003	927059	1	axc2	12/2/2009 13:24:47	OM_12-2-2009_12-51-59
241898004	927059	1	axc2	12/2/2009 13:25:39	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:26:32	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:28:22	OM_12-2-2009_12-51-59
241848004	927059	1	axc2	12/2/2009 13:30:11	OM_12-2-2009_12-51-59
241902001	927059	1	axc2	12/2/2009 13:31:05	OM_12-2-2009_12-51-59
241902002	927059	1	axc2	12/2/2009 13:31:59	OM_12-2-2009_12-51-59
241917001	927059	1	axc2	12/2/2009 13:32:52	OM_12-2-2009_12-51-59
241919001	927059	1	axc2	12/2/2009 13:33:46	OM_12-2-2009_12-51-59
1201979055	925669	1	axc2	12/2/2009 13:34:39	OM_12-2-2009_12-51-59
1201979062	925669	25	axc2	12/2/2009 13:35:32	OM_12-2-2009_12-51-59
241536001	925669	1	axc2	12/2/2009 13:36:25	OM_12-2-2009_12-51-59
241536002	925669	1	axc2	12/2/2009 13:37:18	OM_12-2-2009_12-51-59
241536003	925669	1	axc2	12/2/2009 13:38:11	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:39:04	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:40:54	OM_12-2-2009_12-51-59
241536004	925669	1	axc2	12/2/2009 13:42:42	OM_12-2-2009_12-51-59
241536005	925669	1	axc2	12/2/2009 13:43:34	OM_12-2-2009_12-51-59
241536006	925669	1	axc2	12/2/2009 13:44:27	OM_12-2-2009_12-51-59
241536007	925669	1	axc2	12/2/2009 13:45:19	OM_12-2-2009_12-51-59
241539001	925669	1	axc2	12/2/2009 13:46:11	OM_12-2-2009_12-51-59
241539002	925669	1	axc2	12/2/2009 13:47:03	OM_12-2-2009_12-51-59
241539003	925669	1	axc2	12/2/2009 13:47:57	OM_12-2-2009_12-51-59
241539004	925669	1	axc2	12/2/2009 13:48:51	OM_12-2-2009_12-51-59
241604001	925669	1	axc2	12/2/2009 13:49:45	OM_12-2-2009_12-51-59
1201979056	925669	1	axc2	12/2/2009 13:50:38	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009 13:51:31	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009 13:53:21	OM_12-2-2009_12-51-59

1201979058	925669	1	axc2	12/2/2009	13:55:11	OM_12-2-2009_12-51-59
1201979060	925669	1	axc2	12/2/2009	13:56:04	OM_12-2-2009_12-51-59
241604002	925669	1	axc2	12/2/2009	13:56:57	OM_12-2-2009_12-51-59
1201979057	925669	1	axc2	12/2/2009	13:57:50	OM_12-2-2009_12-51-59
1201979059	925669	1	axc2	12/2/2009	13:58:43	OM_12-2-2009_12-51-59
1201979061	925669	1	axc2	12/2/2009	13:59:36	OM_12-2-2009_12-51-59
241611001	925669	1	axc2	12/2/2009	14:00:29	OM_12-2-2009_12-51-59
241611002	925669	1	axc2	12/2/2009	14:01:21	OM_12-2-2009_12-51-59
241611003	925669	1	axc2	12/2/2009	14:02:13	OM_12-2-2009_12-51-59
241611004	925669	1	axc2	12/2/2009	14:03:06	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009	14:03:58	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009	14:05:48	OM_12-2-2009_12-51-59
241611005	925669	1	axc2	12/2/2009	14:07:36	OM_12-2-2009_12-51-59
241611006	925669	1	axc2	12/2/2009	14:08:32	OM_12-2-2009_12-51-59
241611007	925669	1	axc2	12/2/2009	14:09:25	OM_12-2-2009_12-51-59
CCV		1	axc2	12/2/2009	14:10:18	OM_12-2-2009_12-51-59
CCB		1	axc2	12/2/2009	14:12:08	OM_12-2-2009_12-51-59

Author: axc2 Date : 12/2/2009

Original Run Filename: OM_12-2-2009_12-51-59.OMN created 12/2/2009 12:51:59
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-2-2009_12-51-59.OMN last modified 12/2/2009 14:13:13
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091202-01	1	S1	200	7.81	12/2/2009@12:52:45			200 ppb
WCN091202-02	1	S2	150	6.05	12/2/2009@12:53:37			150 ppb
WCN091202-03	1	S3	100	4.16	12/2/2009@12:54:29			100 ppb
WCN091202-04	1	S4	50.0	2.05	12/2/2009@12:55:22			50 ppb
WCN091202-05	1	S5	10.0	0.566	12/2/2009@12:56:15			10 ppb
WCN091202-06	1	S6	5.00	0.251	12/2/2009@12:57:09			CRDL 5.0 ppb
WCN091202-08	1	S7	0.00	0.0222	12/2/2009@12:58:03			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99952 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091202-07	1	S8	149	5.96	12/2/2009@12:59:54			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-0.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091202-08	1	S7	2.20	0.194	12/2/2009@13:01:45			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091201-06	1	S6	3.76	0.255	12/2/2009@13:03:34			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	3.76 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	3.76 > 2.50					
		Message	Pass					
		Action	None					
1201982106|927059|DUP	1	11	6.20	0.350	12/2/2009@13:05:23			
1201982110||MS	1	12	111	4.45	12/2/2009@13:06:15			
1201982114||MSD	1	13	115	4.60	12/2/2009@13:07:06			
241793001	1	14	122	4.89	12/2/2009@13:07:58		2.00	
241813005	1	15	2.58	0.208	12/2/2009@13:08:50			
1201982103||DUP	1	16	5.05	0.305	12/2/2009@13:09:44			
1201982107||MS	1	17	102	4.10	12/2/2009@13:10:37			
1201982111||MSD	1	18	102	4.10	12/2/2009@13:11:30			
241835005	1	19	0.611	0.132	12/2/2009@13:12:24			
1201982104||DUP	1	20	-1.89	0.0336	12/2/2009@13:13:17			
WCN091202-03	1	S3	104	4.19	12/2/2009@13:14:09			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.3 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.768	0.138	12/2/2009@13:16:00			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.768 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.768 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982108||MS	1	21	101	4.08	12/2/2009@13:17:48			
1201982112||MSD	1	22	104	4.16	12/2/2009@13:18:41			
241835006	1	23	0.772	0.138	12/2/2009@13:19:34			
241848004	1	24	4.46	0.282	12/2/2009@13:20:26			
241848005	1	25	-2.26	0.0193	12/2/2009@13:21:19			
241848006	1	26	-1.84	0.0355	12/2/2009@13:22:11			
241898001	1	27	-0.883	0.0731	12/2/2009@13:23:03			
241898002	1	28	-1.73	0.0398	12/2/2009@13:23:55			
241898003	1	29	-1.54	0.0474	12/2/2009@13:24:47			
241898004	1	30	-1.81	0.0369	12/2/2009@13:25:39			
WCN091202-03	1	S3	106	4.26	12/2/2009@13:26:32			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.426	0.124	12/2/2009@13:28:22			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.426 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.426 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241848004	1	24	-1.80	0.0372	12/2/2009@13:30:11			
241902001	1	31	-2.74	2.27e-4	12/2/2009@13:31:05			
241902002	1	32	-2.72	0.00102	12/2/2009@13:31:59			
241917001	1	33	-2.22	0.0206	12/2/2009@13:32:52			
241919001	1	34	-1.27	0.0579	12/2/2009@13:33:46			
1201979055|925669|MB	1	35	-1.80	0.0374	12/2/2009@13:34:39			
1201979062||LCS	1	36	27.7	1.19	12/2/2009@13:35:32		25.00	
241536001	1	37	-0.723	0.0793	12/2/2009@13:36:25			
241536002	1	38	-0.102	0.104	12/2/2009@13:37:18			
241536003	1	39	-1.64	0.0435	12/2/2009@13:38:11			
WCN091202-03	1	S3	106	4.24	12/2/2009@13:39:04			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.889	0.142	12/2/2009@13:40:54			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	0.889 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.889 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241536004	1	40	-1.71	0.0405	12/2/2009@13:42:42			
241536005	1	41	-0.186	0.100	12/2/2009@13:43:34			
241536006	1	42	-0.694	0.0804	12/2/2009@13:44:27			
241536007	1	43	-1.72	0.0404	12/2/2009@13:45:19			
241539001	1	44	-0.788	0.0767	12/2/2009@13:46:11			
241539002	1	45	13.2	0.626	12/2/2009@13:47:03			
241539003	1	46	-1.39	0.0533	12/2/2009@13:47:57			
241539004	1	47	-1.39	0.0532	12/2/2009@13:48:51			
241604001	1	48	1.95	0.184	12/2/2009@13:49:45			
1201979056||DUP	1	49	2.06	0.188	12/2/2009@13:50:38			
WCN091202-03	1	S3	106	4.26	12/2/2009@13:51:31			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.539	0.129	12/2/2009@13:53:21			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.539 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.539 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979058||MS	1	50	77.6	3.14	12/2/2009@13:55:11			
1201979060||MSD	1	51	82.2	3.32	12/2/2009@13:56:04			
241604002	1	52	6.39	0.358	12/2/2009@13:56:57			
1201979057||DUP	1	53	2.74	0.215	12/2/2009@13:57:50			
1201979059||MS	1	54	79.2	3.21	12/2/2009@13:58:43			
1201979061||MSD	1	55	90.0	3.63	12/2/2009@13:59:36			
241611001	1	56	-0.369	0.0931	12/2/2009@14:00:29			
241611002	1	57	-1.63	0.0437	12/2/2009@14:01:21			
241611003	1	58	0.396	0.123	12/2/2009@14:02:13			
241611004	1	59	-1.17	0.0617	12/2/2009@14:03:06			
WCN091202-03	1	S3	105	4.22	12/2/2009@14:03:58			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091202-08	1	S7	0.892	0.143	12/2/2009@14:05:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.892 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.892 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241611005	1	60	-0.730	0.0790	12/2/2009@14:07:36			
241611006	1	61	-1.35	0.0547	12/2/2009@14:08:32			
241611007	1	62	-0.492	0.0884	12/2/2009@14:09:25			
WCN091202-03	1	S3	106	4.26	12/2/2009@14:10:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091202-08	1	S7	1.35	0.161	12/2/2009@14:12:08			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.35 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.35 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_12-2-2009_12-51-59.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2

Date : 12/2/2009

Channel 1: Current View

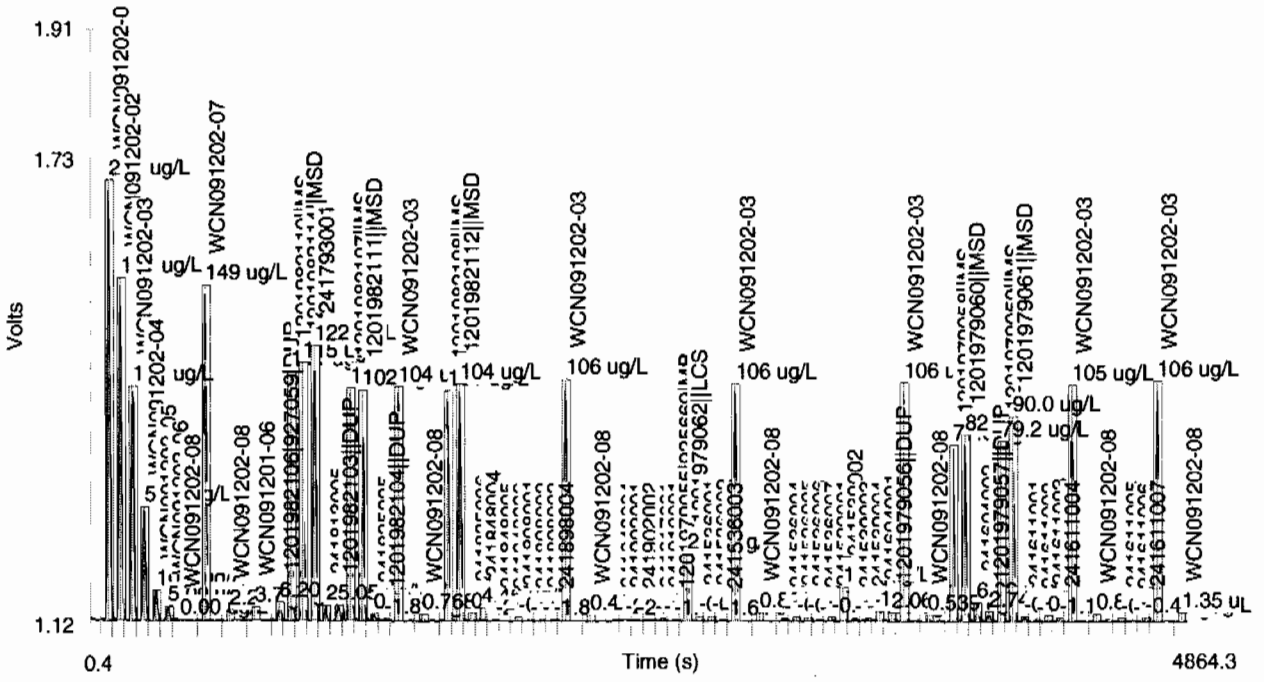

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.81	0.576	1.5	12/2/2009	12:53:48
2	150	1	6.05	0.447	-1.2	12/2/2009	12:54:40
3	100	1	4.16	0.308	-3.5	12/2/2009	12:55:32
4	50.0	1	2.05	0.151	0.5	12/2/2009	12:56:25
5	10.0	1	0.566	0.0404	-12.9	12/2/2009	12:57:19
6	5.00	1	0.251	0.0189	17.8	12/2/2009	12:58:12
7	0.00	1	0.0222	0.00155		12/2/2009	12:59:06

Figure 1: TCYANIDE

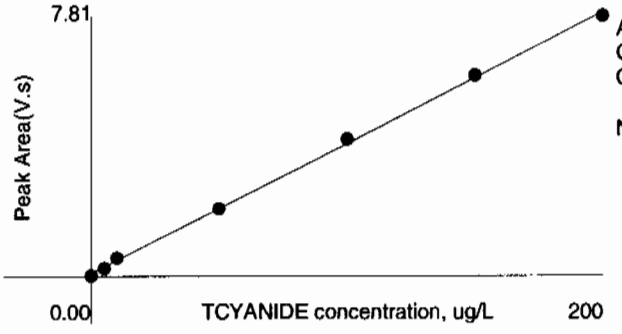

Area = 0.0391 * Conc + 0.110
Conc = 25.6 * Area - 2.75
Correlation Coefficient (r) = 0.99952

No Weighting

Tuesday, November 24, 2009

REQUEST NUMBER: 10-668

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-668

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14130	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8082	1	RE03-09-14130	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-668

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8260B	1	RE03-09-14130	S	11/23/2009	
		1	RE03-09-14290	S	11/23/2009	
		1	RE03-09-14291	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8270C	1	RE03-09-14130	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	

Final Page of REQUEST NUMBER 10-668

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-668

REQUEST NUMBER: 10-668

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14130	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14130	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14291	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-14290	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-2732	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2732	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-2733	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2733	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-2731	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2731	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/24/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14130 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt3
TIME COLLECTED (HH:MM)		1240	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15 ft.	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	RJJ 11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QBt3, Pinkish-gray (7.5 YR 6/3)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID = 1.2 ppm

Samples < MDA
background
Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. Shinsky **REVIEWED BY (PRINT)** J. J.

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14290 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	AIH
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	OTHER	
PRS ID:	60-0046 ~~G 00 097~~ JRJ 11-23-09	Ok	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 2	JRJ 11-23-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Shumlo **REVIEWED BY (PRINT)** J. J

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. J (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14291 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	All(+)
TIME COLLECTED (HH:MM)		1105	SUB-MEDIA:	OTHER	OK
PRS ID:	60-004(b) ~~C-09-007~~	OK	SAMPLE TECH CODE:	SS	
LOCATION ID:	UNK JWJ 11-23-09		FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	~~JWJ 11-23~~ JWJ 11-23-09
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ _____ ~~BOREHOLE DIRECTION:~~ _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
2	1 JWJ 11-23-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14120

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Shando **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jaime Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2731 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	ALLH	QBt3
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	~~SOIL~~	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~	HSA
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FD	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~SR~~		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ____ COMPOSITE TIME INTERVAL: ____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: ____ BOREHOLE DIRECTION: ____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 5.0ppm
Background:
α 17 dpm
β 1557 ↓
Samples: < MDA

COLLECTED BY (PRINT) M. Sherdo

REVIEWED BY (PRINT) J. Jun

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2732 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	~~ALL~~	QB+3
TIME COLLECTED (HH:MM)		1015	SUB-MEDIA:	~~SOIL~~	UA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	UNK	03-608400	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:		UA
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14115

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.1 ppm
Background:
α 17 dpm
β 1557 ↓
Sample: <MDA

COLLECTED BY (PRINT) M. Sherrod **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-23-09 1650	(Printed Name) [signature]	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2733 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	~~ALLH~~	QR+3
TIME COLLECTED (HH:MM)			SUB-MEDIA:	~~SOIL~~	LA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	UNK	03-609401	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	LA	
FIELD MATRIX:	~~S~~ R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of RE03-09-14120

SAMPLE COMMENTS: LA

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.1 ppm
Background:
α: 17 dpm
β: 1557 L
Samples: L MBA

COLLECTED BY (PRINT) M. Sherdo

REVIEWED BY (PRINT) J. Jun

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jun (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2744 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		~~0905~~ 0930	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	Ok 11-23-09	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	Ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Nauck **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	1650	(Printed Name)	11-23-09
(Signature)	11-23-09	(Signature) [illegible]	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2745 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		~~1085~~ 11-23-09 1013	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608400	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14115

SAMPLE COMMENTS: NA

LOCATION DESC: 46-1

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) [signature] REVIEWED BY (PRINT) J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature] (Signature)	11-23-09 1650	(Printed Name) (Signature) [signature]	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2746 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1105	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b),~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	~~03-60~~ 03-60840/	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14120

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Black **REVIEWED BY (PRINT)** J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jack (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2757 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608399	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14110

SAMPLE COMMENTS: NA

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** J. Jurek

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jurek (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2758 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1020	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608400	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14115

SAMPLE COMMENTS: NA

LOCATION DESC: 04(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sherlo **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-10-2759 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	03-608401	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		METALS-GEL	1 LITER POLY	Nitric Acid	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE03-09-14120

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) M. Sherdo **REVIEWED BY (PRINT)** J. Jurl

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jurl (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-668 VALIDATION DATE: 02/03/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the FTB, sample RE03-09-14290, associated with sample -10-2731, acetone and benzene were detected. Also, in the FTB, sample -09-14291, associated with sample -10-2733, acetone was detected. The associated acetone sample results were detects ≤10X the FTB concentration and, thus, were qualified U,V4d. The associated benzene sample result was an ND and, thus, was not qualified.
2. The ICV %Ds were >20% for acetone, 2-butanone and 2-hexanone. Also, the CCV %Ds were >20% for 1,1,1-trichloroethane and carbon tetrachloride. The acetone result for samples -09-14290, -09-14291 and -10-2732 were detects and, thus, were qualified J,V7c. All other associated sample results were NDs or were qualified ND and, thus, were qualified UJ,V7c.
3. The MS/MSD RPDs for chloromethane and methylene chloride were outside laboratory acceptance limits. Since the analysis of an MS or MSD was not required for VOCs, no sample data were qualified as a result.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/03/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/03/10

DATA VALIDATION COVER SHEET

5114-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943
Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14130	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 22:07	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n212.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

P.S. 2/3/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14130	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 22:07	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:10	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n212.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	59.8	ug/kg		J

P.S. 2/3/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827003	Date Received:	11/25/2009 09:10		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14290	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 23:02	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:14	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n214.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	4.65	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene		1.12	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

P.S. 2/3/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827003	Date Received:	11/25/2009 09:10		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14290	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 23:02	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:14	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n214.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

P.S. 2/3/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827002	Date Received:	11/25/2009 09:10		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14291	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 22:35	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:13	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n213.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	3.84	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827002	Date Received:	11/25/2009 09:10		
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14291	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 22:35	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:13	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n213.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827006	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2731	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/02/2009 00:24	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:17	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n217.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04	
67-64-1	Acetone	J	4.94	ug/kg	1.73	5.22	U,V4d
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
74-88-4	Iodomethane	U	5.22	ug/kg	1.67	5.22	
75-09-2	Methylene chloride	U	5.22	ug/kg	2.09	5.22	
75-15-0	Carbon disulfide	U	5.22	ug/kg	1.30	5.22	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04	
78-93-3	2-Butanone	U	5.22	ug/kg	1.56	5.22	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04	
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.22	ug/kg	1.30	5.22	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04	
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04	
591-78-6	2-Hexanone	U	5.22	ug/kg	1.56	5.22	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04	

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827006	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2731	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/02/2009 00:24	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:17	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n217.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.22	ug/kg	1.67	5.22
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
66-25-1	Hexanal	12.99	18.5	ug/kg	90	NJ
	Unknown Siloxane	14.83	60.3	ug/kg		J
124-19-6	Nonanal	17.15	5.48	ug/kg	83	NJ

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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827004	Date Received:	11/25/2009 09:10	%Moisture:	.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2732	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 23:30	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:15	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n215.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.341	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.301	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.301	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.301	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.301	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.301	1.00	
67-64-1	Acetone	J	1.69	ug/kg	1.66	5.01	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.301	1.00	
74-88-4	Iodomethane	U	5.01	ug/kg	1.60	5.01	
75-09-2	Methylene chloride	U	5.01	ug/kg	2.01	5.01	
75-15-0	Carbon disulfide	U	5.01	ug/kg	1.25	5.01	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.301	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.301	1.00	
78-93-3	2-Butanone	U	5.01	ug/kg	1.50	5.01	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.301	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.301	1.00	
67-66-3	Chloroform	U	1.00	ug/kg	0.301	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.331	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.301	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.301	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.301	1.00	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.301	1.00	
71-43-2	Benzene	U	1.00	ug/kg	0.301	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.331	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.301	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.301	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.301	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.01	ug/kg	1.25	5.01	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.301	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.301	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.301	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.301	1.00	
591-78-6	2-Hexanone	U	5.01	ug/kg	1.50	5.01	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.301	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.301	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.301	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.301	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.301	1.00	

P.S. 2/3/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827004	Date Received:	11/25/2009 09:10	%Moisture:	.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2732	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 23:30	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:15	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n215.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.301	1.00
179601-23-1	m,p-Xylenes	U	2.01	ug/kg	0.301	2.01
95-47-6	o-Xylene	U	1.00	ug/kg	0.301	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.301	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.301	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.301	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.301	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.301	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.301	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.301	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.301	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.301	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.301	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.301	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.301	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.301	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.301	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.301	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.301	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.01	ug/kg	1.60	5.01
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.301	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	381	ug/kg		J
	Unknown Siloxane	16.79	20.3	ug/kg		J

P.S. 2/3/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827005	Date Received:	11/25/2009 09:10	%Moisture:	3.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2733	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 23:57	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:16	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n216.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.352	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04	
67-64-1	Acetone	J	2.74	ug/kg	1.72	5.18	U,V4d
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
74-88-4	Iodomethane	U	5.18	ug/kg	1.66	5.18	
75-09-2	Methylene chloride	U	5.18	ug/kg	2.07	5.18	
75-15-0	Carbon disulfide	U	5.18	ug/kg	1.30	5.18	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
78-93-3	2-Butanone	U	5.18	ug/kg	1.55	5.18	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.18	ug/kg	1.30	5.18	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
591-78-6	2-Hexanone	U	5.18	ug/kg	1.55	5.18	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04	

P.S. 2/3/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827005	Date Received:	11/25/2009 09:10	%Moisture:	3.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2733	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/01/2009 23:57	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/01/2009 21:16	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n216.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.18	ug/kg	1.66	5.18
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	68.4	ug/kg		J

P.S. 2/3/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-668 VALIDATION DATE: 02/03/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The ICV/CCV %Ds were > 20% for N-nitrosodipropylamine; 4-chloroaniline; hexachlorocyclopentadiene; 3-nitroaniline; 2,4-dinitrophenol; and 4-nitroaniline. All associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The LCS %R was > the laboratory UAL for 4-nitroaniline. The associated sample results were NDs and, thus, were not qualified.
3. The MS/MSD %Rs for 4-nitroaniline did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for SVOCs, no sample data were qualified as a result. It should be noted that the parent sample for the QC analyses was from another LANL RN, and the parent sample raw data were not included in the data package. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/03/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/03/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☒	☐	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☐	☒	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☐	☒	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:08	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s510408.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	332	ug/kg	66.4	332	
108-95-2	Phenol	U	332	ug/kg	66.4	332	
95-57-8	2-Chlorophenol	U	332	ug/kg	66.4	332	
106-46-7	1,4-Dichlorobenzene	U	332	ug/kg	66.4	332	
621-64-7	N-Nitrosodipropylamine	U	332	ug/kg	66.4	332	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	332	ug/kg	66.4	332	
83-32-9	Acenaphthene	U	33.2	ug/kg	11.0	33.2	
121-14-2	2,4-Dinitrotoluene	U	332	ug/kg	33.2	332	
100-02-7	4-Nitrophenol	U	332	ug/kg	110	332	
87-86-5	Pentachlorophenol	U	332	ug/kg	83.0	332	
129-00-0	Pyrene	U	33.2	ug/kg	9.96	33.2	
110-86-1	Pyridine	U	332	ug/kg	66.4	332	
62-53-3	Aniline	U	332	ug/kg	99.6	332	
111-44-4	bis(2-Chloroethyl) ether	U	332	ug/kg	66.4	332	
541-73-1	1,3-Dichlorobenzene	U	332	ug/kg	66.4	332	
100-51-6	Benzyl alcohol	U	332	ug/kg	99.6	332	
95-50-1	1,2-Dichlorobenzene	U	332	ug/kg	66.4	332	
108-60-1	bis(2-Chloroisopropyl)ether	U	332	ug/kg	66.4	332	
95-48-7	o-Cresol	U	332	ug/kg	66.4	332	
65794-96-9	m,p-Cresols	U	332	ug/kg	99.6	332	
67-72-1	Hexachloroethane	U	332	ug/kg	66.4	332	
98-95-3	Nitrobenzene	U	332	ug/kg	66.4	332	
78-59-1	Isophorone	U	332	ug/kg	66.4	332	
88-75-5	2-Nitrophenol	U	332	ug/kg	66.4	332	
105-67-9	2,4-Dimethylphenol	U	332	ug/kg	116	332	
111-91-1	bis(2-Chloroethoxy)methane	U	332	ug/kg	66.4	332	
120-83-2	2,4-Dichlorophenol	U	332	ug/kg	66.4	332	
65-85-0	Benzoic acid	U	664	ug/kg	166	664	
91-20-3	Naphthalene	U	33.2	ug/kg	9.96	33.2	
106-47-8	4-Chloroaniline	U	332	ug/kg	66.4	332	UJ,SV7c
87-68-3	Hexachlorobutadiene	U	332	ug/kg	66.4	332	
91-57-6	2-Methylnaphthalene	U	33.2	ug/kg	6.64	33.2	
77-47-4	Hexachlorocyclopentadiene	U	332	ug/kg	66.4	332	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	332	ug/kg	66.4	332	
95-95-4	2,4,5-Trichlorophenol	U	332	ug/kg	66.4	332	
91-58-7	2-Chloronaphthalene	U	33.2	ug/kg	11.0	33.2	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	332	ug/kg	66.4	332	
99-09-2	3-Nitroaniline	U	332	ug/kg	66.4	332	UJ,SV7c

P.S. 2/3/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:08	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s510408.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	332	ug/kg	66.4	332	
606-20-2	2,6-Dinitrotoluene	U	332	ug/kg	33.2	332	
208-96-8	Acenaphthylene	U	33.2	ug/kg	9.96	33.2	
51-28-5	2,4-Dinitrophenol	U	664	ug/kg	126	664	UJ,SV7c
132-64-9	Dibenzofuran	U	332	ug/kg	66.4	332	
84-66-2	Diethylphthalate	U	332	ug/kg	66.4	332	
86-73-7	Fluorene	U	33.2	ug/kg	9.96	33.2	
7005-72-3	4-Chlorophenylphenylether	U	332	ug/kg	66.4	332	
534-52-1	2-Methyl-4,6-dinitrophenol	U	332	ug/kg	66.4	332	
100-01-6	4-Nitroaniline	U	332	ug/kg	99.6	332	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	332	ug/kg	66.4	332	
122-66-7	Azobenzene	U	332	ug/kg	66.4	332	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	332	ug/kg	66.4	332	
118-74-1	Hexachlorobenzene	U	332	ug/kg	66.4	332	
85-01-8	Phenanthrene	U	33.2	ug/kg	9.96	33.2	
120-12-7	Anthracene	U	33.2	ug/kg	6.64	33.2	
84-74-2	Di-n-butylphthalate	U	332	ug/kg	66.4	332	
206-44-0	Fluoranthene	U	33.2	ug/kg	9.96	33.2	
85-68-7	Butylbenzylphthalate	U	332	ug/kg	66.4	332	
56-55-3	Benzo(a)anthracene	U	33.2	ug/kg	9.96	33.2	
91-94-1	3,3'-Dichlorobenzidine	U	332	ug/kg	99.6	332	
218-01-9	Chrysene	U	33.2	ug/kg	9.96	33.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	332	ug/kg	66.4	332	
117-84-0	Di-n-octylphthalate	U	332	ug/kg	66.4	332	
205-99-2	Benzo(b)fluoranthene	U	33.2	ug/kg	9.96	33.2	
207-08-9	Benzo(k)fluoranthene	U	33.2	ug/kg	9.96	33.2	
50-32-8	Benzo(a)pyrene	U	33.2	ug/kg	9.96	33.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.2	ug/kg	9.96	33.2	
53-70-3	Dibenzo(a,h)anthracene	U	33.2	ug/kg	9.96	33.2	
191-24-2	Benzo(ghi)perylene	U	33.2	ug/kg	9.96	33.2	
120-82-1	1,2,4-Trichlorobenzene	U	332	ug/kg	66.4	332	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	473	ug/kg		J
	Unknown Aldol Condensate	2.94	168	ug/kg		J

P.S. 2/3/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827006	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2731	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 14:16	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510411.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.5	348	
108-95-2	Phenol	U	348	ug/kg	69.5	348	
95-57-8	2-Chlorophenol	U	348	ug/kg	69.5	348	
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.5	348	
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.5	348	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.5	348	
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8	
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348	
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348	
87-86-5	Pentachlorophenol	U	348	ug/kg	86.9	348	
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8	
110-86-1	Pyridine	U	348	ug/kg	69.5	348	
62-53-3	Aniline	U	348	ug/kg	104	348	
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.5	348	
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.5	348	
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348	
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.5	348	
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.5	348	
95-48-7	o-Cresol	U	348	ug/kg	69.5	348	
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348	
67-72-1	Hexachloroethane	U	348	ug/kg	69.5	348	
98-95-3	Nitrobenzene	U	348	ug/kg	69.5	348	
78-59-1	Isophorone	U	348	ug/kg	69.5	348	
88-75-5	2-Nitrophenol	U	348	ug/kg	69.5	348	
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348	
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.5	348	
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.5	348	
65-85-0	Benzoic acid	U	695	ug/kg	174	695	
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8	
106-47-8	4-Chloroaniline	U	348	ug/kg	69.5	348	UJ,SV7c
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.5	348	
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.95	34.8	
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.5	348	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.5	348	
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.5	348	
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.5	348	
99-09-2	3-Nitroaniline	U	348	ug/kg	69.5	348	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827006	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2731	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 14:16	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510411.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	348	ug/kg	69.5	348	
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348	
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8	
51-28-5	2,4-Dinitrophenol	U	695	ug/kg	132	695	UJ,SV7c
132-64-9	Dibenzofuran	U	348	ug/kg	69.5	348	
84-66-2	Diethylphthalate	U	348	ug/kg	69.5	348	
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8	
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.5	348	
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.5	348	
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	348	ug/kg	69.5	348	
122-66-7	Azobenzene	U	348	ug/kg	69.5	348	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.5	348	
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.5	348	
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8	
120-12-7	Anthracene	U	34.8	ug/kg	6.95	34.8	
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.5	348	
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8	
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.5	348	
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8	
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348	
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8	
117-81-7	bis(2-Ethylhexyl)phthalate	U	348	ug/kg	69.5	348	
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.5	348	
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8	
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8	
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8	
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8	
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8	
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.5	348	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	220	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827004	Date Received:	11/25/2009 09:10	%Moisture:	.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2732	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s510409.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	332	ug/kg	66.5	332	
108-95-2	Phenol	U	332	ug/kg	66.5	332	
95-57-8	2-Chlorophenol	U	332	ug/kg	66.5	332	
106-46-7	1,4-Dichlorobenzene	U	332	ug/kg	66.5	332	
621-64-7	N-Nitrosodipropylamine	U	332	ug/kg	66.5	332	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	332	ug/kg	66.5	332	
83-32-9	Acenaphthene	U	33.2	ug/kg	11.0	33.2	
121-14-2	2,4-Dinitrotoluene	U	332	ug/kg	33.2	332	
100-02-7	4-Nitrophenol	U	332	ug/kg	110	332	
87-86-5	Pentachlorophenol	U	332	ug/kg	83.1	332	
129-00-0	Pyrene	U	33.2	ug/kg	9.97	33.2	
110-86-1	Pyridine	U	332	ug/kg	66.5	332	
62-53-3	Aniline	U	332	ug/kg	99.7	332	
111-44-4	bis(2-Chloroethyl) ether	U	332	ug/kg	66.5	332	
541-73-1	1,3-Dichlorobenzene	U	332	ug/kg	66.5	332	
100-51-6	Benzyl alcohol	U	332	ug/kg	99.7	332	
95-50-1	1,2-Dichlorobenzene	U	332	ug/kg	66.5	332	
108-60-1	bis(2-Chloroisopropyl)ether	U	332	ug/kg	66.5	332	
95-48-7	o-Cresol	U	332	ug/kg	66.5	332	
65794-96-9	m,p-Cresols	U	332	ug/kg	99.7	332	
67-72-1	Hexachloroethane	U	332	ug/kg	66.5	332	
98-95-3	Nitrobenzene	U	332	ug/kg	66.5	332	
78-59-1	Isophorone	U	332	ug/kg	66.5	332	
88-75-5	2-Nitrophenol	U	332	ug/kg	66.5	332	
105-67-9	2,4-Dimethylphenol	U	332	ug/kg	116	332	
111-91-1	bis(2-Chloroethoxy)methane	U	332	ug/kg	66.5	332	
120-83-2	2,4-Dichlorophenol	U	332	ug/kg	66.5	332	
65-85-0	Benzoic acid	U	665	ug/kg	166	665	
91-20-3	Naphthalene	U	33.2	ug/kg	9.97	33.2	
106-47-8	4-Chloroaniline	U	332	ug/kg	66.5	332	UJ,SV7c
87-68-3	Hexachlorobutadiene	U	332	ug/kg	66.5	332	
91-57-6	2-Methylnaphthalene	U	33.2	ug/kg	6.65	33.2	
77-47-4	Hexachlorocyclopentadiene	U	332	ug/kg	66.5	332	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	332	ug/kg	66.5	332	
95-95-4	2,4,5-Trichlorophenol	U	332	ug/kg	66.5	332	
91-58-7	2-Chloronaphthalene	U	33.2	ug/kg	11.0	33.2	
88-74-4	2-Nitroaniline	U	332	ug/kg	66.5	332	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	332	ug/kg	66.5	332	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827004	Date Received:	11/25/2009 09:10	%Moisture:	.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2732	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s510409.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	332	ug/kg	66.5	332	
606-20-2	2,6-Dinitrotoluene	U	332	ug/kg	33.2	332	
208-96-8	Acenaphthylene	U	33.2	ug/kg	9.97	33.2	
51-28-5	2,4-Dinitrophenol	U	665	ug/kg	126	665	UJ,SV7c
132-64-9	Dibenzofuran	U	332	ug/kg	66.5	332	
84-66-2	Diethylphthalate	U	332	ug/kg	66.5	332	
86-73-7	Fluorene	U	33.2	ug/kg	9.97	33.2	
7005-72-3	4-Chlorophenylphenylether	U	332	ug/kg	66.5	332	
534-52-1	2-Methyl-4,6-dinitrophenol	U	332	ug/kg	66.5	332	
100-01-6	4-Nitroaniline	U	332	ug/kg	99.7	332	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	332	ug/kg	66.5	332	
122-66-7	Azobenzene	U	332	ug/kg	66.5	332	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	332	ug/kg	66.5	332	
118-74-1	Hexachlorobenzene	U	332	ug/kg	66.5	332	
85-01-8	Phenanthrene	U	33.2	ug/kg	9.97	33.2	
120-12-7	Anthracene	U	33.2	ug/kg	6.65	33.2	
84-74-2	Di-n-butylphthalate	U	332	ug/kg	66.5	332	
206-44-0	Fluoranthene	U	33.2	ug/kg	9.97	33.2	
85-68-7	Butylbenzylphthalate	U	332	ug/kg	66.5	332	
56-55-3	Benzo(a)anthracene	U	33.2	ug/kg	9.97	33.2	
91-94-1	3,3'-Dichlorobenzidine	U	332	ug/kg	99.7	332	
218-01-9	Chrysene	U	33.2	ug/kg	9.97	33.2	
117-81-7	bis(2-Ethylhexyl)phthalate	U	332	ug/kg	66.5	332	
117-84-0	Di-n-octylphthalate	U	332	ug/kg	66.5	332	
205-99-2	Benzo(b)fluoranthene	U	33.2	ug/kg	9.97	33.2	
207-08-9	Benzo(k)fluoranthene	U	33.2	ug/kg	9.97	33.2	
50-32-8	Benzo(a)pyrene	U	33.2	ug/kg	9.97	33.2	
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.2	ug/kg	9.97	33.2	
53-70-3	Dibenzo(a,h)anthracene	U	33.2	ug/kg	9.97	33.2	
191-24-2	Benzo(ghi)perylene	U	33.2	ug/kg	9.97	33.2	
120-82-1	1,2,4-Trichlorobenzene	U	332	ug/kg	66.5	332	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	251	ug/kg		J
	Unknown Aldol Condensate	2.94	279	ug/kg		JA

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827005	Date Received:	11/25/2009 09:10	%Moisture:	3.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2733	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:53	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	s5l0410.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344	
108-95-2	Phenol	U	344	ug/kg	68.8	344	
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344	
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344	
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344	
83-32-9	Acenaphthene	U	34.4	ug/kg	11.3	34.4	
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344	
100-02-7	4-Nitrophenol	U	344	ug/kg	113	344	
87-86-5	Pentachlorophenol	U	344	ug/kg	86.0	344	
129-00-0	Pyrene	U	34.4	ug/kg	10.3	34.4	
110-86-1	Pyridine	U	344	ug/kg	68.8	344	
62-53-3	Aniline	U	344	ug/kg	103	344	
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344	
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344	
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344	
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344	
108-60-1	bis(2-Chloroisopropyl)ether	U	344	ug/kg	68.8	344	
95-48-7	o-Cresol	U	344	ug/kg	68.8	344	
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344	
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344	
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344	
78-59-1	Isophorone	U	344	ug/kg	68.8	344	
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344	
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344	
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344	
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344	
65-85-0	Benzoic acid	U	688	ug/kg	172	688	
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4	
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344	UJ,SV7c
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344	
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4	
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344	
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344	
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.3	34.4	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	344	ug/kg	68.8	344	
99-09-2	3-Nitroaniline	U	344	ug/kg	68.8	344	UJ,SV7c

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827005	Date Received:	11/25/2009 09:10	%Moisture:	3.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2733	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:53	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	s510410.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	344	ug/kg	68.8	344	
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344	
208-96-8	Acenaphthylene	U	34.4	ug/kg	10.3	34.4	
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688	UJ,SV7c
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344	
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344	
86-73-7	Fluorene	U	34.4	ug/kg	10.3	34.4	
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344	
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344	
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344	
122-66-7	Azobenzene	U	344	ug/kg	68.8	344	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344	
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344	
85-01-8	Phenanthrene	U	34.4	ug/kg	10.3	34.4	
120-12-7	Anthracene	U	34.4	ug/kg	6.88	34.4	
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344	
206-44-0	Fluoranthene	U	34.4	ug/kg	10.3	34.4	
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344	
56-55-3	Benzo(a)anthracene	U	34.4	ug/kg	10.3	34.4	
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344	
218-01-9	Chrysene	U	34.4	ug/kg	10.3	34.4	
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344	
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344	
205-99-2	Benzo(b)fluoranthene	U	34.4	ug/kg	10.3	34.4	
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4	
50-32-8	Benzo(a)pyrene	U	34.4	ug/kg	10.3	34.4	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.4	ug/kg	10.3	34.4	
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4	
191-24-2	Benzo(ghi)perylene	U	34.4	ug/kg	10.3	34.4	
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	203	ug/kg		JA

P.S. 2/3/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-668 VALIDATION DATE: 02/03/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL parent sample from another RN. No sample data were qualified as a result.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/03/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/03/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14130	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 19:55	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.66	mg/kg	2.16	6.66

P.S. 2/3/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827004	Date Received:	11/25/2009 09:10	%Moisture:	.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2732	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 20:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.68	mg/kg	2.17	6.68

P.S. 2/3/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827005	Date Received:	11/25/2009 09:10	%Moisture:	3.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2733	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 21:11	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.91	mg/kg	2.25	6.91

P.S. 2/3/10

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827006	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2731	Method:	SW846 8015A/B SVOC	SOP Ref:	GL-OA-E-003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 21:50	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.92	mg/kg	2.25	6.92

P.S. 2/3/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-668 VALIDATION DATE: 02/03/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL parent sample from another RN. No sample data were qualified as a result.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/03/10

VALIDATOR'S SIGNATURE: Mr. Peter Steves DATE: 02/03/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14130	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 21:45	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	073f7301.d	**Column:**	1 CLP1	**Level:**	LOW
	073b7301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.32	ug/kg	1.10	3.32	1
11104-28-2	Aroclor-1221	U	3.32	ug/kg	1.10	3.32	1
11141-16-5	Aroclor-1232	U	3.32	ug/kg	1.10	3.32	1
53469-21-9	Aroclor-1242	U	3.32	ug/kg	1.10	3.32	1
12672-29-6	Aroclor-1248	U	3.32	ug/kg	1.10	3.32	1
11097-69-1	Aroclor-1254	U	3.32	ug/kg	1.10	3.32	1
11096-82-5	Aroclor-1260	U	3.32	ug/kg	1.10	3.32	1

P.S. 2/3/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–10–2731**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927953**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:19**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:14**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**076f7601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	076b7601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.46	ug/kg	1.15	3.46	1
11104–28–2	Aroclor–1221	U	3.46	ug/kg	1.15	3.46	1
11141–16–5	Aroclor–1232	U	3.46	ug/kg	1.15	3.46	1
53469–21–9	Aroclor–1242	U	3.46	ug/kg	1.15	3.46	1
12672–29–6	Aroclor–1248	U	3.46	ug/kg	1.15	3.46	1
11097–69–1	Aroclor–1254	U	3.46	ug/kg	1.15	3.46	1
11096–82–5	Aroclor–1260	U	3.46	ug/kg	1.15	3.46	1

P.S. 2/3/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 21:57	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	074f7401.d	**Column:**	1 CLP1	**Level:**	LOW
	074b7401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

P.S. 2/3/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–2733	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 22:08	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	075f7501.d	**Column:**	1 CLP1	**Level:**	LOW
	075b7501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.45	ug/kg	1.15	3.45	1
11104–28–2	Aroclor–1221	U	3.45	ug/kg	1.15	3.45	1
11141–16–5	Aroclor–1232	U	3.45	ug/kg	1.15	3.45	1
53469–21–9	Aroclor–1242	U	3.45	ug/kg	1.15	3.45	1
12672–29–6	Aroclor–1248	U	3.45	ug/kg	1.15	3.45	1
11097–69–1	Aroclor–1254	U	3.45	ug/kg	1.15	3.45	1
11096–82–5	Aroclor–1260	U	3.45	ug/kg	1.15	3.45	1

P.S. 2/3/10

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-668

REQUEST NUMBER: 10-668

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 241827%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14130	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-09-14130	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-09-14291	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-09-14290	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE03-10-2732	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2732	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-2733	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2733	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-2731	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2731	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	11/24/09	1400	Greg Tyler		11-25-09	0910
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-668

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-668
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009
TURNAROUND/REPORT DUE: 12/24/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14130	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8082	1	RE03-09-14130	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-668

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8260B	1	RE03-09-14130	S	11/23/2009	
		1	RE03-09-14290	S	11/23/2009	
		1	RE03-09-14291	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8270C	1	RE03-09-14130	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	

Final Page of REQUEST NUMBER 10-668

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

December 01, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241827
SDG: 10-668

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 25, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-668
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241827
SDG: 10-668

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Standards Data.....455
Quality Control Data.....528
Miscellaneous Data.....543

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241827
SDG # : 10-668

December 01, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 25, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241827001	RE03-09-14130
241827002	RE03-09-14291
241827003	RE03-09-14290
241827004	RE03-10-2732
241827005	RE03-10-2733
241827006	RE03-10-2731

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for Francis

Valerie Davis

Project Manager

List of current GEL Certifications as of 01 December 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-668

REQUEST NUMBER: 10-668

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241827%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
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RE03-10-2732	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-2733	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2733	1	GLASS	8270C+8082+TPH-DRO	Ice	S
RE03-10-2731	1	SEPTUM AMBER GLASS	8260B	Ice	S
RE03-10-2731	1	GLASS	8270C+8082+TPH-DRO	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/24/09	1400	Greg Tyler		11-25-09	0910
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-668

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-668
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009
TURNAROUND/REPORT DUE: 12/24/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8015M_EXTRACTABLE	1	RE03-09-14130	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8082	1	RE03-09-14130	S	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-668

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8260B	1	RE03-09-14130	S	11/23/2009	
		1	RE03-09-14290	S	11/23/2009	
		1	RE03-09-14291	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	
	SW-846:8270C	1	RE03-09-14130	S	11/23/2009	
		1	RE03-10-2731	S	11/23/2009	
		1	RE03-10-2732	S	11/23/2009	
		1	RE03-10-2733	S	11/23/2009	

Final Page of REQUEST NUMBER 10-668

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-668**
Received By: Greg Tyler	**Date Received: 11/25/09**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **20 cpm**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other **2, 4, 5, 6C** **14, 16C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
Fed Ex Tracking Numbers
7209 7849 0285 2C **7209 7849 0263 14C**
7209 7849 0230 2C **7209 7849 0252 16C**
7209 7849 0300 2C
7209 7849 0322 4C
7209 7849 0296 4C
7209 7849 0241 4C
7209 7849 0311 5C
7209 7849 0274 6C

PM (or PMA) review: Initials P. [illegible] Date 11-27-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0285
WED - 25NOV A1
PRIORITY OVERNIGHT
*** MASTER ***
XX CHSA
29407
SC-US
CHS

Part # 156149-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7849 0230
Matr# 7209 7849 0220 0201
WED - 25NOV A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS

Part # 156149-434 NRIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0300
WED - 25NOV A1
PRIORITY OVERNIGHT
*** MASTER ***
XX CHSA
29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054198D0

4c

FedEx Express

TRK# 0201 7209 7849 0322
WED - 25NOV A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0296
Matr# 7209 7849 0285 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 06-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7849 0241
Matr# 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 06-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

5c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0311
Matr# 7209 7849 0300 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

6c

FedEx Express

RADIOACTIVE SAMPLES

3 of 3
MPS# 0263 7209 7849 0274
Matr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407

XX CHSA

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV00
ACTWGT: 42.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

14c

FedEx Express

2 of 3

MPS# 0263 7209 7849 0263

Mstr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Part # 156140-434 Rev V2 03-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV00
ACTWGT: 50.0 LB MAN
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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-668

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	928135
Prep Batch Number:	928134

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241827001	RE03-09-14130
241827002	RE03-09-14291
241827003	RE03-09-14290
241827004	RE03-10-2732
241827005	RE03-10-2733
241827006	RE03-10-2731
1201984530	Method Blank (MB)
1201984533	Laboratory Control Sample (LCS)
1201984534	Laboratory Control Sample (LCS)
1201984531	241827001(RE03-09-14130) Post Spike (PS)
1201984532	241827001(RE03-09-14130) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
Samples 241827 001, 004, 005 and 006 in this SDG were analyzed on an "dry weight" basis. Samples 241827 002 and 003 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241827001 (RE03-09-14130) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD between the matrix spike pair were not all within the acceptance limits. The results are reported. See NCR 766675.

Internal Standard (ISTD) Acceptance
In sample 1201984532 (RE03-09-14130MSD), internal standard responses were outside the required acceptance criteria. Sample re-analysis confirmed matrix interference. See NCR 766675.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were required for samples in this SDG due to unacceptable recoveries.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 766675 was generated for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-668 GEL Work Order: 241827

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 13 DEC 2009 **Title: Data Validator**

Roadmap for LANL 10-668 VOA

This roadmap was analyzed by acj on 12-07-2009, 12:08.
This roadmap was reviewed by acj on 12-07-2009, 12:23.
This roadmap was reviewed by kel00587 on 12-07-2009, 18:21.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/120109v4/4n212.d	241827001	RE03-09-14130	01-DEC-2009	22:07	10-668.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n213.d	241827002	RE03-09-14291	01-DEC-2009	22:35	10-668.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n214.d	241827003	RE03-09-14290	01-DEC-2009	23:02	10-668.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n215.d	241827004	RE03-10-2732	01-DEC-2009	23:30	10-668.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n216.d	241827005	RE03-10-2733	01-DEC-2009	23:57	10-668.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n217.d	241827006	RE03-10-2731	02-DEC-2009	00:24	10-668.sub	1	928135	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/120109v4/4n203ll.d	1201984533	LCS	lcs	01-DEC-2009	16:35	all.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n205sl.d	1201984534	LCS	lcs	01-DEC-2009	17:30	all.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n206bl.d	1201984530	BLANK	mb	01-DEC-2009	17:57	all.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n218.d	1201984531	RE03-09-14130MS	ms	02-DEC-2009	00:51	10-668.sub	1	928135	
☐	N	/chem/VOA4.i/120109v4/4n219.d	1201984532	RE03-09-14130MSD	msd	02-DEC-2009	01:18	10-668.sub	1	928135	
■	N	/chem/VOA4.i/120209v4/4n303ll.d	1201988491	LCS	lcs	02-DEC-2009	17:47	all.sub	1	928135	
■	N	/chem/VOA4.i/120209v4/4n305sl.d	1201988492	LCS	lcs	02-DEC-2009	18:41	all.sub	1	928135	
■	N	/chem/VOA4.i/120209v4/4n307bl.d	1201988490	BLANK	mb	02-DEC-2009	19:36	all.sub	1	928135	
■	N	/chem/VOA4.i/120209v4/4n324.d	1201984531	RE03-09-14130MS	ms	03-DEC-2009	04:16	10-668.sub	1	928135	
■	N	/chem/VOA4.i/120209v4/4n325.d	1201984532	RE03-09-14130MSD	msd	03-DEC-2009	04:43	10-668.sub	1	928135	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n212.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14130	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 22:07	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:10	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n212.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	59.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827003**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14290**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:02**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n214.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	4.65	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.12	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827003	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14290	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 23:02	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:14	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n214.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827002**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14291**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n213.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	3.84	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827002**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14291**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n213.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2731**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n217.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04
67-64-1	Acetone	J	4.94	ug/kg	1.73	5.22
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
74-88-4	Iodomethane	U	5.22	ug/kg	1.67	5.22
75-09-2	Methylene chloride	U	5.22	ug/kg	2.09	5.22
75-15-0	Carbon disulfide	U	5.22	ug/kg	1.30	5.22
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04
78-93-3	2-Butanone	U	5.22	ug/kg	1.56	5.22
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04
108-10-1	4-Methyl-2-pentanone	U	5.22	ug/kg	1.30	5.22
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04
591-78-6	2-Hexanone	U	5.22	ug/kg	1.56	5.22
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2731**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n217.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.22	ug/kg	1.67	5.22
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
66-25-1	Hexanal	12.99	18.5	ug/kg	90	NJ
	Unknown Siloxane	14.83	60.3	ug/kg		J
124-19-6	Nonanal	17.15	5.48	ug/kg	83	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 23:30	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n215.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.341	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.301	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.301	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.301	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.301	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.301	1.00
67-64-1	Acetone	J	1.69	ug/kg	1.66	5.01
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.301	1.00
74-88-4	Iodomethane	U	5.01	ug/kg	1.60	5.01
75-09-2	Methylene chloride	U	5.01	ug/kg	2.01	5.01
75-15-0	Carbon disulfide	U	5.01	ug/kg	1.25	5.01
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.301	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.301	1.00
78-93-3	2-Butanone	U	5.01	ug/kg	1.50	5.01
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.301	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.301	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.301	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.331	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.301	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.301	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.301	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.301	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.301	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.331	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.301	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.301	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.301	1.00
108-10-1	4-Methyl-2-pentanone	U	5.01	ug/kg	1.25	5.01
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.301	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.301	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.301	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.301	1.00
591-78-6	2-Hexanone	U	5.01	ug/kg	1.50	5.01
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.301	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.301	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.301	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.301	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.301	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827004**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2732**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:30**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n215.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.301	1.00
179601-23-1	m,p-Xylenes	U	2.01	ug/kg	0.301	2.01
95-47-6	o-Xylene	U	1.00	ug/kg	0.301	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.301	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.301	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.301	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.301	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.301	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.301	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.301	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.301	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.301	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.301	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.301	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.301	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.301	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.301	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.301	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.301	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.01	ug/kg	1.60	5.01
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.301	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	381	ug/kg		J
	Unknown Siloxane	16.79	20.3	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2733	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 23:57	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n216.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.352	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	J	2.74	ug/kg	1.72	5.18
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.18	ug/kg	1.66	5.18
75-09-2	Methylene chloride	U	5.18	ug/kg	2.07	5.18
75-15-0	Carbon disulfide	U	5.18	ug/kg	1.30	5.18
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.18	ug/kg	1.55	5.18
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.18	ug/kg	1.30	5.18
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.18	ug/kg	1.55	5.18
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2733	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 23:57	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:16	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n216.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.18	ug/kg	1.66	5.18
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	68.4	ug/kg		J

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-668

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201984533	LCS for batch 928134	118	99	105
1201984534	LCS for batch 928134	106	99	101
1201984530	MB for batch 928134	102	99	104
241827001	RE03-09-14130	115	102	109
241827002	RE03-09-14291	112	104	109
241827003	RE03-09-14290	107	100	109
241827004	RE03-10-2732	115	106	116
241827005	RE03-10-2733	102	98	107
241827006	RE03-10-2731	112	105	113
1201984531	RE03-09-14130PS	119	100	105
1201984532	RE03-09-14130PSD	118	98	107

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-668**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-14130PS**	**Matrix:**	**S**
Lab Sample ID:	**1201984531**	**%Moisture:**	**0**
Instrument:	**VOA4.I**	**Analysis Date:**	**12/02/2009 00:51**
Analyst:	**ACJ**	**Prep Batch ID:**	**928134**
Purge Vol:	**5 mL**	**Batch ID:**	**928135**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	37.7	75	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	38.4	77	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	42.1	84	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	43.9	88	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	44.4	89	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	45.3	91	51-151
67-64-1	PS	Acetone	250	0.00	U	251	100	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	45.9	92	61-125
74-88-4	PS	Iodomethane	250	0.00	U	215	86	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	46.2	92	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	234	94	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	47.6	95	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	48.3	97	62-125
78-93-3	PS	2-Butanone	250	0.00	U	253	101	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	47.3	95	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	48.5	97	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	46.9	94	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	45.2	90	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	49.9	100	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	48.9	98	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	50.0	100	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	47.8	96	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-668**	**Sample Type:**	**Post Spike**
Client ID:	**RE03-09-14130PS**	**Matrix:**	**S**
Lab Sample ID:	**1201984531**	**%Moisture:**	**0**
Instrument:	**VOA4.I**	**Analysis Date:**	**12/02/2009 00:51**
Analyst:	**ACJ**	**Prep Batch ID**	**928134**
Purge Vol:	**5 mL**	**Batch ID:**	**928135**

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	44.7	89	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	47.4	95	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	46.6	93	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	47.4	95	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	47.0	94	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	240	96	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	46.9	94	54-133
108-88-3	PS	Toluene	50.0	0.00	U	43.2	86	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	46.0	92	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	45.8	92	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	216	86	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	44.8	90	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	40.6	81	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	46.1	92	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	46.4	93	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	44.1	88	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	44.1	88	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	87.2	87	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	43.7	87	52-127
100-42-5	PS	Styrene	50.0	0.00	U	43.9	88	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	44.3	89	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	47.9	96	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: RE03-09-14130PS
Lab Sample ID: 1201984531
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 00:51
Prep Batch ID: 928134
Batch ID: 928135
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	48.6	97	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	42.7	85	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	44.5	89	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	43.9	88	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	44.2	88	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	43.9	88	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	44.8	90	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	44.5	89	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	43.7	87	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	44.6	89	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	43.9	88	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	42.6	85	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	42.5	85	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	44.2	88	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	48.6	97	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	44.7	89	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	43.3	87	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: RE03-09-14130PSD
Lab Sample ID: 1201984532
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 01:18
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	33.6	67	25-149	12	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	29.3	59	39-140	27 *	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	36.6	73	47-129	14	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	36.9	74	31-135	17	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	35.3	71	53-128	23	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	42.5	85	51-151	7	0-25
67-64-1	PSD	Acetone	250	0.00	U	287	115	21-153	14	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	36.2	72	61-125	24	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	182	73	53-142	17	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	35.3	71	59-136	27 *	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	188	75	46-129	22	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	42.7	85	56-126	11	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	43.8	88	62-125	10	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	298	119	26-152	16	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	44.8	90	60-130	5	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	60.4	121	55-135	22	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	43.5	87	60-127	7	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	42.7	85	61-131	6	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	50.4	101	59-131	1	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	45.9	92	57-128	6	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	47.5	95	58-136	5	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	44.7	89	58-126	7	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: RE03-09-14130PSD
Lab Sample ID: 1201984532
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 01:18
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	42.2	84	56-123	6	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	44.3	89	51-137	7	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	43.6	87	60-126	7	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	43.3	87	55-138	9	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	45.6	91	60-132	3	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	279	112	58-136	15	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	42.4	85	54-133	10	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	41.7	83	52-128	3	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	42.3	85	53-137	8	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	44.9	90	59-130	2	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	242	97	31-148	11	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	44.0	88	57-127	2	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	40.3	81	51-128	1	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	43.4	87	59-139	6	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	45.4	91	57-133	2	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	41.8	84	53-122	5	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	42.2	84	51-125	4	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	81.4	81	50-126	7	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	40.8	82	52-127	7	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	39.6	79	49-135	10	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	48.1	96	57-149	8	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	53.0	106	63-127	10	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: RE03-09-14130PSD
Lab Sample ID: 1201984532
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 01:18
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	54.7	109	57-149	12	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	43.2	86	49-131	1	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	46.6	93	40-136	5	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	45.6	91	44-135	4	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	47.2	94	44-140	7	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	44.7	89	42-140	2	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	44.4	89	44-132	1	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	44.6	89	42-142	0	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	44.1	88	43-137	1	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	45.2	90	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	43.6	87	38-145	1	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	41.8	84	43-129	2	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	41.2	82	44-125	3	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	44.1	88	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	53.7	107	47-151	10	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	42.3	85	59-131	6	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	42.7	85	43-129	1	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: LCS for batch 928134
Lab Sample ID: 1201984533
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 16:35
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	47.6	95	33-155
74-87-3	LCS	Chloromethane	50.0	0.0	45.9	92	53-132
75-01-4	LCS	Vinyl chloride	50.0	0.0	51.1	102	61-128
74-83-9	LCS	Bromomethane	50.0	0.0	50.3	101	63-126
75-00-3	LCS	Chloroethane	50.0	0.0	52.4	105	67-124
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	57.0	114	67-151
67-64-1	LCS	Acetone	250	0.0	270	108	29-160
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	57.5	115	70-125
74-88-4	LCS	Iodomethane	250	0.0	259	104	74-131
75-09-2	LCS	Methylene chloride	50.0	0.0	54.9	110	72-127
75-15-0	LCS	Carbon disulfide	250	0.0	284	113	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	56.7	113	71-122
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	55.9	112	75-120
78-93-3	LCS	2-Butanone	250	0.0	280	112	35-162
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	55.1	110	76-122
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	58.9	118	74-135
67-66-3	LCS	Chloroform	50.0	0.0	54.5	109	77-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	53.1	106	76-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	60.2	120	75-128
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	59.6	119	77-125
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	61.8	124	77-134
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	53.9	108	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: LCS for batch 928134
Lab Sample ID: 1201984533
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 16:35
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	53.7	107	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	56.9	114	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	53.7	107	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	55.6	111	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	54.2	108	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	271	108	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	55.5	111	80-125
108-88-3	LCS	Toluene	50.0	0.0	51.3	103	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.8	108	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	51.7	103	76-120
591-78-6	LCS	2-Hexanone	250	0.0	244	98	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	50.8	102	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	52.6	105	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	53.9	108	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	53.1	106	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	52.7	105	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	52.0	104	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	105	105	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	52.2	104	74-120
100-42-5	LCS	Styrene	50.0	0.0	51.6	103	76-125
75-25-2	LCS	Bromoform	50.0	0.0	53.2	106	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	53.5	107	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: LCS for batch 928134
Lab Sample ID: 1201984533
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 16:35
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	54.1	108	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	50.6	101	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	53.1	106	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	51.4	103	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	53.0	106	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	52.1	104	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	52.7	105	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	52.5	105	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	51.4	103	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	53.0	106	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	52.7	105	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	50.7	101	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	50.5	101	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	53.8	108	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	54.7	109	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	52.1	104	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	50.1	100	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: LCS for batch 928134
Lab Sample ID: 1201984534
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/01/2009 17:30
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	265	106	52-139

Method Blank Summary

SDG Number:	10-668	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928134	Instrument ID:	VOA4.I	Data File:	4n206bl.d
Lab Sample ID:	1201984530	Prep Date:	12/01/2009 16:00	Analyzed:	12/01/09 17:57
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 928134	1201984533	4n203ll.d	12/01/09	1635
02	LCS for batch 928134	1201984534	4n205sl.d	12/01/09	1730
03	RE03-09-14130	241827001	4n212.d	12/01/09	2207
04	RE03-09-14291	241827002	4n213.d	12/01/09	2235
05	RE03-09-14290	241827003	4n214.d	12/01/09	2302
06	RE03-10-2732	241827004	4n215.d	12/01/09	2330
07	RE03-10-2733	241827005	4n216.d	12/01/09	2357
08	RE03-10-2731	241827006	4n217.d	12/02/09	0024
09	RE03-09-14130PS	1201984531	4n218.d	12/02/09	0051
10	RE03-09-14130PSD	1201984532	4n219.d	12/02/09	0118

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-668

Instrument ID: VOA4.I **Injection Date/Time:** 01-DEC-09 15:40

Column Description: DB-624 **Lab File ID** /120109v4/4n201.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	17.5
75	30.0 - 60.0% of mass 95	47.8
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	88.1
175	5.0 -9.0% of mass 174	6.8
176	95.0 - 101.0% of mass 174	95.4
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091201-01	/120109v4/4n202.d	01-DEC-09 16:07
LCS	1201984533	/120109v4/4n203ll.d	01-DEC-09 16:35
VSTD250S	UVM091118-08A	/120109v4/4n204.d	01-DEC-09 17:02
LCS	1201984534	/120109v4/4n205sl.d	01-DEC-09 17:30
BLANK	1201984530	/120109v4/4n206bl.d	01-DEC-09 17:57
RE03-09-14130	241827001	/120109v4/4n212.d	01-DEC-09 22:07
RE03-09-14291	241827002	/120109v4/4n213.d	01-DEC-09 22:35
RE03-09-14290	241827003	/120109v4/4n214.d	01-DEC-09 23:02
RE03-10-2732	241827004	/120109v4/4n215.d	01-DEC-09 23:30
RE03-10-2733	241827005	/120109v4/4n216.d	01-DEC-09 23:57
RE03-10-2731	241827006	/120109v4/4n217.d	02-DEC-09 00:24
RE03-09-14130MS	1201984531	/120109v4/4n218.d	02-DEC-09 00:51
RE03-09-14130MSD	1201984532	/120109v4/4n219.d	02-DEC-09 01:18

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-668

Instrument ID: VOA4.I **Injection Date/Time:** 22-NOV-09 09:20

Column Description: DB-624 **Lab File ID** /112209v4/4l701.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	99.3
175	5.0 -9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W4VM091122-01	/112209v4/4l703.d	22-NOV-09 10:14
VSTD001	W4VM091122-02	/112209v4/4l704.d	22-NOV-09 10:41
VSTD002	W4VM091122-04	/112209v4/4l706.d	22-NOV-09 11:36
VSTD005	W4VM091122-05	/112209v4/4l707.d	22-NOV-09 12:04
VSTD010	W4VM091122-06	/112209v4/4l708.d	22-NOV-09 12:31
VSTD020	W4VM091122-07	/112209v4/4l709.d	22-NOV-09 12:59
VSTD050	W4VM091122-08	/112209v4/4l710.d	22-NOV-09 13:27
VSTD100	W4VM091122-09	/112209v4/4l711.d	22-NOV-09 13:54
VSTD005S	W4VM091122-10	/112209v4/4l713.d	22-NOV-09 14:48
VSTD010S	W4VM091122-11	/112209v4/4l714.d	22-NOV-09 15:16
VSTD025S	W4VM091122-12	/112209v4/4l715.d	22-NOV-09 15:43
VSTD050S	W4VM091122-13	/112209v4/4l716.d	22-NOV-09 16:10
VSTD250S	W4VM091122-15	/112209v4/4l718.d	22-NOV-09 17:04
VSTD500S	W4VM091122-16	/112209v4/4l719.d	22-NOV-09 17:32
SECOND SOURCE	W4VM091122-18	/112209v4/4l722.d	22-NOV-09 18:53
SHORT SECOND SOURCE	W4VM091122-19	/112209v4/4l723.d	22-NOV-09 19:21

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-668

Instrument: VOA4.I

STD Analysis Time: 01-DEC-09 16:07

GC Column: RTX-VOLATILES

Data File: 4n202.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1523689		10.6	1193564		13.8	804393		16.2
Upper Limit	3047378		11.1	2387128		14.3	1608786		16.7
Lower Limit	761845		10.1	596782		13.3	402197		15.7
Sample ID									
BLK01LCS	1535652		10.6	1225210		13.8	833679		16.2
BLK01SLCS	1508454		10.6	1204435		13.8	808195		16.2
BLK01	1598121		10.6	1211961		13.8	764221		16.2
RE03-09-14130	1497263		10.6	1171882		13.8	742430		16.2
RE03-09-14291	1438765		10.6	1098724		13.8	685294		16.2
RE03-09-14290	1480281		10.6	1119710		13.8	684570		16.2
RE03-10-2732	1222792		10.6	916684		13.8	544183		16.2
RE03-10-2733	1609919		10.6	1188595		13.8	708978		16.2
RE03-10-2731	1409735		10.6	1065569		13.8	640853		16.2
RE03-09-14130MS	1448318		10.6	1146470		13.8	789872		16.2
RE03-09-14130MSD	733433	*	10.6	565703	*	13.8	338283	*	16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n212.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14130**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:07**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n212.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	59.8	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n212.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 01-DEC-2009 22:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827001|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1497263	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1171882	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	742430	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.259	(0.966)	338983	57.6423	57.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1036502	50.7814	50.8
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	469552	54.6170	54.6

ION RATIO REPORT

VOA REPORT

Data file: 4n212.d
Report Date: 12/01/2009 22:29
Lab. ID: 241827001 SampleType: SAMPLE
Injection Date: 01-DEC-2009 22:07
Operator: ACJ Instrument: VOA4.i
Sample Info: |241827001|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	19696	10.62	10.34	80-120	100	(T)
64	3064	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8468	12.25	12.02	80-120	100	(T)
43	5055	12.25	12.01	231-291	60	(QT)
100	708190	12.25	12.02	7- 67	8363	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	5527	14.83	15.11	80-120	100	(T)
75	15759	14.82	15.11	249-309	285	(T)
77	1090	14.80	15.11	60-120	20	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n212.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 01-DEC-2009 22:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827001|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3504037	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
14.826	4191442	59.8087485	59.8	0		0	61

Data File: /chem/VOA4.i/120109v4/4n212.d
Date : 01-DEC-2009 22:07
Client ID: RE03-09-14130
Sample Info: |241827001|928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

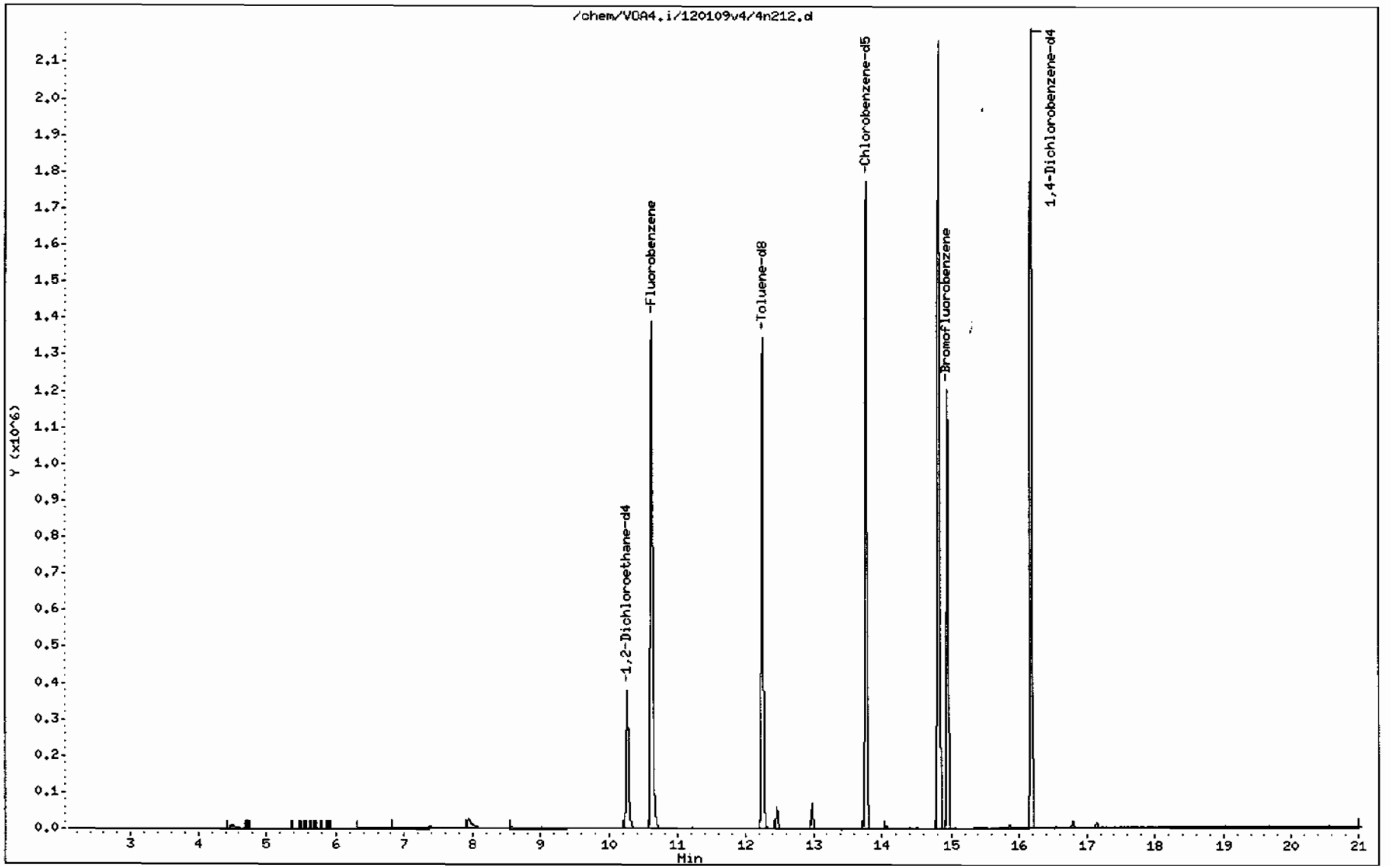

Data File: /chem/VOA4.i/120109v4/4n212.d

Date : 01-DEC-2009 22:07

Client ID: RE03-09-14130

Instrument: VOA4.i

Sample Info: |241827001|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	86	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	78	C8H24O4Si4	296

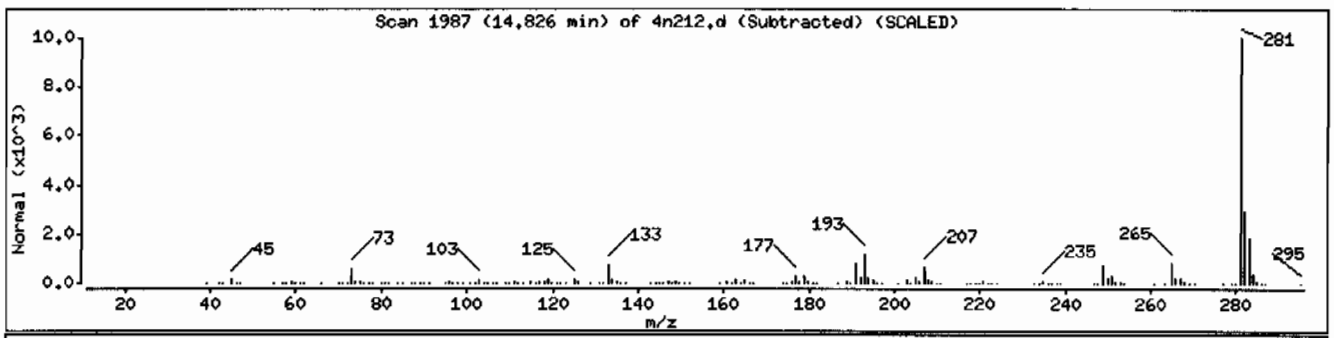

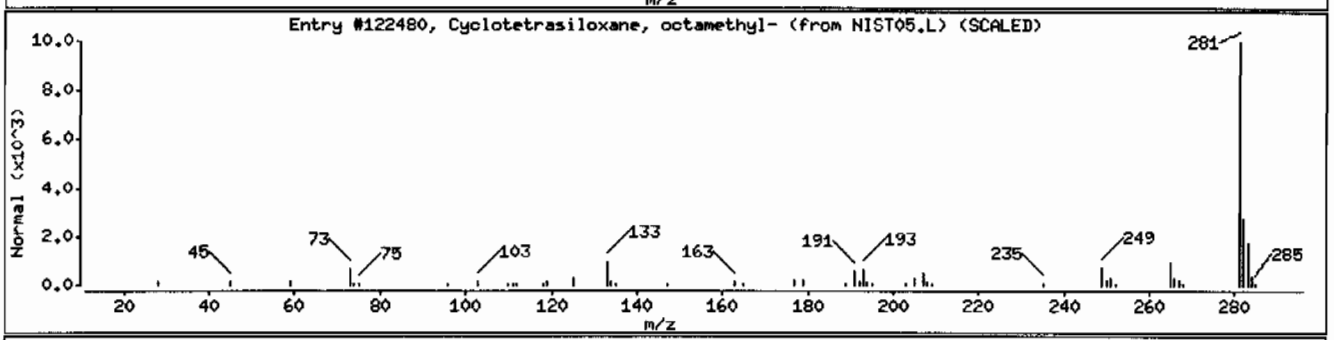

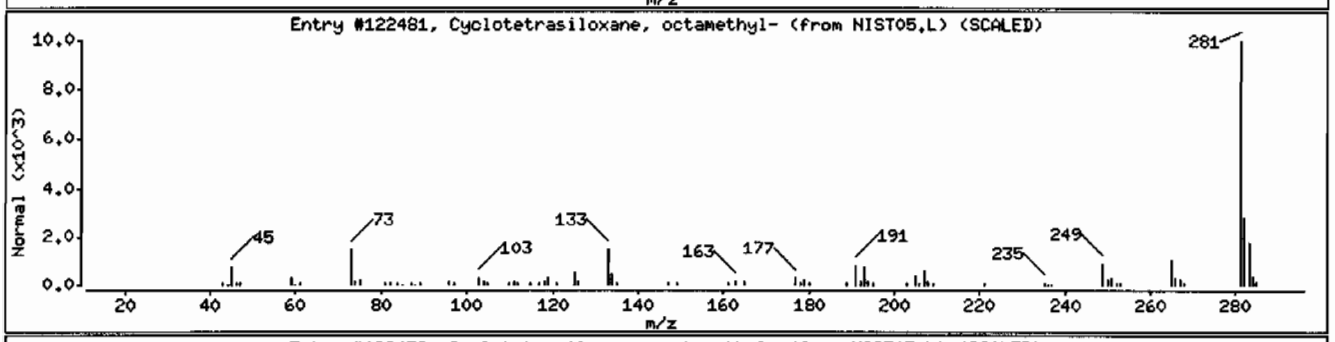

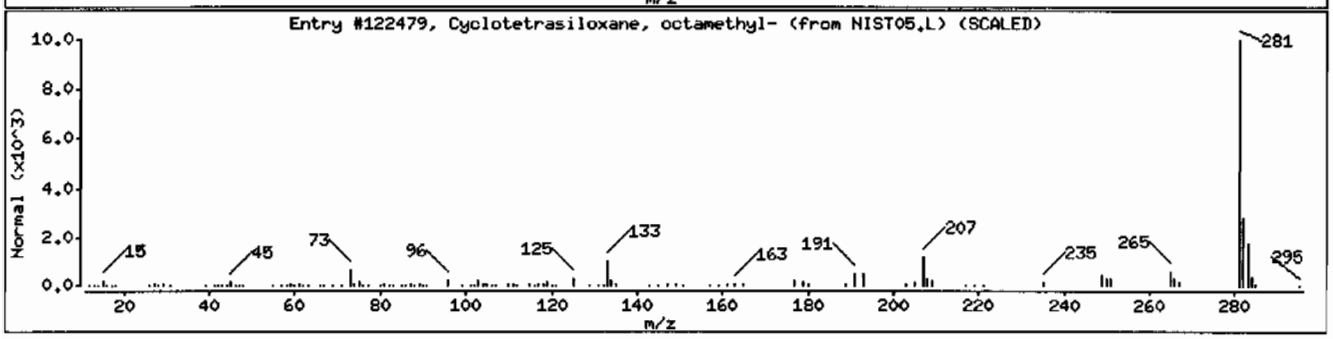

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827003**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14290**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:02**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n214.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	4.65	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.12	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827003**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14290**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:02**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n214.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n214.d
Lab Smp Id: 241827003 Client Smp ID: RE03-09-14290
Inj Date : 01-DEC-2009 23:02
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827003|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1480281	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1119710	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	684570	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.259	(0.967)	309651	53.2586	53.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	978555	50.1763	50.2
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	430979	54.3673	54.4
10 Acetone	43	7.364	7.357	(0.693)	27951	4.64724	4.6(a)
38 Benzene	78	10.376	10.375	(0.977)	35400	1.11570	1.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n214.d
Report Date: 12/02/2009 11:17
Lab. ID: 241827003 SampleType: SAMPLE
Injection Date: 01-DEC-2009 23:02
Operator: ACJ Instrument: VOA4.i
Sample Info: |241827003|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	27951	7.36	7.36	80-120	100	( )
58	8029	7.38	7.36	0- 60	29	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	19252	10.62	10.34	80-120	100	(T)
64	3275	10.62	10.34	2- 62	17	(T)
38 Benzene			CAS#: 71-43-2			
78	35400	10.38	10.37	80-120	100	( )
77	8582	10.38	10.37	0- 53	24	( )
51	5831	10.37	10.37	0- 49	16	( )
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7759	12.25	12.02	80-120	100	(T)
43	5689	12.26	12.01	231-291	73	(QT)
100	675837	12.25	12.02	7- 67	8710	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n214.d
Lab Smp Id: 241827003 Client Smp ID: RE03-09-14290
Inj Date : 01-DEC-2009 23:02
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827003|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120109v4/4n214.d
Date : 01-DEC-2009 23:02
Client ID: RE03-09-14290
Sample Info: |241827003|928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

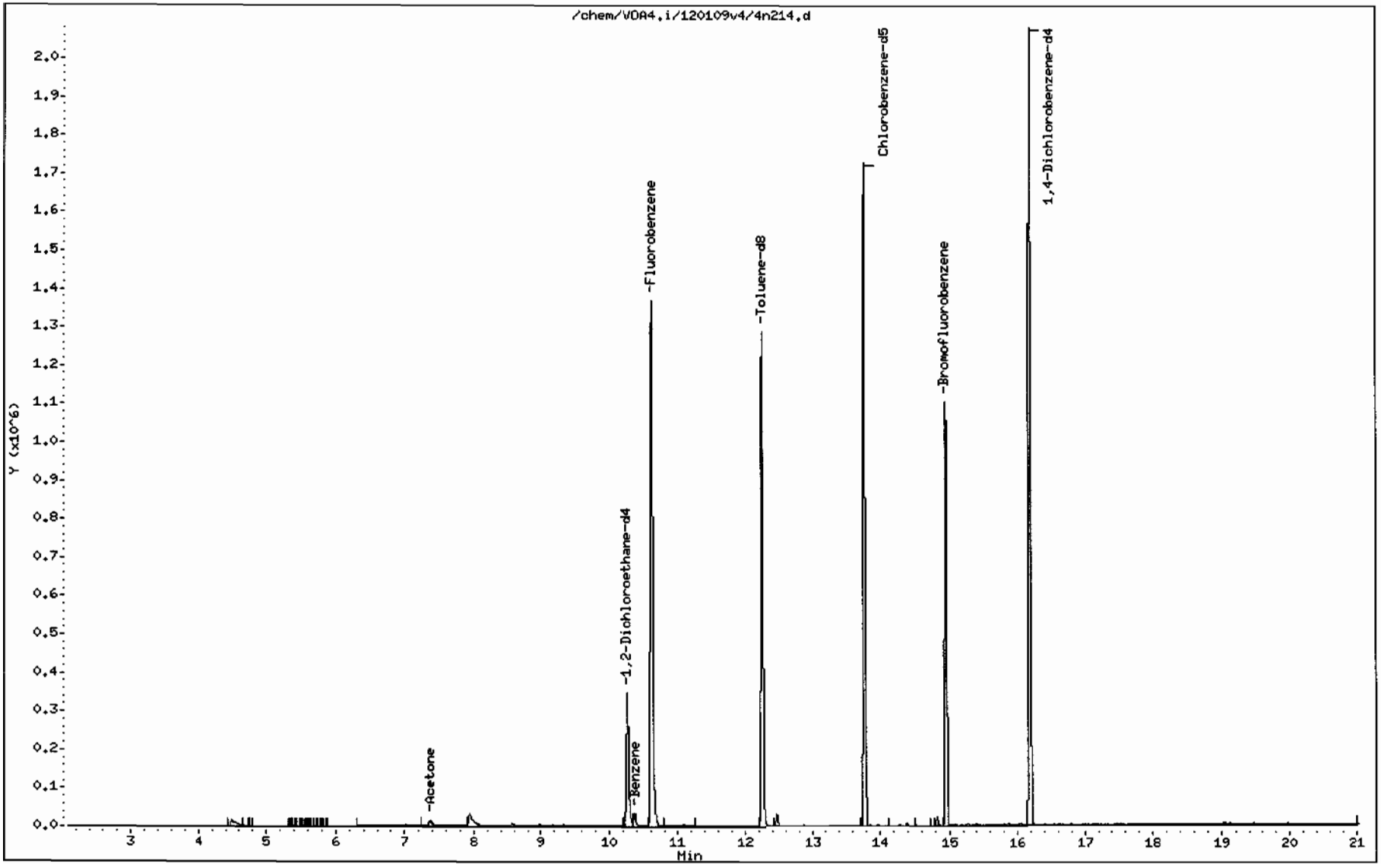

Data File: /chem/VOA4.i/120109v4/4n214.d

Date : 01-DEC-2009 23:02

Client ID: RE03-09-14290

Instrument: VOA4.i

Sample Info: |2418270031928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 4.6 ug/Kg

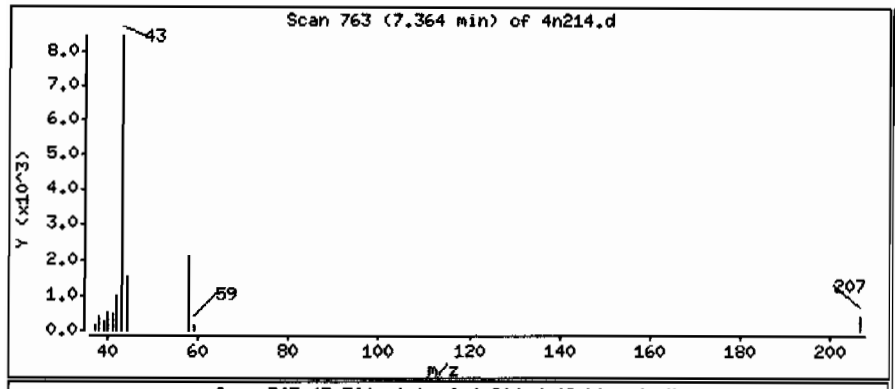

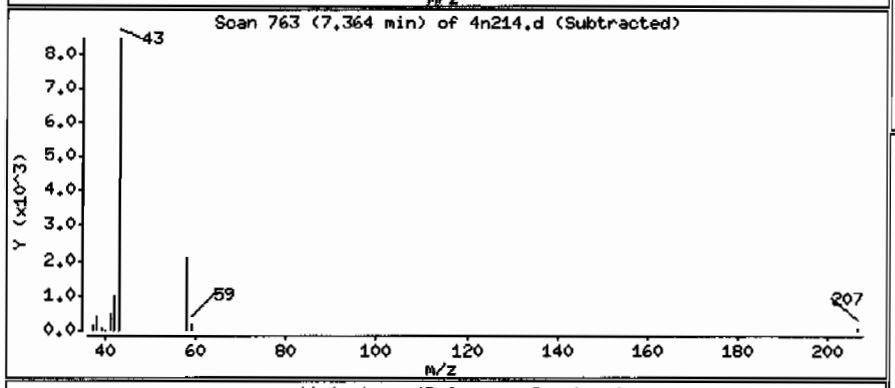

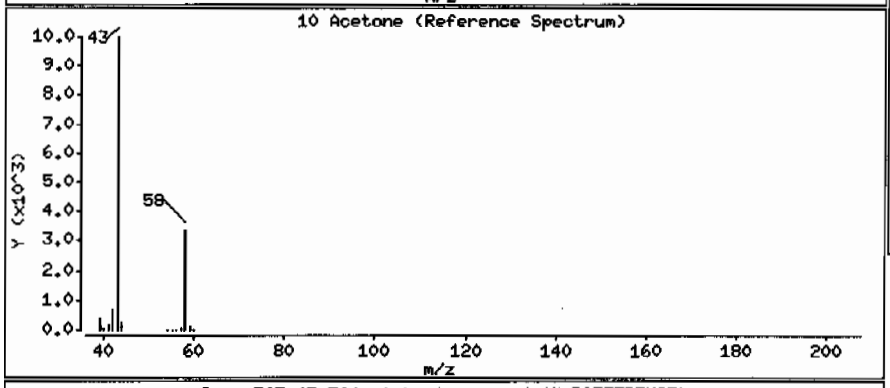

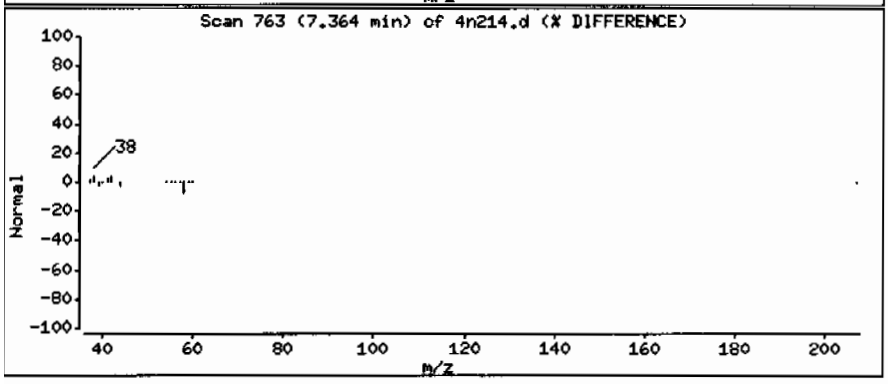

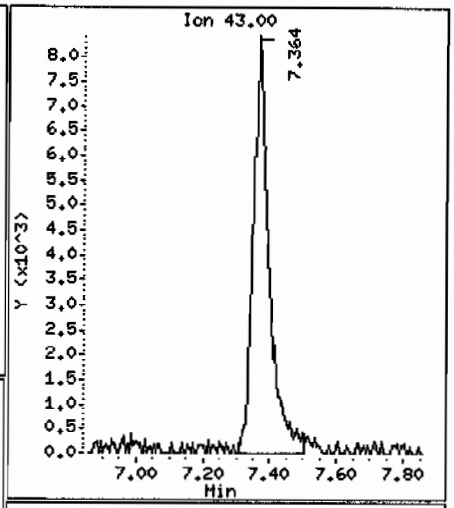

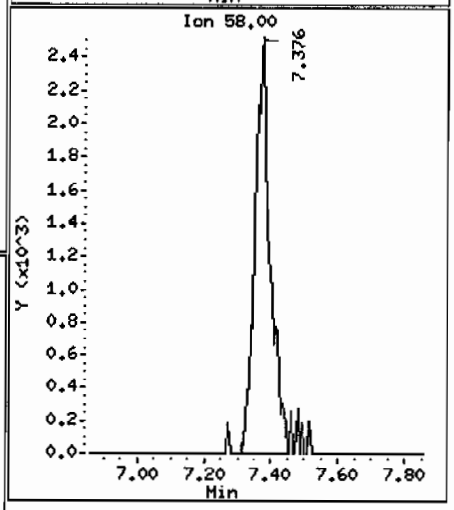

Data File: /chem/VOA4.i/120109v4/4n214.d

Date : 01-DEC-2009 23:02

Client ID: RE03-09-14290

Instrument: VOA4.i

Sample Info: |2418270031928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

38 Benzene

Concentration: 1.1 ug/Kg

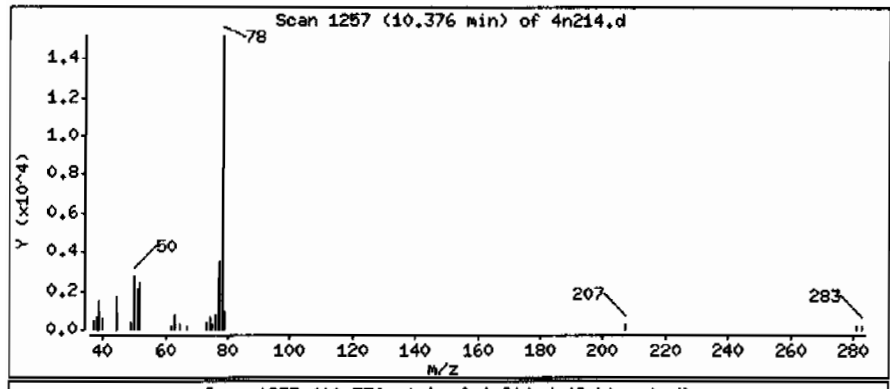

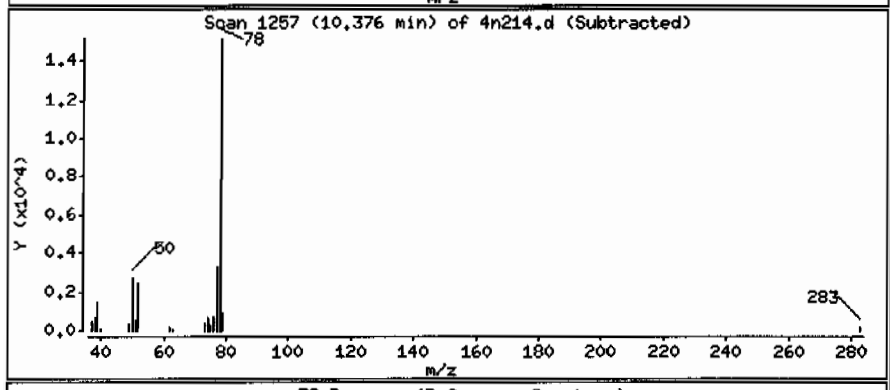

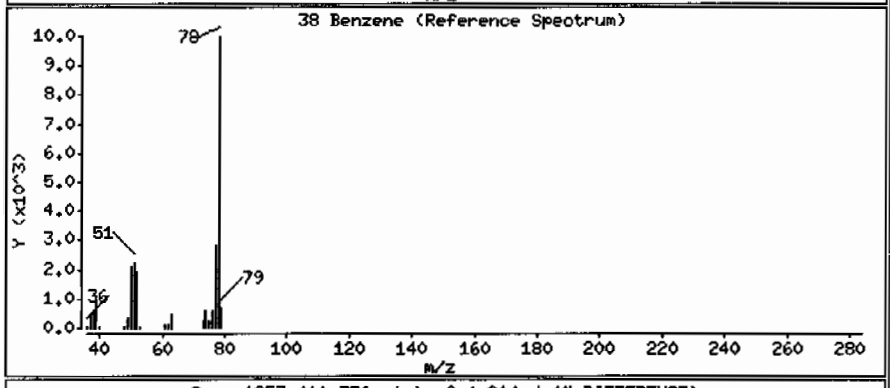

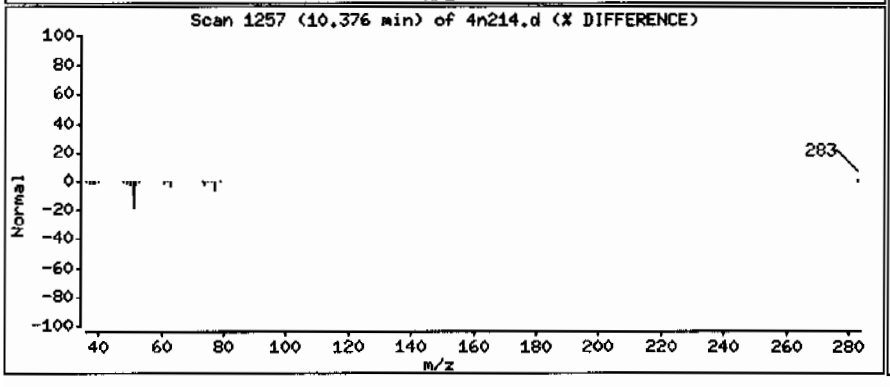

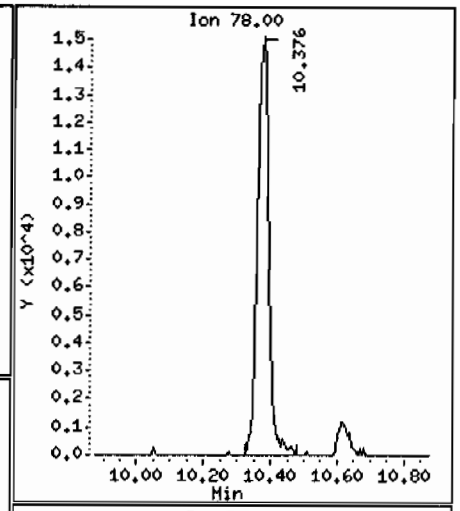

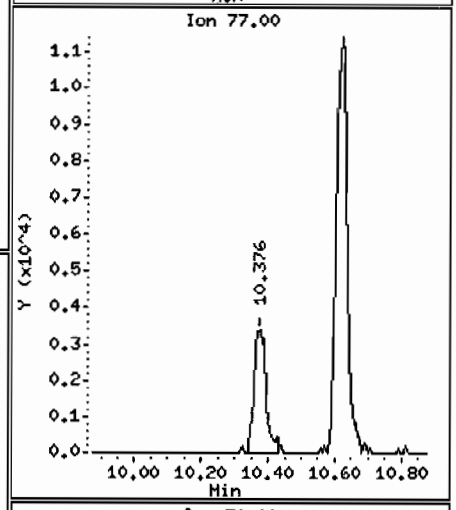

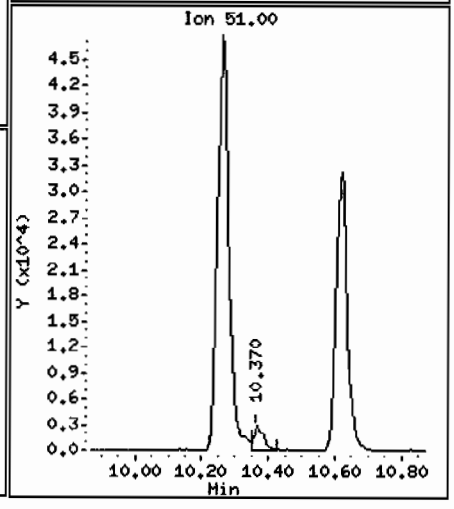

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827002**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14291**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 22:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n213.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	3.84	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827002	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14291	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 22:35	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:13	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n213.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT	Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n213.d
Lab Smp Id: 241827002 Client Smp ID: RE03-09-14291
Inj Date : 01-DEC-2009 22:35
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827002|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1438765	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1098724	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	685294	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	315090	55.7578	55.8
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	999417	52.2248	52.2
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	434114	54.7049	54.7
10 Acetone	43	7.363	7.357	(0.693)	22463	3.84255	3.8(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

ION RATIO REPORT

VOA REPORT

Data file: 4n213.d
Report Date: 12/02/2009 11:16
Lab. ID: 241827002 SampleType: SAMPLE
Injection Date: 01-DEC-2009 22:35
Operator: ACJ Instrument: VOA4.i
Sample Info: |241827002|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	22463	7.36	7.36	80-120	100	( )
58	7054	7.38	7.36	0- 60	31	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	18377	10.62	10.34	80-120	100	(T)
64	3101	10.61	10.34	2- 62	17	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8023	12.25	12.02	80-120	100	(T)
43	5469	12.25	12.01	231-291	68	(QT)
100	686688	12.25	12.02	7- 67	8558	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n213.d
Lab Smp Id: 241827002 Client Smp ID: RE03-09-14291
Inj Date : 01-DEC-2009 22:35
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827002|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120109v4/4n213.d
Date : 01-DEC-2009 22:35
Client ID: RE03-09-14291
Sample Info: |2418270021928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

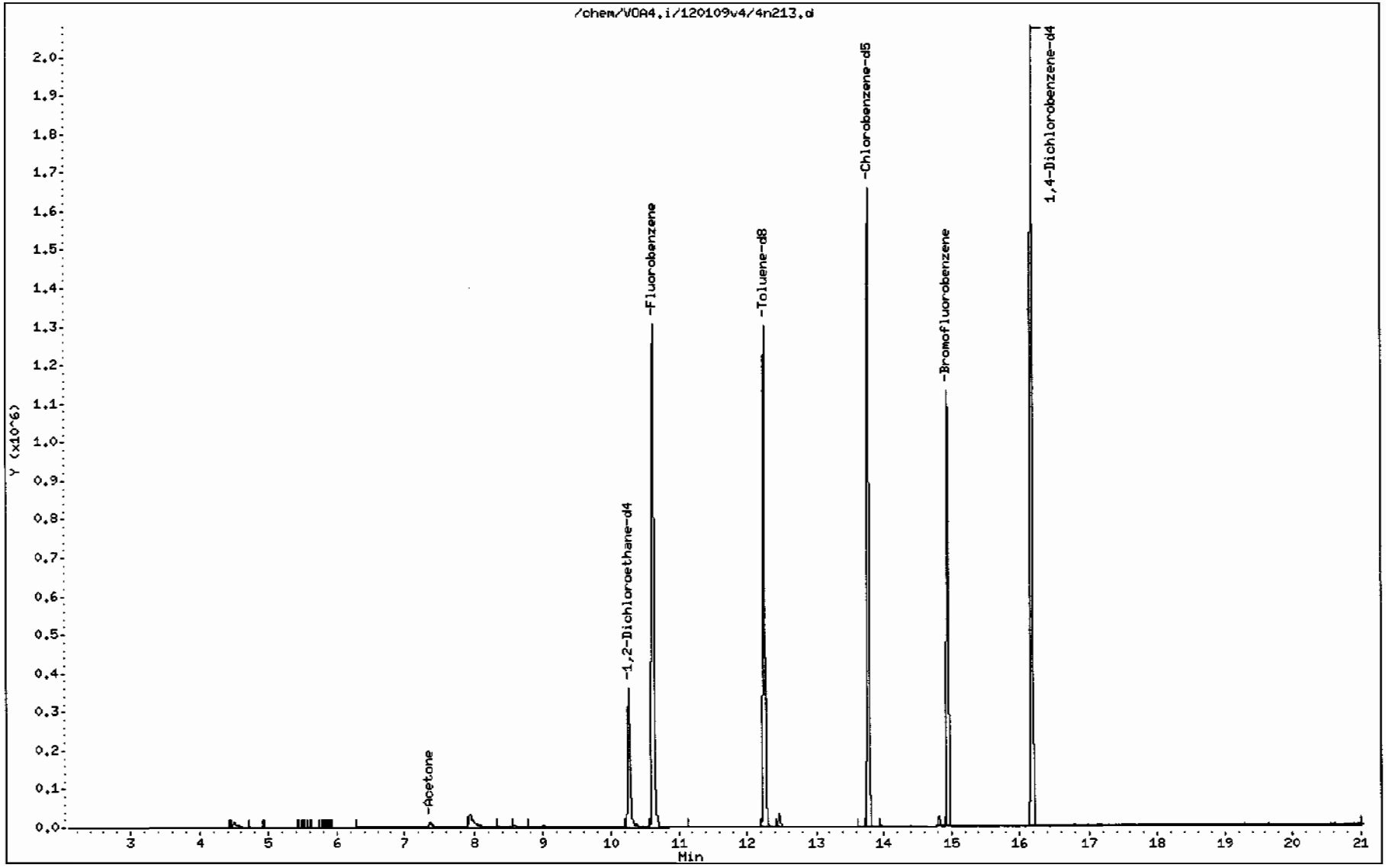

Data File: /chem/VOA4.i/120109v4/4n213.d

Date : 01-DEC-2009 22:35

Client ID: RE03-09-14291

Instrument: VOA4.i

Sample Info: |241827002|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 3.8 ug/Kg

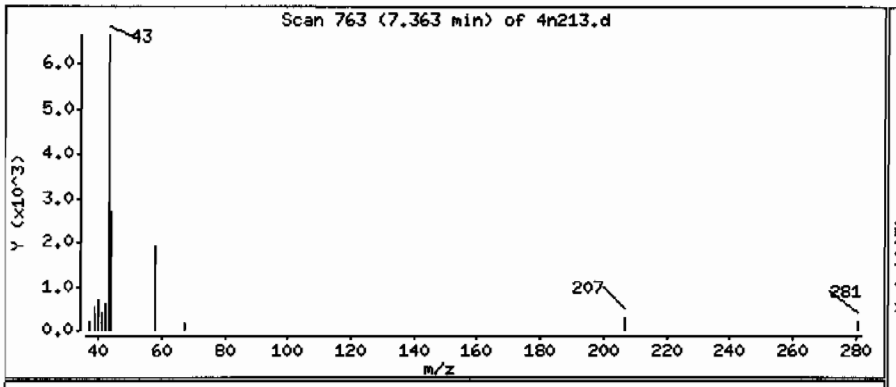

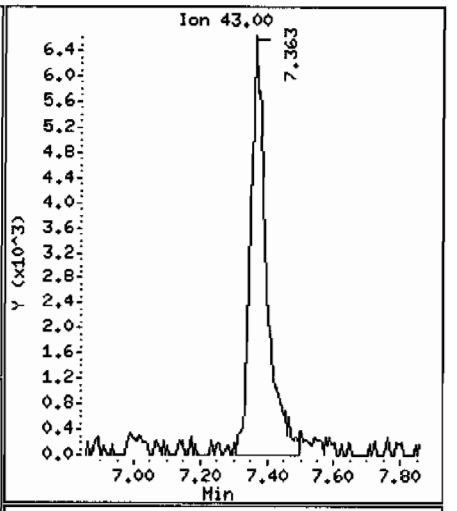

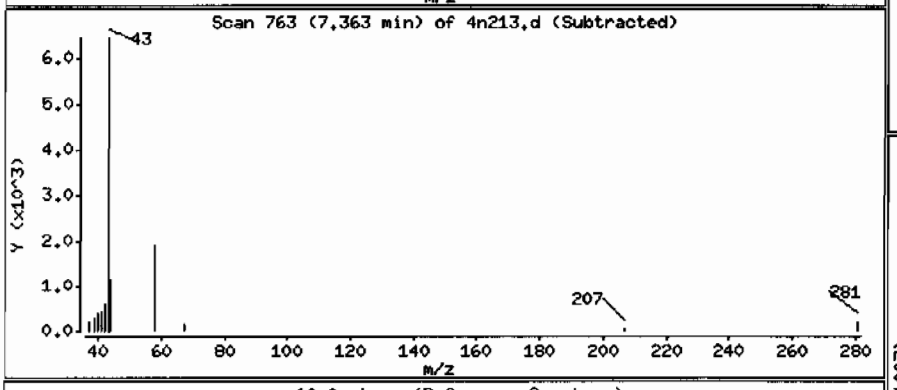

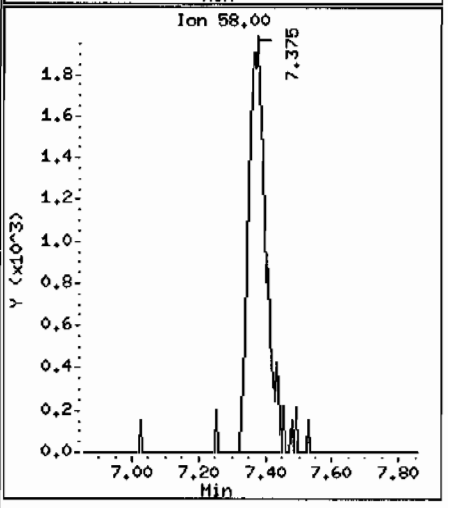

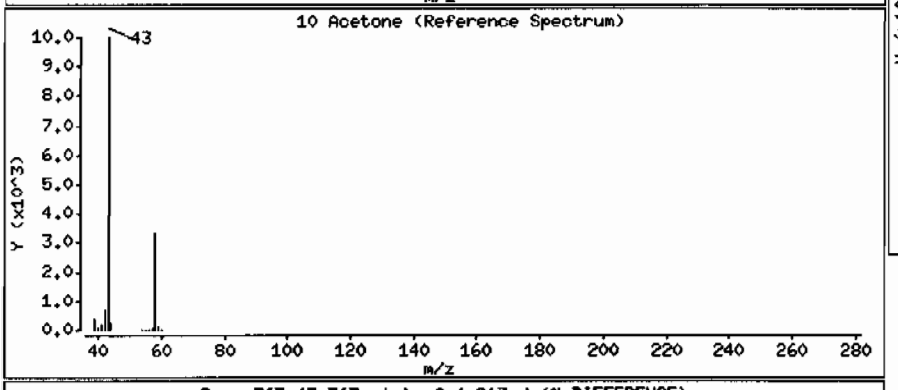

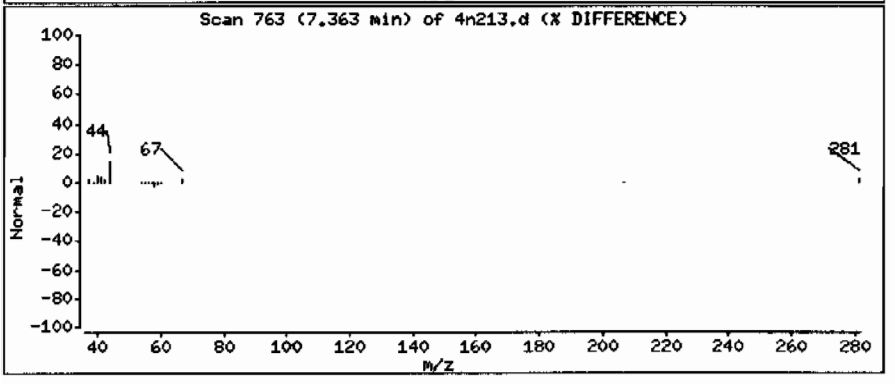

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2731**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n217.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.355	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.313	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.313	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.313	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.313	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.313	1.04
67-64-1	Acetone	J	4.94	ug/kg	1.73	5.22
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
74-88-4	Iodomethane	U	5.22	ug/kg	1.67	5.22
75-09-2	Methylene chloride	U	5.22	ug/kg	2.09	5.22
75-15-0	Carbon disulfide	U	5.22	ug/kg	1.30	5.22
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.313	1.04
78-93-3	2-Butanone	U	5.22	ug/kg	1.56	5.22
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.313	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.313	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.344	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.313	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.313	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.313	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.313	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.313	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.344	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.313	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.313	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.313	1.04
108-10-1	4-Methyl-2-pentanone	U	5.22	ug/kg	1.30	5.22
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.313	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.313	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.313	1.04
591-78-6	2-Hexanone	U	5.22	ug/kg	1.56	5.22
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.313	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.313	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.313	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.313	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.313	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2731**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 00:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n217.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.313	1.04
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.313	2.09
95-47-6	o-Xylene	U	1.04	ug/kg	0.313	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.313	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.313	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.313	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.313	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.313	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.313	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.313	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.313	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.313	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.313	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.313	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.313	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.313	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.22	ug/kg	1.67	5.22
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.313	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.313	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
66-25-1	Hexanal	12.99	18.5	ug/kg	90	NJ
	Unknown Siloxane	14.83	60.3	ug/kg		J
124-19-6	Nonanal	17.15	5.48	ug/kg	83	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n217.d
Lab Smp Id: 241827006 Client Smp ID: RE03-10-2731
Inj Date : 02-DEC-2009 00:24
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827006|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.12440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1409735	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1065569	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	640853	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.259	(0.966)	310651	56.1043	58.5
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	970423	52.2875	54.5
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	419665	56.5515	59.0
10 Acetone	43	7.364	7.357	(0.693)	27128	4.73611	4.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n217.d
Report Date: 12/02/2009 11:17
Lab. ID: 241827006 SampleType: SAMPLE
Injection Date: 02-DEC-2009 00:24
Operator: ACJ Instrument: VOA4.i
Sample Info: |241827006|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	27128	7.36	7.36	80-120	100	( )
58	8148	7.36	7.36	0- 60	30	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	18031	10.62	10.34	80-120	100	(T)
64	2977	10.62	10.34	2- 62	17	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7872	12.25	12.02	80-120	100	(T)
43	5091	12.25	12.01	231-291	65	(QT)
100	672806	12.25	12.02	7- 67	8547	(QT)
54 1,1,2-Trichloroethane			CAS#: 79-00-5			
83	2870	12.99	12.69	80-120	100	(T)
97	183	12.47	12.69	87-147	6	(QT)
85	897	12.99	12.69	35- 95	31	(QT)
55 2-Hexanone			CAS#: 591-78-6			
43	118118	12.99	12.86	80-120	100	(T)
58	17650	12.99	12.86	23- 83	15	(QT)
57	109467	12.98	12.86	0- 49	93	(QT)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	5592	14.83	15.11	80-120	100	(T)
75	14502	14.82	15.11	249-309	259	(T)
77	1246	14.82	15.11	60-120	22	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n217.d
Lab Smp Id: 241827006 Client Smp ID: RE03-10-2731
Inj Date : 02-DEC-2009 00:24
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827006|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	4.12440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3188359	50.000
* 86 1,4-Dichlorobenzene-d4	16.180	3698203	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Hexanal				CAS #: 66-25-1			
12.985	1128789	17.7017171	18.5	90	NIST05.L	3690	61

RT	AREA	CONCENTRATIONS ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
14.826	3686638	57.8140177	60.3	0		0	61
Nonanal				CAS #: 124-19-6			
17.155	388283	5.24961411	5.5	83	NIST05.L	19203	86

Data File: /chem/VOA4.i/120109v4/4n217.d

Date : 02-DEC-2009 00:24

Client ID: RE03-10-2731

Sample Info: |2418270061928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

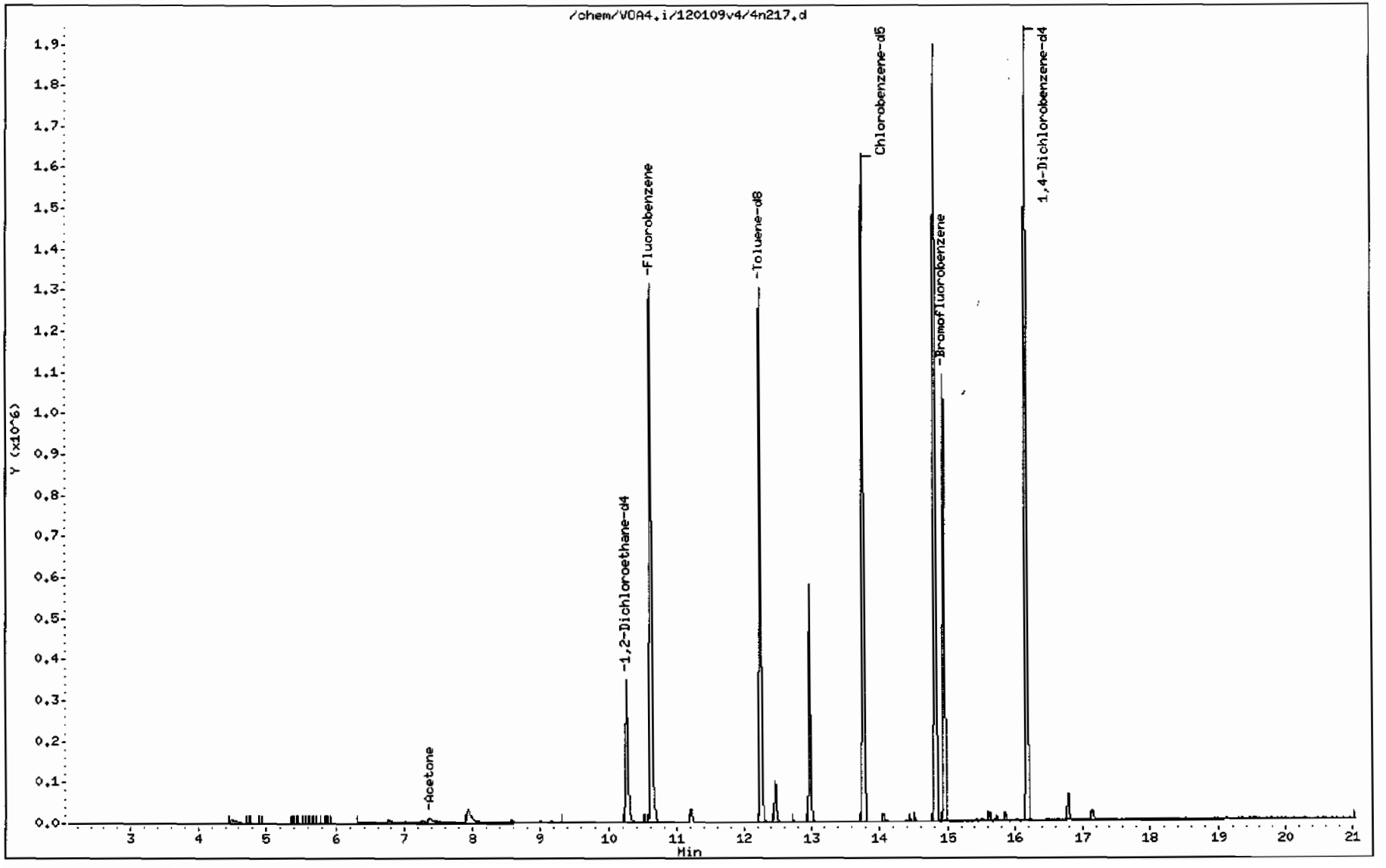

Data File: /chem/VOA4.i/120109v4/4n217.d

Date : 02-DEC-2009 00:24

Client ID: RE03-10-2731

Instrument: VOA4.i

Sample Info: |2418270061928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 4.9 ug/Kg

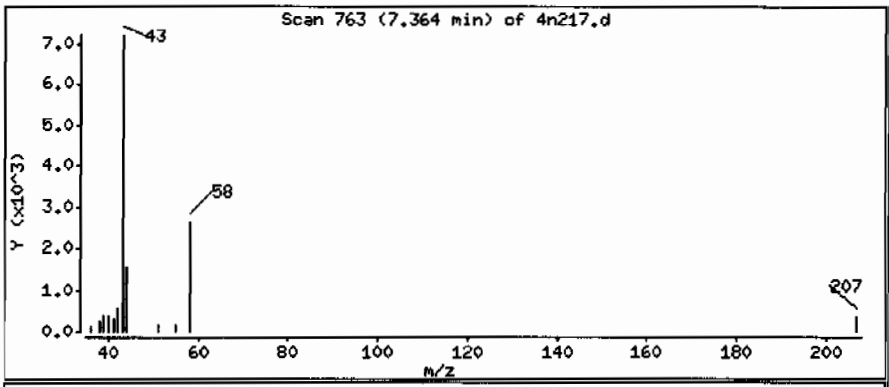

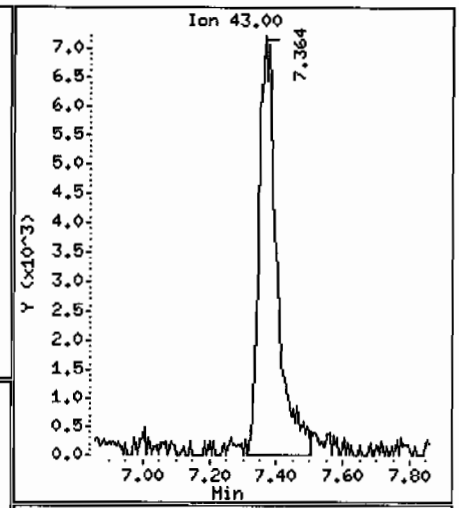

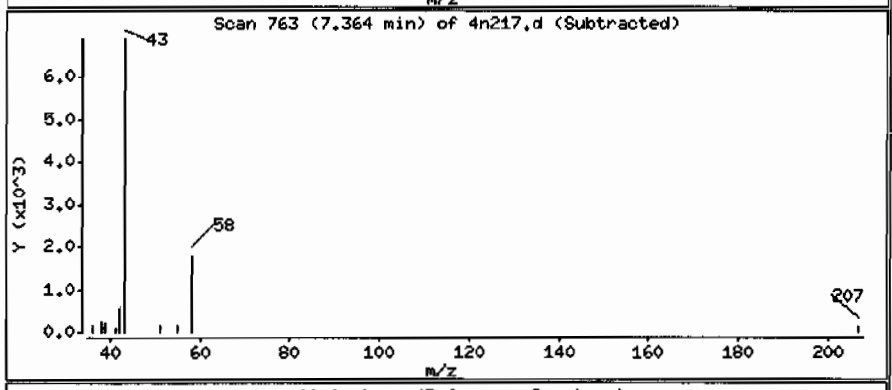

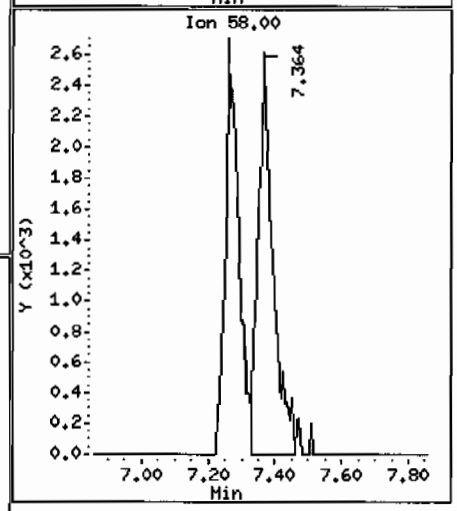

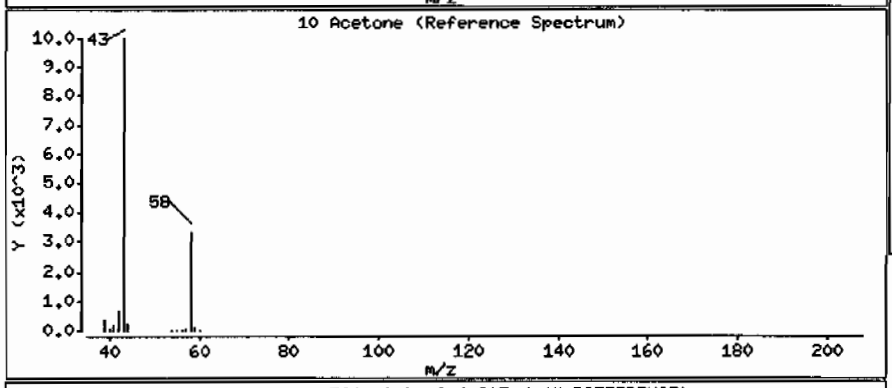

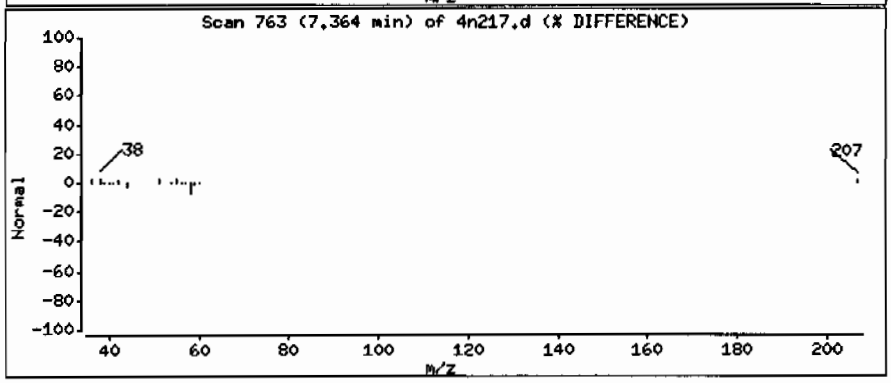

Data File: /chem/VOA4.i/120109v4/4n217.d

Date : 02-DEC-2009 00:24

Client ID: RE03-10-2731

Instrument: VOA4.i

Sample Info: |2418270061928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexanal	66-25-1	NIST05.L	3690	90	C6H12O	100
Hexanal	66-25-1	NIST05.L	3688	90	C6H12O	100
Hexanal	66-25-1	NIST05.L	3684	78	C6H12O	100

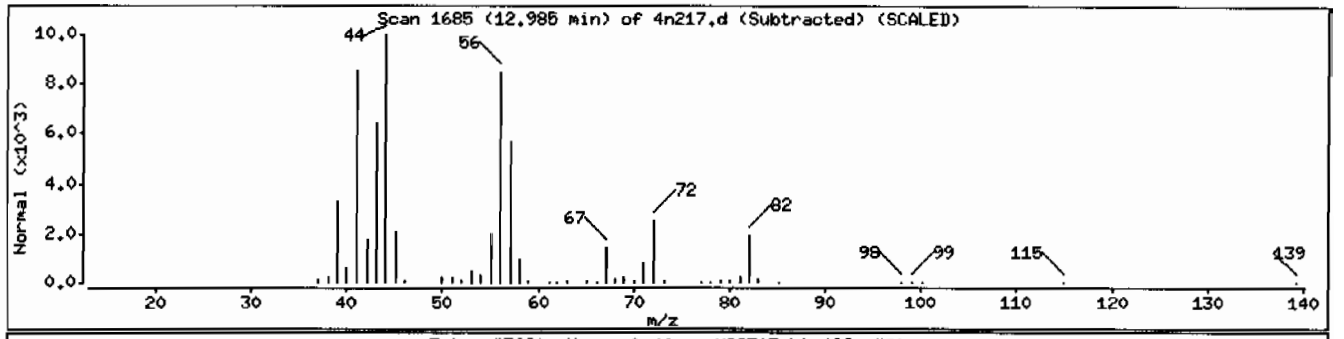

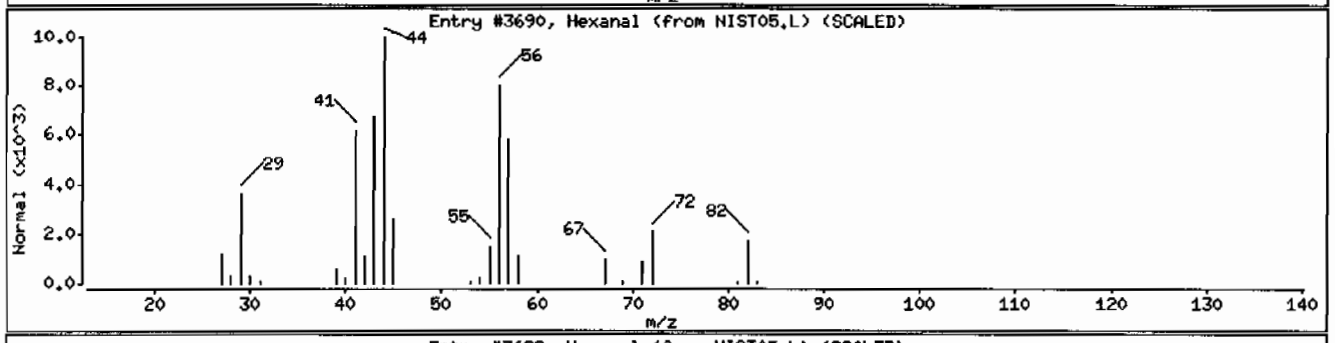

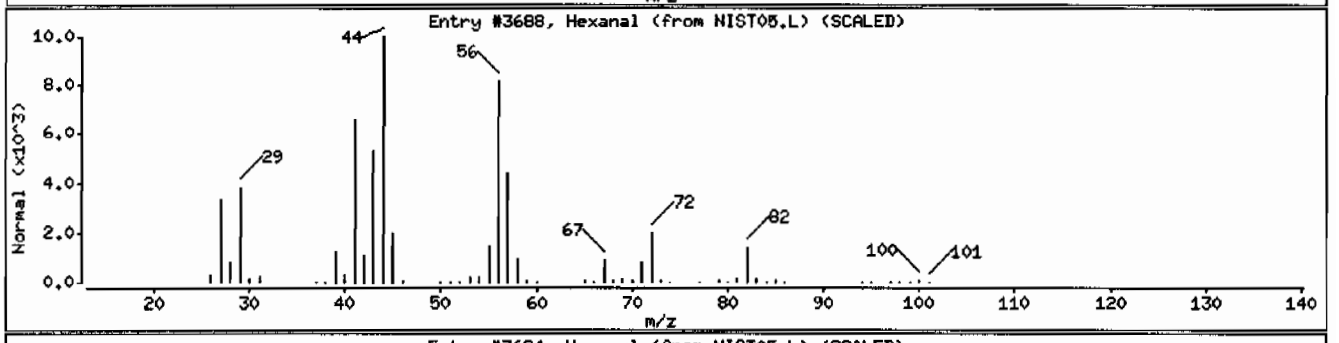

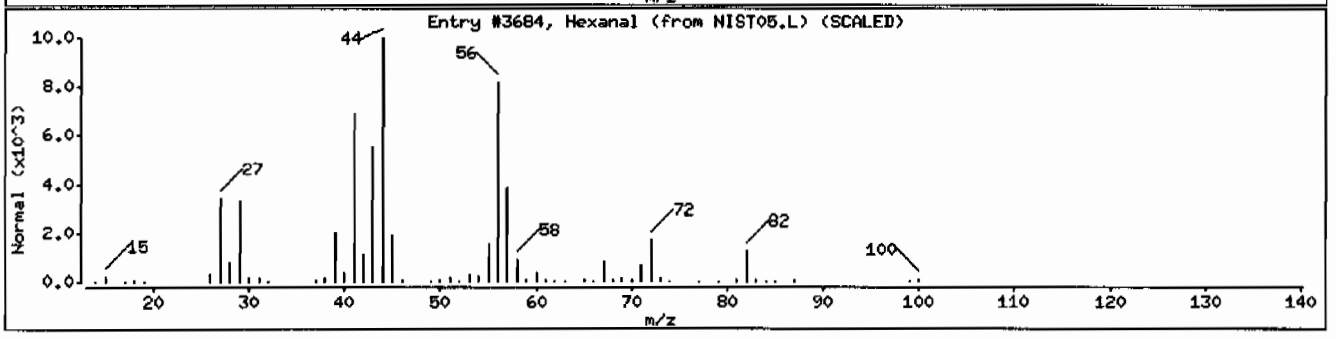

Data File: /chem/VOA4.i/120109v4/4n217.d

Date : 02-DEC-2009 00:24

Client ID: RE03-10-2731

Instrument: VOA4.i

Sample Info: |241827006|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	78	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	72	C8H24O4Si4	296

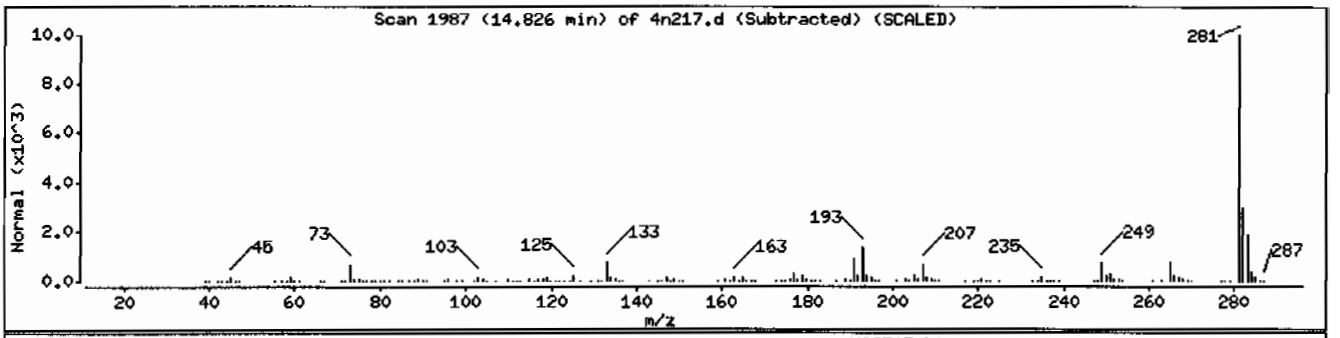

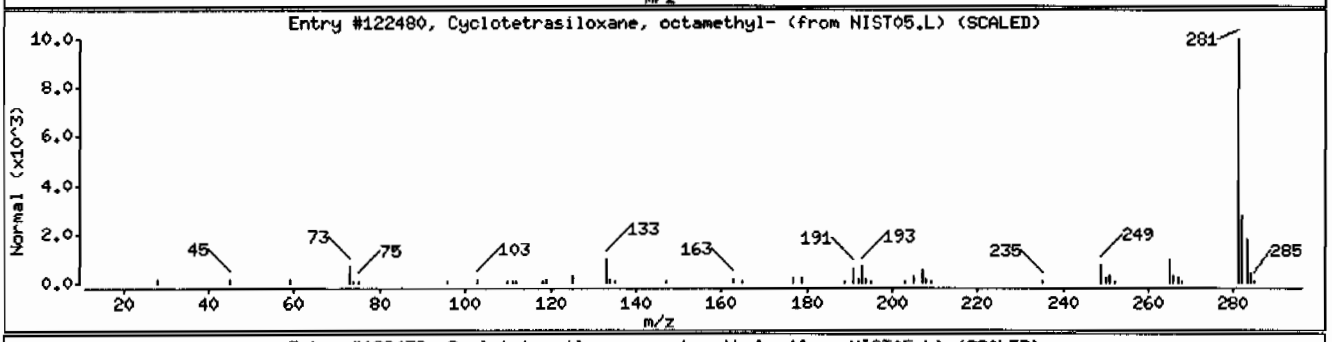

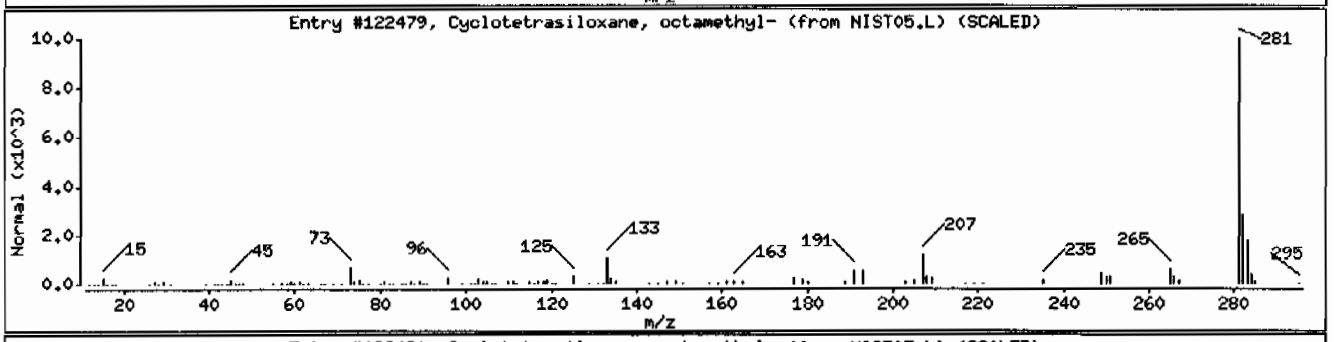

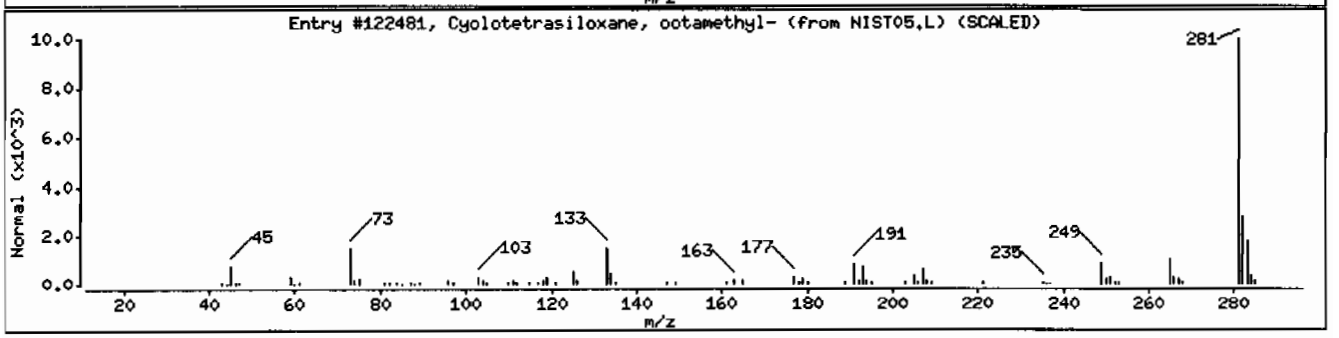

Data File: /chem/VOA4.i/120109v4/4n217.d

Date : 02-DEC-2009 00:24

Client ID: RE03-10-2731

Instrument: VOA4.i

Sample Info: |2418270061928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonanal	124-19-6	NIST05.L	19203	83	C9H18O	142
Nonanal	124-19-6	NIST05.L	19204	72	C9H18O	142
1-Hexanol, 2-ethyl-	104-76-7	NIST05.L	13235	35	C8H18O	130

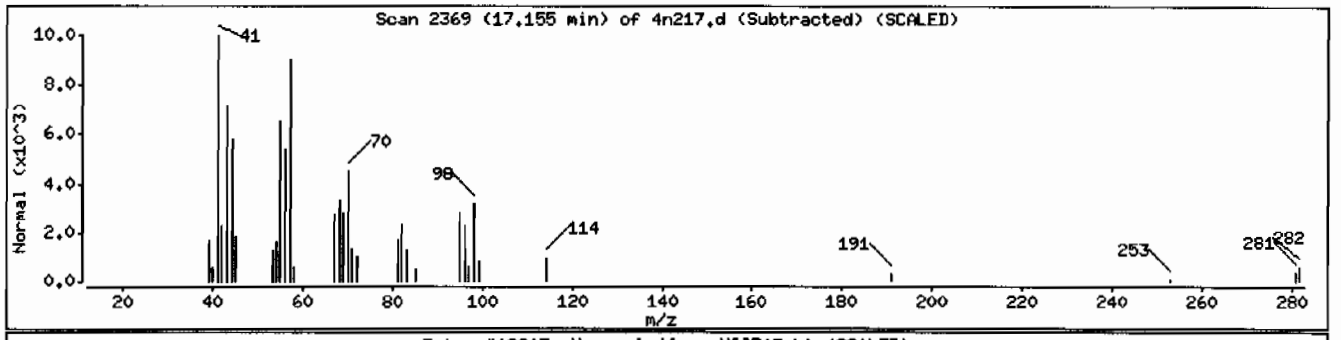

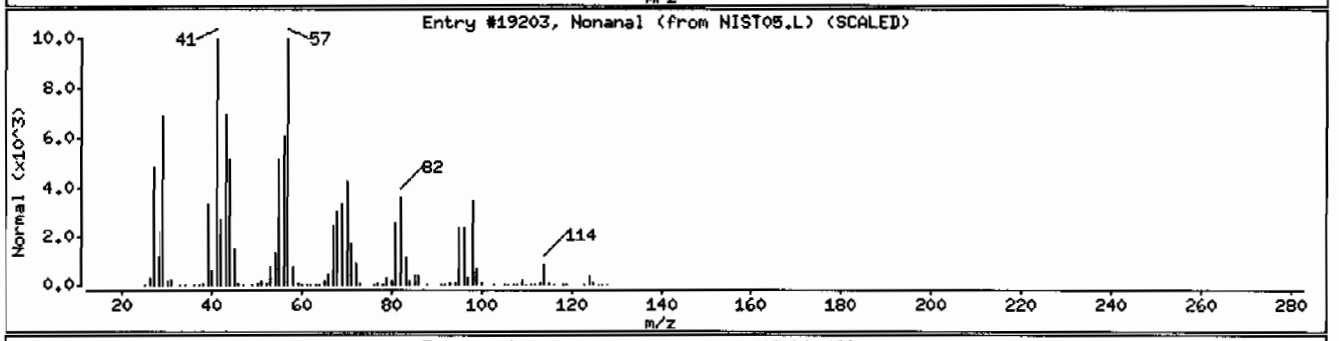

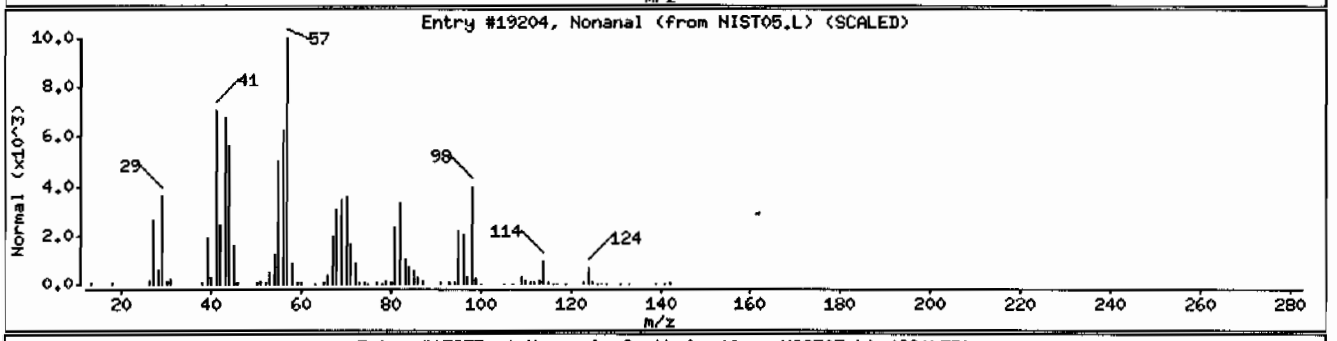

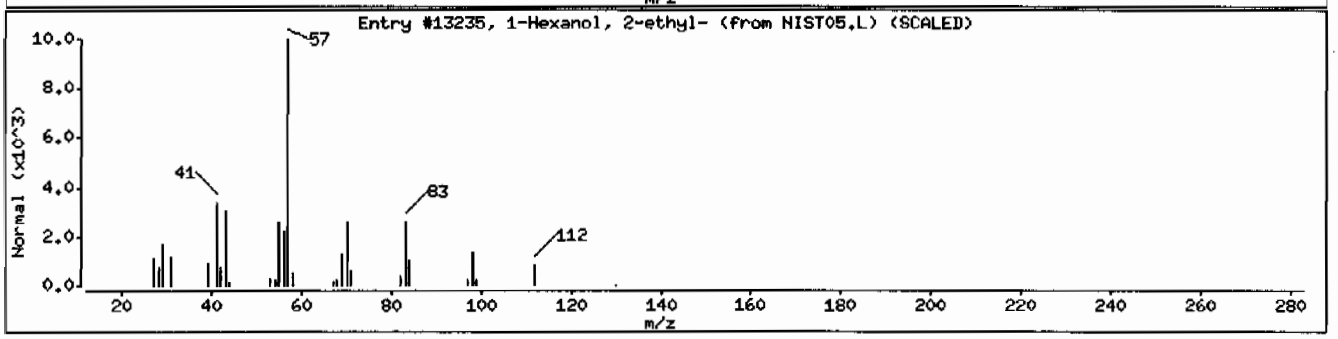

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 23:30	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n215.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.341	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.301	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.301	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.301	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.301	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.301	1.00
67-64-1	Acetone	J	1.69	ug/kg	1.66	5.01
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.301	1.00
74-88-4	Iodomethane	U	5.01	ug/kg	1.60	5.01
75-09-2	Methylene chloride	U	5.01	ug/kg	2.01	5.01
75-15-0	Carbon disulfide	U	5.01	ug/kg	1.25	5.01
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.301	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.301	1.00
78-93-3	2-Butanone	U	5.01	ug/kg	1.50	5.01
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.301	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.301	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.301	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.331	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.301	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.301	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.301	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.301	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.301	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.331	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.301	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.301	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.301	1.00
108-10-1	4-Methyl-2-pentanone	U	5.01	ug/kg	1.25	5.01
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.301	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.301	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.301	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.301	1.00
591-78-6	2-Hexanone	U	5.01	ug/kg	1.50	5.01
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.301	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.301	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.301	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.301	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.301	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/01/2009 23:30	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:15	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n215.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.301	1.00
179601-23-1	m,p-Xylenes	U	2.01	ug/kg	0.301	2.01
95-47-6	o-Xylene	U	1.00	ug/kg	0.301	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.301	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.301	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.301	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.301	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.301	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.301	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.301	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.301	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.301	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.301	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.301	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.301	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.301	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.301	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.301	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.301	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.01	ug/kg	1.60	5.01
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.301	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.301	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	381	ug/kg		J
	Unknown Siloxane	16.79	20.3	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n215.d
Lab Smp Id: 241827004 Client Smp ID: RE03-10-2732
Inj Date : 01-DEC-2009 23:30
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827004|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.28470	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1222792	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	916684	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	544183	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	276995	57.6741	57.8
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	847552	53.0842	53.2
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	365690	58.0320	58.2
10 Acetone	43	7.375	7.357	(0.695)	8397	1.69010	1.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n215.d
Report Date: 12/02/2009 11:17
Lab. ID: 241827004 SampleType: SAMPLE
Injection Date: 01-DEC-2009 23:30
Operator: ACJ Instrument: VOA4.i
Sample Info: |241827004|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	8397	7.38	7.36	80-120	100	( )
58	2360	7.36	7.36	0- 60	28	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	15750	10.62	10.34	80-120	100	(T)
64	2474	10.61	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	7102	12.25	12.02	80-120	100	(T)
43	4079	12.26	12.01	231-291	57	(QT)
100	585216	12.25	12.02	7- 67	8240	(QT)
65 Styrene			CAS#: 100-42-5			
104	28148	14.82	14.40	80-120	100	(T)
78	280	14.82	14.40	21- 81	1	(QT)
66 Bromoform			CAS#: 75-25-2			
173	2224	14.83	14.66	80-120	100	(T)
175	20669	14.83	14.65	18- 78	929	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	25367	14.82	14.76	80-120	100	(T)
120	11951	14.82	14.76	0- 57	47	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
74	1,2,3-Trichloropropane			CAS#: 96-18-4		
110	24751	14.83	15.11	80-120	100	(T)
75	66239	14.82	15.11	249-309	268	(T)
77	4187	14.83	15.11	60-120	17	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n215.d
Lab Smp Id: 241827004 Client Smp ID: RE03-10-2732
Inj Date : 01-DEC-2009 23:30
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827004|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.28470	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	2791664	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	3155034	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
14.825	21193517	379.585649	381	0		0	61

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	========	==========	======
Unknown Siloxane					CAS #:		
16.794	1280326	20.2902135	20.3	0		0	86

Data File: /chem/VOA4.i/120109v4/4n215.d

Date : 01-DEC-2009 23:30

Client ID: RE03-10-2732

Sample Info: |2418270041928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

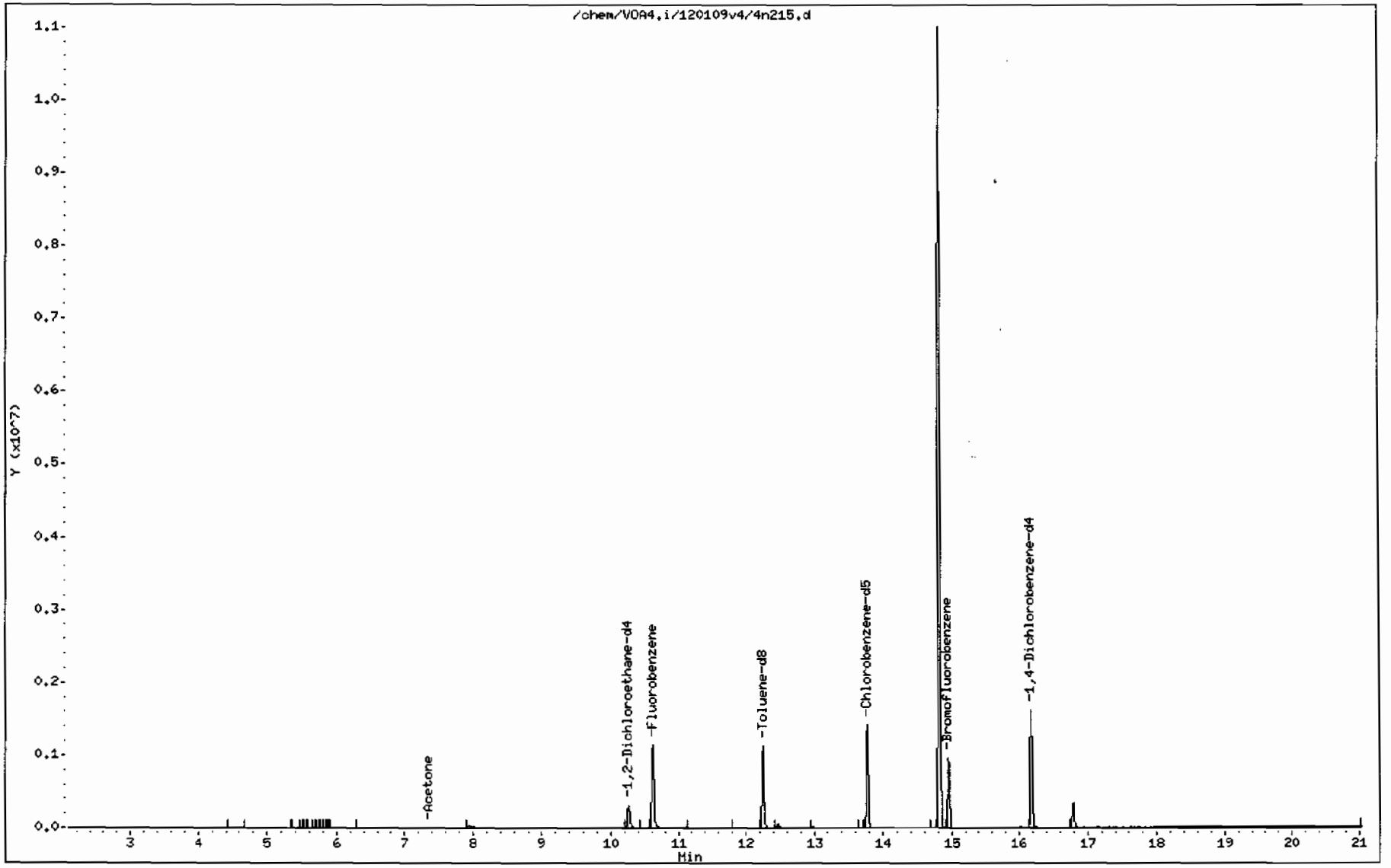

Data File: /chem/VOA4.i/120109v4/4n215.d

Date : 01-DEC-2009 23:30

Client ID: RE03-10-2732

Instrument: VOA4.i

Sample Info: |241827004|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 1.7 ug/Kg

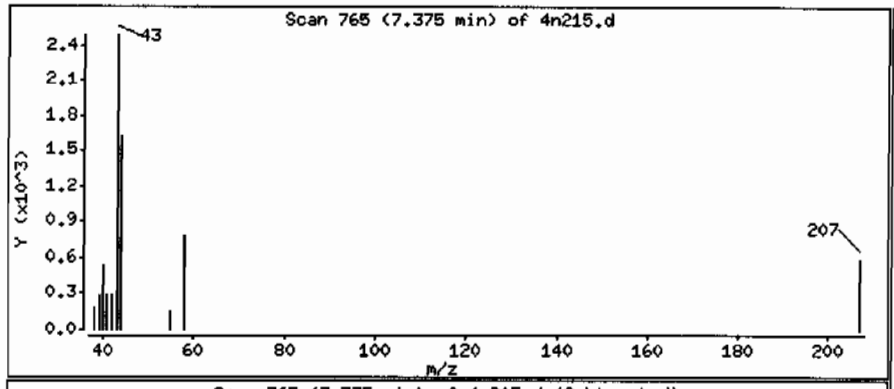

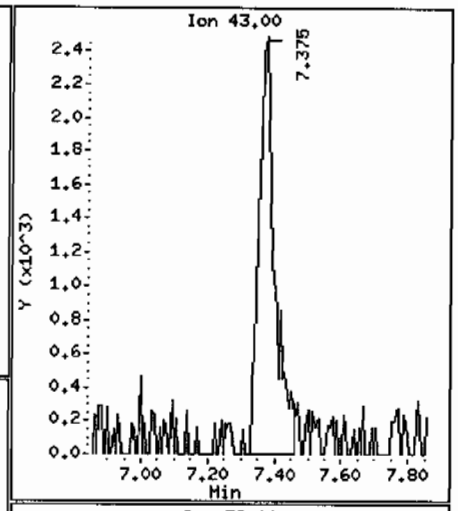

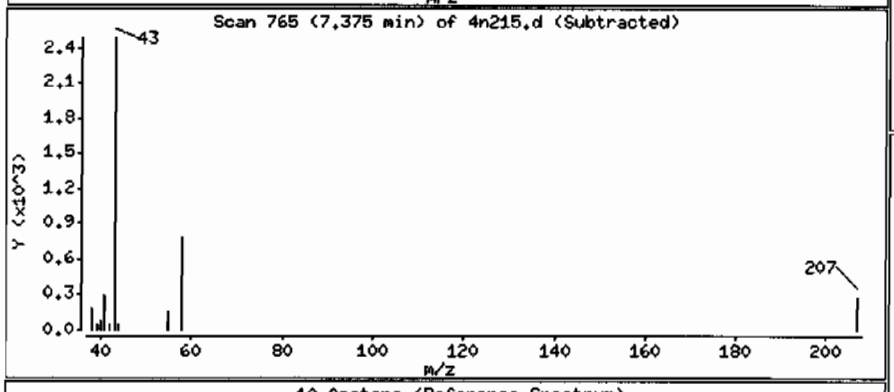

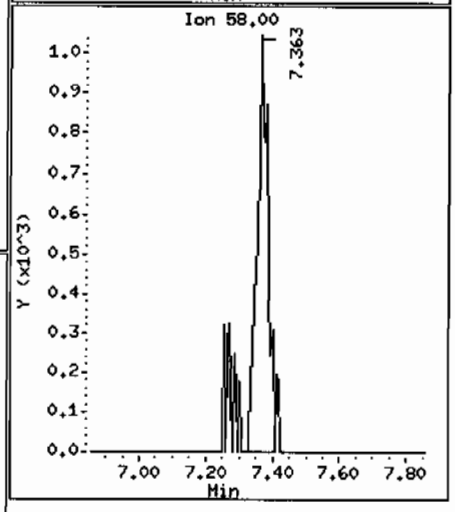

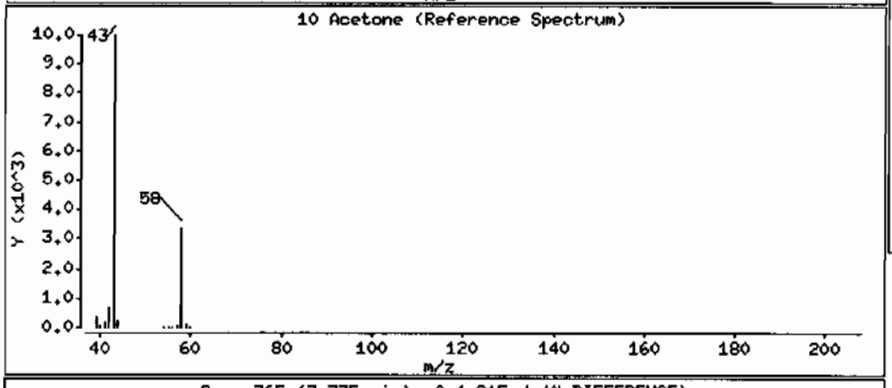

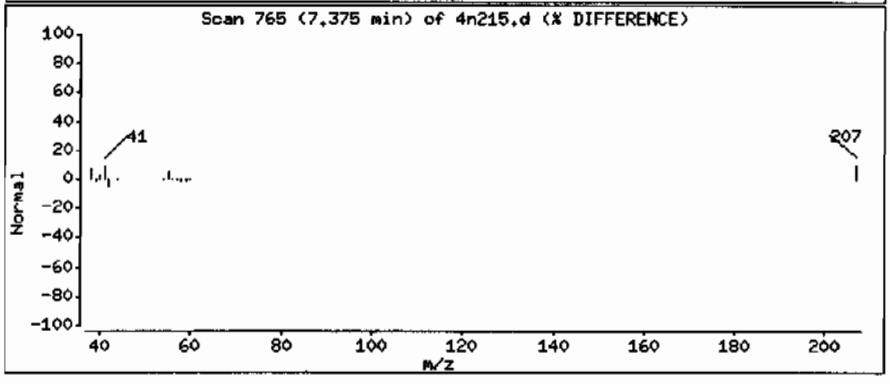

Data File: /chem/VOA4.i/120109v4/4n215.d

Date : 01-DEC-2009 23:30

Client ID: RE03-10-2732

Instrument: VOA4.i

Sample Info: |2418270041928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	86	C8H24O4Si4	296

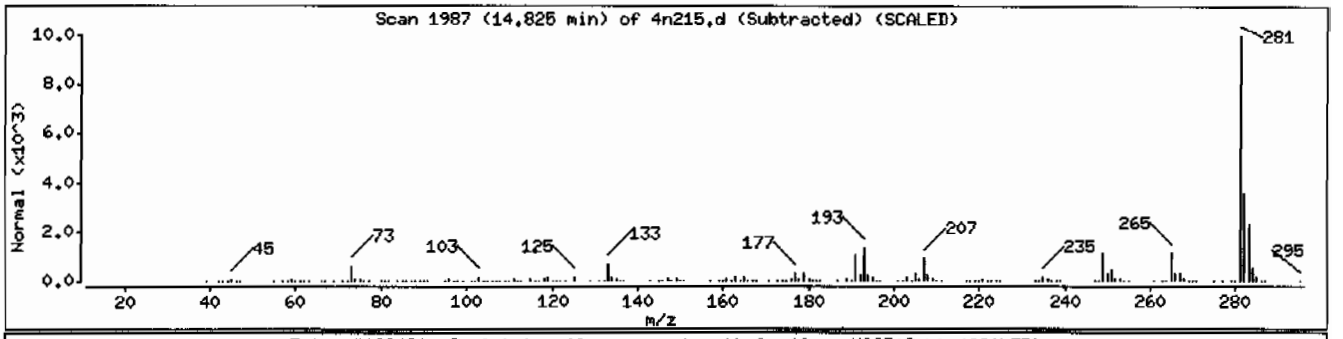

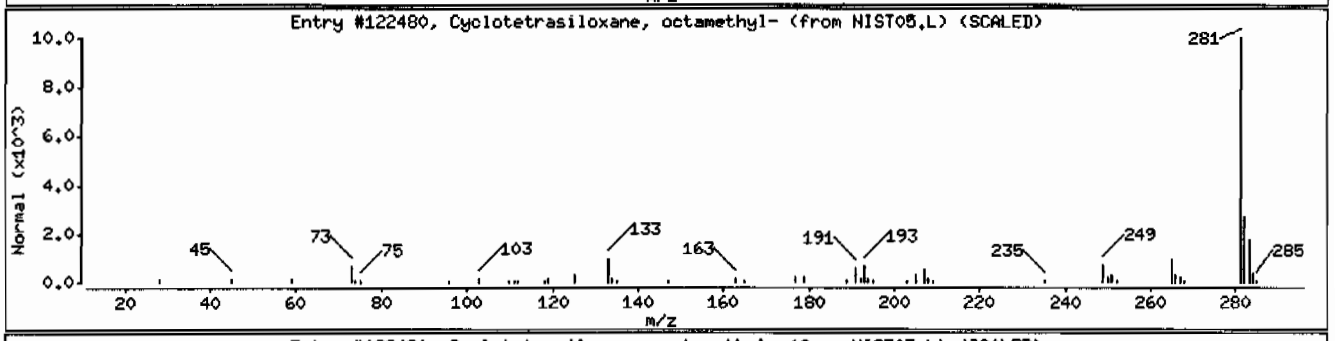

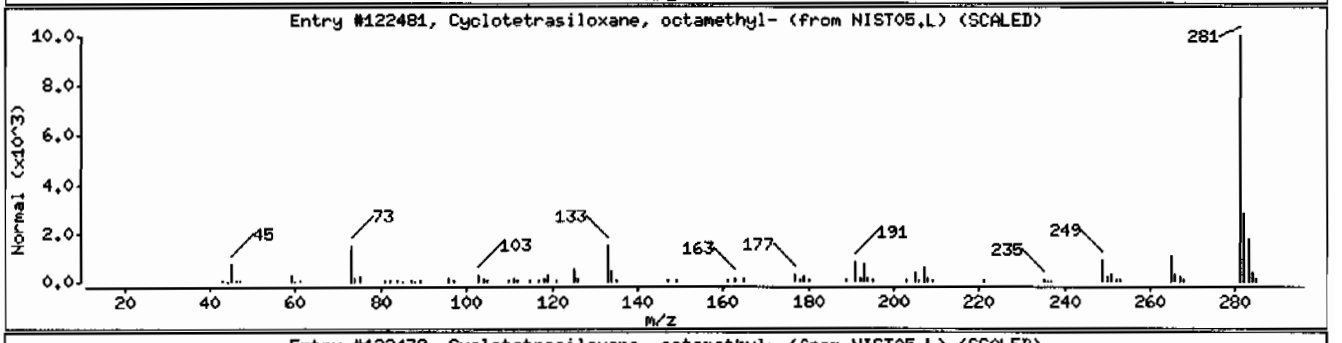

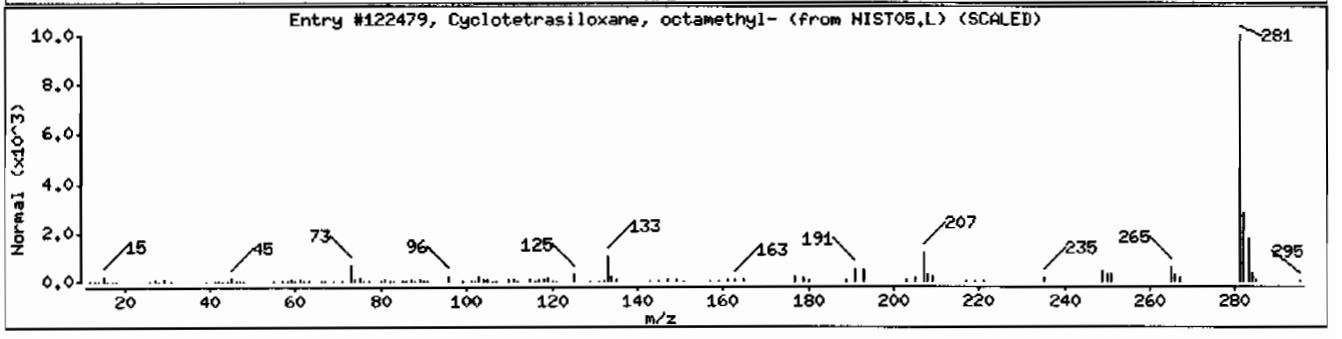

Data File: /chem/VOA4.i/120109v4/4n215.d

Date : 01-DEC-2009 23:30

Client ID: RE03-10-2732

Instrument: VOA4.i

Sample Info: |2418270041928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	64	C13H22O3Si2	282
4-Hydroxymandelic acid, ethyl ester, di-	1000071-53-3	NIST05.L	147514	56	C16H28O4Si2	340
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	56	C16H28O4Si2	340

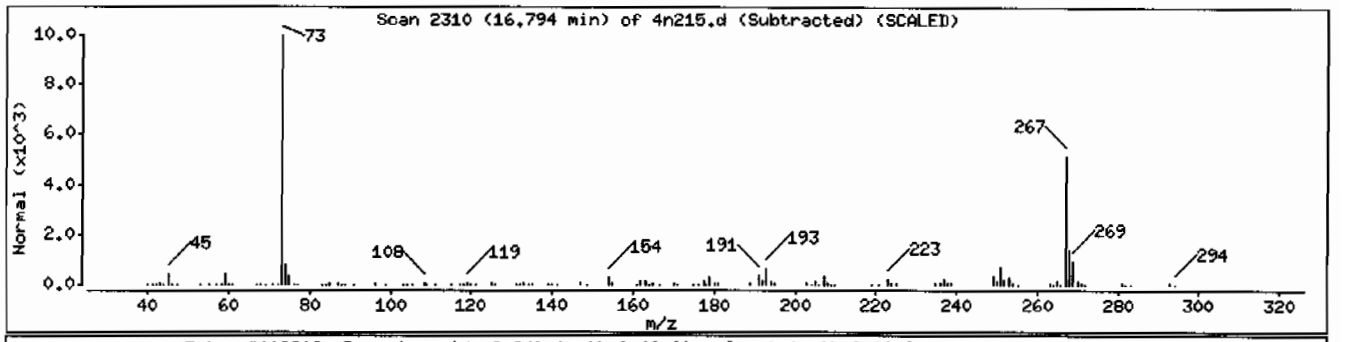

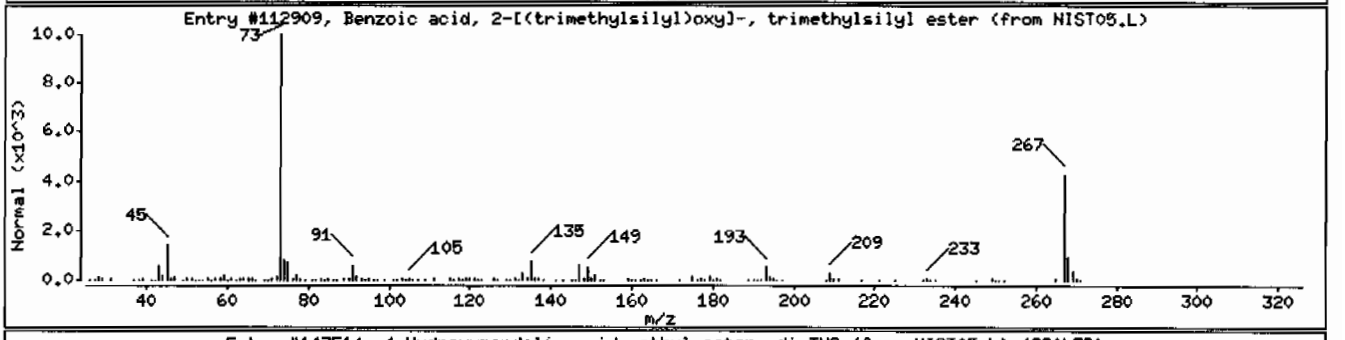

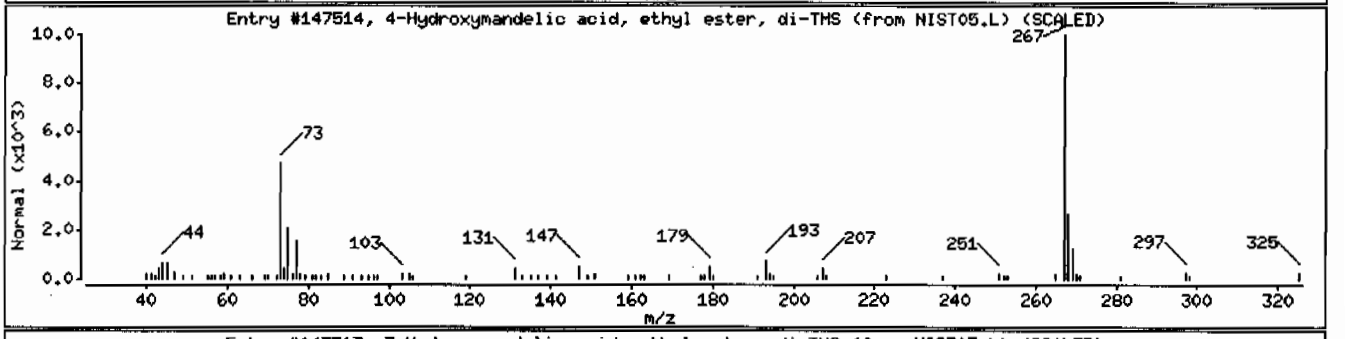

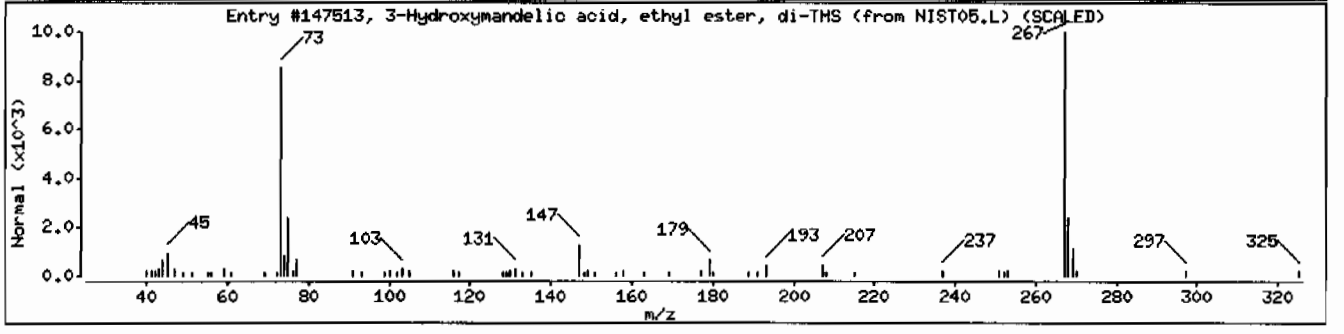

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2733**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n216.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.352	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	J	2.74	ug/kg	1.72	5.18
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.18	ug/kg	1.66	5.18
75-09-2	Methylene chloride	U	5.18	ug/kg	2.07	5.18
75-15-0	Carbon disulfide	U	5.18	ug/kg	1.30	5.18
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.18	ug/kg	1.55	5.18
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.18	ug/kg	1.30	5.18
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.18	ug/kg	1.55	5.18
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2733**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 23:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n216.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.18	ug/kg	1.66	5.18
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	68.4	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n216.d
Lab Smp Id: 241827005 Client Smp ID: RE03-10-2733
Inj Date : 01-DEC-2009 23:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827005|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.52910	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1609919	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1188595	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	708978	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	323839	51.2137	53.1
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1010400	48.8066	50.6
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	438940	53.4653	55.4
10 Acetone	43	7.375	7.357	(0.695)	17298	2.64444	2.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n216.d
Report Date: 12/02/2009 11:17
Lab. ID: 241827005 SampleType: SAMPLE
Injection Date: 01-DEC-2009 23:57
Operator: ACJ Instrument: VOA4.i
Sample Info: |241827005|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	17298	7.38	7.36	80-120	100	( )
58	4091	7.37	7.36	0- 60	24	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	21226	10.62	10.34	80-120	100	(T)
64	3697	10.62	10.34	2- 62	17	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8080	12.26	12.02	80-120	100	(T)
43	4838	12.25	12.01	231-291	60	(QT)
100	695170	12.25	12.02	7- 67	8603	(QT)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	7122	14.83	15.11	80-120	100	(T)
75	17659	14.82	15.11	249-309	248	(QT)
77	1542	14.81	15.11	60-120	22	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n216.d
Lab Smp Id: 241827005 Client Smp ID: RE03-10-2733
Inj Date : 01-DEC-2009 23:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827005|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.52910	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3590892	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
14.825	4737174	65.9609446	68.4	0		0	61

Data File: /chem/VOA4.i/120109v4/4n216.d
Date : 01-DEC-2009 23:57
Client ID: RE03-10-2733
Sample Info: |241827005|928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

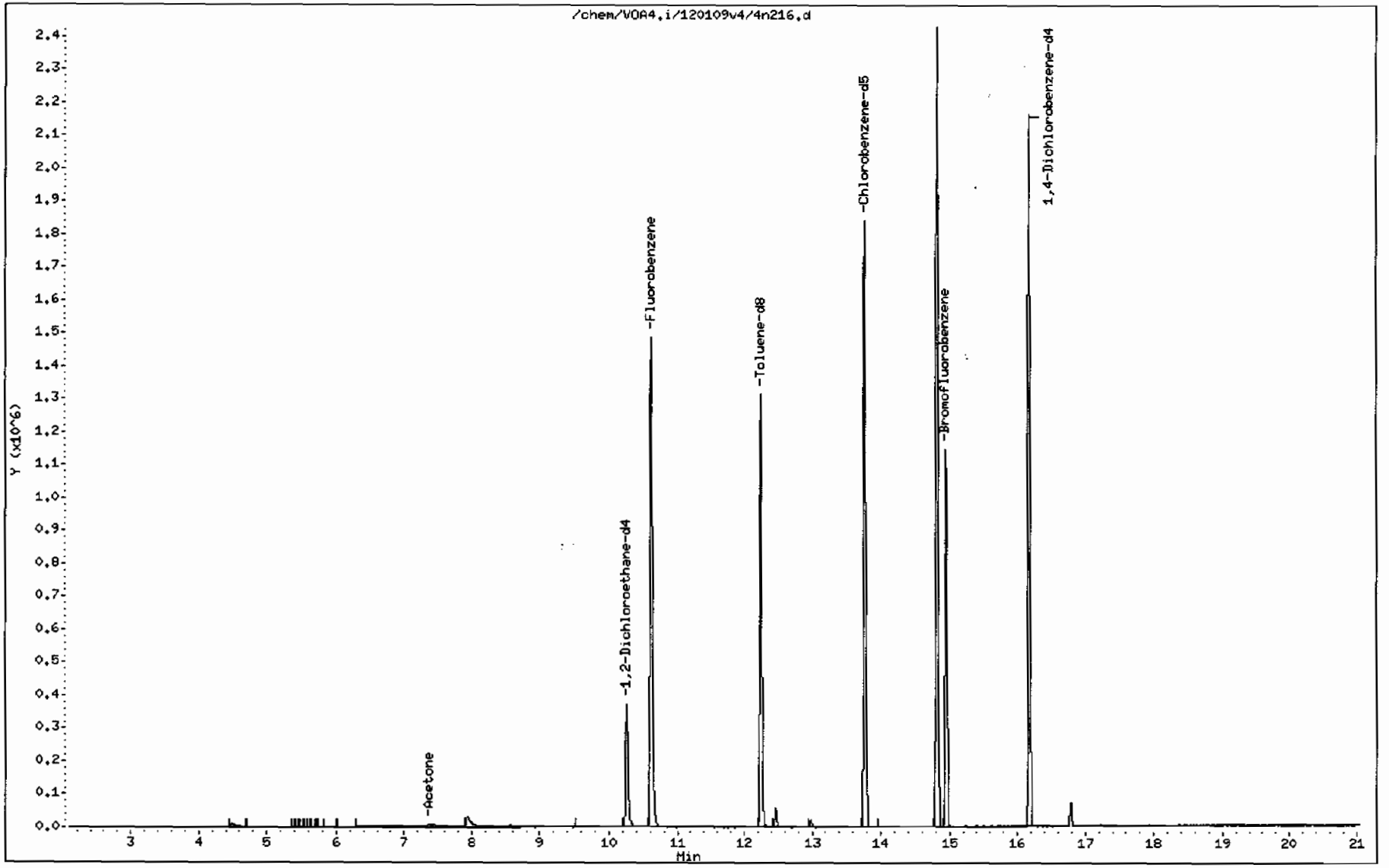

Data File: /chem/VOA4.i/120109v4/4n216.d

Date : 01-DEC-2009 23:57

Client ID: RE03-10-2733

Instrument: VOA4.i

Sample Info: |241827005|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.7 ug/Kg

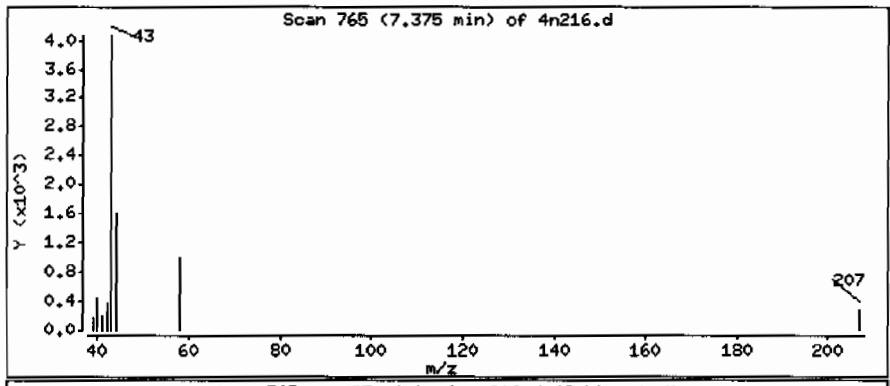

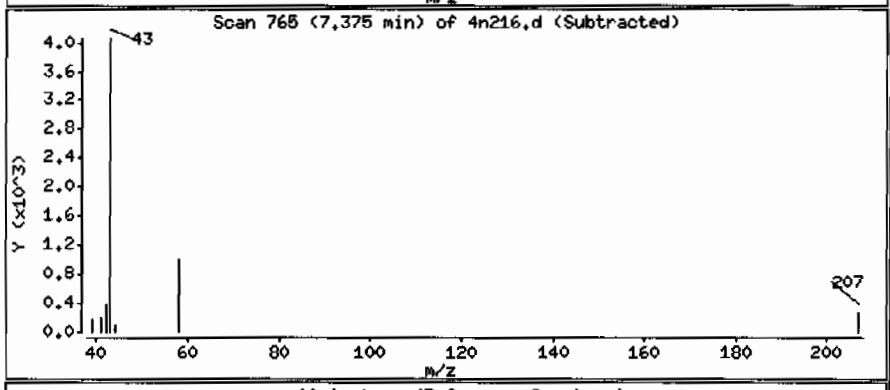

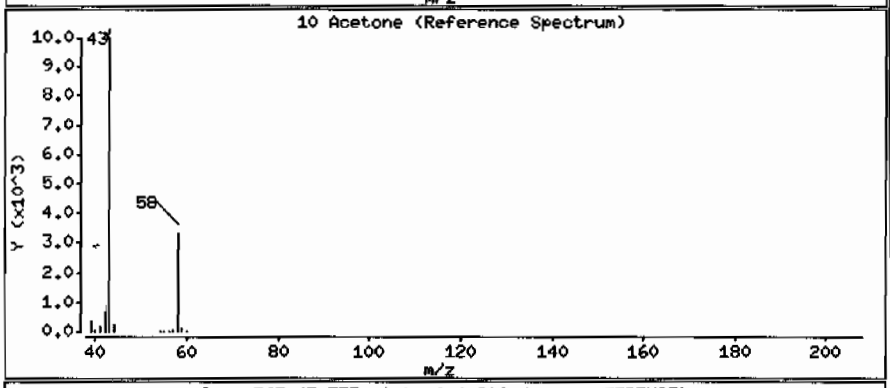

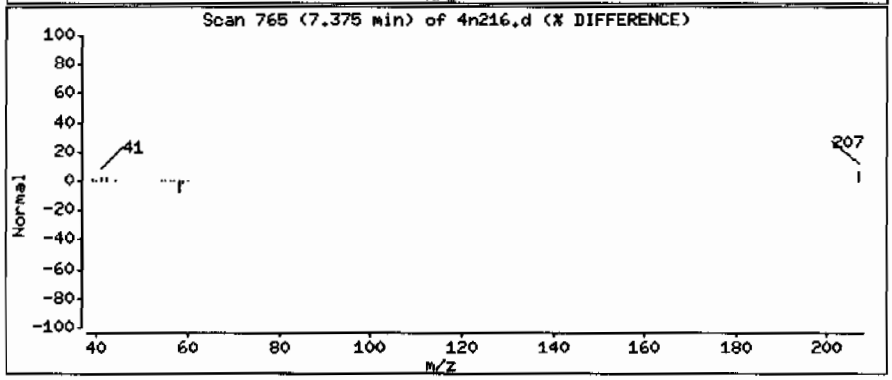

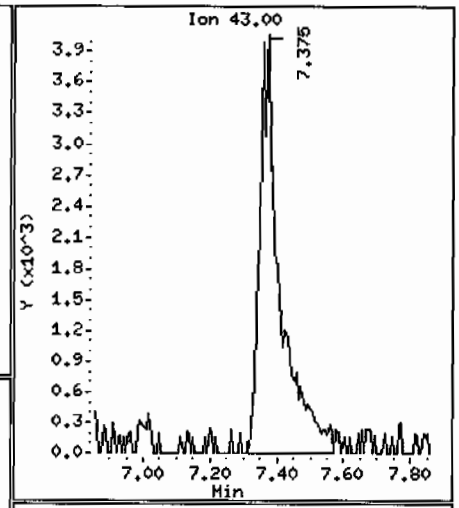

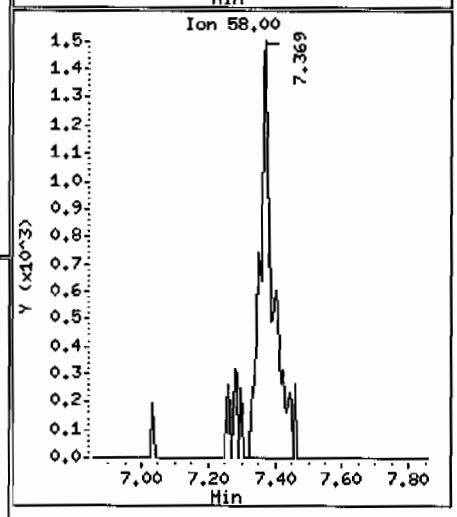

Data File: /chem/VOA4.i/120109v4/4n216.d

Date : 01-DEC-2009 23:57

Client ID: RE03-10-2733

Instrument: VOA4.i

Sample Info: |2418270051928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	86	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C21H15N	281

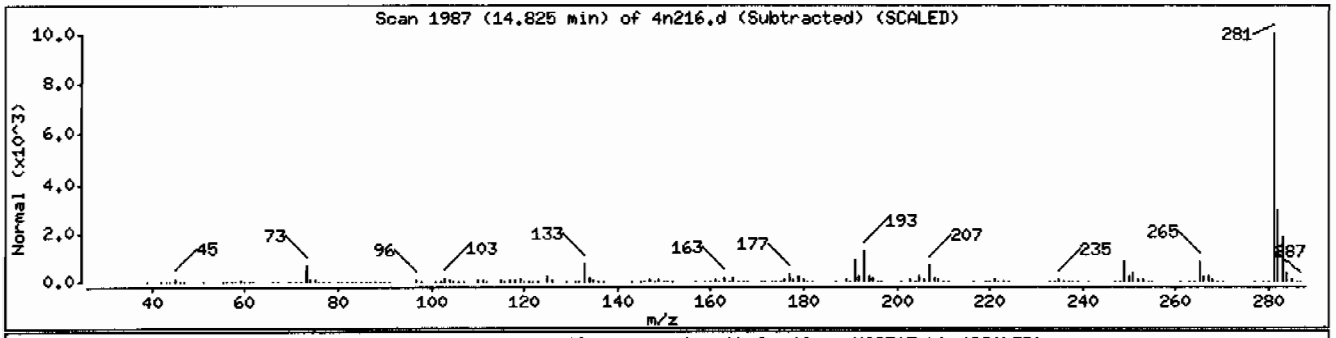

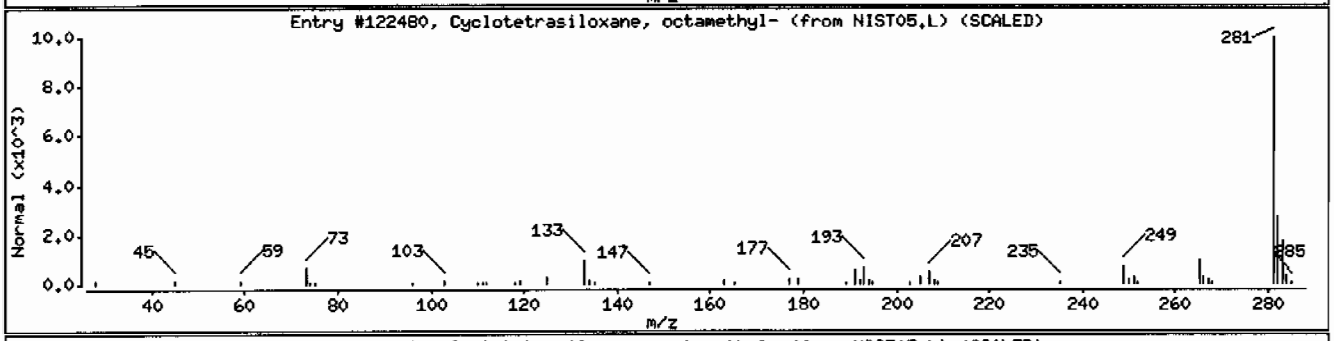

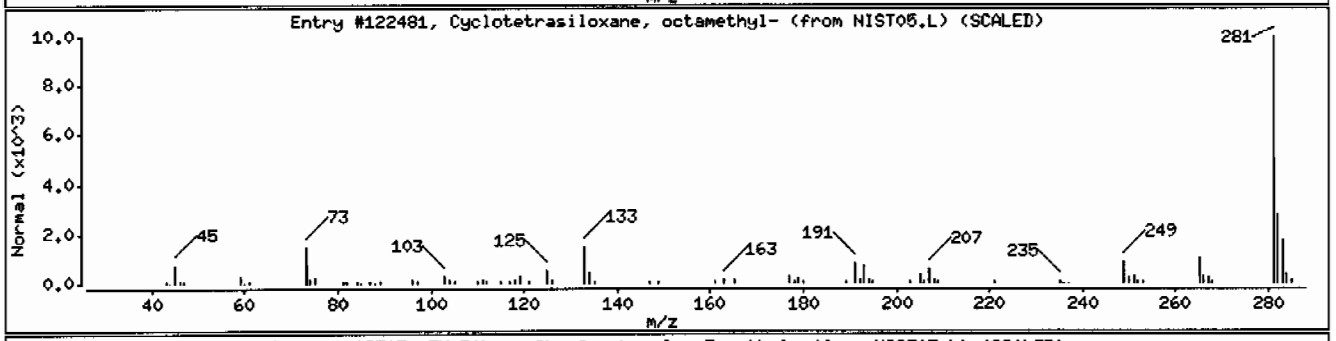

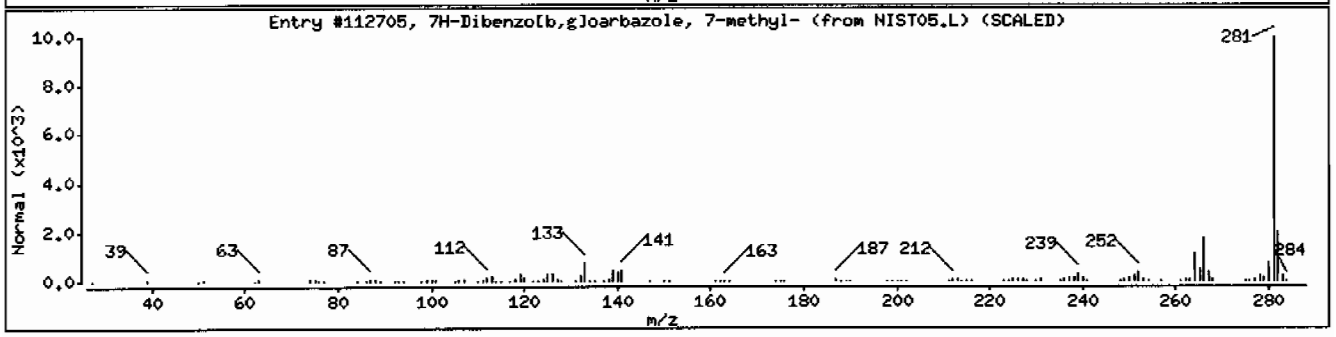

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 04-Dec-2009 17:27

Calibration History

Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Start Cal Date: 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
22-NOV-2009 14:48	ICALsubS	/chem/VOA4.i/112209v4/41713.d
22-NOV-2009 10:41	CALsubL+	/chem/VOA4.i/112209v4/41704.d
Cal Level: 2 , Cal Amount: 2.00000		
22-NOV-2009 15:16	ICALsubS	/chem/VOA4.i/112209v4/41714.d
22-NOV-2009 11:36	CALsubL+	/chem/VOA4.i/112209v4/41706.d
Cal Level: 3 , Cal Amount: 5.00000		
22-NOV-2009 15:43	ICALsubS	/chem/VOA4.i/112209v4/41715.d
22-NOV-2009 12:04	CALsubL+	/chem/VOA4.i/112209v4/41707.d
Cal Level: 4 , Cal Amount: 10.00000		
22-NOV-2009 16:10	ICALsubS	/chem/VOA4.i/112209v4/41716.d
22-NOV-2009 12:31	CALsubL+	/chem/VOA4.i/112209v4/41708.d
Cal Level: 5 , Cal Amount: 20.00000		
22-NOV-2009 16:37	ICALsubS	/chem/VOA4.i/112209v4/41717.d
22-NOV-2009 12:59	CALsubL+	/chem/VOA4.i/112209v4/41709.d
Cal Level: 6 , Cal Amount: 50.00000		
22-NOV-2009 17:04	ICALsubS	/chem/VOA4.i/112209v4/41718.d
22-NOV-2009 13:27	CALsubL+	/chem/VOA4.i/112209v4/41710.d
Cal Level: 7 , Cal Amount: 100.00000		
22-NOV-2009 17:32	ICALsubS	/chem/VOA4.i/112209v4/41719.d
22-NOV-2009 13:54	CALsubL+	/chem/VOA4.i/112209v4/41711.d
Cal Level: 8 , Cal Amount: 200.00000		
22-NOV-2009 10:14	BENZENE+	/chem/VOA4.i/112209v4/41703.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

| Ccal Level: 6 , Ccal Amount: 50.0 |

01-DEC-2009 16:07	CALsubL+	/chem/VOA4.i/120109v4/4n202.d
Ccal Level: 6 , Ccal Amount: 50.0		
01-DEC-2009 17:02	CALsubS+SS	/chem/VOA4.i/120109v4/4n204.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Calibration File Names:
Level 1: /chem/VOA4.i/112209v4/41713.d
Level 2: /chem/VOA4.i/112209v4/41714.d
Level 3: /chem/VOA4.i/112209v4/41715.d
Level 4: /chem/VOA4.i/112209v4/41716.d
Level 5: /chem/VOA4.i/112209v4/41717.d
Level 6: /chem/VOA4.i/112209v4/41718.d
Level 7: /chem/VOA4.i/112209v4/41719.d
Level 8: /chem/VOA4.i/112209v4/41703.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.70135	0.67482	0.71847	0.71001	0.64315	0.71607					
	0.60192	+++++					AVRG		0.68083		6.46217
M 2 1,2-Dichloroethylene (total)	0.39740	0.38742	0.40356	0.41339	0.36979	0.42144					
	0.36963	+++++					AVRG		0.39466		5.12263
M 135 1,3-Dichloropropylene	0.41350	0.40551	0.44628	0.45853	0.42258	0.48108					
	0.42557	+++++					AVRG		0.43615		6.18797
153 Chlorotrifluoroethylene	0.13143	0.18372	0.17447	0.18248	+++++	0.19006					
	+++++	+++++					AVRG		0.17243		13.67715
154 2-Chloro-1,1,1-trifluoroethan	0.26186	0.25912	0.25634	0.25645	+++++	0.26647					
	0.25722	+++++					AVRG		0.25958		1.52910

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
3 Dichlorodifluoromethane	0.21952	0.20478	0.24778	0.23830	0.25344	0.24626					
	0.22084	+++++					AVRG		0.23299		7.76928
4 Chloromethane	0.36252	0.34713	0.37649	0.35126	0.36111	0.38641					
	0.33300	+++++					AVRG		0.35970		5.00875
5 Vinyl chloride	0.33360	0.31585	0.35122	0.33159	0.33730	0.35659					
	0.30468	+++++					AVRG		0.33298		5.49023
6 Bromomethane	0.26744	0.25913	0.27384	0.26317	0.25533	0.28190					
	0.23741	+++++					AVRG		0.26260		5.43369
7 Chloroethane	0.24641	0.22492	0.25216	0.24499	0.24862	0.26778					
	0.22546	+++++					AVRG		0.24433		6.17830
8 Trichlorofluoromethane	0.39788	0.40451	0.41714	0.40395	0.41072	0.45146					
	0.39022	+++++					AVRG		0.41084		4.83812
134 Ethyl Ether	0.20013	0.22799	0.22695	0.23007	0.22323	0.24848					
	0.21817	+++++					AVRG		0.22500		6.43554
9 Acrolein	0.05592	0.05545	0.05313	0.05620	+++++	0.05350					
	0.05200	+++++					AVRG		0.05437		3.16611
12 Trichlorotrifluoroethane	0.10763	0.09987	0.09425	0.09433	+++++	0.08318					
	0.08283	+++++					AVRG		0.09368		10.25666

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
10 Acetone	0.21715	0.21091	0.19514	0.20925	0.18498	0.22820					
	0.17644	+++++					AVRG		0.20316		9.05187
11 1,1-Dichloroethylene	0.43010	0.40719	0.43561	0.43488	0.39281	0.46160					
	0.40074	+++++					AVRG		0.42328		5.70354
147 Isopropyl Alcohol	0.02541	0.02962	0.02587	0.02812	+++++	0.02700					
	0.02584	+++++					AVRG		0.02698		6.03712
13 Iodomethane	0.49411	0.49115	0.52557	0.53262	0.47737	0.55006					
	0.47344	+++++					AVRG		0.50633		5.85556
15 Acetonitrile	0.04684	0.04644	0.04649	0.04892	0.04391	0.04889					
	0.03979	+++++					AVRG		0.04590		6.94320
128 Methyl acetate	0.25731	0.23806	0.23684	0.24780	0.21890	0.24259					
	0.19845	+++++					AVRG		0.23428		8.40002
14 Carbon disulfide	0.91167	0.87511	0.91689	0.92639	0.82243	0.92593					
	0.76534	+++++					AVRG		0.87768		7.06555
16 Allyl chloride	0.47481	0.44851	0.43469	0.44980	+++++	0.41236					
	0.38471	+++++					AVRG		0.43415		7.30172
148 tert-Butyl Alcohol	0.03756	0.04508	0.03881	0.04200	+++++	0.04059					
	0.03810	+++++					AVRG		0.04036		7.04178

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
17 Methylene chloride	+++++	89613	104945	156326	244699	561681					
	1084465	+++++					LINR	-0.13197	0.29325		0.99269
18 Acrylonitrile	0.10599	0.11761	0.10731	0.11347	+++++	0.10855					
	0.10484	+++++					AVRG		0.10963		4.48945
20 tert-Butyl methyl ether	0.79558	0.87853	0.81726	0.87060	0.77996	0.85442					
	0.74022	+++++					AVRG		0.81951		6.25004
21 trans-1,2-Dichloroethylene	0.35735	0.37592	0.38478	0.39437	0.35468	0.40358					
	0.35165	+++++					AVRG		0.37462		5.51097
23 Vinyl acetate	0.49838	0.54680	0.57711	0.57802	0.55244	0.60012					
	0.46080	+++++					AVRG		0.54481		9.01724
149 Isopropyl ether	0.95978	0.92001	0.90178	0.92165	+++++	0.89996					
	0.89878	+++++					AVRG		0.91700		2.54124
22 1,1-Dichloroethane	0.46140	0.44295	0.49088	0.48216	0.44328	0.50152					
	0.43956	+++++					AVRG		0.46596		5.47805
24 2-Chloro-1,3-butadiene	0.42752	0.41435	0.41736	0.41116	+++++	0.40092					
	0.40151	+++++					AVRG		0.41214		2.44686
150 Ethyl tert-butyl ether	0.84482	0.84737	0.83195	0.85512	+++++	0.82219					
	0.83043	+++++					AVRG		0.83865		1.47845

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
30 2-Butanone	0.23385	0.23579	0.22472	0.23959	0.21992	0.26519					
	0.21714	+++++					AVRG		0.23374		6.93171
26 Ethyl acetate	0.32623	0.34240	0.30347	0.31352	+++++	0.29024					
	0.26820	+++++					AVRG		0.30734		8.56310
31 cis-1,2-Dichloroethylene	0.43746	0.39893	0.42234	0.43240	0.38490	0.43930					
	0.38761	+++++					AVRG		0.41470		5.71138
25 2,2-Dichloropropane	0.29466	0.25782	0.28219	0.27714	0.24901	0.27503					
	0.24787	+++++					AVRG		0.26910		6.62310
28 Propionitrile	0.04376	0.05227	0.04399	0.04681	+++++	0.04559					
	0.04383	+++++					AVRG		0.04604		7.13467
27 Methacrylonitrile	0.17978	0.19710	0.18112	0.18893	+++++	0.17963					
	0.16721	+++++					AVRG		0.18229		5.51523
29 Bromochloromethane	0.14402	0.13910	0.15114	0.15508	0.13476	0.15841					
	0.14035	+++++					AVRG		0.14612		6.07266
32 Chloroform	0.50037	0.46709	0.47945	0.48569	0.43681	0.49308					
	0.43321	+++++					AVRG		0.47081		5.65257
72 Tetrahydrofuran	28285	49603	91261	180946	+++++	811740					
	1542403	+++++					LINR	-0.21156	0.17273		0.99744

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
36 1,1,1-Trichloroethane	0.34177	0.33797	0.36697	0.35793	0.32888	0.37723					
	0.33495	+++++					AVRG		0.34939		5.19290
19 Isobutyl alcohol	0.01333	0.01535	0.01335	0.01471	+++++	0.01411					
	0.01295	+++++					AVRG		0.01397		6.66101
129 Cyclohexane	0.43240	0.40010	0.41453	0.40591	0.37242	0.42674					
	0.37265	+++++					AVRG		0.40354		5.92718
34 1,1-Dichloropropene	0.34396	0.33259	0.36640	0.35168	0.33247	0.37748					
	0.32857	+++++					AVRG		0.34759		5.37228
33 Carbon tetrachloride	0.33357	0.32239	0.34241	0.34257	0.31834	0.36936					
	0.33037	+++++					AVRG		0.33700		5.03062
37 1,2-Dichloroethane	0.36646	0.37339	0.38216	0.38288	0.34836	0.39447					
	0.34689	+++++					AVRG		0.37066		4.84641
38 Benzene	1.08632	1.03953	1.11726	1.09466	0.97346	1.10695					
	0.94618	1.20943					AVRG		1.07172		7.84406
151 Methyl tert-amyl ether	0.84827	0.86006	0.82129	0.84576	+++++	0.81709					
	0.82104	+++++					AVRG		0.83559		2.15534
139 Cyclohexene	0.52887	0.49537	0.52023	0.51530	0.47626	0.53834					
	0.47205	+++++					AVRG		0.50663		5.09965

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01024	0.01084	0.01043	0.01203	0.00875	0.01249					
	0.01024	0.01084					AVRG		0.01073		10.73836
39 Trichloroethylene	0.27049	0.26768	0.27901	0.28025	0.25066	0.28409					
	0.25133	+++++					AVRG		0.26907		5.04764
42 Methyl methacrylate	0.20522	0.21958	0.20097	0.21212	+++++	0.19781					
	0.18497	+++++					AVRG		0.20344		5.89043
130 Methylcyclohexane	0.45782	0.40944	0.44364	0.43070	0.40942	0.45487					
	0.39748	+++++					AVRG		0.42905		5.61039
41 1,2-Dichloropropane	0.28007	0.27751	0.28731	0.29540	0.26480	0.30111					
	0.26062	+++++					AVRG		0.28098		5.32401
97 1,4-Dioxane	0.00367	0.00391	0.00331	0.00381	+++++	0.00364					
	0.00350	+++++					AVRG		0.00364		5.86751
43 Dibromomethane	0.17297	0.16928	0.17293	0.18369	0.16407	0.18681					
	0.16513	+++++					AVRG		0.17355		5.03688
45 Bromodichloromethane	0.35810	0.34545	0.37438	0.36950	0.34403	0.39092					
	0.34862	+++++					AVRG		0.36157		4.83779
48 2-Nitropropane	0.09325	0.09886	0.08717	0.09749	+++++	0.09739					
	0.09420	+++++					AVRG		0.09473		4.51184

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
44 2-Chloroethylvinyl ether	0.15167	0.15840	0.16203	0.16999	0.15822	0.17712					
	0.14523	+++++					AVRG		0.16038		6.68189
46 cis-1,3-Dichloropropylene	0.42560	0.42436	0.46605	0.47362	0.43654	0.49344					
	0.43654	+++++					AVRG		0.45088		5.94621
49 4-Methyl-2-pentanone	0.16704	0.16573	0.16058	0.16558	0.15177	0.17455					
	0.14456	+++++					AVRG		0.16140		6.28749
50 Toluene	0.95599	0.89242	0.92210	0.90343	0.80436	0.89036					
	0.76529	+++++					AVRG		0.87628		7.67500
51 Ethyl methacrylate	0.52301	0.54250	0.51464	0.52715	+++++	0.46530					
	0.41126	+++++					AVRG		0.49731		9.98259
53 trans-1,3-Dichloropropylene	0.55667	0.52412	0.57667	0.58556	0.53379	0.60809					
	0.53039	+++++					AVRG		0.55933		5.70215
54 1,1,2-Trichloroethane	0.28664	0.26669	0.29062	0.29122	0.26059	0.29539					
	0.25448	+++++					AVRG		0.27795		6.04778
55 2-Hexanone	0.44966	0.43839	0.43114	0.45156	0.41544	0.47289					
	0.38534	+++++					AVRG		0.43492		6.50323
52 1,3-Dichloropropane	0.58992	0.56247	0.59158	0.58963	0.53126	0.58281					
	0.48934	+++++					AVRG		0.56243		6.91458

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
56 Tetrachloroethylene	0.36707	0.34242	0.34742	0.34437	0.31600	0.35293					
	0.31257	+++++					AVRG		0.34040		5.76135
57 Dibromochloromethane	0.36430	0.36503	0.37424	0.40158	0.37199	0.42902					
	0.38635	+++++					AVRG		0.38465		6.12123
59 1,2-Dibromoethane	0.34061	0.33398	0.36106	0.36598	0.34272	0.38240					
	0.33925	+++++					AVRG		0.35228		5.05692
152 1-Chlorohexane	0.27943	0.25644	0.23756	0.24653	+++++	0.25264					
	0.25465	+++++					AVRG		0.25454		5.49819
62 Chlorobenzene	1.00079	1.01568	1.05757	1.06100	0.94511	1.07380					
	0.92098	+++++					AVRG		1.01070		5.87902
60 1,1,1,2-Tetrachloroethane	0.39361	0.35697	0.40153	0.39299	0.36161	0.40793					
	0.35713	+++++					AVRG		0.38168		5.82855
58 Ethylbenzene	1.84025	1.71034	1.78402	1.76603	1.58732	1.73971					
	1.41449	+++++					AVRG		1.69174		8.58326
63 m,p-Xylenes	0.70030	0.66453	0.70747	0.70329	0.63579	0.70407					
	0.59219	+++++					AVRG		0.67252		6.59440
64 o-Xylene	0.70344	0.69541	0.74047	0.72343	0.65786	0.74007					
	0.62137	+++++					AVRG		0.69744		6.34185

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
65 Styrene	1.21077	1.15199	1.23797	1.24119	1.13289	1.27542					
	1.05111	+++++					AVRG		1.18591		6.57939
66 Bromoform	0.49404	0.47895	0.51340	0.55884	0.52075	0.63851					
	0.57125	+++++					AVRG		0.53939		10.14098
67 Isopropylbenzene	2.81546	2.75017	2.84421	2.84280	2.56688	2.84161					
	2.30776	+++++					AVRG		2.70984		7.50228
68 cis-1,4-Dichloro-2-butene	0.20831	0.23800	0.22368	0.22817	+++++	0.22092					
	0.20566	+++++					AVRG		0.22079		5.52375
70 Cyclohexanone	0.03515	0.04094	0.03660	0.04054	+++++	0.03802					
	0.03639	+++++					AVRG		0.03794		6.20501
73 1,1,2,2-Tetrachloroethane	0.75747	0.79219	0.83626	0.84224	0.76143	0.85606					
	0.71570	+++++					AVRG		0.79448		6.59872
69 trans-1,4-Dichloro-2-butene	0.21501	0.23443	0.20845	0.21973	+++++	0.20938					
	0.19312	+++++					AVRG		0.21335		6.41608
74 1,2,3-Trichloropropane	0.20845	0.20706	0.21761	0.22120	0.20235	0.23283					
	0.19379	+++++					AVRG		0.21190		6.12869
75 Bromobenzene	0.86711	0.84553	0.88263	0.88735	0.79663	0.92286					
	0.79096	+++++					AVRG		0.85615		5.67234

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
76 n-Propylbenzene	3.39349	3.26326	3.49629	3.38979	3.04662	3.32860					
	2.61397	+++++					AVRG		3.21886		9.37389
78 1,3,5-Trimethylbenzene	2.48326	2.44997	2.58869	2.55937	2.29300	2.53053					
	2.01793	+++++					AVRG		2.41754		8.32003
77 2-Chlorotoluene	2.50052	2.28701	2.46919	2.41383	2.13859	2.33326					
	1.85746	+++++					AVRG		2.28570		9.84026
80 4-Chlorotoluene	2.21104	2.08272	2.22413	2.19063	1.96458	2.21541					
	1.81428	+++++					AVRG		2.10040		7.51638
81 tert-Butylbenzene	2.56778	2.48368	2.56772	2.56479	2.28412	2.57734					
	2.10600	+++++					AVRG		2.45020		7.52754
79 1,2,4-Trimethylbenzene	2.72525	2.55215	2.74018	2.72725	2.37980	2.63816					
	2.14623	+++++					AVRG		2.55843		8.70457
82 Pentachloroethane	0.50501	0.48269	0.48049	0.45126	+++++	0.35124					
	0.40108	+++++					AVRG		0.44529		13.11002
83 sec-Butylbenzene	3.45534	3.21255	3.53229	3.46947	3.10653	3.41341					
	2.68756	+++++					AVRG		3.26817		9.11754
84 4-Isopropyltoluene	2.82093	2.66835	2.87406	2.82119	2.51181	2.79014					
	2.27080	+++++					AVRG		2.67961		8.13997

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
85 1,3-Dichlorobenzene	1.63923	1.59498	1.69316	1.70724	1.50639	1.69998					
	1.43192	+++++					AVRG		1.61041		6.61020
87 1,4-Dichlorobenzene	1.71875	1.59053	1.69010	1.67669	1.50062	1.69539					
	1.44149	+++++					AVRG		1.61622		6.70439
88 Benzyl chloride	1.30649	1.38444	1.30279	1.33389	+++++	1.17735					
	0.96630	+++++					AVRG		1.24521		12.26968
89 n-Butylbenzene	2.60812	2.52813	2.66438	2.61551	2.36712	2.57681					
	2.08133	+++++					AVRG		2.49163		8.21192
90 1,2-Dichlorobenzene	1.64359	1.51915	1.65273	1.62268	1.47619	1.63698					
	1.39061	+++++					AVRG		1.56313		6.54277
91 bis(2-Chloroisopropyl)ether	0.37069	0.42630	0.35573	0.38220	+++++	0.37313					
	0.32169	+++++					AVRG		0.37162		9.20525
92 1,2-Dibromo-3-chloropropane	0.16090	0.17023	0.16881	0.18391	0.17674	0.19572					
	0.17820	+++++					AVRG		0.17636		6.41964
93 1,2,4-Trichlorobenzene	0.86804	0.82729	0.90400	0.95532	0.88491	0.92567					
	0.83336	+++++					AVRG		0.88551		5.30559
94 Hexachlorobutadiene	0.65645	0.61705	0.64747	0.65029	0.59424	0.63287					
	0.57806	+++++					AVRG		0.62520		4.80208

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
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Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	1.52349	1.43037	1.51173	1.63279	1.54736	1.60261					
	1.40026	+++++					AVRG		1.52123		5.54782
96 1,2,3-Trichlorobenzene	0.70644	0.66598	0.72623	0.74703	0.68968	0.70642					
	0.65102	+++++					AVRG		0.69897		4.75877
$ 138 1,2-Dichloroethane-d4	0.17578	0.18570	0.19564	0.20439	0.18848	0.20826					
	0.21644	+++++					AVRG		0.19639		7.22804
$ 47 Toluene-d8	0.83900	0.85325	0.89204	0.90684	0.83870	0.92761					
	0.83861	+++++					AVRG		0.87087		4.28714
$ 71 Bromofluorobenzene	0.52483	0.55505	0.58369	0.61009	0.55725	0.63913					
	0.58288	+++++					AVRG		0.57899		6.53887

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
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Integrator : HP RTE
Method file : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Cal Date : 01-Dec-2009 17:25 amj

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.68083	0.69132	0.69132	0.050	1.54202	30.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.39466	0.40630	0.40630	0.050	2.95007	30.00000	Averaged
M 135 1,3-Dichloropropylene	0.43615	0.43846	0.43846	0.050	0.52968	30.00000	Averaged
3 Dichlorodifluoromethane	0.23299	0.21510	0.21510	0.050	-7.67900	30.00000	Averaged
4 Chloromethane	0.35970	0.31949	0.31949	0.100	-11.17813	30.00000	Averaged spcc
5 Vinyl chloride	0.33298	0.32061	0.32061	0.050	-3.71515	20.00000	Averaged ccc
6 Bromomethane	0.26260	0.24826	0.24826	0.050	-5.45987	30.00000	Averaged
7 Chloroethane	0.24433	0.23602	0.23602	0.050	-3.40156	30.00000	Averaged
8 Trichlorofluoromethane	0.41084	0.40966	0.40966	0.050	-0.28572	30.00000	Averaged
134 Ethyl Ether	0.22500	0.21166	0.21166	0.001	-5.93017	30.00000	Averaged
10 Acetone	0.20316	0.14150	0.14150	0.050	-30.34976	40.00000	Averaged
15 Acetonitrile	0.04590	0.04069	0.04069	0.010	-11.34196	30.00000	Averaged
11 1,1-Dichloroethylene	0.42328	0.42893	0.42893	0.050	1.33577	20.00000	Averaged ccc
128 Methyl acetate	0.23428	0.19676	0.19676	0.010	-16.01466	40.00000	Averaged
13 Iodomethane	0.50633	0.51727	0.51727	0.050	2.16046	30.00000	Averaged
17 Methylene chloride	51.31291	50.00000	0.33965	0.050	2.62581	30.00000	Linear
14 Carbon disulfide	0.87768	0.91718	0.91718	0.050	4.50062	30.00000	Averaged
20 tert-Butyl methyl ether	0.81951	0.75110	0.75110	0.050	-8.34781	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.37462	0.38832	0.38832	0.050	3.65819	30.00000	Averaged
23 Vinyl acetate	0.54481	0.49355	0.49355	0.010	-9.40872	40.00000	Averaged
22 1,1-Dichloroethane	0.46596	0.48122	0.48122	0.100	3.27446	30.00000	Averaged spcc
30 2-Butanone	0.23374	0.17581	0.17581	0.030	-24.78714	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.41470	0.42429	0.42429	0.050	2.31050	30.00000	Averaged
25 2,2-Dichloropropane	0.26910	0.27404	0.27404	0.050	1.83530	30.00000	Averaged
32 Chloroform	0.47081	0.47569	0.47569	0.010	1.03561	20.00000	Averaged ccc
29 Bromochloromethane	0.14612	0.14549	0.14549	0.010	-0.43079	30.00000	Averaged
36 1,1,1-Trichloroethane	0.34939	0.36751	0.36751	0.010	5.18800	30.00000	Averaged
129 Cyclohexane	0.40354	0.42421	0.42421	0.010	5.12308	30.00000	Averaged
34 1,1-Dichloropropene	0.34759	0.36893	0.36893	0.010	6.13735	30.00000	Averaged
131 n-Butyl alcohol	0.01073	0.01040	0.01040	0.001	-3.06093	40.00000	Averaged
33 Carbon tetrachloride	0.33700	0.35930	0.35930	0.010	6.61503	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.20547	0.20547	0.001	4.62716	30.00000	Averaged
37 1,2-Dichloroethane	0.37066	0.35941	0.35941	0.010	-3.03368	30.00000	Averaged
38 Benzene	1.07172	1.07229	1.07229	0.010	0.05259	30.00000	Averaged
139 Cyclohexene	0.50663	0.51278	0.51278	0.001	1.21436	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.28019	0.28019	0.010	4.13279	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.28134	0.28134	0.010	0.13000	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.44411	0.44411	0.010	3.50875	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.36895	0.36895	0.010	2.04004	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.16757	0.16757	0.010	-3.44731	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14096	0.14096	0.005	-12.11088	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.13941	0.13941	0.010	-13.62299	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.45323	0.45323	0.010	0.52137	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.86829	0.86829	0.010	-0.29589	30.00000	Averaged	
	50 Toluene	0.87628	0.86307	0.86307	0.010	-1.50792	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.54837	0.54837	0.010	-1.95885	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26103	0.26103	0.010	-6.08674	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.29367	0.29367	0.010	-32.47630	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.53703	0.53703	0.010	-4.51590	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.34775	0.34775	0.010	2.16113	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38777	0.38777	0.010	0.81133	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.34520	0.34520	0.010	-2.00984	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.03137	1.03137	0.300	2.04472	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.38883	0.38883	0.010	1.87227	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.67584	1.67584	0.010	-0.93937	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.68291	0.68291	0.010	1.54543	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70815	0.70815	0.010	1.53566	30.00000	Averaged	
	65 Styrene	1.18591	1.21191	1.21191	0.010	2.19258	30.00000	Averaged	
	66 Bromoform	0.53939	0.54722	0.54722	0.100	1.45063	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.67215	2.67215	0.010	-1.39091	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.72562	0.72562	0.300	-8.66743	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.58218	0.58218	0.010	0.55182	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.19674	0.19674	0.010	-7.15485	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.86007	0.86007	0.010	0.45779	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.16972	3.16972	0.010	-1.52666	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.21699	2.21699	0.010	-3.00590	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.39741	2.39741	0.010	-0.83248	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.09083	2.09083	0.010	-0.45555	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.46685	2.46685	0.010	0.67956	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.51478	2.51478	0.010	-1.70627	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.26146	3.26146	0.010	-0.20528	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.67217	2.67217	0.010	-0.27751	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.61689	1.61689	0.010	0.40229	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.59751	1.59751	0.010	-1.15795	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.47231	2.47231	0.010	-0.77540	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.53519	1.53519	0.010	-1.78760	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17202	0.17202	0.010	-2.46241	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.94077	0.94077	0.010	6.24058	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66766	0.66766	0.010	6.79105	30.00000	Averaged
95 Naphthalene	1.52123	1.56791	1.56791	0.010	3.06878	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.76536	0.76536	0.010	9.49837	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41722.d
Lab Smp Id: W4VM091122-18 Client Smp ID: SECOND SOURCE
Inj Date : 22-NOV-2009 18:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-18|ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01C/IVM091122-01
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2583514	150.000	152
M 2 1,2-Dichloroethylene (total)	96				1310123	100.000	103
M 135 1,3-Dichloropropylene	75				1413814	100.000	100
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	346786	50.0000	46.2
4 Chloromethane	50	5.299	5.299	(0.499)	515104	50.0000	44.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	516895	50.0000	48.1
6 Bromomethane	94	6.138	6.138	(0.578)	400262	50.0000	47.3
7 Chloroethane	64	6.288	6.288	(0.592)	380525	50.0000	48.3
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	660479	50.0000	49.8
134 Ethyl Ether	59	7.003	7.003	(0.660)	341247	50.0000	47.0
10 Acetone	43	7.357	7.357	(0.693)	1140649	250.000	174
15 Acetonitrile	41	7.705	7.705	(0.726)	1640110	1250.00	1110
11 1,1-Dichloroethylene	61	7.394	7.394	(0.696)	691539	50.0000	50.7
128 Methyl acetate	43	7.753	7.753	(0.730)	1586132	250.000	210
13 Iodomethane	142	7.631	7.631	(0.719)	4169845	250.000	255
17 Methylene chloride	84	7.942	7.942	(0.748)	547607	50.0000	51.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7393616	250.000	261
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1210958	50.0000	45.8
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	626069	50.0000	51.8
23 Vinyl acetate	43	8.710	8.710	(0.820)	3978626	250.000	226
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	775846	50.0000	51.6
30 2-Butanone	43	9.326	9.326	(0.878)	1417213	250.000	188
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	684054	50.0000	51.2
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	441819	50.0000	50.9
32 Chloroform	83	9.692	9.692	(0.913)	766928	50.0000	50.5
29 Bromochloromethane	128	9.662	9.662	(0.910)	234568	50.0000	49.8
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	592518	50.0000	52.6
129 Cyclohexane	56	10.082	10.082	(0.949)	683928	50.0000	52.6
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	594801	50.0000	53.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1677330	5000.00	4850
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	579271	50.0000	53.3
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	331271	50.0000	52.3
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	579461	50.0000	48.5
38 Benzene	78	10.375	10.375	(0.977)	1728792	50.0000	50.0
139 Cyclohexene	67	10.497	10.497	(0.989)	826734	50.0000	50.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1612245	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	451741	50.0000	52.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	453589	50.0000	50.1
130 Methylcyclohexane	83	11.265	11.265	(1.061)	716009	50.0000	51.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	594832	50.0000	51.0
43 Dibromomethane	93	11.375	11.375	(1.071)	270167	50.0000	48.3
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1136285	250.000	220
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	868329	250.000	216
46 cis-1,3-Dichloropropylene	75	11.935	11.935	(1.124)	730715	50.0000	50.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1081613	50.0000	49.8
50 Toluene	92	12.326	12.326	(0.895)	1075108	50.0000	49.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	683099	50.0000	49.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	325158	50.0000	47.0
55 2-Hexanone	43	12.856	12.856	(0.934)	1829103	250.000	169
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	668969	50.0000	47.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	433189	50.0000	51.1
57 Dibromochloromethane	129	13.149	13.149	(0.955)	483033	50.0000	50.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	430015	50.0000	49.0
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1245683	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1284761	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	484356	50.0000	50.9
58 Ethylbenzene	91	13.862	13.862	(1.007)	2087570	50.0000	49.5
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1701387	100.000	102
64 o-Xylene	106	14.404	14.404	(1.046)	882126	50.0000	50.8
65 Styrene	104	14.404	14.404	(1.046)	1509654	50.0000	51.1
66 Bromoform	173	14.661	14.661	(0.906)	479720	50.0000	50.7
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2342561	50.0000	49.3
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	636119	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	510376	50.0000	50.3
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	172470	50.0000	46.4
75 Bromobenzene	156	15.167	15.167	(0.937)	753987	50.0000	50.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2778758	50.0000	49.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1943541	50.0000	48.5
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2101707	50.0000	49.6
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1832943	50.0000	49.8
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2162586	50.0000	50.3
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2204597	50.0000	49.1
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	2859180	50.0000	49.9
84 4-Isopropyltoluene	119	16.050	16.050	(0.992)	2342581	50.0000	49.9
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1417460	50.0000	50.2
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	876657	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1400467	50.0000	49.4
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2167366	50.0000	49.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1345835	50.0000	49.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	150799	50.0000	48.8
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	824735	50.0000	53.1
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	585310	50.0000	53.4
95 Naphthalene	128	19.032	19.032	(1.176)	1374522	50.0000	51.5
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	670958	50.0000	54.7

Data File: /chem/VOA4.i/112209v4/41722.d
Date : 22-NOV-2009 18:53
Client ID: SECOND SOURCE
Sample Info: IW4VH091122-18|ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

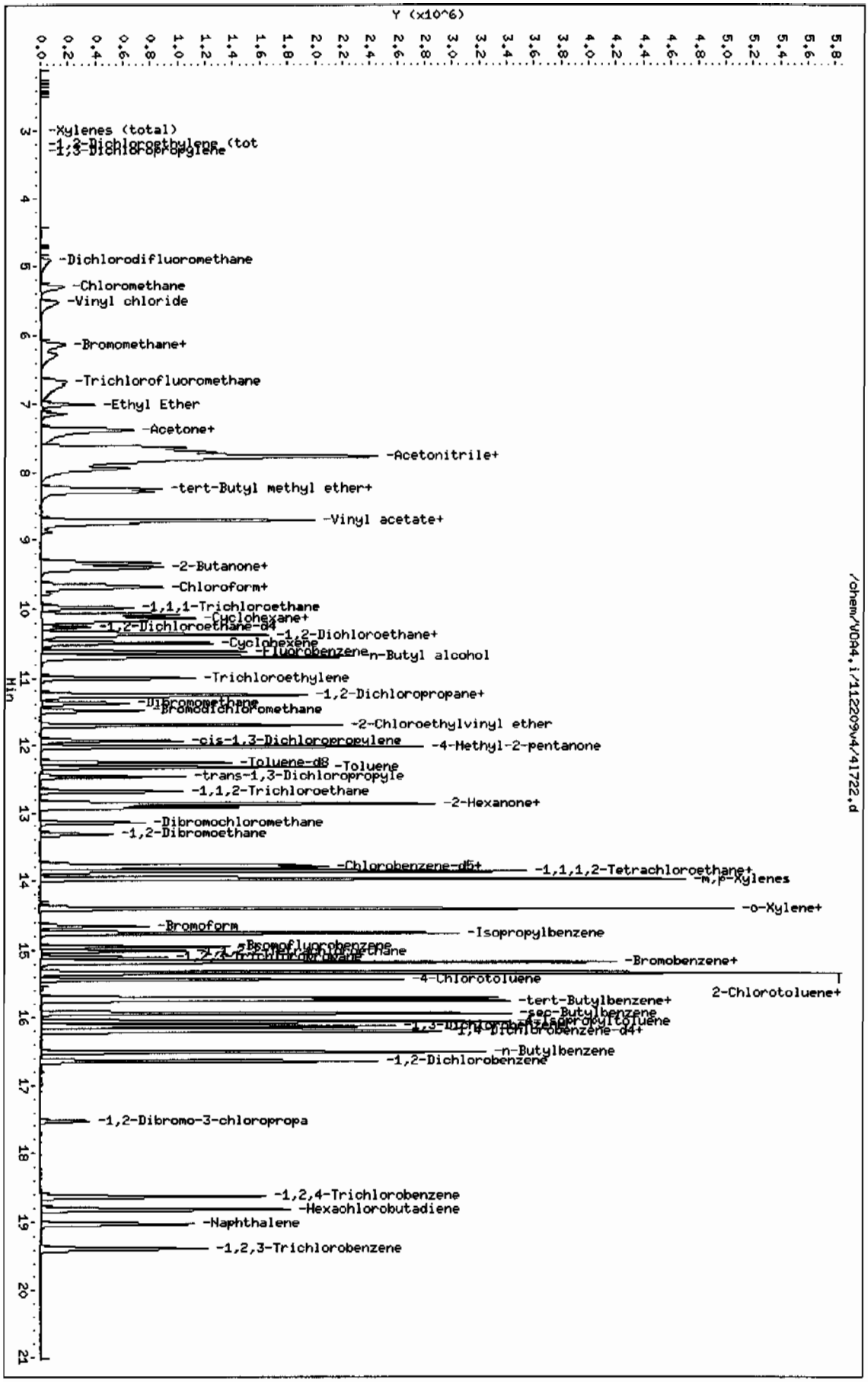

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	0.17243	0.13061	0.13061	0.010	-24.25152	30.00000	Averaged
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.25736	0.25736	0.010	-0.85465	30.00000	Averaged
9 Acrolein	0.05437	0.04991	0.04991	0.001	-8.19106	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.10008	0.10008	0.050	6.83147	30.00000	Averaged
147 Isopropyl Alcohol	0.02698	0.02517	0.02517	0.010	-6.71050	40.00000	Averaged
16 Allyl chloride	0.43415	0.41792	0.41792	0.010	-3.73840	30.00000	Averaged
148 tert-Butyl Alcohol	0.04036	0.03739	0.03739	0.010	-7.33967	40.00000	Averaged
18 Acrylonitrile	0.10963	0.10530	0.10530	0.010	-3.94603	30.00000	Averaged
149 Isopropyl ether	0.91700	0.84326	0.84326	0.010	-8.04141	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.40649	0.40649	0.010	-1.36927	30.00000	Averaged
150 Ethyl tert-butyl ether	0.83865	0.77645	0.77645	0.010	-7.41578	30.00000	Averaged
28 Propionitrile	0.04604	0.04193	0.04193	0.010	-8.93871	30.00000	Averaged
26 Ethyl acetate	0.30734	0.26429	0.26429	0.010	-14.00741	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.17171	0.17171	0.010	-5.80832	30.00000	Averaged
72 Tetrahydrofuran	255	250	0.18327	0.010	1.87504	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01249	0.01249	0.005	-10.58475	40.00000	Averaged
151 Methyl tert-amyl ether	0.83559	0.76954	0.76954	0.010	-7.90398	30.00000	Averaged
42 Methyl methacrylate	0.20344	0.18796	0.18796	0.010	-7.61187	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.45252	0.45252	0.010	-9.00773	30.00000	Averaged
152 1-Chlorohexane	0.25454	0.23444	0.23444	0.010	-7.89735	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00345	0.00345	0.001	-5.31429	40.00000	Averaged
48 2-Nitropropane	0.09473	0.09142	0.09142	0.010	-3.49078	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.21768	0.21768	0.010	-1.40961	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02005	0.02005	0.005	-47.14610	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20712	0.20712	0.010	-2.91969	30.00000	Averaged
82 Pentachloroethane	0.44529	0.35466	0.35466	0.010	-20.35311	30.00000	Averaged
88 Benzyl chloride	1.24521	1.01385	1.01385	0.010	-18.57992	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.34611	0.34611	0.010	-6.86391	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.19105	0.19105	0.001	-2.71473	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.87045	0.87045	0.010	-0.04734	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.57621	0.57621	0.010	-0.48047	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

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|Average %D / Drift Results.                          |
|=====================================================|
|Calculated Average %D/Drift =    8.44016             |
|Maximun Average %D/Drift    =   20.00000             |
|* Passed Average %D/Drift Test.                      |
|_____________________________________________________|
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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41723.d
Lab Smp Id: W4VM091122-19 Client Smp ID: SHORT SECOND SOURCE
Inj Date : 22-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02B/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	635460	150.000	114
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1252089	150.000	149
9 Acrolein	56	7.186	7.186	(0.677)	404736	250.000	230
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	811524	250.000	267
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2040774	2500.00	2330
16 Allyl chloride	41	7.802	7.802	(0.735)	3388727	250.000	241
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3032185	2500.00	2320
18 Acrylonitrile	53	8.180	8.180	(0.770)	853858	250.000	240
149 Isopropyl ether	45	8.747	8.747	(0.824)	1367530	50.0000	46.0
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	659221	50.0000	49.3
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1259195	50.0000	46.3
28 Propionitrile	54	9.393	9.393	(0.885)	339970	250.000	228
26 Ethyl acetate	43	9.345	9.345	(0.880)	2143053	250.000	215
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1392303	250.000	235
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	777504	250.000	255
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1012586	2500.00	2240

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1247986	50.0000	46.0
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1524080	250.000	231
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2794372	250.000	227
152 1-Chlorohexane	55	13.667	13.667	(1.287)	380193	50.0000	46.0
97 1,4-Dioxane	88	11.332	11.332	(1.067)	279362	2500.00	2370
48 2-Nitropropane	43	11.673	11.673	(1.099)	741303	250.000	241
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	923462	250.000	246
70 Cyclohexanone	42	14.904	14.904	(1.082)	619165	1250.00	661
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	878692	250.000	243
82 Pentachloroethane	167	15.776	15.776	(0.975)	1504604	250.000	199
88 Benzyl chloride	91	16.319	16.319	(1.009)	4301119	250.000	204
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1468339	250.000	233
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1621726	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1235040	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	848470	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	309837	50.0000	48.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1075045	50.0000	50.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	488894	50.0000	49.8

Data File: /chem/VOA4.i/112209v4/41723.d
Date : 22-NOV-2009 19:21
Client ID: SHORT SECOND SOURCE
Sample Info: IW4VH091122-19|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

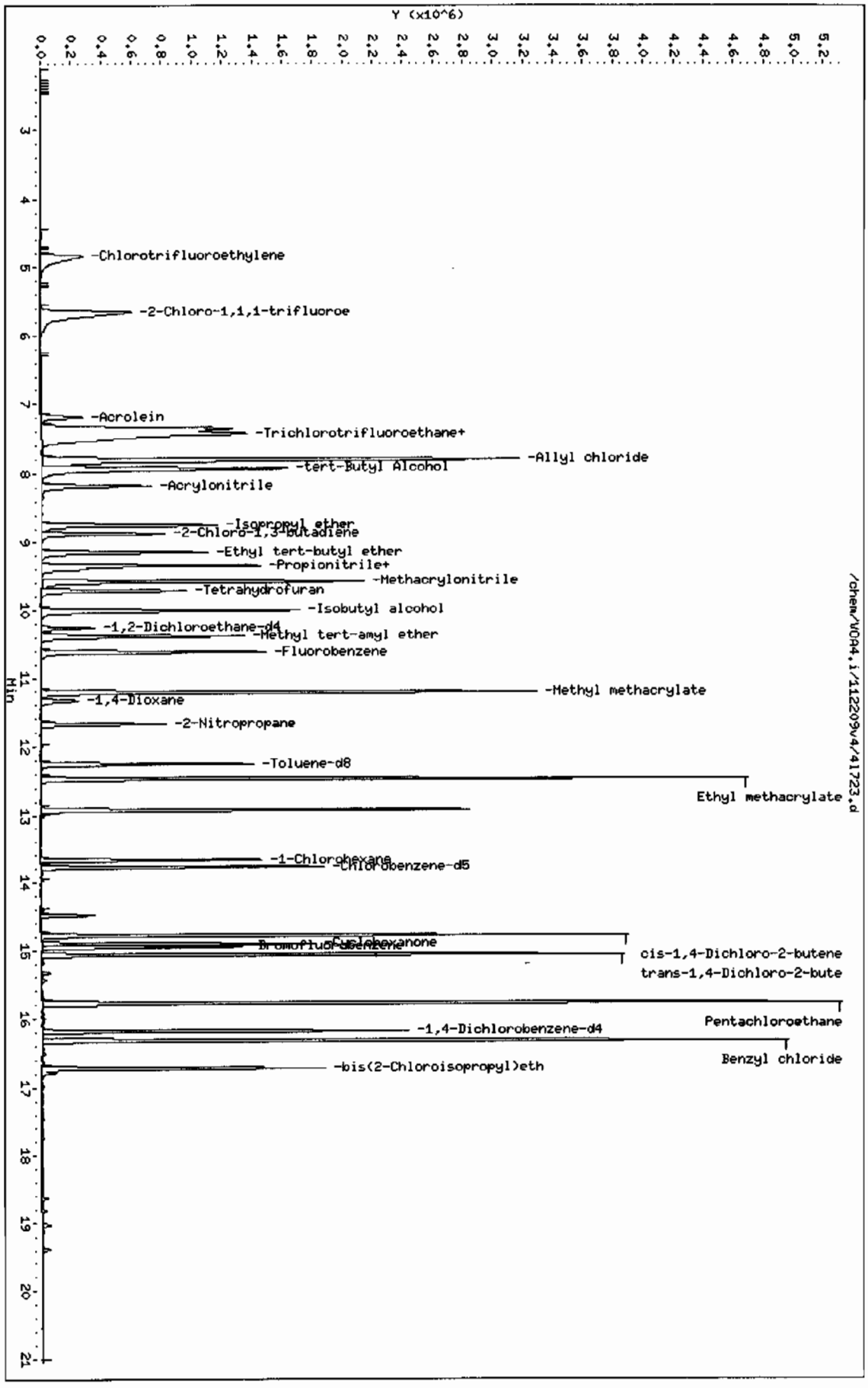

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 01-DEC-2009 16:07
Lab File ID: 4n202.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091201-01 Quant Type: ISTD
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.68083	0.70153	0.70153	0.050	3.04147	30.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.39466	0.44016	0.44016	0.050	11.52948	30.00000	Averaged
M 135 1,3-Dichloropropylene	0.43615	0.45092	0.45092	0.050	3.38640	30.00000	Averaged
3 Dichlorodifluoromethane	0.23299	0.22504	0.22504	0.050	-3.40857	30.00000	Averaged
4 Chloromethane	0.35970	0.33938	0.33938	0.100	-5.65096	30.00000	Averaged spcc
5 Vinyl chloride	0.33298	0.33677	0.33677	0.050	1.13927	20.00000	Averaged ccc
6 Bromomethane	0.26260	0.26303	0.26303	0.050	0.16212	30.00000	Averaged
7 Chloroethane	0.24433	0.25613	0.25613	0.050	4.82698	30.00000	Averaged
8 Trichlorofluoromethane	0.41084	0.46649	0.46649	0.050	13.54621	30.00000	Averaged
134 Ethyl Ether	0.22500	0.22020	0.22020	0.001	-2.13396	30.00000	Averaged
10 Acetone	0.20316	0.18746	0.18746	0.050	-7.72769	40.00000	Averaged
15 Acetonitrile	0.04590	0.04424	0.04424	0.010	-3.61743	30.00000	Averaged
11 1,1-Dichloroethylene	0.42328	0.47547	0.47547	0.050	12.33076	20.00000	Averaged ccc
128 Methyl acetate	0.23428	0.21272	0.21272	0.010	-9.20203	40.00000	Averaged
13 Iodomethane	0.50633	0.49999	0.49999	0.050	-1.25242	30.00000	Averaged
17 Methylene chloride	52.43475	50.00000	0.34623	0.050	4.86951	30.00000	Linear
14 Carbon disulfide	0.87768	0.99324	0.99324	0.050	13.16639	30.00000	Averaged
20 tert-Butyl methyl ether	0.81951	0.76499	0.76499	0.050	-6.65235	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.37462	0.42746	0.42746	0.050	14.10562	30.00000	Averaged
23 Vinyl acetate	0.54481	0.58649	0.58649	0.010	7.65042	40.00000	Averaged
22 1,1-Dichloroethane	0.46596	0.51699	0.51699	0.100	10.94983	30.00000	Averaged spcc
30 2-Butanone	0.23374	0.22086	0.22086	0.030	-5.51079	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.41470	0.45287	0.45287	0.050	9.20248	30.00000	Averaged
25 2,2-Dichloropropane	0.26910	0.32097	0.32097	0.050	19.27587	30.00000	Averaged
32 Chloroform	0.47081	0.50251	0.50251	0.010	6.73225	20.00000	Averaged ccc
29 Bromochloromethane	0.14612	0.14138	0.14138	0.010	-3.24344	30.00000	Averaged
36 1,1,1-Trichloroethane	0.34939	0.42443	0.42443	0.010	21.47888	30.00000	Averaged
129 Cyclohexane	0.40354	0.48876	0.48876	0.010	21.11867	30.00000	Averaged
34 1,1-Dichloropropene	0.34759	0.41348	0.41348	0.010	18.95394	30.00000	Averaged
131 n-Butyl alcohol	0.01073	0.01107	0.01107	0.001	3.11227	40.00000	Averaged
33 Carbon tetrachloride	0.33700	0.41025	0.41025	0.010	21.73638	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.21546	0.21546	0.001	9.71160	30.00000	Averaged
37 1,2-Dichloroethane	0.37066	0.37780	0.37780	0.010	1.92822	30.00000	Averaged
38 Benzene	1.07172	1.12456	1.12456	0.010	4.92965	30.00000	Averaged
139 Cyclohexene	0.50663	0.58125	0.58125	0.001	14.72773	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 01-DEC-2009 16:07
Lab File ID: 4n202.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091201-01 Quant Type: ISTD
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.30167	0.30167	0.010	12.11398	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.29306	0.29306	0.010	4.30218	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.50851	0.50851	0.010	18.51921	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.37681	0.37681	0.010	4.21349	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.17172	0.17172	0.010	-1.05949	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.12444	0.12444	0.005	-22.40685	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.15111	0.15111	0.010	-6.37816	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.46491	0.46491	0.010	3.11196	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.82672	0.82672	0.010	-5.06941	30.00000	Averaged	
	50 Toluene	0.87628	0.89251	0.89251	0.010	1.85148	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.55778	0.55778	0.010	-0.27642	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26342	0.26342	0.010	-5.22585	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.36437	0.36437	0.010	-16.21974	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.52533	0.52533	0.010	-6.59648	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.34467	0.34467	0.010	1.25679	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38281	0.38281	0.010	-0.47582	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.33827	0.33827	0.010	-3.97942	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.03211	1.03211	0.300	2.11795	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.37819	0.37819	0.010	-0.91488	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.75417	1.75417	0.010	3.69035	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.69906	0.69906	0.010	3.94661	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70648	0.70648	0.010	1.29607	30.00000	Averaged	
	65 Styrene	1.18591	1.19175	1.19175	0.010	0.49279	30.00000	Averaged	
	66 Bromoform	0.53939	0.50804	0.50804	0.100	-5.81289	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.87915	2.87915	0.010	6.24800	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.77362	0.77362	0.300	-2.62613	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.57678	0.57678	0.010	-0.38085	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.20627	0.20627	0.010	-2.65365	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.81698	0.81698	0.010	-4.57561	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.46207	3.46207	0.010	7.55584	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.32912	2.32912	0.010	1.89983	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.51484	2.51484	0.010	4.02505	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.20884	2.20884	0.010	5.16274	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.59113	2.59113	0.010	5.75178	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.59760	2.59760	0.010	1.53095	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.48040	3.48040	0.010	6.49388	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 01-DEC-2009 16:07
Lab File ID: 4n202.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091201-01 Quant Type: ISTD
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.80281	2.80281	0.010	4.59761	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.57945	1.57945	0.010	-1.92248	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.56211	1.56211	0.010	-3.34793	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.67048	2.67048	0.010	7.17819	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.47114	1.47114	0.010	-5.88523	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.15834	0.15834	0.010	-10.21472	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.78992	0.78992	0.010	-10.79467	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.57471	0.57471	0.010	-8.07649	30.00000	Averaged
95 Naphthalene	1.52123	1.33114	1.33114	0.010	-12.49576	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.59465	0.59465	0.010	-14.92527	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.93436
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n202.d
Lab Smp Id: W4VM091201-01 Client Smp ID: VSTD050
Inj Date : 01-DEC-2009 16:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091201-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2511974	150.000	154
M 2 1,2-Dichloroethylene (total)	96				1341345	100.000	112
M 135 1,3-Dichloropropylene	75				1374126	100.000	103
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	342898	50.0000	48.3
4 Chloromethane	50	5.299	5.299	(0.499)	517104	50.0000	47.2
5 Vinyl chloride	62	5.521	5.521	(0.520)	513133	50.0000	50.6
6 Bromomethane	94	6.130	6.130	(0.577)	400772	50.0000	50.1
7 Chloroethane	64	6.281	6.281	(0.592)	390258	50.0000	52.4
8 Trichlorofluoromethane	101	6.662	6.662	(0.627)	710787	50.0000	56.8
134 Ethyl Ether	59	6.997	6.997	(0.659)	335518	50.0000	48.9
10 Acetone	43	7.357	7.357	(0.693)	1428124	250.000	231
15 Acetonitrile	41	7.699	7.699	(0.725)	1685073	1250.00	1200
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	724466	50.0000	56.2
128 Methyl acetate	43	7.747	7.747	(0.730)	1620605	250.000	227
13 Iodomethane	142	7.632	7.632	(0.719)	3809156	250.000	247
17 Methylene chloride	84	7.936	7.936	(0.747)	527554	50.0000	52.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7566946	250.000	283
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1165614	50.0000	46.7
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	651315	50.0000	57.0
23 Vinyl acetate	43	8.711	8.711	(0.820)	4468149	250.000	269
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	787725	50.0000	55.5
30 2-Butanone	43	9.326	9.326	(0.878)	1682637	250.000	236
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	690030	50.0000	54.6
25 2,2-Dichloropropane	77	9.418	9.418	(0.887)	489062	50.0000	59.6
32 Chloroform	83	9.692	9.692	(0.913)	765669	50.0000	53.4
29 Bromochloromethane	128	9.662	9.662	(0.910)	215422	50.0000	48.4
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	646698	50.0000	60.7
129 Cyclohexane	56	10.082	10.082	(0.949)	744713	50.0000	60.6
34 1,1-Dichloropropene	75	10.131	10.131	(0.954)	630010	50.0000	59.5
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1686146	5000.00	5160
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	625100	50.0000	60.9
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	328290	50.0000	54.8
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	575656	50.0000	51.0
38 Benzene	78	10.375	10.375	(0.977)	1713475	50.0000	52.5
139 Cyclohexene	67	10.497	10.497	(0.989)	885641	50.0000	57.4
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1523689	50.0000	
39 Trichloroethylene	95	11.003	11.003	(1.036)	459650	50.0000	56.0
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	446537	50.0000	52.2
130 Methylcyclohexane	83	11.265	11.265	(1.061)	774811	50.0000	59.2
45 Bromodichloromethane	83	11.484	11.484	(1.082)	574134	50.0000	52.1
43 Dibromomethane	93	11.375	11.375	(1.071)	261642	50.0000	49.5
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	948071	250.000	194
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	901782	250.000	234
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	708376	50.0000	51.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	986741	50.0000	47.5
50 Toluene	92	12.326	12.326	(0.895)	1065262	50.0000	50.9
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	665750	50.0000	49.9
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	314410	50.0000	47.4
55 2-Hexanone	43	12.856	12.856	(0.934)	2174512	250.000	209
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	627013	50.0000	46.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	411391	50.0000	50.6
57 Dibromochloromethane	129	13.149	13.149	(0.955)	456914	50.0000	49.8
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	403742	50.0000	48.0
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1193564	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1231890	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	451394	50.0000	49.5
58 Ethylbenzene	91	13.862	13.862	(1.007)	2093710	50.0000	51.8
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1668750	100.000	104
64 o-Xylene	106	14.405	14.405	(1.046)	843224	50.0000	50.6
65 Styrene	104	14.405	14.405	(1.046)	1422431	50.0000	50.2
66 Bromoform	173	14.661	14.661	(0.906)	408661	50.0000	47.1
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2315971	50.0000	53.1
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	622291	50.0000	48.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	463961	50.0000	49.8
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	165926	50.0000	48.7
75 Bromobenzene	156	15.167	15.167	(0.937)	657171	50.0000	47.7
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2784867	50.0000	53.8
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1873528	50.0000	50.9
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2022922	50.0000	52.0
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1776774	50.0000	52.6
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2084290	50.0000	52.9
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2089490	50.0000	50.8
83 sec-Butylbenzene	105	15.929	15.929	(0.985)	2799606	50.0000	53.2
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	2254559	50.0000	52.3
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1270501	50.0000	49.0
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	804393	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1256553	50.0000	48.3
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2148116	50.0000	53.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1183373	50.0000	47.0
92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	127371	50.0000	44.9
93 1,2,4-Trichlorobenzene	180	18.635	18.635	(1.152)	635409	50.0000	44.6
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	462292	50.0000	46.0
95 Naphthalene	128	19.032	19.032	(1.176)	1070760	50.0000	43.8
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	478329	50.0000	42.5

Data File: /chem/VOA4.i/120109v4/4n202.d
Date : 01-DEC-2009 16:07
Client ID: VSTD050
Sample Info: W4VH091201-01|CCV/LCS|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

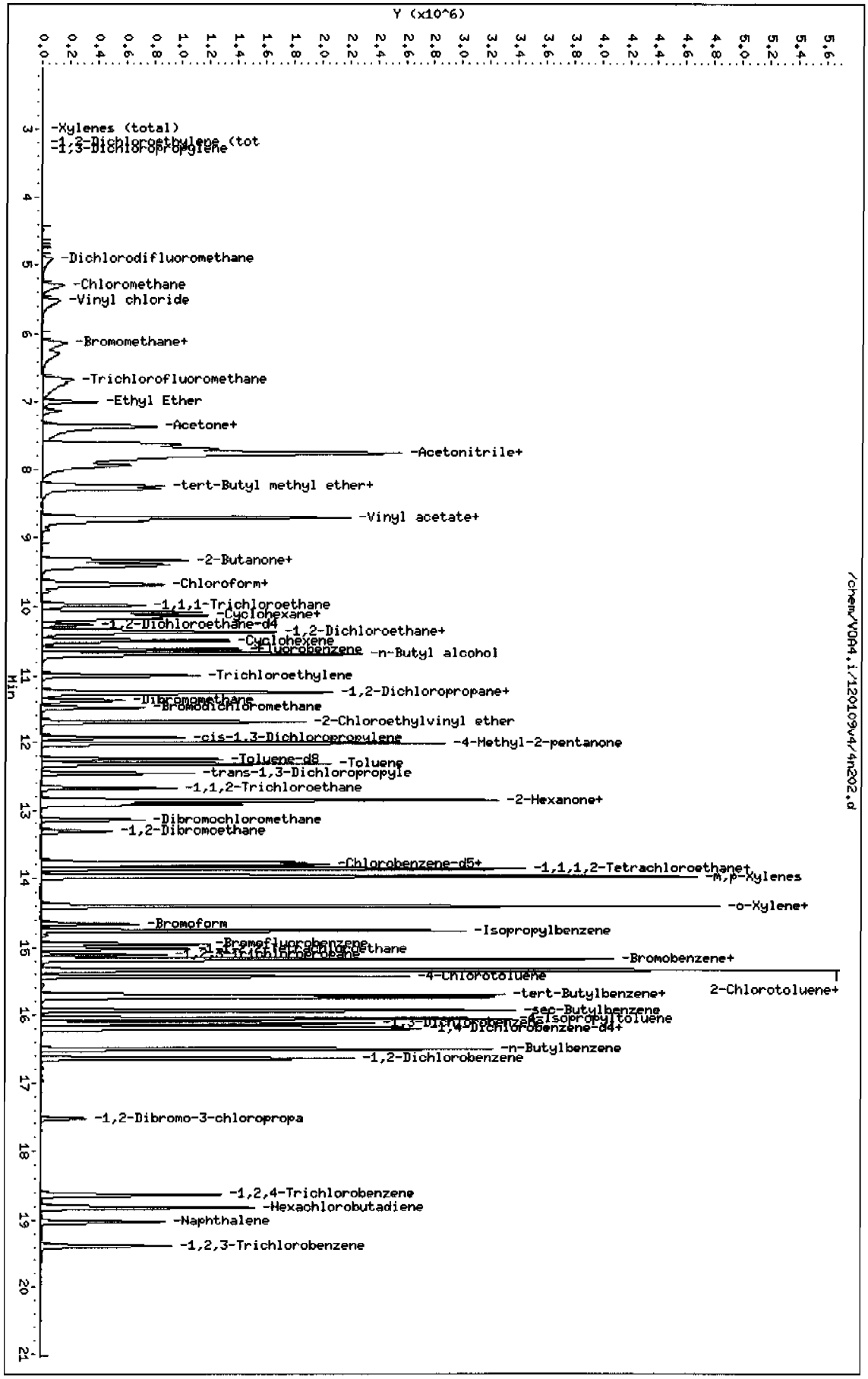

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 01-DEC-2009 17:02
Lab File ID: 4n204.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: UVM091118-08A Quant Type: ISTD
Method: /chem/VOA4.i/120109v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
9 Acrolein	0.05437	0.05700	0.05700	0.001	4.84065	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.11040	0.11040	0.050	17.84370	30.00000	Averaged
16 Allyl chloride	0.43415	0.46299	0.46299	0.010	6.64294	30.00000	Averaged
18 Acrylonitrile	0.10963	0.11069	0.11069	0.010	0.96637	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.45552	0.45552	0.010	10.52741	30.00000	Averaged
28 Propionitrile	0.04604	0.04487	0.04487	0.010	-2.53842	30.00000	Averaged
26 Ethyl acetate	0.30734	0.27865	0.27865	0.010	-9.33655	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.17981	0.17981	0.010	-1.36458	30.00000	Averaged
72 Tetrahydrofuran	275	250	0.19723	0.010	9.95829	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01366	0.01366	0.005	-2.22434	40.00000	Averaged
42 Methyl methacrylate	0.20344	0.19292	0.19292	0.010	-5.17040	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.44684	0.44684	0.010	-10.14826	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00362	0.00362	0.001	-0.48716	40.00000	Averaged
48 2-Nitropropane	0.09473	0.09804	0.09804	0.010	3.49373	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.24441	0.24441	0.010	10.69650	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02368	0.02368	0.005	-37.59876	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.21335	0.23193	0.23193	0.010	8.70861	30.00000	Averaged
82 Pentachloroethane	0.44529	0.48024	0.48024	0.010	7.84850	30.00000	Averaged
88 Benzyl chloride	1.24521	1.34740	1.34740	0.010	8.20654	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.37938	0.37938	0.010	2.08792	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.21211	0.21211	0.001	8.00799	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.93542	0.93542	0.010	7.41286	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.62760	0.62760	0.010	8.39553	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.93436
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n204.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 01-DEC-2009 17:02
Operator : ACJ Inst ID: VOA4.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9 Acrolein	56	7.186	7.186	(0.677)	400162	250.000	262
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	775046	250.000	295
16 Allyl chloride	41	7.802	7.802	(0.735)	3250383	250.000	267
18 Acrylonitrile	53	8.180	8.180	(0.770)	777081	250.000	252
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	639599	50.0000	55.3
28 Propionitrile	54	9.393	9.393	(0.885)	315036	250.000	244
26 Ethyl acetate	43	9.345	9.345	(0.880)	1956244	250.000	227
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1262331	250.000	246
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	706141	250.000	275
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	958672	2500.00	2440
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1354423	250.000	237
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2437612	250.000	225
97 1,4-Dioxane	88	11.326	11.326	(1.067)	254204	2500.00	2490
48 2-Nitropropane	43	11.673	11.673	(1.099)	688272	250.000	259
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	875027	250.000	277
70 Cyclohexanone	42	14.904	14.904	(1.082)	645775	1250.00	780

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	830372	250.000	272
82 Pentachloroethane	167	15.776	15.776	(0.975)	1719375	250.000	270(A)
88 Benzyl chloride	91	16.319	16.319	(1.009)	4823992	250.000	270
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1358269	250.000	255
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1404095	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1091037	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	716044	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	297825	50.0000	54.0
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1020580	50.0000	53.7
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	449388	50.0000	54.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA4.i/120109v4/4n204.d
Date : 01-DEC-2009 17:02
Client ID: VSTD250S
Sample Info: IUVM091118-08A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

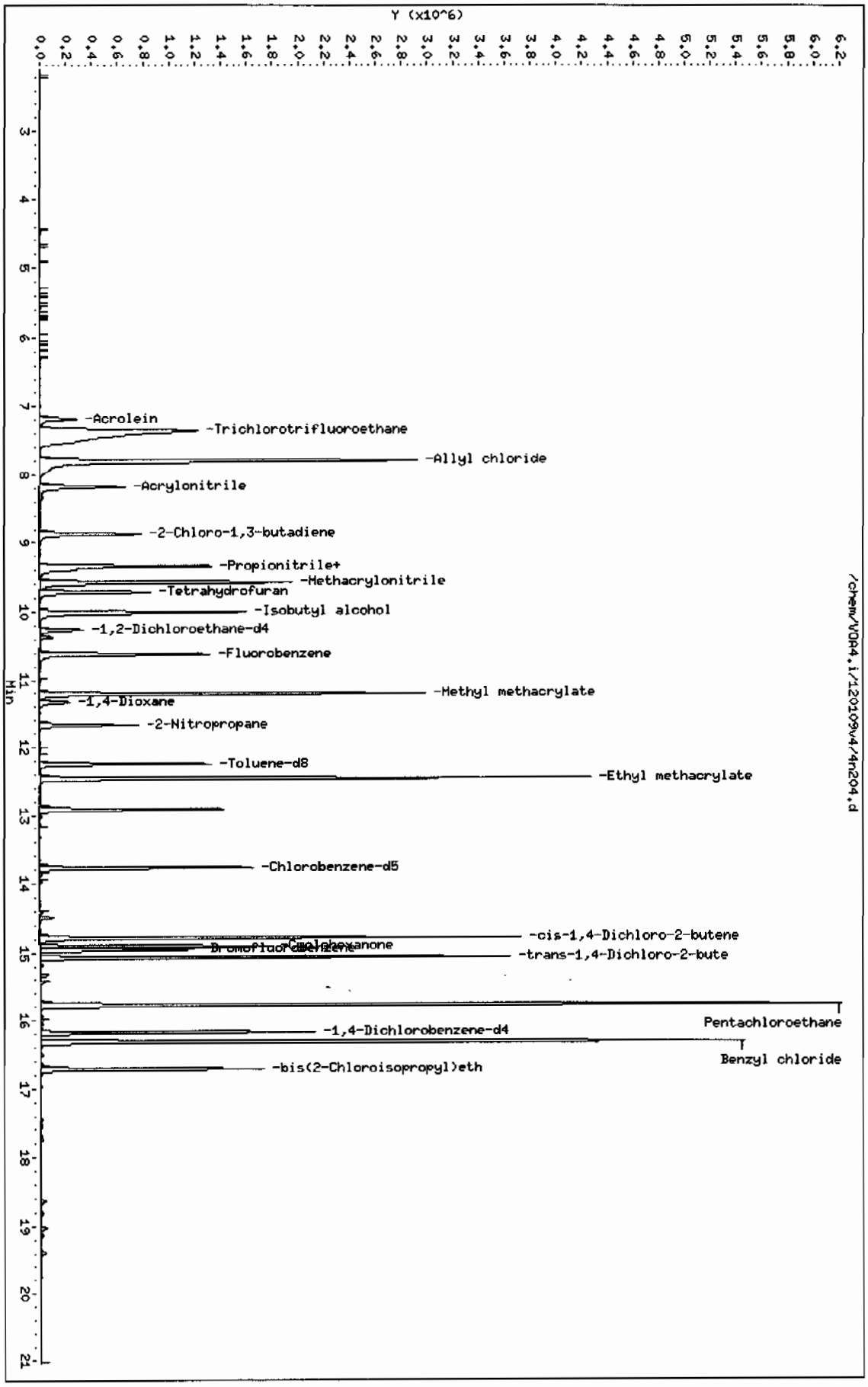

Page 1

QC Data

Data File: /chem/VOA4.i/112209v4/41701.d

Page 1

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

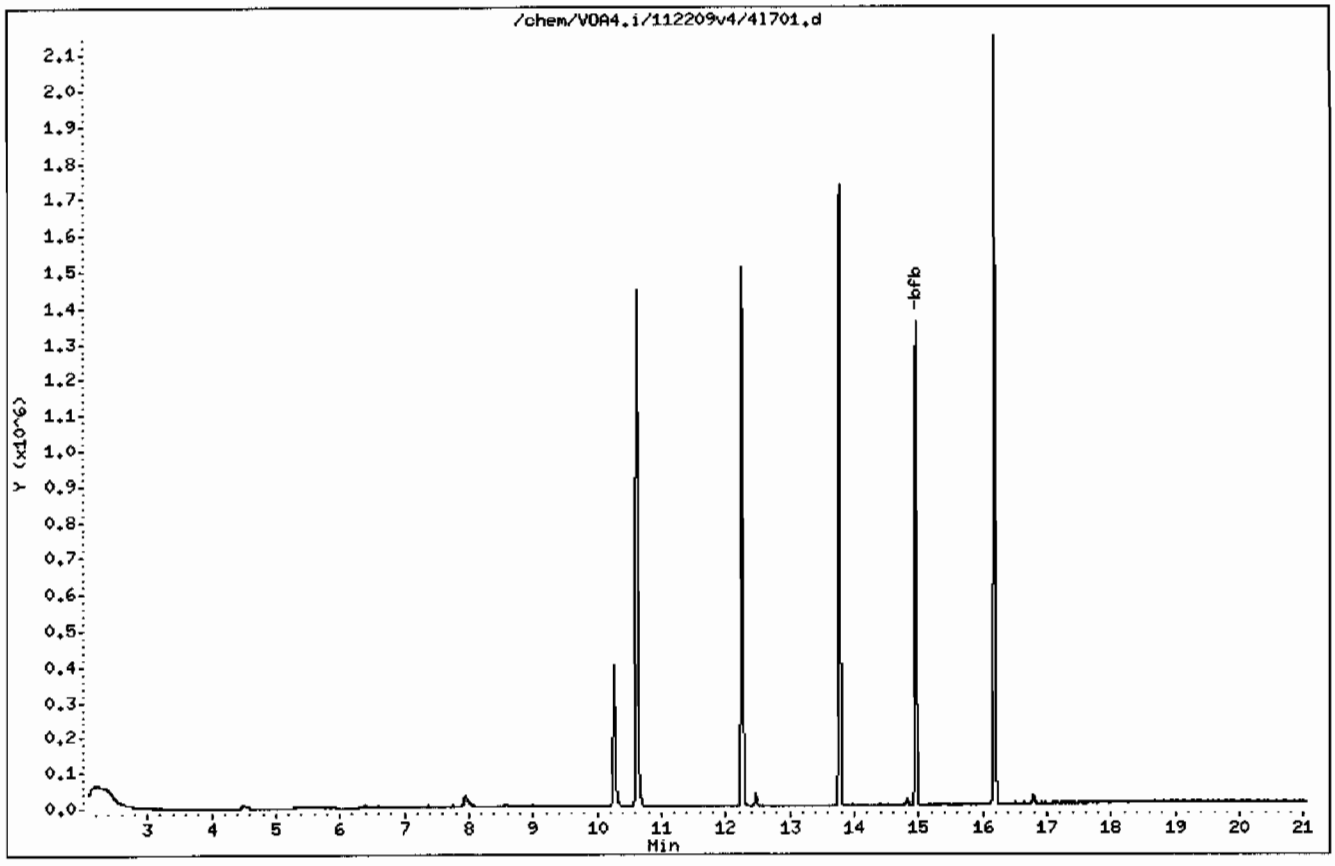

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

1 bfb

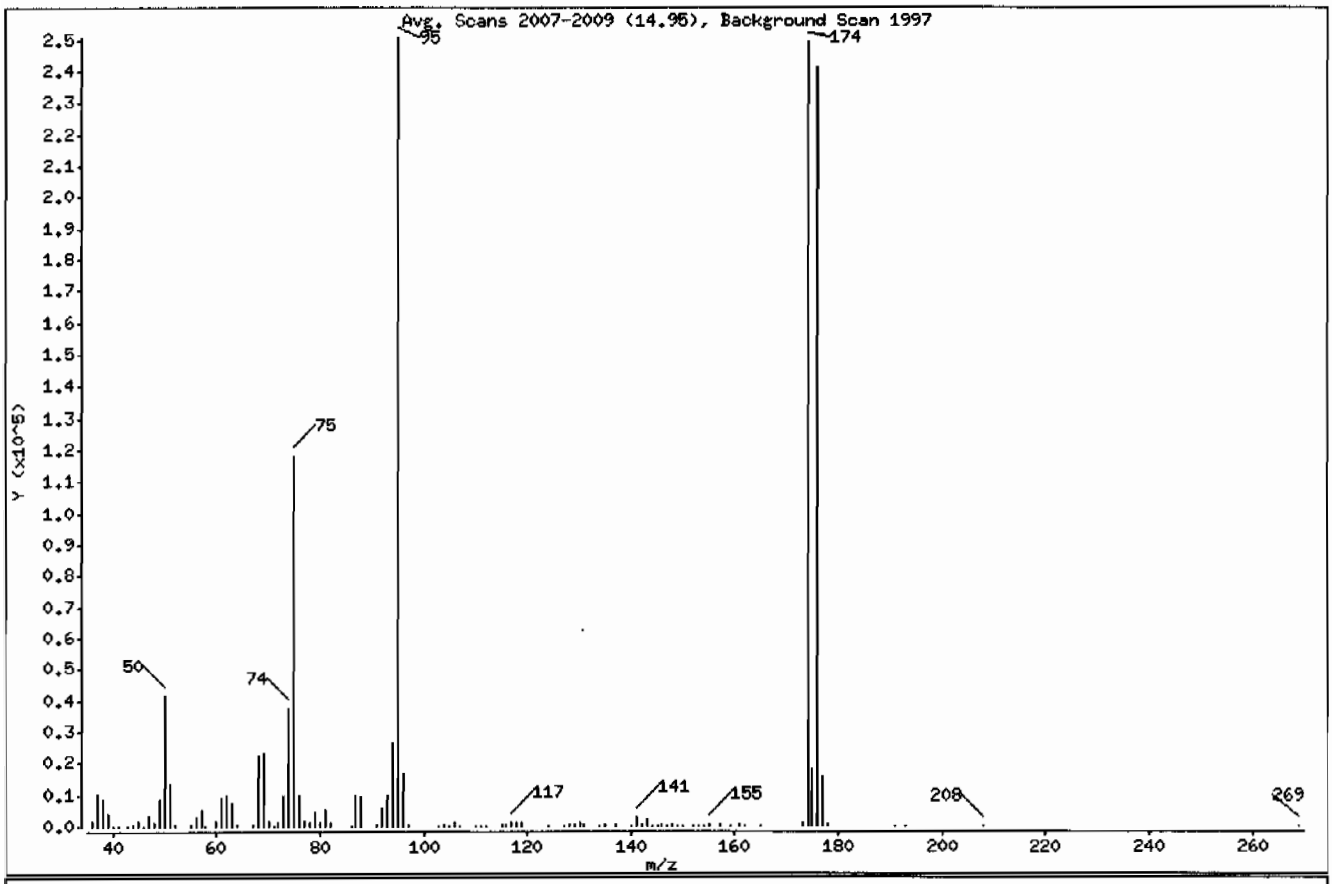

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.45
75	30.00 - 60.00% of mass 95	47.01
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.43 (0.43)
174	50.00 - 100.00% of mass 95	99.29
175	5.00 - 9.00% of mass 174	7.09 (7.14)
176	95.00 - 101.00% of mass 174	96.07 (96.76)
177	5.00 - 9.00% of mass 176	6.11 (6.36)

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 41701.d

Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1997

Location of Maximum: 95.00

Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1852	68.00	22712	104.00	786	145.00	227
37.00	10469	69.00	23288	105.00	216	146.00	338
38.00	8405	70.00	1742	106.00	913	147.00	212
39.00	4011	71.00	281	107.00	271	148.00	588
40.00	10	72.00	1018	110.00	50	149.00	261
41.00	174	73.00	9172	111.00	93	150.00	273
43.00	32	74.00	37232	112.00	54	152.00	51
44.00	673	75.00	118008	115.00	294	153.00	133
45.00	1913	76.00	10049	116.00	814	154.00	263
46.00	181	77.00	1447	117.00	1364	155.00	862
47.00	3182	78.00	1010	118.00	999	157.00	488
48.00	1157	79.00	4497	119.00	1228	159.00	282
49.00	8549	80.00	1297	124.00	61	161.00	368
50.00	41280	81.00	4964	127.00	56	162.00	58
51.00	13197	82.00	981	128.00	697	165.00	52
52.00	604	86.00	130	129.00	382	173.00	1069
55.00	416	87.00	9653	130.00	872	174.00	249216
56.00	2604	88.00	9450	131.00	389	175.00	17792
57.00	5395	91.00	777	134.00	55	176.00	241152
58.00	216	92.00	6052	135.00	375	177.00	15329
60.00	1746	93.00	9586	137.00	534	178.00	346
61.00	9083	94.00	26584	140.00	119	191.00	57
62.00	9883	95.00	251008	141.00	2645	193.00	50
63.00	7531	96.00	16696	142.00	321	208.00	106
64.00	738	97.00	497	143.00	2485	269.00	58
67.00	656	103.00	132	144.00	135		

Data File: /chem/VOA4.i/120109v4/4n201.d

Date : 01-DEC-2009 15:40

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

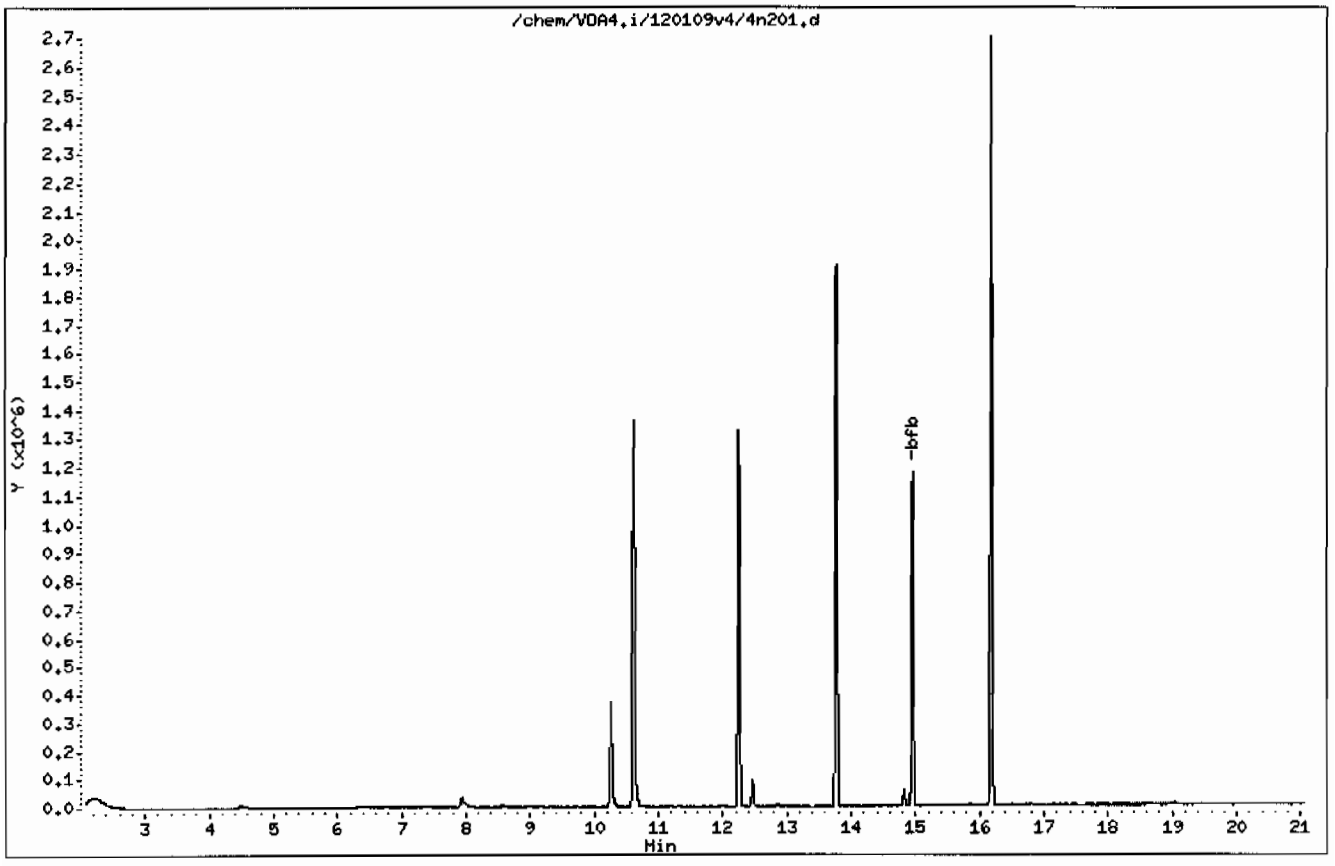

Data File: /chem/VOA4.i/120109v4/4n201.d

Date : 01-DEC-2009 15:40

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

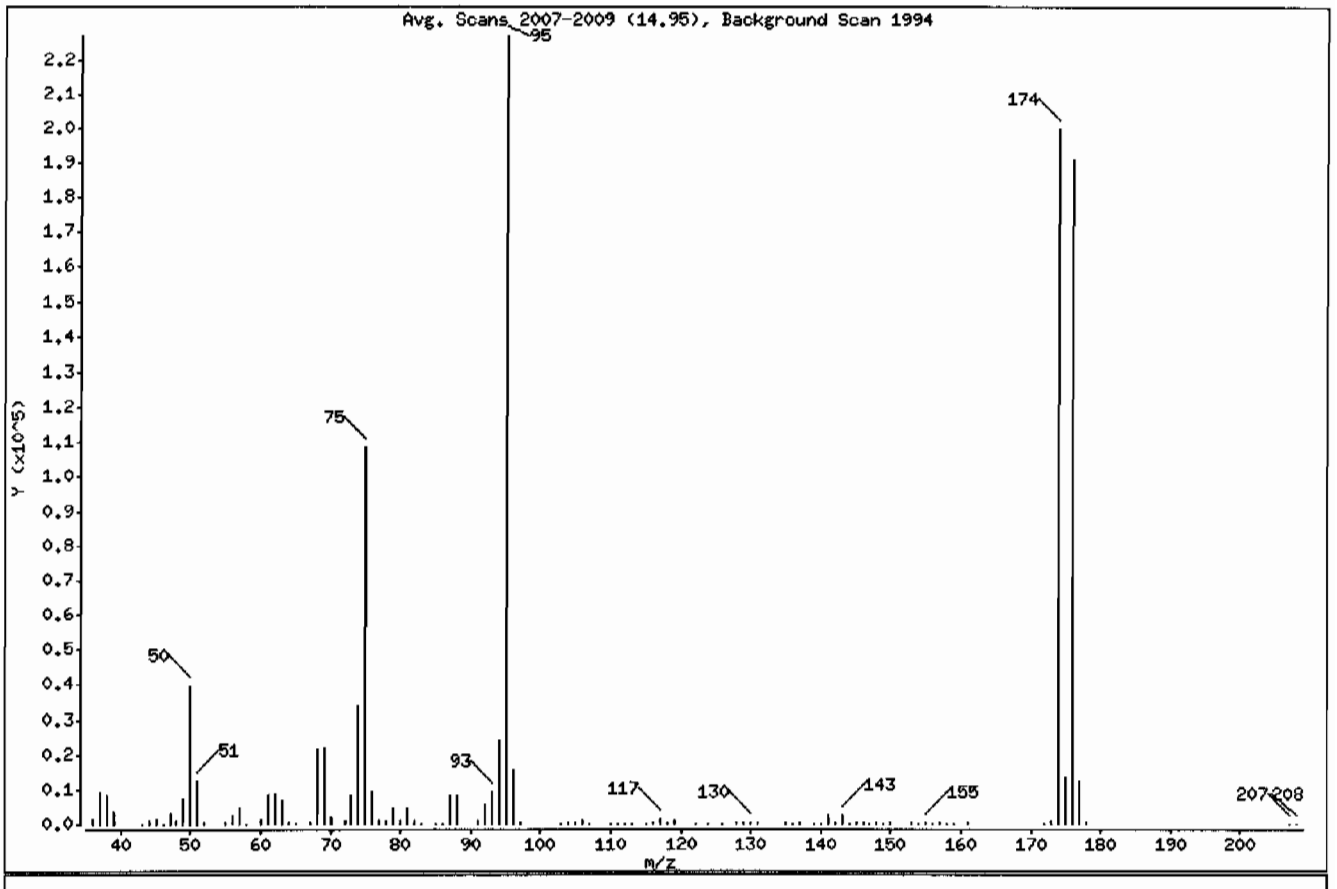

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.54
75	30.00 - 60.00% of mass 95	47.76
96	5.00 - 9.00% of mass 95	6.94
173	Less than 2.00% of mass 174	0.47 (0.54)
174	50.00 - 100.00% of mass 95	88.11
175	5.00 - 9.00% of mass 174	5.99 (6.80)
176	95.00 - 101.00% of mass 174	84.08 (95.43)
177	5.00 - 9.00% of mass 176	5.60 (6.66)

Data File: /chem/VOA4.i/120109v4/4n201.d

Date : 01-DEC-2009 15:40

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4n201.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1994
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1598	70.00	1918	106.00	842	145.00	271
37.00	9579	72.00	1016	107.00	220	146.00	336
38.00	8531	73.00	8380	110.00	68	147.00	208
39.00	3605	74.00	34024	111.00	79	148.00	511
43.00	226	75.00	108456	112.00	53	149.00	88
44.00	907	76.00	9360	113.00	165	150.00	280
45.00	1432	77.00	1146	115.00	215	153.00	266
46.00	59	78.00	891	116.00	702	154.00	70
47.00	2878	79.00	4547	117.00	1318	155.00	545
48.00	1112	80.00	1289	118.00	716	156.00	128
49.00	7530	81.00	4748	119.00	1145	157.00	301
50.00	39824	82.00	979	122.00	63	158.00	73
51.00	12561	83.00	219	124.00	176	159.00	231
52.00	472	85.00	56	126.00	57	161.00	338
55.00	404	86.00	184	128.00	649	172.00	155
56.00	2727	87.00	8404	129.00	354	173.00	1075
57.00	4895	88.00	8107	130.00	676	174.00	200064
58.00	233	91.00	810	131.00	333	175.00	13612
60.00	1736	92.00	5699	135.00	432	176.00	190912
61.00	8441	93.00	9227	136.00	69	177.00	12714
62.00	9015	94.00	23880	137.00	438	178.00	306
63.00	6909	95.00	227072	139.00	52	207.00	58
64.00	668	96.00	15755	140.00	107	208.00	62
65.00	224	97.00	471	141.00	2502		
67.00	467	103.00	118	142.00	275		
68.00	21504	104.00	772	143.00	2609		
69.00	21720	105.00	343	144.00	131		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984530**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n206bl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984530**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 16:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n206bl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n206bl.d
Lab Smp Id: 1201984530 Client Smp ID: BLANK
Inj Date : 01-DEC-2009 17:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984530|928135|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.266	10.259	(0.967)	320536	51.0656	51.1
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1598121	50.0000	
97 1,4-Dioxane	88	11.339	11.326	(1.068)	2007	17.2572	17.2(a)
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	1043162	49.4176	49.4
* 61 Chlorobenzene-d5	117	13.772	13.771	(1.000)	1211961	50.0000	
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	460330	52.0176	52.0
69 trans-1,4-Dichloro-2-butene	53	15.064	15.069	(0.931)	2583	0.79209	0.79(a)
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	764221	50.0000	
88 Benzyl chloride	91	16.320	16.319	(1.009)	22707	1.19307	1.2(a)
91 bis(2-Chloroisopropyl)ether	45	16.716	16.721	(1.033)	10995	1.93573	1.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n206bl.d
Lab Smp Id: 1201984530 Client Smp ID: BLANK
Inj Date : 01-DEC-2009 17:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984530|928135|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120109v4/4n206bl.d
Date : 01-DEC-2009 17:57
Client ID: BLANK
Sample Info: |120198453019281351|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

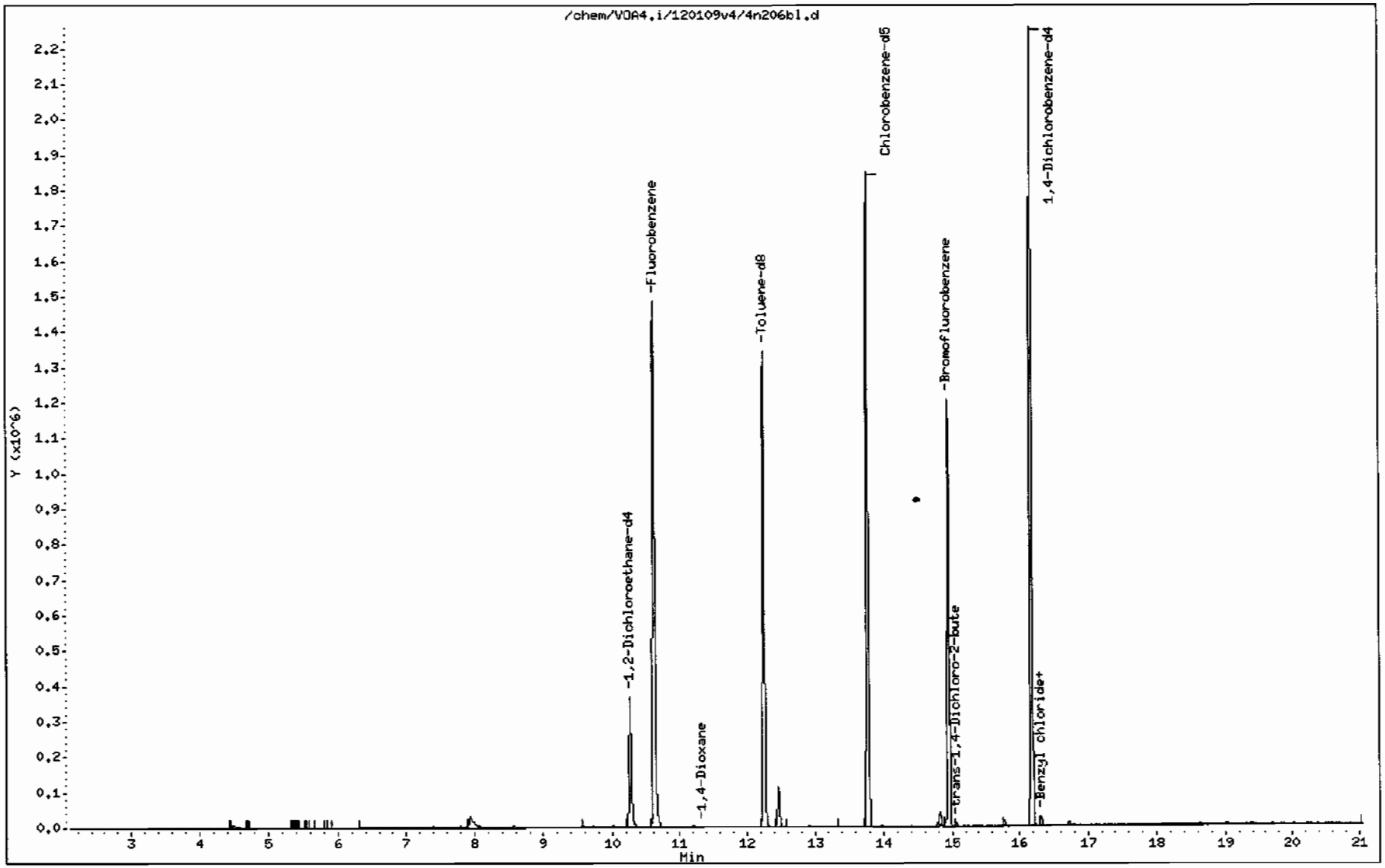

Data File: /chem/VOA4.i/120109v4/4n206bl.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201984530|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

97 1,4-Dioxane

Concentration: 17.2 ug/Kg

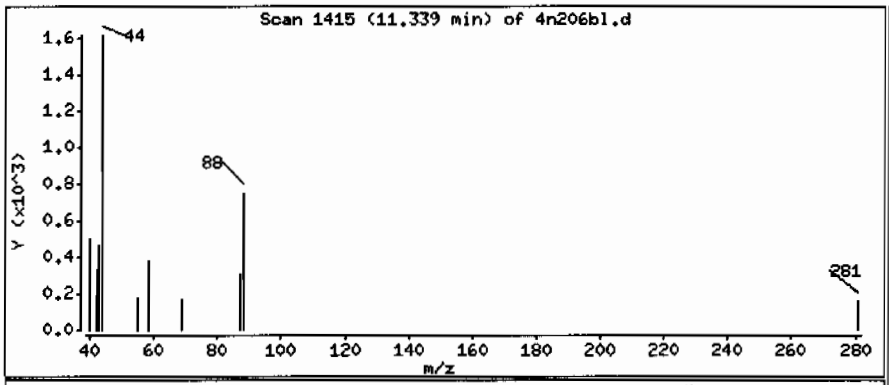

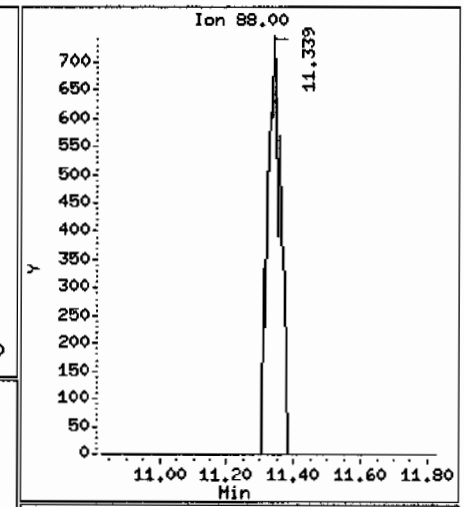

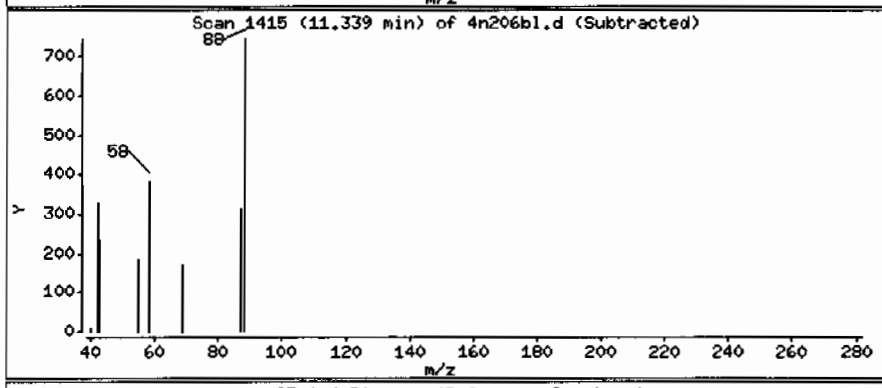

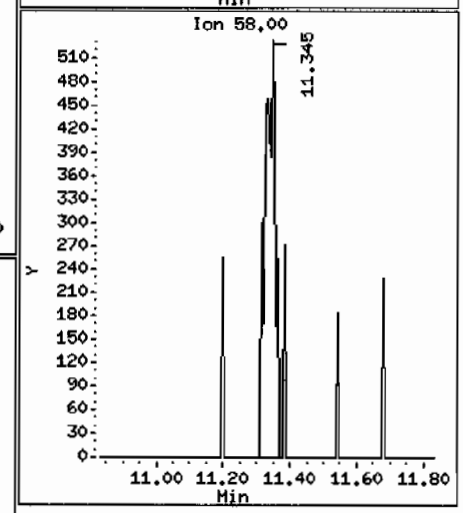

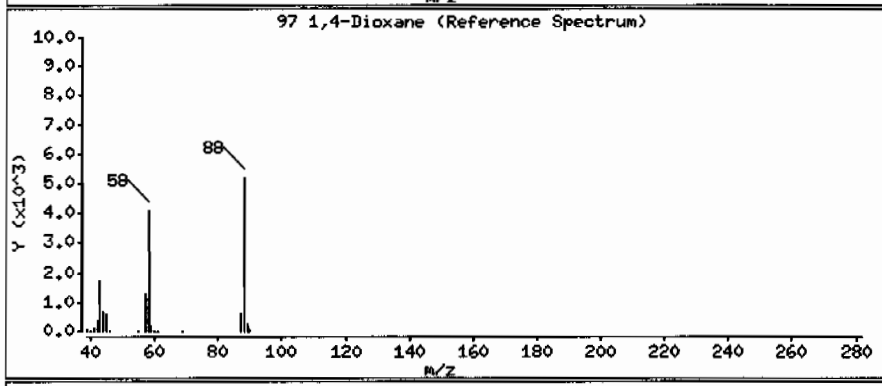

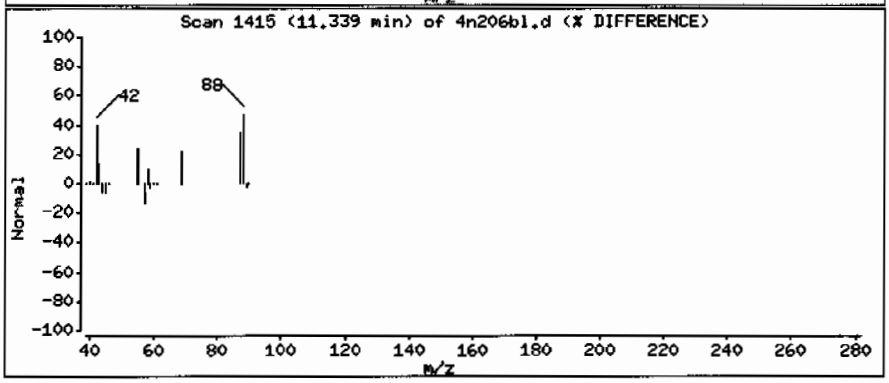

Data File: /chem/VOA4.i/120109v4/4n206bl.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201984530|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

69 trans-1,4-Dichloro-2-butene

Concentration: 0.79 ug/Kg

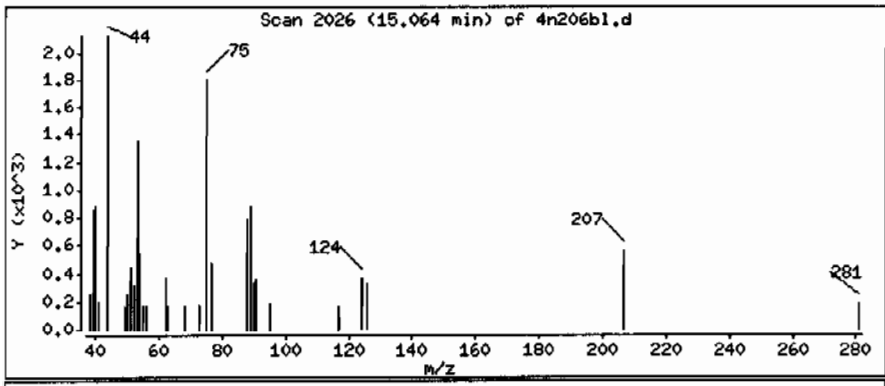

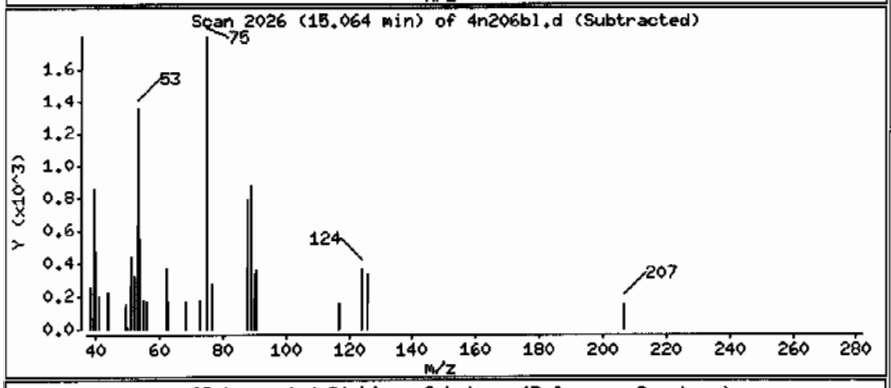

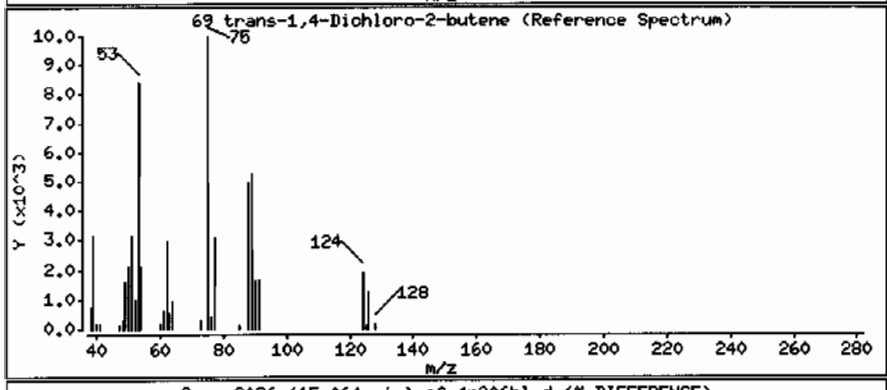

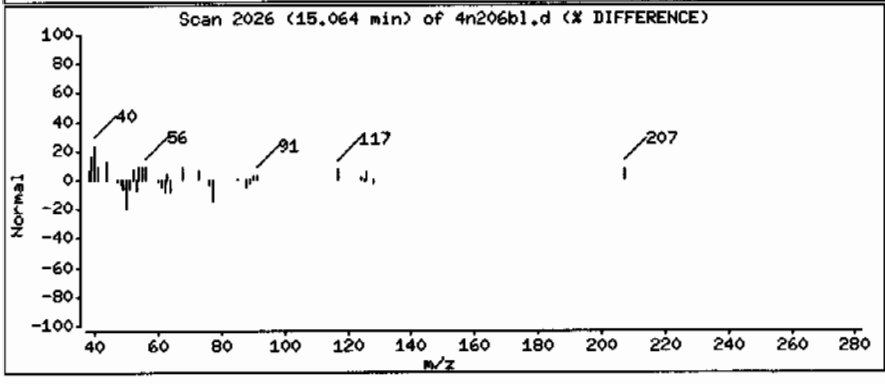

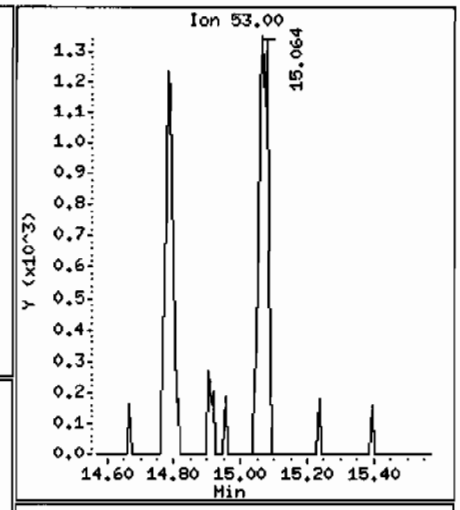

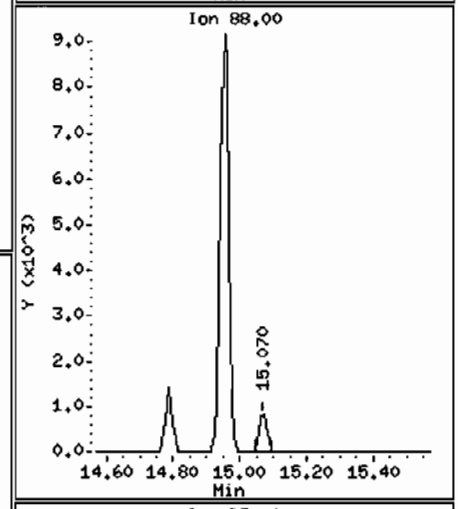

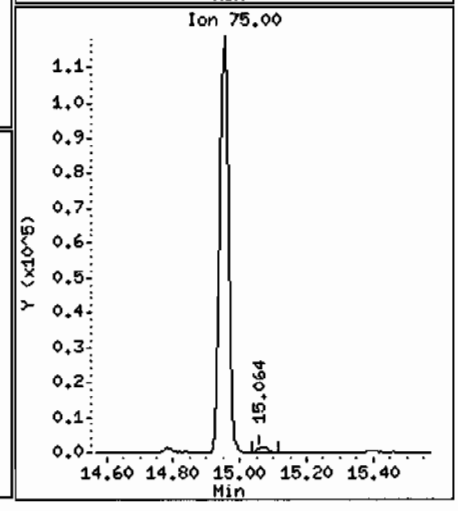

Data File: /chem/VOA4.i/120109v4/4n206bl.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120198453019281351|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

88 Benzyl chloride

Concentration: 1.2 ug/Kg

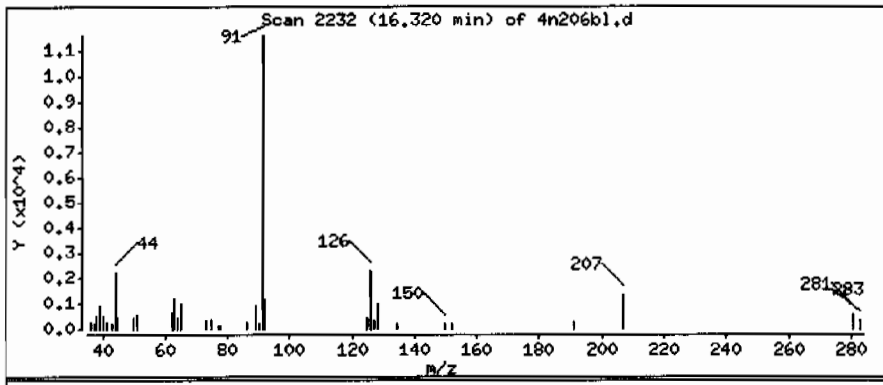

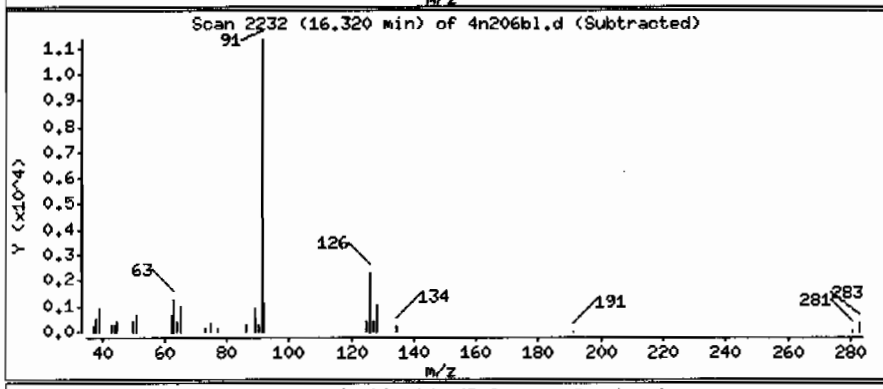

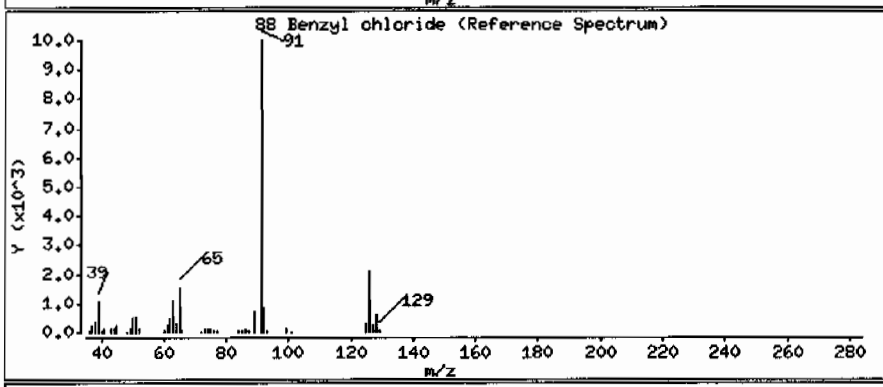

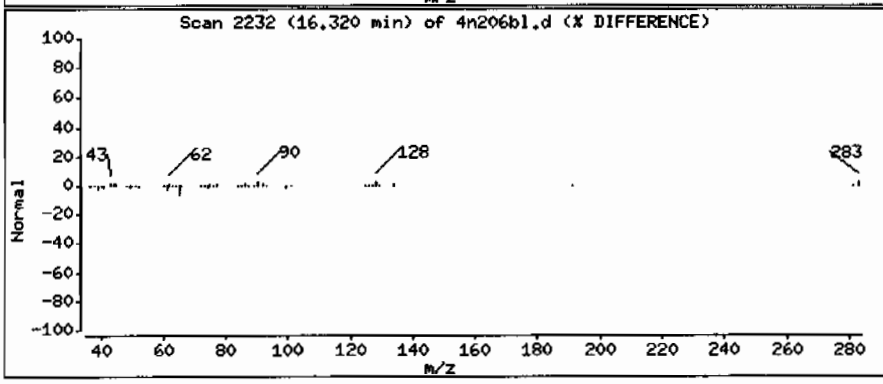

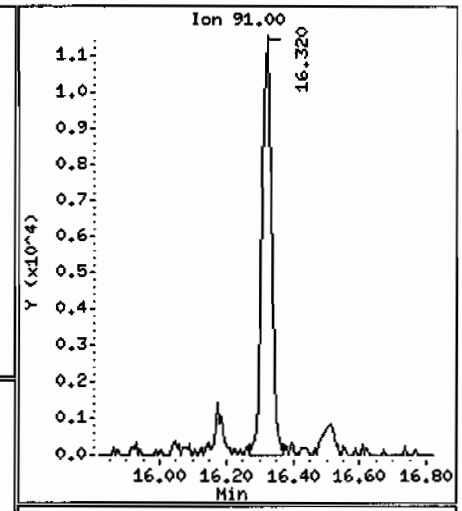

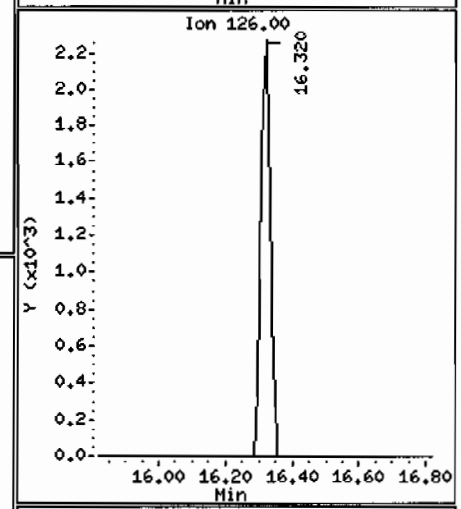

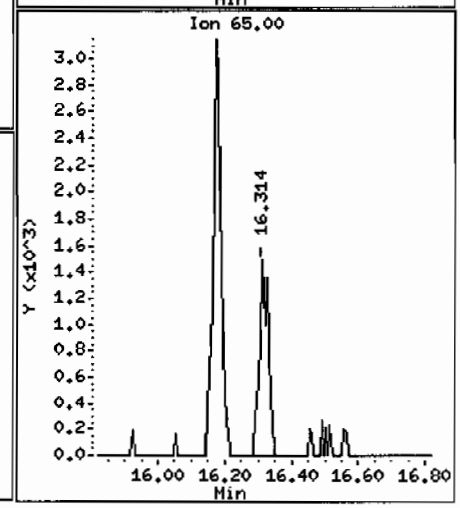

Data File: /chem/VOA4.i/120109v4/4n206bl.d

Date : 01-DEC-2009 17:57

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1201984530|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 1.9 ug/Kg

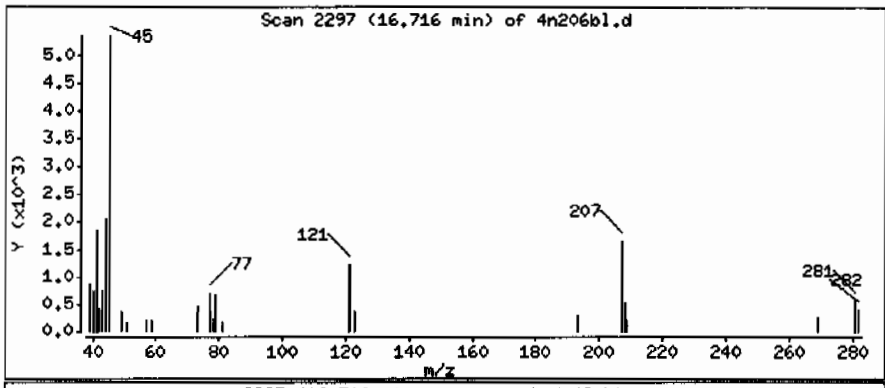

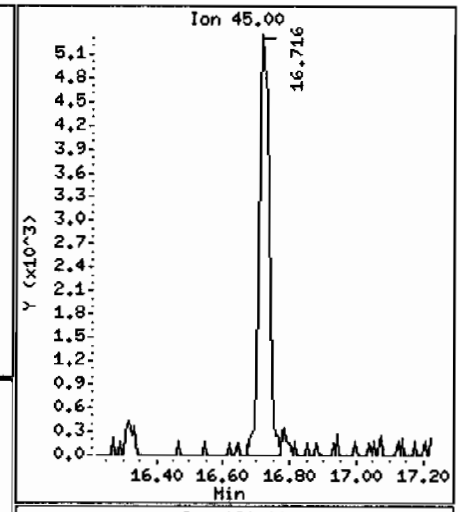

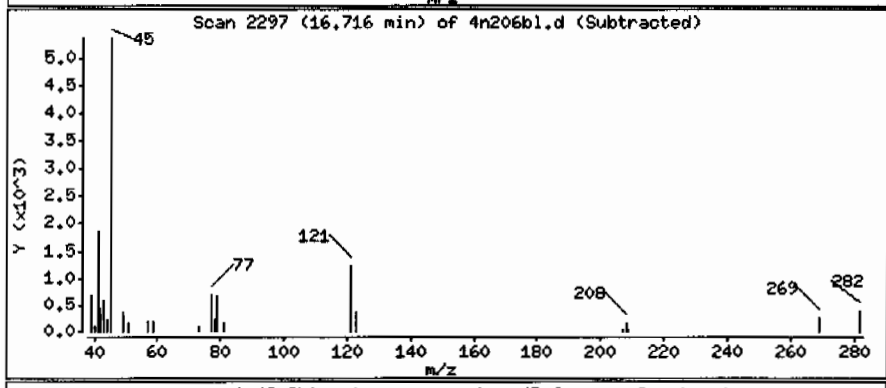

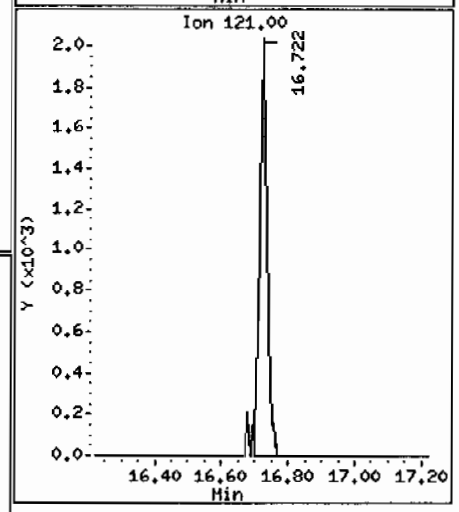

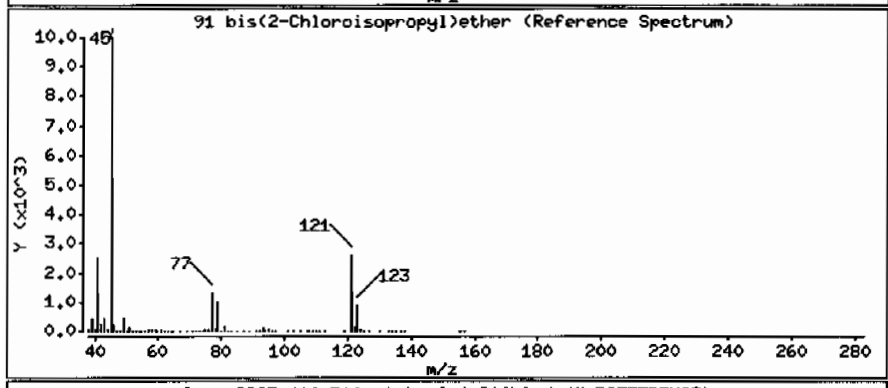

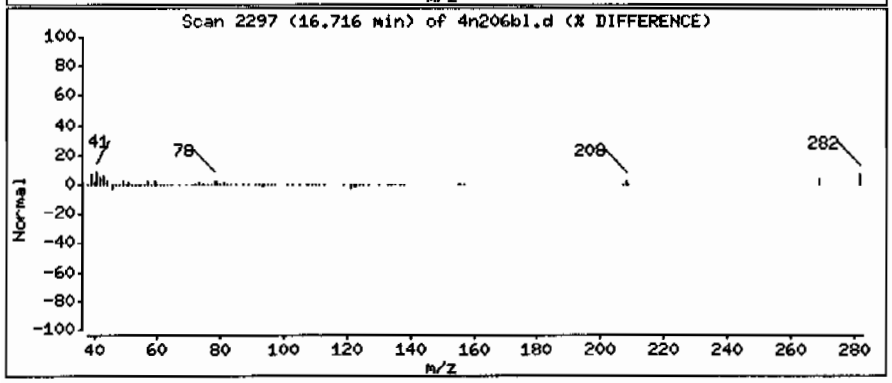

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984533**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 16:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 15:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n203ll.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		47.6	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.9	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		51.1	ug/kg	0.300	1.00
74-83-9	Bromomethane		50.3	ug/kg	0.300	1.00
75-00-3	Chloroethane		52.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		57.0	ug/kg	0.300	1.00
67-64-1	Acetone		270	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		57.5	ug/kg	0.300	1.00
74-88-4	Iodomethane		259	ug/kg	1.60	5.00
75-09-2	Methylene chloride		54.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		284	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		56.7	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		55.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		280	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		55.1	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		58.9	ug/kg	0.300	1.00
67-66-3	Chloroform		54.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		53.1	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		60.2	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		59.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		61.8	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		53.9	ug/kg	0.300	1.00
71-43-2	Benzene		53.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		56.9	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		53.7	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		55.6	ug/kg	0.300	1.00
74-95-3	Dibromomethane		54.2	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		271	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		55.5	ug/kg	0.300	1.00
108-88-3	Toluene		51.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.8	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		51.7	ug/kg	0.300	1.00
591-78-6	2-Hexanone		244	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		50.8	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		52.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		53.9	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		53.1	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		52.7	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984533**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 16:35**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 15:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n20311.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.0	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		105	ug/kg	0.300	2.00
95-47-6	o-Xylene		52.2	ug/kg	0.300	1.00
100-42-5	Styrene		51.6	ug/kg	0.300	1.00
75-25-2	Bromoform		53.2	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		53.5	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		54.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		50.6	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		53.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		51.4	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		53.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		52.1	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		52.7	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		52.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		51.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		53.0	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		52.7	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		50.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		50.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		53.8	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		54.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		52.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		50.1	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n20311.d
Lab Smp Id: 1201984533 Client Smp ID: LCS
Inj Date : 01-DEC-2009 16:35
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984533|928135|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2623167	157.245	157
M 2 1,2-Dichloroethylene (total)	96				1353825	111.773	112
M 135 1,3-Dichloropropylene	75				1506450	112.459	112
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	340376	47.5670	47.6
4 Chloromethane	50	5.299	5.299	(0.499)	506614	45.8575	45.8
5 Vinyl chloride	62	5.521	5.521	(0.520)	522894	51.1301	51.1
6 Bromomethane	94	6.138	6.130	(0.578)	405502	50.2774	50.3
7 Chloroethane	64	6.288	6.281	(0.592)	393188	52.3956	52.4
8 Trichlorofluoromethane	101	6.662	6.662	(0.627)	719803	57.0454	57.0
134 Ethyl Ether	59	7.004	6.997	(0.660)	368834	53.3729	53.4
10 Acetone	43	7.357	7.357	(0.693)	1685091	270.068	270
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	746892	57.4529	57.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.631	7.632	(0.719)	4025515	258.859	259
15 Acetonitrile	41	7.705	7.699	(0.726)	1929325	1368.67	1370
128 Methyl acetate	43	7.753	7.747	(0.730)	1864454	259.116	259
14 Carbon disulfide	76	7.772	7.772	(0.732)	7647629	283.705	284
17 Methylene chloride	84	7.949	7.936	(0.749)	553876	54.8974	54.9
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1314761	52.2359	52.2
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	652345	56.6979	56.7
23 Vinyl acetate	43	8.711	8.711	(0.820)	4824530	288.328	288
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	799533	55.8678	55.9
30 2-Butanone	43	9.326	9.326	(0.878)	2013255	280.436	280
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	701480	55.0749	55.1
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	486941	58.9167	58.9
29 Bromochloromethane	128	9.655	9.662	(0.909)	238458	53.1344	53.1
32 Chloroform	83	9.692	9.692	(0.913)	787794	54.4805	54.5
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	646100	60.2105	60.2
129 Cyclohexane	56	10.082	10.082	(0.949)	756364	61.0276	61.0
34 1,1-Dichloropropene	75	10.137	10.131	(0.955)	636065	59.5808	59.6
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	639455	61.7809	61.8
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	355635	58.9621	59.0
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	613394	53.8821	53.9
38 Benzene	78	10.375	10.375	(0.977)	1766343	53.6623	53.7
139 Cyclohexene	67	10.497	10.497	(0.989)	894870	57.5101	57.5
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1535652	50.0000	
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	2080364	6311.43	6310
39 Trichloroethylene	95	11.009	11.003	(1.037)	470428	56.9245	56.9
130 Methylcyclohexane	83	11.265	11.265	(1.061)	793709	60.2321	60.2
41 1,2-Dichloropropane	63	11.241	11.247	(1.059)	463071	53.6608	53.7
43 Dibromomethane	93	11.375	11.375	(1.071)	289172	54.2496	54.2
45 Bromodichloromethane	83	11.484	11.484	(1.082)	617668	55.6211	55.6
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1035171	210.154	210
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	769234	55.5491	55.5
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	1072440	271.159	271
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1060555	49.6983	49.7
50 Toluene	92	12.326	12.326	(0.895)	1101664	51.3057	51.3
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	737216	53.7882	53.8
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	352405	51.7417	51.7
55 2-Hexanone	43	12.856	12.856	(0.934)	2603388	244.283	244
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	700049	50.7949	50.8
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	439000	52.6307	52.6
57 Dibromochloromethane	129	13.149	13.149	(0.955)	507580	53.8522	53.8
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	458670	53.1332	53.1
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1225210	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1304771	52.6829	52.7
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	486968	52.0665	52.1
58 Ethylbenzene	91	13.862	13.862	(1.007)	2155627	51.9997	52.0
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1731869	105.092	105
64 o-Xylene	106	14.405	14.405	(1.046)	891298	52.1528	52.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	65 Styrene	104	14.405	14.405	(1.046)	1498075	51.5516	51.6
	66 Bromoform	173	14.661	14.661	(0.906)	478702	53.2271	53.2
	67 Isopropylbenzene	105	14.758	14.758	(0.912)	2396247	53.0345	53.0
$	71 Bromofluorobenzene	95	14.953	14.953	(0.924)	505349	52.3470	52.3
	73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	708718	53.5010	53.5
	74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	191020	54.0659	54.1
	75 Bromobenzene	156	15.167	15.167	(0.937)	722181	50.5902	50.6
	76 n-Propylbenzene	91	15.185	15.185	(0.939)	2851292	53.1264	53.1
	78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2099531	52.0859	52.1
	77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1958491	51.3895	51.4
	80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1846923	52.7373	52.7
	81 tert-Butylbenzene	119	15.709	15.703	(0.971)	2143132	52.4587	52.4
	79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2191856	51.3818	51.4
	83 sec-Butylbenzene	105	15.935	15.929	(0.985)	2886002	52.9619	53.0
	84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	2355365	52.7179	52.7
	85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1361223	50.6948	50.7
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	833679	50.0000	
	87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1361545	50.5245	50.5
	89 n-Butylbenzene	91	16.508	16.502	(1.020)	2233476	53.7613	53.8
	90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1306122	50.1140	50.1
	92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	160714	54.6547	54.6
	93 1,2,4-Trichlorobenzene	180	18.629	18.635	(1.151)	744921	50.4530	50.4
	94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	506064	48.5462	48.5
	95 Naphthalene	128	19.032	19.032	(1.176)	1343782	52.9792	53.0
	96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	584292	50.1353	50.1

Data File: /chem/VOA4.i/120109v4/4n20311.d
Date : 01-DEC-2009 16:35
Client ID: LCS
Sample Info: 1120198453319281361111VOAF11|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

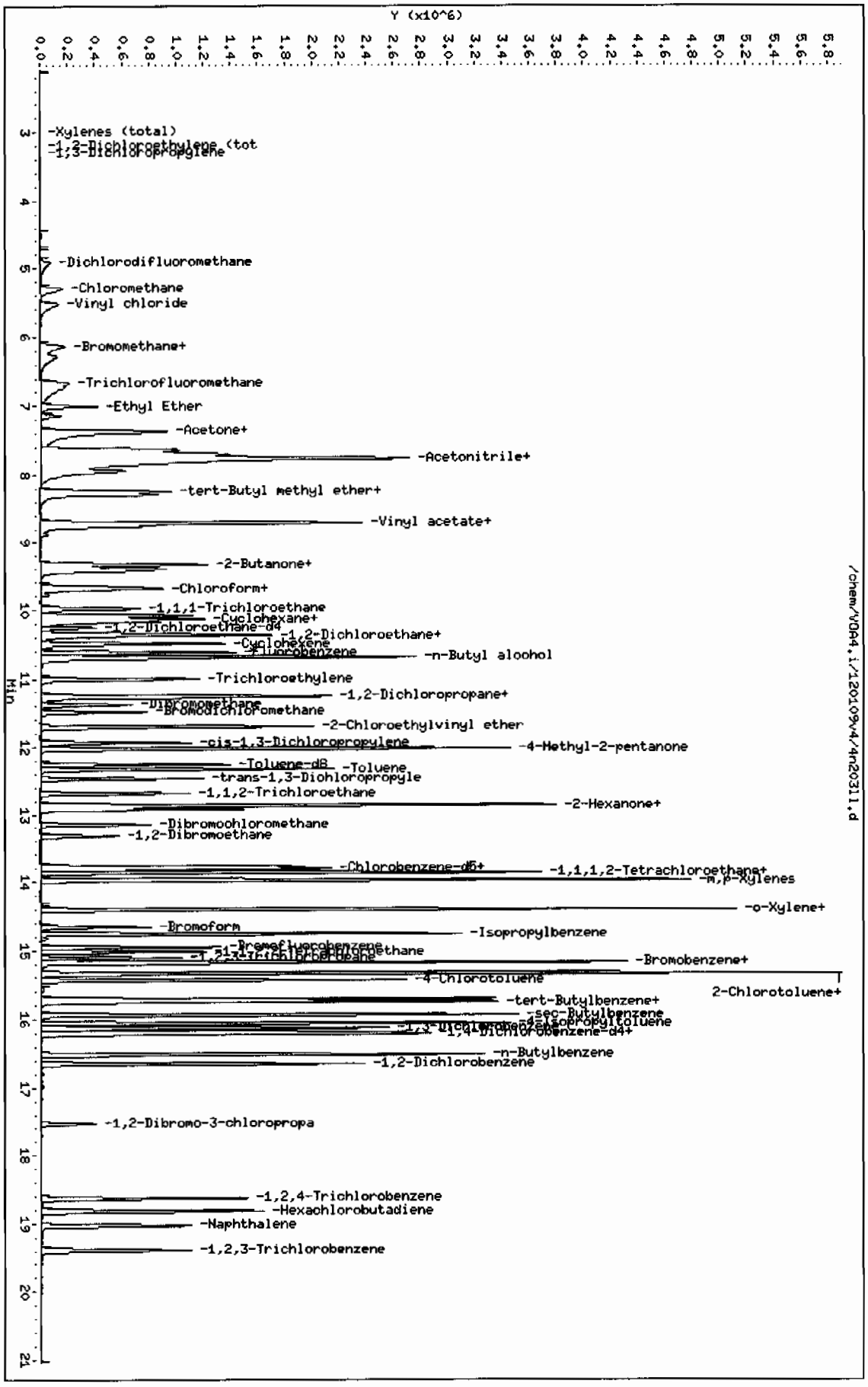

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984534**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:30**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 15:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n205sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984534**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/01/2009 17:30**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 15:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n205sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		265	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n205sl.d
Lab Smp Id: 1201984534 Client Smp ID: LCS
Inj Date : 01-DEC-2009 17:30
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984534|928135|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
9 Acrolein	56	7.186	7.186	(0.677)	416173	253.730	254
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	749306	265.120	265
16 Allyl chloride	41	7.802	7.802	(0.735)	3175914	242.477	242
18 Acrylonitrile	53	8.180	8.180	(0.770)	796814	240.919	241
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	620939	49.9397	49.9
26 Ethyl acetate	43	9.338	9.345	(0.879)	2042053	220.232	220
28 Propionitrile	54	9.393	9.393	(0.885)	325377	234.242	234
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1298787	236.158	236
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	738786	254.039	254
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1017174	2414.13	2410
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	313889	52.9792	53.0
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1508454	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	42 Methyl methacrylate	69	11.210	11.210	(1.056)	1414375	230.440	230
	97 1,4-Dioxane	88	11.326	11.326	(1.067)	268704	2447.80	2450
	48 2-Nitropropane	43	11.673	11.673	(1.099)	722930	252.962	253
$	47 Toluene-d8	98	12.253	12.253	(0.890)	1036938	49.4297	49.4
	51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2590306	216.227	216
*	61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1204435	50.0000	
	68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	925433	259.311	259
	70 Cyclohexanone	42	14.904	14.904	(1.082)	685180	749.692	750
$	71 Bromofluorobenzene	95	14.953	14.953	(0.924)	474415	50.6923	50.7
	69 trans-1,4-Dichloro-2-butene	53	15.063	15.069	(0.931)	883558	256.206	256
	82 Pentachloroethane	167	15.776	15.776	(0.975)	1652812	229.631	230
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	808195	50.0000	
	88 Benzyl chloride	91	16.319	16.319	(1.009)	5037085	250.259	250
	91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1487821	247.687	248

Data File: /chem/VOA4.i/120109v4/4n205sl.d
Date : 01-DEC-2009 17:30
Client ID: LCS
Sample Info: |120198453419281351|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

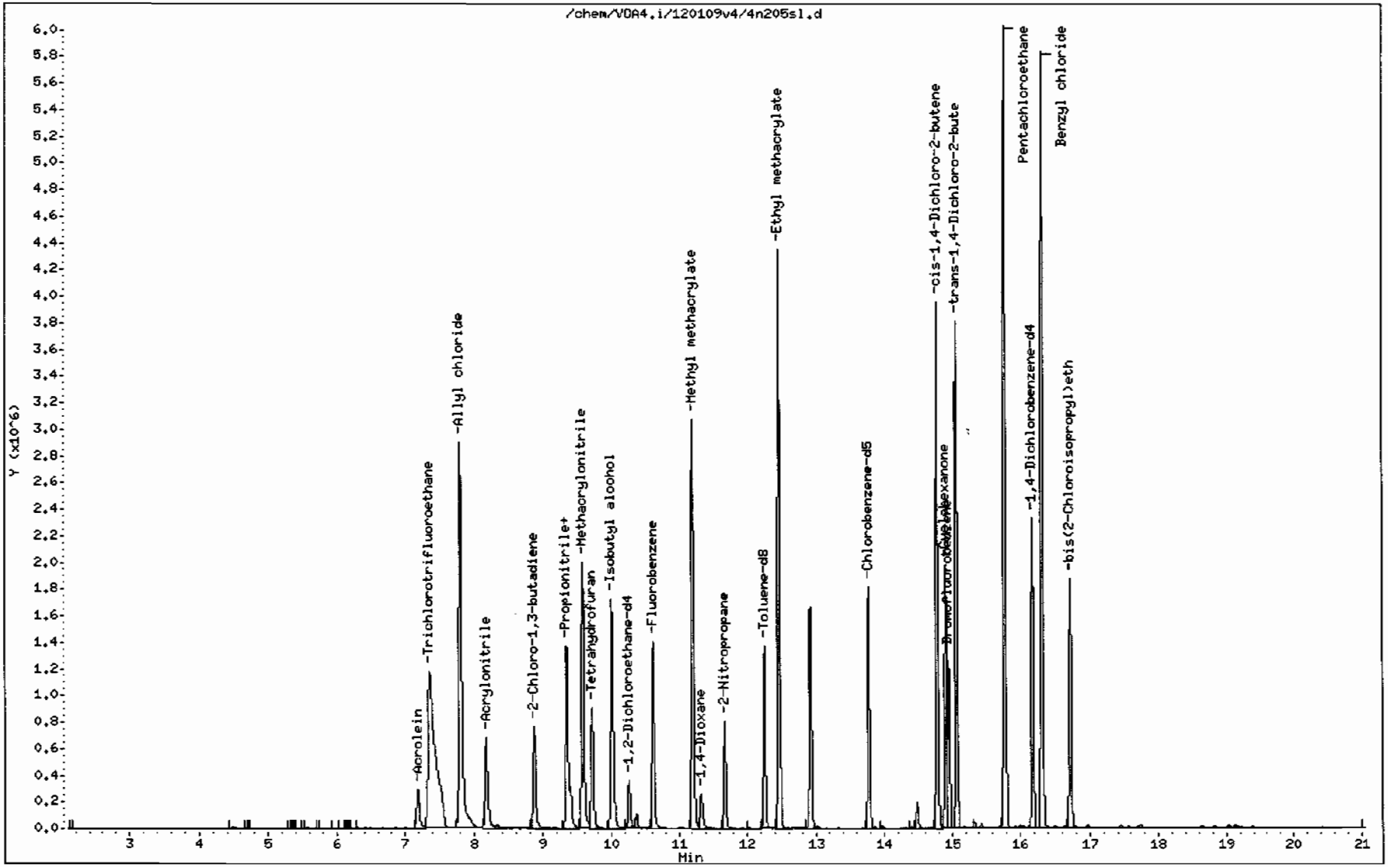

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201984531	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
Client Sample:	QC for batch 928134	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14130PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 00:51	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:11	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n218.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		37.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		38.4	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		42.1	ug/kg	0.300	1.00
74-83-9	Bromomethane		43.9	ug/kg	0.300	1.00
75-00-3	Chloroethane		44.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		45.4	ug/kg	0.300	1.00
67-64-1	Acetone		251	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		45.9	ug/kg	0.300	1.00
74-88-4	Iodomethane		215	ug/kg	1.60	5.00
75-09-2	Methylene chloride		46.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		234	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		47.6	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		48.3	ug/kg	0.300	1.00
78-93-3	2-Butanone		253	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		47.3	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		48.5	ug/kg	0.300	1.00
67-66-3	Chloroform		46.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		45.3	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		50.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		48.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		50.0	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		47.8	ug/kg	0.300	1.00
71-43-2	Benzene		44.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		47.4	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		46.7	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		47.4	ug/kg	0.300	1.00
74-95-3	Dibromomethane		47.0	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		240	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		46.9	ug/kg	0.300	1.00
108-88-3	Toluene		43.2	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		45.9	ug/kg	0.300	1.00
591-78-6	2-Hexanone		216	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		44.8	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		40.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		46.1	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		46.4	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		44.1	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**1201984531**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE03-09-14130PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 00:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/01/2009 21:11**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n218.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		44.1	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		87.2	ug/kg	0.300	2.00
95-47-6	o-Xylene		43.7	ug/kg	0.300	1.00
100-42-5	Styrene		43.9	ug/kg	0.300	1.00
75-25-2	Bromoform		44.3	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.9	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		48.6	ug/kg	0.300	1.00
108-86-1	Bromobenzene		42.7	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		44.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		43.9	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		44.2	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		43.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		44.8	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		44.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		43.7	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		44.6	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		43.9	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		42.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		42.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		44.3	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		48.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		44.7	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		43.3	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n218.d
Lab Smp Id: 1201984531 Client Smp ID: RE03-09-14130MS
Inj Date : 02-DEC-2009 00:51
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984531|928135|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241827001
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1448318	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1146470	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	789872	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.259	(0.967)	339369	59.6581	59.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	993885	49.7728	49.8
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	480567	52.5408	52.6
3 Dichlorodifluoromethane	85	4.911	4.912	(0.462)	254605	37.7262	37.7
4 Chloromethane	50	5.299	5.299	(0.499)	399968	38.3873	38.4
5 Vinyl chloride	62	5.528	5.521	(0.521)	405924	42.0859	42.1
6 Bromomethane	94	6.137	6.130	(0.578)	333705	43.8704	43.9
7 Chloroethane	64	6.295	6.281	(0.593)	313947	44.3588	44.4
8 Trichlorofluoromethane	101	6.675	6.662	(0.629)	539605	45.3431	45.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.364	7.357	(0.693)	1474158	250.508	250
11 1,1-Dichloroethylene	61	7.389	7.388	(0.696)	562811	45.9035	45.9
87 1,4-Dichlorobenzene	146	16.204	16.209	(1.002)	1084405	42.4721	42.5
13 Iodomethane	142	7.626	7.632	(0.718)	3148055	214.641	215
17 Methylene chloride	84	7.943	7.936	(0.748)	448880	46.2451	46.3
14 Carbon disulfide	76	7.773	7.772	(0.732)	5943264	233.773	234
21 trans-1,2-Dichloroethylene	61	8.285	8.284	(0.780)	516085	47.5598	47.6
22 1,1-Dichloroethane	63	8.766	8.759	(0.825)	651483	48.2678	48.3
30 2-Butanone	43	9.327	9.326	(0.878)	1711256	252.743	253
31 cis-1,2-Dichloroethylene	61	9.388	9.387	(0.884)	568470	47.3232	47.3
85 1,3-Dichlorobenzene	146	16.125	16.124	(0.997)	1083614	42.5942	42.6
25 2,2-Dichloropropane	77	9.425	9.418	(0.887)	377821	48.4705	48.5
32 Chloroform	83	9.693	9.692	(0.913)	639072	46.8605	46.9
90 1,2-Dichlorobenzene	146	16.643	16.642	(1.029)	1068001	43.2503	43.3
29 Bromochloromethane	128	9.663	9.662	(0.910)	191515	45.2476	45.3
36 1,1,1-Trichloroethane	97	9.986	9.979	(0.940)	505490	49.9476	50.0
34 1,1-Dichloropropene	75	10.138	10.131	(0.955)	492313	48.8962	48.9
33 Carbon tetrachloride	117	10.175	10.174	(0.958)	487991	49.9902	50.0
37 1,2-Dichloroethane	62	10.345	10.344	(0.974)	512740	47.7563	47.8
38 Benzene	78	10.376	10.375	(0.977)	1386508	44.6627	44.7
39 Trichloroethylene	95	11.004	11.003	(1.036)	369278	47.3793	47.4
41 1,2-Dichloropropane	63	11.241	11.247	(1.059)	379630	46.6443	46.7
45 Bromodichloromethane	83	11.485	11.484	(1.082)	495945	47.3529	47.4
43 Dibromomethane	93	11.376	11.375	(1.071)	236036	46.9513	47.0
49 4-Methyl-2-pentanone	58	12.022	12.021	(0.873)	887312	239.759	240
46 cis-1,3-Dichloropropylene	75	11.930	11.929	(1.123)	612886	46.9275	46.9
50 Toluene	92	12.327	12.326	(0.895)	868209	43.2104	43.2
53 trans-1,3-Dichloropropylene	75	12.467	12.466	(0.905)	589692	45.9796	46.0
54 1,1,2-Trichloroethane	83	12.686	12.685	(0.921)	292143	45.8397	45.8
55 2-Hexanone	43	12.857	12.856	(0.934)	2155240	216.122	216
52 1,3-Dichloropropane	76	12.881	12.880	(0.935)	577506	44.7813	44.8
56 Tetrachloroethylene	164	12.924	12.923	(0.938)	316720	40.5787	40.6
57 Dibromochloromethane	129	13.150	13.149	(0.955)	406379	46.0764	46.1
59 1,2-Dibromoethane	107	13.320	13.319	(0.967)	374973	46.4209	46.4
62 Chlorobenzene	112	13.802	13.801	(1.002)	1022801	44.1341	44.1
60 1,1,1,2-Tetrachloroethane	131	13.851	13.850	(1.006)	390857	44.6605	44.7
58 Ethylbenzene	91	13.863	13.862	(1.007)	1710672	44.1003	44.1
63 m,p-Xylenes	106	13.973	13.972	(1.015)	1344883	87.2141	87.2
64 o-Xylene	106	14.405	14.405	(1.046)	698629	43.6867	43.7
65 Styrene	104	14.405	14.405	(1.046)	1193394	43.8875	43.9
66 Bromoform	173	14.662	14.661	(0.906)	377689	44.3245	44.3
73 1,1,2,2-Tetrachloroethane	83	15.021	15.020	(0.928)	600733	47.8643	47.9
74 1,2,3-Trichloropropane	110	15.113	15.106	(0.934)	162597	48.5735	48.6
75 Bromobenzene	156	15.168	15.167	(0.937)	577785	42.7198	42.7
76 n-Propylbenzene	91	15.186	15.185	(0.939)	2263015	44.5039	44.5
77 2-Chlorotoluene	91	15.332	15.331	(0.948)	1583632	43.8580	43.9
67 Isopropylbenzene	105	14.759	14.758	(0.912)	1893455	44.2307	44.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.332	15.331	(0.948)	1677108	43.9138	43.9
80 4-Chlorotoluene	91	15.430	15.429	(0.954)	1485273	44.7628	44.8
81 tert-Butylbenzene	119	15.704	15.703	(0.971)	1722500	44.5011	44.5
79 1,2,4-Trimethylbenzene	105	15.741	15.746	(0.973)	1766515	43.7076	43.7
83 sec-Butylbenzene	105	15.930	15.929	(0.985)	2300104	44.5509	44.6
84 4-Isopropyltoluene	119	16.052	16.051	(0.992)	1856377	43.8539	43.9
89 n-Butylbenzene	91	16.503	16.502	(1.020)	1741678	44.2485	44.3
92 1,2-Dibromo-3-chloropropane	157	17.533	17.526	(1.084)	135442	48.6149	48.6

Data File: /chem/VOA4.i/120109v4/4n218.d
Date : 02-DEC-2009 00:51
Client ID: RE03-09-14130MS
Sample Info: 1120198453119281351111VOAF111
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

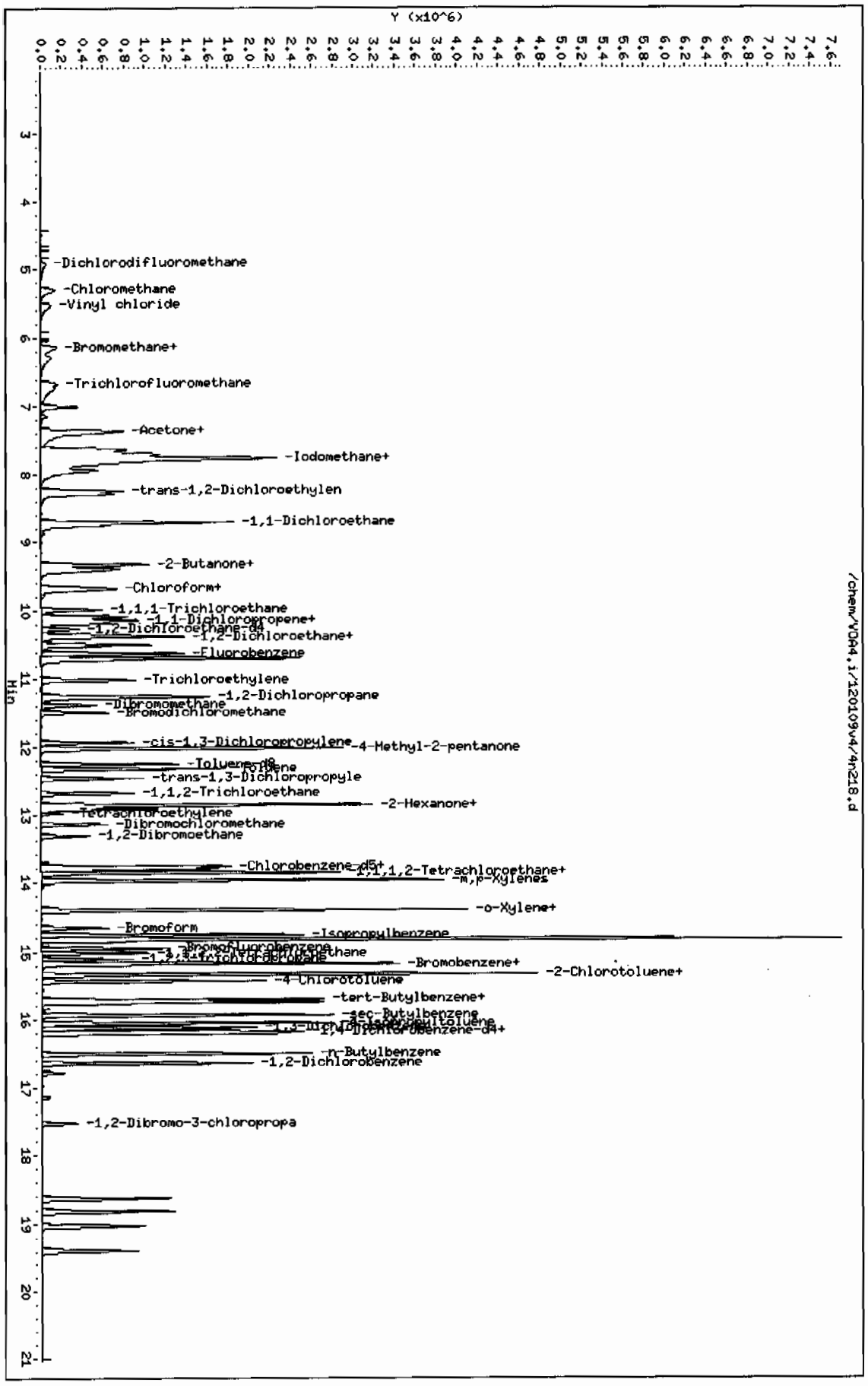

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201984532	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
Client Sample:	QC for batch 928134	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14130PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 01:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n219.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		33.6	ug/kg	0.340	1.00
74-87-3	Chloromethane		29.3	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		36.6	ug/kg	0.300	1.00
74-83-9	Bromomethane		36.9	ug/kg	0.300	1.00
75-00-3	Chloroethane		35.3	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		42.5	ug/kg	0.300	1.00
67-64-1	Acetone		287	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		36.2	ug/kg	0.300	1.00
74-88-4	Iodomethane		182	ug/kg	1.60	5.00
75-09-2	Methylene chloride		35.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		188	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		42.7	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		43.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		298	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		44.8	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		60.4	ug/kg	0.300	1.00
67-66-3	Chloroform		43.6	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		42.7	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		50.4	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		45.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		47.5	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		44.7	ug/kg	0.300	1.00
71-43-2	Benzene		42.2	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		44.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		43.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		43.3	ug/kg	0.300	1.00
74-95-3	Dibromomethane		45.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		279	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		42.4	ug/kg	0.300	1.00
108-88-3	Toluene		41.7	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		42.3	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		44.9	ug/kg	0.300	1.00
591-78-6	2-Hexanone		242	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		44.0	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		40.3	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		43.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		45.4	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		41.8	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	1201984532	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
Client Sample:	QC for batch 928134	**Client:**	LANL010	**Project:**	QC
Client ID:	RE03-09-14130PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 01:18	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/01/2009 21:12	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n219.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		42.2	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		81.5	ug/kg	0.300	2.00
95-47-6	o-Xylene		40.8	ug/kg	0.300	1.00
100-42-5	Styrene		39.6	ug/kg	0.300	1.00
75-25-2	Bromoform		48.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		53.0	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		54.7	ug/kg	0.300	1.00
108-86-1	Bromobenzene		43.2	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		46.6	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		45.6	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		47.2	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		44.7	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		44.4	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		44.6	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		44.1	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.2	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		43.6	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		41.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		41.2	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		44.1	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		53.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		42.3	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		42.7	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n219.d
Lab Smp Id: 1201984532 Client Smp ID: RE03-09-14130MSD
Inj Date : 02-DEC-2009 01:18
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984532|928135|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241827001
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	733433	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	565703	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	338283	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	170531	59.1976	59.2
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	482900	49.0103	49.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	209879	53.5782	53.6
3 Dichlorodifluoromethane	85	4.919	4.912	(0.463)	114885	33.6158	33.6
4 Chloromethane	50	5.284	5.299	(0.498)	154571	29.2950	29.3
5 Vinyl chloride	62	5.521	5.521	(0.520)	178716	36.5897	36.6
6 Bromomethane	94	6.123	6.130	(0.577)	142032	36.8721	36.9
7 Chloroethane	64	6.281	6.281	(0.591)	126637	35.3336	35.3
8 Trichlorofluoromethane	101	6.674	6.662	(0.629)	255845	42.4537	42.5

Compounds	QUANT S1G MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.357	7.357	(0.693)	856325	287.356	287
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	224617	36.1767	36.2
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	450283	41.1788	41.2
13 Iodomethane	142	7.625	7.632	(0.718)	1351595	181.979	182
17 Methylene chloride	84	7.936	7.936	(0.747)	180189	35.2899	35.3
14 Carbon disulfide	76	7.766	7.772	(0.731)	2423910	188.274	188
21 trans-1,2-Dichloroethylene	61	8.290	8.284	(0.781)	234696	42.7098	42.7
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	299693	43.8465	43.9
30 2-Butanone	43	9.326	9.326	(0.878)	1021889	298.038	298
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	272504	44.7964	44.8
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	455040	41.7640	41.8
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	238359	60.3846	60.4
32 Chloroform	83	9.692	9.692	(0.913)	300672	43.5365	43.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	451338	42.6772	42.7
29 Bromochloromethane	128	9.661	9.662	(0.910)	91580	42.7265	42.7
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	258213	50.3829	50.4
34 1,1-Dichloropropene	75	10.131	10.131	(0.954)	234101	45.9135	45.9
33 Carbon tetrachloride	117	10.180	10.174	(0.959)	234858	47.5097	47.5
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	243157	44.7223	44.7
38 Benzene	78	10.375	10.375	(0.977)	662780	42.1595	42.2
39 Trichloroethylene	95	11.009	11.003	(1.037)	174744	44.2732	44.3
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	179539	43.5613	43.6
45 Bromodichloromethane	83	11.484	11.484	(1.082)	229726	43.3138	43.3
43 Dibromomethane	93	11.381	11.375	(1.072)	116111	45.6085	45.6
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	509877	279.215	279
46 cis-1,3-Dichloropropylene	75	11.935	11.929	(1.124)	280455	42.4047	42.4
50 Toluene	92	12.326	12.326	(0.895)	413720	41.7296	41.7
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	267408	42.2560	42.3
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	141213	44.9051	44.9
55 2-Hexanone	43	12.862	12.856	(0.934)	1191438	242.130	242
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	279918	43.9891	44.0
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	155204	40.2995	40.3
57 Dibromochloromethane	129	13.149	13.149	(0.955)	188893	43.4047	43.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	180787	45.3581	45.4
62 Chlorobenzene	112	13.801	13.801	(1.002)	478323	41.8291	41.8
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	182477	42.2560	42.3
58 Ethylbenzene	91	13.862	13.862	(1.007)	807431	42.1847	42.2
63 m,p-Xylenes	106	13.972	13.972	(1.015)	619585	81.4286	81.4
64 o-Xylene	106	14.404	14.405	(1.046)	322186	40.8304	40.8
65 Styrene	104	14.404	14.405	(1.046)	530954	39.5720	39.6
66 Bromoform	173	14.661	14.661	(0.906)	175511	48.0940	48.1
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	284786	52.9817	53.0
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	78376	54.6697	54.7
75 Bromobenzene	156	15.167	15.167	(0.937)	250254	43.2036	43.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	1015548	46.6324	46.6
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	704527	45.5585	45.6
67 Isopropylbenzene	105	14.758	14.758	(0.912)	865407	47.2026	47.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	731196	44.7044	44.7
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	630757	44.3864	44.4
81 tert-Butylbenzene	119	15.709	15.703	(0.971)	739251	44.5943	44.6
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	763725	44.1218	44.1
83 sec-Butylbenzene	105	15.935	15.929	(0.985)	999657	45.2102	45.2
84 4-Isopropyltoluene	119	16.057	16.051	(0.992)	790828	43.6215	43.6
89 n-Butylbenzene	91	16.508	16.502	(1.020)	742580	44.0504	44.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.526	(1.084)	64094	53.7168	53.7

Data File: /chem/VOA4.i/120109v4/4n219.d
Date : 02-DEC-2009 01:18
Client ID: RE03-09-14130MSD
Sample Info: 1120198453219261351|VOAF|1|
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

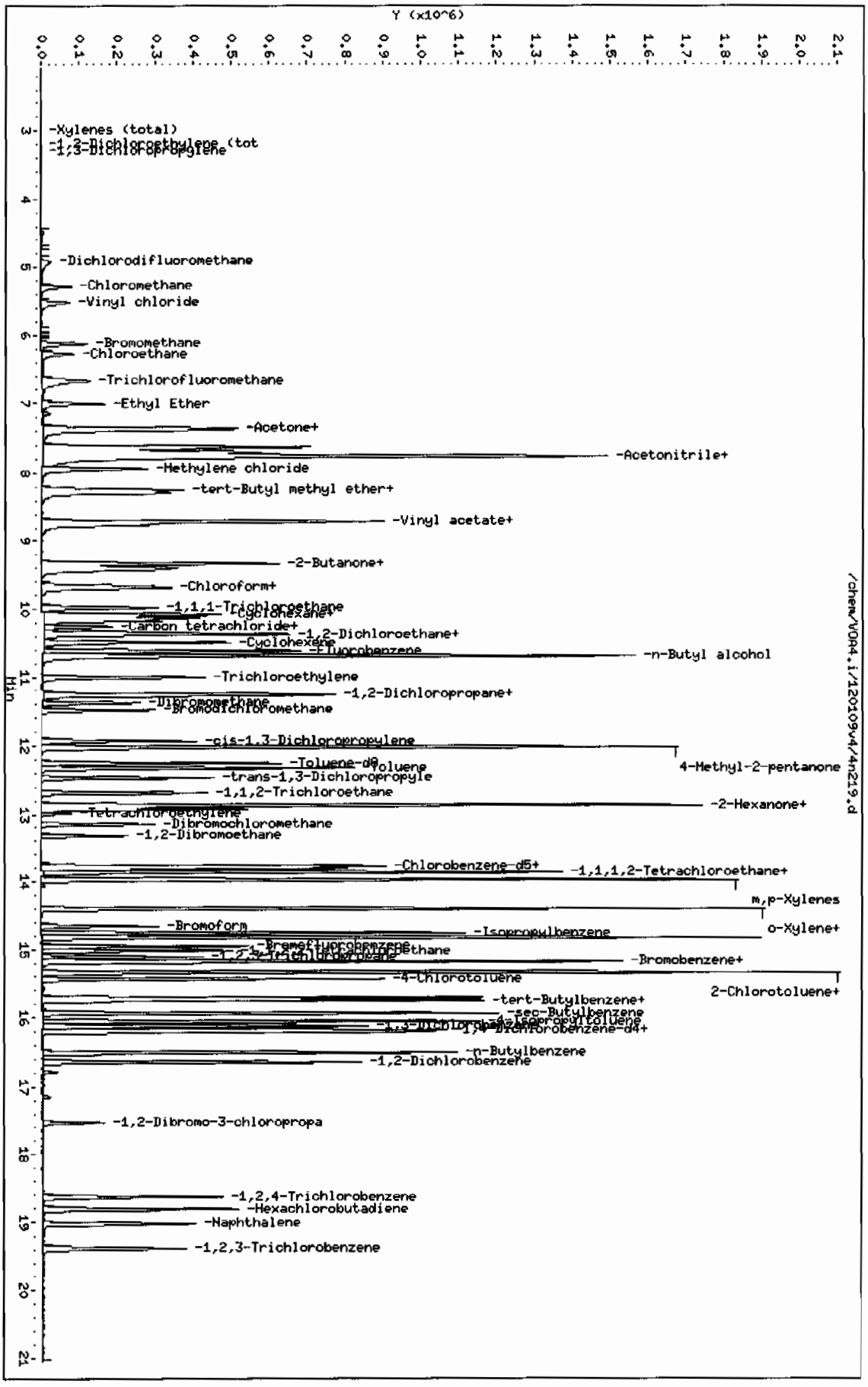

Page 1

Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **928134** Verified by: _____

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201984533 LCS	01-DEC-2009 15:30:00	Soil	5	5	1	
1201984534 LCS	01-DEC-2009 15:45:00	Soil	5	5	1	
1201984530 MB	01-DEC-2009 16:00:00	Soil	5	5	1	
241827001	01-DEC-2009 21:10:00	Soil	5	5	1	
1201984531 PS (241827001)	01-DEC-2009 21:11:00	Soil	5	5	1	
1201984532 PSD (241827001)	01-DEC-2009 21:12:00	Soil	5	5	1	
241827002	01-DEC-2009 21:13:00	Soil	5	5	1	
241827003	01-DEC-2009 21:14:00	Soil	5	5	1	
241827004	01-DEC-2009 21:15:00	Soil	5	5	1	
241827005	01-DEC-2009 21:16:00	Soil	5	5	1	
241827006	01-DEC-2009 21:17:00	Soil	5	5	1	
1201988491 LCS	02-DEC-2009 17:00:00	Soil	5	5	1	
1201988492 LCS	02-DEC-2009 17:15:00	Soil	5	5	1	
1201988490 MB	02-DEC-2009 17:30:00	Soil	5	5	1	
241838001	02-DEC-2009 20:22:00	Soil	5	5	1	
241838002	02-DEC-2009 20:23:00	Soil	5	5	1	
241903001	02-DEC-2009 20:24:00	Soil	5	5	1	
241903002	02-DEC-2009 20:25:00	Soil	5	5	1	
241907001	02-DEC-2009 20:26:00	Soil	5	5	1	
241907002	02-DEC-2009 20:27:00	Soil	5	5	1	
241907003	02-DEC-2009 20:28:00	Soil	5	5	1	
241911001	02-DEC-2009 20:29:00	Soil	5	5	1	
241911002	02-DEC-2009 20:30:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 11/22/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 112209V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM091117-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS					
BFB	UVM091020-02				1
SHORT					
DHEC					

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
11/22/2009 9:20	4L701.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
11/22/2009 9:47	4L702.D	12019----	GEL	BLANK	5ML	1	N/A	2	w	ACJ	N/A	X	
11/22/2009 10:14	4L703.D	W4VM091122-01	GEL	VSTD0005	5ML	1	N/A	3	w	ACJ	N/A	O	UVM090911-01C/UVM091116-01A
11/22/2009 10:41	4L704.D	W4VM091122-02	GEL	VSTD001	5ML	1	N/A	4	w	ACJ	N/A	X	UVM090911-02C/UVM091116-02A;NOT NEEDED
11/22/2009 11:09	4L705.D	W4VM091122-03	GEL	VSTD001	5ML	1	N/A	5	w	ACJ	N/A	O	UVM090911-02C/UVM091116-02A
11/22/2009 11:36	4L706.D	W4VM091122-04	GEL	VSTD002	5ML	1	N/A	6	w	ACJ	N/A	O	UVM090911-03C/UVM091116-03A
11/22/2009 12:04	4L707.D	W4VM091122-05	GEL	VSTD005	5ML	1	N/A	7	w	ACJ	N/A	O	UVM090911-04C/UVM091116-04A
11/22/2009 12:31	4L708.D	W4VM091122-06	GEL	VSTD010	5ML	1	N/A	8	w	ACJ	N/A	O	UVM090911-05C/UVM091116-05A
11/22/2009 12:59	4L709.D	W4VM091122-07	GEL	VSTD020	5ML	1	N/A	9	w	ACJ	N/A	O	UVM090911-06C/UVM091116-06A
11/22/2009 13:27	4L710.D	W4VM091122-08	GEL	VSTD050	5ML	1	N/A	10	w	ACJ	N/A	O	UVM090911-07C/UVM091116-07A
11/22/2009 13:54	4L711.D	W4VM091122-09	GEL	VSTD100	5ML	1	N/A	11	w	ACJ	N/A	O	UVM090911-08C/UVM091116-08A
11/22/2009 14:21	4L712.D	12019----	GEL	BLANK	5ML	1	N/A	12	w	ACJ	N/A	X	
11/22/2009 14:48	4L713.D	W4VM091122-10	GEL	VSTD005S	5ML	1	N/A	13	w	ACJ	N/A	O	UVM091110-01A/UVM091118-01
11/22/2009 15:16	4L714.D	W4VM091122-11	GEL	VSTD010S	5ML	1	N/A	14	w	ACJ	N/A	O	UVM091110-02A/UVM091118-02
11/22/2009 15:43	4L715.D	W4VM091122-12	GEL	VSTD025S	5ML	1	N/A	15	w	ACJ	N/A	O	UVM091110-03A/UVM091118-03
11/22/2009 16:10	4L716.D	W4VM091122-13	GEL	VSTD050S	5ML	1	N/A	16	w	ACJ	N/A	O	UVM091110-04A/UVM091118-04
11/22/2009 16:37	4L717.D	W4VM091122-14	GEL	VSTD100S	5ML	1	N/A	17	w	ACJ	N/A	X	UVM091110-05A/UVM091118-05; chlorotrifluoroethylene high
11/22/2009 17:04	4L718.D	W4VM091122-15	GEL	VSTD250S	5ML	1	N/A	18	w	ACJ	N/A	O	UVM091110-06A/UVM091118-06
11/22/2009 17:32	4L719.D	W4VM091122-16	GEL	VSTD500S	5ML	1	N/A	19	w	ACJ	N/A	O	UVM091110-07A/UVM091118-07
11/22/2009 17:59	4L720.D	12019----	GEL	BLANK	5ML	1	N/A	20	w	ACJ	N/A	X	
11/22/2009 18:26	4L721.D	W4VM091122-17	GEL	ICV	5ML	1	N/A	21	w	ACJ	N/A	X	UVM091105-01A/IVM091122-01
11/22/2009 18:53	4L722.D	W4VM091122-18	GEL	ICV	5ML	1	N/A	22	w	ACJ	N/A	O	UVM091111-01C/IVM091122-01
11/22/2009 19:21	4L723.D	W4VM091122-19	GEL	SHORTICV	5ML	1	N/A	23	w	ACJ	N/A	O	UVM091105-02B/UVM091118-08A

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 12/1/2009 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/22/2009

(See pg. 175 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # _____

Sequence Number: 120109V4

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM091201-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM090821-02	1	1	1	
LCS/MS	W4VM091201-01/02			5+5	
BFB	UVM091020-02				1
SHORT	UVM091118-08A		5	5	
DHEC	N/A			5	

Purge Amount

5	Water Purge Vol:
5	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
1 Dec 2009 15:40	4N201.D	UVM090821-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
1 Dec 2009 16:07	4N202.D	W4VM091201-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091111-01E/IVM091130-01
1 Dec 2009 16:35	4N203.D	W4VM091201-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091111-01E/IVM091130-01
1 Dec 2009 17:02	4N204.D	UVM091118-08A	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	
1 Dec 2009 17:30	4N205.D	UVM091118-08A	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	
1 Dec 2009 17:57	4N206.D	12019----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
1 Dec 2009 18:24	4N207.D	12019----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	O	
1 Dec 2009 20:15	4N208.D	241615006	LANL	927711	5G	1	N/A	8	S	ACJ	N/A	X	CONFIRMS 4N115
1 Dec 2009 20:43	4N209.D	241615010	LANL	927711	5G	1	N/A	9	S	ACJ	N/A	O	
1 Dec 2009 21:12	4N210.D	241752001	WSRS	928131	5ML	1	PH7	10	W	ACJ	N	O	
1 Dec 2009 21:40	4N211.D	12019----	GEL	BLANK	5ML	1	N/A	11	W	ACJ	N/A	X	
1 Dec 2009 22:07	4N212.D	241827001	LANL	928135	5G	1	N/A	12	S	ACJ	N/A	O	
1 Dec 2009 22:35	4N213.D	241827002	LANL	928135	5G	1	N/A	13	S	ACJ	N/A	O	
1 Dec 2009 23:02	4N214.D	241827003	LANL	928135	5G	1	N/A	14	S	ACJ	N/A	O	
1 Dec 2009 23:30	4N215.D	241827004	LANL	928135	5G	1	N/A	15	S	ACJ	N/A	O	
1 Dec 2009 23:57	4N216.D	241827005	LANL	928135	5G	1	N/A	16	S	ACJ	N/A	O	
2 Dec 2009 00:24	4N217.D	241827006	LANL	928135	5G	1	N/A	17	S	ACJ	N/A	O	
2 Dec 2009 00:51	4N218.D	1201984531	LANL	928135	5G	1	N/A	18	S	ACJ	N/A	O	MS 241827001
2 Dec 2009 01:18	4N219.D	1201984532	LANL	928135	5G	1	N/A	19	S	ACJ	N/A	O	MSD 241827001; IS LOW; confirmed by 4n325
2 Dec 2009 01:46	4N220.D	1201983685	LANL	927711	5G	1	N/A	20	S	ACJ	N/A	O	MS 241615001
2 Dec 2009 02:13	4N221.D	1201983686	LANL	927711	5G	1	N/A	21	S	ACJ	N/A	O	MSD 241615001
2 Dec 2009 02:40	4N222.D	1201984527	WSRS	928131	5ML	1	PH7	22	W	ACJ	N	O	MS 241752001
2 Dec 2009 03:07	4N223.D	1201984528	WSRS	928131	5ML	1	PH7	23	W	ACJ	N	O	MSD 241752001

NCR Report No.: 766675
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
928135	See Below		

Potentially affected work order(s)(SDG): 241827(10-668),241838(10-670),241903(10-690),241907(10-692),241911(10-694)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Other

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. QC samples 1201984531MS and 1201984532MSD were outside the RPD acceptance limits for Methylene Chloride and Chloromethane.	1. Narrate and report data. The MS/MSD was reanalyzed with multiple RPD failures. It is believed matrix interference has been demonstrated.
2. QC sample 1201984532MSD was below the internal standard response recovery acceptance criteria.	2. Narrate and report data. The MSD was reanalyzed with similar results. It is believed matrix interference has been demonstrated.

Originator's Name:

Amy Jamison 07-DEC-09

Data Validator/Group Leader:

Kelle Bellamy 07-DEC-09

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-668

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	928249
Prep Batch Number:	928248

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241827001	RE03-09-14130
241827004	RE03-10-2732
241827005	RE03-10-2733
241827006	RE03-10-2731
1201984850	Method Blank (MB)
1201984851	Laboratory Control Sample (LCS)
1201984852	241911001(WST49-10-5432) Matrix Spike (MS)
1201984853	241911001(WST49-10-5432) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the

Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
1201984851LCS failed recovery for p-Nitroaniline high. This failure is less than 5% of the total requested analytes, is biased high, and there were no hits of this analyte in any of the samples.

QC Sample Designation
Sample 241911001 (WST49-10-5432) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were not within the acceptance limits. The failures confirm in the MSD and are attributed to matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the acceptance limits. The failures confirm in the MS and are attributed to matrix interference.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 766479 1201984851 (LCS), 1201984852 (WST49-10-5432) and 1201984853 (WST49-10-5432).

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration
The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD5.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: [signature] **Date:** 12-18-09

Roadmap for LANL 10-668 SVOA

This roadmap was analyzed by rmb on 12-07-2009, 09:08.
This roadmap was reviewed by bar00895 on 12-07-2009, 12:10.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s120409.b/s5l0408.d	241827001	04-DEC-2009	13:08	10-668.sub	RE03-09-14130	1	928249	
☐	N	/chem/MSD5.i/s120409.b/s5l0409.d	241827004	04-DEC-2009	13:30	10-668.sub	RE03-10-2732	1	928249	
☐	N	/chem/MSD5.i/s120409.b/s5l0410.d	241827005	04-DEC-2009	13:53	10-668.sub	RE03-10-2733	1	928249	
☐	N	/chem/MSD5.i/s120409.b/s5l0411.d	241827006	04-DEC-2009	14:16	10-668.sub	RE03-10-2731	1	928249	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s120409.b/s5l0404.d	1201984850	mb	04-DEC-2009	11:37	10-668.sub	SBLK01	1	928249	
☐	N	/chem/MSD5.i/s120409.b/s5l0405.d	1201984851	lcs	04-DEC-2009	11:59	10-668.sub	SBLK01LCS	1	928249	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:08	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s5l0408.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	332	ug/kg	66.4	332
108-95-2	Phenol	U	332	ug/kg	66.4	332
95-57-8	2-Chlorophenol	U	332	ug/kg	66.4	332
106-46-7	1,4-Dichlorobenzene	U	332	ug/kg	66.4	332
621-64-7	N-Nitrosodipropylamine	U	332	ug/kg	66.4	332
59-50-7	4-Chloro-3-methylphenol	U	332	ug/kg	66.4	332
83-32-9	Acenaphthene	U	33.2	ug/kg	11.0	33.2
121-14-2	2,4-Dinitrotoluene	U	332	ug/kg	33.2	332
100-02-7	4-Nitrophenol	U	332	ug/kg	110	332
87-86-5	Pentachlorophenol	U	332	ug/kg	83.0	332
129-00-0	Pyrene	U	33.2	ug/kg	9.96	33.2
110-86-1	Pyridine	U	332	ug/kg	66.4	332
62-53-3	Aniline	U	332	ug/kg	99.6	332
111-44-4	bis(2-Chloroethyl) ether	U	332	ug/kg	66.4	332
541-73-1	1,3-Dichlorobenzene	U	332	ug/kg	66.4	332
100-51-6	Benzyl alcohol	U	332	ug/kg	99.6	332
95-50-1	1,2-Dichlorobenzene	U	332	ug/kg	66.4	332
108-60-1	bis(2-Chloroisopropyl)ether	U	332	ug/kg	66.4	332
95-48-7	o-Cresol	U	332	ug/kg	66.4	332
65794-96-9	m,p-Cresols	U	332	ug/kg	99.6	332
67-72-1	Hexachloroethane	U	332	ug/kg	66.4	332
98-95-3	Nitrobenzene	U	332	ug/kg	66.4	332
78-59-1	Isophorone	U	332	ug/kg	66.4	332
88-75-5	2-Nitrophenol	U	332	ug/kg	66.4	332
105-67-9	2,4-Dimethylphenol	U	332	ug/kg	116	332
111-91-1	bis(2-Chloroethoxy)methane	U	332	ug/kg	66.4	332
120-83-2	2,4-Dichlorophenol	U	332	ug/kg	66.4	332
65-85-0	Benzoic acid	U	664	ug/kg	166	664
91-20-3	Naphthalene	U	33.2	ug/kg	9.96	33.2
106-47-8	4-Chloroaniline	U	332	ug/kg	66.4	332
87-68-3	Hexachlorobutadiene	U	332	ug/kg	66.4	332
91-57-6	2-Methylnaphthalene	U	33.2	ug/kg	6.64	33.2
77-47-4	Hexachlorocyclopentadiene	U	332	ug/kg	66.4	332
88-06-2	2,4,6-Trichlorophenol	U	332	ug/kg	66.4	332
95-95-4	2,4,5-Trichlorophenol	U	332	ug/kg	66.4	332
91-58-7	2-Chloronaphthalene	U	33.2	ug/kg	11.0	33.2
88-74-4	2-Nitroaniline	U	332	ug/kg	66.4	332
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	332	ug/kg	66.4	332

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14130	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:08	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s5I0408.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	332	ug/kg	66.4	332
606-20-2	2,6-Dinitrotoluene	U	332	ug/kg	33.2	332
208-96-8	Acenaphthylene	U	33.2	ug/kg	9.96	33.2
51-28-5	2,4-Dinitrophenol	U	664	ug/kg	126	664
132-64-9	Dibenzofuran	U	332	ug/kg	66.4	332
84-66-2	Diethylphthalate	U	332	ug/kg	66.4	332
86-73-7	Fluorene	U	33.2	ug/kg	9.96	33.2
7005-72-3	4-Chlorophenylphenylether	U	332	ug/kg	66.4	332
534-52-1	2-Methyl-4,6-dinitrophenol	U	332	ug/kg	66.4	332
100-01-6	4-Nitroaniline	U	332	ug/kg	99.6	332
	p-Nitroaniline					
122-39-4	Diphenylamine	U	332	ug/kg	66.4	332
122-66-7	Azobenzene	U	332	ug/kg	66.4	332
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	332	ug/kg	66.4	332
118-74-1	Hexachlorobenzene	U	332	ug/kg	66.4	332
85-01-8	Phenanthrene	U	33.2	ug/kg	9.96	33.2
120-12-7	Anthracene	U	33.2	ug/kg	6.64	33.2
84-74-2	Di-n-butylphthalate	U	332	ug/kg	66.4	332
206-44-0	Fluoranthene	U	33.2	ug/kg	9.96	33.2
85-68-7	Butylbenzylphthalate	U	332	ug/kg	66.4	332
56-55-3	Benzo(a)anthracene	U	33.2	ug/kg	9.96	33.2
91-94-1	3,3'-Dichlorobenzidine	U	332	ug/kg	99.6	332
218-01-9	Chrysene	U	33.2	ug/kg	9.96	33.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	332	ug/kg	66.4	332
117-84-0	Di-n-octylphthalate	U	332	ug/kg	66.4	332
205-99-2	Benzo(b)fluoranthene	U	33.2	ug/kg	9.96	33.2
207-08-9	Benzo(k)fluoranthene	U	33.2	ug/kg	9.96	33.2
50-32-8	Benzo(a)pyrene	U	33.2	ug/kg	9.96	33.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.2	ug/kg	9.96	33.2
53-70-3	Dibenzo(a,h)anthracene	U	33.2	ug/kg	9.96	33.2
191-24-2	Benzo(ghi)perylene	U	33.2	ug/kg	9.96	33.2
120-82-1	1,2,4-Trichlorobenzene	U	332	ug/kg	66.4	332

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	473	ug/kg		J
	Unknown Aldol Condensate	2.94	168	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827006	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2731	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 14:16	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	s510411.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.5	348
108-95-2	Phenol	U	348	ug/kg	69.5	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.5	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.5	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.5	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.5	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	86.9	348
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8
110-86-1	Pyridine	U	348	ug/kg	69.5	348
62-53-3	Aniline	U	348	ug/kg	104	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.5	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.5	348
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.5	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.5	348
95-48-7	o-Cresol	U	348	ug/kg	69.5	348
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.5	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.5	348
78-59-1	Isophorone	U	348	ug/kg	69.5	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.5	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.5	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.5	348
65-85-0	Benzoic acid	U	695	ug/kg	174	695
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.5	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.5	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.95	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.5	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.5	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.5	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	348	ug/kg	69.5	348
99-09-2	3-Nitroaniline	U	348	ug/kg	69.5	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-10-2731**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928249**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:16**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 22:31**	**Aliquot:**	**30.01 g**	**Final Volume:**	**1 mL**
Data File:	**s510411.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.5	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8
51-28-5	2,4-Dinitrophenol	U	695	ug/kg	132	695
132-64-9	Dibenzofuran	U	348	ug/kg	69.5	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.5	348
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.5	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.5	348
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.5	348
122-66-7	Azobenzene	U	348	ug/kg	69.5	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.5	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.5	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.95	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.5	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.5	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	348	ug/kg	69.5	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.5	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.5	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	220	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:30	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s510409.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	332	ug/kg	66.5	332
108-95-2	Phenol	U	332	ug/kg	66.5	332
95-57-8	2-Chlorophenol	U	332	ug/kg	66.5	332
106-46-7	1,4-Dichlorobenzene	U	332	ug/kg	66.5	332
621-64-7	N-Nitrosodipropylamine	U	332	ug/kg	66.5	332
59-50-7	4-Chloro-3-methylphenol	U	332	ug/kg	66.5	332
83-32-9	Acenaphthene	U	33.2	ug/kg	11.0	33.2
121-14-2	2,4-Dinitrotoluene	U	332	ug/kg	33.2	332
100-02-7	4-Nitrophenol	U	332	ug/kg	110	332
87-86-5	Pentachlorophenol	U	332	ug/kg	83.1	332
129-00-0	Pyrene	U	33.2	ug/kg	9.97	33.2
110-86-1	Pyridine	U	332	ug/kg	66.5	332
62-53-3	Aniline	U	332	ug/kg	99.7	332
111-44-4	bis(2-Chloroethyl) ether	U	332	ug/kg	66.5	332
541-73-1	1,3-Dichlorobenzene	U	332	ug/kg	66.5	332
100-51-6	Benzyl alcohol	U	332	ug/kg	99.7	332
95-50-1	1,2-Dichlorobenzene	U	332	ug/kg	66.5	332
108-60-1	bis(2-Chloroisopropyl)ether	U	332	ug/kg	66.5	332
95-48-7	o-Cresol	U	332	ug/kg	66.5	332
65794-96-9	m,p-Cresols	U	332	ug/kg	99.7	332
67-72-1	Hexachloroethane	U	332	ug/kg	66.5	332
98-95-3	Nitrobenzene	U	332	ug/kg	66.5	332
78-59-1	Isophorone	U	332	ug/kg	66.5	332
88-75-5	2-Nitrophenol	U	332	ug/kg	66.5	332
105-67-9	2,4-Dimethylphenol	U	332	ug/kg	116	332
111-91-1	bis(2-Chloroethoxy)methane	U	332	ug/kg	66.5	332
120-83-2	2,4-Dichlorophenol	U	332	ug/kg	66.5	332
65-85-0	Benzoic acid	U	665	ug/kg	166	665
91-20-3	Naphthalene	U	33.2	ug/kg	9.97	33.2
106-47-8	4-Chloroaniline	U	332	ug/kg	66.5	332
87-68-3	Hexachlorobutadiene	U	332	ug/kg	66.5	332
91-57-6	2-Methylnaphthalene	U	33.2	ug/kg	6.65	33.2
77-47-4	Hexachlorocyclopentadiene	U	332	ug/kg	66.5	332
88-06-2	2,4,6-Trichlorophenol	U	332	ug/kg	66.5	332
95-95-4	2,4,5-Trichlorophenol	U	332	ug/kg	66.5	332
91-58-7	2-Chloronaphthalene	U	33.2	ug/kg	11.0	33.2
88-74-4	2-Nitroaniline	U	332	ug/kg	66.5	332
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	332	ug/kg	66.5	332

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:30	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s510409.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	332	ug/kg	66.5	332
606-20-2	2,6-Dinitrotoluene	U	332	ug/kg	33.2	332
208-96-8	Acenaphthylene	U	33.2	ug/kg	9.97	33.2
51-28-5	2,4-Dinitrophenol	U	665	ug/kg	126	665
132-64-9	Dibenzofuran	U	332	ug/kg	66.5	332
84-66-2	Diethylphthalate	U	332	ug/kg	66.5	332
86-73-7	Fluorene	U	33.2	ug/kg	9.97	33.2
7005-72-3	4-Chlorophenylphenylether	U	332	ug/kg	66.5	332
534-52-1	2-Methyl-4,6-dinitrophenol	U	332	ug/kg	66.5	332
100-01-6	4-Nitroaniline	U	332	ug/kg	99.7	332
	p-Nitroaniline					
122-39-4	Diphenylamine	U	332	ug/kg	66.5	332
122-66-7	Azobenzene	U	332	ug/kg	66.5	332
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	332	ug/kg	66.5	332
118-74-1	Hexachlorobenzene	U	332	ug/kg	66.5	332
85-01-8	Phenanthrene	U	33.2	ug/kg	9.97	33.2
120-12-7	Anthracene	U	33.2	ug/kg	6.65	33.2
84-74-2	Di-n-butylphthalate	U	332	ug/kg	66.5	332
206-44-0	Fluoranthene	U	33.2	ug/kg	9.97	33.2
85-68-7	Butylbenzylphthalate	U	332	ug/kg	66.5	332
56-55-3	Benzo(a)anthracene	U	33.2	ug/kg	9.97	33.2
91-94-1	3,3'-Dichlorobenzidine	U	332	ug/kg	99.7	332
218-01-9	Chrysene	U	33.2	ug/kg	9.97	33.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	332	ug/kg	66.5	332
117-84-0	Di-n-octylphthalate	U	332	ug/kg	66.5	332
205-99-2	Benzo(b)fluoranthene	U	33.2	ug/kg	9.97	33.2
207-08-9	Benzo(k)fluoranthene	U	33.2	ug/kg	9.97	33.2
50-32-8	Benzo(a)pyrene	U	33.2	ug/kg	9.97	33.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.2	ug/kg	9.97	33.2
53-70-3	Dibenzo(a,h)anthracene	U	33.2	ug/kg	9.97	33.2
191-24-2	Benzo(ghi)perylene	U	33.2	ug/kg	9.97	33.2
120-82-1	1,2,4-Trichlorobenzene	U	332	ug/kg	66.5	332

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	251	ug/kg		J
	Unknown Aldol Condensate	2.94	279	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2733	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:53	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s5l0410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.3	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	113	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.0	344
129-00-0	Pyrene	U	34.4	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl)ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.3	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	344	ug/kg	68.8	344

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2733	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:53	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s5l0410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	U	34.4	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	U	34.4	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	p-Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene	U	34.4	ug/kg	10.3	34.4
120-12-7	Anthracene	U	34.4	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene	U	34.4	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene	U	34.4	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene	U	34.4	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene	U	34.4	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene	U	34.4	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.4	ug/kg	10.3	34.4
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene	U	34.4	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	203	ug/kg		JA

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-668

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201984850	MB for batch 928248	88	82	91	90	87	110
1201984851	LCS for batch 928248	78	73	86	82	88	103
241827001	RE03-09-14130	61	60	68	68	68	105
241827004	RE03-10-2732	67	63	73	73	73	111
241827005	RE03-10-2733	65	63	69	68	70	96
241827006	RE03-10-2731	64	62	69	67	61	91

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(35%-96%)
PHL	=	Phenol-d5	(36%-96%)
NBZ	=	Nitrobenzene-d5	(34%-104%)
FBP	=	2-Fluorobiphenyl	(36%-100%)
TBP	=	2,4,6-Tribromophenol	(37%-106%)
TPH	=	p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: LCS for batch 928248
Lab Sample ID: 1201984851
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:59
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1320	79	31-95
108-95-2	LCS	Phenol	1670	0.0	1250	75	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1220	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1200	72	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1460	88	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1330	80	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1350	81	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1400	84	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1480	89	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1570	94	38-116
129-00-0	LCS	Pyrene	1670	0.0	1570	94	43-108
110-86-1	LCS	Pyridine	1670	0.0	1250	75	13-129
62-53-3	LCS	Aniline	1670	0.0	1250	75	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1240	75	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1200	72	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1460	88	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1210	73	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1320	79	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1140	69	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1310	79	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1140	68	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1430	86	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 928248 **Matrix:** SOIL
Lab Sample ID: 1201984851
Instrument: MSD5.1 **Analysis Date:** 12/04/2009 11:59 **Dilution:** 1
Analyst: RMB **Prep Batch ID** 928248
Inj. Vol: .5 uL **Batch ID:** 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1370	82	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1240	75	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1380	83	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1330	80	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1360	82	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	3730	112	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1350	81	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1460	88	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1360	81	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1410	84	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1430	86	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1380	83	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1330	80	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1320	79	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1280	77	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1740	104	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1410	85	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1380	83	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1410	85	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1380	83	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1600	96	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1410	84	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: LCS for batch 928248
Lab Sample ID: 1201984851
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:59
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1400	84	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1380	83	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1250	75	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	2550	153 *	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1570	94	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1500	90	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1450	87	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1400	84	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1430	86	45-107
120-12-7	LCS	Anthracene	1670	0.0	1470	88	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1530	92	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1510	91	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1650	99	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1530	92	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1260	76	45-98
218-01-9	LCS	Chrysene	1670	0.0	1470	88	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1610	96	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1680	101	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1580	95	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1490	90	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1540	92	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1340	80	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 928248 **Matrix:** SOIL

Lab Sample ID: 1201984851

Instrument: MSD5.I **Analysis Date:** 12/04/2009 11:59 **Dilution:** 1

Analyst: RMB **Prep Batch ID** 928248

Inj. Vol: .5 uL **Batch ID:** 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1320	79	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1430	86	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1320	79	36-109

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: WST49-10-5432MS
Lab Sample ID: 1201984852
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:27
Prep Batch ID: 928248
Batch ID: 928249
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1680	0.00	U	1100	65	32-90
108-95-2	MS	Phenol	1680	0.00	U	1150	68	32-105
95-57-8	MS	2-Chlorophenol	1680	0.00	U	1100	65	33-106
106-46-7	MS	1,4-Dichlorobenzene	1680	0.00	U	1030	61	33-95
621-64-7	MS	N-Nitrosodipropylamine	1680	0.00	U	1340	80	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1680	0.00	U	1290	77	38-119
83-32-9	MS	Acenaphthene	1680	0.00	U	1220	72	39-100
121-14-2	MS	2,4-Dinitrotoluene	1680	0.00	U	1280	76	42-107
100-02-7	MS	4-Nitrophenol	1680	0.00	U	1160	69	24-120
87-86-5	MS	Pentachlorophenol	1680	0.00	U	1190	71	26-121
129-00-0	MS	Pyrene	1680	0.00	U	1550	92	34-120
110-86-1	MS	Pyridine	1680	0.00	U	954	57	30-95
62-53-3	MS	Aniline	1680	0.00	U	1200	71	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1680	0.00	U	1130	67	34-101
541-73-1	MS	1,3-Dichlorobenzene	1680	0.00	U	1030	61	31-97
100-51-6	MS	Benzyl alcohol	1680	0.00	U	856	51	17-120
95-50-1	MS	1,2-Dichlorobenzene	1680	0.00	U	1030	61	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1680	0.00	U	1170	70	32-113
95-48-7	MS	o-Cresol	1680	0.00	U	1250	74	31-119
65794-96-9	MS	m,p-Cresols	1680	0.00	U	1360	81	35-125
67-72-1	MS	Hexachloroethane	1680	0.00	U	928	55	30-100
98-95-3	MS	Nitrobenzene	1680	0.00	U	1300	77	33-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: WST49-10-5432MS
Lab Sample ID: 1201984852
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:27
Prep Batch ID: 928248
Batch ID: 928249
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1680	0.00	U	1290	77	34-110
88-75-5	MS	2-Nitrophenol	1680	0.00	U	1060	63	32-108
105-67-9	MS	2,4-Dimethylphenol	1680	0.00	U	1250	74	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1680	0.00	U	1250	74	35-108
120-83-2	MS	2,4-Dichlorophenol	1680	0.00	U	1320	78	38-110
65-85-0	MS	Benzoic acid	3370	0.00	U	1500	44	18-134
91-20-3	MS	Naphthalene	1680	0.00	U	1220	73	31-105
106-47-8	MS	4-Chloroaniline	1680	0.00	U	1450	86	29-123
87-68-3	MS	Hexachlorobutadiene	1680	0.00	U	1170	69	31-109
91-57-6	MS	2-Methylnaphthalene	1680	0.00	U	1330	79	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1680	0.00	U	615	36	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1680	0.00	U	1230	73	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1680	0.00	U	1370	81	37-116
91-58-7	MS	2-Chloronaphthalene	1680	0.00	U	1220	72	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1680	0.00	U	1220	72	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1680	0.00	U	1750	104	39-117
131-11-3	MS	Dimethylphthalate	1680	0.00	U	1330	79	41-105
606-20-2	MS	2,6-Dinitrotoluene	1680	0.00	U	1260	75	41-103
208-96-8	MS	Acenaphthylene	1680	0.00	U	1330	79	41-103
51-28-5	MS	2,4-Dinitrophenol	1680	0.00	U	633	38	25-104
132-64-9	MS	Dibenzofuran	1680	0.00	U	1500	89	40-114
84-66-2	MS	Diethylphthalate	1680	0.00	U	1320	78	43-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: WST49-10-5432MS
Lab Sample ID: 1201984852
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:27
Prep Batch ID: 928248
Batch ID: 928249
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1680	0.00	U	1300	77	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1680	0.00	U	1280	76	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1680	0.00	U	642	38	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1680	0.00	U	2660	158 *	35-139
122-39-4	MS	Diphenylamine	1680	0.00	U	1470	88	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1680	0.00	U	1400	83	37-118
101-55-3	MS	4-Bromophenylphenylether	1680	0.00	U	1300	77	39-112
118-74-1	MS	Hexachlorobenzene	1680	0.00	U	1270	75	38-113
85-01-8	MS	Phenanthrene	1680	0.00	U	1310	78	38-110
120-12-7	MS	Anthracene	1680	0.00	U	1350	80	38-112
84-74-2	MS	Di-n-butylphthalate	1680	0.00	U	1380	82	42-119
206-44-0	MS	Fluoranthene	1680	0.00	U	1340	80	38-119
85-68-7	MS	Butylbenzylphthalate	1680	0.00	U	1590	94	39-126
56-55-3	MS	Benzo(a)anthracene	1680	0.00	U	1350	80	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1680	0.00	U	1330	79	35-106
218-01-9	MS	Chrysene	1680	0.00	U	1320	79	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1680	70.0	J	1530	87	40-125
117-84-0	MS	Di-n-octylphthalate	1680	0.00	U	1920	114	30-147
205-99-2	MS	Benzo(b)fluoranthene	1680	0.00	U	1450	86	38-117
207-08-9	MS	Benzo(k)fluoranthene	1680	0.00	U	1470	87	39-120
50-32-8	MS	Benzo(a)pyrene	1680	0.00	U	1390	83	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1680	0.00	U	1060	63	32-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number:	10-668	**Sample Type:**	Matrix Spike
Client ID:	WST49-10-5432MS	**Matrix:**	S
Lab Sample ID:	1201984852	**%Moisture:**	1.5
Instrument:	MSD5.I	**Analysis Date:**	12/04/2009 18:27
Analyst:	RMB	**Prep Batch ID:**	928248
Inj. Vol:	.5 uL	**Batch ID:**	928249

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1680	0.00	U	1070	64	32-124
191-24-2	MS	Benzo(ghi)perylene	1680	0.00	U	1050	62	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1680	0.00	U	1180	70	31-105

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-668

Client ID: WST49-10-5432MSD

Lab Sample ID: 1201984853

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: S

%Moisture: 1.5

Analysis Date: 12/04/2009 18:50

Dilution: 1

Prep Batch ID: 928248

Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD	N-Methyl-N-nitrosomethylam	1690	0.00	U	1100	65	32-90	0	0-30
108-95-2	MSD	Phenol	1690	0.00	U	1160	69	32-105	1	0-30
95-57-8	MSD	2-Chlorophenol	1690	0.00	U	1110	66	33-106	1	0-30
106-46-7	MSD	1,4-Dichlorobenzene	1690	0.00	U	1060	63	33-95	3	0-30
621-64-7	MSD	N-Nitrosodipropylamine	1690	0.00	U	1340	79	31-109	0	0-30
59-50-7	MSD	4-Chloro-3-methylphenol	1690	0.00	U	1330	79	38-119	3	0-30
83-32-9	MSD	Acenaphthene	1690	0.00	U	1220	72	39-100	1	0-30
121-14-2	MSD	2,4-Dinitrotoluene	1690	0.00	U	1290	77	42-107	1	0-30
100-02-7	MSD	4-Nitrophenol	1690	0.00	U	1110	66	24-120	5	0-30
87-86-5	MSD	Pentachlorophenol	1690	0.00	U	1160	68	26-121	3	0-30
129-00-0	MSD	Pyrene	1690	0.00	U	1640	97	34-120	5	0-30
110-86-1	MSD	Pyridine	1690	0.00	U	982	58	30-95	3	0-30
62-53-3	MSD	Aniline	1690	0.00	U	1230	73	34-111	2	0-30
111-44-4	MSD	bis(2-Chloroethyl) ether	1690	0.00	U	1150	68	34-101	2	0-30
541-73-1	MSD	1,3-Dichlorobenzene	1690	0.00	U	1070	63	31-97	4	0-30
100-51-6	MSD	Benzyl alcohol	1690	0.00	U	809	48	17-120	6	0-30
95-50-1	MSD	1,2-Dichlorobenzene	1690	0.00	U	1070	63	32-102	3	0-30
108-60-1	MSD	bis(2-Chloroisopropyl)ether	1690	0.00	U	1200	71	32-113	2	0-30
95-48-7	MSD	o-Cresol	1690	0.00	U	1220	72	31-119	2	0-30
65794-96-9	MSD	m,p-Cresols	1690	0.00	U	1340	80	35-125	1	0-30
67-72-1	MSD	Hexachloroethane	1690	0.00	U	933	55	30-100	1	0-30
98-95-3	MSD	Nitrobenzene	1690	0.00	U	1320	78	33-108	1	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number:	10-668	Sample Type:	Matrix Spike Duplicate
Client ID:	WST49-10-5432MSD	Matrix:	S
Lab Sample ID:	1201984853	%Moisture:	1.5
Instrument:	MSD5.I	Analysis Date:	12/04/2009 18:50
Analyst:	RMB	Prep Batch ID:	928248
Inj. Vol:	.5 uL	Batch ID:	928249

Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1690	0.00	U	1320	78	34-110	2	0-30
88-75-5	MSD 2-Nitrophenol	1690	0.00	U	1080	64	32-108	2	0-30
105-67-9	MSD 2,4-Dimethylphenol	1690	0.00	U	1240	73	32-115	1	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1690	0.00	U	1250	74	35-108	0	0-30
120-83-2	MSD 2,4-Dichlorophenol	1690	0.00	U	1320	78	38-110	0	0-30
65-85-0	MSD Benzoic acid	3380	0.00	U	1270	37	18-134	17	0-30
91-20-3	MSD Naphthalene	1690	0.00	U	1230	73	31-105	0	0-30
106-47-8	MSD 4-Chloroaniline	1690	0.00	U	1490	88	29-123	3	0-30
87-68-3	MSD Hexachlorobutadiene	1690	0.00	U	1210	71	31-109	3	0-30
91-57-6	MSD 2-Methylnaphthalene	1690	0.00	U	1320	78	32-110	1	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1690	0.00	U	527	31	21-122	15	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1690	0.00	U	1230	73	37-108	0	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1690	0.00	U	1400	83	37-116	2	0-30
91-58-7	MSD 2-Chloronaphthalene	1690	0.00	U	1220	72	37-103	1	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1690	0.00	U	1240	73	36-115	2	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1690	0.00	U	1770	104	39-117	1	0-30
131-11-3	MSD Dimethylphthalate	1690	0.00	U	1360	81	41-105	2	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1690	0.00	U	1290	77	41-103	2	0-30
208-96-8	MSD Acenaphthylene	1690	0.00	U	1340	79	41-103	1	0-30
51-28-5	MSD 2,4-Dinitrophenol	1690	0.00	U	609	36	25-104	4	0-30
132-64-9	MSD Dibenzofuran	1690	0.00	U	1510	89	40-114	1	0-30
84-66-2	MSD Diethylphthalate	1690	0.00	U	1330	79	43-110	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: WST49-10-5432MSD
Lab Sample ID: 1201984853
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:50
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1690	0.00	U	1320	78	48-99	1	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1690	0.00	U	1310	78	42-111	2	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1690	0.00	U	617	37	19-118	4	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1690	0.00	U	2670	158 *	35-139	0	0-30
122-39-4	MSD	Diphenylamine	1690	0.00	U	1490	88	41-112	1	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1690	0.00	U	1410	83	37-118	0	0-30
101-55-3	MSD	4-Bromophenylphenylether	1690	0.00	U	1360	81	39-112	5	0-30
118-74-1	MSD	Hexachlorobenzene	1690	0.00	U	1300	77	38-113	3	0-30
85-01-8	MSD	Phenanthrene	1690	0.00	U	1330	79	38-110	2	0-30
120-12-7	MSD	Anthracene	1690	0.00	U	1380	82	38-112	3	0-30
84-74-2	MSD	Di-n-butylphthalate	1690	0.00	U	1400	83	42-119	1	0-30
206-44-0	MSD	Fluoranthene	1690	0.00	U	1350	80	38-119	1	0-30
85-68-7	MSD	Butylbenzylphthalate	1690	0.00	U	1700	101	39-126	7	0-30
56-55-3	MSD	Benzo(a)anthracene	1690	0.00	U	1390	82	39-110	3	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1690	0.00	U	1390	82	35-106	5	0-30
218-01-9	MSD	Chrysene	1690	0.00	U	1340	79	39-109	1	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1690	70.0	J	1590	90	40-125	4	0-30
117-84-0	MSD	Di-n-octylphthalate	1690	0.00	U	2210	131	30-147	14	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1690	0.00	U	1540	91	38-117	6	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1690	0.00	U	1570	93	39-120	6	0-30
50-32-8	MSD	Benzo(a)pyrene	1690	0.00	U	1420	84	40-115	2	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1690	0.00	U	1000	59	32-120	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: WST49-10-5432MSD
Lab Sample ID: 1201984853
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:50
Dilution: 1
Prep Batch ID 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD	Dibenzo(a,h)anthracene	1690	0.00	U	1000	59	32-124	7	0-30
191-24-2	MSD	Benzo(ghi)perylene	1690	0.00	U	974	58	28-119	7	0-30
120-82-1	MSD	1,2,4-Trichlorobenzene	1690	0.00	U	1180	70	31-105	0	0-30

Method Blank Summary

SDG Number:	10-668	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928248	Instrument ID:	MSD5.I	Data File:	s5l0404-2.d
Lab Sample ID:	1201984850	Prep Date:	12/02/2009 22:31	Analyzed:	12/04/09 11:37
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 928248	1201984851	s5l0405-2.d	12/04/09	1159
02	RE03-09-14130	241827001	s5l0408.d	12/04/09	1308
03	RE03-10-2732	241827004	s5l0409.d	12/04/09	1330
04	RE03-10-2733	241827005	s5l0410.d	12/04/09	1353
05	RE03-10-2731	241827006	s5l0411.d	12/04/09	1416

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-668

Instrument ID: MSD5.I **Injection Date/Time:** 04-DEC-09 10:24

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s120409.b/s5I0401.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	32.8
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	38.8
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	45.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	27.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	78
442	Greater than 40% of mass 198	56.8
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD5.i/s120409.b/s5I0402	04-DEC-09 10:38
AP12CVS	WBN091201-03.4	/chem/MSD5.i/s120409.b/s5I0403	04-DEC-09 11:06
SBLK01	1201984850	/chem/MSD5.i/s120409.b/s5I0404	04-DEC-09 11:37
SBLK01LCS	1201984851	/chem/MSD5.i/s120409.b/s5I0405	04-DEC-09 11:59
RE03-09-14130	241827001	/chem/MSD5.i/s120409.b/s5I0408	04-DEC-09 13:08
RE03-10-2732	241827004	/chem/MSD5.i/s120409.b/s5I0409	04-DEC-09 13:30
RE03-10-2733	241827005	/chem/MSD5.i/s120409.b/s5I0410	04-DEC-09 13:53
RE03-10-2731	241827006	/chem/MSD5.i/s120409.b/s5I0411	04-DEC-09 14:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-668

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN091106-08	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:09
MEGAICAL010	WBN091106-07	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:38
MEGAICAL020	WBN091106-06	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:06
MEGAICAL040	WBN091106-05.1	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:34
MEGAICAL050	WBN091106-04	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:02
MEGAICAL080	WBN091106-03	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:31
MEGAICAL100	WBN091106-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 16:59
MEGAICAL120	WBN091106-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 17:28
MEGAICV	WBN091106-09.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:20
AP12ICAL010	WBN091111-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:48
AP12ICAL020	WBN091111-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:10
AP12ICAL040	WBN091111-03.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:34
AP12ICAL050	WBN091111-04	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:57
AP12ICAL080	WBN091111-05	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:20
AP12ICAL100	WBN091111-06	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:42
AP12ICAL120	WBN091111-07	/chem/MSD5.i/s113009.b/s5k303	30-NOV-09 21:05

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-668

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICV	WBN091111-08.1	/chem/MSD5.i/s113009.b/s5k303	01-DEC-09 00:10

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-668

Instrument: MSD5.I

STD Analysis Time: 04-DEC-09 10:38

GC Column: J&W DB-5MS

Data File: s510402.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	413613		3.92	1545687		4.79	886910		6.05	1593509		7.22	1621115		9.64	1429948		11.3
Upper Limit	827226		4.42	3091374		5.29	1773820		6.55	3187018		7.72	3242230		10.1	2859896		11.8
Lower Limit	206807		3.42	772844		4.29	443455		5.55	796755		6.72	810558		9.14	714974		10.8
Sample ID																		
BLK01	443813		3.91	1533750		4.78	954698		6.04	1694929		7.22	1707181		9.63	1540320		11.3
BLK01LCS	433913		3.91	1604371		4.79	904978		6.05	1639318		7.22	1639884		9.64	1442784		11.3
RE03-09-14130	457219		3.91	1563386		4.78	958880		6.04	1670205		7.22	1388672		9.64	897629		11.3
RE03-10-2732	432775		3.91	1481954		4.78	910320		6.04	1616707		7.22	1456141		9.64	1031013		11.3
RE03-10-2733	426431		3.91	1492147		4.78	924539		6.04	1669829		7.22	1527638		9.64	1168619		11.3
RE03-10-2731	435014		3.91	1542831		4.78	946689		6.04	1690430		7.22	1474083		9.64	1037684		11.3

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-09-14130	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:08	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s5l0408.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	332	ug/kg	66.4	332
108-95-2	Phenol	U	332	ug/kg	66.4	332
95-57-8	2-Chlorophenol	U	332	ug/kg	66.4	332
106-46-7	1,4-Dichlorobenzene	U	332	ug/kg	66.4	332
621-64-7	N-Nitrosodipropylamine	U	332	ug/kg	66.4	332
59-50-7	4-Chloro-3-methylphenol	U	332	ug/kg	66.4	332
83-32-9	Acenaphthene	U	33.2	ug/kg	11.0	33.2
121-14-2	2,4-Dinitrotoluene	U	332	ug/kg	33.2	332
100-02-7	4-Nitrophenol	U	332	ug/kg	110	332
87-86-5	Pentachlorophenol	U	332	ug/kg	83.0	332
129-00-0	Pyrene	U	33.2	ug/kg	9.96	33.2
110-86-1	Pyridine	U	332	ug/kg	66.4	332
62-53-3	Aniline	U	332	ug/kg	99.6	332
111-44-4	bis(2-Chloroethyl) ether	U	332	ug/kg	66.4	332
541-73-1	1,3-Dichlorobenzene	U	332	ug/kg	66.4	332
100-51-6	Benzyl alcohol	U	332	ug/kg	99.6	332
95-50-1	1,2-Dichlorobenzene	U	332	ug/kg	66.4	332
108-60-1	bis(2-Chloroisopropyl)ether	U	332	ug/kg	66.4	332
95-48-7	o-Cresol	U	332	ug/kg	66.4	332
65794-96-9	m,p-Cresols	U	332	ug/kg	99.6	332
67-72-1	Hexachloroethane	U	332	ug/kg	66.4	332
98-95-3	Nitrobenzene	U	332	ug/kg	66.4	332
78-59-1	Isophorone	U	332	ug/kg	66.4	332
88-75-5	2-Nitrophenol	U	332	ug/kg	66.4	332
105-67-9	2,4-Dimethylphenol	U	332	ug/kg	116	332
111-91-1	bis(2-Chloroethoxy)methane	U	332	ug/kg	66.4	332
120-83-2	2,4-Dichlorophenol	U	332	ug/kg	66.4	332
65-85-0	Benzoic acid	U	664	ug/kg	166	664
91-20-3	Naphthalene	U	33.2	ug/kg	9.96	33.2
106-47-8	4-Chloroaniline	U	332	ug/kg	66.4	332
87-68-3	Hexachlorobutadiene	U	332	ug/kg	66.4	332
91-57-6	2-Methylnaphthalene	U	33.2	ug/kg	6.64	33.2
77-47-4	Hexachlorocyclopentadiene	U	332	ug/kg	66.4	332
88-06-2	2,4,6-Trichlorophenol	U	332	ug/kg	66.4	332
95-95-4	2,4,5-Trichlorophenol	U	332	ug/kg	66.4	332
91-58-7	2-Chloronaphthalene	U	33.2	ug/kg	11.0	33.2
88-74-4	2-Nitroaniline	U	332	ug/kg	66.4	332
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	332	ug/kg	66.4	332

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-09-14130	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:08	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s510408.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	332	ug/kg	66.4	332
606-20-2	2,6-Dinitrotoluene	U	332	ug/kg	33.2	332
208-96-8	Acenaphthylene	U	33.2	ug/kg	9.96	33.2
51-28-5	2,4-Dinitrophenol	U	664	ug/kg	126	664
132-64-9	Dibenzofuran	U	332	ug/kg	66.4	332
84-66-2	Diethylphthalate	U	332	ug/kg	66.4	332
86-73-7	Fluorene	U	33.2	ug/kg	9.96	33.2
7005-72-3	4-Chlorophenylphenylether	U	332	ug/kg	66.4	332
534-52-1	2-Methyl-4,6-dinitrophenol	U	332	ug/kg	66.4	332
100-01-6	4-Nitroaniline	U	332	ug/kg	99.6	332
	p-Nitroaniline					
122-39-4	Diphenylamine	U	332	ug/kg	66.4	332
122-66-7	Azobenzene	U	332	ug/kg	66.4	332
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	332	ug/kg	66.4	332
118-74-1	Hexachlorobenzene	U	332	ug/kg	66.4	332
85-01-8	Phenanthrene	U	33.2	ug/kg	9.96	33.2
120-12-7	Anthracene	U	33.2	ug/kg	6.64	33.2
84-74-2	Di-n-butylphthalate	U	332	ug/kg	66.4	332
206-44-0	Fluoranthene	U	33.2	ug/kg	9.96	33.2
85-68-7	Butylbenzylphthalate	U	332	ug/kg	66.4	332
56-55-3	Benzo(a)anthracene	U	33.2	ug/kg	9.96	33.2
91-94-1	3,3'-Dichlorobenzidine	U	332	ug/kg	99.6	332
218-01-9	Chrysene	U	33.2	ug/kg	9.96	33.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	332	ug/kg	66.4	332
117-84-0	Di-n-octylphthalate	U	332	ug/kg	66.4	332
205-99-2	Benzo(b)fluoranthene	U	33.2	ug/kg	9.96	33.2
207-08-9	Benzo(k)fluoranthene	U	33.2	ug/kg	9.96	33.2
50-32-8	Benzo(a)pyrene	U	33.2	ug/kg	9.96	33.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.2	ug/kg	9.96	33.2
53-70-3	Dibenzo(a,h)anthracene	U	33.2	ug/kg	9.96	33.2
191-24-2	Benzo(ghi)perylene	U	33.2	ug/kg	9.96	33.2
120-82-1	1,2,4-Trichlorobenzene	U	332	ug/kg	66.4	332

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	473	ug/kg		J
	Unknown Aldol Condensate	2.94	168	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510408.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 04-DEC-2009 13:08
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827001|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	0.03430	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	457219	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1563386	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.049	(1.000)	958880	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1670205	40.0000	
* 91 Chrysene-d12	240	9.636	9.641	(1.000)	1388672	40.0000	
* 98 Perylene-d12	264	11.319	11.331	(1.000)	897629	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.793)	580370	61.2950	2040
$ 5 Phenol-d5	99	3.625	3.632	(0.926)	709295	60.3977	2000
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	340131	34.0286	1130
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	826664	34.1258	1130
$ 60 2,4,6-Tribromophenol	329	6.642	6.651	(1.099)	240076	67.6851	2250
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1045007	52.6202	1750

ION RATIO REPORT

SV REPORT

Data file: s510408.d
Report Date: 12/04/2009 13:30
Lab. ID: 241827001 SampleType: SAMPLE
Injection Date: 04-DEC-2009 13:08
Operator: RMB Instrument: MSD5.i
Sample Info: |241827001|928249|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091117-01
Comment:
Method used: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	41553	3.62	3.70	80-120	100	(T)
93	129	3.62	3.70	241-301	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	51223	4.28	4.16	80-120	100	(T)
42	25404	4.28	4.16	27- 87	50	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	172829	6.05	5.81	80-120	100	(T)
164	958880	6.04	5.81	0- 40	555	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	128156	6.04	5.87	80-120	100	(T)
63	1404	6.04	5.87	38- 98	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	128156	6.04	6.16	80-120	100	(T)
89	1713	6.04	6.16	36- 96	1	(QT)
63	1404	6.04	6.16	10- 70	1	(QT)
53 Fluorene				CAS#: 86-73-7		
166	11378	6.64	6.46	80-120	100	(T)
165	12065	6.64	6.46	62-122	106	(T)
167	4131	6.64	6.46	0- 44	36	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	1025	6.64	6.48	80-120	100	(T)
105	1783	6.64	6.48	5- 65	174	(QT)
51	1085	6.64	6.48	5- 65	106	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	15669	6.64	6.82	80-120	100	(T)
141	96539	6.64	6.82	36- 96	616	(QT)
250	32095	6.64	6.82	68-128	205	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510408.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 04-DEC-2009 13:08
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827001|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	0.03430	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.913	2673684	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.031	952888	14.2557985	473	0		0	10
Unknown Aldol Condensate				CAS #:			
2.937	337786	5.05348358	168	0		0	10

Data File: /chem/MSD5.i/s120409.b/s510408.d

Date : 04-DEC-2009 13:08

Client ID: RE03-09-14130

Sample Info: |241827001|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

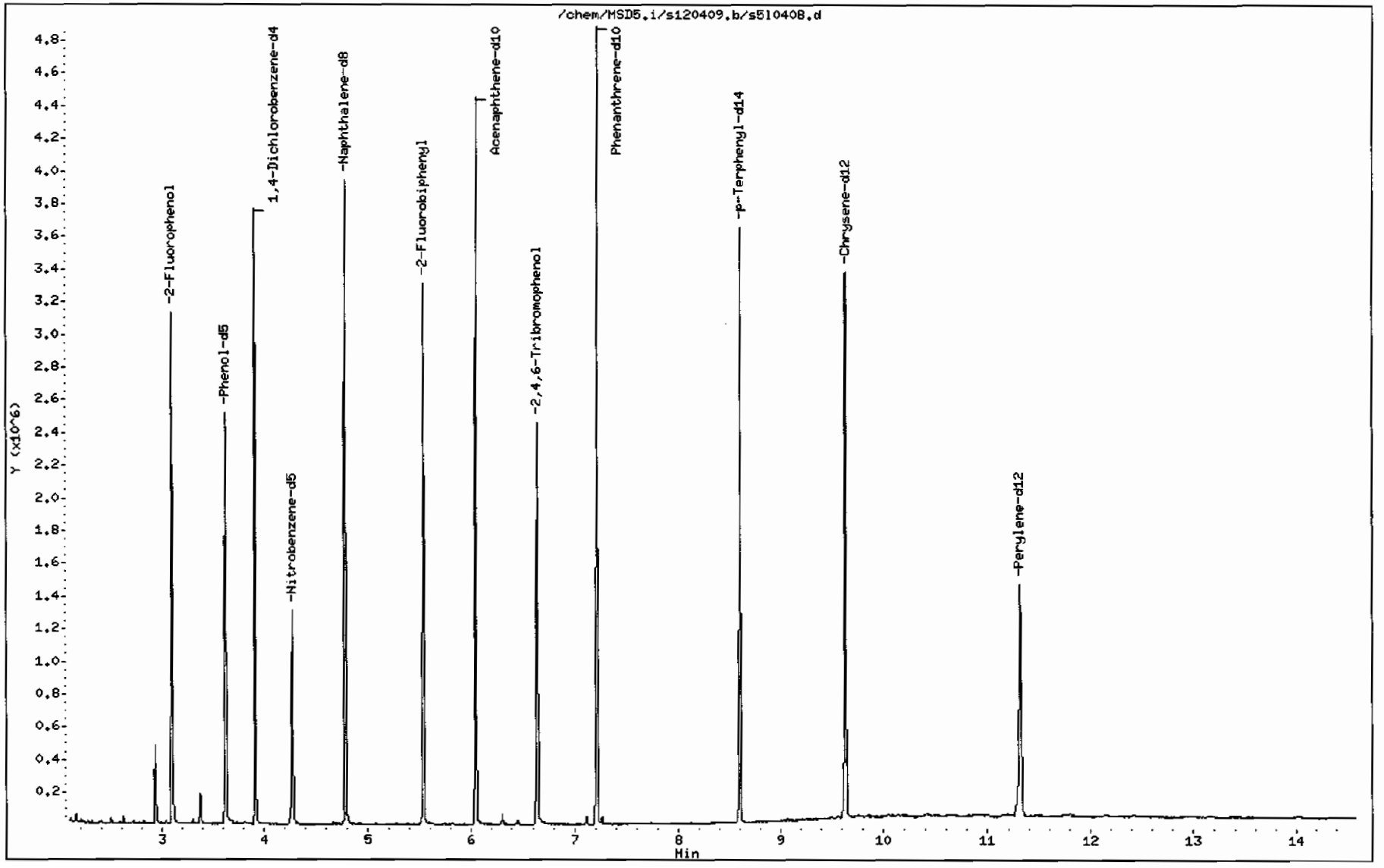

Data File: /chem/MSD5.i/s120409.b/s510408.d

Date : 04-DEC-2009 13:08

Client ID: RE03-09-14130

Instrument: MSD5.i

Sample Info: 1241827001|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	50	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	9	C3H7NO	73

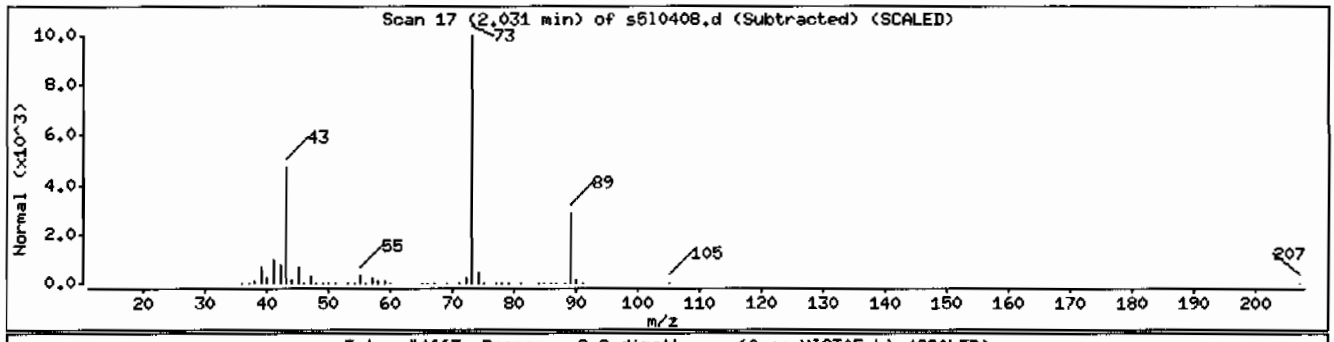

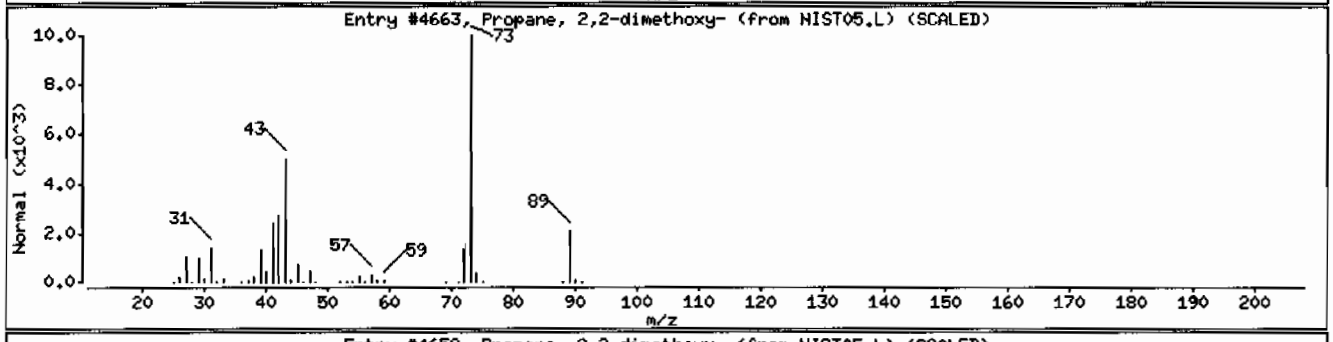

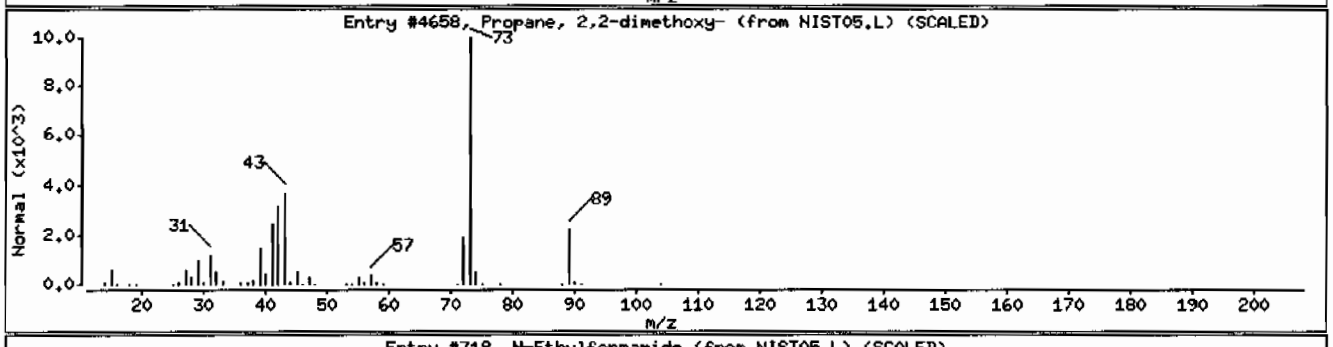

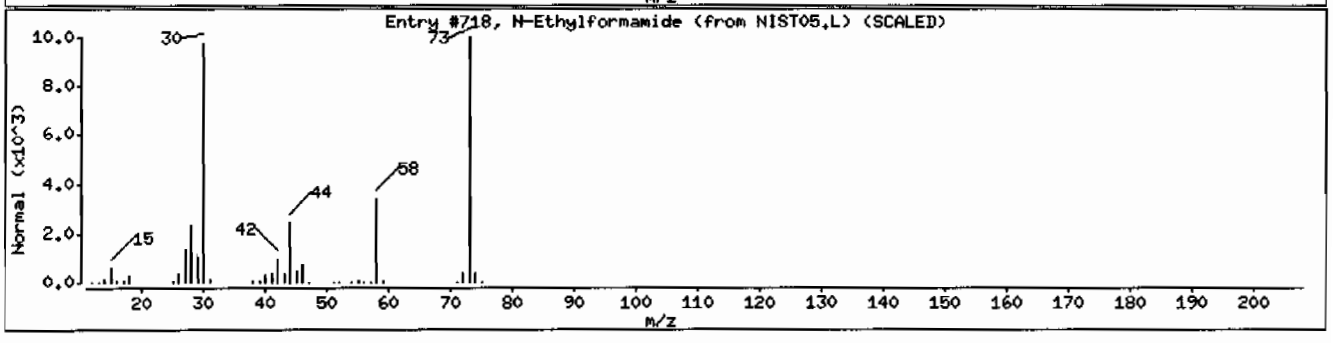

Data File: /chem/MSD5.i/s120409.b/s510408.d

Date : 04-DEC-2009 13:08

Client ID: RE03-09-14130

Instrument: MSD5.i

Sample Info: |241827001|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

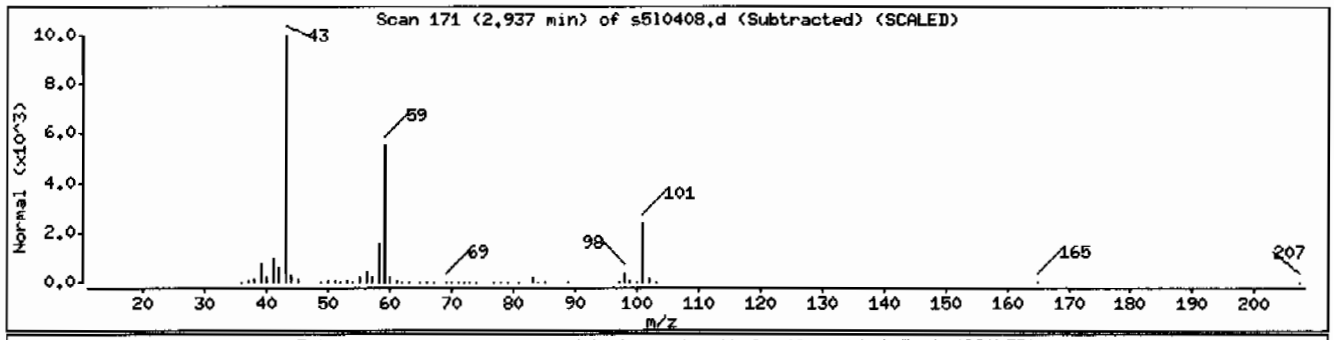

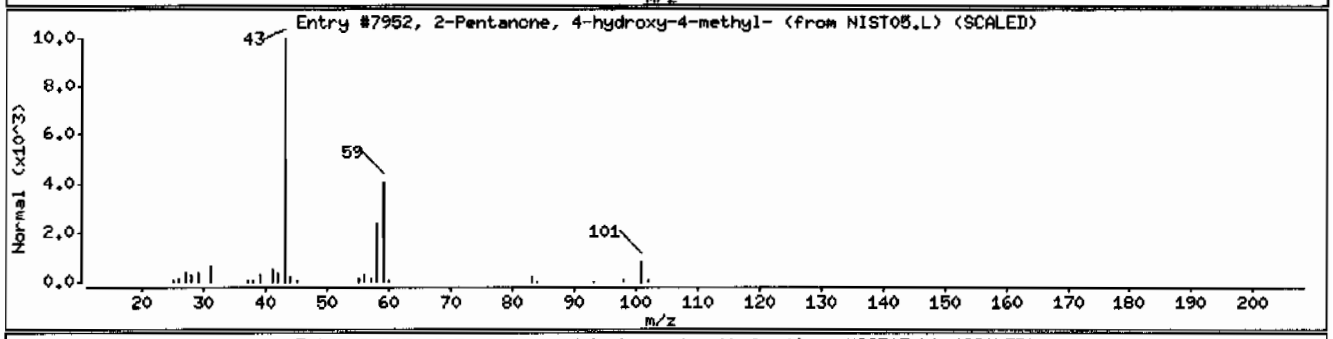

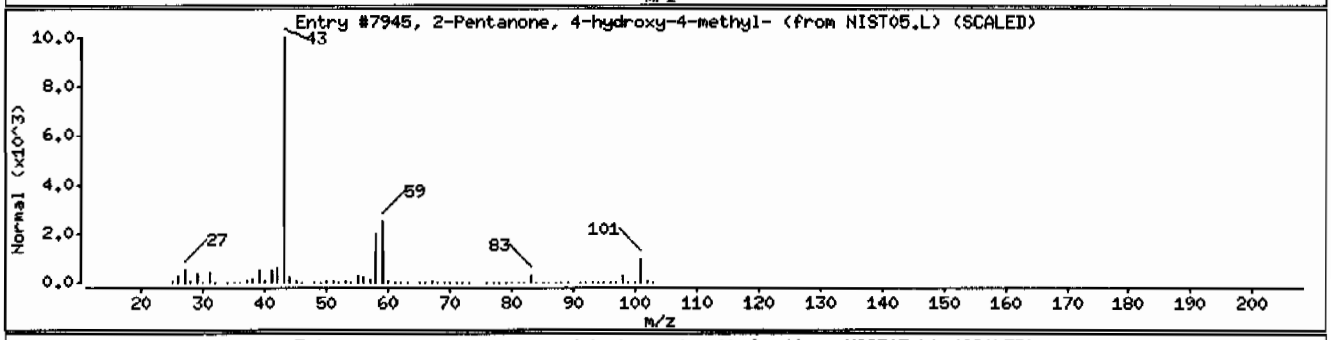

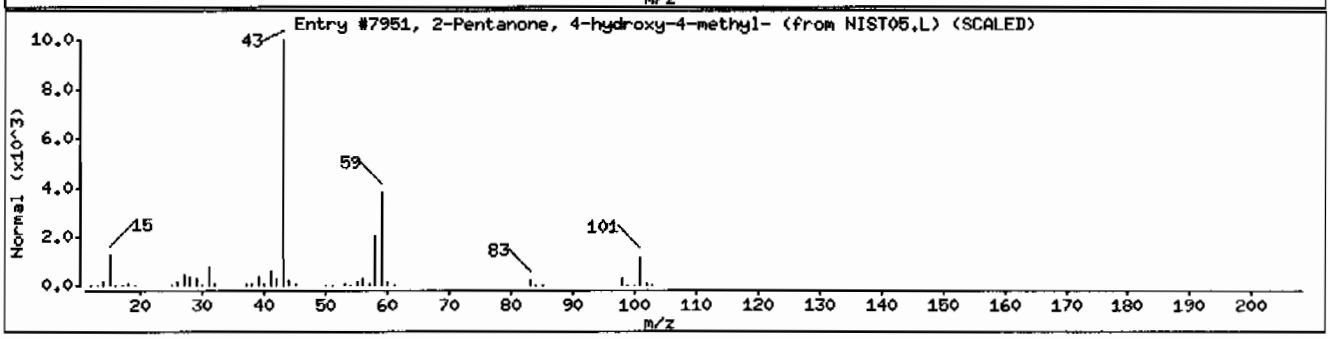

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2731	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 14:16	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s510411.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	348	ug/kg	69.5	348
108-95-2	Phenol	U	348	ug/kg	69.5	348
95-57-8	2-Chlorophenol	U	348	ug/kg	69.5	348
106-46-7	1,4-Dichlorobenzene	U	348	ug/kg	69.5	348
621-64-7	N-Nitrosodipropylamine	U	348	ug/kg	69.5	348
59-50-7	4-Chloro-3-methylphenol	U	348	ug/kg	69.5	348
83-32-9	Acenaphthene	U	34.8	ug/kg	11.5	34.8
121-14-2	2,4-Dinitrotoluene	U	348	ug/kg	34.8	348
100-02-7	4-Nitrophenol	U	348	ug/kg	115	348
87-86-5	Pentachlorophenol	U	348	ug/kg	86.9	348
129-00-0	Pyrene	U	34.8	ug/kg	10.4	34.8
110-86-1	Pyridine	U	348	ug/kg	69.5	348
62-53-3	Aniline	U	348	ug/kg	104	348
111-44-4	bis(2-Chloroethyl) ether	U	348	ug/kg	69.5	348
541-73-1	1,3-Dichlorobenzene	U	348	ug/kg	69.5	348
100-51-6	Benzyl alcohol	U	348	ug/kg	104	348
95-50-1	1,2-Dichlorobenzene	U	348	ug/kg	69.5	348
108-60-1	bis(2-Chloroisopropyl)ether	U	348	ug/kg	69.5	348
95-48-7	o-Cresol	U	348	ug/kg	69.5	348
65794-96-9	m,p-Cresols	U	348	ug/kg	104	348
67-72-1	Hexachloroethane	U	348	ug/kg	69.5	348
98-95-3	Nitrobenzene	U	348	ug/kg	69.5	348
78-59-1	Isophorone	U	348	ug/kg	69.5	348
88-75-5	2-Nitrophenol	U	348	ug/kg	69.5	348
105-67-9	2,4-Dimethylphenol	U	348	ug/kg	122	348
111-91-1	bis(2-Chloroethoxy)methane	U	348	ug/kg	69.5	348
120-83-2	2,4-Dichlorophenol	U	348	ug/kg	69.5	348
65-85-0	Benzoic acid	U	695	ug/kg	174	695
91-20-3	Naphthalene	U	34.8	ug/kg	10.4	34.8
106-47-8	4-Chloroaniline	U	348	ug/kg	69.5	348
87-68-3	Hexachlorobutadiene	U	348	ug/kg	69.5	348
91-57-6	2-Methylnaphthalene	U	34.8	ug/kg	6.95	34.8
77-47-4	Hexachlorocyclopentadiene	U	348	ug/kg	69.5	348
88-06-2	2,4,6-Trichlorophenol	U	348	ug/kg	69.5	348
95-95-4	2,4,5-Trichlorophenol	U	348	ug/kg	69.5	348
91-58-7	2-Chloronaphthalene	U	34.8	ug/kg	11.5	34.8
88-74-4	2-Nitroaniline	U	348	ug/kg	69.5	348
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	348	ug/kg	69.5	348

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2731	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 14:16	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	s510411.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	348	ug/kg	69.5	348
606-20-2	2,6-Dinitrotoluene	U	348	ug/kg	34.8	348
208-96-8	Acenaphthylene	U	34.8	ug/kg	10.4	34.8
51-28-5	2,4-Dinitrophenol	U	695	ug/kg	132	695
132-64-9	Dibenzofuran	U	348	ug/kg	69.5	348
84-66-2	Diethylphthalate	U	348	ug/kg	69.5	348
86-73-7	Fluorene	U	34.8	ug/kg	10.4	34.8
7005-72-3	4-Chlorophenylphenylether	U	348	ug/kg	69.5	348
534-52-1	2-Methyl-4,6-dinitrophenol	U	348	ug/kg	69.5	348
100-01-6	4-Nitroaniline	U	348	ug/kg	104	348
	p-Nitroaniline					
122-39-4	Diphenylamine	U	348	ug/kg	69.5	348
122-66-7	Azobenzene	U	348	ug/kg	69.5	348
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	348	ug/kg	69.5	348
118-74-1	Hexachlorobenzene	U	348	ug/kg	69.5	348
85-01-8	Phenanthrene	U	34.8	ug/kg	10.4	34.8
120-12-7	Anthracene	U	34.8	ug/kg	6.95	34.8
84-74-2	Di-n-butylphthalate	U	348	ug/kg	69.5	348
206-44-0	Fluoranthene	U	34.8	ug/kg	10.4	34.8
85-68-7	Butylbenzylphthalate	U	348	ug/kg	69.5	348
56-55-3	Benzo(a)anthracene	U	34.8	ug/kg	10.4	34.8
91-94-1	3,3'-Dichlorobenzidine	U	348	ug/kg	104	348
218-01-9	Chrysene	U	34.8	ug/kg	10.4	34.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	348	ug/kg	69.5	348
117-84-0	Di-n-octylphthalate	U	348	ug/kg	69.5	348
205-99-2	Benzo(b)fluoranthene	U	34.8	ug/kg	10.4	34.8
207-08-9	Benzo(k)fluoranthene	U	34.8	ug/kg	10.4	34.8
50-32-8	Benzo(a)pyrene	U	34.8	ug/kg	10.4	34.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.8	ug/kg	10.4	34.8
53-70-3	Dibenzo(a,h)anthracene	U	34.8	ug/kg	10.4	34.8
191-24-2	Benzo(ghi)perylene	U	34.8	ug/kg	10.4	34.8
120-82-1	1,2,4-Trichlorobenzene	U	348	ug/kg	69.5	348

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	220	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510411.d
Lab Smp Id: 241827006 Client Smp ID: RE03-10-2731
Inj Date : 04-DEC-2009 14:16
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827006|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	4.12440	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	435014	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1542831	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.049	(1.000)	946689	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1690430	40.0000	
* 91 Chrysene-d12	240	9.636	9.641	(1.000)	1474083	40.0000	
* 98 Perylene-d12	264	11.319	11.331	(1.000)	1037684	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.793)	575107	63.8395	2220
$ 5 Phenol-d5	99	3.625	3.632	(0.926)	687541	61.5337	2140
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	339901	34.4586	1200
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	798788	33.3997	1160
$ 60 2,4,6-Tribromophenol	329	6.642	6.651	(1.099)	214481	61.2478	2130
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	958134	45.4504	1580

ION RATIO REPORT

SV REPORT

Data file: s510411.d
Report Date: 12/04/2009 14:39
Lab. ID: 241827006 SampleType: SAMPLE
Injection Date: 04-DEC-2009 14:16
Operator: RMB Instrument: MSD5.i
Sample Info: |241827006|928249|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091117-01
Comment:
Method used: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	41452	3.62	3.70	80-120	100	(T)
93	113	3.70	3.70	241-301	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	52379	4.28	4.16	80-120	100	(T)
42	25796	4.28	4.16	27- 87	49	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	171393	6.04	5.81	80-120	100	(T)
164	946689	6.04	5.81	0- 40	552	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	125398	6.04	5.87	80-120	100	(T)
63	1235	6.04	5.87	38- 98	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	125398	6.04	6.16	80-120	100	(T)
89	1859	6.04	6.16	36- 96	1	(QT)
63	1235	6.04	6.16	10- 70	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	10841	6.64	6.46	80-120	100	(T)
165	10460	6.64	6.46	62-122	96	(T)
167	3283	6.64	6.46	0- 44	30	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	784	6.64	6.48	80-120	100	(T)
105	1521	6.64	6.48	5- 65	194	(QT)
51	1066	6.64	6.48	5- 65	136	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510411.d
Lab Smp Id: 241827006 Client Smp ID: RE03-10-2731
Inj Date : 04-DEC-2009 14:16
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827006|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariabl

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	4.12440	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.913	2573818	40.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.937	407592	6.33442912	220	0		0	10

Data File: /chem/MSD5.i/s120409.b/s510411.d
Date : 04-DEC-2009 14:16
Client ID: RE03-10-2731
Sample Info: |241827006|928249|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

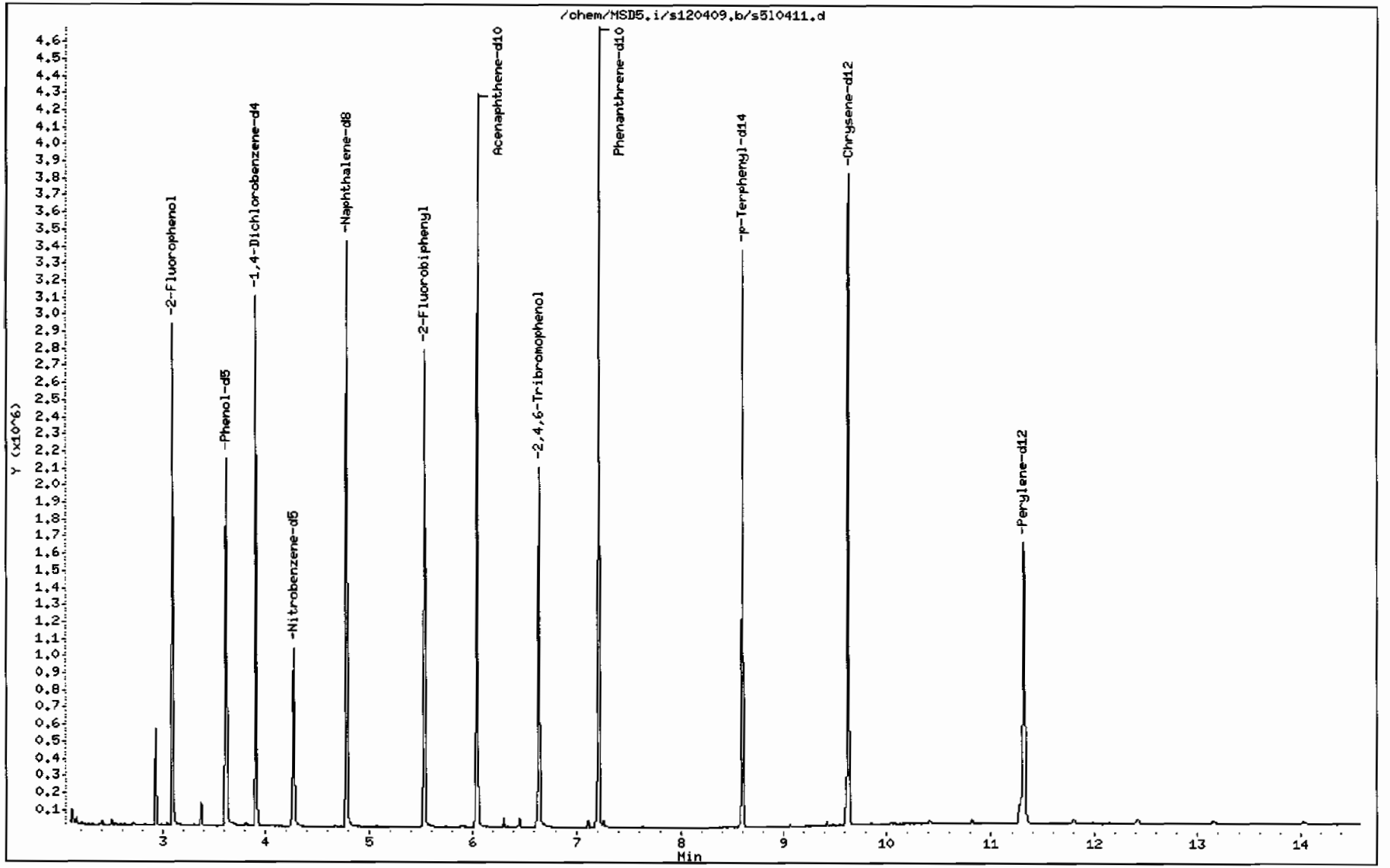

Data File: /chem/MSD5.i/s120409.b/s510411.d

Date : 04-DEC-2009 14:16

Client ID: RE03-10-2731

Instrument: MSD5.i

Sample Info: 1241827006|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

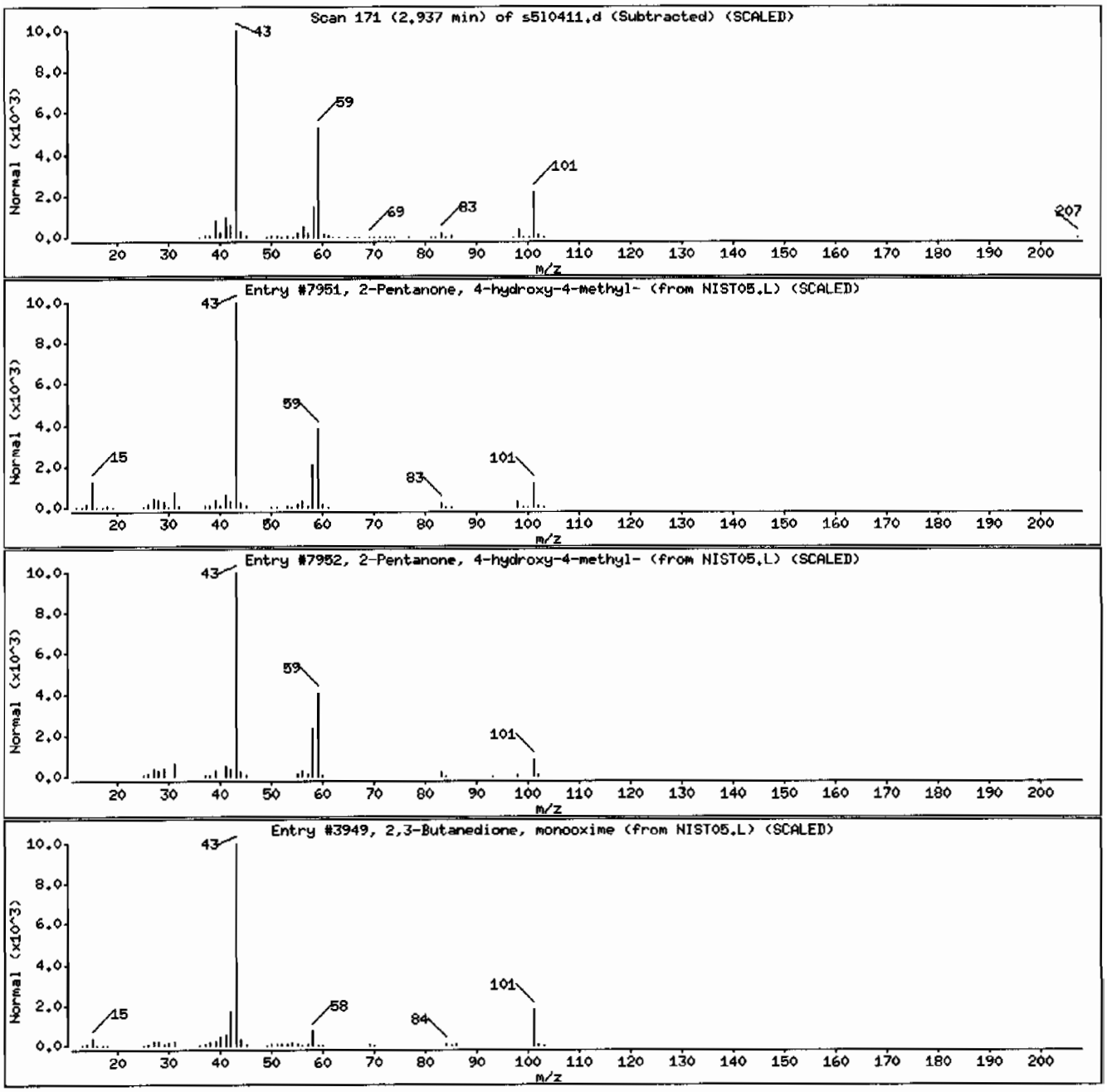

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827004	Date Received:	11/25/2009 09:10	%Moisture:	.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03-10-2732	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 13:30	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s510409.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	332	ug/kg	66.5	332
108-95-2	Phenol	U	332	ug/kg	66.5	332
95-57-8	2-Chlorophenol	U	332	ug/kg	66.5	332
106-46-7	1,4-Dichlorobenzene	U	332	ug/kg	66.5	332
621-64-7	N-Nitrosodipropylamine	U	332	ug/kg	66.5	332
59-50-7	4-Chloro-3-methylphenol	U	332	ug/kg	66.5	332
83-32-9	Acenaphthene	U	33.2	ug/kg	11.0	33.2
121-14-2	2,4-Dinitrotoluene	U	332	ug/kg	33.2	332
100-02-7	4-Nitrophenol	U	332	ug/kg	110	332
87-86-5	Pentachlorophenol	U	332	ug/kg	83.1	332
129-00-0	Pyrene	U	33.2	ug/kg	9.97	33.2
110-86-1	Pyridine	U	332	ug/kg	66.5	332
62-53-3	Aniline	U	332	ug/kg	99.7	332
111-44-4	bis(2-Chloroethyl) ether	U	332	ug/kg	66.5	332
541-73-1	1,3-Dichlorobenzene	U	332	ug/kg	66.5	332
100-51-6	Benzyl alcohol	U	332	ug/kg	99.7	332
95-50-1	1,2-Dichlorobenzene	U	332	ug/kg	66.5	332
108-60-1	bis(2-Chloroisopropyl)ether	U	332	ug/kg	66.5	332
95-48-7	o-Cresol	U	332	ug/kg	66.5	332
65794-96-9	m,p-Cresols	U	332	ug/kg	99.7	332
67-72-1	Hexachloroethane	U	332	ug/kg	66.5	332
98-95-3	Nitrobenzene	U	332	ug/kg	66.5	332
78-59-1	Isophorone	U	332	ug/kg	66.5	332
88-75-5	2-Nitrophenol	U	332	ug/kg	66.5	332
105-67-9	2,4-Dimethylphenol	U	332	ug/kg	116	332
111-91-1	bis(2-Chloroethoxy)methane	U	332	ug/kg	66.5	332
120-83-2	2,4-Dichlorophenol	U	332	ug/kg	66.5	332
65-85-0	Benzoic acid	U	665	ug/kg	166	665
91-20-3	Naphthalene	U	33.2	ug/kg	9.97	33.2
106-47-8	4-Chloroaniline	U	332	ug/kg	66.5	332
87-68-3	Hexachlorobutadiene	U	332	ug/kg	66.5	332
91-57-6	2-Methylnaphthalene	U	33.2	ug/kg	6.65	33.2
77-47-4	Hexachlorocyclopentadiene	U	332	ug/kg	66.5	332
88-06-2	2,4,6-Trichlorophenol	U	332	ug/kg	66.5	332
95-95-4	2,4,5-Trichlorophenol	U	332	ug/kg	66.5	332
91-58-7	2-Chloronaphthalene	U	33.2	ug/kg	11.0	33.2
88-74-4	2-Nitroaniline	U	332	ug/kg	66.5	332
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	332	ug/kg	66.5	332

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:30	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s510409.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	332	ug/kg	66.5	332
606-20-2	2,6-Dinitrotoluene	U	332	ug/kg	33.2	332
208-96-8	Acenaphthylene	U	33.2	ug/kg	9.97	33.2
51-28-5	2,4-Dinitrophenol	U	665	ug/kg	126	665
132-64-9	Dibenzofuran	U	332	ug/kg	66.5	332
84-66-2	Diethylphthalate	U	332	ug/kg	66.5	332
86-73-7	Fluorene	U	33.2	ug/kg	9.97	33.2
7005-72-3	4-Chlorophenylphenylether	U	332	ug/kg	66.5	332
534-52-1	2-Methyl-4,6-dinitrophenol	U	332	ug/kg	66.5	332
100-01-6	4-Nitroaniline	U	332	ug/kg	99.7	332
	p-Nitroaniline					
122-39-4	Diphenylamine	U	332	ug/kg	66.5	332
122-66-7	Azobenzene	U	332	ug/kg	66.5	332
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	332	ug/kg	66.5	332
118-74-1	Hexachlorobenzene	U	332	ug/kg	66.5	332
85-01-8	Phenanthrene	U	33.2	ug/kg	9.97	33.2
120-12-7	Anthracene	U	33.2	ug/kg	6.65	33.2
84-74-2	Di-n-butylphthalate	U	332	ug/kg	66.5	332
206-44-0	Fluoranthene	U	33.2	ug/kg	9.97	33.2
85-68-7	Butylbenzylphthalate	U	332	ug/kg	66.5	332
56-55-3	Benzo(a)anthracene	U	33.2	ug/kg	9.97	33.2
91-94-1	3,3'-Dichlorobenzidine	U	332	ug/kg	99.7	332
218-01-9	Chrysene	U	33.2	ug/kg	9.97	33.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	332	ug/kg	66.5	332
117-84-0	Di-n-octylphthalate	U	332	ug/kg	66.5	332
205-99-2	Benzo(b)fluoranthene	U	33.2	ug/kg	9.97	33.2
207-08-9	Benzo(k)fluoranthene	U	33.2	ug/kg	9.97	33.2
50-32-8	Benzo(a)pyrene	U	33.2	ug/kg	9.97	33.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.2	ug/kg	9.97	33.2
53-70-3	Dibenzo(a,h)anthracene	U	33.2	ug/kg	9.97	33.2
191-24-2	Benzo(ghi)perylene	U	33.2	ug/kg	9.97	33.2
120-82-1	1,2,4-Trichlorobenzene	U	332	ug/kg	66.5	332

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	251	ug/kg		J
	Unknown Aldol Condensate	2.94	279	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510409.d
Lab Smp Id: 241827004 Client Smp ID: RE03-10-2732
Inj Date : 04-DEC-2009 13:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827004|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	0.28470	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	432775	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1481954	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.049	(1.000)	910320	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1616707	40.0000	
* 91 Chrysene-d12	240	9.636	9.641	(1.000)	1456141	40.0000	
* 98 Perylene-d12	264	11.319	11.331	(1.000)	1031013	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.793)	602614	67.2390	2230
$ 5 Phenol-d5	99	3.625	3.632	(0.926)	705105	63.4321	2110
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	345123	36.4253	1210
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	836804	36.3871	1210
$ 60 2,4,6-Tribromophenol	329	6.642	6.651	(1.099)	246625	73.2406	2430
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1153571	55.3955	1840

ION RATIO REPORT

SV REPORT

Data file: s510409.d
Report Date: 12/04/2009 13:41
Lab. ID: 241827004 SampleType: SAMPLE
Injection Date: 04-DEC-2009 13:30
Operator: RMB Instrument: MSD5.i
Sample Info: |241827004|928249|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091117-01
Comment:
Method used: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	42950	3.62	3.70	80-120	100	(T)
93	293	3.70	3.70	241-301	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	52271	4.28	4.16	80-120	100	(T)
42	25727	4.28	4.16	27- 87	49	(T)
41 m-Nitroaniline			CAS#: 99-09-2			
138	188	6.04	6.00	80-120	100	( )
92	4739	6.04	6.00	74-134	2510	(Q)
108	18917	6.04	6.00	0- 40	10017	(Q)
43 Dimethylphthalate			CAS#: 131-11-3			
163	163369	6.05	5.81	80-120	100	(T)
164	910320	6.04	5.81	0- 40	557	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	122855	6.04	5.87	80-120	100	(T)
63	1475	6.04	5.87	38- 98	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	122855	6.04	6.16	80-120	100	(T)
89	1654	6.04	6.16	36- 96	1	(QT)
63	1475	6.04	6.16	10- 70	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	12204	6.64	6.46	80-120	100	(T)
165	11795	6.64	6.46	62-122	97	(T)
167	3539	6.64	6.46	0- 44	29	(T)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	902	6.64	6.48	80-120	100	(T)
105	1805	6.64	6.48	5- 65	200	(QT)
51	1383	6.64	6.48	5- 65	153	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	15805	6.64	6.82	80-120	100	(T)
141	101129	6.64	6.82	36- 96	640	(QT)
250	33072	6.64	6.82	68-128	209	(QT)
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	351	13.12	13.14	80-120	100	( )
139	0	0.00	13.13	0- 30	0	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510409.d
Lab Smp Id: 241827004 Client Smp ID: RE03-10-2732
Inj Date : 04-DEC-2009 13:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827004|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	0.28470	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.913	2531382	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.031	477933	7.55212332	251	0		0	10
Unknown Aldol Condensate				CAS #:			
2.937	531809	8.40346012	279	0		0	10

Data File: /chem/MSD5.i/s120409.b/s510409.d

Date : 04-DEC-2009 13:30

Client ID: RE03-10-2732

Sample Info: |241827004|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

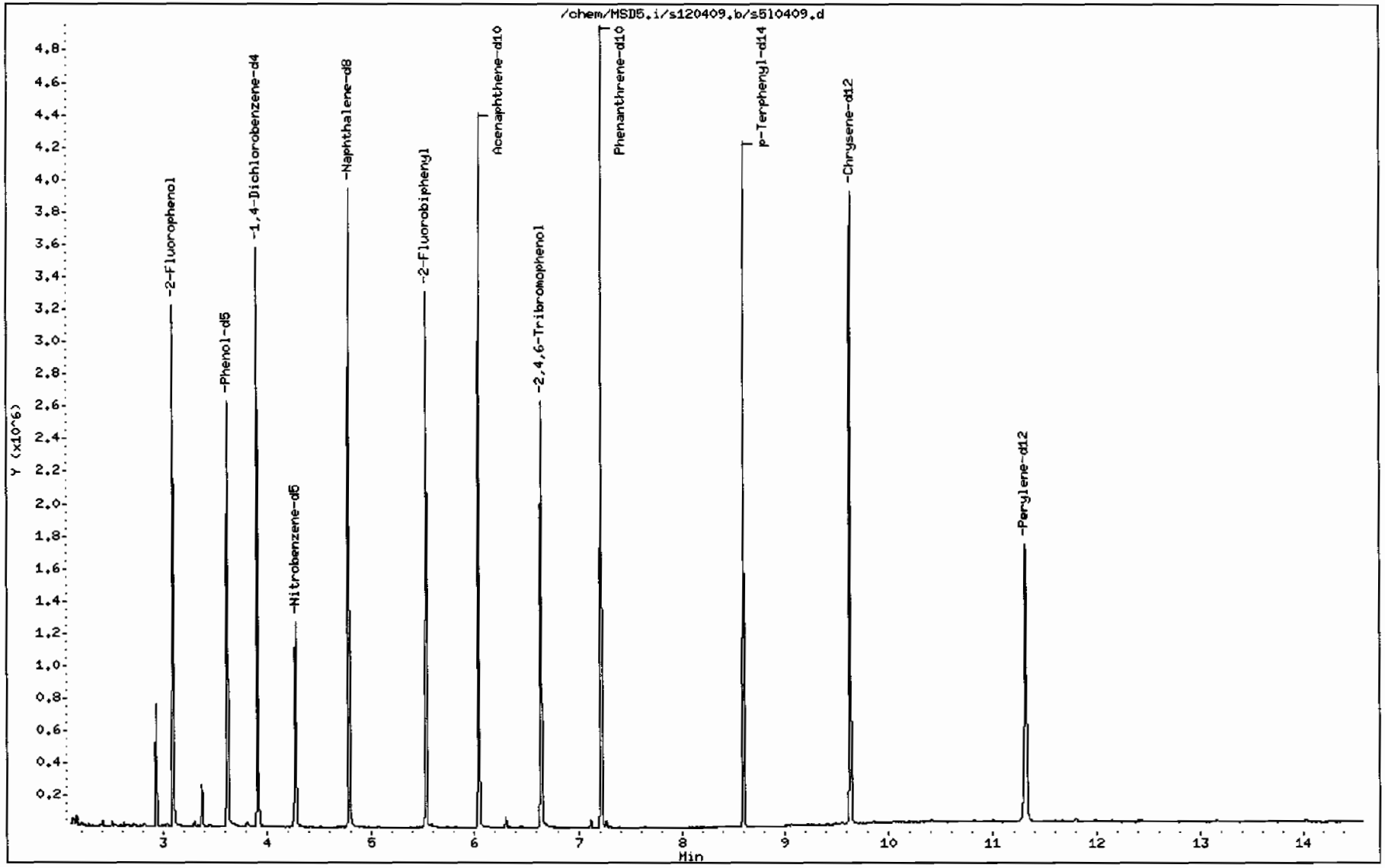

Data File: /chem/MSD5.i/s120409.b/s510409.d

Date : 04-DEC-2009 13:30

Client ID: RE03-10-2732

Instrument: MSD5.i

Sample Info: 1241827004|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	36	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	32	C3H7NO	73
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2096	12	C5H12O	88

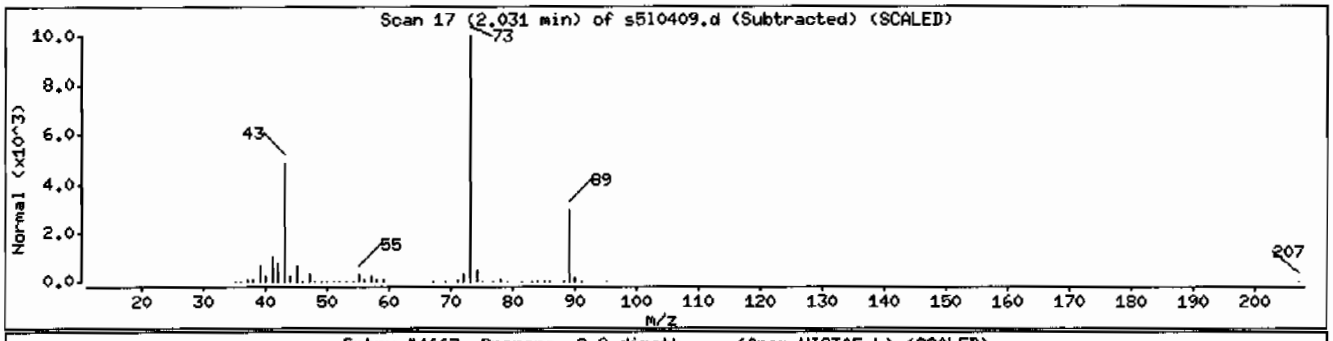

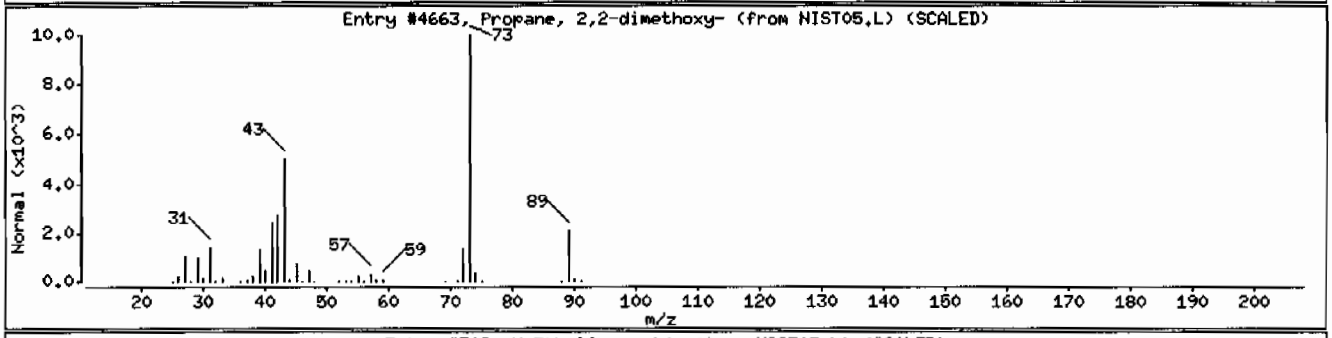

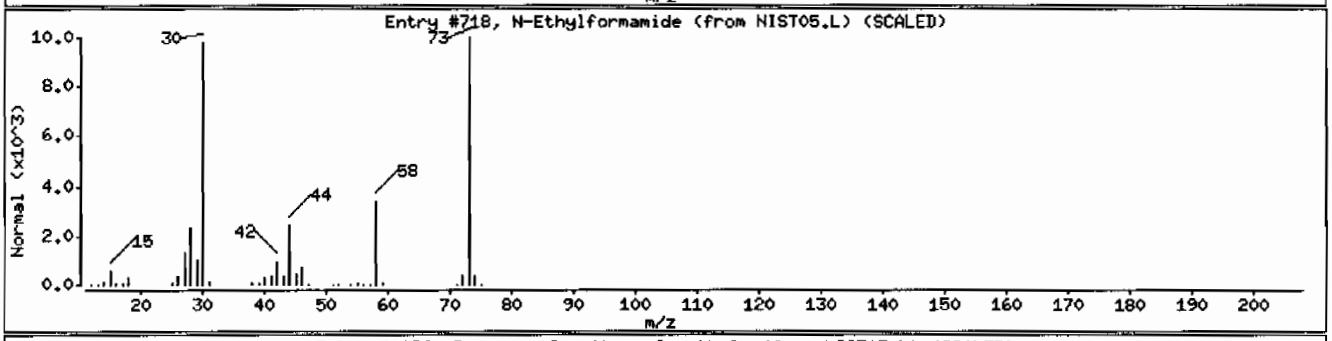

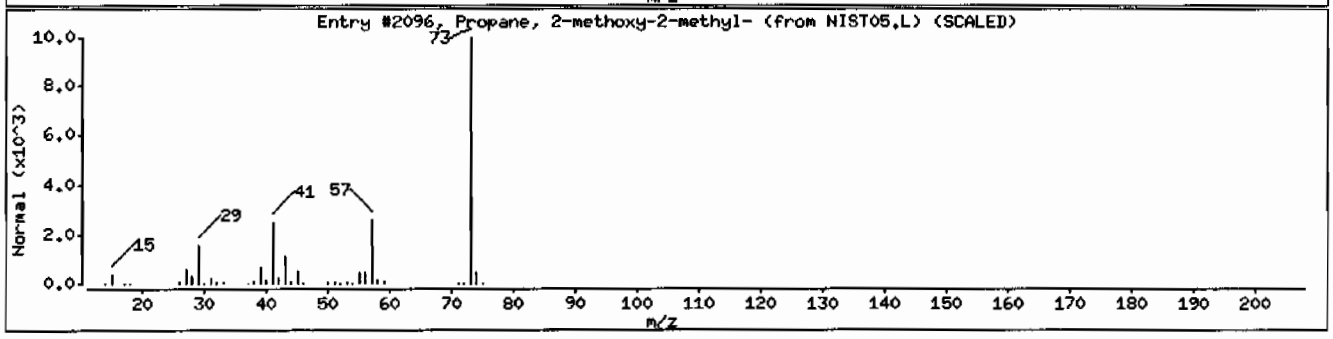

Data File: /chem/MSD5.i/s120409.b/s510409.d

Date : 04-DEC-2009 13:30

Client ID: RE03-10-2732 Instrument: MSD5.i

Sample Info: |2418270041928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

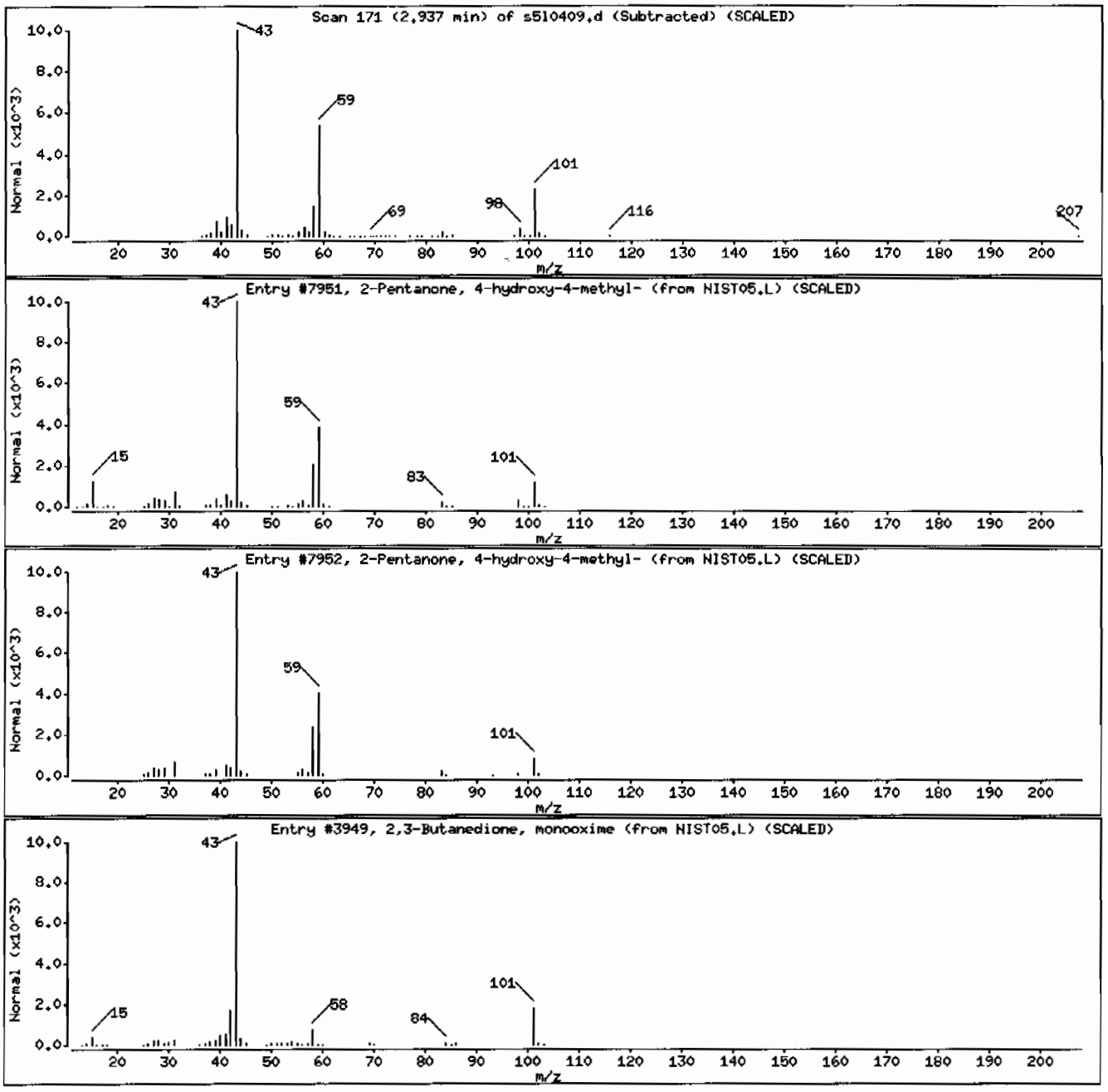

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2733	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:53	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s510410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.3	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	113	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.0	344
129-00-0	Pyrene	U	34.4	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl)ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.3	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	344	ug/kg	68.8	344

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2733	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	928249	**Inst:**	MSD5.I	**Dilution:**	1
Run Date:	12/04/2009 13:53	**Analyst:**	RMB	**Inj. Vol:**	.5 uL
Prep Date:	12/02/2009 22:31	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s510410.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	U	34.4	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	U	34.4	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	p-Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene	U	34.4	ug/kg	10.3	34.4
120-12-7	Anthracene	U	34.4	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene	U	34.4	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene	U	34.4	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene	U	34.4	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene	U	34.4	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene	U	34.4	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.4	ug/kg	10.3	34.4
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene	U	34.4	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	203	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510410.d
Lab Smp Id: 241827005 Client Smp ID: RE03-10-2733
Inj Date : 04-DEC-2009 13:53
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827005|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	3.52910	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	426431	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1492147	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.049	(1.000)	924539	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1669829	40.0000	
* 91 Chrysene-d12	240	9.636	9.641	(1.000)	1527638	40.0000	
* 98 Perylene-d12	264	11.319	11.331	(1.000)	1168619	40.0000	
$ 3 2-Fluorophenol	112	3.096	3.102	(0.791)	574429	65.0477	2240
$ 5 Phenol-d5	99	3.625	3.632	(0.926)	684989	62.5392	2150
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	326799	34.2557	1180
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	793386	33.9686	1170
$ 60 2,4,6-Tribromophenol	329	6.642	6.651	(1.099)	238105	69.6229	2390
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1045882	47.8735	1650

ION RATIO REPORT

SV REPORT

Data file: s510410.d
Report Date: 12/04/2009 14:10
Lab. ID: 241827005 SampleType: SAMPLE
Injection Date: 04-DEC-2009 13:53
Operator: RMB Instrument: MSD5.i
Sample Info: |241827005|928249|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091117-01
Comment:
Method used: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	40003	3.62	3.70	80-120	100	(T)
93	121	3.58	3.70	241-301	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	50685	4.28	4.16	80-120	100	(T)
42	26250	4.27	4.16	27- 87	52	(T)
43 Dimethylphthalate				CAS#: 131-11-3		
163	166437	6.04	5.81	80-120	100	(T)
164	924539	6.04	5.81	0- 40	555	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	123957	6.04	5.87	80-120	100	(T)
63	1381	6.04	5.87	38- 98	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	123957	6.04	6.16	80-120	100	(T)
89	1727	6.04	6.16	36- 96	1	(QT)
63	1381	6.04	6.16	10- 70	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	11351	6.64	6.46	80-120	100	(T)
165	11686	6.64	6.46	62-122	103	(T)
167	3920	6.64	6.46	0- 44	35	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	824	6.64	6.48	80-120	100	(T)
105	1696	6.64	6.48	5- 65	206	(QT)
51	1107	6.64	6.48	5- 65	134	(QT)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	15290	6.64	6.82	80-120	100	(T)
141	94449	6.64	6.82	36- 96	618	(QT)
250	31477	6.64	6.82	68-128	206	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510410.d
Lab Smp Id: 241827005 Client Smp ID: RE03-10-2733
Inj Date : 04-DEC-2009 13:53
Operator : RMB Inst ID: MSD5.i
Smp Info : |241827005|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	3.52910	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.913	2495670	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.937	368701	5.90945821	203	0		0	10

Data File: /chem/MSD5.i/s120409.b/s510410.d

Date : 04-DEC-2009 13:53

Client ID: RE03-10-2733

Sample Info: |241827005|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

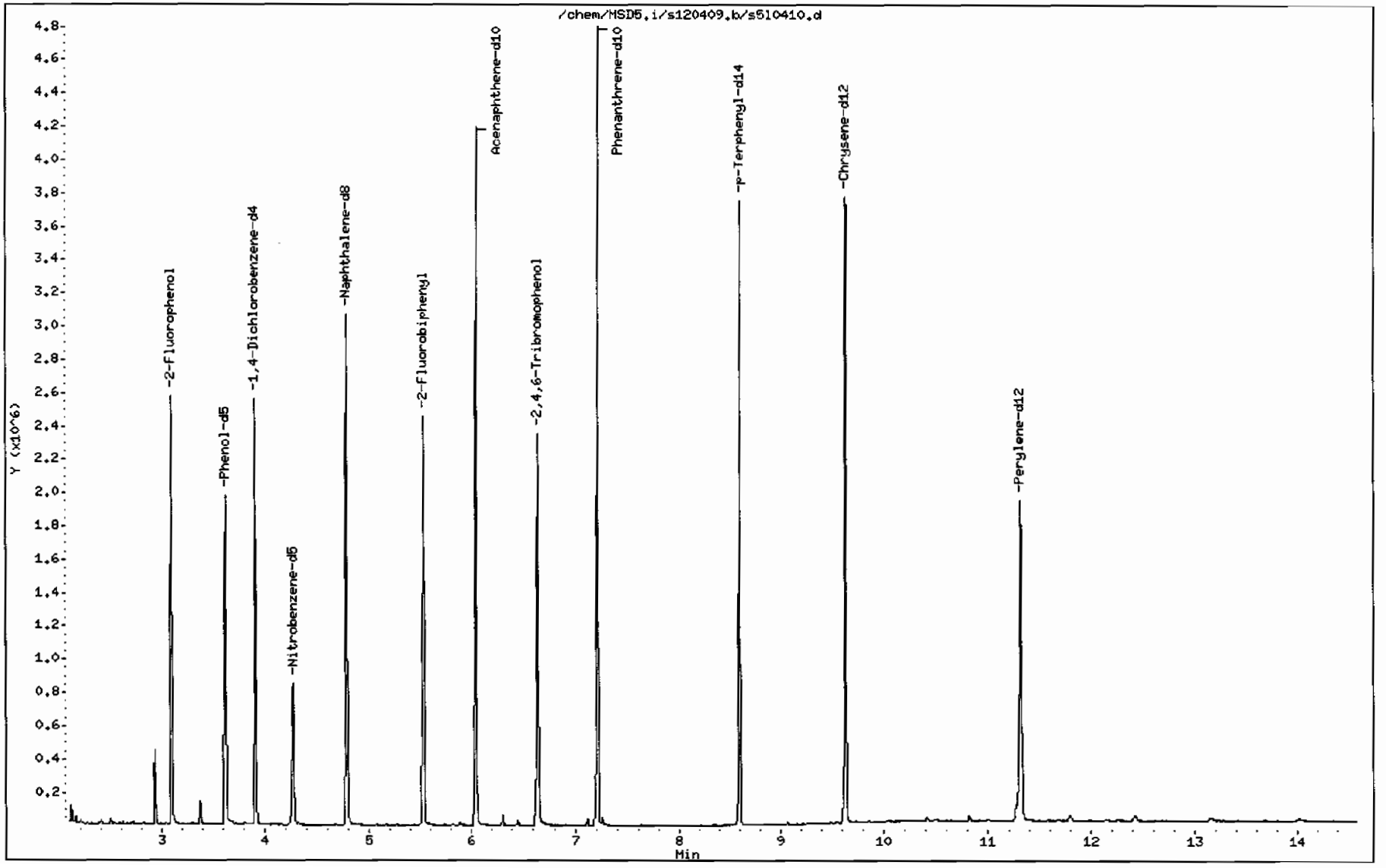

Data File: /chem/MSD5.i/s120409.b/s510410.d

Date : 04-DEC-2009 13:53

Client ID: RE03-10-2733

Instrument: MSD5.i

Sample Info: |2418270051928249111SVMF11|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101

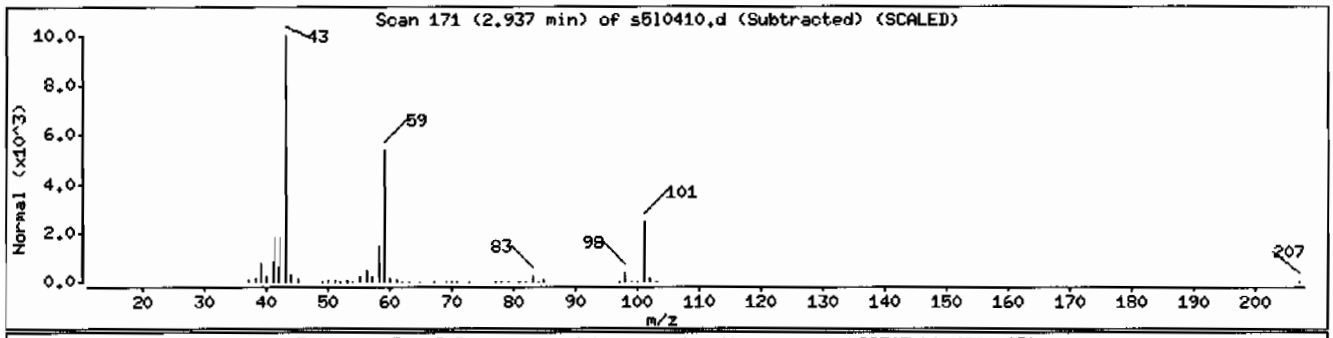

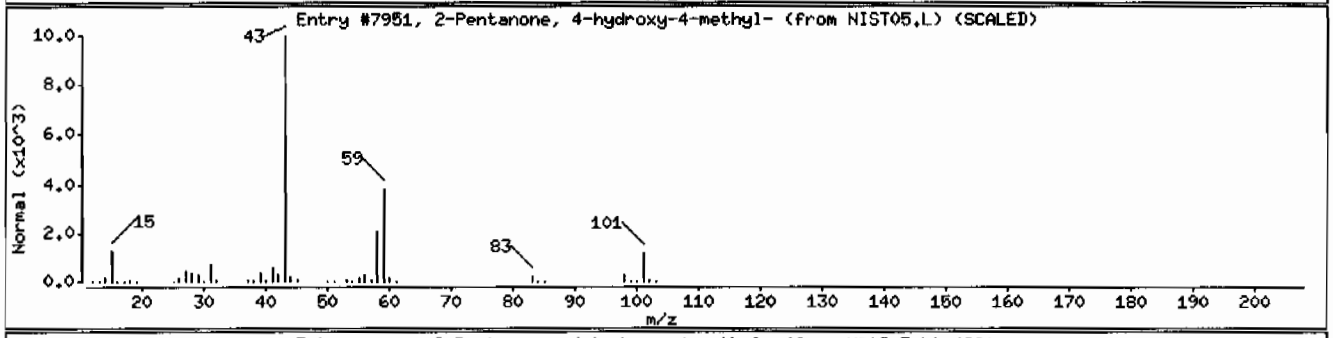

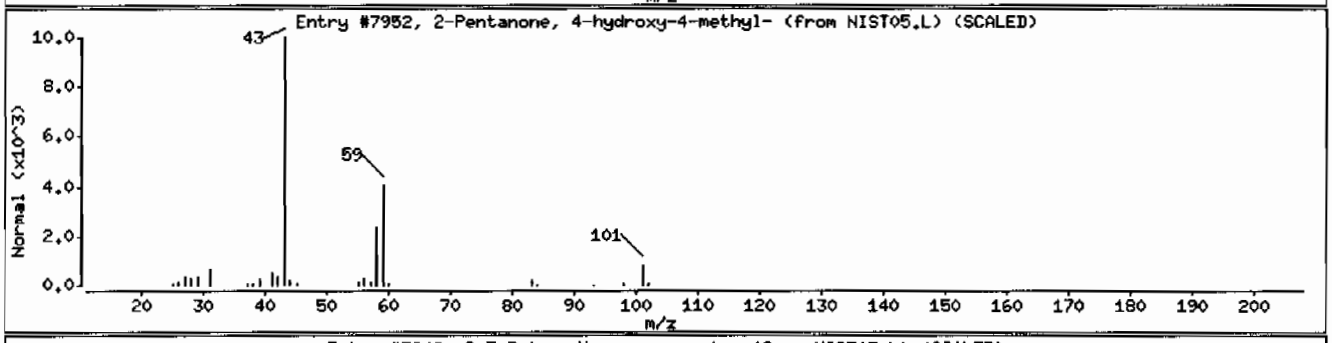

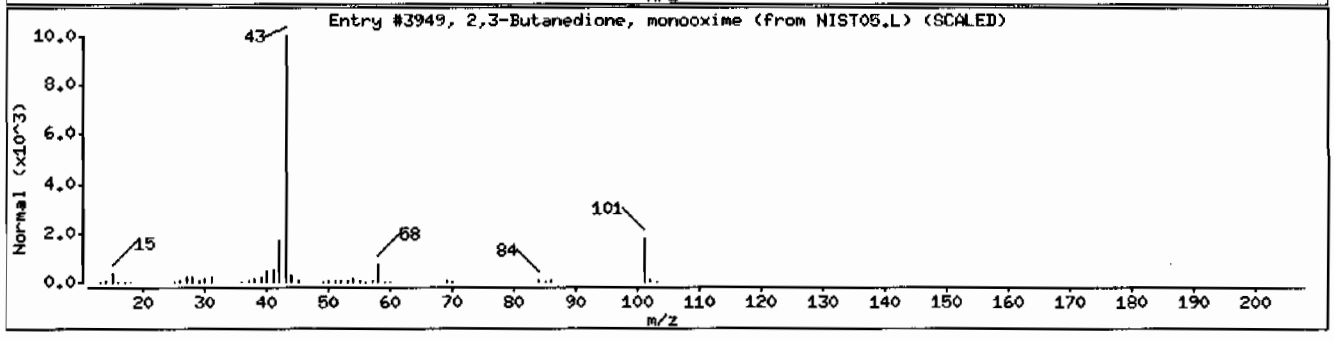

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 04-Dec-2009 10:56

Calibration History

Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Start Cal Date: 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
30-NOV-2009 14:09	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3014.d
Cal Level: 2 , Cal Amount: 10.00000		
01-DEC-2009 12:54	hex	/chem/MSD5.i/s113009.b/s5k3048.d
01-DEC-2009 10:15	pest	/chem/MSD5.i/s113009.b/s5k3041.d
30-NOV-2009 21:28	nev	/chem/MSD5.i/s113009.b/s5k3031.d
30-NOV-2009 18:48	ap12	/chem/MSD5.i/s113009.b/s5k3024.d
30-NOV-2009 14:38	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3015.d
Cal Level: 3 , Cal Amount: 20.00000		
01-DEC-2009 13:18	hex	/chem/MSD5.i/s113009.b/s5k3049.d
01-DEC-2009 10:38	pest	/chem/MSD5.i/s113009.b/s5k3042.d
30-NOV-2009 21:51	nev	/chem/MSD5.i/s113009.b/s5k3032.d
30-NOV-2009 19:10	ap12	/chem/MSD5.i/s113009.b/s5k3025.d
30-NOV-2009 15:06	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3016.d
Cal Level: 4 , Cal Amount: 40.00000		
01-DEC-2009 13:41	hex	/chem/MSD5.i/s113009.b/s5k3050.d
01-DEC-2009 11:00	pest	/chem/MSD5.i/s113009.b/s5k3043.d
30-NOV-2009 22:14	nev	/chem/MSD5.i/s113009.b/s5k3033.d
30-NOV-2009 19:34	ap12	/chem/MSD5.i/s113009.b/s5k3026.d
30-NOV-2009 15:34	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3017.d
Cal Level: 5 , Cal Amount: 50.00000		
01-DEC-2009 14:03	hex	/chem/MSD5.i/s113009.b/s5k3051.d
01-DEC-2009 11:23	pest	/chem/MSD5.i/s113009.b/s5k3044.d
30-NOV-2009 22:38	nev	/chem/MSD5.i/s113009.b/s5k3034.d
30-NOV-2009 19:57	ap12	/chem/MSD5.i/s113009.b/s5k3027.d
30-NOV-2009 16:02	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3018.d
Cal Level: 6 , Cal Amount: 80.00000		
01-DEC-2009 14:25	hex	/chem/MSD5.i/s113009.b/s5k3052.d
01-DEC-2009 11:46	pest	/chem/MSD5.i/s113009.b/s5k3045.d
30-NOV-2009 23:01	nev	/chem/MSD5.i/s113009.b/s5k3035.d
30-NOV-2009 20:20	ap12	/chem/MSD5.i/s113009.b/s5k3028.d
30-NOV-2009 16:31	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3019.d
Cal Level: 7 , Cal Amount: 100.00000		

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|01-DEC-2009 14:48 |hex              |/chem/MSD5.i/s113009.b/s5k3053.d        |
|01-DEC-2009 12:09 |pest             |/chem/MSD5.i/s113009.b/s5k3046.d        |
|30-NOV-2009 23:23 |nev              |/chem/MSD5.i/s113009.b/s5k3036.d        |
|30-NOV-2009 20:42 |apl2             |/chem/MSD5.i/s113009.b/s5k3029.d        |
|30-NOV-2009 16:59 |MEGAIICARE       |/chem/MSD5.i/s113009.b/s5k3020.d        |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 8 , Cal Amount: 120.00000                                        |
+=============================================================================+
|01-DEC-2009 12:32 |pest             |/chem/MSD5.i/s113009.b/s5k3047.d        |
|30-NOV-2009 23:46 |nev              |/chem/MSD5.i/s113009.b/s5k3037.d        |
|30-NOV-2009 21:05 |apl2             |/chem/MSD5.i/s113009.b/s5k3030.d        |
|30-NOV-2009 17:28 |MEGAIICARE       |/chem/MSD5.i/s113009.b/s5k3021.d        |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4
+------------------+-----------------+----------------------------------------+
| Ccal Level: 4 , Ccal Amount: 40.0                                           |
+=============================================================================+
|04-DEC-2009 10:38 |MEGAIICARE       |/chem/MSD5.i/s120409.b/s510402.d        |
+------------------+-----------------+----------------------------------------+
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GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Calibration File Names:
Level 1: /chem/MSD5.i/s113009.b/s5k3014.d
Level 2: /chem/MSD5.i/s113009.b/s5k3048.d
Level 3: /chem/MSD5.i/s113009.b/s5k3049.d
Level 4: /chem/MSD5.i/s113009.b/s5k3050.d
Level 5: /chem/MSD5.i/s113009.b/s5k3051.d
Level 6: /chem/MSD5.i/s113009.b/s5k3052.d
Level 7: /chem/MSD5.i/s113009.b/s5k3053.d
Level 8: /chem/MSD5.i/s113009.b/s5k3047.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.43200	0.48159	0.46738	0.44822	0.47531					
	0.43671	0.47324					AVRG		0.45921		4.34760
2 Pyridine	+++++	0.63985	0.64672	0.62506	0.69334	0.71690					
	0.67003	0.56775					AVRG		0.65138		7.47986
4 Aniline	+++++	0.38715	0.40911	0.40667	0.39891	0.39925					
	0.39855	0.40838					AVRG		0.40115		1.92425
209 Benzaldehyde	+++++	0.75175	0.80370	+++++	+++++	0.73680					
	0.71705	0.69889					AVRG		0.74164		5.39700
6 Phenol	+++++	0.99962	1.09329	1.11449	1.08724	1.08038					
	1.05465	1.08077					AVRG		1.07292		3.43976

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.59944	0.61498	0.62541	0.67247	0.65894	0.63803					
	0.62832	0.63351					AVRG		0.63389		3.66603
8 2-Chlorophenol	+++++	0.87217	0.92912	0.93403	0.92801	0.92624					
	0.91350	0.93801					AVRG		0.92015		2.44524
203 n-Decane	+++++	0.88013	0.89146	0.85550	0.84815	0.81672					
	0.77891	0.76359					AVRG		0.83349		5.87400
9 1,3-Dichlorobenzene	+++++	1.09685	1.13817	1.12405	1.11357	1.09144					
	1.06829	1.08058					AVRG		1.10185		2.24200
11 1,4-Dichlorobenzene	+++++	1.11385	1.14638	1.14426	1.12409	1.10651					
	1.09004	1.10462					AVRG		1.11854		1.87546
12 Benzyl alcohol	+++++	0.51602	0.57510	0.61563	0.58809	0.58621					
	0.58334	0.59941					AVRG		0.58054		5.39098
13 1,2-Dichlorobenzene	+++++	1.04255	1.08183	1.08505	1.06637	1.06273					
	1.03252	1.03867					AVRG		1.05853		1.98597
14 bis(2-Chloroisopropyl)ether	+++++	1.03868	1.06626	1.05750	1.03794	0.97107					
	0.95293	0.92855					AVRG		1.00756		5.49466
15 o-Cresol	+++++	0.69067	0.73824	0.77014	0.74119	0.73428					
	0.72745	0.73902					AVRG		0.73443		3.20276

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	0.99878	1.06200	+++++	+++++	1.04834					
	1.01728	1.04524					AVRG		1.03433		2.48185
17 N-Nitrosodipropylamine	0.39105	0.46274	0.53774	0.54714	0.48085	0.50719					
	0.46219	0.47357					AVRG		0.48281		10.23361
18 m,p-Cresols	+++++	0.87022	0.92832	0.99766	0.95002	0.92840					
	0.92726	0.94238					AVRG		0.93489		4.03823
19 Hexachloroethane	+++++	0.38940	0.41936	0.42131	0.41952	0.41531					
	0.40832	0.41760					AVRG		0.41297		2.72046
21 Nitrobenzene	+++++	0.24845	0.26680	0.25685	0.24412	0.23043					
	0.21217	0.20803					AVRG		0.23812		9.31912
22 Isophorone	+++++	0.45816	0.49226	0.49029	0.45241	0.41992					
	0.39415	0.38838					AVRG		0.44222		9.62880
23 2-Nitrophenol	+++++	0.11547	0.14223	0.13108	0.12558	0.12127					
	0.11523	0.11724					AVRG		0.12401		7.98047
24 2,4-Dimethylphenol	+++++	0.21966	0.23281	0.23194	0.21573	0.20764					
	0.19429	0.19541					AVRG		0.21392		7.35461
25 bis(2-Chloroethoxy)methane	+++++	0.25854	0.27287	0.27115	0.25218	0.23628					
	0.22333	0.21759					AVRG		0.24742		8.96356

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19659	0.21717	0.21714	0.20372	0.19511					
	0.18313	0.18359					AVRG		0.19949		7.05929
27 Benzoic acid	+++++	+++++	0.09002	0.11803	0.10197	0.11586					
	0.10794	0.12814					AVRG		0.11033		12.12819
28 1,2,4-Trichlorobenzene	+++++	0.26481	0.27523	0.26908	0.25466	0.24111					
	0.22459	0.22030					AVRG		0.24997		8.71723
30 Naphthalene	0.81705	0.74573	0.76657	0.72847	0.68863	0.63949					
	0.59297	0.55942					AVRG		0.69229		12.86965
204 alpha-Terpineol	+++++	0.17262	0.18143	0.17832	0.16468	0.15346					
	0.14288	0.13778					AVRG		0.16160		10.68187
31 4-Chloroaniline	+++++	0.26766	0.22783	0.30909	0.29015	0.28897					
	0.27710	0.27967					AVRG		0.27721		9.14686
189 Caprolactam	+++++	0.06063	0.07077	+++++	+++++	0.07699					
	0.07770	0.07957					AVRG		0.07313		10.57301
32 Hexachlorobutadiene	+++++	0.16663	0.17799	0.17401	0.16606	0.15880					
	0.14863	0.14597					AVRG		0.16258		7.45567
33 4-Chloro-3-methylphenol	+++++	0.19010	0.21662	0.21855	0.20067	0.19059					
	0.18078	0.17853					AVRG		0.19655		8.18892

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INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
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Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.51678	0.50700	0.52401	0.52107	0.47972	0.44344					
	0.42192	0.40565					AVRG		0.47745		9.97925
35 1-Methylnaphthalene	0.49817	0.48888	0.50948	0.50950	0.46873	0.43532					
	0.40747	0.39405					AVRG		0.46395		9.93014
36 Hexachlorocyclopentadiene	+++++	0.11559	0.14894	0.17638	0.16699	0.17517					
	0.15973	0.18699					AVRG		0.16140		14.65548
208 1,1'-Biphenyl	+++++	1.06821	1.07871	+++++	+++++	1.07139					
	1.04410	1.03663					AVRG		1.05981		1.73080
205 2,3-Dichloroaniline	+++++	0.42334	0.44162	0.48367	0.45837	0.47569					
	0.46389	0.48191					AVRG		0.46121		4.82890
37 2,4,6-Trichlorophenol	+++++	0.24410	0.27355	0.30569	0.28842	0.30698					
	0.30109	0.31371					AVRG		0.29051		8.42918
38 2,4,5-Trichlorophenol	+++++	0.26102	0.29598	0.31509	0.31354	0.30818					
	0.30243	0.32875					AVRG		0.30357		7.06061
40 2-Chloronaphthalene	0.79673	0.82048	0.87010	0.90775	0.85133	0.85068					
	0.82317	0.83198					AVRG		0.84403		4.05738
42 o-Nitroaniline	+++++	0.19115	0.21865	0.24505	0.22880	0.22737					
	0.22383	0.23238					AVRG		0.22389		7.41961

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	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	14483	15051	82754	119707	239651					
	283774	430579					LINR	0.33554	0.19860		0.99002
43 Dimethylphthalate	+++++	0.95484	1.02595	1.06444	0.99695	0.99604					
	0.94535	0.98159					AVRG		0.99502		4.11153
44 2,6-Dinitrotoluene	+++++	0.20821	0.23299	0.24910	0.23478	0.23887					
	0.22604	0.23758					AVRG		0.23251		5.49531
45 Acenaphthylene	1.14802	1.28799	1.36835	1.40207	1.30955	1.28653					
	1.24364	1.23741					AVRG		1.28545		6.16797
47 Acenaphthene	0.74181	0.78832	0.85183	0.88393	0.83890	0.85177					
	0.82987	0.84268					AVRG		0.82864		5.31903
48 2,4-Dinitrophenol	+++++	+++++	21200	54725	74212	150262					
	173409	+++++					LINR	0.32072	0.11919		0.99343
49 Dibenzofuran	+++++	1.18297	1.25042	1.30282	1.21056	1.17947					
	1.14114	1.14741					AVRG		1.20211		4.81916
50 2,4-Dinitrotoluene	+++++	0.25307	0.29824	0.31858	0.30040	0.30633					
	0.29555	0.30981					AVRG		0.29743		7.08057
51 Diethylphthalate	+++++	0.94215	1.02610	1.07432	0.99980	0.98701					
	0.95141	0.95004					AVRG		0.99012		4.86022

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	14071	43969	105849	128396	217824					
	255018	390419					LINR	0.15210	0.16724		0.99652
53 Fluorene	0.89941	0.94917	1.03641	1.08233	1.01112	1.00641					
	0.97983	0.99090					AVRG		0.99445		5.53573
54 4-Chlorophenylphenylether	+++++	0.51413	0.55022	0.58370	0.54287	0.55212					
	0.53675	0.55173					AVRG		0.54736		3.80860
55 2-Methyl-4,6-dinitrophenol	+++++	12837	44459	104894	133773	234249					
	277848	423559					LINR	0.19850	0.09795		0.99570
56 p-Nitroaniline	+++++	0.09524	0.09753	0.09849	0.08778	0.10616					
	0.11333	+++++					AVRG		0.09976		8.91814
133 Diphenylamine	+++++	0.41220	0.39607	0.40064	0.37402	0.38072					
	0.37482	0.41332					AVRG		0.39311		4.27057
58 1,2-Diphenylhydrazine	+++++	0.47390	0.51146	0.53163	0.49408	0.48123					
	0.45859	0.46295					AVRG		0.48769		5.44241
59 Tributylphosphate	+++++	0.93611	1.00727	1.01733	1.06767	1.06421					
	1.07800	1.05488					AVRG		1.03221		4.83912
61 4-Bromophenylphenylether	+++++	0.16555	0.17995	0.19299	0.18038	0.18154					
	0.17572	0.18754					AVRG		0.18052		4.81438

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
63 Hexachlorobenzene	+++++	0.18110	0.19756	0.20396	0.19230	0.19237						
	0.18432	0.19174					AVRG		0.19191		3.99111	
207 Atrazine	+++++	0.03457	0.03304	+++++	+++++	0.01580						
	0.01516	0.00441					AVRG		0.02060		62.59737	<-
65 Pentachlorophenol	+++++	17155	54261	133219	158706	275325						
	328732	490942					LINR	0.16286	0.11297		0.99712	
206 n-Octadecane	+++++	0.25432	0.27323	0.28870	0.26891	0.26490						
	0.25081	0.24964					AVRG		0.26436		5.33437	
68 Phenanthrene	0.73862	0.73226	0.78776	0.80554	0.76127	0.74608						
	0.70950	0.72888					AVRG		0.75124		4.26078	
69 Anthracene	0.68052	0.72323	0.79165	0.82251	0.76761	0.74693						
	0.71967	0.72544					AVRG		0.74720		6.05239	
72 Di-n-butylphthalate	+++++	0.80580	0.90274	0.94252	0.89139	0.85974						
	0.81610	0.79872					AVRG		0.85957		6.41454	
76 Fluoranthene	0.68758	0.79740	0.87718	0.92162	0.85800	0.83122						
	0.80482	0.80275					AVRG		0.82257		8.43347	
77 Benzidine	+++++	0.14241	0.11832	+++++	+++++	0.11685						
	0.13749	0.14337					AVRG		0.13169		9.93091	

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	0.74327	0.79248	0.86122	0.90593	0.82217	0.81621					
	0.77247	0.76811					AVRG		0.81023		6.58630
85 Butylbenzylphthalate	+++++	0.30152	0.35532	0.39574	0.36768	0.37392					
	0.36173	0.36416					AVRG		0.36001		8.01244
89 Benzo(a)anthracene	0.79661	0.75905	0.83143	0.88224	0.81756	0.80052					
	0.77503	0.79063					AVRG		0.80663		4.71092
90 3,3'-Dichlorobenzidine	+++++	0.22472	0.25680	+++++	+++++	0.28651					
	0.28815	0.29645					AVRG		0.27053		10.97312
92 Chrysene	0.71796	0.71455	0.77592	0.80262	0.74759	0.72786					
	0.70016	0.69597					AVRG		0.73533		5.11466
93 bis(2-Ethylhexyl)phthalate	7926	152141	400766	842654	992598	1555489					
	+++++	+++++					LINR	0.01278	0.54227		0.99788
94 Di-n-octylphthalate	+++++	0.69447	0.85556	0.97066	0.89544	0.90662					
	0.87221	0.86997					AVRG		0.86642		9.77684
95 Benzo(b)fluoranthene	0.64856	0.76776	0.86873	0.91742	0.84122	0.88072					
	0.82904	0.95219					AVRG		0.83820		11.32092
96 Benzo(k)fluoranthene	0.75511	0.78301	0.85963	0.94418	0.88393	0.83753					
	0.84838	0.78179					AVRG		0.83669		7.42267

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.49746	0.67779	0.77735	0.83560	0.78424	0.78360					
	0.76362	0.79281					AVRG		0.73906		14.50348
99 Indeno(1,2,3-cd)pyrene	13655	230839	571625	1119329	1485270	2231964					
	2740272	3942157					LINR	0.02754	0.85117		0.99928
100 Dibenzo(a,h)anthracene	11383	194289	484055	941279	1242196	1871982					
	2304325	3322133					LINR	0.02870	0.71627		0.99919
101 Benzo(ghi)perylene	0.45435	0.62075	0.67088	0.67953	0.70274	0.68415					
	0.68870	0.70141					AVRG		0.65031		12.80349
102 1,4-Dioxane	+++++	0.24634	0.28025	+++++	+++++	0.30356					
	0.29319	0.26953					AVRG		0.27857		7.94884
103 Methyl methacrylate	+++++	0.16872	0.16444	+++++	+++++	0.16505					
	0.18086	0.15892					AVRG		0.16760		4.89346
104 Ethyl methacrylate	+++++	0.66031	0.70980	+++++	+++++	0.69504					
	0.68531	0.66714					AVRG		0.68352		2.95664
105 2-Picoline	+++++	1.01746	1.07832	+++++	+++++	1.04828					
	1.03935	1.02355					AVRG		1.04139		2.30595
106 N-Nitrosomethylethylamine	+++++	0.31757	0.35447	+++++	+++++	0.37185					
	0.37790	0.37352					AVRG		0.35906		6.92083

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.44871	0.47910	+++++	+++++	0.44075					
	0.43643	0.44457					AVRG		0.44991		3.76452
108 N-Nitrosodiethylamine	+++++	0.30410	0.36077	+++++	+++++	0.37459					
	0.37925	0.38070					AVRG		0.35988		8.93633
109 Ethyl Methanesulfonate	+++++	0.52387	0.54987	+++++	+++++	0.53861					
	0.52806	0.54078					AVRG		0.53624		1.93775
110 Pentachloroethane	+++++	0.30723	0.32723	+++++	+++++	0.32393					
	0.32208	0.31995					AVRG		0.32008		2.39449
111 N-Nitrosopyrrolidine	+++++	18119	50578	+++++	+++++	275191					
	347837	418958					LINR	0.09385	0.41052		0.99979
113 N-Nitrosomorpholine	+++++	0.31286	0.38027	+++++	+++++	0.40465					
	0.39989	0.39689					AVRG		0.37891		10.04075
114 o-Toluidine	+++++	1.35701	1.45906	+++++	+++++	1.45255					
	1.43423	1.43439					AVRG		1.42745		2.86402
115 N-Nitrosopiperidine	+++++	0.09506	0.11290	+++++	+++++	0.12040					
	0.12000	0.12173					AVRG		0.11402		9.77130
116 a,a-Dimethylphenethylamine	+++++	67223	221950	+++++	+++++	1304888					
	1645063	1941742					LINR	0.12017	0.55348		0.99966

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Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
117 Triethylphosphorothioate	+++++	0.16537	0.16522	0.16826	0.17549	0.18113						
	0.18346	0.18351					AVRG		0.17464		4.76002	
118 2,6-Dichlorophenol	+++++	0.17667	0.20374	+++++	+++++	0.21733						
	0.21628	0.22228					AVRG		0.20726		8.88487	
119 Hexachloropropene	+++++	0.09341	0.12175	+++++	+++++	0.12774						
	0.13457	0.13555					AVRG		0.12260		14.06913	
120 p-Phenylenediamine	+++++	0.04451	0.09259	+++++	+++++	0.11802						
	0.14321	0.07722					AVRG		0.09511		39.77786	<-
121 N-Nitrosodi-n-butylamine	+++++	0.12388	0.14468	+++++	+++++	0.14675						
	0.14779	0.14275					AVRG		0.14117		6.98114	
122 Safrole	+++++	0.18511	0.20314	+++++	+++++	0.20383						
	0.19860	0.20325					AVRG		0.19879		3.98688	
123 1,2,4,5-Tetrachlorobenzene	+++++	0.44675	0.47581	+++++	+++++	0.47640						
	0.47142	0.46516					AVRG		0.46711		2.61935	
124 Isosafrole	+++++	0.28246	0.31435	+++++	+++++	0.32006						
	0.31708	0.32066					AVRG		0.31092		5.18056	
125 1,4-Naphthoquinone	+++++	0.26279	0.33670	+++++	+++++	0.28475						
	0.25902	0.21482					AVRG		0.27162		16.33213	<-

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126 m-Dinitrobenzene	+++++	0.13426	0.16096	0.17529	0.16515	0.17075					
	0.16615	0.17238					AVRG		0.16356		8.43299
127 Pentachlorobenzene	+++++	0.41386	0.44358	+++++	+++++	0.43445					
	0.42287	0.42694					AVRG		0.42834		2.63934
128 1-Naphthylamine	+++++	0.64290	0.71157	+++++	+++++	0.72798					
	0.75065	0.72826					AVRG		0.71227		5.78366
129 2-Naphthylamine	+++++	0.63606	0.67439	+++++	+++++	0.58978					
	0.64536	0.64782					AVRG		0.63868		4.82722
130 2,3,4,6-Tetrachlorophenol	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
131 5-Nitro-o-toluidine	+++++	27455	74724	+++++	+++++	413995					
	505367	634837					LINR	0.10089	0.28578		0.99956
132 Thionazin	+++++	0.13988	0.14775	0.15045	0.15424	0.15690					
	0.16203	0.16237					AVRG		0.15337		5.26573
134 Sulfotepp	+++++	0.11412	0.11494	0.11319	0.11600	0.11480					
	0.11400	0.11009					AVRG		0.11388		1.65743
135 Phorate	+++++	0.28388	0.29681	0.29037	0.30244	0.30088					
	0.30582	0.29054					AVRG		0.29582		2.65683

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	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	13955	48364	+++++	+++++	268631					
	340694	456398					LINR	0.16614	0.10906		0.99628
137 Phenacetin	+++++	0.17628	0.21001	+++++	+++++	0.23782					
	0.23708	0.23917					AVRG		0.22007		12.41888
138 Diallate	+++++	0.16761	0.18197	+++++	+++++	0.18302					
	0.17779	0.17698					AVRG		0.17747		3.43512
139 Dimethoate	+++++	0.13778	0.14938	0.15610	0.16928	0.17565					
	0.17871	0.17715					AVRG		0.16343		9.72135
140 4-Aminobiphenyl	+++++	0.37135	0.35332	+++++	+++++	0.32358					
	0.31870	0.29146					AVRG		0.33168		9.40668
141 Pentachloronitrobenzene	+++++	0.07139	0.07657	+++++	+++++	0.08321					
	0.08092	0.07832					AVRG		0.07808		5.77895
142 Pronamide	+++++	0.22821	0.24842	+++++	+++++	0.26720					
	0.25993	0.25910					AVRG		0.25257		6.00962
143 Dinoseb	+++++	17592	65243	160618	206017	370757					
	432801	653659					LINR	0.20878	0.15287		0.99661
144 Disulfoton	+++++	0.23435	0.24175	0.24250	0.25185	0.25151					
	0.25868	0.24626					AVRG		0.24670		3.25947

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.10756	0.12574	0.13745	0.15086	0.15374					
	0.16380	0.16473					AVRG		0.14341		14.69707
146 4-Nitroquinoline-1-oxide	+++++	0.00937	0.01228	+++++	+++++	0.00993					
	0.00944	0.00861					AVRG		0.00993		14.10180
147 Methapyrilene	+++++	0.23032	0.26350	+++++	+++++	0.25837					
	0.25388	0.25397					AVRG		0.25201		5.05822
148 Isodrin	+++++	0.08985	0.09732	+++++	+++++	0.10370					
	0.10020	0.10192					AVRG		0.09860		5.50608
149 Aramite	+++++	0.03284	0.03952	+++++	+++++	0.04489					
	0.04319	0.04214					AVRG		0.04052		11.63768
150 Kepone	+++++	0.07101	0.07864	+++++	+++++	0.07592					
	0.07559	0.08027					AVRG		0.07629		4.63038
151 p-(Dimethylamino)azobenzene	+++++	0.17522	0.21262	+++++	+++++	0.22053					
	0.21845	0.21324					AVRG		0.20801		8.95997
152 Chlorobenzilate	+++++	0.23225	0.25848	+++++	+++++	0.28615					
	0.27698	0.27112					AVRG		0.26500		7.87735
153 3,3'-Dimethylbenzidine	+++++	0.33926	0.36462	+++++	+++++	0.35940					
	0.37441	0.36902					AVRG		0.36134		3.74367

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
154 Famphur	+++++	0.25103	0.28114	0.28876	0.31048	0.31944						
	0.33910	0.31592					AVRG		0.30084		9.73369	
155 2-Acetylaminofluorene	+++++	47120	145263	+++++	+++++	949702						
	1100767	1503747					LINR	0.14865	0.33609		0.99853	
157 7,12Dimethylbenz(a)anthracene	+++++	0.38032	0.42131	+++++	+++++	0.44350						
	0.44038	0.42979					AVRG		0.42306		6.01820	
158 3-Methylcholanthrene	+++++	0.30375	0.34529	+++++	+++++	0.39857						
	0.39085	0.39392					AVRG		0.36648		11.21865	
26 Phthalic anhydride	+++++	0.07507	0.06934	0.09549	0.09747	0.09550						
	0.08993	0.08635					AVRG		0.08702		12.56366	
173 Carbazole	14837	139367	246691	487385	568160	1090154						
	1254429	+++++					LINR	0.04109	0.39552		0.99187	
174 Hexachlorophene	+++++	435932	2361068	+++++	4538044	4556630						
	4552314	+++++					LINR	9.14609	0.09969		0.99353	
179 Dibenzo(a,e)pyrene	+++++	0.31362	0.35554	0.33118	0.43912	0.41638						
	0.44192	0.45643					AVRG		0.39346		14.89785	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
184 p-Benzoquinone	+++++	4343	14231	37456	44264	71290					
	83708	+++++					LINR	0.08539	0.11280		0.99437
191 Parathion	+++++	0.06337	0.07126	0.07805	0.08155	0.08375					
	0.08775	0.08748					AVRG		0.07903		11.34928
192 Methoxychlor	+++++	0.37316	0.43593	0.46907	0.48881	0.49691					
	0.47438	0.46605					AVRG		0.45776		9.18359
210 m-Toluidine	+++++	1.01730	0.95828	1.04153	1.07045	1.03819					
	1.06035	1.06455					AVRG		1.03581		3.74343
211 p-Toluidine	+++++	49683	78529	211799	266816	507067					
	569514	+++++					LINR	0.14181	0.78212		0.99497
212 Cis Diallate	+++++	0.14773	0.16624	+++++	+++++	0.17545					
	0.17147	0.16996					AVRG		0.16617		6.51318
213 Trans Diallate	+++++	0.19719	0.21409	+++++	+++++	0.21532					
	0.20917	0.20821					AVRG		0.20879		3.43512
214 1,4-Dinitrobenzene	+++++	0.12784	0.15121	0.16974	0.15587	0.16620					
	0.16695	0.17540					AVRG		0.15903		10.07655
215 2-Ethoxyethanol	+++++	0.38685	0.41544	0.41160	0.40973	0.41987					
	0.40092	0.36487					AVRG		0.40133		4.83383

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.09027	0.07877	0.09631	0.10183	0.11537					
	0.11302	+++++					AVRG		0.09926		13.99534
229 2,2'-Dichlorobenzil	+++++	0.40624	0.44915	0.45206	0.46835	0.49924					
	0.50127	0.49121					AVRG		0.46679		7.33567
230 4-Chlorothioanisole	+++++	0.23519	0.25134	0.25866	0.26118	0.27506					
	0.27431	0.27443					AVRG		0.26145		5.67051
231 4-Chlorothiophenol	+++++	33730	109582	208710	270504	591872					
	637096	698168					LINR	0.16729	0.22127		0.99837
232 bis(p-Chlorophenyl)sulfone	+++++	0.27790	0.28817	0.28727	0.29340	0.31372					
	0.31573	0.30820					AVRG		0.29777		4.94706
233 bis(p-Chlorophenyl)disulfide	+++++	0.08649	0.09716	0.09996	0.10104	0.11282					
	0.11321	0.11036					AVRG		0.10301		9.49989
234 Diphenyl disulfide	+++++	0.17703	0.18827	0.19313	0.19397	0.19743					
	0.19934	0.19498					AVRG		0.19202		3.89349
235 Diphenyl sulfide	+++++	0.73815	0.76067	0.76884	0.77583	0.77384					
	0.77835	0.76108					AVRG		0.76525		1.80366
236 Phenyl sulfone	+++++	0.32490	0.33335	0.34401	0.34629	0.34828					
	0.35151	0.34243					AVRG		0.34154		2.72169

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
237 Hydroxymethyl phthalimide	+++++	0.15868	0.13541	0.13994	0.13819	0.13830					
	0.13473	0.14129					AVRG		0.14093		5.78993
238 Phthalic acid	+++++	34594	90147	182251	231472	444665					
	541872	587383					LINR	0.16006	0.18293		0.99675
239 Thiophenol	+++++	0.64619	0.81626	0.89508	0.92244	0.99432					
	1.00016	1.00671					AVRG		0.89731		14.54651
240 bis(Chloromethyl)ether	+++++	0.74313	0.76318	0.75550	0.73293	0.77257					
	0.73038	0.75865					AVRG		0.75091		2.10971
241 Octachlorostyrene	+++++	0.08120	0.08332	0.08290	0.08503	0.08678					
	0.08899	0.08481					AVRG		0.08472		3.05713
M 225 Trichlorophenols	+++++	0.25256	0.28477	0.31039	0.30098	0.30758					
	0.30176	0.32123					AVRG		0.29704		7.57948
M 226 Tetrachlorophenols	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
M 227 Benzo(b,k)fluoranthene	0.70183	0.77538	0.86418	0.93080	0.86257	0.85913					
	0.83871	0.86699					AVRG		0.83745		8.27901
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.77799	0.82940	0.84165	0.83307	0.84646						
	0.82089	0.84901					AVRG		0.82835		2.93507	
$ 5 Phenol-d5	+++++	0.94004	1.02783	1.06321	1.02953	1.04638						
	1.02443	1.06043					AVRG		1.02741		4.04817	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27903	0.29718	0.29088	0.25443	0.23402						
	0.21749	0.21713					AVRG		0.25574		13.28145	
$ 39 2-Fluorobiphenyl	+++++	0.99517	1.04673	1.06867	1.00896	1.00442						
	0.97367	0.97597					AVRG		1.01051		3.50349	
$ 60 2,4,6-Tribromophenol	+++++	0.12029	0.14713	0.16005	0.15035	0.15227						
	0.14829	0.15735					AVRG		0.14796		8.83326	
$ 81 p-Terphenyl-d14	+++++	0.54698	0.59094	0.62904	0.57872	0.57377						
	0.54438	0.54045					AVRG		0.57204		5.54873	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.83029	0.83029	0.000	0.23433	60.00000	Averaged
$ 5 Phenol-d5	1.02741	0.99434	0.99434	0.000	-3.21879	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.27844	0.27844	0.000	8.87699	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.03773	1.03773	0.000	2.69384	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.14657	0.14657	0.000	-0.93966	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.62712	0.62712	0.000	9.62917	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.42939	0.42939	0.000	-6.49389	60.00000	Averaged
2 Pyridine	0.65138	0.55949	0.55949	0.000	-14.10583	60.00000	Averaged
4 Aniline	0.40115	0.39878	0.39878	0.000	-0.58986	60.00000	Averaged
6 Phenol	1.07292	1.03238	1.03238	0.001	-3.77875	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.63389	0.62332	0.62332	0.000	-1.66734	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.89132	0.89132	0.000	-3.13291	60.00000	Averaged
203 n-Decane	0.83349	0.87112	0.87112	0.000	4.51494	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.09484	1.09484	0.000	-0.63588	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11853	1.10496	1.10496	0.001	-1.21340	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.05853	1.04676	1.04676	0.000	-1.11250	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	0.99850	0.99850	0.000	-0.89937	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.55960	0.55960	0.000	-3.60740	60.00000	Averaged
15 o-Cresol	0.73443	0.71543	0.71543	0.000	-2.58644	60.00000	Averaged
18 m,p-Cresols	0.93489	0.91075	0.91075	0.000	-2.58249	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.48060	0.48060	0.050	-0.45716	60.00000	Averaged spcc
19 Hexachloroethane	0.41297	0.38700	0.38700	0.000	-6.28851	60.00000	Averaged
21 Nitrobenzene	0.23812	0.24737	0.24737	0.000	3.88288	60.00000	Averaged
22 Isophorone	0.44222	0.44350	0.44350	0.000	0.28843	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.11747	0.11747	0.001	-5.27545	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21392	0.21469	0.21469	0.000	0.35583	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.23888	0.23888	0.000	-3.45098	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.19843	0.19843	0.001	-0.53268	20.00000	Averaged ccc
27 Benzoic acid	0.11033	0.11800	0.11800	0.000	6.95226	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.24504	0.24504	0.000	-1.97055	60.00000	Averaged
30 Naphthalene	0.69229	0.76058	0.76058	0.000	9.86346	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.15093	0.15093	0.000	-6.60421	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.26915	0.26915	0.000	-2.90716	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.16847	0.16847	0.001	3.62286	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19655	0.18982	0.18982	0.001	-3.42299	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.47745	0.54686	0.54686	0.000	14.53758	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.46395	0.51084	0.51084	0.000	10.10698	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.16140	0.11816	0.11816	0.050	-26.78720	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.46121	0.43794	0.43794	0.000	-5.04574	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.29051	0.26846	0.26846	0.001	-7.58993	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.30357	0.30531	0.30531	0.000	0.57382	60.00000	Averaged	
40	2-Chloronaphthalene	0.84403	0.82711	0.82711	0.000	-2.00427	60.00000	Averaged	
42	o-Nitroaniline	0.22389	0.21429	0.21429	0.000	-4.28607	60.00000	Averaged	
41	m-Nitroaniline	32.25605	40.00000	0.09351	0.000	-19.35986	60.00000	Linear	
43	Dimethylphthalate	0.99502	1.00014	1.00014	0.000	0.51409	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.23251	0.22347	0.22347	0.000	-3.88808	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.29743	0.29372	0.29372	0.000	-1.24745	60.00000	Averaged	
45	Acenaphthylene	1.28545	1.44563	1.44563	0.000	12.46144	60.00000	Averaged	
47	Acenaphthene	0.82864	0.86500	0.86500	0.001	4.38855	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	31.49171	40.00000	0.05561	0.050	-21.27072	60.00000	Linear	spcc
49	Dibenzofuran	1.20211	1.19562	1.19562	0.000	-0.53995	60.00000	Averaged	
51	Diethylphthalate	0.99012	1.00550	1.00550	0.000	1.55350	60.00000	Averaged	
52	4-Nitrophenol	35.69942	40.00000	0.12382	0.050	-10.75144	60.00000	Linear	spcc
53	Fluorene	0.99445	1.07305	1.07305	0.000	7.90438	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.54736	0.53200	0.53200	0.000	-2.80637	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	39.60786	40.00000	0.07755	0.000	-0.98036	60.00000	Linear	
56	p-Nitroaniline	0.09976	0.09283	0.09283	0.000	-6.94521	60.00000	Averaged	
133	Diphenylamine	0.39311	0.36704	0.36704	0.001	-6.63338	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.48769	0.48502	0.48502	0.000	-0.54741	60.00000	Averaged	
61	4-Bromophenylphenylether	0.18052	0.17126	0.17126	0.000	-5.13387	60.00000	Averaged	
63	Hexachlorobenzene	0.19191	0.18523	0.18523	0.000	-3.47929	60.00000	Averaged	
65	Pentachlorophenol	36.05605	40.00000	0.08343	0.001	-9.85987	20.00000	Linear	ccc
206	n-Octadecane	0.26436	0.25557	0.25557	0.000	-3.32275	60.00000	Averaged	
68	Phenanthrene	0.75124	0.80888	0.80888	0.000	7.67214	60.00000	Averaged	
69	Anthracene	0.74720	0.83500	0.83500	0.000	11.75132	60.00000	Averaged	
72	Di-n-butylphthalate	0.85957	0.89892	0.89892	0.000	4.57698	60.00000	Averaged	
76	Fluoranthene	0.82257	0.93022	0.93022	0.001	13.08693	20.00000	Averaged	ccc
79	Pyrene	0.81023	0.89526	0.89526	0.000	10.49463	60.00000	Averaged	
85	Butylbenzylphthalate	0.36001	0.36740	0.36740	0.000	2.05224	60.00000	Averaged	
89	Benzo(a)anthracene	0.80663	0.86024	0.86024	0.000	6.64603	60.00000	Averaged	
92	Chrysene	0.73533	0.80028	0.80028	0.000	8.83303	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	39.93372	40.00000	0.53444	0.000	-0.16569	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.87303	0.87303	0.001	0.76265	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.92559	0.92559	0.000	10.42552	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.89887	0.89887	0.000	7.43117	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.83326	0.83326	0.001	12.74672	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	42.59286	40.00000	0.88290	0.000	6.48214	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	42.30047	40.00000	0.73690	0.000	5.75119	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.75185	0.75185	0.000	15.61349	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.15432	0.15432	0.000	-5.65249	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
	143 Dinoseb	32.63928	40.00000	0.09282	0.000	-18.40180	60.00000	Linear	
	173 Carbazole	38.13875	40.00000	0.36087	0.000	-4.65311	60.00000	Linear	
	184 p-Benzoquinone	36.94068	40.00000	0.09454	0.000	-7.64830	60.00000	Linear	
	192 Methoxychlor	0.45776	0.42935	0.42935	0.000	-6.20645	60.00000	Averaged	
	211 p-Toluidine	36.08309	40.00000	0.59462	0.000	-9.79228	60.00000	Linear	
	210 m-Toluidine	1.03581	0.92304	0.92304	0.000	-10.88701	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.10069	0.10069	0.000	15.70689	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.28402	0.28402	0.000	-27.81494	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.15861	0.15861	0.000	-0.26496	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.33769	0.33769	0.000	-15.85683	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.08744	0.08744	0.000	-11.91594	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.28689	0.28689	0.000	-3.41833	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.91223	0.91223	0.000	8.92968	60.00000	Averaged	

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Data file : /chem/MSD5.i/s113009.b/s5k3023.d
Lab Smp Id: WBN091106-09.3 Client Smp ID: MEGAICV
Inj Date : 30-NOV-2009 18:20
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-09.3|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 01-Dec-2009 07:52 rmb Quant Type: ISTD
Cal Date : 30-NOV-2009 17:28 Cal File: s5k3021.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	241000	40.0000	
* 29 Naphthalene-d8	136	4.826	4.826	(1.000)	918322	40.0000	
* 46 Acenaphthene-d10	164	6.088	6.088	(1.000)	516156	40.0000	
* 67 Phenanthrene-d10	188	7.268	7.268	(1.000)	970034	40.0000	
* 91 Chrysene-d12	240	9.694	9.694	(1.000)	1047303	40.0000	
* 98 Perylene-d12	264	11.414	11.414	(1.000)	981599	40.0000	
$ 3 2-Fluorophenol	112	3.126	3.126	(0.791)	200101	40.0000	40.1
$ 5 Phenol-d5	99	3.661	3.661	(0.926)	239635	40.0000	38.7
$ 20 Nitrobenzene-d5	82	4.321	4.321	(0.895)	255698	40.0000	43.6
$ 39 2-Fluorobiphenyl	172	5.568	5.568	(0.915)	535633	40.0000	41.1
$ 60 2,4,6-Tribromophenol	329	6.685	6.685	(1.098)	75654	40.0000	39.6
$ 81 p-Terphenyl-d14	244	8.650	8.650	(0.892)	656788	40.0000	43.8
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.419	(0.612)	103482	40.0000	37.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.452	2.452	(0.620)	134838	40.0000	34.4
4 Aniline	66	3.738	3.738	(0.945)	96106	40.0000	39.8
6 Phenol	94	3.670	3.670	(0.928)	248803	40.0000	38.5(Q)
7 bis(2-Chloroethyl) ether	63	3.752	3.752	(0.949)	150220	40.0000	39.3
8 2-Chlorophenol	128	3.820	3.820	(0.966)	214809	40.0000	38.7
203 n-Decane	43	3.800	3.800	(0.961)	209941	40.0000	41.8
9 1,3-Dichlorobenzene	146	3.921	3.921	(0.991)	263857	40.0000	39.7
11 1,4-Dichlorobenzene	146	3.964	3.964	(1.002)	266296	40.0000	39.5
13 1,2-Dichlorobenzene	146	4.070	4.070	(1.029)	252268	40.0000	39.6
14 bis(2-Chloroisopropyl)ether	45	4.099	4.099	(1.037)	240639	40.0000	39.6
12 Benzyl alcohol	108	4.017	4.017	(1.016)	134864	40.0000	38.6
15 o-Cresol	107	4.070	4.070	(1.029)	172419	40.0000	39.0
18 m,p-Cresols	107	4.166	4.166	(1.054)	219491	40.0000	39.0
17 N-Nitrosodipropylamine	70	4.191	4.191	(1.060)	115825	40.0000	39.8(H)
19 Hexachloroethane	117	4.301	4.301	(1.088)	93268	40.0000	37.5
21 Nitrobenzene	77	4.330	4.330	(0.897)	227163	40.0000	41.6
22 Isophorone	82	4.484	4.484	(0.929)	407276	40.0000	40.1
23 2-Nitrophenol	139	4.547	4.547	(0.942)	107877	40.0000	37.9
24 2,4-Dimethylphenol	122	4.537	4.537	(0.940)	197151	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.605	4.605	(0.954)	219371	40.0000	38.6
26 2,4-Dichlorophenol	162	4.706	4.706	(0.975)	182222	40.0000	39.8
27 Benzoic acid	105	4.590	4.590	(0.951)	108359	40.0000	42.8
28 1,2,4-Trichlorobenzene	180	4.773	4.773	(0.989)	225027	40.0000	39.2
30 Naphthalene	128	4.841	4.841	(1.003)	698453	40.0000	43.9
204 alpha-Terpineol	59	4.812	4.812	(0.997)	138598	40.0000	37.4
31 4-Chloroaniline	127	4.841	4.841	(1.003)	247168	40.0000	38.8
32 Hexachlorobutadiene	225	4.908	4.908	(1.017)	154713	40.0000	41.4
33 4-Chloro-3-methylphenol	107	5.163	5.163	(1.070)	174316	40.0000	38.6
34 2-Methylnaphthalene	142	5.322	5.322	(1.103)	502193	40.0000	45.8
35 1-Methylnaphthalene	142	5.399	5.399	(1.119)	469118	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.428	5.428	(0.892)	60991	40.0000	29.3
205 2,3-Dichloroaniline	161	5.520	5.520	(0.907)	226045	40.0000	38.0
37 2,4,6-Trichlorophenol	196	5.510	5.510	(0.905)	138566	40.0000	37.0
38 2,4,5-Trichlorophenol	196	5.539	5.539	(0.910)	157589	40.0000	40.2
40 2-Chloronaphthalene	162	5.678	5.678	(0.933)	426918	40.0000	39.2
42 o-Nitroaniline	65	5.736	5.736	(0.942)	110609	40.0000	38.3
41 m-Nitroaniline	138	6.035	6.035	(0.991)	48268	40.0000	32.2
43 Dimethylphthalate	163	5.842	5.842	(0.960)	516226	40.0000	40.2
44 2,6-Dinitrotoluene	165	5.900	5.900	(0.969)	115345	40.0000	38.4
50 2,4-Dinitrotoluene	165	6.199	6.199	(1.018)	151603	40.0000	39.5
45 Acenaphthylene	152	5.987	5.987	(0.983)	746171	40.0000	45.0
47 Acenaphthene	154	6.112	6.112	(1.004)	446477	40.0000	41.8
48 2,4-Dinitrophenol	184	6.102	6.102	(1.002)	28705	40.0000	31.5
49 Dibenzofuran	168	6.237	6.237	(1.025)	617128	40.0000	39.8
51 Diethylphthalate	149	6.353	6.353	(1.044)	518995	40.0000	40.6
52 4-Nitrophenol	139	6.117	6.117	(1.005)	63912	40.0000	35.7
53 Fluorene	166	6.502	6.502	(1.068)	553863	40.0000	43.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.473	6.473	(1.063)	274594	40.0000	38.9
55 2-Methyl-4,6-dinitrophenol	198	6.512	6.512	(0.896)	75224	40.0000	39.6
56 p-Nitroaniline	138	6.497	6.497	(1.067)	47914	40.0000	37.2
133 Diphenylamine	169	6.564	6.564	(0.903)	356038	40.0000	37.3
58 1,2-Diphenylhydrazine	77	6.598	6.598	(0.908)	470487	40.0000	39.8
61 4-Bromophenylphenylether	248	6.868	6.868	(0.945)	166125	40.0000	37.9
63 Hexachlorobenzene	284	6.940	6.940	(0.955)	179680	40.0000	38.6
65 Pentachlorophenol	266	7.089	7.089	(0.975)	80931	40.0000	36.0
206 n-Octadecane	57	7.075	7.075	(0.973)	247915	40.0000	38.7
68 Phenanthrene	178	7.287	7.287	(1.003)	784638	40.0000	43.1
69 Anthracene	178	7.330	7.330	(1.009)	809979	40.0000	44.7
72 Di-n-butylphthalate	149	7.686	7.686	(1.058)	871980	40.0000	41.8
76 Fluoranthene	202	8.337	8.337	(1.147)	902346	40.0000	45.2
79 Pyrene	202	8.553	8.553	(0.882)	937612	40.0000	44.2
85 Butylbenzylphthalate	149	9.083	9.083	(0.937)	384776	40.0000	40.8
89 Benzo(a)anthracene	228	9.680	9.680	(0.998)	900935	40.0000	42.6
92 Chrysene	228	9.719	9.719	(1.002)	838136	40.0000	43.5
93 bis(2-Ethylhexyl)phthalate	149	9.608	9.608	(0.991)	559723	40.0000	39.9
94 Di-n-octylphthalate	149	10.277	10.277	(0.900)	856961	40.0000	40.3
95 Benzo(b)fluoranthene	252	10.879	10.879	(0.953)	908560	40.0000	44.2(H)
96 Benzo(k)fluoranthene	252	10.918	10.918	(0.957)	882331	40.0000	43.0
97 Benzo(a)pyrene	252	11.332	11.332	(0.993)	817930	40.0000	45.1
99 Indeno(1,2,3-cd)pyrene	276	13.239	13.239	(1.160)	866655	40.0000	42.6
100 Dibenzo(a,h)anthracene	278	13.253	13.253	(1.161)	723343	40.0000	42.3
101 Benzo(ghi)perylene	276	13.797	13.797	(1.209)	738017	40.0000	46.2
126 m-Dinitrobenzene	168	5.881	5.881	(0.966)	79652	40.0000	37.7
130 2,3,4,6-Tetrachlorophenol	232	6.314	6.314	(1.037)	122646	40.0000	36.3
143 Dinoseb	211	7.210	7.210	(0.992)	90043	40.0000	32.6
173 Carbazole	167	7.446	7.446	(1.024)	350056	40.0000	38.1
184 p-Benzoquinone	54	3.435	3.435	(0.868)	22785	40.0000	36.9
192 Methoxychlor	227	9.560	9.560	(0.986)	449656	40.0000	37.5
211 p-Toluidine	106	4.229	4.229	(1.069)	143304	40.0000	36.1
210 m-Toluidine	106	4.253	4.253	(1.075)	222452	40.0000	35.6
26 Phthalic anhydride	104	5.351	5.351	(1.109)	92464	40.0000	46.3
179 Dibenzo(a,e)pyrene	302	18.054	18.054	(1.582)	278791	40.0000	28.9(H)
214 1,4-Dinitrobenzene	75	5.823	5.823	(0.956)	81867	40.0000	39.9
215 2-Ethoxyethanol	59	2.255	2.255	(0.570)	81383	40.0000	33.6
216 Methylenebis(2-chloroaniline)	231	9.622	9.622	(0.993)	91571	40.0000	35.2(Q)
M 225 Trichlorophenols	196				296155	80.0000	77.3
M 226 Tetrachlorophenols	232				122646	40.0000	36.3
M 227 Benzo(b,k)fluoranthene	252				1790891	80.0000	87.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s113009.b/s5K3023.d
Date : 30-NOV-2009 18:20
Client ID: MEGAICV
Sample Info: IWBN091106-09,3140 PPM11ISVM11MEGAICV
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

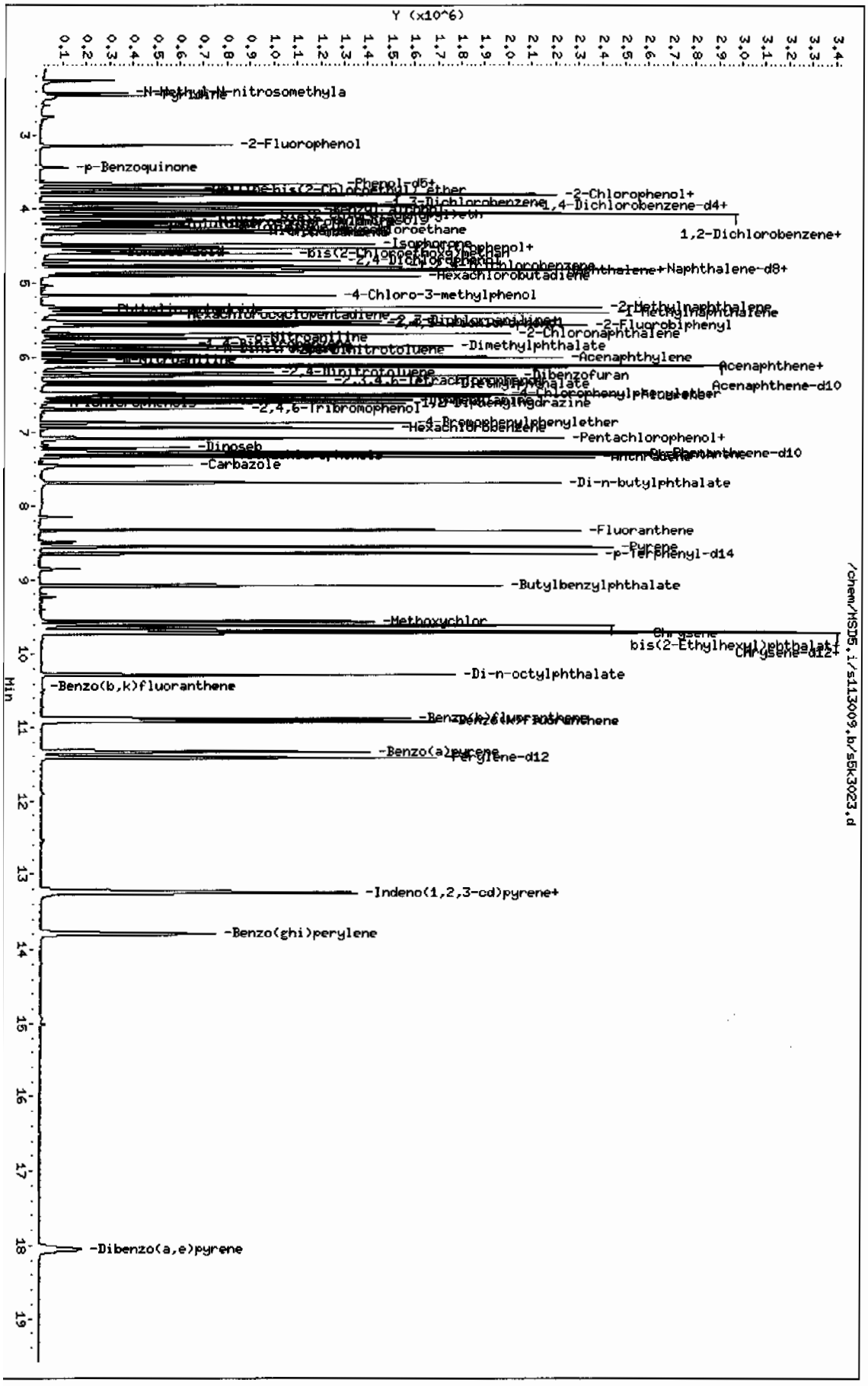

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 01-DEC-2009 00:10
Lab File ID: s5k3038.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.65043	0.65043	0.000	-12.29758	60.00000	Averaged
16 Acetophenone	1.03433	1.03897	1.03897	0.000	0.44885	60.00000	Averaged
189 Caprolactam	0.07313	0.07820	0.07820	0.000	6.93169	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.14668	1.14668	0.000	8.19727	60.00000	Averaged
207 Atrazine	0.02060	0.02454	0.02454	0.000	19.14280	60.00000	Averaged
77 Benzidine	0.13169	0.08089	0.08089	0.000	-38.57488	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.27627	0.27627	0.000	2.12244	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.33600	0.33600	0.000	20.61484	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.19248	0.19248	0.000	14.84568	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.84583	0.84583	0.000	23.74639	60.00000	Averaged
105 2-Picoline	1.04139	1.00530	1.00530	0.000	-3.46598	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.36760	0.36760	0.000	2.37797	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.50459	0.50459	0.000	12.15234	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.35101	0.35101	0.000	-2.46475	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.67398	0.67398	0.000	25.68542	60.00000	Averaged
110 Pentachloroethane	0.32008	0.45290	0.45290	0.000	41.49317	60.00000	Averaged
111 N-Nitrosopyrrolidine	36.47218	40.00000	0.33578	0.000	-8.81956	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.37347	0.37347	0.000	-1.43685	60.00000	Averaged
114 o-Toluidine	1.42745	1.44299	1.44299	0.000	1.08876	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.11246	0.11246	0.000	-1.36442	60.00000	Averaged
116 a,a-Dimethylphenethylamine	38.19678	40.00000	0.46202	0.000	-4.50804	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.21709	0.21709	0.000	4.74185	60.00000	Averaged
119 Hexachloropropene	0.12260	0.18393	0.18393	0.000	50.01830	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.10774	0.10774	0.000	13.27805	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.14117	0.13700	0.13700	0.000	-2.95714	60.00000	Averaged
122 Safrole	0.19879	0.23876	0.23876	0.000	20.10710	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.51426	0.51426	0.000	10.09541	60.00000	Averaged
124 Isosafrole	0.31092	0.42686	0.42686	0.000	37.28900	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.33682	0.33682	0.000	24.00722	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.45613	0.45613	0.000	6.48820	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.70896	0.70896	0.000	-0.46534	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.51413	0.51413	0.000	-19.50189	60.00000	Averaged
131 5-Nitro-o-toluidine	38.89551	40.00000	0.24906	0.000	-2.76124	60.00000	Linear
136 1,3,5-Trinitrobenzene	45.79543	40.00000	0.10675	0.000	14.48858	60.00000	Linear
137 Phenacetin	0.22007	0.24075	0.24075	0.000	9.39579	60.00000	Averaged
138 Diallate	0.17747	0.17603	0.17603	0.000	-0.81534	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 01-DEC-2009 00:10
Lab File ID: s5k3038.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.22410	0.22410	0.000	34.86393	60.00000	Averaged
213 Trans Diallate	0.20879	0.20709	0.20709	0.000	-0.81534	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.31377	0.31377	0.000	-5.40004	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08582	0.08582	0.000	9.90245	60.00000	Averaged
142 Pronamide	0.25257	0.28719	0.28719	0.000	13.70900	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01196	0.01196	0.000	20.41909	60.00000	Averaged
147 Methapyrilene	0.25201	0.29827	0.29827	0.000	18.35726	60.00000	Averaged
148 Isodrin	0.09860	0.09378	0.09378	0.000	-4.88678	60.00000	Averaged
149 Aramite	0.04052	0.04013	0.04013	0.000	-0.95220	60.00000	Averaged
150 Kepone	0.07629	0.06942	0.06942	0.000	-9.00509	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.21652	0.21652	0.000	4.09057	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.26342	0.26342	0.000	-0.59569	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.33149	0.33149	0.000	-8.26293	60.00000	Averaged
155 2-Acetylaminofluorene	38.79550	40.00000	0.27601	0.000	-3.01125	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.43251	0.43251	0.000	2.23307	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.40112	0.40112	0.000	9.45325	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s113009.b/s5k3038.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: AP12ICV
Inj Date : 01-DEC-2009 00:10
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091111-08.1|50 PPM|1|SVM|1|AP12ICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 02-Dec-2009 13:38 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 12:54 Cal File: s5k3048.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.948	3.948	(1.000)	321448	40.0000	
* 29 Naphthalene-d8	136	4.825	4.825	(1.000)	1142641	40.0000	
* 46 Acenaphthene-d10	164	6.084	6.084	(1.000)	698479	40.0000	
* 67 Phenanthrene-d10	188	7.260	7.260	(1.000)	1290991	40.0000	
* 91 Chrysene-d12	240	9.683	9.683	(1.000)	1365925	40.0000	
* 98 Perylene-d12	264	11.407	11.407	(1.000)	1246471	40.0000	
209 Benzaldehyde	77	3.672	3.672	(0.930)	209081	40.0000	35.1
16 Acetophenone	105	4.201	4.201	(1.064)	333975	40.0000	40.2
189 Caprolactam	113	5.095	5.095	(1.056)	89358	40.0000	42.8
208 1,1'-Biphenyl	154	5.648	5.648	(0.928)	800935	40.0000	43.3
207 Atrazine	173	6.954	6.954	(0.958)	31680	40.0000	47.6
77 Benzidine	184	8.419	8.419	(0.869)	110489	40.0000	24.6
90 3,3'-Dichlorobenzidine	252	9.619	9.619	(0.993)	377361	40.0000	40.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.260	2.260	(0.572)	108007	40.0000	48.2
103 Methyl methacrylate	100	2.254	2.254	(0.571)	61872	40.0000	45.9
104 Ethyl methacrylate	69	2.637	2.637	(0.668)	271891	40.0000	49.5
105 2-Picoline	93	2.837	2.837	(0.718)	323151	40.0000	38.6
106 N-Nitrosomethylethylamine	88	2.884	2.884	(0.730)	118164	40.0000	41.0
107 Methyl methanesulfonate	80	3.037	3.037	(0.769)	162199	40.0000	44.9
108 N-Nitrosodiethylamine	102	3.278	3.278	(0.830)	112832	40.0000	39.0
109 Ethyl Methanesulfonate	79	3.431	3.431	(0.869)	216648	40.0000	50.3
110 Pentachloroethane	167	3.778	3.778	(0.957)	145583	40.0000	56.6
111 N-Nitrosopyrrolidine	100	4.190	4.190	(1.061)	107937	40.0000	36.5
113 N-Nitrosomorpholine	56	4.207	4.207	(1.066)	120050	40.0000	39.4
114 o-Toluidine	106	4.231	4.231	(1.071)	463846	40.0000	40.4
115 N-Nitrosopiperidine	114	4.431	4.431	(0.918)	128504	40.0000	39.4
116 a,a-Dimethylphenethylamine	58	4.737	4.737	(0.982)	527921	40.0000	38.2
118 2,6-Dichlorophenol	162	4.866	4.866	(1.009)	248053	40.0000	41.9
119 Hexachloropropene	213	4.895	4.895	(1.015)	210163	40.0000	60.0
120 p-Phenylenediamine	108	5.101	5.101	(1.057)	123106	40.0000	45.3
121 N-Nitrosodi-n-butylamine	84	5.066	5.066	(1.050)	156538	40.0000	38.8(T)
122 Safrole	162	5.237	5.237	(1.085)	272812	40.0000	48.0
123 1,2,4,5-Tetrachlorobenzene	216	5.437	5.437	(0.894)	359203	40.0000	44.0
124 Isosafrole	162	5.607	5.607	(0.922)	298154	40.0000	54.9
125 1,4-Naphthoquinone	158	5.795	5.795	(0.953)	235264	40.0000	49.6
127 Pentachlorobenzene	250	6.201	6.201	(1.019)	318599	40.0000	42.6
128 1-Naphthylamine	143	6.290	6.290	(1.034)	495191	40.0000	39.8
129 2-Naphthylamine	143	6.342	6.342	(1.043)	359107	40.0000	32.2
131 5-Nitro-o-toluidine	152	6.484	6.484	(1.066)	173960	40.0000	38.9
136 1,3,5-Trinitrobenzene	75	6.737	6.737	(0.928)	137808	40.0000	45.8
137 Phenacetin	108	6.778	6.778	(0.934)	310807	40.0000	43.8
138 Diallate	86	6.772	6.772	(0.933)	227250	40.0000	39.7
212 Cis Diallate	86	6.848	6.848	(0.943)	43397	6.00000	8.1(a)
213 Trans Diallate	86	6.772	6.772	(0.933)	227250	34.0000	33.7
140 4-Aminobiphenyl	169	7.072	7.072	(0.974)	405072	40.0000	37.8
141 Pentachloronitrobenzene	237	7.095	7.095	(0.977)	110788	40.0000	44.0
142 Pronamide	173	7.089	7.089	(0.976)	370764	40.0000	45.5
146 4-Nitroquinoline-1-oxide	101	7.936	7.936	(1.093)	15434	40.0000	48.2
147 Methapyrilene	58	7.972	7.972	(1.098)	385063	40.0000	47.3
148 Isodrin	193	8.195	8.195	(1.129)	121070	40.0000	38.0
149 Aramite	185	8.595	8.595	(1.184)	51810	40.0000	39.6
150 Kepone	272	9.183	9.183	(1.265)	89616	40.0000	36.4
151 p-(Dimethylamino)azobenzene	120	8.778	8.778	(0.906)	295751	40.0000	41.6
152 Chlorobenzilate	251	8.807	8.807	(0.909)	359810	40.0000	39.8
153 3,3'-Dimethylbenzidine	212	9.089	9.089	(0.939)	452784	40.0000	36.7
155 2-Acetylaminofluorene	181	9.342	9.342	(0.965)	377007	40.0000	38.8
157 7,12Dimethylbenz(a)anthracene	256	10.848	10.848	(0.951)	539106	40.0000	40.9
158 3-Methylcholanthrene	268	11.824	11.824	(1.037)	499987	40.0000	43.8

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: /chem/MSD5.i/s113009.b/s5k3038.d
Date : 01-DEC-2009 00:10
Client ID: AP121CV
Sample Info: IWBN091111-08,1|50 PPM|1|SVM|1|AP121CV
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

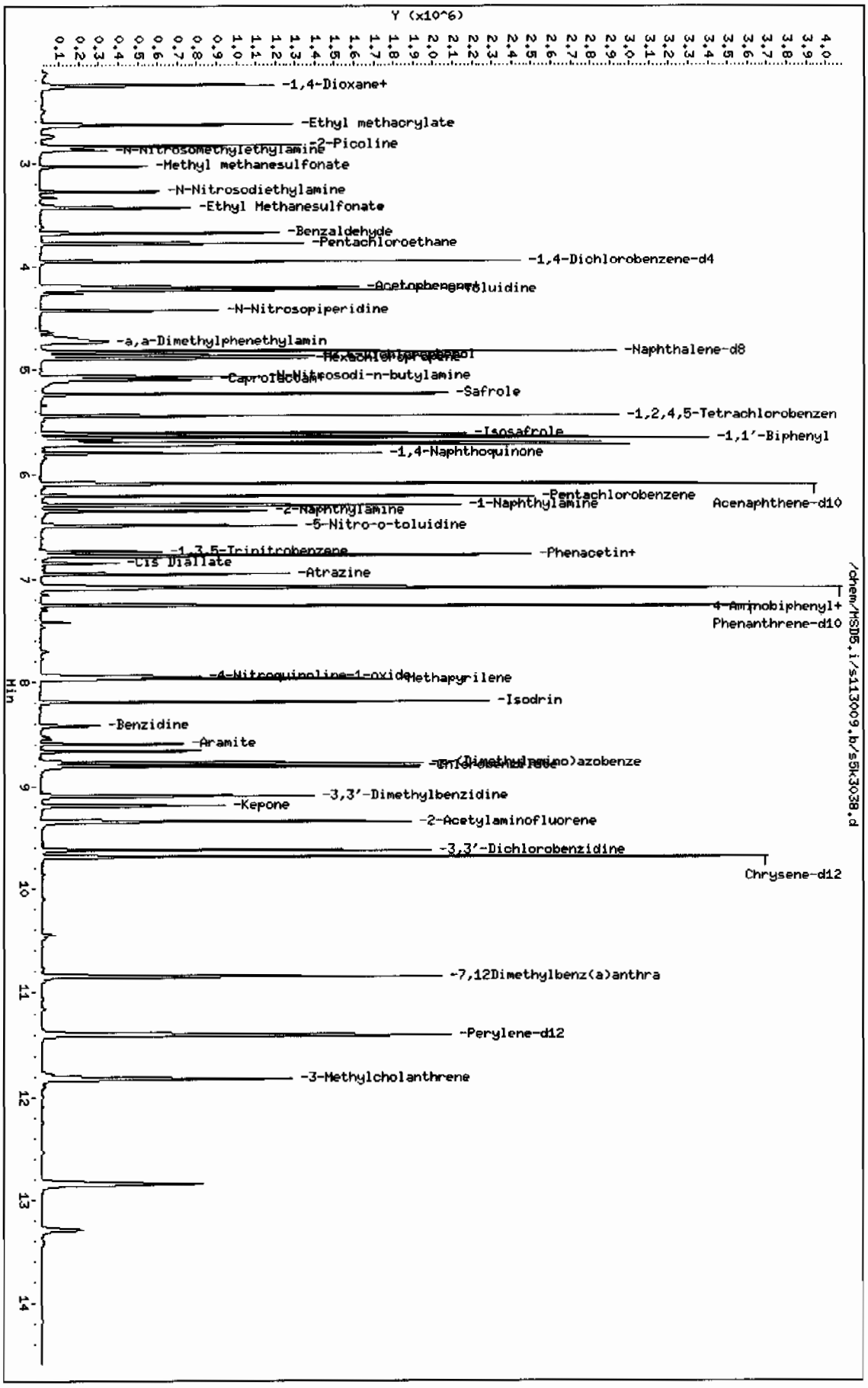

Page 1

Data File: /chem/MSD5.i/s120409.b/s510402.d
Report Date: 05-Dec-2009 10:44

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 04-DEC-2009 10:38
Lab File ID: s510402.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.86505	0.86505	0.000	4.42974	60.00000	Averaged
$ 5 Phenol-d5	1.02741	1.07433	1.07433	0.000	4.56745	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.26681	0.26681	0.000	4.32977	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.08612	1.08612	0.000	7.48163	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.16090	0.16090	0.000	8.74176	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.64993	0.64993	0.000	13.61563	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.50568	0.50568	0.000	10.11945	60.00000	Averaged
2 Pyridine	0.65138	0.67090	0.67090	0.000	2.99812	60.00000	Averaged
4 Aniline	0.40115	0.42894	0.42894	0.000	6.92907	60.00000	Averaged
6 Phenol	1.07292	1.10926	1.10926	0.001	3.38685	20.00000	Averaged
7 bis(2-Chloroethyl) ether	0.63389	0.68532	0.68532	0.000	8.11428	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.96636	0.96636	0.000	5.02156	60.00000	Averaged
203 n-Decane	0.83349	0.90664	0.90664	0.000	8.77652	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.15388	1.15388	0.000	4.72220	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11854	1.16243	1.16243	0.001	3.92470	20.00000	Averaged
13 1,2-Dichlorobenzene	1.05853	1.09341	1.09341	0.000	3.29462	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	1.08867	1.08867	0.000	8.05017	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.59918	0.59918	0.000	3.21059	60.00000	Averaged
15 o-Cresol	0.73443	0.73801	0.73801	0.000	0.48797	60.00000	Averaged
18 m,p-Cresols	0.93489	0.95897	0.95897	0.000	2.57505	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.58592	0.58592	0.050	21.35641	60.00000	Averaged
19 Hexachloroethane	0.41297	0.41626	0.41626	0.000	0.79649	60.00000	Averaged
21 Nitrobenzene	0.23812	0.26776	0.26776	0.000	12.44567	60.00000	Averaged
22 Isophorone	0.44222	0.47366	0.47366	0.000	7.10740	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.13061	0.13061	0.001	5.32062	20.00000	Averaged
24 2,4-Dimethylphenol	0.21392	0.23550	0.23550	0.000	10.08587	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.27956	0.27956	0.000	12.98776	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.23398	0.23398	0.001	17.29026	20.00000	Averaged
27 Benzoic acid	0.11033	0.11207	0.11207	0.000	1.58255	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.28107	0.28107	0.000	12.44293	60.00000	Averaged
30 Naphthalene	0.69229	0.75408	0.75408	0.000	8.92489	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.17933	0.17933	0.000	10.97443	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.34220	0.34220	0.000	23.44491	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.18048	0.18048	0.001	11.00900	20.00000	Averaged
33 4-Chloro-3-methylphenol	0.19655	0.21521	0.21521	0.001	9.49679	20.00000	Averaged
34 2-Methylnaphthalene	0.47745	0.52404	0.52404	0.000	9.75872	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510402.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

Injection Date: 04-DEC-2009 10:38
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.46395	0.51006	0.51006	0.000	9.93759	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16140	0.17696	0.17696	0.050	9.64521	60.00000	Averaged
205 2,3-Dichloroaniline	0.46121	0.49428	0.49428	0.000	7.17036	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.29051	0.31517	0.31517	0.001	8.48992	20.00000	Averaged
38 2,4,5-Trichlorophenol	0.30357	0.33142	0.33142	0.000	9.17362	60.00000	Averaged
40 2-Chloronaphthalene	0.84403	0.89319	0.89319	0.000	5.82494	60.00000	Averaged
42 o-Nitroaniline	0.22389	0.23173	0.23173	0.000	3.50199	60.00000	Averaged
41 m-Nitroaniline	52.81762	40.00000	0.19560	0.000	32.04405	60.00000	Linear
43 Dimethylphthalate	0.99502	1.04245	1.04245	0.000	4.76712	60.00000	Averaged
44 2,6-Dinitrotoluene	0.23251	0.23924	0.23924	0.000	2.89412	60.00000	Averaged
50 2,4-Dinitrotoluene	0.29743	0.30180	0.30180	0.000	1.47170	60.00000	Averaged
45 Acenaphthylene	1.28545	1.38367	1.38367	0.000	7.64154	60.00000	Averaged
47 Acenaphthene	0.82864	0.88358	0.88358	0.001	6.63018	20.00000	Averaged
48 2,4-Dinitrophenol	43.18597	40.00000	0.09046	0.050	7.96492	60.00000	Linear
49 Dibenzofuran	1.20211	1.24994	1.24994	0.000	3.97820	60.00000	Averaged
51 Diethylphthalate	0.99012	1.00217	1.00217	0.000	1.21732	60.00000	Averaged
52 4-Nitrophenol	45.85289	40.00000	0.16628	0.050	14.63222	60.00000	Linear
53 Fluorene	0.99445	1.04903	1.04903	0.000	5.48883	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54736	0.56104	0.56104	0.000	2.49946	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	39.88357	40.00000	0.07822	0.000	-0.29108	60.00000	Linear
56 p-Nitroaniline	0.09976	0.14952	0.14952	0.000	49.88470	60.00000	Averaged
133 Diphenylamine	0.39311	0.45738	0.45738	0.001	16.34842	20.00000	Averaged
58 1,2-Diphenylhydrazine	0.48769	0.54230	0.54230	0.000	11.19777	60.00000	Averaged
61 4-Bromophenylphenylether	0.18052	0.19942	0.19942	0.000	10.46490	60.00000	Averaged
63 Hexachlorobenzene	0.19191	0.20897	0.20897	0.000	8.88844	60.00000	Averaged
65 Pentachlorophenol	45.27662	40.00000	0.10947	0.001	13.19155	20.00000	Linear
206 n-Octadecane	0.26436	0.29051	0.29051	0.000	9.89209	60.00000	Averaged
68 Phenanthrene	0.75124	0.81034	0.81034	0.000	7.86698	60.00000	Averaged
69 Anthracene	0.74720	0.81968	0.81968	0.000	9.70027	60.00000	Averaged
72 Di-n-butylphthalate	0.85957	0.93402	0.93402	0.000	8.66051	60.00000	Averaged
76 Fluoranthene	0.82257	0.91017	0.91017	0.001	10.64985	20.00000	Averaged
79 Pyrene	0.81023	0.95166	0.95166	0.000	17.45501	60.00000	Averaged
85 Butylbenzylphthalate	0.36001	0.40367	0.40367	0.000	12.12826	60.00000	Averaged
89 Benzo(a)anthracene	0.80663	0.87763	0.87763	0.000	8.80183	60.00000	Averaged
92 Chrysene	0.73533	0.79334	0.79334	0.000	7.88891	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	42.78967	40.00000	0.57316	0.000	6.97418	60.00000	Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510402.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

Injection Date: 04-DEC-2009 10:38
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	94 Di-n-octylphthalate	0.86642	1.00352	1.00352	0.001	15.82375	20.00000	Averaged
	95 Benzo(b)fluoranthene	0.83820	0.95213	0.95213	0.000	13.59206	60.00000	Averaged
	96 Benzo(k)fluoranthene	0.83669	0.89754	0.89754	0.000	7.27169	60.00000	Averaged
	97 Benzo(a)pyrene	0.73906	0.82969	0.82969	0.001	12.26370	20.00000	Averaged
	99 Indeno(1,2,3-cd)pyrene	39.40709	40.00000	0.81511	0.000	-1.48228	60.00000	Linear
	100 Dibenzo(a,h)anthracene	38.51909	40.00000	0.66919	0.000	-3.70227	60.00000	Linear
	101 Benzo(ghi)perylene	0.65031	0.67876	0.67876	0.000	4.37420	60.00000	Averaged
	126 m-Dinitrobenzene	0.16356	0.16448	0.16448	0.000	0.56132	60.00000	Averaged
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.28733	0.28733	0.000	9.82953	60.00000	Averaged
	143 Dinoseb	37.89885	40.00000	0.11293	0.000	-5.25288	60.00000	Linear
	173 Carbazole	52.07900	40.00000	0.49871	0.000	30.19751	60.00000	Linear
	184 p-Benzoquinone	30.00885	40.00000	0.07500	0.000	-24.97787	60.00000	Linear
	192 Methoxychlor	0.45776	0.50181	0.50181	0.000	9.62422	60.00000	Averaged
	211 p-Toluidine	46.13186	40.00000	0.79111	0.000	15.32965	60.00000	Linear
	210 m-Toluidine	1.03581	1.11173	1.11173	0.000	7.32972	60.00000	Averaged
	26 Phthalic anhydride	0.08702	0.09470	0.09470	0.000	8.82903	60.00000	Averaged
	179 Dibenzo(a,e)pyrene	0.39346	0.41648	0.41648	0.000	5.85043	60.00000	Averaged
	214 1,4-Dinitrobenzene	0.15903	0.16474	0.16474	0.000	3.59202	60.00000	Averaged
	215 2-Ethoxyethanol	0.40133	0.43057	0.43057	0.000	7.28591	60.00000	Averaged
	216 Methylenebis(2-chloroanilin	0.09926	0.11765	0.11765	0.000	18.52814	60.00000	Averaged
M	225 Trichlorophenols	0.29704	0.32329	0.32329	0.000	8.83925	60.00000	Averaged
M	226 Tetrachlorophenols	0.26162	0.28733	0.28733	0.000	9.82953	60.00000	Averaged
M	227 Benzo(b,k)fluoranthene	0.83745	0.92484	0.92484	0.000	10.43471	60.00000	Averaged

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Data file : /chem/MSD5.i/s120409.b/s510402.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 04-DEC-2009 10:38
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:44 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.921	3.921	(1.000)	413613	40.0000	
* 29 Naphthalene-d8	136	4.792	4.792	(1.000)	1545687	40.0000	
* 46 Acenaphthene-d10	164	6.049	6.049	(1.000)	886910	40.0000	
* 67 Phenanthrene-d10	188	7.224	7.224	(1.000)	1593509	40.0000	
* 91 Chrysene-d12	240	9.641	9.641	(1.000)	1621115	40.0000	
* 98 Perylene-d12	264	11.331	11.331	(1.000)	1429948	40.0000	
$ 3 2-Fluorophenol	112	3.102	3.102	(0.791)	357795	40.0000	41.8
$ 5 Phenol-d5	99	3.632	3.632	(0.926)	444358	40.0000	41.8
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	412407	40.0000	41.7
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.915)	963287	40.0000	43.0
$ 60 2,4,6-Tribromophenol	329	6.651	6.651	(1.099)	142701	40.0000	43.5
$ 81 p-Terphenyl-d14	244	8.606	8.606	(0.893)	1053607	40.0000	45.4
1 N-Methyl-N-nitrosomethylamine	74	2.399	2.399	(0.612)	209154	40.0000	44.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.433	2.433	(0.620)	277495	40.0000	41.2
4 Aniline	66	3.704	3.704	(0.945)	177416	40.0000	42.8
6 Phenol	94	3.641	3.641	(0.929)	458804	40.0000	41.4(Q)
7 bis(2-Chloroethyl) ether	63	3.718	3.718	(0.948)	283459	40.0000	43.2
8 2-Chlorophenol	128	3.786	3.786	(0.966)	399698	40.0000	42.0
203 n-Decane	43	3.771	3.771	(0.962)	375000	40.0000	43.5
9 1,3-Dichlorobenzene	146	3.887	3.887	(0.991)	477260	40.0000	41.9
11 1,4-Dichlorobenzene	146	3.935	3.935	(1.004)	480798	40.0000	41.6
13 1,2-Dichlorobenzene	146	4.036	4.036	(1.029)	452247	40.0000	41.3
14 bis(2-Chloroisopropyl)ether	45	4.065	4.065	(1.037)	450290	40.0000	43.2
12 Benzyl alcohol	108	3.988	3.988	(1.017)	247830	40.0000	41.3
15 o-Cresol	107	4.041	4.041	(1.031)	305251	40.0000	40.2
18 m,p-Cresols	107	4.142	4.142	(1.056)	396642	40.0000	41.0
17 N-Nitrosodipropylamine	70	4.161	4.161	(1.061)	242344	40.0000	48.5
19 Hexachloroethane	117	4.267	4.267	(1.088)	172172	40.0000	40.3
21 Nitrobenzene	77	4.301	4.301	(0.898)	413869	40.0000	45.0
22 Isophorone	82	4.455	4.455	(0.930)	732123	40.0000	42.8
23 2-Nitrophenol	139	4.513	4.513	(0.942)	201886	40.0000	42.1
24 2,4-Dimethylphenol	122	4.508	4.508	(0.941)	364011	40.0000	44.0
25 bis(2-Chloroethoxy)methane	93	4.576	4.576	(0.955)	432105	40.0000	45.2
26 2,4-Dichlorophenol	162	4.677	4.677	(0.976)	361667	40.0000	46.9
27 Benzoic acid	105	4.566	4.566	(0.953)	173229	40.0000	40.6
28 1,2,4-Trichlorobenzene	180	4.744	4.744	(0.990)	434447	40.0000	45.0
30 Naphthalene	128	4.807	4.807	(1.003)	1165568	40.0000	43.6(Q)
204 alpha-Terpineol	59	4.783	4.783	(0.998)	277191	40.0000	44.4
31 4-Chloroaniline	127	4.821	4.821	(1.006)	528938	40.0000	49.4
32 Hexachlorobutadiene	225	4.869	4.869	(1.016)	278969	40.0000	44.4
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	332653	40.0000	43.8
34 2-Methylnaphthalene	142	5.288	5.288	(1.103)	810006	40.0000	43.9
35 1-Methylnaphthalene	142	5.365	5.365	(1.120)	788388	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.394	5.394	(0.892)	156952	40.0000	43.8
205 2,3-Dichloroaniline	161	5.486	5.486	(0.907)	438383	40.0000	42.9
37 2,4,6-Trichlorophenol	196	5.476	5.476	(0.905)	279528	40.0000	43.4(H)
38 2,4,5-Trichlorophenol	196	5.505	5.505	(0.910)	293939	40.0000	43.7
40 2-Chloronaphthalene	162	5.645	5.645	(0.933)	792180	40.0000	42.3
42 o-Nitroaniline	65	5.702	5.702	(0.943)	205524	40.0000	41.4
41 m-Nitroaniline	138	5.996	5.996	(0.991)	173483	40.0000	52.8
43 Dimethylphthalate	163	5.808	5.808	(0.960)	924563	40.0000	41.9
44 2,6-Dinitrotoluene	165	5.866	5.866	(0.970)	212183	40.0000	41.2
50 2,4-Dinitrotoluene	165	6.165	6.165	(1.019)	267672	40.0000	40.6
45 Acenaphthylene	152	5.953	5.953	(0.984)	1227194	40.0000	43.0
47 Acenaphthene	154	6.078	6.078	(1.005)	783655	40.0000	42.6
48 2,4-Dinitrophenol	184	6.073	6.073	(1.004)	80230	40.0000	43.2
49 Dibenzofuran	168	6.198	6.198	(1.025)	1108581	40.0000	41.6
51 Diethylphthalate	149	6.319	6.319	(1.045)	888836	40.0000	40.5
52 4-Nitrophenol	139	6.088	6.088	(1.006)	147471	40.0000	45.8
53 Fluorene	166	6.463	6.463	(1.068)	930397	40.0000	42.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.434	6.434	(1.064)	497592	40.0000	41.0
55 2-Methyl-4,6-dinitrophenol	198	6.478	6.478	(0.897)	124649	40.0000	39.9
56 p-Nitroaniline	138	6.458	6.458	(1.068)	132611	40.0000	60.0
133 Diphenylamine	169	6.526	6.526	(0.903)	728841	40.0000	46.5
58 1,2-Diphenylhydrazine	77	6.564	6.564	(0.909)	864162	40.0000	44.5
61 4-Bromophenylphenylether	248	6.824	6.824	(0.945)	317772	40.0000	44.2
63 Hexachlorobenzene	284	6.901	6.901	(0.955)	332988	40.0000	43.6
65 Pentachlorophenol	266	7.046	7.046	(0.975)	174444	40.0000	45.3
206 n-Octadecane	57	7.036	7.036	(0.974)	462927	40.0000	44.0
68 Phenanthrene	178	7.243	7.243	(1.003)	1291285	40.0000	43.1
69 Anthracene	178	7.287	7.287	(1.009)	1306160	40.0000	43.9
72 Di-n-butylphthalate	149	7.643	7.643	(1.058)	1488366	40.0000	43.5
76 Fluoranthene	202	8.288	8.288	(1.147)	1450371	40.0000	44.2
79 Pyrene	202	8.505	8.505	(0.882)	1542748	40.0000	47.0(H)
85 Butylbenzylphthalate	149	9.035	9.035	(0.937)	654398	40.0000	44.8(H)
89 Benzo(a)anthracene	228	9.632	9.632	(0.999)	1422743	40.0000	43.5
92 Chrysene	228	9.670	9.670	(1.003)	1286092	40.0000	43.2
93 bis(2-Ethylhexyl)phthalate	149	9.559	9.559	(0.992)	929158	40.0000	42.8
94 Di-n-octylphthalate	149	10.214	10.214	(0.901)	1434978	40.0000	46.3
95 Benzo(b)fluoranthene	252	10.807	10.807	(0.954)	1361502	40.0000	45.4(H)
96 Benzo(k)fluoranthene	252	10.845	10.845	(0.957)	1283431	40.0000	42.9
97 Benzo(a)pyrene	252	11.250	11.250	(0.993)	1186418	40.0000	44.9
99 Indeno(1,2,3-cd)pyrene	276	13.118	13.118	(1.158)	1165566	40.0000	39.4
100 Dibenzo(a,h)anthracene	278	13.137	13.137	(1.159)	956908	40.0000	38.5
101 Benzo(ghi)perylene	276	13.667	13.667	(1.206)	970593	40.0000	41.7
126 m-Dinitrobenzene	168	5.852	5.852	(0.967)	145880	40.0000	40.2
130 2,3,4,6-Tetrachlorophenol	232	6.280	6.280	(1.038)	254838	40.0000	43.9
143 Dinoseb	211	7.171	7.171	(0.993)	179948	40.0000	37.9
173 Carbazole	167	7.402	7.402	(1.025)	794703	40.0000	52.1
184 p-Benzoquinone	54	3.405	3.405	(0.869)	31019	40.0000	30.0
192 Methoxychlor	227	9.511	9.511	(0.986)	813496	40.0000	43.8
211 p-Toluidine	106	4.200	4.200	(1.071)	327212	40.0000	46.1(H)
210 m-Toluidine	106	4.224	4.224	(1.077)	459825	40.0000	42.9
26 Phthalic anhydride	104	5.322	5.322	(1.111)	146381	40.0000	43.5
179 Dibenzo(a,e)pyrene	302	17.851	17.851	(1.575)	595539	40.0000	42.3(H)
214 1,4-Dinitrobenzene	75	5.794	5.794	(0.958)	146112	40.0000	41.4(H)
215 2-Ethoxyethanol	59	2.240	2.240	(0.571)	178088	40.0000	42.9
216 Methylenebis(2-chloroaniline)	231	9.569	9.569	(0.992)	190732	40.0000	47.4(Q)
M 225 Trichlorophenols	196				573467	80.0000	87.1
M 226 Tetrachlorophenols	232				254838	40.0000	43.9
M 227 Benzo(b,k)fluoranthene	252				2644933	80.0000	88.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s120409.b/s510402.d
Date : 04-DEC-2009 10:38
Client ID: MEGACVS
Sample Info: IWBN091106-05,3!40 PPM!1!SVM!1!MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

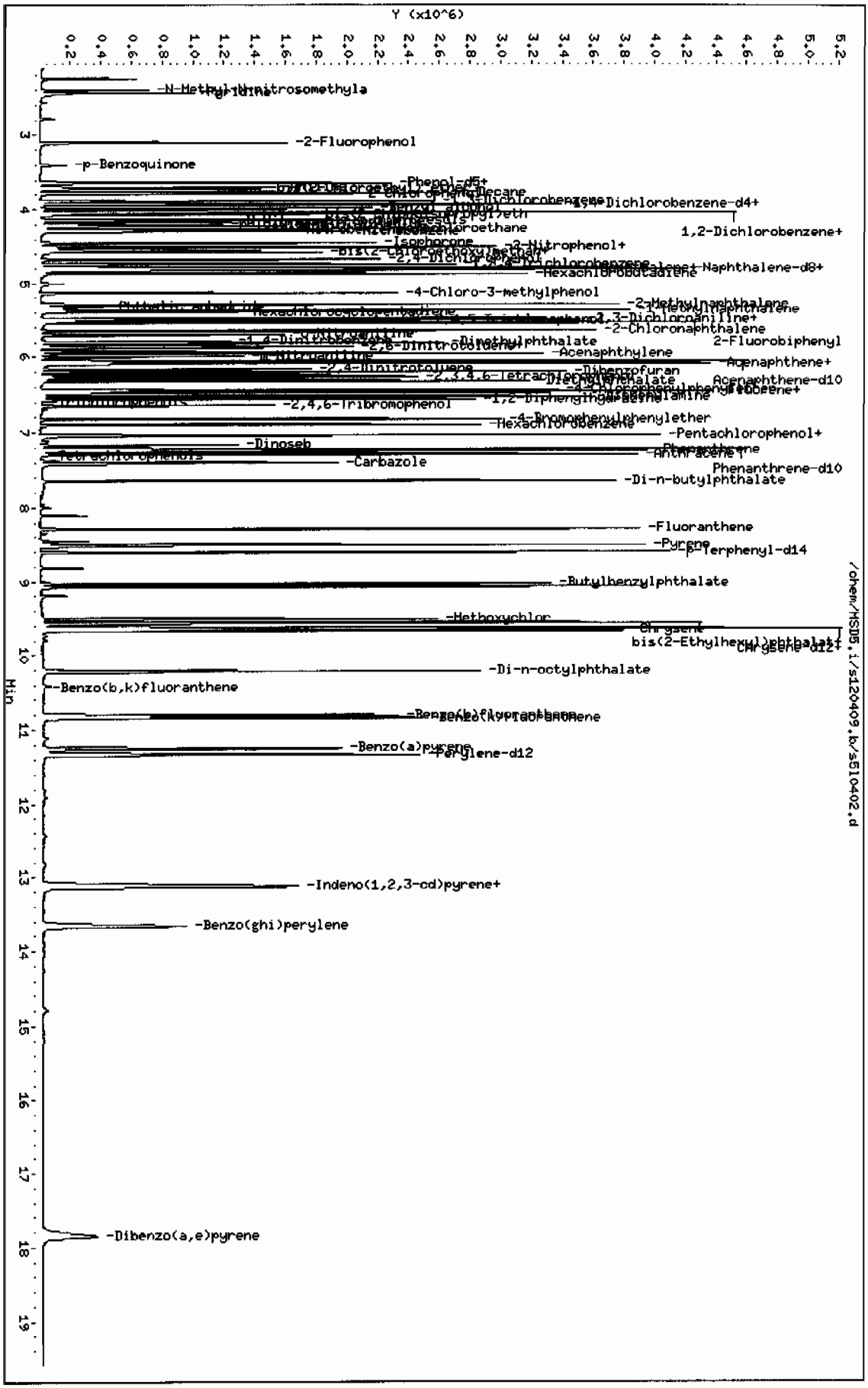

Page 1

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 04-DEC-2009 11:06
Lab File ID: s510403.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091201-03.4 Quant Type: ISTD
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.78240	0.78240	0.000	5.49664	60.00000	Averaged
16 Acetophenone	1.03433	1.04930	1.04930	0.000	1.44744	60.00000	Averaged
189 Caprolactam	0.07313	0.07563	0.07563	0.000	3.41672	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.13721	1.13721	0.000	7.30307	60.00000	Averaged
207 Atrazine	0.02060	0.03648	0.03648	0.000	77.12343	60.00000	Averaged <-
77 Benzidine	0.13169	0.15634	0.15634	0.000	18.72005	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.29650	0.29650	0.000	9.60256	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.30856	0.30856	0.000	10.76318	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.17744	0.17744	0.000	5.87361	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.70639	0.70639	0.000	3.34588	60.00000	Averaged
105 2-Picoline	1.04139	1.07378	1.07378	0.000	3.10962	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.37117	0.37117	0.000	3.37340	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.43147	0.43147	0.000	-4.09860	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.37949	0.37949	0.000	5.44943	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.52561	0.52561	0.000	-1.98258	60.00000	Averaged
110 Pentachloroethane	0.32008	0.31859	0.31859	0.000	-0.46577	60.00000	Averaged
111 N-Nitrosopyrrolidine	41.70424	40.00000	0.38948	0.000	4.26059	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.39178	0.39178	0.000	3.39677	60.00000	Averaged
114 o-Toluidine	1.42745	1.40957	1.40957	0.000	-1.25218	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.12255	0.12255	0.000	7.48720	60.00000	Averaged
116 a,a-Dimethylphenethylamine	44.07309	40.00000	0.54333	0.000	10.18271	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.23070	0.23070	0.000	11.31110	60.00000	Averaged
119 Hexachloropropene	0.12260	0.12714	0.12714	0.000	3.69988	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.21271	0.21271	0.000	124	60.00000	Averaged <-
121 N-Nitrosodi-n-butylamine	0.14117	0.15077	0.15077	0.000	6.79860	60.00000	Averaged
122 Safrole	0.19879	0.21428	0.21428	0.000	7.79230	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.49162	0.49162	0.000	5.24682	60.00000	Averaged
124 Isosafrole	0.31092	0.34333	0.34333	0.000	10.42467	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.27497	0.27497	0.000	1.23532	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.45950	0.45950	0.000	7.27361	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.82461	0.82461	0.000	15.77167	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.72852	0.72852	0.000	14.06671	60.00000	Averaged
131 5-Nitro-o-toluidine	42.26640	40.00000	0.27314	0.000	5.66599	60.00000	Linear
136 1,3,5-Trinitrobenzene	42.18135	40.00000	0.09689	0.000	5.45337	60.00000	Linear
137 Phenacetin	0.22007	0.23332	0.23332	0.000	6.02087	60.00000	Averaged
138 Diallate	0.17747	0.19026	0.19026	0.000	7.20477	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 04-DEC-2009 11:06
Lab File ID: s510403.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091201-03.4 Quant Type: ISTD
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.18529	0.18529	0.000	11.50971	60.00000	Averaged
213 Trans Diallate	0.20879	0.22384	0.22384	0.000	7.20477	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.45777	0.45777	0.000	38.01478	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08362	0.08362	0.000	7.09520	60.00000	Averaged
142 Pronamide	0.25257	0.27226	0.27226	0.000	7.79508	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01137	0.01137	0.000	14.50350	60.00000	Averaged
147 Methapyrilene	0.25201	0.27736	0.27736	0.000	10.05876	60.00000	Averaged
148 Isodrin	0.09860	0.10822	0.10822	0.000	9.75842	60.00000	Averaged
149 Aramite	0.04052	0.04484	0.04484	0.000	10.66764	60.00000	Averaged
150 Kepone	0.07629	0.08267	0.08267	0.000	8.36281	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.22105	0.22105	0.000	6.26891	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.27992	0.27992	0.000	5.63062	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.40864	0.40864	0.000	13.08855	60.00000	Averaged
155 2-Acetylaminofluorene	42.56149	40.00000	0.30765	0.000	6.40374	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.44369	0.44369	0.000	4.87654	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.40552	0.40552	0.000	10.65300	60.00000	Averaged

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Data file : /chem/MSD5.i/s120409.b/s510403.d
Lab Smp Id: WBN091201-03.4 Client Smp ID: AP12CVS
Inj Date : 04-DEC-2009 11:06
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091201-03.4|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:43 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.919	(1.000)	421873	40.0000	
* 29 Naphthalene-d8	136	4.790	4.790	(1.000)	1425804	40.0000	
* 46 Acenaphthene-d10	164	6.043	6.043	(1.000)	875819	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.219	(1.000)	1617103	40.0000	
* 91 Chrysene-d12	240	9.636	9.636	(1.000)	1757221	40.0000	
* 98 Perylene-d12	264	11.325	11.325	(1.000)	1653166	40.0000	
209 Benzaldehyde	77	3.643	3.643	(0.929)	330075	40.0000	42.2
16 Acetophenone	105	4.172	4.172	(1.065)	442671	40.0000	40.6
189 Caprolactam	113	5.066	5.066	(1.058)	107837	40.0000	41.4
208 1,1'-Biphenyl	154	5.607	5.607	(0.928)	995988	40.0000	42.9
207 Atrazine	173	6.919	6.919	(0.958)	58994	40.0000	70.8
77 Benzidine	184	8.372	8.372	(0.869)	274724	40.0000	47.5
90 3,3'-Dichlorobenzidine	252	9.566	9.566	(0.993)	521022	40.0000	43.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.243	2.243	(0.572)	130172	40.0000	44.3
103 Methyl methacrylate	100	2.231	2.231	(0.569)	74858	40.0000	42.3
104 Ethyl methacrylate	69	2.613	2.613	(0.667)	298007	40.0000	41.3
105 2-Picoline	93	2.808	2.808	(0.716)	452997	40.0000	41.2
106 N-Nitrosomethylethylamine	88	2.849	2.849	(0.727)	156588	40.0000	41.3
107 Methyl methanesulfonate	80	3.007	3.007	(0.767)	182027	40.0000	38.4
108 N-Nitrosodiethylamine	102	3.243	3.243	(0.827)	160098	40.0000	42.2
109 Ethyl Methanesulfonate	79	3.402	3.402	(0.868)	221740	40.0000	39.2
110 Pentachloroethane	167	3.743	3.743	(0.955)	134406	40.0000	39.8
111 N-Nitrosopyrrolidine	100	4.160	4.160	(1.062)	164311	40.0000	41.7
113 N-Nitrosomorpholine	56	4.178	4.178	(1.066)	165282	40.0000	41.4
114 o-Toluidine	106	4.196	4.196	(1.071)	594661	40.0000	39.5
115 N-Nitrosopiperidine	114	4.396	4.396	(0.918)	174739	40.0000	43.0
116 a,a-Dimethylphenethylamine	58	4.666	4.666	(0.974)	774680	40.0000	44.1
118 2,6-Dichlorophenol	162	4.831	4.831	(1.009)	328937	40.0000	44.5
119 Hexachloropropene	213	4.854	4.854	(1.014)	181276	40.0000	41.5
120 p-Phenylenediamine	108	5.066	5.066	(1.058)	303286	40.0000	89.4
121 N-Nitrosodi-n-butylamine	84	5.031	5.031	(1.050)	214967	40.0000	42.7(T)
122 Safrole	162	5.196	5.196	(1.085)	305515	40.0000	43.1
123 1,2,4,5-Tetrachlorobenzene	216	5.401	5.401	(0.894)	430567	40.0000	42.1
124 Isosafrole	162	5.572	5.572	(0.922)	300699	40.0000	44.2
125 1,4-Naphthoquinone	158	5.760	5.760	(0.953)	240825	40.0000	40.5
127 Pentachlorobenzene	250	6.160	6.160	(1.019)	402436	40.0000	42.9
128 1-Naphthylamine	143	6.248	6.248	(1.034)	722207	40.0000	46.3
129 2-Naphthylamine	143	6.307	6.307	(1.044)	638055	40.0000	45.6
131 5-Nitro-o-toluidine	152	6.448	6.448	(1.067)	239220	40.0000	42.3
136 1,3,5-Trinitrobenzene	75	6.707	6.707	(0.929)	156684	40.0000	42.2
137 Phenacetin	108	6.743	6.743	(0.934)	377308	40.0000	42.4
138 Diallate	86	6.731	6.731	(0.932)	307672	40.0000	42.9
212 Cis Diallate	86	6.807	6.807	(0.943)	44946	6.00000	6.7(a)
213 Trans Diallate	86	6.731	6.731	(0.932)	307672	34.0000	36.4
140 4-Aminobiphenyl	169	7.031	7.031	(0.974)	740255	40.0000	55.2
141 Pentachloronitrobenzene	237	7.054	7.054	(0.977)	135229	40.0000	42.8
142 Pronamide	173	7.048	7.048	(0.976)	440267	40.0000	43.1
146 4-Nitroquinoline-1-oxide	101	7.890	7.890	(1.093)	18383	40.0000	45.8
147 Methapyrilene	58	7.925	7.925	(1.098)	448514	40.0000	44.0
148 Isodrin	193	8.148	8.148	(1.129)	175004	40.0000	43.9
149 Aramite	185	8.548	8.548	(1.184)	72511	40.0000	44.3
150 Kepone	272	9.136	9.136	(1.266)	133679	40.0000	43.3
151 p-(Dimethylamino)azobenzene	120	8.725	8.725	(0.905)	388437	40.0000	42.5
152 Chlorobenzilate	251	8.754	8.754	(0.908)	491878	40.0000	42.2
153 3,3'-Dimethylbenzidine	212	9.042	9.042	(0.938)	718066	40.0000	45.2
155 2-Acetylaminofluorene	181	9.295	9.295	(0.965)	540611	40.0000	42.6
157 7,12Dimethylbenz(a)anthracene	256	10.778	10.778	(0.952)	733492	40.0000	42.0
158 3-Methylcholanthrene	268	11.730	11.730	(1.036)	670390	40.0000	44.3

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/MSD5.i/s120409.b/s510403.d
Date : 04-DEC-2009 11:06
Client ID: AP12CVS
Sample Info: IWBN091201-03,4140 PPM11ISVM11AP12CVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

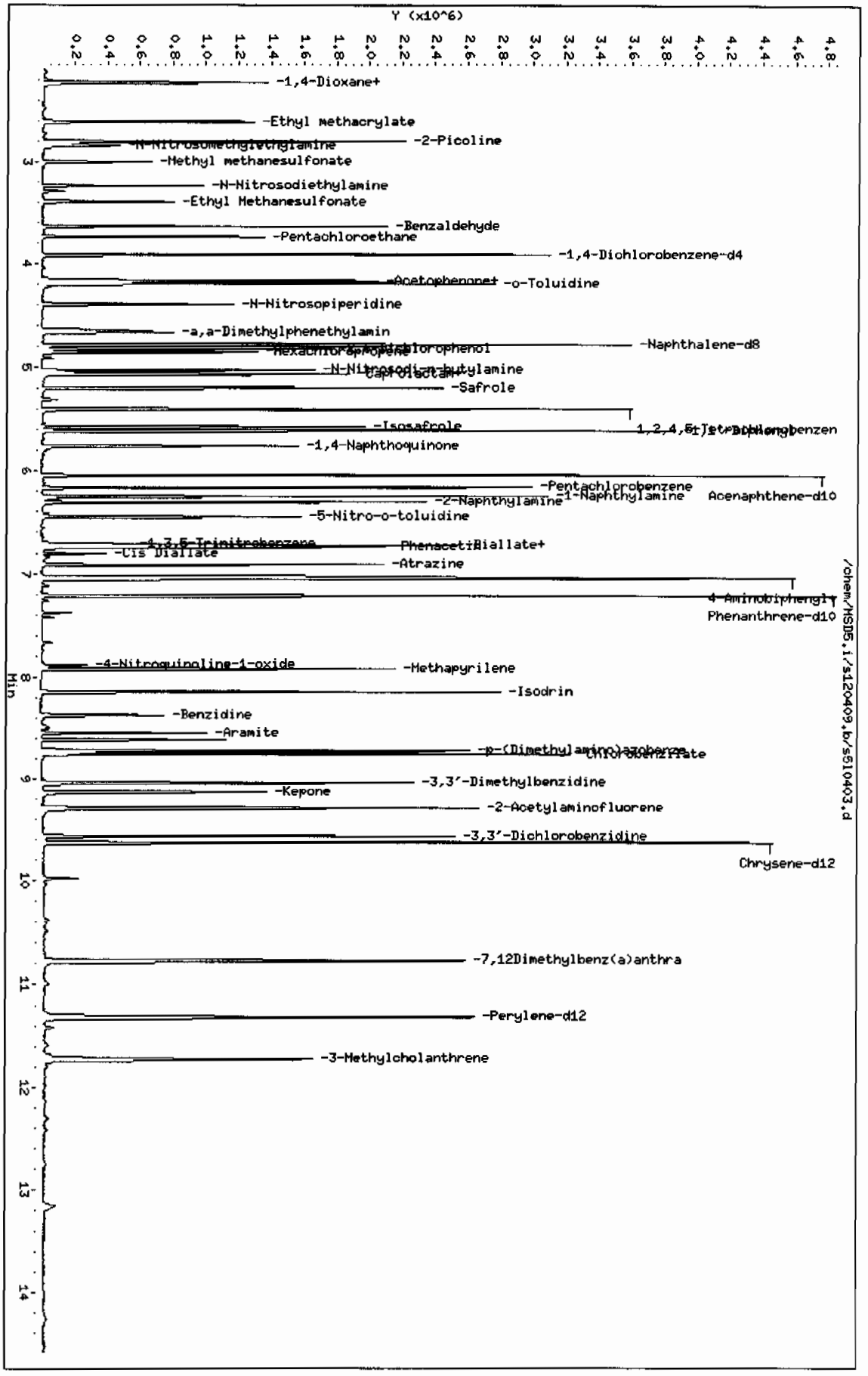

QC Data

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

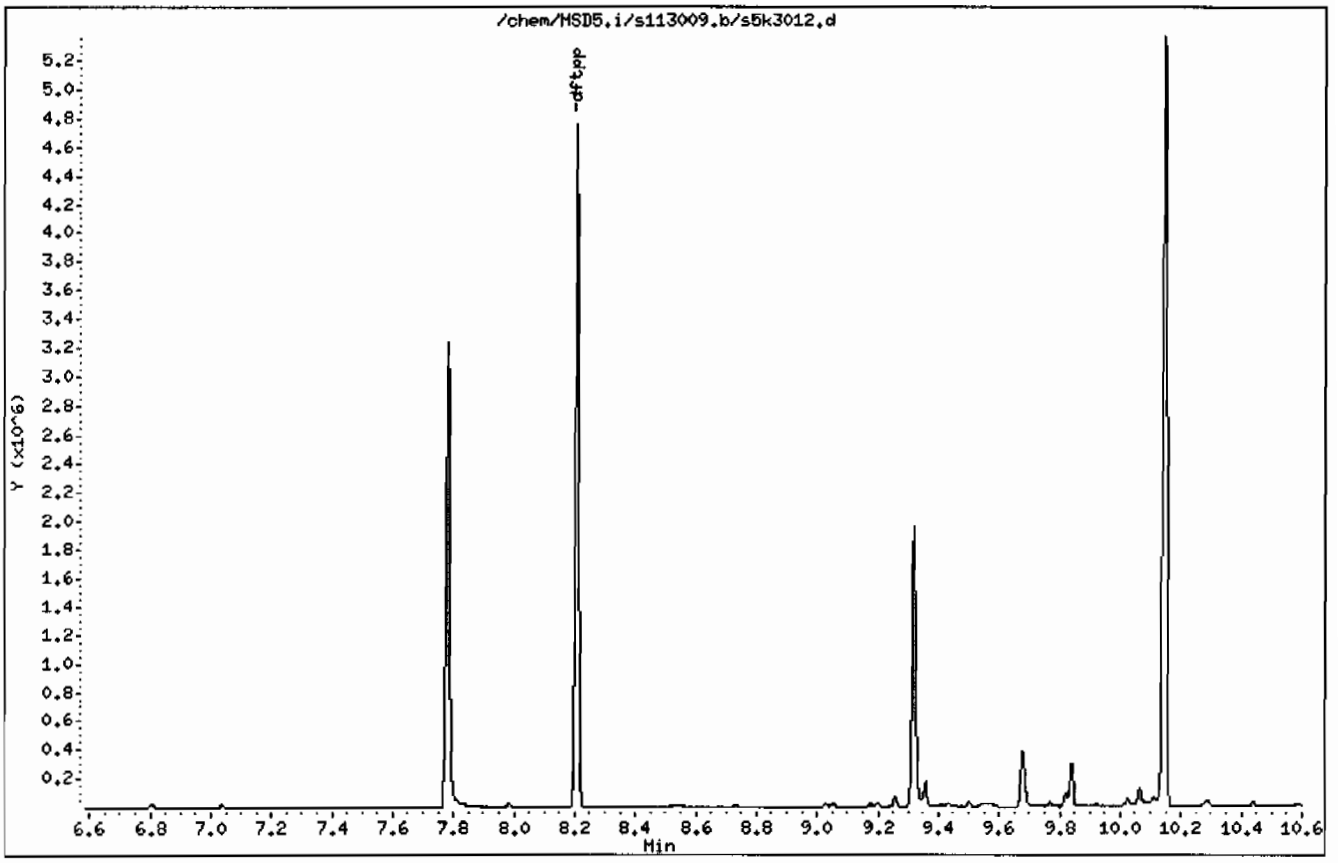

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVHF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5HS

Column diameter: 0.20

1 dftpp

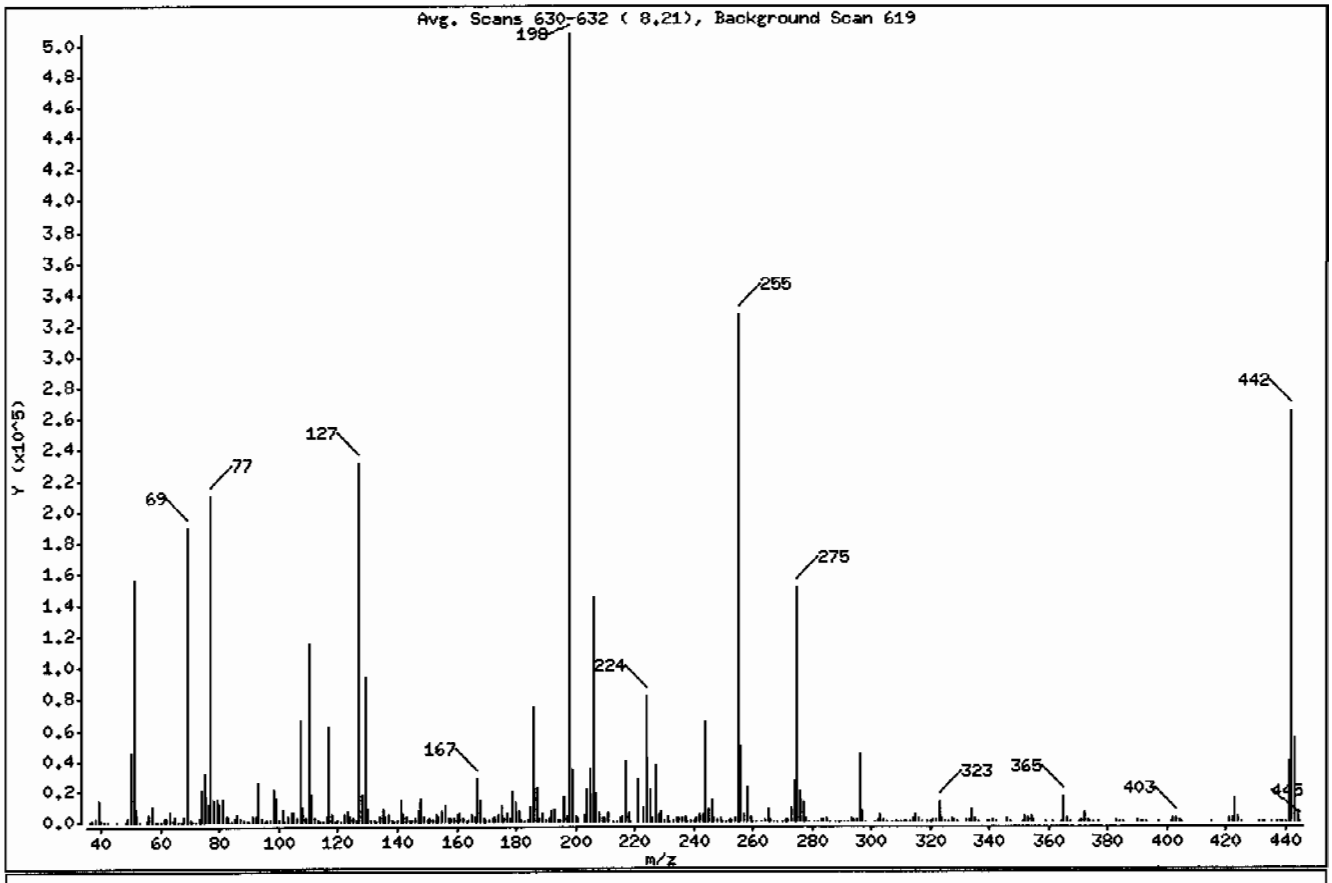

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	30.79
68	Less than 2.00% of mass 69	0.58 (1.57)
69	Mass 69 relative abundance	37.28
70	Less than 2.00% of mass 69	0.19 (0.51)
127	40.00 - 60.00% of mass 198	45.60
197	Less than 1.00% of mass 198	0.70
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	29.60
365	Greater than 1.00% of mass 198	3.10
441	Present, but less than mass 443	7.74
442	Greater than 40.00% of mass 198	52.24
443	17.00 - 23.00% of mass 442	10.70 (20.48)

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	125	126.00	680	213.00	464	307.00	50
37.00	987	127.00	231616	214.00	157	308.00	501
38.00	2716	128.00	17920	215.00	1808	309.00	450
39.00	13632	129.00	94528	216.00	3180	310.00	506
40.00	706	130.00	7593	217.00	39768	311.00	48
41.00	445	131.00	1598	218.00	5515	312.00	106
42.00	45	132.00	1119	219.00	464	313.00	308
45.00	260	133.00	463	221.00	28528	314.00	1959
48.00	107	134.00	3180	223.00	8943	315.00	4843
49.00	1759	135.00	8128	224.00	82288	316.00	2594
50.00	46048	136.00	3126	225.00	21312	317.00	470
51.00	156416	137.00	4122	226.00	2341	319.00	122
52.00	7789	138.00	895	227.00	37768	320.00	161
53.00	334	139.00	564	228.00	5098	321.00	1232
55.00	910	140.00	1328	229.00	7275	322.00	651
56.00	4777	141.00	13534	230.00	1075	323.00	12618
57.00	10418	142.00	4180	231.00	2958	324.00	2388
58.00	476	143.00	3277	232.00	577	325.00	236
59.00	113	144.00	760	233.00	743	326.00	206
60.00	309	145.00	649	234.00	2540	327.00	2542
61.00	2312	146.00	2181	235.00	2704	328.00	1058
62.00	2701	147.00	6737	236.00	1787	329.00	194
63.00	7253	148.00	15544	237.00	2968	332.00	1010
64.00	840	149.00	3108	238.00	525	333.00	1207
65.00	3370	150.00	944	239.00	1657	334.00	8064
66.00	347	151.00	2363	240.00	1214	335.00	1901
67.00	386	152.00	899	241.00	2080	336.00	205
68.00	2964	153.00	4270	242.00	4897	339.00	105
69.00	189376	154.00	3325	243.00	4687	340.00	196
70.00	963	155.00	7175	244.00	65392	341.00	1323
71.00	55	156.00	10369	245.00	8442	342.00	450
72.00	236	157.00	2283	246.00	13909	346.00	2820
73.00	1852	158.00	2547	247.00	2750	347.00	441
74.00	21008	159.00	1763	248.00	604	351.00	300
75.00	31368	160.00	4127	249.00	2266	352.00	3392

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d

Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	11187	161.00	6032	250.00	324	353.00	2458
77.00	210112	162.00	1867	251.00	428	354.00	3352
78.00	13990	163.00	483	252.00	693	355.00	682
79.00	15435	164.00	669	253.00	1399	359.00	140
80.00	11406	165.00	5171	254.00	2631	361.00	68
81.00	14908	166.00	3857	255.00	327168	364.00	54
82.00	3682	167.00	27936	256.00	48920	365.00	15765
83.00	3239	168.00	13823	257.00	4149	366.00	2273
84.00	304	169.00	2332	258.00	21704	367.00	171
85.00	2673	170.00	964	259.00	3552	370.00	223
86.00	4546	171.00	1326	260.00	516	371.00	611
87.00	2199	172.00	2399	261.00	573	372.00	5622
88.00	779	173.00	3174	263.00	216	373.00	1163
89.00	404	174.00	5250	264.00	756	374.00	207
90.00	45	175.00	10362	265.00	8624	375.00	45
91.00	3378	176.00	2819	266.00	1292	377.00	57
92.00	3994	177.00	5390	267.00	158	383.00	1213
93.00	26184	178.00	1798	268.00	96	384.00	220
94.00	1810	179.00	20272	270.00	353	385.00	62
95.00	353	180.00	13307	271.00	742	390.00	764
96.00	1108	181.00	6536	272.00	994	391.00	439
97.00	629	182.00	917	273.00	9575	392.00	334
98.00	21264	183.00	578	274.00	27024	393.00	51
99.00	15464	184.00	1707	275.00	150336	397.00	55
100.00	1213	185.00	9598	276.00	20064	401.00	130
101.00	7941	186.00	75040	277.00	13332	402.00	1809
102.00	407	187.00	21824	278.00	2250	403.00	2548
103.00	3032	188.00	2208	279.00	421	404.00	780
104.00	5846	189.00	5334	281.00	219	405.00	122
105.00	5629	190.00	872	282.00	258	415.00	50
106.00	1800	191.00	2140	283.00	1655	421.00	1997
107.00	67056	192.00	6866	284.00	1098	422.00	1842
108.00	9675	193.00	8056	285.00	2171	423.00	15273
109.00	2337	194.00	1522	286.00	558	424.00	3590
110.00	115352	195.00	1001	288.00	235	425.00	219

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s5k3012.d

Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	17720	196.00	16896	289.00	389	431.00	58
112.00	2652	197.00	3561	290.00	463	432.00	65
113.00	730	198.00	507968	291.00	366	433.00	52
114.00	171	199.00	33816	292.00	523	435.00	55
115.00	254	200.00	2938	293.00	2767	437.00	294
116.00	3878	201.00	2726	294.00	806	438.00	170
117.00	62200	203.00	4278	295.00	870	439.00	365
118.00	4275	204.00	21168	296.00	44632	440.00	62
119.00	548	205.00	35144	297.00	6459	441.00	39312
120.00	883	206.00	144384	298.00	439	442.00	265344
121.00	352	207.00	19096	301.00	457	443.00	54336
122.00	4776	208.00	5385	302.00	797	444.00	5092
123.00	7064	209.00	2007	303.00	4856	445.00	267
124.00	2977	210.00	2161	304.00	1329		
125.00	2892	211.00	5880	305.00	86		

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

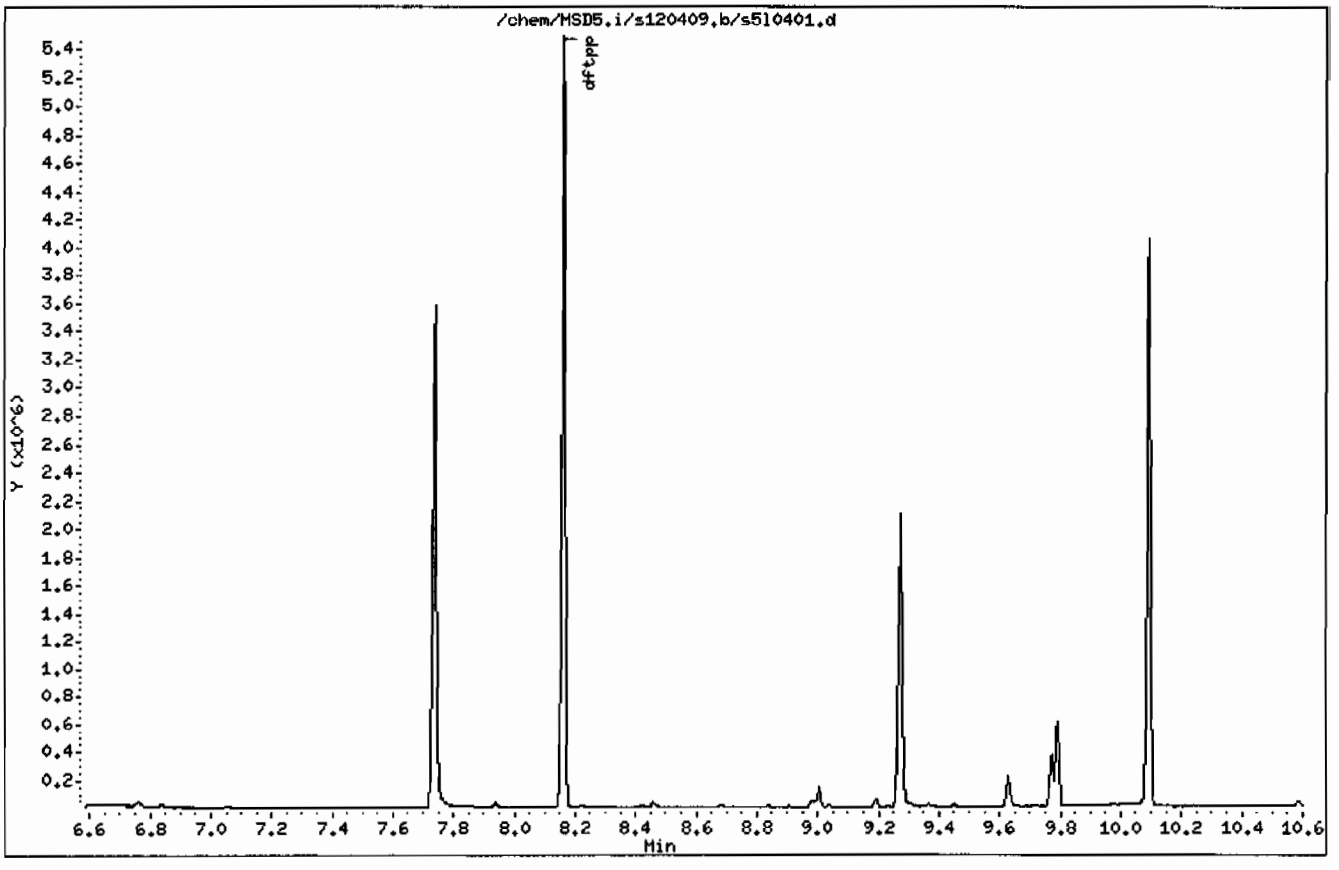

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

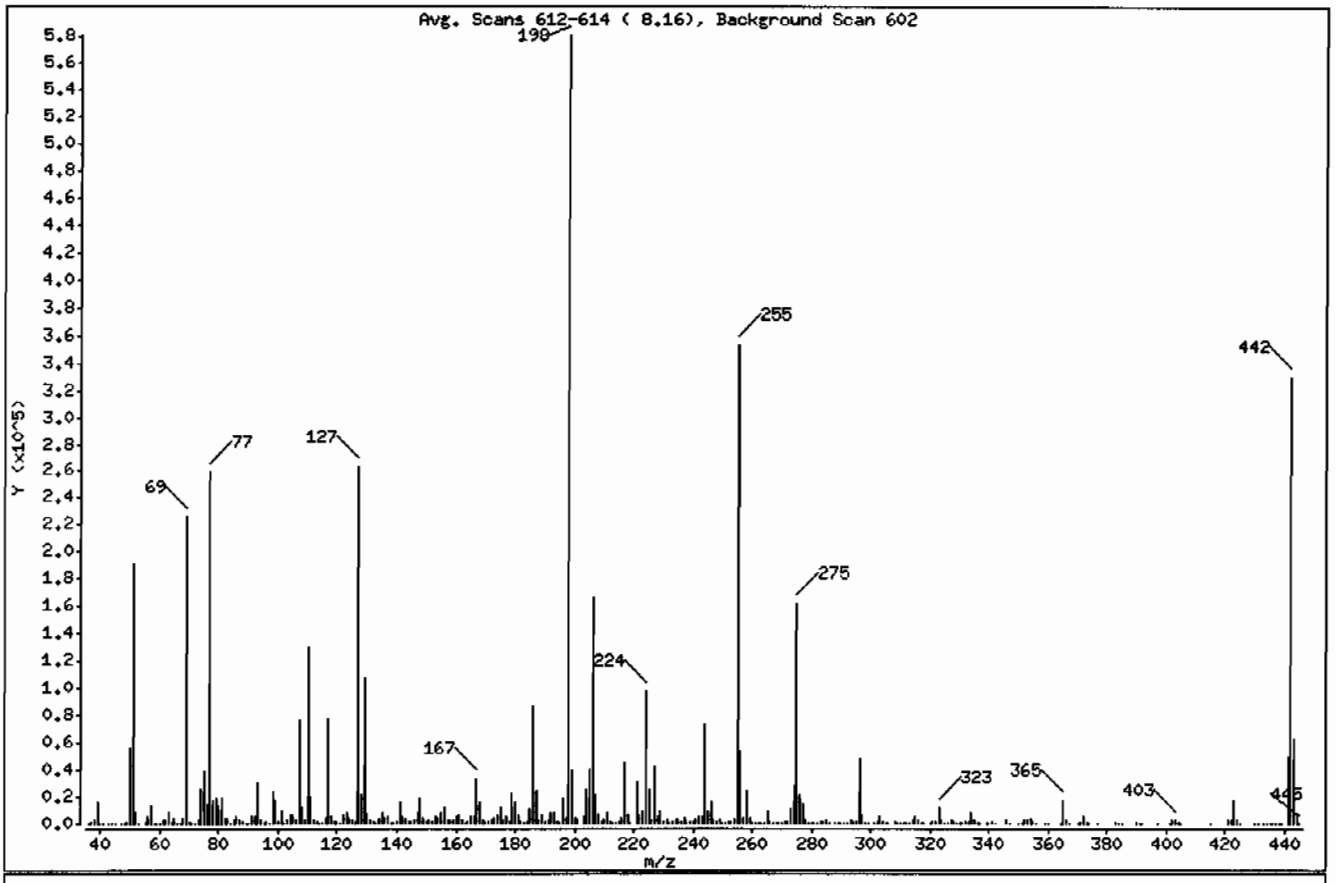

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.83
68	Less than 2.00% of mass 69	0.68 (1.74)
69	Mass 69 relative abundance	38.79
70	Less than 2.00% of mass 69	0.24 (0.61)
127	40.00 - 60.00% of mass 198	45.37
197	Less than 1.00% of mass 198	0.59
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	27.79
365	Greater than 1.00% of mass 198	2.92
441	Present, but less than mass 443	8.42
442	Greater than 40.00% of mass 198	56.81
443	17.00 - 23.00% of mass 442	10.79 (18.99)

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: IWBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s510401.d
Spectrum: Avg. Scans 612-614 (8.16), Background Scan 602
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	184	127.00	263808	216.00	4238	308.00	741
37.00	1283	128.00	21032	217.00	46104	309.00	344
38.00	3312	129.00	106472	218.00	6223	310.00	619
39.00	15927	130.00	8469	219.00	524	311.00	95
40.00	535	131.00	2227	221.00	30520	312.00	118
41.00	470	132.00	1132	222.00	7074	313.00	360
43.00	266	133.00	603	223.00	9981	314.00	2056
44.00	104	134.00	3403	224.00	97280	315.00	5313
45.00	191	135.00	8527	225.00	24984	316.00	2910
47.00	45	136.00	3840	226.00	2509	317.00	664
48.00	62	137.00	4916	227.00	43416	318.00	44
49.00	1796	138.00	660	228.00	6001	320.00	142
50.00	55736	139.00	631	229.00	9051	321.00	1308
51.00	190912	140.00	1365	230.00	1436	322.00	768
52.00	9427	141.00	15443	231.00	3218	323.00	12312
53.00	389	142.00	4954	232.00	583	324.00	2404
55.00	897	143.00	3382	233.00	848	325.00	269
56.00	5896	144.00	882	234.00	3073	326.00	186
57.00	12828	145.00	796	235.00	3131	327.00	2791
58.00	614	146.00	2894	236.00	1980	328.00	1052
59.00	41	147.00	8073	237.00	3533	329.00	189
60.00	240	148.00	19352	238.00	424	330.00	63
61.00	2567	149.00	3546	239.00	1834	331.00	70
62.00	3075	150.00	1052	240.00	1487	332.00	1171
63.00	8740	151.00	2166	241.00	2463	333.00	1349
64.00	1115	152.00	1527	242.00	4964	334.00	7706
65.00	3972	153.00	4917	243.00	5490	335.00	2083
66.00	221	154.00	3444	244.00	73368	336.00	283
67.00	486	155.00	8528	245.00	9971	337.00	52
68.00	3933	156.00	12662	246.00	15761	339.00	214
69.00	225536	157.00	2304	247.00	3311	340.00	196
70.00	1370	158.00	3065	248.00	690	341.00	1628
71.00	133	159.00	2304	249.00	2482	342.00	484
72.00	117	160.00	5240	250.00	531	346.00	3138
73.00	2347	161.00	7152	251.00	616	347.00	534

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: IWBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s510401.d

Spectrum: Avg. Scans 612-614 (8.16), Background Scan 602

Location of Maximum: 198.00

Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	25560	162.00	2128	252.00	760	350.00	168
75.00	38792	163.00	601	253.00	1760	351.00	162
76.00	14334	164.00	825	254.00	2890	352.00	3324
77.00	259264	165.00	5720	255.00	353088	353.00	2460
78.00	17864	166.00	4782	256.00	53472	354.00	3853
79.00	18568	167.00	33168	257.00	4392	355.00	744
80.00	13483	168.00	16552	258.00	23632	356.00	52
81.00	18720	169.00	2813	259.00	3942	359.00	299
82.00	4228	170.00	1220	260.00	624	360.00	100
83.00	4065	171.00	1455	261.00	577	364.00	46
84.00	477	172.00	3286	262.00	48	365.00	16960
85.00	2982	173.00	3899	263.00	378	366.00	2449
86.00	5664	174.00	6468	264.00	310	367.00	61
87.00	2350	175.00	11440	265.00	9449	370.00	284
88.00	1036	176.00	3137	266.00	1603	371.00	945
89.00	445	177.00	5764	267.00	72	372.00	5442
90.00	111	178.00	1976	268.00	213	373.00	1328
91.00	4841	179.00	23136	269.00	56	374.00	122
92.00	4929	180.00	15649	270.00	544	377.00	55
93.00	30744	181.00	7301	271.00	819	383.00	1655
94.00	2238	182.00	1085	272.00	1001	384.00	421
95.00	595	183.00	585	273.00	10432	385.00	61
96.00	1328	184.00	1692	274.00	28016	390.00	951
97.00	462	185.00	10942	275.00	161600	391.00	347
98.00	24040	186.00	86568	276.00	21552	392.00	370
99.00	17344	187.00	24672	277.00	14620	397.00	70
100.00	1526	188.00	2523	278.00	2071	401.00	320
101.00	9637	189.00	6285	279.00	394	402.00	2008
102.00	569	190.00	1055	280.00	53	403.00	2568
103.00	3333	191.00	3031	281.00	77	404.00	843
104.00	6682	192.00	7634	282.00	381	405.00	97
105.00	6496	193.00	8541	283.00	1749	415.00	133
106.00	2242	194.00	1749	284.00	1303	421.00	2585
107.00	76248	195.00	450	285.00	2557	422.00	2298
108.00	11768	196.00	18176	286.00	297	423.00	17344

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s510401.d
Spectrum: Avg. Scans 612-614 (8.16), Background Scan 602
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
109.00	2693	197.00	3448	288.00	218	424.00	3245
110.00	129464	198.00	581440	289.00	609	425.00	297
111.00	20624	199.00	40352	290.00	300	430.00	45
112.00	2723	200.00	3450	291.00	264	431.00	45
113.00	1037	201.00	3033	292.00	646	433.00	119
114.00	307	203.00	4856	293.00	3284	434.00	124
115.00	272	204.00	25272	294.00	927	435.00	158
116.00	4461	205.00	40056	295.00	974	436.00	303
117.00	77792	206.00	165952	296.00	48608	437.00	280
118.00	5706	207.00	21720	297.00	6898	438.00	203
119.00	772	208.00	6190	298.00	614	439.00	230
120.00	979	209.00	1960	299.00	93	441.00	48936
121.00	436	210.00	2662	301.00	496	442.00	330304
122.00	6108	211.00	7370	302.00	671	443.00	62712
123.00	8130	212.00	1053	303.00	5692	444.00	5798
124.00	3625	213.00	529	304.00	1407	445.00	309
125.00	3169	214.00	247	305.00	196		
126.00	1166	215.00	1902	306.00	44		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-668			Matrix:	SOIL
Lab Sample ID:	1201984850				
Client Sample:	QC for batch 928248	Client:	LANL010	Project:	QC
Client ID:	MB for batch 928248	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 11:37	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510404-2.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984850**				
Client Sample:	**QC for batch 928248**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928248**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928249**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:37**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 22:31**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510404-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	1030	ug/kg		J
	Unknown Aldol Condensate	2.94	209	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510404.d
Lab Smp Id: 1201984850 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:37
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984850|928249|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	443813	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1533750	40.0000	
* 46 Acenaphthene-d10	164	6.043	6.049	(1.000)	954698	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1694929	40.0000	
* 91 Chrysene-d12	240	9.631	9.641	(1.000)	1707181	40.0000	
* 98 Perylene-d12	264	11.319	11.331	(1.000)	1540320	40.0000	
$ 3 2-Fluorophenol	112	3.102	3.102	(0.793)	807642	87.8745	2930
$ 5 Phenol-d5	99	3.625	3.632	(0.926)	929507	81.5399	2720
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	444962	45.3766	1510
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	1082420	44.8795	1500
$ 60 2,4,6-Tribromophenol	329	6.642	6.651	(1.099)	307554	87.0892	2900
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1345075	55.0935	1840

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510404.d
Lab Smp Id: 1201984850 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:37
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984850|928249|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.913	2590229	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.025	1998050	30.8551757	1030	0		0	10
Unknown Aldol Condensate				CAS #:			
2.943	406732	6.28102251	209	0		0	10

Data File: /chem/MSD5.i/s120409.b/s510404.d

Date : 04-DEC-2009 11:37

Client ID: SBLK01

Sample Info: |1201984850|928249|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

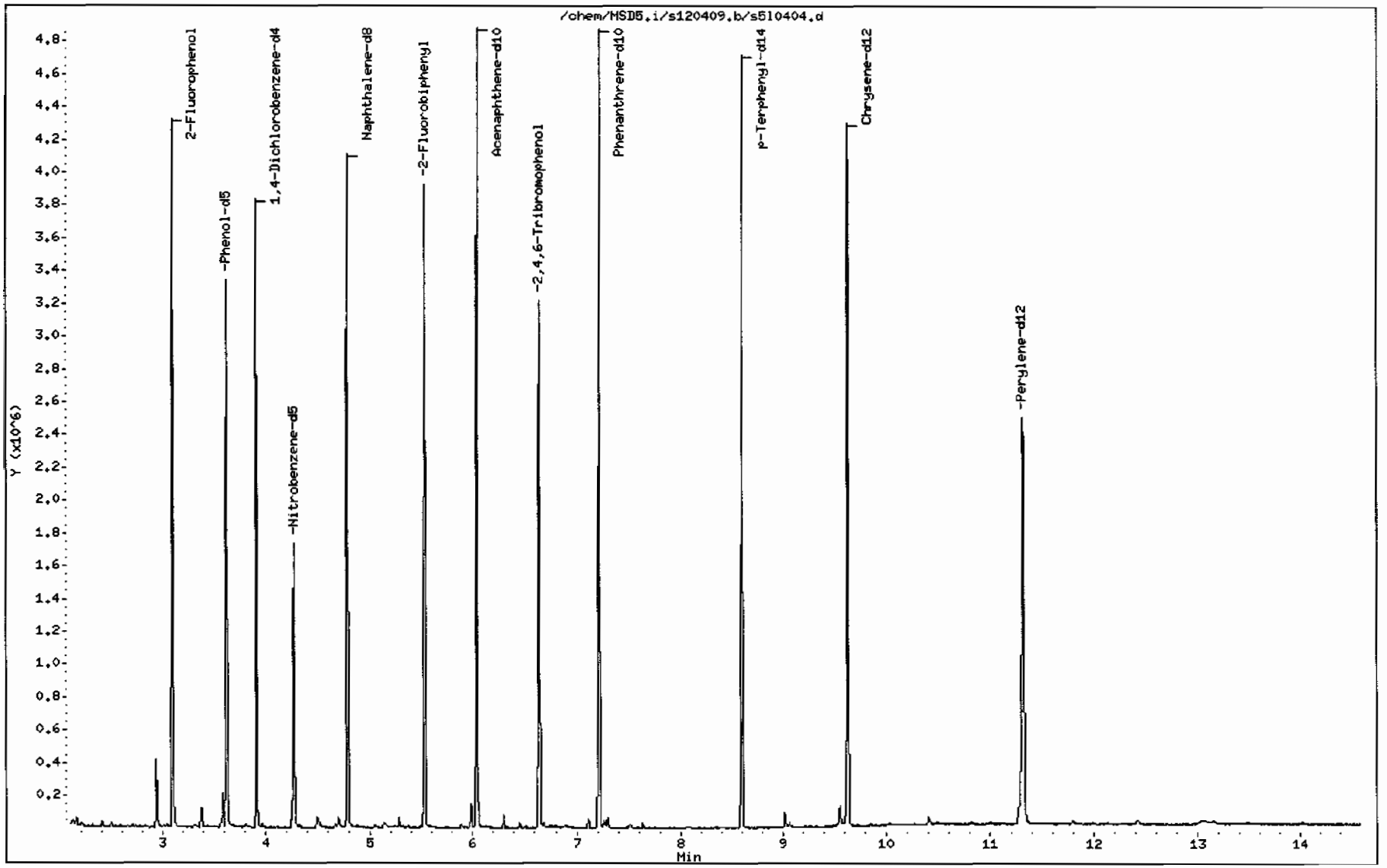

Data File: /chem/MSD5.i/s120409.b/s510404.d

Date : 04-DEC-2009 11:37

Client ID: SBLK01 Instrument: MSD5.i

Sample Info: |1201984850192824911|SVHF|1|SBLK01

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	50	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	9	C3H7NO	73
2-Hydroxy-2-methylbutyric acid	3739-30-8	NIST05.L	8447	9	C5H10O3	118

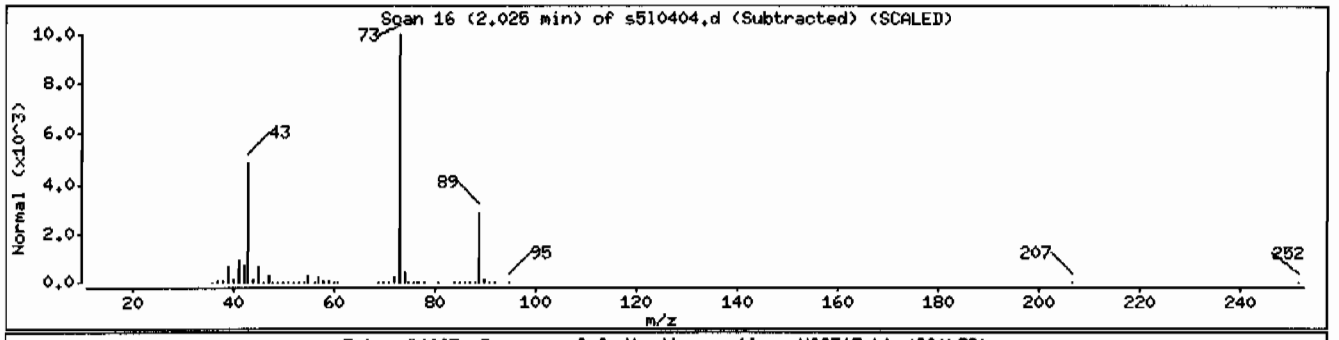

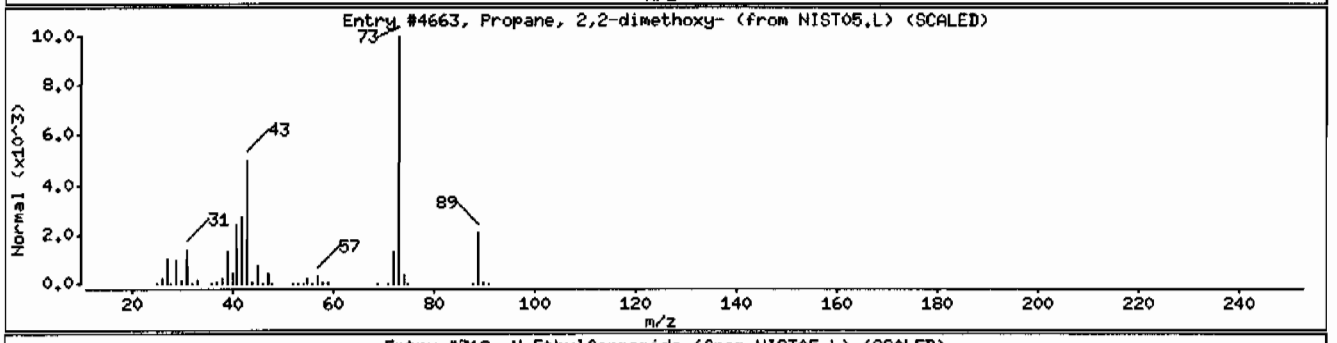

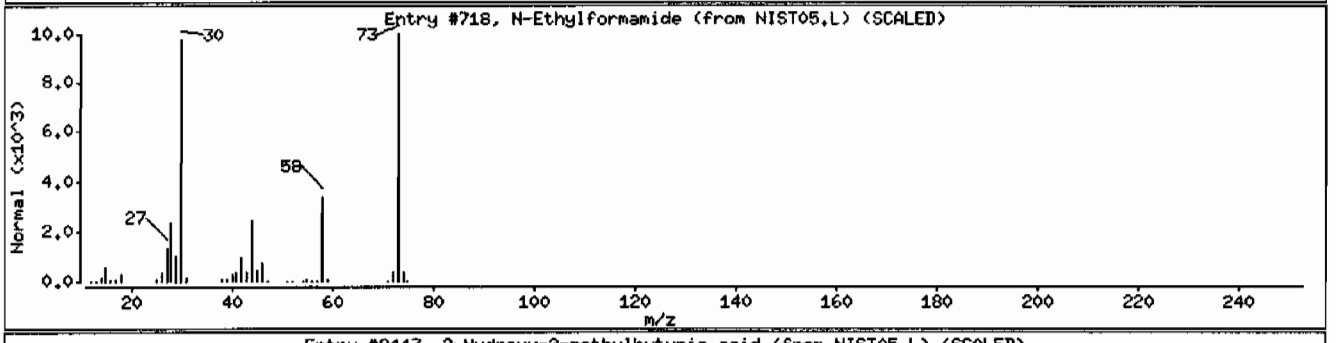

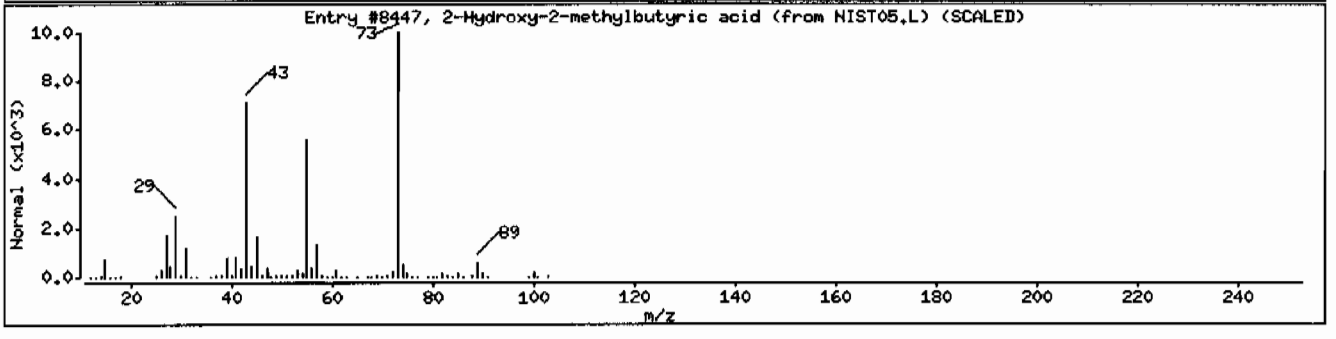

Data File: /chem/MSD5.i/s120409.b/s510404.d

Date : 04-DEC-2009 11:37

Client ID: SBLK01 Instrument: MSD5.i

Sample Info: |120198485019282491|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

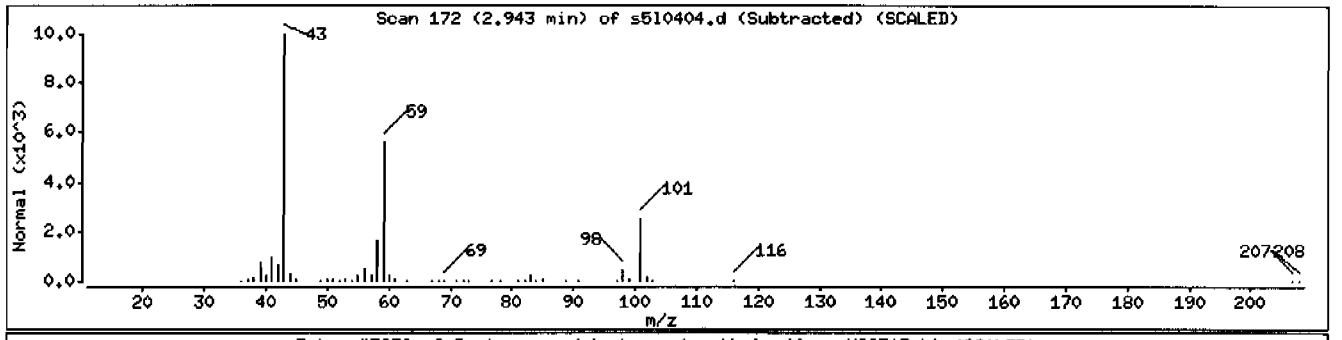

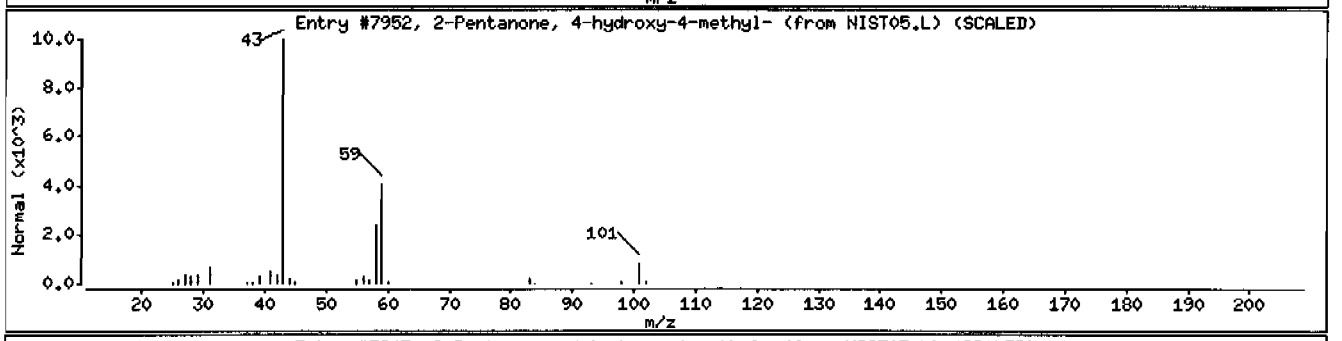

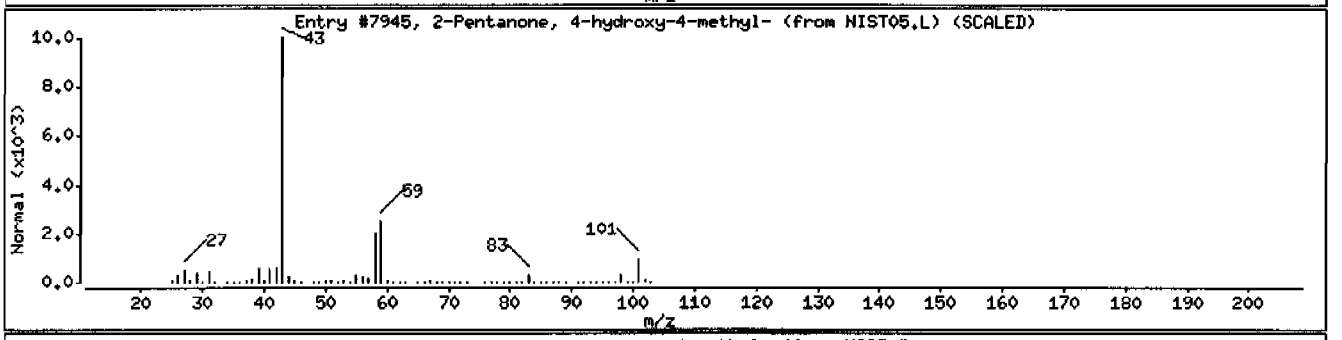

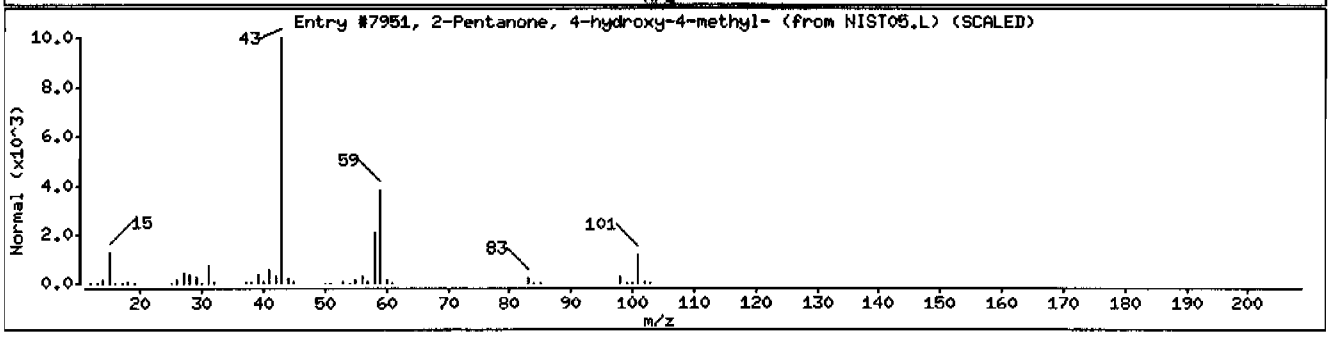

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984851**				
Client Sample:	**QC for batch 928248**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928248**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928249**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:59**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 22:31**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0405-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1320	ug/kg	66.7	333
108-95-2	Phenol		1250	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1220	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1200	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1460	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1330	ug/kg	66.7	333
83-32-9	Acenaphthene		1350	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1400	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1480	ug/kg	110	333
87-86-5	Pentachlorophenol		1570	ug/kg	83.3	333
129-00-0	Pyrene		1570	ug/kg	10.0	33.3
110-86-1	Pyridine		1250	ug/kg	66.7	333
62-53-3	Aniline		1250	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1240	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1200	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1460	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1210	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1320	ug/kg	66.7	333
95-48-7	o-Cresol		1140	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1310	ug/kg	100	333
67-72-1	Hexachloroethane		1140	ug/kg	66.7	333
98-95-3	Nitrobenzene		1430	ug/kg	66.7	333
78-59-1	Isophorone		1370	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1240	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1380	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1330	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1360	ug/kg	66.7	333
65-85-0	Benzoic acid		3730	ug/kg	167	667
91-20-3	Naphthalene		1350	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1460	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1360	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1410	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1430	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1380	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1330	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1320	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1280	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1740	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984851**				
Client Sample:	**QC for batch 928248**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928248**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928249**	**Inst:**	**MSD5.1**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:59**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 22:31**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s5l0405-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1410	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1380	ug/kg	33.3	333
208-96-8	Acenaphthylene		1410	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1380	ug/kg	127	667
132-64-9	Dibenzofuran		1600	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1400	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1380	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1250	ug/kg	66.7	333
100-01-6	4-Nitroaniline		2550	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1570	ug/kg	66.7	333
122-66-7	Azobenzene		1500	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1450	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1400	ug/kg	66.7	333
85-01-8	Phenanthrene		1430	ug/kg	10.0	33.3
120-12-7	Anthracene		1470	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1530	ug/kg	66.7	333
206-44-0	Fluoranthene		1510	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1650	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1530	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1260	ug/kg	100	333
218-01-9	Chrysene		1470	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1610	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1680	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1580	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1490	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1540	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1340	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1320	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1430	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1320	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510405.d
Lab Smp Id: 1201984851 Client Smp ID: SBLK01LCS
Inj Date : 04-DEC-2009 11:59
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984851|928249|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	433913	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1604371	40.0000	
* 46 Acenaphthene-d10	164	6.048	6.049	(1.000)	904978	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1639318	40.0000	
* 91 Chrysene-d12	240	9.636	9.641	(1.000)	1639884	40.0000	
* 98 Perylene-d12	264	11.325	11.331	(1.000)	1442784	40.0000	
$ 3 2-Fluorophenol	112	3.102	3.102	(0.793)	700128	77.9147	2600
$ 5 Phenol-d5	99	3.631	3.632	(0.928)	814025	73.0386	2430
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.893)	440492	42.9435	1430
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.914)	942726	41.2350	1370
$ 60 2,4,6-Tribromophenol	329	6.648	6.651	(1.099)	294329	87.9235	2930
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1204630	51.3658	1710

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.637	3.641	(0.929)	435157	37.3883	1250(Q)
8 2-Chlorophenol	128	3.778	3.786	(0.965)	366510	36.7184	1220
11 1,4-Dichlorobenzene	146	3.925	3.935	(1.003)	438579	36.1457	1200
17 N-Nitrosodipropylamine	70	4.154	4.161	(1.062)	229149	43.7524	1460(Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.744	(0.989)	395924	39.4897	1320
33 4-Chloro-3-methylphenol	107	5.137	5.134	(1.072)	315300	39.9955	1330
47 Acenaphthene	154	6.072	6.078	(1.004)	758162	40.4407	1350
50 2,4-Dinitrotoluene	165	6.160	6.165	(1.018)	281793	41.8769	1400
52 4-Nitrophenol	139	6.090	6.088	(1.007)	145202	44.4594	1480
65 Pentachlorophenol	266	7.048	7.046	(0.976)	187801	47.0787	1570
79 Pyrene	202	8.501	8.505	(0.882)	1561616	47.0123	1570
2 Pyridine	79	2.460	2.433	(0.629)	264766	37.4704	1250
4 Aniline	66	3.696	3.704	(0.944)	163019	37.4623	1250(Q)
7 bis(2-Chloroethyl) ether	63	3.713	3.718	(0.949)	256475	37.2983	1240(Q)
9 1,3-Dichlorobenzene	146	3.878	3.887	(0.991)	430828	36.0445	1200
12 Benzyl alcohol	108	3.984	3.988	(1.018)	276691	43.9357	1460
13 1,2-Dichlorobenzene	146	4.031	4.036	(1.030)	417124	36.3261	1210
14 bis(2-Chloroisopropyl)ether	45	4.060	4.065	(1.038)	434376	39.7421	1320
15 o-Cresol	107	4.037	4.041	(1.032)	273532	34.3335	1140
18 m,p-Cresols	107	4.131	4.142	(1.056)	398726	39.3160	1310
19 Hexachloroethane	117	4.260	4.267	(1.089)	153418	34.2461	1140
21 Nitrobenzene	77	4.296	4.301	(0.897)	408438	42.7645	1420
22 Isophorone	82	4.449	4.455	(0.929)	731301	41.2296	1370
23 2-Nitrophenol	139	4.507	4.513	(0.941)	185640	37.3212	1240
24 2,4-Dimethylphenol	122	4.502	4.508	(0.940)	356400	41.5367	1380
25 bis(2-Chloroethoxy)methane	93	4.566	4.576	(0.953)	396315	39.9355	1330
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	326637	40.8221	1360
27 Benzoic acid	105	4.584	4.566	(0.957)	494578	111.766	3720
30 Naphthalene	128	4.801	4.807	(1.002)	1120910	40.3680	1340
31 4-Chloroaniline	127	4.819	4.821	(1.006)	488501	43.9350	1460
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	265319	40.6863	1360
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	807395	42.1613	1400
36 Hexachlorocyclopentadiene	237	5.390	5.394	(0.891)	156425	42.8382	1430
37 2,4,6-Trichlorophenol	196	5.478	5.476	(0.906)	271957	41.3778	1380
38 2,4,5-Trichlorophenol	196	5.507	5.505	(0.911)	273985	39.8923	1330
40 2-Chloronaphthalene	162	5.643	5.645	(0.933)	753350	39.4514	1320
42 o-Nitroaniline	65	5.696	5.702	(0.942)	194747	38.4466	1280
41 m-Nitroaniline	138	5.996	5.996	(0.991)	174178	52.1859	1740
43 Dimethylphthalate	163	5.801	5.808	(0.959)	953434	42.3526	1410
44 2,6-Dinitrotoluene	165	5.860	5.866	(0.969)	217604	41.3664	1380
45 Acenaphthylene	152	5.948	5.953	(0.983)	1229967	42.2923	1410
48 2,4-Dinitrophenol	184	6.066	6.073	(1.003)	77312	41.4978	1380
49 Dibenzofuran	168	6.196	6.198	(1.024)	1305804	48.0125	1600
51 Diethylphthalate	149	6.319	6.319	(1.045)	945705	42.2173	1410
53 Fluorene	166	6.460	6.463	(1.068)	943674	41.9432	1400
54 4-Chlorophenylphenylether	204	6.431	6.434	(1.063)	513510	41.4666	1380
55 2-Methyl-4,6-dinitrophenol	198	6.472	6.478	(0.897)	119139	37.6184	1250

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56	p-Nitroaniline	138	6.454	6.458	(1.067)	172802	76.5647	2550(R)
133	Diphenylamine	169	6.525	6.526	(0.904)	756720	46.9693	1560
58	1,2-Diphenylhydrazine	77	6.560	6.564	(0.909)	897443	44.9013	1500
61	4-Bromophenylphenylether	248	6.825	6.824	(0.945)	321604	43.4692	1450
63	Hexachlorobenzene	284	6.895	6.901	(0.955)	330068	41.9671	1400
68	Phenanthrene	178	7.243	7.243	(1.003)	1324198	43.0101	1430
69	Anthracene	178	7.284	7.287	(1.009)	1349930	44.0833	1470
72	Di-n-butylphthalate	149	7.642	7.643	(1.059)	1612492	45.7731	1520
76	Fluoranthene	202	8.284	8.288	(1.147)	1530855	45.4106	1510
85	Butylbenzylphthalate	149	9.031	9.035	(0.937)	729859	49.4508	1650
89	Benzo(a)anthracene	228	9.625	9.632	(0.999)	1514764	45.8053	1530
90	3,3'-Dichlorobenzidine	252	9.572	9.566	(0.993)	420472	37.9118	1260
92	Chrysene	228	9.666	9.670	(1.003)	1333560	44.2362	1470
93	bis(2-Ethylhexyl)phthalate	149	9.554	9.559	(0.991)	1059479	48.1678	1600
94	Di-n-octylphthalate	149	10.213	10.214	(0.902)	1576946	50.4601	1680
95	Benzo(b)fluoranthene	252	10.801	10.807	(0.954)	1434978	47.4629	1580
96	Benzo(k)fluoranthene	252	10.836	10.845	(0.957)	1351745	44.7905	1490
97	Benzo(a)pyrene	252	11.248	11.250	(0.993)	1229517	46.1227	1540
99	Indeno(1,2,3-cd)pyrene	276	13.113	13.118	(1.158)	1199572	40.1739	1340
100	Dibenzo(a,h)anthracene	278	13.130	13.137	(1.159)	996027	39.7008	1320
101	Benzo(ghi)perylene	276	13.660	13.667	(1.206)	1004199	42.8109	1430
1	N-Methyl-N-nitrosomethylamine	74	2.419	2.399	(0.618)	196770	39.5011	1320

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD5.i/s120409.b/s510405.d
Date : 04-DEC-2009 11:59
Client ID: SBLK01LCS
Sample Info: I120198485I192824911ISVHF11ISBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

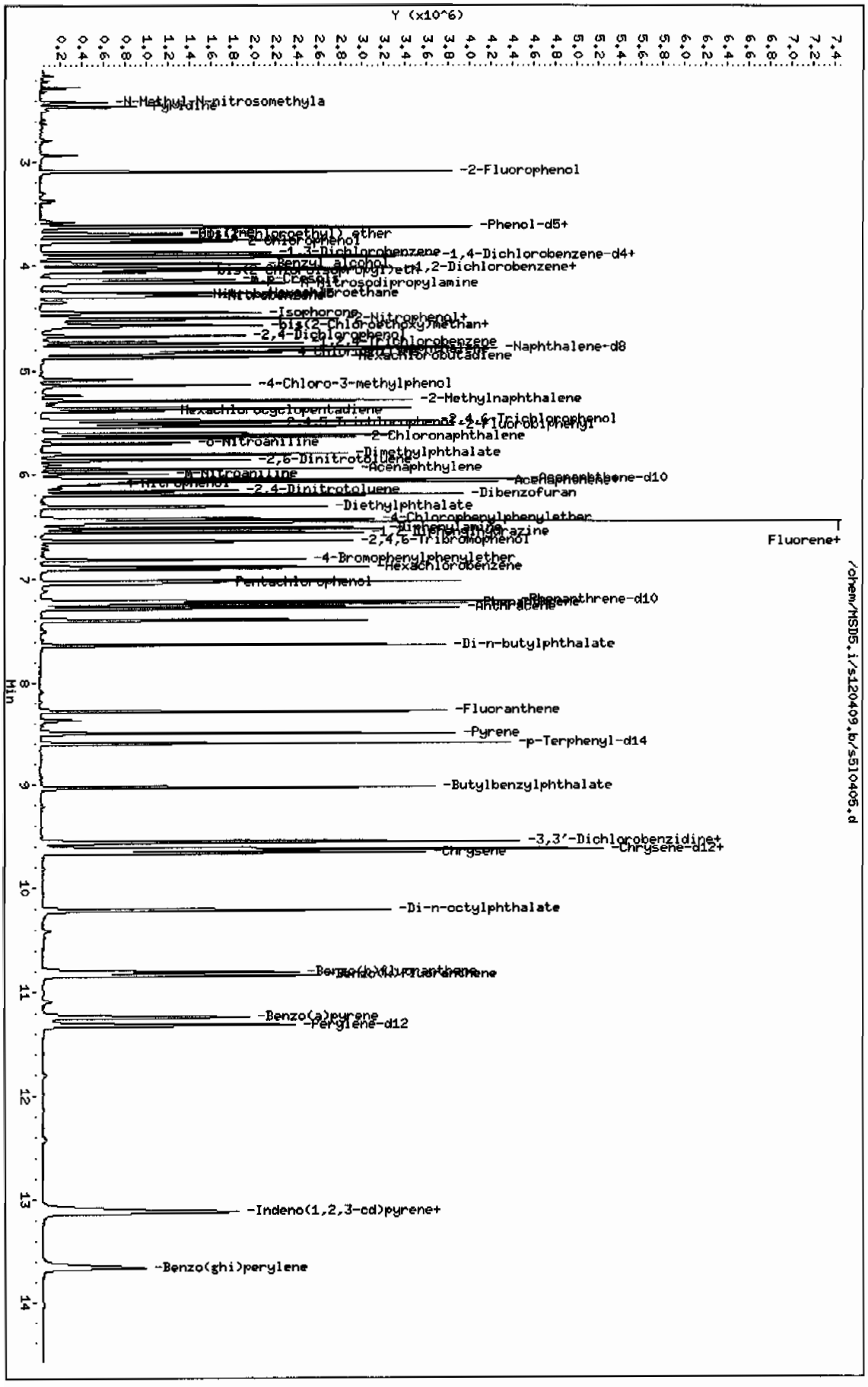

/chem/MSD5.i/s120409.b/s510405.d

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 928248 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984850 MB	02-DEC-2009 22:31:00	30	1	0.03333
1201984851 LCS	02-DEC-2009 22:31:00	30	1	0.03333
241827001	02-DEC-2009 22:31:00	30.12	1	0.0332
241827004	02-DEC-2009 22:31:00	30.18	1	0.03313
241827005	02-DEC-2009 22:31:00	30.14	1	0.03318
241827006	02-DEC-2009 22:31:00	30.01	1	0.03332
241838002	02-DEC-2009 22:31:00	30.05	1	0.03328
241900001	02-DEC-2009 22:31:00	30.02	1	0.03331
241900002	02-DEC-2009 22:31:00	30.14	1	0.03318
241900003	02-DEC-2009 22:31:00	30.01	1	0.03332
241900004	02-DEC-2009 22:31:00	30.09	1	0.03323
241900006	02-DEC-2009 22:31:00	30.19	1	0.03312
241903002	02-DEC-2009 22:31:00	30.02	1	0.03331
241907001	02-DEC-2009 22:31:00	30.17	1	0.03315
241907002	02-DEC-2009 22:31:00	30.05	1	0.03328
241911001	02-DEC-2009 22:31:00	30.14	1	0.03318
1201984852 MS (241911001)	02-DEC-2009 22:31:00	30.12	1	0.0332
1201984853 MSD (241911001)	02-DEC-2009 22:31:00	30.03	1	0.0333
241911002	02-DEC-2009 22:31:00	30.01	1	0.03332

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984851	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201984851	BENZIDINE LCS	UE091201-21	1	mL
MS	1201984852	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201984852	BENZIDINE LCS	UE091201-21	1	mL
MSD	1201984853	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201984853	BENZIDINE LCS	UE091201-21	1	mL
SURR	All	BNA for all Surrogate	UE091117-10	1	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	Methylene Chloride	1236611-D	150	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 12/04/2009 METHOD:8270C MSD5-DFTPPx.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s510401.d	WBN091128-01	rmb	04-DEC-2009 10:24	50PPM	s120409	1.0	DFTPP	
s510402.d	WBN091106-05.3	RMB	04-DEC-2009 10:38	40 PPM	s120409	1.0	MEGACVS	413613
s510403.d	WBN091201-03.4	RMB	04-DEC-2009 11:06	40 PPM	s120409	1.0	AP12CVS	
s510404-2.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-670	1.0	SBLK01	
s510404-3.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-688	1.0	SBLK01	
s510404-4.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-690	1.0	SBLK01	
s510404-5.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-692	1.0	SBLK01	
s510404-6.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-694	1.0	SBLK01	
s510404.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-668	1.0	SBLK01	
s510405-2.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-670	1.0	SBLK01LCS	
s510405-3.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-688	1.0	SBLK01LCS	
s510405-4.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-690	1.0	SBLK01LCS	
s510405-5.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-692	1.0	SBLK01LCS	
s510405-6.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-694	1.0	SBLK01LCS	
s510405.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-668	1.0	SBLK01LCS	
s510406.d	241604001	RMB	04-DEC-2009 12:22	926641	10-638	1.0	LANL	DUSE: rerun of s510321 - still fails
s510407.d	241609002	RMB	04-DEC-2009 12:45	926641	10-640	1.0	LANL	DUSE: fails ISTD - confirmation for s510326
s510408.d	241827001	RMB	04-DEC-2009 13:08	928249	10-668	1.0	LANL	
s510409.d	241827004	RMB	04-DEC-2009 13:30	928249	10-668	1.0	LANL	

s510410.d	241827005	RMB	04-DEC-2009 13:53	928249	10-668		1.0	LANL	
s510411.d	241827006	RMB	04-DEC-2009 14:16	928249	10-668		1.0	LANL	
s510412.d	241838002	RMB	04-DEC-2009 14:39	928249	10-670		1.0	LANL	
s510413.d	241900001	RMB	04-DEC-2009 15:02	928249	10-688		1.0	LANL	
s510414.d	241900002	RMB	04-DEC-2009 15:25	928249	10-688		1.0	LANL	
s510415.d	241900003	RMB	04-DEC-2009 15:47	928249	10-688		1.0	LANL	
s510416.d	241900004	RMB	04-DEC-2009 16:10	928249	10-688		1.0	LANL	
s510417.d	241900006	RMB	04-DEC-2009 16:33	928249	10-688		1.0	LANL	
s510418.d	241903002	RMB	04-DEC-2009 16:56	928249	10-690		1.0	LANL	
s510419.d	241907001	RMB	04-DEC-2009 17:19	928249	10-692		1.0	LANL	
s510420.d	241907002	RMB	04-DEC-2009 17:42	928249	10-692		1.0	LANL	
s510421.d	241911001	RMB	04-DEC-2009 18:04	928249	10-694		1.0	LANL	
s510422.d	1201984852	RMB	04-DEC-2009 18:27	928249	10-694		1.0	LANL11001MS	
s510423.d	1201984853	RMB	04-DEC-2009 18:50	928249	10-694		1.0	LANL11001MSD	
s510424.d	241911002	RMB	04-DEC-2009 19:13	928249	10-694		1.0	LANL	

Instrument Batch: /chem/MSD5.i/s120409.b

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 11/30/2009 METHOD:8270C MSD5-DFTPP8270D.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3001-D.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3001.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3002.d	instrument blank	RMB	30-NOV-2009 08:11		s113009	1.0		DUSE
s5k3003.d	WBN091106-08	RMB	30-NOV-2009 08:34	1 PPM	s113009	1.0	MEGAICAL001	DUSE
s5k3004.d	WBN091106-07	RMB	30-NOV-2009 09:02	10 PPM	s113009	1.0	MEGAICAL010	DUSE
s5k3005.d	WBN091106-06	RMB	30-NOV-2009 09:30	20 PPM	s113009	1.0	MEGAICAL020	DUSE
s5k3006.d	WBN091106-05.1	RMB	30-NOV-2009 09:58	40 PPM	s113009	1.0	MEGAICAL040	DUSE
s5k3007.d	WBN091106-04	RMB	30-NOV-2009 10:27	50 PPM	s113009	1.0	MEGAICAL050	DUSE
s5k3008.d	WBN091106-03	RMB	30-NOV-2009 10:55	80 PPM	s113009	1.0	MEGAICAL080	DUSE
s5k3009.d	WBN091106-02	RMB	30-NOV-2009 11:24	100 PPM	s113009	1.0	MEGAICAL100	DUSE
s5k3010.d	WBN091106-01	RMB	30-NOV-2009 12:23	120 PPM	s113009	1.0	MEGAICAL120	DUSE
s5k3011.d	instrument blank	RMB	30-NOV-2009 12:51		s113009	1.0		DUSE
s5k3012-D.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3012.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3013.d	instrument blank	RMB	30-NOV-2009 13:46		s113009	1.0		
s5k3014-TEST.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3014.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3015-TEST.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	
s5k3015.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	

s5k3016.d	WBN091106-06	RMB	30-NOV-2009 15:06	20 PPM	s113009		1.0	MEGAICAL020
s5k3017.d	WBN091106-05.1	RMB	30-NOV-2009 15:34	40 PPM	s113009		1.0	MEGAICAL040
s5k3018.d	WBN091106-04	RMB	30-NOV-2009 16:02	50 PPM	s113009		1.0	MEGAICAL050
s5k3019.d	WBN091106-03	RMB	30-NOV-2009 16:31	80 PPM	s113009		1.0	MEGAICAL080
s5k3020.d	WBN091106-02	RMB	30-NOV-2009 16:59	100 PPM	s113009		1.0	MEGAICAL100
s5k3021.d	WBN091106-01	RMB	30-NOV-2009 17:28	120 PPM	s113009		1.0	MEGAICAL120
s5k3022.d	instrument blank	RMB	30-NOV-2009 17:56		s113009		1.0	
s5k3023-625.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 625 - 113009
s5k3023-8270D.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 8270D - 113009
s5k3023-BOE.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - BOE - 113009
s5k3023.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009		1.0	MEGAICV	MEGAICV - 8270C - 113009
s5k3024-TEST.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009		1.0	AP12ICAL010
s5k3024.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009		1.0	AP12ICAL010
s5k3025.d	WBN091111-02	RMB	30-NOV-2009 19:10	20 PPM	s113009		1.0	AP12ICAL020
s5k3026.d	WBN091111-03.3	RMB	30-NOV-2009 19:34	40 PPM	s113009		1.0	AP12ICAL040
s5k3027.d	WBN091111-04	RMB	30-NOV-2009 19:57	50 PPM	s113009		1.0	AP12ICAL050
s5k3028.d	WBN091111-05	RMB	30-NOV-2009 20:20	80 PPM	s113009		1.0	AP12ICAL080
s5k3029.d	WBN091111-06	RMB	30-NOV-2009 20:42	100 PPM	s113009		1.0	AP12ICAL100
s5k3030.d	WBN091111-07	RMB	30-NOV-2009 21:05	120 PPM	s113009		1.0	AP12ICAL120
s5k3031-TEST.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009		1.0	NEVADAICAL010
s5k3031.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009		1.0	NEVADAICAL010
s5k3032.d	UBN091117-02	RMB	30-NOV-2009 21:51	20 PPM	s113009		1.0	NEVADAICAL020

Instrument Batch: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3033.d	UBN091117-03	RMB	30-NOV-2009 22:14	40 PPM	s113009		1.0	NEVADAICAL040
s5k3034.d	UBN091117-04	RMB	30-NOV-2009 22:38	50 PPM	s113009		1.0	NEVADAICAL050
s5k3035.d	UBN091117-05	RMB	30-NOV-2009 23:01	80 PPM	s113009		1.0	NEVADAICAL080

s5k3036.d	UBN091117-06	RMB	30-NOV-2009 23:23	100 PPM	s113009		1.0	NEVADAICAL100	
s5k3037.d	UBN091117-07	RMB	30-NOV-2009 23:46	120 PPM	s113009		1.0	NEVADAICAL120	
s5k3038-625.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 625 - 113009
s5k3038-8270D.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 8270D - 113009
s5k3038.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009		1.0	AP12ICV	AP12ICV - 8270C - 113009
Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client		Comments
s5k3039-D.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009		1.0	DFTPP	
s5k3039.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009		1.0	DFTPP	
s5k3040.d	instrument blank	RMB	01-DEC-2009 09:52		s113009		1.0		
s5k3041.d	WBN091029-25	RMB	01-DEC-2009 10:15	10 PPM	s113009		1.0	PESTICAL010	
s5k3042.d	WBN091029-24	RMB	01-DEC-2009 10:38	20 PPM	s113009		1.0	PESTICAL020	
s5k3043.d	WBN091029-23.1	RMB	01-DEC-2009 11:00	40 PPM	s113009		1.0	PESTICAL040	
s5k3044.d	WBN091029-22	RMB	01-DEC-2009 11:23	50 PPM	s113009		1.0	PESTICAL050	
s5k3045.d	WBN091029-21	RMB	01-DEC-2009 11:46	80 PPM	s113009		1.0	PESTICAL080	
s5k3046.d	WBN091029-20	RMB	01-DEC-2009 12:09	100 PPM	s113009		1.0	PESTICAL100	
s5k3047.d	WBN091029-19	RMB	01-DEC-2009 12:32	120 PPM	s113009		1.0	PESTICAL120	
s5k3048-TEST.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009		1.0	HEXICAL500	
s5k3048.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009		1.0	HEXICAL500	
s5k3049.d	WBN091016-15	RMB	01-DEC-2009 13:18	1000 PPM	s113009		1.0	HEXICAL1000	
s5k3050.d	WBN091016-14	RMB	01-DEC-2009 13:41	1250 PPM	s113009		1.0	HEXICAL1250	
s5k3051.d	WBN091016-13	RMB	01-DEC-2009 14:03	1500 PPM	s113009		1.0	HEXICAL1500	
s5k3052.d	WBN091016-12	RMB	01-DEC-2009 14:25	1750 PPM	s113009		1.0	HEXICAL1750	
s5k3053.d	UBN090828-02	RMB	01-DEC-2009 14:48	2000 PPM	s113009		1.0	HEXICAL2000	
s5k3054-625.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 625 - 113009
s5k3054-8270D.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 8270D - 113009
s5k3054.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009		1.0	PESTICV	PESTICV - 8270C - 113009
s5k3055-625.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009		1.0	HEXICV	HEXICV - 625 - 113009

s5k3055-8270D.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV - 8270D - 113009
s5k3055.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV - 8270C - 11300

Instrument Batch: /chem/MSD5.i/s113009.b

NCR Report No.: 766479
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
928249	See Below		

Potentially affected work order(s)(SDG): 241827(10-668),241838(10-670),241900(10-688),241903(10-690),241907(10-692),241911(10-694)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for LCS/LCSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS(1201984851) recovered p-Nitroaniline at 153%. The limits are 44%-139%.	1. Since the LCS was biased high for p-Nitroaniline, and there were no hits of the analyte in any of the samples, the data results have been reported.
2. The MS(1201984852) and MSD(201984853) recovered p-Nitroaniline at 158% and 158%, respectively. The limits are 35%-139%.	2. Since the MS and MSD were biased high for p-Nitroaniline, and the analyte was not detected in the associated parent sample, the data results have been reported.

Originator's Name:

Richard Bomar 07-DEC-09

Data Validator/Group Leader:

Barbara Bailey 07-DEC-09

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510422.d
Lab Smp Id: 1201984852 Client Smp ID: WST49-10-5432MS
Inj Date : 04-DEC-2009 18:27
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984852|928249|1|SVMF|1|LANL11001MS
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:44 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 22 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-694.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	1.46490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	454512	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1667628	40.0000	
* 46 Acenaphthene-d10	164	6.048	6.049	(1.000)	971331	40.0000	
* 67 Phenanthrene-d10	188	7.225	7.224	(1.000)	1785027	40.0000	
* 91 Chrysene-d12	240	9.642	9.641	(1.000)	1591164	40.0000	
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1138673	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.793)	641923	68.1996	2300
$ 5 Phenol-d5	99	3.631	3.632	(0.928)	798557	68.4035	2300
$ 20 Nitrobenzene-d5	82	4.284	4.287	(0.894)	405138	37.9986	1280
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.914)	931403	37.9567	1280
$ 60 2,4,6-Tribromophenol	329	6.648	6.651	(1.099)	284896	79.2917	2670
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.892)	1146631	50.3897	1700

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.643	3.641	(0.931)	416541	34.1668	1150(Q)
8 2-Chlorophenol	128	3.784	3.786	(0.967)	341947	32.7050	1100
11 1,4-Dichlorobenzene	146	3.925	3.935	(1.003)	389338	30.6332	1030
17 N-Nitrosodipropylamine	70	4.154	4.161	(1.062)	218721	39.8685	1340(Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.744	(0.989)	363942	34.9229	1180
33 4-Chloro-3-methylphenol	107	5.142	5.134	(1.074)	314321	38.3589	1290
47 Acenaphthene	154	6.072	6.078	(1.004)	726219	36.0907	1220
50 2,4-Dinitrotoluene	165	6.160	6.165	(1.018)	273359	37.8484	1280
52 4-Nitrophenol	139	6.101	6.088	(1.009)	115283	34.4707	1160
65 Pentachlorophenol	266	7.054	7.046	(0.976)	145033	35.2837	1190
79 Pyrene	202	8.501	8.505	(0.882)	1483563	46.0300	1550
2 Pyridine	79	2.448	2.433	(0.626)	209553	28.3124	954
4 Aniline	66	3.695	3.704	(0.944)	162157	35.5752	1200
7 bis(2-Chloroethyl) ether	63	3.713	3.718	(0.949)	240696	33.4172	1120
9 1,3-Dichlorobenzene	146	3.884	3.887	(0.992)	382493	30.5503	1030
12 Benzyl alcohol	108	3.990	3.988	(1.020)	167599	25.4068	856
13 1,2-Dichlorobenzene	146	4.031	4.036	(1.030)	368046	30.5994	1030
14 bis(2-Chloroisopropyl)ether	45	4.060	4.065	(1.038)	398847	34.8376	1170
15 o-Cresol	107	4.037	4.041	(1.032)	308367	36.9516	1240
18 m,p-Cresols	107	4.137	4.142	(1.057)	428199	40.3086	1360
19 Hexachloroethane	117	4.260	4.267	(1.089)	129235	27.5405	928
21 Nitrobenzene	77	4.295	4.301	(0.897)	382865	38.5663	1300
22 Isophorone	82	4.448	4.455	(0.929)	707618	38.3810	1290
23 2-Nitrophenol	139	4.507	4.513	(0.941)	162482	31.4264	1060
24 2,4-Dimethylphenol	122	4.501	4.508	(0.940)	330715	37.0812	1250
25 bis(2-Chloroethoxy)methane	93	4.566	4.576	(0.953)	382794	37.1099	1250
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	325062	39.0842	1320
27 Benzoic acid	105	4.560	4.566	(0.952)	204590	44.4800	1500
30 Naphthalene	128	4.801	4.807	(1.002)	1048417	36.3250	1220(Q)
31 4-Chloroaniline	127	4.819	4.821	(1.006)	497499	43.0470	1450
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	234974	34.6661	1170
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	783884	39.3808	1330
36 Hexachlorocyclopentadiene	237	5.389	5.394	(0.891)	71485	18.2394	614
37 2,4,6-Trichlorophenol	196	5.478	5.476	(0.906)	257105	36.4457	1230
38 2,4,5-Trichlorophenol	196	5.513	5.505	(0.912)	299769	40.6649	1370
40 2-Chloronaphthalene	162	5.642	5.645	(0.933)	739117	36.0620	1220
42 o-Nitroaniline	65	5.695	5.702	(0.942)	196188	36.0853	1220
41 m-Nitroaniline	138	5.995	5.996	(0.991)	185464	51.8779	1750
43 Dimethylphthalate	163	5.801	5.808	(0.959)	954197	39.4911	1330
44 2,6-Dinitrotoluene	165	5.860	5.866	(0.969)	211745	37.5030	1260
45 Acenaphthylene	152	5.948	5.953	(0.983)	1232359	39.4799	1330
48 2,4-Dinitrophenol	184	6.072	6.073	(1.004)	17250	18.7884	633(aQ)
49 Dibenzofuran	168	6.195	6.198	(1.024)	1299279	44.5092	1500
51 Diethylphthalate	149	6.319	6.319	(1.045)	939030	39.0557	1320
53 Fluorene	166	6.460	6.463	(1.068)	931992	38.5943	1300
54 4-Chlorophenylphenylether	204	6.436	6.434	(1.064)	505763	38.0511	1280
55 2-Methyl-4,6-dinitrophenol	198	6.478	6.478	(0.897)	48546	19.0460	642

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.460	6.458	(1.068)	191267	78.9569	2660(R)
133 Diphenylamine	169	6.525	6.526	(0.903)	767568	43.7537	1470
58 1,2-Diphenylhydrazine	77	6.560	6.564	(0.908)	905671	41.6142	1400
61 4-Bromophenylphenylether	248	6.825	6.824	(0.945)	310658	38.5621	1300
63 Hexachlorobenzene	284	6.895	6.901	(0.954)	321695	37.5636	1260
68 Phenanthrene	178	7.242	7.243	(1.002)	1301794	38.8310	1310
69 Anthracene	178	7.283	7.287	(1.008)	1331360	39.9279	1340
72 Di-n-butylphthalate	149	7.642	7.643	(1.058)	1569454	40.9148	1380
76 Fluoranthene	202	8.289	8.288	(1.147)	1460576	39.7892	1340
85 Butylbenzylphthalate	149	9.030	9.035	(0.937)	676562	47.2432	1590
89 Benzo(a)anthracene	228	9.624	9.632	(0.998)	1281035	39.9236	1340
90 3,3'-Dichlorobenzidine	252	9.572	9.566	(0.993)	424642	39.4602	1330
92 Chrysene	228	9.666	9.670	(1.002)	1149863	39.3106	1320
93 bis(2-Ethylhexyl)phthalate	149	9.554	9.559	(0.991)	970361	45.4956	1530
94 Di-n-octylphthalate	149	10.213	10.214	(0.902)	1408388	57.1026	1920
95 Benzo(b)fluoranthene	252	10.801	10.807	(0.954)	1027417	43.0584	1450
96 Benzo(k)fluoranthene	252	10.836	10.845	(0.957)	1041449	43.7252	1470
97 Benzo(a)pyrene	252	11.248	11.250	(0.993)	870101	41.3573	1390
99 Indeno(1,2,3-cd)pyrene	276	13.107	13.118	(1.157)	733136	31.3589	1060
100 Dibenzo(a,h)anthracene	278	13.124	13.137	(1.159)	626236	31.8612	1070
101 Benzo(ghi)perylene	276	13.654	13.667	(1.206)	576229	31.1266	1050
1 N-Methyl-N-nitrosomethylamine	74	2.407	2.399	(0.615)	170429	32.6626	1100

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD5.i/s120409.b/s510422.d
Date : 04-DEC-2009 18:27
Client ID: WST49-10-5432MS
Sample Info: 1120198485219282491|SWMF1|1|LANL11001MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

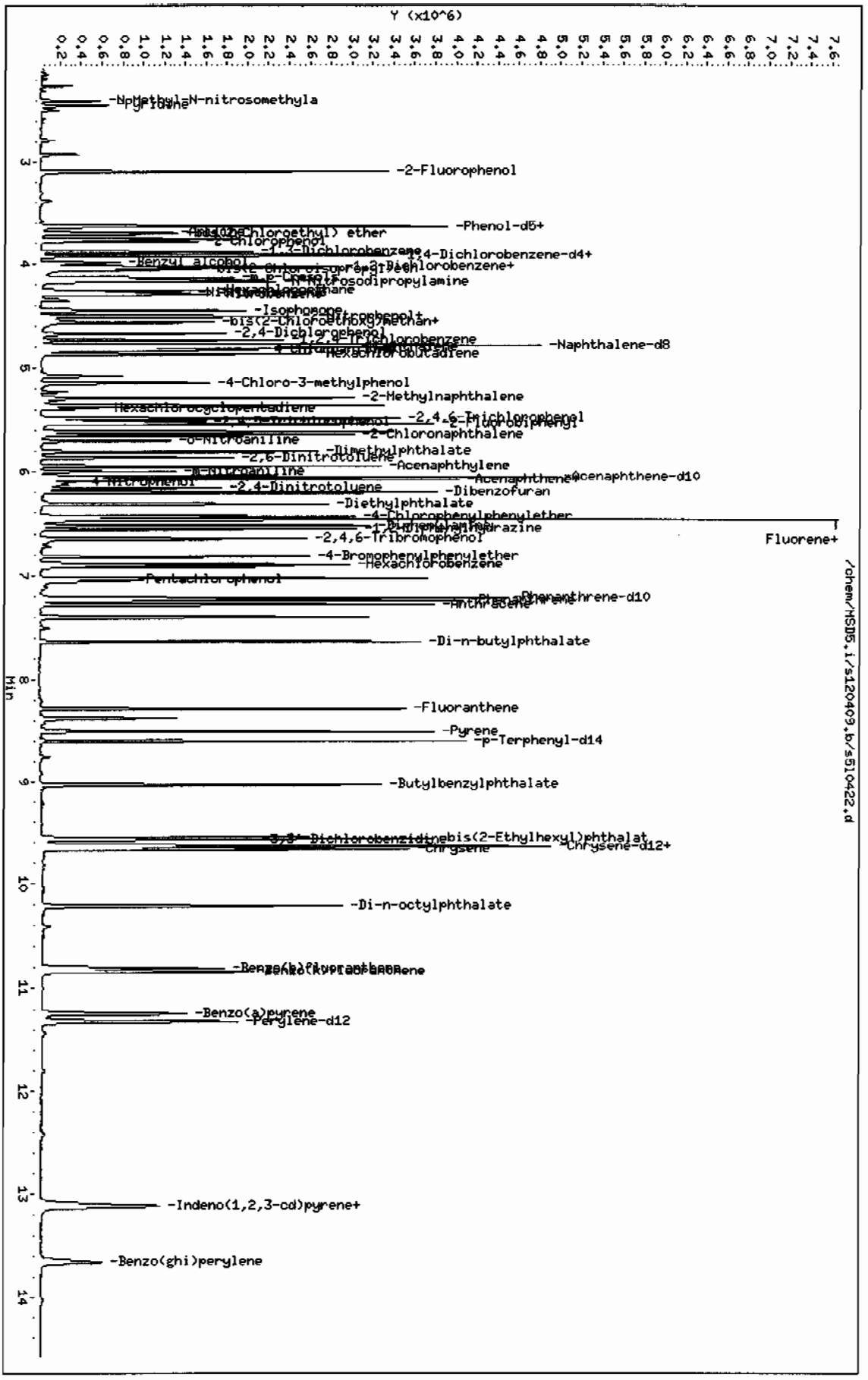

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510423.d
Lab Smp Id: 1201984853 Client Smp ID: WST49-10-5432MSD
Inj Date : 04-DEC-2009 18:50
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984853|928249|1|SVMF|1|LANL11001MSD
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:44 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-694.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	1.46490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.921	(1.000)	457622	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1688982	40.0000	
* 46 Acenaphthene-d10	164	6.048	6.049	(1.000)	992789	40.0000	
* 67 Phenanthrene-d10	188	7.225	7.224	(1.000)	1823412	40.0000	
* 91 Chrysene-d12	240	9.642	9.641	(1.000)	1541029	40.0000	
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1001963	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.791)	647393	68.3133	2310
$ 5 Phenol-d5	99	3.631	3.632	(0.926)	808701	68.8016	2320
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.893)	413512	38.2937	1290
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.914)	945649	37.7043	1270
$ 60 2,4,6-Tribromophenol	329	6.648	6.651	(1.099)	294617	80.2250	2710
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.892)	1177576	53.4332	1800

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.643	3.641	(0.929)	420780	34.2800	1160(Q)
8 2-Chlorophenol	128	3.784	3.786	(0.965)	346037	32.8713	1110
11 1,4-Dichlorobenzene	146	3.925	3.935	(1.002)	402464	31.4507	1060
17 N-Nitrosodipropylamine	70	4.154	4.161	(1.060)	219549	39.7474	1340(Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.744	(0.989)	368421	34.9057	1180
33 4-Chloro-3-methylphenol	107	5.143	5.134	(1.074)	325972	39.2778	1330
47 Acenaphthene	154	6.072	6.078	(1.004)	745069	36.2272	1220
50 2,4-Dinitrotoluene	165	6.160	6.165	(1.018)	282400	38.2551	1290
52 4-Nitrophenol	139	6.101	6.088	(1.009)	111067	32.8414	1110
65 Pentachlorophenol	266	7.054	7.046	(0.976)	142789	34.2423	1160
79 Pyrene	202	8.501	8.505	(0.882)	1513046	48.4721	1640
2 Pyridine	79	2.454	2.433	(0.626)	216485	29.0502	982
4 Aniline	66	3.696	3.704	(0.943)	166869	36.3602	1230
7 bis(2-Chloroethyl) ether	63	3.713	3.718	(0.947)	246162	33.9439	1150
9 1,3-Dichlorobenzene	146	3.884	3.887	(0.991)	399292	31.6754	1070
12 Benzyl alcohol	108	3.990	3.988	(1.018)	159003	23.9399	809
13 1,2-Dichlorobenzene	146	4.031	4.036	(1.029)	382183	31.5588	1070
14 bis(2-Chloroisopropyl)ether	45	4.060	4.065	(1.036)	409273	35.5053	1200
15 o-Cresol	107	4.037	4.041	(1.030)	304423	36.2311	1220
18 m,p-Cresols	107	4.137	4.142	(1.056)	425237	39.7577	1340
19 Hexachloroethane	117	4.260	4.267	(1.087)	130414	27.6029	933
21 Nitrobenzene	77	4.296	4.301	(0.897)	392359	39.0229	1320
22 Isophorone	82	4.448	4.455	(0.929)	729357	39.0600	1320
23 2-Nitrophenol	139	4.507	4.513	(0.941)	167065	31.9043	1080
24 2,4-Dimethylphenol	122	4.501	4.508	(0.940)	331017	36.6458	1240
25 bis(2-Chloroethoxy)methane	93	4.566	4.576	(0.953)	385674	36.9164	1250
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	329644	39.1340	1320
27 Benzoic acid	105	4.554	4.566	(0.951)	174628	37.4860	1270
30 Naphthalene	128	4.801	4.807	(1.002)	1062873	36.3603	1230
31 4-Chloroaniline	127	4.819	4.821	(1.006)	515717	44.0592	1490
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	245374	35.7427	1210
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	785732	38.9746	1320
36 Hexachlorocyclopentadiene	237	5.390	5.394	(0.891)	62418	15.5817	526
37 2,4,6-Trichlorophenol	196	5.478	5.476	(0.906)	261473	36.2638	1220
38 2,4,5-Trichlorophenol	196	5.513	5.505	(0.912)	311475	41.3396	1400
40 2-Chloronaphthalene	162	5.643	5.645	(0.933)	757821	36.1754	1220
42 o-Nitroaniline	65	5.695	5.702	(0.942)	204099	36.7290	1240
41 m-Nitroaniline	138	5.995	5.996	(0.991)	191320	52.2347	1760
43 Dimethylphthalate	163	5.801	5.808	(0.959)	994028	40.2504	1360
44 2,6-Dinitrotoluene	165	5.860	5.866	(0.969)	220801	38.2616	1290
45 Acenaphthylene	152	5.948	5.953	(0.983)	1268182	39.7494	1340
48 2,4-Dinitrophenol	184	6.072	6.073	(1.004)	15399	18.0339	609(aQ)
49 Dibenzofuran	168	6.195	6.198	(1.024)	1334446	44.7258	1510
51 Diethylphthalate	149	6.319	6.319	(1.045)	967785	39.3817	1330
53 Fluorene	166	6.460	6.463	(1.068)	963243	39.0262	1320
54 4-Chlorophenylphenylether	204	6.431	6.434	(1.063)	528320	38.8891	1310
55 2-Methyl-4,6-dinitrophenol	198	6.478	6.478	(0.897)	46089	18.2619	617

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.460	6.458	(1.068)	195363	78.9047	2670(R)
133 Diphenylamine	169	6.525	6.526	(0.903)	790204	44.0957	1490
58 1,2-Diphenylhydrazine	77	6.560	6.564	(0.908)	924998	41.6075	1410
61 4-Bromophenylphenylether	248	6.825	6.824	(0.945)	331652	40.3015	1360
63 Hexachlorobenzene	284	6.895	6.901	(0.954)	337241	38.5499	1300
68 Phenanthrene	178	7.242	7.243	(1.002)	1346929	39.3315	1330
69 Anthracene	178	7.284	7.287	(1.008)	1390328	40.8186	1380
72 Di-n-butylphthalate	149	7.642	7.643	(1.058)	1618056	41.2938	1400
76 Fluoranthene	202	8.289	8.288	(1.147)	1495592	39.8855	1350
85 Butylbenzylphthalate	149	9.031	9.035	(0.937)	698725	50.3782	1700
89 Benzo(a)anthracene	228	9.625	9.632	(0.998)	1280061	41.1911	1390
90 3,3'-Dichlorobenzidine	252	9.572	9.566	(0.993)	428932	41.1556	1390
92 Chrysene	228	9.666	9.670	(1.002)	1122167	39.6119	1340
93 bis(2-Ethylhexyl)phthalate	149	9.554	9.559	(0.991)	974880	47.1754	1590
94 Di-n-octylphthalate	149	10.213	10.214	(0.902)	1417046	65.2927	2210
95 Benzo(b)fluoranthene	252	10.801	10.807	(0.954)	954057	45.4394	1540
96 Benzo(k)fluoranthene	252	10.842	10.845	(0.957)	973642	46.4559	1570
97 Benzo(a)pyrene	252	11.248	11.250	(0.993)	778881	42.0728	1420
99 Indeno(1,2,3-cd)pyrene	276	13.107	13.118	(1.157)	609706	29.6981	1000
100 Dibenzo(a,h)anthracene	278	13.124	13.137	(1.159)	512489	29.7120	1000
101 Benzo(ghi)perylene	276	13.654	13.667	(1.206)	469410	28.8162	974
1 N-Methyl-N-nitrosomethylamine	74	2.413	2.399	(0.616)	170880	32.5264	1100

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD5.i/s120409.b/s10423.d
Date : 04-DEC-2009 18:50
Client ID: WST49-10-5432MSD
Sample Info: 1120198465319282491|1SVMF11|LANL11001MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

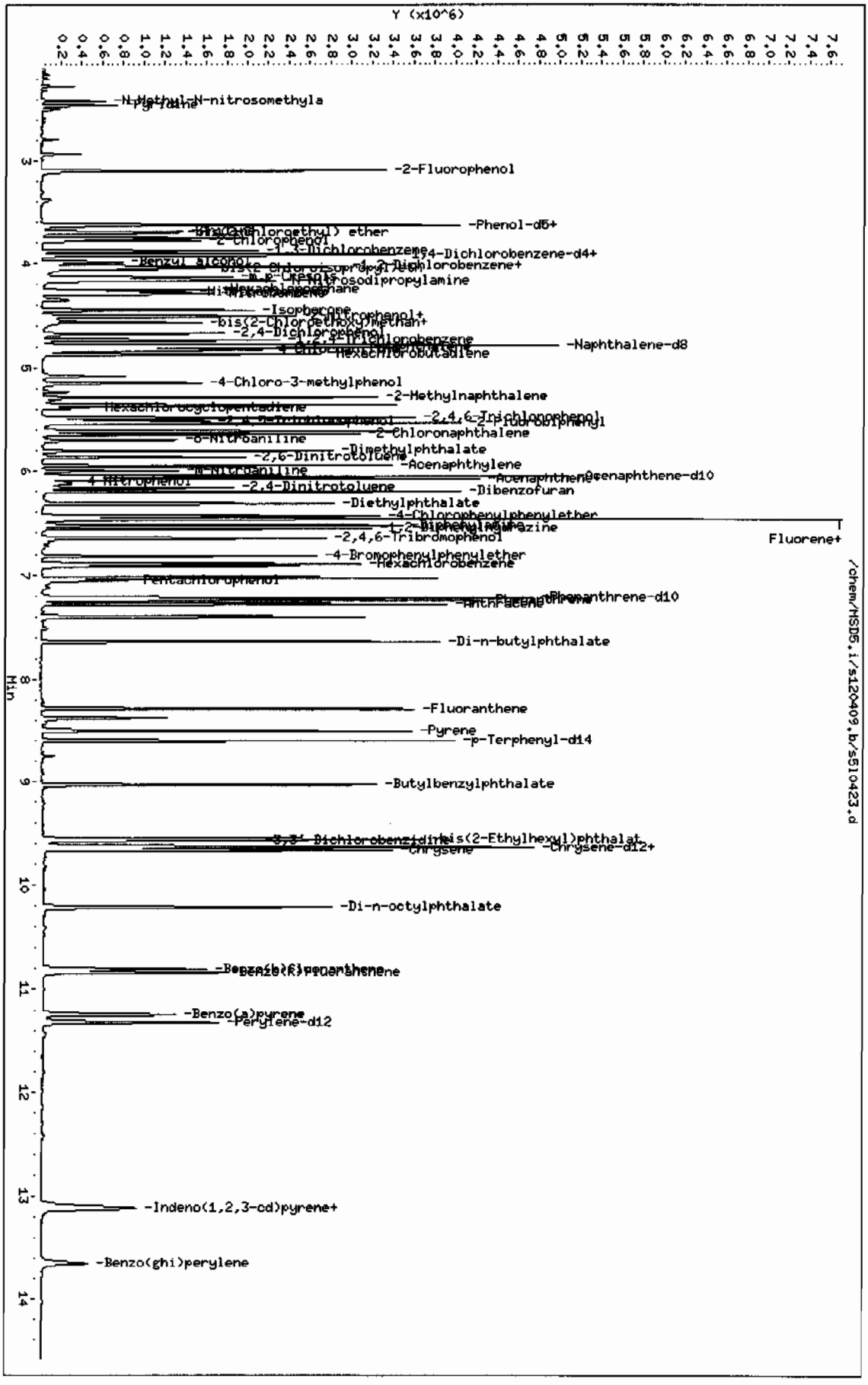

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GC SEMIVOLATILE DRO ANALYSIS

FID Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-668

Method/Analysis Information

Procedure:	**Analysis of Non-Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	927990
Prep Batch Number:	927989

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241827001	RE03-09-14130
241827004	RE03-10-2732
241827005	RE03-10-2733
241827006	RE03-10-2731
1201984266	Method Blank (MB)
1201984267	Laboratory Control Sample (LCS)
1201984268	241911001(WST49-10-5432) Matrix Spike (MS)
1201984269	241911001(WST49-10-5432) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y

axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-694) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak

profiles are included in the raw data section of this fraction. Some of the samples were manually integrated.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock **Date:** 12-14-2009

Roadmap for LANL 10-668 DRO

This roadmap was analyzed by kev01577 on 12-04-2009, 13:04.
This roadmap was reviewed by jcb on 12-07-2009, 10:55.
This roadmap was packaged by jim01140 on 12-11-2009, 14:57.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/120209dr/008f0801.d	241827001	02-DEC-2009	19:55	10-668.sub	RE03-09-14130	1.00000	927990	USE
☐	N	/chem/fid5.i/120209dr/009f0901.d	241827004	02-DEC-2009	20:33	10-668.sub	RE03-10-2732	1.00000	927990	USE
☐	N	/chem/fid5.i/120209dr/010f1001.d	241827005	02-DEC-2009	21:11	10-668.sub	RE03-10-2733	1.00000	927990	USE
☐	N	/chem/fid5.i/120209dr/011f1101.d	241827006	02-DEC-2009	21:50	10-668.sub	RE03-10-2731	1.00000	927990	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/120209dr/006f0601.d	1201984266	mb	02-DEC-2009	18:38	10-668.sub	DBLK01	1.00000	927990	USE
☐	N	/chem/fid5.i/120209dr/007f0701.d	1201984267	lcs	02-DEC-2009	19:17	10-668.sub	DBLK01LCS	1.00000	927990	USE

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827001	Date Received:	11/25/2009 09:10	%Moisture:	0
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–09–14130	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 19:55	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.06 g	Final Volume:	1 mL
Data File:	008f0801.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.66	mg/kg	2.16	6.66

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827004	Date Received:	11/25/2009 09:10	%Moisture:	.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–2732	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 20:33	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.03 g	Final Volume:	1 mL
Data File:	009f0901.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.68	mg/kg	2.17	6.68

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827005	Date Received:	11/25/2009 09:10	%Moisture:	3.5
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–2733	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 21:11	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	010f1001.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.91	mg/kg	2.25	6.91

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–668	Date Collected:	11/23/2009 12:00	Matrix:	S
Lab Sample ID:	241827006	Date Received:	11/25/2009 09:10	%Moisture:	4.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE03–10–2731	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 21:50	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	011f1101.d	Column:	DB--5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.92	mg/kg	2.25	6.92

QUALITY CONTROL SUMMARY

Flame Ionization Detector
Surrogate Recovery Report

SDG Number: 10-668
Matrix Type: SOLID
CAP Column (1) : DB-5MS

Sample ID	Client ID	OTP %REC
1201984266	MB for batch 927989	59
1201984267	LCS for batch 927989	75
241827001	RE03-09-14130	55
241827004	RE03-10-2732	49
241827005	RE03-10-2733	52
241827006	RE03-10-2731	52

Surrogate	Acceptance Limits
OTP = o-Terphenyl	(24%-124%)

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number: 10–668

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 927989

Matrix: SOIL

Lab Sample ID: 1201984267

Instrument: FID5.I

Analysis Date: 12/02/2009 19:17

Dilution: 1

Analyst: KXR2

Prep Batch ID: 927989

Inj. Vol: 1 uL

Batch ID: 927990

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	26.1	78	53–114

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-694**	**Sample Type:**	**Matrix Spike**	
Client ID:	**WST49-10-5432MS**	**Matrix:**	**S**	
Lab Sample ID:	**1201984268**	**%Moisture:**	**1.5**	
Instrument:	**FID5.I**	**Analysis Date:**	**12/03/2009 02:57**	**Dilution: 1**
Analyst:	**KXR2**	**Prep Batch ID:**	**927989**	
Inj. Vol:	**1 uL**	**Batch ID:**	**927990**	

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	33.8	0.00	U	23.5	69	21-122

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10–694**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**WST49–10–5432MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201984269**	**%Moisture:**	**1.5**
Instrument:	**FID5.I**	**Analysis Date:**	**12/03/2009 03:36**
Analyst:	**KXR2**	**Prep Batch ID:**	**927989**
Inj. Vol:	**1 uL**	**Batch ID:**	**927990**

Dilution: 1

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	33.6	0.00	U	20.6	61	21–122	13	0–30

Method Blank Summary

SDG Number:	10–668	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927989	Instrument ID:	FID5.I	Data File:	006f0601.d
Lab Sample ID:	1201984266	Prep Date:	12/01/2009 22:46	Analyzed:	12/02/09 18:38
Column:	DB–5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927989	1201984267	007f0701.d	12/02/09	1917
02 RE03–09–14130	241827001	008f0801.d	12/02/09	1955
03 RE03–10–2732	241827004	009f0901.d	12/02/09	2033
04 RE03–10–2733	241827005	010f1001.d	12/02/09	2111
05 RE03–10–2731	241827006	011f1101.d	12/02/09	2150

SAMPLE
DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	**10–668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–09–14130**	**Method:**	**SW846 8015A/B SVOC**	**SOP Ref:**	**GL–OA–E–003**
Batch ID:	**927990**	**Inst:**	**FID5.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 19:55**	**Analyst:**	**KXR2**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 22:46**	**Aliquot:**	**30.06 g**	**Final Volume:**	**1 mL**
Data File:	**008f0801.d**	**Column:**	**DB–5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.66	mg/kg	2.16	6.66

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/008f0801.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 02-DEC-2009 19:55
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241827001|1|
Misc Info : |FIDDRO_S|927990|FID|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weigth of sample extracted (g)
M	0.03430	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2332081	10.9706	0.36

Data File: /chem/fid5.i/120209dr/008f0801.d
Date : 02-DEC-2009 19:55
Client ID: RE03-09-14130
Sample Info: |241827001|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

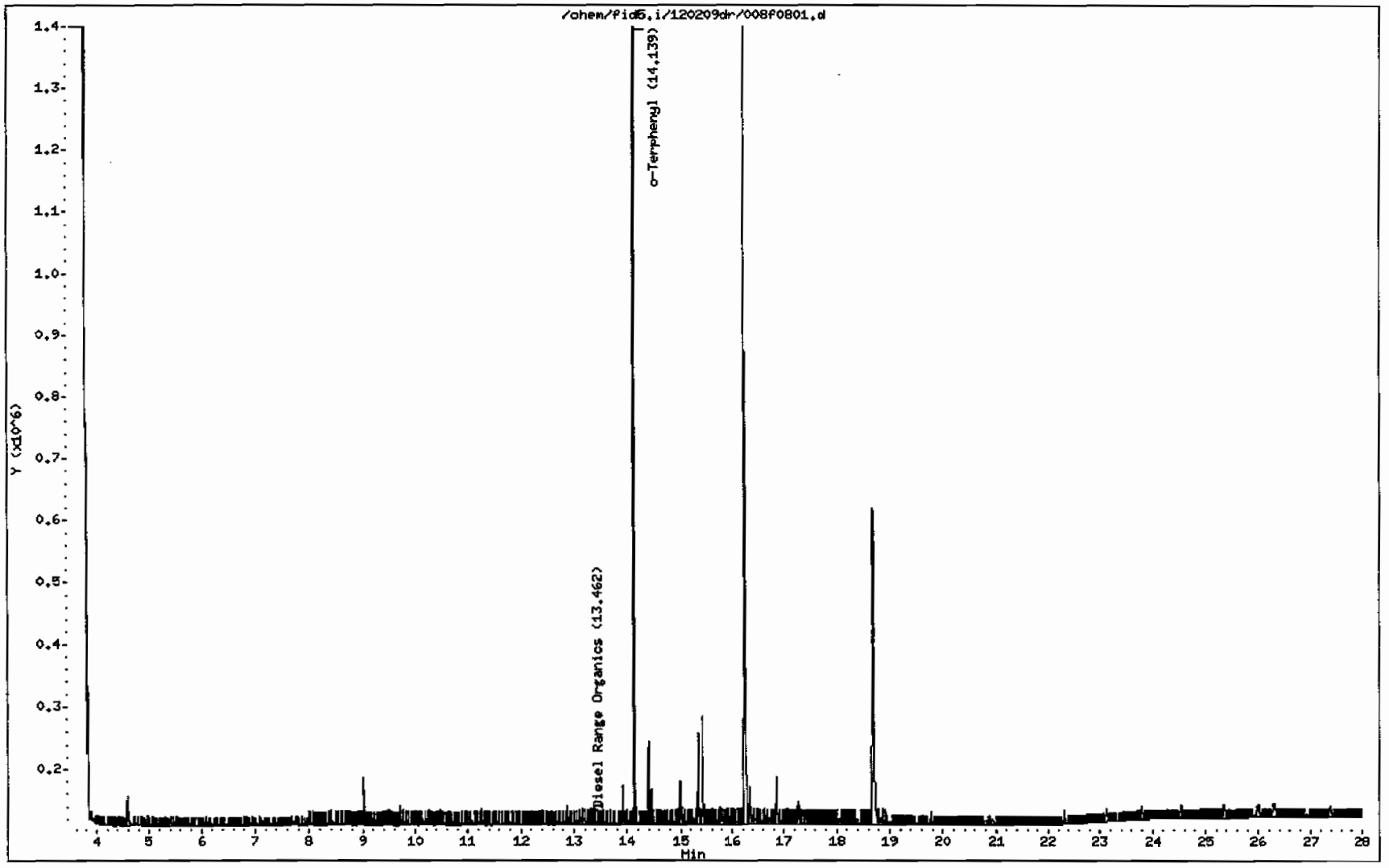

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2732	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 20:33	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	009f0901.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.68	mg/kg	2.17	6.68

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/009f0901.d
Lab Smp Id: 241827004 Client Smp ID: RE03-10-2732
Inj Date : 02-DEC-2009 20:33
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241827004|1|
Misc Info : |FIDDRO_S|927990|FID|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	0.28470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2102177	9.88905	0.33

Data File: /chem/fid5.i/120209dr/009f0901.d
Date : 02-DEC-2009 20:33
Client ID: RE03-10-2732
Sample Info: |241827004|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

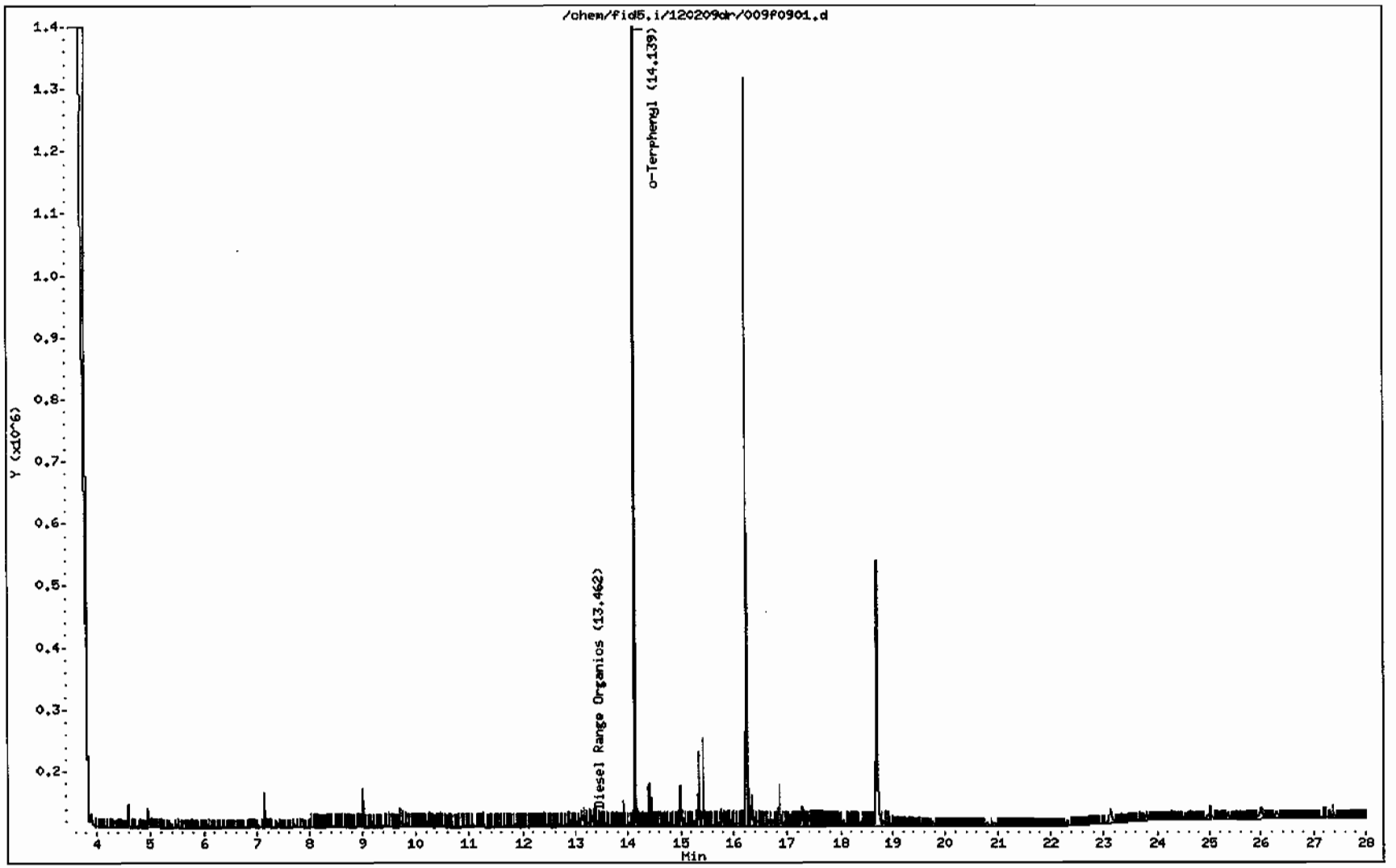

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827005	**Date Received:**	11/25/2009 09:10	**%Moisture:**	3.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2733	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 21:11	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	010f1001.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.91	mg/kg	2.25	6.91

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/010f1001.d
Lab Smp Id: 241827005 Client Smp ID: RE03-10-2733
Inj Date : 02-DEC-2009 21:11
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241827005|1|
Misc Info : |FIDDRO_S|927990|FID|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weigth of sample extracted (g)
M	3.52910	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2204576	10.3708	0.36

Data File: /chem/fid5.i/120209dr/010f1001.d
Date : 02-DEC-2009 21:11
Client ID: RE03-10-2733
Sample Info: |241827005|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

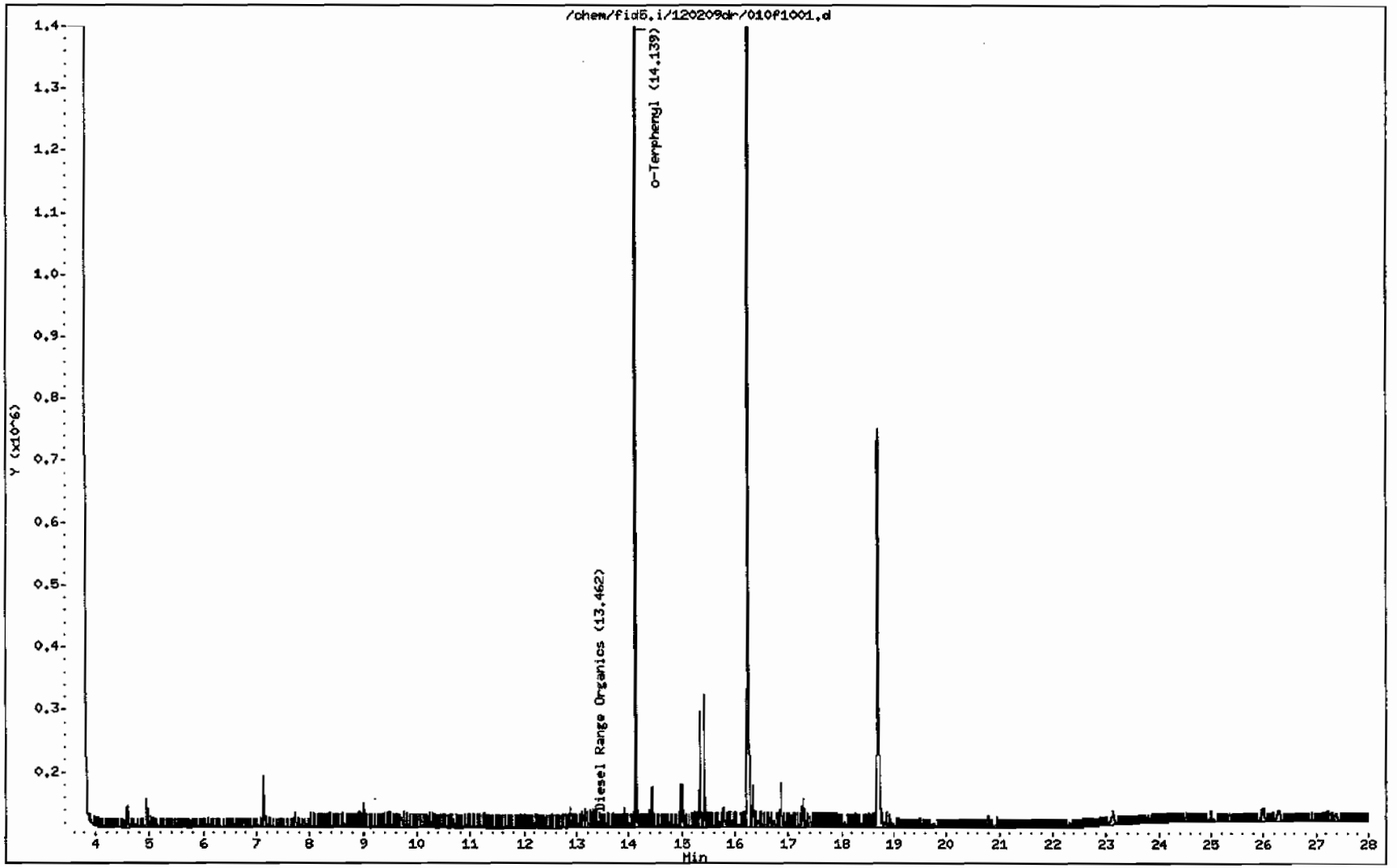

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–2731	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 21:50	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30.15 g	**Final Volume:**	1 mL
Data File:	011f1101.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.92	mg/kg	2.25	6.92

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/011f1101.d
Lab Smp Id: 241827006 Client Smp ID: RE03-10-2731
Inj Date : 02-DEC-2009 21:50
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241827006|1|
Misc Info : |FIDDRO_S|927990|FID|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weigth of sample extracted (g)
M	4.12440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2194535	10.3235	0.36

Data File: /chem/fid5.i/120209dr/011f1101.d
Date : 02-DEC-2009 21:50
Client ID: RE03-10-2731
Sample Info: |2418270061|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

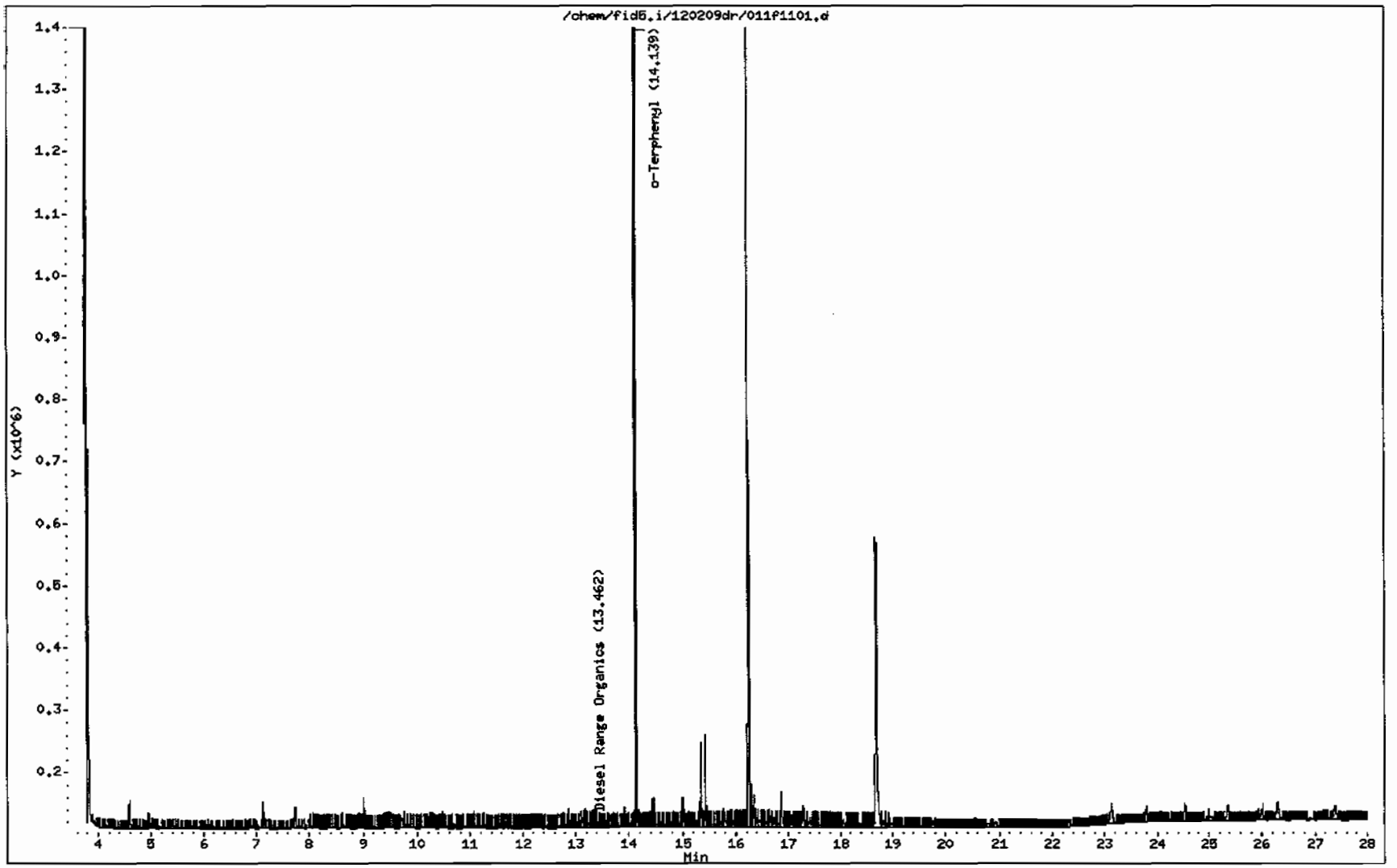

STANDARDS DATA

Report Date: 04-Dec-2009 12:29

Calibration History

Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 15:41	dro	/chem/fid5.i/120209dr/039f3901.d
Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 11:53	dro	/chem/fid5.i/120209dr/033f3301.d
Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 04:52	dro	/chem/fid5.i/120209dr/022f2201.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 23:07	dro	/chem/fid5.i/120209dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 16:44	dro	/chem/fid5.i/120209dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 12:16 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

	Compound	RT	RT Window	RF
	3 Decane (C10)	8.032	8.002-8.062	
S	1 Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2 o-Terphenyl	14.145	14.115-14.175	2.126e+05
	4 Octacosane (C28)	18.881	18.851-18.911	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

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INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Cal Date : 04-Dec-2009 12:16 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	___ RRF	% RSD
3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S 76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: FID5 Calibration Date: 12/02/09 Time: 1644

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	129486.64	0.01	-3.8	15.0
o-Terphenyl	212576.33	188363.99	0.01	-11.4	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: FID5 Calibration Date: 12/02/09 Time: 2307

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	131039.94	0.01	-2.7	15.0
o-Terphenyl	212576.33	190996.71	0.01	-10.2	15.0

FORM VII SV

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 02-DEC-2009 16:44
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	ON-COL (mg/L)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			129486643	1000.00	962
$	2 o-Terphenyl					CAS #: 84-15-1
	14.145	14.145	0.000	4709099	25.0000	22.2

Data File: /chem/fid5.i/120209dr/003f0301.d
Date : 02-DEC-2009 16:44
Client ID: DSTD01
Sample Info: !UFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

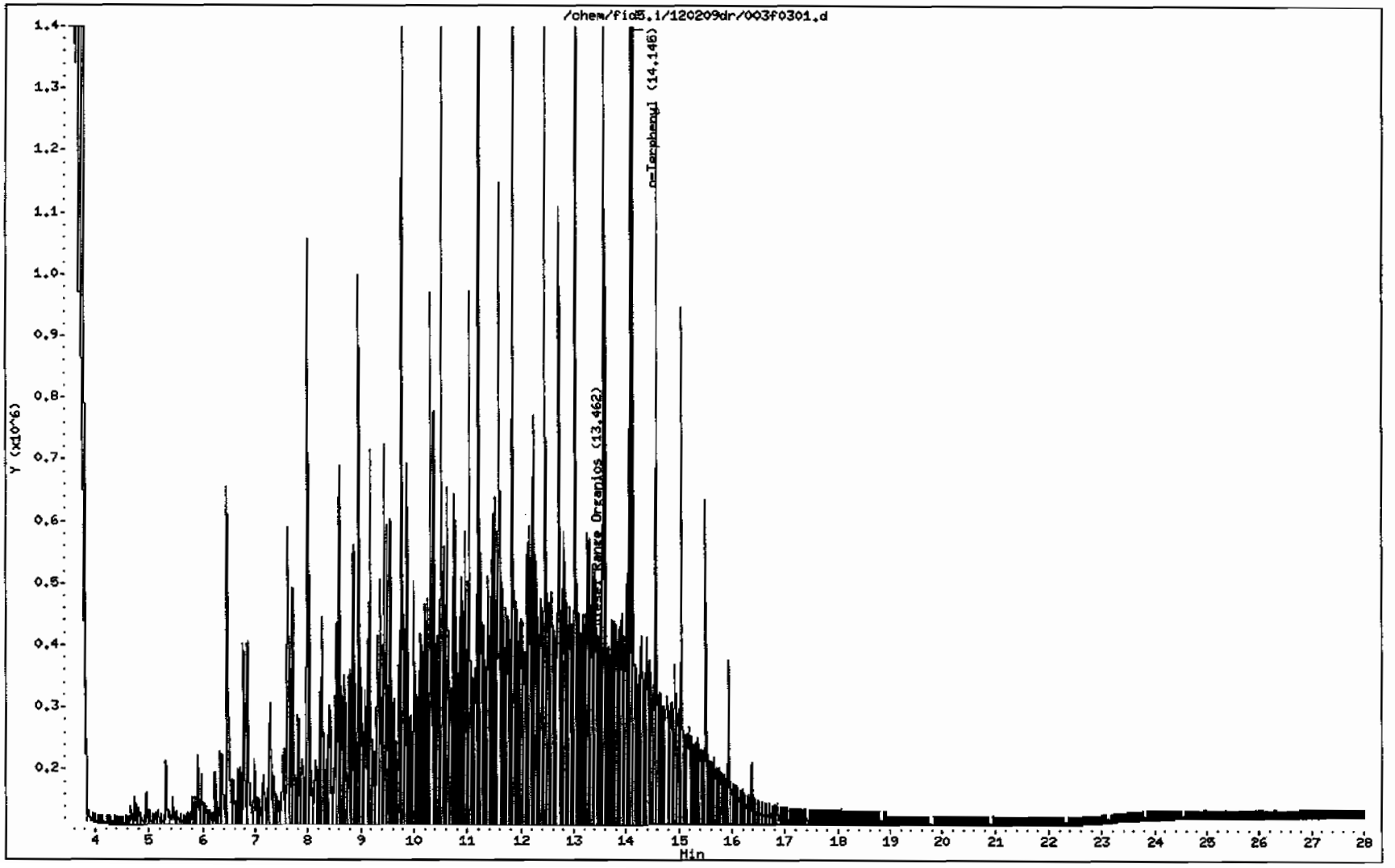

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 02-DEC-2009 23:07
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			131039936	1000.00	973
$ 2 o-Terphenyl					CAS #: 84-15-1
14.144	14.145	-0.001	4774917	25.0000	22.5

Data File: /chem/fid5.i/120209dr/013f1301.d
Date : 02-DEC-2009 23:07
Client ID: DSTD02
Sample Info: IUFI091118-01 D2

Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

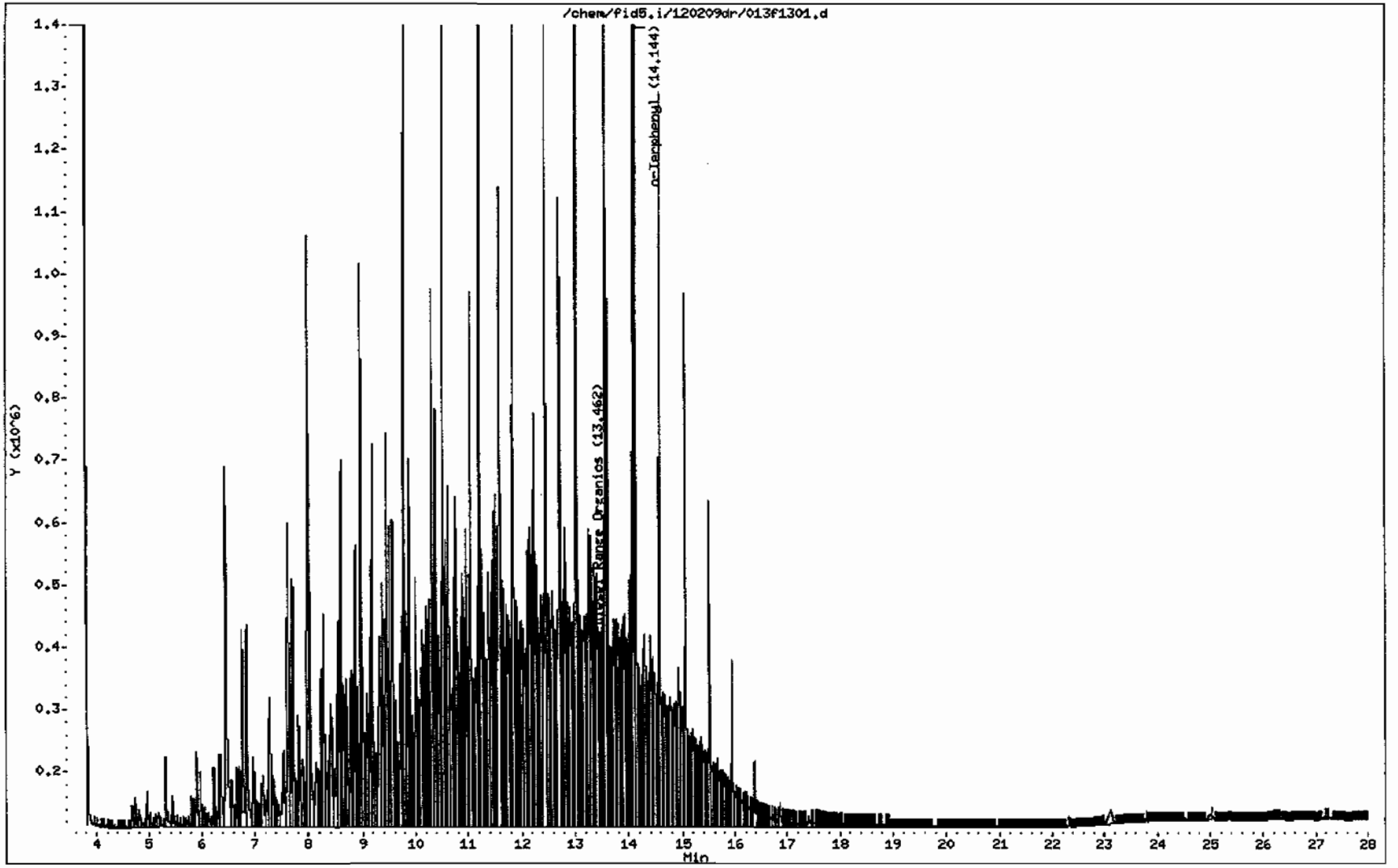

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

QC LIMITS
S1 = o-Terphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.14

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	12/02/09	1528	14.14	
02	RTMARKER	UFI091013-03	12/02/09	1606		
03	DSTD01	UFI091118-01	12/02/09	1644	14.14	
04	DIBLK02	WFI091130-06	12/02/09	1722	14.14	
05	ZZZZZ	ZZZZZ	12/02/09	1800	14.14	
06	DBLK01	1201984266	12/02/09	1838	14.14	
07	DBLK01LCS	1201984267	12/02/09	1917	14.14	
08	RE03-09-14130	241827001	12/02/09	1955	14.14	
09	RE03-10-2732	241827004	12/02/09	2033	14.14	
10	RE03-10-2733	241827005	12/02/09	2111	14.14	
11	RE03-10-2731	241827006	12/02/09	2150	14.14	
12	ZZZZZ	ZZZZZ	12/02/09	2229	14.14	
13	DSTD02	UFI091118-01	12/02/09	2307	14.14	
14	DIBLK03	WFI091130-06	12/02/09	2345	14.14	
15	ZZZZZ	ZZZZZ	12/03/09	0024	14.13	
16	ZZZZZ	ZZZZZ	12/03/09	0102	14.14	
17	ZZZZZ	ZZZZZ	12/03/09	0140	14.14	
18	ZZZZZ	ZZZZZ	12/03/09	0219	14.14	
19	ZZZZZ	ZZZZZ	12/03/09	0257	14.14	
20	ZZZZZ	ZZZZZ	12/03/09	0336	14.14	
21	ZZZZZ	ZZZZZ	12/03/09	0415	14.14	
22	DSTD03	UFI091118-01	12/03/09	0452	14.14	
23	DIBLK04	WFI091130-06	12/03/09	0531	14.14	
24	ZZZZZ	ZZZZZ	12/03/09	0609	14.14	
25	ZZZZZ	ZZZZZ	12/03/09	0648	14.14	
26	ZZZZZ	ZZZZZ	12/03/09	0727	14.14	
27	ZZZZZ	ZZZZZ	12/03/09	0805	14.16	
28	ZZZZZ	ZZZZZ	12/03/09	0843	14.14	
29	ZZZZZ	ZZZZZ	12/03/09	0921	14.14	
30	ZZZZZ	ZZZZZ	12/03/09	0959	14.14	
31	ZZZZZ	ZZZZZ	12/03/09	1037	14.14	
32	ZZZZZ	ZZZZZ	12/03/09	1115	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–668			**Matrix:**	SOIL
Lab Sample ID:	1201984266				
Client Sample:	QC for batch 927989	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 927989	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 18:38	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	006f0601.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/006f0601.d
Lab Smp Id: 1201984266 Client Smp ID: DBLK01
Inj Date : 02-DEC-2009 18:38
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984266|1|
Misc Info : |FIDDRO_S|927990|FID|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.140	14.145	-0.005	2497720	11.7498	0.39

Data File: /chem/fid5.i/120209dr/006f0601.d
Date : 02-DEC-2009 18:38
Client ID: DBLK01
Sample Info: |1201984266|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

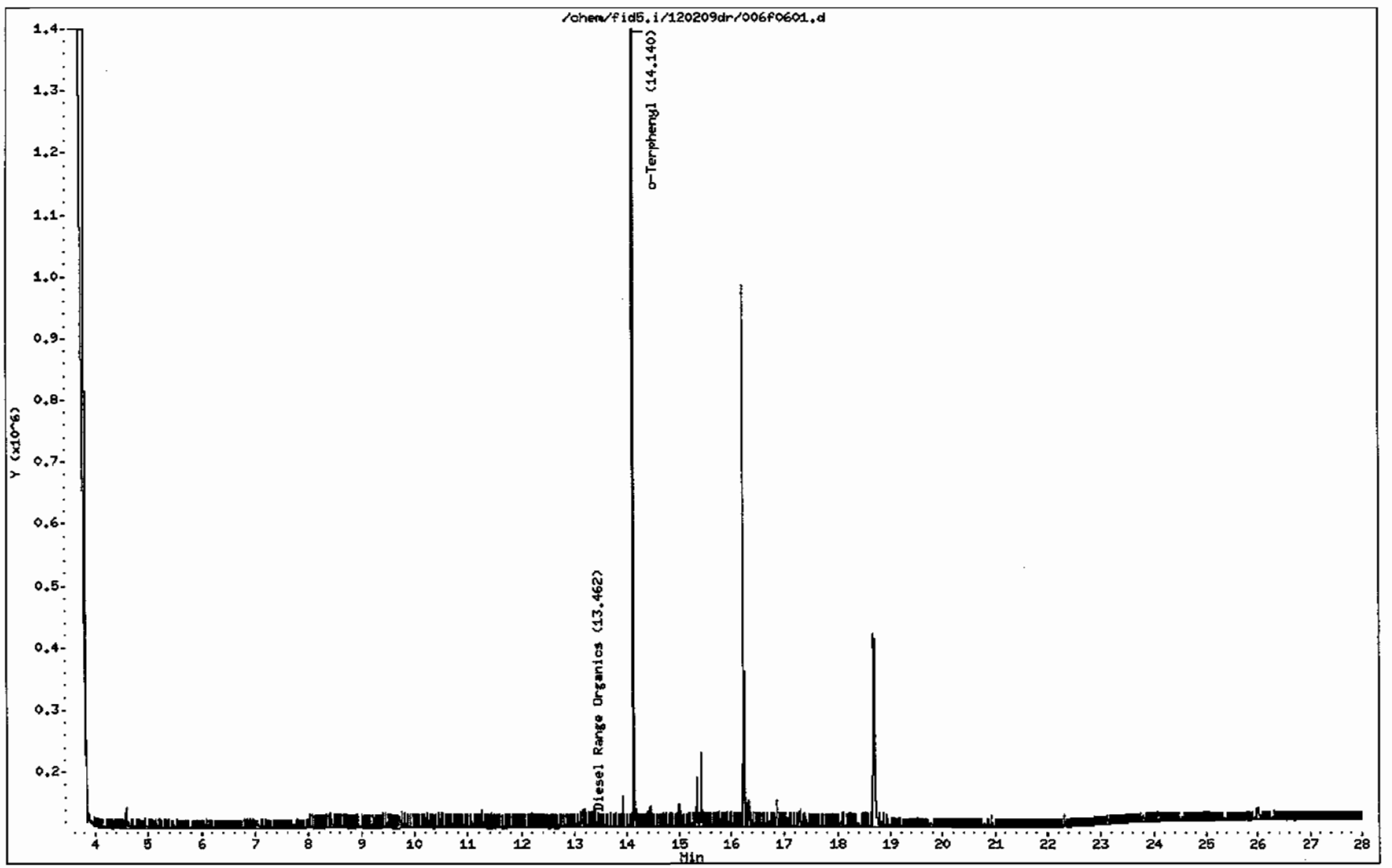

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–668			**Matrix:**	SOIL
Lab Sample ID:	1201984267				
Client Sample:	QC for batch 927989	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927989	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 19:17	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	007f0701.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		26.1	mg/kg	2.17	6.67

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/007f0701.d
Lab Smp Id: 1201984267 Client Smp ID: DBLK01LCS
Inj Date : 02-DEC-2009 19:17
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984267|1|
Misc Info : |FIDDRO_S|927990|FID|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			105373528	782.666	26.1
$	2 o-Terphenyl					CAS #: 84-15-1
	14.142	14.145	-0.003	3197113	15.0398	0.50

Data File: /chem/fid5.i/120209dr/007f0701.d
Date : 02-DEC-2009 19:17
Client ID: DBLK01LCS
Sample Info: |1201984267|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

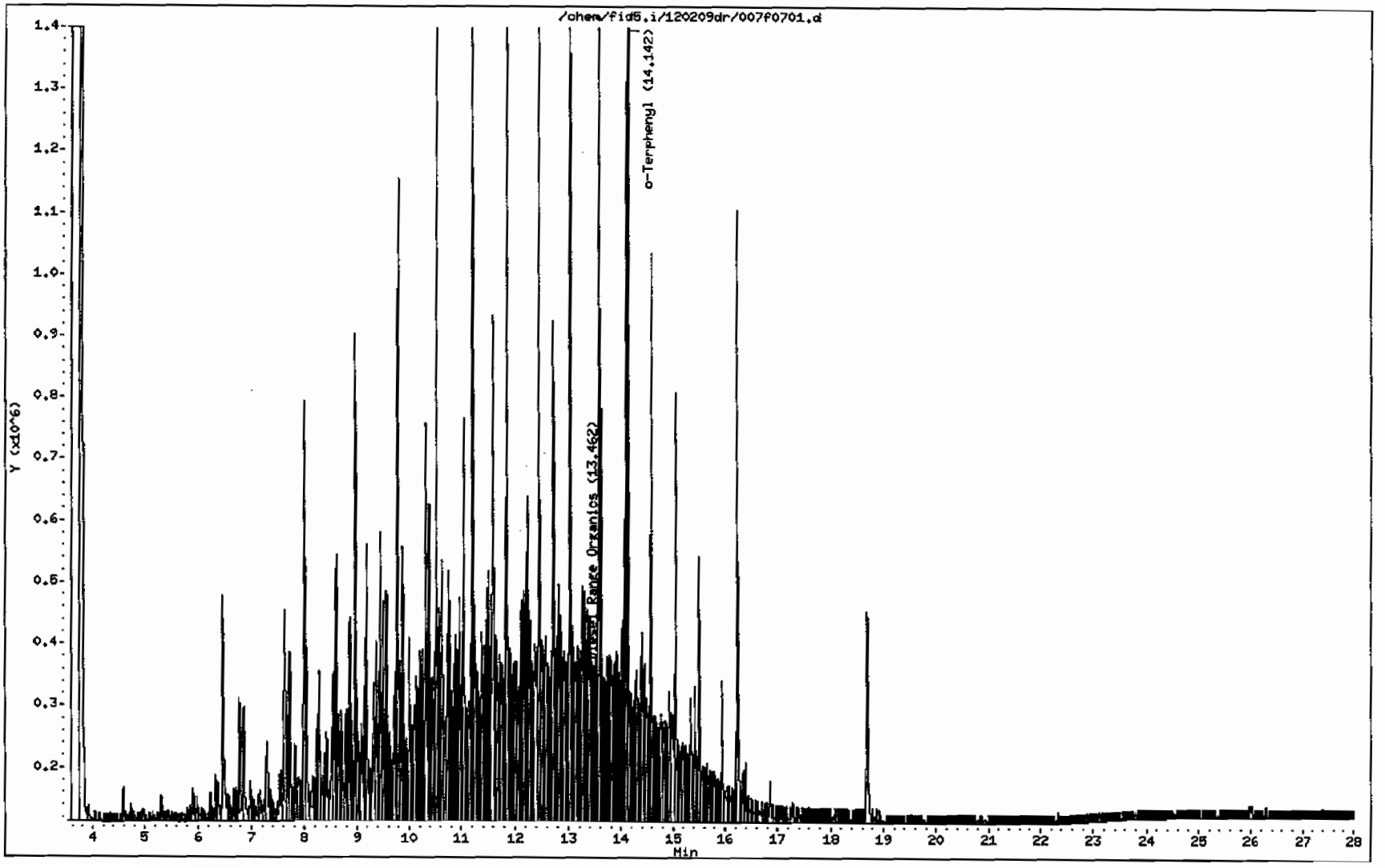

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.1

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORH	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MBSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359	1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359	1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359	1.0	LANL	DUSE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359	1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359	1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359	1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359	1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359	1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08		SDGa26875	1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46		SDGa26875	1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359	1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359	1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359	1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359	1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359	1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359	1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359	1.0	LANL	DUSE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359	1.0	LANL	DUSE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875	1.0		CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359	1.0	LANL	USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359	1.0	LANL	USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359	1.0	LANL	USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359	1.0	LANL	USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406	1.0	LANL	USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406		1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406		1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875		1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875		1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875		1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385		1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385		1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385		1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385		1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385		1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385		1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385		1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385		1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385		1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42		SDGa26875		1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20		SDGa26875		1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58		SDGa26875		1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35		SDGa26875		1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.1

DATE: 12/04/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number: 120209DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	02-DEC-2009 15:28		SDGa17585	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	02-DEC-2009 16:06		SDGa03904	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	02-DEC-2009 16:44		SDGa03904	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	02-DEC-2009 17:22		SDGa17585	1.0		CLEAN
005f0501.d	CH2CL2	KXR2	02-DEC-2009 18:00		SDGa17585	1.0		METHYLENE CHLORIDE SCREEN
006f0601.d	1201984266	KXR2	02-DEC-2009 18:38	927990	10-668	1.0	MB	USE
007f0701.d	1201984267	KXR2	02-DEC-2009 19:17	927990	10-668	1.0	LCS	USE
008f0801.d	241827001	KXR2	02-DEC-2009 19:55	927990	10-668	1.0	LANL	USE
009f0901.d	241827004	KXR2	02-DEC-2009 20:33	927990	10-668	1.0	LANL	USE
010f1001.d	241827005	KXR2	02-DEC-2009 21:11	927990	10-668	1.0	LANL	USE
011f1101.d	241827006	KXR2	02-DEC-2009 21:50	927990	10-668	1.0	LANL	USE
012f1201.d	241838002	KXR2	02-DEC-2009 22:29	927990	10-670	1.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	02-DEC-2009 23:07		SDGa17585	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	02-DEC-2009 23:45		SDGa17585	1.0		CLEAN
015f1501.d	241903002	KXR2	03-DEC-2009 00:24	927990	10-690	20.0	LANL	USE

Instrument Batch: /chem/fid5.i/120209dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241907001	KXR2	03-DEC-2009 01:02	927990	10-692	1.0	LANL	USE

017f1701.d	241907002	KXR2	03-DEC-2009 01:40	927990	10-692		1.0	LANL	USE
018f1801.d	241911001	KXR2	03-DEC-2009 02:19	927990	10-694		1.0	LANL	USE
019f1901.d	1201984268	KXR2	03-DEC-2009 02:57	927990	10-694		1.0	MS	USE
020f2001.d	1201984269	KXR2	03-DEC-2009 03:36	927990	10-694		1.0	MSD	USE
021f2101.d	241911002	KXR2	03-DEC-2009 04:15	927990	10-694		1.0	LANL	USE
022f2201.d	UFI091118-01 D3	KXR2	03-DEC-2009 04:52		SDGa17585		1.0		PASSES
023f2301.d	WFI091130-06 B4	KXR2	03-DEC-2009 05:31		SDGa17585		1.0		CLEAN
024f2401.d	1201983724	KXR2	03-DEC-2009 06:09	927728	10-698		1.0	MB	USE
025f2501.d	1201983725	KXR2	03-DEC-2009 06:48	927728	10-698		1.0	LCS	USE
026f2601.d	241895017	KXR2	03-DEC-2009 07:27	927728	10-698		1.0	LANL	USE
027f2701.d	241895019	KXR2	03-DEC-2009 08:05	927728	10-698		1.0	LANL	DUSE,OVERRANGE RERUN @10X
028f2801.d	241895021	KXR2	03-DEC-2009 08:43	927728	10-698		1.0	LANL	DUSE,RERUN
029f2901.d	1201983726	KXR2	03-DEC-2009 09:21	927728	10-698		1.0	MS	USE
030f3001.d	1201983727	KXR2	03-DEC-2009 09:59	927728	10-698		1.0	MSD	USE
031f3101.d	241895023	KXR2	03-DEC-2009 10:37	927728	10-698		1.0	LANL	DUSE,OVERRANGE RERUN @ 2X
032f3201.d	241918001	KXR2	03-DEC-2009 11:15	927728	10-701		1.0	LANL	DUSE,OVERRANGE RERUN @ 2X
033f3301.d	UFI091118-01 D4	KXR2	03-DEC-2009 11:53		SDGa17585		1.0		PASSES
034f3401.d	WFI091130-06 B5	KXR2	03-DEC-2009 12:31		SDGa17585		1.0		CLEAN
035f3501.d	241895019	KXR2	03-DEC-2009 13:09	927728	10-698		10.0	LANL	USE

Instrument Batch: /chem/fid5.i/120209dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241895021	KXR2	03-DEC-2009 13:47	927728	10-698	1.0	LANL	USE
037f3701.d	241895023	KXR2	03-DEC-2009 14:24	927728	10-698	2.0	LANL	USE
038f3801.d	241918001	KXR2	03-DEC-2009 15:02	927728	10-701	2.0	LANL	USE
039f3901.d	UFI091118-01 D5	KXR2	03-DEC-2009 15:41		SDGa17585	1.0		PASSES
040f4001.d	WFI091130-06 B6	KXR2	03-DEC-2009 16:19		SDGa17585	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927989 **Verified by:** _____
Analyst: Alberto Velasco
Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18
Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984266 MB	01–DEC–2009 22:46:50	30	1	0.03333
1201984267 LCS	01–DEC–2009 22:46:50	30	1	0.03333
241827001	01–DEC–2009 22:46:50	30.06	1	0.03327
241827004	01–DEC–2009 22:46:50	30.03	1	0.0333
241827005	01–DEC–2009 22:46:50	30.01	1	0.03332
241827006	01–DEC–2009 22:46:50	30.15	1	0.03317
241838002	01–DEC–2009 22:46:50	30.17	1	0.03315
241903002	01–DEC–2009 22:46:50	30.11	1	0.03321
241907001	01–DEC–2009 22:46:50	30.07	1	0.03326
241907002	01–DEC–2009 22:46:50	30.16	1	0.03316
241911001	01–DEC–2009 22:46:50	30.04	1	0.03329
1201984268 MS (241911001)	01–DEC–2009 22:46:50	30.04	1	0.03329
1201984269 MSD (241911001)	01–DEC–2009 22:46:50	30.18	1	0.03313
241911002	01–DEC–2009 22:46:50	30.05	1	0.03328

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984267	TPH DRO LCS	UE091030–08	1	mL
MS	1201984268	TPH DRO LCS	UE091030–08	1	mL
MSD	1201984269	TPH DRO LCS	UE091030–08	1	mL
SURR	All	20 ppm surrogate	WE091121–04	1	mL
REGNT	All	Methylene Chloride	1236611–D	300	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:
Verified By: AJS
Final Solvent: CH2Cl2

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/019f1901.d
Lab Smp Id: 1201984268 Client Smp ID: WST49-10-5432MS
Inj Date : 03-DEC-2009 02:57
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984268|1|
Misc Info : |FIDDRO_S|927990|FID|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 19 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S	1 Diesel Range Organics					CAS #:
	8.008- 18.916			93506451	694.523	23.5
$	2 o-Terphenyl					CAS #: 84-15-1
	14.141	14.145	-0.004	2871501	13.5081	0.46

Data File: /chem/fid5.i/120209dr/019f1901.d
Date : 03-DEC-2009 02:57
Client ID: WST49-10-5432MS
Sample Info: |120198426811|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

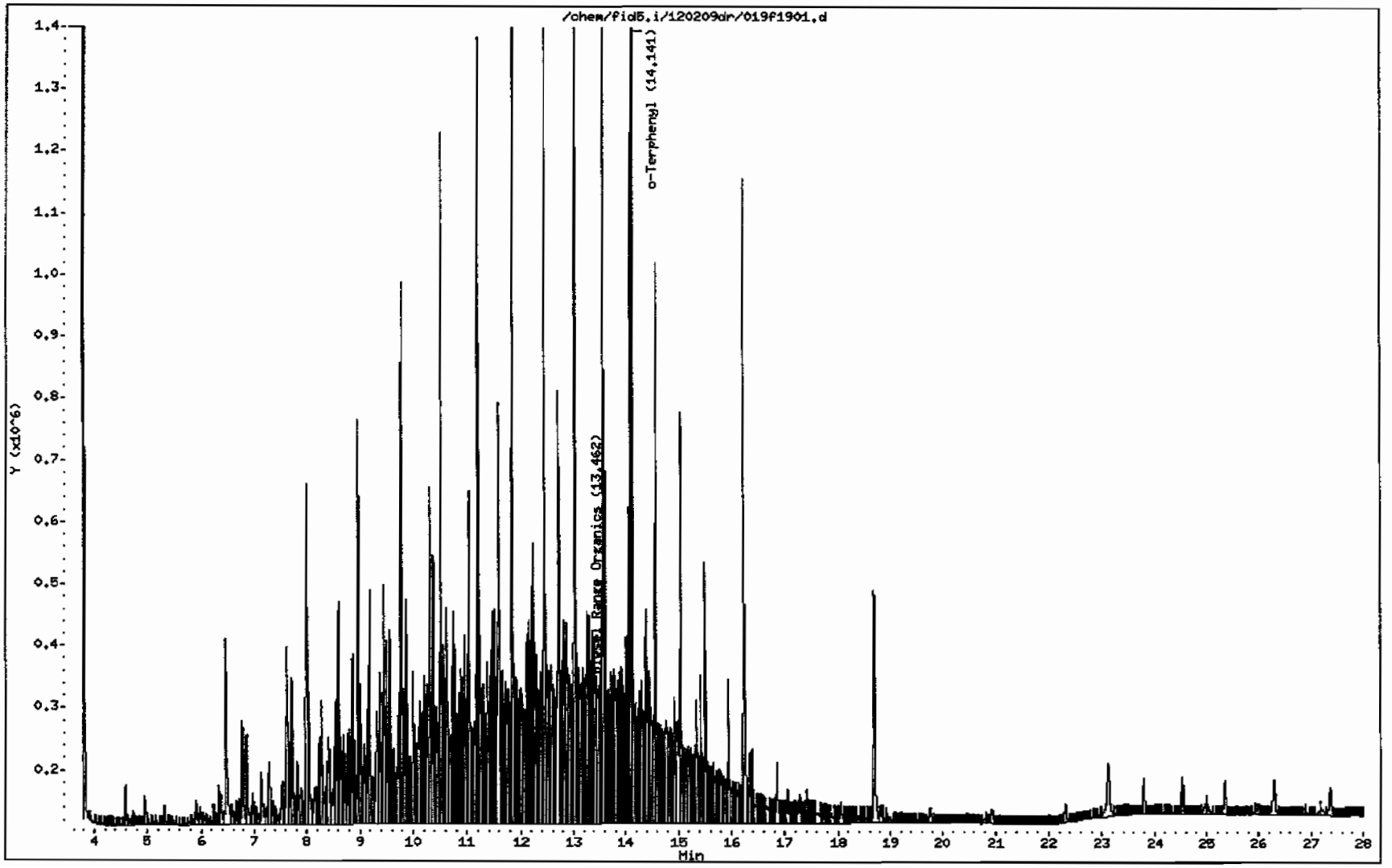

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/020f2001.d
Lab Smp Id: 1201984269 Client Smp ID: WST49-10-5432MSD
Inj Date : 03-DEC-2009 03:36
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984269|1|
Misc Info : |FIDDRO_S|927990|FID|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 20 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			82474016	612.579	20.6
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2603091	12.2454	0.41

Data File: /chem/fid5.i/120209dr/020f2001.d
Date : 03-DEC-2009 03:36
Client ID: WST49-10-5432MSD
Sample Info: !1201984269111
Volume Injected (uL): 1.0
Column phase: DB-5HS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

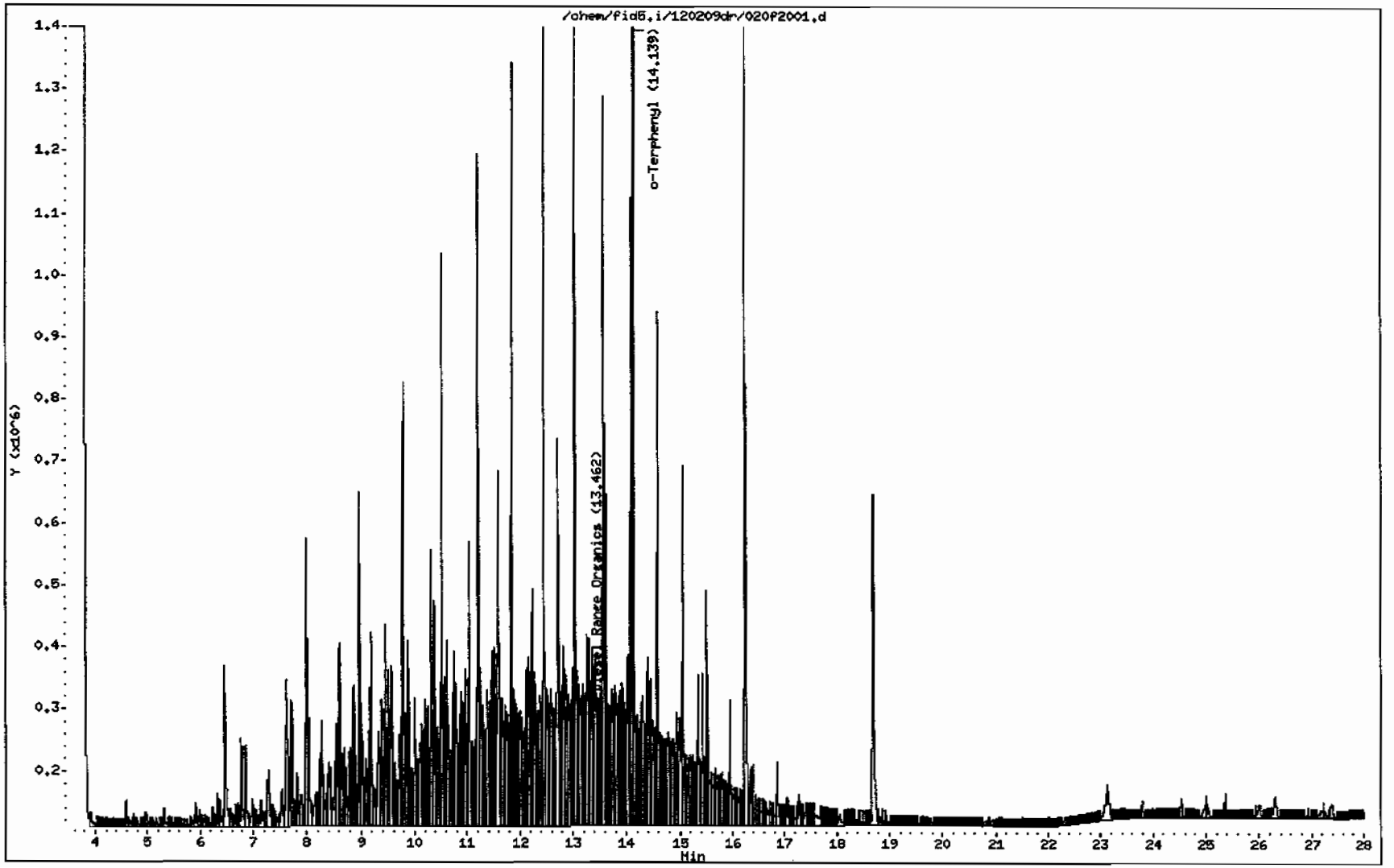

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-668

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927953
Prep Batch Number:	927948

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241827001	RE03-09-14130
241827004	RE03-10-2732
241827005	RE03-10-2733
241827006	RE03-10-2731
1201984179	Method Blank (MB)
1201984180	Laboratory Control Sample (LCS)
1201984181	241911001(WST49-10-5432) Matrix Spike (MS)
1201984182	241911001(WST49-10-5432) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria for the Aroclors.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this non-compliance has no adverse effects on the data as the surrogate recovery was well within the acceptance range in the samples in this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-694) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock Date: 12-21-2009

Roadmap for LANL 10-668 PCB

This roadmap was analyzed by jcn01212 on 12-07-2009, 12:54.
This roadmap was reviewed by jos00786 on 12-07-2009, 15:16.
This roadmap was packaged by yml on 12-20-2009, 08:15.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/073f7301.d	241827001	sample	04-DEC-2009	21:45	10-668.sub	RE03-09-14130	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/074f7401.d	241827004	sample	04-DEC-2009	21:57	10-668.sub	RE03-10-2732	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/075f7501.d	241827005	sample	04-DEC-2009	22:08	10-668.sub	RE03-10-2733	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/076f7601.d	241827006	sample	04-DEC-2009	22:19	10-668.sub	RE03-10-2731	1.00000	927953	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/073b7301.d	241827001	sample	04-DEC-2009	21:45	10-668.sub	RE03-09-14130	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/074b7401.d	241827004	sample	04-DEC-2009	21:57	10-668.sub	RE03-10-2732	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/075b7501.d	241827005	sample	04-DEC-2009	22:08	10-668.sub	RE03-10-2733	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/076b7601.d	241827006	sample	04-DEC-2009	22:19	10-668.sub	RE03-10-2731	1.00000	927953	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/071f7101.d	1201984179	mb	04-DEC-2009	21:23	10-668.sub	PBLK01	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/072f7201.d	1201984180	lcs	04-DEC-2009	21:34	10-668.sub	PBLK01LCS	1.00000	927953	UPLOAD BOTH, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/071b7101.d	1201984179	mb	04-DEC-2009	21:23	10-668.sub	PBLK01	1.00000	927953	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/120409.b/072b7201.d	1201984180	lcs	04-DEC-2009	21:34	10-668.sub	PBLK01LCS	1.00000	927953	UPLOAD BOTH, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827001	**Date Received:**	11/25/2009 09:10	**%Moisture:**	0
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–09–14130	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 21:45	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	073f7301.d	**Column:**	1 CLP1	**Level:**	LOW
	073b7301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.32	ug/kg	1.10	3.32	1
11104–28–2	Aroclor–1221	U	3.32	ug/kg	1.10	3.32	1
11141–16–5	Aroclor–1232	U	3.32	ug/kg	1.10	3.32	1
53469–21–9	Aroclor–1242	U	3.32	ug/kg	1.10	3.32	1
12672–29–6	Aroclor–1248	U	3.32	ug/kg	1.10	3.32	1
11097–69–1	Aroclor–1254	U	3.32	ug/kg	1.10	3.32	1
11096–82–5	Aroclor–1260	U	3.32	ug/kg	1.10	3.32	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827006	**Date Received:**	11/25/2009 09:10	**%Moisture:**	4.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03-10-2731	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 22:19	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	076f7601.d	**Column:**	1 CLP1	**Level:**	LOW
	076b7601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.46	ug/kg	1.15	3.46	1
11104-28-2	Aroclor-1221	U	3.46	ug/kg	1.15	3.46	1
11141-16-5	Aroclor-1232	U	3.46	ug/kg	1.15	3.46	1
53469-21-9	Aroclor-1242	U	3.46	ug/kg	1.15	3.46	1
12672-29-6	Aroclor-1248	U	3.46	ug/kg	1.15	3.46	1
11097-69-1	Aroclor-1254	U	3.46	ug/kg	1.15	3.46	1
11096-82-5	Aroclor-1260	U	3.46	ug/kg	1.15	3.46	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–2732	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 21:57	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	074f7401.d	**Column:**	1 CLP1	**Level:**	LOW
	074b7401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–10–2733**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927953**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:08**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:14**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**075f7501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	075b7501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.45	ug/kg	1.15	3.45	1
11104–28–2	Aroclor–1221	U	3.45	ug/kg	1.15	3.45	1
11141–16–5	Aroclor–1232	U	3.45	ug/kg	1.15	3.45	1
53469–21–9	Aroclor–1242	U	3.45	ug/kg	1.15	3.45	1
12672–29–6	Aroclor–1248	U	3.45	ug/kg	1.15	3.45	1
11097–69–1	Aroclor–1254	U	3.45	ug/kg	1.15	3.45	1
11096–82–5	Aroclor–1260	U	3.45	ug/kg	1.15	3.45	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10–668

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201984179	MB for batch 927948	77	83	67	71
1201984180	LCS for batch 927948	68	73	56	60
241827001	RE03–09–14130	53	57	45	49
241827004	RE03–10–2732	60	65	51	54
241827005	RE03–10–2733	67	73	58	63
241827006	RE03–10–2731	58	63	49	52

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%–105%)
DCB = Decachlorobiphenyl	(33%–115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-668
Client ID: LCS for batch 927948
Lab Sample ID: 1201984180
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 21:34
Prep Batch ID: 927948
Batch ID: 927953
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	22.3	67	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	23.8	71	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–694
Client ID: WST49–10–5432MS
Lab Sample ID: 1201984181
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/05/2009 00:43
Prep Batch ID: 927948
Batch ID: 927953
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674–11–2	MS	Aroclor–1016	33.7	0.00	U	20.1	60	23–117
11096–82–5	MS	Aroclor–1260	33.7	0.00	U	22.8	68	27–116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–694
Client ID: WST49–10–5432MSD
Lab Sample ID: 1201984182
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/05/2009 00:55
Prep Batch ID: 927948
Batch ID: 927953
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	33.7	0.00	U	19.5	58	23–117	3	0–30
11096–82–5	MSD Aroclor–1260	33.7	0.00	U	23.1	69	27–116	1	0–30

Method Blank Summary

SDG Number:	10-668	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927948	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	071b7101-1.d 071f7101-1.d
Lab Sample ID:	1201984179				
Column:	CLP2 CLP1	Prep Date:	12/01/2009 20:14	Analyzed:	12/04/09 21:23
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 927948	1201984180	072f7201-1.d 072b7201-1.d	12/04/09	2134
02	RE03-09-14130	241827001	073f7301.d 073b7301.d	12/04/09	2145
03	RE03-10-2732	241827004	074f7401.d 074b7401.d	12/04/09	2157
04	RE03-10-2733	241827005	075f7501.d 075b7501.d	12/04/09	2208
05	RE03-10-2731	241827006	076f7601.d 076b7601.d	12/04/09	2219

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827001**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**0**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03-09-14130**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927953**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:45**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:14**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**073f7301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	073b7301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.32	ug/kg	1.10	3.32	1
11104-28-2	Aroclor-1221	U	3.32	ug/kg	1.10	3.32	1
11141-16-5	Aroclor-1232	U	3.32	ug/kg	1.10	3.32	1
53469-21-9	Aroclor-1242	U	3.32	ug/kg	1.10	3.32	1
12672-29-6	Aroclor-1248	U	3.32	ug/kg	1.10	3.32	1
11097-69-1	Aroclor-1254	U	3.32	ug/kg	1.10	3.32	1
11096-82-5	Aroclor-1260	U	3.32	ug/kg	1.10	3.32	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/073f7301.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 04-DEC-2009 21:45
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827001|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-09-14130|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	0.03430	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6107923	105.836	3.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.611	-0.001	4912463	89.5957	3.0	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/073f7301.d

Page 1

Date : 04-DEC-2009 21:45

Client ID: RE03-09-14130

Instrument: ecd2a.i

Sample Info: |241827001|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

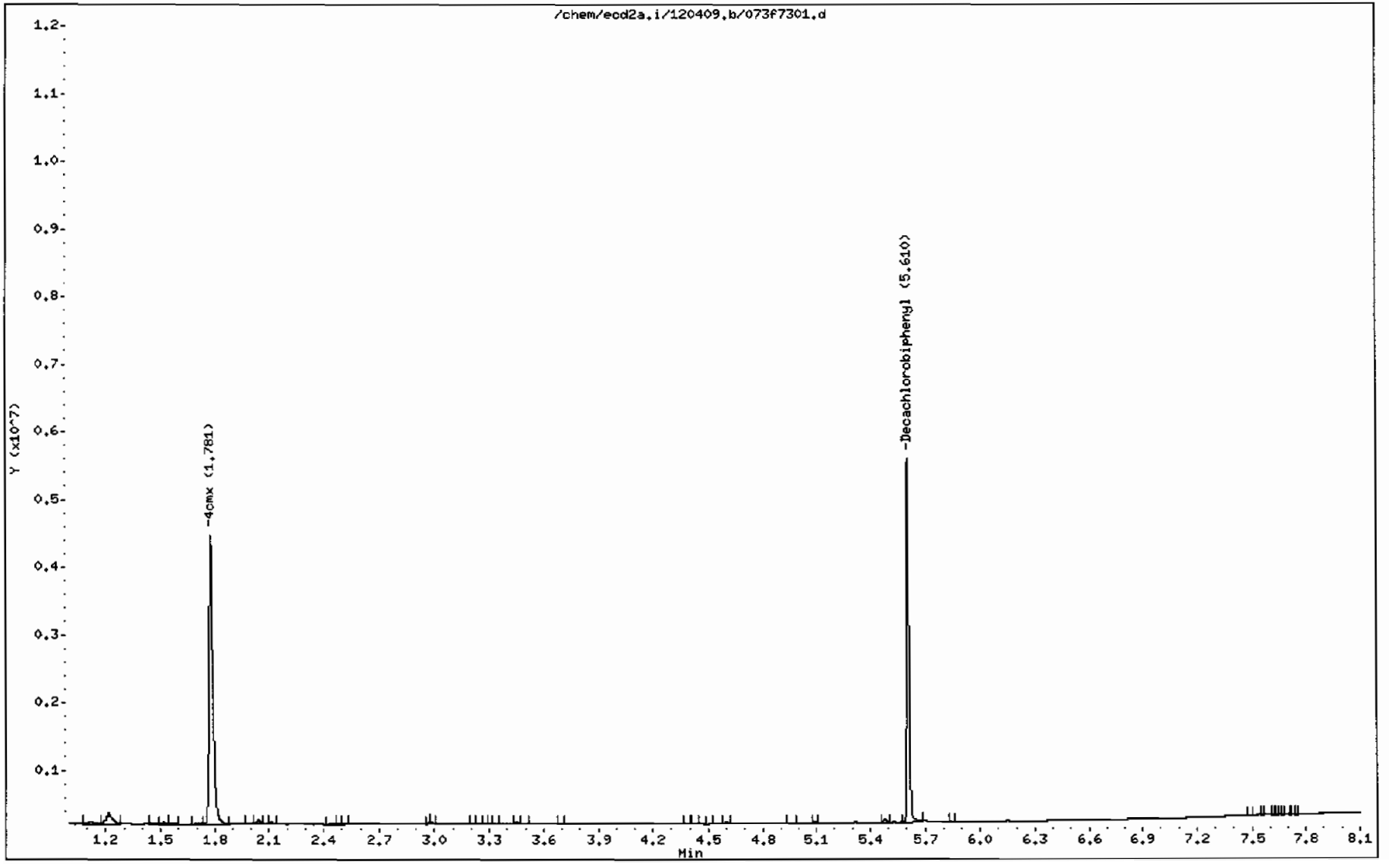

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/073b7301.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 04-DEC-2009 21:45
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827001|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-09-14130|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	0.03430	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	13399930	113.367	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	10645262	97.9852	3.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/073b7301.d

Date : 04-DEC-2009 21:45

Client ID: RE03-09-14130

Sample Info: 1241827001111

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

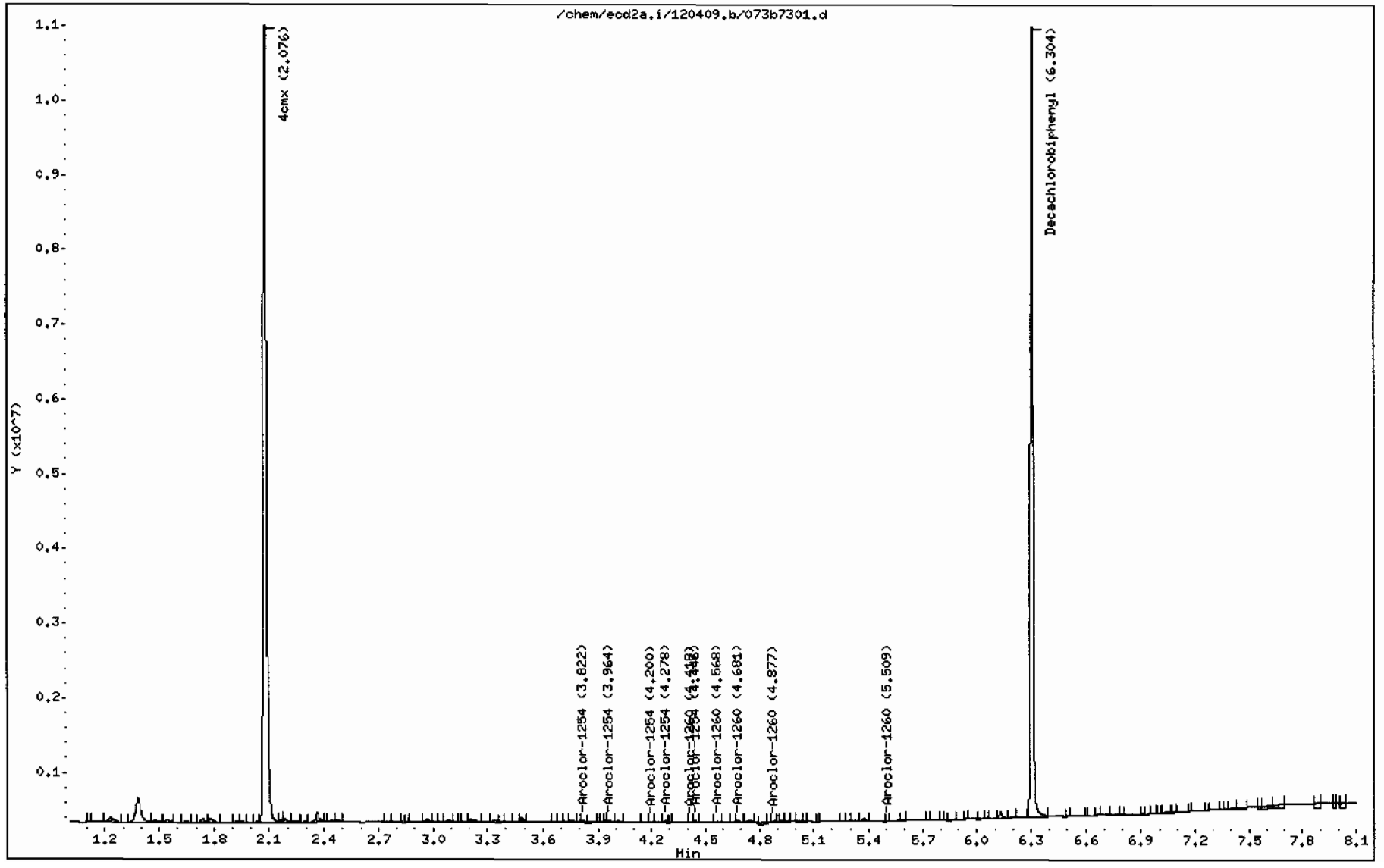

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827006**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**4.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–10–2731**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927953**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:19**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:14**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**076f7601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	076b7601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.46	ug/kg	1.15	3.46	1
11104–28–2	Aroclor–1221	U	3.46	ug/kg	1.15	3.46	1
11141–16–5	Aroclor–1232	U	3.46	ug/kg	1.15	3.46	1
53469–21–9	Aroclor–1242	U	3.46	ug/kg	1.15	3.46	1
12672–29–6	Aroclor–1248	U	3.46	ug/kg	1.15	3.46	1
11097–69–1	Aroclor–1254	U	3.46	ug/kg	1.15	3.46	1
11096–82–5	Aroclor–1260	U	3.46	ug/kg	1.15	3.46	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/076f7601.d
Lab Smp Id: 241827006 Client Smp ID: RE03-10-2731
Inj Date : 04-DEC-2009 22:19
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827006|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-10-2731|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	4.12440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	6737514	116.745	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5333878	97.2816	3.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/076f7601.d

Date : 04-DEC-2009 22:19

Client ID: RE03-10-2731

Sample Info: |241827006|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

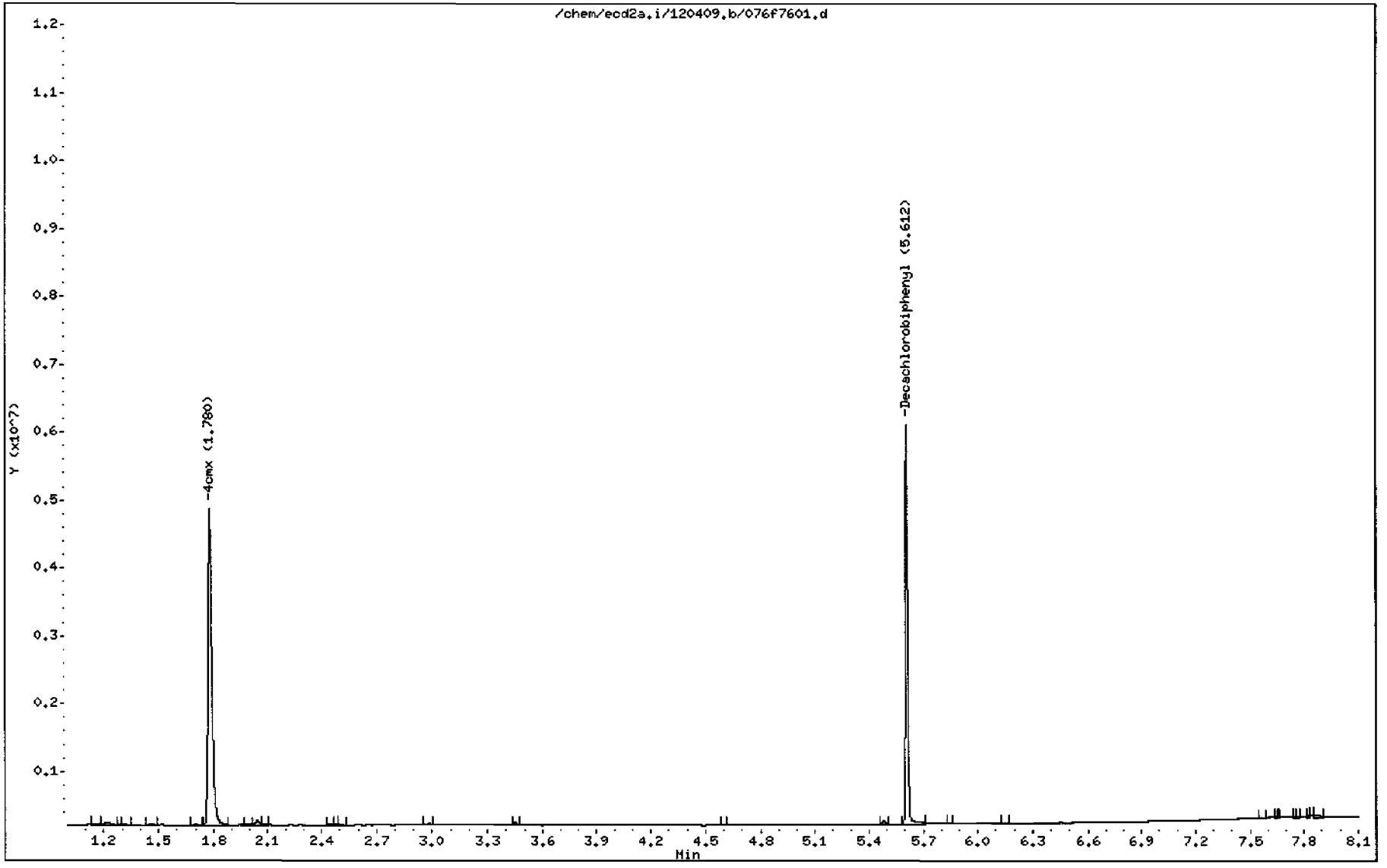

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/076b7601.d
Lab Smp Id: 241827006 Client Smp ID: RE03-10-2731
Inj Date : 04-DEC-2009 22:19
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827006|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-10-2731|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	4.12440	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	14873800	125.836	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11333615	104.321	3.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/076b7601.d
Date : 04-DEC-2009 22:19
Client ID: RE03-10-2731
Sample Info: |241827006|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Page 1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

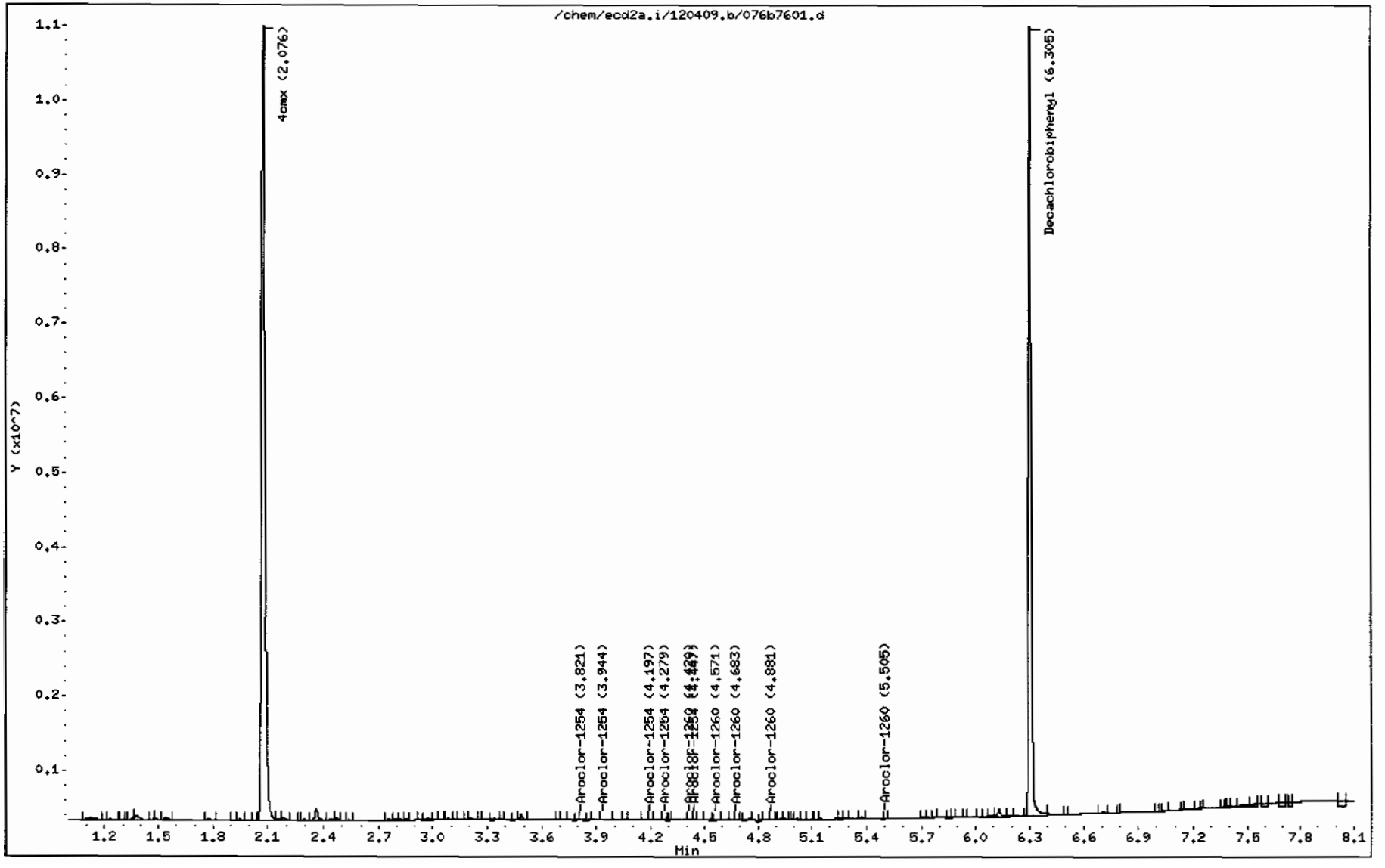

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–668	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241827004	**Date Received:**	11/25/2009 09:10	**%Moisture:**	.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE03–10–2732	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 21:57	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	074f7401.d	**Column:**	1 CLP1	**Level:**	LOW
	074b7401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/074f7401.d
Lab Smp Id: 241827004 Client Smp ID: RE03-10-2732
Inj Date : 04-DEC-2009 21:57
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827004|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-10-2732|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 74
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	0.28470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	6975487	120.869	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	5572560	101.635	3.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/074f7401.d

Page 1

Date : 04-DEC-2009 21:57

Client ID: RE03-10-2732

Instrument: ecd2a.i

Sample Info: |241827004|1|

Volume Injected (uL): 1.0

Operator: JADC

Column phase: CLP1

Column diameter: 0.25

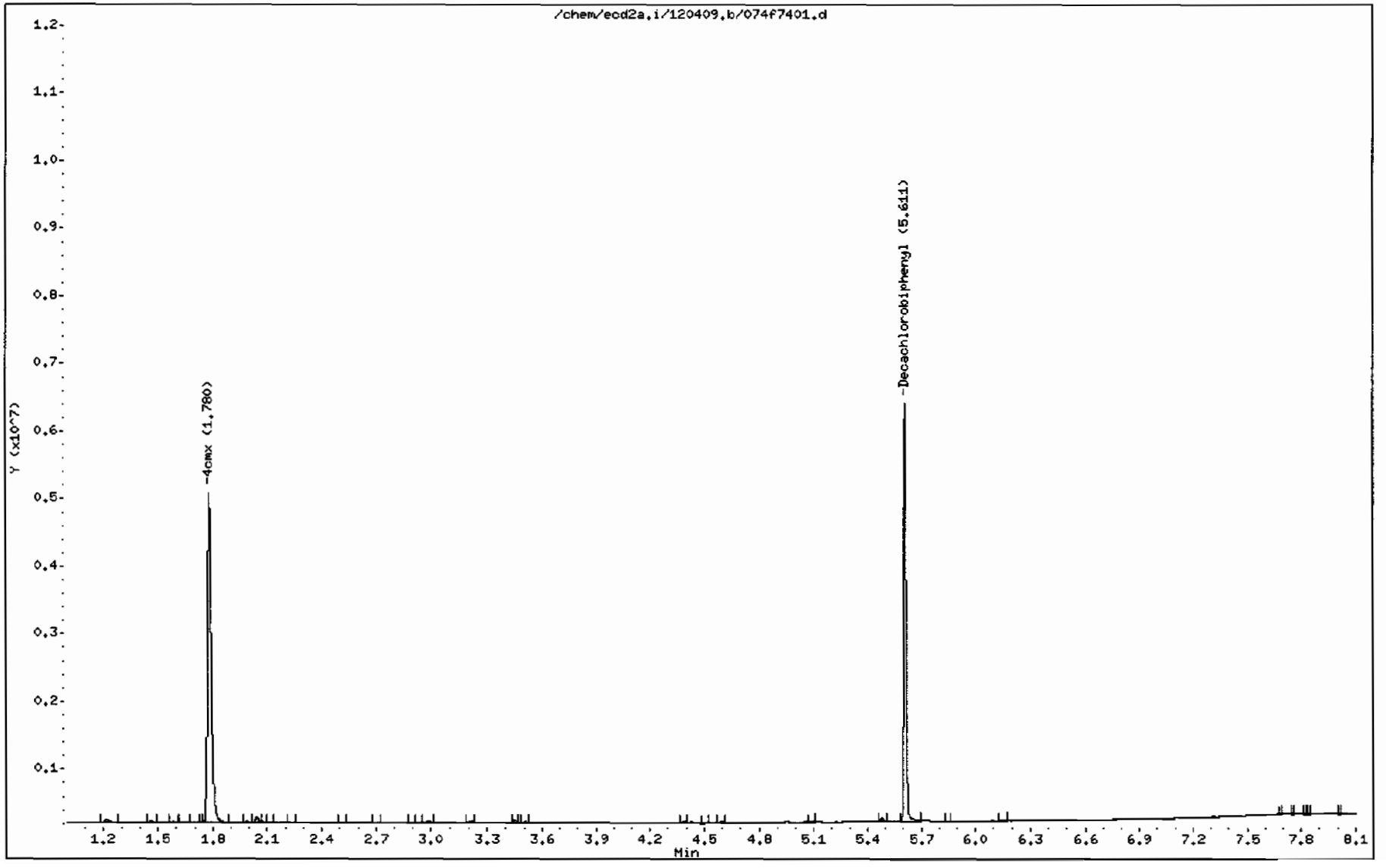

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/074b7401.d
Lab Smp Id: 241827004 Client Smp ID: RE03-10-2732
Inj Date : 04-DEC-2009 21:57
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827004|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-10-2732|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 74
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	0.28470	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	15462127	130.813	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11712542	107.809	3.6	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/074b7401.d

Page 1

Date : 04-DEC-2009 21:57

Client ID: RE03-10-2732

Instrument: ecd2a.i

Sample Info: |24182700411|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP2

Column diameter: 0.25

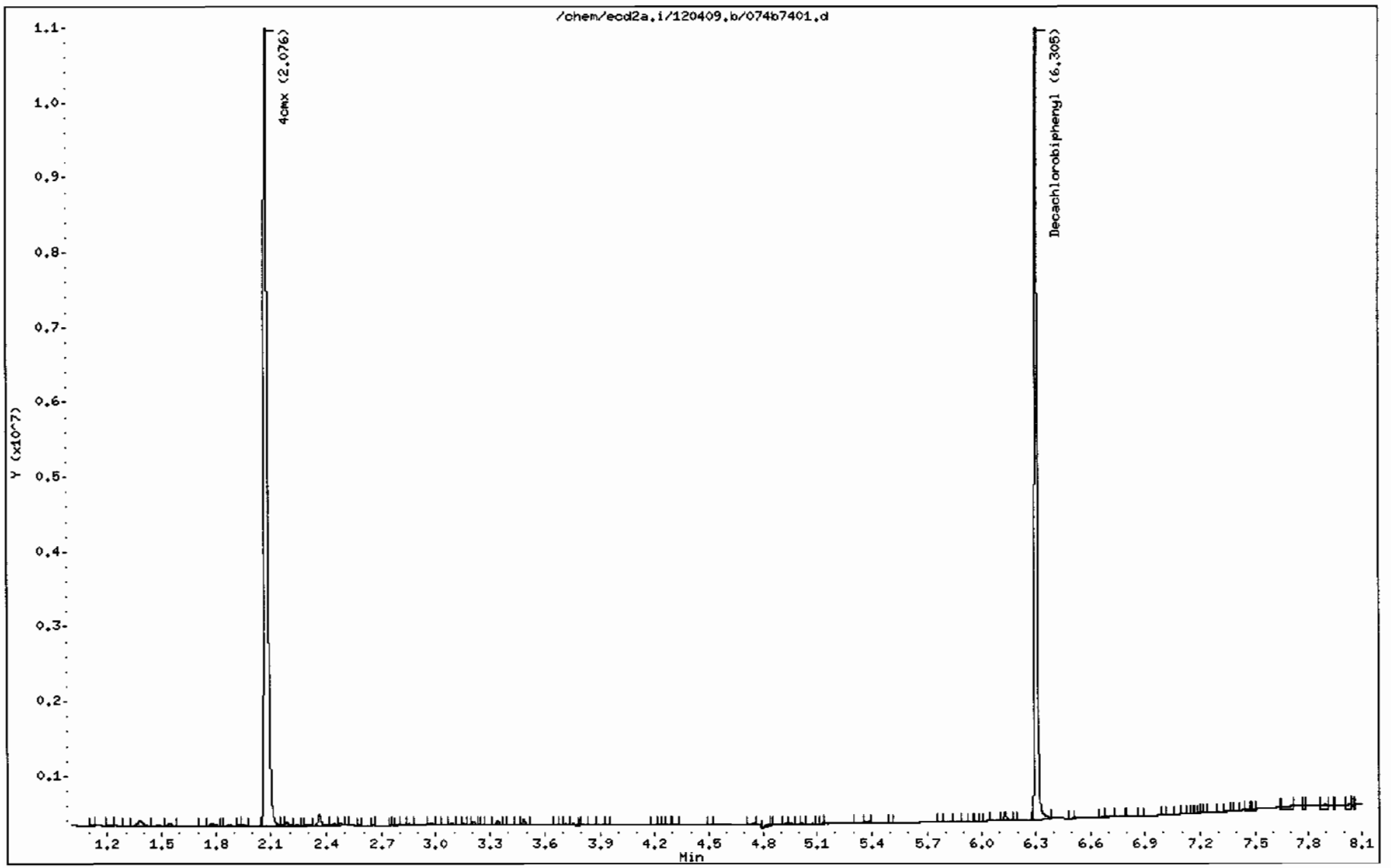

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–668**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241827005**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**3.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE03–10–2733**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927953**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 22:08**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:14**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**075f7501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	075b7501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.45	ug/kg	1.15	3.45	1
11104–28–2	Aroclor–1221	U	3.45	ug/kg	1.15	3.45	1
11141–16–5	Aroclor–1232	U	3.45	ug/kg	1.15	3.45	1
53469–21–9	Aroclor–1242	U	3.45	ug/kg	1.15	3.45	1
12672–29–6	Aroclor–1248	U	3.45	ug/kg	1.15	3.45	1
11097–69–1	Aroclor–1254	U	3.45	ug/kg	1.15	3.45	1
11096–82–5	Aroclor–1260	U	3.45	ug/kg	1.15	3.45	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/075f7501.d
Lab Smp Id: 241827005 Client Smp ID: RE03-10-2733
Inj Date : 04-DEC-2009 22:08
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827005|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-10-2733|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	3.52910	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	7770865	134.651	4.6	80.00- 120.00	100.00(M)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	6312714	115.134	4.0	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/075f7501.d

Page 1

Date : 04-DEC-2009 22:08

Client ID: RE03-10-2733

Instrument: ecd2a.i

Sample Info: |241827005|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

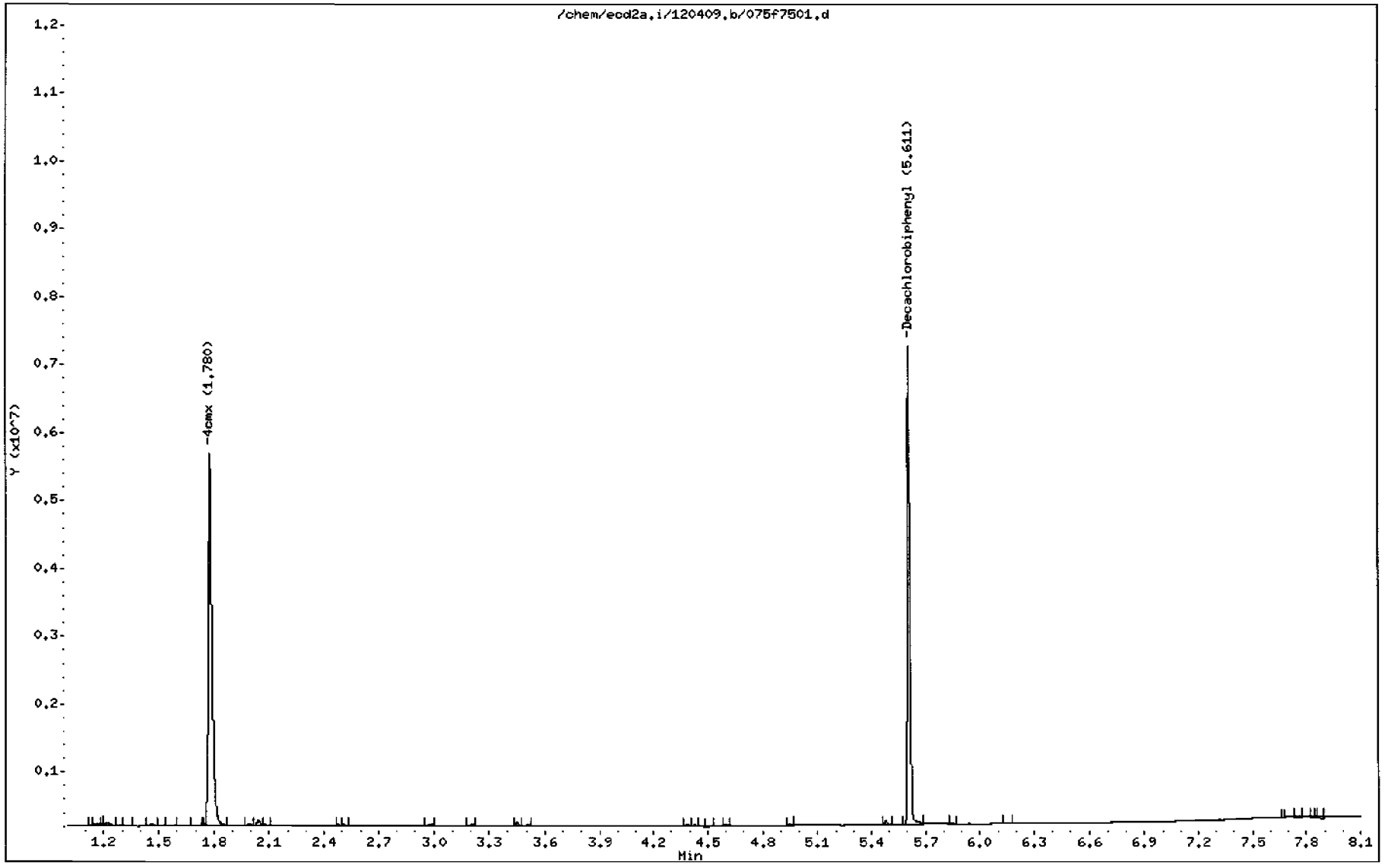

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/075f7501.d
Operator: JAOC
Injection Date: 04-DEC-2009 22:08
Instrument: ecd2a.i
Client Sample ID: RE03-10-2733

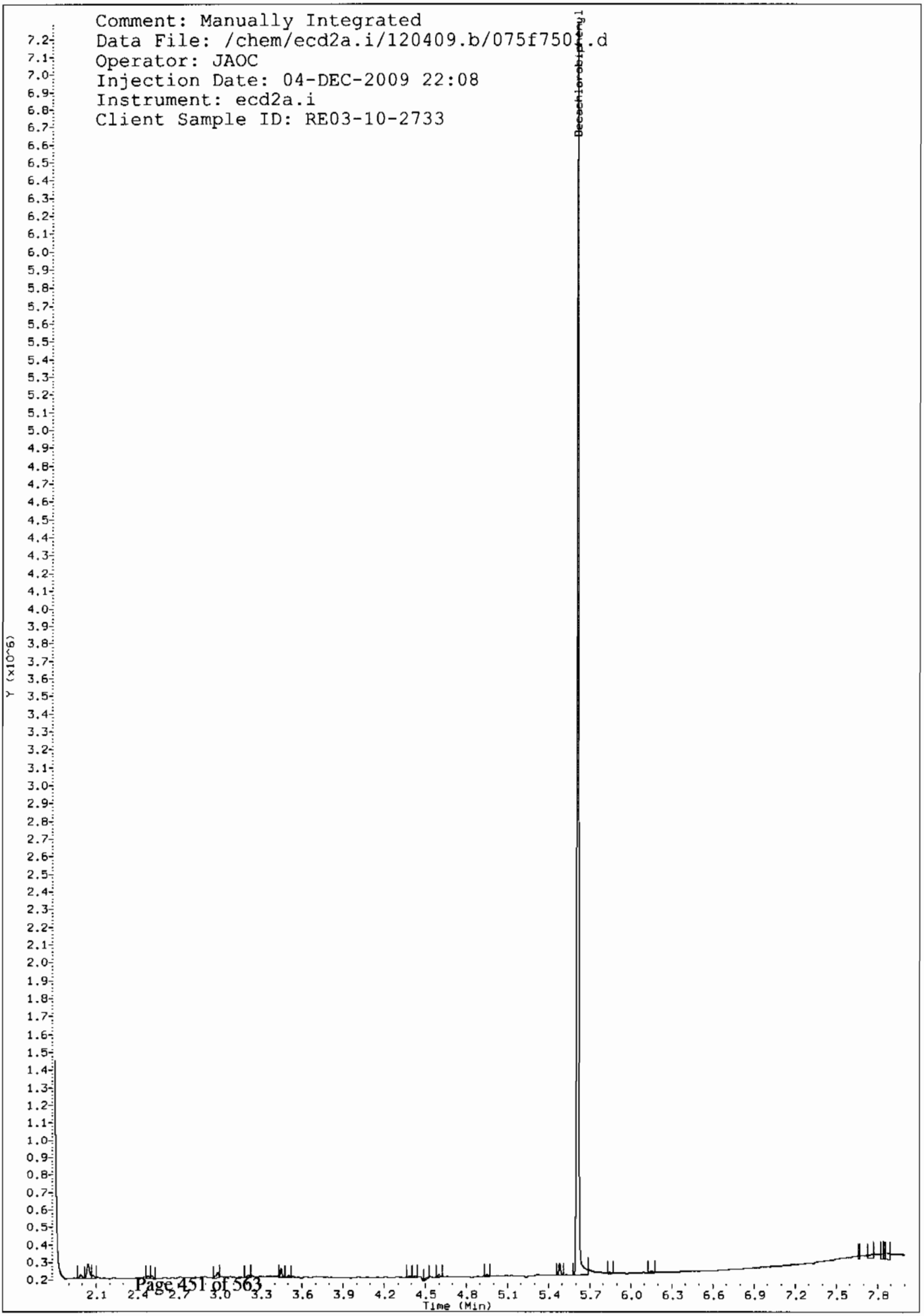

Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-07[illegible]f7501.d
Operator: JAOC
Injection Date: 04-DEC-2009 22:08
Instrument: ecd2a.i
Client Sample ID: RE03-10-2733

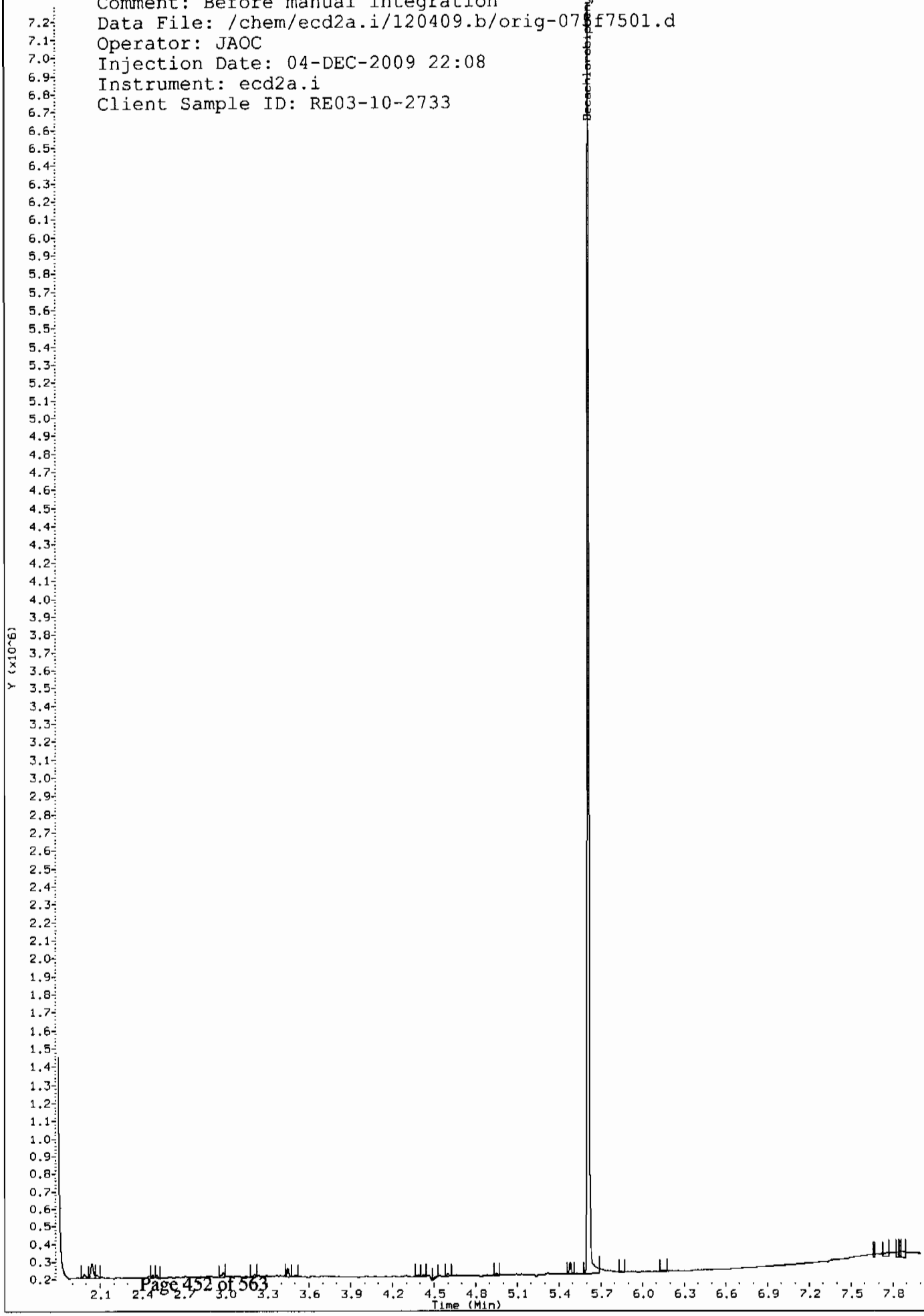

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/075b7501.d
Lab Smp Id: 241827005 Client Smp ID: RE03-10-2733
Inj Date : 04-DEC-2009 22:08
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241827005|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|RE03-10-2733|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	3.52910	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	17278678	146.182	5.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	13759691	126.652	4.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/075b7501.d
Date : 04-DEC-2009 22:08
Client ID: RE03-10-2733
Sample Info: |241827005|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

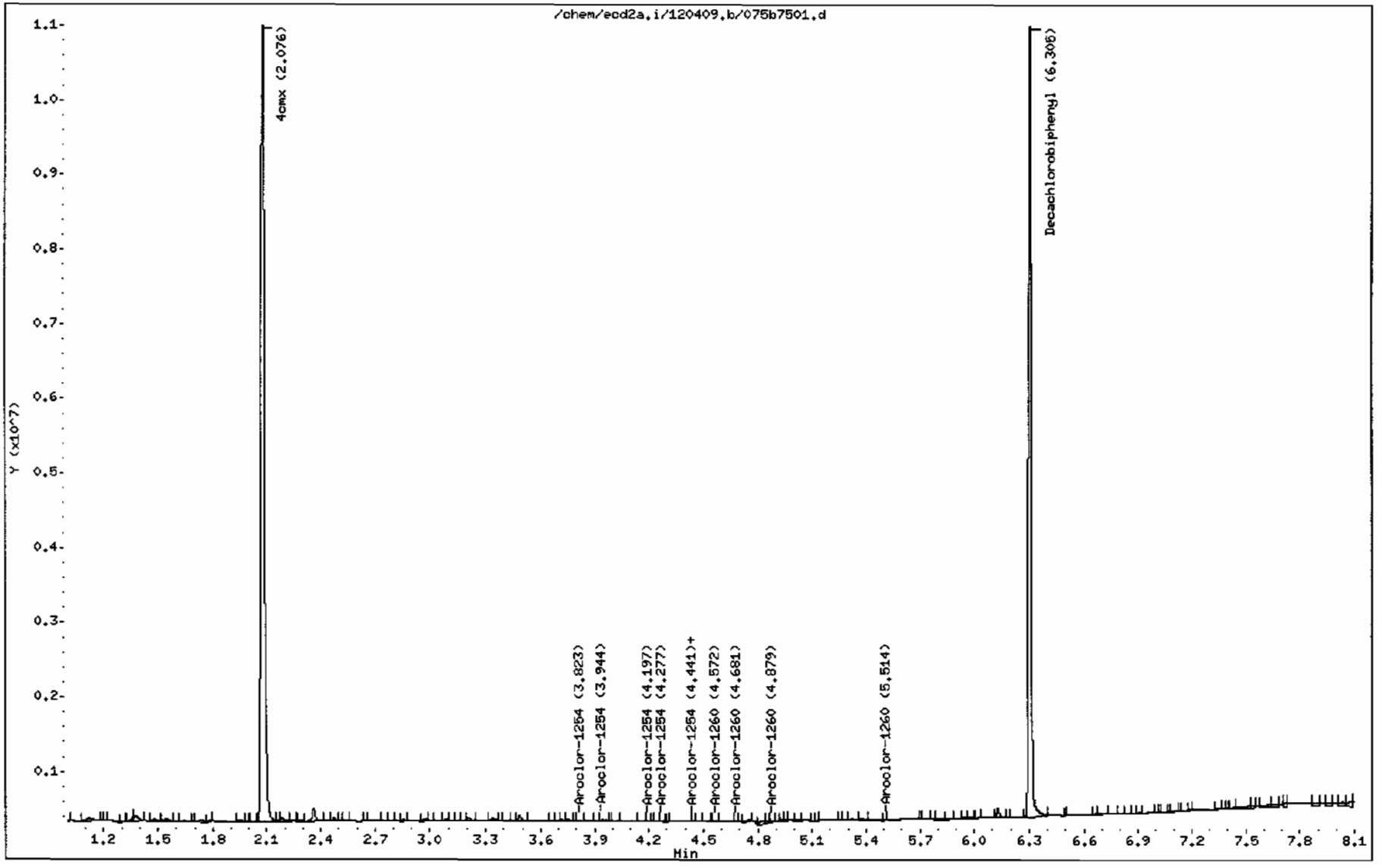

STANDARDS DATA

Report Date: 07-Dec-2009 10:04

Calibration History

Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d

12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 01:17	AR1660	/chem/ecd2a.i/120409.b/092f9201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:14	AR1660	/chem/ecd2a.i/120409.b/081f8101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:01	AR1660	/chem/ecd2a.i/120409.b/069f6901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:05	AR1660	/chem/ecd2a.i/120409.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:21	AR1660	/chem/ecd2a.i/120409.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 15:03	AR1660	/chem/ecd2a.i/120409.b/038f3801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 12:44	AR1660	/chem/ecd2a.i/120409.b/026f2601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:31	AR1660	/chem/ecd2a.i/120409.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:36	AR1268	/chem/ecd2a.i/120409.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:25	AR1262	/chem/ecd2a.i/120409.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:14	AR1221	/chem/ecd2a.i/120409.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:02	AR1232	/chem/ecd2a.i/120409.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:51	AR1248	/chem/ecd2a.i/120409.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:40	AR1242	/chem/ecd2a.i/120409.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:29	AR1254	/chem/ecd2a.i/120409.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:18	AR1660	/chem/ecd2a.i/120409.b/002f0201.d

Report Date: 04-Dec-2009 11:50

Calibration History

Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d

12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:31	AR1660	/chem/ecd2a.i/120409.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:36	AR1268	/chem/ecd2a.i/120409.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:25	AR1262	/chem/ecd2a.i/120409.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:14	AR1221	/chem/ecd2a.i/120409.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:02	AR1232	/chem/ecd2a.i/120409.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:51	AR1248	/chem/ecd2a.i/120409.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:40	AR1242	/chem/ecd2a.i/120409.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:29	AR1254	/chem/ecd2a.i/120409.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:18	AR1660	/chem/ecd2a.i/120409.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 10:54 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.282	2.252-2.312	2.100e+03
	2.604	2.574-2.634	4.505e+03
	2.695	2.665-2.725	1.820e+03
	2.830	2.800-2.860	9.329e+02
	2.980	2.950-3.010	1.378e+03
2 Aroclor-1221	1.446	1.416-1.476	4.641e+02
	1.906	1.876-1.936	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.035	2.005-2.065	1.165e+03
	2.281	2.251-2.311	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.737	2.707-2.767	5.102e+02
	2.980	2.950-3.010	5.840e+02
4 Aroclor-1242	2.282	2.252-2.312	1.733e+03
	2.695	2.665-2.725	1.484e+03
	2.737	2.707-2.767	9.058e+02
	2.830	2.800-2.860	7.269e+02
	2.980	2.950-3.010	1.120e+03
5 Aroclor-1248	2.829	2.799-2.859	1.527e+03
	2.980	2.950-3.010	2.027e+03
	3.039	3.009-3.069	1.571e+03
	3.274	3.244-3.304	2.218e+03
	3.427	3.397-3.457	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.246	3.216-3.276	2.080e+03
		3.429	3.399-3.459	2.772e+03
		3.698	3.668-3.728	3.742e+03
		3.890	3.860-3.920	2.783e+03
		4.019	3.989-4.049	2.760e+03
	7 Aroclor-1260	4.019	3.989-4.049	4.067e+03
		4.290	4.260-4.320	2.528e+03
		4.456	4.426-4.486	2.583e+03
		4.668	4.638-4.698	6.036e+03
		4.857	4.827-4.887	2.912e+03
	8 Aroclor-1262	3.828	3.798-3.858	2.273e+03
		4.019	3.989-4.049	3.072e+03
		4.290	4.261-4.320	4.004e+03
		4.455	4.426-4.486	3.573e+03
		4.857	4.827-4.887	2.501e+03
	9 Aroclor-1268	4.887	4.857-4.917	9.392e+03
		4.913	4.883-4.943	9.361e+03
		5.046	5.016-5.076	7.073e+03
		5.284	5.254-5.314	3.056e+03
		5.481	5.451-5.511	2.201e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.781	1.751-1.811	5.771e+04
$	12 Decachlorobiphenyl	5.611	5.581-5.641	5.483e+04
	13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
	14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
	15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 10:52 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.752	2.722-2.782	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.336	3.306-3.366	1.979e+03
	3.365	3.335-3.395	2.061e+03
	3.524	3.494-3.554	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.404	2.374-2.434	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.449	2.419-2.479	2.061e+03
	2.752	2.722-2.782	1.960e+03
	3.186	3.156-3.216	1.498e+03
	3.258	3.228-3.288	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.752	2.722-2.782	3.445e+03
	3.186	3.156-3.216	2.681e+03
	3.258	3.228-3.288	1.637e+03
	3.337	3.307-3.367	1.508e+03
	3.524	3.494-3.554	2.145e+03
5 Aroclor-1248	3.337	3.307-3.367	3.282e+03
	3.523	3.493-3.553	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.798	3.768-3.828	4.697e+03
	3.828	3.798-3.858	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.823	3.793-3.853	4.985e+03
		3.965	3.935-3.995	5.799e+03
		4.200	4.170-4.230	4.023e+03
		4.281	4.251-4.311	7.731e+03
		4.445	4.415-4.475	5.608e+03
	7 Aroclor-1260	4.420	4.390-4.450	5.513e+03
		4.570	4.540-4.600	7.132e+03
		4.682	4.652-4.712	4.731e+03
		4.880	4.850-4.910	5.801e+03
		5.505	5.475-5.535	9.041e+03
	8 Aroclor-1262	4.420	4.390-4.450	4.703e+03
		4.571	4.541-4.601	5.853e+03
		4.879	4.849-4.909	8.946e+03
		5.080	5.050-5.110	7.772e+03
		5.258	5.228-5.288	1.672e+04
	9 Aroclor-1268	5.504	5.474-5.534	2.032e+04
		5.536	5.506-5.566	2.018e+04
		5.707	5.677-5.737	1.496e+04
		5.907	5.877-5.937	6.438e+03
		6.131	6.101-6.161	4.409e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.077	2.047-2.107	1.182e+05
$	12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
	13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
	14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
	15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Cal Date : 04-Dec-2009 10:54 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008f0801.d
Level 2: /chem/ecd2a.i/120209.b/009f0901.d
Level 3: /chem/ecd2a.i/120209.b/010f1001.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/120209.b/012f1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Cal Date : 04-Dec-2009 10:54 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
(2)	2598	2539	2501	2535	2469	2528	1.903
(3)	2625	2577	2548	2609	2557	2583	1.287
(4)	5914	5894	5999	6196	6179	6036	2.381
(5)	2944	2846	2851	2940	2978	2912	2.044
8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
(2)	3295	3066	3031	3051	2917	3072	4.482
(3)	4237	3997	3977	3997	3815	4004	3.763
(4)	3754	3532	3556	3594	3430	3573	3.295
(5)	2578	2453	2481	2538	2454	2501	2.217
9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
(2)	9332	9272	9238	9197	9765	9361	2.470
(3)	6985	6923	6953	6984	7523	7073	3.568
(4)	3112	3015	2984	2964	3207	3056	3.331
(5)	21397	21592	21760	21851	23464	22013	3.767
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$ 11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$ 12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Cal Date : 04-Dec-2009 10:52 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008b0801.d
Level 2: /chem/ecd2a.i/120209.b/009b0901.d
Level 3: /chem/ecd2a.i/120209.b/010b1001.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/120209.b/012b1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Cal Date : 04-Dec-2009 10:52 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	#####	#####	#####	#####	#####	#####	#####
13 4,4'-DDT	#####	#####	#####	87046	#####	87046	0.000
14 4,4'-DDD	#####	#####	#####	149858	#####	149858	0.000
15 4,4'-DDE	#####	#####	#####	150414	#####	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0818

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2071.757	0.01	-1.3	15.0
(2)	4504.513	4297.144	0.01	-4.6	15.0
(3)	1820.211	1704.431	0.01	-6.4	15.0
(4)	932.883	860.050	0.01	-7.8	15.0
(5)	1378.125	1252.180	0.01	-9.1	15.0
Aroclor-1260	4066.794	4085.124	0.01	0.4	15.0
(2)	2528.317	2494.262	0.01	-1.3	15.0
(3)	2583.202	2561.196	0.01	-0.8	15.0
(4)	6036.106	6040.775	0.01	0.1	15.0
(5)	2911.947	2863.737	0.01	-1.6	15.0
4cmx	57711.247	61632.170	0.01	6.8	15.0
Decachlorobiphenyl	54829.246	47372.580	0.01	-13.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0818

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4225.102	0.01	-0.8	15.0
(2)	3444.681	3391.994	0.01	-1.5	15.0
(3)	1979.487	1966.559	0.01	-0.6	15.0
(4)	2061.253	2066.552	0.01	0.2	15.0
(5)	2754.170	2798.287	0.01	1.6	15.0
Aroclor-1260	5512.644	5841.697	0.01	6.0	15.0
(2)	7131.968	7492.876	0.01	5.1	15.0
(3)	4731.365	5012.957	0.01	6.0	15.0
(4)	5800.657	5917.428	0.01	2.0	15.0
(5)	9040.681	9352.254	0.01	3.4	15.0
4cmx	118199.83	133352.68	0.01	12.8	15.0
Decachlorobiphenyl	108641.52	98848.300	0.01	-9.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2101

Lab File ID: 069F6901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	1991.713	0.01	-5.1	15.0	
(2)	4504.513	4359.721	0.01	-3.2	15.0	
(3)	1820.211	1718.140	0.01	-5.6	15.0	
(4)	932.883	863.079	0.01	-7.5	15.0	
(5)	1378.125	1308.503	0.01	-5.0	15.0	
Aroclor-1260	4066.794	4195.536	0.01	3.2	15.0	
(2)	2528.317	2568.166	0.01	1.6	15.0	
(3)	2583.202	2610.134	0.01	1.0	15.0	
(4)	6036.106	6137.058	0.01	1.7	15.0	
(5)	2911.947	2905.494	0.01	-0.2	15.0	
4cmx	57711.247	62243.020	0.01	7.8	15.0	
Decachlorobiphenyl	54829.246	46427.640	0.01	-15.3	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2101

Lab File ID: 069B6901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4346.886	0.01	2.1	15.0	
(2)	3444.681	3515.637	0.01	2.0	15.0	
(3)	1979.487	2035.326	0.01	2.8	15.0	
(4)	2061.253	2112.762	0.01	2.5	15.0	
(5)	2754.170	2896.483	0.01	5.2	15.0	
Aroclor-1260	5512.644	6026.178	0.01	9.3	15.0	
(2)	7131.968	7661.315	0.01	7.4	15.0	
(3)	4731.365	5099.145	0.01	7.8	15.0	
(4)	5800.657	6036.822	0.01	4.1	15.0	
(5)	9040.681	9406.378	0.01	4.0	15.0	
4cmx	118199.83	136576.95	0.01	15.5	15.0	<-
Decachlorobiphenyl	108641.52	95012.880	0.01	-12.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2314

Lab File ID: 081F8101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2026.301	0.01	-3.5	15.0	
(2)	4504.513	4489.109	0.01	-0.3	15.0	
(3)	1820.211	1764.591	0.01	-3.0	15.0	
(4)	932.883	858.313	0.01	-8.0	15.0	
(5)	1378.125	1322.592	0.01	-4.0	15.0	
Aroclor-1260	4066.794	4246.070	0.01	4.4	15.0	
(2)	2528.317	2567.686	0.01	1.6	15.0	
(3)	2583.202	2617.795	0.01	1.3	15.0	
(4)	6036.106	6176.760	0.01	2.3	15.0	
(5)	2911.947	2914.128	0.01	0.1	15.0	
4cmx	57711.247	63814.830	0.01	10.6	15.0	
Decachlorobiphenyl	54829.246	44704.110	0.01	-18.5	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2314

Lab File ID: 081B8101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4397.293	0.01	3.3	15.0	
(2)	3444.681	3566.977	0.01	3.6	15.0	
(3)	1979.487	2050.811	0.01	3.6	15.0	
(4)	2061.253	2131.643	0.01	3.4	15.0	
(5)	2754.170	2915.510	0.01	5.8	15.0	
Aroclor-1260	5512.644	5967.374	0.01	8.2	15.0	
(2)	7131.968	7545.490	0.01	5.8	15.0	
(3)	4731.365	5001.322	0.01	5.7	15.0	
(4)	5800.657	5804.649	0.01	0.1	15.0	
(5)	9040.681	8954.035	0.01	-1.0	15.0	
4cmx	118199.83	139067.58	0.01	17.6	15.0	<-
Decachlorobiphenyl	108641.52	90054.490	0.01	-17.1	15.0	<-

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 08:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6163217	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	4737258	100.000	86.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.282	0.000	2071757	1000.00	987	80.00- 120.00	100.00(M)
2.604	2.604	0.000	4297144	1000.00	954	195.38- 235.38	207.42
2.695	2.695	0.000	1704431	1000.00	936	66.88- 106.88	82.27
2.830	2.830	0.000	860050	1000.00	922	23.48- 63.48	41.51
2.980	2.980	0.000	1252180	1000.00	909	45.19- 85.19	60.44
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	4085124	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2494262	1000.00	986	41.10- 81.10	61.06
4.456	4.456	0.000	2561196	1000.00	991	42.35- 82.35	62.70
4.668	4.668	0.000	6040775	1000.00	1000	126.34- 166.34	147.87
4.857	4.857	0.000	2863737	1000.00	983	49.78- 89.78	70.10
Average of Peak Amounts =					993		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/002f0201.d
Date : 04-DEC-2009 08:18
Client ID: AR166001
Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

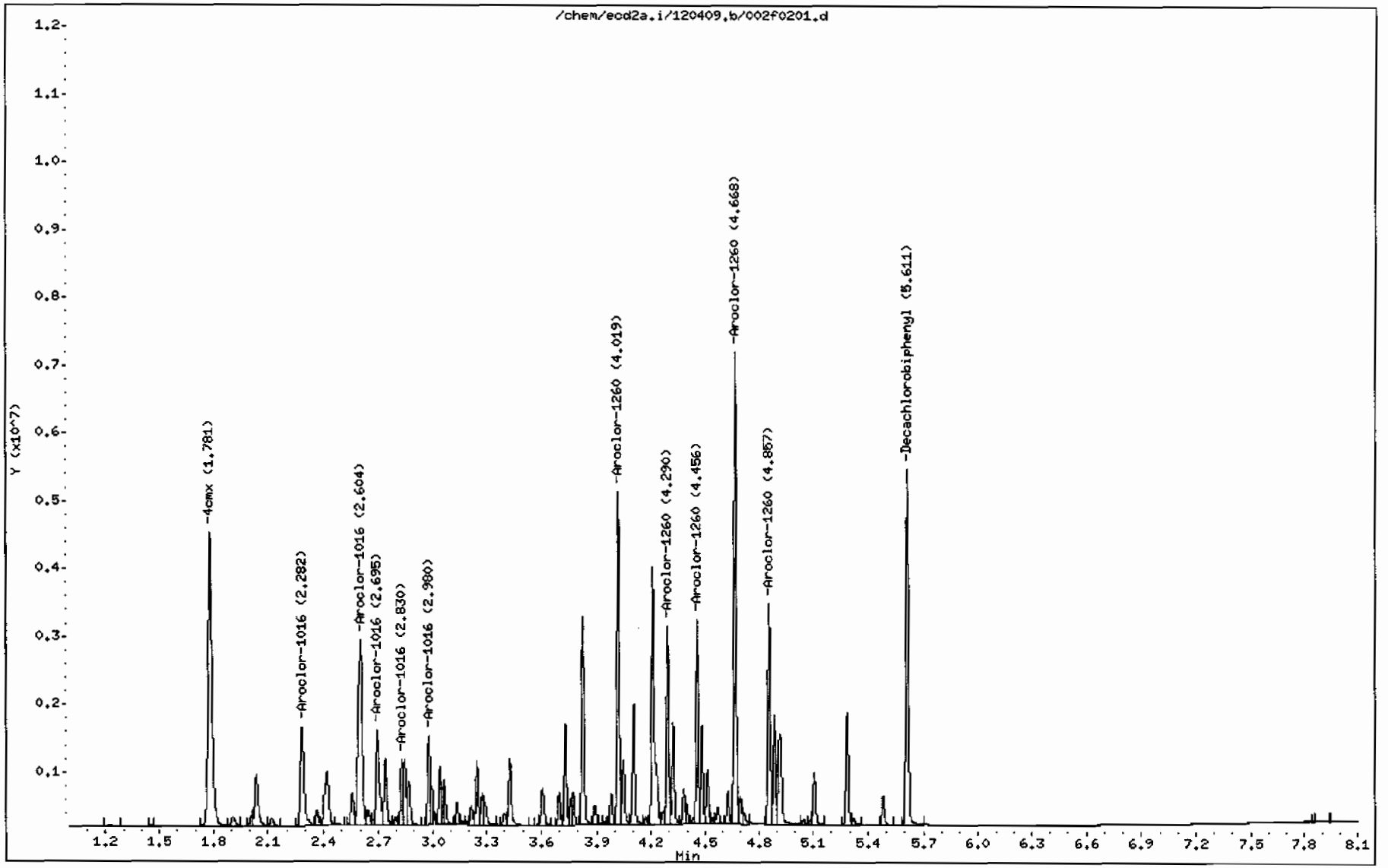

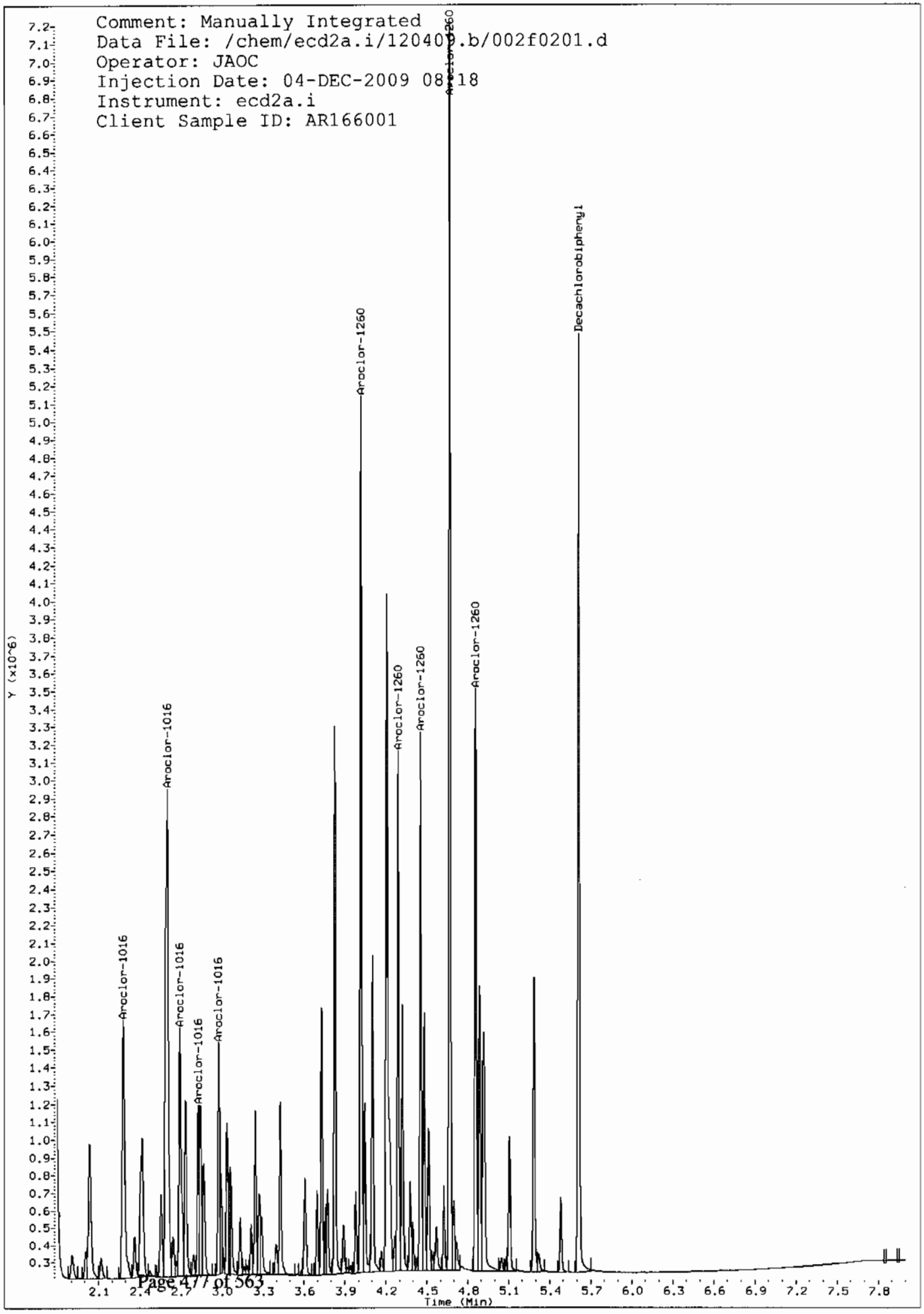
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/002f0201.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:18
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

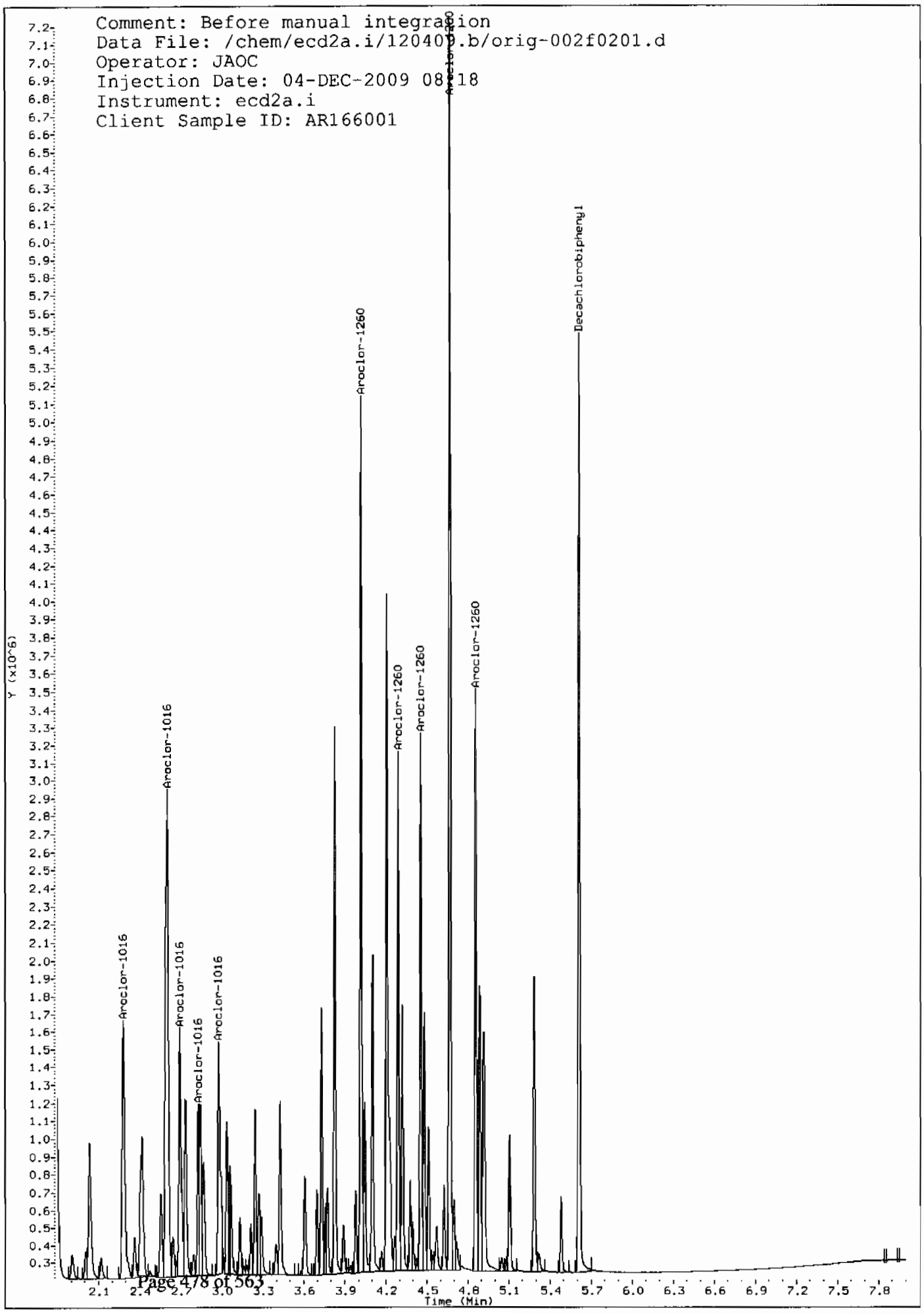
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-002f0201.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:18
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 08:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	13335268	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9884830	100.000	91.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	4225101	1000.00	992	80.00- 120.00	100.00
3.185	3.185	0.000	3391993	1000.00	985	60.93- 100.93	80.28
3.336	3.336	0.000	1966559	1000.00	993	26.64- 66.64	46.54
3.365	3.365	0.000	2066552	1000.00	1000	28.47- 68.47	48.91
3.524	3.524	0.000	2798286	1000.00	1020	46.57- 86.57	66.23
Average of Peak Amounts =					998		
7 Aroclor-1260					CAS #: 11096-82-5		
4.420	4.420	0.000	5841696	1000.00	1060	80.00- 120.00	100.00
4.570	4.570	0.000	7492875	1000.00	1050	107.74- 147.74	128.27
4.682	4.682	0.000	5012957	1000.00	1060	64.97- 104.97	85.81
4.880	4.880	0.000	5917427	1000.00	1020	79.48- 119.48	101.30
5.505	5.505	0.000	9352254	1000.00	1030	137.38- 177.38	160.09
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120409.b/002b0201.d

Date : 04-DEC-2009 08:18

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

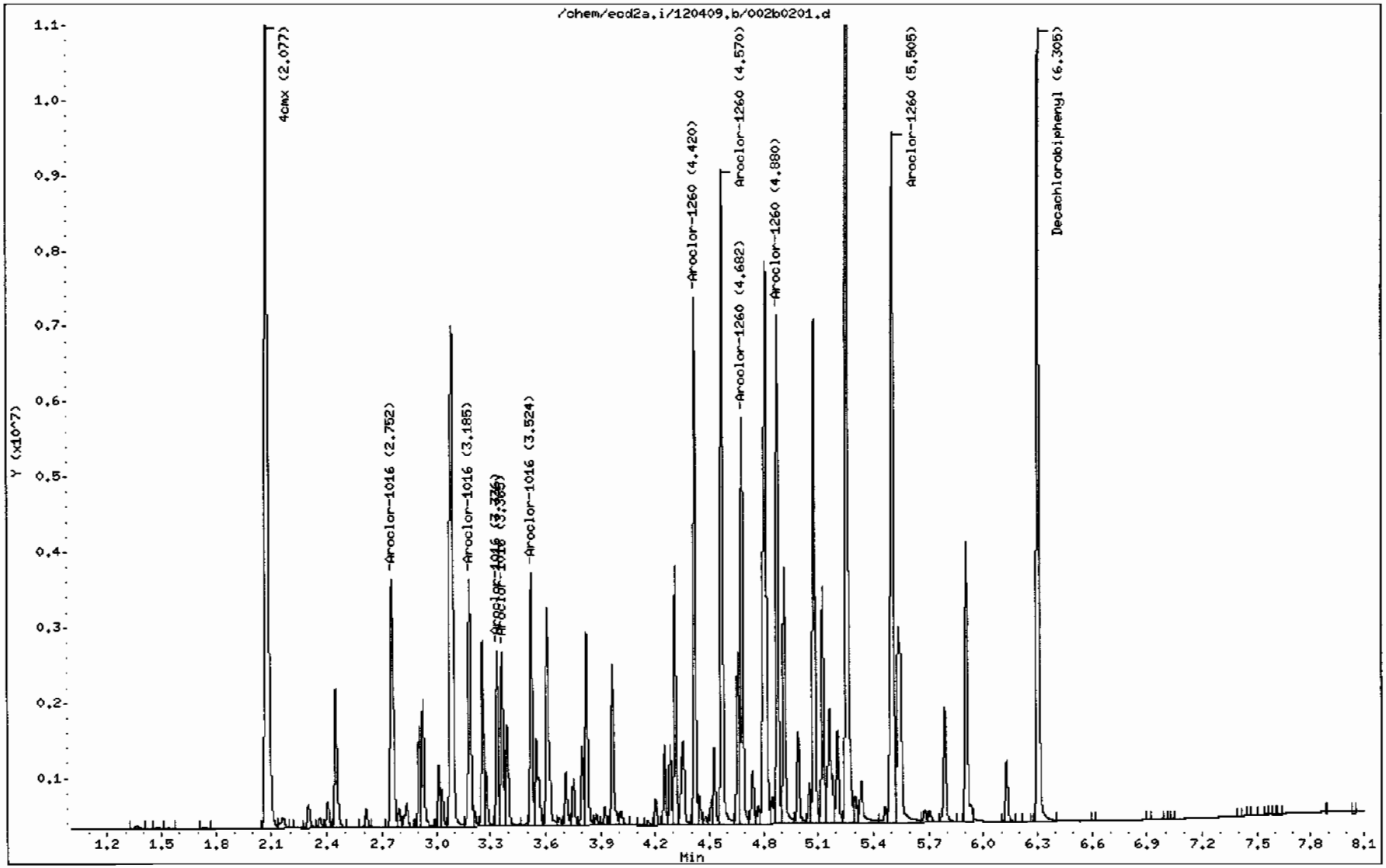

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 08:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.782	1.781	0.001	6531630	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	4917627	100.000	89.7	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.246	3.246	0.000	1983592	1000.00	954	80.00- 120.00	100.00
3.429	3.429	0.000	2669351	1000.00	963	114.57- 154.57	134.57
3.698	3.698	0.000	3658874	1000.00	978	164.46- 204.46	184.46
3.890	3.890	0.000	2704227	1000.00	972	116.33- 156.33	136.33
4.019	4.019	0.000	2559579	1000.00	927	109.04- 149.04	129.04
Average of Peak Amounts =					959		

Data File: /chem/ecd2a.i/120409.b/003f0301.d
Date : 04-DEC-2009 08:29
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

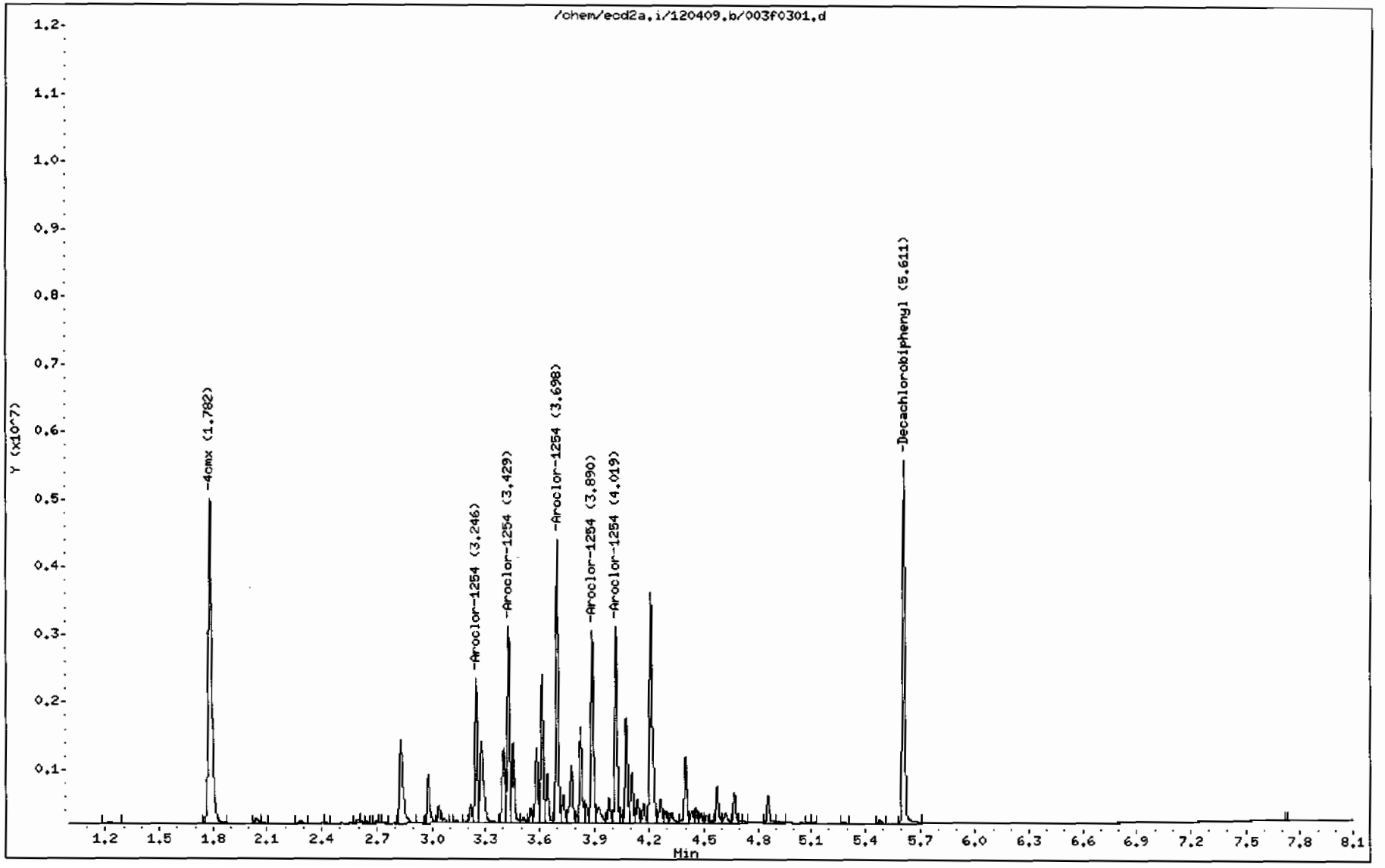

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 08:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.077	0.001	14274103	100.000	121	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10205427	100.000	93.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	5022044	1000.00	1010	80.00- 120.00	100.00
3.965	3.965	0.000	5851683	1000.00	1010	96.52- 136.52	116.52
4.200	4.200	0.000	4134285	1000.00	1030	62.32- 102.32	82.32
4.281	4.281	0.000	7930966	1000.00	1020	137.92- 177.92	157.92
4.445	4.445	0.000	5531600	1000.00	986	90.15- 130.15	110.15

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/120409.b/003b0301.d
Date : 04-DEC-2009 08:29
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

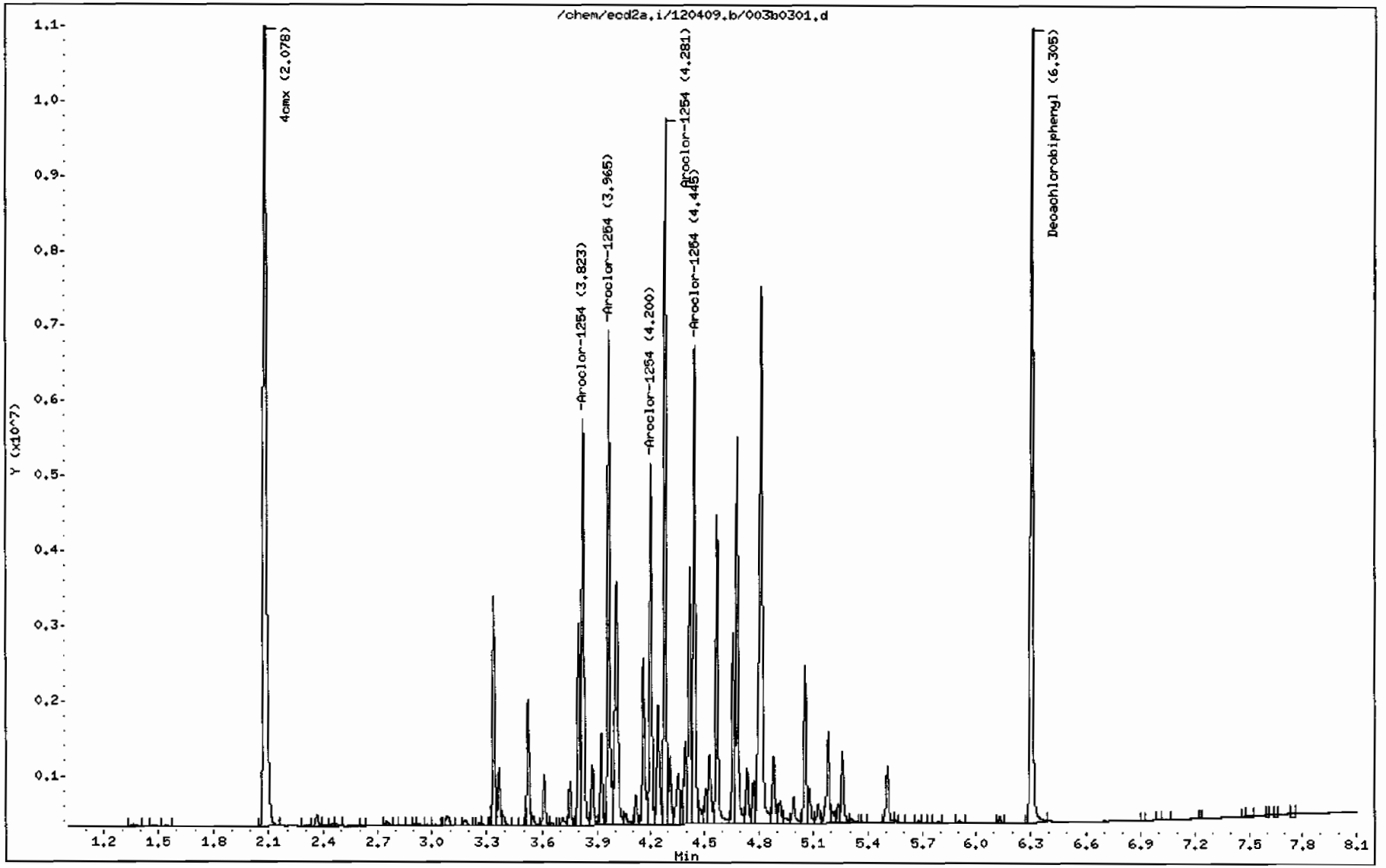

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 08:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6486468	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5102418	100.000	93.1	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.282	2.282	0.000	1755609	1000.00	1010	80.00- 120.00	100.00(M)
2.695	2.695	0.000	1482642	1000.00	999	64.45- 104.45	84.45
2.737	2.737	0.000	919294	1000.00	1010	32.36- 72.36	52.36
2.830	2.830	0.000	731419	1000.00	1010	21.66- 61.66	41.66
2.980	2.980	0.000	1074276	1000.00	960	41.19- 81.19	61.19
Average of Peak Amounts =					998		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/004f0401.d

Page 1

Date : 04-DEC-2009 08:40

Client ID: AR124201

Instrument: ecd2a.i

Sample Info: IWAR091102-42

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

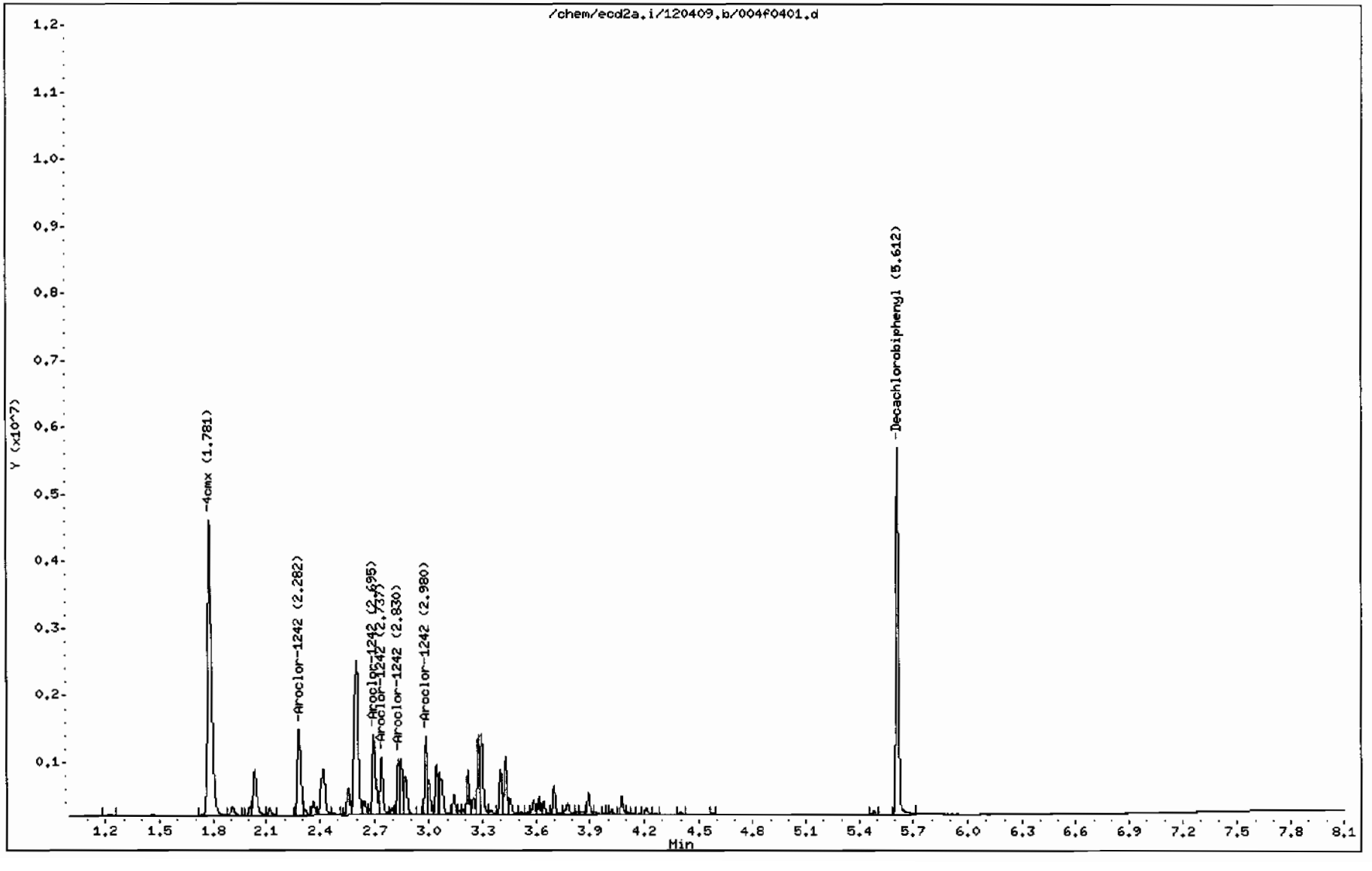

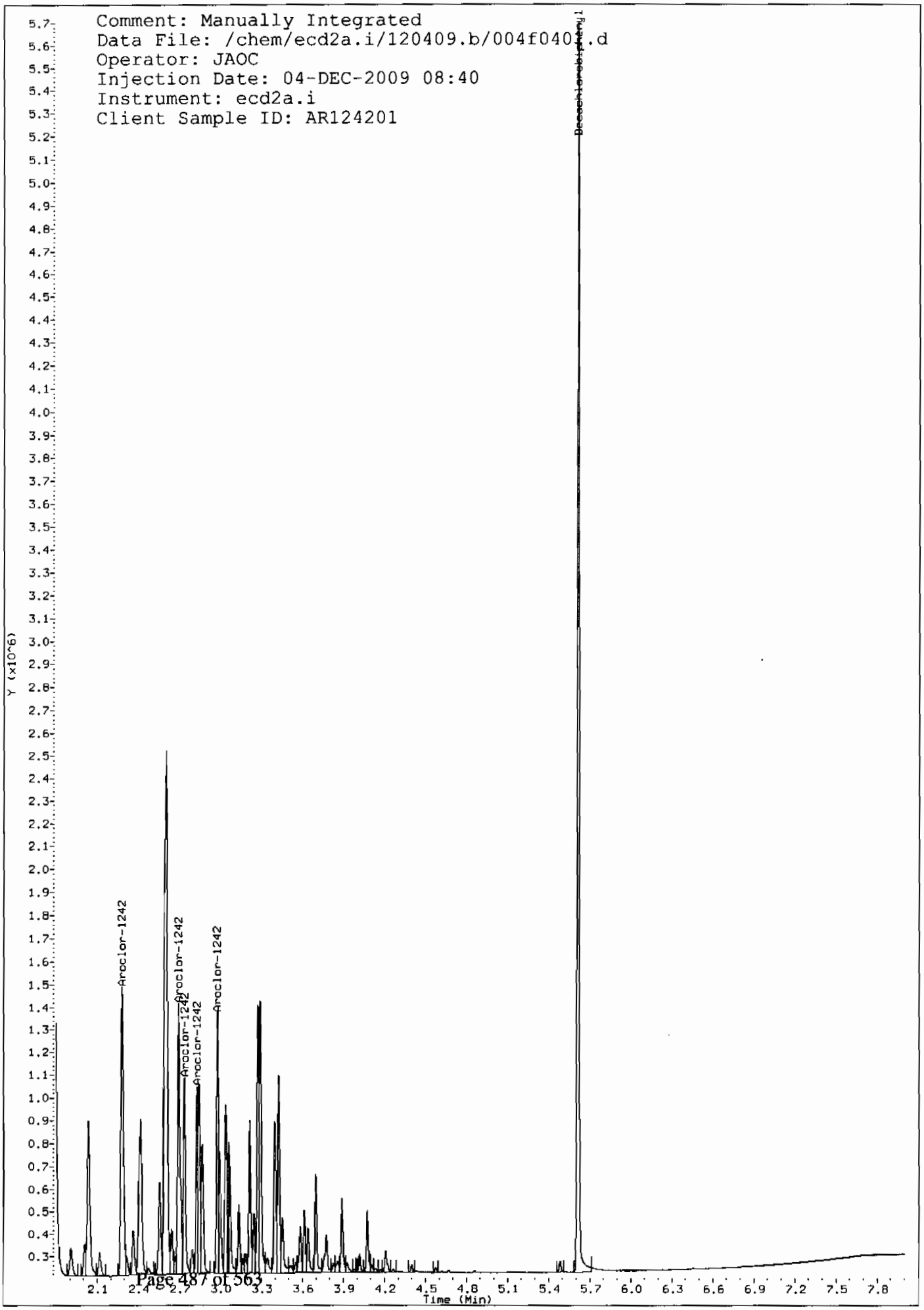
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Operator: JAOC
Injection Date: 04-DEC-2009 08:40
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

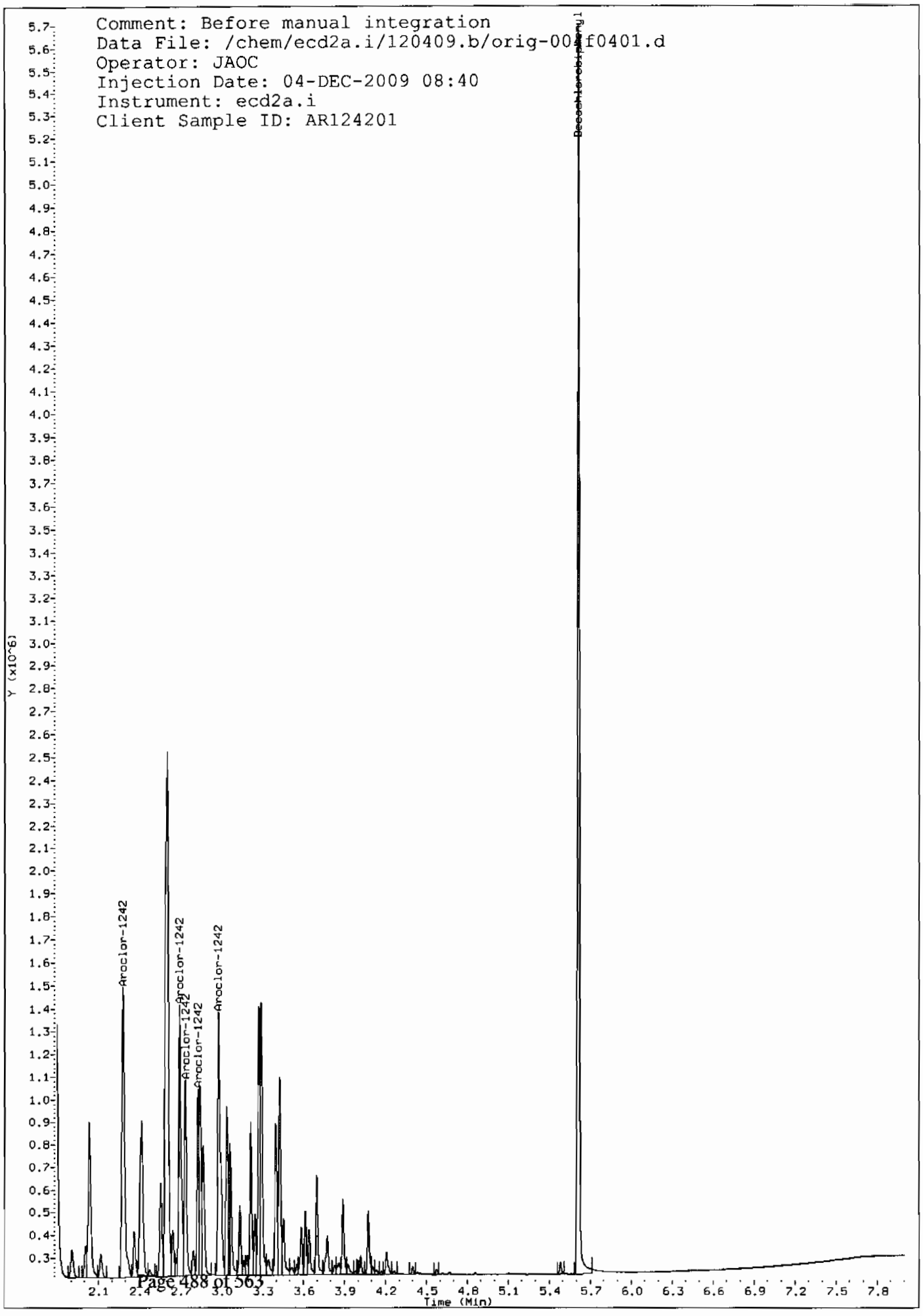
Comment: Before manual integration
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Operator: JAOC
Injection Date: 04-DEC-2009 08:40
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 08:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	14080772	100.000	119	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	10639536	100.000	97.9	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.752	2.752	0.000	3708980	1000.00	1080	80.00- 120.00	100.00
3.186	3.186	0.000	2900924	1000.00	1080	58.21- 98.21	78.21
3.258	3.258	0.000	1759638	1000.00	1080	27.44- 67.44	47.44
3.337	3.337	0.000	1642557	1000.00	1090	24.29- 64.29	44.29
3.524	3.524	0.000	2418759	1000.00	1130	45.21- 85.21	65.21

Average of Peak Amounts = 1.09e+03

Data File: /chem/ecd2a.i/120409.b/004b0401.d
Date : 04-DEC-2009 08:40
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Page 1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

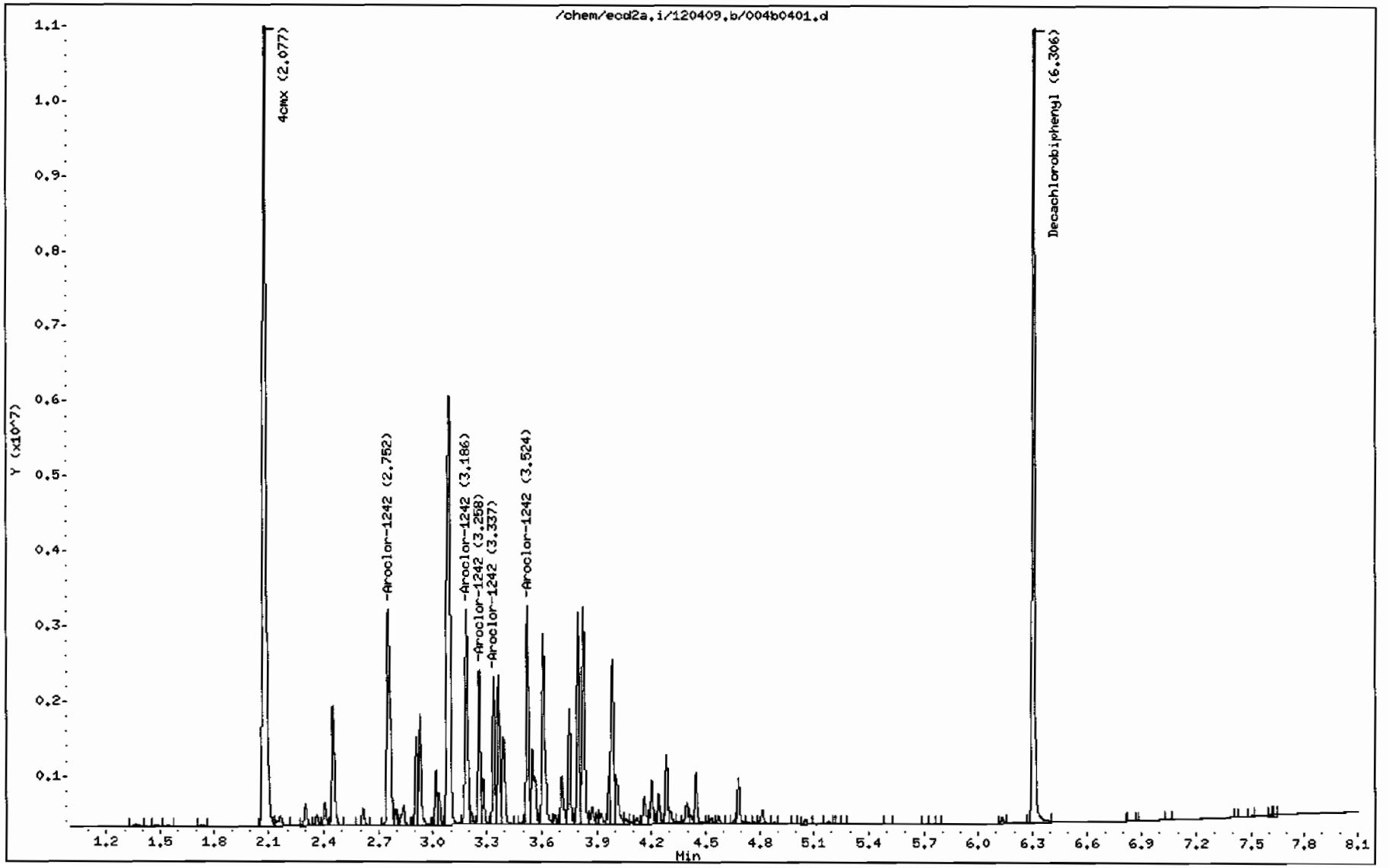

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 08:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	7149591	100.000	124	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5747701	100.000	105	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.829	2.829	0.000	1497108	1000.00	980	80.00- 120.00	100.00(M)
2.980	2.980	0.000	2034290	1000.00	1000	115.88- 155.88	135.88
3.039	3.039	0.000	1541525	1000.00	981	82.97- 122.97	102.97
3.274	3.274	0.000	2243178	1000.00	1010	129.83- 169.83	149.83
3.427	3.427	0.000	1886569	1000.00	986	106.01- 146.01	126.01
Average of Peak Amounts =					993		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/005f0501.d

Date : 04-DEC-2009 08:51

Client ID: AR124801

Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

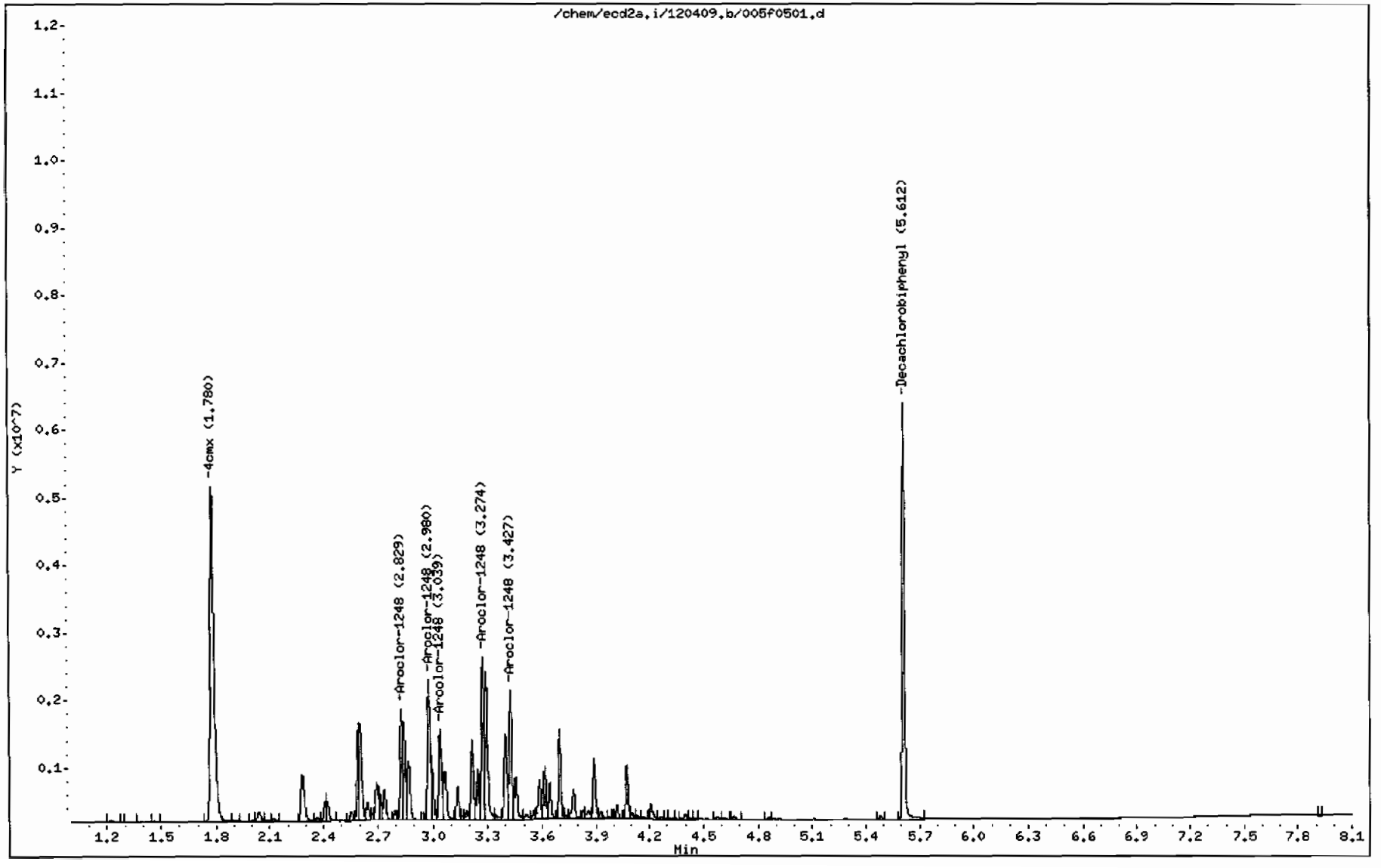

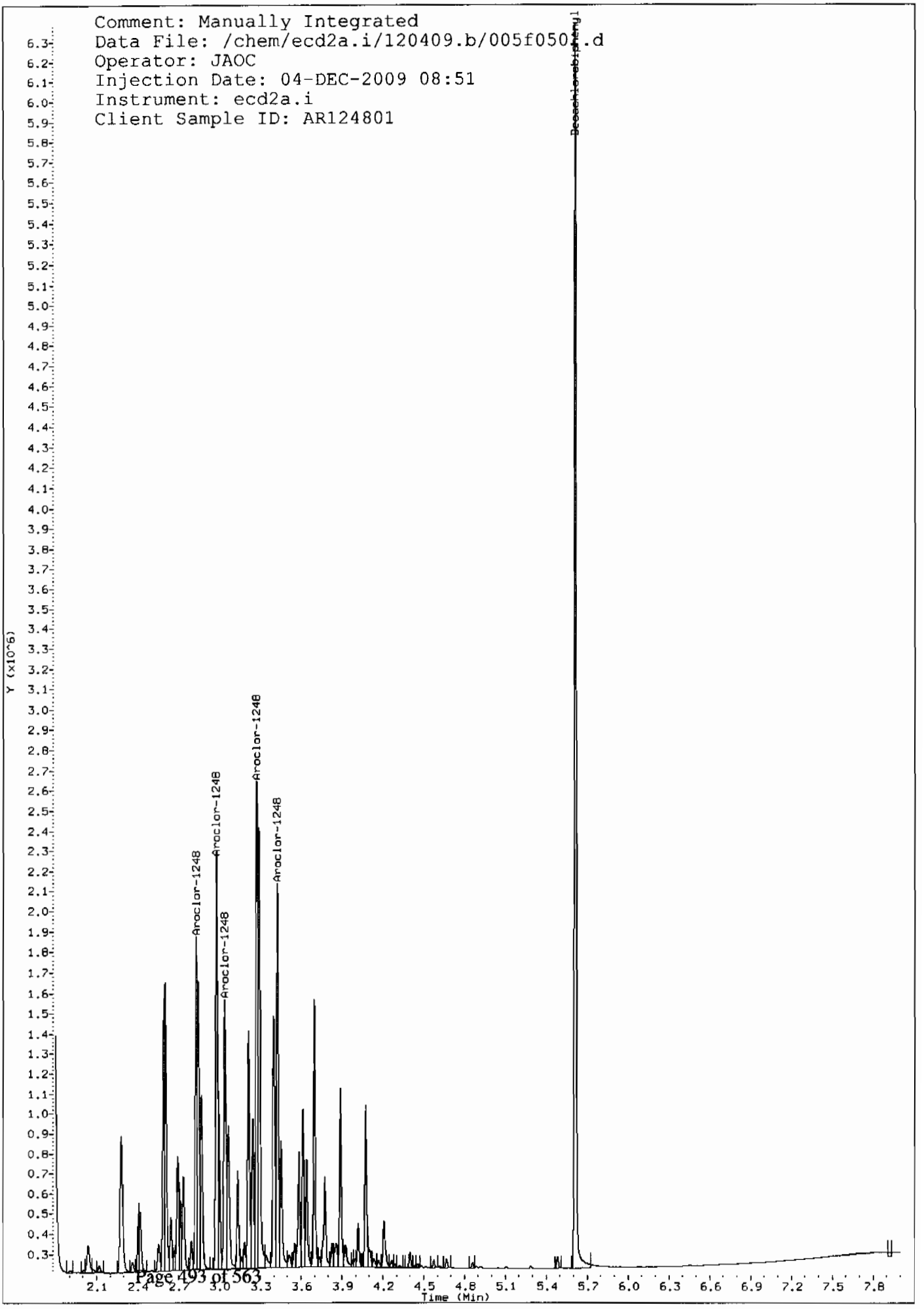
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/005f0501.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:51
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-00[illegible]f0501.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:51
Instrument: ecd2a.i
Client Sample ID: AR124801

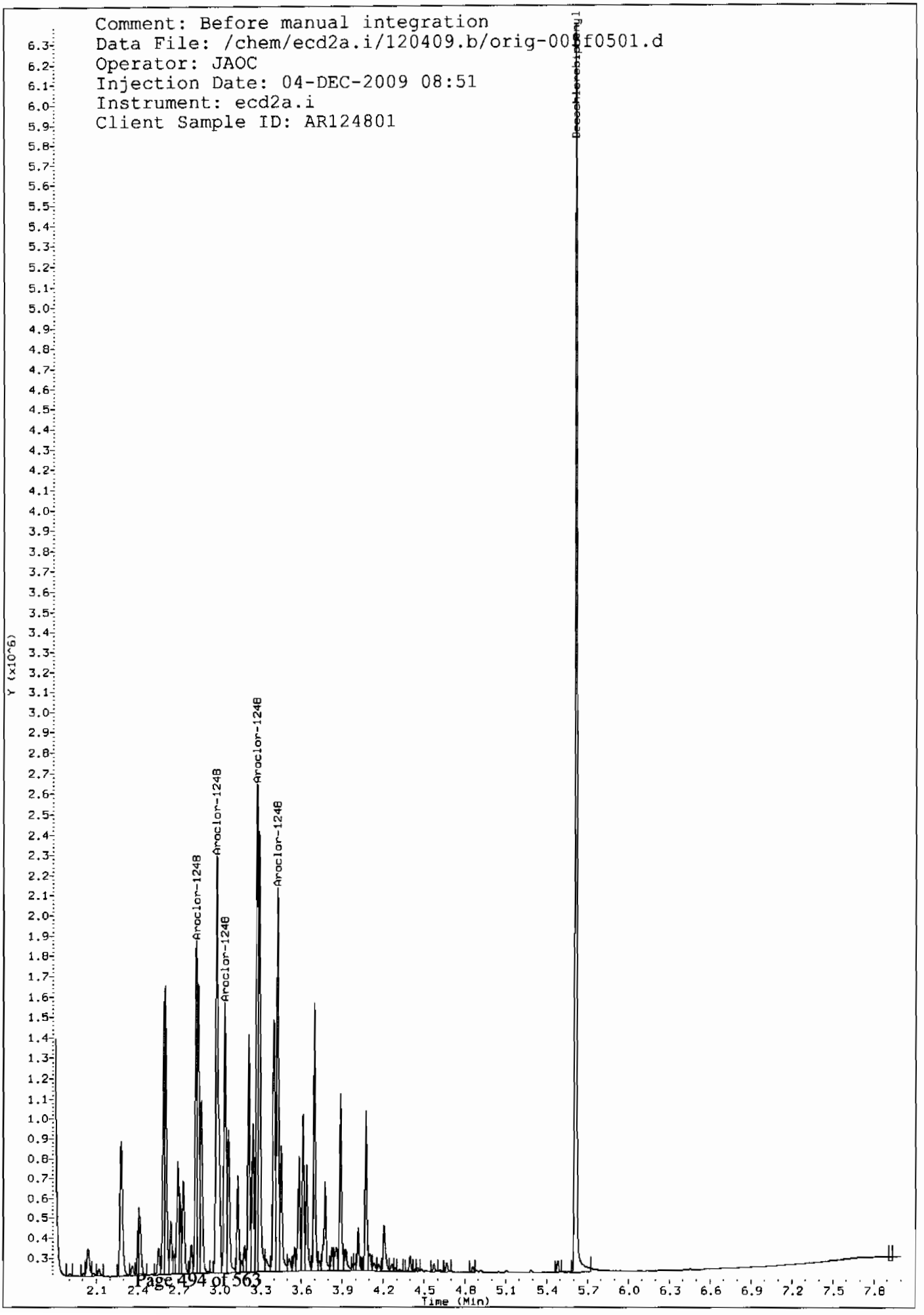

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 08:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	15582216	100.000	132	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	11985221	100.000	110	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.337	3.337	0.000	3392581	1000.00	1030	80.00- 120.00	100.00
3.523	3.523	0.000	4371454	1000.00	1040	108.85- 148.85	128.85
3.609	3.609	0.000	4618983	1000.00	1040	116.15- 156.15	136.15
3.798	3.798	0.000	4893749	1000.00	1040	124.25- 164.25	144.25
3.828	3.828	0.000	5579765	1000.00	1040	144.47- 184.47	164.47

Average of Peak Amounts = 1.04e+03

Data File: /chem/ecd2a.i/120409.b/005b0501.d
Date : 04-DEC-2009 08:51
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

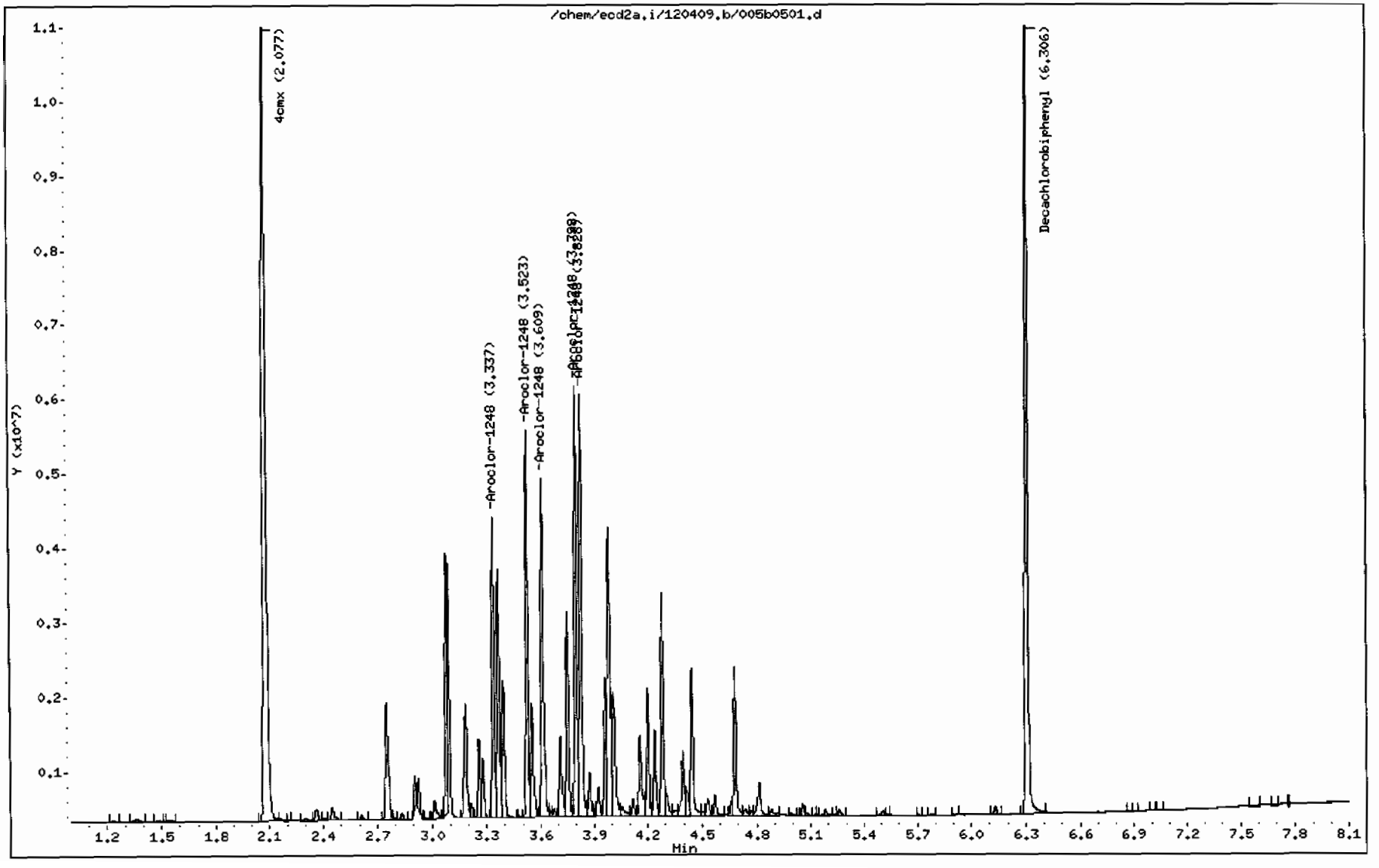

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	8621267	100.000	149	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	6506644	100.000	119	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.035	2.035	0.000	1384275	1000.00	1190	80.00- 120.00	100.00
2.281	2.281	0.000	1104806	1000.00	1190	59.81- 99.81	79.81
2.694	2.694	0.000	941781	1000.00	1180	48.03- 88.03	68.03
2.737	2.737	0.000	600816	1000.00	1180	23.40- 63.40	43.40
2.980	2.980	0.000	943613	1000.00	1620	48.17- 88.17	68.17

Average of Peak Amounts = 1.27e+03

Data File: /chem/ecd2a.i/120409.b/006f0601.d

Date : 04-DEC-2009 09:02

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

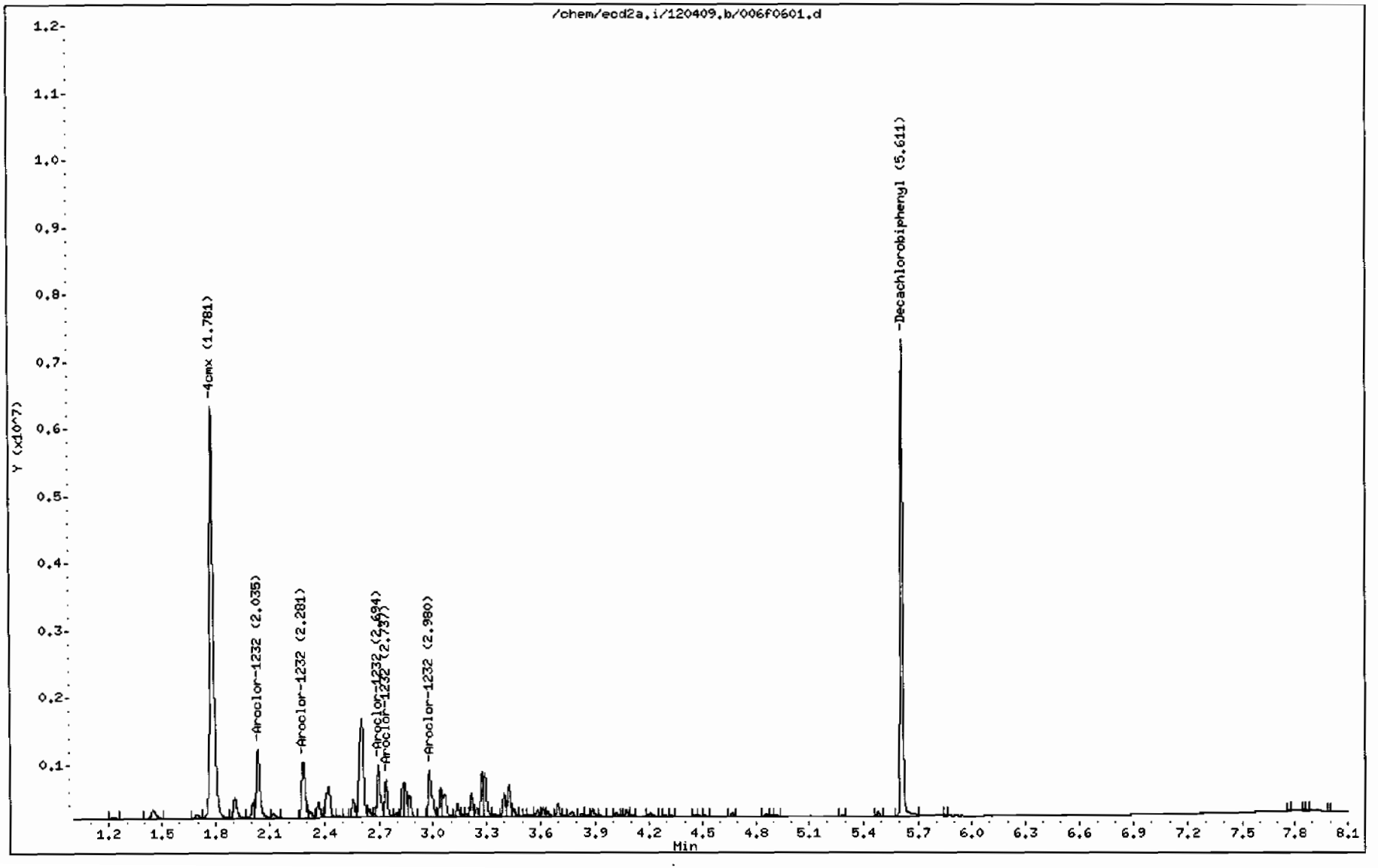

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	18754881	100.000	159	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	13758950	100.000	127	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.449	2.449	0.000	2472780	1000.00	1200	80.00- 120.00	100.00
2.752	2.752	0.000	2370965	1000.00	1210	75.88- 115.88	95.88
3.186	3.186	0.000	1903861	1000.00	1270	56.99- 96.99	76.99
3.258	3.258	0.000	1122766	1000.00	1210	25.41- 65.41	45.41
3.523	3.523	0.000	1380121	1000.00	1250	35.81- 75.81	55.81

Average of Peak Amounts = 1.23e+03

Data File: /chem/ecd2a.i/120409.b/006b0601.d

Date : 04-DEC-2009 09:02

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

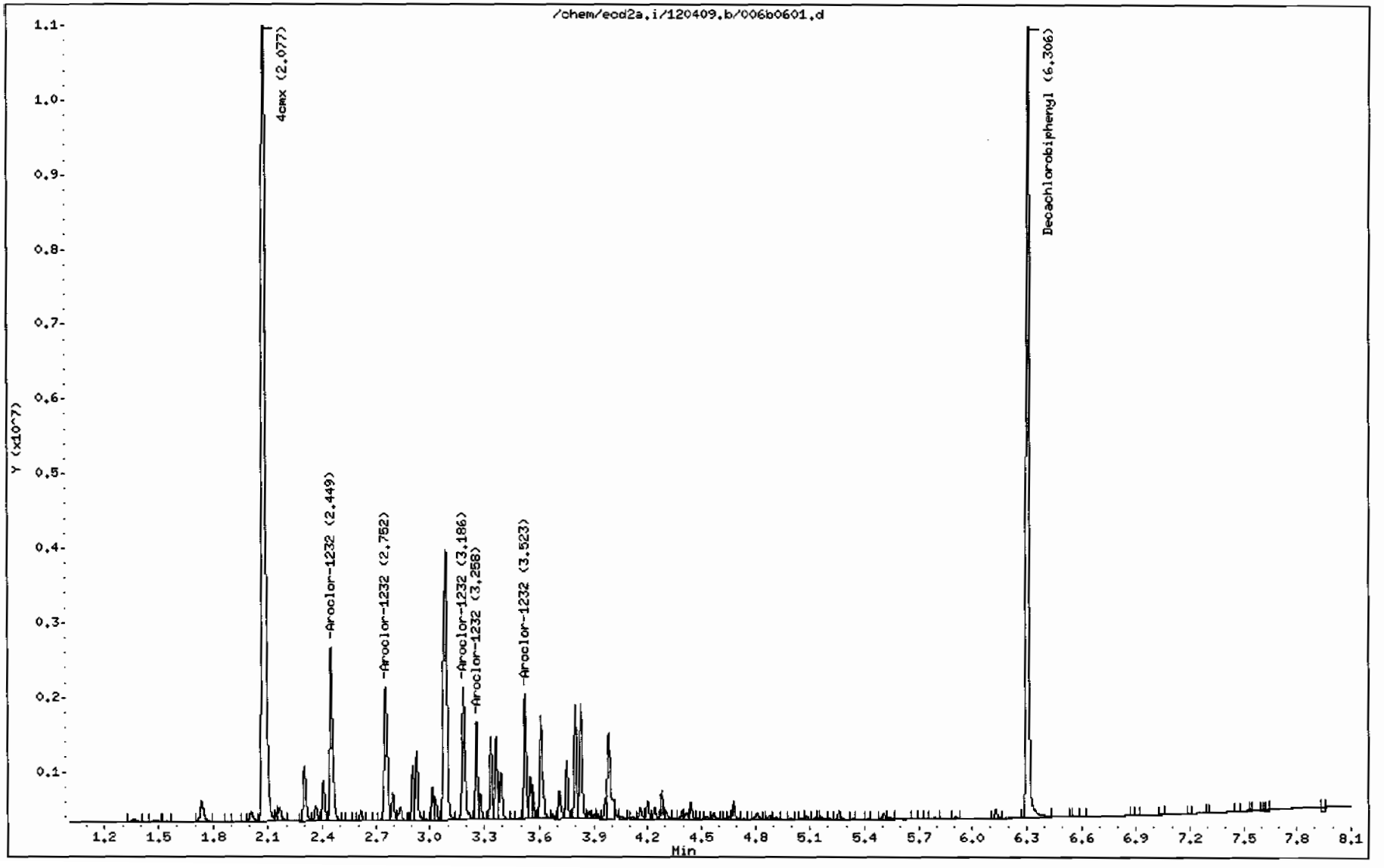

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 09:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	6580063	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5053731	100.000	92.2	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.446	1.446	0.000	540584	1000.00	1160	80.00- 120.00	100.00
1.906	1.906	0.000	754634	1000.00	1150	119.60- 159.60	139.60
2.005	2.005	0.000	376013	1000.00	1080	49.56- 89.56	69.56

Average of Peak Amounts = 1.13e+03

Data File: /chem/ecd2a.i/120409.b/007f0701.d
Date : 04-DEC-2009 09:14
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

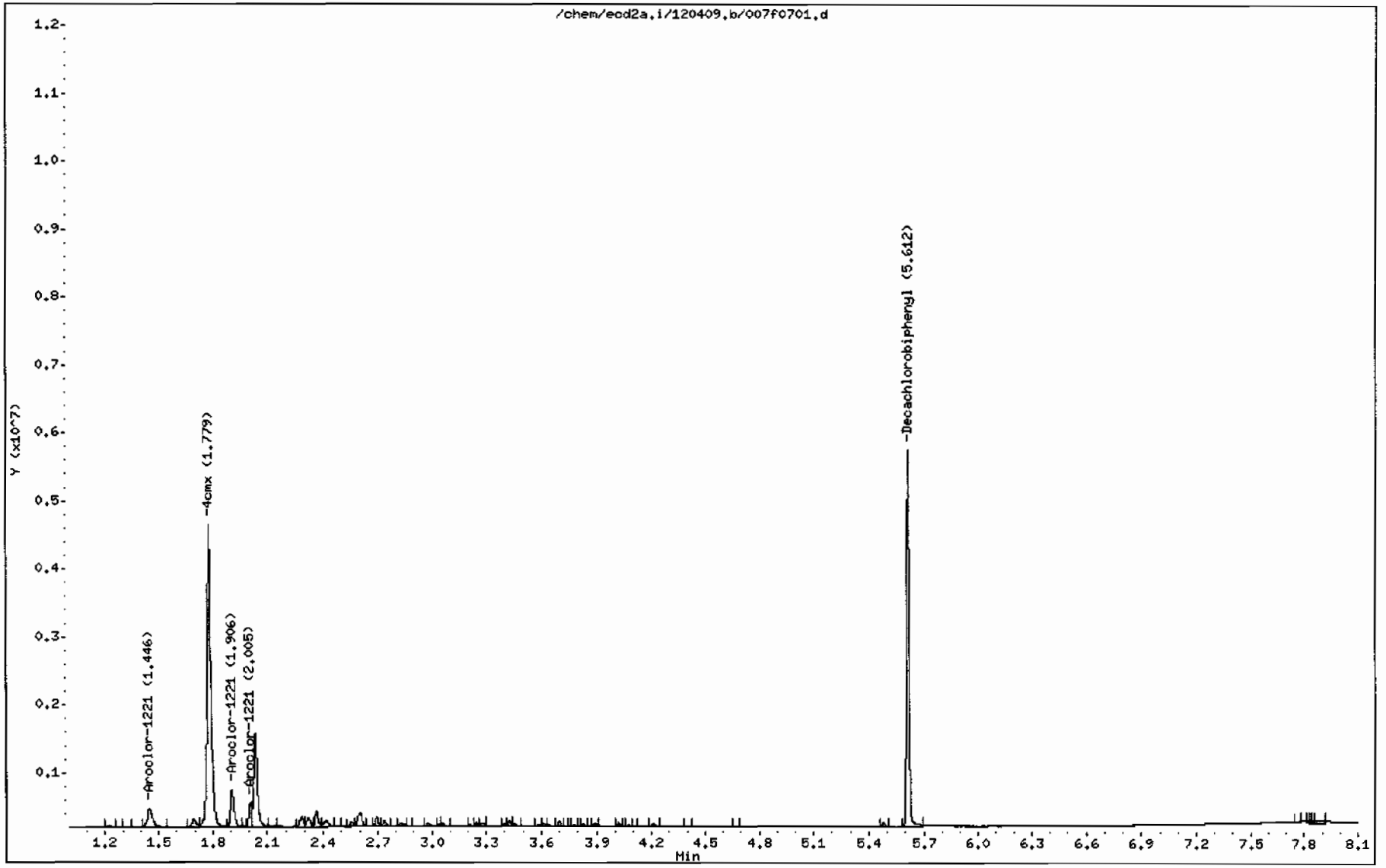

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 09:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	14002245	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	10613265	100.000	97.7	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1409536	1000.00	1120	80.00- 120.00	100.00
2.404	2.404	0.000	866738	1000.00	1120	41.49- 81.49	61.49
2.448	2.448	0.000	3431998	1000.00	1120	223.48- 263.48	243.48

Average of Peak Amounts = 1.12e+03

Data File: /chem/ecd2a.i/120409.b/007b0701.d

Date : 04-DEC-2009 09:14

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

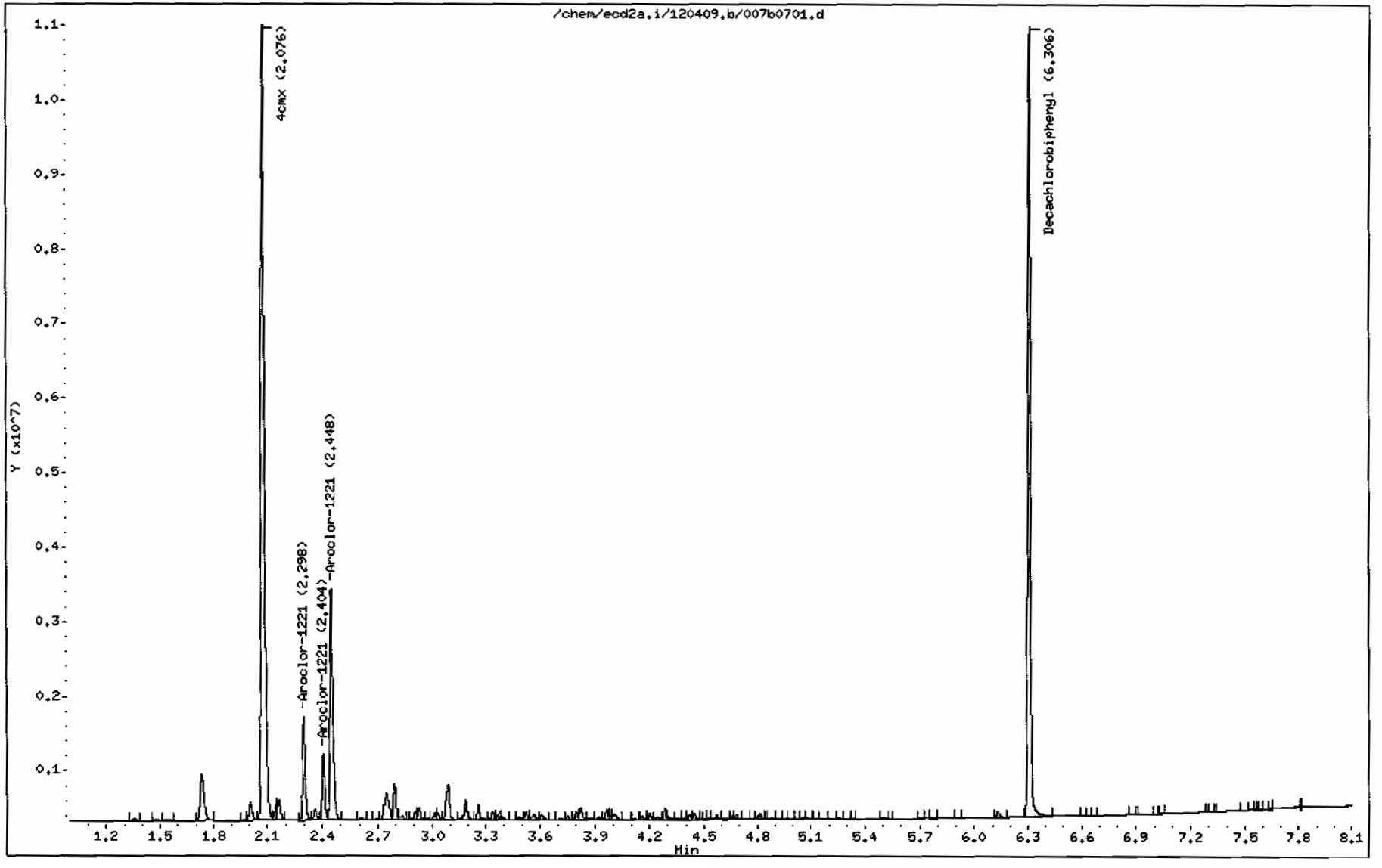

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/069f6901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 21:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 69 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	6224302	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.608	5.611	-0.003	4642764	100.000	84.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.279	2.282	-0.003	1991713	1000.00	948	80.00- 120.00	100.00(M)
2.600	2.604	-0.004	4359721	1000.00	968	200.13- 240.13	218.89
2.692	2.695	-0.003	1718140	1000.00	944	67.04- 107.04	86.26
2.827	2.830	-0.003	863079	1000.00	925	22.75- 62.75	43.33
2.978	2.980	-0.002	1308503	1000.00	949	47.01- 87.01	65.70
Average of Peak Amounts =					947		
7 Aroclor-1260					CAS #: 11096-82-5		
4.015	4.019	-0.004	4195536	1000.00	1030	80.00- 120.00	100.00
4.287	4.290	-0.003	2568166	1000.00	1020	40.62- 80.62	61.21
4.453	4.456	-0.003	2610134	1000.00	1010	41.94- 81.94	62.21
4.664	4.668	-0.004	6137058	1000.00	1020	125.52- 165.52	146.28
4.854	4.857	-0.003	2905494	1000.00	998	48.68- 88.68	69.25
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/069f6901.d
Date : 04-DEC-2009 21:01
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

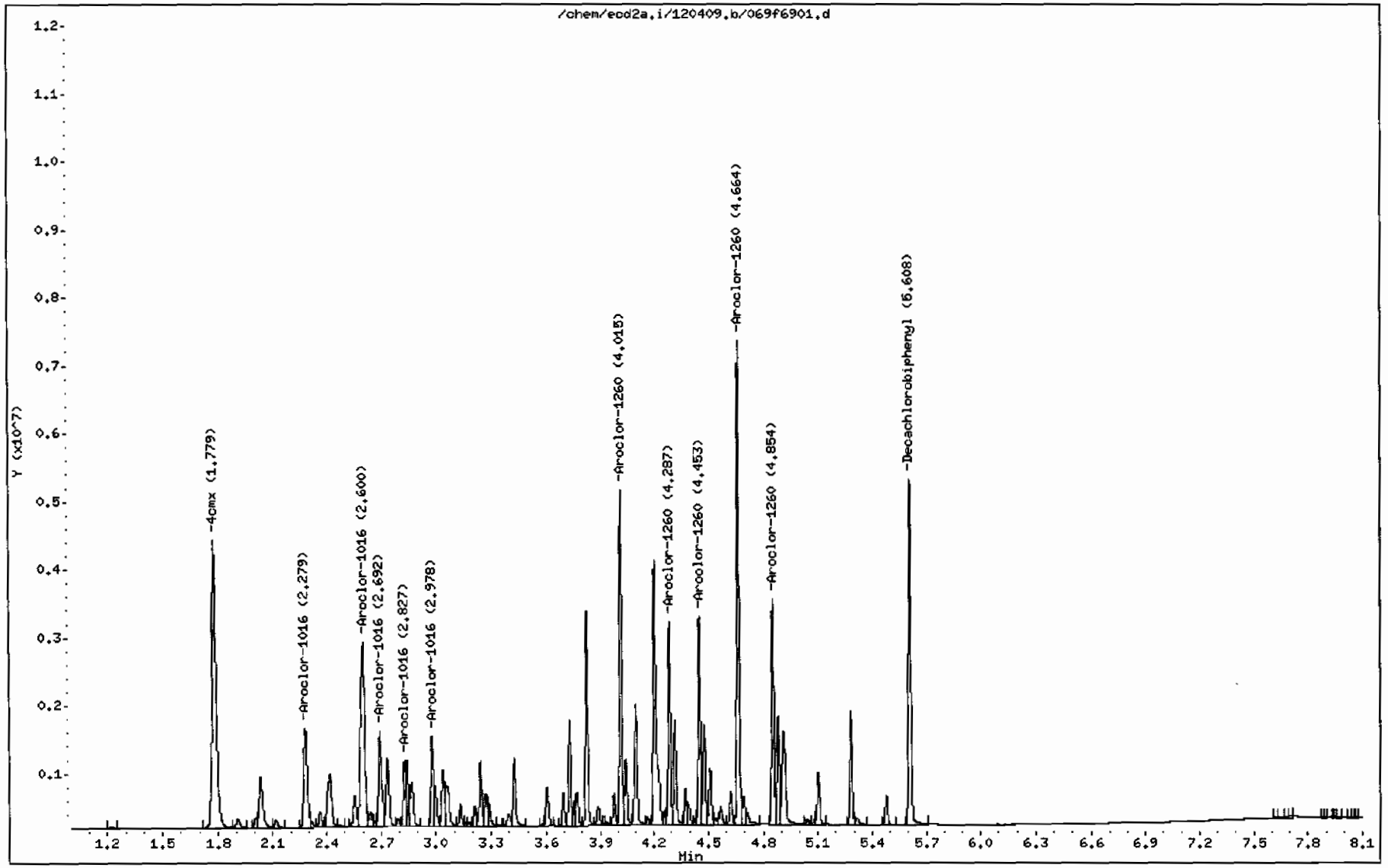

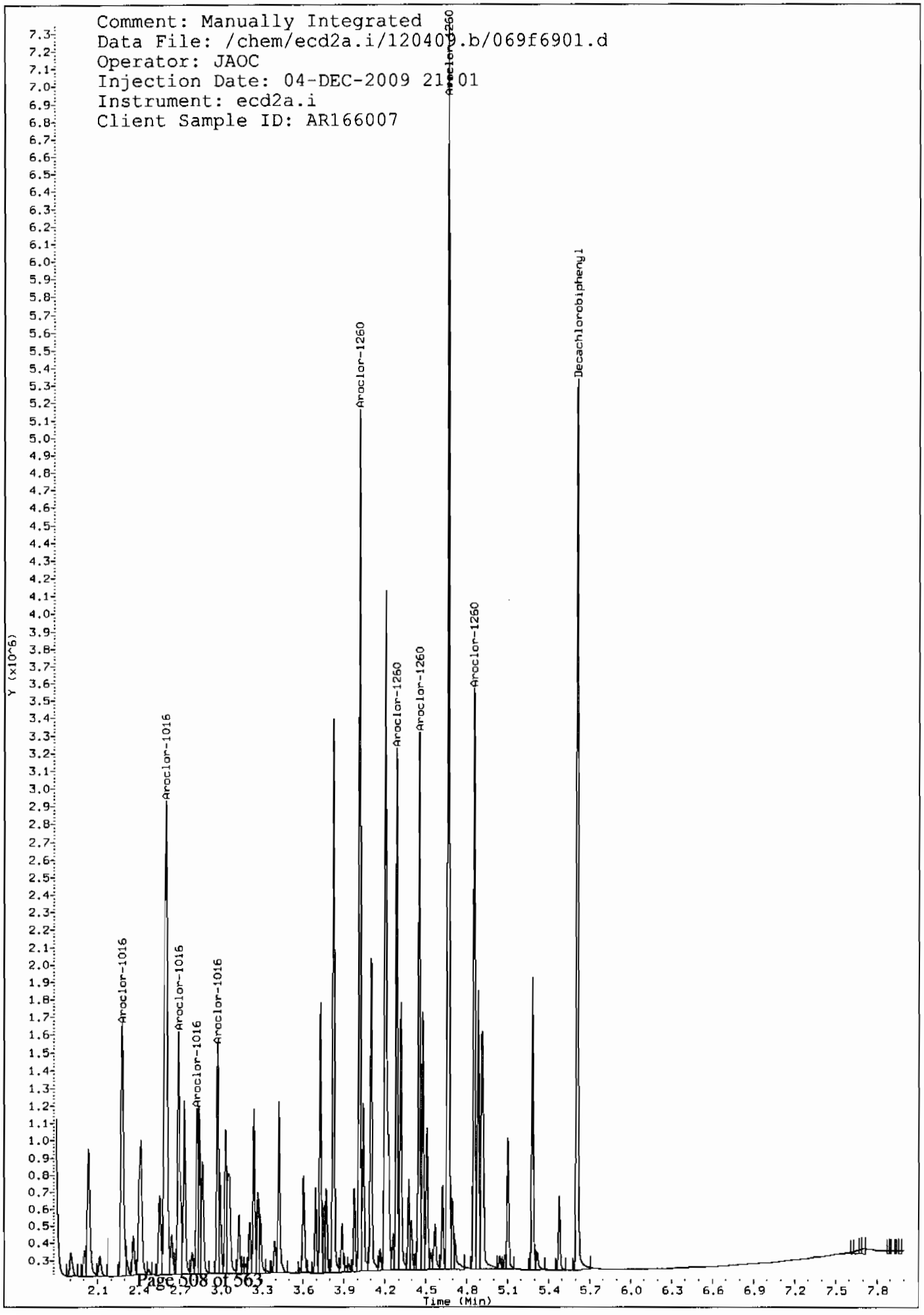
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/069f6901.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:01
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1260
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

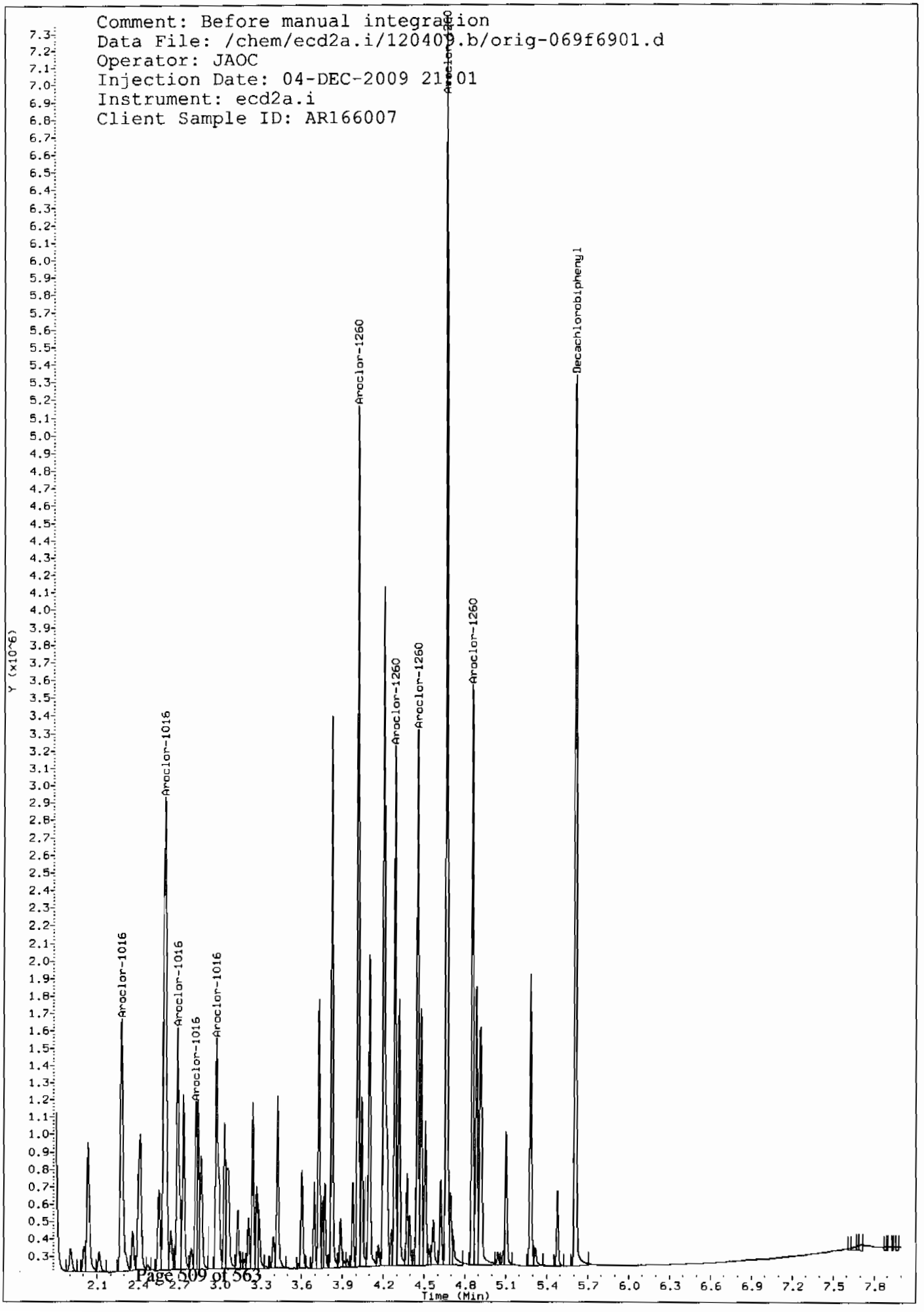
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-069f6901.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:01
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/069b6901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 21:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 69 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	13657695	100.000	116	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	9501288	100.000	87.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.749	2.752	-0.003	4346885	1000.00	1020	80.00- 120.00	100.00
3.184	3.185	-0.001	3515636	1000.00	1020	61.42- 101.42	80.88
3.334	3.336	-0.002	2035326	1000.00	1030	27.15- 67.15	46.82
3.363	3.365	-0.002	2112762	1000.00	1020	28.91- 68.91	48.60
3.521	3.524	-0.003	2896482	1000.00	1050	47.18- 87.18	66.63
Average of Peak Amounts =					1.03e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.417	4.420	-0.003	6026178	1000.00	1090	80.00- 120.00	100.00
4.569	4.570	-0.001	7661314	1000.00	1070	106.73- 146.73	127.13
4.680	4.682	-0.002	5099145	1000.00	1080	63.73- 103.73	84.62
4.877	4.880	-0.003	6036822	1000.00	1040	78.70- 118.70	100.18
5.504	5.505	-0.001	9406378	1000.00	1040	133.18- 173.18	156.09
Average of Peak Amounts =					1.07e+03		

Data File: /chem/ecd2a.i/120409.b/069b6901.d
Date : 04-DEC-2009 21:01
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

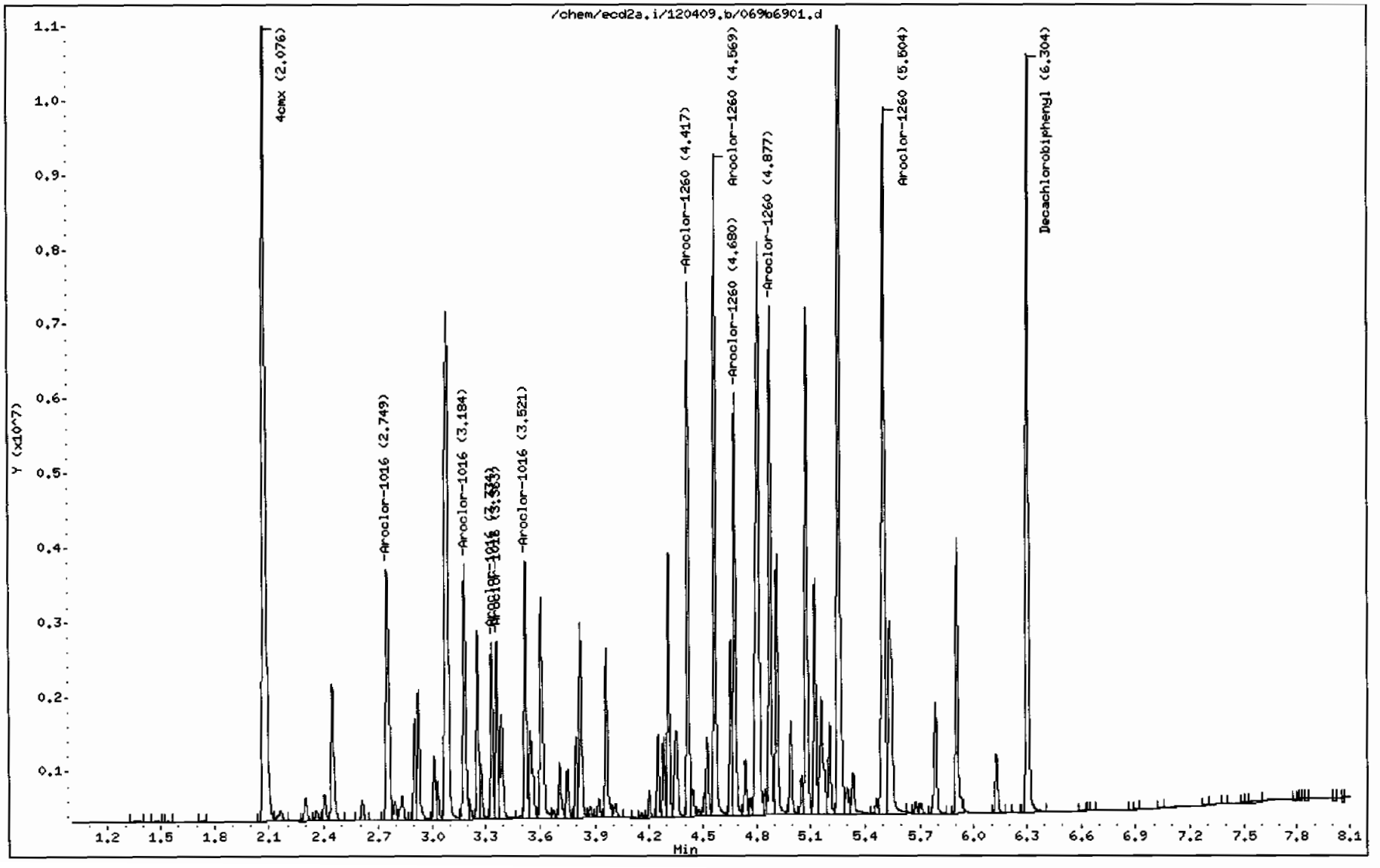

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/081f8101.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 04-DEC-2009 23:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 81 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.782	1.781	0.001	6381483	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.611	-0.001	4470411	100.000	81.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.283	2.282	0.001	2026301	1000.00	965	80.00- 120.00	100.00(M)
2.603	2.604	-0.001	4489109	1000.00	996	200.13- 240.13	221.54
2.694	2.695	-0.001	1764591	1000.00	969	67.04- 107.04	87.08
2.830	2.830	0.000	858313	1000.00	920	22.75- 62.75	42.36
2.980	2.980	0.000	1322592	1000.00	960	47.01- 87.01	65.27
Average of Peak Amounts =					962		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.019	-0.001	4246070	1000.00	1040	80.00- 120.00	100.00
4.290	4.290	0.000	2567686	1000.00	1020	40.62- 80.62	60.47
4.456	4.456	0.000	2617795	1000.00	1010	41.94- 81.94	61.65
4.668	4.668	0.000	6176760	1000.00	1020	125.52- 165.52	145.47
4.857	4.857	0.000	2914128	1000.00	1000	48.68- 88.68	68.63
Average of Peak Amounts =					1.02e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/081f8101.d

Date : 04-DEC-2009 23:14

Client ID: AR166008

Sample Info: IWAR091119-60 08

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

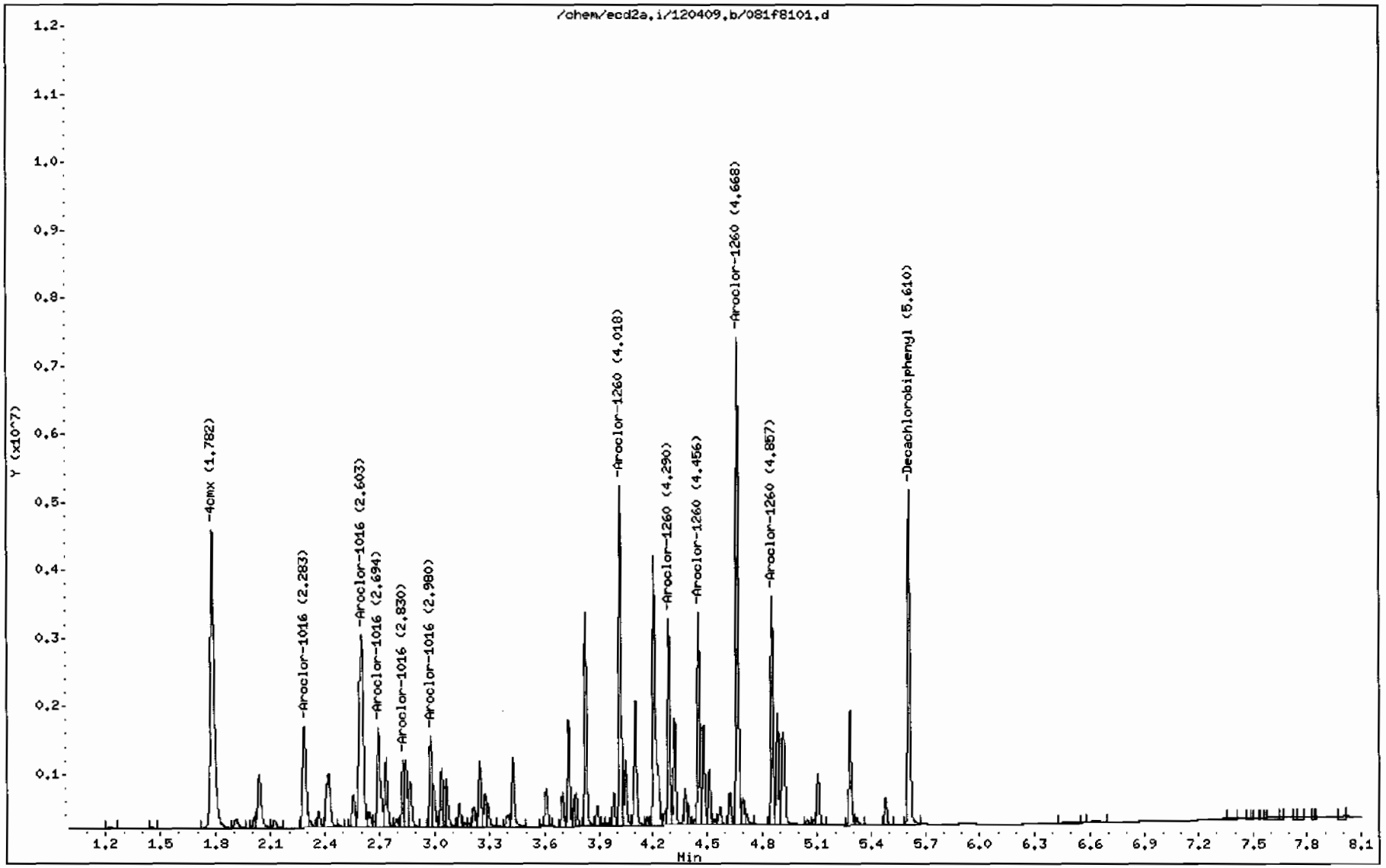

Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/081f8101.d
Operator: JAOC
Injection Date: 04-DEC-2009 23:14
Instrument: ecd2a.i
Client Sample ID: AR166008

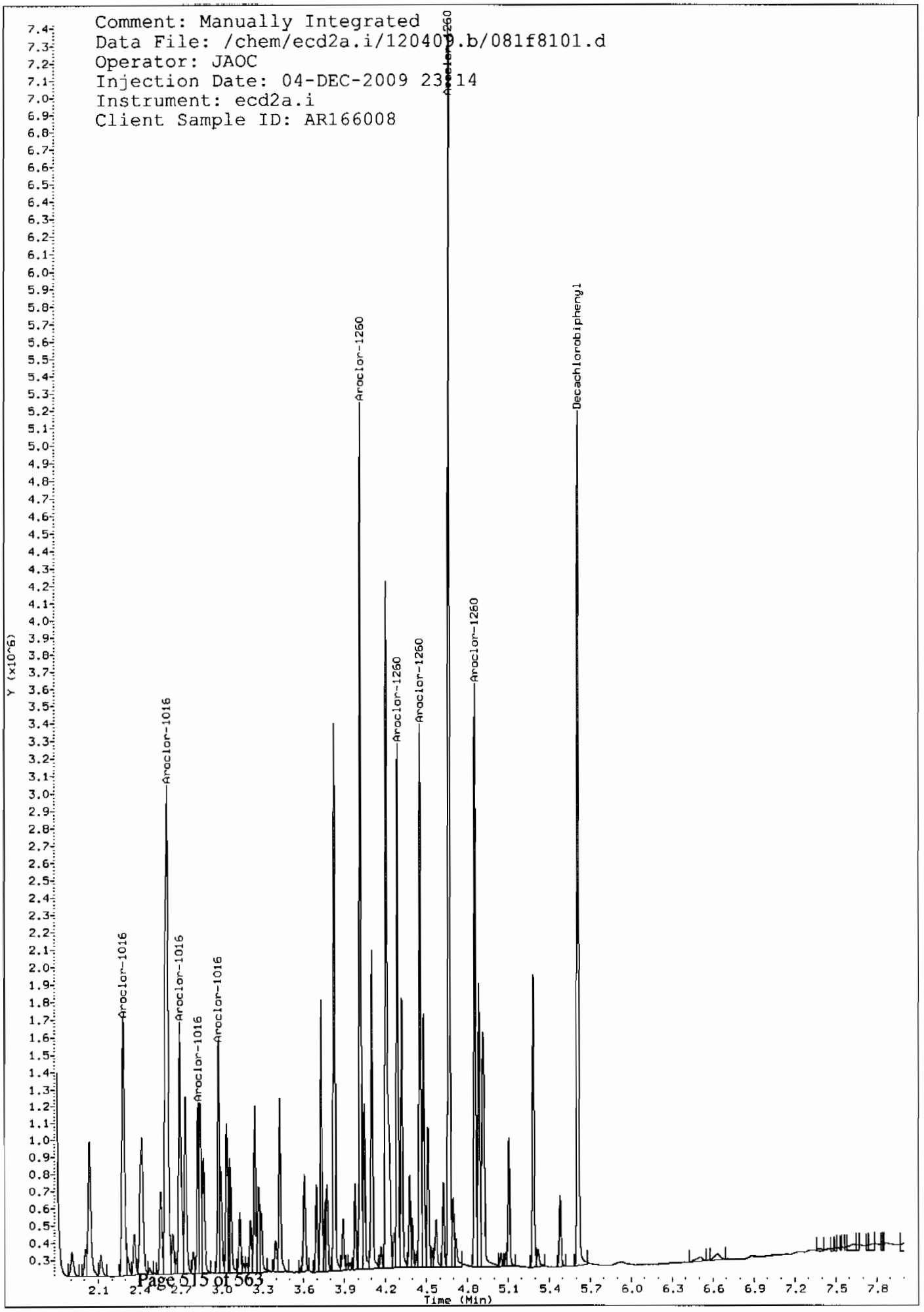

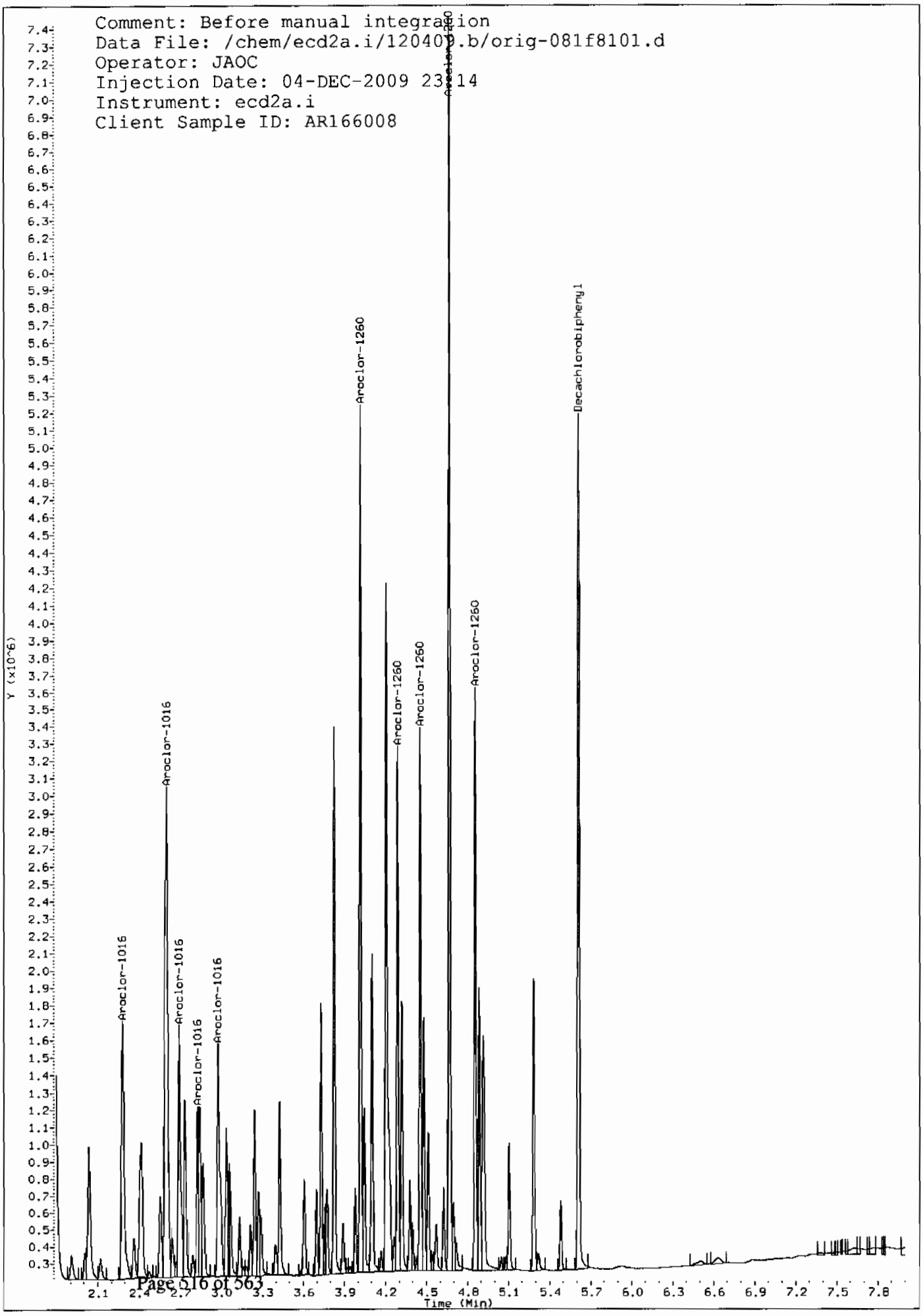
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-081f8101.d
Operator: JAOC
Injection Date: 04-DEC-2009 23:14
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/081b8101.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 04-DEC-2009 23:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 81 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.077	0.001	13906758	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9005449	100.000	82.9	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.753	2.752	0.001	4397292	1000.00	1030	80.00- 120.00	100.00
3.186	3.185	0.001	3566976	1000.00	1040	61.42- 101.42	81.12
3.337	3.336	0.001	2050811	1000.00	1040	27.15- 67.15	46.64
3.365	3.365	0.000	2131643	1000.00	1030	28.91- 68.91	48.48
3.523	3.524	-0.001	2915509	1000.00	1060	47.18- 87.18	66.30
Average of Peak Amounts =					1.04e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	5967374	1000.00	1080	80.00- 120.00	100.00
4.571	4.570	0.001	7545489	1000.00	1060	106.73- 146.73	126.45
4.682	4.682	0.000	5001321	1000.00	1060	63.73- 103.73	83.81
4.879	4.880	-0.001	5804649	1000.00	1000	78.70- 118.70	97.27
5.505	5.505	0.000	8954034	1000.00	990	133.18- 173.18	150.05
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120409.b/081b8101.d
Date : 04-DEC-2009 23:14
Client ID: AR166008
Sample Info: IWAR091119-60 08

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

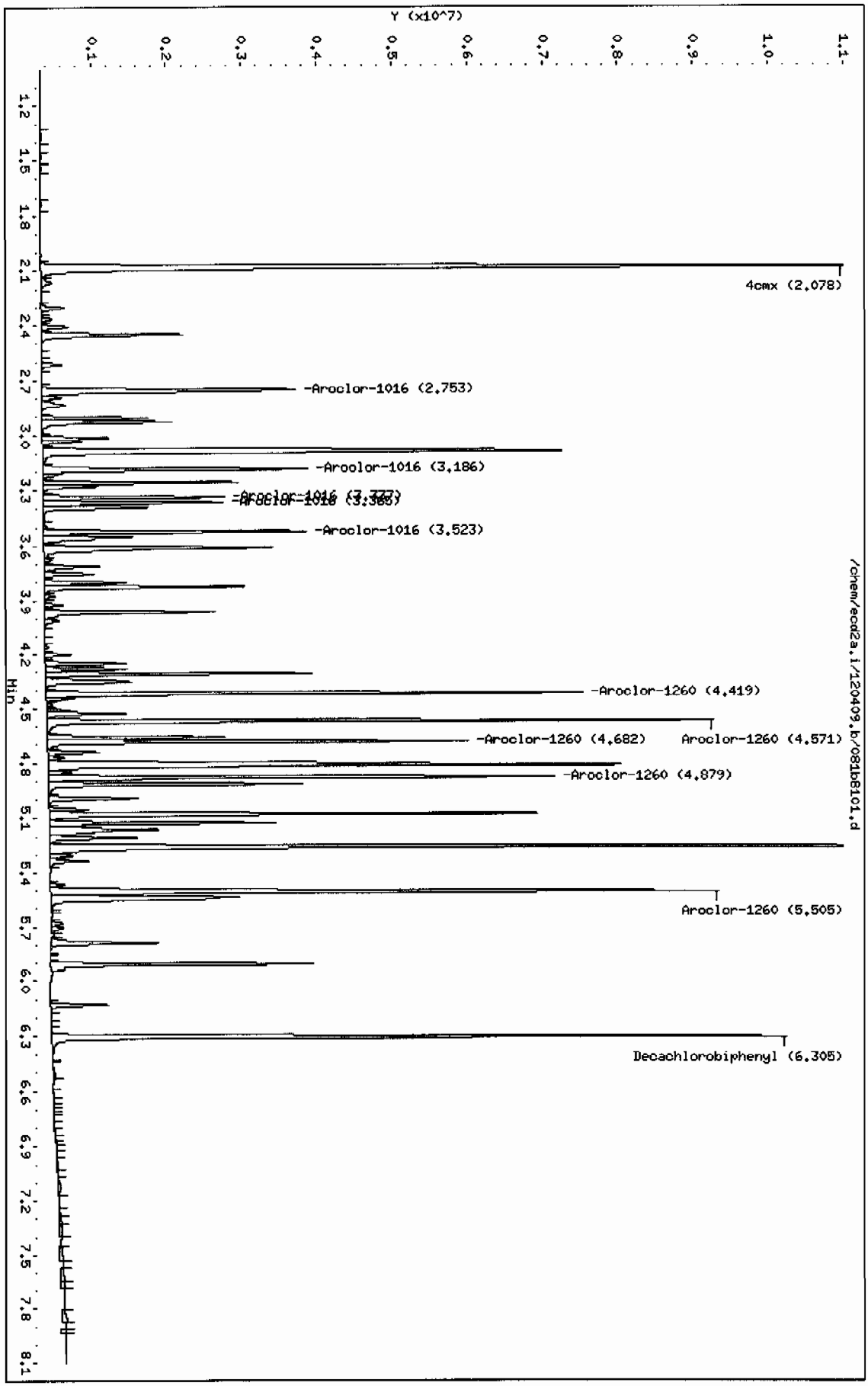

Page 1

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	ZZZZZ	ZZZZZ	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	ZZZZZ	ZZZZZ	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	ZZZZZ	ZZZZZ	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	ZZZZZ	ZZZZZ	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0807	1.78	5.61
02	AR166001	WAR091119-60	12/04/09	0818	1.78	5.61
03	AR125401	WAR091102-54	12/04/09	0829	1.78	5.61
04	AR124201	WAR091102-42	12/04/09	0840	1.78	5.61
05	AR124801	WAR091027-48	12/04/09	0851	1.78	5.61
06	AR123201	WAR090930-32	12/04/09	0902	1.78	5.61
07	AR122101	WAR091111-21	12/04/09	0914	1.78	5.61
08	AR126201	WAR091111-62	12/04/09	0925	1.78	5.61
09	AR126801	WAR091106-68	12/04/09	0936	1.78	5.61
10	DDTANALOGSTD	WAR091020-DD	12/04/09	0947		
11	PIBLK02	WAR090916-99	12/04/09	0958	1.78	5.61
12	ZZZZZ	ZZZZZ	12/04/09	1009	1.78	5.61
13	ZZZZZ	ZZZZZ	12/04/09	1020	1.78	5.61
14	AR166002	WAR091119-60	12/04/09	1031	1.78	5.61
15	PIBLK03	WAR090916-99	12/04/09	1042	1.78	5.61
16	ZZZZZ	ZZZZZ	12/04/09	1054	1.78	5.61
17	ZZZZZ	ZZZZZ	12/04/09	1105	1.78	5.61
18	ZZZZZ	ZZZZZ	12/04/09	1116	1.78	5.61
19	ZZZZZ	ZZZZZ	12/04/09	1127	1.78	5.61
20	ZZZZZ	ZZZZZ	12/04/09	1138	1.78	5.61
21	ZZZZZ	ZZZZZ	12/04/09	1149	1.78	5.61
22	ZZZZZ	ZZZZZ	12/04/09	1200	1.78	5.61
23	ZZZZZ	ZZZZZ	12/04/09	1211	1.78	5.61
24	ZZZZZ	ZZZZZ	12/04/09	1222	1.78	5.61
25	ZZZZZ	ZZZZZ	12/04/09	1233	1.78	5.61
26	AR166003	WAR091119-60	12/04/09	1244	1.78	5.61
27	PIBLK04	WAR090916-99	12/04/09	1255	1.78	5.61
28	ZZZZZ	ZZZZZ	12/04/09	1307	1.78	5.61
29	ZZZZZ	ZZZZZ	12/04/09	1318	1.78	5.61
30	ZZZZZ	ZZZZZ	12/04/09	1329	1.78	5.61
31	ZZZZZ	ZZZZZ	12/04/09	1340	1.78	5.61
32	ZZZZZ	ZZZZZ	12/04/09	1351	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	1402	1.78	5.61
02	ZZZZZ	ZZZZZ	12/04/09	1413	1.78	5.61
03	ZZZZZ	ZZZZZ	12/04/09	1424	1.78	5.61
04	ZZZZZ	ZZZZZ	12/04/09	1435	1.78	5.61
05	ZZZZZ	ZZZZZ	12/04/09	1452	1.77	5.61
06	AR166004	WAR091119-60	12/04/09	1503	1.78	5.61
07	PIBLK05	WAR090916-99	12/04/09	1514	1.78	5.61
08	ZZZZZ	ZZZZZ	12/04/09	1525	1.78	5.61
09	ZZZZZ	ZZZZZ	12/04/09	1536	1.78	5.61
10	ZZZZZ	ZZZZZ	12/04/09	1547	1.78	5.61
11	ZZZZZ	ZZZZZ	12/04/09	1559	1.78	5.61
12	ZZZZZ	ZZZZZ	12/04/09	1610	1.78	5.61
13	ZZZZZ	ZZZZZ	12/04/09	1621	1.78	5.61
14	ZZZZZ	ZZZZZ	12/04/09	1632	1.78	5.61
15	ZZZZZ	ZZZZZ	12/04/09	1643	1.78	5.61
16	ZZZZZ	ZZZZZ	12/04/09	1654	1.78	5.61
17	ZZZZZ	ZZZZZ	12/04/09	1705	1.78	5.61
18	AR166005	WAR091119-60	12/04/09	1721	1.78	5.61
19	PIBLK06	WAR090916-99	12/04/09	1732	1.78	5.61
20	ZZZZZ	ZZZZZ	12/04/09	1743	1.78	5.61
21	ZZZZZ	ZZZZZ	12/04/09	1754	1.78	5.61
22	ZZZZZ	ZZZZZ	12/04/09	1805	1.78	5.61
23	ZZZZZ	ZZZZZ	12/04/09	1816	1.78	5.61
24	ZZZZZ	ZZZZZ	12/04/09	1827	1.78	5.61
25	ZZZZZ	ZZZZZ	12/04/09	1838	1.78	5.61
26	ZZZZZ	ZZZZZ	12/04/09	1850	1.78	5.61
27	AR166006	WAR091119-60	12/04/09	1905	1.78	5.61
28	PIBLK07	WAR090916-99	12/04/09	1916	1.78	5.61
29	ZZZZZ	ZZZZZ	12/04/09	1927	1.78	5.61
30	ZZZZZ	ZZZZZ	12/04/09	1939	1.78	5.61
31	ZZZZZ	ZZZZZ	12/04/09	1950	1.78	5.61
32	ZZZZZ	ZZZZZ	12/04/09	2001	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	2012	1.78	5.61
02	ZZZZZ	ZZZZZ	12/04/09	2023	1.78	5.61
03	ZZZZZ	ZZZZZ	12/04/09	2034	1.78	5.61
04	ZZZZZ	ZZZZZ	12/04/09	2045	1.78	5.61
05	AR166007	WAR091119-60	12/04/09	2101	1.78	5.61
06	PIBLK08	WAR090916-99	12/04/09	2112	1.78	5.61
07	PBLK01	1201984179	12/04/09	2123	1.78	5.61
08	PBLK01LCS	1201984180	12/04/09	2134	1.78	5.61
09	RE03-09-14130	241827001	12/04/09	2145	1.78	5.61
10	RE03-10-2732	241827004	12/04/09	2157	1.78	5.61
11	RE03-10-2733	241827005	12/04/09	2208	1.78	5.61
12	RE03-10-2731	241827006	12/04/09	2219	1.78	5.61
13	ZZZZZ	ZZZZZ	12/04/09	2230	1.78	5.61
14	ZZZZZ	ZZZZZ	12/04/09	2241	1.78	5.61
15	ZZZZZ	ZZZZZ	12/04/09	2252	1.78	5.61
16	ZZZZZ	ZZZZZ	12/04/09	2303	1.78	5.61
17	AR166008	WAR091119-60	12/04/09	2314	1.78	5.61
18	PIBLK09	WAR090916-99	12/04/09	2326	1.78	5.61
19	ZZZZZ	ZZZZZ	12/04/09	2337	1.78	5.61
20	ZZZZZ	ZZZZZ	12/04/09	2348	1.78	5.61
21	ZZZZZ	ZZZZZ	12/04/09	2359	1.78	5.61
22	ZZZZZ	ZZZZZ	12/05/09	0010	1.78	5.61
23	ZZZZZ	ZZZZZ	12/05/09	0021	1.78	5.61
24	ZZZZZ	ZZZZZ	12/05/09	0032	1.78	5.61
25	ZZZZZ	ZZZZZ	12/05/09	0043	1.78	5.61
26	ZZZZZ	ZZZZZ	12/05/09	0055	1.78	5.61
27	ZZZZZ	ZZZZZ	12/05/09	0106	1.78	5.61
28	AR166009	WAR091119-60	12/05/09	0117	1.78	5.61
29	ZZZZZ	ZZZZZ	12/05/09	0128	1.78	5.61
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0807	2.08	6.31
02	AR166001	WAR091119-60	12/04/09	0818	2.08	6.31
03	AR125401	WAR091102-54	12/04/09	0829	2.08	6.31
04	AR124201	WAR091102-42	12/04/09	0840	2.08	6.31
05	AR124801	WAR091027-48	12/04/09	0851	2.08	6.31
06	AR123201	WAR090930-32	12/04/09	0902	2.08	6.31
07	AR122101	WAR091111-21	12/04/09	0914	2.08	6.31
08	AR126201	WAR091111-62	12/04/09	0925	2.08	6.31
09	AR126801	WAR091106-68	12/04/09	0936	2.08	6.30
10	DDTANALOGSTD	WAR091020-DD	12/04/09	0947		
11	PIBLK02	WAR090916-99	12/04/09	0958	2.08	6.30
12	ZZZZZ	ZZZZZ	12/04/09	1009	2.08	6.31
13	ZZZZZ	ZZZZZ	12/04/09	1020	2.08	6.31
14	AR166002	WAR091119-60	12/04/09	1031	2.08	6.30
15	PIBLK03	WAR090916-99	12/04/09	1042	2.08	6.31
16	ZZZZZ	ZZZZZ	12/04/09	1054	2.08	6.31
17	ZZZZZ	ZZZZZ	12/04/09	1105	2.08	6.30
18	ZZZZZ	ZZZZZ	12/04/09	1116	2.08	6.30
19	ZZZZZ	ZZZZZ	12/04/09	1127	2.08	6.30
20	ZZZZZ	ZZZZZ	12/04/09	1138	2.08	6.30
21	ZZZZZ	ZZZZZ	12/04/09	1149	2.08	6.30
22	ZZZZZ	ZZZZZ	12/04/09	1200	2.08	6.30
23	ZZZZZ	ZZZZZ	12/04/09	1211	2.08	6.30
24	ZZZZZ	ZZZZZ	12/04/09	1222	2.08	6.31
25	ZZZZZ	ZZZZZ	12/04/09	1233	2.08	6.30
26	AR166003	WAR091119-60	12/04/09	1244	2.08	6.30
27	PIBLK04	WAR090916-99	12/04/09	1255	2.08	6.31
28	ZZZZZ	ZZZZZ	12/04/09	1307	2.08	6.30
29	ZZZZZ	ZZZZZ	12/04/09	1318	2.08	6.30
30	ZZZZZ	ZZZZZ	12/04/09	1329	2.08	6.30
31	ZZZZZ	ZZZZZ	12/04/09	1340	2.07	6.30
32	ZZZZZ	ZZZZZ	12/04/09	1351	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	1402	2.08	6.30
02	ZZZZZ	ZZZZZ	12/04/09	1413	2.08	6.30
03	ZZZZZ	ZZZZZ	12/04/09	1424	2.08	6.31
04	ZZZZZ	ZZZZZ	12/04/09	1435	2.08	6.31
05	ZZZZZ	ZZZZZ	12/04/09	1452	2.07	6.30
06	AR166004	WAR091119-60	12/04/09	1503	2.08	6.31
07	PIBLK05	WAR090916-99	12/04/09	1514	2.08	6.30
08	ZZZZZ	ZZZZZ	12/04/09	1525	2.08	6.30
09	ZZZZZ	ZZZZZ	12/04/09	1536	2.08	6.30
10	ZZZZZ	ZZZZZ	12/04/09	1547	2.08	6.30
11	ZZZZZ	ZZZZZ	12/04/09	1559	2.08	6.30
12	ZZZZZ	ZZZZZ	12/04/09	1610	2.08	6.30
13	ZZZZZ	ZZZZZ	12/04/09	1621	2.08	6.31
14	ZZZZZ	ZZZZZ	12/04/09	1632	2.08	6.30
15	ZZZZZ	ZZZZZ	12/04/09	1643	2.08	6.30
16	ZZZZZ	ZZZZZ	12/04/09	1654	2.08	6.31
17	ZZZZZ	ZZZZZ	12/04/09	1705	2.08	6.31
18	AR166005	WAR091119-60	12/04/09	1721	2.07	6.30
19	PIBLK06	WAR090916-99	12/04/09	1732	2.08	6.30
20	ZZZZZ	ZZZZZ	12/04/09	1743	2.08	6.30
21	ZZZZZ	ZZZZZ	12/04/09	1754	2.08	6.30
22	ZZZZZ	ZZZZZ	12/04/09	1805	2.08	6.30
23	ZZZZZ	ZZZZZ	12/04/09	1816	2.08	6.30
24	ZZZZZ	ZZZZZ	12/04/09	1827	2.08	6.30
25	ZZZZZ	ZZZZZ	12/04/09	1838	2.08	6.30
26	ZZZZZ	ZZZZZ	12/04/09	1850	2.08	6.31
27	AR166006	WAR091119-60	12/04/09	1905	2.08	6.30
28	PIBLK07	WAR090916-99	12/04/09	1916	2.08	6.30
29	ZZZZZ	ZZZZZ	12/04/09	1927	2.08	6.31
30	ZZZZZ	ZZZZZ	12/04/09	1939	2.08	6.31
31	ZZZZZ	ZZZZZ	12/04/09	1950	2.08	6.30
32	ZZZZZ	ZZZZZ	12/04/09	2001	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-668

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	2012	2.08	6.31
02	ZZZZZ	ZZZZZ	12/04/09	2023	2.08	6.31
03	ZZZZZ	ZZZZZ	12/04/09	2034	2.08	6.31
04	ZZZZZ	ZZZZZ	12/04/09	2045	2.08	6.31
05	AR166007	WAR091119-60	12/04/09	2101	2.08	6.30
06	PIBLK08	WAR090916-99	12/04/09	2112	2.08	6.31
07	PBLK01	1201984179	12/04/09	2123	2.08	6.31
08	PBLK01LCS	1201984180	12/04/09	2134	2.08	6.30
09	RE03-09-14130	241827001	12/04/09	2145	2.08	6.30
10	RE03-10-2732	241827004	12/04/09	2157	2.08	6.30
11	RE03-10-2733	241827005	12/04/09	2208	2.08	6.31
12	RE03-10-2731	241827006	12/04/09	2219	2.08	6.30
13	ZZZZZ	ZZZZZ	12/04/09	2230	2.08	6.31
14	ZZZZZ	ZZZZZ	12/04/09	2241	2.08	6.30
15	ZZZZZ	ZZZZZ	12/04/09	2252	2.08	6.30
16	ZZZZZ	ZZZZZ	12/04/09	2303	2.08	6.31
17	AR166008	WAR091119-60	12/04/09	2314	2.08	6.31
18	PIBLK09	WAR090916-99	12/04/09	2326	2.08	6.31
19	ZZZZZ	ZZZZZ	12/04/09	2337	2.08	6.30
20	ZZZZZ	ZZZZZ	12/04/09	2348	2.08	6.31
21	ZZZZZ	ZZZZZ	12/04/09	2359	2.08	6.31
22	ZZZZZ	ZZZZZ	12/05/09	0010	2.08	6.31
23	ZZZZZ	ZZZZZ	12/05/09	0021	2.08	6.31
24	ZZZZZ	ZZZZZ	12/05/09	0032	2.08	6.31
25	ZZZZZ	ZZZZZ	12/05/09	0043	2.08	6.30
26	ZZZZZ	ZZZZZ	12/05/09	0055	2.08	6.31
27	ZZZZZ	ZZZZZ	12/05/09	0106	2.08	6.31
28	AR166009	WAR091119-60	12/05/09	0117	2.08	6.31
29	PIBLK10	WAR090916-99	12/05/09	0128	2.08	6.31
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10–668 **Client ID:** LCS for batch 927948

Lab Sample ID: 1201984180

Data File: 072f7201.d **Data File:** 072b7201.d
Inst: ECD2A.I_1 **Inst:** ECD2A.I_2
Column: CLP1 **Column:** CLP2
Analyzed: 04–DEC–09 21:34 **Analyzed:** 04–DEC–09 21:34

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							5.71
Column 1	1	2.28	2.25 – 2.31	21.2		ug/kg	
	2	2.6	2.57 – 2.63	21.3		ug/kg	
	3	2.69	2.66 – 2.72	21.2		ug/kg	
	4	2.83	2.8 – 2.86	20.3		ug/kg	
	5	2.98	2.95 – 3.01	21.2		ug/kg	
					21.1		
Column 2	1	2.75	2.72 – 2.78	22.3		ug/kg	
	2	3.19	3.16 – 3.22	22.3		ug/kg	
	3	3.34	3.31 – 3.37	22.8		ug/kg	
	4	3.36	3.33 – 3.39	21.3		ug/kg	
	5	3.52	3.49 – 3.55	22.7		ug/kg	
					22.3		
Aroclor–1260							2.95
Column 1	1	4.02	3.99 – 4.05	23.3		ug/kg	
	2	4.29	4.26 – 4.32	22.9		ug/kg	
	3	4.46	4.43 – 4.49	23.1		ug/kg	
	4	4.67	4.64 – 4.7	23.4		ug/kg	
	5	4.86	4.83 – 4.89	22.9		ug/kg	
					23.1		
Column 2	1	4.42	4.39 – 4.45	24.3		ug/kg	
	2	4.57	4.54 – 4.6	24		ug/kg	
	3	4.68	4.65 – 4.71	23.9		ug/kg	
	4	4.88	4.85 – 4.91	23.2		ug/kg	
	5	5.5	5.48 – 5.54	23.6		ug/kg	
					23.8		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984179**				
Client Sample:	**QC for batch 927948**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927948**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**927953**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:23**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:14**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**071f7101–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	071b7101–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.33	ug/kg	1.11	3.33	1
11104–28–2	Aroclor–1221	U	3.33	ug/kg	1.11	3.33	1
11141–16–5	Aroclor–1232	U	3.33	ug/kg	1.11	3.33	1
53469–21–9	Aroclor–1242	U	3.33	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/071f7101.d
Lab Smp Id: 1201984179 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 21:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984179|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 71 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	8868277	153.666	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	7333895	133.759	4.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/071f7101.d
Date : 04-DEC-2009 21:23
Client ID: PBLK01
Sample Info: !12019841791!
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

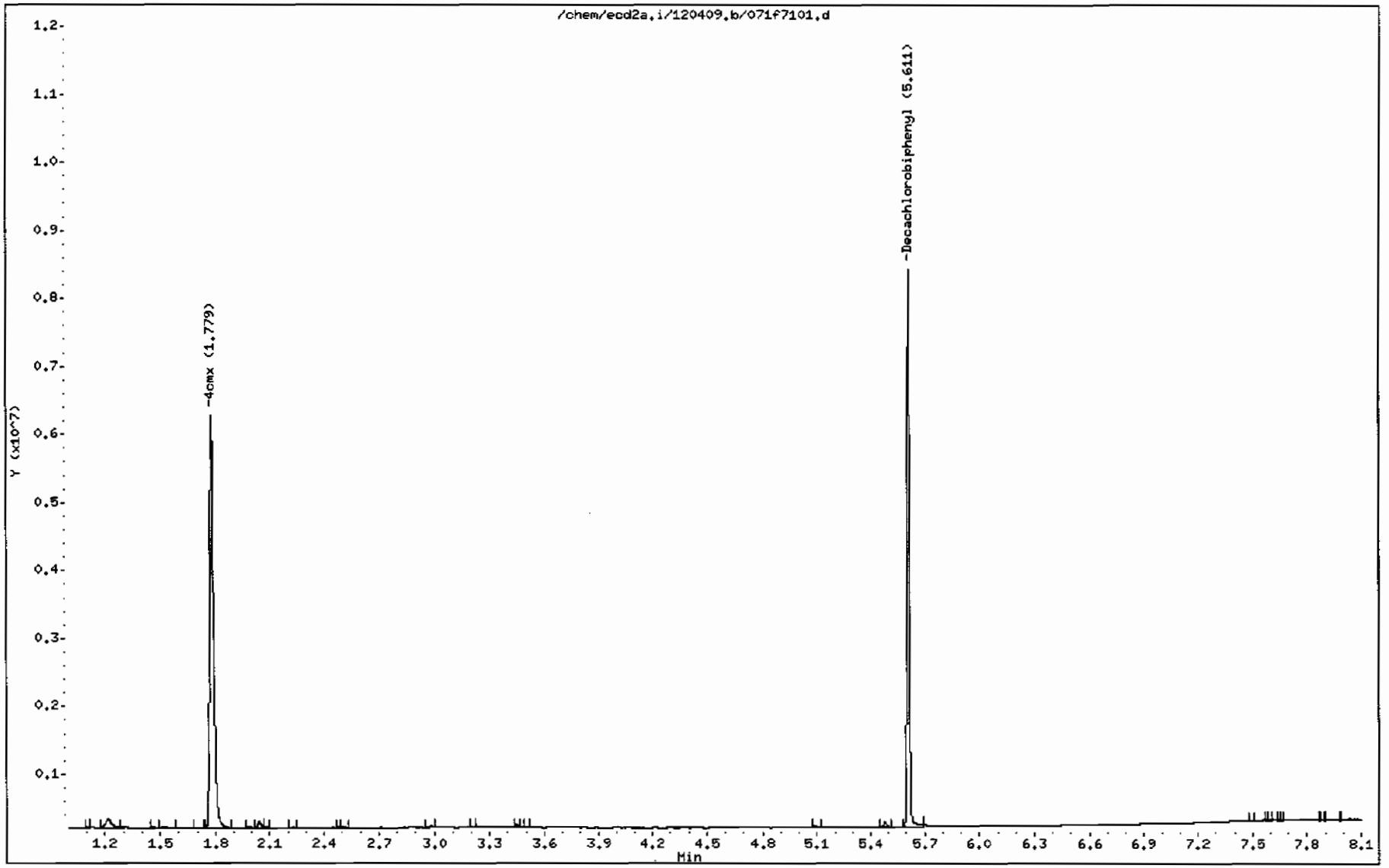

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/071b7101.d
Lab Smp Id: 1201984179 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 21:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984179|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 71 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	19549468	165.393	5.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15517120	142.829	4.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/071b7101.d
Date : 04-DEC-2009 21:23
Client ID: PBLK01
Sample Info: |1201984179|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

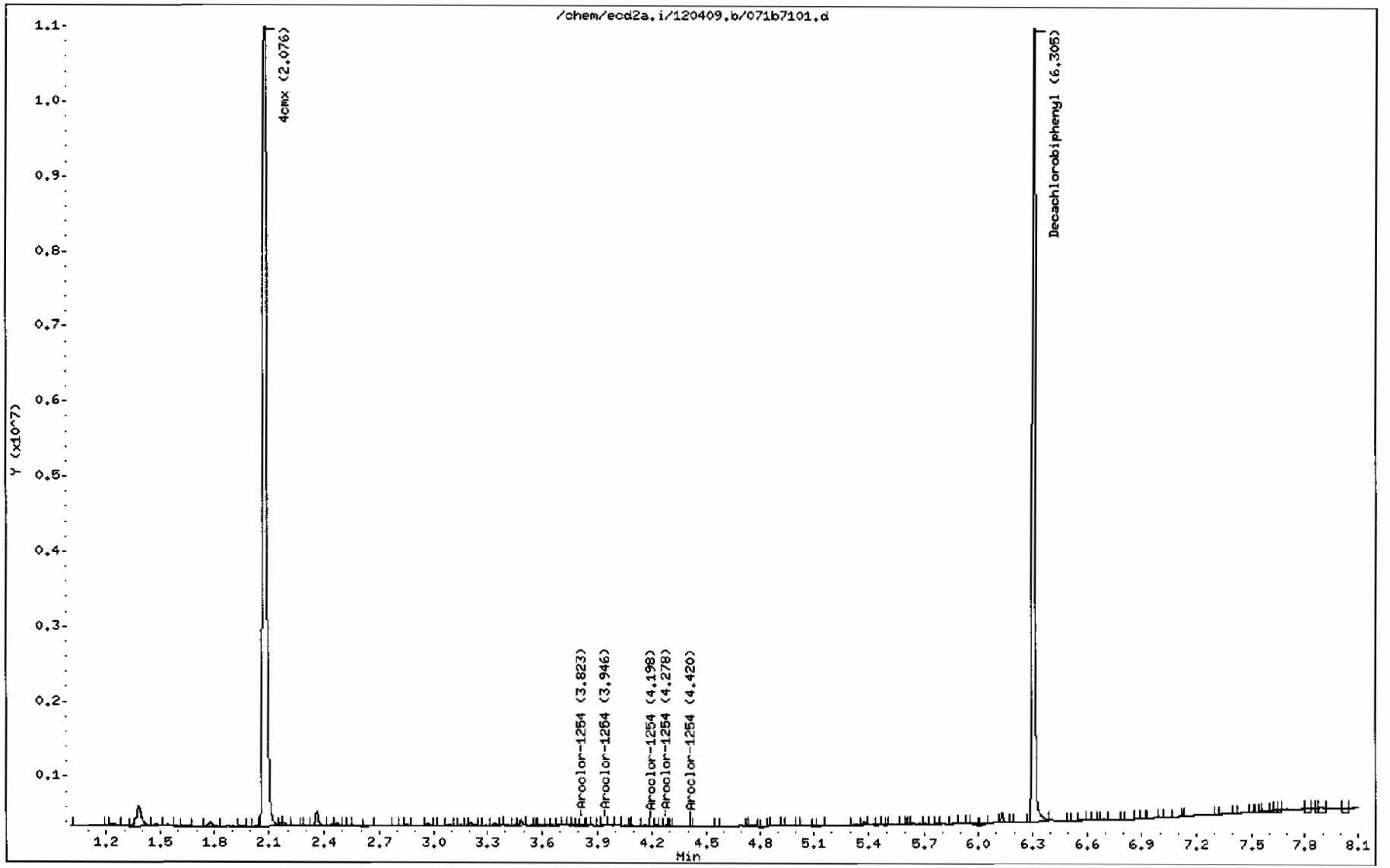

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-668**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984180**				
Client Sample:	**QC for batch 927948**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927948**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**927953**	**Inst:**	**ECD2A.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 21:34**	**Analyst:**	**JAOC**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:14**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**072f7201-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	072b7201-1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		22.3	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		23.8	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/072f7201.d
Lab Smp Id: 1201984180 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 21:34
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984180|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 72 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	7865243	136.286	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.611	-0.001	6184829	112.802	3.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.282	-0.001	1338462	637.422	21.2	80.00- 120.00	100.00(M)
2.604	2.604	0.000	2876819	638.653	21.3	200.13- 240.13	203.31
2.694	2.695	-0.001	1159874	637.220	21.2	67.04- 107.04	81.97
2.829	2.830	-0.001	567148	607.952	20.3	22.75- 62.75	40.08
2.980	2.980	0.000	878018	637.111	21.2	47.01- 87.01	87.51

Average of Peak Concentrations = 21.0

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	2841902	698.806	23.3	80.00- 120.00	100.00
4.289	4.290	-0.001	1735637	686.479	22.9	40.62- 80.62	61.07
4.455	4.456	-0.001	1788964	692.537	23.1	41.94- 81.94	62.95
4.668	4.668	0.000	4236252	701.819	23.4	125.52- 165.52	149.06
4.856	4.857	-0.001	2004914	688.513	23.0	48.68- 88.68	70.55
			Average of Peak Concentrations =		23.1		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/072f7201.d

Page 1

Date : 04-DEC-2009 21:34

Client ID: PBLK01LCS

Instrument: ecd2a.i

Sample Info: |1201984180|1|

Volume Injected (uL): 1.0

Operator: JAOC

Column phase: CLP1

Column diameter: 0.25

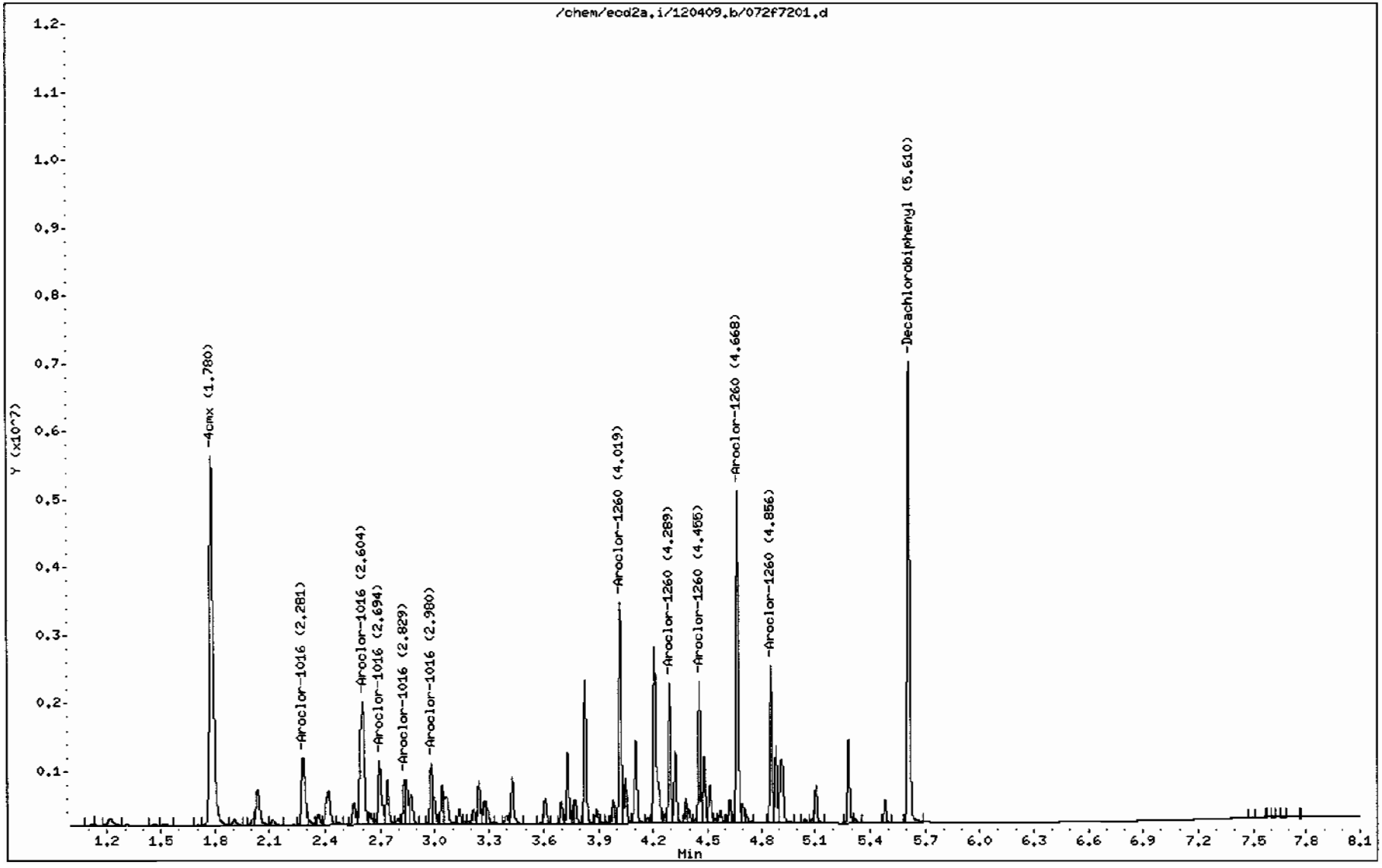

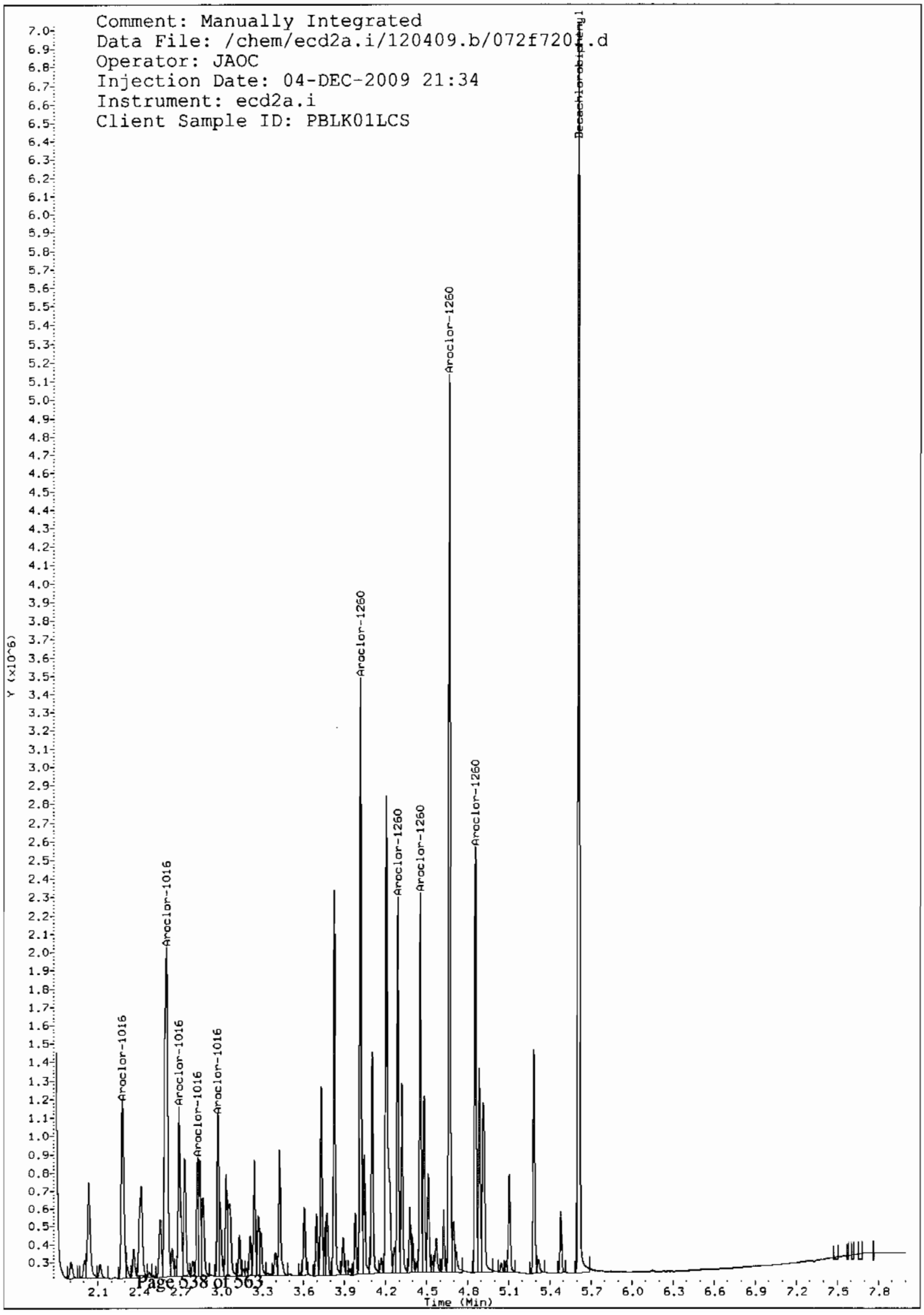
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/072f7201.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:34
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
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Y (x10^6)
Time (Min)

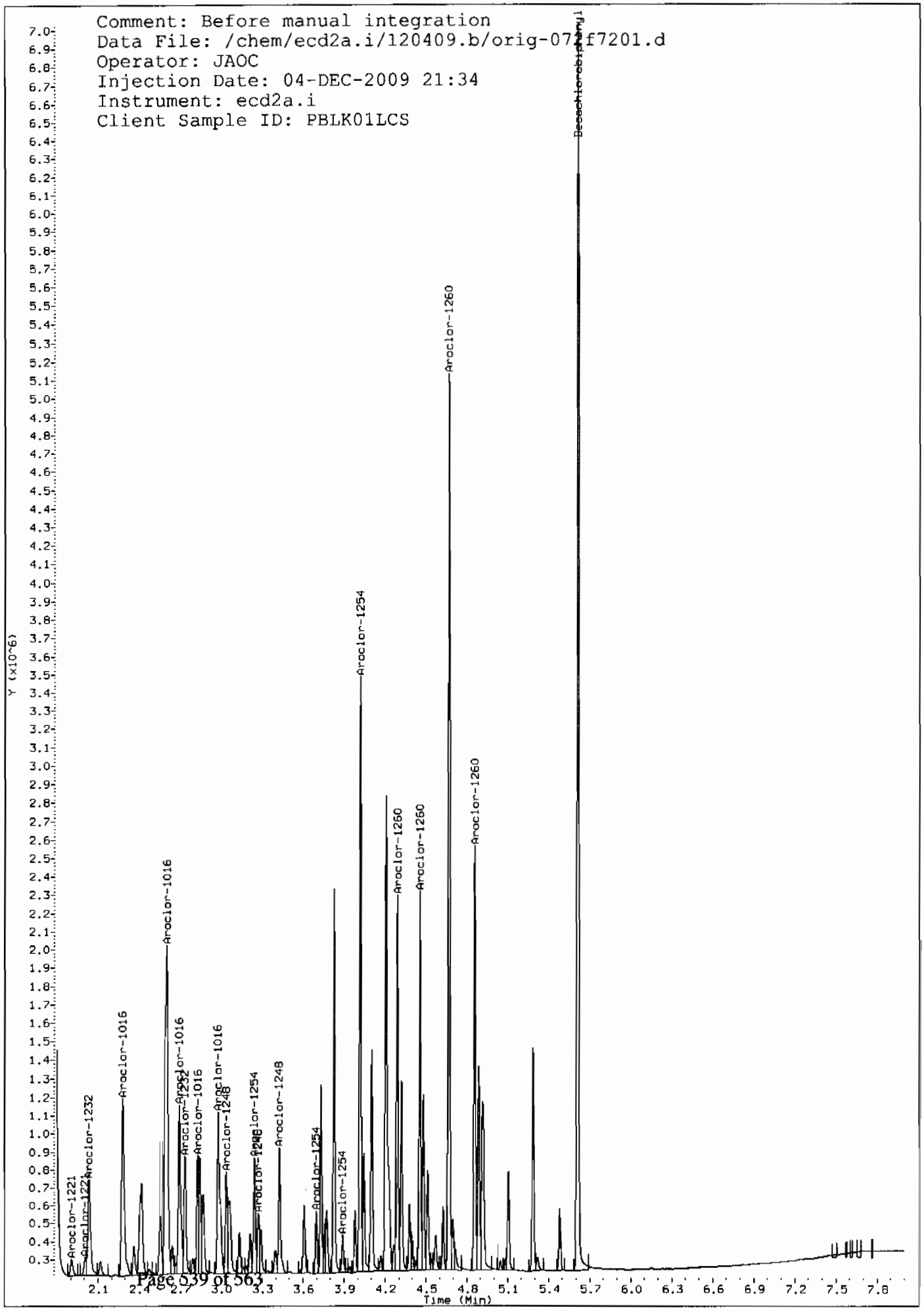
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-07f7201.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:34
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1221
Aroclor-1232
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/072b7201.d
Lab Smp Id: 1201984180 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 21:34
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984180|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 72 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-668.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	17292482	146.299	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	13080299	120.399	4.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	2850023	669.326	22.3	80.00- 120.00	100.00
3.185	3.185	0.000	2306701	669.641	22.3	61.42- 101.42	80.94
3.336	3.336	0.000	1354827	684.433	22.8	27.15- 67.15	47.54
3.364	3.365	-0.001	1317836	639.337	21.3	28.91- 68.91	46.24
3.523	3.524	-0.001	1876560	681.352	22.7	47.18- 87.18	65.84

Average of Peak Concentrations = 22.3

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	4012668	727.903	24.3	80.00- 120.00	100.00
4.570	4.570	0.000	5144082	721.271	24.0	106.73- 146.73	128.20
4.682	4.682	0.000	3396174	717.800	23.9	63.73- 103.73	84.64
4.879	4.880	-0.001	4034274	695.486	23.2	78.70- 118.70	100.54
5.504	5.505	-0.001	6413956	709.455	23.6	133.18- 173.18	159.84
			Average of Peak Concentrations =		23.8		

Data File: /chem/ecd2a.i/120409.b/072b7201.d

Date : 04-DEC-2009 21:34

Client ID: PBLK01LCS

Sample Info: |120198418011|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

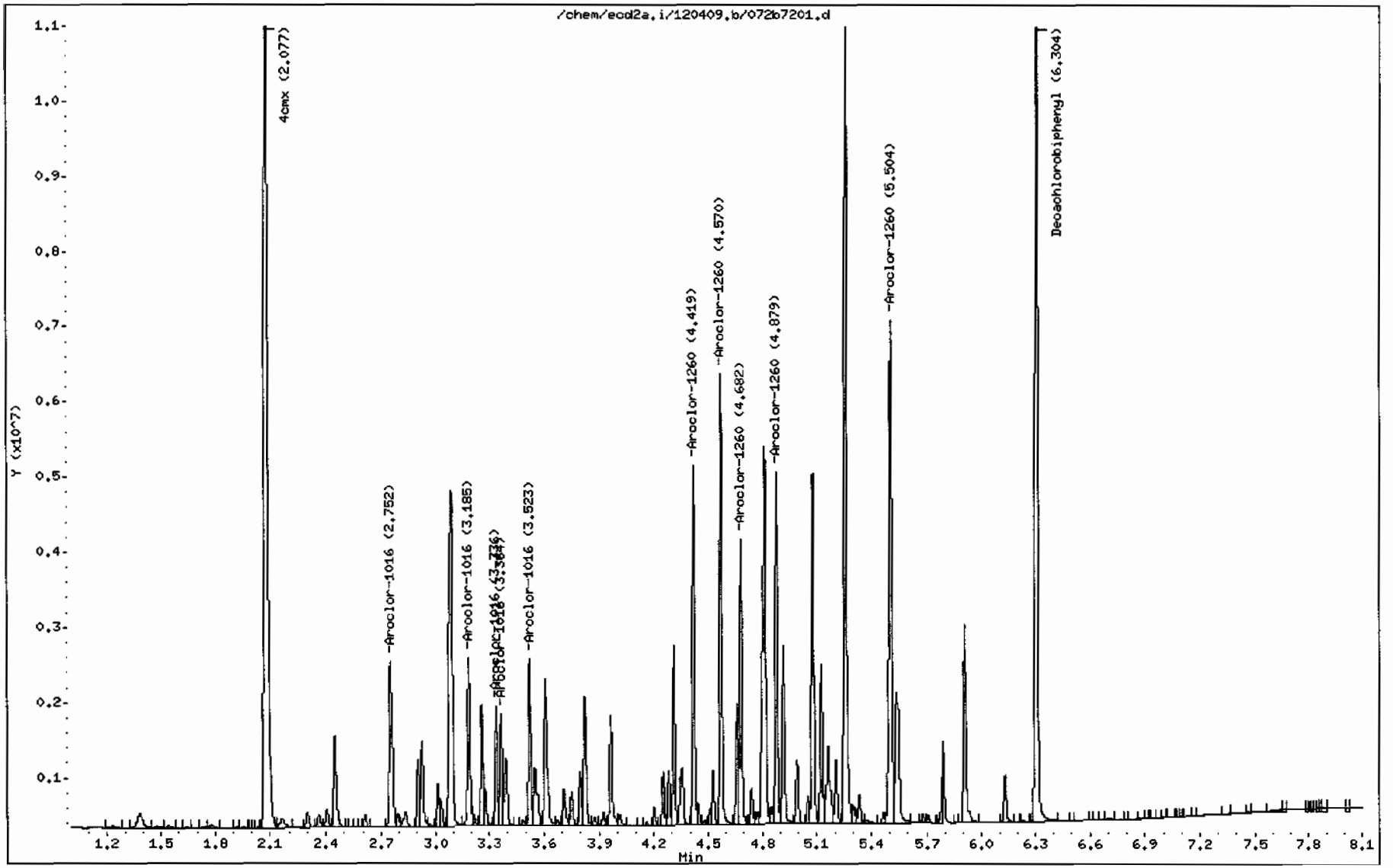

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-6B	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0	DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0	CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0	PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0	CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362	1.0	QC A	UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362	1.0	LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809	1.0		PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/07/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:120409 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	04-DEC-2009 08:07		120409	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	04-DEC-2009 08:18		120409	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	04-DEC-2009 08:29		120409	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	04-DEC-2009 08:40		120409	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	04-DEC-2009 08:51		120409	1.0		PASSES BOTH COLUMNS
006f0601.d	WAR090930-32	JAOC	04-DEC-2009 09:02		120409	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	04-DEC-2009 09:14		120409	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	04-DEC-2009 09:25		120409	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	04-DEC-2009 09:36		120409	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	JAOC	04-DEC-2009 09:47		120409	1.0		DDT
011f1101.d	WAR090916-99 02	JAOC	04-DEC-2009 09:58		120409	1.0		CLEAN
012f1201.d	241423004	JAOC	04-DEC-2009 10:09	926729	10-578	50.0	LANL	UPLOAD BOTH, USE HIGHER
013f1301.d	241423005	JAOC	04-DEC-2009 10:20	926729	10-578	1.0	LANL	UPLOAD BOTH, USE HIGHER
014f1401.d	WAR091119-60 02	JAOC	04-DEC-2009 10:31		120409	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090916-99 03	JAOC	04-DEC-2009 10:42		120409	1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/120409.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1201982181	JAOC	04-DEC-2009 10:54	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES (MB FAILS LIMITS ON ONE COLUMN)

017f1701.d	1201982184	JAOC	04-DEC-2009 11:05	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
018f1801.d	241451001	JAOC	04-DEC-2009 11:16	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
019f1901.d	241451002	JAOC	04-DEC-2009 11:27	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
020f2001.d	241451003	JAOC	04-DEC-2009 11:38	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
021f2101.d	1201982182	JAOC	04-DEC-2009 11:49	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
022f2201.d	1201982183	JAOC	04-DEC-2009 12:00	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
023f2301.d	241451004	JAOC	04-DEC-2009 12:11	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
024f2401.d	241591001	JAOC	04-DEC-2009 12:22	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
025f2501.d	241591002	JAOC	04-DEC-2009 12:33	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
026f2601.d	WAR091119-60 03	JAOC	04-DEC-2009 12:44		120409	1.0		PASSES BOTH COLUMNS
027f2701.d	WAR090916-99 04	JAOC	04-DEC-2009 12:55		120409	1.0		CLEAN
028f2801.d	241591003	JAOC	04-DEC-2009 13:07	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
029f2901.d	241591004	JAOC	04-DEC-2009 13:18	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
030f3001.d	241616001	JAOC	04-DEC-2009 13:29	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
031f3101.d	241616002	JAOC	04-DEC-2009 13:40	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
032f3201.d	241616003	JAOC	04-DEC-2009 13:51	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
033f3301.d	241616004	JAOC	04-DEC-2009 14:02	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
034f3401.d	241616005	JAOC	04-DEC-2009 14:13	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
035f3501.d	241649001	JAOC	04-DEC-2009 14:24	927105	241649	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241649002	JAOC	04-DEC-2009 14:35	927105	241649	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
037f3701.d	241649001	JAOC	04-DEC-2009 14:52	927105	241649	5.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
038f3801.d	WAR091119-60 04	JAOC	04-DEC-2009 15:03		120409	1.0		PASSES BOTH COLUMNS
039f3901.d	WAR090916-99 05	JAOC	04-DEC-2009 15:14		120409	1.0		CLEAN
040f4001.d	1201982189	JAOC	04-DEC-2009 15:25	927108	241765	1.0	QC A	UPLOAD BOTH, USE HIGHER

041f4101.d	1201982192	JAOC	04-DEC-2009 15:36	927108	241765	1.0	QC A	UPLOAD BOTH, USE HIGHER
042f4201.d	241765001	JAOC	04-DEC-2009 15:47	927108	241765	5.0	SAIC	UPLOAD BOTH, USE HIGHER
043f4301.d	241765002	JAOC	04-DEC-2009 15:59	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
044f4401.d	241765003	JAOC	04-DEC-2009 16:10	927108	241765	25.0	SAIC	UPLOAD BOTH, USE HIGHER
045f4501.d	241765004	JAOC	04-DEC-2009 16:21	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
046f4601.d	241765005	JAOC	04-DEC-2009 16:32	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
047f4701.d	241765006	JAOC	04-DEC-2009 16:43	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
048f4801.d	241765007	JAOC	04-DEC-2009 16:54	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
049f4901.d	241765008	JAOC	04-DEC-2009 17:05	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
050f5001.d	WAR091119-60 05	JAOC	04-DEC-2009 17:21		120409	1.0		PASSES BOTH COLUMNS
051f5101.d	WAR090916-99 06	JAOC	04-DEC-2009 17:32		120409	1.0		CLEAN
052f5201.d	241765009	JAOC	04-DEC-2009 17:43	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
053f5301.d	241765010	JAOC	04-DEC-2009 17:54	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
054f5401.d	241853001	JAOC	04-DEC-2009 18:05	927108	241853	5.0	SAIC	UPLOAD BOTH, USE HIGHER
055f5501.d	241853002	JAOC	04-DEC-2009 18:16	927108	241853	5.0	SAIC	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241853003	JAOC	04-DEC-2009 18:27	927108	241853	1.0	SAIC	UPLOAD BOTH, USE HIGHER
057f5701.d	1201982190	JAOC	04-DEC-2009 18:38	927108	241853	1.0	QC A	UPLOAD BOTH, USE HIGHER
058f5801.d	1201982191	JAOC	04-DEC-2009 18:50	927108	241853	1.0	QC A	UPLOAD BOTH, USE HIGHER
059f5901.d	WAR091119-60 06	JAOC	04-DEC-2009 19:05		120409	1.0		PASSES BOTH COLUMNS
060f6001.d	WAR090916-99 07	JAOC	04-DEC-2009 19:16		120409	1.0		CLEAN
061f6101.d	1201982301	JAOC	04-DEC-2009 19:27	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER (HAS HITS BELOW PQL BUT ABOVE MDL, NO HITS IN SAMPLES)
062f6201.d	1201982304	JAOC	04-DEC-2009 19:39	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	241886001	JAOC	04-DEC-2009 19:50	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER
064f6401.d	241886002	JAOC	04-DEC-2009 20:01	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER

065f6501.d	241886003	JAOC	04-DEC-2009 20:12	927182	241886	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
066f6601.d	241886004	JAOC	04-DEC-2009 20:23	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER
067f6701.d	1201982302	JAOC	04-DEC-2009 20:34	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
068f6801.d	1201982303	JAOC	04-DEC-2009 20:45	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
069f6901.d	WAR091119-60 07	JAOC	04-DEC-2009 21:01		120409	1.0		PASSES BOTH COLUMNS
070f7001.d	WAR090916-99 08	JAOC	04-DEC-2009 21:12		120409	1.0		CLEAN
071f7101.d	1201984179	JAOC	04-DEC-2009 21:23	927953	10-668	1.0	QC A	UPLOAD BOTH, USE HIGHER
072f7201.d	1201984180	JAOC	04-DEC-2009 21:34	927953	10-668	1.0	QC A	UPLOAD BOTH, USE HIGHER
073f7301.d	241827001	JAOC	04-DEC-2009 21:45	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
074f7401.d	241827004	JAOC	04-DEC-2009 21:57	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241827005	JAOC	04-DEC-2009 22:08	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241827006	JAOC	04-DEC-2009 22:19	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241838002	JAOC	04-DEC-2009 22:30	927953	10-670	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241900001	JAOC	04-DEC-2009 22:41	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241900002	JAOC	04-DEC-2009 22:52	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241900003	JAOC	04-DEC-2009 23:03	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	WAR091119-60 08	JAOC	04-DEC-2009 23:14		120409	1.0		PASSES BOTH COLUMNS
082f8201.d	WAR090916-99 09	JAOC	04-DEC-2009 23:26		120409	1.0		CLEAN
083f8301.d	241900004	JAOC	04-DEC-2009 23:37	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	241900006	JAOC	04-DEC-2009 23:48	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
085f8501.d	241903002	JAOC	04-DEC-2009 23:59	927953	10-690	5.0	LANL	UPLOAD BOTH, USE HIGHER
086f8601.d	241907001	JAOC	05-DEC-2009 00:10	927953	10-692	1.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	241907002	JAOC	05-DEC-2009 00:21	927953	10-692	1.0	LANL	UPLOAD BOTH, USE HIGHER
088f8801.d	241911001	JAOC	05-DEC-2009 00:32	927953	10-694	1.0	LANL	UPLOAD BOTH, USE HIGHER
089f8901.d	1201984181	JAOC	05-DEC-2009 00:43	927953	10-694	1.0	QC A	UPLOAD BOTH, USE HIGHER

090f9001.d	1201984182	JAOC	05-DEC-2009 00:55	927953	10-694		1.0	QC A	UPLOAD BOTH, USE HIGHER
091f9101.d	241911002	JAOC	05-DEC-2009 01:06	927953	10-694		1.0	LANL	UPLOAD BOTH, USE HIGHER
092f9201.d	WAR091119-60 09	JAOC	05-DEC-2009 01:17		120409		1.0		PASSES BOTH COLUMNS
093f9301.d	WAR090916-99 10	JAOC	05-DEC-2009 01:28		120409		1.0		CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/089b8901.d
Lab Smp Id: 1201984181 Client Smp ID: WST49-10-5432MS
Inj Date : 05-DEC-2009 00:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984181|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 89 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	15978556	135.183	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11724476	107.919	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	2565077	602.406	20.3	80.00- 120.00	100.00
3.186	3.185	0.001	2267683	658.314	22.2	61.42- 101.42	88.41
3.336	3.336	0.000	1256029	634.523	21.4	27.15- 67.15	48.97
3.365	3.365	0.000	1288685	625.195	21.0	28.91- 68.91	50.24
3.523	3.524	-0.001	1783806	647.675	21.8	47.18- 87.18	69.54

Average of Peak Concentrations = 21.3

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	3930398	712.979	24.0	80.00- 120.00	100.00
4.571	4.570	0.001	4998630	700.877	23.6	106.73- 146.73	127.18
4.681	4.682	-0.001	3264150	689.896	23.2	63.73- 103.73	83.05
4.879	4.880	-0.001	3881897	669.217	22.5	78.70- 118.70	98.77
5.505	5.505	0.000	6056414	669.907	22.5	133.18- 173.18	154.09
			Average of Peak Concentrations =		23.2		

Data File: /chem/ecd2a.i/120409.b/089b8901.d

Date : 05-DEC-2009 00:43

Client ID: WST49-10-5432MS

Sample Info: |120198418111|

Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

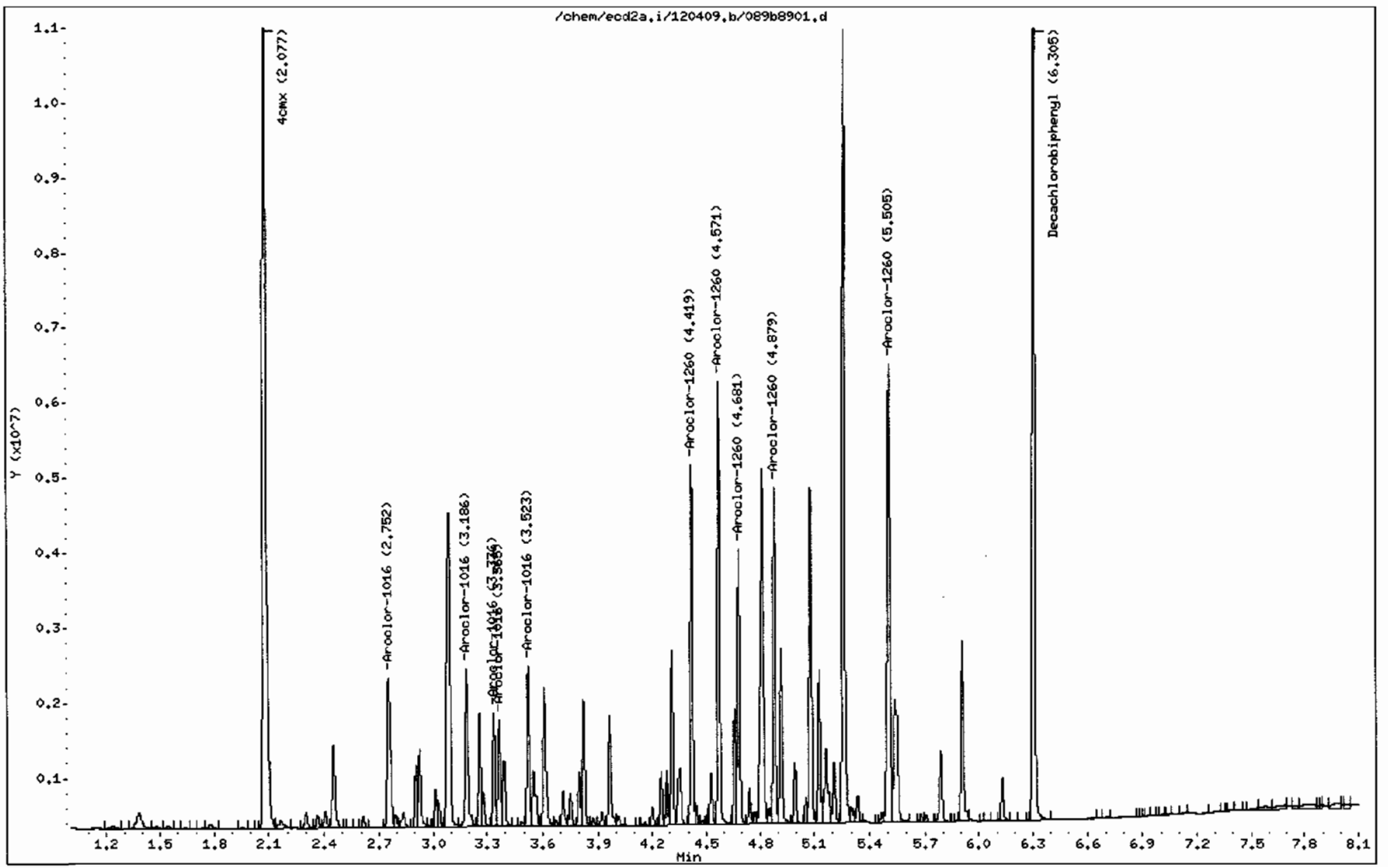

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/089f8901.d
Lab Smp Id: 1201984181 Client Smp ID: WST49-10-5432MS
Inj Date : 05-DEC-2009 00:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984181|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 89 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	7244638	125.533	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	5823110	106.204	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.282	0.000	1228331	584.974	19.7	80.00- 120.00	100.00(M)
2.604	2.604	0.000	2691657	597.547	20.1	200.13- 240.13	207.09
2.695	2.695	0.000	1083526	595.275	20.0	67.04- 107.04	83.36
2.830	2.830	0.000	551253	590.913	19.9	22.75- 62.75	42.41
2.981	2.980	0.001	844782	612.994	20.6	47.01- 87.01	90.28
			Average of Peak Concentrations =		20.1		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	2814596	692.092	23.3	80.00- 120.00	100.00
4.290	4.290	0.000	1706030	674.769	22.7	40.62- 80.62	60.61
4.456	4.456	0.000	1745924	675.876	22.8	41.94- 81.94	62.03
4.668	4.668	0.000	4108778	680.700	22.9	125.52- 165.52	145.98
4.857	4.857	0.000	1928854	662.393	22.3	48.68- 88.68	68.53
Average of Peak Concentrations =					22.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/089f8901.d
Date : 05-DEC-2009 00:43
Client ID: WST49-10-5432MS
Sample Info: |120198418111|
Volume Injected (uL): 1.0
Column phase: CLP1

Page 1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

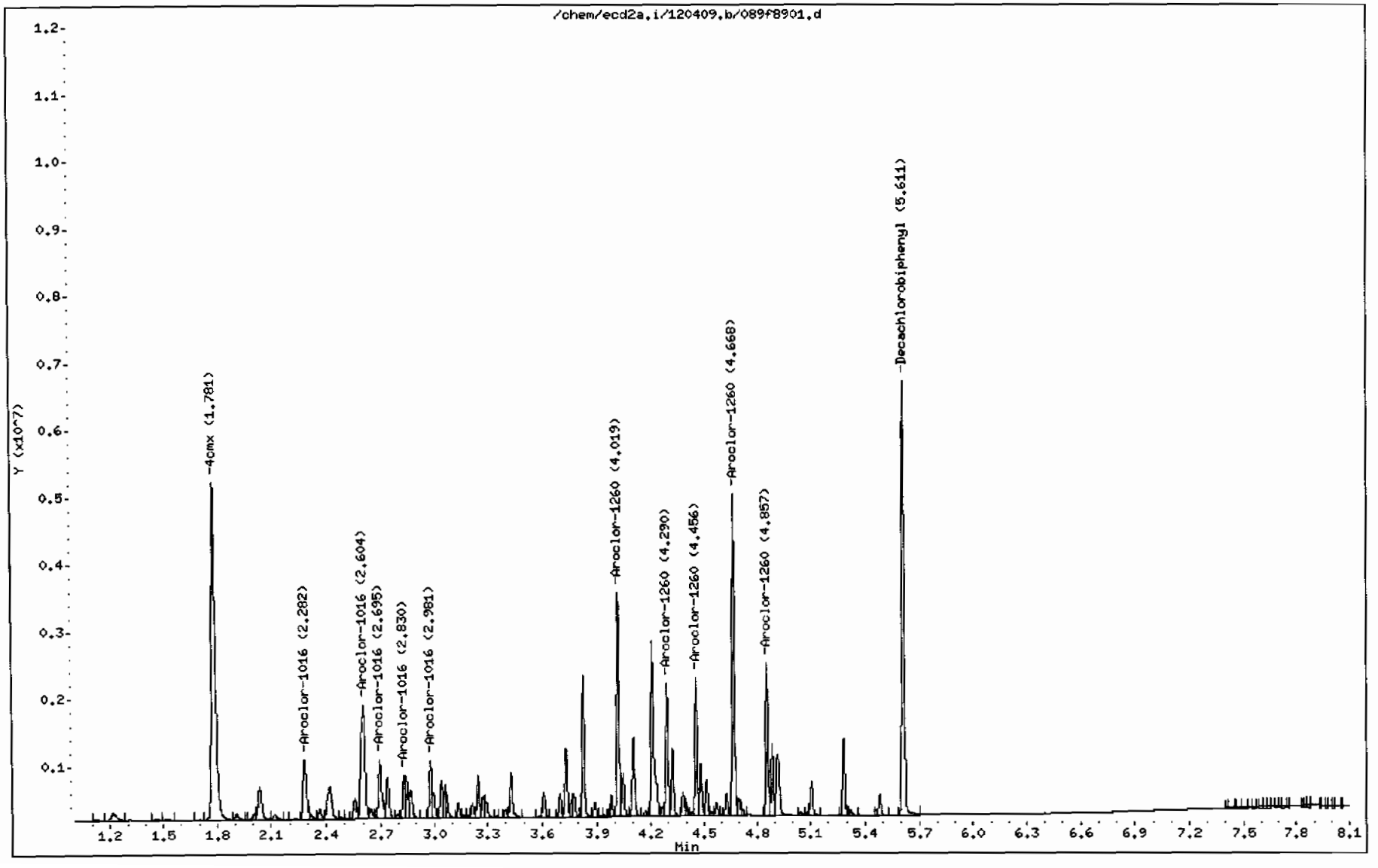

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/090b9001.d
Lab Smp Id: 1201984182 Client Smp ID: WST49-10-5432MSD
Inj Date : 05-DEC-2009 00:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984182|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 90 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	15284426	129.310	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	12147721	111.815	3.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	2510644	589.623	19.9	80.00- 120.00	100.00
3.185	3.185	0.000	2196486	637.646	21.5	61.42- 101.42	87.49
3.336	3.336	0.000	1228634	620.683	20.9	27.15- 67.15	48.94
3.365	3.365	0.000	1144843	555.411	18.7	28.91- 68.91	45.60
3.523	3.524	-0.001	1734417	629.742	21.2	47.18- 87.18	69.08

Average of Peak Concentrations = 20.4

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	3943402	715.338	24.1	80.00- 120.00	100.00
4.570	4.570	0.000	5047795	707.770	23.8	106.73- 146.73	128.01
4.681	4.682	-0.001	3308572	699.285	23.6	63.73- 103.73	83.90
4.880	4.880	0.000	3948546	680.707	22.9	78.70- 118.70	100.13
5.505	5.505	0.000	6140643	679.224	22.9	133.18- 173.18	155.72
			Average of Peak Concentrations =		23.5		

Data File: /chem/ecd2a.i/120409.b/090b9001.d
Date : 05-DEC-2009 00:55
Client ID: WST49-10-5432MSD
Sample Info: |12019841821|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

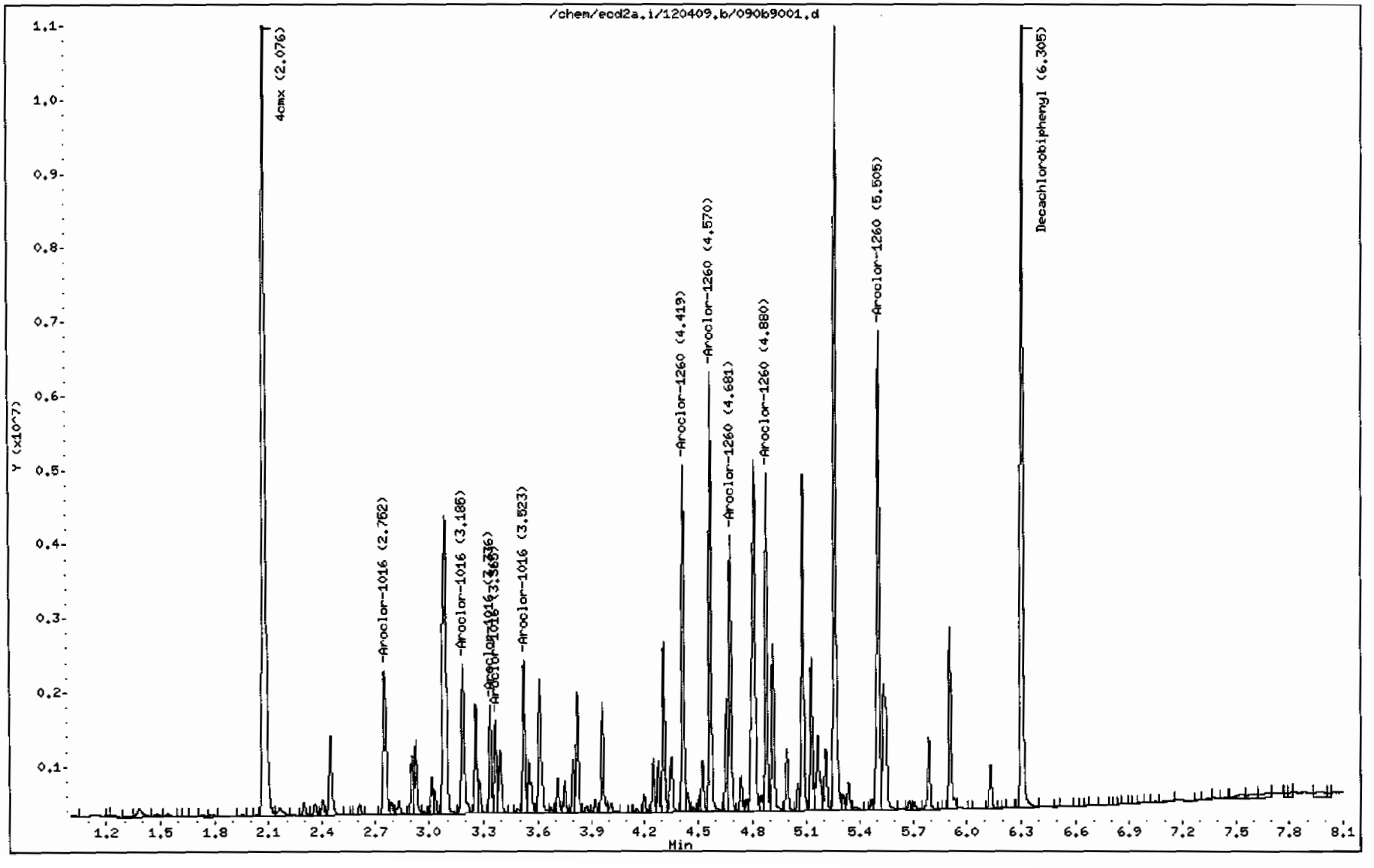

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/090f9001.d
Lab Smp Id: 1201984182 Client Smp ID: WST49-10-5432MSD
Inj Date : 05-DEC-2009 00:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984182|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 90 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	6988316	121.091	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	5781303	105.442	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.282	-0.001	1195422	569.302	19.2	80.00- 120.00	100.00(M)
2.603	2.604	-0.001	2609380	579.281	19.5	200.13- 240.13	207.11
2.694	2.695	-0.001	1048737	576.162	19.4	67.04- 107.04	83.24
2.830	2.830	0.000	531217	569.436	19.2	22.75- 62.75	42.16
2.980	2.980	0.000	828791	601.390	20.3	47.01- 87.01	92.46

Average of Peak Concentrations = 19.5

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.019	-0.001	2826618	695.048	23.4	80.00- 120.00	100.00
4.290	4.290	0.000	1718838	679.835	22.9	40.62- 80.62	60.81
4.455	4.456	-0.001	1764728	683.155	23.0	41.94- 81.94	62.43
4.667	4.668	-0.001	4178157	692.194	23.3	125.52- 165.52	147.81
4.856	4.857	-0.001	1968285	675.934	22.8	48.68- 88.68	69.63
			Average of Peak Concentrations =		23.1		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/090f9001.d

Date : 05-DEC-2009 00:55

Client ID: WST49-10-5432MSD

Sample Info: |120198418211|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

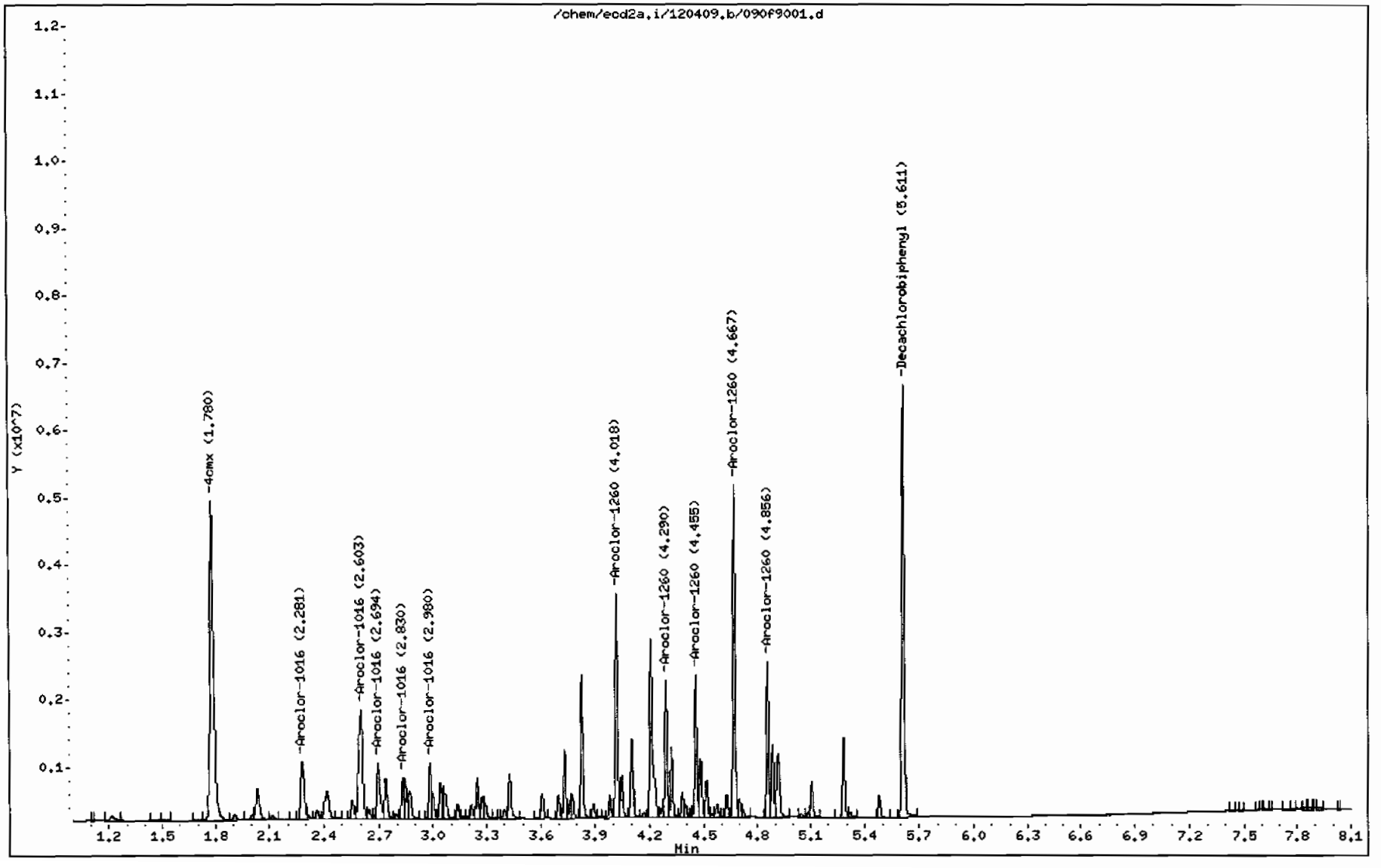

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927948 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984179 MB	01-DEC-2009 20:14:33	30	H2SO4/KMi2		2	9	1	0.03333
1201984180 LCS	01-DEC-2009 20:14:33	30	H2SO4/KMi2		2	9	1	0.03333
241827001	01-DEC-2009 20:14:33	30.17	H2SO4/KMi2		2	9	1	0.03315
241827004	01-DEC-2009 20:14:33	30.14	H2SO4/KMi2		2	9	1	0.03318
241827005	01-DEC-2009 20:14:33	30.05	H2SO4/KMi2		2	9	1	0.03328
241827006	01-DEC-2009 20:14:33	30.14	H2SO4/KMi2		2	9	1	0.03318
241838002	01-DEC-2009 20:14:33	30.14	H2SO4/KMi2		2	9	1	0.03318
241900001	01-DEC-2009 20:14:33	30.05	H2SO4/KMi2		2	9	1	0.03328
241900002	01-DEC-2009 20:14:33	30.18	H2SO4/KMi2		2	9	1	0.03313
241900003	01-DEC-2009 20:14:33	30.14	H2SO4/KMi2		2	9	1	0.03318
241900004	01-DEC-2009 20:14:33	30.14	H2SO4/KMi2		2	9	1	0.03318
241900006	01-DEC-2009 20:14:33	30.12	H2SO4/KMi2		2	9	1	0.0332
241903002	01-DEC-2009 20:14:33	30.14	H2SO4/KMi2		2	9	1	0.03318
241907001	01-DEC-2009 20:14:33	30.01	H2SO4/KMi2		2	9	1	0.03332
241907002	01-DEC-2009 20:14:33	30.05	H2SO4/KMi2		2	9	1	0.03328
241911001	01-DEC-2009 20:14:33	30.12	H2SO4/KMi2		2	9	1	0.0332
1201984181 MS (241911001)	01-DEC-2009 20:14:33	30.15	H2SO4/KMi2		2	9	1	0.03317
1201984182 MSD (241911001)	01-DEC-2009 20:14:33	30.12	H2SO4/KMi2		2	9	1	0.0332
241911002	01-DEC-2009 20:14:33	30.04	H2SO4/KMi2		2	9	1	0.03329

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984180	PCB Laboratory Control	WE091120-07	1	mL
MS	1201984181	PCB Laboratory Control	WE091120-07	1	mL
MSD	1201984182	PCB Laboratory Control	WE091120-07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091117-15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925-B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Clean up Date: 12/01/09
Clean up Initials: AJS
Verified By: AV
Final Solvent: Hexane
Clean Up SOP: GL-OA-E-037

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-667

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14110	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14111	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14112	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14113	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14114	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14115	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14116	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14117	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14118	S	11/23/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14119	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14120	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14121	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14122	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14123	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14124	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14125	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14126	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14127	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14128	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14129	S	11/23/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-14110	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14111	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14112	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14113	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14114	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14115	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14116	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14117	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14118	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14119	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14120	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14121	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14122	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14123	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14124	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14125	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14126	S	11/23/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-14127	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14128	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14129	S	11/23/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-667

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-667

REQUEST NUMBER: 10-667

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14115	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14113	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14125	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14123	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14114	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14126	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14117	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14121	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14129	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14120	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14116	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14111	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14119	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14110	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14127	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14118	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14122	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14124	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14112	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14128	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:		Date	Time	Received By:		Date	Time
		11/24/09	1800				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14110 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt3
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608399		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JRJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt 3, tuff, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-5

FIELD SCREENING/MEASUREMENT RESULTS: PID: 5.0 ppm
Background:
α 17 dpm
β 1557 ↓

Samples: MDA

COLLECTED BY (PRINT) M. Strendo **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14111 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Oil
TIME COLLECTED (HH:MM)		0955	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE: ~~HA~~	HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: clayey Sand, brn (7.5YR 4/4)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.0 ppm
Background:
α: 17 dpm
β: 1557
Samples: < MDA

COLLECTED BY (PRINT) M. Sherrod **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14112 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	S + QBt 3
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b),~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S + R	SLS 11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand to 2.5 ft, brn (7.5YR 4/4); below 2.5 ft QBt3, Pinkish gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.7 ppm Samples: < MDA
Background
α 17 dpm
β 1557 ↓

COLLECTED BY (PRINT) M. Shendo REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14113 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBT3
TIME COLLECTED (HH:MM)		1005	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR	IJ 11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt 3, pinkish-gray (7.5YR 6/2), weathered

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.2
Background
α: 17 dpm
β: 1557 ↓

Samples: < MDA

COLLECTED BY (PRINT) J. Jordan, M. Sherdo

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14114 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt3
TIME COLLECTED (HH:MM)		1010	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE: ~~HA~~	HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	SB 11-23-09		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QBt3, pinkish-gray (7.5YR 6/2),

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.7 ppm Samples: <MDA
Background:
α 17 dpm
β 1557 ↓

COLLECTED BY (PRINT) M. Sperdo **REVIEWED BY (PRINT)** J. Josh

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Josh (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14115 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QB+3
TIME COLLECTED (HH:MM)		1015	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~TH~~ HSA	OK
LOCATION ID:	03-608400		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~R JRJ 11-23-09		EXCAVATED: YES / NO (NA)		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / (NA)

BOREHOLE: YES / NO / (NA) BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, ~~Pinkish~~ JRJ 11-23-09 Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-1

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1.1 ppm Samples: <MDA
Background
α: 17 dpm
β: 1557

COLLECTED BY (PRINT) M. Sherdo REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14116 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1040	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE: ~~HA~~	HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice		
1		Metals+CN - GEL	125 ML POLY	Ice		

SAMPLE DESC: Clayey Sand, brn (7.5YR 4/4), dry

SAMPLE COMMENTS:

LOCATION DESC: 46-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.1 ppm Background
α: 17 dpm
β: 1557 ↓
Samples: 4 MDA

COLLECTED BY (PRINT) M. Sherrill REVIEWED BY (PRINT) J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14117 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	S + QBt 3
TIME COLLECTED (HH:MM)		1045	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE: ~~HA~~	HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S + R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand to 2-5 ft, brn (7.5YR 4/4); below 2.5 ft Qbt 3, Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.3 ppm Samples: <MDA
Background:
α: 17 dpm
β: 1557 ↓

COLLECTED BY (PRINT) M. Sherrod REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14118 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QB23
TIME COLLECTED (HH:MM)		1050	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5'	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, pinkish-gray (7.5YR 6/2), weathered

SAMPLE COMMENTS:

LOCATION DESC: 4(b)4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.3 ppm Background
α: 17 dpm
β: 1557 ↓
Samples: <MDA

COLLECTED BY (PRINT) H. Shendo REVIEWED BY (PRINT) J. Jurado

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jurado	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature)	1650
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14119 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt 3
TIME COLLECTED (HH:MM)		1055	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	SR JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.5 ppm
Background:
α 17 dpm
β 1557 ↓
Samples: < MDA

COLLECTED BY (PRINT) M. Sherdo

REVIEWED BY (PRINT) J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) James Jordan	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14120 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt3
TIME COLLECTED (HH:MM)		1105	SUB-MEDIA:	OTHER	NA
PRS ID:	60-004(b), ~~60-004(d)~~	OK	SAMPLE TECH CODE:	~~HA~~ HSA	OK
LOCATION ID:	03-608401		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14'	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15'	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	SR	11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 0.1 ppm Background: α 17 dpm β 1557 Samples: MDA

COLLECTED BY (PRINT) M. Sherda REVIEWED BY (PRINT) J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jack (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14121 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1135	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand, brn (7.5YR 4/4), sl. moist

SAMPLE COMMENTS:

LOCATION DESC: 4(b)2

FIELD SCREENING/MEASUREMENT RESULTS: PID 1.1 ppm Background
Alpha 17 dpm
Beta 1557 ↓ < MDA

COLLECTED BY (PRINT) M. [illegible] **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible]	11-23-09 1650	(Printed Name) [illegible]	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14122 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA + R	QB + 3
TIME COLLECTED (HH:MM)		1140	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3	SCREEN/PORT DESC:		
FIELD MATRIX:	S + R		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Clayey Sand to 2.5 ft, brn (7.5YR 4/4); QB + 3 below 2.5 ft, Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID 0.1 ppm Samples < MDA
Background Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. Thomas **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14123 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt 3
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	SR JRJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt 3, Pinkish-gray (7.5 YR 6/3)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID = 1.3 ppm

Samples < MDA
Alpha 17 dpm
Beta 1557 dpm
background

COLLECTED BY (PRINT) M. Shendo **REVIEWED BY (PRINT)** J. J[illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-23-09 1650	(Printed Name) [signature]	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14124 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt 3
TIME COLLECTED (HH:MM)		1150	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)		SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R	JRJ 11-23-09	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt3, Pinkish-gray (7.5 YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 1.9 ppm

Background samples < MDA
Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. Sherlo **REVIEWED BY (PRINT)** J. Jurd

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jurd (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14125 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QB3+3
TIME COLLECTED (HH:MM)		~~1450~~ 1455 JJ 11-23-09	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608402		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	14 ~~9~~ ft JJ	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	15 ~~10~~ ft 11-23-09	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~R JJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: tuff, Pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-2

FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.3 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557 ↓

COLLECTED BY (PRINT) M. Shanda **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14126 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Ok
TIME COLLECTED (HH:MM)		1222	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b),60-004(d)	Ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: clayey Sand, brn (7.5YR 4/4)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1.3 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. Shinda **REVIEWED BY (PRINT)** J. Jack

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14127 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt 3
TIME COLLECTED (HH:MM)		1225	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	2 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S + R		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: clayey Sand, brn (7.5 YR 4/4) to 2.5 ft; QBt 3 below 2.5 ft, ~~brn~~ Pinkish-gray (7.5 YR 6/2) (JKJ 11-23-09

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1.5 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557 dpm

COLLECTED BY (PRINT) M. Shanda **REVIEWED BY (PRINT)** J Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J Jordan (Signature)	11-23-09 1650	(Printed Name) (Signature)	11-23-09 1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14128 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	Qbt3
TIME COLLECTED (HH:MM)		1230	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	4 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ R JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA ~~BOREHOLE DECLINATION:~~ ~~BOREHOLE DIRECTION:~~

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: Qbt3, Pinkish-gray (7.5 YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(6)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1.3 ppm

Samples < MDA
Background
Alpha 17 cpm
Beta 1557 ↓

COLLECTED BY (PRINT) M. Shinko **REVIEWED BY (PRINT)** J. Jul

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Jul	11-23-09 1650	(Printed Name)	11-23-09 1650
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2276 **EVENT NAME:** Soil Sampling at TA-60

SAMPLE ID: RE03-09-14129 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	QBt3
TIME COLLECTED (HH:MM)		1235	SUB-MEDIA:	OTHER	
PRS ID:	60-004(b), 60-004(d)	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	03-608403		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	9 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R JLJ 11-23-09		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA ~~COMPOSITE TIME INTERVAL:~~ ~~WATER FLOWING: YES / NO / NA~~

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: BOREHOLE DIRECTION:

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice	Y	
1		Metals+CN - GEL	125 ML POLY	Ice	Y	

SAMPLE DESC: QBt3, pinkish-gray (7.5YR 6/2)

SAMPLE COMMENTS:

LOCATION DESC: 4(b)-3

FIELD SCREENING/MEASUREMENT RESULTS: PID 1-1 ppm

Samples < MDA
Background
Alpha 17 dpm
Beta 1557

COLLECTED BY (PRINT) M. [illegible] **REVIEWED BY (PRINT)** J. [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [illegible] (Signature)	11-23-09 1650	(Printed Name) (Signature) [illegible]	11-23-09 1650
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-667 VALIDATION DATE: 1/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the MB, Ba, B, Cu, Mn, Ti, and Zn were detected. All associated sample results for B <u>except</u> sample RE03-09-14120 and the results for Cu in samples -09-14110, -09-14114, 09-14115, -09-14119, -09-14120, and -09-14125 were detects ≤5X the MB concentrations and, thus, were qualified U,I4. All other associated sample results for Cu; the results for Ba in samples -09-14110, -09-14115, -09-14119, -09-14120, and -09-14125; and the results for Zn in samples -09-14112, -09-14114 – -09-14117, -09-14120, -09-14121, -09-14123 – -09-14125, and -09-14128 were detects >5X but ≤50X the MB concentrations and, thus, were qualified J,I4a. The associated sample results for Mn, Ti, and all other associated sample results for Ba and Zn were detects >50X the MB concentrations and, thus, were not qualified based on professional judgment.

2. In the ICB and CCBs, Si and Tl were detected. The results for Tl in samples -09-14111 – -09-14113, -09-14115, -09-14117, -09-14118, -09-14124, and -09-14128 were detects ≤5X the greatest blank concentration and, thus, were qualified U,I4b. All other associated sample results were NDs and, thus, were not qualified. The associated sample results for Si were detects >5X the greatest blank concentration and, thus, were not qualified.

3. In the FR blanks (samples RE03-10-2757, -10-2758, and -10-2759) associated with all of the field samples, Al, Ba, Ca, Fe, Mn, Si, Na and Ti were detected. The result for Ca in sample -09-14115 and the results for Na in all samples <u>except</u> -09-14113 and -09-14122 were detects ≤5X greatest FR blank concentrations and, thus, were qualified U,I4d. All other associated sample results were detects >5X the FR blank concentration and, thus, were not qualified. In the FB (sample -10-2744) associated with field sample -09-14110 and the FB (sample -10-2746) associated with samples -09-14116 – -09-14120, Si was detected. The associated sample results were detects >5X the FB blank concentration and, thus, were not qualified.

4. The MS %R was < the laboratory's LAL but ≥10% for Si. The associated sample results were detects and, thus, were

DATA VALIDATION COVER SHEET

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Data Validation Cover Sheet

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Los Alamos NATIONAL LABORATORY EST. 1943

qualified J-,I6a. The MS %Rs were > the laboratory's UAL for Al and Ti. The associated sample results were detects and, thus, were qualified J+,I6b. The MS %R was also > the laboratory's UAL for Fe. However, the associated parent sample results were >4X the spike concentrations and, thus, no sample results were qualified, based on professional judgment.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: DATE: 1/28/10

Form 5118-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825001 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14115 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.9906

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	550000	ug/Kg	N	6770	19900	19900	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-36-0	Antimony	996	ug/Kg	U	329	996	996	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-38-2	Arsenic	1.73	mg/kg		0.198	0.992	0.992	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7440-39-3	Barium J,I4a	4580	ug/Kg	*	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-41-7	Beryllium	0.578	mg/kg		0.0198	0.0992	0.0992	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7440-42-8	Boron U,I4	2110	ug/Kg	J	996	4980	4980	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-43-9	Cadmium	498	ug/Kg	U	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-70-2	Calcium U,I4d	138000	ug/Kg	*	7970	24900	24900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-47-3	Chromium	703	ug/Kg	*	149	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-48-4	Cobalt	498	ug/Kg	U	149	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-50-8	Copper U,I4	792	ug/Kg	J	299	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-89-6	Iron	7940000	ug/Kg		7970	24900	24900	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-92-1	Lead	2680	ug/Kg		249	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-93-2	Lithium	6.9	mg/kg		0.397	1.98	1.98	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7439-95-4	Magnesium	136000	ug/Kg	*	8470	29900	29900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7439-96-5	Manganese	64200	ug/Kg		199	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-97-6	Mercury	10.9	ug/kg	U	3.7	10.9	10.9	1	AV	JXL1	12/09/09 12:35	120909S1-5	928044
7440-02-0	Nickel	4.73	mg/kg		0.0992	0.397	0.397	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7440-09-7	Potassium	152000	ug/Kg		6380	24900	24900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7782-49-2	Selenium	0.510	mg/kg	J	0.496	0.992	0.992	2	MS	SKJ	12/15/09 02:18	091214-3	928674
7440-21-3	Silicon J-,I6a	461000	ug/Kg	N	1490	9960	9960	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-22-4	Silver	257	ug/Kg	J	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-23-5	Sodium U,I4d	98600	ug/Kg		6970	24900	24900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-28-0	Thallium U,I4b	0.241	mg/kg		0.0595	0.198	0.198	2	MS	SKJ	12/15/09 02:18	091214-3	928674
7440-32-6	Titanium J+,I6b	141000	ug/Kg	N	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-61-1	Uranium	1.16	mg/kg		0.0131	0.0397	0.0397	2	MS	SKJ	12/15/09 02:18	091214-3	928674
7440-62-2	Vanadium	1590	ug/Kg	*	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-66-6	Zinc J,I4a	13900	ug/Kg		329	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.552	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.502	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.504	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825002 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14113 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	9930000	ug/Kg	N	7160	21100	21100	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-36-0	Antimony	833	ug/Kg	J	352	1070	1070	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-38-2	Arsenic	2.11	mg/kg		0.216	1.08	1.08	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7440-39-3	Barium	71400	ug/Kg	*	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-41-7	Beryllium	0.989	mg/kg		0.0216	0.108	0.108	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7440-42-8	Boron U,I4	4020	ug/Kg	J	1050	5270	5270	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-43-9	Cadmium	527	ug/Kg	U	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-70-2	Calcium	2800000	ug/Kg	*	8540	26700	26700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-47-3	Chromium	5720	ug/Kg	*	158	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-48-4	Cobalt	1890	ug/Kg		158	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-50-8	Copper J,I4a	5160	ug/Kg		316	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-89-6	Iron	12700000	ug/Kg		8430	26300	26300	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-92-1	Lead	10300	ug/Kg		263	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-93-2	Lithium	13.9	mg/kg		0.433	2.16	2.16	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7439-95-4	Magnesium	2110000	ug/Kg	*	9070	32000	32000	1	P	HSC	12/18/09 09:49	121809A-1	933555
7439-96-5	Manganese	136000	ug/Kg		211	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-97-6	Mercury	16.2	ug/kg		4.03	11.9	11.9	1	AV	JXL1	12/09/09 12:44	120909S1-5	928044
7440-02-0	Nickel	8.09	mg/kg		0.108	0.433	0.433	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7440-09-7	Potassium	1330000	ug/Kg		6830	26700	26700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7782-49-2	Selenium	1.08	mg/kg	U	0.541	1.08	1.08	2	MS	SKJ	12/15/09 02:49	091214-3	928674
7440-21-3	Silicon J-,I6a	1230000	ug/Kg	N	1600	10700	10700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-22-4	Silver	523	ug/Kg	J	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-23-5	Sodium	267000	ug/Kg		7470	26700	26700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-28-0	Thallium U,I4b	0.115	mg/kg	J	0.0649	0.216	0.216	2	MS	SKJ	12/15/09 02:49	091214-3	928674
7440-32-6	Titanium J+,I6b	206000	ug/Kg	N	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-61-1	Uranium	1.01	mg/kg		0.0143	0.0433	0.0433	2	MS	SKJ	12/15/09 02:49	091214-3	928674
7440-62-2	Vanadium	12400	ug/Kg	*	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-66-6	Zinc	33400	ug/Kg		348	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.562	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.527	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.513	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825003 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14125 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	1370000	ug/Kg	N	6960	20500	20500	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-36-0	Antimony	590	ug/Kg	J	337	1020	1020	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-38-2	Arsenic	2.06	mg/kg		0.206	1.03	1.03	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7440-39-3	Barium J,I4a	9060	ug/Kg	*	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-41-7	Beryllium	0.377	mg/kg		0.0206	0.103	0.103	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7440-42-8	Boron U,I4	2200	ug/Kg	J	1020	5120	5120	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-43-9	Cadmium	512	ug/Kg	U	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-70-2	Calcium	386000	ug/Kg	*	8160	25500	25500	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-47-3	Chromium	1650	ug/Kg	*	154	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-48-4	Cobalt	214	ug/Kg	J	154	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-50-8	Copper U,I4	1490	ug/Kg		307	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-89-6	Iron	7690000	ug/Kg		8190	25600	25600	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-92-1	Lead	15500	ug/Kg		256	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-93-2	Lithium	4.98	mg/kg		0.412	2.06	2.06	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7439-95-4	Magnesium	444000	ug/Kg	*	8670	30600	30600	1	P	HSC	12/18/09 09:51	121809A-1	933555
7439-96-5	Manganese	146000	ug/Kg		205	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-97-6	Mercury	12.5	ug/kg	U	4.25	12.5	12.5	1	AV	JXL1	12/09/09 12:49	120909S1-5	928044
7440-02-0	Nickel	3.07	mg/kg		0.103	0.412	0.412	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7440-09-7	Potassium	273000	ug/Kg		6530	25500	25500	1	P	HSC	12/18/09 09:51	121809A-1	933555
7782-49-2	Selenium	1.03	mg/kg	U	0.515	1.03	1.03	2	MS	SKJ	12/15/09 03:08	091214-3	928674
7440-21-3	Silicon J-,I6a	771000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-22-4	Silver	314	ug/Kg	J	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-23-5	Sodium U,I4d	86500	ug/Kg		7140	25500	25500	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-28-0	Thallium	0.206	mg/kg	U	0.0618	0.206	0.206	2	MS	SKJ	12/15/09 03:08	091214-3	928674
7440-32-6	Titanium J+,I6b	125000	ug/Kg	N	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-61-1	Uranium	0.382	mg/kg		0.0136	0.0412	0.0412	2	MS	SKJ	12/15/09 03:08	091214-3	928674
7440-62-2	Vanadium	3000	ug/Kg	*	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-66-6	Zinc J,I4a	19200	ug/Kg		338	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.5	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.509	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.506	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825004 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14123 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	6950000	ug/Kg	N	6840	20100	20100	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-36-0	Antimony	1150	ug/Kg		337	1020	1020	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-38-2	Arsenic	1.83	mg/kg		0.206	1.03	1.03	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7440-39-3	Barium	141000	ug/Kg	*	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-41-7	Beryllium	0.570	mg/kg		0.0206	0.103	0.103	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7440-42-8	Boron U,I4	2670	ug/Kg	J	1010	5030	5030	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-43-9	Cadmium	503	ug/Kg	U	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-70-2	Calcium	2950000	ug/Kg	*	8170	25500	25500	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-47-3	Chromium	4300	ug/Kg	*	151	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-48-4	Cobalt	2370	ug/Kg		151	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-50-8	Copper J,I4a	3320	ug/Kg		302	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-89-6	Iron	10400000	ug/Kg		8050	25200	25200	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-92-1	Lead	10000	ug/Kg		252	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-93-2	Lithium	7.6	mg/kg		0.413	2.06	2.06	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7439-95-4	Magnesium	1370000	ug/Kg	*	8690	30700	30700	1	P	HSC	12/18/09 10:02	121809A-1	933555
7439-96-5	Manganese	182000	ug/Kg		201	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-97-6	Mercury	11.3	ug/kg		3.77	11.1	11.1	1	AV	JXL1	12/09/09 12:50	120909S1-5	928044
7440-02-0	Nickel	5.13	mg/kg		0.103	0.413	0.413	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7440-09-7	Potassium	1030000	ug/Kg		6540	25500	25500	1	P	HSC	12/18/09 10:02	121809A-1	933555
7782-49-2	Selenium	1.03	mg/kg	U	0.516	1.03	1.03	2	MS	SKJ	12/15/09 03:14	091214-3	928674
7440-21-3	Silicon J-,I6a	1060000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-22-4	Silver	361	ug/Kg	J	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-23-5	Sodium U,I4d	218000	ug/Kg		7150	25500	25500	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-28-0	Thallium	0.206	mg/kg	U	0.0619	0.206	0.206	2	MS	SKJ	12/15/09 03:14	091214-3	928674
7440-32-6	Titanium J+,I6b	165000	ug/Kg	N	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-61-1	Uranium	1.29	mg/kg		0.0136	0.0413	0.0413	2	MS	SKJ	12/15/09 03:14	091214-3	928674
7440-62-2	Vanadium	9750	ug/Kg	*	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-66-6	Zinc J,I4a	23000	ug/Kg		332	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.573	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.526	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.513	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825005 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14114 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.09

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	3510000	ug/Kg	N	6730	19800	19800	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-36-0	Antimony	341	ug/Kg	J	307	931	931	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-38-2	Arsenic	1.64	mg/kg		0.195	0.976	0.976	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7440-39-3	Barium	58300	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-41-7	Beryllium	0.630	mg/kg		0.0195	0.0976	0.0976	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7440-42-8	Boron U,I4	4550	ug/Kg	J	989	4950	4950	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-43-9	Cadmium	495	ug/Kg	U	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-70-2	Calcium	644000	ug/Kg	*	7450	23300	23300	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-47-3	Chromium	2380	ug/Kg	*	148	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-48-4	Cobalt	257	ug/Kg	J	148	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-50-8	Copper U,I4	1420	ug/Kg		297	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-89-6	Iron	9110000	ug/Kg		7920	24700	24700	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-92-1	Lead	3430	ug/Kg		247	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-93-2	Lithium	8.25	mg/kg		0.39	1.95	1.95	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7439-95-4	Magnesium	486000	ug/Kg	*	7910	27900	27900	1	P	HSC	12/18/09 10:06	121809A-1	933555
7439-96-5	Manganese	62000	ug/Kg		198	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-97-6	Mercury	16.8	ug/kg		4	11.8	11.8	1	AV	JXL1	12/09/09 12:52	120909S1-5	928044
7440-02-0	Nickel	5.93	mg/kg		0.0976	0.39	0.39	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7440-09-7	Potassium	577000	ug/Kg		5960	23300	23300	1	P	HSC	12/18/09 10:06	121809A-1	933555
7782-49-2	Selenium	0.976	mg/kg	U	0.488	0.976	0.976	2	MS	SKJ	12/15/09 03:21	091214-3	928674
7440-21-3	Silicon J-,I6a	767000	ug/Kg	N	1400	9310	9310	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-22-4	Silver	263	ug/Kg	J	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-23-5	Sodium U,I4d	138000	ug/Kg		6520	23300	23300	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-28-0	Thallium	0.195	mg/kg	U	0.0586	0.195	0.195	2	MS	SKJ	12/15/09 03:21	091214-3	928674
7440-32-6	Titanium J+,I6b	142000	ug/Kg	N	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-61-1	Uranium	0.971	mg/kg		0.0129	0.039	0.039	2	MS	SKJ	12/15/09 03:21	091214-3	928674
7440-62-2	Vanadium	4090	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-66-6	Zinc J,I4a	16600	ug/Kg		326	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.515	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.51	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825006 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14126 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	5720000	ug/Kg	N	7190	21200	21200	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-36-0	Antimony	562	ug/Kg	J	351	1060	1060	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-38-2	Arsenic	1.82	mg/kg		0.21	1.05	1.05	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7440-39-3	Barium	76500	ug/Kg	*	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-41-7	Beryllium	0.826	mg/kg		0.021	0.105	0.105	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7440-42-8	Boron U,I4	2540	ug/Kg	J	1060	5290	5290	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-43-9	Cadmium	529	ug/Kg	U	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-70-2	Calcium	793000	ug/Kg	*	8510	26600	26600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-47-3	Chromium	5130	ug/Kg	*	159	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-48-4	Cobalt	2510	ug/Kg		159	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-50-8	Copper J,I4a	4550	ug/Kg		317	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-89-6	Iron	11200000	ug/Kg		8460	26400	26400	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-92-1	Lead	8730	ug/Kg		264	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-93-2	Lithium	10	mg/kg		0.421	2.1	2.1	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7439-95-4	Magnesium	585000	ug/Kg	*	9040	31900	31900	1	P	HSC	12/18/09 10:10	121809A-1	933555
7439-96-5	Manganese	337000	ug/Kg		212	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-97-6	Mercury	6.59	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/09/09 12:54	120909S1-5	928044
7440-02-0	Nickel	6.11	mg/kg		0.105	0.421	0.421	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7440-09-7	Potassium	381000	ug/Kg		6810	26600	26600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7782-49-2	Selenium	1.05	mg/kg	U	0.526	1.05	1.05	2	MS	SKJ	12/15/09 03:27	091214-3	928674
7440-21-3	Silicon J-,I6a	813000	ug/Kg	N	1600	10600	10600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-22-4	Silver	474	ug/Kg	J	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-23-5	Sodium U,I4d	49100	ug/Kg		7450	26600	26600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-28-0	Thallium	0.210	mg/kg	U	0.0631	0.21	0.21	2	MS	SKJ	12/15/09 03:27	091214-3	928674
7440-32-6	Titanium J+,I6b	314000	ug/Kg	N	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-61-1	Uranium	0.533	mg/kg		0.0139	0.0421	0.0421	2	MS	SKJ	12/15/09 03:27	091214-3	928674
7440-62-2	Vanadium	12100	ug/Kg	*	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-66-6	Zinc	32800	ug/Kg		349	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.516	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.515	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.518	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825007 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14117 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.9

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J+,I6b	12200000	ug/Kg	N	7100	20900	20900	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-36-0	Antimony		1330	ug/Kg		327	990	990	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-38-2	Arsenic		2.5	mg/kg		0.211	1.05	1.05	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7440-39-3	Barium		167000	ug/Kg	*	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-41-7	Beryllium		0.893	mg/kg		0.0211	0.105	0.105	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7440-42-8	Boron	U,I4	3160	ug/Kg	J	1040	5220	5220	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-43-9	Cadmium		522	ug/Kg	U	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-70-2	Calcium		2780000	ug/Kg	*	7920	24700	24700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-47-3	Chromium		9760	ug/Kg	*	157	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-48-4	Cobalt		5340	ug/Kg		157	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-50-8	Copper	J,I4a	7260	ug/Kg		313	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-89-6	Iron		14400000	ug/Kg		8360	26100	26100	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-92-1	Lead		12700	ug/Kg		261	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-93-2	Lithium		9.69	mg/kg		0.421	2.11	2.11	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7439-95-4	Magnesium		2180000	ug/Kg	*	8410	29700	29700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7439-96-5	Manganese		324000	ug/Kg		209	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-97-6	Mercury		17.8	ug/kg		3.98	11.7	11.7	1	AV	JXL1	12/09/09 12:55	120909S1-5	928044
7440-02-0	Nickel		6.89	mg/kg		0.105	0.421	0.421	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7440-09-7	Potassium		1390000	ug/Kg		6330	24700	24700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7782-49-2	Selenium		1.05	mg/kg	U	0.526	1.05	1.05	2	MS	SKJ	12/15/09 03:33	091214-3	928674
7440-21-3	Silicon	J-,I6a	999000	ug/Kg	N	1480	9900	9900	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-22-4	Silver		518	ug/Kg	J	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-23-5	Sodium	U,I4d	141000	ug/Kg		6930	24700	24700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-28-0	Thallium	U,I4b	0.207	mg/kg	J	0.0632	0.211	0.211	2	MS	SKJ	12/15/09 03:33	091214-3	928674
7440-32-6	Titanium	J+,I6b	470000	ug/Kg	N	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-61-1	Uranium		1.53	mg/kg		0.0139	0.0421	0.0421	2	MS	SKJ	12/15/09 03:33	091214-3	928674
7440-62-2	Vanadium		24800	ug/Kg	*	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-66-6	Zinc	J,I4a	29700	ug/Kg		345	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.558	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.521	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825008 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14121 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	5770000	ug/Kg	N	7220	21200	21200	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-36-0	Antimony	1240	ug/Kg		346	1050	1050	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-38-2	Arsenic	1.5	mg/kg		0.226	1.13	1.13	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7440-39-3	Barium	90700	ug/Kg	*	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-41-7	Beryllium	0.688	mg/kg		0.0226	0.113	0.113	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7440-42-8	Boron U,I4	2610	ug/Kg	J	1060	5310	5310	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-43-9	Cadmium	531	ug/Kg	U	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-70-2	Calcium	2640000	ug/Kg	*	8390	26200	26200	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-47-3	Chromium	4040	ug/Kg	*	159	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-48-4	Cobalt	1430	ug/Kg		159	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-50-8	Copper J,I4a	3820	ug/Kg		319	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-89-6	Iron	10000000	ug/Kg		8500	26600	26600	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-92-1	Lead	6640	ug/Kg		266	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-93-2	Lithium	12.4	mg/kg		0.452	2.26	2.26	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7439-95-4	Magnesium	1690000	ug/Kg	*	8910	31500	31500	1	P	HSC	12/18/09 10:16	121809A-1	933555
7439-96-5	Manganese	198000	ug/Kg		212	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-97-6	Mercury	14.3	ug/kg		4.39	12.9	12.9	1	AV	JXL1	12/09/09 12:57	120909S1-5	928044
7440-02-0	Nickel	5.34	mg/kg		0.113	0.452	0.452	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7440-09-7	Potassium	978000	ug/Kg		6710	26200	26200	1	P	HSC	12/18/09 10:16	121809A-1	933555
7782-49-2	Selenium	1.13	mg/kg	U	0.565	1.13	1.13	2	MS	SKJ	12/15/09 03:39	091214-3	928674
7440-21-3	Silicon J-,I6a	1090000	ug/Kg	N	1570	10500	10500	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-22-4	Silver	333	ug/Kg	J	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-23-5	Sodium U,I4d	113000	ug/Kg		7340	26200	26200	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-28-0	Thallium	0.226	mg/kg	U	0.0678	0.226	0.226	2	MS	SKJ	12/15/09 03:39	091214-3	928674
7440-32-6	Titanium J+,I6b	305000	ug/Kg	N	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-61-1	Uranium	0.584	mg/kg		0.0149	0.0452	0.0452	2	MS	SKJ	12/15/09 03:39	091214-3	928674
7440-62-2	Vanadium	9690	ug/Kg	*	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-66-6	Zinc J,I4a	31600	ug/Kg		351	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.532	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.539	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.507	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825009 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14129 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 98.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2660000	ug/Kg	N	6640	19500	19500	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-36-0	Antimony	391	ug/Kg	J	324	982	982	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-38-2	Arsenic	1.05	mg/kg		0.195	0.976	0.976	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7440-39-3	Barium	27300	ug/Kg	*	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-41-7	Beryllium	0.598	mg/kg		0.0195	0.0976	0.0976	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7440-42-8	Boron U,I4	1760	ug/Kg	J	976	4880	4880	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-43-9	Cadmium	488	ug/Kg	U	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-70-2	Calcium	508000	ug/Kg	*	7860	24500	24500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-47-3	Chromium	1850	ug/Kg	*	146	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-48-4	Cobalt	510	ug/Kg		146	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-50-8	Copper J,I4a	2690	ug/Kg		293	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-89-6	Iron	9020000	ug/Kg		7810	24400	24400	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-92-1	Lead	4360	ug/Kg		244	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-93-2	Lithium	13.9	mg/kg		0.391	1.95	1.95	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7439-95-4	Magnesium	426000	ug/Kg	*	8350	29500	29500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7439-96-5	Manganese	197000	ug/Kg		195	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-97-6	Mercury	8.77	ug/kg	J	3.98	11.7	11.7	1	AV	JXL1	12/09/09 12:59	120909S1-5	928044
7440-02-0	Nickel	3.5	mg/kg		0.0976	0.391	0.391	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7440-09-7	Potassium	332000	ug/Kg		6280	24500	24500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7782-49-2	Selenium	0.567	mg/kg	J	0.488	0.976	0.976	2	MS	SKJ	12/15/09 03:46	091214-3	928674
7440-21-3	Silicon J-,I6a	706000	ug/Kg	N	1470	9820	9820	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-22-4	Silver	318	ug/Kg	J	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-23-5	Sodium U,I4d	59600	ug/Kg		6870	24500	24500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-28-0	Thallium	0.195	mg/kg	U	0.0586	0.195	0.195	2	MS	SKJ	12/15/09 03:46	091214-3	928674
7440-32-6	Titanium J+,I6b	222000	ug/Kg	N	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-61-1	Uranium	0.509	mg/kg		0.0129	0.0391	0.0391	2	MS	SKJ	12/15/09 03:46	091214-3	928674
7440-62-2	Vanadium	5270	ug/Kg	*	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-66-6	Zinc	33000	ug/Kg		322	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.521	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.52	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.52	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825010 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14120 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 97.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	387000	ug/Kg	N	6730	19800	19800	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-36-0	Antimony	1010	ug/Kg	U	332	1010	1010	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-38-2	Arsenic	0.317	mg/kg	J	0.204	1.02	1.02	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7440-39-3	Barium J,I4a	10000	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-41-7	Beryllium	0.194	mg/kg		0.0204	0.102	0.102	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7440-42-8	Boron	4950	ug/Kg	U	989	4950	4950	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-43-9	Cadmium	495	ug/Kg	U	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-70-2	Calcium	218000	ug/Kg	*	8050	25200	25200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-47-3	Chromium	578	ug/Kg	*	148	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-48-4	Cobalt	181	ug/Kg	J	148	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-50-8	Copper U,I4	744	ug/Kg	J	297	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-89-6	Iron	6510000	ug/Kg		7920	24700	24700	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-92-1	Lead	3720	ug/Kg		247	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-93-2	Lithium	7.58	mg/kg		0.408	2.04	2.04	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7439-95-4	Magnesium	106000	ug/Kg	*	8560	30200	30200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7439-96-5	Manganese	208000	ug/Kg		198	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-97-6	Mercury	12.1	ug/kg	U	4.12	12.1	12.1	1	AV	JXL1	12/09/09 13:00	120909S1-5	928044
7440-02-0	Nickel	1.26	mg/kg		0.102	0.408	0.408	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7440-09-7	Potassium	108000	ug/Kg		6440	25200	25200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7782-49-2	Selenium	1.02	mg/kg	U	0.51	1.02	1.02	2	MS	SKJ	12/15/09 03:52	091214-3	928674
7440-21-3	Silicon J-,I6a	360000	ug/Kg	N	1510	10100	10100	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-22-4	Silver	353	ug/Kg	J	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-23-5	Sodium U,I4d	112000	ug/Kg		7050	25200	25200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-28-0	Thallium	0.204	mg/kg	U	0.0613	0.204	0.204	2	MS	SKJ	12/15/09 03:52	091214-3	928674
7440-32-6	Titanium J+,I6b	157000	ug/Kg	N	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-61-1	Uranium	0.425	mg/kg		0.0135	0.0408	0.0408	2	MS	SKJ	12/15/09 03:52	091214-3	928674
7440-62-2	Vanadium	1430	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-66-6	Zinc J,I4a	27400	ug/Kg		326	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.508	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.519	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.503	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825011 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14116 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	4980000	ug/Kg	N	6940	20400	20400	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-36-0	Antimony	1420	ug/Kg		322	976	976	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-38-2	Arsenic	0.830	mg/kg	J	0.201	1.01	1.01	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7440-39-3	Barium	431000	ug/Kg	*	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-41-7	Beryllium	0.373	mg/kg		0.0201	0.101	0.101	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7440-42-8	Boron U,I4	1690	ug/Kg	J	1020	5100	5100	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-43-9	Cadmium	510	ug/Kg	U	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-70-2	Calcium	3480000	ug/Kg	*	7810	24400	24400	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-47-3	Chromium	8990	ug/Kg	*	153	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-48-4	Cobalt	3900	ug/Kg		153	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-50-8	Copper J,I4a	8820	ug/Kg		306	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-89-6	Iron	11800000	ug/Kg		8160	25500	25500	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-92-1	Lead	14100	ug/Kg		255	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-93-2	Lithium	8.9	mg/kg		0.403	2.01	2.01	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7439-95-4	Magnesium	2000000	ug/Kg	*	8300	29300	29300	1	P	HSC	12/18/09 10:27	121809A-1	933555
7439-96-5	Manganese	217000	ug/Kg		204	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-97-6	Mercury	11.7	ug/kg	U	3.99	11.7	11.7	1	AV	JXL1	12/09/09 13:02	120909S1-5	928044
7440-02-0	Nickel	6.21	mg/kg		0.101	0.403	0.403	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7440-09-7	Potassium	803000	ug/Kg		6250	24400	24400	1	P	HSC	12/18/09 10:27	121809A-1	933555
7782-49-2	Selenium	1.01	mg/kg	U	0.503	1.01	1.01	2	MS	SKJ	12/15/09 03:58	091214-3	928674
7440-21-3	Silicon J-,I6a	884000	ug/Kg	N	1460	9760	9760	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-22-4	Silver	396	ug/Kg	J	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-23-5	Sodium U,I4d	107000	ug/Kg		6830	24400	24400	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-28-0	Thallium	0.201	mg/kg	U	0.0604	0.201	0.201	2	MS	SKJ	12/15/09 03:58	091214-3	928674
7440-32-6	Titanium J+,I6b	432000	ug/Kg	N	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-61-1	Uranium	0.642	mg/kg		0.0133	0.0403	0.0403	2	MS	SKJ	12/15/09 03:58	091214-3	928674
7440-62-2	Vanadium	25700	ug/Kg	*	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-66-6	Zinc J,I4a	26200	ug/Kg		337	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.533	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.511	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.518	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825012 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14111 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	15200000	ug/Kg	N	7710	22700	22700	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-36-0	Antimony	1010	ug/Kg	J	338	1030	1030	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-38-2	Arsenic	2.82	mg/kg		0.224	1.12	1.12	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7440-39-3	Barium	189000	ug/Kg	*	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-41-7	Beryllium	1.08	mg/kg		0.0224	0.112	0.112	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7440-42-8	Boron U,I4	3420	ug/Kg	J	1130	5670	5670	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-43-9	Cadmium	567	ug/Kg	U	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-70-2	Calcium	2310000	ug/Kg	*	8200	25600	25600	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-47-3	Chromium	12100	ug/Kg	*	170	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-48-4	Cobalt	6390	ug/Kg		170	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-50-8	Copper J,I4a	8900	ug/Kg		340	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-89-6	Iron	16800000	ug/Kg		9070	28300	28300	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-92-1	Lead	14800	ug/Kg		283	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-93-2	Lithium	17.5	mg/kg		0.448	2.24	2.24	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7439-95-4	Magnesium	2460000	ug/Kg	*	8720	30800	30800	1	P	HSC	12/18/09 10:30	121809A-1	933555
7439-96-5	Manganese	455000	ug/Kg		227	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-97-6	Mercury	13.1	ug/kg	J	4.65	13.7	13.7	1	AV	JXL1	12/09/09 13:04	120909S1-5	928044
7440-02-0	Nickel	9.03	mg/kg		0.112	0.448	0.448	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7440-09-7	Potassium	1620000	ug/Kg		6560	25600	25600	1	P	HSC	12/18/09 10:30	121809A-1	933555
7782-49-2	Selenium	1.12	mg/kg	U	0.56	1.12	1.12	2	MS	SKJ	12/15/09 04:17	091214-3	928674
7440-21-3	Silicon J-,I6a	1090000	ug/Kg	N	1540	10300	10300	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-22-4	Silver	426	ug/Kg	J	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-23-5	Sodium U,I4d	86600	ug/Kg		7180	25600	25600	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-28-0	Thallium U,I4b	0.0941	mg/kg	J	0.0672	0.224	0.224	2	MS	SKJ	12/15/09 04:17	091214-3	928674
7440-32-6	Titanium J+,I6b	600000	ug/Kg	N	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-61-1	Uranium	0.859	mg/kg		0.0148	0.0448	0.0448	2	MS	SKJ	12/15/09 04:17	091214-3	928674
7440-62-2	Vanadium	30000	ug/Kg	*	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-66-6	Zinc	35100	ug/Kg		374	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.5	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.503	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.509	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825013 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14119 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 98.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	671000	ug/Kg	N	6690	19700	19700	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-36-0	Antimony	952	ug/Kg	U	314	952	952	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-38-2	Arsenic	0.566	mg/kg	J	0.199	0.997	0.997	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7440-39-3	Barium J,I4a	12400	ug/Kg	*	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-41-7	Beryllium	0.251	mg/kg		0.0199	0.0997	0.0997	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7440-42-8	Boron U,I4	1230	ug/Kg	J	984	4920	4920	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-43-9	Cadmium	492	ug/Kg	U	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-70-2	Calcium	577000	ug/Kg	*	7620	23800	23800	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-47-3	Chromium	1160	ug/Kg	*	148	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-48-4	Cobalt	253	ug/Kg	J	148	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-50-8	Copper U,I4	949	ug/Kg	J	295	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-89-6	Iron	6980000	ug/Kg		7870	24600	24600	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-92-1	Lead	4930	ug/Kg		246	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-93-2	Lithium	9.35	mg/kg		0.399	1.99	1.99	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7439-95-4	Magnesium	187000	ug/Kg	*	8090	28600	28600	1	P	HSC	12/18/09 10:40	121809A-1	933555
7439-96-5	Manganese	196000	ug/Kg		197	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-97-6	Mercury	11.2	ug/kg	U	3.82	11.2	11.2	1	AV	JXL1	12/09/09 13:09	120909S1-5	928044
7440-02-0	Nickel	1.76	mg/kg		0.0997	0.399	0.399	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7440-09-7	Potassium	145000	ug/Kg		6090	23800	23800	1	P	HSC	12/18/09 10:40	121809A-1	933555
7782-49-2	Selenium	0.613	mg/kg	J	0.499	0.997	0.997	2	MS	SKJ	12/15/09 04:23	091214-3	928674
7440-21-3	Silicon J-,I6a	447000	ug/Kg	N	1430	9520	9520	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-22-4	Silver	251	ug/Kg	J	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-23-5	Sodium U,I4d	92700	ug/Kg		6670	23800	23800	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-28-0	Thallium	0.199	mg/kg	U	0.0598	0.199	0.199	2	MS	SKJ	12/15/09 04:23	091214-3	928674
7440-32-6	Titanium J+,I6b	173000	ug/Kg	N	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-61-1	Uranium	0.392	mg/kg		0.0132	0.0399	0.0399	2	MS	SKJ	12/15/09 04:23	091214-3	928674
7440-62-2	Vanadium	1950	ug/Kg	*	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-66-6	Zinc	35000	ug/Kg		325	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.543	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.51	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825014 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14110 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 96.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	672000	ug/Kg	N	6850	20200	20200	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-36-0	Antimony	1040	ug/Kg	U	342	1040	1040	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-38-2	Arsenic	1.01	mg/kg	U	0.201	1.01	1.01	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7440-39-3	Barium J,I4a	12300	ug/Kg	*	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-41-7	Beryllium	0.187	mg/kg		0.0201	0.101	0.101	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7440-42-8	Boron U,I4	1110	ug/Kg	J	1010	5040	5040	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-43-9	Cadmium	504	ug/Kg	U	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-70-2	Calcium	240000	ug/Kg	*	8300	25900	25900	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-47-3	Chromium	1310	ug/Kg	*	151	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-48-4	Cobalt	277	ug/Kg	J	151	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-50-8	Copper U,I4	1540	ug/Kg		302	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-89-6	Iron	6900000	ug/Kg		8060	25200	25200	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-92-1	Lead	5760	ug/Kg		252	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-93-2	Lithium	3.36	mg/kg		0.402	2.01	2.01	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7439-95-4	Magnesium	132000	ug/Kg	*	8820	31100	31100	1	P	HSC	12/18/09 10:44	121809A-1	933555
7439-96-5	Manganese	256000	ug/Kg		202	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-97-6	Mercury	11.9	ug/kg	U	4.03	11.9	11.9	1	AV	JXL1	12/09/09 13:11	120909S1-5	928044
7440-02-0	Nickel	0.771	mg/kg		0.101	0.402	0.402	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7440-09-7	Potassium	124000	ug/Kg		6640	25900	25900	1	P	HSC	12/18/09 10:44	121809A-1	933555
7782-49-2	Selenium	1.01	mg/kg	U	0.503	1.01	1.01	2	MS	SKJ	12/15/09 04:29	091214-3	928674
7440-21-3	Silicon J-,I6a	437000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-22-4	Silver	285	ug/Kg	J	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-23-5	Sodium U,I4d	118000	ug/Kg		7260	25900	25900	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-28-0	Thallium	0.201	mg/kg	U	0.0603	0.201	0.201	2	MS	SKJ	12/15/09 04:29	091214-3	928674
7440-32-6	Titanium J+,I6b	127000	ug/Kg	N	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-61-1	Uranium	0.359	mg/kg		0.0133	0.0402	0.0402	2	MS	SKJ	12/15/09 04:29	091214-3	928674
7440-62-2	Vanadium	1680	ug/Kg	*	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-66-6	Zinc	39400	ug/Kg		333	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.525	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.515	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.516	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825015 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14127 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	5830000	ug/Kg	N	6740	19800	19800	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-36-0	Antimony	1180	ug/Kg		343	1040	1040	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-38-2	Arsenic	1.43	mg/kg		0.203	1.01	1.01	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7440-39-3	Barium	71000	ug/Kg	*	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-41-7	Beryllium	0.699	mg/kg		0.0203	0.101	0.101	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7440-42-8	Boron U,I4	2390	ug/Kg	J	991	4960	4960	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-43-9	Cadmium	496	ug/Kg	U	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-70-2	Calcium	1330000	ug/Kg	*	8310	26000	26000	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-47-3	Chromium	4500	ug/Kg	*	149	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-48-4	Cobalt	2080	ug/Kg		149	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-50-8	Copper J,I4a	3970	ug/Kg		297	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-89-6	Iron	10400000	ug/Kg		7930	24800	24800	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-92-1	Lead	8040	ug/Kg		248	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-93-2	Lithium	13.1	mg/kg		0.406	2.03	2.03	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7439-95-4	Magnesium	831000	ug/Kg	*	8830	31100	31100	1	P	HSC	12/18/09 10:47	121809A-1	933555
7439-96-5	Manganese	269000	ug/Kg		198	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-97-6	Mercury	10.3	ug/kg	J	4.01	11.8	11.8	1	AV	JXL1	12/09/09 13:12	120909S1-5	928044
7440-02-0	Nickel	5.59	mg/kg		0.101	0.406	0.406	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7440-09-7	Potassium	543000	ug/Kg		6650	26000	26000	1	P	HSC	12/18/09 10:47	121809A-1	933555
7782-49-2	Selenium	1.01	mg/kg	U	0.507	1.01	1.01	2	MS	SKJ	12/15/09 04:35	091214-3	928674
7440-21-3	Silicon J-,I6a	845000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-22-4	Silver	473	ug/Kg	J	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-23-5	Sodium U,I4d	63100	ug/Kg		7270	26000	26000	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-28-0	Thallium	0.203	mg/kg	U	0.0609	0.203	0.203	2	MS	SKJ	12/15/09 04:35	091214-3	928674
7440-32-6	Titanium J+,I6b	301000	ug/Kg	N	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-61-1	Uranium	0.602	mg/kg		0.0134	0.0406	0.0406	2	MS	SKJ	12/15/09 04:35	091214-3	928674
7440-62-2	Vanadium	10900	ug/Kg	*	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-66-6	Zinc	33200	ug/Kg		327	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.534	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.53	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.518	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825016 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14118 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	23200000	ug/Kg	N	7310	21500	21500	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-36-0	Antimony	2730	ug/Kg		327	990	990	1	P	HSC	12/18/09 10:51	121809A-1	933555
7440-38-2	Arsenic	2.02	mg/kg		0.21	1.05	1.05	2	MS	SKJ	12/15/09 18:53	091215-4	928674
7440-39-3	Barium	265000	ug/Kg	*	107	537	537	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-41-7	Beryllium	1.14	mg/kg		0.021	0.105	0.105	2	MS	SKJ	12/15/09 18:53	091215-4	928674
7440-42-8	Boron U,I4	4010	ug/Kg	J	1070	5370	5370	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-43-9	Cadmium	112	ug/Kg	J	107	537	537	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-70-2	Calcium	17700000	ug/Kg	*	7920	24700	24700	1	P	HSC	12/18/09 10:51	121809A-1	933555
7440-47-3	Chromium	13000	ug/Kg	*	161	537	537	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-48-4	Cobalt	7490	ug/Kg		161	537	537	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-50-8	Copper J,I4a	8940	ug/Kg		322	1070	1070	1	P	HSC	12/11/09 16:32	121109A-2	928610
7439-89-6	Iron	17000000	ug/Kg		8600	26900	26900	1	P	HSC	12/11/09 16:32	121109A-2	928610
7439-92-1	Lead	17000	ug/Kg		269	1070	1070	1	P	HSC	12/11/09 16:32	121109A-2	928610
7439-93-2	Lithium	20.2	mg/kg		0.419	2.1	2.1	2	MS	SKJ	12/15/09 18:53	091215-4	928674
7439-95-4	Magnesium	2390000	ug/Kg	*	8410	29700	29700	1	P	HSC	12/18/09 10:51	121809A-1	933555
7439-96-5	Manganese	490000	ug/Kg		215	1070	1070	1	P	HSC	12/11/09 16:32	121109A-2	928610
7439-97-6	Mercury	26.2	ug/kg		4.16	12.2	12.2	1	AV	JXL1	12/09/09 13:14	120909S1-5	928044
7440-02-0	Nickel	9.11	mg/kg		0.105	0.419	0.419	2	MS	SKJ	12/15/09 18:53	091215-4	928674
7440-09-7	Potassium	1300000	ug/Kg		6340	24700	24700	1	P	HSC	12/18/09 10:51	121809A-1	933555
7782-49-2	Selenium	1.05	mg/kg	U	0.524	1.05	1.05	2	MS	SKJ	12/15/09 04:42	091214-3	928674
7440-21-3	Silicon J-,I6a	1340000	ug/Kg	N	1480	9900	9900	1	P	HSC	12/18/09 10:51	121809A-1	933555
7440-22-4	Silver	374	ug/Kg	J	107	537	537	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-23-5	Sodium U,I4d	214000	ug/Kg		6930	24700	24700	1	P	HSC	12/18/09 10:51	121809A-1	933555
7440-28-0	Thallium U,I4b	0.0706	mg/kg	J	0.0629	0.21	0.21	2	MS	SKJ	12/15/09 04:42	091214-3	928674
7440-32-6	Titanium J+,I6b	764000	ug/Kg	N	107	537	537	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-61-1	Uranium	0.607	mg/kg		0.0138	0.0419	0.0419	2	MS	SKJ	12/15/09 04:42	091214-3	928674
7440-62-2	Vanadium	29500	ug/Kg	*	107	537	537	1	P	HSC	12/11/09 16:32	121109A-2	928610
7440-66-6	Zinc	35300	ug/Kg		355	1070	1070	1	P	HSC	12/11/09 16:32	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.542	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.527	g	50	mL	12/04/09	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825017 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14122 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	7130000	ug/Kg	N	6860	20200	20200	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-36-0	Antimony	667	ug/Kg	J	347	1050	1050	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-38-2	Arsenic	1.5	mg/kg		0.201	1	1	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7440-39-3	Barium	115000	ug/Kg	*	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-41-7	Beryllium	0.716	mg/kg		0.0201	0.1	0.1	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7440-42-8	Boron U,I4	2310	ug/Kg	J	1010	5050	5050	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-43-9	Cadmium	505	ug/Kg	U	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-70-2	Calcium	2850000	ug/Kg	*	8410	26300	26300	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-47-3	Chromium	5180	ug/Kg	*	151	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-48-4	Cobalt	3090	ug/Kg		151	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-50-8	Copper J,I4a	4550	ug/Kg		303	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-89-6	Iron	12100000	ug/Kg		8070	25200	25200	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-92-1	Lead	23900	ug/Kg		252	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-93-2	Lithium	13.5	mg/kg		0.401	2.01	2.01	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7439-95-4	Magnesium	1330000	ug/Kg	*	8940	31500	31500	1	P	HSC	12/18/09 10:54	121809A-1	933555
7439-96-5	Manganese	454000	ug/Kg		202	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-97-6	Mercury	16.1	ug/kg		3.91	11.5	11.5	1	AV	JXL1	12/09/09 13:16	120909S1-5	928044
7440-02-0	Nickel	6.36	mg/kg		0.1	0.401	0.401	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7440-09-7	Potassium	929000	ug/Kg		6730	26300	26300	1	P	HSC	12/18/09 10:54	121809A-1	933555
7782-49-2	Selenium	1	mg/kg	U	0.502	1	1	2	MS	SKJ	12/15/09 04:48	091214-3	928674
7440-21-3	Silicon J-,I6a	1140000	ug/Kg	N	1580	10500	10500	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-22-4	Silver	410	ug/Kg	J	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-23-5	Sodium	321000	ug/Kg		7360	26300	26300	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-28-0	Thallium	0.201	mg/kg	U	0.0602	0.201	0.201	2	MS	SKJ	12/15/09 04:48	091214-3	928674
7440-32-6	Titanium J+,I6b	387000	ug/Kg	N	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-61-1	Uranium	0.625	mg/kg		0.0132	0.0401	0.0401	2	MS	SKJ	12/15/09 04:48	091214-3	928674
7440-62-2	Vanadium	13600	ug/Kg	*	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-66-6	Zinc	38300	ug/Kg		333	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.553	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.525	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.528	g	50	mL	12/04/09	BXA1

LMF
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METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825018 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14124 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	3880000	ug/Kg	N	6910	20300	20300	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-36-0	Antimony	810	ug/Kg	J	328	994	994	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-38-2	Arsenic	0.963	mg/kg	J	0.212	1.06	1.06	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7440-39-3	Barium	54100	ug/Kg	*	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-41-7	Beryllium	0.740	mg/kg		0.0212	0.106	0.106	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7440-42-8	Boron U,I4	1890	ug/Kg	J	1020	5080	5080	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-43-9	Cadmium	508	ug/Kg	U	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-70-2	Calcium	2040000	ug/Kg	*	7950	24800	24800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-47-3	Chromium	2650	ug/Kg	*	152	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-48-4	Cobalt	2820	ug/Kg		152	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-50-8	Copper J,I4a	2760	ug/Kg		305	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-89-6	Iron	9700000	ug/Kg		8130	25400	25400	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-92-1	Lead	21500	ug/Kg		254	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-93-2	Lithium	9.59	mg/kg		0.424	2.12	2.12	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7439-95-4	Magnesium	1040000	ug/Kg	*	8450	29800	29800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7439-96-5	Manganese	497000	ug/Kg		203	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-97-6	Mercury	6.41	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/09/09 13:17	120909S1-5	928044
7440-02-0	Nickel	6.14	mg/kg		0.106	0.424	0.424	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7440-09-7	Potassium	496000	ug/Kg		6360	24800	24800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7782-49-2	Selenium	1.06	mg/kg	U	0.53	1.06	1.06	2	MS	SKJ	12/15/09 04:54	091214-3	928674
7440-21-3	Silicon J-,I6a	1100000	ug/Kg	N	1490	9940	9940	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-22-4	Silver	380	ug/Kg	J	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-23-5	Sodium U,I4d	98600	ug/Kg		6950	24800	24800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-28-0	Thallium U,I4b	0.207	mg/kg	J	0.0636	0.212	0.212	2	MS	SKJ	12/15/09 04:54	091214-3	928674
7440-32-6	Titanium J+,I6b	149000	ug/Kg	N	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-61-1	Uranium	0.747	mg/kg		0.014	0.0424	0.0424	2	MS	SKJ	12/15/09 04:54	091214-3	928674
7440-62-2	Vanadium	6760	ug/Kg	*	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-66-6	Zinc J,I4a	23700	ug/Kg		335	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.513	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.534	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.512	g	50	mL	12/04/09	BXA1

LMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825019 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14112 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte		Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	J+,I6b	23700000	ug/Kg	N	7490	22000	22000	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-36-0	Antimony		1840	ug/Kg		369	1120	1120	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-38-2	Arsenic		2.28	mg/kg		0.22	1.1	1.1	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7440-39-3	Barium		212000	ug/Kg	*	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-41-7	Beryllium		1.44	mg/kg		0.022	0.11	0.11	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7440-42-8	Boron	U,I4	3560	ug/Kg	J	1100	5510	5510	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-43-9	Cadmium		551	ug/Kg	U	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-70-2	Calcium		2780000	ug/Kg	*	8950	28000	28000	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-47-3	Chromium		12500	ug/Kg	*	165	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-48-4	Cobalt		7460	ug/Kg		165	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-50-8	Copper	J,I4a	8390	ug/Kg		330	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-89-6	Iron		16900000	ug/Kg		8810	27500	27500	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-92-1	Lead		15600	ug/Kg		275	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-93-2	Lithium		25.2	mg/kg		0.44	2.2	2.2	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7439-95-4	Magnesium		2400000	ug/Kg	*	9510	33600	33600	1	P	HSC	12/18/09 11:01	121809A-1	933555
7439-96-5	Manganese		451000	ug/Kg		220	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-97-6	Mercury		24.4	ug/kg		4.59	13.5	13.5	1	AV	JXL1	12/09/09 13:19	120909S1-5	928044
7440-02-0	Nickel		10.5	mg/kg		0.11	0.44	0.44	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7440-09-7	Potassium		1600000	ug/Kg		7160	28000	28000	1	P	HSC	12/18/09 11:01	121809A-1	933555
7782-49-2	Selenium		1.1	mg/kg	U	0.55	1.1	1.1	2	MS	SKJ	12/15/09 05:00	091214-3	928674
7440-21-3	Silicon	J-,I6a	1490000	ug/Kg	N	1680	11200	11200	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-22-4	Silver		392	ug/Kg	J	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-23-5	Sodium	U,I4d	239000	ug/Kg		7830	28000	28000	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-28-0	Thallium	U,I4b	0.0958	mg/kg	J	0.0659	0.22	0.22	2	MS	SKJ	12/15/09 05:00	091214-3	928674
7440-32-6	Titanium	J+,I6b	738000	ug/Kg	N	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-61-1	Uranium		0.782	mg/kg		0.0145	0.044	0.044	2	MS	SKJ	12/15/09 05:00	091214-3	928674
7440-62-2	Vanadium		29400	ug/Kg	*	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-66-6	Zinc	J,I4a	30500	ug/Kg		363	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.5	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.511	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.512	g	50	mL	12/04/09	BXA1

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1/28/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825020 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14128 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 97.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	5300000	ug/Kg	N	6730	19800	19800	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-36-0	Antimony	819	ug/Kg	J	328	995	995	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-38-2	Arsenic	1.5	mg/kg		0.196	0.98	0.98	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7440-39-3	Barium	124000	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-41-7	Beryllium	0.564	mg/kg		0.0196	0.098	0.098	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7440-42-8	Boron U,I4	1800	ug/Kg	J	989	4950	4950	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-43-9	Cadmium	495	ug/Kg	U	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-70-2	Calcium	1070000	ug/Kg	*	7960	24900	24900	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-47-3	Chromium	7770	ug/Kg	*	148	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-48-4	Cobalt	7830	ug/Kg		148	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-50-8	Copper J,I4a	5440	ug/Kg		297	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-89-6	Iron	11900000	ug/Kg		7910	24700	24700	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-92-1	Lead	10400	ug/Kg		247	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-93-2	Lithium	6.72	mg/kg		0.392	1.96	1.96	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7439-95-4	Magnesium	1360000	ug/Kg	*	8460	29800	29800	1	P	HSC	12/18/09 11:04	121809A-1	933555
7439-96-5	Manganese	499000	ug/Kg		198	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-97-6	Mercury	8.56	ug/kg	J	3.88	11.4	11.4	1	AV	JXL1	12/09/09 13:21	120909S1-5	928044
7440-02-0	Nickel	5.17	mg/kg		0.098	0.392	0.392	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7440-09-7	Potassium	979000	ug/Kg		6370	24900	24900	1	P	HSC	12/18/09 11:04	121809A-1	933555
7782-49-2	Selenium	0.980	mg/kg	U	0.49	0.98	0.98	2	MS	SKJ	12/15/09 05:07	091214-3	928674
7440-21-3	Silicon J-,I6a	906000	ug/Kg	N	1490	9950	9950	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-22-4	Silver	521	ug/Kg		98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-23-5	Sodium U,I4d	99000	ug/Kg		6960	24900	24900	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-28-0	Thallium U,I4b	0.0997	mg/kg	J	0.0588	0.196	0.196	2	MS	SKJ	12/15/09 05:07	091214-3	928674
7440-32-6	Titanium J+,I6b	405000	ug/Kg	N	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-61-1	Uranium	0.513	mg/kg		0.0129	0.0392	0.0392	2	MS	SKJ	12/15/09 05:07	091214-3	928674
7440-62-2	Vanadium	21400	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-66-6	Zinc J,I4a	24600	ug/Kg		326	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.541	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.52	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.525	g	50	mL	12/04/09	BXA1

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1/28/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-667 VALIDATION DATE: 1/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Total CN Only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

None.

Reviewed by: Mary Donivan Level: I Date: 01/29/10

VALIDATOR'S SIGNATURE: DATE: 1/28/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☐	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 **General Chemistry Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☐	☒	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14115	Project:	LANL01004
Sample ID:	241825001	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	<0.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	64.2	236	ug/kg	1	AXC2 12/07/09	1255	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14113	Project:	LANL01004
Sample ID:	241825002	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	9.91%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		340	75.5	278	ug/kg	1	AXC2 12/07/09	1302	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14125	Project:	LANL01004
Sample ID:	241825003	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.09%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	63.3	233	ug/kg	1	AXC2 12/07/09	1306	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14123	Project:	LANL01004
Sample ID:	241825004	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	5.53%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.6	259	ug/kg	1	AXC2 12/07/09	1307	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14114	Project:	LANL01004
Sample ID:	241825005	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	.908%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.6	252	ug/kg	1	AXC2 12/07/09	1308	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14126	Project:	LANL01004
Sample ID:	241825006	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	8.22%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.4	248	ug/kg	1	AXC2 12/07/09	1309	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14117	Project:	LANL01004
Sample ID:	241825007	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	8.13%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2 12/07/09	1313	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14121	Project:	LANL01004
Sample ID:	241825008	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	12.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.9	275	ug/kg	1	AXC2 12/07/09	1314	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14129	Project:	LANL01004
Sample ID:	241825009	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	1.51%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	62.8	231	ug/kg	1	AXC2 12/07/09	1330	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14120	Project:	LANL01004
Sample ID:	241825010	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	2.63%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2 12/07/09	1316	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14116	Project:	LANL01004
Sample ID:	241825011	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.2	251	ug/kg	1	AXC2 12/07/09	1317	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14111	Project:	LANL01004
Sample ID:	241825012	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	12.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.8	264	ug/kg	1	AXC2 12/07/09	1317	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14119	Project:	LANL01004
Sample ID:	241825013	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	1.67%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.2	254	ug/kg	1	AXC2 12/07/09	1318	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14110	Project:	LANL01004
Sample ID:	241825014	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	3.64%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.2	254	ug/kg	1	AXC2 12/07/09	1319	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14127	Project:	LANL01004
Sample ID:	241825015	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.83%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.4	248	ug/kg	1	AXC2 12/07/09	1320	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14118	Project:	LANL01004
Sample ID:	241825016	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	9.48%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.7	271	ug/kg	1	AXC2 12/07/09	1321	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14122	Project:	LANL01004
Sample ID:	241825017	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	5.64%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.7	260	ug/kg	1	AXC2 12/07/09	1326	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14124	Project:	LANL01004
Sample ID:	241825018	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	7.83%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	64.7	238	ug/kg	1	AXC2 12/07/09	1326	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14112	Project:	LANL01004
Sample ID:	241825019	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	11.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	76.5	281	ug/kg	1	AXC2 12/07/09	1327	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LMF
1/28/10

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14128	Project:	LANL01004
Sample ID:	241825020	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	2.79%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	62.5	230	ug/kg	1	AXC2 12/07/09	1328	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LMF
1/28/10

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-667

REQUEST NUMBER: 10-667

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241825%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14115	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14113	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14125	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14123	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14114	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14126	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14117	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14121	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14129	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14120	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14116	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14111	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14119	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14110	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14127	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14118	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14122	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14124	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14112	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14128	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:	Date	Time	Received By:	Date	Time
[illegible]	11/24/09	1800	Greg Tyler	11-25-09	0910
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-667
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009
TURNAROUND/REPORT DUE: 12/24/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14110	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14111	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14112	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14113	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14114	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14115	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14116	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14117	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14118	S	11/23/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14119	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14120	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14121	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14122	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14123	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14124	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14125	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14126	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14127	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14128	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14129	S	11/23/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-14110	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14111	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14112	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14113	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14114	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14115	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14116	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14117	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14118	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14119	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14120	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14121	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14122	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14123	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14124	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14125	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14126	S	11/23/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-14127	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14128	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14129	S	11/23/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-667

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

December 01, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 241825
SDG: 10-667

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 25, 2009, and analyzed for General Chemistry and Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-667
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241825
SDG: 10-667

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- Case Narrative..... 825
- Sample Data Summary.....830
- Quality Control Summary.....852
- Instrument QC Data Summary.....855
- Cyanide, Total.....857
- Miscellaneous..... 872

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241825
SDG # : 10-667

December 01, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 25, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241825001	RE03-09-14115
241825002	RE03-09-14113
241825003	RE03-09-14125
241825004	RE03-09-14123
241825005	RE03-09-14114
241825006	RE03-09-14126
241825007	RE03-09-14117
241825008	RE03-09-14121
241825009	RE03-09-14129
241825010	RE03-09-14120
241825011	RE03-09-14116
241825012	RE03-09-14111
241825013	RE03-09-14119
241825014	RE03-09-14110
241825015	RE03-09-14127
241825016	RE03-09-14118
241825017	RE03-09-14122
241825018	RE03-09-14124
241825019	RE03-09-14112
241825020	RE03-09-14128

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis

Project Manager

List of current GEL Certifications as of 01 December 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-667

REQUEST NUMBER: 10-667

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241825%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE03-09-14115	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14113	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14125	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14123	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14114	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14126	1	POLY	Metals+CN - GEL	Ice	S
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RE03-09-14120	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14116	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14111	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14119	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14110	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14127	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14118	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14122	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14124	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14112	1	POLY	Metals+CN - GEL	Ice	S
RE03-09-14128	1	POLY	Metals+CN - GEL	Ice	S

Relinquished By:	Date	Time	Received By:	Date	Time
Printed Name / Signature	11/24/09	1900	Greg Tyler / Signature	11-25-09	0910
Printed Name / Signature			Printed Name / Signature		
Printed Name / Signature			Printed Name / Signature		

Received for DISPOSAL By: Date Time

Printed Name Signature

Remarks:

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-667

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14110	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14111	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14112	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14113	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14114	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14115	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14116	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14117	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14118	S	11/23/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE03-09-14119	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14120	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14121	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14122	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14123	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14124	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14125	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14126	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14127	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14128	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14129	S	11/23/2009	Plus, B, Li, Si, Ti, U
	SW-846:9012A	1	RE03-09-14110	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14111	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14112	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14113	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14114	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14115	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14116	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14117	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14118	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14119	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14120	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14121	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14122	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14123	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14124	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14125	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14126	S	11/23/2009	Plus, B, Li, Si, Ti, U

Tuesday, November 24, 2009

REQUEST NUMBER: 10-667

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE03-09-14127	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14128	S	11/23/2009	Plus, B, Li, Si, Ti, U
		1	RE03-09-14129	S	11/23/2009	Plus, B, Li, Si, Ti, U

Final Page of REQUEST NUMBER 10-667

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-667**
Received By: Greg Tyler	**Date Received: 11/25/09**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **20 cpm**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other **2, 4, 5, 6C** **14, 16C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
Fed Ex Tracking Numbers
7209 7849 0285 2C **7209 7849 0263 14C**
7209 7849 0230 2C **7209 7849 0252 16C**
7209 7849 0300 2C
7209 7849 0322 4C
7209 7849 0296 4C
7209 7849 0241 4C
7209 7849 0311 5C
7209 7849 0274 6C

PM (or PMA) review: Initials P. Wel. Date 11-27-09

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0285
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156140-434 NHIT V3 09-09

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7849 0230
Matr# 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156140-434 NHIT V3 09-09

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0300
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054198D0

4c

FedEx Express

TRK# 0201 7209 7849 0322

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0296
Matr# 7209 7849 0285 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Pkg # 156148-434 NAIT V3 09-08

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGNH0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7849 0241
Matr# 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NAIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

5c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0311
Matr# 7209 7849 0300 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 28.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

6c

FedEx Express

RADIOACTIVE SAMPLES

3 of 3
MPS# 0263 7209 7849 0274
Matr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US

ORIGIN ID: SAFA (505)665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV99
ACTWGT: 42.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 68010AMR2A05419GD0

14c

FedEx Express

2 of 3
MPS# 0263 7209 7849 0263
Mstr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505)665-9C
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV99
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 68010AMR2A05419GD0

16C

FedEx Express

1 of 3
TRK# 0201 7209 7849 0252
MM MASTER MM

WED - 25NOV A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-667

Sample Analysis

Sample ID	Client ID
241825001	RE03-09-14115
241825002	RE03-09-14113
241825003	RE03-09-14125
241825004	RE03-09-14123
241825005	RE03-09-14114
241825006	RE03-09-14126
241825007	RE03-09-14117
241825008	RE03-09-14121
241825009	RE03-09-14129
241825010	RE03-09-14120
241825011	RE03-09-14116
241825012	RE03-09-14111
241825013	RE03-09-14119
241825014	RE03-09-14110
241825015	RE03-09-14127
241825016	RE03-09-14118
241825017	RE03-09-14122
241825018	RE03-09-14124
241825019	RE03-09-14112
241825020	RE03-09-14128

1201985635	Method Blank (MB) **ICP**
1201997316	Method Blank (MB) **ICP**
1201985636	Laboratory Control Sample (LCS)
1201997317	Laboratory Control Sample (LCS)
1201985639	241825001(RE03-09-14115L) Serial Dilution (SD)
1201985637	241825001(RE03-09-14115D) Sample Duplicate (DUP)
1201985638	241825001(RE03-09-14115S) Matrix Spike (MS)
1201985641	241825001(RE03-09-14115SD) Matrix Spike Duplicate (MSD)
1201985790	Method Blank (MB) **ICP-MS**
1201985791	Laboratory Control Sample (LCS)
1201985794	241825001(RE03-09-14115L) Serial Dilution (SD)
1201985792	241825001(RE03-09-14115D) Sample Duplicate (DUP)
1201985793	241825001(RE03-09-14115S) Matrix Spike (MS)
1201985795	241825001(RE03-09-14115SD) Matrix Spike Duplicate (MSD)
1201984335	Method Blank (MB) **CVAA**
1201984336	Laboratory Control Sample (LCS)
1201984339	241825001(RE03-09-14115L) Serial Dilution (SD)
1201984337	241825001(RE03-09-14115D) Sample Duplicate (DUP)
1201984338	241825001(RE03-09-14115S) Matrix Spike (MS)
1201984340	241825001(RE03-09-14115SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	928610, 933555, 928674 and 928044
Prep Batch :	928609, 933554, 928673 and 928043
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23

Analytical Method: SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A

Prep Method : SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 241825001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of aluminum, silicon and titanium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of aluminum and silicon, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of barium, calcium, chromium, magnesium and vanadium, as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 770092 and 772334. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson **Date:** 12/21/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825001 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14115 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.9906

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	550000	ug/Kg	N	6770	19900	19900	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-36-0	Antimony	996	ug/Kg	U	329	996	996	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-38-2	Arsenic	1.73	mg/kg		0.198	0.992	0.992	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7440-39-3	Barium	4580	ug/Kg	*	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-41-7	Beryllium	0.578	mg/kg		0.0198	0.0992	0.0992	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7440-42-8	Boron	2110	ug/Kg	J	996	4980	4980	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-43-9	Cadmium	498	ug/Kg	U	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-70-2	Calcium	138000	ug/Kg	*	7970	24900	24900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-47-3	Chromium	703	ug/Kg	*	149	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-48-4	Cobalt	498	ug/Kg	U	149	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-50-8	Copper	792	ug/Kg	J	299	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-89-6	Iron	7940000	ug/Kg		7970	24900	24900	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-92-1	Lead	2680	ug/Kg		249	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-93-2	Lithium	6.9	mg/kg		0.397	1.98	1.98	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7439-95-4	Magnesium	136000	ug/Kg	*	8470	29900	29900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7439-96-5	Manganese	64200	ug/Kg		199	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610
7439-97-6	Mercury	10.9	ug/kg	U	3.7	10.9	10.9	1	AV	JXL1	12/09/09 12:35	120909S1-5	928044
7440-02-0	Nickel	4.73	mg/kg		0.0992	0.397	0.397	2	MS	SKJ	12/15/09 17:52	091215-4	928674
7440-09-7	Potassium	152000	ug/Kg		6380	24900	24900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7782-49-2	Selenium	0.510	mg/kg	J	0.496	0.992	0.992	2	MS	SKJ	12/15/09 02:18	091214-3	928674
7440-21-3	Silicon	461000	ug/Kg	N	1490	9960	9960	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-22-4	Silver	257	ug/Kg	J	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-23-5	Sodium	98600	ug/Kg		6970	24900	24900	1	P	HSC	12/18/09 09:31	121809A-1	933555
7440-28-0	Thallium	0.241	mg/kg		0.0595	0.198	0.198	2	MS	SKJ	12/15/09 02:18	091214-3	928674
7440-32-6	Titanium	141000	ug/Kg	N	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-61-1	Uranium	1.16	mg/kg		0.0131	0.0397	0.0397	2	MS	SKJ	12/15/09 02:18	091214-3	928674
7440-62-2	Vanadium	1590	ug/Kg	*	99.6	498	498	1	P	HSC	12/11/09 13:52	121109A-2	928610
7440-66-6	Zinc	13900	ug/Kg		329	996	996	1	P	HSC	12/11/09 13:52	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.552	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.502	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.504	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.502	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825002 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14113 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 90.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9930000	ug/Kg	N	7160	21100	21100	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-36-0	Antimony	833	ug/Kg	J	352	1070	1070	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-38-2	Arsenic	2.11	mg/kg		0.216	1.08	1.08	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7440-39-3	Barium	71400	ug/Kg	*	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-41-7	Beryllium	0.989	mg/kg		0.0216	0.108	0.108	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7440-42-8	Boron	4020	ug/Kg	J	1050	5270	5270	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-43-9	Cadmium	527	ug/Kg	U	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-70-2	Calcium	2800000	ug/Kg	*	8540	26700	26700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-47-3	Chromium	5720	ug/Kg	*	158	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-48-4	Cobalt	1890	ug/Kg		158	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-50-8	Copper	5160	ug/Kg		316	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-89-6	Iron	12700000	ug/Kg		8430	26300	26300	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-92-1	Lead	10300	ug/Kg		263	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-93-2	Lithium	13.9	mg/kg		0.433	2.16	2.16	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7439-95-4	Magnesium	2110000	ug/Kg	*	9070	32000	32000	1	P	HSC	12/18/09 09:49	121809A-1	933555
7439-96-5	Manganese	136000	ug/Kg		211	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610
7439-97-6	Mercury	16.2	ug/kg		4.03	11.9	11.9	1	AV	JXL1	12/09/09 12:44	120909S1-5	928044
7440-02-0	Nickel	8.09	mg/kg		0.108	0.433	0.433	2	MS	SKJ	12/15/09 18:05	091215-4	928674
7440-09-7	Potassium	1330000	ug/Kg		6830	26700	26700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7782-49-2	Selenium	1.08	mg/kg	U	0.541	1.08	1.08	2	MS	SKJ	12/15/09 02:49	091214-3	928674
7440-21-3	Silicon	1230000	ug/Kg	N	1600	10700	10700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-22-4	Silver	523	ug/Kg	J	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-23-5	Sodium	267000	ug/Kg		7470	26700	26700	1	P	HSC	12/18/09 09:49	121809A-1	933555
7440-28-0	Thallium	0.115	mg/kg	J	0.0649	0.216	0.216	2	MS	SKJ	12/15/09 02:49	091214-3	928674
7440-32-6	Titanium	206000	ug/Kg	N	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-61-1	Uranium	1.01	mg/kg		0.0143	0.0433	0.0433	2	MS	SKJ	12/15/09 02:49	091214-3	928674
7440-62-2	Vanadium	12400	ug/Kg	*	105	527	527	1	P	HSC	12/11/09 14:26	121109A-2	928610
7440-66-6	Zinc	33400	ug/Kg		348	1050	1050	1	P	HSC	12/11/09 14:26	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.562	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.527	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.513	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.52	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825003 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14125 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1370000	ug/Kg	N	6960	20500	20500	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-36-0	Antimony	590	ug/Kg	J	337	1020	1020	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-38-2	Arsenic	2.06	mg/kg		0.206	1.03	1.03	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7440-39-3	Barium	9060	ug/Kg	*	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-41-7	Beryllium	0.377	mg/kg		0.0206	0.103	0.103	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7440-42-8	Boron	2200	ug/Kg	J	1020	5120	5120	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-43-9	Cadmium	512	ug/Kg	U	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-70-2	Calcium	386000	ug/Kg	*	8160	25500	25500	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-47-3	Chromium	1650	ug/Kg	*	154	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-48-4	Cobalt	214	ug/Kg	J	154	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-50-8	Copper	1490	ug/Kg		307	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-89-6	Iron	7690000	ug/Kg		8190	25600	25600	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-92-1	Lead	15500	ug/Kg		256	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-93-2	Lithium	4.98	mg/kg		0.412	2.06	2.06	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7439-95-4	Magnesium	444000	ug/Kg	*	8670	30600	30600	1	P	HSC	12/18/09 09:51	121809A-1	933555
7439-96-5	Manganese	146000	ug/Kg		205	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610
7439-97-6	Mercury	12.5	ug/kg	U	4.25	12.5	12.5	1	AV	JXL1	12/09/09 12:49	120909S1-5	928044
7440-02-0	Nickel	3.07	mg/kg		0.103	0.412	0.412	2	MS	SKJ	12/15/09 18:13	091215-4	928674
7440-09-7	Potassium	273000	ug/Kg		6530	25500	25500	1	P	HSC	12/18/09 09:51	121809A-1	933555
7782-49-2	Selenium	1.03	mg/kg	U	0.515	1.03	1.03	2	MS	SKJ	12/15/09 03:08	091214-3	928674
7440-21-3	Silicon	771000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-22-4	Silver	314	ug/Kg	J	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-23-5	Sodium	86500	ug/Kg		7140	25500	25500	1	P	HSC	12/18/09 09:51	121809A-1	933555
7440-28-0	Thallium	0.206	mg/kg	U	0.0618	0.206	0.206	2	MS	SKJ	12/15/09 03:08	091214-3	928674
7440-32-6	Titanium	125000	ug/Kg	N	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-61-1	Uranium	0.382	mg/kg		0.0136	0.0412	0.0412	2	MS	SKJ	12/15/09 03:08	091214-3	928674
7440-62-2	Vanadium	3000	ug/Kg	*	102	512	512	1	P	HSC	12/11/09 14:33	121109A-2	928610
7440-66-6	Zinc	19200	ug/Kg		338	1020	1020	1	P	HSC	12/11/09 14:33	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.5	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.509	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.506	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.511	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825004 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14123 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6950000	ug/Kg	N	6840	20100	20100	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-36-0	Antimony	1150	ug/Kg		337	1020	1020	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-38-2	Arsenic	1.83	mg/kg		0.206	1.03	1.03	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7440-39-3	Barium	141000	ug/Kg	*	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-41-7	Beryllium	0.570	mg/kg		0.0206	0.103	0.103	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7440-42-8	Boron	2670	ug/Kg	J	1010	5030	5030	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-43-9	Cadmium	503	ug/Kg	U	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-70-2	Calcium	2950000	ug/Kg	*	8170	25500	25500	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-47-3	Chromium	4300	ug/Kg	*	151	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-48-4	Cobalt	2370	ug/Kg		151	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-50-8	Copper	3320	ug/Kg		302	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-89-6	Iron	10400000	ug/Kg		8050	25200	25200	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-92-1	Lead	10000	ug/Kg		252	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-93-2	Lithium	7.6	mg/kg		0.413	2.06	2.06	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7439-95-4	Magnesium	1370000	ug/Kg	*	8690	30700	30700	1	P	HSC	12/18/09 10:02	121809A-1	933555
7439-96-5	Manganese	182000	ug/Kg		201	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610
7439-97-6	Mercury	11.3	ug/kg		3.77	11.1	11.1	1	AV	JXL1	12/09/09 12:50	120909S1-5	928044
7440-02-0	Nickel	5.13	mg/kg		0.103	0.413	0.413	2	MS	SKJ	12/15/09 18:16	091215-4	928674
7440-09-7	Potassium	1030000	ug/Kg		6540	25500	25500	1	P	HSC	12/18/09 10:02	121809A-1	933555
7782-49-2	Selenium	1.03	mg/kg	U	0.516	1.03	1.03	2	MS	SKJ	12/15/09 03:14	091214-3	928674
7440-21-3	Silicon	1060000	ug/Kg	N	1530	10200	10200	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-22-4	Silver	361	ug/Kg	J	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-23-5	Sodium	218000	ug/Kg		7150	25500	25500	1	P	HSC	12/18/09 10:02	121809A-1	933555
7440-28-0	Thallium	0.206	mg/kg	U	0.0619	0.206	0.206	2	MS	SKJ	12/15/09 03:14	091214-3	928674
7440-32-6	Titanium	165000	ug/Kg	N	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-61-1	Uranium	1.29	mg/kg		0.0136	0.0413	0.0413	2	MS	SKJ	12/15/09 03:14	091214-3	928674
7440-62-2	Vanadium	9750	ug/Kg	*	101	503	503	1	P	HSC	12/11/09 14:54	121109A-2	928610
7440-66-6	Zinc	23000	ug/Kg		332	1010	1010	1	P	HSC	12/11/09 14:54	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.573	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.526	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.513	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.518	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825005 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14114 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 99.09

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3510000	ug/Kg	N	6730	19800	19800	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-36-0	Antimony	341	ug/Kg	J	307	931	931	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-38-2	Arsenic	1.64	mg/kg		0.195	0.976	0.976	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7440-39-3	Barium	58300	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-41-7	Beryllium	0.630	mg/kg		0.0195	0.0976	0.0976	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7440-42-8	Boron	4550	ug/Kg	J	989	4950	4950	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-43-9	Cadmium	495	ug/Kg	U	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-70-2	Calcium	644000	ug/Kg	*	7450	23300	23300	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-47-3	Chromium	2380	ug/Kg	*	148	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-48-4	Cobalt	257	ug/Kg	J	148	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-50-8	Copper	1420	ug/Kg		297	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-89-6	Iron	9110000	ug/Kg		7920	24700	24700	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-92-1	Lead	3430	ug/Kg		247	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-93-2	Lithium	8.25	mg/kg		0.39	1.95	1.95	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7439-95-4	Magnesium	486000	ug/Kg	*	7910	27900	27900	1	P	HSC	12/18/09 10:06	121809A-1	933555
7439-96-5	Manganese	62000	ug/Kg		198	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610
7439-97-6	Mercury	16.8	ug/kg		4	11.8	11.8	1	AV	JXL1	12/09/09 12:52	120909S1-5	928044
7440-02-0	Nickel	5.93	mg/kg		0.0976	0.39	0.39	2	MS	SKJ	12/15/09 18:18	091215-4	928674
7440-09-7	Potassium	577000	ug/Kg		5960	23300	23300	1	P	HSC	12/18/09 10:06	121809A-1	933555
7782-49-2	Selenium	0.976	mg/kg	U	0.488	0.976	0.976	2	MS	SKJ	12/15/09 03:21	091214-3	928674
7440-21-3	Silicon	767000	ug/Kg	N	1400	9310	9310	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-22-4	Silver	263	ug/Kg	J	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-23-5	Sodium	138000	ug/Kg		6520	23300	23300	1	P	HSC	12/18/09 10:06	121809A-1	933555
7440-28-0	Thallium	0.195	mg/kg	U	0.0586	0.195	0.195	2	MS	SKJ	12/15/09 03:21	091214-3	928674
7440-32-6	Titanium	142000	ug/Kg	N	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-61-1	Uranium	0.971	mg/kg		0.0129	0.039	0.039	2	MS	SKJ	12/15/09 03:21	091214-3	928674
7440-62-2	Vanadium	4090	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:01	121109A-2	928610
7440-66-6	Zinc	16600	ug/Kg		326	989	989	1	P	HSC	12/11/09 15:01	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.515	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.51	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.542	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825006 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14126 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5720000	ug/Kg	N	7190	21200	21200	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-36-0	Antimony	562	ug/Kg	J	351	1060	1060	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-38-2	Arsenic	1.82	mg/kg		0.21	1.05	1.05	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7440-39-3	Barium	76500	ug/Kg	*	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-41-7	Beryllium	0.826	mg/kg		0.021	0.105	0.105	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7440-42-8	Boron	2540	ug/Kg	J	1060	5290	5290	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-43-9	Cadmium	529	ug/Kg	U	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-70-2	Calcium	793000	ug/Kg	*	8510	26600	26600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-47-3	Chromium	5130	ug/Kg	*	159	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-48-4	Cobalt	2510	ug/Kg		159	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-50-8	Copper	4550	ug/Kg		317	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-89-6	Iron	11200000	ug/Kg		8460	26400	26400	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-92-1	Lead	8730	ug/Kg		264	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-93-2	Lithium	10	mg/kg		0.421	2.1	2.1	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7439-95-4	Magnesium	585000	ug/Kg	*	9040	31900	31900	1	P	HSC	12/18/09 10:10	121809A-1	933555
7439-96-5	Manganese	337000	ug/Kg		212	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610
7439-97-6	Mercury	6.59	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/09/09 12:54	120909S1-5	928044
7440-02-0	Nickel	6.11	mg/kg		0.105	0.421	0.421	2	MS	SKJ	12/15/09 18:21	091215-4	928674
7440-09-7	Potassium	381000	ug/Kg		6810	26600	26600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7782-49-2	Selenium	1.05	mg/kg	U	0.526	1.05	1.05	2	MS	SKJ	12/15/09 03:27	091214-3	928674
7440-21-3	Silicon	813000	ug/Kg	N	1600	10600	10600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-22-4	Silver	474	ug/Kg	J	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-23-5	Sodium	49100	ug/Kg		7450	26600	26600	1	P	HSC	12/18/09 10:10	121809A-1	933555
7440-28-0	Thallium	0.210	mg/kg	U	0.0631	0.21	0.21	2	MS	SKJ	12/15/09 03:27	091214-3	928674
7440-32-6	Titanium	314000	ug/Kg	N	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-61-1	Uranium	0.533	mg/kg		0.0139	0.0421	0.0421	2	MS	SKJ	12/15/09 03:27	091214-3	928674
7440-62-2	Vanadium	12100	ug/Kg	*	106	529	529	1	P	HSC	12/11/09 15:08	121109A-2	928610
7440-66-6	Zinc	32800	ug/Kg		349	1060	1060	1	P	HSC	12/11/09 15:08	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.516	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.515	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.518	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.512	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825007 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14117 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 91.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12200000	ug/Kg	N	7100	20900	20900	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-36-0	Antimony	1330	ug/Kg		327	990	990	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-38-2	Arsenic	2.5	mg/kg		0.211	1.05	1.05	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7440-39-3	Barium	167000	ug/Kg	*	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-41-7	Beryllium	0.893	mg/kg		0.0211	0.105	0.105	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7440-42-8	Boron	3160	ug/Kg	J	1040	5220	5220	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-43-9	Cadmium	522	ug/Kg	U	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-70-2	Calcium	2780000	ug/Kg	*	7920	24700	24700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-47-3	Chromium	9760	ug/Kg	*	157	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-48-4	Cobalt	5340	ug/Kg		157	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-50-8	Copper	7260	ug/Kg		313	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-89-6	Iron	14400000	ug/Kg		8360	26100	26100	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-92-1	Lead	12700	ug/Kg		261	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-93-2	Lithium	9.69	mg/kg		0.421	2.11	2.11	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7439-95-4	Magnesium	2180000	ug/Kg	*	8410	29700	29700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7439-96-5	Manganese	324000	ug/Kg		209	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610
7439-97-6	Mercury	17.8	ug/kg		3.98	11.7	11.7	1	AV	JXL1	12/09/09 12:55	120909S1-5	928044
7440-02-0	Nickel	6.89	mg/kg		0.105	0.421	0.421	2	MS	SKJ	12/15/09 18:24	091215-4	928674
7440-09-7	Potassium	1390000	ug/Kg		6330	24700	24700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7782-49-2	Selenium	1.05	mg/kg	U	0.526	1.05	1.05	2	MS	SKJ	12/15/09 03:33	091214-3	928674
7440-21-3	Silicon	999000	ug/Kg	N	1480	9900	9900	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-22-4	Silver	518	ug/Kg	J	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-23-5	Sodium	141000	ug/Kg		6930	24700	24700	1	P	HSC	12/18/09 10:13	121809A-1	933555
7440-28-0	Thallium	0.207	mg/kg	J	0.0632	0.211	0.211	2	MS	SKJ	12/15/09 03:33	091214-3	928674
7440-32-6	Titanium	470000	ug/Kg	N	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-61-1	Uranium	1.53	mg/kg		0.0139	0.0421	0.0421	2	MS	SKJ	12/15/09 03:33	091214-3	928674
7440-62-2	Vanadium	24800	ug/Kg	*	104	522	522	1	P	HSC	12/11/09 15:15	121109A-2	928610
7440-66-6	Zinc	29700	ug/Kg		345	1040	1040	1	P	HSC	12/11/09 15:15	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.558	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.521	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.55	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825008 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14121 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5770000	ug/Kg	N	7220	21200	21200	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-36-0	Antimony	1240	ug/Kg		346	1050	1050	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-38-2	Arsenic	1.5	mg/kg		0.226	1.13	1.13	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7440-39-3	Barium	90700	ug/Kg	*	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-41-7	Beryllium	0.688	mg/kg		0.0226	0.113	0.113	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7440-42-8	Boron	2610	ug/Kg	J	1060	5310	5310	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-43-9	Cadmium	531	ug/Kg	U	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-70-2	Calcium	2640000	ug/Kg	*	8390	26200	26200	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-47-3	Chromium	4040	ug/Kg	*	159	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-48-4	Cobalt	1430	ug/Kg		159	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-50-8	Copper	3820	ug/Kg		319	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-89-6	Iron	10000000	ug/Kg		8500	26600	26600	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-92-1	Lead	6640	ug/Kg		266	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-93-2	Lithium	12.4	mg/kg		0.452	2.26	2.26	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7439-95-4	Magnesium	1690000	ug/Kg	*	8910	31500	31500	1	P	HSC	12/18/09 10:16	121809A-1	933555
7439-96-5	Manganese	198000	ug/Kg		212	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610
7439-97-6	Mercury	14.3	ug/kg		4.39	12.9	12.9	1	AV	JXL1	12/09/09 12:57	120909S1-5	928044
7440-02-0	Nickel	5.34	mg/kg		0.113	0.452	0.452	2	MS	SKJ	12/15/09 18:26	091215-4	928674
7440-09-7	Potassium	978000	ug/Kg		6710	26200	26200	1	P	HSC	12/18/09 10:16	121809A-1	933555
7782-49-2	Selenium	1.13	mg/kg	U	0.565	1.13	1.13	2	MS	SKJ	12/15/09 03:39	091214-3	928674
7440-21-3	Silicon	1090000	ug/Kg	N	1570	10500	10500	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-22-4	Silver	333	ug/Kg	J	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-23-5	Sodium	113000	ug/Kg		7340	26200	26200	1	P	HSC	12/18/09 10:16	121809A-1	933555
7440-28-0	Thallium	0.226	mg/kg	U	0.0678	0.226	0.226	2	MS	SKJ	12/15/09 03:39	091214-3	928674
7440-32-6	Titanium	305000	ug/Kg	N	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-61-1	Uranium	0.584	mg/kg		0.0149	0.0452	0.0452	2	MS	SKJ	12/15/09 03:39	091214-3	928674
7440-62-2	Vanadium	9690	ug/Kg	*	106	531	531	1	P	HSC	12/11/09 15:22	121109A-2	928610
7440-66-6	Zinc	31600	ug/Kg		351	1060	1060	1	P	HSC	12/11/09 15:22	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.532	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.539	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.507	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.546	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825009 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14129 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 98.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2660000	ug/Kg	N	6640	19500	19500	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-36-0	Antimony	391	ug/Kg	J	324	982	982	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-38-2	Arsenic	1.05	mg/kg		0.195	0.976	0.976	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7440-39-3	Barium	27300	ug/Kg	*	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-41-7	Beryllium	0.598	mg/kg		0.0195	0.0976	0.0976	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7440-42-8	Boron	1760	ug/Kg	J	976	4880	4880	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-43-9	Cadmium	488	ug/Kg	U	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-70-2	Calcium	508000	ug/Kg	*	7860	24500	24500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-47-3	Chromium	1850	ug/Kg	*	146	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-48-4	Cobalt	510	ug/Kg		146	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-50-8	Copper	2690	ug/Kg		293	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-89-6	Iron	9020000	ug/Kg		7810	24400	24400	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-92-1	Lead	4360	ug/Kg		244	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-93-2	Lithium	13.9	mg/kg		0.391	1.95	1.95	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7439-95-4	Magnesium	426000	ug/Kg	*	8350	29500	29500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7439-96-5	Manganese	197000	ug/Kg		195	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610
7439-97-6	Mercury	8.77	ug/kg	J	3.98	11.7	11.7	1	AV	JXL1	12/09/09 12:59	120909S1-5	928044
7440-02-0	Nickel	3.5	mg/kg		0.0976	0.391	0.391	2	MS	SKJ	12/15/09 18:29	091215-4	928674
7440-09-7	Potassium	332000	ug/Kg		6280	24500	24500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7782-49-2	Selenium	0.567	mg/kg	J	0.488	0.976	0.976	2	MS	SKJ	12/15/09 03:46	091214-3	928674
7440-21-3	Silicon	706000	ug/Kg	N	1470	9820	9820	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-22-4	Silver	318	ug/Kg	J	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-23-5	Sodium	59600	ug/Kg		6870	24500	24500	1	P	HSC	12/18/09 10:20	121809A-1	933555
7440-28-0	Thallium	0.195	mg/kg	U	0.0586	0.195	0.195	2	MS	SKJ	12/15/09 03:46	091214-3	928674
7440-32-6	Titanium	222000	ug/Kg	N	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-61-1	Uranium	0.509	mg/kg		0.0129	0.0391	0.0391	2	MS	SKJ	12/15/09 03:46	091214-3	928674
7440-62-2	Vanadium	5270	ug/Kg	*	97.6	488	488	1	P	HSC	12/11/09 15:29	121109A-2	928610
7440-66-6	Zinc	33000	ug/Kg		322	976	976	1	P	HSC	12/11/09 15:29	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.521	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.52	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.52	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.517	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825010 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14120 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 97.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	387000	ug/Kg	N	6730	19800	19800	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-36-0	Antimony	1010	ug/Kg	U	332	1010	1010	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-38-2	Arsenic	0.317	mg/kg	J	0.204	1.02	1.02	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7440-39-3	Barium	10000	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-41-7	Beryllium	0.194	mg/kg		0.0204	0.102	0.102	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7440-42-8	Boron	4950	ug/Kg	U	989	4950	4950	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-43-9	Cadmium	495	ug/Kg	U	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-70-2	Calcium	218000	ug/Kg	*	8050	25200	25200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-47-3	Chromium	578	ug/Kg	*	148	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-48-4	Cobalt	181	ug/Kg	J	148	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-50-8	Copper	744	ug/Kg	J	297	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-89-6	Iron	6510000	ug/Kg		7920	24700	24700	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-92-1	Lead	3720	ug/Kg		247	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-93-2	Lithium	7.58	mg/kg		0.408	2.04	2.04	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7439-95-4	Magnesium	106000	ug/Kg	*	8560	30200	30200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7439-96-5	Manganese	208000	ug/Kg		198	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610
7439-97-6	Mercury	12.1	ug/kg	U	4.12	12.1	12.1	1	AV	JXL1	12/09/09 13:00	120909S1-5	928044
7440-02-0	Nickel	1.26	mg/kg		0.102	0.408	0.408	2	MS	SKJ	12/15/09 18:32	091215-4	928674
7440-09-7	Potassium	108000	ug/Kg		6440	25200	25200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7782-49-2	Selenium	1.02	mg/kg	U	0.51	1.02	1.02	2	MS	SKJ	12/15/09 03:52	091214-3	928674
7440-21-3	Silicon	360000	ug/Kg	N	1510	10100	10100	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-22-4	Silver	353	ug/Kg	J	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-23-5	Sodium	112000	ug/Kg		7050	25200	25200	1	P	HSC	12/18/09 10:23	121809A-1	933555
7440-28-0	Thallium	0.204	mg/kg	U	0.0613	0.204	0.204	2	MS	SKJ	12/15/09 03:52	091214-3	928674
7440-32-6	Titanium	157000	ug/Kg	N	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-61-1	Uranium	0.425	mg/kg		0.0135	0.0408	0.0408	2	MS	SKJ	12/15/09 03:52	091214-3	928674
7440-62-2	Vanadium	1430	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 15:36	121109A-2	928610
7440-66-6	Zinc	27400	ug/Kg		326	989	989	1	P	HSC	12/11/09 15:36	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.508	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.519	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.503	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.51	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825011 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14116 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4980000	ug/Kg	N	6940	20400	20400	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-36-0	Antimony	1420	ug/Kg		322	976	976	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-38-2	Arsenic	0.830	mg/kg	J	0.201	1.01	1.01	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7440-39-3	Barium	431000	ug/Kg	*	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-41-7	Beryllium	0.373	mg/kg		0.0201	0.101	0.101	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7440-42-8	Boron	1690	ug/Kg	J	1020	5100	5100	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-43-9	Cadmium	510	ug/Kg	U	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-70-2	Calcium	3480000	ug/Kg	*	7810	24400	24400	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-47-3	Chromium	8990	ug/Kg	*	153	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-48-4	Cobalt	3900	ug/Kg		153	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-50-8	Copper	8820	ug/Kg		306	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-89-6	Iron	11800000	ug/Kg		8160	25500	25500	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-92-1	Lead	14100	ug/Kg		255	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-93-2	Lithium	8.9	mg/kg		0.403	2.01	2.01	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7439-95-4	Magnesium	2000000	ug/Kg	*	8300	29300	29300	1	P	HSC	12/18/09 10:27	121809A-1	933555
7439-96-5	Manganese	217000	ug/Kg		204	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610
7439-97-6	Mercury	11.7	ug/kg	U	3.99	11.7	11.7	1	AV	JXL1	12/09/09 13:02	120909S1-5	928044
7440-02-0	Nickel	6.21	mg/kg		0.101	0.403	0.403	2	MS	SKJ	12/15/09 18:34	091215-4	928674
7440-09-7	Potassium	803000	ug/Kg		6250	24400	24400	1	P	HSC	12/18/09 10:27	121809A-1	933555
7782-49-2	Selenium	1.01	mg/kg	U	0.503	1.01	1.01	2	MS	SKJ	12/15/09 03:58	091214-3	928674
7440-21-3	Silicon	884000	ug/Kg	N	1460	9760	9760	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-22-4	Silver	396	ug/Kg	J	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-23-5	Sodium	107000	ug/Kg		6830	24400	24400	1	P	HSC	12/18/09 10:27	121809A-1	933555
7440-28-0	Thallium	0.201	mg/kg	U	0.0604	0.201	0.201	2	MS	SKJ	12/15/09 03:58	091214-3	928674
7440-32-6	Titanium	432000	ug/Kg	N	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-61-1	Uranium	0.642	mg/kg		0.0133	0.0403	0.0403	2	MS	SKJ	12/15/09 03:58	091214-3	928674
7440-62-2	Vanadium	25700	ug/Kg	*	102	510	510	1	P	HSC	12/11/09 15:43	121109A-2	928610
7440-66-6	Zinc	26200	ug/Kg		337	1020	1020	1	P	HSC	12/11/09 15:43	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.533	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.511	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.518	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.534	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825012 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14111 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15200000	ug/Kg	N	7710	22700	22700	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-36-0	Antimony	1010	ug/Kg	J	338	1030	1030	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-38-2	Arsenic	2.82	mg/kg		0.224	1.12	1.12	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7440-39-3	Barium	189000	ug/Kg	*	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-41-7	Beryllium	1.08	mg/kg		0.0224	0.112	0.112	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7440-42-8	Boron	3420	ug/Kg	J	1130	5670	5670	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-43-9	Cadmium	567	ug/Kg	U	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-70-2	Calcium	2310000	ug/Kg	*	8200	25600	25600	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-47-3	Chromium	12100	ug/Kg	*	170	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-48-4	Cobalt	6390	ug/Kg		170	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-50-8	Copper	8900	ug/Kg		340	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-89-6	Iron	16800000	ug/Kg		9070	28300	28300	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-92-1	Lead	14800	ug/Kg		283	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-93-2	Lithium	17.5	mg/kg		0.448	2.24	2.24	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7439-95-4	Magnesium	2460000	ug/Kg	*	8720	30800	30800	1	P	HSC	12/18/09 10:30	121809A-1	933555
7439-96-5	Manganese	455000	ug/Kg		227	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610
7439-97-6	Mercury	13.1	ug/kg	J	4.65	13.7	13.7	1	AV	JXL1	12/09/09 13:04	120909S1-5	928044
7440-02-0	Nickel	9.03	mg/kg		0.112	0.448	0.448	2	MS	SKJ	12/15/09 18:42	091215-4	928674
7440-09-7	Potassium	1620000	ug/Kg		6560	25600	25600	1	P	HSC	12/18/09 10:30	121809A-1	933555
7782-49-2	Selenium	1.12	mg/kg	U	0.56	1.12	1.12	2	MS	SKJ	12/15/09 04:17	091214-3	928674
7440-21-3	Silicon	1090000	ug/Kg	N	1540	10300	10300	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-22-4	Silver	426	ug/Kg	J	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-23-5	Sodium	86600	ug/Kg		7180	25600	25600	1	P	HSC	12/18/09 10:30	121809A-1	933555
7440-28-0	Thallium	0.0941	mg/kg	J	0.0672	0.224	0.224	2	MS	SKJ	12/15/09 04:17	091214-3	928674
7440-32-6	Titanium	600000	ug/Kg	N	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-61-1	Uranium	0.859	mg/kg		0.0148	0.0448	0.0448	2	MS	SKJ	12/15/09 04:17	091214-3	928674
7440-62-2	Vanadium	30000	ug/Kg	*	113	567	567	1	P	HSC	12/11/09 15:50	121109A-2	928610
7440-66-6	Zinc	35100	ug/Kg		374	1130	1130	1	P	HSC	12/11/09 15:50	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.5	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.503	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.509	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.556	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825013 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14119 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 98.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	671000	ug/Kg	N	6690	19700	19700	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-36-0	Antimony	952	ug/Kg	U	314	952	952	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-38-2	Arsenic	0.566	mg/kg	J	0.199	0.997	0.997	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7440-39-3	Barium	12400	ug/Kg	*	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-41-7	Beryllium	0.251	mg/kg		0.0199	0.0997	0.0997	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7440-42-8	Boron	1230	ug/Kg	J	984	4920	4920	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-43-9	Cadmium	492	ug/Kg	U	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-70-2	Calcium	577000	ug/Kg	*	7620	23800	23800	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-47-3	Chromium	1160	ug/Kg	*	148	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-48-4	Cobalt	253	ug/Kg	J	148	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-50-8	Copper	949	ug/Kg	J	295	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-89-6	Iron	6980000	ug/Kg		7870	24600	24600	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-92-1	Lead	4930	ug/Kg		246	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-93-2	Lithium	9.35	mg/kg		0.399	1.99	1.99	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7439-95-4	Magnesium	187000	ug/Kg	*	8090	28600	28600	1	P	HSC	12/18/09 10:40	121809A-1	933555
7439-96-5	Manganese	196000	ug/Kg		197	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610
7439-97-6	Mercury	11.2	ug/kg	U	3.82	11.2	11.2	1	AV	JXL1	12/09/09 13:09	120909S1-5	928044
7440-02-0	Nickel	1.76	mg/kg		0.0997	0.399	0.399	2	MS	SKJ	12/15/09 18:45	091215-4	928674
7440-09-7	Potassium	145000	ug/Kg		6090	23800	23800	1	P	HSC	12/18/09 10:40	121809A-1	933555
7782-49-2	Selenium	0.613	mg/kg	J	0.499	0.997	0.997	2	MS	SKJ	12/15/09 04:23	091214-3	928674
7440-21-3	Silicon	447000	ug/Kg	N	1430	9520	9520	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-22-4	Silver	251	ug/Kg	J	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-23-5	Sodium	92700	ug/Kg		6670	23800	23800	1	P	HSC	12/18/09 10:40	121809A-1	933555
7440-28-0	Thallium	0.199	mg/kg	U	0.0598	0.199	0.199	2	MS	SKJ	12/15/09 04:23	091214-3	928674
7440-32-6	Titanium	173000	ug/Kg	N	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-61-1	Uranium	0.392	mg/kg		0.0132	0.0399	0.0399	2	MS	SKJ	12/15/09 04:23	091214-3	928674
7440-62-2	Vanadium	1950	ug/Kg	*	98.4	492	492	1	P	HSC	12/11/09 16:11	121109A-2	928610
7440-66-6	Zinc	35000	ug/Kg		325	984	984	1	P	HSC	12/11/09 16:11	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.543	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.51	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.534	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825014 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14110 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 96.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	672000	ug/Kg	N	6850	20200	20200	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-36-0	Antimony	1040	ug/Kg	U	342	1040	1040	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-38-2	Arsenic	1.01	mg/kg	U	0.201	1.01	1.01	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7440-39-3	Barium	12300	ug/Kg	*	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-41-7	Beryllium	0.187	mg/kg		0.0201	0.101	0.101	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7440-42-8	Boron	1110	ug/Kg	J	1010	5040	5040	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-43-9	Cadmium	504	ug/Kg	U	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-70-2	Calcium	240000	ug/Kg	*	8300	25900	25900	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-47-3	Chromium	1310	ug/Kg	*	151	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-48-4	Cobalt	277	ug/Kg	J	151	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-50-8	Copper	1540	ug/Kg		302	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-89-6	Iron	6900000	ug/Kg		8060	25200	25200	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-92-1	Lead	5760	ug/Kg		252	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-93-2	Lithium	3.36	mg/kg		0.402	2.01	2.01	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7439-95-4	Magnesium	132000	ug/Kg	*	8820	31100	31100	1	P	HSC	12/18/09 10:44	121809A-1	933555
7439-96-5	Manganese	256000	ug/Kg		202	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610
7439-97-6	Mercury	11.9	ug/kg	U	4.03	11.9	11.9	1	AV	JXL1	12/09/09 13:11	120909S1-5	928044
7440-02-0	Nickel	0.771	mg/kg		0.101	0.402	0.402	2	MS	SKJ	12/15/09 18:48	091215-4	928674
7440-09-7	Potassium	124000	ug/Kg		6640	25900	25900	1	P	HSC	12/18/09 10:44	121809A-1	933555
7782-49-2	Selenium	1.01	mg/kg	U	0.503	1.01	1.01	2	MS	SKJ	12/15/09 04:29	091214-3	928674
7440-21-3	Silicon	437000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-22-4	Silver	285	ug/Kg	J	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-23-5	Sodium	118000	ug/Kg		7260	25900	25900	1	P	HSC	12/18/09 10:44	121809A-1	933555
7440-28-0	Thallium	0.201	mg/kg	U	0.0603	0.201	0.201	2	MS	SKJ	12/15/09 04:29	091214-3	928674
7440-32-6	Titanium	127000	ug/Kg	N	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-61-1	Uranium	0.359	mg/kg		0.0133	0.0402	0.0402	2	MS	SKJ	12/15/09 04:29	091214-3	928674
7440-62-2	Vanadium	1680	ug/Kg	*	101	504	504	1	P	HSC	12/11/09 16:18	121109A-2	928610
7440-66-6	Zinc	39400	ug/Kg		333	1010	1010	1	P	HSC	12/11/09 16:18	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.525	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.515	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.516	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.5	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825015 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14127 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 95.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5830000	ug/Kg	N	6740	19800	19800	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-36-0	Antimony	1180	ug/Kg		343	1040	1040	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-38-2	Arsenic	1.43	mg/kg		0.203	1.01	1.01	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7440-39-3	Barium	71000	ug/Kg	*	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-41-7	Beryllium	0.699	mg/kg		0.0203	0.101	0.101	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7440-42-8	Boron	2390	ug/Kg	J	991	4960	4960	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-43-9	Cadmium	496	ug/Kg	U	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-70-2	Calcium	1330000	ug/Kg	*	8310	26000	26000	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-47-3	Chromium	4500	ug/Kg	*	149	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-48-4	Cobalt	2080	ug/Kg		149	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-50-8	Copper	3970	ug/Kg		297	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-89-6	Iron	10400000	ug/Kg		7930	24800	24800	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-92-1	Lead	8040	ug/Kg		248	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-93-2	Lithium	13.1	mg/kg		0.406	2.03	2.03	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7439-95-4	Magnesium	831000	ug/Kg	*	8830	31100	31100	1	P	HSC	12/18/09 10:47	121809A-1	933555
7439-96-5	Manganese	269000	ug/Kg		198	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610
7439-97-6	Mercury	10.3	ug/kg	J	4.01	11.8	11.8	1	AV	JXL1	12/09/09 13:12	120909S1-5	928044
7440-02-0	Nickel	5.59	mg/kg		0.101	0.406	0.406	2	MS	SKJ	12/15/09 18:50	091215-4	928674
7440-09-7	Potassium	543000	ug/Kg		6650	26000	26000	1	P	HSC	12/18/09 10:47	121809A-1	933555
7782-49-2	Selenium	1.01	mg/kg	U	0.507	1.01	1.01	2	MS	SKJ	12/15/09 04:35	091214-3	928674
7440-21-3	Silicon	845000	ug/Kg	N	1560	10400	10400	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-22-4	Silver	473	ug/Kg	J	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-23-5	Sodium	63100	ug/Kg		7270	26000	26000	1	P	HSC	12/18/09 10:47	121809A-1	933555
7440-28-0	Thallium	0.203	mg/kg	U	0.0609	0.203	0.203	2	MS	SKJ	12/15/09 04:35	091214-3	928674
7440-32-6	Titanium	301000	ug/Kg	N	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-61-1	Uranium	0.602	mg/kg		0.0134	0.0406	0.0406	2	MS	SKJ	12/15/09 04:35	091214-3	928674
7440-62-2	Vanadium	10900	ug/Kg	*	99.1	496	496	1	P	HSC	12/11/09 16:25	121109A-2	928610
7440-66-6	Zinc	33200	ug/Kg		327	991	991	1	P	HSC	12/11/09 16:25	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.534	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.53	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.518	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.506	g	50	mL	12/16/09	FGA

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825016 **BASIS:** Dry Weight **DATE COLLECTED** 23–NOV–09

CLIENT ID: RE03–09–14118 **LEVEL:** Low **DATE RECEIVED** 25–NOV–09

MATRIX: SOIL **%SOLIDS:** 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	23200000	ug/Kg	N	7310	21500	21500	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–36–0	Antimony	2730	ug/Kg		327	990	990	1	P	HSC	12/18/09 10:51	121809A–1	933555
7440–38–2	Arsenic	2.02	mg/kg		0.21	1.05	1.05	2	MS	SKJ	12/15/09 18:53	091215–4	928674
7440–39–3	Barium	265000	ug/Kg	*	107	537	537	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–41–7	Beryllium	1.14	mg/kg		0.021	0.105	0.105	2	MS	SKJ	12/15/09 18:53	091215–4	928674
7440–42–8	Boron	4010	ug/Kg	J	1070	5370	5370	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–43–9	Cadmium	112	ug/Kg	J	107	537	537	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–70–2	Calcium	17700000	ug/Kg	*	7920	24700	24700	1	P	HSC	12/18/09 10:51	121809A–1	933555
7440–47–3	Chromium	13000	ug/Kg	*	161	537	537	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–48–4	Cobalt	7490	ug/Kg		161	537	537	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–50–8	Copper	8940	ug/Kg		322	1070	1070	1	P	HSC	12/11/09 16:32	121109A–2	928610
7439–89–6	Iron	17000000	ug/Kg		8600	26900	26900	1	P	HSC	12/11/09 16:32	121109A–2	928610
7439–92–1	Lead	17000	ug/Kg		269	1070	1070	1	P	HSC	12/11/09 16:32	121109A–2	928610
7439–93–2	Lithium	20.2	mg/kg		0.419	2.1	2.1	2	MS	SKJ	12/15/09 18:53	091215–4	928674
7439–95–4	Magnesium	2390000	ug/Kg	*	8410	29700	29700	1	P	HSC	12/18/09 10:51	121809A–1	933555
7439–96–5	Manganese	490000	ug/Kg		215	1070	1070	1	P	HSC	12/11/09 16:32	121109A–2	928610
7439–97–6	Mercury	26.2	ug/kg		4.16	12.2	12.2	1	AV	JXL1	12/09/09 13:14	120909S1–5	928044
7440–02–0	Nickel	9.11	mg/kg		0.105	0.419	0.419	2	MS	SKJ	12/15/09 18:53	091215–4	928674
7440–09–7	Potassium	1300000	ug/Kg		6340	24700	24700	1	P	HSC	12/18/09 10:51	121809A–1	933555
7782–49–2	Selenium	1.05	mg/kg	U	0.524	1.05	1.05	2	MS	SKJ	12/15/09 04:42	091214–3	928674
7440–21–3	Silicon	1340000	ug/Kg	N	1480	9900	9900	1	P	HSC	12/18/09 10:51	121809A–1	933555
7440–22–4	Silver	374	ug/Kg	J	107	537	537	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–23–5	Sodium	214000	ug/Kg		6930	24700	24700	1	P	HSC	12/18/09 10:51	121809A–1	933555
7440–28–0	Thallium	0.0706	mg/kg	J	0.0629	0.21	0.21	2	MS	SKJ	12/15/09 04:42	091214–3	928674
7440–32–6	Titanium	764000	ug/Kg	N	107	537	537	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–61–1	Uranium	0.607	mg/kg		0.0138	0.0419	0.0419	2	MS	SKJ	12/15/09 04:42	091214–3	928674
7440–62–2	Vanadium	29500	ug/Kg	*	107	537	537	1	P	HSC	12/11/09 16:32	121109A–2	928610
7440–66–6	Zinc	35300	ug/Kg		355	1070	1070	1	P	HSC	12/11/09 16:32	121109A–2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.542	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.514	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.527	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.558	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825017 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14122 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 94.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7130000	ug/Kg	N	6860	20200	20200	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-36-0	Antimony	667	ug/Kg	J	347	1050	1050	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-38-2	Arsenic	1.5	mg/kg		0.201	1	1	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7440-39-3	Barium	115000	ug/Kg	*	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-41-7	Beryllium	0.716	mg/kg		0.0201	0.1	0.1	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7440-42-8	Boron	2310	ug/Kg	J	1010	5050	5050	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-43-9	Cadmium	505	ug/Kg	U	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-70-2	Calcium	2850000	ug/Kg	*	8410	26300	26300	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-47-3	Chromium	5180	ug/Kg	*	151	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-48-4	Cobalt	3090	ug/Kg		151	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-50-8	Copper	4550	ug/Kg		303	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-89-6	Iron	12100000	ug/Kg		8070	25200	25200	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-92-1	Lead	23900	ug/Kg		252	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-93-2	Lithium	13.5	mg/kg		0.401	2.01	2.01	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7439-95-4	Magnesium	1330000	ug/Kg	*	8940	31500	31500	1	P	HSC	12/18/09 10:54	121809A-1	933555
7439-96-5	Manganese	454000	ug/Kg		202	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610
7439-97-6	Mercury	16.1	ug/kg		3.91	11.5	11.5	1	AV	JXL1	12/09/09 13:16	120909S1-5	928044
7440-02-0	Nickel	6.36	mg/kg		0.1	0.401	0.401	2	MS	SKJ	12/15/09 18:56	091215-4	928674
7440-09-7	Potassium	929000	ug/Kg		6730	26300	26300	1	P	HSC	12/18/09 10:54	121809A-1	933555
7782-49-2	Selenium	1	mg/kg	U	0.502	1	1	2	MS	SKJ	12/15/09 04:48	091214-3	928674
7440-21-3	Silicon	1140000	ug/Kg	N	1580	10500	10500	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-22-4	Silver	410	ug/Kg	J	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-23-5	Sodium	321000	ug/Kg		7360	26300	26300	1	P	HSC	12/18/09 10:54	121809A-1	933555
7440-28-0	Thallium	0.201	mg/kg	U	0.0602	0.201	0.201	2	MS	SKJ	12/15/09 04:48	091214-3	928674
7440-32-6	Titanium	387000	ug/Kg	N	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-61-1	Uranium	0.625	mg/kg		0.0132	0.0401	0.0401	2	MS	SKJ	12/15/09 04:48	091214-3	928674
7440-62-2	Vanadium	13600	ug/Kg	*	101	505	505	1	P	HSC	12/11/09 16:39	121109A-2	928610
7440-66-6	Zinc	38300	ug/Kg		333	1010	1010	1	P	HSC	12/11/09 16:39	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.553	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.525	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.528	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.504	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825018 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14124 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 92.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3880000	ug/Kg	N	6910	20300	20300	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-36-0	Antimony	810	ug/Kg	J	328	994	994	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-38-2	Arsenic	0.963	mg/kg	J	0.212	1.06	1.06	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7440-39-3	Barium	54100	ug/Kg	*	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-41-7	Beryllium	0.740	mg/kg		0.0212	0.106	0.106	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7440-42-8	Boron	1890	ug/Kg	J	1020	5080	5080	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-43-9	Cadmium	508	ug/Kg	U	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-70-2	Calcium	2040000	ug/Kg	*	7950	24800	24800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-47-3	Chromium	2650	ug/Kg	*	152	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-48-4	Cobalt	2820	ug/Kg		152	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-50-8	Copper	2760	ug/Kg		305	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-89-6	Iron	9700000	ug/Kg		8130	25400	25400	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-92-1	Lead	21500	ug/Kg		254	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-93-2	Lithium	9.59	mg/kg		0.424	2.12	2.12	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7439-95-4	Magnesium	1040000	ug/Kg	*	8450	29800	29800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7439-96-5	Manganese	497000	ug/Kg		203	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610
7439-97-6	Mercury	6.41	ug/kg	J	4.31	12.7	12.7	1	AV	JXL1	12/09/09 13:17	120909S1-5	928044
7440-02-0	Nickel	6.14	mg/kg		0.106	0.424	0.424	2	MS	SKJ	12/15/09 18:58	091215-4	928674
7440-09-7	Potassium	496000	ug/Kg		6360	24800	24800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7782-49-2	Selenium	1.06	mg/kg	U	0.53	1.06	1.06	2	MS	SKJ	12/15/09 04:54	091214-3	928674
7440-21-3	Silicon	1100000	ug/Kg	N	1490	9940	9940	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-22-4	Silver	380	ug/Kg	J	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-23-5	Sodium	98600	ug/Kg		6950	24800	24800	1	P	HSC	12/18/09 10:58	121809A-1	933555
7440-28-0	Thallium	0.207	mg/kg	J	0.0636	0.212	0.212	2	MS	SKJ	12/15/09 04:54	091214-3	928674
7440-32-6	Titanium	149000	ug/Kg	N	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-61-1	Uranium	0.747	mg/kg		0.014	0.0424	0.0424	2	MS	SKJ	12/15/09 04:54	091214-3	928674
7440-62-2	Vanadium	6760	ug/Kg	*	102	508	508	1	P	HSC	12/11/09 16:46	121109A-2	928610
7440-66-6	Zinc	23700	ug/Kg		335	1020	1020	1	P	HSC	12/11/09 16:46	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.513	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.534	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.512	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.546	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825019 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14112 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	23700000	ug/Kg	N	7490	22000	22000	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-36-0	Antimony	1840	ug/Kg		369	1120	1120	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-38-2	Arsenic	2.28	mg/kg		0.22	1.1	1.1	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7440-39-3	Barium	212000	ug/Kg	*	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-41-7	Beryllium	1.44	mg/kg		0.022	0.11	0.11	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7440-42-8	Boron	3560	ug/Kg	J	1100	5510	5510	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-70-2	Calcium	2780000	ug/Kg	*	8950	28000	28000	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-47-3	Chromium	12500	ug/Kg	*	165	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-48-4	Cobalt	7460	ug/Kg		165	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-50-8	Copper	8390	ug/Kg		330	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-89-6	Iron	16900000	ug/Kg		8810	27500	27500	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-92-1	Lead	15600	ug/Kg		275	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-93-2	Lithium	25.2	mg/kg		0.44	2.2	2.2	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7439-95-4	Magnesium	2400000	ug/Kg	*	9510	33600	33600	1	P	HSC	12/18/09 11:01	121809A-1	933555
7439-96-5	Manganese	451000	ug/Kg		220	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610
7439-97-6	Mercury	24.4	ug/kg		4.59	13.5	13.5	1	AV	JXL1	12/09/09 13:19	120909S1-5	928044
7440-02-0	Nickel	10.5	mg/kg		0.11	0.44	0.44	2	MS	SKJ	12/15/09 19:01	091215-4	928674
7440-09-7	Potassium	1600000	ug/Kg		7160	28000	28000	1	P	HSC	12/18/09 11:01	121809A-1	933555
7782-49-2	Selenium	1.1	mg/kg	U	0.55	1.1	1.1	2	MS	SKJ	12/15/09 05:00	091214-3	928674
7440-21-3	Silicon	1490000	ug/Kg	N	1680	11200	11200	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-22-4	Silver	392	ug/Kg	J	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-23-5	Sodium	239000	ug/Kg		7830	28000	28000	1	P	HSC	12/18/09 11:01	121809A-1	933555
7440-28-0	Thallium	0.0958	mg/kg	J	0.0659	0.22	0.22	2	MS	SKJ	12/15/09 05:00	091214-3	928674
7440-32-6	Titanium	738000	ug/Kg	N	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-61-1	Uranium	0.782	mg/kg		0.0145	0.044	0.044	2	MS	SKJ	12/15/09 05:00	091214-3	928674
7440-62-2	Vanadium	29400	ug/Kg	*	110	551	551	1	P	HSC	12/11/09 16:53	121109A-2	928610
7440-66-6	Zinc	30500	ug/Kg		363	1100	1100	1	P	HSC	12/11/09 16:53	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.5	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.511	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.512	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.503	g	50	mL	12/16/09	FGA

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-667 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241825020 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: RE03-09-14128 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 97.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5300000	ug/Kg	N	6730	19800	19800	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-36-0	Antimony	819	ug/Kg	J	328	995	995	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-38-2	Arsenic	1.5	mg/kg		0.196	0.98	0.98	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7440-39-3	Barium	124000	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-41-7	Beryllium	0.564	mg/kg		0.0196	0.098	0.098	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7440-42-8	Boron	1800	ug/Kg	J	989	4950	4950	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-43-9	Cadmium	495	ug/Kg	U	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-70-2	Calcium	1070000	ug/Kg	*	7960	24900	24900	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-47-3	Chromium	7770	ug/Kg	*	148	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-48-4	Cobalt	7830	ug/Kg		148	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-50-8	Copper	5440	ug/Kg		297	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-89-6	Iron	11900000	ug/Kg		7910	24700	24700	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-92-1	Lead	10400	ug/Kg		247	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-93-2	Lithium	6.72	mg/kg		0.392	1.96	1.96	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7439-95-4	Magnesium	1360000	ug/Kg	*	8460	29800	29800	1	P	HSC	12/18/09 11:04	121809A-1	933555
7439-96-5	Manganese	499000	ug/Kg		198	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610
7439-97-6	Mercury	8.56	ug/kg	J	3.88	11.4	11.4	1	AV	JXL1	12/09/09 13:21	120909S1-5	928044
7440-02-0	Nickel	5.17	mg/kg		0.098	0.392	0.392	2	MS	SKJ	12/15/09 19:04	091215-4	928674
7440-09-7	Potassium	979000	ug/Kg		6370	24900	24900	1	P	HSC	12/18/09 11:04	121809A-1	933555
7782-49-2	Selenium	0.980	mg/kg	U	0.49	0.98	0.98	2	MS	SKJ	12/15/09 05:07	091214-3	928674
7440-21-3	Silicon	906000	ug/Kg	N	1490	9950	9950	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-22-4	Silver	521	ug/Kg		98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-23-5	Sodium	99000	ug/Kg		6960	24900	24900	1	P	HSC	12/18/09 11:04	121809A-1	933555
7440-28-0	Thallium	0.0997	mg/kg	J	0.0588	0.196	0.196	2	MS	SKJ	12/15/09 05:07	091214-3	928674
7440-32-6	Titanium	405000	ug/Kg	N	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-61-1	Uranium	0.513	mg/kg		0.0129	0.0392	0.0392	2	MS	SKJ	12/15/09 05:07	091214-3	928674
7440-62-2	Vanadium	21400	ug/Kg	*	98.9	495	495	1	P	HSC	12/11/09 17:01	121109A-2	928610
7440-66-6	Zinc	24600	ug/Kg		326	989	989	1	P	HSC	12/11/09 17:01	121109A-2	928610

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928044	928043	SW846 7471A Prep	0.541	g	30	mL	12/08/09	TXB3
928610	928609	SW846 3050B	0.52	g	50	mL	12/04/09	BXA1
928674	928673	SW846 3050B	0.525	g	50	mL	12/04/09	BXA1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

933555	933554	SW846 3050B	0.517	g	50	mL	12/16/09	FGA

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.14	ug/L	5	ug/L	102.9	90.0 – 110.0	AV	09–DEC–09 09:59	120909S1–5
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Barium	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Boron	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Cadmium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Copper	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Lead	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Silver	263	ug/L	250	ug/L	105.1	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Titanium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Vanadium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Zinc	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11–DEC–09 11:07	121109A–2
	Selenium	48.5	ug/L	50	ug/L	97	90.0 – 110.0	MS	14–DEC–09 23:55	091214–3
	Thallium	46.7	ug/L	50	ug/L	93.4	90.0 – 110.0	MS	14–DEC–09 23:55	091214–3
	Uranium	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	14–DEC–09 23:55	091214–3
	Arsenic	48	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	15–DEC–09 17:18	091215–4
	Beryllium	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	15–DEC–09 17:18	091215–4
	Lithium	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	15–DEC–09 17:18	091215–4
	Nickel	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	15–DEC–09 17:18	091215–4
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Potassium	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Silicon	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
	Sodium	2560	ug/L	2500	ug/L	102.3	90.0 – 110.0	P	18–DEC–09 02:49	121809A–1
CCV01										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	09–DEC–09 10:04	120909S1–5

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Barium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Boron	526	ug/L	500	ug/L	105.1	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Cadmium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Chromium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Lead	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Titanium	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Zinc	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Selenium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	15–DEC–09 00:26	091214–3
	Thallium	46.5	ug/L	50	ug/L	93	90.0 – 110.0	MS	15–DEC–09 00:26	091214–3
	Uranium	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	15–DEC–09 00:26	091214–3
	Arsenic	48.7	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	15–DEC–09 17:31	091215–4
	Beryllium	51.6	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	15–DEC–09 17:31	091215–4
	Lithium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	15–DEC–09 17:31	091215–4
	Nickel	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	15–DEC–09 17:31	091215–4
	Antimony	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Potassium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Sodium	10200	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
CCV02										
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09–DEC–09 10:24	120909S1–5
	Aluminum	4510	ug/L	5000	ug/L	90.2	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Boron	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Cadmium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Chromium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Iron	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Lead	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Manganese	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Silver	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Titanium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Zinc	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-DEC-09 12:09	121109A-2
	Selenium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	15-DEC-09 00:45	091214-3
	Thallium	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	15-DEC-09 00:45	091214-3
	Uranium	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	15-DEC-09 00:45	091214-3
	Arsenic	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	15-DEC-09 17:39	091215-4
	Beryllium	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	15-DEC-09 17:39	091215-4
	Lithium	51.1	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	15-DEC-09 17:39	091215-4
	Nickel	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	15-DEC-09 17:39	091215-4
	Antimony	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	18-DEC-09 03:46	121809A-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	18-DEC-09 03:46	121809A-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	18-DEC-09 03:46	121809A-1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	18-DEC-09 03:46	121809A-1
	Silicon	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	18-DEC-09 03:46	121809A-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	18-DEC-09 03:46	121809A-1
CCV03										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	09-DEC-09 10:44	120909S1-5
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Barium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Cadmium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Chromium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Copper	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Lead	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Manganese	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Titanium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-DEC-09 12:30	121109A-2
	Selenium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	15-DEC-09 01:47	091214-3
	Thallium	46.8	ug/L	50	ug/L	93.6	90.0 – 110.0	MS	15-DEC-09 01:47	091214-3
	Uranium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	15-DEC-09 01:47	091214-3
	Arsenic	46.8	ug/L	50	ug/L	93.5	90.0 – 110.0	MS	15-DEC-09 18:08	091215-4
	Beryllium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	15-DEC-09 18:08	091215-4
	Lithium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	15-DEC-09 18:08	091215-4
	Nickel	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	15-DEC-09 18:08	091215-4
	Antimony	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Silicon	2470	ug/L	2500	ug/L	98.7	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
	Sodium	10100	ug/L	10000	ug/L	100.8	90.0 – 110.0	P	18-DEC-09 03:57	121809A-1
CCV04										
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	09-DEC-09 11:04	120909S1-5
	Aluminum	4770	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Barium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Chromium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Lead	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Manganese	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Titanium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 13:02	121109A-2
	Selenium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	15-DEC-09 02:56	091214-3
	Thallium	46.7	ug/L	50	ug/L	93.4	90.0 – 110.0	MS	15-DEC-09 02:56	091214-3
	Uranium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	15-DEC-09 02:56	091214-3
	Arsenic	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	15-DEC-09 18:37	091215-4
	Beryllium	54.2	ug/L	50	ug/L	108.4	90.0 – 110.0	MS	15-DEC-09 18:37	091215-4
	Lithium	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	15-DEC-09 18:37	091215-4
	Nickel	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	15-DEC-09 18:37	091215-4
	Antimony	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Magnesium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Silicon	2480	ug/L	2500	ug/L	99.2	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 – 110.0	P	18-DEC-09 04:39	121809A-1
CCV05										
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09-DEC-09 11:24	120909S1-5
	Aluminum	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2
	Boron	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-DEC-09 13:24	121109A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Cobalt	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Copper	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Iron	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Lead	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Manganese	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Titanium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Zinc	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Selenium	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	15–DEC–09 04:04	091214–3
	Thallium	46.7	ug/L	50	ug/L	93.4	90.0 – 110.0	MS	15–DEC–09 04:04	091214–3
	Uranium	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	15–DEC–09 04:04	091214–3
	Arsenic	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	15–DEC–09 19:06	091215–4
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	15–DEC–09 19:06	091215–4
	Lithium	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	15–DEC–09 19:06	091215–4
	Nickel	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	15–DEC–09 19:06	091215–4
	Antimony	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Potassium	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Silicon	2470	ug/L	2500	ug/L	98.9	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Sodium	11100	ug/L	10000	ug/L	111.2	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
CCV06										
	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	09–DEC–09 11:45	120909S1–5
	Aluminum	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Barium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Boron	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Cadmium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Copper	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Iron	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Lead	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Manganese	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Silver	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Titanium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Vanadium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Zinc	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Selenium	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	15–DEC–09 05:13	091214–3
	Thallium	46	ug/L	50	ug/L	91.9	90.0 – 110.0	MS	15–DEC–09 05:13	091214–3
	Uranium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	15–DEC–09 05:13	091214–3
	Antimony	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Calcium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Magnesium	5520	ug/L	5000	ug/L	110.4	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Silicon	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Sodium	10600	ug/L	10000	ug/L	105.5	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
CCV07										
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	09–DEC–09 12:05	120909S1–5
	Aluminum	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Boron	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Cadmium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Cobalt	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Copper	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Lead	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Titanium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Vanadium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Zinc	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Potassium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Silicon	2520	ug/L	2500	ug/L	100.9	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Sodium	10600	ug/L	10000	ug/L	105.8	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
CCV08										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	09–DEC–09 12:25	120909S1–5
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Barium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Boron	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Chromium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Copper	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Iron	5280	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Manganese	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Titanium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	18–DEC–09 06:55	121809A–1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	18–DEC–09 06:55	121809A–1
	Magnesium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	18–DEC–09 06:55	121809A–1
	Potassium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	18–DEC–09 06:55	121809A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silicon	2510	ug/L	2500	ug/L	100.5	90.0 – 110.0	P	18–DEC–09 06:55	121809A–1
	Sodium	10400	ug/L	10000	ug/L	104	90.0 – 110.0	P	18–DEC–09 06:55	121809A–1
CCV09										
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 – 120.0	AV	09–DEC–09 12:45	120909S1–5
	Antimony	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Calcium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Potassium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Silicon	2530	ug/L	2500	ug/L	101.1	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
CCV10										
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	09–DEC–09 13:06	120909S1–5
	Antimony	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Calcium	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Potassium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Silicon	2540	ug/L	2500	ug/L	101.5	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
CCV11										
	Mercury	5.08	ug/L	5	ug/L	101.5	80.0 – 120.0	AV	09–DEC–09 13:26	120909S1–5
	Antimony	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Potassium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Silicon	2540	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
	Sodium	10200	ug/L	10000	ug/L	102.4	90.0 – 110.0	P	18–DEC–09 08:46	121809A–1
CCV12										
	Antimony	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-667

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18-DEC-09 09:08	121809A-1
	Silicon	2550	ug/L	2500	ug/L	102	90.0 – 110.0	P	18-DEC-09 09:08	121809A-1
	Sodium	10300	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	18-DEC-09 09:08	121809A-1
CCV13										
	Antimony	495	ug/L	500	ug/L	99	90.0 – 110.0	P	18-DEC-09 09:55	121809A-1
	Calcium	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	18-DEC-09 09:55	121809A-1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	18-DEC-09 09:55	121809A-1
	Potassium	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	18-DEC-09 09:55	121809A-1
	Silicon	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	18-DEC-09 09:55	121809A-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	18-DEC-09 09:55	121809A-1
CCV14										
	Antimony	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	18-DEC-09 10:33	121809A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	18-DEC-09 10:33	121809A-1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18-DEC-09 10:33	121809A-1
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	18-DEC-09 10:33	121809A-1
	Silicon	2540	ug/L	2500	ug/L	101.5	90.0 – 110.0	P	18-DEC-09 10:33	121809A-1
	Sodium	10200	ug/L	10000	ug/L	101.9	90.0 – 110.0	P	18-DEC-09 10:33	121809A-1
CCV15										
	Antimony	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	18-DEC-09 11:08	121809A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	18-DEC-09 11:08	121809A-1
	Magnesium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	18-DEC-09 11:08	121809A-1
	Potassium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	18-DEC-09 11:08	121809A-1
	Silicon	2540	ug/L	2500	ug/L	101.7	90.0 – 110.0	P	18-DEC-09 11:08	121809A-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	18-DEC-09 11:08	121809A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-667

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.174	ug/L	.2	ug/L	87	70.0 - 130.0	AV	09-DEC-09 10:02	120909S1-5
	Thallium	.881	ug/L	1	ug/L	88.1	70.0 - 130.0	MS	15-DEC-09 00:08	091214-3
	Selenium	4.87	ug/L	5	ug/L	97.4	70.0 - 130.0	MS	15-DEC-09 00:08	091214-3
	Uranium	.194	ug/L	.2	ug/L	97	70.0 - 130.0	MS	15-DEC-09 00:08	091214-3
	Nickel	2.16	ug/L	2	ug/L	107.9	70.0 - 130.0	MS	15-DEC-09 17:23	091215-4
	Arsenic	5.51	ug/L	5	ug/L	110.2	70.0 - 130.0	MS	15-DEC-09 17:23	091215-4
	Beryllium	.564	ug/L	.5	ug/L	112.8	70.0 - 130.0	MS	15-DEC-09 17:23	091215-4
	Lithium	11.1	ug/L	10	ug/L	110.9	70.0 - 130.0	MS	15-DEC-09 17:23	091215-4
PQL01										
	Aluminum	226	ug/L	200	ug/L	113	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Iron	130	ug/L	100	ug/L	129.8	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Lead	10.6	ug/L	10	ug/L	106.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Manganese	10.3	ug/L	10	ug/L	102.9	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Silver	5.23	ug/L	5	ug/L	104.6	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Barium	5.03	ug/L	5	ug/L	100.6	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Cadmium	4.97	ug/L	5	ug/L	99.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Chromium	4.91	ug/L	5	ug/L	98.2	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Cobalt	4.82	ug/L	5	ug/L	96.3	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Copper	9.84	ug/L	10	ug/L	98.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Vanadium	4.82	ug/L	5	ug/L	96.4	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Zinc	9.96	ug/L	10	ug/L	99.6	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Boron	49	ug/L	50	ug/L	98	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Titanium	4.91	ug/L	5	ug/L	98.2	70.0 - 130.0	P	11-DEC-09 11:21	121109A-2
	Magnesium	300	ug/L	300	ug/L	100	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Potassium	178	ug/L	150	ug/L	118.6	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Sodium	305	ug/L	300	ug/L	101.7	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Antimony	9.77	ug/L	10	ug/L	97.7	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Calcium	178	ug/L	200	ug/L	89.2	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1
	Silicon	100	ug/L	100	ug/L	100.2	70.0 - 130.0	P	18-DEC-09 02:57	121809A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-667

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS4,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
PQL02										
	Magnesium	282	ug/L	300	ug/L	93.9	70.0 - 130.0	P	18-DEC-09 03:49	121809A-1
	Potassium	185	ug/L	150	ug/L	123.4	70.0 - 130.0	P	18-DEC-09 03:49	121809A-1
	Sodium	312	ug/L	300	ug/L	104	70.0 - 130.0	P	18-DEC-09 03:49	121809A-1
	Antimony	9.54	ug/L	10	ug/L	95.4	70.0 - 130.0	P	18-DEC-09 03:49	121809A-1
	Calcium	179	ug/L	200	ug/L	89.4	70.0 - 130.0	P	18-DEC-09 03:49	121809A-1
	Silicon	101	ug/L	100	ug/L	100.9	70.0 - 130.0	P	18-DEC-09 03:49	121809A-1
PQL03										
	Magnesium	295	ug/L	300	ug/L	98.4	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Potassium	184	ug/L	150	ug/L	122.6	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Sodium	304	ug/L	300	ug/L	101.4	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Antimony	10.8	ug/L	10	ug/L	107.7	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Calcium	180	ug/L	200	ug/L	89.9	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Silicon	99.6	ug/L	100	ug/L	99.6	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
PQL04										
	Magnesium	312	ug/L	300	ug/L	103.9	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Potassium	161	ug/L	150	ug/L	107.5	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Sodium	339	ug/L	300	ug/L	113.1	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Antimony	7.46	ug/L	10	ug/L	74.6	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Calcium	178	ug/L	200	ug/L	88.8	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Silicon	100	ug/L	100	ug/L	100.1	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:01	120909S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 11:14	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 11:14	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 11:14	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 11:14	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 11:14	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 11:14	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 11:14	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 11:14	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 11:14	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 11:14	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 11:14	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 11:14	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 11:14	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 11:14	121109A–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	15–DEC–09 00:02	091214–3
	Thallium	0.362	+/–1	J	0.3	1.0	SOL	MS	15–DEC–09 00:02	091214–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	15–DEC–09 00:02	091214–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	15–DEC–09 17:21	091215–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	15–DEC–09 17:21	091215–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	15–DEC–09 17:21	091215–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	15–DEC–09 17:21	091215–4
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 02:53	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 02:53	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 02:53	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 02:53	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 02:53	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 02:53	121809A–1
CCB01										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:06	120909S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 12:00	121109A–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Boron	15.78	+/–50	J	10.0	50.0	SOL	P	11–DEC–09 12:00	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 12:00	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	15–DEC–09 00:33	091214–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	15–DEC–09 00:33	091214–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	15–DEC–09 00:33	091214–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	15–DEC–09 17:34	091215–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	15–DEC–09 17:34	091215–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	15–DEC–09 17:34	091215–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	15–DEC–09 17:34	091215–4
	Antimony	3.99	+/–10	J	3.3	10.0	SOL	P	18–DEC–09 03:16	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 03:16	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 03:16	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 03:16	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 03:16	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 03:16	121809A–1
CCB02										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:26	120909S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 12:16	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 12:16	121109A–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 12:16	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 12:16	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 12:16	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 12:16	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 12:16	121109A-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	15-DEC-09 00:51	091214-3
	Thallium	0.54	+/-1	J	0.3	1.0	SOL	MS	15-DEC-09 00:51	091214-3
	Uranium	0.068	+/-.2	J	0.066	0.2	SOL	MS	15-DEC-09 00:51	091214-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	15-DEC-09 17:41	091215-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	15-DEC-09 17:41	091215-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	15-DEC-09 17:41	091215-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	15-DEC-09 17:41	091215-4
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 03:53	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 03:53	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 03:53	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 03:53	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 03:53	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 03:53	121809A-1
CCB03										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:46	120909S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 12:37	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 12:37	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:37	121109A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 12:37	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	15-DEC-09 01:53	091214-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	15-DEC-09 01:53	091214-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	15-DEC-09 01:53	091214-3
	Arsenic	-1.14	+/-5	J	1.0	5.0	SOL	MS	15-DEC-09 18:11	091215-4
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	15-DEC-09 18:11	091215-4
	Lithium	2.0	+/-10	U	2.0	10.0	SOL	MS	15-DEC-09 18:11	091215-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	15-DEC-09 18:11	091215-4
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 04:04	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 04:04	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 04:04	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 04:04	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 04:04	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 04:04	121809A-1
CCB04										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 11:06	120909S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 13:09	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 13:09	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 13:09	121109A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 13:09	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 13:09	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 13:09	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:09	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 13:09	121109A–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	15–DEC–09 03:02	091214–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	15–DEC–09 03:02	091214–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	15–DEC–09 03:02	091214–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	15–DEC–09 18:40	091215–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	15–DEC–09 18:40	091215–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	15–DEC–09 18:40	091215–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	15–DEC–09 18:40	091215–4
	Antimony	–3.87	+/–10	J	3.3	10.0	SOL	P	18–DEC–09 04:46	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 04:46	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 04:46	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 04:46	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 04:46	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 04:46	121809A–1
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 11:26	120909S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 13:31	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 13:31	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 13:31	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 13:31	121109A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Titanium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	15–DEC–09 04:10	091214–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	15–DEC–09 04:10	091214–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	15–DEC–09 04:10	091214–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	15–DEC–09 19:09	091215–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	15–DEC–09 19:09	091215–4
	Lithium	2.0	+/–10	U	2.0	10.0	SOL	MS	15–DEC–09 19:09	091215–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	15–DEC–09 19:09	091215–4
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 05:15	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 05:15	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 05:15	121809A–1
	Potassium	192.14	+/–250	J	64.0	250	SOL	P	18–DEC–09 05:15	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 05:15	121809A–1
	Sodium	450.93	+/–250		70.0	250	SOL	P	18–DEC–09 05:15	121809A–1
CCB06										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 11:46	120909S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 14:47	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Boron	10.0	+/–50	U	10.0	50.0	SOL	P	11–DEC–09 14:47	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 14:47	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 14:47	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 14:47	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 14:47	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 14:47	121109A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-667

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 14:47	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 14:47	121109A-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	15-DEC-09 05:19	091214-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	15-DEC-09 05:19	091214-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	15-DEC-09 05:19	091214-3
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 05:54	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 05:54	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 05:54	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 05:54	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 05:54	121809A-1
	Sodium	92.26	+/-250	J	70.0	250	SOL	P	18-DEC-09 05:54	121809A-1
CCB07										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 12:06	120909S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 16:04	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 16:04	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 16:04	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 06:33	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 06:33	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 06:33	121809A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 06:33	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 06:33	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 06:33	121809A-1
CCB08										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 12:27	120909S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 17:15	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Boron	10.0	+/-50	U	10.0	50.0	SOL	P	11-DEC-09 17:15	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 17:15	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Titanium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 06:58	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 06:58	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 06:58	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 06:58	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 06:58	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 06:58	121809A-1
CCB09										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 12:47	120909S1-5
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 07:38	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 07:38	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 07:38	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 07:38	121809A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 07:38	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 07:38	121809A–1
CCB10										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 13:07	120909S1–5
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 08:18	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 08:18	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 08:18	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 08:18	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 08:18	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 08:18	121809A–1
CCB11										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 13:28	120909S1–5
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 08:50	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 08:50	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 08:50	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 08:50	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 08:50	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 08:50	121809A–1
CCB12										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 09:12	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 09:12	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 09:12	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 09:12	121809A–1
	Silicon	16.39	+/–100	J	15.0	100	SOL	P	18–DEC–09 09:12	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 09:12	121809A–1
CCB13										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 09:59	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 09:59	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 09:59	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 09:59	121809A–1
	Silicon	15.0	+/–100	U	15.0	100	SOL	P	18–DEC–09 09:59	121809A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-667

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 09:59	121809A-1
CCB14										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 10:37	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 10:37	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 10:37	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 10:37	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 10:37	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 10:37	121809A-1
CCB15										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 11:11	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 11:11	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 11:11	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 11:11	121809A-1
	Silicon	15.0	+/-100	U	15.0	100	SOL	P	18-DEC-09 11:11	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 11:11	121809A-1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–667

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201984335								
	Mercury	4.08	ug/kg	+/–12.0	U	AV	4.08	12
1201985635								
	Aluminum	6760	ug/Kg	+/–19880.716	U	P	6760	19900
	Barium	268	ug/Kg	+/–497.018	J	P	99.4	497
	Boron	1420	ug/Kg	+/–4970.179	J	P	994	4970
	Cadmium	99.4	ug/Kg	+/–497.018	U	P	99.4	497
	Chromium	149	ug/Kg	+/–497.018	U	P	149	497
	Cobalt	149	ug/Kg	+/–497.018	U	P	149	497
	Copper	369	ug/Kg	+/–994.036	J	P	298	994
	Iron	7950	ug/Kg	+/–24850.895	U	P	7950	24900
	Lead	249	ug/Kg	+/–994.036	U	P	249	994
	Manganese	258	ug/Kg	+/–994.036	J	P	199	994
	Silver	99.4	ug/Kg	+/–497.018	U	P	99.4	497
	Titanium	101	ug/Kg	+/–497.018	J	P	99.4	497
	Vanadium	99.4	ug/Kg	+/–497.018	U	P	99.4	497
	Zinc	644	ug/Kg	+/–994.036	J	P	328	994
1201985790								
	Arsenic	0.199	mg/kg	+/–0.996	U	MS	0.199	0.996
	Beryllium	0.0199	mg/kg	+/–0.1	U	MS	0.0199	0.0996
	Lithium	0.398	mg/kg	+/–1.992	U	MS	0.398	1.99
	Nickel	0.0996	mg/kg	+/–0.398	U	MS	0.0996	0.398
	Selenium	0.498	mg/kg	+/–0.996	U	MS	0.498	0.996
	Thallium	0.0598	mg/kg	+/–0.199	U	MS	0.0598	0.199
	Uranium	0.0132	mg/kg	+/–0.04	U	MS	0.0132	0.0398
1201997316								
	Antimony	325	ug/Kg	+/–984.252	U	P	325	984
	Calcium	7870	ug/Kg	+/–24606.299	U	P	7870	24600
	Magnesium	8370	ug/Kg	+/–29527.559	U	P	8370	29500
	Potassium	6300	ug/Kg	+/–24606.299	U	P	6300	24600
	Silicon	1480	ug/Kg	+/–9842.52	U	P	1480	9840
	Sodium	6890	ug/Kg	+/–24606.299	U	P	6890	24600

METALS
–4–
Interference Check Sample

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	–1.71	ug/L					18–DEC–09 03:00	121809A–1
	Calcium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	18–DEC–09 03:00	121809A–1
	Magnesium	491000	ug/L	500000	ug/L	98.2	80.0 – 120.0	18–DEC–09 03:00	121809A–1
	Potassium	6.92	ug/L					18–DEC–09 03:00	121809A–1
	Silicon	17.1	ug/L					18–DEC–09 03:00	121809A–1
	Sodium	23.0	ug/L					18–DEC–09 03:00	121809A–1
ICSAB01									
	Antimony	486	ug/L	500	ug/L	97.1	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Calcium	485000	ug/L	500000	ug/L	97.1	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Magnesium	489000	ug/L	500000	ug/L	97.7	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Potassium	5190	ug/L	5000	ug/L	104	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Silicon	5030	ug/L	5000	ug/L	101	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Sodium	5150	ug/L	5000	ug/L	103	80.0 – 120.0	18–DEC–09 03:03	121809A–1

METALS
–4–
Interference Check Sample

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	511000	ug/L	500000	ug/L	102	80.0 – 120.0	11–DEC–09 11:28	121109A–2
	Barium	2.33	ug/L					11–DEC–09 11:28	121109A–2
	Boron	0.452	ug/L					11–DEC–09 11:28	121109A–2
	Cadmium	0.083	ug/L					11–DEC–09 11:28	121109A–2
	Chromium	1.51	ug/L					11–DEC–09 11:28	121109A–2
	Cobalt	–1.55	ug/L					11–DEC–09 11:28	121109A–2
	Copper	3.84	ug/L					11–DEC–09 11:28	121109A–2
	Iron	190000	ug/L	200000	ug/L	95	80.0 – 120.0	11–DEC–09 11:28	121109A–2
	Lead	–0.399	ug/L					11–DEC–09 11:28	121109A–2
	Manganese	10.7	ug/L					11–DEC–09 11:28	121109A–2
	Silver	–0.31	ug/L					11–DEC–09 11:28	121109A–2
	Titanium	–0.379	ug/L					11–DEC–09 11:28	121109A–2
	Vanadium	–0.315	ug/L					11–DEC–09 11:28	121109A–2
	Zinc	–8.01	ug/L					11–DEC–09 11:28	121109A–2
ICSAB01									
	Aluminum	513000	ug/L	500000	ug/L	103	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Barium	497	ug/L	500	ug/L	99.5	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Boron	512	ug/L	500	ug/L	102	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Cadmium	470	ug/L	500	ug/L	93.9	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Chromium	483	ug/L	500	ug/L	96.5	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Cobalt	447	ug/L	500	ug/L	89.4	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Copper	559	ug/L	500	ug/L	112	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Iron	191000	ug/L	200000	ug/L	95.3	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Lead	463	ug/L	500	ug/L	92.7	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Manganese	490	ug/L	500	ug/L	98.1	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Silver	275	ug/L	250	ug/L	110	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Titanium	512	ug/L	500	ug/L	102	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Vanadium	507	ug/L	500	ug/L	101	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Zinc	484	ug/L	500	ug/L	96.7	80.0 – 120.0	11–DEC–09 11:34	121109A–2

METALS
-4-
Interference Check Sample

SDG No: 10-667

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Selenium	-1.35	ug/L					15-DEC-09 00:14	091214-3
	Thallium	-0.316	ug/L					15-DEC-09 00:14	091214-3
	Uranium	-0.026	ug/L					15-DEC-09 00:14	091214-3
ICSAB01									
	Selenium	21.9	ug/L	20	ug/L	110	80.0 - 120.0	15-DEC-09 00:20	091214-3
	Thallium	17.7	ug/L	20	ug/L	88.6	80.0 - 120.0	15-DEC-09 00:20	091214-3
	Uranium	21.2	ug/L	20	ug/L	106	80.0 - 120.0	15-DEC-09 00:20	091214-3

METALS
–4–
Interference Check Sample

SDG No: 10–667

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	–1.17	ug/L					15–DEC–09 17:26	091215–4
	Beryllium	–0.016	ug/L					15–DEC–09 17:26	091215–4
	Lithium	0.086	ug/L					15–DEC–09 17:26	091215–4
	Nickel	3.62	ug/L					15–DEC–09 17:26	091215–4
ICSAB01									
	Arsenic	22.6	ug/L	20	ug/L	113	80.0 – 120.0	15–DEC–09 17:28	091215–4
	Beryllium	21.7	ug/L	20	ug/L	108	80.0 – 120.0	15–DEC–09 17:28	091215–4
	Lithium	21.3	ug/L	20	ug/L	106	80.0 – 120.0	15–DEC–09 17:28	091215–4
	Nickel	24.0	ug/L	22.7	ug/L	106	80.0 – 120.0	15–DEC–09 17:28	091215–4

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–667 **Client ID** RE03–09–14115S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 99.9906

Sample ID: 241825001 **Spike ID:** 1201984338

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	123		3.7	U	116	106		AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–667 **Client ID** RE03–09–14115SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 99.9906

Sample ID: 241825001 **Spike ID:** 1201984340

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	114		3.7	U	107	106		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–667 **Client ID** RE03–09–14115S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 99.9906

Sample ID: 241825001 **Spike ID:** 1201985638

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Silicon	ug/Kg	75–125	780000		461000		467000	68.1	N	P
Silver	ug/Kg	75–125	50300		257	J	49400	101		P
Sodium	ug/Kg	75–125	577000		98600		467000	102		P
Titanium	ug/Kg	75–125	207000		141000		49400	134	N	P
Vanadium	ug/Kg	75–125	51600		1590		49400	101		P
Zinc	ug/Kg	75–125	64500		13900		49400	102		P
Cobalt	ug/Kg	75–125	47600		149	U	49400	96.4		P
Copper	ug/Kg	75–125	53000		792	J	49400	106		P
Iron	ug/Kg		9440000		7940000		494000	303	N/A	P
Lead	ug/Kg	75–125	53200		2680		49400	102		P
Magnesium	ug/Kg	75–125	652000		136000		467000	110		P
Manganese	ug/Kg	75–125	122000		64200		49400	117		P
Potassium	ug/Kg	75–125	643000		152000		467000	105		P
Aluminum	ug/Kg	75–125	1560000		550000		494000	205	N	P
Antimony	ug/Kg	75–125	43200		329	U	46700	92.4		P
Barium	ug/Kg	75–125	57200		4580		49400	107		P
Boron	ug/Kg	75–125	51400		2110	J	49400	99.7		P
Cadmium	ug/Kg	75–125	49100		99.6	U	49400	99.3		P
Calcium	ug/Kg	75–125	587000		138000		467000	96.2		P
Chromium	ug/Kg	75–125	50100		703		49400	100		P

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–667 **Client ID** RE03–09–14115SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 99.9906

Sample ID: 241825001 **Spike ID:** 1201985641

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg	75–125	1490000		550000		485000	193	N	P
Antimony	ug/Kg	75–125	46000		329	U	49900	92.1		P
Barium	ug/Kg	75–125	57400		4580		48500	109		P
Boron	ug/Kg	75–125	50800		2110	J	48500	101		P
Cadmium	ug/Kg	75–125	48300		99.6	U	48500	99.6		P
Calcium	ug/Kg	75–125	653000		138000		499000	103		P
Chromium	ug/Kg	75–125	49300		703		48500	100		P
Cobalt	ug/Kg	75–125	47000		149	U	48500	96.9		P
Copper	ug/Kg	75–125	51800		792	J	48500	105		P
Iron	ug/Kg		8740000		7940000		485000	165	N/A	P
Lead	ug/Kg	75–125	52300		2680		48500	102		P
Magnesium	ug/Kg	75–125	686000		136000		499000	110		P
Manganese	ug/Kg	75–125	117000		64200		48500	109		P
Potassium	ug/Kg	75–125	650000		152000		499000	99.9		P
Silicon	ug/Kg	75–125	770000		461000		499000	61.9	N	P
Silver	ug/Kg	75–125	49500		257	J	48500	102		P
Sodium	ug/Kg	75–125	610000		98600		499000	102		P
Titanium	ug/Kg	75–125	198000		141000		48500	118		P
Vanadium	ug/Kg	75–125	50700		1590		48500	101		P
Zinc	ug/Kg	75–125	62400		13900		48500	100		P

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-667 **Client ID** RE03-09-14115S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 99.9906

Sample ID: 241825001 **Spike ID:** 1201985793

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.72		1.73		7.94	101		MS
Beryllium	mg/kg	75-125	5.38		0.578		4.96	96.8		MS
Lithium	mg/kg	75-125	12.9		6.9		4.96	121		MS
Nickel	mg/kg	75-125	9.88		4.73		4.96	104		MS
Selenium	mg/kg	75-125	2.21		0.51	J	1.98	85.5		MS
Thallium	mg/kg	75-125	9.5		0.241		9.92	93.4		MS
Uranium	mg/kg	75-125	6.52		1.16		4.96	108		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–667 **Client ID** RE03–09–14115SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 99.9906

Sample ID: 241825001 **Spike ID:** 1201985795

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	mg/kg	75–125	5.53		0.578		4.86	102		MS
Lithium	mg/kg	75–125	12.5		6.9		4.86	116		MS
Nickel	mg/kg	75–125	9.48		4.73		4.86	97.7		MS
Selenium	mg/kg	75–125	1.99		0.51	J	1.95	76.3		MS
Thallium	mg/kg	75–125	9.39		0.241		9.73	94		MS
Uranium	mg/kg	75–125	6.4		1.16		4.86	108		MS
Arsenic	mg/kg	75–125	9.25		1.73		7.78	96.7		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–667

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14115D

Sample ID: 241825001 **Duplicate ID:** 1201984337 **Percent Solids for Dup:** 99.9906

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		3.7	U	3.89	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–667

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14115SD

Sample ID: 1201984338 **Duplicate ID:** 1201984340 **Percent Solids for Dup:** 99.9906

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	123		114		7.6		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–667

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14115D

Sample ID: 241825001 **Duplicate ID:** 1201985637 **Percent Solids for Dup:** 99.9906

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	550000		592000		7.33		P
Antimony	ug/Kg		329	U	707	J	200		P
Barium	ug/Kg	+/–20%	4580		5940		25.8	*	P
Boron	ug/Kg	+/–4810	2110	J	1790	J	16.7		P
Cadmium	ug/Kg		99.6	U	96.2	U			P
Calcium	ug/Kg	+/–23300	138000		107000		25	*	P
Chromium	ug/Kg	+/–481	703		1540		74.9	*	P
Cobalt	ug/Kg		149	U	144	U			P
Copper	ug/Kg	+/–962	792	J	791	J	.0964		P
Iron	ug/Kg	+/–20%	7940000		8330000		4.77		P
Lead	ug/Kg	+/–962	2680		3230		18.4		P
Magnesium	ug/Kg	+/–28000	136000		106000		25.3	*	P
Manganese	ug/Kg	+/–20%	64200		75100		15.5		P
Potassium	ug/Kg	+/–20%	152000		133000		13.4		P
Silicon	ug/Kg	+/–20%	461000		395000		15.5		P
Silver	ug/Kg	+/–481	257	J	319	J	21.3		P
Sodium	ug/Kg	+/–23300	98600		87000		12.5		P
Titanium	ug/Kg	+/–20%	141000		140000		.047		P
Vanadium	ug/Kg	+/–481	1590		2330		38	*	P
Zinc	ug/Kg	+/–20%	13900		16700		18.4		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–667

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14115SD

Sample ID: 1201985638 **Duplicate ID:** 1201985641 **Percent Solids for Dup:** 99.9906

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	1560000		1490000		4.87		P
Antimony	ug/Kg	+/–20	43200		46000		6.22		P
Barium	ug/Kg	+/–20	57200		57400		.349		P
Boron	ug/Kg	+/–20	51400		50800		1.03		P
Cadmium	ug/Kg	+/–20	49100		48300		1.61		P
Calcium	ug/Kg	+/–20	587000		653000		10.5		P
Chromium	ug/Kg	+/–20	50100		49300		1.54		P
Cobalt	ug/Kg	+/–20	47600		47000		1.44		P
Copper	ug/Kg	+/–20	53000		51800		2.21		P
Iron	ug/Kg	+/–20	9440000		8740000		7.7		P
Lead	ug/Kg	+/–20	53200		52300		1.73		P
Magnesium	ug/Kg	+/–20	652000		686000		5.18		P
Manganese	ug/Kg	+/–20	122000		117000		3.96		P
Potassium	ug/Kg	+/–20	643000		650000		1.09		P
Silicon	ug/Kg	+/–20	780000		770000		1.22		P
Silver	ug/Kg	+/–20	50300		49500		1.71		P
Sodium	ug/Kg	+/–20	577000		610000		5.43		P
Titanium	ug/Kg	+/–20	207000		198000		4.46		P
Vanadium	ug/Kg	+/–20	51600		50700		1.67		P
Zinc	ug/Kg	+/–20	64500		62400		3.35		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–667

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–14115D

Sample ID: 241825001 **Duplicate ID:** 1201985792 **Percent Solids for Dup:** 99.9906

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–.971	1.73		1.68		2.55		MS
Beryllium	mg/kg	+/–20%	0.578		0.501		14.4		MS
Lithium	mg/kg	+/–1.94	6.9		6.89		.0434		MS
Nickel	mg/kg	+/–20%	4.73		4.4		7.32		MS
Selenium	mg/kg		0.51	J	0.485	U	200		MS
Thallium	mg/kg	+/–.194	0.241		0.108	J	76.3		MS
Uranium	mg/kg	+/–20%	1.16		0.965		18.5		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-667

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03-09-14115SD

Sample ID: 1201985793 **Duplicate ID:** 1201985795 **Percent Solids for Dup:** 99.9906

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	9.72		9.25		4.86		MS
Beryllium	mg/kg	+/-20	5.38		5.53		2.68		MS
Lithium	mg/kg	+/-20	12.9		12.5		2.74		MS
Nickel	mg/kg	+/-20	9.88		9.48		4.09		MS
Selenium	mg/kg	+/-20	2.21		1.99		10.1		MS
Thallium	mg/kg	+/-20	9.5		9.39		1.24		MS
Uranium	mg/kg	+/-20	6.52		6.4		1.8		MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-667

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201984336								
	Mercury	ug/kg	5150	5760		112	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-667

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985636								
	Aluminum	ug/Kg	7730000	6920000		89.5	56-144	P
	Barium	ug/Kg	472000	476000		101	80-120	P
	Boron	ug/Kg	130000	137000		105	75-125	P
	Cadmium	ug/Kg	117000	118000		101	81-120	P
	Chromium	ug/Kg	72800	75400		104	80-120	P
	Cobalt	ug/Kg	82500	80600		97.6	81-120	P
	Copper	ug/Kg	100000	107000		107	81-118	P
	Iron	ug/Kg	14500000	19400000		134	51-149	P
	Lead	ug/Kg	166000	167000		100	79-121	P
	Manganese	ug/Kg	374000	369000		98.7	81-119	P
	Silver	ug/Kg	123000	132000		107	66-134	P
	Titanium	ug/Kg	269000	343000		127	39-161	P
	Vanadium	ug/Kg	138000	150000		109	79-121	P
	Zinc	ug/Kg	201000	196000		97.6	80-121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-667

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985791								
	Arsenic	mg/kg	255	267		105	83-120	MS
	Beryllium	mg/kg	86.4	97		112	81.2-126.8	MS
	Lithium	mg/kg	8.01	8.58	J	107	66.7-133.7	MS
	Nickel	mg/kg	101	109		108	83.3-121.4	MS
	Selenium	mg/kg	171	182		106	80.2-125.9	MS
	Thallium	mg/kg	203	207		102	78-123.2	MS
	Uranium	mg/kg	2.12	1.6		75.4	61.9-130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-667

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201997317								
	Antimony	ug/Kg	173000	155000		89.8	71-130	P
	Calcium	ug/Kg	9870000	8960000		90.8	83-117	P
	Magnesium	ug/Kg	4000000	3550000		88.8	79-122	P
	Potassium	ug/Kg	4300000	3900000		90.8	74-127	P
	Silicon	ug/Kg	1210000	1010000		83.4	10-190	P
	Sodium	ug/Kg	1020000	939000		92.1	74-127	P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–667 **Client ID:** RE03–09–14115L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241825001 **Serial Dilution ID:** 1201984339

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.068	U	.34	U				AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–667 **Client ID** RE03–09–14115L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241825001 **Serial Dilution ID:** 1201985639

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	5520		5500		.362		10	P
Antimony	3.3	U	16.5	U				P
Barium	46		48.7		5.76			P
Boron	21.2	J	50	U	100			P
Cadmium	1	U	5	U				P
Calcium	1380		1230	J	11.2			P
Chromium	7.05		7.6	J	7.8			P
Cobalt	1.5	U	7.5	U				P
Copper	7.95	J	35.6	J	347			P
Iron	79700		80500		1		10	P
Lead	26.9		28.7	J	6.69			P
Magnesium	1370		1150	J	16.4			P
Manganese	645		670		3.88		10	P
Potassium	1520		1580		3.62			P
Silicon	4630		4650		.432		10	P
Silver	2.58	J	5	U	100			P
Sodium	990		1000	J	1.01			P
Titanium	1410		1450		2.84		10	P
Vanadium	15.9		17	J	6.6			P
Zinc	139		144		3.6			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-667 **Client ID** RE03-09-14115L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241825001 **Serial Dilution ID:** 1201985794

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	8.7		5	U	100			MS
Beryllium	2.91		3		3.09			MS
Lithium	34.7		37.1	J	6.92			MS
Nickel	23.8		25.8		8.19			MS
Selenium	2.57	J	12.5	U	100			MS
Thallium	1.22		1.5	U	100			MS
Uranium	5.85		5.7		2.56			MS

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–667 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928609						
1201985635	MB for batch 928609	MB	S	04–DEC–09	.503g	50mL	
1201985636	LCS for batch 928609	LCS	S	04–DEC–09	.523g	50mL	
1201985638	RE03–09–14115S	MS	S	04–DEC–09	.506g	50mL	
1201985641	RE03–09–14115SD	MSD	S	04–DEC–09	.516g	50mL	
1201985637	RE03–09–14115D	DUP	S	04–DEC–09	.52g	50mL	
241825001	RE03–09–14115	SAMPLE	S	04–DEC–09	.502g	50mL	
241825002	RE03–09–14113	SAMPLE	S	04–DEC–09	.527g	50mL	
241825003	RE03–09–14125	SAMPLE	S	04–DEC–09	.509g	50mL	
241825004	RE03–09–14123	SAMPLE	S	04–DEC–09	.526g	50mL	
241825005	RE03–09–14114	SAMPLE	S	04–DEC–09	.51g	50mL	
241825006	RE03–09–14126	SAMPLE	S	04–DEC–09	.515g	50mL	
241825007	RE03–09–14117	SAMPLE	S	04–DEC–09	.521g	50mL	
241825008	RE03–09–14121	SAMPLE	S	04–DEC–09	.539g	50mL	
241825009	RE03–09–14129	SAMPLE	S	04–DEC–09	.52g	50mL	
241825010	RE03–09–14120	SAMPLE	S	04–DEC–09	.519g	50mL	
241825011	RE03–09–14116	SAMPLE	S	04–DEC–09	.511g	50mL	
241825012	RE03–09–14111	SAMPLE	S	04–DEC–09	.503g	50mL	
241825013	RE03–09–14119	SAMPLE	S	04–DEC–09	.517g	50mL	
241825014	RE03–09–14110	SAMPLE	S	04–DEC–09	.515g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–667 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241825015	RE03–09–14127	SAMPLE	S	04–DEC–09	.53g	50mL	
241825016	RE03–09–14118	SAMPLE	S	04–DEC–09	.514g	50mL	
241825017	RE03–09–14122	SAMPLE	S	04–DEC–09	.525g	50mL	
241825018	RE03–09–14124	SAMPLE	S	04–DEC–09	.534g	50mL	
241825019	RE03–09–14112	SAMPLE	S	04–DEC–09	.511g	50mL	
241825020	RE03–09–14128	SAMPLE	S	04–DEC–09	.52g	50mL	
Batch Number 933554							
1201997316	MB for batch 933554	MB	S	16–DEC–09	.508g	50mL	
1201997317	LCS for batch 933554	LCS	S	16–DEC–09	.502g	50mL	
1201985638	RE03–09–14115S	MS	S	16–DEC–09	.535g	50mL	
1201985641	RE03–09–14115SD	MSD	S	16–DEC–09	.501g	50mL	
1201985637	RE03–09–14115D	DUP	S	16–DEC–09	.536g	50mL	
241825001	RE03–09–14115	SAMPLE	S	16–DEC–09	.502g	50mL	
241825002	RE03–09–14113	SAMPLE	S	16–DEC–09	.52g	50mL	
241825003	RE03–09–14125	SAMPLE	S	16–DEC–09	.511g	50mL	
241825004	RE03–09–14123	SAMPLE	S	16–DEC–09	.518g	50mL	
241825005	RE03–09–14114	SAMPLE	S	16–DEC–09	.542g	50mL	
241825006	RE03–09–14126	SAMPLE	S	16–DEC–09	.512g	50mL	
241825007	RE03–09–14117	SAMPLE	S	16–DEC–09	.55g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-667 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241825008	RE03-09-14121	SAMPLE	S	16-DEC-09	.546g	50mL	
241825009	RE03-09-14129	SAMPLE	S	16-DEC-09	.517g	50mL	
241825010	RE03-09-14120	SAMPLE	S	16-DEC-09	.51g	50mL	
241825011	RE03-09-14116	SAMPLE	S	16-DEC-09	.534g	50mL	
241825012	RE03-09-14111	SAMPLE	S	16-DEC-09	.556g	50mL	
241825013	RE03-09-14119	SAMPLE	S	16-DEC-09	.534g	50mL	
241825014	RE03-09-14110	SAMPLE	S	16-DEC-09	.5g	50mL	
241825015	RE03-09-14127	SAMPLE	S	16-DEC-09	.506g	50mL	
241825016	RE03-09-14118	SAMPLE	S	16-DEC-09	.558g	50mL	
241825017	RE03-09-14122	SAMPLE	S	16-DEC-09	.504g	50mL	
241825018	RE03-09-14124	SAMPLE	S	16-DEC-09	.546g	50mL	
241825019	RE03-09-14112	SAMPLE	S	16-DEC-09	.503g	50mL	
241825020	RE03-09-14128	SAMPLE	S	16-DEC-09	.517g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–667 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928673						
1201985790	MB for batch 928673	MB	S	04–DEC–09	.502g	50mL	
1201985791	LCS for batch 928673	LCS	S	04–DEC–09	.512g	50mL	
1201985793	RE03–09–14115S	MS	S	04–DEC–09	.504g	50mL	
1201985795	RE03–09–14115SD	MSD	S	04–DEC–09	.514g	50mL	
1201985792	RE03–09–14115D	DUP	S	04–DEC–09	.515g	50mL	
241825001	RE03–09–14115	SAMPLE	S	04–DEC–09	.504g	50mL	
241825002	RE03–09–14113	SAMPLE	S	04–DEC–09	.513g	50mL	
241825003	RE03–09–14125	SAMPLE	S	04–DEC–09	.506g	50mL	
241825004	RE03–09–14123	SAMPLE	S	04–DEC–09	.513g	50mL	
241825005	RE03–09–14114	SAMPLE	S	04–DEC–09	.517g	50mL	
241825006	RE03–09–14126	SAMPLE	S	04–DEC–09	.518g	50mL	
241825007	RE03–09–14117	SAMPLE	S	04–DEC–09	.517g	50mL	
241825008	RE03–09–14121	SAMPLE	S	04–DEC–09	.507g	50mL	
241825009	RE03–09–14129	SAMPLE	S	04–DEC–09	.52g	50mL	
241825010	RE03–09–14120	SAMPLE	S	04–DEC–09	.503g	50mL	
241825011	RE03–09–14116	SAMPLE	S	04–DEC–09	.518g	50mL	
241825012	RE03–09–14111	SAMPLE	S	04–DEC–09	.509g	50mL	
241825013	RE03–09–14119	SAMPLE	S	04–DEC–09	.51g	50mL	
241825014	RE03–09–14110	SAMPLE	S	04–DEC–09	.516g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-667 **Method Type**: MS

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241825015	RE03-09-14127	SAMPLE	S	04-DEC-09	.518g	50mL	
241825016	RE03-09-14118	SAMPLE	S	04-DEC-09	.527g	50mL	
241825017	RE03-09-14122	SAMPLE	S	04-DEC-09	.528g	50mL	
241825018	RE03-09-14124	SAMPLE	S	04-DEC-09	.512g	50mL	
241825019	RE03-09-14112	SAMPLE	S	04-DEC-09	.512g	50mL	
241825020	RE03-09-14128	SAMPLE	S	04-DEC-09	.525g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–667 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928043						
1201984335	MB for batch 928043	MB	S	08–DEC–09	.5g	30mL	
1201984336	LCS for batch 928043	LCS	S	08–DEC–09	.209g	30mL	
1201984338	RE03–09–14115S	MS	S	08–DEC–09	.517g	30mL	
1201984340	RE03–09–14115SD	MSD	S	08–DEC–09	.561g	30mL	
1201984337	RE03–09–14115D	DUP	S	08–DEC–09	.524g	30mL	
241825001	RE03–09–14115	SAMPLE	S	08–DEC–09	.552g	30mL	
241825002	RE03–09–14113	SAMPLE	S	08–DEC–09	.562g	30mL	
241825003	RE03–09–14125	SAMPLE	S	08–DEC–09	.5g	30mL	
241825004	RE03–09–14123	SAMPLE	S	08–DEC–09	.573g	30mL	
241825005	RE03–09–14114	SAMPLE	S	08–DEC–09	.515g	30mL	
241825006	RE03–09–14126	SAMPLE	S	08–DEC–09	.516g	30mL	
241825007	RE03–09–14117	SAMPLE	S	08–DEC–09	.558g	30mL	
241825008	RE03–09–14121	SAMPLE	S	08–DEC–09	.532g	30mL	
241825009	RE03–09–14129	SAMPLE	S	08–DEC–09	.521g	30mL	
241825010	RE03–09–14120	SAMPLE	S	08–DEC–09	.508g	30mL	
241825011	RE03–09–14116	SAMPLE	S	08–DEC–09	.533g	30mL	
241825012	RE03–09–14111	SAMPLE	S	08–DEC–09	.5g	30mL	
241825013	RE03–09–14119	SAMPLE	S	08–DEC–09	.543g	30mL	
241825014	RE03–09–14110	SAMPLE	S	08–DEC–09	.525g	30mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-667 **Method Type:** AV

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
241825015	RE03-09-14127	SAMPLE	S	08-DEC-09	.534g	30mL	
241825016	RE03-09-14118	SAMPLE	S	08-DEC-09	.542g	30mL	
241825017	RE03-09-14122	SAMPLE	S	08-DEC-09	.553g	30mL	
241825018	RE03-09-14124	SAMPLE	S	08-DEC-09	.513g	30mL	
241825019	RE03-09-14112	SAMPLE	S	08-DEC-09	.5g	30mL	
241825020	RE03-09-14128	SAMPLE	S	08-DEC-09	.541g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 11–DEC–09 **End Date:** 11–DEC–09

Client Sdg: 10–667
Method P
Data File: 121109A–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	10:35	X			X		X	X		X	X	X	X	X			X						X			X		X	X
S0.1	1	10:41				X		X	X		X	X	X		X			X						X			X		X	X
S0.5	1	10:48	X			X		X	X		X	X	X		X			X						X			X		X	X
SCAL	1	10:55	X			X		X	X		X	X	X	X	X			X						X			X		X	X
S10	1	11:02	X											X																
ICV01	1	11:07	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ICB01	1	11:14	X			X		X	X		X	X	X	X	X			X						X			X		X	X
PQL01	1	11:21	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ICSA01	1	11:28	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ICSAB01	1	11:34	X			X		X	X		X	X	X	X	X			X						X			X		X	X
LR01	1	11:40	X			X		X	X		X	X	X	X	X			X						X			X		X	X
LR02	1	11:46	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV01	1	11:53	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB01	1	12:00	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV02	1	12:09	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB02	1	12:16	X			X		X	X		X	X	X	X	X			X						X			X		X	X
LR03	1	12:23	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV03	1	12:30	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB03	1	12:37	X			X		X	X		X	X	X	X	X			X						X			X		X	X
ZZZZZZ	5	12:47																												
ZZZZZZ	5	12:54																												
CCV04	1	13:02	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB04	1	13:09	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV05	1	13:24	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB05	1	13:31	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985635	1	13:38	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985636	2	13:45	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825001	1	13:52	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985637	1	13:58	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985638	1	14:05	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985641	1	14:12	X			X		X	X		X	X	X	X	X			X						X			X		X	X
1201985639	5	14:19	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825002	1	14:26	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825003	1	14:33	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV06	1	14:40	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB06	1	14:47	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825004	1	14:54	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825005	1	15:01	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825006	1	15:08	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825007	1	15:15	X			X		X	X		X	X	X	X	X			X						X			X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																													
241825008	1	15:22	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825009	1	15:29	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825010	1	15:36	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825011	1	15:43	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825012	1	15:50	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV07	1	15:57	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB07	1	16:04	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825013	1	16:11	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825014	1	16:18	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825015	1	16:25	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825016	1	16:32	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825017	1	16:39	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825018	1	16:46	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825019	1	16:53	X			X		X	X		X	X	X	X	X			X						X			X		X	X
241825020	1	17:01	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCV08	1	17:08	X			X		X	X		X	X	X	X	X			X						X			X		X	X
CCB08	1	17:15	X			X		X	X		X	X	X	X	X			X						X			X		X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 09-DEC-09 **End Date:** 09-DEC-09

Client Sdg: 10-667
Method AV
Data File: 120909S1-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	09:49																	X											
S0.2	1	09:51																	X											
S0.5	1	09:52																	X											
S2.0	1	09:54																	X											
S5.0	1	09:56																	X											
S10.0	1	09:57																	X											
ICV01	1	09:59																	X											
ICB01	1	10:01																	X											
CRDL01	1	10:02																	X											
CCV01	1	10:04																	X											
CCB01	1	10:06																	X											
ZZZZZZ	1	10:07																												
ZZZZZZ	1	10:09																												
ZZZZZZ	1	10:11																												
ZZZZZZ	1	10:12																												
ZZZZZZ	1	10:14																												
ZZZZZZ	1	10:16																												
ZZZZZZ	1	10:17																												
ZZZZZZ	1	10:19																												
ZZZZZZ	1	10:21																												
ZZZZZZ	1	10:22																												
CCV02	1	10:24																	X											
CCB02	1	10:26																	X											
ZZZZZZ	5	10:27																												
ZZZZZZ	1	10:29																												
ZZZZZZ	1	10:31																												
ZZZZZZ	1	10:32																												
ZZZZZZ	1	10:34																												
ZZZZZZ	1	10:36																												
ZZZZZZ	1	10:37																												
ZZZZZZ	1	10:39																												
ZZZZZZ	1	10:41																												
ZZZZZZ	1	10:42																												
CCV03	1	10:44																	X											
CCB03	1	10:46																	X											
ZZZZZZ	1	10:47																												
ZZZZZZ	1	10:49																												
ZZZZZZ	1	10:51																												
ZZZZZZ	1	10:53																												
ZZZZZZ	5	10:54																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	10:56																											
ZZZZZZ	1	10:58																											
ZZZZZZ	1	10:59																											
ZZZZZZ	1	11:01																											
ZZZZZZ	1	11:03																											
CCV04	1	11:04															X												
CCB04	1	11:06															X												
ZZZZZZ	1	11:08																											
ZZZZZZ	5	11:09																											
ZZZZZZ	1	11:11																											
ZZZZZZ	1	11:13																											
ZZZZZZ	1	11:14																											
ZZZZZZ	1	11:16																											
ZZZZZZ	10	11:18																											
ZZZZZZ	1	11:19																											
ZZZZZZ	1	11:21																											
ZZZZZZ	1	11:23																											
CCV05	1	11:24															X												
CCB05	1	11:26															X												
ZZZZZZ	1	11:28																											
ZZZZZZ	1	11:29																											
ZZZZZZ	1	11:31																											
ZZZZZZ	1	11:33																											
ZZZZZZ	1	11:34																											
ZZZZZZ	1	11:36																											
ZZZZZZ	1	11:38																											
ZZZZZZ	1	11:39																											
ZZZZZZ	1	11:41																											
ZZZZZZ	1	11:43																											
CCV06	1	11:45															X												
CCB06	1	11:46															X												
ZZZZZZ	1	11:48																											
ZZZZZZ	1	11:50																											
ZZZZZZ	5	11:51																											
ZZZZZZ	1	11:53																											
ZZZZZZ	1	11:55																											
ZZZZZZ	1	11:56																											
ZZZZZZ	1	11:58																											
ZZZZZZ	1	12:00																											
ZZZZZZ	1	12:01																											

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	12:03																												
CCV07	1	12:05																	X											
CCB07	1	12:06																	X											
ZZZZZZ	10	12:08																												
ZZZZZZ	1	12:10																												
ZZZZZZ	1	12:11																												
ZZZZZZ	1	12:13																												
ZZZZZZ	1	12:15																												
ZZZZZZ	5	12:17																												
ZZZZZZ	1	12:18																												
ZZZZZZ	1	12:20																												
ZZZZZZ	1	12:22																												
ZZZZZZ	1	12:23																												
CCV08	1	12:25																	X											
CCB08	1	12:27																	X											
ZZZZZZ	1	12:28																												
ZZZZZZ	1	12:30																												
1201984335	1	12:32																	X											
1201984336	10	12:33																	X											
241825001	1	12:35																	X											
1201984337	1	12:37																	X											
1201984338	1	12:38																	X											
1201984340	1	12:40																	X											
1201984339	5	12:42																	X											
241825002	1	12:44																	X											
CCV09	1	12:45																	X											
CCB09	1	12:47																	X											
241825003	1	12:49																	X											
241825004	1	12:50																	X											
241825005	1	12:52																	X											
241825006	1	12:54																	X											
241825007	1	12:55																	X											
241825008	1	12:57																	X											
241825009	1	12:59																	X											
241825010	1	13:00																	X											
241825011	1	13:02																	X											
241825012	1	13:04																	X											
CCV10	1	13:06																	X											
CCB10	1	13:07																	X											
241825013	1	13:09																	X											

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
241825014	1	13:11																X										
241825015	1	13:12																X										
241825016	1	13:14																X										
241825017	1	13:16																X										
241825018	1	13:17																X										
241825019	1	13:19																X										
241825020	1	13:21																X										
ZZZZZZ	1	13:23																										
ZZZZZZ	10	13:24																										
CCV11	1	13:26																X										
CCB11	1	13:28																X										

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 14-DEC-09 **End Date:** 15-DEC-09

Client Sdg: 10-667
Method MS
Data File: 091214-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	23:37																				X				X		X		
S10	1	23:43																				X				X		X		
S100	1	23:49																				X				X		X		
ICV01	1	23:55																				X				X		X		
ICB01	1	00:02																				X				X		X		
CRDL01	1	00:08																				X				X		X		
ICSA01	1	00:14																				X				X		X		
ICSAB01	1	00:20																				X				X		X		
CCV01	1	00:26																				X				X		X		
CCB01	1	00:33																				X				X		X		
LR01	1	00:39																				X				X		X		
CCV02	1	00:45																				X				X		X		
CCB02	1	00:51																				X				X		X		
ZZZZZZ	1	00:57																												
ZZZZZZ	1	01:04																												
ZZZZZZ	1	01:10																												
ZZZZZZ	1	01:16																												
ZZZZZZ	1	01:22																												
ZZZZZZ	5	01:28																												
ZZZZZZ	1	01:35																												
ZZZZZZ	1	01:41																												
CCV03	1	01:47																				X				X		X		
CCB03	1	01:53																				X				X		X		
1201985790	2	02:00																				X				X		X		
ZZZZZZ	40	02:06																												
1201985791	20	02:12																				X				X		X		
241825001	2	02:18																				X				X		X		
1201985792	2	02:24																				X				X		X		
1201985793	2	02:31																				X				X		X		
1201985795	2	02:37																				X				X		X		
1201985794	10	02:43																				X				X		X		
241825002	2	02:49																				X				X		X		
CCV04	1	02:56																				X				X		X		
CCB04	1	03:02																				X				X		X		
241825003	2	03:08																				X				X		X		
241825004	2	03:14																				X				X		X		
241825005	2	03:21																				X				X		X		
241825006	2	03:27																				X				X		X		
241825007	2	03:33																				X				X		X		
241825008	2	03:39																				X				X		X		

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
241825009	2	03:46																			X				X		X			
241825010	2	03:52																			X				X		X			
241825011	2	03:58																			X				X		X			
CCV05	1	04:04																			X				X		X			
CCB05	1	04:10																			X				X		X			
241825012	2	04:17																			X				X		X			
241825013	2	04:23																			X				X		X			
241825014	2	04:29																			X				X		X			
241825015	2	04:35																			X				X		X			
241825016	2	04:42																			X				X		X			
241825017	2	04:48																			X				X		X			
241825018	2	04:54																			X				X		X			
241825019	2	05:00																			X				X		X			
241825020	2	05:07																			X				X		X			
CCV06	1	05:13																			X				X		X			
CCB06	1	05:19																			X				X		X			

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 15–DEC–09 **End Date:** 15–DEC–09

Client Sdg: 10–667
Method MS
Data File: 091215–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	17:10			X		X									X				X										
S10	1	17:13			X		X									X				X										
S100	1	17:15			X		X									X				X										
ICV01	1	17:18			X		X									X				X										
ICB01	1	17:21			X		X									X				X										
CRDL01	1	17:23			X		X									X				X										
ICSA01	1	17:26			X		X									X				X										
ICSAB01	1	17:28			X		X									X				X										
CCV01	1	17:31			X		X									X				X										
CCB01	1	17:34			X		X									X				X										
LR01	1	17:36			X		X									X				X										
CCV02	1	17:39			X		X									X				X										
CCB02	1	17:41			X		X									X				X										
1201985790	2	17:44			X		X									X				X										
ZZZZZZ	40	17:47																												
1201985791	20	17:49			X		X									X				X										
241825001	2	17:52			X		X									X				X										
1201985792	2	17:55			X		X									X				X										
1201985793	2	17:57			X		X									X				X										
1201985795	2	18:00			X		X									X				X										
1201985794	10	18:03			X		X									X				X										
241825002	2	18:05			X		X									X				X										
CCV03	1	18:08			X		X									X				X										
CCB03	1	18:11			X		X									X				X										
241825003	2	18:13			X		X									X				X										
241825004	2	18:16			X		X									X				X										
241825005	2	18:18			X		X									X				X										
241825006	2	18:21			X		X									X				X										
241825007	2	18:24			X		X									X				X										
241825008	2	18:26			X		X									X				X										
241825009	2	18:29			X		X									X				X										
241825010	2	18:32			X		X									X				X										
241825011	2	18:34			X		X									X				X										
CCV04	1	18:37			X		X									X				X										
CCB04	1	18:40			X		X									X				X										
241825012	2	18:42			X		X									X				X										
241825013	2	18:45			X		X									X				X										
241825014	2	18:48			X		X									X				X										
241825015	2	18:50			X		X									X				X										
241825016	2	18:53			X		X									X				X										

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
241825017	2	18:56			X		X								X				X									
241825018	2	18:58			X		X								X				X									
241825019	2	19:01			X		X								X				X									
241825020	2	19:04			X		X								X				X									
CCV05	1	19:06			X		X								X				X									
CCB05	1	19:09			X		X								X				X									

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 18-DEC-09 **End Date:** 18-DEC-09

Client Sdg: 10-667
Method P
Data File: 121809A-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
S0.0	1	02:34		X						X							X				X		X		X					
S0.1	1	02:38		X																	X		X							
S0.5	1	02:41		X						X							X				X		X							
SCAL	1	02:44		X						X							X				X		X		X					
S10	1	02:48								X							X								X					
ICV01	1	02:49		X						X							X				X		X		X					
ICB01	1	02:53		X						X							X				X		X		X					
PQL01	1	02:57		X						X							X				X		X		X					
ICSA01	1	03:00		X						X							X				X		X		X					
ICSAB01	1	03:03		X						X							X				X		X		X					
LR01	1	03:06		X						X							X				X		X		X					
LR02	1	03:09		X						X							X				X		X		X					
CCV01	1	03:12		X						X							X				X		X		X					
CCB01	1	03:16		X						X							X				X		X		X					
ZZZZZZ	100	03:24																												
ZZZZZZ	100	03:28																												
ZZZZZZ	100	03:31																												
ZZZZZZ	100	03:35																												
ZZZZZZ	100	03:38																												
ZZZZZZ	500	03:42																												
CCV02	1	03:46		X						X							X				X		X		X					
PQL02	1	03:49		X						X							X				X		X		X					
CCB02	1	03:53		X						X							X				X		X		X					
CCV03	1	03:57		X						X							X				X		X		X					
PQL03	1	04:01		X						X							X				X		X		X					
CCB03	1	04:04		X						X							X				X		X		X					
ZZZZZZ	1	04:08																												
ZZZZZZ	1	04:12																												
ZZZZZZ	1	04:15																												
ZZZZZZ	1	04:19																												
ZZZZZZ	1	04:23																												
ZZZZZZ	1	04:27																												
ZZZZZZ	1	04:31																												
ZZZZZZ	5	04:35																												
CCV04	1	04:39		X						X							X				X		X		X					
PQL04	1	04:42		X						X							X				X		X		X					
CCB04	1	04:46		X						X							X				X		X		X					
ZZZZZZ	1	04:50																												
ZZZZZZ	1	04:53																												
ZZZZZZ	1	04:57																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
ZZZZZZ	1	05:00																												
ZZZZZZ	1	05:04																												
ZZZZZZ	5	05:08																												
CCV05	1	05:12		X						X							X				X		X		X					
CCB05	1	05:15		X						X							X				X		X		X					
ZZZZZZ	1	05:19																												
ZZZZZZ	1	05:23																												
ZZZZZZ	1	05:26																												
ZZZZZZ	1	05:30																												
ZZZZZZ	1	05:34																												
ZZZZZZ	5	05:37																												
ZZZZZZ	1	05:41																												
ZZZZZZ	1	05:45																												
ZZZZZZ	1	05:47																												
CCV06	1	05:50		X						X							X				X		X		X					
CCB06	1	05:54		X						X							X				X		X		X					
ZZZZZZ	1	05:57																												
ZZZZZZ	1	06:01																												
ZZZZZZ	1	06:04																												
ZZZZZZ	1	06:08																												
ZZZZZZ	1	06:12																												
ZZZZZZ	5	06:15																												
ZZZZZZ	1	06:19																												
ZZZZZZ	1	06:22																												
ZZZZZZ	1	06:26																												
CCV07	1	06:30		X						X							X				X		X		X					
CCB07	1	06:33		X						X							X				X		X		X					
CCV08	1	06:55		X						X							X				X		X		X					
CCB08	1	06:58		X						X							X				X		X		X					
ZZZZZZ	1	07:02																												
ZZZZZZ	1	07:06																												
ZZZZZZ	1	07:09																												
ZZZZZZ	1	07:12																												
ZZZZZZ	1	07:16																												
ZZZZZZ	1	07:19																												
ZZZZZZ	5	07:23																												
ZZZZZZ	1	07:27																												
ZZZZZZ	1	07:30																												
CCV09	1	07:34		X						X							X				X		X		X					
CCB09	1	07:38		X						X							X				X		X		X					

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Ni	K	Se	Si	Ag	Na	Tl	Ti	U	V	Zn
ZZZZZZ	1	07:41																												
ZZZZZZ	1	07:45																												
ZZZZZZ	1	07:49																												
ZZZZZZ	1	07:52																												
ZZZZZZ	1	07:56																												
ZZZZZZ	1	08:00																												
ZZZZZZ	1	08:03																												
ZZZZZZ	1	08:07																												
ZZZZZZ	1	08:10																												
CCV10	1	08:14		X						X							X				X		X		X					
CCB10	1	08:18		X						X							X				X		X		X					
ZZZZZZ	1	08:21																												
ZZZZZZ	1	08:25																												
ZZZZZZ	1	08:28																												
ZZZZZZ	1	08:32																												
ZZZZZZ	1	08:35																												
ZZZZZZ	1	08:39																												
ZZZZZZ	5	08:43																												
CCV11	1	08:46		X						X							X				X		X		X					
CCB11	1	08:50		X						X							X				X		X		X					
ZZZZZZ	1	08:53																												
ZZZZZZ	1	08:57																												
ZZZZZZ	1	09:01																												
ZZZZZZ	1	09:04																												
CCV12	1	09:08		X						X							X				X		X		X					
CCB12	1	09:12		X						X							X				X		X		X					
1201997316	1	09:24		X						X							X				X		X		X					
1201997317	1	09:28		X						X							X				X		X		X					
241825001	1	09:31		X						X							X				X		X		X					
1201985637	1	09:34		X						X							X				X		X		X					
1201985638	1	09:38		X						X							X				X		X		X					
1201985641	1	09:41		X						X							X				X		X		X					
1201985639	5	09:45		X						X							X				X		X		X					
241825002	1	09:49		X						X							X				X		X		X					
241825003	1	09:51		X						X							X				X		X		X					
CCV13	1	09:55		X						X							X				X		X		X					
CCB13	1	09:59		X						X							X				X		X		X					
241825004	1	10:02		X						X							X				X		X		X					
241825005	1	10:06		X						X							X				X		X		X					
241825006	1	10:10		X						X							X				X		X		X					

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
241825007	1	10:13		X						X							X				X		X		X					
241825008	1	10:16		X						X							X				X		X		X					
241825009	1	10:20		X						X							X				X		X		X					
241825010	1	10:23		X						X							X				X		X		X					
241825011	1	10:27		X						X							X				X		X		X					
241825012	1	10:30		X						X							X				X		X		X					
CCV14	1	10:33		X						X							X				X		X		X					
CCB14	1	10:37		X						X							X				X		X		X					
241825013	1	10:40		X						X							X				X		X		X					
241825014	1	10:44		X						X							X				X		X		X					
241825015	1	10:47		X						X							X				X		X		X					
241825016	1	10:51		X						X							X				X		X		X					
241825017	1	10:54		X						X							X				X		X		X					
241825018	1	10:58		X						X							X				X		X		X					
241825019	1	11:01		X						X							X				X		X		X					
241825020	1	11:04		X						X							X				X		X		X					
CCV15	1	11:08		X						X							X				X		X		X					
CCB15	1	11:11		X						X							X				X		X		X					

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–667

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Lithium		2.0	10
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Titanium		2.0	10
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-667

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-667

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Boron	249.677	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silicon	251.611	15.0	100
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Titanium	334.94	1.0	5
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-667
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-667
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-667
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10–667
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	–0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-667
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-667
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-667
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10–667
Effective Dates: 01–NOV–09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	–33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-667
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	-0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-2.33110
Copper	324.752	-0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	-2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	-24.9658
Manganese	257.61	-0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	-0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	-0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.63400	0.00000
Tin	189.927	-0.09214	0.00000	-0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.08158	0.00000	0.00000	0.00000	-6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10–667
Contract: LANL01004
Instrument: OPTIMA1 **Effective Dates:** 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	–1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-667
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-667
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–667

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09
Aluminum	20	500000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–667

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Lithium	1000	1000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Titanium	1000	100	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Boron	1000	200	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–667

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Boron	20	5000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silicon	20	50000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Titanium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

Raw Data

Method: Hg_ReAlign
Result: 122109

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

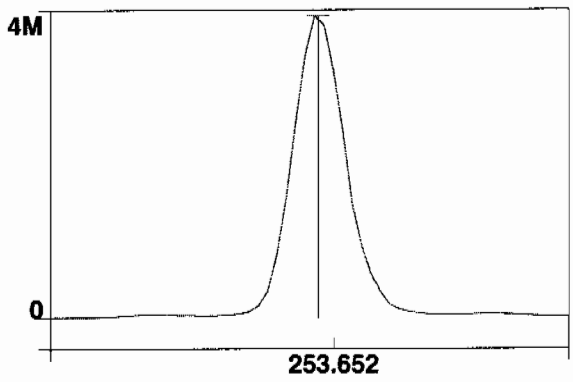

Intensity: 4017578.4 cps
Conc:

1

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Analysis Begun

Start Time: 12/18/2009 02:34:42 **Plasma On Time: 12/17/2009 20:21:18**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121609H.SIF
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/18/2009 02:34:44**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	111933.3	111933.3	99.5	%	02:35:25
1	Al 396.153Radial†	236.3	237.5	[0.00]	µg/L	02:35:25
1	Ca 317.933Radial†	505.5	508.0	[0.00]	µg/L	02:35:45
1	Fe 238.204 Radial†	10.3	10.4	[0.00]	µg/L	02:35:45
1	K 766.490 Radial†	661.9	665.1	[0.00]	µg/L	02:35:25
1	Mg 279.077 IEC†	21.3	21.4	[0.00]	µg/L	02:35:45
1	Na 589.592 Radial†	-675.3	-678.6	[0.00]	µg/L	02:35:25
1	Sr 421.552†	-45.9	-46.1	[0.00]	µg/L	02:35:25
1	Sc 361.383	2052346.2	2052346.2	99.786	%	02:36:47
1	Y 371.029	1249951.6	1249951.6	99.808	%	02:36:47
1	Ag 328.068†	-86.6	-86.7	[0.00]	µg/L	02:36:53
1	As 188.979†	4.9	4.9	[0.00]	µg/L	02:37:13
1	B 249.677†	164.3	164.6	[0.00]	µg/L	02:36:53
1	Ba 233.527†	-87.7	-87.9	[0.00]	µg/L	02:37:13
1	Be 313.107†	3594.6	3602.3	[0.00]	µg/L	02:36:53
1	Cd 226.502†	-90.7	-90.9	[0.00]	µg/L	02:37:13
1	Co 228.616†	-71.8	-72.0	[0.00]	µg/L	02:37:13
1	Cr 267.716†	-120.2	-120.5	[0.00]	µg/L	02:36:53
1	Cu 324.752†	3356.6	3363.8	[0.00]	µg/L	02:36:53
1	Mn 257.610†	-222.8	-223.3	[0.00]	µg/L	02:37:13
1	Mo 202.031†	-9.0	-9.0	[0.00]	µg/L	02:37:13
1	Ni 231.604†	296.4	297.0	[0.00]	µg/L	02:37:13
1	P 214.914†	204.5	204.9	[0.00]	µg/L	02:37:13
1	Pb 220.353†	58.5	58.6	[0.00]	µg/L	02:37:13
1	S 181.975 Axial†	24.6	24.7	[0.00]	µg/L	02:37:13
1	Sb 206.836†	18.6	18.6	[0.00]	µg/L	02:37:13
1	Se 196.026†	11.9	11.9	[0.00]	µg/L	02:37:13
1	SiO2†	1975.5	1979.7	[0.00]	µg/L	02:36:53
1	Si 251.611†	343.9	344.6	[0.00]	µg/L	02:37:13
1	Sn 189.927†	20.7	20.7	[0.00]	µg/L	02:37:13
1	Ti 334.940†	669.0	670.4	[0.00]	µg/L	02:36:53
1	Tl 190.801†	-21.5	-21.6	[0.00]	µg/L	02:37:13
1	U 409.014†	615.1	616.4	[0.00]	µg/L	02:36:53
1	V 292.402†	-72.1	-72.3	[0.00]	µg/L	02:36:53
1	Zn 213.857†	553.3	554.5	[0.00]	µg/L	02:37:13
2	Sc RADIAL	113026.6	113026.6	100	%	02:35:51
2	Al 396.153Radial†	240.4	239.2	[0.00]	µg/L	02:35:51
2	Ca 317.933Radial†	486.8	484.4	[0.00]	µg/L	02:36:11
2	Fe 238.204 Radial†	13.1	13.1	[0.00]	µg/L	02:36:11
2	K 766.490 Radial†	732.8	729.3	[0.00]	µg/L	02:35:51
2	Mg 279.077 IEC†	21.1	21.0	[0.00]	µg/L	02:36:11
2	Na 589.592 Radial†	-699.4	-696.1	[0.00]	µg/L	02:35:51
2	Sr 421.552†	-81.0	-80.6	[0.00]	µg/L	02:35:51
2	Sc 361.383	2060012.5	2060012.5	100.16	%	02:37:19
2	Y 371.029	1254105.4	1254105.4	100.14	%	02:37:19
2	Ag 328.068†	5.3	5.3	[0.00]	µg/L	02:37:25
2	As 188.979†	4.7	4.7	[0.00]	µg/L	02:37:45

2	B 249.677†	142.4	142.2	[0.00]	µg/L	02:37:25
2	Ba 233.527†	-78.4	-78.3	[0.00]	µg/L	02:37:45
2	Be 313.107†	3629.4	3623.7	[0.00]	µg/L	02:37:25
2	Cd 226.502†	-107.5	-107.4	[0.00]	µg/L	02:37:45
2	Co 228.616†	-69.8	-69.6	[0.00]	µg/L	02:37:45
2	Cr 267.716†	-106.2	-106.0	[0.00]	µg/L	02:37:25
2	Cu 324.752†	3410.2	3404.8	[0.00]	µg/L	02:37:25
2	Mn 257.610†	-229.3	-228.9	[0.00]	µg/L	02:37:45
2	Mo 202.031†	-10.8	-10.8	[0.00]	µg/L	02:37:45
2	Ni 231.604†	293.4	292.9	[0.00]	µg/L	02:37:45
2	P 214.914†	207.9	207.6	[0.00]	µg/L	02:37:45
2	Pb 220.353†	47.7	47.7	[0.00]	µg/L	02:37:45
2	S 181.975 Axial†	22.1	22.1	[0.00]	µg/L	02:37:45
2	Sb 206.836†	23.9	23.8	[0.00]	µg/L	02:37:45
2	Se 196.026†	19.1	19.0	[0.00]	µg/L	02:37:45
2	SiO2†	1998.3	1995.2	[0.00]	µg/L	02:37:25
2	Si 251.611†	353.4	352.8	[0.00]	µg/L	02:37:45
2	Sn 189.927†	24.3	24.3	[0.00]	µg/L	02:37:45
2	Ti 334.940†	772.0	770.7	[0.00]	µg/L	02:37:25
2	Tl 190.801†	-19.5	-19.4	[0.00]	µg/L	02:37:45
2	U 409.014†	678.5	677.4	[0.00]	µg/L	02:37:25
2	V 292.402†	-83.8	-83.6	[0.00]	µg/L	02:37:25
2	Zn 213.857†	544.0	543.1	[0.00]	µg/L	02:37:45
3	Sc RADIAL	112480.5	112480.5	100	%	02:36:17
3	Al 396.153Radial†	212.8	212.8	[0.00]	µg/L	02:36:17
3	Ca 317.933Radial†	493.9	493.9	[0.00]	µg/L	02:36:37
3	Fe 238.204 Radial†	10.2	10.2	[0.00]	µg/L	02:36:37
3	K 766.490 Radial†	690.1	690.1	[0.00]	µg/L	02:36:17
3	Mg 279.077 IEC†	17.1	17.1	[0.00]	µg/L	02:36:37
3	Na 589.592 Radial†	-737.1	-737.1	[0.00]	µg/L	02:36:17
3	Sr 421.552†	-64.6	-64.6	[0.00]	µg/L	02:36:17
3	Sc 361.383	2057873.5	2057873.5	100.05	%	02:37:51
3	Y 371.029	1253017.5	1253017.5	100.05	%	02:37:51
3	Ag 328.068†	-3.5	-3.5	[0.00]	µg/L	02:37:57
3	As 188.979†	-2.1	-2.1	[0.00]	µg/L	02:38:17
3	B 249.677†	160.3	160.2	[0.00]	µg/L	02:37:57
3	Ba 233.527†	-75.9	-75.9	[0.00]	µg/L	02:38:17
3	Be 313.107†	3610.5	3608.5	[0.00]	µg/L	02:37:57
3	Cd 226.502†	-104.5	-104.4	[0.00]	µg/L	02:38:17
3	Co 228.616†	-73.6	-73.5	[0.00]	µg/L	02:38:17
3	Cr 267.716†	-141.9	-141.8	[0.00]	µg/L	02:37:57
3	Cu 324.752†	3386.2	3384.4	[0.00]	µg/L	02:37:57
3	Mn 257.610†	-215.9	-215.7	[0.00]	µg/L	02:38:17
3	Mo 202.031†	-3.9	-3.9	[0.00]	µg/L	02:38:17
3	Ni 231.604†	308.4	308.3	[0.00]	µg/L	02:38:17
3	P 214.914†	205.6	205.5	[0.00]	µg/L	02:38:17
3	Pb 220.353†	56.1	56.1	[0.00]	µg/L	02:38:17
3	S 181.975 Axial†	25.3	25.3	[0.00]	µg/L	02:38:17
3	Sb 206.836†	19.2	19.2	[0.00]	µg/L	02:38:17
3	Se 196.026†	11.3	11.3	[0.00]	µg/L	02:38:17
3	SiO2†	1971.2	1970.1	[0.00]	µg/L	02:37:57
3	Si 251.611†	351.7	351.5	[0.00]	µg/L	02:38:17
3	Sn 189.927†	22.4	22.3	[0.00]	µg/L	02:38:17
3	Ti 334.940†	715.8	715.4	[0.00]	µg/L	02:37:57
3	Tl 190.801†	-23.3	-23.2	[0.00]	µg/L	02:38:17
3	U 409.014†	744.2	743.8	[0.00]	µg/L	02:37:57
3	V 292.402†	-120.0	-120.0	[0.00]	µg/L	02:37:57
3	Zn 213.857†	553.1	552.8	[0.00]	µg/L	02:38:17

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2056744.1	3955.94	0.19%	100.00	%
Sc RADIAL	112480.1	546.64	0.49%	100	%
Y 371.029	1252358.2	2153.95	0.17%	100.000	%
Ag 328.068†	-28.3	50.80	179.42%	[0.00]	µg/L
Al 396.153Radial†	229.8	14.81	6.44%	[0.00]	µg/L
As 188.979†	2.5	4.00	160.84%	[0.00]	µg/L
B 249.677†	155.7	11.87	7.63%	[0.00]	µg/L
Ba 233.527†	-80.7	6.36	7.88%	[0.00]	µg/L

Be 313.107†	3611.5	10.97	0.30%	[0.00]	µg/L
Ca 317.933Radial†	495.4	11.86	2.39%	[0.00]	µg/L
Cd 226.502†	-100.9	8.77	8.69%	[0.00]	µg/L
Co 228.616†	-71.7	1.95	2.72%	[0.00]	µg/L
Cr 267.716†	-122.8	18.02	14.68%	[0.00]	µg/L
Cu 324.752†	3384.3	20.51	0.61%	[0.00]	µg/L
Fe 238.204 Radial†	11.2	1.61	14.36%	[0.00]	µg/L
K 766.490 Radial†	694.8	32.34	4.65%	[0.00]	µg/L
Mg 279.077 IEC†	19.8	2.40	12.08%	[0.00]	µg/L
Mn 257.610†	-222.6	6.61	2.97%	[0.00]	µg/L
Mo 202.031†	-7.9	3.56	44.98%	[0.00]	µg/L
Na 589.592 Radial†	-703.9	30.01	4.26%	[0.00]	µg/L
Ni 231.604†	299.4	7.94	2.65%	[0.00]	µg/L
P 214.914†	206.0	1.40	0.68%	[0.00]	µg/L
Pb 220.353†	54.1	5.73	10.58%	[0.00]	µg/L
S 181.975 Axial†	24.0	1.71	7.10%	[0.00]	µg/L
Sb 206.836†	20.5	2.85	13.85%	[0.00]	µg/L
Se 196.026†	14.1	4.28	30.36%	[0.00]	µg/L
SiO2†	1981.7	12.64	0.64%	[0.00]	µg/L
Si 251.611†	349.6	4.41	1.26%	[0.00]	µg/L
Sn 189.927†	22.5	1.80	8.02%	[0.00]	µg/L
Sr 421.552†	-63.8	17.25	27.05%	[0.00]	µg/L
Ti 334.940†	718.9	50.24	6.99%	[0.00]	µg/L
Tl 190.801†	-21.4	1.91	8.90%	[0.00]	µg/L
U 409.014†	679.2	63.72	9.38%	[0.00]	µg/L
V 292.402†	-92.0	24.90	27.08%	[0.00]	µg/L
Zn 213.857†	550.2	6.15	1.12%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/18/2009 02:38:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115622.2	115622.2	103	%	02:39:01
1	K 766.490 Radial†	2691.0	1923.1	[1000]	µg/L	02:39:01
1	Sr 421.552†	18558.8	18118.2	[100]	µg/L	02:39:01
1	Sc 361.383	2055514.3	2055514.3	99.940	%	02:39:23
1	Y 371.029	1251166.3	1251166.3	99.905	%	02:39:23
1	Ag 328.068†	11482.0	11517.2	[100]	µg/L	02:39:29
1	As 188.979†	57.9	55.4	[100]	µg/L	02:39:49
1	B 249.677†	2373.3	2219.0	[100]	µg/L	02:39:29
1	Ba 233.527†	3953.1	4036.2	[100]	µg/L	02:39:29
1	Be 313.107†	165026.0	161513.2	[100]	µg/L	02:39:23
1	Cd 226.502†	3823.3	3926.5	[100]	µg/L	02:39:29
1	Co 228.616†	2026.4	2099.3	[100]	µg/L	02:39:49
1	Cr 267.716†	4789.0	4914.7	[100]	µg/L	02:39:29
1	Cu 324.752†	17934.9	14561.3	[100]	µg/L	02:39:29
1	Mn 257.610†	32268.6	32510.6	[100]	µg/L	02:39:29
1	Mo 202.031†	900.1	908.6	[100]	µg/L	02:39:49
1	Ni 231.604†	2224.8	1926.7	[100]	µg/L	02:39:29
1	P 214.914†	432.4	226.7	[500]	µg/L	02:39:49
1	Pb 220.353†	463.5	409.6	[100]	µg/L	02:39:49
1	S 181.975 Axial†	55.9	31.8	[200]	µg/L	02:39:49
1	Sb 206.836†	123.3	102.8	[100]	µg/L	02:39:49
1	Se 196.026†	84.4	70.4	[100]	µg/L	02:39:49
1	SiO2†	7652.5	5675.4	[1069.5]	µg/L	02:39:29
1	Si 251.611†	6926.8	6581.3	[500]	µg/L	02:39:29
1	Sn 189.927†	231.8	209.5	[100]	µg/L	02:39:49
1	Ti 334.940†	45669.6	44978.0	[100]	µg/L	02:39:29
1	Tl 190.801†	49.0	70.5	[100]	µg/L	02:39:49
1	U 409.014†	1712.0	1033.8	[100]	µg/L	02:39:29
1	V 292.402†	8832.7	8930.0	[100]	µg/L	02:39:29
1	Zn 213.857†	4438.7	3891.2	[100]	µg/L	02:39:29
2	Sc RADIAL	115249.4	115249.4	102	%	02:39:07
2	K 766.490 Radial†	2681.7	1922.4	[1000]	µg/L	02:39:07
2	Sr 421.552†	18519.2	18138.0	[100]	µg/L	02:39:07
2	Sc 361.383	2062183.2	2062183.2	100.26	%	02:39:55
2	Y 371.029	1255826.6	1255826.6	100.28	%	02:39:55
2	Ag 328.068†	11492.5	11490.5	[100]	µg/L	02:40:01
2	As 188.979†	57.1	54.5	[100]	µg/L	02:40:21
2	B 249.677†	2373.1	2211.1	[100]	µg/L	02:40:01
2	Ba 233.527†	3982.2	4052.4	[100]	µg/L	02:40:01
2	Be 313.107†	164842.0	160795.7	[100]	µg/L	02:39:55
2	Cd 226.502†	3804.4	3895.2	[100]	µg/L	02:40:01
2	Co 228.616†	2039.1	2105.4	[100]	µg/L	02:40:21
2	Cr 267.716†	4799.2	4909.3	[100]	µg/L	02:40:01
2	Cu 324.752†	18019.7	14587.9	[100]	µg/L	02:40:01
2	Mn 257.610†	32329.9	32467.3	[100]	µg/L	02:40:01
2	Mo 202.031†	898.2	903.7	[100]	µg/L	02:40:21
2	Ni 231.604†	2208.1	1902.9	[100]	µg/L	02:40:01
2	P 214.914†	444.5	237.3	[500]	µg/L	02:40:21
2	Pb 220.353†	462.8	407.4	[100]	µg/L	02:40:21
2	S 181.975 Axial†	59.4	35.2	[200]	µg/L	02:40:21
2	Sb 206.836†	124.0	103.1	[100]	µg/L	02:40:21
2	Se 196.026†	88.9	74.5	[100]	µg/L	02:40:21
2	SiO2†	7632.3	5630.5	[1069.5]	µg/L	02:40:01
2	Si 251.611†	6955.7	6587.7	[500]	µg/L	02:40:01
2	Sn 189.927†	230.0	206.9	[100]	µg/L	02:40:21
2	Ti 334.940†	45653.4	44814.2	[100]	µg/L	02:40:01
2	Tl 190.801†	51.3	72.5	[100]	µg/L	02:40:21
2	U 409.014†	1789.1	1105.2	[100]	µg/L	02:40:01
2	V 292.402†	8941.5	9009.9	[100]	µg/L	02:40:01

2	Zn 213.857†	4433.2	3871.4	[100]	µg/L	02:40:01
3	Sc RADIAL	116357.5	116357.5	103	%	02:39:13
3	K 766.490 Radial†	2663.3	1879.7	[1000]	µg/L	02:39:13
3	Sr 421.552†	18628.3	18071.3	[100]	µg/L	02:39:13
3	Sc 361.383	2063107.8	2063107.8	100.31	%	02:40:28
3	Y 371.029	1255506.0	1255506.0	100.25	%	02:40:28
3	Ag 328.068†	11445.8	11438.8	[100]	µg/L	02:40:33
3	As 188.979†	52.9	50.2	[100]	µg/L	02:40:54
3	B 249.677†	2405.7	2242.6	[100]	µg/L	02:40:33
3	Ba 233.527†	3994.9	4063.2	[100]	µg/L	02:40:33
3	Be 313.107†	165370.1	161248.5	[100]	µg/L	02:40:28
3	Cd 226.502†	3833.4	3922.4	[100]	µg/L	02:40:33
3	Co 228.616†	2042.5	2108.0	[100]	µg/L	02:40:54
3	Cr 267.716†	4762.7	4870.8	[100]	µg/L	02:40:33
3	Cu 324.752†	18011.4	14571.5	[100]	µg/L	02:40:33
3	Mn 257.610†	32411.3	32534.0	[100]	µg/L	02:40:33
3	Mo 202.031†	898.4	903.6	[100]	µg/L	02:40:54
3	Ni 231.604†	2221.2	1914.9	[100]	µg/L	02:40:33
3	P 214.914†	440.5	233.1	[500]	µg/L	02:40:54
3	Pb 220.353†	462.5	407.0	[100]	µg/L	02:40:54
3	S 181.975 Axial†	61.3	37.1	[200]	µg/L	02:40:54
3	Sb 206.836†	125.5	104.5	[100]	µg/L	02:40:54
3	Se 196.026†	82.4	68.1	[100]	µg/L	02:40:54
3	SiO2†	7612.4	5607.3	[1069.5]	µg/L	02:40:33
3	Si 251.611†	6999.4	6628.2	[500]	µg/L	02:40:33
3	Sn 189.927†	231.8	208.7	[100]	µg/L	02:40:54
3	Ti 334.940†	45819.1	44958.9	[100]	µg/L	02:40:33
3	Tl 190.801†	48.8	70.1	[100]	µg/L	02:40:54
3	U 409.014†	1752.1	1067.4	[100]	µg/L	02:40:33
3	V 292.402†	8937.8	9002.2	[100]	µg/L	02:40:33
3	Zn 213.857†	4442.5	3878.6	[100]	µg/L	02:40:33

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2060268.4	4143.06	0.20%	100.17	%
Sc RADIAL	115743.0	563.84	0.49%	103	%
Y 371.029	1254166.3	2603.02	0.21%	100.14	%
Ag 328.068†	11482.2	39.85	0.35%	[100]	µg/L
As 188.979†	53.4	2.79	5.22%	[100]	µg/L
B 249.677†	2224.2	16.36	0.74%	[100]	µg/L
Ba 233.527†	4050.6	13.62	0.34%	[100]	µg/L
Be 313.107†	161185.8	362.82	0.23%	[100]	µg/L
Cd 226.502†	3914.7	17.01	0.43%	[100]	µg/L
Co 228.616†	2104.2	4.45	0.21%	[100]	µg/L
Cr 267.716†	4898.2	23.92	0.49%	[100]	µg/L
Cu 324.752†	14573.6	13.42	0.09%	[100]	µg/L
K 766.490 Radial†	1908.4	24.84	1.30%	[1000]	µg/L
Mn 257.610†	32504.0	33.83	0.10%	[100]	µg/L
Mo 202.031†	905.3	2.86	0.32%	[100]	µg/L
Ni 231.604†	1914.9	11.89	0.62%	[100]	µg/L
P 214.914†	232.4	5.35	2.30%	[500]	µg/L
Pb 220.353†	408.0	1.42	0.35%	[100]	µg/L
S 181.975 Axial†	34.7	2.66	7.67%	[200]	µg/L
Sb 206.836†	103.5	0.91	0.88%	[100]	µg/L
Se 196.026†	71.0	3.27	4.61%	[100]	µg/L
SiO2†	5637.7	34.65	0.61%	[1069.5]	µg/L
Si 251.611†	6599.1	25.43	0.39%	[500]	µg/L
Sn 189.927†	208.4	1.32	0.63%	[100]	µg/L
Sr 421.552†	18109.2	34.23	0.19%	[100]	µg/L
Ti 334.940†	44917.0	89.59	0.20%	[100]	µg/L
Tl 190.801†	71.0	1.32	1.86%	[100]	µg/L
U 409.014†	1068.8	35.72	3.34%	[100]	µg/L
V 292.402†	8980.7	44.10	0.49%	[100]	µg/L
Zn 213.857†	3880.4	10.03	0.26%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/18/2009 02:41:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115848.8	115848.8	103	%	02:41:36
1	Al 396.153Radial†	10331.0	9800.8	[5000]	µg/L	02:41:36
1	Ca 317.933Radial†	13236.7	12356.3	[5000]	µg/L	02:41:56
1	K 766.490 Radial†	10034.5	9047.9	[5000]	µg/L	02:41:36
1	Mg 279.077 IEC†	961.3	913.5	[5000]	µg/L	02:41:56
1	Sr 421.552†	90081.0	87525.3	[500]	µg/L	02:41:36
1	Sc 361.383	2076720.1	2076720.1	100.97	%	02:43:00
1	Y 371.029	1255720.5	1255720.5	100.27	%	02:43:00
1	Ag 328.068†	55550.8	55044.8	[500]	µg/L	02:43:06
1	As 188.979†	262.2	257.2	[500]	µg/L	02:43:26
1	B 249.677†	11333.1	11068.4	[500]	µg/L	02:43:06
1	Ba 233.527†	19714.5	19605.6	[500]	µg/L	02:43:06
1	Be 313.107†	785440.5	774273.8	[500]	µg/L	02:43:00
1	Cd 226.502†	18750.9	18671.4	[500]	µg/L	02:43:06
1	Co 228.616†	10269.6	10242.5	[500]	µg/L	02:43:06
1	Cr 267.716†	23661.6	23556.8	[500]	µg/L	02:43:06
1	Cu 324.752†	74086.1	69989.2	[500]	µg/L	02:43:06
1	Mn 257.610†	155175.5	153905.5	[500]	µg/L	02:43:00
1	Mo 202.031†	4372.0	4337.9	[500]	µg/L	02:43:26
1	Ni 231.604†	9447.2	9057.0	[500]	µg/L	02:43:06
1	P 214.914†	1348.9	1129.9	[2500]	µg/L	02:43:26
1	Pb 220.353†	2014.8	1941.3	[500]	µg/L	02:43:26
1	S 181.975 Axial†	212.8	186.7	[1000]	µg/L	02:43:26
1	Sb 206.836†	521.9	496.4	[500]	µg/L	02:43:26
1	Se 196.026†	356.7	339.2	[500]	µg/L	02:43:26
1	SiO2†	30034.0	27763.4	[5347.5]	µg/L	02:43:06
1	Si 251.611†	33108.4	32440.3	[2500]	µg/L	02:43:06
1	Sn 189.927†	1040.8	1008.3	[500]	µg/L	02:43:26
1	Ti 334.940†	222258.8	219402.0	[500]	µg/L	02:43:00
1	Tl 190.801†	311.3	329.7	[500]	µg/L	02:43:26
1	U 409.014†	5930.8	5194.6	[500]	µg/L	02:43:06
1	V 292.402†	43871.1	43541.0	[500]	µg/L	02:43:06
1	Zn 213.857†	19277.5	18542.0	[500]	µg/L	02:43:06
2	Sc RADIAL	115231.9	115231.9	102	%	02:42:02
2	Al 396.153Radial†	10369.1	9891.6	[5000]	µg/L	02:42:02
2	Ca 317.933Radial†	13261.6	12449.5	[5000]	µg/L	02:42:22
2	K 766.490 Radial†	10043.4	9108.8	[5000]	µg/L	02:42:02
2	Mg 279.077 IEC†	956.4	913.8	[5000]	µg/L	02:42:22
2	Sr 421.552†	90233.5	88142.4	[500]	µg/L	02:42:02
2	Sc 361.383	2056699.0	2056699.0	99.998	%	02:43:33
2	Y 371.029	1244872.8	1244872.8	99.402	%	02:43:33
2	Ag 328.068†	55581.5	55611.0	[500]	µg/L	02:43:39
2	As 188.979†	264.8	262.4	[500]	µg/L	02:44:00
2	B 249.677†	11264.2	11108.7	[500]	µg/L	02:43:39
2	Ba 233.527†	19673.4	19754.5	[500]	µg/L	02:43:39
2	Be 313.107†	784759.2	781164.9	[500]	µg/L	02:43:33
2	Cd 226.502†	18780.1	18881.4	[500]	µg/L	02:43:39
2	Co 228.616†	10277.3	10349.3	[500]	µg/L	02:43:39
2	Cr 267.716†	23626.5	23749.8	[500]	µg/L	02:43:39
2	Cu 324.752†	74093.8	70711.1	[500]	µg/L	02:43:39
2	Mn 257.610†	155352.9	155579.0	[500]	µg/L	02:43:33
2	Mo 202.031†	4393.5	4401.5	[500]	µg/L	02:44:00
2	Ni 231.604†	9451.0	9151.8	[500]	µg/L	02:43:39
2	P 214.914†	1354.2	1148.2	[2500]	µg/L	02:44:00
2	Pb 220.353†	2022.1	1968.1	[500]	µg/L	02:44:00
2	S 181.975 Axial†	218.0	193.9	[1000]	µg/L	02:44:00
2	Sb 206.836†	522.0	501.4	[500]	µg/L	02:44:00
2	Se 196.026†	363.4	349.3	[500]	µg/L	02:44:00
2	SiO2†	30017.9	28036.9	[5347.5]	µg/L	02:43:39

2	Si 251.611†	33069.1	32720.1	[2500]	µg/L	02:43:39
2	Sn 189.927†	1038.1	1015.6	[500]	µg/L	02:44:00
2	Ti 334.940†	222518.5	221804.5	[500]	µg/L	02:43:33
2	Tl 190.801†	308.5	329.9	[500]	µg/L	02:44:00
2	U 409.014†	5876.2	5197.1	[500]	µg/L	02:43:39
2	V 292.402†	43860.0	43952.9	[500]	µg/L	02:43:39
2	Zn 213.857†	19232.6	18682.8	[500]	µg/L	02:43:39
3	Sc RADIAL	116000.4	116000.4	103	%	02:42:28
3	Al 396.153Radial†	10302.5	9760.1	[5000]	µg/L	02:42:28
3	Ca 317.933Radial†	12767.7	11884.7	[5000]	µg/L	02:42:48
3	K 766.490 Radial†	10020.7	9021.7	[5000]	µg/L	02:42:28
3	Mg 279.077 IEC†	921.9	874.1	[5000]	µg/L	02:42:48
3	Sr 421.552†	90025.2	87357.0	[500]	µg/L	02:42:28
3	Sc 361.383	2068573.4	2068573.4	100.58	%	02:44:07
3	Y 371.029	1252864.9	1252864.9	100.04	%	02:44:07
3	Ag 328.068†	55948.5	55656.9	[500]	µg/L	02:44:12
3	As 188.979†	263.1	259.1	[500]	µg/L	02:44:33
3	B 249.677†	11346.8	11126.2	[500]	µg/L	02:44:12
3	Ba 233.527†	19754.2	19721.9	[500]	µg/L	02:44:12
3	Be 313.107†	791423.9	783286.5	[500]	µg/L	02:44:07
3	Cd 226.502†	18928.7	18921.4	[500]	µg/L	02:44:12
3	Co 228.616†	10351.4	10363.9	[500]	µg/L	02:44:12
3	Cr 267.716†	23779.5	23766.2	[500]	µg/L	02:44:12
3	Cu 324.752†	74353.8	70544.3	[500]	µg/L	02:44:12
3	Mn 257.610†	156684.0	156010.6	[500]	µg/L	02:44:07
3	Mo 202.031†	4320.8	4304.0	[500]	µg/L	02:44:33
3	Ni 231.604†	9497.0	9143.3	[500]	µg/L	02:44:12
3	P 214.914†	1333.1	1119.5	[2500]	µg/L	02:44:33
3	Pb 220.353†	1998.1	1932.6	[500]	µg/L	02:44:33
3	S 181.975 Axial†	212.9	187.7	[1000]	µg/L	02:44:33
3	Sb 206.836†	510.0	486.5	[500]	µg/L	02:44:33
3	Se 196.026†	350.6	334.5	[500]	µg/L	02:44:33
3	SiO2†	30300.1	28145.2	[5347.5]	µg/L	02:44:12
3	Si 251.611†	33286.2	32746.2	[2500]	µg/L	02:44:12
3	Sn 189.927†	1019.2	990.9	[500]	µg/L	02:44:33
3	Ti 334.940†	224099.5	222099.1	[500]	µg/L	02:44:07
3	Tl 190.801†	305.2	324.8	[500]	µg/L	02:44:33
3	U 409.014†	6080.1	5366.1	[500]	µg/L	02:44:12
3	V 292.402†	44125.4	43965.1	[500]	µg/L	02:44:12
3	Zn 213.857†	19377.5	18716.5	[500]	µg/L	02:44:12

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2067330.8	10068.20	0.49%	100.51	%
Sc RADIAL	115693.7	407.07	0.35%	103	%
Y 371.029	1251152.8	5622.88	0.45%	99.904	%
Ag 328.068†	55437.6	340.92	0.61%	[500]	µg/L
Al 396.153Radial†	9817.5	67.36	0.69%	[5000]	µg/L
As 188.979†	259.6	2.60	1.00%	[500]	µg/L
B 249.677†	11101.1	29.64	0.27%	[500]	µg/L
Ba 233.527†	19694.0	78.31	0.40%	[500]	µg/L
Be 313.107†	779575.1	4712.00	0.60%	[500]	µg/L
Ca 317.933Radial†	12230.2	302.76	2.48%	[5000]	µg/L
Cd 226.502†	18824.7	134.25	0.71%	[500]	µg/L
Co 228.616†	10318.6	66.27	0.64%	[500]	µg/L
Cr 267.716†	23690.9	116.45	0.49%	[500]	µg/L
Cu 324.752†	70414.8	377.97	0.54%	[500]	µg/L
K 766.490 Radial†	9059.4	44.67	0.49%	[5000]	µg/L
Mg 279.077 IEC†	900.4	22.83	2.54%	[5000]	µg/L
Mn 257.610†	155165.0	1111.96	0.72%	[500]	µg/L
Mo 202.031†	4347.8	49.50	1.14%	[500]	µg/L
Ni 231.604†	9117.4	52.47	0.58%	[500]	µg/L
P 214.914†	1132.6	14.54	1.28%	[2500]	µg/L
Pb 220.353†	1947.3	18.50	0.95%	[500]	µg/L
S 181.975 Axial†	189.4	3.92	2.07%	[1000]	µg/L
Sb 206.836†	494.8	7.58	1.53%	[500]	µg/L
Se 196.026†	341.0	7.59	2.23%	[500]	µg/L
SiO2†	27981.8	196.76	0.70%	[5347.5]	µg/L
Si 251.611†	32635.5	169.58	0.52%	[2500]	µg/L

Sn 189.927†	1004.9	12.69	1.26%	[500] µg/L
Sr 421.552†	87674.9	413.55	0.47%	[500] µg/L
Ti 334.940†	221101.8	1479.45	0.67%	[500] µg/L
Tl 190.801†	328.1	2.87	0.87%	[500] µg/L
U 409.014†	5252.6	98.32	1.87%	[500] µg/L
V 292.402†	43819.7	241.39	0.55%	[500] µg/L
Zn 213.857†	18647.1	92.60	0.50%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/18/2009 02:44:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113958.5	113958.5	101	%	02:45:15
1	Al 396.153Radial†	20456.2	19961.0	[10000]	µg/L	02:45:15
1	Ca 317.933Radial†	26297.3	25460.7	[10000]	µg/L	02:45:36
1	Fe 238.204 Radial†	1957.5	1920.9	[10000]	µg/L	02:45:36
1	K 766.490 Radial†	19446.8	18499.7	[10000]	µg/L	02:45:15
1	Mg 279.077 IEC†	1898.7	1854.2	[10000]	µg/L	02:45:36
1	Na 589.592 Radial†	36445.0	36676.2	[10000]	µg/L	02:45:15
1	Sr 421.552†	179836.5	177567.3	[1000]	µg/L	02:45:15
1	Sc 361.383	2044115.6	2044115.6	99.386	%	02:46:40
1	Y 371.029	1235076.9	1235076.9	98.620	%	02:46:40
1	Ag 328.068†	111750.4	112469.1	[1000]	µg/L	02:46:45
1	As 188.979†	537.3	538.1	[1000]	µg/L	02:47:06
1	B 249.677†	22658.3	22642.6	[1000]	µg/L	02:46:45
1	Ba 233.527†	39654.0	39979.6	[1000]	µg/L	02:46:45
1	Be 313.107†	1576685.5	1582814.7	[1000]	µg/L	02:46:40
1	Cd 226.502†	37558.9	37891.8	[1000]	µg/L	02:46:45
1	Co 228.616†	20655.5	20854.9	[1000]	µg/L	02:46:45
1	Cr 267.716†	47806.1	48224.2	[1000]	µg/L	02:46:45
1	Cu 324.752†	145140.2	142652.6	[1000]	µg/L	02:46:45
1	Mn 257.610†	313458.4	315617.6	[1000]	µg/L	02:46:40
1	Mo 202.031†	8991.0	9054.4	[1000]	µg/L	02:46:45
1	Ni 231.604†	18572.8	18388.2	[1000]	µg/L	02:46:45
1	P 214.914†	2536.6	2346.3	[5000]	µg/L	02:47:06
1	Pb 220.353†	4032.9	4003.7	[1000]	µg/L	02:47:06
1	S 181.975 Axial†	413.5	392.0	[2000]	µg/L	02:47:06
1	Sb 206.836†	1044.3	1030.2	[1000]	µg/L	02:47:06
1	Se 196.026†	710.6	700.9	[1000]	µg/L	02:47:06
1	SiO2†	57742.3	56117.3	[10695]	µg/L	02:46:45
1	Si 251.611†	65310.8	65364.7	[5000]	µg/L	02:46:45
1	Sn 189.927†	2109.5	2100.1	[1000]	µg/L	02:47:06
1	Ti 334.940†	450682.2	452747.6	[1000]	µg/L	02:46:40
1	Tl 190.801†	647.2	672.6	[1000]	µg/L	02:47:06
1	U 409.014†	11316.0	10706.7	[1000]	µg/L	02:46:45
1	V 292.402†	88383.7	89021.7	[1000]	µg/L	02:46:45
1	Zn 213.857†	37710.4	37393.3	[1000]	µg/L	02:46:45
2	Sc RADIAL	115689.4	115689.4	103	%	02:45:41
2	Al 396.153Radial†	20851.7	20043.5	[10000]	µg/L	02:45:41
2	Ca 317.933Radial†	26352.2	25125.7	[10000]	µg/L	02:46:01
2	Fe 238.204 Radial†	1974.9	1908.9	[10000]	µg/L	02:46:01
2	K 766.490 Radial†	19797.9	18553.8	[10000]	µg/L	02:45:41
2	Mg 279.077 IEC†	1900.9	1828.3	[10000]	µg/L	02:46:01
2	Na 589.592 Radial†	37145.5	36819.0	[10000]	µg/L	02:45:41
2	Sr 421.552†	183355.2	178332.5	[1000]	µg/L	02:45:41
2	Sc 361.383	2060569.5	2060569.5	100.19	%	02:47:13
2	Y 371.029	1245012.0	1245012.0	99.413	%	02:47:13
2	Ag 328.068†	112525.1	112344.5	[1000]	µg/L	02:47:18
2	As 188.979†	528.0	524.6	[1000]	µg/L	02:47:39
2	B 249.677†	22875.6	22677.4	[1000]	µg/L	02:47:18
2	Ba 233.527†	40001.1	40007.6	[1000]	µg/L	02:47:18
2	Be 313.107†	1595573.2	1588999.5	[1000]	µg/L	02:47:13
2	Cd 226.502†	37992.7	38023.0	[1000]	µg/L	02:47:18
2	Co 228.616†	20857.3	20890.2	[1000]	µg/L	02:47:18
2	Cr 267.716†	48306.0	48339.1	[1000]	µg/L	02:47:18
2	Cu 324.752†	146449.7	142793.5	[1000]	µg/L	02:47:18
2	Mn 257.610†	317171.6	316805.4	[1000]	µg/L	02:47:13
2	Mo 202.031†	9026.6	9017.8	[1000]	µg/L	02:47:18
2	Ni 231.604†	18720.1	18386.0	[1000]	µg/L	02:47:18
2	P 214.914†	2529.1	2318.4	[5000]	µg/L	02:47:39
2	Pb 220.353†	4037.9	3976.3	[1000]	µg/L	02:47:39

2	S 181.975 Axial†	420.7	395.9	[2000]	µg/L	02:47:39
2	Sb 206.836†	1033.0	1010.6	[1000]	µg/L	02:47:39
2	Se 196.026†	700.7	685.3	[1000]	µg/L	02:47:39
2	SiO2†	58219.8	56130.1	[10695]	µg/L	02:47:18
2	Si 251.611†	65907.3	65435.3	[5000]	µg/L	02:47:18
2	Sn 189.927†	2090.4	2064.0	[1000]	µg/L	02:47:39
2	Ti 334.940†	455664.5	454099.7	[1000]	µg/L	02:47:13
2	Tl 190.801†	640.9	661.1	[1000]	µg/L	02:47:39
2	U 409.014†	11413.4	10713.0	[1000]	µg/L	02:47:18
2	V 292.402†	89276.9	89203.1	[1000]	µg/L	02:47:18
2	Zn 213.857†	38015.3	37394.5	[1000]	µg/L	02:47:18
3	Sc RADIAL	114563.9	114563.9	102	%	02:46:07
3	Al 396.153Radial†	20740.6	20133.5	[10000]	µg/L	02:46:07
3	Ca 317.933Radial†	26374.4	25399.2	[10000]	µg/L	02:46:27
3	Fe 238.204 Radial†	1972.3	1925.2	[10000]	µg/L	02:46:27
3	K 766.490 Radial†	19551.9	18501.4	[10000]	µg/L	02:46:07
3	Mg 279.077 IEC†	1908.8	1854.2	[10000]	µg/L	02:46:27
3	Na 589.592 Radial†	36789.4	36824.1	[10000]	µg/L	02:46:07
3	Sr 421.552†	181445.7	178209.2	[1000]	µg/L	02:46:07
3	Sc 361.383	2053274.5	2053274.5	99.831	%	02:47:46
3	Y 371.029	1241325.7	1241325.7	99.119	%	02:47:46
3	Ag 328.068†	111600.7	111817.6	[1000]	µg/L	02:47:52
3	As 188.979†	516.7	515.1	[1000]	µg/L	02:48:12
3	B 249.677†	22645.6	22528.2	[1000]	µg/L	02:47:52
3	Ba 233.527†	39604.9	39752.5	[1000]	µg/L	02:47:52
3	Be 313.107†	1586898.6	1585968.6	[1000]	µg/L	02:47:46
3	Cd 226.502†	37554.1	37718.5	[1000]	µg/L	02:47:52
3	Co 228.616†	20643.3	20749.9	[1000]	µg/L	02:47:52
3	Cr 267.716†	47818.4	48022.0	[1000]	µg/L	02:47:52
3	Cu 324.752†	144971.8	141832.5	[1000]	µg/L	02:47:52
3	Mn 257.610†	315419.0	316174.6	[1000]	µg/L	02:47:46
3	Mo 202.031†	8994.6	9017.7	[1000]	µg/L	02:47:52
3	Ni 231.604†	18626.1	18358.1	[1000]	µg/L	02:47:52
3	P 214.914†	2474.1	2272.3	[5000]	µg/L	02:48:12
3	Pb 220.353†	3936.1	3888.7	[1000]	µg/L	02:48:12
3	S 181.975 Axial†	412.4	389.0	[2000]	µg/L	02:48:12
3	Sb 206.836†	1014.7	995.9	[1000]	µg/L	02:48:12
3	Se 196.026†	689.1	676.2	[1000]	µg/L	02:48:12
3	SiO2†	57673.0	55788.7	[10695]	µg/L	02:47:52
3	Si 251.611†	65277.7	65038.4	[5000]	µg/L	02:47:52
3	Sn 189.927†	2038.3	2019.3	[1000]	µg/L	02:48:12
3	Ti 334.940†	453287.2	453334.3	[1000]	µg/L	02:47:46
3	Tl 190.801†	635.4	657.9	[1000]	µg/L	02:48:12
3	U 409.014†	11291.8	10631.7	[1000]	µg/L	02:47:52
3	V 292.402†	88411.7	88653.0	[1000]	µg/L	02:47:52
3	Zn 213.857†	37645.0	37158.5	[1000]	µg/L	02:47:52

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2052653.2	8244.53	0.40%	99.801	%
Sc RADIAL	114737.3	878.38	0.77%	102	%
Y 371.029	1240471.5	5022.31	0.40%	99.051	%
Ag 328.068†	112210.4	345.83	0.31%	[1000]	µg/L
Al 396.153Radial†	20046.0	86.32	0.43%	[10000]	µg/L
As 188.979†	525.9	11.59	2.20%	[1000]	µg/L
B 249.677†	22616.0	78.08	0.35%	[1000]	µg/L
Ba 233.527†	39913.2	139.88	0.35%	[1000]	µg/L
Be 313.107†	1585927.6	3092.63	0.20%	[1000]	µg/L
Ca 317.933Radial†	25328.5	178.34	0.70%	[10000]	µg/L
Cd 226.502†	37877.8	152.74	0.40%	[1000]	µg/L
Co 228.616†	20831.7	73.00	0.35%	[1000]	µg/L
Cr 267.716†	48195.1	160.54	0.33%	[1000]	µg/L
Cu 324.752†	142426.2	518.97	0.36%	[1000]	µg/L
Fe 238.204 Radial†	1918.4	8.45	0.44%	[10000]	µg/L
K 766.490 Radial†	18518.3	30.79	0.17%	[10000]	µg/L
Mg 279.077 IEC†	1845.6	14.96	0.81%	[10000]	µg/L
Mn 257.610†	316199.2	594.30	0.19%	[1000]	µg/L
Mo 202.031†	9030.0	21.18	0.23%	[1000]	µg/L
Na 589.592 Radial†	36773.1	83.99	0.23%	[10000]	µg/L

Ni 231.604†	18377.4	16.75	0.09%	[1000]	µg/L
P 214.914†	2312.3	37.35	1.62%	[5000]	µg/L
Pb 220.353†	3956.2	60.07	1.52%	[1000]	µg/L
S 181.975 Axial†	392.3	3.43	0.87%	[2000]	µg/L
Sb 206.836†	1012.2	17.21	1.70%	[1000]	µg/L
Se 196.026†	687.5	12.49	1.82%	[1000]	µg/L
SiO2†	56012.0	193.49	0.35%	[10695]	µg/L
Si 251.611†	65279.4	211.76	0.32%	[5000]	µg/L
Sn 189.927†	2061.1	40.50	1.96%	[1000]	µg/L
Sr 421.552†	178036.3	410.89	0.23%	[1000]	µg/L
Ti 334.940†	453393.8	678.00	0.15%	[1000]	µg/L
Tl 190.801†	663.9	7.73	1.16%	[1000]	µg/L
U 409.014†	10683.8	45.26	0.42%	[1000]	µg/L
V 292.402†	88959.3	280.28	0.32%	[1000]	µg/L
Zn 213.857†	37315.4	135.92	0.36%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/18/2009 02:48:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114030.2	114030.2	101	%	02:48:54
1	Al 396.153Radial†	99804.8	98218.2	[50000]	µg/L	02:48:54
1	Ca 317.933Radial†	127284.3	125058.6	[50000]	µg/L	02:48:54
1	Fe 238.204 Radial†	3883.8	3819.8	[20000]	µg/L	02:48:59
1	Mg 279.077 IEC†	9157.3	9013.0	[50000]	µg/L	02:48:59
1	Na 589.592 Radial†	71583.1	71314.0	[20000]	µg/L	02:48:54
1	Sc 361.383	2065892.8	2065892.8	100.44	%	02:49:33
1	Y 371.029	1239483.0	1239483.0	98.972	%	02:49:33
2	Sc RADIAL	114120.2	114120.2	101	%	02:49:04
2	Al 396.153Radial†	101068.2	99385.9	[50000]	µg/L	02:49:04
2	Ca 317.933Radial†	128949.9	126601.2	[50000]	µg/L	02:49:04
2	Fe 238.204 Radial†	3851.6	3785.0	[20000]	µg/L	02:49:10
2	Mg 279.077 IEC†	9165.1	9013.5	[50000]	µg/L	02:49:10
2	Na 589.592 Radial†	72424.1	72087.2	[20000]	µg/L	02:49:04
2	Sc 361.383	2050241.8	2050241.8	99.684	%	02:49:40
2	Y 371.029	1230369.3	1230369.3	98.244	%	02:49:40
3	Sc RADIAL	114219.7	114219.7	102	%	02:49:15
3	Al 396.153Radial†	100837.5	99071.9	[50000]	µg/L	02:49:15
3	Ca 317.933Radial†	128701.1	126245.6	[50000]	µg/L	02:49:15
3	Fe 238.204 Radial†	3865.3	3795.2	[20000]	µg/L	02:49:21
3	Mg 279.077 IEC†	9150.7	8991.5	[50000]	µg/L	02:49:21
3	Na 589.592 Radial†	72140.9	71746.1	[20000]	µg/L	02:49:15
3	Sc 361.383	2063002.0	2063002.0	100.30	%	02:49:48
3	Y 371.029	1238175.0	1238175.0	98.867	%	02:49:48

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2059712.2	8328.01	0.40%	100.14	%
Sc RADIAL	114123.4	94.78	0.08%	101	%
Y 371.029	1236009.1	4927.83	0.40%	98.695	%
Al 396.153Radial†	98892.0	604.26	0.61%	[50000]	µg/L
Ca 317.933Radial†	125968.5	807.79	0.64%	[50000]	µg/L
Fe 238.204 Radial†	3800.0	17.90	0.47%	[20000]	µg/L
Mg 279.077 IEC†	9006.0	12.58	0.14%	[50000]	µg/L
Na 589.592 Radial†	71715.7	387.48	0.54%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	112.0	0.00000	0.999986	
Al 396.153Radial	3	Lin Thru 0	0.0	1.979	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	0.5246	0.00000	0.999985	
B 249.677	3	Lin Thru 0	0.0	22.53	0.00000	0.999973	
Ba 233.527	3	Lin Thru 0	0.0	39.81	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	1581	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.519	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	37.84	0.00000	0.999992	
Co 228.616	3	Lin Thru 0	0.0	20.79	0.00000	0.999992	
Cr 267.716	3	Lin Thru 0	0.0	48.04	0.00000	0.999976	
Cu 324.752	3	Lin Thru 0	0.0	142.1	0.00000	0.999987	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1904	0.00000	0.999993	
K 766.490 Radial	3	Lin Thru 0	0.0	1.844	0.00000	0.999958	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1803	0.00000	0.999989	
Mn 257.610	3	Lin Thru 0	0.0	315.1	0.00000	0.999968	
Mo 202.031	3	Lin Thru 0	0.0	8.964	0.00000	0.999889	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.604	0.00000	0.999948	

Ni 231.604	3	Lin Thru 0	0.0	18.36	0.00000	0.999988
P 214.914	3	Lin Thru 0	0.0	0.4606	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	3.945	0.00000	0.999976
S 181.975 Axial	3	Lin Thru 0	0.0	0.1946	0.00000	0.999858
Sb 206.836	3	Lin Thru 0	0.0	1.008	0.00000	0.999957
Se 196.026	3	Lin Thru 0	0.0	0.6866	0.00000	0.999990
SiO2	3	Lin Thru 0	0.0	5.237	0.00000	1.000000
Si 251.611	3	Lin Thru 0	0.0	13.06	0.00000	1.000000
Sn 189.927	3	Lin Thru 0	0.0	2.051	0.00000	0.999949
Sr 421.552	3	Lin Thru 0	0.0	177.5	0.00000	0.999980
Ti 334.940	3	Lin Thru 0	0.0	451.1	0.00000	0.999951
Tl 190.801	3	Lin Thru 0	0.0	0.6627	0.00000	0.999969
U 409.014	3	Lin Thru 0	0.0	10.65	0.00000	0.999978
V 292.402	3	Lin Thru 0	0.0	88.70	0.00000	0.999982
Zn 213.857	3	Lin Thru 0	0.0	37.32	0.00000	0.999994

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/18/2009 02:49:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112073.1	112073.1	99.6	%			02:50:31
1	Al 396.153Radial†	10502.5	10310.9	5191.0	µg/L	5191.0	ppb	02:50:31
1	Ca 317.933Radial†	13060.4	12612.4	5006.5	µg/L	5006.5	ppb	02:50:51
1	Fe 238.204 Radial†	989.0	981.4	5172.2	µg/L	5172.2	ppb	02:50:51
1	K 766.490 Radial†	5127.7	4451.5	2413.6	µg/L	2413.6	ppb	02:50:31
1	Mg 279.077 IEC†	963.0	946.7	5256.5	µg/L	5256.5	ppb	02:50:51
1	Na 589.592 Radial†	8545.0	9280.0	2574.8	µg/L	2574.8	ppb	02:50:31
1	Sr 421.552†	93596.9	94000.6	529.50	µg/L	529.50	ppb	02:50:31
1	Sc 361.383	2041394.9	2041394.9	99.254	%			02:51:55
1	Y 371.029	1238031.3	1238031.3	98.856	%			02:51:55
1	Ag 328.068†	28120.8	28360.5	257.11	µg/L	257.11	ppb	02:52:00
1	As 188.979†	256.2	255.6	486.07	µg/L	486.07	ppb	02:52:21
1	B 249.677†	11715.8	11648.2	515.37	µg/L	515.37	ppb	02:52:00
1	Ba 233.527†	19941.9	20172.6	507.72	µg/L	507.72	ppb	02:52:00
1	Be 313.107†	409705.1	409174.2	258.66	µg/L	258.66	ppb	02:51:55
1	Cd 226.502†	18663.5	18904.7	500.04	µg/L	500.04	ppb	02:52:00
1	Co 228.616†	10439.6	10589.8	509.45	µg/L	509.45	ppb	02:52:00
1	Cr 267.716†	23203.1	23500.4	490.35	µg/L	490.35	ppb	02:52:00
1	Cu 324.752†	75106.8	72287.2	509.69	µg/L	509.69	ppb	02:52:00
1	Mn 257.610†	157989.6	159400.2	506.51	µg/L	506.51	ppb	02:51:55
1	Mo 202.031†	4647.9	4690.8	523.51	µg/L	523.51	ppb	02:52:21
1	Ni 231.604†	9222.0	8991.9	489.86	µg/L	489.86	ppb	02:52:00
1	P 214.914†	1377.6	1181.9	2510.8	µg/L	2510.8	ppb	02:52:21
1	Pb 220.353†	2032.5	1993.7	506.21	µg/L	506.21	ppb	02:52:21
1	S 181.975 Axial†	505.4	485.2	2491.4	µg/L	2491.4	ppb	02:52:21
1	Sb 206.836†	509.2	492.5	487.19	µg/L	487.19	ppb	02:52:21
1	Se 196.026†	1792.3	1791.7	2611.9	µg/L	2611.9	ppb	02:52:21
1	SiO2†	56918.7	55365.0	10573	µg/L	10573	ppb	02:52:00
1	Si 251.611†	64250.6	64384.1	4883.3	µg/L	4883.3	ppb	02:52:00
1	Sn 189.927†	1094.1	1079.9	529.26	µg/L	529.26	ppb	02:52:21
1	Ti 334.940†	219592.5	220524.7	488.54	µg/L	488.54	ppb	02:51:55
1	Tl 190.801†	326.6	350.4	531.07	µg/L	531.07	ppb	02:52:21
1	U 409.014†	5755.8	5119.9	479.97	µg/L	479.97	ppb	02:52:00
1	V 292.402†	43738.6	44159.4	502.67	µg/L	502.67	ppb	02:52:00
1	Zn 213.857†	19230.3	18824.8	500.40	µg/L	500.40	ppb	02:52:00
2	Sc RADIAL	113303.1	113303.1	101	%			02:50:57
2	Al 396.153Radial†	10599.3	10292.5	5181.6	µg/L	5181.6	ppb	02:50:57
2	Ca 317.933Radial†	13126.6	12535.9	4976.2	µg/L	4976.2	ppb	02:51:17
2	Fe 238.204 Radial†	998.6	980.2	5165.7	µg/L	5165.7	ppb	02:51:17
2	K 766.490 Radial†	5354.6	4620.9	2505.4	µg/L	2505.4	ppb	02:50:57
2	Mg 279.077 IEC†	958.3	931.5	5172.2	µg/L	5172.2	ppb	02:51:17
2	Na 589.592 Radial†	8568.5	9210.2	2555.5	µg/L	2555.5	ppb	02:50:57
2	Sr 421.552†	95194.1	94566.5	532.69	µg/L	532.69	ppb	02:50:57
2	Sc 361.383	2024904.6	2024904.6	98.452	%			02:52:28
2	Y 371.029	1227501.2	1227501.2	98.015	%			02:52:28
2	Ag 328.068†	28071.4	28541.1	258.74	µg/L	258.74	ppb	02:52:34
2	As 188.979†	257.0	258.6	491.74	µg/L	491.74	ppb	02:52:54
2	B 249.677†	11639.5	11666.8	516.19	µg/L	516.19	ppb	02:52:34
2	Ba 233.527†	19922.2	20316.1	511.33	µg/L	511.33	ppb	02:52:34
2	Be 313.107†	407458.7	410254.0	259.34	µg/L	259.34	ppb	02:52:28
2	Cd 226.502†	18595.6	18988.9	502.27	µg/L	502.27	ppb	02:52:34
2	Co 228.616†	10402.1	10637.4	511.74	µg/L	511.74	ppb	02:52:34
2	Cr 267.716†	23115.0	23601.3	492.46	µg/L	492.46	ppb	02:52:34
2	Cu 324.752†	74782.0	72573.5	511.70	µg/L	511.70	ppb	02:52:34
2	Mn 257.610†	157143.9	159837.4	507.90	µg/L	507.90	ppb	02:52:28
2	Mo 202.031†	4634.7	4715.4	526.26	µg/L	526.26	ppb	02:52:54
2	Ni 231.604†	9236.7	9082.5	494.80	µg/L	494.80	ppb	02:52:34
2	P 214.914†	1369.0	1184.6	2516.5	µg/L	2516.5	ppb	02:52:54
2	Pb 220.353†	2018.5	1996.1	506.83	µg/L	506.83	ppb	02:52:54

2	S 181.975 Axial†	491.9	475.6	2442.2 µg/L	2442.2 ppb	02:52:54
2	Sb 206.836†	518.4	506.0	500.53 µg/L	500.53 ppb	02:52:54
2	Se 196.026†	1796.8	1811.0	2639.9 µg/L	2639.9 ppb	02:52:54
2	SiO2†	56656.5	55565.6	10611 µg/L	10611 ppb	02:52:34
2	Si 251.611†	63994.9	64651.5	4903.4 µg/L	4903.4 ppb	02:52:34
2	Sn 189.927†	1098.8	1093.6	535.91 µg/L	535.91 ppb	02:52:54
2	Ti 334.940†	218641.6	221360.6	490.39 µg/L	490.39 ppb	02:52:28
2	Tl 190.801†	317.6	344.0	521.30 µg/L	521.30 ppb	02:52:54
2	U 409.014†	5688.8	5099.0	478.01 µg/L	478.01 ppb	02:52:34
2	V 292.402†	43629.5	44407.5	505.49 µg/L	505.49 ppb	02:52:34
2	Zn 213.857†	19218.0	18970.0	504.27 µg/L	504.27 ppb	02:52:34
3	Sc RADIAL	113162.5	113162.5	101 %		02:51:23
3	Al 396.153Radial†	10525.3	10232.0	5151.3 µg/L	5151.3 ppb	02:51:23
3	Ca 317.933Radial†	13062.6	12488.4	4957.3 µg/L	4957.3 ppb	02:51:43
3	Fe 238.204 Radial†	987.1	970.0	5112.4 µg/L	5112.4 ppb	02:51:43
3	K 766.490 Radial†	5280.7	4554.0	2469.1 µg/L	2469.1 ppb	02:51:23
3	Mg 279.077 IEC†	958.3	932.6	5178.5 µg/L	5178.5 ppb	02:51:43
3	Na 589.592 Radial†	8519.3	9171.8	2544.8 µg/L	2544.8 ppb	02:51:23
3	Sr 421.552†	94942.9	94434.1	531.94 µg/L	531.94 ppb	02:51:23
3	Sc 361.383	2029438.9	2029438.9	98.672 %		02:53:01
3	Y 371.029	1230066.2	1230066.2	98.220 %		02:53:01
3	Ag 328.068†	28252.0	28660.4	259.83 µg/L	259.83 ppb	02:53:07
3	As 188.979†	254.1	255.0	484.90 µg/L	484.90 ppb	02:53:27
3	B 249.677†	11720.2	11722.2	518.67 µg/L	518.67 ppb	02:53:07
3	Ba 233.527†	20126.9	20478.4	515.41 µg/L	515.41 ppb	02:53:07
3	Be 313.107†	407625.7	409498.6	258.86 µg/L	258.86 ppb	02:53:01
3	Cd 226.502†	18778.1	19131.6	506.05 µg/L	506.05 ppb	02:53:07
3	Co 228.616†	10500.6	10713.6	515.40 µg/L	515.40 ppb	02:53:07
3	Cr 267.716†	23272.5	23708.4	494.70 µg/L	494.70 ppb	02:53:07
3	Cu 324.752†	75356.0	72985.6	514.59 µg/L	514.59 ppb	02:53:07
3	Mn 257.610†	157266.9	159605.5	507.16 µg/L	507.16 ppb	02:53:01
3	Mo 202.031†	4588.3	4658.0	519.84 µg/L	519.84 ppb	02:53:27
3	Ni 231.604†	9253.5	9078.6	494.58 µg/L	494.58 ppb	02:53:07
3	P 214.914†	1356.6	1168.8	2481.7 µg/L	2481.7 ppb	02:53:27
3	Pb 220.353†	2014.0	1987.0	504.49 µg/L	504.49 ppb	02:53:27
3	S 181.975 Axial†	501.0	483.7	2483.9 µg/L	2483.9 ppb	02:53:27
3	Sb 206.836†	513.5	499.9	494.47 µg/L	494.47 ppb	02:53:27
3	Se 196.026†	1780.8	1790.7	2610.4 µg/L	2610.4 ppb	02:53:27
3	SiO2†	57128.1	55915.1	10678 µg/L	10678 ppb	02:53:07
3	Si 251.611†	64496.0	65014.1	4931.8 µg/L	4931.8 ppb	02:53:07
3	Sn 189.927†	1076.5	1068.5	523.67 µg/L	523.67 ppb	02:53:27
3	Ti 334.940†	218640.7	220863.5	489.29 µg/L	489.29 ppb	02:53:01
3	Tl 190.801†	320.3	346.1	524.47 µg/L	524.47 ppb	02:53:27
3	U 409.014†	5808.8	5207.8	488.23 µg/L	488.23 ppb	02:53:07
3	V 292.402†	44027.9	44712.2	508.89 µg/L	508.89 ppb	02:53:07
3	Zn 213.857†	19352.8	19063.0	506.76 µg/L	506.76 ppb	02:53:07

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2031912.8	98.793	%	0.4142				0.42%
Sc RADIAL	112846.2	100	%	0.6				0.60%
Y 371.029	1231866.2	98.364	%	0.4384				0.45%
Ag 328.068†	28520.7	258.56	µg/L	1.367	258.56	ppb	1.367	0.53%
QC value within limits for Ag 328.068 Recovery = 103.43%								
Al 396.153Radial†	10278.5	5174.6	µg/L	20.75	5174.6	ppb	20.75	0.40%
QC value within limits for Al 396.153Radial Recovery = 103.49%								
As 188.979†	256.4	487.57	µg/L	3.660	487.57	ppb	3.660	0.75%
QC value within limits for As 188.979 Recovery = 97.51%								
B 249.677†	11679.1	516.74	µg/L	1.718	516.74	ppb	1.718	0.33%
QC value within limits for B 249.677 Recovery = 103.35%								
Ba 233.527†	20322.4	511.49	µg/L	3.850	511.49	ppb	3.850	0.75%
QC value within limits for Ba 233.527 Recovery = 102.30%								
Be 313.107†	409642.3	258.95	µg/L	0.350	258.95	ppb	0.350	0.14%
QC value within limits for Be 313.107 Recovery = 103.58%								
Ca 317.933Radial†	12545.6	4980.0	µg/L	24.84	4980.0	ppb	24.84	0.50%
QC value within limits for Ca 317.933Radial Recovery = 99.60%								
Cd 226.502†	19008.4	502.79	µg/L	3.040	502.79	ppb	3.040	0.60%
QC value within limits for Cd 226.502 Recovery = 100.56%								
Co 228.616†	10646.9	512.20	µg/L	2.999	512.20	ppb	2.999	0.59%

```
   QC value within limits for Co 228.616  Recovery = 102.44%
Cr 267.716†            23603.3      492.50 µg/L        2.173      492.50 ppb        2.173   0.44%
   QC value within limits for Cr 267.716  Recovery = 98.50%
Cu 324.752†            72615.4      511.99 µg/L        2.463      511.99 ppb        2.463   0.48%
   QC value within limits for Cu 324.752  Recovery = 102.40%
Fe 238.204 Radial†       977.2      5150.1 µg/L       32.83      5150.1 ppb       32.83   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.00%
K 766.490 Radial†       4542.1      2462.7 µg/L       46.25      2462.7 ppb       46.25   1.88%
   QC value within limits for K 766.490 Radial  Recovery = 98.51%
Mg 279.077 IEC†          937.0      5202.4 µg/L       46.94      5202.4 ppb       46.94   0.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.05%
Mn 257.610†           159614.4      507.19 µg/L       0.694      507.19 ppb       0.694   0.14%
   QC value within limits for Mn 257.610  Recovery = 101.44%
Mo 202.031†            4688.1      523.20 µg/L       3.219      523.20 ppb       3.219   0.62%
   QC value within limits for Mo 202.031  Recovery = 104.64%
Na 589.592 Radial†      9220.7      2558.4 µg/L       15.21      2558.4 ppb       15.21   0.59%
   QC value within limits for Na 589.592 Radial  Recovery = 102.34%
Ni 231.604†            9051.0      493.08 µg/L       2.789      493.08 ppb       2.789   0.57%
   QC value within limits for Ni 231.604  Recovery = 98.62%
P 214.914†             1178.4      2503.0 µg/L       18.65      2503.0 ppb       18.65   0.75%
   QC value within limits for P 214.914  Recovery = 100.12%
Pb 220.353†            1992.3      505.85 µg/L       1.210      505.85 ppb       1.210   0.24%
   QC value within limits for Pb 220.353  Recovery = 101.17%
S 181.975 Axial†        481.5      2472.5 µg/L       26.47      2472.5 ppb       26.47   1.07%
   QC value within limits for S 181.975 Axial  Recovery = 98.90%
Sb 206.836†             499.5      494.06 µg/L       6.679      494.06 ppb       6.679   1.35%
   QC value within limits for Sb 206.836  Recovery = 98.81%
Se 196.026†            1797.8      2620.7 µg/L       16.66      2620.7 ppb       16.66   0.64%
   QC value within limits for Se 196.026  Recovery = 104.83%
SiO2†                 55615.3       10621 µg/L        53.2       10621 ppb        53.2   0.50%
   QC value within limits for SiO2  Recovery = 99.30%
Si 251.611†           64683.2      4906.2 µg/L       24.36      4906.2 ppb       24.36   0.50%
   QC value within limits for Si 251.611  Recovery = 98.12%
Sn 189.927†            1080.7      529.61 µg/L       6.124      529.61 ppb       6.124   1.16%
   QC value within limits for Sn 189.927  Recovery = 105.92%
Sr 421.552†           94333.7      531.38 µg/L       1.667      531.38 ppb       1.667   0.31%
   QC value within limits for Sr 421.552  Recovery = 106.28%
Ti 334.940†          220916.3      489.40 µg/L       0.933      489.40 ppb       0.933   0.19%
   QC value within limits for Ti 334.940  Recovery = 97.88%
Tl 190.801†             346.8      525.61 µg/L       4.986      525.61 ppb       4.986   0.95%
   QC value within limits for Tl 190.801  Recovery = 105.12%
U 409.014†             5142.2      482.07 µg/L       5.427      482.07 ppb       5.427   1.13%
   QC value within limits for U 409.014  Recovery = 96.41%
V 292.402†            44426.4      505.68 µg/L       3.112      505.68 ppb       3.112   0.62%
   QC value within limits for V 292.402  Recovery = 101.14%
Zn 213.857†           18952.6      503.81 µg/L       3.205      503.81 ppb       3.205   0.64%
   QC value within limits for Zn 213.857  Recovery = 100.76%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/18/2009 02:53:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110159.2	110159.2	97.9	%			02:54:09
1	Al 396.153Radial†	212.5	-12.8	-6.4963	µg/L	-6.4963	ppb	02:54:09
1	Ca 317.933Radial†	428.7	-57.7	-22.890	µg/L	-22.890	ppb	02:54:30
1	Fe 238.204 Radial†	7.3	-3.7	-19.631	µg/L	-19.631	ppb	02:54:30
1	K 766.490 Radial†	666.5	-14.3	-7.7500	µg/L	-7.7500	ppb	02:54:09
1	Mg 279.077 IEC†	15.9	-3.6	-20.044	µg/L	-20.044	ppb	02:54:30
1	Na 589.592 Radial†	-676.1	13.6	3.7765	µg/L	3.7765	ppb	02:54:09
1	Sr 421.552†	77.2	142.6	0.8031	µg/L	0.8031	ppb	02:54:09
1	Sc 361.383	2007570.5	2007570.5	97.609	%			02:55:32
1	Y 371.029	1219230.8	1219230.8	97.355	%			02:55:32
1	Ag 328.068†	85.7	116.1	1.0352	µg/L	1.0352	ppb	02:55:37
1	As 188.979†	1.5	-1.0	-1.8089	µg/L	-1.8089	ppb	02:55:58
1	B 249.677†	152.5	0.5	0.0302	µg/L	0.0302	ppb	02:55:58
1	Ba 233.527†	-78.8	-0.1	-0.0023	µg/L	-0.0023	ppb	02:55:58
1	Be 313.107†	3773.3	254.2	0.1607	µg/L	0.1607	ppb	02:55:37
1	Cd 226.502†	-83.0	15.9	0.4356	µg/L	0.4356	ppb	02:55:58
1	Co 228.616†	-66.6	3.5	0.1704	µg/L	0.1704	ppb	02:55:58
1	Cr 267.716†	-109.4	10.7	0.2229	µg/L	0.2229	ppb	02:55:37
1	Cu 324.752†	3281.1	-22.8	-0.1647	µg/L	-0.1647	ppb	02:55:37
1	Mn 257.610†	-171.3	47.2	0.1472	µg/L	0.1472	ppb	02:55:58
1	Mo 202.031†	-2.6	5.2	0.5800	µg/L	0.5800	ppb	02:55:58
1	Ni 231.604†	302.5	10.5	0.5742	µg/L	0.5742	ppb	02:55:58
1	P 214.914†	203.1	2.1	4.4838	µg/L	4.4838	ppb	02:55:58
1	Pb 220.353†	68.9	16.5	4.1686	µg/L	4.1686	ppb	02:55:58
1	S 181.975 Axial†	21.6	-1.9	-9.9508	µg/L	-9.9508	ppb	02:55:58
1	Sb 206.836†	21.1	1.0	1.0292	µg/L	1.0292	ppb	02:55:58
1	Se 196.026†	14.9	1.2	1.7313	µg/L	1.7313	ppb	02:55:58
1	SiO2†	1984.1	51.0	9.7463	µg/L	9.7463	ppb	02:55:37
1	Si 251.611†	379.3	39.0	2.9824	µg/L	2.9824	ppb	02:55:58
1	Sn 189.927†	21.1	-0.8	-0.4167	µg/L	-0.4167	ppb	02:55:58
1	Ti 334.940†	846.6	148.5	0.3304	µg/L	0.3304	ppb	02:55:37
1	Tl 190.801†	-20.0	1.0	1.4465	µg/L	1.4465	ppb	02:55:58
1	U 409.014†	857.0	198.7	18.668	µg/L	18.668	ppb	02:55:37
1	V 292.402†	-93.7	-4.1	-0.0131	µg/L	-0.0131	ppb	02:55:37
1	Zn 213.857†	545.3	8.5	0.2269	µg/L	0.2269	ppb	02:55:58
2	Sc RADIAL	110505.7	110505.7	98.2	%			02:54:35
2	Al 396.153Radial†	200.5	-25.7	-13.041	µg/L	-13.041	ppb	02:54:35
2	Ca 317.933Radial†	424.2	-63.6	-25.264	µg/L	-25.264	ppb	02:54:56
2	Fe 238.204 Radial†	10.7	-0.3	-1.4548	µg/L	-1.4548	ppb	02:54:56
2	K 766.490 Radial†	741.2	59.6	32.300	µg/L	32.300	ppb	02:54:35
2	Mg 279.077 IEC†	17.2	-2.3	-12.743	µg/L	-12.743	ppb	02:54:56
2	Na 589.592 Radial†	-644.1	48.3	13.394	µg/L	13.394	ppb	02:54:35
2	Sr 421.552†	-5.2	58.5	0.3293	µg/L	0.3293	ppb	02:54:35
2	Sc 361.383	1992128.4	1992128.4	96.858	%			02:56:03
2	Y 371.029	1209681.6	1209681.6	96.592	%			02:56:03
2	Ag 328.068†	6.4	34.9	0.3126	µg/L	0.3126	ppb	02:56:09
2	As 188.979†	1.9	-0.5	-0.9483	µg/L	-0.9483	ppb	02:56:29
2	B 249.677†	161.4	10.9	0.4860	µg/L	0.4860	ppb	02:56:29
2	Ba 233.527†	-71.7	6.6	0.1670	µg/L	0.1670	ppb	02:56:29
2	Be 313.107†	3769.5	280.3	0.1772	µg/L	0.1772	ppb	02:56:09
2	Cd 226.502†	-82.8	15.4	0.4257	µg/L	0.4257	ppb	02:56:29
2	Co 228.616†	-68.9	0.6	0.0290	µg/L	0.0290	ppb	02:56:29
2	Cr 267.716†	-89.4	30.4	0.6338	µg/L	0.6338	ppb	02:56:09
2	Cu 324.752†	3282.8	5.0	0.0348	µg/L	0.0348	ppb	02:56:09
2	Mn 257.610†	-166.0	51.2	0.1623	µg/L	0.1623	ppb	02:56:29
2	Mo 202.031†	1.8	9.8	1.0928	µg/L	1.0928	ppb	02:56:29
2	Ni 231.604†	299.8	10.2	0.5534	µg/L	0.5534	ppb	02:56:29
2	P 214.914†	210.6	11.4	24.763	µg/L	24.763	ppb	02:56:29
2	Pb 220.353†	57.7	5.5	1.3735	µg/L	1.3735	ppb	02:56:29

2	S 181.975 Axial†	22.3	-1.0	-5.0530 µg/L	-5.0530 ppb		02:56:29
2	Sb 206.836†	20.3	0.4	0.3978 µg/L	0.3978 ppb		02:56:29
2	Se 196.026†	7.7	-6.1	-8.9218 µg/L	-8.9218 ppb		02:56:29
2	SiO2†	1957.3	39.1	7.4744 µg/L	7.4744 ppb		02:56:09
2	Si 251.611†	382.8	45.6	3.4089 µg/L	3.4089 ppb		02:56:29
2	Sn 189.927†	24.0	2.3	1.1044 µg/L	1.1044 ppb		02:56:29
2	Ti 334.940†	810.6	118.0	0.2629 µg/L	0.2629 ppb		02:56:09
2	Tl 190.801†	-17.6	3.3	4.9329 µg/L	4.9329 ppb		02:56:29
2	U 409.014†	903.7	253.8	23.830 µg/L	23.830 ppb		02:56:09
2	V 292.402†	-77.9	11.6	0.1763 µg/L	0.1763 ppb		02:56:09
2	Zn 213.857†	550.8	18.5	0.4940 µg/L	0.4940 ppb		02:56:29
3	Sc RADIAL	110146.2	110146.2	97.9 %			02:55:01
3	Al 396.153Radial†	221.4	-3.7	-1.9010 µg/L	-1.9010 ppb		02:55:01
3	Ca 317.933Radial†	414.0	-72.6	-28.837 µg/L	-28.837 ppb		02:55:22
3	Fe 238.204 Radial†	10.5	-0.5	-2.5918 µg/L	-2.5918 ppb		02:55:22
3	K 766.490 Radial†	749.7	70.7	38.345 µg/L	38.345 ppb		02:55:01
3	Mg 279.077 IEC†	16.0	-3.5	-19.193 µg/L	-19.193 ppb		02:55:22
3	Na 589.592 Radial†	-671.0	18.7	5.1904 µg/L	5.1904 ppb		02:55:01
3	Sr 421.552†	-1.5	62.3	0.3507 µg/L	0.3507 ppb		02:55:01
3	Sc 361.383	2014186.5	2014186.5	97.931 %			02:56:35
3	Y 371.029	1223550.1	1223550.1	97.700 %			02:56:35
3	Ag 328.068†	48.9	78.3	0.7011 µg/L	0.7011 ppb		02:56:40
3	As 188.979†	2.1	-0.4	-0.7424 µg/L	-0.7424 ppb		02:57:01
3	B 249.677†	153.8	1.3	0.0593 µg/L	0.0593 ppb		02:57:01
3	Ba 233.527†	-69.5	9.7	0.2436 µg/L	0.2436 ppb		02:57:01
3	Be 313.107†	3673.5	139.6	0.0882 µg/L	0.0882 ppb		02:56:40
3	Cd 226.502†	-90.8	8.2	0.2308 µg/L	0.2308 ppb		02:57:01
3	Co 228.616†	-71.6	-1.4	-0.0674 µg/L	-0.0674 ppb		02:57:01
3	Cr 267.716†	-111.6	8.8	0.1841 µg/L	0.1841 ppb		02:56:40
3	Cu 324.752†	3260.5	-54.9	-0.3867 µg/L	-0.3867 ppb		02:56:40
3	Mn 257.610†	-168.8	50.3	0.1593 µg/L	0.1593 ppb		02:57:01
3	Mo 202.031†	-2.5	5.3	0.5965 µg/L	0.5965 ppb		02:57:01
3	Ni 231.604†	297.0	3.9	0.2103 µg/L	0.2103 ppb		02:57:01
3	P 214.914†	202.8	1.1	2.4456 µg/L	2.4456 ppb		02:57:01
3	Pb 220.353†	57.5	4.6	1.1468 µg/L	1.1468 ppb		02:57:01
3	S 181.975 Axial†	21.7	-1.9	-9.6576 µg/L	-9.6576 ppb		02:57:01
3	Sb 206.836†	18.8	-1.4	-1.3584 µg/L	-1.3584 ppb		02:57:01
3	Se 196.026†	13.6	-0.2	-0.2659 µg/L	-0.2659 ppb		02:57:01
3	SiO2†	1981.2	41.4	7.9096 µg/L	7.9096 ppb		02:56:40
3	Si 251.611†	361.1	19.1	1.3821 µg/L	1.3821 ppb		02:57:01
3	Sn 189.927†	24.2	2.2	1.0735 µg/L	1.0735 ppb		02:57:01
3	Ti 334.940†	869.5	169.0	0.3763 µg/L	0.3763 ppb		02:56:40
3	Tl 190.801†	-15.1	6.0	9.0341 µg/L	9.0341 ppb		02:57:01
3	U 409.014†	858.8	197.8	18.571 µg/L	18.571 ppb		02:56:40
3	V 292.402†	-62.4	28.2	0.3521 µg/L	0.3521 ppb		02:56:40
3	Zn 213.857†	550.7	12.1	0.3254 µg/L	0.3254 ppb		02:57:01

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2004628.5	97.466	%	0.5504				0.56%
Sc RADIAL	110270.4	98.0	%	0.18				0.18%
Y 371.029	1217487.5	97.216	%	0.5667				0.58%
Ag 328.068†	76.4	0.6830	µg/L	0.36161	0.6830	ppb	0.36161	52.95%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.1	-7.1459	µg/L	5.59812	-7.1459	ppb	5.59812	78.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-1.1665	µg/L	0.56578	-1.1665	ppb	0.56578	48.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4.3	0.1918	µg/L	0.25518	0.1918	ppb	0.25518	133.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.4	0.1361	µg/L	0.12580	0.1361	ppb	0.12580	92.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	224.7	0.1420	µg/L	0.04736	0.1420	ppb	0.04736	33.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-64.7	-25.663	µg/L	2.9935	-25.663	ppb	2.9935	11.66%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.2	0.3641	µg/L	0.11551	0.3641	ppb	0.11551	31.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.9	0.0440	µg/L	0.11963	0.0440	ppb	0.11963	272.00%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.7      0.3469 µg/L       0.24921      0.3469 ppb        0.24921  71.83%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -24.2     -0.1722 µg/L       0.21082     -0.1722 ppb        0.21082 122.42%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -7.8924 µg/L      10.18140     -7.8924 ppb       10.18140 129.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          38.7      20.965 µg/L       25.0508      20.965 ppb        25.0508 119.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.1     -17.327 µg/L        3.9922     -17.327 ppb         3.9922  23.04%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                49.6      0.1563 µg/L       0.00801      0.1563 ppb        0.00801   5.13%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.8      0.7564 µg/L       0.29141      0.7564 ppb        0.29141  38.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         26.9      7.4538 µg/L       5.19301      7.4538 ppb        5.19301  69.67%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.2      0.4460 µg/L       0.20434      0.4460 ppb        0.20434  45.82%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.8      10.564 µg/L       12.3387      10.564 ppb        12.3387 116.80%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 8.9      2.2297 µg/L       1.68300      2.2297 ppb        1.68300  75.48%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.6     -8.2205 µg/L       2.74699     -8.2205 ppb        2.74699  33.42%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.0      0.0229 µg/L       1.23717      0.0229 ppb        1.23717 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.7     -2.4855 µg/L       5.66280     -2.4855 ppb        5.66280 227.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      43.9      8.3767 µg/L       1.20583      8.3767 ppb        1.20583  14.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                34.6      2.5911 µg/L       1.06852      2.5911 ppb        1.06852  41.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.5871 µg/L       0.86943      0.5871 ppb        0.86943 148.10%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                87.8      0.4944 µg/L       0.26757      0.4944 ppb        0.26757  54.12%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               145.2      0.3232 µg/L       0.05703      0.3232 ppb        0.05703  17.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.4      5.1379 µg/L       3.79795      5.1379 ppb        3.79795  73.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                216.8      20.356 µg/L        3.0085      20.356 ppb         3.0085  14.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 11.9      0.1717 µg/L       0.18263      0.1717 ppb        0.18263 106.34%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                13.0      0.3488 µg/L       0.13506      0.3488 ppb        0.13506  38.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 02:57:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109670.6	109670.6	97.5	%			02:57:43
1	Al 396.153Radial†	579.7	364.7	183.92	µg/L	183.92	ppb	02:57:43
1	Ca 317.933Radial†	925.4	453.6	180.08	µg/L	180.08	ppb	02:58:04
1	Fe 238.204 Radial†	29.1	18.6	97.895	µg/L	97.895	ppb	02:58:04
1	K 766.490 Radial†	1047.0	378.9	205.46	µg/L	205.46	ppb	02:57:43
1	Mg 279.077 IEC†	73.3	55.4	307.32	µg/L	307.32	ppb	02:58:04
1	Na 589.592 Radial†	384.7	1098.5	304.78	µg/L	304.78	ppb	02:57:43
1	Sr 421.552†	862.3	948.1	5.3409	µg/L	5.3409	ppb	02:57:43
1	Sc 361.383	2020682.7	2020682.7	98.247	%			02:59:06
1	Y 371.029	1230392.5	1230392.5	98.246	%			02:59:06
1	Ag 328.068†	580.5	619.2	5.5741	µg/L	5.5741	ppb	02:59:11
1	As 188.979†	13.3	11.1	21.089	µg/L	21.089	ppb	02:59:32
1	B 249.677†	1277.3	1144.4	50.762	µg/L	50.762	ppb	02:59:11
1	Ba 233.527†	119.1	201.9	5.0818	µg/L	5.0818	ppb	02:59:32
1	Be 313.107†	11549.7	8144.3	5.1500	µg/L	5.1500	ppb	02:59:11
1	Cd 226.502†	88.5	191.0	5.0816	µg/L	5.0816	ppb	02:59:32
1	Co 228.616†	22.8	94.9	4.5785	µg/L	4.5785	ppb	02:59:32
1	Cr 267.716†	102.0	226.6	4.7301	µg/L	4.7301	ppb	02:59:11
1	Cu 324.752†	4685.2	1384.5	9.7617	µg/L	9.7617	ppb	02:59:11
1	Mn 257.610†	2986.4	3262.3	10.365	µg/L	10.365	ppb	02:59:11
1	Mo 202.031†	81.3	90.7	10.123	µg/L	10.123	ppb	02:59:32
1	Ni 231.604†	391.9	99.5	5.4226	µg/L	5.4226	ppb	02:59:32
1	P 214.914†	269.6	68.4	147.50	µg/L	147.50	ppb	02:59:32
1	Pb 220.353†	91.6	39.1	9.9059	µg/L	9.9059	ppb	02:59:32
1	S 181.975 Axial†	34.0	10.5	53.947	µg/L	53.947	ppb	02:59:32
1	Sb 206.836†	23.7	3.6	3.5796	µg/L	3.5796	ppb	02:59:32
1	Se 196.026†	26.4	12.8	18.593	µg/L	18.593	ppb	02:59:32
1	SiO2†	3071.6	1144.8	218.61	µg/L	218.61	ppb	02:59:11
1	Si 251.611†	1652.1	1331.9	101.25	µg/L	101.25	ppb	02:59:32
1	Sn 189.927†	39.2	17.5	8.6411	µg/L	8.6411	ppb	02:59:32
1	Ti 334.940†	2983.4	2317.8	5.1276	µg/L	5.1276	ppb	02:59:11
1	Tl 190.801†	-10.1	11.1	16.753	µg/L	16.753	ppb	02:59:32
1	U 409.014†	1204.9	547.2	51.372	µg/L	51.372	ppb	02:59:11
1	V 292.402†	374.0	472.7	5.4902	µg/L	5.4902	ppb	02:59:11
1	Zn 213.857†	927.3	393.7	10.488	µg/L	10.488	ppb	02:59:32
2	Sc RADIAL	110712.5	110712.5	98.4	%			02:58:09
2	Al 396.153Radial†	594.5	374.2	188.75	µg/L	188.75	ppb	02:58:09
2	Ca 317.933Radial†	930.5	449.9	178.58	µg/L	178.58	ppb	02:58:29
2	Fe 238.204 Radial†	30.8	20.0	105.43	µg/L	105.43	ppb	02:58:29
2	K 766.490 Radial†	1006.9	328.1	177.89	µg/L	177.89	ppb	02:58:09
2	Mg 279.077 IEC†	75.0	56.3	312.49	µg/L	312.49	ppb	02:58:29
2	Na 589.592 Radial†	404.9	1115.3	309.47	µg/L	309.47	ppb	02:58:09
2	Sr 421.552†	890.8	968.8	5.4574	µg/L	5.4574	ppb	02:58:09
2	Sc 361.383	2019005.8	2019005.8	98.165	%			02:59:38
2	Y 371.029	1229319.2	1229319.2	98.160	%			02:59:38
2	Ag 328.068†	495.9	533.4	4.8088	µg/L	4.8088	ppb	02:59:43
2	As 188.979†	17.3	15.2	28.872	µg/L	28.872	ppb	03:00:04
2	B 249.677†	1208.9	1075.8	47.716	µg/L	47.716	ppb	02:59:43
2	Ba 233.527†	128.9	212.0	5.3362	µg/L	5.3362	ppb	03:00:04
2	Be 313.107†	11423.6	8025.7	5.0750	µg/L	5.0750	ppb	02:59:43
2	Cd 226.502†	97.0	199.7	5.3109	µg/L	5.3109	ppb	03:00:04
2	Co 228.616†	22.1	94.3	4.5431	µg/L	4.5431	ppb	03:00:04
2	Cr 267.716†	144.0	269.4	5.6208	µg/L	5.6208	ppb	02:59:43
2	Cu 324.752†	4664.4	1367.3	9.6423	µg/L	9.6423	ppb	02:59:43
2	Mn 257.610†	2994.7	3273.4	10.401	µg/L	10.401	ppb	02:59:43
2	Mo 202.031†	72.9	82.1	9.1688	µg/L	9.1688	ppb	03:00:04
2	Ni 231.604†	402.8	110.9	6.0428	µg/L	6.0428	ppb	03:00:04
2	P 214.914†	281.0	80.3	173.25	µg/L	173.25	ppb	03:00:04
2	Pb 220.353†	90.2	37.8	9.5651	µg/L	9.5651	ppb	03:00:04

2	S 181.975 Axial†	42.7	19.5	99.918 µg/L	99.918 ppb	03:00:04
2	Sb 206.836†	34.2	14.3	14.150 µg/L	14.150 ppb	03:00:04
2	Se 196.026†	29.7	16.1	23.488 µg/L	23.488 ppb	03:00:04
2	SiO2†	3103.0	1179.3	225.21 µg/L	225.21 ppb	02:59:43
2	Si 251.611†	1622.8	1303.5	99.008 µg/L	99.008 ppb	03:00:04
2	Sn 189.927†	43.7	22.0	10.861 µg/L	10.861 ppb	03:00:04
2	Ti 334.940†	3018.4	2356.0	5.2122 µg/L	5.2122 ppb	02:59:43
2	Tl 190.801†	-5.3	16.0	24.217 µg/L	24.217 ppb	03:00:04
2	U 409.014†	1171.2	513.8	48.240 µg/L	48.240 ppb	02:59:43
2	V 292.402†	370.2	469.1	5.4391 µg/L	5.4391 ppb	02:59:43
2	Zn 213.857†	923.6	390.7	10.404 µg/L	10.404 ppb	03:00:04
3	Sc RADIAL	110532.5	110532.5	98.3 %		02:58:35
3	Al 396.153Radial†	599.5	380.2	191.75 µg/L	191.75 ppb	02:58:35
3	Ca 317.933Radial†	924.1	444.9	176.62 µg/L	176.62 ppb	02:58:56
3	Fe 238.204 Radial†	31.2	20.5	107.94 µg/L	107.94 ppb	02:58:56
3	K 766.490 Radial†	955.5	277.4	150.43 µg/L	150.43 ppb	02:58:35
3	Mg 279.077 IEC†	69.1	50.5	280.24 µg/L	280.24 ppb	02:58:56
3	Na 589.592 Radial†	374.9	1085.5	301.18 µg/L	301.18 ppb	02:58:35
3	Sr 421.552†	848.9	927.6	5.2251 µg/L	5.2251 ppb	02:58:35
3	Sc 361.383	2016302.3	2016302.3	98.034 %		03:00:10
3	Y 371.029	1227337.6	1227337.6	98.002 %		03:00:10
3	Ag 328.068†	554.3	593.7	5.3440 µg/L	5.3440 ppb	03:00:16
3	As 188.979†	13.1	10.8	20.619 µg/L	20.619 ppb	03:00:36
3	B 249.677†	1213.3	1081.9	47.985 µg/L	47.985 ppb	03:00:16
3	Ba 233.527†	122.2	205.4	5.1681 µg/L	5.1681 ppb	03:00:36
3	Be 313.107†	11444.9	8063.0	5.0985 µg/L	5.0985 ppb	03:00:16
3	Cd 226.502†	91.8	194.5	5.1733 µg/L	5.1733 ppb	03:00:36
3	Co 228.616†	28.0	100.3	4.8378 µg/L	4.8378 ppb	03:00:36
3	Cr 267.716†	135.9	261.4	5.4529 µg/L	5.4529 ppb	03:00:16
3	Cu 324.752†	4659.8	1369.0	9.6545 µg/L	9.6545 ppb	03:00:16
3	Mn 257.610†	3027.0	3310.4	10.519 µg/L	10.519 ppb	03:00:16
3	Mo 202.031†	88.2	97.9	10.928 µg/L	10.928 ppb	03:00:36
3	Ni 231.604†	392.1	100.6	5.4794 µg/L	5.4794 ppb	03:00:36
3	P 214.914†	276.9	76.5	165.10 µg/L	165.10 ppb	03:00:36
3	Pb 220.353†	104.9	52.8	13.386 µg/L	13.386 ppb	03:00:36
3	S 181.975 Axial†	43.1	20.0	102.54 µg/L	102.54 ppb	03:00:36
3	Sb 206.836†	31.6	11.7	11.582 µg/L	11.582 ppb	03:00:36
3	Se 196.026†	38.7	25.4	37.011 µg/L	37.011 ppb	03:00:36
3	SiO2†	3051.4	1130.9	215.96 µg/L	215.96 ppb	03:00:16
3	Si 251.611†	1636.6	1319.8	100.20 µg/L	100.20 ppb	03:00:36
3	Sn 189.927†	45.2	23.6	11.620 µg/L	11.620 ppb	03:00:36
3	Ti 334.940†	3054.5	2396.9	5.3031 µg/L	5.3031 ppb	03:00:16
3	Tl 190.801†	2.1	23.5	35.541 µg/L	35.541 ppb	03:00:36
3	U 409.014†	1185.8	530.4	49.795 µg/L	49.795 ppb	03:00:16
3	V 292.402†	328.4	426.9	4.9787 µg/L	4.9787 ppb	03:00:16
3	Zn 213.857†	922.2	390.6	10.403 µg/L	10.403 ppb	03:00:36

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2018663.6	98.149	%	0.1075				0.11%
Sc RADIAL	110305.2	98.1	%	0.50				0.50%
Y 371.029	1229016.5	98.136	%	0.1238				0.13%
Ag 328.068†	582.1	5.2423	µg/L	0.39264	5.2423	ppb	0.39264	7.49%
QC value within limits for Ag 328.068 Recovery = 104.85%								
Al 396.153Radial†	373.0	188.14	µg/L	3.946	188.14	ppb	3.946	2.10%
QC value within limits for Al 396.153Radial Recovery = 94.07%								
As 188.979†	12.4	23.527	µg/L	4.6353	23.527	ppb	4.6353	19.70%
QC value within limits for As 188.979 Recovery = 78.42%								
B 249.677†	1100.7	48.821	µg/L	1.6864	48.821	ppb	1.6864	3.45%
QC value within limits for B 249.677 Recovery = 97.64%								
Ba 233.527†	206.4	5.1954	µg/L	0.12941	5.1954	ppb	0.12941	2.49%
QC value within limits for Ba 233.527 Recovery = 103.91%								
Be 313.107†	8077.6	5.1078	µg/L	0.03839	5.1078	ppb	0.03839	0.75%
QC value within limits for Be 313.107 Recovery = 102.16%								
Ca 317.933Radial†	449.5	178.42	µg/L	1.733	178.42	ppb	1.733	0.97%
QC value within limits for Ca 317.933Radial Recovery = 89.21%								
Cd 226.502†	195.1	5.1886	µg/L	0.11543	5.1886	ppb	0.11543	2.22%
QC value within limits for Cd 226.502 Recovery = 103.77%								
Co 228.616†	96.5	4.6531	µg/L	0.16088	4.6531	ppb	0.16088	3.46%

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   QC value within limits for Co 228.616  Recovery = 93.06%
Cr 267.716†              252.5      5.2679 µg/L       0.47331      5.2679 ppb        0.47331   8.98%
   QC value within limits for Cr 267.716  Recovery = 105.36%
Cu 324.752†             1373.6      9.6862 µg/L       0.06573      9.6862 ppb        0.06573   0.68%
   QC value within limits for Cu 324.752  Recovery = 96.86%
Fe 238.204 Radial†        19.7      103.75 µg/L         5.226      103.75 ppb          5.226   5.04%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.75%
K 766.490 Radial†        328.2      177.93 µg/L        27.515      177.93 ppb         27.515  15.46%
   QC value within limits for K 766.490 Radial  Recovery = 118.62%
Mg 279.077 IEC†           54.1      300.01 µg/L        17.320      300.01 ppb         17.320   5.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.00%
Mn 257.610†             3282.0      10.429 µg/L        0.0804      10.429 ppb         0.0804   0.77%
   QC value within limits for Mn 257.610  Recovery = 104.29%
Mo 202.031†               90.3      10.073 µg/L        0.8807      10.073 ppb         0.8807   8.74%
   QC value within limits for Mo 202.031  Recovery = 100.73%
Na 589.592 Radial†      1099.8      305.14 µg/L         4.156      305.14 ppb          4.156   1.36%
   QC value within limits for Na 589.592 Radial  Recovery = 101.71%
Ni 231.604†              103.7      5.6482 µg/L       0.34283      5.6482 ppb        0.34283   6.07%
   QC value within limits for Ni 231.604  Recovery = 112.96%
P 214.914†                75.1      161.95 µg/L        13.157      161.95 ppb         13.157   8.12%
   QC value within limits for P 214.914  Recovery = 107.97%
Pb 220.353†               43.2      10.952 µg/L        2.1146      10.952 ppb         2.1146  19.31%
   QC value within limits for Pb 220.353  Recovery = 109.52%
S 181.975 Axial†          16.6      85.467 µg/L       27.3281      85.467 ppb        27.3281  31.98%
   QC value within limits for S 181.975 Axial  Recovery = 85.47%
Sb 206.836†                9.9      9.7703 µg/L       5.51287      9.7703 ppb        5.51287  56.42%
   QC value within limits for Sb 206.836  Recovery = 97.70%
Se 196.026†               18.1      26.364 µg/L        9.5396      26.364 ppb         9.5396  36.18%
   QC value within limits for Se 196.026  Recovery = 87.88%
SiO2†                   1151.7      219.93 µg/L         4.760      219.93 ppb          4.760   2.16%
   QC value within limits for SiO2  Recovery = 103.25%
Si 251.611†             1318.4      100.15 µg/L         1.120      100.15 ppb          1.120   1.12%
   QC value within limits for Si 251.611  Recovery = 100.15%
Sn 189.927†               21.0      10.374 µg/L        1.5479      10.374 ppb         1.5479  14.92%
   QC value within limits for Sn 189.927  Recovery = 103.74%
Sr 421.552†              948.2      5.3411 µg/L       0.11619      5.3411 ppb        0.11619   2.18%
   QC value within limits for Sr 421.552  Recovery = 106.82%
Ti 334.940†             2356.9      5.2143 µg/L       0.08778      5.2143 ppb        0.08778   1.68%
   QC value within limits for Ti 334.940  Recovery = 104.29%
Tl 190.801†               16.9      25.504 µg/L        9.4597      25.504 ppb         9.4597  37.09%
   QC value within limits for Tl 190.801  Recovery = 127.52%
U 409.014†               530.5      49.802 µg/L        1.5664      49.802 ppb         1.5664   3.15%
   QC value within limits for U 409.014  Recovery = 99.60%
V 292.402†               456.2      5.3026 µg/L       0.28173      5.3026 ppb        0.28173   5.31%
   QC value within limits for V 292.402  Recovery = 106.05%
Zn 213.857†              391.7      10.432 µg/L        0.0490      10.432 ppb         0.0490   0.47%
   QC value within limits for Zn 213.857  Recovery = 104.32%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/18/2009 03:00:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105082.1	105082.1	93.4	%			03:01:27
1	Al 396.153Radial†	960820.1	1028234.1	519650	µg/L	519650	ppb	03:01:21
1	Ca 317.933Radial†	1157144.9	1238114.9	491470	µg/L	491470	ppb	03:01:21
1	Fe 238.204 Radial†	33779.0	36145.9	189870	µg/L	189870	ppb	03:01:27
1	K 766.490 Radial†	640.2	-9.5	-5.1731	µg/L	-5.1731	ppb	03:01:27
1	Mg 279.077 IEC†	82664.0	88463.9	490400	µg/L	490400	ppb	03:01:27
1	Na 589.592 Radial†	-594.8	67.2	18.648	µg/L	18.648	ppb	03:01:27
1	Sr 421.552†	545.7	647.9	3.6493	µg/L	3.6493	ppb	03:01:27
1	Sc 361.383	1871245.0	1871245.0	90.981	%			03:02:00
1	Y 371.029	1122914.4	1122914.4	89.664	%			03:02:00
1	Ag 328.068†	-1914.8	-2076.3	-3.6589	µg/L	-3.6589	ppb	03:02:06
1	As 188.979†	34.2	35.1	-35.279	µg/L	-35.279	ppb	03:02:26
1	B 249.677†	1956.6	1994.9	28.831	µg/L	28.831	ppb	03:02:06
1	Ba 233.527†	138.5	232.9	5.8205	µg/L	5.8205	ppb	03:02:26
1	Be 313.107†	2628.1	-722.9	-0.4668	µg/L	-0.4668	ppb	03:02:06
1	Cd 226.502†	490.2	639.7	2.1876	µg/L	2.1876	ppb	03:02:26
1	Co 228.616†	-94.0	-31.6	-1.6045	µg/L	-1.6045	ppb	03:02:26
1	Cr 267.716†	-224.9	-124.4	-2.6227	µg/L	-2.6227	ppb	03:02:26
1	Cu 324.752†	-1289.9	-4802.1	6.9992	µg/L	6.9992	ppb	03:02:06
1	Mn 257.610†	-2211.8	-2208.4	16.859	µg/L	16.859	ppb	03:02:06
1	Mo 202.031†	-109.4	-112.3	-5.0662	µg/L	-5.0662	ppb	03:02:26
1	Ni 231.604†	252.3	-22.1	-1.2044	µg/L	-1.2044	ppb	03:02:26
1	P 214.914†	212.1	27.1	26.694	µg/L	26.694	ppb	03:02:26
1	Pb 220.353†	-48.0	-106.9	15.827	µg/L	15.827	ppb	03:02:26
1	S 181.975 Axial†	60.1	42.0	117.72	µg/L	117.72	ppb	03:02:26
1	Sb 206.836†	60.5	45.9	-0.4258	µg/L	-0.4258	ppb	03:02:26
1	Se 196.026†	16.6	4.2	5.7054	µg/L	5.7054	ppb	03:02:26
1	SiO2†	1699.0	-114.3	-21.825	µg/L	-21.825	ppb	03:02:26
1	Si 251.611†	426.4	119.0	17.012	µg/L	17.012	ppb	03:02:26
1	Sn 189.927†	-396.0	-457.7	6.3150	µg/L	6.3150	ppb	03:02:26
1	Ti 334.940†	11211.3	11603.8	-1.9145	µg/L	-1.9145	ppb	03:02:06
1	Tl 190.801†	15.7	38.6	-7.2325	µg/L	-7.2325	ppb	03:02:26
1	U 409.014†	594.5	-25.8	-26.230	µg/L	-26.230	ppb	03:02:06
1	V 292.402†	-1211.6	-1239.8	1.4219	µg/L	1.4219	ppb	03:02:06
1	Zn 213.857†	1695.7	1313.6	1.6535	µg/L	1.6535	ppb	03:02:26
2	Sc RADIAL	105611.6	105611.6	93.9	%			03:01:38
2	Al 396.153Radial†	967678.1	1030382.0	520730	µg/L	520730	ppb	03:01:33
2	Ca 317.933Radial†	1165292.7	1240582.9	492450	µg/L	492450	ppb	03:01:33
2	Fe 238.204 Radial†	34094.3	36300.4	190680	µg/L	190680	ppb	03:01:38
2	K 766.490 Radial†	639.4	-13.9	-7.5348	µg/L	-7.5348	ppb	03:01:38
2	Mg 279.077 IEC†	83115.2	88500.9	490600	µg/L	490600	ppb	03:01:38
2	Na 589.592 Radial†	-567.7	99.3	27.546	µg/L	27.546	ppb	03:01:38
2	Sr 421.552†	534.1	632.6	3.5634	µg/L	3.5634	ppb	03:01:38
2	Sc 361.383	1856741.7	1856741.7	90.276	%			03:02:32
2	Y 371.029	1115518.0	1115518.0	89.073	%			03:02:32
2	Ag 328.068†	-1958.2	-2140.8	-4.1710	µg/L	-4.1710	ppb	03:02:38
2	As 188.979†	47.4	50.1	-6.9862	µg/L	-6.9862	ppb	03:02:59
2	B 249.677†	1954.5	2009.4	29.220	µg/L	29.220	ppb	03:02:38
2	Ba 233.527†	133.8	228.9	5.7201	µg/L	5.7201	ppb	03:02:59
2	Be 313.107†	2728.2	-589.5	-0.3825	µg/L	-0.3825	ppb	03:02:38
2	Cd 226.502†	476.1	628.3	1.8202	µg/L	1.8202	ppb	03:02:59
2	Co 228.616†	-90.5	-28.5	-1.4605	µg/L	-1.4605	ppb	03:02:59
2	Cr 267.716†	-209.1	-108.8	-2.2981	µg/L	-2.2981	ppb	03:02:59
2	Cu 324.752†	-1316.5	-4842.6	6.8888	µg/L	6.8888	ppb	03:02:38
2	Mn 257.610†	-2183.2	-2195.7	17.001	µg/L	17.001	ppb	03:02:38
2	Mo 202.031†	-123.0	-128.3	-6.8238	µg/L	-6.8238	ppb	03:02:59
2	Ni 231.604†	261.0	-10.3	-0.5628	µg/L	-0.5628	ppb	03:02:59
2	P 214.914†	211.1	27.9	27.751	µg/L	27.751	ppb	03:02:59
2	Pb 220.353†	-49.0	-108.4	15.538	µg/L	15.538	ppb	03:02:59

2	S 181.975 Axial†	63.2	45.9	137.65	µg/L	137.65 ppb	03:02:59
2	Sb 206.836†	54.1	39.4	-7.0564	µg/L	-7.0564 ppb	03:02:59
2	Se 196.026†	29.7	18.8	27.608	µg/L	27.608 ppb	03:02:59
2	SiO2†	1708.4	-89.2	-17.033	µg/L	-17.033 ppb	03:02:59
2	Si 251.611†	425.1	121.2	17.297	µg/L	17.297 ppb	03:02:59
2	Sn 189.927†	-397.5	-462.8	4.1757	µg/L	4.1757 ppb	03:02:59
2	Ti 334.940†	11270.3	11765.5	-1.6113	µg/L	-1.6113 ppb	03:02:38
2	Tl 190.801†	14.3	37.2	-9.4730	µg/L	-9.4730 ppb	03:02:59
2	U 409.014†	524.3	-98.4	-33.178	µg/L	-33.178 ppb	03:02:38
2	V 292.402†	-1201.8	-1239.2	1.4709	µg/L	1.4709 ppb	03:02:38
2	Zn 213.857†	1682.8	1313.9	1.5651	µg/L	1.5651 ppb	03:02:59
3	Sc RADIAL	105395.1	105395.1	93.7	%		03:01:50
3	Al 396.153Radial†	963653.3	1028203.0	519630	µg/L	519630 ppb	03:01:45
3	Ca 317.933Radial†	1161357.8	1238932.2	491800	µg/L	491800 ppb	03:01:45
3	Fe 238.204 Radial†	34063.5	36342.1	190900	µg/L	190900 ppb	03:01:50
3	K 766.490 Radial†	708.9	61.7	33.456	µg/L	33.456 ppb	03:01:50
3	Mg 279.077 IEC†	83232.2	88807.5	492300	µg/L	492300 ppb	03:01:50
3	Na 589.592 Radial†	-582.9	81.8	22.702	µg/L	22.702 ppb	03:01:50
3	Sr 421.552†	542.0	642.2	3.6176	µg/L	3.6176 ppb	03:01:50
3	Sc 361.383	1856111.4	1856111.4	90.245	%		03:03:05
3	Y 371.029	1115169.1	1115169.1	89.046	%		03:03:05
3	Ag 328.068†	-1993.8	-2181.0	-4.5132	µg/L	-4.5132 ppb	03:03:11
3	As 188.979†	41.2	43.2	-20.063	µg/L	-20.063 ppb	03:03:31
3	B 249.677†	1882.2	1929.9	25.626	µg/L	25.626 ppb	03:03:11
3	Ba 233.527†	128.3	222.9	5.5684	µg/L	5.5684 ppb	03:03:31
3	Be 313.107†	2630.2	-697.0	-0.4506	µg/L	-0.4506 ppb	03:03:11
3	Cd 226.502†	493.7	648.0	2.3232	µg/L	2.3232 ppb	03:03:31
3	Co 228.616†	-96.4	-35.1	-1.7734	µg/L	-1.7734 ppb	03:03:31
3	Cr 267.716†	-193.4	-91.5	-1.9374	µg/L	-1.9374 ppb	03:03:31
3	Cu 324.752†	-1254.5	-4774.4	7.4156	µg/L	7.4156 ppb	03:03:11
3	Mn 257.610†	-2248.9	-2269.4	16.795	µg/L	16.795 ppb	03:03:11
3	Mo 202.031†	-109.8	-113.8	-5.1900	µg/L	-5.1900 ppb	03:03:31
3	Ni 231.604†	273.3	3.4	0.1854	µg/L	0.1854 ppb	03:03:31
3	P 214.914†	217.6	35.2	42.891	µg/L	42.891 ppb	03:03:31
3	Pb 220.353†	-52.7	-112.6	14.380	µg/L	14.380 ppb	03:03:31
3	S 181.975 Axial†	49.2	30.5	58.207	µg/L	58.207 ppb	03:03:31
3	Sb 206.836†	62.6	48.8	2.3384	µg/L	2.3384 ppb	03:03:31
3	Se 196.026†	14.8	2.3	2.8944	µg/L	2.8944 ppb	03:03:31
3	SiO2†	1692.7	-106.0	-20.238	µg/L	-20.238 ppb	03:03:31
3	Si 251.611†	422.8	118.8	16.869	µg/L	16.869 ppb	03:03:31
3	Sn 189.927†	-388.1	-452.5	9.4310	µg/L	9.4310 ppb	03:03:31
3	Ti 334.940†	11360.6	11869.7	-1.3434	µg/L	-1.3434 ppb	03:03:11
3	Tl 190.801†	17.7	41.1	-3.6115	µg/L	-3.6115 ppb	03:03:31
3	U 409.014†	518.3	-104.9	-33.838	µg/L	-33.838 ppb	03:03:11
3	V 292.402†	-1205.0	-1243.3	1.4537	µg/L	1.4537 ppb	03:03:11
3	Zn 213.857†	1702.2	1336.1	2.0851	µg/L	2.0851 ppb	03:03:31

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1861366.0	90.501	%	0.4163				0.46%
Sc RADIAL	105362.9	93.7	%	0.24				0.25%
Y 371.029	1117867.2	89.261	%	0.3493				0.39%
Ag 328.068†	-2132.7	-4.1144	µg/L	0.42992	-4.1144	ppb	0.42992	10.45%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1028939.7	520000	µg/L	631.3	520000	ppb	631.3	0.12%
QC value within limits for Al 396.153Radial Recovery = 104.00%								
As 188.979†	42.8	-20.776	µg/L	14.1599	-20.776	ppb	14.1599	68.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1978.1	27.892	µg/L	1.9725	27.892	ppb	1.9725	7.07%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	228.2	5.7030	µg/L	0.12691	5.7030	ppb	0.12691	2.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-669.8	-0.4333	µg/L	0.04472	-0.4333	ppb	0.04472	10.32%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1239210.0	491910	µg/L	499.1	491910	ppb	499.1	0.10%
QC value within limits for Ca 317.933Radial Recovery = 98.38%								
Cd 226.502†	638.7	2.1103	µg/L	0.26028	2.1103	ppb	0.26028	12.33%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-31.8	-1.6128	µg/L	0.15661	-1.6128	ppb	0.15661	9.71%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -108.2     -2.2861 µg/L      0.34282     -2.2861 ppb       0.34282  15.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4806.4      7.1012 µg/L      0.27783      7.1012 ppb       0.27783   3.91%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    36262.8      190490 µg/L        542.9      190490 ppb         542.9   0.29%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.24%
K 766.490 Radial†        12.8      6.9161 µg/L     23.01463      6.9161 ppb      23.01463 332.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       88590.7      491100 µg/L       1045.7      491100 ppb        1045.7   0.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.22%
Mn 257.610†           -2224.5      16.885 µg/L       0.1056      16.885 ppb        0.1056   0.63%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -118.1     -5.6934 µg/L      0.98098     -5.6934 ppb       0.98098  17.23%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       82.8      22.965 µg/L       4.4547      22.965 ppb        4.4547  19.40%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -9.7     -0.5273 µg/L      0.69556     -0.5273 ppb       0.69556 131.91%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               30.1      32.445 µg/L       9.0619      32.445 ppb        9.0619  27.93%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -109.3      15.248 µg/L       0.7660      15.248 ppb        0.7660   5.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         39.5      104.52 µg/L       41.332      104.52 ppb        41.332  39.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              44.7     -1.7146 µg/L      4.82816     -1.7146 ppb       4.82816 281.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               8.4      12.069 µg/L      13.5300      12.069 ppb       13.5300 112.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -103.2     -19.699 µg/L       2.4410     -19.699 ppb        2.4410  12.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             119.7      17.059 µg/L       0.2175      17.059 ppb        0.2175   1.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -457.6      6.6406 µg/L      2.64274      6.6406 ppb       2.64274  39.80%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             640.9      3.6101 µg/L      0.04342      3.6101 ppb       0.04342   1.20%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11746.3     -1.6231 µg/L      0.28578     -1.6231 ppb       0.28578  17.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              39.0     -6.7723 µg/L      2.95775     -6.7723 ppb       2.95775  43.67%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -76.4     -31.082 µg/L       4.2150     -31.082 ppb        4.2150  13.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1240.8      1.4488 µg/L      0.02484      1.4488 ppb       0.02484   1.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1321.2      1.7679 µg/L      0.27821      1.7679 ppb       0.27821  15.74%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/18/2009 03:03:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106602.5	106602.5	94.8	%			03:04:20
1	Al 396.153Radial†	963195.1	1016071.8	513480	µg/L	513480	ppb	03:04:14
1	Ca 317.933Radial†	1163172.8	1226809.8	486990	µg/L	486990	ppb	03:04:14
1	Fe 238.204 Radial†	33843.1	35697.9	187530	µg/L	187530	ppb	03:04:20
1	K 766.490 Radial†	9690.6	9530.1	5167.2	µg/L	5167.2	ppb	03:04:20
1	Mg 279.077 IEC†	83078.7	87639.5	485840	µg/L	485840	ppb	03:04:20
1	Na 589.592 Radial†	16838.3	18470.7	5124.9	µg/L	5124.9	ppb	03:04:20
1	Sr 421.552†	83714.6	88394.0	497.92	µg/L	497.92	ppb	03:04:20
1	Sc 361.383	1856577.2	1856577.2	90.268	%			03:04:54
1	Y 371.029	1117609.1	1117609.1	89.240	%			03:04:54
1	Ag 328.068†	24283.9	26930.4	258.66	µg/L	258.66	ppb	03:05:00
1	As 188.979†	276.9	304.3	479.35	µg/L	479.35	ppb	03:05:20
1	B 249.677†	12255.4	13421.0	536.70	µg/L	536.70	ppb	03:05:00
1	Ba 233.527†	17454.9	19417.5	488.73	µg/L	488.73	ppb	03:05:00
1	Be 313.107†	341165.8	374337.0	236.61	µg/L	236.61	ppb	03:04:54
1	Cd 226.502†	16096.0	17932.3	460.14	µg/L	460.14	ppb	03:05:00
1	Co 228.616†	7834.1	8750.5	420.80	µg/L	420.80	ppb	03:05:20
1	Cr 267.716†	20255.5	22562.1	470.80	µg/L	470.80	ppb	03:05:00
1	Cu 324.752†	68446.9	72442.2	549.95	µg/L	549.95	ppb	03:05:00
1	Mn 257.610†	129310.5	143474.7	478.90	µg/L	478.90	ppb	03:05:00
1	Mo 202.031†	3736.2	4146.9	470.00	µg/L	470.00	ppb	03:05:20
1	Ni 231.604†	7299.6	7787.2	424.23	µg/L	424.23	ppb	03:05:20
1	P 214.914†	1240.6	1168.3	2448.6	µg/L	2448.6	ppb	03:05:20
1	Pb 220.353†	1588.3	1705.5	474.98	µg/L	474.98	ppb	03:05:20
1	S 181.975 Axial†	507.6	538.3	2668.3	µg/L	2668.3	ppb	03:05:20
1	Sb 206.836†	500.6	534.1	483.45	µg/L	483.45	ppb	03:05:20
1	Se 196.026†	1450.8	1593.2	2319.7	µg/L	2319.7	ppb	03:05:20
1	SiO2†	52819.2	56532.2	10796	µg/L	10796	ppb	03:05:00
1	Si 251.611†	60014.1	66134.9	5026.6	µg/L	5026.6	ppb	03:05:00
1	Sn 189.927†	508.7	541.1	491.06	µg/L	491.06	ppb	03:05:20
1	Ti 334.940†	210792.5	232800.2	488.64	µg/L	488.64	ppb	03:05:00
1	Tl 190.801†	285.9	338.2	448.54	µg/L	448.54	ppb	03:05:20
1	U 409.014†	5256.6	5144.1	459.62	µg/L	459.62	ppb	03:05:00
1	V 292.402†	38916.2	43203.9	506.36	µg/L	506.36	ppb	03:05:00
1	Zn 213.857†	17505.3	18842.5	468.68	µg/L	468.68	ppb	03:05:00
2	Sc RADIAL	107246.4	107246.4	95.3	%			03:04:31
2	Al 396.153Radial†	962620.4	1009367.5	510090	µg/L	510090	ppb	03:04:26
2	Ca 317.933Radial†	1158715.6	1214766.7	482210	µg/L	482210	ppb	03:04:26
2	Fe 238.204 Radial†	34318.1	35981.6	189020	µg/L	189020	ppb	03:04:31
2	K 766.490 Radial†	9741.2	9521.7	5162.6	µg/L	5162.6	ppb	03:04:31
2	Mg 279.077 IEC†	83975.0	88053.2	488130	µg/L	488130	ppb	03:04:31
2	Na 589.592 Radial†	17025.4	18560.1	5149.7	µg/L	5149.7	ppb	03:04:31
2	Sr 421.552†	84642.2	88836.6	500.41	µg/L	500.41	ppb	03:04:31
2	Sc 361.383	1848072.7	1848072.7	89.854	%			03:05:26
2	Y 371.029	1111409.3	1111409.3	88.745	%			03:05:26
2	Ag 328.068†	24359.3	27138.1	260.66	µg/L	260.66	ppb	03:05:32
2	As 188.979†	269.7	297.6	467.15	µg/L	467.15	ppb	03:05:53
2	B 249.677†	12320.8	13556.3	542.24	µg/L	542.24	ppb	03:05:32
2	Ba 233.527†	17473.5	19527.2	491.50	µg/L	491.50	ppb	03:05:32
2	Be 313.107†	343176.4	378314.0	239.12	µg/L	239.12	ppb	03:05:26
2	Cd 226.502†	16134.7	18057.4	463.34	µg/L	463.34	ppb	03:05:32
2	Co 228.616†	7841.9	8799.1	423.14	µg/L	423.14	ppb	03:05:53
2	Cr 267.716†	20352.9	22773.7	475.21	µg/L	475.21	ppb	03:05:32
2	Cu 324.752†	68598.0	72959.3	553.91	µg/L	553.91	ppb	03:05:32
2	Mn 257.610†	129575.0	144428.4	482.11	µg/L	482.11	ppb	03:05:32
2	Mo 202.031†	3746.0	4176.9	473.40	µg/L	473.40	ppb	03:05:53
2	Ni 231.604†	7299.1	7823.8	426.23	µg/L	426.23	ppb	03:05:53
2	P 214.914†	1236.4	1170.0	2448.7	µg/L	2448.7	ppb	03:05:53
2	Pb 220.353†	1581.0	1705.4	474.67	µg/L	474.67	ppb	03:05:53

2	S 181.975 Axial†	498.7	530.9	2630.2 µg/L	2630.2 ppb	03:05:53
2	Sb 206.836†	503.9	540.2	489.98 µg/L	489.98 ppb	03:05:53
2	Se 196.026†	1456.0	1606.3	2338.4 µg/L	2338.4 ppb	03:05:53
2	SiO2†	52879.7	56868.8	10860 µg/L	10860 ppb	03:05:32
2	Si 251.611†	60097.8	66533.9	5057.2 µg/L	5057.2 ppb	03:05:32
2	Sn 189.927†	496.8	530.5	485.46 µg/L	485.46 ppb	03:05:53
2	Ti 334.940†	211106.2	234224.0	492.07 µg/L	492.07 ppb	03:05:32
2	Tl 190.801†	278.2	331.1	438.52 µg/L	438.52 ppb	03:05:53
2	U 409.014†	5212.1	5121.4	457.09 µg/L	457.09 ppb	03:05:32
2	V 292.402†	39120.1	43629.3	511.30 µg/L	511.30 ppb	03:05:32
2	Zn 213.857†	17650.2	19093.0	475.16 µg/L	475.16 ppb	03:05:32
3	Sc RADIAL	106254.6	106254.6	94.5 %		03:04:43
3	Al 396.153Radial†	962908.6	1019096.0	515010 µg/L	515010 ppb	03:04:37
3	Ca 317.933Radial†	1159845.6	1227306.0	487180 µg/L	487180 ppb	03:04:37
3	Fe 238.204 Radial†	34116.9	36104.7	189670 µg/L	189670 ppb	03:04:43
3	K 766.490 Radial†	9776.9	9654.9	5234.9 µg/L	5234.9 ppb	03:04:43
3	Mg 279.077 IEC†	83805.9	88696.3	491700 µg/L	491700 ppb	03:04:43
3	Na 589.592 Radial†	16986.4	18685.5	5184.5 µg/L	5184.5 ppb	03:04:43
3	Sr 421.552†	84442.2	89453.5	503.89 µg/L	503.89 ppb	03:04:43
3	Sc 361.383	1850222.1	1850222.1	89.959 %		03:05:59
3	Y 371.029	1113553.8	1113553.8	88.917 %		03:05:59
3	Ag 328.068†	24108.3	26827.6	257.89 µg/L	257.89 ppb	03:06:05
3	As 188.979†	277.7	306.2	482.71 µg/L	482.71 ppb	03:06:26
3	B 249.677†	12153.2	13354.1	533.06 µg/L	533.06 ppb	03:06:05
3	Ba 233.527†	17278.6	19287.9	485.47 µg/L	485.47 ppb	03:06:05
3	Be 313.107†	340734.2	375155.4	237.13 µg/L	237.13 ppb	03:05:59
3	Cd 226.502†	15972.3	17856.1	457.96 µg/L	457.96 ppb	03:06:05
3	Co 228.616†	7827.3	8772.7	421.88 µg/L	421.88 ppb	03:06:26
3	Cr 267.716†	20083.7	22448.2	468.42 µg/L	468.42 ppb	03:06:05
3	Cu 324.752†	67984.3	72188.3	548.62 µg/L	548.62 ppb	03:06:05
3	Mn 257.610†	128012.6	142524.0	476.15 µg/L	476.15 ppb	03:06:05
3	Mo 202.031†	3733.5	4158.2	471.34 µg/L	471.34 ppb	03:06:26
3	Ni 231.604†	7283.2	7796.8	424.76 µg/L	424.76 ppb	03:06:26
3	P 214.914†	1232.7	1164.3	2438.1 µg/L	2438.1 ppb	03:06:26
3	Pb 220.353†	1559.8	1679.8	468.60 µg/L	468.60 ppb	03:06:26
3	S 181.975 Axial†	508.5	541.2	2682.2 µg/L	2682.2 ppb	03:06:26
3	Sb 206.836†	499.1	534.2	483.60 µg/L	483.60 ppb	03:06:26
3	Se 196.026†	1453.6	1601.7	2331.4 µg/L	2331.4 ppb	03:06:26
3	SiO2†	52282.5	56136.6	10720 µg/L	10720 ppb	03:06:05
3	Si 251.611†	59422.2	65705.3	4993.7 µg/L	4993.7 ppb	03:06:05
3	Sn 189.927†	509.7	544.1	494.02 µg/L	494.02 ppb	03:06:26
3	Ti 334.940†	209119.9	231743.1	486.29 µg/L	486.29 ppb	03:06:05
3	Tl 190.801†	285.9	339.3	450.15 µg/L	450.15 ppb	03:06:26
3	U 409.014†	5173.3	5071.5	452.40 µg/L	452.40 ppb	03:06:05
3	V 292.402†	38623.5	43026.6	504.53 µg/L	504.53 ppb	03:06:05
3	Zn 213.857†	17390.8	18781.7	466.67 µg/L	466.67 ppb	03:06:05

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1851624.0	90.027	%	0.2150				0.24%
Sc RADIAL	106701.2	94.9	%	0.45				0.47%
Y 371.029	1114190.7	88.967	%	0.2514				0.28%
Ag 328.068†	26965.4	259.07	µg/L	1.430	259.07	ppb	1.430	0.55%
QC value within limits for Ag 328.068 Recovery = 103.63%								
Al 396.153Radial†	1014845.1	512860	µg/L	2516.3	512860	ppb	2516.3	0.49%
QC value within limits for Al 396.153Radial Recovery = 102.57%								
As 188.979†	302.7	476.40	µg/L	8.185	476.40	ppb	8.185	1.72%
QC value within limits for As 188.979 Recovery = 95.28%								
B 249.677†	13443.8	537.33	µg/L	4.621	537.33	ppb	4.621	0.86%
QC value within limits for B 249.677 Recovery = 107.47%								
Ba 233.527†	19410.9	488.57	µg/L	3.015	488.57	ppb	3.015	0.62%
QC value within limits for Ba 233.527 Recovery = 97.71%								
Be 313.107†	375935.5	237.62	µg/L	1.328	237.62	ppb	1.328	0.56%
QC value within limits for Be 313.107 Recovery = 95.05%								
Ca 317.933Radial†	1222960.8	485460	µg/L	2818.6	485460	ppb	2818.6	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.09%								
Cd 226.502†	17948.6	460.48	µg/L	2.704	460.48	ppb	2.704	0.59%
QC value within limits for Cd 226.502 Recovery = 92.10%								
Co 228.616†	8774.1	421.94	µg/L	1.169	421.94	ppb	1.169	0.28%

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   QC value within limits for Co 228.616  Recovery = 84.39%
Cr 267.716†            22594.7      471.48 µg/L        3.446      471.48 ppb        3.446   0.73%
   QC value within limits for Cr 267.716  Recovery = 94.30%
Cu 324.752†            72529.9      550.83 µg/L        2.750      550.83 ppb        2.750   0.50%
   QC value within limits for Cu 324.752  Recovery = 110.17%
Fe 238.204 Radial†     35928.1      188740 µg/L       1095.9      188740 ppb       1095.9   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.37%
K 766.490 Radial†       9568.9      5188.2 µg/L        40.46      5188.2 ppb        40.46   0.78%
   QC value within limits for K 766.490 Radial  Recovery = 103.76%
Mg 279.077 IEC†        88129.7      488560 µg/L       2952.3      488560 ppb       2952.3   0.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.71%
Mn 257.610†           143475.7      479.05 µg/L        2.984      479.05 ppb        2.984   0.62%
   QC value within limits for Mn 257.610  Recovery = 95.81%
Mo 202.031†             4160.7      471.58 µg/L        1.713      471.58 ppb        1.713   0.36%
   QC value within limits for Mo 202.031  Recovery = 94.32%
Na 589.592 Radial†     18572.1      5153.1 µg/L        29.95      5153.1 ppb        29.95   0.58%
   QC value within limits for Na 589.592 Radial  Recovery = 103.06%
Ni 231.604†             7802.6      425.07 µg/L        1.035      425.07 ppb        1.035   0.24%
   QC value within limits for Ni 231.604  Recovery = 85.01%
P 214.914†              1167.6      2445.1 µg/L         6.06      2445.1 ppb         6.06   0.25%
   QC value within limits for P 214.914  Recovery = 97.80%
Pb 220.353†             1696.9      472.75 µg/L        3.594      472.75 ppb        3.594   0.76%
   QC value within limits for Pb 220.353  Recovery = 94.55%
S 181.975 Axial†         536.8      2660.2 µg/L        26.95      2660.2 ppb        26.95   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 106.41%
Sb 206.836†              536.2      485.68 µg/L        3.726      485.68 ppb        3.726   0.77%
   QC value within limits for Sb 206.836  Recovery = 97.14%
Se 196.026†             1600.4      2329.8 µg/L         9.40      2329.8 ppb         9.40   0.40%
   QC value within limits for Se 196.026  Recovery = 93.19%
SiO2†                  56512.5       10792 µg/L         70.0       10792 ppb         70.0   0.65%
   QC value within limits for SiO2  Recovery = 100.91%
Si 251.611†            66124.7      5025.8 µg/L        31.76      5025.8 ppb        31.76   0.63%
   QC value within limits for Si 251.611  Recovery = 100.52%
Sn 189.927†              538.6      490.18 µg/L        4.345      490.18 ppb        4.345   0.89%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            88894.7      500.74 µg/L        2.997      500.74 ppb        2.997   0.60%
   QC value within limits for Sr 421.552  Recovery = 100.15%
Ti 334.940†           232922.4      489.00 µg/L        2.906      489.00 ppb        2.906   0.59%
   QC value within limits for Ti 334.940  Recovery = 97.80%
Tl 190.801†              336.2      445.74 µg/L        6.302      445.74 ppb        6.302   1.41%
   QC value within limits for Tl 190.801  Recovery = 89.15%
U 409.014†              5112.3      456.37 µg/L        3.659      456.37 ppb        3.659   0.80%
   QC value within limits for U 409.014  Recovery = 91.27%
V 292.402†             43286.6      507.40 µg/L        3.499      507.40 ppb        3.499   0.69%
   QC value within limits for V 292.402  Recovery = 101.48%
Zn 213.857†            18905.8      470.17 µg/L        4.436      470.17 ppb        4.436   0.94%
   QC value within limits for Zn 213.857  Recovery = 94.03%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/18/2009 03:06:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106697.5	106697.5	94.9	%			03:07:15
1	Al 396.153Radial†	943125.6	994009.7	502350	µg/L	502350	ppb	03:07:10
1	Ca 317.933Radial†	1139824.0	1201102.7	476780	µg/L	476780	ppb	03:07:10
1	Fe 238.204 Radial†	82968.3	87453.6	459390	µg/L	459390	ppb	03:07:15
1	K 766.490 Radial†	603.9	-58.2	-31.550	µg/L	-31.550	ppb	03:07:15
1	Mg 279.077 IEC†	83141.6	87627.7	485360	µg/L	485360	ppb	03:07:15
1	Na 589.592 Radial†	1662396.9	1753196.5	486450	µg/L	486450	ppb	03:07:10
1	Sr 421.552†	905.0	1017.8	5.7334	µg/L	5.7334	ppb	03:07:15
1	Sc 361.383	1806040.8	1806040.8	87.811	%			03:07:52
1	Y 371.029	1075642.8	1075642.8	85.889	%			03:07:52
1	Ag 328.068†	-3775.9	-4271.7	-2.2685	µg/L	-2.2685	ppb	03:07:52
1	As 188.979†	37.3	40.0	-62.851	µg/L	-62.851	ppb	03:08:13
1	B 249.677†	4456.3	4919.2	73.871	µg/L	73.871	ppb	03:07:52
1	Ba 233.527†	271.5	389.9	9.6824	µg/L	9.6824	ppb	03:08:13
1	Be 313.107†	-2108.4	-6012.5	-3.8184	µg/L	-3.8184	ppb	03:07:52
1	Cd 226.502†	1234.2	1506.4	14.546	µg/L	14.546	ppb	03:07:52
1	Co 228.616†	50.7	129.4	6.0842	µg/L	6.0842	ppb	03:08:13
1	Cr 267.716†	-246.2	-157.6	-3.4040	µg/L	-3.4040	ppb	03:08:13
1	Cu 324.752†	-8173.2	-12692.1	9.3817	µg/L	9.3817	ppb	03:07:52
1	Mn 257.610†	-13032.2	-14618.5	11.353	µg/L	11.353	ppb	03:07:52
1	Mo 202.031†	-195.6	-214.9	-5.9171	µg/L	-5.9171	ppb	03:08:13
1	Ni 231.604†	259.4	-4.0	-0.2160	µg/L	-0.2160	ppb	03:08:13
1	P 214.914†	369.5	214.8	116.24	µg/L	116.24	ppb	03:08:13
1	Pb 220.353†	31.9	-17.8	21.391	µg/L	21.391	ppb	03:08:13
1	S 181.975 Axial†	53.7	37.1	52.984	µg/L	52.984	ppb	03:08:13
1	Sb 206.836†	48.2	34.4	-2.3419	µg/L	-2.3419	ppb	03:08:13
1	Se 196.026†	-90.0	-116.6	18.436	µg/L	18.436	ppb	03:08:13
1	SiO2†	1534.2	-234.5	-44.788	µg/L	-44.788	ppb	03:08:13
1	Si 251.611†	-246.9	-630.8	-39.322	µg/L	-39.322	ppb	03:08:13
1	Sn 189.927†	-448.3	-533.0	-2.9884	µg/L	-2.9884	ppb	03:08:13
1	Ti 334.940†	16654.9	18248.0	13.639	µg/L	13.639	ppb	03:07:52
1	Tl 190.801†	6.2	28.5	-20.609	µg/L	-20.609	ppb	03:08:13
1	U 409.014†	136179.4	154403.7	14426	µg/L	14426	ppb	03:07:52
1	V 292.402†	-4203.9	-4695.5	7.8324	µg/L	7.8324	ppb	03:07:52
1	Zn 213.857†	2844.1	2688.8	10.001	µg/L	10.001	ppb	03:08:13
2	Sc RADIAL	106266.2	106266.2	94.5	%			03:07:28
2	Al 396.153Radial†	942329.4	997201.7	503960	µg/L	503960	ppb	03:07:23
2	Ca 317.933Radial†	1138415.1	1204487.8	478130	µg/L	478130	ppb	03:07:23
2	Fe 238.204 Radial†	82995.1	87837.0	461410	µg/L	461410	ppb	03:07:28
2	K 766.490 Radial†	597.4	-62.5	-33.909	µg/L	-33.909	ppb	03:07:28
2	Mg 279.077 IEC†	82991.9	87825.0	486450	µg/L	486450	ppb	03:07:28
2	Na 589.592 Radial†	1663512.5	1761489.4	488750	µg/L	488750	ppb	03:07:23
2	Sr 421.552†	877.9	993.0	5.5935	µg/L	5.5935	ppb	03:07:28
2	Sc 361.383	1807413.3	1807413.3	87.877	%			03:08:20
2	Y 371.029	1076926.1	1076926.1	85.992	%			03:08:20
2	Ag 328.068†	-3828.8	-4328.7	-2.6202	µg/L	-2.6202	ppb	03:08:20
2	As 188.979†	33.8	35.9	-71.081	µg/L	-71.081	ppb	03:08:41
2	B 249.677†	4505.0	4970.8	75.527	µg/L	75.527	ppb	03:08:20
2	Ba 233.527†	252.6	368.1	9.1340	µg/L	9.1340	ppb	03:08:41
2	Be 313.107†	-2039.3	-5932.1	-3.7678	µg/L	-3.7678	ppb	03:08:20
2	Cd 226.502†	1235.8	1507.2	14.442	µg/L	14.442	ppb	03:08:20
2	Co 228.616†	36.8	113.6	5.3190	µg/L	5.3190	ppb	03:08:41
2	Cr 267.716†	-238.3	-148.4	-3.2143	µg/L	-3.2143	ppb	03:08:41
2	Cu 324.752†	-8396.2	-12938.8	8.0788	µg/L	8.0788	ppb	03:08:20
2	Mn 257.610†	-13052.1	-14629.9	11.570	µg/L	11.570	ppb	03:08:20
2	Mo 202.031†	-196.7	-215.9	-5.9529	µg/L	-5.9529	ppb	03:08:41
2	Ni 231.604†	257.8	-6.1	-0.3303	µg/L	-0.3303	ppb	03:08:41
2	P 214.914†	371.2	216.4	118.31	µg/L	118.31	ppb	03:08:41
2	Pb 220.353†	20.7	-30.5	18.237	µg/L	18.237	ppb	03:08:41

2	S 181.975 Axial†	46.8	29.2	12.025 µg/L	12.025 ppb	03:08:41
2	Sb 206.836†	62.0	50.0	13.090 µg/L	13.090 ppb	03:08:41
2	Se 196.026†	-96.8	-124.2	8.5246 µg/L	8.5246 ppb	03:08:41
2	SiO2†	1568.1	-197.3	-37.671 µg/L	-37.671 ppb	03:08:41
2	Si 251.611†	-247.6	-631.4	-39.630 µg/L	-39.630 ppb	03:08:41
2	Sn 189.927†	-437.6	-520.4	3.9081 µg/L	3.9081 ppb	03:08:41
2	Ti 334.940†	16998.6	18624.7	14.399 µg/L	14.399 ppb	03:08:20
2	Tl 190.801†	7.1	29.4	-19.398 µg/L	-19.398 ppb	03:08:41
2	U 409.014†	136683.3	154859.4	14468 µg/L	14468 ppb	03:08:20
2	V 292.402†	-4223.0	-4713.5	7.8619 µg/L	7.8619 ppb	03:08:20
2	Zn 213.857†	2866.5	2711.7	10.375 µg/L	10.375 ppb	03:08:41
3	Sc RADIAL	106248.4	106248.4	94.5 %		03:07:41
3	Al 396.153Radial†	947724.0	1003080.2	506930 µg/L	506930 ppb	03:07:36
3	Ca 317.933Radial†	1146477.4	1213225.2	481590 µg/L	481590 ppb	03:07:36
3	Fe 238.204 Radial†	83302.1	88176.8	463190 µg/L	463190 ppb	03:07:41
3	K 766.490 Radial†	743.1	91.8	49.785 µg/L	49.785 ppb	03:07:41
3	Mg 279.077 IEC†	83447.8	88322.3	489210 µg/L	489210 ppb	03:07:41
3	Na 589.592 Radial†	1667848.4	1766375.2	490100 µg/L	490100 ppb	03:07:36
3	Sr 421.552†	867.1	981.7	5.5301 µg/L	5.5301 ppb	03:07:41
3	Sc 361.383	1797604.9	1797604.9	87.401 %		03:08:48
3	Y 371.029	1070859.7	1070859.7	85.507 %		03:08:48
3	Ag 328.068†	-3792.8	-4311.3	-2.3282 µg/L	-2.3282 ppb	03:08:48
3	As 188.979†	48.3	52.8	-39.695 µg/L	-39.695 ppb	03:09:08
3	B 249.677†	4520.9	5017.0	77.015 µg/L	77.015 ppb	03:08:48
3	Ba 233.527†	253.3	370.5	9.1924 µg/L	9.1924 ppb	03:09:08
3	Be 313.107†	-2016.3	-5918.4	-3.7592 µg/L	-3.7592 ppb	03:08:48
3	Cd 226.502†	1215.8	1491.9	13.920 µg/L	13.920 ppb	03:08:48
3	Co 228.616†	30.9	107.0	4.9985 µg/L	4.9985 ppb	03:09:08
3	Cr 267.716†	-244.7	-157.3	-3.3998 µg/L	-3.3998 ppb	03:09:08
3	Cu 324.752†	-8262.4	-12837.9	9.1721 µg/L	9.1721 ppb	03:08:48
3	Mn 257.610†	-12944.8	-14588.2	11.927 µg/L	11.927 ppb	03:08:48
3	Mo 202.031†	-216.7	-240.0	-8.5697 µg/L	-8.5697 ppb	03:09:08
3	Ni 231.604†	262.4	0.9	0.0465 µg/L	0.0465 ppb	03:09:08
3	P 214.914†	377.8	226.3	138.49 µg/L	138.49 ppb	03:09:08
3	Pb 220.353†	43.6	-4.3	25.099 µg/L	25.099 ppb	03:09:08
3	S 181.975 Axial†	53.3	36.9	51.086 µg/L	51.086 ppb	03:09:08
3	Sb 206.836†	59.1	47.1	9.8208 µg/L	9.8208 ppb	03:09:08
3	Se 196.026†	-87.0	-113.7	24.535 µg/L	24.535 ppb	03:09:08
3	SiO2†	1582.9	-170.6	-32.571 µg/L	-32.571 ppb	03:09:08
3	Si 251.611†	-231.7	-614.8	-38.162 µg/L	-38.162 ppb	03:09:08
3	Sn 189.927†	-443.9	-530.4	0.5630 µg/L	0.5630 ppb	03:09:08
3	Ti 334.940†	16946.6	18670.7	14.306 µg/L	14.306 ppb	03:08:48
3	Tl 190.801†	7.5	30.0	-18.980 µg/L	-18.980 ppb	03:09:08
3	U 409.014†	136212.0	155168.8	14497 µg/L	14497 ppb	03:08:48
3	V 292.402†	-4253.7	-4775.0	7.3433 µg/L	7.3433 ppb	03:08:48
3	Zn 213.857†	2861.1	2723.4	10.420 µg/L	10.420 ppb	03:09:08

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1803686.3	87.696	%	0.2582				0.29%
Sc RADIAL	106404.1	94.6	%	0.23				0.24%
Y 371.029	1074476.2	85.796	%	0.2553				0.30%
Ag 328.068†	-4303.9	-2.4056	µg/L	0.18820	-2.4056	ppb	0.18820	7.82%
Al 396.153Radial†	998097.2	504420	µg/L	2325.3	504420	ppb	2325.3	0.46%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	42.9	-57.875	µg/L	16.2738	-57.875	ppb	16.2738	28.12%
B 249.677†	4969.0	75.471	µg/L	1.5727	75.471	ppb	1.5727	2.08%
Ba 233.527†	376.2	9.3362	µg/L	0.30120	9.3362	ppb	0.30120	3.23%
Be 313.107†	-5954.4	-3.7818	µg/L	0.03197	-3.7818	ppb	0.03197	0.85%
Ca 317.933Radial†	1206271.9	478830	µg/L	2483.0	478830	ppb	2483.0	0.52%
QC value within limits for Ca 317.933Radial Recovery = 95.77%								
Cd 226.502†	1501.9	14.303	µg/L	0.3354	14.303	ppb	0.3354	2.35%
Co 228.616†	116.7	5.4672	µg/L	0.55778	5.4672	ppb	0.55778	10.20%
Cr 267.716†	-154.4	-3.3394	µg/L	0.10831	-3.3394	ppb	0.10831	3.24%
Cu 324.752†	-12822.9	8.8775	µg/L	0.69959	8.8775	ppb	0.69959	7.88%
Fe 238.204 Radial†	87822.5	461330	µg/L	1900.4	461330	ppb	1900.4	0.41%
QC value within limits for Fe 238.204 Radial Recovery = 92.27%								
K 766.490 Radial†	-9.6	-5.2244	µg/L	47.65455	-5.2244	ppb	47.65455	912.16%
Mg 279.077 IEC†	87925.0	487010	µg/L	1982.7	487010	ppb	1982.7	0.41%

QC value within limits for Mg 279.077 IEC Recovery = 97.40%

Mn 257.610†	-14612.2	11.616 µg/L	0.2897	11.616 ppb	0.2897	2.49%
Mo 202.031†	-223.6	-6.8133 µg/L	1.52127	-6.8133 ppb	1.52127	22.33%
Na 589.592 Radial†	1760353.7	488430 µg/L	1848.6	488430 ppb	1848.6	0.38%

QC value within limits for Na 589.592 Radial Recovery = 97.69%

Ni 231.604†	-3.1	-0.1666 µg/L	0.19319	-0.1666 ppb	0.19319	115.98%
P 214.914†	219.2	124.35 µg/L	12.290	124.35 ppb	12.290	9.88%
Pb 220.353†	-17.5	21.575 µg/L	3.4349	21.575 ppb	3.4349	15.92%
S 181.975 Axial†	34.4	38.698 µg/L	23.1193	38.698 ppb	23.1193	59.74%
Sb 206.836†	43.8	6.8562 µg/L	8.13173	6.8562 ppb	8.13173	118.60%
Se 196.026†	-118.2	17.165 µg/L	8.0804	17.165 ppb	8.0804	47.07%
SiO2†	-200.8	-38.344 µg/L	6.1361	-38.344 ppb	6.1361	16.00%
Si 251.611†	-625.6	-39.038 µg/L	0.7741	-39.038 ppb	0.7741	1.98%
Sn 189.927†	-527.9	0.4942 µg/L	3.44877	0.4942 ppb	3.44877	697.80%
Sr 421.552†	997.5	5.6190 µg/L	0.10405	5.6190 ppb	0.10405	1.85%
Ti 334.940†	18514.4	14.114 µg/L	0.4142	14.114 ppb	0.4142	2.93%
Tl 190.801†	29.3	-19.662 µg/L	0.8458	-19.662 ppb	0.8458	4.30%
U 409.014†	154810.7	14464 µg/L	35.8	14464 ppb	35.8	0.25%

QC value within limits for U 409.014 Recovery = 96.42%

V 292.402†	-4728.0	7.6792 µg/L	0.29131	7.6792 ppb	0.29131	3.79%
Zn 213.857†	2708.0	10.265 µg/L	0.2297	10.265 ppb	0.2297	2.24%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/18/2009 03:09:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111887.3	111887.3	99.5	%			03:10:00
1	Al 396.153Radial†	904.7	679.7	-24.452	µg/L	-24.452	ppb	03:10:00
1	Ca 317.933Radial†	768.8	277.5	110.14	µg/L	110.14	ppb	03:10:20
1	Fe 238.204 Radial†	2.6	-8.6	271.11	µg/L	271.11	ppb	03:10:20
1	K 766.490 Radial†	542789.4	544970.3	295480	µg/L	295480	ppb	03:09:54
1	Mg 279.077 IEC†	-34.2	-54.2	-58.865	µg/L	-58.865	ppb	03:10:20
1	Na 589.592 Radial†	-101.9	601.5	166.89	µg/L	166.89	ppb	03:10:00
1	Sr 421.552†	1706285.2	1715388.7	9662.7	µg/L	9662.7	ppb	03:09:54
1	Sc 361.383	2018061.1	2018061.1	98.119	%			03:11:52
1	Y 371.029	1209279.4	1209279.4	96.560	%			03:11:52
1	Ag 328.068†	-7178.5	-7287.7	3.5837	µg/L	3.5837	ppb	03:11:52
1	As 188.979†	5061.1	5155.6	9835.7	µg/L	9835.7	ppb	03:11:57
1	B 249.677†	108665.5	110592.7	4908.5	µg/L	4908.5	ppb	03:11:52
1	Ba 233.527†	565241.5	576157.0	14492	µg/L	14492	ppb	03:11:52
1	Be 313.107†	4485313.7	4567678.4	2885.8	µg/L	2885.8	ppb	03:11:41
1	Cd 226.502†	360538.5	367550.3	9723.3	µg/L	9723.3	ppb	03:11:52
1	Co 228.616†	194888.4	198695.8	9557.3	µg/L	9557.3	ppb	03:11:52
1	Cr 267.716†	1138108.6	1160047.1	24171	µg/L	24171	ppb	03:11:52
1	Cu 324.752†	2870512.1	2922150.9	20559	µg/L	20559	ppb	03:11:52
1	Mn 257.610†	2914248.4	2970332.5	9426.5	µg/L	9426.5	ppb	03:11:52
1	Mo 202.031†	85084.9	86723.8	9674.9	µg/L	9674.9	ppb	03:11:52
1	Ni 231.604†	175426.0	178489.2	9723.8	µg/L	9723.8	ppb	03:11:52
1	P 214.914†	8327.6	8281.3	15678	µg/L	15678	ppb	03:11:57
1	Pb 220.353†	96397.6	98191.3	24891	µg/L	24891	ppb	03:11:52
1	S 181.975 Axial†	9765.1	9928.2	51010	µg/L	51010	ppb	03:11:57
1	Sb 206.836†	9863.5	10032.1	9860.8	µg/L	9860.8	ppb	03:11:57
1	Se 196.026†	6643.1	6756.3	9841.0	µg/L	9841.0	ppb	03:11:57
1	SiO2†	510622.6	518428.7	99001	µg/L	99001	ppb	03:11:52
1	Si 251.611†	591450.7	602438.2	45113	µg/L	45113	ppb	03:11:52
1	Sn 189.927†	20918.0	21296.5	10383	µg/L	10383	ppb	03:11:57
1	Ti 334.940†	4308512.2	4390380.5	9731.7	µg/L	9731.7	ppb	03:11:41
1	Tl 190.801†	6168.7	6308.3	9578.1	µg/L	9578.1	ppb	03:11:57
1	U 409.014†	1784.0	1139.0	106.97	µg/L	106.97	ppb	03:11:52
1	V 292.402†	872250.0	889061.6	10090	µg/L	10090	ppb	03:11:52
1	Zn 213.857†	544892.9	554787.4	14784	µg/L	14784	ppb	03:11:52
2	Sc RADIAL	111969.4	111969.4	99.5	%			03:10:32
2	Al 396.153Radial†	817.0	590.9	-71.580	µg/L	-71.580	ppb	03:10:32
2	Ca 317.933Radial†	706.3	214.0	84.962	µg/L	84.962	ppb	03:10:52
2	Fe 238.204 Radial†	-3.6	-14.8	240.82	µg/L	240.82	ppb	03:10:52
2	K 766.490 Radial†	552286.6	554110.6	300440	µg/L	300440	ppb	03:10:26
2	Mg 279.077 IEC†	-42.4	-62.4	-103.13	µg/L	-103.13	ppb	03:10:52
2	Na 589.592 Radial†	-331.5	370.9	102.92	µg/L	102.92	ppb	03:10:32
2	Sr 421.552†	1741202.4	1749207.4	9853.2	µg/L	9853.2	ppb	03:10:26
2	Sc 361.383	2024215.2	2024215.2	98.418	%			03:12:17
2	Y 371.029	1213136.1	1213136.1	96.868	%			03:12:17
2	Ag 328.068†	-7329.7	-7419.2	2.8986	µg/L	2.8986	ppb	03:12:17
2	As 188.979†	5161.9	5242.4	10001	µg/L	10001	ppb	03:12:22
2	B 249.677†	109893.8	111504.1	4948.9	µg/L	4948.9	ppb	03:12:17
2	Ba 233.527†	570885.9	580140.7	14593	µg/L	14593	ppb	03:12:17
2	Be 313.107†	4569513.7	4639333.7	2931.1	µg/L	2931.1	ppb	03:12:06
2	Cd 226.502†	364355.9	370312.0	9796.4	µg/L	9796.4	ppb	03:12:17
2	Co 228.616†	196903.2	200139.1	9626.6	µg/L	9626.6	ppb	03:12:17
2	Cr 267.716†	1149587.7	1168184.2	24341	µg/L	24341	ppb	03:12:17
2	Cu 324.752†	2899438.0	2942647.3	20703	µg/L	20703	ppb	03:12:17
2	Mn 257.610†	2942755.1	2990267.5	9489.7	µg/L	9489.7	ppb	03:12:17
2	Mo 202.031†	85872.0	87259.8	9734.7	µg/L	9734.7	ppb	03:12:17
2	Ni 231.604†	177085.8	179632.1	9786.0	µg/L	9786.0	ppb	03:12:17
2	P 214.914†	8508.8	8439.6	16008	µg/L	16008	ppb	03:12:22
2	Pb 220.353†	97342.5	98852.6	25058	µg/L	25058	ppb	03:12:17

2	S 181.975 Axial†	9943.8	10079.5	51787 µg/L	51787 ppb		03:12:22
2	Sb 206.836†	10049.3	10190.2	10017 µg/L	10017 ppb		03:12:22
2	Se 196.026†	6735.5	6829.6	9947.7 µg/L	9947.7 ppb		03:12:22
2	SiO2†	515360.7	521660.8	99618 µg/L	99618 ppb		03:12:17
2	Si 251.611†	597240.0	606488.0	45407 µg/L	45407 ppb		03:12:17
2	Sn 189.927†	21378.5	21699.6	10579 µg/L	10579 ppb		03:12:22
2	Ti 334.940†	4387455.3	4457242.3	9879.9 µg/L	9879.9 ppb		03:12:06
2	Tl 190.801†	6276.7	6399.0	9715.9 µg/L	9715.9 ppb		03:12:22
2	U 409.014†	1817.6	1167.6	109.66 µg/L	109.66 ppb		03:12:17
2	V 292.402†	881168.3	895420.6	10162 µg/L	10162 ppb		03:12:17
2	Zn 213.857†	549844.2	558130.0	14873 µg/L	14873 ppb		03:12:17
3	Sc RADIAL	111242.2	111242.2	98.9 %			03:11:04
3	Al 396.153Radial†	815.6	594.8	-67.575 µg/L	-67.575 ppb		03:11:04
3	Ca 317.933Radial†	666.8	178.8	70.981 µg/L	70.981 ppb		03:11:24
3	Fe 238.204 Radial†	-8.0	-19.3	215.33 µg/L	215.33 ppb		03:11:24
3	K 766.490 Radial†	552154.6	557604.3	302330 µg/L	302330 ppb		03:10:58
3	Mg 279.077 IEC†	-39.6	-59.8	-90.012 µg/L	-90.012 ppb		03:11:24
3	Na 589.592 Radial†	-405.6	293.8	81.531 µg/L	81.531 ppb		03:11:04
3	Sr 421.552†	1741255.5	1760696.3	9917.9 µg/L	9917.9 ppb		03:10:58
3	Sc 361.383	2024518.1	2024518.1	98.433 %			03:12:42
3	Y 371.029	1214301.7	1214301.7	96.961 %			03:12:42
3	Ag 328.068†	-7280.9	-7368.5	2.9290 µg/L	2.9290 ppb		03:12:42
3	As 188.979†	5168.4	5248.2	10012 µg/L	10012 ppb		03:12:47
3	B 249.677†	109206.9	110789.5	4917.2 µg/L	4917.2 ppb		03:12:42
3	Ba 233.527†	567959.4	577080.7	14516 µg/L	14516 ppb		03:12:42
3	Be 313.107†	4525940.4	4594372.2	2902.7 µg/L	2902.7 ppb		03:12:31
3	Cd 226.502†	362404.5	368274.1	9742.5 µg/L	9742.5 ppb		03:12:42
3	Co 228.616†	195692.4	198879.1	9566.0 µg/L	9566.0 ppb		03:12:42
3	Cr 267.716†	1142567.2	1160877.2	24188 µg/L	24188 ppb		03:12:42
3	Cu 324.752†	2880479.7	2922946.5	20564 µg/L	20564 ppb		03:12:42
3	Mn 257.610†	2928495.2	2975333.3	9442.3 µg/L	9442.3 ppb		03:12:42
3	Mo 202.031†	85416.3	86783.9	9681.6 µg/L	9681.6 ppb		03:12:42
3	Ni 231.604†	176195.4	178700.7	9735.3 µg/L	9735.3 ppb		03:12:42
3	P 214.914†	8465.0	8393.7	15925 µg/L	15925 ppb		03:12:47
3	Pb 220.353†	96806.1	98293.0	24917 µg/L	24917 ppb		03:12:42
3	S 181.975 Axial†	9913.4	10047.2	51621 µg/L	51621 ppb		03:12:47
3	Sb 206.836†	9997.7	10136.2	9964.3 µg/L	9964.3 ppb		03:12:47
3	Se 196.026†	6746.8	6840.1	9962.9 µg/L	9962.9 ppb		03:12:47
3	SiO2†	512972.9	519156.6	99140 µg/L	99140 ppb		03:12:42
3	Si 251.611†	594367.1	603478.5	45182 µg/L	45182 ppb		03:12:42
3	Sn 189.927†	21296.2	21612.7	10537 µg/L	10537 ppb		03:12:47
3	Ti 334.940†	4347702.8	4416190.0	9789.0 µg/L	9789.0 ppb		03:12:31
3	Tl 190.801†	6271.8	6393.1	9706.4 µg/L	9706.4 ppb		03:12:47
3	U 409.014†	1789.7	1139.0	106.98 µg/L	106.98 ppb		03:12:42
3	V 292.402†	875943.2	889978.3	10101 µg/L	10101 ppb		03:12:42
3	Zn 213.857†	546993.2	555150.0	14794 µg/L	14794 ppb		03:12:42

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2022264.8	98.324	%	0.1772				0.18%
Sc RADIAL	111699.7	99.3	%	0.35				0.36%
Y 371.029	1212239.0	96.797	%	0.2099				0.22%
Ag 328.068†	-7358.5	3.1371	µg/L	0.38705	3.1371	ppb	0.38705	12.34%
Al 396.153Radial†	621.8	-54.536	µg/L	26.1298	-54.536	ppb	26.1298	47.91%
As 188.979†	5215.4	9949.8	µg/L	98.97	9949.8	ppb	98.97	0.99%
QC value within limits for As 188.979 Recovery = 99.50%								
B 249.677†	110962.1	4924.9	µg/L	21.29	4924.9	ppb	21.29	0.43%
QC value within limits for B 249.677 Recovery = 98.50%								
Ba 233.527†	577792.8	14534	µg/L	52.5	14534	ppb	52.5	0.36%
QC value within limits for Ba 233.527 Recovery = 96.89%								
Be 313.107†	4600461.4	2906.5	µg/L	22.88	2906.5	ppb	22.88	0.79%
QC value within limits for Be 313.107 Recovery = 96.88%								
Ca 317.933Radial†	223.4	88.694	µg/L	19.8445	88.694	ppb	19.8445	22.37%
Cd 226.502†	368712.2	9754.1	µg/L	37.88	9754.1	ppb	37.88	0.39%
QC value within limits for Cd 226.502 Recovery = 97.54%								
Co 228.616†	199238.0	9583.3	µg/L	37.71	9583.3	ppb	37.71	0.39%
QC value within limits for Co 228.616 Recovery = 95.83%								
Cr 267.716†	1163036.2	24233	µg/L	93.3	24233	ppb	93.3	0.38%
QC value within limits for Cr 267.716 Recovery = 96.93%								

Cu 324.752†	2929248.2	20609 µg/L	81.7	20609 ppb	81.7	0.40%
QC value within limits for Cu 324.752 Recovery = 103.04%						
Fe 238.204 Radial†	-14.2	242.42 µg/L	27.928	242.42 ppb	27.928	11.52%
K 766.490 Radial†	552228.4	299420 µg/L	3537.2	299420 ppb	3537.2	1.18%
QC value within limits for K 766.490 Radial Recovery = 99.81%						
Mg 279.077 IEC†	-58.8	-84.001 µg/L	22.7354	-84.001 ppb	22.7354	27.07%
Mn 257.610†	2978644.4	9452.9 µg/L	32.91	9452.9 ppb	32.91	0.35%
QC value within limits for Mn 257.610 Recovery = 94.53%						
Mo 202.031†	86922.5	9697.1 µg/L	32.76	9697.1 ppb	32.76	0.34%
QC value within limits for Mo 202.031 Recovery = 96.97%						
Na 589.592 Radial†	422.1	117.11 µg/L	44.413	117.11 ppb	44.413	37.92%
Ni 231.604†	178940.7	9748.4 µg/L	33.13	9748.4 ppb	33.13	0.34%
QC value within limits for Ni 231.604 Recovery = 97.48%						
P 214.914†	8371.5	15870 µg/L	171.7	15870 ppb	171.7	1.08%
QC value within limits for P 214.914 Recovery = 105.80%						
Pb 220.353†	98445.6	24955 µg/L	90.3	24955 ppb	90.3	0.36%
QC value within limits for Pb 220.353 Recovery = 99.82%						
S 181.975 Axial†	10018.3	51473 µg/L	409.4	51473 ppb	409.4	0.80%
QC value within limits for S 181.975 Axial Recovery = 102.95%						
Sb 206.836†	10119.5	9947.5 µg/L	79.64	9947.5 ppb	79.64	0.80%
QC value within limits for Sb 206.836 Recovery = 99.48%						
Se 196.026†	6808.7	9917.2 µg/L	66.46	9917.2 ppb	66.46	0.67%
QC value within limits for Se 196.026 Recovery = 99.17%						
SiO2†	519748.7	99253 µg/L	323.8	99253 ppb	323.8	0.33%
QC value within limits for SiO2 Recovery = 92.76%						
Si 251.611†	604134.9	45234 µg/L	154.0	45234 ppb	154.0	0.34%
QC value within limits for Si 251.611 Recovery = 90.47%						
Sn 189.927†	21536.3	10500 µg/L	103.4	10500 ppb	103.4	0.98%
QC value within limits for Sn 189.927 Recovery = 105.00%						
Sr 421.552†	1741764.1	9811.2 µg/L	132.67	9811.2 ppb	132.67	1.35%
QC value within limits for Sr 421.552 Recovery = 98.11%						
Ti 334.940†	4421270.9	9800.2 µg/L	74.74	9800.2 ppb	74.74	0.76%
QC value within limits for Ti 334.940 Recovery = 98.00%						
Tl 190.801†	6366.8	9666.8 µg/L	76.93	9666.8 ppb	76.93	0.80%
QC value within limits for Tl 190.801 Recovery = 96.67%						
U 409.014†	1148.5	107.87 µg/L	1.551	107.87 ppb	1.551	1.44%
V 292.402†	891486.8	10118 µg/L	39.0	10118 ppb	39.0	0.39%
QC value within limits for V 292.402 Recovery = 101.18%						
Zn 213.857†	556022.5	14817 µg/L	48.9	14817 ppb	48.9	0.33%
QC value within limits for Zn 213.857 Recovery = 98.78%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 03:12:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114633.1	114633.1	102	%			03:13:34
1	Al 396.153Radial†	10448.9	10022.9	5046.5	µg/L	5046.5	ppb	03:13:34
1	Ca 317.933Radial†	13327.2	12581.4	4994.3	µg/L	4994.3	ppb	03:13:55
1	Fe 238.204 Radial†	994.3	964.4	5082.5	µg/L	5082.5	ppb	03:13:55
1	K 766.490 Radial†	10272.1	9384.4	5088.2	µg/L	5088.2	ppb	03:13:34
1	Mg 279.077 IEC†	968.5	930.5	5165.9	µg/L	5165.9	ppb	03:13:55
1	Na 589.592 Radial†	36587.9	36604.7	10156	µg/L	10156	ppb	03:13:34
1	Sr 421.552†	90411.4	88777.0	500.07	µg/L	500.07	ppb	03:13:34
1	Sc 361.383	2072418.5	2072418.5	100.76	%			03:14:58
1	Y 371.029	1255835.6	1255835.6	100.28	%			03:14:58
1	Ag 328.068†	55942.8	55548.0	499.92	µg/L	499.92	ppb	03:15:04
1	As 188.979†	268.7	264.2	502.53	µg/L	502.53	ppb	03:15:24
1	B 249.677†	11464.8	11222.4	496.50	µg/L	496.50	ppb	03:15:04
1	Ba 233.527†	19893.5	19823.8	498.96	µg/L	498.96	ppb	03:15:04
1	Be 313.107†	798687.2	789035.0	498.95	µg/L	498.95	ppb	03:14:58
1	Cd 226.502†	18973.6	18931.0	500.77	µg/L	500.77	ppb	03:15:04
1	Co 228.616†	10394.2	10387.3	499.63	µg/L	499.63	ppb	03:15:04
1	Cr 267.716†	23926.5	23868.3	498.01	µg/L	498.01	ppb	03:15:04
1	Cu 324.752†	75013.7	71062.1	501.05	µg/L	501.05	ppb	03:15:04
1	Mn 257.610†	158267.8	157293.4	499.81	µg/L	499.81	ppb	03:14:58
1	Mo 202.031†	4469.7	4443.8	495.94	µg/L	495.94	ppb	03:15:24
1	Ni 231.604†	9538.2	9166.7	499.39	µg/L	499.39	ppb	03:15:04
1	P 214.914†	1368.4	1152.0	2446.4	µg/L	2446.4	ppb	03:15:24
1	Pb 220.353†	2074.2	2004.4	508.82	µg/L	508.82	ppb	03:15:24
1	S 181.975 Axial†	220.8	195.1	1001.1	µg/L	1001.1	ppb	03:15:24
1	Sb 206.836†	535.6	511.0	505.56	µg/L	505.56	ppb	03:15:24
1	Se 196.026†	365.1	348.2	509.29	µg/L	509.29	ppb	03:15:24
1	SiO2†	30460.9	28248.8	5394.5	µg/L	5394.5	ppb	03:15:04
1	Si 251.611†	33517.7	32914.6	2473.3	µg/L	2473.3	ppb	03:15:04
1	Sn 189.927†	1054.7	1024.3	502.09	µg/L	502.09	ppb	03:15:24
1	Ti 334.940†	227531.3	225091.5	498.66	µg/L	498.66	ppb	03:14:58
1	Tl 190.801†	317.8	336.8	510.63	µg/L	510.63	ppb	03:15:24
1	U 409.014†	6032.2	5307.4	497.60	µg/L	497.60	ppb	03:15:04
1	V 292.402†	44312.7	44069.5	501.49	µg/L	501.49	ppb	03:15:04
1	Zn 213.857†	19540.7	18842.8	500.86	µg/L	500.86	ppb	03:15:04
2	Sc RADIAL	113233.8	113233.8	101	%			03:14:00
2	Al 396.153Radial†	10503.4	10203.7	5137.8	µg/L	5137.8	ppb	03:14:00
2	Ca 317.933Radial†	13321.4	12737.3	5056.1	µg/L	5056.1	ppb	03:14:21
2	Fe 238.204 Radial†	994.0	976.2	5144.5	µg/L	5144.5	ppb	03:14:21
2	K 766.490 Radial†	10239.6	9476.6	5138.1	µg/L	5138.1	ppb	03:14:00
2	Mg 279.077 IEC†	975.1	948.7	5267.2	µg/L	5267.2	ppb	03:14:21
2	Na 589.592 Radial†	36638.4	37098.4	10293	µg/L	10293	ppb	03:14:00
2	Sr 421.552†	90481.6	89943.2	506.64	µg/L	506.64	ppb	03:14:00
2	Sc 361.383	2046520.4	2046520.4	99.503	%			03:15:31
2	Y 371.029	1240511.5	1240511.5	99.054	%			03:15:31
2	Ag 328.068†	55744.1	56050.8	504.44	µg/L	504.44	ppb	03:15:37
2	As 188.979†	265.1	263.9	502.04	µg/L	502.04	ppb	03:15:58
2	B 249.677†	11417.0	11318.3	500.73	µg/L	500.73	ppb	03:15:37
2	Ba 233.527†	19773.2	19952.6	502.20	µg/L	502.20	ppb	03:15:37
2	Be 313.107†	796145.9	796511.6	503.67	µg/L	503.67	ppb	03:15:31
2	Cd 226.502†	18825.7	19020.7	503.14	µg/L	503.14	ppb	03:15:37
2	Co 228.616†	10351.4	10474.9	503.83	µg/L	503.83	ppb	03:15:37
2	Cr 267.716†	23808.7	24050.4	501.81	µg/L	501.81	ppb	03:15:37
2	Cu 324.752†	74592.7	71581.1	504.71	µg/L	504.71	ppb	03:15:37
2	Mn 257.610†	157938.3	158949.9	505.08	µg/L	505.08	ppb	03:15:31
2	Mo 202.031†	4430.9	4460.9	497.86	µg/L	497.86	ppb	03:15:58
2	Ni 231.604†	9475.5	9223.5	502.48	µg/L	502.48	ppb	03:15:37
2	P 214.914†	1355.3	1156.1	2454.9	µg/L	2454.9	ppb	03:15:58
2	Pb 220.353†	2054.2	2010.3	510.34	µg/L	510.34	ppb	03:15:58

2	S 181.975 Axial†	218.6	195.6	1003.6 µg/L	1003.6 ppb	03:15:58
2	Sb 206.836†	524.9	507.0	501.60 µg/L	501.60 ppb	03:15:58
2	Se 196.026†	362.3	350.0	511.99 µg/L	511.99 ppb	03:15:58
2	SiO2†	30273.7	28443.3	5431.6 µg/L	5431.6 ppb	03:15:37
2	Si 251.611†	33385.6	33202.8	2494.9 µg/L	2494.9 ppb	03:15:37
2	Sn 189.927†	1050.7	1033.5	506.66 µg/L	506.66 ppb	03:15:58
2	Ti 334.940†	226776.6	227190.6	503.31 µg/L	503.31 ppb	03:15:31
2	Tl 190.801†	315.4	338.4	513.05 µg/L	513.05 ppb	03:15:58
2	U 409.014†	6024.5	5375.3	503.97 µg/L	503.97 ppb	03:15:37
2	V 292.402†	44043.9	44355.9	504.75 µg/L	504.75 ppb	03:15:37
2	Zn 213.857†	19433.9	18980.8	504.53 µg/L	504.53 ppb	03:15:37
3	Sc RADIAL	115035.5	115035.5	102 %		03:14:26
3	Al 396.153Radial†	10588.2	10123.1	5097.1 µg/L	5097.1 ppb	03:14:26
3	Ca 317.933Radial†	13296.7	12505.8	4964.2 µg/L	4964.2 ppb	03:14:47
3	Fe 238.204 Radial†	996.1	962.8	5074.4 µg/L	5074.4 ppb	03:14:47
3	K 766.490 Radial†	10263.8	9341.0	5064.6 µg/L	5064.6 ppb	03:14:26
3	Mg 279.077 IEC†	966.6	925.3	5137.1 µg/L	5137.1 ppb	03:14:47
3	Na 589.592 Radial†	36945.0	36828.2	10218 µg/L	10218 ppb	03:14:26
3	Sr 421.552†	91205.8	89243.5	502.70 µg/L	502.70 ppb	03:14:26
3	Sc 361.383	2049335.6	2049335.6	99.640 %		03:16:05
3	Y 371.029	1240755.8	1240755.8	99.074 %		03:16:05
3	Ag 328.068†	56363.9	56596.0	509.34 µg/L	509.34 ppb	03:16:10
3	As 188.979†	266.6	265.1	504.19 µg/L	504.19 ppb	03:16:31
3	B 249.677†	11498.3	11384.2	503.68 µg/L	503.68 ppb	03:16:10
3	Ba 233.527†	20054.7	20207.9	508.63 µg/L	508.63 ppb	03:16:10
3	Be 313.107†	796154.1	795420.7	502.98 µg/L	502.98 ppb	03:16:05
3	Cd 226.502†	19039.3	19209.0	508.13 µg/L	508.13 ppb	03:16:10
3	Co 228.616†	10487.4	10597.1	509.71 µg/L	509.71 ppb	03:16:10
3	Cr 267.716†	24220.0	24430.4	509.73 µg/L	509.73 ppb	03:16:10
3	Cu 324.752†	75467.4	72355.9	510.15 µg/L	510.15 ppb	03:16:10
3	Mn 257.610†	158033.8	158827.8	504.68 µg/L	504.68 ppb	03:16:05
3	Mo 202.031†	4438.5	4462.5	498.03 µg/L	498.03 ppb	03:16:31
3	Ni 231.604†	9628.7	9364.1	510.14 µg/L	510.14 ppb	03:16:10
3	P 214.914†	1366.4	1165.3	2474.3 µg/L	2474.3 ppb	03:16:31
3	Pb 220.353†	2055.8	2009.1	510.01 µg/L	510.01 ppb	03:16:31
3	S 181.975 Axial†	218.2	195.0	1000.2 µg/L	1000.2 ppb	03:16:31
3	Sb 206.836†	524.4	505.8	500.35 µg/L	500.35 ppb	03:16:31
3	Se 196.026†	361.9	349.1	510.59 µg/L	510.59 ppb	03:16:31
3	SiO2†	30615.1	28744.1	5489.1 µg/L	5489.1 ppb	03:16:10
3	Si 251.611†	33780.4	33552.8	2521.9 µg/L	2521.9 ppb	03:16:10
3	Sn 189.927†	1045.0	1026.3	503.10 µg/L	503.10 ppb	03:16:31
3	Ti 334.940†	226779.8	226880.8	502.63 µg/L	502.63 ppb	03:16:05
3	Tl 190.801†	312.3	334.8	507.59 µg/L	507.59 ppb	03:16:31
3	U 409.014†	6110.2	5453.0	511.27 µg/L	511.27 ppb	03:16:10
3	V 292.402†	44645.3	44898.7	510.87 µg/L	510.87 ppb	03:16:10
3	Zn 213.857†	19680.2	19201.1	510.39 µg/L	510.39 ppb	03:16:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2056091.5	99.968	%	0.6909				0.69%
Sc RADIAL	114300.8	102	%	0.8				0.83%
Y 371.029	1245701.0	99.468	%	0.7009				0.70%
Ag 328.068†	56064.9	504.56	µg/L	4.713	504.56	ppb	4.713	0.93%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	10116.6	5093.8	µg/L	45.75	5093.8	ppb	45.75	0.90%
QC value within limits for Al 396.153Radial Recovery = 101.88%								
As 188.979†	264.4	502.92	µg/L	1.125	502.92	ppb	1.125	0.22%
QC value within limits for As 188.979 Recovery = 100.58%								
B 249.677†	11308.3	500.30	µg/L	3.610	500.30	ppb	3.610	0.72%
QC value within limits for B 249.677 Recovery = 100.06%								
Ba 233.527†	19994.8	503.26	µg/L	4.921	503.26	ppb	4.921	0.98%
QC value within limits for Ba 233.527 Recovery = 100.65%								
Be 313.107†	793655.8	501.87	µg/L	2.554	501.87	ppb	2.554	0.51%
QC value within limits for Be 313.107 Recovery = 100.37%								
Ca 317.933Radial†	12608.2	5004.9	µg/L	46.85	5004.9	ppb	46.85	0.94%
QC value within limits for Ca 317.933Radial Recovery = 100.10%								
Cd 226.502†	19053.5	504.01	µg/L	3.761	504.01	ppb	3.761	0.75%
QC value within limits for Cd 226.502 Recovery = 100.80%								
Co 228.616†	10486.4	504.39	µg/L	5.064	504.39	ppb	5.064	1.00%

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   QC value within limits for Co 228.616  Recovery = 100.88%
Cr 267.716†            24116.4      503.18 µg/L        5.981      503.18 ppb          5.981   1.19%
   QC value within limits for Cr 267.716  Recovery = 100.64%
Cu 324.752†            71666.3      505.30 µg/L        4.579      505.30 ppb          4.579   0.91%
   QC value within limits for Cu 324.752  Recovery = 101.06%
Fe 238.204 Radial†       967.8      5100.5 µg/L       38.37      5100.5 ppb         38.37   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.01%
K 766.490 Radial†       9400.6      5097.0 µg/L       37.55      5097.0 ppb         37.55   0.74%
   QC value within limits for K 766.490 Radial  Recovery = 101.94%
Mg 279.077 IEC†         934.8      5190.1 µg/L       68.34      5190.1 ppb         68.34   1.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.80%
Mn 257.610†           158357.0      503.19 µg/L        2.932      503.19 ppb          2.932   0.58%
   QC value within limits for Mn 257.610  Recovery = 100.64%
Mo 202.031†            4455.7      497.28 µg/L        1.160      497.28 ppb          1.160   0.23%
   QC value within limits for Mo 202.031  Recovery = 99.46%
Na 589.592 Radial†     36843.8       10223 µg/L         68.6       10223 ppb           68.6   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 102.23%
Ni 231.604†            9251.4      504.00 µg/L        5.537      504.00 ppb          5.537   1.10%
   QC value within limits for Ni 231.604  Recovery = 100.80%
P 214.914†             1157.8      2458.5 µg/L       14.27      2458.5 ppb         14.27   0.58%
   QC value within limits for P 214.914  Recovery = 98.34%
Pb 220.353†            2007.9      509.73 µg/L        0.799      509.73 ppb          0.799   0.16%
   QC value within limits for Pb 220.353  Recovery = 101.95%
S 181.975 Axial†        195.2      1001.6 µg/L        1.78      1001.6 ppb           1.78   0.18%
   QC value within limits for S 181.975 Axial  Recovery = 100.16%
Sb 206.836†             507.9      502.50 µg/L        2.720      502.50 ppb          2.720   0.54%
   QC value within limits for Sb 206.836  Recovery = 100.50%
Se 196.026†             349.1      510.62 µg/L        1.350      510.62 ppb          1.350   0.26%
   QC value within limits for Se 196.026  Recovery = 102.12%
SiO2†                  28478.7      5438.4 µg/L       47.65      5438.4 ppb         47.65   0.88%
   QC value within limits for SiO2  Recovery = 101.70%
Si 251.611†            33223.4      2496.7 µg/L       24.38      2496.7 ppb         24.38   0.98%
   QC value within limits for Si 251.611  Recovery = 99.87%
Sn 189.927†            1028.0      503.95 µg/L        2.400      503.95 ppb          2.400   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.79%
Sr 421.552†            89321.2      503.14 µg/L        3.306      503.14 ppb          3.306   0.66%
   QC value within limits for Sr 421.552  Recovery = 100.63%
Ti 334.940†           226387.6      501.53 µg/L        2.511      501.53 ppb          2.511   0.50%
   QC value within limits for Ti 334.940  Recovery = 100.31%
Tl 190.801†             336.7      510.42 µg/L        2.733      510.42 ppb          2.733   0.54%
   QC value within limits for Tl 190.801  Recovery = 102.08%
U 409.014†             5378.6      504.28 µg/L        6.844      504.28 ppb          6.844   1.36%
   QC value within limits for U 409.014  Recovery = 100.86%
V 292.402†            44441.4      505.70 µg/L        4.764      505.70 ppb          4.764   0.94%
   QC value within limits for V 292.402  Recovery = 101.14%
Zn 213.857†           19008.2      505.26 µg/L        4.809      505.26 ppb          4.809   0.95%
   QC value within limits for Zn 213.857  Recovery = 101.05%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 03:16:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111978.7	111978.7	99.6	%			03:17:12
1	Al 396.153Radial†	201.1	-27.8	-14.075	µg/L	-14.075	ppb	03:17:12
1	Ca 317.933Radial†	481.7	-11.6	-4.5894	µg/L	-4.5894	ppb	03:17:33
1	Fe 238.204 Radial†	12.4	1.2	6.5019	µg/L	6.5019	ppb	03:17:33
1	K 766.490 Radial†	744.3	52.8	28.624	µg/L	28.624	ppb	03:17:12
1	Mg 279.077 IEC†	19.3	-0.4	-2.2236	µg/L	-2.2236	ppb	03:17:33
1	Na 589.592 Radial†	-594.9	106.4	29.512	µg/L	29.512	ppb	03:17:12
1	Sr 421.552†	63.6	127.7	0.7192	µg/L	0.7192	ppb	03:17:12
1	Sc 361.383	2034736.0	2034736.0	98.930	%			03:18:34
1	Y 371.029	1239053.5	1239053.5	98.938	%			03:18:34
1	Ag 328.068†	-33.2	-5.2	-0.0435	µg/L	-0.0435	ppb	03:18:40
1	As 188.979†	8.2	5.9	11.157	µg/L	11.157	ppb	03:19:01
1	B 249.677†	205.8	52.3	2.3188	µg/L	2.3188	ppb	03:18:40
1	Ba 233.527†	-57.4	22.6	0.5693	µg/L	0.5693	ppb	03:19:01
1	Be 313.107†	3864.8	295.1	0.1863	µg/L	0.1863	ppb	03:18:40
1	Cd 226.502†	-53.8	46.5	1.2272	µg/L	1.2272	ppb	03:19:01
1	Co 228.616†	-63.7	7.3	0.3487	µg/L	0.3487	ppb	03:19:01
1	Cr 267.716†	-66.4	55.7	1.1599	µg/L	1.1599	ppb	03:18:40
1	Cu 324.752†	3482.8	136.2	0.9594	µg/L	0.9594	ppb	03:18:40
1	Mn 257.610†	-75.8	146.1	0.4644	µg/L	0.4644	ppb	03:19:01
1	Mo 202.031†	-6.0	1.9	0.2110	µg/L	0.2110	ppb	03:19:01
1	Ni 231.604†	305.2	9.1	0.4937	µg/L	0.4937	ppb	03:19:01
1	P 214.914†	210.4	6.7	14.403	µg/L	14.403	ppb	03:19:01
1	Pb 220.353†	69.8	16.4	4.1690	µg/L	4.1690	ppb	03:19:01
1	S 181.975 Axial†	24.5	0.7	3.5474	µg/L	3.5474	ppb	03:19:01
1	Sb 206.836†	27.3	7.1	7.0385	µg/L	7.0385	ppb	03:19:01
1	Se 196.026†	18.2	4.3	6.1975	µg/L	6.1975	ppb	03:19:01
1	SiO2†	1998.7	38.6	7.3738	µg/L	7.3738	ppb	03:18:40
1	Si 251.611†	396.5	51.1	3.9248	µg/L	3.9248	ppb	03:19:01
1	Sn 189.927†	19.0	-3.2	-1.5677	µg/L	-1.5677	ppb	03:19:01
1	Ti 334.940†	1185.4	479.3	1.0627	µg/L	1.0627	ppb	03:18:40
1	Tl 190.801†	-21.9	-0.7	-1.0384	µg/L	-1.0384	ppb	03:19:01
1	U 409.014†	637.2	-35.1	-3.2988	µg/L	-3.2988	ppb	03:18:40
1	V 292.402†	-54.2	37.1	0.4153	µg/L	0.4153	ppb	03:18:40
1	Zn 213.857†	590.6	46.8	1.2492	µg/L	1.2492	ppb	03:19:01
2	Sc RADIAL	111820.9	111820.9	99.4	%			03:17:38
2	Al 396.153Radial†	241.9	13.5	6.7807	µg/L	6.7807	ppb	03:17:38
2	Ca 317.933Radial†	461.3	-31.4	-12.483	µg/L	-12.483	ppb	03:17:59
2	Fe 238.204 Radial†	12.2	1.0	5.4016	µg/L	5.4016	ppb	03:17:59
2	K 766.490 Radial†	653.8	-37.2	-20.145	µg/L	-20.145	ppb	03:17:38
2	Mg 279.077 IEC†	15.0	-4.8	-26.475	µg/L	-26.475	ppb	03:17:59
2	Na 589.592 Radial†	-691.7	8.2	2.2623	µg/L	2.2623	ppb	03:17:38
2	Sr 421.552†	-28.4	35.2	0.1984	µg/L	0.1984	ppb	03:17:38
2	Sc 361.383	2050897.2	2050897.2	99.716	%			03:19:06
2	Y 371.029	1247948.1	1247948.1	99.648	%			03:19:06
2	Ag 328.068†	-28.2	0.1	0.0046	µg/L	0.0046	ppb	03:19:12
2	As 188.979†	4.7	2.2	4.2460	µg/L	4.2460	ppb	03:19:33
2	B 249.677†	203.4	48.3	2.1423	µg/L	2.1423	ppb	03:19:12
2	Ba 233.527†	-55.4	25.2	0.6330	µg/L	0.6330	ppb	03:19:33
2	Be 313.107†	3883.5	283.0	0.1787	µg/L	0.1787	ppb	03:19:12
2	Cd 226.502†	-63.9	36.8	0.9748	µg/L	0.9748	ppb	03:19:33
2	Co 228.616†	-59.8	11.7	0.5647	µg/L	0.5647	ppb	03:19:33
2	Cr 267.716†	-82.9	39.6	0.8265	µg/L	0.8265	ppb	03:19:12
2	Cu 324.752†	3461.0	86.6	0.6104	µg/L	0.6104	ppb	03:19:12
2	Mn 257.610†	-99.8	122.5	0.3896	µg/L	0.3896	ppb	03:19:33
2	Mo 202.031†	0.0	8.0	0.8875	µg/L	0.8875	ppb	03:19:33
2	Ni 231.604†	308.3	9.8	0.5345	µg/L	0.5345	ppb	03:19:33
2	P 214.914†	215.8	10.5	22.683	µg/L	22.683	ppb	03:19:33
2	Pb 220.353†	78.9	25.0	6.3484	µg/L	6.3484	ppb	03:19:33

2	S 181.975 Axial†	24.6	0.6	3.3414 µg/L	3.3414 ppb		03:19:33
2	Sb 206.836†	20.6	0.1	0.1238 µg/L	0.1238 ppb		03:19:33
2	Se 196.026†	8.3	-5.7	-8.3259 µg/L	-8.3259 ppb		03:19:33
2	SiO2†	2029.3	53.5	10.207 µg/L	10.207 ppb		03:19:12
2	Si 251.611†	391.6	43.1	3.2083 µg/L	3.2083 ppb		03:19:33
2	Sn 189.927†	25.3	2.9	1.3975 µg/L	1.3975 ppb		03:19:33
2	Ti 334.940†	1104.4	388.6	0.8622 µg/L	0.8622 ppb		03:19:12
2	Tl 190.801†	-17.9	3.4	5.1862 µg/L	5.1862 ppb		03:19:33
2	U 409.014†	695.7	18.4	1.7292 µg/L	1.7292 ppb		03:19:12
2	V 292.402†	-46.0	45.9	0.5267 µg/L	0.5267 ppb		03:19:12
2	Zn 213.857†	576.8	28.3	0.7546 µg/L	0.7546 ppb		03:19:33
3	Sc RADIAL	111379.5	111379.5	99.0 %			03:18:04
3	Al 396.153Radial†	210.5	-17.3	-8.7766 µg/L	-8.7766 ppb		03:18:04
3	Ca 317.933Radial†	467.9	-22.9	-9.0931 µg/L	-9.0931 ppb		03:18:24
3	Fe 238.204 Radial†	14.0	2.9	15.302 µg/L	15.302 ppb		03:18:24
3	K 766.490 Radial†	706.4	18.6	10.075 µg/L	10.075 ppb		03:18:04
3	Mg 279.077 IEC†	18.2	-1.4	-7.9693 µg/L	-7.9693 ppb		03:18:24
3	Na 589.592 Radial†	-636.3	61.3	17.017 µg/L	17.017 ppb		03:18:04
3	Sr 421.552†	29.9	94.0	0.5294 µg/L	0.5294 ppb		03:18:04
3	Sc 361.383	2012119.5	2012119.5	97.830 %			03:19:39
3	Y 371.029	1225196.2	1225196.2	97.831 %			03:19:39
3	Ag 328.068†	-45.7	-18.4	-0.1603 µg/L	-0.1603 ppb		03:19:44
3	As 188.979†	4.9	2.6	4.8806 µg/L	4.8806 ppb		03:20:05
3	B 249.677†	192.0	40.5	1.7948 µg/L	1.7948 ppb		03:19:44
3	Ba 233.527†	-59.1	20.3	0.5112 µg/L	0.5112 ppb		03:20:05
3	Be 313.107†	3909.5	384.7	0.2429 µg/L	0.2429 ppb		03:19:44
3	Cd 226.502†	-81.2	17.9	0.4728 µg/L	0.4728 ppb		03:20:05
3	Co 228.616†	-63.4	7.0	0.3349 µg/L	0.3349 ppb		03:20:05
3	Cr 267.716†	-62.1	59.3	1.2362 µg/L	1.2362 ppb		03:19:44
3	Cu 324.752†	3504.6	198.1	1.3967 µg/L	1.3967 ppb		03:19:44
3	Mn 257.610†	-98.8	121.7	0.3880 µg/L	0.3880 ppb		03:20:05
3	Mo 202.031†	2.0	10.0	1.1118 µg/L	1.1118 ppb		03:20:05
3	Ni 231.604†	313.3	20.9	1.1377 µg/L	1.1377 ppb		03:20:05
3	P 214.914†	207.6	6.3	13.421 µg/L	13.421 ppb		03:20:05
3	Pb 220.353†	66.3	13.7	3.4689 µg/L	3.4689 ppb		03:20:05
3	S 181.975 Axial†	21.3	-2.3	-11.588 µg/L	-11.588 ppb		03:20:05
3	Sb 206.836†	24.9	4.9	4.8134 µg/L	4.8134 ppb		03:20:05
3	Se 196.026†	14.0	0.2	0.3333 µg/L	0.3333 ppb		03:20:05
3	SiO2†	2030.0	93.3	17.821 µg/L	17.821 ppb		03:19:44
3	Si 251.611†	396.2	55.3	4.0965 µg/L	4.0965 ppb		03:20:05
3	Sn 189.927†	26.0	4.2	2.0281 µg/L	2.0281 ppb		03:20:05
3	Ti 334.940†	1195.0	502.6	1.1147 µg/L	1.1147 ppb		03:19:44
3	Tl 190.801†	-17.5	3.6	5.3967 µg/L	5.3967 ppb		03:20:05
3	U 409.014†	667.4	3.0	0.2741 µg/L	0.2741 ppb		03:19:44
3	V 292.402†	-48.7	42.2	0.4853 µg/L	0.4853 ppb		03:19:44
3	Zn 213.857†	578.4	41.1	1.0911 µg/L	1.0911 ppb		03:20:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032584.2	98.825	%	0.9470				0.96%
Sc RADIAL	111726.4	99.3	%	0.28				0.28%
Y 371.029	1237399.3	98.806	%	0.9155				0.93%
Ag 328.068†	-7.9	-0.0664	µg/L	0.08482	-0.0664	ppb	0.08482	127.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.5	-5.3568	µg/L	10.84006	-5.3568	ppb	10.84006	202.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.5	6.7613	µg/L	3.82014	6.7613	ppb	3.82014	56.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	47.0	2.0853	µg/L	0.26664	2.0853	ppb	0.26664	12.79%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.7	0.5712	µg/L	0.06094	0.5712	ppb	0.06094	10.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	320.9	0.2026	µg/L	0.03508	0.2026	ppb	0.03508	17.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-22.0	-8.7219	µg/L	3.95991	-8.7219	ppb	3.95991	45.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	33.7	0.8916	µg/L	0.38400	0.8916	ppb	0.38400	43.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	8.7	0.4161	µg/L	0.12891	0.4161	ppb	0.12891	30.98%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 51.6      1.0742 µg/L       0.21789      1.0742 ppb        0.21789  20.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                140.3      0.9888 µg/L       0.39398      0.9888 ppb        0.39398  39.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.7      9.0685 µg/L       5.42631      9.0685 ppb        5.42631  59.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          11.4      6.1844 µg/L      24.61606      6.1844 ppb       24.61606 398.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.2     -12.223 µg/L       12.6729     -12.223 ppb        12.6729 103.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                130.1      0.4140 µg/L       0.04364      0.4140 ppb        0.04364  10.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.6      0.7368 µg/L       0.46892      0.7368 ppb        0.46892  63.65%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         58.6      16.263 µg/L       13.6403      16.263 ppb        13.6403  83.87%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                13.3      0.7220 µg/L       0.36064      0.7220 ppb        0.36064  49.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  7.8      16.836 µg/L        5.0879      16.836 ppb         5.0879  30.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                18.4      4.6621 µg/L       1.50175      4.6621 ppb        1.50175  32.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.3     -1.5664 µg/L       8.67963     -1.5664 ppb        8.67963 554.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.0      3.9919 µg/L       3.52981      3.9919 ppb        3.52981  88.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.4     -0.5983 µg/L       7.30640     -0.5983 ppb        7.30640 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      61.8      11.801 µg/L        5.4028      11.801 ppb         5.4028  45.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                49.9      3.7432 µg/L       0.47111      3.7432 ppb        0.47111  12.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.3      0.6193 µg/L       1.92003      0.6193 ppb        1.92003 310.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                85.6      0.4823 µg/L       0.26355      0.4823 ppb        0.26355  54.64%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                456.9      1.0132 µg/L       0.13334      1.0132 ppb        0.13334  13.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.1      3.1815 µg/L       3.65606      3.1815 ppb        3.65606 114.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 -4.6     -0.4318 µg/L       2.58727     -0.4318 ppb        2.58727 599.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 41.7      0.4758 µg/L       0.05630      0.4758 ppb        0.05630  11.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                38.7      1.0316 µg/L       0.25258      1.0316 ppb        0.25258  24.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 03:46:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113927.2	113927.2	101	%			03:46:42
1	Al 396.153Radial†	10279.7	9919.3	4994.2	µg/L	4994.2	ppb	03:46:42
1	Ca 317.933Radial†	13112.5	12450.5	4942.3	µg/L	4942.3	ppb	03:47:02
1	Fe 238.204 Radial†	989.8	966.0	5091.2	µg/L	5091.2	ppb	03:47:02
1	K 766.490 Radial†	9935.8	9114.7	4942.0	µg/L	4942.0	ppb	03:46:42
1	Mg 279.077 IEC†	952.0	920.1	5108.3	µg/L	5108.3	ppb	03:47:02
1	Na 589.592 Radial†	36121.0	36366.1	10090	µg/L	10090	ppb	03:46:42
1	Sr 421.552†	88884.5	87819.3	494.68	µg/L	494.68	ppb	03:46:42
1	Sc 361.383	2053475.1	2053475.1	99.841	%			03:48:05
1	Y 371.029	1243185.3	1243185.3	99.268	%			03:48:05
1	Ag 328.068†	56288.9	56406.8	507.63	µg/L	507.63	ppb	03:48:11
1	As 188.979†	259.7	257.6	490.02	µg/L	490.02	ppb	03:48:31
1	B 249.677†	11455.9	11318.4	500.75	µg/L	500.75	ppb	03:48:11
1	Ba 233.527†	19963.5	20075.9	505.30	µg/L	505.30	ppb	03:48:11
1	Be 313.107†	796231.8	793887.8	502.01	µg/L	502.01	ppb	03:48:05
1	Cd 226.502†	19066.6	19197.9	507.83	µg/L	507.83	ppb	03:48:11
1	Co 228.616†	10412.7	10501.0	505.09	µg/L	505.09	ppb	03:48:11
1	Cr 267.716†	23981.6	24142.6	503.73	µg/L	503.73	ppb	03:48:11
1	Cu 324.752†	74953.3	71688.3	505.46	µg/L	505.46	ppb	03:48:11
1	Mn 257.610†	157751.8	158225.6	502.77	µg/L	502.77	ppb	03:48:05
1	Mo 202.031†	4410.6	4425.5	493.91	µg/L	493.91	ppb	03:48:31
1	Ni 231.604†	9574.7	9290.6	506.13	µg/L	506.13	ppb	03:48:11
1	P 214.914†	1352.0	1148.2	2437.4	µg/L	2437.4	ppb	03:48:31
1	Pb 220.353†	2030.9	1980.0	502.62	µg/L	502.62	ppb	03:48:31
1	S 181.975 Axial†	217.1	193.4	992.26	µg/L	992.26	ppb	03:48:31
1	Sb 206.836†	519.8	500.1	494.73	µg/L	494.73	ppb	03:48:31
1	Se 196.026†	371.6	358.1	523.66	µg/L	523.66	ppb	03:48:31
1	SiO2†	30507.1	28574.0	5456.6	µg/L	5456.6	ppb	03:48:11
1	Si 251.611†	33622.7	33326.6	2504.9	µg/L	2504.9	ppb	03:48:11
1	Sn 189.927†	1044.0	1023.2	501.56	µg/L	501.56	ppb	03:48:31
1	Ti 334.940†	225750.8	225391.3	499.33	µg/L	499.33	ppb	03:48:05
1	Tl 190.801†	305.6	327.5	496.51	µg/L	496.51	ppb	03:48:31
1	U 409.014†	6054.3	5384.7	504.86	µg/L	504.86	ppb	03:48:11
1	V 292.402†	44469.1	44631.8	507.83	µg/L	507.83	ppb	03:48:11
1	Zn 213.857†	19502.9	18983.8	504.60	µg/L	504.60	ppb	03:48:11
2	Sc RADIAL	113882.5	113882.5	101	%			03:47:08
2	Al 396.153Radial†	10363.9	10006.4	5038.2	µg/L	5038.2	ppb	03:47:08
2	Ca 317.933Radial†	13143.0	12485.7	4956.3	µg/L	4956.3	ppb	03:47:28
2	Fe 238.204 Radial†	992.6	969.2	5107.9	µg/L	5107.9	ppb	03:47:28
2	K 766.490 Radial†	10108.8	9289.4	5036.7	µg/L	5036.7	ppb	03:47:08
2	Mg 279.077 IEC†	954.6	923.0	5124.5	µg/L	5124.5	ppb	03:47:28
2	Na 589.592 Radial†	36245.1	36502.7	10128	µg/L	10128	ppb	03:47:08
2	Sr 421.552†	89309.9	88273.9	497.24	µg/L	497.24	ppb	03:47:08
2	Sc 361.383	2034621.2	2034621.2	98.924	%			03:48:38
2	Y 371.029	1232721.4	1232721.4	98.432	%			03:48:38
2	Ag 328.068†	55319.3	55949.1	503.52	µg/L	503.52	ppb	03:48:44
2	As 188.979†	266.8	267.2	508.33	µg/L	508.33	ppb	03:49:05
2	B 249.677†	11185.3	11151.2	493.33	µg/L	493.33	ppb	03:48:44
2	Ba 233.527†	19637.1	19931.3	501.66	µg/L	501.66	ppb	03:48:44
2	Be 313.107†	788746.2	793710.9	501.90	µg/L	501.90	ppb	03:48:38
2	Cd 226.502†	18640.6	18944.2	501.11	µg/L	501.11	ppb	03:48:44
2	Co 228.616†	10232.7	10415.6	500.99	µg/L	500.99	ppb	03:48:44
2	Cr 267.716†	23567.7	23946.7	499.64	µg/L	499.64	ppb	03:48:44
2	Cu 324.752†	73773.6	71191.4	501.96	µg/L	501.96	ppb	03:48:44
2	Mn 257.610†	156476.0	158400.1	503.33	µg/L	503.33	ppb	03:48:38
2	Mo 202.031†	4385.1	4440.6	495.60	µg/L	495.60	ppb	03:49:05
2	Ni 231.604†	9435.4	9238.6	503.30	µg/L	503.30	ppb	03:48:44
2	P 214.914†	1347.5	1156.2	2455.4	µg/L	2455.4	ppb	03:49:05
2	Pb 220.353†	2026.9	1994.8	506.41	µg/L	506.41	ppb	03:49:05

2	S 181.975 Axial†	214.4	192.7	988.56 µg/L	988.56 ppb	03:49:05
2	Sb 206.836†	513.7	498.7	493.37 µg/L	493.37 ppb	03:49:05
2	Se 196.026†	360.3	350.1	512.12 µg/L	512.12 ppb	03:49:05
2	SiO2†	29991.1	28335.5	5411.1 µg/L	5411.1 ppb	03:48:44
2	Si 251.611†	33012.7	33022.0	2481.4 µg/L	2481.4 ppb	03:48:44
2	Sn 189.927†	1040.8	1029.6	504.70 µg/L	504.70 ppb	03:49:05
2	Ti 334.940†	223999.0	225715.7	500.04 µg/L	500.04 ppb	03:48:38
2	Tl 190.801†	312.2	337.0	510.99 µg/L	510.99 ppb	03:49:05
2	U 409.014†	5857.2	5241.6	491.41 µg/L	491.41 ppb	03:48:44
2	V 292.402†	43690.5	44257.5	503.60 µg/L	503.60 ppb	03:48:44
2	Zn 213.857†	19151.1	18809.2	499.94 µg/L	499.94 ppb	03:48:44
3	Sc RADIAL	113273.9	113273.9	101 %		03:47:34
3	Al 396.153Radial†	10271.6	9969.8	5019.6 µg/L	5019.6 ppb	03:47:34
3	Ca 317.933Radial†	13202.0	12614.0	5007.2 µg/L	5007.2 ppb	03:47:54
3	Fe 238.204 Radial†	994.4	976.3	5145.1 µg/L	5145.1 ppb	03:47:54
3	K 766.490 Radial†	9858.4	9094.5	4931.0 µg/L	4931.0 ppb	03:47:34
3	Mg 279.077 IEC†	966.7	940.1	5219.2 µg/L	5219.2 ppb	03:47:54
3	Na 589.592 Radial†	35835.0	36287.8	10068 µg/L	10068 ppb	03:47:34
3	Sr 421.552†	88381.9	87826.3	494.72 µg/L	494.72 ppb	03:47:34
3	Sc 361.383	2028971.2	2028971.2	98.650 %		03:49:12
3	Y 371.029	1228618.1	1228618.1	98.104 %		03:49:12
3	Ag 328.068†	55473.9	56261.5	506.34 µg/L	506.34 ppb	03:49:18
3	As 188.979†	265.3	266.4	506.78 µg/L	506.78 ppb	03:49:38
3	B 249.677†	11294.8	11293.7	499.64 µg/L	499.64 ppb	03:49:18
3	Ba 233.527†	19674.8	20024.8	504.02 µg/L	504.02 ppb	03:49:18
3	Be 313.107†	786144.5	793293.9	501.64 µg/L	501.64 ppb	03:49:12
3	Cd 226.502†	18676.7	19033.3	503.48 µg/L	503.48 ppb	03:49:18
3	Co 228.616†	10276.5	10488.9	504.52 µg/L	504.52 ppb	03:49:18
3	Cr 267.716†	23654.1	24100.6	502.86 µg/L	502.86 ppb	03:49:18
3	Cu 324.752†	74058.9	71688.3	505.47 µg/L	505.47 ppb	03:49:18
3	Mn 257.610†	155886.4	158242.8	502.84 µg/L	502.84 ppb	03:49:12
3	Mo 202.031†	4392.9	4460.9	497.86 µg/L	497.86 ppb	03:49:38
3	Ni 231.604†	9421.7	9251.3	503.99 µg/L	503.99 ppb	03:49:18
3	P 214.914†	1349.3	1161.7	2466.9 µg/L	2466.9 ppb	03:49:38
3	Pb 220.353†	2025.7	1999.3	507.53 µg/L	507.53 ppb	03:49:38
3	S 181.975 Axial†	220.2	199.2	1022.0 µg/L	1022.0 ppb	03:49:38
3	Sb 206.836†	525.4	512.0	506.59 µg/L	506.59 ppb	03:49:38
3	Se 196.026†	364.4	355.3	519.71 µg/L	519.71 ppb	03:49:38
3	SiO2†	30083.7	28513.8	5445.1 µg/L	5445.1 ppb	03:49:18
3	Si 251.611†	33192.0	33296.7	2502.5 µg/L	2502.5 ppb	03:49:18
3	Sn 189.927†	1034.7	1026.4	503.17 µg/L	503.17 ppb	03:49:38
3	Ti 334.940†	223139.6	225475.1	499.51 µg/L	499.51 ppb	03:49:12
3	Tl 190.801†	312.3	338.0	512.43 µg/L	512.43 ppb	03:49:38
3	U 409.014†	6005.7	5408.7	507.10 µg/L	507.10 ppb	03:49:18
3	V 292.402†	43923.0	44616.2	507.69 µg/L	507.69 ppb	03:49:18
3	Zn 213.857†	19230.5	18943.6	503.52 µg/L	503.52 ppb	03:49:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2039022.5	99.138	%	0.6239				0.63%
Sc RADIAL	113694.5	101	%	0.3				0.32%
Y 371.029	1234841.6	98.601	%	0.5998				0.61%
Ag 328.068†	56205.8	505.83	µg/L	2.104	505.83	ppb	2.104	0.42%
QC value within limits for Ag 328.068 Recovery = 101.17%								
Al 396.153Radial†	9965.2	5017.3	µg/L	22.07	5017.3	ppb	22.07	0.44%
QC value within limits for Al 396.153Radial Recovery = 100.35%								
As 188.979†	263.8	501.71	µg/L	10.155	501.71	ppb	10.155	2.02%
QC value within limits for As 188.979 Recovery = 100.34%								
B 249.677†	11254.4	497.91	µg/L	4.005	497.91	ppb	4.005	0.80%
QC value within limits for B 249.677 Recovery = 99.58%								
Ba 233.527†	20010.7	503.66	µg/L	1.847	503.66	ppb	1.847	0.37%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 313.107†	793630.9	501.85	µg/L	0.193	501.85	ppb	0.193	0.04%
QC value within limits for Be 313.107 Recovery = 100.37%								
Ca 317.933Radial†	12516.7	4968.6	µg/L	34.16	4968.6	ppb	34.16	0.69%
QC value within limits for Ca 317.933Radial Recovery = 99.37%								
Cd 226.502†	19058.4	504.14	µg/L	3.408	504.14	ppb	3.408	0.68%
QC value within limits for Cd 226.502 Recovery = 100.83%								
Co 228.616†	10468.5	503.53	µg/L	2.222	503.53	ppb	2.222	0.44%

```
   QC value within limits for Co 228.616  Recovery = 100.71%
Cr 267.716†            24063.3      502.08 µg/L         2.153      502.08 ppb          2.153   0.43%
   QC value within limits for Cr 267.716  Recovery = 100.42%
Cu 324.752†            71522.7      504.29 µg/L         2.020      504.29 ppb          2.020   0.40%
   QC value within limits for Cu 324.752  Recovery = 100.86%
Fe 238.204 Radial†       970.5      5114.7 µg/L         27.58      5114.7 ppb          27.58   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.29%
K 766.490 Radial†       9166.2      4969.9 µg/L         58.11      4969.9 ppb          58.11   1.17%
   QC value within limits for K 766.490 Radial  Recovery = 99.40%
Mg 279.077 IEC†          927.7      5150.7 µg/L         59.93      5150.7 ppb          59.93   1.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.01%
Mn 257.610†           158289.5      502.98 µg/L         0.305      502.98 ppb          0.305   0.06%
   QC value within limits for Mn 257.610  Recovery = 100.60%
Mo 202.031†            4442.4      495.79 µg/L         1.983      495.79 ppb          1.983   0.40%
   QC value within limits for Mo 202.031  Recovery = 99.16%
Na 589.592 Radial†     36385.5       10096 µg/L          30.2       10096 ppb           30.2   0.30%
   QC value within limits for Na 589.592 Radial  Recovery = 100.96%
Ni 231.604†            9260.2      504.48 µg/L         1.475      504.48 ppb          1.475   0.29%
   QC value within limits for Ni 231.604  Recovery = 100.90%
P 214.914†             1155.4      2453.2 µg/L         14.86      2453.2 ppb          14.86   0.61%
   QC value within limits for P 214.914  Recovery = 98.13%
Pb 220.353†            1991.4      505.52 µg/L         2.572      505.52 ppb          2.572   0.51%
   QC value within limits for Pb 220.353  Recovery = 101.10%
S 181.975 Axial†        195.1      1000.9 µg/L         18.33      1000.9 ppb          18.33   1.83%
   QC value within limits for S 181.975 Axial  Recovery = 100.09%
Sb 206.836†             503.6      498.23 µg/L         7.271      498.23 ppb          7.271   1.46%
   QC value within limits for Sb 206.836  Recovery = 99.65%
Se 196.026†             354.5      518.50 µg/L         5.865      518.50 ppb          5.865   1.13%
   QC value within limits for Se 196.026  Recovery = 103.70%
SiO2†                  28474.4      5437.6 µg/L         23.68      5437.6 ppb          23.68   0.44%
   QC value within limits for SiO2  Recovery = 101.68%
Si 251.611†            33215.1      2496.3 µg/L         12.95      2496.3 ppb          12.95   0.52%
   QC value within limits for Si 251.611  Recovery = 99.85%
Sn 189.927†            1026.4      503.14 µg/L         1.569      503.14 ppb          1.569   0.31%
   QC value within limits for Sn 189.927  Recovery = 100.63%
Sr 421.552†            87973.2      495.55 µg/L         1.467      495.55 ppb          1.467   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.11%
Ti 334.940†           225527.4      499.63 µg/L         0.373      499.63 ppb          0.373   0.07%
   QC value within limits for Ti 334.940  Recovery = 99.93%
Tl 190.801†             334.2      506.64 µg/L         8.807      506.64 ppb          8.807   1.74%
   QC value within limits for Tl 190.801  Recovery = 101.33%
U 409.014†             5345.0      501.12 µg/L         8.482      501.12 ppb          8.482   1.69%
   QC value within limits for U 409.014  Recovery = 100.22%
V 292.402†             44501.9      506.37 µg/L         2.402      506.37 ppb          2.402   0.47%
   QC value within limits for V 292.402  Recovery = 101.27%
Zn 213.857†            18912.2      502.68 µg/L         2.440      502.68 ppb          2.440   0.49%
   QC value within limits for Zn 213.857  Recovery = 100.54%
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 03:49:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111094.3	111094.3	98.8	%			03:50:22
1	Al 396.153Radial†	614.8	392.6	198.04	µg/L	198.04	ppb	03:50:22
1	Ca 317.933Radial†	932.9	449.1	178.27	µg/L	178.27	ppb	03:50:43
1	Fe 238.204 Radial†	29.1	18.2	95.963	µg/L	95.963	ppb	03:50:43
1	K 766.490 Radial†	1057.5	375.8	203.77	µg/L	203.77	ppb	03:50:22
1	Mg 279.077 IEC†	69.7	50.8	281.69	µg/L	281.69	ppb	03:50:43
1	Na 589.592 Radial†	465.4	1175.2	326.06	µg/L	326.06	ppb	03:50:22
1	Sr 421.552†	847.0	921.3	5.1899	µg/L	5.1899	ppb	03:50:22
1	Sc 361.383	2038146.3	2038146.3	99.096	%			03:51:44
1	Y 371.029	1241543.0	1241543.0	99.136	%			03:51:44
1	Ag 328.068†	589.5	623.2	5.6089	µg/L	5.6089	ppb	03:51:50
1	As 188.979†	18.2	15.9	30.227	µg/L	30.227	ppb	03:52:11
1	B 249.677†	1263.2	1119.0	49.635	µg/L	49.635	ppb	03:51:50
1	Ba 233.527†	122.2	204.0	5.1357	µg/L	5.1357	ppb	03:52:11
1	Be 313.107†	11610.2	8104.6	5.1249	µg/L	5.1249	ppb	03:51:50
1	Cd 226.502†	93.3	195.1	5.1938	µg/L	5.1938	ppb	03:52:11
1	Co 228.616†	33.8	105.8	5.0995	µg/L	5.0995	ppb	03:52:11
1	Cr 267.716†	128.6	252.6	5.2692	µg/L	5.2692	ppb	03:51:50
1	Cu 324.752†	4758.1	1417.2	9.9912	µg/L	9.9912	ppb	03:51:50
1	Mn 257.610†	3094.4	3345.3	10.628	µg/L	10.628	ppb	03:51:50
1	Mo 202.031†	80.0	88.7	9.8959	µg/L	9.8959	ppb	03:52:11
1	Ni 231.604†	392.1	96.3	5.2474	µg/L	5.2474	ppb	03:52:11
1	P 214.914†	274.0	70.5	151.90	µg/L	151.90	ppb	03:52:11
1	Pb 220.353†	99.5	46.3	11.723	µg/L	11.723	ppb	03:52:11
1	S 181.975 Axial†	43.1	19.4	99.803	µg/L	99.803	ppb	03:52:11
1	Sb 206.836†	29.0	8.7	8.6136	µg/L	8.6136	ppb	03:52:11
1	Se 196.026†	41.2	27.4	39.938	µg/L	39.938	ppb	03:52:11
1	SiO2†	3153.2	1200.3	229.21	µg/L	229.21	ppb	03:51:50
1	Si 251.611†	1655.7	1321.2	100.45	µg/L	100.45	ppb	03:52:11
1	Sn 189.927†	38.4	16.3	8.0588	µg/L	8.0588	ppb	03:52:11
1	Ti 334.940†	3101.5	2410.9	5.3340	µg/L	5.3340	ppb	03:51:50
1	Tl 190.801†	-8.2	13.2	19.921	µg/L	19.921	ppb	03:52:11
1	U 409.014†	1265.2	597.5	56.098	µg/L	56.098	ppb	03:51:50
1	V 292.402†	362.6	457.9	5.3292	µg/L	5.3292	ppb	03:51:50
1	Zn 213.857†	924.9	383.2	10.208	µg/L	10.208	ppb	03:52:11
2	Sc RADIAL	111548.5	111548.5	99.2	%			03:50:48
2	Al 396.153Radial†	610.5	385.8	194.58	µg/L	194.58	ppb	03:50:48
2	Ca 317.933Radial†	939.5	451.9	179.40	µg/L	179.40	ppb	03:51:08
2	Fe 238.204 Radial†	30.7	19.8	103.90	µg/L	103.90	ppb	03:51:08
2	K 766.490 Radial†	1072.8	386.9	209.76	µg/L	209.76	ppb	03:50:48
2	Mg 279.077 IEC†	65.8	46.5	257.90	µg/L	257.90	ppb	03:51:08
2	Na 589.592 Radial†	387.1	1094.2	303.61	µg/L	303.61	ppb	03:50:48
2	Sr 421.552†	850.3	921.1	5.1887	µg/L	5.1887	ppb	03:50:48
2	Sc 361.383	2036202.8	2036202.8	99.001	%			03:52:17
2	Y 371.029	1240677.7	1240677.7	99.067	%			03:52:17
2	Ag 328.068†	517.2	550.7	4.9651	µg/L	4.9651	ppb	03:52:22
2	As 188.979†	16.4	14.0	26.718	µg/L	26.718	ppb	03:52:43
2	B 249.677†	1237.2	1093.9	48.520	µg/L	48.520	ppb	03:52:22
2	Ba 233.527†	126.2	208.2	5.2406	µg/L	5.2406	ppb	03:52:43
2	Be 313.107†	11605.5	8111.1	5.1290	µg/L	5.1290	ppb	03:52:22
2	Cd 226.502†	95.8	197.7	5.2555	µg/L	5.2555	ppb	03:52:43
2	Co 228.616†	23.2	95.2	4.5910	µg/L	4.5910	ppb	03:52:43
2	Cr 267.716†	160.1	284.5	5.9350	µg/L	5.9350	ppb	03:52:22
2	Cu 324.752†	4639.7	1302.2	9.1842	µg/L	9.1842	ppb	03:52:22
2	Mn 257.610†	3066.6	3320.2	10.550	µg/L	10.550	ppb	03:52:22
2	Mo 202.031†	83.9	92.6	10.339	µg/L	10.339	ppb	03:52:43
2	Ni 231.604†	385.9	90.4	4.9225	µg/L	4.9225	ppb	03:52:43
2	P 214.914†	280.9	77.7	167.80	µg/L	167.80	ppb	03:52:43
2	Pb 220.353†	108.5	55.5	14.053	µg/L	14.053	ppb	03:52:43

2	S 181.975 Axial†	43.0	19.4	99.730 µg/L	99.730 ppb	03:52:43
2	Sb 206.836†	35.2	15.0	14.881 µg/L	14.881 ppb	03:52:43
2	Se 196.026†	31.6	17.8	25.943 µg/L	25.943 ppb	03:52:43
2	SiO2†	3143.5	1193.6	227.93 µg/L	227.93 ppb	03:52:22
2	Si 251.611†	1677.7	1345.0	102.19 µg/L	102.19 ppb	03:52:43
2	Sn 189.927†	41.7	19.7	9.7036 µg/L	9.7036 ppb	03:52:43
2	Ti 334.940†	3086.7	2398.9	5.3074 µg/L	5.3074 ppb	03:52:22
2	Tl 190.801†	-10.9	10.4	15.759 µg/L	15.759 ppb	03:52:43
2	U 409.014†	1190.5	523.3	49.124 µg/L	49.124 ppb	03:52:22
2	V 292.402†	401.0	497.0	5.7631 µg/L	5.7631 ppb	03:52:22
2	Zn 213.857†	933.7	393.0	10.473 µg/L	10.473 ppb	03:52:43
3	Sc RADIAL	111700.6	111700.6	99.3 %		03:51:14
3	Al 396.153Radial†	594.8	369.2	186.16 µg/L	186.16 ppb	03:51:14
3	Ca 317.933Radial†	938.3	449.5	178.41 µg/L	178.41 ppb	03:51:34
3	Fe 238.204 Radial†	29.3	18.3	96.264 µg/L	96.264 ppb	03:51:34
3	K 766.490 Radial†	949.9	261.7	141.89 µg/L	141.89 ppb	03:51:14
3	Mg 279.077 IEC†	74.4	55.1	305.72 µg/L	305.72 ppb	03:51:34
3	Na 589.592 Radial†	396.2	1102.9	306.02 µg/L	306.02 ppb	03:51:14
3	Sr 421.552†	857.5	927.2	5.2230 µg/L	5.2230 ppb	03:51:14
3	Sc 361.383	2041519.0	2041519.0	99.260 %		03:52:49
3	Y 371.029	1242687.6	1242687.6	99.228 %		03:52:49
3	Ag 328.068†	532.8	565.1	5.0898 µg/L	5.0898 ppb	03:52:54
3	As 188.979†	16.3	13.9	26.521 µg/L	26.521 ppb	03:53:15
3	B 249.677†	1264.7	1118.4	49.609 µg/L	49.609 ppb	03:52:54
3	Ba 233.527†	124.7	206.3	5.1936 µg/L	5.1936 ppb	03:53:15
3	Be 313.107†	11509.5	7983.9	5.0485 µg/L	5.0485 ppb	03:52:54
3	Cd 226.502†	91.1	192.6	5.1279 µg/L	5.1279 ppb	03:53:15
3	Co 228.616†	32.5	104.5	5.0385 µg/L	5.0385 ppb	03:53:15
3	Cr 267.716†	126.9	250.6	5.2285 µg/L	5.2285 ppb	03:52:54
3	Cu 324.752†	4693.2	1343.9	9.4753 µg/L	9.4753 ppb	03:52:54
3	Mn 257.610†	3116.1	3362.0	10.682 µg/L	10.682 ppb	03:52:54
3	Mo 202.031†	87.7	96.3	10.747 µg/L	10.747 ppb	03:53:15
3	Ni 231.604†	383.0	86.5	4.7124 µg/L	4.7124 ppb	03:53:15
3	P 214.914†	277.1	73.2	157.96 µg/L	157.96 ppb	03:53:15
3	Pb 220.353†	107.6	54.2	13.738 µg/L	13.738 ppb	03:53:15
3	S 181.975 Axial†	40.7	16.9	86.936 µg/L	86.936 ppb	03:53:15
3	Sb 206.836†	25.5	5.2	5.1246 µg/L	5.1246 ppb	03:53:15
3	Se 196.026†	34.7	20.9	30.421 µg/L	30.421 ppb	03:53:15
3	SiO2†	3148.8	1190.6	227.36 µg/L	227.36 ppb	03:52:54
3	Si 251.611†	1652.9	1315.6	99.963 µg/L	99.963 ppb	03:53:15
3	Sn 189.927†	42.0	19.8	9.7884 µg/L	9.7884 ppb	03:53:15
3	Ti 334.940†	3060.1	2364.0	5.2301 µg/L	5.2301 ppb	03:52:54
3	Tl 190.801†	-5.1	16.2	24.523 µg/L	24.523 ppb	03:53:15
3	U 409.014†	1259.0	589.1	55.313 µg/L	55.313 ppb	03:52:54
3	V 292.402†	359.9	454.6	5.2969 µg/L	5.2969 ppb	03:52:54
3	Zn 213.857†	933.5	390.3	10.401 µg/L	10.401 ppb	03:53:15

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2038622.7	99.119	%	0.1308				0.13%
Sc RADIAL	111447.8	99.1	%	0.28				0.28%
Y 371.029	1241636.1	99.144	%	0.0805				0.08%
Ag 328.068†	579.7	5.2213	µg/L	0.34141	5.2213	ppb	0.34141	6.54%
QC value within limits for Ag 328.068 Recovery = 104.43%								
Al 396.153Radial†	382.5	192.93	µg/L	6.110	192.93	ppb	6.110	3.17%
QC value within limits for Al 396.153Radial Recovery = 96.46%								
As 188.979†	14.6	27.822	µg/L	2.0850	27.822	ppb	2.0850	7.49%
QC value within limits for As 188.979 Recovery = 92.74%								
B 249.677†	1110.5	49.255	µg/L	0.6361	49.255	ppb	0.6361	1.29%
QC value within limits for B 249.677 Recovery = 98.51%								
Ba 233.527†	206.2	5.1900	µg/L	0.05255	5.1900	ppb	0.05255	1.01%
QC value within limits for Ba 233.527 Recovery = 103.80%								
Be 313.107†	8066.5	5.1008	µg/L	0.04532	5.1008	ppb	0.04532	0.89%
QC value within limits for Be 313.107 Recovery = 102.02%								
Ca 317.933Radial†	450.2	178.69	µg/L	0.613	178.69	ppb	0.613	0.34%
QC value within limits for Ca 317.933Radial Recovery = 89.35%								
Cd 226.502†	195.1	5.1924	µg/L	0.06381	5.1924	ppb	0.06381	1.23%
QC value within limits for Cd 226.502 Recovery = 103.85%								
Co 228.616†	101.8	4.9097	µg/L	0.27763	4.9097	ppb	0.27763	5.65%

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   QC value within limits for Co 228.616  Recovery = 98.19%
Cr 267.716†              262.5      5.4776 µg/L       0.39668      5.4776 ppb        0.39668   7.24%
   QC value within limits for Cr 267.716  Recovery = 109.55%
Cu 324.752†             1354.4      9.5503 µg/L       0.40871      9.5503 ppb        0.40871   4.28%
   QC value within limits for Cu 324.752  Recovery = 95.50%
Fe 238.204 Radial†        18.8      98.710 µg/L        4.5000     98.710 ppb         4.5000   4.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.71%
K 766.490 Radial†        341.5      185.14 µg/L        37.572     185.14 ppb         37.572  20.29%
   QC value within limits for K 766.490 Radial  Recovery = 123.43%
Mg 279.077 IEC†           50.8      281.77 µg/L        23.911     281.77 ppb         23.911   8.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 93.92%
Mn 257.610†             3342.5      10.620 µg/L        0.0663     10.620 ppb         0.0663   0.62%
   QC value within limits for Mn 257.610  Recovery = 106.20%
Mo 202.031†               92.5      10.327 µg/L        0.4258     10.327 ppb         0.4258   4.12%
   QC value within limits for Mo 202.031  Recovery = 103.27%
Na 589.592 Radial†      1124.1      311.90 µg/L        12.325     311.90 ppb         12.325   3.95%
   QC value within limits for Na 589.592 Radial  Recovery = 103.97%
Ni 231.604†               91.1      4.9608 µg/L       0.26956      4.9608 ppb        0.26956   5.43%
   QC value within limits for Ni 231.604  Recovery = 99.22%
P 214.914†                73.8      159.22 µg/L         8.024     159.22 ppb          8.024   5.04%
   QC value within limits for P 214.914  Recovery = 106.15%
Pb 220.353†               52.0      13.171 µg/L        1.2643     13.171 ppb         1.2643   9.60%
   QC value greater than the upper limit for Pb 220.353  Recovery = 131.71%
S 181.975 Axial†          18.6      95.490 µg/L        7.4077     95.490 ppb         7.4077   7.76%
   QC value within limits for S 181.975 Axial  Recovery = 95.49%
Sb 206.836†                9.6      9.5397 µg/L       4.94367      9.5397 ppb        4.94367  51.82%
   QC value within limits for Sb 206.836  Recovery = 95.40%
Se 196.026†               22.1      32.101 µg/L        7.1472     32.101 ppb         7.1472  22.26%
   QC value within limits for Se 196.026  Recovery = 107.00%
SiO2†                   1194.8      228.17 µg/L         0.949     228.17 ppb          0.949   0.42%
   QC value within limits for SiO2  Recovery = 107.12%
Si 251.611†             1327.3      100.87 µg/L         1.173     100.87 ppb          1.173   1.16%
   QC value within limits for Si 251.611  Recovery = 100.87%
Sn 189.927†               18.6      9.1836 µg/L       0.97499      9.1836 ppb        0.97499  10.62%
   QC value within limits for Sn 189.927  Recovery = 91.84%
Sr 421.552†              923.2      5.2005 µg/L       0.01949      5.2005 ppb        0.01949   0.37%
   QC value within limits for Sr 421.552  Recovery = 104.01%
Ti 334.940†             2391.3      5.2905 µg/L       0.05398      5.2905 ppb        0.05398   1.02%
   QC value within limits for Ti 334.940  Recovery = 105.81%
Tl 190.801†               13.3      20.068 µg/L        4.3840     20.068 ppb         4.3840  21.85%
   QC value within limits for Tl 190.801  Recovery = 100.34%
U 409.014†               570.0      53.512 µg/L        3.8201     53.512 ppb         3.8201   7.14%
   QC value within limits for U 409.014  Recovery = 107.02%
V 292.402†               469.8      5.4631 µg/L       0.26035      5.4631 ppb        0.26035   4.77%
   QC value within limits for V 292.402  Recovery = 109.26%
Zn 213.857†              388.9      10.361 µg/L        0.1370     10.361 ppb         0.1370   1.32%
   QC value within limits for Zn 213.857  Recovery = 103.61%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 03:53:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111244.0	111244.0	98.9	%			03:53:58
1	Al 396.153Radial†	197.5	-30.1	-15.244	µg/L	-15.244	ppb	03:53:58
1	Ca 317.933Radial†	425.1	-65.6	-26.039	µg/L	-26.039	ppb	03:54:18
1	Fe 238.204 Radial†	8.5	-2.6	-13.434	µg/L	-13.434	ppb	03:54:18
1	K 766.490 Radial†	641.5	-46.2	-25.035	µg/L	-25.035	ppb	03:53:58
1	Mg 279.077 IEC†	16.5	-3.1	-17.387	µg/L	-17.387	ppb	03:54:18
1	Na 589.592 Radial†	-713.8	-17.8	-4.9340	µg/L	-4.9340	ppb	03:53:58
1	Sr 421.552†	-40.9	22.4	0.1263	µg/L	0.1263	ppb	03:53:58
1	Sc 361.383	2031588.4	2031588.4	98.777	%			03:55:20
1	Y 371.029	1236665.2	1236665.2	98.747	%			03:55:20
1	Ag 328.068†	-41.8	-14.0	-0.1256	µg/L	-0.1256	ppb	03:55:26
1	As 188.979†	5.0	2.6	4.9491	µg/L	4.9491	ppb	03:55:46
1	B 249.677†	163.1	9.5	0.4242	µg/L	0.4242	ppb	03:55:26
1	Ba 233.527†	-80.4	-0.7	-0.0172	µg/L	-0.0172	ppb	03:55:46
1	Be 313.107†	3648.7	82.4	0.0521	µg/L	0.0521	ppb	03:55:26
1	Cd 226.502†	-94.1	5.6	0.1502	µg/L	0.1502	ppb	03:55:46
1	Co 228.616†	-75.2	-4.4	-0.2091	µg/L	-0.2091	ppb	03:55:46
1	Cr 267.716†	-127.5	-6.4	-0.1322	µg/L	-0.1322	ppb	03:55:26
1	Cu 324.752†	3389.4	47.0	0.3279	µg/L	0.3279	ppb	03:55:26
1	Mn 257.610†	-221.5	-1.6	-0.0069	µg/L	-0.0069	ppb	03:55:46
1	Mo 202.031†	-2.6	5.3	0.5879	µg/L	0.5879	ppb	03:55:46
1	Ni 231.604†	293.6	-2.2	-0.1193	µg/L	-0.1193	ppb	03:55:46
1	P 214.914†	211.5	8.1	17.570	µg/L	17.570	ppb	03:55:46
1	Pb 220.353†	65.3	12.0	3.0465	µg/L	3.0465	ppb	03:55:46
1	S 181.975 Axial†	21.8	-1.9	-9.9643	µg/L	-9.9643	ppb	03:55:46
1	Sb 206.836†	16.8	-3.6	-3.5524	µg/L	-3.5524	ppb	03:55:46
1	Se 196.026†	17.8	4.0	5.7664	µg/L	5.7664	ppb	03:55:46
1	SiO2†	1963.5	6.1	1.1670	µg/L	1.1670	ppb	03:55:26
1	Si 251.611†	342.0	-3.4	-0.1961	µg/L	-0.1961	ppb	03:55:46
1	Sn 189.927†	18.7	-3.5	-1.7372	µg/L	-1.7372	ppb	03:55:46
1	Ti 334.940†	704.8	-5.4	-0.0104	µg/L	-0.0104	ppb	03:55:26
1	Tl 190.801†	-22.8	-1.6	-2.4755	µg/L	-2.4755	ppb	03:55:46
1	U 409.014†	678.5	7.7	0.7216	µg/L	0.7216	ppb	03:55:26
1	V 292.402†	-84.8	6.1	0.0731	µg/L	0.0731	ppb	03:55:26
1	Zn 213.857†	539.3	-4.2	-0.1104	µg/L	-0.1104	ppb	03:55:46
2	Sc RADIAL	111179.0	111179.0	98.8	%			03:54:24
2	Al 396.153Radial†	204.4	-23.0	-11.631	µg/L	-11.631	ppb	03:54:24
2	Ca 317.933Radial†	432.0	-58.3	-23.162	µg/L	-23.162	ppb	03:54:44
2	Fe 238.204 Radial†	11.1	0.0	0.0765	µg/L	0.0765	ppb	03:54:44
2	K 766.490 Radial†	724.5	38.2	20.703	µg/L	20.703	ppb	03:54:24
2	Mg 279.077 IEC†	20.3	0.7	3.8132	µg/L	3.8132	ppb	03:54:44
2	Na 589.592 Radial†	-719.0	-23.5	-6.5094	µg/L	-6.5094	ppb	03:54:24
2	Sr 421.552†	-109.7	-47.2	-0.2660	µg/L	-0.2660	ppb	03:54:24
2	Sc 361.383	2052409.6	2052409.6	99.789	%			03:55:52
2	Y 371.029	1248450.0	1248450.0	99.688	%			03:55:52
2	Ag 328.068†	9.8	38.2	0.3412	µg/L	0.3412	ppb	03:55:58
2	As 188.979†	0.7	-1.8	-3.4745	µg/L	-3.4745	ppb	03:56:18
2	B 249.677†	128.1	-27.3	-1.2109	µg/L	-1.2109	ppb	03:55:58
2	Ba 233.527†	-72.7	7.8	0.1956	µg/L	0.1956	ppb	03:56:18
2	Be 313.107†	3638.2	34.4	0.0217	µg/L	0.0217	ppb	03:55:58
2	Cd 226.502†	-83.7	17.0	0.4526	µg/L	0.4526	ppb	03:56:18
2	Co 228.616†	-66.4	5.2	0.2483	µg/L	0.2483	ppb	03:56:18
2	Cr 267.716†	-118.5	4.1	0.0847	µg/L	0.0847	ppb	03:55:58
2	Cu 324.752†	3364.2	-13.0	-0.0914	µg/L	-0.0914	ppb	03:55:58
2	Mn 257.610†	-223.6	-1.4	-0.0044	µg/L	-0.0044	ppb	03:56:18
2	Mo 202.031†	-6.2	1.7	0.1850	µg/L	0.1850	ppb	03:56:18
2	Ni 231.604†	292.9	-5.9	-0.3189	µg/L	-0.3189	ppb	03:56:18
2	P 214.914†	203.7	-1.9	-4.0422	µg/L	-4.0422	ppb	03:56:18
2	Pb 220.353†	64.7	10.7	2.7023	µg/L	2.7023	ppb	03:56:18

2	S 181.975 Axial†	22.8	-1.1	-5.8998 µg/L	-5.8998 ppb	03:56:18
2	Sb 206.836†	27.2	6.7	6.6560 µg/L	6.6560 ppb	03:56:18
2	Se 196.026†	12.8	-1.3	-1.8851 µg/L	-1.8851 ppb	03:56:18
2	SiO2†	2038.6	61.3	11.697 µg/L	11.697 ppb	03:55:58
2	Si 251.611†	357.8	8.9	0.6747 µg/L	0.6747 ppb	03:56:18
2	Sn 189.927†	21.7	-0.7	-0.3291 µg/L	-0.3291 ppb	03:56:18
2	Ti 334.940†	787.0	69.8	0.1560 µg/L	0.1560 ppb	03:55:58
2	Tl 190.801†	-15.1	6.3	9.4451 µg/L	9.4451 ppb	03:56:18
2	U 409.014†	734.2	56.6	5.3120 µg/L	5.3120 ppb	03:55:58
2	V 292.402†	-87.1	4.7	0.0624 µg/L	0.0624 ppb	03:55:58
2	Zn 213.857†	539.0	-10.0	-0.2671 µg/L	-0.2671 ppb	03:56:18
3	Sc RADIAL	111160.1	111160.1	98.8 %		03:54:49
3	Al 396.153Radial†	156.8	-71.1	-35.976 µg/L	-35.976 ppb	03:54:49
3	Ca 317.933Radial†	427.2	-63.1	-25.067 µg/L	-25.067 ppb	03:55:10
3	Fe 238.204 Radial†	8.4	-2.7	-14.000 µg/L	-14.000 ppb	03:55:10
3	K 766.490 Radial†	724.0	37.7	20.461 µg/L	20.461 ppb	03:54:49
3	Mg 279.077 IEC†	10.9	-8.8	-48.594 µg/L	-48.594 ppb	03:55:10
3	Na 589.592 Radial†	-703.9	-8.3	-2.3161 µg/L	-2.3161 ppb	03:54:49
3	Sr 421.552†	-72.5	-9.6	-0.0539 µg/L	-0.0539 ppb	03:54:49
3	Sc 361.383	2041907.0	2041907.0	99.279 %		03:56:24
3	Y 371.029	1242379.5	1242379.5	99.203 %		03:56:24
3	Ag 328.068†	4.9	33.3	0.2956 µg/L	0.2956 ppb	03:56:30
3	As 188.979†	6.1	3.6	6.9521 µg/L	6.9521 ppb	03:56:50
3	B 249.677†	169.3	14.8	0.6624 µg/L	0.6624 ppb	03:56:30
3	Ba 233.527†	-82.1	-2.0	-0.0515 µg/L	-0.0515 ppb	03:56:50
3	Be 313.107†	3638.3	53.2	0.0336 µg/L	0.0336 ppb	03:56:30
3	Cd 226.502†	-92.9	7.4	0.2008 µg/L	0.2008 ppb	03:56:50
3	Co 228.616†	-73.4	-2.2	-0.1048 µg/L	-0.1048 ppb	03:56:50
3	Cr 267.716†	-120.0	1.9	0.0391 µg/L	0.0391 ppb	03:56:30
3	Cu 324.752†	3359.6	-0.3	-0.0053 µg/L	-0.0053 ppb	03:56:30
3	Mn 257.610†	-207.6	13.6	0.0414 µg/L	0.0414 ppb	03:56:50
3	Mo 202.031†	-3.4	4.4	0.4953 µg/L	0.4953 ppb	03:56:50
3	Ni 231.604†	282.4	-14.9	-0.8132 µg/L	-0.8132 ppb	03:56:50
3	P 214.914†	201.8	-2.7	-5.9402 µg/L	-5.9402 ppb	03:56:50
3	Pb 220.353†	67.4	13.8	3.4938 µg/L	3.4938 ppb	03:56:50
3	S 181.975 Axial†	23.8	-0.0	-0.2234 µg/L	-0.2234 ppb	03:56:50
3	Sb 206.836†	20.0	-0.4	-0.3605 µg/L	-0.3605 ppb	03:56:50
3	Se 196.026†	8.4	-5.6	-8.1707 µg/L	-8.1707 ppb	03:56:50
3	SiO2†	1995.2	28.0	5.3489 µg/L	5.3489 ppb	03:56:30
3	Si 251.611†	376.4	29.5	2.3255 µg/L	2.3255 ppb	03:56:50
3	Sn 189.927†	17.9	-4.4	-2.1598 µg/L	-2.1598 ppb	03:56:50
3	Ti 334.940†	755.4	42.0	0.0946 µg/L	0.0946 ppb	03:56:30
3	Tl 190.801†	-19.3	2.0	3.0319 µg/L	3.0319 ppb	03:56:50
3	U 409.014†	766.6	93.0	8.7360 µg/L	8.7360 ppb	03:56:30
3	V 292.402†	-98.0	-6.8	-0.0597 µg/L	-0.0597 ppb	03:56:30
3	Zn 213.857†	542.3	-3.9	-0.0984 µg/L	-0.0984 ppb	03:56:50

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2041968.3	99.282	%	0.5062				0.51%
Sc RADIAL	111194.4	98.9	%	0.04				0.04%
Y 371.029	1242498.2	99.213	%	0.4706				0.47%
Ag 328.068†	19.2	0.1704	µg/L	0.25739	0.1704	ppb	0.25739	151.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-41.4	-20.950	µg/L	13.1373	-20.950	ppb	13.1373	62.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	2.8089	µg/L	5.53297	2.8089	ppb	5.53297	196.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-1.0	-0.0414	µg/L	1.01974	-0.0414	ppb	1.01974	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0423	µg/L	0.13388	0.0423	ppb	0.13388	316.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	56.7	0.0358	µg/L	0.01534	0.0358	ppb	0.01534	42.83%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-62.4	-24.756	µg/L	1.4636	-24.756	ppb	1.4636	5.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.0	0.2679	µg/L	0.16195	0.2679	ppb	0.16195	60.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.5	-0.0219	µg/L	0.23973	-0.0219	ppb	0.23973	>999.9%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -0.1     -0.0028 µg/L       0.11437     -0.0028 ppb        0.11437 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                11.2      0.0770 µg/L       0.22143      0.0770 ppb        0.22143 287.39%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -9.1191 µg/L       7.96867     -9.1191 ppb        7.96867  87.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†           9.9      5.3761 µg/L      26.33729      5.3761 ppb       26.33729 489.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.7     -20.723 µg/L       26.3622     -20.723 ppb        26.3622 127.21%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 3.5      0.0100 µg/L       0.02717      0.0100 ppb        0.02717 271.35%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4228 µg/L       0.21100      0.4228 ppb        0.21100  49.91%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -16.5     -4.5865 µg/L       2.11812     -4.5865 ppb        2.11812  46.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.7     -0.4171 µg/L       0.35721     -0.4171 ppb        0.35721  85.64%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.2      2.5291 µg/L      13.06006      2.5291 ppb       13.06006 516.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.2      3.0809 µg/L       0.39690      3.0809 ppb        0.39690  12.88%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0     -5.3625 µg/L       4.89263     -5.3625 ppb        4.89263  91.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.9      0.9143 µg/L       5.22225      0.9143 ppb        5.22225 571.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.0     -1.4298 µg/L       6.97972     -1.4298 ppb        6.97972 488.16%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      31.8      6.0710 µg/L       5.30197      6.0710 ppb        5.30197  87.33%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                11.7      0.9347 µg/L       1.28074      0.9347 ppb        1.28074 137.02%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.9     -1.4087 µg/L       0.95858     -1.4087 ppb        0.95858  68.05%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -11.5     -0.0645 µg/L       0.19641     -0.0645 ppb        0.19641 304.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                35.5      0.0800 µg/L       0.08416      0.0800 ppb        0.08416 105.13%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.2      3.3338 µg/L       5.96605      3.3338 ppb        5.96605 178.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 52.4      4.9232 µg/L       4.02130      4.9232 ppb        4.02130  81.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  1.3      0.0253 µg/L       0.07374      0.0253 ppb        0.07374 292.00%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -6.1     -0.1586 µg/L       0.09414     -0.1586 ppb        0.09414  59.34%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Analysis Begun

Start Time: 12/18/2009 03:57:38
Logged In Analyst: optima
Spectrometer Model: Optima 4300 DV, S/N 077N1030502

Plasma On Time: 12/17/2009 20:21:18
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121609H.SIF
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 03:57:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113225.2	113225.2	101	%			03:58:14
1	Al 396.153Radial†	10212.2	9915.2	4992.2	µg/L	4992.2	ppb	03:58:14
1	Ca 317.933Radial†	13134.0	12552.1	4982.6	µg/L	4982.6	ppb	03:58:34
1	Fe 238.204 Radial†	990.8	973.1	5128.2	µg/L	5128.2	ppb	03:58:34
1	K 766.490 Radial†	9903.2	9143.1	4957.4	µg/L	4957.4	ppb	03:58:14
1	Mg 279.077 IEC†	950.7	924.6	5133.4	µg/L	5133.4	ppb	03:58:34
1	Na 589.592 Radial†	35684.4	36153.5	10031	µg/L	10031	ppb	03:58:14
1	Sr 421.552†	88051.0	87535.4	493.08	µg/L	493.08	ppb	03:58:14
1	Sc 361.383	2059590.1	2059590.1	100.14	%			03:59:38
1	Y 371.029	1247790.1	1247790.1	99.635	%			03:59:38
1	Ag 328.068†	55549.0	55500.5	499.49	µg/L	499.49	ppb	03:59:43
1	As 188.979†	273.6	270.8	515.07	µg/L	515.07	ppb	04:00:04
1	B 249.677†	11323.6	11152.2	493.37	µg/L	493.37	ppb	03:59:43
1	Ba 233.527†	19728.0	19781.4	497.89	µg/L	497.89	ppb	03:59:43
1	Be 313.107†	800498.4	795780.7	503.21	µg/L	503.21	ppb	03:59:38
1	Cd 226.502†	18801.0	18875.9	499.31	µg/L	499.31	ppb	03:59:43
1	Co 228.616†	10268.1	10325.7	496.66	µg/L	496.66	ppb	03:59:43
1	Cr 267.716†	23705.1	23795.1	496.48	µg/L	496.48	ppb	03:59:43
1	Cu 324.752†	73953.4	70466.9	496.87	µg/L	496.87	ppb	03:59:43
1	Mn 257.610†	158680.5	158683.8	504.23	µg/L	504.23	ppb	03:59:38
1	Mo 202.031†	4414.6	4416.4	492.90	µg/L	492.90	ppb	04:00:04
1	Ni 231.604†	9489.9	9177.4	499.97	µg/L	499.97	ppb	03:59:43
1	P 214.914†	1366.6	1158.7	2461.3	µg/L	2461.3	ppb	04:00:04
1	Pb 220.353†	2040.3	1983.3	503.49	µg/L	503.49	ppb	04:00:04
1	S 181.975 Axial†	218.4	194.0	995.48	µg/L	995.48	ppb	04:00:04
1	Sb 206.836†	524.3	503.0	497.70	µg/L	497.70	ppb	04:00:04
1	Se 196.026†	361.1	346.5	506.81	µg/L	506.81	ppb	04:00:04
1	SiO2†	30172.4	28149.0	5375.4	µg/L	5375.4	ppb	03:59:43
1	Si 251.611†	33199.4	32803.9	2465.1	µg/L	2465.1	ppb	03:59:43
1	Sn 189.927†	1035.4	1011.5	495.89	µg/L	495.89	ppb	04:00:04
1	Ti 334.940†	226194.1	225162.7	498.82	µg/L	498.82	ppb	03:59:38
1	Tl 190.801†	309.1	330.1	500.46	µg/L	500.46	ppb	04:00:04
1	U 409.014†	5972.6	5285.2	495.50	µg/L	495.50	ppb	03:59:43
1	V 292.402†	43935.4	43966.7	500.31	µg/L	500.31	ppb	03:59:43
1	Zn 213.857†	19278.9	18702.1	497.09	µg/L	497.09	ppb	03:59:43
2	Sc RADIAL	113434.0	113434.0	101	%			03:58:40
2	Al 396.153Radial†	10340.8	10024.1	5047.1	µg/L	5047.1	ppb	03:58:40
2	Ca 317.933Radial†	13180.1	12573.8	4991.2	µg/L	4991.2	ppb	03:59:00
2	Fe 238.204 Radial†	994.4	974.8	5137.4	µg/L	5137.4	ppb	03:59:00
2	K 766.490 Radial†	9975.3	9196.6	4986.3	µg/L	4986.3	ppb	03:58:40
2	Mg 279.077 IEC†	950.7	922.9	5123.8	µg/L	5123.8	ppb	03:59:00
2	Na 589.592 Radial†	36123.8	36523.9	10134	µg/L	10134	ppb	03:58:40
2	Sr 421.552†	89326.6	88639.2	499.30	µg/L	499.30	ppb	03:58:40
2	Sc 361.383	2058533.2	2058533.2	100.09	%			04:00:11
2	Y 371.029	1242568.5	1242568.5	99.218	%			04:00:11
2	Ag 328.068†	55604.1	55584.1	500.24	µg/L	500.24	ppb	04:00:17
2	As 188.979†	270.8	268.1	509.96	µg/L	509.96	ppb	04:00:37

2	B 249.677†	11286.6	11121.1	491.98 µg/L	491.98 ppb	04:00:17
2	Ba 233.527†	19711.5	19775.1	497.73 µg/L	497.73 ppb	04:00:17
2	Be 313.107†	799692.1	795385.6	502.96 µg/L	502.96 ppb	04:00:11
2	Cd 226.502†	18779.5	18864.1	498.99 µg/L	498.99 ppb	04:00:17
2	Co 228.616†	10322.9	10385.7	499.55 µg/L	499.55 ppb	04:00:17
2	Cr 267.716†	23746.5	23848.6	497.60 µg/L	497.60 ppb	04:00:17
2	Cu 324.752†	74181.5	70732.7	498.74 µg/L	498.74 ppb	04:00:17
2	Mn 257.610†	158756.1	158840.8	504.73 µg/L	504.73 ppb	04:00:11
2	Mo 202.031†	4436.3	4440.4	495.57 µg/L	495.57 ppb	04:00:37
2	Ni 231.604†	9491.4	9183.8	500.32 µg/L	500.32 ppb	04:00:17
2	P 214.914†	1374.7	1167.5	2480.2 µg/L	2480.2 ppb	04:00:37
2	Pb 220.353†	2045.5	1989.6	505.08 µg/L	505.08 ppb	04:00:37
2	S 181.975 Axial†	215.4	191.1	980.54 µg/L	980.54 ppb	04:00:37
2	Sb 206.836†	526.8	505.8	500.39 µg/L	500.39 ppb	04:00:37
2	Se 196.026†	365.9	351.5	514.12 µg/L	514.12 ppb	04:00:37
2	SiO2†	30231.6	28223.7	5389.7 µg/L	5389.7 ppb	04:00:17
2	Si 251.611†	33271.4	32892.8	2471.6 µg/L	2471.6 ppb	04:00:17
2	Sn 189.927†	1048.8	1025.4	502.64 µg/L	502.64 ppb	04:00:37
2	Ti 334.940†	226450.0	225534.3	499.64 µg/L	499.64 ppb	04:00:11
2	Tl 190.801†	313.1	334.2	506.78 µg/L	506.78 ppb	04:00:37
2	U 409.014†	5974.2	5289.8	495.93 µg/L	495.93 ppb	04:00:17
2	V 292.402†	44015.0	44068.7	501.48 µg/L	501.48 ppb	04:00:17
2	Zn 213.857†	19342.5	18775.5	499.05 µg/L	499.05 ppb	04:00:17
3	Sc RADIAL	113583.8	113583.8	101 %		03:59:06
3	Al 396.153Radial†	10279.6	9949.9	5009.6 µg/L	5009.6 ppb	03:59:06
3	Ca 317.933Radial†	13170.9	12547.5	4980.8 µg/L	4980.8 ppb	03:59:26
3	Fe 238.204 Radial†	1000.2	979.3	5160.5 µg/L	5160.5 ppb	03:59:26
3	K 766.490 Radial†	10025.2	9232.9	5006.0 µg/L	5006.0 ppb	03:59:06
3	Mg 279.077 IEC†	954.6	925.5	5138.2 µg/L	5138.2 ppb	03:59:26
3	Na 589.592 Radial†	35933.8	36288.5	10069 µg/L	10069 ppb	03:59:06
3	Sr 421.552†	88869.7	88069.9	496.09 µg/L	496.09 ppb	03:59:06
3	Sc 361.383	2055803.8	2055803.8	99.954 %		04:00:44
3	Y 371.029	1244049.6	1244049.6	99.337 %		04:00:44
3	Ag 328.068†	55529.9	55583.6	500.23 µg/L	500.23 ppb	04:00:50
3	As 188.979†	268.7	266.3	506.61 µg/L	506.61 ppb	04:01:10
3	B 249.677†	11231.8	11081.2	490.20 µg/L	490.20 ppb	04:00:50
3	Ba 233.527†	19683.9	19773.6	497.69 µg/L	497.69 ppb	04:00:50
3	Be 313.107†	791543.4	788293.9	498.48 µg/L	498.48 ppb	04:00:44
3	Cd 226.502†	18740.0	18849.5	498.61 µg/L	498.61 ppb	04:00:50
3	Co 228.616†	10277.6	10354.0	498.03 µg/L	498.03 ppb	04:00:50
3	Cr 267.716†	23644.4	23778.0	496.12 µg/L	496.12 ppb	04:00:50
3	Cu 324.752†	74053.8	70703.4	498.54 µg/L	498.54 ppb	04:00:50
3	Mn 257.610†	156897.8	157192.2	499.50 µg/L	499.50 ppb	04:00:44
3	Mo 202.031†	4429.3	4439.2	495.44 µg/L	495.44 ppb	04:01:10
3	Ni 231.604†	9462.9	9167.8	499.45 µg/L	499.45 ppb	04:00:50
3	P 214.914†	1363.8	1158.5	2460.6 µg/L	2460.6 ppb	04:01:10
3	Pb 220.353†	2039.6	1986.4	504.26 µg/L	504.26 ppb	04:01:10
3	S 181.975 Axial†	217.6	193.7	993.48 µg/L	993.48 ppb	04:01:10
3	Sb 206.836†	529.9	509.6	504.23 µg/L	504.23 ppb	04:01:10
3	Se 196.026†	367.2	353.3	516.80 µg/L	516.80 ppb	04:01:10
3	SiO2†	30051.0	28083.1	5362.9 µg/L	5362.9 ppb	04:00:50
3	Si 251.611†	33121.7	32787.2	2463.6 µg/L	2463.6 ppb	04:00:50
3	Sn 189.927†	1048.8	1026.8	503.32 µg/L	503.32 ppb	04:01:10
3	Ti 334.940†	224162.7	223546.3	495.23 µg/L	495.23 ppb	04:00:44
3	Tl 190.801†	313.2	334.8	507.50 µg/L	507.50 ppb	04:01:10
3	U 409.014†	6081.2	5404.8	506.73 µg/L	506.73 ppb	04:00:50
3	V 292.402†	43835.2	43947.2	500.13 µg/L	500.13 ppb	04:00:50
3	Zn 213.857†	19270.0	18728.7	497.80 µg/L	497.80 ppb	04:00:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2057975.7	100.06	%	0.095				0.09%
Sc RADIAL	113414.3	101	%	0.2				0.16%
Y 371.029	1244802.7	99.397	%	0.2149				0.22%
Ag 328.068†	55556.1	499.99	µg/L	0.433	499.99	ppb	0.433	0.09%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	9963.1	5016.3	µg/L	28.06	5016.3	ppb	28.06	0.56%
QC value within limits for Al 396.153Radial Recovery = 100.33%								
As 188.979†	268.4	510.55	µg/L	4.260	510.55	ppb	4.260	0.83%

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   QC value within limits for As 188.979  Recovery = 102.11%
B 249.677†            11118.2      491.85 µg/L        1.585      491.85 ppb          1.585   0.32%
   QC value within limits for B 249.677  Recovery = 98.37%
Ba 233.527†           19776.7      497.77 µg/L        0.103      497.77 ppb          0.103   0.02%
   QC value within limits for Ba 233.527  Recovery = 99.55%
Be 313.107†          793153.4      501.55 µg/L        2.664      501.55 ppb          2.664   0.53%
   QC value within limits for Be 313.107  Recovery = 100.31%
Ca 317.933Radial†     12557.8      4984.9 µg/L         5.59      4984.9 ppb           5.59   0.11%
   QC value within limits for Ca 317.933Radial  Recovery = 99.70%
Cd 226.502†           18863.2      498.97 µg/L        0.348      498.97 ppb          0.348   0.07%
   QC value within limits for Cd 226.502  Recovery = 99.79%
Co 228.616†           10355.1      498.08 µg/L        1.446      498.08 ppb          1.446   0.29%
   QC value within limits for Co 228.616  Recovery = 99.62%
Cr 267.716†           23807.2      496.73 µg/L        0.768      496.73 ppb          0.768   0.15%
   QC value within limits for Cr 267.716  Recovery = 99.35%
Cu 324.752†           70634.3      498.05 µg/L        1.028      498.05 ppb          1.028   0.21%
   QC value within limits for Cu 324.752  Recovery = 99.61%
Fe 238.204 Radial†      975.7      5142.0 µg/L        16.66      5142.0 ppb          16.66   0.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.84%
K 766.490 Radial†      9190.9      4983.3 µg/L        24.48      4983.3 ppb          24.48   0.49%
   QC value within limits for K 766.490 Radial  Recovery = 99.67%
Mg 279.077 IEC†         924.3      5131.8 µg/L         7.36      5131.8 ppb           7.36   0.14%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.64%
Mn 257.610†          158238.9      502.82 µg/L        2.886      502.82 ppb          2.886   0.57%
   QC value within limits for Mn 257.610  Recovery = 100.56%
Mo 202.031†            4432.0      494.64 µg/L        1.509 ❋    494.64 ppb          1.509   0.31%
   QC value within limits for Mo 202.031  Recovery = 98.93%
Na 589.592 Radial†    36322.0       10078 µg/L         52.0       10078 ppb           52.0   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 100.78%
Ni 231.604†            9176.3      499.91 µg/L        0.438      499.91 ppb          0.438   0.09%
   QC value within limits for Ni 231.604  Recovery = 99.98%
P 214.914†             1161.6      2467.4 µg/L        11.14      2467.4 ppb          11.14   0.45%
   QC value within limits for P 214.914  Recovery = 98.70%
Pb 220.353†            1986.4      504.28 µg/L        0.799      504.28 ppb          0.799   0.16%
   QC value within limits for Pb 220.353  Recovery = 100.86%
S 181.975 Axial†        192.9      989.83 µg/L        8.111      989.83 ppb          8.111   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 98.98%
Sb 206.836†             506.2      500.78 µg/L        3.283      500.78 ppb          3.283   0.66%
   QC value within limits for Sb 206.836  Recovery = 100.16%
Se 196.026†             350.4      512.58 µg/L        5.173      512.58 ppb          5.173   1.01%
   QC value within limits for Se 196.026  Recovery = 102.52%
SiO2†                 28151.9      5376.0 µg/L        13.43      5376.0 ppb          13.43   0.25%
   QC value within limits for SiO2  Recovery = 100.53%
Si 251.611†           32828.0      2466.8 µg/L         4.23      2466.8 ppb           4.23   0.17%
   QC value within limits for Si 251.611  Recovery = 98.67%
Sn 189.927†            1021.2      500.62 µg/L        4.111      500.62 ppb          4.111   0.82%
   QC value within limits for Sn 189.927  Recovery = 100.12%
Sr 421.552†           88081.5      496.16 µg/L        3.109      496.16 ppb          3.109   0.63%
   QC value within limits for Sr 421.552  Recovery = 99.23%
Ti 334.940†          224747.8      497.90 µg/L        2.343      497.90 ppb          2.343   0.47%
   QC value within limits for Ti 334.940  Recovery = 99.58%
Tl 190.801†             333.0      504.91 µg/L        3.874      504.91 ppb          3.874   0.77%
   QC value within limits for Tl 190.801  Recovery = 100.98%
U 409.014†             5326.6      499.39 µg/L        6.360      499.39 ppb          6.360   1.27%
   QC value within limits for U 409.014  Recovery = 99.88%
V 292.402†            43994.2      500.64 µg/L        0.734      500.64 ppb          0.734   0.15%
   QC value within limits for V 292.402  Recovery = 100.13%
Zn 213.857†           18735.5      497.98 µg/L        0.993      497.98 ppb          0.993   0.20%
   QC value within limits for Zn 213.857  Recovery = 99.60%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 04:01:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111731.7	111731.7	99.3	%			04:01:55
1	Al 396.153Radial†	586.8	360.9	182.00	µg/L	182.00	ppb	04:01:55
1	Ca 317.933Radial†	946.4	457.3	181.53	µg/L	181.53	ppb	04:02:15
1	Fe 238.204 Radial†	29.4	18.4	96.915	µg/L	96.915	ppb	04:02:15
1	K 766.490 Radial†	974.6	286.2	155.20	µg/L	155.20	ppb	04:01:55
1	Mg 279.077 IEC†	72.7	53.3	295.85	µg/L	295.85	ppb	04:02:15
1	Na 589.592 Radial†	357.3	1063.6	295.11	µg/L	295.11	ppb	04:01:55
1	Sr 421.552†	846.2	915.6	5.1576	µg/L	5.1576	ppb	04:01:55
1	Sc 361.383	2032203.5	2032203.5	98.807	%			04:03:18
1	Y 371.029	1236025.4	1236025.4	98.696	%			04:03:18
1	Ag 328.068†	524.8	559.4	5.0406	µg/L	5.0406	ppb	04:03:23
1	As 188.979†	19.4	17.2	32.697	µg/L	32.697	ppb	04:03:44
1	B 249.677†	1237.5	1096.7	48.646	µg/L	48.646	ppb	04:03:23
1	Ba 233.527†	122.6	204.8	5.1550	µg/L	5.1550	ppb	04:03:44
1	Be 313.107†	11527.0	8054.7	5.0933	µg/L	5.0933	ppb	04:03:23
1	Cd 226.502†	101.6	203.7	5.4217	µg/L	5.4217	ppb	04:03:44
1	Co 228.616†	36.5	108.7	5.2388	µg/L	5.2388	ppb	04:03:44
1	Cr 267.716†	114.8	238.9	4.9861	µg/L	4.9861	ppb	04:03:23
1	Cu 324.752†	4729.0	1401.8	9.8830	µg/L	9.8830	ppb	04:03:23
1	Mn 257.610†	3036.6	3295.9	10.472	µg/L	10.472	ppb	04:03:23
1	Mo 202.031†	84.1	93.0	10.377	µg/L	10.377	ppb	04:03:44
1	Ni 231.604†	397.6	103.0	5.6100	µg/L	5.6100	ppb	04:03:44
1	P 214.914†	281.7	79.1	170.69	µg/L	170.69	ppb	04:03:44
1	Pb 220.353†	102.6	49.7	12.582	µg/L	12.582	ppb	04:03:44
1	S 181.975 Axial†	39.4	15.8	81.352	µg/L	81.352	ppb	04:03:44
1	Sb 206.836†	30.2	10.0	9.8939	µg/L	9.8939	ppb	04:03:44
1	Se 196.026†	28.4	14.7	21.371	µg/L	21.371	ppb	04:03:44
1	SiO2†	3098.5	1154.3	220.42	µg/L	220.42	ppb	04:03:23
1	Si 251.611†	1650.4	1320.7	100.36	µg/L	100.36	ppb	04:03:44
1	Sn 189.927†	41.5	19.6	9.6450	µg/L	9.6450	ppb	04:03:44
1	Ti 334.940†	3104.0	2422.6	5.3598	µg/L	5.3598	ppb	04:03:23
1	Tl 190.801†	-6.2	15.1	22.841	µg/L	22.841	ppb	04:03:44
1	U 409.014†	1248.2	584.0	54.833	µg/L	54.833	ppb	04:03:23
1	V 292.402†	377.2	473.7	5.5096	µg/L	5.5096	ppb	04:03:23
1	Zn 213.857†	935.5	396.6	10.565	µg/L	10.565	ppb	04:03:44
2	Sc RADIAL	112010.0	112010.0	99.6	%			04:02:21
2	Al 396.153Radial†	594.7	367.4	185.27	µg/L	185.27	ppb	04:02:21
2	Ca 317.933Radial†	942.4	450.9	178.97	µg/L	178.97	ppb	04:02:41
2	Fe 238.204 Radial†	29.7	18.6	97.789	µg/L	97.789	ppb	04:02:41
2	K 766.490 Radial†	1034.7	344.2	186.61	µg/L	186.61	ppb	04:02:21
2	Mg 279.077 IEC†	75.7	56.2	311.66	µg/L	311.66	ppb	04:02:41
2	Na 589.592 Radial†	419.2	1124.9	312.11	µg/L	312.11	ppb	04:02:21
2	Sr 421.552†	852.6	920.0	5.1822	µg/L	5.1822	ppb	04:02:21
2	Sc 361.383	2036893.6	2036893.6	99.035	%			04:03:50
2	Y 371.029	1240537.7	1240537.7	99.056	%			04:03:50
2	Ag 328.068†	514.9	548.2	4.9412	µg/L	4.9412	ppb	04:03:55
2	As 188.979†	12.8	10.5	19.916	µg/L	19.916	ppb	04:04:16
2	B 249.677†	1233.7	1090.0	48.348	µg/L	48.348	ppb	04:03:55
2	Ba 233.527†	126.7	208.6	5.2502	µg/L	5.2502	ppb	04:04:16
2	Be 313.107†	11459.1	7959.3	5.0330	µg/L	5.0330	ppb	04:03:55
2	Cd 226.502†	98.2	200.1	5.3274	µg/L	5.3274	ppb	04:04:16
2	Co 228.616†	37.8	109.9	5.2978	µg/L	5.2978	ppb	04:04:16
2	Cr 267.716†	126.0	250.0	5.2175	µg/L	5.2175	ppb	04:03:55
2	Cu 324.752†	4744.0	1405.9	9.9121	µg/L	9.9121	ppb	04:03:55
2	Mn 257.610†	3027.3	3279.5	10.420	µg/L	10.420	ppb	04:03:55
2	Mo 202.031†	87.3	96.0	10.715	µg/L	10.715	ppb	04:04:16
2	Ni 231.604†	390.3	94.7	5.1602	µg/L	5.1602	ppb	04:04:16
2	P 214.914†	267.8	64.4	138.87	µg/L	138.87	ppb	04:04:16
2	Pb 220.353†	106.3	53.2	13.473	µg/L	13.473	ppb	04:04:16

2	S 181.975 Axial†	38.8	15.1	77.769 µg/L	77.769 ppb	04:04:16
2	Sb 206.836†	33.4	13.2	13.077 µg/L	13.077 ppb	04:04:16
2	Se 196.026†	34.1	20.3	29.529 µg/L	29.529 ppb	04:04:16
2	SiO2†	3116.2	1164.9	222.46 µg/L	222.46 ppb	04:03:55
2	Si 251.611†	1646.0	1312.4	99.681 µg/L	99.681 ppb	04:04:16
2	Sn 189.927†	42.8	20.8	10.246 µg/L	10.246 ppb	04:04:16
2	Ti 334.940†	3055.4	2366.3	5.2350 µg/L	5.2350 ppb	04:03:55
2	Tl 190.801†	-3.5	17.9	27.060 µg/L	27.060 ppb	04:04:16
2	U 409.014†	1300.3	633.8	59.506 µg/L	59.506 ppb	04:03:55
2	V 292.402†	389.9	485.7	5.6544 µg/L	5.6544 ppb	04:03:55
2	Zn 213.857†	940.0	399.0	10.631 µg/L	10.631 ppb	04:04:16
3	Sc RADIAL	111506.6	111506.6	99.1 %		04:02:47
3	Al 396.153Radial†	622.4	398.1	200.78 µg/L	200.78 ppb	04:02:47
3	Ca 317.933Radial†	938.3	451.1	179.05 µg/L	179.05 ppb	04:03:07
3	Fe 238.204 Radial†	29.4	18.5	97.349 µg/L	97.349 ppb	04:03:07
3	K 766.490 Radial†	1072.3	386.8	209.71 µg/L	209.71 ppb	04:02:47
3	Mg 279.077 IEC†	69.3	50.1	278.00 µg/L	278.00 ppb	04:03:07
3	Na 589.592 Radial†	394.2	1101.6	305.65 µg/L	305.65 ppb	04:02:47
3	Sr 421.552†	875.1	946.5	5.3317 µg/L	5.3317 ppb	04:02:47
3	Sc 361.383	2035292.1	2035292.1	98.957 %		04:04:22
3	Y 371.029	1239662.0	1239662.0	98.986 %		04:04:22
3	Ag 328.068†	534.8	568.8	5.1228 µg/L	5.1228 ppb	04:04:27
3	As 188.979†	12.8	10.4	19.787 µg/L	19.787 ppb	04:04:48
3	B 249.677†	1251.7	1109.2	49.200 µg/L	49.200 ppb	04:04:27
3	Ba 233.527†	125.1	207.1	5.2120 µg/L	5.2120 ppb	04:04:48
3	Be 313.107†	11540.4	8050.5	5.0907 µg/L	5.0907 ppb	04:04:27
3	Cd 226.502†	95.6	197.5	5.2573 µg/L	5.2573 ppb	04:04:48
3	Co 228.616†	29.4	101.4	4.8905 µg/L	4.8905 ppb	04:04:48
3	Cr 267.716†	94.8	218.6	4.5616 µg/L	4.5616 ppb	04:04:27
3	Cu 324.752†	4787.3	1453.5	10.247 µg/L	10.247 ppb	04:04:27
3	Mn 257.610†	3060.4	3315.3	10.534 µg/L	10.534 ppb	04:04:27
3	Mo 202.031†	81.9	90.7	10.122 µg/L	10.122 ppb	04:04:48
3	Ni 231.604†	384.4	89.1	4.8523 µg/L	4.8523 ppb	04:04:48
3	P 214.914†	279.4	76.4	164.66 µg/L	164.66 ppb	04:04:48
3	Pb 220.353†	118.7	65.8	16.664 µg/L	16.664 ppb	04:04:48
3	S 181.975 Axial†	38.5	14.9	76.352 µg/L	76.352 ppb	04:04:48
3	Sb 206.836†	29.7	9.4	9.3443 µg/L	9.3443 ppb	04:04:48
3	Se 196.026†	30.3	16.5	23.978 µg/L	23.978 ppb	04:04:48
3	SiO2†	3119.3	1170.5	223.52 µg/L	223.52 ppb	04:04:27
3	Si 251.611†	1631.6	1299.1	98.727 µg/L	98.727 ppb	04:04:48
3	Sn 189.927†	39.9	17.8	8.8048 µg/L	8.8048 ppb	04:04:48
3	Ti 334.940†	3016.0	2328.9	5.1522 µg/L	5.1522 ppb	04:04:27
3	Tl 190.801†	-8.1	13.2	19.944 µg/L	19.944 ppb	04:04:48
3	U 409.014†	1269.8	604.0	56.705 µg/L	56.705 ppb	04:04:27
3	V 292.402†	359.6	455.3	5.3033 µg/L	5.3033 ppb	04:04:27
3	Zn 213.857†	924.4	384.0	10.231 µg/L	10.231 ppb	04:04:48

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2034796.4	98.933	%	0.1159				0.12%
Sc RADIAL	111749.4	99.4	%	0.22				0.23%
Y 371.029	1238741.7	98.913	%	0.1911				0.19%
Ag 328.068†	558.8	5.0349	µg/L	0.09092	5.0349	ppb	0.09092	1.81%
QC value within limits for Ag 328.068 Recovery = 100.70%								
Al 396.153Radial†	375.5	189.35	µg/L	10.034	189.35	ppb	10.034	5.30%
QC value within limits for Al 396.153Radial Recovery = 94.68%								
As 188.979†	12.7	24.133	µg/L	7.4166	24.133	ppb	7.4166	30.73%
QC value within limits for As 188.979 Recovery = 80.44%								
B 249.677†	1098.7	48.731	µg/L	0.4327	48.731	ppb	0.4327	0.89%
QC value within limits for B 249.677 Recovery = 97.46%								
Ba 233.527†	206.8	5.2057	µg/L	0.04791	5.2057	ppb	0.04791	0.92%
QC value within limits for Ba 233.527 Recovery = 104.11%								
Be 313.107†	8021.5	5.0723	µg/L	0.03411	5.0723	ppb	0.03411	0.67%
QC value within limits for Be 313.107 Recovery = 101.45%								
Ca 317.933Radial†	453.1	179.85	µg/L	1.452	179.85	ppb	1.452	0.81%
QC value within limits for Ca 317.933Radial Recovery = 89.93%								
Cd 226.502†	200.4	5.3354	µg/L	0.08251	5.3354	ppb	0.08251	1.55%
QC value within limits for Cd 226.502 Recovery = 106.71%								
Co 228.616†	106.7	5.1424	µg/L	0.22007	5.1424	ppb	0.22007	4.28%

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   QC value within limits for Co 228.616  Recovery = 102.85%
Cr 267.716†              235.8      4.9217 µg/L       0.33264      4.9217 ppb        0.33264   6.76%
   QC value within limits for Cr 267.716  Recovery = 98.43%
Cu 324.752†             1420.4      10.014 µg/L        0.2022      10.014 ppb         0.2022   2.02%
   QC value within limits for Cu 324.752  Recovery = 100.14%
Fe 238.204 Radial†        18.5      97.351 µg/L        0.4373      97.351 ppb         0.4373   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.35%
K 766.490 Radial†        339.1      183.84 µg/L        27.360      183.84 ppb         27.360  14.88%
   QC value within limits for K 766.490 Radial  Recovery = 122.56%
Mg 279.077 IEC†           53.2      295.17 µg/L        16.839      295.17 ppb         16.839   5.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.39%
Mn 257.610†             3296.9      10.475 µg/L        0.0569      10.475 ppb         0.0569   0.54%
   QC value within limits for Mn 257.610  Recovery = 104.75%
Mo 202.031†               93.2      10.405 µg/L        0.2971      10.405 ppb         0.2971   2.86%
   QC value within limits for Mo 202.031  Recovery = 104.05%
Na 589.592 Radial†      1096.7      304.29 µg/L         8.581      304.29 ppb          8.581   2.82%
   QC value within limits for Na 589.592 Radial  Recovery = 101.43%
Ni 231.604†               95.6      5.2075 µg/L       0.38110      5.2075 ppb        0.38110   7.32%
   QC value within limits for Ni 231.604  Recovery = 104.15%
P 214.914†                73.3      158.07 µg/L        16.904      158.07 ppb         16.904  10.69%
   QC value within limits for P 214.914  Recovery = 105.38%
Pb 220.353†               56.2      14.240 µg/L        2.1466      14.240 ppb         2.1466  15.07%
   QC value greater than the upper limit for Pb 220.353  Recovery = 142.40%
S 181.975 Axial†          15.3      78.491 µg/L        2.5769      78.491 ppb         2.5769   3.28%
   QC value within limits for S 181.975 Axial  Recovery = 78.49%
Sb 206.836†               10.9      10.772 µg/L        2.0151      10.772 ppb         2.0151  18.71%
   QC value within limits for Sb 206.836  Recovery = 107.72%
Se 196.026†               17.2      24.959 µg/L        4.1668      24.959 ppb         4.1668  16.69%
   QC value within limits for Se 196.026  Recovery = 83.20%
SiO2†                   1163.2      222.13 µg/L         1.574      222.13 ppb          1.574   0.71%
   QC value within limits for SiO2  Recovery = 104.29%
Si 251.611†             1310.7      99.588 µg/L        0.8189      99.588 ppb         0.8189   0.82%
   QC value within limits for Si 251.611  Recovery = 99.59%
Sn 189.927†               19.4      9.5653 µg/L       0.72404      9.5653 ppb        0.72404   7.57%
   QC value within limits for Sn 189.927  Recovery = 95.65%
Sr 421.552†              927.4      5.2238 µg/L       0.09422      5.2238 ppb        0.09422   1.80%
   QC value within limits for Sr 421.552  Recovery = 104.48%
Ti 334.940†             2372.6      5.2490 µg/L       0.10451      5.2490 ppb        0.10451   1.99%
   QC value within limits for Ti 334.940  Recovery = 104.98%
Tl 190.801†               15.4      23.282 µg/L        3.5783      23.282 ppb         3.5783  15.37%
   QC value within limits for Tl 190.801  Recovery = 116.41%
U 409.014†               607.3      57.015 µg/L        2.3517      57.015 ppb         2.3517   4.12%
   QC value within limits for U 409.014  Recovery = 114.03%
V 292.402†               471.6      5.4891 µg/L       0.17643      5.4891 ppb        0.17643   3.21%
   QC value within limits for V 292.402  Recovery = 109.78%
Zn 213.857†              393.2      10.476 µg/L        0.2143      10.476 ppb         0.2143   2.05%
   QC value within limits for Zn 213.857  Recovery = 104.76%
QC Failed.  Continue with analysis.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 04:04:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112440.9	112440.9	100.0	%			04:05:31
1	Al 396.153Radial†	193.5	-36.2	-18.318	µg/L	-18.318	ppb	04:05:31
1	Ca 317.933Radial†	430.8	-64.5	-25.584	µg/L	-25.584	ppb	04:05:51
1	Fe 238.204 Radial†	9.0	-2.2	-11.287	µg/L	-11.287	ppb	04:05:51
1	K 766.490 Radial†	701.5	6.9	3.7212	µg/L	3.7212	ppb	04:05:31
1	Mg 279.077 IEC†	17.4	-2.4	-13.400	µg/L	-13.400	ppb	04:05:51
1	Na 589.592 Radial†	-714.8	-11.2	-3.0979	µg/L	-3.0979	ppb	04:05:31
1	Sr 421.552†	-74.7	-11.0	-0.0617	µg/L	-0.0617	ppb	04:05:31
1	Sc 361.383	2038676.1	2038676.1	99.122	%			04:06:53
1	Y 371.029	1240980.7	1240980.7	99.092	%			04:06:53
1	Ag 328.068†	-55.3	-27.4	-0.2446	µg/L	-0.2446	ppb	04:06:58
1	As 188.979†	1.1	-1.4	-2.6029	µg/L	-2.6029	ppb	04:07:19
1	B 249.677†	146.6	-7.8	-0.3405	µg/L	-0.3405	ppb	04:06:58
1	Ba 233.527†	-79.3	0.7	0.0182	µg/L	0.0182	ppb	04:07:19
1	Be 313.107†	3639.1	59.8	0.0378	µg/L	0.0378	ppb	04:06:58
1	Cd 226.502†	-97.4	2.7	0.0758	µg/L	0.0758	ppb	04:07:19
1	Co 228.616†	-63.8	7.3	0.3530	µg/L	0.3530	ppb	04:07:19
1	Cr 267.716†	-106.7	15.1	0.3145	µg/L	0.3145	ppb	04:06:58
1	Cu 324.752†	3455.4	101.7	0.7129	µg/L	0.7129	ppb	04:06:58
1	Mn 257.610†	-195.7	25.2	0.0786	µg/L	0.0786	ppb	04:07:19
1	Mo 202.031†	-3.3	4.6	0.5109	µg/L	0.5109	ppb	04:07:19
1	Ni 231.604†	291.5	-5.3	-0.2901	µg/L	-0.2901	ppb	04:07:19
1	P 214.914†	204.5	0.3	0.6666	µg/L	0.6666	ppb	04:07:19
1	Pb 220.353†	56.1	2.5	0.6201	µg/L	0.6201	ppb	04:07:19
1	S 181.975 Axial†	24.4	0.6	3.1634	µg/L	3.1634	ppb	04:07:19
1	Sb 206.836†	24.1	3.8	3.7753	µg/L	3.7753	ppb	04:07:19
1	Se 196.026†	11.6	-2.4	-3.5551	µg/L	-3.5551	ppb	04:07:19
1	SiO2†	1972.7	8.5	1.6295	µg/L	1.6295	ppb	04:06:58
1	Si 251.611†	354.0	7.5	0.5174	µg/L	0.5174	ppb	04:07:19
1	Sn 189.927†	24.3	2.1	1.0176	µg/L	1.0176	ppb	04:07:19
1	Ti 334.940†	758.0	45.8	0.1030	µg/L	0.1030	ppb	04:06:58
1	Tl 190.801†	-20.6	0.7	0.9976	µg/L	0.9976	ppb	04:07:19
1	U 409.014†	743.4	70.8	6.6469	µg/L	6.6469	ppb	04:06:58
1	V 292.402†	-73.0	18.3	0.2199	µg/L	0.2199	ppb	04:06:58
1	Zn 213.857†	544.7	-0.7	-0.0160	µg/L	-0.0160	ppb	04:07:19
2	Sc RADIAL	111514.8	111514.8	99.1	%			04:05:56
2	Al 396.153Radial†	181.0	-47.2	-23.882	µg/L	-23.882	ppb	04:05:56
2	Ca 317.933Radial†	433.0	-58.7	-23.283	µg/L	-23.283	ppb	04:06:17
2	Fe 238.204 Radial†	5.3	-5.9	-30.906	µg/L	-30.906	ppb	04:06:17
2	K 766.490 Radial†	669.9	-19.1	-10.380	µg/L	-10.380	ppb	04:05:56
2	Mg 279.077 IEC†	15.8	-3.9	-21.599	µg/L	-21.599	ppb	04:06:17
2	Na 589.592 Radial†	-722.0	-24.3	-6.7369	µg/L	-6.7369	ppb	04:05:56
2	Sr 421.552†	-19.4	44.2	0.2491	µg/L	0.2491	ppb	04:05:56
2	Sc 361.383	2044956.8	2044956.8	99.427	%			04:07:25
2	Y 371.029	1243594.2	1243594.2	99.300	%			04:07:25
2	Ag 328.068†	-59.8	-31.8	-0.2848	µg/L	-0.2848	ppb	04:07:30
2	As 188.979†	0.2	-2.3	-4.3644	µg/L	-4.3644	ppb	04:07:51
2	B 249.677†	148.6	-6.3	-0.2680	µg/L	-0.2680	ppb	04:07:30
2	Ba 233.527†	-78.6	1.6	0.0416	µg/L	0.0416	ppb	04:07:51
2	Be 313.107†	3674.6	84.3	0.0532	µg/L	0.0532	ppb	04:07:30
2	Cd 226.502†	-85.2	15.2	0.4101	µg/L	0.4101	ppb	04:07:51
2	Co 228.616†	-77.7	-6.4	-0.3089	µg/L	-0.3089	ppb	04:07:51
2	Cr 267.716†	-126.3	-4.3	-0.0887	µg/L	-0.0887	ppb	04:07:30
2	Cu 324.752†	3457.1	92.8	0.6459	µg/L	0.6459	ppb	04:07:30
2	Mn 257.610†	-209.5	12.0	0.0340	µg/L	0.0340	ppb	04:07:51
2	Mo 202.031†	-5.5	2.4	0.2638	µg/L	0.2638	ppb	04:07:51
2	Ni 231.604†	288.9	-8.8	-0.4819	µg/L	-0.4819	ppb	04:07:51
2	P 214.914†	204.4	-0.4	-0.9974	µg/L	-0.9974	ppb	04:07:51
2	Pb 220.353†	66.1	12.4	3.1283	µg/L	3.1283	ppb	04:07:51

2	S 181.975 Axial†	21.6	-2.3	-11.909	µg/L	-11.909 ppb	04:07:51
2	Sb 206.836†	25.5	5.1	5.0283	µg/L	5.0283 ppb	04:07:51
2	Se 196.026†	12.5	-1.5	-2.2561	µg/L	-2.2561 ppb	04:07:51
2	SiO2†	2051.5	81.6	15.586	µg/L	15.586 ppb	04:07:30
2	Si 251.611†	350.9	3.3	0.2881	µg/L	0.2881 ppb	04:07:51
2	Sn 189.927†	19.8	-2.6	-1.2736	µg/L	-1.2736 ppb	04:07:51
2	Ti 334.940†	840.4	126.4	0.2815	µg/L	0.2815 ppb	04:07:30
2	Tl 190.801†	-24.7	-3.4	-5.1321	µg/L	-5.1321 ppb	04:07:51
2	U 409.014†	759.5	84.7	7.9606	µg/L	7.9606 ppb	04:07:30
2	V 292.402†	-69.1	22.5	0.2654	µg/L	0.2654 ppb	04:07:30
2	Zn 213.857†	542.7	-4.4	-0.1113	µg/L	-0.1113 ppb	04:07:51
3	Sc RADIAL	111448.5	111448.5	99.1	%		04:06:22
3	Al 396.153Radial†	197.0	-31.0	-15.666	µg/L	-15.666 ppb	04:06:22
3	Ca 317.933Radial†	430.0	-61.4	-24.382	µg/L	-24.382 ppb	04:06:43
3	Fe 238.204 Radial†	7.6	-3.6	-18.762	µg/L	-18.762 ppb	04:06:43
3	K 766.490 Radial†	721.1	33.0	17.872	µg/L	17.872 ppb	04:06:22
3	Mg 279.077 IEC†	13.1	-6.6	-36.364	µg/L	-36.364 ppb	04:06:43
3	Na 589.592 Radial†	-698.7	-1.2	-0.3411	µg/L	-0.3411 ppb	04:06:22
3	Sr 421.552†	-74.7	-11.6	-0.0655	µg/L	-0.0655 ppb	04:06:22
3	Sc 361.383	2038572.5	2038572.5	99.116	%		04:07:57
3	Y 371.029	1242225.0	1242225.0	99.191	%		04:07:57
3	Ag 328.068†	-53.5	-25.7	-0.2295	µg/L	-0.2295 ppb	04:08:02
3	As 188.979†	5.0	2.6	4.9360	µg/L	4.9360 ppb	04:08:23
3	B 249.677†	159.4	5.1	0.2342	µg/L	0.2342 ppb	04:08:02
3	Ba 233.527†	-76.3	3.7	0.0935	µg/L	0.0935 ppb	04:08:23
3	Be 313.107†	3666.5	87.7	0.0554	µg/L	0.0554 ppb	04:08:02
3	Cd 226.502†	-86.8	13.3	0.3499	µg/L	0.3499 ppb	04:08:23
3	Co 228.616†	-76.0	-4.9	-0.2365	µg/L	-0.2365 ppb	04:08:23
3	Cr 267.716†	-128.7	-7.1	-0.1468	µg/L	-0.1468 ppb	04:08:02
3	Cu 324.752†	3437.8	84.2	0.5882	µg/L	0.5882 ppb	04:08:02
3	Mn 257.610†	-221.3	-0.6	-0.0042	µg/L	-0.0042 ppb	04:08:23
3	Mo 202.031†	-2.6	5.3	0.5858	µg/L	0.5858 ppb	04:08:23
3	Ni 231.604†	290.2	-6.6	-0.3602	µg/L	-0.3602 ppb	04:08:23
3	P 214.914†	207.7	3.5	7.6241	µg/L	7.6241 ppb	04:08:23
3	Pb 220.353†	55.4	1.8	0.4519	µg/L	0.4519 ppb	04:08:23
3	S 181.975 Axial†	24.4	0.6	3.0624	µg/L	3.0624 ppb	04:08:23
3	Sb 206.836†	20.6	0.2	0.2483	µg/L	0.2483 ppb	04:08:23
3	Se 196.026†	13.6	-0.3	-0.4850	µg/L	-0.4850 ppb	04:08:23
3	SiO2†	2025.2	61.5	11.754	µg/L	11.754 ppb	04:08:02
3	Si 251.611†	349.8	3.3	0.2027	µg/L	0.2027 ppb	04:08:23
3	Sn 189.927†	23.4	1.1	0.5317	µg/L	0.5317 ppb	04:08:23
3	Ti 334.940†	817.0	105.4	0.2351	µg/L	0.2351 ppb	04:08:02
3	Tl 190.801†	-21.8	-0.6	-0.8511	µg/L	-0.8511 ppb	04:08:23
3	U 409.014†	625.9	-47.7	-4.4762	µg/L	-4.4762 ppb	04:08:02
3	V 292.402†	-73.8	17.5	0.1928	µg/L	0.1928 ppb	04:08:02
3	Zn 213.857†	532.2	-13.2	-0.3490	µg/L	-0.3490 ppb	04:08:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2040735.1	99.222	%	0.1778				0.18%
Sc RADIAL	111801.4	99.4	%	0.49				0.50%
Y 371.029	1242266.6	99.194	%	0.1044				0.11%
Ag 328.068†	-28.3	-0.2530	µg/L	0.02858	-0.2530	ppb	0.02858	11.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-38.1	-19.289	µg/L	4.1928	-19.289	ppb	4.1928	21.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.6771	µg/L	4.94025	-0.6771	ppb	4.94025	729.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.0	-0.1247	µg/L	0.31300	-0.1247	ppb	0.31300	250.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0511	µg/L	0.03854	0.0511	ppb	0.03854	75.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.3	0.0488	µg/L	0.00959	0.0488	ppb	0.00959	19.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-61.5	-24.416	µg/L	1.1511	-24.416	ppb	1.1511	4.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.4	0.2786	µg/L	0.17817	0.2786	ppb	0.17817	63.95%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.3	-0.0641	µg/L	0.36306	-0.0641	ppb	0.36306	566.11%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 1.2      0.0263 µg/L       0.25120      0.0263 ppb        0.25120 953.43%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                92.9      0.6490 µg/L       0.06244      0.6490 ppb        0.06244   9.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -3.9     -20.318 µg/L        9.9017     -20.318 ppb         9.9017  48.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†           6.9      3.7378 µg/L      14.12617      3.7378 ppb       14.12617 377.93%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.3     -23.788 µg/L       11.6374     -23.788 ppb        11.6374  48.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                12.2      0.0361 µg/L       0.04145      0.0361 ppb        0.04145 114.70%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.1      0.4535 µg/L       0.16851      0.4535 ppb        0.16851  37.16%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -12.2     -3.3920 µg/L       3.20801     -3.3920 ppb        3.20801  94.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.9     -0.3774 µg/L       0.09705     -0.3774 ppb        0.09705  25.71%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.1      2.4311 µg/L       4.57361      2.4311 ppb        4.57361 188.13%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 5.5      1.4001 µg/L       1.49901      1.4001 ppb        1.49901 107.07%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.4     -1.8942 µg/L       8.67281     -1.8942 ppb        8.67281 457.85%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.0      3.0173 µg/L       2.47851      3.0173 ppb        2.47851  82.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.4     -2.0987 µg/L       1.54106     -2.0987 ppb        1.54106  73.43%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      50.6      9.6562 µg/L       7.21056      9.6562 ppb        7.21056  74.67%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                 4.7      0.3361 µg/L       0.16273      0.3361 ppb        0.16273  48.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.2      0.0919 µg/L       1.20726      0.0919 ppb        1.20726 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 7.2      0.0406 µg/L       0.18053      0.0406 ppb        0.18053 444.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                92.6      0.2065 µg/L       0.09259      0.2065 ppb        0.09259  44.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.1     -1.6619 µg/L       3.14427     -1.6619 ppb        3.14427 189.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 35.9      3.3771 µg/L       6.83282      3.3771 ppb        6.83282 202.33%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.4      0.2260 µg/L       0.03666      0.2260 ppb        0.03666  16.22%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -6.1     -0.1588 µg/L       0.17150     -0.1588 ppb        0.17150 108.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 04:39:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112993.3	112993.3	100	%			04:39:44
1	Al 396.153Radial†	10308.5	10031.9	5051.0	µg/L	5051.0	ppb	04:39:44
1	Ca 317.933Radial†	13009.8	12455.3	4944.2	µg/L	4944.2	ppb	04:40:05
1	Fe 238.204 Radial†	985.2	969.5	5109.4	µg/L	5109.4	ppb	04:40:05
1	K 766.490 Radial†	10019.8	9279.5	5031.3	µg/L	5031.3	ppb	04:39:44
1	Mg 279.077 IEC†	949.0	924.9	5134.7	µg/L	5134.7	ppb	04:40:05
1	Na 589.592 Radial†	36175.1	36714.7	10187	µg/L	10187	ppb	04:39:44
1	Sr 421.552†	88731.2	88392.0	497.91	µg/L	497.91	ppb	04:39:44
1	Sc 361.383	2039191.5	2039191.5	99.147	%			04:41:08
1	Y 371.029	1235363.7	1235363.7	98.643	%			04:41:08
1	Ag 328.068†	55450.8	55956.4	503.58	µg/L	503.58	ppb	04:41:14
1	As 188.979†	263.5	263.3	500.81	µg/L	500.81	ppb	04:41:34
1	B 249.677†	11157.1	11097.4	490.94	µg/L	490.94	ppb	04:41:14
1	Ba 233.527†	19561.5	19810.6	498.63	µg/L	498.63	ppb	04:41:14
1	Be 313.107†	786500.8	789659.2	499.34	µg/L	499.34	ppb	04:41:08
1	Cd 226.502†	18567.7	18828.4	498.06	µg/L	498.06	ppb	04:41:14
1	Co 228.616†	10187.7	10347.1	497.70	µg/L	497.70	ppb	04:41:14
1	Cr 267.716†	23560.6	23886.1	498.38	µg/L	498.38	ppb	04:41:14
1	Cu 324.752†	73878.4	71130.0	501.53	µg/L	501.53	ppb	04:41:14
1	Mn 257.610†	156127.4	157693.9	501.09	µg/L	501.09	ppb	04:41:08
1	Mo 202.031†	4407.5	4453.4	497.02	µg/L	497.02	ppb	04:41:34
1	Ni 231.604†	9378.1	9159.5	498.99	µg/L	498.99	ppb	04:41:14
1	P 214.914†	1349.5	1155.2	2453.0	µg/L	2453.0	ppb	04:41:34
1	Pb 220.353†	2015.1	1978.3	502.22	µg/L	502.22	ppb	04:41:34
1	S 181.975 Axial†	221.2	199.0	1021.0	µg/L	1021.0	ppb	04:41:34
1	Sb 206.836†	525.7	509.6	504.22	µg/L	504.22	ppb	04:41:34
1	Se 196.026†	358.0	347.0	507.51	µg/L	507.51	ppb	04:41:34
1	SiO2†	29976.4	28252.8	5395.3	µg/L	5395.3	ppb	04:41:14
1	Si 251.611†	32961.3	32895.4	2472.1	µg/L	2472.1	ppb	04:41:14
1	Sn 189.927†	1026.7	1013.1	496.64	µg/L	496.64	ppb	04:41:34
1	Ti 334.940†	223221.8	224424.4	497.18	µg/L	497.18	ppb	04:41:08
1	Tl 190.801†	305.0	329.0	498.90	µg/L	498.90	ppb	04:41:34
1	U 409.014†	5986.7	5359.0	502.43	µg/L	502.43	ppb	04:41:14
1	V 292.402†	43808.8	44277.8	503.86	µg/L	503.86	ppb	04:41:14
1	Zn 213.857†	19147.0	18761.7	498.68	µg/L	498.68	ppb	04:41:14
2	Sc RADIAL	112481.1	112481.1	100	%			04:40:10
2	Al 396.153Radial†	10363.0	10133.0	5102.2	µg/L	5102.2	ppb	04:40:10
2	Ca 317.933Radial†	13046.8	12551.2	4982.3	µg/L	4982.3	ppb	04:40:31
2	Fe 238.204 Radial†	988.9	977.7	5152.5	µg/L	5152.5	ppb	04:40:31
2	K 766.490 Radial†	9980.7	9285.8	5034.7	µg/L	5034.7	ppb	04:40:10
2	Mg 279.077 IEC†	952.8	933.0	5179.7	µg/L	5179.7	ppb	04:40:31
2	Na 589.592 Radial†	36303.3	37006.9	10268	µg/L	10268	ppb	04:40:10
2	Sr 421.552†	88574.2	88637.1	499.29	µg/L	499.29	ppb	04:40:10
2	Sc 361.383	2045235.5	2045235.5	99.440	%			04:41:42
2	Y 371.029	1238335.7	1238335.7	98.880	%			04:41:42
2	Ag 328.068†	55677.9	56019.5	504.15	µg/L	504.15	ppb	04:41:47
2	As 188.979†	258.3	257.3	489.39	µg/L	489.39	ppb	04:42:08
2	B 249.677†	11236.0	11143.5	492.97	µg/L	492.97	ppb	04:41:47
2	Ba 233.527†	19676.8	19868.2	500.08	µg/L	500.08	ppb	04:41:47
2	Be 313.107†	793198.5	794050.3	502.12	µg/L	502.12	ppb	04:41:42
2	Cd 226.502†	18640.3	18846.1	498.52	µg/L	498.52	ppb	04:41:47
2	Co 228.616†	10259.7	10389.2	499.72	µg/L	499.72	ppb	04:41:47
2	Cr 267.716†	23640.1	23895.9	498.59	µg/L	498.59	ppb	04:41:47
2	Cu 324.752†	74292.2	71325.9	502.92	µg/L	502.92	ppb	04:41:47
2	Mn 257.610†	157559.8	158669.0	504.19	µg/L	504.19	ppb	04:41:42
2	Mo 202.031†	4409.5	4442.2	495.77	µg/L	495.77	ppb	04:42:08
2	Ni 231.604†	9413.3	9166.8	499.39	µg/L	499.39	ppb	04:41:47
2	P 214.914†	1358.1	1159.7	2462.8	µg/L	2462.8	ppb	04:42:08
2	Pb 220.353†	2025.4	1982.7	503.32	µg/L	503.32	ppb	04:42:08

2	S 181.975 Axial†	216.7	193.9	994.57 µg/L	994.57 ppb	04:42:08
2	Sb 206.836†	524.4	506.8	501.46 µg/L	501.46 ppb	04:42:08
2	Se 196.026†	358.9	346.8	507.31 µg/L	507.31 ppb	04:42:08
2	SiO2†	30143.2	28331.2	5410.2 µg/L	5410.2 ppb	04:41:47
2	Si 251.611†	33096.5	32933.1	2474.7 µg/L	2474.7 ppb	04:41:47
2	Sn 189.927†	1037.5	1020.9	500.48 µg/L	500.48 ppb	04:42:08
2	Ti 334.940†	225311.1	225860.0	500.36 µg/L	500.36 ppb	04:41:42
2	Tl 190.801†	308.1	331.3	502.30 µg/L	502.30 ppb	04:42:08
2	U 409.014†	6015.4	5370.0	503.46 µg/L	503.46 ppb	04:41:47
2	V 292.402†	43926.8	44265.9	503.72 µg/L	503.72 ppb	04:41:47
2	Zn 213.857†	19223.1	18781.1	499.20 µg/L	499.20 ppb	04:41:47
3	Sc RADIAL	113543.2	113543.2	101 %		04:40:36
3	Al 396.153Radial†	10367.4	10040.5	5055.6 µg/L	5055.6 ppb	04:40:36
3	Ca 317.933Radial†	13114.0	12495.8	4960.3 µg/L	4960.3 ppb	04:40:57
3	Fe 238.204 Radial†	990.1	969.6	5109.8 µg/L	5109.8 ppb	04:40:57
3	K 766.490 Radial†	10041.3	9252.4	5016.6 µg/L	5016.6 ppb	04:40:36
3	Mg 279.077 IEC†	957.9	929.1	5158.2 µg/L	5158.2 ppb	04:40:57
3	Na 589.592 Radial†	36293.6	36657.7	10171 µg/L	10171 ppb	04:40:36
3	Sr 421.552†	88900.5	88132.0	496.44 µg/L	496.44 ppb	04:40:36
3	Sc 361.383	2046115.8	2046115.8	99.483 %		04:42:15
3	Y 371.029	1239632.0	1239632.0	98.984 %		04:42:15
3	Ag 328.068†	55928.8	56247.6	506.20 µg/L	506.20 ppb	04:42:20
3	As 188.979†	259.3	258.1	491.01 µg/L	491.01 ppb	04:42:41
3	B 249.677†	11266.9	11169.7	494.15 µg/L	494.15 ppb	04:42:20
3	Ba 233.527†	19792.6	19976.1	502.79 µg/L	502.79 ppb	04:42:20
3	Be 313.107†	791154.4	791652.5	500.60 µg/L	500.60 ppb	04:42:15
3	Cd 226.502†	18741.7	18939.9	501.01 µg/L	501.01 ppb	04:42:20
3	Co 228.616†	10321.2	10446.5	502.46 µg/L	502.46 ppb	04:42:20
3	Cr 267.716†	23779.4	24025.7	501.29 µg/L	501.29 ppb	04:42:20
3	Cu 324.752†	74591.4	71594.5	504.80 µg/L	504.80 ppb	04:42:20
3	Mn 257.610†	157110.4	158149.1	502.53 µg/L	502.53 ppb	04:42:15
3	Mo 202.031†	4362.6	4393.2	490.31 µg/L	490.31 ppb	04:42:41
3	Ni 231.604†	9508.6	9258.6	504.39 µg/L	504.39 ppb	04:42:20
3	P 214.914†	1340.7	1141.7	2423.4 µg/L	2423.4 ppb	04:42:41
3	Pb 220.353†	2003.7	1960.0	497.54 µg/L	497.54 ppb	04:42:41
3	S 181.975 Axial†	214.5	191.6	982.76 µg/L	982.76 ppb	04:42:41
3	Sb 206.836†	519.5	501.6	496.29 µg/L	496.29 ppb	04:42:41
3	Se 196.026†	360.6	348.4	509.56 µg/L	509.56 ppb	04:42:41
3	SiO2†	30289.4	28465.0	5435.8 µg/L	5435.8 ppb	04:42:20
3	Si 251.611†	33316.8	33140.2	2491.0 µg/L	2491.0 ppb	04:42:20
3	Sn 189.927†	1024.6	1007.5	493.92 µg/L	493.92 ppb	04:42:41
3	Ti 334.940†	224788.7	225237.5	498.98 µg/L	498.98 ppb	04:42:15
3	Tl 190.801†	304.8	327.8	496.99 µg/L	496.99 ppb	04:42:41
3	U 409.014†	6083.7	5436.1	509.68 µg/L	509.68 ppb	04:42:20
3	V 292.402†	44119.4	44440.6	505.66 µg/L	505.66 ppb	04:42:20
3	Zn 213.857†	19331.4	18881.6	501.86 µg/L	501.86 ppb	04:42:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2043514.3	99.357	%	0.1833				0.18%
Sc RADIAL	113005.9	100	%	0.5				0.47%
Y 371.029	1237777.1	98.836	%	0.1747				0.18%
Ag 328.068†	56074.5	504.64	µg/L	1.375	504.64	ppb	1.375	0.27%
QC value within limits for Ag 328.068 Recovery = 100.93%								
Al 396.153Radial†	10068.5	5069.6	µg/L	28.31	5069.6	ppb	28.31	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.39%								
As 188.979†	259.6	493.74	µg/L	6.179	493.74	ppb	6.179	1.25%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	11136.9	492.69	µg/L	1.623	492.69	ppb	1.623	0.33%
QC value within limits for B 249.677 Recovery = 98.54%								
Ba 233.527†	19885.0	500.50	µg/L	2.112	500.50	ppb	2.112	0.42%
QC value within limits for Ba 233.527 Recovery = 100.10%								
Be 313.107†	791787.3	500.69	µg/L	1.390	500.69	ppb	1.390	0.28%
QC value within limits for Be 313.107 Recovery = 100.14%								
Ca 317.933Radial†	12500.8	4962.2	µg/L	19.11	4962.2	ppb	19.11	0.39%
QC value within limits for Ca 317.933Radial Recovery = 99.24%								
Cd 226.502†	18871.5	499.20	µg/L	1.590	499.20	ppb	1.590	0.32%
QC value within limits for Cd 226.502 Recovery = 99.84%								
Co 228.616†	10394.3	499.96	µg/L	2.390	499.96	ppb	2.390	0.48%

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   QC value within limits for Co 228.616  Recovery = 99.99%
Cr 267.716†            23935.9      499.42 µg/L        1.624      499.42 ppb        1.624   0.33%
   QC value within limits for Cr 267.716  Recovery = 99.88%
Cu 324.752†            71350.2      503.08 µg/L        1.640      503.08 ppb        1.640   0.33%
   QC value within limits for Cu 324.752  Recovery = 100.62%
Fe 238.204 Radial†       972.3      5123.9 µg/L       24.77      5123.9 ppb        24.77   0.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.48%
K 766.490 Radial†       9272.6      5027.5 µg/L        9.61      5027.5 ppb         9.61   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 100.55%
Mg 279.077 IEC†          929.0      5157.5 µg/L       22.49      5157.5 ppb        22.49   0.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.15%
Mn 257.610†           158170.7      502.60 µg/L        1.551      502.60 ppb        1.551   0.31%
   QC value within limits for Mn 257.610  Recovery = 100.52%
Mo 202.031†            4429.6      494.36 µg/L        3.569      494.36 ppb        3.569   0.72%
   QC value within limits for Mo 202.031  Recovery = 98.87%
Na 589.592 Radial†    36793.1       10209 µg/L         52.0       10209 ppb         52.0   0.51%
   QC value within limits for Na 589.592 Radial  Recovery = 102.09%
Ni 231.604†            9195.0      500.93 µg/L        3.010      500.93 ppb        3.010   0.60%
   QC value within limits for Ni 231.604  Recovery = 100.19%
P 214.914†             1152.2      2446.4 µg/L       20.56      2446.4 ppb        20.56   0.84%
   QC value within limits for P 214.914  Recovery = 97.86%
Pb 220.353†            1973.7      501.03 µg/L        3.069      501.03 ppb        3.069   0.61%
   QC value within limits for Pb 220.353  Recovery = 100.21%
S 181.975 Axial†        194.8      999.44 µg/L       19.582      999.44 ppb       19.582   1.96%
   QC value within limits for S 181.975 Axial  Recovery = 99.94%
Sb 206.836†             506.0      500.66 µg/L        4.025      500.66 ppb        4.025   0.80%
   QC value within limits for Sb 206.836  Recovery = 100.13%
Se 196.026†             347.4      508.13 µg/L        1.246      508.13 ppb        1.246   0.25%
   QC value within limits for Se 196.026  Recovery = 101.63%
SiO2†                  28349.7      5413.8 µg/L       20.49      5413.8 ppb        20.49   0.38%
   QC value within limits for SiO2  Recovery = 101.24%
Si 251.611†            32989.5      2479.3 µg/L       10.24      2479.3 ppb        10.24   0.41%
   QC value within limits for Si 251.611  Recovery = 99.17%
Sn 189.927†            1013.8      497.01 µg/L        3.297      497.01 ppb        3.297   0.66%
   QC value within limits for Sn 189.927  Recovery = 99.40%
Sr 421.552†            88387.0      497.88 µg/L        1.423      497.88 ppb        1.423   0.29%
   QC value within limits for Sr 421.552  Recovery = 99.58%
Ti 334.940†           225174.0      498.84 µg/L        1.595      498.84 ppb        1.595   0.32%
   QC value within limits for Ti 334.940  Recovery = 99.77%
Tl 190.801†             329.4      499.40 µg/L        2.687      499.40 ppb        2.687   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.88%
U 409.014†             5388.4      505.19 µg/L        3.919      505.19 ppb        3.919   0.78%
   QC value within limits for U 409.014  Recovery = 101.04%
V 292.402†            44328.1      504.41 µg/L        1.081      504.41 ppb        1.081   0.21%
   QC value within limits for V 292.402  Recovery = 100.88%
Zn 213.857†           18808.2      499.92 µg/L        1.707      499.92 ppb        1.707   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 04:42:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112133.3	112133.3	99.7	%			04:43:24
1	Al 396.153Radial†	617.8	389.9	196.61	µg/L	196.61	ppb	04:43:24
1	Ca 317.933Radial†	945.6	453.1	179.84	µg/L	179.84	ppb	04:43:45
1	Fe 238.204 Radial†	33.1	22.0	115.97	µg/L	115.97	ppb	04:43:45
1	K 766.490 Radial†	977.5	285.6	154.87	µg/L	154.87	ppb	04:43:24
1	Mg 279.077 IEC†	72.8	53.2	295.04	µg/L	295.04	ppb	04:43:45
1	Na 589.592 Radial†	529.1	1234.7	342.57	µg/L	342.57	ppb	04:43:24
1	Sr 421.552†	868.8	935.3	5.2684	µg/L	5.2684	ppb	04:43:24
1	Sc 361.383	2041230.8	2041230.8	99.246	%			04:44:47
1	Y 371.029	1243098.4	1243098.4	99.261	%			04:44:47
1	Ag 328.068†	536.3	568.7	5.1262	µg/L	5.1262	ppb	04:44:52
1	As 188.979†	20.4	18.0	34.326	µg/L	34.326	ppb	04:45:13
1	B 249.677†	1263.9	1117.8	49.577	µg/L	49.577	ppb	04:44:52
1	Ba 233.527†	118.9	200.5	5.0478	µg/L	5.0478	ppb	04:45:13
1	Be 313.107†	11576.7	8053.2	5.0924	µg/L	5.0924	ppb	04:44:52
1	Cd 226.502†	91.1	192.7	5.1287	µg/L	5.1287	ppb	04:45:13
1	Co 228.616†	29.9	101.8	4.9098	µg/L	4.9098	ppb	04:45:13
1	Cr 267.716†	123.8	247.5	5.1657	µg/L	5.1657	ppb	04:44:52
1	Cu 324.752†	4752.1	1403.9	9.9020	µg/L	9.9020	ppb	04:44:52
1	Mn 257.610†	3088.7	3334.8	10.598	µg/L	10.598	ppb	04:44:52
1	Mo 202.031†	88.3	96.9	10.818	µg/L	10.818	ppb	04:45:13
1	Ni 231.604†	375.1	78.5	4.2790	µg/L	4.2790	ppb	04:45:13
1	P 214.914†	274.7	70.8	152.55	µg/L	152.55	ppb	04:45:13
1	Pb 220.353†	103.2	49.8	12.612	µg/L	12.612	ppb	04:45:13
1	S 181.975 Axial†	41.0	17.2	88.519	µg/L	88.519	ppb	04:45:13
1	Sb 206.836†	27.6	7.2	7.1874	µg/L	7.1874	ppb	04:45:13
1	Se 196.026†	38.1	24.3	35.441	µg/L	35.441	ppb	04:45:13
1	SiO2†	3183.1	1225.7	234.06	µg/L	234.06	ppb	04:44:52
1	Si 251.611†	1655.6	1318.6	100.23	µg/L	100.23	ppb	04:45:13
1	Sn 189.927†	39.6	17.5	8.6280	µg/L	8.6280	ppb	04:45:13
1	Ti 334.940†	3028.9	2333.1	5.1614	µg/L	5.1614	ppb	04:44:52
1	Tl 190.801†	-8.1	13.2	19.986	µg/L	19.986	ppb	04:45:13
1	U 409.014†	1297.9	628.6	59.015	µg/L	59.015	ppb	04:44:52
1	V 292.402†	397.0	491.9	5.7261	µg/L	5.7261	ppb	04:44:52
1	Zn 213.857†	924.7	381.5	10.165	µg/L	10.165	ppb	04:45:13
2	Sc RADIAL	112501.3	112501.3	100	%			04:43:50
2	Al 396.153Radial†	589.5	359.5	181.31	µg/L	181.31	ppb	04:43:50
2	Ca 317.933Radial†	941.1	445.5	176.83	µg/L	176.83	ppb	04:44:11
2	Fe 238.204 Radial†	29.4	18.2	95.539	µg/L	95.539	ppb	04:44:11
2	K 766.490 Radial†	993.4	298.3	161.76	µg/L	161.76	ppb	04:43:50
2	Mg 279.077 IEC†	76.7	56.9	315.57	µg/L	315.57	ppb	04:44:11
2	Na 589.592 Radial†	488.0	1191.8	330.68	µg/L	330.68	ppb	04:43:50
2	Sr 421.552†	794.3	857.9	4.8327	µg/L	4.8327	ppb	04:43:50
2	Sc 361.383	2045883.3	2045883.3	99.472	%			04:45:19
2	Y 371.029	1246286.3	1246286.3	99.515	%			04:45:19
2	Ag 328.068†	545.3	576.5	5.1913	µg/L	5.1913	ppb	04:45:25
2	As 188.979†	18.2	15.8	30.101	µg/L	30.101	ppb	04:45:45
2	B 249.677†	1256.7	1107.7	49.134	µg/L	49.134	ppb	04:45:25
2	Ba 233.527†	120.0	201.4	5.0682	µg/L	5.0682	ppb	04:45:45
2	Be 313.107†	11696.1	8146.7	5.1515	µg/L	5.1515	ppb	04:45:25
2	Cd 226.502†	96.2	197.6	5.2575	µg/L	5.2575	ppb	04:45:45
2	Co 228.616†	29.8	101.7	4.9032	µg/L	4.9032	ppb	04:45:45
2	Cr 267.716†	120.1	243.5	5.0796	µg/L	5.0796	ppb	04:45:25
2	Cu 324.752†	4702.4	1343.0	9.4693	µg/L	9.4693	ppb	04:45:25
2	Mn 257.610†	3087.5	3326.6	10.569	µg/L	10.569	ppb	04:45:25
2	Mo 202.031†	82.9	91.2	10.181	µg/L	10.181	ppb	04:45:45
2	Ni 231.604†	388.8	91.5	4.9823	µg/L	4.9823	ppb	04:45:45
2	P 214.914†	280.5	76.0	164.06	µg/L	164.06	ppb	04:45:45
2	Pb 220.353†	98.1	44.5	11.277	µg/L	11.277	ppb	04:45:45

2	S 181.975 Axial†	43.0	19.2	98.694 µg/L	98.694 ppb	04:45:45
2	Sb 206.836†	29.1	8.7	8.6700 µg/L	8.6700 ppb	04:45:45
2	Se 196.026†	36.7	22.8	33.131 µg/L	33.131 ppb	04:45:45
2	SiO2†	3156.9	1192.0	227.63 µg/L	227.63 ppb	04:45:25
2	Si 251.611†	1658.6	1317.8	100.17 µg/L	100.17 ppb	04:45:45
2	Sn 189.927†	39.8	17.6	8.6932 µg/L	8.6932 ppb	04:45:45
2	Ti 334.940†	3080.8	2378.3	5.2617 µg/L	5.2617 ppb	04:45:25
2	Tl 190.801†	-2.8	18.6	28.066 µg/L	28.066 ppb	04:45:45
2	U 409.014†	1251.5	578.9	54.351 µg/L	54.351 ppb	04:45:25
2	V 292.402†	353.2	447.1	5.2068 µg/L	5.2068 ppb	04:45:25
2	Zn 213.857†	935.0	389.8	10.387 µg/L	10.387 ppb	04:45:45
3	Sc RADIAL	110974.7	110974.7	98.7 %		04:44:16
3	Al 396.153Radial†	609.4	387.8	195.61 µg/L	195.61 ppb	04:44:16
3	Ca 317.933Radial†	926.5	443.6	176.10 µg/L	176.10 ppb	04:44:37
3	Fe 238.204 Radial†	27.5	16.7	87.644 µg/L	87.644 ppb	04:44:37
3	K 766.490 Radial†	989.2	307.8	166.88 µg/L	166.88 ppb	04:44:16
3	Mg 279.077 IEC†	77.3	58.5	324.66 µg/L	324.66 ppb	04:44:37
3	Na 589.592 Radial†	531.2	1242.4	344.71 µg/L	344.71 ppb	04:44:16
3	Sr 421.552†	817.5	892.3	5.0264 µg/L	5.0264 ppb	04:44:16
3	Sc 361.383	2051852.5	2051852.5	99.762 %		04:45:51
3	Y 371.029	1249540.9	1249540.9	99.775 %		04:45:51
3	Ag 328.068†	520.4	550.0	4.9517 µg/L	4.9517 ppb	04:45:57
3	As 188.979†	17.4	15.0	28.554 µg/L	28.554 ppb	04:46:17
3	B 249.677†	1285.0	1132.4	50.232 µg/L	50.232 ppb	04:45:57
3	Ba 233.527†	121.9	202.9	5.1057 µg/L	5.1057 ppb	04:46:17
3	Be 313.107†	11635.7	8051.9	5.0916 µg/L	5.0916 ppb	04:45:57
3	Cd 226.502†	89.9	191.0	5.0839 µg/L	5.0839 ppb	04:46:17
3	Co 228.616†	34.4	106.2	5.1191 µg/L	5.1191 ppb	04:46:17
3	Cr 267.716†	115.7	238.7	4.9806 µg/L	4.9806 ppb	04:45:57
3	Cu 324.752†	4744.8	1371.8	9.6704 µg/L	9.6704 ppb	04:45:57
3	Mn 257.610†	3080.3	3310.3	10.517 µg/L	10.517 ppb	04:45:57
3	Mo 202.031†	82.7	90.8	10.137 µg/L	10.137 ppb	04:46:17
3	Ni 231.604†	386.0	87.5	4.7673 µg/L	4.7673 ppb	04:46:17
3	P 214.914†	282.9	77.5	167.31 µg/L	167.31 ppb	04:46:17
3	Pb 220.353†	97.9	44.0	11.133 µg/L	11.133 ppb	04:46:17
3	S 181.975 Axial†	49.1	25.2	129.49 µg/L	129.49 ppb	04:46:17
3	Sb 206.836†	27.1	6.6	6.5112 µg/L	6.5112 ppb	04:46:17
3	Se 196.026†	27.4	13.3	19.368 µg/L	19.368 ppb	04:46:17
3	SiO2†	3118.1	1143.8	218.43 µg/L	218.43 ppb	04:45:57
3	Si 251.611†	1659.0	1313.3	99.875 µg/L	99.875 ppb	04:46:17
3	Sn 189.927†	37.8	15.4	7.6379 µg/L	7.6379 ppb	04:46:17
3	Ti 334.940†	3049.1	2337.5	5.1715 µg/L	5.1715 ppb	04:45:57
3	Tl 190.801†	-7.6	13.8	20.814 µg/L	20.814 ppb	04:46:17
3	U 409.014†	1247.5	571.3	53.640 µg/L	53.640 ppb	04:45:57
3	V 292.402†	333.3	426.1	4.9678 µg/L	4.9678 ppb	04:45:57
3	Zn 213.857†	932.9	385.0	10.258 µg/L	10.258 ppb	04:46:17

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2046322.2	99.493	%	0.2589				0.26%
Sc RADIAL	111869.8	99.5	%	0.71				0.71%
Y 371.029	1246308.5	99.517	%	0.2572				0.26%
Ag 328.068†	565.1	5.0897	µg/L	0.12390	5.0897	ppb	0.12390	2.43%
QC value within limits for Ag 328.068 Recovery = 101.79%								
Al 396.153Radial†	379.1	191.18	µg/L	8.559	191.18	ppb	8.559	4.48%
QC value within limits for Al 396.153Radial Recovery = 95.59%								
As 188.979†	16.3	30.994	µg/L	2.9882	30.994	ppb	2.9882	9.64%
QC value within limits for As 188.979 Recovery = 103.31%								
B 249.677†	1119.3	49.647	µg/L	0.5523	49.647	ppb	0.5523	1.11%
QC value within limits for B 249.677 Recovery = 99.29%								
Ba 233.527†	201.6	5.0739	µg/L	0.02936	5.0739	ppb	0.02936	0.58%
QC value within limits for Ba 233.527 Recovery = 101.48%								
Be 313.107†	8083.9	5.1118	µg/L	0.03436	5.1118	ppb	0.03436	0.67%
QC value within limits for Be 313.107 Recovery = 102.24%								
Ca 317.933Radial†	447.4	177.59	µg/L	1.982	177.59	ppb	1.982	1.12%
QC value within limits for Ca 317.933Radial Recovery = 88.80%								
Cd 226.502†	193.7	5.1567	µg/L	0.09015	5.1567	ppb	0.09015	1.75%
QC value within limits for Cd 226.502 Recovery = 103.13%								
Co 228.616†	103.2	4.9774	µg/L	0.12278	4.9774	ppb	0.12278	2.47%

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   QC value within limits for Co 228.616  Recovery = 99.55%
Cr 267.716†              243.2      5.0753 µg/L       0.09264      5.0753 ppb        0.09264   1.83%
   QC value within limits for Cr 267.716  Recovery = 101.51%
Cu 324.752†             1372.9      9.6806 µg/L       0.21654      9.6806 ppb        0.21654   2.24%
   QC value within limits for Cu 324.752  Recovery = 96.81%
Fe 238.204 Radial†        19.0      99.717 µg/L       14.6172      99.717 ppb        14.6172  14.66%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.72%
K 766.490 Radial†        297.3      161.17 µg/L         6.026      161.17 ppb          6.026   3.74%
   QC value within limits for K 766.490 Radial  Recovery = 107.45%
Mg 279.077 IEC†           56.2      311.76 µg/L        15.177      311.76 ppb         15.177   4.87%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†             3323.9      10.561 µg/L        0.0411      10.561 ppb         0.0411   0.39%
   QC value within limits for Mn 257.610  Recovery = 105.61%
Mo 202.031†               93.0      10.379 µg/L        0.3809      10.379 ppb         0.3809   3.67%
   QC value within limits for Mo 202.031  Recovery = 103.79%
Na 589.592 Radial†      1222.9      339.32 µg/L         7.562      339.32 ppb          7.562   2.23%
   QC value within limits for Na 589.592 Radial  Recovery = 113.11%
Ni 231.604†               85.8      4.6762 µg/L       0.36043      4.6762 ppb        0.36043   7.71%
   QC value within limits for Ni 231.604  Recovery = 93.52%
P 214.914†                74.8      161.31 µg/L         7.753      161.31 ppb          7.753   4.81%
   QC value within limits for P 214.914  Recovery = 107.54%
Pb 220.353†               46.1      11.674 µg/L        0.8158      11.674 ppb         0.8158   6.99%
   QC value within limits for Pb 220.353  Recovery = 116.74%
S 181.975 Axial†          20.6      105.57 µg/L        21.334      105.57 ppb         21.334  20.21%
   QC value within limits for S 181.975 Axial  Recovery = 105.57%
Sb 206.836†                7.5      7.4562 µg/L       1.10419      7.4562 ppb        1.10419  14.81%
   QC value within limits for Sb 206.836  Recovery = 74.56%
Se 196.026†               20.1      29.313 µg/L        8.6901      29.313 ppb         8.6901  29.65%
   QC value within limits for Se 196.026  Recovery = 97.71%
SiO2†                   1187.2      226.71 µg/L         7.854      226.71 ppb          7.854   3.46%
   QC value within limits for SiO2  Recovery = 106.44%
Si 251.611†             1316.6      100.09 µg/L         0.191      100.09 ppb          0.191   0.19%
   QC value within limits for Si 251.611  Recovery = 100.09%
Sn 189.927†               16.8      8.3197 µg/L       0.59135      8.3197 ppb        0.59135   7.11%
   QC value within limits for Sn 189.927  Recovery = 83.20%
Sr 421.552†              895.2      5.0425 µg/L       0.21825      5.0425 ppb        0.21825   4.33%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†             2349.6      5.1982 µg/L       0.05523      5.1982 ppb        0.05523   1.06%
   QC value within limits for Ti 334.940  Recovery = 103.96%
Tl 190.801†               15.2      22.955 µg/L        4.4455      22.955 ppb         4.4455  19.37%
   QC value within limits for Tl 190.801  Recovery = 114.78%
U 409.014†               592.9      55.669 µg/L        2.9195      55.669 ppb         2.9195   5.24%
   QC value within limits for U 409.014  Recovery = 111.34%
V 292.402†               455.0      5.3002 µg/L       0.38769      5.3002 ppb        0.38769   7.31%
   QC value within limits for V 292.402  Recovery = 106.00%
Zn 213.857†              385.5      10.270 µg/L        0.1113      10.270 ppb         0.1113   1.08%
   QC value within limits for Zn 213.857  Recovery = 102.70%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 04:46:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111132.5	111132.5	98.8	%			04:47:00
1	Al 396.153Radial†	173.2	-54.5	-27.561	µg/L	-27.561	ppb	04:47:00
1	Ca 317.933Radial†	415.1	-75.3	-29.896	µg/L	-29.896	ppb	04:47:20
1	Fe 238.204 Radial†	12.2	1.2	6.2193	µg/L	6.2193	ppb	04:47:20
1	K 766.490 Radial†	712.5	26.3	14.246	µg/L	14.246	ppb	04:47:00
1	Mg 279.077 IEC†	16.9	-2.7	-15.222	µg/L	-15.222	ppb	04:47:20
1	Na 589.592 Radial†	-618.4	78.0	21.645	µg/L	21.645	ppb	04:47:00
1	Sr 421.552†	-45.3	17.9	0.1011	µg/L	0.1011	ppb	04:47:00
1	Sc 361.383	2043596.3	2043596.3	99.361	%			04:48:22
1	Y 371.029	1244766.0	1244766.0	99.394	%			04:48:22
1	Ag 328.068†	-27.6	0.5	0.0068	µg/L	0.0068	ppb	04:48:28
1	As 188.979†	-0.1	-2.6	-4.8902	µg/L	-4.8902	ppb	04:48:48
1	B 249.677†	156.7	2.0	0.0870	µg/L	0.0870	ppb	04:48:48
1	Ba 233.527†	-85.6	-5.5	-0.1368	µg/L	-0.1368	ppb	04:48:48
1	Be 313.107†	3651.2	63.2	0.0399	µg/L	0.0399	ppb	04:48:28
1	Cd 226.502†	-102.5	-2.2	-0.0526	µg/L	-0.0526	ppb	04:48:48
1	Co 228.616†	-79.0	-7.7	-0.3709	µg/L	-0.3709	ppb	04:48:48
1	Cr 267.716†	-127.3	-5.4	-0.1116	µg/L	-0.1116	ppb	04:48:28
1	Cu 324.752†	3406.6	44.2	0.3124	µg/L	0.3124	ppb	04:48:28
1	Mn 257.610†	-207.1	14.2	0.0458	µg/L	0.0458	ppb	04:48:48
1	Mo 202.031†	-0.2	7.8	0.8657	µg/L	0.8657	ppb	04:48:48
1	Ni 231.604†	303.5	6.0	0.3277	µg/L	0.3277	ppb	04:48:48
1	P 214.914†	206.3	1.7	3.5538	µg/L	3.5538	ppb	04:48:48
1	Pb 220.353†	69.7	16.0	4.0568	µg/L	4.0568	ppb	04:48:48
1	S 181.975 Axial†	20.4	-3.5	-18.126	µg/L	-18.126	ppb	04:48:48
1	Sb 206.836†	18.0	-2.4	-2.3942	µg/L	-2.3942	ppb	04:48:48
1	Se 196.026†	10.0	-4.0	-5.8076	µg/L	-5.8076	ppb	04:48:48
1	SiO2†	1999.2	30.3	5.7956	µg/L	5.7956	ppb	04:48:28
1	Si 251.611†	363.5	16.2	1.2519	µg/L	1.2519	ppb	04:48:48
1	Sn 189.927†	20.5	-1.8	-0.8735	µg/L	-0.8735	ppb	04:48:48
1	Ti 334.940†	763.3	49.3	0.1111	µg/L	0.1111	ppb	04:48:28
1	Tl 190.801†	-13.2	8.2	12.350	µg/L	12.350	ppb	04:48:48
1	U 409.014†	773.2	98.9	9.2874	µg/L	9.2874	ppb	04:48:28
1	V 292.402†	-71.1	20.4	0.2521	µg/L	0.2521	ppb	04:48:28
1	Zn 213.857†	542.7	-4.0	-0.1088	µg/L	-0.1088	ppb	04:48:48
2	Sc RADIAL	111052.2	111052.2	98.7	%			04:47:26
2	Al 396.153Radial†	155.5	-72.3	-36.571	µg/L	-36.571	ppb	04:47:26
2	Ca 317.933Radial†	429.0	-60.9	-24.179	µg/L	-24.179	ppb	04:47:46
2	Fe 238.204 Radial†	10.4	-0.7	-3.6556	µg/L	-3.6556	ppb	04:47:46
2	K 766.490 Radial†	738.8	53.4	28.964	µg/L	28.964	ppb	04:47:26
2	Mg 279.077 IEC†	12.0	-7.7	-42.509	µg/L	-42.509	ppb	04:47:46
2	Na 589.592 Radial†	-637.7	58.1	16.110	µg/L	16.110	ppb	04:47:26
2	Sr 421.552†	-40.8	22.4	0.1263	µg/L	0.1263	ppb	04:47:26
2	Sc 361.383	2040034.5	2040034.5	99.188	%			04:48:54
2	Y 371.029	1241351.3	1241351.3	99.121	%			04:48:54
2	Ag 328.068†	-47.7	-19.7	-0.1743	µg/L	-0.1743	ppb	04:49:00
2	As 188.979†	3.5	1.1	2.0751	µg/L	2.0751	ppb	04:49:21
2	B 249.677†	140.1	-14.4	-0.6401	µg/L	-0.6401	ppb	04:49:21
2	Ba 233.527†	-72.3	7.8	0.1971	µg/L	0.1971	ppb	04:49:21
2	Be 313.107†	3636.7	55.0	0.0348	µg/L	0.0348	ppb	04:49:00
2	Cd 226.502†	-89.1	11.1	0.2887	µg/L	0.2887	ppb	04:49:21
2	Co 228.616†	-73.1	-2.0	-0.0927	µg/L	-0.0927	ppb	04:49:21
2	Cr 267.716†	-89.0	33.0	0.6876	µg/L	0.6876	ppb	04:49:00
2	Cu 324.752†	3324.3	-32.8	-0.2315	µg/L	-0.2315	ppb	04:49:00
2	Mn 257.610†	-212.4	8.5	0.0266	µg/L	0.0266	ppb	04:49:21
2	Mo 202.031†	-2.6	5.2	0.5851	µg/L	0.5851	ppb	04:49:21
2	Ni 231.604†	274.7	-22.5	-1.2251	µg/L	-1.2251	ppb	04:49:21
2	P 214.914†	211.8	7.5	16.364	µg/L	16.364	ppb	04:49:21
2	Pb 220.353†	66.5	12.9	3.2804	µg/L	3.2804	ppb	04:49:21

2	S 181.975 Axial†	20.8	-3.1	-15.740 µg/L	-15.740 ppb	04:49:21
2	Sb 206.836†	17.5	-2.9	-2.9205 µg/L	-2.9205 ppb	04:49:21
2	Se 196.026†	19.7	5.8	8.3872 µg/L	8.3872 ppb	04:49:21
2	SiO2†	1944.6	-21.1	-4.0292 µg/L	-4.0292 ppb	04:49:00
2	Si 251.611†	351.3	4.5	0.2867 µg/L	0.2867 ppb	04:49:21
2	Sn 189.927†	24.3	2.0	0.9601 µg/L	0.9601 ppb	04:49:21
2	Ti 334.940†	729.3	16.4	0.0376 µg/L	0.0376 ppb	04:49:00
2	Tl 190.801†	-18.8	2.4	3.6937 µg/L	3.6937 ppb	04:49:21
2	U 409.014†	628.2	-45.9	-4.3103 µg/L	-4.3103 ppb	04:49:00
2	V 292.402†	-61.1	30.4	0.3396 µg/L	0.3396 ppb	04:49:00
2	Zn 213.857†	547.5	1.8	0.0569 µg/L	0.0569 ppb	04:49:21
3	Sc RADIAL	113198.0	113198.0	101 %		04:47:51
3	Al 396.153Radial†	215.1	-16.1	-8.1660 µg/L	-8.1660 ppb	04:47:51
3	Ca 317.933Radial†	427.3	-70.8	-28.112 µg/L	-28.112 ppb	04:48:12
3	Fe 238.204 Radial†	9.4	-1.9	-9.8518 µg/L	-9.8518 ppb	04:48:12
3	K 766.490 Radial†	717.9	18.5	10.049 µg/L	10.049 ppb	04:47:51
3	Mg 279.077 IEC†	15.6	-4.3	-24.091 µg/L	-24.091 ppb	04:48:12
3	Na 589.592 Radial†	-672.3	35.9	9.9519 µg/L	9.9519 ppb	04:47:51
3	Sr 421.552†	-40.3	23.7	0.1337 µg/L	0.1337 ppb	04:47:51
3	Sc 361.383	2064037.0	2064037.0	100.35 %		04:49:27
3	Y 371.029	1257007.1	1257007.1	100.37 %		04:49:27
3	Ag 328.068†	-23.9	4.5	0.0412 µg/L	0.0412 ppb	04:49:32
3	As 188.979†	0.8	-1.7	-3.2766 µg/L	-3.2766 ppb	04:49:53
3	B 249.677†	124.3	-31.8	-1.4085 µg/L	-1.4085 ppb	04:49:53
3	Ba 233.527†	-76.0	4.9	0.1236 µg/L	0.1236 ppb	04:49:53
3	Be 313.107†	3672.0	47.5	0.0300 µg/L	0.0300 ppb	04:49:32
3	Cd 226.502†	-89.1	12.1	0.3255 µg/L	0.3255 ppb	04:49:53
3	Co 228.616†	-70.4	1.6	0.0772 µg/L	0.0772 ppb	04:49:53
3	Cr 267.716†	-122.4	0.8	0.0170 µg/L	0.0170 ppb	04:49:32
3	Cu 324.752†	3445.0	48.5	0.3393 µg/L	0.3393 ppb	04:49:32
3	Mn 257.610†	-204.1	19.3	0.0600 µg/L	0.0600 ppb	04:49:53
3	Mo 202.031†	-3.7	4.2	0.4704 µg/L	0.4704 ppb	04:49:53
3	Ni 231.604†	280.2	-20.2	-1.0995 µg/L	-1.0995 ppb	04:49:53
3	P 214.914†	213.3	6.6	14.187 µg/L	14.187 ppb	04:49:53
3	Pb 220.353†	60.8	6.5	1.6413 µg/L	1.6413 ppb	04:49:53
3	S 181.975 Axial†	19.8	-4.3	-22.249 µg/L	-22.249 ppb	04:49:53
3	Sb 206.836†	14.2	-6.4	-6.2998 µg/L	-6.2998 ppb	04:49:53
3	Se 196.026†	5.4	-8.7	-12.644 µg/L	-12.644 ppb	04:49:53
3	SiO2†	2033.5	44.6	8.5253 µg/L	8.5253 ppb	04:49:32
3	Si 251.611†	363.9	13.0	1.0618 µg/L	1.0618 ppb	04:49:53
3	Sn 189.927†	18.1	-4.4	-2.1510 µg/L	-2.1510 ppb	04:49:53
3	Ti 334.940†	745.4	23.9	0.0546 µg/L	0.0546 ppb	04:49:32
3	Tl 190.801†	-24.4	-2.9	-4.3994 µg/L	-4.3994 ppb	04:49:53
3	U 409.014†	783.5	101.5	9.5319 µg/L	9.5319 ppb	04:49:32
3	V 292.402†	-70.4	21.8	0.2633 µg/L	0.2633 ppb	04:49:32
3	Zn 213.857†	545.2	-6.8	-0.1763 µg/L	-0.1763 ppb	04:49:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2049222.6	99.634	%	0.6298				0.63%
Sc RADIAL	111794.2	99.4	%	1.08				1.09%
Y 371.029	1247708.1	99.629	%	0.6573				0.66%
Ag 328.068†	-4.9	-0.0421	µg/L	0.11576	-0.0421	ppb	0.11576	275.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-47.6	-24.099	µg/L	14.5153	-24.099	ppb	14.5153	60.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.1	-2.0306	µg/L	3.64601	-2.0306	ppb	3.64601	179.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-14.7	-0.6539	µg/L	0.74783	-0.6539	ppb	0.74783	114.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.4	0.0613	µg/L	0.17546	0.0613	ppb	0.17546	286.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	55.2	0.0349	µg/L	0.00495	0.0349	ppb	0.00495	14.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.0	-27.396	µg/L	2.9252	-27.396	ppb	2.9252	10.68%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.0	0.1872	µg/L	0.20848	0.1872	ppb	0.20848	111.35%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.7	-0.1288	µg/L	0.22622	-0.1288	ppb	0.22622	175.67%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 9.5      0.1977 µg/L       0.42914      0.1977 ppb        0.42914 217.07%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.0      0.1400 µg/L       0.32209      0.1400 ppb        0.32209 229.98%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -2.4293 µg/L       8.10545     -2.4293 ppb        8.10545 333.65%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          32.7      17.753 µg/L        9.9333      17.753 ppb         9.9333  55.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.9     -27.274 µg/L       13.9191     -27.274 ppb        13.9191  51.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                14.0      0.0441 µg/L       0.01678      0.0441 ppb        0.01678  38.04%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.7      0.6404 µg/L       0.20334      0.6404 ppb        0.20334  31.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.3      15.902 µg/L        5.8494      15.902 ppb         5.8494  36.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -12.2     -0.6656 µg/L       0.86252     -0.6656 ppb        0.86252 129.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.3      11.368 µg/L        6.8544      11.368 ppb         6.8544  60.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.8      2.9928 µg/L       1.23316      2.9928 ppb        1.23316  41.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.6     -18.705 µg/L        3.2931     -18.705 ppb         3.2931  17.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.9     -3.8715 µg/L       2.11937     -3.8715 ppb        2.11937  54.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.3     -3.3549 µg/L      10.72815     -3.3549 ppb       10.72815 319.78%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      18.0      3.4306 µg/L       6.60295      3.4306 ppb        6.60295 192.47%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                11.2      0.8668 µg/L       0.51128      0.8668 ppb        0.51128  58.99%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.4     -0.6881 µg/L       1.56382     -0.6881 ppb        1.56382 227.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                21.4      0.1203 µg/L       0.01710      0.1203 ppb        0.01710  14.21%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                29.9      0.0678 µg/L       0.03845      0.0678 ppb        0.03845  56.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.6      3.8816 µg/L       8.37651      3.8816 ppb        8.37651 215.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 51.5      4.8363 µg/L       7.92219      4.8363 ppb        7.92219 163.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 24.2      0.2850 µg/L       0.04765      0.2850 ppb        0.04765  16.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -3.0     -0.0761 µg/L       0.11999     -0.0761 ppb        0.11999 157.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 05:12:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110928.3	110928.3	98.6	%			05:12:50
1	Al 396.153Radial†	10053.7	9964.5	5017.3	µg/L	5017.3	ppb	05:12:50
1	Ca 317.933Radial†	12906.6	12591.7	4998.3	µg/L	4998.3	ppb	05:13:11
1	Fe 238.204 Radial†	960.0	962.3	5070.9	µg/L	5070.9	ppb	05:13:11
1	K 766.490 Radial†	10152.8	9600.0	5205.1	µg/L	5205.1	ppb	05:12:50
1	Mg 279.077 IEC†	922.9	916.0	5085.3	µg/L	5085.3	ppb	05:13:11
1	Na 589.592 Radial†	39107.8	40358.8	11198	µg/L	11198	ppb	05:12:50
1	Sr 421.552†	86143.4	87412.3	492.39	µg/L	492.39	ppb	05:12:50
1	Sc 361.383	1994002.9	1994002.9	96.949	%			05:14:14
1	Y 371.029	1208577.2	1208577.2	96.504	%			05:14:14
1	Ag 328.068†	53405.7	55114.4	495.99	µg/L	495.99	ppb	05:14:20
1	As 188.979†	250.8	256.2	487.34	µg/L	487.34	ppb	05:14:41
1	B 249.677†	10742.3	10924.6	483.28	µg/L	483.28	ppb	05:14:20
1	Ba 233.527†	18711.2	19380.6	487.81	µg/L	487.81	ppb	05:14:20
1	Be 313.107†	766540.2	787047.9	497.69	µg/L	497.69	ppb	05:14:14
1	Cd 226.502†	17668.7	18325.6	484.75	µg/L	484.75	ppb	05:14:20
1	Co 228.616†	9792.7	10172.5	489.28	µg/L	489.28	ppb	05:14:20
1	Cr 267.716†	22520.6	23352.0	487.24	µg/L	487.24	ppb	05:14:20
1	Cu 324.752†	71406.0	70268.5	495.46	µg/L	495.46	ppb	05:14:20
1	Mn 257.610†	152416.7	157435.2	500.26	µg/L	500.26	ppb	05:14:14
1	Mo 202.031†	4219.6	4360.2	486.63	µg/L	486.63	ppb	05:14:41
1	Ni 231.604†	8980.5	8963.7	488.33	µg/L	488.33	ppb	05:14:20
1	P 214.914†	1310.4	1145.6	2432.8	µg/L	2432.8	ppb	05:14:41
1	Pb 220.353†	1928.9	1935.5	491.34	µg/L	491.34	ppb	05:14:41
1	S 181.975 Axial†	358.1	345.3	1772.5	µg/L	1772.5	ppb	05:14:41
1	Sb 206.836†	503.4	498.6	493.38	µg/L	493.38	ppb	05:14:41
1	Se 196.026†	354.4	351.5	514.06	µg/L	514.06	ppb	05:14:41
1	SiO2†	29013.8	27945.0	5336.5	µg/L	5336.5	ppb	05:14:20
1	Si 251.611†	31838.0	32490.1	2441.5	µg/L	2441.5	ppb	05:14:20
1	Sn 189.927†	983.7	992.2	486.47	µg/L	486.47	ppb	05:14:41
1	Ti 334.940†	218796.1	224961.7	498.37	µg/L	498.37	ppb	05:14:14
1	Tl 190.801†	295.1	325.8	493.98	µg/L	493.98	ppb	05:14:41
1	U 409.014†	5765.0	5267.2	493.82	µg/L	493.82	ppb	05:14:20
1	V 292.402†	41916.2	43327.1	493.05	µg/L	493.05	ppb	05:14:20
1	Zn 213.857†	18341.9	18368.9	488.23	µg/L	488.23	ppb	05:14:20
2	Sc RADIAL	110539.3	110539.3	98.3	%			05:13:16
2	Al 396.153Radial†	10112.8	10060.5	5065.5	µg/L	5065.5	ppb	05:13:16
2	Ca 317.933Radial†	12808.5	12538.0	4977.0	µg/L	4977.0	ppb	05:13:37
2	Fe 238.204 Radial†	956.8	962.4	5072.0	µg/L	5072.0	ppb	05:13:37
2	K 766.490 Radial†	10282.5	9768.2	5296.3	µg/L	5296.3	ppb	05:13:16
2	Mg 279.077 IEC†	931.7	928.2	5153.2	µg/L	5153.2	ppb	05:13:37
2	Na 589.592 Radial†	38692.0	40075.3	11119	µg/L	11119	ppb	05:13:16
2	Sr 421.552†	86894.8	88484.2	498.43	µg/L	498.43	ppb	05:13:16
2	Sc 361.383	1965054.8	1965054.8	95.542	%			05:14:48
2	Y 371.029	1190172.7	1190172.7	95.035	%			05:14:48
2	Ag 328.068†	53739.1	56274.9	506.42	µg/L	506.42	ppb	05:14:53
2	As 188.979†	249.0	258.1	490.89	µg/L	490.89	ppb	05:15:14
2	B 249.677†	10781.0	11128.4	492.33	µg/L	492.33	ppb	05:14:53
2	Ba 233.527†	18790.6	19748.0	497.06	µg/L	497.06	ppb	05:14:53
2	Be 313.107†	756517.2	788204.7	498.42	µg/L	498.42	ppb	05:14:48
2	Cd 226.502†	17731.3	18659.6	493.60	µg/L	493.60	ppb	05:14:53
2	Co 228.616†	9783.1	10311.3	495.97	µg/L	495.97	ppb	05:14:53
2	Cr 267.716†	22618.9	23797.1	496.53	µg/L	496.53	ppb	05:14:53
2	Cu 324.752†	71836.3	71803.8	506.26	µg/L	506.26	ppb	05:14:53
2	Mn 257.610†	150573.7	157822.1	501.49	µg/L	501.49	ppb	05:14:48
2	Mo 202.031†	4231.5	4436.9	495.17	µg/L	495.17	ppb	05:15:14
2	Ni 231.604†	9005.1	9125.9	497.16	µg/L	497.16	ppb	05:14:53
2	P 214.914†	1301.2	1155.9	2454.1	µg/L	2454.1	ppb	05:15:14
2	Pb 220.353†	1945.7	1982.4	503.23	µg/L	503.23	ppb	05:15:14

2	S 181.975 Axial†	344.8	336.9	1729.4 µg/L	1729.4 ppb	05:15:14
2	Sb 206.836†	505.8	508.8	503.45 µg/L	503.45 ppb	05:15:14
2	Se 196.026†	347.2	349.3	510.92 µg/L	510.92 ppb	05:15:14
2	SiO2†	29148.7	28527.1	5447.6 µg/L	5447.6 ppb	05:14:53
2	Si 251.611†	31990.4	33133.4	2490.1 µg/L	2490.1 ppb	05:14:53
2	Sn 189.927†	992.4	1016.2	498.17 µg/L	498.17 ppb	05:15:14
2	Ti 334.940†	216174.6	225542.4	499.66 µg/L	499.66 ppb	05:14:48
2	Tl 190.801†	297.0	332.3	503.83 µg/L	503.83 ppb	05:15:14
2	U 409.014†	5834.6	5427.6	508.89 µg/L	508.89 ppb	05:14:53
2	V 292.402†	42154.7	44213.6	503.13 µg/L	503.13 ppb	05:14:53
2	Zn 213.857†	18454.3	18765.2	498.79 µg/L	498.79 ppb	05:14:53
3	Sc RADIAL	109471.1	109471.1	97.3 %		05:13:42
3	Al 396.153Radial†	10017.7	10063.2	5067.1 µg/L	5067.1 ppb	05:13:42
3	Ca 317.933Radial†	12690.2	12543.6	4979.2 µg/L	4979.2 ppb	05:14:03
3	Fe 238.204 Radial†	949.2	964.0	5080.5 µg/L	5080.5 ppb	05:14:03
3	K 766.490 Radial†	10081.7	9663.9	5239.7 µg/L	5239.7 ppb	05:13:42
3	Mg 279.077 IEC†	921.1	926.6	5144.4 µg/L	5144.4 ppb	05:14:03
3	Na 589.592 Radial†	38073.4	39823.8	11050 µg/L	11050 ppb	05:13:42
3	Sr 421.552†	85843.0	88266.3	497.20 µg/L	497.20 ppb	05:13:42
3	Sc 361.383	1971880.6	1971880.6	95.874 %		05:15:21
3	Y 371.029	1194123.8	1194123.8	95.350 %		05:15:21
3	Ag 328.068†	53903.7	56251.9	506.21 µg/L	506.21 ppb	05:15:27
3	As 188.979†	252.3	260.7	495.79 µg/L	495.79 ppb	05:15:47
3	B 249.677†	10849.4	11160.7	493.76 µg/L	493.76 ppb	05:15:27
3	Ba 233.527†	18905.6	19799.9	498.36 µg/L	498.36 ppb	05:15:27
3	Be 313.107†	759370.2	788439.6	498.57 µg/L	498.57 ppb	05:15:21
3	Cd 226.502†	17797.0	18663.8	493.71 µg/L	493.71 ppb	05:15:27
3	Co 228.616†	9820.5	10314.9	496.13 µg/L	496.13 ppb	05:15:27
3	Cr 267.716†	22786.2	23889.6	498.45 µg/L	498.45 ppb	05:15:27
3	Cu 324.752†	72034.0	71749.8	505.89 µg/L	505.89 ppb	05:15:27
3	Mn 257.610†	151086.2	157811.2	501.46 µg/L	501.46 ppb	05:15:21
3	Mo 202.031†	4200.0	4388.6	489.79 µg/L	489.79 ppb	05:15:47
3	Ni 231.604†	9042.2	9131.9	497.49 µg/L	497.49 ppb	05:15:27
3	P 214.914†	1291.1	1140.7	2421.0 µg/L	2421.0 ppb	05:15:47
3	Pb 220.353†	1918.7	1947.1	494.29 µg/L	494.29 ppb	05:15:47
3	S 181.975 Axial†	325.8	315.8	1621.0 µg/L	1621.0 ppb	05:15:47
3	Sb 206.836†	500.7	501.7	496.32 µg/L	496.32 ppb	05:15:47
3	Se 196.026†	343.3	344.0	503.16 µg/L	503.16 ppb	05:15:47
3	SiO2†	29181.5	28455.7	5434.0 µg/L	5434.0 ppb	05:15:27
3	Si 251.611†	32056.3	33086.2	2486.8 µg/L	2486.8 ppb	05:15:27
3	Sn 189.927†	986.2	1006.2	493.27 µg/L	493.27 ppb	05:15:47
3	Ti 334.940†	216790.6	225401.7	499.35 µg/L	499.35 ppb	05:15:21
3	Tl 190.801†	297.1	331.3	502.34 µg/L	502.34 ppb	05:15:47
3	U 409.014†	5761.9	5330.7	499.78 µg/L	499.78 ppb	05:15:27
3	V 292.402†	42260.6	44171.4	502.60 µg/L	502.60 ppb	05:15:27
3	Zn 213.857†	18525.6	18772.8	498.99 µg/L	498.99 ppb	05:15:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1976979.5	96.122	%	0.7358				0.77%
Sc RADIAL	110312.9	98.1	%	0.67				0.68%
Y 371.029	1197624.5	95.630	%	0.7736				0.81%
Ag 328.068†	55880.4	502.87	µg/L	5.964	502.87	ppb	5.964	1.19%
QC value within limits for Ag 328.068 Recovery = 100.57%								
Al 396.153Radial†	10029.4	5050.0	µg/L	28.28	5050.0	ppb	28.28	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.00%								
As 188.979†	258.3	491.34	µg/L	4.241	491.34	ppb	4.241	0.86%
QC value within limits for As 188.979 Recovery = 98.27%								
B 249.677†	11071.2	489.79	µg/L	5.679	489.79	ppb	5.679	1.16%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	19642.8	494.41	µg/L	5.752	494.41	ppb	5.752	1.16%
QC value within limits for Ba 233.527 Recovery = 98.88%								
Be 313.107†	787897.4	498.23	µg/L	0.471	498.23	ppb	0.471	0.09%
QC value within limits for Be 313.107 Recovery = 99.65%								
Ca 317.933Radial†	12557.8	4984.9	µg/L	11.73	4984.9	ppb	11.73	0.24%
QC value within limits for Ca 317.933Radial Recovery = 99.70%								
Cd 226.502†	18549.6	490.69	µg/L	5.138	490.69	ppb	5.138	1.05%
QC value within limits for Cd 226.502 Recovery = 98.14%								
Co 228.616†	10266.2	493.79	µg/L	3.909	493.79	ppb	3.909	0.79%

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   QC value within limits for Co 228.616  Recovery = 98.76%
Cr 267.716†            23679.6      494.07 µg/L        5.997      494.07 ppb          5.997   1.21%
   QC value within limits for Cr 267.716  Recovery = 98.81%
Cu 324.752†            71274.1      502.54 µg/L        6.130      502.54 ppb          6.130   1.22%
   QC value within limits for Cu 324.752  Recovery = 100.51%
Fe 238.204 Radial†       962.9      5074.5 µg/L         5.29      5074.5 ppb           5.29   0.10%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.49%
K 766.490 Radial†       9677.4      5247.0 µg/L        46.03      5247.0 ppb          46.03   0.88%
   QC value within limits for K 766.490 Radial  Recovery = 104.94%
Mg 279.077 IEC†          923.6      5127.7 µg/L        36.94      5127.7 ppb          36.94   0.72%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.55%
Mn 257.610†           157689.5      501.07 µg/L        0.699      501.07 ppb          0.699   0.14%
   QC value within limits for Mn 257.610  Recovery = 100.21%
Mo 202.031†            4395.2      490.53 µg/L        4.320      490.53 ppb          4.320   0.88%
   QC value within limits for Mo 202.031  Recovery = 98.11%
Na 589.592 Radial†    40086.0       11122 µg/L         74.3       11122 ppb           74.3   0.67%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 111.22%
Ni 231.604†            9073.9      494.33 µg/L        5.199      494.33 ppb          5.199   1.05%
   QC value within limits for Ni 231.604  Recovery = 98.87%
P 214.914†             1147.4      2436.0 µg/L        16.78      2436.0 ppb          16.78   0.69%
   QC value within limits for P 214.914  Recovery = 97.44%
Pb 220.353†            1955.0      496.29 µg/L        6.192      496.29 ppb          6.192   1.25%
   QC value within limits for Pb 220.353  Recovery = 99.26%
S 181.975 Axial†        332.7      1707.7 µg/L        78.09      1707.7 ppb          78.09   4.57%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 170.77%
Sb 206.836†             503.0      497.72 µg/L        5.174      497.72 ppb          5.174   1.04%
   QC value within limits for Sb 206.836  Recovery = 99.54%
Se 196.026†             348.3      509.38 µg/L        5.612      509.38 ppb          5.612   1.10%
   QC value within limits for Se 196.026  Recovery = 101.88%
SiO2†                  28309.3      5406.0 µg/L        60.63      5406.0 ppb          60.63   1.12%
   QC value within limits for SiO2  Recovery = 101.09%
Si 251.611†            32903.3      2472.8 µg/L        27.15      2472.8 ppb          27.15   1.10%
   QC value within limits for Si 251.611  Recovery = 98.91%
Sn 189.927†            1004.9      492.64 µg/L        5.878      492.64 ppb          5.878   1.19%
   QC value within limits for Sn 189.927  Recovery = 98.53%
Sr 421.552†            88054.3      496.00 µg/L        3.191      496.00 ppb          3.191   0.64%
   QC value within limits for Sr 421.552  Recovery = 99.20%
Ti 334.940†           225301.9      499.13 µg/L        0.672      499.13 ppb          0.672   0.13%
   QC value within limits for Ti 334.940  Recovery = 99.83%
Tl 190.801†             329.8      500.05 µg/L        5.308      500.05 ppb          5.308   1.06%
   QC value within limits for Tl 190.801  Recovery = 100.01%
U 409.014†             5341.8      500.83 µg/L        7.588      500.83 ppb          7.588   1.52%
   QC value within limits for U 409.014  Recovery = 100.17%
V 292.402†             43904.0      499.59 µg/L        5.673      499.59 ppb          5.673   1.14%
   QC value within limits for V 292.402  Recovery = 99.92%
Zn 213.857†            18635.6      495.33 µg/L        6.152      495.33 ppb          6.152   1.24%
   QC value within limits for Zn 213.857  Recovery = 99.07%
QC Failed.  Continue with analysis.
```

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 05:15:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106486.4	106486.4	94.7	%			05:16:30
1	Al 396.153Radial†	164.7	-55.9	-28.240	µg/L	-28.240	ppb	05:16:30
1	Ca 317.933Radial†	463.4	-5.9	-2.3519	µg/L	-2.3519	ppb	05:16:51
1	Fe 238.204 Radial†	7.8	-2.9	-15.496	µg/L	-15.496	ppb	05:16:51
1	K 766.490 Radial†	992.3	353.3	191.57	µg/L	191.57	ppb	05:16:30
1	Mg 279.077 IEC†	14.5	-4.5	-25.057	µg/L	-25.057	ppb	05:16:51
1	Na 589.592 Radial†	1031.4	1793.4	497.59	µg/L	497.59	ppb	05:16:30
1	Sr 421.552†	-13.9	49.1	0.2766	µg/L	0.2766	ppb	05:16:30
1	Sc 361.383	1956069.2	1956069.2	95.105	%			05:17:52
1	Y 371.029	1190726.9	1190726.9	95.079	%			05:17:52
1	Ag 328.068†	-17.7	9.7	0.0863	µg/L	0.0863	ppb	05:17:58
1	As 188.979†	1.8	-0.6	-1.0929	µg/L	-1.0929	ppb	05:18:18
1	B 249.677†	168.4	21.4	0.9545	µg/L	0.9545	ppb	05:17:58
1	Ba 233.527†	-70.4	6.7	0.1678	µg/L	0.1678	ppb	05:18:18
1	Be 313.107†	3704.1	283.2	0.1790	µg/L	0.1790	ppb	05:17:58
1	Cd 226.502†	-98.0	-2.2	-0.0516	µg/L	-0.0516	ppb	05:18:18
1	Co 228.616†	-68.5	-0.3	-0.0133	µg/L	-0.0133	ppb	05:18:18
1	Cr 267.716†	-119.2	-2.6	-0.0541	µg/L	-0.0541	ppb	05:17:58
1	Cu 324.752†	3310.4	96.4	0.6752	µg/L	0.6752	ppb	05:17:58
1	Mn 257.610†	-179.4	34.0	0.1059	µg/L	0.1059	ppb	05:18:18
1	Mo 202.031†	-4.7	2.9	0.3258	µg/L	0.3258	ppb	05:18:18
1	Ni 231.604†	285.4	0.7	0.0359	µg/L	0.0359	ppb	05:18:18
1	P 214.914†	209.5	14.3	30.890	µg/L	30.890	ppb	05:18:18
1	Pb 220.353†	57.4	6.3	1.5811	µg/L	1.5811	ppb	05:18:18
1	S 181.975 Axial†	94.9	75.7	389.07	µg/L	389.07	ppb	05:18:18
1	Sb 206.836†	21.4	1.9	1.9186	µg/L	1.9186	ppb	05:18:18
1	Se 196.026†	12.4	-1.0	-1.4826	µg/L	-1.4826	ppb	05:18:18
1	SiO2†	1987.1	107.7	20.559	µg/L	20.559	ppb	05:17:58
1	Si 251.611†	407.2	78.5	5.9416	µg/L	5.9416	ppb	05:18:18
1	Sn 189.927†	20.6	-0.8	-0.3924	µg/L	-0.3924	ppb	05:18:18
1	Ti 334.940†	811.9	134.8	0.2989	µg/L	0.2989	ppb	05:17:58
1	Tl 190.801†	-18.5	2.0	3.0271	µg/L	3.0271	ppb	05:18:18
1	U 409.014†	720.5	78.3	7.3581	µg/L	7.3581	ppb	05:17:58
1	V 292.402†	-76.1	11.9	0.1472	µg/L	0.1472	ppb	05:17:58
1	Zn 213.857†	534.2	11.5	0.3090	µg/L	0.3090	ppb	05:18:18
2	Sc RADIAL	106211.8	106211.8	94.4	%			05:16:56
2	Al 396.153Radial†	175.9	-43.5	-21.993	µg/L	-21.993	ppb	05:16:56
2	Ca 317.933Radial†	441.9	-27.4	-10.885	µg/L	-10.885	ppb	05:17:16
2	Fe 238.204 Radial†	8.7	-1.9	-10.243	µg/L	-10.243	ppb	05:17:16
2	K 766.490 Radial†	1006.7	371.3	201.30	µg/L	201.30	ppb	05:16:56
2	Mg 279.077 IEC†	11.2	-8.0	-44.438	µg/L	-44.438	ppb	05:17:16
2	Na 589.592 Radial†	824.4	1577.0	437.56	µg/L	437.56	ppb	05:16:56
2	Sr 421.552†	-10.2	53.0	0.2987	µg/L	0.2987	ppb	05:16:56
2	Sc 361.383	1962817.7	1962817.7	95.433	%			05:18:24
2	Y 371.029	1193988.9	1193988.9	95.339	%			05:18:24
2	Ag 328.068†	-7.0	21.0	0.1853	µg/L	0.1853	ppb	05:18:30
2	As 188.979†	2.9	0.6	1.1192	µg/L	1.1192	ppb	05:18:50
2	B 249.677†	151.1	2.6	0.1197	µg/L	0.1197	ppb	05:18:30
2	Ba 233.527†	-66.5	11.0	0.2761	µg/L	0.2761	ppb	05:18:50
2	Be 313.107†	3684.8	249.7	0.1578	µg/L	0.1578	ppb	05:18:30
2	Cd 226.502†	-96.7	-0.4	-0.0091	µg/L	-0.0091	ppb	05:18:50
2	Co 228.616†	-74.9	-6.8	-0.3262	µg/L	-0.3262	ppb	05:18:50
2	Cr 267.716†	-121.4	-4.4	-0.0926	µg/L	-0.0926	ppb	05:18:30
2	Cu 324.752†	3332.1	107.2	0.7519	µg/L	0.7519	ppb	05:18:30
2	Mn 257.610†	-165.7	49.0	0.1543	µg/L	0.1543	ppb	05:18:50
2	Mo 202.031†	-4.5	3.2	0.3612	µg/L	0.3612	ppb	05:18:50
2	Ni 231.604†	289.5	3.9	0.2142	µg/L	0.2142	ppb	05:18:50
2	P 214.914†	208.3	12.2	26.465	µg/L	26.465	ppb	05:18:50
2	Pb 220.353†	71.5	20.8	5.2711	µg/L	5.2711	ppb	05:18:50

2	S 181.975 Axial†	90.7	71.0	364.86 µg/L	364.86 ppb		05:18:50
2	Sb 206.836†	20.2	0.6	0.5978 µg/L	0.5978 ppb		05:18:50
2	Se 196.026†	6.5	-7.3	-10.623 µg/L	-10.623 ppb		05:18:50
2	SiO2†	2029.7	145.1	27.710 µg/L	27.710 ppb		05:18:30
2	Si 251.611†	410.4	80.4	6.0367 µg/L	6.0367 ppb		05:18:50
2	Sn 189.927†	22.7	1.4	0.6583 µg/L	0.6583 ppb		05:18:50
2	Ti 334.940†	814.1	134.2	0.2981 µg/L	0.2981 ppb		05:18:30
2	Tl 190.801†	-14.0	6.8	10.216 µg/L	10.216 ppb		05:18:50
2	U 409.014†	659.7	12.0	1.1305 µg/L	1.1305 ppb		05:18:30
2	V 292.402†	-106.7	-19.9	-0.2205 µg/L	-0.2205 ppb		05:18:30
2	Zn 213.857†	527.1	2.2	0.0579 µg/L	0.0579 ppb		05:18:50
3	Sc RADIAL	106409.1	106409.1	94.6 %			05:17:22
3	Al 396.153Radial†	208.8	-9.1	-4.6269 µg/L	-4.6269 ppb		05:17:22
3	Ca 317.933Radial†	450.4	-19.4	-7.6860 µg/L	-7.6860 ppb		05:17:42
3	Fe 238.204 Radial†	10.3	-0.3	-1.6326 µg/L	-1.6326 ppb		05:17:42
3	K 766.490 Radial†	977.6	338.6	183.57 µg/L	183.57 ppb		05:17:22
3	Mg 279.077 IEC†	15.6	-3.3	-18.527 µg/L	-18.527 ppb		05:17:42
3	Na 589.592 Radial†	758.0	1505.2	417.63 µg/L	417.63 ppb		05:17:22
3	Sr 421.552†	-55.1	5.6	0.0314 µg/L	0.0314 ppb		05:17:22
3	Sc 361.383	1961134.5	1961134.5	95.351 %			05:18:56
3	Y 371.029	1194043.2	1194043.2	95.344 %			05:18:56
3	Ag 328.068†	-26.3	0.7	0.0072 µg/L	0.0072 ppb		05:19:02
3	As 188.979†	1.1	-1.3	-2.4914 µg/L	-2.4914 ppb		05:19:22
3	B 249.677†	151.6	3.3	0.1466 µg/L	0.1466 ppb		05:19:02
3	Ba 233.527†	-73.3	3.8	0.0963 µg/L	0.0963 ppb		05:19:22
3	Be 313.107†	3690.3	258.7	0.1635 µg/L	0.1635 ppb		05:19:02
3	Cd 226.502†	-86.4	10.3	0.2695 µg/L	0.2695 ppb		05:19:22
3	Co 228.616†	-84.9	-17.3	-0.8317 µg/L	-0.8317 ppb		05:19:22
3	Cr 267.716†	-74.2	44.9	0.9350 µg/L	0.9350 ppb		05:19:02
3	Cu 324.752†	3296.8	73.2	0.5146 µg/L	0.5146 ppb		05:19:02
3	Mn 257.610†	-161.5	53.3	0.1689 µg/L	0.1689 ppb		05:19:22
3	Mo 202.031†	-2.6	5.2	0.5816 µg/L	0.5816 ppb		05:19:22
3	Ni 231.604†	272.6	-13.6	-0.7387 µg/L	-0.7387 ppb		05:19:22
3	P 214.914†	199.4	3.1	6.6844 µg/L	6.6844 ppb		05:19:22
3	Pb 220.353†	63.6	12.6	3.1918 µg/L	3.1918 ppb		05:19:22
3	S 181.975 Axial†	88.3	68.5	352.12 µg/L	352.12 ppb		05:19:22
3	Sb 206.836†	22.0	2.5	2.4880 µg/L	2.4880 ppb		05:19:22
3	Se 196.026†	14.4	1.0	1.5253 µg/L	1.5253 ppb		05:19:22
3	SiO2†	1980.4	95.2	18.188 µg/L	18.188 ppb		05:19:02
3	Si 251.611†	412.3	82.7	6.2930 µg/L	6.2930 ppb		05:19:22
3	Sn 189.927†	18.9	-2.6	-1.2712 µg/L	-1.2712 ppb		05:19:22
3	Ti 334.940†	831.2	152.8	0.3392 µg/L	0.3392 ppb		05:19:02
3	Tl 190.801†	-16.7	3.9	5.8411 µg/L	5.8411 ppb		05:19:22
3	U 409.014†	611.4	-38.0	-3.5673 µg/L	-3.5673 ppb		05:19:02
3	V 292.402†	-79.7	8.3	0.0922 µg/L	0.0922 ppb		05:19:02
3	Zn 213.857†	531.1	6.9	0.1877 µg/L	0.1877 ppb		05:19:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1960007.1	95.297	%	0.1708				0.18%
Sc RADIAL	106369.1	94.6	%	0.13				0.13%
Y 371.029	1192919.7	95.254	%	0.1516				0.16%
Ag 328.068†	10.5	0.0929	µg/L	0.08923	0.0929	ppb	0.08923	96.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-36.2	-18.287	µg/L	12.2350	-18.287	ppb	12.2350	66.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.8217	µg/L	1.82053	-0.8217	ppb	1.82053	221.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	9.1	0.4069	µg/L	0.47438	0.4069	ppb	0.47438	116.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.2	0.1801	µg/L	0.09050	0.1801	ppb	0.09050	50.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	263.9	0.1668	µg/L	0.01098	0.1668	ppb	0.01098	6.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-17.6	-6.9741	µg/L	4.31065	-6.9741	ppb	4.31065	61.81%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.6	0.0696	µg/L	0.17443	0.0696	ppb	0.17443	250.52%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.1	-0.3904	µg/L	0.41294	-0.3904	ppb	0.41294	105.78%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                12.6      0.2628 µg/L       0.58251      0.2628 ppb        0.58251 221.69%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                92.3      0.6472 µg/L       0.12113      0.6472 ppb        0.12113  18.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -9.1240 µg/L       6.99920     -9.1240 ppb        6.99920  76.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         354.4      192.14 µg/L         8.877      192.14 ppb          8.877   4.62%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -5.3     -29.341 µg/L       13.4765     -29.341 ppb        13.4765  45.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                45.4      0.1431 µg/L       0.03298      0.1431 ppb        0.03298  23.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4229 µg/L       0.13862      0.4229 ppb        0.13862  32.78%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       1625.2      450.93 µg/L        41.623      450.93 ppb         41.623   9.23%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.0     -0.1628 µg/L       0.50661     -0.1628 ppb        0.50661 311.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.9      21.347 µg/L       12.8892      21.347 ppb        12.8892  60.38%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                13.2      3.3480 µg/L       1.84997      3.3480 ppb        1.84997  55.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           71.8      368.68 µg/L        18.772      368.68 ppb         18.772   5.09%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.7      1.6681 µg/L       0.96971      1.6681 ppb        0.96971  58.13%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.4     -3.5267 µg/L       6.32675     -3.5267 ppb        6.32675 179.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     116.0      22.152 µg/L        4.9570      22.152 ppb         4.9570  22.38%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                80.5      6.0905 µg/L       0.18177      6.0905 ppb        0.18177   2.98%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.3351 µg/L       0.96604     -0.3351 ppb        0.96604 288.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                35.9      0.2022 µg/L       0.14834      0.2022 ppb        0.14834  73.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               140.6      0.3121 µg/L       0.02351      0.3121 ppb        0.02351   7.53%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.2      6.3615 µg/L       3.62274      6.3615 ppb        3.62274  56.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 17.5      1.6404 µg/L       5.48051      1.6404 ppb        5.48051 334.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  0.1      0.0063 µg/L       0.19833      0.0063 ppb        0.19833 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 6.8      0.1848 µg/L       0.12559      0.1848 ppb        0.12559  67.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 05:50:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106902.1	106902.1	95.0	%			05:50:56
1	Al 396.153Radial†	10678.3	11005.7	5542.8	µg/L	5542.8	ppb	05:50:56
1	Ca 317.933Radial†	13120.8	13310.0	5283.5	µg/L	5283.5	ppb	05:51:17
1	Fe 238.204 Radial†	972.4	1011.9	5332.6	µg/L	5332.6	ppb	05:51:17
1	K 766.490 Radial†	9761.0	9575.4	5191.8	µg/L	5191.8	ppb	05:50:56
1	Mg 279.077 IEC†	965.2	995.7	5527.7	µg/L	5527.7	ppb	05:51:17
1	Na 589.592 Radial†	35394.6	37945.3	10528	µg/L	10528	ppb	05:50:56
1	Sr 421.552†	85748.5	90286.5	508.58	µg/L	508.58	ppb	05:50:56
1	Sc 361.383	1937977.1	1937977.1	94.225	%			05:52:20
1	Y 371.029	1173517.6	1173517.6	93.705	%			05:52:20
1	Ag 328.068†	53958.3	57293.4	515.60	µg/L	515.60	ppb	05:52:26
1	As 188.979†	258.0	271.3	515.98	µg/L	515.98	ppb	05:52:46
1	B 249.677†	10833.7	11342.0	501.72	µg/L	501.72	ppb	05:52:26
1	Ba 233.527†	18966.2	20209.2	508.66	µg/L	508.66	ppb	05:52:26
1	Be 313.107†	761122.3	804155.4	508.51	µg/L	508.51	ppb	05:52:20
1	Cd 226.502†	17859.4	19054.8	504.05	µg/L	504.05	ppb	05:52:26
1	Co 228.616†	9903.7	10582.4	509.01	µg/L	509.01	ppb	05:52:26
1	Cr 267.716†	22727.3	24242.9	505.83	µg/L	505.83	ppb	05:52:26
1	Cu 324.752†	71963.3	72989.2	514.66	µg/L	514.66	ppb	05:52:26
1	Mn 257.610†	151504.1	161011.5	511.65	µg/L	511.65	ppb	05:52:20
1	Mo 202.031†	4251.1	4519.5	504.41	µg/L	504.41	ppb	05:52:46
1	Ni 231.604†	9092.7	9350.6	509.40	µg/L	509.40	ppb	05:52:26
1	P 214.914†	1312.6	1187.1	2520.9	µg/L	2520.9	ppb	05:52:46
1	Pb 220.353†	1955.9	2021.6	513.23	µg/L	513.23	ppb	05:52:46
1	S 181.975 Axial†	237.9	228.5	1172.4	µg/L	1172.4	ppb	05:52:46
1	Sb 206.836†	503.6	513.9	508.44	µg/L	508.44	ppb	05:52:46
1	Se 196.026†	344.8	351.8	514.61	µg/L	514.61	ppb	05:52:46
1	SiO2†	29052.1	28850.9	5509.5	µg/L	5509.5	ppb	05:52:26
1	Si 251.611†	32002.9	33614.6	2526.0	µg/L	2526.0	ppb	05:52:26
1	Sn 189.927†	1002.3	1041.3	510.57	µg/L	510.57	ppb	05:52:46
1	Ti 334.940†	217104.7	229690.9	508.84	µg/L	508.84	ppb	05:52:20
1	Tl 190.801†	296.9	336.5	510.17	µg/L	510.17	ppb	05:52:46
1	U 409.014†	5907.5	5590.4	524.13	µg/L	524.13	ppb	05:52:26
1	V 292.402†	42396.5	45086.7	513.08	µg/L	513.08	ppb	05:52:26
1	Zn 213.857†	18509.9	19094.1	507.48	µg/L	507.48	ppb	05:52:26
2	Sc RADIAL	107824.3	107824.3	95.9	%			05:51:22
2	Al 396.153Radial†	10560.6	10786.7	5432.3	µg/L	5432.3	ppb	05:51:22
2	Ca 317.933Radial†	13046.4	13114.2	5205.8	µg/L	5205.8	ppb	05:51:43
2	Fe 238.204 Radial†	971.3	1002.1	5280.8	µg/L	5280.8	ppb	05:51:43
2	K 766.490 Radial†	9814.6	9543.6	5174.5	µg/L	5174.5	ppb	05:51:22
2	Mg 279.077 IEC†	970.0	992.1	5507.4	µg/L	5507.4	ppb	05:51:43
2	Na 589.592 Radial†	35769.6	38018.1	10549	µg/L	10549	ppb	05:51:22
2	Sr 421.552†	86640.1	90444.9	509.47	µg/L	509.47	ppb	05:51:22
2	Sc 361.383	1947869.6	1947869.6	94.706	%			05:52:53
2	Y 371.029	1179996.1	1179996.1	94.222	%			05:52:53
2	Ag 328.068†	54430.7	57501.4	517.46	µg/L	517.46	ppb	05:52:59
2	As 188.979†	251.9	263.5	501.10	µg/L	501.10	ppb	05:53:19
2	B 249.677†	10895.3	11348.6	502.03	µg/L	502.03	ppb	05:52:59
2	Ba 233.527†	19096.3	20244.3	509.55	µg/L	509.55	ppb	05:52:59
2	Be 313.107†	762973.1	802007.4	507.15	µg/L	507.15	ppb	05:52:53
2	Cd 226.502†	17988.3	19094.6	505.10	µg/L	505.10	ppb	05:52:59
2	Co 228.616†	9973.7	10602.9	509.99	µg/L	509.99	ppb	05:52:59
2	Cr 267.716†	22922.1	24326.0	507.57	µg/L	507.57	ppb	05:52:59
2	Cu 324.752†	72550.5	73221.4	516.28	µg/L	516.28	ppb	05:52:59
2	Mn 257.610†	151702.9	160404.9	509.71	µg/L	509.71	ppb	05:52:53
2	Mo 202.031†	4254.2	4499.9	502.22	µg/L	502.22	ppb	05:53:19
2	Ni 231.604†	9109.9	9319.7	507.72	µg/L	507.72	ppb	05:52:59
2	P 214.914†	1314.2	1181.7	2508.9	µg/L	2508.9	ppb	05:53:19
2	Pb 220.353†	1948.2	2003.0	508.49	µg/L	508.49	ppb	05:53:19

2	S 181.975 Axial†	238.6	227.9	1169.5 µg/L	1169.5 ppb	05:53:19
2	Sb 206.836†	508.0	515.9	510.38 µg/L	510.38 ppb	05:53:19
2	Se 196.026†	349.1	354.5	518.48 µg/L	518.48 ppb	05:53:19
2	SiO2†	29350.9	29009.8	5539.8 µg/L	5539.8 ppb	05:52:59
2	Si 251.611†	32270.3	33724.4	2534.8 µg/L	2534.8 ppb	05:52:59
2	Sn 189.927†	993.1	1026.1	503.15 µg/L	503.15 ppb	05:53:19
2	Ti 334.940†	217691.5	229140.3	507.62 µg/L	507.62 ppb	05:52:53
2	Tl 190.801†	294.0	331.9	503.17 µg/L	503.17 ppb	05:53:19
2	U 409.014†	5907.2	5558.1	521.11 µg/L	521.11 ppb	05:52:59
2	V 292.402†	42693.0	45171.2	514.01 µg/L	514.01 ppb	05:52:59
2	Zn 213.857†	18696.3	19191.1	510.10 µg/L	510.10 ppb	05:52:59
3	Sc RADIAL	106612.4	106612.4	94.8 %		05:51:48
3	Al 396.153Radial†	10397.3	10739.7	5408.5 µg/L	5408.5 ppb	05:51:48
3	Ca 317.933Radial†	12951.9	13169.3	5227.6 µg/L	5227.6 ppb	05:52:09
3	Fe 238.204 Radial†	969.9	1012.1	5333.4 µg/L	5333.4 ppb	05:52:09
3	K 766.490 Radial†	9764.1	9606.6	5208.7 µg/L	5208.7 ppb	05:51:48
3	Mg 279.077 IEC†	962.5	995.7	5527.2 µg/L	5527.2 ppb	05:52:09
3	Na 589.592 Radial†	35497.1	38154.7	10586 µg/L	10586 ppb	05:51:48
3	Sr 421.552†	85727.1	90509.1	509.83 µg/L	509.83 ppb	05:51:48
3	Sc 361.383	1938192.0	1938192.0	94.236 %		05:53:27
3	Y 371.029	1173788.6	1173788.6	93.726 %		05:53:27
3	Ag 328.068†	54127.1	57466.2	517.16 µg/L	517.16 ppb	05:53:32
3	As 188.979†	259.1	272.5	518.30 µg/L	518.30 ppb	05:53:53
3	B 249.677†	10834.0	11341.0	501.68 µg/L	501.68 ppb	05:53:32
3	Ba 233.527†	18969.4	20210.3	508.69 µg/L	508.69 ppb	05:53:32
3	Be 313.107†	760643.0	803557.2	508.13 µg/L	508.13 ppb	05:53:27
3	Cd 226.502†	17903.2	19099.2	505.22 µg/L	505.22 ppb	05:53:32
3	Co 228.616†	9893.9	10570.8	508.45 µg/L	508.45 ppb	05:53:32
3	Cr 267.716†	22820.0	24338.6	507.83 µg/L	507.83 ppb	05:53:32
3	Cu 324.752†	72387.0	73430.4	517.76 µg/L	517.76 ppb	05:53:32
3	Mn 257.610†	151317.9	160796.1	510.96 µg/L	510.96 ppb	05:53:27
3	Mo 202.031†	4236.6	4503.6	502.63 µg/L	502.63 ppb	05:53:53
3	Ni 231.604†	9072.4	9328.0	508.17 µg/L	508.17 ppb	05:53:32
3	P 214.914†	1301.8	1175.4	2495.0 µg/L	2495.0 ppb	05:53:53
3	Pb 220.353†	1931.8	1995.8	506.66 µg/L	506.66 ppb	05:53:53
3	S 181.975 Axial†	237.8	228.3	1171.5 µg/L	1171.5 ppb	05:53:53
3	Sb 206.836†	500.9	511.0	505.55 µg/L	505.55 ppb	05:53:53
3	Se 196.026†	351.0	358.3	524.10 µg/L	524.10 ppb	05:53:53
3	SiO2†	29219.5	29025.0	5542.7 µg/L	5542.7 ppb	05:53:32
3	Si 251.611†	32183.2	33802.1	2540.6 µg/L	2540.6 ppb	05:53:32
3	Sn 189.927†	991.9	1030.1	505.09 µg/L	505.09 ppb	05:53:53
3	Ti 334.940†	217384.6	229962.3	509.44 µg/L	509.44 ppb	05:53:27
3	Tl 190.801†	298.2	337.9	512.27 µg/L	512.27 ppb	05:53:53
3	U 409.014†	5929.2	5612.6	526.22 µg/L	526.22 ppb	05:53:32
3	V 292.402†	42527.3	45220.5	514.58 µg/L	514.58 ppb	05:53:32
3	Zn 213.857†	18580.2	19166.5	509.43 µg/L	509.43 ppb	05:53:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941346.3	94.389	%	0.2747				0.29%
Sc RADIAL	107112.9	95.2	%	0.56				0.59%
Y 371.029	1175767.4	93.884	%	0.2926				0.31%
Ag 328.068†	57420.3	516.74	µg/L	0.997	516.74	ppb	0.997	0.19%
QC value within limits for Ag 328.068 Recovery = 103.35%								
Al 396.153Radial†	10844.0	5461.2	µg/L	71.69	5461.2	ppb	71.69	1.31%
QC value within limits for Al 396.153Radial Recovery = 109.22%								
As 188.979†	269.1	511.79	µg/L	9.332	511.79	ppb	9.332	1.82%
QC value within limits for As 188.979 Recovery = 102.36%								
B 249.677†	11343.9	501.81	µg/L	0.193	501.81	ppb	0.193	0.04%
QC value within limits for B 249.677 Recovery = 100.36%								
Ba 233.527†	20221.3	508.97	µg/L	0.501	508.97	ppb	0.501	0.10%
QC value within limits for Ba 233.527 Recovery = 101.79%								
Be 313.107†	803240.0	507.93	µg/L	0.701	507.93	ppb	0.701	0.14%
QC value within limits for Be 313.107 Recovery = 101.59%								
Ca 317.933Radial†	13197.8	5238.9	µg/L	40.08	5238.9	ppb	40.08	0.76%
QC value within limits for Ca 317.933Radial Recovery = 104.78%								
Cd 226.502†	19082.9	504.79	µg/L	0.645	504.79	ppb	0.645	0.13%
QC value within limits for Cd 226.502 Recovery = 100.96%								
Co 228.616†	10585.4	509.15	µg/L	0.783	509.15	ppb	0.783	0.15%

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   QC value within limits for Co 228.616  Recovery = 101.83%
Cr 267.716†            24302.5      507.08 µg/L        1.084      507.08 ppb          1.084   0.21%
   QC value within limits for Cr 267.716  Recovery = 101.42%
Cu 324.752†            73213.7      516.24 µg/L        1.552      516.24 ppb          1.552   0.30%
   QC value within limits for Cu 324.752  Recovery = 103.25%
Fe 238.204 Radial†      1008.7      5315.6 µg/L        30.11      5315.6 ppb          30.11   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.31%
K 766.490 Radial†       9575.2      5191.6 µg/L        17.10      5191.6 ppb          17.10   0.33%
   QC value within limits for K 766.490 Radial  Recovery = 103.83%
Mg 279.077 IEC†          994.5      5520.8 µg/L        11.58      5520.8 ppb          11.58   0.21%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 110.42%
Mn 257.610†           160737.5      510.77 µg/L        0.979      510.77 ppb          0.979   0.19%
   QC value within limits for Mn 257.610  Recovery = 102.15%
Mo 202.031†            4507.7      503.09 µg/L        1.163      503.09 ppb          1.163   0.23%
   QC value within limits for Mo 202.031  Recovery = 100.62%
Na 589.592 Radial†     38039.4       10554 µg/L         29.5       10554 ppb           29.5   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 105.54%
Ni 231.604†            9332.7      508.43 µg/L        0.871      508.43 ppb          0.871   0.17%
   QC value within limits for Ni 231.604  Recovery = 101.69%
P 214.914†             1181.4      2508.3 µg/L        12.94      2508.3 ppb          12.94   0.52%
   QC value within limits for P 214.914  Recovery = 100.33%
Pb 220.353†            2006.8      509.46 µg/L        3.388      509.46 ppb          3.388   0.67%
   QC value within limits for Pb 220.353  Recovery = 101.89%
S 181.975 Axial†        228.2      1171.1 µg/L         1.49      1171.1 ppb           1.49   0.13%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 117.11%
Sb 206.836†             513.6      508.12 µg/L        2.429      508.12 ppb          2.429   0.48%
   QC value within limits for Sb 206.836  Recovery = 101.62%
Se 196.026†             354.9      519.07 µg/L        4.771      519.07 ppb          4.771   0.92%
   QC value within limits for Se 196.026  Recovery = 103.81%
SiO2†                  28961.9      5530.7 µg/L        18.42      5530.7 ppb          18.42   0.33%
   QC value within limits for SiO2  Recovery = 103.43%
Si 251.611†            33713.7      2533.8 µg/L         7.34      2533.8 ppb           7.34   0.29%
   QC value within limits for Si 251.611  Recovery = 101.35%
Sn 189.927†            1032.5      506.27 µg/L        3.852      506.27 ppb          3.852   0.76%
   QC value within limits for Sn 189.927  Recovery = 101.25%
Sr 421.552†            90413.5      509.29 µg/L        0.645      509.29 ppb          0.645   0.13%
   QC value within limits for Sr 421.552  Recovery = 101.86%
Ti 334.940†           229597.8      508.63 µg/L        0.927      508.63 ppb          0.927   0.18%
   QC value within limits for Ti 334.940  Recovery = 101.73%
Tl 190.801†             335.4      508.54 µg/L        4.762      508.54 ppb          4.762   0.94%
   QC value within limits for Tl 190.801  Recovery = 101.71%
U 409.014†             5587.0      523.82 µg/L        2.568      523.82 ppb          2.568   0.49%
   QC value within limits for U 409.014  Recovery = 104.76%
V 292.402†             45159.5      513.89 µg/L        0.757      513.89 ppb          0.757   0.15%
   QC value within limits for V 292.402  Recovery = 102.78%
Zn 213.857†            19150.6      509.00 µg/L        1.357      509.00 ppb          1.357   0.27%
   QC value within limits for Zn 213.857  Recovery = 101.80%
QC Failed.  Continue with analysis.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 05:54:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105233.3	105233.3	93.6	%			05:54:34
1	Al 396.153Radial†	364.1	159.3	80.497	µg/L	80.497	ppb	05:54:34
1	Ca 317.933Radial†	564.6	108.0	42.886	µg/L	42.886	ppb	05:54:54
1	Fe 238.204 Radial†	16.4	6.4	33.426	µg/L	33.426	ppb	05:54:54
1	K 766.490 Radial†	756.8	114.1	61.846	µg/L	61.846	ppb	05:54:34
1	Mg 279.077 IEC†	31.5	13.8	76.643	µg/L	76.643	ppb	05:54:54
1	Na 589.592 Radial†	-345.0	335.2	93.011	µg/L	93.011	ppb	05:54:34
1	Sr 421.552†	-43.6	17.2	0.0970	µg/L	0.0970	ppb	05:54:34
1	Sc 361.383	1937519.7	1937519.7	94.203	%			05:55:56
1	Y 371.029	1180395.0	1180395.0	94.254	%			05:55:56
1	Ag 328.068†	-48.1	-22.7	-0.2002	µg/L	-0.2002	ppb	05:56:02
1	As 188.979†	2.7	0.4	0.7145	µg/L	0.7145	ppb	05:56:22
1	B 249.677†	152.9	6.6	0.2828	µg/L	0.2828	ppb	05:56:22
1	Ba 233.527†	-78.9	-3.1	-0.0767	µg/L	-0.0767	ppb	05:56:22
1	Be 313.107†	3708.0	324.7	0.2053	µg/L	0.2053	ppb	05:56:02
1	Cd 226.502†	-86.6	9.0	0.2402	µg/L	0.2402	ppb	05:56:22
1	Co 228.616†	-74.6	-7.5	-0.3605	µg/L	-0.3605	ppb	05:56:22
1	Cr 267.716†	-103.0	13.4	0.2794	µg/L	0.2794	ppb	05:56:02
1	Cu 324.752†	3168.2	-21.2	-0.1417	µg/L	-0.1417	ppb	05:56:02
1	Mn 257.610†	-183.7	27.7	0.0920	µg/L	0.0920	ppb	05:56:22
1	Mo 202.031†	-2.3	5.5	0.6160	µg/L	0.6160	ppb	05:56:22
1	Ni 231.604†	283.7	1.8	0.0969	µg/L	0.0969	ppb	05:56:22
1	P 214.914†	217.0	24.4	53.006	µg/L	53.006	ppb	05:56:22
1	Pb 220.353†	61.8	11.5	2.9238	µg/L	2.9238	ppb	05:56:22
1	S 181.975 Axial†	47.6	26.5	136.20	µg/L	136.20	ppb	05:56:22
1	Sb 206.836†	19.4	0.0	0.0108	µg/L	0.0108	ppb	05:56:22
1	Se 196.026†	15.0	1.9	2.6964	µg/L	2.6964	ppb	05:56:22
1	SiO2†	1977.1	117.1	22.353	µg/L	22.353	ppb	05:56:02
1	Si 251.611†	368.8	41.9	3.1239	µg/L	3.1239	ppb	05:56:22
1	Sn 189.927†	23.0	2.0	0.9948	µg/L	0.9948	ppb	05:56:22
1	Ti 334.940†	808.5	139.4	0.3065	µg/L	0.3065	ppb	05:56:02
1	Tl 190.801†	-19.6	0.6	0.8882	µg/L	0.8882	ppb	05:56:22
1	U 409.014†	710.1	74.6	6.9990	µg/L	6.9990	ppb	05:56:02
1	V 292.402†	-86.0	0.6	0.0254	µg/L	0.0254	ppb	05:56:02
1	Zn 213.857†	529.2	11.6	0.3061	µg/L	0.3061	ppb	05:56:22
2	Sc RADIAL	105934.7	105934.7	94.2	%			05:55:00
2	Al 396.153Radial†	239.7	24.7	12.440	µg/L	12.440	ppb	05:55:00
2	Ca 317.933Radial†	545.9	84.2	33.408	µg/L	33.408	ppb	05:55:20
2	Fe 238.204 Radial†	15.5	5.3	27.628	µg/L	27.628	ppb	05:55:20
2	K 766.490 Radial†	740.3	91.2	49.422	µg/L	49.422	ppb	05:55:00
2	Mg 279.077 IEC†	26.6	8.4	46.347	µg/L	46.347	ppb	05:55:20
2	Na 589.592 Radial†	-350.1	332.2	92.168	µg/L	92.168	ppb	05:55:00
2	Sr 421.552†	-31.7	30.1	0.1694	µg/L	0.1694	ppb	05:55:00
2	Sc 361.383	1940159.6	1940159.6	94.332	%			05:56:28
2	Y 371.029	1180719.9	1180719.9	94.280	%			05:56:28
2	Ag 328.068†	-18.2	9.0	0.0828	µg/L	0.0828	ppb	05:56:34
2	As 188.979†	4.8	2.6	4.8782	µg/L	4.8782	ppb	05:56:55
2	B 249.677†	151.2	4.5	0.1930	µg/L	0.1930	ppb	05:56:55
2	Ba 233.527†	-85.3	-9.8	-0.2455	µg/L	-0.2455	ppb	05:56:55
2	Be 313.107†	3635.8	242.7	0.1534	µg/L	0.1534	ppb	05:56:34
2	Cd 226.502†	-94.8	0.3	0.0087	µg/L	0.0087	ppb	05:56:55
2	Co 228.616†	-63.2	4.8	0.2306	µg/L	0.2306	ppb	05:56:55
2	Cr 267.716†	-89.1	28.3	0.5897	µg/L	0.5897	ppb	05:56:34
2	Cu 324.752†	3206.9	15.2	0.1131	µg/L	0.1131	ppb	05:56:34
2	Mn 257.610†	-180.0	31.9	0.1046	µg/L	0.1046	ppb	05:56:55
2	Mo 202.031†	2.2	10.2	1.1422	µg/L	1.1422	ppb	05:56:55
2	Ni 231.604†	295.6	14.0	0.7629	µg/L	0.7629	ppb	05:56:55
2	P 214.914†	205.0	11.3	24.484	µg/L	24.484	ppb	05:56:55
2	Pb 220.353†	68.0	18.0	4.5542	µg/L	4.5542	ppb	05:56:55

2	S 181.975 Axial†	50.6	29.6	151.87 µg/L	151.87 ppb		05:56:55
2	Sb 206.836†	22.7	3.5	3.5006 µg/L	3.5006 ppb		05:56:55
2	Se 196.026†	25.3	12.7	18.468 µg/L	18.468 ppb		05:56:55
2	SiO2†	1992.2	130.2	24.867 µg/L	24.867 ppb		05:56:34
2	Si 251.611†	371.1	43.8	3.2454 µg/L	3.2454 ppb		05:56:55
2	Sn 189.927†	24.1	3.0	1.5032 µg/L	1.5032 ppb		05:56:55
2	Ti 334.940†	818.6	148.9	0.3283 µg/L	0.3283 ppb		05:56:34
2	Tl 190.801†	-16.7	3.7	5.5803 µg/L	5.5803 ppb		05:56:55
2	U 409.014†	652.7	12.7	1.1851 µg/L	1.1851 ppb		05:56:34
2	V 292.402†	-83.1	3.8	0.0554 µg/L	0.0554 ppb		05:56:34
2	Zn 213.857†	529.0	10.6	0.2757 µg/L	0.2757 ppb		05:56:55
3	Sc RADIAL	106144.5	106144.5	94.4 %			05:55:26
3	Al 396.153Radial†	249.8	34.9	17.589 µg/L	17.589 ppb		05:55:26
3	Ca 317.933Radial†	534.2	70.7	28.057 µg/L	28.057 ppb		05:55:46
3	Fe 238.204 Radial†	15.7	5.4	28.444 µg/L	28.444 ppb		05:55:46
3	K 766.490 Radial†	722.6	70.8	38.408 µg/L	38.408 ppb		05:55:26
3	Mg 279.077 IEC†	28.6	10.4	57.838 µg/L	57.838 ppb		05:55:46
3	Na 589.592 Radial†	-352.7	330.1	91.597 µg/L	91.597 ppb		05:55:26
3	Sr 421.552†	-70.8	-11.2	-0.0633 µg/L	-0.0633 ppb		05:55:26
3	Sc 361.383	1954045.7	1954045.7	95.007 %			05:57:01
3	Y 371.029	1189661.4	1189661.4	94.994 %			05:57:01
3	Ag 328.068†	-43.7	-17.7	-0.1515 µg/L	-0.1515 ppb		05:57:06
3	As 188.979†	2.9	0.5	1.0110 µg/L	1.0110 ppb		05:57:27
3	B 249.677†	161.5	14.3	0.6262 µg/L	0.6262 ppb		05:57:27
3	Ba 233.527†	-73.8	3.0	0.0754 µg/L	0.0754 ppb		05:57:27
3	Be 313.107†	3734.2	318.9	0.2016 µg/L	0.2016 ppb		05:57:06
3	Cd 226.502†	-91.3	4.8	0.1274 µg/L	0.1274 ppb		05:57:27
3	Co 228.616†	-78.4	-10.8	-0.5196 µg/L	-0.5196 ppb		05:57:27
3	Cr 267.716†	-146.7	-31.7	-0.6579 µg/L	-0.6579 ppb		05:57:06
3	Cu 324.752†	3132.0	-87.7	-0.6112 µg/L	-0.6112 ppb		05:57:06
3	Mn 257.610†	-177.1	36.2	0.1186 µg/L	0.1186 ppb		05:57:27
3	Mo 202.031†	-0.4	7.5	0.8335 µg/L	0.8335 ppb		05:57:27
3	Ni 231.604†	291.9	7.8	0.4273 µg/L	0.4273 ppb		05:57:27
3	P 214.914†	213.2	18.4	40.005 µg/L	40.005 ppb		05:57:27
3	Pb 220.353†	58.1	7.1	1.7916 µg/L	1.7916 ppb		05:57:27
3	S 181.975 Axial†	45.5	23.9	122.71 µg/L	122.71 ppb		05:57:27
3	Sb 206.836†	14.4	-5.4	-5.3330 µg/L	-5.3330 ppb		05:57:27
3	Se 196.026†	15.2	1.9	2.7521 µg/L	2.7521 ppb		05:57:27
3	SiO2†	1954.0	75.0	14.329 µg/L	14.329 ppb		05:57:06
3	Si 251.611†	371.2	41.0	3.1170 µg/L	3.1170 ppb		05:57:27
3	Sn 189.927†	20.5	-0.8	-0.3855 µg/L	-0.3855 ppb		05:57:27
3	Ti 334.940†	818.0	142.2	0.3135 µg/L	0.3135 ppb		05:57:06
3	Tl 190.801†	-19.9	0.4	0.6621 µg/L	0.6621 ppb		05:57:27
3	U 409.014†	668.0	23.9	2.2376 µg/L	2.2376 ppb		05:57:06
3	V 292.402†	-37.0	53.0	0.6097 µg/L	0.6097 ppb		05:57:06
3	Zn 213.857†	542.2	20.5	0.5444 µg/L	0.5444 ppb		05:57:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943908.4	94.514	%	0.4316				0.46%
Sc RADIAL	105770.8	94.0	%	0.42				0.45%
Y 371.029	1183592.1	94.509	%	0.4199				0.44%
Ag 328.068†	-10.5	-0.0896	µg/L	0.15131	-0.0896	ppb	0.15131	168.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	73.0	36.842	µg/L	37.8938	36.842	ppb	37.8938	102.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	2.2012	µg/L	2.32302	2.2012	ppb	2.32302	105.53%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	8.5	0.3673	µg/L	0.22863	0.3673	ppb	0.22863	62.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.3	-0.0823	µg/L	0.16049	-0.0823	ppb	0.16049	195.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	295.5	0.1868	µg/L	0.02894	0.1868	ppb	0.02894	15.49%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	87.6	34.784	µg/L	7.5096	34.784	ppb	7.5096	21.59%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.7	0.1254	µg/L	0.11572	0.1254	ppb	0.11572	92.26%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.5	-0.2165	µg/L	0.39526	-0.2165	ppb	0.39526	182.56%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.4      0.0704 µg/L       0.64952      0.0704 ppb        0.64952 922.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -31.2     -0.2133 µg/L       0.36744     -0.2133 ppb        0.36744 172.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          5.7      29.833 µg/L        3.1384      29.833 ppb         3.1384  10.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          92.0      49.892 µg/L       11.7257      49.892 ppb        11.7257  23.50%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            10.9      60.276 µg/L       15.2946      60.276 ppb        15.2946  25.37%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                31.9      0.1050 µg/L       0.01330      0.1050 ppb        0.01330  12.66%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.7      0.8639 µg/L       0.26443      0.8639 ppb        0.26443  30.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        332.5      92.259 µg/L        0.7113      92.259 ppb         0.7113   0.77%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.4290 µg/L       0.33300      0.4290 ppb        0.33300  77.61%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 18.0      39.165 µg/L       14.2798      39.165 ppb        14.2798  36.46%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.2      3.0899 µg/L       1.38874      3.0899 ppb        1.38874  44.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           26.7      136.92 µg/L        14.595      136.92 ppb         14.595  10.66%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.6     -0.6072 µg/L       4.44911     -0.6072 ppb        4.44911 732.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      7.9722 µg/L       9.08970      7.9722 ppb        9.08970 114.02%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     107.4      20.516 µg/L        5.5037      20.516 ppb         5.5037  26.83%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                42.2      3.1621 µg/L       0.07222      3.1621 ppb        0.07222   2.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.4      0.7042 µg/L       0.97735      0.7042 ppb        0.97735 138.80%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                12.0      0.0677 µg/L       0.11906      0.0677 ppb        0.11906 175.92%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               143.5      0.3161 µg/L       0.01110      0.3161 ppb        0.01110   3.51%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.6      2.3769 µg/L       2.77657      2.3769 ppb        2.77657 116.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 37.0      3.4739 µg/L       3.09785      3.4739 ppb        3.09785  89.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.2      0.2302 µg/L       0.32902      0.2302 ppb        0.32902 142.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                14.3      0.3754 µg/L       0.14715      0.3754 ppb        0.14715  39.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 06:30:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106958.4	106958.4	95.1	%			06:30:38
1	Al 396.153Radial†	10124.3	10417.2	5245.7	µg/L	5245.7	ppb	06:30:38
1	Ca 317.933Radial†	12427.7	12573.8	4991.2	µg/L	4991.2	ppb	06:30:59
1	Fe 238.204 Radial†	940.9	978.2	5155.1	µg/L	5155.1	ppb	06:30:59
1	K 766.490 Radial†	9803.4	9614.7	5213.0	µg/L	5213.0	ppb	06:30:38
1	Mg 279.077 IEC†	918.5	946.1	5252.7	µg/L	5252.7	ppb	06:30:59
1	Na 589.592 Radial†	35443.8	37977.5	10537	µg/L	10537	ppb	06:30:38
1	Sr 421.552†	85629.5	90114.0	507.61	µg/L	507.61	ppb	06:30:38
1	Sc 361.383	1950090.7	1950090.7	94.814	%			06:32:03
1	Y 371.029	1181754.8	1181754.8	94.362	%			06:32:03
1	Ag 328.068†	53887.7	56863.2	511.72	µg/L	511.72	ppb	06:32:08
1	As 188.979†	249.4	260.5	495.58	µg/L	495.58	ppb	06:32:29
1	B 249.677†	10762.5	11195.4	495.28	µg/L	495.28	ppb	06:32:08
1	Ba 233.527†	18829.0	19939.4	501.88	µg/L	501.88	ppb	06:32:08
1	Be 313.107†	758974.9	796872.8	503.90	µg/L	503.90	ppb	06:32:03
1	Cd 226.502†	17629.3	18694.3	494.52	µg/L	494.52	ppb	06:32:08
1	Co 228.616†	9805.7	10413.7	500.89	µg/L	500.89	ppb	06:32:08
1	Cr 267.716†	22631.9	23992.5	500.61	µg/L	500.61	ppb	06:32:08
1	Cu 324.752†	71909.0	72457.5	510.88	µg/L	510.88	ppb	06:32:08
1	Mn 257.610†	151305.2	159803.0	507.79	µg/L	507.79	ppb	06:32:03
1	Mo 202.031†	4216.2	4454.7	497.17	µg/L	497.17	ppb	06:32:29
1	Ni 231.604†	8967.3	9158.3	498.93	µg/L	498.93	ppb	06:32:08
1	P 214.914†	1303.7	1169.0	2482.0	µg/L	2482.0	ppb	06:32:29
1	Pb 220.353†	1927.6	1978.9	502.35	µg/L	502.35	ppb	06:32:29
1	S 181.975 Axial†	223.1	211.2	1083.8	µg/L	1083.8	ppb	06:32:29
1	Sb 206.836†	499.3	506.0	500.69	µg/L	500.69	ppb	06:32:29
1	Se 196.026†	356.2	361.6	528.81	µg/L	528.81	ppb	06:32:29
1	SiO2†	28979.7	28582.9	5458.3	µg/L	5458.3	ppb	06:32:08
1	Si 251.611†	31937.1	33334.2	2505.1	µg/L	2505.1	ppb	06:32:08
1	Sn 189.927†	991.0	1022.7	501.37	µg/L	501.37	ppb	06:32:29
1	Ti 334.940†	217004.4	228153.8	505.45	µg/L	505.45	ppb	06:32:03
1	Tl 190.801†	291.4	328.7	498.51	µg/L	498.51	ppb	06:32:29
1	U 409.014†	5918.1	5562.5	521.54	µg/L	521.54	ppb	06:32:08
1	V 292.402†	42265.4	44668.9	508.30	µg/L	508.30	ppb	06:32:08
1	Zn 213.857†	18455.8	18915.0	502.77	µg/L	502.77	ppb	06:32:08
2	Sc RADIAL	106770.8	106770.8	94.9	%			06:31:04
2	Al 396.153Radial†	10169.1	10483.1	5278.9	µg/L	5278.9	ppb	06:31:04
2	Ca 317.933Radial†	12384.7	12551.6	4982.4	µg/L	4982.4	ppb	06:31:25
2	Fe 238.204 Radial†	946.8	986.3	5197.4	µg/L	5197.4	ppb	06:31:25
2	K 766.490 Radial†	9816.7	9646.8	5230.4	µg/L	5230.4	ppb	06:31:04
2	Mg 279.077 IEC†	924.7	954.3	5297.8	µg/L	5297.8	ppb	06:31:25
2	Na 589.592 Radial†	35888.0	38511.0	10685	µg/L	10685	ppb	06:31:04
2	Sr 421.552†	86226.9	90901.4	512.04	µg/L	512.04	ppb	06:31:04
2	Sc 361.383	1956710.6	1956710.6	95.136	%			06:32:36
2	Y 371.029	1186480.4	1186480.4	94.740	%			06:32:36
2	Ag 328.068†	54276.3	57079.3	513.66	µg/L	513.66	ppb	06:32:41
2	As 188.979†	252.8	263.3	500.75	µg/L	500.75	ppb	06:33:02
2	B 249.677†	10837.6	11236.0	497.06	µg/L	497.06	ppb	06:32:41
2	Ba 233.527†	18985.2	20036.5	504.32	µg/L	504.32	ppb	06:32:41
2	Be 313.107†	764115.0	799567.6	505.60	µg/L	505.60	ppb	06:32:36
2	Cd 226.502†	17828.2	18840.5	498.38	µg/L	498.38	ppb	06:32:41
2	Co 228.616†	9899.9	10477.8	503.97	µg/L	503.97	ppb	06:32:41
2	Cr 267.716†	22783.2	24070.7	502.24	µg/L	502.24	ppb	06:32:41
2	Cu 324.752†	72484.5	72805.9	513.34	µg/L	513.34	ppb	06:32:41
2	Mn 257.610†	152312.8	160322.2	509.44	µg/L	509.44	ppb	06:32:36
2	Mo 202.031†	4242.4	4467.2	498.56	µg/L	498.56	ppb	06:33:02
2	Ni 231.604†	9095.9	9261.6	504.55	µg/L	504.55	ppb	06:32:41
2	P 214.914†	1299.6	1160.0	2462.0	µg/L	2462.0	ppb	06:33:02
2	Pb 220.353†	1918.0	1961.9	498.06	µg/L	498.06	ppb	06:33:02

2	S 181.975 Axial†	225.0	212.5	1090.1 µg/L	1090.1 ppb	06:33:02
2	Sb 206.836†	491.7	496.3	490.99 µg/L	490.99 ppb	06:33:02
2	Se 196.026†	340.4	343.7	502.78 µg/L	502.78 ppb	06:33:02
2	SiO2†	29206.5	28717.9	5484.1 µg/L	5484.1 ppb	06:32:41
2	Si 251.611†	32137.7	33431.0	2512.7 µg/L	2512.7 ppb	06:32:41
2	Sn 189.927†	982.4	1010.1	495.24 µg/L	495.24 ppb	06:33:02
2	Ti 334.940†	218671.9	229132.2	507.62 µg/L	507.62 ppb	06:32:36
2	Tl 190.801†	296.2	332.8	504.62 µg/L	504.62 ppb	06:33:02
2	U 409.014†	5859.3	5479.6	513.75 µg/L	513.75 ppb	06:32:41
2	V 292.402†	42579.2	44848.0	510.32 µg/L	510.32 ppb	06:32:41
2	Zn 213.857†	18543.8	18941.7	503.45 µg/L	503.45 ppb	06:32:41
3	Sc RADIAL	106886.7	106886.7	95.0 %		06:31:30
3	Al 396.153Radial†	10072.3	10369.6	5221.4 µg/L	5221.4 ppb	06:31:30
3	Ca 317.933Radial†	12428.3	12583.2	4995.0 µg/L	4995.0 ppb	06:31:51
3	Fe 238.204 Radial†	952.3	991.0	5222.4 µg/L	5222.4 ppb	06:31:51
3	K 766.490 Radial†	9796.6	9614.4	5212.9 µg/L	5212.9 ppb	06:31:30
3	Mg 279.077 IEC†	928.9	957.7	5317.0 µg/L	5317.0 ppb	06:31:51
3	Na 589.592 Radial†	35373.2	37928.3	10524 µg/L	10524 ppb	06:31:30
3	Sr 421.552†	85661.3	90207.8	508.13 µg/L	508.13 ppb	06:31:30
3	Sc 361.383	1927746.4	1927746.4	93.728 %		06:33:09
3	Y 371.029	1166780.5	1166780.5	93.167 %		06:33:09
3	Ag 328.068†	54248.6	57907.0	521.10 µg/L	521.10 ppb	06:33:15
3	As 188.979†	252.2	266.6	507.01 µg/L	507.01 ppb	06:33:35
3	B 249.677†	10860.2	11431.2	505.72 µg/L	505.72 ppb	06:33:15
3	Ba 233.527†	18998.6	20350.6	512.22 µg/L	512.22 ppb	06:33:15
3	Be 313.107†	750158.3	796744.6	503.82 µg/L	503.82 ppb	06:33:09
3	Cd 226.502†	17815.2	19108.3	505.47 µg/L	505.47 ppb	06:33:15
3	Co 228.616†	9884.0	10617.1	510.68 µg/L	510.68 ppb	06:33:15
3	Cr 267.716†	22774.7	24421.5	509.56 µg/L	509.56 ppb	06:33:15
3	Cu 324.752†	72347.7	73804.6	520.37 µg/L	520.37 ppb	06:33:15
3	Mn 257.610†	149630.9	159866.3	508.00 µg/L	508.00 ppb	06:33:09
3	Mo 202.031†	4215.0	4504.9	502.77 µg/L	502.77 ppb	06:33:35
3	Ni 231.604†	9083.4	9391.8	511.65 µg/L	511.65 ppb	06:33:15
3	P 214.914†	1290.8	1171.2	2485.6 µg/L	2485.6 ppb	06:33:35
3	Pb 220.353†	1921.9	1996.4	506.80 µg/L	506.80 ppb	06:33:35
3	S 181.975 Axial†	223.5	214.4	1100.1 µg/L	1100.1 ppb	06:33:35
3	Sb 206.836†	502.1	515.2	509.70 µg/L	509.70 ppb	06:33:35
3	Se 196.026†	343.4	352.2	515.22 µg/L	515.22 ppb	06:33:35
3	SiO2†	29200.7	29173.1	5571.0 µg/L	5571.0 ppb	06:33:15
3	Si 251.611†	32158.1	33960.3	2553.0 µg/L	2553.0 ppb	06:33:15
3	Sn 189.927†	978.4	1021.4	500.73 µg/L	500.73 ppb	06:33:35
3	Ti 334.940†	215031.4	228701.6	506.66 µg/L	506.66 ppb	06:33:09
3	Tl 190.801†	296.2	337.4	511.58 µg/L	511.58 ppb	06:33:35
3	U 409.014†	5872.8	5586.6	523.79 µg/L	523.79 ppb	06:33:15
3	V 292.402†	42518.6	45455.8	517.22 µg/L	517.22 ppb	06:33:15
3	Zn 213.857†	18593.6	19287.7	512.67 µg/L	512.67 ppb	06:33:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944849.2	94.560	%	0.7379				0.78%
Sc RADIAL	106871.9	95.0	%	0.08				0.09%
Y 371.029	1178338.5	94.090	%	0.8212				0.87%
Ag 328.068†	57283.2	515.49	µg/L	4.955	515.49	ppb	4.955	0.96%
QC value within limits for Ag 328.068 Recovery = 103.10%								
Al 396.153Radial†	10423.3	5248.7	µg/L	28.87	5248.7	ppb	28.87	0.55%
QC value within limits for Al 396.153Radial Recovery = 104.97%								
As 188.979†	263.5	501.11	µg/L	5.726	501.11	ppb	5.726	1.14%
QC value within limits for As 188.979 Recovery = 100.22%								
B 249.677†	11287.6	499.35	µg/L	5.586	499.35	ppb	5.586	1.12%
QC value within limits for B 249.677 Recovery = 99.87%								
Ba 233.527†	20108.8	506.14	µg/L	5.407	506.14	ppb	5.407	1.07%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	797728.3	504.44	µg/L	1.008	504.44	ppb	1.008	0.20%
QC value within limits for Be 313.107 Recovery = 100.89%								
Ca 317.933Radial†	12569.5	4989.5	µg/L	6.45	4989.5	ppb	6.45	0.13%
QC value within limits for Ca 317.933Radial Recovery = 99.79%								
Cd 226.502†	18881.0	499.46	µg/L	5.553	499.46	ppb	5.553	1.11%
QC value within limits for Cd 226.502 Recovery = 99.89%								
Co 228.616†	10502.9	505.18	µg/L	5.005	505.18	ppb	5.005	0.99%

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   QC value within limits for Co 228.616  Recovery = 101.04%
Cr 267.716†            24161.6      504.14 µg/L        4.767      504.14 ppb          4.767   0.95%
   QC value within limits for Cr 267.716  Recovery = 100.83%
Cu 324.752†            73022.6      514.86 µg/L        4.926      514.86 ppb          4.926   0.96%
   QC value within limits for Cu 324.752  Recovery = 102.97%
Fe 238.204 Radial†       985.1      5191.7 µg/L       34.01      5191.7 ppb         34.01   0.66%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.83%
K 766.490 Radial†       9625.3      5218.8 µg/L       10.09      5218.8 ppb         10.09   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 104.38%
Mg 279.077 IEC†          952.7      5289.2 µg/L       33.03      5289.2 ppb         33.03   0.62%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.78%
Mn 257.610†           159997.2      508.41 µg/L       0.900      508.41 ppb         0.900   0.18%
   QC value within limits for Mn 257.610  Recovery = 101.68%
Mo 202.031†             4475.6      499.50 µg/L       2.919      499.50 ppb         2.919   0.58%
   QC value within limits for Mo 202.031  Recovery = 99.90%
Na 589.592 Radial†     38138.9       10582 µg/L        89.7       10582 ppb          89.7   0.85%
   QC value within limits for Na 589.592 Radial  Recovery = 105.82%
Ni 231.604†             9270.6      505.04 µg/L       6.374      505.04 ppb         6.374   1.26%
   QC value within limits for Ni 231.604  Recovery = 101.01%
P 214.914†              1166.7      2476.5 µg/L       12.67      2476.5 ppb         12.67   0.51%
   QC value within limits for P 214.914  Recovery = 99.06%
Pb 220.353†             1979.1      502.40 µg/L       4.370      502.40 ppb         4.370   0.87%
   QC value within limits for Pb 220.353  Recovery = 100.48%
S 181.975 Axial†         212.7      1091.4 µg/L        8.18      1091.4 ppb         8.18   0.75%
   QC value within limits for S 181.975 Axial  Recovery = 109.14%
Sb 206.836†              505.8      500.46 µg/L       9.357      500.46 ppb         9.357   1.87%
   QC value within limits for Sb 206.836  Recovery = 100.09%
Se 196.026†              352.5      515.60 µg/L      13.017      515.60 ppb        13.017   2.52%
   QC value within limits for Se 196.026  Recovery = 103.12%
SiO2†                  28824.6      5504.5 µg/L       59.04      5504.5 ppb         59.04   1.07%
   QC value within limits for SiO2  Recovery = 102.94%
Si 251.611†            33575.2      2523.6 µg/L       25.72      2523.6 ppb         25.72   1.02%
   QC value within limits for Si 251.611  Recovery = 100.94%
Sn 189.927†             1018.1      499.11 µg/L       3.368      499.11 ppb         3.368   0.67%
   QC value within limits for Sn 189.927  Recovery = 99.82%
Sr 421.552†            90407.7      509.26 µg/L       2.423      509.26 ppb         2.423   0.48%
   QC value within limits for Sr 421.552  Recovery = 101.85%
Ti 334.940†           228662.6      506.57 µg/L       1.087      506.57 ppb         1.087   0.21%
   QC value within limits for Ti 334.940  Recovery = 101.31%
Tl 190.801†              333.0      504.90 µg/L       6.540      504.90 ppb         6.540   1.30%
   QC value within limits for Tl 190.801  Recovery = 100.98%
U 409.014†              5542.9      519.69 µg/L       5.267      519.69 ppb         5.267   1.01%
   QC value within limits for U 409.014  Recovery = 103.94%
V 292.402†             44990.9      511.95 µg/L       4.677      511.95 ppb         4.677   0.91%
   QC value within limits for V 292.402  Recovery = 102.39%
Zn 213.857†            19048.1      506.30 µg/L       5.530      506.30 ppb         5.530   1.09%
   QC value within limits for Zn 213.857  Recovery = 101.26%
All analyte(s) passed QC.
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Sequence No.: 44
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 06:33:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105634.2	105634.2	93.9	%			06:34:17
1	Al 396.153Radial†	206.9	-9.5	-4.8236	µg/L	-4.8236	ppb	06:34:17
1	Ca 317.933Radial†	394.3	-75.6	-30.013	µg/L	-30.013	ppb	06:34:37
1	Fe 238.204 Radial†	11.7	1.3	6.8501	µg/L	6.8501	ppb	06:34:37
1	K 766.490 Radial†	715.4	66.9	36.265	µg/L	36.265	ppb	06:34:17
1	Mg 279.077 IEC†	16.9	-1.8	-10.230	µg/L	-10.230	ppb	06:34:37
1	Na 589.592 Radial†	-547.2	121.3	33.660	µg/L	33.660	ppb	06:34:17
1	Sr 421.552†	-7.5	55.8	0.3143	µg/L	0.3143	ppb	06:34:17
1	Sc 361.383	1946795.9	1946795.9	94.654	%			06:35:40
1	Y 371.029	1183615.8	1183615.8	94.511	%			06:35:40
1	Ag 328.068†	-109.1	-87.0	-0.7756	µg/L	-0.7756	ppb	06:35:45
1	As 188.979†	-2.2	-4.8	-9.1954	µg/L	-9.1954	ppb	06:36:06
1	B 249.677†	155.6	8.7	0.3841	µg/L	0.3841	ppb	06:36:06
1	Ba 233.527†	-76.4	-0.1	-0.0015	µg/L	-0.0015	ppb	06:36:06
1	Be 313.107†	3779.5	381.5	0.2412	µg/L	0.2412	ppb	06:35:45
1	Cd 226.502†	-92.3	3.4	0.0917	µg/L	0.0917	ppb	06:36:06
1	Co 228.616†	-74.6	-7.1	-0.3399	µg/L	-0.3399	ppb	06:36:06
1	Cr 267.716†	-128.6	-13.1	-0.2720	µg/L	-0.2720	ppb	06:35:45
1	Cu 324.752†	3116.1	-92.2	-0.6471	µg/L	-0.6471	ppb	06:35:45
1	Mn 257.610†	-174.8	38.0	0.1214	µg/L	0.1214	ppb	06:36:06
1	Mo 202.031†	-7.1	0.4	0.0504	µg/L	0.0504	ppb	06:36:06
1	Ni 231.604†	295.6	12.9	0.7042	µg/L	0.7042	ppb	06:36:06
1	P 214.914†	209.5	15.4	33.475	µg/L	33.475	ppb	06:36:06
1	Pb 220.353†	61.8	11.2	2.8272	µg/L	2.8272	ppb	06:36:06
1	S 181.975 Axial†	38.0	16.1	82.525	µg/L	82.525	ppb	06:36:06
1	Sb 206.836†	26.1	7.1	7.0234	µg/L	7.0234	ppb	06:36:06
1	Se 196.026†	15.6	2.4	3.5197	µg/L	3.5197	ppb	06:36:06
1	SiO2†	1925.3	52.4	10.004	µg/L	10.004	ppb	06:35:45
1	Si 251.611†	362.2	33.0	2.4395	µg/L	2.4395	ppb	06:36:06
1	Sn 189.927†	24.5	3.5	1.6896	µg/L	1.6896	ppb	06:36:06
1	Ti 334.940†	812.8	139.9	0.3117	µg/L	0.3117	ppb	06:35:45
1	Tl 190.801†	-24.7	-4.7	-7.1081	µg/L	-7.1081	ppb	06:36:06
1	U 409.014†	680.4	39.6	3.7176	µg/L	3.7176	ppb	06:35:45
1	V 292.402†	-81.0	6.3	0.0784	µg/L	0.0784	ppb	06:35:45
1	Zn 213.857†	547.2	28.0	0.7467	µg/L	0.7467	ppb	06:36:06
2	Sc RADIAL	105019.2	105019.2	93.4	%			06:34:43
2	Al 396.153Radial†	209.4	-5.6	-2.8460	µg/L	-2.8460	ppb	06:34:43
2	Ca 317.933Radial†	404.5	-62.2	-24.688	µg/L	-24.688	ppb	06:35:03
2	Fe 238.204 Radial†	8.7	-1.9	-9.7804	µg/L	-9.7804	ppb	06:35:03
2	K 766.490 Radial†	670.9	23.8	12.883	µg/L	12.883	ppb	06:34:43
2	Mg 279.077 IEC†	11.6	-7.4	-41.254	µg/L	-41.254	ppb	06:35:03
2	Na 589.592 Radial†	-557.4	106.9	29.662	µg/L	29.662	ppb	06:34:43
2	Sr 421.552†	-34.4	27.0	0.1518	µg/L	0.1518	ppb	06:34:43
2	Sc 361.383	1925193.6	1925193.6	93.604	%			06:36:12
2	Y 371.029	1171697.4	1171697.4	93.559	%			06:36:12
2	Ag 328.068†	-31.0	-4.8	-0.0420	µg/L	-0.0420	ppb	06:36:17
2	As 188.979†	3.4	1.1	2.1564	µg/L	2.1564	ppb	06:36:38
2	B 249.677†	159.8	15.1	0.6722	µg/L	0.6722	ppb	06:36:38
2	Ba 233.527†	-77.4	-2.0	-0.0504	µg/L	-0.0504	ppb	06:36:38
2	Be 313.107†	3749.4	394.1	0.2492	µg/L	0.2492	ppb	06:36:17
2	Cd 226.502†	-90.5	4.2	0.1118	µg/L	0.1118	ppb	06:36:38
2	Co 228.616†	-63.6	3.8	0.1819	µg/L	0.1819	ppb	06:36:38
2	Cr 267.716†	-102.3	13.5	0.2808	µg/L	0.2808	ppb	06:36:17
2	Cu 324.752†	3150.8	-18.2	-0.1301	µg/L	-0.1301	ppb	06:36:17
2	Mn 257.610†	-171.7	39.2	0.1231	µg/L	0.1231	ppb	06:36:38
2	Mo 202.031†	-1.9	5.9	0.6564	µg/L	0.6564	ppb	06:36:38
2	Ni 231.604†	278.3	-2.0	-0.1108	µg/L	-0.1108	ppb	06:36:38
2	P 214.914†	205.8	13.8	30.090	µg/L	30.090	ppb	06:36:38
2	Pb 220.353†	62.2	12.3	3.1274	µg/L	3.1274	ppb	06:36:38

2	S 181.975 Axial†	41.2	20.0	102.52 µg/L	102.52 ppb	06:36:38
2	Sb 206.836†	20.4	1.2	1.1998 µg/L	1.1998 ppb	06:36:38
2	Se 196.026†	7.8	-5.7	-8.3360 µg/L	-8.3360 ppb	06:36:38
2	SiO2†	1910.1	58.9	11.250 µg/L	11.250 ppb	06:36:17
2	Si 251.611†	357.7	32.5	2.4369 µg/L	2.4369 ppb	06:36:38
2	Sn 189.927†	22.4	1.5	0.7076 µg/L	0.7076 ppb	06:36:38
2	Ti 334.940†	775.3	109.4	0.2440 µg/L	0.2440 ppb	06:36:17
2	Tl 190.801†	-19.3	0.8	1.1392 µg/L	1.1392 ppb	06:36:38
2	U 409.014†	648.2	13.3	1.2531 µg/L	1.2531 ppb	06:36:17
2	V 292.402†	-66.0	21.4	0.2475 µg/L	0.2475 ppb	06:36:17
2	Zn 213.857†	544.1	31.1	0.8365 µg/L	0.8365 ppb	06:36:38
3	Sc RADIAL	104850.9	104850.9	93.2 %		06:35:09
3	Al 396.153Radial†	180.2	-36.5	-18.464 µg/L	-18.464 ppb	06:35:09
3	Ca 317.933Radial†	396.8	-69.7	-27.675 µg/L	-27.675 ppb	06:35:29
3	Fe 238.204 Radial†	10.5	0.1	0.4325 µg/L	0.4325 ppb	06:35:29
3	K 766.490 Radial†	686.2	41.3	22.401 µg/L	22.401 ppb	06:35:09
3	Mg 279.077 IEC†	13.7	-5.2	-28.601 µg/L	-28.601 ppb	06:35:29
3	Na 589.592 Radial†	-563.5	99.4	27.588 µg/L	27.588 ppb	06:35:09
3	Sr 421.552†	-11.0	52.0	0.2927 µg/L	0.2927 ppb	06:35:09
3	Sc 361.383	1946562.8	1946562.8	94.643 %		06:36:44
3	Y 371.029	1183797.4	1183797.4	94.525 %		06:36:44
3	Ag 328.068†	-44.5	-18.7	-0.1644 µg/L	-0.1644 ppb	06:36:49
3	As 188.979†	3.5	1.2	2.3208 µg/L	2.3208 ppb	06:37:10
3	B 249.677†	160.9	14.3	0.6342 µg/L	0.6342 ppb	06:37:10
3	Ba 233.527†	-74.5	2.0	0.0502 µg/L	0.0502 ppb	06:37:10
3	Be 313.107†	3702.4	300.4	0.1899 µg/L	0.1899 ppb	06:36:49
3	Cd 226.502†	-87.1	8.9	0.2417 µg/L	0.2417 ppb	06:37:10
3	Co 228.616†	-78.8	-11.5	-0.5534 µg/L	-0.5534 ppb	06:37:10
3	Cr 267.716†	-96.4	20.9	0.4356 µg/L	0.4356 ppb	06:36:49
3	Cu 324.752†	3141.1	-65.4	-0.4602 µg/L	-0.4602 ppb	06:36:49
3	Mn 257.610†	-178.5	34.0	0.1080 µg/L	0.1080 ppb	06:37:10
3	Mo 202.031†	-3.0	4.7	0.5274 µg/L	0.5274 ppb	06:37:10
3	Ni 231.604†	281.7	-1.8	-0.0968 µg/L	-0.0968 ppb	06:37:10
3	P 214.914†	210.9	16.9	36.689 µg/L	36.689 ppb	06:37:10
3	Pb 220.353†	60.2	9.5	2.4055 µg/L	2.4055 ppb	06:37:10
3	S 181.975 Axial†	35.3	13.2	67.960 µg/L	67.960 ppb	06:37:10
3	Sb 206.836†	10.9	-9.0	-8.9033 µg/L	-8.9033 ppb	06:37:10
3	Se 196.026†	11.4	-2.1	-2.9972 µg/L	-2.9972 ppb	06:37:10
3	SiO2†	1941.4	69.6	13.287 µg/L	13.287 ppb	06:36:49
3	Si 251.611†	371.3	42.7	3.2689 µg/L	3.2689 ppb	06:37:10
3	Sn 189.927†	19.9	-1.4	-0.7135 µg/L	-0.7135 ppb	06:37:10
3	Ti 334.940†	791.1	117.0	0.2609 µg/L	0.2609 ppb	06:36:49
3	Tl 190.801†	-20.7	-0.4	-0.6659 µg/L	-0.6659 ppb	06:37:10
3	U 409.014†	749.9	113.1	10.622 µg/L	10.622 ppb	06:36:49
3	V 292.402†	-59.2	29.4	0.3529 µg/L	0.3529 ppb	06:36:49
3	Zn 213.857†	544.3	25.0	0.6711 µg/L	0.6711 ppb	06:37:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1939517.5	94.300	%	0.6032				0.64%
Sc RADIAL	105168.1	93.5	%	0.37				0.39%
Y 371.029	1179703.5	94.199	%	0.5537				0.59%
Ag 328.068†	-36.8	-0.3273	µg/L	0.39297	-0.3273	ppb	0.39297	120.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-17.2	-8.7112	µg/L	8.50385	-8.7112	ppb	8.50385	97.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-1.5727	µg/L	6.60192	-1.5727	ppb	6.60192	419.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	12.7	0.5635	µg/L	0.15651	0.5635	ppb	0.15651	27.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.0	-0.0006	µg/L	0.05032	-0.0006	ppb	0.05032	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	358.7	0.2268	µg/L	0.03216	0.2268	ppb	0.03216	14.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.2	-27.459	µg/L	2.6689	-27.459	ppb	2.6689	9.72%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.5	0.1484	µg/L	0.08142	0.1484	ppb	0.08142	54.85%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.9	-0.2371	µg/L	0.37829	-0.2371	ppb	0.37829	159.53%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.1      0.1481 µg/L       0.37199      0.1481 ppb        0.37199 251.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -58.6     -0.4125 µg/L       0.26178     -0.4125 ppb        0.26178  63.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.2     -0.8326 µg/L       8.38712     -0.8326 ppb        8.38712 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          44.0      23.850 µg/L       11.7581      23.850 ppb        11.7581  49.30%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.8     -26.695 µg/L       15.5998     -26.695 ppb        15.5998  58.44%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                37.1      0.1175 µg/L       0.00828      0.1175 ppb        0.00828   7.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.7      0.4114 µg/L       0.31922      0.4114 ppb        0.31922  77.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        109.2      30.303 µg/L        3.0864      30.303 ppb         3.0864  10.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 3.0      0.1656 µg/L       0.46656      0.1656 ppb        0.46656 281.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.4      33.418 µg/L        3.2996      33.418 ppb         3.2996   9.87%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.0      2.7867 µg/L       0.36264      2.7867 ppb        0.36264  13.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           16.4      84.335 µg/L       17.3517      84.335 ppb        17.3517  20.57%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.2     -0.2267 µg/L       8.05859     -0.2267 ppb        8.05859 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -2.6045 µg/L       5.93763     -2.6045 ppb        5.93763 227.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      60.3      11.513 µg/L        1.6576      11.513 ppb         1.6576  14.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                36.1      2.7151 µg/L       0.47963      2.7151 ppb        0.47963  17.67%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.5612 µg/L       1.20822      0.5612 ppb        1.20822 215.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                44.9      0.2529 µg/L       0.08822      0.2529 ppb        0.08822  34.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               122.1      0.2722 µg/L       0.03525      0.2722 ppb        0.03525  12.95%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.5     -2.2116 µg/L       4.33547     -2.2116 ppb        4.33547 196.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 55.3      5.1974 µg/L       4.85647      5.1974 ppb        4.85647  93.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.1      0.2263 µg/L       0.13848      0.2263 ppb        0.13848  61.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                28.0      0.7514 µg/L       0.08282      0.7514 ppb        0.08282  11.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/18/2009 06:55:16 **Plasma On Time:** 12/17/2009 20:21:18
Logged In Analyst: optima **Technique:** ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1030502 **Autosampler Model:** AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121809C.sif
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 12/18/2009 06:55:18
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106945.8	106945.8	95.1	%			06:55:52
1	Al 396.153Radial†	10044.5	10334.4	5203.8	µg/L	5203.8	ppb	06:55:52
1	Ca 317.933Radial†	12363.8	12508.2	4965.2	µg/L	4965.2	ppb	06:56:13
1	Fe 238.204 Radial†	946.3	984.0	5185.7	µg/L	5185.7	ppb	06:56:13
1	K 766.490 Radial†	9719.8	9527.9	5166.0	µg/L	5166.0	ppb	06:55:52
1	Mg 279.077 IEC†	913.6	941.0	5224.2	µg/L	5224.2	ppb	06:56:13
1	Na 589.592 Radial†	34929.8	37441.3	10389	µg/L	10389	ppb	06:55:52
1	Sr 421.552†	85564.5	90056.1	507.28	µg/L	507.28	ppb	06:55:52
1	Sc 361.383	1934781.8	1934781.8	94.070	%			06:57:16
1	Y 371.029	1171080.0	1171080.0	93.510	%			06:57:16
1	Ag 328.068†	53582.4	56988.4	512.85	µg/L	512.85	ppb	06:57:22
1	As 188.979†	253.3	266.8	507.45	µg/L	507.45	ppb	06:57:42
1	B 249.677†	10682.2	11199.8	495.46	µg/L	495.46	ppb	06:57:22
1	Ba 233.527†	18798.5	20064.2	505.01	µg/L	505.01	ppb	06:57:22
1	Be 313.107†	753733.3	797634.6	504.38	µg/L	504.38	ppb	06:57:16
1	Cd 226.502†	17655.1	18868.9	499.13	µg/L	499.13	ppb	06:57:22
1	Co 228.616†	9747.0	10433.1	501.83	µg/L	501.83	ppb	06:57:22
1	Cr 267.716†	22508.2	24049.8	501.81	µg/L	501.81	ppb	06:57:22
1	Cu 324.752†	71461.0	72581.3	511.76	µg/L	511.76	ppb	06:57:22
1	Mn 257.610†	150498.5	160208.0	509.08	µg/L	509.08	ppb	06:57:16
1	Mo 202.031†	4205.5	4478.5	499.82	µg/L	499.82	ppb	06:57:42
1	Ni 231.604†	8978.2	9244.7	503.64	µg/L	503.64	ppb	06:57:22
1	P 214.914†	1298.0	1173.9	2492.5	µg/L	2492.5	ppb	06:57:42
1	Pb 220.353†	1932.4	2000.1	507.73	µg/L	507.73	ppb	06:57:42
1	S 181.975 Axial†	216.7	206.3	1058.6	µg/L	1058.6	ppb	06:57:42
1	Sb 206.836†	497.2	508.0	502.66	µg/L	502.66	ppb	06:57:42
1	Se 196.026†	349.3	357.2	522.45	µg/L	522.45	ppb	06:57:42
1	SiO2†	28752.4	28583.2	5458.4	µg/L	5458.4	ppb	06:57:22
1	Si 251.611†	31785.4	33439.4	2513.1	µg/L	2513.1	ppb	06:57:22
1	Sn 189.927†	985.1	1024.8	502.36	µg/L	502.36	ppb	06:57:42
1	Ti 334.940†	215774.0	228656.8	506.56	µg/L	506.56	ppb	06:57:16
1	Tl 190.801†	292.1	331.9	503.36	µg/L	503.36	ppb	06:57:42
1	U 409.014†	5788.7	5474.4	513.26	µg/L	513.26	ppb	06:57:22
1	V 292.402†	42097.2	44842.8	510.27	µg/L	510.27	ppb	06:57:22
1	Zn 213.857†	18407.1	19017.3	505.48	µg/L	505.48	ppb	06:57:22
2	Sc RADIAL	107463.3	107463.3	95.5	%			06:56:18
2	Al 396.153Radial†	10047.5	10286.8	5179.7	µg/L	5179.7	ppb	06:56:18
2	Ca 317.933Radial†	12376.8	12459.1	4945.7	µg/L	4945.7	ppb	06:56:39
2	Fe 238.204 Radial†	941.9	974.7	5136.8	µg/L	5136.8	ppb	06:56:39
2	K 766.490 Radial†	9754.3	9514.8	5158.9	µg/L	5158.9	ppb	06:56:18
2	Mg 279.077 IEC†	919.1	942.1	5230.6	µg/L	5230.6	ppb	06:56:39
2	Na 589.592 Radial†	35095.2	37437.5	10388	µg/L	10388	ppb	06:56:18
2	Sr 421.552†	85730.9	89796.9	505.82	µg/L	505.82	ppb	06:56:18
2	Sc 361.383	1940235.3	1940235.3	94.335	%			06:57:49
2	Y 371.029	1174862.6	1174862.6	93.812	%			06:57:49
2	Ag 328.068†	53778.5	57036.1	513.27	µg/L	513.27	ppb	06:57:55
2	As 188.979†	252.5	265.2	504.37	µg/L	504.37	ppb	06:58:15

2	B 249.677†	10719.7	11207.7	495.83 µg/L	495.83 ppb	06:57:55
2	Ba 233.527†	18814.7	20025.2	504.03 µg/L	504.03 ppb	06:57:55
2	Be 313.107†	753213.8	794831.8	502.61 µg/L	502.61 ppb	06:57:49
2	Cd 226.502†	17721.4	18886.4	499.61 µg/L	499.61 ppb	06:57:55
2	Co 228.616†	9830.4	10492.4	504.68 µg/L	504.68 ppb	06:57:55
2	Cr 267.716†	22623.6	24104.9	502.95 µg/L	502.95 ppb	06:57:55
2	Cu 324.752†	71838.6	72768.1	513.06 µg/L	513.06 ppb	06:57:55
2	Mn 257.610†	150352.3	159603.4	507.15 µg/L	507.15 ppb	06:57:49
2	Mo 202.031†	4209.8	4470.5	498.93 µg/L	498.93 ppb	06:58:15
2	Ni 231.604†	9046.6	9290.5	506.13 µg/L	506.13 ppb	06:57:55
2	P 214.914†	1301.3	1173.5	2491.6 µg/L	2491.6 ppb	06:58:15
2	Pb 220.353†	1928.5	1990.2	505.21 µg/L	505.21 ppb	06:58:15
2	S 181.975 Axial†	216.1	205.1	1052.1 µg/L	1052.1 ppb	06:58:15
2	Sb 206.836†	495.7	504.9	499.57 µg/L	499.57 ppb	06:58:15
2	Se 196.026†	337.7	343.9	502.98 µg/L	502.98 ppb	06:58:15
2	SiO2†	28902.9	28656.8	5472.4 µg/L	5472.4 ppb	06:57:55
2	Si 251.611†	31854.8	33418.0	2511.5 µg/L	2511.5 ppb	06:57:55
2	Sn 189.927†	990.9	1028.0	503.92 µg/L	503.92 ppb	06:58:15
2	Ti 334.940†	215459.3	227678.5	504.40 µg/L	504.40 ppb	06:57:49
2	Tl 190.801†	289.5	328.3	497.85 µg/L	497.85 ppb	06:58:15
2	U 409.014†	5868.8	5542.0	519.61 µg/L	519.61 ppb	06:57:55
2	V 292.402†	42194.2	44819.9	510.01 µg/L	510.01 ppb	06:57:55
2	Zn 213.857†	18434.8	18991.7	504.79 µg/L	504.79 ppb	06:57:55
3	Sc RADIAL	106773.0	106773.0	94.9 %		06:56:44
3	Al 396.153Radial†	10042.0	10348.9	5211.2 µg/L	5211.2 ppb	06:56:44
3	Ca 317.933Radial†	12455.8	12626.1	5012.0 µg/L	5012.0 ppb	06:57:04
3	Fe 238.204 Radial†	948.9	988.4	5208.9 µg/L	5208.9 ppb	06:57:04
3	K 766.490 Radial†	9735.2	9560.7	5183.8 µg/L	5183.8 ppb	06:56:44
3	Mg 279.077 IEC†	907.1	935.7	5194.8 µg/L	5194.8 ppb	06:57:04
3	Na 589.592 Radial†	35014.9	37590.4	10430 µg/L	10430 ppb	06:56:44
3	Sr 421.552†	85619.4	90259.6	508.43 µg/L	508.43 ppb	06:56:44
3	Sc 361.383	1934679.9	1934679.9	94.065 %		06:58:23
3	Y 371.029	1171841.1	1171841.1	93.571 %		06:58:23
3	Ag 328.068†	53604.9	57015.3	513.09 µg/L	513.09 ppb	06:58:28
3	As 188.979†	250.6	264.0	502.10 µg/L	502.10 ppb	06:58:49
3	B 249.677†	10734.6	11256.2	497.95 µg/L	497.95 ppb	06:58:28
3	Ba 233.527†	18778.9	20044.4	504.52 µg/L	504.52 ppb	06:58:28
3	Be 313.107†	756998.9	801148.6	506.60 µg/L	506.60 ppb	06:58:23
3	Cd 226.502†	17679.0	18895.3	499.83 µg/L	499.83 ppb	06:58:28
3	Co 228.616†	9777.9	10466.6	503.43 µg/L	503.43 ppb	06:58:28
3	Cr 267.716†	22628.1	24178.5	504.49 µg/L	504.49 ppb	06:58:28
3	Cu 324.752†	71530.9	72659.7	512.31 µg/L	512.31 ppb	06:58:28
3	Mn 257.610†	151157.8	160917.4	511.33 µg/L	511.33 ppb	06:58:23
3	Mo 202.031†	4194.4	4466.9	498.53 µg/L	498.53 ppb	06:58:49
3	Ni 231.604†	9009.7	9278.7	505.49 µg/L	505.49 ppb	06:58:28
3	P 214.914†	1294.0	1169.6	2483.0 µg/L	2483.0 ppb	06:58:49
3	Pb 220.353†	1919.0	1986.0	504.15 µg/L	504.15 ppb	06:58:49
3	S 181.975 Axial†	219.3	209.1	1072.6 µg/L	1072.6 ppb	06:58:49
3	Sb 206.836†	498.3	509.2	503.75 µg/L	503.75 ppb	06:58:49
3	Se 196.026†	347.9	355.8	520.42 µg/L	520.42 ppb	06:58:49
3	SiO2†	28840.5	28678.5	5476.6 µg/L	5476.6 ppb	06:58:28
3	Si 251.611†	31810.9	33468.3	2515.4 µg/L	2515.4 ppb	06:58:28
3	Sn 189.927†	976.4	1015.6	497.88 µg/L	497.88 ppb	06:58:49
3	Ti 334.940†	216158.2	229077.4	507.49 µg/L	507.49 ppb	06:58:23
3	Tl 190.801†	295.1	335.1	508.14 µg/L	508.14 ppb	06:58:49
3	U 409.014†	5810.0	5497.3	515.41 µg/L	515.41 ppb	06:58:28
3	V 292.402†	42072.4	44818.8	509.99 µg/L	509.99 ppb	06:58:28
3	Zn 213.857†	18433.1	19045.9	506.24 µg/L	506.24 ppb	06:58:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1936565.7	94.157	%	0.1545				0.16%
Sc RADIAL	107060.7	95.2	%	0.32				0.34%
Y 371.029	1172594.6	93.631	%	0.1598				0.17%
Ag 328.068†	57013.3	513.07	µg/L	0.211	513.07	ppb	0.211	0.04%
QC value within limits for Ag 328.068 Recovery = 102.61%								
Al 396.153Radial†	10323.4	5198.2	µg/L	16.44	5198.2	ppb	16.44	0.32%
QC value within limits for Al 396.153Radial Recovery = 103.96%								
As 188.979†	265.3	504.64	µg/L	2.682	504.64	ppb	2.682	0.53%

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   QC value within limits for As 188.979  Recovery = 100.93%
B 249.677†            11221.2      496.41 µg/L        1.346      496.41 ppb          1.346   0.27%
   QC value within limits for B 249.677  Recovery = 99.28%
Ba 233.527†           20044.6      504.52 µg/L        0.490      504.52 ppb          0.490   0.10%
   QC value within limits for Ba 233.527  Recovery = 100.90%
Be 313.107†          797871.7      504.53 µg/L        2.002      504.53 ppb          2.002   0.40%
   QC value within limits for Be 313.107  Recovery = 100.91%
Ca 317.933Radial†     12531.1      4974.3 µg/L       34.07      4974.3 ppb         34.07   0.68%
   QC value within limits for Ca 317.933Radial  Recovery = 99.49%
Cd 226.502†           18883.6      499.52 µg/L        0.357      499.52 ppb          0.357   0.07%
   QC value within limits for Cd 226.502  Recovery = 99.90%
Co 228.616†           10464.0      503.31 µg/L        1.430      503.31 ppb          1.430   0.28%
   QC value within limits for Co 228.616  Recovery = 100.66%
Cr 267.716†           24111.1      503.08 µg/L        1.345      503.08 ppb          1.345   0.27%
   QC value within limits for Cr 267.716  Recovery = 100.62%
Cu 324.752†           72669.7      512.38 µg/L        0.654      512.38 ppb          0.654   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.48%
Fe 238.204 Radial†      982.4      5177.1 µg/L       36.80      5177.1 ppb         36.80   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.54%
K 766.490 Radial†      9534.5      5169.5 µg/L       12.81      5169.5 ppb         12.81   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 103.39%
Mg 279.077 IEC†         939.6      5216.5 µg/L       19.08      5216.5 ppb         19.08   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.33%
Mn 257.610†          160242.9      509.19 µg/L        2.092      509.19 ppb          2.092   0.41%
   QC value within limits for Mn 257.610  Recovery = 101.84%
Mo 202.031†            4472.0      499.10 µg/L        0.661      499.10 ppb          0.661   0.13%
   QC value within limits for Mo 202.031  Recovery = 99.82%
Na 589.592 Radial†    37489.7       10402 µg/L         24.2       10402 ppb           24.2   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 104.02%
Ni 231.604†            9271.3      505.08 µg/L        1.295      505.08 ppb          1.295   0.26%
   QC value within limits for Ni 231.604  Recovery = 101.02%
P 214.914†             1172.3      2489.0 µg/L        5.21      2489.0 ppb           5.21   0.21%
   QC value within limits for P 214.914  Recovery = 99.56%
Pb 220.353†            1992.1      505.70 µg/L        1.836      505.70 ppb          1.836   0.36%
   QC value within limits for Pb 220.353  Recovery = 101.14%
S 181.975 Axial†        206.8      1061.1 µg/L       10.48      1061.1 ppb         10.48   0.99%
   QC value within limits for S 181.975 Axial  Recovery = 106.11%
Sb 206.836†             507.4      501.99 µg/L        2.166      501.99 ppb          2.166   0.43%
   QC value within limits for Sb 206.836  Recovery = 100.40%
Se 196.026†             352.3      515.28 µg/L       10.703      515.28 ppb         10.703   2.08%
   QC value within limits for Se 196.026  Recovery = 103.06%
SiO2†                  28639.5      5469.1 µg/L        9.54      5469.1 ppb           9.54   0.17%
   QC value within limits for SiO2  Recovery = 102.27%
Si 251.611†            33441.9      2513.3 µg/L        2.00      2513.3 ppb           2.00   0.08%
   QC value within limits for Si 251.611  Recovery = 100.53%
Sn 189.927†            1022.8      501.39 µg/L        3.137      501.39 ppb          3.137   0.63%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†            90037.6      507.18 µg/L        1.306      507.18 ppb          1.306   0.26%
   QC value within limits for Sr 421.552  Recovery = 101.44%
Ti 334.940†           228470.9      506.15 µg/L        1.589      506.15 ppb          1.589   0.31%
   QC value within limits for Ti 334.940  Recovery = 101.23%
Tl 190.801†             331.8      503.12 µg/L        5.147      503.12 ppb          5.147   1.02%
   QC value within limits for Tl 190.801  Recovery = 100.62%
U 409.014†             5504.6      516.09 µg/L        3.232      516.09 ppb          3.232   0.63%
   QC value within limits for U 409.014  Recovery = 103.22%
V 292.402†            44827.2      510.09 µg/L        0.154      510.09 ppb          0.154   0.03%
   QC value within limits for V 292.402  Recovery = 102.02%
Zn 213.857†           19018.3      505.50 µg/L        0.726      505.50 ppb          0.726   0.14%
   QC value within limits for Zn 213.857  Recovery = 101.10%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 06:58:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105477.4	105477.4	93.8	%			06:59:31
1	Al 396.153Radial†	199.7	-16.8	-8.5139	µg/L	-8.5139	ppb	06:59:31
1	Ca 317.933Radial†	399.5	-69.5	-27.573	µg/L	-27.573	ppb	06:59:51
1	Fe 238.204 Radial†	6.5	-4.3	-22.702	µg/L	-22.702	ppb	06:59:51
1	K 766.490 Radial†	712.0	64.4	34.937	µg/L	34.937	ppb	06:59:31
1	Mg 279.077 IEC†	12.4	-6.6	-36.446	µg/L	-36.446	ppb	06:59:51
1	Na 589.592 Radial†	-641.5	19.8	5.5067	µg/L	5.5067	ppb	06:59:31
1	Sr 421.552†	-45.8	14.9	0.0839	µg/L	0.0839	ppb	06:59:31
1	Sc 361.383	1950567.4	1950567.4	94.838	%			07:00:54
1	Y 371.029	1186545.2	1186545.2	94.745	%			07:00:54
1	Ag 328.068†	-25.2	1.8	0.0199	µg/L	0.0199	ppb	07:00:59
1	As 188.979†	3.5	1.2	2.2153	µg/L	2.2153	ppb	07:01:20
1	B 249.677†	147.0	-0.7	-0.0260	µg/L	-0.0260	ppb	07:01:20
1	Ba 233.527†	-77.0	-0.5	-0.0109	µg/L	-0.0109	ppb	07:01:20
1	Be 313.107†	3870.5	469.7	0.2970	µg/L	0.2970	ppb	07:00:59
1	Cd 226.502†	-89.0	7.1	0.1934	µg/L	0.1934	ppb	07:01:20
1	Co 228.616†	-76.1	-8.5	-0.4110	µg/L	-0.4110	ppb	07:01:20
1	Cr 267.716†	-123.7	-7.7	-0.1583	µg/L	-0.1583	ppb	07:00:59
1	Cu 324.752†	3193.5	-17.0	-0.1245	µg/L	-0.1245	ppb	07:00:59
1	Mn 257.610†	-185.3	27.3	0.0836	µg/L	0.0836	ppb	07:01:20
1	Mo 202.031†	-5.6	2.0	0.2247	µg/L	0.2247	ppb	07:01:20
1	Ni 231.604†	287.4	3.6	0.1976	µg/L	0.1976	ppb	07:01:20
1	P 214.914†	211.9	17.4	37.853	µg/L	37.853	ppb	07:01:20
1	Pb 220.353†	64.4	13.8	3.4934	µg/L	3.4934	ppb	07:01:20
1	S 181.975 Axial†	35.5	13.3	68.594	µg/L	68.594	ppb	07:01:20
1	Sb 206.836†	16.3	-3.4	-3.3257	µg/L	-3.3257	ppb	07:01:20
1	Se 196.026†	15.1	1.9	2.7226	µg/L	2.7226	ppb	07:01:20
1	SiO2†	1975.1	100.9	19.270	µg/L	19.270	ppb	07:00:59
1	Si 251.611†	352.7	22.3	1.6348	µg/L	1.6348	ppb	07:01:20
1	Sn 189.927†	23.3	2.1	1.0278	µg/L	1.0278	ppb	07:01:20
1	Ti 334.940†	845.5	172.6	0.3842	µg/L	0.3842	ppb	07:00:59
1	Tl 190.801†	-21.6	-1.4	-2.0760	µg/L	-2.0760	ppb	07:01:20
1	U 409.014†	706.8	66.1	6.2103	µg/L	6.2103	ppb	07:00:59
1	V 292.402†	-16.1	75.0	0.8547	µg/L	0.8547	ppb	07:00:59
1	Zn 213.857†	530.3	9.0	0.2446	µg/L	0.2446	ppb	07:01:20
2	Sc RADIAL	104628.2	104628.2	93.0	%			06:59:57
2	Al 396.153Radial†	176.7	-39.8	-20.156	µg/L	-20.156	ppb	06:59:57
2	Ca 317.933Radial†	384.9	-81.7	-32.413	µg/L	-32.413	ppb	07:00:17
2	Fe 238.204 Radial†	10.2	-0.2	-1.2771	µg/L	-1.2771	ppb	07:00:17
2	K 766.490 Radial†	730.0	89.9	48.767	µg/L	48.767	ppb	06:59:57
2	Mg 279.077 IEC†	18.6	0.1	0.6928	µg/L	0.6928	ppb	07:00:17
2	Na 589.592 Radial†	-596.2	63.0	17.478	µg/L	17.478	ppb	06:59:57
2	Sr 421.552†	-55.4	4.2	0.0239	µg/L	0.0239	ppb	06:59:57
2	Sc 361.383	1932770.3	1932770.3	93.972	%			07:01:26
2	Y 371.029	1175769.9	1175769.9	93.884	%			07:01:26
2	Ag 328.068†	-37.6	-11.7	-0.1017	µg/L	-0.1017	ppb	07:01:31
2	As 188.979†	6.1	4.0	7.5633	µg/L	7.5633	ppb	07:01:52
2	B 249.677†	151.5	5.5	0.2446	µg/L	0.2446	ppb	07:01:52
2	Ba 233.527†	-73.4	2.6	0.0656	µg/L	0.0656	ppb	07:01:52
2	Be 313.107†	3632.5	254.1	0.1606	µg/L	0.1606	ppb	07:01:31
2	Cd 226.502†	-97.9	-3.3	-0.0851	µg/L	-0.0851	ppb	07:01:52
2	Co 228.616†	-67.1	0.3	0.0137	µg/L	0.0137	ppb	07:01:52
2	Cr 267.716†	-139.2	-25.4	-0.5272	µg/L	-0.5272	ppb	07:01:31
2	Cu 324.752†	3135.3	-47.9	-0.3370	µg/L	-0.3370	ppb	07:01:31
2	Mn 257.610†	-188.2	22.4	0.0708	µg/L	0.0708	ppb	07:01:52
2	Mo 202.031†	-3.2	4.5	0.5004	µg/L	0.5004	ppb	07:01:52
2	Ni 231.604†	267.6	-14.6	-0.7975	µg/L	-0.7975	ppb	07:01:52
2	P 214.914†	204.0	11.1	24.291	µg/L	24.291	ppb	07:01:52
2	Pb 220.353†	56.7	6.2	1.5785	µg/L	1.5785	ppb	07:01:52

2	S 181.975 Axial†	35.4	13.6	69.997 µg/L	69.997 ppb	07:01:52
2	Sb 206.836†	23.9	4.9	4.8553 µg/L	4.8553 ppb	07:01:52
2	Se 196.026†	8.3	-5.2	-7.6518 µg/L	-7.6518 ppb	07:01:52
2	SiO2†	1945.5	88.6	16.914 µg/L	16.914 ppb	07:01:31
2	Si 251.611†	338.1	10.1	0.6308 µg/L	0.6308 ppb	07:01:52
2	Sn 189.927†	26.6	5.9	2.8455 µg/L	2.8455 ppb	07:01:52
2	Ti 334.940†	763.5	93.6	0.2093 µg/L	0.2093 ppb	07:01:31
2	Tl 190.801†	-24.5	-4.7	-7.0617 µg/L	-7.0617 ppb	07:01:52
2	U 409.014†	666.6	30.1	2.8267 µg/L	2.8267 ppb	07:01:31
2	V 292.402†	-48.3	40.5	0.4647 µg/L	0.4647 ppb	07:01:31
2	Zn 213.857†	524.8	8.3	0.2263 µg/L	0.2263 ppb	07:01:52
3	Sc RADIAL	105590.3	105590.3	93.9 %		07:00:23
3	Al 396.153Radial†	182.7	-35.2	-17.768 µg/L	-17.768 ppb	07:00:23
3	Ca 317.933Radial†	396.7	-72.9	-28.920 µg/L	-28.920 ppb	07:00:43
3	Fe 238.204 Radial†	8.8	-1.8	-9.5354 µg/L	-9.5354 ppb	07:00:43
3	K 766.490 Radial†	746.9	100.7	54.621 µg/L	54.621 ppb	07:00:23
3	Mg 279.077 IEC†	16.7	-2.0	-11.243 µg/L	-11.243 ppb	07:00:43
3	Na 589.592 Radial†	-579.6	86.6	24.015 µg/L	24.015 ppb	07:00:23
3	Sr 421.552†	-70.2	-11.0	-0.0622 µg/L	-0.0622 ppb	07:00:23
3	Sc 361.383	1941750.9	1941750.9	94.409 %		07:01:58
3	Y 371.029	1179520.3	1179520.3	94.184 %		07:01:58
3	Ag 328.068†	-43.3	-17.5	-0.1576 µg/L	-0.1576 ppb	07:02:03
3	As 188.979†	-0.4	-2.9	-5.4643 µg/L	-5.4643 ppb	07:02:24
3	B 249.677†	133.7	-14.1	-0.6228 µg/L	-0.6228 ppb	07:02:24
3	Ba 233.527†	-72.2	4.2	0.1052 µg/L	0.1052 ppb	07:02:24
3	Be 313.107†	3636.9	240.7	0.1522 µg/L	0.1522 ppb	07:02:03
3	Cd 226.502†	-93.9	1.5	0.0392 µg/L	0.0392 ppb	07:02:24
3	Co 228.616†	-72.9	-5.4	-0.2631 µg/L	-0.2631 ppb	07:02:24
3	Cr 267.716†	-94.9	22.2	0.4623 µg/L	0.4623 ppb	07:02:03
3	Cu 324.752†	3162.3	-34.8	-0.2466 µg/L	-0.2466 ppb	07:02:03
3	Mn 257.610†	-191.8	19.5	0.0608 µg/L	0.0608 ppb	07:02:24
3	Mo 202.031†	-10.6	-3.3	-0.3671 µg/L	-0.3671 ppb	07:02:24
3	Ni 231.604†	277.1	-5.9	-0.3199 µg/L	-0.3199 ppb	07:02:24
3	P 214.914†	206.4	12.7	27.562 µg/L	27.562 ppb	07:02:24
3	Pb 220.353†	57.9	7.2	1.8223 µg/L	1.8223 ppb	07:02:24
3	S 181.975 Axial†	37.1	15.3	78.450 µg/L	78.450 ppb	07:02:24
3	Sb 206.836†	16.2	-3.4	-3.3903 µg/L	-3.3903 ppb	07:02:24
3	Se 196.026†	14.2	1.0	1.4190 µg/L	1.4190 ppb	07:02:24
3	SiO2†	1885.3	15.3	2.9244 µg/L	2.9244 ppb	07:02:03
3	Si 251.611†	338.1	8.5	0.6142 µg/L	0.6142 ppb	07:02:24
3	Sn 189.927†	22.1	0.9	0.4320 µg/L	0.4320 ppb	07:02:24
3	Ti 334.940†	742.0	67.1	0.1504 µg/L	0.1504 ppb	07:02:03
3	Tl 190.801†	-19.8	0.5	0.7221 µg/L	0.7221 ppb	07:02:24
3	U 409.014†	634.2	-7.5	-0.7000 µg/L	-0.7000 ppb	07:02:03
3	V 292.402†	-88.5	-1.7	-0.0240 µg/L	-0.0240 ppb	07:02:03
3	Zn 213.857†	528.2	9.3	0.2520 µg/L	0.2520 ppb	07:02:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941696.2	94.406	%	0.4327				0.46%
Sc RADIAL	105232.0	93.6	%	0.47				0.50%
Y 371.029	1180611.8	94.271	%	0.4368				0.46%
Ag 328.068†	-9.2	-0.0798	µg/L	0.09073	-0.0798	ppb	0.09073	113.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-30.6	-15.479	µg/L	6.1491	-15.479	ppb	6.1491	39.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	1.4381	µg/L	6.54851	1.4381	ppb	6.54851	455.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.1	-0.1347	µg/L	0.44380	-0.1347	ppb	0.44380	329.45%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0533	µg/L	0.05905	0.0533	ppb	0.05905	110.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	321.5	0.2033	µg/L	0.08126	0.2033	ppb	0.08126	39.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-74.7	-29.635	µg/L	2.4981	-29.635	ppb	2.4981	8.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.8	0.0491	µg/L	0.13952	0.0491	ppb	0.13952	283.98%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.6	-0.2201	µg/L	0.21559	-0.2201	ppb	0.21559	97.95%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.6     -0.0744 µg/L       0.50006     -0.0744 ppb        0.50006 671.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -33.2     -0.2360 µg/L       0.10664     -0.2360 ppb        0.10664  45.18%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.1     -11.171 µg/L       10.8056     -11.171 ppb        10.8056  96.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        85.0      46.108 µg/L       10.1080      46.108 ppb        10.1080  21.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.8     -15.665 µg/L       18.9603     -15.665 ppb        18.9603 121.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              23.0      0.0717 µg/L       0.01146      0.0717 ppb        0.01146  15.98%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.1      0.1193 µg/L       0.44327      0.1193 ppb        0.44327 371.50%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       56.5      15.667 µg/L        9.3860      15.667 ppb         9.3860  59.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.6     -0.3066 µg/L       0.49767     -0.3066 ppb        0.49767 162.33%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               13.7      29.902 µg/L        7.0774      29.902 ppb         7.0774  23.67%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               9.1      2.2981 µg/L       1.04233      2.2981 ppb        1.04233  45.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         14.1      72.347 µg/L        5.3316      72.347 ppb         5.3316   7.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -0.6     -0.6202 µg/L       4.74205     -0.6202 ppb        4.74205 764.55%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.8     -1.1701 µg/L       5.65107     -1.1701 ppb        5.65107 482.97%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    68.3      13.036 µg/L        8.8359      13.036 ppb         8.8359  67.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              13.6      0.9599 µg/L       0.58449      0.9599 ppb        0.58449  60.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.0      1.4351 µg/L       1.25728      1.4351 ppb        1.25728  87.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               2.7      0.0152 µg/L       0.07343      0.0152 ppb        0.07343 483.34%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             111.1      0.2479 µg/L       0.12165      0.2479 ppb        0.12165  49.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.9     -2.8052 µg/L       3.94280     -2.8052 ppb        3.94280 140.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               29.6      2.7790 µg/L       3.45539      2.7790 ppb        3.45539 124.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               37.9      0.4318 µg/L       0.44027      0.4318 ppb        0.44027 101.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               8.9      0.2410 µg/L       0.01321      0.2410 ppb        0.01321   5.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 07:34:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108426.9	108426.9	96.4	%			07:35:07
1	Al 396.153Radial†	10160.7	10310.7	5191.9	µg/L	5191.9	ppb	07:35:07
1	Ca 317.933Radial†	12371.7	12338.7	4897.9	µg/L	4897.9	ppb	07:35:28
1	Fe 238.204 Radial†	948.4	972.6	5125.9	µg/L	5125.9	ppb	07:35:28
1	K 766.490 Radial†	9790.3	9461.4	5129.9	µg/L	5129.9	ppb	07:35:07
1	Mg 279.077 IEC†	919.5	934.1	5185.9	µg/L	5185.9	ppb	07:35:28
1	Na 589.592 Radial†	35081.2	37096.5	10293	µg/L	10293	ppb	07:35:07
1	Sr 421.552†	85995.3	89273.8	502.87	µg/L	502.87	ppb	07:35:07
1	Sc 361.383	1943880.1	1943880.1	94.512	%			07:36:31
1	Y 371.029	1177912.6	1177912.6	94.056	%			07:36:31
1	Ag 328.068†	54085.1	57253.7	515.21	µg/L	515.21	ppb	07:36:37
1	As 188.979†	248.6	260.6	495.69	µg/L	495.69	ppb	07:36:57
1	B 249.677†	10796.1	11267.3	498.47	µg/L	498.47	ppb	07:36:37
1	Ba 233.527†	18895.7	20073.5	505.25	µg/L	505.25	ppb	07:36:37
1	Be 313.107†	750166.4	790110.4	499.62	µg/L	499.62	ppb	07:36:31
1	Cd 226.502†	17681.9	18809.4	497.57	µg/L	497.57	ppb	07:36:37
1	Co 228.616†	9830.8	10473.4	503.76	µg/L	503.76	ppb	07:36:37
1	Cr 267.716†	22731.2	24173.7	504.39	µg/L	504.39	ppb	07:36:37
1	Cu 324.752†	72230.7	73040.2	514.97	µg/L	514.97	ppb	07:36:37
1	Mn 257.610†	149988.6	158919.7	504.98	µg/L	504.98	ppb	07:36:31
1	Mo 202.031†	4202.9	4454.9	497.18	µg/L	497.18	ppb	07:36:57
1	Ni 231.604†	9001.1	9224.3	502.53	µg/L	502.53	ppb	07:36:37
1	P 214.914†	1292.8	1161.8	2465.9	µg/L	2465.9	ppb	07:36:57
1	Pb 220.353†	1918.0	1975.3	501.43	µg/L	501.43	ppb	07:36:57
1	S 181.975 Axial†	217.2	205.7	1055.5	µg/L	1055.5	ppb	07:36:57
1	Sb 206.836†	497.0	505.3	499.95	µg/L	499.95	ppb	07:36:57
1	Se 196.026†	340.3	346.0	506.11	µg/L	506.11	ppb	07:36:57
1	SiO2†	29458.5	29187.2	5573.7	µg/L	5573.7	ppb	07:36:37
1	Si 251.611†	32421.3	33954.0	2552.8	µg/L	2552.8	ppb	07:36:37
1	Sn 189.927†	982.2	1016.7	498.41	µg/L	498.41	ppb	07:36:57
1	Ti 334.940†	215791.7	227601.9	504.23	µg/L	504.23	ppb	07:36:31
1	Tl 190.801†	290.6	328.9	498.71	µg/L	498.71	ppb	07:36:57
1	U 409.014†	5926.8	5591.7	524.29	µg/L	524.29	ppb	07:36:37
1	V 292.402†	42282.3	44829.2	510.11	µg/L	510.11	ppb	07:36:37
1	Zn 213.857†	18527.0	19052.6	506.44	µg/L	506.44	ppb	07:36:37
2	Sc RADIAL	107319.2	107319.2	95.4	%			07:35:33
2	Al 396.153Radial†	10093.7	10349.3	5211.5	µg/L	5211.5	ppb	07:35:33
2	Ca 317.933Radial†	12329.3	12426.8	4932.8	µg/L	4932.8	ppb	07:35:54
2	Fe 238.204 Radial†	949.8	984.3	5186.7	µg/L	5186.7	ppb	07:35:54
2	K 766.490 Radial†	9685.8	9456.8	5127.4	µg/L	5127.4	ppb	07:35:33
2	Mg 279.077 IEC†	906.1	929.9	5162.4	µg/L	5162.4	ppb	07:35:54
2	Na 589.592 Radial†	35103.1	37495.1	10403	µg/L	10403	ppb	07:35:33
2	Sr 421.552†	85392.1	89562.4	504.50	µg/L	504.50	ppb	07:35:33
2	Sc 361.383	1957099.2	1957099.2	95.155	%			07:37:04
2	Y 371.029	1185312.9	1185312.9	94.646	%			07:37:04
2	Ag 328.068†	53891.6	56663.8	509.92	µg/L	509.92	ppb	07:37:10
2	As 188.979†	255.2	265.7	505.37	µg/L	505.37	ppb	07:37:31
2	B 249.677†	10746.3	11137.8	492.71	µg/L	492.71	ppb	07:37:10
2	Ba 233.527†	18818.1	19856.9	499.80	µg/L	499.80	ppb	07:37:10
2	Be 313.107†	756322.5	791218.9	500.32	µg/L	500.32	ppb	07:37:04
2	Cd 226.502†	17711.4	18714.1	495.03	µg/L	495.03	ppb	07:37:10
2	Co 228.616†	9788.5	10358.6	498.23	µg/L	498.23	ppb	07:37:10
2	Cr 267.716†	22603.6	23877.2	498.20	µg/L	498.20	ppb	07:37:10
2	Cu 324.752†	71903.5	72180.1	508.94	µg/L	508.94	ppb	07:37:10
2	Mn 257.610†	151351.0	159279.6	506.13	µg/L	506.13	ppb	07:37:04
2	Mo 202.031†	4203.6	4425.5	493.91	µg/L	493.91	ppb	07:37:31
2	Ni 231.604†	8999.1	9157.9	498.91	µg/L	498.91	ppb	07:37:10
2	P 214.914†	1293.1	1153.0	2447.3	µg/L	2447.3	ppb	07:37:31
2	Pb 220.353†	1926.9	1970.9	500.33	µg/L	500.33	ppb	07:37:31

2	S 181.975 Axial†	221.2	208.5	1069.5 µg/L	1069.5 ppb	07:37:31
2	Sb 206.836†	502.8	507.8	502.45 µg/L	502.45 ppb	07:37:31
2	Se 196.026†	340.2	343.5	502.44 µg/L	502.44 ppb	07:37:31
2	SiO2†	29245.7	28753.0	5490.8 µg/L	5490.8 ppb	07:37:10
2	Si 251.611†	32194.3	33483.8	2517.0 µg/L	2517.0 ppb	07:37:10
2	Sn 189.927†	978.1	1005.4	492.91 µg/L	492.91 ppb	07:37:31
2	Ti 334.940†	217320.3	227666.2	504.37 µg/L	504.37 ppb	07:37:04
2	Tl 190.801†	291.4	327.6	496.80 µg/L	496.80 ppb	07:37:31
2	U 409.014†	5780.0	5395.1	505.81 µg/L	505.81 ppb	07:37:10
2	V 292.402†	42159.9	44398.4	505.21 µg/L	505.21 ppb	07:37:10
2	Zn 213.857†	18433.2	18821.6	500.27 µg/L	500.27 ppb	07:37:10
3	Sc RADIAL	108101.0	108101.0	96.1 %		07:35:59
3	Al 396.153Radial†	10161.9	10343.7	5208.7 µg/L	5208.7 ppb	07:35:59
3	Ca 317.933Radial†	12389.7	12396.1	4920.7 µg/L	4920.7 ppb	07:36:20
3	Fe 238.204 Radial†	961.6	989.3	5213.5 µg/L	5213.5 ppb	07:36:20
3	K 766.490 Radial†	9814.5	9517.2	5160.2 µg/L	5160.2 ppb	07:35:59
3	Mg 279.077 IEC†	921.1	938.6	5210.7 µg/L	5210.7 ppb	07:36:20
3	Na 589.592 Radial†	35141.4	37268.9	10341 µg/L	10341 ppb	07:35:59
3	Sr 421.552†	86142.1	89695.4	505.25 µg/L	505.25 ppb	07:35:59
3	Sc 361.383	1956426.1	1956426.1	95.122 %		07:37:38
3	Y 371.029	1184365.1	1184365.1	94.571 %		07:37:38
3	Ag 328.068†	53763.0	56548.0	508.89 µg/L	508.89 ppb	07:37:43
3	As 188.979†	255.0	265.6	505.23 µg/L	505.23 ppb	07:38:04
3	B 249.677†	10764.2	11160.5	493.71 µg/L	493.71 ppb	07:37:43
3	Ba 233.527†	18818.6	19864.2	499.98 µg/L	499.98 ppb	07:37:43
3	Be 313.107†	755598.8	790731.5	500.02 µg/L	500.02 ppb	07:37:38
3	Cd 226.502†	17636.1	18641.3	493.11 µg/L	493.11 ppb	07:37:43
3	Co 228.616†	9802.2	10376.6	499.10 µg/L	499.10 ppb	07:37:43
3	Cr 267.716†	22566.2	23846.1	497.55 µg/L	497.55 ppb	07:37:43
3	Cu 324.752†	71907.0	72209.8	509.15 µg/L	509.15 ppb	07:37:43
3	Mn 257.610†	150911.4	158872.2	504.84 µg/L	504.84 ppb	07:37:38
3	Mo 202.031†	4211.8	4435.6	495.04 µg/L	495.04 ppb	07:38:04
3	Ni 231.604†	9017.6	9180.6	500.14 µg/L	500.14 ppb	07:37:43
3	P 214.914†	1306.0	1167.0	2477.6 µg/L	2477.6 ppb	07:38:04
3	Pb 220.353†	1923.9	1968.5	499.71 µg/L	499.71 ppb	07:38:04
3	S 181.975 Axial†	222.7	210.1	1077.8 µg/L	1077.8 ppb	07:38:04
3	Sb 206.836†	495.2	500.1	494.80 µg/L	494.80 ppb	07:38:04
3	Se 196.026†	351.1	355.0	519.20 µg/L	519.20 ppb	07:38:04
3	SiO2†	29228.0	28745.0	5489.3 µg/L	5489.3 ppb	07:37:43
3	Si 251.611†	32162.1	33461.6	2515.2 µg/L	2515.2 ppb	07:37:43
3	Sn 189.927†	982.5	1010.5	495.38 µg/L	495.38 ppb	07:38:04
3	Ti 334.940†	217003.3	227411.5	503.81 µg/L	503.81 ppb	07:37:38
3	Tl 190.801†	288.8	325.0	492.93 µg/L	492.93 ppb	07:38:04
3	U 409.014†	5870.4	5492.2	514.93 µg/L	514.93 ppb	07:37:43
3	V 292.402†	42161.4	44415.2	505.42 µg/L	505.42 ppb	07:37:43
3	Zn 213.857†	18431.9	18826.8	500.40 µg/L	500.40 ppb	07:37:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1952468.5	94.930	%	0.3620				0.38%
Sc RADIAL	107949.0	96.0	%	0.51				0.53%
Y 371.029	1182530.2	94.424	%	0.3215				0.34%
Ag 328.068†	56821.8	511.34	µg/L	3.395	511.34	ppb	3.395	0.66%
QC value within limits for Ag 328.068 Recovery = 102.27%								
Al 396.153Radial†	10334.6	5204.0	µg/L	10.62	5204.0	ppb	10.62	0.20%
QC value within limits for Al 396.153Radial Recovery = 104.08%								
As 188.979†	264.0	502.09	µg/L	5.550	502.09	ppb	5.550	1.11%
QC value within limits for As 188.979 Recovery = 100.42%								
B 249.677†	11188.5	494.96	µg/L	3.081	494.96	ppb	3.081	0.62%
QC value within limits for B 249.677 Recovery = 98.99%								
Ba 233.527†	19931.6	501.68	µg/L	3.095	501.68	ppb	3.095	0.62%
QC value within limits for Ba 233.527 Recovery = 100.34%								
Be 313.107†	790686.9	499.99	µg/L	0.351	499.99	ppb	0.351	0.07%
QC value within limits for Be 313.107 Recovery = 100.00%								
Ca 317.933Radial†	12387.2	4917.1	µg/L	17.75	4917.1	ppb	17.75	0.36%
QC value within limits for Ca 317.933Radial Recovery = 98.34%								
Cd 226.502†	18721.6	495.24	µg/L	2.237	495.24	ppb	2.237	0.45%
QC value within limits for Cd 226.502 Recovery = 99.05%								
Co 228.616†	10402.8	500.36	µg/L	2.973	500.36	ppb	2.973	0.59%

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   QC value within limits for Co 228.616  Recovery = 100.07%
Cr 267.716†            23965.7      500.05 µg/L        3.771      500.05 ppb        3.771   0.75%
   QC value within limits for Cr 267.716  Recovery = 100.01%
Cu 324.752†            72476.7      511.02 µg/L        3.426      511.02 ppb        3.426   0.67%
   QC value within limits for Cu 324.752  Recovery = 102.20%
Fe 238.204 Radial†       982.1      5175.4 µg/L       44.88      5175.4 ppb       44.88   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.51%
K 766.490 Radial†       9478.5      5139.2 µg/L       18.25      5139.2 ppb       18.25   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 102.78%
Mg 279.077 IEC†          934.2      5186.3 µg/L       24.11      5186.3 ppb       24.11   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.73%
Mn 257.610†           159023.8      505.32 µg/L       0.708      505.32 ppb       0.708   0.14%
   QC value within limits for Mn 257.610  Recovery = 101.06%
Mo 202.031†            4438.7      495.38 µg/L       1.661      495.38 ppb       1.661   0.34%
   QC value within limits for Mo 202.031  Recovery = 99.08%
Na 589.592 Radial†    37286.8       10346 µg/L        55.5       10346 ppb        55.5   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 103.46%
Ni 231.604†            9187.6      500.53 µg/L       1.839      500.53 ppb       1.839   0.37%
   QC value within limits for Ni 231.604  Recovery = 100.11%
P 214.914†             1160.6      2463.6 µg/L       15.30      2463.6 ppb       15.30   0.62%
   QC value within limits for P 214.914  Recovery = 98.54%
Pb 220.353†            1971.6      500.49 µg/L       0.869      500.49 ppb       0.869   0.17%
   QC value within limits for Pb 220.353  Recovery = 100.10%
S 181.975 Axial†        208.1      1067.6 µg/L       11.27      1067.6 ppb       11.27   1.06%
   QC value within limits for S 181.975 Axial  Recovery = 106.76%
Sb 206.836†             504.4      499.07 µg/L       3.903      499.07 ppb       3.903   0.78%
   QC value within limits for Sb 206.836  Recovery = 99.81%
Se 196.026†             348.1      509.25 µg/L       8.807      509.25 ppb       8.807   1.73%
   QC value within limits for Se 196.026  Recovery = 101.85%
SiO2†                28895.1      5517.9 µg/L       48.32      5517.9 ppb       48.32   0.88%
   QC value within limits for SiO2  Recovery = 103.19%
Si 251.611†          33633.1      2528.4 µg/L       21.18      2528.4 ppb       21.18   0.84%
   QC value within limits for Si 251.611  Recovery = 101.13%
Sn 189.927†            1010.9      495.57 µg/L       2.755      495.57 ppb       2.755   0.56%
   QC value within limits for Sn 189.927  Recovery = 99.11%
Sr 421.552†           89510.5      504.21 µg/L       1.214      504.21 ppb       1.214   0.24%
   QC value within limits for Sr 421.552  Recovery = 100.84%
Ti 334.940†          227559.9      504.13 µg/L       0.294      504.13 ppb       0.294   0.06%
   QC value within limits for Ti 334.940  Recovery = 100.83%
Tl 190.801†             327.2      496.15 µg/L       2.945      496.15 ppb       2.945   0.59%
   QC value within limits for Tl 190.801  Recovery = 99.23%
U 409.014†             5493.0      515.01 µg/L       9.240      515.01 ppb       9.240   1.79%
   QC value within limits for U 409.014  Recovery = 103.00%
V 292.402†            44547.6      506.91 µg/L       2.772      506.91 ppb       2.772   0.55%
   QC value within limits for V 292.402  Recovery = 101.38%
Zn 213.857†           18900.3      502.37 µg/L       3.524      502.37 ppb       3.524   0.70%
   QC value within limits for Zn 213.857  Recovery = 100.47%
All analyte(s) passed QC.
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Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 07:38:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105823.4	105823.4	94.1	%			07:38:47
1	Al 396.153Radial†	217.3	1.1	0.5826	µg/L	0.5826	ppb	07:38:47
1	Ca 317.933Radial†	399.2	-71.2	-28.247	µg/L	-28.247	ppb	07:39:07
1	Fe 238.204 Radial†	12.9	2.5	12.992	µg/L	12.992	ppb	07:39:07
1	K 766.490 Radial†	734.7	86.1	46.681	µg/L	46.681	ppb	07:38:47
1	Mg 279.077 IEC†	13.5	-5.5	-30.716	µg/L	-30.716	ppb	07:39:07
1	Na 589.592 Radial†	-635.5	28.5	7.8991	µg/L	7.8991	ppb	07:38:47
1	Sr 421.552†	-40.7	20.5	0.1156	µg/L	0.1156	ppb	07:38:47
1	Sc 361.383	1948076.6	1948076.6	94.717	%			07:40:08
1	Y 371.029	1183421.0	1183421.0	94.495	%			07:40:08
1	Ag 328.068†	-81.5	-57.7	-0.5119	µg/L	-0.5119	ppb	07:40:14
1	As 188.979†	2.2	-0.2	-0.3853	µg/L	-0.3853	ppb	07:40:35
1	B 249.677†	171.2	25.1	1.1098	µg/L	1.1098	ppb	07:40:35
1	Ba 233.527†	-78.2	-1.9	-0.0477	µg/L	-0.0477	ppb	07:40:35
1	Be 313.107†	3612.6	202.6	0.1280	µg/L	0.1280	ppb	07:40:14
1	Cd 226.502†	-101.6	-6.3	-0.1606	µg/L	-0.1606	ppb	07:40:35
1	Co 228.616†	-69.6	-1.7	-0.0855	µg/L	-0.0855	ppb	07:40:35
1	Cr 267.716†	-116.4	-0.1	-0.0008	µg/L	-0.0008	ppb	07:40:14
1	Cu 324.752†	3135.4	-74.0	-0.5180	µg/L	-0.5180	ppb	07:40:14
1	Mn 257.610†	-138.3	76.6	0.2448	µg/L	0.2448	ppb	07:40:35
1	Mo 202.031†	-9.9	-2.5	-0.2826	µg/L	-0.2826	ppb	07:40:35
1	Ni 231.604†	276.6	-7.4	-0.4027	µg/L	-0.4027	ppb	07:40:35
1	P 214.914†	211.9	17.7	38.467	µg/L	38.467	ppb	07:40:35
1	Pb 220.353†	65.6	15.1	3.8204	µg/L	3.8204	ppb	07:40:35
1	S 181.975 Axial†	33.2	11.0	56.464	µg/L	56.464	ppb	07:40:35
1	Sb 206.836†	18.5	-1.0	-1.0207	µg/L	-1.0207	ppb	07:40:35
1	Se 196.026†	11.3	-2.1	-3.1090	µg/L	-3.1090	ppb	07:40:35
1	SiO2†	2085.7	220.4	42.081	µg/L	42.081	ppb	07:40:14
1	Si 251.611†	457.7	133.6	10.214	µg/L	10.214	ppb	07:40:35
1	Sn 189.927†	20.9	-0.4	-0.2051	µg/L	-0.2051	ppb	07:40:35
1	Ti 334.940†	852.7	181.4	0.4036	µg/L	0.4036	ppb	07:40:14
1	Tl 190.801†	-20.1	0.2	0.2471	µg/L	0.2471	ppb	07:40:35
1	U 409.014†	762.7	126.1	11.835	µg/L	11.835	ppb	07:40:14
1	V 292.402†	-55.6	33.3	0.3937	µg/L	0.3937	ppb	07:40:14
1	Zn 213.857†	532.7	12.3	0.3312	µg/L	0.3312	ppb	07:40:35
2	Sc RADIAL	105947.7	105947.7	94.2	%			07:39:12
2	Al 396.153Radial†	186.6	-31.7	-16.053	µg/L	-16.053	ppb	07:39:12
2	Ca 317.933Radial†	395.0	-76.1	-30.192	µg/L	-30.192	ppb	07:39:33
2	Fe 238.204 Radial†	11.5	1.0	5.1471	µg/L	5.1471	ppb	07:39:33
2	K 766.490 Radial†	662.4	8.4	4.5367	µg/L	4.5367	ppb	07:39:12
2	Mg 279.077 IEC†	14.5	-4.4	-24.485	µg/L	-24.485	ppb	07:39:33
2	Na 589.592 Radial†	-639.3	25.2	7.0044	µg/L	7.0044	ppb	07:39:12
2	Sr 421.552†	-31.3	30.6	0.1723	µg/L	0.1723	ppb	07:39:12
2	Sc 361.383	1937833.6	1937833.6	94.219	%			07:40:40
2	Y 371.029	1176787.2	1176787.2	93.966	%			07:40:40
2	Ag 328.068†	-80.1	-56.7	-0.5023	µg/L	-0.5023	ppb	07:40:46
2	As 188.979†	-0.3	-2.8	-5.3117	µg/L	-5.3117	ppb	07:41:06
2	B 249.677†	151.7	5.3	0.2327	µg/L	0.2327	ppb	07:41:06
2	Ba 233.527†	-80.0	-4.2	-0.1039	µg/L	-0.1039	ppb	07:41:06
2	Be 313.107†	3605.3	215.0	0.1359	µg/L	0.1359	ppb	07:40:46
2	Cd 226.502†	-90.1	5.3	0.1465	µg/L	0.1465	ppb	07:41:06
2	Co 228.616†	-71.1	-3.7	-0.1802	µg/L	-0.1802	ppb	07:41:06
2	Cr 267.716†	-129.8	-15.0	-0.3114	µg/L	-0.3114	ppb	07:40:46
2	Cu 324.752†	3194.8	6.5	0.0469	µg/L	0.0469	ppb	07:40:46
2	Mn 257.610†	-129.3	85.4	0.2716	µg/L	0.2716	ppb	07:41:06
2	Mo 202.031†	-5.2	2.3	0.2614	µg/L	0.2614	ppb	07:41:06
2	Ni 231.604†	275.4	-7.0	-0.3840	µg/L	-0.3840	ppb	07:41:06
2	P 214.914†	215.0	22.2	48.210	µg/L	48.210	ppb	07:41:06
2	Pb 220.353†	58.3	7.7	1.9527	µg/L	1.9527	ppb	07:41:06

2	S 181.975 Axial†	36.3	14.4	74.145 µg/L	74.145 ppb	07:41:06
2	Sb 206.836†	21.0	1.8	1.7742 µg/L	1.7742 ppb	07:41:06
2	Se 196.026†	14.2	1.0	1.4712 µg/L	1.4712 ppb	07:41:06
2	SiO2†	2029.9	172.8	32.994 µg/L	32.994 ppb	07:40:46
2	Si 251.611†	455.4	133.7	10.209 µg/L	10.209 ppb	07:41:06
2	Sn 189.927†	21.7	0.6	0.2787 µg/L	0.2787 ppb	07:41:06
2	Ti 334.940†	800.4	130.6	0.2913 µg/L	0.2913 ppb	07:40:46
2	Tl 190.801†	-15.9	4.5	6.8548 µg/L	6.8548 ppb	07:41:06
2	U 409.014†	745.4	112.0	10.514 µg/L	10.514 ppb	07:40:46
2	V 292.402†	-39.8	49.7	0.5799 µg/L	0.5799 ppb	07:40:46
2	Zn 213.857†	522.7	4.6	0.1248 µg/L	0.1248 ppb	07:41:06
3	Sc RADIAL	106727.8	106727.8	94.9 %		07:39:38
3	Al 396.153Radial†	236.4	19.3	9.7456 µg/L	9.7456 ppb	07:39:38
3	Ca 317.933Radial†	401.0	-72.8	-28.910 µg/L	-28.910 ppb	07:39:59
3	Fe 238.204 Radial†	8.9	-1.8	-9.5269 µg/L	-9.5269 ppb	07:39:59
3	K 766.490 Radial†	677.7	19.4	10.526 µg/L	10.526 ppb	07:39:38
3	Mg 279.077 IEC†	15.6	-3.4	-18.703 µg/L	-18.703 ppb	07:39:59
3	Na 589.592 Radial†	-636.9	32.7	9.0618 µg/L	9.0618 ppb	07:39:38
3	Sr 421.552†	-64.2	-3.9	-0.0219 µg/L	-0.0219 ppb	07:39:38
3	Sc 361.383	1951593.7	1951593.7	94.888 %		07:41:12
3	Y 371.029	1185614.0	1185614.0	94.671 %		07:41:12
3	Ag 328.068†	-37.9	-11.6	-0.1024 µg/L	-0.1024 ppb	07:41:17
3	As 188.979†	4.9	2.6	5.0218 µg/L	5.0218 ppb	07:41:38
3	B 249.677†	127.1	-21.8	-0.9632 µg/L	-0.9632 ppb	07:41:38
3	Ba 233.527†	-65.3	11.9	0.2995 µg/L	0.2995 ppb	07:41:38
3	Be 313.107†	3685.0	272.1	0.1720 µg/L	0.1720 ppb	07:41:17
3	Cd 226.502†	-94.9	0.9	0.0404 µg/L	0.0404 ppb	07:41:38
3	Co 228.616†	-67.2	0.9	0.0445 µg/L	0.0445 ppb	07:41:38
3	Cr 267.716†	-113.1	3.6	0.0759 µg/L	0.0759 ppb	07:41:17
3	Cu 324.752†	3152.5	-62.0	-0.4380 µg/L	-0.4380 ppb	07:41:17
3	Mn 257.610†	-134.7	80.7	0.2549 µg/L	0.2549 ppb	07:41:38
3	Mo 202.031†	-3.5	4.2	0.4688 µg/L	0.4688 ppb	07:41:38
3	Ni 231.604†	279.5	-4.8	-0.2641 µg/L	-0.2641 ppb	07:41:38
3	P 214.914†	201.4	6.3	13.708 µg/L	13.708 ppb	07:41:38
3	Pb 220.353†	60.8	10.0	2.5169 µg/L	2.5169 ppb	07:41:38
3	S 181.975 Axial†	29.9	7.5	38.310 µg/L	38.310 ppb	07:41:38
3	Sb 206.836†	23.0	3.7	3.6874 µg/L	3.6874 ppb	07:41:38
3	Se 196.026†	6.2	-7.6	-11.007 µg/L	-11.007 ppb	07:41:38
3	SiO2†	2035.4	163.4	31.207 µg/L	31.207 ppb	07:41:17
3	Si 251.611†	476.7	152.7	11.616 µg/L	11.616 ppb	07:41:38
3	Sn 189.927†	24.1	2.9	1.4235 µg/L	1.4235 ppb	07:41:38
3	Ti 334.940†	863.8	191.4	0.4260 µg/L	0.4260 ppb	07:41:17
3	Tl 190.801†	-20.9	-0.6	-0.9330 µg/L	-0.9330 ppb	07:41:38
3	U 409.014†	883.2	251.6	23.630 µg/L	23.630 ppb	07:41:17
3	V 292.402†	-63.5	25.0	0.3230 µg/L	0.3230 ppb	07:41:17
3	Zn 213.857†	530.9	9.3	0.2539 µg/L	0.2539 ppb	07:41:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945834.6	94.608	%	0.3476				0.37%
Sc RADIAL	106166.3	94.4	%	0.44				0.46%
Y 371.029	1181940.8	94.377	%	0.3670				0.39%
Ag 328.068†	-42.0	-0.3722	µg/L	0.23373	-0.3722	ppb	0.23373	62.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.8	-1.9081	µg/L	13.07821	-1.9081	ppb	13.07821	685.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.2251	µg/L	5.16864	-0.2251	ppb	5.16864	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2.9	0.1264	µg/L	1.04060	0.1264	ppb	1.04060	823.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.9	0.0493	µg/L	0.21847	0.0493	ppb	0.21847	443.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	229.9	0.1453	µg/L	0.02344	0.1453	ppb	0.02344	16.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-73.3	-29.116	µg/L	0.9887	-29.116	ppb	0.9887	3.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.1	0.0088	µg/L	0.15596	0.0088	ppb	0.15596	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.5	-0.0737	µg/L	0.11283	-0.0737	ppb	0.11283	153.04%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -3.8     -0.0787 µg/L       0.20510     -0.0787 ppb        0.20510 260.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -43.2     -0.3030 µg/L       0.30570     -0.3030 ppb        0.30570 100.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      2.8708 µg/L      11.43087      2.8708 ppb       11.43087 398.17%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          38.0      20.581 µg/L       22.8006      20.581 ppb        22.8006 110.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.4     -24.635 µg/L        6.0078     -24.635 ppb         6.0078  24.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                80.9      0.2571 µg/L       0.01353      0.2571 ppb        0.01353   5.26%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.3      0.1492 µg/L       0.38810      0.1492 ppb        0.38810 260.11%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         28.8      7.9884 µg/L       1.03163      7.9884 ppb        1.03163  12.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.4     -0.3503 µg/L       0.07521     -0.3503 ppb        0.07521  21.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.4      33.462 µg/L       17.7875      33.462 ppb        17.7875  53.16%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.9      2.7633 µg/L       0.95793      2.7633 ppb        0.95793  34.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           11.0      56.307 µg/L       17.9180      56.307 ppb        17.9180  31.82%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.5      1.4803 µg/L       2.36777      1.4803 ppb        2.36777 159.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.9     -4.2149 µg/L       6.31212     -4.2149 ppb        6.31212 149.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     185.5      35.427 µg/L        5.8311      35.427 ppb         5.8311  16.46%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               140.0      10.680 µg/L        0.8110      10.680 ppb         0.8110   7.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.0      0.4990 µg/L       0.83633      0.4990 ppb        0.83633 167.59%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                15.7      0.0886 µg/L       0.09987      0.0886 ppb        0.09987 112.67%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               167.8      0.3736 µg/L       0.07219      0.3736 ppb        0.07219  19.32%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.4      2.0563 µg/L       4.19734      2.0563 ppb        4.19734 204.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                163.2      15.326 µg/L        7.2210      15.326 ppb         7.2210  47.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 36.0      0.4322 µg/L       0.13272      0.4322 ppb        0.13272  30.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 8.7      0.2366 µg/L       0.10423      0.2366 ppb        0.10423  44.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 08:14:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106636.1	106636.1	94.8	%			08:15:15
1	Al 396.153Radial†	10179.8	10507.8	5291.7	µg/L	5291.7	ppb	08:15:15
1	Ca 317.933Radial†	12435.1	12621.1	5010.0	µg/L	5010.0	ppb	08:15:35
1	Fe 238.204 Radial†	961.0	1002.4	5282.4	µg/L	5282.4	ppb	08:15:35
1	K 766.490 Radial†	9808.1	9650.7	5232.6	µg/L	5232.6	ppb	08:15:15
1	Mg 279.077 IEC†	926.1	957.1	5313.1	µg/L	5313.1	ppb	08:15:35
1	Na 589.592 Radial†	34804.8	37416.2	10382	µg/L	10382	ppb	08:15:15
1	Sr 421.552†	85869.5	90639.1	510.56	µg/L	510.56	ppb	08:15:15
1	Sc 361.383	1960382.6	1960382.6	95.315	%			08:16:38
1	Y 371.029	1186590.5	1186590.5	94.748	%			08:16:38
1	Ag 328.068†	54368.6	57069.4	513.57	µg/L	513.57	ppb	08:16:44
1	As 188.979†	251.3	261.2	496.78	µg/L	496.78	ppb	08:17:05
1	B 249.677†	10816.9	11192.9	495.12	µg/L	495.12	ppb	08:16:44
1	Ba 233.527†	19008.6	20023.6	503.99	µg/L	503.99	ppb	08:16:44
1	Be 313.107†	758104.7	791757.4	500.67	µg/L	500.67	ppb	08:16:38
1	Cd 226.502†	17842.5	18820.4	497.85	µg/L	497.85	ppb	08:16:44
1	Co 228.616†	9890.9	10448.8	502.57	µg/L	502.57	ppb	08:16:44
1	Cr 267.716†	22854.9	24101.1	502.87	µg/L	502.87	ppb	08:16:44
1	Cu 324.752†	72609.9	72794.7	513.28	µg/L	513.28	ppb	08:16:44
1	Mn 257.610†	151498.4	159167.8	505.79	µg/L	505.79	ppb	08:16:38
1	Mo 202.031†	4207.8	4422.5	493.58	µg/L	493.58	ppb	08:17:05
1	Ni 231.604†	9072.7	9219.3	502.25	µg/L	502.25	ppb	08:16:44
1	P 214.914†	1297.9	1155.7	2452.5	µg/L	2452.5	ppb	08:17:05
1	Pb 220.353†	1926.8	1967.4	499.42	µg/L	499.42	ppb	08:17:05
1	S 181.975 Axial†	219.3	206.0	1057.1	µg/L	1057.1	ppb	08:17:05
1	Sb 206.836†	500.8	504.9	499.53	µg/L	499.53	ppb	08:17:05
1	Se 196.026†	341.5	344.1	503.46	µg/L	503.46	ppb	08:17:05
1	SiO2†	29488.5	28956.3	5529.6	µg/L	5529.6	ppb	08:16:44
1	Si 251.611†	32522.2	33771.2	2539.0	µg/L	2539.0	ppb	08:16:44
1	Sn 189.927†	981.0	1006.8	493.62	µg/L	493.62	ppb	08:17:05
1	Ti 334.940†	217576.4	227552.3	504.11	µg/L	504.11	ppb	08:16:38
1	Tl 190.801†	297.3	333.3	505.35	µg/L	505.35	ppb	08:17:05
1	U 409.014†	5917.6	5529.3	518.40	µg/L	518.40	ppb	08:16:44
1	V 292.402†	42552.1	44735.7	509.03	µg/L	509.03	ppb	08:16:44
1	Zn 213.857†	18590.7	18954.3	503.79	µg/L	503.79	ppb	08:16:44
2	Sc RADIAL	108077.7	108077.7	96.1	%			08:15:41
2	Al 396.153Radial†	10222.4	10409.0	5241.6	µg/L	5241.6	ppb	08:15:41
2	Ca 317.933Radial†	12392.9	12402.2	4923.1	µg/L	4923.1	ppb	08:16:01
2	Fe 238.204 Radial†	954.8	982.5	5177.6	µg/L	5177.6	ppb	08:16:01
2	K 766.490 Radial†	9899.7	9608.1	5209.5	µg/L	5209.5	ppb	08:15:41
2	Mg 279.077 IEC†	913.8	931.1	5169.4	µg/L	5169.4	ppb	08:16:01
2	Na 589.592 Radial†	35160.5	37296.6	10348	µg/L	10348	ppb	08:15:41
2	Sr 421.552†	86808.6	90408.5	509.26	µg/L	509.26	ppb	08:15:41
2	Sc 361.383	1954927.8	1954927.8	95.050	%			08:17:12
2	Y 371.029	1183832.8	1183832.8	94.528	%			08:17:12
2	Ag 328.068†	54017.9	56859.6	511.69	µg/L	511.69	ppb	08:17:17
2	As 188.979†	251.5	262.1	498.56	µg/L	498.56	ppb	08:17:38
2	B 249.677†	10811.5	11218.9	496.31	µg/L	496.31	ppb	08:17:17
2	Ba 233.527†	18917.1	19983.0	502.97	µg/L	502.97	ppb	08:17:17
2	Be 313.107†	757399.4	793234.7	501.60	µg/L	501.60	ppb	08:17:12
2	Cd 226.502†	17685.6	18707.6	494.87	µg/L	494.87	ppb	08:17:17
2	Co 228.616†	9840.1	10424.3	501.39	µg/L	501.39	ppb	08:17:17
2	Cr 267.716†	22709.1	24014.6	501.07	µg/L	501.07	ppb	08:17:17
2	Cu 324.752†	72066.3	72435.4	510.73	µg/L	510.73	ppb	08:17:17
2	Mn 257.610†	151570.7	159687.4	507.42	µg/L	507.42	ppb	08:17:12
2	Mo 202.031†	4215.3	4442.8	495.84	µg/L	495.84	ppb	08:17:38
2	Ni 231.604†	9055.2	9227.4	502.69	µg/L	502.69	ppb	08:17:17
2	P 214.914†	1300.9	1162.6	2468.1	µg/L	2468.1	ppb	08:17:38
2	Pb 220.353†	1934.5	1981.2	502.94	µg/L	502.94	ppb	08:17:38

2	S 181.975 Axial†	214.9	202.0	1036.3 µg/L	1036.3 ppb	08:17:38
2	Sb 206.836†	494.0	499.2	493.87 µg/L	493.87 ppb	08:17:38
2	Se 196.026†	340.5	344.1	503.43 µg/L	503.43 ppb	08:17:38
2	SiO2†	29363.7	28911.4	5521.0 µg/L	5521.0 ppb	08:17:17
2	Si 251.611†	32405.9	33744.0	2536.8 µg/L	2536.8 ppb	08:17:17
2	Sn 189.927†	979.1	1007.7	494.00 µg/L	494.00 ppb	08:17:38
2	Ti 334.940†	217301.3	227899.9	504.89 µg/L	504.89 ppb	08:17:12
2	Tl 190.801†	295.5	332.3	503.84 µg/L	503.84 ppb	08:17:38
2	U 409.014†	5835.3	5460.0	511.91 µg/L	511.91 ppb	08:17:17
2	V 292.402†	42365.0	44663.4	508.22 µg/L	508.22 ppb	08:17:17
2	Zn 213.857†	18481.2	18893.6	502.18 µg/L	502.18 ppb	08:17:17
3	Sc RADIAL	107003.3	107003.3	95.1 %		08:16:06
3	Al 396.153Radial†	10050.6	10335.2	5204.4 µg/L	5204.4 ppb	08:16:06
3	Ca 317.933Radial†	12362.2	12499.4	4961.7 µg/L	4961.7 ppb	08:16:27
3	Fe 238.204 Radial†	956.4	994.2	5239.1 µg/L	5239.1 ppb	08:16:27
3	K 766.490 Radial†	9700.9	9502.6	5152.2 µg/L	5152.2 ppb	08:16:06
3	Mg 279.077 IEC†	912.6	939.5	5215.4 µg/L	5215.4 ppb	08:16:27
3	Na 589.592 Radial†	34688.6	37168.0	10313 µg/L	10313 ppb	08:16:06
3	Sr 421.552†	85220.4	89646.0	504.97 µg/L	504.97 ppb	08:16:06
3	Sc 361.383	1963447.0	1963447.0	95.464 %		08:17:45
3	Y 371.029	1188473.7	1188473.7	94.899 %		08:17:45
3	Ag 328.068†	54372.8	56984.7	512.82 µg/L	512.82 ppb	08:17:50
3	As 188.979†	246.2	255.4	485.84 µg/L	485.84 ppb	08:18:11
3	B 249.677†	10890.6	11252.4	497.78 µg/L	497.78 ppb	08:17:50
3	Ba 233.527†	19047.9	20033.6	504.25 µg/L	504.25 ppb	08:17:50
3	Be 313.107†	760193.3	792703.8	501.26 µg/L	501.26 ppb	08:17:45
3	Cd 226.502†	17918.4	18870.8	499.18 µg/L	499.18 ppb	08:17:50
3	Co 228.616†	9923.4	10466.7	503.43 µg/L	503.43 ppb	08:17:50
3	Cr 267.716†	22899.0	24109.9	503.06 µg/L	503.06 ppb	08:17:50
3	Cu 324.752†	72604.9	72670.5	512.40 µg/L	512.40 ppb	08:17:50
3	Mn 257.610†	151870.2	159309.3	506.23 µg/L	506.23 ppb	08:17:45
3	Mo 202.031†	4208.0	4415.9	492.84 µg/L	492.84 ppb	08:18:11
3	Ni 231.604†	9070.8	9202.4	501.33 µg/L	501.33 ppb	08:17:50
3	P 214.914†	1308.6	1164.8	2472.5 µg/L	2472.5 ppb	08:18:11
3	Pb 220.353†	1939.8	1977.9	502.08 µg/L	502.08 ppb	08:18:11
3	S 181.975 Axial†	222.1	208.6	1070.2 µg/L	1070.2 ppb	08:18:11
3	Sb 206.836†	497.2	500.3	494.99 µg/L	494.99 ppb	08:18:11
3	Se 196.026†	347.8	350.2	512.32 µg/L	512.32 ppb	08:18:11
3	SiO2†	29558.7	28981.6	5534.4 µg/L	5534.4 ppb	08:17:50
3	Si 251.611†	32587.1	33785.9	2540.0 µg/L	2540.0 ppb	08:17:50
3	Sn 189.927†	990.9	1015.5	497.85 µg/L	497.85 ppb	08:18:11
3	Ti 334.940†	218041.1	227682.9	504.40 µg/L	504.40 ppb	08:17:45
3	Tl 190.801†	297.0	332.5	504.19 µg/L	504.19 ppb	08:18:11
3	U 409.014†	5932.0	5534.7	518.91 µg/L	518.91 ppb	08:17:50
3	V 292.402†	42726.3	44848.5	510.30 µg/L	510.30 ppb	08:17:50
3	Zn 213.857†	18625.5	18960.3	503.96 µg/L	503.96 ppb	08:17:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1959585.8	95.276	%	0.2098				0.22%
Sc RADIAL	107239.0	95.3	%	0.67				0.70%
Y 371.029	1186299.0	94.725	%	0.1864				0.20%
Ag 328.068†	56971.2	512.69	µg/L	0.950	512.69	ppb	0.950	0.19%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	10417.4	5245.9	µg/L	43.76	5245.9	ppb	43.76	0.83%
QC value within limits for Al 396.153Radial Recovery = 104.92%								
As 188.979†	259.6	493.73	µg/L	6.887	493.73	ppb	6.887	1.39%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	11221.4	496.40	µg/L	1.329	496.40	ppb	1.329	0.27%
QC value within limits for B 249.677 Recovery = 99.28%								
Ba 233.527†	20013.4	503.74	µg/L	0.676	503.74	ppb	0.676	0.13%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	792565.3	501.18	µg/L	0.473	501.18	ppb	0.473	0.09%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	12507.6	4964.9	µg/L	43.53	4964.9	ppb	43.53	0.88%
QC value within limits for Ca 317.933Radial Recovery = 99.30%								
Cd 226.502†	18799.6	497.30	µg/L	2.206	497.30	ppb	2.206	0.44%
QC value within limits for Cd 226.502 Recovery = 99.46%								
Co 228.616†	10446.6	502.46	µg/L	1.020	502.46	ppb	1.020	0.20%

```
   QC value within limits for Co 228.616  Recovery = 100.49%
Cr 267.716†            24075.2      502.33 µg/L        1.098      502.33 ppb          1.098   0.22%
   QC value within limits for Cr 267.716  Recovery = 100.47%
Cu 324.752†            72633.5      512.14 µg/L        1.295      512.14 ppb          1.295   0.25%
   QC value within limits for Cu 324.752  Recovery = 102.43%
Fe 238.204 Radial†       993.0      5233.0 µg/L       52.67      5233.0 ppb          52.67   1.01%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.66%
K 766.490 Radial†       9587.1      5198.1 µg/L       41.36      5198.1 ppb          41.36   0.80%
   QC value within limits for K 766.490 Radial  Recovery = 103.96%
Mg 279.077 IEC†          942.6      5232.6 µg/L       73.34      5232.6 ppb          73.34   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.65%
Mn 257.610†           159388.2      506.48 µg/L       0.846      506.48 ppb          0.846   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.30%
Mo 202.031†            4427.1      494.09 µg/L       1.560      494.09 ppb          1.560   0.32%
   QC value within limits for Mo 202.031  Recovery = 98.82%
Na 589.592 Radial†     37293.6       10348 µg/L        34.4       10348 ppb           34.4   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 103.48%
Ni 231.604†            9216.3      502.09 µg/L       0.693      502.09 ppb          0.693   0.14%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†             1161.0      2464.4 µg/L       10.50      2464.4 ppb          10.50   0.43%
   QC value within limits for P 214.914  Recovery = 98.57%
Pb 220.353†            1975.5      501.48 µg/L       1.832      501.48 ppb          1.832   0.37%
   QC value within limits for Pb 220.353  Recovery = 100.30%
S 181.975 Axial†        205.5      1054.5 µg/L       17.07      1054.5 ppb          17.07   1.62%
   QC value within limits for S 181.975 Axial  Recovery = 105.45%
Sb 206.836†             501.5      496.13 µg/L       2.994      496.13 ppb          2.994   0.60%
   QC value within limits for Sb 206.836  Recovery = 99.23%
Se 196.026†             346.2      506.40 µg/L       5.128      506.40 ppb          5.128   1.01%
   QC value within limits for Se 196.026  Recovery = 101.28%
SiO2†                  28949.8      5528.4 µg/L        6.79      5528.4 ppb           6.79   0.12%
   QC value within limits for SiO2  Recovery = 103.38%
Si 251.611†            33767.0      2538.6 µg/L        1.61      2538.6 ppb           1.61   0.06%
   QC value within limits for Si 251.611  Recovery = 101.54%
Sn 189.927†            1010.0      495.16 µg/L       2.340      495.16 ppb          2.340   0.47%
   QC value within limits for Sn 189.927  Recovery = 99.03%
Sr 421.552†            90231.2      508.27 µg/L       2.928      508.27 ppb          2.928   0.58%
   QC value within limits for Sr 421.552  Recovery = 101.65%
Ti 334.940†           227711.7      504.47 µg/L       0.392      504.47 ppb          0.392   0.08%
   QC value within limits for Ti 334.940  Recovery = 100.89%
Tl 190.801†             332.7      504.46 µg/L       0.790      504.46 ppb          0.790   0.16%
   QC value within limits for Tl 190.801  Recovery = 100.89%
U 409.014†             5508.0      516.40 µg/L       3.903      516.40 ppb          3.903   0.76%
   QC value within limits for U 409.014  Recovery = 103.28%
V 292.402†             44749.2      509.18 µg/L       1.049      509.18 ppb          1.049   0.21%
   QC value within limits for V 292.402  Recovery = 101.84%
Zn 213.857†            18936.1      503.31 µg/L       0.984      503.31 ppb          0.984   0.20%
   QC value within limits for Zn 213.857  Recovery = 100.66%
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 08:18:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105928.2	105928.2	94.2	%			08:18:53
1	Al 396.153Radial†	201.0	-16.4	-8.3098	µg/L	-8.3098	ppb	08:18:53
1	Ca 317.933Radial†	395.3	-75.7	-30.059	µg/L	-30.059	ppb	08:19:14
1	Fe 238.204 Radial†	13.9	3.6	18.808	µg/L	18.808	ppb	08:19:14
1	K 766.490 Radial†	648.7	-6.0	-3.2491	µg/L	-3.2491	ppb	08:18:53
1	Mg 279.077 IEC†	18.5	-0.1	-0.7973	µg/L	-0.7973	ppb	08:19:14
1	Na 589.592 Radial†	-659.9	3.2	0.8988	µg/L	0.8988	ppb	08:18:53
1	Sr 421.552†	-29.2	32.8	0.1846	µg/L	0.1846	ppb	08:18:53
1	Sc 361.383	1938026.0	1938026.0	94.228	%			08:20:16
1	Y 371.029	1179572.6	1179572.6	94.188	%			08:20:16
1	Ag 328.068†	-54.2	-29.2	-0.2579	µg/L	-0.2579	ppb	08:20:21
1	As 188.979†	-2.0	-4.6	-8.7008	µg/L	-8.7008	ppb	08:20:42
1	B 249.677†	152.7	6.4	0.2764	µg/L	0.2764	ppb	08:20:42
1	Ba 233.527†	-68.0	8.5	0.2137	µg/L	0.2137	ppb	08:20:42
1	Be 313.107†	3620.7	231.0	0.1459	µg/L	0.1459	ppb	08:20:21
1	Cd 226.502†	-96.6	-1.6	-0.0368	µg/L	-0.0368	ppb	08:20:42
1	Co 228.616†	-68.0	-0.5	-0.0225	µg/L	-0.0225	ppb	08:20:42
1	Cr 267.716†	-118.7	-3.2	-0.0660	µg/L	-0.0660	ppb	08:20:21
1	Cu 324.752†	3120.6	-72.6	-0.5067	µg/L	-0.5067	ppb	08:20:21
1	Mn 257.610†	-147.5	66.1	0.2122	µg/L	0.2122	ppb	08:20:42
1	Mo 202.031†	0.0	7.9	0.8870	µg/L	0.8870	ppb	08:20:42
1	Ni 231.604†	290.5	8.8	0.4820	µg/L	0.4820	ppb	08:20:42
1	P 214.914†	211.1	18.1	39.274	µg/L	39.274	ppb	08:20:42
1	Pb 220.353†	62.0	11.6	2.9448	µg/L	2.9448	ppb	08:20:42
1	S 181.975 Axial†	31.6	9.5	48.593	µg/L	48.593	ppb	08:20:42
1	Sb 206.836†	18.0	-1.5	-1.4673	µg/L	-1.4673	ppb	08:20:42
1	Se 196.026†	18.6	5.6	8.2257	µg/L	8.2257	ppb	08:20:42
1	SiO2†	2111.3	258.9	49.446	µg/L	49.446	ppb	08:20:21
1	Si 251.611†	484.3	164.3	12.503	µg/L	12.503	ppb	08:20:42
1	Sn 189.927†	23.8	2.8	1.3440	µg/L	1.3440	ppb	08:20:42
1	Ti 334.940†	885.6	221.0	0.4915	µg/L	0.4915	ppb	08:20:21
1	Tl 190.801†	-18.1	2.2	3.3800	µg/L	3.3800	ppb	08:20:42
1	U 409.014†	727.3	92.6	8.6946	µg/L	8.6946	ppb	08:20:21
1	V 292.402†	-64.7	23.3	0.2843	µg/L	0.2843	ppb	08:20:21
1	Zn 213.857†	526.9	9.0	0.2374	µg/L	0.2374	ppb	08:20:42
2	Sc RADIAL	106040.1	106040.1	94.3	%			08:19:19
2	Al 396.153Radial†	207.9	-9.3	-4.7454	µg/L	-4.7454	ppb	08:19:19
2	Ca 317.933Radial†	395.1	-76.4	-30.312	µg/L	-30.312	ppb	08:19:39
2	Fe 238.204 Radial†	10.5	-0.0	-0.0914	µg/L	-0.0914	ppb	08:19:39
2	K 766.490 Radial†	672.1	18.1	9.7975	µg/L	9.7975	ppb	08:19:19
2	Mg 279.077 IEC†	13.1	-5.9	-32.842	µg/L	-32.842	ppb	08:19:39
2	Na 589.592 Radial†	-610.3	56.6	15.709	µg/L	15.709	ppb	08:19:19
2	Sr 421.552†	-63.1	-3.2	-0.0178	µg/L	-0.0178	ppb	08:19:19
2	Sc 361.383	1940376.0	1940376.0	94.342	%			08:20:48
2	Y 371.029	1181884.3	1181884.3	94.373	%			08:20:48
2	Ag 328.068†	-88.5	-65.4	-0.5771	µg/L	-0.5771	ppb	08:20:53
2	As 188.979†	0.8	-1.7	-3.1516	µg/L	-3.1516	ppb	08:21:14
2	B 249.677†	134.6	-13.0	-0.5776	µg/L	-0.5776	ppb	08:21:14
2	Ba 233.527†	-80.5	-4.7	-0.1148	µg/L	-0.1148	ppb	08:21:14
2	Be 313.107†	3577.3	180.3	0.1139	µg/L	0.1139	ppb	08:20:53
2	Cd 226.502†	-82.7	13.2	0.3567	µg/L	0.3567	ppb	08:21:14
2	Co 228.616†	-69.8	-2.3	-0.1104	µg/L	-0.1104	ppb	08:21:14
2	Cr 267.716†	-104.8	11.6	0.2449	µg/L	0.2449	ppb	08:20:53
2	Cu 324.752†	3168.5	-25.8	-0.1816	µg/L	-0.1816	ppb	08:20:53
2	Mn 257.610†	-150.0	63.6	0.2019	µg/L	0.2019	ppb	08:21:14
2	Mo 202.031†	-0.9	6.9	0.7713	µg/L	0.7713	ppb	08:21:14
2	Ni 231.604†	284.5	2.2	0.1172	µg/L	0.1172	ppb	08:21:14
2	P 214.914†	211.5	18.2	39.415	µg/L	39.415	ppb	08:21:14
2	Pb 220.353†	56.9	6.2	1.5603	µg/L	1.5603	ppb	08:21:14

2	S 181.975 Axial†	33.6	11.6	59.656 µg/L	59.656 ppb		08:21:14
2	Sb 206.836†	17.0	-2.5	-2.4928 µg/L	-2.4928 ppb		08:21:14
2	Se 196.026†	9.6	-3.9	-5.7070 µg/L	-5.7070 ppb		08:21:14
2	SiO2†	2008.2	147.0	28.065 µg/L	28.065 ppb		08:20:53
2	Si 251.611†	458.1	135.9	10.481 µg/L	10.481 ppb		08:21:14
2	Sn 189.927†	15.8	-5.7	-2.7771 µg/L	-2.7771 ppb		08:21:14
2	Ti 334.940†	916.6	252.7	0.5617 µg/L	0.5617 ppb		08:20:53
2	Tl 190.801†	-21.8	-1.7	-2.5972 µg/L	-2.5972 ppb		08:21:14
2	U 409.014†	739.1	104.2	9.7830 µg/L	9.7830 ppb		08:20:53
2	V 292.402†	3.8	96.0	1.1037 µg/L	1.1037 ppb		08:20:53
2	Zn 213.857†	533.5	15.3	0.4101 µg/L	0.4101 ppb		08:21:14
3	Sc RADIAL	106371.7	106371.7	94.6 %			08:19:45
3	Al 396.153Radial†	211.4	-6.2	-3.1802 µg/L	-3.1802 ppb		08:19:45
3	Ca 317.933Radial†	408.1	-64.0	-25.386 µg/L	-25.386 ppb		08:20:05
3	Fe 238.204 Radial†	13.4	2.9	15.419 µg/L	15.419 ppb		08:20:05
3	K 766.490 Radial†	715.6	61.9	33.553 µg/L	33.553 ppb		08:19:45
3	Mg 279.077 IEC†	11.9	-7.3	-40.254 µg/L	-40.254 ppb		08:20:05
3	Na 589.592 Radial†	-651.6	14.9	4.1347 µg/L	4.1347 ppb		08:19:45
3	Sr 421.552†	-41.2	20.3	0.1141 µg/L	0.1141 ppb		08:19:45
3	Sc 361.383	1946402.3	1946402.3	94.635 %			08:21:20
3	Y 371.029	1184827.0	1184827.0	94.608 %			08:21:20
3	Ag 328.068†	-28.4	-1.7	-0.0133 µg/L	-0.0133 ppb		08:21:25
3	As 188.979†	-0.5	-3.0	-5.7726 µg/L	-5.7726 ppb		08:21:46
3	B 249.677†	134.6	-13.4	-0.6013 µg/L	-0.6013 ppb		08:21:46
3	Ba 233.527†	-74.2	2.3	0.0571 µg/L	0.0571 ppb		08:21:46
3	Be 313.107†	3605.8	198.7	0.1256 µg/L	0.1256 ppb		08:21:25
3	Cd 226.502†	-99.9	-4.7	-0.1213 µg/L	-0.1213 ppb		08:21:46
3	Co 228.616†	-70.3	-2.6	-0.1233 µg/L	-0.1233 ppb		08:21:46
3	Cr 267.716†	-111.4	5.1	0.1066 µg/L	0.1066 ppb		08:21:25
3	Cu 324.752†	3145.6	-60.4	-0.4217 µg/L	-0.4217 ppb		08:21:25
3	Mn 257.610†	-141.3	73.3	0.2346 µg/L	0.2346 ppb		08:21:46
3	Mo 202.031†	-0.2	7.7	0.8615 µg/L	0.8615 ppb		08:21:46
3	Ni 231.604†	271.3	-12.8	-0.6947 µg/L	-0.6947 ppb		08:21:46
3	P 214.914†	211.2	17.2	37.396 µg/L	37.396 ppb		08:21:46
3	Pb 220.353†	63.5	13.0	3.2926 µg/L	3.2926 ppb		08:21:46
3	S 181.975 Axial†	32.7	10.5	53.835 µg/L	53.835 ppb		08:21:46
3	Sb 206.836†	18.3	-1.2	-1.1444 µg/L	-1.1444 ppb		08:21:46
3	Se 196.026†	10.6	-2.9	-4.1633 µg/L	-4.1633 ppb		08:21:46
3	SiO2†	2038.3	172.1	32.874 µg/L	32.874 ppb		08:21:25
3	Si 251.611†	475.8	153.1	11.742 µg/L	11.742 ppb		08:21:46
3	Sn 189.927†	18.6	-2.8	-1.3662 µg/L	-1.3662 ppb		08:21:46
3	Ti 334.940†	782.1	107.6	0.2399 µg/L	0.2399 ppb		08:21:25
3	Tl 190.801†	-18.1	2.3	3.4613 µg/L	3.4613 ppb		08:21:46
3	U 409.014†	697.7	58.0	5.4466 µg/L	5.4466 ppb		08:21:25
3	V 292.402†	-73.8	14.0	0.1736 µg/L	0.1736 ppb		08:21:25
3	Zn 213.857†	525.2	4.8	0.1332 µg/L	0.1332 ppb		08:21:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941601.4	94.402	%	0.2101				0.22%
Sc RADIAL	106113.3	94.3	%	0.21				0.22%
Y 371.029	1182094.6	94.390	%	0.2103				0.22%
Ag 328.068†	-32.1	-0.2828	µg/L	0.28272	-0.2828	ppb	0.28272	99.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.6	-5.4118	µg/L	2.62891	-5.4118	ppb	2.62891	48.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.1	-5.8750	µg/L	2.77601	-5.8750	ppb	2.77601	47.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-6.7	-0.3008	µg/L	0.50005	-0.3008	ppb	0.50005	166.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0520	µg/L	0.16429	0.0520	ppb	0.16429	315.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.3	0.1285	µg/L	0.01623	0.1285	ppb	0.01623	12.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-72.0	-28.586	µg/L	2.7738	-28.586	ppb	2.7738	9.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.3	0.0662	µg/L	0.25510	0.0662	ppb	0.25510	385.34%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.8	-0.0854	µg/L	0.05486	-0.0854	ppb	0.05486	64.25%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.5      0.0952 µg/L       0.15575      0.0952 ppb        0.15575 163.66%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -52.9     -0.3700 µg/L       0.16864     -0.3700 ppb        0.16864  45.58%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.2      11.379 µg/L       10.0769      11.379 ppb        10.0769  88.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          24.7      13.367 µg/L       18.6590      13.367 ppb        18.6590 139.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.4     -24.631 µg/L       20.9706     -24.631 ppb        20.9706  85.14%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                67.7      0.2162 µg/L       0.01672      0.2162 ppb        0.01672   7.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.5      0.8400 µg/L       0.06080      0.8400 ppb        0.06080   7.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         24.9      6.9141 µg/L       7.78635      6.9141 ppb        7.78635 112.62%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.6     -0.0318 µg/L       0.60233     -0.0318 ppb        0.60233 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 17.8      38.695 µg/L        1.1272      38.695 ppb         1.1272   2.91%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.3      2.5992 µg/L       0.91636      2.5992 ppb        0.91636  35.25%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           10.5      54.028 µg/L        5.5344      54.028 ppb         5.5344  10.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -1.7     -1.7015 µg/L       0.70405     -1.7015 ppb        0.70405  41.38%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.4     -0.5482 µg/L       7.63756     -0.5482 ppb        7.63756 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     192.7      36.795 µg/L       11.2169      36.795 ppb        11.2169  30.49%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               151.1      11.575 µg/L        1.0212      11.575 ppb         1.0212   8.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.9     -0.9331 µg/L       2.09438     -0.9331 ppb        2.09438 224.45%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                16.6      0.0936 µg/L       0.10273      0.0936 ppb        0.10273 109.74%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               193.7      0.4311 µg/L       0.16919      0.4311 ppb        0.16919  39.25%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      1.4147 µg/L       3.47466      1.4147 ppb        3.47466 245.61%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 84.9      7.9747 µg/L       2.25605      7.9747 ppb        2.25605  28.29%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 44.4      0.5205 µg/L       0.50805      0.5205 ppb        0.50805  97.61%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.7      0.2602 µg/L       0.13987      0.2602 ppb        0.13987  53.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 08:46:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108953.8	108953.8	96.9	%			08:47:17
1	Al 396.153Radial†	10076.3	10172.6	5121.8	µg/L	5121.8	ppb	08:47:17
1	Ca 317.933Radial†	12481.4	12389.9	4918.2	µg/L	4918.2	ppb	08:47:38
1	Fe 238.204 Radial†	965.8	985.8	5195.5	µg/L	5195.5	ppb	08:47:38
1	K 766.490 Radial†	9792.0	9414.0	5104.2	µg/L	5104.2	ppb	08:47:17
1	Mg 279.077 IEC†	926.0	936.1	5197.4	µg/L	5197.4	ppb	08:47:38
1	Na 589.592 Radial†	34431.2	36249.5	10058	µg/L	10058	ppb	08:47:17
1	Sr 421.552†	85744.4	88583.3	498.98	µg/L	498.98	ppb	08:47:17
1	Sc 361.383	1939482.4	1939482.4	94.299	%			08:48:42
1	Y 371.029	1175148.4	1175148.4	93.835	%			08:48:42
1	Ag 328.068†	54233.9	57541.2	517.82	µg/L	517.82	ppb	08:48:47
1	As 188.979†	255.1	268.0	509.77	µg/L	509.77	ppb	08:49:08
1	B 249.677†	10769.8	11265.3	498.36	µg/L	498.36	ppb	08:48:47
1	Ba 233.527†	19054.8	20287.5	510.63	µg/L	510.63	ppb	08:48:47
1	Be 313.107†	755329.0	797384.9	504.22	µg/L	504.22	ppb	08:48:42
1	Cd 226.502†	17900.3	19083.5	504.82	µg/L	504.82	ppb	08:48:47
1	Co 228.616†	9910.6	10581.5	508.97	µg/L	508.97	ppb	08:48:47
1	Cr 267.716†	22847.4	24351.5	508.10	µg/L	508.10	ppb	08:48:47
1	Cu 324.752†	72237.6	73220.8	516.26	µg/L	516.26	ppb	08:48:47
1	Mn 257.610†	151134.2	160494.5	509.99	µg/L	509.99	ppb	08:48:42
1	Mo 202.031†	4259.9	4525.4	505.06	µg/L	505.06	ppb	08:49:08
1	Ni 231.604†	9117.3	9369.1	510.41	µg/L	510.41	ppb	08:48:47
1	P 214.914†	1318.8	1192.6	2532.6	µg/L	2532.6	ppb	08:49:08
1	Pb 220.353†	1955.9	2020.1	512.79	µg/L	512.79	ppb	08:49:08
1	S 181.975 Axial†	219.8	209.1	1072.8	µg/L	1072.8	ppb	08:49:08
1	Sb 206.836†	499.2	508.9	503.46	µg/L	503.46	ppb	08:49:08
1	Se 196.026†	348.1	355.0	519.32	µg/L	519.32	ppb	08:49:08
1	SiO2†	29463.6	29263.3	5588.2	µg/L	5588.2	ppb	08:48:47
1	Si 251.611†	32458.8	34071.6	2561.2	µg/L	2561.2	ppb	08:48:47
1	Sn 189.927†	997.7	1035.5	507.59	µg/L	507.59	ppb	08:49:08
1	Ti 334.940†	216514.8	228886.5	507.07	µg/L	507.07	ppb	08:48:42
1	Tl 190.801†	300.5	340.1	515.58	µg/L	515.58	ppb	08:49:08
1	U 409.014†	5906.7	5584.6	523.61	µg/L	523.61	ppb	08:48:47
1	V 292.402†	42561.7	45227.0	514.65	µg/L	514.65	ppb	08:48:47
1	Zn 213.857†	18548.4	19119.7	508.18	µg/L	508.18	ppb	08:48:47
2	Sc RADIAL	108500.9	108500.9	96.5	%			08:47:43
2	Al 396.153Radial†	10266.9	10413.6	5243.8	µg/L	5243.8	ppb	08:47:43
2	Ca 317.933Radial†	12471.4	12433.3	4935.4	µg/L	4935.4	ppb	08:48:04
2	Fe 238.204 Radial†	959.1	983.0	5180.5	µg/L	5180.5	ppb	08:48:04
2	K 766.490 Radial†	9895.3	9563.4	5185.2	µg/L	5185.2	ppb	08:47:43
2	Mg 279.077 IEC†	923.4	937.4	5204.2	µg/L	5204.2	ppb	08:48:04
2	Na 589.592 Radial†	35227.0	37222.8	10328	µg/L	10328	ppb	08:47:43
2	Sr 421.552†	87204.8	90466.8	509.59	µg/L	509.59	ppb	08:47:43
2	Sc 361.383	1944927.5	1944927.5	94.563	%			08:49:15
2	Y 371.029	1177045.7	1177045.7	93.986	%			08:49:15
2	Ag 328.068†	54051.6	57187.4	514.64	µg/L	514.64	ppb	08:49:20
2	As 188.979†	255.7	267.9	509.69	µg/L	509.69	ppb	08:49:41
2	B 249.677†	10755.0	11217.7	496.25	µg/L	496.25	ppb	08:49:20
2	Ba 233.527†	18919.4	20087.8	505.61	µg/L	505.61	ppb	08:49:20
2	Be 313.107†	757398.1	797330.5	504.19	µg/L	504.19	ppb	08:49:15
2	Cd 226.502†	17757.8	18879.6	499.42	µg/L	499.42	ppb	08:49:20
2	Co 228.616†	9818.6	10454.8	502.86	µg/L	502.86	ppb	08:49:20
2	Cr 267.716†	22722.3	24151.4	503.92	µg/L	503.92	ppb	08:49:20
2	Cu 324.752†	72120.2	72882.2	513.87	µg/L	513.87	ppb	08:49:20
2	Mn 257.610†	151571.9	160508.7	510.03	µg/L	510.03	ppb	08:49:15
2	Mo 202.031†	4220.5	4471.0	498.99	µg/L	498.99	ppb	08:49:41
2	Ni 231.604†	9068.7	9290.6	506.14	µg/L	506.14	ppb	08:49:20
2	P 214.914†	1315.3	1184.9	2516.2	µg/L	2516.2	ppb	08:49:41
2	Pb 220.353†	1955.9	2014.2	511.32	µg/L	511.32	ppb	08:49:41

2	S 181.975 Axial†	215.5	203.9	1045.9 µg/L	1045.9 ppb	08:49:41
2	Sb 206.836†	502.0	510.3	504.89 µg/L	504.89 ppb	08:49:41
2	Se 196.026†	346.4	352.2	515.22 µg/L	515.22 ppb	08:49:41
2	SiO2†	29279.8	28981.5	5534.4 µg/L	5534.4 ppb	08:49:20
2	Si 251.611†	32238.4	33742.2	2536.2 µg/L	2536.2 ppb	08:49:20
2	Sn 189.927†	994.7	1029.4	504.60 µg/L	504.60 ppb	08:49:41
2	Ti 334.940†	217120.6	228884.2	507.07 µg/L	507.07 ppb	08:49:15
2	Tl 190.801†	294.1	332.5	504.16 µg/L	504.16 ppb	08:49:41
2	U 409.014†	5794.8	5448.7	510.85 µg/L	510.85 ppb	08:49:20
2	V 292.402†	42440.7	44972.6	511.72 µg/L	511.72 ppb	08:49:20
2	Zn 213.857†	18546.8	19063.0	506.69 µg/L	506.69 ppb	08:49:20
3	Sc RADIAL	107051.7	107051.7	95.2 %		08:48:09
3	Al 396.153Radial†	10104.3	10386.9	5230.4 µg/L	5230.4 ppb	08:48:09
3	Ca 317.933Radial†	12518.3	12657.6	5024.5 µg/L	5024.5 ppb	08:48:30
3	Fe 238.204 Radial†	961.2	998.8	5263.1 µg/L	5263.1 ppb	08:48:30
3	K 766.490 Radial†	9746.9	9546.3	5176.0 µg/L	5176.0 ppb	08:48:09
3	Mg 279.077 IEC†	923.9	950.9	5278.9 µg/L	5278.9 ppb	08:48:30
3	Na 589.592 Radial†	34802.8	37271.5	10341 µg/L	10341 ppb	08:48:09
3	Sr 421.552†	85653.2	90060.3	507.30 µg/L	507.30 ppb	08:48:09
3	Sc 361.383	1952241.5	1952241.5	94.919 %		08:49:48
3	Y 371.029	1182332.9	1182332.9	94.409 %		08:49:48
3	Ag 328.068†	53688.7	56590.9	509.28 µg/L	509.28 ppb	08:49:54
3	As 188.979†	254.1	265.2	504.43 µg/L	504.43 ppb	08:50:14
3	B 249.677†	10708.8	11126.3	492.17 µg/L	492.17 ppb	08:49:54
3	Ba 233.527†	18826.4	19914.9	501.26 µg/L	501.26 ppb	08:49:54
3	Be 313.107†	759861.6	796925.1	503.93 µg/L	503.93 ppb	08:49:48
3	Cd 226.502†	17663.5	18709.9	494.92 µg/L	494.92 ppb	08:49:54
3	Co 228.616†	9778.5	10373.7	498.96 µg/L	498.96 ppb	08:49:54
3	Cr 267.716†	22575.9	23907.2	498.83 µg/L	498.83 ppb	08:49:54
3	Cu 324.752†	71673.1	72125.5	508.57 µg/L	508.57 ppb	08:49:54
3	Mn 257.610†	152048.2	160409.9	509.73 µg/L	509.73 ppb	08:49:48
3	Mo 202.031†	4224.1	4458.1	497.55 µg/L	497.55 ppb	08:50:14
3	Ni 231.604†	8987.4	9169.1	499.52 µg/L	499.52 ppb	08:49:54
3	P 214.914†	1302.5	1166.2	2476.1 µg/L	2476.1 ppb	08:50:14
3	Pb 220.353†	1938.4	1988.0	504.68 µg/L	504.68 ppb	08:50:14
3	S 181.975 Axial†	218.7	206.4	1058.8 µg/L	1058.8 ppb	08:50:14
3	Sb 206.836†	506.5	513.1	507.71 µg/L	507.71 ppb	08:50:14
3	Se 196.026†	339.4	343.5	502.52 µg/L	502.52 ppb	08:50:14
3	SiO2†	29177.3	28757.5	5491.6 µg/L	5491.6 ppb	08:49:54
3	Si 251.611†	32038.7	33404.1	2510.4 µg/L	2510.4 ppb	08:49:54
3	Sn 189.927†	993.1	1023.8	501.94 µg/L	501.94 ppb	08:50:14
3	Ti 334.940†	217632.3	228563.2	506.35 µg/L	506.35 ppb	08:49:48
3	Tl 190.801†	294.3	331.4	502.60 µg/L	502.60 ppb	08:50:14
3	U 409.014†	5890.1	5526.2	518.11 µg/L	518.11 ppb	08:49:54
3	V 292.402†	42154.3	44502.7	506.43 µg/L	506.43 ppb	08:49:54
3	Zn 213.857†	18388.6	18822.7	500.29 µg/L	500.29 ppb	08:49:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945550.5	94.594	%	0.3113				0.33%
Sc RADIAL	108168.8	96.2	%	0.88				0.92%
Y 371.029	1178175.7	94.077	%	0.2973				0.32%
Ag 328.068†	57106.5	513.91	µg/L	4.315	513.91	ppb	4.315	0.84%
QC value within limits for Ag 328.068 Recovery = 102.78%								
Al 396.153Radial†	10324.4	5198.7	µg/L	66.91	5198.7	ppb	66.91	1.29%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	267.0	507.97	µg/L	3.059	507.97	ppb	3.059	0.60%
QC value within limits for As 188.979 Recovery = 101.59%								
B 249.677†	11203.1	495.60	µg/L	3.146	495.60	ppb	3.146	0.63%
QC value within limits for B 249.677 Recovery = 99.12%								
Ba 233.527†	20096.7	505.83	µg/L	4.692	505.83	ppb	4.692	0.93%
QC value within limits for Ba 233.527 Recovery = 101.17%								
Be 313.107†	797213.5	504.12	µg/L	0.159	504.12	ppb	0.159	0.03%
QC value within limits for Be 313.107 Recovery = 100.82%								
Ca 317.933Radial†	12493.6	4959.4	µg/L	57.04	4959.4	ppb	57.04	1.15%
QC value within limits for Ca 317.933Radial Recovery = 99.19%								
Cd 226.502†	18891.0	499.72	µg/L	4.953	499.72	ppb	4.953	0.99%
QC value within limits for Cd 226.502 Recovery = 99.94%								
Co 228.616†	10470.0	503.60	µg/L	5.047	503.60	ppb	5.047	1.00%

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   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†            24136.7      503.62 µg/L        4.641      503.62 ppb        4.641   0.92%
   QC value within limits for Cr 267.716  Recovery = 100.72%
Cu 324.752†            72742.8      512.90 µg/L        3.937      512.90 ppb        3.937   0.77%
   QC value within limits for Cu 324.752  Recovery = 102.58%
Fe 238.204 Radial†       989.2      5213.0 µg/L       44.01      5213.0 ppb        44.01   0.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.26%
K 766.490 Radial†       9507.9      5155.2 µg/L       44.33      5155.2 ppb        44.33   0.86%
   QC value within limits for K 766.490 Radial  Recovery = 103.10%
Mg 279.077 IEC†          941.5      5226.8 µg/L       45.22      5226.8 ppb        45.22   0.87%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.54%
Mn 257.610†           160471.0      509.92 µg/L       0.164      509.92 ppb        0.164   0.03%
   QC value within limits for Mn 257.610  Recovery = 101.98%
Mo 202.031†            4484.8      500.53 µg/L       3.982      500.53 ppb        3.982   0.80%
   QC value within limits for Mo 202.031  Recovery = 100.11%
Na 589.592 Radial†    36914.6       10242 µg/L       160.0       10242 ppb        160.0   1.56%
   QC value within limits for Na 589.592 Radial  Recovery = 102.42%
Ni 231.604†            9276.3      505.36 µg/L       5.491      505.36 ppb        5.491   1.09%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†             1181.2      2508.3 µg/L       29.07      2508.3 ppb        29.07   1.16%
   QC value within limits for P 214.914  Recovery = 100.33%
Pb 220.353†            2007.4      509.60 µg/L       4.323      509.60 ppb        4.323   0.85%
   QC value within limits for Pb 220.353  Recovery = 101.92%
S 181.975 Axial†        206.4      1059.2 µg/L       13.43      1059.2 ppb        13.43   1.27%
   QC value within limits for S 181.975 Axial  Recovery = 105.92%
Sb 206.836†             510.8      505.35 µg/L       2.161      505.35 ppb        2.161   0.43%
   QC value within limits for Sb 206.836  Recovery = 101.07%
Se 196.026†             350.3      512.35 µg/L       8.759      512.35 ppb        8.759   1.71%
   QC value within limits for Se 196.026  Recovery = 102.47%
SiO2†                  29000.8      5538.1 µg/L       48.41      5538.1 ppb        48.41   0.87%
   QC value within limits for SiO2  Recovery = 103.56%
Si 251.611†            33739.3      2535.9 µg/L       25.39      2535.9 ppb        25.39   1.00%
   QC value within limits for Si 251.611  Recovery = 101.44%
Sn 189.927†            1029.6      504.71 µg/L       2.825      504.71 ppb        2.825   0.56%
   QC value within limits for Sn 189.927  Recovery = 100.94%
Sr 421.552†            89703.5      505.29 µg/L       5.583      505.29 ppb        5.583   1.10%
   QC value within limits for Sr 421.552  Recovery = 101.06%
Ti 334.940†           228778.0      506.83 µg/L       0.416      506.83 ppb        0.416   0.08%
   QC value within limits for Ti 334.940  Recovery = 101.37%
Tl 190.801†             334.7      507.44 µg/L       7.085      507.44 ppb        7.085   1.40%
   QC value within limits for Tl 190.801  Recovery = 101.49%
U 409.014†             5519.8      517.52 µg/L       6.400      517.52 ppb        6.400   1.24%
   QC value within limits for U 409.014  Recovery = 103.50%
V 292.402†             44900.8      510.94 µg/L       4.166      510.94 ppb        4.166   0.82%
   QC value within limits for V 292.402  Recovery = 102.19%
Zn 213.857†            19001.8      505.05 µg/L       4.196      505.05 ppb        4.196   0.83%
   QC value within limits for Zn 213.857  Recovery = 101.01%
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 08:50:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106273.5	106273.5	94.5	%			08:50:56
1	Al 396.153Radial†	223.6	6.8	3.4063	µg/L	3.4063	ppb	08:50:56
1	Ca 317.933Radial†	404.2	-67.7	-26.860	µg/L	-26.860	ppb	08:51:16
1	Fe 238.204 Radial†	13.2	2.8	14.556	µg/L	14.556	ppb	08:51:16
1	K 766.490 Radial†	659.5	3.2	1.7395	µg/L	1.7395	ppb	08:50:56
1	Mg 279.077 IEC†	14.2	-4.9	-26.903	µg/L	-26.903	ppb	08:51:16
1	Na 589.592 Radial†	-613.4	54.7	15.172	µg/L	15.172	ppb	08:50:56
1	Sr 421.552†	19.9	84.9	0.4781	µg/L	0.4781	ppb	08:50:56
1	Sc 361.383	1943628.6	1943628.6	94.500	%			08:52:18
1	Y 371.029	1180713.0	1180713.0	94.279	%			08:52:18
1	Ag 328.068†	-102.5	-80.2	-0.7147	µg/L	-0.7147	ppb	08:52:24
1	As 188.979†	-3.2	-5.9	-11.215	µg/L	-11.215	ppb	08:52:44
1	B 249.677†	156.6	10.1	0.4424	µg/L	0.4424	ppb	08:52:44
1	Ba 233.527†	-79.1	-3.0	-0.0752	µg/L	-0.0752	ppb	08:52:44
1	Be 313.107†	3658.4	259.8	0.1643	µg/L	0.1643	ppb	08:52:24
1	Cd 226.502†	-93.7	1.7	0.0545	µg/L	0.0545	ppb	08:52:44
1	Co 228.616†	-66.0	1.9	0.0937	µg/L	0.0937	ppb	08:52:44
1	Cr 267.716†	-109.8	6.6	0.1368	µg/L	0.1368	ppb	08:52:24
1	Cu 324.752†	3111.3	-91.9	-0.6438	µg/L	-0.6438	ppb	08:52:24
1	Mn 257.610†	-165.6	47.4	0.1523	µg/L	0.1523	ppb	08:52:44
1	Mo 202.031†	-0.7	7.1	0.7977	µg/L	0.7977	ppb	08:52:44
1	Ni 231.604†	281.1	-1.9	-0.1032	µg/L	-0.1032	ppb	08:52:44
1	P 214.914†	211.9	18.2	39.711	µg/L	39.711	ppb	08:52:44
1	Pb 220.353†	62.5	12.0	3.0375	µg/L	3.0375	ppb	08:52:44
1	S 181.975 Axial†	25.1	2.5	12.800	µg/L	12.800	ppb	08:52:44
1	Sb 206.836†	20.4	1.1	1.0831	µg/L	1.0831	ppb	08:52:44
1	Se 196.026†	12.3	-1.0	-1.5015	µg/L	-1.5015	ppb	08:52:44
1	SiO2†	2054.1	192.0	36.663	µg/L	36.663	ppb	08:52:24
1	Si 251.611†	491.9	170.9	12.980	µg/L	12.980	ppb	08:52:44
1	Sn 189.927†	25.4	4.4	2.1381	µg/L	2.1381	ppb	08:52:44
1	Ti 334.940†	795.3	122.7	0.2735	µg/L	0.2735	ppb	08:52:24
1	Tl 190.801†	-14.0	6.6	9.9714	µg/L	9.9714	ppb	08:52:44
1	U 409.014†	790.7	157.5	14.784	µg/L	14.784	ppb	08:52:24
1	V 292.402†	-85.5	1.4	0.0470	µg/L	0.0470	ppb	08:52:24
1	Zn 213.857†	534.7	15.7	0.4203	µg/L	0.4203	ppb	08:52:44
2	Sc RADIAL	106051.9	106051.9	94.3	%			08:51:22
2	Al 396.153Radial†	204.8	-12.6	-6.4006	µg/L	-6.4006	ppb	08:51:22
2	Ca 317.933Radial†	402.1	-69.0	-27.385	µg/L	-27.385	ppb	08:51:42
2	Fe 238.204 Radial†	10.2	-0.4	-2.2583	µg/L	-2.2583	ppb	08:51:42
2	K 766.490 Radial†	636.5	-19.8	-10.737	µg/L	-10.737	ppb	08:51:22
2	Mg 279.077 IEC†	13.6	-5.4	-29.880	µg/L	-29.880	ppb	08:51:42
2	Na 589.592 Radial†	-639.6	25.6	7.1035	µg/L	7.1035	ppb	08:51:22
2	Sr 421.552†	-36.6	25.0	0.1406	µg/L	0.1406	ppb	08:51:22
2	Sc 361.383	1950729.9	1950729.9	94.846	%			08:52:50
2	Y 371.029	1185734.0	1185734.0	94.680	%			08:52:50
2	Ag 328.068†	-76.0	-51.8	-0.4622	µg/L	-0.4622	ppb	08:52:55
2	As 188.979†	2.1	-0.3	-0.5988	µg/L	-0.5988	ppb	08:53:16
2	B 249.677†	151.3	3.9	0.1716	µg/L	0.1716	ppb	08:53:16
2	Ba 233.527†	-80.1	-3.7	-0.0938	µg/L	-0.0938	ppb	08:53:16
2	Be 313.107†	3580.7	163.8	0.1034	µg/L	0.1034	ppb	08:52:55
2	Cd 226.502†	-95.0	0.8	0.0316	µg/L	0.0316	ppb	08:53:16
2	Co 228.616†	-64.6	3.6	0.1748	µg/L	0.1748	ppb	08:53:16
2	Cr 267.716†	-89.4	28.5	0.5937	µg/L	0.5937	ppb	08:52:55
2	Cu 324.752†	3176.5	-35.1	-0.2478	µg/L	-0.2478	ppb	08:52:55
2	Mn 257.610†	-154.7	59.5	0.1887	µg/L	0.1887	ppb	08:53:16
2	Mo 202.031†	-3.3	4.5	0.4977	µg/L	0.4977	ppb	08:53:16
2	Ni 231.604†	282.3	-1.8	-0.0974	µg/L	-0.0974	ppb	08:53:16
2	P 214.914†	203.8	8.9	19.385	µg/L	19.385	ppb	08:53:16
2	Pb 220.353†	58.5	7.6	1.9137	µg/L	1.9137	ppb	08:53:16

2	S 181.975 Axial†	33.2	11.0	56.325 µg/L	56.325 ppb	08:53:16
2	Sb 206.836†	18.2	-1.3	-1.2959 µg/L	-1.2959 ppb	08:53:16
2	Se 196.026†	12.5	-1.0	-1.3996 µg/L	-1.3996 ppb	08:53:16
2	SiO2†	2057.5	187.7	35.835 µg/L	35.835 ppb	08:52:55
2	Si 251.611†	476.5	152.8	11.664 µg/L	11.664 ppb	08:53:16
2	Sn 189.927†	22.0	0.8	0.3597 µg/L	0.3597 ppb	08:53:16
2	Ti 334.940†	893.7	223.3	0.4966 µg/L	0.4966 ppb	08:52:55
2	Tl 190.801†	-21.3	-1.0	-1.5650 µg/L	-1.5650 ppb	08:53:16
2	U 409.014†	805.1	169.6	15.932 µg/L	15.932 ppb	08:52:55
2	V 292.402†	-75.5	12.4	0.1684 µg/L	0.1684 ppb	08:52:55
2	Zn 213.857†	530.1	8.7	0.2362 µg/L	0.2362 ppb	08:53:16
3	Sc RADIAL	106508.4	106508.4	94.7 %		08:51:48
3	Al 396.153Radial†	201.8	-16.7	-8.4917 µg/L	-8.4917 ppb	08:51:48
3	Ca 317.933Radial†	400.2	-72.8	-28.884 µg/L	-28.884 ppb	08:52:08
3	Fe 238.204 Radial†	12.0	1.5	7.6192 µg/L	7.6192 ppb	08:52:08
3	K 766.490 Radial†	665.0	7.5	4.0535 µg/L	4.0535 ppb	08:51:48
3	Mg 279.077 IEC†	15.4	-3.6	-19.924 µg/L	-19.924 ppb	08:52:08
3	Na 589.592 Radial†	-633.8	34.5	9.5841 µg/L	9.5841 ppb	08:51:48
3	Sr 421.552†	-60.9	-0.6	-0.0031 µg/L	-0.0031 ppb	08:51:48
3	Sc 361.383	1941399.4	1941399.4	94.392 %		08:53:21
3	Y 371.029	1180781.6	1180781.6	94.285 %		08:53:21
3	Ag 328.068†	-85.5	-62.3	-0.5518 µg/L	-0.5518 ppb	08:53:27
3	As 188.979†	2.0	-0.3	-0.6466 µg/L	-0.6466 ppb	08:53:47
3	B 249.677†	156.8	10.4	0.4591 µg/L	0.4591 ppb	08:53:47
3	Ba 233.527†	-81.2	-5.3	-0.1323 µg/L	-0.1323 ppb	08:53:47
3	Be 313.107†	3589.7	191.5	0.1210 µg/L	0.1210 ppb	08:53:27
3	Cd 226.502†	-99.1	-4.1	-0.0946 µg/L	-0.0946 ppb	08:53:47
3	Co 228.616†	-73.4	-6.1	-0.2916 µg/L	-0.2916 ppb	08:53:47
3	Cr 267.716†	-125.2	-9.9	-0.2041 µg/L	-0.2041 ppb	08:53:27
3	Cu 324.752†	3191.8	-2.9	-0.0187 µg/L	-0.0187 ppb	08:53:27
3	Mn 257.610†	-161.1	52.0	0.1659 µg/L	0.1659 ppb	08:53:47
3	Mo 202.031†	-1.5	6.3	0.7067 µg/L	0.7067 ppb	08:53:47
3	Ni 231.604†	273.7	-9.5	-0.5167 µg/L	-0.5167 ppb	08:53:47
3	P 214.914†	214.0	20.7	44.843 µg/L	44.843 ppb	08:53:47
3	Pb 220.353†	59.3	8.7	2.1792 µg/L	2.1792 ppb	08:53:47
3	S 181.975 Axial†	28.5	6.1	31.558 µg/L	31.558 ppb	08:53:47
3	Sb 206.836†	25.7	6.7	6.6822 µg/L	6.6822 ppb	08:53:47
3	Se 196.026†	5.4	-8.3	-12.152 µg/L	-12.152 ppb	08:53:47
3	SiO2†	2066.5	207.6	39.643 µg/L	39.643 ppb	08:53:27
3	Si 251.611†	482.7	161.8	12.438 µg/L	12.438 ppb	08:53:47
3	Sn 189.927†	17.4	-4.0	-1.9519 µg/L	-1.9519 ppb	08:53:47
3	Ti 334.940†	828.7	159.0	0.3541 µg/L	0.3541 ppb	08:53:27
3	Tl 190.801†	-24.0	-4.0	-6.0782 µg/L	-6.0782 ppb	08:53:47
3	U 409.014†	849.7	220.9	20.745 µg/L	20.745 ppb	08:53:27
3	V 292.402†	-38.0	51.7	0.6216 µg/L	0.6216 ppb	08:53:27
3	Zn 213.857†	529.1	10.4	0.2816 µg/L	0.2816 ppb	08:53:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945252.7	94.579	%	0.2369				0.25%
Sc RADIAL	106277.9	94.5	%	0.20				0.21%
Y 371.029	1182409.5	94.415	%	0.2299				0.24%
Ag 328.068†	-64.8	-0.5762	µg/L	0.12802	-0.5762	ppb	0.12802	22.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.5	-3.8287	µg/L	6.35232	-3.8287	ppb	6.35232	165.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.2	-4.1536	µg/L	6.11573	-4.1536	ppb	6.11573	147.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	8.1	0.3577	µg/L	0.16137	0.3577	ppb	0.16137	45.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.0	-0.1004	µg/L	0.02914	-0.1004	ppb	0.02914	29.01%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	205.1	0.1296	µg/L	0.03130	0.1296	ppb	0.03130	24.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.8	-27.710	µg/L	1.0504	-27.710	ppb	1.0504	3.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.5	-0.0028	µg/L	0.08030	-0.0028	ppb	0.08030	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.2	-0.0077	µg/L	0.24919	-0.0077	ppb	0.24919	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 8.4      0.1755 µg/L       0.40030      0.1755 ppb        0.40030 228.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -43.3     -0.3034 µg/L       0.31623     -0.3034 ppb        0.31623 104.22%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      6.6389 µg/L       8.44989      6.6389 ppb        8.44989 127.28%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -3.0     -1.6480 µg/L       7.95590     -1.6480 ppb        7.95590 482.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.6     -25.569 µg/L        5.1106     -25.569 ppb         5.1106  19.99%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                53.0      0.1690 µg/L       0.01835      0.1690 ppb        0.01835  10.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.0      0.6674 µg/L       0.15382      0.6674 ppb        0.15382  23.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         38.3      10.620 µg/L        4.1330      10.620 ppb         4.1330  38.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.4     -0.2391 µg/L       0.24045     -0.2391 ppb        0.24045 100.57%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.9      34.646 µg/L       13.4633      34.646 ppb        13.4633  38.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 9.4      2.3768 µg/L       0.58737      2.3768 ppb        0.58737  24.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            6.5      33.561 µg/L       21.8319      33.561 ppb        21.8319  65.05%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.2      2.1564 µg/L       4.09591      2.1564 ppb        4.09591 189.94%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.5     -5.0179 µg/L       6.17891     -5.0179 ppb        6.17891 123.14%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     195.7      37.380 µg/L        2.0026      37.380 ppb         2.0026   5.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               161.8      12.361 µg/L        0.6613      12.361 ppb         0.6613   5.35%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.4      0.1819 µg/L       2.05080      0.1819 ppb        2.05080 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                36.4      0.2052 µg/L       0.24701      0.2052 ppb        0.24701 120.38%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               168.4      0.3748 µg/L       0.11296      0.3748 ppb        0.11296  30.14%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.5      0.7761 µg/L       8.27697      0.7761 ppb        8.27697 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                182.7      17.154 µg/L        3.1627      17.154 ppb         3.1627  18.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 21.8      0.2790 µg/L       0.30285      0.2790 ppb        0.30285 108.55%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                11.6      0.3127 µg/L       0.09589      0.3127 ppb        0.09589  30.67%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 38
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 09:08:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107199.1	107199.1	95.3	%			09:09:12
1	Al 396.153Radial†	10137.9	10407.6	5240.8	µg/L	5240.8	ppb	09:09:12
1	Ca 317.933Radial†	12453.4	12571.5	4990.3	µg/L	4990.3	ppb	09:09:32
1	Fe 238.204 Radial†	966.6	1003.0	5285.2	µg/L	5285.2	ppb	09:09:32
1	K 766.490 Radial†	9792.3	9579.9	5194.2	µg/L	5194.2	ppb	09:09:12
1	Mg 279.077 IEC†	914.8	940.0	5218.7	µg/L	5218.7	ppb	09:09:32
1	Na 589.592 Radial†	34720.8	37135.2	10304	µg/L	10304	ppb	09:09:12
1	Sr 421.552†	85778.5	90068.0	507.35	µg/L	507.35	ppb	09:09:12
1	Sc 361.383	1944921.8	1944921.8	94.563	%			09:10:36
1	Y 371.029	1179205.9	1179205.9	94.159	%			09:10:36
1	Ag 328.068†	53690.0	56805.2	511.21	µg/L	511.21	ppb	09:10:42
1	As 188.979†	251.2	263.2	500.62	µg/L	500.62	ppb	09:11:02
1	B 249.677†	10695.2	11154.4	493.41	µg/L	493.41	ppb	09:10:42
1	Ba 233.527†	18852.2	20016.8	503.82	µg/L	503.82	ppb	09:10:42
1	Be 313.107†	755457.0	795280.1	502.89	µg/L	502.89	ppb	09:10:36
1	Cd 226.502†	17672.9	18789.9	497.03	µg/L	497.03	ppb	09:10:42
1	Co 228.616†	9788.1	10422.6	501.32	µg/L	501.32	ppb	09:10:42
1	Cr 267.716†	22643.5	24068.1	502.18	µg/L	502.18	ppb	09:10:42
1	Cu 324.752†	71817.2	72562.0	511.64	µg/L	511.64	ppb	09:10:42
1	Mn 257.610†	150959.4	159861.4	507.99	µg/L	507.99	ppb	09:10:36
1	Mo 202.031†	4211.1	4461.2	497.89	µg/L	497.89	ppb	09:11:02
1	Ni 231.604†	9000.8	9218.9	502.23	µg/L	502.23	ppb	09:10:42
1	P 214.914†	1313.7	1183.2	2512.7	µg/L	2512.7	ppb	09:11:02
1	Pb 220.353†	1933.0	1990.0	505.19	µg/L	505.19	ppb	09:11:02
1	S 181.975 Axial†	211.3	199.4	1022.9	µg/L	1022.9	ppb	09:11:02
1	Sb 206.836†	502.8	511.2	505.76	µg/L	505.76	ppb	09:11:02
1	Se 196.026†	335.7	340.9	498.71	µg/L	498.71	ppb	09:11:02
1	SiO2†	29355.5	29061.6	5549.7	µg/L	5549.7	ppb	09:10:42
1	Si 251.611†	32356.6	33867.3	2545.9	µg/L	2545.9	ppb	09:10:42
1	Sn 189.927†	990.9	1025.4	502.67	µg/L	502.67	ppb	09:11:02
1	Ti 334.940†	216684.0	228423.3	506.04	µg/L	506.04	ppb	09:10:36
1	Tl 190.801†	291.2	329.4	499.50	µg/L	499.50	ppb	09:11:02
1	U 409.014†	5739.3	5390.1	505.32	µg/L	505.32	ppb	09:10:42
1	V 292.402†	42174.1	44690.8	508.54	µg/L	508.54	ppb	09:10:42
1	Zn 213.857†	18397.4	18905.0	502.47	µg/L	502.47	ppb	09:10:42
2	Sc RADIAL	106278.0	106278.0	94.5	%			09:09:38
2	Al 396.153Radial†	10081.6	10440.1	5257.2	µg/L	5257.2	ppb	09:09:38
2	Ca 317.933Radial†	12431.9	12661.9	5026.2	µg/L	5026.2	ppb	09:09:58
2	Fe 238.204 Radial†	961.5	1006.4	5303.2	µg/L	5303.2	ppb	09:09:58
2	K 766.490 Radial†	9680.4	9550.5	5178.2	µg/L	5178.2	ppb	09:09:38
2	Mg 279.077 IEC†	924.0	958.1	5319.1	µg/L	5319.1	ppb	09:09:58
2	Na 589.592 Radial†	34486.4	37202.8	10322	µg/L	10322	ppb	09:09:38
2	Sr 421.552†	85282.7	90323.4	508.79	µg/L	508.79	ppb	09:09:38
2	Sc 361.383	1946465.9	1946465.9	94.638	%			09:11:09
2	Y 371.029	1180269.8	1180269.8	94.244	%			09:11:09
2	Ag 328.068†	54244.5	57346.1	516.07	µg/L	516.07	ppb	09:11:15
2	As 188.979†	257.2	269.3	512.23	µg/L	512.23	ppb	09:11:35
2	B 249.677†	10778.1	11233.0	496.90	µg/L	496.90	ppb	09:11:15
2	Ba 233.527†	18914.9	20067.3	505.09	µg/L	505.09	ppb	09:11:15
2	Be 313.107†	755950.3	795167.6	502.82	µg/L	502.82	ppb	09:11:09
2	Cd 226.502†	17853.7	18966.1	501.69	µg/L	501.69	ppb	09:11:15
2	Co 228.616†	9859.9	10490.2	504.57	µg/L	504.57	ppb	09:11:15
2	Cr 267.716†	22783.9	24197.5	504.89	µg/L	504.89	ppb	09:11:15
2	Cu 324.752†	72292.1	73003.5	514.75	µg/L	514.75	ppb	09:11:15
2	Mn 257.610†	151276.2	160069.4	508.65	µg/L	508.65	ppb	09:11:09
2	Mo 202.031†	4231.6	4479.2	499.91	µg/L	499.91	ppb	09:11:35
2	Ni 231.604†	9037.1	9249.8	503.91	µg/L	503.91	ppb	09:11:15
2	P 214.914†	1307.6	1175.6	2495.8	µg/L	2495.8	ppb	09:11:35
2	Pb 220.353†	1953.9	2010.5	510.37	µg/L	510.37	ppb	09:11:35

2	S 181.975 Axial†	216.5	204.7	1050.1 µg/L	1050.1 ppb	09:11:35
2	Sb 206.836†	497.8	505.4	500.03 µg/L	500.03 ppb	09:11:35
2	Se 196.026†	353.2	359.1	525.30 µg/L	525.30 ppb	09:11:35
2	SiO2†	29587.2	29281.8	5591.8 µg/L	5591.8 ppb	09:11:15
2	Si 251.611†	32616.7	34115.0	2564.9 µg/L	2564.9 ppb	09:11:15
2	Sn 189.927†	987.1	1020.5	500.34 µg/L	500.34 ppb	09:11:35
2	Ti 334.940†	216806.3	228370.7	505.93 µg/L	505.93 ppb	09:11:09
2	Tl 190.801†	293.8	331.9	503.26 µg/L	503.26 ppb	09:11:35
2	U 409.014†	5791.9	5440.9	510.09 µg/L	510.09 ppb	09:11:15
2	V 292.402†	42523.1	45024.3	512.32 µg/L	512.32 ppb	09:11:15
2	Zn 213.857†	18565.7	19067.4	506.81 µg/L	506.81 ppb	09:11:15
3	Sc RADIAL	107553.0	107553.0	95.6 %		09:10:04
3	Al 396.153Radial†	10192.5	10429.6	5252.1 µg/L	5252.1 ppb	09:10:04
3	Ca 317.933Radial†	12404.4	12477.2	4952.9 µg/L	4952.9 ppb	09:10:24
3	Fe 238.204 Radial†	961.5	994.4	5239.8 µg/L	5239.8 ppb	09:10:24
3	K 766.490 Radial†	9808.7	9563.2	5185.1 µg/L	5185.1 ppb	09:10:04
3	Mg 279.077 IEC†	910.3	932.2	5175.3 µg/L	5175.3 ppb	09:10:24
3	Na 589.592 Radial†	34964.3	37270.0	10341 µg/L	10341 ppb	09:10:04
3	Sr 421.552†	86489.4	90515.3	509.87 µg/L	509.87 ppb	09:10:04
3	Sc 361.383	1951079.9	1951079.9	94.863 %		09:11:42
3	Y 371.029	1182285.4	1182285.4	94.405 %		09:11:42
3	Ag 328.068†	53725.4	56663.3	509.93 µg/L	509.93 ppb	09:11:48
3	As 188.979†	253.1	264.3	502.69 µg/L	502.69 ppb	09:12:09
3	B 249.677†	10701.0	11124.8	492.11 µg/L	492.11 ppb	09:11:48
3	Ba 233.527†	18846.2	19947.5	502.07 µg/L	502.07 ppb	09:11:48
3	Be 313.107†	758536.2	796004.5	503.35 µg/L	503.35 ppb	09:11:42
3	Cd 226.502†	17668.2	18726.0	495.35 µg/L	495.35 ppb	09:11:48
3	Co 228.616†	9750.0	10349.7	497.80 µg/L	497.80 ppb	09:11:48
3	Cr 267.716†	22623.1	23971.1	500.16 µg/L	500.16 ppb	09:11:48
3	Cu 324.752†	71837.6	72343.8	510.10 µg/L	510.10 ppb	09:11:48
3	Mn 257.610†	151798.4	160242.0	509.19 µg/L	509.19 ppb	09:11:42
3	Mo 202.031†	4200.3	4435.7	495.05 µg/L	495.05 ppb	09:12:09
3	Ni 231.604†	8995.6	9183.4	500.29 µg/L	500.29 ppb	09:11:48
3	P 214.914†	1302.9	1167.4	2478.6 µg/L	2478.6 ppb	09:12:09
3	Pb 220.353†	1923.8	1973.8	501.07 µg/L	501.07 ppb	09:12:09
3	S 181.975 Axial†	212.7	200.2	1027.0 µg/L	1027.0 ppb	09:12:09
3	Sb 206.836†	501.6	508.2	502.81 µg/L	502.81 ppb	09:12:09
3	Se 196.026†	346.7	351.4	514.05 µg/L	514.05 ppb	09:12:09
3	SiO2†	29309.8	28915.4	5521.8 µg/L	5521.8 ppb	09:11:48
3	Si 251.611†	32354.8	33757.4	2537.7 µg/L	2537.7 ppb	09:11:48
3	Sn 189.927†	986.3	1017.3	498.70 µg/L	498.70 ppb	09:12:09
3	Ti 334.940†	217481.4	228540.7	506.31 µg/L	506.31 ppb	09:11:42
3	Tl 190.801†	289.0	326.0	494.44 µg/L	494.44 ppb	09:12:09
3	U 409.014†	5841.8	5479.0	513.68 µg/L	513.68 ppb	09:11:48
3	V 292.402†	42155.2	44530.1	506.72 µg/L	506.72 ppb	09:11:48
3	Zn 213.857†	18427.1	18874.9	501.69 µg/L	501.69 ppb	09:11:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1947489.2	94.688	%	0.1558				0.16%
Sc RADIAL	107010.0	95.1	%	0.59				0.62%
Y 371.029	1180587.0	94.269	%	0.1249				0.13%
Ag 328.068†	56938.2	512.40	µg/L	3.239	512.40	ppb	3.239	0.63%
QC value within limits for Ag 328.068 Recovery = 102.48%								
Al 396.153Radial†	10425.8	5250.0	µg/L	8.39	5250.0	ppb	8.39	0.16%
QC value within limits for Al 396.153Radial Recovery = 105.00%								
As 188.979†	265.6	505.18	µg/L	6.191	505.18	ppb	6.191	1.23%
QC value within limits for As 188.979 Recovery = 101.04%								
B 249.677†	11170.8	494.14	µg/L	2.473	494.14	ppb	2.473	0.50%
QC value within limits for B 249.677 Recovery = 98.83%								
Ba 233.527†	20010.5	503.66	µg/L	1.516	503.66	ppb	1.516	0.30%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 313.107†	795484.1	503.02	µg/L	0.287	503.02	ppb	0.287	0.06%
QC value within limits for Be 313.107 Recovery = 100.60%								
Ca 317.933Radial†	12570.2	4989.8	µg/L	36.65	4989.8	ppb	36.65	0.73%
QC value within limits for Ca 317.933Radial Recovery = 99.80%								
Cd 226.502†	18827.3	498.02	µg/L	3.285	498.02	ppb	3.285	0.66%
QC value within limits for Cd 226.502 Recovery = 99.60%								
Co 228.616†	10420.9	501.23	µg/L	3.385	501.23	ppb	3.385	0.68%

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   QC value within limits for Co 228.616  Recovery = 100.25%
Cr 267.716†            24078.9      502.41 µg/L        2.371      502.41 ppb        2.371   0.47%
   QC value within limits for Cr 267.716  Recovery = 100.48%
Cu 324.752†            72636.4      512.17 µg/L        2.371      512.17 ppb        2.371   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.43%
Fe 238.204 Radial†      1001.2      5276.1 µg/L       32.69      5276.1 ppb       32.69   0.62%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.52%
K 766.490 Radial†       9564.5      5185.8 µg/L        7.99      5185.8 ppb        7.99   0.15%
   QC value within limits for K 766.490 Radial  Recovery = 103.72%
Mg 279.077 IEC†          943.5      5237.7 µg/L       73.75      5237.7 ppb       73.75   1.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.75%
Mn 257.610†           160057.6      508.61 µg/L       0.602      508.61 ppb       0.602   0.12%
   QC value within limits for Mn 257.610  Recovery = 101.72%
Mo 202.031†            4458.7      497.62 µg/L       2.443      497.62 ppb       2.443   0.49%
   QC value within limits for Mo 202.031  Recovery = 99.52%
Na 589.592 Radial†    37202.7       10322 µg/L        18.7       10322 ppb        18.7   0.18%
   QC value within limits for Na 589.592 Radial  Recovery = 103.22%
Ni 231.604†            9217.3      502.14 µg/L       1.810      502.14 ppb       1.810   0.36%
   QC value within limits for Ni 231.604  Recovery = 100.43%
P 214.914†             1175.4      2495.7 µg/L       17.04      2495.7 ppb       17.04   0.68%
   QC value within limits for P 214.914  Recovery = 99.83%
Pb 220.353†            1991.5      505.55 µg/L       4.662      505.55 ppb       4.662   0.92%
   QC value within limits for Pb 220.353  Recovery = 101.11%
S 181.975 Axial†        201.4      1033.4 µg/L       14.68      1033.4 ppb       14.68   1.42%
   QC value within limits for S 181.975 Axial  Recovery = 103.34%
Sb 206.836†             508.3      502.87 µg/L       2.864      502.87 ppb       2.864   0.57%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†             350.5      512.69 µg/L      13.345      512.69 ppb      13.345   2.60%
   QC value within limits for Se 196.026  Recovery = 102.54%
SiO2†                  29086.3      5554.4 µg/L       35.22      5554.4 ppb       35.22   0.63%
   QC value within limits for SiO2  Recovery = 103.87%
Si 251.611†            33913.2      2549.5 µg/L       13.98      2549.5 ppb       13.98   0.55%
   QC value within limits for Si 251.611  Recovery = 101.98%
Sn 189.927†            1021.1      500.57 µg/L       1.996      500.57 ppb       1.996   0.40%
   QC value within limits for Sn 189.927  Recovery = 100.11%
Sr 421.552†            90302.2      508.67 µg/L       1.264      508.67 ppb       1.264   0.25%
   QC value within limits for Sr 421.552  Recovery = 101.73%
Ti 334.940†           228444.9      506.09 µg/L       0.195      506.09 ppb       0.195   0.04%
   QC value within limits for Ti 334.940  Recovery = 101.22%
Tl 190.801†             329.1      499.07 µg/L       4.426      499.07 ppb       4.426   0.89%
   QC value within limits for Tl 190.801  Recovery = 99.81%
U 409.014†             5436.7      509.70 µg/L       4.192      509.70 ppb       4.192   0.82%
   QC value within limits for U 409.014  Recovery = 101.94%
V 292.402†             44748.4      509.19 µg/L       2.859      509.19 ppb       2.859   0.56%
   QC value within limits for V 292.402  Recovery = 101.84%
Zn 213.857†            18949.1      503.65 µg/L       2.758      503.65 ppb       2.758   0.55%
   QC value within limits for Zn 213.857  Recovery = 100.73%
All analyte(s) passed QC.
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Sequence No.: 39
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 09:12:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105125.0	105125.0	93.5	%			09:12:50
1	Al 396.153Radial†	223.1	8.9	4.4733	µg/L	4.4733	ppb	09:12:50
1	Ca 317.933Radial†	393.7	-74.2	-29.458	µg/L	-29.458	ppb	09:13:10
1	Fe 238.204 Radial†	13.1	2.8	14.855	µg/L	14.855	ppb	09:13:10
1	K 766.490 Radial†	671.2	23.3	12.650	µg/L	12.650	ppb	09:12:50
1	Mg 279.077 IEC†	17.0	-1.7	-9.4232	µg/L	-9.4232	ppb	09:13:10
1	Na 589.592 Radial†	-648.8	9.7	2.7000	µg/L	2.7000	ppb	09:12:50
1	Sr 421.552†	-96.7	-39.7	-0.2234	µg/L	-0.2234	ppb	09:12:50
1	Sc 361.383	1938982.6	1938982.6	94.274	%			09:14:12
1	Y 371.029	1178534.0	1178534.0	94.105	%			09:14:12
1	Ag 328.068†	-98.0	-75.6	-0.6703	µg/L	-0.6703	ppb	09:14:18
1	As 188.979†	5.2	3.0	5.7479	µg/L	5.7479	ppb	09:14:38
1	B 249.677†	152.9	6.5	0.2834	µg/L	0.2834	ppb	09:14:38
1	Ba 233.527†	-63.7	13.1	0.3309	µg/L	0.3309	ppb	09:14:38
1	Be 313.107†	3739.1	354.7	0.2242	µg/L	0.2242	ppb	09:14:18
1	Cd 226.502†	-78.8	17.3	0.4712	µg/L	0.4712	ppb	09:14:38
1	Co 228.616†	-73.1	-5.8	-0.2785	µg/L	-0.2785	ppb	09:14:38
1	Cr 267.716†	-105.3	11.1	0.2321	µg/L	0.2321	ppb	09:14:18
1	Cu 324.752†	3121.4	-73.3	-0.5127	µg/L	-0.5127	ppb	09:14:18
1	Mn 257.610†	-127.1	87.9	0.2807	µg/L	0.2807	ppb	09:14:38
1	Mo 202.031†	-0.8	7.1	0.7886	µg/L	0.7886	ppb	09:14:38
1	Ni 231.604†	276.6	-6.0	-0.3245	µg/L	-0.3245	ppb	09:14:38
1	P 214.914†	212.8	19.8	43.019	µg/L	43.019	ppb	09:14:38
1	Pb 220.353†	68.5	18.5	4.6760	µg/L	4.6760	ppb	09:14:38
1	S 181.975 Axial†	28.4	6.1	31.331	µg/L	31.331	ppb	09:14:38
1	Sb 206.836†	19.9	0.6	0.6076	µg/L	0.6076	ppb	09:14:38
1	Se 196.026†	19.2	6.3	9.2079	µg/L	9.2079	ppb	09:14:38
1	SiO2†	2124.1	271.4	51.829	µg/L	51.829	ppb	09:14:18
1	Si 251.611†	559.2	243.5	18.475	µg/L	18.475	ppb	09:14:38
1	Sn 189.927†	28.5	7.8	3.7749	µg/L	3.7749	ppb	09:14:38
1	Ti 334.940†	846.7	179.3	0.3990	µg/L	0.3990	ppb	09:14:18
1	Tl 190.801†	-19.6	0.6	0.8749	µg/L	0.8749	ppb	09:14:38
1	U 409.014†	851.6	224.1	21.044	µg/L	21.044	ppb	09:14:18
1	V 292.402†	-38.8	50.8	0.6130	µg/L	0.6130	ppb	09:14:18
1	Zn 213.857†	532.3	14.5	0.3901	µg/L	0.3901	ppb	09:14:38
2	Sc RADIAL	105792.8	105792.8	94.1	%			09:13:16
2	Al 396.153Radial†	218.0	1.9	0.9269	µg/L	0.9269	ppb	09:13:16
2	Ca 317.933Radial†	389.6	-81.2	-32.234	µg/L	-32.234	ppb	09:13:36
2	Fe 238.204 Radial†	11.8	1.4	7.2317	µg/L	7.2317	ppb	09:13:36
2	K 766.490 Radial†	675.2	23.0	12.497	µg/L	12.497	ppb	09:13:16
2	Mg 279.077 IEC†	9.5	-9.7	-53.806	µg/L	-53.806	ppb	09:13:36
2	Na 589.592 Radial†	-675.8	-14.6	-4.0603	µg/L	-4.0603	ppb	09:13:16
2	Sr 421.552†	-31.6	30.2	0.1701	µg/L	0.1701	ppb	09:13:16
2	Sc 361.383	1924425.0	1924425.0	93.567	%			09:14:44
2	Y 371.029	1169712.8	1169712.8	93.401	%			09:14:44
2	Ag 328.068†	-87.4	-65.1	-0.5819	µg/L	-0.5819	ppb	09:14:49
2	As 188.979†	-0.0	-2.5	-4.8259	µg/L	-4.8259	ppb	09:15:10
2	B 249.677†	140.3	-5.8	-0.2581	µg/L	-0.2581	ppb	09:15:10
2	Ba 233.527†	-65.8	10.3	0.2589	µg/L	0.2589	ppb	09:15:10
2	Be 313.107†	3736.1	381.5	0.2411	µg/L	0.2411	ppb	09:14:49
2	Cd 226.502†	-82.5	12.7	0.3540	µg/L	0.3540	ppb	09:15:10
2	Co 228.616†	-71.6	-4.8	-0.2299	µg/L	-0.2299	ppb	09:15:10
2	Cr 267.716†	-101.7	14.1	0.2937	µg/L	0.2937	ppb	09:14:49
2	Cu 324.752†	3106.9	-63.8	-0.4472	µg/L	-0.4472	ppb	09:14:49
2	Mn 257.610†	-104.1	111.4	0.3545	µg/L	0.3545	ppb	09:15:10
2	Mo 202.031†	3.6	11.7	1.3067	µg/L	1.3067	ppb	09:15:10
2	Ni 231.604†	278.9	-1.3	-0.0710	µg/L	-0.0710	ppb	09:15:10
2	P 214.914†	215.7	24.5	53.311	µg/L	53.311	ppb	09:15:10
2	Pb 220.353†	63.4	13.7	3.4460	µg/L	3.4460	ppb	09:15:10

2	S 181.975 Axial†	26.5	4.2	21.801 µg/L	21.801 ppb		09:15:10
2	Sb 206.836†	18.4	-0.8	-0.8221 µg/L	-0.8221 ppb		09:15:10
2	Se 196.026†	14.4	1.2	1.8368 µg/L	1.8368 ppb		09:15:10
2	SiO2†	2076.2	237.3	45.322 µg/L	45.322 ppb		09:14:49
2	Si 251.611†	524.8	211.2	15.951 µg/L	15.951 ppb		09:15:10
2	Sn 189.927†	29.7	9.3	4.5048 µg/L	4.5048 ppb		09:15:10
2	Ti 334.940†	931.2	276.4	0.6144 µg/L	0.6144 ppb		09:14:49
2	Tl 190.801†	-22.0	-2.0	-3.0737 µg/L	-3.0737 ppb		09:15:10
2	U 409.014†	891.6	273.7	25.701 µg/L	25.701 ppb		09:14:49
2	V 292.402†	-94.3	-8.8	-0.0483 µg/L	-0.0483 ppb		09:14:49
2	Zn 213.857†	528.8	14.9	0.4022 µg/L	0.4022 ppb		09:15:10
3	Sc RADIAL	105866.6	105866.6	94.1 %			09:13:42
3	Al 396.153Radial†	239.8	25.0	12.608 µg/L	12.608 ppb		09:13:42
3	Ca 317.933Radial†	394.8	-76.0	-30.173 µg/L	-30.173 ppb		09:14:02
3	Fe 238.204 Radial†	10.2	-0.4	-2.1180 µg/L	-2.1180 ppb		09:14:02
3	K 766.490 Radial†	640.9	-13.9	-7.5352 µg/L	-7.5352 ppb		09:13:42
3	Mg 279.077 IEC†	15.9	-3.0	-16.530 µg/L	-16.530 ppb		09:14:02
3	Na 589.592 Radial†	-675.2	-13.5	-3.7417 µg/L	-3.7417 ppb		09:13:42
3	Sr 421.552†	-48.3	12.4	0.0699 µg/L	0.0699 ppb		09:13:42
3	Sc 361.383	1937341.1	1937341.1	94.195 %			09:15:15
3	Y 371.029	1176865.6	1176865.6	93.972 %			09:15:15
3	Ag 328.068†	-108.3	-86.6	-0.7726 µg/L	-0.7726 ppb		09:15:21
3	As 188.979†	2.9	0.6	1.2181 µg/L	1.2181 ppb		09:15:41
3	B 249.677†	139.0	-8.1	-0.3589 µg/L	-0.3589 ppb		09:15:41
3	Ba 233.527†	-71.3	5.0	0.1248 µg/L	0.1248 ppb		09:15:41
3	Be 313.107†	3775.2	396.4	0.2506 µg/L	0.2506 ppb		09:15:21
3	Cd 226.502†	-95.3	-0.3	-0.0026 µg/L	-0.0026 ppb		09:15:41
3	Co 228.616†	-73.5	-6.4	-0.3052 µg/L	-0.3052 ppb		09:15:41
3	Cr 267.716†	-131.0	-16.3	-0.3388 µg/L	-0.3388 ppb		09:15:21
3	Cu 324.752†	3146.2	-44.2	-0.3115 µg/L	-0.3115 ppb		09:15:21
3	Mn 257.610†	-92.8	124.1	0.3936 µg/L	0.3936 ppb		09:15:41
3	Mo 202.031†	-3.0	4.7	0.5275 µg/L	0.5275 ppb		09:15:41
3	Ni 231.604†	271.4	-11.2	-0.6115 µg/L	-0.6115 ppb		09:15:41
3	P 214.914†	213.7	20.9	45.403 µg/L	45.403 ppb		09:15:41
3	Pb 220.353†	64.5	14.3	3.6328 µg/L	3.6328 ppb		09:15:41
3	S 181.975 Axial†	25.6	3.1	16.182 µg/L	16.182 ppb		09:15:41
3	Sb 206.836†	17.1	-2.4	-2.3768 µg/L	-2.3768 ppb		09:15:41
3	Se 196.026†	15.0	1.9	2.7127 µg/L	2.7127 ppb		09:15:41
3	SiO2†	2100.5	248.3	47.418 µg/L	47.418 ppb		09:15:21
3	Si 251.611†	511.2	193.0	14.745 µg/L	14.745 ppb		09:15:41
3	Sn 189.927†	22.0	0.9	0.4515 µg/L	0.4515 ppb		09:15:41
3	Ti 334.940†	863.6	198.0	0.4405 µg/L	0.4405 ppb		09:15:21
3	Tl 190.801†	-22.6	-2.6	-3.8874 µg/L	-3.8874 ppb		09:15:41
3	U 409.014†	731.6	97.5	9.1584 µg/L	9.1584 ppb		09:15:21
3	V 292.402†	-70.1	17.5	0.2158 µg/L	0.2158 ppb		09:15:21
3	Zn 213.857†	538.3	21.3	0.5758 µg/L	0.5758 ppb		09:15:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933582.9	94.012	%	0.3877				0.41%
Sc RADIAL	105594.8	93.9	%	0.36				0.39%
Y 371.029	1175037.5	93.826	%	0.3742				0.40%
Ag 328.068†	-75.8	-0.6750	µg/L	0.09547	-0.6750	ppb	0.09547	14.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.9	6.0029	µg/L	5.98914	6.0029	ppb	5.98914	99.77%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.4	0.7134	µg/L	5.30495	0.7134	ppb	5.30495	743.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-2.5	-0.1112	µg/L	0.34546	-0.1112	ppb	0.34546	310.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.5	0.2382	µg/L	0.10458	0.2382	ppb	0.10458	43.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	377.5	0.2386	µg/L	0.01333	0.2386	ppb	0.01333	5.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-77.1	-30.622	µg/L	1.4410	-30.622	ppb	1.4410	4.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.9	0.2742	µg/L	0.24675	0.2742	ppb	0.24675	89.99%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.7	-0.2712	µg/L	0.03819	-0.2712	ppb	0.03819	14.08%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.0      0.0623 µg/L       0.34874      0.0623 ppb        0.34874 559.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -60.4     -0.4238 µg/L       0.10260     -0.4238 ppb        0.10260  24.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      6.6562 µg/L       8.50109      6.6562 ppb        8.50109 127.72%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          10.8      5.8705 µg/L      11.60989      5.8705 ppb       11.60989 197.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.8     -26.586 µg/L       23.8388     -26.586 ppb        23.8388  89.67%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               107.8      0.3429 µg/L       0.05734      0.3429 ppb        0.05734  16.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.8      0.8743 µg/L       0.39659      0.8743 ppb        0.39659  45.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         -6.1     -1.7007 µg/L       3.81441     -1.7007 ppb        3.81441 224.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.2     -0.3357 µg/L       0.27044     -0.3357 ppb        0.27044  80.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 21.7      47.244 µg/L        5.3873      47.244 ppb         5.3873  11.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                15.5      3.9183 µg/L       0.66284      3.9183 ppb        0.66284  16.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            4.5      23.105 µg/L        7.6580      23.105 ppb         7.6580  33.14%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.9     -0.8638 µg/L       1.49262     -0.8638 ppb        1.49262 172.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.1      4.5858 µg/L       4.02678      4.5858 ppb        4.02678  87.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     252.3      48.190 µg/L        3.3214      48.190 ppb         3.3214   6.89%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               215.9      16.390 µg/L        1.9031      16.390 ppb         1.9031  11.61%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.0      2.9104 µg/L       2.16053      2.9104 ppb        2.16053  74.24%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 1.0      0.0055 µg/L       0.20448      0.0055 ppb        0.20448 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               217.9      0.4846 µg/L       0.11427      0.4846 ppb        0.11427  23.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.4     -2.0287 µg/L       2.54735     -2.0287 ppb        2.54735 125.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                198.4      18.634 µg/L        8.5304      18.634 ppb         8.5304  45.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.8      0.2602 µg/L       0.33287      0.2602 ppb        0.33287 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                16.9      0.4560 µg/L       0.10387      0.4560 ppb        0.10387  22.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/18/2009 09:24:26 Plasma On Time: 12/17/2009 20:21:18
Logged In Analyst: optima Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121809D.sif
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Sequence No.: 1 Autosampler Location: 301
Sample ID: 1201997316|933555|1 Date Collected: 12/18/2009 09:24:28
Analyst: HSC Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 1201997316|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105047.4	105047.4	93.4	%			09:25:04
1	Al 396.153Radial†	191.7	-24.6	-12.458	µg/L	-12.458	ppb	09:25:04
1	Ca 317.933Radial†	410.5	-55.9	-22.190	µg/L	-22.190	ppb	09:25:25
1	Fe 238.204 Radial†	19.4	9.6	50.158	µg/L	50.158	ppb	09:25:25
1	K 766.490 Radial†	632.6	-17.5	-9.5026	µg/L	-9.5026	ppb	09:25:04
1	Mg 279.077 IEC†	12.2	-6.8	-37.722	µg/L	-37.722	ppb	09:25:25
1	Na 589.592 Radial†	-640.4	18.2	5.0550	µg/L	5.0550	ppb	09:25:04
1	Sr 421.552†	-51.7	8.4	0.0473	µg/L	0.0473	ppb	09:25:04
1	Sc 361.383	1906846.9	1906846.9	92.712	%			09:26:26
1	Y 371.029	1155716.6	1155716.6	92.283	%			09:26:26
1	Ag 328.068†	-145.4	-128.5	-1.1425	µg/L	-1.1425	ppb	09:26:32
1	As 188.979†	-4.4	-7.3	-13.869	µg/L	-13.869	ppb	09:26:53
1	B 249.677†	140.4	-4.2	-0.2040	µg/L	-0.2040	ppb	09:26:53
1	Ba 233.527†	-82.3	-8.1	-0.2031	µg/L	-0.2031	ppb	09:26:53
1	Be 313.107†	3539.0	205.7	0.1299	µg/L	0.1299	ppb	09:26:32
1	Cd 226.502†	-107.2	-14.7	-0.3788	µg/L	-0.3788	ppb	09:26:53
1	Co 228.616†	-73.7	-7.7	-0.3711	µg/L	-0.3711	ppb	09:26:53
1	Cr 267.716†	-65.8	51.8	1.0779	µg/L	1.0779	ppb	09:26:32
1	Cu 324.752†	3077.8	-64.6	-0.4436	µg/L	-0.4436	ppb	09:26:32
1	Mn 257.610†	-16.7	204.7	0.6559	µg/L	0.6559	ppb	09:26:53
1	Mo 202.031†	0.4	8.4	0.9347	µg/L	0.9347	ppb	09:26:53
1	Ni 231.604†	300.1	24.3	1.3220	µg/L	1.3220	ppb	09:26:53
1	P 214.914†	221.7	33.1	71.912	µg/L	71.912	ppb	09:26:53
1	Pb 220.353†	62.4	13.2	3.3338	µg/L	3.3338	ppb	09:26:53
1	S 181.975 Axial†	29.6	7.9	40.647	µg/L	40.647	ppb	09:26:53
1	Sb 206.836†	18.9	-0.2	-0.1730	µg/L	-0.1730	ppb	09:26:53
1	Se 196.026†	13.9	0.9	1.3203	µg/L	1.3203	ppb	09:26:53
1	SiO2†	2057.7	237.8	45.410	µg/L	45.410	ppb	09:26:32
1	Si 251.611†	483.8	172.1	13.085	µg/L	13.085	ppb	09:26:53
1	Sn 189.927†	23.9	3.3	1.5989	µg/L	1.5989	ppb	09:26:53
1	Ti 334.940†	954.9	311.1	0.6909	µg/L	0.6909	ppb	09:26:32
1	Tl 190.801†	-21.3	-1.5	-2.2955	µg/L	-2.2955	ppb	09:26:53
1	U 409.014†	804.7	188.7	17.713	µg/L	17.713	ppb	09:26:32
1	V 292.402†	-69.3	17.2	0.2331	µg/L	0.2331	ppb	09:26:32
1	Zn 213.857†	600.1	97.2	2.5925	µg/L	2.5925	ppb	09:26:53
2	Sc RADIAL	104473.5	104473.5	92.9	%			09:25:30
2	Al 396.153Radial†	187.8	-27.7	-14.011	µg/L	-14.011	ppb	09:25:30
2	Ca 317.933Radial†	402.6	-61.9	-24.587	µg/L	-24.587	ppb	09:25:51
2	Fe 238.204 Radial†	17.9	8.1	42.279	µg/L	42.279	ppb	09:25:51
2	K 766.490 Radial†	647.7	2.5	1.3509	µg/L	1.3509	ppb	09:25:30
2	Mg 279.077 IEC†	16.7	-1.8	-10.152	µg/L	-10.152	ppb	09:25:51
2	Na 589.592 Radial†	-672.7	-20.3	-5.6398	µg/L	-5.6398	ppb	09:25:30
2	Sr 421.552†	-88.2	-31.2	-0.1760	µg/L	-0.1760	ppb	09:25:30
2	Sc 361.383	1895398.6	1895398.6	92.155	%			09:26:58
2	Y 371.029	1149461.2	1149461.2	91.784	%			09:26:58
2	Ag 328.068†	-128.1	-110.7	-0.9867	µg/L	-0.9867	ppb	09:27:04
2	As 188.979†	1.0	-1.4	-2.6596	µg/L	-2.6596	ppb	09:27:24

2	B 249.677†	133.8	-10.5	-0.4777 µg/L	-0.4777 ppb		09:27:24
2	Ba 233.527†	-81.6	-7.9	-0.1988 µg/L	-0.1988 ppb		09:27:24
2	Be 313.107†	3575.0	267.8	0.1691 µg/L	0.1691 ppb		09:27:04
2	Cd 226.502†	-98.7	-6.2	-0.1466 µg/L	-0.1466 ppb		09:27:24
2	Co 228.616†	-73.8	-8.3	-0.4011 µg/L	-0.4011 ppb		09:27:24
2	Cr 267.716†	-97.5	17.0	0.3525 µg/L	0.3525 ppb		09:27:04
2	Cu 324.752†	3090.4	-30.8	-0.2076 µg/L	-0.2076 ppb		09:27:04
2	Mn 257.610†	-29.4	190.7	0.6106 µg/L	0.6106 ppb		09:27:24
2	Mo 202.031†	-1.6	6.2	0.6903 µg/L	0.6903 ppb		09:27:24
2	Ni 231.604†	296.7	22.6	1.2309 µg/L	1.2309 ppb		09:27:24
2	P 214.914†	224.7	37.8	82.115 µg/L	82.115 ppb		09:27:24
2	Pb 220.353†	70.4	22.3	5.6212 µg/L	5.6212 ppb		09:27:24
2	S 181.975 Axial†	29.9	8.4	42.898 µg/L	42.898 ppb		09:27:24
2	Sb 206.836†	10.8	-8.8	-8.7455 µg/L	-8.7455 ppb		09:27:24
2	Se 196.026†	7.9	-5.5	-8.0099 µg/L	-8.0099 ppb		09:27:24
2	SiO2†	2025.8	216.6	41.363 µg/L	41.363 ppb		09:27:04
2	Si 251.611†	480.7	172.0	13.051 µg/L	13.051 ppb		09:27:24
2	Sn 189.927†	24.6	4.3	2.0715 µg/L	2.0715 ppb		09:27:24
2	Ti 334.940†	995.2	361.0	0.8017 µg/L	0.8017 ppb		09:27:04
2	Tl 190.801†	-20.7	-1.1	-1.5979 µg/L	-1.5979 ppb		09:27:24
2	U 409.014†	872.2	267.2	25.087 µg/L	25.087 ppb		09:27:04
2	V 292.402†	-98.7	-15.2	-0.1223 µg/L	-0.1223 ppb		09:27:04
2	Zn 213.857†	608.7	110.4	2.9473 µg/L	2.9473 ppb		09:27:24
3	Sc RADIAL	104092.9	104092.9	92.5 %			09:25:56
3	Al 396.153Radial†	197.4	-16.5	-8.3267 µg/L	-8.3267 ppb		09:25:56
3	Ca 317.933Radial†	408.2	-54.4	-21.587 µg/L	-21.587 ppb		09:26:17
3	Fe 238.204 Radial†	19.8	10.2	53.498 µg/L	53.498 ppb		09:26:17
3	K 766.490 Radial†	628.9	-15.3	-8.2722 µg/L	-8.2722 ppb		09:25:56
3	Mg 279.077 IEC†	17.4	-1.0	-5.5907 µg/L	-5.5907 ppb		09:26:17
3	Na 589.592 Radial†	-602.7	52.7	14.614 µg/L	14.614 ppb		09:25:56
3	Sr 421.552†	-41.2	19.3	0.1084 µg/L	0.1084 ppb		09:25:56
3	Sc 361.383	1905315.2	1905315.2	92.637 %			09:27:30
3	Y 371.029	1154923.0	1154923.0	92.220 %			09:27:30
3	Ag 328.068†	-141.9	-124.9	-1.1105 µg/L	-1.1105 ppb		09:27:36
3	As 188.979†	3.3	1.1	2.0861 µg/L	2.0861 ppb		09:27:56
3	B 249.677†	135.9	-9.0	-0.4174 µg/L	-0.4174 ppb		09:27:56
3	Ba 233.527†	-81.9	-7.7	-0.1928 µg/L	-0.1928 ppb		09:27:56
3	Be 313.107†	3584.7	258.1	0.1630 µg/L	0.1630 ppb		09:27:36
3	Cd 226.502†	-89.3	4.5	0.1308 µg/L	0.1308 ppb		09:27:56
3	Co 228.616†	-75.6	-9.9	-0.4784 µg/L	-0.4784 ppb		09:27:56
3	Cr 267.716†	-83.9	32.2	0.6706 µg/L	0.6706 ppb		09:27:36
3	Cu 324.752†	3058.0	-83.3	-0.5742 µg/L	-0.5742 ppb		09:27:36
3	Mn 257.610†	-43.8	175.4	0.5632 µg/L	0.5632 ppb		09:27:56
3	Mo 202.031†	-7.3	-0.0	0.0007 µg/L	0.0007 ppb		09:27:56
3	Ni 231.604†	289.5	13.1	0.7123 µg/L	0.7123 ppb		09:27:56
3	P 214.914†	230.9	43.2	93.890 µg/L	93.890 ppb		09:27:56
3	Pb 220.353†	66.7	17.9	4.5161 µg/L	4.5161 ppb		09:27:56
3	S 181.975 Axial†	30.5	8.9	45.770 µg/L	45.770 ppb		09:27:56
3	Sb 206.836†	20.2	1.3	1.3142 µg/L	1.3142 ppb		09:27:56
3	Se 196.026†	14.6	1.7	2.4903 µg/L	2.4903 ppb		09:27:56
3	SiO2†	2022.9	202.0	38.583 µg/L	38.583 ppb		09:27:36
3	Si 251.611†	480.6	169.2	12.898 µg/L	12.898 ppb		09:27:56
3	Sn 189.927†	22.6	1.9	0.9296 µg/L	0.9296 ppb		09:27:56
3	Ti 334.940†	957.2	314.4	0.6981 µg/L	0.6981 ppb		09:27:36
3	Tl 190.801†	-21.2	-1.5	-2.2446 µg/L	-2.2446 ppb		09:27:56
3	U 409.014†	836.0	223.3	20.956 µg/L	20.956 ppb		09:27:36
3	V 292.402†	-79.7	6.0	0.1054 µg/L	0.1054 ppb		09:27:36
3	Zn 213.857†	607.4	105.5	2.8185 µg/L	2.8185 ppb		09:27:56

Mean Data: 1201997316|933555|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1902520.3	92.502	%	0.3022				0.33%
Sc RADIAL	104537.9	92.9	%	0.43				0.46%
Y 371.029	1153366.9	92.096	%	0.2719				0.30%
Ag 328.068†	-121.4	-1.0799	µg/L	0.08229	-1.0799	ppb	0.08229	7.62%
Al 396.153Radial†	-22.9	-11.599	µg/L	2.9380	-11.599	ppb	2.9380	25.33%
As 188.979†	-2.5	-4.8141	µg/L	8.19281	-4.8141	ppb	8.19281	170.18%
B 249.677†	-7.9	-0.3663	µg/L	0.14384	-0.3663	ppb	0.14384	39.26%
Ba 233.527†	-7.9	-0.1983	µg/L	0.00519	-0.1983	ppb	0.00519	2.62%

Be 313.107†	243.9	0.1540	µg/L	0.02112	0.1540	ppb	0.02112 13.71%
Ca 317.933Radial†	-57.4	-22.788	µg/L	1.5870	-22.788	ppb	1.5870 6.96%
Cd 226.502†	-5.5	-0.1316	µg/L	0.25514	-0.1316	ppb	0.25514 193.91%
Co 228.616†	-8.7	-0.4168	µg/L	0.05535	-0.4168	ppb	0.05535 13.28%
Cr 267.716†	33.6	0.7003	µg/L	0.36365	0.7003	ppb	0.36365 51.92%
Cu 324.752†	-59.5	-0.4085	µg/L	0.18582	-0.4085	ppb	0.18582 45.49%
Fe 238.204 Radial†	9.3	48.645	µg/L	5.7609	48.645	ppb	5.7609 11.84%
K 766.490 Radial†	-10.1	-5.4746	µg/L	5.94301	-5.4746	ppb	5.94301 108.56%
Mg 279.077 IEC†	-3.2	-17.822	µg/L	17.3848	-17.822	ppb	17.3848 97.55%
Mn 257.610†	190.3	0.6099	µg/L	0.04633	0.6099	ppb	0.04633 7.60%
Mo 202.031†	4.8	0.5419	µg/L	0.48438	0.5419	ppb	0.48438 89.39%
Na 589.592 Radial†	16.9	4.6764	µg/L	10.13219	4.6764	ppb	10.13219 216.67%
Ni 231.604†	20.0	1.0884	µg/L	0.32887	1.0884	ppb	0.32887 30.22%
P 214.914†	38.1	82.639	µg/L	10.9984	82.639	ppb	10.9984 13.31%
Pb 220.353†	17.8	4.4903	µg/L	1.14390	4.4903	ppb	1.14390 25.47%
S 181.975 Axial†	8.4	43.105	µg/L	2.5675	43.105	ppb	2.5675 5.96%
Sb 206.836†	-2.6	-2.5348	µg/L	5.42982	-2.5348	ppb	5.42982 214.21%
Se 196.026†	-1.0	-1.3998	µg/L	5.75439	-1.3998	ppb	5.75439 411.10%
SiO2†	218.8	41.785	µg/L	3.4328	41.785	ppb	3.4328 8.22%
Si 251.611†	171.1	13.012	µg/L	0.0999	13.012	ppb	0.0999 0.77%
Sn 189.927†	3.2	1.5333	µg/L	0.57373	1.5333	ppb	0.57373 37.42%
Sr 421.552†	-1.2	-0.0067	µg/L	0.14971	-0.0067	ppb	0.14971 >999.9%
Ti 334.940†	328.9	0.7302	µg/L	0.06196	0.7302	ppb	0.06196 8.49%
Tl 190.801†	-1.4	-2.0460	µg/L	0.38888	-2.0460	ppb	0.38888 19.01%
U 409.014†	226.4	21.252	µg/L	3.6963	21.252	ppb	3.6963 17.39%
V 292.402†	2.7	0.0721	µg/L	0.18005	0.0721	ppb	0.18005 249.82%
Zn 213.857†	104.3	2.7861	µg/L	0.17963	2.7861	ppb	0.17963 6.45%

Sequence No.: 2
Sample ID: 1201997317|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 302
Date Collected: 12/18/2009 09:28:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201997317|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107112.8	107112.8	95.2	%			09:28:39
1	Al 396.153Radial†	161188.7	169035.9	85409	µg/L	85409	ppb	09:28:39
1	Ca 317.933Radial†	214999.8	225277.7	89425	µg/L	89425	ppb	09:28:39
1	Fe 238.204 Radial†	33131.9	34780.9	182730	µg/L	182730	ppb	09:28:44
1	K 766.490 Radial†	68934.7	71694.0	38872	µg/L	38872	ppb	09:28:39
1	Mg 279.077 IEC†	6137.6	6425.4	35382	µg/L	35382	ppb	09:28:44
1	Na 589.592 Radial†	31557.2	33842.5	9390.0	µg/L	9390.0	ppb	09:28:39
1	Sr 421.552†	369622.6	388207.7	2186.7	µg/L	2186.7	ppb	09:28:39
1	Sc 361.383	1896539.2	1896539.2	92.211	%			09:29:19
1	Y 371.029	1164301.0	1164301.0	92.969	%			09:29:19
1	Ag 328.068†	28143.6	30549.3	295.12	µg/L	295.12	ppb	09:29:25
1	As 188.979†	505.8	546.0	1013.5	µg/L	1013.5	ppb	09:29:45
1	B 249.677†	29856.8	32223.1	1372.7	µg/L	1372.7	ppb	09:29:25
1	Ba 233.527†	67938.5	73758.1	1855.0	µg/L	1855.0	ppb	09:29:25
1	Be 313.107†	1086247.0	1174393.2	741.01	µg/L	741.01	ppb	09:29:19
1	Cd 226.502†	19458.3	21202.9	547.50	µg/L	547.50	ppb	09:29:25
1	Co 228.616†	16753.8	18240.7	867.62	µg/L	867.62	ppb	09:29:25
1	Cr 267.716†	96550.9	104829.6	2184.8	µg/L	2184.8	ppb	09:29:25
1	Cu 324.752†	231664.6	247849.5	1783.0	µg/L	1783.0	ppb	09:29:25
1	Mn 257.610†	1522949.3	1651818.9	5265.1	µg/L	5265.1	ppb	09:29:19
1	Mo 202.031†	3960.9	4303.4	487.27	µg/L	487.27	ppb	09:29:45
1	Ni 231.604†	21606.8	23132.6	1260.2	µg/L	1260.2	ppb	09:29:25
1	P 214.914†	3392.5	3473.0	7161.6	µg/L	7161.6	ppb	09:29:45
1	Pb 220.353†	3452.4	3689.9	939.57	µg/L	939.57	ppb	09:29:45
1	S 181.975 Axial†	710.8	746.8	3804.9	µg/L	3804.9	ppb	09:29:45
1	Sb 206.836†	1469.9	1573.5	1560.8	µg/L	1560.8	ppb	09:29:45
1	Se 196.026†	1558.4	1676.0	2567.0	µg/L	2567.0	ppb	09:29:45
1	SiO2†	108695.9	115896.1	22132	µg/L	22132	ppb	09:29:25
1	Si 251.611†	124800.6	134993.2	10097	µg/L	10097	ppb	09:29:25
1	Sn 189.927†	1720.8	1843.7	947.13	µg/L	947.13	ppb	09:29:45
1	Ti 334.940†	2126247.1	2305137.0	5104.6	µg/L	5104.6	ppb	09:29:19
1	Tl 190.801†	679.5	758.3	1185.7	µg/L	1185.7	ppb	09:29:45
1	U 409.014†	453.7	-187.2	-49.571	µg/L	-49.571	ppb	09:29:25
1	V 292.402†	93763.4	101775.7	1165.6	µg/L	1165.6	ppb	09:29:25
1	Zn 213.857†	186744.3	201968.9	5381.9	µg/L	5381.9	ppb	09:29:25
2	Sc RADIAL	106776.2	106776.2	94.9	%			09:28:50
2	Al 396.153Radial†	162124.9	170555.7	86176	µg/L	86176	ppb	09:28:50
2	Ca 317.933Radial†	215932.5	226972.1	90097	µg/L	90097	ppb	09:28:50
2	Fe 238.204 Radial†	33228.6	34992.5	183840	µg/L	183840	ppb	09:28:55
2	K 766.490 Radial†	69386.1	72397.8	39254	µg/L	39254	ppb	09:28:50
2	Mg 279.077 IEC†	6184.4	6494.9	35766	µg/L	35766	ppb	09:28:55
2	Na 589.592 Radial†	31537.0	33925.6	9413.1	µg/L	9413.1	ppb	09:28:50
2	Sr 421.552†	371573.7	391486.7	2205.2	µg/L	2205.2	ppb	09:28:50
2	Sc 361.383	1876116.0	1876116.0	91.218	%			09:29:52
2	Y 371.029	1152555.7	1152555.7	92.031	%			09:29:52
2	Ag 328.068†	28142.0	30879.8	298.26	µg/L	298.26	ppb	09:29:58
2	As 188.979†	501.5	547.3	1015.7	µg/L	1015.7	ppb	09:30:19
2	B 249.677†	30027.5	32762.7	1396.3	µg/L	1396.3	ppb	09:29:58
2	Ba 233.527†	68200.2	74847.0	1882.4	µg/L	1882.4	ppb	09:29:58
2	Be 313.107†	1070528.5	1169985.0	738.23	µg/L	738.23	ppb	09:29:52
2	Cd 226.502†	19501.5	21480.0	554.76	µg/L	554.76	ppb	09:29:58
2	Co 228.616†	16867.6	18563.3	883.18	µg/L	883.18	ppb	09:29:58
2	Cr 267.716†	96912.9	106366.2	2216.8	µg/L	2216.8	ppb	09:29:58
2	Cu 324.752†	232287.7	251267.5	1807.3	µg/L	1807.3	ppb	09:29:58
2	Mn 257.610†	1502880.4	1647796.9	5252.5	µg/L	5252.5	ppb	09:29:52
2	Mo 202.031†	3952.8	4341.2	491.53	µg/L	491.53	ppb	09:30:19
2	Ni 231.604†	21763.4	23559.3	1283.5	µg/L	1283.5	ppb	09:29:58
2	P 214.914†	3376.4	3495.5	7206.7	µg/L	7206.7	ppb	09:30:19
2	Pb 220.353†	3445.4	3723.0	948.00	µg/L	948.00	ppb	09:30:19

2	S 181.975 Axial†	703.8	747.5	3808.2 µg/L	3808.2 ppb	09:30:19
2	Sb 206.836†	1460.2	1580.2	1567.2 µg/L	1567.2 ppb	09:30:19
2	Se 196.026†	1550.0	1685.2	2581.0 µg/L	2581.0 ppb	09:30:19
2	SiO2†	108640.0	117117.9	22365 µg/L	22365 ppb	09:29:58
2	Si 251.611†	124727.6	136386.5	10204 µg/L	10204 ppb	09:29:58
2	Sn 189.927†	1722.6	1866.0	958.39 µg/L	958.39 ppb	09:30:19
2	Ti 334.940†	2097999.0	2299270.6	5091.5 µg/L	5091.5 ppb	09:29:52
2	Tl 190.801†	675.4	761.8	1190.8 µg/L	1190.8 ppb	09:30:19
2	U 409.014†	444.2	-192.2	-50.236 µg/L	-50.236 ppb	09:29:58
2	V 292.402†	93981.9	103122.2	1180.9 µg/L	1180.9 ppb	09:29:58
2	Zn 213.857†	187249.8	204727.6	5455.5 µg/L	5455.5 ppb	09:29:58
3	Sc RADIAL	106931.0	106931.0	95.1 %		09:29:01
3	Al 396.153Radial†	163049.6	171281.1	86543 µg/L	86543 ppb	09:29:01
3	Ca 317.933Radial†	216961.6	227725.1	90396 µg/L	90396 ppb	09:29:01
3	Fe 238.204 Radial†	33195.6	34907.1	183400 µg/L	183400 ppb	09:29:06
3	K 766.490 Radial†	69795.7	72722.8	39430 µg/L	39430 ppb	09:29:01
3	Mg 279.077 IEC†	6205.8	6508.0	35839 µg/L	35839 ppb	09:29:06
3	Na 589.592 Radial†	31815.0	34169.9	9480.9 µg/L	9480.9 ppb	09:29:01
3	Sr 421.552†	373629.3	393082.2	2214.2 µg/L	2214.2 ppb	09:29:01
3	Sc 361.383	1895778.0	1895778.0	92.174 %		09:30:26
3	Y 371.029	1165066.9	1165066.9	93.030 %		09:30:26
3	Ag 328.068†	28216.7	30640.8	296.02 µg/L	296.02 ppb	09:30:32
3	As 188.979†	496.1	535.8	993.75 µg/L	993.75 ppb	09:30:52
3	B 249.677†	30062.5	32459.4	1383.0 µg/L	1383.0 ppb	09:30:32
3	Ba 233.527†	68239.8	74114.6	1864.0 µg/L	1864.0 ppb	09:30:32
3	Be 313.107†	1084235.2	1172683.6	739.93 µg/L	739.93 ppb	09:30:26
3	Cd 226.502†	19577.7	21340.8	551.10 µg/L	551.10 ppb	09:30:32
3	Co 228.616†	16860.5	18363.8	873.55 µg/L	873.55 ppb	09:30:32
3	Cr 267.716†	96857.0	105203.7	2192.6 µg/L	2192.6 ppb	09:30:32
3	Cu 324.752†	233071.7	249477.0	1794.6 µg/L	1794.6 ppb	09:30:32
3	Mn 257.610†	1520221.9	1649523.0	5257.9 µg/L	5257.9 ppb	09:30:26
3	Mo 202.031†	3948.0	4291.2	485.93 µg/L	485.93 ppb	09:30:52
3	Ni 231.604†	21722.5	23267.5	1267.6 µg/L	1267.6 ppb	09:30:32
3	P 214.914†	3369.2	3449.3	7108.3 µg/L	7108.3 ppb	09:30:52
3	Pb 220.353†	3453.3	3692.4	940.28 µg/L	940.28 ppb	09:30:52
3	S 181.975 Axial†	707.3	743.4	3786.9 µg/L	3786.9 ppb	09:30:52
3	Sb 206.836†	1459.4	1562.8	1550.0 µg/L	1550.0 ppb	09:30:52
3	Se 196.026†	1549.5	1666.9	2554.2 µg/L	2554.2 ppb	09:30:52
3	SiO2†	109040.0	116316.7	22212 µg/L	22212 ppb	09:30:32
3	Si 251.611†	125122.7	135397.0	10128 µg/L	10128 ppb	09:30:32
3	Sn 189.927†	1719.0	1842.5	946.93 µg/L	946.93 ppb	09:30:52
3	Ti 334.940†	2123228.3	2302787.8	5099.3 µg/L	5099.3 ppb	09:30:26
3	Tl 190.801†	675.1	753.8	1178.7 µg/L	1178.7 ppb	09:30:52
3	U 409.014†	401.1	-244.1	-55.016 µg/L	-55.016 ppb	09:30:32
3	V 292.402†	94061.3	102139.8	1169.7 µg/L	1169.7 ppb	09:30:32
3	Zn 213.857†	187590.8	202968.5	5408.5 µg/L	5408.5 ppb	09:30:32

Mean Data: 1201997317|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1889477.7	91.867	%	0.5629				0.61%
Sc RADIAL	106940.0	95.1	%	0.15				0.16%
Y 371.029	1160641.2	92.676	%	0.5600				0.60%
Ag 328.068†	30690.0	296.47	µg/L	1.619	296.47	ppb	1.619	0.55%
Al 396.153Radial†	170290.9	86043	µg/L	579.1	86043	ppb	579.1	0.67%
As 188.979†	543.0	1007.6	µg/L	12.07	1007.6	ppb	12.07	1.20%
B 249.677†	32481.8	1384.0	µg/L	11.83	1384.0	ppb	11.83	0.85%
Ba 233.527†	74239.9	1867.1	µg/L	13.96	1867.1	ppb	13.96	0.75%
Be 313.107†	1172353.9	739.72	µg/L	1.404	739.72	ppb	1.404	0.19%
Ca 317.933Radial†	226658.3	89973	µg/L	497.6	89973	ppb	497.6	0.55%
Cd 226.502†	21341.3	551.12	µg/L	3.630	551.12	ppb	3.630	0.66%
Co 228.616†	18389.3	874.78	µg/L	7.848	874.78	ppb	7.848	0.90%
Cr 267.716†	105466.5	2198.1	µg/L	16.70	2198.1	ppb	16.70	0.76%
Cu 324.752†	249531.3	1795.0	µg/L	12.15	1795.0	ppb	12.15	0.68%
Fe 238.204 Radial†	34893.5	183320	µg/L	559.4	183320	ppb	559.4	0.31%
K 766.490 Radial†	72271.6	39185	µg/L	285.1	39185	ppb	285.1	0.73%
Mg 279.077 IEC†	6476.1	35662	µg/L	245.7	35662	ppb	245.7	0.69%
Mn 257.610†	1649712.9	5258.5	µg/L	6.33	5258.5	ppb	6.33	0.12%
Mo 202.031†	4311.9	488.24	µg/L	2.926	488.24	ppb	2.926	0.60%
Na 589.592 Radial†	33979.3	9428.0	µg/L	47.23	9428.0	ppb	47.23	0.50%

Ni 231.604†	23319.8	1270.4	µg/L	11.88	1270.4	ppb	11.88	0.94%
P 214.914†	3472.6	7158.9	µg/L	49.22	7158.9	ppb	49.22	0.69%
Pb 220.353†	3701.8	942.62	µg/L	4.671	942.62	ppb	4.671	0.50%
S 181.975 Axial†	745.9	3800.0	µg/L	11.47	3800.0	ppb	11.47	0.30%
Sb 206.836†	1572.2	1559.3	µg/L	8.67	1559.3	ppb	8.67	0.56%
Se 196.026†	1676.0	2567.4	µg/L	13.44	2567.4	ppb	13.44	0.52%
SiO2†	116443.5	22237	µg/L	118.5	22237	ppb	118.5	0.53%
Si 251.611†	135592.2	10143	µg/L	54.8	10143	ppb	54.8	0.54%
Sn 189.927†	1850.7	950.81	µg/L	6.557	950.81	ppb	6.557	0.69%
Sr 421.552†	390925.5	2202.1	µg/L	14.00	2202.1	ppb	14.00	0.64%
Ti 334.940†	2302398.5	5098.5	µg/L	6.56	5098.5	ppb	6.56	0.13%
Tl 190.801†	758.0	1185.1	µg/L	6.05	1185.1	ppb	6.05	0.51%
U 409.014†	-207.8	-51.607	µg/L	2.9703	-51.607	ppb	2.9703	5.76%
V 292.402†	102345.9	1172.1	µg/L	7.91	1172.1	ppb	7.91	0.68%
Zn 213.857†	203221.7	5415.3	µg/L	37.28	5415.3	ppb	37.28	0.69%

Sequence No.: 3
Sample ID: 241825001|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 303
Date Collected: 12/18/2009 09:31:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825001|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105562.9	105562.9	93.9	%			09:31:34
1	Al 396.153Radial†	11915.3	12466.2	6299.0	µg/L	6299.0	ppb	09:31:34
1	Ca 317.933Radial†	3759.2	3510.0	1393.3	µg/L	1393.3	ppb	09:31:54
1	Fe 238.204 Radial†	14456.9	15393.0	80859	µg/L	80859	ppb	09:31:54
1	K 766.490 Radial†	3334.5	2858.1	1549.7	µg/L	1549.7	ppb	09:31:34
1	Mg 279.077 IEC†	267.6	265.3	1353.1	µg/L	1353.1	ppb	09:31:54
1	Na 589.592 Radial†	2645.1	3522.3	977.31	µg/L	977.31	ppb	09:31:34
1	Sr 421.552†	3097.7	3364.4	18.952	µg/L	18.952	ppb	09:31:34
1	Sc 361.383	1933487.7	1933487.7	94.007	%			09:32:57
1	Y 371.029	1232813.6	1232813.6	98.439	%			09:32:57
1	Ag 328.068†	-930.0	-961.0	-2.1187	µg/L	-2.1187	ppb	09:33:02
1	As 188.979†	10.2	8.4	7.4112	µg/L	7.4112	ppb	09:33:23
1	B 249.677†	1065.1	977.3	17.948	µg/L	17.948	ppb	09:33:02
1	Ba 233.527†	2015.8	2225.0	55.911	µg/L	55.911	ppb	09:33:23
1	Be 313.107†	8648.3	5588.1	3.0660	µg/L	3.0660	ppb	09:33:02
1	Cd 226.502†	127.8	236.9	-0.0270	µg/L	-0.0270	ppb	09:33:02
1	Co 228.616†	-3.1	68.4	0.7145	µg/L	0.7145	ppb	09:33:23
1	Cr 267.716†	217.4	354.0	7.3979	µg/L	7.3979	ppb	09:33:02
1	Cu 324.752†	1504.3	-1784.1	4.8162	µg/L	4.8162	ppb	09:33:02
1	Mn 257.610†	184436.4	196416.5	633.50	µg/L	633.50	ppb	09:32:57
1	Mo 202.031†	243.3	266.8	32.937	µg/L	32.937	ppb	09:33:23
1	Ni 231.604†	328.2	49.7	2.7090	µg/L	2.7090	ppb	09:33:23
1	P 214.914†	378.5	196.7	335.43	µg/L	335.43	ppb	09:33:23
1	Pb 220.353†	171.5	128.3	32.193	µg/L	32.193	ppb	09:33:23
1	S 181.975 Axial†	60.2	40.0	193.22	µg/L	193.22	ppb	09:33:23
1	Sb 206.836†	12.6	-7.1	-2.5443	µg/L	-2.5443	ppb	09:33:23
1	Se 196.026†	-15.1	-30.2	12.276	µg/L	12.276	ppb	09:33:23
1	SiO2†	51926.3	53254.9	10170	µg/L	10170	ppb	09:33:02
1	Si 251.611†	58527.3	61908.7	4695.0	µg/L	4695.0	ppb	09:33:02
1	Sn 189.927†	7.8	-14.2	3.1679	µg/L	3.1679	ppb	09:33:23
1	Ti 334.940†	537868.8	571438.1	1266.6	µg/L	1266.6	ppb	09:32:57
1	Tl 190.801†	-29.2	-9.6	-3.0357	µg/L	-3.0357	ppb	09:33:23
1	U 409.014†	310.3	-349.2	-47.855	µg/L	-47.855	ppb	09:32:57
1	V 292.402†	939.8	1091.7	19.058	µg/L	19.058	ppb	09:33:02
1	Zn 213.857†	5453.6	5251.1	132.05	µg/L	132.05	ppb	09:33:02
2	Sc RADIAL	105323.1	105323.1	93.6	%			09:31:59
2	Al 396.153Radial†	11917.9	12497.9	6315.0	µg/L	6315.0	ppb	09:31:59
2	Ca 317.933Radial†	3719.4	3476.7	1380.1	µg/L	1380.1	ppb	09:32:20
2	Fe 238.204 Radial†	14395.3	15362.3	80698	µg/L	80698	ppb	09:32:20
2	K 766.490 Radial†	3278.0	2805.9	1521.3	µg/L	1521.3	ppb	09:31:59
2	Mg 279.077 IEC†	271.7	270.3	1381.0	µg/L	1381.0	ppb	09:32:20
2	Na 589.592 Radial†	2743.8	3634.2	1008.3	µg/L	1008.3	ppb	09:31:59
2	Sr 421.552†	3042.9	3313.4	18.664	µg/L	18.664	ppb	09:31:59
2	Sc 361.383	1912638.8	1912638.8	92.994	%			09:33:29
2	Y 371.029	1219421.0	1219421.0	97.370	%			09:33:29
2	Ag 328.068†	-899.1	-938.5	-1.9316	µg/L	-1.9316	ppb	09:33:35
2	As 188.979†	11.1	9.4	9.4098	µg/L	9.4098	ppb	09:33:55
2	B 249.677†	1074.9	1000.2	19.017	µg/L	19.017	ppb	09:33:35
2	Ba 233.527†	2004.0	2235.6	56.178	µg/L	56.178	ppb	09:33:55
2	Be 313.107†	8507.4	5536.9	3.0318	µg/L	3.0318	ppb	09:33:35
2	Cd 226.502†	101.5	210.1	-0.7176	µg/L	-0.7176	ppb	09:33:35
2	Co 228.616†	-2.9	68.6	0.7119	µg/L	0.7119	ppb	09:33:55
2	Cr 267.716†	140.6	273.9	5.7305	µg/L	5.7305	ppb	09:33:35
2	Cu 324.752†	1545.9	-1722.0	5.2189	µg/L	5.2189	ppb	09:33:35
2	Mn 257.610†	182883.6	196885.4	634.97	µg/L	634.97	ppb	09:33:29
2	Mo 202.031†	238.5	264.3	32.660	µg/L	32.660	ppb	09:33:55
2	Ni 231.604†	329.0	54.3	2.9607	µg/L	2.9607	ppb	09:33:55
2	P 214.914†	392.3	215.8	377.26	µg/L	377.26	ppb	09:33:55
2	Pb 220.353†	165.8	124.2	31.141	µg/L	31.141	ppb	09:33:55

2	S 181.975 Axial†	61.7	42.3	205.27 µg/L	205.27 ppb	09:33:55
2	Sb 206.836†	16.9	-2.4	2.1462 µg/L	2.1462 ppb	09:33:55
2	Se 196.026†	-16.6	-31.9	9.6482 µg/L	9.6482 ppb	09:33:55
2	SiO2†	50663.4	52498.9	10025 µg/L	10025 ppb	09:33:35
2	Si 251.611†	57221.5	61183.1	4639.2 µg/L	4639.2 ppb	09:33:35
2	Sn 189.927†	11.9	-9.7	5.3436 µg/L	5.3436 ppb	09:33:55
2	Ti 334.940†	534027.2	573543.9	1271.2 µg/L	1271.2 ppb	09:33:29
2	Tl 190.801†	-30.5	-11.4	-5.6942 µg/L	-5.6942 ppb	09:33:55
2	U 409.014†	376.7	-274.1	-40.779 µg/L	-40.779 ppb	09:33:29
2	V 292.402†	921.5	1082.9	18.955 µg/L	18.955 ppb	09:33:35
2	Zn 213.857†	5412.4	5270.1	132.57 µg/L	132.57 ppb	09:33:35
3	Sc RADIAL	105372.4	105372.4	93.7 %		09:32:25
3	Al 396.153Radial†	11869.7	12440.5	6286.0 µg/L	6286.0 ppb	09:32:25
3	Ca 317.933Radial†	3722.0	3477.6	1380.5 µg/L	1380.5 ppb	09:32:46
3	Fe 238.204 Radial†	14392.5	15352.1	80644 µg/L	80644 ppb	09:32:46
3	K 766.490 Radial†	3232.8	2756.0	1494.3 µg/L	1494.3 ppb	09:32:25
3	Mg 279.077 IEC†	270.4	268.8	1372.7 µg/L	1372.7 ppb	09:32:46
3	Na 589.592 Radial†	2660.5	3543.9	983.30 µg/L	983.30 ppb	09:32:25
3	Sr 421.552†	2995.0	3260.8	18.368 µg/L	18.368 ppb	09:32:25
3	Sc 361.383	1935032.7	1935032.7	94.082 %		09:34:02
3	Y 371.029	1233768.4	1233768.4	98.516 %		09:34:02
3	Ag 328.068†	-912.5	-941.5	-1.9605 µg/L	-1.9605 ppb	09:34:07
3	As 188.979†	7.3	5.3	1.4966 µg/L	1.4966 ppb	09:34:27
3	B 249.677†	1036.7	946.2	16.637 µg/L	16.637 ppb	09:34:07
3	Ba 233.527†	2016.1	2223.6	55.877 µg/L	55.877 ppb	09:34:27
3	Be 313.107†	8457.3	5377.7	2.9326 µg/L	2.9326 ppb	09:34:07
3	Cd 226.502†	139.9	249.6	0.3271 µg/L	0.3271 ppb	09:34:07
3	Co 228.616†	-3.8	67.7	0.6790 µg/L	0.6790 ppb	09:34:27
3	Cr 267.716†	168.0	301.3	6.3010 µg/L	6.3010 ppb	09:34:07
3	Cu 324.752†	1528.9	-1759.2	4.9454 µg/L	4.9454 ppb	09:34:07
3	Mn 257.610†	184485.6	196312.1	633.14 µg/L	633.14 ppb	09:34:02
3	Mo 202.031†	246.6	270.0	33.294 µg/L	33.294 ppb	09:34:27
3	Ni 231.604†	320.3	41.1	2.2379 µg/L	2.2379 ppb	09:34:27
3	P 214.914†	390.2	208.7	361.82 µg/L	361.82 ppb	09:34:27
3	Pb 220.353†	164.8	121.0	30.355 µg/L	30.355 ppb	09:34:27
3	S 181.975 Axial†	63.5	43.5	211.22 µg/L	211.22 ppb	09:34:27
3	Sb 206.836†	9.0	-11.0	-6.4034 µg/L	-6.4034 ppb	09:34:27
3	Se 196.026†	-26.4	-42.1	-5.3042 µg/L	-5.3042 ppb	09:34:27
3	SiO2†	50532.3	51729.0	9878.4 µg/L	9878.4 ppb	09:34:07
3	Si 251.611†	56901.7	60131.1	4558.9 µg/L	4558.9 ppb	09:34:07
3	Sn 189.927†	7.4	-14.6	2.9478 µg/L	2.9478 ppb	09:34:27
3	Ti 334.940†	538652.2	571813.9	1267.4 µg/L	1267.4 ppb	09:34:02
3	Tl 190.801†	-30.6	-11.1	-5.2358 µg/L	-5.2358 ppb	09:34:27
3	U 409.014†	347.6	-309.7	-44.109 µg/L	-44.109 ppb	09:34:02
3	V 292.402†	958.7	1110.9	19.266 µg/L	19.266 ppb	09:34:07
3	Zn 213.857†	5348.4	5134.6	128.95 µg/L	128.95 ppb	09:34:07

Mean Data: 241825001|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1927053.1	93.694	%	0.6081				0.65%
Sc RADIAL	105419.5	93.7	%	0.11				0.12%
Y 371.029	1228667.7	98.108	%	0.6406				0.65%
Ag 328.068†	-947.0	-2.0036	µg/L	0.10073	-2.0036	ppb	0.10073	5.03%
Al 396.153Radial†	12468.2	6300.0	µg/L	14.55	6300.0	ppb	14.55	0.23%
As 188.979†	7.7	6.1059	µg/L	4.11491	6.1059	ppb	4.11491	67.39%
B 249.677†	974.6	17.867	µg/L	1.1921	17.867	ppb	1.1921	6.67%
Ba 233.527†	2228.1	55.988	µg/L	0.1651	55.988	ppb	0.1651	0.29%
Be 313.107†	5500.9	3.0101	µg/L	0.06931	3.0101	ppb	0.06931	2.30%
Ca 317.933Radial†	3488.1	1384.6	µg/L	7.53	1384.6	ppb	7.53	0.54%
Cd 226.502†	232.2	-0.1391	µg/L	0.53129	-0.1391	ppb	0.53129	381.84%
Co 228.616†	68.3	0.7018	µg/L	0.01982	0.7018	ppb	0.01982	2.82%
Cr 267.716†	309.7	6.4764	µg/L	0.84747	6.4764	ppb	0.84747	13.09%
Cu 324.752†	-1755.1	4.9935	µg/L	0.20560	4.9935	ppb	0.20560	4.12%
Fe 238.204 Radial†	15369.1	80734	µg/L	112.0	80734	ppb	112.0	0.14%
K 766.490 Radial†	2806.7	1521.8	µg/L	27.69	1521.8	ppb	27.69	1.82%
Mg 279.077 IEC†	268.1	1368.9	µg/L	14.32	1368.9	ppb	14.32	1.05%
Mn 257.610†	196538.0	633.87	µg/L	0.968	633.87	ppb	0.968	0.15%
Mo 202.031†	267.0	32.964	µg/L	0.3181	32.964	ppb	0.3181	0.97%
Na 589.592 Radial†	3566.8	989.65	µg/L	16.465	989.65	ppb	16.465	1.66%

Ni 231.604†	48.4	2.6359	µg/L	0.36688	2.6359	ppb	0.36688	13.92%
P 214.914†	207.1	358.17	µg/L	21.151	358.17	ppb	21.151	5.91%
Pb 220.353†	124.5	31.230	µg/L	0.9221	31.230	ppb	0.9221	2.95%
S 181.975 Axial†	41.9	203.23	µg/L	9.172	203.23	ppb	9.172	4.51%
Sb 206.836†	-6.8	-2.2671	µg/L	4.28151	-2.2671	ppb	4.28151	188.85%
Se 196.026†	-34.7	5.5401	µg/L	9.48299	5.5401	ppb	9.48299	171.17%
SiO2†	52494.3	10025	µg/L	145.7	10025	ppb	145.7	1.45%
Si 251.611†	61074.3	4631.0	µg/L	68.44	4631.0	ppb	68.44	1.48%
Sn 189.927†	-12.8	3.8197	µg/L	1.32427	3.8197	ppb	1.32427	34.67%
Sr 421.552†	3312.9	18.661	µg/L	0.2919	18.661	ppb	0.2919	1.56%
Ti 334.940†	572265.3	1268.4	µg/L	2.49	1268.4	ppb	2.49	0.20%
Tl 190.801†	-10.7	-4.6552	µg/L	1.42112	-4.6552	ppb	1.42112	30.53%
U 409.014†	-311.0	-44.248	µg/L	3.5403	-44.248	ppb	3.5403	8.00%
V 292.402†	1095.2	19.093	µg/L	0.1584	19.093	ppb	0.1584	0.83%
Zn 213.857†	5218.6	131.19	µg/L	1.956	131.19	ppb	1.956	1.49%

Sequence No.: 4
Sample ID: 1201985637|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 304
Date Collected: 12/18/2009 09:34:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985637|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106273.8	106273.8	94.5	%			09:35:09
1	Al 396.153Radial†	9842.0	10187.0	5147.0	µg/L	5147.0	ppb	09:35:09
1	Ca 317.933Radial†	3212.9	2905.1	1153.2	µg/L	1153.2	ppb	09:35:29
1	Fe 238.204 Radial†	16079.0	17006.8	89337	µg/L	89337	ppb	09:35:09
1	K 766.490 Radial†	3113.4	2600.4	1409.9	µg/L	1409.9	ppb	09:35:09
1	Mg 279.077 IEC†	236.2	230.2	1145.7	µg/L	1145.7	ppb	09:35:29
1	Na 589.592 Radial†	2467.8	3315.9	920.03	µg/L	920.03	ppb	09:35:09
1	Sr 421.552†	2598.9	2814.5	15.854	µg/L	15.854	ppb	09:35:09
1	Sc 361.383	1928465.4	1928465.4	93.763	%			09:36:32
1	Y 371.029	1236684.1	1236684.1	98.748	%			09:36:32
1	Ag 328.068†	-1076.0	-1119.3	-2.8538	µg/L	-2.8538	ppb	09:36:37
1	As 188.979†	6.9	4.9	0.0292	µg/L	0.0292	ppb	09:36:58
1	B 249.677†	1138.2	1058.3	18.877	µg/L	18.877	ppb	09:36:37
1	Ba 233.527†	1892.0	2098.5	52.738	µg/L	52.738	ppb	09:36:58
1	Be 313.107†	8793.4	5766.8	3.1106	µg/L	3.1106	ppb	09:36:37
1	Cd 226.502†	154.9	266.1	0.0831	µg/L	0.0831	ppb	09:36:37
1	Co 228.616†	6.4	78.5	0.8198	µg/L	0.8198	ppb	09:36:58
1	Cr 267.716†	185.3	320.4	6.7020	µg/L	6.7020	ppb	09:36:37
1	Cu 324.752†	1262.3	-2038.1	4.8507	µg/L	4.8507	ppb	09:36:37
1	Mn 257.610†	202184.3	215856.0	696.26	µg/L	696.26	ppb	09:36:32
1	Mo 202.031†	265.0	290.6	35.927	µg/L	35.927	ppb	09:36:58
1	Ni 231.604†	322.7	44.8	2.4416	µg/L	2.4416	ppb	09:36:58
1	P 214.914†	401.6	222.3	380.90	µg/L	380.90	ppb	09:36:58
1	Pb 220.353†	178.9	136.7	34.142	µg/L	34.142	ppb	09:36:58
1	S 181.975 Axial†	59.3	39.2	188.06	µg/L	188.06	ppb	09:36:58
1	Sb 206.836†	24.0	5.0	10.180	µg/L	10.180	ppb	09:36:58
1	Se 196.026†	-28.9	-44.9	-3.1303	µg/L	-3.1303	ppb	09:36:58
1	SiO2†	46599.0	47717.0	9112.2	µg/L	9112.2	ppb	09:36:37
1	Si 251.611†	52414.1	55551.0	4201.4	µg/L	4201.4	ppb	09:36:37
1	Sn 189.927†	9.4	-12.5	4.8977	µg/L	4.8977	ppb	09:36:58
1	Ti 334.940†	614608.5	654772.5	1451.3	µg/L	1451.3	ppb	09:36:32
1	Tl 190.801†	-27.1	-7.5	1.8321	µg/L	1.8321	ppb	09:36:58
1	U 409.014†	222.2	-442.2	-58.178	µg/L	-58.178	ppb	09:36:32
1	V 292.402†	1056.6	1218.8	21.187	µg/L	21.187	ppb	09:36:37
1	Zn 213.857†	5845.1	5683.8	142.75	µg/L	142.75	ppb	09:36:37
2	Sc RADIAL	106442.5	106442.5	94.6	%			09:35:35
2	Al 396.153Radial†	10053.5	10393.9	5251.6	µg/L	5251.6	ppb	09:35:35
2	Ca 317.933Radial†	3204.9	2891.2	1147.7	µg/L	1147.7	ppb	09:35:55
2	Fe 238.204 Radial†	16359.2	17276.0	90750	µg/L	90750	ppb	09:35:35
2	K 766.490 Radial†	3170.0	2655.0	1439.5	µg/L	1439.5	ppb	09:35:35
2	Mg 279.077 IEC†	237.2	230.9	1147.5	µg/L	1147.5	ppb	09:35:55
2	Na 589.592 Radial†	2539.4	3387.3	939.86	µg/L	939.86	ppb	09:35:35
2	Sr 421.552†	2632.4	2845.5	16.029	µg/L	16.029	ppb	09:35:35
2	Sc 361.383	1918485.8	1918485.8	93.278	%			09:37:04
2	Y 371.029	1230655.5	1230655.5	98.267	%			09:37:04
2	Ag 328.068†	-1035.0	-1081.3	-2.4068	µg/L	-2.4068	ppb	09:37:09
2	As 188.979†	13.3	11.7	12.881	µg/L	12.881	ppb	09:37:30
2	B 249.677†	1149.1	1076.3	19.231	µg/L	19.231	ppb	09:37:09
2	Ba 233.527†	1894.3	2111.4	53.061	µg/L	53.061	ppb	09:37:30
2	Be 313.107†	8755.0	5774.4	3.1157	µg/L	3.1157	ppb	09:37:09
2	Cd 226.502†	155.6	267.7	0.0157	µg/L	0.0157	ppb	09:37:09
2	Co 228.616†	6.0	78.1	0.8037	µg/L	0.8037	ppb	09:37:30
2	Cr 267.716†	175.4	310.8	6.5011	µg/L	6.5011	ppb	09:37:09
2	Cu 324.752†	1246.4	-2048.1	5.0836	µg/L	5.0836	ppb	09:37:09
2	Mn 257.610†	200731.8	215420.4	695.05	µg/L	695.05	ppb	09:37:04
2	Mo 202.031†	268.8	296.1	36.601	µg/L	36.601	ppb	09:37:30
2	Ni 231.604†	321.6	45.4	2.4731	µg/L	2.4731	ppb	09:37:30
2	P 214.914†	405.9	229.1	394.20	µg/L	394.20	ppb	09:37:30
2	Pb 220.353†	181.0	139.9	34.942	µg/L	34.942	ppb	09:37:30

2	S 181.975 Axial†	58.2	38.4	183.56 µg/L	183.56 ppb	09:37:30
2	Sb 206.836†	20.9	1.9	7.0803 µg/L	7.0803 ppb	09:37:30
2	Se 196.026†	-29.9	-46.2	-4.0240 µg/L	-4.0240 ppb	09:37:30
2	SiO2†	46564.6	47938.7	9154.6 µg/L	9154.6 ppb	09:37:09
2	Si 251.611†	52354.8	55778.2	4218.7 µg/L	4218.7 ppb	09:37:09
2	Sn 189.927†	14.5	-6.9	7.7579 µg/L	7.7579 ppb	09:37:30
2	Ti 334.940†	611158.2	654483.3	1450.7 µg/L	1450.7 ppb	09:37:04
2	Tl 190.801†	-35.3	-16.4	-11.636 µg/L	-11.636 ppb	09:37:30
2	U 409.014†	225.6	-437.3	-57.985 µg/L	-57.985 ppb	09:37:04
2	V 292.402†	1001.3	1165.4	20.705 µg/L	20.705 ppb	09:37:09
2	Zn 213.857†	5776.7	5642.9	141.50 µg/L	141.50 ppb	09:37:09
3	Sc RADIAL	105664.4	105664.4	93.9 %		09:36:00
3	Al 396.153Radial†	9994.1	10409.0	5259.1 µg/L	5259.1 ppb	09:36:00
3	Ca 317.933Radial†	3181.7	2891.5	1147.8 µg/L	1147.8 ppb	09:36:21
3	Fe 238.204 Radial†	16244.0	17280.6	90774 µg/L	90774 ppb	09:36:00
3	K 766.490 Radial†	3099.8	2604.9	1412.4 µg/L	1412.4 ppb	09:36:00
3	Mg 279.077 IEC†	228.7	223.6	1107.0 µg/L	1107.0 ppb	09:36:21
3	Na 589.592 Radial†	2511.2	3377.2	937.03 µg/L	937.03 ppb	09:36:00
3	Sr 421.552†	2623.2	2856.2	16.089 µg/L	16.089 ppb	09:36:00
3	Sc 361.383	1914933.0	1914933.0	93.105 %		09:37:36
3	Y 371.029	1227764.9	1227764.9	98.036 %		09:37:36
3	Ag 328.068†	-1070.4	-1121.3	-2.7617 µg/L	-2.7617 ppb	09:37:41
3	As 188.979†	2.9	0.7	-8.2700 µg/L	-8.2700 ppb	09:38:02
3	B 249.677†	1123.7	1051.2	18.110 µg/L	18.110 ppb	09:37:41
3	Ba 233.527†	1884.6	2104.9	52.896 µg/L	52.896 ppb	09:38:02
3	Be 313.107†	8847.8	5891.5	3.1906 µg/L	3.1906 ppb	09:37:41
3	Cd 226.502†	147.9	259.7	-0.2013 µg/L	-0.2013 ppb	09:37:41
3	Co 228.616†	4.1	76.1	0.7116 µg/L	0.7116 ppb	09:38:02
3	Cr 267.716†	171.8	307.3	6.4285 µg/L	6.4285 ppb	09:37:41
3	Cu 324.752†	1234.4	-2058.5	5.0156 µg/L	5.0156 ppb	09:37:41
3	Mn 257.610†	200147.7	215192.3	694.33 µg/L	694.33 ppb	09:37:36
3	Mo 202.031†	275.9	304.2	37.509 µg/L	37.509 ppb	09:38:02
3	Ni 231.604†	309.3	32.8	1.7892 µg/L	1.7892 ppb	09:38:02
3	P 214.914†	404.6	228.6	392.89 µg/L	392.89 ppb	09:38:02
3	Pb 220.353†	172.3	130.9	32.676 µg/L	32.676 ppb	09:38:02
3	S 181.975 Axial†	55.5	35.6	169.20 µg/L	169.20 ppb	09:38:02
3	Sb 206.836†	19.4	0.3	5.4615 µg/L	5.4615 ppb	09:38:02
3	Se 196.026†	-26.7	-42.8	0.9861 µg/L	0.9861 ppb	09:38:02
3	SiO2†	47105.3	48612.0	9283.1 µg/L	9283.1 ppb	09:37:41
3	Si 251.611†	52963.0	56535.6	4276.9 µg/L	4276.9 ppb	09:37:41
3	Sn 189.927†	11.3	-10.4	6.0923 µg/L	6.0923 ppb	09:38:02
3	Ti 334.940†	609057.1	653442.2	1448.4 µg/L	1448.4 ppb	09:37:36
3	Tl 190.801†	-39.0	-20.4	-17.790 µg/L	-17.790 ppb	09:38:02
3	U 409.014†	185.9	-479.6	-61.959 µg/L	-61.959 ppb	09:37:36
3	V 292.402†	1011.9	1178.8	20.858 µg/L	20.858 ppb	09:37:41
3	Zn 213.857†	5853.3	5736.6	144.01 µg/L	144.01 ppb	09:37:41

Mean Data: 1201985637|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1920628.1	93.382	%	0.3411				0.37%
Sc RADIAL	106126.9	94.4	%	0.36				0.39%
Y 371.029	1231701.5	98.351	%	0.3634				0.37%
Ag 328.068†	-1107.3	-2.6741	µg/L	0.23602	-2.6741	ppb	0.23602	8.83%
Al 396.153Radial†	10329.9	5219.2	µg/L	62.67	5219.2	ppb	62.67	1.20%
As 188.979†	5.8	1.5469	µg/L	10.65710	1.5469	ppb	10.65710	688.93%
B 249.677†	1061.9	18.739	µg/L	0.5728	18.739	ppb	0.5728	3.06%
Ba 233.527†	2105.0	52.898	µg/L	0.1614	52.898	ppb	0.1614	0.31%
Be 313.107†	5810.9	3.1390	µg/L	0.04480	3.1390	ppb	0.04480	1.43%
Ca 317.933Radial†	2895.9	1149.5	µg/L	3.16	1149.5	ppb	3.16	0.27%
Cd 226.502†	264.5	-0.0342	µg/L	0.14860	-0.0342	ppb	0.14860	434.69%
Co 228.616†	77.6	0.7784	µg/L	0.05839	0.7784	ppb	0.05839	7.50%
Cr 267.716†	312.9	6.5438	µg/L	0.14168	6.5438	ppb	0.14168	2.17%
Cu 324.752†	-2048.2	4.9833	µg/L	0.11978	4.9833	ppb	0.11978	2.40%
Fe 238.204 Radial†	17187.8	90287	µg/L	823.3	90287	ppb	823.3	0.91%
K 766.490 Radial†	2620.1	1420.6	µg/L	16.43	1420.6	ppb	16.43	1.16%
Mg 279.077 IEC†	228.2	1133.4	µg/L	22.85	1133.4	ppb	22.85	2.02%
Mn 257.610†	215489.6	695.22	µg/L	0.973	695.22	ppb	0.973	0.14%
Mo 202.031†	297.0	36.679	µg/L	0.7934	36.679	ppb	0.7934	2.16%
Na 589.592 Radial†	3360.1	932.31	µg/L	10.722	932.31	ppb	10.722	1.15%

Ni 231.604†	41.0	2.2346	µg/L	0.38612	2.2346	ppb	0.38612	17.28%
P 214.914†	226.7	389.33	µg/L	7.327	389.33	ppb	7.327	1.88%
Pb 220.353†	135.9	33.920	µg/L	1.1491	33.920	ppb	1.1491	3.39%
S 181.975 Axial†	37.7	180.27	µg/L	9.851	180.27	ppb	9.851	5.46%
Sb 206.836†	2.4	7.5739	µg/L	2.39753	7.5739	ppb	2.39753	31.66%
Se 196.026†	-44.6	-2.0561	µg/L	2.67222	-2.0561	ppb	2.67222	129.97%
SiO2†	48089.2	9183.3	µg/L	89.01	9183.3	ppb	89.01	0.97%
Si 251.611†	55954.9	4232.3	µg/L	39.52	4232.3	ppb	39.52	0.93%
Sn 189.927†	-9.9	6.2493	µg/L	1.43653	6.2493	ppb	1.43653	22.99%
Sr 421.552†	2838.7	15.990	µg/L	0.1220	15.990	ppb	0.1220	0.76%
Ti 334.940†	654232.6	1450.1	µg/L	1.55	1450.1	ppb	1.55	0.11%
Tl 190.801†	-14.8	-9.1980	µg/L	10.03572	-9.1980	ppb	10.03572	109.11%
U 409.014†	-453.0	-59.374	µg/L	2.2406	-59.374	ppb	2.2406	3.77%
V 292.402†	1187.7	20.917	µg/L	0.2463	20.917	ppb	0.2463	1.18%
Zn 213.857†	5687.8	142.75	µg/L	1.257	142.75	ppb	1.257	0.88%

Sequence No.: 5
Sample ID: 1201985638|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 305
Date Collected: 12/18/2009 09:38:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985638|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107884.4	107884.4	95.9	%			09:38:44
1	Al 396.153Radial†	28894.7	29895.7	15089	µg/L	15089	ppb	09:38:44
1	Ca 317.933Radial†	15636.1	15806.8	6274.6	µg/L	6274.6	ppb	09:39:04
1	Fe 238.204 Radial†	18030.6	18787.5	98706	µg/L	98706	ppb	09:39:04
1	K 766.490 Radial†	12805.5	12656.2	6862.1	µg/L	6862.1	ppb	09:38:44
1	Mg 279.077 IEC†	1241.9	1275.0	6939.2	µg/L	6939.2	ppb	09:39:04
1	Na 589.592 Radial†	20583.5	22164.3	6149.8	µg/L	6149.8	ppb	09:38:44
1	Sr 421.552†	87271.0	91052.4	512.89	µg/L	512.89	ppb	09:38:44
1	Sc 361.383	1919916.3	1919916.3	93.347	%			09:40:10
1	Y 371.029	1264530.9	1264530.9	100.97	%			09:40:10
1	Ag 328.068†	51077.6	54746.1	500.20	µg/L	500.20	ppb	09:40:15
1	As 188.979†	240.2	254.8	475.01	µg/L	475.01	ppb	09:40:36
1	B 249.677†	11376.2	12031.3	502.95	µg/L	502.95	ppb	09:40:15
1	Ba 233.527†	21316.0	22915.8	576.64	µg/L	576.64	ppb	09:40:15
1	Be 313.107†	730061.9	778480.1	491.69	µg/L	491.69	ppb	09:40:10
1	Cd 226.502†	17270.9	18602.7	484.82	µg/L	484.82	ppb	09:40:15
1	Co 228.616†	9377.7	10117.8	483.42	µg/L	483.42	ppb	09:40:15
1	Cr 267.716†	22270.4	23980.4	500.36	µg/L	500.36	ppb	09:40:15
1	Cu 324.752†	70803.1	72464.8	531.03	µg/L	531.03	ppb	09:40:15
1	Mn 257.610†	362721.1	388794.0	1246.3	µg/L	1246.3	ppb	09:40:10
1	Mo 202.031†	4257.0	4568.3	513.52	µg/L	513.52	ppb	09:40:36
1	Ni 231.604†	8786.8	9113.6	496.49	µg/L	496.49	ppb	09:40:15
1	P 214.914†	678.6	520.9	968.33	µg/L	968.33	ppb	09:40:36
1	Pb 220.353†	2065.5	2158.6	547.65	µg/L	547.65	ppb	09:40:36
1	S 181.975 Axial†	964.6	1009.3	5169.8	µg/L	5169.8	ppb	09:40:36
1	Sb 206.836†	451.8	463.4	464.12	µg/L	464.12	ppb	09:40:36
1	Se 196.026†	264.4	269.2	459.20	µg/L	459.20	ppb	09:40:36
1	SiO2†	90650.9	95129.7	18166	µg/L	18166	ppb	09:40:15
1	Si 251.611†	103875.8	110929.1	8391.1	µg/L	8391.1	ppb	09:40:15
1	Sn 189.927†	961.6	1007.6	505.63	µg/L	505.63	ppb	09:40:36
1	Ti 334.940†	872157.5	933595.2	2069.1	µg/L	2069.1	ppb	09:40:10
1	Tl 190.801†	267.1	307.6	480.84	µg/L	480.84	ppb	09:40:36
1	U 409.014†	5491.7	5203.9	470.42	µg/L	470.42	ppb	09:40:10
1	V 292.402†	41783.3	44853.1	518.04	µg/L	518.04	ppb	09:40:15
1	Zn 213.857†	23292.1	24401.9	639.78	µg/L	639.78	ppb	09:40:15
2	Sc RADIAL	106975.7	106975.7	95.1	%			09:39:10
2	Al 396.153Radial†	28973.2	30234.2	15260	µg/L	15260	ppb	09:39:10
2	Ca 317.933Radial†	15506.1	15808.5	6275.2	µg/L	6275.2	ppb	09:39:31
2	Fe 238.204 Radial†	17935.8	18847.5	99021	µg/L	99021	ppb	09:39:31
2	K 766.490 Radial†	12636.9	12592.3	6827.5	µg/L	6827.5	ppb	09:39:10
2	Mg 279.077 IEC†	1237.1	1280.9	6971.5	µg/L	6971.5	ppb	09:39:31
2	Na 589.592 Radial†	20503.5	22262.4	6177.0	µg/L	6177.0	ppb	09:39:10
2	Sr 421.552†	87182.5	91732.2	516.72	µg/L	516.72	ppb	09:39:10
2	Sc 361.383	1930860.1	1930860.1	93.879	%			09:40:43
2	Y 371.029	1272055.8	1272055.8	101.57	%			09:40:43
2	Ag 328.068†	50733.5	54069.4	494.15	µg/L	494.15	ppb	09:40:49
2	As 188.979†	238.2	251.3	468.31	µg/L	468.31	ppb	09:41:09
2	B 249.677†	11347.1	11931.2	498.41	µg/L	498.41	ppb	09:40:49
2	Ba 233.527†	21254.7	22721.1	571.74	µg/L	571.74	ppb	09:40:49
2	Be 313.107†	734367.9	778634.1	491.78	µg/L	491.78	ppb	09:40:43
2	Cd 226.502†	17185.5	18406.8	479.62	µg/L	479.62	ppb	09:40:49
2	Co 228.616†	9360.9	10042.9	479.81	µg/L	479.81	ppb	09:40:49
2	Cr 267.716†	22132.3	23698.0	494.47	µg/L	494.47	ppb	09:40:49
2	Cu 324.752†	70101.1	71287.1	522.81	µg/L	522.81	ppb	09:40:49
2	Mn 257.610†	364815.7	388822.8	1246.4	µg/L	1246.4	ppb	09:40:43
2	Mo 202.031†	4244.1	4528.7	509.12	µg/L	509.12	ppb	09:41:09
2	Ni 231.604†	8731.9	9001.8	490.40	µg/L	490.40	ppb	09:40:49
2	P 214.914†	679.9	518.2	962.94	µg/L	962.94	ppb	09:41:09
2	Pb 220.353†	2048.3	2127.7	539.85	µg/L	539.85	ppb	09:41:09

2	S 181.975 Axial†	952.9	991.0	5076.0 µg/L	5076.0 ppb	09:41:09
2	Sb 206.836†	453.9	462.9	463.66 µg/L	463.66 ppb	09:41:09
2	Se 196.026†	265.0	268.2	457.96 µg/L	457.96 ppb	09:41:09
2	SiO2†	90103.6	93996.3	17950 µg/L	17950 ppb	09:40:49
2	Si 251.611†	103232.9	109613.6	8290.9 µg/L	8290.9 ppb	09:40:49
2	Sn 189.927†	944.7	983.8	494.07 µg/L	494.07 ppb	09:41:09
2	Ti 334.940†	877157.7	933625.8	2069.1 µg/L	2069.1 ppb	09:40:43
2	Tl 190.801†	270.3	309.3	483.48 µg/L	483.48 ppb	09:41:09
2	U 409.014†	5540.1	5222.1	472.08 µg/L	472.08 ppb	09:40:43
2	V 292.402†	41609.7	44414.5	513.10 µg/L	513.10 ppb	09:40:49
2	Zn 213.857†	23164.7	24124.8	632.37 µg/L	632.37 ppb	09:40:49
3	Sc RADIAL	106458.8	106458.8	94.6 %		09:39:36
3	Al 396.153Radial†	28925.6	30331.8	15310 µg/L	15310 ppb	09:39:36
3	Ca 317.933Radial†	15496.7	15877.8	6302.7 µg/L	6302.7 ppb	09:39:56
3	Fe 238.204 Radial†	17892.6	18893.4	99262 µg/L	99262 ppb	09:39:56
3	K 766.490 Radial†	12787.7	12816.1	6948.8 µg/L	6948.8 ppb	09:39:36
3	Mg 279.077 IEC†	1236.7	1286.8	7003.6 µg/L	7003.6 ppb	09:39:56
3	Na 589.592 Radial†	20507.7	22371.5	6207.3 µg/L	6207.3 ppb	09:39:36
3	Sr 421.552†	87164.8	92158.6	519.12 µg/L	519.12 ppb	09:39:36
3	Sc 361.383	1917010.5	1917010.5	93.206 %		09:41:17
3	Y 371.029	1262900.2	1262900.2	100.84 %		09:41:17
3	Ag 328.068†	50579.5	54294.6	496.19 µg/L	496.19 ppb	09:41:23
3	As 188.979†	235.7	250.4	466.53 µg/L	466.53 ppb	09:41:43
3	B 249.677†	11298.5	11966.3	499.90 µg/L	499.90 ppb	09:41:23
3	Ba 233.527†	21089.0	22706.9	571.38 µg/L	571.38 ppb	09:41:23
3	Be 313.107†	728498.5	777988.3	491.38 µg/L	491.38 ppb	09:41:17
3	Cd 226.502†	17044.7	18388.1	479.11 µg/L	479.11 ppb	09:41:23
3	Co 228.616†	9321.8	10073.0	481.26 µg/L	481.26 ppb	09:41:23
3	Cr 267.716†	21978.5	23703.3	494.59 µg/L	494.59 ppb	09:41:23
3	Cu 324.752†	69944.2	71658.3	525.47 µg/L	525.47 ppb	09:41:23
3	Mn 257.610†	362071.7	388686.3	1246.0 µg/L	1246.0 ppb	09:41:17
3	Mo 202.031†	4228.5	4544.6	510.90 µg/L	510.90 ppb	09:41:43
3	Ni 231.604†	8694.2	9028.5	491.86 µg/L	491.86 ppb	09:41:23
3	P 214.914†	665.3	507.8	939.83 µg/L	939.83 ppb	09:41:43
3	Pb 220.353†	2031.1	2125.1	539.17 µg/L	539.17 ppb	09:41:43
3	S 181.975 Axial†	960.5	1006.5	5155.3 µg/L	5155.3 ppb	09:41:43
3	Sb 206.836†	445.9	457.9	458.64 µg/L	458.64 ppb	09:41:43
3	Se 196.026†	269.6	275.1	468.20 µg/L	468.20 ppb	09:41:43
3	SiO2†	90070.5	94654.2	18076 µg/L	18076 ppb	09:41:23
3	Si 251.611†	103152.1	110321.4	8344.7 µg/L	8344.7 ppb	09:41:23
3	Sn 189.927†	952.3	999.2	501.61 µg/L	501.61 ppb	09:41:43
3	Ti 334.940†	871189.5	933972.9	2069.9 µg/L	2069.9 ppb	09:41:17
3	Tl 190.801†	265.2	306.0	478.41 µg/L	478.41 ppb	09:41:43
3	U 409.014†	5493.0	5214.1	471.28 µg/L	471.28 ppb	09:41:17
3	V 292.402†	41417.7	44528.7	514.41 µg/L	514.41 ppb	09:41:23
3	Zn 213.857†	23076.7	24208.6	634.58 µg/L	634.58 ppb	09:41:23

Mean Data: 1201985638|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1922595.6	93.478	%	0.3551				0.38%
Sc RADIAL	107106.3	95.2	%	0.64				0.67%
Y 371.029	1266495.6	101.13	%	0.390				0.39%
Ag 328.068†	54370.0	496.85	µg/L	3.079	496.85	ppb	3.079	0.62%
Al 396.153Radial†	30153.9	15220	µg/L	115.7	15220	ppb	115.7	0.76%
As 188.979†	252.2	469.95	µg/L	4.468	469.95	ppb	4.468	0.95%
B 249.677†	11976.3	500.42	µg/L	2.315	500.42	ppb	2.315	0.46%
Ba 233.527†	22781.3	573.25	µg/L	2.936	573.25	ppb	2.936	0.51%
Be 313.107†	778367.5	491.62	µg/L	0.214	491.62	ppb	0.214	0.04%
Ca 317.933Radial†	15831.0	6284.2	µg/L	16.08	6284.2	ppb	16.08	0.26%
Cd 226.502†	18465.9	481.18	µg/L	3.164	481.18	ppb	3.164	0.66%
Co 228.616†	10077.9	481.50	µg/L	1.817	481.50	ppb	1.817	0.38%
Cr 267.716†	23793.9	496.47	µg/L	3.368	496.47	ppb	3.368	0.68%
Cu 324.752†	71803.4	526.44	µg/L	4.193	526.44	ppb	4.193	0.80%
Fe 238.204 Radial†	18842.8	98997	µg/L	279.0	98997	ppb	279.0	0.28%
K 766.490 Radial†	12688.2	6879.5	µg/L	62.51	6879.5	ppb	62.51	0.91%
Mg 279.077 IEC†	1280.9	6971.4	µg/L	32.20	6971.4	ppb	32.20	0.46%
Mn 257.610†	388767.7	1246.2	µg/L	0.21	1246.2	ppb	0.21	0.02%
Mo 202.031†	4547.2	511.18	µg/L	2.214	511.18	ppb	2.214	0.43%
Na 589.592 Radial†	22266.1	6178.0	µg/L	28.76	6178.0	ppb	28.76	0.47%

Ni 231.604†	9048.0	492.92	µg/L	3.180	492.92	ppb	3.180	0.65%
P 214.914†	515.7	957.03	µg/L	15.141	957.03	ppb	15.141	1.58%
Pb 220.353†	2137.1	542.22	µg/L	4.712	542.22	ppb	4.712	0.87%
S 181.975 Axial†	1002.2	5133.7	µg/L	50.54	5133.7	ppb	50.54	0.98%
Sb 206.836†	461.4	462.14	µg/L	3.042	462.14	ppb	3.042	0.66%
Se 196.026†	270.8	461.79	µg/L	5.591	461.79	ppb	5.591	1.21%
SiO2†	94593.4	18064	µg/L	108.7	18064	ppb	108.7	0.60%
Si 251.611†	110288.0	8342.2	µg/L	50.16	8342.2	ppb	50.16	0.60%
Sn 189.927†	996.9	500.44	µg/L	5.869	500.44	ppb	5.869	1.17%
Sr 421.552†	91647.7	516.24	µg/L	3.143	516.24	ppb	3.143	0.61%
Ti 334.940†	933731.3	2069.4	µg/L	0.46	2069.4	ppb	0.46	0.02%
Tl 190.801†	307.6	480.91	µg/L	2.534	480.91	ppb	2.534	0.53%
U 409.014†	5213.4	471.26	µg/L	0.829	471.26	ppb	0.829	0.18%
V 292.402†	44598.8	515.18	µg/L	2.562	515.18	ppb	2.562	0.50%
Zn 213.857†	24245.1	635.58	µg/L	3.807	635.58	ppb	3.807	0.60%

Sequence No.: 6
Sample ID: 1201985641|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 306
Date Collected: 12/18/2009 09:41:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985641|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108532.5	108532.5	96.5	%			09:42:25
1	Al 396.153Radial†	27505.0	28275.6	14271	µg/L	14271	ppb	09:42:25
1	Ca 317.933Radial†	16115.1	16205.8	6433.0	µg/L	6433.0	ppb	09:42:45
1	Fe 238.204 Radial†	18522.7	19185.2	100800	µg/L	100800	ppb	09:42:45
1	K 766.490 Radial†	12181.9	11930.1	6468.4	µg/L	6468.4	ppb	09:42:25
1	Mg 279.077 IEC†	1211.2	1235.5	6716.6	µg/L	6716.6	ppb	09:42:45
1	Na 589.592 Radial†	20432.2	21879.3	6070.7	µg/L	6070.7	ppb	09:42:25
1	Sr 421.552†	87344.3	90585.0	510.26	µg/L	510.26	ppb	09:42:25
1	Sc 361.383	1918408.6	1918408.6	93.274	%			09:43:49
1	Y 371.029	1260235.0	1260235.0	100.63	%			09:43:49
1	Ag 328.068†	50556.8	54230.7	495.75	µg/L	495.75	ppb	09:43:55
1	As 188.979†	236.9	251.5	468.34	µg/L	468.34	ppb	09:44:15
1	B 249.677†	11332.7	11994.2	500.65	µg/L	500.65	ppb	09:43:55
1	Ba 233.527†	21090.7	22692.2	571.02	µg/L	571.02	ppb	09:43:55
1	Be 313.107†	729000.2	777956.5	491.37	µg/L	491.37	ppb	09:43:49
1	Cd 226.502†	17134.5	18470.9	481.15	µg/L	481.15	ppb	09:43:55
1	Co 228.616†	9374.1	10121.7	483.69	µg/L	483.69	ppb	09:43:55
1	Cr 267.716†	21914.7	23617.8	492.81	µg/L	492.81	ppb	09:43:55
1	Cu 324.752†	69804.2	71453.4	524.36	µg/L	524.36	ppb	09:43:55
1	Mn 257.610†	371954.9	398999.0	1278.9	µg/L	1278.9	ppb	09:43:49
1	Mo 202.031†	4237.5	4551.0	511.67	µg/L	511.67	ppb	09:44:15
1	Ni 231.604†	8685.0	9011.9	490.95	µg/L	490.95	ppb	09:43:55
1	P 214.914†	692.1	536.0	999.03	µg/L	999.03	ppb	09:44:15
1	Pb 220.353†	2031.5	2123.9	538.81	µg/L	538.81	ppb	09:44:15
1	S 181.975 Axial†	943.1	987.0	5055.3	µg/L	5055.3	ppb	09:44:15
1	Sb 206.836†	449.9	461.8	462.34	µg/L	462.34	ppb	09:44:15
1	Se 196.026†	253.6	257.7	444.10	µg/L	444.10	ppb	09:44:15
1	SiO2†	83620.5	87668.6	16742	µg/L	16742	ppb	09:43:55
1	Si 251.611†	95671.1	102220.2	7725.9	µg/L	7725.9	ppb	09:43:55
1	Sn 189.927†	950.2	996.3	500.33	µg/L	500.33	ppb	09:44:15
1	Ti 334.940†	854627.6	915535.5	2029.0	µg/L	2029.0	ppb	09:43:49
1	Tl 190.801†	268.4	309.2	482.99	µg/L	482.99	ppb	09:44:15
1	U 409.014†	5140.0	4831.4	435.06	µg/L	435.06	ppb	09:43:49
1	V 292.402†	41522.0	44608.1	515.38	µg/L	515.38	ppb	09:43:55
1	Zn 213.857†	23588.7	24739.5	648.65	µg/L	648.65	ppb	09:43:55
2	Sc RADIAL	106822.3	106822.3	95.0	%			09:42:51
2	Al 396.153Radial†	27507.6	28734.7	14503	µg/L	14503	ppb	09:42:51
2	Ca 317.933Radial†	16227.8	16591.8	6586.2	µg/L	6586.2	ppb	09:43:11
2	Fe 238.204 Radial†	18717.1	19697.3	103490	µg/L	103490	ppb	09:43:11
2	K 766.490 Radial†	12105.4	12051.7	6534.4	µg/L	6534.4	ppb	09:42:51
2	Mg 279.077 IEC†	1234.0	1279.5	6957.0	µg/L	6957.0	ppb	09:43:11
2	Na 589.592 Radial†	20399.3	22183.7	6155.1	µg/L	6155.1	ppb	09:42:51
2	Sr 421.552†	86933.2	91601.4	515.98	µg/L	515.98	ppb	09:42:51
2	Sc 361.383	1911698.9	1911698.9	92.948	%			09:44:21
2	Y 371.029	1255886.1	1255886.1	100.28	%			09:44:21
2	Ag 328.068†	50549.4	54413.0	497.59	µg/L	497.59	ppb	09:44:27
2	As 188.979†	237.3	252.9	470.50	µg/L	470.50	ppb	09:44:47
2	B 249.677†	11309.8	12012.2	500.61	µg/L	500.61	ppb	09:44:27
2	Ba 233.527†	21063.5	22742.3	572.27	µg/L	572.27	ppb	09:44:27
2	Be 313.107†	724945.8	776337.7	490.35	µg/L	490.35	ppb	09:44:21
2	Cd 226.502†	17035.1	18428.5	479.82	µg/L	479.82	ppb	09:44:27
2	Co 228.616†	9364.5	10146.7	484.89	µg/L	484.89	ppb	09:44:27
2	Cr 267.716†	21845.2	23625.4	492.97	µg/L	492.97	ppb	09:44:27
2	Cu 324.752†	69713.8	71618.9	526.10	µg/L	526.10	ppb	09:44:27
2	Mn 257.610†	369485.3	397741.7	1275.3	µg/L	1275.3	ppb	09:44:21
2	Mo 202.031†	4216.2	4544.1	511.00	µg/L	511.00	ppb	09:44:47
2	Ni 231.604†	8684.7	9044.3	492.72	µg/L	492.72	ppb	09:44:27
2	P 214.914†	678.0	523.4	968.43	µg/L	968.43	ppb	09:44:47
2	Pb 220.353†	2034.7	2135.0	541.60	µg/L	541.60	ppb	09:44:47

2	S 181.975 Axial†	934.6	981.5	5026.5 µg/L	5026.5 ppb	09:44:47
2	Sb 206.836†	446.4	459.7	460.27 µg/L	460.27 ppb	09:44:47
2	Se 196.026†	249.9	254.8	441.58 µg/L	441.58 ppb	09:44:47
2	SiO2†	83256.4	87591.6	16727 µg/L	16727 ppb	09:44:27
2	Si 251.611†	94986.4	101843.6	7697.3 µg/L	7697.3 ppb	09:44:27
2	Sn 189.927†	941.0	990.0	497.65 µg/L	497.65 ppb	09:44:47
2	Ti 334.940†	850607.7	914426.4	2026.6 µg/L	2026.6 ppb	09:44:21
2	Tl 190.801†	261.5	302.7	473.22 µg/L	473.22 ppb	09:44:47
2	U 409.014†	5016.3	4717.6	423.88 µg/L	423.88 ppb	09:44:21
2	V 292.402†	41365.2	44595.7	515.44 µg/L	515.44 ppb	09:44:27
2	Zn 213.857†	23520.3	24754.7	648.75 µg/L	648.75 ppb	09:44:27
3	Sc RADIAL	106478.1	106478.1	94.7 %		09:43:17
3	Al 396.153Radial†	27300.0	28609.0	14439 µg/L	14439 ppb	09:43:17
3	Ca 317.933Radial†	16204.2	16622.2	6598.2 µg/L	6598.2 ppb	09:43:37
3	Fe 238.204 Radial†	18646.5	19686.4	103430 µg/L	103430 ppb	09:43:37
3	K 766.490 Radial†	12068.4	12053.8	6535.5 µg/L	6535.5 ppb	09:43:17
3	Mg 279.077 IEC†	1229.5	1278.9	6953.8 µg/L	6953.8 ppb	09:43:37
3	Na 589.592 Radial†	20144.7	21984.2	6099.8 µg/L	6099.8 ppb	09:43:17
3	Sr 421.552†	86201.3	91124.1	513.30 µg/L	513.30 ppb	09:43:17
3	Sc 361.383	1904443.8	1904443.8	92.595 %		09:44:54
3	Y 371.029	1251601.3	1251601.3	99.940 %		09:44:54
3	Ag 328.068†	50385.0	54442.7	497.86 µg/L	497.86 ppb	09:44:59
3	As 188.979†	232.0	248.1	461.40 µg/L	461.40 ppb	09:45:20
3	B 249.677†	11281.2	12027.7	501.31 µg/L	501.31 ppb	09:44:59
3	Ba 233.527†	21013.9	22775.1	573.10 µg/L	573.10 ppb	09:44:59
3	Be 313.107†	723765.2	778034.0	491.42 µg/L	491.42 ppb	09:44:54
3	Cd 226.502†	17040.1	18503.7	481.82 µg/L	481.82 ppb	09:44:59
3	Co 228.616†	9327.5	10145.1	484.80 µg/L	484.80 ppb	09:44:59
3	Cr 267.716†	21869.7	23741.4	495.38 µg/L	495.38 ppb	09:44:59
3	Cu 324.752†	69527.8	71703.7	526.69 µg/L	526.69 ppb	09:44:59
3	Mn 257.610†	368957.4	398685.9	1278.2 µg/L	1278.2 ppb	09:44:54
3	Mo 202.031†	4204.8	4549.0	511.55 µg/L	511.55 ppb	09:45:20
3	Ni 231.604†	8673.9	9068.2	494.02 µg/L	494.02 ppb	09:44:59
3	P 214.914†	685.1	533.9	991.25 µg/L	991.25 ppb	09:45:20
3	Pb 220.353†	2027.8	2135.9	541.81 µg/L	541.81 ppb	09:45:20
3	S 181.975 Axial†	930.3	980.6	5022.0 µg/L	5022.0 ppb	09:45:20
3	Sb 206.836†	443.6	458.5	459.08 µg/L	459.08 ppb	09:45:20
3	Se 196.026†	254.8	261.1	450.74 µg/L	450.74 ppb	09:45:20
3	SiO2†	83129.8	87796.1	16766 µg/L	16766 ppb	09:44:59
3	Si 251.611†	95022.1	102271.5	7729.7 µg/L	7729.7 ppb	09:44:59
3	Sn 189.927†	943.3	996.3	500.73 µg/L	500.73 ppb	09:45:20
3	Ti 334.940†	850369.9	917655.9	2033.7 µg/L	2033.7 ppb	09:44:54
3	Tl 190.801†	260.6	302.9	473.56 µg/L	473.56 ppb	09:45:20
3	U 409.014†	5123.6	4854.1	436.70 µg/L	436.70 ppb	09:44:54
3	V 292.402†	41330.1	44727.3	516.94 µg/L	516.94 ppb	09:44:59
3	Zn 213.857†	23447.4	24772.3	649.23 µg/L	649.23 ppb	09:44:59

Mean Data: 1201985641|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1911517.1	92.939	%	0.3396				0.37%
Sc RADIAL	107277.6	95.4	%	0.98				1.03%
Y 371.029	1255907.5	100.28	%	0.345				0.34%
Ag 328.068†	54362.1	497.06	µg/L	1.148	497.06	ppb	1.148	0.23%
Al 396.153Radial†	28539.8	14404	µg/L	119.9	14404	ppb	119.9	0.83%
As 188.979†	250.8	466.75	µg/L	4.751	466.75	ppb	4.751	1.02%
B 249.677†	12011.4	500.86	µg/L	0.393	500.86	ppb	0.393	0.08%
Ba 233.527†	22736.5	572.13	µg/L	1.050	572.13	ppb	1.050	0.18%
Be 313.107†	777442.7	491.05	µg/L	0.605	491.05	ppb	0.605	0.12%
Ca 317.933Radial†	16473.3	6539.1	µg/L	92.14	6539.1	ppb	92.14	1.41%
Cd 226.502†	18467.7	480.93	µg/L	1.019	480.93	ppb	1.019	0.21%
Co 228.616†	10137.9	484.46	µg/L	0.671	484.46	ppb	0.671	0.14%
Cr 267.716†	23661.5	493.72	µg/L	1.444	493.72	ppb	1.444	0.29%
Cu 324.752†	71592.0	525.72	µg/L	1.210	525.72	ppb	1.210	0.23%
Fe 238.204 Radial†	19522.9	102570	µg/L	1536.8	102570	ppb	1536.8	1.50%
K 766.490 Radial†	12011.9	6512.8	µg/L	38.40	6512.8	ppb	38.40	0.59%
Mg 279.077 IEC†	1264.6	6875.8	µg/L	137.89	6875.8	ppb	137.89	2.01%
Mn 257.610†	398475.5	1277.5	µg/L	1.95	1277.5	ppb	1.95	0.15%
Mo 202.031†	4548.0	511.41	µg/L	0.357	511.41	ppb	0.357	0.07%
Na 589.592 Radial†	22015.7	6108.5	µg/L	42.89	6108.5	ppb	42.89	0.70%

Ni 231.604†	9041.4	492.56 µg/L	1.541	492.56 ppb	1.541	0.31%
P 214.914†	531.1	986.24 µg/L	15.904	986.24 ppb	15.904	1.61%
Pb 220.353†	2131.6	540.74 µg/L	1.675	540.74 ppb	1.675	0.31%
S 181.975 Axial†	983.1	5034.6 µg/L	18.07	5034.6 ppb	18.07	0.36%
Sb 206.836†	460.0	460.56 µg/L	1.648	460.56 ppb	1.648	0.36%
Se 196.026†	257.9	445.47 µg/L	4.731	445.47 ppb	4.731	1.06%
SiO2†	87685.4	16745 µg/L	19.7	16745 ppb	19.7	0.12%
Si 251.611†	102111.8	7717.6 µg/L	17.72	7717.6 ppb	17.72	0.23%
Sn 189.927†	994.2	499.57 µg/L	1.675	499.57 ppb	1.675	0.34%
Sr 421.552†	91103.5	513.18 µg/L	2.864	513.18 ppb	2.864	0.56%
Ti 334.940†	915872.6	2029.8 µg/L	3.64	2029.8 ppb	3.64	0.18%
Tl 190.801†	304.9	476.59 µg/L	5.548	476.59 ppb	5.548	1.16%
U 409.014†	4801.0	431.88 µg/L	6.979	431.88 ppb	6.979	1.62%
V 292.402†	44643.7	515.92 µg/L	0.885	515.92 ppb	0.885	0.17%
Zn 213.857†	24755.5	648.88 µg/L	0.306	648.88 ppb	0.306	0.05%

Sequence No.: 7
Sample ID: 1201985639|933555|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 307
Date Collected: 12/18/2009 09:45:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985639|933555|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105152.1	105152.1	93.5	%			09:46:02
1	Al 396.153Radial†	2501.6	2446.1	1236.0	µg/L	1236.0	ppb	09:46:02
1	Ca 317.933Radial†	1042.3	619.5	245.90	µg/L	245.90	ppb	09:46:22
1	Fe 238.204 Radial†	2882.1	3071.7	16136	µg/L	16136	ppb	09:46:22
1	K 766.490 Radial†	1180.2	567.6	307.76	µg/L	307.76	ppb	09:46:02
1	Mg 279.077 IEC†	59.6	43.9	219.77	µg/L	219.77	ppb	09:46:22
1	Na 589.592 Radial†	80.4	789.9	219.17	µg/L	219.17	ppb	09:46:02
1	Sr 421.552†	740.4	855.8	4.8208	µg/L	4.8208	ppb	09:46:02
1	Sc 361.383	1943869.7	1943869.7	94.512	%			09:47:24
1	Y 371.029	1193863.4	1193863.4	95.329	%			09:47:24
1	Ag 328.068†	-287.8	-276.2	-1.1765	µg/L	-1.1765	ppb	09:47:30
1	As 188.979†	5.4	3.2	4.3918	µg/L	4.3918	ppb	09:47:51
1	B 249.677†	359.2	224.4	4.8849	µg/L	4.8849	ppb	09:47:30
1	Ba 233.527†	332.6	432.6	10.871	µg/L	10.871	ppb	09:47:51
1	Be 313.107†	4795.2	1462.1	0.8339	µg/L	0.8339	ppb	09:47:30
1	Cd 226.502†	-44.3	54.0	0.1753	µg/L	0.1753	ppb	09:47:51
1	Co 228.616†	-65.5	2.4	-0.3861	µg/L	-0.3861	ppb	09:47:51
1	Cr 267.716†	-25.9	95.3	1.9906	µg/L	1.9906	ppb	09:47:30
1	Cu 324.752†	2799.3	-422.4	0.4939	µg/L	0.4939	ppb	09:47:30
1	Mn 257.610†	36403.5	38740.0	124.97	µg/L	124.97	ppb	09:47:30
1	Mo 202.031†	38.1	48.3	6.0195	µg/L	6.0195	ppb	09:47:51
1	Ni 231.604†	272.0	-11.7	-0.6349	µg/L	-0.6349	ppb	09:47:51
1	P 214.914†	249.2	57.7	107.10	µg/L	107.10	ppb	09:47:51
1	Pb 220.353†	88.6	39.7	9.9839	µg/L	9.9839	ppb	09:47:51
1	S 181.975 Axial†	40.5	18.8	94.100	µg/L	94.100	ppb	09:47:51
1	Sb 206.836†	14.6	-5.1	-4.2173	µg/L	-4.2173	ppb	09:47:51
1	Se 196.026†	4.8	-9.0	-1.8385	µg/L	-1.8385	ppb	09:47:51
1	SiO2†	11891.6	10600.5	2024.3	µg/L	2024.3	ppb	09:47:30
1	Si 251.611†	11926.4	12269.2	930.65	µg/L	930.65	ppb	09:47:30
1	Sn 189.927†	19.7	-1.6	1.2047	µg/L	1.2047	ppb	09:47:51
1	Ti 334.940†	105503.7	110911.1	245.83	µg/L	245.83	ppb	09:47:30
1	Tl 190.801†	-23.9	-3.8	-3.5234	µg/L	-3.5234	ppb	09:47:51
1	U 409.014†	638.8	-3.3	-3.3163	µg/L	-3.3163	ppb	09:47:30
1	V 292.402†	121.5	220.5	3.8389	µg/L	3.8389	ppb	09:47:30
1	Zn 213.857†	1485.3	1021.4	25.648	µg/L	25.648	ppb	09:47:51
2	Sc RADIAL	104717.2	104717.2	93.1	%			09:46:28
2	Al 396.153Radial†	2485.6	2440.0	1232.9	µg/L	1232.9	ppb	09:46:28
2	Ca 317.933Radial†	1046.1	628.2	249.38	µg/L	249.38	ppb	09:46:48
2	Fe 238.204 Radial†	2868.1	3069.6	16124	µg/L	16124	ppb	09:46:48
2	K 766.490 Radial†	1228.1	624.3	338.52	µg/L	338.52	ppb	09:46:28
2	Mg 279.077 IEC†	62.5	47.3	239.02	µg/L	239.02	ppb	09:46:48
2	Na 589.592 Radial†	-23.3	678.9	188.37	µg/L	188.37	ppb	09:46:28
2	Sr 421.552†	563.6	669.1	3.7691	µg/L	3.7691	ppb	09:46:28
2	Sc 361.383	1955302.8	1955302.8	95.068	%			09:47:57
2	Y 371.029	1200702.8	1200702.8	95.875	%			09:47:57
2	Ag 328.068†	-367.2	-357.9	-1.9065	µg/L	-1.9065	ppb	09:48:02
2	As 188.979†	3.7	1.4	0.8737	µg/L	0.8737	ppb	09:48:23
2	B 249.677†	305.8	165.9	2.2947	µg/L	2.2947	ppb	09:48:02
2	Ba 233.527†	336.4	434.6	10.920	µg/L	10.920	ppb	09:48:23
2	Be 313.107†	4740.7	1375.2	0.7796	µg/L	0.7796	ppb	09:48:02
2	Cd 226.502†	-53.0	45.1	-0.0585	µg/L	-0.0585	ppb	09:48:23
2	Co 228.616†	-60.8	7.8	-0.1197	µg/L	-0.1197	ppb	09:48:23
2	Cr 267.716†	-64.5	54.9	1.1492	µg/L	1.1492	ppb	09:48:02
2	Cu 324.752†	2834.1	-403.1	0.6272	µg/L	0.6272	ppb	09:48:02
2	Mn 257.610†	36251.7	38355.1	123.75	µg/L	123.75	ppb	09:48:02
2	Mo 202.031†	50.7	61.2	7.4642	µg/L	7.4642	ppb	09:48:23
2	Ni 231.604†	271.5	-13.8	-0.7507	µg/L	-0.7507	ppb	09:48:23
2	P 214.914†	246.6	53.4	97.617	µg/L	97.617	ppb	09:48:23
2	Pb 220.353†	83.3	33.5	8.4324	µg/L	8.4324	ppb	09:48:23

2	S 181.975 Axial†	33.9	11.6	57.315	µg/L	57.315 ppb	09:48:23
2	Sb 206.836†	15.1	-4.7	-3.8057	µg/L	-3.8057 ppb	09:48:23
2	Se 196.026†	2.7	-11.2	-5.1146	µg/L	-5.1146 ppb	09:48:23
2	SiO2†	11922.5	10559.4	2016.5	µg/L	2016.5 ppb	09:48:02
2	Si 251.611†	11936.8	12206.4	925.93	µg/L	925.93 ppb	09:48:02
2	Sn 189.927†	16.8	-4.7	-0.3182	µg/L	-0.3182 ppb	09:48:23
2	Ti 334.940†	105323.3	110068.7	243.96	µg/L	243.96 ppb	09:48:02
2	Tl 190.801†	-26.8	-6.8	-8.0326	µg/L	-8.0326 ppb	09:48:23
2	U 409.014†	642.6	-3.3	-3.3124	µg/L	-3.3124 ppb	09:48:02
2	V 292.402†	130.8	229.6	3.9507	µg/L	3.9507 ppb	09:48:02
2	Zn 213.857†	1486.6	1013.6	25.442	µg/L	25.442 ppb	09:48:23
3	Sc RADIAL	105644.9	105644.9	93.9	%		09:46:54
3	Al 396.153Radial†	2498.5	2430.3	1228.0	µg/L	1228.0 ppb	09:46:54
3	Ca 317.933Radial†	1033.4	604.8	240.07	µg/L	240.07 ppb	09:47:14
3	Fe 238.204 Radial†	2866.3	3040.6	15972	µg/L	15972 ppb	09:47:14
3	K 766.490 Radial†	1171.0	551.9	299.25	µg/L	299.25 ppb	09:46:54
3	Mg 279.077 IEC†	61.3	45.4	228.45	µg/L	228.45 ppb	09:47:14
3	Na 589.592 Radial†	-7.0	696.4	193.24	µg/L	193.24 ppb	09:46:54
3	Sr 421.552†	571.8	672.5	3.7883	µg/L	3.7883 ppb	09:46:54
3	Sc 361.383	1949436.5	1949436.5	94.783	%		09:48:29
3	Y 371.029	1196971.2	1196971.2	95.577	%		09:48:29
3	Ag 328.068†	-283.0	-270.3	-1.1333	µg/L	-1.1333 ppb	09:48:35
3	As 188.979†	1.6	-0.8	-3.2047	µg/L	-3.2047 ppb	09:48:55
3	B 249.677†	306.8	168.0	2.4342	µg/L	2.4342 ppb	09:48:35
3	Ba 233.527†	330.4	429.2	10.787	µg/L	10.787 ppb	09:48:55
3	Be 313.107†	4717.4	1365.6	0.7726	µg/L	0.7726 ppb	09:48:35
3	Cd 226.502†	-46.1	52.2	0.1399	µg/L	0.1399 ppb	09:48:55
3	Co 228.616†	-54.2	14.5	0.1957	µg/L	0.1957 ppb	09:48:55
3	Cr 267.716†	-50.9	69.1	1.4443	µg/L	1.4443 ppb	09:48:35
3	Cu 324.752†	2784.1	-447.0	0.2861	µg/L	0.2861 ppb	09:48:35
3	Mn 257.610†	36466.9	38696.9	124.81	µg/L	124.81 ppb	09:48:35
3	Mo 202.031†	43.5	53.8	6.6323	µg/L	6.6323 ppb	09:48:55
3	Ni 231.604†	290.0	6.6	0.3590	µg/L	0.3590 ppb	09:48:55
3	P 214.914†	243.6	51.0	92.791	µg/L	92.791 ppb	09:48:55
3	Pb 220.353†	83.5	34.0	8.5393	µg/L	8.5393 ppb	09:48:55
3	S 181.975 Axial†	32.6	10.3	50.618	µg/L	50.618 ppb	09:48:55
3	Sb 206.836†	12.3	-7.6	-6.6419	µg/L	-6.6419 ppb	09:48:55
3	Se 196.026†	3.6	-10.3	-3.8156	µg/L	-3.8156 ppb	09:48:55
3	SiO2†	11918.2	10592.6	2022.8	µg/L	2022.8 ppb	09:48:35
3	Si 251.611†	12001.1	12312.1	933.89	µg/L	933.89 ppb	09:48:35
3	Sn 189.927†	19.9	-1.4	1.2745	µg/L	1.2745 ppb	09:48:55
3	Ti 334.940†	106132.8	111256.1	246.60	µg/L	246.60 ppb	09:48:35
3	Tl 190.801†	-25.5	-5.5	-5.9952	µg/L	-5.9952 ppb	09:48:55
3	U 409.014†	602.5	-43.6	-7.0699	µg/L	-7.0699 ppb	09:48:35
3	V 292.402†	161.1	261.9	4.2905	µg/L	4.2905 ppb	09:48:35
3	Zn 213.857†	1482.1	1013.5	25.451	µg/L	25.451 ppb	09:48:55

Mean Data: 1201985639|933555|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1949536.3	94.788	%	0.2780				0.29%
Sc RADIAL	105171.4	93.5	%	0.41				0.44%
Y 371.029	1197179.1	95.594	%	0.2734				0.29%
Ag 328.068†	-301.4	-1.4054	µg/L	0.43444	-1.4054	ppb	0.43444	30.91%
Al 396.153Radial†	2438.8	1232.3	µg/L	4.04	1232.3	ppb	4.04	0.33%
As 188.979†	1.3	0.6869	µg/L	3.80168	0.6869	ppb	3.80168	553.44%
B 249.677†	186.1	3.2046	µg/L	1.45685	3.2046	ppb	1.45685	45.46%
Ba 233.527†	432.1	10.859	µg/L	0.0672	10.859	ppb	0.0672	0.62%
Be 313.107†	1401.0	0.7953	µg/L	0.03356	0.7953	ppb	0.03356	4.22%
Ca 317.933Radial†	617.5	245.11	µg/L	4.705	245.11	ppb	4.705	1.92%
Cd 226.502†	50.4	0.0856	µg/L	0.12606	0.0856	ppb	0.12606	147.29%
Co 228.616†	8.2	-0.1033	µg/L	0.29124	-0.1033	ppb	0.29124	281.80%
Cr 267.716†	73.1	1.5280	µg/L	0.42688	1.5280	ppb	0.42688	27.94%
Cu 324.752†	-424.2	0.4690	µg/L	0.17190	0.4690	ppb	0.17190	36.65%
Fe 238.204 Radial†	3060.6	16077	µg/L	91.4	16077	ppb	91.4	0.57%
K 766.490 Radial†	581.3	315.18	µg/L	20.656	315.18	ppb	20.656	6.55%
Mg 279.077 IEC†	45.5	229.08	µg/L	9.638	229.08	ppb	9.638	4.21%
Mn 257.610†	38597.3	124.51	µg/L	0.665	124.51	ppb	0.665	0.53%
Mo 202.031†	54.4	6.7053	µg/L	0.72515	6.7053	ppb	0.72515	10.81%
Na 589.592 Radial†	721.8	200.26	µg/L	16.553	200.26	ppb	16.553	8.27%

Ni 231.604†	-6.3	-0.3422	µg/L	0.61002	-0.3422	ppb	0.61002 178.27%
P 214.914†	54.0	99.168	µg/L	7.2774	99.168	ppb	7.2774 7.34%
Pb 220.353†	35.7	8.9852	µg/L	0.86655	8.9852	ppb	0.86655 9.64%
S 181.975 Axial†	13.6	67.344	µg/L	23.4122	67.344	ppb	23.4122 34.76%
Sb 206.836†	-5.8	-4.8883	µg/L	1.53253	-4.8883	ppb	1.53253 31.35%
Se 196.026†	-10.2	-3.5896	µg/L	1.64971	-3.5896	ppb	1.64971 45.96%
SiO2†	10584.2	2021.2	µg/L	4.17	2021.2	ppb	4.17 0.21%
Si 251.611†	12262.6	930.15	µg/L	4.004	930.15	ppb	4.004 0.43%
Sn 189.927†	-2.6	0.7203	µg/L	0.90006	0.7203	ppb	0.90006 124.95%
Sr 421.552†	732.5	4.1261	µg/L	0.60174	4.1261	ppb	0.60174 14.58%
Ti 334.940†	110745.3	245.46	µg/L	1.354	245.46	ppb	1.354 0.55%
Tl 190.801†	-5.4	-5.8504	µg/L	2.25810	-5.8504	ppb	2.25810 38.60%
U 409.014†	-16.7	-4.5662	µg/L	2.16823	-4.5662	ppb	2.16823 47.48%
V 292.402†	237.3	4.0267	µg/L	0.23520	4.0267	ppb	0.23520 5.84%
Zn 213.857†	1016.2	25.514	µg/L	0.1168	25.514	ppb	0.1168 0.46%

Sequence No.: 8
Sample ID: 241825002|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 308
Date Collected: 12/18/2009 09:49:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825002|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107683.9	107683.9	95.7	%			09:49:37
1	Al 396.153Radial†	178378.0	186093.0	94046	µg/L	94046	ppb	09:49:37
1	Ca 317.933Radial†	63668.1	66008.3	26202	µg/L	26202	ppb	09:49:42
1	Fe 238.204 Radial†	21406.6	22348.9	117400	µg/L	117400	ppb	09:49:42
1	K 766.490 Radial†	22553.0	22862.7	12396	µg/L	12396	ppb	09:49:42
1	Mg 279.077 IEC†	3446.8	3580.4	19687	µg/L	19687	ppb	09:49:42
1	Na 589.592 Radial†	7874.3	8929.0	2477.5	µg/L	2477.5	ppb	09:49:42
1	Sr 421.552†	41130.4	43026.1	242.36	µg/L	242.36	ppb	09:49:37
1	Sc 361.383	1924108.9	1924108.9	93.551	%			09:50:16
1	Y 371.029	1197519.2	1197519.2	95.621	%			09:50:16
1	Ag 328.068†	-1295.3	-1356.3	-2.0533	µg/L	-2.0533	ppb	09:50:21
1	As 188.979†	30.6	30.2	40.207	µg/L	40.207	ppb	09:50:42
1	B 249.677†	1807.5	1776.4	41.924	µg/L	41.924	ppb	09:50:21
1	Ba 233.527†	24904.1	26701.5	670.90	µg/L	670.90	ppb	09:50:21
1	Be 313.107†	18136.1	15774.8	9.4721	µg/L	9.4721	ppb	09:50:21
1	Cd 226.502†	235.2	352.3	0.2653	µg/L	0.2653	ppb	09:50:42
1	Co 228.616†	335.9	430.8	17.912	µg/L	17.912	ppb	09:50:42
1	Cr 267.716†	2315.7	2598.1	54.355	µg/L	54.355	ppb	09:50:42
1	Cu 324.752†	6279.0	3327.5	48.628	µg/L	48.628	ppb	09:50:21
1	Mn 257.610†	362760.0	387988.9	1246.1	µg/L	1246.1	ppb	09:50:16
1	Mo 202.031†	185.5	206.2	27.614	µg/L	27.614	ppb	09:50:42
1	Ni 231.604†	1199.7	983.0	53.553	µg/L	53.553	ppb	09:50:42
1	P 214.914†	685.9	527.2	1037.1	µg/L	1037.1	ppb	09:50:42
1	Pb 220.353†	420.8	395.7	107.09	µg/L	107.09	ppb	09:50:42
1	S 181.975 Axial†	106.4	89.7	440.49	µg/L	440.49	ppb	09:50:42
1	Sb 206.836†	27.8	9.1	11.413	µg/L	11.413	ppb	09:50:42
1	Se 196.026†	-32.0	-48.3	7.3367	µg/L	7.3367	ppb	09:50:42
1	SiO2†	123579.0	130116.1	24847	µg/L	24847	ppb	09:50:21
1	Si 251.611†	142244.5	151700.2	11566	µg/L	11566	ppb	09:50:21
1	Sn 189.927†	-68.9	-96.1	-23.333	µg/L	-23.333	ppb	09:50:42
1	Ti 334.940†	578328.1	617475.3	1367.2	µg/L	1367.2	ppb	09:50:16
1	Tl 190.801†	-27.7	-8.2	-0.0542	µg/L	-0.0542	ppb	09:50:42
1	U 409.014†	550.9	-90.3	-29.780	µg/L	-29.780	ppb	09:50:16
1	V 292.402†	9571.5	10323.2	126.10	µg/L	126.10	ppb	09:50:21
1	Zn 213.857†	11707.7	11964.6	307.21	µg/L	307.21	ppb	09:50:21
2	Sc RADIAL	107159.7	107159.7	95.3	%			09:49:48
2	Al 396.153Radial†	178054.5	186665.0	94335	µg/L	94335	ppb	09:49:48
2	Ca 317.933Radial†	63591.6	66253.5	26300	µg/L	26300	ppb	09:49:53
2	Fe 238.204 Radial†	21402.8	22454.2	117950	µg/L	117950	ppb	09:49:53
2	K 766.490 Radial†	22608.4	23036.0	12490	µg/L	12490	ppb	09:49:53
2	Mg 279.077 IEC†	3441.5	3592.5	19753	µg/L	19753	ppb	09:49:53
2	Na 589.592 Radial†	7967.3	9066.8	2515.7	µg/L	2515.7	ppb	09:49:53
2	Sr 421.552†	40928.4	43024.3	242.35	µg/L	242.35	ppb	09:49:48
2	Sc 361.383	1919787.9	1919787.9	93.341	%			09:50:48
2	Y 371.029	1195397.3	1195397.3	95.452	%			09:50:48
2	Ag 328.068†	-1233.4	-1293.0	-1.4461	µg/L	-1.4461	ppb	09:50:54
2	As 188.979†	25.8	25.2	30.487	µg/L	30.487	ppb	09:51:14
2	B 249.677†	1777.5	1748.6	40.518	µg/L	40.518	ppb	09:50:54
2	Ba 233.527†	24863.4	26717.8	671.31	µg/L	671.31	ppb	09:50:54
2	Be 313.107†	18009.9	15683.3	9.4137	µg/L	9.4137	ppb	09:50:54
2	Cd 226.502†	239.3	357.3	0.3419	µg/L	0.3419	ppb	09:51:14
2	Co 228.616†	345.3	441.6	18.426	µg/L	18.426	ppb	09:51:14
2	Cr 267.716†	2333.5	2622.7	54.867	µg/L	54.867	ppb	09:51:14
2	Cu 324.752†	6285.7	3349.8	48.904	µg/L	48.904	ppb	09:50:54
2	Mn 257.610†	362626.4	388718.6	1248.4	µg/L	1248.4	ppb	09:50:48
2	Mo 202.031†	179.3	200.0	26.951	µg/L	26.951	ppb	09:51:14
2	Ni 231.604†	1214.7	1001.9	54.583	µg/L	54.583	ppb	09:51:14
2	P 214.914†	703.9	548.1	1082.0	µg/L	1082.0	ppb	09:51:14
2	Pb 220.353†	438.0	415.1	112.04	µg/L	112.04	ppb	09:51:14

2	S 181.975 Axial†	108.0	91.6	450.38 µg/L	450.38	ppb	09:51:14
2	Sb 206.836†	21.7	2.7	5.0294 µg/L	5.0294	ppb	09:51:14
2	Se 196.026†	-33.3	-49.7	5.6808 µg/L	5.6808	ppb	09:51:14
2	SiO2†	123357.1	130175.6	24859 µg/L	24859	ppb	09:50:54
2	Si 251.611†	141644.3	151399.5	11543 µg/L	11543	ppb	09:50:54
2	Sn 189.927†	-66.8	-94.0	-22.204 µg/L	-22.204	ppb	09:51:14
2	Ti 334.940†	577615.2	618103.0	1368.6 µg/L	1368.6	ppb	09:50:48
2	Tl 190.801†	-27.0	-7.5	0.9631 µg/L	0.9631	ppb	09:51:14
2	U 409.014†	365.6	-287.5	-48.397 µg/L	-48.397	ppb	09:50:48
2	V 292.402†	9532.4	10304.4	125.90 µg/L	125.90	ppb	09:50:54
2	Zn 213.857†	11766.4	12055.7	309.59 µg/L	309.59	ppb	09:50:54
3	Sc RADIAL	106983.4	106983.4	95.1 %			09:49:59
3	Al 396.153Radial†	179788.7	188796.2	95412 µg/L	95412	ppb	09:49:59
3	Ca 317.933Radial†	63546.6	66316.1	26324 µg/L	26324	ppb	09:50:04
3	Fe 238.204 Radial†	21463.3	22554.9	118480 µg/L	118480	ppb	09:50:04
3	K 766.490 Radial†	22712.1	23184.2	12570 µg/L	12570	ppb	09:50:04
3	Mg 279.077 IEC†	3440.6	3597.5	19780 µg/L	19780	ppb	09:50:04
3	Na 589.592 Radial†	7945.3	9057.5	2513.1 µg/L	2513.1	ppb	09:50:04
3	Sr 421.552†	41356.5	43545.2	245.29 µg/L	245.29	ppb	09:49:59
3	Sc 361.383	1925904.2	1925904.2	93.638 %			09:51:20
3	Y 371.029	1199518.7	1199518.7	95.781 %			09:51:20
3	Ag 328.068†	-1265.6	-1323.3	-1.6688 µg/L	-1.6688	ppb	09:51:26
3	As 188.979†	16.0	14.6	10.240 µg/L	10.240	ppb	09:51:47
3	B 249.677†	1807.0	1774.0	41.481 µg/L	41.481	ppb	09:51:26
3	Ba 233.527†	24880.6	26651.6	669.65 µg/L	669.65	ppb	09:51:26
3	Be 313.107†	18016.4	15628.9	9.3789 µg/L	9.3789	ppb	09:51:26
3	Cd 226.502†	241.9	359.2	0.3543 µg/L	0.3543	ppb	09:51:47
3	Co 228.616†	330.4	424.6	17.606 µg/L	17.606	ppb	09:51:47
3	Cr 267.716†	2332.0	2613.2	54.672 µg/L	54.672	ppb	09:51:47
3	Cu 324.752†	6304.4	3348.4	49.007 µg/L	49.007	ppb	09:51:26
3	Mn 257.610†	363301.8	388206.1	1246.9 µg/L	1246.9	ppb	09:51:20
3	Mo 202.031†	181.3	201.5	27.141 µg/L	27.141	ppb	09:51:47
3	Ni 231.604†	1220.5	1004.0	54.697 µg/L	54.697	ppb	09:51:47
3	P 214.914†	691.6	532.6	1047.9 µg/L	1047.9	ppb	09:51:47
3	Pb 220.353†	423.4	398.0	107.77 µg/L	107.77	ppb	09:51:47
3	S 181.975 Axial†	108.1	91.4	449.11 µg/L	449.11	ppb	09:51:47
3	Sb 206.836†	23.6	4.7	6.9837 µg/L	6.9837	ppb	09:51:47
3	Se 196.026†	-32.3	-48.6	7.7389 µg/L	7.7389	ppb	09:51:47
3	SiO2†	123763.6	130190.1	24862 µg/L	24862	ppb	09:51:26
3	Si 251.611†	142465.8	151794.8	11573 µg/L	11573	ppb	09:51:26
3	Sn 189.927†	-77.8	-105.5	-27.724 µg/L	-27.724	ppb	09:51:47
3	Ti 334.940†	579858.0	618532.8	1369.6 µg/L	1369.6	ppb	09:51:20
3	Tl 190.801†	-26.5	-6.9	1.9503 µg/L	1.9503	ppb	09:51:47
3	U 409.014†	412.7	-238.5	-43.893 µg/L	-43.893	ppb	09:51:20
3	V 292.402†	9633.4	10379.9	126.80 µg/L	126.80	ppb	09:51:26
3	Zn 213.857†	11733.7	11980.7	307.52 µg/L	307.52	ppb	09:51:26

Mean Data: 241825002|933555|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1923267.0	93.510	%	0.1529				0.16%
Sc RADIAL	107275.7	95.4	%	0.32				0.34%
Y 371.029	1197478.4	95.618	%	0.1646				0.17%
Ag 328.068†	-1324.2	-1.7227	µg/L	0.30714	-1.7227	ppb	0.30714	17.83%
Al 396.153Radial†	187184.7	94598	µg/L	720.0	94598	ppb	720.0	0.76%
As 188.979†	23.3	26.978	µg/L	15.2886	26.978	ppb	15.2886	56.67%
B 249.677†	1766.3	41.308	µg/L	0.7187	41.308	ppb	0.7187	1.74%
Ba 233.527†	26690.3	670.62	µg/L	0.866	670.62	ppb	0.866	0.13%
Be 313.107†	15695.6	9.4216	µg/L	0.04708	9.4216	ppb	0.04708	0.50%
Ca 317.933Radial†	66192.6	26275	µg/L	64.6	26275	ppb	64.6	0.25%
Cd 226.502†	356.3	0.3205	µg/L	0.04819	0.3205	ppb	0.04819	15.04%
Co 228.616†	432.3	17.981	µg/L	0.4148	17.981	ppb	0.4148	2.31%
Cr 267.716†	2611.3	54.631	µg/L	0.2584	54.631	ppb	0.2584	0.47%
Cu 324.752†	3341.9	48.846	µg/L	0.1960	48.846	ppb	0.1960	0.40%
Fe 238.204 Radial†	22452.7	117940	µg/L	541.2	117940	ppb	541.2	0.46%
K 766.490 Radial†	23027.6	12485	µg/L	87.3	12485	ppb	87.3	0.70%
Mg 279.077 IEC†	3590.2	19740	µg/L	47.8	19740	ppb	47.8	0.24%
Mn 257.610†	388304.5	1247.1	µg/L	1.21	1247.1	ppb	1.21	0.10%
Mo 202.031†	202.6	27.236	µg/L	0.3414	27.236	ppb	0.3414	1.25%
Na 589.592 Radial†	9017.7	2502.1	µg/L	21.37	2502.1	ppb	21.37	0.85%

Ni 231.604†	996.3	54.278	µg/L	0.6301	54.278	ppb	0.6301	1.16%
P 214.914†	536.0	1055.7	µg/L	23.44	1055.7	ppb	23.44	2.22%
Pb 220.353†	403.0	108.97	µg/L	2.682	108.97	ppb	2.682	2.46%
S 181.975 Axial†	90.9	446.66	µg/L	5.379	446.66	ppb	5.379	1.20%
Sb 206.836†	5.5	7.8087	µg/L	3.27086	7.8087	ppb	3.27086	41.89%
Se 196.026†	-48.9	6.9188	µg/L	1.09082	6.9188	ppb	1.09082	15.77%
SiO2†	130160.6	24856	µg/L	7.5	24856	ppb	7.5	0.03%
Si 251.611†	151631.5	11561	µg/L	15.9	11561	ppb	15.9	0.14%
Sn 189.927†	-98.5	-24.420	µg/L	2.9159	-24.420	ppb	2.9159	11.94%
Sr 421.552†	43198.5	243.33	µg/L	1.691	243.33	ppb	1.691	0.69%
Ti 334.940†	618037.0	1368.5	µg/L	1.18	1368.5	ppb	1.18	0.09%
Tl 190.801†	-7.5	0.9531	µg/L	1.00230	0.9531	ppb	1.00230	105.16%
U 409.014†	-205.4	-40.690	µg/L	9.7131	-40.690	ppb	9.7131	23.87%
V 292.402†	10335.8	126.27	µg/L	0.474	126.27	ppb	0.474	0.38%
Zn 213.857†	12000.3	308.11	µg/L	1.292	308.11	ppb	1.292	0.42%

Sequence No.: 9
Sample ID: 241825003|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 309
Date Collected: 12/18/2009 09:51:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825003|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104689.8	104689.8	93.1	%			09:52:28
1	Al 396.153Radial†	25501.0	27168.8	13729	µg/L	13729	ppb	09:52:28
1	Ca 317.933Radial†	9454.5	9662.6	3835.6	µg/L	3835.6	ppb	09:52:48
1	Fe 238.204 Radial†	14354.7	15411.7	80957	µg/L	80957	ppb	09:52:48
1	K 766.490 Radial†	5282.1	4980.3	2700.3	µg/L	2700.3	ppb	09:52:28
1	Mg 279.077 IEC†	774.9	812.7	4389.2	µg/L	4389.2	ppb	09:52:48
1	Na 589.592 Radial†	2189.2	3056.0	847.93	µg/L	847.93	ppb	09:52:28
1	Sr 421.552†	7365.6	7977.5	44.937	µg/L	44.937	ppb	09:52:28
1	Sc 361.383	1913147.6	1913147.6	93.018	%			09:53:52
1	Y 371.029	1243880.7	1243880.7	99.323	%			09:53:52
1	Ag 328.068†	-995.9	-1042.4	-2.7404	µg/L	-2.7404	ppb	09:53:57
1	As 188.979†	15.0	13.7	16.699	µg/L	16.699	ppb	09:54:18
1	B 249.677†	1117.5	1045.7	20.955	µg/L	20.955	ppb	09:53:57
1	Ba 233.527†	3074.7	3386.2	85.106	µg/L	85.106	ppb	09:53:57
1	Be 313.107†	10091.9	7237.9	4.1579	µg/L	4.1579	ppb	09:53:57
1	Cd 226.502†	120.1	230.1	-0.2133	µg/L	-0.2133	ppb	09:53:57
1	Co 228.616†	42.8	117.7	3.3693	µg/L	3.3693	ppb	09:54:18
1	Cr 267.716†	495.8	655.8	13.714	µg/L	13.714	ppb	09:53:57
1	Cu 324.752†	2364.3	-842.5	11.462	µg/L	11.462	ppb	09:53:57
1	Mn 257.610†	429970.4	462465.6	1477.8	µg/L	1477.8	ppb	09:53:52
1	Mo 202.031†	289.0	318.6	38.726	µg/L	38.726	ppb	09:54:18
1	Ni 231.604†	500.4	238.6	12.997	µg/L	12.997	ppb	09:54:18
1	P 214.914†	468.9	298.1	558.00	µg/L	558.00	ppb	09:54:18
1	Pb 220.353†	617.0	609.2	154.76	µg/L	154.76	ppb	09:54:18
1	S 181.975 Axial†	52.9	32.8	156.01	µg/L	156.01	ppb	09:54:18
1	Sb 206.836†	22.6	3.8	7.5161	µg/L	7.5161	ppb	09:54:18
1	Se 196.026†	-19.1	-34.6	5.0113	µg/L	5.0113	ppb	09:54:18
1	SiO2†	81434.5	85565.1	16340	µg/L	16340	ppb	09:53:52
1	Si 251.611†	92743.4	99354.8	7566.4	µg/L	7566.4	ppb	09:53:52
1	Sn 189.927†	47.6	28.7	25.236	µg/L	25.236	ppb	09:54:18
1	Ti 334.940†	477473.8	512593.0	1136.0	µg/L	1136.0	ppb	09:53:52
1	Tl 190.801†	-37.8	-19.3	-15.462	µg/L	-15.462	ppb	09:54:18
1	U 409.014†	165.9	-500.9	-62.065	µg/L	-62.065	ppb	09:53:52
1	V 292.402†	2104.1	2354.0	33.314	µg/L	33.314	ppb	09:53:57
1	Zn 213.857†	7229.9	7222.4	184.71	µg/L	184.71	ppb	09:53:57
2	Sc RADIAL	106208.6	106208.6	94.4	%			09:52:54
2	Al 396.153Radial†	25678.0	26964.4	13626	µg/L	13626	ppb	09:52:54
2	Ca 317.933Radial†	9412.7	9473.0	3760.3	µg/L	3760.3	ppb	09:53:14
2	Fe 238.204 Radial†	14336.9	15172.3	79700	µg/L	79700	ppb	09:53:14
2	K 766.490 Radial†	5275.7	4892.4	2652.6	µg/L	2652.6	ppb	09:52:54
2	Mg 279.077 IEC†	779.0	805.1	4349.2	µg/L	4349.2	ppb	09:53:14
2	Na 589.592 Radial†	2236.2	3072.2	852.41	µg/L	852.41	ppb	09:52:54
2	Sr 421.552†	7473.8	7978.9	44.944	µg/L	44.944	ppb	09:52:54
2	Sc 361.383	1929470.7	1929470.7	93.812	%			09:54:24
2	Y 371.029	1254675.0	1254675.0	100.19	%			09:54:24
2	Ag 328.068†	-1015.0	-1053.7	-2.9394	µg/L	-2.9394	ppb	09:54:30
2	As 188.979†	11.3	9.6	9.1081	µg/L	9.1081	ppb	09:54:50
2	B 249.677†	1107.3	1024.6	20.414	µg/L	20.414	ppb	09:54:30
2	Ba 233.527†	3041.9	3323.3	83.526	µg/L	83.526	ppb	09:54:30
2	Be 313.107†	9995.4	7043.2	4.0340	µg/L	4.0340	ppb	09:54:30
2	Cd 226.502†	128.8	238.2	0.0984	µg/L	0.0984	ppb	09:54:30
2	Co 228.616†	37.9	112.1	3.0962	µg/L	3.0962	ppb	09:54:50
2	Cr 267.716†	509.1	665.5	13.915	µg/L	13.915	ppb	09:54:30
2	Cu 324.752†	2417.7	-807.2	11.441	µg/L	11.441	ppb	09:54:30
2	Mn 257.610†	434027.6	462880.0	1479.0	µg/L	1479.0	ppb	09:54:24
2	Mo 202.031†	294.3	321.6	39.007	µg/L	39.007	ppb	09:54:50
2	Ni 231.604†	494.2	227.4	12.390	µg/L	12.390	ppb	09:54:50
2	P 214.914†	472.3	297.4	557.92	µg/L	557.92	ppb	09:54:50
2	Pb 220.353†	622.6	609.5	154.86	µg/L	154.86	ppb	09:54:50

2	S 181.975 Axial†	53.1	32.6	155.03 µg/L	155.03 ppb	09:54:50
2	Sb 206.836†	22.2	3.1	6.8779 µg/L	6.8779 ppb	09:54:50
2	Se 196.026†	-17.8	-33.1	6.2863 µg/L	6.2863 ppb	09:54:50
2	SiO2†	82078.4	85510.8	16329 µg/L	16329 ppb	09:54:24
2	Si 251.611†	93447.2	99261.6	7559.1 µg/L	7559.1 ppb	09:54:24
2	Sn 189.927†	48.8	29.5	25.468 µg/L	25.468 ppb	09:54:50
2	Ti 334.940†	482349.1	513447.4	1137.9 µg/L	1137.9 ppb	09:54:24
2	Tl 190.801†	-30.2	-10.8	-2.6025 µg/L	-2.6025 ppb	09:54:50
2	U 409.014†	174.0	-493.8	-61.161 µg/L	-61.161 ppb	09:54:24
2	V 292.402†	2137.9	2370.9	33.405 µg/L	33.405 ppb	09:54:30
2	Zn 213.857†	7171.3	7094.2	181.41 µg/L	181.41 ppb	09:54:30
3	Sc RADIAL	105643.8	105643.8	93.9 %		09:53:20
3	Al 396.153Radial†	25452.7	26869.9	13578 µg/L	13578 ppb	09:53:20
3	Ca 317.933Radial†	9332.7	9441.2	3747.7 µg/L	3747.7 ppb	09:53:40
3	Fe 238.204 Radial†	14245.4	15156.0	79614 µg/L	79614 ppb	09:53:40
3	K 766.490 Radial†	5293.1	4940.8	2678.9 µg/L	2678.9 ppb	09:53:20
3	Mg 279.077 IEC†	767.3	797.2	4305.1 µg/L	4305.1 ppb	09:53:40
3	Na 589.592 Radial†	2191.6	3037.4	842.76 µg/L	842.76 ppb	09:53:20
3	Sr 421.552†	7419.5	7963.4	44.857 µg/L	44.857 ppb	09:53:20
3	Sc 361.383	1917893.3	1917893.3	93.249 %		09:54:56
3	Y 371.029	1246559.3	1246559.3	99.537 %		09:54:56
3	Ag 328.068†	-938.9	-978.6	-2.2721 µg/L	-2.2721 ppb	09:55:02
3	As 188.979†	16.8	15.6	20.508 µg/L	20.508 ppb	09:55:22
3	B 249.677†	1086.7	1009.7	19.779 µg/L	19.779 ppb	09:55:02
3	Ba 233.527†	3010.1	3308.7	83.161 µg/L	83.161 ppb	09:55:02
3	Be 313.107†	9989.8	7101.5	4.0734 µg/L	4.0734 ppb	09:55:02
3	Cd 226.502†	139.5	250.5	0.4275 µg/L	0.4275 ppb	09:55:02
3	Co 228.616†	37.7	112.1	3.1117 µg/L	3.1117 ppb	09:55:22
3	Cr 267.716†	466.0	622.5	13.022 µg/L	13.022 ppb	09:55:02
3	Cu 324.752†	2352.4	-861.6	11.039 µg/L	11.039 ppb	09:55:02
3	Mn 257.610†	428532.8	459780.1	1469.1 µg/L	1469.1 ppb	09:54:56
3	Mo 202.031†	293.2	322.3	39.084 µg/L	39.084 ppb	09:55:22
3	Ni 231.604†	493.9	230.3	12.545 µg/L	12.545 ppb	09:55:22
3	P 214.914†	474.1	302.4	568.84 µg/L	568.84 ppb	09:55:22
3	Pb 220.353†	621.6	612.5	155.60 µg/L	155.60 ppb	09:55:22
3	S 181.975 Axial†	57.8	38.0	182.72 µg/L	182.72 ppb	09:55:22
3	Sb 206.836†	18.4	-0.8	2.9578 µg/L	2.9578 ppb	09:55:22
3	Se 196.026†	-18.8	-34.3	4.5342 µg/L	4.5342 ppb	09:55:22
3	SiO2†	81381.5	85291.6	16288 µg/L	16288 ppb	09:54:56
3	Si 251.611†	92581.5	98934.5	7534.3 µg/L	7534.3 ppb	09:54:56
3	Sn 189.927†	48.8	29.8	25.588 µg/L	25.588 ppb	09:55:22
3	Ti 334.940†	476634.1	510422.3	1131.2 µg/L	1131.2 ppb	09:54:56
3	Tl 190.801†	-35.4	-16.5	-11.337 µg/L	-11.337 ppb	09:55:22
3	U 409.014†	114.5	-556.5	-67.033 µg/L	-67.033 ppb	09:54:56
3	V 292.402†	2164.0	2412.6	33.859 µg/L	33.859 ppb	09:55:02
3	Zn 213.857†	7142.1	7109.0	181.82 µg/L	181.82 ppb	09:55:02

Mean Data: 241825003|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1920170.5	93.360	%	0.4082				0.44%
Sc RADIAL	105514.1	93.8	%	0.68				0.73%
Y 371.029	1248371.7	99.682	%	0.4488				0.45%
Ag 328.068†	-1024.9	-2.6506	µg/L	0.34260	-2.6506	ppb	0.34260	12.93%
Al 396.153Radial†	27001.1	13644	µg/L	77.2	13644	ppb	77.2	0.57%
As 188.979†	12.9	15.438	µg/L	5.8036	15.438	ppb	5.8036	37.59%
B 249.677†	1026.7	20.383	µg/L	0.5888	20.383	ppb	0.5888	2.89%
Ba 233.527†	3339.4	83.931	µg/L	1.0338	83.931	ppb	1.0338	1.23%
Be 313.107†	7127.5	4.0885	µg/L	0.06330	4.0885	ppb	0.06330	1.55%
Ca 317.933Radial†	9525.6	3781.2	µg/L	47.51	3781.2	ppb	47.51	1.26%
Cd 226.502†	239.6	0.1042	µg/L	0.32046	0.1042	ppb	0.32046	307.54%
Co 228.616†	114.0	3.1924	µg/L	0.15339	3.1924	ppb	0.15339	4.80%
Cr 267.716†	647.9	13.550	µg/L	0.4682	13.550	ppb	0.4682	3.46%
Cu 324.752†	-837.1	11.314	µg/L	0.2383	11.314	ppb	0.2383	2.11%
Fe 238.204 Radial†	15246.7	80090	µg/L	752.0	80090	ppb	752.0	0.94%
K 766.490 Radial†	4937.8	2677.3	µg/L	23.87	2677.3	ppb	23.87	0.89%
Mg 279.077 IEC†	805.0	4347.8	µg/L	42.09	4347.8	ppb	42.09	0.97%
Mn 257.610†	461708.6	1475.3	µg/L	5.38	1475.3	ppb	5.38	0.36%
Mo 202.031†	320.8	38.939	µg/L	0.1886	38.939	ppb	0.1886	0.48%
Na 589.592 Radial†	3055.2	847.70	µg/L	4.828	847.70	ppb	4.828	0.57%

Ni 231.604†	232.1	12.644	µg/L	0.3155	12.644	ppb	0.3155	2.49%
P 214.914†	299.3	561.59	µg/L	6.282	561.59	ppb	6.282	1.12%
Pb 220.353†	610.4	155.07	µg/L	0.460	155.07	ppb	0.460	0.30%
S 181.975 Axial†	34.5	164.59	µg/L	15.713	164.59	ppb	15.713	9.55%
Sb 206.836†	2.0	5.7839	µg/L	2.46823	5.7839	ppb	2.46823	42.67%
Se 196.026†	-34.0	5.2773	µg/L	0.90582	5.2773	ppb	0.90582	17.16%
SiO2†	85455.8	16319	µg/L	27.6	16319	ppb	27.6	0.17%
Si 251.611†	99183.6	7553.3	µg/L	16.81	7553.3	ppb	16.81	0.22%
Sn 189.927†	29.4	25.431	µg/L	0.1792	25.431	ppb	0.1792	0.70%
Sr 421.552†	7973.3	44.913	µg/L	0.0482	44.913	ppb	0.0482	0.11%
Ti 334.940†	512154.2	1135.0	µg/L	3.46	1135.0	ppb	3.46	0.30%
Tl 190.801†	-15.5	-9.8007	µg/L	6.56618	-9.8007	ppb	6.56618	67.00%
U 409.014†	-517.0	-63.420	µg/L	3.1618	-63.420	ppb	3.1618	4.99%
V 292.402†	2379.2	33.526	µg/L	0.2921	33.526	ppb	0.2921	0.87%
Zn 213.857†	7141.9	182.65	µg/L	1.797	182.65	ppb	1.797	0.98%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 09:55:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107034.2	107034.2	95.2	%			09:56:11
1	Al 396.153Radial†	9951.4	10227.9	5150.2	µg/L	5150.2	ppb	09:56:11
1	Ca 317.933Radial†	12201.8	12327.1	4893.3	µg/L	4893.3	ppb	09:56:31
1	Fe 238.204 Radial†	961.3	999.0	5264.3	µg/L	5264.3	ppb	09:56:31
1	K 766.490 Radial†	9565.3	9357.1	5073.4	µg/L	5073.4	ppb	09:56:11
1	Mg 279.077 IEC†	898.5	924.4	5131.9	µg/L	5131.9	ppb	09:56:31
1	Na 589.592 Radial†	33950.0	36381.3	10094	µg/L	10094	ppb	09:56:11
1	Sr 421.552†	84720.4	89094.7	501.86	µg/L	501.86	ppb	09:56:11
1	Sc 361.383	1934927.1	1934927.1	94.077	%			09:57:35
1	Y 371.029	1172426.0	1172426.0	93.617	%			09:57:35
1	Ag 328.068†	52986.8	56351.0	507.11	µg/L	507.11	ppb	09:57:40
1	As 188.979†	251.6	265.0	504.07	µg/L	504.07	ppb	09:58:01
1	B 249.677†	10489.2	10993.8	486.29	µg/L	486.29	ppb	09:57:40
1	Ba 233.527†	18509.2	19755.1	497.24	µg/L	497.24	ppb	09:57:40
1	Be 313.107†	745362.2	788676.4	498.72	µg/L	498.72	ppb	09:57:35
1	Cd 226.502†	17289.4	18478.8	488.81	µg/L	488.81	ppb	09:57:40
1	Co 228.616†	9618.9	10296.2	495.24	µg/L	495.24	ppb	09:57:40
1	Cr 267.716†	22220.2	23741.9	495.38	µg/L	495.38	ppb	09:57:40
1	Cu 324.752†	70701.1	71767.9	506.05	µg/L	506.05	ppb	09:57:40
1	Mn 257.610†	149641.4	159285.0	506.16	µg/L	506.16	ppb	09:57:35
1	Mo 202.031†	4149.3	4418.4	493.12	µg/L	493.12	ppb	09:58:01
1	Ni 231.604†	8872.4	9131.5	497.47	µg/L	497.47	ppb	09:57:40
1	P 214.914†	1296.6	1172.2	2489.3	µg/L	2489.3	ppb	09:58:01
1	Pb 220.353†	1900.1	1965.6	498.96	µg/L	498.96	ppb	09:58:01
1	S 181.975 Axial†	208.8	197.9	1015.4	µg/L	1015.4	ppb	09:58:01
1	Sb 206.836†	494.2	504.8	499.46	µg/L	499.46	ppb	09:58:01
1	Se 196.026†	328.1	334.7	489.71	µg/L	489.71	ppb	09:58:01
1	SiO2†	28581.2	28398.9	5423.2	µg/L	5423.2	ppb	09:57:40
1	Si 251.611†	31474.7	33106.6	2488.4	µg/L	2488.4	ppb	09:57:40
1	Sn 189.927†	962.5	1000.7	490.59	µg/L	490.59	ppb	09:58:01
1	Ti 334.940†	213887.3	226634.2	502.08	µg/L	502.08	ppb	09:57:35
1	Tl 190.801†	285.7	325.1	493.09	µg/L	493.09	ppb	09:58:01
1	U 409.014†	5768.6	5452.6	511.19	µg/L	511.19	ppb	09:57:40
1	V 292.402†	41481.7	44185.2	502.81	µg/L	502.81	ppb	09:57:40
1	Zn 213.857†	18105.3	18694.9	496.88	µg/L	496.88	ppb	09:57:40
2	Sc RADIAL	105933.7	105933.7	94.2	%			09:56:37
2	Al 396.153Radial†	9918.4	10301.6	5187.3	µg/L	5187.3	ppb	09:56:37
2	Ca 317.933Radial†	12234.7	12495.3	4960.1	µg/L	4960.1	ppb	09:56:57
2	Fe 238.204 Radial†	962.1	1010.3	5323.8	µg/L	5323.8	ppb	09:56:57
2	K 766.490 Radial†	9620.8	9520.5	5162.0	µg/L	5162.0	ppb	09:56:37
2	Mg 279.077 IEC†	899.6	935.3	5192.6	µg/L	5192.6	ppb	09:56:57
2	Na 589.592 Radial†	33799.4	36592.0	10153	µg/L	10153	ppb	09:56:37
2	Sr 421.552†	84228.1	89496.9	504.13	µg/L	504.13	ppb	09:56:37
2	Sc 361.383	1930795.6	1930795.6	93.876	%			09:58:08
2	Y 371.029	1169518.3	1169518.3	93.385	%			09:58:08
2	Ag 328.068†	53183.1	56680.6	510.08	µg/L	510.08	ppb	09:58:14
2	As 188.979†	250.3	264.1	502.41	µg/L	502.41	ppb	09:58:34
2	B 249.677†	10520.3	11050.8	488.80	µg/L	488.80	ppb	09:58:14
2	Ba 233.527†	18601.4	19895.5	500.77	µg/L	500.77	ppb	09:58:14
2	Be 313.107†	741220.4	785959.8	497.00	µg/L	497.00	ppb	09:58:08
2	Cd 226.502†	17395.0	18630.5	492.82	µg/L	492.82	ppb	09:58:14
2	Co 228.616†	9667.5	10369.8	498.79	µg/L	498.79	ppb	09:58:14
2	Cr 267.716†	22293.8	23870.9	498.07	µg/L	498.07	ppb	09:58:14
2	Cu 324.752†	70962.4	72207.0	509.15	µg/L	509.15	ppb	09:58:14
2	Mn 257.610†	148775.4	158702.8	504.32	µg/L	504.32	ppb	09:58:08
2	Mo 202.031†	4174.6	4454.8	497.19	µg/L	497.19	ppb	09:58:34
2	Ni 231.604†	8876.1	9155.7	498.78	µg/L	498.78	ppb	09:58:14
2	P 214.914†	1294.8	1173.3	2491.2	µg/L	2491.2	ppb	09:58:34
2	Pb 220.353†	1898.6	1968.3	499.68	µg/L	499.68	ppb	09:58:34

2	S 181.975 Axial†	212.5	202.3	1037.8 µg/L	1037.8 ppb	09:58:34
2	Sb 206.836†	492.7	504.2	498.89 µg/L	498.89 ppb	09:58:34
2	Se 196.026†	334.7	342.4	500.99 µg/L	500.99 ppb	09:58:34
2	SiO2†	28660.6	28548.5	5451.7 µg/L	5451.7 ppb	09:58:14
2	Si 251.611†	31645.6	33360.3	2507.6 µg/L	2507.6 ppb	09:58:14
2	Sn 189.927†	967.4	1008.1	494.22 µg/L	494.22 ppb	09:58:34
2	Ti 334.940†	212775.9	225936.8	500.53 µg/L	500.53 ppb	09:58:08
2	Tl 190.801†	293.1	333.7	505.91 µg/L	505.91 ppb	09:58:34
2	U 409.014†	5745.4	5440.9	510.09 µg/L	510.09 ppb	09:58:14
2	V 292.402†	41658.7	44468.1	506.03 µg/L	506.03 ppb	09:58:14
2	Zn 213.857†	18197.2	18834.0	500.59 µg/L	500.59 ppb	09:58:14
3	Sc RADIAL	107600.7	107600.7	95.7 %		09:57:03
3	Al 396.153Radial†	10075.1	10302.2	5187.9 µg/L	5187.9 ppb	09:57:03
3	Ca 317.933Radial†	12194.2	12251.7	4863.4 µg/L	4863.4 ppb	09:57:23
3	Fe 238.204 Radial†	956.8	989.0	5211.8 µg/L	5211.8 ppb	09:57:23
3	K 766.490 Radial†	9684.0	9428.3	5112.0 µg/L	5112.0 ppb	09:57:03
3	Mg 279.077 IEC†	897.9	918.7	5100.4 µg/L	5100.4 ppb	09:57:23
3	Na 589.592 Radial†	34421.8	36686.6	10179 µg/L	10179 ppb	09:57:03
3	Sr 421.552†	85540.9	89483.8	504.06 µg/L	504.06 ppb	09:57:03
3	Sc 361.383	1943496.4	1943496.4	94.494 %		09:58:41
3	Y 371.029	1177687.4	1177687.4	94.038 %		09:58:41
3	Ag 328.068†	53379.9	56518.7	508.62 µg/L	508.62 ppb	09:58:47
3	As 188.979†	242.5	254.1	483.37 µg/L	483.37 ppb	09:59:08
3	B 249.677†	10618.4	11081.4	490.20 µg/L	490.20 ppb	09:58:47
3	Ba 233.527†	18682.7	19852.0	499.67 µg/L	499.67 ppb	09:58:47
3	Be 313.107†	748040.5	788017.3	498.30 µg/L	498.30 ppb	09:58:41
3	Cd 226.502†	17514.4	18635.9	492.97 µg/L	492.97 ppb	09:58:47
3	Co 228.616†	9700.6	10337.5	497.21 µg/L	497.21 ppb	09:58:47
3	Cr 267.716†	22418.7	23847.8	497.59 µg/L	497.59 ppb	09:58:47
3	Cu 324.752†	71220.8	71986.6	507.58 µg/L	507.58 ppb	09:58:47
3	Mn 257.610†	150021.8	158986.2	505.20 µg/L	505.20 ppb	09:58:41
3	Mo 202.031†	4118.9	4366.8	487.37 µg/L	487.37 ppb	09:59:08
3	Ni 231.604†	8910.8	9130.6	497.42 µg/L	497.42 ppb	09:58:47
3	P 214.914†	1283.2	1151.9	2445.0 µg/L	2445.0 ppb	09:59:08
3	Pb 220.353†	1895.6	1952.0	495.50 µg/L	495.50 ppb	09:59:08
3	S 181.975 Axial†	205.7	193.6	993.25 µg/L	993.25 ppb	09:59:08
3	Sb 206.836†	484.7	492.4	487.18 µg/L	487.18 ppb	09:59:08
3	Se 196.026†	332.1	337.4	493.59 µg/L	493.59 ppb	09:59:08
3	SiO2†	28848.0	28547.3	5451.5 µg/L	5451.5 ppb	09:58:47
3	Si 251.611†	31812.0	33316.0	2504.7 µg/L	2504.7 ppb	09:58:47
3	Sn 189.927†	954.6	987.7	484.26 µg/L	484.26 ppb	09:59:08
3	Ti 334.940†	214541.2	226323.7	501.40 µg/L	501.40 ppb	09:58:41
3	Tl 190.801†	285.7	323.8	491.02 µg/L	491.02 ppb	09:59:08
3	U 409.014†	5908.1	5573.1	522.52 µg/L	522.52 ppb	09:58:47
3	V 292.402†	41841.4	44371.4	504.88 µg/L	504.88 ppb	09:58:47
3	Zn 213.857†	18282.7	18797.8	499.64 µg/L	499.64 ppb	09:58:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1936406.4	94.149	%	0.3150				0.33%
Sc RADIAL	106856.2	95.0	%	0.75				0.79%
Y 371.029	1173210.6	93.680	%	0.3306				0.35%
Ag 328.068†	56516.8	508.61	µg/L	1.485	508.61	ppb	1.485	0.29%
QC value within limits for Ag 328.068 Recovery = 101.72%								
Al 396.153Radial†	10277.2	5175.1	µg/L	21.59	5175.1	ppb	21.59	0.42%
QC value within limits for Al 396.153Radial Recovery = 103.50%								
As 188.979†	261.1	496.62	µg/L	11.500	496.62	ppb	11.500	2.32%
QC value within limits for As 188.979 Recovery = 99.32%								
B 249.677†	11042.0	488.43	µg/L	1.979	488.43	ppb	1.979	0.41%
QC value within limits for B 249.677 Recovery = 97.69%								
Ba 233.527†	19834.2	499.23	µg/L	1.808	499.23	ppb	1.808	0.36%
QC value within limits for Ba 233.527 Recovery = 99.85%								
Be 313.107†	787551.2	498.01	µg/L	0.896	498.01	ppb	0.896	0.18%
QC value within limits for Be 313.107 Recovery = 99.60%								
Ca 317.933Radial†	12358.1	4905.6	µg/L	49.51	4905.6	ppb	49.51	1.01%
QC value within limits for Ca 317.933Radial Recovery = 98.11%								
Cd 226.502†	18581.7	491.53	µg/L	2.360	491.53	ppb	2.360	0.48%
QC value within limits for Cd 226.502 Recovery = 98.31%								
Co 228.616†	10334.5	497.08	µg/L	1.780	497.08	ppb	1.780	0.36%

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   QC value within limits for Co 228.616  Recovery = 99.42%
Cr 267.716†            23820.2      497.01 µg/L        1.435      497.01 ppb          1.435   0.29%
   QC value within limits for Cr 267.716  Recovery = 99.40%
Cu 324.752†            71987.1      507.60 µg/L        1.551      507.60 ppb          1.551   0.31%
   QC value within limits for Cu 324.752  Recovery = 101.52%
Fe 238.204 Radial†       999.5      5266.6 µg/L        56.02      5266.6 ppb          56.02   1.06%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.33%
K 766.490 Radial†       9435.3      5115.8 µg/L        44.41      5115.8 ppb          44.41   0.87%
   QC value within limits for K 766.490 Radial  Recovery = 102.32%
Mg 279.077 IEC†          926.2      5141.6 µg/L        46.88      5141.6 ppb          46.88   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.83%
Mn 257.610†           158991.4      505.23 µg/L        0.920      505.23 ppb          0.920   0.18%
   QC value within limits for Mn 257.610  Recovery = 101.05%
Mo 202.031†             4413.4      492.56 µg/L        4.935      492.56 ppb          4.935   1.00%
   QC value within limits for Mo 202.031  Recovery = 98.51%
Na 589.592 Radial†     36553.3       10142 µg/L         43.4       10142 ppb           43.4   0.43%
   QC value within limits for Na 589.592 Radial  Recovery = 101.42%
Ni 231.604†             9139.3      497.89 µg/L        0.773      497.89 ppb          0.773   0.16%
   QC value within limits for Ni 231.604  Recovery = 99.58%
P 214.914†              1165.8      2475.1 µg/L        26.16      2475.1 ppb          26.16   1.06%
   QC value within limits for P 214.914  Recovery = 99.01%
Pb 220.353†             1962.0      498.05 µg/L        2.240      498.05 ppb          2.240   0.45%
   QC value within limits for Pb 220.353  Recovery = 99.61%
S 181.975 Axial†         197.9      1015.5 µg/L        22.28      1015.5 ppb          22.28   2.19%
   QC value within limits for S 181.975 Axial  Recovery = 101.55%
Sb 206.836†              500.5      495.17 µg/L        6.931      495.17 ppb          6.931   1.40%
   QC value within limits for Sb 206.836  Recovery = 99.03%
Se 196.026†              338.1      494.76 µg/L        5.730      494.76 ppb          5.730   1.16%
   QC value within limits for Se 196.026  Recovery = 98.95%
SiO2†                  28498.2      5442.1 µg/L        16.43      5442.1 ppb          16.43   0.30%
   QC value within limits for SiO2  Recovery = 101.77%
Si 251.611†            33261.0      2500.2 µg/L        10.38      2500.2 ppb          10.38   0.42%
   QC value within limits for Si 251.611  Recovery = 100.01%
Sn 189.927†              998.8      489.69 µg/L        5.041      489.69 ppb          5.041   1.03%
   QC value within limits for Sn 189.927  Recovery = 97.94%
Sr 421.552†            89358.5      503.35 µg/L        1.287      503.35 ppb          1.287   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.67%
Ti 334.940†           226298.2      501.34 µg/L        0.776      501.34 ppb          0.776   0.15%
   QC value within limits for Ti 334.940  Recovery = 100.27%
Tl 190.801†              327.5      496.67 µg/L        8.064      496.67 ppb          8.064   1.62%
   QC value within limits for Tl 190.801  Recovery = 99.33%
U 409.014†              5488.9      514.60 µg/L        6.882      514.60 ppb          6.882   1.34%
   QC value within limits for U 409.014  Recovery = 102.92%
V 292.402†             44341.6      504.58 µg/L        1.633      504.58 ppb          1.633   0.32%
   QC value within limits for V 292.402  Recovery = 100.92%
Zn 213.857†            18775.6      499.04 µg/L        1.927      499.04 ppb          1.927   0.39%
   QC value within limits for Zn 213.857  Recovery = 99.81%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 09:59:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	104773.5	104773.5	93.1	%			09:59:49
1	Al 396.153Radial†	242.8	30.9	15.568	µg/L	15.568	ppb	09:59:49
1	Ca 317.933Radial†	394.6	-71.9	-28.524	µg/L	-28.524	ppb	10:00:09
1	Fe 238.204 Radial†	15.0	5.0	26.022	µg/L	26.022	ppb	10:00:09
1	K 766.490 Radial†	580.2	-72.0	-39.046	µg/L	-39.046	ppb	09:59:49
1	Mg 279.077 IEC†	12.0	-6.9	-38.485	µg/L	-38.485	ppb	10:00:09
1	Na 589.592 Radial†	-622.8	35.4	9.8091	µg/L	9.8091	ppb	09:59:49
1	Sr 421.552†	-8.2	55.0	0.3096	µg/L	0.3096	ppb	09:59:49
1	Sc 361.383	1927013.2	1927013.2	93.692	%			10:01:11
1	Y 371.029	1172783.1	1172783.1	93.646	%			10:01:11
1	Ag 328.068†	-85.7	-63.2	-0.5601	µg/L	-0.5601	ppb	10:01:17
1	As 188.979†	0.3	-2.2	-4.1517	µg/L	-4.1517	ppb	10:01:37
1	B 249.677†	141.5	-4.6	-0.2136	µg/L	-0.2136	ppb	10:01:37
1	Ba 233.527†	-70.5	5.4	0.1369	µg/L	0.1369	ppb	10:01:37
1	Be 313.107†	3721.1	360.1	0.2277	µg/L	0.2277	ppb	10:01:17
1	Cd 226.502†	-91.0	3.8	0.1046	µg/L	0.1046	ppb	10:01:37
1	Co 228.616†	-62.8	4.7	0.2262	µg/L	0.2262	ppb	10:01:37
1	Cr 267.716†	-89.1	27.7	0.5767	µg/L	0.5767	ppb	10:01:37
1	Cu 324.752†	3135.5	-37.8	-0.2602	µg/L	-0.2602	ppb	10:01:17
1	Mn 257.610†	-119.3	95.4	0.3059	µg/L	0.3059	ppb	10:01:37
1	Mo 202.031†	0.6	8.6	0.9583	µg/L	0.9583	ppb	10:01:37
1	Ni 231.604†	269.6	-11.6	-0.6341	µg/L	-0.6341	ppb	10:01:37
1	P 214.914†	210.6	18.7	40.692	µg/L	40.692	ppb	10:01:37
1	Pb 220.353†	59.3	9.2	2.3273	µg/L	2.3273	ppb	10:01:37
1	S 181.975 Axial†	25.7	3.4	17.654	µg/L	17.654	ppb	10:01:37
1	Sb 206.836†	23.7	4.8	4.7379	µg/L	4.7379	ppb	10:01:37
1	Se 196.026†	9.4	-4.0	-5.8435	µg/L	-5.8435	ppb	10:01:37
1	SiO2†	2017.6	171.8	32.809	µg/L	32.809	ppb	10:01:17
1	Si 251.611†	412.7	90.8	6.9475	µg/L	6.9475	ppb	10:01:37
1	Sn 189.927†	20.8	-0.3	-0.1510	µg/L	-0.1510	ppb	10:01:37
1	Ti 334.940†	838.6	176.2	0.3921	µg/L	0.3921	ppb	10:01:17
1	Tl 190.801†	-21.8	-1.8	-2.7488	µg/L	-2.7488	ppb	10:01:37
1	U 409.014†	728.2	98.0	9.1978	µg/L	9.1978	ppb	10:01:17
1	V 292.402†	-59.3	28.7	0.3472	µg/L	0.3472	ppb	10:01:17
1	Zn 213.857†	531.3	16.9	0.4555	µg/L	0.4555	ppb	10:01:37
2	Sc RADIAL	105663.4	105663.4	93.9	%			10:00:15
2	Al 396.153Radial†	213.8	-2.2	-1.1507	µg/L	-1.1507	ppb	10:00:15
2	Ca 317.933Radial†	398.6	-71.2	-28.254	µg/L	-28.254	ppb	10:00:35
2	Fe 238.204 Radial†	13.2	2.9	15.194	µg/L	15.194	ppb	10:00:35
2	K 766.490 Radial†	683.3	32.5	17.648	µg/L	17.648	ppb	10:00:15
2	Mg 279.077 IEC†	14.7	-4.2	-23.122	µg/L	-23.122	ppb	10:00:35
2	Na 589.592 Radial†	-642.8	19.6	5.4450	µg/L	5.4450	ppb	10:00:15
2	Sr 421.552†	-39.6	21.6	0.1218	µg/L	0.1218	ppb	10:00:15
2	Sc 361.383	1937661.4	1937661.4	94.210	%			10:01:43
2	Y 371.029	1179396.0	1179396.0	94.174	%			10:01:43
2	Ag 328.068†	-89.4	-66.6	-0.5912	µg/L	-0.5912	ppb	10:01:49
2	As 188.979†	1.8	-0.6	-1.1844	µg/L	-1.1844	ppb	10:02:09
2	B 249.677†	156.6	10.5	0.4633	µg/L	0.4633	ppb	10:02:09
2	Ba 233.527†	-84.2	-8.7	-0.2174	µg/L	-0.2174	ppb	10:02:09
2	Be 313.107†	3711.1	327.6	0.2071	µg/L	0.2071	ppb	10:01:49
2	Cd 226.502†	-89.5	5.9	0.1556	µg/L	0.1556	ppb	10:02:09
2	Co 228.616†	-74.3	-7.1	-0.3430	µg/L	-0.3430	ppb	10:02:09
2	Cr 267.716†	-104.0	12.4	0.2588	µg/L	0.2588	ppb	10:02:09
2	Cu 324.752†	3175.9	-13.2	-0.0895	µg/L	-0.0895	ppb	10:01:49
2	Mn 257.610†	-133.5	80.9	0.2587	µg/L	0.2587	ppb	10:02:09
2	Mo 202.031†	-2.0	5.8	0.6464	µg/L	0.6464	ppb	10:02:09
2	Ni 231.604†	275.6	-6.9	-0.3762	µg/L	-0.3762	ppb	10:02:09
2	P 214.914†	213.9	21.1	45.736	µg/L	45.736	ppb	10:02:09
2	Pb 220.353†	62.8	12.5	3.1775	µg/L	3.1775	ppb	10:02:09

2	S 181.975 Axial†	27.5	5.2	26.676 µg/L	26.676 ppb	10:02:09
2	Sb 206.836†	14.3	-5.4	-5.3276 µg/L	-5.3276 ppb	10:02:09
2	Se 196.026†	3.0	-10.9	-15.841 µg/L	-15.841 ppb	10:02:09
2	SiO2†	1987.3	127.8	24.405 µg/L	24.405 ppb	10:01:49
2	Si 251.611†	384.7	58.7	4.4810 µg/L	4.4810 ppb	10:02:09
2	Sn 189.927†	20.1	-1.1	-0.5509 µg/L	-0.5509 ppb	10:02:09
2	Ti 334.940†	846.2	179.3	0.3990 µg/L	0.3990 ppb	10:01:49
2	Tl 190.801†	-18.4	1.9	2.8127 µg/L	2.8127 ppb	10:02:09
2	U 409.014†	662.8	24.3	2.2795 µg/L	2.2795 ppb	10:01:49
2	V 292.402†	-59.0	29.4	0.3403 µg/L	0.3403 ppb	10:01:49
2	Zn 213.857†	522.5	4.5	0.1210 µg/L	0.1210 ppb	10:02:09
3	Sc RADIAL	105429.6	105429.6	93.7 %		10:00:40
3	Al 396.153Radial†	236.8	22.8	11.517 µg/L	11.517 ppb	10:00:40
3	Ca 317.933Radial†	386.0	-83.7	-33.212 µg/L	-33.212 ppb	10:01:01
3	Fe 238.204 Radial†	12.9	2.6	13.533 µg/L	13.533 ppb	10:01:01
3	K 766.490 Radial†	635.2	-17.1	-9.2919 µg/L	-9.2919 ppb	10:00:40
3	Mg 279.077 IEC†	16.7	-2.0	-11.257 µg/L	-11.257 ppb	10:01:01
3	Na 589.592 Radial†	-656.5	3.5	0.9707 µg/L	0.9707 ppb	10:00:40
3	Sr 421.552†	-73.9	-15.1	-0.0851 µg/L	-0.0851 ppb	10:00:40
3	Sc 361.383	1951055.2	1951055.2	94.861 %		10:02:15
3	Y 371.029	1186776.5	1186776.5	94.763 %		10:02:15
3	Ag 328.068†	-164.3	-144.8	-1.2902 µg/L	-1.2902 ppb	10:02:21
3	As 188.979†	1.4	-1.0	-1.8689 µg/L	-1.8689 ppb	10:02:42
3	B 249.677†	139.7	-8.4	-0.3770 µg/L	-0.3770 ppb	10:02:42
3	Ba 233.527†	-80.0	-3.7	-0.0910 µg/L	-0.0910 ppb	10:02:42
3	Be 313.107†	3574.0	156.1	0.0986 µg/L	0.0986 ppb	10:02:21
3	Cd 226.502†	-85.0	11.3	0.2990 µg/L	0.2990 ppb	10:02:42
3	Co 228.616†	-73.2	-5.4	-0.2604 µg/L	-0.2604 ppb	10:02:42
3	Cr 267.716†	-101.6	15.7	0.3277 µg/L	0.3277 ppb	10:02:42
3	Cu 324.752†	3128.3	-86.6	-0.6062 µg/L	-0.6062 ppb	10:02:21
3	Mn 257.610†	-133.1	82.3	0.2630 µg/L	0.2630 ppb	10:02:42
3	Mo 202.031†	-7.7	-0.2	-0.0244 µg/L	-0.0244 ppb	10:02:42
3	Ni 231.604†	269.0	-15.9	-0.8640 µg/L	-0.8640 ppb	10:02:42
3	P 214.914†	219.3	25.2	54.738 µg/L	54.738 ppb	10:02:42
3	Pb 220.353†	69.9	19.5	4.9506 µg/L	4.9506 ppb	10:02:42
3	S 181.975 Axial†	26.8	4.2	21.712 µg/L	21.712 ppb	10:02:42
3	Sb 206.836†	12.5	-7.3	-7.2839 µg/L	-7.2839 ppb	10:02:42
3	Se 196.026†	11.1	-2.4	-3.5096 µg/L	-3.5096 ppb	10:02:42
3	SiO2†	2011.7	139.0	26.549 µg/L	26.549 ppb	10:02:21
3	Si 251.611†	400.7	72.7	5.5258 µg/L	5.5258 ppb	10:02:42
3	Sn 189.927†	23.2	2.0	0.9652 µg/L	0.9652 ppb	10:02:42
3	Ti 334.940†	828.0	153.9	0.3431 µg/L	0.3431 ppb	10:02:21
3	Tl 190.801†	-17.9	2.6	3.9056 µg/L	3.9056 ppb	10:02:42
3	U 409.014†	666.9	23.8	2.2285 µg/L	2.2285 ppb	10:02:21
3	V 292.402†	-57.7	31.2	0.3559 µg/L	0.3559 ppb	10:02:21
3	Zn 213.857†	520.1	-1.9	-0.0462 µg/L	-0.0462 ppb	10:02:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1938576.6	94.255	%	0.5857				0.62%
Sc RADIAL	105288.8	93.6	%	0.41				0.44%
Y 371.029	1179651.8	94.194	%	0.5590				0.59%
Ag 328.068†	-91.5	-0.8139	µg/L	0.41283	-0.8139	ppb	0.41283	50.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.1	8.6450	µg/L	8.72175	8.6450	ppb	8.72175	100.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-2.4016	µg/L	1.55374	-2.4016	ppb	1.55374	64.69%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-0.8	-0.0424	µg/L	0.44551	-0.0424	ppb	0.44551	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.3	-0.0572	µg/L	0.17956	-0.0572	ppb	0.17956	313.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	281.3	0.1778	µg/L	0.06936	0.1778	ppb	0.06936	39.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-75.6	-29.997	µg/L	2.7879	-29.997	ppb	2.7879	9.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.0	0.1864	µg/L	0.10081	0.1864	ppb	0.10081	54.09%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.6	-0.1257	µg/L	0.30758	-0.1257	ppb	0.30758	244.64%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.6      0.3878 µg/L       0.16726      0.3878 ppb        0.16726  43.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -45.8     -0.3186 µg/L       0.26326     -0.3186 ppb        0.26326  82.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        3.5      18.250 µg/L        6.7821      18.250 ppb         6.7821  37.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -18.9     -10.230 µg/L       28.3584     -10.230 ppb        28.3584 277.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -4.4     -24.288 µg/L       13.6515     -24.288 ppb        13.6515  56.21%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              86.2      0.2759 µg/L       0.02610      0.2759 ppb        0.02610   9.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.7      0.5268 µg/L       0.50218      0.5268 ppb        0.50218  95.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       19.5      5.4082 µg/L       4.41931      5.4082 ppb        4.41931  81.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -11.5     -0.6248 µg/L       0.24401     -0.6248 ppb        0.24401  39.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               21.7      47.056 µg/L        7.1153      47.056 ppb         7.1153  15.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              13.8      3.4851 µg/L       1.33839      3.4851 ppb        1.33839  38.40%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          4.3      22.014 µg/L        4.5185      22.014 ppb         4.5185  20.53%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.6     -2.6245 µg/L       6.45063     -2.6245 ppb        6.45063 245.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.8     -8.3980 µg/L       6.55054     -8.3980 ppb        6.55054  78.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   146.2      27.921 µg/L        4.3669      27.921 ppb         4.3669  15.64%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              74.1      5.6514 µg/L       1.23802      5.6514 ppb        1.23802  21.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.2      0.0878 µg/L       0.78575      0.0878 ppb        0.78575 895.36%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              20.5      0.1154 µg/L       0.19742      0.1154 ppb        0.19742 171.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             169.8      0.3781 µg/L       0.03047      0.3781 ppb        0.03047   8.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.9      1.3232 µg/L       3.56849      1.3232 ppb        3.56849 269.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               48.7      4.5686 µg/L       4.00908      4.5686 ppb        4.00908  87.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               29.7      0.3478 µg/L       0.00779      0.3478 ppb        0.00779   2.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               6.5      0.1768 µg/L       0.25548      0.1768 ppb        0.25548 144.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: 241825004|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 310
Date Collected: 12/18/2009 10:02:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825004|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108342.0	108342.0	96.3	%			10:03:30
1	Al 396.153Radial†	136511.1	141495.3	71508	µg/L	71508	ppb	10:03:30
1	Ca 317.933Radial†	70177.2	72362.2	28724	µg/L	28724	ppb	10:03:30
1	Fe 238.204 Radial†	18933.7	19645.7	103200	µg/L	103200	ppb	10:03:50
1	K 766.490 Radial†	18306.9	18311.3	9928.3	µg/L	9928.3	ppb	10:03:30
1	Mg 279.077 IEC†	2365.8	2436.3	13362	µg/L	13362	ppb	10:03:50
1	Na 589.592 Radial†	6644.4	7602.2	2109.3	µg/L	2109.3	ppb	10:03:30
1	Sr 421.552†	33134.4	34463.7	194.13	µg/L	194.13	ppb	10:03:30
1	Sc 361.383	1917131.9	1917131.9	93.212	%			10:04:53
1	Y 371.029	1177118.8	1177118.8	93.992	%			10:04:53
1	Ag 328.068†	-1144.2	-1199.3	-1.9277	µg/L	-1.9277	ppb	10:04:59
1	As 188.979†	19.2	18.1	18.531	µg/L	18.531	ppb	10:05:19
1	B 249.677†	1464.2	1415.1	30.357	µg/L	30.357	ppb	10:04:59
1	Ba 233.527†	48551.6	52167.9	1310.5	µg/L	1310.5	ppb	10:04:59
1	Be 313.107†	12931.0	10261.2	6.0170	µg/L	6.0170	ppb	10:04:59
1	Cd 226.502†	193.8	308.8	0.1791	µg/L	0.1791	ppb	10:05:19
1	Co 228.616†	321.9	417.1	17.435	µg/L	17.435	ppb	10:05:19
1	Cr 267.716†	1819.3	2074.6	43.404	µg/L	43.404	ppb	10:05:19
1	Cu 324.752†	4829.8	1797.2	34.812	µg/L	34.812	ppb	10:04:59
1	Mn 257.610†	377363.9	405067.5	1298.5	µg/L	1298.5	ppb	10:04:53
1	Mo 202.031†	179.7	200.7	26.441	µg/L	26.441	ppb	10:05:19
1	Ni 231.604†	864.9	628.5	34.241	µg/L	34.241	ppb	10:05:19
1	P 214.914†	526.8	359.2	682.12	µg/L	682.12	ppb	10:05:19
1	Pb 220.353†	372.3	345.3	92.537	µg/L	92.537	ppb	10:05:19
1	S 181.975 Axial†	115.0	99.3	493.08	µg/L	493.08	ppb	10:05:19
1	Sb 206.836†	23.6	4.8	6.5863	µg/L	6.5863	ppb	10:05:19
1	Se 196.026†	-37.2	-54.0	-7.8536	µg/L	-7.8536	ppb	10:05:19
1	SiO2†	110963.5	117062.6	22355	µg/L	22355	ppb	10:04:59
1	Si 251.611†	127310.5	136232.0	10385	µg/L	10385	ppb	10:04:59
1	Sn 189.927†	-64.6	-91.8	-23.592	µg/L	-23.592	ppb	10:05:19
1	Ti 334.940†	539074.0	577612.3	1278.7	µg/L	1278.7	ppb	10:04:53
1	Tl 190.801†	-22.1	-2.3	7.7172	µg/L	7.7172	ppb	10:05:19
1	U 409.014†	340.8	-313.6	-48.037	µg/L	-48.037	ppb	10:04:59
1	V 292.402†	7647.1	8295.9	102.05	µg/L	102.05	ppb	10:04:59
1	Zn 213.857†	8458.7	8524.5	216.84	µg/L	216.84	ppb	10:04:59
2	Sc RADIAL	107914.3	107914.3	95.9	%			10:03:56
2	Al 396.153Radial†	138124.5	143738.6	72641	µg/L	72641	ppb	10:03:56
2	Ca 317.933Radial†	70433.9	72918.5	28945	µg/L	28945	ppb	10:03:56
2	Fe 238.204 Radial†	18881.1	19668.7	103320	µg/L	103320	ppb	10:04:16
2	K 766.490 Radial†	18521.3	18610.1	10090	µg/L	10090	ppb	10:03:56
2	Mg 279.077 IEC†	2376.3	2457.0	13476	µg/L	13476	ppb	10:04:16
2	Na 589.592 Radial†	6753.2	7742.8	2148.3	µg/L	2148.3	ppb	10:03:56
2	Sr 421.552†	33458.7	34938.1	196.80	µg/L	196.80	ppb	10:03:56
2	Sc 361.383	1912205.9	1912205.9	92.972	%			10:05:25
2	Y 371.029	1174721.8	1174721.8	93.801	%			10:05:25
2	Ag 328.068†	-1179.2	-1240.0	-2.2844	µg/L	-2.2844	ppb	10:05:31
2	As 188.979†	19.8	18.8	19.854	µg/L	19.854	ppb	10:05:51
2	B 249.677†	1486.7	1443.4	31.574	µg/L	31.574	ppb	10:05:31
2	Ba 233.527†	48430.2	52171.6	1310.6	µg/L	1310.6	ppb	10:05:31
2	Be 313.107†	12871.1	10232.5	6.0013	µg/L	6.0013	ppb	10:05:31
2	Cd 226.502†	189.5	304.8	0.0644	µg/L	0.0644	ppb	10:05:51
2	Co 228.616†	328.1	424.6	17.807	µg/L	17.807	ppb	10:05:51
2	Cr 267.716†	1836.1	2097.7	43.883	µg/L	43.883	ppb	10:05:51
2	Cu 324.752†	4841.1	1822.7	35.017	µg/L	35.017	ppb	10:05:31
2	Mn 257.610†	375009.9	403578.4	1293.8	µg/L	1293.8	ppb	10:05:25
2	Mo 202.031†	170.3	191.1	25.374	µg/L	25.374	ppb	10:05:51
2	Ni 231.604†	879.6	646.7	35.233	µg/L	35.233	ppb	10:05:51
2	P 214.914†	530.8	365.0	695.00	µg/L	695.00	ppb	10:05:51
2	Pb 220.353†	356.2	329.0	88.502	µg/L	88.502	ppb	10:05:51

2	S 181.975 Axial†	115.9	100.7	499.86 µg/L	499.86 ppb	10:05:51
2	Sb 206.836†	27.5	9.0	10.744 µg/L	10.744 ppb	10:05:51
2	Se 196.026†	-43.1	-60.5	-17.239 µg/L	-17.239 ppb	10:05:51
2	SiO2†	111026.8	117437.3	22426 µg/L	22426 ppb	10:05:31
2	Si 251.611†	127491.4	136778.4	10427 µg/L	10427 ppb	10:05:31
2	Sn 189.927†	-59.8	-86.7	-21.052 µg/L	-21.052 ppb	10:05:51
2	Ti 334.940†	534953.6	574670.4	1272.2 µg/L	1272.2 ppb	10:05:25
2	Tl 190.801†	-20.3	-0.4	10.467 µg/L	10.467 ppb	10:05:51
2	U 409.014†	331.6	-322.6	-48.900 µg/L	-48.900 ppb	10:05:31
2	V 292.402†	7597.8	8264.0	101.69 µg/L	101.69 ppb	10:05:31
2	Zn 213.857†	8465.1	8554.8	217.63 µg/L	217.63 ppb	10:05:31
3	Sc RADIAL	107442.7	107442.7	95.5 %		10:04:22
3	Al 396.153Radial†	138138.5	144385.3	72968 µg/L	72968 ppb	10:04:22
3	Ca 317.933Radial†	70267.3	73066.3	29004 µg/L	29004 ppb	10:04:22
3	Fe 238.204 Radial†	18816.9	19687.9	103420 µg/L	103420 ppb	10:04:42
3	K 766.490 Radial†	18594.5	18771.4	10178 µg/L	10178 ppb	10:04:22
3	Mg 279.077 IEC†	2360.4	2451.2	13444 µg/L	13444 ppb	10:04:42
3	Na 589.592 Radial†	6693.4	7711.1	2139.5 µg/L	2139.5 ppb	10:04:22
3	Sr 421.552†	33377.3	35005.9	197.19 µg/L	197.19 ppb	10:04:22
3	Sc 361.383	1923001.2	1923001.2	93.497 %		10:05:57
3	Y 371.029	1180524.7	1180524.7	94.264 %		10:05:57
3	Ag 328.068†	-1053.9	-1098.9	-1.0170 µg/L	-1.0170 ppb	10:06:03
3	As 188.979†	26.3	25.6	32.800 µg/L	32.800 ppb	10:06:23
3	B 249.677†	1495.8	1444.2	31.576 µg/L	31.576 ppb	10:06:03
3	Ba 233.527†	48638.4	52101.8	1308.8 µg/L	1308.8 ppb	10:06:03
3	Be 313.107†	12924.7	10212.1	5.9878 µg/L	5.9878 ppb	10:06:03
3	Cd 226.502†	193.5	307.8	0.1363 µg/L	0.1363 ppb	10:06:23
3	Co 228.616†	333.8	428.7	18.002 µg/L	18.002 ppb	10:06:23
3	Cr 267.716†	1826.9	2076.7	43.448 µg/L	43.448 ppb	10:06:23
3	Cu 324.752†	4833.1	1784.9	34.772 µg/L	34.772 ppb	10:06:03
3	Mn 257.610†	377766.5	404262.4	1295.9 µg/L	1295.9 ppb	10:05:57
3	Mo 202.031†	170.9	190.7	25.338 µg/L	25.338 ppb	10:06:23
3	Ni 231.604†	872.4	633.7	34.521 µg/L	34.521 ppb	10:06:23
3	P 214.914†	535.3	366.5	698.45 µg/L	698.45 ppb	10:06:23
3	Pb 220.353†	363.8	335.0	90.059 µg/L	90.059 ppb	10:06:23
3	S 181.975 Axial†	110.8	94.4	467.90 µg/L	467.90 ppb	10:06:23
3	Sb 206.836†	33.1	14.8	16.486 µg/L	16.486 ppb	10:06:23
3	Se 196.026†	-47.6	-65.0	-23.825 µg/L	-23.825 ppb	10:06:23
3	SiO2†	111131.9	116879.3	22320 µg/L	22320 ppb	10:06:03
3	Si 251.611†	127634.3	136161.5	10380 µg/L	10380 ppb	10:06:03
3	Sn 189.927†	-58.0	-84.5	-19.968 µg/L	-19.968 ppb	10:06:23
3	Ti 334.940†	538605.6	575346.2	1273.7 µg/L	1273.7 ppb	10:05:57
3	Tl 190.801†	-24.3	-4.6	4.1197 µg/L	4.1197 ppb	10:06:23
3	U 409.014†	328.9	-327.4	-49.370 µg/L	-49.370 ppb	10:06:03
3	V 292.402†	7631.8	8254.5	101.59 µg/L	101.59 ppb	10:06:03
3	Zn 213.857†	8480.9	8520.6	216.71 µg/L	216.71 ppb	10:06:03

Mean Data: 241825004|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1917446.4	93.227	%	0.2628				0.28%
Sc RADIAL	107899.7	95.9	%	0.40				0.42%
Y 371.029	1177455.1	94.019	%	0.2328				0.25%
Ag 328.068†	-1179.4	-1.7430	µg/L	0.65357	-1.7430	ppb	0.65357	37.50%
Al 396.153Radial†	143206.4	72372	µg/L	766.5	72372	ppb	766.5	1.06%
As 188.979†	20.8	23.728	µg/L	7.8840	23.728	ppb	7.8840	33.23%
B 249.677†	1434.2	31.169	µg/L	0.7030	31.169	ppb	0.7030	2.26%
Ba 233.527†	52147.1	1310.0	µg/L	0.99	1310.0	ppb	0.99	0.08%
Be 313.107†	10235.3	6.0020	µg/L	0.01461	6.0020	ppb	0.01461	0.24%
Ca 317.933Radial†	72782.3	28891	µg/L	147.4	28891	ppb	147.4	0.51%
Cd 226.502†	307.1	0.1266	µg/L	0.05799	0.1266	ppb	0.05799	45.80%
Co 228.616†	423.5	17.748	µg/L	0.2884	17.748	ppb	0.2884	1.63%
Cr 267.716†	2083.0	43.578	µg/L	0.2650	43.578	ppb	0.2650	0.61%
Cu 324.752†	1801.6	34.867	µg/L	0.1314	34.867	ppb	0.1314	0.38%
Fe 238.204 Radial†	19667.5	103310	µg/L	111.0	103310	ppb	111.0	0.11%
K 766.490 Radial†	18564.3	10065	µg/L	126.6	10065	ppb	126.6	1.26%
Mg 279.077 IEC†	2448.2	13427	µg/L	59.0	13427	ppb	59.0	0.44%
Mn 257.610†	404302.8	1296.1	µg/L	2.36	1296.1	ppb	2.36	0.18%
Mo 202.031†	194.1	25.718	µg/L	0.6267	25.718	ppb	0.6267	2.44%
Na 589.592 Radial†	7685.4	2132.4	µg/L	20.47	2132.4	ppb	20.47	0.96%

Ni 231.604†	636.3	34.665 µg/L	0.5116	34.665 ppb	0.5116	1.48%
P 214.914†	363.6	691.86 µg/L	8.608	691.86 ppb	8.608	1.24%
Pb 220.353†	336.4	90.366 µg/L	2.0351	90.366 ppb	2.0351	2.25%
S 181.975 Axial†	98.1	486.95 µg/L	16.841	486.95 ppb	16.841	3.46%
Sb 206.836†	9.5	11.272 µg/L	4.9707	11.272 ppb	4.9707	44.10%
Se 196.026†	-59.8	-16.306 µg/L	8.0264	-16.306 ppb	8.0264	49.22%
SiO2†	117126.4	22367 µg/L	54.3	22367 ppb	54.3	0.24%
Si 251.611†	136390.6	10398 µg/L	25.9	10398 ppb	25.9	0.25%
Sn 189.927†	-87.7	-21.537 µg/L	1.8602	-21.537 ppb	1.8602	8.64%
Sr 421.552†	34802.6	196.04 µg/L	1.664	196.04 ppb	1.664	0.85%
Ti 334.940†	575876.3	1274.9 µg/L	3.42	1274.9 ppb	3.42	0.27%
Tl 190.801†	-2.4	7.4346 µg/L	3.18306	7.4346 ppb	3.18306	42.81%
U 409.014†	-321.2	-48.769 µg/L	0.6763	-48.769 ppb	0.6763	1.39%
V 292.402†	8271.5	101.78 µg/L	0.241	101.78 ppb	0.241	0.24%
Zn 213.857†	8533.3	217.06 µg/L	0.498	217.06 ppb	0.498	0.23%

Sequence No.: 13
Sample ID: 241825005|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 311
Date Collected: 12/18/2009 10:06:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825005|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107085.6	107085.6	95.2	%			10:07:05
1	Al 396.153Radial†	66601.2	69726.5	35237	µg/L	35237	ppb	10:07:05
1	Ca 317.933Radial†	16967.3	17326.6	6877.9	µg/L	6877.9	ppb	10:07:05
1	Fe 238.204 Radial†	17842.5	18730.1	98389	µg/L	98389	ppb	10:07:05
1	K 766.490 Radial†	11449.4	11331.4	6143.8	µg/L	6143.8	ppb	10:07:05
1	Mg 279.077 IEC†	943.3	971.0	5241.2	µg/L	5241.2	ppb	10:07:25
1	Na 589.592 Radial†	4408.2	5334.2	1480.0	µg/L	1480.0	ppb	10:07:05
1	Sr 421.552†	39829.6	41899.8	236.02	µg/L	236.02	ppb	10:07:05
1	Sc 361.383	1932839.0	1932839.0	93.976	%			10:08:29
1	Y 371.029	1209960.4	1209960.4	96.615	%			10:08:29
1	Ag 328.068†	-1019.2	-1056.3	-1.4181	µg/L	-1.4181	ppb	10:08:34
1	As 188.979†	8.2	6.2	0.0691	µg/L	0.0691	ppb	10:08:55
1	B 249.677†	1985.8	1957.4	55.936	µg/L	55.936	ppb	10:08:34
1	Ba 233.527†	27046.8	28861.3	724.99	µg/L	724.99	ppb	10:08:34
1	Be 313.107†	11197.4	8303.7	4.7616	µg/L	4.7616	ppb	10:08:34
1	Cd 226.502†	154.4	265.2	-0.5929	µg/L	-0.5929	ppb	10:08:55
1	Co 228.616†	48.1	122.9	3.2062	µg/L	3.2062	ppb	10:08:55
1	Cr 267.716†	786.9	960.2	20.073	µg/L	20.073	ppb	10:08:55
1	Cu 324.752†	2272.5	-966.1	14.337	µg/L	14.337	ppb	10:08:34
1	Mn 257.610†	188453.4	200756.9	649.48	µg/L	649.48	ppb	10:08:29
1	Mo 202.031†	240.8	264.2	33.337	µg/L	33.337	ppb	10:08:55
1	Ni 231.604†	504.9	237.9	12.960	µg/L	12.960	ppb	10:08:55
1	P 214.914†	724.4	564.9	1124.0	µg/L	1124.0	ppb	10:08:55
1	Pb 220.353†	200.9	159.7	42.406	µg/L	42.406	ppb	10:08:55
1	S 181.975 Axial†	894.0	927.3	4748.8	µg/L	4748.8	ppb	10:08:55
1	Sb 206.836†	24.0	5.0	9.1942	µg/L	9.1942	ppb	10:08:55
1	Se 196.026†	-28.0	-43.9	3.7069	µg/L	3.7069	ppb	10:08:55
1	SiO2†	90213.3	94014.8	17953	µg/L	17953	ppb	10:08:34
1	Si 251.611†	103043.9	109299.9	8321.1	µg/L	8321.1	ppb	10:08:34
1	Sn 189.927†	-9.7	-32.8	-1.8551	µg/L	-1.8551	ppb	10:08:55
1	Ti 334.940†	563193.0	598577.8	1326.4	µg/L	1326.4	ppb	10:08:29
1	Tl 190.801†	-31.3	-11.9	-6.2465	µg/L	-6.2465	ppb	10:08:55
1	U 409.014†	782.4	153.3	-3.8076	µg/L	-3.8076	ppb	10:08:29
1	V 292.402†	2988.5	3272.1	45.143	µg/L	45.143	ppb	10:08:34
1	Zn 213.857†	6613.3	6487.1	163.13	µg/L	163.13	ppb	10:08:34
2	Sc RADIAL	106718.3	106718.3	94.9	%			10:07:31
2	Al 396.153Radial†	67043.0	70432.8	35594	µg/L	35594	ppb	10:07:31
2	Ca 317.933Radial†	17034.4	17458.6	6930.3	µg/L	6930.3	ppb	10:07:31
2	Fe 238.204 Radial†	17941.2	18898.7	99274	µg/L	99274	ppb	10:07:31
2	K 766.490 Radial†	11531.7	11459.4	6213.2	µg/L	6213.2	ppb	10:07:31
2	Mg 279.077 IEC†	932.6	963.1	5196.1	µg/L	5196.1	ppb	10:07:51
2	Na 589.592 Radial†	4390.6	5331.5	1479.3	µg/L	1479.3	ppb	10:07:31
2	Sr 421.552†	40080.1	42307.8	238.32	µg/L	238.32	ppb	10:07:31
2	Sc 361.383	1942346.8	1942346.8	94.438	%			10:09:02
2	Y 371.029	1215193.7	1215193.7	97.032	%			10:09:02
2	Ag 328.068†	-1120.3	-1158.0	-2.2632	µg/L	-2.2632	ppb	10:09:08
2	As 188.979†	12.1	10.3	7.7405	µg/L	7.7405	ppb	10:09:28
2	B 249.677†	1990.1	1951.6	55.399	µg/L	55.399	ppb	10:09:08
2	Ba 233.527†	26775.6	28433.2	714.23	µg/L	714.23	ppb	10:09:08
2	Be 313.107†	11096.6	8138.6	4.6603	µg/L	4.6603	ppb	10:09:08
2	Cd 226.502†	178.1	289.5	-0.0178	µg/L	-0.0178	ppb	10:09:28
2	Co 228.616†	42.8	117.0	2.9401	µg/L	2.9401	ppb	10:09:28
2	Cr 267.716†	798.8	968.6	20.246	µg/L	20.246	ppb	10:09:28
2	Cu 324.752†	2297.5	-951.5	14.630	µg/L	14.630	ppb	10:09:08
2	Mn 257.610†	188380.1	199697.7	646.23	µg/L	646.23	ppb	10:09:02
2	Mo 202.031†	240.3	262.3	33.165	µg/L	33.165	ppb	10:09:28
2	Ni 231.604†	509.6	240.2	13.087	µg/L	13.087	ppb	10:09:28
2	P 214.914†	724.9	561.6	1116.0	µg/L	1116.0	ppb	10:09:28
2	Pb 220.353†	196.9	154.4	41.091	µg/L	41.091	ppb	10:09:28

2	S 181.975 Axial†	901.1	930.2	4763.6 µg/L	4763.6 ppb	10:09:28
2	Sb 206.836†	10.3	-9.6	-5.4039 µg/L	-5.4039 ppb	10:09:28
2	Se 196.026†	-24.8	-40.4	9.4830 µg/L	9.4830 ppb	10:09:28
2	SiO2†	88857.7	92109.4	17590 µg/L	17590 ppb	10:09:08
2	Si 251.611†	101581.9	107215.1	8161.7 µg/L	8161.7 ppb	10:09:08
2	Sn 189.927†	-8.6	-31.5	-1.1367 µg/L	-1.1367 ppb	10:09:28
2	Ti 334.940†	562331.2	594731.7	1317.9 µg/L	1317.9 ppb	10:09:02
2	Tl 190.801†	-30.6	-11.0	-5.0837 µg/L	-5.0837 ppb	10:09:28
2	U 409.014†	799.8	167.7	-2.6230 µg/L	-2.6230 ppb	10:09:02
2	V 292.402†	2925.5	3189.8	44.288 µg/L	44.288 ppb	10:09:08
2	Zn 213.857†	6560.6	6396.8	160.62 µg/L	160.62 ppb	10:09:08
3	Sc RADIAL	106158.8	106158.8	94.4 %		10:07:57
3	Al 396.153Radial†	67074.4	70838.6	35799 µg/L	35799 ppb	10:07:57
3	Ca 317.933Radial†	16959.5	17473.9	6936.3 µg/L	6936.3 ppb	10:07:57
3	Fe 238.204 Radial†	17837.6	18888.6	99221 µg/L	99221 ppb	10:07:57
3	K 766.490 Radial†	11538.8	11531.1	6252.1 µg/L	6252.1 ppb	10:07:57
3	Mg 279.077 IEC†	932.7	968.4	5225.7 µg/L	5225.7 ppb	10:08:17
3	Na 589.592 Radial†	4397.0	5362.8	1488.0 µg/L	1488.0 ppb	10:07:57
3	Sr 421.552†	39920.6	42361.5	238.62 µg/L	238.62 ppb	10:07:57
3	Sc 361.383	1940522.3	1940522.3	94.349 %		10:09:36
3	Y 371.029	1213921.6	1213921.6	96.931 %		10:09:36
3	Ag 328.068†	-1056.2	-1091.1	-1.6692 µg/L	-1.6692 ppb	10:09:41
3	As 188.979†	11.6	9.8	6.7972 µg/L	6.7972 ppb	10:10:02
3	B 249.677†	1980.2	1943.1	55.040 µg/L	55.040 ppb	10:09:41
3	Ba 233.527†	27009.9	28708.2	721.14 µg/L	721.14 ppb	10:09:41
3	Be 313.107†	11118.9	8173.3	4.6810 µg/L	4.6810 ppb	10:09:41
3	Cd 226.502†	169.6	280.6	-0.2484 µg/L	-0.2484 ppb	10:10:02
3	Co 228.616†	32.4	106.0	2.4070 µg/L	2.4070 ppb	10:10:02
3	Cr 267.716†	793.5	963.8	20.148 µg/L	20.148 ppb	10:10:02
3	Cu 324.752†	2269.4	-979.0	14.425 µg/L	14.425 ppb	10:09:41
3	Mn 257.610†	188321.0	199822.6	646.62 µg/L	646.62 ppb	10:09:36
3	Mo 202.031†	240.3	262.6	33.191 µg/L	33.191 ppb	10:10:02
3	Ni 231.604†	517.7	249.3	13.580 µg/L	13.580 ppb	10:10:02
3	P 214.914†	731.1	568.9	1132.1 µg/L	1132.1 ppb	10:10:02
3	Pb 220.353†	198.2	155.9	41.496 µg/L	41.496 ppb	10:10:02
3	S 181.975 Axial†	903.9	933.9	4783.0 µg/L	4783.0 ppb	10:10:02
3	Sb 206.836†	22.3	3.1	7.2053 µg/L	7.2053 ppb	10:10:02
3	Se 196.026†	-28.7	-44.5	3.4763 µg/L	3.4763 ppb	10:10:02
3	SiO2†	89630.8	93017.3	17763 µg/L	17763 ppb	10:09:41
3	Si 251.611†	102360.3	108141.3	8232.5 µg/L	8232.5 ppb	10:09:41
3	Sn 189.927†	-5.7	-28.5	0.3434 µg/L	0.3434 ppb	10:10:02
3	Ti 334.940†	563200.6	596212.9	1321.2 µg/L	1321.2 ppb	10:09:36
3	Tl 190.801†	-30.7	-11.1	-5.1810 µg/L	-5.1810 ppb	10:10:02
3	U 409.014†	780.0	147.5	-4.5049 µg/L	-4.5049 ppb	10:09:36
3	V 292.402†	2932.5	3200.1	44.397 µg/L	44.397 ppb	10:09:41
3	Zn 213.857†	6630.2	6477.1	162.77 µg/L	162.77 ppb	10:09:41

Mean Data: 241825005|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1938569.4	94.254	%	0.2453				0.26%
Sc RADIAL	106654.2	94.8	%	0.41				0.44%
Y 371.029	1213025.2	96.859	%	0.2179				0.23%
Ag 328.068†	-1101.8	-1.7835	µg/L	0.43399	-1.7835	ppb	0.43399	24.33%
Al 396.153Radial†	70332.6	35543	µg/L	284.4	35543	ppb	284.4	0.80%
As 188.979†	8.8	4.8689	µg/L	4.18344	4.8689	ppb	4.18344	85.92%
B 249.677†	1950.7	55.458	µg/L	0.4508	55.458	ppb	0.4508	0.81%
Ba 233.527†	28667.6	720.12	µg/L	5.449	720.12	ppb	5.449	0.76%
Be 313.107†	8205.2	4.7010	µg/L	0.05351	4.7010	ppb	0.05351	1.14%
Ca 317.933Radial†	17419.7	6914.8	µg/L	32.14	6914.8	ppb	32.14	0.46%
Cd 226.502†	278.4	-0.2864	µg/L	0.28942	-0.2864	ppb	0.28942	101.07%
Co 228.616†	115.3	2.8511	µg/L	0.40698	2.8511	ppb	0.40698	14.27%
Cr 267.716†	964.2	20.156	µg/L	0.0868	20.156	ppb	0.0868	0.43%
Cu 324.752†	-965.6	14.464	µg/L	0.1504	14.464	ppb	0.1504	1.04%
Fe 238.204 Radial†	18839.1	98962	µg/L	496.7	98962	ppb	496.7	0.50%
K 766.490 Radial†	11440.6	6203.1	µg/L	54.86	6203.1	ppb	54.86	0.88%
Mg 279.077 IEC†	967.5	5221.0	µg/L	22.93	5221.0	ppb	22.93	0.44%
Mn 257.610†	200092.4	647.44	µg/L	1.775	647.44	ppb	1.775	0.27%
Mo 202.031†	263.0	33.231	µg/L	0.0928	33.231	ppb	0.0928	0.28%
Na 589.592 Radial†	5342.8	1482.4	µg/L	4.80	1482.4	ppb	4.80	0.32%

Ni 231.604†	242.5	13.209	µg/L	0.3275	13.209	ppb	0.3275	2.48%
P 214.914†	565.2	1124.0	µg/L	8.04	1124.0	ppb	8.04	0.72%
Pb 220.353†	156.7	41.664	µg/L	0.6736	41.664	ppb	0.6736	1.62%
S 181.975 Axial†	930.5	4765.1	µg/L	17.15	4765.1	ppb	17.15	0.36%
Sb 206.836†	-0.5	3.6652	µg/L	7.91680	3.6652	ppb	7.91680	216.00%
Se 196.026†	-42.9	5.5554	µg/L	3.40337	5.5554	ppb	3.40337	61.26%
SiO2†	93047.1	17769	µg/L	182.0	17769	ppb	182.0	1.02%
Si 251.611†	108218.8	8238.4	µg/L	79.87	8238.4	ppb	79.87	0.97%
Sn 189.927†	-30.9	-0.8828	µg/L	1.12103	-0.8828	ppb	1.12103	126.98%
Sr 421.552†	42189.7	237.65	µg/L	1.422	237.65	ppb	1.422	0.60%
Ti 334.940†	596507.4	1321.8	µg/L	4.30	1321.8	ppb	4.30	0.33%
Tl 190.801†	-11.3	-5.5037	µg/L	0.64510	-5.5037	ppb	0.64510	11.72%
U 409.014†	156.2	-3.6452	µg/L	0.95138	-3.6452	ppb	0.95138	26.10%
V 292.402†	3220.6	44.609	µg/L	0.4654	44.609	ppb	0.4654	1.04%
Zn 213.857†	6453.7	162.17	µg/L	1.359	162.17	ppb	1.359	0.84%

Sequence No.: 14
Sample ID: 241825006|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 312
Date Collected: 12/18/2009 10:10:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825006|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105946.4	105946.4	94.2	%			10:10:44
1	Al 396.153Radial†	50404.7	53283.3	26927	µg/L	26927	ppb	10:10:44
1	Ca 317.933Radial†	17996.2	18610.5	7387.5	µg/L	7387.5	ppb	10:10:44
1	Fe 238.204 Radial†	14868.8	15774.6	82864	µg/L	82864	ppb	10:11:04
1	K 766.490 Radial†	6827.6	6553.8	3553.5	µg/L	3553.5	ppb	10:10:44
1	Mg 279.077 IEC†	973.7	1014.0	5502.4	µg/L	5502.4	ppb	10:11:04
1	Na 589.592 Radial†	871.5	1629.2	452.04	µg/L	452.04	ppb	10:10:44
1	Sr 421.552†	12089.1	12898.4	72.656	µg/L	72.656	ppb	10:10:44
1	Sc 361.383	1920169.2	1920169.2	93.360	%			10:12:08
1	Y 371.029	1229099.0	1229099.0	98.143	%			10:12:08
1	Ag 328.068†	-993.3	-1035.6	-2.2800	µg/L	-2.2800	ppb	10:12:13
1	As 188.979†	8.8	7.0	6.8077	µg/L	6.8077	ppb	10:12:34
1	B 249.677†	1182.2	1110.6	23.236	µg/L	23.236	ppb	10:12:13
1	Ba 233.527†	14339.3	15439.9	387.94	µg/L	387.94	ppb	10:12:13
1	Be 313.107†	12124.1	9375.0	5.0094	µg/L	5.0094	ppb	10:12:13
1	Cd 226.502†	152.7	264.5	0.5697	µg/L	0.5697	ppb	10:12:13
1	Co 228.616†	324.9	419.8	15.043	µg/L	15.043	ppb	10:12:34
1	Cr 267.716†	887.2	1073.0	22.484	µg/L	22.484	ppb	10:12:13
1	Cu 324.752†	3968.3	866.2	23.893	µg/L	23.893	ppb	10:12:13
1	Mn 257.610†	765666.8	820348.6	2613.8	µg/L	2613.8	ppb	10:12:08
1	Mo 202.031†	188.6	209.9	26.678	µg/L	26.678	ppb	10:12:34
1	Ni 231.604†	721.4	473.3	25.787	µg/L	25.787	ppb	10:12:34
1	P 214.914†	523.6	354.9	681.65	µg/L	681.65	ppb	10:12:34
1	Pb 220.353†	276.8	242.4	62.841	µg/L	62.841	ppb	10:12:34
1	S 181.975 Axial†	58.2	38.3	183.78	µg/L	183.78	ppb	10:12:34
1	Sb 206.836†	18.3	-0.9	7.5296	µg/L	7.5296	ppb	10:12:34
1	Se 196.026†	-19.7	-35.3	5.4342	µg/L	5.4342	ppb	10:12:34
1	SiO2†	82532.8	86421.4	16503	µg/L	16503	ppb	10:12:08
1	Si 251.611†	93959.1	100292.4	7590.5	µg/L	7590.5	ppb	10:12:08
1	Sn 189.927†	-12.7	-36.1	-5.1274	µg/L	-5.1274	ppb	10:12:34
1	Ti 334.940†	1048419.8	1122271.4	2487.2	µg/L	2487.2	ppb	10:12:08
1	Tl 190.801†	-38.6	-20.0	-2.6307	µg/L	-2.6307	ppb	10:12:34
1	U 409.014†	274.5	-385.1	-51.465	µg/L	-51.465	ppb	10:12:08
1	V 292.402†	5129.3	5586.1	69.839	µg/L	69.839	ppb	10:12:13
1	Zn 213.857†	10396.7	10586.0	274.51	µg/L	274.51	ppb	10:12:13
2	Sc RADIAL	105479.9	105479.9	93.8	%			10:11:10
2	Al 396.153Radial†	50881.2	54028.1	27304	µg/L	27304	ppb	10:11:10
2	Ca 317.933Radial†	18071.3	18775.2	7452.9	µg/L	7452.9	ppb	10:11:10
2	Fe 238.204 Radial†	14904.8	15882.8	83432	µg/L	83432	ppb	10:11:30
2	K 766.490 Radial†	6869.4	6630.5	3595.0	µg/L	3595.0	ppb	10:11:10
2	Mg 279.077 IEC†	976.4	1021.4	5542.7	µg/L	5542.7	ppb	10:11:30
2	Na 589.592 Radial†	905.2	1669.2	463.13	µg/L	463.13	ppb	10:11:10
2	Sr 421.552†	12181.3	13053.5	73.529	µg/L	73.529	ppb	10:11:10
2	Sc 361.383	1931003.3	1931003.3	93.886	%			10:12:40
2	Y 371.029	1236759.2	1236759.2	98.754	%			10:12:40
2	Ag 328.068†	-949.6	-983.2	-1.7657	µg/L	-1.7657	ppb	10:12:46
2	As 188.979†	8.6	6.7	6.2466	µg/L	6.2466	ppb	10:13:06
2	B 249.677†	1195.5	1117.6	23.368	µg/L	23.368	ppb	10:12:46
2	Ba 233.527†	14399.1	15417.4	387.37	µg/L	387.37	ppb	10:12:46
2	Be 313.107†	12119.2	9296.8	4.9539	µg/L	4.9539	ppb	10:12:46
2	Cd 226.502†	128.7	237.9	-0.1699	µg/L	-0.1699	ppb	10:12:46
2	Co 228.616†	325.5	418.5	14.948	µg/L	14.948	ppb	10:13:06
2	Cr 267.716†	891.0	1071.8	22.458	µg/L	22.458	ppb	10:12:46
2	Cu 324.752†	3919.0	789.8	23.478	µg/L	23.478	ppb	10:12:46
2	Mn 257.610†	776332.3	827107.2	2635.4	µg/L	2635.4	ppb	10:12:40
2	Mo 202.031†	192.4	212.8	27.021	µg/L	27.021	ppb	10:13:06
2	Ni 231.604†	705.7	452.3	24.639	µg/L	24.639	ppb	10:13:06
2	P 214.914†	526.2	354.5	680.24	µg/L	680.24	ppb	10:13:06
2	Pb 220.353†	272.7	236.3	61.319	µg/L	61.319	ppb	10:13:06

2	S 181.975 Axial†	53.8	33.2	157.54 µg/L	157.54 ppb	10:13:06
2	Sb 206.836†	17.1	-2.3	6.2556 µg/L	6.2556 ppb	10:13:06
2	Se 196.026†	-27.2	-43.1	-5.5592 µg/L	-5.5592 ppb	10:13:06
2	SiO2†	83871.7	87351.5	16681 µg/L	16681 ppb	10:12:40
2	Si 251.611†	95514.9	101384.8	7673.6 µg/L	7673.6 ppb	10:12:40
2	Sn 189.927†	-15.8	-39.3	-6.5755 µg/L	-6.5755 ppb	10:13:06
2	Ti 334.940†	1061337.4	1129729.4	2503.7 µg/L	2503.7 ppb	10:12:40
2	Tl 190.801†	-37.5	-18.5	-0.2648 µg/L	-0.2648 ppb	10:13:06
2	U 409.014†	368.3	-286.9	-42.347 µg/L	-42.347 ppb	10:12:40
2	V 292.402†	5167.9	5596.4	70.019 µg/L	70.019 ppb	10:12:46
2	Zn 213.857†	10449.6	10579.8	274.29 µg/L	274.29 ppb	10:12:46
3	Sc RADIAL	106479.0	106479.0	94.7 %		10:11:36
3	Al 396.153Radial†	51792.1	54481.3	27533 µg/L	27533 ppb	10:11:36
3	Ca 317.933Radial†	18392.8	18933.9	7515.9 µg/L	7515.9 ppb	10:11:36
3	Fe 238.204 Radial†	14793.1	15615.6	82029 µg/L	82029 ppb	10:11:56
3	K 766.490 Radial†	6940.0	6636.3	3598.1 µg/L	3598.1 ppb	10:11:36
3	Mg 279.077 IEC†	970.9	1005.8	5458.5 µg/L	5458.5 ppb	10:11:56
3	Na 589.592 Radial†	932.4	1688.9	468.59 µg/L	468.59 ppb	10:11:36
3	Sr 421.552†	12362.6	13123.1	73.921 µg/L	73.921 ppb	10:11:36
3	Sc 361.383	1915953.5	1915953.5	93.155 %		10:13:13
3	Y 371.029	1226665.9	1226665.9	97.948 %		10:13:13
3	Ag 328.068†	-1025.0	-1072.0	-2.6663 µg/L	-2.6663 ppb	10:13:18
3	As 188.979†	11.6	10.0	12.733 µg/L	12.733 ppb	10:13:39
3	B 249.677†	1208.7	1141.8	24.883 µg/L	24.883 ppb	10:13:18
3	Ba 233.527†	14414.2	15554.0	390.80 µg/L	390.80 ppb	10:13:18
3	Be 313.107†	12108.4	9386.7	5.0130 µg/L	5.0130 ppb	10:13:18
3	Cd 226.502†	148.4	260.2	0.5196 µg/L	0.5196 ppb	10:13:18
3	Co 228.616†	332.9	429.1	15.473 µg/L	15.473 ppb	10:13:39
3	Cr 267.716†	899.6	1088.5	22.806 µg/L	22.806 ppb	10:13:18
3	Cu 324.752†	4006.9	917.0	24.071 µg/L	24.071 ppb	10:13:18
3	Mn 257.610†	767702.4	824338.4	2626.4 µg/L	2626.4 ppb	10:13:13
3	Mo 202.031†	191.9	214.0	27.093 µg/L	27.093 ppb	10:13:39
3	Ni 231.604†	708.6	461.3	25.131 µg/L	25.131 ppb	10:13:39
3	P 214.914†	528.7	361.5	697.20 µg/L	697.20 ppb	10:13:39
3	Pb 220.353†	268.5	234.1	60.806 µg/L	60.806 ppb	10:13:39
3	S 181.975 Axial†	53.8	33.7	160.09 µg/L	160.09 ppb	10:13:39
3	Sb 206.836†	13.1	-6.5	2.0488 µg/L	2.0488 ppb	10:13:39
3	Se 196.026†	-19.5	-35.0	5.1924 µg/L	5.1924 ppb	10:13:39
3	SiO2†	83019.9	87138.8	16640 µg/L	16640 ppb	10:13:13
3	Si 251.611†	94537.8	101135.1	7654.7 µg/L	7654.7 ppb	10:13:13
3	Sn 189.927†	-13.8	-37.2	-5.7503 µg/L	-5.7503 ppb	10:13:39
3	Ti 334.940†	1050515.4	1126991.9	2497.7 µg/L	2497.7 ppb	10:13:13
3	Tl 190.801†	-35.6	-16.8	2.2312 µg/L	2.2312 ppb	10:13:39
3	U 409.014†	241.0	-420.5	-54.630 µg/L	-54.630 ppb	10:13:13
3	V 292.402†	5168.5	5640.3	70.380 µg/L	70.380 ppb	10:13:18
3	Zn 213.857†	10503.8	10725.5	278.34 µg/L	278.34 ppb	10:13:18

Mean Data: 241825006|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1922375.3	93.467	%	0.3775				0.40%
Sc RADIAL	105968.4	94.2	%	0.44				0.47%
Y 371.029	1230841.3	98.282	%	0.4206				0.43%
Ag 328.068†	-1030.2	-2.2373	µg/L	0.45181	-2.2373	ppb	0.45181	20.19%
Al 396.153Radial†	53930.9	27255	µg/L	305.7	27255	ppb	305.7	1.12%
As 188.979†	7.9	8.5958	µg/L	3.59392	8.5958	ppb	3.59392	41.81%
B 249.677†	1123.4	23.829	µg/L	0.9149	23.829	ppb	0.9149	3.84%
Ba 233.527†	15470.4	388.70	µg/L	1.841	388.70	ppb	1.841	0.47%
Be 313.107†	9352.8	4.9921	µg/L	0.03313	4.9921	ppb	0.03313	0.66%
Ca 317.933Radial†	18773.2	7452.1	µg/L	64.19	7452.1	ppb	64.19	0.86%
Cd 226.502†	254.2	0.3065	µg/L	0.41331	0.3065	ppb	0.41331	134.84%
Co 228.616†	422.4	15.155	µg/L	0.2798	15.155	ppb	0.2798	1.85%
Cr 267.716†	1077.8	22.583	µg/L	0.1940	22.583	ppb	0.1940	0.86%
Cu 324.752†	857.7	23.814	µg/L	0.3045	23.814	ppb	0.3045	1.28%
Fe 238.204 Radial†	15757.6	82775	µg/L	706.0	82775	ppb	706.0	0.85%
K 766.490 Radial†	6606.8	3582.2	µg/L	24.95	3582.2	ppb	24.95	0.70%
Mg 279.077 IEC†	1013.7	5501.2	µg/L	42.14	5501.2	ppb	42.14	0.77%
Mn 257.610†	823931.4	2625.2	µg/L	10.81	2625.2	ppb	10.81	0.41%
Mo 202.031†	212.2	26.931	µg/L	0.2217	26.931	ppb	0.2217	0.82%
Na 589.592 Radial†	1662.4	461.26	µg/L	8.436	461.26	ppb	8.436	1.83%

Ni 231.604†	462.3	25.186	µg/L	0.5755	25.186	ppb	0.5755	2.29%
P 214.914†	356.9	686.36	µg/L	9.408	686.36	ppb	9.408	1.37%
Pb 220.353†	237.6	61.655	µg/L	1.0582	61.655	ppb	1.0582	1.72%
S 181.975 Axial†	35.1	167.14	µg/L	14.467	167.14	ppb	14.467	8.66%
Sb 206.836†	-3.2	5.2780	µg/L	2.86816	5.2780	ppb	2.86816	54.34%
Se 196.026†	-37.8	1.6891	µg/L	6.27841	1.6891	ppb	6.27841	371.70%
SiO2†	86970.6	16608	µg/L	93.1	16608	ppb	93.1	0.56%
Si 251.611†	100937.5	7639.6	µg/L	43.55	7639.6	ppb	43.55	0.57%
Sn 189.927†	-37.5	-5.8177	µg/L	0.72639	-5.8177	ppb	0.72639	12.49%
Sr 421.552†	13025.0	73.369	µg/L	0.6478	73.369	ppb	0.6478	0.88%
Ti 334.940†	1126330.9	2496.2	µg/L	8.36	2496.2	ppb	8.36	0.33%
Tl 190.801†	-18.5	-0.2214	µg/L	2.43124	-0.2214	ppb	2.43124	>999.9%
U 409.014†	-364.2	-49.481	µg/L	6.3775	-49.481	ppb	6.3775	12.89%
V 292.402†	5607.6	70.079	µg/L	0.2755	70.079	ppb	0.2755	0.39%
Zn 213.857†	10630.4	275.72	µg/L	2.277	275.72	ppb	2.277	0.83%

Sequence No.: 15
Sample ID: 241825007|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 313
Date Collected: 12/18/2009 10:13:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825007|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107822.4	107822.4	95.9	%			10:14:20
1	Al 396.153Radial†	199497.6	207885.7	105060	µg/L	105060	ppb	10:14:20
1	Ca 317.933Radial†	68584.8	71052.1	28204	µg/L	28204	ppb	10:14:25
1	Fe 238.204 Radial†	25102.6	26175.7	137500	µg/L	137500	ppb	10:14:25
1	K 766.490 Radial†	25487.3	25893.5	14039	µg/L	14039	ppb	10:14:25
1	Mg 279.077 IEC†	3880.6	4028.4	22141	µg/L	22141	ppb	10:14:25
1	Na 589.592 Radial†	4259.4	5147.3	1428.2	µg/L	1428.2	ppb	10:14:25
1	Sr 421.552†	51102.8	53374.1	300.65	µg/L	300.65	ppb	10:14:20
1	Sc 361.383	1919803.7	1919803.7	93.342	%			10:14:58
1	Y 371.029	1194348.0	1194348.0	95.368	%			10:14:58
1	Ag 328.068†	-1530.1	-1610.9	-1.9248	µg/L	-1.9248	ppb	10:15:04
1	As 188.979†	27.7	27.2	35.701	µg/L	35.701	ppb	10:15:24
1	B 249.677†	1914.0	1894.9	40.863	µg/L	40.863	ppb	10:15:04
1	Ba 233.527†	58179.3	62410.0	1568.0	µg/L	1568.0	ppb	10:15:04
1	Be 313.107†	19789.9	17590.1	10.012	µg/L	10.012	ppb	10:15:04
1	Cd 226.502†	313.1	436.4	0.9567	µg/L	0.9567	ppb	10:15:24
1	Co 228.616†	1193.1	1349.9	58.628	µg/L	58.628	ppb	10:15:24
1	Cr 267.716†	4079.6	4493.4	94.088	µg/L	94.088	ppb	10:15:04
1	Cu 324.752†	9151.6	6420.1	74.704	µg/L	74.704	ppb	10:15:04
1	Mn 257.610†	993831.2	1064944.3	3396.9	µg/L	3396.9	ppb	10:14:58
1	Mo 202.031†	16.7	25.8	8.2768	µg/L	8.2768	ppb	10:15:24
1	Ni 231.604†	1634.3	1451.5	79.074	µg/L	79.074	ppb	10:15:24
1	P 214.914†	613.8	451.6	850.53	µg/L	850.53	ppb	10:15:24
1	Pb 220.353†	490.7	471.6	126.93	µg/L	126.93	ppb	10:15:24
1	S 181.975 Axial†	148.3	134.9	669.26	µg/L	669.26	ppb	10:15:24
1	Sb 206.836†	22.1	3.2	11.312	µg/L	11.312	ppb	10:15:24
1	Se 196.026†	-34.0	-50.5	17.457	µg/L	17.457	ppb	10:15:24
1	SiO2†	108456.7	114211.3	21810	µg/L	21810	ppb	10:15:04
1	Si 251.611†	124484.9	133014.8	10076	µg/L	10076	ppb	10:15:04
1	Sn 189.927†	-92.5	-121.5	-32.404	µg/L	-32.404	ppb	10:15:24
1	Ti 334.940†	1269319.1	1359141.3	3011.1	µg/L	3011.1	ppb	10:14:58
1	Tl 190.801†	-41.4	-22.9	-2.1281	µg/L	-2.1281	ppb	10:15:24
1	U 409.014†	549.4	-90.7	-33.517	µg/L	-33.517	ppb	10:14:58
1	V 292.402†	19415.4	20892.3	246.75	µg/L	246.75	ppb	10:15:04
1	Zn 213.857†	11126.7	11370.2	288.92	µg/L	288.92	ppb	10:15:04
2	Sc RADIAL	107921.4	107921.4	95.9	%			10:14:31
2	Al 396.153Radial†	202458.6	210780.8	106520	µg/L	106520	ppb	10:14:31
2	Ca 317.933Radial†	68384.3	70777.4	28095	µg/L	28095	ppb	10:14:36
2	Fe 238.204 Radial†	25008.9	26054.1	136860	µg/L	136860	ppb	10:14:36
2	K 766.490 Radial†	25396.9	25774.8	13975	µg/L	13975	ppb	10:14:36
2	Mg 279.077 IEC†	3865.6	4009.1	22035	µg/L	22035	ppb	10:14:36
2	Na 589.592 Radial†	4238.1	5121.0	1420.9	µg/L	1420.9	ppb	10:14:36
2	Sr 421.552†	51868.9	54123.6	304.87	µg/L	304.87	ppb	10:14:31
2	Sc 361.383	1919603.5	1919603.5	93.332	%			10:15:31
2	Y 371.029	1194067.1	1194067.1	95.345	%			10:15:31
2	Ag 328.068†	-1482.2	-1559.8	-1.5200	µg/L	-1.5200	ppb	10:15:36
2	As 188.979†	24.8	24.1	29.841	µg/L	29.841	ppb	10:15:57
2	B 249.677†	1923.8	1905.5	41.537	µg/L	41.537	ppb	10:15:36
2	Ba 233.527†	58069.2	62298.5	1565.2	µg/L	1565.2	ppb	10:15:36
2	Be 313.107†	19666.1	17459.6	9.9288	µg/L	9.9288	ppb	10:15:36
2	Cd 226.502†	301.5	423.9	0.6759	µg/L	0.6759	ppb	10:15:57
2	Co 228.616†	1184.9	1341.3	58.215	µg/L	58.215	ppb	10:15:57
2	Cr 267.716†	4085.0	4499.7	94.217	µg/L	94.217	ppb	10:15:36
2	Cu 324.752†	9160.3	6430.4	74.639	µg/L	74.639	ppb	10:15:36
2	Mn 257.610†	991215.8	1062253.0	3388.3	µg/L	3388.3	ppb	10:15:31
2	Mo 202.031†	21.0	30.4	8.7680	µg/L	8.7680	ppb	10:15:57
2	Ni 231.604†	1632.3	1449.5	78.967	µg/L	78.967	ppb	10:15:57
2	P 214.914†	616.5	454.5	858.10	µg/L	858.10	ppb	10:15:57
2	Pb 220.353†	495.7	476.9	128.43	µg/L	128.43	ppb	10:15:57

2	S 181.975 Axial†	150.3	137.0	680.51 µg/L	680.51 ppb	10:15:57
2	Sb 206.836†	24.4	5.6	13.759 µg/L	13.759 ppb	10:15:57
2	Se 196.026†	-40.7	-57.7	6.6023 µg/L	6.6023 ppb	10:15:57
2	SiO2†	108575.1	114350.3	21837 µg/L	21837 ppb	10:15:36
2	Si 251.611†	124488.8	133032.9	10077 µg/L	10077 ppb	10:15:36
2	Sn 189.927†	-94.9	-124.2	-33.829 µg/L	-33.829 ppb	10:15:57
2	Ti 334.940†	1269696.4	1359687.4	3012.3 µg/L	3012.3 ppb	10:15:31
2	Tl 190.801†	-34.0	-15.0	9.8440 µg/L	9.8440 ppb	10:15:57
2	U 409.014†	544.9	-95.4	-33.849 µg/L	-33.849 ppb	10:15:31
2	V 292.402†	19401.5	20879.5	246.56 µg/L	246.56 ppb	10:15:36
2	Zn 213.857†	11119.3	11363.6	288.81 µg/L	288.81 ppb	10:15:36
3	Sc RADIAL	107797.8	107797.8	95.8 %		10:14:42
3	Al 396.153Radial†	201604.6	210131.6	106200 µg/L	106200 ppb	10:14:42
3	Ca 317.933Radial†	68221.3	70689.1	28060 µg/L	28060 ppb	10:14:47
3	Fe 238.204 Radial†	24924.6	25996.1	136560 µg/L	136560 ppb	10:14:47
3	K 766.490 Radial†	25376.3	25783.7	13980 µg/L	13980 ppb	10:14:47
3	Mg 279.077 IEC†	3866.1	4014.1	22064 µg/L	22064 ppb	10:14:47
3	Na 589.592 Radial†	4295.8	5186.3	1439.0 µg/L	1439.0 ppb	10:14:47
3	Sr 421.552†	51574.3	53878.2	303.49 µg/L	303.49 ppb	10:14:42
3	Sc 361.383	1910043.6	1910043.6	92.867 %		10:16:03
3	Y 371.029	1189059.0	1189059.0	94.946 %		10:16:03
3	Ag 328.068†	-1509.0	-1596.6	-1.8616 µg/L	-1.8616 ppb	10:16:08
3	As 188.979†	27.7	27.3	36.108 µg/L	36.108 ppb	10:16:29
3	B 249.677†	1972.3	1968.0	44.406 µg/L	44.406 ppb	10:16:08
3	Ba 233.527†	58318.4	62878.2	1579.8 µg/L	1579.8 ppb	10:16:08
3	Be 313.107†	19715.2	17617.9	10.025 µg/L	10.025 ppb	10:16:08
3	Cd 226.502†	290.1	413.3	0.4206 µg/L	0.4206 ppb	10:16:29
3	Co 228.616†	1192.4	1355.8	58.888 µg/L	58.888 ppb	10:16:29
3	Cr 267.716†	4106.0	4544.1	95.146 µg/L	95.146 ppb	10:16:08
3	Cu 324.752†	9205.9	6528.7	75.265 µg/L	75.265 ppb	10:16:08
3	Mn 257.610†	990199.1	1066473.7	3401.7 µg/L	3401.7 ppb	10:16:03
3	Mo 202.031†	22.1	31.7	8.8998 µg/L	8.8998 ppb	10:16:29
3	Ni 231.604†	1617.8	1442.7	78.595 µg/L	78.595 ppb	10:16:29
3	P 214.914†	615.3	456.6	862.63 µg/L	862.63 ppb	10:16:29
3	Pb 220.353†	489.7	473.2	127.46 µg/L	127.46 ppb	10:16:29
3	S 181.975 Axial†	148.4	135.8	674.29 µg/L	674.29 ppb	10:16:29
3	Sb 206.836†	25.7	7.1	15.292 µg/L	15.292 ppb	10:16:29
3	Se 196.026†	-39.9	-57.0	7.3610 µg/L	7.3610 ppb	10:16:29
3	SiO2†	108531.9	114886.0	21939 µg/L	21939 ppb	10:16:08
3	Si 251.611†	124530.8	133745.7	10132 µg/L	10132 ppb	10:16:08
3	Sn 189.927†	-97.9	-127.9	-35.689 µg/L	-35.689 ppb	10:16:29
3	Ti 334.940†	1267596.4	1364235.0	3022.4 µg/L	3022.4 ppb	10:16:03
3	Tl 190.801†	-31.3	-12.2	14.091 µg/L	14.091 ppb	10:16:29
3	U 409.014†	548.3	-88.8	-33.168 µg/L	-33.168 ppb	10:16:03
3	V 292.402†	19437.4	21022.2	248.14 µg/L	248.14 ppb	10:16:08
3	Zn 213.857†	11132.6	11437.5	290.82 µg/L	290.82 ppb	10:16:08

Mean Data: 241825007|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1916483.6	93.180	%	0.2712				0.29%
Sc RADIAL	107847.2	95.9	%	0.06				0.06%
Y 371.029	1192491.4	95.220	%	0.2376				0.25%
Ag 328.068†	-1589.1	-1.7688	µg/L	0.21780	-1.7688	ppb	0.21780	12.31%
Al 396.153Radial†	209599.4	105930	µg/L	767.8	105930	ppb	767.8	0.72%
As 188.979†	26.2	33.883	µg/L	3.5066	33.883	ppb	3.5066	10.35%
B 249.677†	1922.8	42.269	µg/L	1.8819	42.269	ppb	1.8819	4.45%
Ba 233.527†	62528.9	1571.0	µg/L	7.73	1571.0	ppb	7.73	0.49%
Be 313.107†	17555.9	9.9886	µg/L	0.05222	9.9886	ppb	0.05222	0.52%
Ca 317.933Radial†	70839.6	28120	µg/L	75.1	28120	ppb	75.1	0.27%
Cd 226.502†	424.5	0.6844	µg/L	0.26816	0.6844	ppb	0.26816	39.18%
Co 228.616†	1349.0	58.577	µg/L	0.3395	58.577	ppb	0.3395	0.58%
Cr 267.716†	4512.4	94.483	µg/L	0.5773	94.483	ppb	0.5773	0.61%
Cu 324.752†	6459.7	74.869	µg/L	0.3443	74.869	ppb	0.3443	0.46%
Fe 238.204 Radial†	26075.3	136970	µg/L	481.6	136970	ppb	481.6	0.35%
K 766.490 Radial†	25817.3	13998	µg/L	35.8	13998	ppb	35.8	0.26%
Mg 279.077 IEC†	4017.2	22080	µg/L	54.9	22080	ppb	54.9	0.25%
Mn 257.610†	1064557.0	3395.6	µg/L	6.77	3395.6	ppb	6.77	0.20%
Mo 202.031†	29.3	8.6482	µg/L	0.32831	8.6482	ppb	0.32831	3.80%
Na 589.592 Radial†	5151.6	1429.4	µg/L	9.11	1429.4	ppb	9.11	0.64%

Ni 231.604†	1447.9	78.879	µg/L	0.2516	78.879	ppb	0.2516	0.32%
P 214.914†	454.3	857.09	µg/L	6.114	857.09	ppb	6.114	0.71%
Pb 220.353†	473.9	127.61	µg/L	0.762	127.61	ppb	0.762	0.60%
S 181.975 Axial†	135.9	674.69	µg/L	5.633	674.69	ppb	5.633	0.83%
Sb 206.836†	5.3	13.454	µg/L	2.0074	13.454	ppb	2.0074	14.92%
Se 196.026†	-55.1	10.473	µg/L	6.0599	10.473	ppb	6.0599	57.86%
SiO2†	114482.5	21862	µg/L	68.0	21862	ppb	68.0	0.31%
Si 251.611†	133264.5	10095	µg/L	31.8	10095	ppb	31.8	0.31%
Sn 189.927†	-124.5	-33.974	µg/L	1.6473	-33.974	ppb	1.6473	4.85%
Sr 421.552†	53792.0	303.01	µg/L	2.152	303.01	ppb	2.152	0.71%
Ti 334.940†	1361021.2	3015.3	µg/L	6.20	3015.3	ppb	6.20	0.21%
Tl 190.801†	-16.7	7.2691	µg/L	8.41073	7.2691	ppb	8.41073	115.71%
U 409.014†	-91.6	-33.511	µg/L	0.3404	-33.511	ppb	0.3404	1.02%
V 292.402†	20931.3	247.15	µg/L	0.865	247.15	ppb	0.865	0.35%
Zn 213.857†	11390.4	289.52	µg/L	1.133	289.52	ppb	1.133	0.39%

Sequence No.: 16
Sample ID: 241825008|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 314
Date Collected: 12/18/2009 10:16:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825008|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106120.6	106120.6	94.3	%			10:17:11
1	Al 396.153Radial†	154096.2	163100.9	82427	µg/L	82427	ppb	10:17:11
1	Ca 317.933Radial†	60376.0	63498.7	25206	µg/L	25206	ppb	10:17:11
1	Fe 238.204 Radial†	20451.5	21665.9	113810	µg/L	113810	ppb	10:17:31
1	K 766.490 Radial†	16885.3	17202.3	9327.0	µg/L	9327.0	ppb	10:17:11
1	Mg 279.077 IEC†	2787.7	2935.0	16112	µg/L	16112	ppb	10:17:31
1	Na 589.592 Radial†	3005.3	3889.4	1079.2	µg/L	1079.2	ppb	10:17:31
1	Sr 421.552†	39566.9	42001.8	236.59	µg/L	236.59	ppb	10:17:11
1	Sc 361.383	1903672.7	1903672.7	92.558	%			10:18:35
1	Y 371.029	1195941.6	1195941.6	95.495	%			10:18:35
1	Ag 328.068†	-1227.4	-1297.8	-1.5615	µg/L	-1.5615	ppb	10:18:40
1	As 188.979†	17.7	16.7	18.712	µg/L	18.712	ppb	10:19:01
1	B 249.677†	1666.5	1644.8	37.214	µg/L	37.214	ppb	10:18:40
1	Ba 233.527†	42404.5	45894.9	1153.1	µg/L	1153.1	ppb	10:18:40
1	Be 313.107†	16867.8	14612.6	8.2379	µg/L	8.2379	ppb	10:18:40
1	Cd 226.502†	221.8	340.5	0.2249	µg/L	0.2249	ppb	10:19:01
1	Co 228.616†	620.7	742.3	30.054	µg/L	30.054	ppb	10:19:01
1	Cr 267.716†	2579.1	2909.2	60.917	µg/L	60.917	ppb	10:19:01
1	Cu 324.752†	7326.1	4530.9	56.324	µg/L	56.324	ppb	10:18:40
1	Mn 257.610†	758153.9	819338.5	2614.5	µg/L	2614.5	ppb	10:18:35
1	Mo 202.031†	107.4	123.9	18.297	µg/L	18.297	ppb	10:19:01
1	Ni 231.604†	1235.9	1035.9	56.433	µg/L	56.433	ppb	10:19:01
1	P 214.914†	560.2	399.3	758.25	µg/L	758.25	ppb	10:19:01
1	Pb 220.353†	352.2	326.4	88.527	µg/L	88.527	ppb	10:19:01
1	S 181.975 Axial†	97.2	81.0	396.99	µg/L	396.99	ppb	10:19:01
1	Sb 206.836†	23.5	4.8	12.234	µg/L	12.234	ppb	10:19:01
1	Se 196.026†	-29.5	-46.0	9.5358	µg/L	9.5358	ppb	10:19:01
1	SiO2†	111001.7	117945.5	22523	µg/L	22523	ppb	10:18:40
1	Si 251.611†	127465.3	137365.0	10421	µg/L	10421	ppb	10:18:40
1	Sn 189.927†	-70.0	-98.1	-25.645	µg/L	-25.645	ppb	10:19:01
1	Ti 334.940†	1135002.9	1225547.9	2715.1	µg/L	2715.1	ppb	10:18:35
1	Tl 190.801†	-38.1	-19.7	-2.3652	µg/L	-2.3652	ppb	10:19:01
1	U 409.014†	407.6	-238.9	-43.083	µg/L	-43.083	ppb	10:18:35
1	V 292.402†	12490.4	13586.7	162.51	µg/L	162.51	ppb	10:18:40
1	Zn 213.857†	10399.6	10685.6	273.40	µg/L	273.40	ppb	10:18:40
2	Sc RADIAL	106701.0	106701.0	94.9	%			10:17:37
2	Al 396.153Radial†	155571.1	163767.2	82764	µg/L	82764	ppb	10:17:37
2	Ca 317.933Radial†	60614.1	63401.6	25168	µg/L	25168	ppb	10:17:37
2	Fe 238.204 Radial†	20508.7	21608.2	113510	µg/L	113510	ppb	10:17:57
2	K 766.490 Radial†	16986.3	17211.5	9332.0	µg/L	9332.0	ppb	10:17:37
2	Mg 279.077 IEC†	2784.4	2915.4	16004	µg/L	16004	ppb	10:17:57
2	Na 589.592 Radial†	2977.8	3843.0	1066.3	µg/L	1066.3	ppb	10:17:57
2	Sr 421.552†	39883.0	42106.9	237.19	µg/L	237.19	ppb	10:17:37
2	Sc 361.383	1910432.8	1910432.8	92.886	%			10:19:07
2	Y 371.029	1200323.8	1200323.8	95.845	%			10:19:07
2	Ag 328.068†	-1227.1	-1292.8	-1.5335	µg/L	-1.5335	ppb	10:19:12
2	As 188.979†	23.4	22.7	30.183	µg/L	30.183	ppb	10:19:33
2	B 249.677†	1660.7	1632.2	36.750	µg/L	36.750	ppb	10:19:12
2	Ba 233.527†	42871.0	46235.0	1161.6	µg/L	1161.6	ppb	10:19:12
2	Be 313.107†	16960.4	14647.8	8.2621	µg/L	8.2621	ppb	10:19:12
2	Cd 226.502†	225.7	343.9	0.3377	µg/L	0.3377	ppb	10:19:33
2	Co 228.616†	623.1	742.5	30.073	µg/L	30.073	ppb	10:19:33
2	Cr 267.716†	2575.7	2895.7	60.640	µg/L	60.640	ppb	10:19:33
2	Cu 324.752†	7333.6	4510.9	56.118	µg/L	56.118	ppb	10:19:12
2	Mn 257.610†	759228.0	817596.4	2608.9	µg/L	2608.9	ppb	10:19:07
2	Mo 202.031†	104.1	120.0	17.848	µg/L	17.848	ppb	10:19:33
2	Ni 231.604†	1225.5	1020.0	55.567	µg/L	55.567	ppb	10:19:33
2	P 214.914†	557.9	394.6	748.60	µg/L	748.60	ppb	10:19:33
2	Pb 220.353†	363.6	337.3	91.321	µg/L	91.321	ppb	10:19:33

2	S 181.975 Axial†	89.5	72.3	352.35 µg/L	352.35 ppb	10:19:33
2	Sb 206.836†	21.2	2.3	9.7783 µg/L	9.7783 ppb	10:19:33
2	Se 196.026†	-40.1	-57.3	-7.0084 µg/L	-7.0084 ppb	10:19:33
2	SiO2†	111952.9	118545.1	22638 µg/L	22638 ppb	10:19:12
2	Si 251.611†	128398.4	137882.2	10461 µg/L	10461 ppb	10:19:12
2	Sn 189.927†	-70.3	-98.1	-25.727 µg/L	-25.727 ppb	10:19:33
2	Ti 334.940†	1136830.4	1223176.1	2709.9 µg/L	2709.9 ppb	10:19:07
2	Tl 190.801†	-37.0	-18.5	-0.5360 µg/L	-0.5360 ppb	10:19:33
2	U 409.014†	420.1	-226.9	-41.903 µg/L	-41.903 ppb	10:19:07
2	V 292.402†	12623.5	13682.3	163.56 µg/L	163.56 ppb	10:19:12
2	Zn 213.857†	10500.6	10754.6	275.29 µg/L	275.29 ppb	10:19:12
3	Sc RADIAL	106080.2	106080.2	94.3 %		10:18:03
3	Al 396.153Radial†	154872.8	163986.6	82874 µg/L	82874 ppb	10:18:03
3	Ca 317.933Radial†	60099.8	63230.3	25099 µg/L	25099 ppb	10:18:03
3	Fe 238.204 Radial†	20454.7	21677.6	113870 µg/L	113870 ppb	10:18:23
3	K 766.490 Radial†	16883.7	17207.4	9329.8 µg/L	9329.8 ppb	10:18:03
3	Mg 279.077 IEC†	2794.6	2943.4	16158 µg/L	16158 ppb	10:18:23
3	Na 589.592 Radial†	2994.8	3879.5	1076.4 µg/L	1076.4 ppb	10:18:23
3	Sr 421.552†	39615.8	42069.7	236.98 µg/L	236.98 ppb	10:18:03
3	Sc 361.383	1930121.7	1930121.7	93.844 %		10:19:39
3	Y 371.029	1212097.4	1212097.4	96.785 %		10:19:39
3	Ag 328.068†	-1249.2	-1302.9	-1.6117 µg/L	-1.6117 ppb	10:19:45
3	As 188.979†	21.6	20.5	26.044 µg/L	26.044 ppb	10:20:05
3	B 249.677†	1632.4	1583.8	34.488 µg/L	34.488 ppb	10:19:45
3	Ba 233.527†	42819.0	45708.7	1148.4 µg/L	1148.4 ppb	10:19:45
3	Be 313.107†	16895.0	14391.9	8.0990 µg/L	8.0990 ppb	10:19:45
3	Cd 226.502†	232.8	349.0	0.4501 µg/L	0.4501 ppb	10:20:05
3	Co 228.616†	620.6	733.0	29.611 µg/L	29.611 ppb	10:20:05
3	Cr 267.716†	2610.3	2904.3	60.813 µg/L	60.813 ppb	10:20:05
3	Cu 324.752†	7278.8	4372.0	55.219 µg/L	55.219 ppb	10:19:45
3	Mn 257.610†	767543.4	818119.4	2610.7 µg/L	2610.7 ppb	10:19:39
3	Mo 202.031†	106.5	121.3	18.012 µg/L	18.012 ppb	10:20:05
3	Ni 231.604†	1235.6	1017.2	55.418 µg/L	55.418 ppb	10:20:05
3	P 214.914†	568.7	400.0	760.13 µg/L	760.13 ppb	10:20:05
3	Pb 220.353†	371.5	341.7	92.438 µg/L	92.438 ppb	10:20:05
3	S 181.975 Axial†	99.5	82.0	402.20 µg/L	402.20 ppb	10:20:05
3	Sb 206.836†	24.9	6.0	13.470 µg/L	13.470 ppb	10:20:05
3	Se 196.026†	-38.1	-54.7	-3.0828 µg/L	-3.0828 ppb	10:20:05
3	SiO2†	111744.4	117093.5	22361 µg/L	22361 ppb	10:19:45
3	Si 251.611†	128440.1	136516.5	10356 µg/L	10356 ppb	10:19:45
3	Sn 189.927†	-73.5	-100.8	-26.991 µg/L	-26.991 ppb	10:20:05
3	Ti 334.940†	1149934.7	1224655.4	2713.2 µg/L	2713.2 ppb	10:19:39
3	Tl 190.801†	-30.5	-11.1	10.629 µg/L	10.629 ppb	10:20:05
3	U 409.014†	509.5	-136.2	-33.459 µg/L	-33.459 ppb	10:19:39
3	V 292.402†	12549.1	13464.3	161.15 µg/L	161.15 ppb	10:19:45
3	Zn 213.857†	10465.5	10601.9	271.15 µg/L	271.15 ppb	10:19:45

Mean Data: 241825008|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1914742.4	93.096	%	0.6681				0.72%
Sc RADIAL	106300.6	94.5	%	0.31				0.33%
Y 371.029	1202787.6	96.042	%	0.6671				0.69%
Ag 328.068†	-1297.8	-1.5689	µg/L	0.03963	-1.5689	ppb	0.03963	2.53%
Al 396.153Radial†	163618.2	82688	µg/L	233.1	82688	ppb	233.1	0.28%
As 188.979†	19.9	24.980	µg/L	5.8088	24.980	ppb	5.8088	23.25%
B 249.677†	1620.3	36.150	µg/L	1.4585	36.150	ppb	1.4585	4.03%
Ba 233.527†	45946.2	1154.4	µg/L	6.71	1154.4	ppb	6.71	0.58%
Be 313.107†	14550.8	8.1997	µg/L	0.08802	8.1997	ppb	0.08802	1.07%
Ca 317.933Radial†	63376.9	25158	µg/L	54.0	25158	ppb	54.0	0.21%
Cd 226.502†	344.5	0.3376	µg/L	0.11263	0.3376	ppb	0.11263	33.37%
Co 228.616†	739.3	29.913	µg/L	0.2614	29.913	ppb	0.2614	0.87%
Cr 267.716†	2903.1	60.790	µg/L	0.1403	60.790	ppb	0.1403	0.23%
Cu 324.752†	4471.3	55.887	µg/L	0.5877	55.887	ppb	0.5877	1.05%
Fe 238.204 Radial†	21650.6	113730	µg/L	195.1	113730	ppb	195.1	0.17%
K 766.490 Radial†	17207.1	9329.6	µg/L	2.49	9329.6	ppb	2.49	0.03%
Mg 279.077 IEC†	2931.2	16091	µg/L	79.3	16091	ppb	79.3	0.49%
Mn 257.610†	818351.5	2611.4	µg/L	2.85	2611.4	ppb	2.85	0.11%
Mo 202.031†	121.8	18.053	µg/L	0.2269	18.053	ppb	0.2269	1.26%
Na 589.592 Radial†	3870.6	1074.0	µg/L	6.77	1074.0	ppb	6.77	0.63%

Ni 231.604†	1024.4	55.806	µg/L	0.5478	55.806	ppb	0.5478	0.98%
P 214.914†	398.0	755.66	µg/L	6.190	755.66	ppb	6.190	0.82%
Pb 220.353†	335.2	90.762	µg/L	2.0147	90.762	ppb	2.0147	2.22%
S 181.975 Axial†	78.4	383.85	µg/L	27.401	383.85	ppb	27.401	7.14%
Sb 206.836†	4.4	11.827	µg/L	1.8790	11.827	ppb	1.8790	15.89%
Se 196.026†	-52.7	-0.1851	µg/L	8.64437	-0.1851	ppb	8.64437	>999.9%
SiO2†	117861.4	22507	µg/L	139.3	22507	ppb	139.3	0.62%
Si 251.611†	137254.6	10412	µg/L	52.8	10412	ppb	52.8	0.51%
Sn 189.927†	-99.0	-26.121	µg/L	0.7546	-26.121	ppb	0.7546	2.89%
Sr 421.552†	42059.5	236.92	µg/L	0.300	236.92	ppb	0.300	0.13%
Ti 334.940†	1224459.8	2712.7	µg/L	2.65	2712.7	ppb	2.65	0.10%
Tl 190.801†	-16.4	2.5758	µg/L	7.03362	2.5758	ppb	7.03362	273.07%
U 409.014†	-200.7	-39.482	µg/L	5.2489	-39.482	ppb	5.2489	13.29%
V 292.402†	13577.8	162.41	µg/L	1.210	162.41	ppb	1.210	0.74%
Zn 213.857†	10680.7	273.28	µg/L	2.069	273.28	ppb	2.069	0.76%

Sequence No.: 17
Sample ID: 241825009|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 315
Date Collected: 12/18/2009 10:20:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825009|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107719.7	107719.7	95.8	%			10:20:47
1	Al 396.153Radial†	47927.1	49815.3	25174	µg/L	25174	ppb	10:20:47
1	Ca 317.933Radial†	12971.3	13049.1	5179.9	µg/L	5179.9	ppb	10:21:07
1	Fe 238.204 Radial†	16961.1	17699.5	92975	µg/L	92975	ppb	10:20:47
1	K 766.490 Radial†	6615.8	6213.3	3368.8	µg/L	3368.8	ppb	10:20:47
1	Mg 279.077 IEC†	790.1	805.1	4329.5	µg/L	4329.5	ppb	10:21:07
1	Na 589.592 Radial†	1402.7	2168.6	601.70	µg/L	601.70	ppb	10:20:47
1	Sr 421.552†	10447.3	10972.8	61.809	µg/L	61.809	ppb	10:20:47
1	Sc 361.383	1930121.8	1930121.8	93.844	%			10:22:12
1	Y 371.029	1258186.3	1258186.3	100.47	%			10:22:12
1	Ag 328.068†	-954.3	-988.6	-1.1560	µg/L	-1.1560	ppb	10:22:18
1	As 188.979†	12.0	10.3	10.753	µg/L	10.753	ppb	10:22:38
1	B 249.677†	1283.9	1212.5	24.577	µg/L	24.577	ppb	10:22:18
1	Ba 233.527†	9273.8	9962.8	250.34	µg/L	250.34	ppb	10:22:18
1	Be 313.107†	13653.4	10937.6	6.1778	µg/L	6.1778	ppb	10:22:18
1	Cd 226.502†	160.1	271.5	-0.0131	µg/L	-0.0131	ppb	10:22:18
1	Co 228.616†	135.7	216.4	6.2962	µg/L	6.2962	ppb	10:22:38
1	Cr 267.716†	680.6	848.0	17.768	µg/L	17.768	ppb	10:22:18
1	Cu 324.752†	3526.2	373.2	22.597	µg/L	22.597	ppb	10:22:18
1	Mn 257.610†	652854.6	695906.7	2220.2	µg/L	2220.2	ppb	10:22:12
1	Mo 202.031†	256.7	281.4	35.050	µg/L	35.050	ppb	10:22:38
1	Ni 231.604†	775.7	527.2	28.722	µg/L	28.722	ppb	10:22:38
1	P 214.914†	560.4	391.2	748.40	µg/L	748.40	ppb	10:22:38
1	Pb 220.353†	228.9	189.8	49.265	µg/L	49.265	ppb	10:22:38
1	S 181.975 Axial†	46.2	25.2	114.92	µg/L	114.92	ppb	10:22:38
1	Sb 206.836†	18.9	-0.4	6.4998	µg/L	6.4998	ppb	10:22:38
1	Se 196.026†	-25.2	-41.0	4.3417	µg/L	4.3417	ppb	10:22:38
1	SiO2†	78765.0	81950.5	15650	µg/L	15650	ppb	10:22:18
1	Si 251.611†	89902.0	95450.3	7237.0	µg/L	7237.0	ppb	10:22:18
1	Sn 189.927†	-5.4	-28.3	-0.8395	µg/L	-0.8395	ppb	10:22:38
1	Ti 334.940†	848192.1	903117.4	2001.6	µg/L	2001.6	ppb	10:22:12
1	Tl 190.801†	-36.3	-17.2	-3.2486	µg/L	-3.2486	ppb	10:22:38
1	U 409.014†	421.5	-230.0	-38.839	µg/L	-38.839	ppb	10:22:12
1	V 292.402†	4012.7	4367.9	57.010	µg/L	57.010	ppb	10:22:18
1	Zn 213.857†	12281.1	12536.6	325.72	µg/L	325.72	ppb	10:22:18
2	Sc RADIAL	106914.7	106914.7	95.1	%			10:21:13
2	Al 396.153Radial†	47809.2	50068.1	25302	µg/L	25302	ppb	10:21:13
2	Ca 317.933Radial†	12924.7	13102.1	5200.9	µg/L	5200.9	ppb	10:21:34
2	Fe 238.204 Radial†	16855.8	17722.0	93094	µg/L	93094	ppb	10:21:13
2	K 766.490 Radial†	6571.1	6218.3	3371.6	µg/L	3371.6	ppb	10:21:13
2	Mg 279.077 IEC†	790.6	811.9	4366.9	µg/L	4366.9	ppb	10:21:34
2	Na 589.592 Radial†	1426.1	2204.3	611.61	µg/L	611.61	ppb	10:21:13
2	Sr 421.552†	10379.7	10983.7	61.871	µg/L	61.871	ppb	10:21:13
2	Sc 361.383	1944001.6	1944001.6	94.518	%			10:22:46
2	Y 371.029	1266870.3	1266870.3	101.16	%			10:22:46
2	Ag 328.068†	-971.4	-999.4	-1.2480	µg/L	-1.2480	ppb	10:22:51
2	As 188.979†	18.8	17.4	24.178	µg/L	24.178	ppb	10:23:12
2	B 249.677†	1257.3	1174.5	22.854	µg/L	22.854	ppb	10:22:51
2	Ba 233.527†	9243.6	9860.4	247.77	µg/L	247.77	ppb	10:22:51
2	Be 313.107†	13584.1	10760.4	6.0671	µg/L	6.0671	ppb	10:22:51
2	Cd 226.502†	155.9	265.8	-0.1726	µg/L	-0.1726	ppb	10:22:51
2	Co 228.616†	147.5	227.8	6.8549	µg/L	6.8549	ppb	10:23:12
2	Cr 267.716†	686.1	848.6	17.779	µg/L	17.779	ppb	10:22:51
2	Cu 324.752†	3520.6	340.4	22.391	µg/L	22.391	ppb	10:22:51
2	Mn 257.610†	655816.2	694072.9	2214.4	µg/L	2214.4	ppb	10:22:46
2	Mo 202.031†	270.4	293.9	36.452	µg/L	36.452	ppb	10:23:12
2	Ni 231.604†	763.6	508.5	27.701	µg/L	27.701	ppb	10:23:12
2	P 214.914†	564.6	391.3	748.65	µg/L	748.65	ppb	10:23:12
2	Pb 220.353†	238.9	198.7	51.514	µg/L	51.514	ppb	10:23:12

2	S 181.975 Axial†	40.7	19.0	83.107 µg/L	83.107 ppb	10:23:12
2	Sb 206.836†	12.7	-7.2	-0.2520 µg/L	-0.2520 ppb	10:23:12
2	Se 196.026†	-22.3	-37.7	9.1724 µg/L	9.1724 ppb	10:23:12
2	SiO2†	78900.0	81494.2	15562 µg/L	15562 ppb	10:22:51
2	Si 251.611†	89951.9	94819.0	7188.7 µg/L	7188.7 ppb	10:22:51
2	Sn 189.927†	-5.4	-28.2	-0.7880 µg/L	-0.7880 ppb	10:23:12
2	Ti 334.940†	852723.3	901458.2	1997.9 µg/L	1997.9 ppb	10:22:46
2	Tl 190.801†	-35.9	-16.6	-2.2683 µg/L	-2.2683 ppb	10:23:12
2	U 409.014†	449.6	-203.5	-36.368 µg/L	-36.368 ppb	10:22:46
2	V 292.402†	3983.3	4306.3	56.339 µg/L	56.339 ppb	10:22:51
2	Zn 213.857†	12201.0	12358.5	320.94 µg/L	320.94 ppb	10:22:51
3	Sc RADIAL	107032.1	107032.1	95.2 %		10:21:39
3	Al 396.153Radial†	48068.8	50285.7	25412 µg/L	25412 ppb	10:21:39
3	Ca 317.933Radial†	12771.2	12925.8	5131.0 µg/L	5131.0 ppb	10:21:59
3	Fe 238.204 Radial†	17034.4	17890.2	93977 µg/L	93977 ppb	10:21:39
3	K 766.490 Radial†	6652.5	6296.2	3413.8 µg/L	3413.8 ppb	10:21:39
3	Mg 279.077 IEC†	785.0	805.1	4327.7 µg/L	4327.7 ppb	10:21:59
3	Na 589.592 Radial†	1417.6	2193.7	608.67 µg/L	608.67 ppb	10:21:39
3	Sr 421.552†	10438.8	11033.9	62.153 µg/L	62.153 ppb	10:21:39
3	Sc 361.383	1942189.5	1942189.5	94.430 %		10:23:19
3	Y 371.029	1265053.3	1265053.3	101.01 %		10:23:19
3	Ag 328.068†	-1004.1	-1035.0	-1.5004 µg/L	-1.5004 ppb	10:23:25
3	As 188.979†	10.6	8.7	7.5017 µg/L	7.5017 ppb	10:23:45
3	B 249.677†	1238.7	1156.1	21.760 µg/L	21.760 ppb	10:23:25
3	Ba 233.527†	9180.0	9802.1	246.30 µg/L	246.30 ppb	10:23:25
3	Be 313.107†	13486.5	10670.5	6.0130 µg/L	6.0130 ppb	10:23:25
3	Cd 226.502†	153.2	263.1	-0.3119 µg/L	-0.3119 ppb	10:23:25
3	Co 228.616†	140.6	220.6	6.5241 µg/L	6.5241 ppb	10:23:45
3	Cr 267.716†	659.2	820.8	17.199 µg/L	17.199 ppb	10:23:25
3	Cu 324.752†	3503.9	326.3	22.482 µg/L	22.482 ppb	10:23:25
3	Mn 257.610†	651144.9	689773.5	2200.8 µg/L	2200.8 ppb	10:23:19
3	Mo 202.031†	253.3	276.2	34.506 µg/L	34.506 ppb	10:23:45
3	Ni 231.604†	771.0	517.1	28.172 µg/L	28.172 ppb	10:23:45
3	P 214.914†	565.5	392.9	751.01 µg/L	751.01 ppb	10:23:45
3	Pb 220.353†	227.8	187.1	48.574 µg/L	48.574 ppb	10:23:45
3	S 181.975 Axial†	41.5	19.9	87.686 µg/L	87.686 ppb	10:23:45
3	Sb 206.836†	18.3	-1.1	5.6973 µg/L	5.6973 ppb	10:23:45
3	Se 196.026†	-31.7	-47.6	-4.6745 µg/L	-4.6745 ppb	10:23:45
3	SiO2†	78293.3	80929.5	15455 µg/L	15455 ppb	10:23:25
3	Si 251.611†	89277.7	94193.8	7141.2 µg/L	7141.2 ppb	10:23:25
3	Sn 189.927†	-7.0	-29.8	-1.5067 µg/L	-1.5067 ppb	10:23:45
3	Ti 334.940†	848701.3	898040.7	1990.3 µg/L	1990.3 ppb	10:23:19
3	Tl 190.801†	-37.6	-18.4	-5.1126 µg/L	-5.1126 ppb	10:23:45
3	U 409.014†	452.9	-199.6	-36.166 µg/L	-36.166 ppb	10:23:19
3	V 292.402†	3934.5	4258.5	55.860 µg/L	55.860 ppb	10:23:25
3	Zn 213.857†	12116.4	12280.9	318.76 µg/L	318.76 ppb	10:23:25

Mean Data: 241825009|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1938770.9	94.264	%	0.3668				0.39%
Sc RADIAL	107222.2	95.3	%	0.39				0.41%
Y 371.029	1263370.0	100.88	%	0.366				0.36%
Ag 328.068†	-1007.7	-1.3015	µg/L	0.17829	-1.3015	ppb	0.17829	13.70%
Al 396.153Radial†	50056.4	25296	µg/L	119.0	25296	ppb	119.0	0.47%
As 188.979†	12.1	14.144	µg/L	8.8400	14.144	ppb	8.8400	62.50%
B 249.677†	1181.0	23.064	µg/L	1.4200	23.064	ppb	1.4200	6.16%
Ba 233.527†	9875.1	248.13	µg/L	2.045	248.13	ppb	2.045	0.82%
Be 313.107†	10789.5	6.0859	µg/L	0.08402	6.0859	ppb	0.08402	1.38%
Ca 317.933Radial†	13025.7	5170.6	µg/L	35.90	5170.6	ppb	35.90	0.69%
Cd 226.502†	266.8	-0.1658	µg/L	0.14950	-0.1658	ppb	0.14950	90.14%
Co 228.616†	221.6	6.5584	µg/L	0.28088	6.5584	ppb	0.28088	4.28%
Cr 267.716†	839.2	17.582	µg/L	0.3314	17.582	ppb	0.3314	1.89%
Cu 324.752†	346.6	22.490	µg/L	0.1029	22.490	ppb	0.1029	0.46%
Fe 238.204 Radial†	17770.6	93349	µg/L	547.5	93349	ppb	547.5	0.59%
K 766.490 Radial†	6242.6	3384.7	µg/L	25.20	3384.7	ppb	25.20	0.74%
Mg 279.077 IEC†	807.4	4341.4	µg/L	22.16	4341.4	ppb	22.16	0.51%
Mn 257.610†	693251.0	2211.8	µg/L	9.92	2211.8	ppb	9.92	0.45%
Mo 202.031†	283.9	35.336	µg/L	1.0039	35.336	ppb	1.0039	2.84%
Na 589.592 Radial†	2188.9	607.33	µg/L	5.092	607.33	ppb	5.092	0.84%

Ni 231.604†	517.6	28.198 µg/L	0.5111	28.198 ppb	0.5111	1.81%
P 214.914†	391.8	749.35 µg/L	1.441	749.35 ppb	1.441	0.19%
Pb 220.353†	191.9	49.784 µg/L	1.5373	49.784 ppb	1.5373	3.09%
S 181.975 Axial†	21.4	95.238 µg/L	17.1984	95.238 ppb	17.1984	18.06%
Sb 206.836†	-2.9	3.9817 µg/L	3.68842	3.9817 ppb	3.68842	92.63%
Se 196.026†	-42.1	2.9465 µg/L	7.02809	2.9465 ppb	7.02809	238.52%
SiO2†	81458.1	15556 µg/L	97.7	15556 ppb	97.7	0.63%
Si 251.611†	94821.0	7189.0 µg/L	47.90	7189.0 ppb	47.90	0.67%
Sn 189.927†	-28.8	-1.0447 µg/L	0.40090	-1.0447 ppb	0.40090	38.37%
Sr 421.552†	10996.8	61.944 µg/L	0.1837	61.944 ppb	0.1837	0.30%
Ti 334.940†	900872.1	1996.6 µg/L	5.74	1996.6 ppb	5.74	0.29%
Tl 190.801†	-17.4	-3.5432 µg/L	1.44483	-3.5432 ppb	1.44483	40.78%
U 409.014†	-211.0	-37.124 µg/L	1.4885	-37.124 ppb	1.4885	4.01%
V 292.402†	4310.9	56.403 µg/L	0.5777	56.403 ppb	0.5777	1.02%
Zn 213.857†	12392.0	321.81 µg/L	3.559	321.81 ppb	3.559	1.11%

Sequence No.: 18
Sample ID: 241825010|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 316
Date Collected: 12/18/2009 10:23:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825010|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105875.5	105875.5	94.1	%			10:24:27
1	Al 396.153Radial†	6487.6	6662.5	3366.2	µg/L	3366.2	ppb	10:24:27
1	Ca 317.933Radial†	5610.5	5465.0	2169.4	µg/L	2169.4	ppb	10:24:47
1	Fe 238.204 Radial†	12841.8	13631.6	71607	µg/L	71607	ppb	10:24:27
1	K 766.490 Radial†	2502.1	1963.4	1064.5	µg/L	1064.5	ppb	10:24:27
1	Mg 279.077 IEC†	220.3	214.2	1082.8	µg/L	1082.8	ppb	10:24:47
1	Na 589.592 Radial†	3073.8	3969.5	1101.4	µg/L	1101.4	ppb	10:24:27
1	Sr 421.552†	2763.8	3000.0	16.899	µg/L	16.899	ppb	10:24:27
1	Sc 361.383	1918346.8	1918346.8	93.271	%			10:25:50
1	Y 371.029	1257782.1	1257782.1	100.43	%			10:25:50
1	Ag 328.068†	-802.8	-832.4	-1.6738	µg/L	-1.6738	ppb	10:25:56
1	As 188.979†	5.8	3.7	0.8768	µg/L	0.8768	ppb	10:26:16
1	B 249.677†	885.6	793.8	12.715	µg/L	12.715	ppb	10:25:56
1	Ba 233.527†	4098.7	4475.1	112.43	µg/L	112.43	ppb	10:25:56
1	Be 313.107†	9030.9	6070.9	3.2153	µg/L	3.2153	ppb	10:25:56
1	Cd 226.502†	95.2	203.0	-0.1918	µg/L	-0.1918	ppb	10:25:56
1	Co 228.616†	61.4	137.6	3.1382	µg/L	3.1382	ppb	10:26:16
1	Cr 267.716†	115.6	246.7	5.1723	µg/L	5.1723	ppb	10:25:56
1	Cu 324.752†	2290.8	-928.2	8.8506	µg/L	8.8506	ppb	10:25:56
1	Mn 257.610†	678794.7	727988.3	2319.3	µg/L	2319.3	ppb	10:25:50
1	Mo 202.031†	168.6	188.7	23.865	µg/L	23.865	ppb	10:26:16
1	Ni 231.604†	465.8	200.0	10.895	µg/L	10.895	ppb	10:26:16
1	P 214.914†	512.9	344.0	664.53	µg/L	664.53	ppb	10:26:16
1	Pb 220.353†	208.8	169.8	42.529	µg/L	42.529	ppb	10:26:16
1	S 181.975 Axial†	41.2	20.1	92.705	µg/L	92.705	ppb	10:26:16
1	Sb 206.836†	7.5	-12.5	-6.3398	µg/L	-6.3398	ppb	10:26:16
1	Se 196.026†	-9.3	-24.0	14.969	µg/L	14.969	ppb	10:26:16
1	SiO2†	39936.1	40835.5	7798.1	µg/L	7798.1	ppb	10:25:56
1	Si 251.611†	44678.0	47551.6	3580.1	µg/L	3580.1	ppb	10:25:56
1	Sn 189.927†	28.7	8.4	13.185	µg/L	13.185	ppb	10:26:16
1	Ti 334.940†	711082.0	761663.4	1688.2	µg/L	1688.2	ppb	10:25:50
1	Tl 190.801†	-37.1	-18.4	-6.6916	µg/L	-6.6916	ppb	10:26:16
1	U 409.014†	366.9	-285.8	-40.157	µg/L	-40.157	ppb	10:25:50
1	V 292.402†	1249.0	1431.0	22.078	µg/L	22.078	ppb	10:25:56
1	Zn 213.857†	11209.2	11467.7	299.55	µg/L	299.55	ppb	10:25:56
2	Sc RADIAL	105490.9	105490.9	93.8	%			10:24:53
2	Al 396.153Radial†	6426.1	6622.0	3345.9	µg/L	3345.9	ppb	10:24:53
2	Ca 317.933Radial†	5605.1	5481.0	2175.7	µg/L	2175.7	ppb	10:25:13
2	Fe 238.204 Radial†	12895.1	13738.2	72167	µg/L	72167	ppb	10:24:53
2	K 766.490 Radial†	2497.6	1968.2	1067.2	µg/L	1067.2	ppb	10:24:53
2	Mg 279.077 IEC†	214.7	209.0	1053.6	µg/L	1053.6	ppb	10:25:13
2	Na 589.592 Radial†	3093.4	4002.3	1110.5	µg/L	1110.5	ppb	10:24:53
2	Sr 421.552†	2748.6	2994.5	16.868	µg/L	16.868	ppb	10:24:53
2	Sc 361.383	1919749.5	1919749.5	93.339	%			10:26:22
2	Y 371.029	1259913.2	1259913.2	100.60	%			10:26:22
2	Ag 328.068†	-844.4	-876.4	-2.0206	µg/L	-2.0206	ppb	10:26:28
2	As 188.979†	3.8	1.6	-3.2107	µg/L	-3.2107	ppb	10:26:48
2	B 249.677†	884.4	791.9	12.452	µg/L	12.452	ppb	10:26:28
2	Ba 233.527†	4101.2	4474.5	112.42	µg/L	112.42	ppb	10:26:28
2	Be 313.107†	9134.0	6174.3	3.2810	µg/L	3.2810	ppb	10:26:28
2	Cd 226.502†	94.9	202.6	-0.2517	µg/L	-0.2517	ppb	10:26:28
2	Co 228.616†	58.9	134.9	3.0063	µg/L	3.0063	ppb	10:26:48
2	Cr 267.716†	151.2	284.7	5.9654	µg/L	5.9654	ppb	10:26:28
2	Cu 324.752†	2184.6	-1043.9	8.1571	µg/L	8.1571	ppb	10:26:28
2	Mn 257.610†	679237.8	727931.2	2319.2	µg/L	2319.2	ppb	10:26:22
2	Mo 202.031†	158.6	177.8	22.676	µg/L	22.676	ppb	10:26:48
2	Ni 231.604†	474.0	208.5	11.357	µg/L	11.357	ppb	10:26:48
2	P 214.914†	525.7	357.2	692.69	µg/L	692.69	ppb	10:26:48
2	Pb 220.353†	212.3	173.3	43.428	µg/L	43.428	ppb	10:26:48

2	S 181.975 Axial†	31.7	9.9	40.206 µg/L	40.206 ppb	10:26:48
2	Sb 206.836†	17.7	-1.5	4.5127 µg/L	4.5127 ppb	10:26:48
2	Se 196.026†	-20.3	-35.9	-1.8929 µg/L	-1.8929 ppb	10:26:48
2	SiO2†	39732.9	40586.6	7750.6 µg/L	7750.6 ppb	10:26:28
2	Si 251.611†	44380.2	47197.6	3553.1 µg/L	3553.1 ppb	10:26:28
2	Sn 189.927†	24.9	4.3	11.251 µg/L	11.251 ppb	10:26:48
2	Ti 334.940†	711215.8	761249.7	1687.3 µg/L	1687.3 ppb	10:26:22
2	Tl 190.801†	-34.6	-15.7	-2.6558 µg/L	-2.6558 ppb	10:26:48
2	U 409.014†	277.9	-381.4	-49.243 µg/L	-49.243 ppb	10:26:22
2	V 292.402†	1275.2	1458.1	22.406 µg/L	22.406 ppb	10:26:28
2	Zn 213.857†	11228.0	11479.1	299.80 µg/L	299.80 ppb	10:26:28
3	Sc RADIAL	106599.7	106599.7	94.8 %		10:25:18
3	Al 396.153Radial†	6502.1	6631.0	3350.4 µg/L	3350.4 ppb	10:25:18
3	Ca 317.933Radial†	5638.7	5454.3	2165.1 µg/L	2165.1 ppb	10:25:39
3	Fe 238.204 Radial†	12964.9	13668.8	71802 µg/L	71802 ppb	10:25:18
3	K 766.490 Radial†	2555.2	2001.3	1085.1 µg/L	1085.1 ppb	10:25:18
3	Mg 279.077 IEC†	212.9	204.8	1030.7 µg/L	1030.7 ppb	10:25:39
3	Na 589.592 Radial†	3133.2	4010.0	1112.6 µg/L	1112.6 ppb	10:25:18
3	Sr 421.552†	2772.0	2988.6	16.835 µg/L	16.835 ppb	10:25:18
3	Sc 361.383	1913671.2	1913671.2	93.044 %		10:26:55
3	Y 371.029	1254602.8	1254602.8	100.18 %		10:26:55
3	Ag 328.068†	-815.0	-847.6	-1.7955 µg/L	-1.7955 ppb	10:27:00
3	As 188.979†	6.9	4.9	3.1814 µg/L	3.1814 ppb	10:27:21
3	B 249.677†	846.4	754.0	10.885 µg/L	10.885 ppb	10:27:00
3	Ba 233.527†	4134.4	4524.2	113.67 µg/L	113.67 ppb	10:27:00
3	Be 313.107†	9139.5	6211.3	3.3041 µg/L	3.3041 ppb	10:27:00
3	Cd 226.502†	128.5	239.0	0.7400 µg/L	0.7400 ppb	10:27:00
3	Co 228.616†	55.5	131.4	2.8381 µg/L	2.8381 ppb	10:27:21
3	Cr 267.716†	144.6	278.2	5.8284 µg/L	5.8284 ppb	10:27:00
3	Cu 324.752†	2185.4	-1035.5	8.1374 µg/L	8.1374 ppb	10:27:00
3	Mn 257.610†	677176.9	728027.7	2319.5 µg/L	2319.5 ppb	10:26:55
3	Mo 202.031†	162.7	182.8	23.215 µg/L	23.215 ppb	10:27:21
3	Ni 231.604†	471.6	207.4	11.300 µg/L	11.300 ppb	10:27:21
3	P 214.914†	511.8	344.1	664.61 µg/L	664.61 ppb	10:27:21
3	Pb 220.353†	214.0	175.8	44.068 µg/L	44.068 ppb	10:27:21
3	S 181.975 Axial†	35.3	13.9	60.484 µg/L	60.484 ppb	10:27:21
3	Sb 206.836†	17.9	-1.3	4.7656 µg/L	4.7656 ppb	10:27:21
3	Se 196.026†	-14.4	-29.6	7.0325 µg/L	7.0325 ppb	10:27:21
3	SiO2†	40016.1	41026.2	7834.5 µg/L	7834.5 ppb	10:27:00
3	Si 251.611†	44769.8	47767.3	3596.6 µg/L	3596.6 ppb	10:27:00
3	Sn 189.927†	29.4	9.2	13.595 µg/L	13.595 ppb	10:27:21
3	Ti 334.940†	709291.8	761602.1	1688.1 µg/L	1688.1 ppb	10:26:55
3	Tl 190.801†	-32.3	-13.3	0.9553 µg/L	0.9553 ppb	10:27:21
3	U 409.014†	310.9	-345.0	-45.757 µg/L	-45.757 ppb	10:26:55
3	V 292.402†	1232.1	1416.1	21.912 µg/L	21.912 ppb	10:27:00
3	Zn 213.857†	11257.7	11549.2	301.71 µg/L	301.71 ppb	10:27:00

Mean Data: 241825010|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1917255.8	93.218	%	0.1547				0.17%
Sc RADIAL	105988.7	94.2	%	0.50				0.53%
Y 371.029	1257432.7	100.41	%	0.213				0.21%
Ag 328.068†	-852.1	-1.8299	µg/L	0.17594	-1.8299	ppb	0.17594	9.61%
Al 396.153Radial†	6638.5	3354.2	µg/L	10.70	3354.2	ppb	10.70	0.32%
As 188.979†	3.4	0.2825	µg/L	3.23724	0.2825	ppb	3.23724	>999.9%
B 249.677†	779.9	12.017	µg/L	0.9894	12.017	ppb	0.9894	8.23%
Ba 233.527†	4491.3	112.84	µg/L	0.716	112.84	ppb	0.716	0.63%
Be 313.107†	6152.2	3.2668	µg/L	0.04609	3.2668	ppb	0.04609	1.41%
Ca 317.933Radial†	5466.8	2170.1	µg/L	5.34	2170.1	ppb	5.34	0.25%
Cd 226.502†	214.9	0.0988	µg/L	0.55605	0.0988	ppb	0.55605	562.60%
Co 228.616†	134.6	2.9942	µg/L	0.15046	2.9942	ppb	0.15046	5.02%
Cr 267.716†	269.9	5.6553	µg/L	0.42391	5.6553	ppb	0.42391	7.50%
Cu 324.752†	-1002.5	8.3817	µg/L	0.40619	8.3817	ppb	0.40619	4.85%
Fe 238.204 Radial†	13679.6	71859	µg/L	284.1	71859	ppb	284.1	0.40%
K 766.490 Radial†	1977.6	1072.3	µg/L	11.19	1072.3	ppb	11.19	1.04%
Mg 279.077 IEC†	209.3	1055.7	µg/L	26.12	1055.7	ppb	26.12	2.47%
Mn 257.610†	727982.4	2319.3	µg/L	0.13	2319.3	ppb	0.13	0.01%
Mo 202.031†	183.1	23.252	µg/L	0.5954	23.252	ppb	0.5954	2.56%
Na 589.592 Radial†	3993.9	1108.2	µg/L	5.97	1108.2	ppb	5.97	0.54%

Ni 231.604†	205.3	11.184	µg/L	0.2518	11.184	ppb	0.2518	2.25%
P 214.914†	348.4	673.94	µg/L	16.234	673.94	ppb	16.234	2.41%
Pb 220.353†	173.0	43.341	µg/L	0.7731	43.341	ppb	0.7731	1.78%
S 181.975 Axial†	14.7	64.465	µg/L	26.4748	64.465	ppb	26.4748	41.07%
Sb 206.836†	-5.1	0.9795	µg/L	6.33995	0.9795	ppb	6.33995	647.26%
Se 196.026†	-29.8	6.7028	µg/L	8.43577	6.7028	ppb	8.43577	125.85%
SiO2†	40816.1	7794.4	µg/L	42.09	7794.4	ppb	42.09	0.54%
Si 251.611†	47505.5	3576.6	µg/L	21.96	3576.6	ppb	21.96	0.61%
Sn 189.927†	7.3	12.677	µg/L	1.2517	12.677	ppb	1.2517	9.87%
Sr 421.552†	2994.4	16.867	µg/L	0.0321	16.867	ppb	0.0321	0.19%
Ti 334.940†	761505.1	1687.8	µg/L	0.50	1687.8	ppb	0.50	0.03%
Tl 190.801†	-15.8	-2.7974	µg/L	3.82542	-2.7974	ppb	3.82542	136.75%
U 409.014†	-337.4	-45.053	µg/L	4.5837	-45.053	ppb	4.5837	10.17%
V 292.402†	1435.1	22.132	µg/L	0.2512	22.132	ppb	0.2512	1.14%
Zn 213.857†	11498.7	300.35	µg/L	1.184	300.35	ppb	1.184	0.39%

Sequence No.: 19
Sample ID: 241825011|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 317
Date Collected: 12/18/2009 10:27:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825011|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105932.1	105932.1	94.2	%			10:28:03
1	Al 396.153Radial†	88018.8	93229.7	47116	µg/L	47116	ppb	10:28:03
1	Ca 317.933Radial†	84791.3	89537.0	35542	µg/L	35542	ppb	10:28:03
1	Fe 238.204 Radial†	21968.3	23315.0	122470	µg/L	122470	ppb	10:28:08
1	K 766.490 Radial†	14751.1	14968.1	8115.6	µg/L	8115.6	ppb	10:28:08
1	Mg 279.077 IEC†	3482.0	3677.4	20217	µg/L	20217	ppb	10:28:08
1	Na 589.592 Radial†	3010.9	3900.9	1082.4	µg/L	1082.4	ppb	10:28:08
1	Sr 421.552†	48639.4	51709.8	291.28	µg/L	291.28	ppb	10:28:03
1	Sc 361.383	1905056.0	1905056.0	92.625	%			10:28:42
1	Y 371.029	1179325.9	1179325.9	94.168	%			10:28:42
1	Ag 328.068†	-1297.6	-1372.7	-0.8494	µg/L	-0.8494	ppb	10:28:47
1	As 188.979†	19.9	19.0	24.481	µg/L	24.481	ppb	10:29:08
1	B 249.677†	1620.1	1593.4	32.206	µg/L	32.206	ppb	10:28:47
1	Ba 233.527†	128125.6	138408.1	3476.9	µg/L	3476.9	ppb	10:28:47
1	Be 313.107†	12175.3	9533.3	4.4740	µg/L	4.4740	ppb	10:28:47
1	Cd 226.502†	279.2	402.3	1.2101	µg/L	1.2101	ppb	10:29:08
1	Co 228.616†	881.5	1023.4	40.438	µg/L	40.438	ppb	10:29:08
1	Cr 267.716†	3425.6	3821.2	80.139	µg/L	80.139	ppb	10:28:47
1	Cu 324.752†	12568.3	10184.7	97.962	µg/L	97.962	ppb	10:28:47
1	Mn 257.610†	591701.7	639038.0	2043.4	µg/L	2043.4	ppb	10:28:42
1	Mo 202.031†	12.8	21.7	7.2329	µg/L	7.2329	ppb	10:29:08
1	Ni 231.604†	1500.5	1320.6	71.945	µg/L	71.945	ppb	10:29:08
1	P 214.914†	2294.6	2271.3	4793.8	µg/L	4793.8	ppb	10:29:08
1	Pb 220.353†	421.2	400.7	104.06	µg/L	104.06	ppb	10:29:08
1	S 181.975 Axial†	165.9	155.1	775.80	µg/L	775.80	ppb	10:29:08
1	Sb 206.836†	22.9	4.1	16.125	µg/L	16.125	ppb	10:29:08
1	Se 196.026†	-42.7	-60.2	-5.3114	µg/L	-5.3114	ppb	10:29:08
1	SiO2†	97247.1	103008.6	19671	µg/L	19671	ppb	10:28:47
1	Si 251.611†	111321.1	119835.2	9026.3	µg/L	9026.3	ppb	10:28:47
1	Sn 189.927†	-122.2	-154.4	-48.988	µg/L	-48.988	ppb	10:29:08
1	Ti 334.940†	1757535.8	1896758.9	4202.4	µg/L	4202.4	ppb	10:28:42
1	Tl 190.801†	-35.7	-17.2	7.7709	µg/L	7.7709	ppb	10:29:08
1	U 409.014†	486.0	-154.6	-36.539	µg/L	-36.539	ppb	10:28:47
1	V 292.402†	20863.3	22616.4	264.95	µg/L	264.95	ppb	10:28:47
1	Zn 213.857†	10234.1	10498.8	267.22	µg/L	267.22	ppb	10:28:47
2	Sc RADIAL	104579.6	104579.6	93.0	%			10:28:14
2	Al 396.153Radial†	87858.2	94265.7	47640	µg/L	47640	ppb	10:28:14
2	Ca 317.933Radial†	83882.2	89723.7	35616	µg/L	35616	ppb	10:28:14
2	Fe 238.204 Radial†	22144.0	23805.7	125050	µg/L	125050	ppb	10:28:19
2	K 766.490 Radial†	14890.2	15320.3	8306.6	µg/L	8306.6	ppb	10:28:19
2	Mg 279.077 IEC†	3506.2	3751.3	20623	µg/L	20623	ppb	10:28:19
2	Na 589.592 Radial†	3090.0	4027.4	1117.4	µg/L	1117.4	ppb	10:28:19
2	Sr 421.552†	48332.9	52048.0	293.18	µg/L	293.18	ppb	10:28:14
2	Sc 361.383	1902035.5	1902035.5	92.478	%			10:29:15
2	Y 371.029	1179547.1	1179547.1	94.186	%			10:29:15
2	Ag 328.068†	-1372.3	-1455.6	-1.3692	µg/L	-1.3692	ppb	10:29:20
2	As 188.979†	20.6	19.7	25.447	µg/L	25.447	ppb	10:29:41
2	B 249.677†	1655.8	1634.8	33.235	µg/L	33.235	ppb	10:29:20
2	Ba 233.527†	129264.8	139859.7	3513.4	µg/L	3513.4	ppb	10:29:20
2	Be 313.107†	12309.4	9699.2	4.5743	µg/L	4.5743	ppb	10:29:20
2	Cd 226.502†	286.2	410.3	1.2253	µg/L	1.2253	ppb	10:29:41
2	Co 228.616†	888.4	1032.4	40.844	µg/L	40.844	ppb	10:29:41
2	Cr 267.716†	3462.5	3866.9	81.098	µg/L	81.098	ppb	10:29:20
2	Cu 324.752†	12636.3	10279.8	99.184	µg/L	99.184	ppb	10:29:20
2	Mn 257.610†	592906.4	641355.1	2051.1	µg/L	2051.1	ppb	10:29:15
2	Mo 202.031†	8.4	17.0	6.8061	µg/L	6.8061	ppb	10:29:41
2	Ni 231.604†	1481.7	1302.8	70.976	µg/L	70.976	ppb	10:29:41
2	P 214.914†	2289.6	2269.9	4787.7	µg/L	4787.7	ppb	10:29:41
2	Pb 220.353†	419.1	399.0	103.66	µg/L	103.66	ppb	10:29:41

2	S 181.975 Axial†	156.9	145.6	726.40 µg/L	726.40 ppb	10:29:41
2	Sb 206.836†	20.4	1.6	13.605 µg/L	13.605 ppb	10:29:41
2	Se 196.026†	-45.1	-62.9	-7.5467 µg/L	-7.5467 ppb	10:29:41
2	SiO2†	97782.8	103754.6	19813 µg/L	19813 ppb	10:29:20
2	Si 251.611†	112018.5	120780.2	9098.2 µg/L	9098.2 ppb	10:29:20
2	Sn 189.927†	-126.7	-159.5	-51.069 µg/L	-51.069 ppb	10:29:41
2	Ti 334.940†	1759968.7	1902402.9	4214.9 µg/L	4214.9 ppb	10:29:15
2	Tl 190.801†	-30.6	-11.7	16.105 µg/L	16.105 ppb	10:29:41
2	U 409.014†	551.6	-82.8	-30.275 µg/L	-30.275 ppb	10:29:20
2	V 292.402†	21039.6	22842.9	267.72 µg/L	267.72 ppb	10:29:20
2	Zn 213.857†	10298.0	10585.5	269.26 µg/L	269.26 ppb	10:29:20
3	Sc RADIAL	105064.0	105064.0	93.4 %		10:28:25
3	Al 396.153Radial†	88262.7	94263.1	47638 µg/L	47638 ppb	10:28:25
3	Ca 317.933Radial†	84393.0	89854.6	35668 µg/L	35668 ppb	10:28:25
3	Fe 238.204 Radial†	22200.6	23756.4	124790 µg/L	124790 ppb	10:28:30
3	K 766.490 Radial†	14872.1	15227.0	8256.0 µg/L	8256.0 ppb	10:28:30
3	Mg 279.077 IEC†	3511.3	3739.3	20557 µg/L	20557 ppb	10:28:30
3	Na 589.592 Radial†	3051.8	3971.1	1101.8 µg/L	1101.8 ppb	10:28:30
3	Sr 421.552†	48587.7	52081.2	293.37 µg/L	293.37 ppb	10:28:25
3	Sc 361.383	1910127.3	1910127.3	92.871 %		10:29:48
3	Y 371.029	1184153.7	1184153.7	94.554 %		10:29:48
3	Ag 328.068†	-1394.7	-1473.4	-1.5658 µg/L	-1.5658 ppb	10:29:53
3	As 188.979†	8.6	6.8	0.7970 µg/L	0.7970 ppb	10:30:14
3	B 249.677†	1661.1	1632.9	33.231 µg/L	33.231 ppb	10:29:53
3	Ba 233.527†	128378.6	138313.4	3474.5 µg/L	3474.5 ppb	10:29:53
3	Be 313.107†	12218.3	9544.7	4.4775 µg/L	4.4775 ppb	10:29:53
3	Cd 226.502†	275.5	397.6	0.9100 µg/L	0.9100 ppb	10:30:14
3	Co 228.616†	882.3	1021.7	40.334 µg/L	40.334 ppb	10:30:14
3	Cr 267.716†	3411.6	3796.2	79.620 µg/L	79.620 ppb	10:29:53
3	Cu 324.752†	12545.2	10123.8	98.032 µg/L	98.032 ppb	10:29:53
3	Mn 257.610†	594970.6	640861.8	2049.5 µg/L	2049.5 ppb	10:29:48
3	Mo 202.031†	9.7	18.3	6.9477 µg/L	6.9477 ppb	10:30:14
3	Ni 231.604†	1502.1	1318.0	71.803 µg/L	71.803 ppb	10:30:14
3	P 214.914†	2293.3	2263.3	4774.0 µg/L	4774.0 ppb	10:30:14
3	Pb 220.353†	424.3	402.7	104.59 µg/L	104.59 ppb	10:30:14
3	S 181.975 Axial†	164.4	152.9	764.33 µg/L	764.33 ppb	10:30:14
3	Sb 206.836†	20.8	1.9	13.917 µg/L	13.917 ppb	10:30:14
3	Se 196.026†	-35.6	-52.5	7.4685 µg/L	7.4685 ppb	10:30:14
3	SiO2†	97741.7	103262.5	19719 µg/L	19719 ppb	10:29:53
3	Si 251.611†	111894.1	120133.1	9048.6 µg/L	9048.6 ppb	10:29:53
3	Sn 189.927†	-120.0	-151.7	-47.290 µg/L	-47.290 ppb	10:30:14
3	Ti 334.940†	1766332.2	1901192.8	4212.2 µg/L	4212.2 ppb	10:29:48
3	Tl 190.801†	-37.1	-18.5	5.8247 µg/L	5.8247 ppb	10:30:14
3	U 409.014†	577.4	-57.5	-27.849 µg/L	-27.849 ppb	10:29:53
3	V 292.402†	20927.4	22625.7	265.26 µg/L	265.26 ppb	10:29:53
3	Zn 213.857†	10222.9	10457.4	265.86 µg/L	265.86 ppb	10:29:53

Mean Data: 241825011|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1905739.6	92.658	%	0.1988				0.21%
Sc RADIAL	105191.9	93.5	%	0.61				0.65%
Y 371.029	1181008.9	94.303	%	0.2176				0.23%
Ag 328.068†	-1433.9	-1.2615	µg/L	0.37014	-1.2615	ppb	0.37014	29.34%
Al 396.153Radial†	93919.5	47465	µg/L	301.9	47465	ppb	301.9	0.64%
As 188.979†	15.2	16.908	µg/L	13.9612	16.908	ppb	13.9612	82.57%
B 249.677†	1620.4	32.891	µg/L	0.5929	32.891	ppb	0.5929	1.80%
Ba 233.527†	138860.4	3488.3	µg/L	21.77	3488.3	ppb	21.77	0.62%
Be 313.107†	9592.4	4.5086	µg/L	0.05691	4.5086	ppb	0.05691	1.26%
Ca 317.933Radial†	89705.1	35609	µg/L	63.4	35609	ppb	63.4	0.18%
Cd 226.502†	403.4	1.1152	µg/L	0.17779	1.1152	ppb	0.17779	15.94%
Co 228.616†	1025.9	40.539	µg/L	0.2691	40.539	ppb	0.2691	0.66%
Cr 267.716†	3828.1	80.286	µg/L	0.7501	80.286	ppb	0.7501	0.93%
Cu 324.752†	10196.1	98.393	µg/L	0.6864	98.393	ppb	0.6864	0.70%
Fe 238.204 Radial†	23625.7	124110	µg/L	1419.4	124110	ppb	1419.4	1.14%
K 766.490 Radial†	15171.8	8226.1	µg/L	98.94	8226.1	ppb	98.94	1.20%
Mg 279.077 IEC†	3722.7	20465	µg/L	217.8	20465	ppb	217.8	1.06%
Mn 257.610†	640418.3	2048.0	µg/L	4.05	2048.0	ppb	4.05	0.20%
Mo 202.031†	19.0	6.9956	µg/L	0.21737	6.9956	ppb	0.21737	3.11%
Na 589.592 Radial†	3966.5	1100.5	µg/L	17.58	1100.5	ppb	17.58	1.60%

Ni 231.604†	1313.8	71.575	µg/L	0.5235	71.575	ppb	0.5235	0.73%
P 214.914†	2268.2	4785.1	µg/L	10.11	4785.1	ppb	10.11	0.21%
Pb 220.353†	400.8	104.10	µg/L	0.467	104.10	ppb	0.467	0.45%
S 181.975 Axial†	151.2	755.51	µg/L	25.851	755.51	ppb	25.851	3.42%
Sb 206.836†	2.5	14.549	µg/L	1.3740	14.549	ppb	1.3740	9.44%
Se 196.026†	-58.5	-1.7965	µg/L	8.10121	-1.7965	ppb	8.10121	450.94%
SiO2†	103341.9	19735	µg/L	72.4	19735	ppb	72.4	0.37%
Si 251.611†	120249.5	9057.7	µg/L	36.83	9057.7	ppb	36.83	0.41%
Sn 189.927†	-155.2	-49.116	µg/L	1.8929	-49.116	ppb	1.8929	3.85%
Sr 421.552†	51946.3	292.61	µg/L	1.158	292.61	ppb	1.158	0.40%
Ti 334.940†	1900118.2	4209.8	µg/L	6.58	4209.8	ppb	6.58	0.16%
Tl 190.801†	-15.8	9.9002	µg/L	5.46098	9.9002	ppb	5.46098	55.16%
U 409.014†	-98.3	-31.555	µg/L	4.4840	-31.555	ppb	4.4840	14.21%
V 292.402†	22695.0	265.97	µg/L	1.519	265.97	ppb	1.519	0.57%
Zn 213.857†	10513.9	267.45	µg/L	1.714	267.45	ppb	1.714	0.64%

Sequence No.: 20
Sample ID: 241825012|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 318
Date Collected: 12/18/2009 10:30:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825012|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106636.8	106636.8	94.8	%			10:30:56
1	Al 396.153Radial†	225851.6	237997.5	120280	µg/L	120280	ppb	10:30:56
1	Ca 317.933Radial†	54080.8	56548.7	22447	µg/L	22447	ppb	10:31:02
1	Fe 238.204 Radial†	27948.6	29468.9	154800	µg/L	154800	ppb	10:31:02
1	K 766.490 Radial†	28039.1	28880.7	15659	µg/L	15659	ppb	10:30:56
1	Mg 279.077 IEC†	4142.3	4349.5	23897	µg/L	23897	ppb	10:31:02
1	Na 589.592 Radial†	2203.6	3028.3	840.23	µg/L	840.23	ppb	10:31:02
1	Sr 421.552†	53397.4	56387.2	317.62	µg/L	317.62	ppb	10:30:56
1	Sc 361.383	1921996.4	1921996.4	93.448	%			10:31:36
1	Y 371.029	1199478.4	1199478.4	95.778	%			10:31:36
1	Ag 328.068†	-1623.4	-1708.9	-1.1357	µg/L	-1.1357	ppb	10:31:42
1	As 188.979†	25.9	25.2	32.248	µg/L	32.248	ppb	10:32:02
1	B 249.677†	2145.9	2140.6	46.330	µg/L	46.330	ppb	10:31:42
1	Ba 233.527†	69194.0	74125.8	1862.4	µg/L	1862.4	ppb	10:31:42
1	Be 313.107†	20691.4	18530.5	10.335	µg/L	10.335	ppb	10:31:42
1	Cd 226.502†	336.6	461.1	0.3090	µg/L	0.3090	ppb	10:31:42
1	Co 228.616†	1502.7	1679.8	72.950	µg/L	72.950	ppb	10:32:02
1	Cr 267.716†	4571.0	5014.3	105.03	µg/L	105.03	ppb	10:31:42
1	Cu 324.752†	10011.4	7328.9	84.814	µg/L	84.814	ppb	10:31:42
1	Mn 257.610†	1570241.3	1680550.7	5352.8	µg/L	5352.8	ppb	10:31:36
1	Mo 202.031†	-8.0	-0.6	6.0138	µg/L	6.0138	ppb	10:32:02
1	Ni 231.604†	1740.5	1563.1	85.156	µg/L	85.156	ppb	10:32:02
1	P 214.914†	696.5	539.3	1025.3	µg/L	1025.3	ppb	10:32:02
1	Pb 220.353†	565.8	551.3	148.20	µg/L	148.20	ppb	10:32:02
1	S 181.975 Axial†	132.8	118.1	580.17	µg/L	580.17	ppb	10:32:02
1	Sb 206.836†	20.0	0.9	12.324	µg/L	12.324	ppb	10:32:02
1	Se 196.026†	-43.0	-60.1	14.066	µg/L	14.066	ppb	10:32:02
1	SiO2†	114320.4	120353.5	22983	µg/L	22983	ppb	10:31:42
1	Si 251.611†	131428.8	140293.4	10606	µg/L	10606	ppb	10:31:42
1	Sn 189.927†	-97.4	-126.7	-33.823	µg/L	-33.823	ppb	10:32:02
1	Ti 334.940†	1580494.6	1690581.3	3746.1	µg/L	3746.1	ppb	10:31:36
1	Tl 190.801†	-40.1	-21.5	14.125	µg/L	14.125	ppb	10:32:02
1	U 409.014†	1004.8	396.0	8.8194	µg/L	8.8194	ppb	10:31:36
1	V 292.402†	23060.3	24769.0	291.92	µg/L	291.92	ppb	10:31:42
1	Zn 213.857†	11305.8	11548.2	291.76	µg/L	291.76	ppb	10:31:42
2	Sc RADIAL	107206.8	107206.8	95.3	%			10:31:07
2	Al 396.153Radial†	229213.2	240257.9	121420	µg/L	121420	ppb	10:31:07
2	Ca 317.933Radial†	54453.3	56636.3	22482	µg/L	22482	ppb	10:31:12
2	Fe 238.204 Radial†	28253.8	29632.4	155660	µg/L	155660	ppb	10:31:12
2	K 766.490 Radial†	28500.2	29207.2	15836	µg/L	15836	ppb	10:31:07
2	Mg 279.077 IEC†	4173.3	4358.7	23947	µg/L	23947	ppb	10:31:12
2	Na 589.592 Radial†	2203.2	3015.5	836.70	µg/L	836.70	ppb	10:31:12
2	Sr 421.552†	54201.4	56931.2	320.69	µg/L	320.69	ppb	10:31:07
2	Sc 361.383	1922520.8	1922520.8	93.474	%			10:32:10
2	Y 371.029	1200789.3	1200789.3	95.882	%			10:32:10
2	Ag 328.068†	-1681.9	-1771.0	-1.5927	µg/L	-1.5927	ppb	10:32:15
2	As 188.979†	29.9	29.5	40.228	µg/L	40.228	ppb	10:32:36
2	B 249.677†	2126.3	2119.1	45.104	µg/L	45.104	ppb	10:32:15
2	Ba 233.527†	70189.8	75170.9	1888.7	µg/L	1888.7	ppb	10:32:15
2	Be 313.107†	20974.0	18826.9	10.523	µg/L	10.523	ppb	10:32:15
2	Cd 226.502†	333.9	458.1	0.1580	µg/L	0.1580	ppb	10:32:15
2	Co 228.616†	1482.7	1658.0	71.907	µg/L	71.907	ppb	10:32:36
2	Cr 267.716†	4665.2	5113.7	107.11	µg/L	107.11	ppb	10:32:15
2	Cu 324.752†	10126.1	7448.7	85.841	µg/L	85.841	ppb	10:32:15
2	Mn 257.610†	1570853.6	1680747.4	5353.5	µg/L	5353.5	ppb	10:32:10
2	Mo 202.031†	-12.1	-5.0	5.5589	µg/L	5.5589	ppb	10:32:36
2	Ni 231.604†	1718.3	1538.9	83.835	µg/L	83.835	ppb	10:32:36
2	P 214.914†	704.6	547.8	1043.0	µg/L	1043.0	ppb	10:32:36
2	Pb 220.353†	573.5	559.4	150.35	µg/L	150.35	ppb	10:32:36

2	S 181.975 Axial†	132.1	117.3	576.16 µg/L	576.16 ppb	10:32:36
2	Sb 206.836†	14.6	-4.9	6.5511 µg/L	6.5511 ppb	10:32:36
2	Se 196.026†	-33.8	-50.3	29.000 µg/L	29.000 ppb	10:32:36
2	SiO2†	116102.6	122226.8	23341 µg/L	23341 ppb	10:32:15
2	Si 251.611†	133309.1	142266.6	10758 µg/L	10758 ppb	10:32:15
2	Sn 189.927†	-107.9	-137.9	-39.148 µg/L	-39.148 ppb	10:32:36
2	Ti 334.940†	1579859.9	1689441.0	3743.6 µg/L	3743.6 ppb	10:32:10
2	Tl 190.801†	-43.6	-25.2	8.4343 µg/L	8.4343 ppb	10:32:36
2	U 409.014†	941.0	327.4	2.2220 µg/L	2.2220 ppb	10:32:10
2	V 292.402†	23426.0	25153.5	296.31 µg/L	296.31 ppb	10:32:15
2	Zn 213.857†	11497.9	11750.4	297.09 µg/L	297.09 ppb	10:32:15
3	Sc RADIAL	106988.6	106988.6	95.1 %		10:31:18
3	Al 396.153Radial†	229728.3	241290.1	121940 µg/L	121940 ppb	10:31:18
3	Ca 317.933Radial†	54724.5	57038.0	22641 µg/L	22641 ppb	10:31:23
3	Fe 238.204 Radial†	28286.9	29727.7	156160 µg/L	156160 ppb	10:31:23
3	K 766.490 Radial†	28548.3	29318.8	15896 µg/L	15896 ppb	10:31:18
3	Mg 279.077 IEC†	4175.7	4370.2	24010 µg/L	24010 ppb	10:31:23
3	Na 589.592 Radial†	2268.9	3089.3	857.15 µg/L	857.15 ppb	10:31:23
3	Sr 421.552†	54253.3	57101.8	321.65 µg/L	321.65 ppb	10:31:18
3	Sc 361.383	1924845.1	1924845.1	93.587 %		10:32:43
3	Y 371.029	1201916.5	1201916.5	95.972 %		10:32:43
3	Ag 328.068†	-1700.3	-1788.5	-1.7326 µg/L	-1.7326 ppb	10:32:49
3	As 188.979†	28.6	28.1	37.571 µg/L	37.571 ppb	10:33:09
3	B 249.677†	2105.0	2093.5	43.811 µg/L	43.811 ppb	10:32:49
3	Ba 233.527†	69674.8	74529.9	1872.6 µg/L	1872.6 ppb	10:32:49
3	Be 313.107†	20813.4	18628.1	10.399 µg/L	10.399 ppb	10:32:49
3	Cd 226.502†	316.6	439.2	-0.3762 µg/L	-0.3762 ppb	10:32:49
3	Co 228.616†	1484.3	1657.7	71.907 µg/L	71.907 ppb	10:33:09
3	Cr 267.716†	4638.5	5079.1	106.38 µg/L	106.38 ppb	10:32:49
3	Cu 324.752†	9998.9	7299.8	84.901 µg/L	84.901 ppb	10:32:49
3	Mn 257.610†	1569786.0	1677577.4	5343.5 µg/L	5343.5 ppb	10:32:43
3	Mo 202.031†	-2.7	5.0	6.6977 µg/L	6.6977 ppb	10:33:09
3	Ni 231.604†	1732.6	1552.0	84.548 µg/L	84.548 ppb	10:33:09
3	P 214.914†	691.2	532.6	1009.7 µg/L	1009.7 ppb	10:33:09
3	Pb 220.353†	570.3	555.2	149.32 µg/L	149.32 ppb	10:33:09
3	S 181.975 Axial†	132.2	117.2	575.54 µg/L	575.54 ppb	10:33:09
3	Sb 206.836†	18.7	-0.6	10.812 µg/L	10.812 ppb	10:33:09
3	Se 196.026†	-40.3	-57.2	19.355 µg/L	19.355 ppb	10:33:09
3	SiO2†	115093.6	120998.7	23106 µg/L	23106 ppb	10:32:49
3	Si 251.611†	132245.2	140957.6	10657 µg/L	10657 ppb	10:32:49
3	Sn 189.927†	-100.5	-129.8	-35.110 µg/L	-35.110 ppb	10:33:09
3	Ti 334.940†	1579740.8	1687272.9	3738.7 µg/L	3738.7 ppb	10:32:43
3	Tl 190.801†	-48.9	-30.8	-0.0231 µg/L	-0.0231 ppb	10:33:09
3	U 409.014†	1005.2	394.8	8.4596 µg/L	8.4596 ppb	10:32:43
3	V 292.402†	23175.2	24855.3	293.01 µg/L	293.01 ppb	10:32:49
3	Zn 213.857†	11391.5	11622.0	293.59 µg/L	293.59 ppb	10:32:49

Mean Data: 241825012|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1923120.8	93.503	%	0.0737				0.08%
Sc RADIAL	106944.1	95.1	%	0.26				0.27%
Y 371.029	1200728.1	95.877	%	0.0974				0.10%
Ag 328.068†	-1756.1	-1.4870	µg/L	0.31217	-1.4870	ppb	0.31217	20.99%
Al 396.153Radial†	239848.5	121210	µg/L	851.1	121210	ppb	851.1	0.70%
As 188.979†	27.6	36.682	µg/L	4.0633	36.682	ppb	4.0633	11.08%
B 249.677†	2117.7	45.082	µg/L	1.2595	45.082	ppb	1.2595	2.79%
Ba 233.527†	74608.9	1874.5	µg/L	13.24	1874.5	ppb	13.24	0.71%
Be 313.107†	18661.8	10.419	µg/L	0.0957	10.419	ppb	0.0957	0.92%
Ca 317.933Radial†	56741.0	22524	µg/L	103.6	22524	ppb	103.6	0.46%
Cd 226.502†	452.8	0.0303	µg/L	0.36003	0.0303	ppb	0.36003	>999.9%
Co 228.616†	1665.2	72.254	µg/L	0.6024	72.254	ppb	0.6024	0.83%
Cr 267.716†	5069.0	106.18	µg/L	1.055	106.18	ppb	1.055	0.99%
Cu 324.752†	7359.2	85.185	µg/L	0.5696	85.185	ppb	0.5696	0.67%
Fe 238.204 Radial†	29609.6	155540	µg/L	687.5	155540	ppb	687.5	0.44%
K 766.490 Radial†	29135.6	15797	µg/L	123.4	15797	ppb	123.4	0.78%
Mg 279.077 IEC†	4359.5	23951	µg/L	56.6	23951	ppb	56.6	0.24%
Mn 257.610†	1679625.2	5349.9	µg/L	5.57	5349.9	ppb	5.57	0.10%
Mo 202.031†	-0.2	6.0901	µg/L	0.57324	6.0901	ppb	0.57324	9.41%
Na 589.592 Radial†	3044.4	844.69	µg/L	10.933	844.69	ppb	10.933	1.29%

Ni 231.604†	1551.3	84.513	µg/L	0.6615	84.513	ppb	0.6615	0.78%
P 214.914†	539.9	1026.0	µg/L	16.66	1026.0	ppb	16.66	1.62%
Pb 220.353†	555.3	149.29	µg/L	1.075	149.29	ppb	1.075	0.72%
S 181.975 Axial†	117.5	577.29	µg/L	2.514	577.29	ppb	2.514	0.44%
Sb 206.836†	-1.5	9.8956	µg/L	2.99350	9.8956	ppb	2.99350	30.25%
Se 196.026†	-55.9	20.807	µg/L	7.5722	20.807	ppb	7.5722	36.39%
SiO2†	121193.0	23143	µg/L	181.7	23143	ppb	181.7	0.79%
Si 251.611†	141172.5	10674	µg/L	77.0	10674	ppb	77.0	0.72%
Sn 189.927†	-131.5	-36.027	µg/L	2.7785	-36.027	ppb	2.7785	7.71%
Sr 421.552†	56806.7	319.99	µg/L	2.102	319.99	ppb	2.102	0.66%
Ti 334.940†	1689098.4	3742.8	µg/L	3.73	3742.8	ppb	3.73	0.10%
Tl 190.801†	-25.8	7.5119	µg/L	7.11887	7.5119	ppb	7.11887	94.77%
U 409.014†	372.8	6.5003	µg/L	3.70953	6.5003	ppb	3.70953	57.07%
V 292.402†	24925.9	293.75	µg/L	2.287	293.75	ppb	2.287	0.78%
Zn 213.857†	11640.2	294.14	µg/L	2.708	294.14	ppb	2.708	0.92%

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 10:33:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107036.0	107036.0	95.2	%			10:33:56
1	Al 396.153Radial†	10264.5	10556.8	5316.2	µg/L	5316.2	ppb	10:33:56
1	Ca 317.933Radial†	12330.4	12462.1	4946.9	µg/L	4946.9	ppb	10:34:17
1	Fe 238.204 Radial†	980.3	1019.0	5369.3	µg/L	5369.3	ppb	10:34:17
1	K 766.490 Radial†	9630.1	9425.1	5110.2	µg/L	5110.2	ppb	10:33:56
1	Mg 279.077 IEC†	906.8	933.1	5180.3	µg/L	5180.3	ppb	10:34:17
1	Na 589.592 Radial†	34277.5	36724.8	10190	µg/L	10190	ppb	10:33:56
1	Sr 421.552†	85107.1	89499.7	504.15	µg/L	504.15	ppb	10:33:56
1	Sc 361.383	1926894.3	1926894.3	93.687	%			10:35:20
1	Y 371.029	1166554.9	1166554.9	93.149	%			10:35:20
1	Ag 328.068†	53665.1	57309.8	515.75	µg/L	515.75	ppb	10:35:25
1	As 188.979†	248.9	263.2	500.59	µg/L	500.59	ppb	10:35:46
1	B 249.677†	10670.6	11234.0	496.92	µg/L	496.92	ppb	10:35:25
1	Ba 233.527†	18781.1	20127.4	506.61	µg/L	506.61	ppb	10:35:25
1	Be 313.107†	749703.8	796613.4	503.73	µg/L	503.73	ppb	10:35:20
1	Cd 226.502†	17577.2	18862.5	498.96	µg/L	498.96	ppb	10:35:25
1	Co 228.616†	9724.6	10451.6	502.70	µg/L	502.70	ppb	10:35:25
1	Cr 267.716†	22560.3	24203.3	505.01	µg/L	505.01	ppb	10:35:25
1	Cu 324.752†	71590.1	73030.1	514.96	µg/L	514.96	ppb	10:35:25
1	Mn 257.610†	151911.4	162371.1	515.97	µg/L	515.97	ppb	10:35:20
1	Mo 202.031†	4172.8	4462.0	497.99	µg/L	497.99	ppb	10:35:46
1	Ni 231.604†	8979.2	9284.9	505.82	µg/L	505.82	ppb	10:35:25
1	P 214.914†	1305.3	1187.2	2520.8	µg/L	2520.8	ppb	10:35:46
1	Pb 220.353†	1922.3	1997.7	507.12	µg/L	507.12	ppb	10:35:46
1	S 181.975 Axial†	208.7	198.7	1019.6	µg/L	1019.6	ppb	10:35:46
1	Sb 206.836†	495.5	508.3	502.97	µg/L	502.97	ppb	10:35:46
1	Se 196.026†	342.0	350.9	513.43	µg/L	513.43	ppb	10:35:46
1	SiO2†	28973.1	28943.9	5527.2	µg/L	5527.2	ppb	10:35:25
1	Si 251.611†	31972.1	33777.0	2539.0	µg/L	2539.0	ppb	10:35:25
1	Sn 189.927†	971.2	1014.2	497.22	µg/L	497.22	ppb	10:35:46
1	Ti 334.940†	216621.1	230499.9	510.65	µg/L	510.65	ppb	10:35:20
1	Tl 190.801†	289.6	330.5	501.21	µg/L	501.21	ppb	10:35:46
1	U 409.014†	5866.7	5582.8	523.41	µg/L	523.41	ppb	10:35:25
1	V 292.402†	42061.0	44987.3	511.92	µg/L	511.92	ppb	10:35:25
1	Zn 213.857†	18286.6	18968.8	504.15	µg/L	504.15	ppb	10:35:25
2	Sc RADIAL	107989.3	107989.3	96.0	%			10:34:22
2	Al 396.153Radial†	10301.3	10499.9	5287.4	µg/L	5287.4	ppb	10:34:22
2	Ca 317.933Radial†	12461.9	12484.7	4955.9	µg/L	4955.9	ppb	10:34:43
2	Fe 238.204 Radial†	984.2	1013.9	5342.8	µg/L	5342.8	ppb	10:34:43
2	K 766.490 Radial†	9784.9	9497.0	5149.2	µg/L	5149.2	ppb	10:34:22
2	Mg 279.077 IEC†	919.6	938.0	5207.1	µg/L	5207.1	ppb	10:34:43
2	Na 589.592 Radial†	34565.2	36706.5	10185	µg/L	10185	ppb	10:34:22
2	Sr 421.552†	86625.6	90291.8	508.61	µg/L	508.61	ppb	10:34:22
2	Sc 361.383	1926617.9	1926617.9	93.673	%			10:35:52
2	Y 371.029	1165343.1	1165343.1	93.052	%			10:35:52
2	Ag 328.068†	53477.5	57117.7	514.02	µg/L	514.02	ppb	10:35:57
2	As 188.979†	251.1	265.6	505.13	µg/L	505.13	ppb	10:36:18
2	B 249.677†	10595.2	11155.1	493.43	µg/L	493.43	ppb	10:35:57
2	Ba 233.527†	18765.3	20113.4	506.25	µg/L	506.25	ppb	10:35:57
2	Be 313.107†	745689.5	792442.8	501.10	µg/L	501.10	ppb	10:35:52
2	Cd 226.502†	17493.0	18775.3	496.65	µg/L	496.65	ppb	10:35:57
2	Co 228.616†	9711.0	10438.6	502.08	µg/L	502.08	ppb	10:35:57
2	Cr 267.716†	22469.7	24110.1	503.06	µg/L	503.06	ppb	10:35:57
2	Cu 324.752†	71394.6	72832.3	513.56	µg/L	513.56	ppb	10:35:57
2	Mn 257.610†	150952.1	161370.3	512.79	µg/L	512.79	ppb	10:35:52
2	Mo 202.031†	4177.4	4467.4	498.59	µg/L	498.59	ppb	10:36:18
2	Ni 231.604†	8898.3	9199.9	501.20	µg/L	501.20	ppb	10:35:57
2	P 214.914†	1306.5	1188.8	2524.3	µg/L	2524.3	ppb	10:36:18
2	Pb 220.353†	1908.6	1983.4	503.49	µg/L	503.49	ppb	10:36:18

2	S 181.975 Axial†	208.7	198.7	1019.4 µg/L	1019.4 ppb	10:36:18
2	Sb 206.836†	491.5	504.2	498.83 µg/L	498.83 ppb	10:36:18
2	Se 196.026†	326.1	334.0	488.79 µg/L	488.79 ppb	10:36:18
2	SiO2†	28888.7	28858.2	5510.9 µg/L	5510.9 ppb	10:35:57
2	Si 251.611†	31796.6	33594.6	2525.2 µg/L	2525.2 ppb	10:35:57
2	Sn 189.927†	970.5	1013.6	496.91 µg/L	496.91 ppb	10:36:18
2	Ti 334.940†	215418.0	229248.7	507.88 µg/L	507.88 ppb	10:35:52
2	Tl 190.801†	290.8	331.9	503.26 µg/L	503.26 ppb	10:36:18
2	U 409.014†	5820.2	5534.1	518.83 µg/L	518.83 ppb	10:35:57
2	V 292.402†	41893.7	44815.2	509.97 µg/L	509.97 ppb	10:35:57
2	Zn 213.857†	18243.8	18925.8	503.03 µg/L	503.03 ppb	10:35:57
3	Sc RADIAL	108045.9	108045.9	96.1 %		10:34:48
3	Al 396.153Radial†	10255.5	10446.6	5260.5 µg/L	5260.5 ppb	10:34:48
3	Ca 317.933Radial†	12453.2	12468.8	4949.6 µg/L	4949.6 ppb	10:35:09
3	Fe 238.204 Radial†	986.6	1015.9	5353.4 µg/L	5353.4 ppb	10:35:09
3	K 766.490 Radial†	9770.1	9476.2	5138.0 µg/L	5138.0 ppb	10:34:48
3	Mg 279.077 IEC†	911.9	929.5	5160.0 µg/L	5160.0 ppb	10:35:09
3	Na 589.592 Radial†	34625.0	36750.0	10197 µg/L	10197 ppb	10:34:48
3	Sr 421.552†	86280.4	89885.0	506.32 µg/L	506.32 ppb	10:34:48
3	Sc 361.383	1920586.2	1920586.2	93.380 %		10:36:24
3	Y 371.029	1162251.6	1162251.6	92.805 %		10:36:24
3	Ag 328.068†	53783.5	57624.7	518.58 µg/L	518.58 ppb	10:36:30
3	As 188.979†	242.4	257.1	489.04 µg/L	489.04 ppb	10:36:50
3	B 249.677†	10645.6	11244.6	497.39 µg/L	497.39 ppb	10:36:30
3	Ba 233.527†	18848.7	20265.6	510.08 µg/L	510.08 ppb	10:36:30
3	Be 313.107†	744062.2	793200.1	501.58 µg/L	501.58 ppb	10:36:24
3	Cd 226.502†	17609.6	18958.9	501.51 µg/L	501.51 ppb	10:36:30
3	Co 228.616†	9783.8	10549.2	507.40 µg/L	507.40 ppb	10:36:30
3	Cr 267.716†	22591.8	24316.2	507.36 µg/L	507.36 ppb	10:36:30
3	Cu 324.752†	71859.6	73569.6	518.75 µg/L	518.75 ppb	10:36:30
3	Mn 257.610†	150460.5	161349.9	512.72 µg/L	512.72 ppb	10:36:24
3	Mo 202.031†	4167.5	4470.9	498.98 µg/L	498.98 ppb	10:36:50
3	Ni 231.604†	8989.0	9326.9	508.11 µg/L	508.11 ppb	10:36:30
3	P 214.914†	1293.5	1179.2	2502.9 µg/L	2502.9 ppb	10:36:50
3	Pb 220.353†	1923.2	2005.4	509.07 µg/L	509.07 ppb	10:36:50
3	S 181.975 Axial†	210.5	201.4	1033.4 µg/L	1033.4 ppb	10:36:50
3	Sb 206.836†	493.9	508.4	502.98 µg/L	502.98 ppb	10:36:50
3	Se 196.026†	331.3	340.7	498.56 µg/L	498.56 ppb	10:36:50
3	SiO2†	29125.0	29208.1	5577.7 µg/L	5577.7 ppb	10:36:30
3	Si 251.611†	32019.2	33939.5	2551.4 µg/L	2551.4 ppb	10:36:30
3	Sn 189.927†	975.6	1022.3	501.15 µg/L	501.15 ppb	10:36:50
3	Ti 334.940†	214834.2	229345.7	508.09 µg/L	508.09 ppb	10:36:24
3	Tl 190.801†	297.1	339.6	514.86 µg/L	514.86 ppb	10:36:50
3	U 409.014†	5912.5	5652.4	529.95 µg/L	529.95 ppb	10:36:30
3	V 292.402†	42194.4	45277.6	515.21 µg/L	515.21 ppb	10:36:30
3	Zn 213.857†	18373.2	19125.6	508.34 µg/L	508.34 ppb	10:36:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1924699.5	93.580	%	0.1733				0.19%
Sc RADIAL	107690.4	95.7	%	0.50				0.53%
Y 371.029	1164716.5	93.002	%	0.1772				0.19%
Ag 328.068†	57350.7	516.11	µg/L	2.304	516.11	ppb	2.304	0.45%
QC value within limits for Ag 328.068 Recovery = 103.22%								
Al 396.153Radial†	10501.1	5288.1	µg/L	27.87	5288.1	ppb	27.87	0.53%
QC value within limits for Al 396.153Radial Recovery = 105.76%								
As 188.979†	262.0	498.26	µg/L	8.298	498.26	ppb	8.298	1.67%
QC value within limits for As 188.979 Recovery = 99.65%								
B 249.677†	11211.2	495.91	µg/L	2.166	495.91	ppb	2.166	0.44%
QC value within limits for B 249.677 Recovery = 99.18%								
Ba 233.527†	20168.8	507.65	µg/L	2.118	507.65	ppb	2.118	0.42%
QC value within limits for Ba 233.527 Recovery = 101.53%								
Be 313.107†	794085.5	502.14	µg/L	1.405	502.14	ppb	1.405	0.28%
QC value within limits for Be 313.107 Recovery = 100.43%								
Ca 317.933Radial†	12471.9	4950.8	µg/L	4.62	4950.8	ppb	4.62	0.09%
QC value within limits for Ca 317.933Radial Recovery = 99.02%								
Cd 226.502†	18865.6	499.04	µg/L	2.433	499.04	ppb	2.433	0.49%
QC value within limits for Cd 226.502 Recovery = 99.81%								
Co 228.616†	10479.8	504.06	µg/L	2.908	504.06	ppb	2.908	0.58%

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   QC value within limits for Co 228.616  Recovery = 100.81%
Cr 267.716†            24209.9      505.14 µg/L        2.154      505.14 ppb        2.154   0.43%
   QC value within limits for Cr 267.716  Recovery = 101.03%
Cu 324.752†            73144.0      515.75 µg/L        2.685      515.75 ppb        2.685   0.52%
   QC value within limits for Cu 324.752  Recovery = 103.15%
Fe 238.204 Radial†      1016.3      5355.2 µg/L       13.34      5355.2 ppb       13.34   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.10%
K 766.490 Radial†       9466.1      5132.5 µg/L       20.07      5132.5 ppb       20.07   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 102.65%
Mg 279.077 IEC†          933.5      5182.4 µg/L       23.64      5182.4 ppb       23.64   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.65%
Mn 257.610†           161697.1      513.82 µg/L        1.854      513.82 ppb        1.854   0.36%
   QC value within limits for Mn 257.610  Recovery = 102.76%
Mo 202.031†             4466.8      498.52 µg/L        0.502      498.52 ppb        0.502   0.10%
   QC value within limits for Mo 202.031  Recovery = 99.70%
Na 589.592 Radial†     36727.1       10190 µg/L          6.1       10190 ppb          6.1   0.06%
   QC value within limits for Na 589.592 Radial  Recovery = 101.90%
Ni 231.604†             9270.6      505.04 µg/L        3.524      505.04 ppb        3.524   0.70%
   QC value within limits for Ni 231.604  Recovery = 101.01%
P 214.914†              1185.1      2516.0 µg/L       11.46      2516.0 ppb       11.46   0.46%
   QC value within limits for P 214.914  Recovery = 100.64%
Pb 220.353†             1995.5      506.56 µg/L        2.830      506.56 ppb        2.830   0.56%
   QC value within limits for Pb 220.353  Recovery = 101.31%
S 181.975 Axial†         199.6      1024.1 µg/L        8.01      1024.1 ppb        8.01   0.78%
   QC value within limits for S 181.975 Axial  Recovery = 102.41%
Sb 206.836†              507.0      501.60 µg/L        2.392      501.60 ppb        2.392   0.48%
   QC value within limits for Sb 206.836  Recovery = 100.32%
Se 196.026†              341.9      500.26 µg/L       12.406      500.26 ppb       12.406   2.48%
   QC value within limits for Se 196.026  Recovery = 100.05%
SiO2†                  29003.4      5538.6 µg/L       34.83      5538.6 ppb       34.83   0.63%
   QC value within limits for SiO2  Recovery = 103.57%
Si 251.611†            33770.3      2538.5 µg/L       13.13      2538.5 ppb       13.13   0.52%
   QC value within limits for Si 251.611  Recovery = 101.54%
Sn 189.927†             1016.7      498.43 µg/L        2.360      498.43 ppb        2.360   0.47%
   QC value within limits for Sn 189.927  Recovery = 99.69%
Sr 421.552†            89892.2      506.36 µg/L        2.231      506.36 ppb        2.231   0.44%
   QC value within limits for Sr 421.552  Recovery = 101.27%
Ti 334.940†           229698.1      508.87 µg/L        1.543      508.87 ppb        1.543   0.30%
   QC value within limits for Ti 334.940  Recovery = 101.77%
Tl 190.801†              334.0      506.44 µg/L        7.359      506.44 ppb        7.359   1.45%
   QC value within limits for Tl 190.801  Recovery = 101.29%
U 409.014†              5589.8      524.06 µg/L        5.585      524.06 ppb        5.585   1.07%
   QC value within limits for U 409.014  Recovery = 104.81%
V 292.402†             45026.7      512.36 µg/L        2.646      512.36 ppb        2.646   0.52%
   QC value within limits for V 292.402  Recovery = 102.47%
Zn 213.857†            19006.7      505.17 µg/L        2.798      505.17 ppb        2.798   0.55%
   QC value within limits for Zn 213.857  Recovery = 101.03%
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 10:37:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105456.7	105456.7	93.8	%			10:37:32
1	Al 396.153Radial†	256.6	43.9	22.168	µg/L	22.168	ppb	10:37:32
1	Ca 317.933Radial†	407.0	-61.3	-24.328	µg/L	-24.328	ppb	10:37:53
1	Fe 238.204 Radial†	16.5	6.4	33.738	µg/L	33.738	ppb	10:37:53
1	K 766.490 Radial†	700.8	52.7	28.558	µg/L	28.558	ppb	10:37:32
1	Mg 279.077 IEC†	15.5	-3.3	-18.370	µg/L	-18.370	ppb	10:37:53
1	Na 589.592 Radial†	-653.1	7.4	2.0469	µg/L	2.0469	ppb	10:37:32
1	Sr 421.552†	14.1	78.9	0.4442	µg/L	0.4442	ppb	10:37:32
1	Sc 361.383	1948615.0	1948615.0	94.743	%			10:38:55
1	Y 371.029	1185171.9	1185171.9	94.635	%			10:38:55
1	Ag 328.068†	-118.3	-96.5	-0.8578	µg/L	-0.8578	ppb	10:39:00
1	As 188.979†	0.9	-1.6	-2.9877	µg/L	-2.9877	ppb	10:39:21
1	B 249.677†	148.9	1.5	0.0541	µg/L	0.0541	ppb	10:39:21
1	Ba 233.527†	-73.8	2.7	0.0693	µg/L	0.0693	ppb	10:39:21
1	Be 313.107†	3783.3	381.7	0.2413	µg/L	0.2413	ppb	10:39:00
1	Cd 226.502†	-87.0	9.1	0.2421	µg/L	0.2421	ppb	10:39:21
1	Co 228.616†	-70.1	-2.2	-0.1075	µg/L	-0.1075	ppb	10:39:21
1	Cr 267.716†	-101.7	15.4	0.3207	µg/L	0.3207	ppb	10:39:21
1	Cu 324.752†	3169.7	-38.7	-0.2653	µg/L	-0.2653	ppb	10:39:00
1	Mn 257.610†	-50.1	169.8	0.5430	µg/L	0.5430	ppb	10:39:21
1	Mo 202.031†	-5.9	1.6	0.1846	µg/L	0.1846	ppb	10:39:21
1	Ni 231.604†	276.9	-7.2	-0.3909	µg/L	-0.3909	ppb	10:39:21
1	P 214.914†	209.1	14.7	31.861	µg/L	31.861	ppb	10:39:21
1	Pb 220.353†	63.7	13.2	3.3325	µg/L	3.3325	ppb	10:39:21
1	S 181.975 Axial†	25.9	3.3	16.794	µg/L	16.794	ppb	10:39:21
1	Sb 206.836†	16.6	-3.0	-2.9912	µg/L	-2.9912	ppb	10:39:21
1	Se 196.026†	13.5	0.1	0.1931	µg/L	0.1931	ppb	10:39:21
1	SiO2†	1988.4	117.1	22.354	µg/L	22.354	ppb	10:39:00
1	Si 251.611†	386.6	58.4	4.3842	µg/L	4.3842	ppb	10:39:21
1	Sn 189.927†	24.1	3.0	1.4630	µg/L	1.4630	ppb	10:39:21
1	Ti 334.940†	892.7	223.3	0.4964	µg/L	0.4964	ppb	10:39:00
1	Tl 190.801†	-18.1	2.3	3.5411	µg/L	3.5411	ppb	10:39:21
1	U 409.014†	706.9	66.9	6.2739	µg/L	6.2739	ppb	10:39:00
1	V 292.402†	-69.6	18.6	0.2233	µg/L	0.2233	ppb	10:39:00
1	Zn 213.857†	528.6	7.8	0.2077	µg/L	0.2077	ppb	10:39:21
2	Sc RADIAL	105635.2	105635.2	93.9	%			10:37:58
2	Al 396.153Radial†	251.3	37.8	19.059	µg/L	19.059	ppb	10:37:58
2	Ca 317.933Radial†	412.6	-56.1	-22.275	µg/L	-22.275	ppb	10:38:18
2	Fe 238.204 Radial†	12.9	2.5	13.360	µg/L	13.360	ppb	10:38:18
2	K 766.490 Radial†	689.5	39.3	21.323	µg/L	21.323	ppb	10:37:58
2	Mg 279.077 IEC†	11.2	-7.9	-43.802	µg/L	-43.802	ppb	10:38:18
2	Na 589.592 Radial†	-665.9	-5.1	-1.4279	µg/L	-1.4279	ppb	10:37:58
2	Sr 421.552†	-5.7	57.7	0.3249	µg/L	0.3249	ppb	10:37:58
2	Sc 361.383	1934628.3	1934628.3	94.063	%			10:39:27
2	Y 371.029	1177528.6	1177528.6	94.025	%			10:39:27
2	Ag 328.068†	-145.4	-126.3	-1.1243	µg/L	-1.1243	ppb	10:39:32
2	As 188.979†	-2.8	-5.5	-10.441	µg/L	-10.441	ppb	10:39:53
2	B 249.677†	135.0	-12.2	-0.5452	µg/L	-0.5452	ppb	10:39:53
2	Ba 233.527†	-71.3	4.9	0.1228	µg/L	0.1228	ppb	10:39:53
2	Be 313.107†	3656.2	275.5	0.1741	µg/L	0.1741	ppb	10:39:32
2	Cd 226.502†	-90.1	5.1	0.1349	µg/L	0.1349	ppb	10:39:53
2	Co 228.616†	-69.4	-2.0	-0.0986	µg/L	-0.0986	ppb	10:39:53
2	Cr 267.716†	-114.4	1.1	0.0240	µg/L	0.0240	ppb	10:39:53
2	Cu 324.752†	3130.3	-56.5	-0.3945	µg/L	-0.3945	ppb	10:39:32
2	Mn 257.610†	-49.1	170.5	0.5427	µg/L	0.5427	ppb	10:39:53
2	Mo 202.031†	-3.1	4.7	0.5203	µg/L	0.5203	ppb	10:39:53
2	Ni 231.604†	286.6	5.3	0.2880	µg/L	0.2880	ppb	10:39:53
2	P 214.914†	213.4	20.9	45.501	µg/L	45.501	ppb	10:39:53
2	Pb 220.353†	52.2	1.3	0.3385	µg/L	0.3385	ppb	10:39:53

2	S 181.975 Axial†	23.8	1.2	6.2223 µg/L	6.2223 ppb	10:39:53
2	Sb 206.836†	23.7	4.7	4.6376 µg/L	4.6376 ppb	10:39:53
2	Se 196.026†	12.8	-0.5	-0.7488 µg/L	-0.7488 ppb	10:39:53
2	SiO2†	2020.6	166.5	31.787 µg/L	31.787 ppb	10:39:32
2	Si 251.611†	391.2	66.3	4.9730 µg/L	4.9730 ppb	10:39:53
2	Sn 189.927†	24.3	3.4	1.6482 µg/L	1.6482 ppb	10:39:53
2	Ti 334.940†	947.5	288.5	0.6407 µg/L	0.6407 ppb	10:39:32
2	Tl 190.801†	-21.9	-1.9	-2.8520 µg/L	-2.8520 ppb	10:39:53
2	U 409.014†	667.3	30.3	2.8378 µg/L	2.8378 ppb	10:39:32
2	V 292.402†	-52.9	35.7	0.4116 µg/L	0.4116 ppb	10:39:32
2	Zn 213.857†	536.8	20.5	0.5494 µg/L	0.5494 ppb	10:39:53
3	Sc RADIAL	105111.7	105111.7	93.4 %		10:38:24
3	Al 396.153Radial†	284.2	74.3	37.571 µg/L	37.571 ppb	10:38:24
3	Ca 317.933Radial†	388.5	-79.7	-31.652 µg/L	-31.652 ppb	10:38:44
3	Fe 238.204 Radial†	16.6	6.6	34.398 µg/L	34.398 ppb	10:38:44
3	K 766.490 Radial†	639.5	-10.5	-5.6822 µg/L	-5.6822 ppb	10:38:24
3	Mg 279.077 IEC†	18.9	0.4	2.0033 µg/L	2.0033 ppb	10:38:44
3	Na 589.592 Radial†	-680.0	-23.7	-6.5888 µg/L	-6.5888 ppb	10:38:24
3	Sr 421.552†	-12.7	50.2	0.2826 µg/L	0.2826 ppb	10:38:24
3	Sc 361.383	1948487.9	1948487.9	94.737 %		10:39:59
3	Y 371.029	1186163.3	1186163.3	94.714 %		10:39:59
3	Ag 328.068†	-109.5	-87.3	-0.7753 µg/L	-0.7753 ppb	10:40:05
3	As 188.979†	3.3	1.0	1.8219 µg/L	1.8219 ppb	10:40:25
3	B 249.677†	146.1	-1.5	-0.0760 µg/L	-0.0760 ppb	10:40:25
3	Ba 233.527†	-71.1	5.6	0.1407 µg/L	0.1407 ppb	10:40:25
3	Be 313.107†	3710.2	304.8	0.1927 µg/L	0.1927 ppb	10:40:05
3	Cd 226.502†	-79.2	17.3	0.4603 µg/L	0.4603 ppb	10:40:25
3	Co 228.616†	-78.0	-10.6	-0.5113 µg/L	-0.5113 ppb	10:40:25
3	Cr 267.716†	-111.8	4.7	0.0994 µg/L	0.0994 ppb	10:40:25
3	Cu 324.752†	3136.5	-73.6	-0.5101 µg/L	-0.5101 ppb	10:40:05
3	Mn 257.610†	-53.3	166.4	0.5325 µg/L	0.5325 ppb	10:40:25
3	Mo 202.031†	-6.8	0.8	0.0866 µg/L	0.0866 ppb	10:40:25
3	Ni 231.604†	268.6	-15.8	-0.8633 µg/L	-0.8633 ppb	10:40:25
3	P 214.914†	207.9	13.4	29.204 µg/L	29.204 ppb	10:40:25
3	Pb 220.353†	69.9	19.7	4.9898 µg/L	4.9898 ppb	10:40:25
3	S 181.975 Axial†	25.3	2.6	13.566 µg/L	13.566 ppb	10:40:25
3	Sb 206.836†	17.7	-1.8	-1.8152 µg/L	-1.8152 ppb	10:40:25
3	Se 196.026†	8.6	-5.0	-7.2176 µg/L	-7.2176 ppb	10:40:25
3	SiO2†	2012.2	142.3	27.180 µg/L	27.180 ppb	10:40:05
3	Si 251.611†	384.1	55.8	4.2093 µg/L	4.2093 ppb	10:40:25
3	Sn 189.927†	23.7	2.6	1.2514 µg/L	1.2514 ppb	10:40:25
3	Ti 334.940†	887.8	218.3	0.4857 µg/L	0.4857 ppb	10:40:05
3	Tl 190.801†	-20.8	-0.5	-0.7808 µg/L	-0.7808 ppb	10:40:25
3	U 409.014†	723.6	84.6	7.9346 µg/L	7.9346 ppb	10:40:05
3	V 292.402†	-67.0	21.2	0.2558 µg/L	0.2558 ppb	10:40:05
3	Zn 213.857†	516.8	-4.7	-0.1242 µg/L	-0.1242 ppb	10:40:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943910.4	94.514	%	0.3908				0.41%
Sc RADIAL	105401.2	93.7	%	0.24				0.25%
Y 371.029	1182954.6	94.458	%	0.3773				0.40%
Ag 328.068†	-103.4	-0.9192	µg/L	0.18240	-0.9192	ppb	0.18240	19.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	52.0	26.266	µg/L	9.9129	26.266	ppb	9.9129	37.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-3.8688	µg/L	6.17858	-3.8688	ppb	6.17858	159.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-4.1	-0.1890	µg/L	0.31523	-0.1890	ppb	0.31523	166.76%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.4	0.1109	µg/L	0.03713	0.1109	ppb	0.03713	33.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	320.7	0.2027	µg/L	0.03470	0.2027	ppb	0.03470	17.12%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-65.7	-26.085	µg/L	4.9291	-26.085	ppb	4.9291	18.90%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.5	0.2791	µg/L	0.16580	0.2791	ppb	0.16580	59.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.0	-0.2391	µg/L	0.23572	-0.2391	ppb	0.23572	98.57%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.1      0.1480 µg/L       0.15422      0.1480 ppb        0.15422 104.17%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -56.3     -0.3899 µg/L       0.12244     -0.3899 ppb        0.12244  31.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          5.2      27.165 µg/L       11.9605      27.165 ppb        11.9605  44.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          27.2      14.733 µg/L       18.0462      14.733 ppb        18.0462 122.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.6     -20.056 µg/L       22.9493     -20.056 ppb        22.9493 114.42%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               168.9      0.5394 µg/L       0.00597      0.5394 ppb        0.00597   1.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.4      0.2638 µg/L       0.22746      0.2638 ppb        0.22746  86.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         -7.2     -1.9899 µg/L       4.34516     -1.9899 ppb        4.34516 218.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.9     -0.3221 µg/L       0.57876     -0.3221 ppb        0.57876 179.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 16.3      35.522 µg/L        8.7436      35.522 ppb         8.7436  24.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.4      2.8869 µg/L       2.35742      2.8869 ppb        2.35742  81.66%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.4      12.194 µg/L        5.4177      12.194 ppb         5.4177  44.43%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.1     -0.0563 µg/L       4.10731     -0.0563 ppb        4.10731 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -2.5911 µg/L       4.03427     -2.5911 ppb        4.03427 155.70%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     141.9      27.107 µg/L        4.7168      27.107 ppb         4.7168  17.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                60.2      4.5222 µg/L       0.40010      4.5222 ppb        0.40010   8.85%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      1.4542 µg/L       0.19852      1.4542 ppb        0.19852  13.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                62.2      0.3506 µg/L       0.08384      0.3506 ppb        0.08384  23.91%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               243.4      0.5409 µg/L       0.08656      0.5409 ppb        0.08656  16.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.0     -0.0306 µg/L       3.26189     -0.0306 ppb        3.26189 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 60.6      5.6821 µg/L       2.59942      5.6821 ppb        2.59942  45.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 25.2      0.2969 µg/L       0.10061      0.2969 ppb        0.10061  33.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 7.9      0.2110 µg/L       0.33681      0.2110 ppb        0.33681 159.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: 241825013|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 319
Date Collected: 12/18/2009 10:40:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825013|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105608.0	105608.0	93.9	%			10:41:13
1	Al 396.153Radial†	13086.5	13708.2	6926.7	µg/L	6926.7	ppb	10:41:13
1	Ca 317.933Radial†	14884.8	15357.9	6096.4	µg/L	6096.4	ppb	10:41:33
1	Fe 238.204 Radial†	14264.2	15181.2	79747	µg/L	79747	ppb	10:41:33
1	K 766.490 Radial†	3293.9	2813.4	1525.4	µg/L	1525.4	ppb	10:41:13
1	Mg 279.077 IEC†	369.4	373.6	1955.1	µg/L	1955.1	ppb	10:41:33
1	Na 589.592 Radial†	2640.7	3516.5	975.69	µg/L	975.69	ppb	10:41:13
1	Sr 421.552†	6690.0	7189.1	40.495	µg/L	40.495	ppb	10:41:13
1	Sc 361.383	1961611.5	1961611.5	95.375	%			10:42:37
1	Y 371.029	1260440.2	1260440.2	100.65	%			10:42:37
1	Ag 328.068†	-922.8	-939.3	-1.9568	µg/L	-1.9568	ppb	10:42:43
1	As 188.979†	11.8	9.9	10.769	µg/L	10.769	ppb	10:43:03
1	B 249.677†	967.3	858.5	13.027	µg/L	13.027	ppb	10:42:43
1	Ba 233.527†	6805.8	7216.5	181.30	µg/L	181.30	ppb	10:42:43
1	Be 313.107†	9923.5	6793.2	3.6927	µg/L	3.6927	ppb	10:42:43
1	Cd 226.502†	139.0	246.6	0.3580	µg/L	0.3580	ppb	10:42:43
1	Co 228.616†	95.8	172.2	4.9360	µg/L	4.9360	ppb	10:43:03
1	Cr 267.716†	350.8	490.6	10.261	µg/L	10.261	ppb	10:42:43
1	Cu 324.752†	2275.4	-998.6	10.104	µg/L	10.104	ppb	10:42:43
1	Mn 257.610†	824199.7	864393.6	2753.2	µg/L	2753.2	ppb	10:42:37
1	Mo 202.031†	238.1	257.5	31.865	µg/L	31.865	ppb	10:43:03
1	Ni 231.604†	586.1	315.1	17.167	µg/L	17.167	ppb	10:43:03
1	P 214.914†	494.3	312.2	587.19	µg/L	587.19	ppb	10:43:03
1	Pb 220.353†	279.4	238.8	60.229	µg/L	60.229	ppb	10:43:03
1	S 181.975 Axial†	46.0	24.2	112.17	µg/L	112.17	ppb	10:43:03
1	Sb 206.836†	17.9	-1.8	3.6621	µg/L	3.6621	ppb	10:43:03
1	Se 196.026†	-16.7	-31.6	9.9043	µg/L	9.9043	ppb	10:43:03
1	SiO2†	53053.0	53644.2	10244	µg/L	10244	ppb	10:42:43
1	Si 251.611†	59753.6	62301.8	4712.0	µg/L	4712.0	ppb	10:42:43
1	Sn 189.927†	6.7	-15.5	3.5659	µg/L	3.5659	ppb	10:43:03
1	Ti 334.940†	703340.7	736731.8	1632.7	µg/L	1632.7	ppb	10:42:37
1	Tl 190.801†	-33.7	-13.9	0.7106	µg/L	0.7106	ppb	10:43:03
1	U 409.014†	663.0	15.9	-13.251	µg/L	-13.251	ppb	10:42:37
1	V 292.402†	1642.1	1813.7	27.155	µg/L	27.155	ppb	10:42:43
1	Zn 213.857†	14532.5	14687.2	384.89	µg/L	384.89	ppb	10:42:43
2	Sc RADIAL	106322.0	106322.0	94.5	%			10:41:39
2	Al 396.153Radial†	13195.5	13730.0	6937.7	µg/L	6937.7	ppb	10:41:39
2	Ca 317.933Radial†	14833.9	15197.6	6032.7	µg/L	6032.7	ppb	10:41:59
2	Fe 238.204 Radial†	14202.3	15013.7	78867	µg/L	78867	ppb	10:41:59
2	K 766.490 Radial†	3293.9	2789.9	1512.7	µg/L	1512.7	ppb	10:41:39
2	Mg 279.077 IEC†	373.7	375.5	1967.1	µg/L	1967.1	ppb	10:41:59
2	Na 589.592 Radial†	2636.8	3493.4	969.29	µg/L	969.29	ppb	10:41:39
2	Sr 421.552†	6791.8	7248.9	40.833	µg/L	40.833	ppb	10:41:39
2	Sc 361.383	1955065.9	1955065.9	95.056	%			10:43:11
2	Y 371.029	1256806.5	1256806.5	100.36	%			10:43:11
2	Ag 328.068†	-875.3	-892.5	-1.6086	µg/L	-1.6086	ppb	10:43:16
2	As 188.979†	6.9	4.8	1.0531	µg/L	1.0531	ppb	10:43:37
2	B 249.677†	1031.0	928.9	16.428	µg/L	16.428	ppb	10:43:16
2	Ba 233.527†	6799.4	7233.7	181.73	µg/L	181.73	ppb	10:43:16
2	Be 313.107†	9866.9	6768.5	3.6759	µg/L	3.6759	ppb	10:43:16
2	Cd 226.502†	145.4	253.8	0.6107	µg/L	0.6107	ppb	10:43:16
2	Co 228.616†	87.5	163.7	4.5206	µg/L	4.5206	ppb	10:43:37
2	Cr 267.716†	313.7	452.8	9.4731	µg/L	9.4731	ppb	10:43:16
2	Cu 324.752†	2228.5	-1039.9	9.6243	µg/L	9.6243	ppb	10:43:16
2	Mn 257.610†	823250.0	866287.9	2759.1	µg/L	2759.1	ppb	10:43:11
2	Mo 202.031†	230.0	249.9	30.979	µg/L	30.979	ppb	10:43:37
2	Ni 231.604†	591.3	322.6	17.576	µg/L	17.576	ppb	10:43:37
2	P 214.914†	506.7	327.1	620.52	µg/L	620.52	ppb	10:43:37
2	Pb 220.353†	280.2	240.7	60.728	µg/L	60.728	ppb	10:43:37

2	S 181.975 Axial†	39.3	17.3	76.991 µg/L	76.991 ppb	10:43:37
2	Sb 206.836†	17.4	-2.2	3.2806 µg/L	3.2806 ppb	10:43:37
2	Se 196.026†	-22.3	-37.5	0.5936 µg/L	0.5936 ppb	10:43:37
2	SiO2†	52849.9	53616.9	10239 µg/L	10239 ppb	10:43:16
2	Si 251.611†	59545.6	62292.8	4711.1 µg/L	4711.1 ppb	10:43:16
2	Sn 189.927†	13.1	-8.7	6.7453 µg/L	6.7453 ppb	10:43:37
2	Ti 334.940†	702285.8	738091.1	1635.7 µg/L	1635.7 ppb	10:43:11
2	Tl 190.801†	-36.4	-16.9	-3.6706 µg/L	-3.6706 ppb	10:43:37
2	U 409.014†	588.5	-60.1	-20.229 µg/L	-20.229 ppb	10:43:11
2	V 292.402†	1637.7	1814.9	27.079 µg/L	27.079 ppb	10:43:16
2	Zn 213.857†	14571.1	14778.7	387.43 µg/L	387.43 ppb	10:43:16
3	Sc RADIAL	106199.7	106199.7	94.4 %		10:42:04
3	Al 396.153Radial†	13191.8	13742.1	6943.8 µg/L	6943.8 ppb	10:42:04
3	Ca 317.933Radial†	14873.4	15257.5	6056.5 µg/L	6056.5 ppb	10:42:25
3	Fe 238.204 Radial†	14227.1	15057.3	79096 µg/L	79096 ppb	10:42:25
3	K 766.490 Radial†	3299.7	2800.0	1518.2 µg/L	1518.2 ppb	10:42:04
3	Mg 279.077 IEC†	371.2	373.3	1954.9 µg/L	1954.9 ppb	10:42:25
3	Na 589.592 Radial†	2651.8	3512.6	974.60 µg/L	974.60 ppb	10:42:04
3	Sr 421.552†	6759.8	7223.3	40.688 µg/L	40.688 ppb	10:42:04
3	Sc 361.383	1952540.0	1952540.0	94.934 %		10:43:44
3	Y 371.029	1254921.5	1254921.5	100.20 %		10:43:44
3	Ag 328.068†	-903.6	-923.5	-1.8684 µg/L	-1.8684 ppb	10:43:50
3	As 188.979†	10.3	8.4	7.9865 µg/L	7.9865 ppb	10:44:10
3	B 249.677†	1006.9	904.9	15.290 µg/L	15.290 ppb	10:43:50
3	Ba 233.527†	6738.2	7178.5	180.34 µg/L	180.34 ppb	10:43:50
3	Be 313.107†	9906.7	6823.9	3.7113 µg/L	3.7113 ppb	10:43:50
3	Cd 226.502†	157.1	266.4	0.9267 µg/L	0.9267 ppb	10:43:50
3	Co 228.616†	95.7	172.5	4.9459 µg/L	4.9459 ppb	10:44:10
3	Cr 267.716†	327.8	468.1	9.7913 µg/L	9.7913 ppb	10:43:50
3	Cu 324.752†	2280.6	-982.0	10.081 µg/L	10.081 ppb	10:43:50
3	Mn 257.610†	820954.9	864990.6	2755.0 µg/L	2755.0 ppb	10:43:44
3	Mo 202.031†	238.2	258.9	31.986 µg/L	31.986 ppb	10:44:10
3	Ni 231.604†	596.3	328.7	17.909 µg/L	17.909 ppb	10:44:10
3	P 214.914†	501.3	322.1	609.30 µg/L	609.30 ppb	10:44:10
3	Pb 220.353†	281.6	242.5	61.188 µg/L	61.188 ppb	10:44:10
3	S 181.975 Axial†	41.4	19.5	88.341 µg/L	88.341 ppb	10:44:10
3	Sb 206.836†	13.7	-6.1	-0.6281 µg/L	-0.6281 ppb	10:44:10
3	Se 196.026†	-23.4	-38.7	-1.0110 µg/L	-1.0110 ppb	10:44:10
3	SiO2†	52333.7	53145.0	10149 µg/L	10149 ppb	10:43:50
3	Si 251.611†	58899.1	61692.8	4665.2 µg/L	4665.2 ppb	10:43:50
3	Sn 189.927†	10.8	-11.0	5.6330 µg/L	5.6330 ppb	10:44:10
3	Ti 334.940†	701016.2	737709.4	1634.9 µg/L	1634.9 ppb	10:43:44
3	Tl 190.801†	-34.8	-15.2	-1.1605 µg/L	-1.1605 ppb	10:44:10
3	U 409.014†	595.0	-52.4	-19.546 µg/L	-19.546 ppb	10:43:44
3	V 292.402†	1619.2	1797.6	26.911 µg/L	26.911 ppb	10:43:50
3	Zn 213.857†	14406.3	14625.0	383.29 µg/L	383.29 ppb	10:43:50

Mean Data: 241825013|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1956405.8	95.122	%	0.2276				0.24%
Sc RADIAL	106043.2	94.3	%	0.34				0.36%
Y 371.029	1257389.4	100.40	%	0.224				0.22%
Ag 328.068†	-918.4	-1.8113	µg/L	0.18102	-1.8113	ppb	0.18102	9.99%
Al 396.153Radial†	13726.8	6936.1	µg/L	8.67	6936.1	ppb	8.67	0.13%
As 188.979†	7.7	6.6028	µg/L	5.00345	6.6028	ppb	5.00345	75.78%
B 249.677†	897.5	14.915	µg/L	1.7312	14.915	ppb	1.7312	11.61%
Ba 233.527†	7209.5	181.12	µg/L	0.710	181.12	ppb	0.710	0.39%
Be 313.107†	6795.2	3.6933	µg/L	0.01769	3.6933	ppb	0.01769	0.48%
Ca 317.933Radial†	15271.0	6061.9	µg/L	32.15	6061.9	ppb	32.15	0.53%
Cd 226.502†	255.6	0.6318	µg/L	0.28494	0.6318	ppb	0.28494	45.10%
Co 228.616†	169.5	4.8008	µg/L	0.24272	4.8008	ppb	0.24272	5.06%
Cr 267.716†	470.5	9.8418	µg/L	0.39637	9.8418	ppb	0.39637	4.03%
Cu 324.752†	-1006.8	9.9364	µg/L	0.27056	9.9364	ppb	0.27056	2.72%
Fe 238.204 Radial†	15084.1	79236	µg/L	456.6	79236	ppb	456.6	0.58%
K 766.490 Radial†	2801.1	1518.7	µg/L	6.39	1518.7	ppb	6.39	0.42%
Mg 279.077 IEC†	374.1	1959.0	µg/L	7.01	1959.0	ppb	7.01	0.36%
Mn 257.610†	865224.0	2755.8	µg/L	3.02	2755.8	ppb	3.02	0.11%
Mo 202.031†	255.4	31.610	µg/L	0.5499	31.610	ppb	0.5499	1.74%
Na 589.592 Radial†	3507.5	973.20	µg/L	3.425	973.20	ppb	3.425	0.35%

Ni 231.604†	322.2	17.551	µg/L	0.3717	17.551	ppb	0.3717	2.12%
P 214.914†	320.4	605.67	µg/L	16.961	605.67	ppb	16.961	2.80%
Pb 220.353†	240.7	60.715	µg/L	0.4792	60.715	ppb	0.4792	0.79%
S 181.975 Axial†	20.3	92.502	µg/L	17.9561	92.502	ppb	17.9561	19.41%
Sb 206.836†	-3.4	2.1049	µg/L	2.37449	2.1049	ppb	2.37449	112.81%
Se 196.026†	-35.9	3.1623	µg/L	5.89362	3.1623	ppb	5.89362	186.37%
SiO2†	53468.7	10211	µg/L	53.6	10211	ppb	53.6	0.52%
Si 251.611†	62095.8	4696.1	µg/L	26.77	4696.1	ppb	26.77	0.57%
Sn 189.927†	-11.7	5.3147	µg/L	1.61343	5.3147	ppb	1.61343	30.36%
Sr 421.552†	7220.4	40.672	µg/L	0.1692	40.672	ppb	0.1692	0.42%
Ti 334.940†	737510.8	1634.4	µg/L	1.56	1634.4	ppb	1.56	0.10%
Tl 190.801†	-15.3	-1.3735	µg/L	2.19833	-1.3735	ppb	2.19833	160.05%
U 409.014†	-32.2	-17.675	µg/L	3.8469	-17.675	ppb	3.8469	21.76%
V 292.402†	1808.7	27.048	µg/L	0.1249	27.048	ppb	0.1249	0.46%
Zn 213.857†	14697.0	385.20	µg/L	2.090	385.20	ppb	2.090	0.54%

Sequence No.: 24
Sample ID: 241825014|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 320
Date Collected: 12/18/2009 10:44:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825014|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105321.4	105321.4	93.6	%			10:44:52
1	Al 396.153Radial†	9644.4	10070.2	5088.7	µg/L	5088.7	ppb	10:44:52
1	Ca 317.933Radial†	5931.3	5839.0	2317.8	µg/L	2317.8	ppb	10:45:12
1	Fe 238.204 Radial†	9783.5	10437.3	54827	µg/L	54827	ppb	10:44:52
1	K 766.490 Radial†	2708.2	2197.5	1191.5	µg/L	1191.5	ppb	10:44:52
1	Mg 279.077 IEC†	247.4	244.3	1274.7	µg/L	1274.7	ppb	10:45:12
1	Na 589.592 Radial†	3143.4	4060.9	1126.8	µg/L	1126.8	ppb	10:44:52
1	Sr 421.552†	3087.4	3361.0	18.932	µg/L	18.932	ppb	10:44:52
1	Sc 361.383	1942781.8	1942781.8	94.459	%			10:46:16
1	Y 371.029	1243665.5	1243665.5	99.306	%			10:46:16
1	Ag 328.068†	-686.3	-698.2	-1.8392	µg/L	-1.8392	ppb	10:46:21
1	As 188.979†	7.8	5.8	4.9739	µg/L	4.9739	ppb	10:46:42
1	B 249.677†	746.0	634.1	10.902	µg/L	10.902	ppb	10:46:21
1	Ba 233.527†	3643.0	3937.4	98.916	µg/L	98.916	ppb	10:46:21
1	Be 313.107†	8136.8	5002.6	2.8540	µg/L	2.8540	ppb	10:46:21
1	Cd 226.502†	61.3	165.8	0.1153	µg/L	0.1153	ppb	10:46:42
1	Co 228.616†	32.8	106.4	3.3955	µg/L	3.3955	ppb	10:46:42
1	Cr 267.716†	362.8	506.9	10.575	µg/L	10.575	ppb	10:46:21
1	Cu 324.752†	3108.4	-93.6	11.119	µg/L	11.119	ppb	10:46:21
1	Mn 257.610†	615712.6	652052.5	2076.2	µg/L	2076.2	ppb	10:46:16
1	Mo 202.031†	101.7	115.6	15.051	µg/L	15.051	ppb	10:46:42
1	Ni 231.604†	383.2	106.3	5.7886	µg/L	5.7886	ppb	10:46:42
1	P 214.914†	398.6	216.0	406.24	µg/L	406.24	ppb	10:46:42
1	Pb 220.353†	235.4	195.1	49.289	µg/L	49.289	ppb	10:46:42
1	S 181.975 Axial†	41.2	19.5	92.022	µg/L	92.022	ppb	10:46:42
1	Sb 206.836†	10.1	-9.9	-6.9734	µg/L	-6.9734	ppb	10:46:42
1	Se 196.026†	-15.5	-30.5	-6.1795	µg/L	-6.1795	ppb	10:46:42
1	SiO2†	46946.9	47719.1	9112.6	µg/L	9112.6	ppb	10:46:21
1	Si 251.611†	52720.3	55463.2	4217.1	µg/L	4217.1	ppb	10:46:21
1	Sn 189.927†	13.1	-8.6	3.0143	µg/L	3.0143	ppb	10:46:42
1	Ti 334.940†	358055.5	378340.0	838.50	µg/L	838.50	ppb	10:46:16
1	Tl 190.801†	-31.5	-11.9	-4.0983	µg/L	-4.0983	ppb	10:46:42
1	U 409.014†	314.1	-346.7	-42.741	µg/L	-42.741	ppb	10:46:21
1	V 292.402†	783.2	921.1	14.894	µg/L	14.894	ppb	10:46:21
1	Zn 213.857†	11991.7	12145.0	319.50	µg/L	319.50	ppb	10:46:21
2	Sc RADIAL	106341.9	106341.9	94.5	%			10:45:18
2	Al 396.153Radial†	9807.6	10143.8	5126.0	µg/L	5126.0	ppb	10:45:18
2	Ca 317.933Radial†	5945.0	5792.7	2299.4	µg/L	2299.4	ppb	10:45:38
2	Fe 238.204 Radial†	9946.5	10509.4	55206	µg/L	55206	ppb	10:45:18
2	K 766.490 Radial†	2737.0	2200.2	1192.9	µg/L	1192.9	ppb	10:45:18
2	Mg 279.077 IEC†	248.6	243.1	1267.5	µg/L	1267.5	ppb	10:45:38
2	Na 589.592 Radial†	3214.3	4103.8	1138.6	µg/L	1138.6	ppb	10:45:18
2	Sr 421.552†	3168.0	3414.7	19.235	µg/L	19.235	ppb	10:45:18
2	Sc 361.383	1946691.5	1946691.5	94.649	%			10:46:49
2	Y 371.029	1247018.9	1247018.9	99.574	%			10:46:49
2	Ag 328.068†	-634.8	-642.4	-1.3081	µg/L	-1.3081	ppb	10:46:54
2	As 188.979†	8.3	6.3	5.7931	µg/L	5.7931	ppb	10:47:15
2	B 249.677†	690.5	573.8	8.1083	µg/L	8.1083	ppb	10:46:54
2	Ba 233.527†	3631.6	3917.6	98.420	µg/L	98.420	ppb	10:46:54
2	Be 313.107†	8136.4	4984.9	2.8425	µg/L	2.8425	ppb	10:46:54
2	Cd 226.502†	52.8	156.7	-0.1512	µg/L	-0.1512	ppb	10:47:15
2	Co 228.616†	24.9	98.0	2.9860	µg/L	2.9860	ppb	10:47:15
2	Cr 267.716†	329.3	470.7	9.8233	µg/L	9.8233	ppb	10:46:54
2	Cu 324.752†	3061.0	-150.3	10.801	µg/L	10.801	ppb	10:46:54
2	Mn 257.610†	617153.1	652265.4	2076.9	µg/L	2076.9	ppb	10:46:49
2	Mo 202.031†	94.8	108.1	14.224	µg/L	14.224	ppb	10:47:15
2	Ni 231.604†	393.5	116.3	6.3358	µg/L	6.3358	ppb	10:47:15
2	P 214.914†	399.1	215.6	405.08	µg/L	405.08	ppb	10:47:15
2	Pb 220.353†	238.6	197.9	49.988	µg/L	49.988	ppb	10:47:15

2	S 181.975 Axial†	42.6	20.9	99.071 µg/L	99.071 ppb	10:47:15
2	Sb 206.836†	18.4	-1.2	1.7045 µg/L	1.7045 ppb	10:47:15
2	Se 196.026†	-13.3	-28.2	-2.6013 µg/L	-2.6013 ppb	10:47:15
2	SiO2†	47053.5	47731.9	9115.1 µg/L	9115.1 ppb	10:46:54
2	Si 251.611†	52846.7	55484.7	4218.7 µg/L	4218.7 ppb	10:46:54
2	Sn 189.927†	16.1	-5.5	4.5782 µg/L	4.5782 ppb	10:47:15
2	Ti 334.940†	359180.8	378767.5	839.45 µg/L	839.45 ppb	10:46:49
2	Tl 190.801†	-24.9	-4.9	6.4764 µg/L	6.4764 ppb	10:47:15
2	U 409.014†	356.2	-302.9	-38.694 µg/L	-38.694 ppb	10:46:54
2	V 292.402†	811.0	948.8	15.238 µg/L	15.238 ppb	10:46:54
2	Zn 213.857†	11983.9	12111.2	318.55 µg/L	318.55 ppb	10:46:54
3	Sc RADIAL	106460.4	106460.4	94.6 %		10:45:44
3	Al 396.153Radial†	9769.7	10092.3	5099.9 µg/L	5099.9 ppb	10:45:44
3	Ca 317.933Radial†	5991.4	5834.7	2316.1 µg/L	2316.1 ppb	10:46:04
3	Fe 238.204 Radial†	9919.4	10469.1	54994 µg/L	54994 ppb	10:45:44
3	K 766.490 Radial†	2732.7	2192.3	1188.7 µg/L	1188.7 ppb	10:45:44
3	Mg 279.077 IEC†	249.7	244.0	1272.8 µg/L	1272.8 ppb	10:46:04
3	Na 589.592 Radial†	3196.7	4081.4	1132.4 µg/L	1132.4 ppb	10:45:44
3	Sr 421.552†	3135.5	3376.6	19.020 µg/L	19.020 ppb	10:45:44
3	Sc 361.383	1936604.2	1936604.2	94.159 %		10:47:21
3	Y 371.029	1239129.5	1239129.5	98.944 %		10:47:21
3	Ag 328.068†	-624.1	-634.5	-1.2556 µg/L	-1.2556 ppb	10:47:27
3	As 188.979†	6.0	3.9	1.2524 µg/L	1.2524 ppb	10:47:48
3	B 249.677†	744.8	635.4	10.906 µg/L	10.906 ppb	10:47:27
3	Ba 233.527†	3583.7	3886.7	97.645 µg/L	97.645 ppb	10:47:27
3	Be 313.107†	8102.8	4993.9	2.8503 µg/L	2.8503 ppb	10:47:27
3	Cd 226.502†	50.0	154.0	-0.2042 µg/L	-0.2042 ppb	10:47:48
3	Co 228.616†	21.4	94.5	2.8299 µg/L	2.8299 ppb	10:47:48
3	Cr 267.716†	310.9	453.0	9.4540 µg/L	9.4540 ppb	10:47:27
3	Cu 324.752†	3097.2	-94.9	11.145 µg/L	11.145 ppb	10:47:27
3	Mn 257.610†	610449.2	648541.9	2065.1 µg/L	2065.1 ppb	10:47:21
3	Mo 202.031†	95.4	109.3	14.352 µg/L	14.352 ppb	10:47:48
3	Ni 231.604†	397.8	123.1	6.7045 µg/L	6.7045 ppb	10:47:48
3	P 214.914†	396.4	215.0	403.89 µg/L	403.89 ppb	10:47:48
3	Pb 220.353†	237.1	197.7	49.924 µg/L	49.924 ppb	10:47:48
3	S 181.975 Axial†	39.2	17.6	82.169 µg/L	82.169 ppb	10:47:48
3	Sb 206.836†	22.0	2.8	5.6342 µg/L	5.6342 ppb	10:47:48
3	Se 196.026†	-4.2	-18.6	11.251 µg/L	11.251 ppb	10:47:48
3	SiO2†	46696.4	47611.6	9092.1 µg/L	9092.1 ppb	10:47:27
3	Si 251.611†	52399.7	55300.7	4204.9 µg/L	4204.9 ppb	10:47:27
3	Sn 189.927†	11.3	-10.4	2.1331 µg/L	2.1331 ppb	10:47:48
3	Ti 334.940†	354965.4	376267.3	833.91 µg/L	833.91 ppb	10:47:21
3	Tl 190.801†	-29.3	-9.7	-0.7718 µg/L	-0.7718 ppb	10:47:48
3	U 409.014†	369.1	-287.2	-37.183 µg/L	-37.183 ppb	10:47:27
3	V 292.402†	796.1	937.5	15.096 µg/L	15.096 ppb	10:47:27
3	Zn 213.857†	11915.1	12104.2	318.38 µg/L	318.38 ppb	10:47:27

Mean Data: 241825014|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1942025.8	94.422	%	0.2473				0.26%
Sc RADIAL	106041.2	94.3	%	0.56				0.59%
Y 371.029	1243271.3	99.274	%	0.3162				0.32%
Ag 328.068†	-658.4	-1.4676	µg/L	0.32283	-1.4676	ppb	0.32283	22.00%
Al 396.153Radial†	10102.1	5104.9	µg/L	19.12	5104.9	ppb	19.12	0.37%
As 188.979†	5.3	4.0065	µg/L	2.42000	4.0065	ppb	2.42000	60.40%
B 249.677†	614.4	9.9721	µg/L	1.61411	9.9721	ppb	1.61411	16.19%
Ba 233.527†	3913.9	98.327	µg/L	0.6407	98.327	ppb	0.6407	0.65%
Be 313.107†	4993.8	2.8489	µg/L	0.00587	2.8489	ppb	0.00587	0.21%
Ca 317.933Radial†	5822.2	2311.1	µg/L	10.16	2311.1	ppb	10.16	0.44%
Cd 226.502†	158.8	-0.0800	µg/L	0.17124	-0.0800	ppb	0.17124	213.98%
Co 228.616†	99.6	3.0705	µg/L	0.29212	3.0705	ppb	0.29212	9.51%
Cr 267.716†	476.9	9.9509	µg/L	0.57146	9.9509	ppb	0.57146	5.74%
Cu 324.752†	-112.9	11.021	µg/L	0.1915	11.021	ppb	0.1915	1.74%
Fe 238.204 Radial†	10471.9	55009	µg/L	190.0	55009	ppb	190.0	0.35%
K 766.490 Radial†	2196.7	1191.0	µg/L	2.16	1191.0	ppb	2.16	0.18%
Mg 279.077 IEC†	243.8	1271.6	µg/L	3.74	1271.6	ppb	3.74	0.29%
Mn 257.610†	650953.3	2072.7	µg/L	6.64	2072.7	ppb	6.64	0.32%
Mo 202.031†	111.0	14.542	µg/L	0.4452	14.542	ppb	0.4452	3.06%
Na 589.592 Radial†	4082.0	1132.6	µg/L	5.95	1132.6	ppb	5.95	0.52%

Ni 231.604†	115.2	6.2763 µg/L	0.46084	6.2763 ppb	0.46084	7.34%
P 214.914†	215.6	405.07 µg/L	1.178	405.07 ppb	1.178	0.29%
Pb 220.353†	196.9	49.734 µg/L	0.3868	49.734 ppb	0.3868	0.78%
S 181.975 Axial†	19.4	91.087 µg/L	8.4898	91.087 ppb	8.4898	9.32%
Sb 206.836†	-2.7	0.1217 µg/L	6.45110	0.1217 ppb	6.45110	>999.9%
Se 196.026†	-25.7	0.8234 µg/L	9.20606	0.8234 ppb	9.20606	>999.9%
SiO2†	47687.5	9106.6 µg/L	12.62	9106.6 ppb	12.62	0.14%
Si 251.611†	55416.2	4213.6 µg/L	7.55	4213.6 ppb	7.55	0.18%
Sn 189.927†	-8.2	3.2419 µg/L	1.23832	3.2419 ppb	1.23832	38.20%
Sr 421.552†	3384.1	19.062 µg/L	0.1555	19.062 ppb	0.1555	0.82%
Ti 334.940†	377791.6	837.29 µg/L	2.965	837.29 ppb	2.965	0.35%
Tl 190.801†	-8.9	0.5354 µg/L	5.40722	0.5354 ppb	5.40722	>999.9%
U 409.014†	-312.3	-39.539 µg/L	2.8742	-39.539 ppb	2.8742	7.27%
V 292.402†	935.8	15.076 µg/L	0.1728	15.076 ppb	0.1728	1.15%
Zn 213.857†	12120.1	318.81 µg/L	0.602	318.81 ppb	0.602	0.19%

Sequence No.: 25
Sample ID: 241825015|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 321
Date Collected: 12/18/2009 10:47:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825015|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106832.8	106832.8	95.0	%			10:48:29
1	Al 396.153Radial†	66864.2	70168.9	35461	µg/L	35461	ppb	10:48:29
1	Ca 317.933Radial†	31110.1	32259.2	12805	µg/L	12805	ppb	10:48:49
1	Fe 238.204 Radial†	15469.2	16275.7	85496	µg/L	85496	ppb	10:48:49
1	K 766.490 Radial†	9761.8	9583.0	5195.9	µg/L	5195.9	ppb	10:48:29
1	Mg 279.077 IEC†	1412.4	1467.2	8012.5	µg/L	8012.5	ppb	10:48:49
1	Na 589.592 Radial†	1410.6	2189.1	607.38	µg/L	607.38	ppb	10:48:49
1	Sr 421.552†	18551.0	19595.4	110.38	µg/L	110.38	ppb	10:48:29
1	Sc 361.383	1939447.8	1939447.8	94.297	%			10:49:52
1	Y 371.029	1235323.8	1235323.8	98.640	%			10:49:52
1	Ag 328.068†	-1002.9	-1035.3	-1.9818	µg/L	-1.9818	ppb	10:49:58
1	As 188.979†	20.9	19.7	29.635	µg/L	29.635	ppb	10:50:18
1	B 249.677†	1260.1	1180.6	25.516	µg/L	25.516	ppb	10:49:58
1	Ba 233.527†	20817.9	22157.6	556.69	µg/L	556.69	ppb	10:49:58
1	Be 313.107†	13090.9	10271.2	5.6012	µg/L	5.6012	ppb	10:49:58
1	Cd 226.502†	147.6	257.4	0.1921	µg/L	0.1921	ppb	10:50:18
1	Co 228.616†	354.2	447.4	16.510	µg/L	16.510	ppb	10:50:18
1	Cr 267.716†	1247.1	1445.2	30.262	µg/L	30.262	ppb	10:50:18
1	Cu 324.752†	4839.8	1748.1	30.664	µg/L	30.664	ppb	10:49:58
1	Mn 257.610†	724477.8	768516.4	2449.7	µg/L	2449.7	ppb	10:49:52
1	Mo 202.031†	184.2	203.2	26.030	µg/L	26.030	ppb	10:50:18
1	Ni 231.604†	789.0	537.3	29.273	µg/L	29.273	ppb	10:50:18
1	P 214.914†	462.5	284.5	528.05	µg/L	528.05	ppb	10:50:18
1	Pb 220.353†	311.9	276.7	72.231	µg/L	72.231	ppb	10:50:18
1	S 181.975 Axial†	69.1	49.2	239.15	µg/L	239.15	ppb	10:50:18
1	Sb 206.836†	25.6	6.6	14.241	µg/L	14.241	ppb	10:50:18
1	Se 196.026†	-23.6	-39.2	1.3063	µg/L	1.3063	ppb	10:50:18
1	SiO2†	89031.4	92434.3	17652	µg/L	17652	ppb	10:49:58
1	Si 251.611†	101656.9	107455.3	8141.2	µg/L	8141.2	ppb	10:49:58
1	Sn 189.927†	-25.3	-49.3	-9.5574	µg/L	-9.5574	ppb	10:50:18
1	Ti 334.940†	1030370.0	1091967.1	2419.7	µg/L	2419.7	ppb	10:49:52
1	Tl 190.801†	-42.7	-23.9	-10.376	µg/L	-10.376	ppb	10:50:18
1	U 409.014†	402.1	-252.8	-39.403	µg/L	-39.403	ppb	10:49:52
1	V 292.402†	6247.9	6717.7	82.826	µg/L	82.826	ppb	10:49:58
1	Zn 213.857†	11631.1	11784.3	306.24	µg/L	306.24	ppb	10:49:58
2	Sc RADIAL	106584.2	106584.2	94.8	%			10:48:55
2	Al 396.153Radial†	67556.7	71063.9	35913	µg/L	35913	ppb	10:48:55
2	Ca 317.933Radial†	31067.3	32290.4	12818	µg/L	12818	ppb	10:49:15
2	Fe 238.204 Radial†	15464.7	16309.0	85671	µg/L	85671	ppb	10:49:15
2	K 766.490 Radial†	9795.3	9642.3	5228.0	µg/L	5228.0	ppb	10:48:55
2	Mg 279.077 IEC†	1416.6	1475.1	8056.2	µg/L	8056.2	ppb	10:49:15
2	Na 589.592 Radial†	1401.3	2182.8	605.64	µg/L	605.64	ppb	10:49:15
2	Sr 421.552†	18701.0	19799.3	111.53	µg/L	111.53	ppb	10:48:55
2	Sc 361.383	1940744.9	1940744.9	94.360	%			10:50:24
2	Y 371.029	1236139.3	1236139.3	98.705	%			10:50:24
2	Ag 328.068†	-921.9	-948.7	-1.1980	µg/L	-1.1980	ppb	10:50:30
2	As 188.979†	18.9	17.5	25.495	µg/L	25.495	ppb	10:50:50
2	B 249.677†	1250.8	1169.9	24.983	µg/L	24.983	ppb	10:50:30
2	Ba 233.527†	20874.6	22202.9	557.83	µg/L	557.83	ppb	10:50:30
2	Be 313.107†	13163.7	10339.0	5.6425	µg/L	5.6425	ppb	10:50:30
2	Cd 226.502†	143.9	253.4	0.0764	µg/L	0.0764	ppb	10:50:50
2	Co 228.616†	348.7	441.2	16.203	µg/L	16.203	ppb	10:50:50
2	Cr 267.716†	1248.7	1446.1	30.278	µg/L	30.278	ppb	10:50:50
2	Cu 324.752†	4846.0	1751.3	30.723	µg/L	30.723	ppb	10:50:30
2	Mn 257.610†	725247.9	768819.0	2450.7	µg/L	2450.7	ppb	10:50:24
2	Mo 202.031†	176.8	195.3	25.151	µg/L	25.151	ppb	10:50:50
2	Ni 231.604†	788.8	536.6	29.231	µg/L	29.231	ppb	10:50:50
2	P 214.914†	463.9	285.6	530.30	µg/L	530.30	ppb	10:50:50
2	Pb 220.353†	322.4	287.6	75.025	µg/L	75.025	ppb	10:50:50

2	S 181.975 Axial†	64.4	44.2	213.44 µg/L	213.44 ppb	10:50:50
2	Sb 206.836†	21.6	2.4	10.033 µg/L	10.033 ppb	10:50:50
2	Se 196.026†	-26.4	-42.1	-2.8509 µg/L	-2.8509 ppb	10:50:50
2	SiO2†	89115.5	92460.3	17657 µg/L	17657 ppb	10:50:30
2	Si 251.611†	101670.3	107397.5	8136.7 µg/L	8136.7 ppb	10:50:30
2	Sn 189.927†	-27.9	-52.0	-10.849 µg/L	-10.849 ppb	10:50:50
2	Ti 334.940†	1032885.1	1093902.2	2424.0 µg/L	2424.0 ppb	10:50:24
2	Tl 190.801†	-35.0	-15.7	2.1074 µg/L	2.1074 ppb	10:50:50
2	U 409.014†	456.1	-195.8	-34.082 µg/L	-34.082 ppb	10:50:24
2	V 292.402†	6217.5	6681.0	82.429 µg/L	82.429 ppb	10:50:30
2	Zn 213.857†	11570.2	11711.5	304.27 µg/L	304.27 ppb	10:50:30
3	Sc RADIAL	107071.0	107071.0	95.2 %		10:49:21
3	Al 396.153Radial†	67780.6	70975.0	35868 µg/L	35868 ppb	10:49:21
3	Ca 317.933Radial†	31073.4	32147.7	12761 µg/L	12761 ppb	10:49:41
3	Fe 238.204 Radial†	15494.8	16266.4	85448 µg/L	85448 ppb	10:49:41
3	K 766.490 Radial†	9918.6	9724.8	5272.8 µg/L	5272.8 ppb	10:49:21
3	Mg 279.077 IEC†	1403.4	1454.5	7942.0 µg/L	7942.0 ppb	10:49:41
3	Na 589.592 Radial†	1424.6	2200.4	610.54 µg/L	610.54 ppb	10:49:41
3	Sr 421.552†	18729.7	19739.7	111.19 µg/L	111.19 ppb	10:49:21
3	Sc 361.383	1925822.1	1925822.1	93.635 %		10:50:57
3	Y 371.029	1227135.5	1227135.5	97.986 %		10:50:57
3	Ag 328.068†	-936.0	-971.3	-1.4156 µg/L	-1.4156 ppb	10:51:02
3	As 188.979†	14.9	13.4	17.714 µg/L	17.714 ppb	10:51:23
3	B 249.677†	1235.1	1163.3	24.763 µg/L	24.763 ppb	10:51:02
3	Ba 233.527†	20526.6	22002.7	552.80 µg/L	552.80 ppb	10:51:02
3	Be 313.107†	13001.0	10273.3	5.6012 µg/L	5.6012 ppb	10:51:02
3	Cd 226.502†	145.7	256.5	0.1767 µg/L	0.1767 ppb	10:51:23
3	Co 228.616†	349.4	444.9	16.382 µg/L	16.382 ppb	10:51:23
3	Cr 267.716†	1248.6	1456.2	30.490 µg/L	30.490 ppb	10:51:23
3	Cu 324.752†	4785.0	1726.0	30.497 µg/L	30.497 ppb	10:51:02
3	Mn 257.610†	719748.1	768901.0	2450.9 µg/L	2450.9 ppb	10:50:57
3	Mo 202.031†	173.1	192.8	24.863 µg/L	24.863 ppb	10:51:23
3	Ni 231.604†	792.8	547.2	29.813 µg/L	29.813 ppb	10:51:23
3	P 214.914†	468.0	293.8	548.56 µg/L	548.56 ppb	10:51:23
3	Pb 220.353†	306.0	272.7	71.250 µg/L	71.250 ppb	10:51:23
3	S 181.975 Axial†	63.2	43.4	209.21 µg/L	209.21 ppb	10:51:23
3	Sb 206.836†	21.2	2.1	9.8157 µg/L	9.8157 ppb	10:51:23
3	Se 196.026†	-27.9	-43.9	-5.5745 µg/L	-5.5745 ppb	10:51:23
3	SiO2†	88185.3	92198.6	17607 µg/L	17607 ppb	10:51:02
3	Si 251.611†	100746.1	107245.5	8124.9 µg/L	8124.9 ppb	10:51:02
3	Sn 189.927†	-20.8	-44.7	-7.3299 µg/L	-7.3299 ppb	10:51:23
3	Ti 334.940†	1024703.5	1093646.4	2423.5 µg/L	2423.5 ppb	10:50:57
3	Tl 190.801†	-38.2	-19.3	-3.4238 µg/L	-3.4238 ppb	10:51:23
3	U 409.014†	469.8	-177.5	-32.319 µg/L	-32.319 ppb	10:50:57
3	V 292.402†	6185.6	6698.1	82.605 µg/L	82.605 ppb	10:51:02
3	Zn 213.857†	11508.6	11740.8	305.08 µg/L	305.08 ppb	10:51:02

Mean Data: 241825015|933555|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1935338.2	94.097	%	0.4019				0.43%
Sc RADIAL	106829.3	95.0	%	0.22				0.23%
Y 371.029	1232866.2	98.444	%	0.3976				0.40%
Ag 328.068†	-985.1	-1.5318	µg/L	0.40464	-1.5318	ppb	0.40464	26.42%
Al 396.153Radial†	70736.0	35747	µg/L	249.2	35747	ppb	249.2	0.70%
As 188.979†	16.9	24.281	µg/L	6.0525	24.281	ppb	6.0525	24.93%
B 249.677†	1171.3	25.087	µg/L	0.3873	25.087	ppb	0.3873	1.54%
Ba 233.527†	22121.1	555.77	µg/L	2.637	555.77	ppb	2.637	0.47%
Be 313.107†	10294.5	5.6150	µg/L	0.02386	5.6150	ppb	0.02386	0.42%
Ca 317.933Radial†	32232.4	12795	µg/L	29.8	12795	ppb	29.8	0.23%
Cd 226.502†	255.8	0.1484	µg/L	0.06281	0.1484	ppb	0.06281	42.32%
Co 228.616†	444.5	16.365	µg/L	0.1542	16.365	ppb	0.1542	0.94%
Cr 267.716†	1449.2	30.343	µg/L	0.1272	30.343	ppb	0.1272	0.42%
Cu 324.752†	1741.8	30.628	µg/L	0.1171	30.628	ppb	0.1171	0.38%
Fe 238.204 Radial†	16283.7	85538	µg/L	117.7	85538	ppb	117.7	0.14%
K 766.490 Radial†	9650.1	5232.2	µg/L	38.62	5232.2	ppb	38.62	0.74%
Mg 279.077 IEC†	1465.6	8003.6	µg/L	57.62	8003.6	ppb	57.62	0.72%
Mn 257.610†	768745.4	2450.4	µg/L	0.64	2450.4	ppb	0.64	0.03%
Mo 202.031†	197.1	25.348	µg/L	0.6078	25.348	ppb	0.6078	2.40%
Na 589.592 Radial†	2190.8	607.86	µg/L	2.484	607.86	ppb	2.484	0.41%

Ni 231.604†	540.4	29.439	µg/L	0.3247	29.439	ppb	0.3247	1.10%
P 214.914†	288.0	535.64	µg/L	11.249	535.64	ppb	11.249	2.10%
Pb 220.353†	279.0	72.835	µg/L	1.9590	72.835	ppb	1.9590	2.69%
S 181.975 Axial†	45.6	220.60	µg/L	16.205	220.60	ppb	16.205	7.35%
Sb 206.836†	3.7	11.363	µg/L	2.4947	11.363	ppb	2.4947	21.95%
Se 196.026†	-41.7	-2.3730	µg/L	3.46516	-2.3730	ppb	3.46516	146.02%
SiO2†	92364.4	17638	µg/L	27.5	17638	ppb	27.5	0.16%
Si 251.611†	107366.1	8134.3	µg/L	8.42	8134.3	ppb	8.42	0.10%
Sn 189.927†	-48.7	-9.2454	µg/L	1.78012	-9.2454	ppb	1.78012	19.25%
Sr 421.552†	19711.5	111.03	µg/L	0.590	111.03	ppb	0.590	0.53%
Ti 334.940†	1093171.9	2422.4	µg/L	2.33	2422.4	ppb	2.33	0.10%
Tl 190.801†	-19.6	-3.8975	µg/L	6.25527	-3.8975	ppb	6.25527	160.49%
U 409.014†	-208.7	-35.268	µg/L	3.6877	-35.268	ppb	3.6877	10.46%
V 292.402†	6699.0	82.620	µg/L	0.1987	82.620	ppb	0.1987	0.24%
Zn 213.857†	11745.6	305.20	µg/L	0.990	305.20	ppb	0.990	0.32%

Sequence No.: 26
Sample ID: 241825016|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 322
Date Collected: 12/18/2009 10:51:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825016|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107471.8	107471.8	95.5	%			10:52:05
1	Al 396.153Radial†	351976.8	368149.5	186050	µg/L	186050	ppb	10:52:05
1	Ca 317.933Radial†	430460.4	450024.9	178640	µg/L	178640	ppb	10:52:05
1	Fe 238.204 Radial†	27129.6	28382.7	149100	µg/L	149100	ppb	10:52:11
1	K 766.490 Radial†	23705.4	24115.3	13075	µg/L	13075	ppb	10:52:11
1	Mg 279.077 IEC†	4194.6	4370.2	24020	µg/L	24020	ppb	10:52:11
1	Na 589.592 Radial†	6767.4	7786.7	2160.5	µg/L	2160.5	ppb	10:52:11
1	Sr 421.552†	84164.3	88150.2	496.54	µg/L	496.54	ppb	10:52:05
1	Sc 361.383	1903206.9	1903206.9	92.535	%			10:52:46
1	Y 371.029	1187661.2	1187661.2	94.834	%			10:52:46
1	Ag 328.068†	-1779.1	-1894.3	-3.4516	µg/L	-3.4516	ppb	10:52:51
1	As 188.979†	55.2	57.2	76.124	µg/L	76.124	ppb	10:53:12
1	B 249.677†	2175.8	2195.7	50.567	µg/L	50.567	ppb	10:52:51
1	Ba 233.527†	80057.8	86597.0	2175.6	µg/L	2175.6	ppb	10:52:51
1	Be 313.107†	25999.9	24485.9	13.305	µg/L	13.305	ppb	10:52:51
1	Cd 226.502†	371.5	502.4	1.8216	µg/L	1.8216	ppb	10:53:12
1	Co 228.616†	1096.2	1256.4	48.107	µg/L	48.107	ppb	10:53:12
1	Cr 267.716†	4388.1	4864.9	101.85	µg/L	101.85	ppb	10:52:51
1	Cu 324.752†	9449.0	6827.0	80.057	µg/L	80.057	ppb	10:52:51
1	Mn 257.610†	910149.1	983796.1	3140.9	µg/L	3140.9	ppb	10:52:46
1	Mo 202.031†	34.6	45.3	10.916	µg/L	10.916	ppb	10:53:12
1	Ni 231.604†	1658.6	1493.0	81.336	µg/L	81.336	ppb	10:53:12
1	P 214.914†	1317.0	1217.2	2527.2	µg/L	2527.2	ppb	10:53:12
1	Pb 220.353†	515.1	502.5	141.67	µg/L	141.67	ppb	10:53:12
1	S 181.975 Axial†	182.9	173.6	866.54	µg/L	866.54	ppb	10:53:12
1	Sb 206.836†	44.9	27.9	32.559	µg/L	32.559	ppb	10:53:12
1	Se 196.026†	-83.6	-104.5	-32.785	µg/L	-32.785	ppb	10:53:12
1	SiO2†	143668.6	153277.1	29270	µg/L	29270	ppb	10:52:51
1	Si 251.611†	166310.8	179378.0	13525	µg/L	13525	ppb	10:52:46
1	Sn 189.927†	-214.8	-254.6	-62.430	µg/L	-62.430	ppb	10:53:12
1	Ti 334.940†	2463142.3	2661132.1	5888.6	µg/L	5888.6	ppb	10:52:46
1	Tl 190.801†	-26.1	-6.8	20.631	µg/L	20.631	ppb	10:53:12
1	U 409.014†	774.1	157.3	-8.8295	µg/L	-8.8295	ppb	10:52:46
1	V 292.402†	20321.2	22052.5	260.83	µg/L	260.83	ppb	10:52:51
1	Zn 213.857†	10775.4	11094.5	280.23	µg/L	280.23	ppb	10:52:51
2	Sc RADIAL	107640.4	107640.4	95.7	%			10:52:17
2	Al 396.153Radial†	352945.8	368585.2	186270	µg/L	186270	ppb	10:52:17
2	Ca 317.933Radial†	431181.2	450072.5	178660	µg/L	178660	ppb	10:52:17
2	Fe 238.204 Radial†	27279.8	28495.2	149690	µg/L	149690	ppb	10:52:22
2	K 766.490 Radial†	23783.2	24157.7	13098	µg/L	13098	ppb	10:52:22
2	Mg 279.077 IEC†	4225.1	4395.2	24158	µg/L	24158	ppb	10:52:22
2	Na 589.592 Radial†	6754.3	7761.9	2153.6	µg/L	2153.6	ppb	10:52:22
2	Sr 421.552†	84384.9	88242.8	497.07	µg/L	497.07	ppb	10:52:17
2	Sc 361.383	1897642.9	1897642.9	92.264	%			10:53:20
2	Y 371.029	1184972.1	1184972.1	94.619	%			10:53:20
2	Ag 328.068†	-1766.5	-1886.3	-3.3452	µg/L	-3.3452	ppb	10:53:25
2	As 188.979†	44.1	45.3	53.400	µg/L	53.400	ppb	10:53:46
2	B 249.677†	2200.7	2229.5	51.882	µg/L	51.882	ppb	10:53:25
2	Ba 233.527†	79183.1	85902.7	2158.1	µg/L	2158.1	ppb	10:53:25
2	Be 313.107†	25739.9	24286.5	13.177	µg/L	13.177	ppb	10:53:25
2	Cd 226.502†	375.7	508.1	1.9234	µg/L	1.9234	ppb	10:53:46
2	Co 228.616†	1087.8	1250.7	47.816	µg/L	47.816	ppb	10:53:46
2	Cr 267.716†	4342.0	4828.8	101.09	µg/L	101.09	ppb	10:53:25
2	Cu 324.752†	9389.7	6792.6	79.942	µg/L	79.942	ppb	10:53:25
2	Mn 257.610†	908150.7	984514.0	3143.2	µg/L	3143.2	ppb	10:53:20
2	Mo 202.031†	16.0	25.2	8.6991	µg/L	8.6991	ppb	10:53:46
2	Ni 231.604†	1666.2	1506.5	82.071	µg/L	82.071	ppb	10:53:46
2	P 214.914†	1326.9	1232.1	2558.9	µg/L	2558.9	ppb	10:53:46
2	Pb 220.353†	512.5	501.3	141.38	µg/L	141.38	ppb	10:53:46

2	S 181.975 Axial†	179.8	170.8	851.97 µg/L	851.97 ppb	10:53:46
2	Sb 206.836†	40.3	23.2	27.845 µg/L	27.845 ppb	10:53:46
2	Se 196.026†	-85.6	-106.9	-35.938 µg/L	-35.938 ppb	10:53:46
2	SiO2†	141912.6	151829.1	28994 µg/L	28994 ppb	10:53:25
2	Si 251.611†	165716.3	179260.5	13516 µg/L	13516 ppb	10:53:20
2	Sn 189.927†	-220.1	-261.0	-65.459 µg/L	-65.459 ppb	10:53:46
2	Ti 334.940†	2458725.2	2664149.5	5895.3 µg/L	5895.3 ppb	10:53:20
2	Tl 190.801†	-21.1	-1.4	28.761 µg/L	28.761 ppb	10:53:46
2	U 409.014†	720.7	101.9	-14.147 µg/L	-14.147 ppb	10:53:20
2	V 292.402†	20118.5	21897.2	259.10 µg/L	259.10 ppb	10:53:25
2	Zn 213.857†	10689.4	11035.4	278.57 µg/L	278.57 ppb	10:53:25
3	Sc RADIAL	106886.7	106886.7	95.0 %		10:52:28
3	Al 396.153Radial†	353231.1	371486.1	187740 µg/L	187740 ppb	10:52:28
3	Ca 317.933Radial†	430219.5	452237.7	179520 µg/L	179520 ppb	10:52:28
3	Fe 238.204 Radial†	27345.7	28765.6	151110 µg/L	151110 ppb	10:52:33
3	K 766.490 Radial†	23886.0	24441.1	13252 µg/L	13252 ppb	10:52:33
3	Mg 279.077 IEC†	4195.9	4395.7	24158 µg/L	24158 ppb	10:52:33
3	Na 589.592 Radial†	6786.0	7845.0	2176.7 µg/L	2176.7 ppb	10:52:33
3	Sr 421.552†	84329.1	88805.9	500.24 µg/L	500.24 ppb	10:52:28
3	Sc 361.383	1906723.9	1906723.9	92.706 %		10:53:53
3	Y 371.029	1190676.1	1190676.1	95.075 %		10:53:53
3	Ag 328.068†	-1822.6	-1937.7	-3.6876 µg/L	-3.6876 ppb	10:53:59
3	As 188.979†	55.4	57.2	75.791 µg/L	75.791 ppb	10:54:19
3	B 249.677†	2204.9	2222.7	51.135 µg/L	51.135 ppb	10:53:59
3	Ba 233.527†	79808.9	86168.9	2164.8 µg/L	2164.8 ppb	10:53:59
3	Be 313.107†	25948.9	24379.0	13.243 µg/L	13.243 ppb	10:53:59
3	Cd 226.502†	360.4	489.6	1.3253 µg/L	1.3253 ppb	10:54:19
3	Co 228.616†	1093.0	1250.7	47.860 µg/L	47.860 ppb	10:54:19
3	Cr 267.716†	4403.4	4872.6	102.01 µg/L	102.01 ppb	10:53:59
3	Cu 324.752†	9479.2	6840.7	80.585 µg/L	80.585 ppb	10:53:59
3	Mn 257.610†	909785.8	981590.0	3134.1 µg/L	3134.1 ppb	10:53:53
3	Mo 202.031†	24.6	34.5	9.7825 µg/L	9.7825 ppb	10:54:19
3	Ni 231.604†	1663.0	1494.4	81.415 µg/L	81.415 ppb	10:54:19
3	P 214.914†	1327.1	1225.6	2543.5 µg/L	2543.5 ppb	10:54:19
3	Pb 220.353†	524.1	511.2	144.00 µg/L	144.00 ppb	10:54:19
3	S 181.975 Axial†	177.2	167.1	832.65 µg/L	832.65 ppb	10:54:19
3	Sb 206.836†	35.5	17.7	22.255 µg/L	22.255 ppb	10:54:19
3	Se 196.026†	-80.6	-101.0	-26.255 µg/L	-26.255 ppb	10:54:19
3	SiO2†	143224.3	152511.4	29124 µg/L	29124 ppb	10:53:59
3	Si 251.611†	165774.4	178467.8	13456 µg/L	13456 ppb	10:53:53
3	Sn 189.927†	-217.0	-256.5	-62.928 µg/L	-62.928 ppb	10:54:19
3	Ti 334.940†	2461979.2	2654967.8	5874.9 µg/L	5874.9 ppb	10:53:53
3	Tl 190.801†	-14.3	6.0	39.600 µg/L	39.600 ppb	10:54:19
3	U 409.014†	719.9	97.4	-14.815 µg/L	-14.815 ppb	10:53:53
3	V 292.402†	20270.1	21956.9	259.90 µg/L	259.90 ppb	10:53:59
3	Zn 213.857†	10784.7	11083.0	279.70 µg/L	279.70 ppb	10:53:59

Mean Data: 241825016|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1902524.6	92.502	%	0.2226				0.24%
Sc RADIAL	107333.0	95.4	%	0.35				0.37%
Y 371.029	1187769.8	94.843	%	0.2279				0.24%
Ag 328.068†	-1906.1	-3.4948	µg/L	0.17525	-3.4948	ppb	0.17525	5.01%
Al 396.153Radial†	369406.9	186690	µg/L	916.6	186690	ppb	916.6	0.49%
As 188.979†	53.2	68.438	µg/L	13.0245	68.438	ppb	13.0245	19.03%
B 249.677†	2216.0	51.195	µg/L	0.6595	51.195	ppb	0.6595	1.29%
Ba 233.527†	86222.8	2166.2	µg/L	8.80	2166.2	ppb	8.80	0.41%
Be 313.107†	24383.8	13.242	µg/L	0.0643	13.242	ppb	0.0643	0.49%
Ca 317.933Radial†	450778.4	178940	µg/L	501.7	178940	ppb	501.7	0.28%
Cd 226.502†	500.0	1.6901	µg/L	0.31999	1.6901	ppb	0.31999	18.93%
Co 228.616†	1252.6	47.928	µg/L	0.1567	47.928	ppb	0.1567	0.33%
Cr 267.716†	4855.4	101.65	µg/L	0.489	101.65	ppb	0.489	0.48%
Cu 324.752†	6820.1	80.195	µg/L	0.3431	80.195	ppb	0.3431	0.43%
Fe 238.204 Radial†	28547.8	149960	µg/L	1033.6	149960	ppb	1033.6	0.69%
K 766.490 Radial†	24238.0	13142	µg/L	96.0	13142	ppb	96.0	0.73%
Mg 279.077 IEC†	4387.0	24112	µg/L	79.6	24112	ppb	79.6	0.33%
Mn 257.610†	983300.0	3139.4	µg/L	4.72	3139.4	ppb	4.72	0.15%
Mo 202.031†	35.0	9.7991	µg/L	1.10838	9.7991	ppb	1.10838	11.31%
Na 589.592 Radial†	7797.9	2163.6	µg/L	11.84	2163.6	ppb	11.84	0.55%

Ni 231.604†	1498.0	81.607	µg/L	0.4037	81.607	ppb	0.4037	0.49%
P 214.914†	1225.0	2543.2	µg/L	15.87	2543.2	ppb	15.87	0.62%
Pb 220.353†	505.0	142.35	µg/L	1.433	142.35	ppb	1.433	1.01%
S 181.975 Axial†	170.5	850.39	µg/L	17.003	850.39	ppb	17.003	2.00%
Sb 206.836†	22.9	27.553	µg/L	5.1581	27.553	ppb	5.1581	18.72%
Se 196.026†	-104.1	-31.659	µg/L	4.9388	-31.659	ppb	4.9388	15.60%
SiO2†	152539.2	29129	µg/L	138.3	29129	ppb	138.3	0.47%
Si 251.611†	179035.4	13499	µg/L	37.6	13499	ppb	37.6	0.28%
Sn 189.927†	-257.4	-63.606	µg/L	1.6242	-63.606	ppb	1.6242	2.55%
Sr 421.552†	88399.7	497.95	µg/L	1.999	497.95	ppb	1.999	0.40%
Ti 334.940†	2660083.1	5886.3	µg/L	10.40	5886.3	ppb	10.40	0.18%
Tl 190.801†	-0.7	29.664	µg/L	9.5166	29.664	ppb	9.5166	32.08%
U 409.014†	118.8	-12.597	µg/L	3.2802	-12.597	ppb	3.2802	26.04%
V 292.402†	21968.9	259.94	µg/L	0.864	259.94	ppb	0.864	0.33%
Zn 213.857†	11071.0	279.50	µg/L	0.845	279.50	ppb	0.845	0.30%

Sequence No.: 27
Sample ID: 241825017|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 323
Date Collected: 12/18/2009 10:54:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825017|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107535.5	107535.5	95.6	%			10:55:01
1	Al 396.153Radial†	109009.4	113791.9	57507	µg/L	57507	ppb	10:55:01
1	Ca 317.933Radial†	65519.2	68036.4	27007	µg/L	27007	ppb	10:55:01
1	Fe 238.204 Radial†	17390.5	18178.9	95494	µg/L	95494	ppb	10:55:22
1	K 766.490 Radial†	16183.9	16233.2	8801.6	µg/L	8801.6	ppb	10:55:01
1	Mg 279.077 IEC†	2229.3	2312.0	12683	µg/L	12683	ppb	10:55:22
1	Na 589.592 Radial†	9840.7	10997.2	3051.3	µg/L	3051.3	ppb	10:55:01
1	Sr 421.552†	33766.7	35383.1	199.31	µg/L	199.31	ppb	10:55:01
1	Sc 361.383	1934124.9	1934124.9	94.038	%			10:56:25
1	Y 371.029	1216364.5	1216364.5	97.126	%			10:56:25
1	Ag 328.068†	-1084.7	-1125.2	-1.7549	µg/L	-1.7549	ppb	10:56:31
1	As 188.979†	22.8	21.8	30.270	µg/L	30.270	ppb	10:56:51
1	B 249.677†	1432.5	1367.6	30.669	µg/L	30.669	ppb	10:56:31
1	Ba 233.527†	36245.3	38623.8	970.35	µg/L	970.35	ppb	10:56:31
1	Be 313.107†	15669.8	13051.7	7.3314	µg/L	7.3314	ppb	10:56:31
1	Cd 226.502†	187.4	300.2	0.5694	µg/L	0.5694	ppb	10:56:51
1	Co 228.616†	570.6	678.5	27.452	µg/L	27.452	ppb	10:56:51
1	Cr 267.716†	1778.1	2013.5	42.174	µg/L	42.174	ppb	10:56:51
1	Cu 324.752†	6059.8	3059.6	42.038	µg/L	42.038	ppb	10:56:31
1	Mn 257.610†	853176.8	907489.0	2892.0	µg/L	2892.0	ppb	10:56:25
1	Mo 202.031†	140.7	157.5	21.325	µg/L	21.325	ppb	10:56:51
1	Ni 231.604†	1075.4	844.1	45.988	µg/L	45.988	ppb	10:56:51
1	P 214.914†	467.7	291.3	537.67	µg/L	537.67	ppb	10:56:51
1	Pb 220.353†	423.6	396.3	104.32	µg/L	104.32	ppb	10:56:51
1	S 181.975 Axial†	96.1	78.1	385.41	µg/L	385.41	ppb	10:56:51
1	Sb 206.836†	12.6	-7.2	-0.5439	µg/L	-0.5439	ppb	10:56:51
1	Se 196.026†	-32.0	-48.1	-4.6355	µg/L	-4.6355	ppb	10:56:51
1	SiO2†	116854.1	122280.8	23351	µg/L	23351	ppb	10:56:31
1	Si 251.611†	134199.8	142358.1	10811	µg/L	10811	ppb	10:56:31
1	Sn 189.927†	-61.4	-87.7	-23.044	µg/L	-23.044	ppb	10:56:51
1	Ti 334.940†	1060511.7	1127026.9	2496.7	µg/L	2496.7	ppb	10:56:25
1	Tl 190.801†	-29.8	-10.3	10.667	µg/L	10.667	ppb	10:56:51
1	U 409.014†	456.1	-194.2	-35.427	µg/L	-35.427	ppb	10:56:25
1	V 292.402†	9166.5	9839.6	118.81	µg/L	118.81	ppb	10:56:31
1	Zn 213.857†	11642.4	11830.3	306.18	µg/L	306.18	ppb	10:56:31
2	Sc RADIAL	107769.9	107769.9	95.8	%			10:55:27
2	Al 396.153Radial†	109906.0	114479.8	57855	µg/L	57855	ppb	10:55:27
2	Ca 317.933Radial†	65639.9	68013.3	26998	µg/L	26998	ppb	10:55:27
2	Fe 238.204 Radial†	17476.7	18229.3	95759	µg/L	95759	ppb	10:55:48
2	K 766.490 Radial†	16344.2	16363.7	8872.3	µg/L	8872.3	ppb	10:55:27
2	Mg 279.077 IEC†	2234.1	2311.9	12682	µg/L	12682	ppb	10:55:48
2	Na 589.592 Radial†	9871.4	11006.7	3054.0	µg/L	3054.0	ppb	10:55:27
2	Sr 421.552†	33956.4	35504.3	199.99	µg/L	199.99	ppb	10:55:27
2	Sc 361.383	1922019.1	1922019.1	93.450	%			10:56:57
2	Y 371.029	1208245.9	1208245.9	96.478	%			10:56:57
2	Ag 328.068†	-1135.4	-1186.7	-2.2682	µg/L	-2.2682	ppb	10:57:03
2	As 188.979†	21.7	20.7	28.220	µg/L	28.220	ppb	10:57:23
2	B 249.677†	1400.7	1343.2	29.504	µg/L	29.504	ppb	10:57:03
2	Ba 233.527†	36550.9	39193.7	984.66	µg/L	984.66	ppb	10:57:03
2	Be 313.107†	15812.8	13309.7	7.4955	µg/L	7.4955	ppb	10:57:03
2	Cd 226.502†	177.6	290.9	0.3120	µg/L	0.3120	ppb	10:57:23
2	Co 228.616†	568.9	680.5	27.550	µg/L	27.550	ppb	10:57:23
2	Cr 267.716†	1783.1	2030.9	42.540	µg/L	42.540	ppb	10:57:23
2	Cu 324.752†	6098.5	3141.6	42.672	µg/L	42.672	ppb	10:57:03
2	Mn 257.610†	847258.6	906870.3	2890.0	µg/L	2890.0	ppb	10:56:57
2	Mo 202.031†	135.1	152.5	20.777	µg/L	20.777	ppb	10:57:23
2	Ni 231.604†	1070.4	846.0	46.092	µg/L	46.092	ppb	10:57:23
2	P 214.914†	458.2	284.3	522.09	µg/L	522.09	ppb	10:57:23
2	Pb 220.353†	418.5	393.7	103.67	µg/L	103.67	ppb	10:57:23

2	S 181.975 Axial†	93.4	75.9	373.90	µg/L	373.90 ppb	10:57:23
2	Sb 206.836†	18.9	-0.4	6.2182	µg/L	6.2182 ppb	10:57:23
2	Se 196.026†	-30.0	-46.2	-1.7578	µg/L	-1.7578 ppb	10:57:23
2	SiO2†	117655.0	123920.4	23664	µg/L	23664 ppb	10:57:03
2	Si 251.611†	135303.5	144438.0	10970	µg/L	10970 ppb	10:57:03
2	Sn 189.927†	-64.4	-91.4	-24.800	µg/L	-24.800 ppb	10:57:23
2	Ti 334.940†	1052782.6	1125859.1	2494.1	µg/L	2494.1 ppb	10:56:57
2	Tl 190.801†	-35.5	-16.6	1.0988	µg/L	1.0988 ppb	10:57:23
2	U 409.014†	551.0	-89.6	-25.652	µg/L	-25.652 ppb	10:56:57
2	V 292.402†	9289.7	10032.8	121.02	µg/L	121.02 ppb	10:57:03
2	Zn 213.857†	11773.4	12048.5	312.00	µg/L	312.00 ppb	10:57:03
3	Sc RADIAL	108819.9	108819.9	96.7	%		10:55:53
3	Al 396.153Radial†	111088.0	114594.7	57913	µg/L	57913 ppb	10:55:53
3	Ca 317.933Radial†	66806.7	68558.3	27214	µg/L	27214 ppb	10:55:53
3	Fe 238.204 Radial†	17378.5	17951.9	94302	µg/L	94302 ppb	10:56:14
3	K 766.490 Radial†	16453.3	16311.9	8844.2	µg/L	8844.2 ppb	10:55:53
3	Mg 279.077 IEC†	2222.0	2276.9	12490	µg/L	12490 ppb	10:56:14
3	Na 589.592 Radial†	10005.9	11046.4	3065.0	µg/L	3065.0 ppb	10:55:53
3	Sr 421.552†	34413.2	35634.5	200.73	µg/L	200.73 ppb	10:55:53
3	Sc 361.383	1924120.3	1924120.3	93.552	%		10:57:30
3	Y 371.029	1209795.5	1209795.5	96.601	%		10:57:30
3	Ag 328.068†	-1078.9	-1124.9	-1.8435	µg/L	-1.8435 ppb	10:57:35
3	As 188.979†	24.0	23.2	33.049	µg/L	33.049 ppb	10:57:56
3	B 249.677†	1415.3	1357.2	30.582	µg/L	30.582 ppb	10:57:35
3	Ba 233.527†	36058.3	38624.3	970.36	µg/L	970.36 ppb	10:57:35
3	Be 313.107†	15661.8	13129.9	7.3832	µg/L	7.3832 ppb	10:57:35
3	Cd 226.502†	186.8	300.5	0.6737	µg/L	0.6737 ppb	10:57:56
3	Co 228.616†	578.8	690.5	28.036	µg/L	28.036 ppb	10:57:56
3	Cr 267.716†	1770.6	2015.4	42.214	µg/L	42.214 ppb	10:57:56
3	Cu 324.752†	5956.5	2982.7	41.241	µg/L	41.241 ppb	10:57:35
3	Mn 257.610†	846702.6	905285.9	2884.8	µg/L	2884.8 ppb	10:57:30
3	Mo 202.031†	126.8	143.4	19.707	µg/L	19.707 ppb	10:57:56
3	Ni 231.604†	1071.5	846.0	46.089	µg/L	46.089 ppb	10:57:56
3	P 214.914†	468.9	295.2	547.67	µg/L	547.67 ppb	10:57:56
3	Pb 220.353†	421.9	396.8	104.49	µg/L	104.49 ppb	10:57:56
3	S 181.975 Axial†	90.2	72.4	356.04	µg/L	356.04 ppb	10:57:56
3	Sb 206.836†	25.7	6.9	13.363	µg/L	13.363 ppb	10:57:56
3	Se 196.026†	-30.3	-46.4	-2.9551	µg/L	-2.9551 ppb	10:57:56
3	SiO2†	116450.5	122495.4	23392	µg/L	23392 ppb	10:57:35
3	Si 251.611†	133760.8	142630.9	10832	µg/L	10832 ppb	10:57:35
3	Sn 189.927†	-64.6	-91.5	-25.026	µg/L	-25.026 ppb	10:57:56
3	Ti 334.940†	1052326.6	1124141.5	2490.2	µg/L	2490.2 ppb	10:57:30
3	Tl 190.801†	-28.6	-9.1	12.299	µg/L	12.299 ppb	10:57:56
3	U 409.014†	478.2	-168.1	-32.746	µg/L	-32.746 ppb	10:57:30
3	V 292.402†	9154.6	9877.5	119.13	µg/L	119.13 ppb	10:57:35
3	Zn 213.857†	11604.7	11854.4	306.96	µg/L	306.96 ppb	10:57:35

Mean Data: 241825017|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1926754.8	93.680	%	0.3145				0.34%
Sc RADIAL	108041.8	96.1	%	0.61				0.63%
Y 371.029	1211468.6	96.735	%	0.3442				0.36%
Ag 328.068†	-1145.6	-1.9555	µg/L	0.27438	-1.9555	ppb	0.27438	14.03%
Al 396.153Radial†	114288.8	57758	µg/L	219.4	57758	ppb	219.4	0.38%
As 188.979†	21.9	30.513	µg/L	2.4240	30.513	ppb	2.4240	7.94%
B 249.677†	1356.0	30.252	µg/L	0.6487	30.252	ppb	0.6487	2.14%
Ba 233.527†	38813.9	975.12	µg/L	8.262	975.12	ppb	8.262	0.85%
Be 313.107†	13163.8	7.4034	µg/L	0.08390	7.4034	ppb	0.08390	1.13%
Ca 317.933Radial†	68202.7	27073	µg/L	122.3	27073	ppb	122.3	0.45%
Cd 226.502†	297.2	0.5184	µg/L	0.18620	0.5184	ppb	0.18620	35.92%
Co 228.616†	683.2	27.679	µg/L	0.3126	27.679	ppb	0.3126	1.13%
Cr 267.716†	2019.9	42.309	µg/L	0.2010	42.309	ppb	0.2010	0.48%
Cu 324.752†	3061.3	41.984	µg/L	0.7171	41.984	ppb	0.7171	1.71%
Fe 238.204 Radial†	18120.0	95185	µg/L	776.4	95185	ppb	776.4	0.82%
K 766.490 Radial†	16302.9	8839.4	µg/L	35.62	8839.4	ppb	35.62	0.40%
Mg 279.077 IEC†	2300.2	12619	µg/L	111.0	12619	ppb	111.0	0.88%
Mn 257.610†	906548.4	2888.9	µg/L	3.69	2888.9	ppb	3.69	0.13%
Mo 202.031†	151.1	20.603	µg/L	0.8232	20.603	ppb	0.8232	4.00%
Na 589.592 Radial†	11016.8	3056.7	µg/L	7.25	3056.7	ppb	7.25	0.24%

Ni 231.604†	845.4	46.056	µg/L	0.0590	46.056	ppb	0.0590	0.13%
P 214.914†	290.3	535.81	µg/L	12.889	535.81	ppb	12.889	2.41%
Pb 220.353†	395.6	104.16	µg/L	0.434	104.16	ppb	0.434	0.42%
S 181.975 Axial†	75.5	371.78	µg/L	14.801	371.78	ppb	14.801	3.98%
Sb 206.836†	-0.2	6.3458	µg/L	6.95445	6.3458	ppb	6.95445	109.59%
Se 196.026†	-46.9	-3.1161	µg/L	1.44558	-3.1161	ppb	1.44558	46.39%
SiO2†	122898.9	23469	µg/L	170.2	23469	ppb	170.2	0.73%
Si 251.611†	143142.3	10871	µg/L	86.6	10871	ppb	86.6	0.80%
Sn 189.927†	-90.2	-24.290	µg/L	1.0847	-24.290	ppb	1.0847	4.47%
Sr 421.552†	35507.3	200.01	µg/L	0.708	200.01	ppb	0.708	0.35%
Ti 334.940†	1125675.8	2493.7	µg/L	3.22	2493.7	ppb	3.22	0.13%
Tl 190.801†	-12.0	8.0215	µg/L	6.05058	8.0215	ppb	6.05058	75.43%
U 409.014†	-150.6	-31.275	µg/L	5.0510	-31.275	ppb	5.0510	16.15%
V 292.402†	9916.7	119.65	µg/L	1.195	119.65	ppb	1.195	1.00%
Zn 213.857†	11911.1	308.38	µg/L	3.157	308.38	ppb	3.157	1.02%

Sequence No.: 28
Sample ID: 241825018|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 324
Date Collected: 12/18/2009 10:58:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825018|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106023.9	106023.9	94.3	%			10:58:37
1	Al 396.153Radial†	50549.6	53397.9	26985	µg/L	26985	ppb	10:58:37
1	Ca 317.933Radial†	49114.1	51609.4	20487	µg/L	20487	ppb	10:58:37
1	Fe 238.204 Radial†	12505.9	13256.2	69635	µg/L	69635	ppb	10:58:57
1	K 766.490 Radial†	9337.8	9211.5	4994.5	µg/L	4994.5	ppb	10:58:37
1	Mg 279.077 IEC†	1822.7	1913.8	10513	µg/L	10513	ppb	10:58:57
1	Na 589.592 Radial†	2730.3	3600.5	999.01	µg/L	999.01	ppb	10:58:57
1	Sr 421.552†	30901.2	32846.7	185.02	µg/L	185.02	ppb	10:58:37
1	Sc 361.383	1937914.1	1937914.1	94.222	%			11:00:00
1	Y 371.029	1245968.3	1245968.3	99.490	%			11:00:00
1	Ag 328.068†	-883.5	-909.3	-2.3054	µg/L	-2.3054	ppb	11:00:05
1	As 188.979†	23.5	22.5	31.557	µg/L	31.557	ppb	11:00:26
1	B 249.677†	1112.4	1024.9	23.592	µg/L	23.592	ppb	11:00:05
1	Ba 233.527†	15349.2	16371.1	411.29	µg/L	411.29	ppb	11:00:05
1	Be 313.107†	13736.8	10967.6	6.6635	µg/L	6.6635	ppb	11:00:05
1	Cd 226.502†	95.9	202.6	-0.0382	µg/L	-0.0382	ppb	11:00:26
1	Co 228.616†	66.3	142.1	5.3251	µg/L	5.3251	ppb	11:00:26
1	Cr 267.716†	730.9	898.5	18.813	µg/L	18.813	ppb	11:00:26
1	Cu 324.752†	4381.5	1265.8	23.863	µg/L	23.863	ppb	11:00:05
1	Mn 257.610†	307105.7	326159.6	1043.8	µg/L	1043.8	ppb	11:00:00
1	Mo 202.031†	143.4	160.1	20.601	µg/L	20.601	ppb	11:00:26
1	Ni 231.604†	822.4	573.4	31.239	µg/L	31.239	ppb	11:00:26
1	P 214.914†	399.2	217.7	398.87	µg/L	398.87	ppb	11:00:26
1	Pb 220.353†	465.1	439.5	112.96	µg/L	112.96	ppb	11:00:26
1	S 181.975 Axial†	96.7	78.6	392.09	µg/L	392.09	ppb	11:00:26
1	Sb 206.836†	26.5	7.5	8.1806	µg/L	8.1806	ppb	11:00:26
1	Se 196.026†	-24.9	-40.5	-11.762	µg/L	-11.762	ppb	11:00:26
1	SiO2†	118599.0	123889.7	23658	µg/L	23658	ppb	11:00:05
1	Si 251.611†	136342.8	144353.5	11028	µg/L	11028	ppb	11:00:05
1	Sn 189.927†	-31.1	-55.5	-12.252	µg/L	-12.252	ppb	11:00:26
1	Ti 334.940†	315794.3	334439.5	740.17	µg/L	740.17	ppb	11:00:00
1	Tl 190.801†	-16.1	4.3	13.264	µg/L	13.264	ppb	11:00:26
1	U 409.014†	205.6	-461.0	-55.810	µg/L	-55.810	ppb	11:00:00
1	V 292.402†	3840.1	4167.5	52.717	µg/L	52.717	ppb	11:00:05
1	Zn 213.857†	6606.9	6461.9	165.25	µg/L	165.25	ppb	11:00:05
2	Sc RADIAL	106636.1	106636.1	94.8	%			10:59:03
2	Al 396.153Radial†	50868.0	53426.0	27000	µg/L	27000	ppb	10:59:03
2	Ca 317.933Radial†	49414.6	51627.3	20494	µg/L	20494	ppb	10:59:03
2	Fe 238.204 Radial†	12520.5	13195.5	69316	µg/L	69316	ppb	10:59:23
2	K 766.490 Radial†	9340.3	9157.4	4965.1	µg/L	4965.1	ppb	10:59:03
2	Mg 279.077 IEC†	1818.1	1897.9	10425	µg/L	10425	ppb	10:59:23
2	Na 589.592 Radial†	2718.9	3571.8	991.05	µg/L	991.05	ppb	10:59:23
2	Sr 421.552†	31137.1	32907.3	185.36	µg/L	185.36	ppb	10:59:03
2	Sc 361.383	1938853.3	1938853.3	94.268	%			11:00:32
2	Y 371.029	1245319.2	1245319.2	99.438	%			11:00:32
2	Ag 328.068†	-869.9	-894.5	-2.2006	µg/L	-2.2006	ppb	11:00:37
2	As 188.979†	14.8	13.2	14.000	µg/L	14.000	ppb	11:00:58
2	B 249.677†	1095.7	1006.6	22.881	µg/L	22.881	ppb	11:00:37
2	Ba 233.527†	15315.7	16327.6	410.20	µg/L	410.20	ppb	11:00:37
2	Be 313.107†	13706.4	10928.3	6.6401	µg/L	6.6401	ppb	11:00:37
2	Cd 226.502†	101.3	208.3	0.1308	µg/L	0.1308	ppb	11:00:58
2	Co 228.616†	57.8	133.0	4.8985	µg/L	4.8985	ppb	11:00:58
2	Cr 267.716†	685.3	849.8	17.798	µg/L	17.798	ppb	11:00:58
2	Cu 324.752†	4395.3	1278.2	23.882	µg/L	23.882	ppb	11:00:37
2	Mn 257.610†	305497.5	324295.8	1037.9	µg/L	1037.9	ppb	11:00:32
2	Mo 202.031†	145.8	162.5	20.857	µg/L	20.857	ppb	11:00:58
2	Ni 231.604†	822.0	572.6	31.196	µg/L	31.196	ppb	11:00:58
2	P 214.914†	397.1	215.3	393.99	µg/L	393.99	ppb	11:00:58
2	Pb 220.353†	470.4	444.9	114.35	µg/L	114.35	ppb	11:00:58

2	S 181.975 Axial†	88.6	69.9	347.45 µg/L	347.45 ppb	11:00:58
2	Sb 206.836†	24.2	5.1	5.7759 µg/L	5.7759 ppb	11:00:58
2	Se 196.026†	-17.2	-32.4	-0.0787 µg/L	-0.0787 ppb	11:00:58
2	SiO2†	118166.8	123370.2	23559 µg/L	23559 ppb	11:00:37
2	Si 251.611†	135933.6	143849.3	10990 µg/L	10990 ppb	11:00:37
2	Sn 189.927†	-32.8	-57.3	-13.159 µg/L	-13.159 ppb	11:00:58
2	Ti 334.940†	314200.4	332586.3	736.06 µg/L	736.06 ppb	11:00:32
2	Tl 190.801†	-21.6	-1.5	4.4219 µg/L	4.4219 ppb	11:00:58
2	U 409.014†	122.5	-549.3	-64.041 µg/L	-64.041 ppb	11:00:32
2	V 292.402†	3811.6	4135.3	52.317 µg/L	52.317 ppb	11:00:37
2	Zn 213.857†	6578.8	6428.6	164.40 µg/L	164.40 ppb	11:00:37
3	Sc RADIAL	106659.2	106659.2	94.8 %		10:59:29
3	Al 396.153Radial†	51062.9	53619.8	27097 µg/L	27097 ppb	10:59:29
3	Ca 317.933Radial†	49588.3	51799.1	20562 µg/L	20562 ppb	10:59:29
3	Fe 238.204 Radial†	12585.8	13261.4	69662 µg/L	69662 ppb	10:59:49
3	K 766.490 Radial†	9408.5	9227.1	5002.9 µg/L	5002.9 ppb	10:59:29
3	Mg 279.077 IEC†	1833.1	1913.3	10510 µg/L	10510 ppb	10:59:49
3	Na 589.592 Radial†	2710.2	3562.0	988.32 µg/L	988.32 ppb	10:59:49
3	Sr 421.552†	31233.7	33002.0	185.90 µg/L	185.90 ppb	10:59:29
3	Sc 361.383	1924778.3	1924778.3	93.584 %		11:01:04
3	Y 371.029	1236593.6	1236593.6	98.741 %		11:01:04
3	Ag 328.068†	-902.3	-935.8	-2.5356 µg/L	-2.5356 ppb	11:01:10
3	As 188.979†	19.1	17.9	22.896 µg/L	22.896 ppb	11:01:30
3	B 249.677†	1101.1	1020.9	23.406 µg/L	23.406 ppb	11:01:10
3	Ba 233.527†	15489.5	16632.2	417.85 µg/L	417.85 ppb	11:01:10
3	Be 313.107†	13876.0	11215.8	6.8215 µg/L	6.8215 ppb	11:01:10
3	Cd 226.502†	98.8	206.5	0.0536 µg/L	0.0536 ppb	11:01:30
3	Co 228.616†	71.4	148.0	5.6216 µg/L	5.6216 ppb	11:01:30
3	Cr 267.716†	680.6	850.0	17.806 µg/L	17.806 ppb	11:01:30
3	Cu 324.752†	4352.8	1266.9	23.877 µg/L	23.877 ppb	11:01:10
3	Mn 257.610†	303459.3	324487.6	1038.5 µg/L	1038.5 ppb	11:01:04
3	Mo 202.031†	158.6	177.4	22.531 µg/L	22.531 ppb	11:01:30
3	Ni 231.604†	829.1	586.6	31.958 µg/L	31.958 ppb	11:01:30
3	P 214.914†	403.2	224.9	414.53 µg/L	414.53 ppb	11:01:30
3	Pb 220.353†	474.2	452.6	116.32 µg/L	116.32 ppb	11:01:30
3	S 181.975 Axial†	91.9	74.1	368.90 µg/L	368.90 ppb	11:01:30
3	Sb 206.836†	28.5	9.9	10.513 µg/L	10.513 ppb	11:01:30
3	Se 196.026†	-19.8	-35.2	-3.9819 µg/L	-3.9819 ppb	11:01:30
3	SiO2†	119137.1	125323.7	23932 µg/L	23932 ppb	11:01:10
3	Si 251.611†	136859.2	145892.9	11146 µg/L	11146 ppb	11:01:10
3	Sn 189.927†	-29.1	-53.5	-11.276 µg/L	-11.276 ppb	11:01:30
3	Ti 334.940†	312507.5	333214.6	737.45 µg/L	737.45 ppb	11:01:04
3	Tl 190.801†	-17.0	3.2	11.551 µg/L	11.551 ppb	11:01:30
3	U 409.014†	88.5	-584.6	-67.421 µg/L	-67.421 ppb	11:01:04
3	V 292.402†	3865.5	4222.5	53.334 µg/L	53.334 ppb	11:01:10
3	Zn 213.857†	6646.3	6551.8	167.66 µg/L	167.66 ppb	11:01:10

Mean Data: 241825018|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933848.6	94.025	%	0.3826				0.41%
Sc RADIAL	106439.7	94.6	%	0.32				0.34%
Y 371.029	1242627.1	99.223	%	0.4180				0.42%
Ag 328.068†	-913.2	-2.3472	µg/L	0.17140	-2.3472	ppb	0.17140	7.30%
Al 396.153Radial†	53481.3	27027	µg/L	61.0	27027	ppb	61.0	0.23%
As 188.979†	17.9	22.818	µg/L	8.7785	22.818	ppb	8.7785	38.47%
B 249.677†	1017.5	23.293	µg/L	0.3688	23.293	ppb	0.3688	1.58%
Ba 233.527†	16443.6	413.11	µg/L	4.138	413.11	ppb	4.138	1.00%
Be 313.107†	11037.2	6.7083	µg/L	0.09866	6.7083	ppb	0.09866	1.47%
Ca 317.933Radial†	51678.6	20514	µg/L	41.6	20514	ppb	41.6	0.20%
Cd 226.502†	205.8	0.0488	µg/L	0.08461	0.0488	ppb	0.08461	173.53%
Co 228.616†	141.0	5.2817	µg/L	0.36353	5.2817	ppb	0.36353	6.88%
Cr 267.716†	866.1	18.139	µg/L	0.5835	18.139	ppb	0.5835	3.22%
Cu 324.752†	1270.3	23.874	µg/L	0.0096	23.874	ppb	0.0096	0.04%
Fe 238.204 Radial†	13237.7	69538	µg/L	192.5	69538	ppb	192.5	0.28%
K 766.490 Radial†	9198.7	4987.5	µg/L	19.86	4987.5	ppb	19.86	0.40%
Mg 279.077 IEC†	1908.3	10483	µg/L	49.9	10483	ppb	49.9	0.48%
Mn 257.610†	324981.0	1040.1	µg/L	3.27	1040.1	ppb	3.27	0.31%
Mo 202.031†	166.7	21.329	µg/L	1.0481	21.329	ppb	1.0481	4.91%
Na 589.592 Radial†	3578.1	992.80	µg/L	5.554	992.80	ppb	5.554	0.56%

Ni 231.604†	577.5	31.464	µg/L	0.4280	31.464	ppb	0.4280	1.36%
P 214.914†	219.3	402.46	µg/L	10.734	402.46	ppb	10.734	2.67%
Pb 220.353†	445.7	114.54	µg/L	1.689	114.54	ppb	1.689	1.47%
S 181.975 Axial†	74.2	369.48	µg/L	22.323	369.48	ppb	22.323	6.04%
Sb 206.836†	7.5	8.1564	µg/L	2.36841	8.1564	ppb	2.36841	29.04%
Se 196.026†	-36.0	-5.2742	µg/L	5.94788	-5.2742	ppb	5.94788	112.77%
SiO2†	124194.5	23717	µg/L	193.2	23717	ppb	193.2	0.81%
Si 251.611†	144698.6	11055	µg/L	81.5	11055	ppb	81.5	0.74%
Sn 189.927†	-55.4	-12.229	µg/L	0.9419	-12.229	ppb	0.9419	7.70%
Sr 421.552†	32918.7	185.43	µg/L	0.441	185.43	ppb	0.441	0.24%
Ti 334.940†	333413.5	737.89	µg/L	2.090	737.89	ppb	2.090	0.28%
Tl 190.801†	2.0	9.7456	µg/L	4.68940	9.7456	ppb	4.68940	48.12%
U 409.014†	-531.6	-62.424	µg/L	5.9718	-62.424	ppb	5.9718	9.57%
V 292.402†	4175.1	52.790	µg/L	0.5125	52.790	ppb	0.5125	0.97%
Zn 213.857†	6480.8	165.77	µg/L	1.689	165.77	ppb	1.689	1.02%

Sequence No.: 29
Sample ID: 241825019|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 325
Date Collected: 12/18/2009 11:01:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825019|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108446.0	108446.0	96.4	%			11:02:13
1	Al 396.153Radial†	341891.5	354379.9	179100	µg/L	179100	ppb	11:02:13
1	Ca 317.933Radial†	60304.3	62052.1	24632	µg/L	24632	ppb	11:02:18
1	Fe 238.204 Radial†	27442.5	28452.2	149460	µg/L	149460	ppb	11:02:18
1	K 766.490 Radial†	26054.9	26329.3	14276	µg/L	14276	ppb	11:02:13
1	Mg 279.077 IEC†	3757.8	3877.7	21288	µg/L	21288	ppb	11:02:18
1	Na 589.592 Radial†	6725.7	7679.8	2130.9	µg/L	2130.9	ppb	11:02:18
1	Sr 421.552†	52945.3	54978.6	309.69	µg/L	309.69	ppb	11:02:13
1	Sc 361.383	1940292.3	1940292.3	94.338	%			11:02:53
1	Y 371.029	1200767.9	1200767.9	95.881	%			11:02:53
1	Ag 328.068†	-1634.4	-1704.2	-1.7311	µg/L	-1.7311	ppb	11:02:59
1	As 188.979†	24.7	23.7	34.409	µg/L	34.409	ppb	11:03:19
1	B 249.677†	2142.8	2115.7	46.902	µg/L	46.902	ppb	11:02:59
1	Ba 233.527†	73996.2	78517.9	1972.7	µg/L	1972.7	ppb	11:02:59
1	Be 313.107†	26597.0	24581.8	13.549	µg/L	13.549	ppb	11:02:59
1	Cd 226.502†	338.0	459.2	0.6709	µg/L	0.6709	ppb	11:02:59
1	Co 228.616†	1887.5	2072.5	88.368	µg/L	88.368	ppb	11:03:19
1	Cr 267.716†	4337.8	4720.9	98.851	µg/L	98.851	ppb	11:02:59
1	Cu 324.752†	8957.0	6110.3	75.093	µg/L	75.093	ppb	11:02:59
1	Mn 257.610†	1678558.0	1779523.7	5666.2	µg/L	5666.2	ppb	11:02:53
1	Mo 202.031†	-22.9	-16.4	4.0487	µg/L	4.0487	ppb	11:03:19
1	Ni 231.604†	1773.7	1580.7	86.115	µg/L	86.115	ppb	11:03:19
1	P 214.914†	738.9	577.2	1136.6	µg/L	1136.6	ppb	11:03:19
1	Pb 220.353†	619.8	602.9	166.47	µg/L	166.47	ppb	11:03:19
1	S 181.975 Axial†	112.1	94.8	462.00	µg/L	462.00	ppb	11:03:19
1	Sb 206.836†	21.4	2.1	19.574	µg/L	19.574	ppb	11:03:19
1	Se 196.026†	-36.5	-52.8	22.366	µg/L	22.366	ppb	11:03:19
1	SiO2†	143835.4	150486.4	28737	µg/L	28737	ppb	11:02:59
1	Si 251.611†	166045.0	175660.9	13256	µg/L	13256	ppb	11:02:53
1	Sn 189.927†	-114.3	-143.7	-42.765	µg/L	-42.765	ppb	11:03:19
1	Ti 334.940†	2301374.8	2438778.9	5404.4	µg/L	5404.4	ppb	11:02:53
1	Tl 190.801†	-47.0	-28.4	17.536	µg/L	17.536	ppb	11:03:19
1	U 409.014†	992.0	372.3	7.6460	µg/L	7.6460	ppb	11:02:53
1	V 292.402†	20642.3	21973.2	259.95	µg/L	259.95	ppb	11:02:59
1	Zn 213.857†	10284.5	10351.6	260.34	µg/L	260.34	ppb	11:02:59
2	Sc RADIAL	108231.8	108231.8	96.2	%			11:02:24
2	Al 396.153Radial†	343603.0	356860.1	180350	µg/L	180350	ppb	11:02:24
2	Ca 317.933Radial†	60948.9	62845.8	24947	µg/L	24947	ppb	11:02:29
2	Fe 238.204 Radial†	27757.3	28835.6	151480	µg/L	151480	ppb	11:02:29
2	K 766.490 Radial†	26099.4	26429.0	14330	µg/L	14330	ppb	11:02:24
2	Mg 279.077 IEC†	3825.9	3956.2	21720	µg/L	21720	ppb	11:02:29
2	Na 589.592 Radial†	6746.9	7715.6	2140.8	µg/L	2140.8	ppb	11:02:29
2	Sr 421.552†	53065.9	55212.6	311.01	µg/L	311.01	ppb	11:02:24
2	Sc 361.383	1933442.4	1933442.4	94.005	%			11:03:27
2	Y 371.029	1197161.5	1197161.5	95.593	%			11:03:27
2	Ag 328.068†	-1574.3	-1646.3	-1.0553	µg/L	-1.0553	ppb	11:03:32
2	As 188.979†	22.2	21.2	29.228	µg/L	29.228	ppb	11:03:53
2	B 249.677†	2102.5	2080.9	44.725	µg/L	44.725	ppb	11:03:32
2	Ba 233.527†	73584.6	78358.0	1968.6	µg/L	1968.6	ppb	11:03:32
2	Be 313.107†	26462.3	24538.4	13.518	µg/L	13.518	ppb	11:03:32
2	Cd 226.502†	356.9	480.5	1.0832	µg/L	1.0832	ppb	11:03:32
2	Co 228.616†	1903.5	2096.6	89.508	µg/L	89.508	ppb	11:03:53
2	Cr 267.716†	4324.0	4722.5	98.885	µg/L	98.885	ppb	11:03:32
2	Cu 324.752†	8928.7	6113.8	75.550	µg/L	75.550	ppb	11:03:32
2	Mn 257.610†	1675051.9	1782097.8	5674.6	µg/L	5674.6	ppb	11:03:27
2	Mo 202.031†	-17.4	-10.6	4.7697	µg/L	4.7697	ppb	11:03:53
2	Ni 231.604†	1778.8	1592.9	86.777	µg/L	86.777	ppb	11:03:53
2	P 214.914†	738.7	579.8	1140.2	µg/L	1140.2	ppb	11:03:53
2	Pb 220.353†	620.0	605.4	167.20	µg/L	167.20	ppb	11:03:53

2	S 181.975 Axial†	100.9	83.2	402.12 µg/L	402.12 ppb	11:03:53
2	Sb 206.836†	16.7	-2.7	14.775 µg/L	14.775 ppb	11:03:53
2	Se 196.026†	-46.7	-63.7	7.7378 µg/L	7.7378 ppb	11:03:53
2	SiO2†	143005.3	150143.5	28672 µg/L	28672 ppb	11:03:32
2	Si 251.611†	166135.9	176381.2	13311 µg/L	13311 ppb	11:03:27
2	Sn 189.927†	-110.2	-139.7	-40.415 µg/L	-40.415 ppb	11:03:53
2	Ti 334.940†	2297254.3	2443038.5	5413.9 µg/L	5413.9 ppb	11:03:27
2	Tl 190.801†	-54.6	-36.7	5.1186 µg/L	5.1186 ppb	11:03:53
2	U 409.014†	1028.3	414.7	11.257 µg/L	11.257 ppb	11:03:27
2	V 292.402†	20570.2	21974.0	260.13 µg/L	260.13 ppb	11:03:32
2	Zn 213.857†	10291.2	10397.3	261.34 µg/L	261.34 ppb	11:03:32
3	Sc RADIAL	108236.5	108236.5	96.2 %		11:02:35
3	Al 396.153Radial†	345504.8	358821.2	181340 µg/L	181340 ppb	11:02:35
3	Ca 317.933Radial†	60726.8	62612.3	24854 µg/L	24854 ppb	11:02:40
3	Fe 238.204 Radial†	27616.8	28688.4	150700 µg/L	150700 ppb	11:02:40
3	K 766.490 Radial†	26258.7	26593.4	14419 µg/L	14419 ppb	11:02:35
3	Mg 279.077 IEC†	3784.8	3913.3	21483 µg/L	21483 ppb	11:02:40
3	Na 589.592 Radial†	6728.4	7696.2	2135.4 µg/L	2135.4 ppb	11:02:40
3	Sr 421.552†	53412.0	55569.9	313.02 µg/L	313.02 ppb	11:02:35
3	Sc 361.383	1942292.3	1942292.3	94.435 %		11:04:00
3	Y 371.029	1202672.3	1202672.3	96.033 %		11:04:00
3	Ag 328.068†	-1649.4	-1718.2	-1.7458 µg/L	-1.7458 ppb	11:04:06
3	As 188.979†	26.8	25.9	38.396 µg/L	38.396 ppb	11:04:26
3	B 249.677†	2139.1	2109.4	46.234 µg/L	46.234 ppb	11:04:06
3	Ba 233.527†	74297.4	78756.2	1978.6 µg/L	1978.6 ppb	11:04:06
3	Be 313.107†	26730.0	24693.6	13.618 µg/L	13.618 ppb	11:04:06
3	Cd 226.502†	335.2	455.9	0.4825 µg/L	0.4825 ppb	11:04:06
3	Co 228.616†	1902.6	2086.5	89.035 µg/L	89.035 ppb	11:04:26
3	Cr 267.716†	4412.2	4795.0	100.40 µg/L	100.40 ppb	11:04:06
3	Cu 324.752†	8979.3	6124.1	75.457 µg/L	75.457 ppb	11:04:06
3	Mn 257.610†	1680220.7	1779452.2	5666.1 µg/L	5666.1 ppb	11:04:00
3	Mo 202.031†	-16.4	-9.5	4.8642 µg/L	4.8642 ppb	11:04:26
3	Ni 231.604†	1778.2	1583.6	86.272 µg/L	86.272 ppb	11:04:26
3	P 214.914†	739.6	577.2	1135.8 µg/L	1135.8 ppb	11:04:26
3	Pb 220.353†	635.6	619.0	170.74 µg/L	170.74 ppb	11:04:26
3	S 181.975 Axial†	105.6	87.8	425.56 µg/L	425.56 ppb	11:04:26
3	Sb 206.836†	17.1	-2.4	15.082 µg/L	15.082 ppb	11:04:26
3	Se 196.026†	-39.4	-55.8	18.891 µg/L	18.891 ppb	11:04:26
3	SiO2†	144309.7	150831.7	28803 µg/L	28803 ppb	11:04:06
3	Si 251.611†	166815.2	176295.4	13304 µg/L	13304 ppb	11:04:00
3	Sn 189.927†	-108.4	-137.3	-39.420 µg/L	-39.420 ppb	11:04:26
3	Ti 334.940†	2304925.3	2440026.8	5407.2 µg/L	5407.2 ppb	11:04:00
3	Tl 190.801†	-56.8	-38.7	2.0591 µg/L	2.0591 ppb	11:04:26
3	U 409.014†	918.0	292.8	-0.0455 µg/L	-0.0455 ppb	11:04:00
3	V 292.402†	20817.9	22136.6	261.89 µg/L	261.89 ppb	11:04:06
3	Zn 213.857†	10376.9	10438.2	262.52 µg/L	262.52 ppb	11:04:06

Mean Data: 241825019|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1938675.7	94.259	%	0.2257				0.24%
Sc RADIAL	108304.8	96.3	%	0.11				0.11%
Y 371.029	1200200.6	95.835	%	0.2235				0.23%
Ag 328.068†	-1689.6	-1.5107	µg/L	0.39449	-1.5107	ppb	0.39449	26.11%
Al 396.153Radial†	356687.1	180260	µg/L	1124.8	180260	ppb	1124.8	0.62%
As 188.979†	23.6	34.011	µg/L	4.5972	34.011	ppb	4.5972	13.52%
B 249.677†	2102.0	45.953	µg/L	1.1153	45.953	ppb	1.1153	2.43%
Ba 233.527†	78544.0	1973.3	µg/L	5.03	1973.3	ppb	5.03	0.26%
Be 313.107†	24604.6	13.561	µg/L	0.0516	13.561	ppb	0.0516	0.38%
Ca 317.933Radial†	62503.4	24811	µg/L	161.9	24811	ppb	161.9	0.65%
Cd 226.502†	465.2	0.7455	µg/L	0.30724	0.7455	ppb	0.30724	41.21%
Co 228.616†	2085.2	88.970	µg/L	0.5729	88.970	ppb	0.5729	0.64%
Cr 267.716†	4746.1	99.378	µg/L	0.8832	99.378	ppb	0.8832	0.89%
Cu 324.752†	6116.0	75.366	µg/L	0.2417	75.366	ppb	0.2417	0.32%
Fe 238.204 Radial†	28658.7	150550	µg/L	1016.2	150550	ppb	1016.2	0.67%
K 766.490 Radial†	26450.5	14341	µg/L	72.3	14341	ppb	72.3	0.50%
Mg 279.077 IEC†	3915.8	21497	µg/L	216.6	21497	ppb	216.6	1.01%
Mn 257.610†	1780357.9	5669.0	µg/L	4.88	5669.0	ppb	4.88	0.09%
Mo 202.031†	-12.2	4.5609	µg/L	0.44603	4.5609	ppb	0.44603	9.78%
Na 589.592 Radial†	7697.2	2135.7	µg/L	4.97	2135.7	ppb	4.97	0.23%

Ni 231.604†	1585.8	86.388	µg/L	0.3459	86.388	ppb	0.3459	0.40%
P 214.914†	578.1	1137.5	µg/L	2.36	1137.5	ppb	2.36	0.21%
Pb 220.353†	609.1	168.14	µg/L	2.284	168.14	ppb	2.284	1.36%
S 181.975 Axial†	88.6	429.90	µg/L	30.174	429.90	ppb	30.174	7.02%
Sb 206.836†	-1.0	16.477	µg/L	2.6861	16.477	ppb	2.6861	16.30%
Se 196.026†	-57.4	16.332	µg/L	7.6424	16.332	ppb	7.6424	46.80%
SiO2†	150487.2	28738	µg/L	65.7	28738	ppb	65.7	0.23%
Si 251.611†	176112.5	13290	µg/L	29.9	13290	ppb	29.9	0.23%
Sn 189.927†	-140.2	-40.867	µg/L	1.7176	-40.867	ppb	1.7176	4.20%
Sr 421.552†	55253.7	311.24	µg/L	1.678	311.24	ppb	1.678	0.54%
Ti 334.940†	2440614.7	5408.5	µg/L	4.85	5408.5	ppb	4.85	0.09%
Tl 190.801†	-34.6	8.2379	µg/L	8.19641	8.2379	ppb	8.19641	99.50%
U 409.014†	360.0	6.2859	µg/L	5.77277	6.2859	ppb	5.77277	91.84%
V 292.402†	22027.9	260.66	µg/L	1.069	260.66	ppb	1.069	0.41%
Zn 213.857†	10395.7	261.40	µg/L	1.093	261.40	ppb	1.093	0.42%

Sequence No.: 30
Sample ID: 241825020|933555|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 326
Date Collected: 12/18/2009 11:04:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825020|933555|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106444.8	106444.8	94.6	%			11:05:08
1	Al 396.153Radial†	83402.7	87901.8	44423	µg/L	44423	ppb	11:05:08
1	Ca 317.933Radial†	26179.9	27168.8	10785	µg/L	10785	ppb	11:05:29
1	Fe 238.204 Radial†	20318.7	21459.5	112730	µg/L	112730	ppb	11:05:29
1	K 766.490 Radial†	17730.4	18040.8	9781.7	µg/L	9781.7	ppb	11:05:08
1	Mg 279.077 IEC†	2380.8	2496.0	13678	µg/L	13678	ppb	11:05:29
1	Na 589.592 Radial†	2739.2	3598.4	998.42	µg/L	998.42	ppb	11:05:29
1	Sr 421.552†	32209.2	34099.2	192.08	µg/L	192.08	ppb	11:05:08
1	Sc 361.383	1934311.1	1934311.1	94.047	%			11:06:32
1	Y 371.029	1184504.3	1184504.3	94.582	%			11:06:32
1	Ag 328.068†	-1226.5	-1275.9	-1.1391	µg/L	-1.1391	ppb	11:06:38
1	As 188.979†	20.9	19.8	28.307	µg/L	28.307	ppb	11:06:59
1	B 249.677†	1548.3	1490.6	30.710	µg/L	30.710	ppb	11:06:38
1	Ba 233.527†	45683.3	48655.5	1222.5	µg/L	1222.5	ppb	11:06:38
1	Be 313.107†	14892.6	12223.8	6.5531	µg/L	6.5531	ppb	11:06:38
1	Cd 226.502†	212.5	326.8	-0.0359	µg/L	-0.0359	ppb	11:06:59
1	Co 228.616†	1556.2	1726.4	76.377	µg/L	76.377	ppb	11:06:59
1	Cr 267.716†	2859.4	3163.2	66.311	µg/L	66.311	ppb	11:06:59
1	Cu 324.752†	7123.9	4190.5	53.696	µg/L	53.696	ppb	11:06:38
1	Mn 257.610†	1530653.9	1627760.0	5179.9	µg/L	5179.9	ppb	11:06:32
1	Mo 202.031†	30.4	40.3	8.9205	µg/L	8.9205	ppb	11:06:59
1	Ni 231.604†	1187.7	963.5	52.487	µg/L	52.487	ppb	11:06:59
1	P 214.914†	575.3	405.7	759.97	µg/L	759.97	ppb	11:06:59
1	Pb 220.353†	479.8	456.1	118.04	µg/L	118.04	ppb	11:06:59
1	S 181.975 Axial†	115.4	98.7	488.42	µg/L	488.42	ppb	11:06:59
1	Sb 206.836†	18.1	-1.3	9.2954	µg/L	9.2954	ppb	11:06:59
1	Se 196.026†	-29.3	-45.2	8.9332	µg/L	8.9332	ppb	11:06:59
1	SiO2†	99270.5	103572.2	19779	µg/L	19779	ppb	11:06:38
1	Si 251.611†	113728.7	120577.5	9117.9	µg/L	9117.9	ppb	11:06:38
1	Sn 189.927†	-59.0	-85.2	-23.147	µg/L	-23.147	ppb	11:06:59
1	Ti 334.940†	1352297.2	1437172.5	3185.0	µg/L	3185.0	ppb	11:06:32
1	Tl 190.801†	-40.1	-21.2	10.193	µg/L	10.193	ppb	11:06:59
1	U 409.014†	711.5	77.3	-13.532	µg/L	-13.532	ppb	11:06:38
1	V 292.402†	16493.6	17629.5	207.98	µg/L	207.98	ppb	11:06:38
1	Zn 213.857†	9160.9	9190.6	233.55	µg/L	233.55	ppb	11:06:38
2	Sc RADIAL	106644.4	106644.4	94.8	%			11:05:34
2	Al 396.153Radial†	83952.9	88317.1	44633	µg/L	44633	ppb	11:05:34
2	Ca 317.933Radial†	26283.0	27225.8	10807	µg/L	10807	ppb	11:05:55
2	Fe 238.204 Radial†	20416.0	21522.0	113060	µg/L	113060	ppb	11:05:55
2	K 766.490 Radial†	17871.7	18154.9	9843.5	µg/L	9843.5	ppb	11:05:34
2	Mg 279.077 IEC†	2394.8	2506.0	13733	µg/L	13733	ppb	11:05:55
2	Na 589.592 Radial†	2725.7	3578.8	992.99	µg/L	992.99	ppb	11:05:55
2	Sr 421.552†	32400.2	34236.9	192.85	µg/L	192.85	ppb	11:05:34
2	Sc 361.383	1946239.9	1946239.9	94.627	%			11:07:05
2	Y 371.029	1192850.5	1192850.5	95.248	%			11:07:05
2	Ag 328.068†	-1248.9	-1291.6	-1.2575	µg/L	-1.2575	ppb	11:07:11
2	As 188.979†	16.5	15.0	19.034	µg/L	19.034	ppb	11:07:31
2	B 249.677†	1512.3	1442.5	28.473	µg/L	28.473	ppb	11:07:11
2	Ba 233.527†	45849.2	48533.1	1219.4	µg/L	1219.4	ppb	11:07:11
2	Be 313.107†	14998.1	12238.2	6.5644	µg/L	6.5644	ppb	11:07:11
2	Cd 226.502†	230.2	344.2	0.3986	µg/L	0.3986	ppb	11:07:31
2	Co 228.616†	1555.1	1715.1	75.847	µg/L	75.847	ppb	11:07:31
2	Cr 267.716†	2867.8	3153.4	66.105	µg/L	66.105	ppb	11:07:31
2	Cu 324.752†	7064.6	4081.4	52.999	µg/L	52.999	ppb	11:07:11
2	Mn 257.610†	1538456.1	1626029.6	5174.5	µg/L	5174.5	ppb	11:07:05
2	Mo 202.031†	29.0	38.5	8.7399	µg/L	8.7399	ppb	11:07:31
2	Ni 231.604†	1188.1	956.2	52.089	µg/L	52.089	ppb	11:07:31
2	P 214.914†	568.3	394.6	735.64	µg/L	735.64	ppb	11:07:31
2	Pb 220.353†	474.3	447.1	115.77	µg/L	115.77	ppb	11:07:31

2	S 181.975 Axial†	111.1	93.3	460.74 µg/L	460.74 ppb	11:07:31
2	Sb 206.836†	13.9	-5.9	4.7487 µg/L	4.7487 ppb	11:07:31
2	Se 196.026†	-27.7	-43.4	11.821 µg/L	11.821 ppb	11:07:31
2	SiO2†	99605.3	103279.1	19723 µg/L	19723 ppb	11:07:11
2	Si 251.611†	114041.2	120166.7	9086.6 µg/L	9086.6 ppb	11:07:11
2	Sn 189.927†	-58.0	-83.7	-22.398 µg/L	-22.398 ppb	11:07:31
2	Ti 334.940†	1358075.2	1434465.5	3179.0 µg/L	3179.0 ppb	11:07:05
2	Tl 190.801†	-50.1	-31.5	-5.4299 µg/L	-5.4299 ppb	11:07:31
2	U 409.014†	743.7	106.7	-10.832 µg/L	-10.832 ppb	11:07:11
2	V 292.402†	16545.6	17577.0	207.42 µg/L	207.42 ppb	11:07:11
2	Zn 213.857†	9208.9	9181.6	233.27 µg/L	233.27 ppb	11:07:11
3	Sc RADIAL	106359.9	106359.9	94.6 %		11:06:00
3	Al 396.153Radial†	84057.8	88664.8	44809 µg/L	44809 ppb	11:06:00
3	Ca 317.933Radial†	26235.2	27249.4	10817 µg/L	10817 ppb	11:06:20
3	Fe 238.204 Radial†	20329.2	21487.8	112880 µg/L	112880 ppb	11:06:20
3	K 766.490 Radial†	17921.9	18258.3	9899.6 µg/L	9899.6 ppb	11:06:00
3	Mg 279.077 IEC†	2387.2	2504.7	13727 µg/L	13727 ppb	11:06:20
3	Na 589.592 Radial†	2725.3	3586.0	994.98 µg/L	994.98 ppb	11:06:20
3	Sr 421.552†	32474.6	34407.1	193.81 µg/L	193.81 ppb	11:06:00
3	Sc 361.383	1943584.4	1943584.4	94.498 %		11:07:38
3	Y 371.029	1189923.8	1189923.8	95.015 %		11:07:38
3	Ag 328.068†	-1201.1	-1242.7	-0.8418 µg/L	-0.8418 ppb	11:07:44
3	As 188.979†	15.9	14.3	17.895 µg/L	17.895 ppb	11:08:05
3	B 249.677†	1545.0	1479.3	30.161 µg/L	30.161 ppb	11:07:44
3	Ba 233.527†	45667.1	48406.7	1216.2 µg/L	1216.2 ppb	11:07:44
3	Be 313.107†	14881.9	12136.9	6.4982 µg/L	6.4982 ppb	11:07:44
3	Cd 226.502†	220.3	334.0	0.1380 µg/L	0.1380 ppb	11:08:05
3	Co 228.616†	1564.5	1727.4	76.424 µg/L	76.424 ppb	11:08:05
3	Cr 267.716†	2878.5	3168.9	66.426 µg/L	66.426 ppb	11:08:05
3	Cu 324.752†	7072.5	4099.9	53.091 µg/L	53.091 ppb	11:07:44
3	Mn 257.610†	1539922.6	1629802.9	5186.4 µg/L	5186.4 ppb	11:07:38
3	Mo 202.031†	35.0	45.0	9.4520 µg/L	9.4520 ppb	11:08:05
3	Ni 231.604†	1176.3	945.4	51.501 µg/L	51.501 ppb	11:08:05
3	P 214.914†	581.1	408.9	767.00 µg/L	767.00 ppb	11:08:05
3	Pb 220.353†	477.8	451.5	116.92 µg/L	116.92 ppb	11:08:05
3	S 181.975 Axial†	112.8	95.3	470.96 µg/L	470.96 ppb	11:08:05
3	Sb 206.836†	19.5	0.1	10.650 µg/L	10.650 ppb	11:08:05
3	Se 196.026†	-24.7	-40.3	16.245 µg/L	16.245 ppb	11:08:05
3	SiO2†	99771.9	103599.2	19784 µg/L	19784 ppb	11:07:44
3	Si 251.611†	114266.8	120570.0	9117.2 µg/L	9117.2 ppb	11:07:44
3	Sn 189.927†	-56.8	-82.6	-21.839 µg/L	-21.839 ppb	11:08:05
3	Ti 334.940†	1358653.9	1437038.8	3184.7 µg/L	3184.7 ppb	11:07:38
3	Tl 190.801†	-40.0	-20.9	10.735 µg/L	10.735 ppb	11:08:05
3	U 409.014†	662.1	21.5	-18.801 µg/L	-18.801 ppb	11:07:44
3	V 292.402†	16448.3	17497.9	206.51 µg/L	206.51 ppb	11:07:44
3	Zn 213.857†	9193.6	9178.7	233.22 µg/L	233.22 ppb	11:07:44

Mean Data: 241825020|933555|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941378.5	94.391	%	0.3045				0.32%
Sc RADIAL	106483.0	94.7	%	0.13				0.14%
Y 371.029	1189092.9	94.948	%	0.3381				0.36%
Ag 328.068†	-1270.0	-1.0794	µg/L	0.21416	-1.0794	ppb	0.21416	19.84%
Al 396.153Radial†	88294.6	44622	µg/L	193.1	44622	ppb	193.1	0.43%
As 188.979†	16.4	21.745	µg/L	5.7110	21.745	ppb	5.7110	26.26%
B 249.677†	1470.8	29.781	µg/L	1.1659	29.781	ppb	1.1659	3.91%
Ba 233.527†	48531.8	1219.4	µg/L	3.13	1219.4	ppb	3.13	0.26%
Be 313.107†	12199.6	6.5386	µg/L	0.03541	6.5386	ppb	0.03541	0.54%
Ca 317.933Radial†	27214.7	10803	µg/L	16.4	10803	ppb	16.4	0.15%
Cd 226.502†	335.0	0.1669	µg/L	0.21868	0.1669	ppb	0.21868	131.03%
Co 228.616†	1723.0	76.216	µg/L	0.3205	76.216	ppb	0.3205	0.42%
Cr 267.716†	3161.8	66.281	µg/L	0.1629	66.281	ppb	0.1629	0.25%
Cu 324.752†	4124.0	53.262	µg/L	0.3787	53.262	ppb	0.3787	0.71%
Fe 238.204 Radial†	21489.8	112890	µg/L	164.2	112890	ppb	164.2	0.15%
K 766.490 Radial†	18151.3	9841.6	µg/L	58.99	9841.6	ppb	58.99	0.60%
Mg 279.077 IEC†	2502.2	13713	µg/L	30.0	13713	ppb	30.0	0.22%
Mn 257.610†	1627864.1	5180.3	µg/L	5.98	5180.3	ppb	5.98	0.12%
Mo 202.031†	41.2	9.0375	µg/L	0.37018	9.0375	ppb	0.37018	4.10%
Na 589.592 Radial†	3587.7	995.47	µg/L	2.749	995.47	ppb	2.749	0.28%

Ni 231.604†	955.0	52.025	µg/L	0.4957	52.025	ppb	0.4957	0.95%
P 214.914†	403.1	754.20	µg/L	16.453	754.20	ppb	16.453	2.18%
Pb 220.353†	451.5	116.91	µg/L	1.135	116.91	ppb	1.135	0.97%
S 181.975 Axial†	95.8	473.37	µg/L	14.001	473.37	ppb	14.001	2.96%
Sb 206.836†	-2.4	8.2315	µg/L	3.09127	8.2315	ppb	3.09127	37.55%
Se 196.026†	-43.0	12.333	µg/L	3.6825	12.333	ppb	3.6825	29.86%
SiO2†	103483.5	19762	µg/L	33.9	19762	ppb	33.9	0.17%
Si 251.611†	120438.1	9107.2	µg/L	17.88	9107.2	ppb	17.88	0.20%
Sn 189.927†	-83.8	-22.461	µg/L	0.6563	-22.461	ppb	0.6563	2.92%
Sr 421.552†	34247.7	192.92	µg/L	0.869	192.92	ppb	0.869	0.45%
Ti 334.940†	1436225.6	3182.9	µg/L	3.38	3182.9	ppb	3.38	0.11%
Tl 190.801†	-24.5	5.1660	µg/L	9.18037	5.1660	ppb	9.18037	177.71%
U 409.014†	68.5	-14.389	µg/L	4.0529	-14.389	ppb	4.0529	28.17%
V 292.402†	17568.1	207.30	µg/L	0.745	207.30	ppb	0.745	0.36%
Zn 213.857†	9183.6	233.35	µg/L	0.177	233.35	ppb	0.177	0.08%

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 11:08:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107618.4	107618.4	95.7	%			11:08:50
1	Al 396.153Radial†	10050.2	10274.4	5173.4	µg/L	5173.4	ppb	11:08:50
1	Ca 317.933Radial†	12272.9	12331.9	4895.2	µg/L	4895.2	ppb	11:09:10
1	Fe 238.204 Radial†	967.7	1000.2	5270.8	µg/L	5270.8	ppb	11:09:10
1	K 766.490 Radial†	9721.4	9465.8	5132.3	µg/L	5132.3	ppb	11:08:50
1	Mg 279.077 IEC†	908.8	930.0	5163.4	µg/L	5163.4	ppb	11:09:10
1	Na 589.592 Radial†	34023.2	36264.2	10062	µg/L	10062	ppb	11:08:50
1	Sr 421.552†	85596.5	89527.2	504.30	µg/L	504.30	ppb	11:08:50
1	Sc 361.383	1917199.6	1917199.6	93.215	%			11:10:13
1	Y 371.029	1161434.1	1161434.1	92.740	%			11:10:13
1	Ag 328.068†	53323.7	57233.2	515.05	µg/L	515.05	ppb	11:10:18
1	As 188.979†	253.1	269.1	511.82	µg/L	511.82	ppb	11:10:39
1	B 249.677†	10610.8	11227.5	496.66	µg/L	496.66	ppb	11:10:18
1	Ba 233.527†	18734.8	20179.1	507.90	µg/L	507.90	ppb	11:10:18
1	Be 313.107†	748688.9	799571.1	505.61	µg/L	505.61	ppb	11:10:13
1	Cd 226.502†	17597.9	18979.6	502.06	µg/L	502.06	ppb	11:10:18
1	Co 228.616†	9711.1	10489.7	504.54	µg/L	504.54	ppb	11:10:18
1	Cr 267.716†	22450.9	24207.8	505.10	µg/L	505.10	ppb	11:10:18
1	Cu 324.752†	71026.3	72811.7	513.40	µg/L	513.40	ppb	11:10:18
1	Mn 257.610†	151246.2	162477.4	516.29	µg/L	516.29	ppb	11:10:13
1	Mo 202.031†	4179.6	4491.7	501.30	µg/L	501.30	ppb	11:10:39
1	Ni 231.604†	8959.8	9312.5	507.33	µg/L	507.33	ppb	11:10:18
1	P 214.914†	1316.5	1206.3	2562.6	µg/L	2562.6	ppb	11:10:39
1	Pb 220.353†	1932.5	2019.0	512.53	µg/L	512.53	ppb	11:10:39
1	S 181.975 Axial†	208.6	199.7	1024.7	µg/L	1024.7	ppb	11:10:39
1	Sb 206.836†	495.4	510.9	505.51	µg/L	505.51	ppb	11:10:39
1	Se 196.026†	335.7	346.0	506.24	µg/L	506.24	ppb	11:10:39
1	SiO2†	28820.0	28936.0	5525.7	µg/L	5525.7	ppb	11:10:18
1	Si 251.611†	31751.4	33712.8	2533.9	µg/L	2533.9	ppb	11:10:18
1	Sn 189.927†	976.6	1025.2	502.57	µg/L	502.57	ppb	11:10:39
1	Ti 334.940†	215025.2	229957.0	509.45	µg/L	509.45	ppb	11:10:13
1	Tl 190.801†	287.5	329.9	500.29	µg/L	500.29	ppb	11:10:39
1	U 409.014†	5811.9	5555.7	520.88	µg/L	520.88	ppb	11:10:18
1	V 292.402†	41852.6	44990.8	511.97	µg/L	511.97	ppb	11:10:18
1	Zn 213.857†	18256.0	19034.6	505.92	µg/L	505.92	ppb	11:10:18
2	Sc RADIAL	106132.8	106132.8	94.4	%			11:09:16
2	Al 396.153Radial†	9941.7	10306.4	5189.7	µg/L	5189.7	ppb	11:09:16
2	Ca 317.933Radial†	12324.8	12566.5	4988.3	µg/L	4988.3	ppb	11:09:36
2	Fe 238.204 Radial†	965.0	1011.5	5330.1	µg/L	5330.1	ppb	11:09:36
2	K 766.490 Radial†	9650.3	9532.6	5168.6	µg/L	5168.6	ppb	11:09:16
2	Mg 279.077 IEC†	908.9	943.4	5237.3	µg/L	5237.3	ppb	11:09:36
2	Na 589.592 Radial†	33874.5	36604.3	10156	µg/L	10156	ppb	11:09:16
2	Sr 421.552†	84647.3	89773.4	505.69	µg/L	505.69	ppb	11:09:16
2	Sc 361.383	1928639.5	1928639.5	93.771	%			11:10:45
2	Y 371.029	1165407.6	1165407.6	93.057	%			11:10:45
2	Ag 328.068†	53685.1	57279.3	515.49	µg/L	515.49	ppb	11:10:51
2	As 188.979†	243.4	257.1	489.04	µg/L	489.04	ppb	11:11:11
2	B 249.677†	10675.6	11229.0	496.71	µg/L	496.71	ppb	11:10:51
2	Ba 233.527†	18917.6	20254.8	509.81	µg/L	509.81	ppb	11:10:51
2	Be 313.107†	748826.0	794953.2	502.69	µg/L	502.69	ppb	11:10:45
2	Cd 226.502†	17713.1	18990.6	502.35	µg/L	502.35	ppb	11:10:51
2	Co 228.616†	9799.9	10522.5	506.12	µg/L	506.12	ppb	11:10:51
2	Cr 267.716†	22695.9	24326.2	507.57	µg/L	507.57	ppb	11:10:51
2	Cu 324.752†	71617.0	72989.6	514.66	µg/L	514.66	ppb	11:10:51
2	Mn 257.610†	151219.6	161486.6	513.15	µg/L	513.15	ppb	11:10:45
2	Mo 202.031†	4182.6	4468.3	498.69	µg/L	498.69	ppb	11:11:11
2	Ni 231.604†	9028.1	9328.4	508.20	µg/L	508.20	ppb	11:10:51
2	P 214.914†	1308.2	1189.1	2524.9	µg/L	2524.9	ppb	11:11:11
2	Pb 220.353†	1921.4	1994.9	506.41	µg/L	506.41	ppb	11:11:11

2	S 181.975 Axial†	204.4	193.9	994.84 µg/L	994.84 ppb	11:11:11
2	Sb 206.836†	499.8	512.5	507.05 µg/L	507.05 ppb	11:11:11
2	Se 196.026†	334.1	342.2	500.69 µg/L	500.69 ppb	11:11:11
2	SiO2†	29269.7	29232.2	5582.3 µg/L	5582.3 ppb	11:10:51
2	Si 251.611†	32302.1	34098.1	2563.8 µg/L	2563.8 ppb	11:10:51
2	Sn 189.927†	968.2	1010.1	495.23 µg/L	495.23 ppb	11:11:11
2	Ti 334.940†	215103.4	228672.2	506.60 µg/L	506.60 ppb	11:10:45
2	Tl 190.801†	292.8	333.6	505.93 µg/L	505.93 ppb	11:11:11
2	U 409.014†	5889.4	5601.3	525.15 µg/L	525.15 ppb	11:10:51
2	V 292.402†	42279.8	45180.0	514.09 µg/L	514.09 ppb	11:10:51
2	Zn 213.857†	18444.2	19119.2	508.17 µg/L	508.17 ppb	11:10:51
3	Sc RADIAL	106493.6	106493.6	94.7 %		11:09:42
3	Al 396.153Radial†	10021.7	10355.2	5214.5 µg/L	5214.5 ppb	11:09:42
3	Ca 317.933Radial†	12299.3	12495.3	4960.1 µg/L	4960.1 ppb	11:10:02
3	Fe 238.204 Radial†	960.5	1003.3	5286.8 µg/L	5286.8 ppb	11:10:02
3	K 766.490 Radial†	9703.3	9554.0	5180.1 µg/L	5180.1 ppb	11:09:42
3	Mg 279.077 IEC†	909.1	940.4	5220.6 µg/L	5220.6 ppb	11:10:02
3	Na 589.592 Radial†	34109.9	36731.4	10192 µg/L	10192 ppb	11:09:42
3	Sr 421.552†	85379.8	90243.2	508.33 µg/L	508.33 ppb	11:09:42
3	Sc 361.383	1919746.7	1919746.7	93.339 %		11:11:17
3	Y 371.029	1160703.1	1160703.1	92.681 %		11:11:17
3	Ag 328.068†	53306.7	57139.1	514.21 µg/L	514.21 ppb	11:11:23
3	As 188.979†	247.8	263.0	500.21 µg/L	500.21 ppb	11:11:43
3	B 249.677†	10573.3	11172.1	494.20 µg/L	494.20 ppb	11:11:23
3	Ba 233.527†	18707.4	20123.1	506.49 µg/L	506.49 ppb	11:11:23
3	Be 313.107†	749450.6	799321.6	505.45 µg/L	505.45 ppb	11:11:17
3	Cd 226.502†	17554.9	18908.5	500.18 µg/L	500.18 ppb	11:11:23
3	Co 228.616†	9704.6	10468.8	503.53 µg/L	503.53 ppb	11:11:23
3	Cr 267.716†	22501.1	24229.6	505.55 µg/L	505.55 ppb	11:11:23
3	Cu 324.752†	71069.9	72757.3	513.02 µg/L	513.02 ppb	11:11:23
3	Mn 257.610†	151524.0	162559.7	516.55 µg/L	516.55 ppb	11:11:17
3	Mo 202.031†	4138.7	4441.9	495.75 µg/L	495.75 ppb	11:11:43
3	Ni 231.604†	8946.3	9285.4	505.85 µg/L	505.85 ppb	11:11:23
3	P 214.914†	1295.7	1182.2	2510.2 µg/L	2510.2 ppb	11:11:43
3	Pb 220.353†	1913.3	1995.7	506.60 µg/L	506.60 ppb	11:11:43
3	S 181.975 Axial†	205.3	196.0	1005.3 µg/L	1005.3 ppb	11:11:43
3	Sb 206.836†	489.5	503.8	498.49 µg/L	498.49 ppb	11:11:43
3	Se 196.026†	331.0	340.6	498.28 µg/L	498.28 ppb	11:11:43
3	SiO2†	28802.4	28876.1	5514.3 µg/L	5514.3 ppb	11:11:23
3	Si 251.611†	31727.0	33641.5	2528.8 µg/L	2528.8 ppb	11:11:23
3	Sn 189.927†	965.9	1012.4	496.33 µg/L	496.33 ppb	11:11:43
3	Ti 334.940†	215258.7	229901.2	509.32 µg/L	509.32 ppb	11:11:17
3	Tl 190.801†	290.1	332.2	503.77 µg/L	503.77 ppb	11:11:43
3	U 409.014†	5754.3	5485.7	514.30 µg/L	514.30 ppb	11:11:23
3	V 292.402†	41816.5	44892.6	510.81 µg/L	510.81 ppb	11:11:23
3	Zn 213.857†	18324.4	19081.9	507.19 µg/L	507.19 ppb	11:11:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1921861.9	93.442	%	0.2920				0.31%
Sc RADIAL	106748.2	94.9	%	0.69				0.73%
Y 371.029	1162514.9	92.826	%	0.2021				0.22%
Ag 328.068†	57217.2	514.92	µg/L	0.650	514.92	ppb	0.650	0.13%
QC value within limits for Ag 328.068 Recovery = 102.98%								
Al 396.153Radial†	10312.0	5192.5	µg/L	20.68	5192.5	ppb	20.68	0.40%
QC value within limits for Al 396.153Radial Recovery = 103.85%								
As 188.979†	263.1	500.36	µg/L	11.387	500.36	ppb	11.387	2.28%
QC value within limits for As 188.979 Recovery = 100.07%								
B 249.677†	11209.6	495.86	µg/L	1.436	495.86	ppb	1.436	0.29%
QC value within limits for B 249.677 Recovery = 99.17%								
Ba 233.527†	20185.7	508.07	µg/L	1.664	508.07	ppb	1.664	0.33%
QC value within limits for Ba 233.527 Recovery = 101.61%								
Be 313.107†	797948.6	504.58	µg/L	1.642	504.58	ppb	1.642	0.33%
QC value within limits for Be 313.107 Recovery = 100.92%								
Ca 317.933Radial†	12464.6	4947.9	µg/L	47.73	4947.9	ppb	47.73	0.96%
QC value within limits for Ca 317.933Radial Recovery = 98.96%								
Cd 226.502†	18959.6	501.53	µg/L	1.181	501.53	ppb	1.181	0.24%
QC value within limits for Cd 226.502 Recovery = 100.31%								
Co 228.616†	10493.7	504.73	µg/L	1.307	504.73	ppb	1.307	0.26%

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   QC value within limits for Co 228.616  Recovery = 100.95%
Cr 267.716†            24254.5      506.07 µg/L        1.315      506.07 ppb          1.315   0.26%
   QC value within limits for Cr 267.716  Recovery = 101.21%
Cu 324.752†            72852.9      513.69 µg/L        0.861      513.69 ppb          0.861   0.17%
   QC value within limits for Cu 324.752  Recovery = 102.74%
Fe 238.204 Radial†      1005.0      5295.9 µg/L        30.66      5295.9 ppb          30.66   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.92%
K 766.490 Radial†       9517.5      5160.3 µg/L        24.96      5160.3 ppb          24.96   0.48%
   QC value within limits for K 766.490 Radial  Recovery = 103.21%
Mg 279.077 IEC†          937.9      5207.1 µg/L        38.75      5207.1 ppb          38.75   0.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.14%
Mn 257.610†           162174.6      515.33 µg/L        1.892      515.33 ppb          1.892   0.37%
   QC value within limits for Mn 257.610  Recovery = 103.07%
Mo 202.031†             4467.3      498.58 µg/L        2.777      498.58 ppb          2.777   0.56%
   QC value within limits for Mo 202.031  Recovery = 99.72%
Na 589.592 Radial†     36533.3       10137 µg/L         67.0       10137 ppb           67.0   0.66%
   QC value within limits for Na 589.592 Radial  Recovery = 101.37%
Ni 231.604†             9308.8      507.13 µg/L        1.185      507.13 ppb          1.185   0.23%
   QC value within limits for Ni 231.604  Recovery = 101.43%
P 214.914†              1192.6      2532.6 µg/L        27.05      2532.6 ppb          27.05   1.07%
   QC value within limits for P 214.914  Recovery = 101.30%
Pb 220.353†             2003.2      508.51 µg/L        3.479      508.51 ppb          3.479   0.68%
   QC value within limits for Pb 220.353  Recovery = 101.70%
S 181.975 Axial†         196.5      1008.3 µg/L        15.16      1008.3 ppb          15.16   1.50%
   QC value within limits for S 181.975 Axial  Recovery = 100.83%
Sb 206.836†              509.1      503.68 µg/L        4.566      503.68 ppb          4.566   0.91%
   QC value within limits for Sb 206.836  Recovery = 100.74%
Se 196.026†              342.9      501.74 µg/L        4.079      501.74 ppb          4.079   0.81%
   QC value within limits for Se 196.026  Recovery = 100.35%
SiO2†                   29014.8      5540.8 µg/L        36.41      5540.8 ppb          36.41   0.66%
   QC value within limits for SiO2  Recovery = 103.61%
Si 251.611†             33817.4      2542.2 µg/L        18.94      2542.2 ppb          18.94   0.74%
   QC value within limits for Si 251.611  Recovery = 101.69%
Sn 189.927†             1015.9      498.05 µg/L        3.956      498.05 ppb          3.956   0.79%
   QC value within limits for Sn 189.927  Recovery = 99.61%
Sr 421.552†             89847.9      506.11 µg/L        2.049      506.11 ppb          2.049   0.40%
   QC value within limits for Sr 421.552  Recovery = 101.22%
Ti 334.940†            229510.1      508.46 µg/L        1.612      508.46 ppb          1.612   0.32%
   QC value within limits for Ti 334.940  Recovery = 101.69%
Tl 190.801†              331.9      503.33 µg/L        2.847      503.33 ppb          2.847   0.57%
   QC value within limits for Tl 190.801  Recovery = 100.67%
U 409.014†              5547.6      520.11 µg/L        5.466      520.11 ppb          5.466   1.05%
   QC value within limits for U 409.014  Recovery = 104.02%
V 292.402†              45021.2      512.29 µg/L        1.665      512.29 ppb          1.665   0.32%
   QC value within limits for V 292.402  Recovery = 102.46%
Zn 213.857†             19078.6      507.09 µg/L        1.129      507.09 ppb          1.129   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.42%
All analyte(s) passed QC.
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Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 11:11:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104638.5	104638.5	93.0	%			11:12:25
1	Al 396.153Radial†	221.8	8.6	4.3202	µg/L	4.3202	ppb	11:12:25
1	Ca 317.933Radial†	397.9	-67.7	-26.869	µg/L	-26.869	ppb	11:12:45
1	Fe 238.204 Radial†	13.3	3.1	16.205	µg/L	16.205	ppb	11:12:45
1	K 766.490 Radial†	660.6	15.2	8.2488	µg/L	8.2488	ppb	11:12:25
1	Mg 279.077 IEC†	20.0	1.6	9.0439	µg/L	9.0439	ppb	11:12:45
1	Na 589.592 Radial†	-687.2	-34.8	-9.6493	µg/L	-9.6493	ppb	11:12:25
1	Sr 421.552†	-22.8	39.3	0.2215	µg/L	0.2215	ppb	11:12:25
1	Sc 361.383	1899256.4	1899256.4	92.343	%			11:13:47
1	Y 371.029	1153725.2	1153725.2	92.124	%			11:13:47
1	Ag 328.068†	-147.4	-131.4	-1.1690	µg/L	-1.1690	ppb	11:13:52
1	As 188.979†	6.2	4.2	8.0634	µg/L	8.0634	ppb	11:14:13
1	B 249.677†	152.3	9.2	0.4036	µg/L	0.4036	ppb	11:14:13
1	Ba 233.527†	-68.9	6.1	0.1537	µg/L	0.1537	ppb	11:14:13
1	Be 313.107†	3511.4	191.1	0.1207	µg/L	0.1207	ppb	11:13:52
1	Cd 226.502†	-93.8	-0.7	-0.0080	µg/L	-0.0080	ppb	11:14:13
1	Co 228.616†	-79.5	-14.4	-0.6912	µg/L	-0.6912	ppb	11:14:13
1	Cr 267.716†	-98.5	16.1	0.3371	µg/L	0.3371	ppb	11:13:52
1	Cu 324.752†	3115.6	-10.3	-0.0691	µg/L	-0.0691	ppb	11:13:52
1	Mn 257.610†	-149.2	61.0	0.1958	µg/L	0.1958	ppb	11:14:13
1	Mo 202.031†	1.4	9.4	1.0491	µg/L	1.0491	ppb	11:14:13
1	Ni 231.604†	264.8	-12.7	-0.6915	µg/L	-0.6915	ppb	11:14:13
1	P 214.914†	215.1	26.9	58.513	µg/L	58.513	ppb	11:14:13
1	Pb 220.353†	59.5	10.3	2.6090	µg/L	2.6090	ppb	11:14:13
1	S 181.975 Axial†	20.6	-1.7	-8.6567	µg/L	-8.6567	ppb	11:14:13
1	Sb 206.836†	19.2	0.3	0.2615	µg/L	0.2615	ppb	11:14:13
1	Se 196.026†	10.0	-3.2	-4.7170	µg/L	-4.7170	ppb	11:14:13
1	SiO2†	1938.5	117.6	22.452	µg/L	22.452	ppb	11:13:52
1	Si 251.611†	370.4	51.5	3.8618	µg/L	3.8618	ppb	11:14:13
1	Sn 189.927†	23.2	2.6	1.2871	µg/L	1.2871	ppb	11:14:13
1	Ti 334.940†	820.4	169.5	0.3773	µg/L	0.3773	ppb	11:13:52
1	Tl 190.801†	-21.2	-1.6	-2.3812	µg/L	-2.3812	ppb	11:14:13
1	U 409.014†	812.2	200.3	18.806	µg/L	18.806	ppb	11:13:52
1	V 292.402†	-50.3	37.5	0.4621	µg/L	0.4621	ppb	11:13:52
1	Zn 213.857†	519.2	12.1	0.3254	µg/L	0.3254	ppb	11:14:13
2	Sc RADIAL	104779.1	104779.1	93.2	%			11:12:51
2	Al 396.153Radial†	241.9	29.9	15.079	µg/L	15.079	ppb	11:12:51
2	Ca 317.933Radial†	393.0	-73.6	-29.207	µg/L	-29.207	ppb	11:13:11
2	Fe 238.204 Radial†	16.8	6.8	35.725	µg/L	35.725	ppb	11:13:11
2	K 766.490 Radial†	693.5	49.6	26.888	µg/L	26.888	ppb	11:12:51
2	Mg 279.077 IEC†	12.3	-6.6	-36.618	µg/L	-36.618	ppb	11:13:11
2	Na 589.592 Radial†	-698.9	-46.4	-12.864	µg/L	-12.864	ppb	11:12:51
2	Sr 421.552†	-35.4	25.7	0.1449	µg/L	0.1449	ppb	11:12:51
2	Sc 361.383	1900239.3	1900239.3	92.391	%			11:14:19
2	Y 371.029	1155609.3	1155609.3	92.275	%			11:14:19
2	Ag 328.068†	-144.2	-127.8	-1.1348	µg/L	-1.1348	ppb	11:14:24
2	As 188.979†	1.0	-1.4	-2.5961	µg/L	-2.5961	ppb	11:14:45
2	B 249.677†	135.8	-8.7	-0.3963	µg/L	-0.3963	ppb	11:14:45
2	Ba 233.527†	-84.5	-10.7	-0.2688	µg/L	-0.2688	ppb	11:14:45
2	Be 313.107†	3550.3	231.2	0.1462	µg/L	0.1462	ppb	11:14:24
2	Cd 226.502†	-92.3	1.0	0.0375	µg/L	0.0375	ppb	11:14:45
2	Co 228.616†	-70.0	-4.0	-0.1930	µg/L	-0.1930	ppb	11:14:45
2	Cr 267.716†	-114.2	-0.9	-0.0171	µg/L	-0.0171	ppb	11:14:24
2	Cu 324.752†	3102.2	-26.6	-0.1796	µg/L	-0.1796	ppb	11:14:24
2	Mn 257.610†	-149.5	60.8	0.1974	µg/L	0.1974	ppb	11:14:45
2	Mo 202.031†	-0.4	7.5	0.8366	µg/L	0.8366	ppb	11:14:45
2	Ni 231.604†	263.6	-14.1	-0.7660	µg/L	-0.7660	ppb	11:14:45
2	P 214.914†	204.5	15.3	33.242	µg/L	33.242	ppb	11:14:45
2	Pb 220.353†	60.8	11.7	2.9562	µg/L	2.9562	ppb	11:14:45

2	S 181.975 Axial†	27.1	5.3	27.188 µg/L	27.188 ppb		11:14:45
2	Sb 206.836†	20.4	1.5	1.5001 µg/L	1.5001 ppb		11:14:45
2	Se 196.026†	11.1	-2.1	-3.0363 µg/L	-3.0363 ppb		11:14:45
2	SiO2†	1948.9	127.7	24.385 µg/L	24.385 ppb		11:14:24
2	Si 251.611†	333.4	11.2	0.8158 µg/L	0.8158 ppb		11:14:45
2	Sn 189.927†	21.3	0.6	0.2862 µg/L	0.2862 ppb		11:14:45
2	Ti 334.940†	742.2	84.4	0.1888 µg/L	0.1888 ppb		11:14:24
2	Tl 190.801†	-18.5	1.4	2.1507 µg/L	2.1507 ppb		11:14:45
2	U 409.014†	824.2	212.9	19.986 µg/L	19.986 ppb		11:14:24
2	V 292.402†	-40.2	48.4	0.5872 µg/L	0.5872 ppb		11:14:24
2	Zn 213.857†	520.2	12.9	0.3473 µg/L	0.3473 ppb		11:14:45
3	Sc RADIAL	105286.7	105286.7	93.6 %			11:13:17
3	Al 396.153Radial†	277.0	66.1	33.395 µg/L	33.395 ppb		11:13:17
3	Ca 317.933Radial†	409.2	-58.3	-23.153 µg/L	-23.153 ppb		11:13:37
3	Fe 238.204 Radial†	9.7	-0.9	-4.5467 µg/L	-4.5467 ppb		11:13:37
3	K 766.490 Radial†	636.5	-14.9	-8.0831 µg/L	-8.0831 ppb		11:13:17
3	Mg 279.077 IEC†	15.4	-3.4	-18.660 µg/L	-18.660 ppb		11:13:37
3	Na 589.592 Radial†	-649.9	9.6	2.6689 µg/L	2.6689 ppb		11:13:17
3	Sr 421.552†	-81.2	-23.0	-0.1297 µg/L	-0.1297 ppb		11:13:17
3	Sc 361.383	1918953.0	1918953.0	93.301 %			11:14:50
3	Y 371.029	1165783.6	1165783.6	93.087 %			11:14:50
3	Ag 328.068†	-80.1	-57.5	-0.5109 µg/L	-0.5109 ppb		11:14:56
3	As 188.979†	-1.6	-4.2	-7.9126 µg/L	-7.9126 ppb		11:15:16
3	B 249.677†	129.6	-16.8	-0.7438 µg/L	-0.7438 ppb		11:15:16
3	Ba 233.527†	-75.3	-0.0	0.0005 µg/L	0.0005 ppb		11:15:16
3	Be 313.107†	3532.4	174.5	0.1104 µg/L	0.1104 ppb		11:14:56
3	Cd 226.502†	-79.4	15.8	0.4261 µg/L	0.4261 ppb		11:15:16
3	Co 228.616†	-72.3	-5.7	-0.2754 µg/L	-0.2754 ppb		11:15:16
3	Cr 267.716†	-87.7	28.8	0.6005 µg/L	0.6005 ppb		11:14:56
3	Cu 324.752†	3086.4	-76.3	-0.5377 µg/L	-0.5377 ppb		11:14:56
3	Mn 257.610†	-151.8	60.0	0.1898 µg/L	0.1898 ppb		11:15:16
3	Mo 202.031†	-7.1	0.3	0.0323 µg/L	0.0323 ppb		11:15:16
3	Ni 231.604†	266.1	-14.2	-0.7748 µg/L	-0.7748 ppb		11:15:16
3	P 214.914†	223.2	33.2	72.308 µg/L	72.308 ppb		11:15:16
3	Pb 220.353†	65.9	16.5	4.1787 µg/L	4.1787 ppb		11:15:16
3	S 181.975 Axial†	27.6	5.5	28.485 µg/L	28.485 ppb		11:15:16
3	Sb 206.836†	19.7	0.6	0.6153 µg/L	0.6153 ppb		11:15:16
3	Se 196.026†	8.3	-5.2	-7.5222 µg/L	-7.5222 ppb		11:15:16
3	SiO2†	1975.6	135.8	25.928 µg/L	25.928 ppb		11:14:56
3	Si 251.611†	360.0	36.2	2.6911 µg/L	2.6911 ppb		11:15:16
3	Sn 189.927†	24.7	4.1	1.9724 µg/L	1.9724 ppb		11:15:16
3	Ti 334.940†	723.0	56.1	0.1256 µg/L	0.1256 ppb		11:14:56
3	Tl 190.801†	-17.4	2.8	4.2236 µg/L	4.2236 ppb		11:15:16
3	U 409.014†	752.4	127.2	11.949 µg/L	11.949 ppb		11:14:56
3	V 292.402†	-47.5	41.1	0.4825 µg/L	0.4825 ppb		11:14:56
3	Zn 213.857†	515.0	1.8	0.0540 µg/L	0.0540 ppb		11:15:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1906149.6	92.678	%	0.5396				0.58%
Sc RADIAL	104901.4	93.3	%	0.30				0.33%
Y 371.029	1158372.7	92.495	%	0.5180				0.56%
Ag 328.068†	-105.6	-0.9383	µg/L	0.37049	-0.9383	ppb	0.37049	39.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	34.9	17.598	µg/L	14.7002	17.598	ppb	14.7002	83.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.8151	µg/L	8.13556	-0.8151	ppb	8.13556	998.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-5.4	-0.2455	µg/L	0.58840	-0.2455	ppb	0.58840	239.67%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.6	-0.0382	µg/L	0.21385	-0.0382	ppb	0.21385	559.59%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	198.9	0.1258	µg/L	0.01843	0.1258	ppb	0.01843	14.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-66.5	-26.410	µg/L	3.0528	-26.410	ppb	3.0528	11.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.4	0.1519	µg/L	0.23857	0.1519	ppb	0.23857	157.10%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.1	-0.3865	µg/L	0.26706	-0.3865	ppb	0.26706	69.09%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              14.7      0.3068 µg/L       0.30988      0.3068 ppb        0.30988 100.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -37.7     -0.2621 µg/L       0.24498     -0.2621 ppb        0.24498  93.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        3.0      15.795 µg/L       20.1391      15.795 ppb        20.1391 127.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        16.6      9.0179 µg/L      17.49824      9.0179 ppb       17.49824 194.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.8     -15.411 µg/L       23.0034     -15.411 ppb        23.0034 149.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              60.6      0.1943 µg/L       0.00402      0.1943 ppb        0.00402   2.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.7      0.6393 µg/L       0.53634      0.6393 ppb        0.53634  83.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -23.8     -6.6150 µg/L       8.19920     -6.6150 ppb        8.19920 123.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -13.7     -0.7441 µg/L       0.04575     -0.7441 ppb        0.04575   6.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               25.2      54.688 µg/L       19.8122      54.688 ppb        19.8122  36.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              12.9      3.2480 µg/L       0.82454      3.2480 ppb        0.82454  25.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.1      15.672 µg/L       21.0792      15.672 ppb        21.0792 134.50%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               0.8      0.7923 µg/L       0.63797      0.7923 ppb        0.63797  80.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -3.5     -5.0918 µg/L       2.26634     -5.0918 ppb        2.26634  44.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   127.0      24.255 µg/L        1.7419      24.255 ppb         1.7419   7.18%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              33.0      2.4562 µg/L       1.53652      2.4562 ppb        1.53652  62.56%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.4      1.1819 µg/L       0.84796      1.1819 ppb        0.84796  71.75%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              14.0      0.0789 µg/L       0.18466      0.0789 ppb        0.18466 234.06%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             103.3      0.2306 µg/L       0.13096      0.2306 ppb        0.13096  56.80%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.9      1.3310 µg/L       3.37780      1.3310 ppb        3.37780 253.77%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              180.1      16.914 µg/L        4.3400      16.914 ppb         4.3400  25.66%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               42.4      0.5106 µg/L       0.06711      0.5106 ppb        0.06711  13.14%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               8.9      0.2422 µg/L       0.16339      0.2422 ppb        0.16339  67.45%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 122009

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

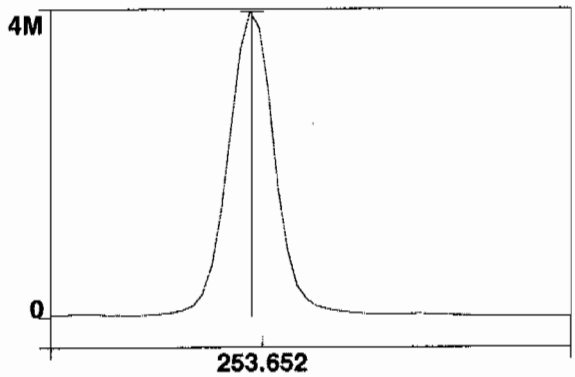

Intensity: 3563147.5 cps
Conc:

1

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 121109
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 121109A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/11/2009 12:44:17**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/11/2009 10:35:01**
Analyst: **Data Type: Reprocessed on 12/11/2009 12:45:49**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	867384.7	867384.7	99.939	%	10:38:11
1	Sc Radial	5608.5	5608.5	101	%	10:36:54
1	Y 371.029	729366.4	729366.4	99.988	%	10:38:11
1	Y RADIAL	6113.1	6113.1	101.2	%	10:36:54
1	Ag 328.068†	291.2	291.4	[0.00]	ug/L	10:38:11

1	Al 396.153Radial†	-27.8	-27.7	[0.00]	ug/L	10:36:54
1	As 188.979†	-33.2	-33.2	[0.00]	ug/L	10:38:31
1	B 249.677†	-500.0	-500.3	[0.00]	ug/L	10:38:31
1	Ba 233.527†	-23.0	-23.0	[0.00]	ug/L	10:38:31
1	Be 313.107†	-4673.8	-4676.6	[0.00]	ug/L	10:38:11
1	Ca 317.933Radial†	18.4	18.3	[0.00]	ug/L	10:37:14
1	Cd 226.502†	-195.7	-195.8	[0.00]	ug/L	10:38:31
1	Co 228.616†	-73.5	-73.5	[0.00]	ug/L	10:38:31
1	Cr 267.716†	98.1	98.1	[0.00]	ug/L	10:38:31
1	Cu 324.752†	6710.6	6714.7	[0.00]	ug/L	10:38:11
1	Fe 238.204 Radial†	11.2	11.2	[0.00]	ug/L	10:37:14
1	K 766.490 Radial†	2781.3	2765.0	[0.00]	ug/L	10:36:54
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	10:37:14
1	Mn 257.610†	514.8	515.2	[0.00]	ug/L	10:38:31
1	Mo 202.031†	16.4	16.4	[0.00]	ug/L	10:38:31
1	Na 589.592 Radial†	-1549.4	-1540.3	[0.00]	ug/L	10:36:54
1	Ni 231.604†	92.4	92.4	[0.00]	ug/L	10:38:31
1	P 214.914†	242.5	242.6	[0.00]	ug/L	10:38:31
1	Pb 220.353†	-68.7	-68.7	[0.00]	ug/L	10:38:31
1	S 181.975 Axial†	46.0	46.1	[0.00]	ug/L	10:38:31
1	Sb 206.836†	43.0	43.0	[0.00]	ug/L	10:38:31
1	Se 196.026†	-23.4	-23.4	[0.00]	ug/L	10:38:31
1	Si 251.611†	471.9	472.2	[0.00]	ug/L	10:38:31
1	Sn 189.927†	5.3	5.3	[0.00]	ug/L	10:38:31
1	Sr 421.552†	8.4	8.3	[0.00]	ug/L	10:36:54
1	Ti 334.940†	-1298.5	-1299.3	[0.00]	ug/L	10:38:11
1	Tl 190.801†	-28.3	-28.3	[0.00]	ug/L	10:38:31
1	U 409.014†	-2617.2	-2618.8	[0.00]	ug/L	10:38:11
1	V 292.402†	-1364.9	-1365.7	[0.00]	ug/L	10:38:11
1	Zn 213.857†	737.5	738.0	[0.00]	ug/L	10:38:31
1	SiO2†	543.0	543.4	[0.00]	ug/L	10:39:27
2	Sc 361.383	873164.9	873164.9	100.60	%	10:38:36
2	Sc Radial	5567.4	5567.4	99.9	%	10:37:19
2	Y 371.029	733929.4	733929.4	100.61	%	10:38:36
2	Y RADIAL	6042.1	6042.1	100.0	%	10:37:19
2	Ag 328.068†	268.9	267.3	[0.00]	ug/L	10:38:36
2	Al 396.153Radial†	-36.3	-36.3	[0.00]	ug/L	10:37:19
2	As 188.979†	-30.2	-30.0	[0.00]	ug/L	10:38:56
2	B 249.677†	-501.5	-498.5	[0.00]	ug/L	10:38:56
2	Ba 233.527†	-11.8	-11.7	[0.00]	ug/L	10:38:56
2	Be 313.107†	-4652.0	-4624.1	[0.00]	ug/L	10:38:36
2	Ca 317.933Radial†	14.4	14.4	[0.00]	ug/L	10:37:39
2	Cd 226.502†	-208.8	-207.6	[0.00]	ug/L	10:38:56
2	Co 228.616†	-74.9	-74.4	[0.00]	ug/L	10:38:56
2	Cr 267.716†	76.0	75.5	[0.00]	ug/L	10:38:56
2	Cu 324.752†	6865.2	6823.9	[0.00]	ug/L	10:38:36
2	Fe 238.204 Radial†	8.6	8.6	[0.00]	ug/L	10:37:39
2	K 766.490 Radial†	2732.7	2736.8	[0.00]	ug/L	10:37:19
2	Mg 279.077 IEC†	0.6	0.6	[0.00]	ug/L	10:37:39
2	Mn 257.610†	513.2	510.1	[0.00]	ug/L	10:38:56
2	Mo 202.031†	21.4	21.3	[0.00]	ug/L	10:38:56
2	Na 589.592 Radial†	-1616.8	-1619.2	[0.00]	ug/L	10:37:19
2	Ni 231.604†	82.6	82.1	[0.00]	ug/L	10:38:56
2	P 214.914†	229.0	227.6	[0.00]	ug/L	10:38:56
2	Pb 220.353†	-75.5	-75.1	[0.00]	ug/L	10:38:56
2	S 181.975 Axial†	49.2	48.9	[0.00]	ug/L	10:38:56
2	Sb 206.836†	34.6	34.4	[0.00]	ug/L	10:38:56
2	Se 196.026†	-27.5	-27.3	[0.00]	ug/L	10:38:56
2	Si 251.611†	487.6	484.7	[0.00]	ug/L	10:38:56
2	Sn 189.927†	9.1	9.1	[0.00]	ug/L	10:38:56
2	Sr 421.552†	-10.9	-10.9	[0.00]	ug/L	10:37:19
2	Ti 334.940†	-1175.8	-1168.7	[0.00]	ug/L	10:38:36
2	Tl 190.801†	-31.7	-31.5	[0.00]	ug/L	10:38:56
2	U 409.014†	-2571.7	-2556.3	[0.00]	ug/L	10:38:36
2	V 292.402†	-1358.1	-1349.9	[0.00]	ug/L	10:38:36
2	Zn 213.857†	758.6	754.0	[0.00]	ug/L	10:38:56
2	SiO2†	515.7	512.6	[0.00]	ug/L	10:39:32
3	Sc 361.383	863198.0	863198.0	99.456	%	10:39:02
3	Sc Radial	5551.4	5551.4	99.6	%	10:37:44
3	Y 371.029	725074.5	725074.5	99.399	%	10:39:02
3	Y RADIAL	5962.3	5962.3	98.73	%	10:37:44

3	Ag 328.068†	261.9	263.4	[0.00]	ug/L	10:39:02
3	Al 396.153Radial†	-41.8	-41.9	[0.00]	ug/L	10:37:44
3	As 188.979†	-30.5	-30.7	[0.00]	ug/L	10:39:22
3	B 249.677†	-478.2	-480.8	[0.00]	ug/L	10:39:22
3	Ba 233.527†	1.4	1.4	[0.00]	ug/L	10:39:22
3	Be 313.107†	-4661.7	-4687.2	[0.00]	ug/L	10:39:02
3	Ca 317.933Radial†	18.0	18.0	[0.00]	ug/L	10:38:05
3	Cd 226.502†	-192.4	-193.4	[0.00]	ug/L	10:39:22
3	Co 228.616†	-72.0	-72.4	[0.00]	ug/L	10:39:22
3	Cr 267.716†	84.0	84.5	[0.00]	ug/L	10:39:22
3	Cu 324.752†	6698.3	6734.9	[0.00]	ug/L	10:39:02
3	Fe 238.204 Radial†	9.9	9.9	[0.00]	ug/L	10:38:05
3	K 766.490 Radial†	2704.9	2716.8	[0.00]	ug/L	10:37:44
3	Mg 279.077 IEC†	3.2	3.2	[0.00]	ug/L	10:38:05
3	Mn 257.610†	532.3	535.3	[0.00]	ug/L	10:39:22
3	Mo 202.031†	17.4	17.5	[0.00]	ug/L	10:39:22
3	Na 589.592 Radial†	-1496.3	-1502.9	[0.00]	ug/L	10:37:44
3	Ni 231.604†	82.9	83.3	[0.00]	ug/L	10:39:22
3	P 214.914†	254.4	255.8	[0.00]	ug/L	10:39:22
3	Pb 220.353†	-59.8	-60.1	[0.00]	ug/L	10:39:22
3	S 181.975 Axial†	52.9	53.2	[0.00]	ug/L	10:39:22
3	Sb 206.836†	34.5	34.7	[0.00]	ug/L	10:39:22
3	Se 196.026†	-29.5	-29.6	[0.00]	ug/L	10:39:22
3	Si 251.611†	485.7	488.4	[0.00]	ug/L	10:39:22
3	Sn 189.927†	12.1	12.1	[0.00]	ug/L	10:39:22
3	Sr 421.552†	1.9	1.9	[0.00]	ug/L	10:37:44
3	Ti 334.940†	-1293.7	-1300.8	[0.00]	ug/L	10:39:02
3	Tl 190.801†	-43.7	-43.9	[0.00]	ug/L	10:39:22
3	U 409.014†	-2562.9	-2576.9	[0.00]	ug/L	10:39:02
3	V 292.402†	-1365.1	-1372.6	[0.00]	ug/L	10:39:02
3	Zn 213.857†	765.4	769.6	[0.00]	ug/L	10:39:22
3	SiO2†	514.6	517.4	[0.00]	ug/L	10:39:37

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	867915.8	5004.66	0.58%	100.00	%
Sc Radial	5575.8	29.49	0.53%	100	%
Y 371.029	729456.7	4428.18	0.61%	100.00	%
Y RADIAL	6039.2	75.46	1.25%	100.0	%
Ag 328.068†	274.0	15.19	5.54%	[0.00]	ug/L
Al 396.153Radial†	-35.3	7.20	20.40%	[0.00]	ug/L
As 188.979†	-31.3	1.70	5.42%	[0.00]	ug/L
B 249.677†	-493.2	10.80	2.19%	[0.00]	ug/L
Ba 233.527†	-11.1	12.19	109.76%	[0.00]	ug/L
Be 313.107†	-4662.6	33.82	0.73%	[0.00]	ug/L
Ca 317.933Radial†	16.9	2.17	12.81%	[0.00]	ug/L
Cd 226.502†	-198.9	7.58	3.81%	[0.00]	ug/L
Co 228.616†	-73.4	1.03	1.40%	[0.00]	ug/L
Cr 267.716†	86.0	11.38	13.22%	[0.00]	ug/L
Cu 324.752†	6757.8	58.13	0.86%	[0.00]	ug/L
Fe 238.204 Radial†	9.9	1.30	13.13%	[0.00]	ug/L
K 766.490 Radial†	2739.5	24.23	0.88%	[0.00]	ug/L
Mg 279.077 IEC†	1.9	1.29	67.77%	[0.00]	ug/L
Mn 257.610†	520.2	13.31	2.56%	[0.00]	ug/L
Mo 202.031†	18.4	2.55	13.83%	[0.00]	ug/L
Na 589.592 Radial†	-1554.1	59.38	3.82%	[0.00]	ug/L
Ni 231.604†	85.9	5.65	6.58%	[0.00]	ug/L
P 214.914†	242.0	14.10	5.83%	[0.00]	ug/L
Pb 220.353†	-68.0	7.50	11.03%	[0.00]	ug/L
S 181.975 Axial†	49.4	3.61	7.31%	[0.00]	ug/L
Sb 206.836†	37.4	4.89	13.08%	[0.00]	ug/L
Se 196.026†	-26.8	3.12	11.65%	[0.00]	ug/L
Si 251.611†	481.7	8.49	1.76%	[0.00]	ug/L
Sn 189.927†	8.8	3.41	38.63%	[0.00]	ug/L
Sr 421.552†	-0.2	9.82	>999.9%	[0.00]	ug/L
Ti 334.940†	-1256.2	75.82	6.04%	[0.00]	ug/L
Tl 190.801†	-34.6	8.24	23.82%	[0.00]	ug/L
U 409.014†	-2584.0	31.88	1.23%	[0.00]	ug/L
V 292.402†	-1362.7	11.62	0.85%	[0.00]	ug/L

Zn 213.857†	753.9	15.79	2.09%	[0.00] ug/L
SiO2†	524.5	16.53	3.15%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/11/2009 10:41:48
Data Type: Reprocessed on 12/11/2009 12:45:50

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	875842.7	875842.7	100.91	%	10:44:12
1	Sc Radial	5490.5	5490.5	98.5	%	10:43:46
1	Y 371.029	731965.3	731965.3	100.34	%	10:44:12
1	Y RADIAL	5960.4	5960.4	98.70	%	10:43:46
1	Ag 328.068†	21744.6	21273.8	[100]	ug/L	10:44:17
1	As 188.979†	217.4	246.7	[100]	ug/L	10:44:37
1	B 249.677†	3900.4	4358.3	[100]	ug/L	10:44:17
1	Ba 233.527†	13083.6	12976.3	[100]	ug/L	10:44:17
1	Be 313.107†	259024.2	261342.5	[100]	ug/L	10:44:12
1	Cd 226.502†	9235.0	9350.4	[100]	ug/L	10:44:17
1	Co 228.616†	4935.1	4963.9	[100]	ug/L	10:44:37
1	Cr 267.716†	9393.3	9222.2	[100]	ug/L	10:44:17
1	Cu 324.752†	39672.7	32555.8	[100]	ug/L	10:44:17
1	K 766.490 Radial†	8407.4	5798.4	[1000]	ug/L	10:43:40
1	Mn 257.610†	91938.6	90586.4	[100]	ug/L	10:44:17
1	Mo 202.031†	1522.8	1490.6	[100]	ug/L	10:44:37
1	Ni 231.604†	4178.8	4055.1	[100]	ug/L	10:44:37
1	P 214.914†	1076.2	824.4	[500]	ug/L	10:44:37
1	Pb 220.353†	785.2	846.1	[100]	ug/L	10:44:37
1	S 181.975 Axial†	185.0	134.0	[200]	ug/L	10:44:37
1	Sb 206.836†	324.9	284.5	[100]	ug/L	10:44:37
1	Se 196.026†	139.6	165.1	[100]	ug/L	10:44:37
1	Si 251.611†	16386.5	15756.4	[500]	ug/L	10:44:17
1	Sn 189.927†	584.6	570.5	[100]	ug/L	10:44:37
1	Sr 421.552†	15716.8	15961.0	[100]	ug/L	10:43:46
1	Ti 334.940†	58684.5	59409.6	[100]	ug/L	10:44:17
1	Tl 190.801†	306.5	338.3	[100]	ug/L	10:44:37
1	U 409.014†	652.2	3230.3	[100]	ug/L	10:44:12
1	V 292.402†	13019.5	14264.4	[100]	ug/L	10:44:17
1	Zn 213.857†	12046.1	11183.3	[100]	ug/L	10:44:17
1	SiO2†	16331.5	15659.2	[1069.5]	ug/L	10:45:44
2	Sc 361.383	876251.3	876251.3	100.96	%	10:44:43
2	Sc Radial	5517.6	5517.6	99.0	%	10:43:56
2	Y 371.029	732181.8	732181.8	100.37	%	10:44:43
2	Y RADIAL	6014.9	6014.9	99.60	%	10:43:56
2	Ag 328.068†	21438.3	20960.3	[100]	ug/L	10:44:48
2	As 188.979†	215.7	244.9	[100]	ug/L	10:45:08
2	B 249.677†	3806.3	4263.3	[100]	ug/L	10:44:48
2	Ba 233.527†	12864.3	12753.0	[100]	ug/L	10:44:48
2	Be 313.107†	258711.3	260912.9	[100]	ug/L	10:44:43
2	Cd 226.502†	9036.0	9149.0	[100]	ug/L	10:44:48
2	Co 228.616†	4922.9	4949.5	[100]	ug/L	10:45:08
2	Cr 267.716†	9233.9	9060.1	[100]	ug/L	10:44:48
2	Cu 324.752†	38791.5	31664.6	[100]	ug/L	10:44:48
2	K 766.490 Radial†	8506.7	5856.8	[1000]	ug/L	10:43:51
2	Mn 257.610†	90655.4	89272.9	[100]	ug/L	10:44:48
2	Mo 202.031†	1526.9	1494.0	[100]	ug/L	10:45:08
2	Ni 231.604†	4185.8	4060.0	[100]	ug/L	10:45:08
2	P 214.914†	1063.0	810.8	[500]	ug/L	10:45:08
2	Pb 220.353†	786.4	846.9	[100]	ug/L	10:45:08
2	S 181.975 Axial†	193.4	142.2	[200]	ug/L	10:45:08
2	Sb 206.836†	328.4	287.9	[100]	ug/L	10:45:08
2	Se 196.026†	143.4	168.9	[100]	ug/L	10:45:08
2	Si 251.611†	16134.8	15499.6	[500]	ug/L	10:44:48
2	Sn 189.927†	595.0	580.5	[100]	ug/L	10:45:08
2	Sr 421.552†	15803.8	15970.6	[100]	ug/L	10:43:56
2	Ti 334.940†	57870.5	58576.2	[100]	ug/L	10:44:48
2	Tl 190.801†	304.5	336.2	[100]	ug/L	10:45:08

2	U 409.014†	865.7	3441.5	[100]	ug/L	10:44:43
2	V 292.402†	12746.3	13987.8	[100]	ug/L	10:44:48
2	Zn 213.857†	11880.2	11013.4	[100]	ug/L	10:44:48
2	SiO2†	16234.1	15555.2	[1069.5]	ug/L	10:45:49
3	Sc 361.383	871070.4	871070.4	100.36	%	10:45:13
3	Sc Radial	5463.9	5463.9	98.0	%	10:44:06
3	Y 371.029	728966.6	728966.6	99.933	%	10:45:13
3	Y RADIAL	5953.0	5953.0	98.57	%	10:44:06
3	Ag 328.068†	21625.9	21273.6	[100]	ug/L	10:45:18
3	As 188.979†	218.8	249.3	[100]	ug/L	10:45:38
3	B 249.677†	3831.9	4311.2	[100]	ug/L	10:45:18
3	Ba 233.527†	13046.8	13010.7	[100]	ug/L	10:45:18
3	Be 313.107†	258070.6	261798.7	[100]	ug/L	10:45:13
3	Cd 226.502†	9135.9	9301.8	[100]	ug/L	10:45:18
3	Co 228.616†	4918.9	4974.6	[100]	ug/L	10:45:38
3	Cr 267.716†	9344.1	9224.2	[100]	ug/L	10:45:18
3	Cu 324.752†	39512.1	32611.2	[100]	ug/L	10:45:18
3	K 766.490 Radial†	8464.4	5898.1	[1000]	ug/L	10:44:01
3	Mn 257.610†	91873.8	91020.9	[100]	ug/L	10:45:18
3	Mo 202.031†	1534.5	1510.6	[100]	ug/L	10:45:38
3	Ni 231.604†	4204.2	4103.0	[100]	ug/L	10:45:38
3	P 214.914†	1070.9	824.9	[500]	ug/L	10:45:38
3	Pb 220.353†	786.1	851.2	[100]	ug/L	10:45:38
3	S 181.975 Axial†	186.1	136.0	[200]	ug/L	10:45:38
3	Sb 206.836†	327.2	288.7	[100]	ug/L	10:45:38
3	Se 196.026†	154.0	180.3	[100]	ug/L	10:45:38
3	Si 251.611†	16375.9	15834.9	[500]	ug/L	10:45:18
3	Sn 189.927†	604.1	593.1	[100]	ug/L	10:45:38
3	Sr 421.552†	15771.1	16094.2	[100]	ug/L	10:44:06
3	Ti 334.940†	58689.0	59732.7	[100]	ug/L	10:45:18
3	Tl 190.801†	303.8	337.3	[100]	ug/L	10:45:38
3	U 409.014†	486.0	3068.3	[100]	ug/L	10:45:13
3	V 292.402†	12958.4	14274.2	[100]	ug/L	10:45:18
3	Zn 213.857†	11966.3	11169.1	[100]	ug/L	10:45:18
3	SiO2†	16008.2	15425.8	[1069.5]	ug/L	10:45:54

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	874388.1	2880.49	0.33%	100.75	%
Sc Radial	5490.7	26.84	0.49%	98.5	%
Y 371.029	731037.9	1797.06	0.25%	100.22	%
Y RADIAL	5976.1	33.76	0.56%	98.96	%
Ag 328.068†	21169.2	180.92	0.85%	[100]	ug/L
As 188.979†	247.0	2.22	0.90%	[100]	ug/L
B 249.677†	4310.9	47.50	1.10%	[100]	ug/L
Ba 233.527†	12913.3	139.90	1.08%	[100]	ug/L
Be 313.107†	261351.4	442.96	0.17%	[100]	ug/L
Cd 226.502†	9267.0	105.10	1.13%	[100]	ug/L
Co 228.616†	4962.6	12.57	0.25%	[100]	ug/L
Cr 267.716†	9168.8	94.20	1.03%	[100]	ug/L
Cu 324.752†	32277.2	531.23	1.65%	[100]	ug/L
K 766.490 Radial†	5851.1	50.10	0.86%	[1000]	ug/L
Mn 257.610†	90293.4	910.10	1.01%	[100]	ug/L
Mo 202.031†	1498.4	10.66	0.71%	[100]	ug/L
Ni 231.604†	4072.7	26.39	0.65%	[100]	ug/L
P 214.914†	820.1	8.01	0.98%	[500]	ug/L
Pb 220.353†	848.1	2.78	0.33%	[100]	ug/L
S 181.975 Axial†	137.4	4.26	3.10%	[200]	ug/L
Sb 206.836†	287.0	2.20	0.77%	[100]	ug/L
Se 196.026†	171.4	7.91	4.62%	[100]	ug/L
Si 251.611†	15697.0	175.35	1.12%	[500]	ug/L
Sn 189.927†	581.4	11.35	1.95%	[100]	ug/L
Sr 421.552†	16008.6	74.27	0.46%	[100]	ug/L
Ti 334.940†	59239.5	596.69	1.01%	[100]	ug/L
Tl 190.801†	337.2	1.06	0.31%	[100]	ug/L
U 409.014†	3246.7	187.14	5.76%	[100]	ug/L
V 292.402†	14175.5	162.60	1.15%	[100]	ug/L
Zn 213.857†	11121.9	94.26	0.85%	[100]	ug/L
SiO2†	15546.7	116.97	0.75%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2009 10:48:04
Data Type: Reprocessed on 12/11/2009 12:45:56

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	862154.4	862154.4	99.336	%	10:51:14
1	Sc Radial	5481.4	5481.4	98.3	%	10:49:57
1	Y 371.029	712144.1	712144.1	97.627	%	10:51:14
1	Y RADIAL	5921.2	5921.2	98.05	%	10:49:57
1	Ag 328.068†	113189.5	113671.8	[500]	ug/L	10:51:19
1	Al 396.153Radial†	7182.3	7341.3	[5000]	ug/L	10:49:57
1	As 188.979†	1282.0	1321.9	[500]	ug/L	10:51:39
1	B 249.677†	23230.2	23878.7	[500]	ug/L	10:51:19
1	Ba 233.527†	67975.9	68441.2	[500]	ug/L	10:51:19
1	Be 313.107†	1405181.5	1419234.3	[500]	ug/L	10:51:14
1	Ca 317.933Radial†	3492.8	3536.1	[5000]	ug/L	10:50:17
1	Cd 226.502†	49155.7	49683.2	[500]	ug/L	10:51:19
1	Co 228.616†	26963.6	27217.2	[500]	ug/L	10:51:19
1	Cr 267.716†	48603.2	48842.0	[500]	ug/L	10:51:19
1	Cu 324.752†	179701.3	174144.3	[500]	ug/L	10:51:19
1	K 766.490 Radial†	32539.6	30360.4	[5000]	ug/L	10:49:57
1	Mg 279.077 IEC†	159.8	160.7	[5000]	ug/L	10:50:17
1	Mn 257.610†	480086.9	482774.9	[500]	ug/L	10:51:14
1	Mo 202.031†	8055.5	8090.9	[500]	ug/L	10:51:39
1	Ni 231.604†	22326.2	22389.5	[500]	ug/L	10:51:19
1	P 214.914†	4773.9	4563.8	[2500]	ug/L	10:51:39
1	Pb 220.353†	4475.4	4573.3	[500]	ug/L	10:51:39
1	S 181.975 Axial†	839.9	796.1	[1000]	ug/L	10:51:39
1	Sb 206.836†	1659.7	1633.4	[500]	ug/L	10:51:39
1	Se 196.026†	882.8	915.5	[500]	ug/L	10:51:39
1	Si 251.611†	87899.1	88004.8	[2500]	ug/L	10:51:19
1	Sn 189.927†	3195.2	3207.7	[500]	ug/L	10:51:39
1	Sr 421.552†	85559.7	87033.4	[500]	ug/L	10:49:57
1	Ti 334.940†	315692.6	319058.5	[500]	ug/L	10:51:19
1	Tl 190.801†	1768.4	1814.8	[500]	ug/L	10:51:39
1	U 409.014†	14815.3	17498.3	[500]	ug/L	10:51:19
1	V 292.402†	74574.4	76435.5	[500]	ug/L	10:51:19
1	Zn 213.857†	60376.0	60025.6	[500]	ug/L	10:51:19
1	SiO2†	86990.1	87046.9	[5347.5]	ug/L	10:52:47
2	Sc 361.383	869710.7	869710.7	100.21	%	10:51:45
2	Sc Radial	5365.2	5365.2	96.2	%	10:50:22
2	Y 371.029	718941.2	718941.2	98.558	%	10:51:45
2	Y RADIAL	5826.9	5826.9	96.48	%	10:50:22
2	Ag 328.068†	113787.1	113278.3	[500]	ug/L	10:51:50
2	Al 396.153Radial†	7081.8	7395.0	[5000]	ug/L	10:50:22
2	As 188.979†	1283.1	1311.8	[500]	ug/L	10:52:10
2	B 249.677†	23348.0	23793.0	[500]	ug/L	10:51:50
2	Ba 233.527†	68259.7	68130.0	[500]	ug/L	10:51:50
2	Be 313.107†	1417482.9	1419220.2	[500]	ug/L	10:51:45
2	Ca 317.933Radial†	3479.3	3599.0	[5000]	ug/L	10:50:42
2	Cd 226.502†	49266.7	49363.9	[500]	ug/L	10:51:50
2	Co 228.616†	27019.5	27037.1	[500]	ug/L	10:51:50
2	Cr 267.716†	48764.9	48578.2	[500]	ug/L	10:51:50
2	Cu 324.752†	180993.9	173862.5	[500]	ug/L	10:51:50
2	K 766.490 Radial†	32284.5	30811.7	[5000]	ug/L	10:50:22
2	Mg 279.077 IEC†	158.5	162.8	[5000]	ug/L	10:50:42
2	Mn 257.610†	482638.4	481122.2	[500]	ug/L	10:51:45
2	Mo 202.031†	8034.1	7999.1	[500]	ug/L	10:52:10
2	Ni 231.604†	22414.2	22282.0	[500]	ug/L	10:51:50
2	P 214.914†	4776.3	4524.5	[2500]	ug/L	10:52:10
2	Pb 220.353†	4468.2	4526.9	[500]	ug/L	10:52:10
2	S 181.975 Axial†	825.9	774.7	[1000]	ug/L	10:52:10
2	Sb 206.836†	1651.7	1610.9	[500]	ug/L	10:52:10

2	Se 196.026†	877.5	902.4	[500]	ug/L	10:52:10
2	Si 251.611†	88332.2	87668.2	[2500]	ug/L	10:51:50
2	Sn 189.927†	3195.2	3179.8	[500]	ug/L	10:52:10
2	Sr 421.552†	83941.4	87235.3	[500]	ug/L	10:50:22
2	Ti 334.940†	317719.6	318320.1	[500]	ug/L	10:51:50
2	Tl 190.801†	1766.5	1797.5	[500]	ug/L	10:52:10
2	U 409.014†	15164.8	17717.5	[500]	ug/L	10:51:50
2	V 292.402†	75076.8	76284.6	[500]	ug/L	10:51:50
2	Zn 213.857†	60583.5	59704.6	[500]	ug/L	10:51:50
2	SiO2†	88381.8	87675.0	[5347.5]	ug/L	10:52:52
3	Sc 361.383	879497.5	879497.5	101.33	%	10:52:16
3	Sc Radial	5472.2	5472.2	98.1	%	10:50:47
3	Y 371.029	727729.6	727729.6	99.763	%	10:52:16
3	Y RADIAL	5921.7	5921.7	98.05	%	10:50:47
3	Ag 328.068†	113888.3	112114.5	[500]	ug/L	10:52:21
3	Al 396.153Radial†	7240.2	7412.5	[5000]	ug/L	10:50:47
3	As 188.979†	1290.5	1304.8	[500]	ug/L	10:52:41
3	B 249.677†	23462.3	23646.5	[500]	ug/L	10:52:21
3	Ba 233.527†	68134.9	67248.8	[500]	ug/L	10:52:21
3	Be 313.107†	1436756.2	1422498.9	[500]	ug/L	10:52:16
3	Ca 317.933Radial†	3445.1	3493.4	[5000]	ug/L	10:51:07
3	Cd 226.502†	49122.3	48674.3	[500]	ug/L	10:52:21
3	Co 228.616†	27027.0	26744.5	[500]	ug/L	10:52:21
3	Cr 267.716†	48752.2	48024.1	[500]	ug/L	10:52:21
3	Cu 324.752†	181069.6	171927.4	[500]	ug/L	10:52:21
3	K 766.490 Radial†	32771.2	30651.6	[5000]	ug/L	10:50:47
3	Mg 279.077 IEC†	155.8	156.8	[5000]	ug/L	10:51:07
3	Mn 257.610†	487896.6	480951.6	[500]	ug/L	10:52:16
3	Mo 202.031†	8036.7	7912.5	[500]	ug/L	10:52:41
3	Ni 231.604†	22306.3	21926.6	[500]	ug/L	10:52:21
3	P 214.914†	4778.5	4473.5	[2500]	ug/L	10:52:41
3	Pb 220.353†	4426.8	4436.5	[500]	ug/L	10:52:41
3	S 181.975 Axial†	816.1	756.0	[1000]	ug/L	10:52:41
3	Sb 206.836†	1659.4	1600.2	[500]	ug/L	10:52:41
3	Se 196.026†	884.8	900.0	[500]	ug/L	10:52:41
3	Si 251.611†	88184.8	86541.8	[2500]	ug/L	10:52:21
3	Sn 189.927†	3185.0	3134.3	[500]	ug/L	10:52:41
3	Sr 421.552†	85571.7	87190.7	[500]	ug/L	10:50:47
3	Ti 334.940†	317393.1	314469.8	[500]	ug/L	10:52:21
3	Tl 190.801†	1768.6	1779.8	[500]	ug/L	10:52:41
3	U 409.014†	15098.8	17484.0	[500]	ug/L	10:52:21
3	V 292.402†	74801.1	75178.8	[500]	ug/L	10:52:21
3	Zn 213.857†	60531.6	58980.6	[500]	ug/L	10:52:21
3	SiO2†	87774.3	86094.0	[5347.5]	ug/L	10:52:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	870454.2	8695.40	1.00%	100.29	%
Sc Radial	5439.6	64.57	1.19%	97.6	%
Y 371.029	719605.0	7813.91	1.09%	98.649	%
Y RADIAL	5889.9	54.59	0.93%	97.53	%
Ag 328.068†	113021.5	809.76	0.72%	[500]	ug/L
Al 396.153Radial†	7382.9	37.08	0.50%	[5000]	ug/L
As 188.979†	1312.8	8.58	0.65%	[500]	ug/L
B 249.677†	23772.7	117.39	0.49%	[500]	ug/L
Ba 233.527†	67940.0	618.48	0.91%	[500]	ug/L
Be 313.107†	1420317.8	1888.90	0.13%	[500]	ug/L
Ca 317.933Radial†	3542.8	53.11	1.50%	[5000]	ug/L
Cd 226.502†	49240.5	515.63	1.05%	[500]	ug/L
Co 228.616†	26999.6	238.58	0.88%	[500]	ug/L
Cr 267.716†	48481.4	417.42	0.86%	[500]	ug/L
Cu 324.752†	173311.4	1206.87	0.70%	[500]	ug/L
K 766.490 Radial†	30607.9	228.83	0.75%	[5000]	ug/L
Mg 279.077 IEC†	160.1	3.01	1.88%	[5000]	ug/L
Mn 257.610†	481616.2	1007.05	0.21%	[500]	ug/L
Mo 202.031†	8000.8	89.21	1.12%	[500]	ug/L
Ni 231.604†	22199.3	242.25	1.09%	[500]	ug/L
P 214.914†	4520.6	45.26	1.00%	[2500]	ug/L
Pb 220.353†	4512.2	69.56	1.54%	[500]	ug/L

S 181.975 Axial†	775.6	20.09	2.59%	[1000]	ug/L
Sb 206.836†	1614.8	16.98	1.05%	[500]	ug/L
Se 196.026†	906.0	8.34	0.92%	[500]	ug/L
Si 251.611†	87404.9	766.17	0.88%	[2500]	ug/L
Sn 189.927†	3173.9	37.08	1.17%	[500]	ug/L
Sr 421.552†	87153.1	106.08	0.12%	[500]	ug/L
Ti 334.940†	317282.8	2463.95	0.78%	[500]	ug/L
Tl 190.801†	1797.4	17.50	0.97%	[500]	ug/L
U 409.014†	17566.6	130.90	0.75%	[500]	ug/L
V 292.402†	75966.3	686.14	0.90%	[500]	ug/L
Zn 213.857†	59570.3	535.28	0.90%	[500]	ug/L
SiO2†	86938.6	796.02	0.92%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/11/2009 10:55:08
Data Type: Reprocessed on 12/11/2009 12:45:57

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	853185.0	853185.0	98.303	%	10:58:24
1	Sc Radial	5453.9	5453.9	97.8	%	10:57:01
1	Y 371.029	706727.3	706727.3	96.884	%	10:58:24
1	Y RADIAL	5894.8	5894.8	97.61	%	10:57:01
1	Ag 328.068†	216668.2	220135.1	[1000]	ug/L	10:58:24
1	Al 396.153Radial†	13864.0	14209.2	[10000]	ug/L	10:57:01
1	As 188.979†	2487.8	2562.1	[1000]	ug/L	10:58:44
1	B 249.677†	45672.0	46953.8	[1000]	ug/L	10:58:24
1	Ba 233.527†	131213.3	133489.8	[1000]	ug/L	10:58:24
1	Be 313.107†	2694496.8	2745681.6	[1000]	ug/L	10:58:19
1	Ca 317.933Radial†	6738.5	6872.2	[10000]	ug/L	10:57:01
1	Cd 226.502†	94285.2	96112.0	[1000]	ug/L	10:58:24
1	Co 228.616†	51927.8	52897.8	[1000]	ug/L	10:58:24
1	Cr 267.716†	93794.4	95327.8	[1000]	ug/L	10:58:24
1	Cu 324.752†	345381.4	344586.8	[1000]	ug/L	10:58:24
1	Fe 238.204 Radial†	1097.6	1112.3	[10000]	ug/L	10:57:21
1	K 766.490 Radial†	60558.7	59172.9	[10000]	ug/L	10:57:01
1	Mg 279.077 IEC†	298.3	303.0	[10000]	ug/L	10:57:21
1	Mn 257.610†	915562.2	930849.8	[1000]	ug/L	10:58:19
1	Mo 202.031†	15288.8	15534.4	[1000]	ug/L	10:58:44
1	Na 589.592 Radial†	29494.4	31707.9	[10000]	ug/L	10:57:01
1	Ni 231.604†	42800.5	43453.5	[1000]	ug/L	10:58:24
1	P 214.914†	8932.9	8845.1	[5000]	ug/L	10:58:44
1	Pb 220.353†	8650.8	8868.2	[1000]	ug/L	10:58:44
1	S 181.975 Axial†	1510.1	1486.8	[2000]	ug/L	10:58:44
1	Sb 206.836†	3111.7	3128.0	[1000]	ug/L	10:58:44
1	Se 196.026†	1704.5	1760.7	[1000]	ug/L	10:58:44
1	Si 251.611†	164115.4	166467.2	[5000]	ug/L	10:58:24
1	Sn 189.927†	6048.0	6143.6	[1000]	ug/L	10:58:44
1	Sr 421.552†	160418.7	164004.8	[1000]	ug/L	10:57:01
1	Ti 334.940†	616360.4	628258.5	[1000]	ug/L	10:58:19
1	Tl 190.801†	3412.4	3505.9	[1000]	ug/L	10:58:44
1	U 409.014†	31688.2	34819.3	[1000]	ug/L	10:58:24
1	V 292.402†	146096.9	149982.1	[1000]	ug/L	10:58:24
1	Zn 213.857†	114549.0	115772.9	[1000]	ug/L	10:58:24
1	SiO2†	162872.7	165160.3	[10695]	ug/L	10:59:54
2	Sc 361.383	845212.1	845212.1	97.384	%	10:58:56
2	Sc Radial	5375.1	5375.1	96.4	%	10:57:26
2	Y 371.029	702106.8	702106.8	96.251	%	10:58:56
2	Y RADIAL	5817.0	5817.0	96.32	%	10:57:26
2	Ag 328.068†	214228.6	219709.1	[1000]	ug/L	10:58:56
2	Al 396.153Radial†	13767.3	14316.5	[10000]	ug/L	10:57:26
2	As 188.979†	2504.5	2603.1	[1000]	ug/L	10:59:16
2	B 249.677†	44921.9	46621.8	[1000]	ug/L	10:58:56
2	Ba 233.527†	129473.4	132962.3	[1000]	ug/L	10:58:56
2	Be 313.107†	2728112.9	2806057.1	[1000]	ug/L	10:58:51
2	Ca 317.933Radial†	6632.8	6863.5	[10000]	ug/L	10:57:26
2	Cd 226.502†	92841.3	95534.1	[1000]	ug/L	10:58:56
2	Co 228.616†	51178.4	52626.6	[1000]	ug/L	10:58:56
2	Cr 267.716†	92627.1	95029.1	[1000]	ug/L	10:58:56
2	Cu 324.752†	341207.0	343614.6	[1000]	ug/L	10:58:56
2	Fe 238.204 Radial†	1089.7	1120.5	[10000]	ug/L	10:57:46
2	K 766.490 Radial†	59733.1	59223.1	[10000]	ug/L	10:57:26
2	Mg 279.077 IEC†	297.7	306.9	[10000]	ug/L	10:57:46
2	Mn 257.610†	925258.4	949592.2	[1000]	ug/L	10:58:51
2	Mo 202.031†	15392.0	15787.0	[1000]	ug/L	10:59:16
2	Na 589.592 Radial†	28816.5	31446.2	[10000]	ug/L	10:57:26
2	Ni 231.604†	42127.9	43173.6	[1000]	ug/L	10:58:56

2	P 214.914†	9025.3	9025.7	[5000]	ug/L	10:59:16
2	Pb 220.353†	8677.8	8978.9	[1000]	ug/L	10:59:16
2	S 181.975 Axial†	1524.6	1516.2	[2000]	ug/L	10:59:16
2	Sb 206.836†	3130.8	3177.5	[1000]	ug/L	10:59:16
2	Se 196.026†	1708.5	1781.2	[1000]	ug/L	10:59:16
2	Si 251.611†	161974.9	165844.1	[5000]	ug/L	10:58:56
2	Sn 189.927†	6084.3	6238.9	[1000]	ug/L	10:59:16
2	Sr 421.552†	157729.9	163617.5	[1000]	ug/L	10:57:26
2	Ti 334.940†	622983.8	640974.4	[1000]	ug/L	10:58:51
2	Tl 190.801†	3442.1	3569.1	[1000]	ug/L	10:59:16
2	U 409.014†	31177.9	34599.3	[1000]	ug/L	10:58:56
2	V 292.402†	144580.6	149827.0	[1000]	ug/L	10:58:56
2	Zn 213.857†	112917.6	115196.9	[1000]	ug/L	10:58:56
2	SiO2†	162491.3	166331.6	[10695]	ug/L	10:59:59
3	Sc 361.383	853864.7	853864.7	98.381	%	10:59:28
3	Sc Radial	5464.8	5464.8	98.0	%	10:57:51
3	Y 371.029	708211.8	708211.8	97.088	%	10:59:28
3	Y RADIAL	5914.4	5914.4	97.93	%	10:57:51
3	Ag 328.068†	216589.6	219879.7	[1000]	ug/L	10:59:28
3	Al 396.153Radial†	13938.9	14257.2	[10000]	ug/L	10:57:51
3	As 188.979†	2508.7	2581.3	[1000]	ug/L	10:59:48
3	B 249.677†	45602.5	46846.2	[1000]	ug/L	10:59:28
3	Ba 233.527†	131477.4	133652.1	[1000]	ug/L	10:59:28
3	Be 313.107†	2717028.2	2766401.9	[1000]	ug/L	10:59:23
3	Ca 317.933Radial†	6728.8	6848.6	[10000]	ug/L	10:57:51
3	Cd 226.502†	94433.2	96186.1	[1000]	ug/L	10:59:28
3	Co 228.616†	52001.9	52931.1	[1000]	ug/L	10:59:28
3	Cr 267.716†	93825.2	95283.1	[1000]	ug/L	10:59:28
3	Cu 324.752†	344619.5	343532.6	[1000]	ug/L	10:59:28
3	Fe 238.204 Radial†	1090.9	1103.2	[10000]	ug/L	10:58:11
3	K 766.490 Radial†	60752.2	59246.2	[10000]	ug/L	10:57:51
3	Mg 279.077 IEC†	298.0	302.1	[10000]	ug/L	10:58:11
3	Mn 257.610†	921996.7	936648.8	[1000]	ug/L	10:59:23
3	Mo 202.031†	15392.5	15627.4	[1000]	ug/L	10:59:48
3	Na 589.592 Radial†	29549.3	31703.5	[10000]	ug/L	10:57:51
3	Ni 231.604†	42734.9	43352.2	[1000]	ug/L	10:59:28
3	P 214.914†	9045.5	8952.4	[5000]	ug/L	10:59:48
3	Pb 220.353†	8686.4	8897.3	[1000]	ug/L	10:59:48
3	S 181.975 Axial†	1538.7	1514.6	[2000]	ug/L	10:59:48
3	Sb 206.836†	3146.0	3160.4	[1000]	ug/L	10:59:48
3	Se 196.026†	1711.8	1766.8	[1000]	ug/L	10:59:48
3	Si 251.611†	164219.2	166439.8	[5000]	ug/L	10:59:28
3	Sn 189.927†	6088.8	6180.2	[1000]	ug/L	10:59:48
3	Sr 421.552†	160324.3	163579.9	[1000]	ug/L	10:57:51
3	Ti 334.940†	620417.6	631883.3	[1000]	ug/L	10:59:23
3	Tl 190.801†	3452.1	3543.5	[1000]	ug/L	10:59:48
3	U 409.014†	31628.3	34732.7	[1000]	ug/L	10:59:28
3	V 292.402†	146327.9	150098.6	[1000]	ug/L	10:59:28
3	Zn 213.857†	114636.0	115768.6	[1000]	ug/L	10:59:28
3	SiO2†	164626.4	166811.0	[10695]	ug/L	11:00:04

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	850753.9	4811.42	0.57%	98.023	%
Sc Radial	5431.3	48.92	0.90%	97.4	%
Y 371.029	705682.0	3183.94	0.45%	96.741	%
Y RADIAL	5875.4	51.52	0.88%	97.29	%
Ag 328.068†	219908.0	214.38	0.10%	[1000]	ug/L
Al 396.153Radial†	14260.9	53.73	0.38%	[10000]	ug/L
As 188.979†	2582.1	20.52	0.79%	[1000]	ug/L
B 249.677†	46807.3	169.38	0.36%	[1000]	ug/L
Ba 233.527†	133368.1	360.63	0.27%	[1000]	ug/L
Be 313.107†	2772713.6	30678.59	1.11%	[1000]	ug/L
Ca 317.933Radial†	6861.4	11.95	0.17%	[10000]	ug/L
Cd 226.502†	95944.1	356.96	0.37%	[1000]	ug/L
Co 228.616†	52818.5	167.02	0.32%	[1000]	ug/L
Cr 267.716†	95213.3	161.08	0.17%	[1000]	ug/L
Cu 324.752†	343911.3	586.41	0.17%	[1000]	ug/L
Fe 238.204 Radial†	1112.0	8.69	0.78%	[10000]	ug/L

K 766.490 Radial†	59214.1	37.52	0.06%	[10000]	ug/L
Mg 279.077 IEC†	304.0	2.54	0.83%	[10000]	ug/L
Mn 257.610†	939030.3	9595.46	1.02%	[1000]	ug/L
Mo 202.031†	15649.6	127.78	0.82%	[1000]	ug/L
Na 589.592 Radial†	31619.2	149.79	0.47%	[10000]	ug/L
Ni 231.604†	43326.4	141.72	0.33%	[1000]	ug/L
P 214.914†	8941.0	90.83	1.02%	[5000]	ug/L
Pb 220.353†	8914.8	57.38	0.64%	[1000]	ug/L
S 181.975 Axial†	1505.8	16.54	1.10%	[2000]	ug/L
Sb 206.836†	3155.3	25.11	0.80%	[1000]	ug/L
Se 196.026†	1769.6	10.54	0.60%	[1000]	ug/L
Si 251.611†	166250.4	352.13	0.21%	[5000]	ug/L
Sn 189.927†	6187.5	48.07	0.78%	[1000]	ug/L
Sr 421.552†	163734.0	235.21	0.14%	[1000]	ug/L
Ti 334.940†	633705.4	6550.82	1.03%	[1000]	ug/L
Tl 190.801†	3539.5	31.82	0.90%	[1000]	ug/L
U 409.014†	34717.1	110.82	0.32%	[1000]	ug/L
V 292.402†	149969.2	136.25	0.09%	[1000]	ug/L
Zn 213.857†	115579.5	331.33	0.29%	[1000]	ug/L
SiO2†	166101.0	849.19	0.51%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/11/2009 11:02:15
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860963.7	860963.7	99.199	%	11:05:26
1	Sc Radial	5387.2	5387.2	96.6	%	11:04:29
1	Y 371.029	709124.8	709124.8	97.213	%	11:05:26
1	Y RADIAL	5822.0	5822.0	96.40	%	11:04:29
1	Al 396.153Radial†	68975.6	71425.6	[50000]	ug/L	11:04:09
1	Ca 317.933Radial†	32653.3	33779.6	[50000]	ug/L	11:04:09
1	Fe 238.204 Radial†	2164.6	2230.5	[20000]	ug/L	11:04:29
1	Mg 279.077 IEC†	1433.3	1481.6	[50000]	ug/L	11:04:29
1	Na 589.592 Radial†	61862.2	65582.1	[20000]	ug/L	11:04:09
2	Sc 361.383	854136.3	854136.3	98.412	%	11:05:32
2	Sc Radial	5350.4	5350.4	96.0	%	11:04:54
2	Y 371.029	702699.8	702699.8	96.332	%	11:05:32
2	Y RADIAL	5769.4	5769.4	95.53	%	11:04:54
2	Al 396.153Radial†	70067.2	73053.7	[50000]	ug/L	11:04:34
2	Ca 317.933Radial†	32982.7	34355.0	[50000]	ug/L	11:04:34
2	Fe 238.204 Radial†	2153.5	2234.3	[20000]	ug/L	11:04:54
2	Mg 279.077 IEC†	1432.1	1490.5	[50000]	ug/L	11:04:54
2	Na 589.592 Radial†	62754.2	66951.5	[20000]	ug/L	11:04:34
3	Sc 361.383	843792.7	843792.7	97.221	%	11:05:38
3	Sc Radial	5364.3	5364.3	96.2	%	11:05:19
3	Y 371.029	695516.3	695516.3	95.347	%	11:05:38
3	Y RADIAL	5786.0	5786.0	95.81	%	11:05:19
3	Al 396.153Radial†	70617.8	73437.3	[50000]	ug/L	11:04:59
3	Ca 317.933Radial†	33303.8	34599.9	[50000]	ug/L	11:04:59
3	Fe 238.204 Radial†	2163.3	2238.8	[20000]	ug/L	11:05:19
3	Mg 279.077 IEC†	1426.7	1481.1	[50000]	ug/L	11:05:19
3	Na 589.592 Radial†	63458.0	67514.1	[20000]	ug/L	11:04:59

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	852964.2	8645.27	1.01%	98.277	%
Sc Radial	5367.3	18.56	0.35%	96.3	%
Y 371.029	702447.0	6807.78	0.97%	96.297	%
Y RADIAL	5792.4	26.90	0.46%	95.91	%
Al 396.153Radial†	72638.9	1068.08	1.47%	[50000]	ug/L
Ca 317.933Radial†	34244.8	421.13	1.23%	[50000]	ug/L
Fe 238.204 Radial†	2234.5	4.14	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1484.4	5.33	0.36%	[50000]	ug/L
Na 589.592 Radial†	66682.5	993.69	1.49%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	221.1	0.00000	0.999932	
Al 396.153Radial	3	Lin Thru 0	0.0	1.452	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	2.590	0.00000	0.999969	
B 249.677	3	Lin Thru 0	0.0	46.92	0.00000	0.999954	
Ba 233.527	3	Lin Thru 0	0.0	133.8	0.00000	0.999967	
Be 313.107	3	Lin Thru 0	0.0	2785	0.00000	0.999938	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6852	0.00000	0.999994	
Cd 226.502	3	Lin Thru 0	0.0	96.42	0.00000	0.999939	
Co 228.616	3	Lin Thru 0	0.0	53.03	0.00000	0.999944	
Cr 267.716	3	Lin Thru 0	0.0	95.53	0.00000	0.999967	
Cu 324.752	3	Lin Thru 0	0.0	344.3	0.00000	0.999979	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1116	0.00000	0.999998	

K 766.490 Radial	3	Lin Thru 0	0.0	5.961	0.00000	0.999909
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0297	0.00000	0.999961
Mn 257.610	3	Lin Thru 0	0.0	943.5	0.00000	0.999940
Mo 202.031	3	Lin Thru 0	0.0	15.71	0.00000	0.999952
Na 589.592 Radia	2	Lin Thru 0	0.0	3.300	0.00000	0.999782
Ni 231.604	3	Lin Thru 0	0.0	43.52	0.00000	0.999935
P 214.914	3	Lin Thru 0	0.0	1.791	0.00000	0.999962
Pb 220.353	3	Lin Thru 0	0.0	8.933	0.00000	0.999978
S 181.975 Axial	3	Lin Thru 0	0.0	0.7569	0.00000	0.999894
Sb 206.836	3	Lin Thru 0	0.0	3.168	0.00000	0.999921
Se 196.026	3	Lin Thru 0	0.0	1.778	0.00000	0.999950
Si 251.611	3	Lin Thru 0	0.0	33.58	0.00000	0.999777
Sn 189.927	3	Lin Thru 0	0.0	6.216	0.00000	0.999930
Sr 421.552	3	Lin Thru 0	0.0	165.8	0.00000	0.999673
Ti 334.940	3	Lin Thru 0	0.0	633.5	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	3.549	0.00000	0.999971
U 409.014	3	Lin Thru 0	0.0	34.78	0.00000	0.999971
V 292.402	3	Lin Thru 0	0.0	150.3	0.00000	0.999974
Zn 213.857	3	Lin Thru 0	0.0	116.3	0.00000	0.999918
SiO2	3	Lin Thru 0	0.0	15.67	0.00000	0.999808

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/11/2009 11:07:49
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874645.6	874645.6	100.78	%			11:10:59
1	Sc Radial	5587.3	5587.3	100	%			11:09:42
1	Y 371.029	728574.2	728574.2	99.879	%			11:10:59
1	Y RADIAL	6058.4	6058.4	100.3	%			11:09:42
1	Ag 328.068†	58053.1	57332.4	262.49	ug/L	262.49	ppb	11:10:59
1	Al 396.153Radial†	7264.0	7284.3	4993.5	ug/L	4993.5	ppb	11:09:42
1	As 188.979†	1218.1	1240.0	483.13	ug/L	483.13	ppb	11:11:20
1	B 249.677†	23759.8	24070.2	511.00	ug/L	511.00	ppb	11:10:59
1	Ba 233.527†	68791.2	68273.0	511.47	ug/L	511.47	ppb	11:10:59
1	Be 313.107†	723572.8	722668.1	260.48	ug/L	260.48	ppb	11:10:59
1	Ca 317.933Radial†	3406.8	3382.8	4937.2	ug/L	4937.2	ppb	11:10:02
1	Cd 226.502†	48503.8	48329.6	501.04	ug/L	501.04	ppb	11:10:59
1	Co 228.616†	26736.9	26604.6	502.05	ug/L	502.05	ppb	11:11:20
1	Cr 267.716†	47283.2	46833.4	491.07	ug/L	491.07	ppb	11:10:59
1	Cu 324.752†	182267.7	174107.5	505.97	ug/L	505.97	ppb	11:10:59
1	Fe 238.204 Radial†	582.9	571.8	5139.0	ug/L	5139.0	ppb	11:10:02
1	K 766.490 Radial†	17719.4	14943.3	2501.7	ug/L	2501.7	ppb	11:09:42
1	Mg 279.077 IEC†	162.2	160.0	5385.9	ug/L	5385.9	ppb	11:10:02
1	Mn 257.610†	487398.0	483127.7	512.44	ug/L	512.44	ppb	11:10:59
1	Mo 202.031†	8653.5	8568.5	545.63	ug/L	545.63	ppb	11:11:20
1	Na 589.592 Radial†	6915.1	8455.0	2562.4	ug/L	2562.4	ppb	11:09:42
1	Ni 231.604†	22000.8	21745.5	499.36	ug/L	499.36	ppb	11:11:20
1	P 214.914†	4771.1	4492.3	2432.3	ug/L	2432.3	ppb	11:11:20
1	Pb 220.353†	4457.3	4491.0	504.37	ug/L	504.37	ppb	11:11:20
1	S 181.975 Axial†	1968.6	1904.0	2514.6	ug/L	2514.6	ppb	11:11:20
1	Sb 206.836†	1636.5	1586.5	510.11	ug/L	510.11	ppb	11:11:20
1	Se 196.026†	4530.0	4521.9	2562.2	ug/L	2562.2	ppb	11:11:20
1	Si 251.611†	163300.9	161562.7	4800.0	ug/L	4800.0	ppb	11:10:59
1	Sn 189.927†	3417.0	3381.9	544.62	ug/L	544.62	ppb	11:11:20
1	Sr 421.552†	89500.9	89316.4	538.64	ug/L	538.64	ppb	11:09:42
1	Ti 334.940†	319392.4	318191.1	502.11	ug/L	502.11	ppb	11:10:59
1	Tl 190.801†	1859.2	1879.5	532.82	ug/L	532.82	ppb	11:11:20
1	U 409.014†	14369.1	16842.5	482.64	ug/L	482.64	ppb	11:10:59
1	V 292.402†	75659.8	76440.4	515.94	ug/L	515.94	ppb	11:10:59
1	Zn 213.857†	60676.5	59455.8	506.97	ug/L	506.97	ppb	11:10:59
1	SiO2†	162240.8	160468.0	10216	ug/L	10216	ppb	11:12:17
2	Sc 361.383	878001.3	878001.3	101.16	%			11:11:26
2	Sc Radial	5467.5	5467.5	98.1	%			11:10:07
2	Y 371.029	730239.8	730239.8	100.11	%			11:11:26
2	Y RADIAL	5921.3	5921.3	98.05	%			11:10:07
2	Ag 328.068†	58405.7	57460.7	263.11	ug/L	263.11	ppb	11:11:26
2	Al 396.153Radial†	7160.7	7337.8	5030.5	ug/L	5030.5	ppb	11:10:07
2	As 188.979†	1203.4	1220.8	475.74	ug/L	475.74	ppb	11:11:46
2	B 249.677†	24050.9	24267.9	515.21	ug/L	515.21	ppb	11:11:26
2	Ba 233.527†	69257.7	68473.2	512.97	ug/L	512.97	ppb	11:11:26
2	Be 313.107†	727003.0	723314.6	260.71	ug/L	260.71	ppb	11:11:26
2	Ca 317.933Radial†	3402.8	3453.3	5040.0	ug/L	5040.0	ppb	11:10:27
2	Cd 226.502†	48761.4	48400.2	501.76	ug/L	501.76	ppb	11:11:26
2	Co 228.616†	26605.2	26373.1	497.67	ug/L	497.67	ppb	11:11:46
2	Cr 267.716†	47507.9	46876.1	491.52	ug/L	491.52	ppb	11:11:26
2	Cu 324.752†	183955.9	175085.0	508.82	ug/L	508.82	ppb	11:11:26
2	Fe 238.204 Radial†	581.1	582.8	5236.6	ug/L	5236.6	ppb	11:10:27
2	K 766.490 Radial†	17421.0	15026.4	2515.6	ug/L	2515.6	ppb	11:10:07
2	Mg 279.077 IEC†	160.2	161.5	5437.4	ug/L	5437.4	ppb	11:10:27
2	Mn 257.610†	490051.8	483902.5	513.27	ug/L	513.27	ppb	11:11:26
2	Mo 202.031†	8613.8	8496.5	541.06	ug/L	541.06	ppb	11:11:46
2	Na 589.592 Radial†	6700.5	8387.3	2541.8	ug/L	2541.8	ppb	11:10:07
2	Ni 231.604†	21861.8	21524.8	494.29	ug/L	494.29	ppb	11:11:46

2	P 214.914†	4761.7	4464.9	2416.4	ug/L	2416.4 ppb	11:11:46
2	Pb 220.353†	4437.6	4454.6	500.29	ug/L	500.29 ppb	11:11:46
2	S 181.975 Axial†	1950.1	1878.3	2480.6	ug/L	2480.6 ppb	11:11:46
2	Sb 206.836†	1631.7	1575.5	506.43	ug/L	506.43 ppb	11:11:46
2	Se 196.026†	4526.8	4501.6	2551.0	ug/L	2551.0 ppb	11:11:46
2	Si 251.611†	164658.6	162285.4	4821.6	ug/L	4821.6 ppb	11:11:26
2	Sn 189.927†	3387.7	3339.9	537.87	ug/L	537.87 ppb	11:11:46
2	Sr 421.552†	87524.2	89257.6	538.29	ug/L	538.29 ppb	11:10:07
2	Ti 334.940†	321061.9	318630.1	502.80	ug/L	502.80 ppb	11:11:26
2	Tl 190.801†	1840.7	1854.1	525.70	ug/L	525.70 ppb	11:11:46
2	U 409.014†	14592.1	17008.4	487.40	ug/L	487.40 ppb	11:11:26
2	V 292.402†	76145.1	76633.1	517.15	ug/L	517.15 ppb	11:11:26
2	Zn 213.857†	61065.8	59610.5	508.32	ug/L	508.32 ppb	11:11:26
2	SiO2†	162458.2	160067.6	10191	ug/L	10191 ppb	11:12:22
3	Sc 361.383	870914.4	870914.4	100.35	%		11:11:52
3	Sc Radial	5417.4	5417.4	97.2	%		11:10:32
3	Y 371.029	722870.7	722870.7	99.097	%		11:11:52
3	Y RADIAL	5860.9	5860.9	97.05	%		11:10:32
3	Ag 328.068†	57902.4	57429.0	262.99	ug/L	262.99 ppb	11:11:52
3	Al 396.153Radial†	7053.3	7294.8	5000.5	ug/L	5000.5 ppb	11:10:32
3	As 188.979†	1214.7	1241.8	483.83	ug/L	483.83 ppb	11:12:12
3	B 249.677†	23877.0	24288.0	515.61	ug/L	515.61 ppb	11:11:52
3	Ba 233.527†	68734.2	68508.7	513.24	ug/L	513.24 ppb	11:11:52
3	Be 313.107†	720723.4	722904.6	260.57	ug/L	260.57 ppb	11:11:52
3	Ca 317.933Radial†	3424.3	3507.5	5119.1	ug/L	5119.1 ppb	11:10:52
3	Cd 226.502†	48419.6	48451.8	502.29	ug/L	502.29 ppb	11:11:52
3	Co 228.616†	26795.1	26776.3	505.30	ug/L	505.30 ppb	11:12:12
3	Cr 267.716†	47171.2	46922.8	492.00	ug/L	492.00 ppb	11:11:52
3	Cu 324.752†	182186.1	174800.9	508.00	ug/L	508.00 ppb	11:11:52
3	Fe 238.204 Radial†	587.6	594.9	5345.6	ug/L	5345.6 ppb	11:10:52
3	K 766.490 Radial†	17277.6	15043.0	2518.4	ug/L	2518.4 ppb	11:10:32
3	Mg 279.077 IEC†	161.6	164.4	5535.9	ug/L	5535.9 ppb	11:10:52
3	Mn 257.610†	487073.8	484876.7	514.32	ug/L	514.32 ppb	11:11:52
3	Mo 202.031†	8691.2	8642.8	550.38	ug/L	550.38 ppb	11:12:12
3	Na 589.592 Radial†	6591.4	8338.2	2527.0	ug/L	2527.0 ppb	11:10:32
3	Ni 231.604†	22035.2	21873.4	502.30	ug/L	502.30 ppb	11:12:12
3	P 214.914†	4774.7	4516.2	2445.2	ug/L	2445.2 ppb	11:12:12
3	Pb 220.353†	4472.6	4525.2	508.20	ug/L	508.20 ppb	11:12:12
3	S 181.975 Axial†	1963.5	1907.3	2519.0	ug/L	2519.0 ppb	11:12:12
3	Sb 206.836†	1653.4	1610.3	517.77	ug/L	517.77 ppb	11:12:12
3	Se 196.026†	4555.5	4566.6	2587.9	ug/L	2587.9 ppb	11:12:12
3	Si 251.611†	163499.9	162455.2	4826.4	ug/L	4826.4 ppb	11:11:52
3	Sn 189.927†	3416.9	3396.3	546.95	ug/L	546.95 ppb	11:12:12
3	Sr 421.552†	86670.2	89203.7	537.96	ug/L	537.96 ppb	11:10:32
3	Ti 334.940†	318502.9	318662.5	502.86	ug/L	502.86 ppb	11:11:52
3	Tl 190.801†	1856.3	1884.5	534.22	ug/L	534.22 ppb	11:12:12
3	U 409.014†	14588.1	17121.9	490.65	ug/L	490.65 ppb	11:11:52
3	V 292.402†	75362.7	76466.0	516.16	ug/L	516.16 ppb	11:11:52
3	Zn 213.857†	60732.2	59769.3	509.62	ug/L	509.62 ppb	11:11:52
3	SiO2†	163681.3	162593.3	10352	ug/L	10352 ppb	11:12:28

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874520.4	100.76	%	0.408				0.41%
Sc Radial	5490.7	98.5	%	1.57				1.59%
Y 371.029	727228.3	99.695	%	0.5298				0.53%
Y RADIAL	5946.9	98.47	%	1.676				1.70%
Ag 328.068†	57407.4	262.86	ug/L	0.324	262.86	ppb	0.324	0.12%
QC value within limits for Ag 328.068 Recovery = 105.15%								
Al 396.153Radial†	7305.6	5008.1	ug/L	19.66	5008.1	ppb	19.66	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.16%								
As 188.979†	1234.2	480.90	ug/L	4.484	480.90	ppb	4.484	0.93%
QC value within limits for As 188.979 Recovery = 96.18%								
B 249.677†	24208.7	513.94	ug/L	2.553	513.94	ppb	2.553	0.50%
QC value within limits for B 249.677 Recovery = 102.79%								
Ba 233.527†	68418.3	512.56	ug/L	0.954	512.56	ppb	0.954	0.19%
QC value within limits for Ba 233.527 Recovery = 102.51%								
Be 313.107†	722962.4	260.59	ug/L	0.118	260.59	ppb	0.118	0.05%
QC value within limits for Be 313.107 Recovery = 104.23%								

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Ca 317.933Radial†        3447.9      5032.1 ug/L         91.20      5032.1 ppb          91.20   1.81%
   QC value within limits for Ca 317.933Radial  Recovery = 100.64%
Cd 226.502†             48393.9       501.70 ug/L         0.627       501.70 ppb          0.627   0.13%
   QC value within limits for Cd 226.502  Recovery = 100.34%
Co 228.616†             26584.7       501.67 ug/L         3.827       501.67 ppb          3.827   0.76%
   QC value within limits for Co 228.616  Recovery = 100.33%
Cr 267.716†             46877.4       491.53 ug/L         0.469       491.53 ppb          0.469   0.10%
   QC value within limits for Cr 267.716  Recovery = 98.31%
Cu 324.752†            174664.5       507.60 ug/L         1.464       507.60 ppb          1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 101.52%
Fe 238.204 Radial†        583.2      5240.4 ug/L        103.38      5240.4 ppb         103.38   1.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.81%
K 766.490 Radial†       15004.3      2511.9 ug/L          8.96      2511.9 ppb           8.96   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 100.48%
Mg 279.077 IEC†           162.0      5453.1 ug/L         76.21      5453.1 ppb          76.21   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.06%
Mn 257.610†            483968.9       513.35 ug/L         0.938       513.35 ppb          0.938   0.18%
   QC value within limits for Mn 257.610  Recovery = 102.67%
Mo 202.031†             8569.3       545.69 ug/L         4.661       545.69 ppb          4.661   0.85%
   QC value within limits for Mo 202.031  Recovery = 109.14%
Na 589.592 Radial†      8393.5      2543.7 ug/L         17.76      2543.7 ppb          17.76   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 101.75%
Ni 231.604†            21714.6       498.65 ug/L         4.050       498.65 ppb          4.050   0.81%
   QC value within limits for Ni 231.604  Recovery = 99.73%
P 214.914†              4491.2      2431.3 ug/L         14.43      2431.3 ppb          14.43   0.59%
   QC value within limits for P 214.914  Recovery = 97.25%
Pb 220.353†             4490.3       504.29 ug/L         3.953       504.29 ppb          3.953   0.78%
   QC value within limits for Pb 220.353  Recovery = 100.86%
S 181.975 Axial†        1896.6      2504.7 ug/L         21.01      2504.7 ppb          21.01   0.84%
   QC value within limits for S 181.975 Axial  Recovery = 100.19%
Sb 206.836†             1590.8       511.44 ug/L         5.783       511.44 ppb          5.783   1.13%
   QC value within limits for Sb 206.836  Recovery = 102.29%
Se 196.026†             4530.0      2567.0 ug/L         18.93      2567.0 ppb          18.93   0.74%
   QC value within limits for Se 196.026  Recovery = 102.68%
Si 251.611†            162101.1      4816.0 ug/L         14.10      4816.0 ppb          14.10   0.29%
   QC value within limits for Si 251.611  Recovery = 96.32%
Sn 189.927†             3372.7       543.15 ug/L         4.717       543.15 ppb          4.717   0.87%
   QC value within limits for Sn 189.927  Recovery = 108.63%
Sr 421.552†            89259.2       538.30 ug/L         0.341       538.30 ppb          0.341   0.06%
   QC value within limits for Sr 421.552  Recovery = 107.66%
Ti 334.940†            318494.6       502.59 ug/L         0.418       502.59 ppb          0.418   0.08%
   QC value within limits for Ti 334.940  Recovery = 100.52%
Tl 190.801†             1872.7       530.91 ug/L         4.567       530.91 ppb          4.567   0.86%
   QC value within limits for Tl 190.801  Recovery = 106.18%
U 409.014†             16991.0       486.90 ug/L         4.025       486.90 ppb          4.025   0.83%
   QC value within limits for U 409.014  Recovery = 97.38%
V 292.402†             76513.2       516.42 ug/L         0.645       516.42 ppb          0.645   0.12%
   QC value within limits for V 292.402  Recovery = 103.28%
Zn 213.857†            59611.8       508.30 ug/L         1.325       508.30 ppb          1.325   0.26%
   QC value within limits for Zn 213.857  Recovery = 101.66%
SiO2†                 161043.0        10253 ug/L          86.5        10253 ppb           86.5   0.84%
   QC value within limits for SiO2  Recovery = 95.87%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/11/2009 11:14:38
Data Type: Reprocessed on 12/11/2009 12:46:00

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	871028.0	871028.0	100.36	%			11:17:48
1	Sc Radial	5612.3	5612.3	101	%			11:16:31
1	Y 371.029	732501.0	732501.0	100.42	%			11:17:48
1	Y RADIAL	6085.8	6085.8	100.8	%			11:16:31
1	Ag 328.068†	348.8	73.5	0.3353	ug/L	0.3353	ppb	11:17:48
1	Al 396.153Radial†	-12.8	22.6	15.521	ug/L	15.521	ppb	11:16:31
1	As 188.979†	-27.4	3.9	1.5214	ug/L	1.5214	ppb	11:18:08
1	B 249.677†	-289.2	205.0	4.3696	ug/L	4.3696	ppb	11:18:08
1	Ba 233.527†	-12.6	-1.4	-0.0107	ug/L	-0.0107	ppb	11:18:08
1	Be 313.107†	-4511.2	167.5	0.0602	ug/L	0.0602	ppb	11:17:48
1	Ca 317.933Radial†	19.7	2.7	3.9544	ug/L	3.9544	ppb	11:16:51
1	Cd 226.502†	-200.3	-0.7	-0.0070	ug/L	-0.0070	ppb	11:18:08
1	Co 228.616†	-84.2	-10.4	-0.1945	ug/L	-0.1945	ppb	11:18:08
1	Cr 267.716†	88.4	2.1	0.0230	ug/L	0.0230	ppb	11:18:08
1	Cu 324.752†	6779.9	-2.2	-0.0063	ug/L	-0.0063	ppb	11:17:48
1	Fe 238.204 Radial†	9.9	-0.0	-0.0536	ug/L	-0.0536	ppb	11:16:51
1	K 766.490 Radial†	2839.1	81.1	13.610	ug/L	13.610	ppb	11:16:31
1	Mg 279.077 IEC†	4.7	2.8	94.399	ug/L	94.399	ppb	11:16:51
1	Mn 257.610†	522.8	0.8	-0.0009	ug/L	-0.0009	ppb	11:18:08
1	Mo 202.031†	31.5	13.0	0.8243	ug/L	0.8243	ppb	11:18:08
1	Na 589.592 Radial†	-1625.7	-61.0	-18.490	ug/L	-18.490	ppb	11:16:31
1	Ni 231.604†	94.7	8.4	0.1942	ug/L	0.1942	ppb	11:18:08
1	P 214.914†	228.2	-14.7	-8.1967	ug/L	-8.1967	ppb	11:18:08
1	Pb 220.353†	-63.2	5.0	0.5673	ug/L	0.5673	ppb	11:18:08
1	S 181.975 Axial†	48.3	-1.3	-1.7250	ug/L	-1.7250	ppb	11:18:08
1	Sb 206.836†	49.7	12.2	3.8364	ug/L	3.8364	ppb	11:18:08
1	Se 196.026†	-30.8	-3.9	-2.1655	ug/L	-2.1655	ppb	11:18:08
1	Si 251.611†	550.8	67.1	1.9835	ug/L	1.9835	ppb	11:18:08
1	Sn 189.927†	3.0	-5.8	-0.9386	ug/L	-0.9386	ppb	11:18:08
1	Sr 421.552†	-20.8	-20.5	-0.1236	ug/L	-0.1236	ppb	11:16:31
1	Ti 334.940†	-1250.7	10.0	0.0175	ug/L	0.0175	ppb	11:17:48
1	Tl 190.801†	-23.1	11.6	3.2610	ug/L	3.2610	ppb	11:18:08
1	U 409.014†	-2714.8	-121.1	-3.4828	ug/L	-3.4828	ppb	11:17:48
1	V 292.402†	-1376.0	-8.3	-0.0481	ug/L	-0.0481	ppb	11:17:48
1	Zn 213.857†	753.9	-2.6	-0.0268	ug/L	-0.0268	ppb	11:18:08
1	SiO2†	514.4	-11.9	-0.7943	ug/L	-0.7943	ppb	11:19:04
2	Sc 361.383	868979.5	868979.5	100.12	%			11:18:13
2	Sc Radial	5550.9	5550.9	99.6	%			11:16:56
2	Y 371.029	731655.6	731655.6	100.30	%			11:18:13
2	Y RADIAL	6018.6	6018.6	99.66	%			11:16:56
2	Ag 328.068†	291.0	16.6	0.0729	ug/L	0.0729	ppb	11:18:13
2	Al 396.153Radial†	-9.6	25.7	17.661	ug/L	17.661	ppb	11:16:56
2	As 188.979†	-32.4	-1.1	-0.4345	ug/L	-0.4345	ppb	11:18:33
2	B 249.677†	-299.4	194.2	4.1401	ug/L	4.1401	ppb	11:18:33
2	Ba 233.527†	-11.9	-0.8	-0.0064	ug/L	-0.0064	ppb	11:18:33
2	Be 313.107†	-4488.3	179.8	0.0646	ug/L	0.0646	ppb	11:18:13
2	Ca 317.933Radial†	17.4	0.6	0.9006	ug/L	0.9006	ppb	11:17:16
2	Cd 226.502†	-198.1	1.1	0.0125	ug/L	0.0125	ppb	11:18:33
2	Co 228.616†	-81.8	-8.2	-0.1526	ug/L	-0.1526	ppb	11:18:33
2	Cr 267.716†	97.0	10.9	0.1143	ug/L	0.1143	ppb	11:18:33
2	Cu 324.752†	6774.6	8.5	0.0240	ug/L	0.0240	ppb	11:18:13
2	Fe 238.204 Radial†	8.3	-1.6	-14.202	ug/L	-14.202	ppb	11:17:16
2	K 766.490 Radial†	2861.4	134.7	22.618	ug/L	22.618	ppb	11:16:56
2	Mg 279.077 IEC†	4.5	2.6	89.132	ug/L	89.132	ppb	11:17:16
2	Mn 257.610†	557.3	36.5	0.0356	ug/L	0.0356	ppb	11:18:33
2	Mo 202.031†	31.0	12.6	0.8003	ug/L	0.8003	ppb	11:18:33
2	Na 589.592 Radial†	-1655.0	-108.2	-32.804	ug/L	-32.804	ppb	11:16:56
2	Ni 231.604†	91.5	5.5	0.1258	ug/L	0.1258	ppb	11:18:33

2	P 214.914†	235.1	-7.2	-4.0257 ug/L	-4.0257 ppb	11:18:33
2	Pb 220.353†	-70.1	-2.0	-0.2169 ug/L	-0.2169 ppb	11:18:33
2	S 181.975 Axial†	48.6	-0.8	-1.1038 ug/L	-1.1038 ppb	11:18:33
2	Sb 206.836†	24.2	-13.2	-4.1820 ug/L	-4.1820 ppb	11:18:33
2	Se 196.026†	-25.5	1.3	0.6912 ug/L	0.6912 ppb	11:18:33
2	Si 251.611†	542.2	59.8	1.7624 ug/L	1.7624 ppb	11:18:33
2	Sn 189.927†	1.4	-7.5	-1.2016 ug/L	-1.2016 ppb	11:18:33
2	Sr 421.552†	-48.0	-48.0	-0.2897 ug/L	-0.2897 ppb	11:16:56
2	Ti 334.940†	-1247.0	10.8	0.0184 ug/L	0.0184 ppb	11:18:13
2	Tl 190.801†	-32.9	1.7	0.4765 ug/L	0.4765 ppb	11:18:33
2	U 409.014†	-2695.5	-108.2	-3.1097 ug/L	-3.1097 ppb	11:18:13
2	V 292.402†	-1381.9	-17.4	-0.1066 ug/L	-0.1066 ppb	11:18:13
2	Zn 213.857†	749.9	-4.9	-0.0444 ug/L	-0.0444 ppb	11:18:33
2	SiO2†	585.7	60.5	3.8244 ug/L	3.8244 ppb	11:19:09
3	Sc 361.383	873513.7	873513.7	100.64 %		11:18:38
3	Sc Radial	5529.5	5529.5	99.2 %		11:17:21
3	Y 371.029	733605.4	733605.4	100.57 %		11:18:38
3	Y RADIAL	5996.7	5996.7	99.30 %		11:17:21
3	Ag 328.068†	326.3	50.2	0.2326 ug/L	0.2326 ppb	11:18:38
3	Al 396.153Radial†	-32.8	2.3	1.5538 ug/L	1.5538 ppb	11:17:21
3	As 188.979†	-28.7	2.8	1.0687 ug/L	1.0687 ppb	11:18:58
3	B 249.677†	-285.2	209.8	4.4719 ug/L	4.4719 ppb	11:18:58
3	Ba 233.527†	-12.3	-1.1	-0.0082 ug/L	-0.0082 ppb	11:18:58
3	Be 313.107†	-4603.0	89.1	0.0321 ug/L	0.0321 ppb	11:18:38
3	Ca 317.933Radial†	16.9	0.1	0.1833 ug/L	0.1833 ppb	11:17:41
3	Cd 226.502†	-199.6	0.6	0.0061 ug/L	0.0061 ppb	11:18:58
3	Co 228.616†	-76.0	-2.1	-0.0391 ug/L	-0.0391 ppb	11:18:58
3	Cr 267.716†	79.0	-7.6	-0.0771 ug/L	-0.0771 ppb	11:18:58
3	Cu 324.752†	6812.4	10.9	0.0317 ug/L	0.0317 ppb	11:18:38
3	Fe 238.204 Radial†	9.9	0.1	1.1664 ug/L	1.1664 ppb	11:17:41
3	K 766.490 Radial†	2728.0	11.3	1.9062 ug/L	1.9062 ppb	11:17:21
3	Mg 279.077 IEC†	3.0	1.1	38.007 ug/L	38.007 ppb	11:17:41
3	Mn 257.610†	543.0	19.3	0.0199 ug/L	0.0199 ppb	11:18:58
3	Mo 202.031†	19.4	0.8	0.0534 ug/L	0.0534 ppb	11:18:58
3	Na 589.592 Radial†	-1614.2	-73.6	-22.309 ug/L	-22.309 ppb	11:17:21
3	Ni 231.604†	89.0	2.4	0.0563 ug/L	0.0563 ppb	11:18:58
3	P 214.914†	235.9	-7.7	-4.2936 ug/L	-4.2936 ppb	11:18:58
3	Pb 220.353†	-62.0	6.3	0.7110 ug/L	0.7110 ppb	11:18:58
3	S 181.975 Axial†	42.5	-7.2	-9.5340 ug/L	-9.5340 ppb	11:18:58
3	Sb 206.836†	32.1	-5.5	-1.7119 ug/L	-1.7119 ppb	11:18:58
3	Se 196.026†	-31.9	-4.9	-2.7624 ug/L	-2.7624 ppb	11:18:58
3	Si 251.611†	524.2	39.1	1.1628 ug/L	1.1628 ppb	11:18:58
3	Sn 189.927†	12.1	3.2	0.5085 ug/L	0.5085 ppb	11:18:58
3	Sr 421.552†	-25.5	-25.5	-0.1539 ug/L	-0.1539 ppb	11:17:21
3	Ti 334.940†	-1240.4	23.8	0.0402 ug/L	0.0402 ppb	11:18:38
3	Tl 190.801†	-46.1	-11.3	-3.1726 ug/L	-3.1726 ppb	11:18:58
3	U 409.014†	-2816.5	-214.4	-6.1647 ug/L	-6.1647 ppb	11:18:38
3	V 292.402†	-1369.5	2.0	0.0030 ug/L	0.0030 ppb	11:18:38
3	Zn 213.857†	769.9	11.2	0.0941 ug/L	0.0941 ppb	11:18:58
3	SiO2†	579.8	51.6	3.2857 ug/L	3.2857 ppb	11:19:14

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871173.7	100.38	%	0.262				0.26%
Sc Radial	5564.2	99.8	%	0.77				0.77%
Y 371.029	732587.3	100.43	%	0.134				0.13%
Y RADIAL	6033.7	99.91	%	0.768				0.77%
Ag 328.068†	46.8	0.2136	ug/L	0.13224	0.2136	ppb	0.13224	61.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.8	11.578	ug/L	8.7473	11.578	ppb	8.7473	75.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	0.7185	ug/L	1.02385	0.7185	ppb	1.02385	142.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	203.0	4.3272	ug/L	0.16987	4.3272	ppb	0.16987	3.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.1	-0.0084	ug/L	0.00213	-0.0084	ppb	0.00213	25.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.5	0.0523	ug/L	0.01764	0.0523	ppb	0.01764	33.74%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.2      1.6794 ug/L       2.00260      1.6794 ppb        2.00260 119.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                0.3      0.0039 ug/L       0.00993      0.0039 ppb        0.00993 256.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -6.9     -0.1287 ug/L       0.08042     -0.1287 ppb        0.08042  62.47%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.8      0.0201 ug/L       0.09576      0.0201 ppb        0.09576 477.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                5.7      0.0165 ug/L       0.02006      0.0165 ppb        0.02006 121.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.5     -4.3629 ug/L       8.54236     -4.3629 ppb        8.54236 195.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         75.7      12.712 ug/L       10.3853      12.712 ppb        10.3853  81.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      73.846 ug/L       31.1487      73.846 ppb        31.1487  42.18%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.9      0.0182 ug/L       0.01832      0.0182 ppb        0.01832 100.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                8.8      0.5593 ug/L       0.43831      0.5593 ppb        0.43831  78.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -81.0     -24.534 ug/L        7.4119     -24.534 ppb         7.4119  30.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.5      0.1254 ug/L       0.06896      0.1254 ppb        0.06896  54.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.9     -5.5053 ug/L       2.33463     -5.5053 ppb        2.33463  42.41%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.1      0.3538 ug/L       0.49945      0.3538 ppb        0.49945 141.18%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.1     -4.1209 ug/L       4.69812     -4.1209 ppb        4.69812 114.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.2     -0.6858 ug/L       4.10651     -0.6858 ppb        4.10651 598.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.5     -1.4122 ug/L       1.84594     -1.4122 ppb        1.84594 130.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.3      1.6362 ug/L       0.42468      1.6362 ppb        0.42468  25.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.4     -0.5439 ug/L       0.92085     -0.5439 ppb        0.92085 169.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -31.3     -0.1891 ug/L       0.08845     -0.1891 ppb        0.08845  46.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               14.8      0.0254 ug/L       0.01288      0.0254 ppb        0.01288  50.72%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.7      0.1883 ug/L       3.22645      0.1883 ppb        3.22645 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -147.9     -4.2524 ug/L       1.66656     -4.2524 ppb        1.66656  39.19%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -7.9     -0.0506 ug/L       0.05485     -0.0506 ppb        0.05485 108.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                1.2      0.0076 ug/L       0.07540      0.0076 ppb        0.07540 985.80%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     33.4      2.1053 ug/L       2.52552      2.1053 ppb        2.52552 119.96%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/11/2009 11:21:24
Data Type: Reprocessed on 12/11/2009 12:46:01

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	869577.2	869577.2	100.19	%			11:24:35
1	Sc Radial	4842.6	4842.6	86.9	%			11:23:18
1	Y 371.029	732644.8	732644.8	100.44	%			11:24:35
1	Y RADIAL	5290.9	5290.9	87.61	%			11:23:18
1	Ag 328.068†	1484.8	1207.9	5.4853	ug/L	5.4853	ppb	11:24:35
1	Al 396.153Radial†	270.1	346.3	238.07	ug/L	238.07	ppb	11:23:18
1	As 188.979†	45.7	76.9	29.713	ug/L	29.713	ppb	11:24:55
1	B 249.677†	1805.2	2294.9	48.874	ug/L	48.874	ppb	11:24:35
1	Ba 233.527†	656.4	666.2	4.9940	ug/L	4.9940	ppb	11:24:55
1	Be 313.107†	8959.2	13604.7	4.8949	ug/L	4.8949	ppb	11:24:35
1	Ca 317.933Radial†	156.2	162.9	237.79	ug/L	237.79	ppb	11:23:38
1	Cd 226.502†	291.1	489.5	5.0649	ug/L	5.0649	ppb	11:24:55
1	Co 228.616†	188.2	261.3	4.9417	ug/L	4.9417	ppb	11:24:55
1	Cr 267.716†	549.7	462.6	4.8376	ug/L	4.8376	ppb	11:24:55
1	Cu 324.752†	10209.9	3432.6	9.9779	ug/L	9.9779	ppb	11:24:35
1	Fe 238.204 Radial†	23.2	16.8	150.52	ug/L	150.52	ppb	11:23:38
1	K 766.490 Radial†	3786.4	1620.1	271.59	ug/L	271.59	ppb	11:23:18
1	Mg 279.077 IEC†	11.2	11.0	370.57	ug/L	370.57	ppb	11:23:38
1	Mn 257.610†	10186.4	9646.7	10.232	ug/L	10.232	ppb	11:24:35
1	Mo 202.031†	176.0	157.3	10.020	ug/L	10.020	ppb	11:24:55
1	Na 589.592 Radial†	-576.3	890.6	269.91	ug/L	269.91	ppb	11:23:18
1	Ni 231.604†	329.7	243.2	5.5841	ug/L	5.5841	ppb	11:24:55
1	P 214.914†	488.2	245.2	135.36	ug/L	135.36	ppb	11:24:55
1	Pb 220.353†	16.0	83.9	9.4534	ug/L	9.4534	ppb	11:24:55
1	S 181.975 Axial†	123.8	74.2	97.933	ug/L	97.933	ppb	11:24:55
1	Sb 206.836†	67.5	30.0	9.6730	ug/L	9.6730	ppb	11:24:55
1	Se 196.026†	20.2	47.0	26.973	ug/L	26.973	ppb	11:24:55
1	Si 251.611†	3706.6	3217.8	95.552	ug/L	95.552	ppb	11:24:55
1	Sn 189.927†	52.2	43.3	6.9935	ug/L	6.9935	ppb	11:24:55
1	Sr 421.552†	845.7	974.0	5.8722	ug/L	5.8722	ppb	11:23:18
1	Ti 334.940†	1903.6	3156.2	4.9711	ug/L	4.9711	ppb	11:24:35
1	Tl 190.801†	37.1	71.6	20.243	ug/L	20.243	ppb	11:24:55
1	U 409.014†	-899.4	1686.3	48.455	ug/L	48.455	ppb	11:24:35
1	V 292.402†	-670.0	694.0	4.8329	ug/L	4.8329	ppb	11:24:35
1	Zn 213.857†	1936.5	1179.0	10.067	ug/L	10.067	ppb	11:24:55
1	SiO2†	3854.5	3322.7	211.45	ug/L	211.45	ppb	11:25:51
2	Sc 361.383	867433.3	867433.3	99.944	%			11:25:00
2	Sc Radial	5581.3	5581.3	100	%			11:23:43
2	Y 371.029	729901.6	729901.6	100.06	%			11:25:00
2	Y RADIAL	6092.4	6092.4	100.9	%			11:23:43
2	Ag 328.068†	1380.6	1107.4	5.0231	ug/L	5.0231	ppb	11:25:00
2	Al 396.153Radial†	293.4	328.5	225.78	ug/L	225.78	ppb	11:23:43
2	As 188.979†	51.9	83.2	32.155	ug/L	32.155	ppb	11:25:20
2	B 249.677†	1788.5	2282.7	48.616	ug/L	48.616	ppb	11:25:00
2	Ba 233.527†	665.1	676.6	5.0706	ug/L	5.0706	ppb	11:25:20
2	Be 313.107†	9192.1	13859.8	4.9863	ug/L	4.9863	ppb	11:25:00
2	Ca 317.933Radial†	158.3	141.3	206.21	ug/L	206.21	ppb	11:24:03
2	Cd 226.502†	279.4	478.5	4.9534	ug/L	4.9534	ppb	11:25:20
2	Co 228.616†	178.1	251.7	4.7607	ug/L	4.7607	ppb	11:25:20
2	Cr 267.716†	555.4	469.6	4.9105	ug/L	4.9105	ppb	11:25:20
2	Cu 324.752†	10097.0	3344.8	9.7219	ug/L	9.7219	ppb	11:25:00
2	Fe 238.204 Radial†	24.3	14.4	129.38	ug/L	129.38	ppb	11:24:03
2	K 766.490 Radial†	3728.1	984.8	165.00	ug/L	165.00	ppb	11:23:43
2	Mg 279.077 IEC†	10.0	8.1	272.93	ug/L	272.93	ppb	11:24:03
2	Mn 257.610†	10271.6	9757.1	10.349	ug/L	10.349	ppb	11:25:00
2	Mo 202.031†	178.1	159.8	10.178	ug/L	10.178	ppb	11:25:20
2	Na 589.592 Radial†	-538.0	1016.7	308.11	ug/L	308.11	ppb	11:23:43
2	Ni 231.604†	312.7	226.9	5.2112	ug/L	5.2112	ppb	11:25:20

2	P 214.914†	496.2	254.4	140.61 ug/L	140.61 ppb	11:25:20
2	Pb 220.353†	27.1	95.1	10.699 ug/L	10.699 ppb	11:25:20
2	S 181.975 Axial†	124.6	75.3	99.446 ug/L	99.446 ppb	11:25:20
2	Sb 206.836†	73.8	36.5	11.769 ug/L	11.769 ppb	11:25:20
2	Se 196.026†	26.0	52.8	30.186 ug/L	30.186 ppb	11:25:20
2	Si 251.611†	3692.9	3213.2	95.442 ug/L	95.442 ppb	11:25:20
2	Sn 189.927†	66.8	58.0	9.3598 ug/L	9.3598 ppb	11:25:20
2	Sr 421.552†	852.9	852.3	5.1383 ug/L	5.1383 ppb	11:23:43
2	Ti 334.940†	1843.4	3100.7	4.8813 ug/L	4.8813 ppb	11:25:00
2	Tl 190.801†	30.2	64.8	18.334 ug/L	18.334 ppb	11:25:20
2	U 409.014†	-858.9	1724.6	49.557 ug/L	49.557 ppb	11:25:00
2	V 292.402†	-676.1	686.3	4.7869 ug/L	4.7869 ppb	11:25:00
2	Zn 213.857†	1919.3	1166.5	9.9676 ug/L	9.9676 ppb	11:25:20
2	SiO2†	3846.8	3324.4	211.62 ug/L	211.62 ppb	11:25:56
3	Sc 361.383	881014.9	881014.9	101.51 %		11:25:25
3	Sc Radial	5538.1	5538.1	99.3 %		11:24:08
3	Y 371.029	740744.8	740744.8	101.55 %		11:25:25
3	Y RADIAL	6054.5	6054.5	100.3 %		11:24:08
3	Ag 328.068†	1438.5	1143.1	5.1803 ug/L	5.1803 ppb	11:25:25
3	Al 396.153Radial†	274.4	311.6	214.13 ug/L	214.13 ppb	11:24:08
3	As 188.979†	58.8	89.2	34.480 ug/L	34.480 ppb	11:25:45
3	B 249.677†	1856.1	2321.7	49.451 ug/L	49.451 ppb	11:25:25
3	Ba 233.527†	669.2	670.3	5.0232 ug/L	5.0232 ppb	11:25:45
3	Be 313.107†	9258.8	13783.7	4.9590 ug/L	4.9590 ppb	11:25:25
3	Ca 317.933Radial†	153.8	137.9	201.33 ug/L	201.33 ppb	11:24:28
3	Cd 226.502†	277.4	472.2	4.8893 ug/L	4.8893 ppb	11:25:45
3	Co 228.616†	180.1	250.9	4.7470 ug/L	4.7470 ppb	11:25:45
3	Cr 267.716†	571.0	476.5	4.9824 ug/L	4.9824 ppb	11:25:45
3	Cu 324.752†	10294.2	3383.3	9.8327 ug/L	9.8327 ppb	11:25:25
3	Fe 238.204 Radial†	21.9	12.2	109.35 ug/L	109.35 ppb	11:24:28
3	K 766.490 Radial†	3707.0	992.7	166.32 ug/L	166.32 ppb	11:24:08
3	Mg 279.077 IEC†	11.8	10.0	334.97 ug/L	334.97 ppb	11:24:28
3	Mn 257.610†	10367.7	9693.4	10.278 ug/L	10.278 ppb	11:25:25
3	Mo 202.031†	181.2	160.1	10.198 ug/L	10.198 ppb	11:25:45
3	Na 589.592 Radial†	-596.5	953.6	289.00 ug/L	289.00 ppb	11:24:08
3	Ni 231.604†	309.3	218.8	5.0239 ug/L	5.0239 ppb	11:25:45
3	P 214.914†	479.9	230.7	127.35 ug/L	127.35 ppb	11:25:45
3	Pb 220.353†	37.2	104.6	11.769 ug/L	11.769 ppb	11:25:45
3	S 181.975 Axial†	132.5	81.1	107.13 ug/L	107.13 ppb	11:25:45
3	Sb 206.836†	66.0	27.6	8.9622 ug/L	8.9622 ppb	11:25:45
3	Se 196.026†	27.9	54.3	30.951 ug/L	30.951 ppb	11:25:45
3	Si 251.611†	3731.0	3193.8	94.865 ug/L	94.865 ppb	11:25:45
3	Sn 189.927†	61.6	51.8	8.3624 ug/L	8.3624 ppb	11:25:45
3	Sr 421.552†	820.1	825.9	4.9794 ug/L	4.9794 ppb	11:24:08
3	Ti 334.940†	1869.5	3098.0	4.8776 ug/L	4.8776 ppb	11:25:25
3	Tl 190.801†	30.3	64.4	18.212 ug/L	18.212 ppb	11:25:45
3	U 409.014†	-942.7	1655.3	47.568 ug/L	47.568 ppb	11:25:25
3	V 292.402†	-679.5	693.3	4.8348 ug/L	4.8348 ppb	11:25:25
3	Zn 213.857†	1935.7	1153.1	9.8533 ug/L	9.8533 ppb	11:25:45
3	SiO2†	3816.3	3235.1	205.92 ug/L	205.92 ppb	11:26:01

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	872675.2	100.55	%	0.841				0.84%
Sc Radial	5320.7	95.4	%	7.44				7.79%
Y 371.029	734430.4	100.68	%	0.773				0.77%
Y RADIAL	5812.6	96.25	%	7.488				7.78%
Ag 328.068†	1152.8	5.2296	ug/L	0.23498	5.2296	ppb	0.23498	4.49%
QC value within limits for Ag 328.068 Recovery = 104.59%								
Al 396.153Radial†	328.8	225.99	ug/L	11.970	225.99	ppb	11.970	5.30%
QC value within limits for Al 396.153Radial Recovery = 113.00%								
As 188.979†	83.1	32.116	ug/L	2.3836	32.116	ppb	2.3836	7.42%
QC value within limits for As 188.979 Recovery = 107.05%								
B 249.677†	2299.8	48.981	ug/L	0.4272	48.981	ppb	0.4272	0.87%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	671.1	5.0293	ug/L	0.03861	5.0293	ppb	0.03861	0.77%
QC value within limits for Ba 233.527 Recovery = 100.59%								
Be 313.107†	13749.4	4.9468	ug/L	0.04694	4.9468	ppb	0.04694	0.95%
QC value within limits for Be 313.107 Recovery = 98.94%								

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Ca 317.933Radial†        147.4      215.11 ug/L        19.794      215.11 ppb        19.794   9.20%
   QC value within limits for Ca 317.933Radial  Recovery = 107.56%
Cd 226.502†              480.1      4.9692 ug/L       0.08885      4.9692 ppb       0.08885   1.79%
   QC value within limits for Cd 226.502  Recovery = 99.38%
Co 228.616†              254.6      4.8165 ug/L       0.10864      4.8165 ppb       0.10864   2.26%
   QC value within limits for Co 228.616  Recovery = 96.33%
Cr 267.716†              469.6      4.9101 ug/L       0.07240      4.9101 ppb       0.07240   1.47%
   QC value within limits for Cr 267.716  Recovery = 98.20%
Cu 324.752†             3386.9      9.8442 ug/L       0.12836      9.8442 ppb       0.12836   1.30%
   QC value within limits for Cu 324.752  Recovery = 98.44%
Fe 238.204 Radial†        14.5      129.75 ug/L        20.588      129.75 ppb        20.588  15.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.75%
K 766.490 Radial†       1199.2      200.97 ug/L        61.163      200.97 ppb        61.163  30.43%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 133.98%
Mg 279.077 IEC†            9.7      326.16 ug/L        49.410      326.16 ppb        49.410  15.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.72%
Mn 257.610†             9699.1      10.286 ug/L        0.0588      10.286 ppb        0.0588   0.57%
   QC value within limits for Mn 257.610  Recovery = 102.86%
Mo 202.031†              159.1      10.132 ug/L        0.0975      10.132 ppb        0.0975   0.96%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†       953.6      289.00 ug/L        19.101      289.00 ppb        19.101   6.61%
   QC value within limits for Na 589.592 Radial  Recovery = 96.33%
Ni 231.604†              229.6      5.2731 ug/L       0.28518      5.2731 ppb       0.28518   5.41%
   QC value within limits for Ni 231.604  Recovery = 105.46%
P 214.914†               243.5      134.44 ug/L         6.678      134.44 ppb         6.678   4.97%
   QC value within limits for P 214.914  Recovery = 89.63%
Pb 220.353†               94.5      10.641 ug/L        1.1591      10.641 ppb        1.1591  10.89%
   QC value within limits for Pb 220.353  Recovery = 106.41%
S 181.975 Axial†          76.9      101.50 ug/L         4.930      101.50 ppb         4.930   4.86%
   QC value within limits for S 181.975 Axial  Recovery = 101.50%
Sb 206.836†               31.3      10.135 ug/L        1.4595      10.135 ppb        1.4595  14.40%
   QC value within limits for Sb 206.836  Recovery = 101.35%
Se 196.026†               51.4      29.370 ug/L        2.1103      29.370 ppb        2.1103   7.19%
   QC value within limits for Se 196.026  Recovery = 97.90%
Si 251.611†             3208.3      95.286 ug/L        0.3691      95.286 ppb        0.3691   0.39%
   QC value within limits for Si 251.611  Recovery = 95.29%
Sn 189.927†               51.1      8.2386 ug/L       1.18799      8.2386 ppb       1.18799  14.42%
   QC value within limits for Sn 189.927  Recovery = 82.39%
Sr 421.552†              884.1      5.3300 ug/L       0.47629      5.3300 ppb       0.47629   8.94%
   QC value within limits for Sr 421.552  Recovery = 106.60%
Ti 334.940†             3118.3      4.9100 ug/L       0.05293      4.9100 ppb       0.05293   1.08%
   QC value within limits for Ti 334.940  Recovery = 98.20%
Tl 190.801†               66.9      18.930 ug/L        1.1388      18.930 ppb        1.1388   6.02%
   QC value within limits for Tl 190.801  Recovery = 94.65%
U 409.014†              1688.7      48.527 ug/L        0.9963      48.527 ppb        0.9963   2.05%
   QC value within limits for U 409.014  Recovery = 97.05%
V 292.402†               691.2      4.8182 ug/L       0.02710      4.8182 ppb       0.02710   0.56%
   QC value within limits for V 292.402  Recovery = 96.36%
Zn 213.857†             1166.2      9.9626 ug/L       0.10681      9.9626 ppb       0.10681   1.07%
   QC value within limits for Zn 213.857  Recovery = 99.63%
SiO2†                   3294.1      209.67 ug/L         3.241      209.67 ppb         3.241   1.55%
   QC value within limits for SiO2  Recovery = 98.43%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/11/2009 11:28:12
Data Type: Reprocessed on 12/11/2009 12:46:02

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	756993.4	756993.4	87.220	%			11:30:38
1	Sc Radial	4880.9	4880.9	87.5	%			11:30:10
1	Y 371.029	620548.2	620548.2	85.070	%			11:30:38
1	Y RADIAL	5338.7	5338.7	88.40	%			11:30:10
1	Ag 328.068†	-9919.8	-11647.4	1.5150	ug/L	1.5150	ppb	11:30:38
1	Al 396.153Radial†	689990.2	788262.9	542890	ug/L	542890	ppb	11:30:05
1	As 188.979†	-105.2	-89.4	-4.8296	ug/L	-4.8296	ppb	11:30:58
1	B 249.677†	600.4	1181.6	-0.4812	ug/L	-0.4812	ppb	11:30:38
1	Ba 233.527†	-572.8	-645.6	2.3899	ug/L	2.3899	ppb	11:30:58
1	Be 313.107†	-4945.1	-1007.1	-0.4108	ug/L	-0.4108	ppb	11:30:38
1	Ca 317.933Radial†	302719.8	345802.7	504700	ug/L	504700	ppb	11:30:05
1	Cd 226.502†	1418.0	1824.8	-0.4092	ug/L	-0.4092	ppb	11:30:58
1	Co 228.616†	-4.8	68.0	-1.4714	ug/L	-1.4714	ppb	11:30:58
1	Cr 267.716†	-70.1	-166.4	1.7380	ug/L	1.7380	ppb	11:30:58
1	Cu 324.752†	4107.1	-2048.9	3.9153	ug/L	3.9153	ppb	11:30:38
1	Fe 238.204 Radial†	18907.2	21589.2	193420	ug/L	193420	ppb	11:30:10
1	K 766.490 Radial†	2657.0	295.8	66.366	ug/L	66.366	ppb	11:30:05
1	Mg 279.077 IEC†	13012.5	14863.3	499660	ug/L	499660	ppb	11:30:10
1	Mn 257.610†	1219.3	877.7	10.913	ug/L	10.913	ppb	11:30:38
1	Mo 202.031†	-231.7	-284.0	-4.3540	ug/L	-4.3540	ppb	11:30:58
1	Na 589.592 Radial†	-1428.1	-77.3	-23.415	ug/L	-23.415	ppb	11:30:10
1	Ni 231.604†	240.6	189.9	4.3628	ug/L	4.3628	ppb	11:30:58
1	P 214.914†	197.0	-16.2	18.997	ug/L	18.997	ppb	11:30:58
1	Pb 220.353†	-811.3	-862.2	9.3939	ug/L	9.3939	ppb	11:30:58
1	S 181.975 Axial†	76.0	37.7	-56.928	ug/L	-56.928	ppb	11:30:58
1	Sb 206.836†	86.2	61.4	6.2629	ug/L	6.2629	ppb	11:30:58
1	Se 196.026†	-1040.9	-1166.6	19.008	ug/L	19.008	ppb	11:30:58
1	Si 251.611†	466.9	53.5	2.1022	ug/L	2.1022	ppb	11:30:58
1	Sn 189.927†	-357.2	-418.4	-12.019	ug/L	-12.019	ppb	11:30:58
1	Sr 421.552†	575.5	657.7	-0.7113	ug/L	-0.7113	ppb	11:30:10
1	Ti 334.940†	-14931.3	-15862.9	1.2743	ug/L	1.2743	ppb	11:30:38
1	Tl 190.801†	-93.8	-72.9	-5.9073	ug/L	-5.9073	ppb	11:30:58
1	U 409.014†	-1285.6	1110.0	7.5826	ug/L	7.5826	ppb	11:30:38
1	V 292.402†	1155.9	2688.0	-0.4308	ug/L	-0.4308	ppb	11:30:58
1	Zn 213.857†	3322.4	3055.4	-9.3150	ug/L	-9.3150	ppb	11:30:58
1	SiO2†	472.1	16.8	2.1784	ug/L	2.1784	ppb	11:31:54
2	Sc 361.383	748375.7	748375.7	86.227	%			11:31:03
2	Sc Radial	5137.5	5137.5	92.1	%			11:30:21
2	Y 371.029	613588.1	613588.1	84.116	%			11:31:03
2	Y RADIAL	5544.8	5544.8	91.81	%			11:30:21
2	Ag 328.068†	-10027.9	-11903.8	-1.3768	ug/L	-1.3768	ppb	11:31:03
2	Al 396.153Radial†	643630.0	698570.9	481110	ug/L	481110	ppb	11:30:16
2	As 188.979†	-72.9	-53.2	7.9134	ug/L	7.9134	ppb	11:31:23
2	B 249.677†	650.9	1248.1	1.9790	ug/L	1.9790	ppb	11:31:03
2	Ba 233.527†	-566.8	-646.3	2.0929	ug/L	2.0929	ppb	11:31:23
2	Be 313.107†	-5112.7	-1266.8	-0.5041	ug/L	-0.5041	ppb	11:31:03
2	Ca 317.933Radial†	285126.3	309432.5	451610	ug/L	451610	ppb	11:30:16
2	Cd 226.502†	1400.8	1823.5	0.3625	ug/L	0.3625	ppb	11:31:23
2	Co 228.616†	7.3	81.9	-1.0956	ug/L	-1.0956	ppb	11:31:23
2	Cr 267.716†	-95.1	-196.3	1.2811	ug/L	1.2811	ppb	11:31:23
2	Cu 324.752†	4033.3	-2080.2	3.4233	ug/L	3.4233	ppb	11:31:03
2	Fe 238.204 Radial†	19093.0	20711.9	185560	ug/L	185560	ppb	11:30:21
2	K 766.490 Radial†	2667.1	155.0	40.166	ug/L	40.166	ppb	11:30:16
2	Mg 279.077 IEC†	13097.5	14212.9	477790	ug/L	477790	ppb	11:30:21
2	Mn 257.610†	1083.5	736.5	10.386	ug/L	10.386	ppb	11:31:03
2	Mo 202.031†	-226.6	-281.2	-4.7343	ug/L	-4.7343	ppb	11:31:23
2	Na 589.592 Radial†	-1350.8	88.1	26.712	ug/L	26.712	ppb	11:30:21
2	Ni 231.604†	192.9	137.8	3.1652	ug/L	3.1652	ppb	11:31:23

2	P 214.914†	167.9	-47.4	-13.017 ug/L	-13.017 ppb	11:31:23
2	Pb 220.353†	-834.9	-900.3	-8.0877 ug/L	-8.0877 ppb	11:31:23
2	S 181.975 Axial†	68.2	29.7	-55.392 ug/L	-55.392 ppb	11:31:23
2	Sb 206.836†	67.4	40.8	1.3270 ug/L	1.3270 ppb	11:31:23
2	Se 196.026†	-1013.6	-1148.8	-4.2965 ug/L	-4.2965 ppb	11:31:23
2	Si 251.611†	467.8	60.8	2.3247 ug/L	2.3247 ppb	11:31:23
2	Sn 189.927†	-357.8	-423.8	-18.546 ug/L	-18.546 ppb	11:31:23
2	Sr 421.552†	520.6	565.2	-0.7770 ug/L	-0.7770 ppb	11:30:21
2	Ti 334.940†	-14753.1	-15853.5	-1.4837 ug/L	-1.4837 ppb	11:31:03
2	Tl 190.801†	-62.9	-38.4	2.1377 ug/L	2.1377 ppb	11:31:23
2	U 409.014†	-990.6	1435.1	17.919 ug/L	17.919 ppb	11:31:03
2	V 292.402†	1127.3	2670.1	0.1734 ug/L	0.1734 ppb	11:31:23
2	Zn 213.857†	3343.9	3124.2	-7.2162 ug/L	-7.2162 ppb	11:31:23
2	SiO2†	472.1	23.0	2.5906 ug/L	2.5906 ppb	11:31:59
3	Sc 361.383	731671.0	731671.0	84.302 %		11:31:28
3	Sc Radial	5024.3	5024.3	90.1 %		11:30:31
3	Y 371.029	601193.9	601193.9	82.417 %		11:31:28
3	Y RADIAL	5440.1	5440.1	90.08 %		11:30:31
3	Ag 328.068†	-10018.7	-12158.3	-1.0690 ug/L	-1.0690 ppb	11:31:28
3	Al 396.153Radial†	664641.7	737630.5	508020 ug/L	508020 ppb	11:30:26
3	As 188.979†	-72.7	-54.9	8.1410 ug/L	8.1410 ppb	11:31:48
3	B 249.677†	582.2	1183.8	-0.1430 ug/L	-0.1430 ppb	11:31:28
3	Ba 233.527†	-531.7	-619.6	2.5022 ug/L	2.5022 ppb	11:31:48
3	Be 313.107†	-5001.9	-1270.7	-0.5069 ug/L	-0.5069 ppb	11:31:28
3	Ca 317.933Radial†	294034.9	326292.3	476220 ug/L	476220 ppb	11:30:26
3	Cd 226.502†	1410.2	1871.8	0.2962 ug/L	0.2962 ppb	11:31:48
3	Co 228.616†	-32.8	34.5	-2.0714 ug/L	-2.0714 ppb	11:31:48
3	Cr 267.716†	-82.7	-184.1	1.5151 ug/L	1.5151 ppb	11:31:48
3	Cu 324.752†	4076.9	-1921.8	4.1731 ug/L	4.1731 ppb	11:31:28
3	Fe 238.204 Radial†	19243.2	21345.6	191230 ug/L	191230 ppb	11:30:31
3	K 766.490 Radial†	2570.1	112.6	33.988 ug/L	33.988 ppb	11:30:26
3	Mg 279.077 IEC†	13195.9	14642.4	492230 ug/L	492230 ppb	11:30:31
3	Mn 257.610†	1029.6	701.2	10.646 ug/L	10.646 ppb	11:31:28
3	Mo 202.031†	-233.6	-295.5	-5.2381 ug/L	-5.2381 ppb	11:31:48
3	Na 589.592 Radial†	-1340.0	67.0	20.318 ug/L	20.318 ppb	11:30:31
3	Ni 231.604†	214.7	168.8	3.8778 ug/L	3.8778 ppb	11:31:48
3	P 214.914†	163.9	-47.6	-8.7638 ug/L	-8.7638 ppb	11:31:48
3	Pb 220.353†	-816.2	-900.2	-2.5019 ug/L	-2.5019 ppb	11:31:48
3	S 181.975 Axial†	74.1	38.5	-49.071 ug/L	-49.071 ppb	11:31:48
3	Sb 206.836†	58.8	32.3	-2.1131 ug/L	-2.1131 ppb	11:31:48
3	Se 196.026†	-1038.8	-1205.4	-14.715 ug/L	-14.715 ppb	11:31:48
3	Si 251.611†	431.0	29.5	1.4270 ug/L	1.4270 ppb	11:31:48
3	Sn 189.927†	-376.1	-455.0	-20.917 ug/L	-20.917 ppb	11:31:48
3	Sr 421.552†	554.7	615.8	-0.6998 ug/L	-0.6998 ppb	11:30:31
3	Ti 334.940†	-14815.5	-16318.0	-0.9262 ug/L	-0.9262 ppb	11:31:28
3	Tl 190.801†	-106.1	-91.3	-12.048 ug/L	-12.048 ppb	11:31:48
3	U 409.014†	-1449.0	865.2	0.8188 ug/L	0.8188 ppb	11:31:28
3	V 292.402†	1066.8	2628.1	-0.6876 ug/L	-0.6876 ppb	11:31:48
3	Zn 213.857†	3344.7	3213.7	-7.4880 ug/L	-7.4880 ppb	11:31:48
3	SiO2†	364.7	-91.9	-4.6727 ug/L	-4.6727 ppb	11:32:04

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	745680.1	85.916	%	1.4834				1.73%
Sc Radial	5014.2	89.9	%	2.31				2.57%
Y 371.029	611776.7	83.867	%	1.3439				1.60%
Y RADIAL	5441.2	90.10	%	1.707				1.89%
Ag 328.068†	-11903.1	-0.3103	ug/L	1.58818	-0.3103	ppb	1.58818	511.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	741488.1	510670	ug/L	30971.5	510670	ppb	30971.5	6.06%
QC value within limits for Al 396.153Radial Recovery = 102.13%								
As 188.979†	-65.8	3.7416	ug/L	7.42374	3.7416	ppb	7.42374	198.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1204.5	0.4516	ug/L	1.33353	0.4516	ppb	1.33353	295.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-637.1	2.3283	ug/L	0.21149	2.3283	ppb	0.21149	9.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1181.5	-0.4739	ug/L	0.05467	-0.4739	ppb	0.05467	11.53%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     327175.8      477510 ug/L       26564.5      477510 ppb        26564.5   5.56%
   QC value within limits for Ca 317.933Radial  Recovery = 95.50%
Cd 226.502†             1840.0      0.0832 ug/L       0.42771      0.0832 ppb        0.42771 514.38%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.5     -1.5462 ug/L       0.49217     -1.5462 ppb        0.49217  31.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -182.3      1.5114 ug/L       0.22845      1.5114 ppb        0.22845  15.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -2017.0      3.8372 ug/L       0.38095      3.8372 ppb        0.38095   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     21215.6      190070 ug/L        4057.3      190070 ppb         4057.3   2.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.03%
K 766.490 Radial†        187.8      46.840 ug/L       17.1898      46.840 ppb        17.1898  36.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        14572.9      489890 ug/L       11118.2      489890 ppb        11118.2   2.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.98%
Mn 257.610†              771.8      10.648 ug/L        0.2632      10.648 ppb         0.2632   2.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -286.9     -4.7755 ug/L       0.44349     -4.7755 ppb        0.44349   9.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        26.0      7.8718 ug/L      27.28290      7.8718 ppb       27.28290 346.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              165.5      3.8019 ug/L       0.60243      3.8019 ppb        0.60243  15.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -37.1     -0.9278 ug/L      17.38629     -0.9278 ppb       17.38629 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -887.6     -0.3986 ug/L       8.92859     -0.3986 ppb        8.92859 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          35.3     -53.797 ug/L        4.1643     -53.797 ppb         4.1643   7.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               44.9      1.8256 ug/L       4.21020      1.8256 ppb        4.21020 230.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1173.6     -0.0013 ug/L      17.26716     -0.0013 ppb       17.26716 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               47.9      1.9513 ug/L       0.46751      1.9513 ppb        0.46751  23.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -432.4     -17.161 ug/L        4.6077     -17.161 ppb         4.6077  26.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              612.9     -0.7293 ug/L       0.04164     -0.7293 ppb        0.04164   5.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16011.5     -0.3785 ug/L       1.45827     -0.3785 ppb        1.45827 385.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -67.5     -5.2725 ug/L       7.11413     -5.2725 ppb        7.11413 134.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              1136.8      8.7736 ug/L       8.61226      8.7736 ppb        8.61226  98.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2662.1     -0.3150 ug/L       0.44201     -0.3150 ppb        0.44201 140.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             3131.1     -8.0064 ug/L       1.14141     -8.0064 ppb        1.14141  14.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -17.3      0.0321 ug/L       4.07969      0.0321 ppb        4.07969 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/11/2009 11:34:15
Data Type: Reprocessed on 12/11/2009 12:46:03

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	758951.0	758951.0	87.445	%			11:36:41
1	Sc Radial	4987.2	4987.2	89.4	%			11:36:13
1	Y 371.029	621080.9	621080.9	85.143	%			11:36:41
1	Y RADIAL	5400.8	5400.8	89.43	%			11:36:13
1	Ag 328.068†	42647.1	48496.1	274.60	ug/L	274.60	ppb	11:36:41
1	Al 396.153Radial†	660949.3	738982.6	508930	ug/L	508930	ppb	11:36:08
1	As 188.979†	1049.6	1231.6	508.39	ug/L	508.39	ppb	11:37:01
1	B 249.677†	21526.7	25110.5	508.75	ug/L	508.75	ppb	11:36:41
1	Ba 233.527†	57172.2	65391.7	496.83	ug/L	496.83	ppb	11:36:41
1	Be 313.107†	582917.2	671270.9	242.00	ug/L	242.00	ppb	11:36:41
1	Ca 317.933Radial†	289405.7	323541.3	472210	ug/L	472210	ppb	11:36:08
1	Cd 226.502†	40964.3	47044.6	469.17	ug/L	469.17	ppb	11:36:41
1	Co 228.616†	20702.3	23748.1	445.38	ug/L	445.38	ppb	11:37:01
1	Cr 267.716†	39985.1	45639.8	481.89	ug/L	481.89	ppb	11:36:41
1	Cu 324.752†	171387.9	189236.7	559.36	ug/L	559.36	ppb	11:36:41
1	Fe 238.204 Radial†	19000.6	21233.0	190240	ug/L	190240	ppb	11:36:13
1	K 766.490 Radial†	31877.7	32900.0	5528.6	ug/L	5528.6	ppb	11:36:08
1	Mg 279.077 IEC†	13124.0	14670.8	493200	ug/L	493200	ppb	11:36:13
1	Mn 257.610†	396615.6	453038.6	489.93	ug/L	489.93	ppb	11:36:41
1	Mo 202.031†	6533.4	7453.0	487.78	ug/L	487.78	ppb	11:37:01
1	Na 589.592 Radial†	15252.2	18606.2	5638.8	ug/L	5638.8	ppb	11:36:13
1	Ni 231.604†	17062.5	19426.2	446.10	ug/L	446.10	ppb	11:37:01
1	P 214.914†	4156.3	4511.0	2455.5	ug/L	2455.5	ppb	11:37:01
1	Pb 220.353†	2780.9	3248.2	462.94	ug/L	462.94	ppb	11:37:01
1	S 181.975 Axial†	1860.9	2078.6	2646.2	ug/L	2646.2	ppb	11:37:01
1	Sb 206.836†	1514.6	1694.6	530.20	ug/L	530.20	ppb	11:37:01
1	Se 196.026†	2895.9	3338.4	2540.1	ug/L	2540.1	ppb	11:37:01
1	Si 251.611†	154917.7	176677.9	5250.8	ug/L	5250.8	ppb	11:36:41
1	Sn 189.927†	2316.7	2640.5	476.61	ug/L	476.61	ppb	11:37:01
1	Sr 421.552†	76362.9	85374.7	510.54	ug/L	510.54	ppb	11:36:08
1	Ti 334.940†	268916.2	308781.5	511.62	ug/L	511.62	ppb	11:36:41
1	Tl 190.801†	1350.0	1578.3	461.73	ug/L	461.73	ppb	11:37:01
1	U 409.014†	13317.1	17813.1	487.28	ug/L	487.28	ppb	11:36:41
1	V 292.402†	66843.3	77803.0	506.91	ug/L	506.91	ppb	11:36:41
1	Zn 213.857†	53716.7	60675.1	483.37	ug/L	483.37	ppb	11:36:41
1	SiO2†	156111.1	178000.0	11337	ug/L	11337	ppb	11:37:58
2	Sc 361.383	760073.7	760073.7	87.575	%			11:37:07
2	Sc Radial	5036.8	5036.8	90.3	%			11:36:23
2	Y 371.029	622660.3	622660.3	85.359	%			11:37:07
2	Y RADIAL	5470.1	5470.1	90.58	%			11:36:23
2	Ag 328.068†	42822.9	48624.8	275.06	ug/L	275.06	ppb	11:37:07
2	Al 396.153Radial†	668783.0	740388.7	509890	ug/L	509890	ppb	11:36:18
2	As 188.979†	1057.7	1239.1	511.27	ug/L	511.27	ppb	11:37:27
2	B 249.677†	21772.6	25355.0	514.00	ug/L	514.00	ppb	11:37:07
2	Ba 233.527†	57342.2	65489.2	497.55	ug/L	497.55	ppb	11:37:07
2	Be 313.107†	584422.8	672005.6	242.26	ug/L	242.26	ppb	11:37:07
2	Ca 317.933Radial†	293875.9	325308.4	474790	ug/L	474790	ppb	11:36:18
2	Cd 226.502†	41033.4	47054.3	469.30	ug/L	469.30	ppb	11:37:07
2	Co 228.616†	20775.3	23796.5	446.31	ug/L	446.31	ppb	11:37:27
2	Cr 267.716†	40113.5	45718.9	482.71	ug/L	482.71	ppb	11:37:07
2	Cu 324.752†	171912.4	189546.1	560.25	ug/L	560.25	ppb	11:37:07
2	Fe 238.204 Radial†	19164.0	21205.0	189990	ug/L	189990	ppb	11:36:23
2	K 766.490 Radial†	32285.0	33000.4	5545.3	ug/L	5545.3	ppb	11:36:18
2	Mg 279.077 IEC†	13200.4	14611.1	491190	ug/L	491190	ppb	11:36:23
2	Mn 257.610†	397691.3	453597.1	490.53	ug/L	490.53	ppb	11:37:07
2	Mo 202.031†	6575.2	7489.6	490.09	ug/L	490.09	ppb	11:37:27
2	Na 589.592 Radial†	15268.6	18456.7	5593.5	ug/L	5593.5	ppb	11:36:23
2	Ni 231.604†	17120.7	19463.9	446.97	ug/L	446.97	ppb	11:37:27

2	P 214.914†	4170.4	4520.0	2461.0 ug/L	2461.0 ppb	11:37:27
2	Pb 220.353†	2775.6	3237.4	461.98 ug/L	461.98 ppb	11:37:27
2	S 181.975 Axial†	1850.2	2063.3	2625.7 ug/L	2625.7 ppb	11:37:27
2	Sb 206.836†	1535.4	1715.9	536.97 ug/L	536.97 ppb	11:37:27
2	Se 196.026†	2927.9	3370.1	2557.4 ug/L	2557.4 ppb	11:37:27
2	Si 251.611†	155531.8	177117.5	5263.8 ug/L	5263.8 ppb	11:37:07
2	Sn 189.927†	2340.2	2663.4	480.56 ug/L	480.56 ppb	11:37:27
2	Sr 421.552†	77355.4	85633.9	512.08 ug/L	512.08 ppb	11:36:18
2	Ti 334.940†	269367.0	308842.1	511.85 ug/L	511.85 ppb	11:37:07
2	Tl 190.801†	1353.2	1579.7	462.15 ug/L	462.15 ppb	11:37:27
2	U 409.014†	13457.9	17951.4	491.29 ug/L	491.29 ppb	11:37:07
2	V 292.402†	66938.6	77798.8	506.92 ug/L	506.92 ppb	11:37:07
2	Zn 213.857†	53878.9	60769.5	484.27 ug/L	484.27 ppb	11:37:07
2	SiO2†	154326.5	175698.4	11189 ug/L	11189 ppb	11:38:04
3	Sc 361.383	753121.3	753121.3	86.774 %		11:37:33
3	Sc Radial	4947.8	4947.8	88.7 %		11:36:33
3	Y 371.029	616563.3	616563.3	84.524 %		11:37:33
3	Y RADIAL	5419.6	5419.6	89.74 %		11:36:33
3	Ag 328.068†	42451.5	48648.2	275.53 ug/L	275.53 ppb	11:37:33
3	Al 396.153Radial†	669785.4	754825.5	519840 ug/L	519840 ppb	11:36:28
3	As 188.979†	1063.9	1257.4	518.56 ug/L	518.56 ppb	11:37:53
3	B 249.677†	21521.5	25295.1	512.51 ug/L	512.51 ppb	11:37:33
3	Ba 233.527†	56818.0	65489.6	497.61 ug/L	497.61 ppb	11:37:33
3	Be 313.107†	578443.8	671275.7	242.00 ug/L	242.00 ppb	11:37:33
3	Ca 317.933Radial†	293749.8	331013.8	483110 ug/L	483110 ppb	11:36:28
3	Cd 226.502†	40771.4	47184.9	470.51 ug/L	470.51 ppb	11:37:33
3	Co 228.616†	20701.7	23930.6	448.82 ug/L	448.82 ppb	11:37:53
3	Cr 267.716†	39768.4	45744.0	483.00 ug/L	483.00 ppb	11:37:33
3	Cu 324.752†	169859.6	188992.6	558.72 ug/L	558.72 ppb	11:37:33
3	Fe 238.204 Radial†	18976.5	21375.0	191510 ug/L	191510 ppb	11:36:33
3	K 766.490 Radial†	32308.4	33669.2	5657.9 ug/L	5657.9 ppb	11:36:28
3	Mg 279.077 IEC†	13082.5	14741.0	495550 ug/L	495550 ppb	11:36:33
3	Mn 257.610†	394294.3	453874.5	490.90 ug/L	490.90 ppb	11:37:33
3	Mo 202.031†	6534.9	7512.6	491.66 ug/L	491.66 ppb	11:37:53
3	Na 589.592 Radial†	15175.1	18655.2	5653.6 ug/L	5653.6 ppb	11:36:33
3	Ni 231.604†	17057.9	19572.1	449.45 ug/L	449.45 ppb	11:37:53
3	P 214.914†	4154.4	4545.6	2477.7 ug/L	2477.7 ppb	11:37:53
3	Pb 220.353†	2759.8	3248.5	465.32 ug/L	465.32 ppb	11:37:53
3	S 181.975 Axial†	1869.6	2105.2	2679.0 ug/L	2679.0 ppb	11:37:53
3	Sb 206.836†	1520.7	1715.1	536.53 ug/L	536.53 ppb	11:37:53
3	Se 196.026†	2889.0	3356.2	2555.7 ug/L	2555.7 ppb	11:37:53
3	Si 251.611†	153939.2	176921.7	5257.9 ug/L	5257.9 ppb	11:37:33
3	Sn 189.927†	2327.8	2673.7	483.12 ug/L	483.12 ppb	11:37:53
3	Sr 421.552†	77374.4	87194.4	521.41 ug/L	521.41 ppb	11:36:28
3	Ti 334.940†	267159.7	309137.7	512.75 ug/L	512.75 ppb	11:37:33
3	Tl 190.801†	1350.3	1590.7	465.49 ug/L	465.49 ppb	11:37:53
3	U 409.014†	13410.7	18038.8	493.61 ug/L	493.61 ppb	11:37:33
3	V 292.402†	66385.9	77867.5	507.27 ug/L	507.27 ppb	11:37:33
3	Zn 213.857†	53341.8	60718.6	483.52 ug/L	483.52 ppb	11:37:33
3	SiO2†	156041.1	179301.1	11419 ug/L	11419 ppb	11:38:09

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757382.0	87.264	%	0.4300				0.49%
Sc Radial	4990.6	89.5	%	0.80				0.89%
Y 371.029	620101.5	85.009	%	0.4338				0.51%
Y RADIAL	5430.1	89.92	%	0.593				0.66%
Ag 328.068†	48589.7	275.06	ug/L	0.465	275.06	ppb	0.465	0.17%
QC value within limits for Ag 328.068 Recovery = 110.02%								
Al 396.153Radial†	744732.3	512880	ug/L	6039.4	512880	ppb	6039.4	1.18%
QC value within limits for Al 396.153Radial Recovery = 102.58%								
As 188.979†	1242.7	512.74	ug/L	5.241	512.74	ppb	5.241	1.02%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	25253.5	511.75	ug/L	2.701	511.75	ppb	2.701	0.53%
QC value within limits for B 249.677 Recovery = 102.35%								
Ba 233.527†	65456.8	497.33	ug/L	0.434	497.33	ppb	0.434	0.09%
QC value within limits for Ba 233.527 Recovery = 99.47%								
Be 313.107†	671517.4	242.08	ug/L	0.152	242.08	ppb	0.152	0.06%
QC value within limits for Be 313.107 Recovery = 96.83%								

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Ca 317.933Radial†     326621.2      476700 ug/L        5699.8      476700 ppb         5699.8   1.20%
   QC value within limits for Ca 317.933Radial  Recovery = 95.34%
Cd 226.502†            47094.6      469.66 ug/L         0.734      469.66 ppb          0.734   0.16%
   QC value within limits for Cd 226.502  Recovery = 93.93%
Co 228.616†            23825.1      446.84 ug/L         1.777      446.84 ppb          1.777   0.40%
   QC value within limits for Co 228.616  Recovery = 89.37%
Cr 267.716†            45700.9      482.54 ug/L         0.577      482.54 ppb          0.577   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.51%
Cu 324.752†           189258.5      559.44 ug/L         0.768      559.44 ppb          0.768   0.14%
   QC value within limits for Cu 324.752  Recovery = 111.89%
Fe 238.204 Radial†     21271.0      190580 ug/L         816.7      190580 ppb          816.7   0.43%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.29%
K 766.490 Radial†      33189.9      5577.3 ug/L         70.35      5577.3 ppb          70.35   1.26%
   QC value within limits for K 766.490 Radial  Recovery = 111.55%
Mg 279.077 IEC†        14674.3      493310 ug/L        2184.9      493310 ppb         2184.9   0.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.66%
Mn 257.610†           453503.4      490.45 ug/L         0.489      490.45 ppb          0.489   0.10%
   QC value within limits for Mn 257.610  Recovery = 98.09%
Mo 202.031†             7485.1      489.84 ug/L         1.955      489.84 ppb          1.955   0.40%
   QC value within limits for Mo 202.031  Recovery = 97.97%
Na 589.592 Radial†     18572.7      5628.6 ug/L         31.33      5628.6 ppb          31.33   0.56%
   QC value within limits for Na 589.592 Radial  Recovery = 112.57%
Ni 231.604†            19487.4      447.51 ug/L         1.739      447.51 ppb          1.739   0.39%
   QC value within limits for Ni 231.604  Recovery = 89.50%
P 214.914†              4525.5      2464.7 ug/L         11.55      2464.7 ppb          11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.59%
Pb 220.353†             3244.7      463.41 ug/L         1.722      463.41 ppb          1.722   0.37%
   QC value within limits for Pb 220.353  Recovery = 92.68%
S 181.975 Axial†        2082.4      2650.3 ug/L         26.93      2650.3 ppb          26.93   1.02%
   QC value within limits for S 181.975 Axial  Recovery = 106.01%
Sb 206.836†             1708.5      534.57 ug/L         3.789      534.57 ppb          3.789   0.71%
   QC value within limits for Sb 206.836  Recovery = 106.91%
Se 196.026†             3354.9      2551.1 ug/L          9.50      2551.1 ppb           9.50   0.37%
   QC value within limits for Se 196.026  Recovery = 102.04%
Si 251.611†           176905.7      5257.5 ug/L          6.53      5257.5 ppb           6.53   0.12%
   QC value within limits for Si 251.611  Recovery = 105.15%
Sn 189.927†             2659.2      480.10 ug/L         3.278      480.10 ppb          3.278   0.68%
   QC value within limits for Sn 189.927  Recovery = 96.02%
Sr 421.552†            86067.7      514.68 ug/L         5.884      514.68 ppb          5.884   1.14%
   QC value within limits for Sr 421.552  Recovery = 102.94%
Ti 334.940†           308920.4      512.07 ug/L         0.596      512.07 ppb          0.596   0.12%
   QC value within limits for Ti 334.940  Recovery = 102.41%
Tl 190.801†             1582.9      463.12 ug/L         2.059      463.12 ppb          2.059   0.44%
   QC value within limits for Tl 190.801  Recovery = 92.62%
U 409.014†             17934.4      490.73 ug/L         3.200      490.73 ppb          3.200   0.65%
   QC value within limits for U 409.014  Recovery = 98.15%
V 292.402†             77823.1      507.03 ug/L         0.203      507.03 ppb          0.203   0.04%
   QC value within limits for V 292.402  Recovery = 101.41%
Zn 213.857†            60721.1      483.72 ug/L         0.481      483.72 ppb          0.481   0.10%
   QC value within limits for Zn 213.857  Recovery = 96.74%
SiO2†                 177666.5       11315 ug/L         116.4       11315 ppb          116.4   1.03%
   QC value within limits for SiO2  Recovery = 105.80%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/11/2009 11:40:18
Data Type: Reprocessed on 12/11/2009 12:46:04

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	740552.4	740552.4	85.325	%			11:42:45
1	Sc Radial	4969.6	4969.6	89.1	%			11:42:16
1	Y 371.029	607165.9	607165.9	83.235	%			11:42:45
1	Y RADIAL	5424.0	5424.0	89.81	%			11:42:16
1	Ag 328.068†	-23489.1	-27802.9	-2.8641	ug/L	-2.8641	ppb	11:42:45
1	Al 396.153Radial†	644142.1	722747.2	497770	ug/L	497770	ppb	11:42:11
1	As 188.979†	-201.4	-204.8	-10.167	ug/L	-10.167	ppb	11:43:05
1	B 249.677†	1984.5	2819.0	0.8022	ug/L	0.8022	ppb	11:42:45
1	Ba 233.527†	-1613.5	-1879.9	2.5961	ug/L	2.5961	ppb	11:43:05
1	Be 313.107†	-11598.1	-8930.2	-3.2347	ug/L	-3.2347	ppb	11:42:45
1	Ca 317.933Radial†	284191.5	318839.1	465340	ug/L	465340	ppb	11:42:11
1	Cd 226.502†	3571.9	4385.1	0.8224	ug/L	0.8224	ppb	11:43:05
1	Co 228.616†	194.7	301.7	-0.7620	ug/L	-0.7620	ppb	11:43:05
1	Cr 267.716†	42.7	-36.0	2.9304	ug/L	2.9304	ppb	11:43:05
1	Cu 324.752†	1283.7	-5253.3	7.5286	ug/L	7.5286	ppb	11:42:45
1	Fe 238.204 Radial†	44449.7	49861.6	446710	ug/L	446710	ppb	11:42:16
1	K 766.490 Radial†	3284.2	945.3	-49.160	ug/L	-49.160	ppb	11:42:11
1	Mg 279.077 IEC†	12857.3	14423.7	484660	ug/L	484660	ppb	11:42:16
1	Mn 257.610†	-23452.1	-28005.7	5.8356	ug/L	5.8356	ppb	11:42:45
1	Mo 202.031†	-533.6	-643.7	-9.2781	ug/L	-9.2781	ppb	11:43:05
1	Na 589.592 Radial†	1542374.9	1732061.6	524920	ug/L	524920	ppb	11:42:11
1	Ni 231.604†	297.4	262.6	6.0309	ug/L	6.0309	ppb	11:43:05
1	P 214.914†	601.0	462.3	67.963	ug/L	67.963	ppb	11:43:05
1	Pb 220.353†	-588.5	-621.7	5.3514	ug/L	5.3514	ppb	11:43:05
1	S 181.975 Axial†	129.4	102.3	37.240	ug/L	37.240	ppb	11:43:05
1	Sb 206.836†	52.1	23.7	-1.0104	ug/L	-1.0104	ppb	11:43:05
1	Se 196.026†	-2373.2	-2754.5	-102.71	ug/L	-102.71	ppb	11:43:05
1	Si 251.611†	-568.9	-1148.5	-33.299	ug/L	-33.299	ppb	11:43:05
1	Sn 189.927†	-412.7	-492.5	-24.674	ug/L	-24.674	ppb	11:43:05
1	Sr 421.552†	806.9	905.5	1.1481	ug/L	1.1481	ppb	11:42:16
1	Ti 334.940†	-8809.8	-9068.7	3.4577	ug/L	3.4577	ppb	11:42:45
1	Tl 190.801†	-125.0	-111.9	-18.286	ug/L	-18.286	ppb	11:43:05
1	U 409.014†	434877.4	512253.5	14671	ug/L	14671	ppb	11:42:45
1	V 292.402†	3110.2	5007.9	4.3404	ug/L	4.3404	ppb	11:42:45
1	Zn 213.857†	6282.7	6609.4	-2.4207	ug/L	-2.4207	ppb	11:43:05
1	SiO2†	-560.3	-1181.2	-73.425	ug/L	-73.425	ppb	11:44:02
2	Sc 361.383	731220.0	731220.0	84.250	%			11:43:10
2	Sc Radial	4811.2	4811.2	86.3	%			11:42:27
2	Y 371.029	599802.7	599802.7	82.226	%			11:43:10
2	Y RADIAL	5273.6	5273.6	87.32	%			11:42:27
2	Ag 328.068†	-22989.1	-27560.7	-0.4938	ug/L	-0.4938	ppb	11:43:10
2	Al 396.153Radial†	654324.4	758342.3	522280	ug/L	522280	ppb	11:42:22
2	As 188.979†	-189.0	-193.1	-4.8776	ug/L	-4.8776	ppb	11:43:31
2	B 249.677†	1680.6	2487.9	-6.9076	ug/L	-6.9076	ppb	11:43:10
2	Ba 233.527†	-1578.3	-1862.2	2.9075	ug/L	2.9075	ppb	11:43:31
2	Be 313.107†	-11555.5	-9053.0	-3.2781	ug/L	-3.2781	ppb	11:43:10
2	Ca 317.933Radial†	287901.6	333636.9	486940	ug/L	486940	ppb	11:42:22
2	Cd 226.502†	3576.5	4444.1	0.9420	ug/L	0.9420	ppb	11:43:31
2	Co 228.616†	205.6	317.5	-0.5340	ug/L	-0.5340	ppb	11:43:31
2	Cr 267.716†	39.3	-39.4	2.9922	ug/L	2.9922	ppb	11:43:31
2	Cu 324.752†	1345.1	-5161.3	8.0471	ug/L	8.0471	ppb	11:43:10
2	Fe 238.204 Radial†	43507.1	50411.2	451630	ug/L	451630	ppb	11:42:27
2	K 766.490 Radial†	3352.4	1145.6	-25.351	ug/L	-25.351	ppb	11:42:22
2	Mg 279.077 IEC†	12571.2	14567.0	489470	ug/L	489470	ppb	11:42:27
2	Mn 257.610†	-23090.5	-27927.3	6.3199	ug/L	6.3199	ppb	11:43:10
2	Mo 202.031†	-519.0	-634.4	-8.3347	ug/L	-8.3347	ppb	11:43:31
2	Na 589.592 Radial†	1563595.8	1813630.2	549640	ug/L	549640	ppb	11:42:22
2	Ni 231.604†	306.0	277.3	6.3685	ug/L	6.3685	ppb	11:43:31

2	P 214.914†	575.4	440.9	60.292	ug/L	60.292 ppb	11:43:31
2	Pb 220.353†	-591.1	-633.6	9.1208	ug/L	9.1208 ppb	11:43:31
2	S 181.975 Axial†	121.8	95.2	23.018	ug/L	23.018 ppb	11:43:31
2	Sb 206.836†	70.4	46.2	5.5298	ug/L	5.5298 ppb	11:43:31
2	Se 196.026†	-2383.3	-2802.0	-110.63	ug/L	-110.63 ppb	11:43:31
2	Si 251.611†	-547.0	-1131.0	-32.801	ug/L	-32.801 ppb	11:43:31
2	Sn 189.927†	-404.0	-488.4	-21.688	ug/L	-21.688 ppb	11:43:31
2	Sr 421.552†	781.2	905.6	0.9485	ug/L	0.9485 ppb	11:42:27
2	Ti 334.940†	-8483.5	-8813.2	5.0026	ug/L	5.0026 ppb	11:43:10
2	Tl 190.801†	-107.4	-92.9	-12.247	ug/L	-12.247 ppb	11:43:31
2	U 409.014†	428397.3	511066.8	14637	ug/L	14637 ppb	11:43:10
2	V 292.402†	2914.2	4821.7	2.4034	ug/L	2.4034 ppb	11:43:10
2	Zn 213.857†	6285.7	6707.0	-2.2191	ug/L	-2.2191 ppb	11:43:31
2	SiO2†	-609.5	-1247.9	-77.734	ug/L	-77.734 ppb	11:44:07
3	Sc 361.383	733959.0	733959.0	84.566	%		11:43:36
3	Sc Radial	4847.4	4847.4	86.9	%		11:42:38
3	Y 371.029	603107.7	603107.7	82.679	%		11:43:36
3	Y RADIAL	5267.1	5267.1	87.22	%		11:42:38
3	Ag 328.068†	-23001.8	-27473.9	0.0752	ug/L	0.0752 ppb	11:43:36
3	Al 396.153Radial†	642180.4	738704.7	508760	ug/L	508760 ppb	11:42:33
3	As 188.979†	-201.1	-206.5	-10.095	ug/L	-10.095 ppb	11:43:56
3	B 249.677†	1627.2	2417.4	-8.3983	ug/L	-8.3983 ppb	11:43:36
3	Ba 233.527†	-1605.5	-1887.4	2.7148	ug/L	2.7148 ppb	11:43:56
3	Be 313.107†	-11402.2	-8820.6	-3.1955	ug/L	-3.1955 ppb	11:43:36
3	Ca 317.933Radial†	282744.6	325210.7	474640	ug/L	474640 ppb	11:42:33
3	Cd 226.502†	3580.9	4433.3	0.8396	ug/L	0.8396 ppb	11:43:56
3	Co 228.616†	208.9	320.5	-0.4742	ug/L	-0.4742 ppb	11:43:56
3	Cr 267.716†	-1.4	-87.7	2.4940	ug/L	2.4940 ppb	11:43:56
3	Cu 324.752†	1152.4	-5395.1	7.3634	ug/L	7.3634 ppb	11:43:36
3	Fe 238.204 Radial†	43826.3	50401.4	451550	ug/L	451550 ppb	11:42:38
3	K 766.490 Radial†	3322.7	1082.4	-30.604	ug/L	-30.604 ppb	11:42:33
3	Mg 279.077 IEC†	12659.1	14559.3	489210	ug/L	489210 ppb	11:42:38
3	Mn 257.610†	-23139.4	-27882.8	6.3632	ug/L	6.3632 ppb	11:43:36
3	Mo 202.031†	-519.4	-632.6	-8.2254	ug/L	-8.2254 ppb	11:43:56
3	Na 589.592 Radial†	1537159.2	1769674.9	536320	ug/L	536320 ppb	11:42:33
3	Ni 231.604†	313.0	284.2	6.5265	ug/L	6.5265 ppb	11:43:56
3	P 214.914†	574.5	437.3	53.897	ug/L	53.897 ppb	11:43:56
3	Pb 220.353†	-582.2	-620.5	7.5575	ug/L	7.5575 ppb	11:43:56
3	S 181.975 Axial†	122.3	95.2	25.688	ug/L	25.688 ppb	11:43:56
3	Sb 206.836†	69.5	44.8	5.4590	ug/L	5.4590 ppb	11:43:56
3	Se 196.026†	-2374.6	-2781.2	-101.23	ug/L	-101.23 ppb	11:43:56
3	Si 251.611†	-568.1	-1153.6	-33.468	ug/L	-33.468 ppb	11:43:56
3	Sn 189.927†	-412.6	-496.7	-24.312	ug/L	-24.312 ppb	11:43:56
3	Sr 421.552†	811.0	933.0	1.2279	ug/L	1.2279 ppb	11:42:38
3	Ti 334.940†	-8748.4	-9088.9	3.9399	ug/L	3.9399 ppb	11:43:36
3	Tl 190.801†	-111.6	-97.4	-13.906	ug/L	-13.906 ppb	11:43:56
3	U 409.014†	429086.3	509984.0	14606	ug/L	14606 ppb	11:43:36
3	V 292.402†	2838.4	4719.2	1.6707	ug/L	1.6707 ppb	11:43:36
3	Zn 213.857†	6258.4	6646.8	-2.7197	ug/L	-2.7197 ppb	11:43:56
3	SiO2†	-683.4	-1332.6	-83.127	ug/L	-83.127 ppb	11:44:12

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	735243.8	84.714	%	0.5527				0.65%
Sc Radial	4876.1	87.5	%	1.49				1.70%
Y 371.029	603358.7	82.713	%	0.5056				0.61%
Y RADIAL	5321.5	88.12	%	1.470				1.67%
Ag 328.068†	-27612.5	-1.0942	ug/L	1.55893	-1.0942	ppb	1.55893	142.47%
Al 396.153Radial†	739931.4	509600	ug/L	12279.1	509600	ppb	12279.1	2.41%
QC value within limits for Al 396.153Radial Recovery = 101.92%								
As 188.979†	-201.5	-8.3797	ug/L	3.03311	-8.3797	ppb	3.03311	36.20%
B 249.677†	2574.8	-4.8346	ug/L	4.93817	-4.8346	ppb	4.93817	102.14%
Ba 233.527†	-1876.5	2.7395	ug/L	0.15716	2.7395	ppb	0.15716	5.74%
Be 313.107†	-8934.6	-3.2361	ug/L	0.04133	-3.2361	ppb	0.04133	1.28%
Ca 317.933Radial†	325895.6	475640	ug/L	10833.3	475640	ppb	10833.3	2.28%
QC value within limits for Ca 317.933Radial Recovery = 95.13%								
Cd 226.502†	4420.8	0.8680	ug/L	0.06461	0.8680	ppb	0.06461	7.44%
Co 228.616†	313.2	-0.5900	ug/L	0.15184	-0.5900	ppb	0.15184	25.73%
Cr 267.716†	-54.4	2.8055	ug/L	0.27155	2.8055	ppb	0.27155	9.68%

Cu 324.752†	-5269.9	7.6464 ug/L	0.35675	7.6464 ppb	0.35675	4.67%
Fe 238.204 Radial†	50224.7	449960 ug/L	2817.5	449960 ppb	2817.5	0.63%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.99%						
K 766.490 Radial†	1057.8	-35.039 ug/L	12.5088	-35.039 ppb	12.5088	35.70%
Mg 279.077 IEC†	14516.7	487780 ug/L	2708.0	487780 ppb	2708.0	0.56%
QC value within limits for Mg 279.077 IEC Recovery = 97.56%						
Mn 257.610†	-27938.6	6.1729 ug/L	0.29292	6.1729 ppb	0.29292	4.75%
Mo 202.031†	-636.9	-8.6128 ug/L	0.57883	-8.6128 ppb	0.57883	6.72%
Na 589.592 Radial†	1771788.9	536960 ug/L	12372.5	536960 ppb	12372.5	2.30%
QC value within limits for Na 589.592 Radial Recovery = 107.39%						
Ni 231.604†	274.7	6.3086 ug/L	0.25318	6.3086 ppb	0.25318	4.01%
P 214.914†	446.9	60.717 ug/L	7.0429	60.717 ppb	7.0429	11.60%
Pb 220.353†	-625.3	7.3432 ug/L	1.89385	7.3432 ppb	1.89385	25.79%
S 181.975 Axial†	97.6	28.649 ug/L	7.5591	28.649 ppb	7.5591	26.39%
Sb 206.836†	38.2	3.3262 ug/L	3.75571	3.3262 ppb	3.75571	112.91%
Se 196.026†	-2779.3	-104.85 ug/L	5.054	-104.85 ppb	5.054	4.82%
Si 251.611†	-1144.3	-33.189 ug/L	0.3467	-33.189 ppb	0.3467	1.04%
Sn 189.927†	-492.6	-23.558 ug/L	1.6298	-23.558 ppb	1.6298	6.92%
Sr 421.552†	914.7	1.1082 ug/L	0.14389	1.1082 ppb	0.14389	12.98%
Ti 334.940†	-8990.3	4.1334 ug/L	0.79042	4.1334 ppb	0.79042	19.12%
Tl 190.801†	-100.8	-14.813 ug/L	3.1200	-14.813 ppb	3.1200	21.06%
U 409.014†	511101.5	14638 ug/L	32.9	14638 ppb	32.9	0.23%
QC value within limits for U 409.014 Recovery = 97.59%						
V 292.402†	4849.6	2.8048 ug/L	1.37938	2.8048 ppb	1.37938	49.18%
Zn 213.857†	6654.4	-2.4532 ug/L	0.25188	-2.4532 ppb	0.25188	10.27%
SiO2†	-1253.9	-78.095 ug/L	4.8613	-78.095 ppb	4.8613	6.22%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/11/2009 11:46:21
Data Type: Reprocessed on 12/11/2009 12:46:06

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	837251.0	837251.0	96.467	%			11:49:56
1	Sc Radial	5347.5	5347.5	95.9	%			11:48:19
1	Y 371.029	683255.2	683255.2	93.666	%			11:49:56
1	Y RADIAL	5762.6	5762.6	95.42	%			11:48:19
1	Ag 328.068†	-8049.0	-8617.8	0.3257	ug/L	0.3257	ppb	11:50:01
1	Al 396.153Radial†	621.7	683.6	45.489	ug/L	45.489	ppb	11:48:19
1	As 188.979†	25286.5	26243.9	10217	ug/L	10217	ppb	11:50:01
1	B 249.677†	225772.5	234534.8	4974.0	ug/L	4974.0	ppb	11:49:56
1	Ba 233.527†	1845481.4	1913084.5	14317	ug/L	14317	ppb	11:49:56
1	Be 313.107†	7686962.2	7973164.7	2882.6	ug/L	2882.6	ppb	11:49:50
1	Ca 317.933Radial†	39.3	24.1	35.124	ug/L	35.124	ppb	11:48:39
1	Cd 226.502†	906122.1	939508.4	9750.1	ug/L	9750.1	ppb	11:49:56
1	Co 228.616†	486152.4	504031.5	9507.2	ug/L	9507.2	ppb	11:50:01
1	Cr 267.716†	2213381.5	2294361.9	24034	ug/L	24034	ppb	11:49:56
1	Cu 324.752†	6710633.2	6949656.6	20186	ug/L	20186	ppb	11:49:50
1	Fe 238.204 Radial†	-20.8	-31.6	17.073	ug/L	17.073	ppb	11:48:39
1	K 766.490 Radial†	1732609.8	1803834.1	302550	ug/L	302550	ppb	11:48:14
1	Mg 279.077 IEC†	-4.0	-6.0	-1.3443	ug/L	-1.3443	ppb	11:48:39
1	Mn 257.610†	8551310.9	8863987.9	9394.3	ug/L	9394.3	ppb	11:49:50
1	Mo 202.031†	150610.7	156108.5	9934.2	ug/L	9934.2	ppb	11:50:01
1	Na 589.592 Radial†	-779.4	741.4	224.70	ug/L	224.70	ppb	11:48:19
1	Ni 231.604†	412809.2	427842.6	9825.2	ug/L	9825.2	ppb	11:49:56
1	P 214.914†	33067.1	34036.2	15914	ug/L	15914	ppb	11:50:01
1	Pb 220.353†	211539.7	219355.4	24564	ug/L	24564	ppb	11:50:01
1	S 181.975 Axial†	39022.2	40402.1	53378	ug/L	53378	ppb	11:50:01
1	Sb 206.836†	32817.6	33982.2	10540	ug/L	10540	ppb	11:50:01
1	Se 196.026†	17638.7	18311.5	10332	ug/L	10332	ppb	11:50:01
1	Si 251.611†	1577623.0	1634922.7	48388	ug/L	48388	ppb	11:49:56
1	Sn 189.927†	63790.0	66117.5	10636	ug/L	10636	ppb	11:50:01
1	Sr 421.552†	1570688.8	1637740.6	9877.6	ug/L	9877.6	ppb	11:48:14
1	Ti 334.940†	6094708.6	6319187.5	9965.8	ug/L	9965.8	ppb	11:49:50
1	Tl 190.801†	33633.3	34899.7	9893.2	ug/L	9893.2	ppb	11:50:01
1	U 409.014†	-1295.4	1241.1	-10.671	ug/L	-10.671	ppb	11:50:01
1	V 292.402†	1453895.5	1508508.1	10159	ug/L	10159	ppb	11:49:56
1	Zn 213.857†	1587837.1	1645238.8	14065	ug/L	14065	ppb	11:49:56
1	SiO2†	1596693.8	1654649.3	104940	ug/L	104940	ppb	11:50:49
2	Sc 361.383	842169.8	842169.8	97.034	%			11:50:16
2	Sc Radial	5370.5	5370.5	96.3	%			11:48:49
2	Y 371.029	688325.6	688325.6	94.361	%			11:50:16
2	Y RADIAL	5799.1	5799.1	96.03	%			11:48:49
2	Ag 328.068†	-8067.9	-8588.6	0.4127	ug/L	0.4127	ppb	11:50:21
2	Al 396.153Radial†	619.6	678.6	48.109	ug/L	48.109	ppb	11:48:49
2	As 188.979†	24976.6	25771.4	10035	ug/L	10035	ppb	11:50:21
2	B 249.677†	227113.3	234549.6	4974.7	ug/L	4974.7	ppb	11:50:16
2	Ba 233.527†	1849328.5	1905875.6	14263	ug/L	14263	ppb	11:50:16
2	Be 313.107†	7743416.3	7984803.5	2886.8	ug/L	2886.8	ppb	11:50:10
2	Ca 317.933Radial†	37.1	21.6	31.569	ug/L	31.569	ppb	11:49:09
2	Cd 226.502†	906906.5	934830.6	9701.6	ug/L	9701.6	ppb	11:50:16
2	Co 228.616†	482505.6	497329.7	9380.4	ug/L	9380.4	ppb	11:50:21
2	Cr 267.716†	2219678.0	2287449.9	23962	ug/L	23962	ppb	11:50:16
2	Cu 324.752†	6770226.2	6970441.5	20246	ug/L	20246	ppb	11:50:10
2	Fe 238.204 Radial†	-22.3	-33.0	0.3162	ug/L	0.3162	ppb	11:49:09
2	K 766.490 Radial†	1752650.9	1816897.6	304740	ug/L	304740	ppb	11:48:44
2	Mg 279.077 IEC†	-2.7	-4.8	38.628	ug/L	38.628	ppb	11:49:09
2	Mn 257.610†	8593488.9	8855681.0	9385.5	ug/L	9385.5	ppb	11:50:10
2	Mo 202.031†	149327.0	153873.7	9792.0	ug/L	9792.0	ppb	11:50:21
2	Na 589.592 Radial†	-789.4	734.5	222.61	ug/L	222.61	ppb	11:48:49
2	Ni 231.604†	413677.8	426238.5	9788.4	ug/L	9788.4	ppb	11:50:16

2	P 214.914†	32679.1	33436.1	15567	ug/L	15567 ppb	11:50:21
2	Pb 220.353†	209886.8	216371.2	24230	ug/L	24230 ppb	11:50:21
2	S 181.975 Axial†	38581.7	39711.8	52466	ug/L	52466 ppb	11:50:21
2	Sb 206.836†	32499.6	33455.8	10369	ug/L	10369 ppb	11:50:21
2	Se 196.026†	17411.4	17970.5	10140	ug/L	10140 ppb	11:50:21
2	Si 251.611†	1584599.5	1632560.7	48320	ug/L	48320 ppb	11:50:16
2	Sn 189.927†	63289.6	65215.5	10491	ug/L	10491 ppb	11:50:21
2	Sr 421.552†	1595897.7	1656893.1	9993.2	ug/L	9993.2 ppb	11:48:44
2	Ti 334.940†	6138412.0	6327326.1	9978.7	ug/L	9978.7 ppb	11:50:10
2	Tl 190.801†	33440.6	34497.5	9780.6	ug/L	9780.6 ppb	11:50:21
2	U 409.014†	-1543.1	993.7	-17.644	ug/L	-17.644 ppb	11:50:21
2	V 292.402†	1460677.7	1506694.9	10145	ug/L	10145 ppb	11:50:16
2	Zn 213.857†	1590430.7	1638298.1	14006	ug/L	14006 ppb	11:50:16
2	SiO2†	1605901.9	1654471.6	104930	ug/L	104930 ppb	11:50:56
3	Sc 361.383	837288.5	837288.5	96.471	%		11:50:36
3	Sc Radial	5294.4	5294.4	95.0	%		11:49:20
3	Y 371.029	684764.8	684764.8	93.873	%		11:50:36
3	Y RADIAL	5705.6	5705.6	94.48	%		11:49:20
3	Ag 328.068†	-8049.9	-8618.4	0.2868	ug/L	0.2868 ppb	11:50:41
3	Al 396.153Radial†	638.7	708.0	63.575	ug/L	63.575 ppb	11:49:20
3	As 188.979†	25083.6	26032.4	10135	ug/L	10135 ppb	11:50:41
3	B 249.677†	225219.1	233950.7	4961.7	ug/L	4961.7 ppb	11:50:36
3	Ba 233.527†	1838531.9	1905795.1	14263	ug/L	14263 ppb	11:50:36
3	Be 313.107†	7707648.1	7994250.8	2890.2	ug/L	2890.2 ppb	11:50:29
3	Ca 317.933Radial†	37.4	22.5	32.782	ug/L	32.782 ppb	11:49:40
3	Cd 226.502†	902023.4	935217.7	9705.6	ug/L	9705.6 ppb	11:50:36
3	Co 228.616†	484907.3	502718.3	9482.3	ug/L	9482.3 ppb	11:50:41
3	Cr 267.716†	2209225.0	2289950.7	23988	ug/L	23988 ppb	11:50:36
3	Cu 324.752†	6725933.8	6965205.7	20231	ug/L	20231 ppb	11:50:29
3	Fe 238.204 Radial†	-23.4	-34.5	-10.387	ug/L	-10.387 ppb	11:49:40
3	K 766.490 Radial†	1724455.2	1813374.3	304150	ug/L	304150 ppb	11:49:15
3	Mg 279.077 IEC†	-3.7	-5.8	5.8542	ug/L	5.8542 ppb	11:49:40
3	Mn 257.610†	8548946.0	8861140.0	9391.3	ug/L	9391.3 ppb	11:50:29
3	Mo 202.031†	150164.3	155638.8	9904.3	ug/L	9904.3 ppb	11:50:41
3	Na 589.592 Radial†	-873.1	634.6	192.33	ug/L	192.33 ppb	11:49:20
3	Ni 231.604†	411099.0	426050.8	9784.0	ug/L	9784.0 ppb	11:50:36
3	P 214.914†	32871.0	33831.4	15792	ug/L	15792 ppb	11:50:41
3	Pb 220.353†	210969.1	218754.1	24497	ug/L	24497 ppb	11:50:41
3	S 181.975 Axial†	38817.6	40188.1	53096	ug/L	53096 ppb	11:50:41
3	Sb 206.836†	32632.9	33789.2	10478	ug/L	10478 ppb	11:50:41
3	Se 196.026†	17505.7	18172.8	10254	ug/L	10254 ppb	11:50:41
3	Si 251.611†	1572697.9	1629744.3	48234	ug/L	48234 ppb	11:50:36
3	Sn 189.927†	63614.8	65933.0	10606	ug/L	10606 ppb	11:50:41
3	Sr 421.552†	1564038.8	1647171.2	9934.5	ug/L	9934.5 ppb	11:49:15
3	Ti 334.940†	6103807.6	6328336.6	9980.3	ug/L	9980.3 ppb	11:50:29
3	Tl 190.801†	33596.9	34860.4	9882.4	ug/L	9882.4 ppb	11:50:41
3	U 409.014†	-1533.3	994.6	-17.667	ug/L	-17.667 ppb	11:50:41
3	V 292.402†	1452717.8	1507219.9	10150	ug/L	10150 ppb	11:50:36
3	Zn 213.857†	1581952.4	1639065.2	14013	ug/L	14013 ppb	11:50:36
3	SiO2†	1590163.2	1647805.7	104500	ug/L	104500 ppb	11:51:03

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	838903.1	96.657	%	0.3260				0.34%
Sc Radial	5337.5	95.7	%	0.70				0.73%
Y 371.029	685448.5	93.967	%	0.3569				0.38%
Y RADIAL	5755.8	95.31	%	0.780				0.82%
Ag 328.068†	-8608.3	0.3418	ug/L	0.06447	0.3418	ppb	0.06447	18.86%
Al 396.153Radial†	690.1	52.391	ug/L	9.7738	52.391	ppb	9.7738	18.66%
As 188.979†	26015.9	10129	ug/L	91.3	10129	ppb	91.3	0.90%
QC value within limits for As 188.979 Recovery = 101.29%								
B 249.677†	234345.0	4970.1	ug/L	7.34	4970.1	ppb	7.34	0.15%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	1908251.7	14281	ug/L	31.3	14281	ppb	31.3	0.22%
QC value within limits for Ba 233.527 Recovery = 95.21%								
Be 313.107†	7984073.0	2886.5	ug/L	3.81	2886.5	ppb	3.81	0.13%
QC value within limits for Be 313.107 Recovery = 96.22%								
Ca 317.933Radial†	22.7	33.158	ug/L	1.8072	33.158	ppb	1.8072	5.45%
Cd 226.502†	936518.9	9719.1	ug/L	26.94	9719.1	ppb	26.94	0.28%

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   QC value within limits for Cd 226.502  Recovery = 97.19%
Co 228.616†          501359.9      9456.7 ug/L        67.18      9456.7 ppb        67.18   0.71%
   QC value within limits for Co 228.616  Recovery = 94.57%
Cr 267.716†         2290587.5       23995 ug/L         36.6       23995 ppb         36.6   0.15%
   QC value within limits for Cr 267.716  Recovery = 95.98%
Cu 324.752†         6961767.9       20221 ug/L         31.4       20221 ppb         31.4   0.16%
   QC value within limits for Cu 324.752  Recovery = 101.11%
Fe 238.204 Radial†      -33.0      2.3340 ug/L     13.84073      2.3340 ppb     13.84073 592.99%
K 766.490 Radial†   1811368.7      303810 ug/L       1133.7      303810 ppb       1133.7   0.37%
   QC value within limits for K 766.490 Radial  Recovery = 101.27%
Mg 279.077 IEC†         -5.5      14.379 ug/L      21.3060      14.379 ppb     21.3060 148.17%
Mn 257.610†         8860269.6      9390.4 ug/L         4.47      9390.4 ppb        4.47   0.05%
   QC value within limits for Mn 257.610  Recovery = 93.90%
Mo 202.031†          155207.0      9876.9 ug/L        74.99      9876.9 ppb        74.99   0.76%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†      703.5      213.21 ug/L       18.115      213.21 ppb       18.115   8.50%
Ni 231.604†          426710.6      9799.2 ug/L        22.61      9799.2 ppb        22.61   0.23%
   QC value within limits for Ni 231.604  Recovery = 97.99%
P 214.914†            33767.9       15758 ug/L        175.9       15758 ppb        175.9   1.12%
   QC value within limits for P 214.914  Recovery = 105.05%
Pb 220.353†          218160.3       24430 ug/L        176.9       24430 ppb        176.9   0.72%
   QC value within limits for Pb 220.353  Recovery = 97.72%
S 181.975 Axial†      40100.6       52980 ug/L        466.9       52980 ppb        466.9   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 105.96%
Sb 206.836†           33742.4       10462 ug/L         86.2       10462 ppb         86.2   0.82%
   QC value within limits for Sb 206.836  Recovery = 104.62%
Se 196.026†           18151.6       10242 ug/L         96.7       10242 ppb         96.7   0.94%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†         1632409.3       48314 ug/L         77.2       48314 ppb         77.2   0.16%
   QC value within limits for Si 251.611  Recovery = 96.63%
Sn 189.927†           65755.4       10578 ug/L         76.7       10578 ppb         76.7   0.72%
   QC value within limits for Sn 189.927  Recovery = 105.78%
Sr 421.552†         1647268.3      9935.1 ug/L        57.76      9935.1 ppb        57.76   0.58%
   QC value within limits for Sr 421.552  Recovery = 99.35%
Ti 334.940†         6324950.1      9974.9 ug/L         7.93      9974.9 ppb         7.93   0.08%
   QC value within limits for Ti 334.940  Recovery = 99.75%
Tl 190.801†           34752.5      9852.1 ug/L        62.12      9852.1 ppb        62.12   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             1076.5     -15.327 ug/L       4.0323     -15.327 ppb       4.0323  26.31%
V 292.402†          1507474.3       10151 ug/L          7.1       10151 ppb          7.1   0.07%
   QC value within limits for V 292.402  Recovery = 101.51%
Zn 213.857†         1640867.3       14028 ug/L         32.6       14028 ppb         32.6   0.23%
   QC value within limits for Zn 213.857  Recovery = 93.52%
SiO2†               1652308.8      104790 ug/L        250.2      104790 ppb        250.2   0.24%
   QC value within limits for SiO2  Recovery = 97.94%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 11:53:12
Data Type: Reprocessed on 12/11/2009 12:46:07

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	863964.4	863964.4	99.545	%			11:56:22
1	Sc Radial	5504.0	5504.0	98.7	%			11:55:04
1	Y 371.029	714434.9	714434.9	97.941	%			11:56:22
1	Y RADIAL	5955.5	5955.5	98.61	%			11:55:04
1	Ag 328.068†	111593.8	111830.1	508.99	ug/L	508.99	ppb	11:56:27
1	Al 396.153Radial†	7082.6	7210.2	4944.1	ug/L	4944.1	ppb	11:55:04
1	As 188.979†	1327.3	1364.6	531.23	ug/L	531.23	ppb	11:56:47
1	B 249.677†	24139.7	24743.3	525.33	ug/L	525.33	ppb	11:56:27
1	Ba 233.527†	66828.8	67145.6	503.03	ug/L	503.03	ppb	11:56:27
1	Be 313.107†	1371508.7	1382444.2	497.37	ug/L	497.37	ppb	11:56:22
1	Ca 317.933Radial†	3415.6	3443.2	5025.3	ug/L	5025.3	ppb	11:55:24
1	Cd 226.502†	48442.8	48863.3	506.57	ug/L	506.57	ppb	11:56:27
1	Co 228.616†	26549.5	26744.4	504.59	ug/L	504.59	ppb	11:56:27
1	Cr 267.716†	47819.0	47951.7	502.75	ug/L	502.75	ppb	11:56:27
1	Cu 324.752†	177055.2	171107.1	497.26	ug/L	497.26	ppb	11:56:27
1	Fe 238.204 Radial†	580.6	578.3	5196.7	ug/L	5196.7	ppb	11:55:24
1	K 766.490 Radial†	35101.9	32819.8	5497.4	ug/L	5497.4	ppb	11:55:04
1	Mg 279.077 IEC†	157.0	157.1	5288.6	ug/L	5288.6	ppb	11:55:24
1	Mn 257.610†	468210.9	469832.1	498.36	ug/L	498.36	ppb	11:56:22
1	Mo 202.031†	7925.6	7943.4	505.86	ug/L	505.86	ppb	11:56:47
1	Na 589.592 Radial†	32449.4	34426.4	10433	ug/L	10433	ppb	11:55:04
1	Ni 231.604†	21952.5	21967.0	504.45	ug/L	504.45	ppb	11:56:27
1	P 214.914†	4693.5	4473.0	2422.3	ug/L	2422.3	ppb	11:56:47
1	Pb 220.353†	4391.9	4480.0	503.04	ug/L	503.04	ppb	11:56:47
1	S 181.975 Axial†	829.8	784.2	1035.1	ug/L	1035.1	ppb	11:56:47
1	Sb 206.836†	1666.9	1637.2	524.33	ug/L	524.33	ppb	11:56:47
1	Se 196.026†	864.2	895.0	521.77	ug/L	521.77	ppb	11:56:47
1	Si 251.611†	86606.4	86520.8	2564.7	ug/L	2564.7	ppb	11:56:27
1	Sn 189.927†	3156.9	3162.5	509.33	ug/L	509.33	ppb	11:56:47
1	Sr 421.552†	83999.5	85094.4	513.18	ug/L	513.18	ppb	11:55:04
1	Ti 334.940†	310688.6	313365.8	494.49	ug/L	494.49	ppb	11:56:27
1	Tl 190.801†	1750.4	1792.9	508.30	ug/L	508.30	ppb	11:56:47
1	U 409.014†	14719.6	17370.9	497.80	ug/L	497.80	ppb	11:56:27
1	V 292.402†	73286.6	74984.5	505.70	ug/L	505.70	ppb	11:56:27
1	Zn 213.857†	59525.8	59044.2	503.41	ug/L	503.41	ppb	11:56:27
1	SiO2†	86672.4	86544.3	5497.3	ug/L	5497.3	ppb	11:57:54
2	Sc 361.383	867146.6	867146.6	99.911	%			11:56:53
2	Sc Radial	5452.5	5452.5	97.8	%			11:55:30
2	Y 371.029	716354.7	716354.7	98.204	%			11:56:53
2	Y RADIAL	5873.6	5873.6	97.26	%			11:55:30
2	Ag 328.068†	112371.5	112197.2	510.67	ug/L	510.67	ppb	11:56:58
2	Al 396.153Radial†	7048.5	7243.2	4966.9	ug/L	4966.9	ppb	11:55:30
2	As 188.979†	1324.7	1357.2	528.38	ug/L	528.38	ppb	11:57:18
2	B 249.677†	24316.6	24831.4	527.20	ug/L	527.20	ppb	11:56:58
2	Ba 233.527†	67384.3	67455.2	505.35	ug/L	505.35	ppb	11:56:58
2	Be 313.107†	1375274.0	1381156.7	496.92	ug/L	496.92	ppb	11:56:53
2	Ca 317.933Radial†	3411.4	3471.7	5066.9	ug/L	5066.9	ppb	11:55:50
2	Cd 226.502†	48848.4	49090.6	508.93	ug/L	508.93	ppb	11:56:58
2	Co 228.616†	26707.2	26804.4	505.71	ug/L	505.71	ppb	11:56:58
2	Cr 267.716†	48238.9	48195.7	505.31	ug/L	505.31	ppb	11:56:58
2	Cu 324.752†	178605.9	172006.5	499.88	ug/L	499.88	ppb	11:56:58
2	Fe 238.204 Radial†	580.4	583.6	5244.8	ug/L	5244.8	ppb	11:55:50
2	K 766.490 Radial†	34520.6	32561.4	5454.1	ug/L	5454.1	ppb	11:55:30
2	Mg 279.077 IEC†	159.9	161.6	5440.3	ug/L	5440.3	ppb	11:55:50
2	Mn 257.610†	469700.5	469597.0	498.11	ug/L	498.11	ppb	11:56:53
2	Mo 202.031†	7936.3	7924.9	504.69	ug/L	504.69	ppb	11:57:18
2	Na 589.592 Radial†	31804.2	34077.3	10327	ug/L	10327	ppb	11:55:30
2	Ni 231.604†	22133.8	22067.5	506.76	ug/L	506.76	ppb	11:56:58

2	P 214.914†	4705.8	4467.9	2419.0 ug/L	2419.0 ppb	11:57:18
2	Pb 220.353†	4409.9	4481.8	503.24 ug/L	503.24 ppb	11:57:18
2	S 181.975 Axial†	841.2	792.5	1046.0 ug/L	1046.0 ppb	11:57:18
2	Sb 206.836†	1680.1	1644.2	526.44 ug/L	526.44 ppb	11:57:18
2	Se 196.026†	875.2	902.8	526.32 ug/L	526.32 ppb	11:57:18
2	Si 251.611†	87501.2	87097.1	2581.9 ug/L	2581.9 ppb	11:56:58
2	Sn 189.927†	3165.9	3159.9	508.91 ug/L	508.91 ppb	11:57:18
2	Sr 421.552†	82795.3	84667.2	510.60 ug/L	510.60 ppb	11:55:30
2	Ti 334.940†	313440.0	314974.3	497.03 ug/L	497.03 ppb	11:56:58
2	Tl 190.801†	1737.0	1773.1	502.71 ug/L	502.71 ppb	11:57:18
2	U 409.014†	14815.4	17412.5	498.99 ug/L	498.99 ppb	11:56:58
2	V 292.402†	73939.9	75368.2	508.23 ug/L	508.23 ppb	11:56:58
2	Zn 213.857†	60005.1	59304.4	505.62 ug/L	505.62 ppb	11:56:58
2	SiO2†	85548.6	85100.0	5405.2 ug/L	5405.2 ppb	11:58:00
3	Sc 361.383	865766.7	865766.7	99.752 %		11:57:24
3	Sc Radial	5487.2	5487.2	98.4 %		11:55:55
3	Y 371.029	715205.5	715205.5	98.046 %		11:57:24
3	Y RADIAL	5904.0	5904.0	97.76 %		11:55:55
3	Ag 328.068†	111370.8	111373.2	506.94 ug/L	506.94 ppb	11:57:29
3	Al 396.153Radial†	7047.4	7196.4	4934.6 ug/L	4934.6 ppb	11:55:55
3	As 188.979†	1320.8	1355.3	527.66 ug/L	527.66 ppb	11:57:49
3	B 249.677†	24128.9	24682.0	524.02 ug/L	524.02 ppb	11:57:29
3	Ba 233.527†	66953.3	67130.6	502.91 ug/L	502.91 ppb	11:57:29
3	Be 313.107†	1371679.0	1379746.6	496.41 ug/L	496.41 ppb	11:57:24
3	Ca 317.933Radial†	3432.1	3470.6	5065.2 ug/L	5065.2 ppb	11:56:15
3	Cd 226.502†	48351.6	48670.6	504.57 ug/L	504.57 ppb	11:57:29
3	Co 228.616†	26573.8	26713.2	504.00 ug/L	504.00 ppb	11:57:29
3	Cr 267.716†	47762.2	47794.8	501.11 ug/L	501.11 ppb	11:57:29
3	Cu 324.752†	177287.9	170970.2	496.87 ug/L	496.87 ppb	11:57:29
3	Fe 238.204 Radial†	585.1	584.7	5253.8 ug/L	5253.8 ppb	11:56:15
3	K 766.490 Radial†	34816.4	32638.6	5467.0 ug/L	5467.0 ppb	11:55:55
3	Mg 279.077 IEC†	156.0	156.6	5271.2 ug/L	5271.2 ppb	11:56:15
3	Mn 257.610†	468391.6	469034.1	497.52 ug/L	497.52 ppb	11:57:24
3	Mo 202.031†	7936.6	7937.9	505.51 ug/L	505.51 ppb	11:57:49
3	Na 589.592 Radial†	32093.4	34165.3	10354 ug/L	10354 ppb	11:55:55
3	Ni 231.604†	21970.5	21939.1	503.81 ug/L	503.81 ppb	11:57:29
3	P 214.914†	4712.3	4481.9	2427.3 ug/L	2427.3 ppb	11:57:49
3	Pb 220.353†	4397.4	4476.3	502.62 ug/L	502.62 ppb	11:57:49
3	S 181.975 Axial†	824.6	777.3	1025.9 ug/L	1025.9 ppb	11:57:49
3	Sb 206.836†	1662.7	1629.5	521.92 ug/L	521.92 ppb	11:57:49
3	Se 196.026†	871.9	900.8	525.23 ug/L	525.23 ppb	11:57:49
3	Si 251.611†	86694.0	86427.5	2562.0 ug/L	2562.0 ppb	11:57:29
3	Sn 189.927†	3160.2	3159.2	508.80 ug/L	508.80 ppb	11:57:49
3	Sr 421.552†	83348.7	84693.6	510.76 ug/L	510.76 ppb	11:55:55
3	Ti 334.940†	311161.4	313190.1	494.21 ug/L	494.21 ppb	11:57:29
3	Tl 190.801†	1745.5	1784.4	505.88 ug/L	505.88 ppb	11:57:49
3	U 409.014†	14530.8	17150.9	491.47 ug/L	491.47 ppb	11:57:29
3	V 292.402†	73265.1	74809.7	504.52 ug/L	504.52 ppb	11:57:29
3	Zn 213.857†	59407.5	58801.1	501.32 ug/L	501.32 ppb	11:57:29
3	SiO2†	86760.1	86451.0	5491.4 ug/L	5491.4 ppb	11:58:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865625.9	99.736	%	0.1839				0.18%
Sc Radial	5481.3	98.3	%	0.47				0.48%
Y 371.029	715331.7	98.064	%	0.1324				0.14%
Y RADIAL	5911.0	97.88	%	0.685				0.70%
Ag 328.068†	111800.2	508.87	ug/L	1.869	508.87	ppb	1.869	0.37%
QC value within limits for Ag 328.068 Recovery = 101.77%								
Al 396.153Radial†	7216.6	4948.5	ug/L	16.56	4948.5	ppb	16.56	0.33%
QC value within limits for Al 396.153Radial Recovery = 98.97%								
As 188.979†	1359.0	529.09	ug/L	1.890	529.09	ppb	1.890	0.36%
QC value within limits for As 188.979 Recovery = 105.82%								
B 249.677†	24752.3	525.52	ug/L	1.598	525.52	ppb	1.598	0.30%
QC value within limits for B 249.677 Recovery = 105.10%								
Ba 233.527†	67243.8	503.76	ug/L	1.374	503.76	ppb	1.374	0.27%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	1381115.8	496.90	ug/L	0.485	496.90	ppb	0.485	0.10%
QC value within limits for Be 313.107 Recovery = 99.38%								

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Ca 317.933Radial†        3461.8      5052.5 ug/L        23.53      5052.5 ppb        23.53   0.47%
   QC value within limits for Ca 317.933Radial  Recovery = 101.05%
Cd 226.502†             48874.8      506.69 ug/L        2.182      506.69 ppb        2.182   0.43%
   QC value within limits for Cd 226.502  Recovery = 101.34%
Co 228.616†             26754.0      504.77 ug/L        0.869      504.77 ppb        0.869   0.17%
   QC value within limits for Co 228.616  Recovery = 100.95%
Cr 267.716†             47980.7      503.06 ug/L        2.117      503.06 ppb        2.117   0.42%
   QC value within limits for Cr 267.716  Recovery = 100.61%
Cu 324.752†            171361.3      498.00 ug/L        1.636      498.00 ppb        1.636   0.33%
   QC value within limits for Cu 324.752  Recovery = 99.60%
Fe 238.204 Radial†       582.2      5231.7 ug/L        30.70      5231.7 ppb        30.70   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.63%
K 766.490 Radial†       32673.3      5472.8 ug/L        22.23      5472.8 ppb        22.23   0.41%
   QC value within limits for K 766.490 Radial  Recovery = 109.46%
Mg 279.077 IEC†          158.4      5333.3 ug/L        93.05      5333.3 ppb        93.05   1.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.67%
Mn 257.610†            469487.8      498.00 ug/L        0.432      498.00 ppb        0.432   0.09%
   QC value within limits for Mn 257.610  Recovery = 99.60%
Mo 202.031†             7935.4      505.35 ug/L        0.601      505.35 ppb        0.601   0.12%
   QC value within limits for Mo 202.031  Recovery = 101.07%
Na 589.592 Radial†      34223.0       10372 ug/L         55.0       10372 ppb         55.0   0.53%
   QC value within limits for Na 589.592 Radial  Recovery = 103.72%
Ni 231.604†             21991.2      505.01 ug/L        1.551      505.01 ppb        1.551   0.31%
   QC value within limits for Ni 231.604  Recovery = 101.00%
P 214.914†               4474.3      2422.9 ug/L         4.18      2422.9 ppb         4.18   0.17%
   QC value within limits for P 214.914  Recovery = 96.92%
Pb 220.353†              4479.4      502.97 ug/L        0.318      502.97 ppb        0.318   0.06%
   QC value within limits for Pb 220.353  Recovery = 100.59%
S 181.975 Axial†          784.7      1035.7 ug/L        10.06      1035.7 ppb        10.06   0.97%
   QC value within limits for S 181.975 Axial  Recovery = 103.57%
Sb 206.836†             1636.9      524.23 ug/L        2.261      524.23 ppb        2.261   0.43%
   QC value within limits for Sb 206.836  Recovery = 104.85%
Se 196.026†              899.5      524.44 ug/L        2.375      524.44 ppb        2.375   0.45%
   QC value within limits for Se 196.026  Recovery = 104.89%
Si 251.611†             86681.8      2569.5 ug/L        10.82      2569.5 ppb        10.82   0.42%
   QC value within limits for Si 251.611  Recovery = 102.78%
Sn 189.927†             3160.5      509.02 ug/L        0.281      509.02 ppb        0.281   0.06%
   QC value within limits for Sn 189.927  Recovery = 101.80%
Sr 421.552†             84818.4      511.52 ug/L        1.444      511.52 ppb        1.444   0.28%
   QC value within limits for Sr 421.552  Recovery = 102.30%
Ti 334.940†            313843.4      495.24 ug/L        1.551      495.24 ppb        1.551   0.31%
   QC value within limits for Ti 334.940  Recovery = 99.05%
Tl 190.801†             1783.5      505.63 ug/L        2.802      505.63 ppb        2.802   0.55%
   QC value within limits for Tl 190.801  Recovery = 101.13%
U 409.014†              17311.4      496.09 ug/L        4.041      496.09 ppb        4.041   0.81%
   QC value within limits for U 409.014  Recovery = 99.22%
V 292.402†              75054.1      506.15 ug/L        1.900      506.15 ppb        1.900   0.38%
   QC value within limits for V 292.402  Recovery = 101.23%
Zn 213.857†             59049.9      503.45 ug/L        2.152      503.45 ppb        2.152   0.43%
   QC value within limits for Zn 213.857  Recovery = 100.69%
SiO2†                   86031.8      5464.7 ug/L        51.56      5464.7 ppb        51.56   0.94%
   QC value within limits for SiO2  Recovery = 102.19%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:00:14
Data Type: Reprocessed on 12/11/2009 12:46:08

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899225.0	899225.0	103.61	%			12:03:24
1	Sc Radial	5574.2	5574.2	100.0	%			12:02:07
1	Y 371.029	754915.1	754915.1	103.49	%			12:03:24
1	Y RADIAL	6020.5	6020.5	99.69	%			12:02:07
1	Ag 328.068†	314.4	29.5	0.1304	ug/L	0.1304	ppb	12:03:29
1	Al 396.153Radial†	-17.9	17.4	11.952	ug/L	11.952	ppb	12:02:07
1	As 188.979†	14.4	45.2	17.457	ug/L	17.457	ppb	12:03:49
1	B 249.677†	293.3	776.3	16.543	ug/L	16.543	ppb	12:03:29
1	Ba 233.527†	6.6	17.5	0.1304	ug/L	0.1304	ppb	12:03:49
1	Be 313.107†	-4567.3	254.3	0.0916	ug/L	0.0916	ppb	12:03:29
1	Ca 317.933Radial†	17.6	0.7	1.0760	ug/L	1.0760	ppb	12:02:27
1	Cd 226.502†	-176.2	28.9	0.2995	ug/L	0.2995	ppb	12:03:49
1	Co 228.616†	-65.4	10.4	0.1985	ug/L	0.1985	ppb	12:03:49
1	Cr 267.716†	96.4	7.0	0.0723	ug/L	0.0723	ppb	12:03:49
1	Cu 324.752†	6796.9	-197.6	-0.5739	ug/L	-0.5739	ppb	12:03:29
1	Fe 238.204 Radial†	9.9	0.1	0.4846	ug/L	0.4846	ppb	12:02:27
1	K 766.490 Radial†	4296.7	1558.4	261.42	ug/L	261.42	ppb	12:02:07
1	Mg 279.077 IEC†	0.5	-1.4	-46.595	ug/L	-46.595	ppb	12:02:27
1	Mn 257.610†	514.9	-23.2	-0.0237	ug/L	-0.0237	ppb	12:03:49
1	Mo 202.031†	39.3	19.5	1.2426	ug/L	1.2426	ppb	12:03:49
1	Na 589.592 Radial†	-1274.1	279.7	84.765	ug/L	84.765	ppb	12:02:07
1	Ni 231.604†	98.6	9.2	0.2118	ug/L	0.2118	ppb	12:03:49
1	P 214.914†	223.6	-26.2	-14.556	ug/L	-14.556	ppb	12:03:49
1	Pb 220.353†	-60.4	9.7	1.0905	ug/L	1.0905	ppb	12:03:49
1	S 181.975 Axial†	55.7	4.4	5.8074	ug/L	5.8074	ppb	12:03:49
1	Sb 206.836†	46.7	7.7	2.4698	ug/L	2.4698	ppb	12:03:49
1	Se 196.026†	-35.7	-7.6	-4.2827	ug/L	-4.2827	ppb	12:03:49
1	Si 251.611†	600.7	98.1	2.8129	ug/L	2.8129	ppb	12:03:49
1	Sn 189.927†	9.8	0.6	0.0926	ug/L	0.0926	ppb	12:03:49
1	Sr 421.552†	-31.0	-30.8	-0.1858	ug/L	-0.1858	ppb	12:02:07
1	Ti 334.940†	-1214.4	84.2	0.1318	ug/L	0.1318	ppb	12:03:29
1	Tl 190.801†	-38.3	-2.4	-0.6739	ug/L	-0.6739	ppb	12:03:49
1	U 409.014†	-2588.1	86.0	2.4729	ug/L	2.4729	ppb	12:03:24
1	V 292.402†	-1446.3	-33.2	-0.1995	ug/L	-0.1995	ppb	12:03:29
1	Zn 213.857†	841.2	58.1	0.5003	ug/L	0.5003	ppb	12:03:49
1	SiO2†	574.8	30.3	1.6953	ug/L	1.6953	ppb	12:04:55
2	Sc 361.383	856785.8	856785.8	98.718	%			12:03:54
2	Sc Radial	5655.9	5655.9	101	%			12:02:32
2	Y 371.029	718466.2	718466.2	98.493	%			12:03:54
2	Y RADIAL	6136.2	6136.2	101.6	%			12:02:32
2	Ag 328.068†	299.0	28.8	0.1308	ug/L	0.1308	ppb	12:03:59
2	Al 396.153Radial†	-15.1	20.5	14.040	ug/L	14.040	ppb	12:02:32
2	As 188.979†	11.6	43.0	16.603	ug/L	16.603	ppb	12:04:19
2	B 249.677†	232.0	728.2	15.520	ug/L	15.520	ppb	12:03:59
2	Ba 233.527†	-0.0	11.1	0.0824	ug/L	0.0824	ppb	12:04:19
2	Be 313.107†	-4589.5	13.5	0.0048	ug/L	0.0048	ppb	12:03:59
2	Ca 317.933Radial†	14.3	-2.8	-4.0322	ug/L	-4.0322	ppb	12:02:52
2	Cd 226.502†	-158.9	38.0	0.3951	ug/L	0.3951	ppb	12:04:19
2	Co 228.616†	-77.3	-4.8	-0.0877	ug/L	-0.0877	ppb	12:04:19
2	Cr 267.716†	95.3	10.5	0.1112	ug/L	0.1112	ppb	12:04:19
2	Cu 324.752†	6921.7	253.8	0.7367	ug/L	0.7367	ppb	12:03:59
2	Fe 238.204 Radial†	9.0	-1.0	-8.9708	ug/L	-8.9708	ppb	12:02:52
2	K 766.490 Radial†	4372.5	1571.0	263.54	ug/L	263.54	ppb	12:02:32
2	Mg 279.077 IEC†	-0.8	-2.7	-91.143	ug/L	-91.143	ppb	12:02:52
2	Mn 257.610†	528.4	15.1	0.0168	ug/L	0.0168	ppb	12:04:19
2	Mo 202.031†	38.2	20.3	1.2890	ug/L	1.2890	ppb	12:04:19
2	Na 589.592 Radial†	-1331.0	242.0	73.329	ug/L	73.329	ppb	12:02:32
2	Ni 231.604†	98.9	14.2	0.3272	ug/L	0.3272	ppb	12:04:19

2	P 214.914†	223.3	-15.9	-8.9718 ug/L	-8.9718 ppb	12:04:19
2	Pb 220.353†	-72.0	-5.0	-0.5491 ug/L	-0.5491 ppb	12:04:19
2	S 181.975 Axial†	55.5	6.8	8.9914 ug/L	8.9914 ppb	12:04:19
2	Sb 206.836†	43.2	6.4	2.0316 ug/L	2.0316 ppb	12:04:19
2	Se 196.026†	-27.2	-0.8	-0.4531 ug/L	-0.4531 ppb	12:04:19
2	Si 251.611†	626.0	152.4	4.4304 ug/L	4.4304 ppb	12:04:19
2	Sn 189.927†	7.8	-1.0	-0.1582 ug/L	-0.1582 ppb	12:04:19
2	Sr 421.552†	-48.0	-47.1	-0.2843 ug/L	-0.2843 ppb	12:02:32
2	Ti 334.940†	-1259.2	-19.4	-0.0290 ug/L	-0.0290 ppb	12:03:59
2	Tl 190.801†	-31.3	2.9	0.8168 ug/L	0.8168 ppb	12:04:19
2	U 409.014†	-2693.0	-144.0	-4.1394 ug/L	-4.1394 ppb	12:03:54
2	V 292.402†	-1353.6	-8.4	-0.0465 ug/L	-0.0465 ppb	12:03:59
2	Zn 213.857†	856.0	113.3	0.9754 ug/L	0.9754 ppb	12:04:19
2	SiO2†	577.0	60.1	3.5906 ug/L	3.5906 ppb	12:05:00
3	Sc 361.383	880066.8	880066.8	101.40 %		12:04:25
3	Sc Radial	5379.1	5379.1	96.5 %		12:02:57
3	Y 371.029	738261.2	738261.2	101.21 %		12:04:25
3	Y RADIAL	5820.9	5820.9	96.39 %		12:02:57
3	Ag 328.068†	302.6	24.4	0.1168 ug/L	0.1168 ppb	12:04:30
3	Al 396.153Radial†	-28.2	6.1	4.1223 ug/L	4.1223 ppb	12:02:57
3	As 188.979†	1.7	33.0	12.719 ug/L	12.719 ppb	12:04:50
3	B 249.677†	226.9	716.9	15.276 ug/L	15.276 ppb	12:04:30
3	Ba 233.527†	6.0	17.0	0.1280 ug/L	0.1280 ppb	12:04:50
3	Be 313.107†	-4594.7	131.3	0.0474 ug/L	0.0474 ppb	12:04:30
3	Ca 317.933Radial†	17.6	1.3	1.9409 ug/L	1.9409 ppb	12:03:17
3	Cd 226.502†	-167.9	33.3	0.3435 ug/L	0.3435 ppb	12:04:50
3	Co 228.616†	-74.7	-0.3	-0.0019 ug/L	-0.0019 ppb	12:04:50
3	Cr 267.716†	74.1	-12.9	-0.1349 ug/L	-0.1349 ppb	12:04:50
3	Cu 324.752†	6940.3	86.7	0.2527 ug/L	0.2527 ppb	12:04:30
3	Fe 238.204 Radial†	11.8	2.3	20.828 ug/L	20.828 ppb	12:03:17
3	K 766.490 Radial†	4141.7	1553.6	260.63 ug/L	260.63 ppb	12:02:57
3	Mg 279.077 IEC†	3.6	1.9	62.406 ug/L	62.406 ppb	12:03:17
3	Mn 257.610†	548.2	20.4	0.0226 ug/L	0.0226 ppb	12:04:50
3	Mo 202.031†	40.7	21.7	1.3849 ug/L	1.3849 ppb	12:04:50
3	Na 589.592 Radial†	-1288.7	218.3	66.150 ug/L	66.150 ppb	12:02:57
3	Ni 231.604†	81.3	-5.8	-0.1326 ug/L	-0.1326 ppb	12:04:50
3	P 214.914†	240.1	-5.3	-2.9996 ug/L	-2.9996 ppb	12:04:50
3	Pb 220.353†	-70.5	-1.5	-0.1701 ug/L	-0.1701 ppb	12:04:50
3	S 181.975 Axial†	49.8	-0.3	-0.4468 ug/L	-0.4468 ppb	12:04:50
3	Sb 206.836†	51.7	13.6	4.3256 ug/L	4.3256 ppb	12:04:50
3	Se 196.026†	-19.6	7.5	4.2930 ug/L	4.2930 ppb	12:04:50
3	Si 251.611†	567.3	77.7	2.2042 ug/L	2.2042 ppb	12:04:50
3	Sn 189.927†	9.6	0.6	0.0948 ug/L	0.0948 ppb	12:04:50
3	Sr 421.552†	-13.4	-13.6	-0.0822 ug/L	-0.0822 ppb	12:02:57
3	Ti 334.940†	-1193.7	79.0	0.1244 ug/L	0.1244 ppb	12:04:30
3	Tl 190.801†	-35.3	-0.2	-0.0538 ug/L	-0.0538 ppb	12:04:50
3	U 409.014†	-2587.8	31.9	0.9148 ug/L	0.9148 ppb	12:04:25
3	V 292.402†	-1356.8	24.7	0.1838 ug/L	0.1838 ppb	12:04:30
3	Zn 213.857†	818.6	53.4	0.4561 ug/L	0.4561 ppb	12:04:50
3	SiO2†	591.0	58.4	3.4822 ug/L	3.4822 ppb	12:05:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	878692.5	101.24	%	2.449				2.42%
Sc Radial	5536.4	99.3	%	2.55				2.57%
Y 371.029	737214.2	101.06	%	2.501				2.48%
Y RADIAL	5992.5	99.23	%	2.641				2.66%
Ag 328.068†	27.5	0.1260	ug/L	0.00800	0.1260	ppb	0.00800	6.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	10.038	ug/L	5.2286	10.038	ppb	5.2286	52.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	40.4	15.593	ug/L	2.5253	15.593	ppb	2.5253	16.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	740.5	15.779	ug/L	0.6721	15.779	ppb	0.6721	4.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.1136	ug/L	0.02706	0.1136	ppb	0.02706	23.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	133.0	0.0479	ug/L	0.04341	0.0479	ppb	0.04341	90.58%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -0.2     -0.3384 ug/L       3.22799     -0.3384 ppb        3.22799 953.84%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                33.4      0.3460 ug/L       0.04784      0.3460 ppb        0.04784  13.82%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0363 ug/L       0.14688      0.0363 ppb        0.14688 404.85%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 1.5      0.0162 ug/L       0.13233      0.0162 ppb        0.13233 816.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                47.6      0.1385 ug/L       0.66271      0.1385 ppb        0.66271 478.48%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.1140 ug/L      15.22749      4.1140 ppb       15.22749 370.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        1561.0      261.86 ug/L         1.506      261.86 ppb          1.506   0.58%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.7     -25.111 ug/L      78.9972     -25.111 ppb        78.9972 314.60%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 4.1      0.0052 ug/L       0.02523      0.0052 ppb        0.02523 482.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                20.5      1.3055 ug/L       0.07254      1.3055 ppb        0.07254   5.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        246.6      74.748 ug/L        9.3882      74.748 ppb         9.3882  12.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.9      0.1355 ug/L       0.23922      0.1355 ppb        0.23922 176.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.8     -8.8423 ug/L       5.77912     -8.8423 ppb        5.77912  65.36%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.1      0.1238 ug/L       0.85841      0.1238 ppb        0.85841 693.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.6      4.7840 ug/L       4.80157      4.7840 ppb        4.80157 100.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.2      2.9423 ug/L       1.21781      2.9423 ppb        1.21781  41.39%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.3     -0.1476 ug/L       4.29600     -0.1476 ppb        4.29600 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               109.4      3.1492 ug/L       1.15055      3.1492 ppb        1.15055  36.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.1      0.0098 ug/L       0.14543      0.0098 ppb        0.14543 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -30.5     -0.1841 ug/L       0.10103     -0.1841 ppb        0.10103  54.87%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                47.9      0.0757 ug/L       0.09077      0.0757 ppb        0.09077 119.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.1      0.0297 ug/L       0.74885      0.0297 ppb        0.74885 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 -8.7     -0.2506 ug/L       3.45672     -0.2506 ppb        3.45672 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.7     -0.0207 ug/L       0.19295     -0.0207 ppb        0.19295 931.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                74.9      0.6439 ug/L       0.28788      0.6439 ppb        0.28788  44.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      49.6      2.9227 ug/L       1.06435      2.9227 ppb        1.06435  36.42%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:09:40
Data Type: Reprocessed on 12/11/2009 12:46:09

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	875638.3	875638.3	100.89	%			12:12:50
1	Sc Radial	5429.2	5429.2	97.4	%			12:11:32
1	Y 371.029	723807.3	723807.3	99.226	%			12:12:50
1	Y RADIAL	5896.7	5896.7	97.64	%			12:11:32
1	Ag 328.068†	110582.1	109332.8	497.68	ug/L	497.68	ppb	12:12:55
1	Al 396.153Radial†	7008.0	7232.6	4959.8	ug/L	4959.8	ppb	12:11:32
1	As 188.979†	1277.0	1297.0	505.08	ug/L	505.08	ppb	12:13:15
1	B 249.677†	23016.5	23306.7	494.74	ug/L	494.74	ppb	12:12:55
1	Ba 233.527†	66448.8	65873.9	493.50	ug/L	493.50	ppb	12:12:55
1	Be 313.107†	1392693.8	1385073.8	498.30	ug/L	498.30	ppb	12:12:50
1	Ca 317.933Radial†	3425.4	3501.0	5109.7	ug/L	5109.7	ppb	12:11:52
1	Cd 226.502†	48048.2	47823.4	495.78	ug/L	495.78	ppb	12:12:55
1	Co 228.616†	26374.2	26215.0	494.61	ug/L	494.61	ppb	12:12:55
1	Cr 267.716†	47569.7	47064.2	493.45	ug/L	493.45	ppb	12:12:55
1	Cu 324.752†	175534.7	167228.8	486.00	ug/L	486.00	ppb	12:12:55
1	Fe 238.204 Radial†	578.2	583.9	5247.1	ug/L	5247.1	ppb	12:11:52
1	K 766.490 Radial†	33041.0	31193.5	5224.6	ug/L	5224.6	ppb	12:11:32
1	Mg 279.077 IEC†	153.6	155.9	5246.7	ug/L	5246.7	ppb	12:11:52
1	Mn 257.610†	475093.7	470383.6	498.95	ug/L	498.95	ppb	12:12:50
1	Mo 202.031†	7936.1	7847.7	499.77	ug/L	499.77	ppb	12:13:15
1	Na 589.592 Radial†	31411.3	33813.5	10247	ug/L	10247	ppb	12:11:32
1	Ni 231.604†	21807.3	21529.1	494.39	ug/L	494.39	ppb	12:12:55
1	P 214.914†	4705.5	4422.0	2395.5	ug/L	2395.5	ppb	12:13:15
1	Pb 220.353†	4423.0	4452.0	499.90	ug/L	499.90	ppb	12:13:15
1	S 181.975 Axial†	813.0	756.5	998.44	ug/L	998.44	ppb	12:13:15
1	Sb 206.836†	1660.3	1608.3	515.20	ug/L	515.20	ppb	12:13:15
1	Se 196.026†	867.5	886.7	517.22	ug/L	517.22	ppb	12:13:15
1	Si 251.611†	85830.4	84591.7	2507.5	ug/L	2507.5	ppb	12:12:55
1	Sn 189.927†	3158.9	3122.2	502.85	ug/L	502.85	ppb	12:13:15
1	Sr 421.552†	82692.5	84925.3	512.16	ug/L	512.16	ppb	12:11:32
1	Ti 334.940†	308600.9	307135.5	484.66	ug/L	484.66	ppb	12:12:55
1	Tl 190.801†	1747.6	1766.7	500.92	ug/L	500.92	ppb	12:13:15
1	U 409.014†	14535.8	16991.6	486.91	ug/L	486.91	ppb	12:12:55
1	V 292.402†	72837.9	73558.2	496.11	ug/L	496.11	ppb	12:12:55
1	Zn 213.857†	58972.5	57698.5	491.91	ug/L	491.91	ppb	12:12:55
1	SiO2†	85357.0	84079.8	5340.5	ug/L	5340.5	ppb	12:14:22
2	Sc 361.383	875573.2	875573.2	100.88	%			12:13:21
2	Sc Radial	5960.6	5960.6	107	%			12:11:57
2	Y 371.029	724459.8	724459.8	99.315	%			12:13:21
2	Y RADIAL	6427.7	6427.7	106.4	%			12:11:57
2	Ag 328.068†	111738.3	110487.1	502.78	ug/L	502.78	ppb	12:13:26
2	Al 396.153Radial†	6723.0	6324.3	4334.2	ug/L	4334.2	ppb	12:11:57
2	As 188.979†	1290.9	1310.9	510.41	ug/L	510.41	ppb	12:13:46
2	B 249.677†	23369.6	23658.4	502.28	ug/L	502.28	ppb	12:13:26
2	Ba 233.527†	67099.8	66524.1	498.36	ug/L	498.36	ppb	12:13:26
2	Be 313.107†	1396730.2	1389177.7	499.78	ug/L	499.78	ppb	12:13:21
2	Ca 317.933Radial†	3417.0	3179.6	4640.5	ug/L	4640.5	ppb	12:12:17
2	Cd 226.502†	48317.9	48094.3	498.63	ug/L	498.63	ppb	12:13:26
2	Co 228.616†	26608.6	26449.3	499.03	ug/L	499.03	ppb	12:13:26
2	Cr 267.716†	47929.9	47424.7	497.22	ug/L	497.22	ppb	12:13:26
2	Cu 324.752†	177929.5	169615.6	492.91	ug/L	492.91	ppb	12:13:26
2	Fe 238.204 Radial†	581.1	533.7	4797.4	ug/L	4797.4	ppb	12:12:17
2	K 766.490 Radial†	32020.2	27213.5	4557.4	ug/L	4557.4	ppb	12:11:57
2	Mg 279.077 IEC†	152.9	141.1	4750.6	ug/L	4750.6	ppb	12:12:17
2	Mn 257.610†	474874.7	470201.5	498.72	ug/L	498.72	ppb	12:13:21
2	Mo 202.031†	7963.5	7875.4	501.50	ug/L	501.50	ppb	12:13:46
2	Na 589.592 Radial†	29968.0	29587.5	8966.8	ug/L	8966.8	ppb	12:11:57
2	Ni 231.604†	21971.3	21693.2	498.16	ug/L	498.16	ppb	12:13:26

2	P 214.914†	4711.5	4428.2	2398.0 ug/L	2398.0 ppb	12:13:46
2	Pb 220.353†	4428.3	4457.5	500.41 ug/L	500.41 ppb	12:13:46
2	S 181.975 Axial†	820.7	764.1	1008.6 ug/L	1008.6 ppb	12:13:46
2	Sb 206.836†	1650.6	1598.8	512.15 ug/L	512.15 ppb	12:13:46
2	Se 196.026†	874.7	893.8	519.77 ug/L	519.77 ppb	12:13:46
2	Si 251.611†	86883.9	85642.3	2539.0 ug/L	2539.0 ppb	12:13:26
2	Sn 189.927†	3160.1	3123.7	503.04 ug/L	503.04 ppb	12:13:46
2	Sr 421.552†	78610.6	73536.0	443.47 ug/L	443.47 ppb	12:11:57
2	Ti 334.940†	312119.6	310646.2	490.18 ug/L	490.18 ppb	12:13:26
2	Tl 190.801†	1745.7	1765.0	500.42 ug/L	500.42 ppb	12:13:46
2	U 409.014†	14686.0	17141.6	491.27 ug/L	491.27 ppb	12:13:26
2	V 292.402†	73499.2	74219.2	500.59 ug/L	500.59 ppb	12:13:26
2	Zn 213.857†	59423.7	58150.1	495.82 ug/L	495.82 ppb	12:13:26
2	SiO2†	86519.8	85238.7	5414.9 ug/L	5414.9 ppb	12:14:27
3	Sc 361.383	861169.5	861169.5	99.223 %		12:13:52
3	Sc Radial	6087.9	6087.9	109 %		12:12:22
3	Y 371.029	712398.4	712398.4	97.662 %		12:13:52
3	Y RADIAL	6565.2	6565.2	108.7 %		12:12:22
3	Ag 328.068†	112865.7	113475.9	516.31 ug/L	516.31 ppb	12:13:57
3	Al 396.153Radial†	6721.6	6191.4	4242.3 ug/L	4242.3 ppb	12:12:22
3	As 188.979†	1276.6	1317.9	513.19 ug/L	513.19 ppb	12:14:17
3	B 249.677†	23748.1	24427.3	518.65 ug/L	518.65 ppb	12:13:57
3	Ba 233.527†	67856.0	68398.6	512.39 ug/L	512.39 ppb	12:13:57
3	Be 313.107†	1374575.3	1390006.3	500.11 ug/L	500.11 ppb	12:13:52
3	Ca 317.933Radial†	3396.0	3093.4	4514.8 ug/L	4514.8 ppb	12:12:42
3	Cd 226.502†	49074.6	49657.9	514.87 ug/L	514.87 ppb	12:13:57
3	Co 228.616†	26890.6	27174.7	512.70 ug/L	512.70 ppb	12:13:57
3	Cr 267.716†	48434.3	48727.7	510.88 ug/L	510.88 ppb	12:13:57
3	Cu 324.752†	179617.3	174266.5	506.41 ug/L	506.41 ppb	12:13:57
3	Fe 238.204 Radial†	577.1	518.7	4663.1 ug/L	4663.1 ppb	12:12:42
3	K 766.490 Radial†	32203.3	26754.7	4480.5 ug/L	4480.5 ppb	12:12:22
3	Mg 279.077 IEC†	156.7	141.6	4767.3 ug/L	4767.3 ppb	12:12:42
3	Mn 257.610†	468651.1	471802.3	500.41 ug/L	500.41 ppb	12:13:52
3	Mo 202.031†	7954.1	7998.0	509.30 ug/L	509.30 ppb	12:14:17
3	Na 589.592 Radial†	30250.4	29259.7	8867.4 ug/L	8867.4 ppb	12:12:22
3	Ni 231.604†	22247.5	22335.8	512.92 ug/L	512.92 ppb	12:13:57
3	P 214.914†	4734.4	4529.5	2452.6 ug/L	2452.6 ppb	12:14:17
3	Pb 220.353†	4407.6	4510.2	506.31 ug/L	506.31 ppb	12:14:17
3	S 181.975 Axial†	827.2	784.3	1035.4 ug/L	1035.4 ppb	12:14:17
3	Sb 206.836†	1656.2	1631.8	522.55 ug/L	522.55 ppb	12:14:17
3	Se 196.026†	871.8	905.5	525.93 ug/L	525.93 ppb	12:14:17
3	Si 251.611†	87807.2	88013.3	2609.4 ug/L	2609.4 ppb	12:13:57
3	Sn 189.927†	3156.1	3172.0	510.80 ug/L	510.80 ppb	12:14:17
3	Sr 421.552†	79155.7	72496.9	437.21 ug/L	437.21 ppb	12:12:22
3	Ti 334.940†	315664.1	319393.2	503.97 ug/L	503.97 ppb	12:13:57
3	Tl 190.801†	1759.7	1808.1	512.57 ug/L	512.57 ppb	12:14:17
3	U 409.014†	14688.7	17387.8	498.34 ug/L	498.34 ppb	12:13:57
3	V 292.402†	74374.7	76320.1	514.70 ug/L	514.70 ppb	12:13:57
3	Zn 213.857†	60227.6	59945.6	511.16 ug/L	511.16 ppb	12:13:57
3	SiO2†	85613.7	85760.0	5447.9 ug/L	5447.9 ppb	12:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870793.7	100.33	%	0.960				0.96%
Sc Radial	5825.9	104	%	6.3				6.00%
Y 371.029	720221.8	98.734	%	0.9299				0.94%
Y RADIAL	6296.6	104.3	%	5.85				5.61%
Ag 328.068†	111098.6	505.59	ug/L	9.626	505.59	ppb	9.626	1.90%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	6582.8	4512.1	ug/L	390.42	4512.1	ppb	390.42	8.65%
QC value within limits for Al 396.153Radial Recovery = 90.24%								
As 188.979†	1308.6	509.56	ug/L	4.123	509.56	ppb	4.123	0.81%
QC value within limits for As 188.979 Recovery = 101.91%								
B 249.677†	23797.5	505.22	ug/L	12.224	505.22	ppb	12.224	2.42%
QC value within limits for B 249.677 Recovery = 101.04%								
Ba 233.527†	66932.2	501.42	ug/L	9.807	501.42	ppb	9.807	1.96%
QC value within limits for Ba 233.527 Recovery = 100.28%								
Be 313.107†	1388085.9	499.40	ug/L	0.965	499.40	ppb	0.965	0.19%
QC value within limits for Be 313.107 Recovery = 99.88%								

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Ca 317.933Radial†       3258.0      4755.0 ug/L        313.50      4755.0 ppb         313.50   6.59%
   QC value within limits for Ca 317.933Radial  Recovery = 95.10%
Cd 226.502†            48525.2      503.10 ug/L        10.300      503.10 ppb         10.300   2.05%
   QC value within limits for Cd 226.502  Recovery = 100.62%
Co 228.616†            26613.0      502.11 ug/L         9.433      502.11 ppb          9.433   1.88%
   QC value within limits for Co 228.616  Recovery = 100.42%
Cr 267.716†            47738.9      500.52 ug/L         9.171      500.52 ppb          9.171   1.83%
   QC value within limits for Cr 267.716  Recovery = 100.10%
Cu 324.752†           170370.3      495.11 ug/L        10.382      495.11 ppb         10.382   2.10%
   QC value within limits for Cu 324.752  Recovery = 99.02%
Fe 238.204 Radial†       545.5      4902.5 ug/L        305.83      4902.5 ppb         305.83   6.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.05%
K 766.490 Radial†      28387.2      4754.2 ug/L        409.22      4754.2 ppb         409.22   8.61%
   QC value within limits for K 766.490 Radial  Recovery = 95.08%
Mg 279.077 IEC†          146.2      4921.6 ug/L        281.71      4921.6 ppb         281.71   5.72%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.43%
Mn 257.610†           470795.8      499.36 ug/L         0.913      499.36 ppb          0.913   0.18%
   QC value within limits for Mn 257.610  Recovery = 99.87%
Mo 202.031†             7907.0      503.52 ug/L         5.074      503.52 ppb          5.074   1.01%
   QC value within limits for Mo 202.031  Recovery = 100.70%
Na 589.592 Radial†     30886.9      9360.6 ug/L        769.70      9360.6 ppb         769.70   8.22%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†            21852.7      501.83 ug/L         9.792      501.83 ppb          9.792   1.95%
   QC value within limits for Ni 231.604  Recovery = 100.37%
P 214.914†              4459.9      2415.4 ug/L        32.24       2415.4 ppb         32.24    1.33%
   QC value within limits for P 214.914  Recovery = 96.62%
Pb 220.353†             4473.2      502.21 ug/L         3.560      502.21 ppb          3.560   0.71%
   QC value within limits for Pb 220.353  Recovery = 100.44%
S 181.975 Axial†         768.3      1014.1 ug/L        19.07       1014.1 ppb         19.07    1.88%
   QC value within limits for S 181.975 Axial  Recovery = 101.41%
Sb 206.836†             1612.9      516.63 ug/L         5.345      516.63 ppb          5.345   1.03%
   QC value within limits for Sb 206.836  Recovery = 103.33%
Se 196.026†              895.3      520.97 ug/L         4.475      520.97 ppb          4.475   0.86%
   QC value within limits for Se 196.026  Recovery = 104.19%
Si 251.611†            86082.5      2552.0 ug/L        52.21       2552.0 ppb         52.21    2.05%
   QC value within limits for Si 251.611  Recovery = 102.08%
Sn 189.927†             3139.3      505.56 ug/L         4.534      505.56 ppb          4.534   0.90%
   QC value within limits for Sn 189.927  Recovery = 101.11%
Sr 421.552†            76986.1      464.28 ug/L        41.584      464.28 ppb         41.584   8.96%
   QC value within limits for Sr 421.552  Recovery = 92.86%
Ti 334.940†           312391.7      492.94 ug/L         9.944      492.94 ppb          9.944   2.02%
   QC value within limits for Ti 334.940  Recovery = 98.59%
Tl 190.801†             1780.0      504.64 ug/L         6.878      504.64 ppb          6.878   1.36%
   QC value within limits for Tl 190.801  Recovery = 100.93%
U 409.014†             17173.7      492.17 ug/L         5.768      492.17 ppb          5.768   1.17%
   QC value within limits for U 409.014  Recovery = 98.43%
V 292.402†             74699.2      503.80 ug/L         9.699      503.80 ppb          9.699   1.93%
   QC value within limits for V 292.402  Recovery = 100.76%
Zn 213.857†            58598.1      499.63 ug/L        10.179      499.63 ppb         10.179   2.04%
   QC value within limits for Zn 213.857  Recovery = 99.93%
SiO2†                  85026.1      5401.1 ug/L        55.01       5401.1 ppb         55.01    1.02%
   QC value within limits for SiO2  Recovery = 101.00%
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:16:43
Data Type: Reprocessed on 12/11/2009 12:46:10

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	878516.8	878516.8	101.22	%			12:19:52
1	Sc Radial	5246.4	5246.4	94.1	%			12:18:35
1	Y 371.029	738877.4	738877.4	101.29	%			12:19:52
1	Y RADIAL	5741.2	5741.2	95.07	%			12:18:35
1	Ag 328.068†	305.4	27.7	0.1333	ug/L	0.1333	ppb	12:19:52
1	Al 396.153Radial†	-14.2	20.2	13.882	ug/L	13.882	ppb	12:18:35
1	As 188.979†	-18.9	12.7	4.8840	ug/L	4.8840	ppb	12:20:12
1	B 249.677†	-12.7	480.6	10.239	ug/L	10.239	ppb	12:20:12
1	Ba 233.527†	-12.1	-0.8	-0.0053	ug/L	-0.0053	ppb	12:20:12
1	Be 313.107†	-4609.0	109.3	0.0393	ug/L	0.0393	ppb	12:19:52
1	Ca 317.933Radial†	21.3	5.7	8.3750	ug/L	8.3750	ppb	12:18:55
1	Cd 226.502†	-166.1	34.8	0.3581	ug/L	0.3581	ppb	12:20:12
1	Co 228.616†	-73.8	0.5	0.0115	ug/L	0.0115	ppb	12:20:12
1	Cr 267.716†	73.1	-13.8	-0.1441	ug/L	-0.1441	ppb	12:20:12
1	Cu 324.752†	6826.6	-13.7	-0.0383	ug/L	-0.0383	ppb	12:19:52
1	Fe 238.204 Radial†	12.2	3.1	27.577	ug/L	27.577	ppb	12:18:55
1	K 766.490 Radial†	3558.7	1042.6	174.91	ug/L	174.91	ppb	12:18:35
1	Mg 279.077 IEC†	3.9	2.2	73.687	ug/L	73.687	ppb	12:18:55
1	Mn 257.610†	509.3	-17.0	-0.0166	ug/L	-0.0166	ppb	12:20:12
1	Mo 202.031†	30.7	11.9	0.7590	ug/L	0.7590	ppb	12:20:12
1	Na 589.592 Radial†	-1422.0	42.8	12.984	ug/L	12.984	ppb	12:18:35
1	Ni 231.604†	79.2	-7.7	-0.1779	ug/L	-0.1779	ppb	12:20:12
1	P 214.914†	227.9	-16.8	-9.4048	ug/L	-9.4048	ppb	12:20:12
1	Pb 220.353†	-58.5	10.2	1.1427	ug/L	1.1427	ppb	12:20:12
1	S 181.975 Axial†	54.2	4.2	5.5186	ug/L	5.5186	ppb	12:20:12
1	Sb 206.836†	45.0	7.1	2.2641	ug/L	2.2641	ppb	12:20:12
1	Se 196.026†	-25.5	1.6	0.9949	ug/L	0.9949	ppb	12:20:12
1	Si 251.611†	534.3	46.2	1.3013	ug/L	1.3013	ppb	12:20:12
1	Sn 189.927†	13.2	4.2	0.6808	ug/L	0.6808	ppb	12:20:12
1	Sr 421.552†	-6.1	-6.2	-0.0377	ug/L	-0.0377	ppb	12:18:35
1	Ti 334.940†	-1262.3	9.1	0.0146	ug/L	0.0146	ppb	12:19:52
1	Tl 190.801†	-34.3	0.7	0.1981	ug/L	0.1981	ppb	12:20:12
1	U 409.014†	-2594.1	21.2	0.6055	ug/L	0.6055	ppb	12:19:52
1	V 292.402†	-1385.1	-5.6	-0.0278	ug/L	-0.0278	ppb	12:19:52
1	Zn 213.857†	777.0	13.8	0.1149	ug/L	0.1149	ppb	12:20:12
1	SiO2†	508.9	-21.7	-1.5475	ug/L	-1.5475	ppb	12:21:08
2	Sc 361.383	869660.2	869660.2	100.20	%			12:20:17
2	Sc Radial	5600.5	5600.5	100	%			12:19:00
2	Y 371.029	732581.1	732581.1	100.43	%			12:20:17
2	Y RADIAL	6095.4	6095.4	100.9	%			12:19:00
2	Ag 328.068†	253.6	-21.0	-0.0988	ug/L	-0.0988	ppb	12:20:17
2	Al 396.153Radial†	-17.0	18.4	12.629	ug/L	12.629	ppb	12:19:00
2	As 188.979†	-13.8	17.6	6.7688	ug/L	6.7688	ppb	12:20:37
2	B 249.677†	-24.0	469.2	10.001	ug/L	10.001	ppb	12:20:37
2	Ba 233.527†	-3.7	7.4	0.0550	ug/L	0.0550	ppb	12:20:37
2	Be 313.107†	-4553.9	117.8	0.0422	ug/L	0.0422	ppb	12:20:17
2	Ca 317.933Radial†	15.4	-1.6	-2.3484	ug/L	-2.3484	ppb	12:19:20
2	Cd 226.502†	-174.0	25.3	0.2635	ug/L	0.2635	ppb	12:20:37
2	Co 228.616†	-57.8	15.7	0.2990	ug/L	0.2990	ppb	12:20:37
2	Cr 267.716†	89.4	3.2	0.0333	ug/L	0.0333	ppb	12:20:37
2	Cu 324.752†	6852.1	80.5	0.2333	ug/L	0.2333	ppb	12:20:17
2	Fe 238.204 Radial†	8.6	-1.3	-11.614	ug/L	-11.614	ppb	12:19:20
2	K 766.490 Radial†	3590.6	835.2	140.10	ug/L	140.10	ppb	12:19:00
2	Mg 279.077 IEC†	1.5	-0.5	-15.361	ug/L	-15.361	ppb	12:19:20
2	Mn 257.610†	517.5	-3.7	-0.0048	ug/L	-0.0048	ppb	12:20:37
2	Mo 202.031†	30.9	12.4	0.7895	ug/L	0.7895	ppb	12:20:37
2	Na 589.592 Radial†	-1378.6	181.6	55.033	ug/L	55.033	ppb	12:19:00
2	Ni 231.604†	89.1	3.0	0.0682	ug/L	0.0682	ppb	12:20:37

2	P 214.914†	225.0	-17.5	-9.7541 ug/L	-9.7541 ppb	12:20:37
2	Pb 220.353†	-61.1	7.0	0.7929 ug/L	0.7929 ppb	12:20:37
2	S 181.975 Axial†	43.2	-6.3	-8.3044 ug/L	-8.3044 ppb	12:20:37
2	Sb 206.836†	38.4	1.0	0.3394 ug/L	0.3394 ppb	12:20:37
2	Se 196.026†	-25.2	1.7	0.9088 ug/L	0.9088 ppb	12:20:37
2	Si 251.611†	522.4	39.7	1.1172 ug/L	1.1172 ppb	12:20:37
2	Sn 189.927†	16.4	7.5	1.2041 ug/L	1.2041 ppb	12:20:37
2	Sr 421.552†	-13.3	-13.0	-0.0785 ug/L	-0.0785 ppb	12:19:00
2	Ti 334.940†	-1286.3	-27.5	-0.0436 ug/L	-0.0436 ppb	12:20:17
2	Tl 190.801†	-38.6	-4.0	-1.1227 ug/L	-1.1227 ppb	12:20:37
2	U 409.014†	-2583.2	6.0	0.1727 ug/L	0.1727 ppb	12:20:17
2	V 292.402†	-1371.0	-5.6	-0.0240 ug/L	-0.0240 ppb	12:20:17
2	Zn 213.857†	789.8	34.4	0.2969 ug/L	0.2969 ppb	12:20:37
2	SiO2†	538.3	12.7	0.6702 ug/L	0.6702 ppb	12:21:13
3	Sc 361.383	874124.6	874124.6	100.72 %		12:20:43
3	Sc Radial	5577.2	5577.2	100 %		12:19:25
3	Y 371.029	735292.9	735292.9	100.80 %		12:20:43
3	Y RADIAL	6069.2	6069.2	100.5 %		12:19:25
3	Ag 328.068†	287.0	10.9	0.0521 ug/L	0.0521 ppb	12:20:43
3	Al 396.153Radial†	-29.2	6.1	4.1795 ug/L	4.1795 ppb	12:19:25
3	As 188.979†	-18.2	13.3	5.1209 ug/L	5.1209 ppb	12:21:03
3	B 249.677†	-91.2	402.7	8.5816 ug/L	8.5816 ppb	12:21:03
3	Ba 233.527†	-11.0	0.2	0.0011 ug/L	0.0011 ppb	12:21:03
3	Be 313.107†	-4503.8	190.8	0.0688 ug/L	0.0688 ppb	12:20:43
3	Ca 317.933Radial†	9.5	-7.4	-10.864 ug/L	-10.864 ppb	12:19:45
3	Cd 226.502†	-182.9	17.4	0.1803 ug/L	0.1803 ppb	12:21:03
3	Co 228.616†	-82.9	-8.8	-0.1652 ug/L	-0.1652 ppb	12:21:03
3	Cr 267.716†	90.0	3.3	0.0360 ug/L	0.0360 ppb	12:21:03
3	Cu 324.752†	6801.4	-4.8	-0.0139 ug/L	-0.0139 ppb	12:20:43
3	Fe 238.204 Radial†	9.7	-0.2	-1.6037 ug/L	-1.6037 ppb	12:19:45
3	K 766.490 Radial†	3534.0	793.5	133.11 ug/L	133.11 ppb	12:19:25
3	Mg 279.077 IEC†	2.1	0.1	4.8443 ug/L	4.8443 ppb	12:19:45
3	Mn 257.610†	500.5	-23.2	-0.0249 ug/L	-0.0249 ppb	12:21:03
3	Mo 202.031†	29.8	11.2	0.7112 ug/L	0.7112 ppb	12:21:03
3	Na 589.592 Radial†	-1391.4	163.1	49.427 ug/L	49.427 ppb	12:19:25
3	Ni 231.604†	87.3	0.7	0.0161 ug/L	0.0161 ppb	12:21:03
3	P 214.914†	237.0	-6.7	-3.7174 ug/L	-3.7174 ppb	12:21:03
3	Pb 220.353†	-47.4	20.9	2.3410 ug/L	2.3410 ppb	12:21:03
3	S 181.975 Axial†	48.8	-0.9	-1.2359 ug/L	-1.2359 ppb	12:21:03
3	Sb 206.836†	36.7	-1.0	-0.2826 ug/L	-0.2826 ppb	12:21:03
3	Se 196.026†	-23.7	3.3	1.8454 ug/L	1.8454 ppb	12:21:03
3	Si 251.611†	540.5	54.9	1.5760 ug/L	1.5760 ppb	12:21:03
3	Sn 189.927†	13.9	5.0	0.8044 ug/L	0.8044 ppb	12:21:03
3	Sr 421.552†	-21.1	-20.9	-0.1259 ug/L	-0.1259 ppb	12:19:25
3	Ti 334.940†	-1179.6	85.0	0.1353 ug/L	0.1353 ppb	12:20:43
3	Tl 190.801†	-31.4	3.4	0.9565 ug/L	0.9565 ppb	12:21:03
3	U 409.014†	-2735.1	-131.7	-3.7860 ug/L	-3.7860 ppb	12:20:43
3	V 292.402†	-1376.4	-3.9	-0.0231 ug/L	-0.0231 ppb	12:20:43
3	Zn 213.857†	804.2	44.6	0.3838 ug/L	0.3838 ppb	12:21:03
3	SiO2†	544.3	15.9	0.8859 ug/L	0.8859 ppb	12:21:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874100.5	100.71	%	0.510				0.51%
Sc Radial	5474.7	98.2	%	3.55				3.62%
Y 371.029	735583.8	100.84	%	0.433				0.43%
Y RADIAL	5968.6	98.83	%	3.269				3.31%
Ag 328.068†	5.9	0.0289	ug/L	0.11774	0.0289	ppb	0.11774	407.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.9	10.230	ug/L	5.2772	10.230	ppb	5.2772	51.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	14.5	5.5912	ug/L	1.02664	5.5912	ppb	1.02664	18.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	450.8	9.6072	ug/L	0.89611	9.6072	ppb	0.89611	9.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.3	0.0169	ug/L	0.03314	0.0169	ppb	0.03314	195.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	139.3	0.0501	ug/L	0.01626	0.0501	ppb	0.01626	32.45%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.1     -1.6125 ug/L       9.64065     -1.6125 ppb        9.64065 597.87%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                25.8      0.2673 ug/L       0.08895      0.2673 ppb        0.08895  33.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.5      0.0484 ug/L       0.23428      0.0484 ppb        0.23428 483.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -2.4     -0.0249 ug/L       0.10322     -0.0249 ppb        0.10322 414.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.7      0.0603 ug/L       0.15025      0.0603 ppb        0.15025 248.96%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.7863 ug/L      20.36173      4.7863 ppb       20.36173 425.41%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         890.4      149.38 ug/L        22.389      149.38 ppb         22.389  14.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.057 ug/L       46.6852      21.057 ppb        46.6852 221.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -14.6     -0.0154 ug/L       0.01009     -0.0154 ppb        0.01009  65.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                11.8      0.7533 ug/L       0.03947      0.7533 ppb        0.03947   5.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        129.2      39.148 ug/L       22.8314      39.148 ppb        22.8314  58.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.4     -0.0312 ug/L       0.12971     -0.0312 ppb        0.12971 415.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -13.7     -7.6254 ug/L       3.38898     -7.6254 ppb        3.38898  44.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.7      1.4256 ug/L       0.81188      1.4256 ppb        0.81188  56.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0     -1.3406 ug/L       6.91208     -1.3406 ppb        6.91208 515.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7736 ug/L       1.32771      0.7736 ppb        1.32771 171.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.2      1.2497 ug/L       0.51768      1.2497 ppb        0.51768  41.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                46.9      1.3315 ug/L       0.23091      1.3315 ppb        0.23091  17.34%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.8965 ug/L       0.27351      0.8965 ppb        0.27351  30.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -13.4     -0.0807 ug/L       0.04413     -0.0807 ppb        0.04413  54.68%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.2      0.0355 ug/L       0.09123      0.0355 ppb        0.09123 257.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.0      0.0106 ug/L       1.05217      0.0106 ppb        1.05217 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -34.9     -1.0026 ug/L       2.42018     -1.0026 ppb        2.42018 241.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.0     -0.0250 ug/L       0.00250     -0.0250 ppb        0.00250  10.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.9      0.2652 ug/L       0.13722      0.2652 ppb        0.13722  51.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       2.3      0.0029 ug/L       1.34702      0.0029 ppb        1.34702 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/11/2009 12:23:28
Data Type: Reprocessed on 12/11/2009 12:46:11

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	861705.9	861705.9	99.284	%			12:26:39
1	Sc Radial	5356.0	5356.0	96.1	%			12:25:22
1	Y 371.029	718237.7	718237.7	98.462	%			12:26:39
1	Y RADIAL	5821.6	5821.6	96.40	%			12:25:22
1	Ag 328.068†	-25788.0	-26247.8	4.5515	ug/L	4.5515	ppb	12:26:39
1	Al 396.153Radial†	-58.7	-25.8	-16.754	ug/L	-16.754	ppb	12:25:22
1	As 188.979†	-219.6	-189.9	-13.581	ug/L	-13.581	ppb	12:26:59
1	B 249.677†	2608.9	3120.9	15.176	ug/L	15.176	ppb	12:26:39
1	Ba 233.527†	-1736.5	-1737.9	1.4933	ug/L	1.4933	ppb	12:26:39
1	Be 313.107†	-4122.4	510.6	0.1831	ug/L	0.1831	ppb	12:26:39
1	Ca 317.933Radial†	8.8	-7.7	-11.255	ug/L	-11.255	ppb	12:25:42
1	Cd 226.502†	3508.9	3733.1	0.0438	ug/L	0.0438	ppb	12:26:39
1	Co 228.616†	244.3	319.5	0.4449	ug/L	0.4449	ppb	12:26:59
1	Cr 267.716†	-583.7	-673.9	-0.0534	ug/L	-0.0534	ppb	12:26:39
1	Cu 324.752†	453.7	-6300.8	1.4319	ug/L	1.4319	ppb	12:26:39
1	Fe 238.204 Radial†	41486.5	43178.9	386840	ug/L	386840	ppb	12:25:22
1	K 766.490 Radial†	3092.8	480.1	93.208	ug/L	93.208	ppb	12:25:22
1	Mg 279.077 IEC†	15.4	14.1	143.65	ug/L	143.65	ppb	12:25:42
1	Mn 257.610†	-35683.4	-36460.7	-0.0742	ug/L	-0.0742	ppb	12:26:39
1	Mo 202.031†	-356.2	-377.2	3.4378	ug/L	3.4378	ppb	12:26:39
1	Na 589.592 Radial†	-1407.6	88.8	26.914	ug/L	26.914	ppb	12:25:22
1	Ni 231.604†	178.6	93.9	2.1545	ug/L	2.1545	ppb	12:26:59
1	P 214.914†	743.8	507.2	-25.892	ug/L	-25.892	ppb	12:26:59
1	Pb 220.353†	227.0	296.6	1.3987	ug/L	1.3987	ppb	12:26:59
1	S 181.975 Axial†	70.3	21.4	28.312	ug/L	28.312	ppb	12:26:59
1	Sb 206.836†	21.4	-15.9	1.0130	ug/L	1.0130	ppb	12:26:59
1	Se 196.026†	-2056.6	-2044.7	38.448	ug/L	38.448	ppb	12:26:59
1	Si 251.611†	-787.4	-1274.8	-37.562	ug/L	-37.562	ppb	12:26:39
1	Sn 189.927†	-21.3	-30.2	0.3038	ug/L	0.3038	ppb	12:26:59
1	Sr 421.552†	64.7	67.6	0.4076	ug/L	0.4076	ppb	12:25:22
1	Ti 334.940†	-1316.7	-69.9	-0.1365	ug/L	-0.1365	ppb	12:26:39
1	Tl 190.801†	-46.9	-12.7	-3.9619	ug/L	-3.9619	ppb	12:26:59
1	U 409.014†	-376.4	2204.9	14.736	ug/L	14.736	ppb	12:26:39
1	V 292.402†	7414.8	8831.0	-0.2906	ug/L	-0.2906	ppb	12:26:39
1	Zn 213.857†	4916.8	4198.4	-0.8283	ug/L	-0.8283	ppb	12:26:59
1	SiO2†	-780.4	-1310.5	-82.767	ug/L	-82.767	ppb	12:27:57
2	Sc 361.383	860218.2	860218.2	99.113	%			12:27:05
2	Sc Radial	5513.5	5513.5	98.9	%			12:25:47
2	Y 371.029	717273.7	717273.7	98.330	%			12:27:05
2	Y RADIAL	5987.8	5987.8	99.15	%			12:25:47
2	Ag 328.068†	-25878.0	-26383.6	3.2131	ug/L	3.2131	ppb	12:27:05
2	Al 396.153Radial†	-33.1	1.8	2.3584	ug/L	2.3584	ppb	12:25:47
2	As 188.979†	-233.0	-203.8	-19.307	ug/L	-19.307	ppb	12:27:25
2	B 249.677†	2427.4	2942.3	11.675	ug/L	11.675	ppb	12:27:05
2	Ba 233.527†	-1834.7	-1840.0	0.6453	ug/L	0.6453	ppb	12:27:05
2	Be 313.107†	-4135.8	489.8	0.1759	ug/L	0.1759	ppb	12:27:05
2	Ca 317.933Radial†	7.2	-9.6	-14.036	ug/L	-14.036	ppb	12:26:07
2	Cd 226.502†	3495.6	3725.8	0.1960	ug/L	0.1960	ppb	12:27:05
2	Co 228.616†	199.9	275.1	-0.3648	ug/L	-0.3648	ppb	12:27:25
2	Cr 267.716†	-581.4	-672.7	-0.0809	ug/L	-0.0809	ppb	12:27:05
2	Cu 324.752†	320.9	-6434.0	0.9288	ug/L	0.9288	ppb	12:27:05
2	Fe 238.204 Radial†	42455.2	42924.5	384560	ug/L	384560	ppb	12:25:47
2	K 766.490 Radial†	3107.1	402.6	80.127	ug/L	80.127	ppb	12:25:47
2	Mg 279.077 IEC†	12.8	11.1	43.037	ug/L	43.037	ppb	12:26:07
2	Mn 257.610†	-36042.6	-36885.3	-0.7496	ug/L	-0.7496	ppb	12:27:05
2	Mo 202.031†	-385.2	-407.1	1.3735	ug/L	1.3735	ppb	12:27:05
2	Na 589.592 Radial†	-1391.5	147.0	44.541	ug/L	44.541	ppb	12:25:47
2	Ni 231.604†	176.9	92.5	2.1221	ug/L	2.1221	ppb	12:27:25

2	P 214.914†	751.8	516.5	-18.782 ug/L	-18.782 ppb	12:27:25
2	Pb 220.353†	260.1	330.4	5.3728 ug/L	5.3728 ppb	12:27:25
2	S 181.975 Axial†	73.1	24.3	32.140 ug/L	32.140 ppb	12:27:25
2	Sb 206.836†	21.7	-15.5	1.0522 ug/L	1.0522 ppb	12:27:25
2	Se 196.026†	-2057.2	-2048.9	29.075 ug/L	29.075 ppb	12:27:25
2	Si 251.611†	-690.5	-1178.4	-34.651 ug/L	-34.651 ppb	12:27:05
2	Sn 189.927†	-23.0	-32.0	-0.0145 ug/L	-0.0145 ppb	12:27:25
2	Sr 421.552†	111.1	112.5	0.6788 ug/L	0.6788 ppb	12:25:47
2	Ti 334.940†	-1239.0	6.2	-0.0155 ug/L	-0.0155 ppb	12:27:05
2	Tl 190.801†	-45.5	-11.4	-3.5871 ug/L	-3.5871 ppb	12:27:25
2	U 409.014†	-457.8	2122.1	12.643 ug/L	12.643 ppb	12:27:05
2	V 292.402†	7362.4	8791.0	-0.2444 ug/L	-0.2444 ppb	12:27:05
2	Zn 213.857†	4870.6	4160.3	-0.9335 ug/L	-0.9335 ppb	12:27:25
2	SiO2†	-581.7	-1111.4	-69.976 ug/L	-69.976 ppb	12:28:02
3	Sc 361.383	855218.9	855218.9	98.537 %		12:27:31
3	Sc Radial	5682.5	5682.5	102 %		12:26:12
3	Y 371.029	712850.6	712850.6	97.723 %		12:27:31
3	Y RADIAL	6133.6	6133.6	101.6 %		12:26:12
3	Ag 328.068†	-25694.0	-26349.5	-2.5804 ug/L	-2.5804 ppb	12:27:31
3	Al 396.153Radial†	-39.2	-3.2	-1.0218 ug/L	-1.0218 ppb	12:26:12
3	As 188.979†	-227.7	-199.7	-20.616 ug/L	-20.616 ppb	12:27:51
3	B 249.677†	2486.5	3016.7	15.739 ug/L	15.739 ppb	12:27:31
3	Ba 233.527†	-1842.5	-1858.7	-0.1875 ug/L	-0.1875 ppb	12:27:31
3	Be 313.107†	-4027.5	575.4	0.2066 ug/L	0.2066 ppb	12:27:31
3	Ca 317.933Radial†	5.7	-11.3	-16.464 ug/L	-16.464 ppb	12:26:32
3	Cd 226.502†	3457.9	3708.2	1.8822 ug/L	1.8822 ppb	12:27:31
3	Co 228.616†	204.3	280.8	0.0046 ug/L	0.0046 ppb	12:27:51
3	Cr 267.716†	-622.3	-717.5	-0.8845 ug/L	-0.8845 ppb	12:27:31
3	Cu 324.752†	486.8	-6263.8	0.4695 ug/L	0.4695 ppb	12:27:31
3	Fe 238.204 Radial†	41629.6	40838.0	365870 ug/L	365870 ppb	12:26:12
3	K 766.490 Radial†	3141.6	343.1	69.553 ug/L	69.553 ppb	12:26:12
3	Mg 279.077 IEC†	10.9	8.8	-18.363 ug/L	-18.363 ppb	12:26:32
3	Mn 257.610†	-35630.1	-36679.3	-2.3939 ug/L	-2.3939 ppb	12:27:31
3	Mo 202.031†	-403.3	-427.7	-1.2629 ug/L	-1.2629 ppb	12:27:31
3	Na 589.592 Radial†	-1501.4	81.0	24.540 ug/L	24.540 ppb	12:26:12
3	Ni 231.604†	172.6	89.2	2.0466 ug/L	2.0466 ppb	12:27:51
3	P 214.914†	741.7	510.7	-7.0329 ug/L	-7.0329 ppb	12:27:51
3	Pb 220.353†	240.5	312.0	4.8421 ug/L	4.8421 ppb	12:27:51
3	S 181.975 Axial†	62.5	14.0	18.505 ug/L	18.505 ppb	12:27:51
3	Sb 206.836†	35.6	-1.3	5.2054 ug/L	5.2054 ppb	12:27:51
3	Se 196.026†	-2059.5	-2063.3	-36.500 ug/L	-36.500 ppb	12:27:51
3	Si 251.611†	-699.2	-1191.4	-35.013 ug/L	-35.013 ppb	12:27:31
3	Sn 189.927†	-20.5	-29.7	0.1133 ug/L	0.1133 ppb	12:27:51
3	Sr 421.552†	91.2	89.7	0.5413 ug/L	0.5413 ppb	12:26:12
3	Ti 334.940†	-1228.4	9.6	-0.0098 ug/L	-0.0098 ppb	12:27:31
3	Tl 190.801†	-48.5	-14.6	-4.5105 ug/L	-4.5105 ppb	12:27:51
3	U 409.014†	-476.8	2100.1	14.364 ug/L	14.364 ppb	12:27:31
3	V 292.402†	7338.9	8810.5	2.7077 ug/L	2.7077 ppb	12:27:31
3	Zn 213.857†	4894.2	4213.0	1.3067 ug/L	1.3067 ppb	12:27:51
3	SiO2†	-786.8	-1322.9	-83.424 ug/L	-83.424 ppb	12:28:07

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859047.7	98.978	%	0.3915				0.40%
Sc Radial	5517.3	99.0	%	2.93				2.96%
Y 371.029	716120.7	98.172	%	0.3938				0.40%
Y RADIAL	5981.0	99.04	%	2.585				2.61%
Ag 328.068†	-26327.0	1.7281	ug/L	3.79081	1.7281	ppb	3.79081	219.37%
Al 396.153Radial†	-9.1	-5.1393	ug/L	10.20005	-5.1393	ppb	10.20005	198.47%
As 188.979†	-197.8	-17.835	ug/L	3.7414	-17.835	ppb	3.7414	20.98%
B 249.677†	3026.6	14.197	ug/L	2.2019	14.197	ppb	2.2019	15.51%
Ba 233.527†	-1812.2	0.6504	ug/L	0.84043	0.6504	ppb	0.84043	129.22%
Be 313.107†	525.3	0.1886	ug/L	0.01607	0.1886	ppb	0.01607	8.52%
Ca 317.933Radial†	-9.5	-13.918	ug/L	2.6066	-13.918	ppb	2.6066	18.73%
Cd 226.502†	3722.4	0.7073	ug/L	1.02032	0.7073	ppb	1.02032	144.25%
Co 228.616†	291.8	0.0282	ug/L	0.40539	0.0282	ppb	0.40539	>999.9%
Cr 267.716†	-688.0	-0.3396	ug/L	0.47210	-0.3396	ppb	0.47210	139.01%
Cu 324.752†	-6332.9	0.9434	ug/L	0.48134	0.9434	ppb	0.48134	51.02%
Fe 238.204 Radial†	42313.8	379090	ug/L	11507.0	379090	ppb	11507.0	3.04%

K 766.490 Radial†	408.6	80.963	ug/L	11.8498	80.963	ppb	11.8498 14.64%
Mg 279.077 IEC†	11.3	56.108	ug/L	81.7938	56.108	ppb	81.7938 145.78%
Mn 257.610†	-36675.1	-1.0726	ug/L	1.19309	-1.0726	ppb	1.19309 111.24%
Mo 202.031†	-404.0	1.1828	ug/L	2.35610	1.1828	ppb	2.35610 199.20%
Na 589.592 Radial†	105.6	31.999	ug/L	10.9271	31.999	ppb	10.9271 34.15%
Ni 231.604†	91.9	2.1077	ug/L	0.05540	2.1077	ppb	0.05540 2.63%
P 214.914†	511.4	-17.236	ug/L	9.5241	-17.236	ppb	9.5241 55.26%
Pb 220.353†	313.0	3.8712	ug/L	2.15762	3.8712	ppb	2.15762 55.73%
S 181.975 Axial†	19.9	26.319	ug/L	7.0329	26.319	ppb	7.0329 26.72%
Sb 206.836†	-10.9	2.4235	ug/L	2.40924	2.4235	ppb	2.40924 99.41%
Se 196.026†	-2052.3	10.341	ug/L	40.8356	10.341	ppb	40.8356 394.88%
Si 251.611†	-1214.8	-35.742	ug/L	1.5862	-35.742	ppb	1.5862 4.44%
Sn 189.927†	-30.7	0.1342	ug/L	0.16017	0.1342	ppb	0.16017 119.34%
Sr 421.552†	89.9	0.5426	ug/L	0.13561	0.5426	ppb	0.13561 24.99%
Ti 334.940†	-18.1	-0.0539	ug/L	0.07156	-0.0539	ppb	0.07156 132.74%
Tl 190.801†	-12.9	-4.0198	ug/L	0.46438	-4.0198	ppb	0.46438 11.55%
U 409.014†	2142.4	13.914	ug/L	1.1168	13.914	ppb	1.1168 8.03%
V 292.402†	8810.8	0.7242	ug/L	1.71790	0.7242	ppb	1.71790 237.21%
Zn 213.857†	4190.6	-0.1517	ug/L	1.26412	-0.1517	ppb	1.26412 833.32%
SiO2†	-1248.3	-78.722	ug/L	7.5817	-78.722	ppb	7.5817 9.63%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:30:18
Data Type: Reprocessed on 12/11/2009 12:46:12

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874709.1	874709.1	100.78	%			12:33:28
1	Sc Radial	5563.9	5563.9	99.8	%			12:32:10
1	Y 371.029	722977.6	722977.6	99.112	%			12:33:28
1	Y RADIAL	6026.8	6026.8	99.79	%			12:32:10
1	Ag 328.068†	111391.2	110252.1	501.81	ug/L	501.81	ppb	12:33:33
1	Al 396.153Radial†	7064.0	7114.4	4878.3	ug/L	4878.3	ppb	12:32:10
1	As 188.979†	1272.7	1294.1	503.96	ug/L	503.96	ppb	12:33:53
1	B 249.677†	23228.1	23541.0	499.74	ug/L	499.74	ppb	12:33:33
1	Ba 233.527†	66804.5	66296.8	496.67	ug/L	496.67	ppb	12:33:33
1	Be 313.107†	1388852.3	1382728.6	497.47	ug/L	497.47	ppb	12:33:28
1	Ca 317.933Radial†	3365.3	3355.5	4897.4	ug/L	4897.4	ppb	12:32:30
1	Cd 226.502†	48309.9	48133.7	499.01	ug/L	499.01	ppb	12:33:33
1	Co 228.616†	26539.2	26406.5	498.22	ug/L	498.22	ppb	12:33:33
1	Cr 267.716†	47776.1	47319.0	496.12	ug/L	496.12	ppb	12:33:33
1	Cu 324.752†	177379.4	169244.0	491.85	ug/L	491.85	ppb	12:33:33
1	Fe 238.204 Radial†	578.8	570.1	5123.5	ug/L	5123.5	ppb	12:32:30
1	K 766.490 Radial†	32804.6	30134.8	5047.0	ug/L	5047.0	ppb	12:32:10
1	Mg 279.077 IEC†	152.2	150.6	5070.1	ug/L	5070.1	ppb	12:32:30
1	Mn 257.610†	473929.3	469728.5	498.25	ug/L	498.25	ppb	12:33:28
1	Mo 202.031†	7939.6	7859.5	500.52	ug/L	500.52	ppb	12:33:53
1	Na 589.592 Radial†	32525.7	34149.0	10349	ug/L	10349	ppb	12:32:10
1	Ni 231.604†	21887.3	21631.3	496.74	ug/L	496.74	ppb	12:33:33
1	P 214.914†	4726.0	4447.3	2408.7	ug/L	2408.7	ppb	12:33:53
1	Pb 220.353†	4384.0	4417.9	496.08	ug/L	496.08	ppb	12:33:53
1	S 181.975 Axial†	821.4	765.6	1010.5	ug/L	1010.5	ppb	12:33:53
1	Sb 206.836†	1643.6	1593.4	510.43	ug/L	510.43	ppb	12:33:53
1	Se 196.026†	863.8	883.9	515.28	ug/L	515.28	ppb	12:33:53
1	Si 251.611†	86522.9	85369.2	2530.7	ug/L	2530.7	ppb	12:33:33
1	Sn 189.927†	3148.6	3115.3	501.72	ug/L	501.72	ppb	12:33:53
1	Sr 421.552†	84421.0	84600.7	510.20	ug/L	510.20	ppb	12:32:10
1	Ti 334.940†	310984.2	309825.2	488.90	ug/L	488.90	ppb	12:33:33
1	Tl 190.801†	1743.6	1764.7	500.33	ug/L	500.33	ppb	12:33:53
1	U 409.014†	14618.2	17088.7	489.71	ug/L	489.71	ppb	12:33:33
1	V 292.402†	73236.0	74030.0	499.28	ug/L	499.28	ppb	12:33:33
1	Zn 213.857†	59285.0	58070.7	495.10	ug/L	495.10	ppb	12:33:33
1	SiO2†	86443.9	85248.1	5415.2	ug/L	5415.2	ppb	12:35:00
2	Sc 361.383	871455.0	871455.0	100.41	%			12:33:59
2	Sc Radial	5511.6	5511.6	98.8	%			12:32:36
2	Y 371.029	721889.3	721889.3	98.963	%			12:33:59
2	Y RADIAL	5973.0	5973.0	98.90	%			12:32:36
2	Ag 328.068†	111979.3	111250.5	506.37	ug/L	506.37	ppb	12:34:04
2	Al 396.153Radial†	7134.0	7252.3	4973.4	ug/L	4973.4	ppb	12:32:36
2	As 188.979†	1267.8	1293.9	503.94	ug/L	503.94	ppb	12:34:24
2	B 249.677†	23257.8	23656.5	502.18	ug/L	502.18	ppb	12:34:04
2	Ba 233.527†	67214.9	66953.0	501.59	ug/L	501.59	ppb	12:34:04
2	Be 313.107†	1382869.5	1381916.0	497.18	ug/L	497.18	ppb	12:33:59
2	Ca 317.933Radial†	3403.2	3425.9	5000.1	ug/L	5000.1	ppb	12:32:56
2	Cd 226.502†	48455.7	48457.8	502.37	ug/L	502.37	ppb	12:34:04
2	Co 228.616†	26689.7	26654.8	502.88	ug/L	502.88	ppb	12:34:04
2	Cr 267.716†	47985.5	47704.6	500.17	ug/L	500.17	ppb	12:34:04
2	Cu 324.752†	177894.6	170414.3	495.25	ug/L	495.25	ppb	12:34:04
2	Fe 238.204 Radial†	582.6	579.5	5207.7	ug/L	5207.7	ppb	12:32:56
2	K 766.490 Radial†	33027.5	30672.4	5137.1	ug/L	5137.1	ppb	12:32:36
2	Mg 279.077 IEC†	152.2	152.0	5118.7	ug/L	5118.7	ppb	12:32:56
2	Mn 257.610†	470267.0	467837.0	496.25	ug/L	496.25	ppb	12:33:59
2	Mo 202.031†	7879.3	7828.8	498.57	ug/L	498.57	ppb	12:34:24
2	Na 589.592 Radial†	32681.8	34616.4	10491	ug/L	10491	ppb	12:32:36
2	Ni 231.604†	21939.9	21764.8	499.81	ug/L	499.81	ppb	12:34:04

2	P 214.914†	4707.7	4446.5	2407.8 ug/L	2407.8 ppb	12:34:24
2	Pb 220.353†	4386.3	4436.5	498.16 ug/L	498.16 ppb	12:34:24
2	S 181.975 Axial†	812.0	759.3	1002.2 ug/L	1002.2 ppb	12:34:24
2	Sb 206.836†	1641.9	1597.9	511.72 ug/L	511.72 ppb	12:34:24
2	Se 196.026†	864.8	888.1	517.90 ug/L	517.90 ppb	12:34:24
2	Si 251.611†	86976.6	86141.7	2553.7 ug/L	2553.7 ppb	12:34:04
2	Sn 189.927†	3145.1	3123.5	503.05 ug/L	503.05 ppb	12:34:24
2	Sr 421.552†	84743.4	85730.0	517.01 ug/L	517.01 ppb	12:32:36
2	Ti 334.940†	312388.6	312376.2	492.93 ug/L	492.93 ppb	12:34:04
2	Tl 190.801†	1740.7	1768.2	501.32 ug/L	501.32 ppb	12:34:24
2	U 409.014†	14640.0	17164.5	491.87 ug/L	491.87 ppb	12:34:04
2	V 292.402†	73801.7	74864.7	504.79 ug/L	504.79 ppb	12:34:04
2	Zn 213.857†	59575.7	58579.9	499.45 ug/L	499.45 ppb	12:34:04
2	SiO2†	86190.0	85315.5	5419.5 ug/L	5419.5 ppb	12:35:06
3	Sc 361.383	868637.4	868637.4	100.08 %		12:34:30
3	Sc Radial	5484.0	5484.0	98.4 %		12:33:01
3	Y 371.029	718522.2	718522.2	98.501 %		12:34:30
3	Y RADIAL	5942.8	5942.8	98.40 %		12:33:01
3	Ag 328.068†	111539.4	111172.7	506.01 ug/L	506.01 ppb	12:34:35
3	Al 396.153Radial†	6980.7	7132.8	4890.9 ug/L	4890.9 ppb	12:33:01
3	As 188.979†	1269.6	1299.8	506.21 ug/L	506.21 ppb	12:34:55
3	B 249.677†	23148.6	23622.6	501.45 ug/L	501.45 ppb	12:34:35
3	Ba 233.527†	67128.5	67083.9	502.56 ug/L	502.56 ppb	12:34:35
3	Be 313.107†	1381302.3	1384817.6	498.22 ug/L	498.22 ppb	12:34:30
3	Ca 317.933Radial†	3378.4	3418.1	4988.7 ug/L	4988.7 ppb	12:33:21
3	Cd 226.502†	48625.2	48783.7	505.75 ug/L	505.75 ppb	12:34:35
3	Co 228.616†	26670.3	26721.6	504.16 ug/L	504.16 ppb	12:34:35
3	Cr 267.716†	47975.8	47849.9	501.69 ug/L	501.69 ppb	12:34:35
3	Cu 324.752†	176857.8	169953.1	493.91 ug/L	493.91 ppb	12:34:35
3	Fe 238.204 Radial†	575.7	575.5	5171.7 ug/L	5171.7 ppb	12:33:21
3	K 766.490 Radial†	32329.9	30131.5	5046.4 ug/L	5046.4 ppb	12:33:01
3	Mg 279.077 IEC†	157.8	158.5	5336.5 ug/L	5336.5 ppb	12:33:21
3	Mn 257.610†	470878.8	469967.5	498.50 ug/L	498.50 ppb	12:34:30
3	Mo 202.031†	7939.5	7914.5	504.02 ug/L	504.02 ppb	12:34:55
3	Na 589.592 Radial†	31935.8	34024.5	10311 ug/L	10311 ppb	12:33:01
3	Ni 231.604†	22062.0	21957.7	504.24 ug/L	504.24 ppb	12:34:35
3	P 214.914†	4718.4	4472.4	2422.5 ug/L	2422.5 ppb	12:34:55
3	Pb 220.353†	4401.9	4466.3	501.49 ug/L	501.49 ppb	12:34:55
3	S 181.975 Axial†	821.4	771.3	1018.1 ug/L	1018.1 ppb	12:34:55
3	Sb 206.836†	1653.3	1614.5	517.12 ug/L	517.12 ppb	12:34:55
3	Se 196.026†	868.2	894.3	521.29 ug/L	521.29 ppb	12:34:55
3	Si 251.611†	86644.6	86090.9	2552.1 ug/L	2552.1 ppb	12:34:35
3	Sn 189.927†	3156.0	3144.6	506.44 ug/L	506.44 ppb	12:34:55
3	Sr 421.552†	83013.6	84403.4	509.01 ug/L	509.01 ppb	12:33:01
3	Ti 334.940†	311422.2	312419.8	492.99 ug/L	492.99 ppb	12:34:35
3	Tl 190.801†	1738.0	1771.1	502.13 ug/L	502.13 ppb	12:34:55
3	U 409.014†	14591.5	17163.4	491.84 ug/L	491.84 ppb	12:34:35
3	V 292.402†	73520.9	74822.6	504.60 ug/L	504.60 ppb	12:34:35
3	Zn 213.857†	59543.0	58739.7	500.79 ug/L	500.79 ppb	12:34:35
3	SiO2†	86642.0	86045.6	5465.9 ug/L	5465.9 ppb	12:35:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871600.5	100.42	%	0.350				0.35%
Sc Radial	5519.8	99.0	%	0.73				0.74%
Y 371.029	721129.7	98.858	%	0.3184				0.32%
Y RADIAL	5980.8	99.03	%	0.704				0.71%
Ag 328.068†	110891.8	504.73	ug/L	2.535	504.73	ppb	2.535	0.50%
QC value within limits for Ag 328.068 Recovery = 100.95%								
Al 396.153Radial†	7166.5	4914.2	ug/L	51.66	4914.2	ppb	51.66	1.05%
QC value within limits for Al 396.153Radial Recovery = 98.28%								
As 188.979†	1296.0	504.71	ug/L	1.305	504.71	ppb	1.305	0.26%
QC value within limits for As 188.979 Recovery = 100.94%								
B 249.677†	23606.7	501.12	ug/L	1.254	501.12	ppb	1.254	0.25%
QC value within limits for B 249.677 Recovery = 100.22%								
Ba 233.527†	66777.9	500.27	ug/L	3.160	500.27	ppb	3.160	0.63%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 313.107†	1383154.1	497.62	ug/L	0.539	497.62	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 99.52%								

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Ca 317.933Radial†        3399.8      4962.1 ug/L        56.32      4962.1 ppb        56.32   1.14%
   QC value within limits for Ca 317.933Radial  Recovery = 99.24%
Cd 226.502†             48458.4      502.38 ug/L        3.371      502.38 ppb        3.371   0.67%
   QC value within limits for Cd 226.502  Recovery = 100.48%
Co 228.616†             26594.3      501.75 ug/L        3.128      501.75 ppb        3.128   0.62%
   QC value within limits for Co 228.616  Recovery = 100.35%
Cr 267.716†             47624.5      499.32 ug/L        2.877      499.32 ppb        2.877   0.58%
   QC value within limits for Cr 267.716  Recovery = 99.86%
Cu 324.752†            169870.4      493.67 ug/L        1.714      493.67 ppb        1.714   0.35%
   QC value within limits for Cu 324.752  Recovery = 98.73%
Fe 238.204 Radial†       575.0      5167.6 ug/L        42.23      5167.6 ppb        42.23   0.82%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.35%
K 766.490 Radial†       30312.9      5076.8 ug/L        52.21      5076.8 ppb        52.21   1.03%
   QC value within limits for K 766.490 Radial  Recovery = 101.54%
Mg 279.077 IEC†           153.7      5175.1 ug/L       141.91      5175.1 ppb       141.91   2.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†            469177.7      497.67 ug/L        1.233      497.67 ppb        1.233   0.25%
   QC value within limits for Mn 257.610  Recovery = 99.53%
Mo 202.031†             7867.6      501.04 ug/L        2.761      501.04 ppb        2.761   0.55%
   QC value within limits for Mo 202.031  Recovery = 100.21%
Na 589.592 Radial†      34263.3       10384 ug/L         94.6       10384 ppb         94.6   0.91%
   QC value within limits for Na 589.592 Radial  Recovery = 103.84%
Ni 231.604†             21784.6      500.26 ug/L        3.768      500.26 ppb        3.768   0.75%
   QC value within limits for Ni 231.604  Recovery = 100.05%
P 214.914†               4455.4      2413.0 ug/L        8.23       2413.0 ppb        8.23    0.34%
   QC value within limits for P 214.914  Recovery = 96.52%
Pb 220.353†              4440.2      498.58 ug/L        2.732      498.58 ppb        2.732   0.55%
   QC value within limits for Pb 220.353  Recovery = 99.72%
S 181.975 Axial†          765.4      1010.2 ug/L        7.95       1010.2 ppb        7.95    0.79%
   QC value within limits for S 181.975 Axial  Recovery = 101.02%
Sb 206.836†              1601.9      513.09 ug/L        3.551      513.09 ppb        3.551   0.69%
   QC value within limits for Sb 206.836  Recovery = 102.62%
Se 196.026†               888.8      518.16 ug/L        3.012      518.16 ppb        3.012   0.58%
   QC value within limits for Se 196.026  Recovery = 103.63%
Si 251.611†             85867.3      2545.5 ug/L        12.85      2545.5 ppb        12.85   0.50%
   QC value within limits for Si 251.611  Recovery = 101.82%
Sn 189.927†              3127.8      503.74 ug/L        2.435      503.74 ppb        2.435   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.75%
Sr 421.552†             84911.4      512.08 ug/L        4.317      512.08 ppb        4.317   0.84%
   QC value within limits for Sr 421.552  Recovery = 102.42%
Ti 334.940†            311540.4      491.61 ug/L        2.346      491.61 ppb        2.346   0.48%
   QC value within limits for Ti 334.940  Recovery = 98.32%
Tl 190.801†              1768.0      501.26 ug/L        0.902      501.26 ppb        0.902   0.18%
   QC value within limits for Tl 190.801  Recovery = 100.25%
U 409.014†              17138.9      491.14 ug/L        1.239      491.14 ppb        1.239   0.25%
   QC value within limits for U 409.014  Recovery = 98.23%
V 292.402†              74572.4      502.89 ug/L        3.128      502.89 ppb        3.128   0.62%
   QC value within limits for V 292.402  Recovery = 100.58%
Zn 213.857†             58463.4      498.45 ug/L        2.974      498.45 ppb        2.974   0.60%
   QC value within limits for Zn 213.857  Recovery = 99.69%
SiO2†                   85536.4      5433.5 ug/L        28.13      5433.5 ppb        28.13   0.52%
   QC value within limits for SiO2  Recovery = 101.61%
All analyte(s) passed QC.
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Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:37:20
Data Type: Reprocessed on 12/11/2009 12:46:13

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	847568.2	847568.2	97.656	%			12:40:30
1	Sc Radial	5624.4	5624.4	101	%			12:39:13
1	Y 371.029	713720.6	713720.6	97.843	%			12:40:30
1	Y RADIAL	6144.5	6144.5	101.7	%			12:39:13
1	Ag 328.068†	378.1	113.2	0.5160	ug/L	0.5160	ppb	12:40:30
1	Al 396.153Radial†	-18.5	16.9	11.642	ug/L	11.642	ppb	12:39:13
1	As 188.979†	-22.0	8.7	3.3641	ug/L	3.3641	ppb	12:40:50
1	B 249.677†	-169.4	319.7	6.8141	ug/L	6.8141	ppb	12:40:50
1	Ba 233.527†	-26.0	-15.5	-0.1172	ug/L	-0.1172	ppb	12:40:50
1	Be 313.107†	-4472.9	82.3	0.0296	ug/L	0.0296	ppb	12:40:30
1	Ca 317.933Radial†	13.7	-3.3	-4.8029	ug/L	-4.8029	ppb	12:39:33
1	Cd 226.502†	-181.9	12.7	0.1317	ug/L	0.1317	ppb	12:40:50
1	Co 228.616†	-85.9	-14.5	-0.2722	ug/L	-0.2722	ppb	12:40:50
1	Cr 267.716†	63.8	-20.7	-0.2157	ug/L	-0.2157	ppb	12:40:50
1	Cu 324.752†	6713.9	117.3	0.3406	ug/L	0.3406	ppb	12:40:30
1	Fe 238.204 Radial†	10.0	-0.0	-0.1211	ug/L	-0.1211	ppb	12:39:33
1	K 766.490 Radial†	3088.5	322.2	54.063	ug/L	54.063	ppb	12:39:13
1	Mg 279.077 IEC†	2.0	0.1	3.4114	ug/L	3.4114	ppb	12:39:33
1	Mn 257.610†	485.0	-23.5	-0.0250	ug/L	-0.0250	ppb	12:40:50
1	Mo 202.031†	26.8	9.0	0.5714	ug/L	0.5714	ppb	12:40:50
1	Na 589.592 Radial†	-1538.6	28.8	8.7370	ug/L	8.7370	ppb	12:39:13
1	Ni 231.604†	75.9	-8.2	-0.1882	ug/L	-0.1882	ppb	12:40:50
1	P 214.914†	227.6	-9.0	-5.0728	ug/L	-5.0728	ppb	12:40:50
1	Pb 220.353†	-58.9	7.7	0.8665	ug/L	0.8665	ppb	12:40:50
1	S 181.975 Axial†	54.1	6.0	7.9430	ug/L	7.9430	ppb	12:40:50
1	Sb 206.836†	38.0	1.5	0.4847	ug/L	0.4847	ppb	12:40:50
1	Se 196.026†	-33.4	-7.5	-4.1895	ug/L	-4.1895	ppb	12:40:50
1	Si 251.611†	528.4	59.3	1.7391	ug/L	1.7391	ppb	12:40:50
1	Sn 189.927†	7.8	-0.8	-0.1315	ug/L	-0.1315	ppb	12:40:50
1	Sr 421.552†	-51.0	-50.3	-0.3033	ug/L	-0.3033	ppb	12:39:13
1	Ti 334.940†	-1231.0	-4.3	-0.0037	ug/L	-0.0037	ppb	12:40:30
1	Tl 190.801†	-32.0	1.8	0.4998	ug/L	0.4998	ppb	12:40:50
1	U 409.014†	-2775.7	-258.4	-7.4274	ug/L	-7.4274	ppb	12:40:30
1	V 292.402†	-1414.2	-85.5	-0.5746	ug/L	-0.5746	ppb	12:40:30
1	Zn 213.857†	779.8	44.7	0.3849	ug/L	0.3849	ppb	12:40:50
1	SiO2†	535.2	23.5	1.4416	ug/L	1.4416	ppb	12:41:46
2	Sc 361.383	850980.6	850980.6	98.049	%			12:40:55
2	Sc Radial	5226.4	5226.4	93.7	%			12:39:38
2	Y 371.029	716574.3	716574.3	98.234	%			12:40:55
2	Y RADIAL	5690.7	5690.7	94.23	%			12:39:38
2	Ag 328.068†	348.6	81.5	0.3744	ug/L	0.3744	ppb	12:40:55
2	Al 396.153Radial†	-36.8	-3.9	-2.7236	ug/L	-2.7236	ppb	12:39:38
2	As 188.979†	-23.9	6.9	2.6793	ug/L	2.6793	ppb	12:41:15
2	B 249.677†	-177.9	311.8	6.6422	ug/L	6.6422	ppb	12:41:15
2	Ba 233.527†	-10.5	0.4	0.0019	ug/L	0.0019	ppb	12:41:15
2	Be 313.107†	-4484.6	88.8	0.0319	ug/L	0.0319	ppb	12:40:55
2	Ca 317.933Radial†	13.4	-2.6	-3.7376	ug/L	-3.7376	ppb	12:39:58
2	Cd 226.502†	-190.0	5.2	0.0527	ug/L	0.0527	ppb	12:41:15
2	Co 228.616†	-65.8	6.4	0.1208	ug/L	0.1208	ppb	12:41:15
2	Cr 267.716†	81.6	-2.8	-0.0290	ug/L	-0.0290	ppb	12:41:15
2	Cu 324.752†	6807.4	185.0	0.5381	ug/L	0.5381	ppb	12:40:55
2	Fe 238.204 Radial†	10.7	1.5	13.644	ug/L	13.644	ppb	12:39:58
2	K 766.490 Radial†	3279.1	758.8	127.31	ug/L	127.31	ppb	12:39:38
2	Mg 279.077 IEC†	2.5	0.7	24.525	ug/L	24.525	ppb	12:39:58
2	Mn 257.610†	508.2	-1.8	-0.0010	ug/L	-0.0010	ppb	12:41:15
2	Mo 202.031†	24.8	6.9	0.4417	ug/L	0.4417	ppb	12:41:15
2	Na 589.592 Radial†	-1499.3	-45.4	-13.764	ug/L	-13.764	ppb	12:39:38
2	Ni 231.604†	91.9	7.8	0.1795	ug/L	0.1795	ppb	12:41:15

2	P 214.914†	236.7	-0.7	-0.4870 ug/L	-0.4870 ppb	12:41:15
2	Pb 220.353†	-67.3	-0.7	-0.0795 ug/L	-0.0795 ppb	12:41:15
2	S 181.975 Axial†	47.6	-0.8	-1.0703 ug/L	-1.0703 ppb	12:41:15
2	Sb 206.836†	35.8	-0.9	-0.2940 ug/L	-0.2940 ppb	12:41:15
2	Se 196.026†	-15.0	11.5	6.5280 ug/L	6.5280 ppb	12:41:15
2	Si 251.611†	497.0	25.2	0.7024 ug/L	0.7024 ppb	12:41:15
2	Sn 189.927†	2.4	-6.3	-1.0202 ug/L	-1.0202 ppb	12:41:15
2	Sr 421.552†	-16.5	-17.4	-0.1049 ug/L	-0.1049 ppb	12:39:38
2	Ti 334.940†	-1223.0	8.9	0.0158 ug/L	0.0158 ppb	12:40:55
2	Tl 190.801†	-29.5	4.5	1.2547 ug/L	1.2547 ppb	12:41:15
2	U 409.014†	-2678.8	-148.1	-4.2607 ug/L	-4.2607 ppb	12:40:55
2	V 292.402†	-1420.0	-85.5	-0.5724 ug/L	-0.5724 ppb	12:40:55
2	Zn 213.857†	767.0	28.4	0.2403 ug/L	0.2403 ppb	12:41:15
2	SiO2†	543.1	29.4	1.7730 ug/L	1.7730 ppb	12:41:51
3	Sc 361.383	871743.4	871743.4	100.44 %		12:41:20
3	Sc Radial	5613.5	5613.5	101 %		12:40:03
3	Y 371.029	732016.1	732016.1	100.35 %		12:41:20
3	Y RADIAL	6098.6	6098.6	101.0 %		12:40:03
3	Ag 328.068†	321.4	45.9	0.2161 ug/L	0.2161 ppb	12:41:20
3	Al 396.153Radial†	-14.4	21.0	14.465 ug/L	14.465 ppb	12:40:03
3	As 188.979†	-28.8	2.6	0.9995 ug/L	0.9995 ppb	12:41:40
3	B 249.677†	-175.0	319.0	6.7956 ug/L	6.7956 ppb	12:41:40
3	Ba 233.527†	3.9	15.0	0.1125 ug/L	0.1125 ppb	12:41:40
3	Be 313.107†	-4613.2	69.7	0.0249 ug/L	0.0249 ppb	12:41:20
3	Ca 317.933Radial†	14.9	-2.1	-3.0652 ug/L	-3.0652 ppb	12:40:23
3	Cd 226.502†	-191.1	8.7	0.0878 ug/L	0.0878 ppb	12:41:40
3	Co 228.616†	-73.5	0.2	0.0045 ug/L	0.0045 ppb	12:41:40
3	Cr 267.716†	66.6	-19.7	-0.2057 ug/L	-0.2057 ppb	12:41:40
3	Cu 324.752†	6808.2	20.5	0.0606 ug/L	0.0606 ppb	12:41:20
3	Fe 238.204 Radial†	12.3	2.4	21.114 ug/L	21.114 ppb	12:40:23
3	K 766.490 Radial†	3159.7	398.9	66.917 ug/L	66.917 ppb	12:40:03
3	Mg 279.077 IEC†	3.2	1.3	43.185 ug/L	43.185 ppb	12:40:23
3	Mn 257.610†	509.9	-12.5	-0.0119 ug/L	-0.0119 ppb	12:41:40
3	Mo 202.031†	20.7	2.1	0.1378 ug/L	0.1378 ppb	12:41:40
3	Na 589.592 Radial†	-1474.7	89.3	27.067 ug/L	27.067 ppb	12:40:03
3	Ni 231.604†	71.5	-14.8	-0.3389 ug/L	-0.3389 ppb	12:41:40
3	P 214.914†	230.9	-12.2	-6.8179 ug/L	-6.8179 ppb	12:41:40
3	Pb 220.353†	-60.8	7.4	0.8329 ug/L	0.8329 ppb	12:41:40
3	S 181.975 Axial†	52.2	2.6	3.4239 ug/L	3.4239 ppb	12:41:40
3	Sb 206.836†	43.9	6.3	2.0264 ug/L	2.0264 ppb	12:41:40
3	Se 196.026†	-38.8	-11.8	-6.5690 ug/L	-6.5690 ppb	12:41:40
3	Si 251.611†	527.2	43.2	1.2583 ug/L	1.2583 ppb	12:41:40
3	Sn 189.927†	14.2	5.3	0.8595 ug/L	0.8595 ppb	12:41:40
3	Sr 421.552†	-37.7	-37.2	-0.2243 ug/L	-0.2243 ppb	12:40:03
3	Ti 334.940†	-1298.4	-36.4	-0.0565 ug/L	-0.0565 ppb	12:41:20
3	Tl 190.801†	-27.3	7.4	2.0781 ug/L	2.0781 ppb	12:41:40
3	U 409.014†	-2681.9	-86.1	-2.4777 ug/L	-2.4777 ppb	12:41:20
3	V 292.402†	-1391.1	-22.3	-0.1531 ug/L	-0.1531 ppb	12:41:20
3	Zn 213.857†	776.4	19.1	0.1631 ug/L	0.1631 ppb	12:41:40
3	SiO2†	530.9	4.1	0.2003 ug/L	0.2003 ppb	12:41:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856764.1	98.715	%	1.5075				1.53%
Sc Radial	5488.1	98.4	%	4.07				4.13%
Y 371.029	720770.3	98.809	%	1.3494				1.37%
Y RADIAL	5977.9	98.99	%	4.137				4.18%
Ag 328.068†	80.2	0.3689	ug/L	0.15003	0.3689	ppb	0.15003	40.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.3	7.7943	ug/L	9.21744	7.7943	ppb	9.21744	118.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.1	2.3476	ug/L	1.21668	2.3476	ppb	1.21668	51.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	316.8	6.7506	ug/L	0.09438	6.7506	ppb	0.09438	1.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0009	ug/L	0.11484	-0.0009	ppb	0.11484	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.3	0.0288	ug/L	0.00356	0.0288	ppb	0.00356	12.36%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -2.7     -3.8686 ug/L       0.87624     -3.8686 ppb        0.87624  22.65%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.9      0.0907 ug/L       0.03961      0.0907 ppb        0.03961  43.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.6     -0.0490 ug/L       0.20189     -0.0490 ppb        0.20189 412.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -14.4     -0.1501 ug/L       0.10498     -0.1501 ppb        0.10498  69.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               107.6      0.3131 ug/L       0.23993      0.3131 ppb        0.23993  76.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.3      11.546 ug/L       10.7720      11.546 ppb        10.7720  93.30%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         493.3      82.763 ug/L       39.1107      82.763 ppb        39.1107  47.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.7      23.707 ug/L       19.8994      23.707 ppb        19.8994  83.94%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -12.6     -0.0127 ug/L       0.01201     -0.0127 ppb        0.01201  94.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.0      0.3837 ug/L       0.22256      0.3837 ppb        0.22256  58.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        24.2      7.3467 ug/L      20.45092      7.3467 ppb       20.45092 278.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -5.0     -0.1159 ug/L       0.26666     -0.1159 ppb        0.26666 230.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -7.3     -4.1259 ug/L       3.26994     -4.1259 ppb        3.26994  79.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                4.8      0.5399 ug/L       0.53675      0.5399 ppb        0.53675  99.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.6      3.4322 ug/L       4.50668      3.4322 ppb        4.50668 131.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.3      0.7390 ug/L       1.18090      0.7390 ppb        1.18090 159.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.6     -1.4101 ug/L       6.97685     -1.4101 ppb        6.97685 494.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               42.5      1.2332 ug/L       0.51879      1.2332 ppb        0.51879  42.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.6     -0.0974 ug/L       0.94032     -0.0974 ppb        0.94032 965.25%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -35.0     -0.2108 ug/L       0.09986     -0.2108 ppb        0.09986  47.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -10.6     -0.0148 ug/L       0.03737     -0.0148 ppb        0.03737 252.28%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                4.5      1.2775 ug/L       0.78940      1.2775 ppb        0.78940  61.79%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -164.2     -4.7219 ug/L       2.50685     -4.7219 ppb        2.50685  53.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -64.4     -0.4334 ug/L       0.24273     -0.4334 ppb        0.24273  56.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               30.7      0.2628 ug/L       0.11259      0.2628 ppb        0.11259  42.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     19.0      1.1383 ug/L       0.82903      1.1383 ppb        0.82903  72.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 13:02:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5959.4	5959.4	107	%			13:03:53
1	Y RADIAL	6433.9	6433.9	106.5	%			13:03:53
1	Al 396.153Radial†	6880.1	6472.5	4436.2	ug/L	4436.2	ppb	13:03:53
1	Ca 317.933Radial†	3391.0	3155.8	4605.9	ug/L	4605.9	ppb	13:04:13
1	Fe 238.204 Radial†	580.6	533.3	4793.9	ug/L	4793.9	ppb	13:04:13
1	K 766.490 Radial†	32130.2	27322.1	4575.4	ug/L	4575.4	ppb	13:03:53
1	Mg 279.077 IEC†	154.9	143.0	4815.3	ug/L	4815.3	ppb	13:04:13
1	Na 589.592 Radial†	31940.4	31438.2	9527.6	ug/L	9527.6	ppb	13:03:53
1	Sr 421.552†	82353.6	77051.8	464.68	ug/L	464.68	ppb	13:03:53
1	Sc 361.383	868304.2	868304.2	100.04	%			13:05:11
1	Y 371.029	718002.5	718002.5	98.430	%			13:05:11
1	Ag 328.068†	111566.0	111242.1	506.20	ug/L	506.20	ppb	13:05:16
1	As 188.979†	1272.4	1303.2	507.45	ug/L	507.45	ppb	13:05:36
1	B 249.677†	23032.5	23515.4	499.22	ug/L	499.22	ppb	13:05:16
1	Ba 233.527†	66943.7	66924.9	501.36	ug/L	501.36	ppb	13:05:16
1	Be 313.107†	1385036.2	1389079.4	499.76	ug/L	499.76	ppb	13:05:11
1	Cd 226.502†	48353.2	48530.5	503.16	ug/L	503.16	ppb	13:05:16
1	Co 228.616†	26620.9	26682.5	503.42	ug/L	503.42	ppb	13:05:16
1	Cr 267.716†	47781.5	47674.1	499.84	ug/L	499.84	ppb	13:05:16
1	Cu 324.752†	177423.8	170586.6	495.73	ug/L	495.73	ppb	13:05:16
1	Mn 257.610†	472521.3	471789.8	500.40	ug/L	500.40	ppb	13:05:11
1	Mo 202.031†	7896.7	7874.7	501.46	ug/L	501.46	ppb	13:05:36
1	Ni 231.604†	21927.6	21831.9	501.35	ug/L	501.35	ppb	13:05:16
1	P 214.914†	4708.4	4464.3	2417.8	ug/L	2417.8	ppb	13:05:36
1	Pb 220.353†	4390.4	4456.4	500.31	ug/L	500.31	ppb	13:05:36
1	S 181.975 Axial†	819.1	769.4	1015.6	ug/L	1015.6	ppb	13:05:36
1	Sb 206.836†	1637.0	1598.9	512.13	ug/L	512.13	ppb	13:05:36
1	Se 196.026†	868.5	894.9	520.39	ug/L	520.39	ppb	13:05:36
1	Si 251.611†	86739.6	86219.0	2556.1	ug/L	2556.1	ppb	13:05:16
1	Sn 189.927†	3142.3	3132.1	504.39	ug/L	504.39	ppb	13:05:36
1	Ti 334.940†	311670.3	312787.2	493.55	ug/L	493.55	ppb	13:05:16
1	Tl 190.801†	1745.1	1778.9	504.35	ug/L	504.35	ppb	13:05:36
1	U 409.014†	14952.8	17530.1	502.44	ug/L	502.44	ppb	13:05:16
1	V 292.402†	73449.6	74779.4	504.34	ug/L	504.34	ppb	13:05:16
1	Zn 213.857†	59419.1	58638.7	500.00	ug/L	500.00	ppb	13:05:16
1	SiO2†	86119.9	85556.9	5435.2	ug/L	5435.2	ppb	13:06:43
2	Sc Radial	5427.5	5427.5	97.3	%			13:04:18
2	Y RADIAL	5846.3	5846.3	96.81	%			13:04:18
2	Al 396.153Radial†	6976.9	7202.8	4939.2	ug/L	4939.2	ppb	13:04:18
2	Ca 317.933Radial†	3369.6	3444.7	5027.6	ug/L	5027.6	ppb	13:04:38
2	Fe 238.204 Radial†	578.6	584.5	5252.6	ug/L	5252.6	ppb	13:04:38
2	K 766.490 Radial†	32118.8	30256.5	5067.3	ug/L	5067.3	ppb	13:04:18
2	Mg 279.077 IEC†	152.0	154.3	5194.1	ug/L	5194.1	ppb	13:04:38
2	Na 589.592 Radial†	32122.3	34553.8	10472	ug/L	10472	ppb	13:04:18
2	Sr 421.552†	83110.6	85380.7	514.91	ug/L	514.91	ppb	13:04:18
2	Sc 361.383	868381.1	868381.1	100.05	%			13:05:42
2	Y 371.029	717381.1	717381.1	98.345	%			13:05:42
2	Ag 328.068†	112619.5	112285.1	511.08	ug/L	511.08	ppb	13:05:47
2	As 188.979†	1257.8	1288.4	501.86	ug/L	501.86	ppb	13:06:07
2	B 249.677†	23342.0	23822.7	505.69	ug/L	505.69	ppb	13:05:47
2	Ba 233.527†	67721.2	67696.0	507.15	ug/L	507.15	ppb	13:05:47
2	Be 313.107†	1385484.5	1389404.7	499.88	ug/L	499.88	ppb	13:05:42
2	Cd 226.502†	48926.1	49098.8	509.01	ug/L	509.01	ppb	13:05:47
2	Co 228.616†	26952.7	27011.7	509.61	ug/L	509.61	ppb	13:05:47
2	Cr 267.716†	48407.5	48295.6	506.36	ug/L	506.36	ppb	13:05:47
2	Cu 324.752†	178880.8	172027.1	499.94	ug/L	499.94	ppb	13:05:47
2	Mn 257.610†	474037.8	473263.6	502.01	ug/L	502.01	ppb	13:05:42
2	Mo 202.031†	7887.5	7864.8	500.86	ug/L	500.86	ppb	13:06:07
2	Ni 231.604†	22264.6	22166.7	509.04	ug/L	509.04	ppb	13:05:47

2	P 214.914†	4697.4	4452.8	2410.5 ug/L	2410.5 ppb	13:06:07
2	Pb 220.353†	4377.4	4443.0	498.88 ug/L	498.88 ppb	13:06:07
2	S 181.975 Axial†	810.4	760.6	1003.9 ug/L	1003.9 ppb	13:06:07
2	Sb 206.836†	1617.5	1579.2	505.76 ug/L	505.76 ppb	13:06:07
2	Se 196.026†	870.1	896.5	522.76 ug/L	522.76 ppb	13:06:07
2	Si 251.611†	87756.7	87227.9	2586.0 ug/L	2586.0 ppb	13:05:47
2	Sn 189.927†	3143.0	3132.5	504.51 ug/L	504.51 ppb	13:06:07
2	Ti 334.940†	314645.2	315732.8	498.22 ug/L	498.22 ppb	13:05:47
2	Tl 190.801†	1726.0	1759.6	498.92 ug/L	498.92 ppb	13:06:07
2	U 409.014†	14759.9	17336.0	496.78 ug/L	496.78 ppb	13:05:47
2	V 292.402†	74164.6	75487.6	508.96 ug/L	508.96 ppb	13:05:47
2	Zn 213.857†	60106.5	59320.4	505.75 ug/L	505.75 ppb	13:05:47
2	SiO2†	85989.9	85419.4	5426.1 ug/L	5426.1 ppb	13:06:48
3	Sc Radial	5434.7	5434.7	97.5 %		13:04:43
3	Y RADIAL	5906.3	5906.3	97.80 %		13:04:43
3	Al 396.153Radial†	6977.6	7194.0	4933.5 ug/L	4933.5 ppb	13:04:43
3	Ca 317.933Radial†	3381.9	3452.7	5039.3 ug/L	5039.3 ppb	13:05:03
3	Fe 238.204 Radial†	573.9	578.9	5202.1 ug/L	5202.1 ppb	13:05:03
3	K 766.490 Radial†	32398.3	30499.8	5108.1 ug/L	5108.1 ppb	13:04:43
3	Mg 279.077 IEC†	158.1	160.3	5397.0 ug/L	5397.0 ppb	13:05:03
3	Na 589.592 Radial†	32068.4	34455.0	10442 ug/L	10442 ppb	13:04:43
3	Sr 421.552†	83420.9	85586.6	516.15 ug/L	516.15 ppb	13:04:43
3	Sc 361.383	875985.1	875985.1	100.93 %		13:06:12
3	Y 371.029	723429.5	723429.5	99.174 %		13:06:12
3	Ag 328.068†	112126.0	110819.1	504.41 ug/L	504.41 ppb	13:06:18
3	As 188.979†	1252.0	1271.7	495.36 ug/L	495.36 ppb	13:06:38
3	B 249.677†	23210.9	23490.3	498.64 ug/L	498.64 ppb	13:06:18
3	Ba 233.527†	67343.9	66734.7	499.95 ug/L	499.95 ppb	13:06:18
3	Be 313.107†	1399333.1	1391105.5	500.48 ug/L	500.48 ppb	13:06:12
3	Cd 226.502†	48639.6	48390.5	501.67 ug/L	501.67 ppb	13:06:18
3	Co 228.616†	26704.2	26531.7	500.55 ug/L	500.55 ppb	13:06:18
3	Cr 267.716†	48090.7	47561.6	498.67 ug/L	498.67 ppb	13:06:18
3	Cu 324.752†	177858.7	169462.5	492.49 ug/L	492.49 ppb	13:06:18
3	Mn 257.610†	477719.8	472799.0	501.50 ug/L	501.50 ppb	13:06:12
3	Mo 202.031†	7834.2	7743.6	493.15 ug/L	493.15 ppb	13:06:38
3	Ni 231.604†	22095.0	21805.5	500.74 ug/L	500.74 ppb	13:06:18
3	P 214.914†	4653.0	4368.1	2364.3 ug/L	2364.3 ppb	13:06:38
3	Pb 220.353†	4359.3	4387.1	492.61 ug/L	492.61 ppb	13:06:38
3	S 181.975 Axial†	806.7	749.9	989.80 ug/L	989.80 ppb	13:06:38
3	Sb 206.836†	1607.0	1554.8	497.90 ug/L	497.90 ppb	13:06:38
3	Se 196.026†	864.5	883.3	515.16 ug/L	515.16 ppb	13:06:38
3	Si 251.611†	87004.1	85720.9	2541.3 ug/L	2541.3 ppb	13:06:18
3	Sn 189.927†	3112.4	3074.9	495.24 ug/L	495.24 ppb	13:06:38
3	Ti 334.940†	312623.4	310999.9	490.76 ug/L	490.76 ppb	13:06:18
3	Tl 190.801†	1725.5	1744.2	494.58 ug/L	494.58 ppb	13:06:38
3	U 409.014†	14588.3	17037.9	488.24 ug/L	488.24 ppb	13:06:18
3	V 292.402†	73779.3	74462.4	502.04 ug/L	502.04 ppb	13:06:18
3	Zn 213.857†	59657.7	58354.3	497.50 ug/L	497.50 ppb	13:06:18
3	SiO2†	86650.3	85327.7	5420.5 ug/L	5420.5 ppb	13:06:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	870890.1	100.34	%	0.508				0.51%
Sc Radial	5607.2	101	%	5.5				5.44%
Y 371.029	719604.4	98.649	%	0.4561				0.46%
Y RADIAL	6062.2	100.4	%	5.35				5.33%
Ag 328.068†	111448.8	507.23	ug/L	3.451	507.23	ppb	3.451	0.68%
QC value within limits for Ag 328.068 Recovery = 101.45%								
Al 396.153Radial†	6956.4	4769.6	ug/L	288.77	4769.6	ppb	288.77	6.05%
QC value within limits for Al 396.153Radial Recovery = 95.39%								
As 188.979†	1287.8	501.56	ug/L	6.050	501.56	ppb	6.050	1.21%
QC value within limits for As 188.979 Recovery = 100.31%								
B 249.677†	23609.5	501.19	ug/L	3.915	501.19	ppb	3.915	0.78%
QC value within limits for B 249.677 Recovery = 100.24%								
Ba 233.527†	67118.5	502.82	ug/L	3.816	502.82	ppb	3.816	0.76%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1389863.2	500.04	ug/L	0.386	500.04	ppb	0.386	0.08%
QC value within limits for Be 313.107 Recovery = 100.01%								
Ca 317.933Radial†	3351.1	4890.9	ug/L	246.91	4890.9	ppb	246.91	5.05%

```
   QC value within limits for Ca 317.933Radial  Recovery = 97.82%
Cd 226.502†            48673.3      504.61 ug/L         3.883      504.61 ppb          3.883   0.77%
   QC value within limits for Cd 226.502  Recovery = 100.92%
Co 228.616†            26741.9      504.53 ug/L         4.628      504.53 ppb          4.628   0.92%
   QC value within limits for Co 228.616  Recovery = 100.91%
Cr 267.716†            47843.8      501.62 ug/L         4.145      501.62 ppb          4.145   0.83%
   QC value within limits for Cr 267.716  Recovery = 100.32%
Cu 324.752†           170692.1      496.05 ug/L         3.736      496.05 ppb          3.736   0.75%
   QC value within limits for Cu 324.752  Recovery = 99.21%
Fe 238.204 Radial†       565.6      5082.9 ug/L        251.53      5082.9 ppb        251.53   4.95%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.66%
K 766.490 Radial†      29359.4      4916.9 ug/L        296.48      4916.9 ppb        296.48   6.03%
   QC value within limits for K 766.490 Radial  Recovery = 98.34%
Mg 279.077 IEC†          152.5      5135.5 ug/L        295.22      5135.5 ppb        295.22   5.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.71%
Mn 257.610†           472617.5      501.30 ug/L         0.819      501.30 ppb          0.819   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.26%
Mo 202.031†             7827.7      498.49 ug/L         4.638      498.49 ppb          4.638   0.93%
   QC value within limits for Mo 202.031  Recovery = 99.70%
Na 589.592 Radial†     33482.3       10147 ug/L         536.7       10147 ppb          536.7   5.29%
   QC value within limits for Na 589.592 Radial  Recovery = 101.47%
Ni 231.604†            21934.7      503.71 ug/L         4.624      503.71 ppb          4.624   0.92%
   QC value within limits for Ni 231.604  Recovery = 100.74%
P 214.914†              4428.4      2397.5 ug/L        29.00      2397.5 ppb         29.00   1.21%
   QC value within limits for P 214.914  Recovery = 95.90%
Pb 220.353†             4428.9      497.27 ug/L         4.095      497.27 ppb          4.095   0.82%
   QC value within limits for Pb 220.353  Recovery = 99.45%
S 181.975 Axial†         760.0      1003.1 ug/L        12.91      1003.1 ppb         12.91   1.29%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1577.6      505.26 ug/L         7.131      505.26 ppb          7.131   1.41%
   QC value within limits for Sb 206.836  Recovery = 101.05%
Se 196.026†              891.6      519.44 ug/L         3.887      519.44 ppb          3.887   0.75%
   QC value within limits for Se 196.026  Recovery = 103.89%
Si 251.611†            86389.3      2561.1 ug/L        22.79      2561.1 ppb         22.79   0.89%
   QC value within limits for Si 251.611  Recovery = 102.45%
Sn 189.927†             3113.2      501.38 ug/L         5.315      501.38 ppb          5.315   1.06%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†            82673.1      498.58 ug/L        29.365      498.58 ppb         29.365   5.89%
   QC value within limits for Sr 421.552  Recovery = 99.72%
Ti 334.940†           313173.3      494.18 ug/L         3.771      494.18 ppb          3.771   0.76%
   QC value within limits for Ti 334.940  Recovery = 98.84%
Tl 190.801†             1760.9      499.28 ug/L         4.891      499.28 ppb          4.891   0.98%
   QC value within limits for Tl 190.801  Recovery = 99.86%
U 409.014†             17301.3      495.82 ug/L         7.149      495.82 ppb          7.149   1.44%
   QC value within limits for U 409.014  Recovery = 99.16%
V 292.402†             74909.8      505.11 ug/L         3.526      505.11 ppb          3.526   0.70%
   QC value within limits for V 292.402  Recovery = 101.02%
Zn 213.857†            58771.1      501.08 ug/L         4.231      501.08 ppb          4.231   0.84%
   QC value within limits for Zn 213.857  Recovery = 100.22%
SiO2†                  85434.7      5427.3 ug/L          7.40      5427.3 ppb           7.40   0.14%
   QC value within limits for SiO2  Recovery = 101.49%
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:09:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5692.7	5692.7	102	%			13:10:56
1	Y RADIAL	6161.1	6161.1	102.0	%			13:10:56
1	Al 396.153Radial†	-4.7	30.7	21.091	ug/L	21.091	ppb	13:10:56
1	Ca 317.933Radial†	14.8	-2.4	-3.5139	ug/L	-3.5139	ppb	13:11:16
1	Fe 238.204 Radial†	10.4	0.3	2.2803	ug/L	2.2803	ppb	13:11:16
1	K 766.490 Radial†	3060.7	258.3	43.330	ug/L	43.330	ppb	13:10:56
1	Mg 279.077 IEC†	1.8	-0.2	-5.6613	ug/L	-5.6613	ppb	13:11:16
1	Na 589.592 Radial†	-1535.5	50.2	15.210	ug/L	15.210	ppb	13:10:56
1	Sr 421.552†	-33.8	-32.9	-0.1981	ug/L	-0.1981	ppb	13:10:56
1	Sc 361.383	871003.4	871003.4	100.36	%			13:12:13
1	Y 371.029	732360.3	732360.3	100.40	%			13:12:13
1	Ag 328.068†	372.0	96.6	0.4413	ug/L	0.4413	ppb	13:12:13
1	As 188.979†	-24.9	6.5	2.4896	ug/L	2.4896	ppb	13:12:33
1	B 249.677†	-214.7	279.3	5.9514	ug/L	5.9514	ppb	13:12:33
1	Ba 233.527†	-16.6	-5.5	-0.0405	ug/L	-0.0405	ppb	13:12:33
1	Be 313.107†	-4604.9	74.1	0.0264	ug/L	0.0264	ppb	13:12:13
1	Cd 226.502†	-198.1	1.5	0.0154	ug/L	0.0154	ppb	13:12:33
1	Co 228.616†	-80.2	-6.4	-0.1176	ug/L	-0.1176	ppb	13:12:33
1	Cr 267.716†	77.2	-9.1	-0.0937	ug/L	-0.0937	ppb	13:12:33
1	Cu 324.752†	6713.5	-68.1	-0.1977	ug/L	-0.1977	ppb	13:12:13
1	Mn 257.610†	529.1	7.1	0.0078	ug/L	0.0078	ppb	13:12:33
1	Mo 202.031†	38.8	20.2	1.2860	ug/L	1.2860	ppb	13:12:33
1	Ni 231.604†	88.0	1.7	0.0399	ug/L	0.0399	ppb	13:12:33
1	P 214.914†	228.1	-14.7	-8.1756	ug/L	-8.1756	ppb	13:12:33
1	Pb 220.353†	-68.0	0.3	0.0364	ug/L	0.0364	ppb	13:12:33
1	S 181.975 Axial†	50.5	0.9	1.1638	ug/L	1.1638	ppb	13:12:33
1	Sb 206.836†	41.3	3.8	1.2370	ug/L	1.2370	ppb	13:12:33
1	Se 196.026†	-22.9	4.0	2.2601	ug/L	2.2601	ppb	13:12:33
1	Si 251.611†	525.7	42.1	1.2169	ug/L	1.2169	ppb	13:12:33
1	Sn 189.927†	10.7	1.8	0.2965	ug/L	0.2965	ppb	13:12:33
1	Ti 334.940†	-1314.7	-53.8	-0.0836	ug/L	-0.0836	ppb	13:12:13
1	Tl 190.801†	-30.7	3.9	1.1088	ug/L	1.1088	ppb	13:12:33
1	U 409.014†	-2705.0	-111.4	-3.2038	ug/L	-3.2038	ppb	13:12:13
1	V 292.402†	-1342.9	24.5	0.1751	ug/L	0.1751	ppb	13:12:13
1	Zn 213.857†	767.1	10.5	0.0901	ug/L	0.0901	ppb	13:12:33
1	SiO2†	529.1	2.8	0.0943	ug/L	0.0943	ppb	13:13:29
2	Sc Radial	5700.2	5700.2	102	%			13:11:21
2	Y RADIAL	6213.4	6213.4	102.9	%			13:11:21
2	Al 396.153Radial†	-10.8	24.8	17.055	ug/L	17.055	ppb	13:11:21
2	Ca 317.933Radial†	15.8	-1.5	-2.1535	ug/L	-2.1535	ppb	13:11:41
2	Fe 238.204 Radial†	9.2	-0.9	-7.6609	ug/L	-7.6609	ppb	13:11:41
2	K 766.490 Radial†	2798.1	-2.5	-0.4269	ug/L	-0.4269	ppb	13:11:21
2	Mg 279.077 IEC†	2.7	0.7	24.628	ug/L	24.628	ppb	13:11:41
2	Na 589.592 Radial†	-1529.9	57.6	17.451	ug/L	17.451	ppb	13:11:21
2	Sr 421.552†	-26.4	-25.6	-0.1543	ug/L	-0.1543	ppb	13:11:21
2	Sc 361.383	872038.6	872038.6	100.48	%			13:12:38
2	Y 371.029	733622.4	733622.4	100.57	%			13:12:38
2	Ag 328.068†	320.6	45.1	0.2030	ug/L	0.2030	ppb	13:12:38
2	As 188.979†	-22.8	8.6	3.2992	ug/L	3.2992	ppb	13:12:58
2	B 249.677†	-230.0	264.3	5.6346	ug/L	5.6346	ppb	13:12:58
2	Ba 233.527†	8.3	19.3	0.1443	ug/L	0.1443	ppb	13:12:58
2	Be 313.107†	-4567.0	117.2	0.0416	ug/L	0.0416	ppb	13:12:38
2	Cd 226.502†	-203.4	-3.5	-0.0359	ug/L	-0.0359	ppb	13:12:58
2	Co 228.616†	-81.0	-7.2	-0.1340	ug/L	-0.1340	ppb	13:12:58
2	Cr 267.716†	99.3	12.8	0.1348	ug/L	0.1348	ppb	13:12:58
2	Cu 324.752†	6802.2	12.2	0.0349	ug/L	0.0349	ppb	13:12:38
2	Mn 257.610†	510.0	-12.5	-0.0145	ug/L	-0.0145	ppb	13:12:58
2	Mo 202.031†	24.2	5.6	0.3573	ug/L	0.3573	ppb	13:12:58
2	Ni 231.604†	86.6	0.3	0.0063	ug/L	0.0063	ppb	13:12:58

2	P 214.914†	234.4	-8.7	-4.8677 ug/L	-4.8677 ppb	13:12:58
2	Pb 220.353†	-70.9	-2.5	-0.2794 ug/L	-0.2794 ppb	13:12:58
2	S 181.975 Axial†	55.4	5.8	7.6105 ug/L	7.6105 ppb	13:12:58
2	Sb 206.836†	44.5	6.9	2.1847 ug/L	2.1847 ppb	13:12:58
2	Se 196.026†	-23.7	3.2	1.7875 ug/L	1.7875 ppb	13:12:58
2	Si 251.611†	536.1	51.8	1.5376 ug/L	1.5376 ppb	13:12:58
2	Sn 189.927†	8.9	0.0	0.0028 ug/L	0.0028 ppb	13:12:58
2	Ti 334.940†	-1408.1	-145.2	-0.2288 ug/L	-0.2288 ppb	13:12:38
2	Tl 190.801†	-33.2	1.6	0.4399 ug/L	0.4399 ppb	13:12:58
2	U 409.014†	-2635.5	-39.1	-1.1224 ug/L	-1.1224 ppb	13:12:38
2	V 292.402†	-1352.5	16.7	0.1158 ug/L	0.1158 ppb	13:12:38
2	Zn 213.857†	763.5	6.0	0.0514 ug/L	0.0514 ppb	13:12:58
2	SiO2†	500.5	-26.3	-1.6927 ug/L	-1.6927 ppb	13:13:34
3	Sc Radial	5765.8	5765.8	103 %		13:11:46
3	Y RADIAL	6256.3	6256.3	103.6 %		13:11:46
3	Al 396.153Radial†	-22.4	13.7	9.4289 ug/L	9.4289 ppb	13:11:46
3	Ca 317.933Radial†	17.9	0.5	0.6607 ug/L	0.6607 ppb	13:12:06
3	Fe 238.204 Radial†	12.7	2.4	21.299 ug/L	21.299 ppb	13:12:06
3	K 766.490 Radial†	2860.1	26.2	4.3980 ug/L	4.3980 ppb	13:11:46
3	Mg 279.077 IEC†	-2.3	-4.1	-138.65 ug/L	-138.65 ppb	13:12:06
3	Na 589.592 Radial†	-1539.2	65.6	19.891 ug/L	19.891 ppb	13:11:46
3	Sr 421.552†	-2.4	-2.1	-0.0129 ug/L	-0.0129 ppb	13:11:46
3	Sc 361.383	872446.7	872446.7	100.52 %		13:13:03
3	Y 371.029	732965.3	732965.3	100.48 %		13:13:03
3	Ag 328.068†	318.3	42.6	0.2025 ug/L	0.2025 ppb	13:13:03
3	As 188.979†	-23.2	8.2	3.1715 ug/L	3.1715 ppb	13:13:23
3	B 249.677†	-263.8	230.8	4.9152 ug/L	4.9152 ppb	13:13:23
3	Ba 233.527†	-9.1	2.0	0.0155 ug/L	0.0155 ppb	13:13:23
3	Be 313.107†	-4495.3	190.6	0.0686 ug/L	0.0686 ppb	13:13:03
3	Cd 226.502†	-207.0	-6.9	-0.0741 ug/L	-0.0741 ppb	13:13:23
3	Co 228.616†	-74.5	-0.7	-0.0138 ug/L	-0.0138 ppb	13:13:23
3	Cr 267.716†	100.0	13.5	0.1427 ug/L	0.1427 ppb	13:13:23
3	Cu 324.752†	6737.6	-55.3	-0.1594 ug/L	-0.1594 ppb	13:13:03
3	Mn 257.610†	521.7	-1.1	0.0035 ug/L	0.0035 ppb	13:13:23
3	Mo 202.031†	19.5	0.9	0.0618 ug/L	0.0618 ppb	13:13:23
3	Ni 231.604†	86.5	0.1	0.0035 ug/L	0.0035 ppb	13:13:23
3	P 214.914†	237.5	-5.8	-3.2263 ug/L	-3.2263 ppb	13:13:23
3	Pb 220.353†	-64.6	3.7	0.4120 ug/L	0.4120 ppb	13:13:23
3	S 181.975 Axial†	48.2	-1.4	-1.9171 ug/L	-1.9171 ppb	13:13:23
3	Sb 206.836†	42.0	4.4	1.3982 ug/L	1.3982 ppb	13:13:23
3	Se 196.026†	-31.6	-4.6	-2.5419 ug/L	-2.5419 ppb	13:13:23
3	Si 251.611†	507.6	23.2	0.6874 ug/L	0.6874 ppb	13:13:23
3	Sn 189.927†	10.5	1.6	0.2586 ug/L	0.2586 ppb	13:13:23
3	Ti 334.940†	-1214.3	48.3	0.0781 ug/L	0.0781 ppb	13:13:03
3	Tl 190.801†	-37.5	-2.7	-0.7700 ug/L	-0.7700 ppb	13:13:23
3	U 409.014†	-2746.4	-148.2	-4.2625 ug/L	-4.2625 ppb	13:13:03
3	V 292.402†	-1394.8	-24.8	-0.1789 ug/L	-0.1789 ppb	13:13:03
3	Zn 213.857†	770.0	12.1	0.1071 ug/L	0.1071 ppb	13:13:23
3	SiO2†	529.8	2.6	0.1564 ug/L	0.1564 ppb	13:13:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871829.6	100.45	%	0.086				0.09%
Sc Radial	5719.6	103	%	0.7				0.70%
Y 371.029	732982.7	100.48	%	0.087				0.09%
Y RADIAL	6210.3	102.8	%	0.79				0.77%
Ag 328.068†	61.4	0.2823	ug/L	0.13775	0.2823	ppb	0.13775	48.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.1	15.858	ug/L	5.9224	15.858	ppb	5.9224	37.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.7	2.9868	ug/L	0.43527	2.9868	ppb	0.43527	14.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	258.1	5.5004	ug/L	0.53096	5.5004	ppb	0.53096	9.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.3	0.0398	ug/L	0.09476	0.0398	ppb	0.09476	238.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.3	0.0456	ug/L	0.02136	0.0456	ppb	0.02136	46.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.1	-1.6689	ug/L	2.12910	-1.6689	ppb	2.12910	127.57%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -3.0     -0.0315 ug/L       0.04492     -0.0315 ppb        0.04492 142.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -4.8     -0.0885 ug/L       0.06521     -0.0885 ppb        0.06521  73.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.7      0.0612 ug/L       0.13427      0.0612 ppb        0.13427 219.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -37.1     -0.1074 ug/L       0.12473     -0.1074 ppb        0.12473 116.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      5.3062 ug/L      14.71531      5.3062 ppb       14.71531 277.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          94.0      15.767 ug/L       23.9916      15.767 ppb        23.9916 152.16%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -39.896 ug/L       86.8579     -39.896 ppb        86.8579 217.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -2.2     -0.0011 ug/L       0.01184     -0.0011 ppb        0.01184 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.9      0.5684 ug/L       0.63883      0.5684 ppb        0.63883 112.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.8      17.517 ug/L        2.3410      17.517 ppb         2.3410  13.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.7      0.0165 ug/L       0.02025      0.0165 ppb        0.02025 122.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -9.8     -5.4232 ug/L       2.52099     -5.4232 ppb        2.52099  46.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.5      0.0564 ug/L       0.34614      0.0564 ppb        0.34614 614.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      2.2858 ug/L       4.86186      2.2858 ppb        4.86186 212.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.0      1.6066 ug/L       0.50705      1.6066 ppb        0.50705  31.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5019 ug/L       2.64660      0.5019 ppb        2.64660 527.33%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                39.0      1.1473 ug/L       0.42932      1.1473 ppb        0.42932  37.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.1860 ug/L       0.15974      0.1860 ppb        0.15974  85.89%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -20.2     -0.1218 ug/L       0.09679     -0.1218 ppb        0.09679  79.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -50.2     -0.0781 ug/L       0.15353     -0.0781 ppb        0.15353 196.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      0.2596 ug/L       0.95230      0.2596 ppb        0.95230 366.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -99.5     -2.8629 ug/L       1.59755     -2.8629 ppb        1.59755  55.80%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  5.5      0.0373 ug/L       0.18959      0.0373 ppb        0.18959 507.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.5      0.0829 ug/L       0.02853      0.0829 ppb        0.02853  34.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -7.0     -0.4806 ug/L       1.05009     -0.4806 ppb        1.05009 218.47%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 12/11/2009 13:24:41 **Plasma On Time: 12/7/2009 05:17:52**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\121109A.sif
Batch ID:
Results Data Set: 121109A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/11/2009 13:24:42**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5584.7	5584.7	100	%			13:26:34
1	Y RADIAL	6014.3	6014.3	99.59	%			13:26:34
1	Al 396.153Radial†	7102.9	7126.9	4887.1	ug/L	4887.1	ppb	13:26:34
1	Ca 317.933Radial†	3376.9	3354.7	4896.1	ug/L	4896.1	ppb	13:26:54
1	Fe 238.204 Radial†	568.9	558.1	5016.1	ug/L	5016.1	ppb	13:26:54
1	K 766.490 Radial†	32581.4	29790.0	4989.4	ug/L	4989.4	ppb	13:26:34
1	Mg 279.077 IEC†	152.0	149.9	5045.7	ug/L	5045.7	ppb	13:26:54
1	Na 589.592 Radial†	31162.5	32667.1	9900.1	ug/L	9900.1	ppb	13:26:34
1	Sr 421.552†	82919.5	82787.8	499.27	ug/L	499.27	ppb	13:26:34
1	Sc 361.383	878232.5	878232.5	101.19	%			13:27:52
1	Y 371.029	725784.5	725784.5	99.497	%			13:27:52
1	Ag 328.068†	111857.9	110269.9	501.86	ug/L	501.86	ppb	13:27:57
1	As 188.979†	1263.9	1280.3	498.62	ug/L	498.62	ppb	13:28:17
1	B 249.677†	23090.2	23312.2	494.88	ug/L	494.88	ppb	13:27:57
1	Ba 233.527†	67142.3	66364.6	497.17	ug/L	497.17	ppb	13:27:57
1	Be 313.107†	1378752.5	1367218.9	491.90	ug/L	491.90	ppb	13:27:52
1	Cd 226.502†	48440.8	48070.7	498.37	ug/L	498.37	ppb	13:27:57
1	Co 228.616†	26625.5	26386.1	497.83	ug/L	497.83	ppb	13:27:57
1	Cr 267.716†	47890.8	47242.1	495.31	ug/L	495.31	ppb	13:27:57
1	Cu 324.752†	177617.5	168773.2	490.47	ug/L	490.47	ppb	13:27:57
1	Mn 257.610†	470696.3	464646.9	492.85	ug/L	492.85	ppb	13:27:52
1	Mo 202.031†	7912.8	7801.4	496.81	ug/L	496.81	ppb	13:28:17
1	Ni 231.604†	22004.8	21660.4	497.41	ug/L	497.41	ppb	13:27:57
1	P 214.914†	4714.8	4417.4	2392.3	ug/L	2392.3	ppb	13:28:17
1	Pb 220.353†	4401.0	4417.3	496.00	ug/L	496.00	ppb	13:28:17
1	S 181.975 Axial†	812.3	753.3	994.31	ug/L	994.31	ppb	13:28:17
1	Sb 206.836†	1639.8	1583.2	507.06	ug/L	507.06	ppb	13:28:17
1	Se 196.026†	859.6	876.3	510.64	ug/L	510.64	ppb	13:28:17
1	Si 251.611†	86797.5	85296.1	2528.6	ug/L	2528.6	ppb	13:27:57
1	Sn 189.927†	3138.0	3092.3	498.02	ug/L	498.02	ppb	13:28:17
1	Ti 334.940†	311908.5	309500.7	488.38	ug/L	488.38	ppb	13:27:57
1	Tl 190.801†	1740.3	1754.4	497.41	ug/L	497.41	ppb	13:28:17
1	U 409.014†	14693.6	17105.0	490.19	ug/L	490.19	ppb	13:27:57
1	V 292.402†	73465.3	73965.0	498.81	ug/L	498.81	ppb	13:27:57
1	Zn 213.857†	59549.3	58095.9	495.33	ug/L	495.33	ppb	13:27:57
1	SiO2†	86417.3	84877.7	5391.7	ug/L	5391.7	ppb	13:29:24
2	Sc Radial	5537.3	5537.3	99.3	%			13:26:59
2	Y RADIAL	5945.8	5945.8	98.45	%			13:26:59
2	Al 396.153Radial†	7019.4	7103.4	4870.8	ug/L	4870.8	ppb	13:26:59
2	Ca 317.933Radial†	3402.1	3408.8	4975.1	ug/L	4975.1	ppb	13:27:19
2	Fe 238.204 Radial†	568.8	562.9	5058.6	ug/L	5058.6	ppb	13:27:19
2	K 766.490 Radial†	32189.2	29673.1	4969.8	ug/L	4969.8	ppb	13:26:59
2	Mg 279.077 IEC†	151.7	150.8	5077.8	ug/L	5077.8	ppb	13:27:19
2	Na 589.592 Radial†	30602.9	32369.4	9809.8	ug/L	9809.8	ppb	13:26:59
2	Sr 421.552†	81702.7	82269.8	496.14	ug/L	496.14	ppb	13:26:59
2	Sc 361.383	873262.5	873262.5	100.62	%			13:28:23
2	Y 371.029	721749.2	721749.2	98.943	%			13:28:23

2	Ag 328.068†	110843.8	109891.1	500.15 ug/L	500.15 ppb	13:28:28
2	As 188.979†	1267.3	1290.8	502.68 ug/L	502.68 ppb	13:28:48
2	B 249.677†	22889.2	23242.3	493.38 ug/L	493.38 ppb	13:28:28
2	Ba 233.527†	66633.3	66236.5	496.21 ug/L	496.21 ppb	13:28:28
2	Be 313.107†	1370874.5	1367143.8	491.87 ug/L	491.87 ppb	13:28:23
2	Cd 226.502†	47989.6	47894.7	496.54 ug/L	496.54 ppb	13:28:28
2	Co 228.616†	26424.1	26335.8	496.89 ug/L	496.89 ppb	13:28:28
2	Cr 267.716†	47465.9	47089.3	493.71 ug/L	493.71 ppb	13:28:28
2	Cu 324.752†	175973.8	168138.5	488.63 ug/L	488.63 ppb	13:28:28
2	Mn 257.610†	468396.0	465008.1	493.24 ug/L	493.24 ppb	13:28:23
2	Mo 202.031†	7908.5	7841.6	499.37 ug/L	499.37 ppb	13:28:48
2	Ni 231.604†	21806.3	21586.8	495.72 ug/L	495.72 ppb	13:28:28
2	P 214.914†	4678.0	4407.3	2387.0 ug/L	2387.0 ppb	13:28:48
2	Pb 220.353†	4399.3	4440.3	498.59 ug/L	498.59 ppb	13:28:48
2	S 181.975 Axial†	813.6	759.2	1002.0 ug/L	1002.0 ppb	13:28:48
2	Sb 206.836†	1628.5	1581.1	506.57 ug/L	506.57 ppb	13:28:48
2	Se 196.026†	863.9	885.4	515.93 ug/L	515.93 ppb	13:28:48
2	Si 251.611†	85949.8	84941.9	2518.0 ug/L	2518.0 ppb	13:28:28
2	Sn 189.927†	3136.6	3108.5	500.64 ug/L	500.64 ppb	13:28:48
2	Ti 334.940†	309155.8	308519.2	486.84 ug/L	486.84 ppb	13:28:28
2	Tl 190.801†	1750.7	1774.5	503.08 ug/L	503.08 ppb	13:28:48
2	U 409.014†	14485.8	16981.1	486.63 ug/L	486.63 ppb	13:28:28
2	V 292.402†	72767.0	73684.2	496.97 ug/L	496.97 ppb	13:28:28
2	Zn 213.857†	58962.6	57847.8	493.20 ug/L	493.20 ppb	13:28:28
2	SiO2†	86883.4	85826.9	5452.2 ug/L	5452.2 ppb	13:29:29
3	Sc Radial	5439.0	5439.0	97.5 %		13:27:24
3	Y RADIAL	5906.3	5906.3	97.80 %		13:27:24
3	Al 396.153Radial†	6973.6	7184.2	4926.7 ug/L	4926.7 ppb	13:27:24
3	Ca 317.933Radial†	3371.3	3439.1	5019.4 ug/L	5019.4 ppb	13:27:45
3	Fe 238.204 Radial†	566.0	570.3	5124.8 ug/L	5124.8 ppb	13:27:45
3	K 766.490 Radial†	31991.7	30056.4	5034.1 ug/L	5034.1 ppb	13:27:24
3	Mg 279.077 IEC†	154.5	156.5	5268.9 ug/L	5268.9 ppb	13:27:45
3	Na 589.592 Radial†	30174.7	32487.3	9845.6 ug/L	9845.6 ppb	13:27:24
3	Sr 421.552†	81012.2	83049.0	500.84 ug/L	500.84 ppb	13:27:24
3	Sc 361.383	881292.7	881292.7	101.54 %		13:28:54
3	Y 371.029	728794.8	728794.8	99.909 %		13:28:54
3	Ag 328.068†	110410.6	108460.7	493.69 ug/L	493.69 ppb	13:28:59
3	As 188.979†	1262.4	1274.5	496.33 ug/L	496.33 ppb	13:29:19
3	B 249.677†	22786.5	22933.8	486.82 ug/L	486.82 ppb	13:28:59
3	Ba 233.527†	66290.8	65295.7	489.17 ug/L	489.17 ppb	13:28:59
3	Be 313.107†	1382061.9	1365746.6	491.35 ug/L	491.35 ppb	13:28:54
3	Cd 226.502†	47733.3	47207.7	489.40 ug/L	489.40 ppb	13:28:59
3	Co 228.616†	26230.9	25906.1	488.78 ug/L	488.78 ppb	13:28:59
3	Cr 267.716†	47330.2	46525.8	487.81 ug/L	487.81 ppb	13:28:59
3	Cu 324.752†	175270.6	165852.4	482.00 ug/L	482.00 ppb	13:28:59
3	Mn 257.610†	471375.3	463700.2	491.86 ug/L	491.86 ppb	13:28:54
3	Mo 202.031†	7906.2	7767.7	494.68 ug/L	494.68 ppb	13:29:19
3	Ni 231.604†	21724.0	21308.4	489.33 ug/L	489.33 ppb	13:28:59
3	P 214.914†	4720.5	4406.8	2387.7 ug/L	2387.7 ppb	13:29:19
3	Pb 220.353†	4388.4	4389.8	492.93 ug/L	492.93 ppb	13:29:19
3	S 181.975 Axial†	809.3	747.6	986.80 ug/L	986.80 ppb	13:29:19
3	Sb 206.836†	1633.7	1571.6	503.51 ug/L	503.51 ppb	13:29:19
3	Se 196.026†	864.4	878.0	511.97 ug/L	511.97 ppb	13:29:19
3	Si 251.611†	85631.2	83849.7	2485.6 ug/L	2485.6 ppb	13:28:59
3	Sn 189.927†	3134.2	3077.8	495.70 ug/L	495.70 ppb	13:29:19
3	Ti 334.940†	307876.4	304459.5	480.44 ug/L	480.44 ppb	13:28:59
3	Tl 190.801†	1732.7	1741.0	493.62 ug/L	493.62 ppb	13:29:19
3	U 409.014†	14327.8	16694.3	478.39 ug/L	478.39 ppb	13:28:59
3	V 292.402†	72659.1	72919.0	491.79 ug/L	491.79 ppb	13:28:59
3	Zn 213.857†	58706.5	57061.6	486.48 ug/L	486.48 ppb	13:28:59
3	SiO2†	86081.4	84250.4	5351.8 ug/L	5351.8 ppb	13:29:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877595.9	101.12	%	0.467				0.46%
Sc Radial	5520.3	99.0	%	1.33				1.35%
Y 371.029	725442.8	99.450	%	0.4846				0.49%
Y RADIAL	5955.5	98.61	%	0.905				0.92%
Ag 328.068†	109540.5	498.57	ug/L	4.309	498.57	ppb	4.309	0.86%

```
   QC value within limits for Ag 328.068  Recovery = 99.71%
Al 396.153Radial†       7138.2      4894.9 ug/L        28.74      4894.9 ppb        28.74   0.59%
   QC value within limits for Al 396.153Radial  Recovery = 97.90%
As 188.979†             1281.9      499.21 ug/L        3.213      499.21 ppb        3.213   0.64%
   QC value within limits for As 188.979  Recovery = 99.84%
B 249.677†             23162.8      491.69 ug/L        4.285      491.69 ppb        4.285   0.87%
   QC value within limits for B 249.677  Recovery = 98.34%
Ba 233.527†            65965.6      494.18 ug/L        4.367      494.18 ppb        4.367   0.88%
   QC value within limits for Ba 233.527  Recovery = 98.84%
Be 313.107†          1366703.1      491.70 ug/L        0.306      491.70 ppb        0.306   0.06%
   QC value within limits for Be 313.107  Recovery = 98.34%
Ca 317.933Radial†       3400.9      4963.5 ug/L        62.44      4963.5 ppb        62.44   1.26%
   QC value within limits for Ca 317.933Radial  Recovery = 99.27%
Cd 226.502†            47724.4      494.77 ug/L        4.737      494.77 ppb        4.737   0.96%
   QC value within limits for Cd 226.502  Recovery = 98.95%
Co 228.616†            26209.4      494.50 ug/L        4.972      494.50 ppb        4.972   1.01%
   QC value within limits for Co 228.616  Recovery = 98.90%
Cr 267.716†            46952.4      492.28 ug/L        3.953      492.28 ppb        3.953   0.80%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           167588.0      487.03 ug/L        4.459      487.03 ppb        4.459   0.92%
   QC value within limits for Cu 324.752  Recovery = 97.41%
Fe 238.204 Radial†       563.8      5066.5 ug/L        54.81      5066.5 ppb        54.81   1.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.33%
K 766.490 Radial†      29839.8      4997.7 ug/L        32.96      4997.7 ppb        32.96   0.66%
   QC value within limits for K 766.490 Radial  Recovery = 99.95%
Mg 279.077 IEC†          152.4      5130.8 ug/L       120.71      5130.8 ppb       120.71   2.35%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.62%
Mn 257.610†           464451.7      492.65 ug/L        0.714      492.65 ppb        0.714   0.14%
   QC value within limits for Mn 257.610  Recovery = 98.53%
Mo 202.031†             7803.6      496.95 ug/L        2.352      496.95 ppb        2.352   0.47%
   QC value within limits for Mo 202.031  Recovery = 99.39%
Na 589.592 Radial†     32507.9      9851.8 ug/L        45.43      9851.8 ppb        45.43   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.52%
Ni 231.604†            21518.5      494.15 ug/L        4.264      494.15 ppb        4.264   0.86%
   QC value within limits for Ni 231.604  Recovery = 98.83%
P 214.914†              4410.5      2389.0 ug/L         2.92      2389.0 ppb         2.92   0.12%
   QC value within limits for P 214.914  Recovery = 95.56%
Pb 220.353†             4415.8      495.84 ug/L        2.831      495.84 ppb        2.831   0.57%
   QC value within limits for Pb 220.353  Recovery = 99.17%
S 181.975 Axial†         753.4      994.38 ug/L        7.617      994.38 ppb        7.617   0.77%
   QC value within limits for S 181.975 Axial  Recovery = 99.44%
Sb 206.836†             1578.6      505.71 ug/L        1.927      505.71 ppb        1.927   0.38%
   QC value within limits for Sb 206.836  Recovery = 101.14%
Se 196.026†              879.9      512.85 ug/L        2.754      512.85 ppb        2.754   0.54%
   QC value within limits for Se 196.026  Recovery = 102.57%
Si 251.611†            84695.9      2510.7 ug/L        22.43      2510.7 ppb        22.43   0.89%
   QC value within limits for Si 251.611  Recovery = 100.43%
Sn 189.927†             3092.9      498.12 ug/L        2.471      498.12 ppb        2.471   0.50%
   QC value within limits for Sn 189.927  Recovery = 99.62%
Sr 421.552†            82702.2      498.75 ug/L        2.392      498.75 ppb        2.392   0.48%
   QC value within limits for Sr 421.552  Recovery = 99.75%
Ti 334.940†           307493.1      485.22 ug/L        4.212      485.22 ppb        4.212   0.87%
   QC value within limits for Ti 334.940  Recovery = 97.04%
Tl 190.801†             1756.6      498.04 ug/L        4.758      498.04 ppb        4.758   0.96%
   QC value within limits for Tl 190.801  Recovery = 99.61%
U 409.014†             16926.8      485.07 ug/L        6.055      485.07 ppb        6.055   1.25%
   QC value within limits for U 409.014  Recovery = 97.01%
V 292.402†             73522.8      495.86 ug/L        3.636      495.86 ppb        3.636   0.73%
   QC value within limits for V 292.402  Recovery = 99.17%
Zn 213.857†            57668.4      491.67 ug/L        4.622      491.67 ppb        4.622   0.94%
   QC value within limits for Zn 213.857  Recovery = 98.33%
SiO2†                  84985.0      5398.6 ug/L        50.58      5398.6 ppb        50.58   0.94%
   QC value within limits for SiO2  Recovery = 100.96%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:31:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5346.3	5346.3	95.9	%			13:33:38
1	Y RADIAL	5800.0	5800.0	96.04	%			13:33:38
1	Al 396.153Radial†	-26.7	7.5	5.1179	ug/L	5.1179	ppb	13:33:38
1	Ca 317.933Radial†	19.3	3.3	4.7457	ug/L	4.7457	ppb	13:33:58
1	Fe 238.204 Radial†	9.2	-0.3	-2.2396	ug/L	-2.2396	ppb	13:33:58
1	K 766.490 Radial†	2879.5	263.6	44.222	ug/L	44.222	ppb	13:33:38
1	Mg 279.077 IEC†	1.5	-0.4	-12.037	ug/L	-12.037	ppb	13:33:58
1	Na 589.592 Radial†	-1520.7	-31.8	-9.6462	ug/L	-9.6462	ppb	13:33:38
1	Sr 421.552†	-22.5	-23.3	-0.1405	ug/L	-0.1405	ppb	13:33:38
1	Sc 361.383	868207.5	868207.5	100.03	%			13:34:54
1	Y 371.029	729184.9	729184.9	99.963	%			13:34:54
1	Ag 328.068†	356.4	82.3	0.3741	ug/L	0.3741	ppb	13:34:54
1	As 188.979†	-26.8	4.5	1.7496	ug/L	1.7496	ppb	13:35:14
1	B 249.677†	-239.3	254.0	5.4127	ug/L	5.4127	ppb	13:35:14
1	Ba 233.527†	-19.8	-8.7	-0.0655	ug/L	-0.0655	ppb	13:35:14
1	Be 313.107†	-4601.7	62.5	0.0224	ug/L	0.0224	ppb	13:34:54
1	Cd 226.502†	-195.7	3.3	0.0341	ug/L	0.0341	ppb	13:35:14
1	Co 228.616†	-69.4	4.0	0.0772	ug/L	0.0772	ppb	13:35:14
1	Cr 267.716†	88.2	2.2	0.0235	ug/L	0.0235	ppb	13:35:14
1	Cu 324.752†	6735.0	-25.1	-0.0732	ug/L	-0.0732	ppb	13:34:54
1	Mn 257.610†	555.9	35.6	0.0377	ug/L	0.0377	ppb	13:35:14
1	Mo 202.031†	23.7	5.3	0.3364	ug/L	0.3364	ppb	13:35:14
1	Ni 231.604†	89.9	3.9	0.0895	ug/L	0.0895	ppb	13:35:14
1	P 214.914†	223.3	-18.8	-10.470	ug/L	-10.470	ppb	13:35:14
1	Pb 220.353†	-67.2	0.8	0.0948	ug/L	0.0948	ppb	13:35:14
1	S 181.975 Axial†	50.8	1.4	1.8759	ug/L	1.8759	ppb	13:35:14
1	Sb 206.836†	42.7	5.3	1.6775	ug/L	1.6775	ppb	13:35:14
1	Se 196.026†	-33.0	-6.2	-3.5157	ug/L	-3.5157	ppb	13:35:14
1	Si 251.611†	519.5	37.5	1.0981	ug/L	1.0981	ppb	13:35:14
1	Sn 189.927†	8.0	-0.9	-0.1417	ug/L	-0.1417	ppb	13:35:14
1	Ti 334.940†	-1257.3	-0.6	0.0009	ug/L	0.0009	ppb	13:34:54
1	Tl 190.801†	-35.7	-1.1	-0.3026	ug/L	-0.3026	ppb	13:35:14
1	U 409.014†	-2711.5	-126.6	-3.6397	ug/L	-3.6397	ppb	13:34:54
1	V 292.402†	-1375.0	-11.8	-0.0809	ug/L	-0.0809	ppb	13:34:54
1	Zn 213.857†	772.7	18.6	0.1597	ug/L	0.1597	ppb	13:35:14
1	SiO2†	539.4	14.8	0.8991	ug/L	0.8991	ppb	13:36:10
2	Sc Radial	5699.5	5699.5	102	%			13:34:03
2	Y RADIAL	6171.4	6171.4	102.2	%			13:34:03
2	Al 396.153Radial†	-32.7	3.3	2.2838	ug/L	2.2838	ppb	13:34:03
2	Ca 317.933Radial†	20.7	3.4	4.9526	ug/L	4.9526	ppb	13:34:23
2	Fe 238.204 Radial†	8.7	-1.4	-12.324	ug/L	-12.324	ppb	13:34:23
2	K 766.490 Radial†	2859.8	58.2	9.7571	ug/L	9.7571	ppb	13:34:03
2	Mg 279.077 IEC†	2.8	0.8	26.593	ug/L	26.593	ppb	13:34:23
2	Na 589.592 Radial†	-1537.4	50.1	15.173	ug/L	15.173	ppb	13:34:03
2	Sr 421.552†	-12.6	-12.1	-0.0728	ug/L	-0.0728	ppb	13:34:03
2	Sc 361.383	867538.8	867538.8	99.957	%			13:35:20
2	Y 371.029	729479.4	729479.4	100.00	%			13:35:20
2	Ag 328.068†	313.4	39.5	0.1791	ug/L	0.1791	ppb	13:35:20
2	As 188.979†	-30.6	0.7	0.2618	ug/L	0.2618	ppb	13:35:40
2	B 249.677†	-212.3	280.8	5.9857	ug/L	5.9857	ppb	13:35:40
2	Ba 233.527†	-14.4	-3.4	-0.0247	ug/L	-0.0247	ppb	13:35:40
2	Be 313.107†	-4514.4	146.2	0.0526	ug/L	0.0526	ppb	13:35:20
2	Cd 226.502†	-208.2	-9.4	-0.0963	ug/L	-0.0963	ppb	13:35:40
2	Co 228.616†	-78.2	-4.8	-0.0888	ug/L	-0.0888	ppb	13:35:40
2	Cr 267.716†	101.7	15.7	0.1661	ug/L	0.1661	ppb	13:35:40
2	Cu 324.752†	6718.7	-36.3	-0.1060	ug/L	-0.1060	ppb	13:35:20
2	Mn 257.610†	509.6	-10.3	-0.0127	ug/L	-0.0127	ppb	13:35:40
2	Mo 202.031†	25.6	7.2	0.4577	ug/L	0.4577	ppb	13:35:40
2	Ni 231.604†	82.4	-3.5	-0.0809	ug/L	-0.0809	ppb	13:35:40

2	P 214.914†	232.5	-9.4	-5.2314 ug/L	-5.2314 ppb	13:35:40
2	Pb 220.353†	-83.3	-15.4	-1.7197 ug/L	-1.7197 ppb	13:35:40
2	S 181.975 Axial†	47.5	-1.9	-2.5385 ug/L	-2.5385 ppb	13:35:40
2	Sb 206.836†	36.1	-1.2	-0.3980 ug/L	-0.3980 ppb	13:35:40
2	Se 196.026†	-29.6	-2.8	-1.5950 ug/L	-1.5950 ppb	13:35:40
2	Si 251.611†	507.2	25.7	0.7571 ug/L	0.7571 ppb	13:35:40
2	Sn 189.927†	4.7	-4.1	-0.6626 ug/L	-0.6626 ppb	13:35:40
2	Ti 334.940†	-1234.4	21.3	0.0353 ug/L	0.0353 ppb	13:35:20
2	Tl 190.801†	-37.6	-3.1	-0.8684 ug/L	-0.8684 ppb	13:35:40
2	U 409.014†	-2705.5	-122.7	-3.5258 ug/L	-3.5258 ppb	13:35:20
2	V 292.402†	-1311.3	50.9	0.3408 ug/L	0.3408 ppb	13:35:20
2	Zn 213.857†	776.7	23.2	0.2006 ug/L	0.2006 ppb	13:35:40
2	SiO2†	527.5	3.3	0.1901 ug/L	0.1901 ppb	13:36:15
3	Sc Radial	5663.2	5663.2	102 %		13:34:28
3	Y RADIAL	6182.8	6182.8	102.4 %		13:34:28
3	Al 396.153Radial†	-31.4	4.4	3.0200 ug/L	3.0200 ppb	13:34:28
3	Ca 317.933Radial†	19.3	2.1	3.1081 ug/L	3.1081 ppb	13:34:48
3	Fe 238.204 Radial†	6.2	-3.8	-33.863 ug/L	-33.863 ppb	13:34:48
3	K 766.490 Radial†	2949.9	164.8	27.646 ug/L	27.646 ppb	13:34:28
3	Mg 279.077 IEC†	3.9	2.0	66.482 ug/L	66.482 ppb	13:34:48
3	Na 589.592 Radial†	-1531.6	46.1	13.984 ug/L	13.984 ppb	13:34:28
3	Sr 421.552†	-45.2	-44.3	-0.2672 ug/L	-0.2672 ppb	13:34:28
3	Sc 361.383	864816.8	864816.8	99.643 %		13:35:45
3	Y 371.029	727738.8	727738.8	99.764 %		13:35:45
3	Ag 328.068†	314.2	41.3	0.1754 ug/L	0.1754 ppb	13:35:45
3	As 188.979†	-28.2	3.0	1.1584 ug/L	1.1584 ppb	13:36:05
3	B 249.677†	-230.7	261.7	5.5816 ug/L	5.5816 ppb	13:36:05
3	Ba 233.527†	-1.7	9.4	0.0686 ug/L	0.0686 ppb	13:36:05
3	Be 313.107†	-4512.8	133.6	0.0479 ug/L	0.0479 ppb	13:35:45
3	Cd 226.502†	-200.3	-2.1	-0.0182 ug/L	-0.0182 ppb	13:36:05
3	Co 228.616†	-76.0	-2.9	-0.0531 ug/L	-0.0531 ppb	13:36:05
3	Cr 267.716†	75.1	-10.7	-0.1123 ug/L	-0.1123 ppb	13:36:05
3	Cu 324.752†	6740.5	6.8	0.0180 ug/L	0.0180 ppb	13:35:45
3	Mn 257.610†	513.3	-5.0	-0.0099 ug/L	-0.0099 ppb	13:36:05
3	Mo 202.031†	19.5	1.1	0.0693 ug/L	0.0693 ppb	13:36:05
3	Ni 231.604†	99.3	13.7	0.3155 ug/L	0.3155 ppb	13:36:05
3	P 214.914†	235.6	-5.5	-3.0759 ug/L	-3.0759 ppb	13:36:05
3	Pb 220.353†	-72.6	-4.9	-0.5475 ug/L	-0.5475 ppb	13:36:05
3	S 181.975 Axial†	55.0	5.8	7.6569 ug/L	7.6569 ppb	13:36:05
3	Sb 206.836†	37.7	0.5	0.1481 ug/L	0.1481 ppb	13:36:05
3	Se 196.026†	-22.4	4.3	2.3375 ug/L	2.3375 ppb	13:36:05
3	Si 251.611†	506.2	26.3	0.7731 ug/L	0.7731 ppb	13:36:05
3	Sn 189.927†	6.1	-2.7	-0.4327 ug/L	-0.4327 ppb	13:36:05
3	Ti 334.940†	-1275.6	-23.9	-0.0375 ug/L	-0.0375 ppb	13:35:45
3	Tl 190.801†	-35.2	-0.8	-0.2183 ug/L	-0.2183 ppb	13:36:05
3	U 409.014†	-2572.5	2.3	0.0706 ug/L	0.0706 ppb	13:35:45
3	V 292.402†	-1376.4	-18.6	-0.1162 ug/L	-0.1162 ppb	13:35:45
3	Zn 213.857†	759.1	8.0	0.0676 ug/L	0.0676 ppb	13:36:05
3	SiO2†	523.7	1.1	0.0517 ug/L	0.0517 ppb	13:36:21

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866854.4	99.878	%	0.2069				0.21%
Sc Radial	5569.7	99.9	%	3.48				3.49%
Y 371.029	728801.0	99.910	%	0.1277				0.13%
Y RADIAL	6051.4	100.2	%	3.61				3.60%
Ag 328.068†	54.3	0.2429	ug/L	0.11369	0.2429	ppb	0.11369	46.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.1	3.4739	ug/L	1.47053	3.4739	ppb	1.47053	42.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	1.0566	ug/L	0.74908	1.0566	ppb	0.74908	70.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	265.5	5.6600	ug/L	0.29445	5.6600	ppb	0.29445	5.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.9	-0.0072	ug/L	0.06878	-0.0072	ppb	0.06878	955.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	114.1	0.0410	ug/L	0.01621	0.0410	ppb	0.01621	39.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.9	4.2688	ug/L	1.01047	4.2688	ppb	1.01047	23.67%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -2.7     -0.0268 ug/L      0.06560     -0.0268 ppb       0.06560 244.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -1.2     -0.0216 ug/L      0.08741     -0.0216 ppb       0.08741 405.18%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               2.4      0.0258 ug/L      0.13925      0.0258 ppb       0.13925 540.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -18.2     -0.0537 ug/L      0.06423     -0.0537 ppb       0.06423 119.55%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.8     -16.142 ug/L      16.1538     -16.142 ppb       16.1538 100.07%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       162.2      27.208 ug/L      17.2368      27.208 ppb       17.2368  63.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.8      27.013 ug/L      39.2611      27.013 ppb       39.2611 145.34%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               6.8      0.0050 ug/L      0.02833      0.0050 ppb       0.02833 561.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.5      0.2878 ug/L      0.19869      0.2878 ppb       0.19869  69.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       21.5      6.5034 ug/L     13.99861      6.5034 ppb      13.99861 215.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               4.7      0.1080 ug/L      0.19885      0.1080 ppb       0.19885 184.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -11.2     -6.2590 ug/L      3.80255     -6.2590 ppb       3.80255  60.75%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -6.5     -0.7241 ug/L      0.92003     -0.7241 ppb       0.92003 127.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.8      2.3314 ug/L      5.11294      2.3314 ppb       5.11294 219.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               1.5      0.4758 ug/L      1.07586      0.4758 ppb       1.07586 226.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.6     -0.9244 ug/L      2.98365     -0.9244 ppb       2.98365 322.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              29.8      0.8761 ug/L      0.19242      0.8761 ppb       0.19242  21.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -2.6     -0.4123 ug/L      0.26106     -0.4123 ppb       0.26106  63.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -26.6     -0.1602 ug/L      0.09867     -0.1602 ppb       0.09867  61.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -1.1     -0.0005 ug/L      0.03644     -0.0005 ppb       0.03644 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.6     -0.4631 ug/L      0.35351     -0.4631 ppb       0.35351  76.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -82.3     -2.3650 ug/L      2.11001     -2.3650 ppb       2.11001  89.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                6.8      0.0479 ug/L      0.25428      0.0479 ppb       0.25428 530.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              16.6      0.1427 ug/L      0.06814      0.1427 ppb       0.06814  47.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     6.4      0.3803 ug/L      0.45458      0.3803 ppb       0.45458 119.54%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: 1201985635|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 12/11/2009 13:38:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985635|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5512.8	5512.8	98.9	%			13:40:24
1	Y RADIAL	5949.0	5949.0	98.51	%			13:40:24
1	Al 396.153Radial†	24.4	60.0	41.285	ug/L	41.285	ppb	13:40:24
1	Ca 317.933Radial†	1832.5	1836.5	2680.4	ug/L	2680.4	ppb	13:40:44
1	Fe 238.204 Radial†	15.0	5.3	47.441	ug/L	47.441	ppb	13:40:44
1	K 766.490 Radial†	6334.0	3666.8	613.59	ug/L	613.59	ppb	13:40:24
1	Mg 279.077 IEC†	19.4	17.7	596.48	ug/L	596.48	ppb	13:40:44
1	Na 589.592 Radial†	7765.0	9407.8	2851.1	ug/L	2851.1	ppb	13:40:24
1	Sr 421.552†	1325.0	1340.3	8.0591	ug/L	8.0591	ppb	13:40:24
1	Sc 361.383	858883.6	858883.6	98.959	%			13:41:40
1	Y 371.029	719168.5	719168.5	98.590	%			13:41:40
1	Ag 328.068†	348.1	77.7	0.3271	ug/L	0.3271	ppb	13:41:40
1	As 188.979†	-32.5	-1.5	-0.5911	ug/L	-0.5911	ppb	13:42:01
1	B 249.677†	174.8	669.9	14.269	ug/L	14.269	ppb	13:42:01
1	Ba 233.527†	359.7	374.6	2.8001	ug/L	2.8001	ppb	13:42:01
1	Be 313.107†	-4476.5	139.1	0.0519	ug/L	0.0519	ppb	13:41:40
1	Cd 226.502†	-199.6	-2.7	-0.0327	ug/L	-0.0327	ppb	13:42:01
1	Co 228.616†	-73.2	-0.5	-0.0090	ug/L	-0.0090	ppb	13:42:01
1	Cr 267.716†	156.1	71.7	0.7509	ug/L	0.7509	ppb	13:42:01
1	Cu 324.752†	7941.7	1267.3	3.6835	ug/L	3.6835	ppb	13:41:40
1	Mn 257.610†	2896.5	2406.8	2.5444	ug/L	2.5444	ppb	13:41:40
1	Mo 202.031†	33.9	15.9	1.0130	ug/L	1.0130	ppb	13:42:01
1	Ni 231.604†	112.3	27.6	0.6335	ug/L	0.6335	ppb	13:42:01
1	P 214.914†	342.4	104.0	57.353	ug/L	57.353	ppb	13:42:01
1	Pb 220.353†	-48.6	18.8	2.1125	ug/L	2.1125	ppb	13:42:01
1	S 181.975 Axial†	1400.7	1366.0	1804.8	ug/L	1804.8	ppb	13:42:01
1	Sb 206.836†	50.1	13.2	4.0640	ug/L	4.0640	ppb	13:42:01
1	Se 196.026†	-20.4	6.1	3.6136	ug/L	3.6136	ppb	13:42:01
1	Si 251.611†	21503.7	21248.1	632.65	ug/L	632.65	ppb	13:41:40
1	Sn 189.927†	-32.0	-41.2	-6.3423	ug/L	-6.3423	ppb	13:42:01
1	Ti 334.940†	-628.2	621.4	1.1209	ug/L	1.1209	ppb	13:41:40
1	Tl 190.801†	-38.2	-4.0	-1.0985	ug/L	-1.0985	ppb	13:42:01
1	U 409.014†	-2600.4	-43.7	-1.2647	ug/L	-1.2647	ppb	13:41:40
1	V 292.402†	-1397.3	-49.3	-0.3109	ug/L	-0.3109	ppb	13:41:40
1	Zn 213.857†	1496.4	758.3	6.4891	ug/L	6.4891	ppb	13:42:01
1	SiO2†	21410.7	21111.4	1347.1	ug/L	1347.1	ppb	13:42:57
2	Sc Radial	5173.3	5173.3	92.8	%			13:40:49
2	Y RADIAL	5586.4	5586.4	92.50	%			13:40:49
2	Al 396.153Radial†	5.2	40.9	28.152	ug/L	28.152	ppb	13:40:49
2	Ca 317.933Radial†	1904.3	2035.6	2970.9	ug/L	2970.9	ppb	13:41:09
2	Fe 238.204 Radial†	16.0	7.3	65.602	ug/L	65.602	ppb	13:41:09
2	K 766.490 Radial†	6433.2	4194.2	701.94	ug/L	701.94	ppb	13:40:49
2	Mg 279.077 IEC†	17.4	16.8	565.23	ug/L	565.23	ppb	13:41:09
2	Na 589.592 Radial†	7972.6	10147.0	3075.1	ug/L	3075.1	ppb	13:40:49
2	Sr 421.552†	1378.7	1486.2	8.9358	ug/L	8.9358	ppb	13:40:49
2	Sc 361.383	850722.9	850722.9	98.019	%			13:42:06
2	Y 371.029	710977.9	710977.9	97.467	%			13:42:06
2	Ag 328.068†	269.3	0.7	-0.0152	ug/L	-0.0152	ppb	13:42:06
2	As 188.979†	-21.8	9.1	3.5178	ug/L	3.5178	ppb	13:42:26
2	B 249.677†	147.9	644.1	13.717	ug/L	13.717	ppb	13:42:26
2	Ba 233.527†	330.1	347.8	2.6010	ug/L	2.6010	ppb	13:42:26
2	Be 313.107†	-4536.6	34.4	0.0139	ug/L	0.0139	ppb	13:42:06
2	Cd 226.502†	-171.2	24.3	0.2458	ug/L	0.2458	ppb	13:42:26
2	Co 228.616†	-72.0	-0.0	-0.0016	ug/L	-0.0016	ppb	13:42:26
2	Cr 267.716†	141.3	58.1	0.6111	ug/L	0.6111	ppb	13:42:26
2	Cu 324.752†	7838.2	1238.7	3.6014	ug/L	3.6014	ppb	13:42:06
2	Mn 257.610†	2899.0	2437.5	2.5793	ug/L	2.5793	ppb	13:42:06
2	Mo 202.031†	19.6	1.5	0.1024	ug/L	0.1024	ppb	13:42:26
2	Ni 231.604†	116.7	33.1	0.7608	ug/L	0.7608	ppb	13:42:26

2	P 214.914†	365.6	130.9	72.387 ug/L	72.387 ppb	13:42:26
2	Pb 220.353†	-60.1	6.7	0.7454 ug/L	0.7454 ppb	13:42:26
2	S 181.975 Axial†	1388.2	1366.9	1805.9 ug/L	1805.9 ppb	13:42:26
2	Sb 206.836†	44.1	7.6	2.2623 ug/L	2.2623 ppb	13:42:26
2	Se 196.026†	-28.7	-2.5	-1.1926 ug/L	-1.1926 ppb	13:42:26
2	Si 251.611†	21387.3	21337.8	635.31 ug/L	635.31 ppb	13:42:06
2	Sn 189.927†	-31.4	-40.9	-6.2729 ug/L	-6.2729 ppb	13:42:26
2	Ti 334.940†	-751.9	489.2	0.9296 ug/L	0.9296 ppb	13:42:06
2	Tl 190.801†	-45.7	-12.1	-3.3757 ug/L	-3.3757 ppb	13:42:26
2	U 409.014†	-2741.1	-212.5	-6.1202 ug/L	-6.1202 ppb	13:42:06
2	V 292.402†	-1367.1	-32.0	-0.2217 ug/L	-0.2217 ppb	13:42:06
2	Zn 213.857†	1484.9	761.0	6.5117 ug/L	6.5117 ppb	13:42:26
2	SiO2†	21465.9	21375.2	1363.9 ug/L	1363.9 ppb	13:43:02
3	Sc Radial	5509.5	5509.5	98.8 %		13:41:14
3	Y RADIAL	6014.4	6014.4	99.59 %		13:41:14
3	Al 396.153Radial†	1.8	37.1	25.522 ug/L	25.522 ppb	13:41:14
3	Ca 317.933Radial†	1901.6	1907.6	2784.1 ug/L	2784.1 ppb	13:41:34
3	Fe 238.204 Radial†	14.9	5.2	46.560 ug/L	46.560 ppb	13:41:34
3	K 766.490 Radial†	6267.3	3603.2	602.92 ug/L	602.92 ppb	13:41:14
3	Mg 279.077 IEC†	18.8	17.1	574.37 ug/L	574.37 ppb	13:41:34
3	Na 589.592 Radial†	7666.9	9313.3	2822.5 ug/L	2822.5 ppb	13:41:14
3	Sr 421.552†	1320.0	1336.0	8.0323 ug/L	8.0323 ppb	13:41:14
3	Sc 361.383	851428.3	851428.3	98.100 %		13:42:31
3	Y 371.029	713047.6	713047.6	97.751 %		13:42:31
3	Ag 328.068†	285.9	17.4	0.0585 ug/L	0.0585 ppb	13:42:31
3	As 188.979†	-24.3	6.5	2.5229 ug/L	2.5229 ppb	13:42:51
3	B 249.677†	197.5	694.5	14.795 ug/L	14.795 ppb	13:42:51
3	Ba 233.527†	343.0	360.8	2.6973 ug/L	2.6973 ppb	13:42:51
3	Be 313.107†	-4444.6	131.9	0.0491 ug/L	0.0491 ppb	13:42:31
3	Cd 226.502†	-210.2	-15.3	-0.1632 ug/L	-0.1632 ppb	13:42:51
3	Co 228.616†	-81.0	-9.2	-0.1720 ug/L	-0.1720 ppb	13:42:51
3	Cr 267.716†	124.4	40.8	0.4296 ug/L	0.4296 ppb	13:42:51
3	Cu 324.752†	7926.8	1322.5	3.8436 ug/L	3.8436 ppb	13:42:31
3	Mn 257.610†	2975.9	2513.4	2.6577 ug/L	2.6577 ppb	13:42:31
3	Mo 202.031†	31.2	13.4	0.8531 ug/L	0.8531 ppb	13:42:51
3	Ni 231.604†	120.5	36.9	0.8480 ug/L	0.8480 ppb	13:42:51
3	P 214.914†	357.7	122.6	67.724 ug/L	67.724 ppb	13:42:51
3	Pb 220.353†	-77.7	-11.2	-1.2546 ug/L	-1.2546 ppb	13:42:51
3	S 181.975 Axial†	1387.5	1364.9	1803.3 ug/L	1803.3 ppb	13:42:51
3	Sb 206.836†	49.3	12.9	3.9672 ug/L	3.9672 ppb	13:42:51
3	Se 196.026†	-21.5	4.9	2.8904 ug/L	2.8904 ppb	13:42:51
3	Si 251.611†	21312.8	21243.8	632.53 ug/L	632.53 ppb	13:42:31
3	Sn 189.927†	-29.0	-38.4	-5.8925 ug/L	-5.8925 ppb	13:42:51
3	Ti 334.940†	-699.8	542.9	1.0051 ug/L	1.0051 ppb	13:42:31
3	Tl 190.801†	-39.6	-5.8	-1.6100 ug/L	-1.6100 ppb	13:42:51
3	U 409.014†	-2774.5	-244.2	-7.0286 ug/L	-7.0286 ppb	13:42:31
3	V 292.402†	-1343.0	-6.3	-0.0383 ug/L	-0.0383 ppb	13:42:31
3	Zn 213.857†	1476.2	751.0	6.4256 ug/L	6.4256 ppb	13:42:51
3	SiO2†	21398.4	21288.3	1358.4 ug/L	1358.4 ppb	13:43:07

Mean Data: 1201985635|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	853678.3	98.360	%	0.5210				0.53%
Sc Radial	5398.5	96.8	%	3.50				3.61%
Y 371.029	714398.0	97.936	%	0.5839				0.60%
Y RADIAL	5849.9	96.87	%	3.817				3.94%
Ag 328.068†	31.9	0.1235	ug/L	0.18016	0.1235	ppb	0.18016	145.92%
Al 396.153Radial†	46.0	31.653	ug/L	8.4447	31.653	ppb	8.4447	26.68%
As 188.979†	4.7	1.8166	ug/L	2.14358	1.8166	ppb	2.14358	118.00%
B 249.677†	669.5	14.260	ug/L	0.5388	14.260	ppb	0.5388	3.78%
Ba 233.527†	361.1	2.6995	ug/L	0.09957	2.6995	ppb	0.09957	3.69%
Be 313.107†	101.8	0.0383	ug/L	0.02118	0.0383	ppb	0.02118	55.37%
Ca 317.933Radial†	1926.6	2811.8	ug/L	147.26	2811.8	ppb	147.26	5.24%
Cd 226.502†	2.1	0.0166	ug/L	0.20896	0.0166	ppb	0.20896	>999.9%
Co 228.616†	-3.2	-0.0609	ug/L	0.09630	-0.0609	ppb	0.09630	158.24%
Cr 267.716†	56.8	0.5972	ug/L	0.16109	0.5972	ppb	0.16109	26.97%
Cu 324.752†	1276.2	3.7095	ug/L	0.12318	3.7095	ppb	0.12318	3.32%
Fe 238.204 Radial†	5.9	53.201	ug/L	10.7489	53.201	ppb	10.7489	20.20%
K 766.490 Radial†	3821.4	639.49	ug/L	54.350	639.49	ppb	54.350	8.50%

Mg 279.077 IEC†	17.2	578.70	ug/L	16.070	578.70	ppb	16.070	2.78%
Mn 257.610†	2452.5	2.5938	ug/L	0.05803	2.5938	ppb	0.05803	2.24%
Mo 202.031†	10.3	0.6561	ug/L	0.48618	0.6561	ppb	0.48618	74.10%
Na 589.592 Radial†	9622.7	2916.2	ug/L	138.36	2916.2	ppb	138.36	4.74%
Ni 231.604†	32.5	0.7474	ug/L	0.10787	0.7474	ppb	0.10787	14.43%
P 214.914†	119.2	65.821	ug/L	7.6955	65.821	ppb	7.6955	11.69%
Pb 220.353†	4.8	0.5344	ug/L	1.69344	0.5344	ppb	1.69344	316.87%
S 181.975 Axial†	1366.0	1804.7	ug/L	1.29	1804.7	ppb	1.29	0.07%
Sb 206.836†	11.2	3.4312	ug/L	1.01341	3.4312	ppb	1.01341	29.54%
Se 196.026†	2.8	1.7705	ug/L	2.59144	1.7705	ppb	2.59144	146.37%
Si 251.611†	21276.6	633.50	ug/L	1.571	633.50	ppb	1.571	0.25%
Sn 189.927†	-40.2	-6.1693	ug/L	0.24215	-6.1693	ppb	0.24215	3.93%
Sr 421.552†	1387.5	8.3424	ug/L	0.51410	8.3424	ppb	0.51410	6.16%
Ti 334.940†	551.2	1.0185	ug/L	0.09638	1.0185	ppb	0.09638	9.46%
Tl 190.801†	-7.3	-2.0281	ug/L	1.19476	-2.0281	ppb	1.19476	58.91%
U 409.014†	-166.8	-4.8045	ug/L	3.09901	-4.8045	ppb	3.09901	64.50%
V 292.402†	-29.2	-0.1903	ug/L	0.13897	-0.1903	ppb	0.13897	73.03%
Zn 213.857†	756.7	6.4755	ug/L	0.04461	6.4755	ppb	0.04461	0.69%
SiO2†	21258.3	1356.4	ug/L	8.57	1356.4	ppb	8.57	0.63%

Sequence No.: 4
Sample ID: 1201985636|928610|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 12/11/2009 13:45:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985636|928610|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5555.2	5555.2	99.6	%			13:47:30
1	Y RADIAL	6371.3	6371.3	105.5	%			13:47:30
1	Al 396.153Radial†	52370.2	52599.0	36207	ug/L	36207	ppb	13:47:10
1	Ca 317.933Radial†	14050.4	14085.4	20558	ug/L	20558	ppb	13:47:10
1	Fe 238.204 Radial†	11296.2	11328.1	101500	ug/L	101500	ppb	13:47:10
1	K 766.490 Radial†	76121.7	73663.5	12340	ug/L	12340	ppb	13:47:10
1	Mg 279.077 IEC†	470.5	470.3	15738	ug/L	15738	ppb	13:47:30
1	Na 589.592 Radial†	13305.0	14908.3	4518.1	ug/L	4518.1	ppb	13:47:10
1	Sr 421.552†	148221.3	148769.4	897.08	ug/L	897.08	ppb	13:47:10
1	Sc 361.383	882468.5	882468.5	101.68	%			13:48:29
1	Y 371.029	780562.1	780562.1	107.01	%			13:48:29
1	Ag 328.068†	148703.8	145977.5	695.62	ug/L	695.62	ppb	13:48:29
1	As 188.979†	3498.8	3472.4	1370.8	ug/L	1370.8	ppb	13:48:49
1	B 249.677†	34495.1	34419.5	718.96	ug/L	718.96	ppb	13:48:29
1	Ba 233.527†	339463.3	333876.4	2500.3	ug/L	2500.3	ppb	13:48:29
1	Be 313.107†	1318502.1	1301421.5	470.85	ug/L	470.85	ppb	13:48:29
1	Cd 226.502†	61664.5	60846.6	621.24	ug/L	621.24	ppb	13:48:29
1	Co 228.616†	22980.2	22674.7	424.44	ug/L	424.44	ppb	13:48:49
1	Cr 267.716†	38286.5	37569.1	396.53	ug/L	396.53	ppb	13:48:29
1	Cu 324.752†	200406.7	190344.0	558.05	ug/L	558.05	ppb	13:48:29
1	Mn 257.610†	1852474.8	1821405.7	1940.2	ug/L	1940.2	ppb	13:48:29
1	Mo 202.031†	6940.8	6807.9	440.43	ug/L	440.43	ppb	13:48:49
1	Ni 231.604†	23328.9	22858.2	524.98	ug/L	524.98	ppb	13:48:49
1	P 214.914†	7517.9	7151.9	3842.6	ug/L	3842.6	ppb	13:48:49
1	Pb 220.353†	7916.7	7854.1	879.64	ug/L	879.64	ppb	13:48:49
1	S 181.975 Axial†	1609.3	1533.4	2018.7	ug/L	2018.7	ppb	13:48:49
1	Sb 206.836†	1735.0	1669.0	534.09	ug/L	534.09	ppb	13:48:49
1	Se 196.026†	1240.5	1246.8	1020.1	ug/L	1020.1	ppb	13:48:49
1	Si 251.611†	425866.2	418361.5	12447	ug/L	12447	ppb	13:48:29
1	Sn 189.927†	3511.4	3444.6	557.63	ug/L	557.63	ppb	13:48:49
1	Ti 334.940†	1159398.0	1141534.8	1802.8	ug/L	1802.8	ppb	13:48:29
1	Tl 190.801†	3703.3	3676.8	1058.1	ug/L	1058.1	ppb	13:48:49
1	U 409.014†	-7154.1	-4452.1	-141.53	ug/L	-141.53	ppb	13:48:29
1	V 292.402†	121462.2	120821.9	792.63	ug/L	792.63	ppb	13:48:29
1	Zn 213.857†	124316.7	121512.8	1031.0	ug/L	1031.0	ppb	13:48:29
1	SiO2†	411892.0	404575.0	25794	ug/L	25794	ppb	13:49:49
2	Sc Radial	5508.9	5508.9	98.8	%			13:47:55
2	Y RADIAL	6318.7	6318.7	104.6	%			13:47:55
2	Al 396.153Radial†	51353.6	52012.5	35803	ug/L	35803	ppb	13:47:35
2	Ca 317.933Radial†	13842.0	13993.2	20423	ug/L	20423	ppb	13:47:35
2	Fe 238.204 Radial†	11085.7	11210.4	100450	ug/L	100450	ppb	13:47:35
2	K 766.490 Radial†	74783.2	72951.7	12220	ug/L	12220	ppb	13:47:35
2	Mg 279.077 IEC†	470.2	474.0	15862	ug/L	15862	ppb	13:47:55
2	Na 589.592 Radial†	13080.4	14793.4	4483.3	ug/L	4483.3	ppb	13:47:35
2	Sr 421.552†	145076.6	146838.4	885.43	ug/L	885.43	ppb	13:47:35
2	Sc 361.383	880998.2	880998.2	101.51	%			13:48:56
2	Y 371.029	778713.3	778713.3	106.75	%			13:48:56
2	Ag 328.068†	147560.9	145095.7	691.27	ug/L	691.27	ppb	13:48:56
2	As 188.979†	3461.5	3441.4	1358.6	ug/L	1358.6	ppb	13:49:16
2	B 249.677†	34248.9	34233.5	715.14	ug/L	715.14	ppb	13:48:56
2	Ba 233.527†	337547.1	332545.8	2490.3	ug/L	2490.3	ppb	13:48:56
2	Be 313.107†	1306158.3	1291425.2	467.24	ug/L	467.24	ppb	13:48:56
2	Cd 226.502†	61315.8	60604.2	618.83	ug/L	618.83	ppb	13:48:56
2	Co 228.616†	22879.8	22613.5	423.31	ug/L	423.31	ppb	13:49:16
2	Cr 267.716†	38011.3	37360.8	394.32	ug/L	394.32	ppb	13:48:56
2	Cu 324.752†	204234.6	194443.9	569.90	ug/L	569.90	ppb	13:48:56
2	Mn 257.610†	1840634.3	1812781.6	1931.0	ug/L	1931.0	ppb	13:48:56
2	Mo 202.031†	6911.9	6790.8	439.27	ug/L	439.27	ppb	13:49:16
2	Ni 231.604†	23218.0	22787.3	523.35	ug/L	523.35	ppb	13:49:16

2	P 214.914†	7486.1	7132.9	3830.9 ug/L	3830.9 ppb	13:49:16
2	Pb 220.353†	7857.6	7808.9	874.56 ug/L	874.56 ppb	13:49:16
2	S 181.975 Axial†	1597.4	1524.3	2006.8 ug/L	2006.8 ppb	13:49:16
2	Sb 206.836†	1706.3	1643.5	526.06 ug/L	526.06 ppb	13:49:16
2	Se 196.026†	1252.3	1260.5	1024.5 ug/L	1024.5 ppb	13:49:16
2	Si 251.611†	423480.1	416709.9	12398 ug/L	12398 ppb	13:48:56
2	Sn 189.927†	3496.3	3435.6	556.14 ug/L	556.14 ppb	13:49:16
2	Ti 334.940†	1151567.3	1135723.3	1793.6 ug/L	1793.6 ppb	13:48:56
2	Tl 190.801†	3697.6	3677.3	1058.1 ug/L	1058.1 ppb	13:49:16
2	U 409.014†	-6958.5	-4271.2	-136.19 ug/L	-136.19 ppb	13:48:56
2	V 292.402†	120534.4	120107.2	788.04 ug/L	788.04 ppb	13:48:56
2	Zn 213.857†	123600.0	121010.8	1026.8 ug/L	1026.8 ppb	13:48:56
2	SiO2†	412139.7	405495.1	25853 ug/L	25853 ppb	13:49:55
3	Sc Radial	5486.5	5486.5	98.4 %		13:48:20
3	Y RADIAL	6332.6	6332.6	104.9 %		13:48:20
3	Al 396.153Radial†	52161.9	53046.2	36515 ug/L	36515 ppb	13:48:00
3	Ca 317.933Radial†	13980.4	14191.0	20712 ug/L	20712 ppb	13:48:00
3	Fe 238.204 Radial†	11271.1	11444.7	102550 ug/L	102550 ppb	13:48:00
3	K 766.490 Radial†	75679.9	74172.3	12425 ug/L	12425 ppb	13:48:00
3	Mg 279.077 IEC†	470.7	476.5	15944 ug/L	15944 ppb	13:48:20
3	Na 589.592 Radial†	13289.7	15060.1	4564.1 ug/L	4564.1 ppb	13:48:00
3	Sr 421.552†	147631.2	150034.5	904.71 ug/L	904.71 ppb	13:48:00
3	Sc 361.383	878266.7	878266.7	101.19 %		13:49:24
3	Y 371.029	775757.6	775757.6	106.35 %		13:49:24
3	Ag 328.068†	145935.7	143941.7	686.69 ug/L	686.69 ppb	13:49:24
3	As 188.979†	3389.4	3380.8	1335.4 ug/L	1335.4 ppb	13:49:44
3	B 249.677†	33974.6	34067.4	711.34 ug/L	711.34 ppb	13:49:24
3	Ba 233.527†	334022.9	330097.4	2472.1 ug/L	2472.1 ppb	13:49:24
3	Be 313.107†	1292506.1	1281935.8	463.81 ug/L	463.81 ppb	13:49:24
3	Cd 226.502†	60784.2	60266.7	615.11 ug/L	615.11 ppb	13:49:24
3	Co 228.616†	22428.5	22237.6	416.20 ug/L	416.20 ppb	13:49:44
3	Cr 267.716†	37742.5	37211.6	392.79 ug/L	392.79 ppb	13:49:24
3	Cu 324.752†	196629.1	187553.9	550.00 ug/L	550.00 ppb	13:49:24
3	Mn 257.610†	1822907.3	1800903.2	1918.6 ug/L	1918.6 ppb	13:49:24
3	Mo 202.031†	6787.3	6688.9	432.94 ug/L	432.94 ppb	13:49:44
3	Ni 231.604†	22784.2	22429.7	515.14 ug/L	515.14 ppb	13:49:44
3	P 214.914†	7318.4	6990.1	3752.7 ug/L	3752.7 ppb	13:49:44
3	Pb 220.353†	7712.6	7689.7	861.21 ug/L	861.21 ppb	13:49:44
3	S 181.975 Axial†	1553.1	1485.4	1955.3 ug/L	1955.3 ppb	13:49:44
3	Sb 206.836†	1680.9	1623.7	519.59 ug/L	519.59 ppb	13:49:44
3	Se 196.026†	1202.1	1214.7	1005.3 ug/L	1005.3 ppb	13:49:44
3	Si 251.611†	418886.5	413468.0	12302 ug/L	12302 ppb	13:49:24
3	Sn 189.927†	3429.6	3380.3	547.31 ug/L	547.31 ppb	13:49:44
3	Ti 334.940†	1137975.2	1125819.8	1778.0 ug/L	1778.0 ppb	13:49:24
3	Tl 190.801†	3617.1	3609.1	1038.8 ug/L	1038.8 ppb	13:49:44
3	U 409.014†	-7088.3	-4420.7	-140.75 ug/L	-140.75 ppb	13:49:24
3	V 292.402†	119075.8	119035.1	780.51 ug/L	780.51 ppb	13:49:24
3	Zn 213.857†	122283.4	120088.4	1018.7 ug/L	1018.7 ppb	13:49:24
3	SiO2†	410997.7	405629.4	25862 ug/L	25862 ppb	13:50:00

Mean Data: 1201985636|928610|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	880577.8	101.46	%	0.246				0.24%
Sc Radial	5516.9	98.9	%	0.63				0.64%
Y 371.029	778344.3	106.70	%	0.332				0.31%
Y RADIAL	6340.9	105.0	%	0.45				0.43%
Ag 328.068†	145005.0	691.19	ug/L	4.464	691.19	ppb	4.464	0.65%
Al 396.153Radial†	52552.6	36175	ug/L	357.2	36175	ppb	357.2	0.99%
As 188.979†	3431.5	1355.0	ug/L	17.98	1355.0	ppb	17.98	1.33%
B 249.677†	34240.1	715.15	ug/L	3.810	715.15	ppb	3.810	0.53%
Ba 233.527†	332173.2	2487.6	ug/L	14.31	2487.6	ppb	14.31	0.58%
Be 313.107†	1291594.2	467.30	ug/L	3.523	467.30	ppb	3.523	0.75%
Ca 317.933Radial†	14089.9	20564	ug/L	144.5	20564	ppb	144.5	0.70%
Cd 226.502†	60572.5	618.39	ug/L	3.085	618.39	ppb	3.085	0.50%
Co 228.616†	22508.6	421.32	ug/L	4.466	421.32	ppb	4.466	1.06%
Cr 267.716†	37380.5	394.55	ug/L	1.882	394.55	ppb	1.882	0.48%
Cu 324.752†	190780.6	559.32	ug/L	10.013	559.32	ppb	10.013	1.79%
Fe 238.204 Radial†	11327.7	101500	ug/L	1049.4	101500	ppb	1049.4	1.03%
K 766.490 Radial†	73595.8	12328	ug/L	103.0	12328	ppb	103.0	0.84%

Mg 279.077 IEC†	473.6	15848	ug/L	103.6	15848	ppb	103.6	0.65%
Mn 257.610†	1811696.8	1929.9	ug/L	10.85	1929.9	ppb	10.85	0.56%
Mo 202.031†	6762.5	437.55	ug/L	4.035	437.55	ppb	4.035	0.92%
Na 589.592 Radial†	14920.6	4521.8	ug/L	40.55	4521.8	ppb	40.55	0.90%
Ni 231.604†	22691.7	521.16	ug/L	5.275	521.16	ppb	5.275	1.01%
P 214.914†	7091.6	3808.8	ug/L	48.86	3808.8	ppb	48.86	1.28%
Pb 220.353†	7784.2	871.80	ug/L	9.519	871.80	ppb	9.519	1.09%
S 181.975 Axial†	1514.4	1993.6	ug/L	33.74	1993.6	ppb	33.74	1.69%
Sb 206.836†	1645.4	526.58	ug/L	7.263	526.58	ppb	7.263	1.38%
Se 196.026†	1240.7	1016.6	ug/L	10.06	1016.6	ppb	10.06	0.99%
Si 251.611†	416179.8	12382	ug/L	74.1	12382	ppb	74.1	0.60%
Sn 189.927†	3420.2	553.70	ug/L	5.576	553.70	ppb	5.576	1.01%
Sr 421.552†	148547.4	895.74	ug/L	9.706	895.74	ppb	9.706	1.08%
Ti 334.940†	1134359.3	1791.5	ug/L	12.54	1791.5	ppb	12.54	0.70%
Tl 190.801†	3654.4	1051.7	ug/L	11.15	1051.7	ppb	11.15	1.06%
U 409.014†	-4381.3	-139.49	ug/L	2.884	-139.49	ppb	2.884	2.07%
V 292.402†	119988.1	787.06	ug/L	6.120	787.06	ppb	6.120	0.78%
Zn 213.857†	120870.7	1025.5	ug/L	6.24	1025.5	ppb	6.24	0.61%
SiO2†	405233.2	25836	ug/L	36.8	25836	ppb	36.8	0.14%

Sequence No.: 5
Sample ID: 241825001|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 12/11/2009 13:52:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825001|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5654.1	5654.1	101	%			13:54:04
1	Y RADIAL	7311.0	7311.0	121.1	%			13:54:04
1	Al 396.153Radial†	7963.3	7888.4	5431.7	ug/L	5431.7	ppb	13:54:04
1	Ca 317.933Radial†	2914.0	2856.8	4169.4	ug/L	4169.4	ppb	13:54:24
1	Fe 238.204 Radial†	8891.6	8758.6	78468	ug/L	78468	ppb	13:54:04
1	K 766.490 Radial†	14928.8	11982.5	2003.5	ug/L	2003.5	ppb	13:54:04
1	Mg 279.077 IEC†	64.7	61.9	2015.5	ug/L	2015.5	ppb	13:54:24
1	Na 589.592 Radial†	11387.6	12784.0	3874.3	ug/L	3874.3	ppb	13:54:04
1	Sr 421.552†	4233.6	4175.2	25.143	ug/L	25.143	ppb	13:54:04
1	Sc 361.383	889828.9	889828.9	102.52	%			13:55:22
1	Y 371.029	884255.8	884255.8	121.22	%			13:55:22
1	Ag 328.068†	-4983.1	-5134.4	2.0131	ug/L	2.0131	ppb	13:55:22
1	As 188.979†	-56.7	-24.0	14.640	ug/L	14.640	ppb	13:55:42
1	B 249.677†	1091.6	1557.9	22.782	ug/L	22.782	ppb	13:55:22
1	Ba 233.527†	5846.8	5713.9	45.671	ug/L	45.671	ppb	13:55:42
1	Be 313.107†	-11937.3	-6980.7	0.2653	ug/L	0.2653	ppb	13:55:22
1	Cd 226.502†	532.7	718.5	-0.3903	ug/L	-0.3903	ppb	13:55:42
1	Co 228.616†	134.9	205.0	-0.1653	ug/L	-0.1653	ppb	13:55:42
1	Cr 267.716†	598.9	498.1	6.7493	ug/L	6.7493	ppb	13:55:42
1	Cu 324.752†	8293.9	1331.8	7.8712	ug/L	7.8712	ppb	13:55:22
1	Mn 257.610†	616650.2	600944.3	644.69	ug/L	644.69	ppb	13:55:22
1	Mo 202.031†	439.1	409.9	31.649	ug/L	31.649	ppb	13:55:42
1	Ni 231.604†	281.4	188.5	4.3297	ug/L	4.3297	ppb	13:55:42
1	P 214.914†	1057.5	789.4	378.69	ug/L	378.69	ppb	13:55:42
1	Pb 220.353†	231.2	293.5	27.695	ug/L	27.695	ppb	13:55:42
1	S 181.975 Axial†	1587.1	1498.6	1978.9	ug/L	1978.9	ppb	13:55:42
1	Sb 206.836†	45.2	6.7	-0.0969	ug/L	-0.0969	ppb	13:55:42
1	Se 196.026†	-431.5	-394.1	20.314	ug/L	20.314	ppb	13:55:42
1	Si 251.611†	314503.0	306276.2	9121.0	ug/L	9121.0	ppb	13:55:22
1	Sn 189.927†	8.3	-0.7	1.3706	ug/L	1.3706	ppb	13:55:42
1	Ti 334.940†	914730.8	893460.8	1410.6	ug/L	1410.6	ppb	13:55:22
1	Tl 190.801†	-118.7	-81.2	-8.2490	ug/L	-8.2490	ppb	13:55:42
1	U 409.014†	-11499.7	-8632.5	-258.07	ug/L	-258.07	ppb	13:55:22
1	V 292.402†	3166.8	4451.6	16.066	ug/L	16.066	ppb	13:55:42
1	Zn 213.857†	18302.8	17098.2	139.48	ug/L	139.48	ppb	13:55:22
1	SiO2†	308395.9	300276.8	19164	ug/L	19164	ppb	13:56:39
2	Sc Radial	5391.6	5391.6	96.7	%			13:54:29
2	Y RADIAL	7036.3	7036.3	116.5	%			13:54:29
2	Al 396.153Radial†	7989.9	8298.0	5713.8	ug/L	5713.8	ppb	13:54:29
2	Ca 317.933Radial†	2874.3	2955.5	4313.6	ug/L	4313.6	ppb	13:54:49
2	Fe 238.204 Radial†	8865.7	9158.5	82051	ug/L	82051	ppb	13:54:29
2	K 766.490 Radial†	14659.3	12420.3	2077.1	ug/L	2077.1	ppb	13:54:29
2	Mg 279.077 IEC†	66.2	66.6	2168.8	ug/L	2168.8	ppb	13:54:49
2	Na 589.592 Radial†	11203.0	13139.8	3982.1	ug/L	3982.1	ppb	13:54:29
2	Sr 421.552†	4191.7	4335.0	26.106	ug/L	26.106	ppb	13:54:29
2	Sc 361.383	891638.2	891638.2	102.73	%			13:55:47
2	Y 371.029	886387.3	886387.3	121.51	%			13:55:47
2	Ag 328.068†	-4892.3	-5036.2	3.5962	ug/L	3.5962	ppb	13:55:47
2	As 188.979†	-44.0	-11.6	19.990	ug/L	19.990	ppb	13:56:07
2	B 249.677†	980.5	1447.6	19.956	ug/L	19.956	ppb	13:55:47
2	Ba 233.527†	5834.0	5689.9	45.624	ug/L	45.624	ppb	13:56:07
2	Be 313.107†	-12056.9	-7073.5	0.2338	ug/L	0.2338	ppb	13:55:47
2	Cd 226.502†	547.3	731.7	-0.6119	ug/L	-0.6119	ppb	13:56:07
2	Co 228.616†	133.0	202.9	-0.2585	ug/L	-0.2585	ppb	13:56:07
2	Cr 267.716†	635.2	532.3	7.1711	ug/L	7.1711	ppb	13:56:07
2	Cu 324.752†	8252.4	1275.0	7.8889	ug/L	7.8889	ppb	13:55:47
2	Mn 257.610†	617845.9	600887.7	644.98	ug/L	644.98	ppb	13:55:47
2	Mo 202.031†	439.5	409.4	31.873	ug/L	31.873	ppb	13:56:07
2	Ni 231.604†	288.2	194.6	4.4701	ug/L	4.4701	ppb	13:56:07

2	P 214.914†	1049.3	779.4	370.34 ug/L	370.34 ppb	13:56:07
2	Pb 220.353†	220.4	282.5	26.229 ug/L	26.229 ppb	13:56:07
2	S 181.975 Axial†	1589.2	1497.5	1977.3 ug/L	1977.3 ppb	13:56:07
2	Sb 206.836†	43.7	5.2	-0.5356 ug/L	-0.5356 ppb	13:56:07
2	Se 196.026†	-417.5	-379.6	39.561 ug/L	39.561 ppb	13:56:07
2	Si 251.611†	316225.5	307330.5	9152.4 ug/L	9152.4 ppb	13:55:47
2	Sn 189.927†	5.2	-3.7	0.9477 ug/L	0.9477 ppb	13:56:07
2	Ti 334.940†	917180.3	894034.7	1411.5 ug/L	1411.5 ppb	13:55:47
2	Tl 190.801†	-106.4	-69.0	-4.8176 ug/L	-4.8176 ppb	13:56:07
2	U 409.014†	-11578.9	-8686.9	-260.09 ug/L	-260.09 ppb	13:55:47
2	V 292.402†	3137.4	4416.6	15.287 ug/L	15.287 ppb	13:56:07
2	Zn 213.857†	18326.5	17085.0	139.02 ug/L	139.02 ppb	13:55:47
2	SiO2†	311586.1	302771.8	19323 ug/L	19323 ppb	13:56:44
3	Sc Radial	5606.3	5606.3	101 %		13:54:54
3	Y RADIAL	7256.9	7256.9	120.2 %		13:54:54
3	Al 396.153Radial†	7866.2	7858.7	5411.2 ug/L	5411.2 ppb	13:54:54
3	Ca 317.933Radial†	2886.9	2854.3	4165.8 ug/L	4165.8 ppb	13:55:14
3	Fe 238.204 Radial†	8836.7	8778.7	78648 ug/L	78648 ppb	13:54:54
3	K 766.490 Radial†	14908.6	12087.8	2021.2 ug/L	2021.2 ppb	13:54:54
3	Mg 279.077 IEC†	61.3	59.1	1920.2 ug/L	1920.2 ppb	13:55:14
3	Na 589.592 Radial†	11242.9	12735.7	3859.7 ug/L	3859.7 ppb	13:54:54
3	Sr 421.552†	4188.2	4165.5	25.085 ug/L	25.085 ppb	13:54:54
3	Sc 361.383	880580.1	880580.1	101.46 %		13:56:13
3	Y 371.029	875020.0	875020.0	119.96 %		13:56:13
3	Ag 328.068†	-4917.8	-5121.1	2.1390 ug/L	2.1390 ppb	13:56:13
3	As 188.979†	-43.2	-11.3	19.573 ug/L	19.573 ppb	13:56:33
3	B 249.677†	991.9	1470.9	20.902 ug/L	20.902 ppb	13:56:13
3	Ba 233.527†	5910.1	5836.2	46.593 ug/L	46.593 ppb	13:56:33
3	Be 313.107†	-11891.0	-7057.3	0.2372 ug/L	0.2372 ppb	13:56:13
3	Cd 226.502†	528.8	720.1	-0.3920 ug/L	-0.3920 ppb	13:56:33
3	Co 228.616†	137.5	208.9	-0.0917 ug/L	-0.0917 ppb	13:56:33
3	Cr 267.716†	640.0	544.8	7.2444 ug/L	7.2444 ppb	13:56:33
3	Cu 324.752†	8277.2	1400.3	8.0792 ug/L	8.0792 ppb	13:56:13
3	Mn 257.610†	610568.8	601267.6	645.05 ug/L	645.05 ppb	13:56:13
3	Mo 202.031†	441.3	416.6	32.089 ug/L	32.089 ppb	13:56:33
3	Ni 231.604†	265.5	175.8	4.0367 ug/L	4.0367 ppb	13:56:33
3	P 214.914†	1064.5	807.2	388.43 ug/L	388.43 ppb	13:56:33
3	Pb 220.353†	221.1	285.9	26.830 ug/L	26.830 ppb	13:56:33
3	S 181.975 Axial†	1606.4	1533.9	2025.5 ug/L	2025.5 ppb	13:56:33
3	Sb 206.836†	41.3	3.3	-1.1578 ug/L	-1.1578 ppb	13:56:33
3	Se 196.026†	-438.4	-405.3	14.584 ug/L	14.584 ppb	13:56:33
3	Si 251.611†	313122.9	308138.0	9176.5 ug/L	9176.5 ppb	13:56:13
3	Sn 189.927†	5.5	-3.4	0.9365 ug/L	0.9365 ppb	13:56:33
3	Ti 334.940†	905042.0	893282.2	1410.3 ug/L	1410.3 ppb	13:56:13
3	Tl 190.801†	-116.0	-79.8	-7.8613 ug/L	-7.8613 ppb	13:56:33
3	U 409.014†	-11647.7	-8896.2	-265.68 ug/L	-265.68 ppb	13:56:13
3	V 292.402†	3201.2	4517.9	16.469 ug/L	16.469 ppb	13:56:33
3	Zn 213.857†	18092.6	17078.5	139.30 ug/L	139.30 ppb	13:56:13
3	SiO2†	312946.0	307920.9	19651 ug/L	19651 ppb	13:56:49

Mean Data: 241825001|928610|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	887349.1	102.24	%	0.683				0.67%
Sc Radial	5550.7	99.6	%	2.51				2.52%
Y 371.029	881887.7	120.90	%	0.828				0.69%
Y RADIAL	7201.4	119.2	%	2.41				2.02%
Ag 328.068†	-5097.2	2.5828	ug/L	0.87991	2.5828	ppb	0.87991	34.07%
Al 396.153Radial†	8015.0	5518.9	ug/L	169.11	5518.9	ppb	169.11	3.06%
As 188.979†	-15.6	18.068	ug/L	2.9755	18.068	ppb	2.9755	16.47%
B 249.677†	1492.1	21.213	ug/L	1.4385	21.213	ppb	1.4385	6.78%
Ba 233.527†	5746.7	45.963	ug/L	0.5461	45.963	ppb	0.5461	1.19%
Be 313.107†	-7037.2	0.2454	ug/L	0.01731	0.2454	ppb	0.01731	7.05%
Ca 317.933Radial†	2888.9	4216.3	ug/L	84.29	4216.3	ppb	84.29	2.00%
Cd 226.502†	723.4	-0.4647	ug/L	0.12742	-0.4647	ppb	0.12742	27.42%
Co 228.616†	205.6	-0.1719	ug/L	0.08361	-0.1719	ppb	0.08361	48.65%
Cr 267.716†	525.1	7.0549	ug/L	0.26722	7.0549	ppb	0.26722	3.79%
Cu 324.752†	1335.7	7.9464	ug/L	0.11534	7.9464	ppb	0.11534	1.45%
Fe 238.204 Radial†	8898.6	79722	ug/L	2018.7	79722	ppb	2018.7	2.53%
K 766.490 Radial†	12163.5	2033.9	ug/L	38.39	2033.9	ppb	38.39	1.89%

Mg 279.077 IEC†	62.5	2034.8	ug/L	125.41	2034.8	ppb	125.41	6.16%
Mn 257.610†	601033.2	644.91	ug/L	0.193	644.91	ppb	0.193	0.03%
Mo 202.031†	412.0	31.871	ug/L	0.2198	31.871	ppb	0.2198	0.69%
Na 589.592 Radial†	12886.5	3905.4	ug/L	66.87	3905.4	ppb	66.87	1.71%
Ni 231.604†	186.3	4.2788	ug/L	0.22113	4.2788	ppb	0.22113	5.17%
P 214.914†	792.0	379.15	ug/L	9.052	379.15	ppb	9.052	2.39%
Pb 220.353†	287.3	26.918	ug/L	0.7368	26.918	ppb	0.7368	2.74%
S 181.975 Axial†	1510.0	1993.9	ug/L	27.36	1993.9	ppb	27.36	1.37%
Sb 206.836†	5.1	-0.5968	ug/L	0.53306	-0.5968	ppb	0.53306	89.32%
Se 196.026†	-393.0	24.820	ug/L	13.0842	24.820	ppb	13.0842	52.72%
Si 251.611†	307248.2	9150.0	ug/L	27.80	9150.0	ppb	27.80	0.30%
Sn 189.927†	-2.6	1.0850	ug/L	0.24745	1.0850	ppb	0.24745	22.81%
Sr 421.552†	4225.3	25.445	ug/L	0.5734	25.445	ppb	0.5734	2.25%
Ti 334.940†	893592.6	1410.8	ug/L	0.62	1410.8	ppb	0.62	0.04%
Tl 190.801†	-76.7	-6.9760	ug/L	1.87923	-6.9760	ppb	1.87923	26.94%
U 409.014†	-8738.5	-261.28	ug/L	3.940	-261.28	ppb	3.940	1.51%
V 292.402†	4462.0	15.941	ug/L	0.6008	15.941	ppb	0.6008	3.77%
Zn 213.857†	17087.2	139.27	ug/L	0.232	139.27	ppb	0.232	0.17%
SiO2†	303656.5	19379	ug/L	248.8	19379	ppb	248.8	1.28%

Sequence No.: 6
Sample ID: 1201985637|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/11/2009 13:58:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985637|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5678.3	5678.3	102	%			14:00:52
1	Y RADIAL	7930.6	7930.6	131.3	%			14:00:52
1	Al 396.153Radial†	8756.2	8633.5	5944.7	ug/L	5944.7	ppb	14:00:52
1	Ca 317.933Radial†	3018.3	2946.9	4301.0	ug/L	4301.0	ppb	14:01:12
1	Fe 238.204 Radial†	9511.3	9329.8	83585	ug/L	83585	ppb	14:00:52
1	K 766.490 Radial†	16703.7	13662.7	2283.9	ug/L	2283.9	ppb	14:00:52
1	Mg 279.077 IEC†	73.7	70.4	2297.2	ug/L	2297.2	ppb	14:01:12
1	Na 589.592 Radial†	11676.7	13020.1	3945.8	ug/L	3945.8	ppb	14:00:52
1	Sr 421.552†	5531.9	5432.3	32.724	ug/L	32.724	ppb	14:00:52
1	Sc 361.383	882860.9	882860.9	101.72	%			14:02:09
1	Y 371.029	942625.0	942625.0	129.22	%			14:02:09
1	Ag 328.068†	-5362.7	-5546.0	2.1473	ug/L	2.1473	ppb	14:02:09
1	As 188.979†	-7.7	23.7	34.258	ug/L	34.258	ppb	14:02:29
1	B 249.677†	946.1	1423.3	19.231	ug/L	19.231	ppb	14:02:09
1	Ba 233.527†	7970.9	7847.1	61.823	ug/L	61.823	ppb	14:02:29
1	Be 313.107†	-10115.3	-5281.5	0.9730	ug/L	0.9730	ppb	14:02:09
1	Cd 226.502†	555.6	745.1	-0.6242	ug/L	-0.6242	ppb	14:02:29
1	Co 228.616†	183.3	253.7	0.5851	ug/L	0.5851	ppb	14:02:29
1	Cr 267.716†	1472.4	1361.4	16.020	ug/L	16.020	ppb	14:02:29
1	Cu 324.752†	8171.7	1275.5	7.9686	ug/L	7.9686	ppb	14:02:09
1	Mn 257.610†	741299.3	728230.4	780.09	ug/L	780.09	ppb	14:02:09
1	Mo 202.031†	478.0	451.5	34.663	ug/L	34.663	ppb	14:02:29
1	Ni 231.604†	396.0	303.3	6.9672	ug/L	6.9672	ppb	14:02:29
1	P 214.914†	1695.5	1424.8	729.58	ug/L	729.58	ppb	14:02:29
1	Pb 220.353†	275.4	338.7	32.454	ug/L	32.454	ppb	14:02:29
1	S 181.975 Axial†	1633.5	1556.4	2055.1	ug/L	2055.1	ppb	14:02:29
1	Sb 206.836†	34.4	-3.6	-3.4794	ug/L	-3.4794	ppb	14:02:29
1	Se 196.026†	-456.3	-421.8	20.557	ug/L	20.557	ppb	14:02:29
1	Si 251.611†	327588.9	321561.8	9576.1	ug/L	9576.1	ppb	14:02:09
1	Sn 189.927†	27.1	17.8	4.4311	ug/L	4.4311	ppb	14:02:29
1	Ti 334.940†	939543.8	924895.4	1460.4	ug/L	1460.4	ppb	14:02:09
1	Tl 190.801†	-132.4	-95.6	-11.159	ug/L	-11.159	ppb	14:02:29
1	U 409.014†	-25065.8	-22057.4	-644.71	ug/L	-644.71	ppb	14:02:09
1	V 292.402†	4695.4	5978.6	24.684	ug/L	24.684	ppb	14:02:29
1	Zn 213.857†	22280.2	21149.2	173.82	ug/L	173.82	ppb	14:02:09
1	SiO2†	333212.5	327047.4	20872	ug/L	20872	ppb	14:03:26
2	Sc Radial	5217.8	5217.8	93.6	%			14:01:17
2	Y RADIAL	7441.9	7441.9	123.2	%			14:01:17
2	Al 396.153Radial†	8860.0	9503.2	6543.7	ug/L	6543.7	ppb	14:01:17
2	Ca 317.933Radial†	3027.1	3217.9	4696.5	ug/L	4696.5	ppb	14:01:37
2	Fe 238.204 Radial†	9616.0	10265.9	91972	ug/L	91972	ppb	14:01:17
2	K 766.490 Radial†	16775.4	15186.9	2539.8	ug/L	2539.8	ppb	14:01:17
2	Mg 279.077 IEC†	74.6	77.8	2538.8	ug/L	2538.8	ppb	14:01:37
2	Na 589.592 Radial†	11737.2	14096.6	4272.1	ug/L	4272.1	ppb	14:01:17
2	Sr 421.552†	5591.8	5975.7	35.997	ug/L	35.997	ppb	14:01:17
2	Sc 361.383	887446.0	887446.0	102.25	%			14:02:35
2	Y 371.029	947026.6	947026.6	129.83	%			14:02:35
2	Ag 328.068†	-5335.6	-5492.2	5.0505	ug/L	5.0505	ppb	14:02:35
2	As 188.979†	-0.5	30.8	38.315	ug/L	38.315	ppb	14:02:55
2	B 249.677†	941.8	1414.2	17.926	ug/L	17.926	ppb	14:02:35
2	Ba 233.527†	7968.7	7804.5	61.816	ug/L	61.816	ppb	14:02:55
2	Be 313.107†	-10106.8	-5221.8	0.9952	ug/L	0.9952	ppb	14:02:35
2	Cd 226.502†	552.3	739.1	-1.5253	ug/L	-1.5253	ppb	14:02:55
2	Co 228.616†	177.7	247.2	0.3436	ug/L	0.3436	ppb	14:02:55
2	Cr 267.716†	1488.8	1370.0	16.258	ug/L	16.258	ppb	14:02:55
2	Cu 324.752†	8297.0	1356.6	8.6320	ug/L	8.6320	ppb	14:02:35
2	Mn 257.610†	745114.7	728196.7	780.89	ug/L	780.89	ppb	14:02:35
2	Mo 202.031†	486.8	457.7	35.648	ug/L	35.648	ppb	14:02:55
2	Ni 231.604†	386.3	291.9	6.7045	ug/L	6.7045	ppb	14:02:55

2	P 214.914†	1713.1	1433.4	727.78 ug/L	727.78 ppb	14:02:55
2	Pb 220.353†	306.9	368.1	35.198 ug/L	35.198 ppb	14:02:55
2	S 181.975 Axial†	1641.2	1555.7	2054.0 ug/L	2054.0 ppb	14:02:55
2	Sb 206.836†	33.3	-4.8	-3.7669 ug/L	-3.7669 ppb	14:02:55
2	Se 196.026†	-455.5	-418.6	48.196 ug/L	48.196 ppb	14:02:55
2	Si 251.611†	330633.4	322875.4	9615.2 ug/L	9615.2 ppb	14:02:35
2	Sn 189.927†	23.3	14.0	3.9692 ug/L	3.9692 ppb	14:02:55
2	Ti 334.940†	944669.7	925136.5	1460.8 ug/L	1460.8 ppb	14:02:35
2	Tl 190.801†	-130.2	-92.7	-10.334 ug/L	-10.334 ppb	14:02:55
2	U 409.014†	-25044.5	-21909.3	-641.51 ug/L	-641.51 ppb	14:02:35
2	V 292.402†	4732.0	5990.6	23.507 ug/L	23.507 ppb	14:02:55
2	Zn 213.857†	22392.8	21146.1	172.98 ug/L	172.98 ppb	14:02:35
2	SiO2†	333308.2	325448.6	20770 ug/L	20770 ppb	14:03:32
3	Sc Radial	5589.0	5589.0	100 %		14:01:42
3	Y RADIAL	7782.2	7782.2	128.9 %		14:01:42
3	Al 396.153Radial†	8651.0	8665.9	5967.0 ug/L	5967.0 ppb	14:01:42
3	Ca 317.933Radial†	3043.4	3019.3	4406.6 ug/L	4406.6 ppb	14:02:02
3	Fe 238.204 Radial†	9441.6	9409.4	84299 ug/L	84299 ppb	14:01:42
3	K 766.490 Radial†	16593.0	13814.3	2309.3 ug/L	2309.3 ppb	14:01:42
3	Mg 279.077 IEC†	75.6	73.6	2402.2 ug/L	2402.2 ppb	14:02:02
3	Na 589.592 Radial†	11502.6	13029.6	3948.7 ug/L	3948.7 ppb	14:01:42
3	Sr 421.552†	5455.8	5443.2	32.788 ug/L	32.788 ppb	14:01:42
3	Sc 361.383	886761.0	886761.0	102.17 %		14:03:01
3	Y 371.029	945634.1	945634.1	129.64 %		14:03:01
3	Ag 328.068†	-5304.5	-5465.8	2.7385 ug/L	2.7385 ppb	14:03:01
3	As 188.979†	-8.6	22.9	34.070 ug/L	34.070 ppb	14:03:21
3	B 249.677†	924.6	1398.1	18.601 ug/L	18.601 ppb	14:03:01
3	Ba 233.527†	7960.8	7802.8	61.518 ug/L	61.518 ppb	14:03:21
3	Be 313.107†	-10051.5	-5175.3	1.0121 ug/L	1.0121 ppb	14:03:01
3	Cd 226.502†	567.4	754.3	-0.6011 ug/L	-0.6011 ppb	14:03:21
3	Co 228.616†	175.0	244.7	0.4054 ug/L	0.4054 ppb	14:03:21
3	Cr 267.716†	1467.1	1349.9	15.913 ug/L	15.913 ppb	14:03:21
3	Cu 324.752†	8230.4	1297.7	8.0695 ug/L	8.0695 ppb	14:03:01
3	Mn 257.610†	745219.1	728861.8	780.83 ug/L	780.83 ppb	14:03:01
3	Mo 202.031†	482.6	453.9	34.866 ug/L	34.866 ppb	14:03:21
3	Ni 231.604†	367.1	273.3	6.2780 ug/L	6.2780 ppb	14:03:21
3	P 214.914†	1703.6	1425.4	729.33 ug/L	729.33 ppb	14:03:21
3	Pb 220.353†	281.9	343.9	32.985 ug/L	32.985 ppb	14:03:21
3	S 181.975 Axial†	1634.6	1550.5	2047.3 ug/L	2047.3 ppb	14:03:21
3	Sb 206.836†	30.5	-7.5	-4.7207 ug/L	-4.7207 ppb	14:03:21
3	Se 196.026†	-462.2	-425.6	20.627 ug/L	20.627 ppb	14:03:21
3	Si 251.611†	331252.2	323730.8	9640.7 ug/L	9640.7 ppb	14:03:01
3	Sn 189.927†	20.3	11.0	3.3616 ug/L	3.3616 ppb	14:03:21
3	Ti 334.940†	944012.0	925206.4	1460.9 ug/L	1460.9 ppb	14:03:01
3	Tl 190.801†	-137.1	-99.6	-12.268 ug/L	-12.268 ppb	14:03:21
3	U 409.014†	-25301.5	-22179.8	-648.32 ug/L	-648.32 ppb	14:03:01
3	V 292.402†	4719.3	5981.7	24.594 ug/L	24.594 ppb	14:03:21
3	Zn 213.857†	22347.5	21118.7	173.49 ug/L	173.49 ppb	14:03:01
3	SiO2†	329574.4	322045.9	20553 ug/L	20553 ppb	14:03:37

Mean Data: 1201985637|928610|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885689.3	102.05	%	0.285				0.28%
Sc Radial	5495.0	98.6	%	4.38				4.44%
Y 371.029	945095.2	129.56	%	0.308				0.24%
Y RADIAL	7718.2	127.8	%	4.15				3.25%
Ag 328.068†	-5501.3	3.3121	ug/L	1.53424	3.3121	ppb	1.53424	46.32%
Al 396.153Radial†	8934.2	6151.8	ug/L	339.57	6151.8	ppb	339.57	5.52%
As 188.979†	25.8	35.548	ug/L	2.3982	35.548	ppb	2.3982	6.75%
B 249.677†	1411.9	18.586	ug/L	0.6526	18.586	ppb	0.6526	3.51%
Ba 233.527†	7818.1	61.719	ug/L	0.1738	61.719	ppb	0.1738	0.28%
Be 313.107†	-5226.2	0.9934	ug/L	0.01961	0.9934	ppb	0.01961	1.97%
Ca 317.933Radial†	3061.4	4468.0	ug/L	204.78	4468.0	ppb	204.78	4.58%
Cd 226.502†	746.2	-0.9169	ug/L	0.52701	-0.9169	ppb	0.52701	57.48%
Co 228.616†	248.5	0.4447	ug/L	0.12546	0.4447	ppb	0.12546	28.21%
Cr 267.716†	1360.4	16.064	ug/L	0.1766	16.064	ppb	0.1766	1.10%
Cu 324.752†	1309.9	8.2234	ug/L	0.35751	8.2234	ppb	0.35751	4.35%
Fe 238.204 Radial†	9668.3	86619	ug/L	4650.0	86619	ppb	4650.0	5.37%
K 766.490 Radial†	14221.3	2377.7	ug/L	140.96	2377.7	ppb	140.96	5.93%

Mg 279.077 IEC†	73.9	2412.7	ug/L	121.12	2412.7	ppb	121.12	5.02%
Mn 257.610†	728429.6	780.60	ug/L	0.444	780.60	ppb	0.444	0.06%
Mo 202.031†	454.4	35.059	ug/L	0.5201	35.059	ppb	0.5201	1.48%
Na 589.592 Radial†	13382.1	4055.6	ug/L	187.54	4055.6	ppb	187.54	4.62%
Ni 231.604†	289.5	6.6499	ug/L	0.34787	6.6499	ppb	0.34787	5.23%
P 214.914†	1427.9	728.90	ug/L	0.976	728.90	ppb	0.976	0.13%
Pb 220.353†	350.2	33.546	ug/L	1.4556	33.546	ppb	1.4556	4.34%
S 181.975 Axial†	1554.2	2052.2	ug/L	4.23	2052.2	ppb	4.23	0.21%
Sb 206.836†	-5.3	-3.9890	ug/L	0.64978	-3.9890	ppb	0.64978	16.29%
Se 196.026†	-422.0	29.793	ug/L	15.9374	29.793	ppb	15.9374	53.49%
Si 251.611†	322722.6	9610.7	ug/L	32.53	9610.7	ppb	32.53	0.34%
Sn 189.927†	14.3	3.9206	ug/L	0.53640	3.9206	ppb	0.53640	13.68%
Sr 421.552†	5617.1	33.837	ug/L	1.8716	33.837	ppb	1.8716	5.53%
Ti 334.940†	925079.4	1460.7	ug/L	0.26	1460.7	ppb	0.26	0.02%
Tl 190.801†	-96.0	-11.254	ug/L	0.9704	-11.254	ppb	0.9704	8.62%
U 409.014†	-22048.8	-644.84	ug/L	3.406	-644.84	ppb	3.406	0.53%
V 292.402†	5983.6	24.262	ug/L	0.6552	24.262	ppb	0.6552	2.70%
Zn 213.857†	21138.0	173.43	ug/L	0.420	173.43	ppb	0.420	0.24%
SiO2†	324847.3	20731	ug/L	163.0	20731	ppb	163.0	0.79%

Sequence No.: 7
Sample ID: 1201985638|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/11/2009 14:05:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985638|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5663.9	5663.9	102	%			14:07:40
1	Y RADIAL	8088.8	8088.8	133.9	%			14:07:40
1	Al 396.153Radial†	23275.6	22948.7	15783	ug/L	15783	ppb	14:07:40
1	Ca 317.933Radial†	6527.8	6409.3	9354.3	ug/L	9354.3	ppb	14:07:40
1	Fe 238.204 Radial†	10788.7	10610.9	95078	ug/L	95078	ppb	14:07:40
1	K 766.490 Radial†	51622.7	48079.9	8052.5	ug/L	8052.5	ppb	14:07:40
1	Mg 279.077 IEC†	227.2	221.8	7386.6	ug/L	7386.6	ppb	14:08:00
1	Na 589.592 Radial†	33558.3	34590.3	10483	ug/L	10483	ppb	14:07:40
1	Sr 421.552†	92388.4	90951.0	548.46	ug/L	548.46	ppb	14:07:40
1	Sc 361.383	882967.2	882967.2	101.73	%			14:08:59
1	Y 371.029	966177.0	966177.0	132.45	%			14:08:59
1	Ag 328.068†	107541.9	105434.7	509.00	ug/L	509.00	ppb	14:08:59
1	As 188.979†	1230.7	1241.0	510.72	ug/L	510.72	ppb	14:09:19
1	B 249.677†	24794.2	24864.7	516.04	ug/L	516.04	ppb	14:08:59
1	Ba 233.527†	78008.8	76690.2	577.75	ug/L	577.75	ppb	14:08:59
1	Be 313.107†	1429927.4	1410214.9	510.48	ug/L	510.48	ppb	14:08:59
1	Cd 226.502†	49288.8	48647.6	495.35	ug/L	495.35	ppb	14:08:59
1	Co 228.616†	26233.3	25859.5	483.31	ug/L	483.31	ppb	14:09:19
1	Cr 267.716†	49078.0	48155.3	506.65	ug/L	506.65	ppb	14:08:59
1	Cu 324.752†	192674.8	182632.5	535.32	ug/L	535.32	ppb	14:08:59
1	Mn 257.610†	1171697.5	1151204.1	1229.4	ug/L	1229.4	ppb	14:08:59
1	Mo 202.031†	8384.0	8222.7	530.01	ug/L	530.01	ppb	14:09:19
1	Ni 231.604†	22161.4	21697.7	498.27	ug/L	498.27	ppb	14:09:19
1	P 214.914†	2245.7	1965.4	948.17	ug/L	948.17	ppb	14:09:19
1	Pb 220.353†	4876.9	4861.8	540.85	ug/L	540.85	ppb	14:09:19
1	S 181.975 Axial†	5575.5	5431.0	7172.3	ug/L	7172.3	ppb	14:09:19
1	Sb 206.836†	1648.2	1582.7	504.53	ug/L	504.53	ppb	14:09:19
1	Se 196.026†	413.3	433.1	539.80	ug/L	539.80	ppb	14:09:19
1	Si 251.611†	642703.2	631265.7	18788	ug/L	18788	ppb	14:08:59
1	Sn 189.927†	3279.3	3214.6	519.37	ug/L	519.37	ppb	14:09:19
1	Ti 334.940†	1344679.8	1323014.2	2088.5	ug/L	2088.5	ppb	14:08:59
1	Tl 190.801†	1673.9	1679.9	493.23	ug/L	493.23	ppb	14:09:19
1	U 409.014†	3449.6	5974.8	158.84	ug/L	158.84	ppb	14:08:59
1	V 292.402†	79641.0	79646.2	520.96	ug/L	520.96	ppb	14:08:59
1	Zn 213.857†	79395.3	77288.1	651.68	ug/L	651.68	ppb	14:08:59
1	SiO2†	637669.0	626274.6	39945	ug/L	39945	ppb	14:10:20
2	Sc Radial	5596.6	5596.6	100	%			14:08:05
2	Y RADIAL	7977.0	7977.0	132.1	%			14:08:05
2	Al 396.153Radial†	23062.6	23012.2	15826	ug/L	15826	ppb	14:08:05
2	Ca 317.933Radial†	6480.6	6439.6	9398.6	ug/L	9398.6	ppb	14:08:05
2	Fe 238.204 Radial†	10755.4	10705.5	95926	ug/L	95926	ppb	14:08:05
2	K 766.490 Radial†	51237.9	48307.9	8090.7	ug/L	8090.7	ppb	14:08:05
2	Mg 279.077 IEC†	232.3	229.6	7648.3	ug/L	7648.3	ppb	14:08:25
2	Na 589.592 Radial†	33371.4	34801.5	10547	ug/L	10547	ppb	14:08:05
2	Sr 421.552†	91592.9	91252.7	550.28	ug/L	550.28	ppb	14:08:05
2	Sc 361.383	884118.7	884118.7	101.87	%			14:09:26
2	Y 371.029	967208.8	967208.8	132.59	%			14:09:26
2	Ag 328.068†	107657.8	105410.7	509.17	ug/L	509.17	ppb	14:09:26
2	As 188.979†	1228.3	1237.1	509.38	ug/L	509.38	ppb	14:09:46
2	B 249.677†	24992.6	25027.7	519.40	ug/L	519.40	ppb	14:09:26
2	Ba 233.527†	78322.5	76898.2	579.34	ug/L	579.34	ppb	14:09:26
2	Be 313.107†	1436668.0	1415001.4	512.20	ug/L	512.20	ppb	14:09:26
2	Cd 226.502†	49514.5	48806.0	496.91	ug/L	496.91	ppb	14:09:26
2	Co 228.616†	26315.9	25907.0	484.19	ug/L	484.19	ppb	14:09:46
2	Cr 267.716†	49241.7	48253.3	507.69	ug/L	507.69	ppb	14:09:26
2	Cu 324.752†	192692.1	182402.9	534.70	ug/L	534.70	ppb	14:09:26
2	Mn 257.610†	1176995.3	1154904.9	1233.4	ug/L	1233.4	ppb	14:09:26
2	Mo 202.031†	8399.8	8227.4	530.37	ug/L	530.37	ppb	14:09:46
2	Ni 231.604†	22261.6	21767.7	499.88	ug/L	499.88	ppb	14:09:46

2	P 214.914†	2252.9	1969.6	949.96 ug/L	949.96 ppb	14:09:46
2	Pb 220.353†	4885.3	4863.7	541.01 ug/L	541.01 ppb	14:09:46
2	S 181.975 Axial†	5587.9	5436.1	7178.9 ug/L	7178.9 ppb	14:09:46
2	Sb 206.836†	1653.6	1585.9	505.53 ug/L	505.53 ppb	14:09:46
2	Se 196.026†	408.6	427.9	539.52 ug/L	539.52 ppb	14:09:46
2	Si 251.611†	644475.0	632182.3	18816 ug/L	18816 ppb	14:09:26
2	Sn 189.927†	3287.1	3218.0	519.94 ug/L	519.94 ppb	14:09:46
2	Ti 334.940†	1348589.9	1325131.1	2091.8 ug/L	2091.8 ppb	14:09:26
2	Tl 190.801†	1691.7	1695.3	497.60 ug/L	497.60 ppb	14:09:46
2	U 409.014†	3622.9	6140.5	163.50 ug/L	163.50 ppb	14:09:26
2	V 292.402†	79992.3	79889.1	522.46 ug/L	522.46 ppb	14:09:26
2	Zn 213.857†	79692.8	77478.4	653.22 ug/L	653.22 ppb	14:09:26
2	SiO2†	643326.5	631012.1	40247 ug/L	40247 ppb	14:10:25
3	Sc Radial	5714.6	5714.6	102 %		14:08:30
3	Y RADIAL	8183.2	8183.2	135.5 %		14:08:30
3	Al 396.153Radial†	23475.1	22940.1	15777 ug/L	15777 ppb	14:08:30
3	Ca 317.933Radial†	6625.1	6447.2	9409.7 ug/L	9409.7 ppb	14:08:30
3	Fe 238.204 Radial†	10940.3	10664.6	95559 ug/L	95559 ppb	14:08:30
3	K 766.490 Radial†	52151.8	48145.4	8063.3 ug/L	8063.3 ppb	14:08:30
3	Mg 279.077 IEC†	232.2	224.6	7482.5 ug/L	7482.5 ppb	14:08:50
3	Na 589.592 Radial†	34254.0	34976.1	10600 ug/L	10600 ppb	14:08:30
3	Sr 421.552†	93755.3	91478.0	551.64 ug/L	551.64 ppb	14:08:30
3	Sc 361.383	889822.3	889822.3	102.52 %		14:09:54
3	Y 371.029	971263.2	971263.2	133.15 %		14:09:54
3	Ag 328.068†	108507.1	105561.7	509.73 ug/L	509.73 ppb	14:09:54
3	As 188.979†	1224.0	1225.1	504.74 ug/L	504.74 ppb	14:10:14
3	B 249.677†	25349.0	25218.1	523.52 ug/L	523.52 ppb	14:09:54
3	Ba 233.527†	78917.4	76985.6	579.98 ug/L	579.98 ppb	14:09:54
3	Be 313.107†	1442971.7	1412109.9	511.18 ug/L	511.18 ppb	14:09:54
3	Cd 226.502†	49850.7	48822.4	497.11 ug/L	497.11 ppb	14:09:54
3	Co 228.616†	26174.5	25603.6	478.45 ug/L	478.45 ppb	14:10:14
3	Cr 267.716†	49480.8	48176.6	506.88 ug/L	506.88 ppb	14:09:54
3	Cu 324.752†	195044.1	183484.5	537.82 ug/L	537.82 ppb	14:09:54
3	Mn 257.610†	1186635.6	1156901.7	1235.5 ug/L	1235.5 ppb	14:09:54
3	Mo 202.031†	8359.6	8135.4	524.49 ug/L	524.49 ppb	14:10:14
3	Ni 231.604†	22128.0	21497.3	493.67 ug/L	493.67 ppb	14:10:14
3	P 214.914†	2265.0	1967.2	948.29 ug/L	948.29 ppb	14:10:14
3	Pb 220.353†	4856.3	4804.7	534.41 ug/L	534.41 ppb	14:10:14
3	S 181.975 Axial†	5551.2	5365.1	7085.2 ug/L	7085.2 ppb	14:10:14
3	Sb 206.836†	1638.4	1560.7	497.31 ug/L	497.31 ppb	14:10:14
3	Se 196.026†	403.5	420.4	534.11 ug/L	534.11 ppb	14:10:14
3	Si 251.611†	651839.3	635310.0	18909 ug/L	18909 ppb	14:09:54
3	Sn 189.927†	3259.7	3170.6	512.31 ug/L	512.31 ppb	14:10:14
3	Ti 334.940†	1360602.7	1328362.3	2096.9 ug/L	2096.9 ppb	14:09:54
3	Tl 190.801†	1679.0	1672.3	491.20 ug/L	491.20 ppb	14:10:14
3	U 409.014†	3688.2	6181.4	164.72 ug/L	164.72 ppb	14:09:54
3	V 292.402†	80445.3	79827.6	522.02 ug/L	522.02 ppb	14:09:54
3	Zn 213.857†	80192.4	77464.3	653.18 ug/L	653.18 ppb	14:09:54
3	SiO2†	644790.7	628392.1	40080 ug/L	40080 ppb	14:10:30

Mean Data: 1201985638|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885636.1	102.04	%	0.423				0.41%
Sc Radial	5658.4	101	%	1.1				1.05%
Y 371.029	968216.3	132.73	%	0.369				0.28%
Y RADIAL	8083.0	133.8	%	1.71				1.28%
Ag 328.068†	105469.0	509.30	ug/L	0.381	509.30	ppb	0.381	0.07%
Al 396.153Radial†	22967.0	15795	ug/L	27.1	15795	ppb	27.1	0.17%
As 188.979†	1234.4	508.28	ug/L	3.136	508.28	ppb	3.136	0.62%
B 249.677†	25036.9	519.65	ug/L	3.746	519.65	ppb	3.746	0.72%
Ba 233.527†	76858.0	579.02	ug/L	1.147	579.02	ppb	1.147	0.20%
Be 313.107†	1412442.1	511.29	ug/L	0.868	511.29	ppb	0.868	0.17%
Ca 317.933Radial†	6432.0	9387.5	ug/L	29.27	9387.5	ppb	29.27	0.31%
Cd 226.502†	48758.7	496.45	ug/L	0.964	496.45	ppb	0.964	0.19%
Co 228.616†	25790.0	481.98	ug/L	3.094	481.98	ppb	3.094	0.64%
Cr 267.716†	48195.1	507.08	ug/L	0.547	507.08	ppb	0.547	0.11%
Cu 324.752†	182839.9	535.95	ug/L	1.653	535.95	ppb	1.653	0.31%
Fe 238.204 Radial†	10660.3	95521	ug/L	425.1	95521	ppb	425.1	0.45%
K 766.490 Radial†	48177.7	8068.8	ug/L	19.69	8068.8	ppb	19.69	0.24%

Mg 279.077 IEC†	225.3	7505.8	ug/L	132.40	7505.8	ppb	132.40	1.76%
Mn 257.610†	1154336.9	1232.8	ug/L	3.09	1232.8	ppb	3.09	0.25%
Mo 202.031†	8195.2	528.29	ug/L	3.297	528.29	ppb	3.297	0.62%
Na 589.592 Radial†	34789.3	10543	ug/L	58.5	10543	ppb	58.5	0.56%
Ni 231.604†	21654.2	497.28	ug/L	3.223	497.28	ppb	3.223	0.65%
P 214.914†	1967.4	948.80	ug/L	1.001	948.80	ppb	1.001	0.11%
Pb 220.353†	4843.4	538.76	ug/L	3.768	538.76	ppb	3.768	0.70%
S 181.975 Axial†	5410.7	7145.5	ug/L	52.30	7145.5	ppb	52.30	0.73%
Sb 206.836†	1576.5	502.46	ug/L	4.486	502.46	ppb	4.486	0.89%
Se 196.026†	427.1	537.81	ug/L	3.205	537.81	ppb	3.205	0.60%
Si 251.611†	632919.3	18838	ug/L	63.2	18838	ppb	63.2	0.34%
Sn 189.927†	3201.1	517.20	ug/L	4.249	517.20	ppb	4.249	0.82%
Sr 421.552†	91227.2	550.13	ug/L	1.595	550.13	ppb	1.595	0.29%
Ti 334.940†	1325502.5	2092.4	ug/L	4.25	2092.4	ppb	4.25	0.20%
Tl 190.801†	1682.5	494.01	ug/L	3.271	494.01	ppb	3.271	0.66%
U 409.014†	6098.9	162.36	ug/L	3.102	162.36	ppb	3.102	1.91%
V 292.402†	79787.6	521.81	ug/L	0.772	521.81	ppb	0.772	0.15%
Zn 213.857†	77410.3	652.70	ug/L	0.875	652.70	ppb	0.875	0.13%
SiO2†	628559.6	40091	ug/L	151.4	40091	ppb	151.4	0.38%

Sequence No.: 8
Sample ID: 1201985641|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 12/11/2009 14:12:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985641|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5549.8	5549.8	99.5	%			14:14:33
1	Y RADIAL	7815.6	7815.6	129.4	%			14:14:33
1	Al 396.153Radial†	22222.8	22361.9	15379	ug/L	15379	ppb	14:14:33
1	Ca 317.933Radial†	6330.4	6343.1	9257.6	ug/L	9257.6	ppb	14:14:33
1	Fe 238.204 Radial†	10040.6	10077.6	90300	ug/L	90300	ppb	14:14:33
1	K 766.490 Radial†	51700.3	49202.3	8240.9	ug/L	8240.9	ppb	14:14:33
1	Mg 279.077 IEC†	222.5	221.7	7387.5	ug/L	7387.5	ppb	14:14:53
1	Na 589.592 Radial†	32388.6	34094.1	10333	ug/L	10333	ppb	14:14:33
1	Sr 421.552†	90750.5	91174.7	549.81	ug/L	549.81	ppb	14:14:33
1	Sc 361.383	875597.8	875597.8	100.89	%			14:15:53
1	Y 371.029	941137.8	941137.8	129.02	%			14:15:53
1	Ag 328.068†	107234.8	106020.0	510.09	ug/L	510.09	ppb	14:15:53
1	As 188.979†	1221.3	1241.8	509.88	ug/L	509.88	ppb	14:16:13
1	B 249.677†	24923.5	25198.1	523.78	ug/L	523.78	ppb	14:15:53
1	Ba 233.527†	79209.9	78526.1	591.29	ug/L	591.29	ppb	14:15:53
1	Be 313.107†	1429718.1	1421837.3	514.55	ug/L	514.55	ppb	14:15:53
1	Cd 226.502†	49018.6	48787.5	497.28	ug/L	497.28	ppb	14:15:53
1	Co 228.616†	26048.7	25893.6	484.13	ug/L	484.13	ppb	14:16:13
1	Cr 267.716†	48827.7	48313.3	508.20	ug/L	508.20	ppb	14:15:53
1	Cu 324.752†	190718.0	182286.9	534.08	ug/L	534.08	ppb	14:15:53
1	Mn 257.610†	1139886.0	1129365.2	1205.8	ug/L	1205.8	ppb	14:15:53
1	Mo 202.031†	8310.9	8219.6	529.47	ug/L	529.47	ppb	14:16:13
1	Ni 231.604†	21935.1	21656.7	497.33	ug/L	497.33	ppb	14:16:13
1	P 214.914†	2142.6	1881.8	905.28	ug/L	905.28	ppb	14:16:13
1	Pb 220.353†	4812.7	4838.4	538.54	ug/L	538.54	ppb	14:16:13
1	S 181.975 Axial†	5440.5	5343.4	7056.6	ug/L	7056.6	ppb	14:16:13
1	Sb 206.836†	1623.7	1572.1	501.14	ug/L	501.14	ppb	14:16:13
1	Se 196.026†	418.3	441.4	529.73	ug/L	529.73	ppb	14:16:13
1	Si 251.611†	646495.7	640342.0	19059	ug/L	19059	ppb	14:15:53
1	Sn 189.927†	3230.0	3192.8	515.79	ug/L	515.79	ppb	14:16:13
1	Ti 334.940†	1301218.5	1291058.6	2038.0	ug/L	2038.0	ppb	14:15:53
1	Tl 190.801†	1682.0	1701.8	498.87	ug/L	498.87	ppb	14:16:13
1	U 409.014†	5185.5	7724.1	209.74	ug/L	209.74	ppb	14:15:53
1	V 292.402†	79024.4	79693.8	522.15	ug/L	522.15	ppb	14:15:53
1	Zn 213.857†	77589.4	76154.9	642.40	ug/L	642.40	ppb	14:15:53
1	SiO2†	642665.2	636502.4	40597	ug/L	40597	ppb	14:17:13
2	Sc Radial	5564.5	5564.5	99.8	%			14:14:59
2	Y RADIAL	7781.1	7781.1	128.8	%			14:14:59
2	Al 396.153Radial†	22210.4	22290.8	15329	ug/L	15329	ppb	14:14:59
2	Ca 317.933Radial†	6318.1	6314.0	9215.3	ug/L	9215.3	ppb	14:14:59
2	Fe 238.204 Radial†	10047.9	10058.5	90129	ug/L	90129	ppb	14:14:59
2	K 766.490 Radial†	51754.6	49120.1	8227.1	ug/L	8227.1	ppb	14:14:59
2	Mg 279.077 IEC†	223.1	221.7	7387.3	ug/L	7387.3	ppb	14:15:19
2	Na 589.592 Radial†	32577.4	34197.6	10364	ug/L	10364	ppb	14:14:59
2	Sr 421.552†	90767.8	90952.4	548.47	ug/L	548.47	ppb	14:14:59
2	Sc 361.383	874085.6	874085.6	100.71	%			14:16:20
2	Y 371.029	939226.3	939226.3	128.76	%			14:16:20
2	Ag 328.068†	107119.4	106089.3	510.36	ug/L	510.36	ppb	14:16:20
2	As 188.979†	1232.2	1254.8	514.87	ug/L	514.87	ppb	14:16:40
2	B 249.677†	24864.1	25181.8	523.44	ug/L	523.44	ppb	14:16:20
2	Ba 233.527†	79343.1	78794.1	593.29	ug/L	593.29	ppb	14:16:20
2	Be 313.107†	1429937.4	1424506.8	515.52	ug/L	515.52	ppb	14:16:20
2	Cd 226.502†	49064.1	48916.7	498.64	ug/L	498.64	ppb	14:16:20
2	Co 228.616†	26239.5	26127.8	488.56	ug/L	488.56	ppb	14:16:40
2	Cr 267.716†	48848.4	48417.5	509.30	ug/L	509.30	ppb	14:16:20
2	Cu 324.752†	190501.3	182398.7	534.39	ug/L	534.39	ppb	14:16:20
2	Mn 257.610†	1141212.4	1132636.9	1209.3	ug/L	1209.3	ppb	14:16:20
2	Mo 202.031†	8360.8	8283.4	533.52	ug/L	533.52	ppb	14:16:40
2	Ni 231.604†	22094.1	21852.2	501.82	ug/L	501.82	ppb	14:16:40

2	P 214.914†	2180.5	1923.0	928.51 ug/L	928.51 ppb	14:16:40
2	Pb 220.353†	4876.6	4910.2	546.58 ug/L	546.58 ppb	14:16:40
2	S 181.975 Axial†	5495.4	5407.2	7140.9 ug/L	7140.9 ppb	14:16:40
2	Sb 206.836†	1643.0	1594.0	508.24 ug/L	508.24 ppb	14:16:40
2	Se 196.026†	433.5	457.3	538.15 ug/L	538.15 ppb	14:16:40
2	Si 251.611†	646034.3	640992.5	19078 ug/L	19078 ppb	14:16:20
2	Sn 189.927†	3272.1	3240.1	523.40 ug/L	523.40 ppb	14:16:40
2	Ti 334.940†	1300810.9	1292885.3	2040.9 ug/L	2040.9 ppb	14:16:20
2	Tl 190.801†	1689.9	1712.5	501.89 ug/L	501.89 ppb	14:16:40
2	U 409.014†	5038.0	7586.4	205.80 ug/L	205.80 ppb	14:16:20
2	V 292.402†	79149.4	79953.4	523.95 ug/L	523.95 ppb	14:16:20
2	Zn 213.857†	77666.0	76364.0	644.19 ug/L	644.19 ppb	14:16:20
2	SiO2†	642240.0	637182.3	40641 ug/L	40641 ppb	14:17:19
3	Sc Radial	5537.5	5537.5	99.3 %		14:15:24
3	Y RADIAL	7789.4	7789.4	129.0 %		14:15:24
3	Al 396.153Radial†	22085.4	22273.3	15318 ug/L	15318 ppb	14:15:24
3	Ca 317.933Radial†	6259.0	6285.3	9173.4 ug/L	9173.4 ppb	14:15:24
3	Fe 238.204 Radial†	9998.1	10057.3	90119 ug/L	90119 ppb	14:15:24
3	K 766.490 Radial†	51388.0	49003.7	8207.5 ug/L	8207.5 ppb	14:15:24
3	Mg 279.077 IEC†	224.9	224.5	7483.0 ug/L	7483.0 ppb	14:15:44
3	Na 589.592 Radial†	32241.7	34018.6	10310 ug/L	10310 ppb	14:15:24
3	Sr 421.552†	90366.6	90991.3	548.71 ug/L	548.71 ppb	14:15:24
3	Sc 361.383	882792.0	882792.0	101.71 %		14:16:47
3	Y 371.029	947698.9	947698.9	129.92 %		14:16:47
3	Ag 328.068†	108374.8	106274.5	511.19 ug/L	511.19 ppb	14:16:47
3	As 188.979†	1234.4	1244.9	511.08 ug/L	511.08 ppb	14:17:07
3	B 249.677†	25245.9	25313.7	526.27 ug/L	526.27 ppb	14:16:47
3	Ba 233.527†	80097.9	78759.3	593.03 ug/L	593.03 ppb	14:16:47
3	Be 313.107†	1443242.5	1423584.7	515.19 ug/L	515.19 ppb	14:16:47
3	Cd 226.502†	49546.6	48910.7	498.57 ug/L	498.57 ppb	14:16:47
3	Co 228.616†	26081.9	25715.8	480.76 ug/L	480.76 ppb	14:17:07
3	Cr 267.716†	49409.5	48490.9	510.06 ug/L	510.06 ppb	14:16:47
3	Cu 324.752†	192726.0	182720.5	535.33 ug/L	535.33 ppb	14:16:47
3	Mn 257.610†	1153119.5	1133167.9	1209.8 ug/L	1209.8 ppb	14:16:47
3	Mo 202.031†	8310.3	8151.9	525.15 ug/L	525.15 ppb	14:17:07
3	Ni 231.604†	21983.5	21527.1	494.35 ug/L	494.35 ppb	14:17:07
3	P 214.914†	2174.7	1896.0	913.12 ug/L	913.12 ppb	14:17:07
3	Pb 220.353†	4818.8	4805.5	534.85 ug/L	534.85 ppb	14:17:07
3	S 181.975 Axial†	5453.9	5312.6	7015.9 ug/L	7015.9 ppb	14:17:07
3	Sb 206.836†	1643.1	1578.0	502.79 ug/L	502.79 ppb	14:17:07
3	Se 196.026†	433.3	452.8	535.57 ug/L	535.57 ppb	14:17:07
3	Si 251.611†	653482.9	641989.1	19108 ug/L	19108 ppb	14:16:47
3	Sn 189.927†	3235.2	3171.9	512.41 ug/L	512.41 ppb	14:17:07
3	Ti 334.940†	1315191.4	1294285.0	2043.1 ug/L	2043.1 ppb	14:16:47
3	Tl 190.801†	1674.5	1680.9	493.04 ug/L	493.04 ppb	14:17:07
3	U 409.014†	5135.6	7633.1	207.14 ug/L	207.14 ppb	14:16:47
3	V 292.402†	79925.4	79941.3	523.76 ug/L	523.76 ppb	14:16:47
3	Zn 213.857†	78467.2	76391.1	644.46 ug/L	644.46 ppb	14:16:47
3	SiO2†	655078.4	643515.1	41045 ug/L	41045 ppb	14:17:24

Mean Data: 1201985641|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877491.8	101.10	%	0.536				0.53%
Sc Radial	5550.6	99.5	%	0.24				0.24%
Y 371.029	942687.7	129.23	%	0.609				0.47%
Y RADIAL	7795.4	129.1	%	0.30				0.23%
Ag 328.068†	106127.9	510.55	ug/L	0.575	510.55	ppb	0.575	0.11%
Al 396.153Radial†	22308.7	15342	ug/L	32.3	15342	ppb	32.3	0.21%
As 188.979†	1247.2	511.95	ug/L	2.606	511.95	ppb	2.606	0.51%
B 249.677†	25231.2	524.50	ug/L	1.548	524.50	ppb	1.548	0.30%
Ba 233.527†	78693.2	592.53	ug/L	1.087	592.53	ppb	1.087	0.18%
Be 313.107†	1423309.6	515.09	ug/L	0.490	515.09	ppb	0.490	0.10%
Ca 317.933Radial†	6314.1	9215.4	ug/L	42.14	9215.4	ppb	42.14	0.46%
Cd 226.502†	48871.6	498.16	ug/L	0.767	498.16	ppb	0.767	0.15%
Co 228.616†	25912.4	484.49	ug/L	3.910	484.49	ppb	3.910	0.81%
Cr 267.716†	48407.2	509.19	ug/L	0.935	509.19	ppb	0.935	0.18%
Cu 324.752†	182468.7	534.60	ug/L	0.650	534.60	ppb	0.650	0.12%
Fe 238.204 Radial†	10064.5	90183	ug/L	102.1	90183	ppb	102.1	0.11%
K 766.490 Radial†	49108.7	8225.2	ug/L	16.78	8225.2	ppb	16.78	0.20%

Mg 279.077 IEC†	222.6	7419.3	ug/L	55.18	7419.3	ppb	55.18	0.74%
Mn 257.610†	1131723.3	1208.3	ug/L	2.17	1208.3	ppb	2.17	0.18%
Mo 202.031†	8218.3	529.38	ug/L	4.186	529.38	ppb	4.186	0.79%
Na 589.592 Radial†	34103.5	10335	ug/L	27.2	10335	ppb	27.2	0.26%
Ni 231.604†	21678.7	497.84	ug/L	3.759	497.84	ppb	3.759	0.75%
P 214.914†	1900.3	915.64	ug/L	11.816	915.64	ppb	11.816	1.29%
Pb 220.353†	4851.4	539.99	ug/L	6.002	539.99	ppb	6.002	1.11%
S 181.975 Axial†	5354.4	7071.1	ug/L	63.77	7071.1	ppb	63.77	0.90%
Sb 206.836†	1581.4	504.06	ug/L	3.718	504.06	ppb	3.718	0.74%
Se 196.026†	450.5	534.48	ug/L	4.310	534.48	ppb	4.310	0.81%
Si 251.611†	641107.9	19081	ug/L	24.8	19081	ppb	24.8	0.13%
Sn 189.927†	3201.6	517.20	ug/L	5.627	517.20	ppb	5.627	1.09%
Sr 421.552†	91039.5	549.00	ug/L	0.716	549.00	ppb	0.716	0.13%
Ti 334.940†	1292743.0	2040.7	ug/L	2.55	2040.7	ppb	2.55	0.13%
Tl 190.801†	1698.4	497.93	ug/L	4.500	497.93	ppb	4.500	0.90%
U 409.014†	7647.9	207.56	ug/L	2.001	207.56	ppb	2.001	0.96%
V 292.402†	79862.9	523.29	ug/L	0.987	523.29	ppb	0.987	0.19%
Zn 213.857†	76303.3	643.68	ug/L	1.120	643.68	ppb	1.120	0.17%
SiO2†	639066.6	40761	ug/L	247.0	40761	ppb	247.0	0.61%

Sequence No.: 9
Sample ID: 1201985639|928610|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 12/11/2009 14:19:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985639|928610|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5552.8	5552.8	99.6	%			14:21:26
1	Y RADIAL	6305.7	6305.7	104.4	%			14:21:26
1	Al 396.153Radial†	1573.7	1615.5	1112.4	ug/L	1112.4	ppb	14:21:26
1	Ca 317.933Radial†	605.1	590.8	862.20	ug/L	862.20	ppb	14:21:46
1	Fe 238.204 Radial†	1793.7	1791.2	16047	ug/L	16047	ppb	14:21:46
1	K 766.490 Radial†	5122.4	2404.1	401.94	ug/L	401.94	ppb	14:21:26
1	Mg 279.077 IEC†	10.2	8.3	265.24	ug/L	265.24	ppb	14:21:46
1	Na 589.592 Radial†	926.7	2484.6	752.99	ug/L	752.99	ppb	14:21:26
1	Sr 421.552†	807.6	811.1	4.8842	ug/L	4.8842	ppb	14:21:26
1	Sc 361.383	870531.5	870531.5	100.30	%			14:22:43
1	Y 371.029	756725.9	756725.9	103.74	%			14:22:43
1	Ag 328.068†	-681.7	-953.6	0.8493	ug/L	0.8493	ppb	14:22:43
1	As 188.979†	-25.2	6.2	7.2922	ug/L	7.2922	ppb	14:23:03
1	B 249.677†	32.3	525.4	9.0658	ug/L	9.0658	ppb	14:23:03
1	Ba 233.527†	1202.0	1209.5	9.6456	ug/L	9.6456	ppb	14:23:03
1	Be 313.107†	-6143.5	-1462.4	0.0450	ug/L	0.0450	ppb	14:22:43
1	Cd 226.502†	-43.1	156.0	0.0145	ug/L	0.0145	ppb	14:23:03
1	Co 228.616†	-23.4	50.1	0.1194	ug/L	0.1194	ppb	14:23:03
1	Cr 267.716†	200.8	114.1	1.5094	ug/L	1.5094	ppb	14:23:03
1	Cu 324.752†	8859.8	2075.3	6.8465	ug/L	6.8465	ppb	14:22:43
1	Mn 257.610†	125689.7	124791.9	133.85	ug/L	133.85	ppb	14:22:43
1	Mo 202.031†	113.1	94.4	7.1432	ug/L	7.1432	ppb	14:23:03
1	Ni 231.604†	166.7	80.3	1.8443	ug/L	1.8443	ppb	14:23:03
1	P 214.914†	396.2	153.0	71.901	ug/L	71.901	ppb	14:23:03
1	Pb 220.353†	3.7	71.7	6.9662	ug/L	6.9662	ppb	14:23:03
1	S 181.975 Axial†	361.2	310.7	410.22	ug/L	410.22	ppb	14:23:03
1	Sb 206.836†	43.0	5.5	1.2768	ug/L	1.2768	ppb	14:23:03
1	Se 196.026†	-109.5	-82.3	3.1785	ug/L	3.1785	ppb	14:23:03
1	Si 251.611†	62547.5	61877.8	1842.7	ug/L	1842.7	ppb	14:22:43
1	Sn 189.927†	7.5	-1.4	0.0799	ug/L	0.0799	ppb	14:23:03
1	Ti 334.940†	183064.0	183770.2	290.13	ug/L	290.13	ppb	14:22:43
1	Tl 190.801†	-49.4	-14.7	-1.1222	ug/L	-1.1222	ppb	14:23:03
1	U 409.014†	-4455.9	-1858.5	-55.453	ug/L	-55.453	ppb	14:22:43
1	V 292.402†	-475.1	889.1	3.1430	ug/L	3.1430	ppb	14:23:03
1	Zn 213.857†	4246.2	3479.6	28.371	ug/L	28.371	ppb	14:23:03
1	SiO2†	62081.6	61370.6	3916.6	ug/L	3916.6	ppb	14:23:59
2	Sc Radial	5435.3	5435.3	97.5	%			14:21:51
2	Y RADIAL	6136.3	6136.3	101.6	%			14:21:51
2	Al 396.153Radial†	1525.3	1600.1	1101.8	ug/L	1101.8	ppb	14:21:51
2	Ca 317.933Radial†	604.8	603.5	880.84	ug/L	880.84	ppb	14:22:11
2	Fe 238.204 Radial†	1790.6	1827.0	16368	ug/L	16368	ppb	14:22:11
2	K 766.490 Radial†	5154.7	2548.4	426.15	ug/L	426.15	ppb	14:21:51
2	Mg 279.077 IEC†	14.0	12.4	403.99	ug/L	403.99	ppb	14:22:11
2	Na 589.592 Radial†	878.1	2454.9	743.98	ug/L	743.98	ppb	14:21:51
2	Sr 421.552†	791.8	812.5	4.8921	ug/L	4.8921	ppb	14:21:51
2	Sc 361.383	859935.0	859935.0	99.080	%			14:23:09
2	Y 371.029	747828.2	747828.2	102.52	%			14:23:09
2	Ag 328.068†	-802.5	-1084.0	0.3652	ug/L	0.3652	ppb	14:23:09
2	As 188.979†	-37.5	-6.5	2.4346	ug/L	2.4346	ppb	14:23:29
2	B 249.677†	48.9	542.5	9.3889	ug/L	9.3889	ppb	14:23:29
2	Ba 233.527†	1204.1	1226.4	9.7848	ug/L	9.7848	ppb	14:23:29
2	Be 313.107†	-6091.9	-1485.8	0.0366	ug/L	0.0366	ppb	14:23:09
2	Cd 226.502†	-60.4	138.0	-0.2039	ug/L	-0.2039	ppb	14:23:29
2	Co 228.616†	-41.6	31.5	-0.2392	ug/L	-0.2392	ppb	14:23:29
2	Cr 267.716†	197.9	113.7	1.5119	ug/L	1.5119	ppb	14:23:29
2	Cu 324.752†	8907.0	2231.8	7.3175	ug/L	7.3175	ppb	14:23:09
2	Mn 257.610†	124383.6	125017.8	134.12	ug/L	134.12	ppb	14:23:09
2	Mo 202.031†	95.4	77.9	6.1165	ug/L	6.1165	ppb	14:23:29
2	Ni 231.604†	150.1	65.5	1.5047	ug/L	1.5047	ppb	14:23:29

2	P 214.914†	384.8	146.3	67.816 ug/L	67.816 ppb	14:23:29
2	Pb 220.353†	-19.7	48.1	4.2961 ug/L	4.2961 ppb	14:23:29
2	S 181.975 Axial†	357.9	311.8	411.72 ug/L	411.72 ppb	14:23:29
2	Sb 206.836†	35.6	-1.5	-0.9580 ug/L	-0.9580 ppb	14:23:29
2	Se 196.026†	-109.4	-83.6	3.4225 ug/L	3.4225 ppb	14:23:29
2	Si 251.611†	61581.2	61671.0	1836.6 ug/L	1836.6 ppb	14:23:09
2	Sn 189.927†	-2.7	-11.5	-1.5439 ug/L	-1.5439 ppb	14:23:29
2	Ti 334.940†	180824.5	183758.9	290.12 ug/L	290.12 ppb	14:23:09
2	Tl 190.801†	-40.7	-6.5	1.1768 ug/L	1.1768 ppb	14:23:29
2	U 409.014†	-4504.0	-1961.8	-58.464 ug/L	-58.464 ppb	14:23:09
2	V 292.402†	-423.1	935.7	3.3869 ug/L	3.3869 ppb	14:23:29
2	Zn 213.857†	4238.9	3524.4	28.722 ug/L	28.722 ppb	14:23:29
2	SiO2†	62009.1	62060.1	3960.7 ug/L	3960.7 ppb	14:24:04
3	Sc Radial	5599.9	5599.9	100 %		14:22:16
3	Y RADIAL	6299.1	6299.1	104.3 %		14:22:16
3	Al 396.153Radial†	1565.2	1593.8	1097.4 ug/L	1097.4 ppb	14:22:16
3	Ca 317.933Radial†	602.4	583.0	850.82 ug/L	850.82 ppb	14:22:37
3	Fe 238.204 Radial†	1799.9	1782.3	15968 ug/L	15968 ppb	14:22:37
3	K 766.490 Radial†	5284.7	2522.4	421.77 ug/L	421.77 ppb	14:22:16
3	Mg 279.077 IEC†	14.1	12.2	395.18 ug/L	395.18 ppb	14:22:37
3	Na 589.592 Radial†	968.5	2518.5	763.26 ug/L	763.26 ppb	14:22:16
3	Sr 421.552†	792.0	788.9	4.7499 ug/L	4.7499 ppb	14:22:16
3	Sc 361.383	852794.7	852794.7	98.258 %		14:23:34
3	Y 371.029	741105.3	741105.3	101.60 %		14:23:34
3	Ag 328.068†	-752.5	-1039.9	0.4407 ug/L	0.4407 ppb	14:23:34
3	As 188.979†	-27.3	3.5	6.2556 ug/L	6.2556 ppb	14:23:54
3	B 249.677†	7.1	500.5	8.5456 ug/L	8.5456 ppb	14:23:54
3	Ba 233.527†	1192.6	1224.9	9.7588 ug/L	9.7588 ppb	14:23:54
3	Be 313.107†	-6076.1	-1521.2	0.0252 ug/L	0.0252 ppb	14:23:34
3	Cd 226.502†	-53.9	144.1	-0.1013 ug/L	-0.1013 ppb	14:23:54
3	Co 228.616†	-35.2	37.6	-0.1186 ug/L	-0.1186 ppb	14:23:54
3	Cr 267.716†	200.5	118.0	1.5515 ug/L	1.5515 ppb	14:23:54
3	Cu 324.752†	8787.7	2185.6	7.1629 ug/L	7.1629 ppb	14:23:34
3	Mn 257.610†	123717.3	125390.8	134.48 ug/L	134.48 ppb	14:23:34
3	Mo 202.031†	99.3	82.7	6.3929 ug/L	6.3929 ppb	14:23:54
3	Ni 231.604†	150.0	66.7	1.5328 ug/L	1.5328 ppb	14:23:54
3	P 214.914†	405.7	170.8	81.861 ug/L	81.861 ppb	14:23:54
3	Pb 220.353†	-5.1	62.8	5.9688 ug/L	5.9688 ppb	14:23:54
3	S 181.975 Axial†	356.8	313.7	414.26 ug/L	414.26 ppb	14:23:54
3	Sb 206.836†	40.1	3.4	0.6114 ug/L	0.6114 ppb	14:23:54
3	Se 196.026†	-104.4	-79.5	4.5306 ug/L	4.5306 ppb	14:23:54
3	Si 251.611†	61418.3	62025.6	1847.1 ug/L	1847.1 ppb	14:23:34
3	Sn 189.927†	6.0	-2.7	-0.1353 ug/L	-0.1353 ppb	14:23:54
3	Ti 334.940†	179749.0	184192.4	290.80 ug/L	290.80 ppb	14:23:34
3	Tl 190.801†	-56.1	-22.5	-3.3173 ug/L	-3.3173 ppb	14:23:54
3	U 409.014†	-4553.3	-2050.0	-60.951 ug/L	-60.951 ppb	14:23:34
3	V 292.402†	-391.9	963.9	3.6340 ug/L	3.6340 ppb	14:23:54
3	Zn 213.857†	4257.5	3579.2	29.232 ug/L	29.232 ppb	14:23:54
3	SiO2†	62260.4	62839.9	4010.4 ug/L	4010.4 ppb	14:24:10

Mean Data: 1201985639|928610|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861087.1	99.213	%	1.0282				1.04%
Sc Radial	5529.3	99.2	%	1.52				1.53%
Y 371.029	748553.1	102.62	%	1.074				1.05%
Y RADIAL	6247.0	103.4	%	1.59				1.54%
Ag 328.068†	-1025.8	0.5517	ug/L	0.26045	0.5517	ppb	0.26045	47.21%
Al 396.153Radial†	1603.1	1103.9	ug/L	7.68	1103.9	ppb	7.68	0.70%
As 188.979†	1.1	5.3275	ug/L	2.55834	5.3275	ppb	2.55834	48.02%
B 249.677†	522.8	9.0001	ug/L	0.42545	9.0001	ppb	0.42545	4.73%
Ba 233.527†	1220.2	9.7297	ug/L	0.07401	9.7297	ppb	0.07401	0.76%
Be 313.107†	-1489.8	0.0356	ug/L	0.00995	0.0356	ppb	0.00995	27.94%
Ca 317.933Radial†	592.4	864.62	ug/L	15.153	864.62	ppb	15.153	1.75%
Cd 226.502†	146.0	-0.0969	ug/L	0.10928	-0.0969	ppb	0.10928	112.77%
Co 228.616†	39.8	-0.0795	ug/L	0.18250	-0.0795	ppb	0.18250	229.68%
Cr 267.716†	115.3	1.5243	ug/L	0.02362	1.5243	ppb	0.02362	1.55%
Cu 324.752†	2164.2	7.1090	ug/L	0.24009	7.1090	ppb	0.24009	3.38%
Fe 238.204 Radial†	1800.2	16128	ug/L	212.0	16128	ppb	212.0	1.31%
K 766.490 Radial†	2491.6	416.62	ug/L	12.903	416.62	ppb	12.903	3.10%

Mg 279.077 IEC†	11.0	354.81	ug/L	77.688	354.81	ppb	77.688	21.90%
Mn 257.610†	125066.8	134.15	ug/L	0.313	134.15	ppb	0.313	0.23%
Mo 202.031†	85.0	6.5509	ug/L	0.53127	6.5509	ppb	0.53127	8.11%
Na 589.592 Radial†	2486.0	753.41	ug/L	9.646	753.41	ppb	9.646	1.28%
Ni 231.604†	70.8	1.6273	ug/L	0.18851	1.6273	ppb	0.18851	11.58%
P 214.914†	156.7	73.860	ug/L	7.2243	73.860	ppb	7.2243	9.78%
Pb 220.353†	60.8	5.7437	ug/L	1.34920	5.7437	ppb	1.34920	23.49%
S 181.975 Axial†	312.1	412.07	ug/L	2.038	412.07	ppb	2.038	0.49%
Sb 206.836†	2.5	0.3100	ug/L	1.14750	0.3100	ppb	1.14750	370.11%
Se 196.026†	-81.8	3.7105	ug/L	0.72062	3.7105	ppb	0.72062	19.42%
Si 251.611†	61858.1	1842.2	ug/L	5.30	1842.2	ppb	5.30	0.29%
Sn 189.927†	-5.2	-0.5331	ug/L	0.88195	-0.5331	ppb	0.88195	165.44%
Sr 421.552†	804.2	4.8421	ug/L	0.07991	4.8421	ppb	0.07991	1.65%
Ti 334.940†	183907.2	290.35	ug/L	0.390	290.35	ppb	0.390	0.13%
Tl 190.801†	-14.6	-1.0876	ug/L	2.24726	-1.0876	ppb	2.24726	206.63%
U 409.014†	-1956.8	-58.289	ug/L	2.7530	-58.289	ppb	2.7530	4.72%
V 292.402†	929.6	3.3880	ug/L	0.24553	3.3880	ppb	0.24553	7.25%
Zn 213.857†	3527.7	28.775	ug/L	0.4330	28.775	ppb	0.4330	1.50%
SiO2†	62090.2	3962.6	ug/L	46.93	3962.6	ppb	46.93	1.18%

Sequence No.: 10
Sample ID: 241825002|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 12/11/2009 14:26:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825002|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5238.2	5238.2	93.9	%			14:28:33
1	Y RADIAL	6471.4	6471.4	107.2	%			14:28:33
1	Al 396.153Radial†	128530.7	136848.0	94248	ug/L	94248	ppb	14:28:13
1	Ca 317.933Radial†	18620.4	19803.3	28903	ug/L	28903	ppb	14:28:13
1	Fe 238.204 Radial†	12705.1	13513.8	121070	ug/L	121070	ppb	14:28:13
1	K 766.490 Radial†	76283.7	78459.6	13158	ug/L	13158	ppb	14:28:13
1	Mg 279.077 IEC†	601.2	638.0	21351	ug/L	21351	ppb	14:28:33
1	Na 589.592 Radial†	15305.0	17845.3	5408.2	ug/L	5408.2	ppb	14:28:13
1	Sr 421.552†	39469.4	42012.9	253.12	ug/L	253.12	ppb	14:28:13
1	Sc 361.383	872420.5	872420.5	100.52	%			14:29:30
1	Y 371.029	822027.8	822027.8	112.69	%			14:29:30
1	Ag 328.068†	-7181.0	-7418.0	5.2900	ug/L	5.2900	ppb	14:29:35
1	As 188.979†	-55.2	-23.6	25.925	ug/L	25.925	ppb	14:29:55
1	B 249.677†	2119.2	2601.4	39.319	ug/L	39.319	ppb	14:29:35
1	Ba 233.527†	90214.7	89760.0	675.49	ug/L	675.49	ppb	14:29:35
1	Be 313.107†	7926.3	12548.0	8.3376	ug/L	8.3376	ppb	14:29:35
1	Cd 226.502†	891.9	1086.2	-0.8024	ug/L	-0.8024	ppb	14:29:55
1	Co 228.616†	1170.6	1238.0	17.802	ug/L	17.802	ppb	14:29:55
1	Cr 267.716†	5098.9	4986.5	54.680	ug/L	54.680	ppb	14:29:55
1	Cu 324.752†	21609.6	14740.2	48.990	ug/L	48.990	ppb	14:29:35
1	Mn 257.610†	1215985.5	1209186.7	1293.2	ug/L	1293.2	ppb	14:29:30
1	Mo 202.031†	290.2	270.3	25.789	ug/L	25.789	ppb	14:29:55
1	Ni 231.604†	2541.8	2442.7	56.116	ug/L	56.116	ppb	14:29:55
1	P 214.914†	2037.8	1785.3	923.98	ug/L	923.98	ppb	14:29:55
1	Pb 220.353†	716.0	780.3	98.573	ug/L	98.573	ppb	14:29:55
1	S 181.975 Axial†	1761.8	1703.3	2231.9	ug/L	2231.9	ppb	14:29:55
1	Sb 206.836†	56.4	18.7	-0.9204	ug/L	-0.9204	ppb	14:29:55
1	Se 196.026†	-640.7	-610.6	42.695	ug/L	42.695	ppb	14:29:55
1	Si 251.611†	960407.3	954966.7	28438	ug/L	28438	ppb	14:29:30
1	Sn 189.927†	-106.1	-114.4	-13.724	ug/L	-13.724	ppb	14:29:55
1	Ti 334.940†	1240288.4	1235140.6	1951.2	ug/L	1951.2	ppb	14:29:30
1	Tl 190.801†	-139.7	-104.4	-4.7901	ug/L	-4.7901	ppb	14:29:55
1	U 409.014†	-10756.9	-8117.4	-248.71	ug/L	-248.71	ppb	14:29:30
1	V 292.402†	19398.6	20661.2	117.16	ug/L	117.16	ppb	14:29:35
1	Zn 213.857†	39131.9	38176.0	315.69	ug/L	315.69	ppb	14:29:35
1	SiO2†	959790.9	954310.7	60902	ug/L	60902	ppb	14:31:04
2	Sc Radial	5430.3	5430.3	97.4	%			14:28:58
2	Y RADIAL	6649.3	6649.3	110.1	%			14:28:58
2	Al 396.153Radial†	134995.4	138646.4	95487	ug/L	95487	ppb	14:28:38
2	Ca 317.933Radial†	19469.3	19973.9	29152	ug/L	29152	ppb	14:28:38
2	Fe 238.204 Radial†	13291.1	13637.2	122180	ug/L	122180	ppb	14:28:38
2	K 766.490 Radial†	79093.1	78472.0	13160	ug/L	13160	ppb	14:28:38
2	Mg 279.077 IEC†	596.4	610.5	20425	ug/L	20425	ppb	14:28:58
2	Na 589.592 Radial†	16157.2	18144.1	5498.7	ug/L	5498.7	ppb	14:28:38
2	Sr 421.552†	41447.0	42557.3	256.40	ug/L	256.40	ppb	14:28:38
2	Sc 361.383	879195.2	879195.2	101.30	%			14:30:01
2	Y 371.029	828647.8	828647.8	113.60	%			14:30:01
2	Ag 328.068†	-7232.5	-7413.8	5.6602	ug/L	5.6602	ppb	14:30:06
2	As 188.979†	-39.2	-7.4	32.344	ug/L	32.344	ppb	14:30:27
2	B 249.677†	2006.5	2474.0	36.455	ug/L	36.455	ppb	14:30:06
2	Ba 233.527†	90817.1	89663.1	674.80	ug/L	674.80	ppb	14:30:06
2	Be 313.107†	8025.1	12584.8	8.3514	ug/L	8.3514	ppb	14:30:06
2	Cd 226.502†	887.2	1074.8	-1.0326	ug/L	-1.0326	ppb	14:30:27
2	Co 228.616†	1188.6	1246.8	17.954	ug/L	17.954	ppb	14:30:27
2	Cr 267.716†	5115.7	4964.0	54.465	ug/L	54.465	ppb	14:30:27
2	Cu 324.752†	21500.0	14466.3	48.251	ug/L	48.251	ppb	14:30:06
2	Mn 257.610†	1226610.2	1210353.6	1294.6	ug/L	1294.6	ppb	14:30:01
2	Mo 202.031†	307.7	285.3	26.825	ug/L	26.825	ppb	14:30:27
2	Ni 231.604†	2520.3	2402.1	55.181	ug/L	55.181	ppb	14:30:27

2	P 214.914†	2023.6	1755.6	907.13 ug/L	907.13 ppb	14:30:27
2	Pb 220.353†	725.1	783.7	99.145 ug/L	99.145 ppb	14:30:27
2	S 181.975 Axial†	1764.5	1692.5	2217.3 ug/L	2217.3 ppb	14:30:27
2	Sb 206.836†	61.1	22.9	0.4933 ug/L	0.4933 ppb	14:30:27
2	Se 196.026†	-634.0	-599.1	52.715 ug/L	52.715 ppb	14:30:27
2	Si 251.611†	967921.3	955021.9	28440 ug/L	28440 ppb	14:30:01
2	Sn 189.927†	-81.0	-88.8	-9.5674 ug/L	-9.5674 ppb	14:30:27
2	Ti 334.940†	1250107.4	1235325.8	1951.5 ug/L	1951.5 ppb	14:30:01
2	Tl 190.801†	-151.2	-114.6	-7.6314 ug/L	-7.6314 ppb	14:30:27
2	U 409.014†	-10958.9	-8234.3	-252.21 ug/L	-252.21 ppb	14:30:01
2	V 292.402†	19562.7	20674.5	117.07 ug/L	117.07 ppb	14:30:06
2	Zn 213.857†	39330.2	38071.7	314.72 ug/L	314.72 ppb	14:30:06
2	SiO2†	963053.8	950174.1	60637 ug/L	60637 ppb	14:31:10
3	Sc Radial	5492.3	5492.3	98.5 %		14:29:23
3	Y RADIAL	6726.0	6726.0	111.4 %		14:29:23
3	Al 396.153Radial†	133081.0	135137.7	93070 ug/L	93070 ppb	14:29:03
3	Ca 317.933Radial†	19256.2	19531.8	28506 ug/L	28506 ppb	14:29:03
3	Fe 238.204 Radial†	13094.6	13283.6	119010 ug/L	119010 ppb	14:29:03
3	K 766.490 Radial†	78871.1	77329.5	12968 ug/L	12968 ppb	14:29:03
3	Mg 279.077 IEC†	596.9	604.0	20211 ug/L	20211 ppb	14:29:23
3	Na 589.592 Radial†	16011.3	17808.6	5397.1 ug/L	5397.1 ppb	14:29:03
3	Sr 421.552†	41031.9	41655.3	250.97 ug/L	250.97 ppb	14:29:03
3	Sc 361.383	876527.1	876527.1	100.99 %		14:30:32
3	Y 371.029	824881.0	824881.0	113.08 %		14:30:32
3	Ag 328.068†	-7371.9	-7573.5	3.9448 ug/L	3.9448 ppb	14:30:38
3	As 188.979†	-39.2	-7.6	31.830 ug/L	31.830 ppb	14:30:58
3	B 249.677†	2084.3	2557.0	38.645 ug/L	38.645 ppb	14:30:38
3	Ba 233.527†	91889.1	90997.5	684.66 ug/L	684.66 ppb	14:30:38
3	Be 313.107†	8122.8	12705.6	8.4029 ug/L	8.4029 ppb	14:30:38
3	Cd 226.502†	880.9	1071.2	-0.7524 ug/L	-0.7524 ppb	14:30:58
3	Co 228.616†	1185.2	1247.0	17.999 ug/L	17.999 ppb	14:30:58
3	Cr 267.716†	5039.6	4904.0	53.783 ug/L	53.783 ppb	14:30:58
3	Cu 324.752†	22020.1	15045.9	49.773 ug/L	49.773 ppb	14:30:38
3	Mn 257.610†	1226525.1	1213955.2	1298.1 ug/L	1298.1 ppb	14:30:32
3	Mo 202.031†	313.7	292.2	27.034 ug/L	27.034 ppb	14:30:58
3	Ni 231.604†	2523.1	2412.4	55.418 ug/L	55.418 ppb	14:30:58
3	P 214.914†	2007.0	1745.3	902.77 ug/L	902.77 ppb	14:30:58
3	Pb 220.353†	703.1	764.2	96.675 ug/L	96.675 ppb	14:30:58
3	S 181.975 Axial†	1734.1	1667.7	2185.0 ug/L	2185.0 ppb	14:30:58
3	Sb 206.836†	60.6	22.6	0.3489 ug/L	0.3489 ppb	14:30:58
3	Se 196.026†	-625.4	-592.5	46.345 ug/L	46.345 ppb	14:30:58
3	Si 251.611†	968006.5	958014.8	28529 ug/L	28529 ppb	14:30:32
3	Sn 189.927†	-106.0	-113.8	-13.709 ug/L	-13.709 ppb	14:30:58
3	Ti 334.940†	1248960.9	1237947.0	1955.6 ug/L	1955.6 ppb	14:30:32
3	Tl 190.801†	-137.1	-101.1	-3.8440 ug/L	-3.8440 ppb	14:30:58
3	U 409.014†	-10870.3	-8179.5	-250.24 ug/L	-250.24 ppb	14:30:32
3	V 292.402†	19787.3	20955.6	119.42 ug/L	119.42 ppb	14:30:38
3	Zn 213.857†	39819.8	38674.7	320.22 ug/L	320.22 ppb	14:30:38
3	SiO2†	965057.2	955051.7	60949 ug/L	60949 ppb	14:31:16

Mean Data: 241825002|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	876047.6	100.94	%	0.393				0.39%
Sc Radial	5387.0	96.6	%	2.38				2.46%
Y 371.029	825185.5	113.12	%	0.455				0.40%
Y RADIAL	6615.5	109.5	%	2.16				1.97%
Ag 328.068†	-7468.4	4.9650	ug/L	0.90275	4.9650	ppb	0.90275	18.18%
Al 396.153Radial†	136877.4	94268	ug/L	1208.4	94268	ppb	1208.4	1.28%
As 188.979†	-12.8	30.033	ug/L	3.5667	30.033	ppb	3.5667	11.88%
B 249.677†	2544.1	38.140	ug/L	1.4973	38.140	ppb	1.4973	3.93%
Ba 233.527†	90140.2	678.32	ug/L	5.505	678.32	ppb	5.505	0.81%
Be 313.107†	12612.8	8.3640	ug/L	0.03442	8.3640	ppb	0.03442	0.41%
Ca 317.933Radial†	19769.7	28854	ug/L	325.4	28854	ppb	325.4	1.13%
Cd 226.502†	1077.4	-0.8625	ug/L	0.14940	-0.8625	ppb	0.14940	17.32%
Co 228.616†	1243.9	17.919	ug/L	0.1036	17.919	ppb	0.1036	0.58%
Cr 267.716†	4951.5	54.309	ug/L	0.4681	54.309	ppb	0.4681	0.86%
Cu 324.752†	14750.8	49.005	ug/L	0.7611	49.005	ppb	0.7611	1.55%
Fe 238.204 Radial†	13478.2	120750	ug/L	1608.1	120750	ppb	1608.1	1.33%
K 766.490 Radial†	78087.0	13096	ug/L	110.2	13096	ppb	110.2	0.84%

Mg 279.077 IEC†	617.5	20662	ug/L	605.9	20662	ppb	605.9	2.93%
Mn 257.610†	1211165.2	1295.3	ug/L	2.51	1295.3	ppb	2.51	0.19%
Mo 202.031†	282.6	26.550	ug/L	0.6668	26.550	ppb	0.6668	2.51%
Na 589.592 Radial†	17932.7	5434.7	ug/L	55.77	5434.7	ppb	55.77	1.03%
Ni 231.604†	2419.1	55.572	ug/L	0.4861	55.572	ppb	0.4861	0.87%
P 214.914†	1762.0	911.29	ug/L	11.200	911.29	ppb	11.200	1.23%
Pb 220.353†	776.1	98.131	ug/L	1.2929	98.131	ppb	1.2929	1.32%
S 181.975 Axial†	1687.8	2211.4	ug/L	23.99	2211.4	ppb	23.99	1.08%
Sb 206.836†	21.4	-0.0261	ug/L	0.77787	-0.0261	ppb	0.77787	>999.9%
Se 196.026†	-600.7	47.252	ug/L	5.0711	47.252	ppb	5.0711	10.73%
Si 251.611†	956001.1	28469	ug/L	52.0	28469	ppb	52.0	0.18%
Sn 189.927†	-105.7	-12.333	ug/L	2.3954	-12.333	ppb	2.3954	19.42%
Sr 421.552†	42075.2	253.50	ug/L	2.737	253.50	ppb	2.737	1.08%
Ti 334.940†	1236137.8	1952.7	ug/L	2.46	1952.7	ppb	2.46	0.13%
Tl 190.801†	-106.7	-5.4219	ug/L	1.97114	-5.4219	ppb	1.97114	36.36%
U 409.014†	-8177.1	-250.39	ug/L	1.755	-250.39	ppb	1.755	0.70%
V 292.402†	20763.8	117.89	ug/L	1.332	117.89	ppb	1.332	1.13%
Zn 213.857†	38307.5	316.88	ug/L	2.933	316.88	ppb	2.933	0.93%
SiO2†	953178.9	60829	ug/L	167.8	60829	ppb	167.8	0.28%

Sequence No.: 11
Sample ID: 241825003|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 12/11/2009 14:33:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825003|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5674.7	5674.7	102	%			14:35:19
1	Y RADIAL	7820.2	7820.2	129.5	%			14:35:19
1	Al 396.153Radial†	19222.9	18923.2	13031	ug/L	13031	ppb	14:35:19
1	Ca 317.933Radial†	4292.0	4200.3	6130.3	ug/L	6130.3	ppb	14:35:19
1	Fe 238.204 Radial†	8295.9	8141.4	72939	ug/L	72939	ppb	14:35:19
1	K 766.490 Radial†	21891.9	18770.8	3133.5	ug/L	3133.5	ppb	14:35:19
1	Mg 279.077 IEC†	151.1	146.6	4866.8	ug/L	4866.8	ppb	14:35:39
1	Na 589.592 Radial†	10594.0	11963.5	3625.7	ug/L	3625.7	ppb	14:35:19
1	Sr 421.552†	8758.9	8606.5	51.851	ug/L	51.851	ppb	14:35:19
1	Sc 361.383	879784.4	879784.4	101.37	%			14:36:36
1	Y 371.029	937153.0	937153.0	128.47	%			14:36:36
1	Ag 328.068†	-4405.0	-4619.6	2.6482	ug/L	2.6482	ppb	14:36:36
1	As 188.979†	-2.0	29.3	32.803	ug/L	32.803	ppb	14:36:57
1	B 249.677†	1057.0	1535.9	23.041	ug/L	23.041	ppb	14:36:36
1	Ba 233.527†	11551.1	11406.4	88.029	ug/L	88.029	ppb	14:36:36
1	Be 313.107†	-4818.2	-90.6	2.3733	ug/L	2.3733	ppb	14:36:36
1	Cd 226.502†	475.2	667.7	-0.3576	ug/L	-0.3576	ppb	14:36:57
1	Co 228.616†	246.6	316.8	2.4400	ug/L	2.4400	ppb	14:36:57
1	Cr 267.716†	1504.4	1398.1	16.110	ug/L	16.110	ppb	14:36:57
1	Cu 324.752†	10624.5	3723.4	14.536	ug/L	14.536	ppb	14:36:36
1	Mn 257.610†	1349752.2	1331023.5	1417.8	ug/L	1417.8	ppb	14:36:36
1	Mo 202.031†	476.5	451.6	33.915	ug/L	33.915	ppb	14:36:57
1	Ni 231.604†	745.0	649.0	14.910	ug/L	14.910	ppb	14:36:57
1	P 214.914†	1309.4	1049.7	530.28	ug/L	530.28	ppb	14:36:57
1	Pb 220.353†	1326.8	1376.9	151.13	ug/L	151.13	ppb	14:36:57
1	S 181.975 Axial†	1456.9	1387.8	1831.0	ug/L	1831.0	ppb	14:36:57
1	Sb 206.836†	45.6	7.6	0.6668	ug/L	0.6668	ppb	14:36:57
1	Se 196.026†	-402.8	-370.5	17.734	ug/L	17.734	ppb	14:36:57
1	Si 251.611†	620790.8	611934.4	18224	ug/L	18224	ppb	14:36:36
1	Sn 189.927†	154.0	143.1	24.640	ug/L	24.640	ppb	14:36:57
1	Ti 334.940†	784781.8	775451.0	1224.4	ug/L	1224.4	ppb	14:36:36
1	Tl 190.801†	-118.5	-82.4	-5.3158	ug/L	-5.3158	ppb	14:36:57
1	U 409.014†	-13236.6	-10474.0	-310.34	ug/L	-310.34	ppb	14:36:36
1	V 292.402†	5054.9	6349.4	29.735	ug/L	29.735	ppb	14:36:36
1	Zn 213.857†	23780.7	22706.0	188.08	ug/L	188.08	ppb	14:36:36
1	SiO2†	620712.4	611814.3	39047	ug/L	39047	ppb	14:37:54
2	Sc Radial	5358.1	5358.1	96.1	%			14:35:44
2	Y RADIAL	7532.1	7532.1	124.7	%			14:35:44
2	Al 396.153Radial†	19433.4	20258.1	13951	ug/L	13951	ppb	14:35:44
2	Ca 317.933Radial†	4339.0	4498.4	6565.4	ug/L	6565.4	ppb	14:35:44
2	Fe 238.204 Radial†	8422.4	8754.6	78433	ug/L	78433	ppb	14:35:44
2	K 766.490 Radial†	22132.0	20291.5	3388.7	ug/L	3388.7	ppb	14:35:44
2	Mg 279.077 IEC†	154.7	159.1	5282.5	ug/L	5282.5	ppb	14:36:04
2	Na 589.592 Radial†	10734.2	12724.3	3856.2	ug/L	3856.2	ppb	14:35:44
2	Sr 421.552†	8792.4	9149.8	55.124	ug/L	55.124	ppb	14:35:44
2	Sc 361.383	888605.0	888605.0	102.38	%			14:37:02
2	Y 371.029	945220.8	945220.8	129.58	%			14:37:02
2	Ag 328.068†	-4598.1	-4765.1	3.7268	ug/L	3.7268	ppb	14:37:02
2	As 188.979†	-5.8	25.6	32.216	ug/L	32.216	ppb	14:37:22
2	B 249.677†	976.1	1446.5	20.409	ug/L	20.409	ppb	14:37:02
2	Ba 233.527†	11730.0	11468.0	88.691	ug/L	88.691	ppb	14:37:02
2	Be 313.107†	-4835.5	-60.3	2.3823	ug/L	2.3823	ppb	14:37:02
2	Cd 226.502†	477.0	664.9	-0.9367	ug/L	-0.9367	ppb	14:37:22
2	Co 228.616†	215.9	284.3	1.7494	ug/L	1.7494	ppb	14:37:22
2	Cr 267.716†	1485.1	1364.5	15.855	ug/L	15.855	ppb	14:37:22
2	Cu 324.752†	10643.0	3637.3	14.566	ug/L	14.566	ppb	14:37:02
2	Mn 257.610†	1366846.7	1334502.6	1422.1	ug/L	1422.1	ppb	14:37:02
2	Mo 202.031†	467.6	438.3	33.454	ug/L	33.454	ppb	14:37:22
2	Ni 231.604†	733.1	630.0	14.474	ug/L	14.474	ppb	14:37:22

2	P 214.914†	1308.1	1035.6	518.32 ug/L	518.32 ppb	14:37:22
2	Pb 220.353†	1331.2	1368.2	149.91 ug/L	149.91 ppb	14:37:22
2	S 181.975 Axial†	1457.1	1373.8	1812.3 ug/L	1812.3 ppb	14:37:22
2	Sb 206.836†	42.1	3.7	-0.5256 ug/L	-0.5256 ppb	14:37:22
2	Se 196.026†	-404.2	-368.0	36.174 ug/L	36.174 ppb	14:37:22
2	Si 251.611†	626997.7	611917.7	18224 ug/L	18224 ppb	14:37:02
2	Sn 189.927†	144.9	132.7	23.082 ug/L	23.082 ppb	14:37:22
2	Ti 334.940†	792034.9	774850.4	1223.5 ug/L	1223.5 ppb	14:37:02
2	Tl 190.801†	-123.0	-85.6	-6.1788 ug/L	-6.1788 ppb	14:37:22
2	U 409.014†	-13289.0	-10395.6	-308.77 ug/L	-308.77 ppb	14:37:02
2	V 292.402†	4962.4	6209.6	27.972 ug/L	27.972 ppb	14:37:02
2	Zn 213.857†	23958.2	22646.5	187.03 ug/L	187.03 ppb	14:37:02
2	SiO2†	628125.1	612976.2	39121 ug/L	39121 ppb	14:37:59
3	Sc Radial	5477.1	5477.1	98.2 %		14:36:09
3	Y RADIAL	7653.8	7653.8	126.7 %		14:36:09
3	Al 396.153Radial†	18794.5	19168.5	13200 ug/L	13200 ppb	14:36:09
3	Ca 317.933Radial†	4187.1	4245.7	6196.5 ug/L	6196.5 ppb	14:36:09
3	Fe 238.204 Radial†	8124.5	8261.0	74010 ug/L	74010 ppb	14:36:09
3	K 766.490 Radial†	21667.7	19318.6	3225.3 ug/L	3225.3 ppb	14:36:09
3	Mg 279.077 IEC†	153.1	154.0	5115.5 ug/L	5115.5 ppb	14:36:29
3	Na 589.592 Radial†	10405.6	12147.2	3681.3 ug/L	3681.3 ppb	14:36:09
3	Sr 421.552†	8524.8	8678.7	52.286 ug/L	52.286 ppb	14:36:09
3	Sc 361.383	876366.7	876366.7	100.97 %		14:37:28
3	Y 371.029	931446.2	931446.2	127.69 %		14:37:28
3	Ag 328.068†	-4428.5	-4659.8	2.8118 ug/L	2.8118 ppb	14:37:28
3	As 188.979†	0.7	32.0	34.010 ug/L	34.010 ppb	14:37:48
3	B 249.677†	966.6	1450.5	21.079 ug/L	21.079 ppb	14:37:28
3	Ba 233.527†	11596.9	11496.2	88.741 ug/L	88.741 ppb	14:37:28
3	Be 313.107†	-4667.2	40.4	2.4218 ug/L	2.4218 ppb	14:37:28
3	Cd 226.502†	499.9	694.0	-0.1923 ug/L	-0.1923 ppb	14:37:48
3	Co 228.616†	226.6	297.8	2.0647 ug/L	2.0647 ppb	14:37:48
3	Cr 267.716†	1507.3	1406.7	16.222 ug/L	16.222 ppb	14:37:48
3	Cu 324.752†	10539.0	3679.5	14.463 ug/L	14.463 ppb	14:37:28
3	Mn 257.610†	1352549.4	1338986.4	1426.4 ug/L	1426.4 ppb	14:37:28
3	Mo 202.031†	464.6	441.7	33.355 ug/L	33.355 ppb	14:37:48
3	Ni 231.604†	742.1	649.0	14.909 ug/L	14.909 ppb	14:37:48
3	P 214.914†	1299.4	1044.8	526.77 ug/L	526.77 ppb	14:37:48
3	Pb 220.353†	1330.9	1386.1	152.11 ug/L	152.11 ppb	14:37:48
3	S 181.975 Axial†	1464.0	1400.5	1847.7 ug/L	1847.7 ppb	14:37:48
3	Sb 206.836†	57.1	19.2	4.3215 ug/L	4.3215 ppb	14:37:48
3	Se 196.026†	-412.5	-381.7	14.770 ug/L	14.770 ppb	14:37:48
3	Si 251.611†	619696.4	613238.8	18263 ug/L	18263 ppb	14:37:28
3	Sn 189.927†	156.8	146.4	25.198 ug/L	25.198 ppb	14:37:48
3	Ti 334.940†	782234.1	775947.2	1225.2 ug/L	1225.2 ppb	14:37:28
3	Tl 190.801†	-128.1	-92.3	-8.0405 ug/L	-8.0405 ppb	14:37:48
3	U 409.014†	-13311.8	-10599.4	-314.08 ug/L	-314.08 ppb	14:37:28
3	V 292.402†	5117.1	6430.5	30.100 ug/L	30.100 ppb	14:37:28
3	Zn 213.857†	23776.5	22793.4	188.72 ug/L	188.72 ppb	14:37:28
3	SiO2†	621928.7	615406.9	39277 ug/L	39277 ppb	14:38:05

Mean Data: 241825003|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881585.4	101.57	%	0.728				0.72%
Sc Radial	5503.3	98.7	%	2.87				2.91%
Y 371.029	937940.0	128.58	%	0.949				0.74%
Y RADIAL	7668.7	127.0	%	2.40				1.89%
Ag 328.068†	-4681.5	3.0623	ug/L	0.58128	3.0623	ppb	0.58128	18.98%
Al 396.153Radial†	19449.9	13394	ug/L	489.4	13394	ppb	489.4	3.65%
As 188.979†	29.0	33.010	ug/L	0.9146	33.010	ppb	0.9146	2.77%
B 249.677†	1477.7	21.510	ug/L	1.3678	21.510	ppb	1.3678	6.36%
Ba 233.527†	11456.9	88.487	ug/L	0.3973	88.487	ppb	0.3973	0.45%
Be 313.107†	-36.8	2.3925	ug/L	0.02584	2.3925	ppb	0.02584	1.08%
Ca 317.933Radial†	4314.8	6297.4	ug/L	234.43	6297.4	ppb	234.43	3.72%
Cd 226.502†	675.5	-0.4956	ug/L	0.39090	-0.4956	ppb	0.39090	78.88%
Co 228.616†	299.6	2.0847	ug/L	0.34569	2.0847	ppb	0.34569	16.58%
Cr 267.716†	1389.8	16.062	ug/L	0.1883	16.062	ppb	0.1883	1.17%
Cu 324.752†	3680.1	14.522	ug/L	0.0530	14.522	ppb	0.0530	0.36%
Fe 238.204 Radial†	8385.7	75127	ug/L	2912.3	75127	ppb	2912.3	3.88%
K 766.490 Radial†	19460.3	3249.2	ug/L	129.27	3249.2	ppb	129.27	3.98%

Mg 279.077 IEC†	153.2	5088.2	ug/L	209.17	5088.2	ppb	209.17	4.11%
Mn 257.610†	1334837.5	1422.1	ug/L	4.27	1422.1	ppb	4.27	0.30%
Mo 202.031†	443.9	33.575	ug/L	0.2987	33.575	ppb	0.2987	0.89%
Na 589.592 Radial†	12278.4	3721.1	ug/L	120.32	3721.1	ppb	120.32	3.23%
Ni 231.604†	642.7	14.764	ug/L	0.2514	14.764	ppb	0.2514	1.70%
P 214.914†	1043.4	525.13	ug/L	6.151	525.13	ppb	6.151	1.17%
Pb 220.353†	1377.1	151.05	ug/L	1.100	151.05	ppb	1.100	0.73%
S 181.975 Axial†	1387.4	1830.4	ug/L	17.71	1830.4	ppb	17.71	0.97%
Sb 206.836†	10.2	1.4875	ug/L	2.52565	1.4875	ppb	2.52565	169.79%
Se 196.026†	-373.4	22.893	ug/L	11.5968	22.893	ppb	11.5968	50.66%
Si 251.611†	612363.7	18237	ug/L	22.6	18237	ppb	22.6	0.12%
Sn 189.927†	140.7	24.307	ug/L	1.0965	24.307	ppb	1.0965	4.51%
Sr 421.552†	8811.6	53.087	ug/L	1.7775	53.087	ppb	1.7775	3.35%
Ti 334.940†	775416.2	1224.4	ug/L	0.86	1224.4	ppb	0.86	0.07%
Tl 190.801†	-86.7	-6.5117	ug/L	1.39250	-6.5117	ppb	1.39250	21.38%
U 409.014†	-10489.7	-311.06	ug/L	2.726	-311.06	ppb	2.726	0.88%
V 292.402†	6329.8	29.269	ug/L	1.1380	29.269	ppb	1.1380	3.89%
Zn 213.857†	22715.3	187.94	ug/L	0.853	187.94	ppb	0.853	0.45%
SiO2†	613399.1	39148	ug/L	117.0	39148	ppb	117.0	0.30%

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 14:40:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5433.1	5433.1	97.4	%			14:42:08
1	Y RADIAL	5850.2	5850.2	96.87	%			14:42:08
1	Al 396.153Radial†	7030.4	7250.3	4971.6	ug/L	4971.6	ppb	14:42:08
1	Ca 317.933Radial†	3435.1	3508.4	5120.4	ug/L	5120.4	ppb	14:42:28
1	Fe 238.204 Radial†	584.8	590.3	5304.3	ug/L	5304.3	ppb	14:42:28
1	K 766.490 Radial†	32191.1	30296.6	5074.0	ug/L	5074.0	ppb	14:42:08
1	Mg 279.077 IEC†	156.7	158.9	5350.4	ug/L	5350.4	ppb	14:42:28
1	Na 589.592 Radial†	32196.4	34595.8	10485	ug/L	10485	ppb	14:42:08
1	Sr 421.552†	83672.8	85869.5	517.85	ug/L	517.85	ppb	14:42:08
1	Sc 361.383	860112.6	860112.6	99.101	%			14:43:26
1	Y 371.029	711898.8	711898.8	97.593	%			14:43:26
1	Ag 328.068†	112466.5	113212.8	515.30	ug/L	515.30	ppb	14:43:31
1	As 188.979†	1276.5	1319.4	513.89	ug/L	513.89	ppb	14:43:51
1	B 249.677†	23151.6	23854.8	506.38	ug/L	506.38	ppb	14:43:31
1	Ba 233.527†	67283.9	67905.4	508.72	ug/L	508.72	ppb	14:43:31
1	Be 313.107†	1377691.0	1394852.5	501.85	ug/L	501.85	ppb	14:43:26
1	Cd 226.502†	48592.5	49232.3	510.39	ug/L	510.39	ppb	14:43:31
1	Co 228.616†	26584.5	26899.2	507.49	ug/L	507.49	ppb	14:43:31
1	Cr 267.716†	48093.7	48444.0	507.92	ug/L	507.92	ppb	14:43:31
1	Cu 324.752†	178525.6	173387.4	503.89	ug/L	503.89	ppb	14:43:31
1	Mn 257.610†	469476.0	473215.1	501.96	ug/L	501.96	ppb	14:43:26
1	Mo 202.031†	7942.9	7996.6	509.25	ug/L	509.25	ppb	14:43:51
1	Ni 231.604†	22071.3	22185.6	509.47	ug/L	509.47	ppb	14:43:31
1	P 214.914†	4710.5	4511.2	2442.5	ug/L	2442.5	ppb	14:43:51
1	Pb 220.353†	4413.6	4521.6	507.70	ug/L	507.70	ppb	14:43:51
1	S 181.975 Axial†	821.5	779.6	1029.0	ug/L	1029.0	ppb	14:43:51
1	Sb 206.836†	1638.8	1616.3	517.69	ug/L	517.69	ppb	14:43:51
1	Se 196.026†	873.4	908.1	529.48	ug/L	529.48	ppb	14:43:51
1	Si 251.611†	87136.8	87445.6	2592.3	ug/L	2592.3	ppb	14:43:31
1	Sn 189.927†	3154.6	3174.4	511.25	ug/L	511.25	ppb	14:43:51
1	Ti 334.940†	317196.6	321330.6	507.06	ug/L	507.06	ppb	14:43:26
1	Tl 190.801†	1742.9	1793.3	508.49	ug/L	508.49	ppb	14:43:51
1	U 409.014†	14809.1	17527.4	502.28	ug/L	502.28	ppb	14:43:31
1	V 292.402†	73797.5	75829.7	511.35	ug/L	511.35	ppb	14:43:31
1	Zn 213.857†	59645.7	59433.0	506.70	ug/L	506.70	ppb	14:43:31
1	SiO2†	86310.8	86569.4	5499.1	ug/L	5499.1	ppb	14:44:59
2	Sc Radial	5475.6	5475.6	98.2	%			14:42:33
2	Y RADIAL	5916.3	5916.3	97.97	%			14:42:33
2	Al 396.153Radial†	7067.6	7232.1	4959.3	ug/L	4959.3	ppb	14:42:33
2	Ca 317.933Radial†	3425.1	3470.8	5065.7	ug/L	5065.7	ppb	14:42:53
2	Fe 238.204 Radial†	587.3	588.1	5284.9	ug/L	5284.9	ppb	14:42:53
2	K 766.490 Radial†	32480.5	30335.0	5080.4	ug/L	5080.4	ppb	14:42:33
2	Mg 279.077 IEC†	158.6	159.6	5372.7	ug/L	5372.7	ppb	14:42:53
2	Na 589.592 Radial†	32429.1	34576.3	10479	ug/L	10479	ppb	14:42:33
2	Sr 421.552†	84153.5	85692.8	516.79	ug/L	516.79	ppb	14:42:33
2	Sc 361.383	869074.0	869074.0	100.13	%			14:43:57
2	Y 371.029	719098.2	719098.2	98.580	%			14:43:57
2	Ag 328.068†	112778.1	112353.8	511.40	ug/L	511.40	ppb	14:44:02
2	As 188.979†	1278.4	1308.0	509.51	ug/L	509.51	ppb	14:44:22
2	B 249.677†	23343.2	23805.3	505.33	ug/L	505.33	ppb	14:44:02
2	Ba 233.527†	67602.5	67523.5	505.86	ug/L	505.86	ppb	14:44:02
2	Be 313.107†	1396705.8	1399507.1	503.53	ug/L	503.53	ppb	14:43:57
2	Cd 226.502†	48773.5	48907.4	507.02	ug/L	507.02	ppb	14:44:02
2	Co 228.616†	26811.7	26849.4	506.54	ug/L	506.54	ppb	14:44:02
2	Cr 267.716†	48248.4	48098.0	504.29	ug/L	504.29	ppb	14:44:02
2	Cu 324.752†	179308.0	172311.2	500.76	ug/L	500.76	ppb	14:44:02
2	Mn 257.610†	475105.2	473951.8	502.73	ug/L	502.73	ppb	14:43:57
2	Mo 202.031†	7945.1	7916.1	504.13	ug/L	504.13	ppb	14:44:22
2	Ni 231.604†	22158.7	22043.3	506.20	ug/L	506.20	ppb	14:44:02

2	P 214.914†	4740.2	4491.9	2432.2 ug/L	2432.2 ppb	14:44:22
2	Pb 220.353†	4408.4	4470.5	501.97 ug/L	501.97 ppb	14:44:22
2	S 181.975 Axial†	823.6	773.1	1020.4 ug/L	1020.4 ppb	14:44:22
2	Sb 206.836†	1641.2	1601.6	512.98 ug/L	512.98 ppb	14:44:22
2	Se 196.026†	876.3	902.0	525.97 ug/L	525.97 ppb	14:44:22
2	Si 251.611†	87719.2	87120.6	2582.8 ug/L	2582.8 ppb	14:44:02
2	Sn 189.927†	3168.5	3155.4	508.20 ug/L	508.20 ppb	14:44:22
2	Ti 334.940†	321009.1	321837.5	507.86 ug/L	507.86 ppb	14:43:57
2	Tl 190.801†	1747.3	1779.6	504.65 ug/L	504.65 ppb	14:44:22
2	U 409.014†	14724.5	17288.9	495.43 ug/L	495.43 ppb	14:44:02
2	V 292.402†	74077.5	75341.6	508.02 ug/L	508.02 ppb	14:44:02
2	Zn 213.857†	59964.2	59130.4	504.12 ug/L	504.12 ppb	14:44:02
2	SiO2†	86853.3	86213.1	5476.6 ug/L	5476.6 ppb	14:45:04
3	Sc Radial	5529.8	5529.8	99.2 %		14:42:58
3	Y RADIAL	5922.3	5922.3	98.07 %		14:42:58
3	Al 396.153Radial†	7136.7	7231.3	4958.4 ug/L	4958.4 ppb	14:42:58
3	Ca 317.933Radial†	3405.4	3416.8	4986.7 ug/L	4986.7 ppb	14:43:18
3	Fe 238.204 Radial†	582.3	577.3	5187.7 ug/L	5187.7 ppb	14:43:18
3	K 766.490 Radial†	32653.2	30185.1	5055.3 ug/L	5055.3 ppb	14:42:58
3	Mg 279.077 IEC†	155.1	154.5	5200.4 ug/L	5200.4 ppb	14:43:18
3	Na 589.592 Radial†	32642.1	34467.6	10446 ug/L	10446 ppb	14:42:58
3	Sr 421.552†	84661.9	85365.9	514.82 ug/L	514.82 ppb	14:42:58
3	Sc 361.383	859473.2	859473.2	99.027 %		14:44:28
3	Y 371.029	709608.6	709608.6	97.279 %		14:44:28
3	Ag 328.068†	111995.2	112821.3	513.49 ug/L	513.49 ppb	14:44:33
3	As 188.979†	1273.6	1317.4	513.11 ug/L	513.11 ppb	14:44:53
3	B 249.677†	23217.5	23938.8	508.17 ug/L	508.17 ppb	14:44:33
3	Ba 233.527†	67231.2	67902.8	508.69 ug/L	508.69 ppb	14:44:33
3	Be 313.107†	1381011.4	1399239.7	503.43 ug/L	503.43 ppb	14:44:28
3	Cd 226.502†	48643.5	49320.3	511.32 ug/L	511.32 ppb	14:44:33
3	Co 228.616†	26718.8	27054.7	510.43 ug/L	510.43 ppb	14:44:33
3	Cr 267.716†	47958.8	48343.9	506.86 ug/L	506.86 ppb	14:44:33
3	Cu 324.752†	177442.8	172428.0	501.10 ug/L	501.10 ppb	14:44:33
3	Mn 257.610†	472388.4	476508.5	505.44 ug/L	505.44 ppb	14:44:28
3	Mo 202.031†	7973.7	8033.7	511.60 ug/L	511.60 ppb	14:44:53
3	Ni 231.604†	22015.4	22145.7	508.55 ug/L	508.55 ppb	14:44:33
3	P 214.914†	4749.3	4553.9	2467.0 ug/L	2467.0 ppb	14:44:53
3	Pb 220.353†	4428.0	4539.5	509.72 ug/L	509.72 ppb	14:44:53
3	S 181.975 Axial†	829.2	787.9	1040.0 ug/L	1040.0 ppb	14:44:53
3	Sb 206.836†	1652.6	1631.4	522.61 ug/L	522.61 ppb	14:44:53
3	Se 196.026†	870.7	906.1	528.01 ug/L	528.01 ppb	14:44:53
3	Si 251.611†	87060.3	87433.8	2591.9 ug/L	2591.9 ppb	14:44:33
3	Sn 189.927†	3176.0	3198.4	515.10 ug/L	515.10 ppb	14:44:53
3	Ti 334.940†	318210.1	322592.1	509.04 ug/L	509.04 ppb	14:44:28
3	Tl 190.801†	1764.0	1815.9	514.87 ug/L	514.87 ppb	14:44:53
3	U 409.014†	14697.8	17426.2	499.39 ug/L	499.39 ppb	14:44:33
3	V 292.402†	73503.8	75588.6	509.79 ug/L	509.79 ppb	14:44:33
3	Zn 213.857†	59544.2	59375.2	506.23 ug/L	506.23 ppb	14:44:33
3	SiO2†	88039.4	88379.8	5614.6 ug/L	5614.6 ppb	14:45:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862886.6	99.421	%	0.6185				0.62%
Sc Radial	5479.5	98.3	%	0.87				0.88%
Y 371.029	713535.2	97.817	%	0.6788				0.69%
Y RADIAL	5896.3	97.63	%	0.663				0.68%
Ag 328.068†	112796.0	513.39	ug/L	1.951	513.39	ppb	1.951	0.38%
QC value within limits for Ag 328.068 Recovery = 102.68%								
Al 396.153Radial†	7237.9	4963.1	ug/L	7.37	4963.1	ppb	7.37	0.15%
QC value within limits for Al 396.153Radial Recovery = 99.26%								
As 188.979†	1314.9	512.17	ug/L	2.338	512.17	ppb	2.338	0.46%
QC value within limits for As 188.979 Recovery = 102.43%								
B 249.677†	23866.3	506.63	ug/L	1.440	506.63	ppb	1.440	0.28%
QC value within limits for B 249.677 Recovery = 101.33%								
Ba 233.527†	67777.2	507.76	ug/L	1.644	507.76	ppb	1.644	0.32%
QC value within limits for Ba 233.527 Recovery = 101.55%								
Be 313.107†	1397866.4	502.94	ug/L	0.940	502.94	ppb	0.940	0.19%
QC value within limits for Be 313.107 Recovery = 100.59%								
Ca 317.933Radial†	3465.3	5057.6	ug/L	67.21	5057.6	ppb	67.21	1.33%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.15%
Cd 226.502†            49153.3      509.58 ug/L         2.260      509.58 ppb          2.260   0.44%
   QC value within limits for Cd 226.502  Recovery = 101.92%
Co 228.616†            26934.4      508.15 ug/L         2.028      508.15 ppb          2.028   0.40%
   QC value within limits for Co 228.616  Recovery = 101.63%
Cr 267.716†            48295.3      506.36 ug/L         1.865      506.36 ppb          1.865   0.37%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           172708.9      501.92 ug/L         1.717      501.92 ppb          1.717   0.34%
   QC value within limits for Cu 324.752  Recovery = 100.38%
Fe 238.204 Radial†       585.2      5259.0 ug/L        62.47      5259.0 ppb          62.47   1.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.18%
K 766.490 Radial†      30272.2      5069.9 ug/L        13.06      5069.9 ppb          13.06   0.26%
   QC value within limits for K 766.490 Radial  Recovery = 101.40%
Mg 279.077 IEC†          157.7      5307.9 ug/L        93.70      5307.9 ppb          93.70   1.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.16%
Mn 257.610†           474558.5      503.38 ug/L         1.827      503.38 ppb          1.827   0.36%
   QC value within limits for Mn 257.610  Recovery = 100.68%
Mo 202.031†             7982.1      508.33 ug/L         3.820      508.33 ppb          3.820   0.75%
   QC value within limits for Mo 202.031  Recovery = 101.67%
Na 589.592 Radial†     34546.6       10470 ug/L          20.9       10470 ppb           20.9   0.20%
   QC value within limits for Na 589.592 Radial  Recovery = 104.70%
Ni 231.604†            22124.9      508.08 ug/L         1.687      508.08 ppb          1.687   0.33%
   QC value within limits for Ni 231.604  Recovery = 101.62%
P 214.914†              4519.0      2447.2 ug/L        17.85      2447.2 ppb          17.85   0.73%
   QC value within limits for P 214.914  Recovery = 97.89%
Pb 220.353†             4510.6      506.46 ug/L         4.019      506.46 ppb          4.019   0.79%
   QC value within limits for Pb 220.353  Recovery = 101.29%
S 181.975 Axial†         780.2      1029.8 ug/L         9.83      1029.8 ppb           9.83   0.95%
   QC value within limits for S 181.975 Axial  Recovery = 102.98%
Sb 206.836†             1616.4      517.76 ug/L         4.817      517.76 ppb          4.817   0.93%
   QC value within limits for Sb 206.836  Recovery = 103.55%
Se 196.026†              905.4      527.82 ug/L         1.764      527.82 ppb          1.764   0.33%
   QC value within limits for Se 196.026  Recovery = 105.56%
Si 251.611†            87333.3      2589.0 ug/L         5.42      2589.0 ppb           5.42   0.21%
   QC value within limits for Si 251.611  Recovery = 103.56%
Sn 189.927†             3176.1      511.51 ug/L         3.455      511.51 ppb          3.455   0.68%
   QC value within limits for Sn 189.927  Recovery = 102.30%
Sr 421.552†            85642.7      516.49 ug/L         1.540      516.49 ppb          1.540   0.30%
   QC value within limits for Sr 421.552  Recovery = 103.30%
Ti 334.940†           321920.1      507.99 ug/L         0.999      507.99 ppb          0.999   0.20%
   QC value within limits for Ti 334.940  Recovery = 101.60%
Tl 190.801†             1796.3      509.34 ug/L         5.164      509.34 ppb          5.164   1.01%
   QC value within limits for Tl 190.801  Recovery = 101.87%
U 409.014†             17414.2      499.03 ug/L         3.438      499.03 ppb          3.438   0.69%
   QC value within limits for U 409.014  Recovery = 99.81%
V 292.402†             75586.6      509.72 ug/L         1.666      509.72 ppb          1.666   0.33%
   QC value within limits for V 292.402  Recovery = 101.94%
Zn 213.857†            59312.9      505.68 ug/L         1.372      505.68 ppb          1.372   0.27%
   QC value within limits for Zn 213.857  Recovery = 101.14%
SiO2†                  87054.1      5530.1 ug/L        74.02      5530.1 ppb          74.02   1.34%
   QC value within limits for SiO2  Recovery = 103.41%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 14:47:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5612.9	5612.9	101	%			14:49:10
1	Y RADIAL	6085.5	6085.5	100.8	%			14:49:10
1	Al 396.153Radial†	-28.8	6.7	4.5403	ug/L	4.5403	ppb	14:49:10
1	Ca 317.933Radial†	12.6	-4.4	-6.4244	ug/L	-6.4244	ppb	14:49:30
1	Fe 238.204 Radial†	9.3	-0.7	-6.1453	ug/L	-6.1453	ppb	14:49:30
1	K 766.490 Radial†	2798.0	40.0	6.7168	ug/L	6.7168	ppb	14:49:10
1	Mg 279.077 IEC†	0.0	-1.9	-63.848	ug/L	-63.848	ppb	14:49:30
1	Na 589.592 Radial†	-1562.7	1.8	0.5478	ug/L	0.5478	ppb	14:49:10
1	Sr 421.552†	-48.7	-48.1	-0.2901	ug/L	-0.2901	ppb	14:49:10
1	Sc 361.383	860909.6	860909.6	99.193	%			14:50:27
1	Y 371.029	724080.5	724080.5	99.263	%			14:50:27
1	Ag 328.068†	373.1	102.1	0.4681	ug/L	0.4681	ppb	14:50:27
1	As 188.979†	-23.2	7.9	3.0593	ug/L	3.0593	ppb	14:50:47
1	B 249.677†	-203.3	288.2	6.1435	ug/L	6.1435	ppb	14:50:47
1	Ba 233.527†	-5.1	6.0	0.0454	ug/L	0.0454	ppb	14:50:47
1	Be 313.107†	-4524.0	101.8	0.0366	ug/L	0.0366	ppb	14:50:27
1	Cd 226.502†	-191.9	5.5	0.0575	ug/L	0.0575	ppb	14:50:47
1	Co 228.616†	-77.2	-4.4	-0.0806	ug/L	-0.0806	ppb	14:50:47
1	Cr 267.716†	79.2	-6.1	-0.0612	ug/L	-0.0612	ppb	14:50:47
1	Cu 324.752†	6800.8	98.3	0.2852	ug/L	0.2852	ppb	14:50:27
1	Mn 257.610†	517.8	1.8	0.0025	ug/L	0.0025	ppb	14:50:47
1	Mo 202.031†	35.9	17.8	1.1335	ug/L	1.1335	ppb	14:50:47
1	Ni 231.604†	81.4	-3.9	-0.0893	ug/L	-0.0893	ppb	14:50:47
1	P 214.914†	222.9	-17.3	-9.7319	ug/L	-9.7319	ppb	14:50:47
1	Pb 220.353†	-55.9	11.7	1.3108	ug/L	1.3108	ppb	14:50:47
1	S 181.975 Axial†	48.3	-0.7	-0.8888	ug/L	-0.8888	ppb	14:50:47
1	Sb 206.836†	47.0	10.0	3.1845	ug/L	3.1845	ppb	14:50:47
1	Se 196.026†	-32.8	-6.2	-3.5194	ug/L	-3.5194	ppb	14:50:47
1	Si 251.611†	580.8	103.7	3.0696	ug/L	3.0696	ppb	14:50:47
1	Sn 189.927†	5.5	-3.3	-0.5244	ug/L	-0.5244	ppb	14:50:47
1	Ti 334.940†	-1228.0	18.3	0.0318	ug/L	0.0318	ppb	14:50:27
1	Tl 190.801†	-36.6	-2.3	-0.6504	ug/L	-0.6504	ppb	14:50:47
1	U 409.014†	-2817.2	-256.1	-7.3616	ug/L	-7.3616	ppb	14:50:27
1	V 292.402†	-1286.3	66.0	0.4405	ug/L	0.4405	ppb	14:50:27
1	Zn 213.857†	810.9	63.7	0.5506	ug/L	0.5506	ppb	14:50:47
1	SiO2†	608.0	88.5	5.6055	ug/L	5.6055	ppb	14:51:43
2	Sc Radial	5496.3	5496.3	98.6	%			14:49:35
2	Y RADIAL	6010.2	6010.2	99.52	%			14:49:35
2	Al 396.153Radial†	-18.7	16.4	11.247	ug/L	11.247	ppb	14:49:35
2	Ca 317.933Radial†	15.9	-0.8	-1.1546	ug/L	-1.1546	ppb	14:49:55
2	Fe 238.204 Radial†	9.1	-0.6	-5.5103	ug/L	-5.5103	ppb	14:49:55
2	K 766.490 Radial†	2935.1	238.0	39.930	ug/L	39.930	ppb	14:49:35
2	Mg 279.077 IEC†	3.0	1.1	37.240	ug/L	37.240	ppb	14:49:55
2	Na 589.592 Radial†	-1482.0	50.8	15.380	ug/L	15.380	ppb	14:49:35
2	Sr 421.552†	-8.0	-7.9	-0.0477	ug/L	-0.0477	ppb	14:49:35
2	Sc 361.383	855903.7	855903.7	98.616	%			14:50:52
2	Y 371.029	719719.2	719719.2	98.665	%			14:50:52
2	Ag 328.068†	438.2	170.3	0.7711	ug/L	0.7711	ppb	14:50:52
2	As 188.979†	-31.8	-0.9	-0.3704	ug/L	-0.3704	ppb	14:51:12
2	B 249.677†	-220.3	269.8	5.7503	ug/L	5.7503	ppb	14:51:12
2	Ba 233.527†	-5.0	6.0	0.0446	ug/L	0.0446	ppb	14:51:12
2	Be 313.107†	-4496.3	103.2	0.0369	ug/L	0.0369	ppb	14:50:52
2	Cd 226.502†	-200.1	-4.0	-0.0408	ug/L	-0.0408	ppb	14:51:12
2	Co 228.616†	-70.6	1.8	0.0362	ug/L	0.0362	ppb	14:51:12
2	Cr 267.716†	76.5	-8.5	-0.0878	ug/L	-0.0878	ppb	14:51:12
2	Cu 324.752†	6798.2	135.7	0.3940	ug/L	0.3940	ppb	14:50:52
2	Mn 257.610†	526.5	13.7	0.0133	ug/L	0.0133	ppb	14:51:12
2	Mo 202.031†	28.1	10.1	0.6396	ug/L	0.6396	ppb	14:51:12
2	Ni 231.604†	106.0	21.5	0.4952	ug/L	0.4952	ppb	14:51:12

2	P 214.914†	234.9	-3.9	-2.2485 ug/L	-2.2485 ppb	14:51:12
2	Pb 220.353†	-60.9	6.2	0.7019 ug/L	0.7019 ppb	14:51:12
2	S 181.975 Axial†	53.8	5.1	6.7393 ug/L	6.7393 ppb	14:51:12
2	Sb 206.836†	36.9	0.0	-0.0045 ug/L	-0.0045 ppb	14:51:12
2	Se 196.026†	-23.6	2.9	1.6024 ug/L	1.6024 ppb	14:51:12
2	Si 251.611†	594.5	121.1	3.5877 ug/L	3.5877 ppb	14:51:12
2	Sn 189.927†	-3.2	-12.0	-1.9376 ug/L	-1.9376 ppb	14:51:12
2	Ti 334.940†	-1272.8	-34.4	-0.0530 ug/L	-0.0530 ppb	14:50:52
2	Tl 190.801†	-36.0	-2.0	-0.5560 ug/L	-0.5560 ppb	14:51:12
2	U 409.014†	-2651.9	-105.1	-3.0210 ug/L	-3.0210 ppb	14:50:52
2	V 292.402†	-1342.3	1.6	0.0155 ug/L	0.0155 ppb	14:50:52
2	Zn 213.857†	787.3	44.5	0.3783 ug/L	0.3783 ppb	14:51:12
2	SiO2†	578.1	61.7	3.9008 ug/L	3.9008 ppb	14:51:48
3	Sc Radial	5536.5	5536.5	99.3 %		14:50:00
3	Y RADIAL	6020.3	6020.3	99.69 %		14:50:00
3	Al 396.153Radial†	-24.1	11.1	7.6025 ug/L	7.6025 ppb	14:50:00
3	Ca 317.933Radial†	14.7	-2.1	-3.0756 ug/L	-3.0756 ppb	14:50:20
3	Fe 238.204 Radial†	7.7	-2.1	-19.008 ug/L	-19.008 ppb	14:50:20
3	K 766.490 Radial†	2849.5	130.2	21.841 ug/L	21.841 ppb	14:50:00
3	Mg 279.077 IEC†	2.9	1.0	34.320 ug/L	34.320 ppb	14:50:20
3	Na 589.592 Radial†	-1501.5	42.0	12.734 ug/L	12.734 ppb	14:50:00
3	Sr 421.552†	-3.5	-3.3	-0.0201 ug/L	-0.0201 ppb	14:50:00
3	Sc 361.383	866507.0	866507.0	99.838 %		14:51:17
3	Y 371.029	727552.5	727552.5	99.739 %		14:51:17
3	Ag 328.068†	347.8	74.4	0.3326 ug/L	0.3326 ppb	14:51:17
3	As 188.979†	-17.5	13.8	5.3142 ug/L	5.3142 ppb	14:51:37
3	B 249.677†	-230.6	262.3	5.5916 ug/L	5.5916 ppb	14:51:37
3	Ba 233.527†	-7.7	3.4	0.0243 ug/L	0.0243 ppb	14:51:37
3	Be 313.107†	-4653.4	1.7	0.0005 ug/L	0.0005 ppb	14:51:17
3	Cd 226.502†	-187.4	11.2	0.1183 ug/L	0.1183 ppb	14:51:37
3	Co 228.616†	-73.5	-0.2	-0.0007 ug/L	-0.0007 ppb	14:51:37
3	Cr 267.716†	62.3	-23.6	-0.2465 ug/L	-0.2465 ppb	14:51:37
3	Cu 324.752†	6777.7	30.8	0.0886 ug/L	0.0886 ppb	14:51:17
3	Mn 257.610†	508.7	-10.6	-0.0138 ug/L	-0.0138 ppb	14:51:37
3	Mo 202.031†	30.4	12.1	0.7669 ug/L	0.7669 ppb	14:51:37
3	Ni 231.604†	86.2	0.4	0.0083 ug/L	0.0083 ppb	14:51:37
3	P 214.914†	239.0	-2.6	-1.4741 ug/L	-1.4741 ppb	14:51:37
3	Pb 220.353†	-73.2	-5.3	-0.5866 ug/L	-0.5866 ppb	14:51:37
3	S 181.975 Axial†	59.1	9.8	12.990 ug/L	12.990 ppb	14:51:37
3	Sb 206.836†	34.3	-3.0	-0.9262 ug/L	-0.9262 ppb	14:51:37
3	Se 196.026†	-25.3	1.5	0.7743 ug/L	0.7743 ppb	14:51:37
3	Si 251.611†	564.3	83.5	2.4667 ug/L	2.4667 ppb	14:51:37
3	Sn 189.927†	9.5	0.7	0.1080 ug/L	0.1080 ppb	14:51:37
3	Ti 334.940†	-1283.5	-29.4	-0.0453 ug/L	-0.0453 ppb	14:51:17
3	Tl 190.801†	-35.4	-0.9	-0.2625 ug/L	-0.2625 ppb	14:51:37
3	U 409.014†	-2667.7	-88.1	-2.5288 ug/L	-2.5288 ppb	14:51:17
3	V 292.402†	-1362.0	-1.5	-0.0001 ug/L	-0.0001 ppb	14:51:17
3	Zn 213.857†	793.3	40.8	0.3511 ug/L	0.3511 ppb	14:51:37
3	SiO2†	574.4	50.9	3.2023 ug/L	3.2023 ppb	14:51:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861106.8	99.215	%	0.6112				0.62%
Sc Radial	5548.6	99.5	%	1.06				1.07%
Y 371.029	723784.1	99.222	%	0.5381				0.54%
Y RADIAL	6038.7	99.99	%	0.677				0.68%
Ag 328.068†	115.6	0.5239	ug/L	0.22455	0.5239	ppb	0.22455	42.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.4	7.7966	ug/L	3.35753	7.7966	ppb	3.35753	43.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.9	2.6677	ug/L	2.86250	2.6677	ppb	2.86250	107.30%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	273.4	5.8285	ug/L	0.28415	5.8285	ppb	0.28415	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.1	0.0381	ug/L	0.01197	0.0381	ppb	0.01197	31.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	68.9	0.0247	ug/L	0.02094	0.0247	ppb	0.02094	84.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-3.5515	ug/L	2.66695	-3.5515	ppb	2.66695	75.09%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                4.2      0.0450 ug/L       0.08028      0.0450 ppb        0.08028 178.36%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -0.9     -0.0150 ug/L       0.05968     -0.0150 ppb        0.05968 396.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -12.7     -0.1319 ug/L       0.10020     -0.1319 ppb        0.10020  75.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               88.3      0.2559 ug/L       0.15481      0.2559 ppb        0.15481  60.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.1    -10.221 ug/L        7.6162    -10.221 ppb         7.6162  74.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        136.1      22.829 ug/L       16.6287      22.829 ppb        16.6287  72.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      2.5703 ug/L      57.53886      2.5703 ppb       57.53886 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                1.6      0.0007 ug/L       0.01362      0.0007 ppb        0.01362 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               13.3      0.8467 ug/L       0.25644      0.8467 ppb        0.25644  30.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        31.5      9.5539 ug/L       7.91103      9.5539 ppb        7.91103  82.80%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                6.0      0.1381 ug/L       0.31310      0.1381 ppb        0.31310 226.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -8.0     -4.4848 ug/L       4.56058     -4.4848 ppb        4.56058 101.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                4.2      0.4753 ug/L       0.96874      0.4753 ppb        0.96874 203.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.8      6.2800 ug/L       6.95060      6.2800 ppb        6.95060 110.68%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.4      0.7513 ug/L       2.15701      0.7513 ppb        2.15701 287.11%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.6     -0.3809 ug/L       2.74941     -0.3809 ppb        2.74941 721.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              102.8      3.0414 ug/L       0.56105      3.0414 ppb        0.56105  18.45%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -4.9     -0.7847 ug/L       1.04734     -0.7847 ppb        1.04734 133.47%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -19.8     -0.1193 ug/L       0.14858     -0.1193 ppb        0.14858 124.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -15.2     -0.0222 ug/L       0.04690     -0.0222 ppb        0.04690 211.56%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.7     -0.4896 ug/L       0.20230     -0.4896 ppb        0.20230  41.32%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -149.7    -4.3038 ug/L       2.65954     -4.3038 ppb        2.65954  61.79%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                22.0      0.1520 ug/L       0.25000      0.1520 ppb        0.25000 164.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               49.6      0.4267 ug/L       0.10819      0.4267 ppb        0.10819  25.36%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     67.1      4.2362 ug/L       1.23621      4.2362 ppb        1.23621  29.18%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: 241825004|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 12/11/2009 14:54:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825004|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5460.4	5460.4	97.9	%			14:56:15
1	Y RADIAL	6410.2	6410.2	106.1	%			14:56:15
1	Al 396.153Radial†	99089.2	101218.5	69710	ug/L	69710	ppb	14:55:55
1	Ca 317.933Radial†	19027.5	19412.7	28333	ug/L	28333	ppb	14:55:55
1	Fe 238.204 Radial†	11481.1	11713.8	104940	ug/L	104940	ppb	14:55:55
1	K 766.490 Radial†	61416.6	59975.0	10048	ug/L	10048	ppb	14:55:55
1	Mg 279.077 IEC†	387.7	394.0	13160	ug/L	13160	ppb	14:56:15
1	Na 589.592 Radial†	9774.6	11535.3	3495.9	ug/L	3495.9	ppb	14:55:55
1	Sr 421.552†	32422.1	33107.5	199.42	ug/L	199.42	ppb	14:55:55
1	Sc 361.383	872065.6	872065.6	100.48	%			14:57:13
1	Y 371.029	784091.4	784091.4	107.49	%			14:57:13
1	Ag 328.068†	-6469.6	-6712.8	3.2735	ug/L	3.2735	ppb	14:57:18
1	As 188.979†	-34.3	-2.9	28.833	ug/L	28.833	ppb	14:57:38
1	B 249.677†	1372.2	1858.9	25.622	ug/L	25.622	ppb	14:57:18
1	Ba 233.527†	187689.0	186807.0	1400.0	ug/L	1400.0	ppb	14:57:18
1	Be 313.107†	1146.1	5803.3	5.3071	ug/L	5.3071	ppb	14:57:18
1	Cd 226.502†	782.4	977.6	-0.3288	ug/L	-0.3288	ppb	14:57:38
1	Co 228.616†	1396.7	1463.5	23.276	ug/L	23.276	ppb	14:57:38
1	Cr 267.716†	3967.1	3862.2	42.584	ug/L	42.584	ppb	14:57:38
1	Cu 324.752†	16480.0	9643.7	33.365	ug/L	33.365	ppb	14:57:18
1	Mn 257.610†	1700204.5	1691593.8	1803.0	ug/L	1803.0	ppb	14:57:13
1	Mo 202.031†	303.5	283.7	25.495	ug/L	25.495	ppb	14:57:38
1	Ni 231.604†	1754.9	1660.6	38.140	ug/L	38.140	ppb	14:57:38
1	P 214.914†	1704.8	1454.6	746.42	ug/L	746.42	ppb	14:57:38
1	Pb 220.353†	753.4	817.8	98.603	ug/L	98.603	ppb	14:57:38
1	S 181.975 Axial†	1074.0	1019.4	1333.2	ug/L	1333.2	ppb	14:57:38
1	Sb 206.836†	53.5	15.9	-0.3333	ug/L	-0.3333	ppb	14:57:38
1	Se 196.026†	-572.5	-543.0	27.505	ug/L	27.505	ppb	14:57:38
1	Si 251.611†	861698.3	857116.1	25525	ug/L	25525	ppb	14:57:13
1	Sn 189.927†	-112.8	-121.1	-15.104	ug/L	-15.104	ppb	14:57:38
1	Ti 334.940†	1042650.5	1038945.2	1641.5	ug/L	1641.5	ppb	14:57:13
1	Tl 190.801†	-147.1	-111.8	-6.8901	ug/L	-6.8901	ppb	14:57:38
1	U 409.014†	-11115.9	-8479.0	-257.06	ug/L	-257.06	ppb	14:57:13
1	V 292.402†	15882.7	17169.9	96.540	ug/L	96.540	ppb	14:57:18
1	Zn 213.857†	28724.0	27833.4	228.67	ug/L	228.67	ppb	14:57:18
1	SiO2†	857210.1	852606.6	54412	ug/L	54412	ppb	14:58:47
2	Sc Radial	5559.4	5559.4	99.7	%			14:56:40
2	Y RADIAL	6485.4	6485.4	107.4	%			14:56:40
2	Al 396.153Radial†	96849.5	97170.6	66922	ug/L	66922	ppb	14:56:20
2	Ca 317.933Radial†	18591.9	18629.8	27190	ug/L	27190	ppb	14:56:20
2	Fe 238.204 Radial†	11202.1	11225.3	100570	ug/L	100570	ppb	14:56:20
2	K 766.490 Radial†	60285.7	57724.1	9669.7	ug/L	9669.7	ppb	14:56:20
2	Mg 279.077 IEC†	389.6	388.8	12989	ug/L	12989	ppb	14:56:40
2	Na 589.592 Radial†	9514.7	11096.9	3363.0	ug/L	3363.0	ppb	14:56:20
2	Sr 421.552†	31649.3	31742.9	191.20	ug/L	191.20	ppb	14:56:20
2	Sc 361.383	860392.5	860392.5	99.133	%			14:57:44
2	Y 371.029	774485.5	774485.5	106.17	%			14:57:44
2	Ag 328.068†	-6117.1	-6444.6	3.1219	ug/L	3.1219	ppb	14:57:49
2	As 188.979†	-38.5	-7.6	26.367	ug/L	26.367	ppb	14:58:09
2	B 249.677†	1466.5	1972.5	28.623	ug/L	28.623	ppb	14:57:49
2	Ba 233.527†	187895.1	189549.2	1420.3	ug/L	1420.3	ppb	14:57:49
2	Be 313.107†	1112.6	5785.0	5.3085	ug/L	5.3085	ppb	14:57:49
2	Cd 226.502†	773.4	979.2	0.1252	ug/L	0.1252	ppb	14:58:09
2	Co 228.616†	1421.1	1507.0	24.160	ug/L	24.160	ppb	14:58:09
2	Cr 267.716†	3986.1	3935.0	43.273	ug/L	43.273	ppb	14:58:09
2	Cu 324.752†	16335.5	9720.4	33.364	ug/L	33.364	ppb	14:57:49
2	Mn 257.610†	1681672.9	1695857.4	1807.1	ug/L	1807.1	ppb	14:57:44
2	Mo 202.031†	309.0	293.2	25.795	ug/L	25.795	ppb	14:58:09
2	Ni 231.604†	1732.3	1661.5	38.161	ug/L	38.161	ppb	14:58:09

2	P 214.914†	1699.4	1472.2	758.81 ug/L	758.81 ppb	14:58:09
2	Pb 220.353†	778.3	853.1	102.29 ug/L	102.29 ppb	14:58:09
2	S 181.975 Axial†	1089.8	1050.0	1374.0 ug/L	1374.0 ppb	14:58:09
2	Sb 206.836†	50.3	13.3	-1.1135 ug/L	-1.1135 ppb	14:58:09
2	Se 196.026†	-586.5	-564.8	1.3575 ug/L	1.3575 ppb	14:58:09
2	Si 251.611†	851391.2	858354.1	25562 ug/L	25562 ppb	14:57:44
2	Sn 189.927†	-103.6	-113.4	-14.029 ug/L	-14.029 ppb	14:58:09
2	Ti 334.940†	1031231.1	1041504.5	1645.4 ug/L	1645.4 ppb	14:57:44
2	Tl 190.801†	-143.4	-110.1	-6.4301 ug/L	-6.4301 ppb	14:58:09
2	U 409.014†	-11155.6	-8669.1	-261.98 ug/L	-261.98 ppb	14:57:44
2	V 292.402†	15913.4	17415.3	98.829 ug/L	98.829 ppb	14:57:49
2	Zn 213.857†	28672.0	28168.8	231.98 ug/L	231.98 ppb	14:57:49
2	SiO2†	852158.5	859085.3	54826 ug/L	54826 ppb	14:58:52
3	Sc Radial	5429.5	5429.5	97.4 %		14:57:06
3	Y RADIAL	6362.8	6362.8	105.4 %		14:57:06
3	Al 396.153Radial†	99603.5	102321.8	70469 ug/L	70469 ppb	14:56:46
3	Ca 317.933Radial†	19030.2	19525.9	28498 ug/L	28498 ppb	14:56:46
3	Fe 238.204 Radial†	11460.4	11759.2	105350 ug/L	105350 ppb	14:56:46
3	K 766.490 Radial†	61757.7	60681.7	10166 ug/L	10166 ppb	14:56:46
3	Mg 279.077 IEC†	388.5	397.0	13261 ug/L	13261 ppb	14:57:06
3	Na 589.592 Radial†	9728.1	11544.3	3498.6 ug/L	3498.6 ppb	14:56:46
3	Sr 421.552†	32545.2	33422.1	201.31 ug/L	201.31 ppb	14:56:46
3	Sc 361.383	877792.6	877792.6	101.14 %		14:58:15
3	Y 371.029	788354.1	788354.1	108.07 %		14:58:15
3	Ag 328.068†	-6298.5	-6501.7	4.3588 ug/L	4.3588 ppb	14:58:20
3	As 188.979†	-31.5	0.2	30.109 ug/L	30.109 ppb	14:58:40
3	B 249.677†	1368.6	1846.4	25.302 ug/L	25.302 ppb	14:58:20
3	Ba 233.527†	186159.6	184076.0	1379.6 ug/L	1379.6 ppb	14:58:20
3	Be 313.107†	1211.4	5860.4	5.3386 ug/L	5.3386 ppb	14:58:20
3	Cd 226.502†	798.4	988.4	-0.2575 ug/L	-0.2575 ppb	14:58:40
3	Co 228.616†	1412.1	1469.7	23.368 ug/L	23.368 ppb	14:58:40
3	Cr 267.716†	3982.0	3851.2	42.477 ug/L	42.477 ppb	14:58:40
3	Cu 324.752†	16181.7	9241.8	32.218 ug/L	32.218 ppb	14:58:20
3	Mn 257.610†	1715643.9	1695819.6	1807.5 ug/L	1807.5 ppb	14:58:15
3	Mo 202.031†	320.1	298.1	26.441 ug/L	26.441 ppb	14:58:40
3	Ni 231.604†	1747.8	1642.1	37.717 ug/L	37.717 ppb	14:58:40
3	P 214.914†	1695.1	1434.0	735.03 ug/L	735.03 ppb	14:58:40
3	Pb 220.353†	758.2	817.6	98.721 ug/L	98.721 ppb	14:58:40
3	S 181.975 Axial†	1081.0	1019.5	1333.0 ug/L	1333.0 ppb	14:58:40
3	Sb 206.836†	51.7	13.8	-0.9735 ug/L	-0.9735 ppb	14:58:40
3	Se 196.026†	-574.2	-541.0	29.979 ug/L	29.979 ppb	14:58:40
3	Si 251.611†	870156.2	859883.6	25607 ug/L	25607 ppb	14:58:15
3	Sn 189.927†	-103.1	-110.8	-13.417 ug/L	-13.417 ppb	14:58:40
3	Ti 334.940†	1053072.6	1042479.8	1647.0 ug/L	1647.0 ppb	14:58:15
3	Tl 190.801†	-133.8	-97.8	-2.8489 ug/L	-2.8489 ppb	14:58:40
3	U 409.014†	-11500.1	-8786.7	-265.96 ug/L	-265.96 ppb	14:58:15
3	V 292.402†	15822.3	17007.0	95.387 ug/L	95.387 ppb	14:58:20
3	Zn 213.857†	28432.2	27358.4	224.55 ug/L	224.55 ppb	14:58:20
3	SiO2†	861635.2	851415.8	54336 ug/L	54336 ppb	14:58:58

Mean Data: 241825004|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870083.6	100.25	%	1.022				1.02%
Sc Radial	5483.1	98.3	%	1.22				1.24%
Y 371.029	782310.3	107.25	%	0.974				0.91%
Y RADIAL	6419.4	106.3	%	1.02				0.96%
Ag 328.068†	-6553.0	3.5847	ug/L	0.67464	3.5847	ppb	0.67464	18.82%
Al 396.153Radial†	100237.0	69034	ug/L	1867.9	69034	ppb	1867.9	2.71%
As 188.979†	-3.4	28.436	ug/L	1.9024	28.436	ppb	1.9024	6.69%
B 249.677†	1892.6	26.516	ug/L	1.8318	26.516	ppb	1.8318	6.91%
Ba 233.527†	186810.7	1400.0	ug/L	20.36	1400.0	ppb	20.36	1.45%
Be 313.107†	5816.2	5.3180	ug/L	0.01779	5.3180	ppb	0.01779	0.33%
Ca 317.933Radial†	19189.5	28007	ug/L	712.2	28007	ppb	712.2	2.54%
Cd 226.502†	981.7	-0.1537	ug/L	0.24413	-0.1537	ppb	0.24413	158.87%
Co 228.616†	1480.1	23.601	ug/L	0.4858	23.601	ppb	0.4858	2.06%
Cr 267.716†	3882.8	42.778	ug/L	0.4316	42.778	ppb	0.4316	1.01%
Cu 324.752†	9535.3	32.982	ug/L	0.6620	32.982	ppb	0.6620	2.01%
Fe 238.204 Radial†	11566.1	103620	ug/L	2652.0	103620	ppb	2652.0	2.56%
K 766.490 Radial†	59460.2	9961.3	ug/L	259.36	9961.3	ppb	259.36	2.60%

Mg 279.077 IEC†	393.3	13137	ug/L	137.6	13137	ppb	137.6	1.05%
Mn 257.610†	1694423.6	1805.9	ug/L	2.49	1805.9	ppb	2.49	0.14%
Mo 202.031†	291.7	25.910	ug/L	0.4836	25.910	ppb	0.4836	1.87%
Na 589.592 Radial†	11392.2	3452.5	ug/L	77.51	3452.5	ppb	77.51	2.25%
Ni 231.604†	1654.7	38.006	ug/L	0.2507	38.006	ppb	0.2507	0.66%
P 214.914†	1453.6	746.75	ug/L	11.896	746.75	ppb	11.896	1.59%
Pb 220.353†	829.5	99.871	ug/L	2.0945	99.871	ppb	2.0945	2.10%
S 181.975 Axial†	1029.6	1346.7	ug/L	23.65	1346.7	ppb	23.65	1.76%
Sb 206.836†	14.3	-0.8068	ug/L	0.41593	-0.8068	ppb	0.41593	51.55%
Se 196.026†	-549.6	19.614	ug/L	15.8588	19.614	ppb	15.8588	80.85%
Si 251.611†	858451.3	25565	ug/L	41.3	25565	ppb	41.3	0.16%
Sn 189.927†	-115.1	-14.183	ug/L	0.8541	-14.183	ppb	0.8541	6.02%
Sr 421.552†	32757.5	197.31	ug/L	5.377	197.31	ppb	5.377	2.73%
Ti 334.940†	1040976.5	1644.6	ug/L	2.88	1644.6	ppb	2.88	0.18%
Tl 190.801†	-106.5	-5.3897	ug/L	2.21237	-5.3897	ppb	2.21237	41.05%
U 409.014†	-8644.9	-261.66	ug/L	4.458	-261.66	ppb	4.458	1.70%
V 292.402†	17197.4	96.919	ug/L	1.7518	96.919	ppb	1.7518	1.81%
Zn 213.857†	27786.9	228.40	ug/L	3.724	228.40	ppb	3.724	1.63%
SiO2†	854369.2	54525	ug/L	263.6	54525	ppb	263.6	0.48%

Sequence No.: 15
Sample ID: 241825005|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 12/11/2009 15:01:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825005|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5512.9	5512.9	98.9	%			15:03:05
1	Y RADIAL	6667.5	6667.5	110.4	%			15:03:05
1	Al 396.153Radial†	51015.6	51632.8	35559	ug/L	35559	ppb	15:03:05
1	Ca 317.933Radial†	6116.3	6169.1	9003.8	ug/L	9003.8	ppb	15:03:05
1	Fe 238.204 Radial†	10234.5	10341.3	92648	ug/L	92648	ppb	15:03:05
1	K 766.490 Radial†	41120.8	38850.2	6515.7	ug/L	6515.7	ppb	15:03:05
1	Mg 279.077 IEC†	188.8	189.1	6279.5	ug/L	6279.5	ppb	15:03:25
1	Na 589.592 Radial†	7930.8	9575.4	2901.9	ug/L	2901.9	ppb	15:03:05
1	Sr 421.552†	35175.8	35577.2	214.49	ug/L	214.49	ppb	15:03:05
1	Sc 361.383	864837.8	864837.8	99.645	%			15:04:22
1	Y 371.029	799708.8	799708.8	109.63	%			15:04:22
1	Ag 328.068†	-5577.2	-5871.1	3.1226	ug/L	3.1226	ppb	15:04:22
1	As 188.979†	-33.1	-2.0	25.545	ug/L	25.545	ppb	15:04:42
1	B 249.677†	2227.0	2728.1	45.831	ug/L	45.831	ppb	15:04:22
1	Ba 233.527†	78030.1	78318.9	588.76	ug/L	588.76	ppb	15:04:22
1	Be 313.107†	-3382.6	1268.0	3.2767	ug/L	3.2767	ppb	15:04:22
1	Cd 226.502†	658.7	860.0	-0.3328	ug/L	-0.3328	ppb	15:04:42
1	Co 228.616†	283.4	357.9	2.6925	ug/L	2.6925	ppb	15:04:42
1	Cr 267.716†	2220.0	2141.9	24.217	ug/L	24.217	ppb	15:04:42
1	Cu 324.752†	10006.3	3284.0	14.265	ug/L	14.265	ppb	15:04:22
1	Mn 257.610†	580364.4	581909.8	625.85	ug/L	625.85	ppb	15:04:22
1	Mo 202.031†	386.0	369.0	30.054	ug/L	30.054	ppb	15:04:42
1	Ni 231.604†	820.2	737.2	16.935	ug/L	16.935	ppb	15:04:42
1	P 214.914†	2027.7	1792.9	936.80	ug/L	936.80	ppb	15:04:42
1	Pb 220.353†	249.5	318.4	36.062	ug/L	36.062	ppb	15:04:42
1	S 181.975 Axial†	4227.4	4193.0	5532.8	ug/L	5532.8	ppb	15:04:42
1	Sb 206.836†	52.4	15.2	1.4247	ug/L	1.4247	ppb	15:04:42
1	Se 196.026†	-500.6	-475.6	22.561	ug/L	22.561	ppb	15:04:42
1	Si 251.611†	703563.5	705585.8	21013	ug/L	21013	ppb	15:04:22
1	Sn 189.927†	-26.9	-35.8	-3.5731	ug/L	-3.5731	ppb	15:04:42
1	Ti 334.940†	904923.9	909400.9	1435.9	ug/L	1435.9	ppb	15:04:22
1	Tl 190.801†	-113.3	-79.1	-6.8479	ug/L	-6.8479	ppb	15:04:42
1	U 409.014†	-6824.0	-4264.3	-134.30	ug/L	-134.30	ppb	15:04:22
1	V 292.402†	7161.2	8549.4	41.443	ug/L	41.443	ppb	15:04:22
1	Zn 213.857†	21250.5	20572.3	167.78	ug/L	167.78	ppb	15:04:22
1	SiO2†	709519.0	711519.8	45409	ug/L	45409	ppb	15:05:40
2	Sc Radial	5489.3	5489.3	98.4	%			15:03:30
2	Y RADIAL	6598.2	6598.2	109.3	%			15:03:30
2	Al 396.153Radial†	50684.2	51517.7	35480	ug/L	35480	ppb	15:03:30
2	Ca 317.933Radial†	6076.0	6154.8	8982.9	ug/L	8982.9	ppb	15:03:30
2	Fe 238.204 Radial†	10128.5	10278.1	92082	ug/L	92082	ppb	15:03:30
2	K 766.490 Radial†	40960.0	38865.5	6518.2	ug/L	6518.2	ppb	15:03:30
2	Mg 279.077 IEC†	187.6	188.7	6265.8	ug/L	6265.8	ppb	15:03:50
2	Na 589.592 Radial†	8003.2	9683.4	2934.6	ug/L	2934.6	ppb	15:03:30
2	Sr 421.552†	35085.0	35637.8	214.86	ug/L	214.86	ppb	15:03:30
2	Sc 361.383	866586.9	866586.9	99.847	%			15:04:48
2	Y 371.029	799836.2	799836.2	109.65	%			15:04:48
2	Ag 328.068†	-5639.1	-5921.8	2.7159	ug/L	2.7159	ppb	15:04:48
2	As 188.979†	-52.0	-20.8	18.191	ug/L	18.191	ppb	15:05:08
2	B 249.677†	2196.2	2692.8	45.154	ug/L	45.154	ppb	15:04:48
2	Ba 233.527†	78326.7	78458.0	589.78	ug/L	589.78	ppb	15:04:48
2	Be 313.107†	-3430.5	1226.8	3.2651	ug/L	3.2651	ppb	15:04:48
2	Cd 226.502†	671.2	871.2	-0.1597	ug/L	-0.1597	ppb	15:05:08
2	Co 228.616†	270.2	344.1	2.4358	ug/L	2.4358	ppb	15:05:08
2	Cr 267.716†	2205.5	2122.9	24.009	ug/L	24.009	ppb	15:05:08
2	Cu 324.752†	10099.1	3356.7	14.447	ug/L	14.447	ppb	15:04:48
2	Mn 257.610†	582495.4	582868.5	626.81	ug/L	626.81	ppb	15:04:48
2	Mo 202.031†	377.0	359.1	29.385	ug/L	29.385	ppb	15:05:08
2	Ni 231.604†	819.2	734.5	16.874	ug/L	16.874	ppb	15:05:08

2	P 214.914†	2022.1	1783.2	931.75	ug/L	931.75 ppb	15:05:08
2	Pb 220.353†	234.0	302.3	34.292	ug/L	34.292 ppb	15:05:08
2	S 181.975 Axial†	4213.4	4170.4	5502.9	ug/L	5502.9 ppb	15:05:08
2	Sb 206.836†	48.5	11.2	0.1115	ug/L	0.1115 ppb	15:05:08
2	Se 196.026†	-499.0	-473.0	22.244	ug/L	22.244 ppb	15:05:08
2	Si 251.611†	707573.1	708176.5	21090	ug/L	21090 ppb	15:04:48
2	Sn 189.927†	-32.1	-41.0	-4.4106	ug/L	-4.4106 ppb	15:05:08
2	Ti 334.940†	907773.3	910421.7	1437.5	ug/L	1437.5 ppb	15:04:48
2	Tl 190.801†	-113.0	-78.6	-6.6823	ug/L	-6.6823 ppb	15:05:08
2	U 409.014†	-6974.7	-4401.4	-138.17	ug/L	-138.17 ppb	15:04:48
2	V 292.402†	7145.2	8518.9	41.307	ug/L	41.307 ppb	15:04:48
2	Zn 213.857†	21375.4	20654.4	168.54	ug/L	168.54 ppb	15:04:48
2	SiO2†	708428.3	708990.3	45248	ug/L	45248 ppb	15:05:45
3	Sc Radial	5515.5	5515.5	98.9	%		15:03:55
3	Y RADIAL	6658.6	6658.6	110.3	%		15:03:55
3	Al 396.153Radial†	50686.8	51276.4	35314	ug/L	35314 ppb	15:03:55
3	Ca 317.933Radial†	6070.4	6119.9	8932.0	ug/L	8932.0 ppb	15:03:55
3	Fe 238.204 Radial†	10101.8	10202.4	91403	ug/L	91403 ppb	15:03:55
3	K 766.490 Radial†	40808.8	38515.5	6459.5	ug/L	6459.5 ppb	15:03:55
3	Mg 279.077 IEC†	188.4	188.6	6264.6	ug/L	6264.6 ppb	15:04:15
3	Na 589.592 Radial†	7909.7	9550.3	2894.3	ug/L	2894.3 ppb	15:03:55
3	Sr 421.552†	35094.7	35478.7	213.90	ug/L	213.90 ppb	15:03:55
3	Sc 361.383	869171.0	869171.0	100.14	%		15:05:14
3	Y 371.029	801903.8	801903.8	109.93	%		15:05:14
3	Ag 328.068†	-5737.2	-6003.0	2.1316	ug/L	2.1316 ppb	15:05:14
3	As 188.979†	-38.4	-7.1	23.411	ug/L	23.411 ppb	15:05:34
3	B 249.677†	2278.2	2768.1	46.848	ug/L	46.848 ppb	15:05:14
3	Ba 233.527†	78650.1	78547.6	590.43	ug/L	590.43 ppb	15:05:14
3	Be 313.107†	-3457.0	1210.7	3.2629	ug/L	3.2629 ppb	15:05:14
3	Cd 226.502†	644.8	842.8	-0.3864	ug/L	-0.3864 ppb	15:05:34
3	Co 228.616†	282.7	355.7	2.6643	ug/L	2.6643 ppb	15:05:34
3	Cr 267.716†	2206.7	2117.5	23.940	ug/L	23.940 ppb	15:05:34
3	Cu 324.752†	10134.1	3361.6	14.427	ug/L	14.427 ppb	15:05:14
3	Mn 257.610†	585022.2	583657.2	627.58	ug/L	627.58 ppb	15:05:14
3	Mo 202.031†	391.2	372.2	30.169	ug/L	30.169 ppb	15:05:34
3	Ni 231.604†	824.0	736.9	16.928	ug/L	16.928 ppb	15:05:34
3	P 214.914†	2026.4	1781.5	931.30	ug/L	931.30 ppb	15:05:34
3	Pb 220.353†	229.5	297.1	33.736	ug/L	33.736 ppb	15:05:34
3	S 181.975 Axial†	4195.7	4140.2	5463.0	ug/L	5463.0 ppb	15:05:34
3	Sb 206.836†	45.5	8.1	-0.8519	ug/L	-0.8519 ppb	15:05:34
3	Se 196.026†	-490.0	-462.5	26.022	ug/L	26.022 ppb	15:05:34
3	Si 251.611†	710592.2	709084.3	21117	ug/L	21117 ppb	15:05:14
3	Sn 189.927†	-29.8	-38.6	-4.0432	ug/L	-4.0432 ppb	15:05:34
3	Ti 334.940†	911654.6	911594.3	1439.4	ug/L	1439.4 ppb	15:05:14
3	Tl 190.801†	-103.0	-68.3	-3.7583	ug/L	-3.7583 ppb	15:05:34
3	U 409.014†	-6952.7	-4358.6	-136.86	ug/L	-136.86 ppb	15:05:14
3	V 292.402†	7147.2	8499.6	41.295	ug/L	41.295 ppb	15:05:14
3	Zn 213.857†	21430.7	20645.9	168.53	ug/L	168.53 ppb	15:05:14
3	SiO2†	712422.9	710869.6	45368	ug/L	45368 ppb	15:05:51

Mean Data: 241825005|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866865.2	99.879	%	0.2512				0.25%
Sc Radial	5505.9	98.7	%	0.26				0.26%
Y 371.029	800482.9	109.74	%	0.169				0.15%
Y RADIAL	6641.4	110.0	%	0.62				0.57%
Ag 328.068†	-5931.9	2.6567	ug/L	0.49813	2.6567	ppb	0.49813	18.75%
Al 396.153Radial†	51475.6	35451	ug/L	125.3	35451	ppb	125.3	0.35%
As 188.979†	-9.9	22.382	ug/L	3.7836	22.382	ppb	3.7836	16.90%
B 249.677†	2729.7	45.945	ug/L	0.8526	45.945	ppb	0.8526	1.86%
Ba 233.527†	78441.5	589.66	ug/L	0.838	589.66	ppb	0.838	0.14%
Be 313.107†	1235.2	3.2682	ug/L	0.00742	3.2682	ppb	0.00742	0.23%
Ca 317.933Radial†	6147.9	8972.9	ug/L	36.94	8972.9	ppb	36.94	0.41%
Cd 226.502†	858.0	-0.2930	ug/L	0.11848	-0.2930	ppb	0.11848	40.44%
Co 228.616†	352.6	2.5975	ug/L	0.14076	2.5975	ppb	0.14076	5.42%
Cr 267.716†	2127.4	24.055	ug/L	0.1443	24.055	ppb	0.1443	0.60%
Cu 324.752†	3334.1	14.380	ug/L	0.0999	14.380	ppb	0.0999	0.69%
Fe 238.204 Radial†	10274.0	92044	ug/L	623.4	92044	ppb	623.4	0.68%
K 766.490 Radial†	38743.7	6497.8	ug/L	33.22	6497.8	ppb	33.22	0.51%

Mg 279.077 IEC†	188.8	6270.0	ug/L	8.31	6270.0	ppb	8.31	0.13%
Mn 257.610†	582811.8	626.74	ug/L	0.866	626.74	ppb	0.866	0.14%
Mo 202.031†	366.8	29.869	ug/L	0.4232	29.869	ppb	0.4232	1.42%
Na 589.592 Radial†	9603.0	2910.3	ug/L	21.43	2910.3	ppb	21.43	0.74%
Ni 231.604†	736.2	16.912	ug/L	0.0332	16.912	ppb	0.0332	0.20%
P 214.914†	1785.9	933.28	ug/L	3.056	933.28	ppb	3.056	0.33%
Pb 220.353†	305.9	34.697	ug/L	1.2150	34.697	ppb	1.2150	3.50%
S 181.975 Axial†	4167.9	5499.6	ug/L	34.99	5499.6	ppb	34.99	0.64%
Sb 206.836†	11.5	0.2281	ug/L	1.14280	0.2281	ppb	1.14280	501.03%
Se 196.026†	-470.4	23.609	ug/L	2.0959	23.609	ppb	2.0959	8.88%
Si 251.611†	707615.5	21073	ug/L	54.1	21073	ppb	54.1	0.26%
Sn 189.927†	-38.5	-4.0089	ug/L	0.41979	-4.0089	ppb	0.41979	10.47%
Sr 421.552†	35564.6	214.42	ug/L	0.484	214.42	ppb	0.484	0.23%
Ti 334.940†	910472.3	1437.6	ug/L	1.73	1437.6	ppb	1.73	0.12%
Tl 190.801†	-75.3	-5.7628	ug/L	1.73793	-5.7628	ppb	1.73793	30.16%
U 409.014†	-4341.4	-136.44	ug/L	1.968	-136.44	ppb	1.968	1.44%
V 292.402†	8522.6	41.348	ug/L	0.0822	41.348	ppb	0.0822	0.20%
Zn 213.857†	20624.2	168.28	ug/L	0.437	168.28	ppb	0.437	0.26%
SiO2†	710459.9	45342	ug/L	83.8	45342	ppb	83.8	0.18%

Sequence No.: 16
Sample ID: 241825006|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 12/11/2009 15:08:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825006|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5585.4	5585.4	100	%			15:10:16
1	Y RADIAL	7282.2	7282.2	120.6	%			15:10:16
1	Al 396.153Radial†	78364.2	78264.0	53901	ug/L	53901	ppb	15:09:56
1	Ca 317.933Radial†	9949.3	9915.2	14471	ug/L	14471	ppb	15:09:56
1	Fe 238.204 Radial†	11795.6	11765.3	105410	ug/L	105410	ppb	15:09:56
1	K 766.490 Radial†	44311.2	41495.0	6930.1	ug/L	6930.1	ppb	15:09:56
1	Mg 279.077 IEC†	345.3	342.8	11436	ug/L	11436	ppb	15:10:16
1	Na 589.592 Radial†	5536.0	7080.6	2145.8	ug/L	2145.8	ppb	15:09:56
1	Sr 421.552†	25281.8	25238.3	152.08	ug/L	152.08	ppb	15:09:56
1	Sc 361.383	878184.9	878184.9	101.18	%			15:11:13
1	Y 371.029	892558.4	892558.4	122.36	%			15:11:13
1	Ag 328.068†	-6363.6	-6563.2	4.3718	ug/L	4.3718	ppb	15:11:18
1	As 188.979†	-60.5	-28.5	30.191	ug/L	30.191	ppb	15:11:38
1	B 249.677†	1305.4	1783.3	23.943	ug/L	23.943	ppb	15:11:18
1	Ba 233.527†	96244.3	95129.9	715.02	ug/L	715.02	ppb	15:11:18
1	Be 313.107†	-6483.4	-1745.0	5.2126	ug/L	5.2126	ppb	15:11:18
1	Cd 226.502†	789.6	979.3	-0.3538	ug/L	-0.3538	ppb	15:11:38
1	Co 228.616†	1588.5	1643.4	23.504	ug/L	23.504	ppb	15:11:38
1	Cr 267.716†	4508.4	4369.6	47.936	ug/L	47.936	ppb	15:11:38
1	Cu 324.752†	19824.0	12834.3	42.655	ug/L	42.655	ppb	15:11:18
1	Mn 257.610†	3034296.6	2998294.8	3188.0	ug/L	3188.0	ppb	15:11:13
1	Mo 202.031†	203.9	183.1	19.132	ug/L	19.132	ppb	15:11:38
1	Ni 231.604†	2001.0	1891.6	43.448	ug/L	43.448	ppb	15:11:38
1	P 214.914†	1799.1	1536.0	784.82	ug/L	784.82	ppb	15:11:38
1	Pb 220.353†	642.1	702.6	82.094	ug/L	82.094	ppb	15:11:38
1	S 181.975 Axial†	927.7	867.5	1135.5	ug/L	1135.5	ppb	15:11:38
1	Sb 206.836†	55.1	17.1	-3.1777	ug/L	-3.1777	ppb	15:11:38
1	Se 196.026†	-563.8	-530.4	33.615	ug/L	33.615	ppb	15:11:38
1	Si 251.611†	651242.6	643145.6	19153	ug/L	19153	ppb	15:11:13
1	Sn 189.927†	-45.5	-53.8	-5.7132	ug/L	-5.7132	ppb	15:11:38
1	Ti 334.940†	1903129.4	1882131.4	2971.6	ug/L	2971.6	ppb	15:11:13
1	Tl 190.801†	-209.1	-172.0	-6.0313	ug/L	-6.0313	ppb	15:11:38
1	U 409.014†	-11287.5	-8571.5	-259.79	ug/L	-259.79	ppb	15:11:13
1	V 292.402†	18667.0	19811.5	112.44	ug/L	112.44	ppb	15:11:18
1	Zn 213.857†	38018.7	36820.3	305.95	ug/L	305.95	ppb	15:11:18
1	SiO2†	644961.3	636894.9	40646	ug/L	40646	ppb	15:12:46
2	Sc Radial	5488.6	5488.6	98.4	%			15:10:41
2	Y RADIAL	7198.6	7198.6	119.2	%			15:10:41
2	Al 396.153Radial†	78256.4	79534.3	54776	ug/L	54776	ppb	15:10:21
2	Ca 317.933Radial†	9903.2	10043.6	14659	ug/L	14659	ppb	15:10:21
2	Fe 238.204 Radial†	11781.4	11958.6	107140	ug/L	107140	ppb	15:10:21
2	K 766.490 Radial†	44335.4	42299.9	7065.2	ug/L	7065.2	ppb	15:10:21
2	Mg 279.077 IEC†	347.7	351.3	11723	ug/L	11723	ppb	15:10:41
2	Na 589.592 Radial†	5558.2	7200.6	2182.2	ug/L	2182.2	ppb	15:10:21
2	Sr 421.552†	25356.9	25759.8	155.23	ug/L	155.23	ppb	15:10:21
2	Sc 361.383	869787.2	869787.2	100.22	%			15:11:44
2	Y 371.029	883139.5	883139.5	121.07	%			15:11:44
2	Ag 328.068†	-6247.5	-6508.1	5.1763	ug/L	5.1763	ppb	15:11:49
2	As 188.979†	-56.4	-25.0	31.791	ug/L	31.791	ppb	15:12:09
2	B 249.677†	1291.6	1782.1	23.685	ug/L	23.685	ppb	15:11:49
2	Ba 233.527†	96984.6	96787.0	727.47	ug/L	727.47	ppb	15:11:49
2	Be 313.107†	-6257.1	-1581.0	5.2704	ug/L	5.2704	ppb	15:11:49
2	Cd 226.502†	775.9	973.2	-0.5891	ug/L	-0.5891	ppb	15:12:09
2	Co 228.616†	1602.1	1672.1	24.029	ug/L	24.029	ppb	15:12:09
2	Cr 267.716†	4528.8	4433.0	48.634	ug/L	48.634	ppb	15:12:09
2	Cu 324.752†	19807.4	13006.9	43.245	ug/L	43.245	ppb	15:11:49
2	Mn 257.610†	3012240.0	3005239.0	3195.5	ug/L	3195.5	ppb	15:11:44
2	Mo 202.031†	207.2	188.3	19.585	ug/L	19.585	ppb	15:12:09
2	Ni 231.604†	2045.8	1955.4	44.913	ug/L	44.913	ppb	15:12:09

2	P 214.914†	1803.3	1557.4	795.55	ug/L	795.55 ppb	15:12:09
2	Pb 220.353†	646.2	712.7	83.285	ug/L	83.285 ppb	15:12:09
2	S 181.975 Axial†	950.0	898.6	1176.4	ug/L	1176.4 ppb	15:12:09
2	Sb 206.836†	48.0	10.5	-5.2663	ug/L	-5.2663 ppb	15:12:09
2	Se 196.026†	-561.7	-533.7	37.223	ug/L	37.223 ppb	15:12:09
2	Si 251.611†	645253.9	643383.9	19160	ug/L	19160 ppb	15:11:44
2	Sn 189.927†	-50.4	-59.2	-6.5331	ug/L	-6.5331 ppb	15:12:09
2	Ti 334.940†	1884563.4	1881765.1	2971.1	ug/L	2971.1 ppb	15:11:44
2	Tl 190.801†	-193.1	-158.1	-2.0537	ug/L	-2.0537 ppb	15:12:09
2	U 409.014†	-11090.9	-8483.0	-257.46	ug/L	-257.46 ppb	15:11:44
2	V 292.402†	18847.0	20169.2	114.58	ug/L	114.58 ppb	15:11:49
2	Zn 213.857†	38263.8	37427.6	310.99	ug/L	310.99 ppb	15:11:49
2	SiO2†	650825.3	648900.6	41412	ug/L	41412 ppb	15:12:52
3	Sc Radial	5557.5	5557.5	99.7	%		15:11:06
3	Y RADIAL	7307.5	7307.5	121.0	%		15:11:06
3	Al 396.153Radial†	77394.8	77685.1	53502	ug/L	53502 ppb	15:10:46
3	Ca 317.933Radial†	9795.3	9810.7	14319	ug/L	14319 ppb	15:10:46
3	Fe 238.204 Radial†	11668.3	11696.9	104790	ug/L	104790 ppb	15:10:46
3	K 766.490 Radial†	43681.9	41086.3	6861.5	ug/L	6861.5 ppb	15:10:46
3	Mg 279.077 IEC†	353.9	353.2	11787	ug/L	11787 ppb	15:11:06
3	Na 589.592 Radial†	5440.3	7012.4	2125.2	ug/L	2125.2 ppb	15:10:46
3	Sr 421.552†	25061.3	25144.0	151.52	ug/L	151.52 ppb	15:10:46
3	Sc 361.383	875804.8	875804.8	100.91	%		15:12:15
3	Y 371.029	888299.0	888299.0	121.78	%		15:12:15
3	Ag 328.068†	-6410.2	-6626.5	3.9006	ug/L	3.9006 ppb	15:12:20
3	As 188.979†	-56.3	-24.5	31.548	ug/L	31.548 ppb	15:12:41
3	B 249.677†	1314.5	1795.9	24.291	ug/L	24.291 ppb	15:12:20
3	Ba 233.527†	97803.3	96933.4	728.48	ug/L	728.48 ppb	15:12:20
3	Be 313.107†	-6532.2	-1810.8	5.1703	ug/L	5.1703 ppb	15:12:20
3	Cd 226.502†	792.7	984.5	-0.2377	ug/L	-0.2377 ppb	15:12:41
3	Co 228.616†	1597.0	1656.1	23.780	ug/L	23.780 ppb	15:12:41
3	Cr 267.716†	4580.6	4453.3	48.805	ug/L	48.805 ppb	15:12:41
3	Cu 324.752†	19964.4	13026.7	43.183	ug/L	43.183 ppb	15:12:20
3	Mn 257.610†	3022210.2	2994467.0	3183.9	ug/L	3183.9 ppb	15:12:15
3	Mo 202.031†	209.7	189.4	19.483	ug/L	19.483 ppb	15:12:41
3	Ni 231.604†	2038.5	1934.2	44.425	ug/L	44.425 ppb	15:12:41
3	P 214.914†	1812.8	1554.4	795.31	ug/L	795.31 ppb	15:12:41
3	Pb 220.353†	641.4	703.6	82.171	ug/L	82.171 ppb	15:12:41
3	S 181.975 Axial†	940.1	882.2	1155.1	ug/L	1155.1 ppb	15:12:41
3	Sb 206.836†	66.6	28.7	0.4721	ug/L	0.4721 ppb	15:12:41
3	Se 196.026†	-557.1	-525.3	34.537	ug/L	34.537 ppb	15:12:41
3	Si 251.611†	647372.0	641058.9	19091	ug/L	19091 ppb	15:12:15
3	Sn 189.927†	-53.5	-61.9	-7.0391	ug/L	-7.0391 ppb	15:12:41
3	Ti 334.940†	1891872.7	1876087.6	2962.1	ug/L	2962.1 ppb	15:12:15
3	Tl 190.801†	-194.3	-157.9	-2.1715	ug/L	-2.1715 ppb	15:12:41
3	U 409.014†	-11113.8	-8429.7	-255.63	ug/L	-255.63 ppb	15:12:15
3	V 292.402†	19063.3	20254.3	115.51	ug/L	115.51 ppb	15:12:20
3	Zn 213.857†	38701.5	37599.0	312.69	ug/L	312.69 ppb	15:12:20
3	SiO2†	647072.8	640719.7	40890	ug/L	40890 ppb	15:12:57

Mean Data: 241825006|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874592.3	100.77	%	0.499				0.49%
Sc Radial	5543.8	99.4	%	0.89				0.90%
Y 371.029	887999.0	121.73	%	0.647				0.53%
Y RADIAL	7262.8	120.3	%	0.94				0.78%
Ag 328.068†	-6565.9	4.4829	ug/L	0.64506	4.4829	ppb	0.64506	14.39%
Al 396.153Radial†	78494.5	54060	ug/L	651.5	54060	ppb	651.5	1.21%
As 188.979†	-26.0	31.177	ug/L	0.8624	31.177	ppb	0.8624	2.77%
B 249.677†	1787.1	23.973	ug/L	0.3040	23.973	ppb	0.3040	1.27%
Ba 233.527†	96283.5	723.65	ug/L	7.497	723.65	ppb	7.497	1.04%
Be 313.107†	-1712.3	5.2177	ug/L	0.05025	5.2177	ppb	0.05025	0.96%
Ca 317.933Radial†	9923.2	14483	ug/L	170.3	14483	ppb	170.3	1.18%
Cd 226.502†	979.0	-0.3935	ug/L	0.17907	-0.3935	ppb	0.17907	45.50%
Co 228.616†	1657.2	23.771	ug/L	0.2628	23.771	ppb	0.2628	1.11%
Cr 267.716†	4418.6	48.458	ug/L	0.4601	48.458	ppb	0.4601	0.95%
Cu 324.752†	12956.0	43.028	ug/L	0.3240	43.028	ppb	0.3240	0.75%
Fe 238.204 Radial†	11807.0	105780	ug/L	1216.1	105780	ppb	1216.1	1.15%
K 766.490 Radial†	41627.1	6952.3	ug/L	103.62	6952.3	ppb	103.62	1.49%

Mg 279.077 IEC†	349.1	11649	ug/L	186.7	11649	ppb	186.7	1.60%
Mn 257.610†	2999333.6	3189.1	ug/L	5.91	3189.1	ppb	5.91	0.19%
Mo 202.031†	186.9	19.400	ug/L	0.2377	19.400	ppb	0.2377	1.23%
Na 589.592 Radial†	7097.9	2151.1	ug/L	28.88	2151.1	ppb	28.88	1.34%
Ni 231.604†	1927.1	44.262	ug/L	0.7460	44.262	ppb	0.7460	1.69%
P 214.914†	1549.3	791.89	ug/L	6.130	791.89	ppb	6.130	0.77%
Pb 220.353†	706.3	82.517	ug/L	0.6664	82.517	ppb	0.6664	0.81%
S 181.975 Axial†	882.8	1155.7	ug/L	20.45	1155.7	ppb	20.45	1.77%
Sb 206.836†	18.8	-2.6573	ug/L	2.90436	-2.6573	ppb	2.90436	109.30%
Se 196.026†	-529.8	35.125	ug/L	1.8748	35.125	ppb	1.8748	5.34%
Si 251.611†	642529.5	19135	ug/L	38.1	19135	ppb	38.1	0.20%
Sn 189.927†	-58.3	-6.4284	ug/L	0.66909	-6.4284	ppb	0.66909	10.41%
Sr 421.552†	25380.7	152.94	ug/L	1.999	152.94	ppb	1.999	1.31%
Ti 334.940†	1879994.7	2968.3	ug/L	5.36	2968.3	ppb	5.36	0.18%
Tl 190.801†	-162.7	-3.4188	ug/L	2.26324	-3.4188	ppb	2.26324	66.20%
U 409.014†	-8494.8	-257.63	ug/L	2.081	-257.63	ppb	2.081	0.81%
V 292.402†	20078.3	114.18	ug/L	1.574	114.18	ppb	1.574	1.38%
Zn 213.857†	37282.3	309.87	ug/L	3.504	309.87	ppb	3.504	1.13%
SiO2†	642171.7	40983	ug/L	391.4	40983	ppb	391.4	0.96%

Sequence No.: 17
Sample ID: 241825007|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 12/11/2009 15:15:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825007|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5582.1	5582.1	100	%			15:17:22
1	Y RADIAL	6807.9	6807.9	112.7	%			15:17:22
1	Al 396.153Radial†	166203.2	166049.0	114360	ug/L	114360	ppb	15:17:02
1	Ca 317.933Radial†	21231.7	21190.6	30928	ug/L	30928	ppb	15:17:02
1	Fe 238.204 Radial†	15098.8	15071.7	135030	ug/L	135030	ppb	15:17:02
1	K 766.490 Radial†	92152.8	89308.2	14959	ug/L	14959	ppb	15:17:02
1	Mg 279.077 IEC†	665.2	662.6	22165	ug/L	22165	ppb	15:17:22
1	Na 589.592 Radial†	7818.5	9363.7	2837.8	ug/L	2837.8	ppb	15:17:02
1	Sr 421.552†	51786.5	51727.7	311.70	ug/L	311.70	ppb	15:17:02
1	Sc 361.383	877448.2	877448.2	101.10	%			15:18:21
1	Y 371.029	822701.9	822701.9	112.78	%			15:18:21
1	Ag 328.068†	-8573.4	-8754.3	4.1372	ug/L	4.1372	ppb	15:18:21
1	As 188.979†	-67.3	-35.3	45.276	ug/L	45.276	ppb	15:18:41
1	B 249.677†	1771.0	2244.9	29.770	ug/L	29.770	ppb	15:18:21
1	Ba 233.527†	216689.1	214346.1	1607.2	ug/L	1607.2	ppb	15:18:21
1	Be 313.107†	-6857.6	-2120.5	8.1460	ug/L	8.1460	ppb	15:18:21
1	Cd 226.502†	1148.1	1334.5	0.3908	ug/L	0.3908	ppb	15:18:41
1	Co 228.616†	3278.0	3315.8	51.649	ug/L	51.649	ppb	15:18:41
1	Cr 267.716†	8877.6	8695.1	93.966	ug/L	93.966	ppb	15:18:41
1	Cu 324.752†	28713.3	21643.5	69.754	ug/L	69.754	ppb	15:18:21
1	Mn 257.610†	2966572.5	2933824.3	3122.4	ug/L	3122.4	ppb	15:18:21
1	Mo 202.031†	-15.6	-33.8	7.4267	ug/L	7.4267	ppb	15:18:41
1	Ni 231.604†	3472.2	3348.6	76.906	ug/L	76.906	ppb	15:18:41
1	P 214.914†	1954.5	1691.2	863.74	ug/L	863.74	ppb	15:18:41
1	Pb 220.353†	913.4	971.5	123.28	ug/L	123.28	ppb	15:18:41
1	S 181.975 Axial†	1221.8	1159.1	1508.9	ug/L	1508.9	ppb	15:18:41
1	Sb 206.836†	81.4	43.2	-1.7853	ug/L	-1.7853	ppb	15:18:41
1	Se 196.026†	-752.2	-717.3	28.493	ug/L	28.493	ppb	15:18:41
1	Si 251.611†	942850.2	932125.6	27758	ug/L	27758	ppb	15:18:21
1	Sn 189.927†	-151.2	-158.4	-20.400	ug/L	-20.400	ppb	15:18:41
1	Ti 334.940†	2901352.6	2871089.4	4533.4	ug/L	4533.4	ppb	15:18:21
1	Tl 190.801†	-234.0	-196.9	-0.2660	ug/L	-0.2660	ppb	15:18:41
1	U 409.014†	-9879.7	-7188.3	-223.83	ug/L	-223.83	ppb	15:18:21
1	V 292.402†	38968.1	39907.5	240.03	ug/L	240.03	ppb	15:18:21
1	Zn 213.857†	36039.2	34893.8	285.94	ug/L	285.94	ppb	15:18:21
1	SiO2†	937848.8	927135.8	59166	ug/L	59166	ppb	15:19:41
2	Sc Radial	5357.7	5357.7	96.1	%			15:17:47
2	Y RADIAL	6568.3	6568.3	108.8	%			15:17:47
2	Al 396.153Radial†	167196.9	174037.4	119860	ug/L	119860	ppb	15:17:27
2	Ca 317.933Radial†	21401.1	22255.3	32481	ug/L	32481	ppb	15:17:27
2	Fe 238.204 Radial†	15191.4	15799.9	141550	ug/L	141550	ppb	15:17:27
2	K 766.490 Radial†	92867.1	93907.4	15732	ug/L	15732	ppb	15:17:27
2	Mg 279.077 IEC†	670.7	696.1	23286	ug/L	23286	ppb	15:17:47
2	Na 589.592 Radial†	7873.0	9747.6	2954.1	ug/L	2954.1	ppb	15:17:27
2	Sr 421.552†	52123.8	54245.5	326.87	ug/L	326.87	ppb	15:17:27
2	Sc 361.383	887072.9	887072.9	102.21	%			15:18:48
2	Y 371.029	829457.5	829457.5	113.71	%			15:18:48
2	Ag 328.068†	-8611.3	-8699.3	6.4297	ug/L	6.4297	ppb	15:18:48
2	As 188.979†	-74.7	-41.8	43.291	ug/L	43.291	ppb	15:19:08
2	B 249.677†	1865.5	2318.4	30.474	ug/L	30.474	ppb	15:18:48
2	Ba 233.527†	217554.3	212867.1	1596.4	ug/L	1596.4	ppb	15:18:48
2	Be 313.107†	-6901.9	-2090.3	8.0502	ug/L	8.0502	ppb	15:18:48
2	Cd 226.502†	1154.3	1328.3	-0.3269	ug/L	-0.3269	ppb	15:19:08
2	Co 228.616†	3251.7	3254.9	50.516	ug/L	50.516	ppb	15:19:08
2	Cr 267.716†	8864.6	8587.2	92.949	ug/L	92.949	ppb	15:19:08
2	Cu 324.752†	28624.0	21248.0	68.938	ug/L	68.938	ppb	15:18:48
2	Mn 257.610†	2972521.5	2907807.2	3095.5	ug/L	3095.5	ppb	15:18:48
2	Mo 202.031†	-22.4	-40.4	7.4727	ug/L	7.4727	ppb	15:19:08
2	Ni 231.604†	3447.1	3286.7	75.485	ug/L	75.485	ppb	15:19:08

2	P 214.914†	1939.4	1655.5	840.56 ug/L	840.56 ppb	15:19:08
2	Pb 220.353†	905.1	953.5	121.96 ug/L	121.96 ppb	15:19:08
2	S 181.975 Axial†	1233.2	1157.2	1505.3 ug/L	1505.3 ppb	15:19:08
2	Sb 206.836†	91.5	52.1	1.1404 ug/L	1.1404 ppb	15:19:08
2	Se 196.026†	-738.3	-695.6	61.559 ug/L	61.559 ppb	15:19:08
2	Si 251.611†	944650.5	923768.2	27508 ug/L	27508 ppb	15:18:48
2	Sn 189.927†	-160.9	-166.3	-21.416 ug/L	-21.416 ppb	15:19:08
2	Ti 334.940†	2898058.5	2836728.7	4479.3 ug/L	4479.3 ppb	15:18:48
2	Tl 190.801†	-239.1	-199.3	-1.3588 ug/L	-1.3588 ppb	15:19:08
2	U 409.014†	-10091.6	-7289.7	-227.57 ug/L	-227.57 ppb	15:18:48
2	V 292.402†	38927.7	39449.8	236.07 ug/L	236.07 ppb	15:18:48
2	Zn 213.857†	36225.1	34688.9	283.52 ug/L	283.52 ppb	15:18:48
2	SiO2†	936729.6	915975.6	58454 ug/L	58454 ppb	15:19:47
3	Sc Radial	5523.3	5523.3	99.1 %		15:18:12
3	Y RADIAL	6708.8	6708.8	111.1 %		15:18:12
3	Al 396.153Radial†	165660.4	167268.2	115200 ug/L	115200 ppb	15:17:52
3	Ca 317.933Radial†	21211.4	21395.9	31227 ug/L	31227 ppb	15:17:52
3	Fe 238.204 Radial†	15101.9	15235.4	136500 ug/L	136500 ppb	15:17:52
3	K 766.490 Radial†	91967.7	90101.1	15093 ug/L	15093 ppb	15:17:52
3	Mg 279.077 IEC†	660.3	664.7	22235 ug/L	22235 ppb	15:18:12
3	Na 589.592 Radial†	7832.7	9461.2	2867.3 ug/L	2867.3 ppb	15:17:52
3	Sr 421.552†	51574.4	52064.2	313.72 ug/L	313.72 ppb	15:17:52
3	Sc 361.383	885967.7	885967.7	102.08 %		15:19:15
3	Y 371.029	827734.1	827734.1	113.47 %		15:19:15
3	Ag 328.068†	-8716.9	-8813.4	4.3157 ug/L	4.3157 ppb	15:19:15
3	As 188.979†	-65.3	-32.7	46.178 ug/L	46.178 ppb	15:19:35
3	B 249.677†	1826.3	2282.3	30.373 ug/L	30.373 ppb	15:19:15
3	Ba 233.527†	217341.1	212923.8	1596.6 ug/L	1596.6 ppb	15:19:15
3	Be 313.107†	-6614.1	-1816.7	8.1788 ug/L	8.1788 ppb	15:19:15
3	Cd 226.502†	1157.9	1333.2	0.2296 ug/L	0.2296 ppb	15:19:35
3	Co 228.616†	3287.5	3293.9	51.296 ug/L	51.296 ppb	15:19:35
3	Cr 267.716†	8898.1	8630.8	93.312 ug/L	93.312 ppb	15:19:35
3	Cu 324.752†	28946.8	21599.2	69.700 ug/L	69.700 ppb	15:19:15
3	Mn 257.610†	2972544.5	2911457.9	3098.9 ug/L	3098.9 ppb	15:19:15
3	Mo 202.031†	3.0	-15.4	8.7003 ug/L	8.7003 ppb	15:19:35
3	Ni 231.604†	3458.2	3301.8	75.832 ug/L	75.832 ppb	15:19:35
3	P 214.914†	1928.8	1647.5	838.45 ug/L	838.45 ppb	15:19:35
3	Pb 220.353†	897.2	946.9	120.60 ug/L	120.60 ppb	15:19:35
3	S 181.975 Axial†	1233.7	1159.1	1508.8 ug/L	1508.8 ppb	15:19:35
3	Sb 206.836†	89.0	49.9	0.5237 ug/L	0.5237 ppb	15:19:35
3	Se 196.026†	-746.3	-704.3	40.402 ug/L	40.402 ppb	15:19:35
3	Si 251.611†	946660.6	926890.4	27602 ug/L	27602 ppb	15:19:15
3	Sn 189.927†	-131.6	-137.8	-17.032 ug/L	-17.032 ppb	15:19:35
3	Ti 334.940†	2904444.0	2846521.4	4494.7 ug/L	4494.7 ppb	15:19:15
3	Tl 190.801†	-226.8	-187.6	1.9595 ug/L	1.9595 ppb	15:19:35
3	U 409.014†	-9826.4	-7042.2	-219.81 ug/L	-219.81 ppb	15:19:15
3	V 292.402†	38835.3	39406.7	236.55 ug/L	236.55 ppb	15:19:15
3	Zn 213.857†	36117.6	34627.9	283.51 ug/L	283.51 ppb	15:19:15
3	SiO2†	938570.1	918922.0	58642 ug/L	58642 ppb	15:19:53

Mean Data: 241825007|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883496.3	101.80	%	0.607				0.60%
Sc Radial	5487.7	98.4	%	2.09				2.12%
Y 371.029	826631.2	113.32	%	0.481				0.42%
Y RADIAL	6695.0	110.9	%	1.99				1.80%
Ag 328.068†	-8755.7	4.9609	ug/L	1.27518	4.9609	ppb	1.27518	25.70%
Al 396.153Radial†	169118.2	116470	ug/L	2963.9	116470	ppb	2963.9	2.54%
As 188.979†	-36.6	44.915	ug/L	1.4771	44.915	ppb	1.4771	3.29%
B 249.677†	2281.9	30.206	ug/L	0.3804	30.206	ppb	0.3804	1.26%
Ba 233.527†	213379.0	1600.1	ug/L	6.18	1600.1	ppb	6.18	0.39%
Be 313.107†	-2009.1	8.1250	ug/L	0.06682	8.1250	ppb	0.06682	0.82%
Ca 317.933Radial†	21613.9	31545	ug/L	824.4	31545	ppb	824.4	2.61%
Cd 226.502†	1332.0	0.0978	ug/L	0.37651	0.0978	ppb	0.37651	384.87%
Co 228.616†	3288.2	51.154	ug/L	0.5797	51.154	ppb	0.5797	1.13%
Cr 267.716†	8637.7	93.409	ug/L	0.5156	93.409	ppb	0.5156	0.55%
Cu 324.752†	21496.9	69.464	ug/L	0.4565	69.464	ppb	0.4565	0.66%
Fe 238.204 Radial†	15369.0	137690	ug/L	3422.6	137690	ppb	3422.6	2.49%
K 766.490 Radial†	91105.6	15261	ug/L	413.0	15261	ppb	413.0	2.71%

Mg 279.077 IEC†	674.4	22562	ug/L	627.7	22562	ppb	627.7	2.78%
Mn 257.610†	2917696.5	3105.6	ug/L	14.68	3105.6	ppb	14.68	0.47%
Mo 202.031†	-29.9	7.8665	ug/L	0.72242	7.8665	ppb	0.72242	9.18%
Na 589.592 Radial†	9524.2	2886.4	ug/L	60.47	2886.4	ppb	60.47	2.10%
Ni 231.604†	3312.4	76.075	ug/L	0.7407	76.075	ppb	0.7407	0.97%
P 214.914†	1664.7	847.58	ug/L	14.027	847.58	ppb	14.027	1.65%
Pb 220.353†	957.3	121.95	ug/L	1.340	121.95	ppb	1.340	1.10%
S 181.975 Axial†	1158.5	1507.6	ug/L	2.05	1507.6	ppb	2.05	0.14%
Sb 206.836†	48.4	-0.0404	ug/L	1.54225	-0.0404	ppb	1.54225	>999.9%
Se 196.026†	-705.7	43.485	ug/L	16.7468	43.485	ppb	16.7468	38.51%
Si 251.611†	927594.7	27623	ug/L	125.9	27623	ppb	125.9	0.46%
Sn 189.927†	-154.2	-19.616	ug/L	2.2948	-19.616	ppb	2.2948	11.70%
Sr 421.552†	52679.1	317.43	ug/L	8.237	317.43	ppb	8.237	2.59%
Ti 334.940†	2851446.5	4502.5	ug/L	27.90	4502.5	ppb	27.90	0.62%
Tl 190.801†	-194.6	0.1115	ug/L	1.69105	0.1115	ppb	1.69105	>999.9%
U 409.014†	-7173.4	-223.74	ug/L	3.877	-223.74	ppb	3.877	1.73%
V 292.402†	39588.0	237.55	ug/L	2.164	237.55	ppb	2.164	0.91%
Zn 213.857†	34736.9	284.32	ug/L	1.396	284.32	ppb	1.396	0.49%
SiO2†	920677.8	58754	ug/L	369.4	58754	ppb	369.4	0.63%

Sequence No.: 18
Sample ID: 241825008|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 12/11/2009 15:22:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825008|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5638.0	5638.0	101	%			15:23:56
1	Y RADIAL	7309.2	7309.2	121.0	%			15:23:56
1	Al 396.153Radial†	79841.9	78996.4	54405	ug/L	54405	ppb	15:23:56
1	Ca 317.933Radial†	23101.1	22829.4	33319	ug/L	33319	ppb	15:23:56
1	Fe 238.204 Radial†	10676.0	10548.3	94503	ug/L	94503	ppb	15:23:56
1	K 766.490 Radial†	44822.7	41588.8	6960.0	ug/L	6960.0	ppb	15:23:56
1	Mg 279.077 IEC†	337.8	332.2	11090	ug/L	11090	ppb	15:24:16
1	Na 589.592 Radial†	6105.2	7592.0	2300.8	ug/L	2300.8	ppb	15:23:56
1	Sr 421.552†	33373.0	33005.0	198.75	ug/L	198.75	ppb	15:23:56
1	Sc 361.383	877251.3	877251.3	101.08	%			15:25:13
1	Y 371.029	870876.4	870876.4	119.39	%			15:25:13
1	Ag 328.068†	-5788.3	-6000.8	3.1170	ug/L	3.1170	ppb	15:25:19
1	As 188.979†	-44.9	-13.1	33.569	ug/L	33.569	ppb	15:25:39
1	B 249.677†	1216.6	1696.9	23.574	ug/L	23.574	ppb	15:25:19
1	Ba 233.527†	115769.9	114549.0	859.66	ug/L	859.66	ppb	15:25:19
1	Be 313.107†	-7329.8	-2589.2	4.7100	ug/L	4.7100	ppb	15:25:19
1	Cd 226.502†	712.7	904.1	-0.0476	ug/L	-0.0476	ppb	15:25:39
1	Co 228.616†	1018.5	1081.1	13.357	ug/L	13.357	ppb	15:25:39
1	Cr 267.716†	3588.2	3464.0	38.235	ug/L	38.235	ppb	15:25:39
1	Cu 324.752†	17741.4	10794.8	36.175	ug/L	36.175	ppb	15:25:19
1	Mn 257.610†	1765564.6	1746255.8	1860.0	ug/L	1860.0	ppb	15:25:13
1	Mo 202.031†	299.1	277.5	24.362	ug/L	24.362	ppb	15:25:39
1	Ni 231.604†	1742.8	1638.3	37.634	ug/L	37.634	ppb	15:25:39
1	P 214.914†	1717.6	1457.2	750.58	ug/L	750.58	ppb	15:25:39
1	Pb 220.353†	445.8	509.1	61.458	ug/L	61.458	ppb	15:25:39
1	S 181.975 Axial†	1084.1	1023.1	1341.1	ug/L	1341.1	ppb	15:25:39
1	Sb 206.836†	60.4	22.4	-1.2860	ug/L	-1.2860	ppb	15:25:39
1	Se 196.026†	-525.0	-492.6	21.451	ug/L	21.451	ppb	15:25:39
1	Si 251.611†	753898.7	745394.2	22198	ug/L	22198	ppb	15:25:13
1	Sn 189.927†	-112.6	-120.3	-14.597	ug/L	-14.597	ppb	15:25:39
1	Ti 334.940†	1836095.3	1817812.3	2871.1	ug/L	2871.1	ppb	15:25:13
1	Tl 190.801†	-177.9	-141.4	-5.8361	ug/L	-5.8361	ppb	15:25:39
1	U 409.014†	-12720.6	-10001.2	-299.50	ug/L	-299.50	ppb	15:25:13
1	V 292.402†	15242.0	16442.5	91.799	ug/L	91.799	ppb	15:25:19
1	Zn 213.857†	37063.0	35914.8	299.26	ug/L	299.26	ppb	15:25:19
1	SiO2†	756486.8	747912.0	47732	ug/L	47732	ppb	15:26:47
2	Sc Radial	5599.5	5599.5	100	%			15:24:21
2	Y RADIAL	7320.6	7320.6	121.2	%			15:24:21
2	Al 396.153Radial†	79937.3	79633.2	54843	ug/L	54843	ppb	15:24:21
2	Ca 317.933Radial†	23171.7	23056.4	33651	ug/L	33651	ppb	15:24:21
2	Fe 238.204 Radial†	10661.4	10606.2	95021	ug/L	95021	ppb	15:24:21
2	K 766.490 Radial†	44713.4	41784.0	6992.7	ug/L	6992.7	ppb	15:24:21
2	Mg 279.077 IEC†	345.0	341.6	11406	ug/L	11406	ppb	15:24:41
2	Na 589.592 Radial†	6220.3	7748.0	2348.1	ug/L	2348.1	ppb	15:24:21
2	Sr 421.552†	33340.1	33198.8	199.92	ug/L	199.92	ppb	15:24:21
2	Sc 361.383	884500.2	884500.2	101.91	%			15:25:44
2	Y 371.029	877399.4	877399.4	120.28	%			15:25:44
2	Ag 328.068†	-5764.8	-5930.7	3.5908	ug/L	3.5908	ppb	15:25:50
2	As 188.979†	-36.5	-4.5	37.001	ug/L	37.001	ppb	15:26:10
2	B 249.677†	1227.7	1697.9	23.526	ug/L	23.526	ppb	15:25:50
2	Ba 233.527†	115412.6	113259.7	850.04	ug/L	850.04	ppb	15:25:50
2	Be 313.107†	-7173.2	-2376.1	4.7920	ug/L	4.7920	ppb	15:25:50
2	Cd 226.502†	704.9	890.6	-0.2397	ug/L	-0.2397	ppb	15:26:10
2	Co 228.616†	1029.7	1083.9	13.391	ug/L	13.391	ppb	15:26:10
2	Cr 267.716†	3584.6	3431.4	37.902	ug/L	37.902	ppb	15:26:10
2	Cu 324.752†	17631.3	10542.8	35.470	ug/L	35.470	ppb	15:25:50
2	Mn 257.610†	1784831.4	1750845.7	1864.9	ug/L	1864.9	ppb	15:25:44
2	Mo 202.031†	296.5	272.6	24.085	ug/L	24.085	ppb	15:26:10
2	Ni 231.604†	1708.2	1590.2	36.528	ug/L	36.528	ppb	15:26:10

2	P 214.914†	1734.7	1460.1	751.99	ug/L	751.99 ppb	15:26:10
2	Pb 220.353†	475.6	534.7	64.380	ug/L	64.380 ppb	15:26:10
2	S 181.975 Axial†	1095.3	1025.4	1343.9	ug/L	1343.9 ppb	15:26:10
2	Sb 206.836†	62.1	23.5	-0.9952	ug/L	-0.9952 ppb	15:26:10
2	Se 196.026†	-524.4	-487.8	25.846	ug/L	25.846 ppb	15:26:10
2	Si 251.611†	761141.7	746388.6	22228	ug/L	22228 ppb	15:25:44
2	Sn 189.927†	-129.3	-135.7	-17.034	ug/L	-17.034 ppb	15:26:10
2	Ti 334.940†	1853073.9	1819585.1	2873.9	ug/L	2873.9 ppb	15:25:44
2	Tl 190.801†	-177.0	-139.1	-5.1206	ug/L	-5.1206 ppb	15:26:10
2	U 409.014†	-12875.7	-10050.3	-300.98	ug/L	-300.98 ppb	15:25:44
2	V 292.402†	15196.6	16274.4	90.599	ug/L	90.599 ppb	15:25:50
2	Zn 213.857†	36990.7	35543.3	296.01	ug/L	296.01 ppb	15:25:50
2	SiO2†	747542.1	733001.2	46780	ug/L	46780 ppb	15:26:53
3	Sc Radial	5643.4	5643.4	101	%		15:24:46
3	Y RADIAL	7300.1	7300.1	120.9	%		15:24:46
3	Al 396.153Radial†	78724.8	77816.1	53592	ug/L	53592 ppb	15:24:46
3	Ca 317.933Radial†	22861.5	22570.5	32942	ug/L	32942 ppb	15:24:46
3	Fe 238.204 Radial†	10511.7	10375.7	92957	ug/L	92957 ppb	15:24:46
3	K 766.490 Radial†	44162.8	40893.7	6843.2	ug/L	6843.2 ppb	15:24:46
3	Mg 279.077 IEC†	346.3	340.2	11361	ug/L	11361 ppb	15:25:06
3	Na 589.592 Radial†	6118.7	7599.5	2303.1	ug/L	2303.1 ppb	15:24:46
3	Sr 421.552†	32876.5	32482.5	195.61	ug/L	195.61 ppb	15:24:46
3	Sc 361.383	878638.4	878638.4	101.24	%		15:26:16
3	Y 371.029	870506.6	870506.6	119.34	%		15:26:16
3	Ag 328.068†	-5782.0	-5985.5	2.7013	ug/L	2.7013 ppb	15:26:21
3	As 188.979†	-42.1	-10.3	34.498	ug/L	34.498 ppb	15:26:41
3	B 249.677†	1356.8	1833.4	26.688	ug/L	26.688 ppb	15:26:21
3	Ba 233.527†	114910.9	113519.7	851.91	ug/L	851.91 ppb	15:26:21
3	Be 313.107†	-7154.9	-2405.0	4.7919	ug/L	4.7919 ppb	15:26:21
3	Cd 226.502†	719.0	909.1	0.1595	ug/L	0.1595 ppb	15:26:41
3	Co 228.616†	1030.4	1091.3	13.551	ug/L	13.551 ppb	15:26:41
3	Cr 267.716†	3562.9	3433.4	37.888	ug/L	37.888 ppb	15:26:41
3	Cu 324.752†	17840.8	10865.2	36.301	ug/L	36.301 ppb	15:26:21
3	Mn 257.610†	1775369.9	1753183.8	1867.1	ug/L	1867.1 ppb	15:26:16
3	Mo 202.031†	300.8	278.7	24.329	ug/L	24.329 ppb	15:26:41
3	Ni 231.604†	1737.0	1629.9	37.439	ug/L	37.439 ppb	15:26:41
3	P 214.914†	1701.5	1438.7	741.13	ug/L	741.13 ppb	15:26:41
3	Pb 220.353†	449.8	512.3	61.762	ug/L	61.762 ppb	15:26:41
3	S 181.975 Axial†	1092.2	1029.5	1349.6	ug/L	1349.6 ppb	15:26:41
3	Sb 206.836†	43.5	5.6	-6.6487	ug/L	-6.6487 ppb	15:26:41
3	Se 196.026†	-511.1	-478.0	24.779	ug/L	24.779 ppb	15:26:41
3	Si 251.611†	758288.6	748553.0	22292	ug/L	22292 ppb	15:26:16
3	Sn 189.927†	-120.7	-128.1	-15.912	ug/L	-15.912 ppb	15:26:41
3	Ti 334.940†	1844141.2	1822892.2	2879.1	ug/L	2879.1 ppb	15:26:16
3	Tl 190.801†	-165.7	-129.1	-2.2875	ug/L	-2.2875 ppb	15:26:41
3	U 409.014†	-12948.6	-10206.6	-305.21	ug/L	-305.21 ppb	15:26:16
3	V 292.402†	15142.1	16320.1	91.207	ug/L	91.207 ppb	15:26:21
3	Zn 213.857†	36846.9	35643.4	297.06	ug/L	297.06 ppb	15:26:21
3	SiO2†	753958.7	744233.2	47497	ug/L	47497 ppb	15:26:59

Mean Data: 241825008|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	880130.0	101.41	%	0.443				0.44%
Sc Radial	5627.0	101	%	0.4				0.43%
Y 371.029	872927.4	119.67	%	0.532				0.44%
Y RADIAL	7309.9	121.0	%	0.17				0.14%
Ag 328.068†	-5972.3	3.1364	ug/L	0.44509	3.1364	ppb	0.44509	14.19%
Al 396.153Radial†	78815.2	54280	ug/L	635.0	54280	ppb	635.0	1.17%
As 188.979†	-9.3	35.022	ug/L	1.7750	35.022	ppb	1.7750	5.07%
B 249.677†	1742.7	24.596	ug/L	1.8121	24.596	ppb	1.8121	7.37%
Ba 233.527†	113776.1	853.87	ug/L	5.100	853.87	ppb	5.100	0.60%
Be 313.107†	-2456.7	4.7646	ug/L	0.04732	4.7646	ppb	0.04732	0.99%
Ca 317.933Radial†	22818.8	33304	ug/L	354.8	33304	ppb	354.8	1.07%
Cd 226.502†	901.3	-0.0426	ug/L	0.19966	-0.0426	ppb	0.19966	468.65%
Co 228.616†	1085.4	13.433	ug/L	0.1036	13.433	ppb	0.1036	0.77%
Cr 267.716†	3442.9	38.008	ug/L	0.1965	38.008	ppb	0.1965	0.52%
Cu 324.752†	10734.3	35.982	ug/L	0.4480	35.982	ppb	0.4480	1.24%
Fe 238.204 Radial†	10510.1	94160	ug/L	1074.1	94160	ppb	1074.1	1.14%
K 766.490 Radial†	41422.2	6932.0	ug/L	78.61	6932.0	ppb	78.61	1.13%

Mg 279.077 IEC†	338.0	11285	ug/L	171.2	11285	ppb	171.2	1.52%
Mn 257.610†	1750095.1	1864.0	ug/L	3.67	1864.0	ppb	3.67	0.20%
Mo 202.031†	276.2	24.259	ug/L	0.1512	24.259	ppb	0.1512	0.62%
Na 589.592 Radial†	7646.5	2317.3	ug/L	26.67	2317.3	ppb	26.67	1.15%
Ni 231.604†	1619.5	37.200	ug/L	0.5905	37.200	ppb	0.5905	1.59%
P 214.914†	1452.0	747.90	ug/L	5.906	747.90	ppb	5.906	0.79%
Pb 220.353†	518.7	62.533	ug/L	1.6062	62.533	ppb	1.6062	2.57%
S 181.975 Axial†	1026.0	1344.9	ug/L	4.34	1344.9	ppb	4.34	0.32%
Sb 206.836†	17.2	-2.9766	ug/L	3.18340	-2.9766	ppb	3.18340	106.95%
Se 196.026†	-486.1	24.025	ug/L	2.2925	24.025	ppb	2.2925	9.54%
Si 251.611†	746778.6	22240	ug/L	48.1	22240	ppb	48.1	0.22%
Sn 189.927†	-128.0	-15.848	ug/L	1.2197	-15.848	ppb	1.2197	7.70%
Sr 421.552†	32895.4	198.09	ug/L	2.231	198.09	ppb	2.231	1.13%
Ti 334.940†	1820096.5	2874.7	ug/L	4.06	2874.7	ppb	4.06	0.14%
Tl 190.801†	-136.5	-4.4147	ug/L	1.87669	-4.4147	ppb	1.87669	42.51%
U 409.014†	-10086.0	-301.90	ug/L	2.964	-301.90	ppb	2.964	0.98%
V 292.402†	16345.7	91.202	ug/L	0.6002	91.202	ppb	0.6002	0.66%
Zn 213.857†	35700.5	297.44	ug/L	1.657	297.44	ppb	1.657	0.56%
SiO2†	741715.5	47337	ug/L	495.8	47337	ppb	495.8	1.05%

Sequence No.: 19
Sample ID: 241825009|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 12/11/2009 15:29:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825009|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5652.7	5652.7	101	%			15:31:02
1	Y RADIAL	7993.7	7993.7	132.4	%			15:31:02
1	Al 396.153Radial†	40138.0	39626.7	27290	ug/L	27290	ppb	15:31:02
1	Ca 317.933Radial†	5296.9	5207.9	7600.9	ug/L	7600.9	ppb	15:31:02
1	Fe 238.204 Radial†	10502.9	10350.0	92726	ug/L	92726	ppb	15:31:02
1	K 766.490 Radial†	26723.2	23619.8	3942.7	ug/L	3942.7	ppb	15:31:02
1	Mg 279.077 IEC†	157.6	153.5	5083.2	ug/L	5083.2	ppb	15:31:22
1	Na 589.592 Radial†	5264.2	6746.6	2044.6	ug/L	2044.6	ppb	15:31:02
1	Sr 421.552†	12035.9	11872.2	71.534	ug/L	71.534	ppb	15:31:02
1	Sc 361.383	898954.3	898954.3	103.58	%			15:32:19
1	Y 371.029	975896.7	975896.7	133.78	%			15:32:19
1	Ag 328.068†	-5725.5	-5801.8	3.6861	ug/L	3.6861	ppb	15:32:24
1	As 188.979†	-43.2	-10.5	29.330	ug/L	29.330	ppb	15:32:44
1	B 249.677†	978.8	1438.2	18.320	ug/L	18.320	ppb	15:32:24
1	Ba 233.527†	38196.1	36888.4	279.23	ug/L	279.23	ppb	15:32:24
1	Be 313.107†	-4491.6	326.1	4.5926	ug/L	4.5926	ppb	15:32:24
1	Cd 226.502†	708.6	883.1	-0.0928	ug/L	-0.0928	ppb	15:32:44
1	Co 228.616†	546.2	600.8	5.3617	ug/L	5.3617	ppb	15:32:44
1	Cr 267.716†	1794.9	1646.9	19.118	ug/L	19.118	ppb	15:32:44
1	Cu 324.752†	15093.4	7814.4	27.428	ug/L	27.428	ppb	15:32:24
1	Mn 257.610†	1962306.3	1894033.1	2016.5	ug/L	2016.5	ppb	15:32:19
1	Mo 202.031†	497.0	461.4	35.939	ug/L	35.939	ppb	15:32:44
1	Ni 231.604†	1414.5	1279.8	29.400	ug/L	29.400	ppb	15:32:44
1	P 214.914†	1688.0	1387.7	705.57	ug/L	705.57	ppb	15:32:44
1	Pb 220.353†	358.2	413.8	44.887	ug/L	44.887	ppb	15:32:44
1	S 181.975 Axial†	811.0	733.6	963.89	ug/L	963.89	ppb	15:32:44
1	Sb 206.836†	45.2	6.3	-3.1769	ug/L	-3.1769	ppb	15:32:44
1	Se 196.026†	-513.5	-468.9	25.303	ug/L	25.303	ppb	15:32:44
1	Si 251.611†	569925.9	549766.2	16372	ug/L	16372	ppb	15:32:19
1	Sn 189.927†	-25.0	-33.0	-3.2628	ug/L	-3.2628	ppb	15:32:44
1	Ti 334.940†	1492862.7	1442574.5	2277.5	ug/L	2277.5	ppb	15:32:19
1	Tl 190.801†	-165.9	-125.6	-5.6141	ug/L	-5.6141	ppb	15:32:44
1	U 409.014†	-13502.3	-10452.1	-312.20	ug/L	-312.20	ppb	15:32:19
1	V 292.402†	9554.4	10587.3	53.777	ug/L	53.777	ppb	15:32:24
1	Zn 213.857†	42632.0	40406.2	338.33	ug/L	338.33	ppb	15:32:24
1	SiO2†	562181.9	542246.9	34607	ug/L	34607	ppb	15:33:52
2	Sc Radial	5631.8	5631.8	101	%			15:31:27
2	Y RADIAL	7968.1	7968.1	131.9	%			15:31:27
2	Al 396.153Radial†	39802.9	39442.4	27163	ug/L	27163	ppb	15:31:27
2	Ca 317.933Radial†	5206.9	5138.2	7499.2	ug/L	7499.2	ppb	15:31:27
2	Fe 238.204 Radial†	10416.2	10302.8	92303	ug/L	92303	ppb	15:31:27
2	K 766.490 Radial†	26586.5	23582.6	3936.4	ug/L	3936.4	ppb	15:31:27
2	Mg 279.077 IEC†	155.4	152.0	5031.7	ug/L	5031.7	ppb	15:31:47
2	Na 589.592 Radial†	5255.8	6757.7	2048.0	ug/L	2048.0	ppb	15:31:27
2	Sr 421.552†	11866.3	11748.6	70.789	ug/L	70.789	ppb	15:31:27
2	Sc 361.383	899835.6	899835.6	103.68	%			15:32:50
2	Y 371.029	974868.3	974868.3	133.64	%			15:32:50
2	Ag 328.068†	-5799.0	-5867.3	3.2601	ug/L	3.2601	ppb	15:32:55
2	As 188.979†	-41.8	-9.1	29.832	ug/L	29.832	ppb	15:33:15
2	B 249.677†	974.9	1433.6	18.278	ug/L	18.278	ppb	15:32:55
2	Ba 233.527†	38338.7	36989.9	279.97	ug/L	279.97	ppb	15:32:55
2	Be 313.107†	-4322.8	493.2	4.6581	ug/L	4.6581	ppb	15:32:55
2	Cd 226.502†	698.8	872.9	-0.1562	ug/L	-0.1562	ppb	15:33:15
2	Co 228.616†	528.7	583.4	5.0348	ug/L	5.0348	ppb	15:33:15
2	Cr 267.716†	1747.6	1599.6	18.617	ug/L	18.617	ppb	15:33:15
2	Cu 324.752†	15105.5	7811.8	27.399	ug/L	27.399	ppb	15:32:55
2	Mn 257.610†	1967357.9	1897049.9	2019.7	ug/L	2019.7	ppb	15:32:50
2	Mo 202.031†	500.1	463.9	36.072	ug/L	36.072	ppb	15:33:15
2	Ni 231.604†	1388.5	1253.3	28.791	ug/L	28.791	ppb	15:33:15

2	P 214.914†	1711.2	1408.5	717.52	ug/L	717.52 ppb	15:33:15
2	Pb 220.353†	353.9	409.4	44.398	ug/L	44.398 ppb	15:33:15
2	S 181.975 Axial†	793.3	715.7	940.28	ug/L	940.28 ppb	15:33:15
2	Sb 206.836†	61.7	22.1	1.8638	ug/L	1.8638 ppb	15:33:15
2	Se 196.026†	-523.0	-477.7	19.072	ug/L	19.072 ppb	15:33:15
2	Si 251.611†	572382.9	551597.1	16427	ug/L	16427 ppb	15:32:50
2	Sn 189.927†	-11.4	-19.8	-1.1646	ug/L	-1.1646 ppb	15:33:15
2	Ti 334.940†	1496169.2	1444352.1	2280.3	ug/L	2280.3 ppb	15:32:50
2	Tl 190.801†	-163.4	-123.1	-4.8680	ug/L	-4.8680 ppb	15:33:15
2	U 409.014†	-13557.5	-10492.5	-313.31	ug/L	-313.31 ppb	15:32:50
2	V 292.402†	9661.7	10681.7	54.466	ug/L	54.466 ppb	15:32:55
2	Zn 213.857†	42851.9	40577.9	339.85	ug/L	339.85 ppb	15:32:55
2	SiO2†	559756.3	539375.7	34423	ug/L	34423 ppb	15:33:58
3	Sc Radial	5624.1	5624.1	101	%		15:31:52
3	Y RADIAL	7974.1	7974.1	132.0	%		15:31:52
3	Al 396.153Radial†	39778.1	39471.6	27183	ug/L	27183 ppb	15:31:52
3	Ca 317.933Radial†	5230.0	5168.2	7542.9	ug/L	7542.9 ppb	15:31:52
3	Fe 238.204 Radial†	10372.6	10273.6	92041	ug/L	92041 ppb	15:31:52
3	K 766.490 Radial†	26437.1	23470.4	3917.6	ug/L	3917.6 ppb	15:31:52
3	Mg 279.077 IEC†	156.9	153.7	5089.0	ug/L	5089.0 ppb	15:32:12
3	Na 589.592 Radial†	5236.7	6745.9	2044.4	ug/L	2044.4 ppb	15:31:52
3	Sr 421.552†	11858.3	11756.6	70.837	ug/L	70.837 ppb	15:31:52
3	Sc 361.383	893129.9	893129.9	102.91	%		15:33:21
3	Y 371.029	967108.8	967108.8	132.58	%		15:33:21
3	Ag 328.068†	-5834.9	-5944.2	2.8278	ug/L	2.8278 ppb	15:33:26
3	As 188.979†	-47.8	-15.2	27.404	ug/L	27.404 ppb	15:33:47
3	B 249.677†	927.9	1394.9	17.489	ug/L	17.489 ppb	15:33:26
3	Ba 233.527†	37818.1	36761.5	278.25	ug/L	278.25 ppb	15:33:26
3	Be 313.107†	-4440.4	347.6	4.6015	ug/L	4.6015 ppb	15:33:26
3	Cd 226.502†	697.7	877.0	-0.0874	ug/L	-0.0874 ppb	15:33:47
3	Co 228.616†	537.1	595.4	5.2670	ug/L	5.2670 ppb	15:33:47
3	Cr 267.716†	1794.9	1658.2	19.225	ug/L	19.225 ppb	15:33:47
3	Cu 324.752†	15098.9	7914.8	27.685	ug/L	27.685 ppb	15:33:26
3	Mn 257.610†	1950800.3	1895206.9	2017.7	ug/L	2017.7 ppb	15:33:21
3	Mo 202.031†	486.7	454.5	35.454	ug/L	35.454 ppb	15:33:47
3	Ni 231.604†	1417.8	1291.8	29.676	ug/L	29.676 ppb	15:33:47
3	P 214.914†	1682.4	1392.9	708.99	ug/L	708.99 ppb	15:33:47
3	Pb 220.353†	354.7	412.7	44.794	ug/L	44.794 ppb	15:33:47
3	S 181.975 Axial†	793.7	721.9	948.42	ug/L	948.42 ppb	15:33:47
3	Sb 206.836†	51.2	12.3	-1.2438	ug/L	-1.2438 ppb	15:33:47
3	Se 196.026†	-504.4	-463.4	26.304	ug/L	26.304 ppb	15:33:47
3	Si 251.611†	568003.3	551486.3	16424	ug/L	16424 ppb	15:33:21
3	Sn 189.927†	-11.9	-20.4	-1.2493	ug/L	-1.2493 ppb	15:33:47
3	Ti 334.940†	1483572.6	1442946.0	2278.1	ug/L	2278.1 ppb	15:33:21
3	Tl 190.801†	-148.2	-109.4	-1.0429	ug/L	-1.0429 ppb	15:33:47
3	U 409.014†	-13583.0	-10615.5	-316.82	ug/L	-316.82 ppb	15:33:21
3	V 292.402†	9445.9	10542.0	53.564	ug/L	53.564 ppb	15:33:26
3	Zn 213.857†	42199.2	40254.0	337.09	ug/L	337.09 ppb	15:33:26
3	SiO2†	561278.7	544908.7	34776	ug/L	34776 ppb	15:34:03

Mean Data: 241825009|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	897306.6	103.39	%	0.420				0.41%
Sc Radial	5636.2	101	%	0.3				0.26%
Y 371.029	972624.6	133.34	%	0.659				0.49%
Y RADIAL	7978.6	132.1	%	0.22				0.17%
Ag 328.068†	-5871.1	3.2580	ug/L	0.42918	3.2580	ppb	0.42918	13.17%
Al 396.153Radial†	39513.5	27212	ug/L	68.2	27212	ppb	68.2	0.25%
As 188.979†	-11.6	28.856	ug/L	1.2818	28.856	ppb	1.2818	4.44%
B 249.677†	1422.2	18.029	ug/L	0.4681	18.029	ppb	0.4681	2.60%
Ba 233.527†	36879.9	279.15	ug/L	0.861	279.15	ppb	0.861	0.31%
Be 313.107†	388.9	4.6174	ug/L	0.03554	4.6174	ppb	0.03554	0.77%
Ca 317.933Radial†	5171.4	7547.7	ug/L	50.99	7547.7	ppb	50.99	0.68%
Cd 226.502†	877.7	-0.1121	ug/L	0.03827	-0.1121	ppb	0.03827	34.12%
Co 228.616†	593.2	5.2212	ug/L	0.16821	5.2212	ppb	0.16821	3.22%
Cr 267.716†	1634.9	18.987	ug/L	0.3246	18.987	ppb	0.3246	1.71%
Cu 324.752†	7847.0	27.504	ug/L	0.1573	27.504	ppb	0.1573	0.57%
Fe 238.204 Radial†	10308.8	92356	ug/L	345.6	92356	ppb	345.6	0.37%
K 766.490 Radial†	23557.6	3932.2	ug/L	13.06	3932.2	ppb	13.06	0.33%

Mg 279.077 IEC†	153.0	5068.0	ug/L	31.54	5068.0	ppb	31.54	0.62%
Mn 257.610†	1895430.0	2018.0	ug/L	1.60	2018.0	ppb	1.60	0.08%
Mo 202.031†	460.0	35.822	ug/L	0.3251	35.822	ppb	0.3251	0.91%
Na 589.592 Radial†	6750.0	2045.7	ug/L	2.00	2045.7	ppb	2.00	0.10%
Ni 231.604†	1274.9	29.289	ug/L	0.4529	29.289	ppb	0.4529	1.55%
P 214.914†	1396.4	710.69	ug/L	6.153	710.69	ppb	6.153	0.87%
Pb 220.353†	411.9	44.693	ug/L	0.2597	44.693	ppb	0.2597	0.58%
S 181.975 Axial†	723.8	950.86	ug/L	11.995	950.86	ppb	11.995	1.26%
Sb 206.836†	13.6	-0.8523	ug/L	2.54304	-0.8523	ppb	2.54304	298.38%
Se 196.026†	-470.0	23.560	ug/L	3.9185	23.560	ppb	3.9185	16.63%
Si 251.611†	550949.9	16408	ug/L	30.6	16408	ppb	30.6	0.19%
Sn 189.927†	-24.4	-1.8922	ug/L	1.18773	-1.8922	ppb	1.18773	62.77%
Sr 421.552†	11792.5	71.053	ug/L	0.4169	71.053	ppb	0.4169	0.59%
Ti 334.940†	1443290.9	2278.6	ug/L	1.48	2278.6	ppb	1.48	0.06%
Tl 190.801†	-119.3	-3.8417	ug/L	2.45235	-3.8417	ppb	2.45235	63.84%
U 409.014†	-10520.0	-314.11	ug/L	2.408	-314.11	ppb	2.408	0.77%
V 292.402†	10603.6	53.936	ug/L	0.4713	53.936	ppb	0.4713	0.87%
Zn 213.857†	40412.7	338.42	ug/L	1.387	338.42	ppb	1.387	0.41%
SiO2†	542177.1	34602	ug/L	176.6	34602	ppb	176.6	0.51%

Sequence No.: 20
Sample ID: 241825010|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 12/11/2009 15:36:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825010|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5539.5	5539.5	99.3	%			15:38:07
1	Y RADIAL	7788.2	7788.2	129.0	%			15:38:07
1	Al 396.153Radial†	5385.6	5456.2	3757.0	ug/L	3757.0	ppb	15:38:07
1	Ca 317.933Radial†	1252.9	1244.2	1815.9	ug/L	1815.9	ppb	15:38:27
1	Fe 238.204 Radial†	7011.4	7047.4	63138	ug/L	63138	ppb	15:38:07
1	K 766.490 Radial†	11365.8	8700.7	1435.1	ug/L	1435.1	ppb	15:38:07
1	Mg 279.077 IEC†	35.3	33.7	1078.6	ug/L	1078.6	ppb	15:38:27
1	Na 589.592 Radial†	3106.0	4680.4	1418.5	ug/L	1418.5	ppb	15:38:07
1	Sr 421.552†	2696.8	2714.7	16.356	ug/L	16.356	ppb	15:38:07
1	Sc 361.383	868277.4	868277.4	100.04	%			15:39:25
1	Y 371.029	940635.8	940635.8	128.95	%			15:39:25
1	Ag 328.068†	-3695.7	-3968.2	2.4588	ug/L	2.4588	ppb	15:39:30
1	As 188.979†	-34.2	-2.8	22.018	ug/L	22.018	ppb	15:39:50
1	B 249.677†	146.3	639.4	5.2364	ug/L	5.2364	ppb	15:39:30
1	Ba 233.527†	13494.7	13500.2	103.28	ug/L	103.28	ppb	15:39:30
1	Be 313.107†	-11348.9	-6681.5	0.7395	ug/L	0.7395	ppb	15:39:30
1	Cd 226.502†	369.8	568.6	-0.4066	ug/L	-0.4066	ppb	15:39:50
1	Co 228.616†	242.9	316.2	1.7541	ug/L	1.7541	ppb	15:39:50
1	Cr 267.716†	505.4	419.2	5.6537	ug/L	5.6537	ppb	15:39:30
1	Cu 324.752†	8276.1	1514.8	7.6207	ug/L	7.6207	ppb	15:39:30
1	Mn 257.610†	2000160.3	1998807.3	2124.7	ug/L	2124.7	ppb	15:39:25
1	Mo 202.031†	271.3	252.8	20.564	ug/L	20.564	ppb	15:39:50
1	Ni 231.604†	658.6	572.4	13.149	ug/L	13.149	ppb	15:39:50
1	P 214.914†	1120.2	877.7	439.91	ug/L	439.91	ppb	15:39:50
1	Pb 220.353†	317.3	385.2	38.814	ug/L	38.814	ppb	15:39:50
1	S 181.975 Axial†	104.5	55.0	71.934	ug/L	71.934	ppb	15:39:50
1	Sb 206.836†	43.7	6.3	-0.8984	ug/L	-0.8984	ppb	15:39:50
1	Se 196.026†	-349.9	-323.0	12.949	ug/L	12.949	ppb	15:39:50
1	Si 251.611†	280316.5	279718.1	8330.3	ug/L	8330.3	ppb	15:39:25
1	Sn 189.927†	94.8	85.9	14.850	ug/L	14.850	ppb	15:39:50
1	Ti 334.940†	1010855.8	1011691.2	1597.1	ug/L	1597.1	ppb	15:39:25
1	Tl 190.801†	-140.4	-105.7	-5.1081	ug/L	-5.1081	ppb	15:39:50
1	U 409.014†	-12185.6	-9596.5	-283.86	ug/L	-283.86	ppb	15:39:25
1	V 292.402†	2736.0	4097.6	15.619	ug/L	15.619	ppb	15:39:30
1	Zn 213.857†	34417.8	33649.6	283.30	ug/L	283.30	ppb	15:39:30
1	SiO2†	286896.8	286252.9	18269	ug/L	18269	ppb	15:40:57
2	Sc Radial	5639.8	5639.8	101	%			15:38:32
2	Y RADIAL	7865.5	7865.5	130.2	%			15:38:32
2	Al 396.153Radial†	5379.4	5353.6	3686.4	ug/L	3686.4	ppb	15:38:32
2	Ca 317.933Radial†	1266.6	1235.3	1802.9	ug/L	1802.9	ppb	15:38:52
2	Fe 238.204 Radial†	7017.2	6927.7	62065	ug/L	62065	ppb	15:38:32
2	K 766.490 Radial†	11363.6	8495.0	1400.9	ug/L	1400.9	ppb	15:38:32
2	Mg 279.077 IEC†	35.8	33.5	1073.8	ug/L	1073.8	ppb	15:38:52
2	Na 589.592 Radial†	3080.9	4600.0	1394.1	ug/L	1394.1	ppb	15:38:32
2	Sr 421.552†	2665.7	2635.7	15.880	ug/L	15.880	ppb	15:38:32
2	Sc 361.383	885285.0	885285.0	102.00	%			15:39:56
2	Y 371.029	953883.7	953883.7	130.77	%			15:39:56
2	Ag 328.068†	-3643.9	-3846.5	2.6546	ug/L	2.6546	ppb	15:40:01
2	As 188.979†	-38.7	-6.6	20.214	ug/L	20.214	ppb	15:40:21
2	B 249.677†	64.7	556.6	3.6126	ug/L	3.6126	ppb	15:40:01
2	Ba 233.527†	13358.0	13107.0	100.30	ug/L	100.30	ppb	15:40:01
2	Be 313.107†	-11208.9	-6326.4	0.8234	ug/L	0.8234	ppb	15:40:01
2	Cd 226.502†	392.7	584.0	-0.1404	ug/L	-0.1404	ppb	15:40:21
2	Co 228.616†	267.3	335.5	2.1769	ug/L	2.1769	ppb	15:40:21
2	Cr 267.716†	554.0	457.1	6.0256	ug/L	6.0256	ppb	15:40:01
2	Cu 324.752†	8360.5	1438.6	7.3445	ug/L	7.3445	ppb	15:40:01
2	Mn 257.610†	2011323.6	1971341.6	2095.5	ug/L	2095.5	ppb	15:39:56
2	Mo 202.031†	263.8	240.2	19.690	ug/L	19.690	ppb	15:40:21
2	Ni 231.604†	646.6	547.9	12.587	ug/L	12.587	ppb	15:40:21

2	P 214.914†	1125.9	861.8	431.87 ug/L	431.87 ppb	15:40:21
2	Pb 220.353†	313.8	375.6	37.812 ug/L	37.812 ppb	15:40:21
2	S 181.975 Axial†	101.3	49.9	65.159 ug/L	65.159 ppb	15:40:21
2	Sb 206.836†	53.4	15.0	1.8487 ug/L	1.8487 ppb	15:40:21
2	Se 196.026†	-342.7	-309.2	17.391 ug/L	17.391 ppb	15:40:21
2	Si 251.611†	282912.9	276880.5	8245.8 ug/L	8245.8 ppb	15:39:56
2	Sn 189.927†	87.0	76.5	13.317 ug/L	13.317 ppb	15:40:21
2	Ti 334.940†	1016287.0	997603.9	1574.8 ug/L	1574.8 ppb	15:39:56
2	Tl 190.801†	-127.1	-90.0	-1.0258 ug/L	-1.0258 ppb	15:40:21
2	U 409.014†	-12037.3	-9217.1	-272.81 ug/L	-272.81 ppb	15:39:56
2	V 292.402†	2621.9	3933.2	14.722 ug/L	14.722 ppb	15:40:01
2	Zn 213.857†	34145.9	32722.2	275.43 ug/L	275.43 ppb	15:40:01
2	SiO2†	281839.2	275785.1	17601 ug/L	17601 ppb	15:41:03
3	Sc Radial	5089.7	5089.7	91.3 %		15:38:57
3	Y RADIAL	7386.8	7386.8	122.3 %		15:38:57
3	Al 396.153Radial†	5661.9	6237.9	4295.4 ug/L	4295.4 ppb	15:38:57
3	Ca 317.933Radial†	1231.8	1332.6	1944.9 ug/L	1944.9 ppb	15:39:17
3	Fe 238.204 Radial†	7352.0	8044.2	72068 ug/L	72068 ppb	15:38:57
3	K 766.490 Radial†	11655.0	10028.5	1658.6 ug/L	1658.6 ppb	15:38:57
3	Mg 279.077 IEC†	34.5	35.8	1144.1 ug/L	1144.1 ppb	15:39:17
3	Na 589.592 Radial†	3316.7	5187.5	1572.1 ug/L	1572.1 ppb	15:38:57
3	Sr 421.552†	2884.4	3160.0	19.041 ug/L	19.041 ppb	15:38:57
3	Sc 361.383	890392.6	890392.6	102.59 %		15:40:27
3	Y 371.029	959185.7	959185.7	131.49 %		15:40:27
3	Ag 328.068†	-3721.1	-3901.2	5.5920 ug/L	5.5920 ppb	15:40:32
3	As 188.979†	-44.9	-12.5	19.486 ug/L	19.486 ppb	15:40:52
3	B 249.677†	149.2	638.6	4.0339 ug/L	4.0339 ppb	15:40:32
3	Ba 233.527†	13363.7	13037.4	100.15 ug/L	100.15 ppb	15:40:32
3	Be 313.107†	-11180.4	-6235.6	0.8543 ug/L	0.8543 ppb	15:40:32
3	Cd 226.502†	390.4	579.5	-1.1877 ug/L	-1.1877 ppb	15:40:52
3	Co 228.616†	242.8	310.1	1.5582 ug/L	1.5582 ppb	15:40:52
3	Cr 267.716†	521.1	422.0	5.8383 ug/L	5.8383 ppb	15:40:32
3	Cu 324.752†	8319.4	1351.6	7.6020 ug/L	7.6020 ppb	15:40:32
3	Mn 257.610†	2019599.2	1968097.0	2093.0 ug/L	2093.0 ppb	15:40:27
3	Mo 202.031†	275.2	249.8	21.011 ug/L	21.011 ppb	15:40:52
3	Ni 231.604†	622.8	521.2	11.972 ug/L	11.972 ppb	15:40:52
3	P 214.914†	1121.3	850.9	418.00 ug/L	418.00 ppb	15:40:52
3	Pb 220.353†	308.2	368.4	36.319 ug/L	36.319 ppb	15:40:52
3	S 181.975 Axial†	90.5	38.8	50.395 ug/L	50.395 ppb	15:40:52
3	Sb 206.836†	31.7	-6.5	-4.7660 ug/L	-4.7660 ppb	15:40:52
3	Se 196.026†	-353.8	-318.1	43.215 ug/L	43.215 ppb	15:40:52
3	Si 251.611†	283887.9	276239.8	8226.7 ug/L	8226.7 ppb	15:40:27
3	Sn 189.927†	84.5	73.6	13.002 ug/L	13.002 ppb	15:40:52
3	Ti 334.940†	1021592.0	997059.6	1574.0 ug/L	1574.0 ppb	15:40:27
3	Tl 190.801†	-129.6	-91.7	-1.5113 ug/L	-1.5113 ppb	15:40:52
3	U 409.014†	-12262.1	-9368.5	-278.43 ug/L	-278.43 ppb	15:40:27
3	V 292.402†	2621.0	3917.6	13.100 ug/L	13.100 ppb	15:40:32
3	Zn 213.857†	34110.0	32495.1	272.52 ug/L	272.52 ppb	15:40:32
3	SiO2†	283607.0	275923.3	17610 ug/L	17610 ppb	15:41:08

Mean Data: 241825010|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881318.3	101.54	%	1.334				1.31%
Sc Radial	5423.0	97.3	%	5.25				5.40%
Y 371.029	951235.1	130.40	%	1.310				1.00%
Y RADIAL	7680.1	127.2	%	4.26				3.35%
Ag 328.068†	-3905.3	3.5684	ug/L	1.75515	3.5684	ppb	1.75515	49.19%
Al 396.153Radial†	5682.6	3913.0	ug/L	333.09	3913.0	ppb	333.09	8.51%
As 188.979†	-7.3	20.573	ug/L	1.3031	20.573	ppb	1.3031	6.33%
B 249.677†	611.6	4.2943	ug/L	0.84263	4.2943	ppb	0.84263	19.62%
Ba 233.527†	13214.9	101.24	ug/L	1.765	101.24	ppb	1.765	1.74%
Be 313.107†	-6414.5	0.8057	ug/L	0.05937	0.8057	ppb	0.05937	7.37%
Ca 317.933Radial†	1270.7	1854.6	ug/L	78.48	1854.6	ppb	78.48	4.23%
Cd 226.502†	577.3	-0.5782	ug/L	0.54432	-0.5782	ppb	0.54432	94.13%
Co 228.616†	320.6	1.8297	ug/L	0.31621	1.8297	ppb	0.31621	17.28%
Cr 267.716†	432.7	5.8392	ug/L	0.18596	5.8392	ppb	0.18596	3.18%
Cu 324.752†	1435.0	7.5224	ug/L	0.15432	7.5224	ppb	0.15432	2.05%
Fe 238.204 Radial†	7339.8	65757	ug/L	5492.0	65757	ppb	5492.0	8.35%
K 766.490 Radial†	9074.7	1498.2	ug/L	139.92	1498.2	ppb	139.92	9.34%

Mg 279.077 IEC†	34.3	1098.8	ug/L	39.27	1098.8	ppb	39.27	3.57%
Mn 257.610†	1979415.3	2104.4	ug/L	17.62	2104.4	ppb	17.62	0.84%
Mo 202.031†	247.6	20.422	ug/L	0.6719	20.422	ppb	0.6719	3.29%
Na 589.592 Radial†	4822.7	1461.6	ug/L	96.53	1461.6	ppb	96.53	6.60%
Ni 231.604†	547.2	12.569	ug/L	0.5886	12.569	ppb	0.5886	4.68%
P 214.914†	863.5	429.93	ug/L	11.085	429.93	ppb	11.085	2.58%
Pb 220.353†	376.4	37.648	ug/L	1.2553	37.648	ppb	1.2553	3.33%
S 181.975 Axial†	47.9	62.496	ug/L	11.0139	62.496	ppb	11.0139	17.62%
Sb 206.836†	4.9	-1.2719	ug/L	3.32313	-1.2719	ppb	3.32313	261.28%
Se 196.026†	-316.7	24.518	ug/L	16.3433	24.518	ppb	16.3433	66.66%
Si 251.611†	277612.8	8267.6	ug/L	55.15	8267.6	ppb	55.15	0.67%
Sn 189.927†	78.6	13.723	ug/L	0.9885	13.723	ppb	0.9885	7.20%
Sr 421.552†	2836.8	17.092	ug/L	1.7044	17.092	ppb	1.7044	9.97%
Ti 334.940†	1002118.2	1582.0	ug/L	13.09	1582.0	ppb	13.09	0.83%
Tl 190.801†	-95.8	-2.5484	ug/L	2.23001	-2.5484	ppb	2.23001	87.51%
U 409.014†	-9394.0	-278.37	ug/L	5.521	-278.37	ppb	5.521	1.98%
V 292.402†	3982.8	14.481	ug/L	1.2769	14.481	ppb	1.2769	8.82%
Zn 213.857†	32955.6	277.08	ug/L	5.576	277.08	ppb	5.576	2.01%
SiO2†	279320.4	17827	ug/L	383.2	17827	ppb	383.2	2.15%

Sequence No.: 21
Sample ID: 241825011|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 12/11/2009 15:43:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825011|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5557.8	5557.8	99.7	%			15:45:31
1	Y RADIAL	6520.9	6520.9	108.0	%			15:45:31
1	Al 396.153Radial†	70908.8	71173.5	49018	ug/L	49018	ppb	15:45:11
1	Ca 317.933Radial†	21176.6	21228.2	30982	ug/L	30982	ppb	15:45:11
1	Fe 238.204 Radial†	12970.6	13002.7	116490	ug/L	116490	ppb	15:45:11
1	K 766.490 Radial†	52272.5	49702.0	8318.2	ug/L	8318.2	ppb	15:45:11
1	Mg 279.077 IEC†	579.4	579.4	19383	ug/L	19383	ppb	15:45:31
1	Na 589.592 Radial†	3057.4	4621.4	1400.6	ug/L	1400.6	ppb	15:45:11
1	Sr 421.552†	50391.3	50554.5	304.62	ug/L	304.62	ppb	15:45:11
1	Sc 361.383	876737.6	876737.6	101.02	%			15:46:30
1	Y 371.029	795582.2	795582.2	109.07	%			15:46:30
1	Ag 328.068†	-7208.5	-7410.0	4.3013	ug/L	4.3013	ppb	15:46:30
1	As 188.979†	-116.8	-84.3	21.018	ug/L	21.018	ppb	15:46:50
1	B 249.677†	1052.4	1535.0	17.139	ug/L	17.139	ppb	15:46:30
1	Ba 233.527†	571815.9	566073.4	4234.6	ug/L	4234.6	ppb	15:46:30
1	Be 313.107†	-19516.4	-14657.4	3.0680	ug/L	3.0680	ppb	15:46:30
1	Cd 226.502†	980.2	1169.3	0.5255	ug/L	0.5255	ppb	15:46:50
1	Co 228.616†	2448.9	2497.7	38.287	ug/L	38.287	ppb	15:46:50
1	Cr 267.716†	8365.1	8194.9	88.395	ug/L	88.395	ppb	15:46:50
1	Cu 324.752†	34907.8	27798.7	86.686	ug/L	86.686	ppb	15:46:30
1	Mn 257.610†	2022575.5	2001704.2	2132.7	ug/L	2132.7	ppb	15:46:30
1	Mo 202.031†	-37.5	-55.5	4.7316	ug/L	4.7316	ppb	15:46:50
1	Ni 231.604†	3167.7	3049.9	70.053	ug/L	70.053	ppb	15:46:50
1	P 214.914†	7802.2	7481.7	4086.7	ug/L	4086.7	ppb	15:46:50
1	Pb 220.353†	1170.8	1227.0	138.73	ug/L	138.73	ppb	15:46:50
1	S 181.975 Axial†	759.4	702.3	918.24	ug/L	918.24	ppb	15:46:50
1	Sb 206.836†	92.7	54.3	4.0710	ug/L	4.0710	ppb	15:46:50
1	Se 196.026†	-608.0	-575.1	41.752	ug/L	41.752	ppb	15:46:50
1	Si 251.611†	842621.7	833661.5	24827	ug/L	24827	ppb	15:46:30
1	Sn 189.927†	-179.4	-186.5	-25.196	ug/L	-25.196	ppb	15:46:50
1	Ti 334.940†	2711366.2	2685340.7	4240.2	ug/L	4240.2	ppb	15:46:30
1	Tl 190.801†	-207.4	-170.7	-2.6527	ug/L	-2.6527	ppb	15:46:50
1	U 409.014†	-7634.5	-4973.7	-157.82	ug/L	-157.82	ppb	15:46:30
1	V 292.402†	40373.9	41330.4	252.69	ug/L	252.69	ppb	15:46:30
1	Zn 213.857†	32408.9	31329.0	257.16	ug/L	257.16	ppb	15:46:30
1	SiO2†	840861.8	831876.5	53091	ug/L	53091	ppb	15:47:50
2	Sc Radial	5606.9	5606.9	101	%			15:45:56
2	Y RADIAL	6613.5	6613.5	109.5	%			15:45:56
2	Al 396.153Radial†	69664.6	69313.3	47737	ug/L	47737	ppb	15:45:36
2	Ca 317.933Radial†	20744.2	20612.2	30083	ug/L	30083	ppb	15:45:36
2	Fe 238.204 Radial†	12653.6	12573.5	112650	ug/L	112650	ppb	15:45:36
2	K 766.490 Radial†	51271.3	48247.2	8074.0	ug/L	8074.0	ppb	15:45:36
2	Mg 279.077 IEC†	588.5	583.3	19518	ug/L	19518	ppb	15:45:56
2	Na 589.592 Radial†	2893.0	4431.0	1342.9	ug/L	1342.9	ppb	15:45:36
2	Sr 421.552†	49284.0	49010.7	295.32	ug/L	295.32	ppb	15:45:36
2	Sc 361.383	876164.3	876164.3	100.95	%			15:46:57
2	Y 371.029	794908.5	794908.5	108.97	%			15:46:57
2	Ag 328.068†	-7175.7	-7382.2	3.2101	ug/L	3.2101	ppb	15:46:57
2	As 188.979†	-113.5	-81.2	21.580	ug/L	21.580	ppb	15:47:17
2	B 249.677†	932.0	1416.4	15.121	ug/L	15.121	ppb	15:46:57
2	Ba 233.527†	569910.3	564556.1	4223.2	ug/L	4223.2	ppb	15:46:57
2	Be 313.107†	-19335.6	-14491.0	3.1134	ug/L	3.1134	ppb	15:46:57
2	Cd 226.502†	989.1	1178.7	1.0073	ug/L	1.0073	ppb	15:47:17
2	Co 228.616†	2450.2	2500.6	38.407	ug/L	38.407	ppb	15:47:17
2	Cr 267.716†	8337.5	8173.0	88.095	ug/L	88.095	ppb	15:47:17
2	Cu 324.752†	34749.1	27664.1	86.099	ug/L	86.099	ppb	15:46:57
2	Mn 257.610†	2015146.0	1995654.6	2125.9	ug/L	2125.9	ppb	15:46:57
2	Mo 202.031†	-37.9	-55.9	4.4308	ug/L	4.4308	ppb	15:47:17
2	Ni 231.604†	3125.2	3009.9	69.133	ug/L	69.133	ppb	15:47:17

2	P 214.914†	7765.9	7450.7	4072.1 ug/L	4072.1 ppb	15:47:17
2	Pb 220.353†	1173.1	1230.0	139.09 ug/L	139.09 ppb	15:47:17
2	S 181.975 Axial†	745.7	689.3	901.31 ug/L	901.31 ppb	15:47:17
2	Sb 206.836†	82.3	44.2	0.8383 ug/L	0.8383 ppb	15:47:17
2	Se 196.026†	-613.7	-581.2	26.333 ug/L	26.333 ppb	15:47:17
2	Si 251.611†	840553.2	832158.3	24783 ug/L	24783 ppb	15:46:57
2	Sn 189.927†	-184.7	-191.8	-26.205 ug/L	-26.205 ppb	15:47:17
2	Ti 334.940†	2704926.7	2680718.0	4232.9 ug/L	4232.9 ppb	15:46:57
2	Tl 190.801†	-213.7	-177.1	-4.5782 ug/L	-4.5782 ppb	15:47:17
2	U 409.014†	-7491.8	-4837.3	-153.41 ug/L	-153.41 ppb	15:46:57
2	V 292.402†	40225.1	41209.1	252.48 ug/L	252.48 ppb	15:46:57
2	Zn 213.857†	32388.7	31329.9	257.54 ug/L	257.54 ppb	15:46:57
2	SiO2†	845582.2	837097.2	53425 ug/L	53425 ppb	15:47:56
3	Sc Radial	5546.8	5546.8	99.5 %		15:46:21
3	Y RADIAL	6540.8	6540.8	108.3 %		15:46:21
3	Al 396.153Radial†	71578.0	71986.7	49578 ug/L	49578 ppb	15:46:01
3	Ca 317.933Radial†	21268.3	21362.3	31178 ug/L	31178 ppb	15:46:01
3	Fe 238.204 Radial†	13003.1	13061.0	117010 ug/L	117010 ppb	15:46:01
3	K 766.490 Radial†	52340.8	49874.4	8347.3 ug/L	8347.3 ppb	15:46:01
3	Mg 279.077 IEC†	586.3	587.4	19654 ug/L	19654 ppb	15:46:21
3	Na 589.592 Radial†	3036.6	4606.6	1396.1 ug/L	1396.1 ppb	15:46:01
3	Sr 421.552†	50789.6	51054.8	307.64 ug/L	307.64 ppb	15:46:01
3	Sc 361.383	876343.4	876343.4	100.97 %		15:47:24
3	Y 371.029	796515.3	796515.3	109.19 %		15:47:24
3	Ag 328.068†	-7278.7	-7482.8	4.1266 ug/L	4.1266 ppb	15:47:24
3	As 188.979†	-122.2	-89.7	18.907 ug/L	18.907 ppb	15:47:44
3	B 249.677†	1073.0	1555.9	17.516 ug/L	17.516 ppb	15:47:24
3	Ba 233.527†	569166.0	563703.5	4217.0 ug/L	4217.0 ppb	15:47:24
3	Be 313.107†	-19563.4	-14712.6	3.0234 ug/L	3.0234 ppb	15:47:24
3	Cd 226.502†	1004.8	1194.1	0.7306 ug/L	0.7306 ppb	15:47:44
3	Co 228.616†	2432.4	2482.5	38.013 ug/L	38.013 ppb	15:47:44
3	Cr 267.716†	8295.8	8130.0	87.722 ug/L	87.722 ppb	15:47:44
3	Cu 324.752†	34823.7	27730.9	86.516 ug/L	86.516 ppb	15:47:24
3	Mn 257.610†	2012610.5	1992735.6	2123.3 ug/L	2123.3 ppb	15:47:24
3	Mo 202.031†	-30.4	-48.5	5.2145 ug/L	5.2145 ppb	15:47:44
3	Ni 231.604†	3146.7	3030.5	69.606 ug/L	69.606 ppb	15:47:44
3	P 214.914†	7769.8	7453.0	4070.4 ug/L	4070.4 ppb	15:47:44
3	Pb 220.353†	1148.8	1205.7	136.42 ug/L	136.42 ppb	15:47:44
3	S 181.975 Axial†	761.3	704.6	921.09 ug/L	921.09 ppb	15:47:44
3	Sb 206.836†	85.6	47.4	1.9012 ug/L	1.9012 ppb	15:47:44
3	Se 196.026†	-617.6	-584.9	37.960 ug/L	37.960 ppb	15:47:44
3	Si 251.611†	838374.2	829830.0	24713 ug/L	24713 ppb	15:47:24
3	Sn 189.927†	-187.3	-194.3	-26.433 ug/L	-26.433 ppb	15:47:44
3	Ti 334.940†	2702087.6	2677358.6	4227.6 ug/L	4227.6 ppb	15:47:24
3	Tl 190.801†	-210.7	-174.1	-3.7223 ug/L	-3.7223 ppb	15:47:44
3	U 409.014†	-7409.7	-4754.4	-151.58 ug/L	-151.58 ppb	15:47:24
3	V 292.402†	40221.0	41196.9	251.76 ug/L	251.76 ppb	15:47:24
3	Zn 213.857†	32345.0	31280.0	256.68 ug/L	256.68 ppb	15:47:24
3	SiO2†	846768.3	838100.7	53488 ug/L	53488 ppb	15:48:02

Mean Data: 241825011|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	876415.1	100.98	%	0.034				0.03%
Sc Radial	5570.5	99.9	%	0.57				0.57%
Y 371.029	795668.6	109.08	%	0.111				0.10%
Y RADIAL	6558.4	108.6	%	0.81				0.74%
Ag 328.068†	-7425.0	3.8793	ug/L	0.58608	3.8793	ppb	0.58608	15.11%
Al 396.153Radial†	70824.5	48778	ug/L	943.8	48778	ppb	943.8	1.93%
As 188.979†	-85.1	20.502	ug/L	1.4095	20.502	ppb	1.4095	6.88%
B 249.677†	1502.4	16.592	ug/L	1.2874	16.592	ppb	1.2874	7.76%
Ba 233.527†	564777.7	4224.9	ug/L	8.98	4224.9	ppb	8.98	0.21%
Be 313.107†	-14620.3	3.0683	ug/L	0.04500	3.0683	ppb	0.04500	1.47%
Ca 317.933Radial†	21067.6	30748	ug/L	583.8	30748	ppb	583.8	1.90%
Cd 226.502†	1180.7	0.7545	ug/L	0.24178	0.7545	ppb	0.24178	32.05%
Co 228.616†	2493.6	38.236	ug/L	0.2018	38.236	ppb	0.2018	0.53%
Cr 267.716†	8166.0	88.070	ug/L	0.3373	88.070	ppb	0.3373	0.38%
Cu 324.752†	27731.2	86.434	ug/L	0.3020	86.434	ppb	0.3020	0.35%
Fe 238.204 Radial†	12879.1	115380	ug/L	2384.9	115380	ppb	2384.9	2.07%
K 766.490 Radial†	49274.5	8246.5	ug/L	150.08	8246.5	ppb	150.08	1.82%

Mg 279.077 IEC†	583.4	19518	ug/L	135.8	19518	ppb	135.8	0.70%
Mn 257.610†	1996698.1	2127.3	ug/L	4.88	2127.3	ppb	4.88	0.23%
Mo 202.031†	-53.3	4.7923	ug/L	0.39539	4.7923	ppb	0.39539	8.25%
Na 589.592 Radial†	4553.0	1379.8	ug/L	32.09	1379.8	ppb	32.09	2.33%
Ni 231.604†	3030.1	69.597	ug/L	0.4600	69.597	ppb	0.4600	0.66%
P 214.914†	7461.8	4076.4	ug/L	8.92	4076.4	ppb	8.92	0.22%
Pb 220.353†	1220.9	138.08	ug/L	1.447	138.08	ppb	1.447	1.05%
S 181.975 Axial†	698.7	913.55	ug/L	10.696	913.55	ppb	10.696	1.17%
Sb 206.836†	48.6	2.2702	ug/L	1.64764	2.2702	ppb	1.64764	72.58%
Se 196.026†	-580.4	35.348	ug/L	8.0341	35.348	ppb	8.0341	22.73%
Si 251.611†	831883.3	24774	ug/L	57.5	24774	ppb	57.5	0.23%
Sn 189.927†	-190.9	-25.945	ug/L	0.6586	-25.945	ppb	0.6586	2.54%
Sr 421.552†	50206.7	302.52	ug/L	6.421	302.52	ppb	6.421	2.12%
Ti 334.940†	2681139.1	4233.6	ug/L	6.32	4233.6	ppb	6.32	0.15%
Tl 190.801†	-174.0	-3.6511	ug/L	0.96475	-3.6511	ppb	0.96475	26.42%
U 409.014†	-4855.1	-154.27	ug/L	3.207	-154.27	ppb	3.207	2.08%
V 292.402†	41245.5	252.31	ug/L	0.488	252.31	ppb	0.488	0.19%
Zn 213.857†	31313.0	257.13	ug/L	0.428	257.13	ppb	0.428	0.17%
SiO2†	835691.5	53335	ug/L	213.3	53335	ppb	213.3	0.40%

Sequence No.: 22
Sample ID: 241825012|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 12/11/2009 15:50:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825012|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5419.3	5419.3	97.2	%			15:52:25
1	Y RADIAL	6837.1	6837.1	113.2	%			15:52:25
1	Al 396.153Radial†	191180.5	196736.0	135490	ug/L	135490	ppb	15:52:05
1	Ca 317.933Radial†	15804.3	16243.8	23708	ug/L	23708	ppb	15:52:05
1	Fe 238.204 Radial†	16322.3	16783.7	150370	ug/L	150370	ppb	15:52:05
1	K 766.490 Radial†	93975.6	93949.5	15731	ug/L	15731	ppb	15:52:05
1	Mg 279.077 IEC†	742.4	761.9	25494	ug/L	25494	ppb	15:52:25
1	Na 589.592 Radial†	1487.5	3084.6	934.81	ug/L	934.81	ppb	15:52:05
1	Sr 421.552†	49231.7	50653.5	305.28	ug/L	305.28	ppb	15:52:05
1	Sc 361.383	860145.2	860145.2	99.105	%			15:53:28
1	Y 371.029	864952.6	864952.6	118.57	%			15:53:23
1	Ag 328.068†	-9533.7	-9893.9	4.0923	ug/L	4.0923	ppb	15:53:28
1	As 188.979†	-78.8	-48.2	49.819	ug/L	49.819	ppb	15:53:48
1	B 249.677†	1830.0	2339.7	29.738	ug/L	29.738	ppb	15:53:28
1	Ba 233.527†	220338.5	222340.1	1667.6	ug/L	1667.6	ppb	15:53:28
1	Be 313.107†	-7269.7	-2672.7	9.6234	ug/L	9.6234	ppb	15:53:28
1	Cd 226.502†	1263.1	1473.4	0.3054	ug/L	0.3054	ppb	15:53:48
1	Co 228.616†	3583.7	3689.5	56.682	ug/L	56.682	ppb	15:53:48
1	Cr 267.716†	9940.5	9944.3	107.37	ug/L	107.37	ppb	15:53:48
1	Cu 324.752†	30885.3	24406.5	78.561	ug/L	78.561	ppb	15:53:28
1	Mn 257.610†	3810454.8	3844358.6	4088.9	ug/L	4088.9	ppb	15:53:23
1	Mo 202.031†	-34.2	-53.0	7.2958	ug/L	7.2958	ppb	15:53:48
1	Ni 231.604†	3921.5	3871.0	88.906	ug/L	88.906	ppb	15:53:48
1	P 214.914†	2271.1	2049.6	1057.4	ug/L	1057.4	ppb	15:53:48
1	Pb 220.353†	954.2	1030.8	133.40	ug/L	133.40	ppb	15:53:48
1	S 181.975 Axial†	454.0	408.7	513.35	ug/L	513.35	ppb	15:53:48
1	Sb 206.836†	84.8	48.2	-3.0530	ug/L	-3.0530	ppb	15:53:48
1	Se 196.026†	-813.5	-794.1	35.579	ug/L	35.579	ppb	15:53:48
1	Si 251.611†	911720.5	919475.3	27381	ug/L	27381	ppb	15:53:23
1	Sn 189.927†	-117.7	-127.6	-15.984	ug/L	-15.984	ppb	15:53:48
1	Ti 334.940†	3379427.3	3411213.6	5385.6	ug/L	5385.6	ppb	15:53:23
1	Tl 190.801†	-268.8	-236.7	1.2112	ug/L	1.2112	ppb	15:53:48
1	U 409.014†	-10105.9	-7613.2	-238.00	ug/L	-238.00	ppb	15:53:28
1	V 292.402†	42463.8	44210.2	265.42	ug/L	265.42	ppb	15:53:28
1	Zn 213.857†	38293.2	37885.3	310.00	ug/L	310.00	ppb	15:53:28
1	SiO2†	894030.8	901583.1	57535	ug/L	57535	ppb	15:54:58
2	Sc Radial	5543.3	5543.3	99.4	%			15:52:50
2	Y RADIAL	6978.7	6978.7	115.6	%			15:52:50
2	Al 396.153Radial†	192802.3	193968.4	133590	ug/L	133590	ppb	15:52:30
2	Ca 317.933Radial†	15867.9	15944.1	23270	ug/L	23270	ppb	15:52:30
2	Fe 238.204 Radial†	16427.4	16513.9	147950	ug/L	147950	ppb	15:52:30
2	K 766.490 Radial†	94775.5	92591.8	15504	ug/L	15504	ppb	15:52:30
2	Mg 279.077 IEC†	732.7	735.1	24592	ug/L	24592	ppb	15:52:50
2	Na 589.592 Radial†	1419.6	2982.1	903.74	ug/L	903.74	ppb	15:52:30
2	Sr 421.552†	49598.9	49890.0	300.68	ug/L	300.68	ppb	15:52:30
2	Sc 361.383	870733.4	870733.4	100.32	%			15:54:00
2	Y 371.029	855613.2	855613.2	117.29	%			15:53:55
2	Ag 328.068†	-9511.6	-9754.8	3.9505	ug/L	3.9505	ppb	15:54:00
2	As 188.979†	-82.9	-51.3	47.115	ug/L	47.115	ppb	15:54:20
2	B 249.677†	1892.9	2379.9	30.916	ug/L	30.916	ppb	15:54:00
2	Ba 233.527†	222475.7	221766.9	1663.2	ug/L	1663.2	ppb	15:54:00
2	Be 313.107†	-7269.2	-2583.1	9.3933	ug/L	9.3933	ppb	15:54:00
2	Cd 226.502†	1285.7	1480.5	0.6203	ug/L	0.6203	ppb	15:54:20
2	Co 228.616†	3615.0	3676.7	56.758	ug/L	56.758	ppb	15:54:20
2	Cr 267.716†	10013.5	9895.0	106.81	ug/L	106.81	ppb	15:54:20
2	Cu 324.752†	31290.4	24431.3	78.510	ug/L	78.510	ppb	15:54:00
2	Mn 257.610†	3757080.5	3744403.0	3982.7	ug/L	3982.7	ppb	15:53:55
2	Mo 202.031†	-38.9	-57.1	6.8582	ug/L	6.8582	ppb	15:54:20
2	Ni 231.604†	3958.8	3860.0	88.654	ug/L	88.654	ppb	15:54:20

2	P 214.914†	2260.2	2010.9	1037.0 ug/L	1037.0 ppb	15:54:20
2	Pb 220.353†	929.6	994.6	129.11 ug/L	129.11 ppb	15:54:20
2	S 181.975 Axial†	465.9	415.0	521.98 ug/L	521.98 ppb	15:54:20
2	Sb 206.836†	88.9	51.2	-1.7551 ug/L	-1.7551 ppb	15:54:20
2	Se 196.026†	-806.8	-777.4	37.211 ug/L	37.211 ppb	15:54:20
2	Si 251.611†	898416.4	895027.6	26653 ug/L	26653 ppb	15:53:55
2	Sn 189.927†	-135.2	-143.6	-18.631 ug/L	-18.631 ppb	15:54:20
2	Ti 334.940†	3336205.1	3326665.9	5252.1 ug/L	5252.1 ppb	15:53:55
2	Tl 190.801†	-271.8	-236.3	-0.3843 ug/L	-0.3843 ppb	15:54:20
2	U 409.014†	-10131.3	-7514.5	-234.86 ug/L	-234.86 ppb	15:54:00
2	V 292.402†	42789.5	44013.7	264.61 ug/L	264.61 ppb	15:54:00
2	Zn 213.857†	38688.3	37809.3	309.61 ug/L	309.61 ppb	15:54:00
2	SiO2†	888805.0	885404.5	56502 ug/L	56502 ppb	15:55:04
3	Sc Radial	5542.5	5542.5	99.4 %		15:53:15
3	Y RADIAL	6973.3	6973.3	115.5 %		15:53:15
3	Al 396.153Radial†	192059.6	193248.7	133090 ug/L	133090 ppb	15:52:55
3	Ca 317.933Radial†	15851.1	15929.4	23249 ug/L	23249 ppb	15:52:55
3	Fe 238.204 Radial†	16378.3	16466.8	147530 ug/L	147530 ppb	15:52:55
3	K 766.490 Radial†	94671.4	92500.6	15489 ug/L	15489 ppb	15:52:55
3	Mg 279.077 IEC†	732.6	735.1	24594 ug/L	24594 ppb	15:53:15
3	Na 589.592 Radial†	1401.3	2963.8	898.21 ug/L	898.21 ppb	15:52:55
3	Sr 421.552†	49355.6	49652.3	299.25 ug/L	299.25 ppb	15:52:55
3	Sc 361.383	871044.3	871044.3	100.36 %		15:54:32
3	Y 371.029	859561.9	859561.9	117.84 %		15:54:27
3	Ag 328.068†	-9645.8	-9885.2	3.2267 ug/L	3.2267 ppb	15:54:32
3	As 188.979†	-77.3	-45.7	49.257 ug/L	49.257 ppb	15:54:52
3	B 249.677†	1839.7	2326.3	29.831 ug/L	29.831 ppb	15:54:32
3	Ba 233.527†	222168.4	221381.6	1660.3 ug/L	1660.3 ppb	15:54:32
3	Be 313.107†	-7645.9	-2955.8	9.2680 ug/L	9.2680 ppb	15:54:32
3	Cd 226.502†	1255.1	1449.6	0.3406 ug/L	0.3406 ppb	15:54:52
3	Co 228.616†	3554.1	3614.8	55.588 ug/L	55.588 ppb	15:54:52
3	Cr 267.716†	9911.1	9789.4	105.70 ug/L	105.70 ppb	15:54:52
3	Cu 324.752†	31280.2	24410.0	78.427 ug/L	78.427 ppb	15:54:32
3	Mn 257.610†	3757204.9	3743190.2	3981.4 ug/L	3981.4 ppb	15:54:27
3	Mo 202.031†	-28.4	-46.7	7.4899 ug/L	7.4899 ppb	15:54:52
3	Ni 231.604†	3894.1	3794.2	87.142 ug/L	87.142 ppb	15:54:52
3	P 214.914†	2224.5	1974.5	1016.9 ug/L	1016.9 ppb	15:54:52
3	Pb 220.353†	943.5	1008.1	130.55 ug/L	130.55 ppb	15:54:52
3	S 181.975 Axial†	456.5	405.5	509.50 ug/L	509.50 ppb	15:54:52
3	Sb 206.836†	79.2	41.5	-4.7423 ug/L	-4.7423 ppb	15:54:52
3	Se 196.026†	-804.5	-774.8	37.319 ug/L	37.319 ppb	15:54:52
3	Si 251.611†	899092.2	895381.3	26663 ug/L	26663 ppb	15:54:27
3	Sn 189.927†	-117.3	-125.8	-15.770 ug/L	-15.770 ppb	15:54:52
3	Ti 334.940†	3340167.7	3329427.2	5256.5 ug/L	5256.5 ppb	15:54:27
3	Tl 190.801†	-276.8	-241.2	-1.7442 ug/L	-1.7442 ppb	15:54:52
3	U 409.014†	-10094.5	-7474.3	-233.65 ug/L	-233.65 ppb	15:54:32
3	V 292.402†	42833.5	44042.4	264.87 ug/L	264.87 ppb	15:54:32
3	Zn 213.857†	38605.7	37713.2	308.84 ug/L	308.84 ppb	15:54:32
3	SiO2†	896572.6	892827.9	56976 ug/L	56976 ppb	15:55:10

Mean Data: 241825012|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867307.6	99.930	%	0.7149				0.72%
Sc Radial	5501.7	98.7	%	1.28				1.30%
Y 371.029	860042.6	117.90	%	0.643				0.55%
Y RADIAL	6929.7	114.7	%	1.33				1.16%
Ag 328.068†	-9844.6	3.7565	ug/L	0.46427	3.7565	ppb	0.46427	12.36%
Al 396.153Radial†	194651.0	134060	ug/L	1268.0	134060	ppb	1268.0	0.95%
As 188.979†	-48.4	48.730	ug/L	1.4268	48.730	ppb	1.4268	2.93%
B 249.677†	2348.6	30.162	ug/L	0.6552	30.162	ppb	0.6552	2.17%
Ba 233.527†	221829.6	1663.7	ug/L	3.66	1663.7	ppb	3.66	0.22%
Be 313.107†	-2737.2	9.4282	ug/L	0.18025	9.4282	ppb	0.18025	1.91%
Ca 317.933Radial†	16039.1	23409	ug/L	258.9	23409	ppb	258.9	1.11%
Cd 226.502†	1467.8	0.4221	ug/L	0.17255	0.4221	ppb	0.17255	40.88%
Co 228.616†	3660.3	56.343	ug/L	0.6547	56.343	ppb	0.6547	1.16%
Cr 267.716†	9876.3	106.63	ug/L	0.853	106.63	ppb	0.853	0.80%
Cu 324.752†	24415.9	78.499	ug/L	0.0679	78.499	ppb	0.0679	0.09%
Fe 238.204 Radial†	16588.1	148610	ug/L	1532.2	148610	ppb	1532.2	1.03%
K 766.490 Radial†	93014.0	15575	ug/L	135.6	15575	ppb	135.6	0.87%

Mg 279.077 IEC†	744.0	24893	ug/L	519.9	24893	ppb	519.9	2.09%
Mn 257.610†	3777317.3	4017.7	ug/L	61.68	4017.7	ppb	61.68	1.54%
Mo 202.031†	-52.3	7.2146	ug/L	0.32358	7.2146	ppb	0.32358	4.48%
Na 589.592 Radial†	3010.2	912.26	ug/L	19.730	912.26	ppb	19.730	2.16%
Ni 231.604†	3841.7	88.234	ug/L	0.9541	88.234	ppb	0.9541	1.08%
P 214.914†	2011.6	1037.1	ug/L	20.23	1037.1	ppb	20.23	1.95%
Pb 220.353†	1011.2	131.02	ug/L	2.181	131.02	ppb	2.181	1.67%
S 181.975 Axial†	409.7	514.95	ug/L	6.393	514.95	ppb	6.393	1.24%
Sb 206.836†	47.0	-3.1835	ug/L	1.49783	-3.1835	ppb	1.49783	47.05%
Se 196.026†	-782.1	36.703	ug/L	0.9751	36.703	ppb	0.9751	2.66%
Si 251.611†	903294.7	26899	ug/L	417.3	26899	ppb	417.3	1.55%
Sn 189.927†	-132.3	-16.795	ug/L	1.5936	-16.795	ppb	1.5936	9.49%
Sr 421.552†	50065.3	301.74	ug/L	3.152	301.74	ppb	3.152	1.04%
Ti 334.940†	3355768.9	5298.1	ug/L	75.84	5298.1	ppb	75.84	1.43%
Tl 190.801†	-238.1	-0.3058	ug/L	1.47924	-0.3058	ppb	1.47924	483.81%
U 409.014†	-7534.0	-235.50	ug/L	2.248	-235.50	ppb	2.248	0.95%
V 292.402†	44088.8	264.97	ug/L	0.414	264.97	ppb	0.414	0.16%
Zn 213.857†	37802.6	309.49	ug/L	0.594	309.49	ppb	0.594	0.19%
SiO2†	893271.8	57005	ug/L	516.8	57005	ppb	516.8	0.91%

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 15:57:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5558.6	5558.6	99.7	%			15:59:12
1	Y RADIAL	5971.1	5971.1	98.87	%			15:59:12
1	Al 396.153Radial†	7083.3	7140.5	4896.1	ug/L	4896.1	ppb	15:59:12
1	Ca 317.933Radial†	3430.9	3424.7	4998.3	ug/L	4998.3	ppb	15:59:32
1	Fe 238.204 Radial†	588.3	580.2	5214.1	ug/L	5214.1	ppb	15:59:32
1	K 766.490 Radial†	32544.2	29905.5	5008.5	ug/L	5008.5	ppb	15:59:12
1	Mg 279.077 IEC†	157.3	155.8	5246.5	ug/L	5246.5	ppb	15:59:32
1	Na 589.592 Radial†	32184.8	33838.7	10255	ug/L	10255	ppb	15:59:12
1	Sr 421.552†	84145.3	84406.2	509.03	ug/L	509.03	ppb	15:59:12
1	Sc 361.383	869736.0	869736.0	100.21	%			16:00:29
1	Y 371.029	718165.7	718165.7	98.452	%			16:00:29
1	Ag 328.068†	112428.6	111919.3	509.40	ug/L	509.40	ppb	16:00:35
1	As 188.979†	1276.4	1305.0	508.24	ug/L	508.24	ppb	16:00:55
1	B 249.677†	23207.3	23652.0	502.07	ug/L	502.07	ppb	16:00:35
1	Ba 233.527†	67216.3	67086.7	502.59	ug/L	502.59	ppb	16:00:35
1	Be 313.107†	1391057.6	1392809.1	501.10	ug/L	501.10	ppb	16:00:29
1	Cd 226.502†	48541.0	48638.4	504.24	ug/L	504.24	ppb	16:00:35
1	Co 228.616†	26754.9	26772.3	505.11	ug/L	505.11	ppb	16:00:35
1	Cr 267.716†	47906.4	47720.1	500.33	ug/L	500.33	ppb	16:00:35
1	Cu 324.752†	178862.1	171730.0	499.07	ug/L	499.07	ppb	16:00:35
1	Mn 257.610†	475113.1	473598.6	502.36	ug/L	502.36	ppb	16:00:29
1	Mo 202.031†	7974.3	7939.2	505.60	ug/L	505.60	ppb	16:00:55
1	Ni 231.604†	21958.4	21826.5	501.22	ug/L	501.22	ppb	16:00:35
1	P 214.914†	4733.2	4481.3	2426.6	ug/L	2426.6	ppb	16:00:55
1	Pb 220.353†	4419.8	4478.5	502.86	ug/L	502.86	ppb	16:00:55
1	S 181.975 Axial†	822.4	771.3	1018.1	ug/L	1018.1	ppb	16:00:55
1	Sb 206.836†	1648.1	1607.3	514.89	ug/L	514.89	ppb	16:00:55
1	Se 196.026†	873.3	898.3	523.66	ug/L	523.66	ppb	16:00:55
1	Si 251.611†	87277.4	86613.1	2567.6	ug/L	2567.6	ppb	16:00:35
1	Sn 189.927†	3153.7	3138.3	505.43	ug/L	505.43	ppb	16:00:55
1	Ti 334.940†	313418.1	314018.5	495.52	ug/L	495.52	ppb	16:00:35
1	Tl 190.801†	1743.3	1774.2	503.05	ug/L	503.05	ppb	16:00:55
1	U 409.014†	14827.4	17380.4	498.08	ug/L	498.08	ppb	16:00:35
1	V 292.402†	73812.8	75021.1	505.94	ug/L	505.94	ppb	16:00:35
1	Zn 213.857†	59642.5	58763.8	501.01	ug/L	501.01	ppb	16:00:35
1	SiO2†	88264.4	87555.2	5562.3	ug/L	5562.3	ppb	16:02:02
2	Sc Radial	5504.9	5504.9	98.7	%			15:59:37
2	Y RADIAL	5969.3	5969.3	98.84	%			15:59:37
2	Al 396.153Radial†	7134.7	7261.8	4979.6	ug/L	4979.6	ppb	15:59:37
2	Ca 317.933Radial†	3435.2	3462.5	5053.6	ug/L	5053.6	ppb	15:59:57
2	Fe 238.204 Radial†	574.1	571.6	5136.6	ug/L	5136.6	ppb	15:59:57
2	K 766.490 Radial†	32661.5	30342.4	5081.8	ug/L	5081.8	ppb	15:59:37
2	Mg 279.077 IEC†	155.2	155.3	5229.6	ug/L	5229.6	ppb	15:59:57
2	Na 589.592 Radial†	32263.5	34233.0	10375	ug/L	10375	ppb	15:59:37
2	Sr 421.552†	84579.0	85668.1	516.64	ug/L	516.64	ppb	15:59:37
2	Sc 361.383	869177.5	869177.5	100.15	%			16:01:00
2	Y 371.029	718464.4	718464.4	98.493	%			16:01:00
2	Ag 328.068†	112475.0	112037.7	509.92	ug/L	509.92	ppb	16:01:06
2	As 188.979†	1281.0	1310.4	510.31	ug/L	510.31	ppb	16:01:26
2	B 249.677†	23260.1	23719.5	503.53	ug/L	503.53	ppb	16:01:06
2	Ba 233.527†	67346.4	67259.8	503.88	ug/L	503.88	ppb	16:01:06
2	Be 313.107†	1389305.1	1391951.0	500.79	ug/L	500.79	ppb	16:01:00
2	Cd 226.502†	48549.7	48678.1	504.66	ug/L	504.66	ppb	16:01:06
2	Co 228.616†	26651.6	26686.4	503.50	ug/L	503.50	ppb	16:01:06
2	Cr 267.716†	48051.9	47896.1	502.17	ug/L	502.17	ppb	16:01:06
2	Cu 324.752†	178995.2	171977.5	499.79	ug/L	499.79	ppb	16:01:06
2	Mn 257.610†	474312.1	473103.4	501.82	ug/L	501.82	ppb	16:01:00
2	Mo 202.031†	8011.6	7981.6	508.29	ug/L	508.29	ppb	16:01:26
2	Ni 231.604†	22037.2	21919.2	503.35	ug/L	503.35	ppb	16:01:06

2	P 214.914†	4754.5	4505.6	2440.2 ug/L	2440.2 ppb	16:01:26
2	Pb 220.353†	4443.2	4504.7	505.82 ug/L	505.82 ppb	16:01:26
2	S 181.975 Axial†	829.2	778.6	1027.7 ug/L	1027.7 ppb	16:01:26
2	Sb 206.836†	1646.9	1607.1	514.96 ug/L	514.96 ppb	16:01:26
2	Se 196.026†	876.8	902.3	525.71 ug/L	525.71 ppb	16:01:26
2	Si 251.611†	87347.2	86738.7	2571.3 ug/L	2571.3 ppb	16:01:06
2	Sn 189.927†	3192.2	3178.7	511.94 ug/L	511.94 ppb	16:01:26
2	Ti 334.940†	314049.1	314849.5	496.83 ug/L	496.83 ppb	16:01:06
2	Tl 190.801†	1766.2	1798.2	509.82 ug/L	509.82 ppb	16:01:26
2	U 409.014†	14853.4	17415.8	499.10 ug/L	499.10 ppb	16:01:06
2	V 292.402†	73985.1	75240.4	507.45 ug/L	507.45 ppb	16:01:06
2	Zn 213.857†	59643.9	58803.4	501.35 ug/L	501.35 ppb	16:01:06
2	SiO2†	87705.6	87053.8	5530.0 ug/L	5530.0 ppb	16:02:07
3	Sc Radial	5423.1	5423.1	97.3 %		16:00:02
3	Y RADIAL	5814.6	5814.6	96.28 %		16:00:02
3	Al 396.153Radial†	6992.7	7224.9	4953.8 ug/L	4953.8 ppb	16:00:02
3	Ca 317.933Radial†	3449.0	3529.2	5150.8 ug/L	5150.8 ppb	16:00:22
3	Fe 238.204 Radial†	584.9	591.5	5315.5 ug/L	5315.5 ppb	16:00:22
3	K 766.490 Radial†	32100.7	30265.1	5068.8 ug/L	5068.8 ppb	16:00:02
3	Mg 279.077 IEC†	155.7	158.1	5323.8 ug/L	5323.8 ppb	16:00:22
3	Na 589.592 Radial†	31834.9	34285.5	10391 ug/L	10391 ppb	16:00:02
3	Sr 421.552†	82849.3	85182.5	513.71 ug/L	513.71 ppb	16:00:02
3	Sc 361.383	854224.4	854224.4	98.422 %		16:01:31
3	Y 371.029	706974.9	706974.9	96.918 %		16:01:31
3	Ag 328.068†	112475.0	114003.7	518.90 ug/L	518.90 ppb	16:01:37
3	As 188.979†	1282.6	1334.5	519.71 ug/L	519.71 ppb	16:01:57
3	B 249.677†	23152.0	24016.3	509.80 ug/L	509.80 ppb	16:01:37
3	Ba 233.527†	67522.8	68616.2	514.04 ug/L	514.04 ppb	16:01:37
3	Be 313.107†	1368231.9	1394824.4	501.84 ug/L	501.84 ppb	16:01:31
3	Cd 226.502†	48632.3	49610.7	514.32 ug/L	514.32 ppb	16:01:37
3	Co 228.616†	26855.9	27359.7	516.20 ug/L	516.20 ppb	16:01:37
3	Cr 267.716†	48130.6	48816.0	511.82 ug/L	511.82 ppb	16:01:37
3	Cu 324.752†	178719.2	174825.9	508.07 ug/L	508.07 ppb	16:01:37
3	Mn 257.610†	466387.7	473342.8	502.09 ug/L	502.09 ppb	16:01:31
3	Mo 202.031†	7993.6	8103.3	516.04 ug/L	516.04 ppb	16:01:57
3	Ni 231.604†	22087.8	22355.9	513.38 ug/L	513.38 ppb	16:01:37
3	P 214.914†	4762.0	4596.3	2489.4 ug/L	2489.4 ppb	16:01:57
3	Pb 220.353†	4425.3	4564.2	512.48 ug/L	512.48 ppb	16:01:57
3	S 181.975 Axial†	822.1	785.9	1037.3 ug/L	1037.3 ppb	16:01:57
3	Sb 206.836†	1651.4	1640.5	525.51 ug/L	525.51 ppb	16:01:57
3	Se 196.026†	875.3	916.1	534.05 ug/L	534.05 ppb	16:01:57
3	Si 251.611†	87475.0	88395.3	2620.5 ug/L	2620.5 ppb	16:01:37
3	Sn 189.927†	3163.6	3205.5	516.25 ug/L	516.25 ppb	16:01:57
3	Ti 334.940†	314008.5	320297.6	505.43 ug/L	505.43 ppb	16:01:37
3	Tl 190.801†	1751.4	1814.1	514.27 ug/L	514.27 ppb	16:01:57
3	U 409.014†	14617.9	17436.2	499.65 ug/L	499.65 ppb	16:01:37
3	V 292.402†	73997.9	76546.7	516.21 ug/L	516.21 ppb	16:01:37
3	Zn 213.857†	59798.5	60003.1	511.57 ug/L	511.57 ppb	16:01:37
3	SiO2†	88252.0	89142.1	5663.0 ug/L	5663.0 ppb	16:02:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	864379.3	99.593	%	1.0138				1.02%
Sc Radial	5495.5	98.6	%	1.22				1.24%
Y 371.029	714535.0	97.954	%	0.8978				0.92%
Y RADIAL	5918.3	98.00	%	1.488				1.52%
Ag 328.068†	112653.6	512.74	ug/L	5.341	512.74	ppb	5.341	1.04%
QC value within limits for Ag 328.068 Recovery = 102.55%								
Al 396.153Radial†	7209.1	4943.2	ug/L	42.74	4943.2	ppb	42.74	0.86%
QC value within limits for Al 396.153Radial Recovery = 98.86%								
As 188.979†	1316.6	512.75	ug/L	6.112	512.75	ppb	6.112	1.19%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	23796.0	505.13	ug/L	4.104	505.13	ppb	4.104	0.81%
QC value within limits for B 249.677 Recovery = 101.03%								
Ba 233.527†	67654.2	506.84	ug/L	6.273	506.84	ppb	6.273	1.24%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1393194.8	501.24	ug/L	0.539	501.24	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 100.25%								
Ca 317.933Radial†	3472.1	5067.5	ug/L	77.23	5067.5	ppb	77.23	1.52%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.35%
Cd 226.502†            48975.8      507.74 ug/L         5.703      507.74 ppb          5.703   1.12%
   QC value within limits for Cd 226.502  Recovery = 101.55%
Co 228.616†            26939.5      508.27 ug/L         6.913      508.27 ppb          6.913   1.36%
   QC value within limits for Co 228.616  Recovery = 101.65%
Cr 267.716†            48144.1      504.77 ug/L         6.171      504.77 ppb          6.171   1.22%
   QC value within limits for Cr 267.716  Recovery = 100.95%
Cu 324.752†           172844.5      502.31 ug/L         5.001      502.31 ppb          5.001   1.00%
   QC value within limits for Cu 324.752  Recovery = 100.46%
Fe 238.204 Radial†       581.1      5222.1 ug/L        89.73      5222.1 ppb         89.73   1.72%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.44%
K 766.490 Radial†      30171.0      5053.0 ug/L        39.11      5053.0 ppb         39.11   0.77%
   QC value within limits for K 766.490 Radial  Recovery = 101.06%
Mg 279.077 IEC†          156.4      5266.6 ug/L        50.23      5266.6 ppb         50.23   0.95%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.33%
Mn 257.610†           473348.3      502.09 ug/L         0.266      502.09 ppb         0.266   0.05%
   QC value within limits for Mn 257.610  Recovery = 100.42%
Mo 202.031†             8008.0      509.98 ug/L         5.425      509.98 ppb         5.425   1.06%
   QC value within limits for Mo 202.031  Recovery = 102.00%
Na 589.592 Radial†     34119.1       10340 ug/L          74.0       10340 ppb          74.0   0.72%
   QC value within limits for Na 589.592 Radial  Recovery = 103.40%
Ni 231.604†            22033.9      505.99 ug/L         6.492      505.99 ppb         6.492   1.28%
   QC value within limits for Ni 231.604  Recovery = 101.20%
P 214.914†              4527.7      2452.1 ug/L        33.06      2452.1 ppb         33.06   1.35%
   QC value within limits for P 214.914  Recovery = 98.08%
Pb 220.353†             4515.8      507.05 ug/L         4.925      507.05 ppb         4.925   0.97%
   QC value within limits for Pb 220.353  Recovery = 101.41%
S 181.975 Axial†         778.6      1027.7 ug/L         9.61      1027.7 ppb          9.61   0.94%
   QC value within limits for S 181.975 Axial  Recovery = 102.77%
Sb 206.836†             1618.3      518.45 ug/L         6.110      518.45 ppb         6.110   1.18%
   QC value within limits for Sb 206.836  Recovery = 103.69%
Se 196.026†              905.6      527.81 ug/L         5.503      527.81 ppb         5.503   1.04%
   QC value within limits for Se 196.026  Recovery = 105.56%
Si 251.611†            87249.0      2586.5 ug/L        29.51      2586.5 ppb         29.51   1.14%
   QC value within limits for Si 251.611  Recovery = 103.46%
Sn 189.927†             3174.2      511.21 ug/L         5.449      511.21 ppb         5.449   1.07%
   QC value within limits for Sn 189.927  Recovery = 102.24%
Sr 421.552†            85085.6      513.13 ug/L         3.839      513.13 ppb         3.839   0.75%
   QC value within limits for Sr 421.552  Recovery = 102.63%
Ti 334.940†           316388.5      499.26 ug/L         5.385      499.26 ppb         5.385   1.08%
   QC value within limits for Ti 334.940  Recovery = 99.85%
Tl 190.801†             1795.5      509.05 ug/L         5.649      509.05 ppb         5.649   1.11%
   QC value within limits for Tl 190.801  Recovery = 101.81%
U 409.014†             17410.8      498.94 ug/L         0.797      498.94 ppb         0.797   0.16%
   QC value within limits for U 409.014  Recovery = 99.79%
V 292.402†             75602.7      509.87 ug/L         5.548      509.87 ppb         5.548   1.09%
   QC value within limits for V 292.402  Recovery = 101.97%
Zn 213.857†            59190.1      504.64 ug/L         6.002      504.64 ppb         6.002   1.19%
   QC value within limits for Zn 213.857  Recovery = 100.93%
SiO2†                  87917.0      5585.1 ug/L        69.37      5585.1 ppb         69.37   1.24%
   QC value within limits for SiO2  Recovery = 104.44%
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 16:04:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5548.2	5548.2	99.5	%			16:06:14
1	Y RADIAL	6034.4	6034.4	99.92	%			16:06:14
1	Al 396.153Radial†	-6.6	28.6	19.727	ug/L	19.727	ppb	16:06:14
1	Ca 317.933Radial†	21.4	4.6	6.6582	ug/L	6.6582	ppb	16:06:34
1	Fe 238.204 Radial†	8.9	-0.9	-8.1568	ug/L	-8.1568	ppb	16:06:34
1	K 766.490 Radial†	2838.3	112.9	18.939	ug/L	18.939	ppb	16:06:14
1	Mg 279.077 IEC†	-2.7	-4.7	-156.97	ug/L	-156.97	ppb	16:06:34
1	Na 589.592 Radial†	-1557.0	-10.6	-3.2075	ug/L	-3.2075	ppb	16:06:14
1	Sr 421.552†	-37.3	-37.3	-0.2247	ug/L	-0.2247	ppb	16:06:14
1	Sc 361.383	864632.5	864632.5	99.622	%			16:07:31
1	Y 371.029	726006.4	726006.4	99.527	%			16:07:31
1	Ag 328.068†	288.2	15.3	0.0666	ug/L	0.0666	ppb	16:07:31
1	As 188.979†	-25.1	6.1	2.3693	ug/L	2.3693	ppb	16:07:51
1	B 249.677†	-254.9	237.3	5.0591	ug/L	5.0591	ppb	16:07:51
1	Ba 233.527†	-10.7	0.4	0.0021	ug/L	0.0021	ppb	16:07:51
1	Be 313.107†	-4579.0	66.2	0.0236	ug/L	0.0236	ppb	16:07:31
1	Cd 226.502†	-194.6	3.6	0.0384	ug/L	0.0384	ppb	16:07:51
1	Co 228.616†	-80.6	-7.5	-0.1409	ug/L	-0.1409	ppb	16:07:51
1	Cr 267.716†	93.2	7.5	0.0786	ug/L	0.0786	ppb	16:07:51
1	Cu 324.752†	6844.0	112.2	0.3254	ug/L	0.3254	ppb	16:07:31
1	Mn 257.610†	494.5	-23.7	-0.0231	ug/L	-0.0231	ppb	16:07:51
1	Mo 202.031†	14.6	-3.8	-0.2412	ug/L	-0.2412	ppb	16:07:51
1	Ni 231.604†	83.7	-2.0	-0.0451	ug/L	-0.0451	ppb	16:07:51
1	P 214.914†	241.2	0.1	0.0020	ug/L	0.0020	ppb	16:07:51
1	Pb 220.353†	-60.3	7.4	0.8366	ug/L	0.8366	ppb	16:07:51
1	S 181.975 Axial†	53.6	4.4	5.8658	ug/L	5.8658	ppb	16:07:51
1	Sb 206.836†	41.3	4.0	1.2754	ug/L	1.2754	ppb	16:07:51
1	Se 196.026†	-29.2	-2.5	-1.4380	ug/L	-1.4380	ppb	16:07:51
1	Si 251.611†	573.7	94.2	2.8007	ug/L	2.8007	ppb	16:07:51
1	Sn 189.927†	12.5	3.7	0.6031	ug/L	0.6031	ppb	16:07:51
1	Ti 334.940†	-1296.2	-44.9	-0.0699	ug/L	-0.0699	ppb	16:07:31
1	Tl 190.801†	-33.1	1.4	0.3932	ug/L	0.3932	ppb	16:07:51
1	U 409.014†	-2626.7	-52.7	-1.5140	ug/L	-1.5140	ppb	16:07:31
1	V 292.402†	-1400.5	-43.1	-0.2955	ug/L	-0.2955	ppb	16:07:31
1	Zn 213.857†	794.6	43.8	0.3827	ug/L	0.3827	ppb	16:07:51
1	SiO2†	579.5	57.2	3.6417	ug/L	3.6417	ppb	16:08:47
2	Sc Radial	5527.9	5527.9	99.1	%			16:06:39
2	Y RADIAL	6016.9	6016.9	99.63	%			16:06:39
2	Al 396.153Radial†	-21.1	14.0	9.6624	ug/L	9.6624	ppb	16:06:39
2	Ca 317.933Radial†	17.1	0.4	0.5806	ug/L	0.5806	ppb	16:06:59
2	Fe 238.204 Radial†	12.3	2.5	22.169	ug/L	22.169	ppb	16:06:59
2	K 766.490 Radial†	2794.2	78.8	13.236	ug/L	13.236	ppb	16:06:39
2	Mg 279.077 IEC†	3.1	1.2	41.283	ug/L	41.283	ppb	16:06:59
2	Na 589.592 Radial†	-1630.4	-90.4	-27.393	ug/L	-27.393	ppb	16:06:39
2	Sr 421.552†	-40.5	-40.7	-0.2453	ug/L	-0.2453	ppb	16:06:39
2	Sc 361.383	849624.2	849624.2	97.892	%			16:07:56
2	Y 371.029	714603.2	714603.2	97.964	%			16:07:56
2	Ag 328.068†	416.8	151.8	0.6964	ug/L	0.6964	ppb	16:07:56
2	As 188.979†	-33.5	-3.0	-1.1437	ug/L	-1.1437	ppb	16:08:16
2	B 249.677†	-221.1	267.3	5.6944	ug/L	5.6944	ppb	16:08:16
2	Ba 233.527†	-9.1	1.8	0.0137	ug/L	0.0137	ppb	16:08:16
2	Be 313.107†	-4513.5	52.0	0.0183	ug/L	0.0183	ppb	16:07:56
2	Cd 226.502†	-198.9	-4.3	-0.0467	ug/L	-0.0467	ppb	16:08:16
2	Co 228.616†	-76.7	-5.0	-0.0933	ug/L	-0.0933	ppb	16:08:16
2	Cr 267.716†	103.1	19.2	0.2028	ug/L	0.2028	ppb	16:08:16
2	Cu 324.752†	6678.2	64.1	0.1873	ug/L	0.1873	ppb	16:07:56
2	Mn 257.610†	635.2	128.7	0.1378	ug/L	0.1378	ppb	16:08:16
2	Mo 202.031†	19.8	1.8	0.1164	ug/L	0.1164	ppb	16:08:16
2	Ni 231.604†	70.2	-14.2	-0.3263	ug/L	-0.3263	ppb	16:08:16

2	P 214.914†	231.6	-5.5	-3.1134 ug/L	-3.1134 ppb	16:08:16
2	Pb 220.353†	-62.6	4.0	0.4480 ug/L	0.4480 ppb	16:08:16
2	S 181.975 Axial†	53.7	5.5	7.2283 ug/L	7.2283 ppb	16:08:16
2	Sb 206.836†	43.7	7.3	2.2821 ug/L	2.2821 ppb	16:08:16
2	Se 196.026†	-28.7	-2.5	-1.3229 ug/L	-1.3229 ppb	16:08:16
2	Si 251.611†	567.3	97.7	2.9063 ug/L	2.9063 ppb	16:08:16
2	Sn 189.927†	5.1	-3.6	-0.5764 ug/L	-0.5764 ppb	16:08:16
2	Ti 334.940†	-1329.7	-102.0	-0.1589 ug/L	-0.1589 ppb	16:07:56
2	Tl 190.801†	-41.0	-7.4	-2.0701 ug/L	-2.0701 ppb	16:08:16
2	U 409.014†	-2697.0	-171.1	-4.9210 ug/L	-4.9210 ppb	16:07:56
2	V 292.402†	-1384.3	-51.4	-0.3523 ug/L	-0.3523 ppb	16:07:56
2	Zn 213.857†	792.8	56.0	0.4802 ug/L	0.4802 ppb	16:08:16
2	SiO2†	563.2	50.8	3.2340 ug/L	3.2340 ppb	16:08:52
3	Sc Radial	5638.7	5638.7	101 %		16:07:04
3	Y RADIAL	6129.6	6129.6	101.5 %		16:07:04
3	Al 396.153Radial†	-19.9	15.7	10.777 ug/L	10.777 ppb	16:07:04
3	Ca 317.933Radial†	22.4	5.3	7.6677 ug/L	7.6677 ppb	16:07:24
3	Fe 238.204 Radial†	8.8	-1.2	-10.499 ug/L	-10.499 ppb	16:07:24
3	K 766.490 Radial†	2867.9	96.4	16.174 ug/L	16.174 ppb	16:07:04
3	Mg 279.077 IEC†	4.2	2.2	75.544 ug/L	75.544 ppb	16:07:24
3	Na 589.592 Radial†	-1619.8	-47.6	-14.411 ug/L	-14.411 ppb	16:07:04
3	Sr 421.552†	-4.5	-4.2	-0.0257 ug/L	-0.0257 ppb	16:07:04
3	Sc 361.383	858167.6	858167.6	98.877 %		16:08:21
3	Y 371.029	721928.7	721928.7	98.968 %		16:08:21
3	Ag 328.068†	362.6	92.7	0.4118 ug/L	0.4118 ppb	16:08:21
3	As 188.979†	-20.1	11.0	4.2405 ug/L	4.2405 ppb	16:08:42
3	B 249.677†	-283.5	206.4	4.4010 ug/L	4.4010 ppb	16:08:42
3	Ba 233.527†	3.2	14.4	0.1061 ug/L	0.1061 ppb	16:08:42
3	Be 313.107†	-4623.9	-13.8	-0.0051 ug/L	-0.0051 ppb	16:08:21
3	Cd 226.502†	-192.3	4.5	0.0473 ug/L	0.0473 ppb	16:08:42
3	Co 228.616†	-76.2	-3.6	-0.0659 ug/L	-0.0659 ppb	16:08:42
3	Cr 267.716†	76.2	-9.0	-0.0959 ug/L	-0.0959 ppb	16:08:42
3	Cu 324.752†	6783.0	102.3	0.2965 ug/L	0.2965 ppb	16:08:21
3	Mn 257.610†	529.3	15.2	0.0136 ug/L	0.0136 ppb	16:08:42
3	Mo 202.031†	25.9	7.7	0.4911 ug/L	0.4911 ppb	16:08:42
3	Ni 231.604†	87.3	2.4	0.0544 ug/L	0.0544 ppb	16:08:42
3	P 214.914†	228.7	-10.8	-6.0518 ug/L	-6.0518 ppb	16:08:42
3	Pb 220.353†	-85.8	-18.8	-2.0965 ug/L	-2.0965 ppb	16:08:42
3	S 181.975 Axial†	49.7	0.9	1.1292 ug/L	1.1292 ppb	16:08:42
3	Sb 206.836†	36.8	-0.2	-0.0482 ug/L	-0.0482 ppb	16:08:42
3	Se 196.026†	-37.4	-11.1	-6.2580 ug/L	-6.2580 ppb	16:08:42
3	Si 251.611†	563.5	88.2	2.6135 ug/L	2.6135 ppb	16:08:42
3	Sn 189.927†	6.8	-1.9	-0.3105 ug/L	-0.3105 ppb	16:08:42
3	Ti 334.940†	-1279.5	-37.8	-0.0604 ug/L	-0.0604 ppb	16:08:21
3	Tl 190.801†	-37.5	-3.4	-0.9465 ug/L	-0.9465 ppb	16:08:42
3	U 409.014†	-2460.9	95.1	2.7368 ug/L	2.7368 ppb	16:08:21
3	V 292.402†	-1408.3	-61.6	-0.3941 ug/L	-0.3941 ppb	16:08:21
3	Zn 213.857†	794.1	49.2	0.4214 ug/L	0.4214 ppb	16:08:42
3	SiO2†	567.2	49.2	3.1110 ug/L	3.1110 ppb	16:08:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	857474.8	98.797	%	0.8674				0.88%
Sc Radial	5571.6	99.9	%	1.06				1.06%
Y 371.029	720846.1	98.820	%	0.7921				0.80%
Y RADIAL	6060.3	100.4	%	1.00				1.00%
Ag 328.068†	86.6	0.3916	ug/L	0.31539	0.3916	ppb	0.31539	80.54%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	19.4	13.389	ug/L	5.5170	13.389	ppb	5.5170	41.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.7	1.8220	ug/L	2.73353	1.8220	ppb	2.73353	150.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	237.0	5.0515	ug/L	0.64673	5.0515	ppb	0.64673	12.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.5	0.0406	ug/L	0.05695	0.0406	ppb	0.05695	140.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	34.8	0.0123	ug/L	0.01527	0.0123	ppb	0.01527	124.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9689	ug/L	3.83368	4.9689	ppb	3.83368	77.15%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 1.3      0.0130 ug/L       0.05187      0.0130 ppb        0.05187 399.10%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.1000 ug/L       0.03794     -0.1000 ppb        0.03794  37.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.9      0.0618 ug/L       0.15009      0.0618 ppb        0.15009 242.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                92.8      0.2697 ug/L       0.07284      0.2697 ppb        0.07284  27.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.1      1.1711 ug/L      18.22225      1.1711 ppb       18.22225 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          96.0     16.116 ug/L        2.8522     16.116 ppb         2.8522  17.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4    -13.382 ug/L      125.5279    -13.382 ppb       125.5279 938.02%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.0      0.0428 ug/L       0.08431      0.0428 ppb        0.08431 197.02%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.9      0.1221 ug/L       0.36617      0.1221 ppb        0.36617 299.86%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -49.5    -15.004 ug/L      12.1037    -15.004 ppb        12.1037  80.67%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.6     -0.1057 ug/L       0.19743     -0.1057 ppb        0.19743 186.82%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.4     -3.0544 ug/L       3.02731     -3.0544 ppb        3.02731  99.11%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.4     -0.2707 ug/L       1.59316     -0.2707 ppb        1.59316 588.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.6      4.7411 ug/L       3.20133      4.7411 ppb        3.20133  67.52%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.7      1.1698 ug/L       1.16872      1.1698 ppb        1.16872  99.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.4     -3.0063 ug/L       2.81665     -3.0063 ppb        2.81665  93.69%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                93.4      2.7735 ug/L       0.14826      2.7735 ppb        0.14826   5.35%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.6     -0.0946 ug/L       0.61866     -0.0946 ppb        0.61866 654.09%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -27.4     -0.1652 ug/L       0.12129     -0.1652 ppb        0.12129  73.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -61.6     -0.0964 ug/L       0.05435     -0.0964 ppb        0.05435  56.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.1     -0.8745 ug/L       1.23322     -0.8745 ppb        1.23322 141.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -42.9     -1.2327 ug/L       3.83663     -1.2327 ppb        3.83663 311.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -52.0     -0.3473 ug/L       0.04949     -0.3473 ppb        0.04949  14.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                49.7      0.4281 ug/L       0.04910      0.4281 ppb        0.04910  11.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.4      3.3289 ug/L       0.27774      3.3289 ppb        0.27774   8.34%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: 241825013|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 12/11/2009 16:11:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825013|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5694.3	5694.3	102	%			16:12:59
1	Y RADIAL	7627.5	7627.5	126.3	%			16:12:59
1	Al 396.153Radial†	10058.1	9884.1	6806.2	ug/L	6806.2	ppb	16:12:59
1	Ca 317.933Radial†	6689.1	6533.0	9534.9	ug/L	9534.9	ppb	16:12:59
1	Fe 238.204 Radial†	8083.1	7905.0	70821	ug/L	70821	ppb	16:12:59
1	K 766.490 Radial†	14023.8	10992.4	1820.6	ug/L	1820.6	ppb	16:12:59
1	Mg 279.077 IEC†	72.5	69.1	2264.2	ug/L	2264.2	ppb	16:13:19
1	Na 589.592 Radial†	6571.5	7988.9	2421.1	ug/L	2421.1	ppb	16:12:59
1	Sr 421.552†	6753.9	6613.6	39.800	ug/L	39.800	ppb	16:12:59
1	Sc 361.383	881388.0	881388.0	101.55	%			16:14:17
1	Y 371.029	906891.1	906891.1	124.32	%			16:14:17
1	Ag 328.068†	-4262.1	-4471.0	2.5270	ug/L	2.5270	ppb	16:14:22
1	As 188.979†	-42.5	-10.6	21.537	ug/L	21.537	ppb	16:14:42
1	B 249.677†	496.3	981.9	11.514	ug/L	11.514	ppb	16:14:22
1	Ba 233.527†	16674.4	16430.7	125.47	ug/L	125.47	ppb	16:14:22
1	Be 313.107†	-11092.0	-6259.8	1.2040	ug/L	1.2040	ppb	16:14:22
1	Cd 226.502†	484.0	675.5	-0.0650	ug/L	-0.0650	ppb	16:14:42
1	Co 228.616†	302.4	371.3	2.3761	ug/L	2.3761	ppb	16:14:42
1	Cr 267.716†	1089.1	986.4	11.734	ug/L	11.734	ppb	16:14:42
1	Cu 324.752†	9024.6	2128.8	9.7960	ug/L	9.7960	ppb	16:14:22
1	Mn 257.610†	1907589.7	1877911.7	1997.3	ug/L	1997.3	ppb	16:14:17
1	Mo 202.031†	424.1	399.2	30.427	ug/L	30.427	ppb	16:14:42
1	Ni 231.604†	734.8	637.6	14.648	ug/L	14.648	ppb	16:14:42
1	P 214.914†	1332.0	1069.6	541.42	ug/L	541.42	ppb	16:14:42
1	Pb 220.353†	424.4	485.9	50.167	ug/L	50.167	ppb	16:14:42
1	S 181.975 Axial†	773.7	712.5	940.02	ug/L	940.02	ppb	16:14:42
1	Sb 206.836†	36.3	-1.7	-3.9555	ug/L	-3.9555	ppb	16:14:42
1	Se 196.026†	-398.0	-365.1	13.343	ug/L	13.343	ppb	16:14:42
1	Si 251.611†	335021.6	329419.0	9810.4	ug/L	9810.4	ppb	16:14:22
1	Sn 189.927†	11.0	2.0	2.2603	ug/L	2.2603	ppb	16:14:42
1	Ti 334.940†	1128596.7	1112602.1	1756.8	ug/L	1756.8	ppb	16:14:17
1	Tl 190.801†	-136.6	-100.0	-2.9444	ug/L	-2.9444	ppb	16:14:42
1	U 409.014†	-11943.6	-9177.0	-272.77	ug/L	-272.77	ppb	16:14:17
1	V 292.402†	3594.1	4901.9	19.808	ug/L	19.808	ppb	16:14:42
1	Zn 213.857†	43415.8	41998.3	354.33	ug/L	354.33	ppb	16:14:22
1	SiO2†	347223.3	341391.4	21788	ug/L	21788	ppb	16:15:49
2	Sc Radial	5526.4	5526.4	99.1	%			16:13:24
2	Y RADIAL	7428.5	7428.5	123.0	%			16:13:24
2	Al 396.153Radial†	9784.8	9907.6	6822.4	ug/L	6822.4	ppb	16:13:24
2	Ca 317.933Radial†	6569.9	6611.7	9649.8	ug/L	9649.8	ppb	16:13:24
2	Fe 238.204 Radial†	7885.4	7946.1	71189	ug/L	71189	ppb	16:13:24
2	K 766.490 Radial†	13858.9	11243.3	1862.8	ug/L	1862.8	ppb	16:13:24
2	Mg 279.077 IEC†	74.0	72.7	2385.6	ug/L	2385.6	ppb	16:13:44
2	Na 589.592 Radial†	6355.6	7966.5	2414.3	ug/L	2414.3	ppb	16:13:24
2	Sr 421.552†	6562.6	6621.5	39.846	ug/L	39.846	ppb	16:13:24
2	Sc 361.383	885693.4	885693.4	102.05	%			16:14:48
2	Y 371.029	912351.9	912351.9	125.07	%			16:14:48
2	Ag 328.068†	-4308.3	-4495.8	2.5316	ug/L	2.5316	ppb	16:14:53
2	As 188.979†	-37.5	-5.5	23.551	ug/L	23.551	ppb	16:15:13
2	B 249.677†	588.5	1069.9	13.339	ug/L	13.339	ppb	16:14:53
2	Ba 233.527†	16848.2	16521.1	126.16	ug/L	126.16	ppb	16:14:53
2	Be 313.107†	-11344.1	-6453.8	1.1298	ug/L	1.1298	ppb	16:14:53
2	Cd 226.502†	474.2	663.6	-0.2256	ug/L	-0.2256	ppb	16:15:13
2	Co 228.616†	315.4	382.5	2.5873	ug/L	2.5873	ppb	16:15:13
2	Cr 267.716†	1106.0	997.7	11.860	ug/L	11.860	ppb	16:15:13
2	Cu 324.752†	8991.4	2053.0	9.5947	ug/L	9.5947	ppb	16:14:53
2	Mn 257.610†	1910322.3	1871458.3	1990.5	ug/L	1990.5	ppb	16:14:48
2	Mo 202.031†	416.2	389.4	29.830	ug/L	29.830	ppb	16:15:13
2	Ni 231.604†	741.2	640.4	14.711	ug/L	14.711	ppb	16:15:13

2	P 214.914†	1333.3	1064.5	538.27 ug/L	538.27 ppb	16:15:13
2	Pb 220.353†	426.7	486.2	50.167 ug/L	50.167 ppb	16:15:13
2	S 181.975 Axial†	770.6	705.7	931.04 ug/L	931.04 ppb	16:15:13
2	Sb 206.836†	45.1	6.8	-1.3392 ug/L	-1.3392 ppb	16:15:13
2	Se 196.026†	-393.8	-359.1	17.868 ug/L	17.868 ppb	16:15:13
2	Si 251.611†	338108.9	330840.7	9852.7 ug/L	9852.7 ppb	16:14:53
2	Sn 189.927†	-3.0	-11.8	0.0546 ug/L	0.0546 ppb	16:15:13
2	Ti 334.940†	1132603.1	1111125.8	1754.4 ug/L	1754.4 ppb	16:14:48
2	Tl 190.801†	-130.5	-93.3	-1.1355 ug/L	-1.1355 ppb	16:15:13
2	U 409.014†	-12099.7	-9272.9	-275.58 ug/L	-275.58 ppb	16:14:48
2	V 292.402†	3583.1	4873.9	19.557 ug/L	19.557 ppb	16:15:13
2	Zn 213.857†	43740.0	42108.2	355.24 ug/L	355.24 ppb	16:14:53
2	SiO2†	348281.8	340766.6	21748 ug/L	21748 ppb	16:15:55
3	Sc Radial	5601.9	5601.9	100 %		16:13:50
3	Y RADIAL	7553.2	7553.2	125.1 %		16:13:50
3	Al 396.153Radial†	9948.8	9937.7	6843.2 ug/L	6843.2 ppb	16:13:50
3	Ca 317.933Radial†	6640.5	6592.7	9622.0 ug/L	9622.0 ppb	16:13:50
3	Fe 238.204 Radial†	7955.3	7908.3	70851 ug/L	70851 ppb	16:13:50
3	K 766.490 Radial†	14146.7	11341.2	1879.2 ug/L	1879.2 ppb	16:13:50
3	Mg 279.077 IEC†	74.3	72.0	2361.6 ug/L	2361.6 ppb	16:14:10
3	Na 589.592 Radial†	6506.6	8030.4	2433.7 ug/L	2433.7 ppb	16:13:50
3	Sr 421.552†	6668.3	6637.4	39.943 ug/L	39.943 ppb	16:13:50
3	Sc 361.383	884452.8	884452.8	101.91 %		16:15:19
3	Y 371.029	911023.6	911023.6	124.89 %		16:15:19
3	Ag 328.068†	-4260.6	-4455.0	2.6080 ug/L	2.6080 ppb	16:15:24
3	As 188.979†	-31.1	0.8	25.897 ug/L	25.897 ppb	16:15:44
3	B 249.677†	555.0	1037.8	12.700 ug/L	12.700 ppb	16:15:24
3	Ba 233.527†	16835.8	16532.1	126.23 ug/L	126.23 ppb	16:15:24
3	Be 313.107†	-11309.3	-6435.2	1.1357 ug/L	1.1357 ppb	16:15:24
3	Cd 226.502†	456.5	646.9	-0.3646 ug/L	-0.3646 ppb	16:15:44
3	Co 228.616†	324.2	391.5	2.7626 ug/L	2.7626 ppb	16:15:44
3	Cr 267.716†	1084.9	978.6	11.653 ug/L	11.653 ppb	16:15:44
3	Cu 324.752†	8972.3	2046.7	9.5590 ug/L	9.5590 ppb	16:15:24
3	Mn 257.610†	1907947.6	1871753.8	1990.8 ug/L	1990.8 ppb	16:15:19
3	Mo 202.031†	414.3	388.2	29.728 ug/L	29.728 ppb	16:15:44
3	Ni 231.604†	765.8	665.5	15.288 ug/L	15.288 ppb	16:15:44
3	P 214.914†	1350.7	1083.4	549.13 ug/L	549.13 ppb	16:15:44
3	Pb 220.353†	425.4	485.4	50.115 ug/L	50.115 ppb	16:15:44
3	S 181.975 Axial†	777.4	713.4	941.22 ug/L	941.22 ppb	16:15:44
3	Sb 206.836†	46.9	8.7	-0.7136 ug/L	-0.7136 ppb	16:15:44
3	Se 196.026†	-394.7	-360.5	16.013 ug/L	16.013 ppb	16:15:44
3	Si 251.611†	338680.5	331866.4	9883.3 ug/L	9883.3 ppb	16:15:24
3	Sn 189.927†	8.5	-0.5	1.8732 ug/L	1.8732 ppb	16:15:44
3	Ti 334.940†	1130749.9	1110864.1	1754.0 ug/L	1754.0 ppb	16:15:19
3	Tl 190.801†	-140.7	-103.5	-4.0025 ug/L	-4.0025 ppb	16:15:44
3	U 409.014†	-11967.8	-9160.0	-272.29 ug/L	-272.29 ppb	16:15:19
3	V 292.402†	3632.7	4927.5	19.970 ug/L	19.970 ppb	16:15:44
3	Zn 213.857†	43846.5	42272.9	356.68 ug/L	356.68 ppb	16:15:24
3	SiO2†	346380.7	339379.8	21660 ug/L	21660 ppb	16:16:00

Mean Data: 241825013|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883844.7	101.84	%	0.255				0.25%
Sc Radial	5607.5	101	%	1.5				1.50%
Y 371.029	910088.9	124.76	%	0.390				0.31%
Y RADIAL	7536.4	124.8	%	1.67				1.33%
Ag 328.068†	-4473.9	2.5555	ug/L	0.04548	2.5555	ppb	0.04548	1.78%
Al 396.153Radial†	9909.8	6823.9	ug/L	18.54	6823.9	ppb	18.54	0.27%
As 188.979†	-5.1	23.662	ug/L	2.1821	23.662	ppb	2.1821	9.22%
B 249.677†	1029.9	12.517	ug/L	0.9260	12.517	ppb	0.9260	7.40%
Ba 233.527†	16494.6	125.95	ug/L	0.420	125.95	ppb	0.420	0.33%
Be 313.107†	-6383.0	1.1565	ug/L	0.04127	1.1565	ppb	0.04127	3.57%
Ca 317.933Radial†	6579.1	9602.2	ug/L	59.93	9602.2	ppb	59.93	0.62%
Cd 226.502†	662.0	-0.2184	ug/L	0.14991	-0.2184	ppb	0.14991	68.63%
Co 228.616†	381.8	2.5753	ug/L	0.19350	2.5753	ppb	0.19350	7.51%
Cr 267.716†	987.6	11.749	ug/L	0.1043	11.749	ppb	0.1043	0.89%
Cu 324.752†	2076.2	9.6499	ug/L	0.12777	9.6499	ppb	0.12777	1.32%
Fe 238.204 Radial†	7919.8	70953	ug/L	204.4	70953	ppb	204.4	0.29%
K 766.490 Radial†	11192.3	1854.2	ug/L	30.23	1854.2	ppb	30.23	1.63%

Mg 279.077 IEC†	71.3	2337.2	ug/L	64.29	2337.2	ppb	64.29	2.75%
Mn 257.610†	1873708.0	1992.8	ug/L	3.85	1992.8	ppb	3.85	0.19%
Mo 202.031†	392.3	29.995	ug/L	0.3779	29.995	ppb	0.3779	1.26%
Na 589.592 Radial†	7995.3	2423.0	ug/L	9.82	2423.0	ppb	9.82	0.41%
Ni 231.604†	647.9	14.882	ug/L	0.3530	14.882	ppb	0.3530	2.37%
P 214.914†	1072.5	542.94	ug/L	5.585	542.94	ppb	5.585	1.03%
Pb 220.353†	485.8	50.150	ug/L	0.0297	50.150	ppb	0.0297	0.06%
S 181.975 Axial†	710.6	937.43	ug/L	5.559	937.43	ppb	5.559	0.59%
Sb 206.836†	4.6	-2.0028	ug/L	1.71984	-2.0028	ppb	1.71984	85.87%
Se 196.026†	-361.6	15.741	ug/L	2.2750	15.741	ppb	2.2750	14.45%
Si 251.611†	330708.7	9848.8	ug/L	36.60	9848.8	ppb	36.60	0.37%
Sn 189.927†	-3.4	1.3960	ug/L	1.17770	1.3960	ppb	1.17770	84.36%
Sr 421.552†	6624.1	39.863	ug/L	0.0729	39.863	ppb	0.0729	0.18%
Ti 334.940†	1111530.7	1755.1	ug/L	1.48	1755.1	ppb	1.48	0.08%
Tl 190.801†	-98.9	-2.6941	ug/L	1.44978	-2.6941	ppb	1.44978	53.81%
U 409.014†	-9203.3	-273.55	ug/L	1.774	-273.55	ppb	1.774	0.65%
V 292.402†	4901.1	19.778	ug/L	0.2081	19.778	ppb	0.2081	1.05%
Zn 213.857†	42126.5	355.41	ug/L	1.186	355.41	ppb	1.186	0.33%
SiO2†	340512.6	21732	ug/L	65.7	21732	ppb	65.7	0.30%

Sequence No.: 26
Sample ID: 241825014|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 12/11/2009 16:18:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825014|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5579.5	5579.5	100	%			16:20:03
1	Y RADIAL	7710.1	7710.1	127.7	%			16:20:03
1	Al 396.153Radial†	9654.5	9683.3	6668.4	ug/L	6668.4	ppb	16:20:03
1	Ca 317.933Radial†	2701.9	2683.2	3916.1	ug/L	3916.1	ppb	16:20:23
1	Fe 238.204 Radial†	7655.5	7640.4	68451	ug/L	68451	ppb	16:20:03
1	K 766.490 Radial†	14023.9	11274.9	1861.5	ug/L	1861.5	ppb	16:20:03
1	Mg 279.077 IEC†	63.9	61.9	2023.4	ug/L	2023.4	ppb	16:20:23
1	Na 589.592 Radial†	8043.5	9592.2	2907.0	ug/L	2907.0	ppb	16:20:03
1	Sr 421.552†	4154.8	4152.2	25.007	ug/L	25.007	ppb	16:20:03
1	Sc 361.383	886341.9	886341.9	102.12	%			16:21:20
1	Y 371.029	938630.3	938630.3	128.68	%			16:21:20
1	Ag 328.068†	-4076.2	-4265.5	2.7685	ug/L	2.7685	ppb	16:21:25
1	As 188.979†	-42.4	-10.2	17.224	ug/L	17.224	ppb	16:21:45
1	B 249.677†	442.5	926.5	10.648	ug/L	10.648	ppb	16:21:25
1	Ba 233.527†	16472.2	16140.8	123.21	ug/L	123.21	ppb	16:21:25
1	Be 313.107†	-8195.8	-3362.8	1.2794	ug/L	1.2794	ppb	16:21:25
1	Cd 226.502†	449.8	639.4	-0.2041	ug/L	-0.2041	ppb	16:21:45
1	Co 228.616†	276.3	344.0	2.9065	ug/L	2.9065	ppb	16:21:45
1	Cr 267.716†	1223.5	1112.0	13.000	ug/L	13.000	ppb	16:21:45
1	Cu 324.752†	11057.6	4069.9	15.313	ug/L	15.313	ppb	16:21:25
1	Mn 257.610†	2442878.4	2391573.5	2541.5	ug/L	2541.5	ppb	16:21:20
1	Mo 202.031†	236.5	213.2	18.420	ug/L	18.420	ppb	16:21:45
1	Ni 231.604†	662.8	563.1	12.935	ug/L	12.935	ppb	16:21:45
1	P 214.914†	1159.9	893.8	444.24	ug/L	444.24	ppb	16:21:45
1	Pb 220.353†	460.4	518.8	53.980	ug/L	53.980	ppb	16:21:45
1	S 181.975 Axial†	815.7	749.3	988.71	ug/L	988.71	ppb	16:21:45
1	Sb 206.836†	41.7	3.4	-1.3134	ug/L	-1.3134	ppb	16:21:45
1	Se 196.026†	-374.6	-340.0	20.128	ug/L	20.128	ppb	16:21:45
1	Si 251.611†	348323.5	340600.5	10144	ug/L	10144	ppb	16:21:25
1	Sn 189.927†	25.8	16.5	3.9741	ug/L	3.9741	ppb	16:21:45
1	Ti 334.940†	817340.9	801605.5	1265.6	ug/L	1265.6	ppb	16:21:20
1	Tl 190.801†	-147.8	-110.2	-6.3964	ug/L	-6.3964	ppb	16:21:45
1	U 409.014†	-11958.4	-9125.8	-271.01	ug/L	-271.01	ppb	16:21:20
1	V 292.402†	3026.6	4326.4	16.707	ug/L	16.707	ppb	16:21:45
1	Zn 213.857†	48311.5	46553.3	393.75	ug/L	393.75	ppb	16:21:25
1	SiO2†	352580.1	344725.9	22001	ug/L	22001	ppb	16:22:53
2	Sc Radial	5581.8	5581.8	100	%			16:20:28
2	Y RADIAL	7690.0	7690.0	127.3	%			16:20:28
2	Al 396.153Radial†	9656.5	9681.4	6667.1	ug/L	6667.1	ppb	16:20:28
2	Ca 317.933Radial†	2712.6	2692.7	3930.0	ug/L	3930.0	ppb	16:20:48
2	Fe 238.204 Radial†	7643.3	7625.2	68314	ug/L	68314	ppb	16:20:28
2	K 766.490 Radial†	14016.9	11262.2	1859.4	ug/L	1859.4	ppb	16:20:28
2	Mg 279.077 IEC†	65.3	63.3	2070.5	ug/L	2070.5	ppb	16:20:48
2	Na 589.592 Radial†	7969.8	9515.3	2883.7	ug/L	2883.7	ppb	16:20:28
2	Sr 421.552†	4150.5	4146.3	24.971	ug/L	24.971	ppb	16:20:28
2	Sc 361.383	884579.8	884579.8	101.92	%			16:21:51
2	Y 371.029	938435.6	938435.6	128.65	%			16:21:51
2	Ag 328.068†	-4127.9	-4324.2	2.4587	ug/L	2.4587	ppb	16:21:56
2	As 188.979†	-36.1	-4.1	19.527	ug/L	19.527	ppb	16:22:16
2	B 249.677†	482.6	966.7	11.523	ug/L	11.523	ppb	16:21:56
2	Ba 233.527†	16161.6	15868.2	121.17	ug/L	121.17	ppb	16:21:56
2	Be 313.107†	-8275.0	-3456.5	1.2423	ug/L	1.2423	ppb	16:21:56
2	Cd 226.502†	440.5	631.2	-0.2755	ug/L	-0.2755	ppb	16:22:16
2	Co 228.616†	255.2	323.8	2.5336	ug/L	2.5336	ppb	16:22:16
2	Cr 267.716†	1238.1	1128.7	13.171	ug/L	13.171	ppb	16:22:16
2	Cu 324.752†	10963.3	3998.9	15.100	ug/L	15.100	ppb	16:21:56
2	Mn 257.610†	2435785.4	2389379.2	2539.1	ug/L	2539.1	ppb	16:21:51
2	Mo 202.031†	249.6	226.5	19.258	ug/L	19.258	ppb	16:22:16
2	Ni 231.604†	668.8	570.2	13.100	ug/L	13.100	ppb	16:22:16

2	P 214.914†	1158.0	894.2	444.61	ug/L	444.61 ppb	16:22:16
2	Pb 220.353†	486.6	545.5	56.976	ug/L	56.976 ppb	16:22:16
2	S 181.975 Axial†	807.3	742.7	979.90	ug/L	979.90 ppb	16:22:16
2	Sb 206.836†	45.0	6.8	-0.2277	ug/L	-0.2277 ppb	16:22:16
2	Se 196.026†	-386.0	-351.9	12.982	ug/L	12.982 ppb	16:22:16
2	Si 251.611†	343000.5	336057.2	10008	ug/L	10008 ppb	16:21:56
2	Sn 189.927†	27.3	18.0	4.2190	ug/L	4.2190 ppb	16:22:16
2	Ti 334.940†	814566.9	800478.1	1263.8	ug/L	1263.8 ppb	16:21:51
2	Tl 190.801†	-138.3	-101.1	-3.8625	ug/L	-3.8625 ppb	16:22:16
2	U 409.014†	-11913.4	-9105.0	-270.39	ug/L	-270.39 ppb	16:21:51
2	V 292.402†	3026.4	4332.1	16.783	ug/L	16.783 ppb	16:22:16
2	Zn 213.857†	47398.0	45751.3	386.86	ug/L	386.86 ppb	16:21:56
2	SiO2†	353772.4	346583.5	22120	ug/L	22120 ppb	16:22:58
3	Sc Radial	5526.9	5526.9	99.1	%		16:20:53
3	Y RADIAL	7647.0	7647.0	126.6	%		16:20:53
3	Al 396.153Radial†	9568.7	9688.6	6672.0	ug/L	6672.0 ppb	16:20:53
3	Ca 317.933Radial†	2720.8	2728.0	3981.5	ug/L	3981.5 ppb	16:21:13
3	Fe 238.204 Radial†	7617.1	7674.6	68757	ug/L	68757 ppb	16:20:53
3	K 766.490 Radial†	13935.1	11318.7	1868.8	ug/L	1868.8 ppb	16:20:53
3	Mg 279.077 IEC†	64.0	62.6	2046.9	ug/L	2046.9 ppb	16:21:13
3	Na 589.592 Radial†	7951.3	9575.7	2902.0	ug/L	2902.0 ppb	16:20:53
3	Sr 421.552†	4117.6	4154.2	25.018	ug/L	25.018 ppb	16:20:53
3	Sc 361.383	886605.8	886605.8	102.15	%		16:22:22
3	Y 371.029	938233.7	938233.7	128.62	%		16:22:22
3	Ag 328.068†	-3988.1	-4178.1	3.2582	ug/L	3.2582 ppb	16:22:27
3	As 188.979†	-38.1	-6.0	18.868	ug/L	18.868 ppb	16:22:47
3	B 249.677†	461.7	945.2	11.005	ug/L	11.005 ppb	16:22:27
3	Ba 233.527†	16296.2	15963.8	121.90	ug/L	121.90 ppb	16:22:27
3	Be 313.107†	-8259.4	-3422.6	1.2572	ug/L	1.2572 ppb	16:22:27
3	Cd 226.502†	432.6	622.4	-0.4114	ug/L	-0.4114 ppb	16:22:47
3	Co 228.616†	271.7	339.4	2.8179	ug/L	2.8179 ppb	16:22:47
3	Cr 267.716†	1216.0	1104.4	12.924	ug/L	12.924 ppb	16:22:47
3	Cu 324.752†	11051.9	4061.1	15.303	ug/L	15.303 ppb	16:22:27
3	Mn 257.610†	2447579.9	2395463.8	2545.6	ug/L	2545.6 ppb	16:22:22
3	Mo 202.031†	248.9	225.2	19.209	ug/L	19.209 ppb	16:22:47
3	Ni 231.604†	628.4	529.2	12.156	ug/L	12.156 ppb	16:22:47
3	P 214.914†	1169.8	903.2	449.21	ug/L	449.21 ppb	16:22:47
3	Pb 220.353†	520.1	577.1	60.482	ug/L	60.482 ppb	16:22:47
3	S 181.975 Axial†	813.1	746.6	985.07	ug/L	985.07 ppb	16:22:47
3	Sb 206.836†	25.0	-12.9	-6.4665	ug/L	-6.4665 ppb	16:22:47
3	Se 196.026†	-385.8	-350.9	14.940	ug/L	14.940 ppb	16:22:47
3	Si 251.611†	346980.0	339183.8	10101	ug/L	10101 ppb	16:22:27
3	Sn 189.927†	15.2	6.1	2.3118	ug/L	2.3118 ppb	16:22:47
3	Ti 334.940†	817351.8	801378.0	1265.2	ug/L	1265.2 ppb	16:22:22
3	Tl 190.801†	-145.1	-107.5	-5.6147	ug/L	-5.6147 ppb	16:22:47
3	U 409.014†	-11892.7	-9058.0	-269.10	ug/L	-269.10 ppb	16:22:22
3	V 292.402†	3017.5	4316.6	16.611	ug/L	16.611 ppb	16:22:47
3	Zn 213.857†	48017.0	46250.9	391.12	ug/L	391.12 ppb	16:22:27
3	SiO2†	355095.1	347085.1	22152	ug/L	22152 ppb	16:23:03

Mean Data: 241825014|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885842.5	102.07	%	0.127				0.12%
Sc Radial	5562.7	99.8	%	0.56				0.56%
Y 371.029	938433.2	128.65	%	0.027				0.02%
Y RADIAL	7682.3	127.2	%	0.53				0.42%
Ag 328.068†	-4255.9	2.8285	ug/L	0.40311	2.8285	ppb	0.40311	14.25%
Al 396.153Radial†	9684.4	6669.2	ug/L	2.57	6669.2	ppb	2.57	0.04%
As 188.979†	-6.8	18.540	ug/L	1.1862	18.540	ppb	1.1862	6.40%
B 249.677†	946.1	11.059	ug/L	0.4399	11.059	ppb	0.4399	3.98%
Ba 233.527†	15990.9	122.09	ug/L	1.035	122.09	ppb	1.035	0.85%
Be 313.107†	-3414.0	1.2597	ug/L	0.01868	1.2597	ppb	0.01868	1.48%
Ca 317.933Radial†	2701.3	3942.6	ug/L	34.44	3942.6	ppb	34.44	0.87%
Cd 226.502†	631.0	-0.2970	ug/L	0.10533	-0.2970	ppb	0.10533	35.46%
Co 228.616†	335.7	2.7527	ug/L	0.19484	2.7527	ppb	0.19484	7.08%
Cr 267.716†	1115.0	13.032	ug/L	0.1268	13.032	ppb	0.1268	0.97%
Cu 324.752†	4043.3	15.239	ug/L	0.1203	15.239	ppb	0.1203	0.79%
Fe 238.204 Radial†	7646.7	68507	ug/L	226.8	68507	ppb	226.8	0.33%
K 766.490 Radial†	11285.3	1863.2	ug/L	4.94	1863.2	ppb	4.94	0.27%

Mg 279.077 IEC†	62.6	2046.9	ug/L	23.58	2046.9	ppb	23.58	1.15%
Mn 257.610†	2392138.8	2542.1	ug/L	3.29	2542.1	ppb	3.29	0.13%
Mo 202.031†	221.6	18.962	ug/L	0.4703	18.962	ppb	0.4703	2.48%
Na 589.592 Radial†	9561.1	2897.6	ug/L	12.27	2897.6	ppb	12.27	0.42%
Ni 231.604†	554.2	12.730	ug/L	0.5041	12.730	ppb	0.5041	3.96%
P 214.914†	897.0	446.02	ug/L	2.770	446.02	ppb	2.770	0.62%
Pb 220.353†	547.1	57.146	ug/L	3.2542	57.146	ppb	3.2542	5.69%
S 181.975 Axial†	746.2	984.56	ug/L	4.426	984.56	ppb	4.426	0.45%
Sb 206.836†	-0.9	-2.6692	ug/L	3.33303	-2.6692	ppb	3.33303	124.87%
Se 196.026†	-347.6	16.016	ug/L	3.6927	16.016	ppb	3.6927	23.06%
Si 251.611†	338613.8	10084	ug/L	69.2	10084	ppb	69.2	0.69%
Sn 189.927†	13.5	3.5016	ug/L	1.03768	3.5016	ppb	1.03768	29.63%
Sr 421.552†	4150.9	24.999	ug/L	0.0248	24.999	ppb	0.0248	0.10%
Ti 334.940†	801153.9	1264.9	ug/L	0.94	1264.9	ppb	0.94	0.07%
Tl 190.801†	-106.3	-5.2912	ug/L	1.29754	-5.2912	ppb	1.29754	24.52%
U 409.014†	-9096.3	-270.17	ug/L	0.975	-270.17	ppb	0.975	0.36%
V 292.402†	4325.0	16.700	ug/L	0.0858	16.700	ppb	0.0858	0.51%
Zn 213.857†	46185.2	390.58	ug/L	3.477	390.58	ppb	3.477	0.89%
SiO2†	346131.5	22091	ug/L	79.3	22091	ppb	79.3	0.36%

Sequence No.: 27
Sample ID: 241825015|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 12/11/2009 16:25:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825015|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5562.2	5562.2	99.8	%			16:27:27
1	Y RADIAL	7315.8	7315.8	121.1	%			16:27:27
1	Al 396.153Radial†	85768.9	86013.4	59238	ug/L	59238	ppb	16:27:07
1	Ca 317.933Radial†	12250.0	12263.0	17898	ug/L	17898	ppb	16:27:07
1	Fe 238.204 Radial†	11799.2	11818.0	105880	ug/L	105880	ppb	16:27:07
1	K 766.490 Radial†	51910.4	49297.5	8245.4	ug/L	8245.4	ppb	16:27:07
1	Mg 279.077 IEC†	376.0	375.0	12520	ug/L	12520	ppb	16:27:27
1	Na 589.592 Radial†	5903.0	7471.5	2264.3	ug/L	2264.3	ppb	16:27:07
1	Sr 421.552†	26289.3	26353.6	158.78	ug/L	158.78	ppb	16:27:07
1	Sc 361.383	887442.5	887442.5	102.25	%			16:28:25
1	Y 371.029	899851.5	899851.5	123.36	%			16:28:25
1	Ag 328.068†	-6326.2	-6461.0	4.9316	ug/L	4.9316	ppb	16:28:30
1	As 188.979†	-51.9	-19.5	34.256	ug/L	34.256	ppb	16:28:50
1	B 249.677†	1306.8	1771.3	23.629	ug/L	23.629	ppb	16:28:30
1	Ba 233.527†	96677.0	94560.9	710.78	ug/L	710.78	ppb	16:28:30
1	Be 313.107†	-5998.2	-1203.6	5.5300	ug/L	5.5300	ppb	16:28:30
1	Cd 226.502†	792.4	973.9	-0.4571	ug/L	-0.4571	ppb	16:28:50
1	Co 228.616†	1475.4	1516.4	20.983	ug/L	20.983	ppb	16:28:50
1	Cr 267.716†	4276.4	4096.3	45.082	ug/L	45.082	ppb	16:28:50
1	Cu 324.752†	18976.6	11801.2	39.679	ug/L	39.679	ppb	16:28:30
1	Mn 257.610†	2605397.9	2547550.5	2710.3	ug/L	2710.3	ppb	16:28:25
1	Mo 202.031†	289.1	264.3	24.328	ug/L	24.328	ppb	16:28:50
1	Ni 231.604†	2006.8	1876.7	43.107	ug/L	43.107	ppb	16:28:50
1	P 214.914†	1527.9	1252.3	628.28	ug/L	628.28	ppb	16:28:50
1	Pb 220.353†	633.6	687.7	81.599	ug/L	81.599	ppb	16:28:50
1	S 181.975 Axial†	906.0	836.7	1093.7	ug/L	1093.7	ppb	16:28:50
1	Sb 206.836†	74.8	35.8	2.5690	ug/L	2.5690	ppb	16:28:50
1	Se 196.026†	-558.1	-519.0	42.294	ug/L	42.294	ppb	16:28:50
1	Si 251.611†	847335.6	828209.7	24664	ug/L	24664	ppb	16:28:25
1	Sn 189.927†	-51.5	-59.2	-6.2100	ug/L	-6.2100	ppb	16:28:50
1	Ti 334.940†	1963734.9	1921782.6	3034.4	ug/L	3034.4	ppb	16:28:25
1	Tl 190.801†	-200.8	-161.8	-5.2907	ug/L	-5.2907	ppb	16:28:50
1	U 409.014†	-11872.6	-9027.4	-272.95	ug/L	-272.95	ppb	16:28:25
1	V 292.402†	18336.0	19295.3	108.94	ug/L	108.94	ppb	16:28:30
1	Zn 213.857†	41569.4	39900.9	332.37	ug/L	332.37	ppb	16:28:30
1	SiO2†	849272.0	830060.7	52974	ug/L	52974	ppb	16:29:58
2	Sc Radial	5616.4	5616.4	101	%			16:27:52
2	Y RADIAL	7343.1	7343.1	121.6	%			16:27:52
2	Al 396.153Radial†	84741.1	84163.2	57963	ug/L	57963	ppb	16:27:32
2	Ca 317.933Radial†	12104.1	11999.6	17513	ug/L	17513	ppb	16:27:32
2	Fe 238.204 Radial†	11678.3	11583.9	103780	ug/L	103780	ppb	16:27:32
2	K 766.490 Radial†	51482.1	48370.0	8089.6	ug/L	8089.6	ppb	16:27:32
2	Mg 279.077 IEC†	375.6	370.9	12385	ug/L	12385	ppb	16:27:52
2	Na 589.592 Radial†	5966.6	7477.5	2266.1	ug/L	2266.1	ppb	16:27:32
2	Sr 421.552†	25993.1	25805.2	155.48	ug/L	155.48	ppb	16:27:32
2	Sc 361.383	889373.4	889373.4	102.47	%			16:28:56
2	Y 371.029	902645.5	902645.5	123.74	%			16:28:56
2	Ag 328.068†	-6290.8	-6413.1	4.4915	ug/L	4.4915	ppb	16:29:01
2	As 188.979†	-58.6	-25.9	31.458	ug/L	31.458	ppb	16:29:21
2	B 249.677†	1388.4	1848.1	25.545	ug/L	25.545	ppb	16:29:01
2	Ba 233.527†	97595.4	95251.8	715.86	ug/L	715.86	ppb	16:29:01
2	Be 313.107†	-5989.4	-1182.3	5.5416	ug/L	5.5416	ppb	16:29:01
2	Cd 226.502†	789.0	968.9	-0.2985	ug/L	-0.2985	ppb	16:29:21
2	Co 228.616†	1487.9	1525.5	21.182	ug/L	21.182	ppb	16:29:21
2	Cr 267.716†	4317.5	4127.3	45.371	ug/L	45.371	ppb	16:29:21
2	Cu 324.752†	19145.2	11925.4	39.933	ug/L	39.933	ppb	16:29:01
2	Mn 257.610†	2612908.3	2549347.7	2712.0	ug/L	2712.0	ppb	16:28:56
2	Mo 202.031†	286.5	261.1	23.979	ug/L	23.979	ppb	16:29:21
2	Ni 231.604†	2017.4	1882.8	43.245	ug/L	43.245	ppb	16:29:21

2	P 214.914†	1544.9	1265.6	636.93 ug/L	636.93 ppb	16:29:21
2	Pb 220.353†	629.9	682.7	80.922 ug/L	80.922 ppb	16:29:21
2	S 181.975 Axial†	914.0	842.5	1101.7 ug/L	1101.7 ppb	16:29:21
2	Sb 206.836†	57.7	19.0	-2.7609 ug/L	-2.7609 ppb	16:29:21
2	Se 196.026†	-560.3	-520.0	35.097 ug/L	35.097 ppb	16:29:21
2	Si 251.611†	850683.5	829677.7	24708 ug/L	24708 ppb	16:28:56
2	Sn 189.927†	-53.7	-61.2	-6.6147 ug/L	-6.6147 ppb	16:29:21
2	Ti 334.940†	1969288.5	1923032.5	3036.4 ug/L	3036.4 ppb	16:28:56
2	Tl 190.801†	-193.0	-153.7	-3.0388 ug/L	-3.0388 ppb	16:29:21
2	U 409.014†	-11980.7	-9107.7	-274.99 ug/L	-274.99 ppb	16:28:56
2	V 292.402†	18495.2	19411.7	110.02 ug/L	110.02 ppb	16:29:01
2	Zn 213.857†	41886.2	40121.8	334.48 ug/L	334.48 ppb	16:29:01
2	SiO2†	840482.5	819680.1	52312 ug/L	52312 ppb	16:30:04
3	Sc Radial	5518.5	5518.5	99.0 %		16:28:17
3	Y RADIAL	7246.4	7246.4	120.0 %		16:28:17
3	Al 396.153Radial†	84958.6	85875.1	59142 ug/L	59142 ppb	16:27:57
3	Ca 317.933Radial†	12127.9	12236.8	17860 ug/L	17860 ppb	16:27:57
3	Fe 238.204 Radial†	11704.5	11816.0	105860 ug/L	105860 ppb	16:27:57
3	K 766.490 Radial†	51538.0	49333.0	8251.3 ug/L	8251.3 ppb	16:27:57
3	Mg 279.077 IEC†	372.9	374.8	12515 ug/L	12515 ppb	16:28:17
3	Na 589.592 Radial†	5896.2	7511.5	2276.4 ug/L	2276.4 ppb	16:27:57
3	Sr 421.552†	26131.7	26403.0	159.08 ug/L	159.08 ppb	16:27:57
3	Sc 361.383	883241.1	883241.1	101.77 %		16:29:27
3	Y 371.029	896149.5	896149.5	122.85 %		16:29:27
3	Ag 328.068†	-6309.1	-6473.6	4.8794 ug/L	4.8794 ppb	16:29:32
3	As 188.979†	-54.4	-22.2	33.232 ug/L	33.232 ppb	16:29:52
3	B 249.677†	1274.2	1745.3	23.079 ug/L	23.079 ppb	16:29:32
3	Ba 233.527†	97819.0	96132.9	722.52 ug/L	722.52 ppb	16:29:32
3	Be 313.107†	-5794.5	-1031.4	5.5969 ug/L	5.5969 ppb	16:29:32
3	Cd 226.502†	801.2	986.3	-0.3270 ug/L	-0.3270 ppb	16:29:52
3	Co 228.616†	1457.7	1505.8	20.785 ug/L	20.785 ppb	16:29:52
3	Cr 267.716†	4309.6	4148.8	45.635 ug/L	45.635 ppb	16:29:52
3	Cu 324.752†	19184.4	12093.7	40.527 ug/L	40.527 ppb	16:29:32
3	Mn 257.610†	2596898.5	2551319.2	2714.3 ug/L	2714.3 ppb	16:29:27
3	Mo 202.031†	294.0	270.5	24.721 ug/L	24.721 ppb	16:29:52
3	Ni 231.604†	2001.9	1881.2	43.210 ug/L	43.210 ppb	16:29:52
3	P 214.914†	1541.9	1273.1	639.72 ug/L	639.72 ppb	16:29:52
3	Pb 220.353†	623.3	680.4	80.769 ug/L	80.769 ppb	16:29:52
3	S 181.975 Axial†	901.2	836.2	1093.1 ug/L	1093.1 ppb	16:29:52
3	Sb 206.836†	61.2	22.8	-1.5687 ug/L	-1.5687 ppb	16:29:52
3	Se 196.026†	-557.7	-521.2	40.983 ug/L	40.983 ppb	16:29:52
3	Si 251.611†	844914.3	829772.3	24711 ug/L	24711 ppb	16:29:27
3	Sn 189.927†	-60.6	-68.4	-7.6970 ug/L	-7.6970 ppb	16:29:52
3	Ti 334.940†	1956088.5	1923404.4	3037.0 ug/L	3037.0 ppb	16:29:27
3	Tl 190.801†	-196.8	-158.8	-4.4207 ug/L	-4.4207 ppb	16:29:52
3	U 409.014†	-11932.3	-9141.2	-276.22 ug/L	-276.22 ppb	16:29:27
3	V 292.402†	18532.0	19573.2	110.79 ug/L	110.79 ppb	16:29:32
3	Zn 213.857†	41995.3	40512.8	337.64 ug/L	337.64 ppb	16:29:32
3	SiO2†	845151.7	829962.9	52968 ug/L	52968 ppb	16:30:10

Mean Data: 241825015|928610|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	886685.6	102.16	%	0.361				0.35%
Sc Radial	5565.7	99.8	%	0.88				0.88%
Y 371.029	899548.8	123.32	%	0.447				0.36%
Y RADIAL	7301.8	120.9	%	0.83				0.68%
Ag 328.068†	-6449.3	4.7675	ug/L	0.24047	4.7675	ppb	0.24047	5.04%
Al 396.153Radial†	85350.5	58781	ug/L	709.8	58781	ppb	709.8	1.21%
As 188.979†	-22.5	32.982	ug/L	1.4155	32.982	ppb	1.4155	4.29%
B 249.677†	1788.2	24.084	ug/L	1.2942	24.084	ppb	1.2942	5.37%
Ba 233.527†	95315.2	716.39	ug/L	5.892	716.39	ppb	5.892	0.82%
Be 313.107†	-1139.1	5.5562	ug/L	0.03575	5.5562	ppb	0.03575	0.64%
Ca 317.933Radial†	12166.5	17757	ug/L	211.8	17757	ppb	211.8	1.19%
Cd 226.502†	976.4	-0.3609	ug/L	0.08457	-0.3609	ppb	0.08457	23.43%
Co 228.616†	1515.9	20.983	ug/L	0.1984	20.983	ppb	0.1984	0.95%
Cr 267.716†	4124.1	45.362	ug/L	0.2766	45.362	ppb	0.2766	0.61%
Cu 324.752†	11940.1	40.046	ug/L	0.4356	40.046	ppb	0.4356	1.09%
Fe 238.204 Radial†	11739.3	105170	ug/L	1205.9	105170	ppb	1205.9	1.15%
K 766.490 Radial†	49000.1	8195.4	ug/L	91.71	8195.4	ppb	91.71	1.12%

Mg 279.077 IEC†	373.6	12474	ug/L	76.5	12474	ppb	76.5	0.61%
Mn 257.610†	2549405.8	2712.2	ug/L	2.00	2712.2	ppb	2.00	0.07%
Mo 202.031†	265.3	24.343	ug/L	0.3711	24.343	ppb	0.3711	1.52%
Na 589.592 Radial†	7486.8	2269.0	ug/L	6.54	2269.0	ppb	6.54	0.29%
Ni 231.604†	1880.2	43.187	ug/L	0.0718	43.187	ppb	0.0718	0.17%
P 214.914†	1263.7	634.98	ug/L	5.969	634.98	ppb	5.969	0.94%
Pb 220.353†	683.6	81.097	ug/L	0.4420	81.097	ppb	0.4420	0.54%
S 181.975 Axial†	838.4	1096.2	ug/L	4.79	1096.2	ppb	4.79	0.44%
Sb 206.836†	25.8	-0.5869	ug/L	2.79728	-0.5869	ppb	2.79728	476.65%
Se 196.026†	-520.1	39.458	ug/L	3.8333	39.458	ppb	3.8333	9.71%
Si 251.611†	829219.9	24695	ug/L	26.1	24695	ppb	26.1	0.11%
Sn 189.927†	-62.9	-6.8406	ug/L	0.76881	-6.8406	ppb	0.76881	11.24%
Sr 421.552†	26187.3	157.78	ug/L	1.999	157.78	ppb	1.999	1.27%
Ti 334.940†	1922739.8	3035.9	ug/L	1.34	3035.9	ppb	1.34	0.04%
Tl 190.801†	-158.1	-4.2501	ug/L	1.13558	-4.2501	ppb	1.13558	26.72%
U 409.014†	-9092.1	-274.72	ug/L	1.653	-274.72	ppb	1.653	0.60%
V 292.402†	19426.7	109.92	ug/L	0.928	109.92	ppb	0.928	0.84%
Zn 213.857†	40178.5	334.83	ug/L	2.650	334.83	ppb	2.650	0.79%
SiO2†	826567.9	52752	ug/L	380.7	52752	ppb	380.7	0.72%

Sequence No.: 28
Sample ID: 241825016|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 12/11/2009 16:32:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825016|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5574.6	5574.6	100.0	%			16:34:34
1	Y RADIAL	6858.8	6858.8	113.6	%			16:34:34
1	Al 396.153Radial†	316111.1	316214.5	217780	ug/L	217780	ppb	16:34:14
1	Ca 317.933Radial†	21790.0	21777.8	31785	ug/L	31785	ppb	16:34:14
1	Fe 238.204 Radial†	17882.4	17876.3	160160	ug/L	160160	ppb	16:34:14
1	K 766.490 Radial†	93030.6	90311.1	15125	ug/L	15125	ppb	16:34:14
1	Mg 279.077 IEC†	765.3	763.5	25538	ug/L	25538	ppb	16:34:34
1	Na 589.592 Radial†	6390.8	7946.3	2408.2	ug/L	2408.2	ppb	16:34:14
1	Sr 421.552†	61772.0	61785.6	372.35	ug/L	372.35	ppb	16:34:14
1	Sc 361.383	853741.8	853741.8	98.367	%			16:35:37
1	Y 371.029	820082.4	820082.4	112.42	%			16:35:32
1	Ag 328.068†	-10120.8	-10562.8	4.1236	ug/L	4.1236	ppb	16:35:37
1	As 188.979†	-113.6	-84.2	51.896	ug/L	51.896	ppb	16:35:57
1	B 249.677†	2182.5	2712.0	36.329	ug/L	36.329	ppb	16:35:37
1	Ba 233.527†	322751.4	328120.9	2458.4	ug/L	2458.4	ppb	16:35:37
1	Be 313.107†	-10983.1	-6502.8	11.638	ug/L	11.638	ppb	16:35:37
1	Cd 226.502†	1410.1	1632.5	0.9829	ug/L	0.9829	ppb	16:35:57
1	Co 228.616†	4441.8	4589.0	70.185	ug/L	70.185	ppb	16:35:57
1	Cr 267.716†	11221.7	11322.0	121.99	ug/L	121.99	ppb	16:35:57
1	Cu 324.752†	32050.9	25825.2	83.182	ug/L	83.182	ppb	16:35:37
1	Mn 257.610†	4218035.7	4287544.3	4559.6	ug/L	4559.6	ppb	16:35:32
1	Mo 202.031†	-58.3	-77.7	6.4186	ug/L	6.4186	ppb	16:35:57
1	Ni 231.604†	4340.4	4326.5	99.363	ug/L	99.363	ppb	16:35:57
1	P 214.914†	4132.9	3959.5	2143.1	ug/L	2143.1	ppb	16:35:57
1	Pb 220.353†	1015.2	1100.1	158.80	ug/L	158.80	ppb	16:35:57
1	S 181.975 Axial†	503.3	462.3	567.93	ug/L	567.93	ppb	16:35:57
1	Sb 206.836†	120.4	85.0	1.3269	ug/L	1.3269	ppb	16:35:57
1	Se 196.026†	-907.9	-896.1	20.507	ug/L	20.507	ppb	16:35:57
1	Si 251.611†	970823.0	986459.0	29376	ug/L	29376	ppb	16:35:32
1	Sn 189.927†	-143.9	-155.1	-19.383	ug/L	-19.383	ppb	16:35:57
1	Ti 334.940†	4429202.2	4503993.1	7110.9	ug/L	7110.9	ppb	16:35:32
1	Tl 190.801†	-312.6	-283.3	6.2131	ug/L	6.2131	ppb	16:35:57
1	U 409.014†	-10486.9	-8077.0	-252.60	ug/L	-252.60	ppb	16:35:37
1	V 292.402†	44004.2	46097.5	274.54	ug/L	274.54	ppb	16:35:37
1	Zn 213.857†	40159.2	40072.1	327.81	ug/L	327.81	ppb	16:35:37
1	SiO2†	961330.7	976766.4	62334	ug/L	62334	ppb	16:37:07
2	Sc Radial	5609.7	5609.7	101	%			16:34:59
2	Y RADIAL	6904.1	6904.1	114.3	%			16:34:59
2	Al 396.153Radial†	311830.3	309982.1	213490	ug/L	213490	ppb	16:34:39
2	Ca 317.933Radial†	21563.9	21416.8	31258	ug/L	31258	ppb	16:34:39
2	Fe 238.204 Radial†	17648.3	17531.8	157070	ug/L	157070	ppb	16:34:39
2	K 766.490 Radial†	92017.2	88721.9	14857	ug/L	14857	ppb	16:34:39
2	Mg 279.077 IEC†	770.0	763.4	25537	ug/L	25537	ppb	16:34:59
2	Na 589.592 Radial†	6334.1	7850.0	2379.0	ug/L	2379.0	ppb	16:34:39
2	Sr 421.552†	60957.1	60589.2	365.14	ug/L	365.14	ppb	16:34:39
2	Sc 361.383	854044.5	854044.5	98.402	%			16:36:09
2	Y 371.029	824384.3	824384.3	113.01	%			16:36:04
2	Ag 328.068†	-10221.1	-10661.2	2.7041	ug/L	2.7041	ppb	16:36:09
2	As 188.979†	-115.8	-86.4	51.054	ug/L	51.054	ppb	16:36:29
2	B 249.677†	2290.8	2821.2	39.068	ug/L	39.068	ppb	16:36:09
2	Ba 233.527†	324614.0	329897.4	2471.5	ug/L	2471.5	ppb	16:36:09
2	Be 313.107†	-10742.6	-6254.4	11.844	ug/L	11.844	ppb	16:36:09
2	Cd 226.502†	1394.0	1615.6	1.1162	ug/L	1.1162	ppb	16:36:29
2	Co 228.616†	4401.0	4546.0	69.297	ug/L	69.297	ppb	16:36:29
2	Cr 267.716†	11126.0	11220.7	120.88	ug/L	120.88	ppb	16:36:29
2	Cu 324.752†	32165.7	25930.2	83.329	ug/L	83.329	ppb	16:36:09
2	Mn 257.610†	4256486.1	4325099.7	4599.1	ug/L	4599.1	ppb	16:36:04
2	Mo 202.031†	-58.1	-77.5	6.2123	ug/L	6.2123	ppb	16:36:29
2	Ni 231.604†	4297.1	4281.0	98.317	ug/L	98.317	ppb	16:36:29

2	P 214.914†	4088.7	3913.1	2118.1 ug/L	2118.1 ppb	16:36:29
2	Pb 220.353†	1020.5	1105.0	158.64 ug/L	158.64 ppb	16:36:29
2	S 181.975 Axial†	491.1	449.6	552.06 ug/L	552.06 ppb	16:36:29
2	Sb 206.836†	115.2	79.7	-0.4078 ug/L	-0.4078 ppb	16:36:29
2	Se 196.026†	-913.7	-901.8	7.1961 ug/L	7.1961 ppb	16:36:29
2	Si 251.611†	980735.4	996182.8	29666 ug/L	29666 ppb	16:36:04
2	Sn 189.927†	-145.0	-156.2	-19.660 ug/L	-19.660 ppb	16:36:29
2	Ti 334.940†	4467822.0	4541644.5	7170.3 ug/L	7170.3 ppb	16:36:04
2	Tl 190.801†	-323.4	-294.0	3.7517 ug/L	3.7517 ppb	16:36:29
2	U 409.014†	-10359.2	-7943.4	-248.37 ug/L	-248.37 ppb	16:36:09
2	V 292.402†	44139.3	46219.0	275.76 ug/L	275.76 ppb	16:36:09
2	Zn 213.857†	40293.0	40193.6	329.15 ug/L	329.15 ppb	16:36:09
2	SiO2†	957851.3	972884.3	62087 ug/L	62087 ppb	16:37:13
3	Sc Radial	5575.7	5575.7	100.0 %		16:35:24
3	Y RADIAL	6863.9	6863.9	113.7 %		16:35:24
3	Al 396.153Radial†	312956.9	312998.4	215570 ug/L	215570 ppb	16:35:04
3	Ca 317.933Radial†	21560.9	21544.4	31444 ug/L	31444 ppb	16:35:04
3	Fe 238.204 Radial†	17660.4	17650.8	158140 ug/L	158140 ppb	16:35:04
3	K 766.490 Radial†	92109.2	89371.5	14967 ug/L	14967 ppb	16:35:04
3	Mg 279.077 IEC†	764.2	762.4	25501 ug/L	25501 ppb	16:35:24
3	Na 589.592 Radial†	6239.4	7793.6	2361.9 ug/L	2361.9 ppb	16:35:04
3	Sr 421.552†	61133.7	61135.1	368.43 ug/L	368.43 ppb	16:35:04
3	Sc 361.383	853648.4	853648.4	98.356 %		16:36:41
3	Y 371.029	811711.2	811711.2	111.28 %		16:36:36
3	Ag 328.068†	-10090.5	-10533.2	3.6130 ug/L	3.6130 ppb	16:36:41
3	As 188.979†	-112.6	-83.2	51.484 ug/L	51.484 ppb	16:37:01
3	B 249.677†	2182.6	2712.3	36.605 ug/L	36.605 ppb	16:36:41
3	Ba 233.527†	323730.8	329152.6	2466.0 ug/L	2466.0 ppb	16:36:41
3	Be 313.107†	-10614.5	-6129.3	11.660 ug/L	11.660 ppb	16:36:41
3	Cd 226.502†	1396.1	1618.3	1.0376 ug/L	1.0376 ppb	16:37:01
3	Co 228.616†	4404.8	4551.9	69.637 ug/L	69.637 ppb	16:37:01
3	Cr 267.716†	11162.9	11263.5	121.34 ug/L	121.34 ppb	16:37:01
3	Cu 324.752†	32076.4	25854.7	83.164 ug/L	83.164 ppb	16:36:41
3	Mn 257.610†	4188305.4	4257786.3	4527.8 ug/L	4527.8 ppb	16:36:36
3	Mo 202.031†	-66.0	-85.5	5.7776 ug/L	5.7776 ppb	16:37:01
3	Ni 231.604†	4280.1	4265.7	97.965 ug/L	97.965 ppb	16:37:01
3	P 214.914†	4085.5	3911.7	2117.2 ug/L	2117.2 ppb	16:37:01
3	Pb 220.353†	1012.6	1097.5	158.18 ug/L	158.18 ppb	16:37:01
3	S 181.975 Axial†	502.9	461.9	567.89 ug/L	567.89 ppb	16:37:01
3	Sb 206.836†	130.4	95.2	4.7543 ug/L	4.7543 ppb	16:37:01
3	Se 196.026†	-915.7	-904.2	9.4454 ug/L	9.4454 ppb	16:37:01
3	Si 251.611†	964243.4	979877.5	29180 ug/L	29180 ppb	16:36:36
3	Sn 189.927†	-137.7	-148.9	-18.445 ug/L	-18.445 ppb	16:37:01
3	Ti 334.940†	4392899.1	4467575.9	7053.4 ug/L	7053.4 ppb	16:36:36
3	Tl 190.801†	-319.0	-289.7	3.7044 ug/L	3.7044 ppb	16:37:01
3	U 409.014†	-10293.1	-7881.1	-246.71 ug/L	-246.71 ppb	16:36:41
3	V 292.402†	43923.8	46020.6	274.40 ug/L	274.40 ppb	16:36:41
3	Zn 213.857†	40131.6	40048.5	327.81 ug/L	327.81 ppb	16:36:41
3	SiO2†	980357.1	996217.8	63576 ug/L	63576 ppb	16:37:19

Mean Data: 241825016|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	853811.6	98.375	%	0.0239				0.02%
Sc Radial	5586.6	100	%	0.4				0.36%
Y 371.029	818726.0	112.24	%	0.883				0.79%
Y RADIAL	6875.6	113.9	%	0.41				0.36%
Ag 328.068†	-10585.7	3.4802	ug/L	0.71903	3.4802	ppb	0.71903	20.66%
Al 396.153Radial†	313065.0	215610	ug/L	2146.5	215610	ppb	2146.5	1.00%
As 188.979†	-84.6	51.478	ug/L	0.4211	51.478	ppb	0.4211	0.82%
B 249.677†	2748.5	37.334	ug/L	1.5081	37.334	ppb	1.5081	4.04%
Ba 233.527†	329057.0	2465.3	ug/L	6.61	2465.3	ppb	6.61	0.27%
Be 313.107†	-6295.5	11.714	ug/L	0.1133	11.714	ppb	0.1133	0.97%
Ca 317.933Radial†	21579.7	31495	ug/L	267.2	31495	ppb	267.2	0.85%
Cd 226.502†	1622.1	1.0456	ug/L	0.06703	1.0456	ppb	0.06703	6.41%
Co 228.616†	4562.3	69.706	ug/L	0.4481	69.706	ppb	0.4481	0.64%
Cr 267.716†	11268.7	121.40	ug/L	0.560	121.40	ppb	0.560	0.46%
Cu 324.752†	25870.0	83.225	ug/L	0.0907	83.225	ppb	0.0907	0.11%
Fe 238.204 Radial†	17686.3	158450	ug/L	1567.8	158450	ppb	1567.8	0.99%
K 766.490 Radial†	89468.2	14983	ug/L	134.6	14983	ppb	134.6	0.90%

Mg 279.077 IEC†	763.1	25525	ug/L	21.3	25525	ppb	21.3	0.08%
Mn 257.610†	4290143.5	4562.2	ug/L	35.69	4562.2	ppb	35.69	0.78%
Mo 202.031†	-80.2	6.1362	ug/L	0.32719	6.1362	ppb	0.32719	5.33%
Na 589.592 Radial†	7863.3	2383.0	ug/L	23.39	2383.0	ppb	23.39	0.98%
Ni 231.604†	4291.1	98.548	ug/L	0.7268	98.548	ppb	0.7268	0.74%
P 214.914†	3928.1	2126.1	ug/L	14.66	2126.1	ppb	14.66	0.69%
Pb 220.353†	1100.9	158.54	ug/L	0.323	158.54	ppb	0.323	0.20%
S 181.975 Axial†	458.0	562.63	ug/L	9.149	562.63	ppb	9.149	1.63%
Sb 206.836†	86.6	1.8911	ug/L	2.62688	1.8911	ppb	2.62688	138.91%
Se 196.026†	-900.7	12.383	ug/L	7.1253	12.383	ppb	7.1253	57.54%
Si 251.611†	987506.5	29407	ug/L	244.3	29407	ppb	244.3	0.83%
Sn 189.927†	-153.4	-19.163	ug/L	0.6369	-19.163	ppb	0.6369	3.32%
Sr 421.552†	61170.0	368.64	ug/L	3.610	368.64	ppb	3.610	0.98%
Ti 334.940†	4504404.5	7111.5	ug/L	58.45	7111.5	ppb	58.45	0.82%
Tl 190.801†	-289.0	4.5564	ug/L	1.43493	4.5564	ppb	1.43493	31.49%
U 409.014†	-7967.2	-249.22	ug/L	3.036	-249.22	ppb	3.036	1.22%
V 292.402†	46112.4	274.90	ug/L	0.747	274.90	ppb	0.747	0.27%
Zn 213.857†	40104.7	328.26	ug/L	0.777	328.26	ppb	0.777	0.24%
SiO2†	981956.2	62666	ug/L	798.0	62666	ppb	798.0	1.27%

Sequence No.: 29
Sample ID: 241825017|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 12/11/2009 16:39:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825017|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5645.0	5645.0	101	%			16:41:44
1	Y RADIAL	7380.3	7380.3	122.2	%			16:41:44
1	Al 396.153Radial†	101715.9	100504.2	69217	ug/L	69217	ppb	16:41:24
1	Ca 317.933Radial†	19165.7	18913.8	27605	ug/L	27605	ppb	16:41:24
1	Fe 238.204 Radial†	13282.9	13110.1	117450	ug/L	117450	ppb	16:41:24
1	K 766.490 Radial†	62833.6	59323.7	9905.5	ug/L	9905.5	ppb	16:41:24
1	Mg 279.077 IEC†	434.5	427.3	14269	ug/L	14269	ppb	16:41:44
1	Na 589.592 Radial†	9381.0	10820.2	3279.2	ug/L	3279.2	ppb	16:41:24
1	Sr 421.552†	35957.4	35516.8	213.96	ug/L	213.96	ppb	16:41:24
1	Sc 361.383	880559.0	880559.0	101.46	%			16:42:42
1	Y 371.029	891757.5	891757.5	122.25	%			16:42:42
1	Ag 328.068†	-7367.6	-7535.8	3.7739	ug/L	3.7739	ppb	16:42:47
1	As 188.979†	-59.3	-27.1	39.810	ug/L	39.810	ppb	16:43:08
1	B 249.677†	1372.1	1845.6	23.649	ug/L	23.649	ppb	16:42:47
1	Ba 233.527†	153866.0	151667.9	1138.0	ug/L	1138.0	ppb	16:42:47
1	Be 313.107†	-7125.0	-2360.1	6.6908	ug/L	6.6908	ppb	16:42:47
1	Cd 226.502†	959.5	1144.7	0.1671	ug/L	0.1671	ppb	16:43:08
1	Co 228.616†	2072.3	2116.0	30.621	ug/L	30.621	ppb	16:43:08
1	Cr 267.716†	4821.3	4666.0	51.322	ug/L	51.322	ppb	16:43:08
1	Cu 324.752†	20516.7	13464.2	45.100	ug/L	45.100	ppb	16:42:47
1	Mn 257.610†	4295467.5	4233272.4	4498.0	ug/L	4498.0	ppb	16:42:42
1	Mo 202.031†	354.3	330.8	29.383	ug/L	29.383	ppb	16:43:08
1	Ni 231.604†	2677.1	2552.7	58.632	ug/L	58.632	ppb	16:43:08
1	P 214.914†	1735.7	1468.8	742.34	ug/L	742.34	ppb	16:43:08
1	Pb 220.353†	2031.5	2070.4	237.67	ug/L	237.67	ppb	16:43:08
1	S 181.975 Axial†	346.0	291.6	371.66	ug/L	371.66	ppb	16:43:08
1	Sb 206.836†	69.2	30.8	-1.3514	ug/L	-1.3514	ppb	16:43:08
1	Se 196.026†	-664.5	-628.1	17.977	ug/L	17.977	ppb	16:43:08
1	Si 251.611†	890903.6	877630.1	26136	ug/L	26136	ppb	16:42:42
1	Sn 189.927†	-89.6	-97.1	-11.150	ug/L	-11.150	ppb	16:43:08
1	Ti 334.940†	2463902.2	2429781.4	3836.8	ug/L	3836.8	ppb	16:42:42
1	Tl 190.801†	-251.1	-212.9	-2.9231	ug/L	-2.9231	ppb	16:43:08
1	U 409.014†	-13693.3	-10912.6	-328.62	ug/L	-328.62	ppb	16:42:42
1	V 292.402†	22709.3	23746.0	135.90	ug/L	135.90	ppb	16:42:47
1	Zn 213.857†	46975.6	45547.3	379.67	ug/L	379.67	ppb	16:42:47
1	SiO2†	898824.3	885394.4	56505	ug/L	56505	ppb	16:44:18
2	Sc Radial	5538.8	5538.8	99.3	%			16:42:09
2	Y RADIAL	7268.0	7268.0	120.3	%			16:42:09
2	Al 396.153Radial†	102760.6	103481.7	71268	ug/L	71268	ppb	16:41:49
2	Ca 317.933Radial†	19336.7	19448.8	28385	ug/L	28385	ppb	16:41:49
2	Fe 238.204 Radial†	13424.9	13504.6	120990	ug/L	120990	ppb	16:41:49
2	K 766.490 Radial†	63396.7	61080.2	10200	ug/L	10200	ppb	16:41:49
2	Mg 279.077 IEC†	437.0	438.0	14625	ug/L	14625	ppb	16:42:09
2	Na 589.592 Radial†	9519.8	11137.4	3375.3	ug/L	3375.3	ppb	16:41:49
2	Sr 421.552†	36304.1	36546.6	220.16	ug/L	220.16	ppb	16:41:49
2	Sc 361.383	881816.0	881816.0	101.60	%			16:43:14
2	Y 371.029	891414.9	891414.9	122.20	%			16:43:14
2	Ag 328.068†	-7446.2	-7602.9	4.5759	ug/L	4.5759	ppb	16:43:20
2	As 188.979†	-51.3	-19.2	43.478	ug/L	43.478	ppb	16:43:40
2	B 249.677†	1364.9	1836.6	22.988	ug/L	22.988	ppb	16:43:20
2	Ba 233.527†	153445.2	151037.6	1133.4	ug/L	1133.4	ppb	16:43:20
2	Be 313.107†	-7184.8	-2409.0	6.6886	ug/L	6.6886	ppb	16:43:20
2	Cd 226.502†	947.3	1131.3	-0.3247	ug/L	-0.3247	ppb	16:43:40
2	Co 228.616†	2064.8	2105.7	30.357	ug/L	30.357	ppb	16:43:40
2	Cr 267.716†	4804.9	4643.2	51.143	ug/L	51.143	ppb	16:43:40
2	Cu 324.752†	20338.3	13259.9	44.686	ug/L	44.686	ppb	16:43:20
2	Mn 257.610†	4306177.4	4237778.3	4503.1	ug/L	4503.1	ppb	16:43:14
2	Mo 202.031†	350.5	326.5	29.363	ug/L	29.363	ppb	16:43:40
2	Ni 231.604†	2689.3	2561.0	58.822	ug/L	58.822	ppb	16:43:40

2	P 214.914†	1720.9	1451.7	730.75 ug/L	730.75 ppb	16:43:40
2	Pb 220.353†	2015.3	2051.5	235.74 ug/L	235.74 ppb	16:43:40
2	S 181.975 Axial†	345.8	290.9	370.38 ug/L	370.38 ppb	16:43:40
2	Sb 206.836†	68.2	29.8	-1.7211 ug/L	-1.7211 ppb	16:43:40
2	Se 196.026†	-670.1	-632.8	26.522 ug/L	26.522 ppb	16:43:40
2	Si 251.611†	894434.9	879854.0	26202 ug/L	26202 ppb	16:43:14
2	Sn 189.927†	-94.9	-102.3	-11.844 ug/L	-11.844 ppb	16:43:40
2	Ti 334.940†	2472432.0	2434714.9	3844.6 ug/L	3844.6 ppb	16:43:14
2	Tl 190.801†	-248.0	-209.5	-1.8305 ug/L	-1.8305 ppb	16:43:40
2	U 409.014†	-13661.6	-10862.2	-327.61 ug/L	-327.61 ppb	16:43:14
2	V 292.402†	22479.6	23488.0	133.65 ug/L	133.65 ppb	16:43:20
2	Zn 213.857†	46719.5	45229.2	376.59 ug/L	376.59 ppb	16:43:20
2	SiO2†	894295.6	879674.2	56140 ug/L	56140 ppb	16:44:24
3	Sc Radial	5563.0	5563.0	99.8 %		16:42:34
3	Y RADIAL	7308.0	7308.0	121.0 %		16:42:34
3	Al 396.153Radial†	103364.8	103636.7	71375 ug/L	71375 ppb	16:42:14
3	Ca 317.933Radial†	19449.8	19477.4	28427 ug/L	28427 ppb	16:42:14
3	Fe 238.204 Radial†	13518.3	13539.4	121300 ug/L	121300 ppb	16:42:14
3	K 766.490 Radial†	63723.4	61129.7	10209 ug/L	10209 ppb	16:42:14
3	Mg 279.077 IEC†	438.3	437.4	14605 ug/L	14605 ppb	16:42:34
3	Na 589.592 Radial†	9483.2	11059.0	3351.5 ug/L	3351.5 ppb	16:42:14
3	Sr 421.552†	36454.7	36538.4	220.11 ug/L	220.11 ppb	16:42:14
3	Sc 361.383	870558.6	870558.6	100.30 %		16:43:46
3	Y 371.029	882629.9	882629.9	121.00 %		16:43:46
3	Ag 328.068†	-7539.1	-7790.3	3.8377 ug/L	3.8377 ppb	16:43:52
3	As 188.979†	-56.6	-25.1	41.168 ug/L	41.168 ppb	16:44:12
3	B 249.677†	1298.8	1788.0	21.912 ug/L	21.912 ppb	16:43:52
3	Ba 233.527†	153477.2	153022.4	1148.2 ug/L	1148.2 ppb	16:43:52
3	Be 313.107†	-7431.3	-2746.1	6.5506 ug/L	6.5506 ppb	16:43:52
3	Cd 226.502†	969.1	1165.1	-0.0053 ug/L	-0.0053 ppb	16:44:12
3	Co 228.616†	2058.6	2125.8	30.759 ug/L	30.759 ppb	16:44:12
3	Cr 267.716†	4778.9	4678.3	51.521 ug/L	51.521 ppb	16:44:12
3	Cu 324.752†	20385.1	13565.3	45.590 ug/L	45.590 ppb	16:43:52
3	Mn 257.610†	4243018.2	4229617.6	4494.5 ug/L	4494.5 ppb	16:43:46
3	Mo 202.031†	363.8	344.3	30.512 ug/L	30.512 ppb	16:44:12
3	Ni 231.604†	2678.6	2584.5	59.363 ug/L	59.363 ppb	16:44:12
3	P 214.914†	1721.1	1473.8	742.71 ug/L	742.71 ppb	16:44:12
3	Pb 220.353†	2009.7	2071.6	237.98 ug/L	237.98 ppb	16:44:12
3	S 181.975 Axial†	333.5	283.0	359.92 ug/L	359.92 ppb	16:44:12
3	Sb 206.836†	75.2	37.6	0.7968 ug/L	0.7968 ppb	16:44:12
3	Se 196.026†	-674.8	-645.9	20.113 ug/L	20.113 ppb	16:44:12
3	Si 251.611†	879904.0	876751.1	26109 ug/L	26109 ppb	16:43:46
3	Sn 189.927†	-95.3	-103.8	-12.089 ug/L	-12.089 ppb	16:44:12
3	Ti 334.940†	2435390.1	2429253.3	3836.0 ug/L	3836.0 ppb	16:43:46
3	Tl 190.801†	-240.1	-204.8	-0.6165 ug/L	-0.6165 ppb	16:44:12
3	U 409.014†	-13546.1	-10921.0	-329.34 ug/L	-329.34 ppb	16:43:46
3	V 292.402†	22551.6	23845.9	136.00 ug/L	136.00 ppb	16:43:52
3	Zn 213.857†	46793.1	45897.2	382.30 ug/L	382.30 ppb	16:43:52
3	SiO2†	900047.6	896790.9	57232 ug/L	57232 ppb	16:44:30

Mean Data: 241825017|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877644.5	101.12	%	0.711				0.70%
Sc Radial	5582.3	100	%	1.0				1.00%
Y 371.029	888600.8	121.82	%	0.709				0.58%
Y RADIAL	7318.8	121.2	%	0.94				0.78%
Ag 328.068†	-7643.0	4.0625	ug/L	0.44575	4.0625	ppb	0.44575	10.97%
Al 396.153Radial†	102540.9	70620	ug/L	1215.9	70620	ppb	1215.9	1.72%
As 188.979†	-23.8	41.485	ug/L	1.8547	41.485	ppb	1.8547	4.47%
B 249.677†	1823.4	22.849	ug/L	0.8768	22.849	ppb	0.8768	3.84%
Ba 233.527†	151909.3	1139.9	ug/L	7.60	1139.9	ppb	7.60	0.67%
Be 313.107†	-2505.1	6.6433	ug/L	0.08033	6.6433	ppb	0.08033	1.21%
Ca 317.933Radial†	19280.0	28139	ug/L	463.3	28139	ppb	463.3	1.65%
Cd 226.502†	1147.0	-0.0543	ug/L	0.24956	-0.0543	ppb	0.24956	459.56%
Co 228.616†	2115.8	30.579	ug/L	0.2046	30.579	ppb	0.2046	0.67%
Cr 267.716†	4662.5	51.329	ug/L	0.1894	51.329	ppb	0.1894	0.37%
Cu 324.752†	13429.8	45.125	ug/L	0.4522	45.125	ppb	0.4522	1.00%
Fe 238.204 Radial†	13384.7	119910	ug/L	2136.1	119910	ppb	2136.1	1.78%
K 766.490 Radial†	60511.2	10105	ug/L	172.7	10105	ppb	172.7	1.71%

Mg 279.077 IEC†	434.2	14500	ug/L	199.7	14500	ppb	199.7	1.38%
Mn 257.610†	4233556.1	4498.5	ug/L	4.33	4498.5	ppb	4.33	0.10%
Mo 202.031†	333.9	29.753	ug/L	0.6581	29.753	ppb	0.6581	2.21%
Na 589.592 Radial†	11005.5	3335.3	ug/L	50.08	3335.3	ppb	50.08	1.50%
Ni 231.604†	2566.1	58.939	ug/L	0.3789	58.939	ppb	0.3789	0.64%
P 214.914†	1464.8	738.60	ug/L	6.803	738.60	ppb	6.803	0.92%
Pb 220.353†	2064.5	237.13	ug/L	1.218	237.13	ppb	1.218	0.51%
S 181.975 Axial†	288.5	367.32	ug/L	6.441	367.32	ppb	6.441	1.75%
Sb 206.836†	32.8	-0.7586	ug/L	1.35962	-0.7586	ppb	1.35962	179.23%
Se 196.026†	-635.6	21.537	ug/L	4.4468	21.537	ppb	4.4468	20.65%
Si 251.611†	878078.4	26149	ug/L	47.6	26149	ppb	47.6	0.18%
Sn 189.927†	-101.1	-11.694	ug/L	0.4870	-11.694	ppb	0.4870	4.16%
Sr 421.552†	36200.6	218.07	ug/L	3.568	218.07	ppb	3.568	1.64%
Ti 334.940†	2431249.8	3839.1	ug/L	4.76	3839.1	ppb	4.76	0.12%
Tl 190.801†	-209.1	-1.7901	ug/L	1.15383	-1.7901	ppb	1.15383	64.46%
U 409.014†	-10898.6	-328.52	ug/L	0.868	-328.52	ppb	0.868	0.26%
V 292.402†	23693.3	135.19	ug/L	1.332	135.19	ppb	1.332	0.99%
Zn 213.857†	45557.9	379.52	ug/L	2.859	379.52	ppb	2.859	0.75%
SiO2†	887286.5	56626	ug/L	556.1	56626	ppb	556.1	0.98%

Sequence No.: 30
Sample ID: 241825018|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 12/11/2009 16:46:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825018|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5314.1	5314.1	95.3	%			16:48:55
1	Y RADIAL	7813.4	7813.4	129.4	%			16:48:35
1	Al 396.153Radial†	53834.5	56520.7	38925	ug/L	38925	ppb	16:48:35
1	Ca 317.933Radial†	12913.1	13532.0	19750	ug/L	19750	ppb	16:48:35
1	Fe 238.204 Radial†	10422.9	10926.3	97889	ug/L	97889	ppb	16:48:35
1	K 766.490 Radial†	37540.7	36649.7	6093.5	ug/L	6093.5	ppb	16:48:35
1	Mg 279.077 IEC†	390.4	407.7	13628	ug/L	13628	ppb	16:48:55
1	Na 589.592 Radial†	1791.9	3434.3	1040.8	ug/L	1040.8	ppb	16:48:35
1	Sr 421.552†	30391.9	31888.7	192.15	ug/L	192.15	ppb	16:48:35
1	Sc 361.383	873654.9	873654.9	100.66	%			16:49:53
1	Y 371.029	942323.7	942323.7	129.18	%			16:49:53
1	Ag 328.068†	-5744.9	-5981.2	4.4436	ug/L	4.4436	ppb	16:49:58
1	As 188.979†	-9.4	22.0	35.871	ug/L	35.871	ppb	16:50:19
1	B 249.677†	1024.5	1511.0	19.133	ug/L	19.133	ppb	16:49:58
1	Ba 233.527†	71902.5	71441.3	537.63	ug/L	537.63	ppb	16:49:58
1	Be 313.107†	3978.9	8615.4	5.9799	ug/L	5.9799	ppb	16:49:58
1	Cd 226.502†	702.2	896.6	-0.4457	ug/L	-0.4457	ppb	16:50:19
1	Co 228.616†	1650.1	1712.7	28.083	ug/L	28.083	ppb	16:50:19
1	Cr 267.716†	2401.5	2299.7	26.087	ug/L	26.087	ppb	16:50:19
1	Cu 324.752†	14640.8	7786.7	27.611	ug/L	27.611	ppb	16:49:58
1	Mn 257.610†	4651628.2	4620551.2	4906.5	ug/L	4906.5	ppb	16:49:53
1	Mo 202.031†	448.5	427.2	34.127	ug/L	34.127	ppb	16:50:19
1	Ni 231.604†	2981.6	2876.1	66.069	ug/L	66.069	ppb	16:50:19
1	P 214.914†	1094.3	845.1	402.46	ug/L	402.46	ppb	16:50:19
1	Pb 220.353†	1830.5	1886.4	211.92	ug/L	211.92	ppb	16:50:19
1	S 181.975 Axial†	314.2	262.7	339.41	ug/L	339.41	ppb	16:50:19
1	Sb 206.836†	37.9	0.2	-3.2449	ug/L	-3.2449	ppb	16:50:19
1	Se 196.026†	-532.9	-502.6	23.962	ug/L	23.962	ppb	16:50:19
1	Si 251.611†	885027.5	878731.9	26170	ug/L	26170	ppb	16:49:53
1	Sn 189.927†	-7.8	-16.5	0.7198	ug/L	0.7198	ppb	16:50:19
1	Ti 334.940†	935222.3	930335.0	1469.6	ug/L	1469.6	ppb	16:49:53
1	Tl 190.801†	-172.1	-136.4	2.2558	ug/L	2.2558	ppb	16:50:19
1	U 409.014†	-15220.0	-12536.0	-372.78	ug/L	-372.78	ppb	16:49:53
1	V 292.402†	11307.4	12595.9	67.290	ug/L	67.290	ppb	16:49:58
1	Zn 213.857†	29473.2	28525.7	235.11	ug/L	235.11	ppb	16:49:58
1	SiO2†	883910.6	877579.7	56009	ug/L	56009	ppb	16:51:29
2	Sc Radial	5543.2	5543.2	99.4	%			16:49:20
2	Y RADIAL	7804.1	7804.1	129.2	%			16:49:00
2	Al 396.153Radial†	54343.9	54698.2	37670	ug/L	37670	ppb	16:49:00
2	Ca 317.933Radial†	12976.1	13035.3	19025	ug/L	19025	ppb	16:49:00
2	Fe 238.204 Radial†	10417.1	10468.4	93787	ug/L	93787	ppb	16:49:00
2	K 766.490 Radial†	37738.1	35220.1	5853.6	ug/L	5853.6	ppb	16:49:00
2	Mg 279.077 IEC†	388.6	389.0	13000	ug/L	13000	ppb	16:49:20
2	Na 589.592 Radial†	1846.1	3411.1	1033.8	ug/L	1033.8	ppb	16:49:00
2	Sr 421.552†	30624.5	30804.5	185.61	ug/L	185.61	ppb	16:49:00
2	Sc 361.383	883863.8	883863.8	101.84	%			16:50:25
2	Y 371.029	953110.4	953110.4	130.66	%			16:50:25
2	Ag 328.068†	-5824.1	-5993.0	3.0874	ug/L	3.0874	ppb	16:50:30
2	As 188.979†	-13.0	18.5	33.883	ug/L	33.883	ppb	16:50:51
2	B 249.677†	911.8	1388.5	17.068	ug/L	17.068	ppb	16:50:30
2	Ba 233.527†	71802.2	70517.7	530.57	ug/L	530.57	ppb	16:50:30
2	Be 313.107†	4045.8	8635.4	5.9837	ug/L	5.9837	ppb	16:50:30
2	Cd 226.502†	700.7	887.0	-0.1344	ug/L	-0.1344	ppb	16:50:51
2	Co 228.616†	1647.7	1691.4	27.744	ug/L	27.744	ppb	16:50:51
2	Cr 267.716†	2464.1	2333.6	26.365	ug/L	26.365	ppb	16:50:51
2	Cu 324.752†	14684.1	7661.3	27.037	ug/L	27.037	ppb	16:50:30
2	Mn 257.610†	4692617.8	4607426.4	4892.2	ug/L	4892.2	ppb	16:50:25
2	Mo 202.031†	470.4	443.5	34.873	ug/L	34.873	ppb	16:50:51
2	Ni 231.604†	3012.9	2872.6	65.988	ug/L	65.988	ppb	16:50:51

2	P 214.914†	1076.9	815.4	388.77 ug/L	388.77 ppb	16:50:51
2	Pb 220.353†	1872.7	1906.9	214.28 ug/L	214.28 ppb	16:50:51
2	S 181.975 Axial†	308.1	253.2	327.09 ug/L	327.09 ppb	16:50:51
2	Sb 206.836†	36.8	-1.3	-3.7952 ug/L	-3.7952 ppb	16:50:51
2	Se 196.026†	-538.5	-501.9	11.542 ug/L	11.542 ppb	16:50:51
2	Si 251.611†	894517.5	877895.6	26145 ug/L	26145 ppb	16:50:25
2	Sn 189.927†	-30.5	-38.8	-2.9942 ug/L	-2.9942 ppb	16:50:51
2	Ti 334.940†	945035.8	929240.3	1467.9 ug/L	1467.9 ppb	16:50:25
2	Tl 190.801†	-186.4	-148.5	-1.2768 ug/L	-1.2768 ppb	16:50:51
2	U 409.014†	-15414.6	-12552.5	-372.74 ug/L	-372.74 ppb	16:50:25
2	V 292.402†	11126.9	12288.8	65.872 ug/L	65.872 ppb	16:50:30
2	Zn 213.857†	29487.9	28202.0	232.74 ug/L	232.74 ppb	16:50:30
2	SiO2†	890490.9	873898.9	55774 ug/L	55774 ppb	16:51:35
3	Sc Radial	5554.9	5554.9	99.6 %		16:49:45
3	Y RADIAL	7867.6	7867.6	130.3 %		16:49:25
3	Al 396.153Radial†	54901.9	55143.4	37977 ug/L	37977 ppb	16:49:25
3	Ca 317.933Radial†	13110.0	13142.3	19181 ug/L	19181 ppb	16:49:25
3	Fe 238.204 Radial†	10552.3	10582.0	94805 ug/L	94805 ppb	16:49:25
3	K 766.490 Radial†	38135.1	35538.8	5907.2 ug/L	5907.2 ppb	16:49:25
3	Mg 279.077 IEC†	385.1	384.6	12852 ug/L	12852 ppb	16:49:45
3	Na 589.592 Radial†	1932.7	3494.1	1058.9 ug/L	1058.9 ppb	16:49:25
3	Sr 421.552†	30898.7	31014.9	186.88 ug/L	186.88 ppb	16:49:25
3	Sc 361.383	891200.1	891200.1	102.68 %		16:50:57
3	Y 371.029	960237.1	960237.1	131.64 %		16:50:57
3	Ag 328.068†	-5812.0	-5934.2	3.6789 ug/L	3.6789 ppb	16:51:02
3	As 188.979†	-27.4	4.6	28.680 ug/L	28.680 ppb	16:51:23
3	B 249.677†	1050.5	1516.3	19.657 ug/L	19.657 ppb	16:51:02
3	Ba 233.527†	72085.1	70212.9	528.33 ug/L	528.33 ppb	16:51:02
3	Be 313.107†	3935.7	8495.5	5.9359 ug/L	5.9359 ppb	16:51:02
3	Cd 226.502†	701.0	881.6	-0.2927 ug/L	-0.2927 ppb	16:51:23
3	Co 228.616†	1639.6	1670.2	27.323 ug/L	27.323 ppb	16:51:23
3	Cr 267.716†	2436.4	2286.7	25.893 ug/L	25.893 ppb	16:51:23
3	Cu 324.752†	14766.6	7622.9	26.978 ug/L	26.978 ppb	16:51:02
3	Mn 257.610†	4731823.0	4607675.2	4892.6 ug/L	4892.6 ppb	16:50:57
3	Mo 202.031†	464.2	433.6	34.320 ug/L	34.320 ppb	16:51:23
3	Ni 231.604†	2997.6	2833.3	65.086 ug/L	65.086 ppb	16:51:23
3	P 214.914†	1086.2	815.8	388.32 ug/L	388.32 ppb	16:51:23
3	Pb 220.353†	1831.8	1851.9	208.10 ug/L	208.10 ppb	16:51:23
3	S 181.975 Axial†	302.7	245.4	316.75 ug/L	316.75 ppb	16:51:23
3	Sb 206.836†	49.5	10.8	0.0571 ug/L	0.0571 ppb	16:51:23
3	Se 196.026†	-544.3	-503.3	13.976 ug/L	13.976 ppb	16:51:23
3	Si 251.611†	902257.9	878203.0	26154 ug/L	26154 ppb	16:50:57
3	Sn 189.927†	-21.1	-29.4	-1.4481 ug/L	-1.4481 ppb	16:51:23
3	Ti 334.940†	953688.7	930028.0	1469.1 ug/L	1469.1 ppb	16:50:57
3	Tl 190.801†	-177.4	-138.2	1.6436 ug/L	1.6436 ppb	16:51:23
3	U 409.014†	-15574.7	-12583.8	-373.77 ug/L	-373.77 ppb	16:50:57
3	V 292.402†	11330.4	12397.1	66.422 ug/L	66.422 ppb	16:51:02
3	Zn 213.857†	29514.4	27989.4	230.83 ug/L	230.83 ppb	16:51:02
3	SiO2†	896218.4	872278.6	55670 ug/L	55670 ppb	16:51:41

Mean Data: 241825018|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882906.3	101.73	%	1.015				1.00%
Sc Radial	5470.7	98.1	%	2.44				2.48%
Y 371.029	951890.4	130.49	%	1.236				0.95%
Y RADIAL	7828.4	129.6	%	0.57				0.44%
Ag 328.068†	-5969.5	3.7366	ug/L	0.67992	3.7366	ppb	0.67992	18.20%
Al 396.153Radial†	55454.1	38191	ug/L	654.4	38191	ppb	654.4	1.71%
As 188.979†	15.0	32.811	ug/L	3.7137	32.811	ppb	3.7137	11.32%
B 249.677†	1471.9	18.619	ug/L	1.3688	18.619	ppb	1.3688	7.35%
Ba 233.527†	70724.0	532.18	ug/L	4.852	532.18	ppb	4.852	0.91%
Be 313.107†	8582.1	5.9665	ug/L	0.02657	5.9665	ppb	0.02657	0.45%
Ca 317.933Radial†	13236.6	19319	ug/L	381.5	19319	ppb	381.5	1.97%
Cd 226.502†	888.4	-0.2910	ug/L	0.15564	-0.2910	ppb	0.15564	53.49%
Co 228.616†	1691.4	27.717	ug/L	0.3804	27.717	ppb	0.3804	1.37%
Cr 267.716†	2306.7	26.115	ug/L	0.2370	26.115	ppb	0.2370	0.91%
Cu 324.752†	7690.3	27.209	ug/L	0.3496	27.209	ppb	0.3496	1.28%
Fe 238.204 Radial†	10658.9	95494	ug/L	2136.0	95494	ppb	2136.0	2.24%
K 766.490 Radial†	35802.9	5951.4	ug/L	125.92	5951.4	ppb	125.92	2.12%

Mg 279.077 IEC†	393.8	13160	ug/L	412.0	13160	ppb	412.0	3.13%
Mn 257.610†	4611884.3	4897.1	ug/L	8.16	4897.1	ppb	8.16	0.17%
Mo 202.031†	434.8	34.440	ug/L	0.3876	34.440	ppb	0.3876	1.13%
Na 589.592 Radial†	3446.5	1044.5	ug/L	12.98	1044.5	ppb	12.98	1.24%
Ni 231.604†	2860.7	65.714	ug/L	0.5457	65.714	ppb	0.5457	0.83%
P 214.914†	825.5	393.18	ug/L	8.038	393.18	ppb	8.038	2.04%
Pb 220.353†	1881.7	211.43	ug/L	3.119	211.43	ppb	3.119	1.48%
S 181.975 Axial†	253.8	327.75	ug/L	11.342	327.75	ppb	11.342	3.46%
Sb 206.836†	3.3	-2.3277	ug/L	2.08355	-2.3277	ppb	2.08355	89.51%
Se 196.026†	-502.6	16.493	ug/L	6.5815	16.493	ppb	6.5815	39.90%
Si 251.611†	878276.8	26156	ug/L	12.6	26156	ppb	12.6	0.05%
Sn 189.927†	-28.2	-1.2408	ug/L	1.86568	-1.2408	ppb	1.86568	150.35%
Sr 421.552†	31236.0	188.21	ug/L	3.464	188.21	ppb	3.464	1.84%
Ti 334.940†	929867.8	1468.9	ug/L	0.91	1468.9	ppb	0.91	0.06%
Tl 190.801†	-141.0	0.8742	ug/L	1.88783	0.8742	ppb	1.88783	215.95%
U 409.014†	-12557.4	-373.09	ug/L	0.581	-373.09	ppb	0.581	0.16%
V 292.402†	12427.3	66.528	ug/L	0.7146	66.528	ppb	0.7146	1.07%
Zn 213.857†	28239.0	232.90	ug/L	2.147	232.90	ppb	2.147	0.92%
SiO2†	874585.7	55818	ug/L	173.3	55818	ppb	173.3	0.31%

Sequence No.: 31
Sample ID: 241825019|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 12/11/2009 16:53:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825019|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5591.4	5591.4	100	%			16:56:05
1	Y RADIAL	6722.9	6722.9	111.3	%			16:56:05
1	Al 396.153Radial†	311874.1	311035.0	214210	ug/L	214210	ppb	16:55:45
1	Ca 317.933Radial†	17992.3	17925.0	26161	ug/L	26161	ppb	16:55:45
1	Fe 238.204 Radial†	17174.4	17116.4	153350	ug/L	153350	ppb	16:55:45
1	K 766.490 Radial†	103128.1	100099.4	16773	ug/L	16773	ppb	16:55:45
1	Mg 279.077 IEC†	725.2	721.2	24122	ug/L	24122	ppb	16:56:05
1	Na 589.592 Radial†	6699.2	8234.5	2495.6	ug/L	2495.6	ppb	16:55:45
1	Sr 421.552†	54170.3	54018.7	325.56	ug/L	325.56	ppb	16:55:45
1	Sc 361.383	863490.1	863490.1	99.490	%			16:57:09
1	Y 371.029	788123.7	788123.7	108.04	%			16:57:09
1	Ag 328.068†	-9918.8	-10243.6	3.4282	ug/L	3.4282	ppb	16:57:09
1	As 188.979†	-103.0	-72.2	51.688	ug/L	51.688	ppb	16:57:29
1	B 249.677†	1901.2	2404.1	30.682	ug/L	30.682	ppb	16:57:09
1	Ba 233.527†	256305.1	257629.9	1931.4	ug/L	1931.4	ppb	16:57:09
1	Be 313.107†	-6448.0	-1818.4	12.433	ug/L	12.433	ppb	16:57:09
1	Cd 226.502†	1343.0	1548.8	0.7954	ug/L	0.7954	ppb	16:57:29
1	Co 228.616†	4291.8	4387.3	67.196	ug/L	67.196	ppb	16:57:29
1	Cr 267.716†	10478.4	10446.1	112.68	ug/L	112.68	ppb	16:57:29
1	Cu 324.752†	30298.8	23696.3	76.651	ug/L	76.651	ppb	16:57:09
1	Mn 257.610†	3807965.3	3826962.7	4070.8	ug/L	4070.8	ppb	16:57:03
1	Mo 202.031†	-103.5	-122.4	3.0877	ug/L	3.0877	ppb	16:57:29
1	Ni 231.604†	4321.0	4257.2	97.773	ug/L	97.773	ppb	16:57:29
1	P 214.914†	2467.8	2238.4	1187.4	ug/L	1187.4	ppb	16:57:29
1	Pb 220.353†	871.1	943.5	141.03	ug/L	141.03	ppb	16:57:29
1	S 181.975 Axial†	388.5	341.1	408.55	ug/L	408.55	ppb	16:57:29
1	Sb 206.836†	99.1	62.2	-4.4593	ug/L	-4.4593	ppb	16:57:29
1	Se 196.026†	-888.2	-866.0	15.992	ug/L	15.992	ppb	16:57:29
1	Si 251.611†	978250.4	982782.6	29266	ug/L	29266	ppb	16:57:03
1	Sn 189.927†	-128.5	-138.0	-17.318	ug/L	-17.318	ppb	16:57:29
1	Ti 334.940†	4195270.6	4218029.5	6659.2	ug/L	6659.2	ppb	16:57:03
1	Tl 190.801†	-308.6	-275.6	1.9854	ug/L	1.9854	ppb	16:57:29
1	U 409.014†	-9815.9	-7282.2	-228.87	ug/L	-228.87	ppb	16:57:09
1	V 292.402†	43159.1	44743.0	267.03	ug/L	267.03	ppb	16:57:09
1	Zn 213.857†	34723.3	34147.4	277.56	ug/L	277.56	ppb	16:57:09
1	SiO2†	975200.2	979674.1	62519	ug/L	62519	ppb	16:58:38
2	Sc Radial	5606.6	5606.6	101	%			16:56:30
2	Y RADIAL	6730.7	6730.7	111.5	%			16:56:30
2	Al 396.153Radial†	316420.5	314715.3	216750	ug/L	216750	ppb	16:56:10
2	Ca 317.933Radial†	18265.5	18148.2	26487	ug/L	26487	ppb	16:56:10
2	Fe 238.204 Radial†	17362.1	17256.7	154600	ug/L	154600	ppb	16:56:10
2	K 766.490 Radial†	104766.0	101450.1	17000	ug/L	17000	ppb	16:56:10
2	Mg 279.077 IEC†	729.7	723.7	24205	ug/L	24205	ppb	16:56:30
2	Na 589.592 Radial†	6781.1	8297.9	2514.8	ug/L	2514.8	ppb	16:56:10
2	Sr 421.552†	54889.0	54587.3	328.98	ug/L	328.98	ppb	16:56:10
2	Sc 361.383	859735.9	859735.9	99.058	%			16:57:40
2	Y 371.029	787529.4	787529.4	107.96	%			16:57:40
2	Ag 328.068†	-9892.5	-10260.6	3.7430	ug/L	3.7430	ppb	16:57:40
2	As 188.979†	-112.3	-82.1	48.195	ug/L	48.195	ppb	16:58:01
2	B 249.677†	1990.4	2502.6	32.611	ug/L	32.611	ppb	16:57:40
2	Ba 233.527†	254120.5	256549.4	1923.3	ug/L	1923.3	ppb	16:57:40
2	Be 313.107†	-6851.1	-2253.7	12.306	ug/L	12.306	ppb	16:57:40
2	Cd 226.502†	1340.3	1552.0	0.7034	ug/L	0.7034	ppb	16:58:01
2	Co 228.616†	4301.7	4416.1	67.687	ug/L	67.687	ppb	16:58:01
2	Cr 267.716†	10474.9	10488.6	113.15	ug/L	113.15	ppb	16:58:01
2	Cu 324.752†	29968.9	23496.2	76.133	ug/L	76.133	ppb	16:57:40
2	Mn 257.610†	3788902.2	3824431.5	4068.2	ug/L	4068.2	ppb	16:57:35
2	Mo 202.031†	-94.3	-113.6	3.7372	ug/L	3.7372	ppb	16:58:01
2	Ni 231.604†	4354.6	4310.1	98.988	ug/L	98.988	ppb	16:58:01

2	P 214.914†	2460.0	2241.4	1189.0	ug/L	1189.0 ppb	16:58:01
2	Pb 220.353†	872.5	948.8	142.09	ug/L	142.09 ppb	16:58:01
2	S 181.975 Axial†	381.7	335.9	401.15	ug/L	401.15 ppb	16:58:01
2	Sb 206.836†	108.9	72.6	-1.2944	ug/L	-1.2944 ppb	16:58:01
2	Se 196.026†	-890.5	-872.2	16.750	ug/L	16.750 ppb	16:58:01
2	Si 251.611†	974126.0	982912.5	29270	ug/L	29270 ppb	16:57:35
2	Sn 189.927†	-133.7	-143.8	-18.200	ug/L	-18.200 ppb	16:58:01
2	Ti 334.940†	4186419.1	4227507.0	6674.2	ug/L	6674.2 ppb	16:57:35
2	Tl 190.801†	-304.0	-272.3	3.0826	ug/L	3.0826 ppb	16:58:01
2	U 409.014†	-9771.6	-7280.6	-228.98	ug/L	-228.98 ppb	16:57:40
2	V 292.402†	42836.7	44607.0	265.93	ug/L	265.93 ppb	16:57:40
2	Zn 213.857†	34499.3	34073.7	276.80	ug/L	276.80 ppb	16:57:40
2	SiO2†	972432.4	981160.1	62613	ug/L	62613 ppb	16:58:44
3	Sc Radial	5599.6	5599.6	100	%		16:56:56
3	Y RADIAL	6741.6	6741.6	111.6	%		16:56:56
3	Al 396.153Radial†	311417.2	310125.0	213590	ug/L	213590 ppb	16:56:36
3	Ca 317.933Radial†	17945.8	17852.4	26056	ug/L	26056 ppb	16:56:36
3	Fe 238.204 Radial†	17065.3	16982.7	152150	ug/L	152150 ppb	16:56:36
3	K 766.490 Radial†	102997.5	99818.9	16725	ug/L	16725 ppb	16:56:36
3	Mg 279.077 IEC†	723.0	718.0	24014	ug/L	24014 ppb	16:56:56
3	Na 589.592 Radial†	6539.4	8065.7	2444.4	ug/L	2444.4 ppb	16:56:36
3	Sr 421.552†	53775.6	53546.6	322.71	ug/L	322.71 ppb	16:56:36
3	Sc 361.383	852445.3	852445.3	98.218	%		16:58:12
3	Y 371.029	780181.3	780181.3	106.95	%		16:58:12
3	Ag 328.068†	-9693.1	-10143.1	3.5037	ug/L	3.5037 ppb	16:58:12
3	As 188.979†	-102.9	-73.5	51.951	ug/L	51.951 ppb	16:58:32
3	B 249.677†	2014.3	2544.1	33.819	ug/L	33.819 ppb	16:58:12
3	Ba 233.527†	252625.5	257221.3	1928.3	ug/L	1928.3 ppb	16:58:12
3	Be 313.107†	-6877.3	-2339.5	12.470	ug/L	12.470 ppb	16:58:12
3	Cd 226.502†	1364.9	1588.6	1.3283	ug/L	1.3283 ppb	16:58:32
3	Co 228.616†	4311.2	4462.9	68.393	ug/L	68.393 ppb	16:58:32
3	Cr 267.716†	10452.6	10556.2	113.81	ug/L	113.81 ppb	16:58:32
3	Cu 324.752†	29679.8	23460.6	75.905	ug/L	75.905 ppb	16:58:12
3	Mn 257.610†	3822178.7	3891025.0	4138.6	ug/L	4138.6 ppb	16:58:07
3	Mo 202.031†	-113.4	-133.9	2.2738	ug/L	2.2738 ppb	16:58:32
3	Ni 231.604†	4318.8	4311.2	99.013	ug/L	99.013 ppb	16:58:32
3	P 214.914†	2445.0	2247.3	1193.2	ug/L	1193.2 ppb	16:58:32
3	Pb 220.353†	876.8	960.7	142.91	ug/L	142.91 ppb	16:58:32
3	S 181.975 Axial†	383.6	341.1	408.67	ug/L	408.67 ppb	16:58:32
3	Sb 206.836†	111.1	75.8	-0.5782	ug/L	-0.5782 ppb	16:58:32
3	Se 196.026†	-876.5	-865.6	12.438	ug/L	12.438 ppb	16:58:32
3	Si 251.611†	982673.2	1000025.4	29779	ug/L	29779 ppb	16:58:07
3	Sn 189.927†	-141.5	-153.0	-19.744	ug/L	-19.744 ppb	16:58:32
3	Ti 334.940†	4212379.4	4290083.6	6772.9	ug/L	6772.9 ppb	16:58:07
3	Tl 190.801†	-316.2	-287.3	-0.0673	ug/L	-0.0673 ppb	16:58:32
3	U 409.014†	-9735.2	-7327.9	-230.04	ug/L	-230.04 ppb	16:58:12
3	V 292.402†	42572.9	44708.3	266.84	ug/L	266.84 ppb	16:58:12
3	Zn 213.857†	34236.2	34103.6	277.29	ug/L	277.29 ppb	16:58:12
3	SiO2†	968394.3	985444.6	62887	ug/L	62887 ppb	16:58:50

Mean Data: 241825019|928610|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	858557.1	98.922	%	0.6471				0.65%
Sc Radial	5599.2	100	%	0.1				0.14%
Y 371.029	785278.1	107.65	%	0.606				0.56%
Y RADIAL	6731.8	111.5	%	0.16				0.14%
Ag 328.068†	-10215.8	3.5583	ug/L	0.16432	3.5583	ppb	0.16432	4.62%
Al 396.153Radial†	311958.5	214850	ug/L	1673.9	214850	ppb	1673.9	0.78%
As 188.979†	-75.9	50.612	ug/L	2.0965	50.612	ppb	2.0965	4.14%
B 249.677†	2483.6	32.371	ug/L	1.5825	32.371	ppb	1.5825	4.89%
Ba 233.527†	257133.6	1927.7	ug/L	4.05	1927.7	ppb	4.05	0.21%
Be 313.107†	-2137.2	12.403	ug/L	0.0857	12.403	ppb	0.0857	0.69%
Ca 317.933Radial†	17975.2	26235	ug/L	224.9	26235	ppb	224.9	0.86%
Cd 226.502†	1563.2	0.9424	ug/L	0.33739	0.9424	ppb	0.33739	35.80%
Co 228.616†	4422.1	67.759	ug/L	0.6017	67.759	ppb	0.6017	0.89%
Cr 267.716†	10497.0	113.21	ug/L	0.569	113.21	ppb	0.569	0.50%
Cu 324.752†	23551.0	76.230	ug/L	0.3821	76.230	ppb	0.3821	0.50%
Fe 238.204 Radial†	17118.6	153370	ug/L	1227.4	153370	ppb	1227.4	0.80%
K 766.490 Radial†	100456.1	16833	ug/L	146.9	16833	ppb	146.9	0.87%

Mg 279.077 IEC†	721.0	24114	ug/L	96.0	24114	ppb	96.0	0.40%
Mn 257.610†	3847473.1	4092.5	ug/L	39.89	4092.5	ppb	39.89	0.97%
Mo 202.031†	-123.3	3.0329	ug/L	0.73321	3.0329	ppb	0.73321	24.18%
Na 589.592 Radial†	8199.4	2484.9	ug/L	36.38	2484.9	ppb	36.38	1.46%
Ni 231.604†	4292.9	98.591	ug/L	0.7087	98.591	ppb	0.7087	0.72%
P 214.914†	2242.4	1189.8	ug/L	3.01	1189.8	ppb	3.01	0.25%
Pb 220.353†	951.0	142.01	ug/L	0.942	142.01	ppb	0.942	0.66%
S 181.975 Axial†	339.4	406.12	ug/L	4.307	406.12	ppb	4.307	1.06%
Sb 206.836†	70.2	-2.1106	ug/L	2.06530	-2.1106	ppb	2.06530	97.85%
Se 196.026†	-867.9	15.060	ug/L	2.3021	15.060	ppb	2.3021	15.29%
Si 251.611†	988573.5	29438	ug/L	295.4	29438	ppb	295.4	1.00%
Sn 189.927†	-144.9	-18.421	ug/L	1.2276	-18.421	ppb	1.2276	6.66%
Sr 421.552†	54050.9	325.75	ug/L	3.141	325.75	ppb	3.141	0.96%
Ti 334.940†	4245206.7	6702.1	ug/L	61.79	6702.1	ppb	61.79	0.92%
Tl 190.801†	-278.4	1.6669	ug/L	1.59893	1.6669	ppb	1.59893	95.92%
U 409.014†	-7296.9	-229.30	ug/L	0.643	-229.30	ppb	0.643	0.28%
V 292.402†	44686.1	266.60	ug/L	0.590	266.60	ppb	0.590	0.22%
Zn 213.857†	34108.3	277.22	ug/L	0.388	277.22	ppb	0.388	0.14%
SiO2†	982093.0	62673	ug/L	191.3	62673	ppb	191.3	0.31%

Sequence No.: 32
Sample ID: 241825020|928610|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 12/11/2009 17:01:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241825020|928610|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5504.5	5504.5	98.7	%			17:03:14
1	Y RADIAL	6310.3	6310.3	104.5	%			17:03:14
1	Al 396.153Radial†	77199.4	78234.5	53881	ug/L	53881	ppb	17:02:54
1	Ca 317.933Radial†	7942.3	8028.3	11717	ug/L	11717	ppb	17:02:54
1	Fe 238.204 Radial†	13351.0	13514.0	121070	ug/L	121070	ppb	17:02:54
1	K 766.490 Radial†	70105.0	68273.4	11401	ug/L	11401	ppb	17:02:54
1	Mg 279.077 IEC†	465.0	469.2	15673	ug/L	15673	ppb	17:03:14
1	Na 589.592 Radial†	2242.6	3825.8	1159.4	ug/L	1159.4	ppb	17:02:54
1	Sr 421.552†	36179.4	36648.2	220.93	ug/L	220.93	ppb	17:02:54
1	Sc 361.383	877516.6	877516.6	101.11	%			17:04:13
1	Y 371.029	775048.9	775048.9	106.25	%			17:04:13
1	Ag 328.068†	-7335.8	-7529.6	5.3859	ug/L	5.3859	ppb	17:04:18
1	As 188.979†	-69.7	-37.7	38.491	ug/L	38.491	ppb	17:04:38
1	B 249.677†	1136.7	1617.5	18.182	ug/L	18.182	ppb	17:04:18
1	Ba 233.527†	168474.8	166642.6	1250.2	ug/L	1250.2	ppb	17:04:18
1	Be 313.107†	-11544.2	-6755.3	5.6173	ug/L	5.6173	ppb	17:04:18
1	Cd 226.502†	987.4	1175.5	0.1245	ug/L	0.1245	ppb	17:04:38
1	Co 228.616†	4716.5	4738.4	79.463	ug/L	79.463	ppb	17:04:38
1	Cr 267.716†	7414.0	7246.9	78.501	ug/L	78.501	ppb	17:04:18
1	Cu 324.752†	23763.1	16745.2	54.814	ug/L	54.814	ppb	17:04:18
1	Mn 257.610†	4811299.6	4758140.0	5054.6	ug/L	5054.6	ppb	17:04:13
1	Mo 202.031†	30.8	12.0	9.3541	ug/L	9.3541	ppb	17:04:38
1	Ni 231.604†	2627.2	2512.6	57.678	ug/L	57.678	ppb	17:04:38
1	P 214.914†	1725.4	1464.5	730.28	ug/L	730.28	ppb	17:04:38
1	Pb 220.353†	869.0	927.5	105.95	ug/L	105.95	ppb	17:04:38
1	S 181.975 Axial†	445.6	391.3	506.41	ug/L	506.41	ppb	17:04:38
1	Sb 206.836†	77.4	39.1	0.1096	ug/L	0.1096	ppb	17:04:38
1	Se 196.026†	-661.9	-627.8	26.909	ug/L	26.909	ppb	17:04:38
1	Si 251.611†	724235.7	715830.3	21317	ug/L	21317	ppb	17:04:13
1	Sn 189.927†	-93.5	-101.3	-13.425	ug/L	-13.425	ppb	17:04:38
1	Ti 334.940†	2619869.1	2592461.9	4092.6	ug/L	4092.6	ppb	17:04:13
1	Tl 190.801†	-245.4	-208.1	2.7884	ug/L	2.7884	ppb	17:04:38
1	U 409.014†	-8615.1	-5936.9	-186.07	ug/L	-186.07	ppb	17:04:18
1	V 292.402†	35069.0	36048.0	216.93	ug/L	216.93	ppb	17:04:18
1	Zn 213.857†	31445.8	30347.9	248.53	ug/L	248.53	ppb	17:04:18
1	SiO2†	731054.8	722532.0	46109	ug/L	46109	ppb	17:05:48
2	Sc Radial	5513.7	5513.7	98.9	%			17:03:40
2	Y RADIAL	6320.1	6320.1	104.7	%			17:03:40
2	Al 396.153Radial†	76536.7	77433.6	53329	ug/L	53329	ppb	17:03:20
2	Ca 317.933Radial†	7890.3	7962.2	11621	ug/L	11621	ppb	17:03:20
2	Fe 238.204 Radial†	13286.7	13426.3	120290	ug/L	120290	ppb	17:03:20
2	K 766.490 Radial†	69621.4	67665.6	11299	ug/L	11299	ppb	17:03:20
2	Mg 279.077 IEC†	469.9	473.3	15813	ug/L	15813	ppb	17:03:40
2	Na 589.592 Radial†	2258.6	3838.1	1163.2	ug/L	1163.2	ppb	17:03:20
2	Sr 421.552†	35895.0	36299.3	218.82	ug/L	218.82	ppb	17:03:20
2	Sc 361.383	880666.1	880666.1	101.47	%			17:04:45
2	Y 371.029	778871.4	778871.4	106.77	%			17:04:45
2	Ag 328.068†	-7351.2	-7518.8	5.1930	ug/L	5.1930	ppb	17:04:50
2	As 188.979†	-83.1	-50.6	33.327	ug/L	33.327	ppb	17:05:10
2	B 249.677†	1113.0	1590.1	17.703	ug/L	17.703	ppb	17:04:50
2	Ba 233.527†	169761.6	167314.9	1255.2	ug/L	1255.2	ppb	17:04:50
2	Be 313.107†	-11717.2	-6884.9	5.5565	ug/L	5.5565	ppb	17:04:50
2	Cd 226.502†	979.8	1164.5	0.0887	ug/L	0.0887	ppb	17:05:10
2	Co 228.616†	4728.4	4733.3	79.400	ug/L	79.400	ppb	17:05:10
2	Cr 267.716†	7504.7	7310.0	79.150	ug/L	79.150	ppb	17:04:50
2	Cu 324.752†	24107.0	17000.1	55.514	ug/L	55.514	ppb	17:04:50
2	Mn 257.610†	4811775.1	4741590.5	5037.0	ug/L	5037.0	ppb	17:04:45
2	Mo 202.031†	49.3	30.2	10.455	ug/L	10.455	ppb	17:05:10
2	Ni 231.604†	2627.3	2503.3	57.467	ug/L	57.467	ppb	17:05:10

2	P 214.914†	1741.0	1473.8	735.81 ug/L	735.81 ppb	17:05:10
2	Pb 220.353†	873.6	928.9	106.05 ug/L	106.05 ppb	17:05:10
2	S 181.975 Axial†	440.6	384.8	497.93 ug/L	497.93 ppb	17:05:10
2	Sb 206.836†	85.2	46.6	2.5219 ug/L	2.5219 ppb	17:05:10
2	Se 196.026†	-668.3	-631.8	22.154 ug/L	22.154 ppb	17:05:10
2	Si 251.611†	725131.5	714151.4	21267 ug/L	21267 ppb	17:04:45
2	Sn 189.927†	-85.9	-93.5	-12.191 ug/L	-12.191 ppb	17:05:10
2	Ti 334.940†	2624610.4	2587867.7	4085.4 ug/L	4085.4 ppb	17:04:45
2	Tl 190.801†	-243.9	-205.8	3.2836 ug/L	3.2836 ppb	17:05:10
2	U 409.014†	-8780.6	-6069.5	-189.78 ug/L	-189.78 ppb	17:04:50
2	V 292.402†	35335.5	36186.7	217.99 ug/L	217.99 ppb	17:04:50
2	Zn 213.857†	31699.5	30486.7	249.79 ug/L	249.79 ppb	17:04:50
2	SiO2†	730981.1	719873.6	45940 ug/L	45940 ppb	17:05:54
3	Sc Radial	5554.9	5554.9	99.6 %		17:04:05
3	Y RADIAL	6351.9	6351.9	105.2 %		17:04:05
3	Al 396.153Radial†	77576.7	77904.0	53653 ug/L	53653 ppb	17:03:45
3	Ca 317.933Radial†	7998.9	8012.1	11694 ug/L	11694 ppb	17:03:45
3	Fe 238.204 Radial†	13425.8	13466.4	120650 ug/L	120650 ppb	17:03:45
3	K 766.490 Radial†	70482.0	68007.8	11356 ug/L	11356 ppb	17:03:45
3	Mg 279.077 IEC†	466.4	466.2	15575 ug/L	15575 ppb	17:04:05
3	Na 589.592 Radial†	2240.1	3802.7	1152.4 ug/L	1152.4 ppb	17:03:45
3	Sr 421.552†	36430.1	36567.5	220.44 ug/L	220.44 ppb	17:03:45
3	Sc 361.383	885995.4	885995.4	102.08 %		17:05:17
3	Y 371.029	781707.1	781707.1	107.16 %		17:05:17
3	Ag 328.068†	-7409.4	-7532.3	5.2295 ug/L	5.2295 ppb	17:05:22
3	As 188.979†	-75.5	-42.6	36.532 ug/L	36.532 ppb	17:05:42
3	B 249.677†	1175.2	1644.5	18.815 ug/L	18.815 ppb	17:05:22
3	Ba 233.527†	169084.7	165645.5	1242.7 ug/L	1242.7 ppb	17:05:22
3	Be 313.107†	-11348.3	-6454.1	5.7307 ug/L	5.7307 ppb	17:05:22
3	Cd 226.502†	983.9	1162.8	0.0347 ug/L	0.0347 ppb	17:05:42
3	Co 228.616†	4721.1	4698.2	78.704 ug/L	78.704 ppb	17:05:42
3	Cr 267.716†	7445.7	7207.7	78.079 ug/L	78.079 ppb	17:05:22
3	Cu 324.752†	23919.6	16673.7	54.585 ug/L	54.585 ppb	17:05:22
3	Mn 257.610†	4853960.8	4754391.0	5050.6 ug/L	5050.6 ppb	17:05:17
3	Mo 202.031†	40.1	20.9	9.8861 ug/L	9.8861 ppb	17:05:42
3	Ni 231.604†	2645.1	2505.2	57.510 ug/L	57.510 ppb	17:05:42
3	P 214.914†	1726.3	1449.0	721.97 ug/L	721.97 ppb	17:05:42
3	Pb 220.353†	859.5	909.9	103.96 ug/L	103.96 ppb	17:05:42
3	S 181.975 Axial†	456.0	397.3	514.39 ug/L	514.39 ppb	17:05:42
3	Sb 206.836†	62.0	23.4	-4.8382 ug/L	-4.8382 ppb	17:05:42
3	Se 196.026†	-669.9	-629.4	24.676 ug/L	24.676 ppb	17:05:42
3	Si 251.611†	731220.2	715817.2	21316 ug/L	21316 ppb	17:05:17
3	Sn 189.927†	-87.6	-94.6	-12.366 ug/L	-12.366 ppb	17:05:42
3	Ti 334.940†	2646894.3	2594138.2	4095.3 ug/L	4095.3 ppb	17:05:17
3	Tl 190.801†	-252.8	-213.0	1.4074 ug/L	1.4074 ppb	17:05:42
3	U 409.014†	-8735.5	-5973.2	-187.06 ug/L	-187.06 ppb	17:05:22
3	V 292.402†	35021.2	35669.3	214.48 ug/L	214.48 ppb	17:05:22
3	Zn 213.857†	31556.7	30158.9	246.95 ug/L	246.95 ppb	17:05:22
3	SiO2†	730020.3	714599.1	45603 ug/L	45603 ppb	17:06:00

Mean Data: 241825020|928610|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881392.7	101.55	%	0.494				0.49%
Sc Radial	5524.3	99.1	%	0.48				0.49%
Y 371.029	778542.5	106.73	%	0.458				0.43%
Y RADIAL	6327.4	104.8	%	0.36				0.34%
Ag 328.068†	-7526.9	5.2695	ug/L	0.10246	5.2695	ppb	0.10246	1.94%
Al 396.153Radial†	77857.4	53621	ug/L	277.2	53621	ppb	277.2	0.52%
As 188.979†	-43.6	36.117	ug/L	2.6065	36.117	ppb	2.6065	7.22%
B 249.677†	1617.4	18.234	ug/L	0.5576	18.234	ppb	0.5576	3.06%
Ba 233.527†	166534.4	1249.4	ug/L	6.28	1249.4	ppb	6.28	0.50%
Be 313.107†	-6698.1	5.6348	ug/L	0.08839	5.6348	ppb	0.08839	1.57%
Ca 317.933Radial†	8000.9	11677	ug/L	50.3	11677	ppb	50.3	0.43%
Cd 226.502†	1167.6	0.0826	ug/L	0.04520	0.0826	ppb	0.04520	54.69%
Co 228.616†	4723.3	79.189	ug/L	0.4214	79.189	ppb	0.4214	0.53%
Cr 267.716†	7254.9	78.577	ug/L	0.5399	78.577	ppb	0.5399	0.69%
Cu 324.752†	16806.3	54.971	ug/L	0.4843	54.971	ppb	0.4843	0.88%
Fe 238.204 Radial†	13468.9	120670	ug/L	393.2	120670	ppb	393.2	0.33%
K 766.490 Radial†	67982.3	11352	ug/L	51.1	11352	ppb	51.1	0.45%

Mg 279.077 IEC†	469.6	15687	ug/L	119.7	15687	ppb	119.7	0.76%
Mn 257.610†	4751373.8	5047.4	ug/L	9.24	5047.4	ppb	9.24	0.18%
Mo 202.031†	21.0	9.8983	ug/L	0.55046	9.8983	ppb	0.55046	5.56%
Na 589.592 Radial†	3822.2	1158.4	ug/L	5.45	1158.4	ppb	5.45	0.47%
Ni 231.604†	2507.0	57.552	ug/L	0.1119	57.552	ppb	0.1119	0.19%
P 214.914†	1462.4	729.35	ug/L	6.970	729.35	ppb	6.970	0.96%
Pb 220.353†	922.1	105.32	ug/L	1.177	105.32	ppb	1.177	1.12%
S 181.975 Axial†	391.2	506.24	ug/L	8.233	506.24	ppb	8.233	1.63%
Sb 206.836†	36.4	-0.7356	ug/L	3.75213	-0.7356	ppb	3.75213	510.11%
Se 196.026†	-629.7	24.580	ug/L	2.3787	24.580	ppb	2.3787	9.68%
Si 251.611†	715266.3	21300	ug/L	28.8	21300	ppb	28.8	0.13%
Sn 189.927†	-96.5	-12.661	ug/L	0.6677	-12.661	ppb	0.6677	5.27%
Sr 421.552†	36505.0	220.06	ug/L	1.101	220.06	ppb	1.101	0.50%
Ti 334.940†	2591489.3	4091.1	ug/L	5.13	4091.1	ppb	5.13	0.13%
Tl 190.801†	-209.0	2.4931	ug/L	0.97234	2.4931	ppb	0.97234	39.00%
U 409.014†	-5993.2	-187.64	ug/L	1.924	-187.64	ppb	1.924	1.03%
V 292.402†	35968.0	216.47	ug/L	1.803	216.47	ppb	1.803	0.83%
Zn 213.857†	30331.2	248.42	ug/L	1.425	248.42	ppb	1.425	0.57%
SiO2†	719001.5	45884	ug/L	257.7	45884	ppb	257.7	0.56%

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 17:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5545.8	5545.8	99.5	%			17:10:03
1	Y RADIAL	5973.0	5973.0	98.90	%			17:10:03
1	Al 396.153Radial†	7299.2	7374.0	5056.7	ug/L	5056.7	ppb	17:10:03
1	Ca 317.933Radial†	3474.9	3476.8	5074.4	ug/L	5074.4	ppb	17:10:23
1	Fe 238.204 Radial†	589.1	582.4	5233.4	ug/L	5233.4	ppb	17:10:23
1	K 766.490 Radial†	33057.0	30496.3	5107.6	ug/L	5107.6	ppb	17:10:03
1	Mg 279.077 IEC†	160.6	159.6	5372.2	ug/L	5372.2	ppb	17:10:23
1	Na 589.592 Radial†	32265.0	33993.7	10302	ug/L	10302	ppb	17:10:03
1	Sr 421.552†	85077.8	85538.4	515.86	ug/L	515.86	ppb	17:10:03
1	Sc 361.383	873480.0	873480.0	100.64	%			17:11:22
1	Y 371.029	722647.0	722647.0	99.066	%			17:11:22
1	Ag 328.068†	112725.8	111733.7	508.59	ug/L	508.59	ppb	17:11:22
1	As 188.979†	1284.7	1307.8	509.42	ug/L	509.42	ppb	17:11:42
1	B 249.677†	23215.5	23560.8	500.14	ug/L	500.14	ppb	17:11:22
1	Ba 233.527†	67768.5	67347.9	504.54	ug/L	504.54	ppb	17:11:22
1	Be 313.107†	1406791.2	1402492.3	504.60	ug/L	504.60	ppb	17:11:22
1	Cd 226.502†	48814.6	48702.6	504.90	ug/L	504.90	ppb	17:11:22
1	Co 228.616†	26553.3	26457.6	499.17	ug/L	499.17	ppb	17:11:42
1	Cr 267.716†	48232.9	47839.6	501.59	ug/L	501.59	ppb	17:11:22
1	Cu 324.752†	180837.6	172927.8	502.55	ug/L	502.55	ppb	17:11:22
1	Mn 257.610†	477483.4	473921.6	502.70	ug/L	502.70	ppb	17:11:22
1	Mo 202.031†	8098.1	8028.1	511.25	ug/L	511.25	ppb	17:11:42
1	Ni 231.604†	21964.3	21738.5	499.20	ug/L	499.20	ppb	17:11:42
1	P 214.914†	4776.2	4503.7	2438.6	ug/L	2438.6	ppb	17:11:42
1	Pb 220.353†	4494.2	4533.5	509.06	ug/L	509.06	ppb	17:11:42
1	S 181.975 Axial†	825.9	771.3	1018.0	ug/L	1018.0	ppb	17:11:42
1	Sb 206.836†	1632.8	1585.0	507.97	ug/L	507.97	ppb	17:11:42
1	Se 196.026†	883.8	904.9	527.50	ug/L	527.50	ppb	17:11:42
1	Si 251.611†	87752.8	86712.1	2570.5	ug/L	2570.5	ppb	17:11:22
1	Sn 189.927†	3187.8	3158.6	508.72	ug/L	508.72	ppb	17:11:42
1	Ti 334.940†	322693.5	321894.1	507.96	ug/L	507.96	ppb	17:11:22
1	Tl 190.801†	1778.3	1801.6	510.89	ug/L	510.89	ppb	17:11:42
1	U 409.014†	14099.9	16594.1	475.47	ug/L	475.47	ppb	17:11:22
1	V 292.402†	74235.9	75125.7	506.66	ug/L	506.66	ppb	17:11:22
1	Zn 213.857†	60008.5	58872.3	501.95	ug/L	501.95	ppb	17:11:22
1	SiO2†	88619.4	87530.4	5560.4	ug/L	5560.4	ppb	17:12:43
2	Sc Radial	5463.0	5463.0	98.0	%			17:10:28
2	Y RADIAL	5906.7	5906.7	97.81	%			17:10:28
2	Al 396.153Radial†	7168.5	7351.7	5041.4	ug/L	5041.4	ppb	17:10:28
2	Ca 317.933Radial†	3437.0	3491.1	5095.2	ug/L	5095.2	ppb	17:10:48
2	Fe 238.204 Radial†	580.0	582.0	5230.2	ug/L	5230.2	ppb	17:10:48
2	K 766.490 Radial†	32605.2	30538.6	5114.7	ug/L	5114.7	ppb	17:10:28
2	Mg 279.077 IEC†	152.3	153.5	5167.4	ug/L	5167.4	ppb	17:10:48
2	Na 589.592 Radial†	31607.2	33813.6	10248	ug/L	10248	ppb	17:10:28
2	Sr 421.552†	83627.1	85353.3	514.74	ug/L	514.74	ppb	17:10:28
2	Sc 361.383	872388.4	872388.4	100.52	%			17:11:50
2	Y 371.029	721642.3	721642.3	98.929	%			17:11:50
2	Ag 328.068†	112887.0	112034.2	509.95	ug/L	509.95	ppb	17:11:50
2	As 188.979†	1288.1	1312.8	511.34	ug/L	511.34	ppb	17:12:10
2	B 249.677†	23256.6	23630.6	501.63	ug/L	501.63	ppb	17:11:50
2	Ba 233.527†	67921.7	67584.6	506.31	ug/L	506.31	ppb	17:11:50
2	Be 313.107†	1403602.6	1401069.2	504.09	ug/L	504.09	ppb	17:11:50
2	Cd 226.502†	48909.0	48857.1	506.50	ug/L	506.50	ppb	17:11:50
2	Co 228.616†	26557.1	26494.4	499.86	ug/L	499.86	ppb	17:12:10
2	Cr 267.716†	48281.9	47948.3	502.73	ug/L	502.73	ppb	17:11:50
2	Cu 324.752†	180664.8	172980.7	502.71	ug/L	502.71	ppb	17:11:50
2	Mn 257.610†	477978.3	475007.6	503.85	ug/L	503.85	ppb	17:11:50
2	Mo 202.031†	8089.6	8029.7	511.35	ug/L	511.35	ppb	17:12:10
2	Ni 231.604†	21996.6	21797.8	500.57	ug/L	500.57	ppb	17:12:10

2	P 214.914†	4785.4	4518.8	2447.0 ug/L	2447.0 ppb	17:12:10
2	Pb 220.353†	4476.5	4521.5	507.72 ug/L	507.72 ppb	17:12:10
2	S 181.975 Axial†	821.8	768.2	1013.9 ug/L	1013.9 ppb	17:12:10
2	Sb 206.836†	1661.7	1615.8	517.63 ug/L	517.63 ppb	17:12:10
2	Se 196.026†	869.0	891.4	519.87 ug/L	519.87 ppb	17:12:10
2	Si 251.611†	87904.9	86972.5	2578.2 ug/L	2578.2 ppb	17:11:50
2	Sn 189.927†	3175.0	3149.8	507.30 ug/L	507.30 ppb	17:12:10
2	Ti 334.940†	322604.3	322206.6	508.45 ug/L	508.45 ppb	17:11:50
2	Tl 190.801†	1773.3	1798.8	510.10 ug/L	510.10 ppb	17:12:10
2	U 409.014†	14029.3	16541.4	473.95 ug/L	473.95 ppb	17:11:50
2	V 292.402†	74076.3	75059.3	506.21 ug/L	506.21 ppb	17:11:50
2	Zn 213.857†	60033.7	58972.1	502.81 ug/L	502.81 ppb	17:11:50
2	SiO2†	87360.6	86388.2	5487.5 ug/L	5487.5 ppb	17:12:48
3	Sc Radial	5372.5	5372.5	96.4 %		17:10:53
3	Y RADIAL	5831.4	5831.4	96.56 %		17:10:53
3	Al 396.153Radial†	7114.3	7418.7	5087.6 ug/L	5087.6 ppb	17:10:53
3	Ca 317.933Radial†	3472.1	3586.6	5234.6 ug/L	5234.6 ppb	17:11:13
3	Fe 238.204 Radial†	585.1	597.3	5367.3 ug/L	5367.3 ppb	17:11:13
3	K 766.490 Radial†	32335.7	30819.4	5161.8 ug/L	5161.8 ppb	17:10:53
3	Mg 279.077 IEC†	157.3	161.4	5432.9 ug/L	5432.9 ppb	17:11:13
3	Na 589.592 Radial†	31358.8	34099.2	10334 ug/L	10334 ppb	17:10:53
3	Sr 421.552†	83073.6	86216.4	519.95 ug/L	519.95 ppb	17:10:53
3	Sc 361.383	877526.6	877526.6	101.11 %		17:12:17
3	Y 371.029	724696.9	724696.9	99.347 %		17:12:17
3	Ag 328.068†	113511.6	111994.4	509.81 ug/L	509.81 ppb	17:12:17
3	As 188.979†	1291.4	1308.5	509.73 ug/L	509.73 ppb	17:12:37
3	B 249.677†	23369.2	23606.4	501.09 ug/L	501.09 ppb	17:12:17
3	Ba 233.527†	68501.5	67762.4	507.64 ug/L	507.64 ppb	17:12:17
3	Be 313.107†	1411604.7	1400807.3	504.00 ug/L	504.00 ppb	17:12:17
3	Cd 226.502†	49327.0	48985.7	507.82 ug/L	507.82 ppb	17:12:17
3	Co 228.616†	26732.3	26513.0	500.20 ug/L	500.20 ppb	17:12:37
3	Cr 267.716†	48628.3	48009.7	503.37 ug/L	503.37 ppb	17:12:17
3	Cu 324.752†	182075.7	173323.7	503.71 ug/L	503.71 ppb	17:12:17
3	Mn 257.610†	481503.0	475709.4	504.60 ug/L	504.60 ppb	17:12:17
3	Mo 202.031†	8113.5	8006.2	509.87 ug/L	509.87 ppb	17:12:37
3	Ni 231.604†	22141.8	21813.4	500.92 ug/L	500.92 ppb	17:12:37
3	P 214.914†	4793.1	4498.6	2435.5 ug/L	2435.5 ppb	17:12:37
3	Pb 220.353†	4496.7	4515.5	507.03 ug/L	507.03 ppb	17:12:37
3	S 181.975 Axial†	836.0	777.4	1026.1 ug/L	1026.1 ppb	17:12:37
3	Sb 206.836†	1663.6	1608.0	515.16 ug/L	515.16 ppb	17:12:37
3	Se 196.026†	888.1	905.2	528.08 ug/L	528.08 ppb	17:12:37
3	Si 251.611†	88543.4	87092.0	2581.8 ug/L	2581.8 ppb	17:12:17
3	Sn 189.927†	3203.1	3159.2	508.82 ug/L	508.82 ppb	17:12:37
3	Ti 334.940†	324987.8	322684.8	509.22 ug/L	509.22 ppb	17:12:17
3	Tl 190.801†	1778.8	1793.9	508.74 ug/L	508.74 ppb	17:12:37
3	U 409.014†	14137.6	16566.7	474.66 ug/L	474.66 ppb	17:12:17
3	V 292.402†	74516.6	75063.2	506.20 ug/L	506.20 ppb	17:12:17
3	Zn 213.857†	60534.6	59117.8	504.03 ug/L	504.03 ppb	17:12:17
3	SiO2†	88441.9	86948.8	5523.2 ug/L	5523.2 ppb	17:12:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874465.0	100.75	%	0.312				0.31%
Sc Radial	5460.4	97.9	%	1.55				1.59%
Y 371.029	722995.4	99.114	%	0.2134				0.22%
Y RADIAL	5903.7	97.76	%	1.173				1.20%
Ag 328.068†	111920.8	509.45	ug/L	0.747	509.45	ppb	0.747	0.15%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7381.5	5061.9	ug/L	23.54	5061.9	ppb	23.54	0.47%
QC value within limits for Al 396.153Radial Recovery = 101.24%								
As 188.979†	1309.7	510.16	ug/L	1.028	510.16	ppb	1.028	0.20%
QC value within limits for As 188.979 Recovery = 102.03%								
B 249.677†	23599.3	500.95	ug/L	0.753	500.95	ppb	0.753	0.15%
QC value within limits for B 249.677 Recovery = 100.19%								
Ba 233.527†	67565.0	506.16	ug/L	1.556	506.16	ppb	1.556	0.31%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	1401456.3	504.23	ug/L	0.325	504.23	ppb	0.325	0.06%
QC value within limits for Be 313.107 Recovery = 100.85%								
Ca 317.933Radial†	3518.2	5134.7	ug/L	87.12	5134.7	ppb	87.12	1.70%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.69%
Cd 226.502†            48848.5      506.41 ug/L         1.464      506.41 ppb          1.464   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            26488.3      499.74 ug/L         0.528      499.74 ppb          0.528   0.11%
   QC value within limits for Co 228.616  Recovery = 99.95%
Cr 267.716†            47932.5      502.56 ug/L         0.902      502.56 ppb          0.902   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.51%
Cu 324.752†           173077.4      502.99 ug/L         0.628      502.99 ppb          0.628   0.12%
   QC value within limits for Cu 324.752  Recovery = 100.60%
Fe 238.204 Radial†       587.3      5277.0 ug/L        78.20      5277.0 ppb         78.20   1.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.54%
K 766.490 Radial†      30618.1      5128.0 ug/L        29.43      5128.0 ppb         29.43   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 102.56%
Mg 279.077 IEC†          158.2      5324.2 ug/L       139.13      5324.2 ppb        139.13   2.61%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.48%
Mn 257.610†           474879.5      503.72 ug/L         0.961      503.72 ppb          0.961   0.19%
   QC value within limits for Mn 257.610  Recovery = 100.74%
Mo 202.031†             8021.3      510.82 ug/L         0.830      510.82 ppb          0.830   0.16%
   QC value within limits for Mo 202.031  Recovery = 102.16%
Na 589.592 Radial†     33968.8       10295 ug/L        43.8        10295 ppb         43.8   0.43%
   QC value within limits for Na 589.592 Radial  Recovery = 102.95%
Ni 231.604†            21783.2      500.23 ug/L         0.908      500.23 ppb          0.908   0.18%
   QC value within limits for Ni 231.604  Recovery = 100.05%
P 214.914†              4507.0      2440.4 ug/L         5.97      2440.4 ppb          5.97   0.24%
   QC value within limits for P 214.914  Recovery = 97.61%
Pb 220.353†             4523.5      507.94 ug/L         1.033      507.94 ppb          1.033   0.20%
   QC value within limits for Pb 220.353  Recovery = 101.59%
S 181.975 Axial†         772.3      1019.3 ug/L         6.22      1019.3 ppb          6.22   0.61%
   QC value within limits for S 181.975 Axial  Recovery = 101.93%
Sb 206.836†             1602.9      513.58 ug/L         5.015      513.58 ppb          5.015   0.98%
   QC value within limits for Sb 206.836  Recovery = 102.72%
Se 196.026†              900.5      525.15 ug/L         4.584      525.15 ppb          4.584   0.87%
   QC value within limits for Se 196.026  Recovery = 105.03%
Si 251.611†            86925.5      2576.8 ug/L         5.79      2576.8 ppb          5.79   0.22%
   QC value within limits for Si 251.611  Recovery = 103.07%
Sn 189.927†             3155.9      508.28 ug/L         0.849      508.28 ppb          0.849   0.17%
   QC value within limits for Sn 189.927  Recovery = 101.66%
Sr 421.552†            85702.7      516.85 ug/L         2.740      516.85 ppb          2.740   0.53%
   QC value within limits for Sr 421.552  Recovery = 103.37%
Ti 334.940†           322261.8      508.54 ug/L         0.633      508.54 ppb          0.633   0.12%
   QC value within limits for Ti 334.940  Recovery = 101.71%
Tl 190.801†             1798.1      509.91 ug/L         1.090      509.91 ppb          1.090   0.21%
   QC value within limits for Tl 190.801  Recovery = 101.98%
U 409.014†             16567.4      474.69 ug/L         0.759      474.69 ppb          0.759   0.16%
   QC value within limits for U 409.014  Recovery = 94.94%
V 292.402†             75082.7      506.36 ug/L         0.262      506.36 ppb          0.262   0.05%
   QC value within limits for V 292.402  Recovery = 101.27%
Zn 213.857†            58987.4      502.93 ug/L         1.048      502.93 ppb          1.048   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.59%
SiO2†                  86955.8      5523.7 ug/L        36.45      5523.7 ppb         36.45   0.66%
   QC value within limits for SiO2  Recovery = 103.29%
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 17:15:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5609.6	5609.6	101	%			17:16:54
1	Y RADIAL	6093.4	6093.4	100.9	%			17:16:54
1	Al 396.153Radial†	-31.4	4.1	2.7902	ug/L	2.7902	ppb	17:16:54
1	Ca 317.933Radial†	23.4	6.3	9.2653	ug/L	9.2653	ppb	17:17:14
1	Fe 238.204 Radial†	9.2	-0.7	-6.3809	ug/L	-6.3809	ppb	17:17:14
1	K 766.490 Radial†	2923.7	166.6	27.957	ug/L	27.957	ppb	17:16:54
1	Mg 279.077 IEC†	0.6	-1.3	-43.876	ug/L	-43.876	ppb	17:17:14
1	Na 589.592 Radial†	-1657.3	-93.2	-28.238	ug/L	-28.238	ppb	17:16:54
1	Sr 421.552†	-42.5	-42.0	-0.2534	ug/L	-0.2534	ppb	17:16:54
1	Sc 361.383	868166.3	868166.3	100.03	%			17:18:11
1	Y 371.029	730614.2	730614.2	100.16	%			17:18:11
1	Ag 328.068†	359.5	85.3	0.3852	ug/L	0.3852	ppb	17:18:11
1	As 188.979†	-25.2	6.1	2.3339	ug/L	2.3339	ppb	17:18:31
1	B 249.677†	-286.5	206.8	4.4085	ug/L	4.4085	ppb	17:18:31
1	Ba 233.527†	-11.2	-0.1	-0.0011	ug/L	-0.0011	ppb	17:18:31
1	Be 313.107†	-4666.5	-2.5	-0.0006	ug/L	-0.0006	ppb	17:18:11
1	Cd 226.502†	-193.5	5.5	0.0584	ug/L	0.0584	ppb	17:18:31
1	Co 228.616†	-70.1	3.3	0.0649	ug/L	0.0649	ppb	17:18:31
1	Cr 267.716†	73.1	-13.0	-0.1355	ug/L	-0.1355	ppb	17:18:31
1	Cu 324.752†	6805.7	45.9	0.1329	ug/L	0.1329	ppb	17:18:11
1	Mn 257.610†	555.2	34.9	0.0372	ug/L	0.0372	ppb	17:18:31
1	Mo 202.031†	31.1	12.7	0.8064	ug/L	0.8064	ppb	17:18:31
1	Ni 231.604†	99.7	13.7	0.3147	ug/L	0.3147	ppb	17:18:31
1	P 214.914†	229.7	-12.4	-6.9214	ug/L	-6.9214	ppb	17:18:31
1	Pb 220.353†	-67.2	0.8	0.0908	ug/L	0.0908	ppb	17:18:31
1	S 181.975 Axial†	47.0	-2.5	-3.2610	ug/L	-3.2610	ppb	17:18:31
1	Sb 206.836†	45.1	7.7	2.4528	ug/L	2.4528	ppb	17:18:31
1	Se 196.026†	-32.6	-5.8	-3.2627	ug/L	-3.2627	ppb	17:18:31
1	Si 251.611†	582.1	100.2	2.9613	ug/L	2.9613	ppb	17:18:31
1	Sn 189.927†	10.4	1.5	0.2480	ug/L	0.2480	ppb	17:18:31
1	Ti 334.940†	-1173.5	83.1	0.1324	ug/L	0.1324	ppb	17:18:11
1	Tl 190.801†	-24.9	9.7	2.7329	ug/L	2.7329	ppb	17:18:31
1	U 409.014†	-2641.7	-56.9	-1.6357	ug/L	-1.6357	ppb	17:18:11
1	V 292.402†	-1363.9	-0.8	0.0030	ug/L	0.0030	ppb	17:18:11
1	Zn 213.857†	799.7	45.6	0.3923	ug/L	0.3923	ppb	17:18:31
1	SiO2†	620.8	96.2	6.0871	ug/L	6.0871	ppb	17:19:27
2	Sc Radial	5558.2	5558.2	99.7	%			17:17:19
2	Y RADIAL	6036.1	6036.1	99.95	%			17:17:19
2	Al 396.153Radial†	-14.4	20.9	14.377	ug/L	14.377	ppb	17:17:19
2	Ca 317.933Radial†	20.0	3.1	4.5610	ug/L	4.5610	ppb	17:17:39
2	Fe 238.204 Radial†	10.7	0.9	7.6278	ug/L	7.6278	ppb	17:17:39
2	K 766.490 Radial†	2898.0	167.7	28.149	ug/L	28.149	ppb	17:17:19
2	Mg 279.077 IEC†	0.9	-1.0	-33.881	ug/L	-33.881	ppb	17:17:39
2	Na 589.592 Radial†	-1655.6	-106.7	-32.347	ug/L	-32.347	ppb	17:17:19
2	Sr 421.552†	-33.5	-33.3	-0.2011	ug/L	-0.2011	ppb	17:17:19
2	Sc 361.383	866834.8	866834.8	99.875	%			17:18:36
2	Y 371.029	728507.0	728507.0	99.870	%			17:18:36
2	Ag 328.068†	325.8	52.2	0.2387	ug/L	0.2387	ppb	17:18:36
2	As 188.979†	-19.9	11.4	4.3868	ug/L	4.3868	ppb	17:18:56
2	B 249.677†	-319.2	173.6	3.6982	ug/L	3.6982	ppb	17:18:56
2	Ba 233.527†	3.8	14.9	0.1106	ug/L	0.1106	ppb	17:18:56
2	Be 313.107†	-4565.1	91.9	0.0330	ug/L	0.0330	ppb	17:18:36
2	Cd 226.502†	-218.8	-20.1	-0.2095	ug/L	-0.2095	ppb	17:18:56
2	Co 228.616†	-71.6	1.7	0.0340	ug/L	0.0340	ppb	17:18:56
2	Cr 267.716†	72.4	-13.6	-0.1418	ug/L	-0.1418	ppb	17:18:56
2	Cu 324.752†	6800.8	51.4	0.1497	ug/L	0.1497	ppb	17:18:36
2	Mn 257.610†	560.5	41.1	0.0449	ug/L	0.0449	ppb	17:18:56
2	Mo 202.031†	26.5	8.1	0.5185	ug/L	0.5185	ppb	17:18:56
2	Ni 231.604†	79.6	-6.2	-0.1428	ug/L	-0.1428	ppb	17:18:56

2	P 214.914†	240.5	-1.3	-0.7334 ug/L	-0.7334 ppb	17:18:56
2	Pb 220.353†	-57.9	10.1	1.1296 ug/L	1.1296 ppb	17:18:56
2	S 181.975 Axial†	50.1	0.8	1.0401 ug/L	1.0401 ppb	17:18:56
2	Sb 206.836†	47.1	9.7	3.0859 ug/L	3.0859 ppb	17:18:56
2	Se 196.026†	-25.3	1.4	0.8294 ug/L	0.8294 ppb	17:18:56
2	Si 251.611†	560.3	79.2	2.3415 ug/L	2.3415 ppb	17:18:56
2	Sn 189.927†	8.9	0.1	0.0150 ug/L	0.0150 ppb	17:18:56
2	Ti 334.940†	-1238.7	16.0	0.0267 ug/L	0.0267 ppb	17:18:36
2	Tl 190.801†	-24.7	9.9	2.7779 ug/L	2.7779 ppb	17:18:56
2	U 409.014†	-2669.6	-88.9	-2.5567 ug/L	-2.5567 ppb	17:18:36
2	V 292.402†	-1434.9	-74.0	-0.4916 ug/L	-0.4916 ppb	17:18:36
2	Zn 213.857†	798.0	45.1	0.3895 ug/L	0.3895 ppb	17:18:56
2	SiO2†	602.9	79.2	5.0123 ug/L	5.0123 ppb	17:19:32
3	Sc Radial	5597.3	5597.3	100 %		17:17:44
3	Y RADIAL	6082.5	6082.5	100.7 %		17:17:44
3	Al 396.153Radial†	-17.0	18.3	12.625 ug/L	12.625 ppb	17:17:44
3	Ca 317.933Radial†	20.4	3.4	5.0215 ug/L	5.0215 ppb	17:18:04
3	Fe 238.204 Radial†	9.7	-0.3	-2.4137 ug/L	-2.4137 ppb	17:18:04
3	K 766.490 Radial†	2753.4	3.3	0.5633 ug/L	0.5633 ppb	17:17:44
3	Mg 279.077 IEC†	-2.1	-4.0	-133.66 ug/L	-133.66 ppb	17:18:04
3	Na 589.592 Radial†	-1571.9	-11.8	-3.5616 ug/L	-3.5616 ppb	17:17:44
3	Sr 421.552†	-0.6	-0.4	-0.0023 ug/L	-0.0023 ppb	17:17:44
3	Sc 361.383	855593.0	855593.0	98.580 %		17:19:02
3	Y 371.029	719053.6	719053.6	98.574 %		17:19:02
3	Ag 328.068†	345.1	76.1	0.3495 ug/L	0.3495 ppb	17:19:02
3	As 188.979†	-30.3	0.6	0.2199 ug/L	0.2199 ppb	17:19:22
3	B 249.677†	-311.8	177.0	3.7718 ug/L	3.7718 ppb	17:19:22
3	Ba 233.527†	-8.4	2.6	0.0181 ug/L	0.0181 ppb	17:19:22
3	Be 313.107†	-4493.9	104.0	0.0372 ug/L	0.0372 ppb	17:19:02
3	Cd 226.502†	-196.4	-0.3	-0.0024 ug/L	-0.0024 ppb	17:19:22
3	Co 228.616†	-75.9	-3.6	-0.0669 ug/L	-0.0669 ppb	17:19:22
3	Cr 267.716†	85.2	0.4	0.0062 ug/L	0.0062 ppb	17:19:22
3	Cu 324.752†	6720.6	59.6	0.1729 ug/L	0.1729 ppb	17:19:02
3	Mn 257.610†	550.6	38.3	0.0429 ug/L	0.0429 ppb	17:19:22
3	Mo 202.031†	20.5	2.3	0.1487 ug/L	0.1487 ppb	17:19:22
3	Ni 231.604†	103.1	18.6	0.4277 ug/L	0.4277 ppb	17:19:22
3	P 214.914†	231.9	-6.8	-3.8262 ug/L	-3.8262 ppb	17:19:22
3	Pb 220.353†	-83.1	-16.4	-1.8272 ug/L	-1.8272 ppb	17:19:22
3	S 181.975 Axial†	48.6	-0.1	-0.1872 ug/L	-0.1872 ppb	17:19:22
3	Sb 206.836†	37.3	0.5	0.1325 ug/L	0.1325 ppb	17:19:22
3	Se 196.026†	-23.8	2.6	1.4819 ug/L	1.4819 ppb	17:19:22
3	Si 251.611†	548.9	75.1	2.2363 ug/L	2.2363 ppb	17:19:22
3	Sn 189.927†	3.0	-5.8	-0.9253 ug/L	-0.9253 ppb	17:19:22
3	Ti 334.940†	-1289.7	-52.1	-0.0779 ug/L	-0.0779 ppb	17:19:02
3	Tl 190.801†	-33.2	0.9	0.2532 ug/L	0.2532 ppb	17:19:22
3	U 409.014†	-2861.8	-319.0	-9.1711 ug/L	-9.1711 ppb	17:19:02
3	V 292.402†	-1405.3	-62.9	-0.4365 ug/L	-0.4365 ppb	17:19:02
3	Zn 213.857†	795.5	53.1	0.4585 ug/L	0.4585 ppb	17:19:22
3	SiO2†	582.3	66.2	4.2273 ug/L	4.2273 ppb	17:19:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863531.4	99.495	%	0.7958				0.80%
Sc Radial	5588.3	100	%	0.5				0.48%
Y 371.029	726058.3	99.534	%	0.8441				0.85%
Y RADIAL	6070.7	100.5	%	0.50				0.50%
Ag 328.068†	71.2	0.3245	ug/L	0.07643	0.3245	ppb	0.07643	23.55%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.4	9.9306	ug/L	6.24547	9.9306	ppb	6.24547	62.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.0	2.3135	ug/L	2.08349	2.3135	ppb	2.08349	90.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	185.8	3.9595	ug/L	0.39059	3.9595	ppb	0.39059	9.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.8	0.0425	ug/L	0.05973	0.0425	ppb	0.05973	140.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	64.5	0.0232	ug/L	0.02074	0.0232	ppb	0.02074	89.42%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.3	6.2826	ug/L	2.59333	6.2826	ppb	2.59333	41.28%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -5.0     -0.0512 ug/L       0.14045     -0.0512 ppb        0.14045 274.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0107 ug/L       0.06892      0.0107 ppb        0.06892 645.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -8.7     -0.0903 ug/L       0.08369     -0.0903 ppb        0.08369  92.63%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                52.3      0.1518 ug/L       0.02010      0.1518 ppb        0.02010  13.24%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.0     -0.3889 ug/L       7.22051     -0.3889 ppb        7.22051 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.5      18.890 ug/L       15.8716      18.890 ppb        15.8716  84.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.1     -70.473 ug/L       54.9514     -70.473 ppb        54.9514  77.97%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                38.1      0.0416 ug/L       0.00401      0.0416 ppb        0.00401   9.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.7      0.4912 ug/L       0.32972      0.4912 ppb        0.32972  67.13%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -70.6     -21.382 ug/L       15.5690     -21.382 ppb        15.5690  72.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.7      0.1999 ug/L       0.30205      0.1999 ppb        0.30205 151.13%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.8     -3.8270 ug/L       3.09403     -3.8270 ppb        3.09403  80.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.8     -0.2023 ug/L       1.50005     -0.2023 ppb        1.50005 741.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.6     -0.8027 ug/L       2.21563     -0.8027 ppb        2.21563 276.02%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.0      1.8904 ug/L       1.55496      1.8904 ppb        1.55496  82.26%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.6     -0.3171 ug/L       2.57169     -0.3171 ppb        2.57169 810.93%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                84.9      2.5130 ug/L       0.39179      2.5130 ppb        0.39179  15.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.4     -0.2208 ug/L       0.62115     -0.2208 ppb        0.62115 281.33%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -25.2     -0.1523 ug/L       0.13251     -0.1523 ppb        0.13251  87.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                15.7      0.0270 ug/L       0.10513      0.0270 ppb        0.10513 388.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.8      1.9213 ug/L       1.44483      1.9213 ppb        1.44483  75.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -154.9     -4.4545 ug/L       4.11056     -4.4545 ppb        4.11056  92.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -45.9     -0.3084 ug/L       0.27105     -0.3084 ppb        0.27105  87.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.9      0.4134 ug/L       0.03904      0.4134 ppb        0.03904   9.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      80.5      5.1089 ug/L       0.93366      5.1089 ppb        0.93366  18.28%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, December 14, 2009 10:16:18
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.308
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	983.0	983.034	31.411	3.2
	Mg	24.0	22630.3	22630.312	205.602	0.9
	Co	58.9	65908.1	65908.104	803.256	1.2
	Rh	102.9	111995.5	111995.505	727.243	0.6
	In	114.9	135677.7	135677.668	818.478	0.6
	Pb	208.0	75412.9	75412.938	688.890	0.9
⌈>	Ba	137.9	117965.5	117965.486	885.690	0.8
⌊	Ba++	69.0	2116.9	0.018	0.000	1.6
⌈>	Ce	139.9	141894.0	141894.034	1037.718	0.7
⌊	CeO	155.9	3761.0	0.027	0.000	1.6
	Bkgd	220.0	5.2	5.200	2.308	44.4

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	19	6.0	1266.1
Co	59	19	7.0	42954.1
In	115	19	8.5	91131.8

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	607	2060	0.621
Be	9.0	9.1	2059	2055	0.628
Mg	24.0	24.0	5671	2075	0.600
Mg	25.0	25.0	5945	2080	0.619
Mg	26.0	26.0	6149	2095	0.610
Co	58.9	58.9	14162	2120	0.676
Rh	102.9	102.9	24875	2220	0.650
In	114.9	114.9	27787	2255	0.626
Ce	139.9	139.9	33849	2300	0.624
Pb	206.0	206.0	49918	2460	0.611
Pb	207.0	206.9	50113	2380	0.628
Pb	208.0	208.0	50424	2490	0.657
U	238.1	238.0	57684	2480	0.645

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 14, 2009 23:37:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\Blank.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		8	
	Be	9		ug/L		3	
	B	11		ug/L		45	
	Na	23		ug/L		23352	
	Mg	24		ug/L		333	
	Al	27		ug/L		1000	
	P	31		ug/L		1799	
	K	39		ug/L		247803	
	Ca	43		ug/L		348	
>	Sc	45		ug/L		301392	
	Ti	47		ug/L		188	
	V	51		ug/L		5986	
	Cr	52		ug/L		-1414	
	Cr	53		ug/L		216010	
	Mn	55		ug/L		1059	
	Fe	57		ug/L		2341	
	Co	59		ug/L		97	
	Ni	60		ug/L		31	
	Cu	63		ug/L		125	
	Cu	65		ug/L		75	
	Zn	66		ug/L		96	
	Zn	67		ug/L		8856	
	Zn	68		ug/L		860	
>	Ge	74		ug/L		106405	
	As	75		ug/L		1433	
	Se	77		ug/L		12845	
	Se	82		ug/L		-1	
	Kr	83		ug/L		41	
	Sr	88		ug/L		190	
	Y	89		ug/L		14	
	Zr	90		ug/L		231	
	Mo	98		ug/L		50	
	Ag	107		ug/L		61	
	Cd	111		ug/L		18	
	Cd	114		ug/L		31	
>	In	115		ug/L		78296	
	Sn	120		ug/L		158	
	Sb	121		ug/L		188	
	Sb	123		ug/L		171	
	Ba	135		ug/L		16	
	Ba	137		ug/L		34	
	Ho	165		ug/L		17	
>	Lu	175		ug/L		88189	
	Tl	205		ug/L		2470	
	Pb	208		ug/L		399	
	Bi	209		ug/L		26	
	Th	232		ug/L		507	
	U	238		ug/L		213	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 14, 2009 23:43:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\Standard 1.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	3.850	716	0.002
	Be	9	10.000	ug/L	2.669	213	0.001
	B	11	20.000	ug/L	10.644	381	0.001
	Na	23	1000.000	ug/L	7.805	513115	1.641
	Mg	24	1000.000	ug/L	12.214	312748	1.049
	Al	27	1000.000	ug/L	8.620	405060	1.352
	P	31	1000.000	ug/L	2.293	30595	0.097
	K	39	1000.000	ug/L	3.318	1197944	3.196
	Ca	43	1000.000	ug/L	1.740	2341	0.007
>	Sc	45		ug/L		298178	298177.890
	Ti	47	10.000	ug/L	2.275	1460	0.004
	V	51	10.000	ug/L	40.958	21441	0.051
	Cr	52	10.000	ug/L	3.954	10697	0.041
	Cr	53		ug/L		195557	-0.060
	Mn	55	10.000	ug/L	3.118	20216	0.064
	Fe	57	1000.000	ug/L	1.232	45251	0.144
	Co	59	10.000	ug/L	1.876	18596	0.062
	Ni	60	10.000	ug/L	3.175	4073	0.014
	Cu	63		ug/L		9493	0.031
	Cu	65	10.000	ug/L	3.682	4525	0.015
	Zn	66	10.000	ug/L	2.475	1956	0.018
	Zn	67		ug/L		8270	-0.004
	Zn	68		ug/L		2202	0.013
>	Ge	74		ug/L		104090	104089.595
	As	75	10.000	ug/L	14.683	3388	0.019
	Se	77		ug/L		10828	-0.017
	Se	82	10.000	ug/L	7.373	238	0.002
	Kr	83		ug/L		37	-0.000
	Sr	88	10.000	ug/L	4.379	38744	0.503
	Y	89		ug/L		18	0.000
	Zr	90	10.000	ug/L	3.733	21694	0.280
	Mo	98	10.000	ug/L	2.973	9789	0.127
	Ag	107	10.000	ug/L	3.710	16553	0.215
	Cd	111	10.000	ug/L	4.810	3452	0.045
	Cd	114		ug/L		8158	0.106
>	In	115		ug/L		76768	76768.152
	Sn	120	10.000	ug/L	4.305	16561	0.214
	Sb	121	10.000	ug/L	3.848	12275	0.158
	Sb	123		ug/L		9478	0.121
	Ba	135		ug/L		4439	0.051
	Ba	137	10.000	ug/L	3.895	7492	0.085
	Ho	165		ug/L		15	-0.000
>	Lu	175		ug/L		87578	87577.649
	Tl	205	10.000	ug/L	3.417	33196	0.351
	Pb	208	10.000	ug/L	5.233	56923	0.646
	Bi	209		ug/L		29	0.000
	Th	232	10.000	ug/L	2.816	69831	0.792
	U	238	10.000	ug/L	6.174	69738	0.795

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, December 14, 2009 23:49:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\Standard 2.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.935**	**ug/L**	2.565	6814	0.022
	Be	9	**99.907**	**ug/L**	2.312	1970	0.006
	B	11	**200.139**	**ug/L**	1.296	3736	0.012
	Na	23	**9983.965**	**ug/L**	7.518	4341158	14.123
	Mg	24	**10002.578**	**ug/L**	1.706	3285014	10.770
	Al	27	**10018.214**	**ug/L**	8.323	5042189	16.558
	P	31	**9999.678**	**ug/L**	0.508	295503	0.963
	K	39	**10003.618**	**ug/L**	3.893	10360832	33.170
	Ca	43	**10000.494**	**ug/L**	0.847	20872	0.067
>	Sc	45		**ug/L**		305111	305110.998
	Ti	47	**99.988**	**ug/L**	0.824	13077	0.042
	V	51	**99.913**	**ug/L**	6.022	150029	0.472
	Cr	52	**100.049**	**ug/L**	1.437	128646	0.426
	Cr	53		**ug/L**		186627	-0.105
	Mn	55	**99.966**	**ug/L**	2.193	190723	0.622
	Fe	57	**9994.571**	**ug/L**	2.151	418767	1.366
	Co	59	**99.961**	**ug/L**	2.532	182186	0.597
	Ni	60	**99.965**	**ug/L**	1.689	40006	0.131
	Cu	63		**ug/L**		91618	0.300
	Cu	65	**99.959**	**ug/L**	3.824	43821	0.144
	Zn	66	**99.977**	**ug/L**	2.175	18574	0.175
	Zn	67		**ug/L**		10405	0.015
	Zn	68		**ug/L**		14176	0.126
>	Ge	74		**ug/L**		105672	105672.297
	As	75	**100.206**	**ug/L**	1.617	26881	0.241
	Se	77		**ug/L**		10431	-0.022
	Se	82	**99.985**	**ug/L**	2.954	2383	0.023
	Kr	83		**ug/L**		55	0.000
	Sr	88	**99.982**	**ug/L**	1.070	382739	4.935
	Y	89		**ug/L**		51	0.000
	Zr	90	**100.009**	**ug/L**	1.263	219199	2.825
	Mo	98	**100.011**	**ug/L**	1.361	99539	1.283
	Ag	107	**99.976**	**ug/L**	0.327	162849	2.100
	Cd	111	**100.002**	**ug/L**	2.554	34776	0.449
	Cd	114		**ug/L**		79278	1.023
>	In	115		**ug/L**		77524	77524.360
	Sn	120	**100.002**	**ug/L**	2.591	166236	2.143
	Sb	121	**100.027**	**ug/L**	3.690	125783	1.621
	Sb	123		**ug/L**		96109	1.238
	Ba	135		**ug/L**		43768	0.481
	Ba	137	**99.962**	**ug/L**	1.541	74622	0.821
	Ho	165		**ug/L**		10	-0.000
>	Lu	175		**ug/L**		90912	90912.352
	Tl	205	**99.997**	**ug/L**	1.369	320991	3.503
	Pb	208	**99.947**	**ug/L**	1.160	558077	6.135
	Bi	209		**ug/L**		69	0.000
	Th	232	**99.984**	**ug/L**	1.635	708984	7.795
	U	238	**99.971**	**ug/L**	1.829	702057	7.722

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, December 14, 2009 23:55:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 1.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.320**	**ug/L**	3.568	3560	0.012
	Be	9	**52.449**	**ug/L**	4.975	1032	0.003
	B	11	**105.254**	**ug/L**	1.662	1980	0.006
	Na	23	**4961.541**	**ug/L**	12.594	2166885	7.019
	Mg	24	**4751.178**	**ug/L**	6.598	1556733	5.116
	Al	27	**4117.906**	**ug/L**	6.184	2075489	6.806
	P	31	**5059.731**	**ug/L**	0.865	150008	0.487
	K	39	**4978.676**	**ug/L**	6.659	5281838	16.508
	Ca	43	**5110.484**	**ug/L**	1.939	10806	0.034
>	Sc	45		**ug/L**		304232	304232.278
	Ti	47	**51.077**	**ug/L**	2.819	6760	0.022
	V	51	**52.713**	**ug/L**	1.632	81912	0.249
	Cr	52	**51.841**	**ug/L**	1.694	65791	0.221
	Cr	53		**ug/L**		180785	-0.122
	Mn	55	**53.731**	**ug/L**	1.762	102720	0.334
	Fe	57	**5203.303**	**ug/L**	2.054	218567	0.711
	Co	59	**50.677**	**ug/L**	2.815	92143	0.303
	Ni	60	**51.791**	**ug/L**	2.659	20675	0.068
	Cu	63		**ug/L**		48205	0.158
	Cu	65	**52.820**	**ug/L**	4.359	23116	0.076
	Zn	66	**51.755**	**ug/L**	2.806	9806	0.091
	Zn	67		**ug/L**		9122	0.002
	Zn	68		**ug/L**		7603	0.063
>	Ge	74		**ug/L**		107249	107248.970
	As	75	**45.063**	**ug/L**	4.753	13053	0.108
	Se	77		**ug/L**		9586	-0.031
	Se	82	**48.514**	**ug/L**	2.305	1173	0.011
	Kr	83		**ug/L**		39	-0.000
	Sr	88	**49.106**	**ug/L**	1.440	191123	2.424
	Y	89		**ug/L**		26	0.000
	Zr	90	**49.348**	**ug/L**	0.639	110028	1.394
	Mo	98	**49.204**	**ug/L**	0.763	49794	0.631
	Ag	107	**49.722**	**ug/L**	0.206	82333	1.044
	Cd	111	**49.342**	**ug/L**	0.930	17455	0.221
	Cd	114		**ug/L**		40842	0.518
>	In	115		**ug/L**		78778	78778.363
	Sn	120	**49.788**	**ug/L**	1.290	84206	1.067
	Sb	121	**49.856**	**ug/L**	2.366	63824	0.808
	Sb	123		**ug/L**		48994	0.620
	Ba	135		**ug/L**		22123	0.245
	Ba	137	**50.961**	**ug/L**	2.491	37726	0.418
	Ho	165		**ug/L**		14	-0.000
>	Lu	175		**ug/L**		90093	90093.093
	Tl	205	**46.714**	**ug/L**	1.364	149971	1.637
	Pb	208	**51.912**	**ug/L**	1.038	287490	3.187
	Bi	209		**ug/L**		44	0.000
	Th	232	**51.098**	**ug/L**	0.482	359401	3.983
	U	238	**53.297**	**ug/L**	0.579	371111	4.117

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	104.640				
	Be	9	104.899				
	B	11	105.254				
	Na	23	99.231				
	Mg	24	95.024				
	Al	27	81.543				
	P	31	101.195				
	K	39	99.574				
	Ca	43	102.210				
>	Sc	45		100.9			
	Ti	47	102.155				
	V	51	105.427				
	Cr	52	103.682				
	Cr	53					
	Mn	55	107.463				
	Fe	57	104.066				
	Co	59	101.355				
	Ni	60	103.582				
	Cu	63					
	Cu	65	105.640				
	Zn	66	103.510				
	Zn	67					
	Zn	68					
>	Ge	74		100.8			
	As	75	90.126				
	Se	77					
	Se	82	97.028				
	Kr	83					
	Sr	88	98.212				
	Y	89					
	Zr	90	98.696				
	Mo	98	98.409				
	Ag	107	99.444				
	Cd	111	98.684				
	Cd	114					
>	In	115		100.6			
	Sn	120	99.576				
	Sb	121	99.711				
	Sb	123					
	Ba	135					
	Ba	137	101.923				
	Ho	165					
>	Lu	175		102.2			
	Tl	205	93.428				
	Pb	208	103.824				
	Bi	209					
	Th	232	102.195				
	U	238	106.594				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 1	Al	27ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 15, 2009 00:02:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 2.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.036**	**ug/L**	17.212	6	-0.000
	Be	9	**0.115**	**ug/L**	81.231	5	0.000
	B	11	**2.336**	**ug/L**	49.371	95	0.000
	Na	23	**-10.457**	**ug/L**	61.893	20348	-0.015
	Mg	24	**1.678**	**ug/L**	279.217	1000	0.002
	Al	27	**1.750**	**ug/L**	111.354	2000	0.003
	P	31	**-0.271**	**ug/L**	1190.704	1941	-0.000
	K	39	**-19.867**	**ug/L**	32.349	246442	-0.066
	Ca	43	**-1.461**	**ug/L**	1565.348	373	-0.000
>	Sc	45		**ug/L**		326073	326072.856
	Ti	47	**-0.262**	**ug/L**	44.800	167	-0.000
	V	51	**2.575**	**ug/L**	126.007	10586	0.012
	Cr	52	**-0.274**	**ug/L**	64.702	-1907	-0.001
	Cr	53		**ug/L**		193621	-0.122
	Mn	55	**-0.054**	**ug/L**	38.207	1036	-0.000
	Fe	57	**-2.779**	**ug/L**	21.374	2408	-0.000
	Co	59	**-0.003**	**ug/L**	167.261	99	-0.000
	Ni	60	**-0.003**	**ug/L**	272.678	32	-0.000
	Cu	63		**ug/L**		143	0.000
	Cu	65	**-0.010**	**ug/L**	202.255	76	-0.000
	Zn	66	**-0.047**	**ug/L**	14.555	92	-0.000
	Zn	67		**ug/L**		8256	-0.010
	Zn	68		**ug/L**		791	-0.001
>	Ge	74		**ug/L**		112715	112715.052
	As	75	**-3.247**	**ug/L**	63.620	641	-0.008
	Se	77		**ug/L**		10738	-0.025
	Se	82	**-0.010**	**ug/L**	2992.002	-1	-0.000
	Kr	83		**ug/L**		43	-0.000
	Sr	88	**0.003**	**ug/L**	179.173	208	0.000
	Y	89		**ug/L**		13	-0.000
	Zr	90	**0.179**	**ug/L**	26.516	650	0.005
	Mo	98	**0.032**	**ug/L**	53.537	86	0.000
	Ag	107	**0.011**	**ug/L**	69.174	82	0.000
	Cd	111	**0.004**	**ug/L**	333.466	20	0.000
	Cd	114		**ug/L**		30	-0.000
>	In	115		**ug/L**		81080	81079.593
	Sn	120	**0.058**	**ug/L**	8.715	265	0.001
	Sb	121	**0.604**	**ug/L**	14.807	988	0.010
	Sb	123		**ug/L**		773	0.007
	Ba	135		**ug/L**		20	0.000
	Ba	137	**-0.002**	**ug/L**	295.365	34	-0.000
	Ho	165		**ug/L**		13	-0.000
>	Lu	175		**ug/L**		91507	91507.063
	Tl	205	**0.362**	**ug/L**	46.979	3721	0.013
	Pb	208	**0.014**	**ug/L**	20.963	494	0.001
	Bi	209		**ug/L**		29	0.000
	Th	232	**0.194**	**ug/L**	32.484	1908	0.015
	U	238	**0.007**	**ug/L**	33.797	273	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			108.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			105.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			103.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			103.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 15, 2009 00:08:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 3.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.233**	**ug/L**	1.194	819	0.003
	Be	9	**0.475**	**ug/L**	22.194	13	0.000
	B	11	**16.189**	**ug/L**	2.366	364	0.001
	Na	23	**240.136**	**ug/L**	8.420	134974	0.340
	Mg	24	**10.500**	**ug/L**	5.983	4001	0.011
	Al	27	**27.341**	**ug/L**	2.703	15675	0.045
	P	31	**46.374**	**ug/L**	9.765	3369	0.004
	K	39	**296.726**	**ug/L**	17.424	584881	0.984
	Ca	43	**219.286**	**ug/L**	21.779	846	0.001
>	Sc	45		**ug/L**		322974	322973.578
	Ti	47	**8.534**	**ug/L**	5.487	1364	0.004
	V	51	**12.547**	**ug/L**	9.127	25625	0.059
	Cr	52	**10.749**	**ug/L**	0.477	13282	0.046
	Cr	53		**ug/L**		181187	-0.155
	Mn	55	**5.739**	**ug/L**	1.535	12661	0.036
	Fe	57	**109.154**	**ug/L**	5.520	7316	0.015
	Co	59	**1.076**	**ug/L**	5.482	2176	0.006
	Ni	60	**2.196**	**ug/L**	7.694	961	0.003
	Cu	63		**ug/L**		1227	0.003
	Cu	65	**1.094**	**ug/L**	2.228	587	0.002
	Zn	66	**11.082**	**ug/L**	1.106	2253	0.019
	Zn	67		**ug/L**		7913	-0.012
	Zn	68		**ug/L**		2300	0.013
>	Ge	74		**ug/L**		111039	111038.742
	As	75	**1.389**	**ug/L**	153.504	1863	0.003
	Se	77		**ug/L**		9746	-0.033
	Se	82	**4.872**	**ug/L**	8.471	121	0.001
	Kr	83		**ug/L**		39	-0.000
	Sr	88	**11.130**	**ug/L**	0.102	44963	0.549
	Y	89		**ug/L**		13	-0.000
	Zr	90	**2.013**	**ug/L**	3.127	4873	0.057
	Mo	98	**0.504**	**ug/L**	3.927	579	0.006
	Ag	107	**1.024**	**ug/L**	4.547	1815	0.022
	Cd	111	**1.061**	**ug/L**	2.290	406	0.005
	Cd	114		**ug/L**		913	0.011
>	In	115		**ug/L**		81480	81480.050
	Sn	120	**5.300**	**ug/L**	1.420	9419	0.114
	Sb	121	**3.185**	**ug/L**	2.286	4400	0.052
	Sb	123		**ug/L**		3314	0.039
	Ba	135		**ug/L**		975	0.010
	Ba	137	**2.073**	**ug/L**	1.431	1636	0.017
	Ho	165		**ug/L**		13	-0.000
>	Lu	175		**ug/L**		93987	93987.103
	Tl	205	**0.881**	**ug/L**	1.641	5535	0.031
	Pb	208	**2.140**	**ug/L**	1.083	12770	0.131
	Bi	209		**ug/L**		34	0.000
	Th	232	**1.046**	**ug/L**	1.741	8203	0.082
	U	238	**0.194**	**ug/L**	3.718	1638	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	112.325				
	Be	9	94.901				
	B	11	107.927				
	Na	23	96.054				
	Mg	24	69.998				
	Al	27	91.138				
	P	31	92.749				
	K	39	98.909				
	Ca	43	109.643				
>	Sc	45		107.2			
	Ti	47	85.342				
	V	51	125.474				
	Cr	52	107.492				
	Cr	53					
	Mn	55	114.774				
	Fe	57	109.154				
	Co	59	107.558				
	Ni	60	109.802				
	Cu	63					
	Cu	65	109.386				
	Zn	66	110.816				
	Zn	67					
	Zn	68					
>	Ge	74		104.4			
	As	75	27.789				
	Se	77					
	Se	82	97.449				
	Kr	83					
	Sr	88	111.297				
	Y	89					
	Zr	90	100.660				
	Mo	98	100.804				
	Ag	107	102.390				
	Cd	111	106.066				
	Cd	114					
>	In	115		104.1			
	Sn	120	106.008				
	Sb	121	106.173				
	Sb	123					
	Ba	135					
	Ba	137	103.662				
	Ho	165					
>	Lu	175		106.6			
	Tl	205	88.142				
	Pb	208	106.984				
	Bi	209					
	Th	232	104.583				
	U	238	97.183				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Mg	24	CRDL is out of limits
QC Std 3	As	75	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 15, 2009 00:14:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 4.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.007**	ug/L	486.492	9	0.000
	Be	9	**0.059**	ug/L	200.300	4	0.000
	B	11	**1.012**	ug/L	18.514	73	0.000
	Na	23	**105242.436**	ug/L	3.258	51591931	148.877
	Mg	24	**98295.247**	ug/L	2.085	36673603	105.841
	Al	27	**92070.879**	ug/L	5.176	52745907	152.176
	P	31	**102631.229**	ug/L	0.113	3425550	9.880
	K	39	**101065.513**	ug/L	4.117	116500743	335.113
	Ca	43	**98195.936**	ug/L	0.697	229250	0.660
>	Sc	45		ug/L		346520	346519.729
	Ti	47	**1446.701**	ug/L	1.885	211945	0.611
	V	51	**-0.805**	ug/L	211.272	5583	-0.004
	Cr	52	**2.754**	ug/L	2.677	2441	0.012
	Cr	53		ug/L		151157	-0.281
	Mn	55	**5.503**	ug/L	2.158	13076	0.034
	Fe	57	**97642.676**	ug/L	1.350	4624272	13.341
	Co	59	**0.322**	ug/L	2.797	778	0.002
	Ni	60	**3.993**	ug/L	3.132	1849	0.005
	Cu	63		ug/L		1984	0.005
	Cu	65	**2.874**	ug/L	0.179	1516	0.004
	Zn	66	**6.207**	ug/L	3.167	1252	0.011
	Zn	67		ug/L		7106	-0.017
	Zn	68		ug/L		864	0.000
>	Ge	74		ug/L		106488	106487.850
	As	75	**-2.311**	ug/L	100.024	847	-0.006
	Se	77		ug/L		7422	-0.051
	Se	82	**-1.353**	ug/L	56.430	-33	-0.000
	Kr	83		ug/L		90	0.000
	Sr	88	**1.151**	ug/L	1.723	4592	0.057
	Y	89		ug/L		157	0.002
	Zr	90	**0.477**	ug/L	46.652	1273	0.013
	Mo	98	**1963.809**	ug/L	0.809	1952709	25.200
	Ag	107	**0.086**	ug/L	2.839	199	0.002
	Cd	111	**0.844**	ug/L	38.683	312	0.004
	Cd	114		ug/L		3189	0.041
>	In	115		ug/L		77491	77491.173
	Sn	120	**0.096**	ug/L	8.379	316	0.002
	Sb	121	**0.184**	ug/L	23.429	417	0.003
	Sb	123		ug/L		378	0.003
	Ba	135		ug/L		316	0.003
	Ba	137	**0.642**	ug/L	1.404	521	0.005
	Ho	165		ug/L		240	0.002
>	Lu	175		ug/L		92119	92118.977
	Tl	205	**-0.316**	ug/L	2.056	1561	-0.011
	Pb	208	**0.141**	ug/L	2.878	1216	0.009
	Bi	209		ug/L		209	0.002
	Th	232	**0.082**	ug/L	46.008	1119	0.006
	U	238	**-0.026**	ug/L	2.150	40	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	105.242				
	Mg	24	98.295				
	Al	27	92.071				
	P	31	102.631				
	K	39	101.066				
	Ca	43	98.196				
>	Sc	45		115.0			
	Ti	47	72.335				
	V	51					
	Cr	52	74.432				
	Cr	53					
	Mn	55	94.876				
	Fe	57	97.643				
	Co	59	128.748				
	Ni	60	147.877				
	Cu	63					
	Cu	65	99.114				
	Zn	66	172.429				
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	95.947				
	Y	89					
	Zr	90					
	Mo	98	98.190				
	Ag	107					
	Cd	111	211.096				
	Cd	114					
>	In	115		99.0			
	Sn	120					
	Sb	121	184.048				
	Sb	123					
	Ba	135					
	Ba	137	95.893				
	Ho	165					
>	Lu	175		104.5			
	Tl	205					
	Pb	208	70.668				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 15, 2009 00:20:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 5.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**16.415**	ug/L	2.166	1347	0.004
	Be	9	**19.109**	ug/L	5.084	453	0.001
	B	11	**19.766**	ug/L	9.246	490	0.001
	Na	23	**106467.386**	ug/L	3.008	54995093	150.610
	Mg	24	**100981.330**	ug/L	1.490	39677045	108.734
	Al	27	**91969.867**	ug/L	6.473	55530629	152.009
	P	31	**103663.397**	ug/L	1.741	3643618	9.979
	K	39	**99366.749**	ug/L	5.828	120547078	329.480
	Ca	43	**98726.174**	ug/L	1.204	242658	0.664
>	Sc	45		ug/L		364777	364777.424
	Ti	47	**1439.959**	ug/L	1.412	222095	0.608
	V	51	**20.962**	ug/L	9.221	43463	0.099
	Cr	52	**23.307**	ug/L	1.486	34522	0.099
	Cr	53		ug/L		148965	-0.308
	Mn	55	**25.879**	ug/L	1.384	59999	0.161
	Fe	57	**96545.966**	ug/L	1.197	4813311	13.191
	Co	59	**19.042**	ug/L	1.195	41605	0.114
	Ni	60	**21.649**	ug/L	4.356	10383	0.028
	Cu	63		ug/L		21444	0.058
	Cu	65	**20.379**	ug/L	1.894	10759	0.029
	Zn	66	**26.886**	ug/L	3.546	5277	0.047
	Zn	67		ug/L		7530	-0.015
	Zn	68		ug/L		3711	0.026
>	Ge	74		ug/L		110062	110062.144
	As	75	**17.634**	ug/L	6.227	6146	0.042
	Se	77		ug/L		7256	-0.055
	Se	82	**21.941**	ug/L	4.328	544	0.005
	Kr	83		ug/L		99	0.001
	Sr	88	**23.481**	ug/L	2.097	91478	1.159
	Y	89		ug/L		135	0.002
	Zr	90	**22.267**	ug/L	0.638	49761	0.629
	Mo	98	**2092.180**	ug/L	4.590	2114775	26.847
	Ag	107	**19.051**	ug/L	0.798	31573	0.400
	Cd	111	**21.524**	ug/L	2.999	7621	0.097
	Cd	114		ug/L		20038	0.254
>	In	115		ug/L		78752	78752.349
	Sn	120	**20.781**	ug/L	1.960	35230	0.445
	Sb	121	**21.786**	ug/L	0.909	27993	0.353
	Sb	123		ug/L		21347	0.269
	Ba	135		ug/L		9432	0.102
	Ba	137	**20.997**	ug/L	0.365	16013	0.172
	Ho	165		ug/L		275	0.003
>	Lu	175		ug/L		92692	92691.999
	Tl	205	**17.725**	ug/L	1.901	60155	0.621
	Pb	208	**20.102**	ug/L	0.905	114797	1.234
	Bi	209		ug/L		295	0.003
	Th	232	**20.745**	ug/L	0.452	150436	1.617
	U	238	**21.241**	ug/L	1.170	152305	1.641

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	82.075				
	Be	9	95.545				
	B	11	98.830				
	Na	23	106.467				
	Mg	24	100.981				
	Al	27	91.970				
	P	31	103.663				
	K	39	99.367				
	Ca	43	98.726				
>	Sc	45		121.0			
	Ti	47	71.998				
	V	51	104.811				
	Cr	52	98.343				
	Cr	53					
	Mn	55	100.307				
	Fe	57	96.546				
	Co	59	94.036				
	Ni	60	95.368				
	Cu	63					
	Cu	65	88.991				
	Zn	66	113.923				
	Zn	67					
	Zn	68					
>	Ge	74		103.4			
	As	75	88.171				
	Se	77					
	Se	82	109.705				
	Kr	83					
	Sr	88	110.762				
	Y	89					
	Zr	90	111.333				
	Mo	98	104.609				
	Ag	107	95.255				
	Cd	111	105.508				
	Cd	114					
>	In	115		100.6			
	Sn	120	103.905				
	Sb	121	108.389				
	Sb	123					
	Ba	135					
	Ba	137	101.584				
	Ho	165					
>	Lu	175		105.1			
	Tl	205	88.623				
	Pb	208	99.516				
	Bi	209					
	Th	232	103.724				
	U	238	106.205				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 00:26:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 6.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**40.665**	**ug/L**	4.175	3388	0.009
	Be	9	**45.279**	**ug/L**	0.499	1091	0.003
	B	11	**94.200**	**ug/L**	6.874	2169	0.006
	Na	23	**5468.360**	**ug/L**	13.911	2922465	7.736
	Mg	24	**4674.408**	**ug/L**	3.692	1871423	5.033
	Al	27	**4810.740**	**ug/L**	6.025	2966445	7.951
	P	31	**5017.409**	**ug/L**	0.954	181954	0.483
	K	39	**4983.944**	**ug/L**	3.341	6454116	16.526
	Ca	43	**5040.314**	**ug/L**	0.900	13046	0.034
>	Sc	45		**ug/L**		372177	372176.705
	Ti	47	**48.630**	**ug/L**	1.946	7874	0.021
	V	51	**48.046**	**ug/L**	5.153	91793	0.227
	Cr	52	**48.795**	**ug/L**	3.147	75579	0.208
	Cr	53		**ug/L**		159372	-0.288
	Mn	55	**50.728**	**ug/L**	2.330	118672	0.316
	Fe	57	**4895.277**	**ug/L**	3.408	251509	0.669
	Co	59	**46.318**	**ug/L**	2.947	102999	0.277
	Ni	60	**46.334**	**ug/L**	4.000	22617	0.061
	Cu	63		**ug/L**		52921	0.142
	Cu	65	**47.592**	**ug/L**	4.043	25487	0.068
	Zn	66	**52.841**	**ug/L**	3.395	10936	0.092
	Zn	67		**ug/L**		8676	-0.009
	Zn	68		**ug/L**		8575	0.065
>	Ge	74		**ug/L**		117166	117166.198
	As	75	**45.389**	**ug/L**	5.643	14352	0.109
	Se	77		**ug/L**		7067	-0.060
	Se	82	**51.473**	**ug/L**	3.156	1360	0.012
	Kr	83		**ug/L**		48	0.000
	Sr	88	**49.471**	**ug/L**	2.009	209559	2.442
	Y	89		**ug/L**		23	0.000
	Zr	90	**49.879**	**ug/L**	1.556	121040	1.409
	Mo	98	**49.818**	**ug/L**	1.337	54868	0.639
	Ag	107	**49.116**	**ug/L**	2.057	88491	1.032
	Cd	111	**50.122**	**ug/L**	1.993	19292	0.225
	Cd	114		**ug/L**		44568	0.520
>	In	115		**ug/L**		85738	85738.070
	Sn	120	**48.840**	**ug/L**	1.854	89892	1.047
	Sb	121	**48.949**	**ug/L**	2.558	68195	0.793
	Sb	123		**ug/L**		51905	0.603
	Ba	135		**ug/L**		22898	0.239
	Ba	137	**50.612**	**ug/L**	0.676	39827	0.415
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		95768	95767.902
	Tl	205	**46.479**	**ug/L**	1.749	158618	1.628
	Pb	208	**51.068**	**ug/L**	0.995	300640	3.135
	Bi	209		**ug/L**		47	0.000
	Th	232	**50.512**	**ug/L**	0.698	377674	3.938
	U	238	**52.586**	**ug/L**	0.319	389217	4.062

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	81.331				
	Be	9	90.557				
	B	11	94.200				
	Na	23	109.367				
	Mg	24	93.488				
	Al	27	95.262				
	P	31	100.348				
	K	39	99.679				
	Ca	43	100.806				
>	Sc	45		123.5			
	Ti	47	97.260				
	V	51	96.092				
	Cr	52	97.591				
	Cr	53					
	Mn	55	101.456				
	Fe	57	97.906				
	Co	59	92.637				
	Ni	60	92.668				
	Cu	63					
	Cu	65	95.184				
	Zn	66	105.681				
	Zn	67					
	Zn	68					
>	Ge	74		110.1			
	As	75	90.777				
	Se	77					
	Se	82	102.946				
	Kr	83					
	Sr	88	98.942				
	Y	89					
	Zr	90	99.758				
	Mo	98	99.636				
	Ag	107	98.233				
	Cd	111	100.244				
	Cd	114					
>	In	115		109.5			
	Sn	120	97.680				
	Sb	121	97.897				
	Sb	123					
	Ba	135					
	Ba	137	101.223				
	Ho	165					
>	Lu	175		108.6			
	Tl	205	92.958				
	Pb	208	102.136				
	Bi	209					
	Th	232	101.025				
	U	238	105.171				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 00:33:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 7.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.041**	ug/L	99.889	6	-0.000
	Be	9	**0.007**	ug/L	892.912	3	0.000
	B	11	**0.981**	ug/L	52.210	74	0.000
	Na	23	**-16.150**	ug/L	28.677	19346	-0.023
	Mg	24	**2.417**	ug/L	54.292	1333	0.003
	Al	27	**0.244**	ug/L	801.953	1333	0.000
	P	31	**-2.556**	ug/L	96.105	2032	-0.000
	K	39	**-36.144**	ug/L	62.076	250203	-0.120
	Ca	43	**9.898**	ug/L	271.800	432	0.000
>	Sc	45		ug/L		355344	355343.662
	Ti	47	**-0.002**	ug/L	12545.517	221	-0.000
	V	51	**1.278**	ug/L	302.058	9018	0.006
	Cr	52	**-1.296**	ug/L	15.089	-3623	-0.006
	Cr	53		ug/L		167618	-0.244
	Mn	55	**-0.157**	ug/L	15.121	900	-0.001
	Fe	57	**-5.752**	ug/L	7.867	2480	-0.001
	Co	59	**-0.009**	ug/L	53.779	95	-0.000
	Ni	60	**-0.003**	ug/L	449.859	35	-0.000
	Cu	63		ug/L		134	-0.000
	Cu	65	**-0.005**	ug/L	296.461	86	-0.000
	Zn	66	**0.016**	ug/L	286.234	105	0.000
	Zn	67		ug/L		7562	-0.017
	Zn	68		ug/L		678	-0.002
>	Ge	74		ug/L		113578	113577.951
	As	75	**-4.252**	ug/L	36.155	364	-0.010
	Se	77		ug/L		7264	-0.057
	Se	82	**0.176**	ug/L	248.894	3	0.000
	Kr	83		ug/L		37	-0.000
	Sr	88	**-0.003**	ug/L	79.971	190	-0.000
	Y	89		ug/L		11	-0.000
	Zr	90	**0.138**	ug/L	37.273	565	0.004
	Mo	98	**0.099**	ug/L	21.877	158	0.001
	Ag	107	**0.013**	ug/L	31.933	86	0.000
	Cd	111	**-0.021**	ug/L	37.700	11	-0.000
	Cd	114		ug/L		32	-0.000
>	In	115		ug/L		82472	82472.152
	Sn	120	**0.046**	ug/L	21.744	247	0.001
	Sb	121	**0.262**	ug/L	26.923	548	0.004
	Sb	123		ug/L		470	0.004
	Ba	135		ug/L		18	0.000
	Ba	137	**-0.002**	ug/L	333.657	34	-0.000
	Ho	165		ug/L		14	-0.000
>	Lu	175		ug/L		94204	94203.887
	Tl	205	**0.262**	ug/L	63.022	3509	0.009
	Pb	208	**0.008**	ug/L	34.365	472	0.000
	Bi	209		ug/L		24	-0.000
	Th	232	**0.106**	ug/L	38.311	1319	0.008
	U	238	**0.007**	ug/L	59.969	277	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			117.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			106.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			105.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			106.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 15, 2009 00:39:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 10.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**828.737**	**ug/L**	3.175	63841	0.185
	Be	9	**924.453**	**ug/L**	1.002	20593	0.060
	B	11	**0.401**	**ug/L**	177.701	60	0.000
	Na	23	**53027.082**	**ug/L**	10.680	26000155	75.013
	Mg	24	**52867.095**	**ug/L**	3.736	19643398	56.926
	Al	27	**44466.128**	**ug/L**	3.659	25390110	73.494
	P	31	**24483.123**	**ug/L**	2.104	815965	2.357
	K	39	**50696.892**	**ug/L**	2.388	58334670	168.101
	Ca	43	**49703.869**	**ug/L**	2.029	115834	0.334
>	Sc	45		**ug/L**		345148	345147.642
	Ti	47	**44.462**	**ug/L**	3.274	6693	0.019
	V	51	**1002.763**	**ug/L**	2.729	1642083	4.742
	Cr	52	**934.457**	**ug/L**	1.158	1372756	3.983
	Cr	53		**ug/L**		314171	0.194
	Mn	55	**948.749**	**ug/L**	2.255	2039906	5.903
	Fe	57	**49146.747**	**ug/L**	2.334	2318671	6.715
	Co	59	**866.782**	**ug/L**	2.608	1786055	5.178
	Ni	60	**891.702**	**ug/L**	3.253	403203	1.169
	Cu	63		**ug/L**		895374	2.596
	Cu	65	**869.124**	**ug/L**	2.222	430476	1.248
	Zn	66	**2441.108**	**ug/L**	0.826	469848	4.271
	Zn	67		**ug/L**		82528	0.667
	Zn	68		**ug/L**		332874	3.019
>	Ge	74		**ug/L**		109982	109982.253
	As	75	**943.877**	**ug/L**	0.394	251030	2.269
	Se	77		**ug/L**		14543	0.011
	Se	82	**481.035**	**ug/L**	0.494	11941	0.109
	Kr	83		**ug/L**		56	0.000
	Sr	88	**1064.005**	**ug/L**	1.527	4021523	52.523
	Y	89		**ug/L**		163	0.002
	Zr	90	**525.456**	**ug/L**	0.618	1136450	14.841
	Mo	98	**1034.359**	**ug/L**	0.328	1016226	13.273
	Ag	107	**244.970**	**ug/L**	1.604	394010	5.145
	Cd	111	**1001.458**	**ug/L**	1.175	343930	4.492
	Cd	114		**ug/L**		790650	10.327
>	In	115		**ug/L**		76559	76558.660
	Sn	120	**1015.164**	**ug/L**	1.633	1665866	21.757
	Sb	121	**258.005**	**ug/L**	0.800	320292	4.181
	Sb	123		**ug/L**		242899	3.171
	Ba	135		**ug/L**		425292	4.621
	Ba	137	**959.382**	**ug/L**	0.465	724830	7.876
	Ho	165		**ug/L**		81	0.001
>	Lu	175		**ug/L**		92028	92028.419
	Tl	205	**460.195**	**ug/L**	0.485	1486304	16.123
	Pb	208	**4883.003**	**ug/L**	1.746	27580409	299.733
	Bi	209		**ug/L**		654	0.007
	Th	232	**2469.273**	**ug/L**	1.256	17714089	192.499
	U	238	**5096.740**	**ug/L**	2.556	36225543	393.681

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	82.874				
	Be	9	92.445				
	B	11					
	Na	23	106.054				
	Mg	24	105.734				
	Al	27	88.932				
	P	31	97.932				
	K	39	101.394				
	Ca	43	99.408				
>	Sc	45		114.5			
	Ti	47					
	V	51	100.276				
	Cr	52	93.446				
	Cr	53					
	Mn	55	94.875				
	Fe	57	98.293				
	Co	59	86.678				
	Ni	60	89.170				
	Cu	63					
	Cu	65	86.912				
	Zn	66	97.644				
	Zn	67					
	Zn	68					
>	Ge	74		103.4			
	As	75	94.388				
	Se	77					
	Se	82	96.207				
	Kr	83					
	Sr	88	106.400				
	Y	89					
	Zr	90	105.091				
	Mo	98	103.436				
	Ag	107	97.988				
	Cd	111	100.146				
	Cd	114					
>	In	115		97.8			
	Sn	120	101.516				
	Sb	121	103.202				
	Sb	123					
	Ba	135					
	Ba	137	95.938				
	Ho	165					
>	Lu	175		104.4			
	Tl	205	92.039				
	Pb	208	97.660				
	Bi	209					
	Th	232	98.771				
	U	238	101.935				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Li	7	LRS is out of limits (+/- 10%)
QC Std 10	Al	27	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 15, 2009 00:45:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 11.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	42.665	ug/L	3.516	3294	0.010
	Be	9	49.122	ug/L	2.230	1096	0.003
	B	11	96.704	ug/L	2.266	2069	0.006
	Na	23	5423.724	ug/L	10.843	2682117	7.672
	Mg	24	4847.104	ug/L	6.128	1798286	5.219
	Al	27	4623.141	ug/L	3.925	2638831	7.641
	P	31	5160.249	ug/L	1.800	173435	0.497
	K	39	5316.759	ug/L	5.745	6354011	17.629
	Ca	43	5105.962	ug/L	0.978	12241	0.034
>	Sc	45		ug/L		344910	344909.669
	Ti	47	48.881	ug/L	3.525	7330	0.021
	V	51	51.505	ug/L	3.310	90939	0.244
	Cr	52	50.822	ug/L	1.784	73068	0.217
	Cr	53		ug/L		161766	-0.247
	Mn	55	52.535	ug/L	0.903	113914	0.327
	Fe	57	5036.421	ug/L	1.913	239896	0.688
	Co	59	48.469	ug/L	2.130	99917	0.290
	Ni	60	49.319	ug/L	2.103	22326	0.065
	Cu	63		ug/L		52007	0.150
	Cu	65	50.289	ug/L	2.520	24968	0.072
	Zn	66	54.223	ug/L	2.304	10812	0.095
	Zn	67		ug/L		8915	-0.004
	Zn	68		ug/L		8287	0.065
>	Ge	74		ug/L		112918	112917.746
	As	75	46.165	ug/L	2.427	14053	0.111
	Se	77		ug/L		6692	-0.061
	Se	82	50.785	ug/L	1.693	1293	0.011
	Kr	83		ug/L		54	0.000
	Sr	88	49.624	ug/L	1.381	200737	2.450
	Y	89		ug/L		20	0.000
	Zr	90	51.868	ug/L	2.416	120172	1.465
	Mo	98	50.300	ug/L	2.268	52885	0.645
	Ag	107	50.280	ug/L	0.417	86520	1.056
	Cd	111	49.668	ug/L	2.266	18255	0.223
	Cd	114		ug/L		42465	0.518
>	In	115		ug/L		81865	81865.421
	Sn	120	50.895	ug/L	1.273	89461	1.091
	Sb	121	52.081	ug/L	1.198	69300	0.844
	Sb	123		ug/L		52948	0.645
	Ba	135		ug/L		22358	0.243
	Ba	137	51.453	ug/L	0.553	38948	0.422
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		92122	92122.015
	Tl	205	48.278	ug/L	1.935	158377	1.691
	Pb	208	52.833	ug/L	0.153	299176	3.243
	Bi	209		ug/L		42	0.000
	Th	232	51.941	ug/L	0.857	373569	4.049
	U	238	53.402	ug/L	0.576	380197	4.125

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	85.330				
	Be	9	98.244				
	B	11	96.704				
	Na	23	108.474				
	Mg	24	96.942				
	Al	27	91.547				
	P	31	103.205				
	K	39	106.335				
	Ca	43	102.119				
>	Sc	45		114.4			
	Ti	47	97.762				
	V	51	103.010				
	Cr	52	101.645				
	Cr	53					
	Mn	55	105.070				
	Fe	57	100.728				
	Co	59	96.937				
	Ni	60	98.638				
	Cu	63					
	Cu	65	100.577				
	Zn	66	108.445				
	Zn	67					
	Zn	68					
>	Ge	74		106.1			
	As	75	92.331				
	Se	77					
	Se	82	101.570				
	Kr	83					
	Sr	88	99.248				
	Y	89					
	Zr	90	103.736				
	Mo	98	100.599				
	Ag	107	100.560				
	Cd	111	99.335				
	Cd	114					
>	In	115		104.6			
	Sn	120	101.791				
	Sb	121	104.161				
	Sb	123					
	Ba	135					
	Ba	137	102.907				
	Ho	165					
>	Lu	175		104.5			
	Tl	205	96.556				
	Pb	208	105.666				
	Bi	209					
	Th	232	103.881				
	U	238	106.804				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Li	7	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 15, 2009 00:51:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 12.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.003**	ug/L	1006.984	9	0.000
	Be	9	**0.015**	ug/L	486.156	3	0.000
	B	11	**1.419**	ug/L	13.868	81	0.000
	Na	23	**-21.767**	ug/L	4.737	16009	-0.031
	Mg	24	**0.821**	ug/L	194.946	667	0.001
	Al	27	**1.485**	ug/L	109.698	2000	0.002
	P	31	**-3.665**	ug/L	160.203	1929	-0.000
	K	39	**-27.818**	ug/L	4.602	250174	-0.092
	Ca	43	**-7.019**	ug/L	109.515	380	-0.000
>	Sc	45		ug/L		342720	342720.405
	Ti	47	**-0.267**	ug/L	17.549	175	-0.000
	V	51	**-1.414**	ug/L	102.193	4454	-0.007
	Cr	52	**-1.551**	ug/L	9.732	-3869	-0.007
	Cr	53		ug/L		168846	-0.224
	Mn	55	**-0.162**	ug/L	11.646	857	-0.001
	Fe	57	**-3.509**	ug/L	56.394	2499	-0.000
	Co	59	**-0.002**	ug/L	203.020	106	-0.000
	Ni	60	**0.026**	ug/L	54.610	47	0.000
	Cu	63		ug/L		177	0.000
	Cu	65	**0.039**	ug/L	71.008	104	0.000
	Zn	66	**0.089**	ug/L	78.747	117	0.000
	Zn	67		ug/L		7704	-0.014
	Zn	68		ug/L		707	-0.002
>	Ge	74		ug/L		110610	110610.014
	As	75	**-3.403**	ug/L	36.927	587	-0.008
	Se	77		ug/L		6828	-0.059
	Se	82	**0.027**	ug/L	544.162	-0	0.000
	Kr	83		ug/L		44	0.000
	Sr	88	**0.002**	ug/L	164.918	199	0.000
	Y	89		ug/L		12	-0.000
	Zr	90	**0.273**	ug/L	19.815	844	0.008
	Mo	98	**0.125**	ug/L	3.115	178	0.002
	Ag	107	**0.025**	ug/L	18.710	103	0.001
	Cd	111	**0.011**	ug/L	201.870	22	0.000
	Cd	114		ug/L		40	0.000
>	In	115		ug/L		79100	79100.109
	Sn	120	**0.317**	ug/L	13.224	696	0.007
	Sb	121	**1.196**	ug/L	11.802	1723	0.019
	Sb	123		ug/L		1345	0.015
	Ba	135		ug/L		20	0.000
	Ba	137	**0.003**	ug/L	680.154	36	0.000
	Ho	165		ug/L		17	-0.000
>	Lu	175		ug/L		88635	88634.816
	Tl	205	**0.540**	ug/L	36.620	4151	0.019
	Pb	208	**0.189**	ug/L	13.447	1426	0.012
	Bi	209		ug/L		24	-0.000
	Th	232	**0.376**	ug/L	22.040	3102	0.029
	U	238	**0.068**	ug/L	14.979	676	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		113.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 01:47:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 6.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.885**	**ug/L**	1.109	3342	0.010
	Be	9	**47.781**	**ug/L**	1.573	1076	0.003
	B	11	**97.796**	**ug/L**	3.988	2109	0.006
	Na	23	**5145.358**	**ug/L**	13.402	2565133	7.279
	Mg	24	**4510.849**	**ug/L**	13.027	1694196	4.857
	Al	27	**4440.678**	**ug/L**	4.022	2556927	7.340
	P	31	**5087.755**	**ug/L**	2.524	172580	0.490
	K	39	**4924.658**	**ug/L**	2.757	5969399	16.329
	Ca	43	**5086.422**	**ug/L**	2.001	12310	0.034
>	Sc	45		**ug/L**		347989	347988.782
	Ti	47	**49.183**	**ug/L**	2.442	7448	0.021
	V	51	**47.199**	**ug/L**	0.948	84575	0.223
	Cr	52	**49.057**	**ug/L**	1.369	71136	0.209
	Cr	53		**ug/L**		190331	-0.170
	Mn	55	**51.405**	**ug/L**	1.204	112496	0.320
	Fe	57	**5023.172**	**ug/L**	1.224	241479	0.686
	Co	59	**48.580**	**ug/L**	0.552	101113	0.290
	Ni	60	**48.608**	**ug/L**	1.315	22214	0.064
	Cu	63		**ug/L**		51707	0.148
	Cu	65	**48.407**	**ug/L**	2.882	24260	0.069
	Zn	66	**51.779**	**ug/L**	1.694	10555	0.091
	Zn	67		**ug/L**		10331	0.006
	Zn	68		**ug/L**		8371	0.064
>	Ge	74		**ug/L**		115396	115396.465
	As	75	**45.088**	**ug/L**	4.582	14054	0.108
	Se	77		**ug/L**		8160	-0.050
	Se	82	**50.086**	**ug/L**	0.889	1304	0.011
	Kr	83		**ug/L**		51	0.000
	Sr	88	**50.162**	**ug/L**	0.531	204633	2.476
	Y	89		**ug/L**		26	0.000
	Zr	90	**49.825**	**ug/L**	0.787	116419	1.407
	Mo	98	**49.349**	**ug/L**	0.686	52334	0.633
	Ag	107	**49.237**	**ug/L**	0.168	85444	1.034
	Cd	111	**50.484**	**ug/L**	0.591	18713	0.226
	Cd	114		**ug/L**		42814	0.518
>	In	115		**ug/L**		82558	82557.931
	Sn	120	**49.580**	**ug/L**	1.866	87880	1.063
	Sb	121	**49.694**	**ug/L**	2.052	66683	0.805
	Sb	123		**ug/L**		50854	0.614
	Ba	135		**ug/L**		22544	0.241
	Ba	137	**49.821**	**ug/L**	0.491	38274	0.409
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		93496	93495.896
	Tl	205	**46.811**	**ug/L**	0.522	155956	1.640
	Pb	208	**50.885**	**ug/L**	1.168	292451	3.123
	Bi	209		**ug/L**		63	0.000
	Th	232	**50.039**	**ug/L**	0.555	365251	3.901
	U	238	**52.025**	**ug/L**	1.720	375907	4.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	85.770				
	Be	9	95.562				
	B	11	97.796				
	Na	23	102.907				
	Mg	24	90.217				
	Al	27	87.934				
	P	31	101.755				
	K	39	98.493				
	Ca	43	101.728				
>	Sc	45		115.5			
	Ti	47	98.367				
	V	51	94.397				
	Cr	52	98.114				
	Cr	53					
	Mn	55	102.810				
	Fe	57	100.463				
	Co	59	97.159				
	Ni	60	97.217				
	Cu	63					
	Cu	65	96.815				
	Zn	66	103.559				
	Zn	67					
	Zn	68					
>	Ge	74		108.4			
	As	75	90.175				
	Se	77					
	Se	82	100.172				
	Kr	83					
	Sr	88	100.324				
	Y	89					
	Zr	90	99.650				
	Mo	98	98.698				
	Ag	107	98.473				
	Cd	111	100.968				
	Cd	114					
>	In	115		105.4			
	Sn	120	99.160				
	Sb	121	99.387				
	Sb	123					
	Ba	135					
	Ba	137	99.641				
	Ho	165					
>	Lu	175		106.0			
	Tl	205	93.622				
	Pb	208	101.771				
	Bi	209					
	Th	232	100.078				
	U	238	104.049				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)

QC Action

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 01:53:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 7.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.010	ug/L	202.864	10	0.000
	Be	9	-0.051	ug/L	141.207	2	-0.000
	B	11	1.059	ug/L	93.265	75	0.000
	Na	23	-26.125	ug/L	42.447	14341	-0.037
	Mg	24	1.567	ug/L	161.779	1000	0.002
	Al	27	-2.008	ug/L	0.000	0	-0.003
	P	31	-1.354	ug/L	400.704	2046	-0.000
	K	39	-16.729	ug/L	3.776	268842	-0.055
	Ca	43	-1.362	ug/L	610.763	402	-0.000
>	Sc	45		ug/L		350621	350620.748
	Ti	47	-0.338	ug/L	51.685	168	-0.000
	V	51	0.662	ug/L	764.978	8239	0.003
	Cr	52	-1.243	ug/L	8.976	-3500	-0.005
	Cr	53		ug/L		183825	-0.192
	Mn	55	-0.124	ug/L	19.594	960	-0.001
	Fe	57	-2.449	ug/L	54.707	2604	-0.000
	Co	59	-0.004	ug/L	120.994	104	-0.000
	Ni	60	0.018	ug/L	131.116	44	0.000
	Cu	63		ug/L		120	-0.000
	Cu	65	-0.019	ug/L	158.897	77	-0.000
	Zn	66	-0.067	ug/L	103.262	90	-0.000
	Zn	67		ug/L		8363	-0.011
	Zn	68		ug/L		774	-0.001
>	Ge	74		ug/L		115716	115715.925
	As	75	-1.813	ug/L	35.327	1054	-0.004
	Se	77		ug/L		8152	-0.050
	Se	82	0.043	ug/L	339.043	-0	0.000
	Kr	83		ug/L		39	-0.000
	Sr	88	-0.003	ug/L	67.155	191	-0.000
	Y	89		ug/L		16	0.000
	Zr	90	0.178	ug/L	29.435	662	0.005
	Mo	98	0.042	ug/L	8.270	98	0.001
	Ag	107	0.013	ug/L	54.845	86	0.000
	Cd	111	-0.010	ug/L	86.361	15	-0.000
	Cd	114		ug/L		34	0.000
>	In	115		ug/L		82957	82956.590
	Sn	120	0.053	ug/L	28.232	261	0.001
	Sb	121	0.337	ug/L	12.073	652	0.005
	Sb	123		ug/L		530	0.004
	Ba	135		ug/L		21	0.000
	Ba	137	-0.008	ug/L	147.196	30	-0.000
	Ho	165		ug/L		13	-0.000
>	Lu	175		ug/L		92883	92882.907
	Tl	205	0.078	ug/L	161.132	2854	0.003
	Pb	208	0.025	ug/L	19.815	565	0.002
	Bi	209		ug/L		28	0.000
	Th	232	0.169	ug/L	30.293	1760	0.013
	U	238	0.014	ug/L	13.506	328	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		116.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		106.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985790
Sample Date/Time: Tuesday, December 15, 2009 02:00:04
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\1201985790.207

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.051	ug/L	104.251	5	-0.000
	Be	9	0.049	ug/L	197.103	4	0.000
	B	11	-0.095	ug/L	114.161	48	-0.000
	Na	23	-22.118	ug/L	38.839	15342	-0.031
	Mg	24	-1.027	ug/L	0.000	0	-0.001
	Al	27	2.234	ug/L	51.464	2334	0.004
	P	31	8.638	ug/L	27.589	2273	0.001
	K	39	-43.669	ug/L	38.594	226113	-0.145
	Ca	43	-24.280	ug/L	46.526	332	-0.000
>	Sc	45		ug/L		334393	334392.920
	Ti	47	-0.276	ug/L	47.158	170	-0.000
	V	51	2.298	ug/L	14.184	10272	0.011
	Cr	52	-0.473	ug/L	38.658	-2247	-0.002
	Cr	53		ug/L		132861	-0.320
	Mn	55	0.031	ug/L	84.597	1239	0.000
	Fe	57	18.679	ug/L	6.525	3450	0.003
	Co	59	-0.016	ug/L	8.955	75	-0.000
	Ni	60	0.012	ug/L	50.485	40	0.000
	Cu	63		ug/L		159	0.000
	Cu	65	0.002	ug/L	517.063	84	0.000
	Zn	66	0.634	ug/L	9.782	221	0.001
	Zn	67		ug/L		6123	-0.028
	Zn	68		ug/L		767	-0.001
>	Ge	74		ug/L		110238	110238.186
	As	75	-4.501	ug/L	16.161	292	-0.011
	Se	77		ug/L		4824	-0.077
	Se	82	0.935	ug/L	66.763	22	0.000
	Kr	83		ug/L		37	-0.000
	Sr	88	-0.013	ug/L	28.788	147	-0.001
	Y	89		ug/L		21	0.000
	Zr	90	0.188	ug/L	27.395	671	0.005
	Mo	98	0.041	ug/L	22.892	94	0.001
	Ag	107	-0.006	ug/L	89.210	53	-0.000
	Cd	111	-0.008	ug/L	277.092	15	-0.000
	Cd	114		ug/L		17	-0.000
>	In	115		ug/L		81119	81119.043
	Sn	120	0.046	ug/L	35.101	244	0.001
	Sb	121	-0.054	ug/L	13.321	124	-0.001
	Sb	123		ug/L		129	-0.001
	Ba	135		ug/L		40	0.000
	Ba	137	0.037	ug/L	23.967	63	0.000
	Ho	165		ug/L		12	-0.000
>	Lu	175		ug/L		91707	91707.356
	Tl	205	-0.209	ug/L	10.889	1898	-0.007
	Pb	208	0.017	ug/L	13.699	513	0.001
	Bi	209		ug/L		46	0.000
	Th	232	0.027	ug/L	27.494	718	0.002
	U	238	-0.024	ug/L	6.485	52	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		110.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		103.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985791
Sample Date/Time: Tuesday, December 15, 2009 02:12:30
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928674|20|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\1201985791.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.589**	**ug/L**	1.364	295	0.001
	Be	9	**45.175**	**ug/L**	3.310	1044	0.003
	B	11	**70.535**	**ug/L**	2.287	1574	0.004
	Na	23	**616.309**	**ug/L**	5.161	338991	0.872
	Mg	24	**1626.555**	**ug/L**	12.391	624830	1.751
	Al	27	**4888.353**	**ug/L**	5.563	2887101	8.080
	P	31	**382.951**	**ug/L**	3.070	15284	0.037
	K	39	**1409.761**	**ug/L**	12.948	1964849	4.674
	Ca	43	**2330.137**	**ug/L**	5.908	6006	0.016
>	Sc	45		**ug/L**		356749	356748.729
	Ti	47	**126.582**	**ug/L**	2.314	19294	0.053
	V	51	**69.156**	**ug/L**	6.309	123579	0.327
	Cr	52	**34.865**	**ug/L**	1.606	51331	0.149
	Cr	53		**ug/L**		160262	-0.267
	Mn	55	**195.720**	**ug/L**	2.249	435510	1.218
	Fe	57	**5806.952**	**ug/L**	3.247	285637	0.793
	Co	59	**42.732**	**ug/L**	3.623	91115	0.255
	Ni	60	**52.420**	**ug/L**	4.241	24535	0.069
	Cu	63		**ug/L**		53800	0.150
	Cu	65	**49.810**	**ug/L**	1.898	25591	0.072
	Zn	66	**111.942**	**ug/L**	1.253	22730	0.196
	Zn	67		**ug/L**		11187	0.014
	Zn	68		**ug/L**		18109	0.149
>	Ge	74		**ug/L**		115521	115521.046
	As	75	**130.651**	**ug/L**	0.886	37838	0.314
	Se	77		**ug/L**		7956	-0.052
	Se	82	**93.167**	**ug/L**	2.829	2428	0.021
	Kr	83		**ug/L**		55	0.000
	Sr	88	**90.345**	**ug/L**	1.436	366072	4.460
	Y	89		**ug/L**		32198	0.392
	Zr	90	**3.767**	**ug/L**	0.376	8972	0.106
	Mo	98	**43.392**	**ug/L**	0.951	45734	0.557
	Ag	107	**10.535**	**ug/L**	2.161	18217	0.221
	Cd	111	**63.107**	**ug/L**	1.231	23243	0.283
	Cd	114		**ug/L**		54531	0.664
>	In	115		**ug/L**		82048	82047.914
	Sn	120	**26.447**	**ug/L**	1.002	46667	0.567
	Sb	121	**12.947**	**ug/L**	0.688	17413	0.210
	Sb	123		**ug/L**		13256	0.159
	Ba	135		**ug/L**		112964	1.204
	Ba	137	**252.508**	**ug/L**	1.013	194474	2.073
	Ho	165		**ug/L**		1676	0.018
>	Lu	175		**ug/L**		93802	93801.892
	Tl	205	**105.772**	**ug/L**	1.222	350225	3.706
	Pb	208	**89.180**	**ug/L**	0.655	513900	5.474
	Bi	209		**ug/L**		829	0.009
	Th	232	**6.442**	**ug/L**	2.108	47644	0.502
	U	238	**0.818**	**ug/L**	1.892	6154	0.063

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		118.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		104.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825001
Sample Date/Time: Tuesday, December 15, 2009 02:18:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825001.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**29.685**	ug/L	2.907	2446	0.007
	Be	9	**2.442**	ug/L	6.234	61	0.000
	B	11	**14.609**	ug/L	6.609	379	0.001
	Na	23	**571.122**	ug/L	10.173	325699	0.808
	Mg	24	**7323.987**	ug/L	6.792	2907114	7.886
	Al	27	**42828.261**	ug/L	3.834	26045339	70.787
	P	31	**745.683**	ug/L	3.113	28564	0.072
	K	39	**8126.268**	ug/L	2.794	10202772	26.945
	Ca	43	**9792.530**	ug/L	0.993	24648	0.066
>	Sc	45		ug/L		367733	367733.458
	Ti	47	**1243.556**	ug/L	0.738	193390	0.525
	V	51	**64.936**	ug/L	6.810	119979	0.307
	Cr	52	**27.200**	ug/L	3.361	40863	0.116
	Cr	53		ug/L		114756	-0.405
	Mn	55	**1705.652**	ug/L	3.601	3898940	10.612
	Fe	57	**35414.052**	ug/L	3.812	1779816	4.838
	Co	59	**19.226**	ug/L	3.398	42308	0.115
	Ni	60	**23.299**	ug/L	3.136	11260	0.031
	Cu	63		ug/L		25426	0.069
	Cu	65	**23.579**	ug/L	3.584	12524	0.034
	Zn	66	**107.575**	ug/L	1.527	21149	0.188
	Zn	67		ug/L		9681	0.003
	Zn	68		ug/L		18530	0.158
>	Ge	74		ug/L		111826	111826.445
	As	75	**5.548**	ug/L	18.966	2999	0.013
	Se	77		ug/L		3873	-0.086
	Se	82	**2.572**	ug/L	23.643	64	0.001
	Kr	83		ug/L		93	0.000
	Sr	88	**98.379**	ug/L	0.128	395239	4.856
	Y	89		ug/L		170187	2.092
	Zr	90	**82.100**	ug/L	1.837	188879	2.319
	Mo	98	**2.035**	ug/L	4.090	2177	0.026
	Ag	107	**0.457**	ug/L	0.507	844	0.010
	Cd	111	**2.088**	ug/L	7.451	780	0.009
	Cd	114		ug/L		420	0.005
>	In	115		ug/L		81345	81344.734
	Sn	120	**0.954**	ug/L	0.568	1828	0.020
	Sb	121	**0.218**	ug/L	10.541	482	0.004
	Sb	123		ug/L		404	0.003
	Ba	135		ug/L		274316	2.849
	Ba	137	**594.057**	ug/L	0.563	469570	4.877
	Ho	165		ug/L		9037	0.094
>	Lu	175		ug/L		96284	96283.693
	Tl	205	**1.217**	ug/L	12.140	6805	0.043
	Pb	208	**60.269**	ug/L	1.622	356601	3.699
	Bi	209		ug/L		5200	0.054
	Th	232	**25.206**	ug/L	2.282	189724	1.965
	U	238	**5.854**	ug/L	1.203	43769	0.452

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		122.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		105.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201985792
Sample Date/Time: Tuesday, December 15, 2009 02:24:58
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\1201985792.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**30.707**	ug/L	3.091	2570	0.007
	Be	9	**2.458**	ug/L	14.260	62	0.000
	B	11	**12.981**	ug/L	3.836	349	0.001
	Na	23	**412.554**	ug/L	16.389	248192	0.584
	Mg	24	**7102.617**	ug/L	3.882	2855246	7.648
	Al	27	**39492.011**	ug/L	3.096	24407267	65.273
	P	31	**664.543**	ug/L	1.014	26126	0.064
	K	39	**7773.057**	ug/L	4.293	9947241	25.774
	Ca	43	**8689.514**	ug/L	0.826	22263	0.058
>	Sc	45		ug/L		373631	373630.887
	Ti	47	**1355.150**	ug/L	0.941	214125	0.573
	V	51	**70.991**	ug/L	1.459	132786	0.336
	Cr	52	**28.030**	ug/L	1.882	42866	0.119
	Cr	53		ug/L		109372	-0.424
	Mn	55	**1494.028**	ug/L	3.124	3470670	9.295
	Fe	57	**35420.760**	ug/L	2.609	1809474	4.839
	Co	59	**17.108**	ug/L	3.632	38265	0.102
	Ni	60	**21.865**	ug/L	2.751	10740	0.029
	Cu	63		ug/L		20824	0.055
	Cu	65	**19.324**	ug/L	3.481	10447	0.028
	Zn	66	**104.910**	ug/L	2.992	21000	0.184
	Zn	67		ug/L		9244	-0.002
	Zn	68		ug/L		18189	0.152
>	Ge	74		ug/L		113851	113850.755
	As	75	**5.020**	ug/L	17.621	2908	0.012
	Se	77		ug/L		3745	-0.088
	Se	82	**1.256**	ug/L	101.678	32	0.000
	Kr	83		ug/L		90	0.000
	Sr	88	**87.671**	ug/L	1.060	351773	4.328
	Y	89		ug/L		155208	1.911
	Zr	90	**79.865**	ug/L	1.445	183483	2.256
	Mo	98	**1.759**	ug/L	3.039	1886	0.023
	Ag	107	**0.449**	ug/L	7.226	829	0.009
	Cd	111	**1.992**	ug/L	8.411	745	0.009
	Cd	114		ug/L		328	0.004
>	In	115		ug/L		81250	81249.768
	Sn	120	**0.945**	ug/L	4.959	1808	0.020
	Sb	121	**0.196**	ug/L	6.661	453	0.003
	Sb	123		ug/L		365	0.002
	Ba	135		ug/L		239247	2.523
	Ba	137	**527.219**	ug/L	1.518	410463	4.328
	Ho	165		ug/L		8104	0.085
>	Lu	175		ug/L		94838	94838.390
	Tl	205	**0.557**	ug/L	3.829	4508	0.020
	Pb	208	**53.612**	ug/L	0.856	312530	3.291
	Bi	209		ug/L		4511	0.047
	Th	232	**23.123**	ug/L	0.848	171495	1.803
	U	238	**4.969**	ug/L	1.687	36623	0.384

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		124.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		107.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201985793
Sample Date/Time: Tuesday, December 15, 2009 02:31:13
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\1201985793.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.840**	**ug/L**	2.818	4629	0.012
	Be	9	**26.357**	**ug/L**	5.739	634	0.002
	B	11	**60.551**	**ug/L**	2.683	1412	0.004
	Na	23	**1527.831**	**ug/L**	5.268	830206	2.161
	Mg	24	**9122.432**	**ug/L**	2.498	3638215	9.823
	Al	27	**52688.179**	**ug/L**	3.523	32270011	87.084
	P	31	**1718.574**	**ug/L**	1.253	63520	0.165
	K	39	**9984.066**	**ug/L**	8.382	12602649	33.105
	Ca	43	**11313.859**	**ug/L**	0.300	28625	0.076
>	Sc	45		**ug/L**		370589	370588.685
	Ti	47	**1421.532**	**ug/L**	0.930	222755	0.601
	V	51	**96.613**	**ug/L**	2.503	176566	0.457
	Cr	52	**56.608**	**ug/L**	2.471	87622	0.241
	Cr	53		**ug/L**		113745	-0.410
	Mn	55	**1661.362**	**ug/L**	2.750	3828689	10.336
	Fe	57	**38855.555**	**ug/L**	3.147	1968376	5.309
	Co	59	**42.992**	**ug/L**	2.971	95222	0.257
	Ni	60	**48.281**	**ug/L**	4.290	23477	0.063
	Cu	63		**ug/L**		50634	0.136
	Cu	65	**45.490**	**ug/L**	3.935	24267	0.065
	Zn	66	**137.472**	**ug/L**	2.638	27094	0.241
	Zn	67		**ug/L**		10356	0.009
	Zn	68		**ug/L**		23001	0.197
>	Ge	74		**ug/L**		112260	112259.939
	As	75	**45.370**	**ug/L**	1.848	13758	0.109
	Se	77		**ug/L**		3806	-0.087
	Se	82	**11.120**	**ug/L**	5.806	281	0.003
	Kr	83		**ug/L**		88	0.000
	Sr	88	**133.630**	**ug/L**	1.507	531784	6.596
	Y	89		**ug/L**		159635	1.981
	Zr	90	**111.302**	**ug/L**	1.830	253548	3.144
	Mo	98	**25.341**	**ug/L**	0.597	26259	0.325
	Ag	107	**25.303**	**ug/L**	1.333	42891	0.531
	Cd	111	**7.823**	**ug/L**	1.965	2847	0.035
	Cd	114		**ug/L**		4740	0.058
>	In	115		**ug/L**		80601	80600.814
	Sn	120	**12.025**	**ug/L**	1.354	20931	0.258
	Sb	121	**28.894**	**ug/L**	2.257	37926	0.468
	Sb	123		**ug/L**		28797	0.355
	Ba	135		**ug/L**		287529	2.996
	Ba	137	**627.729**	**ug/L**	2.008	494470	5.153
	Ho	165		**ug/L**		8435	0.088
>	Lu	175		**ug/L**		95950	95949.773
	Tl	205	**47.897**	**ug/L**	1.985	163693	1.678
	Pb	208	**80.965**	**ug/L**	1.275	477293	4.970
	Bi	209		**ug/L**		4921	0.051
	Th	232	**48.256**	**ug/L**	0.603	361501	3.762
	U	238	**32.858**	**ug/L**	0.717	243754	2.538

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			123.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			105.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			102.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			108.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201985795
Sample Date/Time: Tuesday, December 15, 2009 02:37:27
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\1201985795.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.210**	**ug/L**	5.382	4535	0.012
	Be	9	**25.766**	**ug/L**	1.804	626	0.002
	B	11	**62.027**	**ug/L**	2.484	1458	0.004
	Na	23	**1647.424**	**ug/L**	9.011	903313	2.330
	Mg	24	**8803.979**	**ug/L**	9.946	3559177	9.480
	Al	27	**51860.052**	**ug/L**	5.171	32106204	85.715
	P	31	**1705.430**	**ug/L**	1.713	63672	0.164
	K	39	**9784.515**	**ug/L**	4.772	12468298	32.443
	Ca	43	**10600.332**	**ug/L**	2.087	27126	0.071
>	Sc	45		**ug/L**		374274	374273.900
	Ti	47	**1348.045**	**ug/L**	2.477	213242	0.570
	V	51	**90.908**	**ug/L**	1.466	168324	0.430
	Cr	52	**55.200**	**ug/L**	2.835	86235	0.235
	Cr	53		**ug/L**		110238	-0.422
	Mn	55	**1651.831**	**ug/L**	3.641	3844059	10.277
	Fe	57	**36237.408**	**ug/L**	3.890	1854011	4.951
	Co	59	**42.002**	**ug/L**	2.318	93972	0.251
	Ni	60	**46.757**	**ug/L**	3.586	22959	0.061
	Cu	63		**ug/L**		49431	0.132
	Cu	65	**44.170**	**ug/L**	5.481	23787	0.063
	Zn	66	**135.813**	**ug/L**	1.212	26779	0.238
	Zn	67		**ug/L**		9933	0.005
	Zn	68		**ug/L**		22121	0.189
>	Ge	74		**ug/L**		112265	112265.450
	As	75	**45.516**	**ug/L**	4.158	13785	0.109
	Se	77		**ug/L**		3762	-0.087
	Se	82	**10.249**	**ug/L**	9.582	258	0.002
	Kr	83		**ug/L**		93	0.000
	Sr	88	**130.948**	**ug/L**	3.944	519093	6.464
	Y	89		**ug/L**		162192	2.020
	Zr	90	**107.187**	**ug/L**	2.779	243323	3.027
	Mo	98	**25.463**	**ug/L**	3.059	26285	0.327
	Ag	107	**25.534**	**ug/L**	2.723	43126	0.536
	Cd	111	**7.669**	**ug/L**	6.531	2778	0.034
	Cd	114		**ug/L**		4753	0.059
>	In	115		**ug/L**		80350	80349.535
	Sn	120	**11.407**	**ug/L**	2.958	19791	0.244
	Sb	121	**27.902**	**ug/L**	4.346	36486	0.452
	Sb	123		**ug/L**		28002	0.347
	Ba	135		**ug/L**		278192	2.904
	Ba	137	**607.533**	**ug/L**	2.215	477808	4.987
	Ho	165		**ug/L**		8503	0.089
>	Lu	175		**ug/L**		95814	95813.570
	Tl	205	**48.245**	**ug/L**	2.569	164607	1.690
	Pb	208	**79.507**	**ug/L**	1.777	467958	4.880
	Bi	209		**ug/L**		4999	0.052
	Th	232	**48.916**	**ug/L**	2.799	365826	3.813
	U	238	**32.913**	**ug/L**	1.669	243770	2.542

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		124.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		105.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1201985794
Sample Date/Time: Tuesday, December 15, 2009 02:43:39
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928674|10|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\1201985794.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**5.927**	ug/L	3.926	498	0.001
	Be	9	**0.637**	ug/L	31.296	18	0.000
	B	11	**3.334**	ug/L	17.279	130	0.000
	Na	23	**88.968**	ug/L	38.763	74868	0.126
	Mg	24	**1288.303**	ug/L	3.761	513780	1.387
	Al	27	**9445.881**	ug/L	9.766	5761405	15.612
	P	31	**137.688**	ug/L	3.208	7109	0.013
	K	39	**1863.033**	ug/L	5.937	2584281	6.177
	Ca	43	**1988.065**	ug/L	0.253	5370	0.013
>	Sc	45		ug/L		369690	369690.041
	Ti	47	**248.765**	ug/L	1.121	39078	0.105
	V	51	**11.622**	ug/L	2.029	27666	0.055
	Cr	52	**5.358**	ug/L	0.039	6710	0.023
	Cr	53		ug/L		115755	-0.404
	Mn	55	**337.238**	ug/L	2.672	776577	2.098
	Fe	57	**7398.612**	ug/L	1.387	376430	1.011
	Co	59	**3.923**	ug/L	1.787	8779	0.023
	Ni	60	**4.652**	ug/L	2.092	2292	0.006
	Cu	63		ug/L		5410	0.014
	Cu	65	**4.791**	ug/L	2.662	2633	0.007
	Zn	66	**22.759**	ug/L	1.492	4766	0.040
	Zn	67		ug/L		6104	-0.031
	Zn	68		ug/L		4442	0.030
>	Ge	74		ug/L		117075	117074.539
	As	75	**-3.901**	ug/L	11.951	476	-0.009
	Se	77		ug/L		4400	-0.083
	Se	82	**0.374**	ug/L	100.373	9	0.000
	Kr	83		ug/L		45	-0.000
	Sr	88	**19.342**	ug/L	0.473	79324	0.955
	Y	89		ug/L		34339	0.414
	Zr	90	**15.979**	ug/L	2.455	37636	0.451
	Mo	98	**0.402**	ug/L	4.513	480	0.005
	Ag	107	**0.076**	ug/L	4.910	197	0.002
	Cd	111	**0.347**	ug/L	8.630	148	0.002
	Cd	114		ug/L		101	0.001
>	In	115		ug/L		82874	82874.124
	Sn	120	**0.163**	ug/L	7.829	458	0.004
	Sb	121	**0.021**	ug/L	59.057	227	0.000
	Sb	123		ug/L		205	0.000
	Ba	135		ug/L		54048	0.569
	Ba	137	**118.943**	ug/L	0.693	92758	0.976
	Ho	165		ug/L		1733	0.018
>	Lu	175		ug/L		94963	94963.225
	Tl	205	**0.198**	ug/L	39.049	3319	0.007
	Pb	208	**12.186**	ug/L	0.161	71462	0.748
	Bi	209		ug/L		1104	0.011
	Th	232	**4.934**	ug/L	0.681	37071	0.385
	U	238	**1.137**	ug/L	2.518	8572	0.088

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45			122.7		
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74			110.0		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115			105.8		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175			107.7		
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825002
Sample Date/Time: Tuesday, December 15, 2009 02:49:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825002.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	56.333	ug/L	1.613	4801	0.013
	Be	9	3.834	ug/L	11.910	97	0.000
	B	11	17.512	ug/L	3.683	459	0.001
	Na	23	753.927	ug/L	1.635	435554	1.067
	Mg	24	12255.397	ug/L	5.841	5031259	13.196
	Al	27	90354.782	ug/L	1.581	56841086	149.340
	P	31	800.218	ug/L	2.653	31582	0.077
	K	39	11763.435	ug/L	1.306	15163221	39.005
	Ca	43	10499.474	ug/L	0.561	27320	0.071
>	Sc	45		ug/L		380621	380620.631
	Ti	47	1662.091	ug/L	1.630	267388	0.702
	V	51	89.409	ug/L	4.318	168335	0.423
	Cr	52	42.454	ug/L	2.546	67061	0.181
	Cr	53		ug/L		108179	-0.433
	Mn	55	1332.644	ug/L	2.634	3154704	8.291
	Fe	57	53942.137	ug/L	3.364	2805456	7.370
	Co	59	20.619	ug/L	4.077	46962	0.123
	Ni	60	37.447	ug/L	4.352	18709	0.049
	Cu	63		ug/L		32160	0.084
	Cu	65	28.748	ug/L	3.841	15792	0.041
	Zn	66	133.374	ug/L	0.535	26075	0.233
	Zn	67		ug/L		10452	0.011
	Zn	68		ug/L		23581	0.204
>	Ge	74		ug/L		111314	111313.599
	As	75	6.276	ug/L	13.192	3181	0.015
	Se	77		ug/L		3571	-0.089
	Se	82	0.394	ug/L	102.454	9	0.000
	Kr	83		ug/L		109	0.001
	Sr	88	130.335	ug/L	2.062	519235	6.434
	Y	89		ug/L		222131	2.753
	Zr	90	106.729	ug/L	1.224	243424	3.014
	Mo	98	1.117	ug/L	4.366	1208	0.014
	Ag	107	0.644	ug/L	2.844	1154	0.014
	Cd	111	2.261	ug/L	4.572	836	0.010
	Cd	114		ug/L		180	0.002
>	In	115		ug/L		80671	80671.033
	Sn	120	0.601	ug/L	2.773	1201	0.013
	Sb	121	0.040	ug/L	17.227	246	0.001
	Sb	123		ug/L		232	0.001
	Ba	135		ug/L		396599	4.119
	Ba	137	856.528	ug/L	1.943	676999	7.031
	Ho	165		ug/L		11243	0.117
>	Lu	175		ug/L		96299	96299.175
	Tl	205	0.531	ug/L	4.093	4489	0.019
	Pb	208	43.722	ug/L	2.018	258820	2.684
	Bi	209		ug/L		4222	0.044
	Th	232	31.227	ug/L	1.832	234936	2.434
	U	238	4.647	ug/L	2.241	34792	0.359

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 02:56:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 6.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.691**	ug/L	3.268	3582	0.010
	Be	9	**46.705**	ug/L	2.115	1132	0.003
	B	11	**98.168**	ug/L	1.806	2279	0.006
	Na	23	**5794.024**	ug/L	10.988	3107512	8.196
	Mg	24	**5287.061**	ug/L	9.715	2138153	5.693
	Al	27	**5062.580**	ug/L	11.080	3143050	8.368
	P	31	**5195.806**	ug/L	1.646	189640	0.500
	K	39	**5392.717**	ug/L	11.543	7025766	17.881
	Ca	43	**5198.710**	ug/L	1.433	13532	0.035
>	Sc	45		ug/L		374525	374524.762
	Ti	47	**49.013**	ug/L	1.923	7985	0.021
	V	51	**46.964**	ug/L	5.832	90492	0.222
	Cr	52	**50.819**	ug/L	2.379	79338	0.217
	Cr	53		ug/L		150711	-0.314
	Mn	55	**51.301**	ug/L	2.705	120767	0.319
	Fe	57	**4938.616**	ug/L	2.500	255447	0.675
	Co	59	**46.867**	ug/L	2.893	104905	0.280
	Ni	60	**48.051**	ug/L	3.142	23615	0.063
	Cu	63		ug/L		54800	0.146
	Cu	65	**48.564**	ug/L	2.521	26189	0.070
	Zn	66	**53.512**	ug/L	1.163	11216	0.094
	Zn	67		ug/L		8019	-0.016
	Zn	68		ug/L		8373	0.062
>	Ge	74		ug/L		118681	118681.232
	As	75	**44.725**	ug/L	6.521	14360	0.108
	Se	77		ug/L		7122	-0.061
	Se	82	**51.390**	ug/L	1.311	1375	0.012
	Kr	83		ug/L		43	-0.000
	Sr	88	**50.716**	ug/L	3.739	211665	2.503
	Y	89		ug/L		35	0.000
	Zr	90	**50.712**	ug/L	2.266	121250	1.432
	Mo	98	**49.949**	ug/L	1.012	54206	0.641
	Ag	107	**49.661**	ug/L	2.470	88179	1.043
	Cd	111	**49.798**	ug/L	3.252	18887	0.223
	Cd	114		ug/L		44101	0.522
>	In	115		ug/L		84496	84496.093
	Sn	120	**48.761**	ug/L	1.805	88453	1.045
	Sb	121	**49.081**	ug/L	2.419	67397	0.795
	Sb	123		ug/L		51439	0.607
	Ba	135		ug/L		22690	0.242
	Ba	137	**50.419**	ug/L	0.779	38824	0.414
	Ho	165		ug/L		23	0.000
>	Lu	175		ug/L		93722	93721.767
	Tl	205	**46.682**	ug/L	1.979	155876	1.636
	Pb	208	**50.818**	ug/L	1.851	292711	3.119
	Bi	209		ug/L		48	0.000
	Th	232	**49.945**	ug/L	0.798	365419	3.894
	U	238	**51.987**	ug/L	2.338	376466	4.016

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	85.381				
	Be	9	93.410				
	B	11	98.168				
	Na	23	115.880				
	Mg	24	105.741				
	Al	27	100.249				
	P	31	103.916				
	K	39	107.854				
	Ca	43	103.974				
>	Sc	45		124.3			
	Ti	47	98.027				
	V	51	93.927				
	Cr	52	101.639				
	Cr	53					
	Mn	55	102.602				
	Fe	57	98.772				
	Co	59	93.734				
	Ni	60	96.101				
	Cu	63					
	Cu	65	97.128				
	Zn	66	107.023				
	Zn	67					
	Zn	68					
>	Ge	74		111.5			
	As	75	89.451				
	Se	77					
	Se	82	102.779				
	Kr	83					
	Sr	88	101.431				
	Y	89					
	Zr	90	101.424				
	Mo	98	99.899				
	Ag	107	99.322				
	Cd	111	99.596				
	Cd	114					
>	In	115		107.9			
	Sn	120	97.522				
	Sb	121	98.162				
	Sb	123					
	Ba	135					
	Ba	137	100.838				
	Ho	165					
>	Lu	175		106.3			
	Tl	205	93.365				
	Pb	208	101.636				
	Bi	209					
	Th	232	99.890				
	U	238	103.974				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 6	As	75	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 03:02:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 7.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.006**	**ug/L**	162.796	9	-0.000
	Be	9	**-0.056**	**ug/L**	126.257	2	-0.000
	B	11	**0.903**	**ug/L**	87.907	79	0.000
	Na	23	**-27.507**	**ug/L**	26.982	15008	-0.039
	Mg	24	**2.191**	**ug/L**	65.820	1333	0.002
	Al	27	**6.326**	**ug/L**	8.566	5334	0.010
	P	31	**-5.657**	**ug/L**	36.385	2100	-0.001
	K	39	**-31.832**	**ug/L**	36.481	277346	-0.106
	Ca	43	**-7.431**	**ug/L**	234.930	426	-0.000
>	Sc	45		**ug/L**		386620	386619.888
	Ti	47	**-0.494**	**ug/L**	11.014	160	-0.000
	V	51	**-0.777**	**ug/L**	324.883	6359	-0.004
	Cr	52	**0.107**	**ug/L**	178.311	-1633	0.000
	Cr	53		**ug/L**		160722	-0.301
	Mn	55	**-0.155**	**ug/L**	14.448	984	-0.001
	Fe	57	**2.808**	**ug/L**	57.282	3150	0.000
	Co	59	**-0.003**	**ug/L**	183.169	116	-0.000
	Ni	60	**0.027**	**ug/L**	76.453	53	0.000
	Cu	63		**ug/L**		152	-0.000
	Cu	65	**-0.035**	**ug/L**	69.821	76	-0.000
	Zn	66	**-0.004**	**ug/L**	758.021	107	-0.000
	Zn	67		**ug/L**		7094	-0.024
	Zn	68		**ug/L**		620	-0.003
>	Ge	74		**ug/L**		119830	119830.428
	As	75	**-4.361**	**ug/L**	15.683	358	-0.010
	Se	77		**ug/L**		7276	-0.060
	Se	82	**0.392**	**ug/L**	225.544	9	0.000
	Kr	83		**ug/L**		41	-0.000
	Sr	88	**-0.003**	**ug/L**	109.822	195	-0.000
	Y	89		**ug/L**		15	-0.000
	Zr	90	**0.160**	**ug/L**	25.064	635	0.005
	Mo	98	**0.025**	**ug/L**	51.855	82	0.000
	Ag	107	**0.010**	**ug/L**	38.101	84	0.000
	Cd	111	**-0.008**	**ug/L**	305.639	17	-0.000
	Cd	114		**ug/L**		28	-0.000
>	In	115		**ug/L**		84776	84776.389
	Sn	120	**0.032**	**ug/L**	40.538	230	0.001
	Sb	121	**0.179**	**ug/L**	36.659	450	0.003
	Sb	123		**ug/L**		390	0.002
	Ba	135		**ug/L**		28	0.000
	Ba	137	**0.007**	**ug/L**	94.534	41	0.000
	Ho	165		**ug/L**		11	-0.000
>	Lu	175		**ug/L**		93020	93020.207
	Tl	205	**-0.054**	**ug/L**	153.895	2429	-0.002
	Pb	208	**0.024**	**ug/L**	16.777	560	0.001
	Bi	209		**ug/L**		24	-0.000
	Th	232	**0.116**	**ug/L**	24.651	1377	0.009
	U	238	**0.014**	**ug/L**	25.216	328	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		128.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		112.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		108.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825003
Sample Date/Time: Tuesday, December 15, 2009 03:08:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825003.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.497**	**ug/L**	2.419	1690	0.005
	Be	9	**1.832**	**ug/L**	3.912	47	0.000
	B	11	**5.791**	**ug/L**	6.507	183	0.000
	Na	23	**348.036**	**ug/L**	21.414	209567	0.492
	Mg	24	**3959.049**	**ug/L**	5.161	1565526	4.263
	Al	27	**27381.989**	**ug/L**	4.737	16605951	45.257
	P	31	**470.426**	**ug/L**	1.768	18815	0.045
	K	39	**4193.968**	**ug/L**	4.831	5408286	13.906
	Ca	43	**3732.044**	**ug/L**	5.317	9642	0.025
>	Sc	45		**ug/L**		367016	367015.648
	Ti	47	**1036.009**	**ug/L**	0.715	160892	0.438
	V	51	**59.248**	**ug/L**	0.988	110102	0.280
	Cr	52	**19.025**	**ug/L**	1.593	28039	0.081
	Cr	53		**ug/L**		108851	-0.420
	Mn	55	**1609.783**	**ug/L**	1.112	3677410	10.015
	Fe	57	**30411.500**	**ug/L**	0.480	1527896	4.155
	Co	59	**13.716**	**ug/L**	1.952	30186	0.082
	Ni	60	**14.495**	**ug/L**	0.778	7012	0.019
	Cu	63		**ug/L**		17043	0.046
	Cu	65	**15.837**	**ug/L**	1.201	8437	0.023
	Zn	66	**84.733**	**ug/L**	4.438	17028	0.148
	Zn	67		**ug/L**		7952	-0.014
	Zn	68		**ug/L**		13784	0.113
>	Ge	74		**ug/L**		114226	114226.162
	As	75	**6.340**	**ug/L**	22.414	3278	0.015
	Se	77		**ug/L**		3583	-0.089
	Se	82	**-0.171**	**ug/L**	192.928	-5	-0.000
	Kr	83		**ug/L**		83	0.000
	Sr	88	**49.870**	**ug/L**	2.401	199977	2.462
	Y	89		**ug/L**		128569	1.584
	Zr	90	**67.365**	**ug/L**	0.881	154647	1.903
	Mo	98	**2.194**	**ug/L**	4.144	2337	0.028
	Ag	107	**0.455**	**ug/L**	6.478	839	0.010
	Cd	111	**1.388**	**ug/L**	10.560	524	0.006
	Cd	114		**ug/L**		165	0.002
>	In	115		**ug/L**		81152	81151.945
	Sn	120	**0.919**	**ug/L**	1.470	1762	0.020
	Sb	121	**0.139**	**ug/L**	11.853	378	0.002
	Sb	123		**ug/L**		331	0.002
	Ba	135		**ug/L**		115129	1.211
	Ba	137	**252.863**	**ug/L**	2.731	197268	2.076
	Ho	165		**ug/L**		6684	0.070
>	Lu	175		**ug/L**		95032	95031.671
	Tl	205	**0.190**	**ug/L**	12.242	3293	0.007
	Pb	208	**46.142**	**ug/L**	1.833	269562	2.832
	Bi	209		**ug/L**		8376	0.088
	Th	232	**14.930**	**ug/L**	3.015	111139	1.164
	U	238	**1.853**	**ug/L**	1.735	13830	0.143

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			121.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			107.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			103.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			107.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825004
Sample Date/Time: Tuesday, December 15, 2009 03:14:47
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825004.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**28.177**	ug/L	1.913	2406	0.006
	Be	9	**2.170**	ug/L	4.507	57	0.000
	B	11	**13.692**	ug/L	4.385	372	0.001
	Na	23	**356.382**	ug/L	4.491	221713	0.504
	Mg	24	**7013.217**	ug/L	5.876	2879945	7.552
	Al	27	**41558.891**	ug/L	9.796	26209146	68.689
	P	31	**735.167**	ug/L	0.960	29227	0.071
	K	39	**7885.990**	ug/L	1.051	10273899	26.148
	Ca	43	**9941.161**	ug/L	0.939	25911	0.067
>	Sc	45		ug/L		380879	380878.875
	Ti	47	**1298.667**	ug/L	1.586	209155	0.549
	V	51	**63.526**	ug/L	1.550	121986	0.300
	Cr	52	**28.918**	ug/L	1.154	45153	0.123
	Cr	53		ug/L		103739	-0.445
	Mn	55	**1684.589**	ug/L	1.691	3991811	10.481
	Fe	57	**35092.784**	ug/L	1.813	1828394	4.795
	Co	59	**18.654**	ug/L	2.769	42545	0.111
	Ni	60	**23.658**	ug/L	2.395	11849	0.031
	Cu	63		ug/L		24143	0.063
	Cu	65	**21.311**	ug/L	2.143	11745	0.031
	Zn	66	**103.138**	ug/L	1.423	20622	0.180
	Zn	67		ug/L		8843	-0.005
	Zn	68		ug/L		18042	0.151
>	Ge	74		ug/L		113716	113715.679
	As	75	**5.229**	ug/L	1.553	2961	0.013
	Se	77		ug/L		3443	-0.090
	Se	82	**1.105**	ug/L	13.393	27	0.000
	Kr	83		ug/L		88	0.000
	Sr	88	**95.050**	ug/L	1.069	384281	4.692
	Y	89		ug/L		164101	2.005
	Zr	90	**75.948**	ug/L	0.562	175841	2.145
	Mo	98	**1.815**	ug/L	0.684	1959	0.023
	Ag	107	**0.427**	ug/L	4.414	797	0.009
	Cd	111	**1.875**	ug/L	10.299	707	0.008
	Cd	114		ug/L		414	0.005
>	In	115		ug/L		81858	81857.839
	Sn	120	**0.799**	ug/L	3.791	1567	0.017
	Sb	121	**0.239**	ug/L	2.730	514	0.004
	Sb	123		ug/L		423	0.003
	Ba	135		ug/L		256531	2.656
	Ba	137	**554.280**	ug/L	1.153	439535	4.550
	Ho	165		ug/L		8476	0.088
>	Lu	175		ug/L		96593	96593.451
	Tl	205	**0.160**	ug/L	9.300	3245	0.006
	Pb	208	**58.823**	ug/L	1.305	349182	3.611
	Bi	209		ug/L		5390	0.056
	Th	232	**23.564**	ug/L	1.231	177983	1.837
	U	238	**6.274**	ug/L	1.541	47038	0.485

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		106.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		104.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825005
Sample Date/Time: Tuesday, December 15, 2009 03:21:02
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825005.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**34.911**	**ug/L**	1.317	2983	0.008
	Be	9	**2.568**	**ug/L**	12.451	67	0.000
	B	11	**13.983**	**ug/L**	3.658	379	0.001
	Na	23	**344.850**	**ug/L**	8.749	215625	0.488
	Mg	24	**9858.354**	**ug/L**	0.928	4045754	10.615
	Al	27	**49889.260**	**ug/L**	5.300	31450975	82.458
	P	31	**935.315**	**ug/L**	2.376	36609	0.090
	K	39	**9207.946**	**ug/L**	6.472	11946700	30.532
	Ca	43	**10780.718**	**ug/L**	1.150	28086	0.073
>	Sc	45		**ug/L**		381168	381167.867
	Ti	47	**1417.269**	**ug/L**	1.389	228401	0.599
	V	51	**79.514**	**ug/L**	3.170	150782	0.376
	Cr	52	**33.705**	**ug/L**	2.179	52947	0.144
	Cr	53		**ug/L**		102847	-0.447
	Mn	55	**1560.397**	**ug/L**	2.587	3699476	9.708
	Fe	57	**42399.817**	**ug/L**	1.590	2210176	5.793
	Co	59	**20.357**	**ug/L**	2.354	46453	0.122
	Ni	60	**29.339**	**ug/L**	2.847	14694	0.038
	Cu	63		**ug/L**		27941	0.073
	Cu	65	**24.516**	**ug/L**	2.397	13503	0.035
	Zn	66	**109.651**	**ug/L**	1.680	22079	0.192
	Zn	67		**ug/L**		9156	-0.003
	Zn	68		**ug/L**		19910	0.166
>	Ge	74		**ug/L**		114556	114555.958
	As	75	**4.765**	**ug/L**	18.149	2855	0.011
	Se	77		**ug/L**		3422	-0.091
	Se	82	**0.812**	**ug/L**	21.108	20	0.000
	Kr	83		**ug/L**		88	0.000
	Sr	88	**117.342**	**ug/L**	0.623	475095	5.792
	Y	89		**ug/L**		168541	2.055
	Zr	90	**69.165**	**ug/L**	0.778	160405	1.953
	Mo	98	**1.223**	**ug/L**	4.967	1339	0.016
	Ag	107	**0.388**	**ug/L**	4.393	732	0.008
	Cd	111	**1.580**	**ug/L**	5.673	599	0.007
	Cd	114		**ug/L**		302	0.003
>	In	115		**ug/L**		81989	81988.882
	Sn	120	**0.598**	**ug/L**	3.863	1216	0.013
	Sb	121	**0.114**	**ug/L**	11.648	349	0.002
	Sb	123		**ug/L**		309	0.002
	Ba	135		**ug/L**		300419	3.145
	Ba	137	**659.786**	**ug/L**	0.246	517336	5.416
	Ho	165		**ug/L**		8868	0.093
>	Lu	175		**ug/L**		95507	95507.167
	Tl	205	**0.154**	**ug/L**	28.145	3188	0.005
	Pb	208	**46.985**	**ug/L**	1.512	275853	2.884
	Bi	209		**ug/L**		3465	0.036
	Th	232	**29.295**	**ug/L**	0.776	218658	2.284
	U	238	**4.977**	**ug/L**	0.581	36946	0.384

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		104.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825006
Sample Date/Time: Tuesday, December 15, 2009 03:27:18
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825006.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**40.064**	**ug/L**	3.379	3412	0.009
	Be	9	**3.632**	**ug/L**	8.048	93	0.000
	B	11	**11.963**	**ug/L**	6.003	332	0.001
	Na	23	**441.779**	**ug/L**	15.894	268215	0.625
	Mg	24	**8978.551**	**ug/L**	4.456	3682674	9.668
	Al	27	**65327.683**	**ug/L**	5.493	41115598	107.975
	P	31	**492.213**	**ug/L**	0.653	20303	0.047
	K	39	**8885.190**	**ug/L**	4.009	11530476	29.462
	Ca	43	**8580.108**	**ug/L**	1.184	22393	0.058
>	Sc	45		**ug/L**		380531	380531.159
	Ti	47	**1554.047**	**ug/L**	0.989	250016	0.657
	V	51	**85.806**	**ug/L**	3.062	161822	0.406
	Cr	52	**36.282**	**ug/L**	2.283	57029	0.155
	Cr	53		**ug/L**		101904	-0.449
	Mn	55	**1574.111**	**ug/L**	1.640	3726327	9.793
	Fe	57	**51110.135**	**ug/L**	2.341	2658340	6.983
	Co	59	**20.577**	**ug/L**	2.065	46874	0.123
	Ni	60	**28.170**	**ug/L**	2.454	14084	0.037
	Cu	63		**ug/L**		23941	0.063
	Cu	65	**21.434**	**ug/L**	1.913	11798	0.031
	Zn	66	**120.239**	**ug/L**	2.749	23894	0.210
	Zn	67		**ug/L**		9427	0.000
	Zn	68		**ug/L**		20496	0.173
>	Ge	74		**ug/L**		113097	113097.133
	As	75	**5.167**	**ug/L**	13.089	2930	0.012
	Se	77		**ug/L**		3274	-0.092
	Se	82	**0.254**	**ug/L**	282.150	5	0.000
	Kr	83		**ug/L**		104	0.001
	Sr	88	**106.224**	**ug/L**	0.821	425200	5.244
	Y	89		**ug/L**		189834	2.342
	Zr	90	**103.648**	**ug/L**	0.957	237534	2.927
	Mo	98	**1.398**	**ug/L**	3.851	1507	0.018
	Ag	107	**0.554**	**ug/L**	1.821	1006	0.012
	Cd	111	**2.069**	**ug/L**	3.397	771	0.009
	Cd	114		**ug/L**		171	0.002
>	In	115		**ug/L**		81056	81055.847
	Sn	120	**0.510**	**ug/L**	2.152	1050	0.011
	Sb	121	**0.029**	**ug/L**	72.727	233	0.000
	Sb	123		**ug/L**		220	0.001
	Ba	135		**ug/L**		300849	3.093
	Ba	137	**642.176**	**ug/L**	1.162	512851	5.272
	Ho	165		**ug/L**		9920	0.102
>	Lu	175		**ug/L**		97286	97286.144
	Tl	205	**0.142**	**ug/L**	5.927	3208	0.005
	Pb	208	**47.992**	**ug/L**	0.330	287035	2.946
	Bi	209		**ug/L**		4242	0.043
	Th	232	**30.344**	**ug/L**	1.962	230652	2.366
	U	238	**2.535**	**ug/L**	3.003	19278	0.196

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		106.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825007
Sample Date/Time: Tuesday, December 15, 2009 03:33:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825007.222

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**38.998**	**ug/L**	0.524	3354	0.009
	Be	9	**3.675**	**ug/L**	3.718	94	0.000
	B	11	**16.409**	**ug/L**	2.395	438	0.001
	Na	23	**568.285**	**ug/L**	2.018	338298	0.804
	Mg	24	**10989.508**	**ug/L**	4.870	4549621	11.833
	Al	27	**64009.898**	**ug/L**	5.434	40624177	105.797
	P	31	**1162.458**	**ug/L**	1.195	45255	0.112
	K	39	**10635.122**	**ug/L**	3.003	13864495	35.264
	Ca	43	**17749.484**	**ug/L**	0.687	46281	0.119
>	Sc	45		**ug/L**		383900	383899.990
	Ti	47	**1265.827**	**ug/L**	2.875	205382	0.535
	V	51	**87.430**	**ug/L**	2.477	166202	0.413
	Cr	52	**40.940**	**ug/L**	2.476	65140	0.175
	Cr	53		**ug/L**		103902	-0.446
	Mn	55	**1706.200**	**ug/L**	2.383	4073222	10.615
	Fe	57	**52409.933**	**ug/L**	4.153	2747957	7.161
	Co	59	**19.453**	**ug/L**	4.442	44672	0.116
	Ni	60	**32.158**	**ug/L**	4.659	16201	0.042
	Cu	63		**ug/L**		44293	0.115
	Cu	65	**38.689**	**ug/L**	4.258	21389	0.056
	Zn	66	**222.473**	**ug/L**	1.768	43524	0.389
	Zn	67		**ug/L**		12414	0.028
	Zn	68		**ug/L**		34602	0.302
>	Ge	74		**ug/L**		111555	111554.990
	As	75	**7.989**	**ug/L**	14.664	3645	0.019
	Se	77		**ug/L**		3484	-0.089
	Se	82	**0.995**	**ug/L**	37.775	24	0.000
	Kr	83		**ug/L**		122	0.001
	Sr	88	**168.103**	**ug/L**	0.815	669708	8.298
	Y	89		**ug/L**		296215	3.671
	Zr	90	**121.296**	**ug/L**	2.587	276668	3.426
	Mo	98	**2.744**	**ug/L**	1.979	2892	0.035
	Ag	107	**0.679**	**ug/L**	1.987	1214	0.014
	Cd	111	**3.073**	**ug/L**	6.165	1131	0.014
	Cd	114		**ug/L**		607	0.007
>	In	115		**ug/L**		80687	80687.098
	Sn	120	**0.793**	**ug/L**	4.301	1534	0.017
	Sb	121	**0.195**	**ug/L**	5.382	449	0.003
	Sb	123		**ug/L**		400	0.003
	Ba	135		**ug/L**		293287	3.074
	Ba	137	**637.179**	**ug/L**	1.014	499052	5.231
	Ho	165		**ug/L**		14982	0.157
>	Lu	175		**ug/L**		95405	95405.477
	Tl	205	**0.982**	**ug/L**	0.939	5956	0.034
	Pb	208	**79.177**	**ug/L**	1.437	464094	4.860
	Bi	209		**ug/L**		13703	0.143
	Th	232	**29.787**	**ug/L**	1.883	222077	2.322
	U	238	**7.255**	**ug/L**	1.915	53692	0.560

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			127.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			104.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			103.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			108.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for san	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825008
Sample Date/Time: Tuesday, December 15, 2009 03:39:46
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825008.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.460**	ug/L	1.915	4037	0.010
	Be	9	**2.805**	ug/L	3.559	74	0.000
	B	11	**25.750**	ug/L	7.097	663	0.002
	Na	23	**4206.824**	ug/L	7.339	2341801	5.951
	Mg	24	**9730.871**	ug/L	7.333	4072924	10.478
	Al	27	**46142.846**	ug/L	5.892	29649097	76.266
	P	31	**448.499**	ug/L	1.661	19086	0.043
	K	39	**6254.469**	ug/L	3.727	8366642	20.739
	Ca	43	**14016.693**	ug/L	2.180	37044	0.094
>	Sc	45		ug/L		388229	388228.696
	Ti	47	**763.700**	ug/L	0.890	125486	0.323
	V	51	**51.604**	ug/L	5.718	102310	0.244
	Cr	52	**27.877**	ug/L	1.701	44294	0.119
	Cr	53		ug/L		98436	-0.463
	Mn	55	**1318.371**	ug/L	1.580	3184649	8.202
	Fe	57	**34420.164**	ug/L	2.282	1827676	4.703
	Co	59	**15.592**	ug/L	2.574	36265	0.093
	Ni	60	**22.933**	ug/L	2.282	11708	0.030
	Cu	63		ug/L		23107	0.059
	Cu	65	**20.016**	ug/L	3.280	11244	0.029
	Zn	66	**154.606**	ug/L	2.496	30690	0.270
	Zn	67		ug/L		9696	0.003
	Zn	68		ug/L		24010	0.204
>	Ge	74		ug/L		113058	113057.804
	As	75	**3.043**	ug/L	26.031	2351	0.007
	Se	77		ug/L		3259	-0.092
	Se	82	**1.838**	ug/L	24.807	46	0.000
	Kr	83		ug/L		108	0.001
	Sr	88	**107.749**	ug/L	2.326	431725	5.319
	Y	89		ug/L		340384	4.195
	Zr	90	**80.962**	ug/L	2.892	185745	2.287
	Mo	98	**2.755**	ug/L	0.991	2921	0.035
	Ag	107	**0.437**	ug/L	3.282	807	0.009
	Cd	111	**1.856**	ug/L	8.722	695	0.008
	Cd	114		ug/L		80	0.001
>	In	115		ug/L		81165	81164.680
	Sn	120	**1.918**	ug/L	3.295	3499	0.041
	Sb	121	**0.079**	ug/L	23.672	298	0.001
	Sb	123		ug/L		267	0.001
	Ba	135		ug/L		188281	1.920
	Ba	137	**399.282**	ug/L	1.469	321373	3.278
	Ho	165		ug/L		16563	0.169
>	Lu	175		ug/L		98045	98044.970
	Tl	205	**-0.056**	ug/L	23.622	2553	-0.002
	Pb	208	**32.912**	ug/L	0.464	198522	2.020
	Bi	209		ug/L		8750	0.089
	Th	232	**25.225**	ug/L	0.639	193362	1.966
	U	238	**2.585**	ug/L	1.183	19809	0.200

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		128.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		106.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		111.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825009
Sample Date/Time: Tuesday, December 15, 2009 03:46:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825009.224

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**58.398**	ug/L	0.967	5053	0.013
	Be	9	**2.472**	ug/L	11.537	65	0.000
	B	11	**16.790**	ug/L	4.866	450	0.001
	Na	23	**3847.855**	ug/L	12.070	2137734	5.443
	Mg	24	**4570.670**	ug/L	11.471	1905876	4.922
	Al	27	**22968.330**	ug/L	6.768	14694015	37.962
	P	31	**510.460**	ug/L	2.063	21308	0.049
	K	39	**3952.823**	ug/L	3.853	5387211	13.107
	Ca	43	**6110.445**	ug/L	4.003	16337	0.041
>	Sc	45		ug/L		386660	386660.345
	Ti	47	**550.755**	ug/L	1.854	90228	0.233
	V	51	**30.107**	ug/L	0.869	62732	0.142
	Cr	52	**13.292**	ug/L	2.477	20085	0.057
	Cr	53		ug/L		93840	-0.474
	Mn	55	**970.274**	ug/L	2.522	2336215	6.037
	Fe	57	**31110.225**	ug/L	2.136	1646480	4.250
	Co	59	**3.864**	ug/L	4.762	9044	0.023
	Ni	60	**17.179**	ug/L	2.434	8746	0.023
	Cu	63		ug/L		16046	0.041
	Cu	65	**13.900**	ug/L	1.901	7812	0.020
	Zn	66	**179.557**	ug/L	1.678	36014	0.314
	Zn	67		ug/L		9762	0.002
	Zn	68		ug/L		26159	0.221
>	Ge	74		ug/L		114308	114307.983
	As	75	**1.596**	ug/L	62.125	1979	0.004
	Se	77		ug/L		3193	-0.093
	Se	82	**2.905**	ug/L	14.863	.74	0.001
	Kr	83		ug/L		133	0.001
	Sr	88	**50.282**	ug/L	2.642	202197	2.482
	Y	89		ug/L		550835	6.768
	Zr	90	**67.529**	ug/L	1.666	155474	1.907
	Mo	98	**8.192**	ug/L	2.041	8607	0.105
	Ag	107	**0.433**	ug/L	2.853	804	0.009
	Cd	111	**1.859**	ug/L	6.578	698	0.008
	Cd	114		ug/L		166	0.002
>	In	115		ug/L		81399	81399.074
	Sn	120	**2.146**	ug/L	2.128	3908	0.046
	Sb	121	**0.022**	ug/L	36.439	224	0.000
	Sb	123		ug/L		196	0.000
	Ba	135		ug/L		66499	0.666
	Ba	137	**138.196**	ug/L	2.528	113357	1.134
	Ho	165		ug/L		25575	0.256
>	Lu	175		ug/L		99926	99925.738
	Tl	205	**-0.070**	ug/L	30.131	2554	-0.002
	Pb	208	**18.523**	ug/L	2.082	114027	1.137
	Bi	209		ug/L		13686	0.137
	Th	232	**23.530**	ug/L	2.417	183796	1.834
	U	238	**2.609**	ug/L	2.472	20371	0.202

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		128.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		104.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		113.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825010
Sample Date/Time: Tuesday, December 15, 2009 03:52:14
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825010.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**27.925**	ug/L	4.168	2369	0.006
	Be	9	**0.770**	ug/L	34.553	22	0.000
	B	11	**10.444**	ug/L	6.676	295	0.001
	Na	23	**4723.784**	ug/L	9.701	2558752	6.682
	Mg	24	**1236.909**	ug/L	5.892	505875	1.332
	Al	27	**2325.471**	ug/L	3.193	1455630	3.844
	P	31	**289.852**	ug/L	2.043	12820	0.028
	K	39	**1874.745**	ug/L	0.804	2665945	6.216
	Ca	43	**4007.156**	ug/L	1.027	10647	0.027
>	Sc	45		ug/L		378702	378702.012
	Ti	47	**211.639**	ug/L	2.116	34073	0.089
	V	51	**1.975**	ug/L	28.128	11022	0.009
	Cr	52	**2.182**	ug/L	9.590	1735	0.009
	Cr	53		ug/L		95131	-0.466
	Mn	55	**877.208**	ug/L	3.387	2068193	5.458
	Fe	57	**10793.466**	ug/L	3.361	560714	1.475
	Co	59	**1.210**	ug/L	4.893	2854	0.007
	Ni	60	**5.635**	ug/L	2.745	2834	0.007
	Cu	63		ug/L		5732	0.015
	Cu	65	**4.947**	ug/L	3.127	2781	0.007
	Zn	66	**121.463**	ug/L	2.380	24539	0.213
	Zn	67		ug/L		7970	-0.014
	Zn	68		ug/L		17545	0.144
>	Ge	74		ug/L		114983	114983.384
	As	75	**-2.654**	ug/L	16.724	814	-0.006
	Se	77		ug/L		3260	-0.092
	Se	82	**1.711**	ug/L	42.182	43	0.000
	Kr	83		ug/L		109	0.001
	Sr	88	**18.239**	ug/L	0.855	74815	0.900
	Y	89		ug/L		436571	5.268
	Zr	90	**32.766**	ug/L	1.053	76948	0.925
	Mo	98	**6.129**	ug/L	0.940	6571	0.079
	Ag	107	**0.152**	ug/L	2.088	330	0.003
	Cd	111	**1.068**	ug/L	0.787	416	0.005
	Cd	114		ug/L		89	0.001
>	In	115		ug/L		82877	82876.790
	Sn	120	**2.133**	ug/L	1.713	3956	0.046
	Sb	121	**0.018**	ug/L	27.033	222	0.000
	Sb	123		ug/L		201	0.000
	Ba	135		ug/L		24638	0.249
	Ba	137	**51.975**	ug/L	2.465	42196	0.427
	Ho	165		ug/L		20283	0.205
>	Lu	175		ug/L		98826	98826.363
	Tl	205	**-0.313**	ug/L	4.157	1683	-0.011
	Pb	208	**12.176**	ug/L	1.634	74298	0.747
	Bi	209		ug/L		597	0.006
	Th	232	**17.414**	ug/L	1.554	134706	1.358
	U	238	**2.083**	ug/L	0.981	16139	0.161

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		125.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		105.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		112.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825011
Sample Date/Time: Tuesday, December 15, 2009 03:58:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825011.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**35.418**	**ug/L**	2.815	3105	0.008
	Be	9	**1.622**	**ug/L**	22.365	45	0.000
	B	11	**19.610**	**ug/L**	9.175	524	0.001
	Na	23	**4342.894**	**ug/L**	11.968	2443895	6.144
	Mg	24	**13275.769**	**ug/L**	7.184	5604284	14.295
	Al	27	**37148.602**	**ug/L**	6.376	24079653	61.400
	P	31	**2071.861**	**ug/L**	0.494	80412	0.199
	K	39	**6040.468**	**ug/L**	2.543	8163798	20.029
	Ca	43	**17785.245**	**ug/L**	1.876	47288	0.120
>	Sc	45		**ug/L**		391464	391463.835
	Ti	47	**1390.365**	**ug/L**	1.181	230121	0.587
	V	51	**91.829**	**ug/L**	1.553	177687	0.434
	Cr	52	**38.656**	**ug/L**	2.956	62613	0.165
	Cr	53		**ug/L**		102489	-0.455
	Mn	55	**933.958**	**ug/L**	3.006	2274276	5.811
	Fe	57	**42223.760**	**ug/L**	2.793	2259685	5.769
	Co	59	**15.629**	**ug/L**	2.983	36645	0.093
	Ni	60	**29.693**	**ug/L**	4.494	15261	0.039
	Cu	63		**ug/L**		48697	0.124
	Cu	65	**41.947**	**ug/L**	2.096	23658	0.060
	Zn	66	**141.613**	**ug/L**	1.178	28476	0.248
	Zn	67		**ug/L**		13446	0.034
	Zn	68		**ug/L**		35342	0.301
>	Ge	74		**ug/L**		114508	114507.655
	As	75	**0.545**	**ug/L**	280.175	1692	0.001
	Se	77		**ug/L**		3506	-0.090
	Se	82	**0.971**	**ug/L**	51.052	24	0.000
	Kr	83		**ug/L**		88	0.000
	Sr	88	**190.321**	**ug/L**	0.409	761105	9.395
	Y	89		**ug/L**		201595	2.489
	Zr	90	**84.467**	**ug/L**	0.784	193453	2.386
	Mo	98	**1.664**	**ug/L**	3.988	1782	0.021
	Ag	107	**0.442**	**ug/L**	0.668	815	0.009
	Cd	111	**1.958**	**ug/L**	6.374	729	0.009
	Cd	114		**ug/L**		291	0.003
>	In	115		**ug/L**		80992	80991.922
	Sn	120	**1.041**	**ug/L**	2.233	1970	0.022
	Sb	121	**0.023**	**ug/L**	34.085	224	0.000
	Sb	123		**ug/L**		222	0.001
	Ba	135		**ug/L**		1058068	11.202
	Ba	137	**2305.939**	**ug/L**	2.853	1787754	18.930
	Ho	165		**ug/L**		9814	0.104
>	Lu	175		**ug/L**		94482	94482.474
	Tl	205	**-0.221**	**ug/L**	13.704	1914	-0.008
	Pb	208	**51.365**	**ug/L**	3.298	298176	3.153
	Bi	209		**ug/L**		3327	0.035
	Th	232	**17.000**	**ug/L**	1.500	125728	1.325
	U	238	**3.187**	**ug/L**	2.835	23474	0.246

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			129.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			107.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			103.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			107.1		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 04:04:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 6.227

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**40.280**	**ug/L**	3.562	3542	0.009
	Be	9	**44.809**	**ug/L**	3.443	1138	0.003
	B	11	**94.755**	**ug/L**	5.303	2307	0.006
	Na	23	**5803.795**	**ug/L**	2.878	3254273	8.210
	Mg	24	**4879.159**	**ug/L**	9.217	2066721	5.254
	Al	27	**4667.660**	**ug/L**	4.424	3027873	7.715
	P	31	**5094.685**	**ug/L**	0.267	194780	0.490
	K	39	**5150.281**	**ug/L**	4.928	7015229	17.077
	Ca	43	**5090.266**	**ug/L**	1.524	13890	0.034
>	Sc	45		**ug/L**		392390	392389.807
	Ti	47	**47.636**	**ug/L**	1.659	8139	0.020
	V	51	**43.784**	**ug/L**	8.395	88895	0.207
	Cr	52	**49.661**	**ug/L**	1.652	81193	0.212
	Cr	53		**ug/L**		145880	-0.345
	Mn	55	**49.806**	**ug/L**	1.015	122967	0.310
	Fe	57	**4764.275**	**ug/L**	0.818	258412	0.651
	Co	59	**45.613**	**ug/L**	2.126	106998	0.273
	Ni	60	**45.692**	**ug/L**	2.217	23536	0.060
	Cu	63		**ug/L**		54829	0.139
	Cu	65	**45.721**	**ug/L**	1.482	25845	0.066
	Zn	66	**53.623**	**ug/L**	2.672	11374	0.094
	Zn	67		**ug/L**		7837	-0.018
	Zn	68		**ug/L**		8683	0.064
>	Ge	74		**ug/L**		120062	120061.755
	As	75	**44.706**	**ug/L**	4.617	14511	0.107
	Se	77		**ug/L**		6984	-0.063
	Se	82	**51.032**	**ug/L**	2.540	1381	0.012
	Kr	83		**ug/L**		45	-0.000
	Sr	88	**51.414**	**ug/L**	1.807	214187	2.538
	Y	89		**ug/L**		50	0.000
	Zr	90	**51.987**	**ug/L**	1.021	124054	1.468
	Mo	98	**50.280**	**ug/L**	2.136	54448	0.645
	Ag	107	**49.960**	**ug/L**	2.283	88522	1.049
	Cd	111	**50.393**	**ug/L**	0.290	19080	0.226
	Cd	114		**ug/L**		43740	0.518
>	In	115		**ug/L**		84327	84327.037
	Sn	120	**49.026**	**ug/L**	0.437	88771	1.051
	Sb	121	**48.667**	**ug/L**	2.860	66682	0.789
	Sb	123		**ug/L**		51404	0.608
	Ba	135		**ug/L**		22621	0.247
	Ba	137	**51.253**	**ug/L**	1.072	38561	0.421
	Ho	165		**ug/L**		23	0.000
>	Lu	175		**ug/L**		91573	91572.839
	Tl	205	**46.688**	**ug/L**	1.869	152338	1.636
	Pb	208	**51.010**	**ug/L**	0.288	287137	3.131
	Bi	209		**ug/L**		49	0.000
	Th	232	**49.101**	**ug/L**	1.233	351062	3.828
	U	238	**51.947**	**ug/L**	1.367	367673	4.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	80.559				
	Be	9	89.619				
	B	11	94.755				
	Na	23	116.076				
	Mg	24	97.583				
	Al	27	92.429				
	P	31	101.894				
	K	39	103.006				
	Ca	43	101.805				
>	Sc	45		130.2			
	Ti	47	95.271				
	V	51	87.568				
	Cr	52	99.323				
	Cr	53					
	Mn	55	99.613				
	Fe	57	95.286				
	Co	59	91.226				
	Ni	60	91.384				
	Cu	63					
	Cu	65	91.443				
	Zn	66	107.246				
	Zn	67					
	Zn	68					
>	Ge	74		112.8			
	As	75	89.412				
	Se	77					
	Se	82	102.065				
	Kr	83					
	Sr	88	102.827				
	Y	89					
	Zr	90	103.973				
	Mo	98	100.561				
	Ag	107	99.920				
	Cd	111	100.786				
	Cd	114					
>	In	115		107.7			
	Sn	120	98.051				
	Sb	121	97.335				
	Sb	123					
	Ba	135					
	Ba	137	102.506				
	Ho	165					
>	Lu	175		103.8			
	Tl	205	93.376				
	Pb	208	102.021				
	Bi	209					
	Th	232	98.202				
	U	238	103.894				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 6	V	51	CCV is out of limits (+/- 10%)

QC Std 6	As	75CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 04:10:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 7.228

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.019	ug/L	93.320	8	-0.000
	Be	9	-0.006	ug/L	1617.946	3	-0.000
	B	11	0.582	ug/L	58.324	73	0.000
	Na	23	-27.912	ug/L	38.991	15009	-0.039
	Mg	24	3.636	ug/L	60.708	2000	0.004
	Al	27	3.050	ug/L	143.732	3334	0.005
	P	31	-10.948	ug/L	4.520	1941	-0.001
	K	39	-32.356	ug/L	15.532	282437	-0.107
	Ca	43	-21.183	ug/L	37.233	400	-0.000
>	Sc	45		ug/L		394875	394874.950
	Ti	47	-0.441	ug/L	21.583	173	-0.000
	V	51	-0.934	ug/L	55.381	6077	-0.004
	Cr	52	0.565	ug/L	19.561	-901	0.002
	Cr	53		ug/L		154000	-0.327
	Mn	55	-0.172	ug/L	2.386	965	-0.001
	Fe	57	3.641	ug/L	25.523	3263	0.000
	Co	59	-0.004	ug/L	17.731	117	-0.000
	Ni	60	-0.001	ug/L	378.388	40	-0.000
	Cu	63		ug/L		135	-0.000
	Cu	65	-0.038	ug/L	26.966	76	-0.000
	Zn	66	-0.017	ug/L	302.036	105	-0.000
	Zn	67		ug/L		6784	-0.027
	Zn	68		ug/L		589	-0.003
>	Ge	74		ug/L		120867	120866.793
	As	75	-4.290	ug/L	16.691	379	-0.010
	Se	77		ug/L		7104	-0.062
	Se	82	0.005	ug/L	1131.210	-1	0.000
	Kr	83		ug/L		40	-0.000
	Sr	88	0.001	ug/L	180.304	210	0.000
	Y	89		ug/L		17	0.000
	Zr	90	0.202	ug/L	18.600	738	0.006
	Mo	98	0.037	ug/L	54.094	95	0.000
	Ag	107	0.001	ug/L	119.451	68	0.000
	Cd	111	-0.011	ug/L	140.936	15	-0.000
	Cd	114		ug/L		29	-0.000
>	In	115		ug/L		85131	85131.490
	Sn	120	0.043	ug/L	38.042	251	0.001
	Sb	121	0.187	ug/L	23.553	462	0.003
	Sb	123		ug/L		407	0.003
	Ba	135		ug/L		31	0.000
	Ba	137	0.024	ug/L	34.139	54	0.000
	Ho	165		ug/L		10	-0.000
>	Lu	175		ug/L		92264	92263.595
	Tl	205	-0.245	ug/L	46.709	1791	-0.009
	Pb	208	0.022	ug/L	19.775	541	0.001
	Bi	209		ug/L		25	-0.000
	Th	232	0.099	ug/L	29.928	1244	0.008
	U	238	0.009	ug/L	35.207	289	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		131.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		113.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		108.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825012
Sample Date/Time: Tuesday, December 15, 2009 04:17:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825012.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**67.337**	**ug/L**	2.785	5900	0.015
	Be	9	**4.253**	**ug/L**	6.621	111	0.000
	B	11	**30.759**	**ug/L**	3.528	786	0.002
	Na	23	**3567.164**	**ug/L**	10.419	2009213	5.046
	Mg	24	**17808.567**	**ug/L**	9.506	7518484	19.176
	Al	27	**93925.193**	**ug/L**	2.633	60772458	155.241
	P	31	**532.252**	**ug/L**	2.268	22393	0.051
	K	39	**12678.670**	**ug/L**	3.132	16772798	42.040
	Ca	43	**14085.537**	**ug/L**	1.930	37537	0.095
>	Sc	45		**ug/L**		391408	391408.083
	Ti	47	**1475.630**	**ug/L**	1.536	244317	0.623
	V	51	**132.536**	**ug/L**	2.736	252953	0.627
	Cr	52	**59.978**	**ug/L**	2.829	98188	0.256
	Cr	53		**ug/L**		112430	-0.430
	Mn	55	**1642.826**	**ug/L**	1.357	4000834	10.221
	Fe	57	**71217.964**	**ug/L**	2.473	3809577	9.730
	Co	59	**27.515**	**ug/L**	2.638	64437	0.164
	Ni	60	**41.712**	**ug/L**	1.647	21444	0.055
	Cu	63		**ug/L**		44989	0.115
	Cu	65	**38.954**	**ug/L**	2.492	21975	0.056
	Zn	66	**187.897**	**ug/L**	1.419	37172	0.329
	Zn	67		**ug/L**		12264	0.026
	Zn	68		**ug/L**		31793	0.274
>	Ge	74		**ug/L**		112780	112780.293
	As	75	**7.114**	**ug/L**	3.341	3448	0.017
	Se	77		**ug/L**		3551	-0.089
	Se	82	**0.497**	**ug/L**	67.952	12	0.000
	Kr	83		**ug/L**		127	0.001
	Sr	88	**185.651**	**ug/L**	0.973	729731	9.164
	Y	89		**ug/L**		251394	3.158
	Zr	90	**106.576**	**ug/L**	0.486	239846	3.010
	Mo	98	**1.631**	**ug/L**	2.314	1718	0.021
	Ag	107	**0.639**	**ug/L**	2.927	1130	0.013
	Cd	111	**2.070**	**ug/L**	5.717	757	0.009
	Cd	114		**ug/L**		201	0.002
>	In	115		**ug/L**		79603	79603.254
	Sn	120	**1.234**	**ug/L**	3.425	2266	0.026
	Sb	121	**0.048**	**ug/L**	30.740	253	0.001
	Sb	123		**ug/L**		242	0.001
	Ba	135		**ug/L**		377750	4.014
	Ba	137	**839.941**	**ug/L**	2.385	648971	6.895
	Ho	165		**ug/L**		13146	0.139
>	Lu	175		**ug/L**		94132	94132.419
	Tl	205	**0.420**	**ug/L**	8.877	4022	0.015
	Pb	208	**61.771**	**ug/L**	2.561	357269	3.792
	Bi	209		**ug/L**		4947	0.052
	Th	232	**39.763**	**ug/L**	1.846	292291	3.100
	U	238	**3.834**	**ug/L**	2.669	28098	0.296

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		129.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		106.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825013
Sample Date/Time: Tuesday, December 15, 2009 04:23:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825013.230

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**37.084**	ug/L	4.322	3171	0.008
	Be	9	**0.991**	ug/L	22.948	28	0.000
	B	11	**10.226**	ug/L	6.527	293	0.001
	Na	23	**4632.244**	ug/L	13.040	2535355	6.553
	Mg	24	**1700.614**	ug/L	9.742	700974	1.831
	Al	27	**4516.241**	ug/L	5.769	2853828	7.465
	P	31	**402.753**	ug/L	1.669	17081	0.039
	K	39	**1975.066**	ug/L	6.587	2810833	6.549
	Ca	43	**5890.863**	ug/L	1.925	15570	0.040
>	Sc	45		ug/L		381753	381752.854
	Ti	47	**242.610**	ug/L	1.952	39351	0.103
	V	51	**5.417**	ug/L	49.597	17280	0.026
	Cr	52	**4.582**	ug/L	6.297	5655	0.020
	Cr	53		ug/L		98033	-0.460
	Mn	55	**883.226**	ug/L	2.476	2099802	5.495
	Fe	57	**13160.571**	ug/L	1.785	689104	1.798
	Co	59	**1.834**	ug/L	5.634	4302	0.011
	Ni	60	**8.108**	ug/L	4.881	4093	0.011
	Cu	63		ug/L		6480	0.017
	Cu	65	**5.757**	ug/L	1.759	3249	0.008
	Zn	66	**170.147**	ug/L	0.866	35070	0.298
	Zn	67		ug/L		9546	-0.002
	Zn	68		ug/L		25216	0.207
>	Ge	74		ug/L		117466	117465.519
	As	75	**-1.264**	ug/L	32.980	1226	-0.003
	Se	77		ug/L		3577	-0.090
	Se	82	**3.075**	ug/L	29.188	81	0.001
	Kr	83		ug/L		94	0.000
	Sr	88	**27.453**	ug/L	1.980	114271	1.355
	Y	89		ug/L		394673	4.689
	Zr	90	**43.582**	ug/L	0.920	103857	1.231
	Mo	98	**5.635**	ug/L	2.279	6139	0.072
	Ag	107	**0.227**	ug/L	8.767	467	0.005
	Cd	111	**1.111**	ug/L	14.880	439	0.005
	Cd	114		ug/L		84	0.001
>	In	115		ug/L		84171	84170.801
	Sn	120	**2.041**	ug/L	2.854	3851	0.044
	Sb	121	**0.028**	ug/L	16.510	240	0.000
	Sb	123		ug/L		239	0.001
	Ba	135		ug/L		36849	0.378
	Ba	137	**78.924**	ug/L	1.116	63237	0.648
	Ho	165		ug/L		18865	0.193
>	Lu	175		ug/L		97546	97545.874
	Tl	205	**-0.248**	ug/L	2.614	1885	-0.009
	Pb	208	**18.260**	ug/L	0.747	109777	1.121
	Bi	209		ug/L		957	0.010
	Th	232	**17.419**	ug/L	0.755	133018	1.358
	U	238	**1.964**	ug/L	1.504	15031	0.152

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		110.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		107.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825014
Sample Date/Time: Tuesday, December 15, 2009 04:29:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825014.231

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**12.479**	ug/L	0.573	1076	0.003
	Be	9	**0.831**	ug/L	32.100	24	0.000
	B	11	**3.173**	ug/L	17.515	131	0.000
	Na	23	**1779.959**	ug/L	8.055	995527	2.518
	Mg	24	**1074.943**	ug/L	5.326	443118	1.157
	Al	27	**4186.644**	ug/L	14.908	2661866	6.920
	P	31	**203.741**	ug/L	2.552	9790	0.020
	K	39	**1423.742**	ug/L	8.060	2125595	4.721
	Ca	43	**1825.078**	ug/L	3.201	5134	0.012
>	Sc	45		ug/L		382612	382612.168
	Ti	47	**160.423**	ug/L	0.866	26165	0.068
	V	51	**2.376**	ug/L	62.485	11985	0.011
	Cr	52	**4.983**	ug/L	4.430	6321	0.021
	Cr	53		ug/L		97726	-0.461
	Mn	55	**686.108**	ug/L	2.815	1633462	4.269
	Fe	57	**8654.825**	ug/L	2.711	455044	1.182
	Co	59	**1.059**	ug/L	1.497	2544	0.006
	Ni	60	**3.523**	ug/L	3.852	1805	0.005
	Cu	63		ug/L		5354	0.014
	Cu	65	**4.554**	ug/L	4.950	2592	0.007
	Zn	66	**118.974**	ug/L	0.983	24605	0.208
	Zn	67		ug/L		8085	-0.015
	Zn	68		ug/L		17816	0.143
>	Ge	74		ug/L		117701	117700.749
	As	75	**-3.636**	ug/L	19.178	558	-0.009
	Se	77		ug/L		3511	-0.091
	Se	82	**1.693**	ug/L	37.999	44	0.000
	Kr	83		ug/L		94	0.000
	Sr	88	**11.494**	ug/L	0.820	47788	0.567
	Y	89		ug/L		338109	4.031
	Zr	90	**47.980**	ug/L	0.724	113901	1.355
	Mo	98	**4.051**	ug/L	2.500	4413	0.052
	Ag	107	**0.230**	ug/L	5.428	470	0.005
	Cd	111	**1.106**	ug/L	16.498	435	0.005
	Cd	114		ug/L		71	0.000
>	In	115		ug/L		83864	83863.545
	Sn	120	**1.207**	ug/L	2.579	2340	0.026
	Sb	121	**-0.053**	ug/L	7.743	130	-0.001
	Sb	123		ug/L		165	-0.000
	Ba	135		ug/L		22186	0.225
	Ba	137	**46.850**	ug/L	3.374	37951	0.385
	Ho	165		ug/L		16528	0.167
>	Lu	175		ug/L		98616	98615.661
	Tl	205	**-0.532**	ug/L	1.472	924	-0.019
	Pb	208	**16.799**	ug/L	2.241	102101	1.031
	Bi	209		ug/L		1310	0.013
	Th	232	**16.550**	ug/L	1.215	127774	1.290
	U	238	**1.787**	ug/L	1.984	13849	0.138

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		126.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		110.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		107.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		111.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825015
Sample Date/Time: Tuesday, December 15, 2009 04:35:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825015.232

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.438**	ug/L	1.134	4511	0.011
	Be	9	**3.066**	ug/L	13.664	82	0.000
	B	11	**16.126**	ug/L	3.180	449	0.001
	Na	23	**1508.687**	ug/L	5.407	885081	2.134
	Mg	24	**8458.101**	ug/L	3.709	3643155	9.107
	Al	27	**42569.322**	ug/L	7.083	28174832	70.359
	P	31	**453.967**	ug/L	1.303	19850	0.044
	K	39	**6382.154**	ug/L	0.354	8785501	21.162
	Ca	43	**9161.535**	ug/L	3.037	25093	0.062
>	Sc	45		ug/L		399597	399597.107
	Ti	47	**966.119**	ug/L	1.865	163279	0.408
	V	51	**58.018**	ug/L	1.484	117518	0.274
	Cr	52	**28.428**	ug/L	2.126	46524	0.121
	Cr	53		ug/L		97840	-0.472
	Mn	55	**1566.435**	ug/L	2.070	3893415	9.746
	Fe	57	**39683.467**	ug/L	2.308	2168199	5.422
	Co	59	**14.076**	ug/L	4.407	33688	0.084
	Ni	60	**26.111**	ug/L	5.163	13702	0.034
	Cu	63		ug/L		24925	0.062
	Cu	65	**20.939**	ug/L	4.466	12096	0.030
	Zn	66	**179.652**	ug/L	3.977	36559	0.314
	Zn	67		ug/L		10657	0.009
	Zn	68		ug/L		28178	0.235
>	Ge	74		ug/L		116015	116015.027
	As	75	**1.869**	ug/L	44.426	2084	0.004
	Se	77		ug/L		3177	-0.093
	Se	82	**1.486**	ug/L	35.417	38	0.000
	Kr	83		ug/L		130	0.001
	Sr	88	**88.596**	ug/L	0.862	359945	4.373
	Y	89		ug/L		464136	5.642
	Zr	90	**81.911**	ug/L	1.659	190535	2.314
	Mo	98	**3.504**	ug/L	1.555	3751	0.045
	Ag	107	**0.476**	ug/L	5.605	886	0.010
	Cd	111	**1.840**	ug/L	6.422	698	0.008
	Cd	114		ug/L		147	0.001
>	In	115		ug/L		82263	82262.514
	Sn	120	**1.794**	ug/L	4.197	3328	0.038
	Sb	121	**0.036**	ug/L	25.955	245	0.001
	Sb	123		ug/L		243	0.001
	Ba	135		ug/L		188320	1.894
	Ba	137	**394.727**	ug/L	1.428	322152	3.240
	Ho	165		ug/L		22192	0.223
>	Lu	175		ug/L		99426	99425.541
	Tl	205	**-0.047**	ug/L	62.969	2621	-0.002
	Pb	208	**38.656**	ug/L	1.886	236309	2.373
	Bi	209		ug/L		18992	0.191
	Th	232	**29.200**	ug/L	1.922	226845	2.276
	U	238	**2.969**	ug/L	0.946	23041	0.229

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		132.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		109.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		105.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		112.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825016
Sample Date/Time: Tuesday, December 15, 2009 04:42:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825016.233

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.647**	ug/L	0.529	7411	0.018
	Be	9	**5.121**	ug/L	10.126	140	0.000
	B	11	**25.487**	ug/L	4.577	695	0.002
	Na	23	**2278.043**	ug/L	4.262	1355112	3.223
	Mg	24	**15319.050**	ug/L	5.256	6782443	16.495
	Al	27	**126561.861**	ug/L	5.082	85834954	209.183
	P	31	**799.652**	ug/L	1.855	34081	0.077
	K	39	**9827.358**	ug/L	3.557	13738047	32.586
	Ca	43	**14850.319**	ug/L	1.500	41507	0.100
>	Sc	45		ug/L		410827	410826.526
	Ti	47	**1973.326**	ug/L	0.982	342678	0.834
	V	51	**102.251**	ug/L	2.439	206654	0.484
	Cr	52	**54.375**	ug/L	2.420	93231	0.232
	Cr	53		ug/L		101271	-0.470
	Mn	55	**1562.619**	ug/L	1.353	3993909	9.722
	Fe	57	**65091.906**	ug/L	2.132	3654604	8.893
	Co	59	**26.955**	ug/L	1.360	66267	0.161
	Ni	60	**42.298**	ug/L	2.278	22813	0.055
	Cu	63		ug/L		38997	0.095
	Cu	65	**32.429**	ug/L	3.875	19208	0.047
	Zn	66	**172.274**	ug/L	0.819	34589	0.301
	Zn	67		ug/L		11630	0.018
	Zn	68		ug/L		30375	0.257
>	Ge	74		ug/L		114432	114432.108
	As	75	**5.789**	ug/L	10.555	3131	0.014
	Se	77		ug/L		3350	-0.091
	Se	82	**0.146**	ug/L	251.519	3	0.000
	Kr	83		ug/L		132	0.001
	Sr	88	**187.398**	ug/L	0.576	748982	9.251
	Y	89		ug/L		272478	3.366
	Zr	90	**146.129**	ug/L	0.850	334310	4.127
	Mo	98	**1.712**	ug/L	3.793	1831	0.022
	Ag	107	**0.818**	ug/L	2.735	1453	0.017
	Cd	111	**2.848**	ug/L	0.857	1052	0.013
	Cd	114		ug/L		170	0.002
>	In	115		ug/L		80943	80942.921
	Sn	120	**1.292**	ug/L	0.814	2405	0.028
	Sb	121	**-0.000**	ug/L	1764.850	194	-0.000
	Sb	123		ug/L		195	0.000
	Ba	135		ug/L		476548	4.919
	Ba	137	**1010.493**	ug/L	0.422	803701	8.295
	Ho	165		ug/L		12990	0.134
>	Lu	175		ug/L		96884	96884.416
	Tl	205	**0.337**	ug/L	11.004	3855	0.012
	Pb	208	**61.720**	ug/L	0.787	367472	3.789
	Bi	209		ug/L		7510	0.077
	Th	232	**44.023**	ug/L	0.799	333038	3.432
	U	238	**2.896**	ug/L	1.386	21905	0.224

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			136.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			107.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			103.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			109.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for san	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

Fe	57Sample is out of limits (over linear range)
Ba	137Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825017
Sample Date/Time: Tuesday, December 15, 2009 04:48:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825017.234

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	52.191	ug/L	2.558	4678	0.012
	Be	9	3.188	ug/L	17.777	86	0.000
	B	11	17.982	ug/L	6.144	495	0.001
	Na	23	2942.704	ug/L	4.665	1699308	4.163
	Mg	24	10144.293	ug/L	8.366	4384136	10.923
	Al	27	60600.752	ug/L	3.845	40132755	100.162
	P	31	346.118	ug/L	0.411	15738	0.033
	K	39	8015.120	ug/L	4.008	10982534	26.577
	Ca	43	15372.711	ug/L	1.320	41883	0.103
>	Sc	45		ug/L		400600	400600.357
	Ti	47	1079.633	ug/L	1.183	182935	0.456
	V	51	65.188	ug/L	2.063	131385	0.308
	Cr	52	32.415	ug/L	1.489	53463	0.138
	Cr	53		ug/L		98027	-0.472
	Mn	55	1689.436	ug/L	2.106	4210450	10.511
	Fe	57	43177.311	ug/L	2.803	2365131	5.899
	Co	59	16.359	ug/L	2.349	39268	0.098
	Ni	60	28.847	ug/L	2.310	15188	0.038
	Cu	63		ug/L		25506	0.063
	Cu	65	21.804	ug/L	2.894	12632	0.031
	Zn	66	185.990	ug/L	3.093	37784	0.325
	Zn	67		ug/L		11223	0.014
	Zn	68		ug/L		30443	0.255
>	Ge	74		ug/L		115840	115840.457
	As	75	3.889	ug/L	12.617	2641	0.009
	Se	77		ug/L		3343	-0.092
	Se	82	1.059	ug/L	8.721	27	0.000
	Kr	83		ug/L		123	0.001
	Sr	88	125.283	ug/L	1.145	509226	6.184
	Y	89		ug/L		348940	4.239
	Zr	90	105.405	ug/L	2.150	245240	2.977
	Mo	98	2.438	ug/L	2.989	2628	0.031
	Ag	107	0.571	ug/L	3.574	1051	0.012
	Cd	111	2.047	ug/L	17.408	776	0.009
	Cd	114		ug/L		122	0.001
>	In	115		ug/L		82316	82316.381
	Sn	120	1.743	ug/L	1.654	3240	0.037
	Sb	121	0.014	ug/L	30.013	216	0.000
	Sb	123		ug/L		210	0.000
	Ba	135		ug/L		277054	2.838
	Ba	137	598.338	ug/L	1.399	479475	4.912
	Ho	165		ug/L		16876	0.173
>	Lu	175		ug/L		97613	97613.023
	Tl	205	0.169	ug/L	9.220	3312	0.006
	Pb	208	48.562	ug/L	1.124	291392	2.981
	Bi	209		ug/L		38862	0.398
	Th	232	31.094	ug/L	1.719	237152	2.424
	U	238	3.113	ug/L	1.063	23710	0.240

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		132.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		105.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825018
Sample Date/Time: Tuesday, December 15, 2009 04:54:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825018.235

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**34.880**	ug/L	2.634	3192	0.008
	Be	9	**3.120**	ug/L	8.908	86	0.000
	B	11	**19.921**	ug/L	9.048	553	0.001
	Na	23	**1634.319**	ug/L	4.474	976708	2.312
	Mg	24	**11339.545**	ug/L	7.424	5001620	12.210
	Al	27	**45044.007**	ug/L	5.707	30468133	74.449
	P	31	**243.273**	ug/L	0.722	12013	0.023
	K	39	**5792.508**	ug/L	3.629	8176970	19.207
	Ca	43	**12045.757**	ug/L	1.478	33593	0.081
>	Sc	45		ug/L		408700	408700.238
	Ti	47	**333.542**	ug/L	2.266	57810	0.141
	V	51	**41.003**	ug/L	5.359	87229	0.194
	Cr	52	**23.119**	ug/L	2.828	38324	0.099
	Cr	53		ug/L		96002	-0.482
	Mn	55	**942.050**	ug/L	2.369	2395224	5.861
	Fe	57	**27889.658**	ug/L	2.784	1559252	3.810
	Co	59	**7.526**	ug/L	1.902	18497	0.045
	Ni	60	**27.683**	ug/L	1.958	14869	0.036
	Cu	63		ug/L		18426	0.045
	Cu	65	**15.137**	ug/L	3.809	8973	0.022
	Zn	66	**130.104**	ug/L	3.069	26683	0.228
	Zn	67		ug/L		8667	-0.009
	Zn	68		ug/L		20529	0.168
>	Ge	74		ug/L		116791	116791.416
	As	75	**0.412**	ug/L	128.742	1687	0.001
	Se	77		ug/L		3345	-0.092
	Se	82	**1.654**	ug/L	8.854	42	0.000
	Kr	83		ug/L		141	0.001
	Sr	88	**108.053**	ug/L	1.925	449009	5.334
	Y	89		ug/L		499574	5.937
	Zr	90	**95.599**	ug/L	2.813	227435	2.700
	Mo	98	**6.221**	ug/L	2.141	6771	0.080
	Ag	107	**0.498**	ug/L	2.897	945	0.010
	Cd	111	**1.959**	ug/L	2.541	759	0.009
	Cd	114		ug/L		93	0.001
>	In	115		ug/L		84151	84151.109
	Sn	120	**0.908**	ug/L	1.772	1808	0.019
	Sb	121	**0.056**	ug/L	18.668	278	0.001
	Sb	123		ug/L		255	0.001
	Ba	135		ug/L		111750	1.125
	Ba	137	**234.530**	ug/L	0.976	191324	1.925
	Ho	165		ug/L		24820	0.250
>	Lu	175		ug/L		99356	99355.646
	Tl	205	**0.975**	ug/L	3.235	6177	0.034
	Pb	208	**66.451**	ug/L	0.645	405714	4.079
	Bi	209		ug/L		29345	0.295
	Th	232	**27.497**	ug/L	1.237	213536	2.144
	U	238	**3.527**	ug/L	0.777	27305	0.272

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			135.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			109.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			107.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			112.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825019
Sample Date/Time: Tuesday, December 15, 2009 05:00:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825019.236

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**96.325**	ug/L	1.321	8921	0.022
	Be	9	**6.160**	ug/L	2.688	168	0.000
	B	11	**26.876**	ug/L	4.629	735	0.002
	Na	23	**2312.295**	ug/L	2.330	1387428	3.271
	Mg	24	**17756.031**	ug/L	4.214	7911204	19.119
	Al	27	**149271.481**	ug/L	1.944	102215670	246.718
	P	31	**690.560**	ug/L	2.624	29980	0.066
	K	39	**13397.100**	ug/L	1.478	18738011	44.422
	Ca	43	**14588.852**	ug/L	1.674	41108	0.098
>	Sc	45		ug/L		414080	414079.960
	Ti	47	**2276.657**	ug/L	1.820	398340	0.962
	V	51	**116.179**	ug/L	3.361	235502	0.549
	Cr	52	**62.133**	ug/L	2.577	107646	0.265
	Cr	53		ug/L		101563	-0.472
	Mn	55	**1600.287**	ug/L	3.033	4120706	9.956
	Fe	57	**74558.238**	ug/L	3.692	4216900	10.187
	Co	59	**25.756**	ug/L	3.841	63781	0.154
	Ni	60	**46.454**	ug/L	2.975	25247	0.061
	Cu	63		ug/L		43436	0.105
	Cu	65	**35.709**	ug/L	3.370	21310	0.051
	Zn	66	**187.492**	ug/L	0.659	36925	0.328
	Zn	67		ug/L		11914	0.023
	Zn	68		ug/L		32012	0.277
>	Ge	74		ug/L		112270	112270.031
	As	75	**5.676**	ug/L	8.241	3043	0.014
	Se	77		ug/L		3246	-0.092
	Se	82	**-0.819**	ug/L	103.550	-22	-0.000
	Kr	83		ug/L		149	0.001
	Sr	88	**200.186**	ug/L	2.660	782535	9.882
	Y	89		ug/L		272760	3.445
	Zr	90	**159.221**	ug/L	2.776	356244	4.497
	Mo	98	**1.647**	ug/L	3.339	1724	0.021
	Ag	107	**0.911**	ug/L	1.074	1577	0.019
	Cd	111	**3.032**	ug/L	1.237	1095	0.014
	Cd	114		ug/L		189	0.002
>	In	115		ug/L		79197	79197.265
	Sn	120	**1.108**	ug/L	2.548	2039	0.024
	Sb	121	**0.012**	ug/L	95.358	206	0.000
	Sb	123		ug/L		211	0.000
	Ba	135		ug/L		459443	4.815
	Ba	137	**1004.617**	ug/L	1.629	786877	8.247
	Ho	165		ug/L		13505	0.141
>	Lu	175		ug/L		95421	95420.967
	Tl	205	**0.436**	ug/L	15.212	4128	0.015
	Pb	208	**68.414**	ug/L	1.493	401089	4.199
	Bi	209		ug/L		5398	0.056
	Th	232	**51.341**	ug/L	1.329	382417	4.002
	U	238	**3.558**	ug/L	1.881	26450	0.275

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		137.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		105.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		108.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

Fe	57Sample is out of limits (over linear range)
Ba	137Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 241825020
Sample Date/Time: Tuesday, December 15, 2009 05:07:14
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\241825020.237

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**27.177**	ug/L	1.898	2385	0.006
	Be	9	**2.592**	ug/L	11.995	69	0.000
	B	11	**13.054**	ug/L	4.717	368	0.001
	Na	23	**1560.197**	ug/L	2.905	894164	2.207
	Mg	24	**9644.415**	ug/L	6.207	4070454	10.385
	Al	27	**34438.558**	ug/L	2.016	22277774	56.921
	P	31	**381.419**	ug/L	1.585	16716	0.037
	K	39	**7495.447**	ug/L	3.264	10049980	24.853
	Ca	43	**6506.155**	ug/L	0.419	17582	0.044
>	Sc	45		ug/L		391472	391471.588
	Ti	47	**974.559**	ug/L	1.800	161376	0.412
	V	51	**84.083**	ug/L	1.774	163371	0.398
	Cr	52	**33.734**	ug/L	0.589	54450	0.144
	Cr	53		ug/L		97613	-0.467
	Mn	55	**2177.730**	ug/L	2.923	5301308	13.549
	Fe	57	**43459.432**	ug/L	3.176	2325543	5.938
	Co	59	**31.829**	ug/L	2.499	74519	0.190
	Ni	60	**25.097**	ug/L	2.135	12915	0.033
	Cu	63		ug/L		26016	0.066
	Cu	65	**22.429**	ug/L	3.478	12691	0.032
	Zn	66	**124.675**	ug/L	0.744	25189	0.218
	Zn	67		ug/L		9138	-0.004
	Zn	68		ug/L		21229	0.176
>	Ge	74		ug/L		115007	115006.997
	As	75	**4.344**	ug/L	2.660	2750	0.010
	Se	77		ug/L		3039	-0.094
	Se	82	**0.958**	ug/L	26.257	24	0.000
	Kr	83		ug/L		68	0.000
	Sr	88	**113.104**	ug/L	1.161	451663	5.583
	Y	89		ug/L		146435	1.811
	Zr	90	**62.720**	ug/L	1.491	143490	1.771
	Mo	98	**1.597**	ug/L	0.641	1709	0.020
	Ag	107	**0.341**	ug/L	6.933	643	0.007
	Cd	111	**1.296**	ug/L	10.954	489	0.006
	Cd	114		ug/L		150	0.001
>	In	115		ug/L		80864	80863.717
	Sn	120	**0.655**	ug/L	2.798	1297	0.014
	Sb	121	**0.089**	ug/L	11.816	311	0.001
	Sb	123		ug/L		287	0.001
	Ba	135		ug/L		260353	2.840
	Ba	137	**588.689**	ug/L	0.823	442978	4.833
	Ho	165		ug/L		7558	0.082
>	Lu	175		ug/L		91663	91662.742
	Tl	205	**0.509**	ug/L	10.649	4202	0.018
	Pb	208	**44.951**	ug/L	0.820	253318	2.759
	Bi	209		ug/L		4266	0.046
	Th	232	**25.446**	ug/L	1.078	182347	1.984
	U	238	**2.616**	ug/L	0.421	18739	0.202

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		129.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 05:13:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 6.238

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**38.817**	**ug/L**	4.922	3483	0.009
	Be	9	**42.904**	**ug/L**	4.256	1112	0.003
	B	11	**94.923**	**ug/L**	0.923	2357	0.006
	Na	23	**5800.166**	**ug/L**	6.117	3320210	8.205
	Mg	24	**5607.062**	**ug/L**	0.366	2418067	6.038
	Al	27	**5209.819**	**ug/L**	2.611	3450188	8.611
	P	31	**5093.056**	**ug/L**	1.690	198676	0.490
	K	39	**5289.721**	**ug/L**	1.767	7349789	17.540
	Ca	43	**5080.728**	**ug/L**	0.629	14146	0.034
>	Sc	45		**ug/L**		400407	400407.231
	Ti	47	**47.230**	**ug/L**	1.229	8238	0.020
	V	51	**45.435**	**ug/L**	3.725	93929	0.215
	Cr	52	**49.404**	**ug/L**	1.872	82424	0.211
	Cr	53		**ug/L**		137896	-0.372
	Mn	55	**49.357**	**ug/L**	1.949	124324	0.307
	Fe	57	**4754.503**	**ug/L**	2.731	263071	0.650
	Co	59	**45.259**	**ug/L**	3.119	108329	0.270
	Ni	60	**45.265**	**ug/L**	2.584	23794	0.059
	Cu	63		**ug/L**		56091	0.140
	Cu	65	**46.140**	**ug/L**	1.669	26616	0.066
	Zn	66	**54.458**	**ug/L**	0.500	11604	0.095
	Zn	67		**ug/L**		7357	-0.022
	Zn	68		**ug/L**		8537	0.063
>	Ge	74		**ug/L**		120658	120657.609
	As	75	**44.608**	**ug/L**	2.617	14563	0.107
	Se	77		**ug/L**		6388	-0.068
	Se	82	**48.912**	**ug/L**	2.256	1331	0.011
	Kr	83		**ug/L**		40	-0.000
	Sr	88	**51.857**	**ug/L**	1.286	217259	2.560
	Y	89		**ug/L**		59	0.001
	Zr	90	**54.120**	**ug/L**	3.051	129867	1.529
	Mo	98	**50.488**	**ug/L**	1.735	54981	0.648
	Ag	107	**49.500**	**ug/L**	0.774	88219	1.040
	Cd	111	**50.536**	**ug/L**	2.057	19240	0.227
	Cd	114		**ug/L**		43879	0.517
>	In	115		**ug/L**		84786	84786.238
	Sn	120	**48.389**	**ug/L**	0.253	88097	1.037
	Sb	121	**48.801**	**ug/L**	0.814	67259	0.791
	Sb	123		**ug/L**		50960	0.599
	Ba	135		**ug/L**		22595	0.243
	Ba	137	**50.200**	**ug/L**	1.838	38254	0.412
	Ho	165		**ug/L**		25	0.000
>	Lu	175		**ug/L**		92749	92749.387
	Tl	205	**45.959**	**ug/L**	1.233	151939	1.610
	Pb	208	**49.940**	**ug/L**	1.291	284722	3.065
	Bi	209		**ug/L**		51	0.000
	Th	232	**48.552**	**ug/L**	2.161	351545	3.785
	U	238	**50.488**	**ug/L**	1.640	361889	3.900

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	77.633				
	Be	9	85.808				
	B	11	94.923				
	Na	23	116.003				
	Mg	24	112.141				
	Al	27	103.165				
	P	31	101.861				
	K	39	105.794				
	Ca	43	101.615				
>	Sc	45		132.9			
	Ti	47	94.459				
	V	51	90.871				
	Cr	52	98.807				
	Cr	53					
	Mn	55	98.715				
	Fe	57	95.090				
	Co	59	90.518				
	Ni	60	90.530				
	Cu	63					
	Cu	65	92.279				
	Zn	66	108.916				
	Zn	67					
	Zn	68					
>	Ge	74		113.4			
	As	75	89.216				
	Se	77					
	Se	82	97.823				
	Kr	83					
	Sr	88	103.714				
	Y	89					
	Zr	90	108.240				
	Mo	98	100.975				
	Ag	107	99.000				
	Cd	111	101.071				
	Cd	114					
>	In	115		108.3			
	Sn	120	96.777				
	Sb	121	97.601				
	Sb	123					
	Ba	135					
	Ba	137	100.400				
	Ho	165					
>	Lu	175		105.2			
	Tl	205	91.917				
	Pb	208	99.881				
	Bi	209					
	Th	232	97.104				
	U	238	100.975				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	

QC Std 6	As	75CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 05:19:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\091214\QC Std 7.239

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.080	ug/L	62.312	17	0.000
	Be	9	-0.047	ug/L	94.440	2	-0.000
	B	11	0.687	ug/L	56.448	76	0.000
	Na	23	-31.026	ug/L	19.325	13340	-0.044
	Mg	24	5.216	ug/L	54.300	2667	0.006
	Al	27	3.904	ug/L	193.780	4001	0.006
	P	31	-8.150	ug/L	3.830	2069	-0.001
	K	39	-42.889	ug/L	65.566	271248	-0.142
	Ca	43	-19.780	ug/L	45.555	408	-0.000
>	Sc	45		ug/L		399029	399029.459
	Ti	47	-0.412	ug/L	11.133	179	-0.000
	V	51	-3.626	ug/L	73.680	1122	-0.017
	Cr	52	0.329	ug/L	13.920	-1311	0.001
	Cr	53		ug/L		152769	-0.334
	Mn	55	-0.169	ug/L	2.805	983	-0.001
	Fe	57	4.412	ug/L	33.464	3341	0.001
	Co	59	-0.002	ug/L	177.668	123	-0.000
	Ni	60	0.003	ug/L	612.810	43	0.000
	Cu	63		ug/L		152	-0.000
	Cu	65	-0.040	ug/L	34.214	76	-0.000
	Zn	66	-0.026	ug/L	199.520	104	-0.000
	Zn	67		ug/L		6618	-0.029
	Zn	68		ug/L		543	-0.004
>	Ge	74		ug/L		121413	121413.035
	As	75	-4.551	ug/L	13.772	306	-0.011
	Se	77		ug/L		6538	-0.067
	Se	82	-0.031	ug/L	68.534	-2	-0.000
	Kr	83		ug/L		42	-0.000
	Sr	88	0.002	ug/L	605.215	210	0.000
	Y	89		ug/L		23	0.000
	Zr	90	0.278	ug/L	10.692	906	0.008
	Mo	98	0.040	ug/L	38.873	97	0.001
	Ag	107	0.016	ug/L	16.876	92	0.000
	Cd	111	0.003	ug/L	403.958	20	0.000
	Cd	114		ug/L		37	0.000
>	In	115		ug/L		83824	83824.187
	Sn	120	0.032	ug/L	22.243	226	0.001
	Sb	121	0.210	ug/L	29.758	486	0.003
	Sb	123		ug/L		414	0.003
	Ba	135		ug/L		26	0.000
	Ba	137	0.006	ug/L	50.960	39	0.000
	Ho	165		ug/L		14	-0.000
>	Lu	175		ug/L		89073	89073.132
	Tl	205	-0.274	ug/L	28.508	1642	-0.010
	Pb	208	0.027	ug/L	33.095	549	0.002
	Bi	209		ug/L		28	0.000
	Th	232	0.099	ug/L	31.873	1201	0.008
	U	238	0.015	ug/L	26.386	316	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9998
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9998
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		132.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		114.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		107.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 15, 2009 11:20:43
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.309
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	910.4	910.429	33.007	3.6
	Mg	24.0	21517.8	21517.796	307.643	1.4
	Co	58.9	64597.5	64597.525	422.231	0.7
	Rh	102.9	111546.8	111546.816	736.283	0.7
	In	114.9	135770.5	135770.539	679.218	0.5
	Pb	208.0	71081.0	71081.038	1184.254	1.7
⌈>	Ba	137.9	115521.4	115521.385	767.609	0.7
⌊	Ba++	69.0	2090.4	0.018	0.001	3.1
⌈>	Ce	139.9	139604.3	139604.266	1419.985	1.0
⌊	CeO	155.9	3643.6	0.026	0.001	2.7
	Bkgd	220.0	5.0	5.000	1.000	20.0

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	19	6.0	1294.1
Co	59	19	7.5	41153.5
In	115	19	8.8	88385.6

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	611	2060	0.609
Be	9.0	9.0	2043	2055	0.624
Mg	24.0	23.9	5667	2065	0.637
Mg	25.0	25.0	5953	2080	0.638
Mg	26.0	26.0	6158	2095	0.601
Co	58.9	58.8	14158	2120	0.668
Rh	102.9	102.9	24873	2220	0.636
In	114.9	114.9	27785	2255	0.617
Ce	139.9	139.9	33847	2300	0.626
Pb	206.0	206.0	49932	2460	0.613
Pb	207.0	207.0	50125	2380	0.636
Pb	208.0	208.0	50436	2490	0.630
U	238.1	238.1	57708	2480	0.643

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 15, 2009 17:10:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\Blank.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		28	
	Be	9		ug/L		6	
>	Sc	45		ug/L		358741	
	Ni	60		ug/L		42	
>	Ge	74		ug/L		172535	
	As	75		ug/L		323	
	Se	77		ug/L		5866	
	Se	82		ug/L		-14	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
Sc	45	Linear Thru Zero	
Ni	60	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 15, 2009 17:13:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\Standard 1.105

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	3.874	2846	0.008
	Be	9	10.000	ug/L	2.978	809	0.002
>	Sc	45		ug/L		359304	359303.691
	Ni	60	10.000	ug/L	3.468	6602	0.018
>	Ge	74		ug/L		174744	174743.643
	As	75	10.000	ug/L	7.188	4250	0.022
	Se	77		ug/L		5973	0.000
	Se	82	10.000	ug/L	2.500	420	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 15, 2009 17:15:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\Standard 2.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.988**	**ug/L**	9.461	28137	0.078
	Be	9	**99.984**	**ug/L**	10.451	7974	0.022
>	Sc	45		**ug/L**		364079	364079.032
	Ni	60	**99.964**	**ug/L**	7.254	64055	0.176
>	Ge	74		**ug/L**		171751	171750.905
	As	75	**100.097**	**ug/L**	8.903	42926	0.249
	Se	77		**ug/L**		8481	0.016
	Se	82	**100.047**	**ug/L**	7.020	4447	0.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 15, 2009 17:18:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 1.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.144**	**ug/L**	3.241	14630	0.040
	Be	9	**53.003**	**ug/L**	3.413	4215	0.012
>	Sc	45		**ug/L**		361342	361341.688
	Ni	60	**51.081**	**ug/L**	0.853	32593	0.090
>	Ge	74		**ug/L**		173756	173755.872
	As	75	**47.965**	**ug/L**	4.932	21069	0.119
	Se	77		**ug/L**		6992	0.006
	Se	82	**49.637**	**ug/L**	3.286	2230	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	104.288				
	Be	9	106.006				
>	Sc	45		100.7			
	Ni	60	102.162				
>	Ge	74		100.7			
	As	75	95.930				
	Se	77					
	Se	82	99.275				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 15, 2009 17:21:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 2.108

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.022**	**ug/L**	182.744	33	0.000
	Be	9	**-0.050**	**ug/L**	44.867	2	-0.000
>	Sc	45		**ug/L**		351724	351724.432
	Ni	60	**0.010**	**ug/L**	93.685	47	0.000
>	Ge	74		**ug/L**		168773	168772.748
	As	75	**-0.718**	**ug/L**	261.552	18	-0.002
	Se	77		**ug/L**		5420	-0.002
	Se	82	**0.174**	**ug/L**	75.182	-6	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45			98.0		
	Ni	60					
>	Ge	74			97.8		
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 15, 2009 17:23:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 3.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.094**	**ug/L**	0.778	3145	0.009
	Be	9	**0.564**	**ug/L**	9.824	51	0.000
>	Sc	45		**ug/L**		362454	362454.162
	Ni	60	**2.158**	**ug/L**	1.670	1422	0.004
>	Ge	74		**ug/L**		174791	174791.435
	As	75	**5.508**	**ug/L**	3.745	2722	0.014
	Se	77		**ug/L**		5713	-0.001
	Se	82	**5.426**	**ug/L**	0.660	233	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	110.938				
	Be	9	112.812				
>	Sc	45		101.0			
	Ni	60	107.917				
>	Ge	74		101.3			
	As	75	110.162				
	Se	77					
	Se	82	108.528				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 15, 2009 17:26:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 4.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.086**	**ug/L**	16.934	51	0.000
	Be	9	**-0.016**	**ug/L**	240.605	5	-0.000
>	Sc	45		**ug/L**		351645	351644.841
	Ni	60	**3.623**	**ug/L**	4.531	2288	0.006
>	Ge	74		**ug/L**		163476	163475.694
	As	75	**-1.166**	**ug/L**	17.009	-168	-0.003
	Se	77		**ug/L**		5123	-0.003
	Se	82	**-0.141**	**ug/L**	91.238	-19	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		98.0			
	Ni	60	134.191				
>	Ge	74		94.7			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 15, 2009 17:28:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 5.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.261**	**ug/L**	4.004	5716	0.016
	Be	9	**21.676**	**ug/L**	3.085	1651	0.005
>	Sc	45		**ug/L**		345413	345412.736
	Ni	60	**23.950**	**ug/L**	5.794	14614	0.042
>	Ge	74		**ug/L**		160682	160681.973
	As	75	**22.565**	**ug/L**	8.349	9324	0.056
	Se	77		**ug/L**		5911	0.003
	Se	82	**23.215**	**ug/L**	0.749	958	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	106.305				
	Be	9	108.382				
>	Sc	45			96.3		
	Ni	60	105.507				
>	Ge	74			93.1		
	As	75	112.826				
	Se	77					
	Se	82	116.075				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 17:31:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 6.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.813**	**ug/L**	4.804	14194	0.039
	Be	9	**51.629**	**ug/L**	1.557	4089	0.011
>	Sc	45		**ug/L**		359750	359750.416
	Ni	60	**51.023**	**ug/L**	1.960	32410	0.090
>	Ge	74		**ug/L**		172915	172914.700
	As	75	**48.733**	**ug/L**	3.633	21292	0.121
	Se	77		**ug/L**		7166	0.007
	Se	82	**50.511**	**ug/L**	2.685	2259	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.625				
	Be	9	103.259				
>	Sc	45			100.3		
	Ni	60	102.046				
>	Ge	74			100.2		
	As	75	97.466				
	Se	77					
	Se	82	101.023				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 17:34:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 7.113

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.025**	**ug/L**	146.816	35	0.000
	Be	9	**-0.005**	**ug/L**	868.760	6	-0.000
>	Sc	45		**ug/L**		362354	362354.095
	Ni	60	**0.009**	**ug/L**	26.910	48	0.000
>	Ge	74		**ug/L**		176341	176340.779
	As	75	**-0.448**	**ug/L**	70.287	132	-0.001
	Se	77		**ug/L**		5764	-0.001
	Se	82	**0.217**	**ug/L**	45.372	-4	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		101.0			
	Ni	60					
>	Ge	74		102.2			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 15, 2009 17:36:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 10.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**982.960**	**ug/L**	0.948	265312	0.762
	Be	9	**1004.601**	**ug/L**	1.417	76892	0.221
>	Sc	45		**ug/L**		348145	348145.114
	Ni	60	**930.848**	**ug/L**	2.812	571451	1.642
>	Ge	74		**ug/L**		163736	163736.328
	As	75	**938.762**	**ug/L**	2.444	382660	2.335
	Se	77		**ug/L**		19654	0.086
	Se	82	**468.377**	**ug/L**	0.973	19946	0.122

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	98.296				
	Be	9	100.460				
>	Sc	45			97.0		
	Ni	60	93.085				
>	Ge	74			94.9		
	As	75	93.876				
	Se	77					
	Se	82	93.675				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 15, 2009 17:39:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 11.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.126**	**ug/L**	0.809	14165	0.040
	Be	9	**53.294**	**ug/L**	2.334	4185	0.012
>	Sc	45		**ug/L**		356710	356709.946
	Ni	60	**51.569**	**ug/L**	1.850	32489	0.091
>	Ge	74		**ug/L**		173409	173409.029
	As	75	**49.192**	**ug/L**	1.598	21546	0.122
	Se	77		**ug/L**		6746	0.005
	Se	82	**48.521**	**ug/L**	2.158	2176	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.251				
	Be	9	106.588				
>	Sc	45			99.4		
	Ni	60	103.139				
>	Ge	74			100.5		
	As	75	98.385				
	Se	77					
	Se	82	97.042				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 15, 2009 17:41:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 12.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.133**	**ug/L**	7.452	65	0.000
	Be	9	**-0.009**	**ug/L**	490.928	5	-0.000
>	Sc	45		**ug/L**		362349	362349.006
	Ni	60	**0.035**	**ug/L**	29.831	64	0.000
>	Ge	74		**ug/L**		174851	174850.816
	As	75	**-0.052**	**ug/L**	2010.241	302	-0.000
	Se	77		**ug/L**		5480	-0.003
	Se	82	**0.436**	**ug/L**	32.179	6	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45			101.0		
	Ni	60					
>	Ge	74			101.3		
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985790
Sample Date/Time: Tuesday, December 15, 2009 17:44:36
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\1201985790.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.023**	**ug/L**	117.763	34	0.000
	Be	9	**-0.038**	**ug/L**	58.306	3	-0.000
>	Sc	45		**ug/L**		361907	361906.500
	Ni	60	**0.046**	**ug/L**	12.872	72	0.000
>	Ge	74		**ug/L**		171404	171403.904
	As	75	**-0.710**	**ug/L**	159.254	20	-0.002
	Se	77		**ug/L**		4179	-0.010
	Se	82	**0.192**	**ug/L**	265.144	-5	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		100.9			
	Ni	60					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985791
Sample Date/Time: Tuesday, December 15, 2009 17:49:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928674|20|sk|
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\1201985791.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.395**	**ug/L**	5.747	1265	0.003
	Be	9	**49.644**	**ug/L**	1.901	3970	0.011
>	Sc	45		**ug/L**		363306	363306.387
	Ni	60	**55.956**	**ug/L**	3.540	35875	0.099
>	Ge	74		**ug/L**		172856	172855.720
	As	75	**136.574**	**ug/L**	1.220	59053	0.340
	Se	77		**ug/L**		8833	0.017
	Se	82	**91.775**	**ug/L**	2.194	4114	0.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		101.3			
	Ni	60					
>	Ge	74		100.2			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825001
Sample Date/Time: Tuesday, December 15, 2009 17:52:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825001.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**34.748**	**ug/L**	3.936	10488	0.027
	Be	9	**2.913**	**ug/L**	9.324	255	0.001
>	Sc	45		**ug/L**		388432	388431.749
	Ni	60	**23.835**	**ug/L**	2.675	16370	0.042
>	Ge	74		**ug/L**		167130	167129.627
	As	75	**8.700**	**ug/L**	8.158	3926	0.022
	Se	77		**ug/L**		3617	-0.012
	Se	82	**1.091**	**ug/L**	29.586	34	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		108.3			
	Ni	60					
>	Ge	74		96.9			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985792
Sample Date/Time: Tuesday, December 15, 2009 17:55:10
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\1201985792.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**35.491**	**ug/L**	3.764	10634	0.028
	Be	9	**2.578**	**ug/L**	9.843	225	0.001
>	Sc	45		**ug/L**		385616	385616.343
	Ni	60	**22.635**	**ug/L**	2.750	15434	0.040
>	Ge	74		**ug/L**		169665	169665.409
	As	75	**8.666**	**ug/L**	5.411	3977	0.022
	Se	77		**ug/L**		3388	-0.014
	Se	82	**0.868**	**ug/L**	32.650	25	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		107.5			
	Ni	60					
>	Ge	74		98.3			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985793
Sample Date/Time: Tuesday, December 15, 2009 17:57:50
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\1201985793.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**64.890**	**ug/L**	1.901	19349	0.050
	Be	9	**27.109**	**ug/L**	3.318	2295	0.006
>	Sc	45		**ug/L**		384134	384133.786
	Ni	60	**49.787**	**ug/L**	1.753	33768	0.088
>	Ge	74		**ug/L**		167675	167674.792
	As	75	**48.963**	**ug/L**	3.075	20732	0.122
	Se	77		**ug/L**		3683	-0.012
	Se	82	**9.830**	**ug/L**	5.974	416	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		107.1			
	Ni	60					
>	Ge	74		97.2			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985795
Sample Date/Time: Tuesday, December 15, 2009 18:00:28
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\1201985795.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**64.386**	**ug/L**	2.395	18722	0.050
	Be	9	**28.399**	**ug/L**	2.070	2345	0.006
>	Sc	45		**ug/L**		374570	374570.096
	Ni	60	**48.738**	**ug/L**	1.764	32236	0.086
>	Ge	74		**ug/L**		166370	166370.014
	As	75	**47.565**	**ug/L**	1.745	19995	0.118
	Se	77		**ug/L**		3627	-0.012
	Se	82	**9.659**	**ug/L**	8.300	405	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		104.4			
	Ni	60					
>	Ge	74		96.4			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1201985794
Sample Date/Time: Tuesday, December 15, 2009 18:03:06
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928674|10|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\1201985794.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**7.417**	**ug/L**	3.955	2091	0.006
	Be	9	**0.600**	**ug/L**	12.052	53	0.000
>	Sc	45		**ug/L**		358976	358975.511
	Ni	60	**5.146**	**ug/L**	2.233	3300	0.009
>	Ge	74		**ug/L**		168985	168984.666
	As	75	**0.946**	**ug/L**	92.192	717	0.002
	Se	77		**ug/L**		3984	-0.010
	Se	82	**0.690**	**ug/L**	12.567	17	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		100.1			
	Ni	60					
>	Ge	74		97.9			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825002
Sample Date/Time: Tuesday, December 15, 2009 18:05:44
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825002.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**64.468**	**ug/L**	1.619	19686	0.050
	Be	9	**4.572**	**ug/L**	4.416	402	0.001
>	Sc	45		**ug/L**		393303	393303.264
	Ni	60	**37.389**	**ug/L**	1.356	25984	0.066
>	Ge	74		**ug/L**		163544	163544.149
	As	75	**9.729**	**ug/L**	5.426	4264	0.024
	Se	77		**ug/L**		3380	-0.013
	Se	82	**0.568**	**ug/L**	58.064	11	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		109.6			
	Ni	60					
>	Ge	74		94.8			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 18:08:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 6.126

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.701**	**ug/L**	3.192	14221	0.039
	Be	9	**52.702**	**ug/L**	2.882	4190	0.012
>	Sc	45		**ug/L**		361251	361250.888
	Ni	60	**50.999**	**ug/L**	1.445	32530	0.090
>	Ge	74		**ug/L**		174373	174372.833
	As	75	**46.765**	**ug/L**	4.848	20611	0.116
	Se	77		**ug/L**		6811	0.005
	Se	82	**48.344**	**ug/L**	2.437	2180	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.402				
	Be	9	105.404				
>	Sc	45			100.7		
	Ni	60	101.997				
>	Ge	74			101.1		
	As	75	93.529				
	Se	77					
	Se	82	96.688				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 18:11:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 7.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.063**	**ug/L**	38.628	47	0.000
	Be	9	**-0.023**	**ug/L**	124.682	4	-0.000
>	Sc	45		**ug/L**		368653	368652.622
	Ni	60	**-0.004**	**ug/L**	265.605	40	-0.000
>	Ge	74		**ug/L**		176038	176038.092
	As	75	**-1.137**	**ug/L**	41.522	-168	-0.003
	Se	77		**ug/L**		5329	-0.004
	Se	82	**-0.062**	**ug/L**	469.990	-17	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		102.8			
	Ni	60					
>	Ge	74		102.0			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825003
Sample Date/Time: Tuesday, December 15, 2009 18:13:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825003.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**24.146**	ug/L	4.490	6901	0.019
	Be	9	**1.828**	ug/L	10.220	154	0.000
>	Sc	45		ug/L		367453	367453.497
	Ni	60	**14.889**	ug/L	0.352	9691	0.026
>	Ge	74		ug/L		165477	165477.022
	As	75	**9.981**	ug/L	1.969	4418	0.025
	Se	77		ug/L		3313	-0.014
	Se	82	**0.553**	ug/L	9.891	11	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		102.4			
	Ni	60					
>	Ge	74		95.9			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825004
Sample Date/Time: Tuesday, December 15, 2009 18:16:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825004.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**36.811**	**ug/L**	6.824	10443	0.029
	Be	9	**2.761**	**ug/L**	6.925	228	0.001
>	Sc	45		**ug/L**		365493	365492.774
	Ni	60	**24.850**	**ug/L**	5.354	16043	0.044
>	Ge	74		**ug/L**		160061	160060.933
	As	75	**8.857**	**ug/L**	3.913	3825	0.022
	Se	77		**ug/L**		3183	-0.014
	Se	82	**0.627**	**ug/L**	65.649	14	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		101.9			
	Ni	60					
>	Ge	74		92.8			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825005
Sample Date/Time: Tuesday, December 15, 2009 18:18:59
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825005.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.285**	**ug/L**	3.180	12403	0.033
	Be	9	**3.230**	**ug/L**	3.362	274	0.001
>	Sc	45		**ug/L**		377636	377635.793
	Ni	60	**30.385**	**ug/L**	0.508	20283	0.054
>	Ge	74		**ug/L**		164642	164641.974
	As	75	**8.418**	**ug/L**	14.930	3755	0.021
	Se	77		**ug/L**		3215	-0.014
	Se	82	**0.922**	**ug/L**	16.167	26	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		105.3			
	Ni	60					
>	Ge	74		95.4			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825006
Sample Date/Time: Tuesday, December 15, 2009 18:21:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825006.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.671**	**ug/L**	2.987	14139	0.037
	Be	9	**3.927**	**ug/L**	2.400	336	0.001
>	Sc	45		**ug/L**		381877	381876.886
	Ni	60	**29.044**	**ug/L**	1.687	19603	0.051
>	Ge	74		**ug/L**		161754	161753.798
	As	75	**8.660**	**ug/L**	13.414	3789	0.022
	Se	77		**ug/L**		3108	-0.015
	Se	82	**0.493**	**ug/L**	14.953	8	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		106.4			
	Ni	60					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825007
Sample Date/Time: Tuesday, December 15, 2009 18:24:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825007.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.047**	**ug/L**	4.055	14144	0.036
	Be	9	**4.240**	**ug/L**	12.614	375	0.001
>	Sc	45		**ug/L**		395650	395649.827
	Ni	60	**32.706**	**ug/L**	2.177	22860	0.058
>	Ge	74		**ug/L**		162522	162522.229
	As	75	**11.867**	**ug/L**	5.672	5103	0.030
	Se	77		**ug/L**		3422	-0.013
	Se	82	**1.272**	**ug/L**	26.202	41	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		110.3			
	Ni	60					
>	Ge	74		94.2			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825008
Sample Date/Time: Tuesday, December 15, 2009 18:26:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|sk|
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825008.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.016**	**ug/L**	3.012	16614	0.043
	Be	9	**3.048**	**ug/L**	6.621	267	0.001
>	Sc	45		**ug/L**		388842	388841.813
	Ni	60	**23.629**	**ug/L**	1.059	16249	0.042
>	Ge	74		**ug/L**		163863	163862.647
	As	75	**6.647**	**ug/L**	7.092	3014	0.017
	Se	77		**ug/L**		3221	-0.014
	Se	82	**0.629**	**ug/L**	10.568	14	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		108.4			
	Ni	60					
>	Ge	74		95.0			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825009
Sample Date/Time: Tuesday, December 15, 2009 18:29:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825009.134

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**71.305**	**ug/L**	3.508	21081	0.055
	Be	9	**3.065**	**ug/L**	0.260	263	0.001
>	Sc	45		**ug/L**		380923	380922.706
	Ni	60	**17.903**	**ug/L**	2.950	12068	0.032
>	Ge	74		**ug/L**		164244	164243.970
	As	75	**5.401**	**ug/L**	15.172	2515	0.013
	Se	77		**ug/L**		3088	-0.015
	Se	82	**1.405**	**ug/L**	47.574	47	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		106.2			
	Ni	60					
>	Ge	74		95.2			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825010
Sample Date/Time: Tuesday, December 15, 2009 18:32:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825010.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**37.112**	**ug/L**	1.076	10379	0.029
	Be	9	**0.952**	**ug/L**	8.218	81	0.000
>	Sc	45		**ug/L**		359775	359775.366
	Ni	60	**6.166**	**ug/L**	2.675	3955	0.011
>	Ge	74		**ug/L**		166625	166624.566
	As	75	**1.554**	**ug/L**	45.178	955	0.004
	Se	77		**ug/L**		3232	-0.015
	Se	82	**1.124**	**ug/L**	40.268	35	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		100.3			
	Ni	60					
>	Ge	74		96.6			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825011
Sample Date/Time: Tuesday, December 15, 2009 18:34:55
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825011.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.206**	**ug/L**	4.837	13270	0.034
	Be	9	**1.851**	**ug/L**	14.617	164	0.000
>	Sc	45		**ug/L**		386561	386561.348
	Ni	60	**30.871**	**ug/L**	1.564	21089	0.054
>	Ge	74		**ug/L**		165884	165884.093
	As	75	**4.125**	**ug/L**	7.430	2015	0.010
	Se	77		**ug/L**		3497	-0.013
	Se	82	**0.582**	**ug/L**	19.352	12	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		107.8			
	Ni	60					
>	Ge	74		96.1			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 18:37:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 6.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.343**	**ug/L**	3.137	14103	0.040
	Be	9	**54.200**	**ug/L**	5.496	4218	0.012
>	Sc	45		**ug/L**		353776	353775.657
	Ni	60	**52.374**	**ug/L**	2.919	32707	0.092
>	Ge	74		**ug/L**		167376	167376.228
	As	75	**49.561**	**ug/L**	3.221	20938	0.123
	Se	77		**ug/L**		7158	0.009
	Se	82	**50.734**	**ug/L**	3.767	2195	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.687				
	Be	9	108.400				
>	Sc	45			98.6		
	Ni	60	104.749				
>	Ge	74			97.0		
	As	75	99.121				
	Se	77					
	Se	82	101.467				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 18:40:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 7.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.086**	**ug/L**	9.975	51	0.000
	Be	9	**-0.046**	**ug/L**	41.783	2	-0.000
>	Sc	45		**ug/L**		356887	356887.185
	Ni	60	**0.003**	**ug/L**	654.524	43	0.000
>	Ge	74		**ug/L**		171982	171982.159
	As	75	**-0.999**	**ug/L**	98.356	-102	-0.002
	Se	77		**ug/L**		5353	-0.003
	Se	82	**0.313**	**ug/L**	26.869	0	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45			99.5		
	Ni	60					
>	Ge	74			99.7		
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825012
Sample Date/Time: Tuesday, December 15, 2009 18:42:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825012.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**78.158**	**ug/L**	1.347	24794	0.061
	Be	9	**4.811**	**ug/L**	4.888	439	0.001
>	Sc	45		**ug/L**		408659	408658.733
	Ni	60	**40.330**	**ug/L**	3.031	29115	0.071
>	Ge	74		**ug/L**		162284	162284.184
	As	75	**12.602**	**ug/L**	3.080	5391	0.031
	Se	77		**ug/L**		3520	-0.012
	Se	82	**0.186**	**ug/L**	263.682	-5	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		113.9			
	Ni	60					
>	Ge	74		94.1			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825013
Sample Date/Time: Tuesday, December 15, 2009 18:45:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825013.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.881**	**ug/L**	3.241	13569	0.036
	Be	9	**1.258**	**ug/L**	9.639	109	0.000
>	Sc	45		**ug/L**		372714	372714.449
	Ni	60	**8.812**	**ug/L**	1.988	5835	0.016
>	Ge	74		**ug/L**		169045	169045.258
	As	75	**2.838**	**ug/L**	24.779	1512	0.007
	Se	77		**ug/L**		3496	-0.013
	Se	82	**1.361**	**ug/L**	29.614	46	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		103.9			
	Ni	60					
>	Ge	74		98.0			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825014
Sample Date/Time: Tuesday, December 15, 2009 18:48:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825014.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	16.690	ug/L	1.466	4696	0.013
	Be	9	0.928	ug/L	3.733	80	0.000
>	Sc	45		ug/L		360856	360855.703
	Ni	60	3.834	ug/L	1.699	2482	0.007
>	Ge	74		ug/L		166577	166577.234
	As	75	0.422	ug/L	167.728	491	0.001
	Se	77		ug/L		3415	-0.013
	Se	82	0.949	ug/L	37.449	28	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		100.6			
	Ni	60					
>	Ge	74		96.5			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825015
Sample Date/Time: Tuesday, December 15, 2009 18:50:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825015.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**64.781**	**ug/L**	1.961	19343	0.050
	Be	9	**3.445**	**ug/L**	1.948	298	0.001
>	Sc	45		**ug/L**		384566	384566.023
	Ni	60	**27.554**	**ug/L**	1.501	18734	0.049
>	Ge	74		**ug/L**		162018	162017.534
	As	75	**7.055**	**ug/L**	7.449	3144	0.018
	Se	77		**ug/L**		3213	-0.014
	Se	82	**1.111**	**ug/L**	35.266	34	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		107.2			
	Ni	60					
>	Ge	74		93.9			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825016
Sample Date/Time: Tuesday, December 15, 2009 18:53:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825016.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**96.278**	**ug/L**	3.350	30219	0.075
	Be	9	**5.448**	**ug/L**	6.389	491	0.001
>	Sc	45		**ug/L**		404569	404568.929
	Ni	60	**43.468**	**ug/L**	0.947	31061	0.077
>	Ge	74		**ug/L**		161998	161997.992
	As	75	**9.615**	**ug/L**	3.181	4178	0.024
	Se	77		**ug/L**		3359	-0.013
	Se	82	**0.138**	**ug/L**	92.154	-7	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		112.8			
	Ni	60					
>	Ge	74		93.9			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825017
Sample Date/Time: Tuesday, December 15, 2009 18:56:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825017.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**67.283**	**ug/L**	5.113	19780	0.052
	Be	9	**3.568**	**ug/L**	7.667	304	0.001
>	Sc	45		**ug/L**		378803	378803.153
	Ni	60	**31.678**	**ug/L**	4.565	21200	0.056
>	Ge	74		**ug/L**		156154	156154.388
	As	75	**7.465**	**ug/L**	5.530	3191	0.019
	Se	77		**ug/L**		3347	-0.013
	Se	82	**0.407**	**ug/L**	22.482	4	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		105.6			
	Ni	60					
>	Ge	74		90.5			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825018
Sample Date/Time: Tuesday, December 15, 2009 18:58:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825018.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**45.277**	**ug/L**	2.368	13954	0.035
	Be	9	**3.491**	**ug/L**	5.762	311	0.001
>	Sc	45		**ug/L**		396696	396695.552
	Ni	60	**28.962**	**ug/L**	1.924	20311	0.051
>	Ge	74		**ug/L**		164107	164107.294
	As	75	**4.545**	**ug/L**	8.664	2162	0.011
	Se	77		**ug/L**		3297	-0.014
	Se	82	**1.063**	**ug/L**	17.357	32	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		110.6			
	Ni	60					
>	Ge	74		95.1			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825019
Sample Date/Time: Tuesday, December 15, 2009 19:01:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825019.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**114.425**	**ug/L**	2.344	37003	0.089
	Be	9	**6.568**	**ug/L**	4.387	609	0.001
>	Sc	45		**ug/L**		416900	416899.525
	Ni	60	**47.571**	**ug/L**	1.834	35020	0.084
>	Ge	74		**ug/L**		164251	164251.264
	As	75	**10.362**	**ug/L**	6.048	4541	0.026
	Se	77		**ug/L**		3158	-0.015
	Se	82	**0.034**	**ug/L**	1757.302	-12	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		116.2			
	Ni	60					
>	Ge	74		95.2			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 241825020
Sample Date/Time: Tuesday, December 15, 2009 19:04:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928674|2|skj
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\241825020.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**34.312**	**ug/L**	4.165	10131	0.027
	Be	9	**2.879**	**ug/L**	6.111	247	0.001
>	Sc	45		**ug/L**		380019	380018.600
	Ni	60	**26.403**	**ug/L**	1.329	17736	0.047
>	Ge	74		**ug/L**		165189	165188.710
	As	75	**7.665**	**ug/L**	16.262	3464	0.019
	Se	77		**ug/L**		3111	-0.015
	Se	82	**0.671**	**ug/L**	49.132	16	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		105.9			
	Ni	60					
>	Ge	74		95.7			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 15, 2009 19:06:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 6.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.239**	**ug/L**	2.377	13900	0.039
	Be	9	**52.509**	**ug/L**	2.756	4119	0.012
>	Sc	45		**ug/L**		356294	356293.771
	Ni	60	**51.386**	**ug/L**	2.506	32322	0.091
>	Ge	74		**ug/L**		172074	172074.380
	As	75	**49.115**	**ug/L**	2.452	21345	0.122
	Se	77		**ug/L**		6419	0.003
	Se	82	**50.534**	**ug/L**	1.144	2249	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	100.477				
	Be	9	105.017				
>	Sc	45			99.3		
	Ni	60	102.772				
>	Ge	74			99.7		
	As	75	98.230				
	Se	77					
	Se	82	101.068				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 15, 2009 19:09:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li,be,ni,as,se.mth
Dataset File: C:\elandata\Dataset\091215\QC Std 7.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.073**	**ug/L**	11.362	48	0.000
	Be	9	**-0.005**	**ug/L**	661.819	6	-0.000
>	Sc	45		**ug/L**		360911	360910.766
	Ni	60	**-0.002**	**ug/L**	1394.492	41	-0.000
>	Ge	74		**ug/L**		171689	171688.685
	As	75	**-0.887**	**ug/L**	222.496	-54	-0.002
	Se	77		**ug/L**		4952	-0.005
	Se	82	**0.278**	**ug/L**	137.696	-1	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
>	Sc	45		100.6			
	Ni	60					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120909S1.SIF
Batch ID:
Results Data Set: 120909S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: SOIL **Method Last Saved: 12/7/2009 16:18:28**
Method Description: 7471A, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/9/2009 09:48:12**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	09:49:02	Yes
2		[0.00]	0.0001	0.0005	0.0001	09:49:32	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	12.71				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/9/2009 09:49:51**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0027	0.0120	0.0028	09:50:41	Yes
2		[0.2]	0.0026	0.0113	0.0027	09:51:11	Yes
Mean:		[0.2]	0.0026				
SD:		0.0	0.0001				
%RSD:		0.0	1.99				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01311 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/9/2009 09:51:30**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0067	0.0287	0.0068	09:52:21	Yes
2		[0.5]	0.0066	0.0286	0.0067	09:52:51	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.38				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999975 Slope: 0.01333 Intercept: -0.00002

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/9/2009 09:53:11**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0262	0.1118	0.0263	09:54:02	Yes
2		[2.0]	0.0260	0.1114	0.0261	09:54:32	Yes
Mean:		[2.0]	0.0261				
SD:		0.0	0.0001				
%RSD:		0.0	0.46				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999984 Slope: 0.01303 Intercept: 0.00005

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/9/2009 09:54:52**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0637	0.2711	0.0638	09:55:43	Yes
2		[5.0]	0.0635	0.2705	0.0636	09:56:13	Yes
Mean:		[5.0]	0.0636				
SD:		0.0	0.0002				
%RSD:		0.0	0.25				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999945 Slope: 0.01271 Intercept: 0.00022

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/9/2009 09:56:33**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1239	0.5296	0.1240	09:57:23	Yes
2		[10.0]	0.1237	0.5263	0.1238	09:57:53	Yes
Mean:		[10.0]	0.1238				
SD:		0.0	0.0002				
%RSD:		0.0	0.13				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

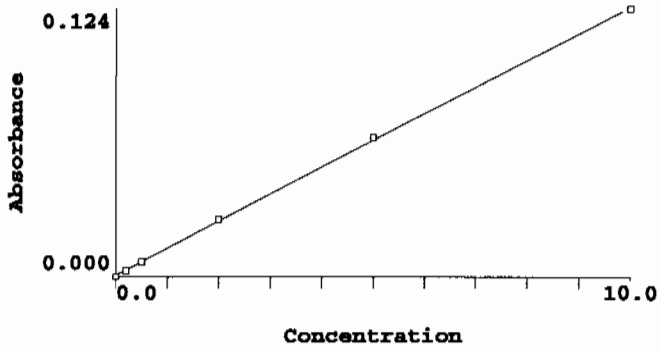

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.046	0.00	12.7
S0.2	0.0026	0.2	0.165	0.00	2.0
S0.5	0.0067	0.5	0.491	0.00	0.4
S2.0	0.0261	2.0	2.059	0.00	0.5

S5.0	0.0636	5.0	5.084	0.00	0.2
S10.0	0.1238	10.0	9.947	0.00	0.1

Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

==========

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/9/2009 09:58:12**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.135	5.135	0.0642	0.2745	0.0643	09:59:03	Yes
2	5.151	5.151	0.0644	0.2738	0.0645	09:59:33	Yes
Mean:	5.143	5.143	0.0643				
SD:	0.012	0.012	0.0001				
%RSD:	0.225	0.225	0.22				

QC value within limits for Hg 253.7 Recovery = 102.86%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/9/2009 09:59:53**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0006	0.0002	10:00:44	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	10:01:14	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.240	3.240	18.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/9/2009 10:01:33**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.175	0.175	0.0027	0.0126	0.0028	10:02:24	Yes
2	0.172	0.172	0.0027	0.0120	0.0028	10:02:54	Yes
Mean:	0.174	0.174	0.0027				
SD:	0.002	0.002	0.0000				
%RSD:	1.238	1.238	0.98				

QC value within limits for Hg 253.7 Recovery = 86.79%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:03:14**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.169	5.169	0.0646	0.2746	0.0647	10:04:04	Yes
2	5.106	5.106	0.0638	0.2718	0.0639	10:04:34	Yes
Mean:	5.138	5.138	0.0642				
SD:	0.044	0.044	0.0005				
%RSD:	0.863	0.863	0.86				

QC value within limits for Hg 253.7 Recovery = 102.75%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 10:04:53
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	10:05:44	Yes
2	-0.037	-0.037	0.0001	0.0011	0.0002	10:06:14	Yes
Mean:	-0.039	-0.039	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.870	4.870	23.91				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201987684|929435|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 12/9/2009 10:06:33
Data Type: Original

Replicate Data: 1201987684|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0004	0.0002	10:07:25	Yes
2	-0.036	-0.036	0.0001	0.0010	0.0002	10:07:55	Yes
Mean:	-0.037	-0.037	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.673	5.673	23.16				

Sequence No.: 13
Sample ID: 1201987685|929435|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 12/9/2009 10:08:15
Data Type: Original

Replicate Data: 1201987685|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.112	2.112	0.0267	0.1144	0.0268	10:09:07	Yes
2	2.119	2.119	0.0268	0.1137	0.0269	10:09:37	Yes
Mean:	2.116	2.116	0.0268				
SD:	0.005	0.005	0.0001				
%RSD:	0.233	0.233	0.23				

Sequence No.: 14
Sample ID: 242156001|929435|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 12/9/2009 10:09:57
Data Type: Original

Replicate Data: 242156001|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0010	0.0043	0.0011	10:10:48	Yes
2	0.031	0.031	0.0010	0.0042	0.0011	10:11:18	Yes
Mean:	0.032	0.032	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	3.102	3.102	1.26				

Sequence No.: 15
Sample ID: 242156002|929435|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 12/9/2009 10:11:37
Data Type: Original

Replicate Data: 242156002|929435|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1201987687|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.348	2.348	0.0297	0.1272	0.0298	10:20:46	Yes
2	2.347	2.347	0.0296	0.1275	0.0297	10:21:16	Yes
Mean:	2.347	2.347	0.0297				
SD:	0.001	0.001	0.0000				
%RSD:	0.025	0.025	0.02				

Sequence No.: 21
Sample ID: 1201987688|929435|1
Analyst: JXL1
Autosampler Location: 21
Date Collected: 12/9/2009 10:21:35
Data Type: Original

Replicate Data: 1201987688|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.257	2.257	0.0285	0.1224	0.0286	10:22:26	Yes
2	2.268	2.268	0.0287	0.1224	0.0288	10:22:56	Yes
Mean:	2.263	2.263	0.0286				
SD:	0.008	0.008	0.0001				
%RSD:	0.348	0.348	0.34				

Sequence No.: 22
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/9/2009 10:23:15
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.127	5.127	0.0641	0.2745	0.0642	10:24:06	Yes
2	5.094	5.094	0.0637	0.2725	0.0638	10:24:36	Yes
Mean:	5.110	5.110	0.0639				
SD:	0.023	0.023	0.0003				
%RSD:	0.453	0.453	0.45				

QC value within limits for Hg 253.7 Recovery = 102.21%
All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 10:24:55
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0006	0.0002	10:25:45	Yes
2	-0.039	-0.039	0.0001	0.0010	0.0002	10:26:15	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.855	2.855	18.17				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24
Sample ID: 1201987689|929435|5
Analyst: JXL1
Autosampler Location: 22
Date Collected: 12/9/2009 10:26:35
Data Type: Original

Replicate Data: 1201987689|929435|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0005	0.0026	0.0006	10:27:26	Yes
2	-0.004	-0.004	0.0005	0.0027	0.0006	10:27:56	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0060	0.0262	0.0061	10:35:50	Yes
2	0.436	0.436	0.0060	0.0257	0.0061	10:36:20	Yes
Mean:	0.438	0.438	0.0060				
SD:	0.003	0.003	0.0000				
%RSD:	0.627	0.627	0.57				

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 242316002|929460|1 **Date Collected: 12/9/2009 10:36:39**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316002|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.465	0.465	0.0063	0.0277	0.0064	10:37:29	Yes
2	0.458	0.458	0.0062	0.0268	0.0063	10:37:59	Yes
Mean:	0.461	0.461	0.0063				
SD:	0.005	0.005	0.0001				
%RSD:	1.087	1.087	0.99				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 242316003|929460|1 **Date Collected: 12/9/2009 10:38:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316003|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0020	0.0087	0.0021	10:39:09	Yes
2	0.112	0.112	0.0020	0.0089	0.0021	10:39:39	Yes
Mean:	0.112	0.112	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.186	0.186	0.13				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 242316004|929460|1 **Date Collected: 12/9/2009 10:39:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316004|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.205	0.205	0.0031	0.0138	0.0032	10:40:49	Yes
2	0.207	0.207	0.0031	0.0139	0.0032	10:41:19	Yes
Mean:	0.206	0.206	0.0031				
SD:	0.002	0.002	0.0000				
%RSD:	0.731	0.731	0.60				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 242316005|929460|1 **Date Collected: 12/9/2009 10:41:38**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316005|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.224	0.224	0.0033	0.0144	0.0034	10:42:29	Yes
2	0.224	0.224	0.0033	0.0146	0.0034	10:42:59	Yes
Mean:	0.224	0.224	0.0033				
SD:	0.000	0.000	0.0000				
%RSD:	0.058	0.058	0.05				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:43:18**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.162	5.162	0.0645	0.2762	0.0646	10:44:09	Yes
2	5.116	5.116	0.0640	0.2741	0.0641	10:44:39	Yes
Mean:	5.139	5.139	0.0642				
SD:	0.032	0.032	0.0004				
%RSD:	0.623	0.623	0.62				

QC value within limits for Hg 253.7 Recovery = 102.78%
All analyte(s) passed QC.

==========

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/9/2009 10:44:58
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0006	0.0002	10:45:49	Yes
2	-0.038	-0.038	0.0001	0.0013	0.0002	10:46:19	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.882	6.882	40.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 36 Autosampler Location: 32
Sample ID: 242316006|929460|1 Date Collected: 12/9/2009 10:46:38
Analyst: JXL1 Data Type: Original

Replicate Data: 242316006|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.072	0.072	0.0015	0.0067	0.0016	10:47:29	Yes
2	0.072	0.072	0.0015	0.0065	0.0016	10:47:59	Yes
Mean:	0.072	0.072	0.0015				
SD:	0.000	0.000	0.0000				
%RSD:	0.079	0.079	0.05				

==========

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1201987743|929460|1 Date Collected: 12/9/2009 10:48:18
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987743|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.074	0.074	0.0015	0.0068	0.0016	10:49:09	Yes
2	0.075	0.075	0.0015	0.0066	0.0016	10:49:39	Yes
Mean:	0.074	0.074	0.0015				
SD:	0.001	0.001	0.0000				
%RSD:	1.300	1.300	0.80				

==========

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1201987744|929460|1 Date Collected: 12/9/2009 10:49:59
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987744|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.168	2.168	0.0274	0.1171	0.0275	10:50:50	Yes

Replicate Data: 242333001|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.590	0.590	0.0079	0.0340	0.0080	10:59:16	Yes
2	0.588	0.588	0.0079	0.0343	0.0080	10:59:46	Yes
Mean:	0.589	0.589	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.238	0.238	0.22				

==========

Sequence No.: 44 Autosampler Location: 40
Sample ID: 1201989931|930397|1 Date Collected: 12/9/2009 11:00:05
Analyst: JXL1 Data Type: Original

Replicate Data: 1201989931|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.600	0.600	0.0080	0.0349	0.0081	11:00:56	Yes
2	0.593	0.593	0.0079	0.0361	0.0080	11:01:26	Yes
Mean:	0.596	0.596	0.0080				
SD:	0.005	0.005	0.0001				
%RSD:	0.770	0.770	0.71				

==========

Sequence No.: 45 Autosampler Location: 41
Sample ID: 1201989932|930397|1 Date Collected: 12/9/2009 11:01:46
Analyst: JXL1 Data Type: Original

Replicate Data: 1201989932|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.604	2.604	0.0328	0.1408	0.0329	11:02:37	Yes
2	2.596	2.596	0.0327	0.1394	0.0328	11:03:07	Yes
Mean:	2.600	2.600	0.0328				
SD:	0.006	0.006	0.0001				
%RSD:	0.218	0.218	0.21				

==========

Sequence No.: 46 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/9/2009 11:03:26
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.222	5.222	0.0653	0.2784	0.0654	11:04:16	Yes
2	5.172	5.172	0.0647	0.2761	0.0648	11:04:46	Yes
Mean:	5.197	5.197	0.0650				
SD:	0.035	0.035	0.0004				
%RSD:	0.676	0.676	0.67				

QC value within limits for Hg 253.7 Recovery = 103.94%
All analyte(s) passed QC.

==========

Sequence No.: 47 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/9/2009 11:05:05
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	11:05:55	Yes
2	-0.042	-0.042	0.0001	0.0005	0.0001	11:06:25	Yes
Mean:	-0.042	-0.042	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.206	0.206	2.18				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 241916003|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.594	0.594	0.0079	0.0339	0.0080	11:22:44	Yes
2	0.593	0.593	0.0079	0.0338	0.0080	11:23:14	Yes
Mean:	0.594	0.594	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.089	0.089	0.08				

Sequence No.: 58
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/9/2009 11:23:34
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.106	5.106	0.0638	0.2734	0.0639	11:24:24	Yes
2	5.118	5.118	0.0640	0.2723	0.0641	11:24:54	Yes
Mean:	5.112	5.112	0.0639				
SD:	0.008	0.008	0.0001				
%RSD:	0.165	0.165	0.16				

QC value within limits for Hg 253.7 Recovery = 102.25%
All analyte(s) passed QC.

Sequence No.: 59
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 11:25:12
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0004	0.0002	11:26:03	Yes
2	-0.040	-0.040	0.0001	0.0006	0.0002	11:26:33	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.305	1.305	9.29				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60
Sample ID: 241916004|928035|1
Analyst: JXL1
Autosampler Location: 52
Date Collected: 12/9/2009 11:26:52
Data Type: Original

Replicate Data: 241916004|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.181	1.181	0.0152	0.0653	0.0153	11:27:43	Yes
2	1.177	1.177	0.0152	0.0648	0.0153	11:28:13	Yes
Mean:	1.179	1.179	0.0152				
SD:	0.003	0.003	0.0000				
%RSD:	0.234	0.234	0.22				

Sequence No.: 61
Sample ID: 241916005|928035|1
Analyst: JXL1
Autosampler Location: 53
Date Collected: 12/9/2009 11:28:33
Data Type: Original

Replicate Data: 241916005|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.319	0.319	0.0045	0.0197	0.0046	11:29:24	Yes
2	0.330	0.330	0.0047	0.0212	0.0048	11:29:54	Yes
Mean:	0.324	0.324	0.0046				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.299	0.299	0.0043	0.0186	0.0044	11:37:48	Yes
2	0.303	0.303	0.0043	0.0187	0.0044	11:38:18	Yes
Mean:	0.301	0.301	0.0043				
SD:	0.003	0.003	0.0000				
%RSD:	1.073	1.073	0.93				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 241916011|928035|1 **Date Collected: 12/9/2009 11:38:37**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241916011|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.415	0.415	0.0057	0.0244	0.0058	11:39:29	Yes
2	0.407	0.407	0.0056	0.0240	0.0057	11:39:58	Yes
Mean:	0.411	0.411	0.0057				
SD:	0.005	0.005	0.0001				
%RSD:	1.278	1.278	1.15				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241922001|928035|1 **Date Collected: 12/9/2009 11:40:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241922001|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.036	1.036	0.0134	0.0569	0.0135	11:41:10	Yes
2	1.030	1.030	0.0133	0.0567	0.0134	11:41:40	Yes
Mean:	1.033	1.033	0.0134				
SD:	0.004	0.004	0.0001				
%RSD:	0.401	0.401	0.38				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201984320|928035|1 **Date Collected: 12/9/2009 11:42:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984320|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.236	1.236	0.0159	0.0671	0.0160	11:42:51	Yes
2	1.223	1.223	0.0157	0.0666	0.0158	11:43:21	Yes
Mean:	1.230	1.230	0.0158				
SD:	0.009	0.009	0.0001				
%RSD:	0.759	0.759	0.73				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 11:43:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.170	5.170	0.0646	0.2729	0.0647	11:44:32	Yes
2	5.127	5.127	0.0641	0.2716	0.0642	11:45:02	Yes
Mean:	5.148	5.148	0.0644				
SD:	0.030	0.030	0.0004				
%RSD:	0.587	0.587	0.58				

QC value within limits for Hg 253.7 Recovery = 102.97%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 12/9/2009 11:45:21
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0004	0.0002	11:46:11	Yes
2	-0.044	-0.044	0.0000	0.0001	0.0001	11:46:41	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.281	2.281	28.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 1201984321|928035|1
Analyst: JXL1
Autosampler Location: 62
Date Collected: 12/9/2009 11:47:01
Data Type: Original

Replicate Data: 1201984321|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.129	3.129	0.0393	0.1671	0.0394	11:47:52	Yes
2	3.115	3.115	0.0392	0.1665	0.0393	11:48:22	Yes
Mean:	3.122	3.122	0.0393				
SD:	0.010	0.010	0.0001				
%RSD:	0.316	0.316	0.31				

Sequence No.: 73
Sample ID: 1201984323|928035|1
Analyst: JXL1
Autosampler Location: 63
Date Collected: 12/9/2009 11:48:42
Data Type: Original

Replicate Data: 1201984323|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.118	3.118	0.0392	0.1666	0.0393	11:49:33	Yes
2	3.100	3.100	0.0390	0.1662	0.0391	11:50:03	Yes
Mean:	3.109	3.109	0.0391				
SD:	0.013	0.013	0.0002				
%RSD:	0.411	0.411	0.40				

Sequence No.: 74
Sample ID: 1201984322|928035|5
Analyst: JXL1
Autosampler Location: 64
Date Collected: 12/9/2009 11:50:23
Data Type: Original

Replicate Data: 1201984322|928035|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.177	0.177	0.0028	0.0119	0.0029	11:51:15	Yes
2	0.179	0.179	0.0028	0.0120	0.0029	11:51:44	Yes
Mean:	0.178	0.178	0.0028				
SD:	0.001	0.001	0.0000				
%RSD:	0.738	0.738	0.59				

Sequence No.: 75
Sample ID: 241922002|928035|1
Analyst: JXL1
Autosampler Location: 65
Date Collected: 12/9/2009 11:52:04
Data Type: Original

Replicate Data: 241922002|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.961	0.961	0.0125	0.0531	0.0126	11:52:56	Yes
2	0.958	0.958	0.0124	0.0531	0.0125	11:53:26	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.261	0.261	0.0038	0.0167	0.0039	12:01:21	Yes
2	0.255	0.255	0.0037	0.0163	0.0038	12:01:51	Yes
Mean:	0.258	0.258	0.0038				
SD:	0.004	0.004	0.0001				
%RSD:	1.643	1.643	1.39				

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201981594|926816|1 **Date Collected: 12/9/2009 12:02:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981594|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:02	Yes
2	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:32	Yes
Mean:	-0.044	-0.044	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.850	0.850	14.48				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:03:52**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.113	5.113	0.0639	0.2744	0.0640	12:04:42	Yes
2	5.098	5.098	0.0637	0.2741	0.0638	12:05:12	Yes
Mean:	5.106	5.106	0.0638				
SD:	0.011	0.011	0.0001				
%RSD:	0.206	0.206	0.20				

QC value within limits for Hg 253.7 Recovery = 102.12%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:05:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	12:06:21	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	12:06:51	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.638	2.638	23.77				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201981595|926816|10 **Date Collected: 12/9/2009 12:07:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981595|926816|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.982	3.982	0.0499	0.2127	0.0500	12:08:02	Yes
2	3.961	3.961	0.0497	0.2123	0.0498	12:08:32	Yes
Mean:	3.972	3.972	0.0498				
SD:	0.014	0.014	0.0002				
%RSD:	0.362	0.362	0.36				

2	0.042	0.042	0.0011	0.0049	0.0012	12:17:00	Yes
Mean:	0.041	0.041	0.0011				
SD:	0.001	0.001	0.0000				
%RSD:	1.821	1.821	0.86				

Sequence No.: 90 **Autosampler Location: 78**
Sample ID: 241711002|926816|1 **Date Collected: 12/9/2009 12:17:20**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711002|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.294	0.294	0.0042	0.0184	0.0043	12:18:12	Yes
2	0.294	0.294	0.0042	0.0185	0.0043	12:18:42	Yes
Mean:	0.294	0.294	0.0042				
SD:	0.000	0.000	0.0000				
%RSD:	0.024	0.024	0.02				

Sequence No.: 91 **Autosampler Location: 79**
Sample ID: 241711003|926816|1 **Date Collected: 12/9/2009 12:19:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711003|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.272	0.272	0.0039	0.0174	0.0040	12:19:53	Yes
2	0.270	0.270	0.0039	0.0168	0.0040	12:20:23	Yes
Mean:	0.271	0.271	0.0039				
SD:	0.002	0.002	0.0000				
%RSD:	0.579	0.579	0.49				

Sequence No.: 92 **Autosampler Location: 80**
Sample ID: 241711004|926816|1 **Date Collected: 12/9/2009 12:20:43**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711004|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.492	0.492	0.0067	0.0293	0.0068	12:21:34	Yes
2	0.488	0.488	0.0066	0.0290	0.0067	12:22:04	Yes
Mean:	0.490	0.490	0.0066				
SD:	0.003	0.003	0.0000				
%RSD:	0.610	0.610	0.56				

Sequence No.: 93 **Autosampler Location: 81**
Sample ID: 241711005|926816|1 **Date Collected: 12/9/2009 12:22:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711005|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.296	0.296	0.0042	0.0187	0.0043	12:23:15	Yes
2	0.294	0.294	0.0042	0.0187	0.0043	12:23:45	Yes
Mean:	0.295	0.295	0.0042				
SD:	0.002	0.002	0.0000				
%RSD:	0.527	0.527	0.46				

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:24:05**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.115	5.115	0.0639	0.2767	0.0640	12:24:55	Yes
2	5.089	5.089	0.0636	0.2752	0.0637	12:25:25	Yes
Mean:	5.102	5.102	0.0638				
SD:	0.019	0.019	0.0002				
%RSD:	0.372	0.372	0.37				

QC value within limits for Hg 253.7 Recovery = 102.04%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:25:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0007	0.0002	12:26:35	Yes
2	-0.043	-0.043	0.0000	0.0006	0.0001	12:27:05	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.813	1.813	18.79				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 241711006|926816|1 **Date Collected: 12/9/2009 12:27:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711006|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.327	0.327	0.0046	0.0204	0.0047	12:28:16	Yes
2	0.323	0.323	0.0046	0.0203	0.0047	12:28:46	Yes
Mean:	0.325	0.325	0.0046				
SD:	0.003	0.003	0.0000				
%RSD:	0.902	0.902	0.79				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 241711007|926816|1 **Date Collected: 12/9/2009 12:29:06**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711007|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.383	0.383	0.0053	0.0230	0.0054	12:29:57	Yes
2	0.380	0.380	0.0053	0.0228	0.0054	12:30:27	Yes
Mean:	0.381	0.381	0.0053				
SD:	0.002	0.002	0.0000				
%RSD:	0.416	0.416	0.37				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 1201984335|928044|1 **Date Collected: 12/9/2009 12:30:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984335|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	12:31:38	Yes
2	-0.041	-0.041	0.0001	0.0004	0.0002	12:32:08	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.000	0.000	0.0000				

%RSD:	0.480	0.480	3.27

==========

Sequence No.: 99 **Autosampler Location: 85**
Sample ID: 1201984336|928044|10 **Date Collected: 12/9/2009 12:32:28**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984336|928044|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.015	4.015	0.0503	0.2179	0.0504	12:33:20	Yes
2	4.013	4.013	0.0503	0.2164	0.0504	12:33:50	Yes
Mean:	4.014	4.014	0.0503				
SD:	0.001	0.001	0.0000				
%RSD:	0.026	0.026	0.03				

==========

Sequence No.: 100 **Autosampler Location: 86**
Sample ID: 241825001|928044|1 **Date Collected: 12/9/2009 12:34:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825001|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	0.0005	0.0022	0.0006	12:35:02	Yes
2	-0.005	-0.005	0.0005	0.0026	0.0006	12:35:32	Yes
Mean:	-0.005	-0.005	0.0005				
SD:	0.000	0.000	0.0000				
%RSD:	0.994	0.994	0.13				

==========

Sequence No.: 101 **Autosampler Location: 87**
Sample ID: 1201984337|928044|1 **Date Collected: 12/9/2009 12:35:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984337|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	0.0004	0.0021	0.0005	12:36:44	Yes
2	-0.011	-0.011	0.0004	0.0021	0.0005	12:37:14	Yes
Mean:	-0.012	-0.012	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	4.783	4.783	1.62				

==========

Sequence No.: 102 **Autosampler Location: 88**
Sample ID: 1201984338|928044|1 **Date Collected: 12/9/2009 12:37:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984338|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.110	2.110	0.0267	0.1154	0.0268	12:38:26	Yes
2	2.112	2.112	0.0267	0.1152	0.0268	12:38:56	Yes
Mean:	2.111	2.111	0.0267				
SD:	0.001	0.001	0.0000				
%RSD:	0.067	0.067	0.07				

==========

Sequence No.: 103 **Autosampler Location: 89**
Sample ID: 1201984340|928044|1 **Date Collected: 12/9/2009 12:39:16**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984340|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	2.129	2.129	0.0269	0.1157	0.0270	12:40:08	Yes
2	2.117	2.117	0.0268	0.1153	0.0269	12:40:38	Yes
Mean:	2.123	2.123	0.0269				
SD:	0.008	0.008	0.0001				
%RSD:	0.400	0.400	0.39				

==========

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 1201984339|928044|5 **Date Collected: 12/9/2009 12:40:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984339|928044|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	0.0001	0.0007	0.0002	12:41:50	Yes
2	-0.035	-0.035	0.0001	0.0009	0.0002	12:42:20	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.977	3.977	13.36				

==========

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 241825002|928044|1 **Date Collected: 12/9/2009 12:42:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825002|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.273	0.273	0.0040	0.0173	0.0041	12:43:32	Yes
2	0.274	0.274	0.0040	0.0176	0.0041	12:44:02	Yes
Mean:	0.274	0.274	0.0040				
SD:	0.000	0.000	0.0000				
%RSD:	0.084	0.084	0.07				

==========

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:44:22**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.112	5.112	0.0639	0.2765	0.0640	12:45:12	Yes
2	5.069	5.069	0.0634	0.2743	0.0635	12:45:42	Yes
Mean:	5.091	5.091	0.0636				
SD:	0.030	0.030	0.0004				
%RSD:	0.591	0.591	0.59				

QC value within limits for Hg 253.7 Recovery = 101.81%
All analyte(s) passed QC.

==========

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:46:01**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0009	0.0002	12:46:51	Yes
2	-0.043	-0.043	0.0000	0.0004	0.0001	12:47:21	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.460	5.460	43.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 108
Sample ID: 241825003|928044|1
Analyst: JXL1

Autosampler Location: 92
Date Collected: 12/9/2009 12:47:40
Data Type: Original

Replicate Data: 241825003|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	0.0005	0.0024	0.0006	12:48:32	Yes
2	-0.006	-0.006	0.0005	0.0026	0.0006	12:49:02	Yes
Mean:	-0.007	-0.007	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	21.34	21.34	3.60				

Sequence No.: 109
Sample ID: 241825004|928044|1
Analyst: JXL1

Autosampler Location: 93
Date Collected: 12/9/2009 12:49:23
Data Type: Original

Replicate Data: 241825004|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.203	0.203	0.0031	0.0136	0.0032	12:50:14	Yes
2	0.203	0.203	0.0031	0.0135	0.0032	12:50:44	Yes
Mean:	0.203	0.203	0.0031				
SD:	0.000	0.000	0.0000				
%RSD:	0.003	0.003	0.00				

Sequence No.: 110
Sample ID: 241825005|928044|1
Analyst: JXL1

Autosampler Location: 94
Date Collected: 12/9/2009 12:51:05
Data Type: Original

Replicate Data: 241825005|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.281	0.281	0.0041	0.0179	0.0042	12:51:56	Yes
2	0.289	0.289	0.0042	0.0182	0.0042	12:52:26	Yes
Mean:	0.285	0.285	0.0041				
SD:	0.005	0.005	0.0001				
%RSD:	1.810	1.810	1.56				

Sequence No.: 111
Sample ID: 241825006|928044|1
Analyst: JXL1

Autosampler Location: 95
Date Collected: 12/9/2009 12:52:46
Data Type: Original

Replicate Data: 241825006|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.104	0.104	0.0019	0.0085	0.0020	12:53:38	Yes
2	0.104	0.104	0.0019	0.0083	0.0020	12:54:08	Yes
Mean:	0.104	0.104	0.0019				
SD:	0.000	0.000	0.0000				
%RSD:	0.220	0.220	0.15				

Sequence No.: 112
Sample ID: 241825007|928044|1
Analyst: JXL1

Autosampler Location: 96
Date Collected: 12/9/2009 12:54:28
Data Type: Original

Replicate Data: 241825007|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.305	0.305	0.0044	0.0189	0.0045	12:55:20	Yes
2	0.304	0.304	0.0043	0.0190	0.0044	12:55:50	Yes
Mean:	0.305	0.305	0.0043				

SD:	0.001	0.001	0.0000
%RSD:	0.191	0.191	0.17

==========

Sequence No.: 113 **Autosampler Location: 97**
Sample ID: 241825008|928044|1 **Date Collected: 12/9/2009 12:56:10**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825008|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.222	0.222	0.0033	0.0146	0.0034	12:57:01	Yes
2	0.220	0.220	0.0033	0.0147	0.0034	12:57:31	Yes
Mean:	0.221	0.221	0.0033				
SD:	0.001	0.001	0.0000				
%RSD:	0.610	0.610	0.50				

==========

Sequence No.: 114 **Autosampler Location: 98**
Sample ID: 241825009|928044|1 **Date Collected: 12/9/2009 12:57:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825009|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0024	0.0108	0.0025	12:58:44	Yes
2	0.149	0.149	0.0024	0.0109	0.0025	12:59:14	Yes
Mean:	0.150	0.150	0.0024				
SD:	0.001	0.001	0.0000				
%RSD:	0.945	0.945	0.72				

==========

Sequence No.: 115 **Autosampler Location: 99**
Sample ID: 241825010|928044|1 **Date Collected: 12/9/2009 12:59:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825010|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	0.0004	0.0022	0.0005	13:00:26	Yes
2	-0.014	-0.014	0.0004	0.0020	0.0005	13:00:56	Yes
Mean:	-0.013	-0.013	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.518	6.518	2.56				

==========

Sequence No.: 116 **Autosampler Location: 100**
Sample ID: 241825011|928044|1 **Date Collected: 12/9/2009 13:01:17**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825011|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.034	0.034	0.0010	0.0045	0.0011	13:02:09	Yes
2	0.033	0.033	0.0010	0.0046	0.0011	13:02:39	Yes
Mean:	0.033	0.033	0.0010				
SD:	0.000	0.000	0.0000				
%RSD:	0.670	0.670	0.28				

==========

Sequence No.: 117 **Autosampler Location: 101**
Sample ID: 241825012|928044|1 **Date Collected: 12/9/2009 13:02:59**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825012|928044|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.192	0.192	0.0030	0.0131	0.0031	13:03:51	Yes
2	0.190	0.190	0.0029	0.0129	0.0030	13:04:21	Yes
Mean:	0.191	0.191	0.0029				
SD:	0.002	0.002	0.0000				
%RSD:	0.902	0.902	0.73				

==========

Sequence No.: 118 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:04:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.116	5.116	0.0640	0.2787	0.0641	13:05:32	Yes
2	5.095	5.095	0.0637	0.2773	0.0638	13:06:02	Yes
Mean:	5.105	5.105	0.0638				
SD:	0.015	0.015	0.0002				
%RSD:	0.299	0.299	0.30				

QC value within limits for Hg 253.7 Recovery = 102.11%
All analyte(s) passed QC.

==========

Sequence No.: 119 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:06:21**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0001	0.0001	13:07:12	Yes
2	-0.043	-0.043	0.0000	0.0006	0.0001	13:07:42	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.114	1.114	14.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 120 **Autosampler Location: 102**
Sample ID: 241825013|928044|1 **Date Collected: 12/9/2009 13:08:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825013|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.061	0.061	0.0013	0.0060	0.0014	13:08:53	Yes
2	0.065	0.065	0.0014	0.0067	0.0015	13:09:23	Yes
Mean:	0.063	0.063	0.0014				
SD:	0.003	0.003	0.0000				
%RSD:	4.456	4.456	2.57				

==========

Sequence No.: 121 **Autosampler Location: 103**
Sample ID: 241825014|928044|1 **Date Collected: 12/9/2009 13:09:44**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825014|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0005	0.0027	0.0006	13:10:35	Yes
2	-0.005	-0.005	0.0005	0.0023	0.0006	13:11:05	Yes
Mean:	-0.005	-0.005	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	15.90	15.90	1.73				

Sequence No.: 122
Sample ID: 241825015|928044|1
Analyst: JXL1

Autosampler Location: 104
Date Collected: 12/9/2009 13:11:26
Data Type: Original

Replicate Data: 241825015|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.174	0.174	0.0027	0.0120	0.0028	13:12:18	Yes
2	0.175	0.175	0.0027	0.0120	0.0028	13:12:48	Yes
Mean:	0.175	0.175	0.0027				
SD:	0.001	0.001	0.0000				
%RSD:	0.531	0.531	0.42				

Sequence No.: 123
Sample ID: 241825016|928044|1
Analyst: JXL1

Autosampler Location: 105
Date Collected: 12/9/2009 13:13:08
Data Type: Original

Replicate Data: 241825016|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.430	0.430	0.0059	0.0263	0.0060	13:14:01	Yes
2	0.429	0.429	0.0059	0.0258	0.0060	13:14:30	Yes
Mean:	0.429	0.429	0.0059				
SD:	0.001	0.001	0.0000				
%RSD:	0.154	0.154	0.14				

Sequence No.: 124
Sample ID: 241825017|928044|1
Analyst: JXL1

Autosampler Location: 106
Date Collected: 12/9/2009 13:14:51
Data Type: Original

Replicate Data: 241825017|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.280	0.280	0.0040	0.0177	0.0041	13:15:42	Yes
2	0.280	0.280	0.0040	0.0180	0.0041	13:16:12	Yes
Mean:	0.280	0.280	0.0040				
SD:	0.001	0.001	0.0000				
%RSD:	0.182	0.182	0.16				

Sequence No.: 125
Sample ID: 241825018|928044|1
Analyst: JXL1

Autosampler Location: 107
Date Collected: 12/9/2009 13:16:33
Data Type: Original

Replicate Data: 241825018|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.101	0.101	0.0018	0.0085	0.0019	13:17:25	Yes
2	0.102	0.102	0.0018	0.0085	0.0019	13:17:55	Yes
Mean:	0.101	0.101	0.0018				
SD:	0.000	0.000	0.0000				
%RSD:	0.423	0.423	0.29				

Sequence No.: 126
Sample ID: 241825019|928044|1
Analyst: JXL1

Autosampler Location: 108
Date Collected: 12/9/2009 13:18:15
Data Type: Original

Replicate Data: 241825019|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.363	0.363	0.0051	0.0226	0.0052	13:19:07	Yes
2	0.359	0.359	0.0050	0.0220	0.0051	13:19:37	Yes

Mean:	0.361	0.361	0.0050
SD:	0.003	0.003	0.0000
%RSD:	0.759	0.759	0.67

==========

Sequence No.: 127 **Autosampler Location: 109**
Sample ID: 241825020|928044|1 **Date Collected: 12/9/2009 13:19:57**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825020|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.149	0.149	0.0024	0.0109	0.0025	13:20:49	Yes
2	0.151	0.151	0.0024	0.0113	0.0025	13:21:19	Yes
Mean:	0.150	0.150	0.0024				
SD:	0.002	0.002	0.0000				
%RSD:	1.179	1.179	0.90				

==========

Sequence No.: 128 **Autosampler Location: 110**
Sample ID: 1201984341|928047|1 **Date Collected: 12/9/2009 13:21:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984341|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0000	0.0003	0.0001	13:22:32	Yes
2	-0.045	-0.045	0.0000	0.0004	0.0001	13:23:02	Yes
Mean:	-0.045	-0.045	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.018	0.018	0.87				

==========

Sequence No.: 129 **Autosampler Location: 111**
Sample ID: 1201984342|928047|10 **Date Collected: 12/9/2009 13:23:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984342|928047|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.643	3.643	0.0457	0.1987	0.0458	13:24:15	Yes
2	3.623	3.623	0.0455	0.1973	0.0456	13:24:45	Yes
Mean:	3.633	3.633	0.0456				
SD:	0.014	0.014	0.0002				
%RSD:	0.377	0.377	0.37				

==========

Sequence No.: 130 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:25:05**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.104	5.104	0.0638	0.2784	0.0639	13:25:56	Yes
2	5.049	5.049	0.0631	0.2769	0.0632	13:26:25	Yes
Mean:	5.076	5.076	0.0635				
SD:	0.039	0.039	0.0005				
%RSD:	0.770	0.770	0.76				

QC value within limits for Hg 253.7 Recovery = 101.53%
All analyte(s) passed QC.

==========

Sequence No.: 131 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:26:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	0.0000	0.0004	0.0001	13:27:35	Yes
2	-0.043	-0.043	0.0000	0.0004	0.0001	13:28:05	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.424	1.424	20.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 132 Autosampler Location: 112
Sample ID: 241832001|928047|1 Date Collected: 12/9/2009 13:28:24
Analyst: JXL1 Data Type: Original

Replicate Data: 241832001|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	0.0004	0.0020	0.0005	13:29:16	Yes
2	-0.013	-0.013	0.0004	0.0019	0.0005	13:29:46	Yes
Mean:	-0.013	-0.013	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.360	6.360	2.40				

Sequence No.: 133 Autosampler Location: 113
Sample ID: 241832002|928047|1 Date Collected: 12/9/2009 13:30:06
Analyst: JXL1 Data Type: Original

Replicate Data: 241832002|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0004	0.0023	0.0005	13:30:58	Yes
2	-0.012	-0.012	0.0004	0.0021	0.0005	13:31:28	Yes
Mean:	-0.012	-0.012	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.516	6.516	2.22				

Sequence No.: 134 Autosampler Location: 114
Sample ID: 241832003|928047|1 Date Collected: 12/9/2009 13:31:49
Analyst: JXL1 Data Type: Original

Replicate Data: 241832003|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	0.0005	0.0025	0.0006	13:32:41	Yes
2	-0.006	-0.006	0.0005	0.0025	0.0006	13:33:11	Yes
Mean:	-0.007	-0.007	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	8.206	8.206	1.38				

Sequence No.: 135 Autosampler Location: 115
Sample ID: 241832004|928047|1 Date Collected: 12/9/2009 13:33:32
Analyst: JXL1 Data Type: Original

Replicate Data: 241832004|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	0.0003	0.0019	0.0004	13:34:24	Yes
2	-0.024	-0.024	0.0003	0.0014	0.0004	13:34:54	Yes
Mean:	-0.022	-0.022	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	13.54	13.54	11.99				

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 928673

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985791	UI647733-01	.512	g
MS	1201985793	UI090611-A	.5	mL
MS	1201985793	UI090611-B	.5	mL
MSD	1201985795	UI090611-A	.5	mL
MSD	1201985795	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985790		SW846 3050B	04-DEC-2009 19:09	0.502 g	50 mL	99.60159	SOIL
LCS	1201985791		SW846 3050B	04-DEC-2009 19:09	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241825001		SW846 3050B	04-DEC-2009 19:09	0.504 g	50 mL	99.20635	SOIL
DUP	1201985792	241825001	SW846 3050B	04-DEC-2009 19:09	0.515 g	50 mL	97.08738	SOIL
MS	1201985793	241825001	SW846 3050B	04-DEC-2009 19:09	0.504 g	50 mL	99.20635	SOIL
MSD	1201985795	241825001	SW846 3050B	04-DEC-2009 19:09	0.514 g	50 mL	97.27626	SOIL
SDILT	1201985794	241825001	SW846 3050B	04-DEC-2009 19:09	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241825002		SW846 3050B	04-DEC-2009 19:09	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241825003		SW846 3050B	04-DEC-2009 19:09	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241825004		SW846 3050B	04-DEC-2009 19:09	0.513 g	50 mL	97.46589	SOIL
SAMPLE	241825005		SW846 3050B	04-DEC-2009 19:09	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241825006		SW846 3050B	04-DEC-2009 19:09	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241825007		SW846 3050B	04-DEC-2009 19:09	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241825008		SW846 3050B	04-DEC-2009 19:09	0.507 g	50 mL	98.61933	SOIL
SAMPLE	241825009		SW846 3050B	04-DEC-2009 19:09	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241825010		SW846 3050B	04-DEC-2009 19:09	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241825011		SW846 3050B	04-DEC-2009 19:09	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241825012		SW846 3050B	04-DEC-2009 19:09	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241825013		SW846 3050B	04-DEC-2009 19:09	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241825014		SW846 3050B	04-DEC-2009 19:09	0.516 g	50 mL	96.89922	SOIL
SAMPLE	241825015		SW846 3050B	04-DEC-2009 19:09	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241825016		SW846 3050B	04-DEC-2009 19:09	0.527 g	50 mL	94.87666	SOIL
SAMPLE	241825017		SW846 3050B	04-DEC-2009 19:09	0.528 g	50 mL	94.69697	SOIL
SAMPLE	241825018		SW846 3050B	04-DEC-2009 19:09	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241825019		SW846 3050B	04-DEC-2009 19:09	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241825020		SW846 3050B	04-DEC-2009 19:09	0.525 g	50 mL	95.2381	SOIL

Reagent/Solvent Lot ID Amount Description

Prep LogBook

1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: sample#241825001 is a gray soil with small rocks.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 928609

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985636	UI647735	.523	g
MS	1201985638	UI091119-01	.25	mL
MS	1201985638	UI091119-06	.25	mL
MSD	1201985641	UI091119-01	.25	mL
MSD	1201985641	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985635		SW846 3050B	04-DEC-2009 19:20	0.503 g	50 mL	99.40358	SOIL
LCS	1201985636		SW846 3050B	04-DEC-2009 19:20	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241825001		SW846 3050B	04-DEC-2009 19:20	0.502 g	50 mL	99.60159	SOIL
DUP	1201985637	241825001	SW846 3050B	04-DEC-2009 19:20	0.52 g	50 mL	96.15385	SOIL
MS	1201985638	241825001	SW846 3050B	04-DEC-2009 19:20	0.506 g	50 mL	98.81423	SOIL
MSD	1201985641	241825001	SW846 3050B	04-DEC-2009 19:20	0.516 g	50 mL	96.89922	SOIL
SDILT	1201985639	241825001	SW846 3050B	04-DEC-2009 19:20	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241825002		SW846 3050B	04-DEC-2009 19:20	0.527 g	50 mL	94.87666	SOIL
SAMPLE	241825003		SW846 3050B	04-DEC-2009 19:20	0.509 g	50 mL	98.23183	SOIL
SAMPLE	241825004		SW846 3050B	04-DEC-2009 19:20	0.526 g	50 mL	95.05703	SOIL
SAMPLE	241825005		SW846 3050B	04-DEC-2009 19:20	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241825006		SW846 3050B	04-DEC-2009 19:20	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241825007		SW846 3050B	04-DEC-2009 19:20	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241825008		SW846 3050B	04-DEC-2009 19:20	0.539 g	50 mL	92.76438	SOIL
SAMPLE	241825009		SW846 3050B	04-DEC-2009 19:20	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241825010		SW846 3050B	04-DEC-2009 19:20	0.519 g	50 mL	96.33911	SOIL
SAMPLE	241825011		SW846 3050B	04-DEC-2009 19:20	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241825012		SW846 3050B	04-DEC-2009 19:20	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241825013		SW846 3050B	04-DEC-2009 19:20	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241825014		SW846 3050B	04-DEC-2009 19:20	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241825015		SW846 3050B	04-DEC-2009 19:20	0.53 g	50 mL	94.33962	SOIL
SAMPLE	241825016		SW846 3050B	04-DEC-2009 19:20	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241825017		SW846 3050B	04-DEC-2009 19:20	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241825018		SW846 3050B	04-DEC-2009 19:20	0.534 g	50 mL	93.63296	SOIL
SAMPLE	241825019		SW846 3050B	04-DEC-2009 19:20	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241825020		SW846 3050B	04-DEC-2009 19:20	0.52 g	50 mL	96.15385	SOIL

Reagent/Solvent Lot ID	Amount	Description

Prep LogBook

1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments sample#241825001 is a gray soil with small rocks.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 933554

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201997317	UI062540-I	.502	g
MS	1201985638	UI091124-01	.25	mL
MS	1201985638	UI091124-06	.25	mL
MSD	1201985641	UI091124-01	.25	mL
MSD	1201985641	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201997316		SW846 3050B	16-DEC-2009 13:30	0.508 g	50 mL	98.4252	SOIL
LCS	1201997317		SW846 3050B	16-DEC-2009 13:30	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241825001		SW846 3050B	16-DEC-2009 13:30	0.502 g	50 mL	99.60159	SOIL
DUP	1201985637	241825001	SW846 3050B	16-DEC-2009 13:30	0.536 g	50 mL	93.28358	SOIL
MS	1201985638	241825001	SW846 3050B	16-DEC-2009 13:30	0.535 g	50 mL	93.45794	SOIL
MSD	1201985641	241825001	SW846 3050B	16-DEC-2009 13:30	0.501 g	50 mL	99.8004	SOIL
SDILT	1201985639	241825001	SW846 3050B	16-DEC-2009 13:30	0.502 g	50 mL	99.60159	SOIL
SAMPLE	241825002		SW846 3050B	16-DEC-2009 13:30	0.52 g	50 mL	96.15385	SOIL
SAMPLE	241825003		SW846 3050B	16-DEC-2009 13:30	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241825004		SW846 3050B	16-DEC-2009 13:30	0.518 g	50 mL	96.5251	SOIL
SAMPLE	241825005		SW846 3050B	16-DEC-2009 13:30	0.542 g	50 mL	92.25092	SOIL
SAMPLE	241825006		SW846 3050B	16-DEC-2009 13:30	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241825007		SW846 3050B	16-DEC-2009 13:30	0.55 g	50 mL	90.90909	SOIL
SAMPLE	241825008		SW846 3050B	16-DEC-2009 13:30	0.546 g	50 mL	91.57509	SOIL
SAMPLE	241825009		SW846 3050B	16-DEC-2009 13:30	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241825010		SW846 3050B	16-DEC-2009 13:30	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241825011		SW846 3050B	16-DEC-2009 13:30	0.534 g	50 mL	93.63296	SOIL
SAMPLE	241825012		SW846 3050B	16-DEC-2009 13:30	0.556 g	50 mL	89.92806	SOIL
SAMPLE	241825013		SW846 3050B	16-DEC-2009 13:30	0.534 g	50 mL	93.63296	SOIL
SAMPLE	241825014		SW846 3050B	16-DEC-2009 13:30	0.5 g	50 mL	100	SOIL
SAMPLE	241825015		SW846 3050B	16-DEC-2009 13:30	0.506 g	50 mL	98.81423	SOIL
SAMPLE	241825016		SW846 3050B	16-DEC-2009 13:30	0.558 g	50 mL	89.60573	SOIL
SAMPLE	241825017		SW846 3050B	16-DEC-2009 13:30	0.504 g	50 mL	99.20635	SOIL
SAMPLE	241825018		SW846 3050B	16-DEC-2009 13:30	0.546 g	50 mL	91.57509	SOIL
SAMPLE	241825019		SW846 3050B	16-DEC-2009 13:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241825020		SW846 3050B	16-DEC-2009 13:30	0.517 g	50 mL	96.7118	SOIL

Reagent/Solvent Lot ID Amount Description

Prep LogBook

1215803	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments: Light,brown,medium soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 928043

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201984336	UI031809A	.209	g
MS	1201984338	WHG091208-14	.3	mL
MSD	1201984340	WHG091208-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201984335		SW846 7471A Prep	08-DEC-2009 12:40	0.5 g	30 mL	60	SOIL
LCS	1201984336		SW846 7471A Prep	08-DEC-2009 12:40	0.209 g	30 mL	143.54067	SOIL
SAMPLE	241825001		SW846 7471A Prep	08-DEC-2009 12:40	0.552 g	30 mL	54.34783	SOIL
DUP	1201984337	241825001	SW846 7471A Prep	08-DEC-2009 12:40	0.524 g	30 mL	57.25191	SOIL
MS	1201984338	241825001	SW846 7471A Prep	08-DEC-2009 12:40	0.517 g	30 mL	58.02708	SOIL
MSD	1201984340	241825001	SW846 7471A Prep	08-DEC-2009 12:40	0.561 g	30 mL	53.47594	SOIL
SDILT	1201984339	241825001	SW846 7471A Prep	08-DEC-2009 12:40	0.552 g	30 mL	54.34783	SOIL
SAMPLE	241825002		SW846 7471A Prep	08-DEC-2009 12:40	0.562 g	30 mL	53.38078	SOIL
SAMPLE	241825003		SW846 7471A Prep	08-DEC-2009 12:40	0.5 g	30 mL	60	SOIL
SAMPLE	241825004		SW846 7471A Prep	08-DEC-2009 12:40	0.573 g	30 mL	52.35602	SOIL
SAMPLE	241825005		SW846 7471A Prep	08-DEC-2009 12:40	0.515 g	30 mL	58.25243	SOIL
SAMPLE	241825006		SW846 7471A Prep	08-DEC-2009 12:40	0.516 g	30 mL	58.13953	SOIL
SAMPLE	241825007		SW846 7471A Prep	08-DEC-2009 12:40	0.558 g	30 mL	53.76344	SOIL
SAMPLE	241825008		SW846 7471A Prep	08-DEC-2009 12:40	0.532 g	30 mL	56.39098	SOIL
SAMPLE	241825009		SW846 7471A Prep	08-DEC-2009 12:40	0.521 g	30 mL	57.58157	SOIL
SAMPLE	241825010		SW846 7471A Prep	08-DEC-2009 12:40	0.508 g	30 mL	59.05512	SOIL
SAMPLE	241825011		SW846 7471A Prep	08-DEC-2009 12:40	0.533 g	30 mL	56.28518	SOIL
SAMPLE	241825012		SW846 7471A Prep	08-DEC-2009 12:40	0.5 g	30 mL	60	SOIL
SAMPLE	241825013		SW846 7471A Prep	08-DEC-2009 12:40	0.543 g	30 mL	55.24862	SOIL
SAMPLE	241825014		SW846 7471A Prep	08-DEC-2009 12:40	0.525 g	30 mL	57.14286	SOIL
SAMPLE	241825015		SW846 7471A Prep	08-DEC-2009 12:40	0.534 g	30 mL	56.17978	SOIL
SAMPLE	241825016		SW846 7471A Prep	08-DEC-2009 12:40	0.542 g	30 mL	55.35055	SOIL
SAMPLE	241825017		SW846 7471A Prep	08-DEC-2009 12:40	0.553 g	30 mL	54.24955	SOIL
SAMPLE	241825018		SW846 7471A Prep	08-DEC-2009 12:40	0.513 g	30 mL	58.47953	SOIL
SAMPLE	241825019		SW846 7471A Prep	08-DEC-2009 12:40	0.5 g	30 mL	60	SOIL
SAMPLE	241825020		SW846 7471A Prep	08-DEC-2009 12:40	0.541 g	30 mL	55.45287	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution

Comments: Sample 241825001 is a rocky brown soil.
Digestion Start Date: 08-DEC-09 12:40
Digestion End Date: 08-DEC-09 13:10

Prep LogBook

1206350-C	2 mL	Hg reducing agent
WHG091208-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091208-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091208-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091208-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091208-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091208-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
928610	See Below		

Potentially affected work order(s)(SDG): 241825(10-667)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201985638MS 2. Failed RPD for DUP: QC 1201985637DUP 3. Failed Recovery for MSD/PSD: QC 1201985641MSD	1. The matrix spike recovery failed outside of the control limits for aluminum and titanium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for barium,chromium and vanadium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for aluminum due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 16-DEC-09

Data Validator/Group Leader:
Louise Smith 16-DEC-09

NCR Report No.: 772334
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
18-DEC-09	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
933555	See Below		

Potentially affected work order(s)(SDG): 241825(10-667)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201985638MS 2. Failed RPD for DUP: QC 1201985637DUP 3. Failed Recovery for MSD/PSD: QC 1201985641MSD	1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for calcium and magnesium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 19-DEC-09

Data Validator/Group Leader:
Jamie Johnson 19-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL Sta **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID:	UI090929-06	**Opened:**	29-SEP-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master A	**Received:**	29-SEP-09	**Catalog Number :**	160055-01
Type:	Source Material	**Expires:**	29-SEP-10	**Lot Number :**	1017426
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV SOLN A - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID:	UI090929-07	**Opened:**	29-SEP-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master B	**Received:**	29-SEP-09	**Catalog Number :**	160054-02
Type:	Source Material	**Expires:**	29-SEP-10	**Lot Number :**	1017428
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV Soln B - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID:	UI090929-08	**Opened:**	29-SEP-09	**Amount :**	250 mL
Name:	ICP-MS ICV/CCV Master C	**Received:**	29-SEP-09	**Catalog Number :**	160054-03
Type:	Source Material	**Expires:**	17-DEC-09	**Lot Number :**	1017427
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 5% HNO3 100 cm2
Supplier:	02SI				
Description:	ICPMS ICV/CCV Soln C - 10ppm				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Standard Logbook

Serial ID: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI647735 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS (Reference)

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7730 mg/kg	Antimony	60.6 mg/kg
Arsenic	257 mg/kg	Barium	472 mg/kg
Beryllium	88.4 mg/kg	Boron	130 mg/kg
Cadmium	117 mg/kg	Calcium	3640 mg/kg
Chromium	72.8 mg/kg	Cobalt	82.5 mg/kg
Copper	100 mg/kg	Iron	14500 mg/kg
Lead	166 mg/kg	Magnesium	3000 mg/kg
Manganese	374 mg/kg	Mercury	4.18 mg/kg
Molybdenum	82.7 mg/kg	Nickel	103 mg/kg
Phosphorous	690 mg/kg	Potassium	2410 mg/kg
Selenium	173 mg/kg	Silica	3896 mg/kg
Silicon	1818 mg/kg	Silver	123 mg/kg
Sodium	574 mg/kg	Strontium	160 mg/kg
Sulfur	200 mg/kg	Thallium	194 mg/kg
Tin	107 mg/kg	Titanium	269 mg/kg
Vanadium	138 mg/kg	Zinc	201 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091208-01 **Opened:** 08-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 08-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 09-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091208-02 **Opened:** 08-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 09-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG091208-07 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG091208-08 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091208-09 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091208-10 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG091208-11 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Serial ID: WHG091208-12 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091208-14 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091211-42 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091211-43 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091211-44 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091211-45 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091211-46 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091211-47 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091218-43 **Opened:** 18-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WMS091214-04 **Opened:** 14-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 14-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 15-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1242296
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091214-04A **Opened:** 14-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 14-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091214-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091214-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091214-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091214-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091214-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091214-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091214-05 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 14-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091214-06 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 14-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091214-07 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 14-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 15-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1242296
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091214-08 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 14-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091214-70 **Opened:** 14-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 14-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 15-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091215-04 **Opened:** 15-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 15-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 16-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1242296
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091215-04A **Opened:** 15-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 15-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091215-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091215-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091215-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091215-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091215-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091215-05 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 15-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L•	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091215-06 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 15-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091215-07 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 15-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 16-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1242296
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091215-08 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 15-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091215-70 **Opened:** 15-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 15-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 16-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1242296
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Standard Logbook

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242296 **Opened:** 14-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 14-DEC-09
Type: Reagent/Solvent **Expires:** 21-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1242318 **Opened:** 14-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 20-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-667

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	927055	**Method:**	SW846 9012A
Prep Batch :	927054	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241825001	RE03-09-14115
241825002	RE03-09-14113
241825003	RE03-09-14125
241825004	RE03-09-14123
241825005	RE03-09-14114
241825006	RE03-09-14126
241825007	RE03-09-14117
241825008	RE03-09-14121
241825009	RE03-09-14129
241825010	RE03-09-14120
241825011	RE03-09-14116
241825012	RE03-09-14111
241825013	RE03-09-14119
241825014	RE03-09-14110
241825015	RE03-09-14127
241825016	RE03-09-14118
241825017	RE03-09-14122
241825018	RE03-09-14124
241825019	RE03-09-14112
241825020	RE03-09-14128
1201982089	Method Blank (MB)
1201982090	241825001(RE03-09-14115) Sample Duplicate (DUP)
1201982091	241825002(RE03-09-14113) Sample Duplicate (DUP)
1201982092	241825001(RE03-09-14115) Matrix Spike (MS)
1201982093	241825002(RE03-09-14113) Matrix Spike (MS)
1201982094	241825001(RE03-09-14115) Matrix Spike Duplicate (MSD)
1201982095	241825002(RE03-09-14113) Matrix Spike Duplicate (MSD)
1201982096	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241825001 (RE03-09-14115) and 241825002 (RE03-09-14113).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The Relative Percent Difference (RPD) between the sample and its duplicate falls outside of the normal acceptance limits for samples 1201982091 (RE03-09-14113) and 241825002 (RE03-09-14113) because of the heterogeneous matrix of the sample.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201982096 (LCS).

Sample Re-analysis
The following samples were re-analyzed due to instrument failure: 1201982093 (RE03-09-14113) and 241825009 (RE03-09-14129).

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 767175 1201982091 (RE03-09-14113).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 21Dec09

Sample Data Summary

GEL LABORATORIES LLC

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Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-667 GEL Work Order: 241825

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
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TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14115	Project:	LANL01004
Sample ID:	241825001	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	<0.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	64.2	236	ug/kg	1	AXC2 12/07/09	1255	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14113	Project:	LANL01004
Sample ID:	241825002	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	9.91%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total		340	75.5	278	ug/kg	1	AXC2 12/07/09	1302	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14125	Project:	LANL01004
Sample ID:	241825003	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.09%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	63.3	233	ug/kg	1	AXC2 12/07/09	1306	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14123	Project:	LANL01004
Sample ID:	241825004	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	5.53%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.6	259	ug/kg	1	AXC2 12/07/09	1307	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14114	Project:	LANL01004
Sample ID:	241825005	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	.908%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.6	252	ug/kg	1	AXC2 12/07/09	1308	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14126	Project:	LANL01004
Sample ID:	241825006	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	8.22%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.4	248	ug/kg	1	AXC2 12/07/09	1309	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14117	Project:	LANL01004
Sample ID:	241825007	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	8.13%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2 12/07/09	1313	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14121	Project:	LANL01004
Sample ID:	241825008	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	12.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.9	275	ug/kg	1	AXC2 12/07/09	1314	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14129	Project:	LANL01004
Sample ID:	241825009	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	1.51%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	62.8	231	ug/kg	1	AXC2 12/07/09	1330	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14120	Project:	LANL01004
Sample ID:	241825010	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	2.63%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2 12/07/09	1316	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14116	Project:	LANL01004
Sample ID:	241825011	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.2	251	ug/kg	1	AXC2 12/07/09	1317	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14111	Project:	LANL01004
Sample ID:	241825012	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	12.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.8	264	ug/kg	1	AXC2 12/07/09	1317	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14119	Project:	LANL01004
Sample ID:	241825013	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	1.67%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.2	254	ug/kg	1	AXC2 12/07/09	1318	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14110	Project:	LANL01004
Sample ID:	241825014	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	3.64%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.2	254	ug/kg	1	AXC2 12/07/09	1319	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14127	Project:	LANL01004
Sample ID:	241825015	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	4.83%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.4	248	ug/kg	1	AXC2 12/07/09	1320	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14118	Project:	LANL01004
Sample ID:	241825016	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	9.48%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.7	271	ug/kg	1	AXC2 12/07/09	1321	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14122	Project:	LANL01004
Sample ID:	241825017	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	5.64%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.7	260	ug/kg	1	AXC2 12/07/09	1326	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14124	Project:	LANL01004
Sample ID:	241825018	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	7.83%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	64.7	238	ug/kg	1	AXC2 12/07/09	1326	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14112	Proiect:	LANL01004
Sample ID:	241825019	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	11.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	76.5	281	ug/kg	1	AXC2 12/07/09	1327	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 21, 2009

Client SDG: 10-667

Client Sample ID:	RE03-09-14128	Project:	LANL01004
Sample ID:	241825020	Client ID:	LANL010
Matrix:	S		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	2.79%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	62.5	230	ug/kg	1	AXC2 12/07/09	1328	927055	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/03/09	1430	927054

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: December 21, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241825

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 927055											
QC1201982090 241825001 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	12/07/09 12:56
QC1201982091 241825002 DUP											
Cyanide, Total			340	U	ND	ug/kg	200 ^				12/07/09 13:03
QC1201982096 LCS											
Cyanide, Total	67900				70300	ug/kg		103	(46%-145%)		12/07/09 12:54
QC1201982089 MB											
Cyanide, Total				U	250	ug/kg					12/07/09 12:53
QC1201982092 241825001 MS											
Cyanide, Total	4810	U	ND		4270	ug/kg		88.8	(50%-130%)		12/07/09 13:01
QC1201982093 241825002 MS											
Cyanide, Total	4960		340		5400	ug/kg		102	(50%-130%)		12/07/09 13:29
QC1201982094 241825001 MSD											
Cyanide, Total	4460	U	ND		3590	ug/kg	17.2	80.5	(0%-30%)		12/07/09 13:01
QC1201982095 241825002 MSD											
Cyanide, Total	5550		340		5830	ug/kg	7.59	98.9	(0%-30%)		12/07/09 13:05

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: 241825

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 21-DEC-2009 14:46

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-667

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**07-DEC-2009 12:18:17**	**OM_12-7-2009_12-07-49**	**143**	**150**	**95**	**(90%-110%)**	**Yes**
CCV	07-DEC-2009 12:45:00	OM_12-7-2009_12-07-49	110	100	110	(90%-110%)	Yes
CCV	07-DEC-2009 12:57:22	OM_12-7-2009_12-07-49	100	100	100	(90%-110%)	Yes
CCV	07-DEC-2009 13:09:53	OM_12-7-2009_12-07-49	101	100	101	(90%-110%)	Yes
CCV	07-DEC-2009 13:22:21	OM_12-7-2009_12-07-49	99.9	100	100	(90%-110%)	Yes
CCV	07-DEC-2009 13:34:48	OM_12-7-2009_12-07-49	99.9	100	100	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**07-DEC-2009 12:20:08**	**OM_12-7-2009_12-07-49**	**-1.61**	**5**	**Yes**
CCB	07-DEC-2009 12:46:49	OM_12-7-2009_12-07-49	-1.71	5	Yes
CCB	07-DEC-2009 12:59:12	OM_12-7-2009_12-07-49	-2.01	5	Yes
CCB	07-DEC-2009 13:11:44	OM_12-7-2009_12-07-49	-1.91	5	Yes
CCB	07-DEC-2009 13:24:12	OM_12-7-2009_12-07-49	-1.86	5	Yes
CCB	07-DEC-2009 13:36:38	OM_12-7-2009_12-07-49	-0.0359	5	Yes

Cyanide, Total

Prep LogBook

Analyst: SXJ1 Verified by:_____

Batch: 927054

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982096	URF1200957-01	.25	g
MS	1201982092	URF1184831-02	.025	mL
MS	1201982093	URF1184831-02	.025	mL
MSD	1201982094	URF1184831-02	.025	mL
MSD	1201982095	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201982089		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
LCS	1201982096		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.25 g	25 mL	100	SOIL
SAMPLE	241825001		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.53 g	25 mL	47.16981	SOIL
DUP	1201982090	241825001	SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
MS	1201982092	241825001	SW846 9010B Prep	03-DEC-2009 14:30	>12	0.52 g	25 mL	48.07692	SOIL
MSD	1201982094	241825001	SW846 9010B Prep	03-DEC-2009 14:30	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241825002		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
DUP	1201982091	241825002	SW846 9010B Prep	03-DEC-2009 14:30	>12	0.55 g	25 mL	45.45455	SOIL
MS	1201982093	241825002	SW846 9010B Prep	03-DEC-2009 14:30	>12	0.56 g	25 mL	44.64286	SOIL
MSD	1201982095	241825002	SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241825003		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241825004		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241825005		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241825006		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241825007		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241825008		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241825009		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241825010		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241825011		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241825012		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241825013		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241825014		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241825015		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	241825016		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241825017		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241825018		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	241825019		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.5 g	25 mL	50	SOIL
SAMPLE	241825020		SW846 9010B Prep	03-DEC-2009 14:30	>12	0.56 g	25 mL	44.64286	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091203-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments.

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/7/2009 12:11:08	OM_12-7-2009_12-07-49
150 ppb		1	axc2	12/7/2009 12:12:01	OM_12-7-2009_12-07-49
100 ppb		1	axc2	12/7/2009 12:12:53	OM_12-7-2009_12-07-49
50 ppb		1	axc2	12/7/2009 12:13:46	OM_12-7-2009_12-07-49
10 ppb		1	axc2	12/7/2009 12:14:39	OM_12-7-2009_12-07-49
CRDL 5.0 ppb		1	axc2	12/7/2009 12:15:33	OM_12-7-2009_12-07-49
ICAL-00		1	axc2	12/7/2009 12:16:27	OM_12-7-2009_12-07-49
ICV		1	axc2	12/7/2009 12:18:17	OM_12-7-2009_12-07-49
ICB		1	axc2	12/7/2009 12:20:08	OM_12-7-2009_12-07-49
CRDL		1	axc2	12/7/2009 12:21:57	OM_12-7-2009_12-07-49
1201982533	927317	1	axc2	12/7/2009 12:23:47	OM_12-7-2009_12-07-49
1201982540	927317	25	axc2	12/7/2009 12:24:40	OM_12-7-2009_12-07-49
241901001	927317	1	axc2	12/7/2009 12:25:33	OM_12-7-2009_12-07-49
241901002	927317	1	axc2	12/7/2009 12:26:26	OM_12-7-2009_12-07-49
241901003	927317	1	axc2	12/7/2009 12:27:19	OM_12-7-2009_12-07-49
241901004	927317	1	axc2	12/7/2009 12:28:12	OM_12-7-2009_12-07-49
241901005	927317	1	axc2	12/7/2009 12:29:05	OM_12-7-2009_12-07-49
241905001	927317	1	axc2	12/7/2009 12:29:57	OM_12-7-2009_12-07-49
1201982534	927317	1	axc2	12/7/2009 12:30:49	OM_12-7-2009_12-07-49
1201982536	927317	1	axc2	12/7/2009 12:31:42	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009 12:32:34	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009 12:34:25	OM_12-7-2009_12-07-49
1201982538	927317	1	axc2	12/7/2009 12:36:13	OM_12-7-2009_12-07-49
241909001	927317	1	axc2	12/7/2009 12:37:05	OM_12-7-2009_12-07-49
241909002	927317	1	axc2	12/7/2009 12:37:57	OM_12-7-2009_12-07-49
241913001	927317	1	axc2	12/7/2009 12:38:49	OM_12-7-2009_12-07-49
1201982535	927317	1	axc2	12/7/2009 12:39:40	OM_12-7-2009_12-07-49
1201982537	927317	1	axc2	12/7/2009 12:40:34	OM_12-7-2009_12-07-49
1201982539	927317	1	axc2	12/7/2009 12:41:27	OM_12-7-2009_12-07-49
241916011	927317	1	axc2	12/7/2009 12:42:21	OM_12-7-2009_12-07-49
241922001	927317	1	axc2	12/7/2009 12:43:14	OM_12-7-2009_12-07-49
241922002	927317	1	axc2	12/7/2009 12:44:07	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009 12:45:00	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009 12:46:49	OM_12-7-2009_12-07-49
241922003	927317	1	axc2	12/7/2009 12:48:39	OM_12-7-2009_12-07-49
241922004	927317	1	axc2	12/7/2009 12:49:31	OM_12-7-2009_12-07-49
241922005	927317	1	axc2	12/7/2009 12:50:24	OM_12-7-2009_12-07-49
241922006	927317	1	axc2	12/7/2009 12:51:17	OM_12-7-2009_12-07-49
241922007	927317	1	axc2	12/7/2009 12:52:09	OM_12-7-2009_12-07-49
242027001	927317	1	axc2	12/7/2009 12:53:02	OM_12-7-2009_12-07-49
1201982089	927055	1	axc2	12/7/2009 12:53:54	OM_12-7-2009_12-07-49
1201982096	927055	25	axc2	12/7/2009 12:54:46	OM_12-7-2009_12-07-49
241825001	927055	1	axc2	12/7/2009 12:55:37	OM_12-7-2009_12-07-49
1201982090	927055	1	axc2	12/7/2009 12:56:29	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009 12:57:22	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009 12:59:12	OM_12-7-2009_12-07-49
1201982092	927055	1	axc2	12/7/2009 13:01:02	OM_12-7-2009_12-07-49
1201982094	927055	1	axc2	12/7/2009 13:01:56	OM_12-7-2009_12-07-49
241825002	927055	1	axc2	12/7/2009 13:02:49	OM_12-7-2009_12-07-49
1201982091	927055	1	axc2	12/7/2009 13:03:43	OM_12-7-2009_12-07-49
1201982093*	927055	1	axc2	12/7/2009 13:04:36	OM_12-7-2009_12-07-49
1201982095	927055	1	axc2	12/7/2009 13:05:29	OM_12-7-2009_12-07-49
241825003	927055	1	axc2	12/7/2009 13:06:23	OM_12-7-2009_12-07-49
241825004	927055	1	axc2	12/7/2009 13:07:16	OM_12-7-2009_12-07-49
241825005	927055	1	axc2	12/7/2009 13:08:09	OM_12-7-2009_12-07-49
241825006	927055	1	axc2	12/7/2009 13:09:01	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009 13:09:53	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009 13:11:44	OM_12-7-2009_12-07-49

241825007	927055	1	axc2	12/7/2009	13:13:31	OM_12-7-2009_12-07-49
241825008	927055	1	axc2	12/7/2009	13:14:24	OM_12-7-2009_12-07-49
241825009*	927055	1	axc2	12/7/2009	13:15:16	OM_12-7-2009_12-07-49
241825010	927055	1	axc2	12/7/2009	13:16:08	OM_12-7-2009_12-07-49
241825011	927055	1	axc2	12/7/2009	13:17:00	OM_12-7-2009_12-07-49
241825012	927055	1	axc2	12/7/2009	13:17:55	OM_12-7-2009_12-07-49
241825013	927055	1	axc2	12/7/2009	13:18:48	OM_12-7-2009_12-07-49
241825014	927055	1	axc2	12/7/2009	13:19:42	OM_12-7-2009_12-07-49
241825015	927055	1	axc2	12/7/2009	13:20:35	OM_12-7-2009_12-07-49
241825016	927055	1	axc2	12/7/2009	13:21:29	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	13:22:21	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	13:24:12	OM_12-7-2009_12-07-49
241825017	927055	1	axc2	12/7/2009	13:26:02	OM_12-7-2009_12-07-49
241825018	927055	1	axc2	12/7/2009	13:26:54	OM_12-7-2009_12-07-49
241825019	927055	1	axc2	12/7/2009	13:27:47	OM_12-7-2009_12-07-49
241825020	927055	1	axc2	12/7/2009	13:28:41	OM_12-7-2009_12-07-49
1201982093	927055	1	axc2	12/7/2009	13:29:34	OM_12-7-2009_12-07-49
241825009	927055	1	axc2	12/7/2009	13:30:26	OM_12-7-2009_12-07-49
1201984795	928227	1	axc2	12/7/2009	13:31:19	OM_12-7-2009_12-07-49
1201984791	928227	1	axc2	12/7/2009	13:32:11	OM_12-7-2009_12-07-49
241970002	928227	1	axc2	12/7/2009	13:33:04	OM_12-7-2009_12-07-49
241977002	928227	1	axc2	12/7/2009	13:33:56	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	13:34:48	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	13:36:38	OM_12-7-2009_12-07-49
1201984792	928227	1	axc2	12/7/2009	13:38:27	OM_12-7-2009_12-07-49
1201984793	928227	1	axc2	12/7/2009	13:39:20	OM_12-7-2009_12-07-49
1201984794	928227	1	axc2	12/7/2009	13:40:13	OM_12-7-2009_12-07-49
241988001	928227	1	axc2	12/7/2009	13:41:07	OM_12-7-2009_12-07-49
241995001	928227	1	axc2	12/7/2009	13:42:02	OM_12-7-2009_12-07-49
242001001	928227	1	axc2	12/7/2009	13:42:55	OM_12-7-2009_12-07-49
242070002	928227	1	axc2	12/7/2009	13:43:49	OM_12-7-2009_12-07-49
242070003	928227	1	axc2	12/7/2009	13:44:43	OM_12-7-2009_12-07-49
242070004	928227	1	axc2	12/7/2009	13:45:36	OM_12-7-2009_12-07-49
242070005	928227	1	axc2	12/7/2009	13:46:29	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	13:47:22	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	13:49:12	OM_12-7-2009_12-07-49
242070006*	928227	1	axc2	12/7/2009	13:51:02	OM_12-7-2009_12-07-49
242070007	928227	1	axc2	12/7/2009	13:51:56	OM_12-7-2009_12-07-49
242070008	928227	1	axc2	12/7/2009	13:52:48	OM_12-7-2009_12-07-49
1201985965	928227	1	axc2	12/7/2009	13:53:40	OM_12-7-2009_12-07-49
1201985966*	928227	1	axc2	12/7/2009	13:54:32	OM_12-7-2009_12-07-49
1201985967	928227	1	axc2	12/7/2009	13:55:25	OM_12-7-2009_12-07-49
242070009	928227	1	axc2	12/7/2009	13:56:17	OM_12-7-2009_12-07-49
242070010	928227	1	axc2	12/7/2009	13:57:11	OM_12-7-2009_12-07-49
242070011	928227	1	axc2	12/7/2009	13:58:06	OM_12-7-2009_12-07-49
242070012	928227	1	axc2	12/7/2009	13:59:00	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	13:59:53	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	14:01:44	OM_12-7-2009_12-07-49
242070006	928227	1	axc2	12/7/2009	14:03:33	OM_12-7-2009_12-07-49
1201985966	928227	1	axc2	12/7/2009	14:04:25	OM_12-7-2009_12-07-49
242070013	928227	1	axc2	12/7/2009	14:05:20	OM_12-7-2009_12-07-49
242070014	928227	1	axc2	12/7/2009	14:06:13	OM_12-7-2009_12-07-49
1201985987*	928766	1	axc2	12/7/2009	14:07:07	OM_12-7-2009_12-07-49
1201985991*	928766	1	axc2	12/7/2009	14:08:00	OM_12-7-2009_12-07-49
242039001*	928766	1	axc2	12/7/2009	14:08:54	OM_12-7-2009_12-07-49
1201985988*	928766	1	axc2	12/7/2009	14:09:48	OM_12-7-2009_12-07-49
1201985989*	928766	1	axc2	12/7/2009	14:10:41	OM_12-7-2009_12-07-49
1201985990*	928766	1	axc2	12/7/2009	14:11:33	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	14:12:26	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	14:14:16	OM_12-7-2009_12-07-49

1201985987*	928766	1	axc2	12/7/2009	14:16:06	OM_12-7-2009_12-07-49
1201985991	928766	1	axc2	12/7/2009	14:17:00	OM_12-7-2009_12-07-49
242039001	928766	1	axc2	12/7/2009	14:17:53	OM_12-7-2009_12-07-49
1201985988	928766	1	axc2	12/7/2009	14:18:46	OM_12-7-2009_12-07-49
1201985989	928766	1	axc2	12/7/2009	14:19:40	OM_12-7-2009_12-07-49
1201985990	928766	1	axc2	12/7/2009	14:20:32	OM_12-7-2009_12-07-49
1201985987	928766	1	axc2	12/7/2009	14:21:26	OM_12-7-2009_12-07-49
242039002	928766	1	axc2	12/7/2009	14:22:19	OM_12-7-2009_12-07-49
242039003	928766	1	axc2	12/7/2009	14:23:11	OM_12-7-2009_12-07-49
242039004	928766	1	axc2	12/7/2009	14:24:04	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	14:24:56	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	14:26:47	OM_12-7-2009_12-07-49
242039005	928766	1	axc2	12/7/2009	14:28:35	OM_12-7-2009_12-07-49
242040001	928766	1	axc2	12/7/2009	14:29:30	OM_12-7-2009_12-07-49
1201987013	928766	1	axc2	12/7/2009	14:30:24	OM_12-7-2009_12-07-49
1201987016	928766	1	axc2	12/7/2009	14:31:19	OM_12-7-2009_12-07-49
1201987019	928766	1	axc2	12/7/2009	14:32:13	OM_12-7-2009_12-07-49
242095001	928766	1	axc2	12/7/2009	14:33:07	OM_12-7-2009_12-07-49
242095002	928766	1	axc2	12/7/2009	14:34:01	OM_12-7-2009_12-07-49
1201987014	928766	1	axc2	12/7/2009	14:34:55	OM_12-7-2009_12-07-49
1201987017	928766	1	axc2	12/7/2009	14:35:48	OM_12-7-2009_12-07-49
1201987020	928766	1	axc2	12/7/2009	14:36:42	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	14:37:34	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	14:39:25	OM_12-7-2009_12-07-49
242095003	928766	1	axc2	12/7/2009	14:41:14	OM_12-7-2009_12-07-49
242095004	928766	1	axc2	12/7/2009	14:42:07	OM_12-7-2009_12-07-49
242095006	928766	1	axc2	12/7/2009	14:43:00	OM_12-7-2009_12-07-49
242095007	928766	1	axc2	12/7/2009	14:43:53	OM_12-7-2009_12-07-49
242095008	928766	1	axc2	12/7/2009	14:44:46	OM_12-7-2009_12-07-49
242095009	928766	1	axc2	12/7/2009	14:45:39	OM_12-7-2009_12-07-49
242095010	928766	1	axc2	12/7/2009	14:46:33	OM_12-7-2009_12-07-49
242095011	928766	1	axc2	12/7/2009	14:47:28	OM_12-7-2009_12-07-49
242095012	928766	1	axc2	12/7/2009	14:48:22	OM_12-7-2009_12-07-49
242106002*	928766	1	axc2	12/7/2009	14:49:16	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	14:50:09	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	14:52:00	OM_12-7-2009_12-07-49
242185002	928766	1	axc2	12/7/2009	14:53:50	OM_12-7-2009_12-07-49
242200002	928766	1	axc2	12/7/2009	14:54:44	OM_12-7-2009_12-07-49
1201987015	928766	1	axc2	12/7/2009	14:55:39	OM_12-7-2009_12-07-49
1201987018*	928766	1	axc2	12/7/2009	14:56:32	OM_12-7-2009_12-07-49
1201987021	928766	1	axc2	12/7/2009	14:57:26	OM_12-7-2009_12-07-49
1201984804	928233	1	axc2	12/7/2009	14:58:19	OM_12-7-2009_12-07-49
1201984805	928233	250	axc2	12/7/2009	14:59:12	OM_12-7-2009_12-07-49
241795001	928233	1	axc2	12/7/2009	15:00:05	OM_12-7-2009_12-07-49
242030001	928233	1	axc2	12/7/2009	15:00:59	OM_12-7-2009_12-07-49
1201985986	928233	1	axc2	12/7/2009	15:01:51	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	15:02:44	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	15:04:34	OM_12-7-2009_12-07-49
1201987042	929146	1	axc2	12/7/2009	15:06:23	OM_12-7-2009_12-07-49
1201987044	929146	250	axc2	12/7/2009	15:07:19	OM_12-7-2009_12-07-49
242107001	929146	1	axc2	12/7/2009	15:08:13	OM_12-7-2009_12-07-49
242199001	929146	1	axc2	12/7/2009	15:09:08	OM_12-7-2009_12-07-49
1201987043	929146	1	axc2	12/7/2009	15:10:02	OM_12-7-2009_12-07-49
242106002	928766	1	axc2	12/7/2009	15:10:56	OM_12-7-2009_12-07-49
1201987018	928766	1	axc2	12/7/2009	15:11:50	OM_12-7-2009_12-07-49
CCV		1	axc2	12/7/2009	15:12:43	OM_12-7-2009_12-07-49
CCB		1	axc2	12/7/2009	15:14:34	OM_12-7-2009_12-07-49

Author: axc2

Date : 12/7/2009

Original Run Filename: OM_12-7-2009_12-07-49.OMN created 12/7/2009 12:07:49
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-7-2009_12-07-49.OMN last modified 12/7/2009 15:15:40
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091207-01	1	S1	200	7.99	12/7/2009@12:11:08			200 ppb
WCN091207-02	1	S2	150	6.17	12/7/2009@12:12:01			150 ppb
WCN091207-03	1	S3	100	4.14	12/7/2009@12:12:53			100 ppb
WCN091207-04	1	S4	50.0	2.14	12/7/2009@12:13:46			50 ppb
WCN091207-05	1	S5	10.0	0.494	12/7/2009@12:14:39			10 ppb
WCN091207-06	1	S6	5.00	0.295	12/7/2009@12:15:33			CRDL 5.0 ppb
WCN091207-08	1	S7	0.00	0.0177	12/7/2009@12:16:27			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99977 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091207-07	1	S8	143	5.83	12/7/2009@12:18:17			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-4.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-4.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091207-08	1	S7	-1.61	0.0300	12/7/2009@12:20:08			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.61 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.61 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091207-06	1	S6	4.92	0.291	12/7/2009@12:21:57			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.92 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.92 > 2.50					
		Message	Pass					
		Action	None					
1201982533|927317|MB	1	1	-1.84	0.0210	12/7/2009@12:23:47			
1201982540||LCS	1	2	24.6	1.08	12/7/2009@12:24:40		25.00	
241901001	1	3	-1.06	0.0519	12/7/2009@12:25:33			
241901002	1	4	-0.0233	0.0934	12/7/2009@12:26:26			
241901003	1	5	0.0431	0.0961	12/7/2009@12:27:19			
241901004	1	6	-1.44	0.0370	12/7/2009@12:28:12			
241901005	1	7	0.275	0.105	12/7/2009@12:29:05			
241905001	1	8	-0.933	0.0570	12/7/2009@12:29:57			
1201982534||DUP	1	9	-1.03	0.0532	12/7/2009@12:30:49			
1201982536||MS	1	10	90.6	3.72	12/7/2009@12:31:42			
WCN091207-03	1	S3	108	4.43	12/7/2009@12:32:34			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.4 < 10.0					

		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	8.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-2.68	-0.0130	12/7/2009@12:34:25			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.68 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.68 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982538||MSD	1	11	85.6	3.51	12/7/2009@12:36:13			
241909001	1	12	-1.22	0.0454	12/7/2009@12:37:05			
241909002	1	13	-1.42	0.0375	12/7/2009@12:37:57			
241913001	1	14	0.407	0.111	12/7/2009@12:38:49			
1201982535||DUP	1	15	-1.52	0.0335	12/7/2009@12:39:40			
1201982537||MS	1	16	90.0	3.69	12/7/2009@12:40:34			
1201982539||MSD	1	17	97.0	3.97	12/7/2009@12:41:27			
241916011	1	18	2.40	0.190	12/7/2009@12:42:21			
241922001	1	19	15.9	0.728	12/7/2009@12:43:14			
241922002	1	20	7.48	0.393	12/7/2009@12:44:07			
WCN091207-03	1	S3	110	4.48	12/7/2009@12:45:00			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	9.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	9.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.71	0.0261	12/7/2009@12:46:49			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.71 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.71 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241922003	1	21	14.3	0.666	12/7/2009@12:48:39			
241922004	1	22	5.35	0.308	12/7/2009@12:49:31			
241922005	1	23	15.2	0.703	12/7/2009@12:50:24			
241922006	1	24	0.484	0.114	12/7/2009@12:51:17			
241922007	1	25	0.373	0.109	12/7/2009@12:52:09			
242027001	1	26	-1.07	0.0515	12/7/2009@12:53:02			
1201982089|927055|MB	1	27	-1.79	0.0227	12/7/2009@12:53:54			
1201982096||LCS	1	28	28.1	1.22	12/7/2009@12:54:46		25.00	
241825001	1	29	-1.56	0.0321	12/7/2009@12:55:37			
1201982090||DUP	1	30	-1.47	0.0358	12/7/2009@12:56:29			
WCN091207-03	1	S3	100	4.10	12/7/2009@12:57:22			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-2.01	0.0139	12/7/2009@12:59:12			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	-2.01 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.01 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982092||MS	1	31	88.8	3.64	12/7/2009@13:01:02			
1201982094||MSD	1	32	80.5	3.31	12/7/2009@13:01:56			
241825002	1	33	6.13	0.339	12/7/2009@13:02:49			
1201982091||DUP	1	34	-0.939	0.0568	12/7/2009@13:03:43			
1201982093||MS	1	35	63.5	2.63	12/7/2009@13:04:36			
1201982095||MSD	1	36	105	4.28	12/7/2009@13:05:29			
241825003	1	37	-1.25	0.0442	12/7/2009@13:06:23			
241825004	1	38	-1.03	0.0531	12/7/2009@13:07:16			
241825005	1	39	-0.764	0.0638	12/7/2009@13:08:09			
241825006	1	40	-0.742	0.0647	12/7/2009@13:09:01			
WCN091207-03	1	S3	101	4.12	12/7/2009@13:09:53			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.91	0.0180	12/7/2009@13:11:44			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.91 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.91 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241825007	1	41	-0.415	0.0778	12/7/2009@13:13:31			
241825008	1	42	0.278	0.105	12/7/2009@13:14:24			
241825009	1	43	3.94	0.252	12/7/2009@13:15:16			
241825010	1	44	-1.27	0.0434	12/7/2009@13:16:08			
241825011	1	45	-1.30	0.0422	12/7/2009@13:17:00			
241825012	1	46	-1.31	0.0419	12/7/2009@13:17:55			
241825013	1	47	-1.34	0.0406	12/7/2009@13:18:48			
241825014	1	48	-1.47	0.0357	12/7/2009@13:19:42			
241825015	1	49	-1.51	0.0340	12/7/2009@13:20:35			
241825016	1	50	-1.42	0.0375	12/7/2009@13:21:29			
WCN091207-03	1	S3	99.9	4.09	12/7/2009@13:22:21			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.86	0.0202	12/7/2009@13:24:12			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.86 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.86 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241825017	1	51	-1.66	0.0281	12/7/2009@13:26:02			
241825018	1	52	-1.63	0.0293	12/7/2009@13:26:54			
241825019	1	53	-0.699	0.0664	12/7/2009@13:27:47			
241825020	1	54	-1.73	0.0252	12/7/2009@13:28:41			
1201982093||MS	1	35	109	4.43	12/7/2009@13:29:34			
241825009	1	43	-1.29	0.0427	12/7/2009@13:30:26			
1201984795|928227|LCS	1	55	47.4	1.99	12/7/2009@13:31:19			
1201984791||MB	1	56	2.63	0.199	12/7/2009@13:32:11			
241970002	1	57	-1.18	0.0473	12/7/2009@13:33:04			
241977002	1	58	-0.853	0.0603	12/7/2009@13:33:56			
WCN091207-03	1	S3	99.9	4.09	12/7/2009@13:34:48			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
Result:			-0.1 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.1 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091207-08	1	S7	-0.0359	0.0929	12/7/2009@13:36:38			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
Result:			-0.0359 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.0359 > -5.00					
Message			CCB Passed					
Action			Continue					
1201984792||DUP	1	59	-1.59	0.0308	12/7/2009@13:38:27			
1201984793||MS	1	60	87.8	3.60	12/7/2009@13:39:20			
1201984794||MSD	1	61	88.8	3.64	12/7/2009@13:40:13			
241988001	1	62	-1.97	0.0156	12/7/2009@13:41:07			
241995001	1	63	-2.08	0.0113	12/7/2009@13:42:02			
242001001	1	64	-0.495	0.0746	12/7/2009@13:42:55			
242070002	1	65	-1.74	0.0248	12/7/2009@13:43:49			
242070003	1	66	-0.783	0.0631	12/7/2009@13:44:43			
242070004	1	67	-1.48	0.0352	12/7/2009@13:45:36			
242070005	1	68	-1.14	0.0487	12/7/2009@13:46:29			
WCN091207-03	1	S3	100	4.09	12/7/2009@13:47:22			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
Result:			0.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			0.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091207-08	1	S7	-2.54	-0.00726	12/7/2009@13:49:12			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
Result:			-2.54 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.54 > -5.00					
Message			CCB Passed					
Action			Continue					
242070006	1	69	-10.7	-0.333	12/7/2009@13:51:02			
242070007	1	70	-1.69	0.0266	12/7/2009@13:51:56			
242070008	1	71	-1.59	0.0310	12/7/2009@13:52:48			
1201985965||DUP	1	72	-1.84	0.0208	12/7/2009@13:53:40			
1201985966||MS	1	73	-1.73	0.0250	12/7/2009@13:54:32			
1201985967||MSD	1	74	96.3	3.94	12/7/2009@13:55:25			
242070009	1	75	-1.44	0.0367	12/7/2009@13:56:17			
242070010	1	76	-1.69	0.0270	12/7/2009@13:57:11			

242070011	1	77	-1.05	0.0524	12/7/2009@13:58:06			
242070012	1	78	-1.59	0.0308	12/7/2009@13:59:00			
WCN091207-03	1	S3	99.6	4.08	12/7/2009@13:59:53			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-0.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-0.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-2.30	0.00262	12/7/2009@14:01:44			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.30 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.30 > -5.00					
		Message	CCB Passed					
		Action	Continue					
242070006	1	69	-1.46	0.0359	12/7/2009@14:03:33			
1201985966||MS	1	73	96.2	3.94	12/7/2009@14:04:25			
242070013	1	79	-0.872	0.0595	12/7/2009@14:05:20			
242070014	1	80	-1.55	0.0324	12/7/2009@14:06:13			
1201985987|928766|MB	1	81	7.25	0.384	12/7/2009@14:07:07			
1201985991||LCS	1	82	99.6	4.08	12/7/2009@14:08:00			
242039001	1	83	-1.15	0.0485	12/7/2009@14:08:54			
1201985988||DUP	1	84	-2.36	-1.40e-4	12/7/2009@14:09:48			
1201985989||MS	1	85	205	8.30	12/7/2009@14:10:41			
1201985990||MSD	1	86	219	8.86	12/7/2009@14:11:33			
WCN091207-03	1	S3	101	4.13	12/7/2009@14:12:26			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.71	0.0258	12/7/2009@14:14:16			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.71 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.71 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201985987|928766|MB	1	81	7.26	0.385	12/7/2009@14:16:06			
1201985991||LCS	1	82	47.6	2.00	12/7/2009@14:17:00			
242039001	1	83	-1.60	0.0302	12/7/2009@14:17:53			
1201985988||DUP	1	84	-1.59	0.0310	12/7/2009@14:18:46			
1201985989||MS	1	85	205	8.30	12/7/2009@14:19:40			
1201985990||MSD	1	86	218	8.82	12/7/2009@14:20:32			
1201985987|928766|MB	1	81	-0.962	0.0559	12/7/2009@14:21:26			
242039002	1	87	-1.41	0.0378	12/7/2009@14:22:19			
242039003	1	88	-1.73	0.0251	12/7/2009@14:23:11			
242039004	1	89	-1.48	0.0351	12/7/2009@14:24:04			
WCN091207-03	1	S3	99.8	4.08	12/7/2009@14:24:56			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					

DQM Test: < - Percent Relative Difference								
		Result:	-0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-2.52	-0.00651	12/7/2009@14:26:47			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.52 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.52 > -5.00					
		Message	CCB Passed					
		Action	Continue					
242039005	1	90	-1.44	0.0370	12/7/2009@14:28:35			
242040001	1	91	-1.60	0.0304	12/7/2009@14:29:30			
1201987013||DUP	1	92	-1.73	0.0250	12/7/2009@14:30:24			
1201987016||MS	1	93	63.2	2.62	12/7/2009@14:31:19			
1201987019||MSD	1	94	59.8	2.49	12/7/2009@14:32:13			
242095001	1	95	-0.765	0.0638	12/7/2009@14:33:07			
242095002	1	96	-1.85	0.0206	12/7/2009@14:34:01			
1201987014||DUP	1	97	-1.69	0.0269	12/7/2009@14:34:55			
1201987017||MS	1	98	98.1	4.01	12/7/2009@14:35:48			
1201987020||MSD	1	99	108	4.41	12/7/2009@14:36:42			
WCN091207-03	1	S3	100	4.10	12/7/2009@14:37:34			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.09	0.0506	12/7/2009@14:39:25			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.09 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.09 > -5.00					
		Message	CCB Passed					
		Action	Continue					
242095003	1	100	-2.58	-0.00891	12/7/2009@14:41:14			
242095004	1	101	-1.65	0.0282	12/7/2009@14:42:07			
242095006	1	102	-1.87	0.0195	12/7/2009@14:43:00			
242095007	1	103	-2.36	0.00	12/7/2009@14:43:53			
242095008	1	104	-1.59	0.0307	12/7/2009@14:44:46			
242095009	1	105	0.639	0.120	12/7/2009@14:45:39			
242095010	1	106	-1.92	0.0174	12/7/2009@14:46:33			
242095011	1	107	-2.49	-0.00528	12/7/2009@14:47:28			
242095012	1	108	-1.55	0.0325	12/7/2009@14:48:22			
242106002	1	109	-9.42	-0.282	12/7/2009@14:49:16			
WCN091207-03	1	S3	99.9	4.09	12/7/2009@14:50:09			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.69	0.0269	12/7/2009@14:52:00			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.69 < 5.00					

		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.69 > -5.00					
		Message	CCB Passed					
		Action	Continue					
242185002	1	110	32.3	1.38	12/7/2009@14:53:50			
242200002	1	111	0.354	0.108	12/7/2009@14:54:44			
1201987015||DUP	1	112	1.16	0.141	12/7/2009@14:55:39			
1201987018||MS	1	113	40.4	1.71	12/7/2009@14:56:32			
1201987021||MSD	1	114	117	4.78	12/7/2009@14:57:26			
1201984804|928233|MB	1	115	0.510	0.115	12/7/2009@14:58:19			
1201984805||LCS	1	116	149	6.04	12/7/2009@14:59:12		250.00	
241795001	1	117	-1.55	0.0323	12/7/2009@15:00:05			
242030001	1	118	-1.36	0.0400	12/7/2009@15:00:59			
1201985986||DUP	1	119	-1.77	0.0238	12/7/2009@15:01:51			
WCN091207-03	1	S3	100	4.09	12/7/2009@15:02:44			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.56	0.0318	12/7/2009@15:04:34			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.56 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.56 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201987042|929146|MB	1	120	-1.49	0.0347	12/7/2009@15:06:23			
1201987044||LCS	1	121	135	5.50	12/7/2009@15:07:19		250.00	
242107001	1	122	-1.56	0.0321	12/7/2009@15:08:13			
242199001	1	123	-0.469	0.0756	12/7/2009@15:09:08			
1201987043||DUP	1	124	-2.71	-0.0140	12/7/2009@15:10:02			
242106002|928766|	1	109	-1.38	0.0392	12/7/2009@15:10:56			
1201987018||MS	1	113	90.9	3.73	12/7/2009@15:11:50			
WCN091207-03	1	S3	101	4.12	12/7/2009@15:12:43			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091207-08	1	S7	-1.04	0.0528	12/7/2009@15:14:34			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.04 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.04 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-7-2009_12-07-49.OMN

Property	Channel 1
	TCYANIDE

Author: axc2

Date : 12/7/2009

Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

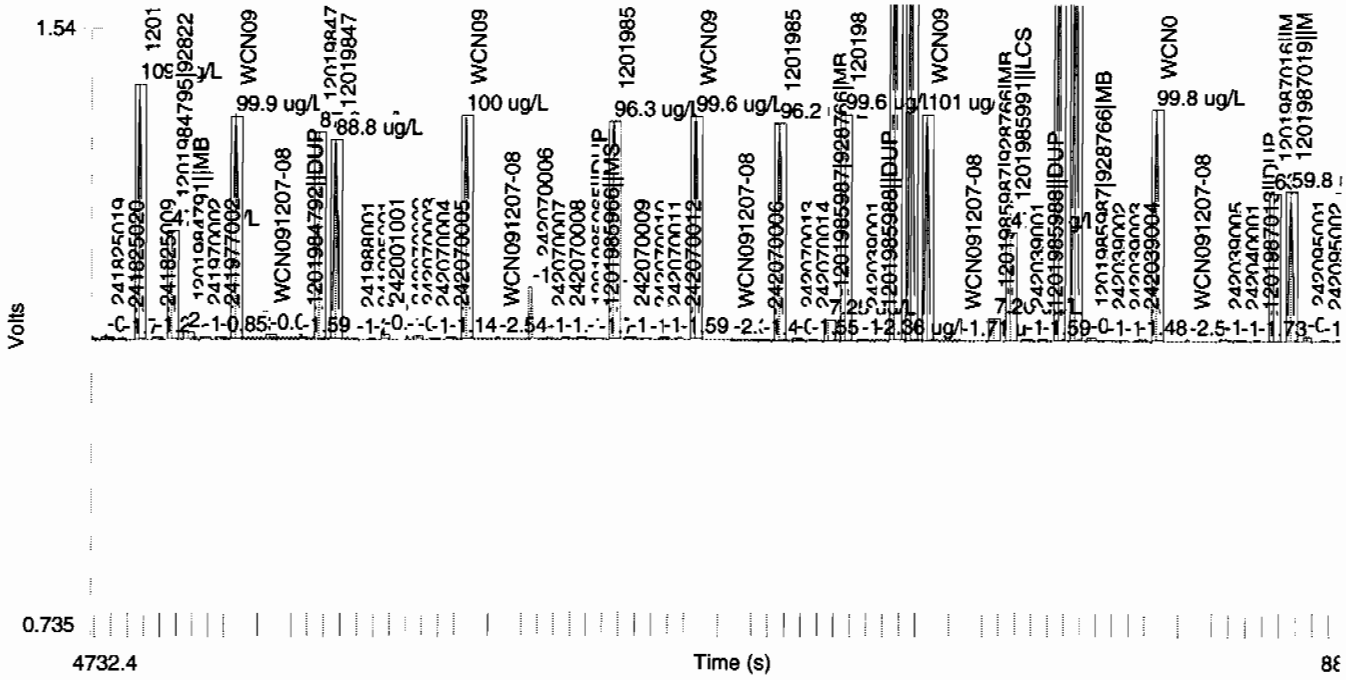

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.99	0.589	1.2	12/7/2009	12:12:11
2	150	1	6.17	0.455	-1.3	12/7/2009	12:13:03
3	100	1	4.14	0.304	-1.2	12/7/2009	12:13:56
4	50.0	1	2.14	0.159	-2.3	12/7/2009	12:14:49
5	10.0	1	0.494	0.0354	0.3	12/7/2009	12:15:42
6	5.00	1	0.295	0.0208	0.2	12/7/2009	12:16:36
7	0.00	1	0.0177	7.53e-4		12/7/2009	12:17:30

Author: axc2

Date : 12/7/2009

Figure 1: TCYANIDE

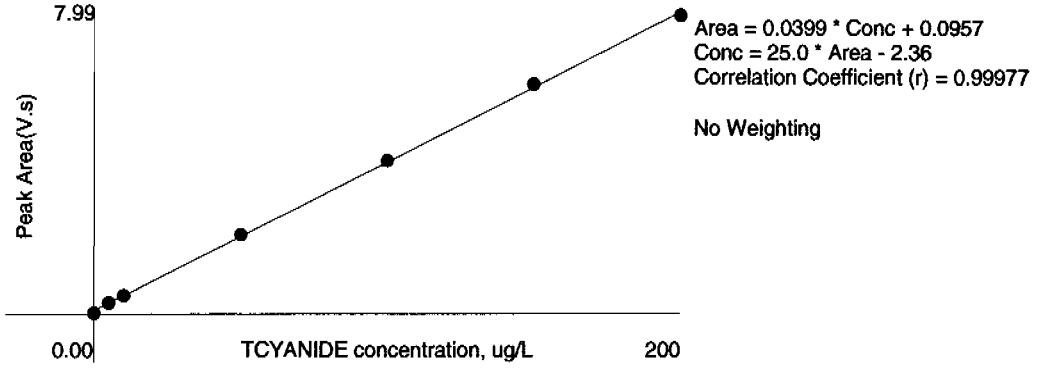

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
08-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	SW846 9012A	Solid	LANL
Batch ID:	**Sample Numbers:**		
927055	See Below		

Potentially affected work order(s)(SDG): 241825(10-667)

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1201982091DUP	1. The Relative Percent Difference (RPD) between the sample and duplicate falls outside of the normal acceptance limits because of the heterogeneous matrix of the sample.

Originator's Name:

Ashley Earl 08-DEC-09

Data Validator/Group Leader:

Julia Hamilton 15-DEC-09

Tuesday, November 24, 2009

REQUEST NUMBER: 10-670

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-670

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	WST03-10-2134	R	11/23/2009	
	HASL-300:ISOPU	1	WST03-10-2134	R	11/23/2009	
	HASL-300:ISOU	1	WST03-10-2134	R	11/23/2009	
	SW-846:6010B	1	WST03-10-2134	R	11/23/2009	
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2134	R	11/23/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2134	R	11/23/2009	
		2	WST03-10-2134	R	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-670

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2134	R	11/23/2009	
	SW-846:8081A_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8082	1	WST03-10-2134	R	11/23/2009	
	SW-846:8151A	1	WST03-10-2134	R	11/23/2009	
	SW-846:8151A_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8260B	1	WST03-10-2134	R	11/23/2009	
		2	WST03-10-2134	R	11/23/2009	
		1	WST03-10-2189	S	11/23/2009	
	SW-846:8260B_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8270C	1	WST03-10-2134	R	11/23/2009	
	SW-846:8270C_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:9012A	1	WST03-10-2134	R	11/23/2009	

Final Page of REQUEST NUMBER 10-670

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-670

REQUEST NUMBER: 10-670

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2189	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2134	1	GLASS	8081A+8151A	Ice	R
WST03-10-2134	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2134	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2134	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2134	1	POLY	AM-241+ISOPU+ISOU+SR90	None	R
WST03-10-2134	1	POLY	H3	Ice	R
WST03-10-2134	1	POLY	TAL metals + TCLP metals	Ice	R
WST03-10-2134	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2134	1	POLY	TCN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/24/09	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2189 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1330	SUB-MEDIA:	SOIL	
PRS ID:		60-004(b)	SAMPLE TECH CODE:	DC	
LOCATION ID:	WST-600902	OK	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — **COMPOSITE TIME INTERVAL:** — **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** — **BOREHOLE DIRECTION:** —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1-2	11-23-09	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of WST03-10-2134

SAMPLE COMMENTS: ~~10~~ 15 DAY TURNAROUND

LOCATION DESC: 60-004(b) - 1,2,3,4

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** J. Jordan

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) [signature]	11-23-09	(Printed Name)	11-23-09
(Signature)	1650	(Signature) [signature]	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2350 **EVENT NAME:** Upper Sandia Cyn Aggregate Area - Waste Characterization

SAMPLE ID: WST03-10-2134 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11-23-09	MEDIA:	NA	AIIH
TIME COLLECTED (HH:MM)		1330	SUB-MEDIA:	OTHER	NA
PRS ID:		60-004(b)	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	WST-600902	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	WST	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~RS~~		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8081A+8151A	500 ML GLASS	Ice	Y	
2		8260B+TPH-GRO	125 ML GLASS	Ice		
1		8270C+8082+TPH-DRO	500 ML GLASS	Ice		
1		AM-241+ISOPU+ISOU+SR90	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		TAL metals + TCLP metals	1 LITER POLY	Ice		
1		TCLP ORGANICS P/H/S/V	500 ML AMBER GLASS	Ice		
1		TCN	125 ML POLY	Ice		

SAMPLE DESC: Waste Sample for 60-00~~0~~4(b), 1,2,3,4

SAMPLE COMMENTS: ~~10~~ 15 DAY TURNAROUND

LOCATION DESC: 4(b)-1,2,3,4

FIELD SCREENING/MEASUREMENT RESULTS: PID: 1-9 ppm Background: α 17 dpm β 1557 ↓ Samples: ↑ MDA

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** S. [signature]

RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time
[signature]	11-23-09 1650	[signature]	11-23-09 1650

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS VOCs (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Acetone and benzene were detected in FTB sample WST03-10-2189, associated with non-TCLP sample -2134. The associated sample results were NDs and, thus, were not qualified.
2. The %Ds were >20% for acetone; 2-butanone; 2,2-dichloropropane; 1,1,1-trichloroethane; 1,1-dichloropropene; carbon tetrachloride; and 2-hexanone in the ICV/CCV associated with the non-TCLP samples. The %D was >20% for carbon tetrachloride in the CCV associated with the TCLP sample. The acetone result for non-TCLP sample -2189 was a detect and, thus, was qualified J,V7c. The remaining associated sample results were NDs and, thus, were qualified UJ,V7c.
3. The non-TCLP MS/MSD RPDs were > the laboratory acceptance limits for chloromethane and methylene chloride. It should be noted that the non-TCLP MS/MSD analyses were performed on a LANL sample from another RN, and trichlorotrifluoroethane was not represented in the MS/MSD analyses. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

DATA VALIDATION COVER SHEET	
5114-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943
Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☐	☒	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☐	☒	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☐	☒	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☐	☒	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☒	☐	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☒	☐	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☒	☐	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	Date Collected:	11/23/2009 12:00	Matrix:	R
Lab Sample ID:	241838002	Date Received:	11/25/2009 09:10	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2134	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	928135	Inst:	VOA4.I	Dilution:	1
Run Date:	12/02/2009 21:24	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	12/02/2009 20:23	Aliquot:	5 g	Final Volume:	5 mL
Data File:	4n309.d	Column:	RTX-VOLATILES	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07	
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07	
67-64-1	Acetone	U	5.36	ug/kg	1.78	5.36	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
74-88-4	Iodomethane	U	5.36	ug/kg	1.72	5.36	
75-09-2	Methylene chloride	U	5.36	ug/kg	2.15	5.36	
75-15-0	Carbon disulfide	U	5.36	ug/kg	1.34	5.36	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
78-93-3	2-Butanone	U	5.36	ug/kg	1.61	5.36	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	UJ,V7c
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.36	ug/kg	1.34	5.36	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
591-78-6	2-Hexanone	U	5.36	ug/kg	1.61	5.36	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07	

MLD 01/05/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241838002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 21:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:23**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n309.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.36	ug/kg	1.72	5.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	178	ug/kg		J
	Unknown Siloxane	16.79	24.3	ug/kg		J

MLD 01/05/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241838001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2189**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 20:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:22**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n308.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	J	1.99	ug/kg	1.66	5.00	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00	
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00	
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00	
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00	
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
71-43-2	Benzene		1.06	ug/kg	0.300	1.00	
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00	
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00	
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00	
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00	
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00	
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00	
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00	
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00	
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00	
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00	
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00	
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00	

MLD 01/05/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241838001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2189**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 20:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:22**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n308.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	No Tentatively Identified Compounds Found			ug/kg		

MLD 01/05/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241839001	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	931007	**Inst:**	VOAA.I	**Dilution:**	10
Run Date:	12/09/2009 20:45	**Analyst:**	JEB	**Purge Vol:**	5 mL
Prep Date:	12/07/2009 15:00				
Data File:	120909\AO309.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010	
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010	
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050	
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010	
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010	UJ,V7c
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010	
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010	
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010	
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010	
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010	
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010	

MLD 01/05/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): GC/MS SVOC (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The %Ds were >20% for N-nitrosodipropylamine; 4-chloroaniline; hexachlorocyclopentadiene; 3-nitroaniline; 2,4-dinitrophenol; and 4-nitroaniline in the ICV/CCV associated with the non-TCLP sample. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. The non-TCLP LCS %R was > the laboratory UAL for 4-nitroaniline. The associated sample result was an ND and, thus, was not qualified.
3. The non-TCLP MS and MSD %Rs were > the laboratory UAL for 4-nitroaniline. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
☐	☒	☐	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
☐	☐	☒	20. The quantitating IS area count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
☐	☐	☒	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
☐	☐	☒	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
☐	☒	☐	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
☒	☐	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
☐	☐	☒	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☐	☒	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	Date Collected:	11/23/2009 12:00	Matrix:	R
Lab Sample ID:	241838002	Date Received:	11/25/2009 09:10	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2134	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 14:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s510412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357	
108-95-2	Phenol	U	357	ug/kg	71.4	357	
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357	
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357	
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357	
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7	
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357	
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357	
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357	
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7	
110-86-1	Pyridine	U	357	ug/kg	71.4	357	
62-53-3	Aniline	U	357	ug/kg	107	357	
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357	
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357	
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357	
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357	
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357	
95-48-7	o-Cresol	U	357	ug/kg	71.4	357	
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357	
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357	
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357	
78-59-1	Isophorone	U	357	ug/kg	71.4	357	
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357	
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357	
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357	
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357	
65-85-0	Benzoic acid	U	714	ug/kg	178	714	
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7	
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357	UJ,SV7c
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357	
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7	
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357	
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357	
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	357	ug/kg	71.4	357	
99-09-2	3-Nitroaniline	U	357	ug/kg	71.4	357	UJ,SV7c

MLD 01/05/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241838002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928249**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 14:39**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 22:31**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s510412.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357	
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357	
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7	
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714	UJ,SV7c
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357	
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357	
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7	
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357	
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357	
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357	
122-66-7	Azobenzene	U	357	ug/kg	71.4	357	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357	
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357	
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7	
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7	
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357	
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7	
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357	
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7	
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357	
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357	
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357	
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7	
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7	
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7	
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7	
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7	
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	252	ug/kg		JA
544-76-3	Hexadecane	10.81	242	ug/kg	95	NJ

MLD 01/05/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241839001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 14:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s511216.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene	U	0.010	mg/L	0.002	0.010
87-86-5	Pentachlorophenol	U	0.010	mg/L	0.002	0.010
110-86-1	Pyridine	U	0.010	mg/L	0.003	0.010
95-48-7	o-Cresol	U	0.010	mg/L	0.002	0.010
65794-96-9	m,p-Cresols	U	0.010	mg/L	0.003	0.010
67-72-1	Hexachloroethane	U	0.010	mg/L	0.002	0.010
98-95-3	Nitrobenzene	U	0.010	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene	U	0.010	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol	U	0.010	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol	U	0.010	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene	U	0.010	mg/L	0.002	0.010

MLD 01/05/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☒ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 **TPH GRO and DRO Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–670	Date Collected:	11/23/2009 12:00	Matrix:	R
Lab Sample ID:	241838002	Date Received:	11/25/2009 09:10	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03–10–2134	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 22:29	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	012f1201.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.64	mg/kg	2.31	7.11

MLD 01/05/10

DATA VALIDATION COVER SHEET

5130-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☒ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2

TPH GRO and DRO Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The retention time criteria were not met.	R, DR0 or GR0	R, DR0 or GR0
☐	☒	☐	2. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR0b	R, GR0b
☐	☒	☐	3. The surrogate is less than 10%R. Follow external laboratory limits.	R, DR3 or GR3	J-, DR3 or GR3
☐	☒	☐	4. The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R. Follow external laboratory limits.	UJ, DR3a or GR3a	J-, DR3a or GR3a
☐	☒	☐	5. The surrogate %R value is greater than the Upper Acceptance Limit. Follow external laboratory limits.	N/A	J+, DR3b or GR3b
☐	☒	☐	6. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR3d or GR3d	R, DR3d or GR3d
☐	☒	☐	7. The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank.	U, DR4 or GR4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank, but was greater than 5x.	N/A	J+, DR4a or GR4a
☐	☐	☒	9. The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank or equipment blank.	U, DR4d or GR4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, DR4e or GR4e	R, DR4e or GR4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, DR7 or GR7	J, DR7 or GR7

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST	
5130-2 **TPH GRO and DRO Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.	UJ, DR7a or GR7a	J, DR7a or GR7a
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method specific limits.	UJ, DR7c or GR7c	J, DR7c or GR7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, DR7d or GR7d	J, DR7d or GR7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, DR7f or GR7f	R, DR7f or GR7f
☐	☒	☐	16. The holding time was greater than 1 and less than or equal to 2 times the applicable holding time requirement.	UJ, DR9 or GR9	J-, DR9 or GR9
☐	☒	☐	17. The holding time was greater than 2 times the applicable holding time requirement.	R, DR9a or GR9a	J-, DR9a or GR9a
☐	☒	☐	18. The LCS percent recovery was less than 10%. Follow the external laboratory limits.	R, DR12 or GR12	J-, DR12 or GR12
☐	☒	☐	19. The LCS percent recovery was less than the Lower Acceptance Limit, but greater than 10%. Follow the external laboratory limits.	UJ, DR12a or GR12a	J-, DR12a or GR12a
☐	☒	☐	20. The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, DR12b or GR12b
☐	☒	☐	21. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.	R, DR12c or GR12c	R, DR12c or GR12c
☐	☒	☐	22. The MS/MSD percent recovery was less than 10%.	R, DR12d or GR12d	R, DR12d or Gr12d
☐	☒	☐	23. The MS/MSD percent recovery was greater than 10%, but less than 70%.	UJ, DR12e or GR12e	J, DR12e or GR12e

TPH GRO AND DRO ANALYTICAL DATA VALIDATION CHECKLIST

5130-2 TPH GRO and DRO Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The MS/MSD percent recovery was greater than 70%.	N/A	J+, DR12f or GR12f
☐	☒	☐	25. The MS/MSD relative percent difference was greater than 30%.	UJ, DR12g or GR12g	J, DR12g or GR12g
☐	☐	☒	26. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, DR15 or GR15	R, DR15 or GR15
☐	☒	☐	27. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, DR19 or GR19	J, R, DR19 or GR19
☐	☒	☐	28. Duplicate, dilution, or reanalysis.	UJ, DR88 or GR88	J, DR88 or GR88

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	930378	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/07/2009 23:58	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/07/2009 23:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4o100016.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		71.1	ug/kg	12.0	53.6

MLD 01/05/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality /associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Organochlorine Pesticides (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The %Ds were >15% on one column only for 4,4'-DDT and endrin ketone in a bracketing CCV associated with the non-TCLP sample. The associated results were NDs and, thus, were not qualified. The %Ds were >15% on both columns for methoxychlor and heptachlor in bracketing CCVs associated with the TCLP sample. The associated sample results were NDs and, thus, were qualified UJ,P7c.
2. It should be noted that the non-TCLP MS/MSD analyses were performed on a LANL sample from another RN, the parent sample raw data were not included in the data package, and toxaphene was not represented in the non-TCLP MS/MSD analyses. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☒	☐	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	928403	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/05/2009 04:51	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	12/03/2009 10:03	**Aliquot:**	30.03 g	**Final Volume:**	5 mL
Data File:	032f3201.d	**Column:**	1 CLP-1	**Level:**	LOW
	032b3201.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.14	ug/kg	1.79	7.14	1
58-89-9	gamma-BHC (Lindane)	U	7.14	ug/kg	1.79	7.14	1
319-85-7	beta-BHC	U	7.14	ug/kg	1.79	7.14	1
319-86-8	delta-BHC	U	7.14	ug/kg	1.79	7.14	1
76-44-8	Heptachlor	U	7.14	ug/kg	1.79	7.14	1
309-00-2	Aldrin	U	7.14	ug/kg	1.79	7.14	1
1024-57-3	Heptachlor epoxide	U	7.14	ug/kg	2.23	7.14	1
5103-74-2	gamma-Chlordane	U	7.14	ug/kg	1.79	7.14	1
5103-71-9	alpha-Chlordane	U	7.14	ug/kg	1.79	7.14	1
959-98-8	Endosulfan I	U	7.14	ug/kg	1.79	7.14	1
72-55-9	4,4'-DDE	U	14.3	ug/kg	3.57	14.3	1
60-57-1	Dieldrin	U	14.3	ug/kg	3.57	14.3	1
72-20-8	Endrin	U	14.3	ug/kg	3.57	14.3	1
72-54-8	4,4'-DDD	U	14.3	ug/kg	3.57	14.3	1
33213-65-9	Endosulfan II	U	14.3	ug/kg	3.57	14.3	1
7421-93-4	Endrin aldehyde	U	14.3	ug/kg	3.57	14.3	1
50-29-3	4,4'-DDT	U	14.3	ug/kg	3.57	14.3	1
1031-07-8	Endosulfan sulfate	U	14.3	ug/kg	3.57	14.3	1
72-43-5	Methoxychlor	U	71.4	ug/kg	17.9	71.4	1
53494-70-5	Endrin ketone	U	14.3	ug/kg	3.57	14.3	1
8001-35-2	Toxaphene	U	179	ug/kg	59.5	179	1

MLD 01/05/10

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241839001	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/16/2009 23:20	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	037f3701.d	**Column:**	1 CLP–1	**Level:**	LOW
	037b3701.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1 UJ,P7c
1024–57–3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72–20–8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1 UJ,P7c
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

MLD 01/05/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

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Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

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Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 22:30	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.56	ug/kg	1.18	3.56	1
11104–28–2	Aroclor–1221	U	3.56	ug/kg	1.18	3.56	1
11141–16–5	Aroclor–1232	U	3.56	ug/kg	1.18	3.56	1
53469–21–9	Aroclor–1242	U	3.56	ug/kg	1.18	3.56	1
12672–29–6	Aroclor–1248	U	3.56	ug/kg	1.18	3.56	1
11097–69–1	Aroclor–1254	U	3.56	ug/kg	1.18	3.56	1
11096–82–5	Aroclor–1260	U	3.56	ug/kg	1.18	3.56	1

MLD 01/05/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): Herbicides (TCLP and non-TCLP)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The %Ds were >15% on both columns for MCPA; 2,4-D; MCPP; dichlorprop; dicamba; and 2,4-DB in CCVs bracketing the non-TCLP sample. The associated sample results were NDs and, thus, were qualified UJ,P7c. The %Ds were >15% on one column only for dinoseb and 2,4,5-TP in the CCVs bracketing the non-TCLP sample, and for 2,4-D in a CCV bracketing the TCLP sample. The associated sample results were NDs and, thus, were not qualified.
2. The non-TCLP MS/MSD RPD was > the laboratory acceptance limit for 2,4,5-T. It should be noted that the non-TCLP MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
☒	☐	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
☐	☐	☒	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
☐	☒	☐	20. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☐	☒	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
☐	☒	☐	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
☐	☒	☐	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927988	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/05/2009 05:41	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:01	**Aliquot:**	50.12 g	**Final Volume:**	10 mL
Data File:	037f3701.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	037b3701.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column	
75–99–0	Dalapon	U	107	ug/kg	21.4	107	1	
1918–00–9	Dicamba	U	5.35	ug/kg	1.78	5.35	1	UJ,P7c
93–65–2	MCPP	U	1070	ug/kg	214	1070	1	
94–74–6	MCPA	U	1070	ug/kg	246	1070	1	
120–36–5	Dichlorprop	U	5.35	ug/kg	1.78	5.35	1	
94–75–7	2,4–D	U	5.35	ug/kg	1.78	5.35	1	
93–72–1	2,4,5–TP	U	5.35	ug/kg	1.78	5.35	1	
93–76–5	2,4,5–T	U	5.35	ug/kg	1.78	5.35	1	
94–82–6	2,4–DB	U	5.35	ug/kg	1.78	5.35	1	UJ,P7c
88–85–7	Dinoseb	U	5.35	ug/kg	1.78	5.35	1	

MLD 01/05/10

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1	Date Collected:	11/23/2009 12:00	Matrix:	TCLP R
Lab Sample ID:	241839001	Date Received:	11/25/2009 09:10		
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2134	Method:	SW846 8151A	SOP Ref:	GL-OA-E-011
Batch ID:	931362	Inst:	ECD6A.I	Dilution:	1
Run Date:	12/12/2009 05:21	Analyst:	RXE1	Inj. Vol:	1 uL
Prep Date:	12/10/2009 21:28	Aliquot:	5 mL	Final Volume:	10 mL
Data File:	094f9401.d	Column:	1 Rtx-CLP	Level:	LOW
	094b9401.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

MLD 01/05/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): TCLP and non-TCLP metals

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Target analytes Ba, Cu, Mn, and Zn were detected in the non-TCLP MB. Target analyte Cr was detected in the TCLP MB. The Cu result was a detect >5X but ≤50X the MB concentration and, thus, was qualified J,I4a. The TCLP Cr result was an ND and, thus, was not qualified. The remaining associated sample results were detects >50X the MB concentrations and, thus, were not qualified based on professional judgment.
2. The non-TCLP MS %Rs were > the laboratory UAL for Ca, Mg, K, Al, Fe, and Mn. The associated Ca, Mg, and K sample results were detects and, thus, were qualified J+,I6b. The parent sample concentrations for Al, Fe, and Mn were >4X the spike concentrations; thus, associated sample results were not qualified based on professional judgment.
3. It should be noted that the non-TCLP ICP-MS matrix QC analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

DATA VALIDATION COVER SHEET

5118-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 **Metals Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☐	☒	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-670 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241838002 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: WST03-10-2134 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5410000	ug/Kg		7250	21300	21300	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-36-0	Antimony	838	ug/Kg	J	331	1000	1000	1	P	HSC	12/18/09 11:22	121809A-1	933564
7440-38-2	Arsenic	1360	ug/kg		207	1040	1040	2	MS	RMJ	12/10/09 21:46	091209-5	928677
7440-39-3	Barium	80200	ug/Kg	*	107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-41-7	Beryllium	583	ug/kg		20.7	104	104	2	MS	RMJ	12/07/09 12:45	091206-4	928677
7440-43-9	Cadmium	533	ug/Kg	U	107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-70-2	Calcium J+,I6b	1480000	ug/Kg	N	8020	25100	25100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7440-47-3	Chromium	6610	ug/Kg		160	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-48-4	Cobalt	2170	ug/Kg		160	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-50-8	Copper J,I4a	4920	ug/Kg		320	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-89-6	Iron	10300000	ug/Kg		8530	26700	26700	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-92-1	Lead	8090	ug/Kg		267	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-95-4	Magnesium J+,I6b	889000	ug/Kg	N	8520	30100	30100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7439-96-5	Manganese	311000	ug/Kg	*	213	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-97-6	Mercury	10.2	ug/kg	J	4.07	12	12	1	AV	JXL1	12/09/09 13:36	120909S1-6	928047
7440-02-0	Nickel	4670	ug/kg		104	415	415	2	MS	RMJ	12/07/09 12:45	091206-4	928677
7440-09-7	Potassium J+,I6b	583000	ug/Kg	N	6420	25100	25100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7782-49-2	Selenium	1040	ug/kg	U	519	1040	1040	2	MS	RMJ	12/07/09 12:45	091206-4	928677
7440-22-4	Silver	365	ug/Kg	J	107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-23-5	Sodium	137000	ug/Kg		7020	25100	25100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7440-28-0	Thallium	153	ug/kg	J	62.2	207	207	2	MS	BAJ	12/08/09 22:38	091208-3	928677
7440-62-2	Vanadium	11600	ug/Kg		107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-66-6	Zinc	33400	ug/Kg		352	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.538	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.503	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1
933564	933563	SW846 3050B	0.535	g	50	mL	12/16/09	FGA

MLD 01/05/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-670-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241839001 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: WST03-10-2134 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: TCLP **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-38-2	Arsenic	0.050	mg/L	U	0.016	0.05	0.05	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-39-3	Barium	0.765	mg/L		0.006	0.02	0.02	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-43-9	Cadmium	0.010	mg/L	U	0.0011	0.01	0.01	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-47-3	Chromium	0.10	mg/L	U	0.02	0.1	0.1	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7439-92-1	Lead	0.020	mg/L	U	0.005	0.02	0.02	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7439-97-6	Mercury	0.002	mg/L	U	0.00066	0.002	0.002	1	AV	JXL1	12/10/09 12:05	121009W2-2	930762
7782-49-2	Selenium	0.050	mg/L	U	0.01	0.05	0.05	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-22-4	Silver	0.010	mg/L	U	0.002	0.01	0.01	1	MS	BAJ	12/10/09 03:51	091209-1	930787

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
930762	930761	SW846 7470A Prep	2	mL	20	mL	12/09/09	TXB3
930787	930786	SW846 3010A	5	mL	50	mL	12/09/09	AXG2

MLD 01/05/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): total cyanide only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. Total cyanide was detected in the ICB. The associated sample result was an ND and, thus, was not qualified.
2. It should be noted that the matrix QC analyses were performed on LANL samples from other RNs. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☐	☒	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-670

Client Sample ID:	WST03-10-2134	Project:	LANL01004
Sample ID:	241838002	Client ID:	LANL010
Matrix:	R		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	6.76%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.1	258	ug/kg	1	AXC2 12/03/09	1152	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

MLD 01/05/10

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-670 VALIDATION DATE: 01/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☒ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The alpha spec Am-243 tracer %R was > the laboratory UAL but ≤125% for the LCS. Since the tracer outlier occurred in a QC sample, no sample data were qualified.
2. An MS was not performed for the tritium analysis. An LCS was analyzed and met QC acceptance criteria. No sample data were qualified as a result.
3. It should be noted that the matrix QC analyses were performed on LANL samples from other RNs for all analytical methods. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 01/06/10

VALIDATOR'S SIGNATURE: [signature] DATE: 01/05/10

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☐	☒	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☐	☒	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☒	☐	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☒	☐	☐	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☒	☐	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☐	☒	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 17, 2009

Client Sample ID:	WST03-10-2134	Project:	LANL01004
Sample ID:	241838002	Client ID:	LANL010
Matrix:	R		
Collect Date:	23-NOV-09		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	7.12%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.0016	0.0225	+/-0.00386	0.050	pCi/g		MXE1	12/12/09	1002	928318	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00277	0.0224	+/-0.0083	0.050	pCi/g		MXE1	12/15/09	0827	928321	3
Plutonium-239/240	U	-0.00415	0.0253	+/-0.00415	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.961	0.146	+/-0.0992	0.100	pCi/g		MXE1	12/10/09	1952	928323	5
Uranium-235/236	U	0.0594	0.0886	+/-0.0269	0.100	pCi/g						
Uranium-238		0.798	0.0805	+/-0.0849	0.100	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	0.0931	0.291	+/-0.086	0.500	pCi/g		JXR1	12/04/09	1242	927434	6
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium		184	78.3	+/-30.6	250	pCi/L		KXK2	12/07/09	0157	927684	7

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, Pu-11-RC Modified
5	DOE EML HASL-300, U-02-RC Modified
6	EPA 905.0 Modified
7	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	94.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	79.9	(50%-105%)

MLD 01/05/10

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-670

REQUEST NUMBER: 10-670

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 2418387, 2418397

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2189	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2134	1	GLASS	8081A+8151A	Ice	R
WST03-10-2134	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2134	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2134	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2134	1	POLY	AM-241+ISOPU+ISOU+SR90	None	R
WST03-10-2134	1	POLY	H3	Ice	R
WST03-10-2134	1	POLY	TAL metals + TCLP metals	Ice	R
WST03-10-2134	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2134	1	POLY	TCN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	11/24/09	1440	Greg Tyler	Signature	11-25-09	0910
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-670

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-670
Per Agreement Number:126310011
Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009
TURNAROUND/REPORT DUE: 12/24/2009
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:908.0	1	WST03-10-2134	R	11/23/2009	
	HASL-300:ISOPU	1	WST03-10-2134	R	11/23/2009	
	HASL-300:ISOU	1	WST03-10-2134	R	11/23/2009	
	SW-846:6010B	1	WST03-10-2134	R	11/23/2009	
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2134	R	11/23/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2134	R	11/23/2009	
		2	WST03-10-2134	R	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-670

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2134	R	11/23/2009	
	SW-846:8081A_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8082	1	WST03-10-2134	R	11/23/2009	
	SW-846:8151A	1	WST03-10-2134	R	11/23/2009	
	SW-846:8151A_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8260B	1	WST03-10-2134	R	11/23/2009	
		2	WST03-10-2134	R	11/23/2009	
		1	WST03-10-2189	S	11/23/2009	
	SW-846:8260B_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8270C	1	WST03-10-2134	R	11/23/2009	
	SW-846:8270C_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:9012A	1	WST03-10-2134	R	11/23/2009	

Final Page of REQUEST NUMBER 10-670

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

December 01, 2009

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 241838 241839
SDG: 10-670

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 25, 2009, and analyzed for FID Flame Ionization Detector, GC Semivolatile Herbicide, GC Semivolatile PCB, GC Semivolatile Pesticide, GC Volatiles (GRO), GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-670
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 241838 and 241839
SDG: 10-670

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- QC Summary 25
- Sample Data 41
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GC/MS Volatile Analysis **140**
- Case Narrative 141
- Sample Data Summary 146
- Quality Control Summary 148
- Sample Data 157
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- Quality Control Data 194
- Miscellaneous 227

GC/MS Semivolatile Analysis **231**
- Sample Data Summary 238
- QC Summary 241
- Sample Data 260
- Standard Data 271
- QC Data 325
- Miscellaneous Data 349

GC/MS Semivolatile Analysis **366**
- Sample Data Summary 373
- QC Summary 375
- Sample Data 384
- Standard Data 389
- QC Data 431
- Miscellaneous Data 460

GC Semivolatile DRO Analysis **469**
- Sample Data Summary 474

Quality Control Summary 476
Sample Data 482
Standards Data 488
Quality Control Data 500
Miscellaneous Data 507

GC Volatile GRO Analysis 519
Sample Data Summary 525
QC Summary 527
Sample Data 533
Standard Data 537
QC Data 548
Miscellaneous Data 555

GC Semivolatile Pesticide Analysis 565
Sample Data Summary 571
Quality Control Summary 573
Sample Data 580
Standards Data 586
Quality Control Data 656
Miscellaneous Data 684

GC Semivolatile Pesticide Analysis 707
Sample Data Summary 715
Quality Control Summary 717
Sample Data 729
Standards Data 735
Quality Control Data 849
Miscellaneous Data 940

GC Semivolatile PCB Analysis 1001
Sample Data Summary 1008
Quality Control Summary 1010
Sample Data 1016
Standards Data 1022
Quality Control Data 1095
Miscellaneous Data 1110

GC Semivolatile Herbicide Analysis 1131
Sample Data Summary 1137
Quality Control Summary 1139

Sample Data 1146
Standards Data 1152
Quality Control Data 1201
Miscellaneous Data 1225

GC Semivolatile Herbicide Analysis 1244
Sample Data Summary 1250
Quality Control Summary 1252
Sample Data 1258
Standards Data 1264
Quality Control Data 1322
Miscellaneous Data 1348

Metals Analysis 1358
Case Narrative 1359
Sample Data Summary 1365
Quality Control Summary 1367
Standards 1433
Raw Data 1453
Miscellaneous 1947

Metals Analysis 1998
Case Narrative 1999
Sample Data Summary 2004
Quality Control Summary 2006
Standards 2033
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Miscellaneous 2142

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Sample Data Summary 2177
Quality Control Summary 2180
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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 241838 and 241839
SDG # : 10-670

December 01, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 25, 2009 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. The containers for radiochemistry were received at 14/16C temperatures. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
241838001	WST03-10-2189
241838002	WST03-10-2134
241839001	WST03-10-2134

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: FID Flame Ionization Detector, GC Semivolatile Herbicide, GC Semivolatile PCB, GC Semivolatile Pesticide, GC Volatiles (GRO), GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for
Valerie Davis

Project Manager

List of current GEL Certifications as of 01 December 2009

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Tuesday, November 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-670

REQUEST NUMBER: 10-670

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 241838Y, 241839Y

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
WST03-10-2189	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
WST03-10-2134	1	GLASS	8081A+8151A	Ice	R
WST03-10-2134	1	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2134	2	GLASS	8260B+TPH-GRO	Ice	R
WST03-10-2134	1	GLASS	8270C+8082+TPH-DRO	Ice	R
WST03-10-2134	1	POLY	AM-241+ISOPU+ISOU+SR90	None	R
WST03-10-2134	1	POLY	H3	Ice	R
WST03-10-2134	1	POLY	TAL metals + TCLP metals	Ice	R
WST03-10-2134	1	AMBER GLASS	TCLP ORGANICS P/H/S/V	Ice	R
WST03-10-2134	1	POLY	TCN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	11/24/09	1400	Greg Tyler	[illegible]	11-25-09	0910
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Tuesday, November 24, 2009

REQUEST NUMBER: 10-670

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-670

Per Agreement Number:126310011

Project Cost Code: MR2A054196D0

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 11/24/2009

TURNAROUND/REPORT DUE: 12/24/2009

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	WST03-10-2134	R	11/23/2009	
	HASL-300:ISOPU	1	WST03-10-2134	R	11/23/2009	
	HASL-300:ISOU	1	WST03-10-2134	R	11/23/2009	
	SW-846:6010B	1	WST03-10-2134	R	11/23/2009	
	SW-846:8015M_EXTRACTABLE	1	WST03-10-2134	R	11/23/2009	
	SW-846:8015M_PURGEABLE	1	WST03-10-2134	R	11/23/2009	
		2	WST03-10-2134	R	11/23/2009	

Tuesday, November 24, 2009

REQUEST NUMBER: 10-670

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8081A	1	WST03-10-2134	R	11/23/2009	
	SW-846:8081A_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8082	1	WST03-10-2134	R	11/23/2009	
	SW-846:8151A	1	WST03-10-2134	R	11/23/2009	
	SW-846:8151A_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8260B	1	WST03-10-2134	R	11/23/2009	
		2	WST03-10-2134	R	11/23/2009	
		1	WST03-10-2189	S	11/23/2009	
	SW-846:8260B_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:8270C	1	WST03-10-2134	R	11/23/2009	
	SW-846:8270C_TCLP	1	WST03-10-2134	R	11/23/2009	
	SW-846:9012A	1	WST03-10-2134	R	11/23/2009	

Final Page of REQUEST NUMBER 10-670

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-670**
Received By: Greg Tyler	**Date Received: 11/25/09**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **20 cpm**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other **2, 4, 5, 6C** **14, 16C**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
Fed Ex Tracking Numbers
7209 7849 0285 2C **7209 7849 0263 14C**
7209 7849 0230 2C **7209 7849 0252 16C**
7209 7849 0300 2C
7209 7849 0322 4C
7209 7849 0296 4C
7209 7849 0241 4C
7209 7849 0311 5C
7209 7849 0274 6C

PM (or PMA) review: Initials P. Ward Date 11-27-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0285
MASTER

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NINIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

2c

FedEx Express

2 of 3
MPS# 0263 7209 7849 0230
Mstr# 7209 7849 0228 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NINIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

2c

FedEx Express

1 of 2
TRK# 0201 7209 7849 0300
MASTER

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A05419BD0

4c

FedEx Express

TRK# 0201 7209 7849 0322

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

4c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0296
Mstr# 7209 7849 0285 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NHIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWH0

4c

FedEx Express

3 of 3
MPS# 0263 7209 7849 0241
Mstr# 7209 7849 0220 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NHIT V3 09-09

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWL0

5c

FedEx Express

2 of 2
MPS# 0263 7209 7849 0311
Mstr# 7209 7849 0300 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX AUGA

29407
SC-US

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

6c

FedEx Express

RADIOACTIVE SAMPLES

3 of 3
MPS# 0263 7209 7849 0274
Mstr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX AUGA

29407
SC-US

ORIGIN ID: SAFA (505)665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24NOV09
ACTWGT: 42.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

14c

FedEx Express

2 of 3
MPS# 0269 7209 7849 0263
Mstr# 7209 7849 0252 0201

WED - 25NOV A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156140-434 Rev 7/09 Q1-09

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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	928135
Prep Batch Number:	928134

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241838001	WST03-10-2189
241838002	WST03-10-2134
1201988490	Method Blank (MB)
1201988491	Laboratory Control Sample (LCS)
1201988492	Laboratory Control Sample (LCS)
1201984531	241827001(RE03-09-14130) Post Spike (PS)
1201984532	241827001(RE03-09-14130) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
Samples 241838 002 in this SDG were analyzed on an "dry weight" basis. Samples 241838 001 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241827001 (RE03-09-14130) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD between the matrix spike pair were not all within the acceptance limits. See NCR# 766675.

Internal Standard (ISTD) Acceptance
In the following sample, internal standard response was outside the required acceptance criteria. Sample reanalysis confirmed matrix interference: 1201984532 (RE03-09-14130). See NCR# 766675.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from

sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
The following samples in this SDG were re-analyzed due to unacceptable recoveries in the initial analysis: 1201984531 (RE03-09-14130) and 1201984532 (RE03-09-14130).

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 766675

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/15/09

Roadmap for LANL 10-670 VOA

This roadmap was analyzed by acj on 12-07-2009, 12:09.
This roadmap was reviewed by kel00587 on 12-07-2009, 18:26.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/120209v4/4n308.d	241838001	WST03-10-2189	02-DEC-2009	20:57	10-670.sub	1	928135	
☐	N	/chem/VOA4.i/120209v4/4n309.d	241838002	WST03-10-2134	02-DEC-2009	21:24	10-670.sub	1	928135	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
■	N	/chem/VOA4.i/120109v4/4n218.d	1201984531	RE03-09-14130MS	ms	02-DEC-2009	00:51	10-668.sub	1	928135	
■	N	/chem/VOA4.i/120109v4/4n219.d	1201984532	RE03-09-14130MSD	msd	02-DEC-2009	01:18	10-668.sub	1	928135	
☐	N	/chem/VOA4.i/120209v4/4n303ll.d	1201988491	LCS	lcs	02-DEC-2009	17:47	all.sub	1	928135	
☐	N	/chem/VOA4.i/120209v4/4n305sl.d	1201988492	LCS	lcs	02-DEC-2009	18:41	all.sub	1	928135	
☐	N	/chem/VOA4.i/120209v4/4n307bl.d	1201988490	BLANK	mb	02-DEC-2009	19:36	all.sub	1	928135	
■	N	/chem/VOA4.i/120209v4/4n324.d	1201984531	RE03-09-14130MS	ms	03-DEC-2009	04:16	10-668.sub	1	928135	
■	N	/chem/VOA4.i/120209v4/4n325.d	1201984532	RE03-09-14130MSD	msd	03-DEC-2009	04:43	10-668.sub	1	928135	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 21:24	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n309.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	U	5.36	ug/kg	1.78	5.36
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.36	ug/kg	1.72	5.36
75-09-2	Methylene chloride	U	5.36	ug/kg	2.15	5.36
75-15-0	Carbon disulfide	U	5.36	ug/kg	1.34	5.36
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.36	ug/kg	1.61	5.36
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.36	ug/kg	1.34	5.36
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.36	ug/kg	1.61	5.36
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 21:24	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:23	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n309.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.36	ug/kg	1.72	5.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	178	ug/kg		J
	Unknown Siloxane	16.79	24.3	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241838001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2189**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 20:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:22**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n308.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.99	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.06	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241838001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2189**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 20:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:22**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n308.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-670

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201988491	LCS for batch 928134	117	104	103
1201988492	LCS for batch 928134	103	100	97
1201988490	MB for batch 928134	118	116	116
241838001	WST03-10-2189	105	103	104
241838002	WST03-10-2134	108	108	108

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(68%-131%)
TOL	= Toluene-d8	(75%-129%)
BFB	= Bromofluorobenzene	(68%-133%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: RE03-09-14130PS
Lab Sample ID: 1201984531
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 00:51
Prep Batch ID: 928134
Batch ID: 928135

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS	Dichlorodifluoromethane	50.0	0.00	U	37.7	75	25-149
74-87-3	PS	Chloromethane	50.0	0.00	U	38.4	77	39-140
75-01-4	PS	Vinyl chloride	50.0	0.00	U	42.1	84	47-129
74-83-9	PS	Bromomethane	50.0	0.00	U	43.9	88	31-135
75-00-3	PS	Chloroethane	50.0	0.00	U	44.4	89	53-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	45.3	91	51-151
67-64-1	PS	Acetone	250	0.00	U	251	100	21-153
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	45.9	92	61-125
74-88-4	PS	Iodomethane	250	0.00	U	215	86	53-142
75-09-2	PS	Methylene chloride	50.0	0.00	U	46.2	92	59-136
75-15-0	PS	Carbon disulfide	250	0.00	U	234	94	46-129
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	47.6	95	56-126
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	48.3	97	62-125
78-93-3	PS	2-Butanone	250	0.00	U	253	101	26-152
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	47.3	95	60-130
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	48.5	97	55-135
67-66-3	PS	Chloroform	50.0	0.00	U	46.9	94	60-127
74-97-5	PS	Bromochloromethane	50.0	0.00	U	45.2	90	61-131
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	49.9	100	59-131
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	48.9	98	57-128
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	50.0	100	58-136
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	47.8	96	58-126

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: RE03-09-14130PS
Lab Sample ID: 1201984531
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 00:51
Prep Batch ID: 928134
Batch ID: 928135
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS	Benzene	50.0	0.00	U	44.7	89	56-123
79-01-6	PS	Trichloroethylene	50.0	0.00	U	47.4	95	51-137
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	46.6	93	60-126
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	47.4	95	55-138
74-95-3	PS	Dibromomethane	50.0	0.00	U	47.0	94	60-132
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	240	96	58-136
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	46.9	94	54-133
108-88-3	PS	Toluene	50.0	0.00	U	43.2	86	52-128
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	46.0	92	53-137
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	45.8	92	59-130
591-78-6	PS	2-Hexanone	250	0.00	U	216	86	31-148
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	44.8	90	57-127
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	40.6	81	51-128
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	46.1	92	59-139
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	46.4	93	57-133
108-90-7	PS	Chlorobenzene	50.0	0.00	U	44.1	88	53-122
100-41-4	PS	Ethylbenzene	50.0	0.00	U	44.1	88	51-125
179601-23-1	PS	m,p-Xylenes	100	0.00	U	87.2	87	50-126
95-47-6	PS	o-Xylene	50.0	0.00	U	43.7	87	52-127
100-42-5	PS	Styrene	50.0	0.00	U	43.9	88	49-135
75-25-2	PS	Bromoform	50.0	0.00	U	44.3	89	57-149
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	47.9	96	63-127

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: RE03-09-14130PS
Lab Sample ID: 1201984531
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 00:51
Prep Batch ID: 928134
Batch ID: 928135
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS	1,2,3-Trichloropropane	50.0	0.00	U	48.6	97	57-149
108-86-1	PS	Bromobenzene	50.0	0.00	U	42.7	85	49-131
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	44.5	89	40-136
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	43.9	88	44-135
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	44.2	88	44-140
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	43.9	88	42-140
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	44.8	90	44-132
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	44.5	89	42-142
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	43.7	87	43-137
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	44.6	89	39-139
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	43.9	88	38-145
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	42.6	85	43-129
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	42.5	85	44-125
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	44.2	88	36-141
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	48.6	97	47-151
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	44.7	89	59-131
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	43.3	87	43-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: RE03-09-14130PSD
Lab Sample ID: 1201984532
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 01:18
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	33.6	67	25-149	12	0-25
74-87-3	PSD	Chloromethane	50.0	0.00	U	29.3	59	39-140	27 *	0-25
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	36.6	73	47-129	14	0-25
74-83-9	PSD	Bromomethane	50.0	0.00	U	36.9	74	31-135	17	0-25
75-00-3	PSD	Chloroethane	50.0	0.00	U	35.3	71	53-128	23	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	42.5	85	51-151	7	0-25
67-64-1	PSD	Acetone	250	0.00	U	287	115	21-153	14	0-25
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	36.2	72	61-125	24	0-25
74-88-4	PSD	Iodomethane	250	0.00	U	182	73	53-142	17	0-25
75-09-2	PSD	Methylene chloride	50.0	0.00	U	35.3	71	59-136	27 *	0-25
75-15-0	PSD	Carbon disulfide	250	0.00	U	188	75	46-129	22	0-25
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	42.7	85	56-126	11	0-25
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	43.8	88	62-125	10	0-25
78-93-3	PSD	2-Butanone	250	0.00	U	298	119	26-152	16	0-25
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	44.8	90	60-130	5	0-25
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	60.4	121	55-135	22	0-25
67-66-3	PSD	Chloroform	50.0	0.00	U	43.5	87	60-127	7	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	42.7	85	61-131	6	0-25
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	50.4	101	59-131	1	0-25
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	45.9	92	57-128	6	0-25
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	47.5	95	58-136	5	0-25
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	44.7	89	58-126	7	0-25

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-670

Client ID: RE03-09-14130PSD

Lab Sample ID: 1201984532

Instrument: VOA4.I

Analyst: ACJ

Purge Vol: 5 mL

Sample Type: Post Spike Duplicate

Matrix: S

%Moisture: 0

Analysis Date: 12/02/2009 01:18

Dilution: 1

Prep Batch ID: 928134

Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD	Benzene	50.0	0.00	U	42.2	84	56-123	6	0-25
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	44.3	89	51-137	7	0-25
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	43.6	87	60-126	7	0-25
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	43.3	87	55-138	9	0-25
74-95-3	PSD	Dibromomethane	50.0	0.00	U	45.6	91	60-132	3	0-25
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	279	112	58-136	15	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	42.4	85	54-133	10	0-25
108-88-3	PSD	Toluene	50.0	0.00	U	41.7	83	52-128	3	0-25
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	42.3	85	53-137	8	0-25
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	44.9	90	59-130	2	0-25
591-78-6	PSD	2-Hexanone	250	0.00	U	242	97	31-148	11	0-25
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	44.0	88	57-127	2	0-25
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	40.3	81	51-128	1	0-25
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	43.4	87	59-139	6	0-25
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	45.4	91	57-133	2	0-25
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	41.8	84	53-122	5	0-25
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	42.2	84	51-125	4	0-25
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	81.4	81	50-126	7	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	40.8	82	52-127	7	0-25
100-42-5	PSD	Styrene	50.0	0.00	U	39.6	79	49-135	10	0-25
75-25-2	PSD	Bromoform	50.0	0.00	U	48.1	96	57-149	8	0-25
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	53.0	106	63-127	10	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: RE03-09-14130PSD
Lab Sample ID: 1201984532
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: S
%Moisture: 0
Analysis Date: 12/02/2009 01:18
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD	1,2,3-Trichloropropane	50.0	0.00	U	54.7	109	57-149	12	0-25
108-86-1	PSD	Bromobenzene	50.0	0.00	U	43.2	86	49-131	1	0-25
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	46.6	93	40-136	5	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	45.6	91	44-135	4	0-25
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	47.2	94	44-140	7	0-25
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	44.7	89	42-140	2	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	44.4	89	44-132	1	0-25
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	44.6	89	42-142	0	0-25
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	44.1	88	43-137	1	0-25
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	45.2	90	39-139	1	0-25
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	43.6	87	38-145	1	0-25
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	41.8	84	43-129	2	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	41.2	82	44-125	3	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	44.1	88	36-141	0	0-25
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	53.7	107	47-151	10	0-25
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	42.3	85	59-131	6	0-25
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	42.7	85	43-129	1	0-25

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928134
Lab Sample ID: 1201988491
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/02/2009 17:47
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS Dichlorodifluoromethane	50.0	0.0	38.9	78	33-155
74-87-3	LCS Chloromethane	50.0	0.0	40.5	81	53-132
75-01-4	LCS Vinyl chloride	50.0	0.0	45.8	92	61-128
74-83-9	LCS Bromomethane	50.0	0.0	47.0	94	63-126
75-00-3	LCS Chloroethane	50.0	0.0	48.8	98	67-124
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	52.0	104	67-151
67-64-1	LCS Acetone	250	0.0	231	92	29-160
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	51.4	103	70-125
74-88-4	LCS Iodomethane	250	0.0	250	100	74-131
75-09-2	LCS Methylene chloride	50.0	0.0	50.6	101	72-127
75-15-0	LCS Carbon disulfide	250	0.0	261	104	64-127
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	54.2	108	71-122
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	53.9	108	75-120
78-93-3	LCS 2-Butanone	250	0.0	242	97	35-162
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	52.9	106	76-122
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	57.1	114	74-135
67-66-3	LCS Chloroform	50.0	0.0	52.9	106	77-120
74-97-5	LCS Bromochloromethane	50.0	0.0	51.7	103	76-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	57.8	116	75-128
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	58.1	116	77-125
56-23-5	LCS Carbon tetrachloride	50.0	0.0	60.2	120	77-134
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	51.1	102	72-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928134
Lab Sample ID: 1201988491
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/02/2009 17:47
Dilution: 1
Prep Batch ID: 928134
Batch ID: 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	52.4	105	72-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	55.9	112	78-121
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	52.4	105	74-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	53.0	106	79-125
74-95-3	LCS	Dibromomethane	50.0	0.0	51.6	103	78-122
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	264	106	71-134
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	53.7	107	80-125
108-88-3	LCS	Toluene	50.0	0.0	51.7	103	65-124
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	52.7	105	71-134
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	50.9	102	76-120
591-78-6	LCS	2-Hexanone	250	0.0	239	96	42-159
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	49.4	99	72-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	55.1	110	74-123
124-48-1	LCS	Dibromochloromethane	50.0	0.0	53.8	108	83-128
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	52.0	104	79-121
108-90-7	LCS	Chlorobenzene	50.0	0.0	52.4	105	75-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	51.7	103	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	105	105	74-120
95-47-6	LCS	o-Xylene	50.0	0.0	51.9	104	74-120
100-42-5	LCS	Styrene	50.0	0.0	51.4	103	76-125
75-25-2	LCS	Bromoform	50.0	0.0	55.7	111	77-138
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	55.3	111	72-122

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-670 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 928134 **Matrix:** SOIL

Lab Sample ID: 1201988491

Instrument: VOA4.I **Analysis Date:** 12/02/2009 17:47 **Dilution:** 1

Analyst: ACJ **Prep Batch ID** 928134

Purge Vol: 5 mL **Batch ID:** 928135

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	53.0	106	75-135
108-86-1	LCS	Bromobenzene	50.0	0.0	51.0	102	73-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	51.0	102	68-121
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	48.7	97	69-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	51.1	102	66-127
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	50.2	100	67-126
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	51.2	102	72-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	51.5	103	72-124
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	50.2	100	72-122
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	51.8	104	71-124
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	52.1	104	72-130
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	51.9	104	73-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	52.0	104	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	52.8	106	72-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	61.9	124	68-145
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	52.1	104	78-121
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	53.4	107	74-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **10-670**

Client ID: **LCS for batch 928134**

Lab Sample ID: **1201988492**

Instrument: **VOA4.I**

Analyst: **ACJ**

Purge Vol: **5 mL**

Sample Type: **Laboratory Control Sample**

Matrix: **SOIL**

Analysis Date: **12/02/2009 18:41**

Dilution: 1

Prep Batch ID: **928134**

Batch ID: **928135**

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS	1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane*	250	0.0	229	92	52-139

Method Blank Summary

SDG Number:	10-670	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928134	Instrument ID:	VOA4.I	Data File:	4n307bl.d
Lab Sample ID:	1201988490	Prep Date:	12/02/2009 17:30	Analyzed:	12/02/09 19:36
Column:	RTX-VOLATILES	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928134	1201988491	4n303ll.d	12/02/09	1747
02 LCS for batch 928134	1201988492	4n305sl.d	12/02/09	1841
03 WST03-10-2189	241838001	4n308.d	12/02/09	2057
04 WST03-10-2134	241838002	4n309.d	12/02/09	2124

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-670

Instrument ID: VOA4.I **Injection Date/Time:** 02-DEC-09 16:51

Column Description: DB-624 **Lab File ID** /120209v4/4n301.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	98.1
175	5.0 -9.0% of mass 174	7
176	95.0 - 101.0% of mass 174	97.8
177	5.0 - 9.0% of mass 176	6.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM091202-01	/120209v4/4n302.d	02-DEC-09 17:19
LCS	1201988491	/120209v4/4n303ll.d	02-DEC-09 17:47
VSTD250S	UVM091118-08A	/120209v4/4n304.d	02-DEC-09 18:14
LCS	1201988492	/120209v4/4n305sl.d	02-DEC-09 18:41
BLANK	1201988490	/120209v4/4n307bl.d	02-DEC-09 19:36
WST03-10-2189	241838001	/120209v4/4n308.d	02-DEC-09 20:57
WST03-10-2134	241838002	/120209v4/4n309.d	02-DEC-09 21:24

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-670

Instrument ID: VOA4.I **Injection Date/Time:** 22-NOV-09 09:20

Column Description: DB-624 **Lab File ID** /112209v4/4l701.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	47
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	99.3
175	5.0 -9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W4VM091122-01	/112209v4/4l703.d	22-NOV-09 10:14
VSTD001	W4VM091122-02	/112209v4/4l704.d	22-NOV-09 10:41
VSTD002	W4VM091122-04	/112209v4/4l706.d	22-NOV-09 11:36
VSTD005	W4VM091122-05	/112209v4/4l707.d	22-NOV-09 12:04
VSTD010	W4VM091122-06	/112209v4/4l708.d	22-NOV-09 12:31
VSTD020	W4VM091122-07	/112209v4/4l709.d	22-NOV-09 12:59
VSTD050	W4VM091122-08	/112209v4/4l710.d	22-NOV-09 13:27
VSTD100	W4VM091122-09	/112209v4/4l711.d	22-NOV-09 13:54
VSTD005S	W4VM091122-10	/112209v4/4l713.d	22-NOV-09 14:48
VSTD010S	W4VM091122-11	/112209v4/4l714.d	22-NOV-09 15:16
VSTD025S	W4VM091122-12	/112209v4/4l715.d	22-NOV-09 15:43
VSTD050S	W4VM091122-13	/112209v4/4l716.d	22-NOV-09 16:10
VSTD250S	W4VM091122-15	/112209v4/4l718.d	22-NOV-09 17:04
VSTD500S	W4VM091122-16	/112209v4/4l719.d	22-NOV-09 17:32
SECOND SOURCE	W4VM091122-18	/112209v4/4l722.d	22-NOV-09 18:53
SHORT SECOND SOURCE	W4VM091122-19	/112209v4/4l723.d	22-NOV-09 19:21

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: RTX-VOLATILES

Client SDG: 10-670

STD Analysis Time: 02-DEC-09 17:19

Data File: 4n302.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1474109		10.6	1156709		13.8	821958		16.2
Upper Limit	2948218		11.1	2313418		14.3	1643916		16.7
Lower Limit	737055		10.1	578355		13.3	410979		15.7
Sample ID									
BLK01LCS	1648214		10.6	1276321		13.8	903046		16.2
BLK01SLCS	1716236		10.6	1330619		13.8	920803		16.2
BLK01	1445085		10.6	1077546		13.8	721157		16.2
WST03-10-2189	1538051		10.6	1157515		13.8	742414		16.2
WST03-10-2134	1545364		10.6	1129858		13.8	707850		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241838002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 21:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:23**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n309.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	U	5.36	ug/kg	1.78	5.36
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.36	ug/kg	1.72	5.36
75-09-2	Methylene chloride	U	5.36	ug/kg	2.15	5.36
75-15-0	Carbon disulfide	U	5.36	ug/kg	1.34	5.36
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.36	ug/kg	1.61	5.36
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.36	ug/kg	1.34	5.36
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.36	ug/kg	1.61	5.36
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241838002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 21:24**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:23**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n309.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.36	ug/kg	1.72	5.36
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	178	ug/kg		J
	Unknown Siloxane	16.79	24.3	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n309.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 02-DEC-2009 21:24
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241838002|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.76260	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1545364	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.772	(1.000)	1129858	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	707850	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	328856	54.1797	58.1
$ 47 Toluene-d8	98	12.254	12.254	(0.890)	1058458	53.7859	57.7
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	444167	54.1882	58.1

ION RATIO REPORT

VOA REPORT

Data file: 4n309.d
Report Date: 12/03/2009 15:46
Lab. ID: 241838002 SampleType: SAMPLE
Injection Date: 02-DEC-2009 21:24
Operator: ACJ Instrument: VOA4.i
Sample Info: |241838002|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-670
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	20879	10.61	10.34	80-120	100	(T)
64	3245	10.62	10.34	3- 63	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8188	12.25	12.02	80-120	100	(T)
43	4383	12.25	12.02	227-287	54	(QT)
100	733925	12.25	12.02	9- 69	8963	(QT)
65 Styrene			CAS#: 100-42-5			
104	15443	14.81	14.40	80-120	100	(T)
78	1795	14.79	14.40	21- 81	12	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	16761	14.82	14.76	80-120	100	(T)
120	6262	14.83	14.76	0- 58	37	(T)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	13581	14.83	15.11	80-120	100	(T)
75	35625	14.82	15.11	249-309	262	(T)
77	11396	14.79	15.11	62-122	84	(T)
76 n-Propylbenzene			CAS#: 103-65-1			
91	14287	14.80	15.18	80-120	100	(T)
120	6262	14.83	15.19	0- 54	44	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n309.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 02-DEC-2009 21:24
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241838002|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.76260	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.772	3396881	50.000
* 86 1,4-Dichlorobenzene-d4	16.180	3882031	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
14.826	11271799	165.913911	178	0		0	61

RT	AREA	CONCENTRATIONS ON-COL (ug/l)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
16.789	1758697	22.6517541	24.3	0		0	86

Data File: /chem/VOA4.i/120209v4/4n309.d
Date : 02-DEC-2009 21:24
Client ID: WST03-10-2134
Sample Info: |2418380021928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

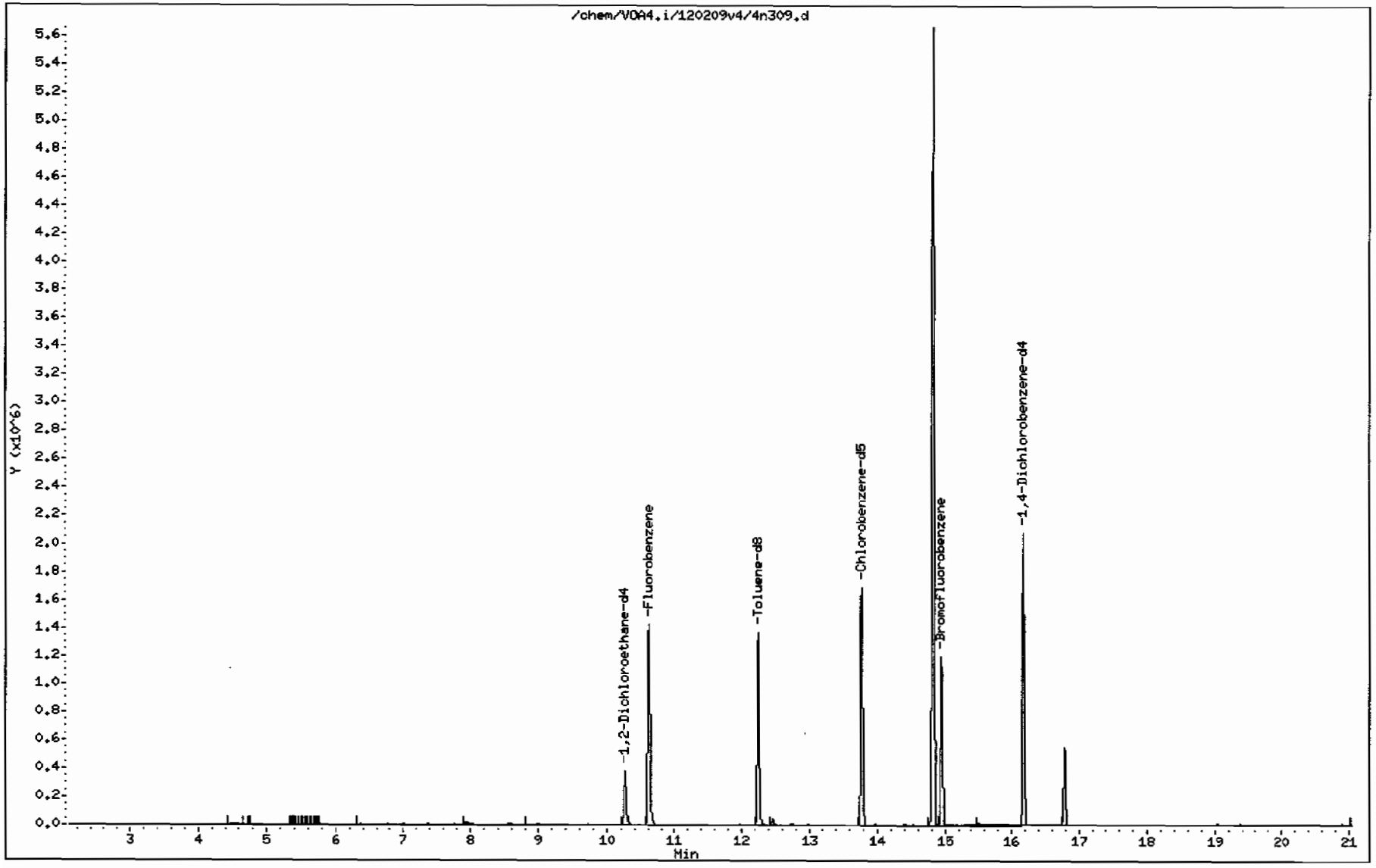

Data File: /chem/VOA4.i/120209v4/4n309.d

Date : 02-DEC-2009 21:24

Client ID: WST03-10-2134

Instrument: VOA4.i

Sample Info: |241838002|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	91	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	91	C8H24O4Si4	296
Benzene, 1-phenyl-4-(2-cyano-2-phenyleth	27869-56-3	NIST05.L	112707	53	C21H15N	281

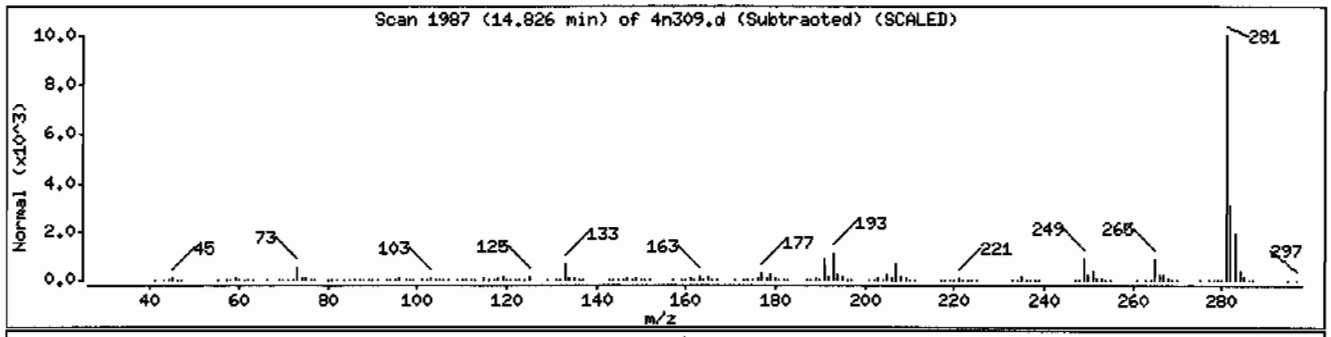

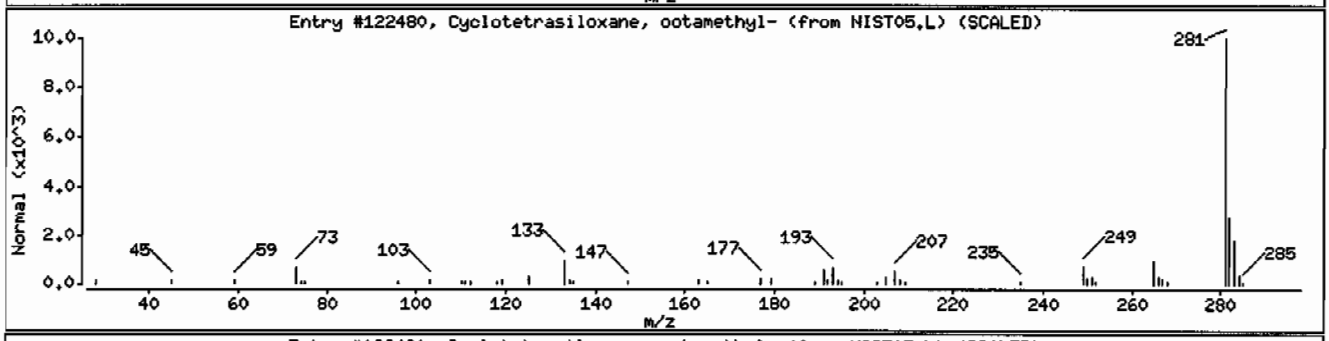

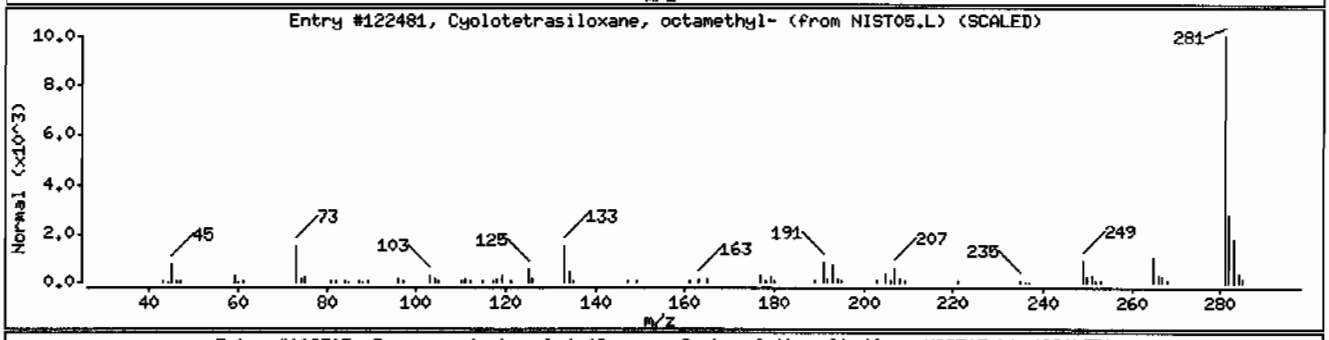

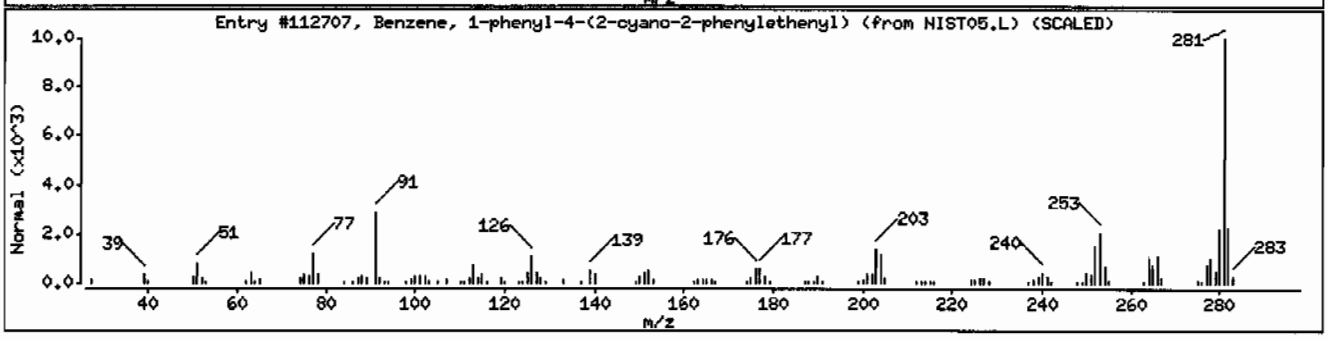

Data File: /chem/VOA4.i/120209v4/4n309.d

Date : 02-DEC-2009 21:24

Client ID: WST03-10-2134

Instrument: VOA4.i

Sample Info: |2418380021928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzaldehyde, 2,4-bis(trimethylsiloxy)-	33617-38-8	NIST05.L	112902	59	C13H22O3Si2	282
Benzaldehyde, 2,5-bis[(trimethylsilyl)ox	56114-69-3	NIST05.L	112903	56	C13H22O3Si2	282
Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-	55471-01-7	NIST05.L	184036	46	C18H26F7NO3Si4	493

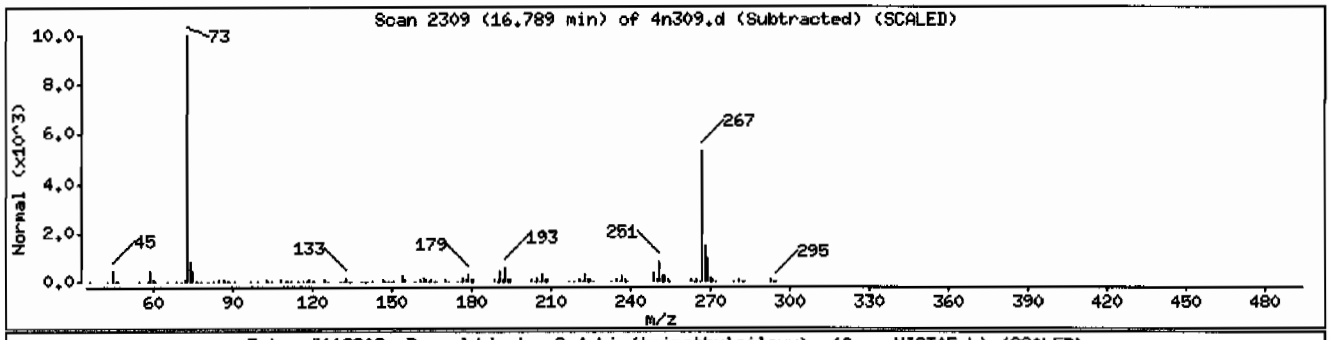

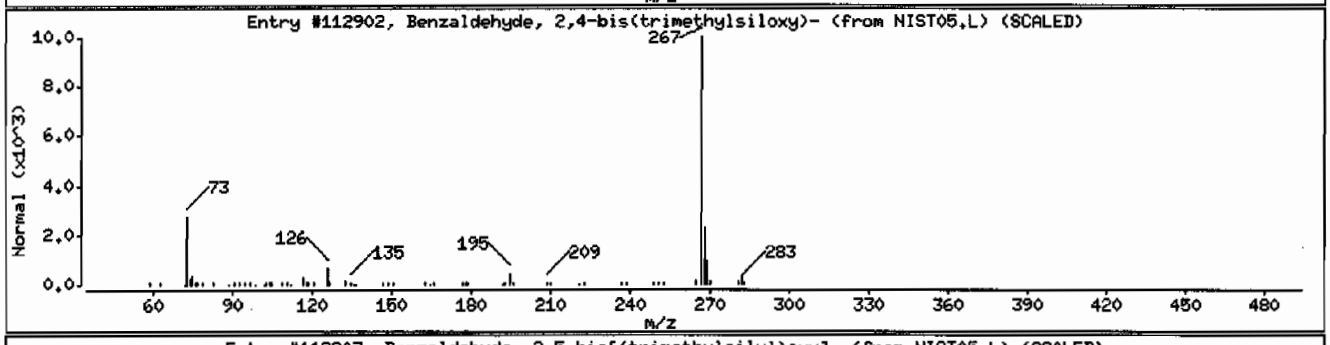

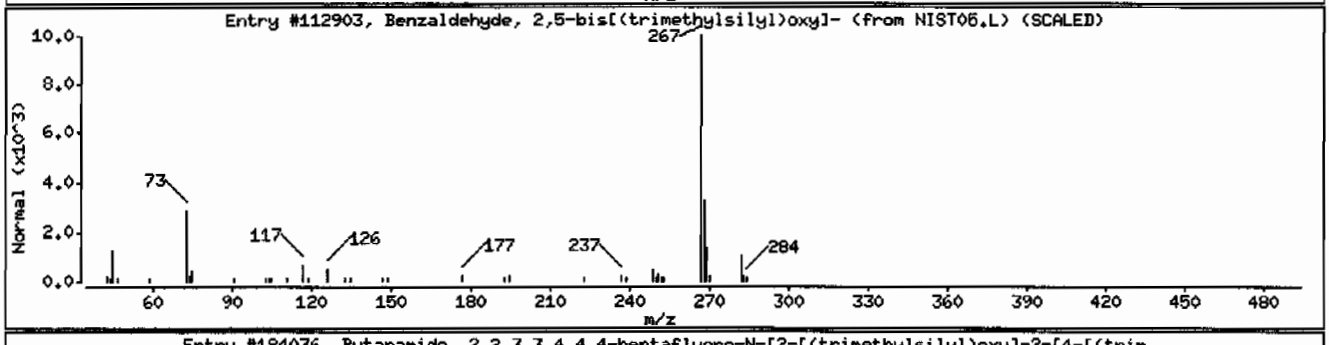

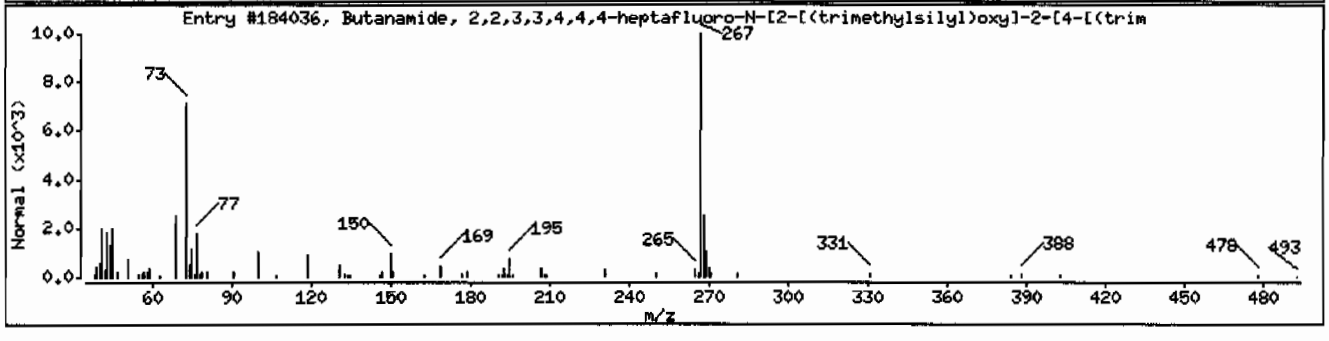

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	S
Lab Sample ID:	241838001	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2189	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 20:57	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 20:22	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n308.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.99	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene		1.06	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**S**
Lab Sample ID:	**241838001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2189**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 20:57**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 20:22**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n308.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n308.d
Lab Smp Id: 241838001 Client Smp ID: WST03-10-2189
Inj Date : 02-DEC-2009 20:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241838001|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1538051	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1157515	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	742414	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	318510	52.7246	52.7
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	1041036	51.6366	51.6
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	445146	51.7793	51.8
10 Acetone	43	7.375	7.358	(0.695)	12405	1.98503	2.0(a)
38 Benzene	78	10.375	10.376	(0.977)	34861	1.05744	1.0

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 4n308.d
Report Date: 12/03/2009 15:46
Lab. ID: 241838001 SampleType: SAMPLE
Injection Date: 02-DEC-2009 20:57
Operator: ACJ Instrument: VOA4.i
Sample Info: |241838001|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-670
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone			CAS#: 67-64-1			
43	12405	7.38	7.36	80-120	100	( )
58	3234	7.37	7.36	2- 62	26	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	18701	10.62	10.34	80-120	100	(T)
64	3204	10.61	10.34	3- 63	17	(T)
38 Benzene			CAS#: 71-43-2			
78	34861	10.37	10.38	80-120	100	( )
77	8559	10.37	10.38	0- 53	25	( )
51	6591	10.37	10.37	0- 49	19	( )
39 Trichloroethylene			CAS#: 79-01-6			
95	131694	10.62	11.00	80-120	100	(T)
97	100684	10.62	11.00	35- 95	76	(T)
130	127	11.01	11.00	72-132	0	(Q)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	8361	12.25	12.02	80-120	100	(T)
43	5222	12.25	12.02	227-287	62	(QT)
100	725060	12.25	12.02	9- 69	8671	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n308.d
Lab Smp Id: 241838001 Client Smp ID: WST03-10-2189
Inj Date : 02-DEC-2009 20:57
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241838001|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120209v4/4n308.d
Date : 02-DEC-2009 20:57
Client ID: WST03-10-2189
Sample Info: |2418380011928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

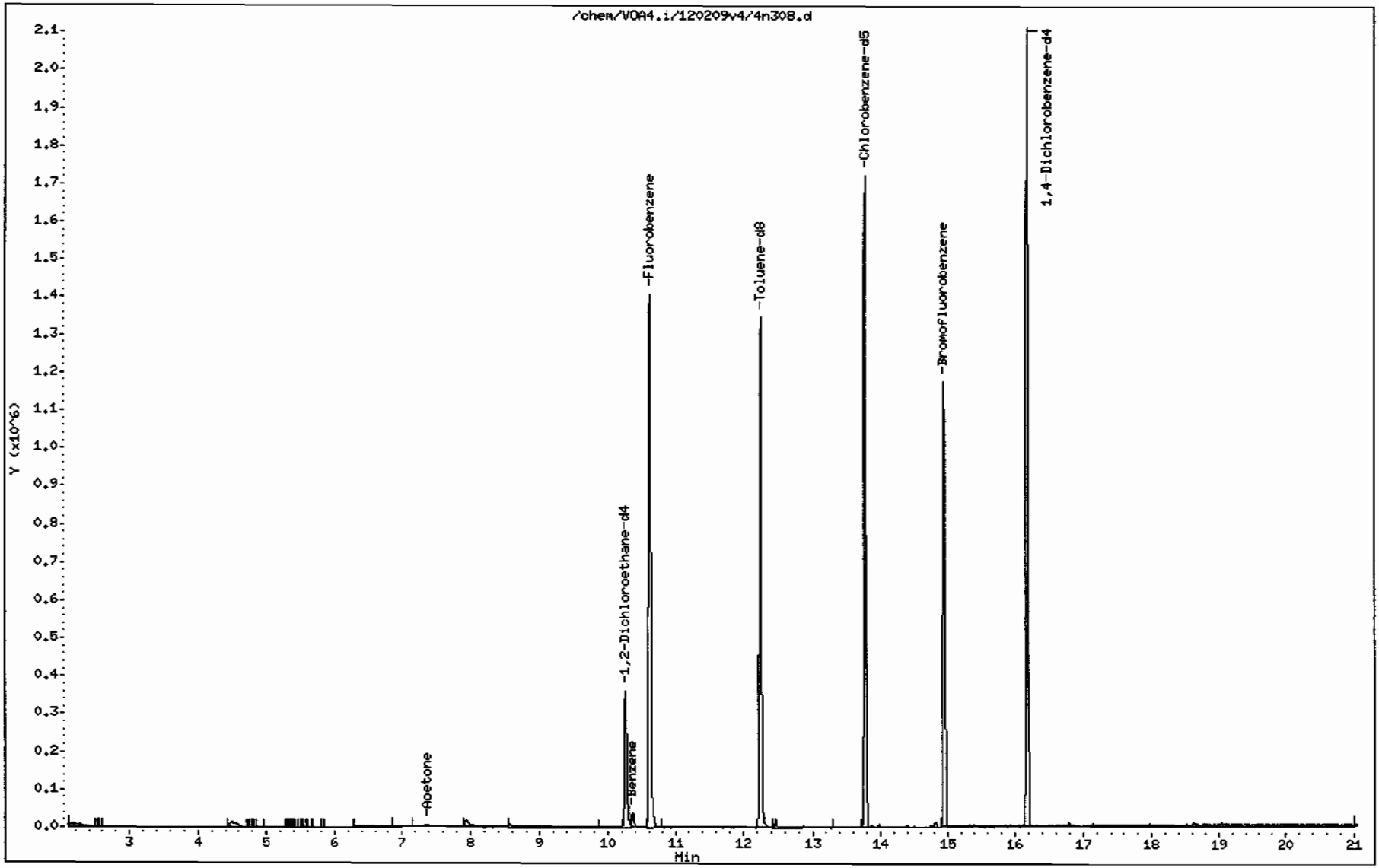

Data File: /chem/VOA4.i/120209v4/4n308.d

Page 2

Date : 02-DEC-2009 20:57

Client ID: WST03-10-2189

Instrument: VOA4.i

Sample Info: |2418380001|928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 2.0 ug/Kg

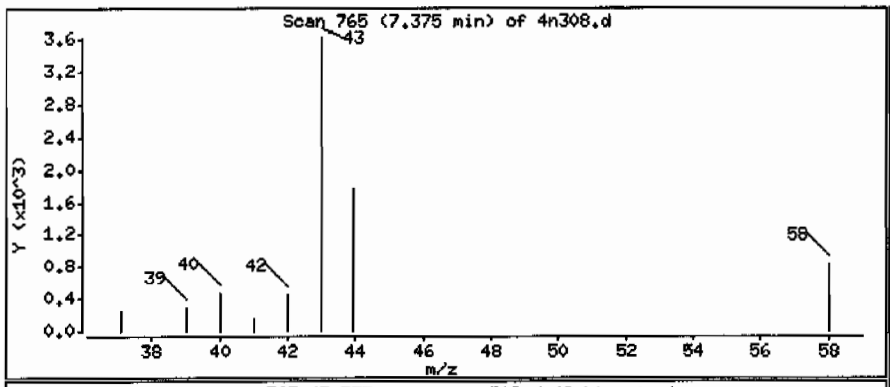

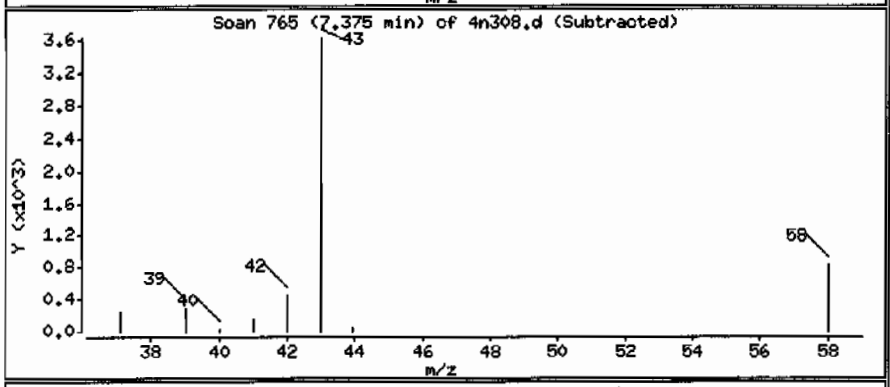

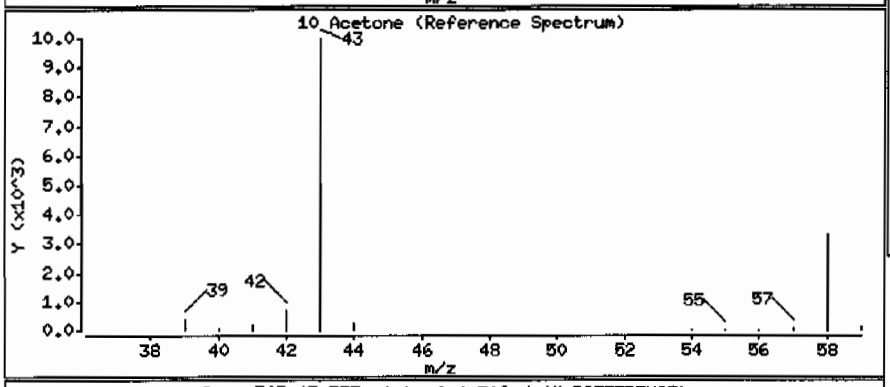

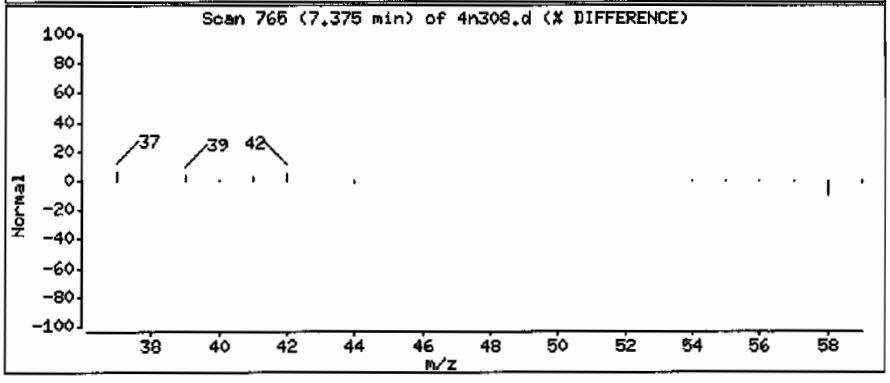

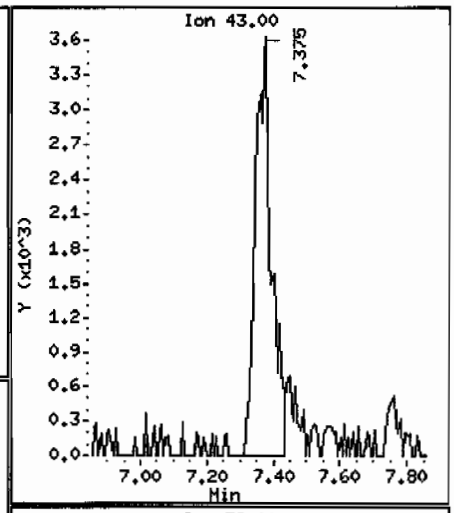

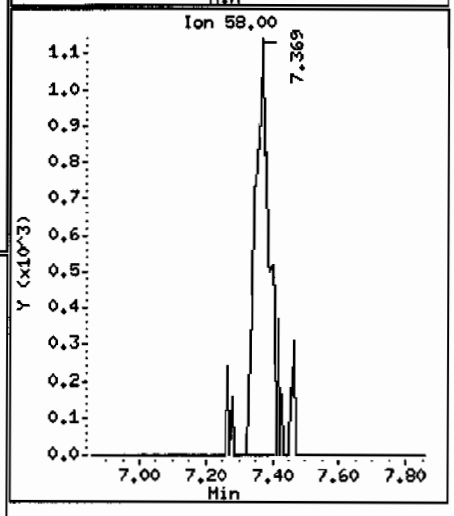

Data File: /chem/VOA4.i/120209v4/4n308.d

Date : 02-DEC-2009 20:57

Client ID: WST03-10-2189

Instrument: VOA4.i

Sample Info: |2418380011928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

38 Benzene

Concentration: 1.0 ug/Kg

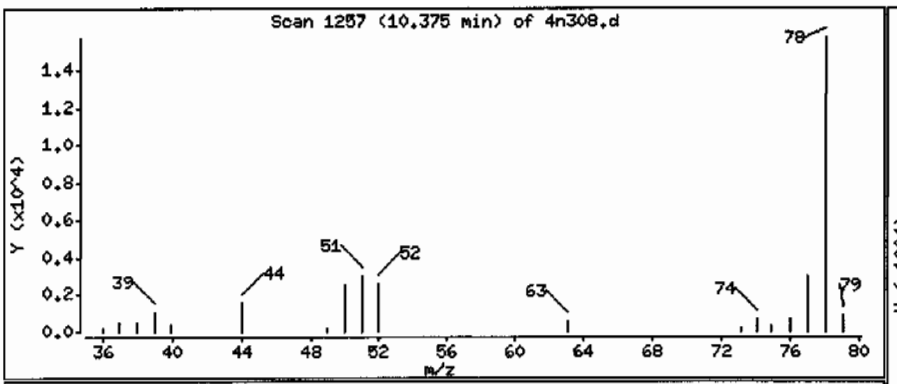

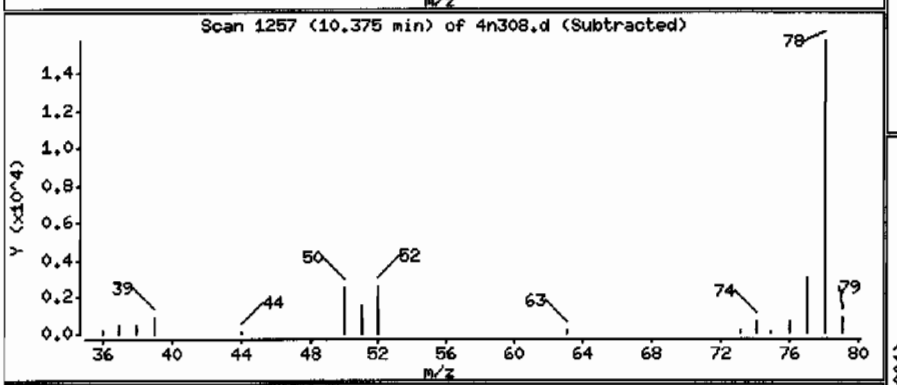

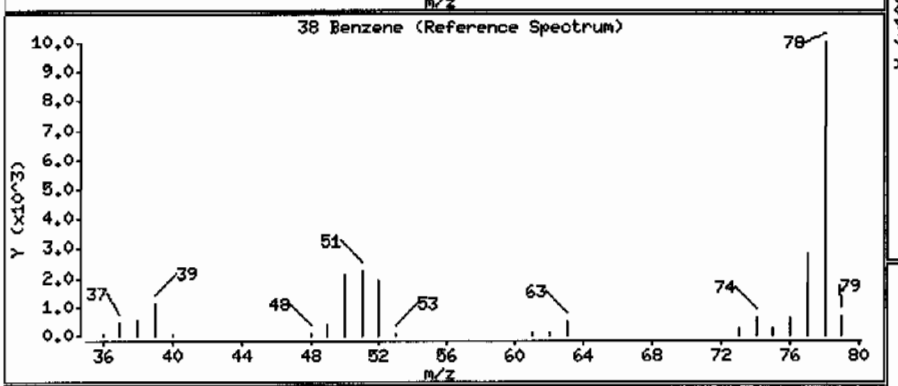

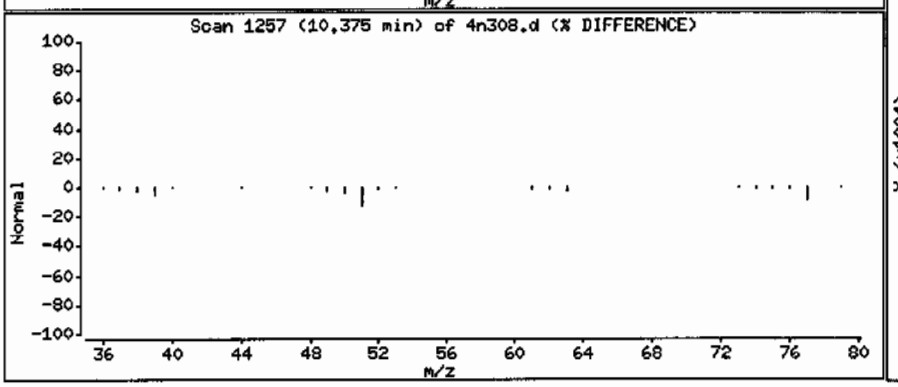

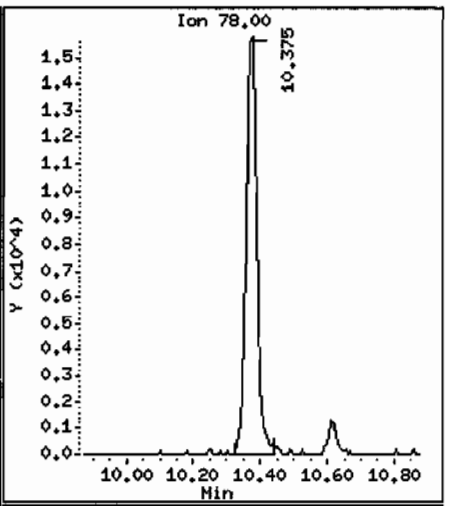

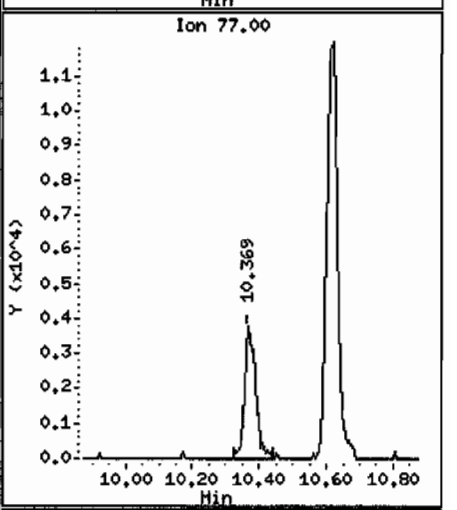

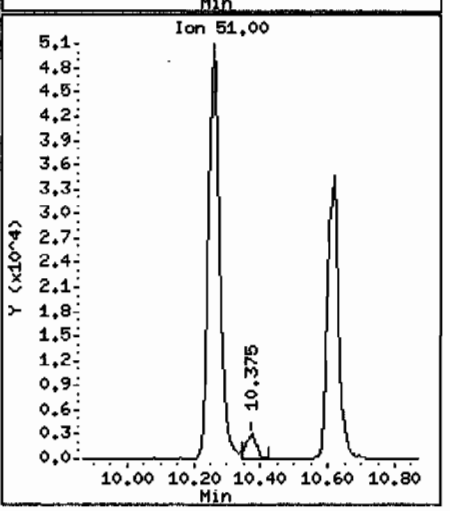

Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 04-Dec-2009 17:34

Calibration History

Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Start Cal Date: 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
22-NOV-2009 14:48	ICALsubS	/chem/VOA4.i/112209v4/41713.d
22-NOV-2009 10:41	CALsubL+	/chem/VOA4.i/112209v4/41704.d
Cal Level: 2 , Cal Amount: 2.00000		
22-NOV-2009 15:16	ICALsubS	/chem/VOA4.i/112209v4/41714.d
22-NOV-2009 11:36	CALsubL+	/chem/VOA4.i/112209v4/41706.d
Cal Level: 3 , Cal Amount: 5.00000		
22-NOV-2009 15:43	ICALsubS	/chem/VOA4.i/112209v4/41715.d
22-NOV-2009 12:04	CALsubL+	/chem/VOA4.i/112209v4/41707.d
Cal Level: 4 , Cal Amount: 10.00000		
22-NOV-2009 16:10	ICALsubS	/chem/VOA4.i/112209v4/41716.d
22-NOV-2009 12:31	CALsubL+	/chem/VOA4.i/112209v4/41708.d
Cal Level: 5 , Cal Amount: 20.00000		
22-NOV-2009 16:37	ICALsubS	/chem/VOA4.i/112209v4/41717.d
22-NOV-2009 12:59	CALsubL+	/chem/VOA4.i/112209v4/41709.d
Cal Level: 6 , Cal Amount: 50.00000		
22-NOV-2009 17:04	ICALsubS	/chem/VOA4.i/112209v4/41718.d
22-NOV-2009 13:27	CALsubL+	/chem/VOA4.i/112209v4/41710.d
Cal Level: 7 , Cal Amount: 100.00000		
22-NOV-2009 17:32	ICALsubS	/chem/VOA4.i/112209v4/41719.d
22-NOV-2009 13:54	CALsubL+	/chem/VOA4.i/112209v4/41711.d
Cal Level: 8 , Cal Amount: 200.00000		
22-NOV-2009 10:14	BENZENE+	/chem/VOA4.i/112209v4/41703.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
02-DEC-2009 17:19	CALsubL+	/chem/VOA4.i/120209v4/4n302.d
Ccal Level: 6 , Ccal Amount: 50.0		
02-DEC-2009 18:14	CALsubS+SS	/chem/VOA4.i/120209v4/4n304.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Calibration File Names:
Level 1: /chem/VOA4.i/112209v4/41713.d
Level 2: /chem/VOA4.i/112209v4/41714.d
Level 3: /chem/VOA4.i/112209v4/41715.d
Level 4: /chem/VOA4.i/112209v4/41716.d
Level 5: /chem/VOA4.i/112209v4/41717.d
Level 6: /chem/VOA4.i/112209v4/41718.d
Level 7: /chem/VOA4.i/112209v4/41719.d
Level 8: /chem/VOA4.i/112209v4/41703.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.70135	0.67482	0.71847	0.71001	0.64315	0.71607					
	0.60192	+++++					AVRG		0.68083		6.46217
M 2 1,2-Dichloroethylene (total)	0.39740	0.38742	0.40356	0.41339	0.36979	0.42144					
	0.36963	+++++					AVRG		0.39466		5.12263
M 135 1,3-Dichloropropylene	0.41350	0.40551	0.44628	0.45853	0.42258	0.48108					
	0.42557	+++++					AVRG		0.43615		6.18797
153 Chlorotrifluoroethylene	0.13143	0.18372	0.17447	0.18248	+++++	0.19006					
	+++++	+++++					AVRG		0.17243		13.67715
154 2-Chloro-1,1,1-trifluoroethan	0.26186	0.25912	0.25634	0.25645	+++++	0.26647					
	0.25722	+++++					AVRG		0.25958		1.52910

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
3 Dichlorodifluoromethane	0.21952	0.20478	0.24778	0.23830	0.25344	0.24626					
	0.22084	+++++					AVRG		0.23299		7.76928
4 Chloromethane	0.36252	0.34713	0.37649	0.35126	0.36111	0.38641					
	0.33300	+++++					AVRG		0.35970		5.00875
5 Vinyl chloride	0.33360	0.31585	0.35122	0.33159	0.33730	0.35659					
	0.30468	+++++					AVRG		0.33298		5.49023
6 Bromomethane	0.26744	0.25913	0.27384	0.26317	0.25533	0.28190					
	0.23741	+++++					AVRG		0.26260		5.43369
7 Chloroethane	0.24641	0.22492	0.25216	0.24499	0.24862	0.26778					
	0.22546	+++++					AVRG		0.24433		6.17830
8 Trichlorofluoromethane	0.39788	0.40451	0.41714	0.40395	0.41072	0.45146					
	0.39022	+++++					AVRG		0.41084		4.83812
134 Ethyl Ether	0.20013	0.22799	0.22695	0.23007	0.22323	0.24848					
	0.21817	+++++					AVRG		0.22500		6.43554
9 Acrolein	0.05592	0.05545	0.05313	0.05620	+++++	0.05350					
	0.05200	+++++					AVRG		0.05437		3.16611
12 Trichlorotrifluoroethane	0.10763	0.09987	0.09425	0.09433	+++++	0.08318					
	0.08283	+++++					AVRG		0.09368		10.25666

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
10 Acetone	0.21715	0.21091	0.19514	0.20925	0.18498	0.22820					
	0.17644	+++++					AVRG		0.20316		9.05187
11 1,1-Dichloroethylene	0.43010	0.40719	0.43561	0.43488	0.39281	0.46160					
	0.40074	+++++					AVRG		0.42328		5.70354
147 Isopropyl Alcohol	0.02541	0.02962	0.02587	0.02812	+++++	0.02700					
	0.02584	+++++					AVRG		0.02698		6.03712
13 Iodomethane	0.49411	0.49115	0.52557	0.53262	0.47737	0.55006					
	0.47344	+++++					AVRG		0.50633		5.85556
15 Acetonitrile	0.04684	0.04644	0.04649	0.04892	0.04391	0.04889					
	0.03979	+++++					AVRG		0.04590		6.94320
128 Methyl acetate	0.25731	0.23806	0.23684	0.24780	0.21890	0.24259					
	0.19845	+++++					AVRG		0.23428		8.40002
14 Carbon disulfide	0.91167	0.87511	0.91689	0.92639	0.82243	0.92593					
	0.76534	+++++					AVRG		0.87768		7.06555
16 Allyl chloride	0.47481	0.44851	0.43469	0.44980	+++++	0.41236					
	0.38471	+++++					AVRG		0.43415		7.30172
148 tert-Butyl Alcohol	0.03756	0.04508	0.03881	0.04200	+++++	0.04059					
	0.03810	+++++					AVRG		0.04036		7.04178

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
17 Methylene chloride	+++++	89613	104945	156326	244699	561681					
	1084465	+++++					LINR	-0.13197	0.29325		0.99269
18 Acrylonitrile	0.10599	0.11761	0.10731	0.11347	+++++	0.10855					
	0.10484	+++++					AVRG		0.10963		4.48945
20 tert-Butyl methyl ether	0.79558	0.87853	0.81726	0.87060	0.77996	0.85442					
	0.74022	+++++					AVRG		0.81951		6.25004
21 trans-1,2-Dichloroethylene	0.35735	0.37592	0.38478	0.39437	0.35468	0.40358					
	0.35165	+++++					AVRG		0.37462		5.51097
23 Vinyl acetate	0.49838	0.54680	0.57711	0.57802	0.55244	0.60012					
	0.46080	+++++					AVRG		0.54481		9.01724
149 Isopropyl ether	0.95978	0.92001	0.90178	0.92165	+++++	0.89996					
	0.89878	+++++					AVRG		0.91700		2.54124
22 1,1-Dichloroethane	0.46140	0.44295	0.49088	0.48216	0.44328	0.50152					
	0.43956	+++++					AVRG		0.46596		5.47805
24 2-Chloro-1,3-butadiene	0.42752	0.41435	0.41736	0.41116	+++++	0.40092					
	0.40151	+++++					AVRG		0.41214		2.44686
150 Ethyl tert-butyl ether	0.84482	0.84737	0.83195	0.85512	+++++	0.82219					
	0.83043	+++++					AVRG		0.83865		1.47845

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
30 2-Butanone	0.23385	0.23579	0.22472	0.23959	0.21992	0.26519					
	0.21714	+++++					AVRG		0.23374		6.93171
26 Ethyl acetate	0.32623	0.34240	0.30347	0.31352	+++++	0.29024					
	0.26820	+++++					AVRG		0.30734		8.56310
31 cis-1,2-Dichloroethylene	0.43746	0.39893	0.42234	0.43240	0.38490	0.43930					
	0.38761	+++++					AVRG		0.41470		5.71138
25 2,2-Dichloropropane	0.29466	0.25782	0.28219	0.27714	0.24901	0.27503					
	0.24787	+++++					AVRG		0.26910		6.62310
28 Propionitrile	0.04376	0.05227	0.04399	0.04681	+++++	0.04559					
	0.04383	+++++					AVRG		0.04604		7.13467
27 Methacrylonitrile	0.17978	0.19710	0.18112	0.18893	+++++	0.17963					
	0.16721	+++++					AVRG		0.18229		5.51523
29 Bromochloromethane	0.14402	0.13910	0.15114	0.15508	0.13476	0.15841					
	0.14035	+++++					AVRG		0.14612		6.07266
32 Chloroform	0.50037	0.46709	0.47945	0.48569	0.43681	0.49308					
	0.43321	+++++					AVRG		0.47081		5.65257
72 Tetrahydrofuran	28285	49603	91261	180946	+++++	811740					
	1542403	+++++					LINR	-0.21156	0.17273		0.99744

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-NOV-2009 10:14
End Cal Date : 22-NOV-2009 17:32
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
36 1,1,1-Trichloroethane	0.34177	0.33797	0.36697	0.35793	0.32888	0.37723					
	0.33495	+++++					AVRG		0.34939		5.19290
19 Isobutyl alcohol	0.01333	0.01535	0.01335	0.01471	+++++	0.01411					
	0.01295	+++++					AVRG		0.01397		6.66101
129 Cyclohexane	0.43240	0.40010	0.41453	0.40591	0.37242	0.42674					
	0.37265	+++++					AVRG		0.40354		5.92718
34 1,1-Dichloropropene	0.34396	0.33259	0.36640	0.35168	0.33247	0.37748					
	0.32857	+++++					AVRG		0.34759		5.37228
33 Carbon tetrachloride	0.33357	0.32239	0.34241	0.34257	0.31834	0.36936					
	0.33037	+++++					AVRG		0.33700		5.03062
37 1,2-Dichloroethane	0.36646	0.37339	0.38216	0.38288	0.34836	0.39447					
	0.34689	+++++					AVRG		0.37066		4.84641
38 Benzene	1.08632	1.03953	1.11726	1.09466	0.97346	1.10695					
	0.94618	1.20943					AVRG		1.07172		7.84406
151 Methyl tert-amyl ether	0.84827	0.86006	0.82129	0.84576	+++++	0.81709					
	0.82104	+++++					AVRG		0.83559		2.15534
139 Cyclohexene	0.52887	0.49537	0.52023	0.51530	0.47626	0.53834					
	0.47205	+++++					AVRG		0.50663		5.09965

GEL Laboratories LLC

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01024	0.01084	0.01043	0.01203	0.00875	0.01249					
	0.01024	0.01084					AVRG		0.01073		10.73836
39 Trichloroethylene	0.27049	0.26768	0.27901	0.28025	0.25066	0.28409					
	0.25133	+++++					AVRG		0.26907		5.04764
42 Methyl methacrylate	0.20522	0.21958	0.20097	0.21212	+++++	0.19781					
	0.18497	+++++					AVRG		0.20344		5.89043
130 Methylcyclohexane	0.45782	0.40944	0.44364	0.43070	0.40942	0.45487					
	0.39748	+++++					AVRG		0.42905		5.61039
41 1,2-Dichloropropane	0.28007	0.27751	0.28731	0.29540	0.26480	0.30111					
	0.26062	+++++					AVRG		0.28098		5.32401
97 1,4-Dioxane	0.00367	0.00391	0.00331	0.00381	+++++	0.00364					
	0.00350	+++++					AVRG		0.00364		5.86751
43 Dibromomethane	0.17297	0.16928	0.17293	0.18369	0.16407	0.18681					
	0.16513	+++++					AVRG		0.17355		5.03688
45 Bromodichloromethane	0.35810	0.34545	0.37438	0.36950	0.34403	0.39092					
	0.34862	+++++					AVRG		0.36157		4.83779
48 2-Nitropropane	0.09325	0.09886	0.08717	0.09749	+++++	0.09739					
	0.09420	+++++					AVRG		0.09473		4.51184

GEL Laboratories LLC

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
44 2-Chloroethylvinyl ether	0.15167	0.15840	0.16203	0.16999	0.15822	0.17712					
	0.14523	+++++					AVRG		0.16038		6.68189
46 cis-1,3-Dichloropropylene	0.42560	0.42436	0.46605	0.47362	0.43654	0.49344					
	0.43654	+++++					AVRG		0.45088		5.94621
49 4-Methyl-2-pentanone	0.16704	0.16573	0.16058	0.16558	0.15177	0.17455					
	0.14456	+++++					AVRG		0.16140		6.28749
50 Toluene	0.95599	0.89242	0.92210	0.90343	0.80436	0.89036					
	0.76529	+++++					AVRG		0.87628		7.67500
51 Ethyl methacrylate	0.52301	0.54250	0.51464	0.52715	+++++	0.46530					
	0.41126	+++++					AVRG		0.49731		9.98259
53 trans-1,3-Dichloropropylene	0.55667	0.52412	0.57667	0.58556	0.53379	0.60809					
	0.53039	+++++					AVRG		0.55933		5.70215
54 1,1,2-Trichloroethane	0.28664	0.26669	0.29062	0.29122	0.26059	0.29539					
	0.25448	+++++					AVRG		0.27795		6.04778
55 2-Hexanone	0.44966	0.43839	0.43114	0.45156	0.41544	0.47289					
	0.38534	+++++					AVRG		0.43492		6.50323
52 1,3-Dichloropropane	0.58992	0.56247	0.59158	0.58963	0.53126	0.58281					
	0.48934	+++++					AVRG		0.56243		6.91458

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Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
56 Tetrachloroethylene	0.36707	0.34242	0.34742	0.34437	0.31600	0.35293					
	0.31257	+++++					AVRG		0.34040		5.76135
57 Dibromochloromethane	0.36430	0.36503	0.37424	0.40158	0.37199	0.42902					
	0.38635	+++++					AVRG		0.38465		6.12123
59 1,2-Dibromoethane	0.34061	0.33398	0.36106	0.36598	0.34272	0.38240					
	0.33925	+++++					AVRG		0.35228		5.05692
152 1-Chlorohexane	0.27943	0.25644	0.23756	0.24653	+++++	0.25264					
	0.25465	+++++					AVRG		0.25454		5.49819
62 Chlorobenzene	1.00079	1.01568	1.05757	1.06100	0.94511	1.07380					
	0.92098	+++++					AVRG		1.01070		5.87902
60 1,1,1,2-Tetrachloroethane	0.39361	0.35697	0.40153	0.39299	0.36161	0.40793					
	0.35713	+++++					AVRG		0.38168		5.82855
58 Ethylbenzene	1.84025	1.71034	1.78402	1.76603	1.58732	1.73971					
	1.41449	+++++					AVRG		1.69174		8.58326
63 m,p-Xylenes	0.70030	0.66453	0.70747	0.70329	0.63579	0.70407					
	0.59219	+++++					AVRG		0.67252		6.59440
64 o-Xylene	0.70344	0.69541	0.74047	0.72343	0.65786	0.74007					
	0.62137	+++++					AVRG		0.69744		6.34185

GEL Laboratories LLC

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Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
65 Styrene	1.21077	1.15199	1.23797	1.24119	1.13289	1.27542					
	1.05111	+++++					AVRG		1.18591		6.57939
66 Bromoform	0.49404	0.47895	0.51340	0.55884	0.52075	0.63851					
	0.57125	+++++					AVRG		0.53939		10.14098
67 Isopropylbenzene	2.81546	2.75017	2.84421	2.84280	2.56688	2.84161					
	2.30776	+++++					AVRG		2.70984		7.50228
68 cis-1,4-Dichloro-2-butene	0.20831	0.23800	0.22368	0.22817	+++++	0.22092					
	0.20566	+++++					AVRG		0.22079		5.52375
70 Cyclohexanone	0.03515	0.04094	0.03660	0.04054	+++++	0.03802					
	0.03639	+++++					AVRG		0.03794		6.20501
73 1,1,2,2-Tetrachloroethane	0.75747	0.79219	0.83626	0.84224	0.76143	0.85606					
	0.71570	+++++					AVRG		0.79448		6.59872
69 trans-1,4-Dichloro-2-butene	0.21501	0.23443	0.20845	0.21973	+++++	0.20938					
	0.19312	+++++					AVRG		0.21335		6.41608
74 1,2,3-Trichloropropane	0.20845	0.20706	0.21761	0.22120	0.20235	0.23283					
	0.19379	+++++					AVRG		0.21190		6.12869
75 Bromobenzene	0.86711	0.84553	0.88263	0.88735	0.79663	0.92286					
	0.79096	+++++					AVRG		0.85615		5.67234

GEL Laboratories LLC

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Integrator : HP RTE
Method file : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
76 n-Propylbenzene	3.39349	3.26326	3.49629	3.38979	3.04662	3.32860					
	2.61397	+++++					AVRG		3.21886		9.37389
78 1,3,5-Trimethylbenzene	2.48326	2.44997	2.58869	2.55937	2.29300	2.53053					
	2.01793	+++++					AVRG		2.41754		8.32003
77 2-Chlorotoluene	2.50052	2.28701	2.46919	2.41383	2.13859	2.33326					
	1.85746	+++++					AVRG		2.28570		9.84026
80 4-Chlorotoluene	2.21104	2.08272	2.22413	2.19063	1.96458	2.21541					
	1.81428	+++++					AVRG		2.10040		7.51638
81 tert-Butylbenzene	2.56778	2.48368	2.56772	2.56479	2.28412	2.57734					
	2.10600	+++++					AVRG		2.45020		7.52754
79 1,2,4-Trimethylbenzene	2.72525	2.55215	2.74018	2.72725	2.37980	2.63816					
	2.14623	+++++					AVRG		2.55843		8.70457
82 Pentachloroethane	0.50501	0.48269	0.48049	0.45126	+++++	0.35124					
	0.40108	+++++					AVRG		0.44529		13.11002
83 sec-Butylbenzene	3.45534	3.21255	3.53229	3.46947	3.10653	3.41341					
	2.68756	+++++					AVRG		3.26817		9.11754
84 4-Isopropyltoluene	2.82093	2.66835	2.87406	2.82119	2.51181	2.79014					
	2.27080	+++++					AVRG		2.67961		8.13997

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Cal Date : 02-Dec-2009 18:39 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	1.63923	1.59498	1.69316	1.70724	1.50639	1.69998					
	1.43192	+++++					AVRG		1.61041		6.61020
87 1,4-Dichlorobenzene	1.71875	1.59053	1.69010	1.67669	1.50062	1.69539					
	1.44149	+++++					AVRG		1.61622		6.70439
88 Benzyl chloride	1.30649	1.38444	1.30279	1.33389	+++++	1.17735					
	0.96630	+++++					AVRG		1.24521		12.26968
89 n-Butylbenzene	2.60812	2.52813	2.66438	2.61551	2.36712	2.57681					
	2.08133	+++++					AVRG		2.49163		8.21192
90 1,2-Dichlorobenzene	1.64359	1.51915	1.65273	1.62268	1.47619	1.63698					
	1.39061	+++++					AVRG		1.56313		6.54277
91 bis(2-Chloroisopropyl)ether	0.37069	0.42630	0.35573	0.38220	+++++	0.37313					
	0.32169	+++++					AVRG		0.37162		9.20525
92 1,2-Dibromo-3-chloropropane	0.16090	0.17023	0.16881	0.18391	0.17674	0.19572					
	0.17820	+++++					AVRG		0.17636		6.41964
93 1,2,4-Trichlorobenzene	0.86804	0.82729	0.90400	0.95532	0.88491	0.92567					
	0.83336	+++++					AVRG		0.88551		5.30559
94 Hexachlorobutadiene	0.65645	0.61705	0.64747	0.65029	0.59424	0.63287					
	0.57806	+++++					AVRG		0.62520		4.80208

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	1.52349	1.43037	1.51173	1.63279	1.54736	1.60261					
	1.40026	+++++					AVRG		1.52123		5.54782
96 1,2,3-Trichlorobenzene	0.70644	0.66598	0.72623	0.74703	0.68968	0.70642					
	0.65102	+++++					AVRG		0.69897		4.75877
$ 138 1,2-Dichloroethane-d4	0.17578	0.18570	0.19564	0.20439	0.18848	0.20826					
	0.21644	+++++					AVRG		0.19639		7.22804
$ 47 Toluene-d8	0.83900	0.85325	0.89204	0.90684	0.83870	0.92761					
	0.83861	+++++					AVRG		0.87087		4.28714
$ 71 Bromofluorobenzene	0.52483	0.55505	0.58369	0.61009	0.55725	0.63913					
	0.58288	+++++					AVRG		0.57899		6.53887

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Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 18:53
Lab File ID: 41722.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-18 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.68083	0.69132	0.69132	0.050	1.54202	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.39466	0.40630	0.40630	0.050	2.95007	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.43615	0.43846	0.43846	0.050	0.52968	30.00000	Averaged	
3 Dichlorodifluoromethane	0.23299	0.21510	0.21510	0.050	-7.67900	30.00000	Averaged	
4 Chloromethane	0.35970	0.31949	0.31949	0.100	-11.17813	30.00000	Averaged	spcc
5 Vinyl chloride	0.33298	0.32061	0.32061	0.050	-3.71515	20.00000	Averaged	ccc
6 Bromomethane	0.26260	0.24826	0.24826	0.050	-5.45987	30.00000	Averaged	
7 Chloroethane	0.24433	0.23602	0.23602	0.050	-3.40156	30.00000	Averaged	
8 Trichlorofluoromethane	0.41084	0.40966	0.40966	0.050	-0.28572	30.00000	Averaged	
134 Ethyl Ether	0.22500	0.21166	0.21166	0.001	-5.93017	30.00000	Averaged	
10 Acetone	0.20316	0.14150	0.14150	0.050	-30.34976	40.00000	Averaged	
15 Acetonitrile	0.04590	0.04069	0.04069	0.010	-11.34196	30.00000	Averaged	
11 1,1-Dichloroethylene	0.42328	0.42893	0.42893	0.050	1.33577	20.00000	Averaged	ccc
128 Methyl acetate	0.23428	0.19676	0.19676	0.010	-16.01466	40.00000	Averaged	
13 Iodomethane	0.50633	0.51727	0.51727	0.050	2.16046	30.00000	Averaged	
17 Methylene chloride	51.31291	50.00000	0.33965	0.050	2.62581	30.00000	Linear	
14 Carbon disulfide	0.87768	0.91718	0.91718	0.050	4.50062	30.00000	Averaged	
20 tert-Butyl methyl ether	0.81951	0.75110	0.75110	0.050	-8.34781	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.37462	0.38832	0.38832	0.050	3.65819	30.00000	Averaged	
23 Vinyl acetate	0.54481	0.49355	0.49355	0.010	-9.40872	40.00000	Averaged	
22 1,1-Dichloroethane	0.46596	0.48122	0.48122	0.100	3.27446	30.00000	Averaged	spcc
30 2-Butanone	0.23374	0.17581	0.17581	0.030	-24.78714	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.41470	0.42429	0.42429	0.050	2.31050	30.00000	Averaged	
25 2,2-Dichloropropane	0.26910	0.27404	0.27404	0.050	1.83530	30.00000	Averaged	
32 Chloroform	0.47081	0.47569	0.47569	0.010	1.03561	20.00000	Averaged	ccc
29 Bromochloromethane	0.14612	0.14549	0.14549	0.010	-0.43079	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.34939	0.36751	0.36751	0.010	5.18800	30.00000	Averaged	
129 Cyclohexane	0.40354	0.42421	0.42421	0.010	5.12308	30.00000	Averaged	
34 1,1-Dichloropropene	0.34759	0.36893	0.36893	0.010	6.13735	30.00000	Averaged	
131 n-Butyl alcohol	0.01073	0.01040	0.01040	0.001	-3.06093	40.00000	Averaged	
33 Carbon tetrachloride	0.33700	0.35930	0.35930	0.010	6.61503	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.19639	0.20547	0.20547	0.001	4.62716	30.00000	Averaged	
37 1,2-Dichloroethane	0.37066	0.35941	0.35941	0.010	-3.03368	30.00000	Averaged	
38 Benzene	1.07172	1.07229	1.07229	0.010	0.05259	30.00000	Averaged	
139 Cyclohexene	0.50663	0.51278	0.51278	0.001	1.21436	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 41722.d
Analysis Type: WATER
Lab Sample ID: W4VM091122-18
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Injection Date: 22-NOV-2009 18:53
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.28019	0.28019	0.010	4.13279	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.28134	0.28134	0.010	0.13000	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.44411	0.44411	0.010	3.50875	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.36895	0.36895	0.010	2.04004	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.16757	0.16757	0.010	-3.44731	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14096	0.14096	0.005	-12.11088	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.13941	0.13941	0.010	-13.62299	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.45323	0.45323	0.010	0.52137	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.86829	0.86829	0.010	-0.29589	30.00000	Averaged	
	50 Toluene	0.87628	0.86307	0.86307	0.010	-1.50792	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.54837	0.54837	0.010	-1.95885	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.26103	0.26103	0.010	-6.08674	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.29367	0.29367	0.010	-32.47630	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.53703	0.53703	0.010	-4.51590	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.34775	0.34775	0.010	2.16113	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.38777	0.38777	0.010	0.81133	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.34520	0.34520	0.010	-2.00984	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.03137	1.03137	0.300	2.04472	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.38883	0.38883	0.010	1.87227	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.67584	1.67584	0.010	-0.93937	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.68291	0.68291	0.010	1.54543	30.00000	Averaged	
	64 o-Xylene	0.69744	0.70815	0.70815	0.010	1.53566	30.00000	Averaged	
	65 Styrene	1.18591	1.21191	1.21191	0.010	2.19258	30.00000	Averaged	
	66 Bromoform	0.53939	0.54722	0.54722	0.100	1.45063	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.67215	2.67215	0.010	-1.39091	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.72562	0.72562	0.300	-8.66743	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.58218	0.58218	0.010	0.55182	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.19674	0.19674	0.010	-7.15485	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.86007	0.86007	0.010	0.45779	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.16972	3.16972	0.010	-1.52666	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.21699	2.21699	0.010	-3.00590	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.39741	2.39741	0.010	-0.83248	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.09083	2.09083	0.010	-0.45555	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.46685	2.46685	0.010	0.67956	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.51478	2.51478	0.010	-1.70627	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.26146	3.26146	0.010	-0.20528	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 41722.d
Analysis Type: WATER
Lab Sample ID: W4VM091122-18
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Injection Date: 22-NOV-2009 18:53
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.67217	2.67217	0.010	-0.27751	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.61689	1.61689	0.010	0.40229	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.59751	1.59751	0.010	-1.15795	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.47231	2.47231	0.010	-0.77540	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.53519	1.53519	0.010	-1.78760	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.17202	0.17202	0.010	-2.46241	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	0.94077	0.94077	0.010	6.24058	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.66766	0.66766	0.010	6.79105	30.00000	Averaged
95 Naphthalene	1.52123	1.56791	1.56791	0.010	3.06878	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.76536	0.76536	0.010	9.49837	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.44016
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41722.d
Lab Smp Id: W4VM091122-18 Client Smp ID: SECOND SOURCE
Inj Date : 22-NOV-2009 18:53
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-18|ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01C/IVM091122-01
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2583514	150.000	152
M 2 1,2-Dichloroethylene (total)	96				1310123	100.000	103
M 135 1,3-Dichloropropylene	75				1413814	100.000	100
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	346786	50.0000	46.2
4 Chloromethane	50	5.299	5.299	(0.499)	515104	50.0000	44.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	516895	50.0000	48.1
6 Bromomethane	94	6.138	6.138	(0.578)	400262	50.0000	47.3
7 Chloroethane	64	6.288	6.288	(0.592)	380525	50.0000	48.3
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	660479	50.0000	49.8
134 Ethyl Ether	59	7.003	7.003	(0.660)	341247	50.0000	47.0
10 Acetone	43	7.357	7.357	(0.693)	1140649	250.000	174
15 Acetonitrile	41	7.705	7.705	(0.726)	1640110	1250.00	1110
11 1,1-Dichloroethylene	61	7.394	7.394	(0.696)	691539	50.0000	50.7
128 Methyl acetate	43	7.753	7.753	(0.730)	1586132	250.000	210
13 Iodomethane	142	7.631	7.631	(0.719)	4169845	250.000	255
17 Methylene chloride	84	7.942	7.942	(0.748)	547607	50.0000	51.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	7393616	250.000	261
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	1210958	50.0000	45.8
21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	626069	50.0000	51.8
23 Vinyl acetate	43	8.710	8.710	(0.820)	3978626	250.000	226
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	775846	50.0000	51.6
30 2-Butanone	43	9.326	9.326	(0.878)	1417213	250.000	188
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	684054	50.0000	51.2
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	441819	50.0000	50.9
32 Chloroform	83	9.692	9.692	(0.913)	766928	50.0000	50.5
29 Bromochloromethane	128	9.662	9.662	(0.910)	234568	50.0000	49.8
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	592518	50.0000	52.6
129 Cyclohexane	56	10.082	10.082	(0.949)	683928	50.0000	52.6
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	594801	50.0000	53.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1677330	5000.00	4850
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	579271	50.0000	53.3
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	331271	50.0000	52.3
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	579461	50.0000	48.5
38 Benzene	78	10.375	10.375	(0.977)	1728792	50.0000	50.0
139 Cyclohexene	67	10.497	10.497	(0.989)	826734	50.0000	50.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1612245	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	451741	50.0000	52.1
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	453589	50.0000	50.1
130 Methylcyclohexane	83	11.265	11.265	(1.061)	716009	50.0000	51.8
45 Bromodichloromethane	83	11.484	11.484	(1.082)	594832	50.0000	51.0
43 Dibromomethane	93	11.375	11.375	(1.071)	270167	50.0000	48.3
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	1136285	250.000	220
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	868329	250.000	216
46 cis-1,3-Dichloropropylene	75	11.935	11.935	(1.124)	730715	50.0000	50.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	1081613	50.0000	49.8
50 Toluene	92	12.326	12.326	(0.895)	1075108	50.0000	49.2
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	683099	50.0000	49.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	325158	50.0000	47.0
55 2-Hexanone	43	12.856	12.856	(0.934)	1829103	250.000	169
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	668969	50.0000	47.7
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	433189	50.0000	51.1
57 Dibromochloromethane	129	13.149	13.149	(0.955)	483033	50.0000	50.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	430015	50.0000	49.0
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	1245683	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	1284761	50.0000	51.0
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	484356	50.0000	50.9
58 Ethylbenzene	91	13.862	13.862	(1.007)	2087570	50.0000	49.5
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1701387	100.000	102
64 o-Xylene	106	14.404	14.404	(1.046)	882126	50.0000	50.8
65 Styrene	104	14.404	14.404	(1.046)	1509654	50.0000	51.1
66 Bromoform	173	14.661	14.661	(0.906)	479720	50.0000	50.7
67 Isopropylbenzene	105	14.758	14.758	(0.912)	2342561	50.0000	49.3
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	636119	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	510376	50.0000	50.3
74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	172470	50.0000	46.4
75 Bromobenzene	156	15.167	15.167	(0.937)	753987	50.0000	50.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	2778758	50.0000	49.2
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1943541	50.0000	48.5
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	2101707	50.0000	49.6
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1832943	50.0000	49.8
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	2162586	50.0000	50.3
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	2204597	50.0000	49.1
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	2859180	50.0000	49.9
84 4-Isopropyltoluene	119	16.050	16.050	(0.992)	2342581	50.0000	49.9
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	1417460	50.0000	50.2
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	876657	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	1400467	50.0000	49.4
89 n-Butylbenzene	91	16.502	16.502	(1.020)	2167366	50.0000	49.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	1345835	50.0000	49.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	150799	50.0000	48.8
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	824735	50.0000	53.1
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	585310	50.0000	53.4
95 Naphthalene	128	19.032	19.032	(1.176)	1374522	50.0000	51.5
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	670958	50.0000	54.7

Data File: /chem/VOA4.i/112209w4/41722.d
Date : 22-NOV-2009 18:53
Client ID: SECOND SOURCE
Sample Info: IW4VHC091122-18|ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

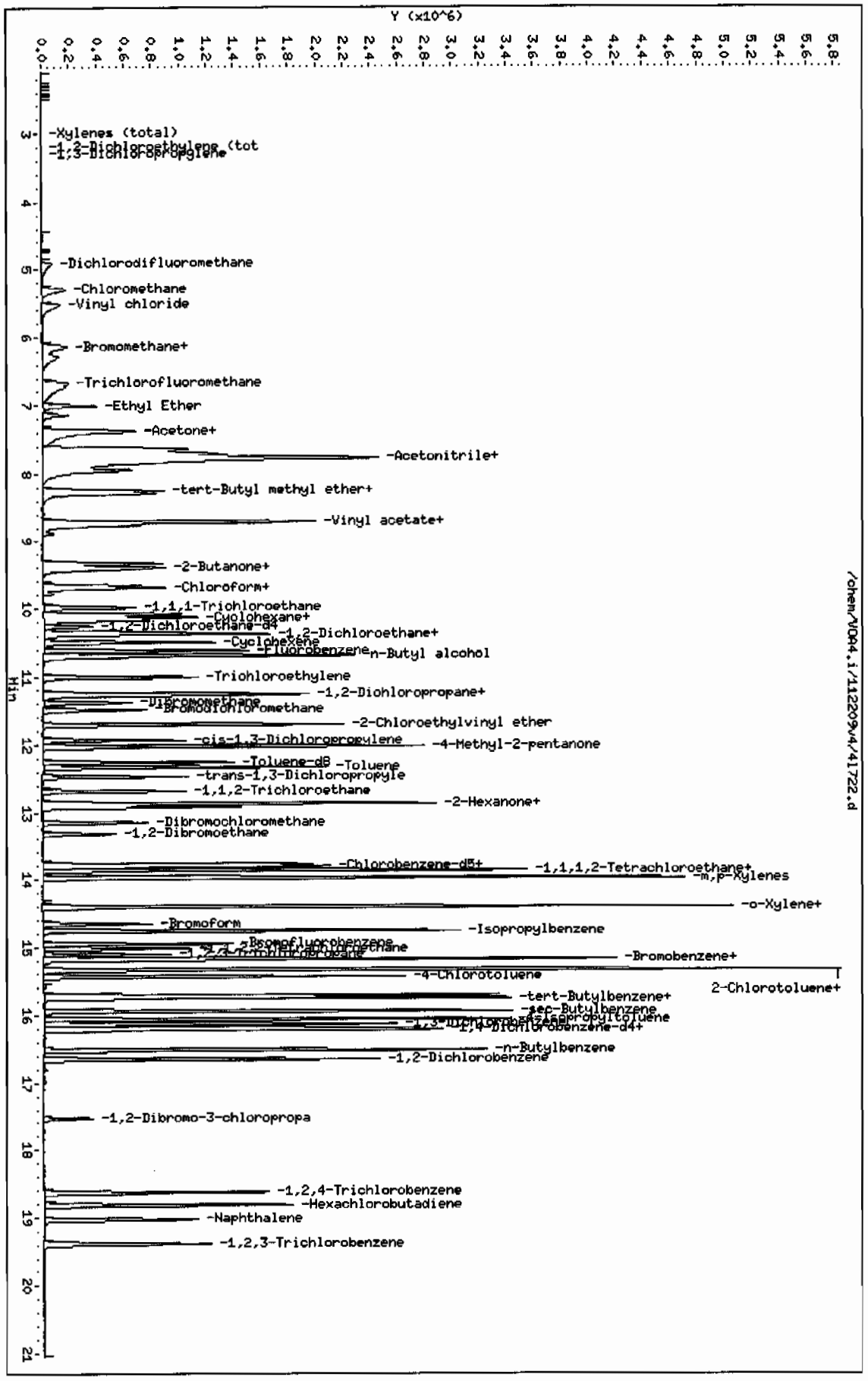

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 22-NOV-2009 19:21
Lab File ID: 41723.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091122-19 Quant Type: ISTD
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	0.17243	0.13061	0.13061	0.010	-24.25152	30.00000	Averaged
154 2-Chloro-1,1,1-trifluoroeth	0.25958	0.25736	0.25736	0.010	-0.85465	30.00000	Averaged
9 Acrolein	0.05437	0.04991	0.04991	0.001	-8.19106	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.10008	0.10008	0.050	6.83147	30.00000	Averaged
147 Isopropyl Alcohol	0.02698	0.02517	0.02517	0.010	-6.71050	40.00000	Averaged
16 Allyl chloride	0.43415	0.41792	0.41792	0.010	-3.73840	30.00000	Averaged
148 tert-Butyl Alcohol	0.04036	0.03739	0.03739	0.010	-7.33967	40.00000	Averaged
18 Acrylonitrile	0.10963	0.10530	0.10530	0.010	-3.94603	30.00000	Averaged
149 Isopropyl ether	0.91700	0.84326	0.84326	0.010	-8.04141	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.40649	0.40649	0.010	-1.36927	30.00000	Averaged
150 Ethyl tert-butyl ether	0.83865	0.77645	0.77645	0.010	-7.41578	30.00000	Averaged
28 Propionitrile	0.04604	0.04193	0.04193	0.010	-8.93871	30.00000	Averaged
26 Ethyl acetate	0.30734	0.26429	0.26429	0.010	-14.00741	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.17171	0.17171	0.010	-5.80832	30.00000	Averaged
72 Tetrahydrofuran	255	250	0.18327	0.010	1.87504	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01249	0.01249	0.005	-10.58475	40.00000	Averaged
151 Methyl tert-amyl ether	0.83559	0.76954	0.76954	0.010	-7.90398	30.00000	Averaged
42 Methyl methacrylate	0.20344	0.18796	0.18796	0.010	-7.61187	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.45252	0.45252	0.010	-9.00773	30.00000	Averaged
152 1-Chlorohexane	0.25454	0.23444	0.23444	0.010	-7.89735	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00345	0.00345	0.001	-5.31429	40.00000	Averaged
48 2-Nitropropane	0.09473	0.09142	0.09142	0.010	-3.49078	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.21768	0.21768	0.010	-1.40961	30.00000	Averaged
70 Cyclohexanone	0.03794	0.02005	0.02005	0.005	-47.14610	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.20712	0.20712	0.010	-2.91969	30.00000	Averaged
82 Pentachloroethane	0.44529	0.35466	0.35466	0.010	-20.35311	30.00000	Averaged
88 Benzyl chloride	1.24521	1.01385	1.01385	0.010	-18.57992	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.34611	0.34611	0.010	-6.86391	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.19105	0.19105	0.001	-2.71473	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.87045	0.87045	0.010	-0.04734	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.57621	0.57621	0.010	-0.48047	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 41723.d
Analysis Type: WATER
Lab Sample ID: W4VM091122-19
Method: /chem/VOA4.i/112209v4/VOA4-8260-112209.m

Injection Date: 22-NOV-2009 19:21
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

Average %D / Drift Results.	
Calculated Average %D/Drift =	8.44016
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/112209v4/41723.d
Lab Smp Id: W4VM091122-19 Client Smp ID: SHORT SECOND SOURCE
Inj Date : 22-NOV-2009 19:21
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091122-19|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091105-02B/UVM091118-08A
Comment :
Method : /chem/VOA4.i/112209v4/VOA4-8260-112209.m
Meth Date : 23-Nov-2009 16:11 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 17:04 Cal File: 41718.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	635460	150.000	114
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1252089	150.000	149
9 Acrolein	56	7.186	7.186	(0.677)	404736	250.000	230
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	811524	250.000	267
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	2040774	2500.00	2330
16 Allyl chloride	41	7.802	7.802	(0.735)	3388727	250.000	241
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	3032185	2500.00	2320
18 Acrylonitrile	53	8.180	8.180	(0.770)	853858	250.000	240
149 Isopropyl ether	45	8.747	8.747	(0.824)	1367530	50.0000	46.0
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	659221	50.0000	49.3
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	1259195	50.0000	46.3
28 Propionitrile	54	9.393	9.393	(0.885)	339970	250.000	228
26 Ethyl acetate	43	9.345	9.345	(0.880)	2143053	250.000	215
27 Methacrylonitrile	41	9.576	9.576	(0.902)	1392303	250.000	235
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	777504	250.000	255
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	1012586	2500.00	2240

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	1247986	50.0000	46.0
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1524080	250.000	231
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2794372	250.000	227
152 1-Chlorohexane	55	13.667	13.667	(1.287)	380193	50.0000	46.0
97 1,4-Dioxane	88	11.332	11.332	(1.067)	279362	2500.00	2370
48 2-Nitropropane	43	11.673	11.673	(1.099)	741303	250.000	241
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	923462	250.000	246
70 Cyclohexanone	42	14.904	14.904	(1.082)	619165	1250.00	661
69 trans-1,4-Dichloro-2-butene	53	15.069	15.069	(0.931)	878692	250.000	243
82 Pentachloroethane	167	15.776	15.776	(0.975)	1504604	250.000	199
88 Benzyl chloride	91	16.319	16.319	(1.009)	4301119	250.000	204
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1468339	250.000	233
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1621726	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1235040	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	848470	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	309837	50.0000	48.6
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1075045	50.0000	50.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	488894	50.0000	49.8

Data File: /chem/VOA4.i/112209v4/41723.d
Date : 22-NOV-2009 19:21
Client ID: SHORT SECOND SOURCE
Sample Info: IW4VH091122-19|SHORTICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

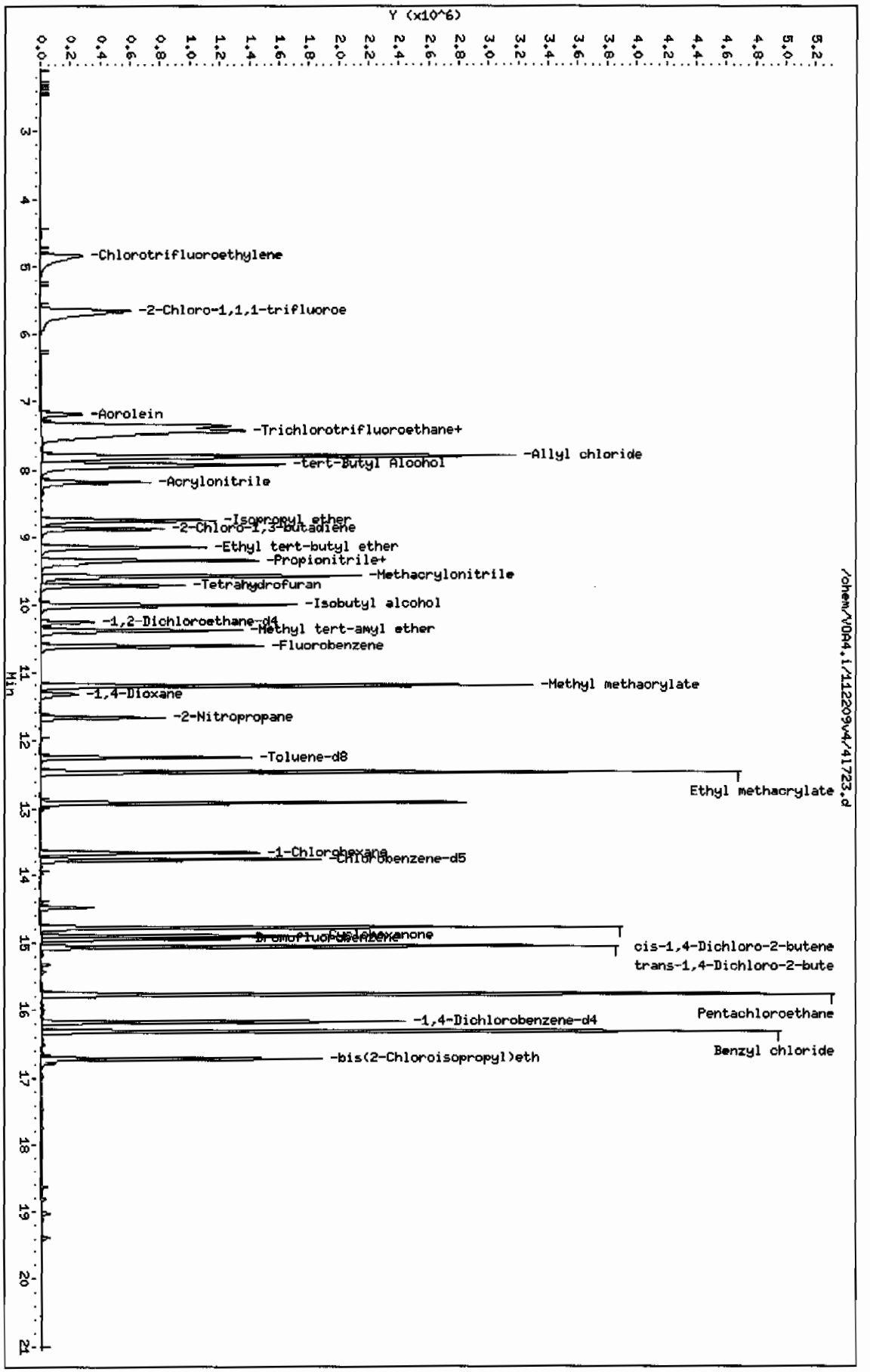

Page 1

Data File: /chem/VOA4.i/120209v4/4n302.d
Report Date: 04-Dec-2009 17:35

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n302.d
Analysis Type: WATER
Lab Sample ID: W4VM091202-01
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

Injection Date: 02-DEC-2009 17:19
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.68083	0.73297	0.73297	0.050	7.65885	30.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.39466	0.44829	0.44829	0.050	13.58781	30.00000	Averaged
M 135 1,3-Dichloropropylene	0.43615	0.48044	0.48044	0.050	10.15469	30.00000	Averaged
3 Dichlorodifluoromethane	0.23299	0.19530	0.19530	0.050	-16.17482	30.00000	Averaged
4 Chloromethane	0.35970	0.31941	0.31941	0.100	-11.20216	30.00000	Averaged spcc
5 Vinyl chloride	0.33298	0.32926	0.32926	0.050	-1.11745	20.00000	Averaged ccc
6 Bromomethane	0.26260	0.26606	0.26606	0.050	1.31786	30.00000	Averaged
7 Chloroethane	0.24433	0.25762	0.25762	0.050	5.43607	30.00000	Averaged
8 Trichlorofluoromethane	0.41084	0.46298	0.46298	0.050	12.69049	30.00000	Averaged
134 Ethyl Ether	0.22500	0.22825	0.22825	0.001	1.44348	30.00000	Averaged
10 Acetone	0.20316	0.17461	0.17461	0.050	-14.04977	40.00000	Averaged
15 Acetonitrile	0.04590	0.04512	0.04512	0.010	-1.68881	30.00000	Averaged
11 1,1-Dichloroethylene	0.42328	0.47678	0.47678	0.050	12.63955	20.00000	Averaged ccc
128 Methyl acetate	0.23428	0.22007	0.22007	0.010	-6.06464	40.00000	Averaged
13 Iodomethane	0.50633	0.54305	0.54305	0.050	7.25105	30.00000	Averaged
17 Methylene chloride	54.57943	50.00000	0.35881	0.050	9.15886	30.00000	Linear
14 Carbon disulfide	0.87768	0.99567	0.99567	0.050	13.44341	30.00000	Averaged
20 tert-Butyl methyl ether	0.81951	0.82174	0.82174	0.050	0.27232	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.37462	0.42978	0.42978	0.050	14.72483	30.00000	Averaged
23 Vinyl acetate	0.54481	0.61700	0.61700	0.010	13.24961	40.00000	Averaged
22 1,1-Dichloroethane	0.46596	0.53331	0.53331	0.100	14.45425	30.00000	Averaged spcc
30 2-Butanone	0.23374	0.21357	0.21357	0.030	-8.63235	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.41470	0.46680	0.46680	0.050	12.56082	30.00000	Averaged
25 2,2-Dichloropropane	0.26910	0.32750	0.32750	0.050	21.70320	30.00000	Averaged
32 Chloroform	0.47081	0.52535	0.52535	0.010	11.58311	20.00000	Averaged ccc
29 Bromochloromethane	0.14612	0.15750	0.15750	0.010	7.79039	30.00000	Averaged
36 1,1,1-Trichloroethane	0.34939	0.42429	0.42429	0.010	21.43834	30.00000	Averaged
129 Cyclohexane	0.40354	0.48542	0.48542	0.010	20.29151	30.00000	Averaged
34 1,1-Dichloropropene	0.34759	0.42754	0.42754	0.010	22.99854	30.00000	Averaged
131 n-Butyl alcohol	0.01073	0.01263	0.01263	0.001	17.68219	40.00000	Averaged
33 Carbon tetrachloride	0.33700	0.42415	0.42415	0.010	25.85964	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.22881	0.22881	0.001	16.51085	30.00000	Averaged
37 1,2-Dichloroethane	0.37066	0.39031	0.39031	0.010	5.30302	30.00000	Averaged
38 Benzene	1.07172	1.17309	1.17309	0.010	9.45831	30.00000	Averaged
139 Cyclohexene	0.50663	0.58524	0.58524	0.001	15.51483	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n302.d
Analysis Type: WATER
Lab Sample ID: W4VM091202-01 Quant Type: ISTD
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

Injection Date: 02-DEC-2009 17:19
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.26907	0.31032	0.31032	0.010	15.32763	30.00000	Averaged	
	41 1,2-Dichloropropane	0.28098	0.30418	0.30418	0.010	8.25813	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.42905	0.52702	0.52702	0.010	22.83260	30.00000	Averaged	
	45 Bromodichloromethane	0.36157	0.39589	0.39589	0.010	9.49253	30.00000	Averaged	
	43 Dibromomethane	0.17355	0.18216	0.18216	0.010	4.96059	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.16038	0.14457	0.14457	0.005	-9.86046	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16140	0.16230	0.16230	0.010	0.55628	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.45088	0.49724	0.49724	0.010	10.28305	30.00000	Averaged	
$	47 Toluene-d8	0.87087	0.91458	0.91458	0.010	5.02012	30.00000	Averaged	
	50 Toluene	0.87628	0.93006	0.93006	0.010	6.13702	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55933	0.59086	0.59086	0.010	5.63768	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27795	0.27973	0.27973	0.010	0.64327	30.00000	Averaged	
	55 2-Hexanone	0.43492	0.39047	0.39047	0.010	-10.21967	40.00000	Averaged	
	52 1,3-Dichloropropane	0.56243	0.56234	0.56234	0.010	-0.01622	30.00000	Averaged	
	56 Tetrachloroethylene	0.34040	0.37910	0.37910	0.010	11.36880	30.00000	Averaged	
	57 Dibromochloromethane	0.38465	0.41337	0.41337	0.010	7.46841	30.00000	Averaged	
	59 1,2-Dibromoethane	0.35228	0.36134	0.36134	0.010	2.57085	30.00000	Averaged	
	62 Chlorobenzene	1.01070	1.08519	1.08519	0.300	7.36942	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.38168	0.40606	0.40606	0.010	6.38581	30.00000	Averaged	
	58 Ethylbenzene	1.69174	1.80022	1.80022	0.010	6.41263	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.67252	0.72759	0.72759	0.010	8.18912	30.00000	Averaged	
	64 o-Xylene	0.69744	0.74372	0.74372	0.010	6.63641	30.00000	Averaged	
	65 Styrene	1.18591	1.25776	1.25776	0.010	6.05933	30.00000	Averaged	
	66 Bromoform	0.53939	0.57627	0.57627	0.100	6.83751	30.00000	Averaged	spcc
	67 Isopropylbenzene	2.70984	2.81387	2.81387	0.010	3.83887	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.79448	0.82429	0.82429	0.300	3.75236	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.57899	0.59643	0.59643	0.010	3.01201	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.21190	0.21429	0.21429	0.010	1.12871	30.00000	Averaged	
	75 Bromobenzene	0.85615	0.88394	0.88394	0.010	3.24607	30.00000	Averaged	
	76 n-Propylbenzene	3.21886	3.35939	3.35939	0.010	4.36568	30.00000	Averaged	
	77 2-Chlorotoluene	2.28570	2.31932	2.31932	0.010	1.47098	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.41754	2.49681	2.49681	0.010	3.27893	30.00000	Averaged	
	80 4-Chlorotoluene	2.10040	2.18261	2.18261	0.010	3.91397	30.00000	Averaged	
	81 tert-Butylbenzene	2.45020	2.59678	2.59678	0.010	5.98206	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.55843	2.64114	2.64114	0.010	3.23283	30.00000	Averaged	
	83 sec-Butylbenzene	3.26817	3.50076	3.50076	0.010	7.11689	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 02-DEC-2009 17:19
Lab File ID: 4n302.d Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Analysis Type: WATER Init. Cal. Times: 10:14 17:32
Lab Sample ID: W4VM091202-01 Quant Type: ISTD
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.67961	2.87015	2.87015	0.010	7.11057	30.00000	Averaged
85 1,3-Dichlorobenzene	1.61041	1.69313	1.69313	0.010	5.13656	30.00000	Averaged
87 1,4-Dichlorobenzene	1.61622	1.70790	1.70790	0.010	5.67212	30.00000	Averaged
89 n-Butylbenzene	2.49163	2.70144	2.70144	0.010	8.42086	30.00000	Averaged
90 1,2-Dichlorobenzene	1.56313	1.62271	1.62271	0.010	3.81151	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.17636	0.19267	0.19267	0.010	9.24980	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.88551	1.01574	1.01574	0.010	14.70675	30.00000	Averaged
94 Hexachlorobutadiene	0.62520	0.72267	0.72267	0.010	15.59004	30.00000	Averaged
95 Naphthalene	1.52123	1.65204	1.65204	0.010	8.59920	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.69897	0.78111	0.78111	0.010	11.75183	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.86469
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n302.d
Lab Smp Id: W4VM091202-01 Client Smp ID: VSTD050
Inj Date : 02-DEC-2009 17:19
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM091202-01|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2543497	150.000	162
M 2 1,2-Dichloroethylene (total)	96				1321648	100.000	114
M 135 1,3-Dichloropropylene	75				1416444	100.000	110
3 Dichlorodifluoromethane	85	4.912	4.912	(0.462)	287895	50.0000	41.9
4 Chloromethane	50	5.299	5.299	(0.499)	470843	50.0000	44.4
5 Vinyl chloride	62	5.528	5.528	(0.521)	485359	50.0000	49.4
6 Bromomethane	94	6.138	6.138	(0.578)	392205	50.0000	50.6
7 Chloroethane	64	6.288	6.288	(0.592)	379753	50.0000	52.7
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	682476	50.0000	56.3
134 Ethyl Ether	59	7.005	7.005	(0.660)	336466	50.0000	50.7
10 Acetone	43	7.358	7.358	(0.693)	1286989	250.000	215
15 Acetonitrile	41	7.706	7.706	(0.726)	1662863	1250.00	1230
11 1,1-Dichloroethylene	61	7.383	7.383	(0.695)	702819	50.0000	56.3
128 Methyl acetate	43	7.748	7.748	(0.730)	1622047	250.000	235
13 Iodomethane	142	7.626	7.626	(0.718)	4002553	250.000	268

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
17 Methylene chloride	84	7.943	7.943	(0.748)	528930	50.0000	54.6
14 Carbon disulfide	76	7.773	7.773	(0.732)	7338642	250.000	284
20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	1211339	50.0000	50.1
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	633541	50.0000	57.4
23 Vinyl acetate	43	8.712	8.712	(0.820)	4547596	250.000	283
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	786164	50.0000	57.2
30 2-Butanone	43	9.327	9.327	(0.878)	1574106	250.000	228
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	688107	50.0000	56.3
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	482777	50.0000	60.8
32 Chloroform	83	9.693	9.693	(0.913)	774421	50.0000	55.8
29 Bromochloromethane	128	9.656	9.656	(0.909)	232179	50.0000	53.9
36 1,1,1-Trichloroethane	97	9.980	9.980	(0.940)	625446	50.0000	60.7
129 Cyclohexane	56	10.083	10.083	(0.949)	715560	50.0000	60.1
34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	630234	50.0000	61.5
131 n-Butyl alcohol	56	10.693	10.693	(1.007)	1861782	5000.00	5880
33 Carbon tetrachloride	117	10.175	10.175	(0.958)	625243	50.0000	62.9
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	337291	50.0000	58.2
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	575364	50.0000	52.6
38 Benzene	78	10.376	10.376	(0.977)	1729265	50.0000	54.7
139 Cyclohexene	67	10.492	10.492	(0.988)	862701	50.0000	57.8
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1474109	50.0000	
39 Trichloroethylene	95	11.004	11.004	(1.036)	457440	50.0000	57.7
41 1,2-Dichloropropane	63	11.242	11.242	(1.059)	448392	50.0000	54.1
130 Methylcyclohexane	83	11.266	11.266	(1.061)	776880	50.0000	61.4
45 Bromodichloromethane	83	11.485	11.485	(1.082)	583589	50.0000	54.7
43 Dibromomethane	93	11.376	11.376	(1.071)	268530	50.0000	52.5
44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	1065531	250.000	225
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	938668	250.000	251
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	732988	50.0000	55.1
$ 47 Toluene-d8	98	12.254	12.254	(0.890)	1057908	50.0000	52.5
50 Toluene	92	12.327	12.327	(0.895)	1075807	50.0000	53.1
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	683456	50.0000	52.8
54 1,1,2-Trichloroethane	83	12.686	12.686	(0.921)	323571	50.0000	50.3
55 2-Hexanone	43	12.857	12.857	(0.934)	2258290	250.000	224
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	650461	50.0000	50.0
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	438503	50.0000	55.7
57 Dibromochloromethane	129	13.150	13.150	(0.955)	478151	50.0000	53.7
59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	417967	50.0000	51.3
* 61 Chlorobenzene-d5	117	13.772	13.772	(1.000)	1156709	50.0000	
62 Chlorobenzene	112	13.802	13.802	(1.002)	1255246	50.0000	53.7
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	469688	50.0000	53.2
58 Ethylbenzene	91	13.863	13.863	(1.007)	2082331	50.0000	53.2
63 m,p-Xylenes	106	13.973	13.973	(1.015)	1683228	100.000	108
64 o-Xylene	106	14.406	14.406	(1.046)	860269	50.0000	53.3
65 Styrene	104	14.399	14.399	(1.046)	1454868	50.0000	53.0
66 Bromoform	173	14.656	14.656	(0.906)	473671	50.0000	53.4
67 Isopropylbenzene	105	14.759	14.759	(0.912)	2312883	50.0000	51.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	677533	50.0000	51.9
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	490239	50.0000	51.5
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	176137	50.0000	50.6
75 Bromobenzene	156	15.168	15.168	(0.937)	726564	50.0000	51.6
76 n-Propylbenzene	91	15.180	15.180	(0.938)	2761274	50.0000	52.2
77 2-Chlorotoluene	91	15.332	15.332	(0.948)	1906382	50.0000	50.7
78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	2052269	50.0000	51.6
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	1794013	50.0000	52.0
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	2134441	50.0000	53.0
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	2170906	50.0000	51.6
83 sec-Butylbenzene	105	15.930	15.930	(0.985)	2877475	50.0000	53.6
84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	2359139	50.0000	53.6
85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	1391684	50.0000	52.6
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	821958	50.0000	
87 1,4-Dichlorobenzene	146	16.210	16.210	(1.002)	1403820	50.0000	52.8
89 n-Butylbenzene	91	16.503	16.503	(1.020)	2220473	50.0000	54.2
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	1333800	50.0000	51.9
92 1,2-Dibromo-3-chloropropane	157	17.527	17.527	(1.083)	158368	50.0000	54.6
93 1,2,4-Trichlorobenzene	180	18.630	18.630	(1.151)	834897	50.0000	57.4
94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	594007	50.0000	57.8
95 Naphthalene	128	19.033	19.033	(1.176)	1357910	50.0000	54.3
96 1,2,3-Trichlorobenzene	180	19.386	19.386	(1.198)	642040	50.0000	55.9

Data File: /chem/VOA4.i/120209v4/4n302.d
Date : 02-DEC-2009 17:19
Client ID: VSTD050
Sample Info: IW4VM091202-01ICCV/LCS1I1VOAF1I1
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

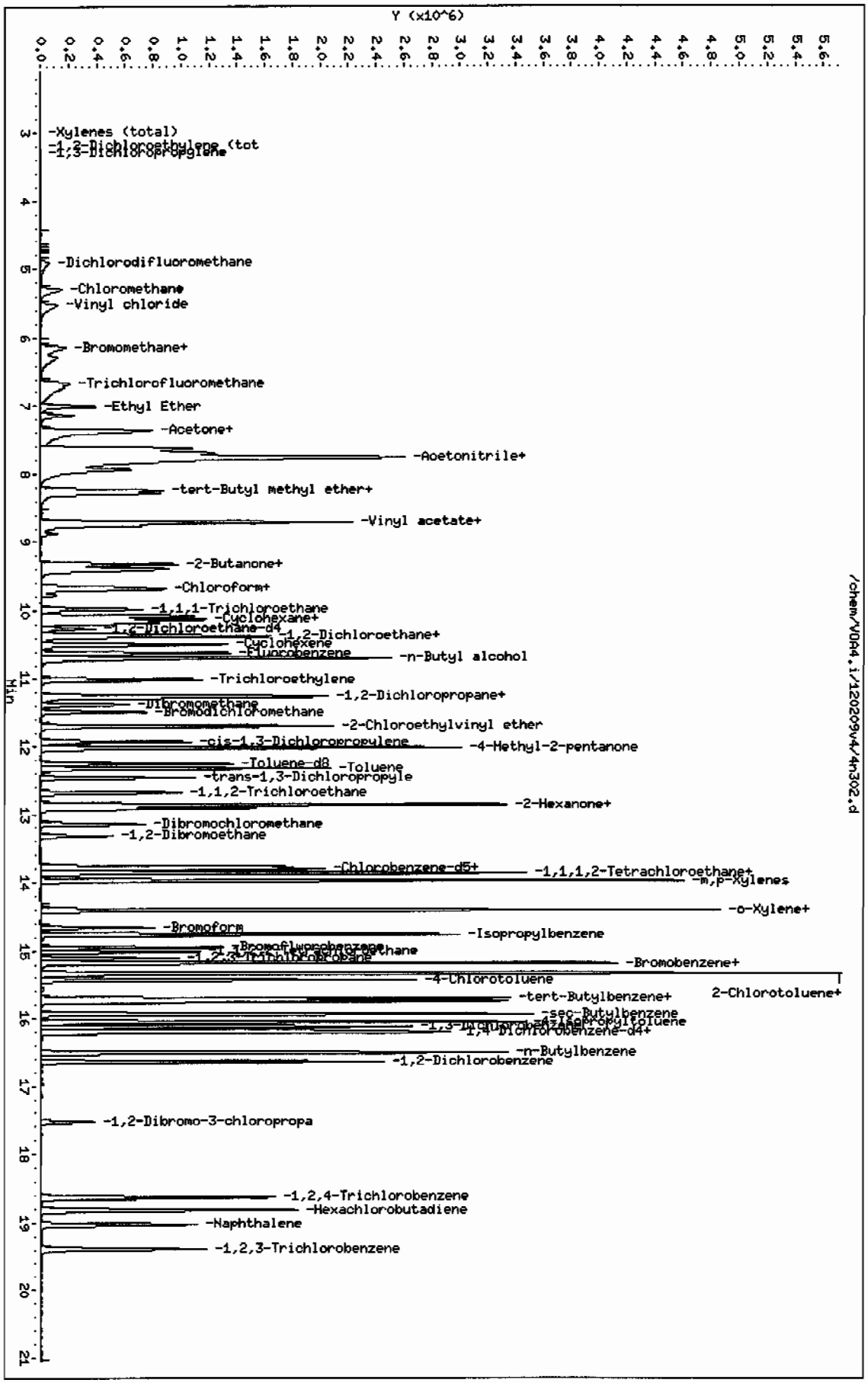

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4n304.d
Analysis Type: WATER
Lab Sample ID: UVM091118-08A
Method: /chem/VOA4.i/120209v4/VOA4-8260-112209.m

Injection Date: 02-DEC-2009 18:14
Init. Cal. Date(s): 22-NOV-2009 22-NOV-2009
Init. Cal. Times: 10:14 17:32
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
9 Acrolein	0.05437	0.04795	0.04795	0.001	-11.80795	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09368	0.08408	0.08408	0.050	-10.24865	30.00000	Averaged
16 Allyl chloride	0.43415	0.37605	0.37605	0.010	-13.38072	30.00000	Averaged
18 Acrylonitrile	0.10963	0.09499	0.09499	0.010	-13.35284	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.41214	0.36112	0.36112	0.010	-12.37794	30.00000	Averaged
28 Propionitrile	0.04604	0.03887	0.03887	0.010	-15.58604	30.00000	Averaged
26 Ethyl acetate	0.30734	0.23902	0.23902	0.010	-22.23135	40.00000	Averaged
27 Methacrylonitrile	0.18229	0.15353	0.15353	0.010	-15.78149	30.00000	Averaged
72 Tetrahydrofuran	234	250	0.16906	0.010	-6.35564	30.00000	Linear
19 Isobutyl alcohol	0.01397	0.01157	0.01157	0.005	-17.14221	40.00000	Averaged
42 Methyl methacrylate	0.20344	0.16744	0.16744	0.010	-17.69688	30.00000	Averaged
51 Ethyl methacrylate	0.49731	0.39899	0.39899	0.010	-19.76985	30.00000	Averaged
97 1,4-Dioxane	0.00364	0.00311	0.00311	0.001	-14.43670	40.00000	Averaged
48 2-Nitropropane	0.09473	0.08373	0.08373	0.010	-11.60560	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.22079	0.20645	0.20645	0.010	-6.49408	30.00000	Averaged
70 Cyclohexanone	0.03794	0.01905	0.01905	0.005	-49.79935	40.00000	Averaged <-
69 trans-1,4-Dichloro-2-butene	0.21335	0.19573	0.19573	0.010	-8.26072	30.00000	Averaged
82 Pentachloroethane	0.44529	0.42766	0.42766	0.010	-3.95985	30.00000	Averaged
88 Benzyl chloride	1.24521	1.14744	1.14744	0.010	-7.85223	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.37162	0.32144	0.32144	0.010	-13.50460	30.00000	Averaged
$ 138 1,2-Dichloroethane-d4	0.19639	0.18732	0.18732	0.001	-4.61560	30.00000	Averaged
$ 47 Toluene-d8	0.87087	0.83169	0.83169	0.010	-4.49830	30.00000	Averaged
$ 71 Bromofluorobenzene	0.57899	0.55269	0.55269	0.010	-4.54161	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 31.15721
Maximun Average %D/Drift = 20.00000
* Failed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n304.d
Lab Smp Id: UVM091118-08A Client Smp ID: VSTD250S
Inj Date : 02-DEC-2009 18:14
Operator : ACJ Inst ID: VOA4.i
Smp Info : |UVM091118-08A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9 Acrolein	56	7.186	7.186	(0.677)	399552	250.000	220
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	700648	250.000	224
16 Allyl chloride	41	7.802	7.802	(0.735)	3133681	250.000	216
18 Acrylonitrile	53	8.180	8.180	(0.770)	791556	250.000	217
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	601851	50.0000	43.8
28 Propionitrile	54	9.393	9.393	(0.885)	323876	250.000	211
26 Ethyl acetate	43	9.344	9.344	(0.880)	1991742	250.000	194
27 Methacrylonitrile	41	9.582	9.582	(0.902)	1279339	250.000	210
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	723265	250.000	234
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	964296	2500.00	2070
42 Methyl methacrylate	69	11.210	11.210	(1.056)	1395290	250.000	206
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2543159	250.000	200
97 1,4-Dioxane	88	11.332	11.332	(1.067)	259435	2500.00	2140
48 2-Nitropropane	43	11.673	11.673	(1.099)	697764	250.000	221
68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	883252	250.000	234

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70 Cyclohexanone	42	14.904	14.904	(1.082)	607009	1250.00	628
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	837379	250.000	229
82 Pentachloroethane	167	15.776	15.776	(0.975)	1829647	250.000	240
88 Benzyl chloride	91	16.319	16.319	(1.009)	4909032	250.000	230
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1375189	250.000	216
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1666611	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.770	(1.000)	1274786	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.178	(1.000)	855653	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	312191	50.0000	47.7
$ 47 Toluene-d8	98	12.252	12.252	(0.890)	1060229	50.0000	47.8
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	472914	50.0000	47.7

Data File: /chem/VOA4.i/120209v4/4n304.d
Date : 02-DEC-2009 18:14
Client ID: VSTD250S
Sample Info: IUVH091118-08A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

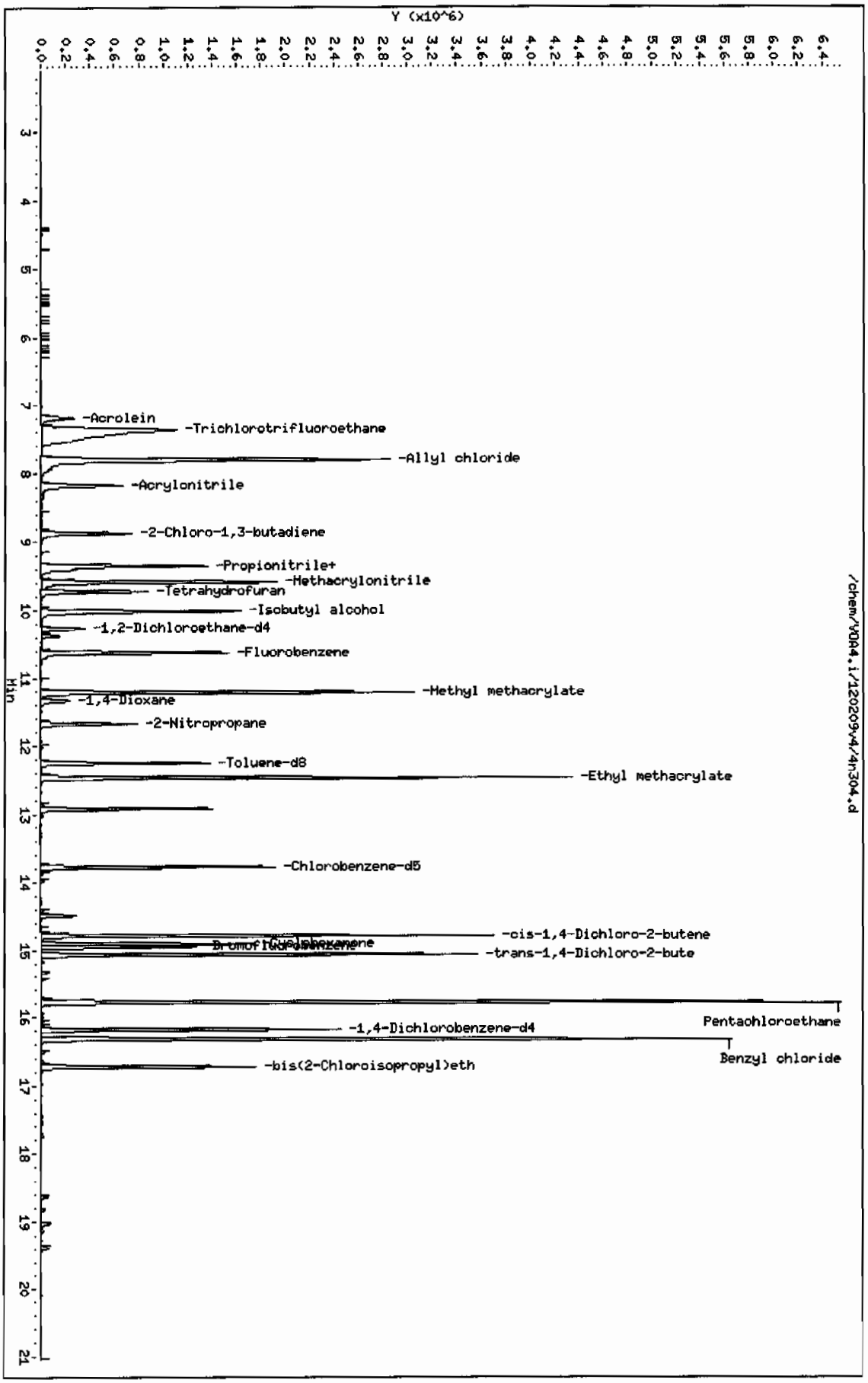

Page 1

QC Data

Data File: /chem/VOA4.i/112209v4/41701.d

Page 1

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

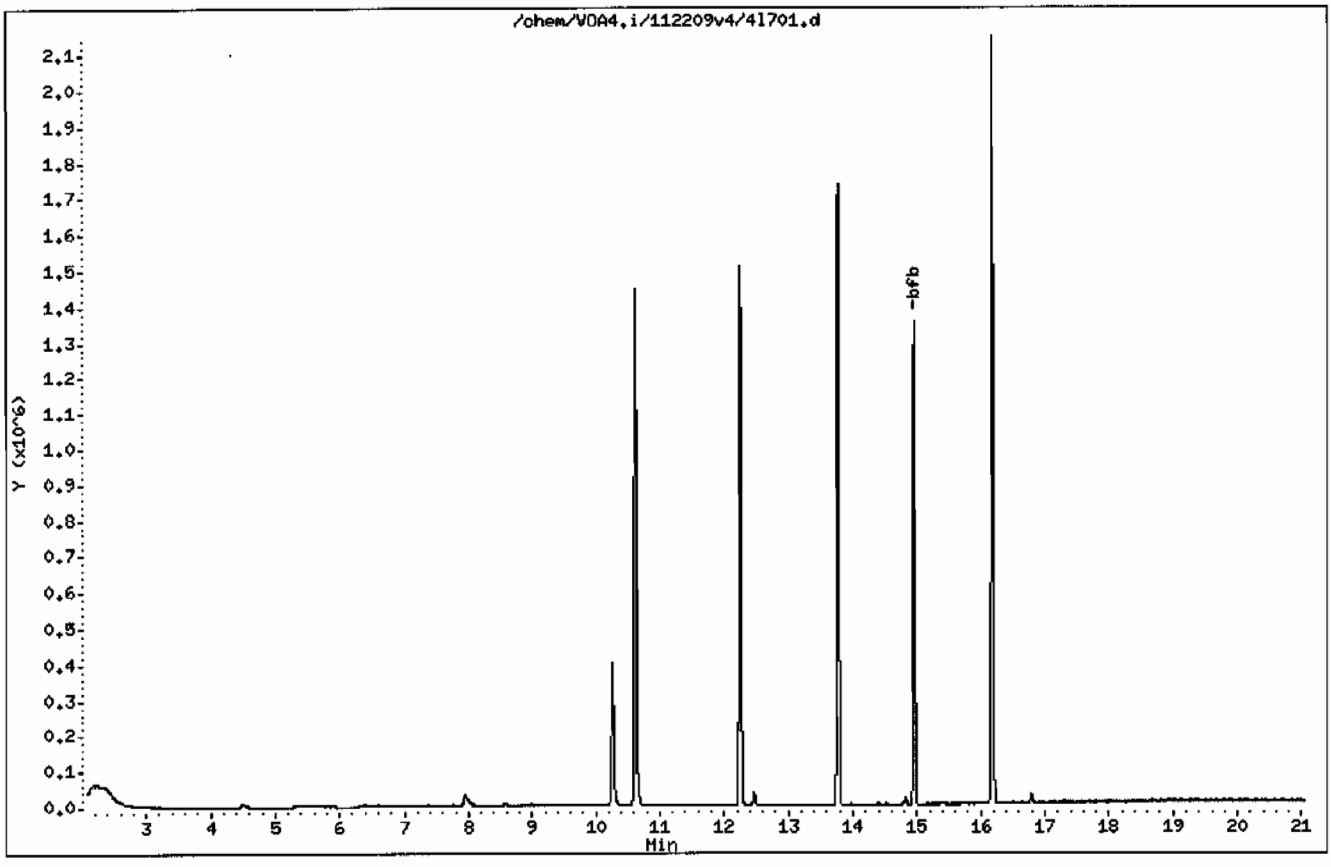

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVM091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

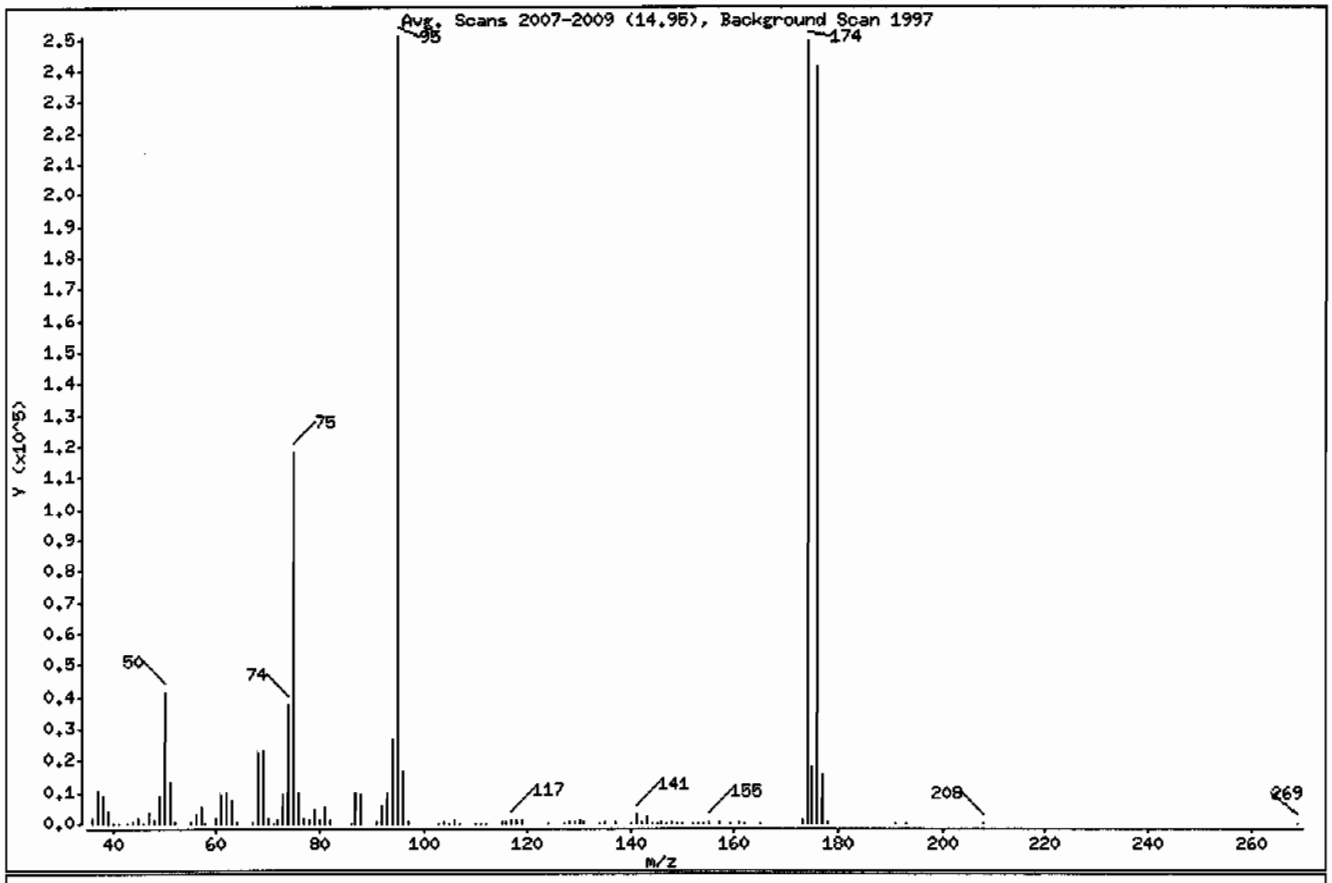

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.45
75	30.00 - 60.00% of mass 95	47.01
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.43 (0.43)
174	50.00 - 100.00% of mass 95	99.29
175	5.00 - 9.00% of mass 174	7.09 (7.14)
176	95.00 - 101.00% of mass 174	96.07 (96.76)
177	5.00 - 9.00% of mass 176	6.11 (6.36)

Data File: /chem/VOA4.i/112209v4/41701.d

Date : 22-NOV-2009 09:20

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVH091020-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 41701.d

Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1997

Location of Maximum: 95.00

Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1852	68.00	22712	104.00	786	145.00	227
37.00	10469	69.00	23288	105.00	216	146.00	338
38.00	8405	70.00	1742	106.00	913	147.00	212
39.00	4011	71.00	281	107.00	271	148.00	588
40.00	10	72.00	1018	110.00	50	149.00	261
41.00	174	73.00	9172	111.00	93	150.00	273
43.00	32	74.00	37232	112.00	54	152.00	51
44.00	673	75.00	118008	115.00	294	153.00	133
45.00	1913	76.00	10049	116.00	814	154.00	263
46.00	181	77.00	1447	117.00	1364	155.00	862
47.00	3182	78.00	1010	118.00	999	157.00	488
48.00	1157	79.00	4497	119.00	1228	159.00	282
49.00	8549	80.00	1297	124.00	61	161.00	368
50.00	41280	81.00	4964	127.00	56	162.00	58
51.00	13197	82.00	981	128.00	697	165.00	52
52.00	604	86.00	130	129.00	382	173.00	1069
55.00	416	87.00	9653	130.00	872	174.00	249216
56.00	2604	88.00	9450	131.00	389	175.00	17792
57.00	5395	91.00	777	134.00	55	176.00	241152
58.00	216	92.00	6052	135.00	375	177.00	15329
60.00	1746	93.00	9586	137.00	534	178.00	346
61.00	9083	94.00	26584	140.00	119	191.00	57
62.00	9883	95.00	251008	141.00	2645	193.00	50
63.00	7531	96.00	16696	142.00	321	208.00	106
64.00	738	97.00	497	143.00	2485	269.00	58
67.00	656	103.00	132	144.00	135		

Data File: /chem/VOA4.i/120209v4/4n301.d

Date : 02-DEC-2009 16:51

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

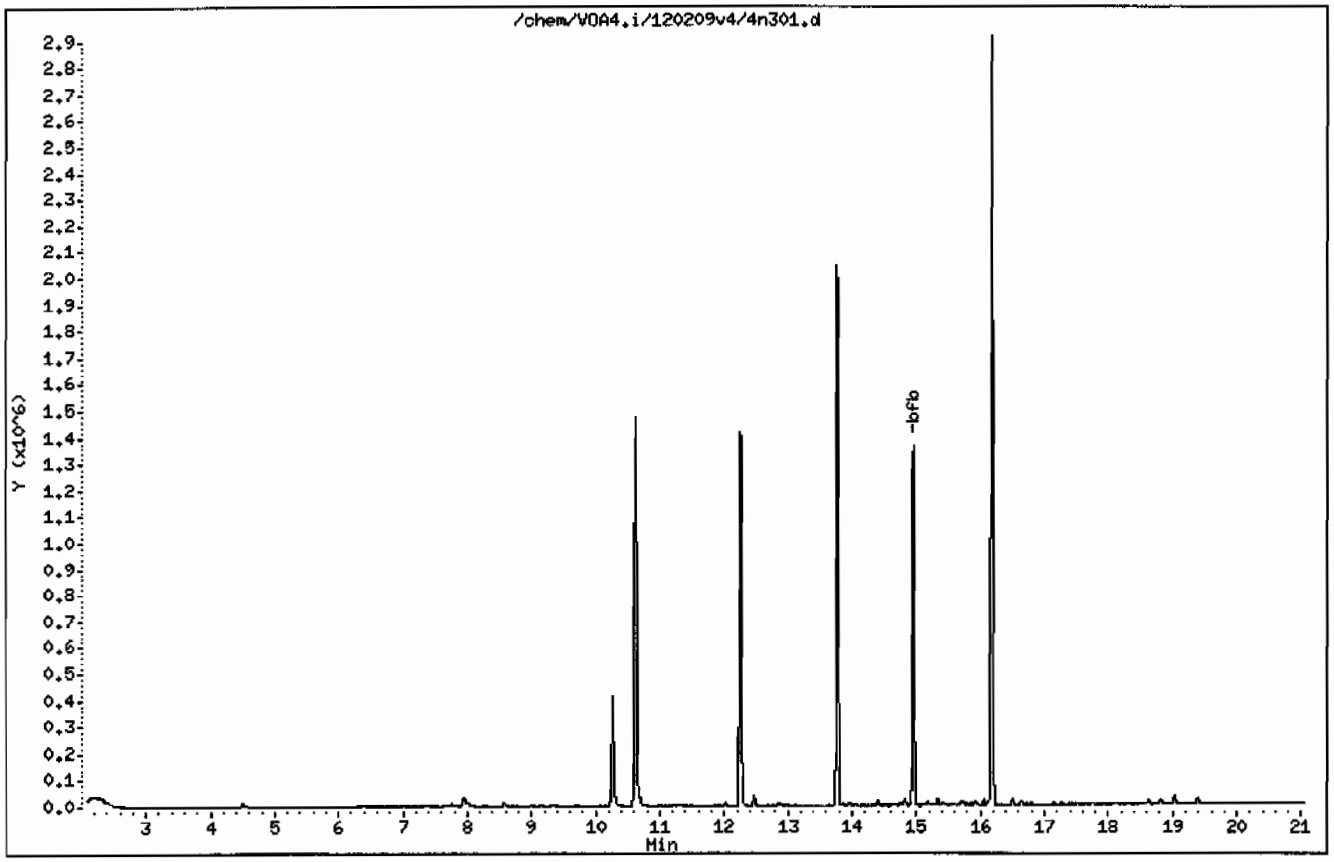

Data File: /chem/VOA4.i/120209v4/4n301.d

Date : 02-DEC-2009 16:51

Client ID: BFB01

Instrument: VOA4.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb

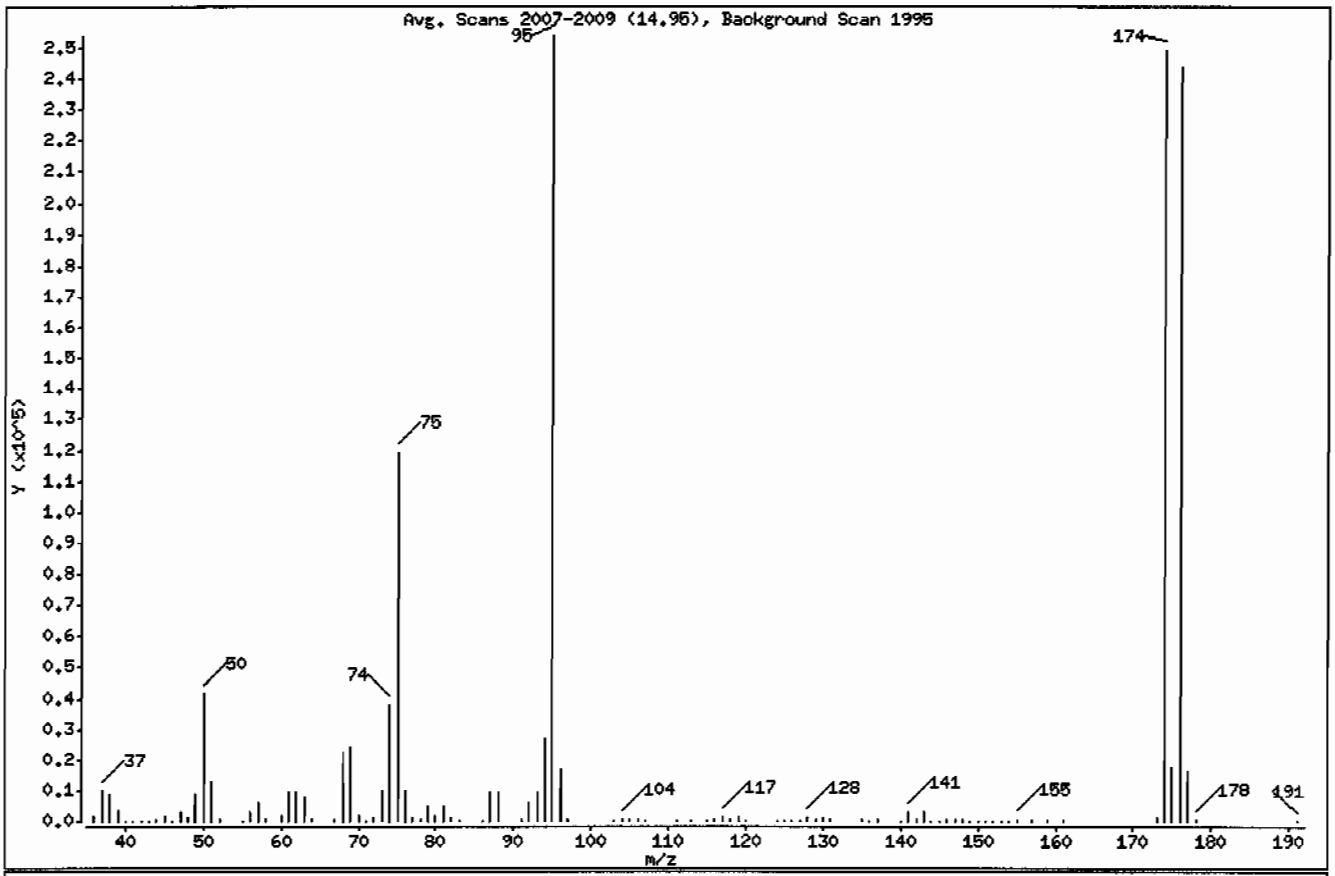

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.41
75	30.00 - 60.00% of mass 95	46.96
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.50 (0.51)
174	50.00 - 100.00% of mass 95	98.09
175	5.00 - 9.00% of mass 174	6.88 (7.02)
176	95.00 - 101.00% of mass 174	95.94 (97.82)
177	5.00 - 9.00% of mass 176	6.44 (6.71)

Data File: /chem/VOA4.i/120209v4/4n301.d

Date : 02-DEC-2009 16:51

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVH090821-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4n301.d
Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1995
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2012	67.00	452	97.00	586	141.00	2673
37.00	9830	68.00	22344	103.00	50	142.00	414
38.00	8781	69.00	24104	104.00	857	143.00	2665
39.00	3559	70.00	1886	105.00	367	144.00	199
40.00	136	71.00	61	106.00	830	145.00	220
41.00	73	72.00	1156	107.00	206	146.00	365
42.00	52	73.00	9851	111.00	145	147.00	326
43.00	63	74.00	37784	113.00	130	148.00	681
44.00	510	75.00	119288	115.00	282	149.00	266
45.00	1634	76.00	9643	116.00	655	150.00	287
46.00	147	77.00	1129	117.00	1275	151.00	54
47.00	2968	78.00	845	118.00	761	152.00	92
48.00	1059	79.00	4852	119.00	1015	153.00	146
49.00	8873	80.00	1530	120.00	68	154.00	105
50.00	41680	81.00	4578	124.00	78	155.00	714
51.00	12772	82.00	964	125.00	54	157.00	488
52.00	587	83.00	123	126.00	82	159.00	326
55.00	170	86.00	205	127.00	53	161.00	335
56.00	2975	87.00	9205	128.00	948	173.00	1267
57.00	5577	88.00	9073	129.00	329	174.00	249152
58.00	324	91.00	821	130.00	904	175.00	17488
60.00	1771	92.00	6005	131.00	333	176.00	243712
61.00	9402	93.00	9600	135.00	388	177.00	16363
62.00	9521	94.00	26664	136.00	85	178.00	500
63.00	7354	95.00	254016	137.00	462	191.00	56
64.00	761	96.00	17224	140.00	250		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670			**Matrix:**	SOIL
Lab Sample ID:	1201988490				
Client Sample:	QC for batch 928134	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 928134	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 19:36	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 17:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n307bl.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670			**Matrix:**	SOIL
Lab Sample ID:	1201988490				
Client Sample:	QC for batch 928134	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 928134	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	928135	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	12/02/2009 19:36	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	12/02/2009 17:30	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4n307bl.d	**Column:**	RTX-VOLATILES	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n307bl.d
Lab Smp Id: 1201988490 Client Smp ID: BLANK
Inj Date : 02-DEC-2009 19:36
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201988490|928135|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.266	10.260	(0.967)	335477	59.1059	59.1
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1445085	50.0000	
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	1089671	58.0602	58.1
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1077546	50.0000	
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	484272	57.9908	58.0
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	721157	50.0000	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n307bl.d
Lab Smp Id: 1201988490 Client Smp ID: BLANK
Inj Date : 02-DEC-2009 19:36
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201988490|928135|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/120209v4/4n307bl.d
Date : 02-DEC-2009 19:36
Client ID: BLANK
Sample Info: |1201988490|928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

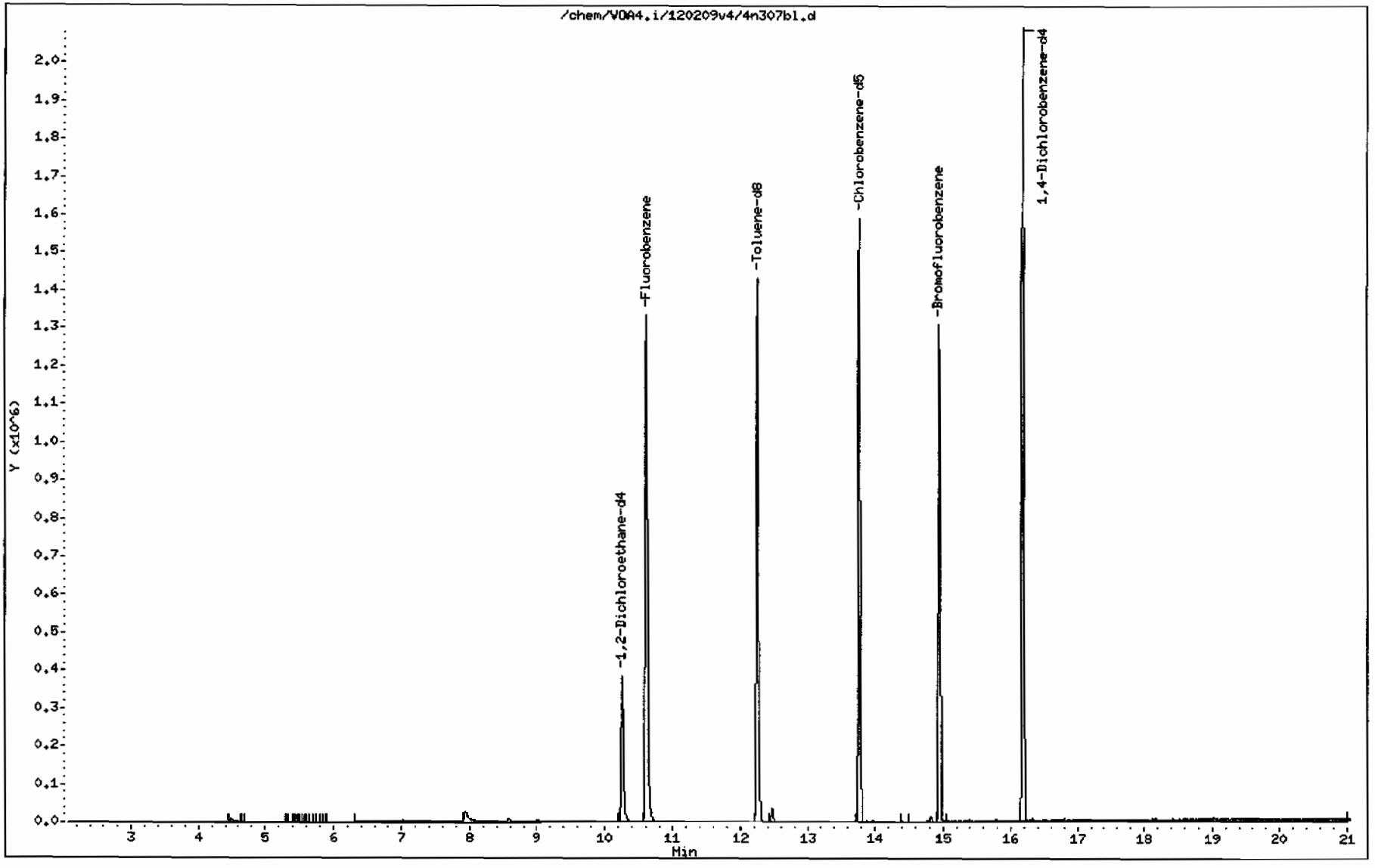

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201988491**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 17:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n303ll.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		38.9	ug/kg	0.340	1.00
74-87-3	Chloromethane		40.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		47.0	ug/kg	0.300	1.00
75-00-3	Chloroethane		48.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		52.0	ug/kg	0.300	1.00
67-64-1	Acetone		231	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		51.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		250	ug/kg	1.60	5.00
75-09-2	Methylene chloride		50.6	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		261	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		54.2	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		53.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		242	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		52.9	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		57.1	ug/kg	0.300	1.00
67-66-3	Chloroform		52.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		51.7	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		57.8	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		58.1	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		60.2	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		51.1	ug/kg	0.300	1.00
71-43-2	Benzene		52.4	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		55.9	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		52.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		53.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		51.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		264	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.7	ug/kg	0.300	1.00
108-88-3	Toluene		51.7	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		52.7	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.9	ug/kg	0.300	1.00
591-78-6	2-Hexanone		239	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		55.1	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		53.8	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		52.0	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		52.4	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201988491**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 17:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 17:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n303ll.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.7	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		105	ug/kg	0.300	2.00
95-47-6	o-Xylene		51.9	ug/kg	0.300	1.00
100-42-5	Styrene		51.4	ug/kg	0.300	1.00
75-25-2	Bromoform		55.7	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		55.3	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		53.0	ug/kg	0.300	1.00
108-86-1	Bromobenzene		51.0	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		51.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		48.7	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		51.1	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		50.2	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		51.2	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		51.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		50.2	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		51.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		52.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		51.9	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		52.0	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		52.8	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		61.9	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		52.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		53.4	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n30311.d
Lab Smp Id: 1201988491 Client Smp ID: LCS
Inj Date : 02-DEC-2009 17:47
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201988491|928135|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091111-01E/IVM091130-01
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				2724981	156.810	157
M 2 1,2-Dichloroethylene (total)	96				1393355	107.169	107
M 135 1,3-Dichloropropylene	75				1549891	107.800	108
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	298691	38.8909	38.9
4 Chloromethane	50	5.299	5.299	(0.499)	479920	40.4745	40.5
5 Vinyl chloride	62	5.528	5.528	(0.521)	502822	45.8096	45.8
6 Bromomethane	94	6.130	6.138	(0.577)	406851	46.9996	47.0
7 Chloroethane	64	6.288	6.288	(0.592)	392839	48.7740	48.8
8 Trichlorofluoromethane	101	6.668	6.663	(0.628)	704231	51.9997	52.0
134 Ethyl Ether	59	7.004	7.005	(0.660)	374800	50.5322	50.5
10 Acetone	43	7.363	7.358	(0.693)	1544044	230.562	230
11 1,1-Dichloroethylene	61	7.388	7.383	(0.696)	716752	51.3691	51.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
13 Iodomethane	142	7.625	7.626	(0.718)	4174153	250.086	250
15 Acetonitrile	41	7.705	7.706	(0.726)	1882583	1244.30	1240
128 Methyl acetate	43	7.753	7.748	(0.730)	1805386	233.772	234
14 Carbon disulfide	76	7.772	7.773	(0.732)	7551129	260.995	261
17 Methylene chloride	84	7.942	7.943	(0.748)	552687	50.5746	50.6
20 tert-Butyl methyl ether	73	8.241	8.242	(0.776)	1342659	49.7012	49.7
21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.780)	669921	54.2491	54.2
23 Vinyl acetate	43	8.711	8.712	(0.820)	4967490	276.597	276
22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	827535	53.8755	53.9
30 2-Butanone	43	9.326	9.327	(0.878)	1866598	242.251	242
31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.884)	723434	52.9196	52.9
25 2,2-Dichloropropane	77	9.424	9.419	(0.887)	506313	57.0769	57.1
29 Bromochloromethane	128	9.662	9.656	(0.910)	249219	51.7397	51.7
32 Chloroform	83	9.692	9.693	(0.913)	820369	52.8587	52.8
36 1,1,1-Trichloroethane	97	9.979	9.980	(0.940)	665272	57.7632	57.8
129 Cyclohexane	56	10.082	10.083	(0.949)	755607	56.8029	56.8
34 1,1-Dichloropropene	75	10.137	10.132	(0.955)	665854	58.1116	58.1
33 Carbon tetrachloride	117	10.174	10.175	(0.958)	668841	60.2069	60.2
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	379912	58.6855	58.7
37 1,2-Dichloroethane	62	10.338	10.339	(0.974)	624403	51.1033	51.1
38 Benzene	78	10.375	10.376	(0.977)	1849540	52.3524	52.4
139 Cyclohexene	67	10.497	10.492	(0.989)	930168	55.6961	55.7
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1648214	50.0000	
131 n-Butyl alcohol	56	10.692	10.693	(1.007)	2350217	6643.18	6640
39 Trichloroethylene	95	11.003	11.004	(1.036)	496044	55.9249	55.9
130 Methylcyclohexane	83	11.265	11.266	(1.061)	824028	58.2623	58.3
41 1,2-Dichloropropane	63	11.247	11.242	(1.059)	485120	52.3767	52.4
43 Dibromomethane	93	11.375	11.376	(1.071)	295396	51.6326	51.6
45 Bromodichloromethane	83	11.484	11.485	(1.082)	631322	52.9681	53.0
44 2-Chloroethylvinyl ether	63	11.698	11.699	(1.102)	1162881	219.958	220
46 cis-1,3-Dichloropropylene	75	11.936	11.930	(1.124)	797449	53.6538	53.6
49 4-Methyl-2-pentanone	58	12.021	12.016	(0.873)	1088701	264.247	264
$ 47 Toluene-d8	98	12.253	12.254	(0.890)	1152356	51.8377	51.8
50 Toluene	92	12.326	12.327	(0.895)	1156192	51.6888	51.7
53 trans-1,3-Dichloropropylene	75	12.466	12.461	(0.905)	752442	52.7006	52.7
54 1,1,2-Trichloroethane	83	12.685	12.686	(0.921)	361237	50.9145	50.9
55 2-Hexanone	43	12.856	12.857	(0.934)	2657504	239.375	239
52 1,3-Dichloropropane	76	12.880	12.875	(0.935)	709607	49.4266	49.4
56 Tetrachloroethylene	164	12.923	12.918	(0.938)	478547	55.0744	55.1
57 Dibromochloromethane	129	13.149	13.150	(0.955)	528013	53.7768	53.8
59 1,2-Dibromoethane	107	13.319	13.320	(0.967)	467576	51.9958	52.0
* 61 Chlorobenzene-d5	117	13.771	13.772	(1.000)	1276321	50.0000	
62 Chlorobenzene	112	13.801	13.802	(1.002)	1352786	52.4342	52.4
60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	507703	52.1097	52.1
58 Ethylbenzene	91	13.862	13.863	(1.007)	2231597	51.6765	51.7
63 m,p-Xylenes	106	13.972	13.973	(1.015)	1800592	104.887	105
64 o-Xylene	106	14.405	14.406	(1.046)	924389	51.9231	51.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
65 Styrene	104	14.405	14.399	(1.046)	1555672	51.3899	51.4
66 Bromoform	173	14.661	14.656	(0.906)	542821	55.7203	55.7
67 Isopropylbenzene	105	14.758	14.759	(0.912)	2498763	51.0553	51.0
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	539592	51.6007	51.6
73 1,1,2,2-Tetrachloroethane	83	15.020	15.015	(0.928)	793165	55.2765	55.3
74 1,2,3-Trichloropropane	110	15.106	15.107	(0.934)	202957	53.0320	53.0
75 Bromobenzene	156	15.167	15.168	(0.937)	788373	50.9849	51.0
76 n-Propylbenzene	91	15.185	15.180	(0.939)	2962906	50.9654	51.0
78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	2191860	50.1996	50.2
77 2-Chlorotoluene	91	15.331	15.332	(0.948)	2009070	48.6672	48.7
80 4-Chlorotoluene	91	15.435	15.430	(0.954)	1942825	51.2144	51.2
81 tert-Butylbenzene	119	15.703	15.704	(0.971)	2278243	51.4823	51.5
79 1,2,4-Trimethylbenzene	105	15.746	15.741	(0.973)	2318089	50.1668	50.2
83 sec-Butylbenzene	105	15.935	15.930	(0.985)	3055572	51.7665	51.8
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	2521761	52.1066	52.1
85 1,3-Dichlorobenzene	146	16.124	16.119	(0.997)	1509604	51.9022	51.9
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	903046	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.210	(1.002)	1517021	51.9697	52.0
89 n-Butylbenzene	91	16.502	16.503	(1.020)	2375643	52.7908	52.8
90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	1508890	53.4469	53.4
92 1,2-Dibromo-3-chloropropane	157	17.532	17.527	(1.084)	197285	61.9380	61.9
93 1,2,4-Trichlorobenzene	180	18.629	18.630	(1.151)	957940	59.8969	59.9
94 Hexachlorobutadiene	225	18.818	18.819	(1.163)	663742	58.7811	58.8
95 Naphthalene	128	19.032	19.033	(1.176)	1692581	61.6048	61.6
96 1,2,3-Trichlorobenzene	180	19.385	19.386	(1.198)	787287	62.3642	62.4

Data File: /chem/VOA4.i/120209x4/4n30311.d
Date : 02-DEC-2009 17:47
Client ID: LCS
Sample Info: 1120198849119281351|VOAF1|1
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

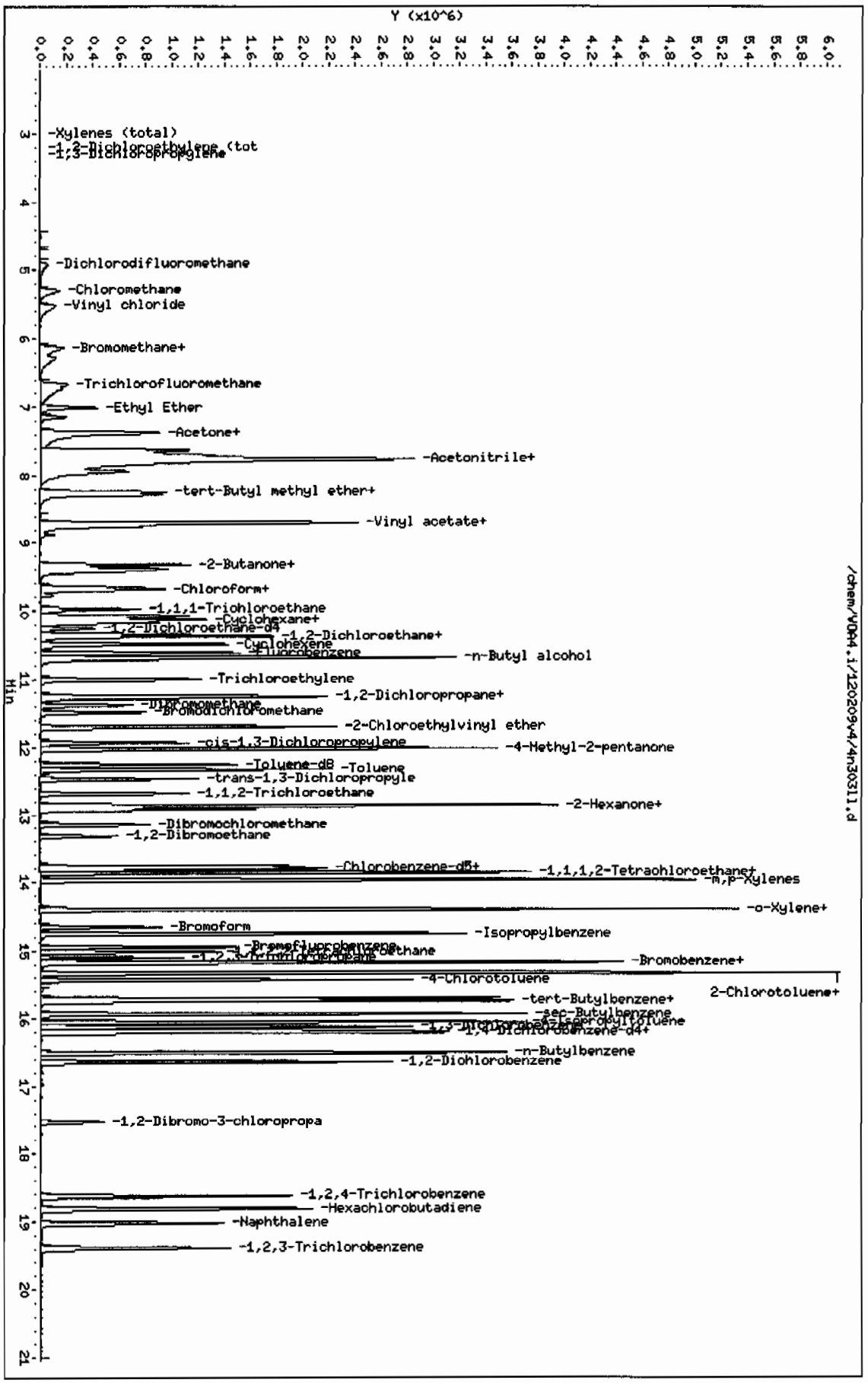

Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201988492**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 18:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 17:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n305sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201988492**				
Client Sample:	**QC for batch 928134**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**928135**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**12/02/2009 18:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**12/02/2009 17:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4n305sl.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*		229	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120209v4/4n305sl.d
Lab Smp Id: 1201988492 Client Smp ID: LCS
Inj Date : 02-DEC-2009 18:41
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201988492|928135|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/120209v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:34 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
9 Acrolein	56	7.186	7.186	(0.677)	393259	210.733	211
12 Trichlorotrifluoroethane	85	7.363	7.357	(0.693)	737517	229.356	229
16 Allyl chloride	41	7.802	7.802	(0.735)	3130660	210.084	210
18 Acrylonitrile	53	8.180	8.180	(0.770)	794477	211.131	211
24 2-Chloro-1,3-butadiene	53	8.875	8.869	(0.836)	605653	42.8130	42.8
26 Ethyl acetate	43	9.344	9.344	(0.880)	2025638	192.013	192
28 Propionitrile	54	9.393	9.393	(0.885)	320795	202.983	203
27 Methacrylonitrile	41	9.576	9.582	(0.902)	1284473	205.279	205
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	719978	215.765	216
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	959408	2001.35	2000
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	346382	51.3854	51.4
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	1716236	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	42 Methyl methacrylate	69	11.210	11.210	(1.056)	1444807	206.899	207
	97 1,4-Dioxane	88	11.332	11.332	(1.067)	265150	2122.99	2120
	48 2-Nitropropane	43	11.673	11.673	(1.099)	699103	215.008	215
$	47 Toluene-d8	98	12.252	12.254	(0.890)	1157641	49.9504	50.0
	51 Ethyl methacrylate	69	12.466	12.466	(0.905)	2601307	196.553	196
*	61 Chlorobenzene-d5	117	13.770	13.772	(1.000)	1330619	50.0000	
	68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	892794	219.572	220
	70 Cyclohexanone	42	14.904	14.904	(1.082)	610597	604.731	605
$	71 Bromofluorobenzene	95	14.953	14.954	(0.924)	518524	48.6297	48.6
	69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	856225	217.918	218
	82 Pentachloroethane	167	15.776	15.776	(0.975)	1713171	208.909	209
*	86 1,4-Dichlorobenzene-d4	152	16.178	16.180	(1.000)	920803	50.0000	
	88 Benzyl chloride	91	16.319	16.319	(1.009)	5058200	220.575	220
	91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1450029	211.874	212

Data File: /chem/VOA4.i/120209v4/4n305s1.d
Date : 02-DEC-2009 18:41
Client ID: LCS
Sample Info: 1120198492192813511VOAF11
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

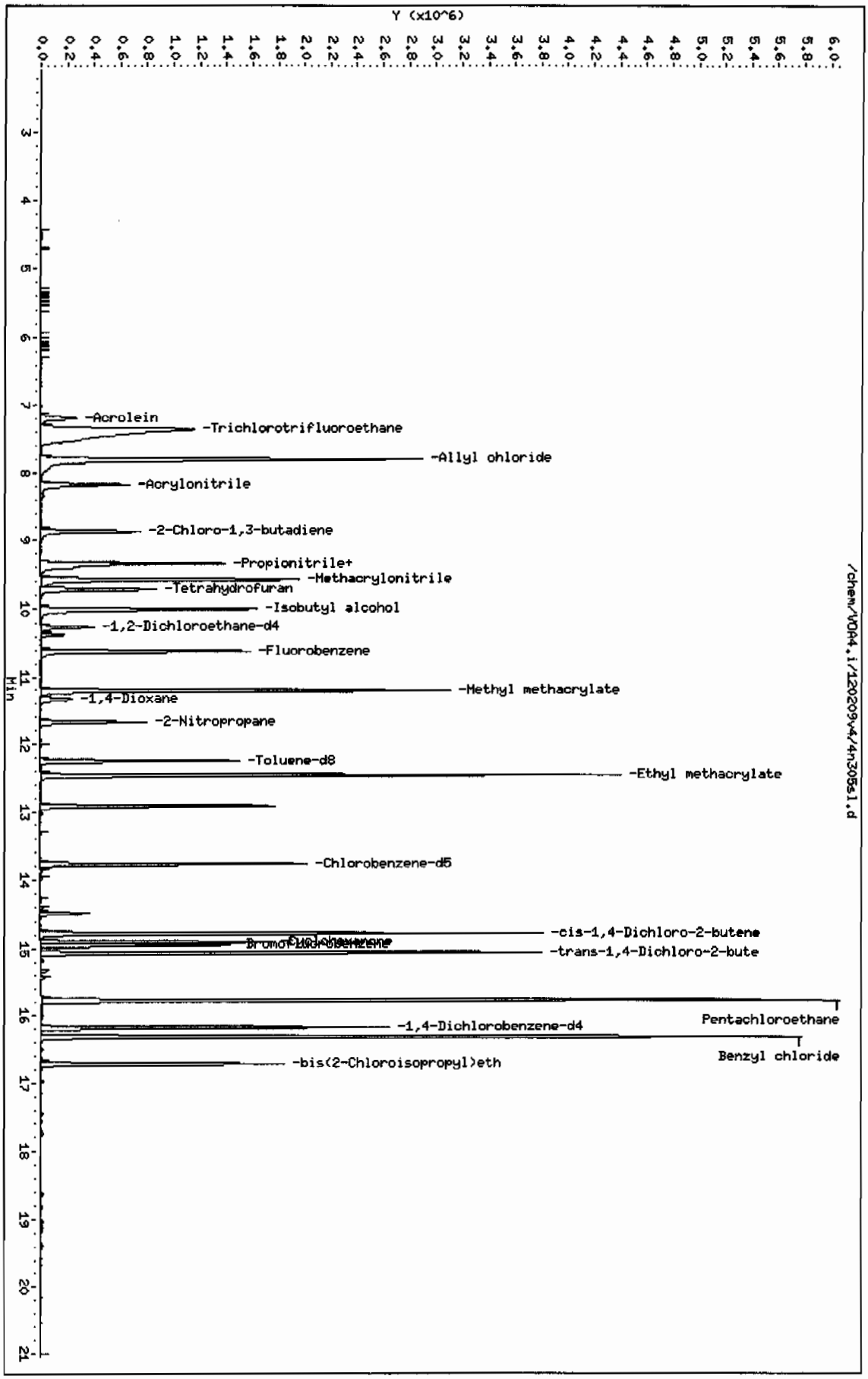

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Miscellaneous Data

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **928134** Verified by: _____

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 12
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201984533 LCS	01-DEC-2009 15:30:00	Soil	5	5	1	
1201984534 LCS	01-DEC-2009 15:45:00	Soil	5	5	1	
1201984530 MB	01-DEC-2009 16:00:00	Soil	5	5	1	
241827001	01-DEC-2009 21:10:00	Soil	5	5	1	
1201984531 PS (241827001)	01-DEC-2009 21:11:00	Soil	5	5	1	
1201984532 PSD (241827001)	01-DEC-2009 21:12:00	Soil	5	5	1	
241827002	01-DEC-2009 21:13:00	Soil	5	5	1	
241827003	01-DEC-2009 21:14:00	Soil	5	5	1	
241827004	01-DEC-2009 21:15:00	Soil	5	5	1	
241827005	01-DEC-2009 21:16:00	Soil	5	5	1	
241827006	01-DEC-2009 21:17:00	Soil	5	5	1	
1201988491 LCS	02-DEC-2009 17:00:00	Soil	5	5	1	
1201988492 LCS	02-DEC-2009 17:15:00	Soil	5	5	1	
1201988490 MB	02-DEC-2009 17:30:00	Soil	5	5	1	
241838001	02-DEC-2009 20:22:00	Soil	5	5	1	
241838002	02-DEC-2009 20:23:00	Soil	5	5	1	
241903001	02-DEC-2009 20:24:00	Soil	5	5	1	
241903002	02-DEC-2009 20:25:00	Soil	5	5	1	
241907001	02-DEC-2009 20:26:00	Soil	5	5	1	
241907002	02-DEC-2009 20:27:00	Soil	5	5	1	
241907003	02-DEC-2009 20:28:00	Soil	5	5	1	
241911001	02-DEC-2009 20:29:00	Soil	5	5	1	
241911002	02-DEC-2009 20:30:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

NCR Report No.: 766675
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
928135	See Below		

Potentially affected work order(s)(SDG): 241827(10-668),241838(10-670),241903(10-690),241907(10-692),241911(10-694)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Other

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. QC samples 1201984531MS and 1201984532MSD were outside the RPD acceptance limits for Methylene Chloride and Chloromethane.	1. Narrate and report data. The MS/MSD was reanalyzed with multiple RPD failures. It is believed matrix interference has been demonstrated.
2. QC sample 1201984532MSD was below the internal standard response recovery acceptance criteria.	2. Narrate and report data. The MSD was reanalyzed with similar results. It is believed matrix interference has been demonstrated.

Originator's Name:

Amy Jamison 07-DEC-09

Data Validator/Group Leader:

Kelle Bellamy 07-DEC-09

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n212.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 01-DEC-2009 22:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827001|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1497263	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1171882	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	742430	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.259	(0.966)	338983	57.6423	57.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	1036502	50.7814	50.8
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	469552	54.6170	54.6

ION RATIO REPORT

VOA REPORT

Data file: 4n212.d
Report Date: 12/01/2009 22:29
Lab. ID: 241827001 SampleType: SAMPLE
Injection Date: 01-DEC-2009 22:07
Operator: ACJ Instrument: VOA4.i
Sample Info: |241827001|928135|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-668
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	19696	10.62	10.34	80-120	100	(T)
64	3064	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	8468	12.25	12.02	80-120	100	(T)
43	5055	12.25	12.01	231-291	60	(QT)
100	708190	12.25	12.02	7- 67	8363	(QT)
74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	5527	14.83	15.11	80-120	100	(T)
75	15759	14.82	15.11	249-309	285	(T)
77	1090	14.80	15.11	60-120	20	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n212.d
Lab Smp Id: 241827001 Client Smp ID: RE03-09-14130
Inj Date : 01-DEC-2009 22:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |241827001|928135|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.771	3504037	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane					CAS #:		
14.826	4191442	59.8087485	59.8	0		0	61

Data File: /chem/VOA4.i/120109v4/4n212.d
Date : 01-DEC-2009 22:07
Client ID: RE03-09-14130
Sample Info: |2418270011928135|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

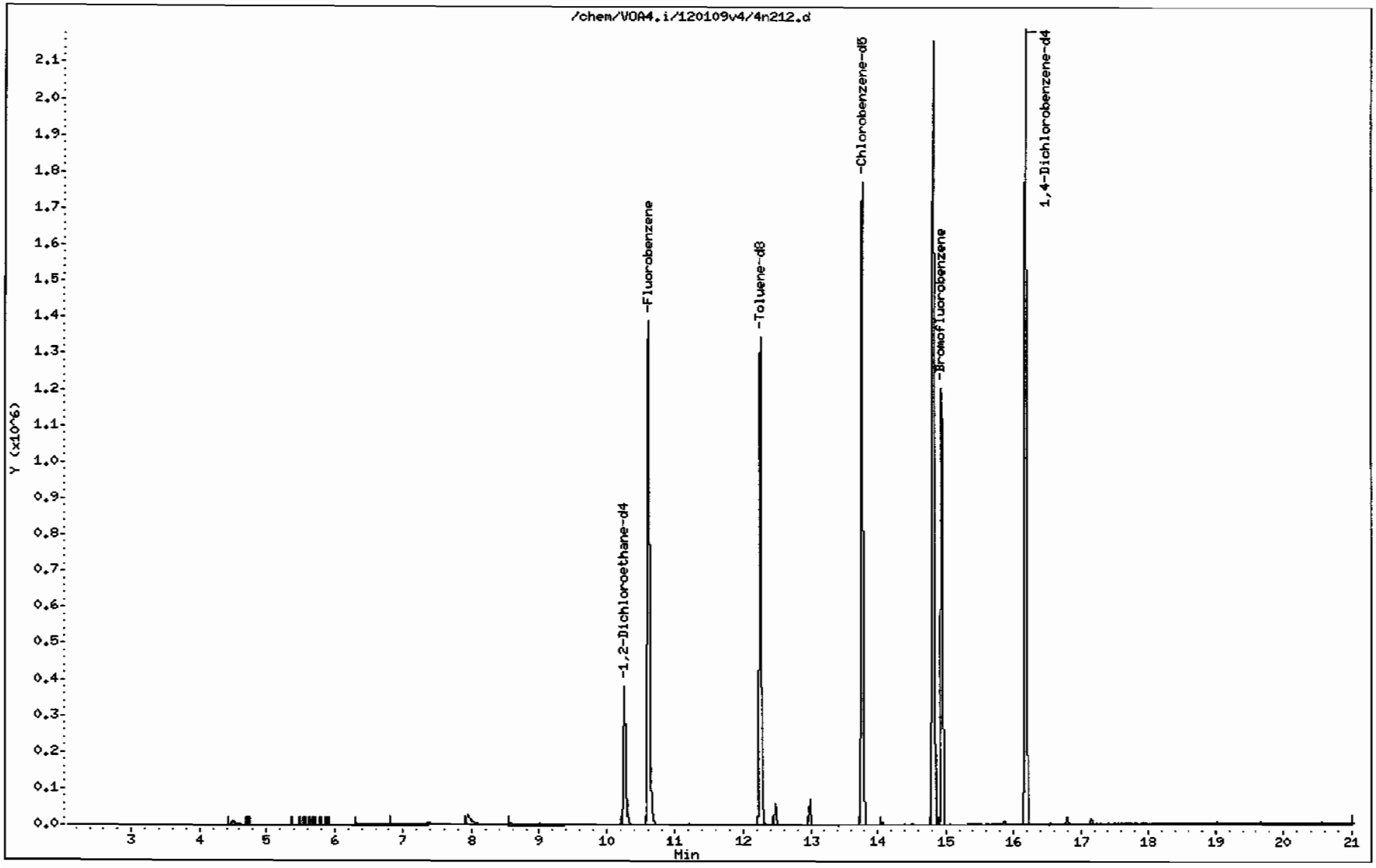

Data File: /chem/VOA4.i/120109v4/4n212.d

Date : 01-DEC-2009 22:07

Client ID: RE03-09-14130

Instrument: VOA4.i

Sample Info: |2418270011928135|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	86	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	78	C8H24O4Si4	296

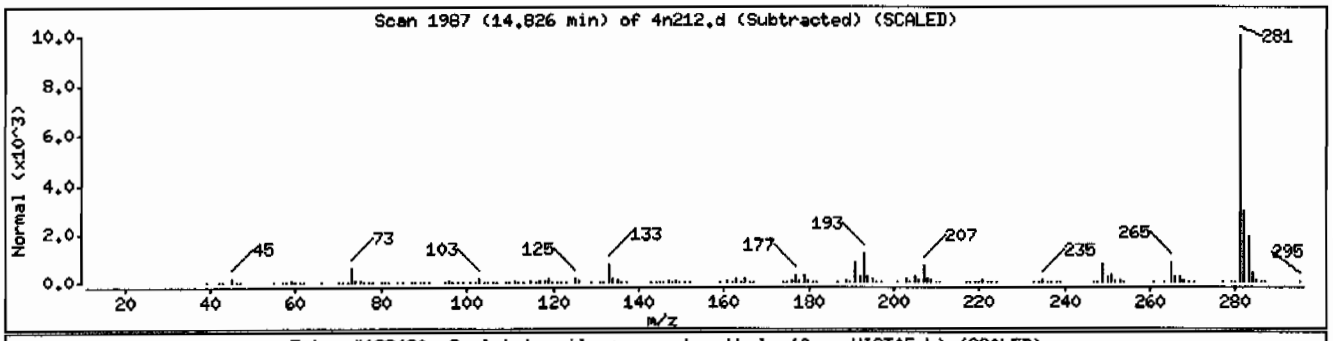

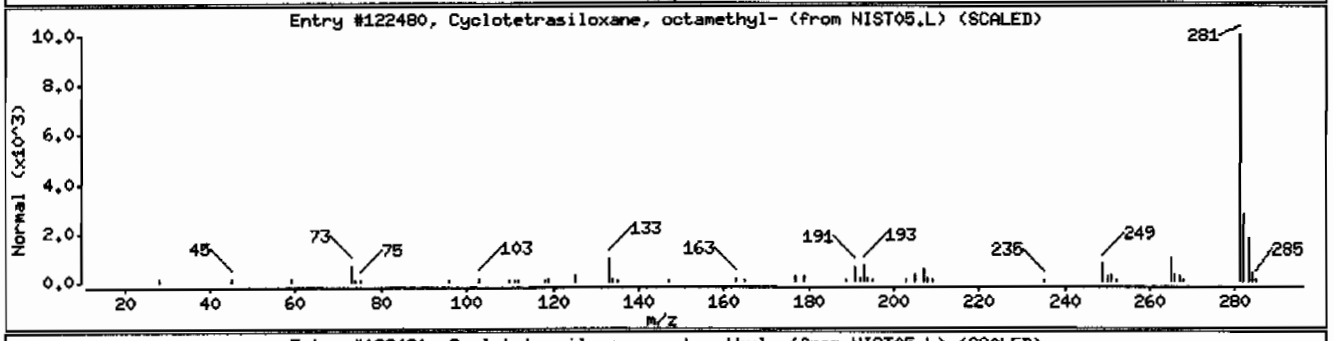

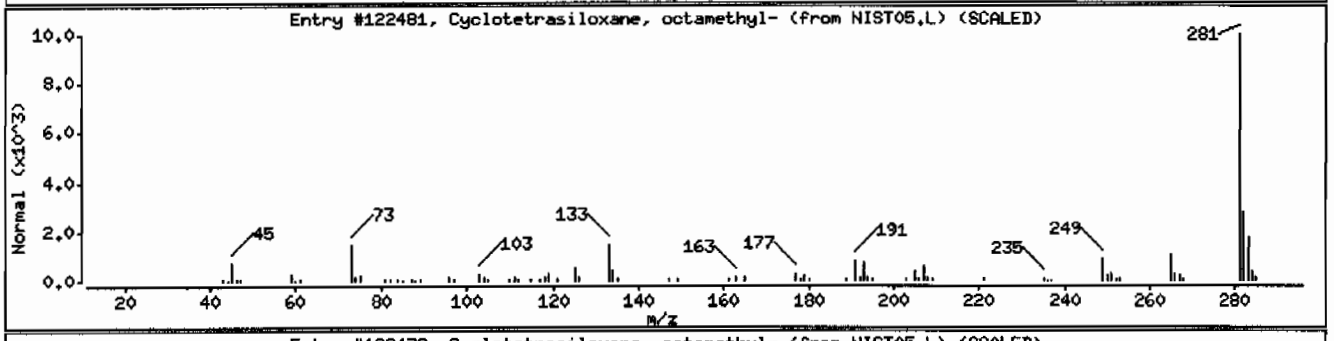

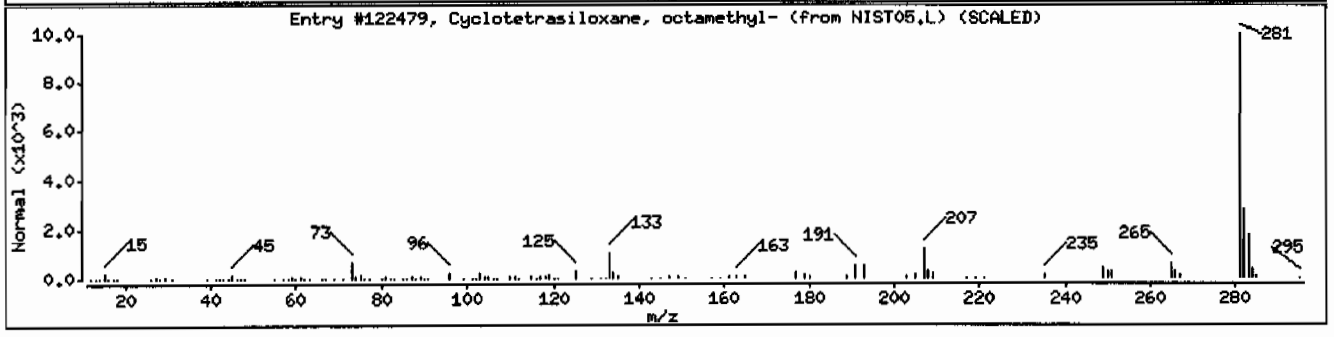

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n218.d
Lab Smp Id: 1201984531 Client Smp ID: RE03-09-14130MS
Inj Date : 02-DEC-2009 00:51
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984531|928135|1|VOAF|1|
Misc Info : LANL 5G N/A MS 241827001
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1448318	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	1146470	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	789872	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.266	10.259	(0.967)	339369	59.6581	59.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	993885	49.7728	49.8
$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	480567	52.5408	52.6
3 Dichlorodifluoromethane	85	4.911	4.912	(0.462)	254605	37.7262	37.7
4 Chloromethane	50	5.299	5.299	(0.499)	399968	38.3873	38.4
5 Vinyl chloride	62	5.528	5.521	(0.521)	405924	42.0859	42.1
6 Bromomethane	94	6.137	6.130	(0.578)	333705	43.8704	43.9
7 Chloroethane	64	6.295	6.281	(0.593)	313947	44.3588	44.4
8 Trichlorofluoromethane	101	6.675	6.662	(0.629)	539605	45.3431	45.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.364	7.357	(0.693)	1474158	250.508	250
11 1,1-Dichloroethylene	61	7.389	7.388	(0.696)	562811	45.9035	45.9
87 1,4-Dichlorobenzene	146	16.204	16.209	(1.002)	1084405	42.4721	42.5
13 Iodomethane	142	7.626	7.632	(0.718)	3148055	214.641	215
17 Methylene chloride	84	7.943	7.936	(0.748)	448880	46.2451	46.3
14 Carbon disulfide	76	7.773	7.772	(0.732)	5943264	233.773	234
21 trans-1,2-Dichloroethylene	61	8.285	8.284	(0.780)	516085	47.5598	47.6
22 1,1-Dichloroethane	63	8.766	8.759	(0.825)	651483	48.2678	48.3
30 2-Butanone	43	9.327	9.326	(0.878)	1711256	252.743	253
31 cis-1,2-Dichloroethylene	61	9.388	9.387	(0.884)	568470	47.3232	47.3
85 1,3-Dichlorobenzene	146	16.125	16.124	(0.997)	1083614	42.5942	42.6
25 2,2-Dichloropropane	77	9.425	9.418	(0.887)	377821	48.4705	48.5
32 Chloroform	83	9.693	9.692	(0.913)	639072	46.8605	46.9
90 1,2-Dichlorobenzene	146	16.643	16.642	(1.029)	1068001	43.2503	43.3
29 Bromochloromethane	128	9.663	9.662	(0.910)	191515	45.2476	45.3
36 1,1,1-Trichloroethane	97	9.986	9.979	(0.940)	505490	49.9476	50.0
34 1,1-Dichloropropene	75	10.138	10.131	(0.955)	492313	48.8962	48.9
33 Carbon tetrachloride	117	10.175	10.174	(0.958)	487991	49.9902	50.0
37 1,2-Dichloroethane	62	10.345	10.344	(0.974)	512740	47.7563	47.8
38 Benzene	78	10.376	10.375	(0.977)	1386508	44.6627	44.7
39 Trichloroethylene	95	11.004	11.003	(1.036)	369278	47.3793	47.4
41 1,2-Dichloropropane	63	11.241	11.247	(1.059)	379630	46.6443	46.7
45 Bromodichloromethane	83	11.485	11.484	(1.082)	495945	47.3529	47.4
43 Dibromomethane	93	11.376	11.375	(1.071)	236036	46.9513	47.0
49 4-Methyl-2-pentanone	58	12.022	12.021	(0.873)	887312	239.759	240
46 cis-1,3-Dichloropropylene	75	11.930	11.929	(1.123)	612886	46.9275	46.9
50 Toluene	92	12.327	12.326	(0.895)	868209	43.2104	43.2
53 trans-1,3-Dichloropropylene	75	12.467	12.466	(0.905)	589692	45.9796	46.0
54 1,1,2-Trichloroethane	83	12.686	12.685	(0.921)	292143	45.8397	45.8
55 2-Hexanone	43	12.857	12.856	(0.934)	2155240	216.122	216
52 1,3-Dichloropropane	76	12.881	12.880	(0.935)	577506	44.7813	44.8
56 Tetrachloroethylene	164	12.924	12.923	(0.938)	316720	40.5787	40.6
57 Dibromochloromethane	129	13.150	13.149	(0.955)	406379	46.0764	46.1
59 1,2-Dibromoethane	107	13.320	13.319	(0.967)	374973	46.4209	46.4
62 Chlorobenzene	112	13.802	13.801	(1.002)	1022801	44.1341	44.1
60 1,1,1,2-Tetrachloroethane	131	13.851	13.850	(1.006)	390857	44.6605	44.7
58 Ethylbenzene	91	13.863	13.862	(1.007)	1710672	44.1003	44.1
63 m,p-Xylenes	106	13.973	13.972	(1.015)	1344883	87.2141	87.2
64 o-Xylene	106	14.405	14.405	(1.046)	698629	43.6867	43.7
65 Styrene	104	14.405	14.405	(1.046)	1193394	43.8875	43.9
66 Bromoform	173	14.662	14.661	(0.906)	377689	44.3245	44.3
73 1,1,2,2-Tetrachloroethane	83	15.021	15.020	(0.928)	600733	47.8643	47.9
74 1,2,3-Trichloropropane	110	15.113	15.106	(0.934)	162597	48.5735	48.6
75 Bromobenzene	156	15.168	15.167	(0.937)	577785	42.7198	42.7
76 n-Propylbenzene	91	15.186	15.185	(0.939)	2263015	44.5039	44.5
77 2-Chlorotoluene	91	15.332	15.331	(0.948)	1583632	43.8580	43.9
67 Isopropylbenzene	105	14.759	14.758	(0.912)	1893455	44.2307	44.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.332	15.331	(0.948)	1677108	43.9138	43.9
80 4-Chlorotoluene	91	15.430	15.429	(0.954)	1485273	44.7628	44.8
81 tert-Butylbenzene	119	15.704	15.703	(0.971)	1722500	44.5011	44.5
79 1,2,4-Trimethylbenzene	105	15.741	15.746	(0.973)	1766515	43.7076	43.7
83 sec-Butylbenzene	105	15.930	15.929	(0.985)	2300104	44.5509	44.6
84 4-Isopropyltoluene	119	16.052	16.051	(0.992)	1856377	43.8539	43.9
89 n-Butylbenzene	91	16.503	16.502	(1.020)	1741678	44.2485	44.3
92 1,2-Dibromo-3-chloropropane	157	17.533	17.526	(1.084)	135442	48.6149	48.6

Data File: /chem/VOA4.i/120109v4/4n218.d
Date : 02-DEC-2009 00:51
Client ID: RE03-09-14130MS
Sample Info: 1120198453119281351111VOAF111
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

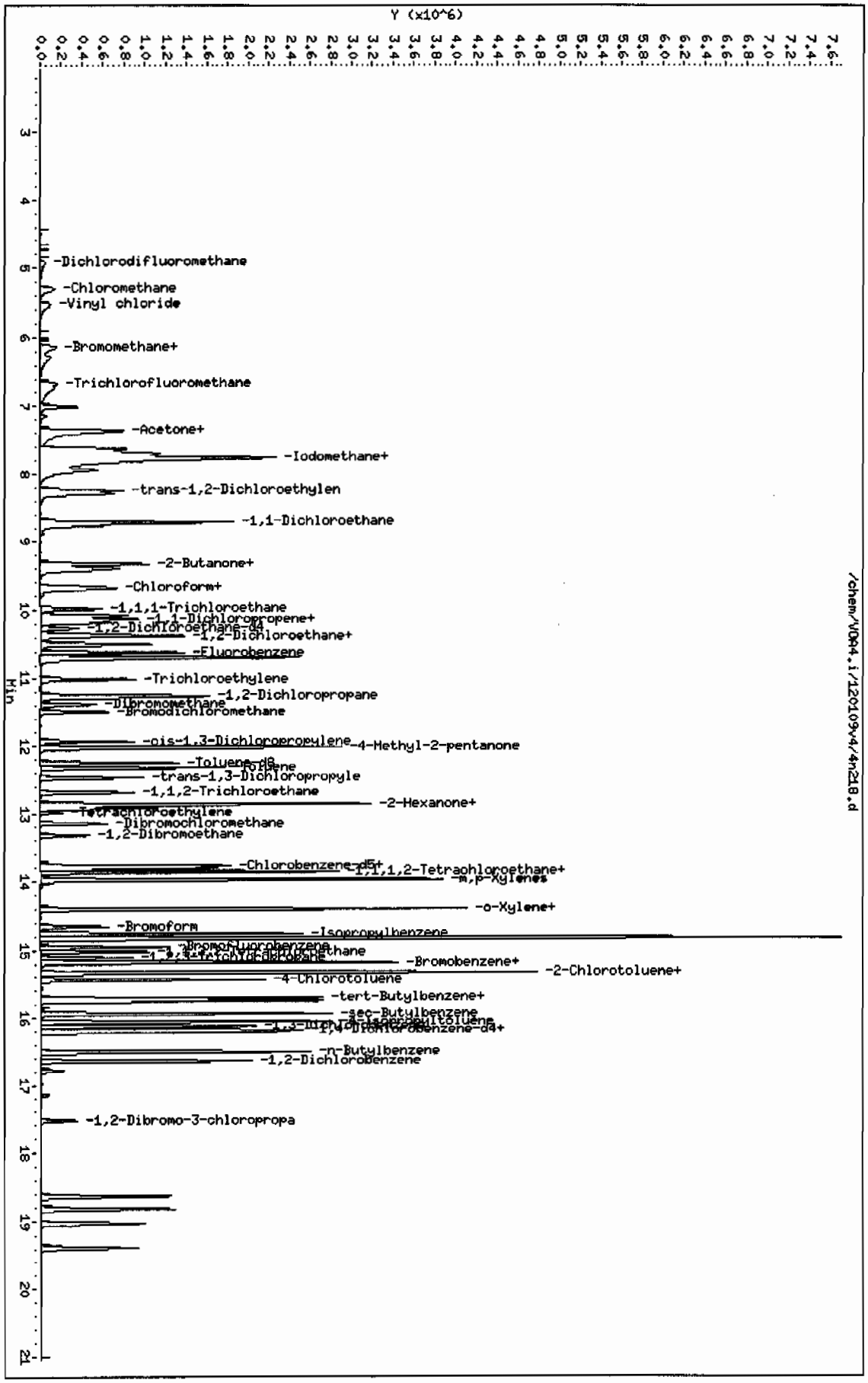

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GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA4.i/120109v4/4n219.d
Lab Smp Id: 1201984532 Client Smp ID: RE03-09-14130MSD
Inj Date : 02-DEC-2009 01:18
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1201984532|928135|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 241827001
Comment :
Method : /chem/VOA4.i/120109v4/VOA4-8260-112209.m
Meth Date : 04-Dec-2009 17:28 amj Quant Type: ISTD
Cal Date : 22-NOV-2009 15:16 Cal File: 41714.d
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-668.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.03430	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	733433	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	565703	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	338283	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	170531	59.1976	59.2
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	482900	49.0103	49.0
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	209879	53.5782	53.6
3 Dichlorodifluoromethane	85	4.919	4.912	(0.463)	114885	33.6158	33.6
4 Chloromethane	50	5.284	5.299	(0.498)	154571	29.2950	29.3
5 Vinyl chloride	62	5.521	5.521	(0.520)	178716	36.5897	36.6
6 Bromomethane	94	6.123	6.130	(0.577)	142032	36.8721	36.9
7 Chloroethane	64	6.281	6.281	(0.591)	126637	35.3336	35.3
8 Trichlorofluoromethane	101	6.674	6.662	(0.629)	255845	42.4537	42.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.357	7.357	(0.693)	856325	287.356	287
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	224617	36.1767	36.2
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	450283	41.1788	41.2
13 Iodomethane	142	7.625	7.632	(0.718)	1351595	181.979	182
17 Methylene chloride	84	7.936	7.936	(0.747)	180189	35.2899	35.3
14 Carbon disulfide	76	7.766	7.772	(0.731)	2423910	188.274	188
21 trans-1,2-Dichloroethylene	61	8.290	8.284	(0.781)	234696	42.7098	42.7
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	299693	43.8465	43.9
30 2-Butanone	43	9.326	9.326	(0.878)	1021889	298.038	298
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	272504	44.7964	44.8
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	455040	41.7640	41.8
25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	238359	60.3846	60.4
32 Chloroform	83	9.692	9.692	(0.913)	300672	43.5365	43.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	451338	42.6772	42.7
29 Bromochloromethane	128	9.661	9.662	(0.910)	91580	42.7265	42.7
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	258213	50.3829	50.4
34 1,1-Dichloropropene	75	10.131	10.131	(0.954)	234101	45.9135	45.9
33 Carbon tetrachloride	117	10.180	10.174	(0.959)	234858	47.5097	47.5
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	243157	44.7223	44.7
38 Benzene	78	10.375	10.375	(0.977)	662780	42.1595	42.2
39 Trichloroethylene	95	11.009	11.003	(1.037)	174744	44.2732	44.3
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	179539	43.5613	43.6
45 Bromodichloromethane	83	11.484	11.484	(1.082)	229726	43.3138	43.3
43 Dibromomethane	93	11.381	11.375	(1.072)	116111	45.6085	45.6
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	509877	279.215	279
46 cis-1,3-Dichloropropylene	75	11.935	11.929	(1.124)	280455	42.4047	42.4
50 Toluene	92	12.326	12.326	(0.895)	413720	41.7296	41.7
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	267408	42.2560	42.3
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	141213	44.9051	44.9
55 2-Hexanone	43	12.862	12.856	(0.934)	1191438	242.130	242
52 1,3-Dichloropropane	76	12.880	12.880	(0.935)	279918	43.9891	44.0
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	155204	40.2995	40.3
57 Dibromochloromethane	129	13.149	13.149	(0.955)	188893	43.4047	43.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	180787	45.3581	45.4
62 Chlorobenzene	112	13.801	13.801	(1.002)	478323	41.8291	41.8
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	182477	42.2560	42.3
58 Ethylbenzene	91	13.862	13.862	(1.007)	807431	42.1847	42.2
63 m,p-Xylenes	106	13.972	13.972	(1.015)	619585	81.4286	81.4
64 o-Xylene	106	14.404	14.405	(1.046)	322186	40.8304	40.8
65 Styrene	104	14.404	14.405	(1.046)	530954	39.5720	39.6
66 Bromoform	173	14.661	14.661	(0.906)	175511	48.0940	48.1
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	284786	52.9817	53.0
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	78376	54.6697	54.7
75 Bromobenzene	156	15.167	15.167	(0.937)	250254	43.2036	43.2
76 n-Propylbenzene	91	15.185	15.185	(0.939)	1015548	46.6324	46.6
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	704527	45.5585	45.6
67 Isopropylbenzene	105	14.758	14.758	(0.912)	865407	47.2026	47.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	731196	44.7044	44.7
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	630757	44.3864	44.4
81 tert-Butylbenzene	119	15.709	15.703	(0.971)	739251	44.5943	44.6
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	763725	44.1218	44.1
83 sec-Butylbenzene	105	15.935	15.929	(0.985)	999657	45.2102	45.2
84 4-Isopropyltoluene	119	16.057	16.051	(0.992)	790828	43.6215	43.6
89 n-Butylbenzene	91	16.508	16.502	(1.020)	742580	44.0504	44.1
92 1,2-Dibromo-3-chloropropane	157	17.532	17.526	(1.084)	64094	53.7168	53.7

Data File: /chem/VOA4.i/120109v4/4n219.d

Date : 02-DEC-2009 01:18

Client ID: RE03-09-14130MSD

Sample Info: |120198453219281351|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25

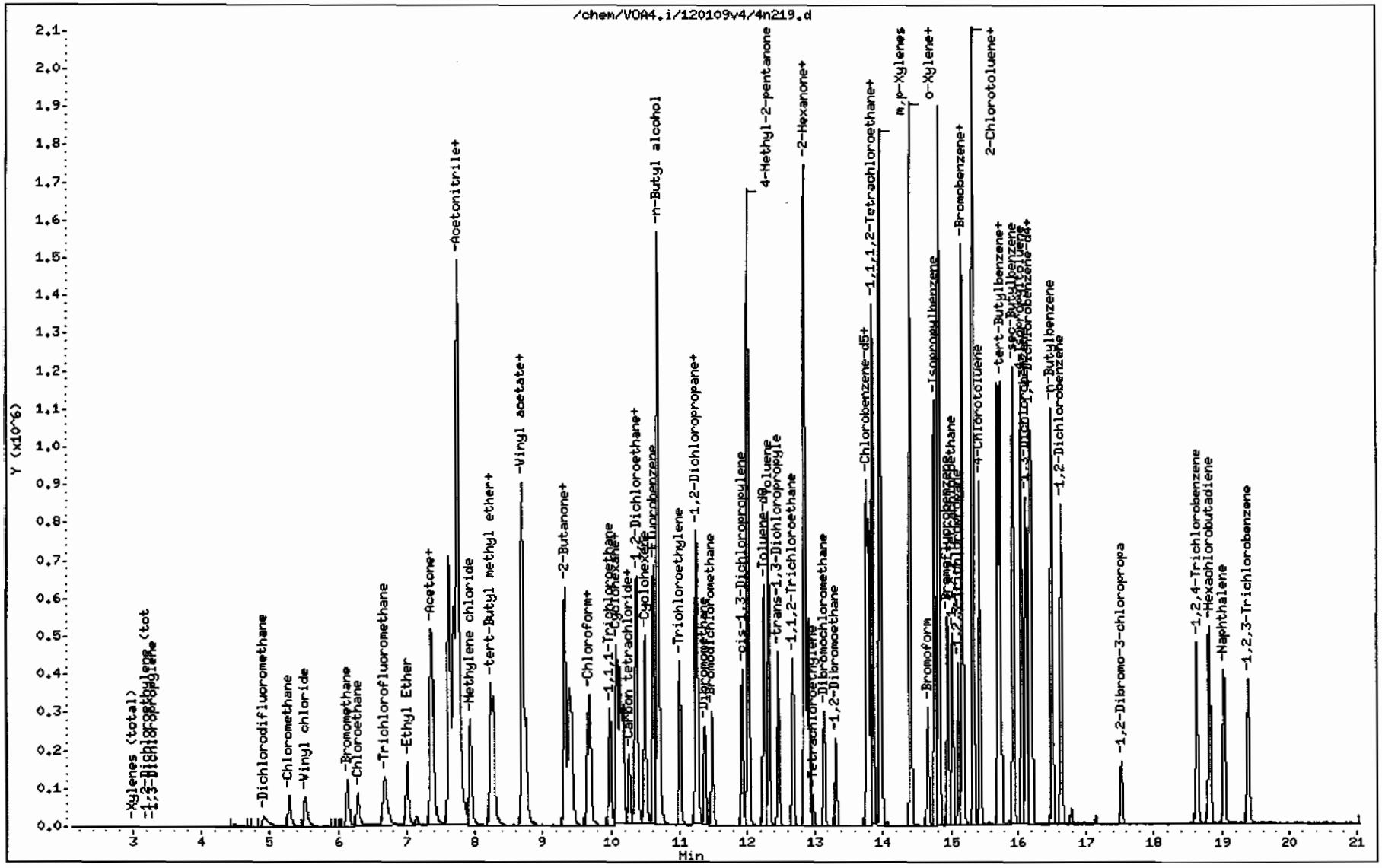

GC/MS Volatile Analysis

Case Narrative

ChemStation Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670-1

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 1311 / 5030B
Analytical Batch Number:	931007
Prep Batch Number:	930034

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241839001	WST03-10-2134
1201988991	Tumbling Blank (TB)
1201991305	Method Blank (MB)
1201991308	Laboratory Control Sample (LCS)
1201991306	241839001(WST03-10-2134) Post Spike (PS)
1201991307	241839001(WST03-10-2134) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration

All initial calibration requirements have been met for this sample delivery groups (SDG). A second source

initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241839001 (WST03-10-2134) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
Due to problems associated with the nature of the TCLP matrix, volatile extracts are routinely diluted before analysis. The dilution factor does not increase detection limits above the regulatory limits required by the client.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOAA.I	Agilent 7890/5975C GC/MS system	HP7890A/HP5975C	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-670-1 GEL Work Order: 241839

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this case narrative:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 16 DEC 2009 **Title: Data Validator**

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241839001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**931007**	**Inst:**	**VOAA.I**	**Dilution:**	**10**
Run Date:	**12/09/2009 20:45**	**Analyst:**	**JEB**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 15:00**				
Data File:	**120909\AO309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

Quality Control Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-670-1

Matrix Type: TCLP SOLID

Sample ID	Client ID	DCED4 %REC		TOL %REC		BFB %REC	
1201991308	LCS for batch 931007	116		96		95	
1201991305	MB for batch 931007	104		95		92	
1201988991	TB for batch 930034	116	D	95	D	94	D
241839001	WST03-10-2134	116	D	95	D	94	D
1201991306	WST03-10-2134PS	118	D	97	D	96	D
1201991307	WST03-10-2134PSD	115	D	97	D	95	D

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(59%-130%)
TOL	= Toluene-d8	(76%-129%)
BFB	= Bromofluorobenzene	(71%-126%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134PS
Lab Sample ID: 1201991306
Instrument: VOAA.I
Analyst: JEB
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: TCLP R
Analysis Date: 12/09/2009 21:11
Dilution: 10
Prep Batch ID: 930034
Batch ID: 931007

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
75-01-4	PS	Vinyl chloride	0.050	0.00	U	0.0439	88	51-134
75-35-4	PS	1,1-Dichloroethylene	0.050	0.00	U	0.0434	87	61-129
78-93-3	PS	2-Butanone	0.250	0.00	U	0.121	48	11-151
67-66-3	PS	Chloroform	0.050	0.00	U	0.0485	97	70-126
56-23-5	PS	Carbon tetrachloride	0.050	0.00	U	0.0554	111	66-138
107-06-2	PS	1,2-Dichloroethane	0.050	0.00	U	0.0505	101	65-129
71-43-2	PS	Benzene	0.050	0.00	U	0.0402	80	66-121
79-01-6	PS	Trichloroethylene	0.050	0.00	U	0.0448	90	66-127
127-18-4	PS	Tetrachloroethylene	0.050	0.00	U	0.0449	90	63-126
108-90-7	PS	Chlorobenzene	0.050	0.00	U	0.0432	86	69-120
106-46-7	PS	1,4-Dichlorobenzene	0.050	0.00	U	0.0408	82	64-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1 **Sample Type:** Post Spike Duplicate

Client ID: WST03-10-2134PSD **Matrix:** TCLP R

Lab Sample ID: 1201991307

Instrument: VOAA.I **Analysis Date:** 12/09/2009 21:37 **Dilution:** 10

Analyst: JEB **Prep Batch ID:** 930034

Purge Vol: 5 mL **Batch ID:** 931007

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-01-4	PSD	Vinyl chloride	0.050	0.00	U	0.0438	88	51-134	0	0-20
75-35-4	PSD	1,1-Dichloroethylene	0.050	0.00	U	0.0424	85	61-129	2	0-20
78-93-3	PSD	2-Butanone	0.250	0.00	U	0.114	46	11-151	6	0-20
67-66-3	PSD	Chloroform	0.050	0.00	U	0.0473	95	70-126	3	0-20
56-23-5	PSD	Carbon tetrachloride	0.050	0.00	U	0.0534	107	66-138	4	0-20
107-06-2	PSD	1,2-Dichloroethane	0.050	0.00	U	0.0488	98	65-129	3	0-20
71-43-2	PSD	Benzene	0.050	0.00	U	0.0394	79	66-121	2	0-20
79-01-6	PSD	Trichloroethylene	0.050	0.00	U	0.0427	85	66-127	5	0-20
127-18-4	PSD	Tetrachloroethylene	0.050	0.00	U	0.0407	81	63-126	10	0-20
108-90-7	PSD	Chlorobenzene	0.050	0.00	U	0.0392	78	69-120	10	0-20
106-46-7	PSD	1,4-Dichlorobenzene	0.050	0.00	U	0.0341	68	64-120	18	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: LCS for batch 931007
Lab Sample ID: 1201991308
Instrument: VOAA.I
Analyst: JEB
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/09/2009 17:28
Dilution: 1
Prep Batch ID: 930034
Batch ID: 931007

CAS No	Parmname		Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
75-01-4	LCS	Vinyl chloride	0.050	0.0	0.0509	102	61-131
75-35-4	LCS	1,1-Dichloroethylene	0.050	0.0	0.0509	102	70-128
78-93-3	LCS	2-Butanone	0.250	0.0	0.218	87	31-160
67-66-3	LCS	Chloroform	0.050	0.0	0.054	108	76-121
56-23-5	LCS	Carbon tetrachloride	0.050	0.0	0.0664	133	75-139
107-06-2	LCS	1,2-Dichloroethane	0.050	0.0	0.055	110	70-123
71-43-2	LCS	Benzene	0.050	0.0	0.0459	92	72-120
79-01-6	LCS	Trichloroethylene	0.050	0.0	0.0523	105	76-123
127-18-4	LCS	Tetrachloroethylene	0.050	0.0	0.0556	111	72-126
108-90-7	LCS	Chlorobenzene	0.050	0.0	0.0497	99	76-120
106-46-7	LCS	1,4-Dichlorobenzene	0.050	0.0	0.0492	98	74-120

Method Blank Summary

SDG Number:	10-670-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 931007	Instrument ID:	VOAA.I	Data File:	120909\AO306LA.D
Lab Sample ID:	1201991305	Prep Date:	12/09/2009 19:28	Analyzed:	12/09/09 19:28
Column:	DB-624				

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 931007	1201991308	120909\AO302LA.D	12/09/09	1728
02 TB for batch 930034	1201988991	120909\AO308.D	12/09/09	2020
03 WST03-10-2134	241839001	120909\AO309.D	12/09/09	2045
04 WST03-10-2134PS	1201991306	120909\AO310.D	12/09/09	2111
05 WST03-10-2134PSD	1201991307	120909\AO311.D	12/09/09	2137

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-670-1

Instrument ID: VOAA.I **Injection Date/Time:** 06-NOV-09 11:39

Column Description: DB-624 **Lab File ID** 110609\AJ501.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	24.8
75	30.0 - 60.0% of mass 95	50.4
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	1
174	50.0 - 100.0% of mass 95	78
175	5.0 -9.0% of mass 174	7.1
177	5.0 - 9.0% of mass 176	6.6
176	95.0 - 101.0% of mass 174	97.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	WAVM091106-01	110609\AJ503.D	06-NOV-09 12:30
ICALMIX[A]	WAVM091106-03	110609\AJ505.D	06-NOV-09 13:21
ICALMIX[A]	WAVM091106-04	110609\AJ506.D	06-NOV-09 13:47
ICALMIX[A]	WAVM091106-05	110609\AJ507.D	06-NOV-09 14:13
ICALMIX[A]	WAVM091106-06	110609\AJ508.D	06-NOV-09 14:39
ICALMIX[A]	WAVM091106-07	110609\AJ509.D	06-NOV-09 15:05
ICALMIX[A]	WAVM091106-08	110609\AJ510.D	06-NOV-09 15:31
ICALMIX[A]	WAVM091106-09	110609\AJ511.D	06-NOV-09 15:57
ICVMIX[A]01	WAVM091106-17	110609\AJ521.D	06-NOV-09 20:17

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-670-1

Instrument ID: VOAA.I **Injection Date/Time:** 09-DEC-09 17:03

Column Description: DB-624 **Lab File ID** 120909\AO301.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	49
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	79
175	5.0 -9.0% of mass 174	6.7
176	95.0 - 101.0% of mass 174	96.7
177	5.0 - 9.0% of mass 176	6.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]01	WAVM091209-01	120909\AO302.D	09-DEC-09 17:28
BLK01LCS	1201991308	120909\AO302LA.D	09-DEC-09 17:28
BLK01	1201991305	120909\AO306LA.D	09-DEC-09 19:28
TBLK01	1201988991	120909\AO308.D	09-DEC-09 20:20
WST03-10-2134	241839001	120909\AO309.D	09-DEC-09 20:45
WST03-10-2134MS	1201991306	120909\AO310.D	09-DEC-09 21:11
WST03-10-2134MSD	1201991307	120909\AO311.D	09-DEC-09 21:37

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOAA.I

GC Column: DB-624

Client SDG: 10-670-1

STD Analysis Time: 09-DEC-09 17:28

Data File: C:\msdchem\1\DATA\120909\AO302.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1307289		9.34	1082198		12.5	661353		14.9
Upper Limit	2614578		9.84	2164396		13.0	1322706		15.4
Lower Limit	653645		8.84	541099		12.0	330677		14.4
Sample ID									
BLK01LCS	1307289		9.34	1082198		12.5	661353		14.9
BLK01	1328132		9.34	1071339		12.5	658871		14.9
TBLK01	1247841		9.34	1037249		12.5	638412		14.9
WST03-10-2134	1225367		9.34	1019046		12.5	626563		14.9
WST03-10-2134MS	1252394		9.34	1042768		12.5	649269		14.9
WST03-10-2134MSD	1303774		9.34	1075043		12.5	660305		14.9

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241839001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**931007**	**Inst:**	**VOAA.I**	**Dilution:**	**10**
Run Date:	**12/09/2009 20:45**	**Analyst:**	**JEB**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 15:00**				
Data File:	**120909\AO309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0309.D
Acq On : 9 Dec 2009 8:45 pm
Operator : JEB
InstName : VOAA
Sample : |241839001|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 14:31:16 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.339	96	1225367	50.00 ug/L	0.00
41) Chlorobenzene-d5	12.507	117	1019046	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	152	626563	50.00 ug/L	0.00
82) B Fluorobenzene	9.339	96	1225367	50.00 ug/L	0.00
103) B Chlorobenzene-d5	12.507	117	1019046	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	152	626563	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	8.978	65	492640	57.87 ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 115.74%		
43) Toluene-d8	10.983	98	1228549	47.49 ug/L	0.00
Spiked Amount 50.000	Range 76 - 129		Recovery = 94.98%		
61) Bromofluorobenzene	13.713	95	532403	47.17 ug/L	0.00
Spiked Amount 50.000	Range 71 - 126		Recovery = 94.34%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.043	50	362	N.D.	
4) Vinyl chloride	4.275	62	343	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.089	43	7754	1.56 ug/L	73
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	6.421	41	8657	9.93 ug/L	82
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	0.000		0	N.D.	
15) Methylene chloride	6.648	84	4425	Below Cal #	76
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	7.298	43	110	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	8.066	43	113	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO309.D
Acq On : 9 Dec 2009 8:45 pm
Operator : JEB
InstName : VOAA
Sample : |241839001|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 14:31:16 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40)	cis-1,3-Dichloropropylene	0.000		0m	N.D.	d
42)	4-Methyl-2-pentanone	0.000		0	N.D.	
44)	Toluene	11.057	91	779	N.D.	
45)	trans-1,3-Dichloroprop...	0.000		0	N.D.	
46)	1,1,2-Trichloroethane	0.000		0	N.D.	
47)	2-Hexanone	0.000		0m	N.D.	d
48)	1,3-Dichloropropane	0.000		0	N.D.	
49)	Tetrachloroethylene	0.000		0	N.D.	
50)	Dibromochloromethane	0.000		0	N.D.	
51)	1,2-Dibromoethane	0.000		0	N.D.	
52)	Chlorobenzene	0.000		0	N.D.	
53)	1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54)	Ethylbenzene	12.727	91	2018	N.D.	
55)	m,p-Xylenes	12.730	106	417	N.D.	
56)	o-Xylene	0.000		0	N.D.	
57)	Styrene	0.000		0	N.D.	
59)	Bromoform	0.000		0	N.D.	
60)	Isopropylbenzene	13.717	105	116	N.D.	
62)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63)	1,2,3-Trichloropropane	0.000		0	N.D.	
64)	Bromobenzene	0.000		0	N.D.	
65)	n-Propylbenzene	13.717	91	1560	N.D.	
66)	1,3,5-Trimethylbenzene	0.000		0	N.D.	
67)	2-Chlorotoluene	0.000		0	N.D.	
68)	4-Chlorotoluene	14.198	91	109	N.D.	
69)	tert-Butylbenzene	0.000		0	N.D.	
70)	1,2,4-Trimethylbenzene	0.000		0	N.D.	
71)	sec-Butylbenzene	0.000		0	N.D.	
72)	4-Isopropyltoluene	0.000		0	N.D.	
73)	1,3-Dichlorobenzene	14.887	146	113	N.D.	
74)	1,4-Dichlorobenzene	14.965	146	917	N.D.	
75)	n-Butylbenzene	0.000		0	N.D.	
76)	1,2-Dichlorobenzene	0.000		0	N.D.	
77)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	17.183	180	469	N.D.	
79)	Hexachlorobutadiene	0.000		0	N.D.	
80)	Naphthalene	17.529	128	1849	N.D.	
81)	1,2,3-Trichlorobenzene	17.847	180	120	N.D.	
83)	Chlorotrifluoroethylene	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85)	Acrolein	0.000		0	N.D.	
86)	Trichlorotrifluoroethane	0.000		0	N.D.	
87)	Isopropyl Alcohol	0.000		0	N.D.	
88)	Allyl chloride	6.421	41	8657	N.D.	
89)	tert-Butyl Alcohol	0.000		0	N.D.	
90)	Acrylonitrile	0.000		0	N.D.	
91)	Isopropyl ether	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000		0	N.D.	
94)	Ethyl acetate	8.066	43	113	N.D.	
95)	Propionitrile	0.000		0	N.D.	
96)	Methacrylonitrile	0.000		0	N.D.	
97)	Tetrahydrofuran	0.000		0	N.D.	
98)	Isobutyl alcohol	0.000		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0309.D
Acq On : 9 Dec 2009 8:45 pm
Operator : JEB
InstName : VOAA
Sample : |241839001|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 14:31:16 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0m	N.D. d	
104) Ethyl methacrylate	0.000		0m	N.D. d	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D. d	
112) bis(2-Chloroisopropyl)...	15.602	45	225	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO309.D
Acq On : 9 Dec 2009 8:45 pm
Operator : JEB
InstName : VOAA
Sample : |241839001|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 14:31:16 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

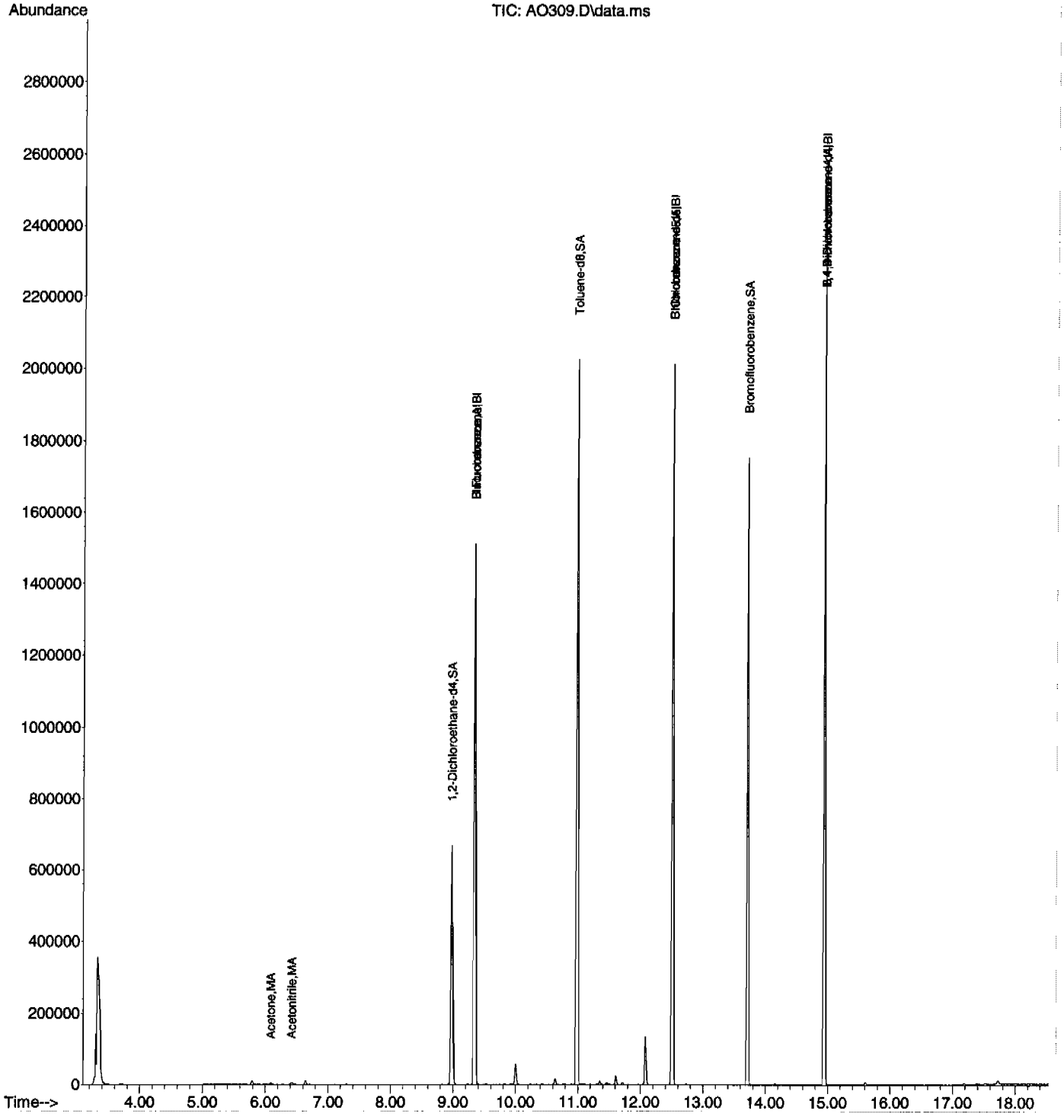

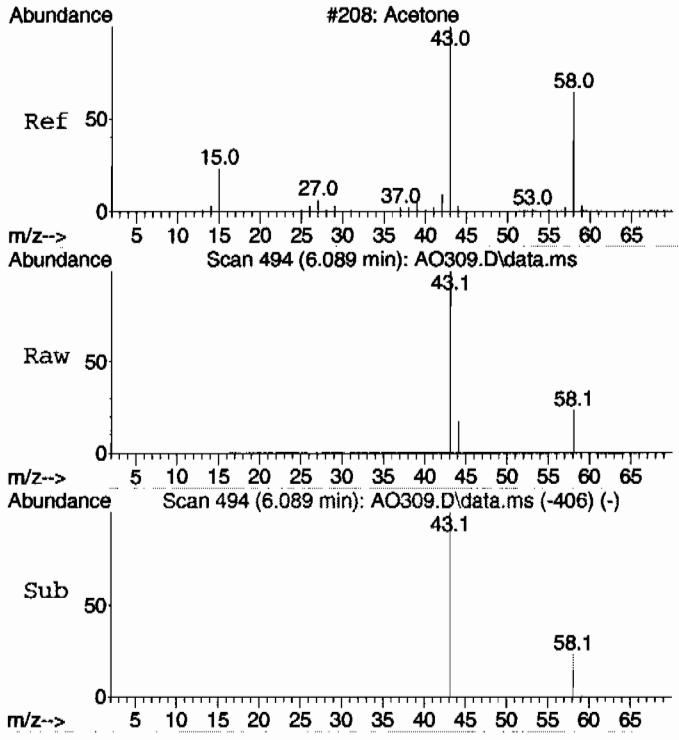

#9
Acetone
Concen: 1.56 ug/L
RT: 6.089 min Scan# 494
Delta R.T. 0.011 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 43 Resp: 7754

Ion	Ratio	Lower	Upper
43	100		
58	20.6	6.7	66.7

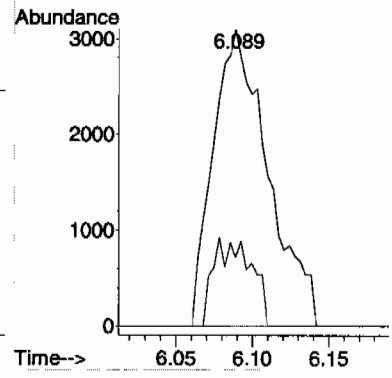

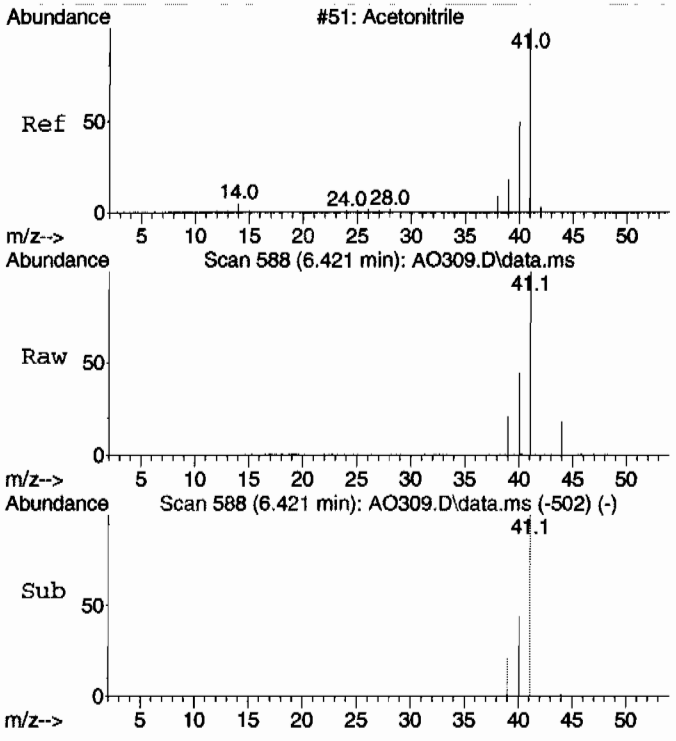

#12
Acetonitrile
Concen: 9.93 ug/L
RT: 6.421 min Scan# 588
Delta R.T. 0.003 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 41 Resp: 8657

Ion	Ratio	Lower	Upper
41	100		
40	60.8	19.5	79.5
39	10.5	0.0	49.8

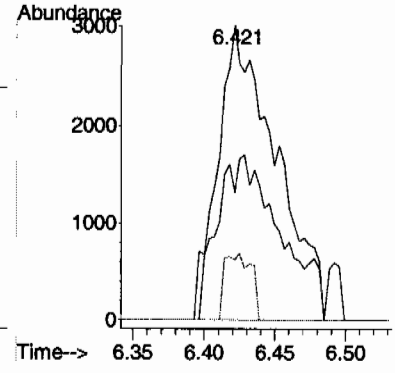

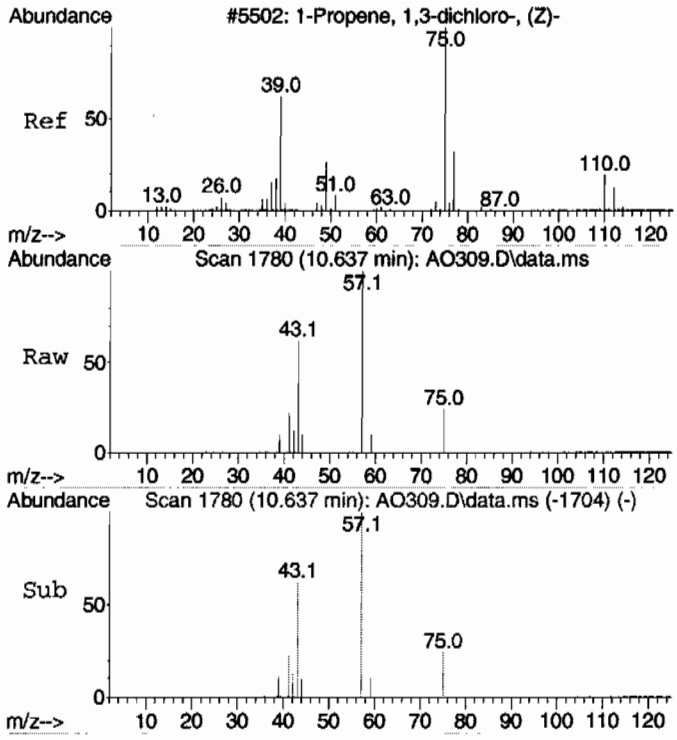

#40 BEFORE analyst DELETION
cis-1,3-Dichloropropylene
Concen: 0.28 ug/L
RT: 10.637 min Scan# 1780
Delta R.T. -0.032 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 75 Resp: 2399

Ion	Ratio	Lower	Upper
75	100		
39	37.5	14.7	74.7
77	0.0	1.8	61.8#

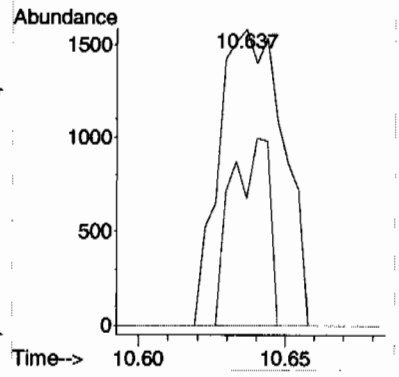

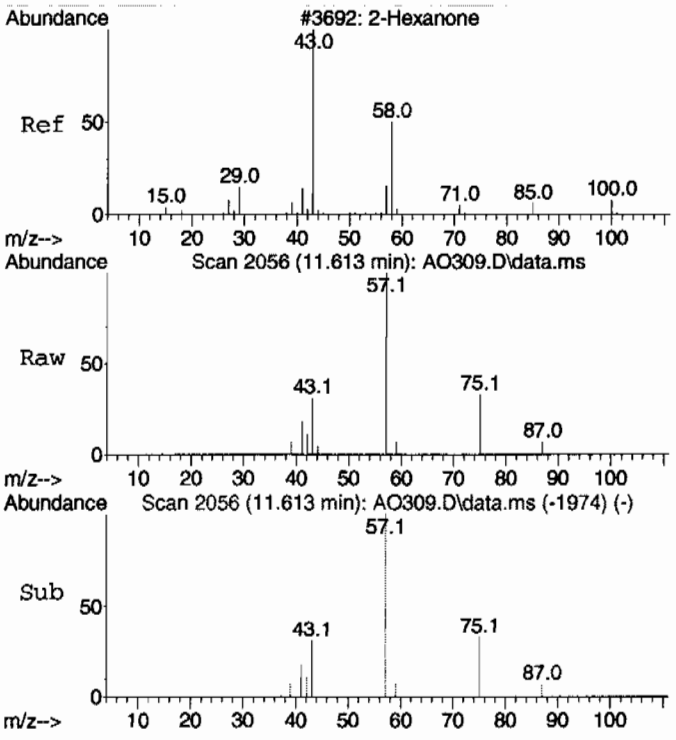

#47 BEFORE analyst DELETION
2-Hexanone
Concen: 7.18 ug/L
RT: 11.613 min Scan# 2056
Delta R.T. -0.010 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 43 Resp: 5873

Ion	Ratio	Lower	Upper
43	100		
58	1.9	32.7	92.7#
57	310.5	0.0	50.9#
100	0.0	0.0	42.6

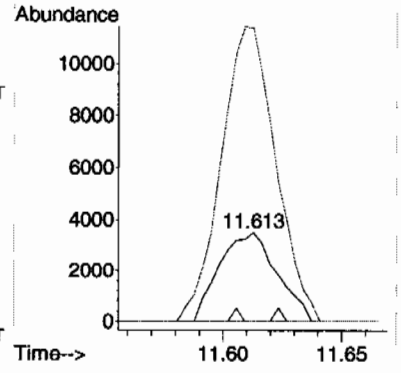

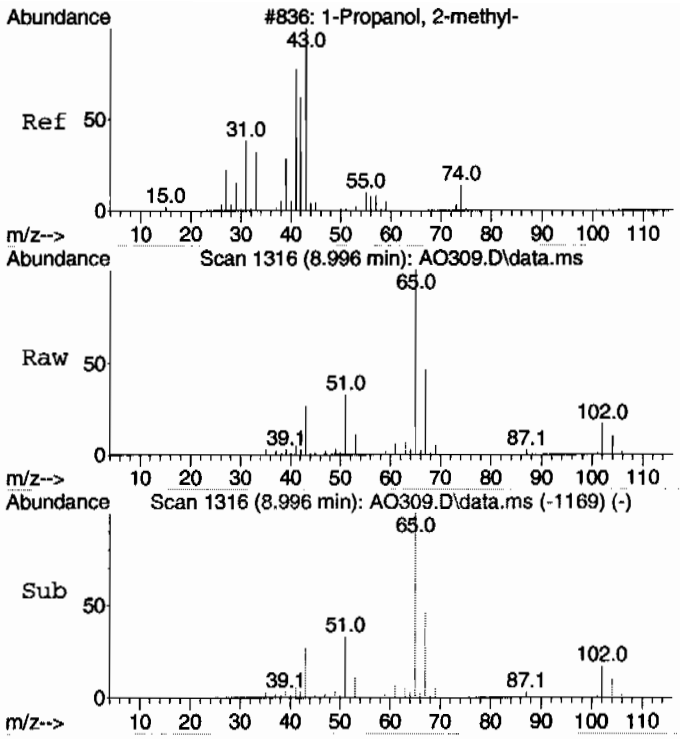

#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 41.04 ug/L
RT: 8.996 min Scan# 1316
Delta R.T. 0.219 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 41 Resp: 8758

Ion	Ratio	Lower	Upper
41	100		
43	594.2	115.9	175.9#

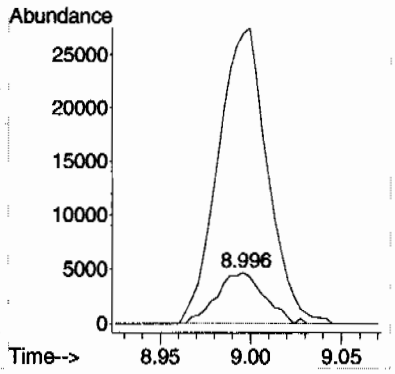

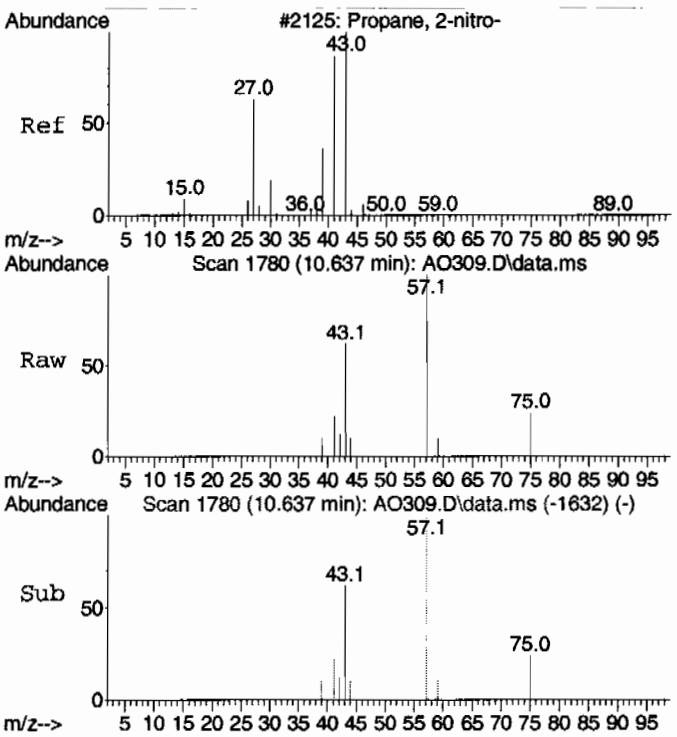

#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 12.26 ug/L
RT: 10.637 min Scan# 1780
Delta R.T. 0.223 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 43 Resp: 6833

Ion	Ratio	Lower	Upper
43	100		
41	39.2	52.7	112.7#

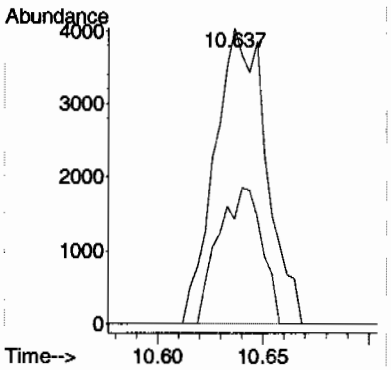

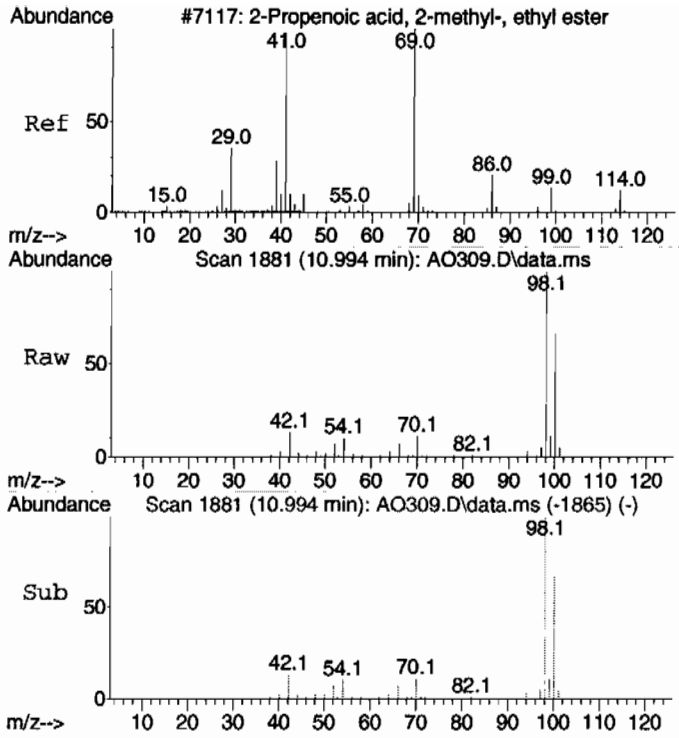

#104 BEFORE analyst DELETION
Ethyl methacrylate
Concen: 1.75 ug/L
RT: 10.994 min Scan# 1881
Delta R.T. -0.244 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 69 Resp: 4276

Ion	Ratio	Lower	Upper
69	100		
41	88.1	36.3	96.3
99	2918.1	0.0	50.5#

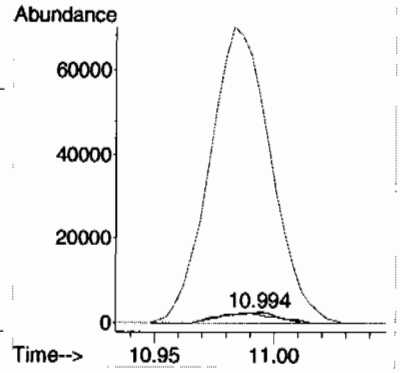

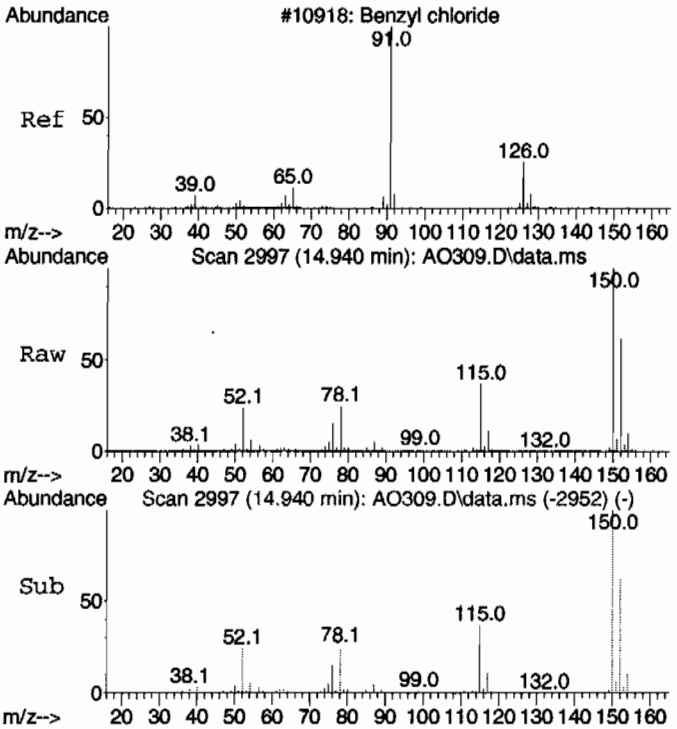

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.46 ug/L
RT: 14.940 min Scan# 2997
Delta R.T. -0.141 min
Lab File: AO309.D
Acq: 9 Dec 2009 8:45 pm

Tgt Ion: 91 Resp: 1233

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.0
65	395.4	0.0	41.2#

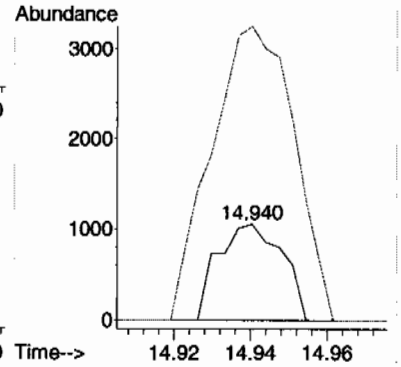

Standards

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOAA
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Last Update : Mon Nov 09 16:21:09 2009
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\110609\AJ503.D

Injection Date	Mix	Calibration File
6 Nov 2009 12:30 pm	A	C:\msdchem\1\DATA\110609\AJ503.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\110609\AJ513.D

Injection Date	Mix	Calibration File
6 Nov 2009 1:21 pm	A	C:\msdchem\1\DATA\110609\AJ505.D
6 Nov 2009 4:49 pm	B	C:\msdchem\1\DATA\110609\AJ513.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\110609\AJ514.D

Injection Date	Mix	Calibration File
6 Nov 2009 1:47 pm	A	C:\msdchem\1\DATA\110609\AJ506.D
6 Nov 2009 5:15 pm	B	C:\msdchem\1\DATA\110609\AJ514.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\110609\AJ515.D

Injection Date	Mix	Calibration File
6 Nov 2009 2:13 pm	A	C:\msdchem\1\DATA\110609\AJ507.D
6 Nov 2009 5:41 pm	B	C:\msdchem\1\DATA\110609\AJ515.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\110609\AJ516.D

Injection Date	Mix	Calibration File
6 Nov 2009 2:39 pm	A	C:\msdchem\1\DATA\110609\AJ508.D
6 Nov 2009 6:07 pm	B	C:\msdchem\1\DATA\110609\AJ516.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\110609\AJ517.D

Injection Date	Mix	Calibration File
6 Nov 2009 3:05 pm	A	C:\msdchem\1\DATA\110609\AJ509.D
6 Nov 2009 6:34 pm	B	C:\msdchem\1\DATA\110609\AJ517.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\110609\AJ518.D

Injection Date	Mix	Calibration File
6 Nov 2009 3:31 pm	A	C:\msdchem\1\DATA\110609\AJ510.D
6 Nov 2009 6:59 pm	B	C:\msdchem\1\DATA\110609\AJ518.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\110609\AJ519.D

Injection Date	Mix	Calibration File
6 Nov 2009 3:57 pm	A	C:\msdchem\1\DATA\110609\AJ511.D
6 Nov 2009 7:25 pm	B	C:\msdchem\1\DATA\110609\AJ519.D

Response Factor Report VOAA
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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
2)MA Dichlorodifluoromethane	0.1896028	0.2284171 0.2248416	0.2500854	0.2438131	0.2478375	0.2371723	0.2317	AVRG		8.9938
3)MPA Chloromethane	0.2008350	0.2472204 0.2138999	0.2481122	0.2444351	0.2335430	0.2329192	0.2316	AVRG		7.7785
4)MCA Vinyl chloride	0.2097691	0.2425630 0.2209500	0.2460064	0.2383315	0.2295359	0.2304360	0.2311	AVRG		5.4932
5)MA Bromomethane	0.2097707	0.2151680 0.2232352	0.2256556	0.2288854	0.2224480	0.2211131	0.2209	AVRG		2.9280
6)MA Chloroethane	0.1272143	0.1663661 0.1228851	0.1653688	0.1619724	0.1472962	0.1454664	0.1481	AVRG		12.0294
7)MA Trichlorofluoromethane	0.4306075	0.4454943 0.4474854	0.4539765	0.4627758	0.4431113	0.4490273	0.4475	AVRG		2.2089
8)MA Ethyl ether	0.2196477	0.2046092 0.2259525	0.2098697	0.2209100	0.2151878	0.2229120	0.2170	AVRG		3.4945
9)MA Acetone	0.2144869	0.2218273 0.1854993	0.1971350	0.1987115	0.2026961	0.1980181	0.2026	AVRG		5.9408
10)MCA 1,1-Dichloroethylene	0.4197439	0.4095655 0.3967345	0.4013913	0.3885094	0.4088718	0.4172649	0.4060	AVRG		2.7533
11)MA Iodomethane	0.4452170	0.4222708 0.4219107	0.4119908	0.4005178	0.4231290	0.4347497	0.4228	AVRG		3.4270
12)MA Acetonitrile	0.0345252	0.0376402 0.0311829	0.0368141	0.0360411	0.0365890	0.0362524	0.0356	AVRG		6.0607
13)MA Methyl acetate	0.2049924	0.2383395 0.1995419	0.2200333	0.2241490	0.2316781	0.2241947	0.2204	AVRG		6.2811
14)MA Carbon disulfide	0.7542450	0.7485289 0.6557753	0.7260767	0.6760011	0.7459274	0.7518621	0.7226	AVRG		5.5707
15)MA Methylene chloride 0.0082 | 0.2421 | 0.00	474170	941033	27019	52735	99166	194439		LINR		0.9998
16)MA tert-Butyl methyl ether	0.6746083	0.6311845 0.6752490	0.6600470	0.6204350	0.6886643	0.6639808	0.6592	AVRG		3.7542

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
17)MA trans-1,2-Dichloroethyle	0.4079894	0.4119376 0.3926089	0.4068398	0.3994959	0.4110829	0.4124931	0.4061	AVRG		1.8250
18)MA Vinyl acetate	0.5056782	0.3279591 0.4847819	0.3727205	0.4192542	0.4271344	0.4755991	0.4304	AVRG		14.8825
19)MPA 1,1-Dichloroethane	0.4780993	0.4866881 0.4618329	0.4951641	0.4881494	0.4873671	0.4923985	0.4842	AVRG		2.3192
20)MA 2-Butanone	0.2604852	0.2112048 0.2357205	0.2062060	0.2191848	0.2246664	0.2324686	0.2271	AVRG		7.9888
21)MA cis-1,2-Dichloroethylene	0.4644228	0.4408369 0.4544201	0.4469377	0.4585091	0.4582812	0.4665088	0.4557	AVRG		2.0168
22)MA 2,2-Dichloropropane	0.3936300	0.3316040 0.3940719	0.3480698	0.3541490	0.3654943	0.3816343	0.3670	AVRG		6.5203
23)MA Bromochloromethane	0.1361408	0.1310448 0.1363109	0.1328988	0.1301290	0.1319682	0.1350743	0.1334	AVRG		1.8702
24)MCA Chloroform	0.4741747	0.4822621 0.4729119	0.4793193	0.4667112	0.4642791	0.4701783	0.4728	AVRG		1.3665
25)MA 1,1,1-Trichloroethane	0.4546446	0.4102598 0.4559180	0.4241424	0.4197076	0.4319514	0.4437147	0.4343	AVRG		4.0640
26)MA Cyclohexane	0.5260666	0.4456679 0.5048610	0.4621051	0.4620318	0.4969203	0.5130377	0.4872	AVRG		6.2548
27)MA 1,1-Dichloropropene	0.3499463	0.3103707 0.3480036	0.3217403	0.3258515	0.3383907	0.3485462	0.3347	AVRG		4.6494
28)MA Carbon tetrachloride	0.4309229	0.3677932 0.4360131	0.3806281	0.3909857	0.4019675	0.4184844	0.4038	AVRG		6.3858
29)SA 1,2-Dichloroethane-d4	0.3439127	0.3498739 0.3417155	0.3486105	0.3547216	0.3465466	0.3462002	0.3474	AVRG		1.2204
30)MA 1,2-Dichloroethane	0.4195080	0.4311460 0.4138022	0.4246431	0.4164698	0.4227540	0.4233321	0.4217	AVRG		1.3561
31)MA Benzene	0.9553418 0.9384836	0.9704545 0.9260161	0.9502450	0.9286267	0.9344827	0.9435503	0.9434	AVRG		1.5751

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
32)MA Cyclohexene		0.4065859	0.4127006	0.4352863	0.4653493	0.4804490				
	0.4925146	0.4787128					0.4531	AVRG		7.6565
33)MA n-Butyl alcohol	7258	17262	35681	105255	253911	546710				
-0.0160 | 0.0083 | 0.00	1527534	3183067						LINR	#	0.9997
34)MA Trichloroethylene		0.2674412	0.2657093	0.2580665	0.2674662	0.2711792				
	0.2720791	0.2723487					0.2678	AVRG		1.8659
35)MCA 1,2-Dichloropropane		0.2622342	0.2615567	0.2617170	0.2605845	0.2680255				
	0.2650654	0.2615015					0.2630	AVRG		1.0050
36)MA Methylcyclohexane		0.3478906	0.3779922	0.3927529	0.4143953	0.4319777				
	0.4362118	0.4244932					0.4037	AVRG		8.0264
37)MA Dibromomethane		0.1552866	0.1523367	0.1575894	0.1611304	0.1652006				
	0.1674119	0.1672440					0.1609	AVRG		3.7380
38)MA Bromodichloromethane		0.2696398	0.2818486	0.3051050	0.3110923	0.3347219				
	0.3503272	0.3608085					0.3162	AVRG		10.7974
39)MA 2-Chloroethylvinyl ether		17172	36279	113321	248728	544599				
-0.0063 | 0.1541 | 0.00	1422336	2951100						LINR		0.9999
40)MA cis-1,3-Dichloropropylen		0.2796200	0.3078246	0.3252934	0.3463089	0.3726977				
	0.3950088	0.4046251					0.3473	AVRG		13.3140
42)MA 4-Methyl-2-pentanone		14505	30014	90525	199868	431638				
0.0005 | 0.1556 | 0.00	1288641	2354776						LINR		0.9949
43)SA Toluene-d8		1.2645282	1.2727406	1.2842134	1.2680488	1.2646157				
	1.2650373	1.2667337					1.2694	AVRG		0.5618
44)MCA Toluene		1.3821178	1.3402837	1.3073106	1.3036920	1.3156077				
	1.3110852	1.2975340					1.3225	AVRG		2.2380
45)MA trans-1,3-Dichloropropyl		0.3377297	0.3470094	0.3867934	0.4080679	0.4429610				
	0.4685587	0.4768357					0.4097	AVRG		13.6316
46)MA 1,1,2-Trichloroethane		0.2048898	0.2138892	0.2183557	0.2168638	0.2196460				
	0.2179541	0.2155925					0.2153	AVRG		2.3079
47)MA 2-Hexanone		39588	79795	244539	539862	1157124				
-0.0630 | 0.4787 | 0.00	3521381							LINR		0.9969

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Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
48)MA 1,3-Dichloropropane	0.4603949	0.4721781 0.4413362	0.4577663	0.4707684	0.4662965	0.4748414	0.4634	AVRG		2.4892
49)MA Tetrachloroethylene	0.2736894	0.2781369 0.2766317	0.2840440	0.2775343	0.2736438	0.2793627	0.2776	AVRG		1.2889
50)MA Dibromochloromethane -0.0068 | 0.3473 | 0.00	510378	6281	13330	36721	81056	182234		LINR		0.9990
51)MA 1,2-Dibromoethane	0.2831527	0.2397551 0.2848285	0.2445961	0.2569507	0.2665979	0.2773337	0.2647	AVRG		6.8882
52)MPA Chlorobenzene	0.8922478	0.9394930 0.8919372	0.9308388	0.8923358	0.8913391	0.9053332	0.9062	AVRG		2.2648
53)MA 1,1,1,2-Tetrachloroethan	0.3576431	0.2976645 0.3619233	0.2905336	0.3152351	0.3205883	0.3442106	0.3268	AVRG		8.6763
54)MCA Ethylbenzene	1.5605591	1.4288418 1.5541935	1.4420348	1.4766500	1.4942562	1.5578978	1.5021	AVRG		3.7393
55)MA m,p-Xylenes	0.5783126	0.5142634 0.5718555	0.5210533	0.5446216	0.5602396	0.5846932	0.5536	AVRG		5.0246
56)MA o-Xylene	0.5766754	0.4595338 0.5661791	0.5037038	0.5220979	0.5460473	0.5782606	0.5361	AVRG		8.1794
57)MA Styrene -0.0195 | 0.9286 | 0.00	1357212	15415 2855712	31773	94019	214941	493104		LINR		0.9998
59)MPA Bromoform -0.0183 | 0.4369 | 0.00	340420	3666 761102	7641	21822	48970	115524		LINR		0.9981
60)MA Isopropylbenzene	2.7082295	2.0149538 2.7596385	2.1338606	2.3129974	2.5067174	2.6562154	2.4418	AVRG		12.0077
61)SA Bromofluorobenzene	0.8954447	0.9040025 0.8980596	0.9023951	0.9078522	0.9019390	0.8953097	0.9007	AVRG		0.5170
62)MPA 1,1,2,2-Tetrachloroethan	0.6283386	0.5859281 0.6257384	0.5798015	0.6071476	0.6196160	0.6308766	0.6111	AVRG		3.4092
63)MA 1,2,3-Trichloropropane	0.1822774	0.1720950 0.1832208	0.1768623	0.1775474	0.1835288	0.1831219	0.1798	AVRG		2.4438

Response Factor Report VOAA
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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
64)MA Bromobenzene	0.6770506	0.6853607 0.6932896	0.6562152	0.6544721	0.6619801	0.6777948	0.6723	AVRG		2.2286
65)MA n-Propylbenzene	3.2726149	2.8357764 3.3048477	2.8532601	3.0002544	3.1948658	3.2743373	3.1051	AVRG		6.5949
66)MA 1,3,5-Trimethylbenzene	2.2833846	1.7291352 2.3334520	1.8729769	2.0262873	2.1663128	2.2627090	2.0963	AVRG		10.9026
67)MA 2-Chlorotoluene	0.6454465	0.5861964 0.6554578	0.5967673	0.6113184	0.6328022	0.6518776	0.6257	AVRG		4.4328
68)MA 4-Chlorotoluene	1.9386503	1.8005899 1.9663031	1.8529478	1.8660815	1.9207618	1.9717906	1.9024	AVRG		3.3712
69)MA tert-Butylbenzene	0.5017388	0.3643180 0.5179058	0.3815972	0.4288125	0.4575243	0.4841678	0.4480	AVRG		13.1907
70)MA 1,2,4-Trimethylbenzene	2.3181385	1.6861283 2.3722848	1.8629455	2.0676849	2.2329897	2.3261717	2.1238	AVRG		12.3855
71)MA sec-Butylbenzene	2.9989239	2.2827242 3.0569588	2.4225495	2.6090044	2.8132576	2.9648258	2.7355	AVRG		11.0713
72)MA 4-Isopropyltoluene -0.0416 | 2.5666 | 0.00	2113937	25269 4482759	55393	161714	361109	808325		LINR		0.9999
73)MA 1,3-Dichlorobenzene	1.2314206	1.3271106 1.2669200	1.2577626	1.2182594	1.2461758	1.2652782	1.2590	AVRG		2.7758
74)MA 1,4-Dichlorobenzene	1.2579272	1.3915204 1.2943477	1.3710702	1.2756685	1.2920596	1.3063913	1.3127	AVRG		3.7826
75)MA n-Butylbenzene	2.4002051	1.8802970 2.4592012	1.9977298	2.0660838	2.2924486	2.4249912	2.2173	AVRG		10.5030
76)MA 1,2-Dichlorobenzene	1.2182085	1.2095627 1.2475199	1.2212052	1.1813037	1.2021922	1.2351176	1.2164	AVRG		1.7839
77)MA 1,2-Dibromo-3-chloroprop -0.0058 | 0.1432 | 0.00	113319	866 248815	2394	7309	16195	37969		LINR		0.9986
78)MA 1,2,4-Trichlorobenzene	0.9784360	0.9642016 1.0228148	0.9181761	0.8765290	0.9380416	1.0112874	0.9585	AVRG		5.4072

Response Factor Report VOAA
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Last Update : Mon Nov 09 16:21:09 2009
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
79)MA Hexachlorobutadiene	0.6053941	0.5552663 0.6258383	0.5644851	0.5386982	0.5681912	0.6001041	0.5797	AVRG		5.3851
80)MA Naphthalene	2.4363324	1.8339354 2.4572775	1.8140677	1.9362740	2.1274429	2.3597325	2.1379	AVRG		13.2067
81)MA 1,2,3-Trichlorobenzene	0.9384330	0.9177057 0.9592765	0.8858265	0.8506781	0.8942110	0.9640070	0.9157	AVRG		4.5323
83)B Chlorotrifluoroethylene 0.0000 | 0.0000 | 0.00								LINR	#	0.0000 #
84)B 2-Chloro-1,1,1-trifluoro	0.2457600	0.2450594 0.2479301	0.2452571	0.2520563	0.2501476	0.2556986	0.2488	AVRG		1.6119
85)B Acrolein	0.0506026	0.0374250 0.0487411	0.0387500	0.0408733	0.0426890	0.0431272	0.0432	AVRG		11.3604
86)B Trichlorotrifluoroethane	0.1072334	0.1247553 0.1037097	0.1046547	0.1058492	0.1065934	0.1047546	0.1082	AVRG		6.8291
87)B Isopropyl Alcohol	0.0171552	0.0136213 0.0191013	0.0150693	0.0162705	0.0170978	0.0176457	0.0166	AVRG		10.8046
88)B Allyl chloride	0.4136321	0.4030547 0.3857870	0.3727111	0.3952250	0.4068964	0.4083963	0.3980	AVRG		3.6321
89)B tert-Butyl Alcohol	0.0283665	0.0233175 0.0305640	0.0252535	0.0272118	0.0281217	0.0288034	0.0274	AVRG		8.7895
90)B Acrylonitrile	0.0971351	0.0903971 0.0929072	0.0871323	0.0931199	0.0943884	0.0931832	0.0926	AVRG		3.3923
91)B Isopropyl ether	0.9320427	0.8372836 0.9920189	0.8623064	0.8945706	0.9216733	0.9727444	0.9161	AVRG		6.1147
92)B 2-Chloro-1,3-butadiene	0.4210329	0.3354618 0.4244844	0.3152320	0.3459664	0.3712694	0.3907437	0.3720	AVRG		11.3756
93)B Ethyl tert-butyl ether	0.8205014	0.7345233 0.8861627	0.7258408	0.7798175	0.7995135	0.8453262	0.7988	AVRG		7.2426
94)B Ethyl acetate	0.2429476	0.2452883 0.2299409	0.2205612	0.2320390	0.2351269	0.2322970	0.2340	AVRG		3.5433

Response Factor Report VOAA
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Last Update : Mon Nov 09 16:21:09 2009
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
95)B Propionitrile	0.0380650	0.0341718 0.0362821	0.0341737	0.0364927	0.0369634	0.0370559	0.0362	AVRG		4.0850
96)B Methacrylonitrile	0.1517615	0.1304737 0.1431611	0.1250619	0.1412447	0.1468973	0.1468503	0.1408	AVRG		6.8258
97)B Tetrahydrofuran	0.0777719	0.0748340 0.0732409	0.0691332	0.0745251	0.0758922	0.0748246	0.0743	AVRG		3.6029
98)B Isobutyl alcohol	0.0094054	0.0082059 0.0090675	0.0079652	0.0083518	0.0088831	0.0090780	0.0087	AVRG	#	6.1373
99)B Methyl tert-amyl ether	0.6758874	0.5560770 0.7191817	0.5872043	0.6074785	0.6283349	0.6683778	0.6346	AVRG		8.9103
100)B Methyl methacrylate	0.1462439	0.1060454 0.1394387	0.1012264	0.1187256	0.1282183	0.1357225	0.1251	AVRG		13.6485
101)B 1,4-Dioxane	0.0019619	0.0013811 0.0020903	0.0017104	0.0018895	0.0019286	0.0019776	0.0018	AVRG	#	12.7565
102)B 2-Nitropropane -0.0130 | 0.0758 | 0.00	701023	9445 1432934	16139	44744	104962	231118		LINR		0.9990
104)B Ethyl methacrylate -0.0078 | 0.3446 | 0.00	2722498	34497 5210972	72032	214773	476144	1009154		LINR		0.9990
106)B 1-Chlorohexane	0.5998199	0.5183224 0.6740098	0.5329908	0.5922762	0.6130088	0.6499374	0.5972	AVRG		9.4986
107)B cis-1,4-Dichloro-2-buten	0.2419943	0.1664947 0.2354031	0.1746502	0.1989008	0.2156325	0.2259501	0.2084	AVRG		14.1287
108)B Cyclohexanone -0.0228 | 0.0388 | 0.00		6882	16895	52773	125006	306853		LINR		0.9932
109)B trans-1,4-Dichloro-2-but	0.2310784	0.1812712 0.2225558	0.1871125	0.2084657	0.2205129	0.2240504	0.2107	AVRG		9.2057
110)B Pentachloroethane	0.2868706	0.2013388 0.2479758	0.2027150	0.2117323	0.2052401	0.2441323	0.2286	AVRG		14.1265
111)B Benzyl chloride -0.1013 | 1.1564 | 0.00	4927427	60106 9801961	127618	364518	811083	1738766		LINR		0.9997

Response Factor Report VOAA
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Last Update : Mon Nov 09 16:21:09 2009
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
112)B bis(2-Chloroisopropyl)et		0.2689057	0.2722758	0.2942971	0.3251118	0.3280596				
	0.3546269	0.3396405					0.3118	AVRG		10.7630

(#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-670-1

Instrument ID: VOAA.I **Injection Dat** 06-NOV-09 20:17

Data File: 110609\AJ521.D **Init. Cal. Date(s)** 06-NOV-09 12:30 - 06-NOV-09 15:5

Lab Sample ID WAVM091106-17 **Quant Type** ISTD **Method:** VOAA-8260-110609.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.3474	0.33		.01		-5.00864	30		Averaged	
S	Toluene-d8	1.2694	1.259		.01		-0.81928	30		Averaged	
S	Bromofluorobenzene	0.9007	0.884		.01		-1.85411	30		Averaged	
	Dichlorodifluoromethane	0.2317	0.193		.01		-16.70263	30		Averaged	
	Chloromethane	0.2316	0.188		.1		-18.82556	30		Averaged	spcc
	Vinyl chloride	0.2311	0.202		.01		-12.59195	20		Averaged	ccc
	Bromomethane	0.2209	0.193		.01		-12.63015	30		Averaged	
	Chloroethane	0.1481	0.116		.01		-21.67454	30		Averaged	
	Trichlorofluoromethane	0.4475	0.399		.01		-10.83799	30		Averaged	
	Ethyl ether	0.217	0.197		.01		-9.21659	30		Averaged	
	Acetone	0.2026	0.158		.01		-22.01382	40		Averaged	
	1,1-Dichloroethylene	0.406	0.357		.01		-12.06897	20		Averaged	ccc
	Iodomethane	0.4228	0.395		.01		-6.57521	30		Averaged	
	Acetonitrile	0.0356	0.03		.01		-15.73034	30		Averaged	
	Carbon disulfide	0.7226	0.692		.01		-4.23471	30		Averaged	
	Methyl acetate	0.2204	0.177		.01		-19.69147	40		Averaged	
	Methylene chloride	50	46.55	50			-6.9	30		Linear	
	tert-Butyl methyl ether	0.6592	0.62		.01		-5.9466	30		Averaged	
	trans-1,2-Dichloroethylene	0.4061	0.363		.01		-10.61315	30		Averaged	
	Vinyl acetate	0.4304	0.442		.01		2.69517	40		Averaged	
	1,1-Dichloroethane	0.4842	0.433		.1		-10.57414	30		Averaged	spcc
	2-Butanone	0.2271	0.194		.01		-14.57508	40		Averaged	
	cis-1,2-Dichloroethylene	0.4557	0.421		.01		-7.61466	30		Averaged	
	2,2-Dichloropropane	0.367	0.348		.01		-5.17711	30		Averaged	
	Bromochloromethane	0.1334	0.127		.01		-4.7976	30		Averaged	
	Chloroform	0.4728	0.436		.01		-7.78342	20		Averaged	ccc
	1,1,1-Trichloroethane	0.4343	0.408		.01		-6.05572	30		Averaged	
	Cyclohexane	0.4872	0.472		.01		-3.11987	30		Averaged	
	1,1-Dichloropropene	0.3347	0.319		.01		-4.69077	30		Averaged	
	Carbon tetrachloride	0.4038	0.388		.01		-3.91283	30		Averaged	
	1,2-Dichloroethane	0.4217	0.378		.01		-10.36282	30		Averaged	
	Benzene	0.9434	0.863		.01		-8.52237	30		Averaged	
	Cyclohexene	0.4531	0.43		.01		-5.09821	30		Averaged	
	n-Butyl alcohol	5000	4520.84	5000			-9.5832	40		Linear	
	Trichloroethylene	0.2678	0.25		.01		-6.64675	30		Averaged	
	1,2-Dichloropropane	0.263	0.244		.01		-7.22433	20		Averaged	ccc
	Methylcyclohexane	0.4037	0.393		.01		-2.65048	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOAA.I **Injection Dat** 06-NOV-09 20:17

Data File: 110609\AJ521.D **Init. Cal. Date(s)** 06-NOV-09 12:30 06-NOV-09 15:5

Lab Sample ID WAVM091106-17 **Quant Type** ISTD **Method:** VOAA-8260-110609.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1609	0.151		.01		-6.15289	30		Averaged	
Bromodichloromethane	0.3162	0.323		.01		2.15054	30		Averaged	
2-Chloroethylvinyl ether	250	229.64	250			-8.144	30		Linear	
cis-1,3-Dichloropropylene	0.3473	0.356		.01		2.50504	30		Averaged	
4-Methyl-2-pentanone	250	212.72	250			-14.912	40		Linear	
Toluene	1.3225	1.208		.01		-8.65784	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4097	0.424		.01		3.49036	30		Averaged	
1,1,2-Trichloroethane	0.2153	0.202		.01		-6.17743	30		Averaged	
1,3-Dichloropropane	0.4634	0.423		.01		-8.71817	30		Averaged	
2-Hexanone	250	183.16	250			-26.736	40		Linear	
Tetrachloroethylene	0.2776	0.256		.01		-7.78098	30		Averaged	
Dibromochloromethane	50	46.06	50			-7.88	30		Linear	
1,2-Dibromoethane	0.2647	0.258		.01		-2.53117	30		Averaged	
Chlorobenzene	0.9062	0.843		.3		-6.97418	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3268	0.33		.01		0.97919	30		Averaged	
Ethylbenzene	1.5021	1.423		.01		-5.26596	20		Averaged	ccc
m,p-Xylenes	0.5536	0.532		.01		-3.90173	30		Averaged	
o-Xylene	0.5361	0.533		.01		-0.57825	30		Averaged	
Styrene	50	46.55	50			-6.9	30		Linear	
Bromoform	50	43.91	50			-12.18	30		Linear	spcc
Isopropylbenzene	2.4418	2.479		.01		1.52347	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6111	0.566		.3		-7.38013	30		Averaged	spcc
1,2,3-Trichloropropane	0.1798	0.167		.01		-7.11902	30		Averaged	
Bromobenzene	0.6723	0.643		.01		-4.35817	30		Averaged	
n-Propylbenzene	3.1051	2.985		.01		-3.86783	30		Averaged	
2-Chlorotoluene	0.6257	0.611		.01		-2.34937	30		Averaged	
1,3,5-Trimethylbenzene	2.0963	2.091		.01		-0.25283	30		Averaged	
4-Chlorotoluene	1.9024	1.811		.01		-4.80446	30		Averaged	
tert-Butylbenzene	0.448	0.463		.01		3.34821	30		Averaged	
1,2,4-Trimethylbenzene	2.1238	2.142		.01		0.85695	30		Averaged	
sec-Butylbenzene	2.7355	2.735		.01		-0.01828	30		Averaged	
4-Isopropyltoluene	50	45.22	50			-9.56	30		Linear	
1,3-Dichlorobenzene	1.259	1.174		.01		-6.75139	30		Averaged	
1,4-Dichlorobenzene	1.3127	1.205		.01		-8.20446	30		Averaged	
n-Butylbenzene	2.2173	2.178		.01		-1.77243	30		Averaged	
1,2-Dichlorobenzene	1.2164	1.16		.01		-4.63663	30		Averaged	
1,2-Dibromo-3-chloropropane	50	43.51	50			-12.98	30		Linear	

Continuing Calibration Summary

Instrument ID: VOAA.I **Injection Dat** 06-NOV-09 20:17

Data File: 110609\AJ521.D **Init. Cal. Date(s)** 06-NOV-09 12:30 06-NOV-09 15:5

Lab Sample ID WAVM091106-17 **Quant Type** ISTD **Method:** VOAA-8260-110609.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9585	0.936		.01		-2.34742	30		Averaged
Hexachlorobutadiene	0.5797	0.562		.01		-3.0533	30		Averaged
Naphthalene	2.1379	2.226		.01		4.12087	30		Averaged
1,2,3-Trichlorobenzene	0.9157	0.917		.01		0.14197	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\110609\
Data File : AJ521.D
Acq On : 6 Nov 2009 8:17 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091106-17|ICV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1011-01D/091106-01
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 12 18:17:05 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.339	96	1940045	50.00 ug/L	0.00
41) Chlorobenzene-d5	12.508	117	1551877	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.941	152	886379	50.00 ug/L	0.00
82) B Fluorobenzene	9.339	96	1940045	50.00 ug/L	0.00
103) B Chlorobenzene-d5	12.508	117	1551877	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.941	152	886379	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	8.978	65	641024	47.56 ug/L	0.00
43) Toluene-d8	10.983	98	1953793	49.59 ug/L	0.00
61) Bromofluorobenzene	13.713	95	783218	49.05 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.731	85	374610	41.67 ug/L	100
3) Chloromethane	4.054	50	365245	40.65 ug/L	100
4) Vinyl chloride	4.275	62	391875	43.71 ug/L	100
5) Bromomethane	4.839	94	375121	43.77 ug/L	95
6) Chloroethane	4.990	64	224337	39.04 ug/L	100
7) Trichlorofluoromethane	5.396	101	774395	44.60 ug/L	99
8) Ethyl ether	5.728	59	382111	45.38 ug/L	90
9) Acetone	6.078	43	1532671	194.95 ug/L	91
10) 1,1-Dichloroethylene	6.078	61	691848	43.92 ug/L	93
11) Iodomethane	6.301	142	3831352	233.53 ug/L	93
12) Acetonitrile	6.414	41	1433908	1038.72 ug/L	97
13) Methyl acetate	6.478	43	1715723	200.61 ug/L	94
14) Carbon disulfide	6.428	76	6714095	239.46 ug/L	100
15) Methylene chloride	6.648	84	453049	46.55 ug/L	85
16) tert-Butyl methyl ether	6.970	73	1202604	47.02 ug/L	98
17) trans-1,2-Dichloroethy...	6.994	61	703767	44.67 ug/L	92
18) Vinyl acetate	7.450	43	4284161	256.51 ug/L	94
19) 1,1-Dichloroethane	7.472	63	839321	44.67 ug/L	100
20) 2-Butanone	8.059	43	1883893	213.76 ug/L	90
21) cis-1,2-Dichloroethylene	8.105	61	816501	46.18 ug/L	91
22) 2,2-Dichloropropane	8.137	77	675773	47.46 ug/L	87
23) Bromochloromethane	8.373	128	246294	47.60 ug/L	94
24) Chloroform	8.419	83	845771	46.10 ug/L	99
25) 1,1,1-Trichloroethane	8.692	97	791353	46.96 ug/L	98
26) Cyclohexane	8.787	56	915447	48.42 ug/L	94
27) 1,1-Dichloropropene	8.851	75	618358	47.62 ug/L	90
28) Carbon tetrachloride	8.886	117	752009	47.99 ug/L	100
30) 1,2-Dichloroethane	9.060	62	733639	44.84 ug/L	100
31) Benzene	9.084	78	1674194	45.74 ug/L	95
32) Cyclohexene	9.205	67	835010	47.50 ug/L	92
33) n-Butyl alcohol	9.459	56	1433220	4520.84 ug/L	89
34) Trichloroethylene	9.728	95	485826	46.76 ug/L	96
35) 1,2-Dichloropropane	9.965	63	473513	46.41 ug/L	99
36) Methylcyclohexane	9.979	83	763023	48.72 ug/L	92
37) Dibromomethane	10.092	93	292541	46.86 ug/L	92
38) Bromodichloromethane	10.212	83	626779	51.08 ug/L	99
39) 2-Chloroethylvinyl ether	10.453	63	1361260	229.64 ug/L	98
40) cis-1,3-Dichloropropylene	10.669	75	691374	51.30 ug/L	91
42) 4-Methyl-2-pentanone	10.775	58	1027875	212.72 ug/L #	83
44) Toluene	11.058	91	1874483	45.67 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\110609\
Data File : AJ521.D
Acq On : 6 Nov 2009 8:17 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091106-17|ICV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1011-01D/091106-01
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 12 18:17:05 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45)	trans-1,3-Dichloroprop...	11.210	75	658588	51.79	ug/L	93
46)	1,1,2-Trichloroethane	11.425	83	313531	46.92	ug/L	99
47)	2-Hexanone	11.623	43	2623808	183.16	ug/L	91
48)	1,3-Dichloropropane	11.616	76	656793	45.67	ug/L	92
49)	Tetrachloroethylene	11.652	164	396892	46.07	ug/L	93
50)	Dibromochloromethane	11.882	129	486003	46.06	ug/L	100
51)	1,2-Dibromoethane	12.044	107	401002	48.80	ug/L	100
52)	Chlorobenzene	12.539	112	1307722	46.49	ug/L	96
53)	1,1,1,2-Tetrachloroethane	12.596	131	512202	50.49	ug/L	98
54)	Ethylbenzene	12.614	91	2209095	47.38	ug/L	98
55)	m,p-Xylenes	12.727	106	1652628	96.19	ug/L	93
56)	o-Xylene	13.158	106	827855	49.76	ug/L	92
57)	Styrene	13.162	104	1311446	46.55	ug/L	92
59)	Bromoform	13.402	173	323876	43.91	ug/L	100
60)	Isopropylbenzene	13.526	105	2197694	50.77	ug/L	98
62)	1,1,2,2-Tetrachloroethane	13.791	83	501920	46.33	ug/L	99
63)	1,2,3-Trichloropropane	13.876	110	147927	46.41	ug/L	95
64)	Bromobenzene	13.919	156	569531	47.79	ug/L	93
65)	n-Propylbenzene	13.957	91	2645735	48.06	ug/L	97
66)	1,3,5-Trimethylbenzene	14.117	105	1853363	49.87	ug/L	96
67)	2-Chlorotoluene	14.095	126	541885	48.85	ug/L	89
68)	4-Chlorotoluene	14.198	91	1605030	47.59	ug/L	94
69)	tert-Butylbenzene	14.488	134	410592	51.70	ug/L	88
70)	1,2,4-Trimethylbenzene	14.527	105	1898690	50.43	ug/L	96
71)	sec-Butylbenzene	14.714	105	2423827	49.98	ug/L	98
72)	4-Isopropyltoluene	14.842	119	2020635	45.22	ug/L	97
73)	1,3-Dichlorobenzene	14.884	146	1040387	46.61	ug/L	98
74)	1,4-Dichlorobenzene	14.969	146	1068492	45.91	ug/L	98
75)	n-Butylbenzene	15.276	91	1930970	49.13	ug/L	98
76)	1,2-Dichlorobenzene	15.379	146	1028085	47.67	ug/L	98
77)	1,2-Dibromo-3-chloropr...	16.192	157	105306	43.51	ug/L	93
78)	1,2,4-Trichlorobenzene	17.183	180	829792	48.83	ug/L	100
79)	Hexachlorobutadiene	17.360	225	498325	48.49	ug/L	100
80)	Naphthalene	17.522	128	1972712	52.05	ug/L	100
81)	1,2,3-Trichlorobenzene	17.847	180	812577	50.05	ug/L	99
83)	Chlorotrifluoroethylene	3.651		0m	N.D.	d	
84)	2-Chloro-1,1,1-trifluo...	4.426		0m	N.D.	d	
85)	Acrolein	5.859		0m	N.D.	d	
86)	Trichlorotrifluoroethane	6.078		0m	N.D.	d	
87)	Isopropyl Alcohol	6.195		0m	N.D.	d	
88)	Allyl chloride	6.414		0m	N.D.	d	
89)	tert-Butyl Alcohol	6.683		0m	N.D.	d	
90)	Acrylonitrile	6.895		0m	N.D.	d	
91)	Isopropyl ether	7.450		0m	N.D.	d	
92)	2-Chloro-1,3-butadiene	7.606		0m	N.D.	d	
93)	Ethyl tert-butyl ether	7.889		0m	N.D.	d	
94)	Ethyl acetate	8.059		0m	N.D.	d	
95)	Propionitrile	8.059		0m	N.D.	d	
96)	Methacrylonitrile	8.303		0m	N.D.	d	
97)	Tetrahydrofuran	8.427		0m	N.D.	d	
98)	Isobutyl alcohol	8.787		0m	N.D.	d	
99)	Methyl tert-amyl ether	9.084		0m	N.D.	d	
100)	Methyl methacrylate	9.979		0m	N.D.	d	
101)	1,4-Dioxane	10.082		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\110609\
Data File : AJ521.D
Acq On : 6 Nov 2009 8:17 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091106-17|ICV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1011-01D/091106-01
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 12 18:17:05 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102) 2-Nitropropane	10.563		0m	N.D. d	
104) Ethyl methacrylate	11.241		0m	N.D. d	
106) 1-Chlorohexane	12.423		0m	N.D. d	
107) cis-1,4-Dichloro-2-butene	13.522		0m	N.D. d	
108) Cyclohexanone	13.657		0m	N.D. d	
109) trans-1,4-Dichloro-2-b...	13.848		0m	N.D. d	
110) Pentachloroethane	14.541		0m	N.D. d	
111) Benzyl chloride	15.082		0m	N.D. d	
112) bis(2-Chloroisopropyl)...	15.482		0m	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\110609\
Data File : AJ521.D
Acq On : 6 Nov 2009 8:17 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091106-17|ICV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1011-01D/091106-01
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 12 18:17:05 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

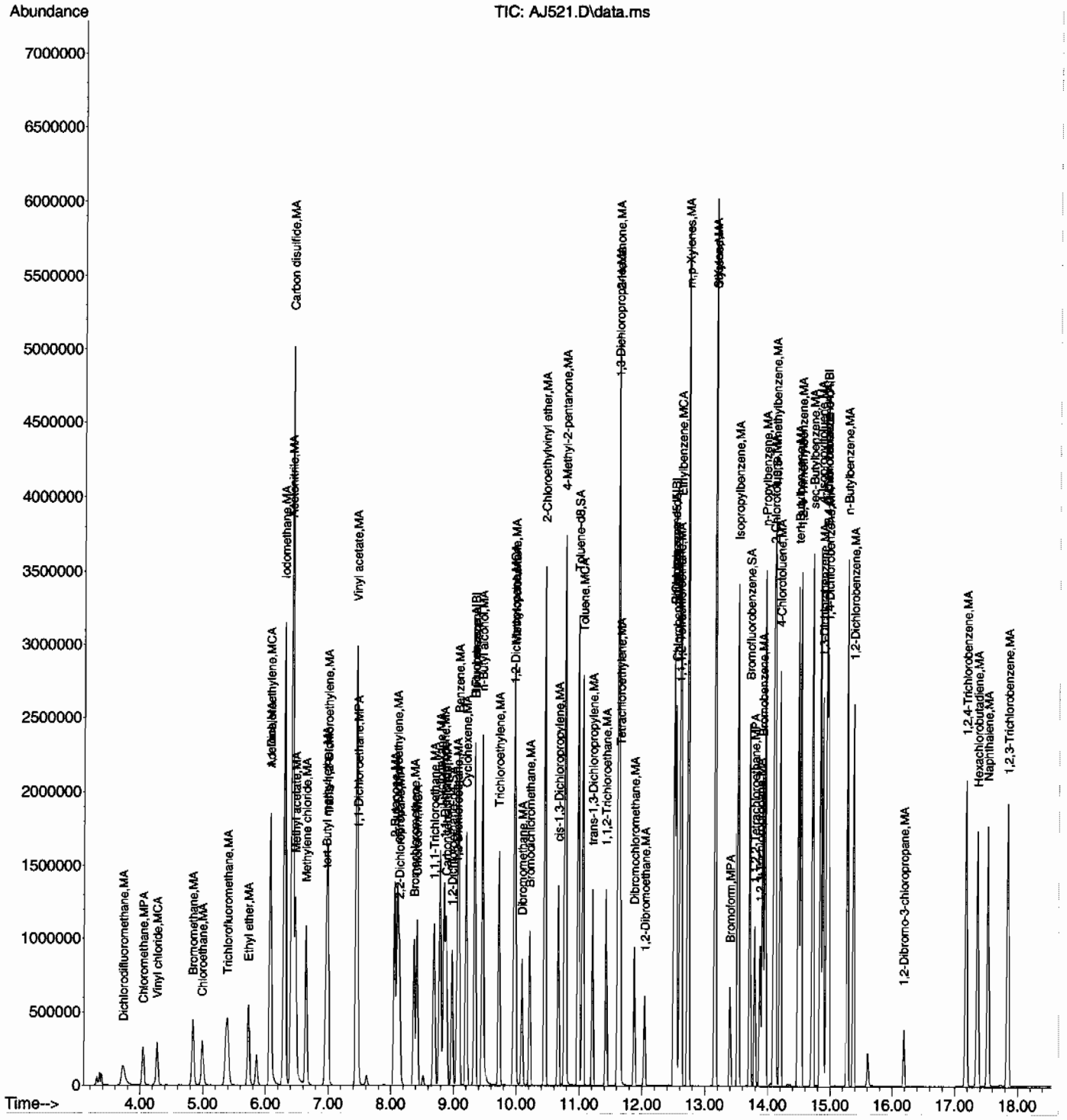

Continuing Calibration Summary

Client SDG: 10-670-1

Instrument ID: VOAA.I **Injection Date** 09-DEC-09 17:28

Data File: 120909\AO302.D **Init. Cal. Date(s)** 06-NOV-09 12:30 - 06-NOV-09 15:5

Lab Sample ID WAVM091209-01 **Quant Type** ISTD **Method:** VOAA-8260-110609.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.3474	0.40369		.01		16.20322	30		Averaged	
S	Toluene-d8	1.2694	1.21815		.01		-4.03734	30		Averaged	
S	Bromofluorobenzene	0.9007	0.85434		.01		-5.14711	30		Averaged	
	Dichlorodifluoromethane	0.2317	0.22282		.01		-3.83254	30		Averaged	
	Chloromethane	0.2316	0.20099		.1		-13.21675	30		Averaged	spcc
	Vinyl chloride	0.2311	0.23543		.01		1.87365	20		Averaged	ccc
	Bromomethane	0.2209	0.19888		.01		-9.96831	30		Averaged	
	Chloroethane	0.1481	0.12348		.01		-16.6239	30		Averaged	
	Trichlorofluoromethane	0.4475	0.53086		.01		18.62793	30		Averaged	
	Ethyl ether	0.217	0.20286		.01		-6.51613	30		Averaged	
	Acetone	0.2026	0.18196		.01		-10.18756	40		Averaged	
	1,1-Dichloroethylene	0.406	0.41295		.01		1.71182	20		Averaged	ccc
	Iodomethane	0.4228	0.4472		.01		5.77105	30		Averaged	
	Acetonitrile	0.0356	0.03034		.01		-14.77528	30		Averaged	
	Carbon disulfide	0.7226	0.70118		.01		-2.9643	30		Averaged	
	Methyl acetate	0.2204	0.18301		.01		-16.96461	40		Averaged	
	Methylene chloride	50	46.44	50			-7.12	30		Linear	
	tert-Butyl methyl ether	0.6592	0.70277		.01		6.60953	30		Averaged	
	trans-1,2-Dichloroethylene	0.4061	0.39805		.01		-1.98227	30		Averaged	
	Vinyl acetate	0.4304	0.52724		.01		22.5	40		Averaged	
	1,1-Dichloroethane	0.4842	0.45601		.1		-5.82197	30		Averaged	spcc
	2-Butanone	0.2271	0.19803		.01		-12.80053	40		Averaged	
	cis-1,2-Dichloroethylene	0.4557	0.46132		.01		1.23327	30		Averaged	
	2,2-Dichloropropane	0.367	0.47203		.01		28.61853	30		Averaged	
	Bromochloromethane	0.1334	0.14052		.01		5.33733	30		Averaged	
	Chloroform	0.4728	0.51049		.01		7.97166	20		Averaged	ccc
	1,1,1-Trichloroethane	0.4343	0.54325		.01		25.08635	30		Averaged	
	Cyclohexane	0.4872	0.4991		.01		2.44253	30		Averaged	
	1,1-Dichloropropene	0.3347	0.3676		.01		9.8297	30		Averaged	
	Carbon tetrachloride	0.4038	0.5365		.01		32.8628	30	*	Averaged	
	1,2-Dichloroethane	0.4217	0.46355		.01		9.92412	30		Averaged	
	Benzene	0.9434	0.86561		.01		-8.24571	30		Averaged	
	Cyclohexene	0.4531	0.45473		.01		0.35974	30		Averaged	
	n-Butyl alcohol	5000	5193.93	5000			3.8786	40		Linear	
	Trichloroethylene	0.2678	0.28012		.01		4.60045	30		Averaged	
	1,2-Dichloropropane	0.263	0.23826		.01		-9.40684	20		Averaged	ccc
	Methylcyclohexane	0.4037	0.42609		.01		5.5462	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOAA.I **Injection Date** 09-DEC-09 17:28

Data File: 120909\AO302.D **Init. Cal. Date(s)** 06-NOV-09 12:30 06-NOV-09 15:5

Lab Sample ID WAVM091209-01 **Quant Type** ISTD **Method:** VOAA-8260-110609.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1609	0.16818		.01		4.52455	30		Averaged	
Bromodichloromethane	0.3162	0.38371		.01		21.35041	30		Averaged	
2-Chloroethylvinyl ether	250	223.72	250			-10.512	30		Linear	
cis-1,3-Dichloropropylene	0.3473	0.39513		.01		13.77196	30		Averaged	
4-Methyl-2-pentanone	250	219.42	250			-12.232	40		Linear	
Toluene	1.3225	1.24455		.01		-5.89414	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4097	0.48795		.01		19.09934	30		Averaged	
1,1,2-Trichloroethane	0.2153	0.19951		.01		-7.33395	30		Averaged	
1,3-Dichloropropane	0.4634	0.42765		.01		-7.71472	30		Averaged	
2-Hexanone	250	182.23	250			-27.108	40		Linear	
Tetrachloroethylene	0.2776	0.30871		.01		11.20677	30		Averaged	
Dibromochloromethane	50	55.32	50			10.64	30		Linear	
1,2-Dibromoethane	0.2647	0.28223		.01		6.62259	30		Averaged	
Chlorobenzene	0.9062	0.90159		.3		-0.50872	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3268	0.38879		.01		18.96879	30		Averaged	
Ethylbenzene	1.5021	1.56202		.01		3.98908	20		Averaged	ccc
m,p-Xylenes	0.5536	0.57219		.01		3.35802	30		Averaged	
o-Xylene	0.5361	0.56363		.01		5.13524	30		Averaged	
Styrene	50	48.86	50			-2.28	30		Linear	
Bromoform	50	50.8	50			1.6	30		Linear	spcc
Isopropylbenzene	2.4418	2.65165		.01		8.59407	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6111	0.53494		.3		-12.46277	30		Averaged	spcc
1,2,3-Trichloropropane	0.1798	0.19183		.01		6.69077	30		Averaged	
Bromobenzene	0.6723	0.68752		.01		2.26387	30		Averaged	
n-Propylbenzene	3.1051	3.08514		.01		-0.64281	30		Averaged	
2-Chlorotoluene	0.6257	0.63088		.01		0.82787	30		Averaged	
1,3,5-Trimethylbenzene	2.0963	2.26839		.01		8.20923	30		Averaged	
4-Chlorotoluene	1.9024	1.91836		.01		0.83894	30		Averaged	
tert-Butylbenzene	0.448	0.50439		.01		12.58705	30		Averaged	
1,2,4-Trimethylbenzene	2.1238	2.30223		.01		8.40145	30		Averaged	
sec-Butylbenzene	2.7355	2.90857		.01		6.32681	30		Averaged	
4-Isopropyltoluene	50	50.58	50			1.16	30		Linear	
1,3-Dichlorobenzene	1.259	1.26036		.01		0.10802	30		Averaged	
1,4-Dichlorobenzene	1.3127	1.29164		.01		-1.60433	30		Averaged	
n-Butylbenzene	2.2173	2.36837		.01		6.81324	30		Averaged	
1,2-Dichlorobenzene	1.2164	1.23342		.01		1.39921	30		Averaged	
1,2-Dibromo-3-chloropropane	50	51.59	50			3.18	30		Linear	

Continuing Calibration Summary

Instrument ID: VOAA.I **Injection Date** 09-DEC-09 17:28

Data File: 120909\AO302.D **Init. Cal. Date(s)** 06-NOV-09 12:30 06-NOV-09 15:5

Lab Sample ID WAVM091209-01 **Quant Type** ISTD **Method:** VOAA-8260-110609.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9585	1.10205		.01		14.97653	30		Averaged
Hexachlorobutadiene	0.5797	0.74439		.01		28.40952	30		Averaged
Naphthalene	2.1379	2.37996		.01		11.32233	30		Averaged
1,2,3-Trichlorobenzene	0.9157	1.03916		.01		13.48258	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0302.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091209-01|CCV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.339	96	1307289	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	117	1082198	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	152	661353	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	96	1307289	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	117	1082198	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	152	661353	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	8.978	65	527738	58.11	ug/L	0.00
43) Toluene-d8	10.987	98	1318281	47.98	ug/L	0.00
61) Bromofluorobenzene	13.713	95	565018	47.43	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.731	85	291286	48.09	ug/L	100
3) Chloromethane	4.064	50	262750	43.40	ug/L	99
4) Vinyl chloride	4.285	62	307774	50.94	ug/L	100
5) Bromomethane	4.849	94	259994	45.02	ug/L	95
6) Chloroethane	4.990	64	161420	41.69	ug/L	100
7) Trichlorofluoromethane	5.396	101	693983	59.31	ug/L	100
8) Ethyl ether	5.732	59	265198	46.74	ug/L	92
9) Acetone	6.078	43	1189371	224.50	ug/L	85
10) 1,1-Dichloroethylene	6.078	61	539841	50.85	ug/L	91
11) Iodomethane	6.301	142	2923106	264.41	ug/L	88
12) Acetonitrile	6.418	41	991461	1065.85	ug/L	96
13) Methyl acetate	6.478	43	1196199	207.56	ug/L	94
14) Carbon disulfide	6.428	76	4583248	242.58	ug/L	100
15) Methylene chloride	6.648	84	304608	46.44	ug/L	86
16) tert-Butyl methyl ether	6.973	73	918729	53.31	ug/L	98
17) trans-1,2-Dichloroethy...	6.994	61	520372	49.01	ug/L	90
18) Vinyl acetate	7.450	43	3446288	306.22	ug/L	95
19) 1,1-Dichloroethane	7.472	63	596132	47.08	ug/L	99
20) 2-Butanone	8.062	43	1294431	217.97	ug/L	89
21) cis-1,2-Dichloroethylene	8.105	61	603083	50.62	ug/L	89
22) 2,2-Dichloropropane	8.140	77	617074	64.32	ug/L	94
23) Bromochloromethane	8.373	128	183698	52.68	ug/L	99
24) Chloroform	8.419	83	667351	53.98	ug/L	99
25) 1,1,1-Trichloroethane	8.695	97	710182	62.54	ug/L	99
26) Cyclohexane	8.791	56	652463	51.22	ug/L	94
27) 1,1-Dichloropropene	8.851	75	480556	54.92	ug/L	87
28) Carbon tetrachloride	8.886	117	701362	66.43	ug/L	100
30) 1,2-Dichloroethane	9.063	62	605991	54.97	ug/L	100
31) Benzene	9.084	78	1131606	45.88	ug/L	92
32) Cyclohexene	9.204	67	594467	50.18	ug/L	89
33) n-Butyl alcohol	9.463	56	1112680	5193.93	ug/L	88
34) Trichloroethylene	9.728	95	366193	52.31	ug/L	97
35) 1,2-Dichloropropane	9.965	63	311469	45.30	ug/L	99
36) Methylcyclohexane	9.982	83	557028	52.78	ug/L	90
37) Dibromomethane	10.092	93	219856	52.27	ug/L	95
38) Bromodichloromethane	10.212	83	501615	60.67	ug/L	99
39) 2-Chloroethylvinyl ether	10.453	63	893393	223.72	ug/L	100
40) cis-1,3-Dichloropropylene	10.668	75	516548	56.88	ug/L	88
42) 4-Methyl-2-pentanone	10.775	58	739346	219.42	ug/L #	82
44) Toluene	11.057	91	1346845	47.05	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0302.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091209-01|CCV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
45) trans-1,3-Dichloroprop...	11.213	75	528053	59.55 ug/L	94	
46) 1,1,2-Trichloroethane	11.425	83	215913	46.33 ug/L	97	
47) 2-Hexanone	11.623	43	1820132	182.23 ug/L	91	
48) 1,3-Dichloropropane	11.616	76	462803	46.15 ug/L	87	
49) Tetrachloroethylene	11.652	164	334090	55.61 ug/L	95	
50) Dibromochloromethane	11.881	129	408504	55.32 ug/L	100	E
51) 1,2-Dibromoethane	12.044	107	305425	53.30 ug/L	100	
52) Chlorobenzene	12.539	112	975702	49.74 ug/L	97	
53) 1,1,1,2-Tetrachloroethane	12.599	131	420744	59.48 ug/L	96	
54) Ethylbenzene	12.617	91	1690413	52.00 ug/L	97	
55) m,p-Xylenes	12.730	106	1238439	103.36 ug/L	88	
56) o-Xylene	13.162	106	609960	52.57 ug/L	87	
57) Styrene	13.162	104	960944	48.86 ug/L	86	
59) Bromoform	13.402	173	281447	50.80 ug/L	100	
60) Isopropylbenzene	13.529	105	1753676	54.30 ug/L	96	
62) 1,1,2,2-Tetrachloroethane	13.795	83	353787	43.77 ug/L	100	
63) 1,2,3-Trichloropropane	13.879	110	126870	53.34 ug/L	85	
64) Bromobenzene	13.918	156	454695	51.13 ug/L	98	
65) n-Propylbenzene	13.957	91	2040368	49.68 ug/L	98	
66) 1,3,5-Trimethylbenzene	14.116	105	1500209	54.10 ug/L	94	
67) 2-Chlorotoluene	14.095	126	417234	50.41 ug/L	86	
68) 4-Chlorotoluene	14.198	91	1268715	50.42 ug/L	94	
69) tert-Butylbenzene	14.488	134	333582	56.29 ug/L #	83	
70) 1,2,4-Trimethylbenzene	14.530	105	1522584	54.20 ug/L	95	
71) sec-Butylbenzene	14.718	105	1923591	53.16 ug/L	99	
72) 4-Isopropyltoluene	14.845	119	1689607	50.58 ug/L	96	
73) 1,3-Dichlorobenzene	14.884	146	833545	50.05 ug/L	98	
74) 1,4-Dichlorobenzene	14.969	146	854231	49.20 ug/L	98	
75) n-Butylbenzene	15.276	91	1566331	53.41 ug/L	99	
76) 1,2-Dichlorobenzene	15.379	146	815724	50.70 ug/L	98	
77) 1,2-Dibromo-3-chloropr...	16.196	157	93859	51.59 ug/L	93	
78) 1,2,4-Trichlorobenzene	17.183	180	728846	57.49 ug/L	99	
79) Hexachlorobutadiene	17.367	225	492303	64.20 ug/L	100	
80) Naphthalene	17.530	128	1573994	55.66 ug/L	100	
81) 1,2,3-Trichlorobenzene	17.847	180	687253	56.74 ug/L	99	
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	5.866		0m	N.D. d		
86) Trichlorotrifluoroethane	6.078		0m	N.D. d		
87) Isopropyl Alcohol	6.428		0m	N.D. d		
88) Allyl chloride	6.418		0m	N.D. d		
89) tert-Butyl Alcohol	6.478		0m	N.D. d		
90) Acrylonitrile	6.966		0m	N.D. d		
91) Isopropyl ether	7.450		0m	N.D. d		
92) 2-Chloro-1,3-butadiene	7.613		0m	N.D. d		
93) Ethyl tert-butyl ether	8.105		0m	N.D. d		
94) Ethyl acetate	8.062		0m	N.D. d		
95) Propionitrile	8.062		0m	N.D. d		
96) Methacrylonitrile	8.136		0m	N.D. d		
97) Tetrahydrofuran	8.430		0m	N.D. d		
98) Isobutyl alcohol	8.787		0m	N.D. d		
99) Methyl tert-amyl ether	9.088		0m	N.D. d		
100) Methyl methacrylate	9.979		0m	N.D. d		
101) 1,4-Dioxane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0302.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091209-01|CCV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102) 2-Nitropropane	10.453		0m	N.D.	d
104) Ethyl methacrylate	11.248		0m	N.D.	d
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.529		0m	N.D.	d
108) Cyclohexanone	13.529		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.957		0m	N.D.	d
110) Pentachloroethane	14.541		0m	N.D.	d
111) Benzyl chloride	15.276		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.605		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO302.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |WAVM091209-01|CCV|1|VOA|1|VOA8260BLF|
Misc : GEEL 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

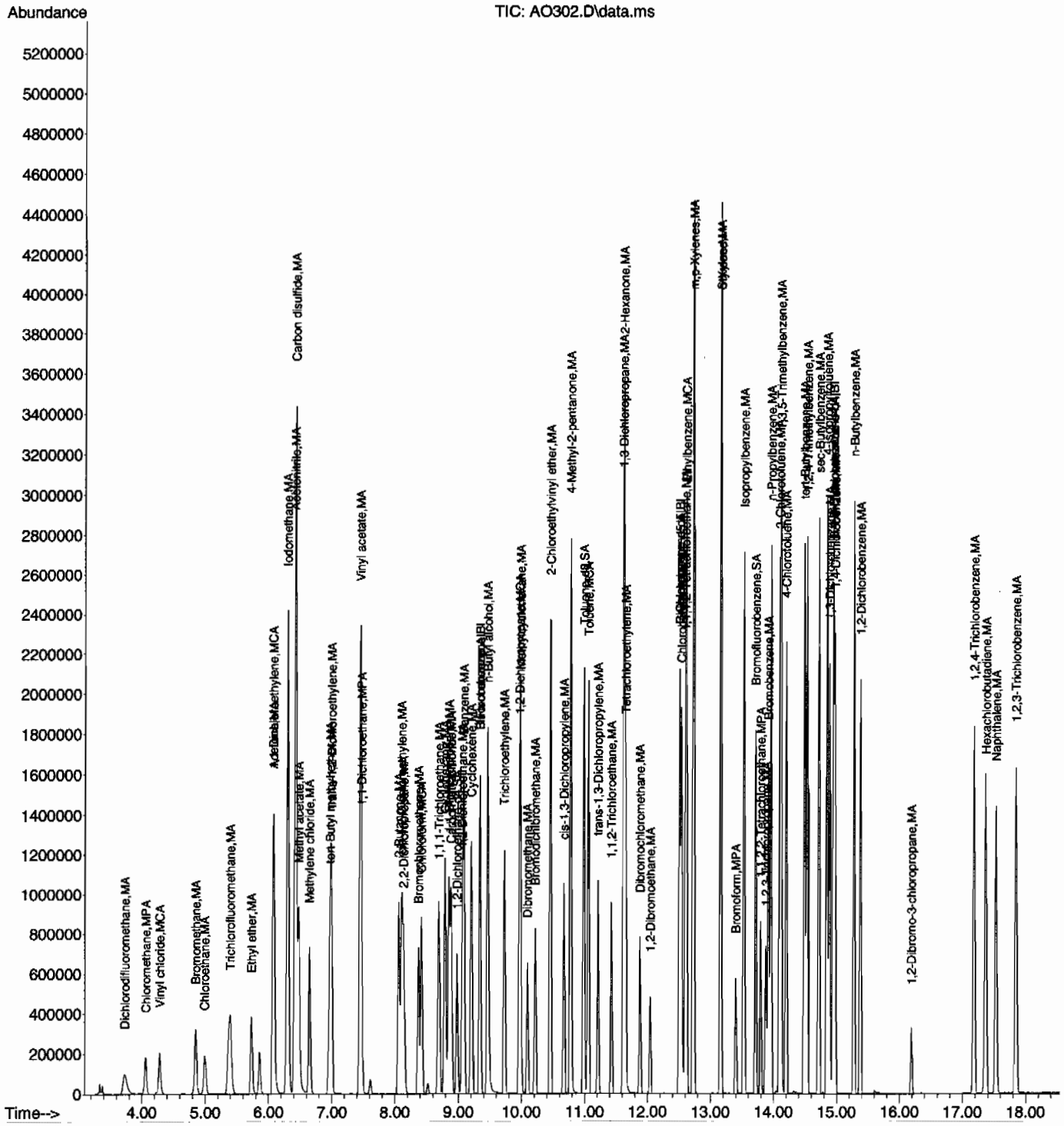

Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\110609\
Data File : AJ501.D
Acq On : 6 Nov 2009 11:39 am
Operator : JEB
Sample : |UVM091020-02|BFB|1|VOA|1|
Misc : GEL 5ML N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Title : Volatile Organics 8260B
Last Update : Fri Nov 06 14:48:01 2009

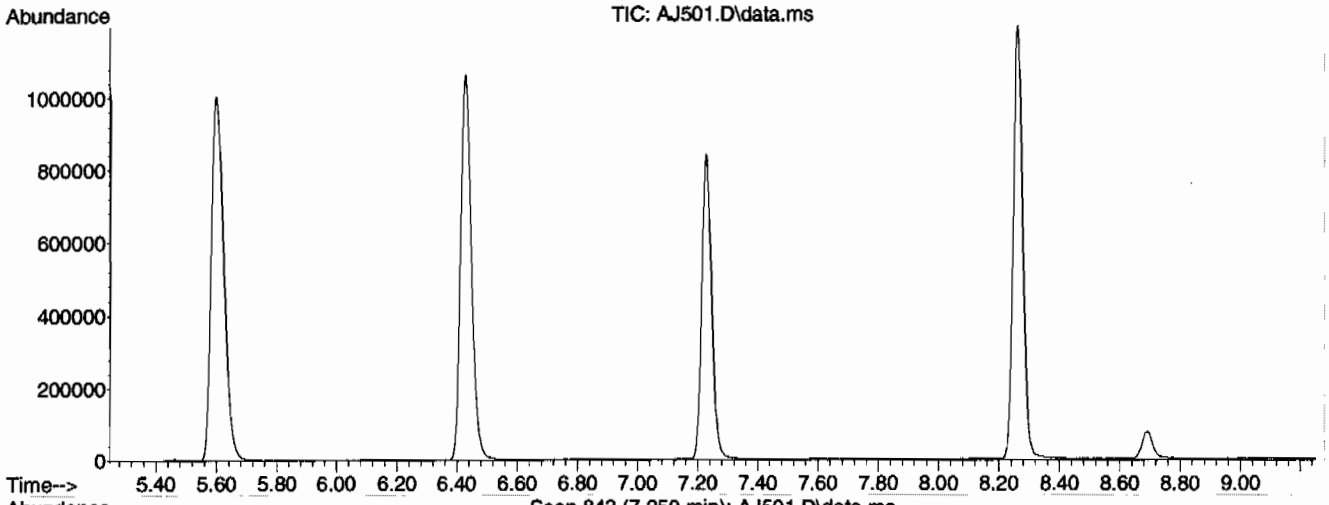

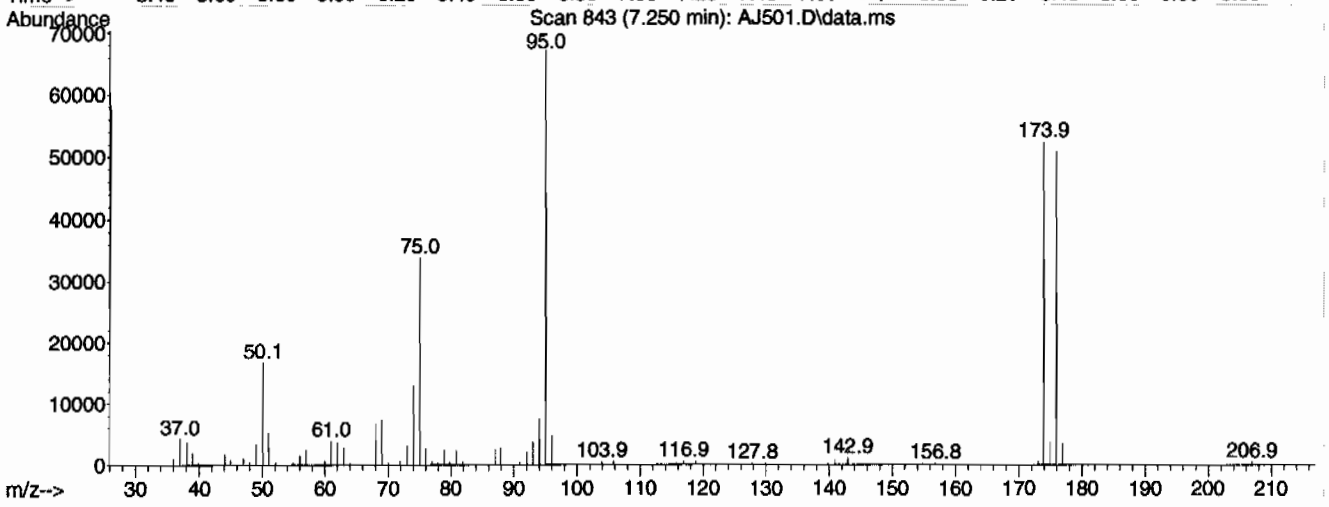

Spectrum Information: Scan 843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.8	16624	PASS
75	95	30	60	50.4	33784	PASS
95	95	100	100	100.0	67080	PASS
96	95	5	9	7.0	4685	PASS
173	174	0.00	2	1.0	509	PASS
174	95	50	100	78.0	52304	PASS
175	174	5	9	7.1	3724	PASS
176	174	95	101	97.2	50832	PASS
177	176	5	9	6.6	3338	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO301.D
Acq On : 9 Dec 2009 5:03 pm
Operator : JEB
Sample : |UVM091021-02|BFB|1|VOA|1|
Misc : GEL 5ML N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Title : Volatile Organics 8260B
Last Update : Mon Nov 09 16:21:09 2009

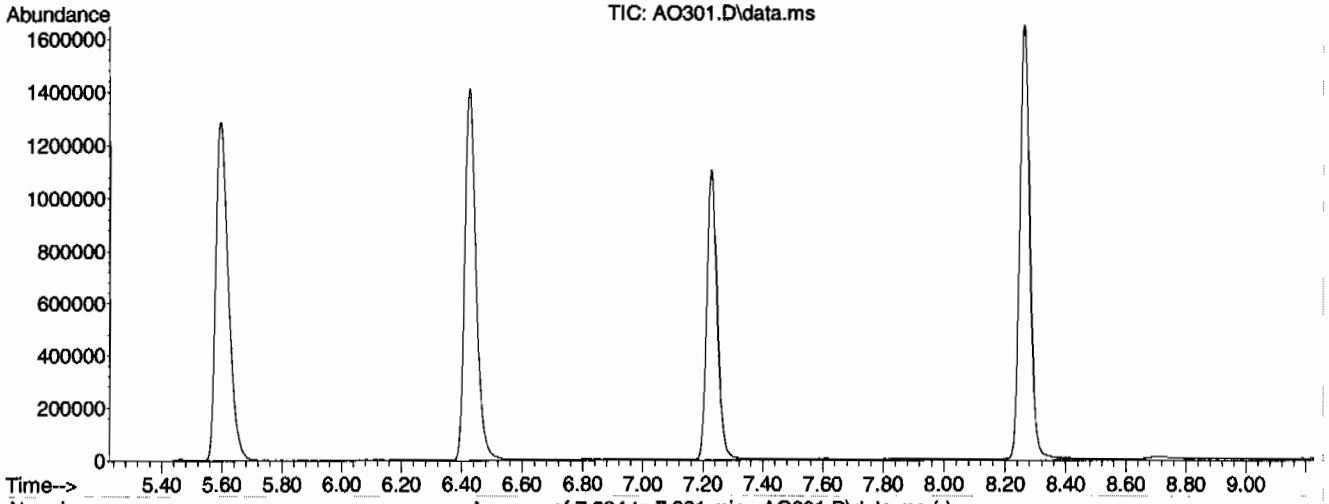

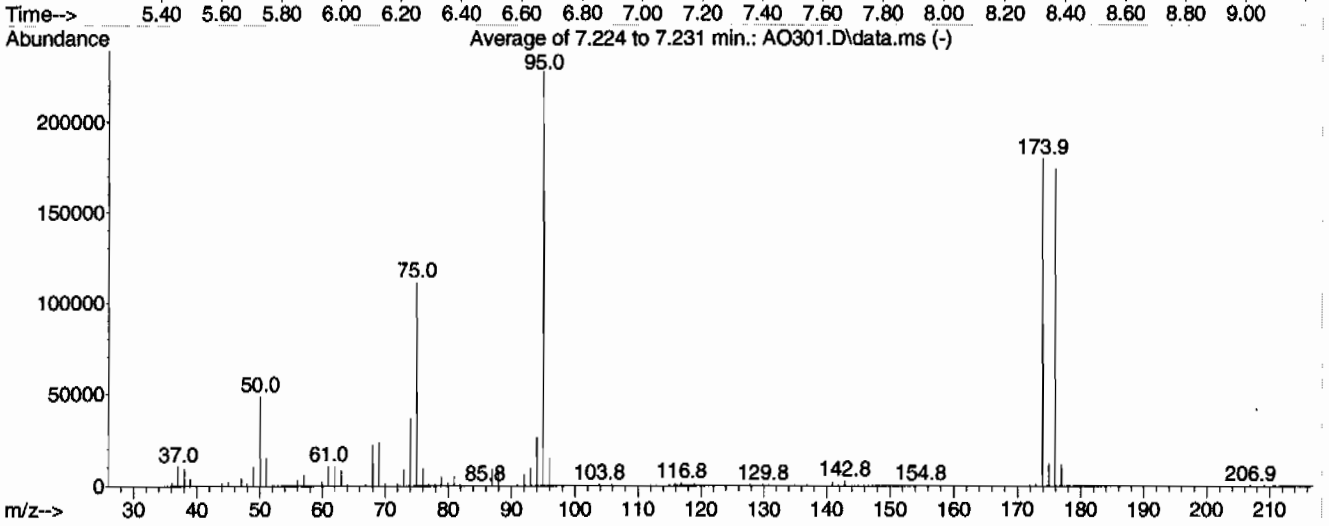

AutoFind: Scans 835, 836, 837; Background Corrected with Scan 818

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4	48653	PASS
75	95	30	60	49.0	111451	PASS
95	95	100	100	100.0	227541	PASS
96	95	5	9	6.7	15309	PASS
173	174	0.00	2	0.5	862	PASS
174	95	50	100	79.0	179669	PASS
175	174	5	9	6.7	12096	PASS
176	174	95	101	96.7	173739	PASS
177	176	5	9	6.4	11049	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201991305**				
Client Sample:	**QC for batch 931007**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 931007**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**931007**	**Inst:**	**VOAA.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 19:28**	**Analyst:**	**JEB**	**Purge Vol:**	**5 mL**
Prep Date:	**12/09/2009 19:28**				
Data File:	**120909\AO306LA.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.001	mg/L	0.0005	0.001
75-35-4	1,1-Dichloroethylene	U	0.001	mg/L	0.0003	0.001
78-93-3	2-Butanone	U	0.005	mg/L	0.00125	0.005
67-66-3	Chloroform	U	0.001	mg/L	0.00025	0.001
56-23-5	Carbon tetrachloride	U	0.001	mg/L	0.0003	0.001
107-06-2	1,2-Dichloroethane	U	0.001	mg/L	0.00025	0.001
71-43-2	Benzene	U	0.001	mg/L	0.0003	0.001
79-01-6	Trichloroethylene	U	0.001	mg/L	0.00025	0.001
127-18-4	Tetrachloroethylene	U	0.001	mg/L	0.0003	0.001
108-90-7	Chlorobenzene	U	0.001	mg/L	0.00025	0.001
106-46-7	1,4-Dichlorobenzene	U	0.001	mg/L	0.00025	0.001

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO306LA.D
Acq On : 9 Dec 2009 7:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991305|931007|1|VOA|1|VOATCLPL|
Misc : GEEL 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 21:15:53 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.342	96	1328132	50.00 ug/L	0.00
41) Chlorobenzene-d5	12.507	117	1071339	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	152	658871	50.00 ug/L	0.00
82) B Fluorobenzene	9.342	96	1328132	50.00 ug/L	0.00
103) B Chlorobenzene-d5	12.507	117	1071339	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	152	658871	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	8.982	65	477491	51.75 ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 103.50%		
43) Toluene-d8	10.983	98	1291325	47.48 ug/L	0.00
Spiked Amount 50.000	Range 76 - 129		Recovery = 94.96%		
61) Bromofluorobenzene	13.713	95	546923	46.08 ug/L	0.00
Spiked Amount 50.000	Range 71 - 126		Recovery = 92.16%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.043	50	195	N.D.	
4) Vinyl chloride	4.275	62	989	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.099	43	980	N.D.	
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	0.000		0	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	6.425	76	455	N.D.	
15) Methylene chloride	6.644	84	3155	Below Cal #	76
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	7.291	43	116	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	8.090	43	121	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO306LA.D
Acq On : 9 Dec 2009 7:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991305|931007|1|VOA|1|VOATCLPL|
Misc : GEEL 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 21:15:53 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units Dev(Min)
40) cis-1,3-Dichloropropylene	0.000		0	N.D.
42) 4-Methyl-2-pentanone	0.000		0	N.D.
44) Toluene	11.054	91	568	N.D.
45) trans-1,3-Dichloroprop...	0.000		0	N.D.
46) 1,1,2-Trichloroethane	0.000		0	N.D.
47) 2-Hexanone	0.000		0	N.D.
48) 1,3-Dichloropropane	0.000		0	N.D.
49) Tetrachloroethylene	0.000		0	N.D.
50) Dibromochloromethane	0.000		0	N.D.
51) 1,2-Dibromoethane	0.000		0	N.D.
52) Chlorobenzene	12.543	112	231	N.D.
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.
54) Ethylbenzene	12.730	91	2329	N.D.
55) m,p-Xylenes	12.734	106	916	N.D.
56) o-Xylene	0.000		0	N.D.
57) Styrene	0.000		0	N.D.
59) Bromoform	0.000		0	N.D.
60) Isopropylbenzene	13.717	105	368	N.D.
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.
63) 1,2,3-Trichloropropane	0.000		0	N.D.
64) Bromobenzene	0.000		0	N.D.
65) n-Propylbenzene	14.187	91	111	N.D.
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.
67) 2-Chlorotoluene	0.000		0	N.D.
68) 4-Chlorotoluene	14.205	91	410	N.D.
69) tert-Butylbenzene	0.000		0	N.D.
70) 1,2,4-Trimethylbenzene	0.000		0	N.D.
71) sec-Butylbenzene	0.000		0	N.D.
72) 4-Isopropyltoluene	0.000		0	N.D.
73) 1,3-Dichlorobenzene	14.880	146	248	N.D.
74) 1,4-Dichlorobenzene	14.972	146	1106	N.D.
75) n-Butylbenzene	15.085	91	3853	N.D.
76) 1,2-Dichlorobenzene	15.379	146	142	N.D.
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.
78) 1,2,4-Trichlorobenzene	17.183	180	965	N.D.
79) Hexachlorobutadiene	0.000		0	N.D.
80) Naphthalene	17.529	128	3193	N.D.
81) 1,2,3-Trichlorobenzene	17.847	180	429	N.D.
83) Chlorotrifluoroethylene	0.000		0	N.D.
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.
85) Acrolein	0.000		0	N.D.
86) Trichlorotrifluoroethane	0.000		0	N.D.
87) Isopropyl Alcohol	0.000		0	N.D.
88) Allyl chloride	0.000		0	N.D.
89) tert-Butyl Alcohol	0.000		0	N.D.
90) Acrylonitrile	6.906	53	506	N.D.
91) Isopropyl ether	0.000		0	N.D.
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.
93) Ethyl tert-butyl ether	0.000		0	N.D.
94) Ethyl acetate	8.090	43	121	N.D.
95) Propionitrile	0.000		0	N.D.
96) Methacrylonitrile	8.317	41	132	N.D.
97) Tetrahydrofuran	8.444	42	111	N.D.
98) Isobutyl alcohol	0.000		0	N.D.

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO306LA.D
Acq On : 9 Dec 2009 7:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991305|931007|1|VOA|1|VOATCLPL|
Misc : GEEL 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 21:15:53 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0	N.D.	
104) Ethyl methacrylate	0.000		0	N.D.	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.558	53	489	N.D.	
108) Cyclohexanone	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.851	53	990	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.474	45	121	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO306LA.D
Acq On : 9 Dec 2009 7:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991305|931007|1|VOA|1|VOATCLPL|
Misc : GEEL 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 21:15:53 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

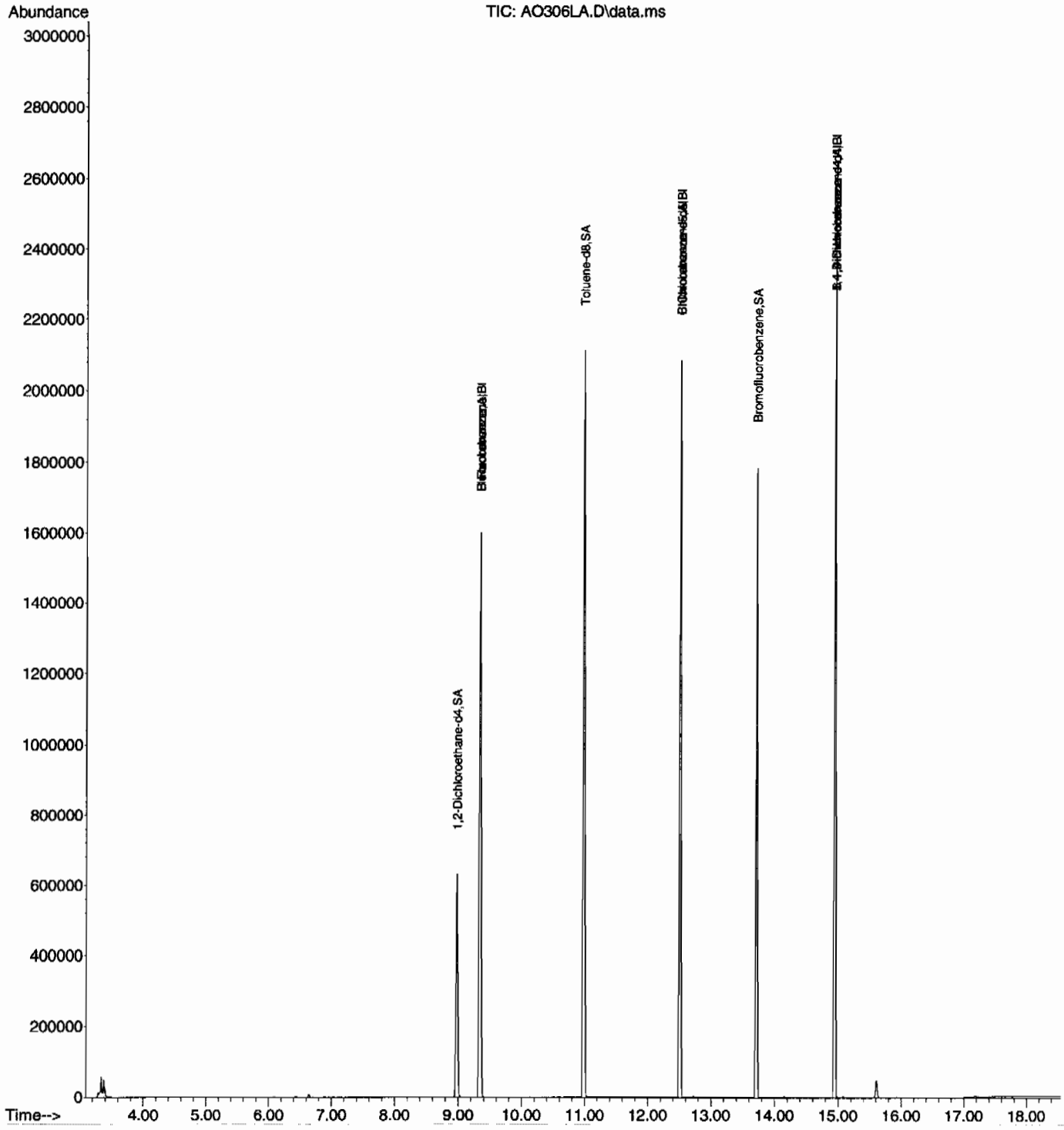

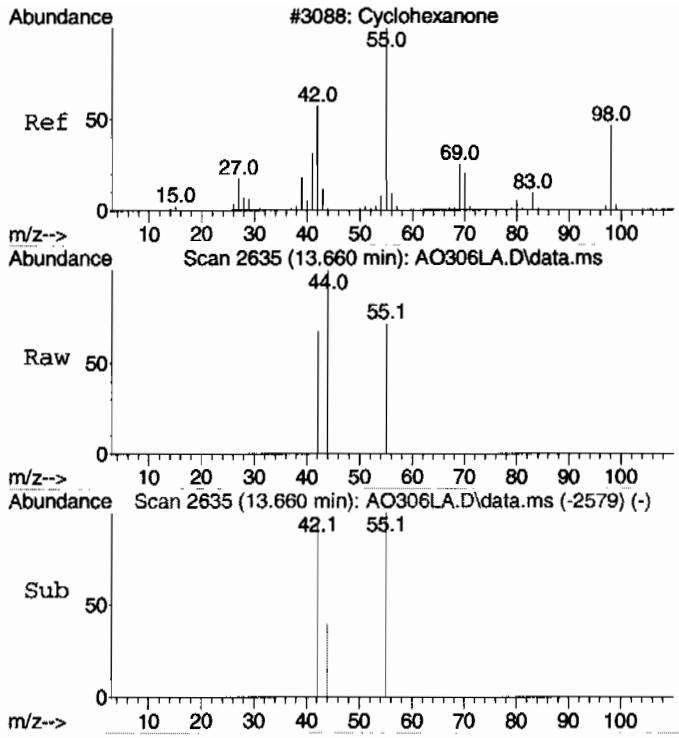

#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 29.57 ug/L
RT: 13.660 min Scan# 2635
Delta R.T. -0.004 min
Lab File: AO306LA.D
Acq: 9 Dec 2009 7:28 pm

Tgt Ion: 42 Resp: 130

Ion	Ratio	Lower	Upper
42	100		
55	534.6	93.4	153.4#
98	0.0	25.0	85.0#

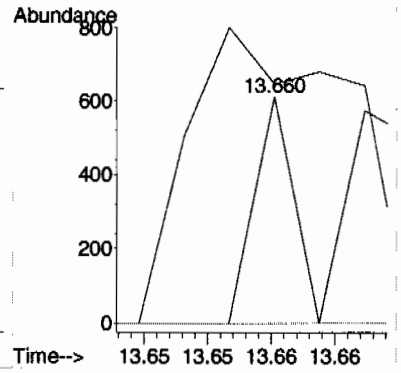

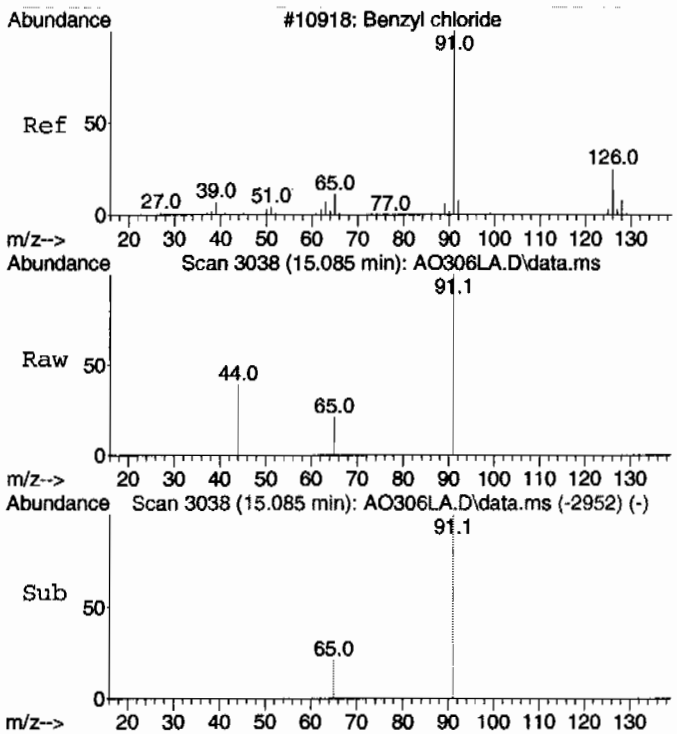

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.63 ug/L
RT: 15.085 min Scan# 3038
Delta R.T. 0.004 min
Lab File: AO306LA.D
Acq: 9 Dec 2009 7:28 pm

Tgt Ion: 91 Resp: 3853

Ion	Ratio	Lower	Upper
91	100		
126	2.9	0.0	52.0
65	2.8	0.0	41.2

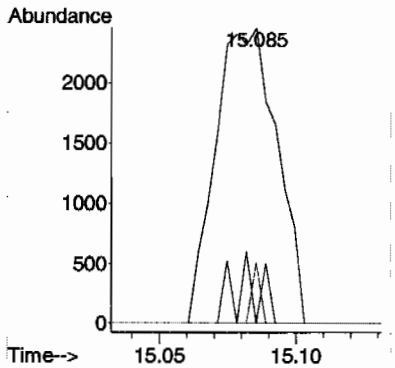

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201988991**				
Client Sample:	**QC for batch 930034**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 930034**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**931007**	**Inst:**	**VOAA.I**	**Dilution:**	**10**
Run Date:	**12/09/2009 20:20**	**Analyst:**	**JEB**	**Purge Vol:**	**5 mL**
Prep Date:	**12/07/2009 15:00**				
Data File:	**120909\AO308.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride	U	0.010	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene	U	0.010	mg/L	0.003	0.010
78-93-3	2-Butanone	U	0.050	mg/L	0.0125	0.050
67-66-3	Chloroform	U	0.010	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride	U	0.010	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane	U	0.010	mg/L	0.0025	0.010
71-43-2	Benzene	U	0.010	mg/L	0.003	0.010
79-01-6	Trichloroethylene	U	0.010	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene	U	0.010	mg/L	0.003	0.010
108-90-7	Chlorobenzene	U	0.010	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.0025	0.010

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0308.D
Acq On : 9 Dec 2009 8:20 pm
Operator : JEB
InstName : VOAA
Sample : |1201988991|931007|10|VOA|1|VOATCLPL|
Misc : GEEL 500UL N/A
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 12 11:03:54 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.339	96	1247841	50.00 ug/L	0.00
41) Chlorobenzene-d5	12.507	117	1037249	50.00 ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	152	638412	50.00 ug/L	0.00
82) B Fluorobenzene	9.339	96	1247841	50.00 ug/L	0.00
103) B Chlorobenzene-d5	12.507	117	1037249	50.00 ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	152	638412	50.00 ug/L	0.00
System Monitoring Compounds					
29) 1,2-Dichloroethane-d4	8.978	65	503779	58.11 ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 116.22%		
43) Toluene-d8	10.983	98	1249468	47.45 ug/L	0.00
Spiked Amount 50.000	Range 76 - 129		Recovery = 94.90%		
61) Bromofluorobenzene	13.713	95	541489	47.08 ug/L	0.00
Spiked Amount 50.000	Range 71 - 126		Recovery = 94.16%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.043	50	154	N.D.	
4) Vinyl chloride	4.265	62	515	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.085	43	5490	N.D.	
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	6.428	41	7043	7.93 ug/L	76
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	6.414	76	124	N.D.	
15) Methylene chloride	6.640	84	3513	Below Cal	83
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	7.295	43	112	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	8.069	43	1066	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	8.992	62	124	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	
38) Bromodichloromethane	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO308.D
Acq On : 9 Dec 2009 8:20 pm
Operator : JEB
InstName : VOAA
Sample : |1201988991|931007|10|VOA|1|VOATCLPL|
Misc : GEEL 500UL N/A
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 12 11:03:54 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) cis-1,3-Dichloropropylene	0.000		0m	N.D.	d
42) 4-Methyl-2-pentanone	0.000		0	N.D.	
44) Toluene	11.050	91	632	N.D.	
45) trans-1,3-Dichloroprop...	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000		0	N.D.	
47) 2-Hexanone	0.000		0m	N.D.	d
48) 1,3-Dichloropropane	0.000		0	N.D.	
49) Tetrachloroethylene	0.000		0	N.D.	
50) Dibromochloromethane	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000		0	N.D.	
52) Chlorobenzene	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
54) Ethylbenzene	12.730	91	2641	N.D.	
55) m,p-Xylenes	12.730	106	755	N.D.	
56) o-Xylene	0.000		0	N.D.	
57) Styrene	0.000		0	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Isopropylbenzene	13.713	105	351	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000		0	N.D.	
64) Bromobenzene	0.000		0	N.D.	
65) n-Propylbenzene	13.961	91	111	N.D.	
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000		0	N.D.	
68) 4-Chlorotoluene	14.201	91	484	N.D.	
69) tert-Butylbenzene	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000		0	N.D.	
71) sec-Butylbenzene	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.884	146	131	N.D.	
74) 1,4-Dichlorobenzene	14.972	146	2064	N.D.	
75) n-Butylbenzene	15.082	91	678	N.D.	
76) 1,2-Dichlorobenzene	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	180	614	N.D.	
79) Hexachlorobutadiene	0.000		0	N.D.	
80) Naphthalene	17.529	128	2400	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	180	511	N.D.	
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	6.188	45	117	N.D.	
88) Allyl chloride	6.499	41	233	N.D.	
89) tert-Butyl Alcohol	0.000		0	N.D.	
90) Acrylonitrile	0.000		0	N.D.	
91) Isopropyl ether	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000		0	N.D.	
94) Ethyl acetate	8.069	43	1066	N.D.	
95) Propionitrile	0.000		0	N.D.	
96) Methacrylonitrile	0.000		0	N.D.	
97) Tetrahydrofuran	0.000		0	N.D.	
98) Isobutyl alcohol	0.000		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO308.D
Acq On : 9 Dec 2009 8:20 pm
Operator : JEB
InstName : VOAA
Sample : |1201988991|931007|10|VOA|1|VOATCLPL|
Misc : GEEL 500UL N/A
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 12 11:03:54 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
99) Methyl tert-amyl ether	0.000		0	N.D.	
100) Methyl methacrylate	0.000		0	N.D.	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000		0m	N.D.	d
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.	
108) Cyclohexanone	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
110) Pentachloroethane	0.000		0	N.D.	
111) Benzyl chloride	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO308.D
Acq On : 9 Dec 2009 8:20 pm
Operator : JEB
InstName : VOAA
Sample : |1201988991|931007|10|VOA|1|VOATCLPL|
Misc : GEEL 500UL N/A
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 12 11:03:54 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

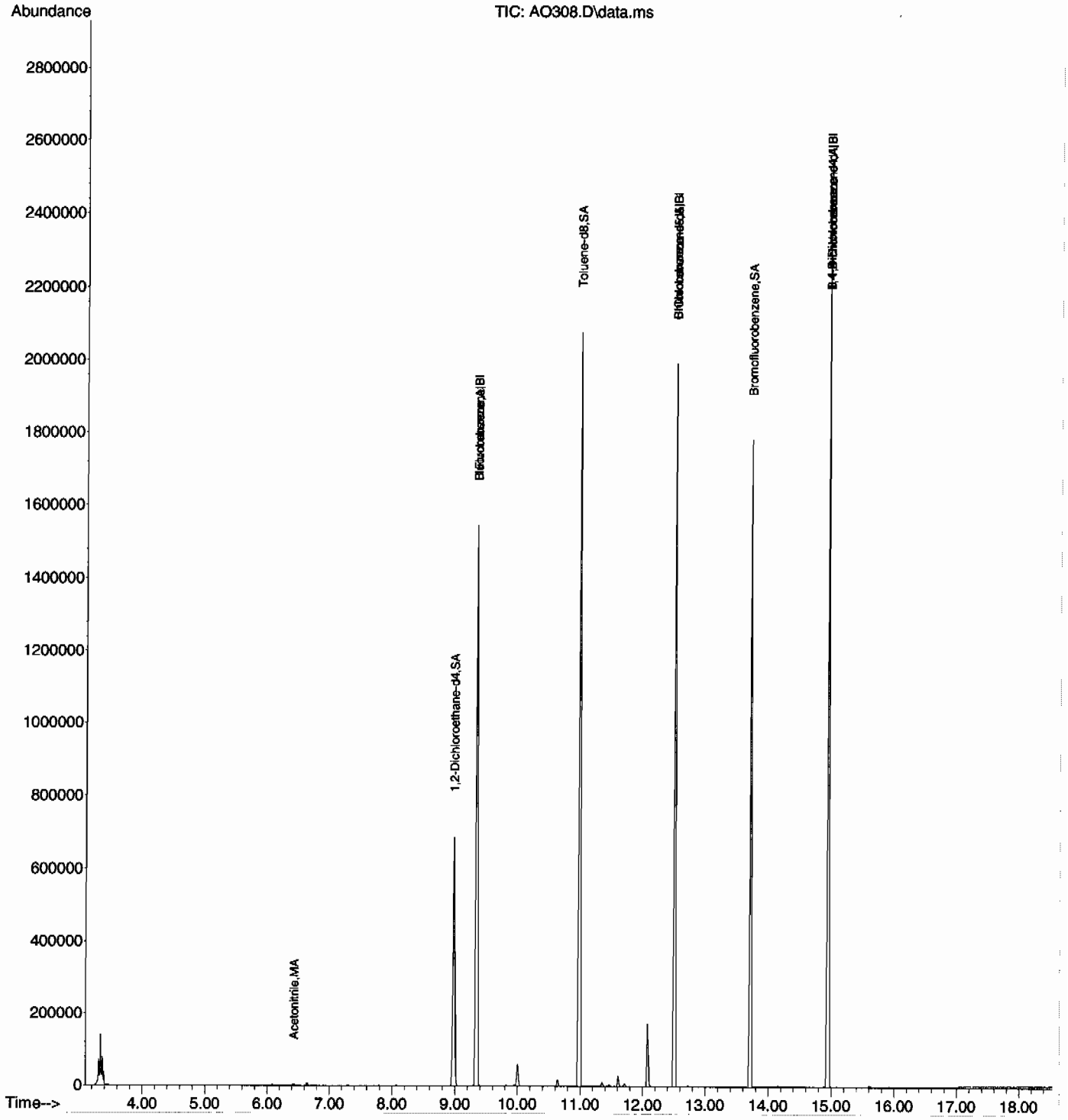

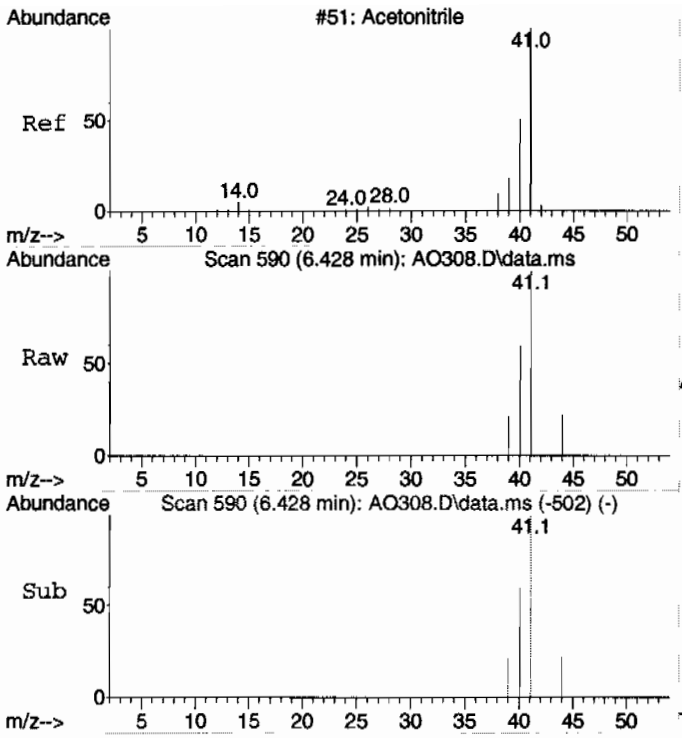

#12
Acetonitrile
Concen: 7.93 ug/L
RT: 6.428 min Scan# 590
Delta R.T. 0.010 min
Lab File: AO308.D
Acq: 9 Dec 2009 8:20 pm

Tgt Ion: 41 Resp: 7043

Ion	Ratio	Lower	Upper
41	100		
40	62.8	19.5	79.5
39	3.5	0.0	49.8

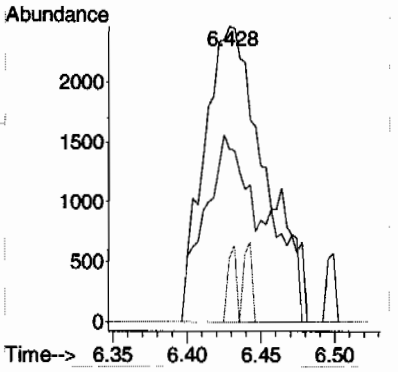

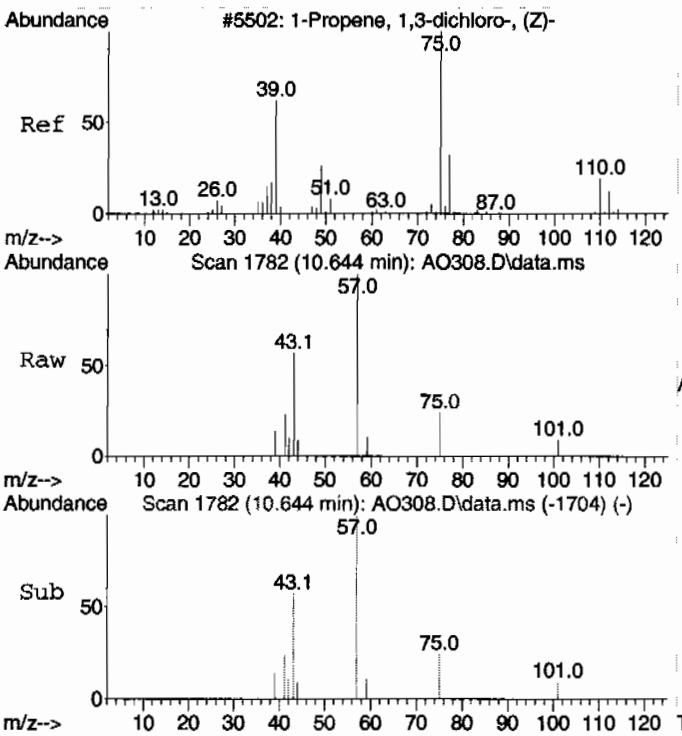

#40 BEFORE analyst DELETION
cis-1,3-Dichloropropylene
Concen: 0.29 ug/L
RT: 10.644 min Scan# 1782
Delta R.T. -0.025 min
Lab File: AO308.D
Acq: 9 Dec 2009 8:20 pm

Tgt Ion: 75 Resp: 2527

Ion	Ratio	Lower	Upper
75	100		
39	52.2	14.7	74.7
77	0.0	1.8	61.8#

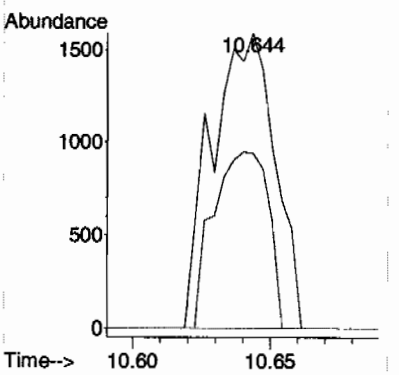

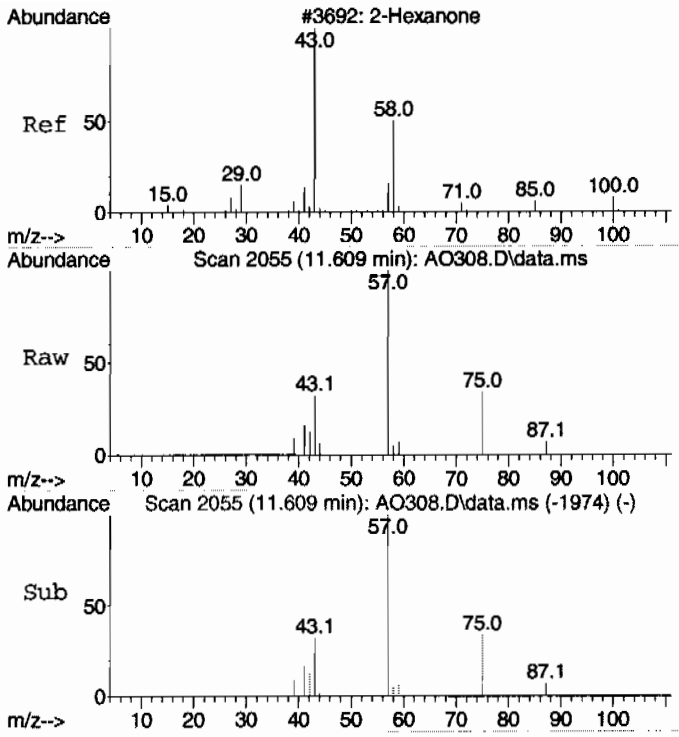

#47 BEFORE analyst DELETION
2-Hexanone
Concen: 7.27 ug/L
RT: 11.609 min Scan# 2055
Delta R.T. -0.014 min
Lab File: AO308.D
Acq: 9 Dec 2009 8:20 pm

Tgt Ion: 43 Resp: 6884

Ion	Ratio	Lower	Upper
43	100		
58	7.0	32.7	92.7#
57	299.1	0.0	50.9#
100	0.0	0.0	42.6

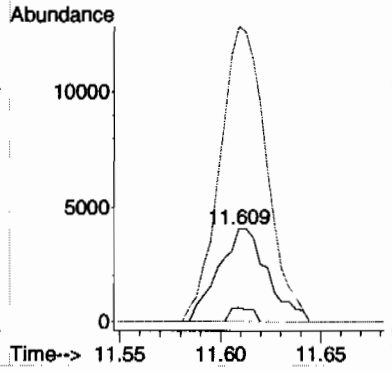

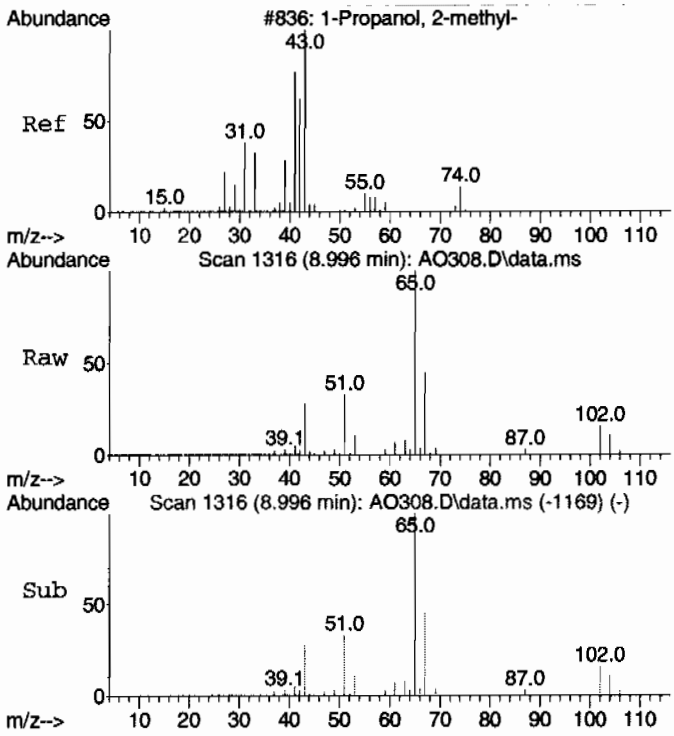

#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 40.44 ug/L
RT: 8.996 min Scan# 1316
Delta R.T. 0.219 min
Lab File: AO308.D
Acq: 9 Dec 2009 8:20 pm

Tgt Ion: 41 Resp: 8788

Ion	Ratio	Lower	Upper
41	100		
43	604.8	115.9	175.9#

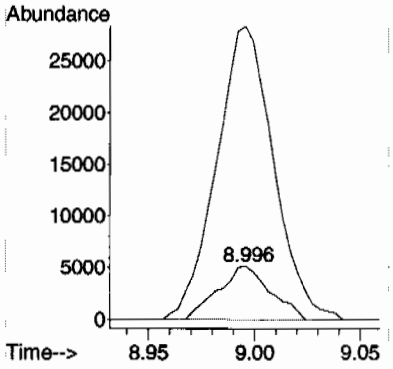

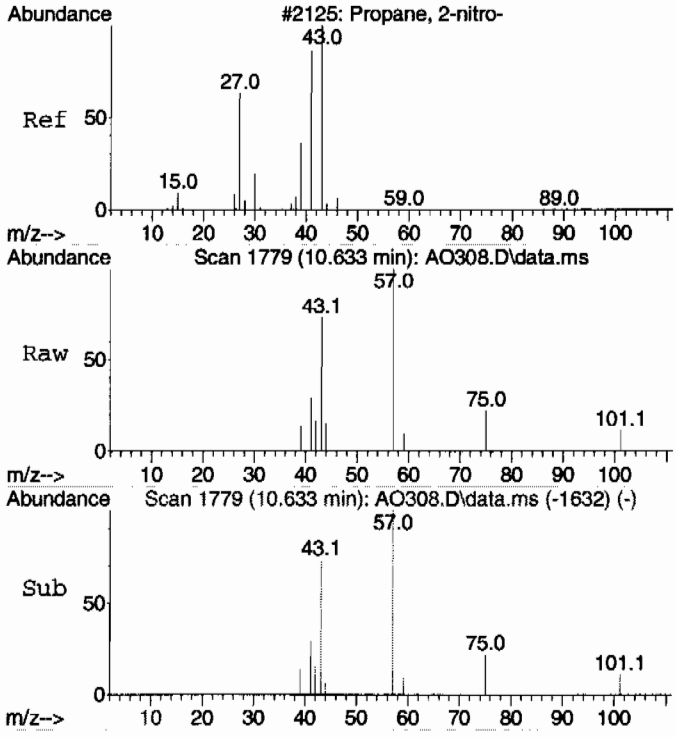

#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 12.42 ug/L
RT: 10.633 min Scan# 1779
Delta R.T. 0.219 min
Lab File: AO308.D
Acq: 9 Dec 2009 8:20 pm

Tgt Ion: 43 Resp: 7256

Ion	Ratio	Lower	Upper
43	100		
41	41.2	52.7	112.7#

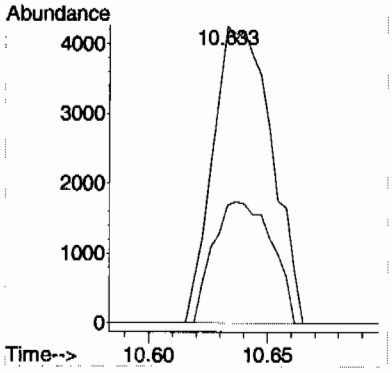

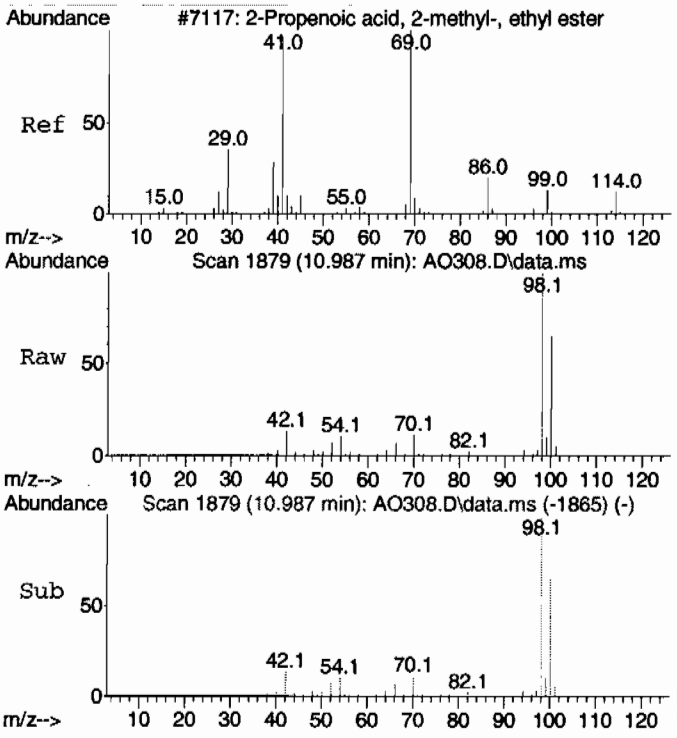

#104 BEFORE analyst DELETION
Ethyl methacrylate
Concen: 1.74 ug/L
RT: 10.987 min Scan# 1879
Delta R.T. -0.251 min
Lab File: AO308.D
Acq: 9 Dec 2009 8:20 pm

Tgt Ion: 69 Resp: 4322

Ion	Ratio	Lower	Upper
69	100		
41	85.4	36.3	96.3
99	2966.9	0.0	50.5#

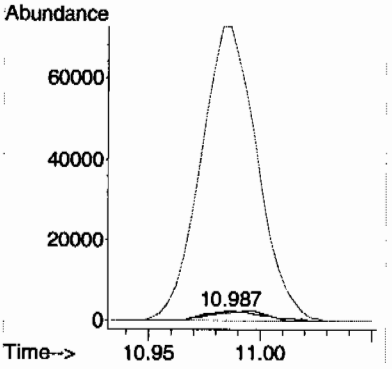

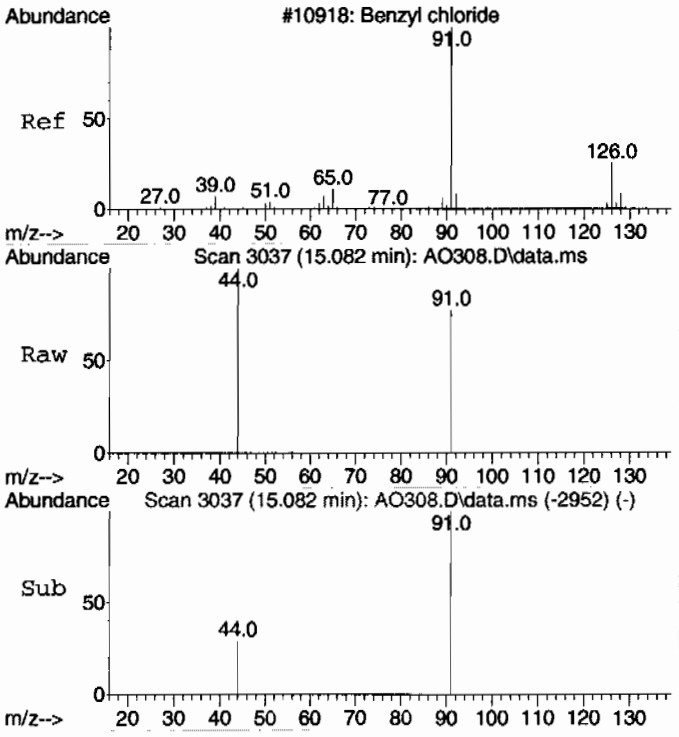

#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 4.43 ug/L
RT: 15.082 min Scan# 3037
Delta R.T. 0.000 min
Lab File: AO308.D
Acq: 9 Dec 2009 8:20 pm

Tgt Ion: 91 Resp: 678

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.0
65	0.0	0.0	41.2

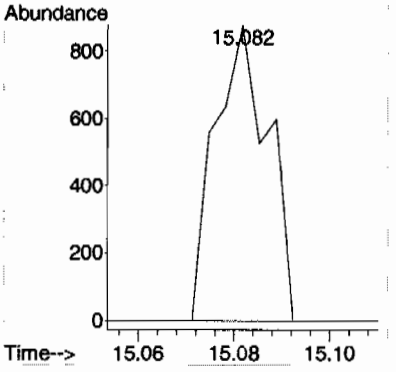

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201991308**				
Client Sample:	**QC for batch 931007**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 931007**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**931007**	**Inst:**	**VOAA.I**	**Dilution:**	**1**
Run Date:	**12/09/2009 17:28**	**Analyst:**	**JEB**	**Purge Vol:**	**5 mL**
Prep Date:	**12/09/2009 17:28**				
Data File:	**120909\AO302LA.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride		0.0509	mg/L	0.0005	0.001
75-35-4	1,1-Dichloroethylene		0.0509	mg/L	0.0003	0.001
78-93-3	2-Butanone		0.218	mg/L	0.00125	0.005
67-66-3	Chloroform		0.054	mg/L	0.00025	0.001
56-23-5	Carbon tetrachloride		0.0664	mg/L	0.0003	0.001
107-06-2	1,2-Dichloroethane		0.055	mg/L	0.00025	0.001
71-43-2	Benzene		0.0459	mg/L	0.0003	0.001
79-01-6	Trichloroethylene		0.0523	mg/L	0.00025	0.001
127-18-4	Tetrachloroethylene		0.0556	mg/L	0.0003	0.001
108-90-7	Chlorobenzene		0.0497	mg/L	0.00025	0.001
106-46-7	1,4-Dichlorobenzene		0.0492	mg/L	0.00025	0.001

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO302LA.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991308|931007|1|VOA|1|VOATCLPL|
Misc : LCS 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.339	96	1307289	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	117	1082198	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	152	661353	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	96	1307289	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	117	1082198	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	152	661353	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	8.978	65	527738	58.11	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 116.22%			
43) Toluene-d8	10.987	98	1318281	47.98	ug/L	0.00
Spiked Amount 50.000	Range 76 - 129		Recovery = 95.96%			
61) Bromofluorobenzene	13.713	95	565018	47.43	ug/L	0.00
Spiked Amount 50.000	Range 71 - 126		Recovery = 94.86%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.731	85	291286	48.09	ug/L	100
3) Chloromethane	4.064	50	262750	43.40	ug/L	99
4) Vinyl chloride	4.285	62	307774	50.94	ug/L	100
5) Bromomethane	4.849	94	259994	45.02	ug/L	95
6) Chloroethane	4.990	64	161420	41.69	ug/L	100
7) Trichlorofluoromethane	5.396	101	693983	59.31	ug/L	100
8) Ethyl ether	5.732	59	265198	46.74	ug/L	92
9) Acetone	6.078	43	1189371	224.50	ug/L	85
10) 1,1-Dichloroethylene	6.078	61	539841	50.85	ug/L	91
11) Iodomethane	6.301	142	2923106	264.41	ug/L	88
12) Acetonitrile	6.418	41	991461	1065.85	ug/L	96
13) Methyl acetate	6.478	43	1196199	207.56	ug/L	94
14) Carbon disulfide	6.428	76	4583248	242.58	ug/L	100
15) Methylene chloride	6.648	84	304608	46.44	ug/L	86
16) tert-Butyl methyl ether	6.973	73	918729	53.31	ug/L	98
17) trans-1,2-Dichloroethy...	6.994	61	520372	49.01	ug/L	90
18) Vinyl acetate	7.450	43	3446288	306.22	ug/L	95
19) 1,1-Dichloroethane	7.472	63	596132	47.08	ug/L	99
20) 2-Butanone	8.062	43	1294431	217.97	ug/L	89
21) cis-1,2-Dichloroethylene	8.105	61	603083	50.62	ug/L	89
22) 2,2-Dichloropropane	8.140	77	617074	64.32	ug/L	94
23) Bromochloromethane	8.373	128	183698	52.68	ug/L	99
24) Chloroform	8.419	83	667351	53.98	ug/L	99
25) 1,1,1-Trichloroethane	8.695	97	710182	62.54	ug/L	99
26) Cyclohexane	8.791	56	652463	51.22	ug/L	94
27) 1,1-Dichloropropene	8.851	75	480556	54.92	ug/L	87
28) Carbon tetrachloride	8.886	117	701362	66.43	ug/L	100
30) 1,2-Dichloroethane	9.063	62	605991	54.97	ug/L	100
31) Benzene	9.084	78	1131606	45.88	ug/L	92
32) Cyclohexene	9.204	67	594467	50.18	ug/L	89
33) n-Butyl alcohol	9.463	56	1112680	5193.93	ug/L	88
34) Trichloroethylene	9.728	95	366193	52.31	ug/L	97
35) 1,2-Dichloropropane	9.965	63	311469	45.30	ug/L	99
36) Methylcyclohexane	9.982	83	557028	52.78	ug/L	90
37) Dibromomethane	10.092	93	219856	52.27	ug/L	95
38) Bromodichloromethane	10.212	83	501615	60.67	ug/L	99
39) 2-Chloroethylvinyl ether	10.453	63	893393	223.72	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO302LA.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991308|931007|1|VOA|1|VOATCLPL|
Misc : LCS 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
40) cis-1,3-Dichloropropylene	10.668	75	516548	56.88 ug/L	88	
42) 4-Methyl-2-pentanone	10.775	58	739346	219.42 ug/L #	82	
44) Toluene	11.057	91	1346845	47.05 ug/L	99	
45) trans-1,3-Dichloroprop...	11.213	75	528053	59.55 ug/L	94	
46) 1,1,2-Trichloroethane	11.425	83	215913	46.33 ug/L	97	
47) 2-Hexanone	11.623	43	1820132	182.23 ug/L	91	
48) 1,3-Dichloropropane	11.616	76	462803	46.15 ug/L	87	
49) Tetrachloroethylene	11.652	164	334090	55.61 ug/L	95	
50) Dibromochloromethane	11.881	129	408504	55.32 ug/L	100	E
51) 1,2-Dibromoethane	12.044	107	305425	53.30 ug/L	100	
52) Chlorobenzene	12.539	112	975702	49.74 ug/L	97	
53) 1,1,1,2-Tetrachloroethane	12.599	131	420744	59.48 ug/L	96	
54) Ethylbenzene	12.617	91	1690413	52.00 ug/L	97	
55) m,p-Xylenes	12.730	106	1238439	103.36 ug/L	88	
56) o-Xylene	13.162	106	609960	52.57 ug/L	87	
57) Styrene	13.162	104	960944	48.86 ug/L	86	
59) Bromoform	13.402	173	281447	50.80 ug/L	100	
60) Isopropylbenzene	13.529	105	1753676	54.30 ug/L	96	
62) 1,1,2,2-Tetrachloroethane	13.795	83	353787	43.77 ug/L	100	
63) 1,2,3-Trichloropropane	13.879	110	126870	53.34 ug/L	85	
64) Bromobenzene	13.918	156	454695	51.13 ug/L	98	
65) n-Propylbenzene	13.957	91	2040368	49.68 ug/L	98	
66) 1,3,5-Trimethylbenzene	14.116	105	1500209	54.10 ug/L	94	
67) 2-Chlorotoluene	14.095	126	417234	50.41 ug/L	86	
68) 4-Chlorotoluene	14.198	91	1268715	50.42 ug/L	94	
69) tert-Butylbenzene	14.488	134	333582	56.29 ug/L #	83	
70) 1,2,4-Trimethylbenzene	14.530	105	1522584	54.20 ug/L	95	
71) sec-Butylbenzene	14.718	105	1923591	53.16 ug/L	99	
72) 4-Isopropyltoluene	14.845	119	1689607	50.58 ug/L	96	
73) 1,3-Dichlorobenzene	14.884	146	833545	50.05 ug/L	98	
74) 1,4-Dichlorobenzene	14.969	146	854231	49.20 ug/L	98	
75) n-Butylbenzene	15.276	91	1566331	53.41 ug/L	99	
76) 1,2-Dichlorobenzene	15.379	146	815724	50.70 ug/L	98	
77) 1,2-Dibromo-3-chloropr...	16.196	157	93859	51.59 ug/L	93	
78) 1,2,4-Trichlorobenzene	17.183	180	728846	57.49 ug/L	99	
79) Hexachlorobutadiene	17.367	225	492303	64.20 ug/L	100	
80) Naphthalene	17.530	128	1573994	55.66 ug/L	100	
81) 1,2,3-Trichlorobenzene	17.847	180	687253	56.74 ug/L	99	
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	5.866		0m	N.D. d		
86) Trichlorotrifluoroethane	6.078		0m	N.D. d		
87) Isopropyl Alcohol	6.428		0m	N.D. d		
88) Allyl chloride	6.418		0m	N.D. d		
89) tert-Butyl Alcohol	6.478		0m	N.D. d		
90) Acrylonitrile	6.966		0m	N.D. d		
91) Isopropyl ether	7.450		0m	N.D. d		
92) 2-Chloro-1,3-butadiene	7.613		0m	N.D. d		
93) Ethyl tert-butyl ether	8.105		0m	N.D. d		
94) Ethyl acetate	8.062		0m	N.D. d		
95) Propionitrile	8.062		0m	N.D. d		
96) Methacrylonitrile	8.136		0m	N.D. d		
97) Tetrahydrofuran	8.430		0m	N.D. d		
98) Isobutyl alcohol	8.787		0m	N.D. d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0302LA.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991308|931007|1|VOA|1|VOATCLPL|
Misc : LCS 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
99) Methyl tert-amyl ether	9.088		0m	N.D. d	
100) Methyl methacrylate	9.979		0m	N.D. d	
101) 1,4-Dioxane	0.000		0	N.D.	
102) 2-Nitropropane	10.453		0m	N.D. d	
104) Ethyl methacrylate	11.248		0m	N.D. d	
106) 1-Chlorohexane	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.529		0m	N.D. d	
108) Cyclohexanone	13.529		0m	N.D. d	
109) trans-1,4-Dichloro-2-b...	13.957		0m	N.D. d	
110) Pentachloroethane	14.541		0m	N.D. d	
111) Benzyl chloride	15.276		0m	N.D. d	
112) bis(2-Chloroisopropyl)...	15.605		0m	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO302LA.D
Acq On : 9 Dec 2009 5:28 pm
Operator : JEB
InstName : VOAA
Sample : |1201991308|931007|1|VOA|1|VOATCLPL|
Misc : LCS 5ML MIX[A]1129-01C/091209-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 09 21:10:08 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

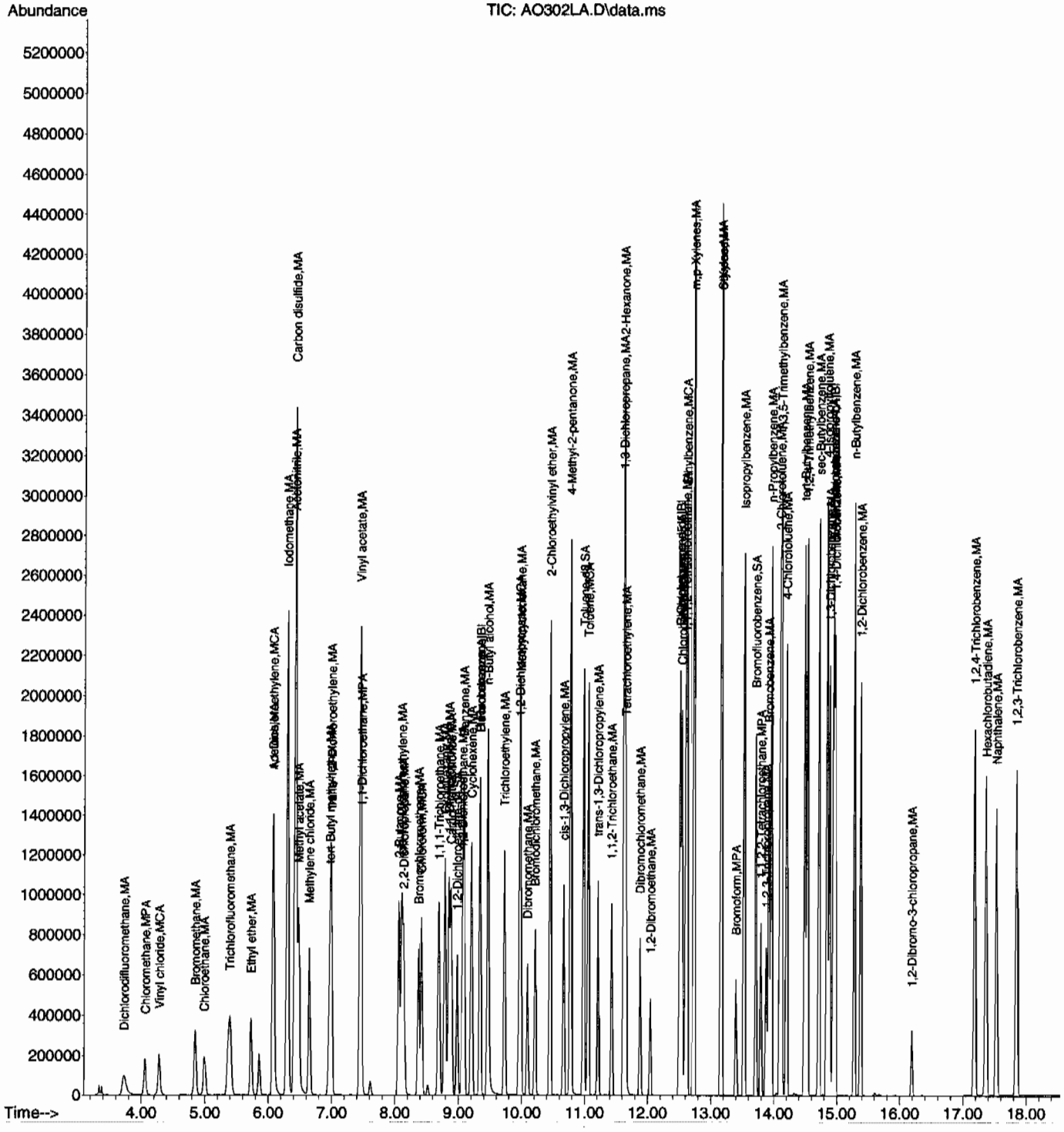

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**1201991306**	**Date Received:**	**11/25/2009 09:10**		
Client Sample:	**QC for batch 931007**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**WST03-10-2134PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**931007**	**Inst:**	**VOAA.I**	**Dilution:**	**10**
Run Date:	**12/09/2009 21:11**	**Analyst:**	**JEB**	**Purge Vol:**	**5 mL**
Prep Date:	**12/09/2009 21:11**				
Data File:	**120909\AO310.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride		0.439	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene		0.434	mg/L	0.003	0.010
78-93-3	2-Butanone		1.21	mg/L	0.0125	0.050
67-66-3	Chloroform		0.485	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride		0.554	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane		0.505	mg/L	0.0025	0.010
71-43-2	Benzene		0.402	mg/L	0.003	0.010
79-01-6	Trichloroethylene		0.448	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene		0.449	mg/L	0.003	0.010
108-90-7	Chlorobenzene		0.432	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene		0.408	mg/L	0.0025	0.010

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0310.D
Acq On : 9 Dec 2009 9:11 pm
Operator : JEB
InstName : VOAA
Sample : |1201991306|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 10 14:23:32 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.339	96	1252394	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	117	1042768	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	152	649269	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	96	1252394	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	117	1042768	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	152	649269	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	8.978	65	512581	58.91	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 117.82%			
43) Toluene-d8	10.987	98	1289375	48.70	ug/L	0.00
Spiked Amount 50.000	Range 76 - 129		Recovery = 97.40%			
61) Bromofluorobenzene	13.713	95	560669	47.94	ug/L	0.00
Spiked Amount 50.000	Range 71 - 126		Recovery = 95.88%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.721	85	215624	37.16	ug/L	100
3) Chloromethane	4.053	50	219717	37.88	ug/L	99
4) Vinyl chloride	4.285	62	254190	43.92	ug/L	100
5) Bromomethane	4.849	94	225025	40.67	ug/L	95
6) Chloroethane	4.990	64	134027	36.13	ug/L	99
7) Trichlorofluoromethane	5.392	101	564262	50.34	ug/L	99
8) Ethyl ether	5.728	59	233868	43.02	ug/L	91
9) Acetone	6.078	43	457291	90.10	ug/L	85
10) 1,1-Dichloroethylene	6.078	61	441272	43.39	ug/L	91
11) Iodomethane	6.301	142	2494914	235.57	ug/L	87
12) Acetonitrile	6.418	41	879900	987.38	ug/L	95
13) Methyl acetate	6.478	43	1069534	193.72	ug/L	93
14) Carbon disulfide	6.425	76	3788054	209.28	ug/L	100
15) Methylene chloride	6.648	84	268055	42.52	ug/L	85
16) tert-Butyl methyl ether	6.969	73	810344	49.08	ug/L	99
17) trans-1,2-Dichloroethy...	6.991	61	436979	42.96	ug/L	89
18) Vinyl acetate	7.447	43	3046727	282.58	ug/L	94
19) 1,1-Dichloroethane	7.472	63	513183	42.31	ug/L	99
20) 2-Butanone	8.062	43	688681	121.05	ug/L	89
21) cis-1,2-Dichloroethylene	8.105	61	515099	45.13	ug/L	89
22) 2,2-Dichloropropane	8.136	77	494712	53.82	ug/L	92
23) Bromochloromethane	8.370	128	160254	47.97	ug/L	99
24) Chloroform	8.419	83	574762	48.53	ug/L	99
25) 1,1,1-Trichloroethane	8.692	97	580431	53.35	ug/L	99
26) Cyclohexane	8.791	56	519949	42.60	ug/L	94
27) 1,1-Dichloropropene	8.851	75	387221	46.19	ug/L	87
28) Carbon tetrachloride	8.886	117	560326	55.40	ug/L	99
30) 1,2-Dichloroethane	9.059	62	533779	50.54	ug/L	100
31) Benzene	9.084	78	950512	40.22	ug/L	92
32) Cyclohexene	9.204	67	480219	42.31	ug/L	87
33) n-Butyl alcohol	9.463	56	943857	4610.00	ug/L	88
34) Trichloroethylene	9.731	95	300512	44.81	ug/L	96
35) 1,2-Dichloropropane	9.968	63	268999	40.84	ug/L	100
36) Methylcyclohexane	9.982	83	439295	43.45	ug/L	90
37) Dibromomethane	10.092	93	192171	47.69	ug/L	95
38) Bromodichloromethane	10.216	83	433983	54.79	ug/L	99
39) 2-Chloroethylvinyl ether	10.453	63	874060	228.43	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO310.D
Acq On : 9 Dec 2009 9:11 pm
Operator : JEB
InstName : VOAA
Sample : |1201991306|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 10 14:23:32 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) cis-1,3-Dichloropropylene	10.668	75	438856	50.44 ug/L	88
42) 4-Methyl-2-pentanone	10.775	58	606891	186.89 ug/L #	82
44) Toluene	11.057	91	1113227	40.36 ug/L	99
45) trans-1,3-Dichloroprop...	11.213	75	442827	51.83 ug/L	93
46) 1,1,2-Trichloroethane	11.425	83	188790	42.04 ug/L	97
47) 2-Hexanone	11.623	43	1073915	114.14 ug/L	91
48) 1,3-Dichloropropane	11.620	76	410020	42.43 ug/L	97
49) Tetrachloroethylene	11.655	164	259821	44.88 ug/L	94
50) Dibromochloromethane	11.881	129	351569	49.51 ug/L	99
51) 1,2-Dibromoethane	12.044	107	265567	48.10 ug/L	100
52) Chlorobenzene	12.539	112	816878	43.22 ug/L	96
53) 1,1,1,2-Tetrachloroethane	12.596	131	362663	53.21 ug/L	96
54) Ethylbenzene	12.617	91	1376532	43.94 ug/L	97
55) m,p-Xylenes	12.730	106	1008930	87.39 ug/L	88
56) o-Xylene	13.162	106	504669	45.14 ug/L	86
57) Styrene	13.162	104	805924	42.66 ug/L	87
59) Bromoform	13.402	173	242023	44.75 ug/L	99
60) Isopropylbenzene	13.529	105	1402530	44.23 ug/L	97
62) 1,1,2,2-Tetrachloroethane	13.795	83	313624	39.52 ug/L	100
63) 1,2,3-Trichloropropane	13.876	110	110065	47.14 ug/L	88
64) Bromobenzene	13.918	156	386405	44.26 ug/L	99
65) n-Propylbenzene	13.957	91	1611359	39.96 ug/L	98
66) 1,3,5-Trimethylbenzene	14.116	105	1209812	44.44 ug/L	94
67) 2-Chlorotoluene	14.095	126	341423	42.02 ug/L	86
68) 4-Chlorotoluene	14.198	91	1025359	41.51 ug/L	93
69) tert-Butylbenzene	14.488	134	268909	46.22 ug/L #	84
70) 1,2,4-Trimethylbenzene	14.530	105	1221925	44.31 ug/L	95
71) sec-Butylbenzene	14.718	105	1513497	42.61 ug/L	99
72) 4-Isopropyltoluene	14.841	119	1304749	39.96 ug/L	96
73) 1,3-Dichlorobenzene	14.884	146	680196	41.61 ug/L	98
74) 1,4-Dichlorobenzene	14.969	146	696194	40.84 ug/L	98
75) n-Butylbenzene	15.276	91	1154111	40.08 ug/L	99
76) 1,2-Dichlorobenzene	15.379	146	688817	43.61 ug/L	98
77) 1,2-Dibromo-3-chloropr...	16.192	157	81380	45.80 ug/L	93
78) 1,2,4-Trichlorobenzene	17.183	180	550329	44.22 ug/L	99
79) Hexachlorobutadiene	17.360	225	348672	46.32 ug/L	99
80) Naphthalene	17.529	128	1353773	48.77 ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	180	559396	47.04 ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	6.418		0m	N.D. d	
88) Allyl chloride	6.418		0m	N.D. d	
89) tert-Butyl Alcohol	6.481		0m	N.D. d	
90) Acrylonitrile	6.973		0m	N.D. d	
91) Isopropyl ether	7.450		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	8.101		0m	N.D. d	
94) Ethyl acetate	8.062		0m	N.D. d	
95) Propionitrile	8.062		0m	N.D. d	
96) Methacrylonitrile	8.136		0m	N.D. d	
97) Tetrahydrofuran	8.419		0m	N.D. d	
98) Isobutyl alcohol	8.787		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0310.D
Acq On : 9 Dec 2009 9:11 pm
Operator : JEB
InstName : VOAA
Sample : |1201991306|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 10 14:23:32 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Methyl tert-amyl ether	9.084		0m	N.D.	d	
100)	Methyl methacrylate	9.982		0m	N.D.	d	
101)	1,4-Dioxane	0.000		0	N.D.		
102)	2-Nitropropane	10.640		0m	N.D.	d	
104)	Ethyl methacrylate	10.990		0m	N.D.	d	
106)	1-Chlorohexane	0.000		0	N.D.		
107)	cis-1,4-Dichloro-2-butene	13.529		0m	N.D.	d	
108)	Cyclohexanone	13.529		0m	N.D.	d	
109)	trans-1,4-Dichloro-2-b...	13.957		0m	N.D.	d	
110)	Pentachloroethane	14.541		0m	N.D.	d	
111)	Benzyl chloride	15.078		0m	N.D.	d	
112)	bis(2-Chloroisopropyl)...	15.609		0m	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO310.D
Acq On : 9 Dec 2009 9:11 pm
Operator : JEB
InstName : VOAA
Sample : |1201991306|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 10 14:23:32 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

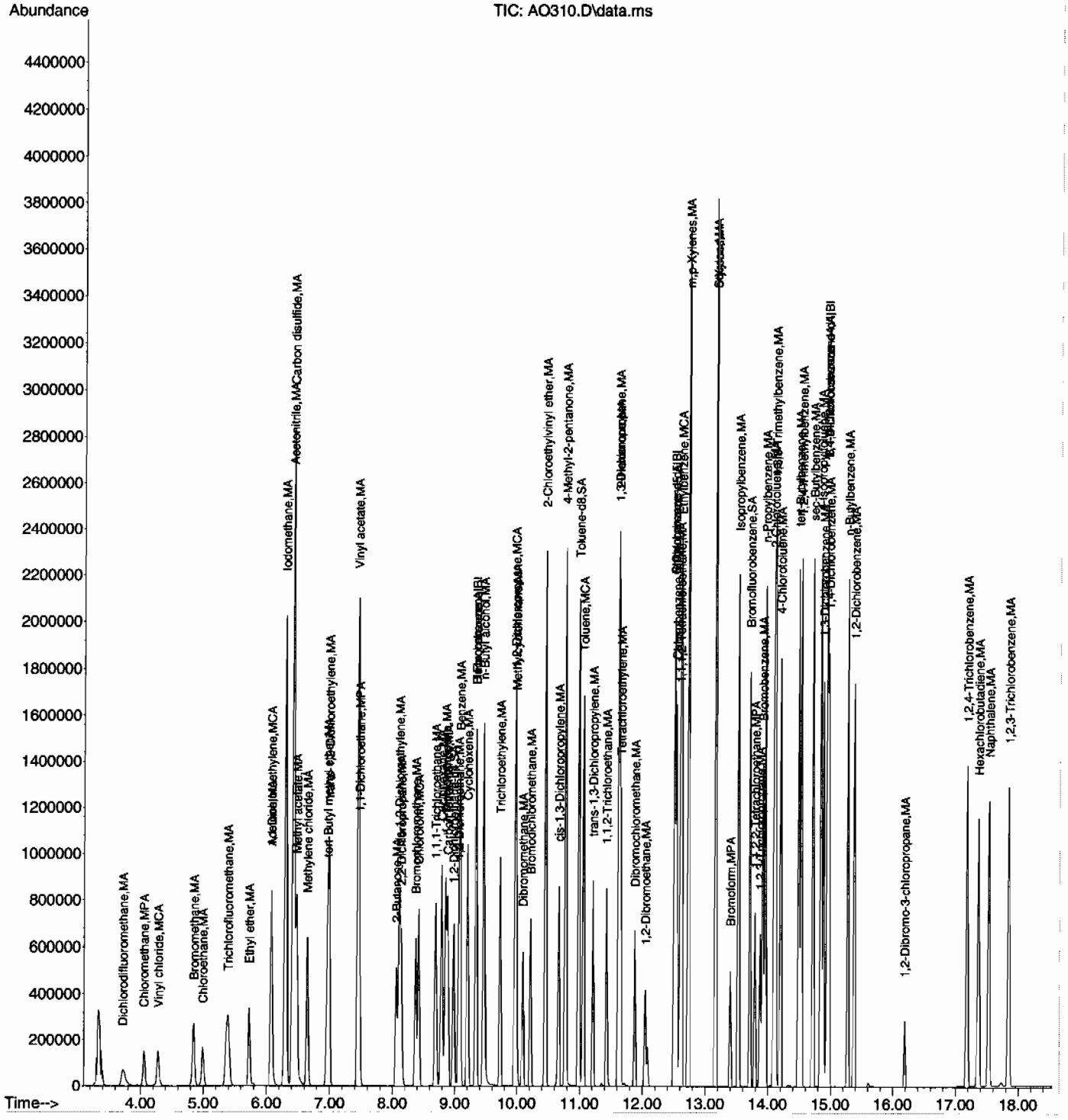

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**1201991307**	**Date Received:**	**11/25/2009 09:10**		
Client Sample:	**QC for batch 931007**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**WST03-10-2134PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**931007**	**Inst:**	**VOAA.I**	**Dilution:**	**10**
Run Date:	**12/09/2009 21:37**	**Analyst:**	**JEB**	**Purge Vol:**	**5 mL**
Prep Date:	**12/09/2009 21:37**				
Data File:	**120909\AO311.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-01-4	Vinyl chloride		0.438	mg/L	0.005	0.010
75-35-4	1,1-Dichloroethylene		0.424	mg/L	0.003	0.010
78-93-3	2-Butanone		1.14	mg/L	0.0125	0.050
67-66-3	Chloroform		0.473	mg/L	0.0025	0.010
56-23-5	Carbon tetrachloride		0.534	mg/L	0.003	0.010
107-06-2	1,2-Dichloroethane		0.488	mg/L	0.0025	0.010
71-43-2	Benzene		0.394	mg/L	0.003	0.010
79-01-6	Trichloroethylene		0.427	mg/L	0.0025	0.010
127-18-4	Tetrachloroethylene		0.407	mg/L	0.003	0.010
108-90-7	Chlorobenzene		0.392	mg/L	0.0025	0.010
106-46-7	1,4-Dichlorobenzene		0.341	mg/L	0.0025	0.010

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO311.D
Acq On : 9 Dec 2009 9:37 pm
Operator : JEB
InstName : VOAA
Sample : |1201991307|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MSD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 10 14:23:34 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.342	96	1303774	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	117	1075043	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	152	660305	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	96	1303774	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	117	1075043	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	152	660305	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	8.982	65	518635	57.26	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 114.52%			
43) Toluene-d8	10.983	98	1324450	48.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 129		Recovery = 97.06%			
61) Bromofluorobenzene	13.713	95	565918	47.58	ug/L	0.00
Spiked Amount 50.000	Range 71 - 126		Recovery = 95.16%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.741	85	215385	35.65	ug/L	100
3) Chloromethane	4.064	50	227543	37.68	ug/L	100
4) Vinyl chloride	4.295	62	264124	43.83	ug/L	100
5) Bromomethane	4.849	94	229218	39.79	ug/L	95
6) Chloroethane	4.990	64	149058	38.60	ug/L	98
7) Trichlorofluoromethane	5.399	101	570898	48.93	ug/L	100
8) Ethyl ether	5.735	59	237799	42.02	ug/L	93
9) Acetone	6.082	43	450223	85.21	ug/L	86
10) 1,1-Dichloroethylene	6.082	61	448653	42.38	ug/L	91
11) Iodomethane	6.308	142	2578887	233.90	ug/L	88
12) Acetonitrile	6.421	41	868605	936.29	ug/L	96
13) Methyl acetate	6.481	43	1058457	184.16	ug/L	94
14) Carbon disulfide	6.432	76	3824016	202.94	ug/L	100
15) Methylene chloride	6.651	84	273902	41.70	ug/L	86
16) tert-Butyl methyl ether	6.973	73	831722	48.39	ug/L	98
17) trans-1,2-Dichloroethy...	6.998	61	437306	41.30	ug/L	91
18) Vinyl acetate	7.450	43	3073367	273.82	ug/L	95
19) 1,1-Dichloroethane	7.475	63	522793	41.40	ug/L	99
20) 2-Butanone	8.062	43	677537	114.40	ug/L	90
21) cis-1,2-Dichloroethylene	8.108	61	522988	44.01	ug/L	89
22) 2,2-Dichloropropane	8.140	77	500386	52.30	ug/L	94
23) Bromochloromethane	8.377	128	165183	47.50	ug/L	98
24) Chloroform	8.423	83	583583	47.33	ug/L	99
25) 1,1,1-Trichloroethane	8.695	97	588723	51.98	ug/L	99
26) Cyclohexane	8.791	56	526697	41.46	ug/L	94
27) 1,1-Dichloropropene	8.854	75	388366	44.50	ug/L	87
28) Carbon tetrachloride	8.886	117	562446	53.41	ug/L	99
30) 1,2-Dichloroethane	9.063	62	536731	48.82	ug/L	100
31) Benzene	9.088	78	968233	39.36	ug/L	93
32) Cyclohexene	9.204	67	479651	40.60	ug/L	89
33) n-Butyl alcohol	9.463	56	945187	4438.22	ug/L	88
34) Trichloroethylene	9.731	95	298008	42.68	ug/L	96
35) 1,2-Dichloropropane	9.965	63	273381	39.87	ug/L	99
36) Methylcyclohexane	9.982	83	436081	41.43	ug/L	90
37) Dibromomethane	10.092	93	192802	45.96	ug/L	96
38) Bromodichloromethane	10.216	83	437754	53.09	ug/L	99
39) 2-Chloroethylvinyl ether	10.453	63	831720	208.97	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0311.D
Acq On : 9 Dec 2009 9:37 pm
Operator : JEB
InstName : VOAA
Sample : |1201991307|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MSD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 10 14:23:34 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) cis-1,3-Dichloropropylene	10.668	75	438318	48.40 ug/L	89
42) 4-Methyl-2-pentanone	10.775	58	591875	176.79 ug/L #	83
44) Toluene	11.057	91	1067358	37.54 ug/L	100
45) trans-1,3-Dichloroprop...	11.213	75	438813	49.81 ug/L	94
46) 1,1,2-Trichloroethane	11.425	83	188433	40.70 ug/L	97
47) 2-Hexanone	11.623	43	1031844	106.82 ug/L	92
48) 1,3-Dichloropropane	11.616	76	407955	40.95 ug/L	95
49) Tetrachloroethylene	11.652	164	242964	40.71 ug/L	94
50) Dibromochloromethane	11.881	129	347855	47.56 ug/L	99
51) 1,2-Dibromoethane	12.044	107	262882	46.18 ug/L	100
52) Chlorobenzene	12.539	112	763795	39.20 ug/L	96
53) 1,1,1,2-Tetrachloroethane	12.596	131	350596	49.89 ug/L	97
54) Ethylbenzene	12.617	91	1243353	38.50 ug/L	97
55) m,p-Xylenes	12.730	106	899751	75.59 ug/L	88
56) o-Xylene	13.162	106	460128	39.92 ug/L	87
57) Styrene	13.162	104	734738	37.85 ug/L	87
59) Bromoform	13.402	173	235876	42.98 ug/L	100
60) Isopropylbenzene	13.529	105	1210347	37.53 ug/L	97
62) 1,1,2,2-Tetrachloroethane	13.795	83	303111	37.56 ug/L	100
63) 1,2,3-Trichloropropane	13.876	110	107222	45.15 ug/L	88
64) Bromobenzene	13.918	156	354009	39.87 ug/L	98
65) n-Propylbenzene	13.957	91	1311956	31.99 ug/L	99
66) 1,3,5-Trimethylbenzene	14.116	105	994820	35.93 ug/L	94
67) 2-Chlorotoluene	14.095	126	294328	35.62 ug/L	87
68) 4-Chlorotoluene	14.198	91	868449	34.57 ug/L	93
69) tert-Butylbenzene	14.491	134	220409	37.25 ug/L #	85
70) 1,2,4-Trimethylbenzene	14.530	105	1008080	35.94 ug/L	94
71) sec-Butylbenzene	14.718	105	1175256	32.53 ug/L	99
72) 4-Isopropyltoluene	14.841	119	980244	29.73 ug/L	96
73) 1,3-Dichlorobenzene	14.884	146	579585	34.86 ug/L	98
74) 1,4-Dichlorobenzene	14.969	146	591006	34.09 ug/L	98
75) n-Butylbenzene	15.276	91	807062	27.56 ug/L	98
76) 1,2-Dichlorobenzene	15.379	146	603921	37.59 ug/L	98
77) 1,2-Dibromo-3-chloropr...	16.192	157	77762	43.15 ug/L	93
78) 1,2,4-Trichlorobenzene	17.183	180	440096	34.77 ug/L	100
79) Hexachlorobutadiene	17.360	225	205612	26.86 ug/L	100
80) Naphthalene	17.529	128	1217967	43.14 ug/L	99
81) 1,2,3-Trichlorobenzene	17.847	180	462699	38.26 ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.	
85) Acrolein	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000		0	N.D.	
87) Isopropyl Alcohol	6.078		0m	N.D. d	
88) Allyl chloride	6.421		0m	N.D. d	
89) tert-Butyl Alcohol	6.481		0m	N.D. d	
90) Acrylonitrile	6.973		0m	N.D. d	
91) Isopropyl ether	7.450		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.	
93) Ethyl tert-butyl ether	7.899		0m	N.D. d	
94) Ethyl acetate	8.062		0m	N.D. d	
95) Propionitrile	8.059		0m	N.D. d	
96) Methacrylonitrile	8.140		0m	N.D. d	
97) Tetrahydrofuran	8.426		0m	N.D. d	
98) Isobutyl alcohol	8.791		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : A0311.D
Acq On : 9 Dec 2009 9:37 pm
Operator : JEB
InstName : VOAA
Sample : |1201991307|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MSD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 10 14:23:34 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Methyl tert-amyl ether	9.088		0m	N.D.	d	
100)	Methyl methacrylate	9.982		0m	N.D.	d	
101)	1,4-Dioxane	0.000		0	N.D.		
102)	2-Nitropropane	10.640		0m	N.D.	d	
104)	Ethyl methacrylate	10.994		0m	N.D.	d	
106)	1-Chlorohexane	0.000		0	N.D.		
107)	cis-1,4-Dichloro-2-butene	13.526		0m	N.D.	d	
108)	Cyclohexanone	13.526		0m	N.D.	d	
109)	trans-1,4-Dichloro-2-b...	13.954		0m	N.D.	d	
110)	Pentachloroethane	14.537		0m	N.D.	d	
111)	Benzyl chloride	15.085		0m	N.D.	d	
112)	bis(2-Chloroisopropyl)...	15.605		0m	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\120909\
Data File : AO311.D
Acq On : 9 Dec 2009 9:37 pm
Operator : JEB
InstName : VOAA
Sample : |1201991307|931007|10|VOA|1|VOATCLPL|
Misc : LANL 500UL N/A MIX[A] 241839001MSD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 10 14:23:34 2009
Quant Method : C:\msdchem\1\METHODS\VOAA-8260-110609.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Nov 09 16:21:09 2009
Response via : Initial Calibration
Integrator: RTE

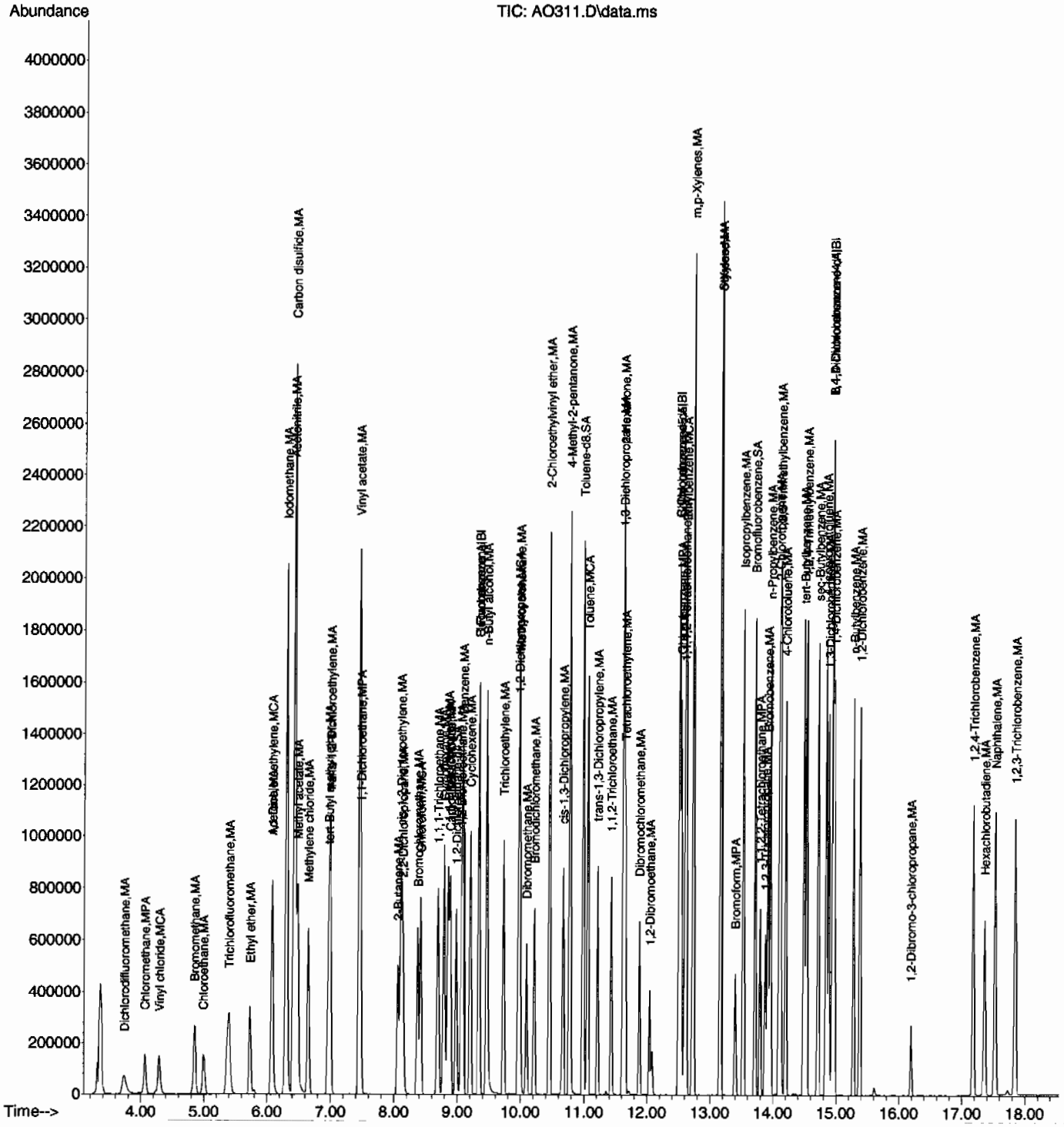

Miscellaneous

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930034 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #104

Sample ID	1201988991 TB	241839001
Analysis Start Date	07-DEC-2009 15:00:03	07-DEC-2009 15:00:03
100% Solid Y/N		y
(I) Sub Sample Aliquot I=G-H (g)		25
Initial pH (su)	4.93	
Final pH (su)	4.93	
Tumbler Speed	28	28
Sample Properties <>/= Water	tclp#1	Solid
(J) 20X Wet Solid Weight 20XC (g)	500	500
Filtrate Volume (mL)	40	40
VOA Positive Pressure Y/N	y	y
ZHE Vessle ID	21	24

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1018062ZHE	500	mL

Comments:

Extration End Date: 08-DEC-09 08:00:24
Filtration End Date: 08-DEC-09 13:58:24
Bottle Lot Number: B-9-195-01VB
Filter Lot Number: 521112
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOAA

Date: 11/6/2009 Method 8260B/624 Operator: JEB

REVIEWED BY: ____
DATE: ____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1235

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/6/2009

(See pg. 64 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: 110609VA

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	N/A		5+5		
IS	UVM091020-01	1	1	1	
SS	UVM091020-02	1	1	1	
LCS/MS	N/A			5+5	
BFB	UVM091020-02				1
SHORT	N/A		5+5	5+5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
N/A	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
6 Nov 2009 11:39	AJ501.D	UVM091020-02	GEL	BFB	5ML	1	N/A	1	W	JEB	N/A	O	
6 Nov 2009 12:03	AJ502.D	BLANK	GEEL	BLK	5ML	1	N/A	2	w	JEB	N/A	O	
6 Nov 2009 12:30	AJ503.D	WAVM091106-01	GEEL	0.5 PPB	5ML	1	N/A	3	w	JEB	N/A	O	UVM090911-01B/UVM091012-01C
6 Nov 2009 12:55	AJ504.D	WAVM091106-02	GEEL	1.0 PPB	5ML	1	N/A	4	w	JEB	N/A	X	UVM090911-02B/UVM091012-02C
6 Nov 2009 13:21	AJ505.D	WAVM091106-03	GEEL	1.0 PPB	5ML	1	N/A	5	w	JEB	N/A	O	UVM090911-02B/UVM091012-02C
6 Nov 2009 13:47	AJ506.D	WAVM091106-04	GEEL	2.0 PPB	5ML	1	N/A	6	w	JEB	N/A	O	UVM090911-03B/UVM091012-03C
6 Nov 2009 14:13	AJ507.D	WAVM091106-05	GEEL	5.0 PPB	5ML	1	N/A	7	w	JEB	N/A	O	UVM090911-04B/UVM091012-04C
6 Nov 2009 14:39	AJ508.D	WAVM091106-06	GEEL	10.0 PPB	5ML	1	N/A	8	w	JEB	N/A	O	UVM090911-05B/UVM091012-05C
6 Nov 2009 15:05	AJ509.D	WAVM091106-07	GEEL	20.0 PPB	5ML	1	N/A	9	w	JEB	N/A	O	UVM090911-06B/UVM091012-06C
6 Nov 2009 15:31	AJ510.D	WAVM091106-08	GEEL	50.0 PPB	5ML	1	N/A	10	w	JEB	N/A	O	UVM090911-07B/UVM091012-07C
6 Nov 2009 15:57	AJ511.D	WAVM091106-09	GEEL	100.0 PPB	5ML	1	N/A	11	w	JEB	N/A	O	UVM090911-08B/UVM091012-08C
6 Nov 2009 16:23	AJ512.D	BLANK	GEEL	BLK	5ML	1	N/A	12	w	JEB	N/A	O	
6 Nov 2009 16:49	AJ513.D	WAVM091106-10	GEEL	5.0 PPB	5ML	1	N/A	13	w	JEB	N/A	O	UVM091023-01/UVM090921-01E
6 Nov 2009 17:15	AJ514.D	WAVM091106-11	GEEL	10.0 PPB	5ML	1	N/A	14	w	JEB	N/A	O	UVM091023-02/UVM090921-02E
6 Nov 2009 17:41	AJ515.D	WAVM091106-12	GEEL	25.0 PPB	5ML	1	N/A	15	w	JEB	N/A	O	UVM091023-03/UVM090921-03E
6 Nov 2009 18:07	AJ516.D	WAVM091106-13	GEEL	50.0 PPB	5ML	1	N/A	16	w	JEB	N/A	O	UVM091023-04/UVM090921-04E
6 Nov 2009 18:34	AJ517.D	WAVM091106-14	GEEL	100.0 PPB	5ML	1	N/A	17	w	JEB	N/A	O	UVM091023-05/UVM090921-05E
6 Nov 2009 18:59	AJ518.D	WAVM091106-15	GEEL	250.0 PPB	5ML	1	N/A	18	w	JEB	N/A	O	UVM091023-06/UVM090921-06E
6 Nov 2009 19:25	AJ519.D	WAVM091106-16	GEEL	500.0 PPB	5ML	1	N/A	19	w	JEB	N/A	O	UVM091023-07/UVM090921-07E
6 Nov 2009 19:51	AJ520.D	BLANK	GEEL	BLK	5ML	1	N/A	20	w	JEB	N/A	O	
6 Nov 2009 20:17	AJ521.D	WAVM091106-17	GEEL	50.0 PPB	5ML	1	N/A	21	w	JEB	N/A	O	UVM091011-01D/IVM091106-01
6 Nov 2009 20:42	AJ522.D	WAVM091106-18	GEEL	50.0 PPB	5ML	1	N/A	22	w	JEB	N/A	X	UVM090914-01E/IVM091106-01
6 Nov 2009 21:08	AJ523.D	WAVM091106-19	GEEL	250.0 PPB	5ML	1	N/A	23	w	JEB	N/A	O	UVM090925-08B/UVM090914-02E

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOAA

Date: 12/9/2009 Method 8260B/624 Operator: JEB

REVIEWED BY: ____
DATE: ____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1235

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/6/2009

(See pg. 64 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 121009VA

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	WAVM091209-01		5+5		
IS	UVM091117-01	1	1	1	
SS	UVM091020-01	1	1	1	
LCS/MS	WAVM091209-01,02			5+5	
BFB	UVM091021-02				1
SHORT	WAVM091209-03		5	5	
DHEC	N/A			5	

Purge Amount

5	Water Purge Vol:
various	Soil Purge Wt.
various	Mid level ext. MeOH Vol:
various	ul
C7937	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
9 Dec 2009 17:03	AO301.D	UVM091021-02	GEL	BFB	5ML	1	N/A	1	W	JEB	N/A	O	
9 Dec 2009 17:28	AO302.D	WAVM091209-01	GEL	CCV/LCS	5ML	1	N/A	2	W	JEB	N/A	O	UVM091129-01C/IVM091209-01
9 Dec 2009 18:11	AO303.D	WAVM091209-02	GEL	LCS	5.0G	1	N/A	3	s	JEB	N/A	O	UVM091129-01C/IVM091209-01
9 Dec 2009 18:37	AO304.D	WAVM091209-03	GEL	CCV	5ML	1	N/A	4	W	JEB	N/A	O	UVM091118-08B
9 Dec 2009 19:02	AO305.D	WAVM091209-04	GEL	LCS	5.0G	1	N/A	5	s	JEB	N/A	O	UVM091118-08B
9 Dec 2009 19:28	AO306.D	BLANK	GEL	BLANK	5ML	1	N/A	6	W	JEB	N/A	O	
9 Dec 2009 19:54	AO307.D	BLANK	GEL	BLANK	5.0G	1	N/A	7	s	JEB	N/A	O	
9 Dec 2009 20:20	AO308.D	1201988991	GEEL	931007	500UL	10	N/A	8	w	JEB	N/A	O	
9 Dec 2009 20:45	AO309.D	241839001	LANL	931007	500UL	10	N/A	9	w	JEB	N/A	O	
9 Dec 2009 21:11	AO310.D	1201991306	LANL	931007	500UL	10	N/A	10	w	JEB	N/A	O	MIX[A] 241839001MS
9 Dec 2009 21:37	AO311.D	1201991307	LANL	931007	500UL	10	N/A	11	w	JEB	N/A	O	MIX[A] 241839001MSD
9 Dec 2009 22:03	AO312.D	BLANK	GEEL	BLANK	5ML	1	N/A	12	w	JEB	N/A	O	
9 Dec 2009 22:29	AO313.D	1201991297	GEEL	931000	100UL	50	N/A	13	w	JEB	N/A	O	
9 Dec 2009 22:54	AO314.D	242217001	CARE	931000	100UL	1	N/A	14	w	JEB	N/A	O	5G/8ML SOIL
9 Dec 2009 23:20	AO315.D	1201991294	CARE	931000	100UL	1	N/A	15	w	JEB	N/A	O	5G/8MLMIX[A] 242217001MS
9 Dec 2009 23:46	AO316.D	1201991295	CARE	931000	100UL	1	N/A	16	w	JEB	N/A	O	5G/8MLMIX[A] 242217001MSD
12/10/2009 0:12	AO317.D	BLANK	GEEL	BLANK	5ML	1	N/A	17	w	JEB	N/A	O	
12/10/2009 0:38	AO318.D	242190006	LBNL	931178	5ML	1	PH2	18	w	JEB	N/A	O	
12/10/2009 1:04	AO319.D	242056001	LBNL	931178	20UL	250	N/A	19	w	JEB	N/A	O	
12/10/2009 1:30	AO320.D	242190002	LBNL	931178	50UL	100	N/A	20	w	JEB	N/A	O	
12/10/2009 1:56	AO321.D	242190001	LBNL	931178	2UL	2500	N/A	21	w	JEB	N/A	O	
12/10/2009 2:22	AO322.D	BLANK	GEEL	BLANK	5ML	1	N/A	22	w	JEB	N/A	O	
12/10/2009 2:48	AO323.D	1201991771	LBNL	931178	20UL	250	N/A	23	w	JEB	N/A	O	MIX[A] 242056001MS
12/10/2009 3:14	AO324.D	1201991772	LBNL	931178	20UL	250	N/A	24	w	JEB	N/A	O	MIX[A] 242056001MSD
12/10/2009 3:40	AO325.D	BLANK	GEEL	BLANK	5ML	1	N/A	25	w	JEB	N/A	X	SCREENS
12/10/2009 4:06	AO326.D	BLANK	GEEL	BLANK	5ML	1	N/A	26	w	JEB	N/A	X	SCREENS
12/10/2009 4:32	AO327.D	BLANK	GEEL	BLANK	5ML	1	N/A	27	w	JEB	N/A	X	SCREENS
12/10/2009 4:58	AO328.D	BLANK	GEEL	BLANK	5ML	1	N/A	28	w	JEB	N/A	X	SCREENS

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	928249
Prep Batch Number:	928248

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241838002	WST03-10-2134
1201984850	Method Blank (MB)
1201984851	Laboratory Control Sample (LCS)
1201984852	241911001(WST49-10-5432) Matrix Spike (MS)
1201984853	241911001(WST49-10-5432) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS recovered p-Nitroaniline at 153%. The limits are 44%-139%. Since the LCS was biased high for p-Nitroaniline, and there were no hits of the analyte in any of the samples, the data results have been reported.

QC Sample Designation
The non-SDG sample 241911001 (WST49-10-5432) was selected for analysis as the matrix spike and matrix spike duplicate. Please the associated raw data files located in the Miscellaneous Section of the data report.

Matrix Spike (MS) Recovery Statement
The MS recovered p-Nitroaniline at 158%. The limits are 35%-139%. Since the LCS was biased high for p-Nitroaniline, and there were no hits of the analyte in any of the samples, the data results have been reported.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovered p-Nitroaniline at 158%. The limits are 35%-139%. Since the LCS was biased high for p-Nitroaniline, and there were no hits of the analyte in any of the samples, the data results have been reported.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 766479. It is located in the Miscellaneous Section of the data report.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD5.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: [illegible] **Date:** 12-18-09

Roadmap for LANL 10-670 SVOA

This roadmap was analyzed by rmb on 12-07-2009, 09:10.
This roadmap was reviewed by bar00895 on 12-07-2009, 12:08.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s120409.b/s510412.d	241838002	04-DEC-2009	14:39	10-670.sub	WST03-10-2134	1	928249	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s120409.b/s510404-2.d	1201984850	mb	04-DEC-2009	11:37	10-670.sub	SBLK01	1	928249	
☐	N	/chem/MSD5.i/s120409.b/s510405-2.d	1201984851	lcs	04-DEC-2009	11:59	10-670.sub	SBLK01LCS	1	928249	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	Date Collected:	11/23/2009 12:00	Matrix:	R
Lab Sample ID:	241838002	Date Received:	11/25/2009 09:10	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2134	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 14:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s5l0412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.4	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	Date Collected:	11/23/2009 12:00	Matrix:	R
Lab Sample ID:	241838002	Date Received:	11/25/2009 09:10	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2134	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 14:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s5l0412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	252	ug/kg		JA
544-76-3	Hexadecane	10.81	242	ug/kg	95	NJ

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-670

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201984850	MB for batch 928248	88	82	91	90	87	110
1201984851	LCS for batch 928248	78	73	86	82	88	103
241838002	WST03-10-2134	70	67	75	75	77	112

Surrogate		Acceptance Limits
2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928248
Lab Sample ID: 1201984851
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:59
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS	N-Methyl-N-nitrosomethylam	1670	0.0	1320	79	31-95
108-95-2	LCS	Phenol	1670	0.0	1250	75	37-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1220	73	40-105
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1200	72	34-103
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1460	88	36-110
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1330	80	46-114
83-32-9	LCS	Acenaphthene	1670	0.0	1350	81	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1400	84	49-107
100-02-7	LCS	4-Nitrophenol	1670	0.0	1480	89	33-110
87-86-5	LCS	Pentachlorophenol	1670	0.0	1570	94	38-116
129-00-0	LCS	Pyrene	1670	0.0	1570	94	43-108
110-86-1	LCS	Pyridine	1670	0.0	1250	75	13-129
62-53-3	LCS	Aniline	1670	0.0	1250	75	30-121
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1240	75	37-106
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1200	72	33-103
100-51-6	LCS	Benzyl alcohol	1670	0.0	1460	88	31-100
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1210	73	34-108
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1320	79	34-120
95-48-7	LCS	o-Cresol	1670	0.0	1140	69	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1310	79	43-118
67-72-1	LCS	Hexachloroethane	1670	0.0	1140	68	34-105
98-95-3	LCS	Nitrobenzene	1670	0.0	1430	86	37-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928248
Lab Sample ID: 1201984851
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:59
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS	Isophorone	1670	0.0	1370	82	41-108
88-75-5	LCS	2-Nitrophenol	1670	0.0	1240	75	35-112
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1380	83	35-114
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1330	80	40-109
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1360	82	45-109
65-85-0	LCS	Benzoic acid	3330	0.0	3730	112	27-137
91-20-3	LCS	Naphthalene	1670	0.0	1350	81	35-105
106-47-8	LCS	4-Chloroaniline	1670	0.0	1460	88	30-122
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1360	81	37-111
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1410	84	40-106
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1430	86	24-135
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1380	83	46-107
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1330	80	44-110
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1320	79	44-104
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1280	77	44-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1740	104	48-113
131-11-3	LCS	Dimethylphthalate	1670	0.0	1410	85	47-104
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1380	83	47-103
208-96-8	LCS	Acenaphthylene	1670	0.0	1410	85	43-104
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1380	83	32-114
132-64-9	LCS	Dibenzofuran	1670	0.0	1600	96	47-112
84-66-2	LCS	Diethylphthalate	1670	0.0	1410	84	50-108

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928248
Lab Sample ID: 1201984851
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:59
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	1670	0.0	1400	84	49-102
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1380	83	50-109
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1250	75	35-114
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	2550	153 *	44-139
122-39-4	LCS	Diphenylamine	1670	0.0	1570	94	46-111
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1500	90	40-119
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1450	87	45-112
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1400	84	44-115
85-01-8	LCS	Phenanthrene	1670	0.0	1430	86	45-107
120-12-7	LCS	Anthracene	1670	0.0	1470	88	46-106
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1530	92	52-115
206-44-0	LCS	Fluoranthene	1670	0.0	1510	91	50-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1650	99	49-115
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1530	92	48-105
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1260	76	45-98
218-01-9	LCS	Chrysene	1670	0.0	1470	88	48-105
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1610	96	50-117
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1680	101	39-123
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1580	95	46-111
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1490	90	46-114
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1540	92	49-112
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1340	80	45-128

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928248
Lab Sample ID: 1201984851
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 11:59
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS	Dibenzo(a,h)anthracene	1670	0.0	1320	79	44-131
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1430	86	42-128
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1320	79	36-109

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: WST49-10-5432MS
Lab Sample ID: 1201984852
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:27
Prep Batch ID: 928248
Batch ID: 928249
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylam	1680	0.00	U	1100	65	32-90
108-95-2	MS	Phenol	1680	0.00	U	1150	68	32-105
95-57-8	MS	2-Chlorophenol	1680	0.00	U	1100	65	33-106
106-46-7	MS	1,4-Dichlorobenzene	1680	0.00	U	1030	61	33-95
621-64-7	MS	N-Nitrosodipropylamine	1680	0.00	U	1340	80	31-109
59-50-7	MS	4-Chloro-3-methylphenol	1680	0.00	U	1290	77	38-119
83-32-9	MS	Acenaphthene	1680	0.00	U	1220	72	39-100
121-14-2	MS	2,4-Dinitrotoluene	1680	0.00	U	1280	76	42-107
100-02-7	MS	4-Nitrophenol	1680	0.00	U	1160	69	24-120
87-86-5	MS	Pentachlorophenol	1680	0.00	U	1190	71	26-121
129-00-0	MS	Pyrene	1680	0.00	U	1550	92	34-120
110-86-1	MS	Pyridine	1680	0.00	U	954	57	30-95
62-53-3	MS	Aniline	1680	0.00	U	1200	71	34-111
111-44-4	MS	bis(2-Chloroethyl) ether	1680	0.00	U	1130	67	34-101
541-73-1	MS	1,3-Dichlorobenzene	1680	0.00	U	1030	61	31-97
100-51-6	MS	Benzyl alcohol	1680	0.00	U	856	51	17-120
95-50-1	MS	1,2-Dichlorobenzene	1680	0.00	U	1030	61	32-102
108-60-1	MS	bis(2-Chloroisopropyl)ether	1680	0.00	U	1170	70	32-113
95-48-7	MS	o-Cresol	1680	0.00	U	1250	74	31-119
65794-96-9	MS	m,p-Cresols	1680	0.00	U	1360	81	35-125
67-72-1	MS	Hexachloroethane	1680	0.00	U	928	55	30-100
98-95-3	MS	Nitrobenzene	1680	0.00	U	1300	77	33-108

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-670

Client ID: WST49-10-5432MS

Lab Sample ID: 1201984852

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: S

%Moisture: 1.5

Analysis Date: 12/04/2009 18:27

Dilution: 1

Prep Batch ID: 928248

Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1680	0.00	U	1290	77	34-110
88-75-5	MS	2-Nitrophenol	1680	0.00	U	1060	63	32-108
105-67-9	MS	2,4-Dimethylphenol	1680	0.00	U	1250	74	32-115
111-91-1	MS	bis(2-Chloroethoxy)methane	1680	0.00	U	1250	74	35-108
120-83-2	MS	2,4-Dichlorophenol	1680	0.00	U	1320	78	38-110
65-85-0	MS	Benzoic acid	3370	0.00	U	1500	44	18-134
91-20-3	MS	Naphthalene	1680	0.00	U	1220	73	31-105
106-47-8	MS	4-Chloroaniline	1680	0.00	U	1450	86	29-123
87-68-3	MS	Hexachlorobutadiene	1680	0.00	U	1170	69	31-109
91-57-6	MS	2-Methylnaphthalene	1680	0.00	U	1330	79	32-110
77-47-4	MS	Hexachlorocyclopentadiene	1680	0.00	U	615	36	21-122
88-06-2	MS	2,4,6-Trichlorophenol	1680	0.00	U	1230	73	37-108
95-95-4	MS	2,4,5-Trichlorophenol	1680	0.00	U	1370	81	37-116
91-58-7	MS	2-Chloronaphthalene	1680	0.00	U	1220	72	37-103
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1680	0.00	U	1220	72	36-115
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1680	0.00	U	1750	104	39-117
131-11-3	MS	Dimethylphthalate	1680	0.00	U	1330	79	41-105
606-20-2	MS	2,6-Dinitrotoluene	1680	0.00	U	1260	75	41-103
208-96-8	MS	Acenaphthylene	1680	0.00	U	1330	79	41-103
51-28-5	MS	2,4-Dinitrophenol	1680	0.00	U	633	38	25-104
132-64-9	MS	Dibenzofuran	1680	0.00	U	1500	89	40-114
84-66-2	MS	Diethylphthalate	1680	0.00	U	1320	78	43-110

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: WST49-10-5432MS
Lab Sample ID: 1201984852
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:27
Prep Batch ID: 928248
Batch ID: 928249

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1680	0.00	U	1300	77	48-99
7005-72-3	MS	4-Chlorophenylphenylether	1680	0.00	U	1280	76	42-111
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1680	0.00	U	642	38	19-118
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1680	0.00	U	2660	158 *	35-139
122-39-4	MS	Diphenylamine	1680	0.00	U	1470	88	41-112
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1680	0.00	U	1400	83	37-118
101-55-3	MS	4-Bromophenylphenylether	1680	0.00	U	1300	77	39-112
118-74-1	MS	Hexachlorobenzene	1680	0.00	U	1270	75	38-113
85-01-8	MS	Phenanthrene	1680	0.00	U	1310	78	38-110
120-12-7	MS	Anthracene	1680	0.00	U	1350	80	38-112
84-74-2	MS	Di-n-butylphthalate	1680	0.00	U	1380	82	42-119
206-44-0	MS	Fluoranthene	1680	0.00	U	1340	80	38-119
85-68-7	MS	Butylbenzylphthalate	1680	0.00	U	1590	94	39-126
56-55-3	MS	Benzo(a)anthracene	1680	0.00	U	1350	80	39-110
91-94-1	MS	3,3'-Dichlorobenzidine	1680	0.00	U	1330	79	35-106
218-01-9	MS	Chrysene	1680	0.00	U	1320	79	39-109
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1680	70.0	J	1530	87	40-125
117-84-0	MS	Di-n-octylphthalate	1680	0.00	U	1920	114	30-147
205-99-2	MS	Benzo(b)fluoranthene	1680	0.00	U	1450	86	38-117
207-08-9	MS	Benzo(k)fluoranthene	1680	0.00	U	1470	87	39-120
50-32-8	MS	Benzo(a)pyrene	1680	0.00	U	1390	83	40-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1680	0.00	U	1060	63	32-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: WST49-10-5432MS
Lab Sample ID: 1201984852
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:27
Prep Batch ID: 928248
Batch ID: 928249

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS	Dibenzo(a,h)anthracene	1680	0.00	U	1070	64	32-124
191-24-2	MS	Benzo(ghi)perylene	1680	0.00	U	1050	62	28-119
120-82-1	MS	1,2,4-Trichlorobenzene	1680	0.00	U	1180	70	31-105

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: WST49-10-5432MSD
Lab Sample ID: 1201984853
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:50
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD	N-Methyl-N-nitrosomethylam	1690	0.00	U	1100	65	32-90	0	0-30
108-95-2	MSD	Phenol	1690	0.00	U	1160	69	32-105	1	0-30
95-57-8	MSD	2-Chlorophenol	1690	0.00	U	1110	66	33-106	1	0-30
106-46-7	MSD	1,4-Dichlorobenzene	1690	0.00	U	1060	63	33-95	3	0-30
621-64-7	MSD	N-Nitrosodipropylamine	1690	0.00	U	1340	79	31-109	0	0-30
59-50-7	MSD	4-Chloro-3-methylphenol	1690	0.00	U	1330	79	38-119	3	0-30
83-32-9	MSD	Acenaphthene	1690	0.00	U	1220	72	39-100	1	0-30
121-14-2	MSD	2,4-Dinitrotoluene	1690	0.00	U	1290	77	42-107	1	0-30
100-02-7	MSD	4-Nitrophenol	1690	0.00	U	1110	66	24-120	5	0-30
87-86-5	MSD	Pentachlorophenol	1690	0.00	U	1160	68	26-121	3	0-30
129-00-0	MSD	Pyrene	1690	0.00	U	1640	97	34-120	5	0-30
110-86-1	MSD	Pyridine	1690	0.00	U	982	58	30-95	3	0-30
62-53-3	MSD	Aniline	1690	0.00	U	1230	73	34-111	2	0-30
111-44-4	MSD	bis(2-Chloroethyl) ether	1690	0.00	U	1150	68	34-101	2	0-30
541-73-1	MSD	1,3-Dichlorobenzene	1690	0.00	U	1070	63	31-97	4	0-30
100-51-6	MSD	Benzyl alcohol	1690	0.00	U	809	48	17-120	6	0-30
95-50-1	MSD	1,2-Dichlorobenzene	1690	0.00	U	1070	63	32-102	3	0-30
108-60-1	MSD	bis(2-Chloroisopropyl)ether	1690	0.00	U	1200	71	32-113	2	0-30
95-48-7	MSD	o-Cresol	1690	0.00	U	1220	72	31-119	2	0-30
65794-96-9	MSD	m,p-Cresols	1690	0.00	U	1340	80	35-125	1	0-30
67-72-1	MSD	Hexachloroethane	1690	0.00	U	933	55	30-100	1	0-30
98-95-3	MSD	Nitrobenzene	1690	0.00	U	1320	78	33-108	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: WST49-10-5432MSD
Lab Sample ID: 1201984853
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:50
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1690	0.00	U	1320	78	34-110	2	0-30
88-75-5	MSD 2-Nitrophenol	1690	0.00	U	1080	64	32-108	2	0-30
105-67-9	MSD 2,4-Dimethylphenol	1690	0.00	U	1240	73	32-115	1	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1690	0.00	U	1250	74	35-108	0	0-30
120-83-2	MSD 2,4-Dichlorophenol	1690	0.00	U	1320	78	38-110	0	0-30
65-85-0	MSD Benzoic acid	3380	0.00	U	1270	37	18-134	17	0-30
91-20-3	MSD Naphthalene	1690	0.00	U	1230	73	31-105	0	0-30
106-47-8	MSD 4-Chloroaniline	1690	0.00	U	1490	88	29-123	3	0-30
87-68-3	MSD Hexachlorobutadiene	1690	0.00	U	1210	71	31-109	3	0-30
91-57-6	MSD 2-Methylnaphthalene	1690	0.00	U	1320	78	32-110	1	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1690	0.00	U	527	31	21-122	15	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1690	0.00	U	1230	73	37-108	0	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1690	0.00	U	1400	83	37-116	2	0-30
91-58-7	MSD 2-Chloronaphthalene	1690	0.00	U	1220	72	37-103	1	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1690	0.00	U	1240	73	36-115	2	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1690	0.00	U	1770	104	39-117	1	0-30
131-11-3	MSD Dimethylphthalate	1690	0.00	U	1360	81	41-105	2	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1690	0.00	U	1290	77	41-103	2	0-30
208-96-8	MSD Acenaphthylene	1690	0.00	U	1340	79	41-103	1	0-30
51-28-5	MSD 2,4-Dinitrophenol	1690	0.00	U	609	36	25-104	4	0-30
132-64-9	MSD Dibenzofuran	1690	0.00	U	1510	89	40-114	1	0-30
84-66-2	MSD Diethylphthalate	1690	0.00	U	1330	79	43-110	1	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: WST49-10-5432MSD
Lab Sample ID: 1201984853
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:50
Dilution: 1
Prep Batch ID: 928248
Batch ID: 928249

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD	Fluorene	1690	0.00	U	1320	78	48-99	1	0-30
7005-72-3	MSD	4-Chlorophenylphenylether	1690	0.00	U	1310	78	42-111	2	0-30
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	1690	0.00	U	617	37	19-118	4	0-30
100-01-6	MSD	4-Nitroaniline *p-Nitroaniline*	1690	0.00	U	2670	158 *	35-139	0	0-30
122-39-4	MSD	Diphenylamine	1690	0.00	U	1490	88	41-112	1	0-30
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	1690	0.00	U	1410	83	37-118	0	0-30
101-55-3	MSD	4-Bromophenylphenylether	1690	0.00	U	1360	81	39-112	5	0-30
118-74-1	MSD	Hexachlorobenzene	1690	0.00	U	1300	77	38-113	3	0-30
85-01-8	MSD	Phenanthrene	1690	0.00	U	1330	79	38-110	2	0-30
120-12-7	MSD	Anthracene	1690	0.00	U	1380	82	38-112	3	0-30
84-74-2	MSD	Di-n-butylphthalate	1690	0.00	U	1400	83	42-119	1	0-30
206-44-0	MSD	Fluoranthene	1690	0.00	U	1350	80	38-119	1	0-30
85-68-7	MSD	Butylbenzylphthalate	1690	0.00	U	1700	101	39-126	7	0-30
56-55-3	MSD	Benzo(a)anthracene	1690	0.00	U	1390	82	39-110	3	0-30
91-94-1	MSD	3,3'-Dichlorobenzidine	1690	0.00	U	1390	82	35-106	5	0-30
218-01-9	MSD	Chrysene	1690	0.00	U	1340	79	39-109	1	0-30
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	1690	70.0	J	1590	90	40-125	4	0-30
117-84-0	MSD	Di-n-octylphthalate	1690	0.00	U	2210	131	30-147	14	0-30
205-99-2	MSD	Benzo(b)fluoranthene	1690	0.00	U	1540	91	38-117	6	0-30
207-08-9	MSD	Benzo(k)fluoranthene	1690	0.00	U	1570	93	39-120	6	0-30
50-32-8	MSD	Benzo(a)pyrene	1690	0.00	U	1420	84	40-115	2	0-30
193-39-5	MSD	Indeno(1,2,3-cd)pyrene	1690	0.00	U	1000	59	32-120	5	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: WST49-10-5432MSD
Lab Sample ID: 1201984853
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/04/2009 18:50
Prep Batch ID: 928248
Batch ID: 928249
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1690	0.00	U	1000	59	32-124	7	0-30
191-24-2	MSD Benzo(ghi)perylene	1690	0.00	U	974	58	28-119	7	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1690	0.00	U	1180	70	31-105	0	0-30

Method Blank Summary

SDG Number:	10-670	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928248	Instrument ID:	MSD5.I	Data File:	s5l0404-2.d
Lab Sample ID:	1201984850	Prep Date:	12/02/2009 22:31	Analyzed:	12/04/09 11:37
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928248	1201984851	s5l0405-2.d	12/04/09	1159
02 WST03-10-2134	241838002	s5l0412.d	12/04/09	1439

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-670

Instrument ID: MSD5.I **Injection Date/Time:** 04-DEC-09 10:24

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s120409.b/s510401.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	32.8
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	38.8
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	45.4
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	27.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	78
442	Greater than 40% of mass 198	56.8
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD5.i/s120409.b/s510402	04-DEC-09 10:38
AP12CVS	WBN091201-03.4	/chem/MSD5.i/s120409.b/s510403	04-DEC-09 11:06
SBLK01	1201984850	/chem/MSD5.i/s120409.b/s510404	04-DEC-09 11:37
SBLK01LCS	1201984851	/chem/MSD5.i/s120409.b/s510405	04-DEC-09 11:59
WST03-10-2134	241838002	/chem/MSD5.i/s120409.b/s510412	04-DEC-09 14:39

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-670

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN091106-08	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:09
MEGAICAL010	WBN091106-07	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:38
MEGAICAL020	WBN091106-06	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:06
MEGAICAL040	WBN091106-05.1	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:34
MEGAICAL050	WBN091106-04	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:02
MEGAICAL080	WBN091106-03	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:31
MEGAICAL100	WBN091106-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 16:59
MEGAICAL120	WBN091106-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 17:28
MEGAICV	WBN091106-09.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:20
AP12ICAL010	WBN091111-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:48
AP12ICAL020	WBN091111-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:10
AP12ICAL040	WBN091111-03.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:34
AP12ICAL050	WBN091111-04	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 19:57
AP12ICAL080	WBN091111-05	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:20
AP12ICAL100	WBN091111-06	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 20:42
AP12ICAL120	WBN091111-07	/chem/MSD5.i/s113009.b/s5k303	30-NOV-09 21:05

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-670

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICV	WBN091111-08.1	/chem/MSD5.i/s113009.b/s5k303	01-DEC-09 00:10

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-670

Instrument: MSD5.I

STD Analysis Time: 04-DEC-09 10:38

GC Column: J&W DB-5MS

Data File: s5l0402.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	413613		3.92	1545687		4.79	886910		6.05	1593509		7.22	1621115		9.64	1429948		11.3
Upper Limit	827226		4.42	3091374		5.29	1773820		6.55	3187018		7.72	3242230		10.1	2859896		11.8
Lower Limit	206807		3.42	772844		4.29	443455		5.55	796755		6.72	810558		9.14	714974		10.8
Sample ID																		
BLK01	443813		3.91	1533750		4.78	954698		6.04	1694929		7.22	1707181		9.63	1540320		11.3
BLK01LCS	433913		3.91	1604371		4.79	904978		6.05	1639318		7.22	1639884		9.64	1442784		11.3
WST03-10-2134	459554		3.91	1593506		4.78	972802		6.04	1750042		7.22	1458669		9.64	1000417		11.3

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	Date Collected:	11/23/2009 12:00	Matrix:	R
Lab Sample ID:	241838002	Date Received:	11/25/2009 09:10	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2134	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.1	Dilution:	1
Run Date:	12/04/2009 14:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s510412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.4	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670	Date Collected:	11/23/2009 12:00	Matrix:	R
Lab Sample ID:	241838002	Date Received:	11/25/2009 09:10	%Moisture:	6.8
		Client:	LANL010	Project:	LANL01004
Client ID:	WST03-10-2134	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 14:39	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s510412.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	252	ug/kg		JA
544-76-3	Hexadecane	10.81	242	ug/kg	95	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510412.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 04-DEC-2009 14:39
Operator : RMB Inst ID: MSD5.i
Smp Info : |241838002|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	6.76260	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	459554	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1593506	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.049	(1.000)	972802	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1750042	40.0000	
* 91 Chrysene-d12	240	9.636	9.641	(1.000)	1458669	40.0000	
* 98 Perylene-d12	264	11.319	11.331	(1.000)	1000417	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.793)	663002	69.6662	2490
$ 5 Phenol-d5	99	3.625	3.632	(0.926)	789722	66.9045	2390
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	382686	37.5623	1340
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	917934	37.3512	1330
$ 60 2,4,6-Tribromophenol	329	6.642	6.651	(1.099)	278338	77.3494	2760
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1171780	56.1724	2000

ION RATIO REPORT

SV REPORT

Data file: s510412.d
Report Date: 12/04/2009 14:55
Lab. ID: 241838002 SampleType: SAMPLE
Injection Date: 04-DEC-2009 14:39
Operator: RMB Instrument: MSD5.i
Sample Info: |241838002|928249|1|SVMF|1|LANL
Miscellaneous Info: |MSD8270_SF|WBN091117-01
Comment:
Method used: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-670
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	46301	3.62	3.70	80-120	100	(T)
93	2280	3.68	3.70	241-301	5	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	58088	4.28	4.16	80-120	100	(T)
42	29464	4.28	4.16	27- 87	51	(T)
41 m-Nitroaniline			CAS#: 99-09-2			
138	137	6.05	6.00	80-120	100	( )
92	6098	6.04	6.00	74-134	4420	(Q)
108	20142	6.04	6.00	0- 40	14600	(Q)
43 Dimethylphthalate			CAS#: 131-11-3			
163	173644	6.05	5.81	80-120	100	(T)
164	972802	6.04	5.81	0- 40	560	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	129721	6.04	5.87	80-120	100	(T)
63	1638	6.04	5.87	38- 98	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	129721	6.04	6.16	80-120	100	(T)
89	1768	6.04	6.16	36- 96	1	(QT)
63	1638	6.04	6.16	10- 70	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	13170	6.64	6.46	80-120	100	(T)
165	13212	6.64	6.46	62-122	100	(T)
167	4489	6.64	6.46	0- 44	34	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	121	6.62	6.48	80-120	100	(T)
105	2422	6.64	6.48	5- 65	2001	(QT)
51	179	6.62	6.48	5- 65	149	(QT)
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	17856	6.64	6.82	80-120	100	(T)
141	108990	6.64	6.82	36- 96	610	(QT)
250	36698	6.64	6.82	68-128	206	(QT)
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	9413	9.64	9.63	80-120	100	( )
226	1257	9.63	9.63	0- 56	13	( )
229	2421	9.64	9.63	0- 50	26	( )
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	884	13.09	13.12	80-120	100	( )
138	666	13.27	13.12	0- 54	75	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510412.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 04-DEC-2009 14:39
Operator : RMB Inst ID: MSD5.i
Smp Info : |241838002|928249|1|SVMF|1|LANL
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	6.76260	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.913	2708878	40.000
* 98 Perylene-d12	11.319	2514394	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
2.937	478467	7.06517054	252	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Hexadecane					CAS #: 544-76-3		
10.813	425867	6.77486552	242	95	NIST05.L	76093	98

Data File: /chem/MSD5.i/s120409.b/s510412.d
Date : 04-DEC-2009 14:39
Client ID: WST03-10-2134
Sample Info: |2418380021928249|1|SWHF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Page 1

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

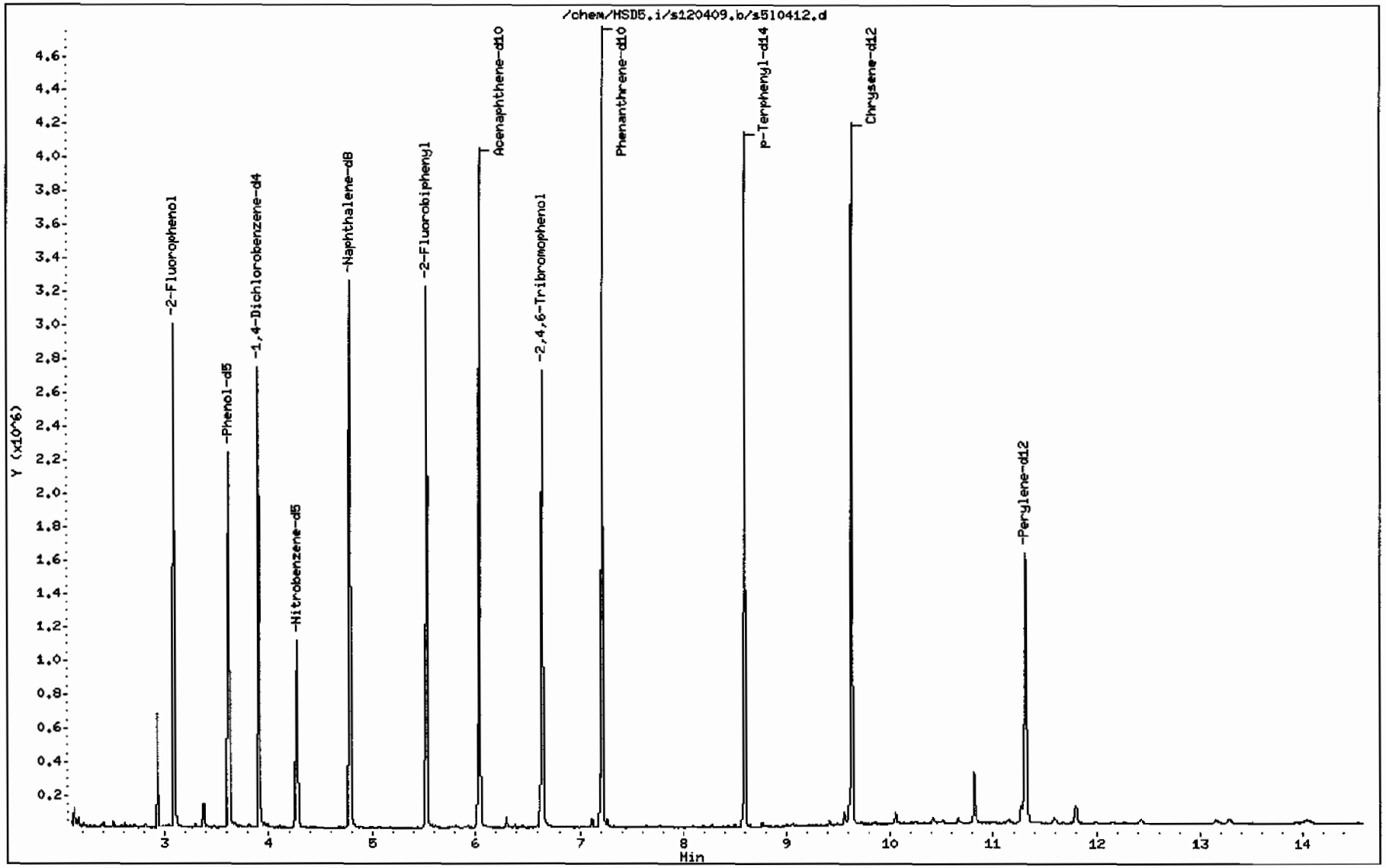

Data File: /chem/MSD5.i/s120409.b/s510412.d

Date : 04-DEC-2009 14:39

Client ID: WST03-10-2134

Instrument: MSD5.i

Sample Info: 1241838002192824911ISVMF11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	28	C6H12O2	116

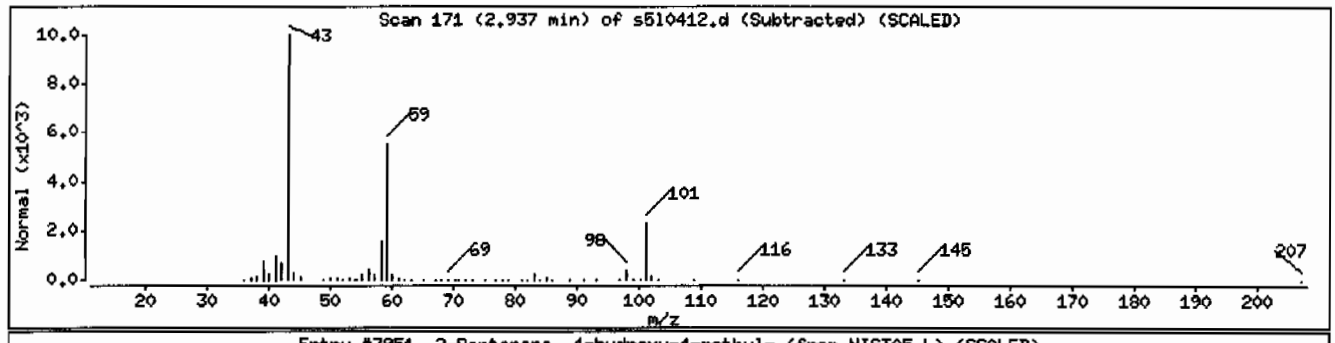

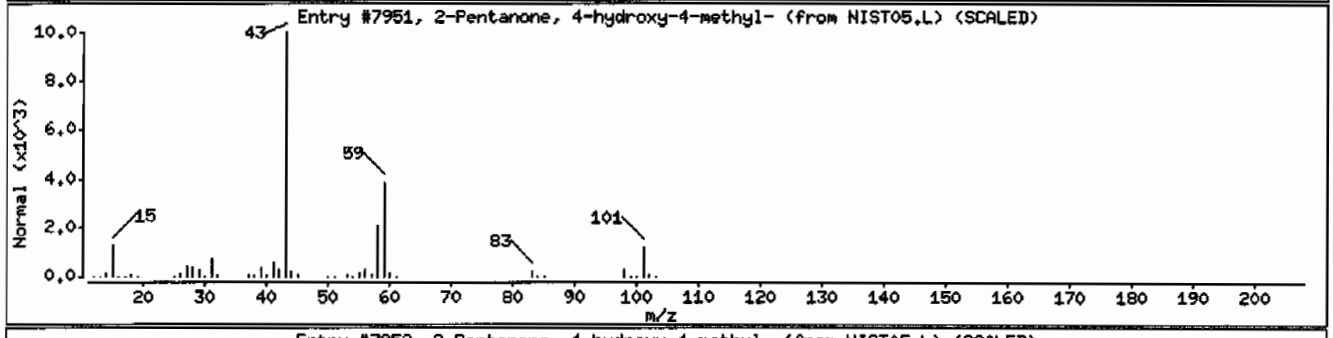

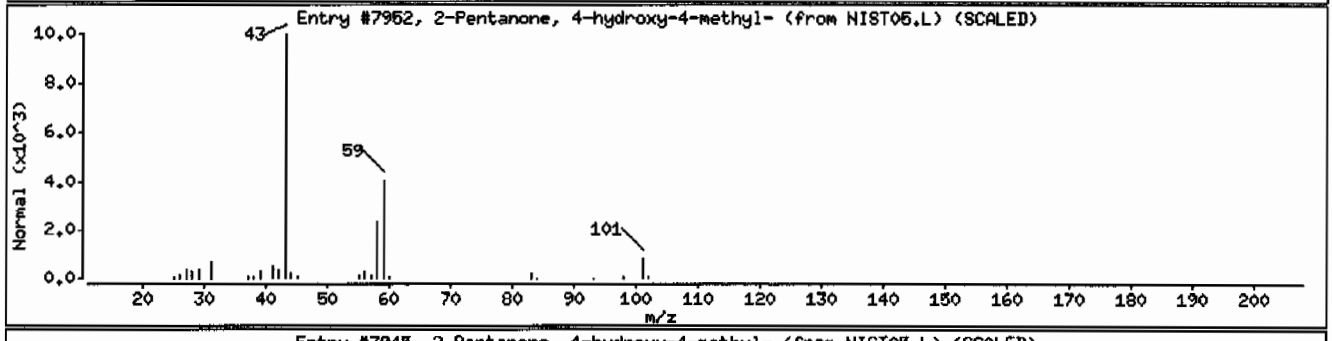

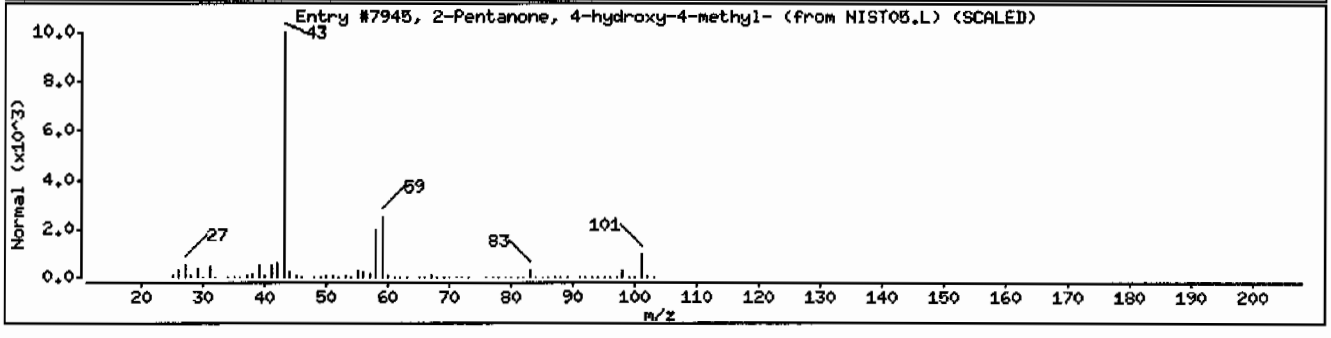

Data File: /chem/MSD5.i/s120409.b/s510412.d

Date : 04-DEC-2009 14:39

Client ID: WST03-10-2134

Instrument: MSD5.i

Sample Info: 1241838002|928249|1|SVMF|1|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane	544-76-3	NIST05.L	76093	95	C16H34	226
Hexadecane	544-76-3	NIST05.L	76088	95	C16H34	226
Eicosane	112-95-8	NIST05.L	113491	94	C20H42	282

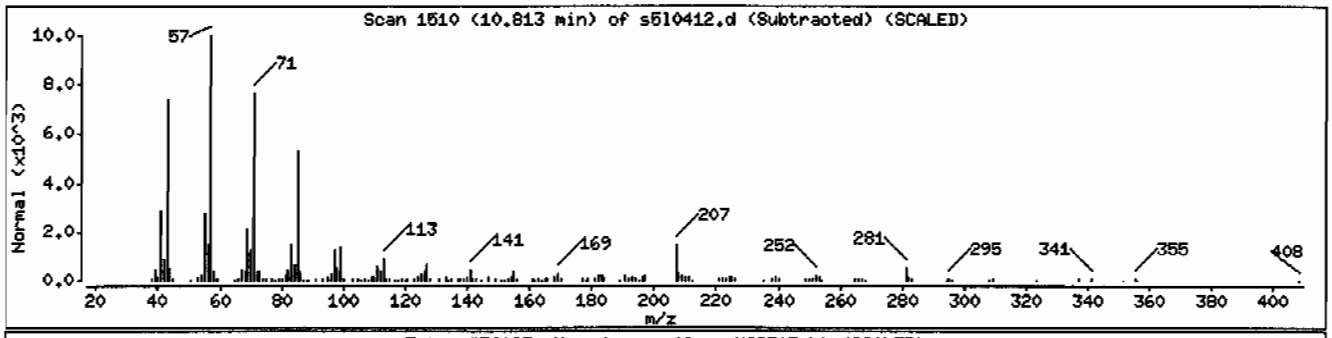

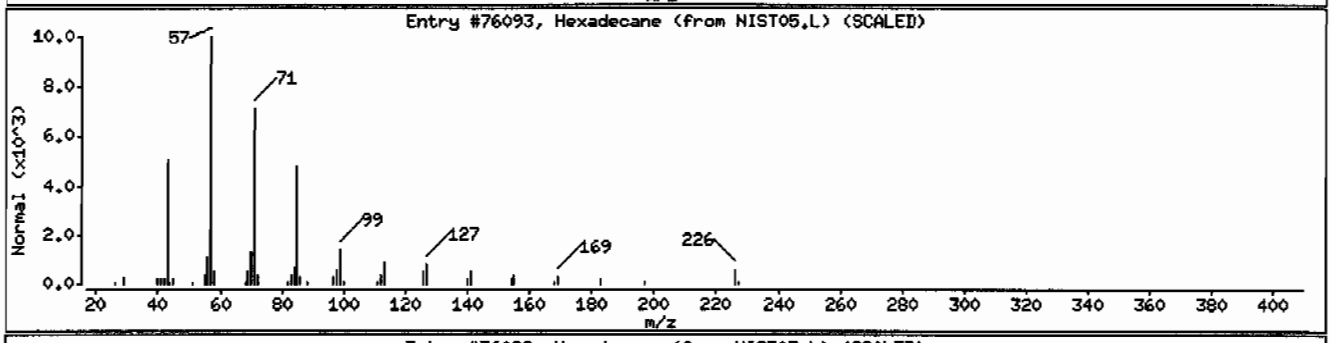

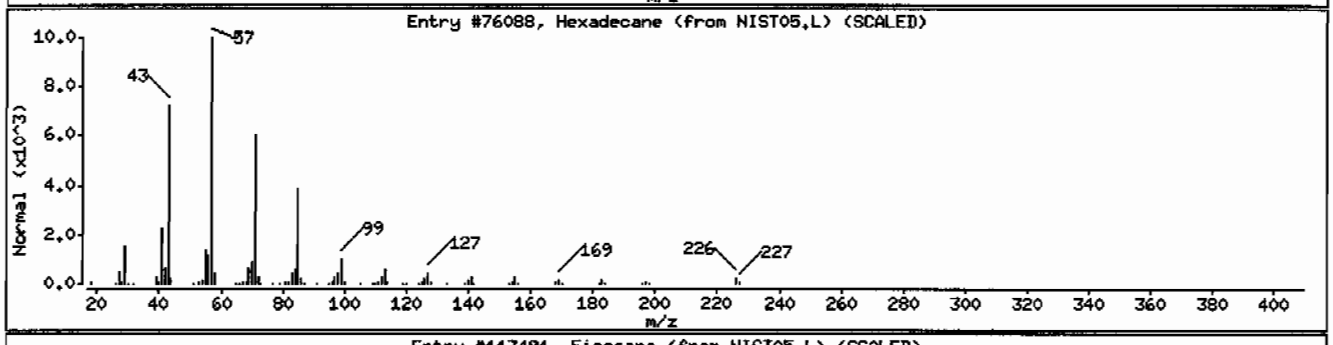

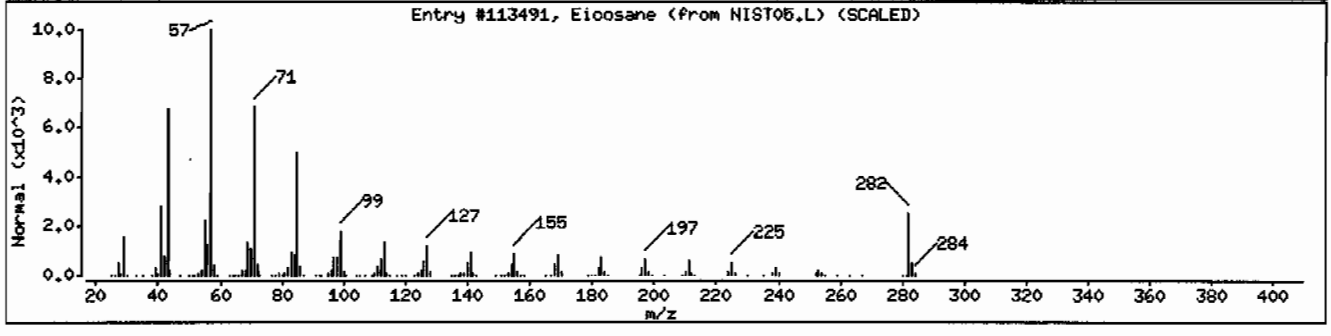

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 04-Dec-2009 10:56

Calibration History

Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Start Cal Date: 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
30-NOV-2009 14:09	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3014.d
Cal Level: 2 , Cal Amount: 10.00000		
01-DEC-2009 12:54	hex	/chem/MSD5.i/s113009.b/s5k3048.d
01-DEC-2009 10:15	pest	/chem/MSD5.i/s113009.b/s5k3041.d
30-NOV-2009 21:28	nev	/chem/MSD5.i/s113009.b/s5k3031.d
30-NOV-2009 18:48	ap12	/chem/MSD5.i/s113009.b/s5k3024.d
30-NOV-2009 14:38	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3015.d
Cal Level: 3 , Cal Amount: 20.00000		
01-DEC-2009 13:18	hex	/chem/MSD5.i/s113009.b/s5k3049.d
01-DEC-2009 10:38	pest	/chem/MSD5.i/s113009.b/s5k3042.d
30-NOV-2009 21:51	nev	/chem/MSD5.i/s113009.b/s5k3032.d
30-NOV-2009 19:10	ap12	/chem/MSD5.i/s113009.b/s5k3025.d
30-NOV-2009 15:06	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3016.d
Cal Level: 4 , Cal Amount: 40.00000		
01-DEC-2009 13:41	hex	/chem/MSD5.i/s113009.b/s5k3050.d
01-DEC-2009 11:00	pest	/chem/MSD5.i/s113009.b/s5k3043.d
30-NOV-2009 22:14	nev	/chem/MSD5.i/s113009.b/s5k3033.d
30-NOV-2009 19:34	ap12	/chem/MSD5.i/s113009.b/s5k3026.d
30-NOV-2009 15:34	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3017.d
Cal Level: 5 , Cal Amount: 50.00000		
01-DEC-2009 14:03	hex	/chem/MSD5.i/s113009.b/s5k3051.d
01-DEC-2009 11:23	pest	/chem/MSD5.i/s113009.b/s5k3044.d
30-NOV-2009 22:38	nev	/chem/MSD5.i/s113009.b/s5k3034.d
30-NOV-2009 19:57	ap12	/chem/MSD5.i/s113009.b/s5k3027.d
30-NOV-2009 16:02	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3018.d
Cal Level: 6 , Cal Amount: 80.00000		
01-DEC-2009 14:25	hex	/chem/MSD5.i/s113009.b/s5k3052.d
01-DEC-2009 11:46	pest	/chem/MSD5.i/s113009.b/s5k3045.d
30-NOV-2009 23:01	nev	/chem/MSD5.i/s113009.b/s5k3035.d
30-NOV-2009 20:20	ap12	/chem/MSD5.i/s113009.b/s5k3028.d
30-NOV-2009 16:31	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3019.d
Cal Level: 7 , Cal Amount: 100.00000		

01-DEC-2009 14:48	hex	/chem/MSD5.i/s113009.b/s5k3053.d
01-DEC-2009 12:09	pest	/chem/MSD5.i/s113009.b/s5k3046.d
30-NOV-2009 23:23	nev	/chem/MSD5.i/s113009.b/s5k3036.d
30-NOV-2009 20:42	ap12	/chem/MSD5.i/s113009.b/s5k3029.d
30-NOV-2009 16:59	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3020.d

Cal Level: 8 , Cal Amount: 120.00000		
01-DEC-2009 12:32	pest	/chem/MSD5.i/s113009.b/s5k3047.d
30-NOV-2009 23:46	nev	/chem/MSD5.i/s113009.b/s5k3037.d
30-NOV-2009 21:05	ap12	/chem/MSD5.i/s113009.b/s5k3030.d
30-NOV-2009 17:28	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3021.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
04-DEC-2009 10:38	MEGAIICARE	/chem/MSD5.i/s120409.b/s510402.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Calibration File Names:
Level 1: /chem/MSD5.i/s113009.b/s5k3014.d
Level 2: /chem/MSD5.i/s113009.b/s5k3048.d
Level 3: /chem/MSD5.i/s113009.b/s5k3049.d
Level 4: /chem/MSD5.i/s113009.b/s5k3050.d
Level 5: /chem/MSD5.i/s113009.b/s5k3051.d
Level 6: /chem/MSD5.i/s113009.b/s5k3052.d
Level 7: /chem/MSD5.i/s113009.b/s5k3053.d
Level 8: /chem/MSD5.i/s113009.b/s5k3047.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.43200	0.48159	0.46738	0.44822	0.47531					
	0.43671	0.47324					AVRG		0.45921		4.34760
2 Pyridine	+++++	0.63985	0.64672	0.62506	0.69334	0.71690					
	0.67003	0.56775					AVRG		0.65138		7.47986
4 Aniline	+++++	0.38715	0.40911	0.40667	0.39891	0.39925					
	0.39855	0.40838					AVRG		0.40115		1.92425
209 Benzaldehyde	+++++	0.75175	0.80370	+++++	+++++	0.73680					
	0.71705	0.69889					AVRG		0.74164		5.39700
6 Phenol	+++++	0.99962	1.09329	1.11449	1.08724	1.08038					
	1.05465	1.08077					AVRG		1.07292		3.43976

GEL Laboratories LLC

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.59944	0.61498	0.62541	0.67247	0.65894	0.63803					
	0.62832	0.63351					AVRG		0.63389		3.66603
8 2-Chlorophenol	+++++	0.87217	0.92912	0.93403	0.92801	0.92624					
	0.91350	0.93801					AVRG		0.92015		2.44524
203 n-Decane	+++++	0.88013	0.89146	0.85550	0.84815	0.81672					
	0.77891	0.76359					AVRG		0.83349		5.87400
9 1,3-Dichlorobenzene	+++++	1.09685	1.13817	1.12405	1.11357	1.09144					
	1.06829	1.08058					AVRG		1.10185		2.24200
11 1,4-Dichlorobenzene	+++++	1.11385	1.14638	1.14426	1.12409	1.10651					
	1.09004	1.10462					AVRG		1.11854		1.87546
12 Benzyl alcohol	+++++	0.51602	0.57510	0.61563	0.58809	0.58621					
	0.58334	0.59941					AVRG		0.58054		5.39098
13 1,2-Dichlorobenzene	+++++	1.04255	1.08183	1.08505	1.06637	1.06273					
	1.03252	1.03867					AVRG		1.05853		1.98597
14 bis(2-Chloroisopropyl)ether	+++++	1.03868	1.06626	1.05750	1.03794	0.97107					
	0.95293	0.92855					AVRG		1.00756		5.49466
15 o-Cresol	+++++	0.69067	0.73824	0.77014	0.74119	0.73428					
	0.72745	0.73902					AVRG		0.73443		3.20276

GEL Laboratories LLC

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	++++++	0.99878	1.06200	++++++	++++++	1.04834					
	1.01728	1.04524					AVRG		1.03433		2.48185
17 N-Nitrosodipropylamine	0.39105	0.46274	0.53774	0.54714	0.48085	0.50719					
	0.46219	0.47357					AVRG		0.48281		10.23361
18 m,p-Cresols	++++++	0.87022	0.92832	0.99766	0.95002	0.92840					
	0.92726	0.94238					AVRG		0.93489		4.03823
19 Hexachloroethane	++++++	0.38940	0.41936	0.42131	0.41952	0.41531					
	0.40832	0.41760					AVRG		0.41297		2.72046
21 Nitrobenzene	++++++	0.24845	0.26680	0.25685	0.24412	0.23043					
	0.21217	0.20803					AVRG		0.23812		9.31912
22 Isophorone	++++++	0.45816	0.49226	0.49029	0.45241	0.41992					
	0.39415	0.38838					AVRG		0.44222		9.62880
23 2-Nitrophenol	++++++	0.11547	0.14223	0.13108	0.12558	0.12127					
	0.11523	0.11724					AVRG		0.12401		7.98047
24 2,4-Dimethylphenol	++++++	0.21966	0.23281	0.23194	0.21573	0.20764					
	0.19429	0.19541					AVRG		0.21392		7.35461
25 bis(2-Chloroethoxy)methane	++++++	0.25854	0.27287	0.27115	0.25218	0.23628					
	0.22333	0.21759					AVRG		0.24742		8.96356

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Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19659	0.21717	0.21714	0.20372	0.19511					
	0.18313	0.18359					AVRG		0.19949		7.05929
27 Benzoic acid	+++++	+++++	0.09002	0.11803	0.10197	0.11586					
	0.10794	0.12814					AVRG		0.11033		12.12819
28 1,2,4-Trichlorobenzene	+++++	0.26481	0.27523	0.26908	0.25466	0.24111					
	0.22459	0.22030					AVRG		0.24997		8.71723
30 Naphthalene	0.81705	0.74573	0.76657	0.72847	0.68863	0.63949					
	0.59297	0.55942					AVRG		0.69229		12.86965
204 alpha-Terpineol	+++++	0.17262	0.18143	0.17832	0.16468	0.15346					
	0.14288	0.13778					AVRG		0.16160		10.68187
31 4-Chloroaniline	+++++	0.26766	0.22783	0.30909	0.29015	0.28897					
	0.27710	0.27967					AVRG		0.27721		9.14686
189 Caprolactam	+++++	0.06063	0.07077	+++++	+++++	0.07699					
	0.07770	0.07957					AVRG		0.07313		10.57301
32 Hexachlorobutadiene	+++++	0.16663	0.17799	0.17401	0.16606	0.15880					
	0.14863	0.14597					AVRG		0.16258		7.45567
33 4-Chloro-3-methylphenol	+++++	0.19010	0.21662	0.21855	0.20067	0.19059					
	0.18078	0.17853					AVRG		0.19655		8.18892

GEL Laboratories LLC

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Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.51678	0.50700	0.52401	0.52107	0.47972	0.44344					
	0.42192	0.40565					AVRG		0.47745		9.97925
35 1-Methylnaphthalene	0.49817	0.48888	0.50948	0.50950	0.46873	0.43532					
	0.40747	0.39405					AVRG		0.46395		9.93014
36 Hexachlorocyclopentadiene	+++++	0.11559	0.14894	0.17638	0.16699	0.17517					
	0.15973	0.18699					AVRG		0.16140		14.65548
208 1,1'-Biphenyl	+++++	1.06821	1.07871	+++++	+++++	1.07139					
	1.04410	1.03663					AVRG		1.05981		1.73080
205 2,3-Dichloroaniline	+++++	0.42334	0.44162	0.48367	0.45837	0.47569					
	0.46389	0.48191					AVRG		0.46121		4.82890
37 2,4,6-Trichlorophenol	+++++	0.24410	0.27355	0.30569	0.28842	0.30698					
	0.30109	0.31371					AVRG		0.29051		8.42918
38 2,4,5-Trichlorophenol	+++++	0.26102	0.29598	0.31509	0.31354	0.30818					
	0.30243	0.32875					AVRG		0.30357		7.06061
40 2-Chloronaphthalene	0.79673	0.82048	0.87010	0.90775	0.85133	0.85068					
	0.82317	0.83198					AVRG		0.84403		4.05738
42 o-Nitroaniline	+++++	0.19115	0.21865	0.24505	0.22880	0.22737					
	0.22383	0.23238					AVRG		0.22389		7.41961

GEL Laboratories LLC

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Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	14483	15051	82754	119707	239651					
	283774	430579					LINR	0.33554	0.19860		0.99002
43 Dimethylphthalate	+++++	0.95484	1.02595	1.06444	0.99695	0.99604					
	0.94535	0.98159					AVRG		0.99502		4.11153
44 2,6-Dinitrotoluene	+++++	0.20821	0.23299	0.24910	0.23478	0.23887					
	0.22604	0.23758					AVRG		0.23251		5.49531
45 Acenaphthylene	1.14802	1.28799	1.36835	1.40207	1.30955	1.28653					
	1.24364	1.23741					AVRG		1.28545		6.16797
47 Acenaphthene	0.74181	0.78832	0.85183	0.88393	0.83890	0.85177					
	0.82987	0.84268					AVRG		0.82864		5.31903
48 2,4-Dinitrophenol	+++++	+++++	21200	54725	74212	150262					
	173409	+++++					LINR	0.32072	0.11919		0.99343
49 Dibenzofuran	+++++	1.18297	1.25042	1.30282	1.21056	1.17947					
	1.14114	1.14741					AVRG		1.20211		4.81916
50 2,4-Dinitrotoluene	+++++	0.25307	0.29824	0.31858	0.30040	0.30633					
	0.29555	0.30981					AVRG		0.29743		7.08057
51 Diethylphthalate	+++++	0.94215	1.02610	1.07432	0.99980	0.98701					
	0.95141	0.95004					AVRG		0.99012		4.86022

GEL Laboratories LLC

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	14071	43969	105849	128396	217824					
	255018	390419					LINR	0.15210	0.16724		0.99652
53 Fluorene	0.89941	0.94917	1.03641	1.08233	1.01112	1.00641					
	0.97983	0.99090					AVRG		0.99445		5.53573
54 4-Chlorophenylphenylether	+++++	0.51413	0.55022	0.58370	0.54287	0.55212					
	0.53675	0.55173					AVRG		0.54736		3.80860
55 2-Methyl-4,6-dinitrophenol	+++++	12837	44459	104894	133773	234249					
	277848	423559					LINR	0.19850	0.09795		0.99570
56 p-Nitroaniline	+++++	0.09524	0.09753	0.09849	0.08778	0.10616					
	0.11333	+++++					AVRG		0.09976		8.91814
133 Diphenylamine	+++++	0.41220	0.39607	0.40064	0.37402	0.38072					
	0.37482	0.41332					AVRG		0.39311		4.27057
58 1,2-Diphenylhydrazine	+++++	0.47390	0.51146	0.53163	0.49408	0.48123					
	0.45859	0.46295					AVRG		0.48769		5.44241
59 Tributylphosphate	+++++	0.93611	1.00727	1.01733	1.06767	1.06421					
	1.07800	1.05488					AVRG		1.03221		4.83912
61 4-Bromophenylphenylether	+++++	0.16555	0.17995	0.19299	0.18038	0.18154					
	0.17572	0.18754					AVRG		0.18052		4.81438

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INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
63 Hexachlorobenzene	+++++	0.18110	0.19756	0.20396	0.19230	0.19237						
	0.18432	0.19174					AVRG		0.19191		3.99111	
207 Atrazine	+++++	0.03457	0.03304	+++++	+++++	0.01580						
	0.01516	0.00441					AVRG		0.02060		62.59737	<-
65 Pentachlorophenol	+++++	17155	54261	133219	158706	275325						
	328732	490942					LINR	0.16286	0.11297		0.99712	
206 n-Octadecane	+++++	0.25432	0.27323	0.28870	0.26891	0.26490						
	0.25081	0.24964					AVRG		0.26436		5.33437	
68 Phenanthrene	0.73862	0.73226	0.78776	0.80554	0.76127	0.74608						
	0.70950	0.72888					AVRG		0.75124		4.26078	
69 Anthracene	0.68052	0.72323	0.79165	0.82251	0.76761	0.74693						
	0.71967	0.72544					AVRG		0.74720		6.05239	
72 Di-n-butylphthalate	+++++	0.80580	0.90274	0.94252	0.89139	0.85974						
	0.81610	0.79872					AVRG		0.85957		6.41454	
76 Fluoranthene	0.68758	0.79740	0.87718	0.92162	0.85800	0.83122						
	0.80482	0.80275					AVRG		0.82257		8.43347	
77 Benzidine	+++++	0.14241	0.11832	+++++	+++++	0.11685						
	0.13749	0.14337					AVRG		0.13169		9.93091	

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Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	0.74327	0.79248	0.86122	0.90593	0.82217	0.81621					
	0.77247	0.76811					AVRG		0.81023		6.58630
85 Butylbenzylphthalate	+++++	0.30152	0.35532	0.39574	0.36768	0.37392					
	0.36173	0.36416					AVRG		0.36001		8.01244
89 Benzo(a)anthracene	0.79661	0.75905	0.83143	0.88224	0.81756	0.80052					
	0.77503	0.79063					AVRG		0.80663		4.71092
90 3,3'-Dichlorobenzidine	+++++	0.22472	0.25680	+++++	+++++	0.28651					
	0.28815	0.29645					AVRG		0.27053		10.97312
92 Chrysene	0.71796	0.71455	0.77592	0.80262	0.74759	0.72786					
	0.70016	0.69597					AVRG		0.73533		5.11466
93 bis(2-Ethylhexyl)phthalate	7926	152141	400766	842654	992598	1555489					
	+++++	+++++					LINR	0.01278	0.54227		0.99788
94 Di-n-octylphthalate	+++++	0.69447	0.85556	0.97066	0.89544	0.90662					
	0.87221	0.86997					AVRG		0.86642		9.77684
95 Benzo(b)fluoranthene	0.64856	0.76776	0.86873	0.91742	0.84122	0.88072					
	0.82904	0.95219					AVRG		0.83820		11.32092
96 Benzo(k)fluoranthene	0.75511	0.78301	0.85963	0.94418	0.88393	0.83753					
	0.84838	0.78179					AVRG		0.83669		7.42267

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	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.49746	0.67779	0.77735	0.83560	0.78424	0.78360					
	0.76362	0.79281					AVRG		0.73906		14.50348
99 Indeno(1,2,3-cd)pyrene	13655	230839	571625	1119329	1485270	2231964					
	2740272	3942157					LINR	0.02754	0.85117		0.99928
100 Dibenzo(a,h)anthracene	11383	194289	484055	941279	1242196	1871982					
	2304325	3322133					LINR	0.02870	0.71627		0.99919
101 Benzo(ghi)perylene	0.45435	0.62075	0.67088	0.67953	0.70274	0.68415					
	0.68870	0.70141					AVRG		0.65031		12.80349
102 1,4-Dioxane	+++++	0.24634	0.28025	+++++	+++++	0.30356					
	0.29319	0.26953					AVRG		0.27857		7.94884
103 Methyl methacrylate	+++++	0.16872	0.16444	+++++	+++++	0.16505					
	0.18086	0.15892					AVRG		0.16760		4.89346
104 Ethyl methacrylate	+++++	0.66031	0.70980	+++++	+++++	0.69504					
	0.68531	0.66714					AVRG		0.68352		2.95664
105 2-Picoline	+++++	1.01746	1.07832	+++++	+++++	1.04828					
	1.03935	1.02355					AVRG		1.04139		2.30595
106 N-Nitrosomethylethylamine	+++++	0.31757	0.35447	+++++	+++++	0.37185					
	0.37790	0.37352					AVRG		0.35906		6.92083

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.44871	0.47910	+++++	+++++	0.44075					
	0.43643	0.44457					AVRG		0.44991		3.76452
108 N-Nitrosodiethylamine	+++++	0.30410	0.36077	+++++	+++++	0.37459					
	0.37925	0.38070					AVRG		0.35988		8.93633
109 Ethyl Methanesulfonate	+++++	0.52387	0.54987	+++++	+++++	0.53861					
	0.52806	0.54078					AVRG		0.53624		1.93775
110 Pentachloroethane	+++++	0.30723	0.32723	+++++	+++++	0.32393					
	0.32208	0.31995					AVRG		0.32008		2.39449
111 N-Nitrosopyrrolidine	+++++	18119	50578	+++++	+++++	275191					
	347837	418958					LINR	0.09385	0.41052		0.99979
113 N-Nitrosomorpholine	+++++	0.31286	0.38027	+++++	+++++	0.40465					
	0.39989	0.39689					AVRG		0.37891		10.04075
114 o-Toluidine	+++++	1.35701	1.45906	+++++	+++++	1.45255					
	1.43423	1.43439					AVRG		1.42745		2.86402
115 N-Nitrosopiperidine	+++++	0.09506	0.11290	+++++	+++++	0.12040					
	0.12000	0.12173					AVRG		0.11402		9.77130
116 a,a-Dimethylphenethylamine	+++++	67223	221950	+++++	+++++	1304888					
	1645063	1941742					LINR	0.12017	0.55348		0.99966

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	100 Level 7	120 Level 8										
117 Triethylphosphorothioate	+++++	0.16537	0.16522	0.16826	0.17549	0.18113						
	0.18346	0.18351					AVRG		0.17464		4.76002	
118 2,6-Dichlorophenol	+++++	0.17667	0.20374	+++++	+++++	0.21733						
	0.21628	0.22228					AVRG		0.20726		8.88487	
119 Hexachloropropene	+++++	0.09341	0.12175	+++++	+++++	0.12774						
	0.13457	0.13555					AVRG		0.12260		14.06913	
120 p-Phenylenediamine	+++++	0.04451	0.09259	+++++	+++++	0.11802						
	0.14321	0.07722					AVRG		0.09511		39.77786	<-
121 N-Nitrosodi-n-butylamine	+++++	0.12388	0.14468	+++++	+++++	0.14675						
	0.14779	0.14275					AVRG		0.14117		6.98114	
122 Safrole	+++++	0.18511	0.20314	+++++	+++++	0.20383						
	0.19860	0.20325					AVRG		0.19879		3.98688	
123 1,2,4,5-Tetrachlorobenzene	+++++	0.44675	0.47581	+++++	+++++	0.47640						
	0.47142	0.46516					AVRG		0.46711		2.61935	
124 Isosafrole	+++++	0.28246	0.31435	+++++	+++++	0.32006						
	0.31708	0.32066					AVRG		0.31092		5.18056	
125 1,4-Naphthoquinone	+++++	0.26279	0.33670	+++++	+++++	0.28475						
	0.25902	0.21482					AVRG		0.27162		16.33213	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.13426	0.16096	0.17529	0.16515	0.17075					
	0.16615	0.17238					AVRG		0.16356		8.43299
127 Pentachlorobenzene	+++++	0.41386	0.44358	+++++	+++++	0.43445					
	0.42287	0.42694					AVRG		0.42834		2.63934
128 1-Naphthylamine	+++++	0.64290	0.71157	+++++	+++++	0.72798					
	0.75065	0.72826					AVRG		0.71227		5.78366
129 2-Naphthylamine	+++++	0.63606	0.67439	+++++	+++++	0.58978					
	0.64536	0.64782					AVRG		0.63868		4.82722
130 2,3,4,6-Tetrachlorophenol	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
131 5-Nitro-o-toluidine	+++++	27455	74724	+++++	+++++	413995					
	505367	634837					LINR	0.10089	0.28578		0.99956
132 Thionazin	+++++	0.13988	0.14775	0.15045	0.15424	0.15690					
	0.16203	0.16237					AVRG		0.15337		5.26573
134 Sulfotepp	+++++	0.11412	0.11494	0.11319	0.11600	0.11480					
	0.11400	0.11009					AVRG		0.11388		1.65743
135 Phorate	+++++	0.28388	0.29681	0.29037	0.30244	0.30088					
	0.30582	0.29054					AVRG		0.29582		2.65683

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	13955	48364	+++++	+++++	268631					
	340694	456398					LINR	0.16614	0.10906		0.99628
137 Phenacetin	+++++	0.17628	0.21001	+++++	+++++	0.23782					
	0.23708	0.23917					AVRG		0.22007		12.41888
138 Diallate	+++++	0.16761	0.18197	+++++	+++++	0.18302					
	0.17779	0.17698					AVRG		0.17747		3.43512
139 Dimethoate	+++++	0.13778	0.14938	0.15610	0.16928	0.17565					
	0.17871	0.17715					AVRG		0.16343		9.72135
140 4-Aminobiphenyl	+++++	0.37135	0.35332	+++++	+++++	0.32358					
	0.31870	0.29146					AVRG		0.33168		9.40668
141 Pentachloronitrobenzene	+++++	0.07139	0.07657	+++++	+++++	0.08321					
	0.08092	0.07832					AVRG		0.07808		5.77895
142 Pronamide	+++++	0.22821	0.24842	+++++	+++++	0.26720					
	0.25993	0.25910					AVRG		0.25257		6.00962
143 Dinoseb	+++++	17592	65243	160618	206017	370757					
	432801	653659					LINR	0.20878	0.15287		0.99661
144 Disulfoton	+++++	0.23435	0.24175	0.24250	0.25185	0.25151					
	0.25868	0.24626					AVRG		0.24670		3.25947

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.10756	0.12574	0.13745	0.15086	0.15374					
	0.16380	0.16473					AVRG		0.14341		14.69707
146 4-Nitroquinoline-1-oxide	+++++	0.00937	0.01228	+++++	+++++	0.00993					
	0.00944	0.00861					AVRG		0.00993		14.10180
147 Methapyrilene	+++++	0.23032	0.26350	+++++	+++++	0.25837					
	0.25388	0.25397					AVRG		0.25201		5.05822
148 Isodrin	+++++	0.08985	0.09732	+++++	+++++	0.10370					
	0.10020	0.10192					AVRG		0.09860		5.50608
149 Aramite	+++++	0.03284	0.03952	+++++	+++++	0.04489					
	0.04319	0.04214					AVRG		0.04052		11.63768
150 Kepone	+++++	0.07101	0.07864	+++++	+++++	0.07592					
	0.07559	0.08027					AVRG		0.07629		4.63038
151 p-(Dimethylamino)azobenzene	+++++	0.17522	0.21262	+++++	+++++	0.22053					
	0.21845	0.21324					AVRG		0.20801		8.95997
152 Chlorobenzilate	+++++	0.23225	0.25848	+++++	+++++	0.28615					
	0.27698	0.27112					AVRG		0.26500		7.87735
153 3,3'-Dimethylbenzidine	+++++	0.33926	0.36462	+++++	+++++	0.35940					
	0.37441	0.36902					AVRG		0.36134		3.74367

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	100 Level 7	120 Level 8										
154 Famphur	+++++	0.25103	0.28114	0.28876	0.31048	0.31944						
	0.33910	0.31592					AVRG		0.30084		9.73369	
155 2-Acetylaminofluorene	+++++	47120	145263	+++++	+++++	949702						
	1100767	1503747					LINR	0.14865	0.33609		0.99853	
157 7,12Dimethylbenz(a)anthracene	+++++	0.38032	0.42131	+++++	+++++	0.44350						
	0.44038	0.42979					AVRG		0.42306		6.01820	
158 3-Methylcholanthrene	+++++	0.30375	0.34529	+++++	+++++	0.39857						
	0.39085	0.39392					AVRG		0.36648		11.21865	
26 Phthalic anhydride	+++++	0.07507	0.06934	0.09549	0.09747	0.09550						
	0.08993	0.08635					AVRG		0.08702		12.56366	
173 Carbazole	14837	139367	246691	487385	568160	1090154						
	1254429	+++++					LINR	0.04109	0.39552		0.99187	
174 Hexachlorophene	+++++	435932	2361068	+++++	4538044	4556630						
	4552314	+++++					LINR	9.14609	0.09969		0.99353	
179 Dibenzo(a,e)pyrene	+++++	0.31362	0.35554	0.33118	0.43912	0.41638						
	0.44192	0.45643					AVRG		0.39346		14.89785	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	4343	14231	37456	44264	71290					
	83708	+++++					LINR	0.08539	0.11280		0.99437
191 Parathion	+++++	0.06337	0.07126	0.07805	0.08155	0.08375					
	0.08775	0.08748					AVRG		0.07903		11.34928
192 Methoxychlor	+++++	0.37316	0.43593	0.46907	0.48881	0.49691					
	0.47438	0.46605					AVRG		0.45776		9.18359
210 m-Toluidine	+++++	1.01730	0.95828	1.04153	1.07045	1.03819					
	1.06035	1.06455					AVRG		1.03581		3.74343
211 p-Toluidine	+++++	49683	78529	211799	266816	507067					
	569514	+++++					LINR	0.14181	0.78212		0.99497
212 Cis Diallate	+++++	0.14773	0.16624	+++++	+++++	0.17545					
	0.17147	0.16996					AVRG		0.16617		6.51318
213 Trans Diallate	+++++	0.19719	0.21409	+++++	+++++	0.21532					
	0.20917	0.20821					AVRG		0.20879		3.43512
214 1,4-Dinitrobenzene	+++++	0.12784	0.15121	0.16974	0.15587	0.16620					
	0.16695	0.17540					AVRG		0.15903		10.07655
215 2-Ethoxyethanol	+++++	0.38685	0.41544	0.41160	0.40973	0.41987					
	0.40092	0.36487					AVRG		0.40133		4.83383

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	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.09027	0.07877	0.09631	0.10183	0.11537					
	0.11302	+++++					AVRG		0.09926		13.99534
229 2,2'-Dichlorobenzil	+++++	0.40624	0.44915	0.45206	0.46835	0.49924					
	0.50127	0.49121					AVRG		0.46679		7.33567
230 4-Chlorothioanisole	+++++	0.23519	0.25134	0.25866	0.26118	0.27506					
	0.27431	0.27443					AVRG		0.26145		5.67051
231 4-Chlorothiophenol	+++++	33730	109582	208710	270504	591872					
	637096	698168					LINR	0.16729	0.22127		0.99837
232 bis(p-Chlorophenyl)sulfone	+++++	0.27790	0.28817	0.28727	0.29340	0.31372					
	0.31573	0.30820					AVRG		0.29777		4.94706
233 bis(p-Chlorophenyl)disulfide	+++++	0.08649	0.09716	0.09996	0.10104	0.11282					
	0.11321	0.11036					AVRG		0.10301		9.49989
234 Diphenyl disulfide	+++++	0.17703	0.18827	0.19313	0.19397	0.19743					
	0.19934	0.19498					AVRG		0.19202		3.89349
235 Diphenyl sulfide	+++++	0.73815	0.76067	0.76884	0.77583	0.77384					
	0.77835	0.76108					AVRG		0.76525		1.80366
236 Phenyl sulfone	+++++	0.32490	0.33335	0.34401	0.34629	0.34828					
	0.35151	0.34243					AVRG		0.34154		2.72169

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.15868	0.13541	0.13994	0.13819	0.13830						
	0.13473	0.14129					AVRG		0.14093		5.78993	
238 Phthalic acid	+++++	34594	90147	182251	231472	444665						
	541872	587383					LINR	0.16006	0.18293		0.99675	
239 Thiophenol	+++++	0.64619	0.81626	0.89508	0.92244	0.99432						
	1.00016	1.00671					AVRG		0.89731		14.54651	
240 bis(Chloromethyl)ether	+++++	0.74313	0.76318	0.75550	0.73293	0.77257						
	0.73038	0.75865					AVRG		0.75091		2.10971	
241 Octachlorostyrene	+++++	0.08120	0.08332	0.08290	0.08503	0.08678						
	0.08899	0.08481					AVRG		0.08472		3.05713	
M 225 Trichlorophenols	+++++	0.25256	0.28477	0.31039	0.30098	0.30758						
	0.30176	0.32123					AVRG		0.29704		7.57948	
M 226 Tetrachlorophenols	+++++	0.22059	0.24692	0.28284	0.26774	0.26616						
	0.26891	0.27816					AVRG		0.26162		8.15946	
M 227 Benzo(b,k)fluoranthene	0.70183	0.77538	0.86418	0.93080	0.86257	0.85913						
	0.83871	0.86699					AVRG		0.83745		8.27901	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.77799	0.82940	0.84165	0.83307	0.84646						
	0.82089	0.84901					AVRG		0.82835		2.93507	
$ 5 Phenol-d5	+++++	0.94004	1.02783	1.06321	1.02953	1.04638						
	1.02443	1.06043					AVRG		1.02741		4.04817	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27903	0.29718	0.29088	0.25443	0.23402						
	0.21749	0.21713					AVRG		0.25574		13.28145	
$ 39 2-Fluorobiphenyl	+++++	0.99517	1.04673	1.06867	1.00896	1.00442						
	0.97367	0.97597					AVRG		1.01051		3.50349	
$ 60 2,4,6-Tribromophenol	+++++	0.12029	0.14713	0.16005	0.15035	0.15227						
	0.14829	0.15735					AVRG		0.14796		8.83326	
$ 81 p-Terphenyl-d14	+++++	0.54698	0.59094	0.62904	0.57872	0.57377						
	0.54438	0.54045					AVRG		0.57204		5.54873	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Cal Date : 04-Dec-2009 10:56 rmb

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

Data File: /chem/MSD5.i/s113009.b/s5k3023.d
Report Date: 01-Dec-2009 07:52

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s5k3023.d
Analysis Type: WATER
Lab Sample ID: WBN091106-09.3
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

Injection Date: 30-NOV-2009 18:20
Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Init. Cal. Times: 14:09 17:28
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	3 2-Fluorophenol	0.82835	0.83029	0.83029	0.000	0.23433	60.00000	Averaged
$	5 Phenol-d5	1.02741	0.99434	0.99434	0.000	-3.21879	60.00000	Averaged
$	20 Nitrobenzene-d5	0.25574	0.27844	0.27844	0.000	8.87699	60.00000	Averaged
$	39 2-Fluorobiphenyl	1.01051	1.03773	1.03773	0.000	2.69384	60.00000	Averaged
$	60 2,4,6-Tribromophenol	0.14796	0.14657	0.14657	0.000	-0.93966	60.00000	Averaged
$	81 p-Terphenyl-d14	0.57204	0.62712	0.62712	0.000	9.62917	60.00000	Averaged
	1 N-Methyl-N-nitrosomethylami	0.45921	0.42939	0.42939	0.000	-6.49389	60.00000	Averaged
	2 Pyridine	0.65138	0.55949	0.55949	0.000	-14.10583	60.00000	Averaged
	4 Aniline	0.40115	0.39878	0.39878	0.000	-0.58986	60.00000	Averaged
	6 Phenol	1.07292	1.03238	1.03238	0.001	-3.77875	20.00000	Averaged ccc
	7 bis(2-Chloroethyl) ether	0.63389	0.62332	0.62332	0.000	-1.66734	60.00000	Averaged
	8 2-Chlorophenol	0.92015	0.89132	0.89132	0.000	-3.13291	60.00000	Averaged
	203 n-Decane	0.83349	0.87112	0.87112	0.000	4.51494	60.00000	Averaged
	9 1,3-Dichlorobenzene	1.10185	1.09484	1.09484	0.000	-0.63588	60.00000	Averaged
	11 1,4-Dichlorobenzene	1.11853	1.10496	1.10496	0.001	-1.21340	20.00000	Averaged ccc
	13 1,2-Dichlorobenzene	1.05853	1.04676	1.04676	0.000	-1.11250	60.00000	Averaged
	14 bis(2-Chloroisopropyl)ether	1.00756	0.99850	0.99850	0.000	-0.89937	60.00000	Averaged
	12 Benzyl alcohol	0.58054	0.55960	0.55960	0.000	-3.60740	60.00000	Averaged
	15 o-Cresol	0.73443	0.71543	0.71543	0.000	-2.58644	60.00000	Averaged
	18 m,p-Cresols	0.93489	0.91075	0.91075	0.000	-2.58249	60.00000	Averaged
	17 N-Nitrosodipropylamine	0.48281	0.48060	0.48060	0.050	-0.45716	60.00000	Averaged spcc
	19 Hexachloroethane	0.41297	0.38700	0.38700	0.000	-6.28851	60.00000	Averaged
	21 Nitrobenzene	0.23812	0.24737	0.24737	0.000	3.88288	60.00000	Averaged
	22 Isophorone	0.44222	0.44350	0.44350	0.000	0.28843	60.00000	Averaged
	23 2-Nitrophenol	0.12401	0.11747	0.11747	0.001	-5.27545	20.00000	Averaged ccc
	24 2,4-Dimethylphenol	0.21392	0.21469	0.21469	0.000	0.35583	60.00000	Averaged
	25 bis(2-Chloroethoxy)methane	0.24742	0.23888	0.23888	0.000	-3.45098	60.00000	Averaged
	26 2,4-Dichlorophenol	0.19949	0.19843	0.19843	0.001	-0.53268	20.00000	Averaged ccc
	27 Benzoic acid	0.11033	0.11800	0.11800	0.000	6.95226	60.00000	Averaged
	28 1,2,4-Trichlorobenzene	0.24997	0.24504	0.24504	0.000	-1.97055	60.00000	Averaged
	30 Naphthalene	0.69229	0.76058	0.76058	0.000	9.86346	60.00000	Averaged
	204 alpha-Terpineol	0.16160	0.15093	0.15093	0.000	-6.60421	60.00000	Averaged
	31 4-Chloroaniline	0.27721	0.26915	0.26915	0.000	-2.90716	60.00000	Averaged
	32 Hexachlorobutadiene	0.16258	0.16847	0.16847	0.001	3.62286	20.00000	Averaged ccc
	33 4-Chloro-3-methylphenol	0.19655	0.18982	0.18982	0.001	-3.42299	20.00000	Averaged ccc
	34 2-Methylnaphthalene	0.47745	0.54686	0.54686	0.000	14.53758	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.46395	0.51084	0.51084	0.000	10.10698	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16140	0.11816	0.11816	0.050	-26.78720	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.46121	0.43794	0.43794	0.000	-5.04574	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.29051	0.26846	0.26846	0.001	-7.58993	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.30357	0.30531	0.30531	0.000	0.57382	60.00000	Averaged	
40 2-Chloronaphthalene	0.84403	0.82711	0.82711	0.000	-2.00427	60.00000	Averaged	
42 o-Nitroaniline	0.22389	0.21429	0.21429	0.000	-4.28607	60.00000	Averaged	
41 m-Nitroaniline	32.25605	40.00000	0.09351	0.000	-19.35986	60.00000	Linear	
43 Dimethylphthalate	0.99502	1.00014	1.00014	0.000	0.51409	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.23251	0.22347	0.22347	0.000	-3.88808	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.29743	0.29372	0.29372	0.000	-1.24745	60.00000	Averaged	
45 Acenaphthylene	1.28545	1.44563	1.44563	0.000	12.46144	60.00000	Averaged	
47 Acenaphthene	0.82864	0.86500	0.86500	0.001	4.38855	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	31.49171	40.00000	0.05561	0.050	-21.27072	60.00000	Linear	spcc
49 Dibenzofuran	1.20211	1.19562	1.19562	0.000	-0.53995	60.00000	Averaged	
51 Diethylphthalate	0.99012	1.00550	1.00550	0.000	1.55350	60.00000	Averaged	
52 4-Nitrophenol	35.69942	40.00000	0.12382	0.050	-10.75144	60.00000	Linear	spcc
53 Fluorene	0.99445	1.07305	1.07305	0.000	7.90438	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.54736	0.53200	0.53200	0.000	-2.80637	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	39.60786	40.00000	0.07755	0.000	-0.98036	60.00000	Linear	
56 p-Nitroaniline	0.09976	0.09283	0.09283	0.000	-6.94521	60.00000	Averaged	
133 Diphenylamine	0.39311	0.36704	0.36704	0.001	-6.63338	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.48769	0.48502	0.48502	0.000	-0.54741	60.00000	Averaged	
61 4-Bromophenylphenylether	0.18052	0.17126	0.17126	0.000	-5.13387	60.00000	Averaged	
63 Hexachlorobenzene	0.19191	0.18523	0.18523	0.000	-3.47929	60.00000	Averaged	
65 Pentachlorophenol	36.05605	40.00000	0.08343	0.001	-9.85987	20.00000	Linear	ccc
206 n-Octadecane	0.26436	0.25557	0.25557	0.000	-3.32275	60.00000	Averaged	
68 Phenanthrene	0.75124	0.80888	0.80888	0.000	7.67214	60.00000	Averaged	
69 Anthracene	0.74720	0.83500	0.83500	0.000	11.75132	60.00000	Averaged	
72 Di-n-butylphthalate	0.85957	0.89892	0.89892	0.000	4.57698	60.00000	Averaged	
76 Fluoranthene	0.82257	0.93022	0.93022	0.001	13.08693	20.00000	Averaged	ccc
79 Pyrene	0.81023	0.89526	0.89526	0.000	10.49463	60.00000	Averaged	
85 Butylbenzylphthalate	0.36001	0.36740	0.36740	0.000	2.05224	60.00000	Averaged	
89 Benzo(a)anthracene	0.80663	0.86024	0.86024	0.000	6.64603	60.00000	Averaged	
92 Chrysene	0.73533	0.80028	0.80028	0.000	8.83303	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	39.93372	40.00000	0.53444	0.000	-0.16569	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s5k3023.d
Analysis Type: WATER
Lab Sample ID: WBN091106-09.3
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

Injection Date: 30-NOV-2009 18:20
Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Init. Cal. Times: 14:09 17:28
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.87303	0.87303	0.001	0.76265	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.92559	0.92559	0.000	10.42552	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.89887	0.89887	0.000	7.43117	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.83326	0.83326	0.001	12.74672	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	42.59286	40.00000	0.88290	0.000	6.48214	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	42.30047	40.00000	0.73690	0.000	5.75119	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.75185	0.75185	0.000	15.61349	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.15432	0.15432	0.000	-5.65249	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
	143 Dinoseb	32.63928	40.00000	0.09282	0.000	-18.40180	60.00000	Linear	
	173 Carbazole	38.13875	40.00000	0.36087	0.000	-4.65311	60.00000	Linear	
	184 p-Benzoquinone	36.94068	40.00000	0.09454	0.000	-7.64830	60.00000	Linear	
	192 Methoxychlor	0.45776	0.42935	0.42935	0.000	-6.20645	60.00000	Averaged	
	211 p-Toluidine	36.08309	40.00000	0.59462	0.000	-9.79228	60.00000	Linear	
	210 m-Toluidine	1.03581	0.92304	0.92304	0.000	-10.88701	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.10069	0.10069	0.000	15.70689	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.28402	0.28402	0.000	-27.81494	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.15861	0.15861	0.000	-0.26496	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.33769	0.33769	0.000	-15.85683	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.08744	0.08744	0.000	-11.91594	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.28689	0.28689	0.000	-3.41833	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.91223	0.91223	0.000	8.92968	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD5.i/s113009.b/s5k3023.d
Lab Smp Id: WBN091106-09.3 Client Smp ID: MEGAICV
Inj Date : 30-NOV-2009 18:20
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-09.3|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 01-Dec-2009 07:52 rmb Quant Type: ISTD
Cal Date : 30-NOV-2009 17:28 Cal File: s5k3021.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	241000	40.0000	
* 29 Naphthalene-d8	136	4.826	4.826	(1.000)	918322	40.0000	
* 46 Acenaphthene-d10	164	6.088	6.088	(1.000)	516156	40.0000	
* 67 Phenanthrene-d10	188	7.268	7.268	(1.000)	970034	40.0000	
* 91 Chrysene-d12	240	9.694	9.694	(1.000)	1047303	40.0000	
* 98 Perylene-d12	264	11.414	11.414	(1.000)	981599	40.0000	
$ 3 2-Fluorophenol	112	3.126	3.126	(0.791)	200101	40.0000	40.1
$ 5 Phenol-d5	99	3.661	3.661	(0.926)	239635	40.0000	38.7
$ 20 Nitrobenzene-d5	82	4.321	4.321	(0.895)	255698	40.0000	43.6
$ 39 2-Fluorobiphenyl	172	5.568	5.568	(0.915)	535633	40.0000	41.1
$ 60 2,4,6-Tribromophenol	329	6.685	6.685	(1.098)	75654	40.0000	39.6
$ 81 p-Terphenyl-d14	244	8.650	8.650	(0.892)	656788	40.0000	43.8
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.419	(0.612)	103482	40.0000	37.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.452	2.452	(0.620)	134838	40.0000	34.4
4 Aniline	66	3.738	3.738	(0.945)	96106	40.0000	39.8
6 Phenol	94	3.670	3.670	(0.928)	248803	40.0000	38.5(Q)
7 bis(2-Chloroethyl) ether	63	3.752	3.752	(0.949)	150220	40.0000	39.3
8 2-Chlorophenol	128	3.820	3.820	(0.966)	214809	40.0000	38.7
203 n-Decane	43	3.800	3.800	(0.961)	209941	40.0000	41.8
9 1,3-Dichlorobenzene	146	3.921	3.921	(0.991)	263857	40.0000	39.7
11 1,4-Dichlorobenzene	146	3.964	3.964	(1.002)	266296	40.0000	39.5
13 1,2-Dichlorobenzene	146	4.070	4.070	(1.029)	252268	40.0000	39.6
14 bis(2-Chloroisopropyl)ether	45	4.099	4.099	(1.037)	240639	40.0000	39.6
12 Benzyl alcohol	108	4.017	4.017	(1.016)	134864	40.0000	38.6
15 o-Cresol	107	4.070	4.070	(1.029)	172419	40.0000	39.0
18 m,p-Cresols	107	4.166	4.166	(1.054)	219491	40.0000	39.0
17 N-Nitrosodipropylamine	70	4.191	4.191	(1.060)	115825	40.0000	39.8(H)
19 Hexachloroethane	117	4.301	4.301	(1.088)	93268	40.0000	37.5
21 Nitrobenzene	77	4.330	4.330	(0.897)	227163	40.0000	41.6
22 Isophorone	82	4.484	4.484	(0.929)	407276	40.0000	40.1
23 2-Nitrophenol	139	4.547	4.547	(0.942)	107877	40.0000	37.9
24 2,4-Dimethylphenol	122	4.537	4.537	(0.940)	197151	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.605	4.605	(0.954)	219371	40.0000	38.6
26 2,4-Dichlorophenol	162	4.706	4.706	(0.975)	182222	40.0000	39.8
27 Benzoic acid	105	4.590	4.590	(0.951)	108359	40.0000	42.8
28 1,2,4-Trichlorobenzene	180	4.773	4.773	(0.989)	225027	40.0000	39.2
30 Naphthalene	128	4.841	4.841	(1.003)	698453	40.0000	43.9
204 alpha-Terpineol	59	4.812	4.812	(0.997)	138598	40.0000	37.4
31 4-Chloroaniline	127	4.841	4.841	(1.003)	247168	40.0000	38.8
32 Hexachlorobutadiene	225	4.908	4.908	(1.017)	154713	40.0000	41.4
33 4-Chloro-3-methylphenol	107	5.163	5.163	(1.070)	174316	40.0000	38.6
34 2-Methylnaphthalene	142	5.322	5.322	(1.103)	502193	40.0000	45.8
35 1-Methylnaphthalene	142	5.399	5.399	(1.119)	469118	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.428	5.428	(0.892)	60991	40.0000	29.3
205 2,3-Dichloroaniline	161	5.520	5.520	(0.907)	226045	40.0000	38.0
37 2,4,6-Trichlorophenol	196	5.510	5.510	(0.905)	138566	40.0000	37.0
38 2,4,5-Trichlorophenol	196	5.539	5.539	(0.910)	157589	40.0000	40.2
40 2-Chloronaphthalene	162	5.678	5.678	(0.933)	426918	40.0000	39.2
42 o-Nitroaniline	65	5.736	5.736	(0.942)	110609	40.0000	38.3
41 m-Nitroaniline	138	6.035	6.035	(0.991)	48268	40.0000	32.2
43 Dimethylphthalate	163	5.842	5.842	(0.960)	516226	40.0000	40.2
44 2,6-Dinitrotoluene	165	5.900	5.900	(0.969)	115345	40.0000	38.4
50 2,4-Dinitrotoluene	165	6.199	6.199	(1.018)	151603	40.0000	39.5
45 Acenaphthylene	152	5.987	5.987	(0.983)	746171	40.0000	45.0
47 Acenaphthene	154	6.112	6.112	(1.004)	446477	40.0000	41.8
48 2,4-Dinitrophenol	184	6.102	6.102	(1.002)	28705	40.0000	31.5
49 Dibenzofuran	168	6.237	6.237	(1.025)	617128	40.0000	39.8
51 Diethylphthalate	149	6.353	6.353	(1.044)	518995	40.0000	40.6
52 4-Nitrophenol	139	6.117	6.117	(1.005)	63912	40.0000	35.7
53 Fluorene	166	6.502	6.502	(1.068)	553863	40.0000	43.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.473	6.473	(1.063)	274594	40.0000	38.9
55 2-Methyl-4,6-dinitrophenol	198	6.512	6.512	(0.896)	75224	40.0000	39.6
56 p-Nitroaniline	138	6.497	6.497	(1.067)	47914	40.0000	37.2
133 Diphenylamine	169	6.564	6.564	(0.903)	356038	40.0000	37.3
58 1,2-Diphenylhydrazine	77	6.598	6.598	(0.908)	470487	40.0000	39.8
61 4-Bromophenylphenylether	248	6.868	6.868	(0.945)	166125	40.0000	37.9
63 Hexachlorobenzene	284	6.940	6.940	(0.955)	179680	40.0000	38.6
65 Pentachlorophenol	266	7.089	7.089	(0.975)	80931	40.0000	36.0
206 n-Octadecane	57	7.075	7.075	(0.973)	247915	40.0000	38.7
68 Phenanthrene	178	7.287	7.287	(1.003)	784638	40.0000	43.1
69 Anthracene	178	7.330	7.330	(1.009)	809979	40.0000	44.7
72 Di-n-butylphthalate	149	7.686	7.686	(1.058)	871980	40.0000	41.8
76 Fluoranthene	202	8.337	8.337	(1.147)	902346	40.0000	45.2
79 Pyrene	202	8.553	8.553	(0.882)	937612	40.0000	44.2
85 Butylbenzylphthalate	149	9.083	9.083	(0.937)	384776	40.0000	40.8
89 Benzo(a)anthracene	228	9.680	9.680	(0.998)	900935	40.0000	42.6
92 Chrysene	228	9.719	9.719	(1.002)	838136	40.0000	43.5
93 bis(2-Ethylhexyl)phthalate	149	9.608	9.608	(0.991)	559723	40.0000	39.9
94 Di-n-octylphthalate	149	10.277	10.277	(0.900)	856961	40.0000	40.3
95 Benzo(b)fluoranthene	252	10.879	10.879	(0.953)	908560	40.0000	44.2(H)
96 Benzo(k)fluoranthene	252	10.918	10.918	(0.957)	882331	40.0000	43.0
97 Benzo(a)pyrene	252	11.332	11.332	(0.993)	817930	40.0000	45.1
99 Indeno(1,2,3-cd)pyrene	276	13.239	13.239	(1.160)	866655	40.0000	42.6
100 Dibenzo(a,h)anthracene	278	13.253	13.253	(1.161)	723343	40.0000	42.3
101 Benzo(ghi)perylene	276	13.797	13.797	(1.209)	738017	40.0000	46.2
126 m-Dinitrobenzene	168	5.881	5.881	(0.966)	79652	40.0000	37.7
130 2,3,4,6-Tetrachlorophenol	232	6.314	6.314	(1.037)	122646	40.0000	36.3
143 Dinoseb	211	7.210	7.210	(0.992)	90043	40.0000	32.6
173 Carbazole	167	7.446	7.446	(1.024)	350056	40.0000	38.1
184 p-Benzoquinone	54	3.435	3.435	(0.868)	22785	40.0000	36.9
192 Methoxychlor	227	9.560	9.560	(0.986)	449656	40.0000	37.5
211 p-Toluidine	106	4.229	4.229	(1.069)	143304	40.0000	36.1
210 m-Toluidine	106	4.253	4.253	(1.075)	222452	40.0000	35.6
26 Phthalic anhydride	104	5.351	5.351	(1.109)	92464	40.0000	46.3
179 Dibenzo(a,e)pyrene	302	18.054	18.054	(1.582)	278791	40.0000	28.9(H)
214 1,4-Dinitrobenzene	75	5.823	5.823	(0.956)	81867	40.0000	39.9
215 2-Ethoxyethanol	59	2.255	2.255	(0.570)	81383	40.0000	33.6
216 Methylenebis(2-chloroaniline)	231	9.622	9.622	(0.993)	91571	40.0000	35.2(Q)
M 225 Trichlorophenols	196				296155	80.0000	77.3
M 226 Tetrachlorophenols	232				122646	40.0000	36.3
M 227 Benzo(b,k)fluoranthene	252				1790891	80.0000	87.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s113009.b/s5k3023.d
Date : 30-NOV-2009 18:20
Client ID: MEGAICV
Sample Info: IWBN091106-09,3140 PPM!1!SVM11!MEGAICV
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

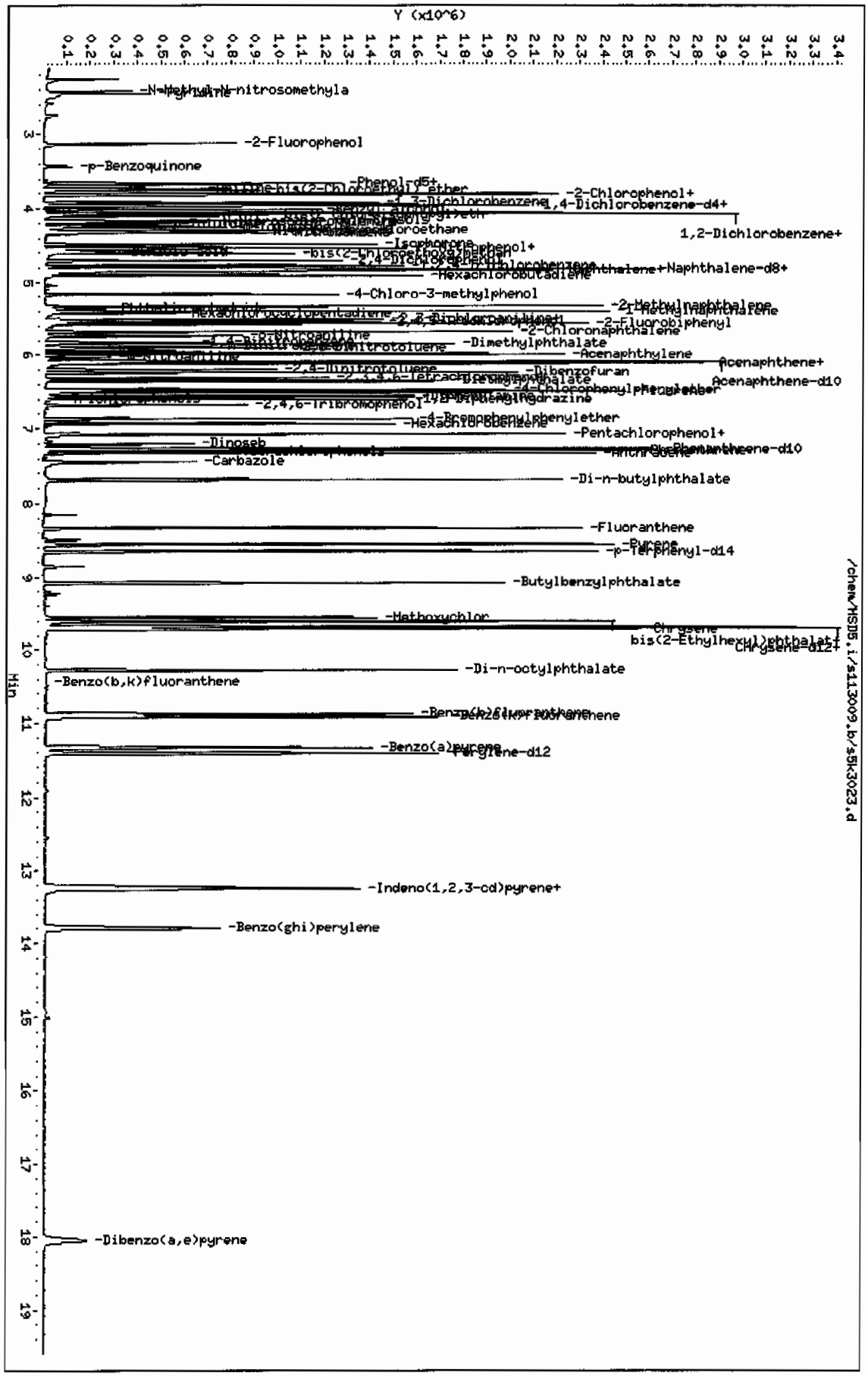

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 01-DEC-2009 00:10
Lab File ID: s5k3038.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091111-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.65043	0.65043	0.000	-12.29758	60.00000	Averaged
16 Acetophenone	1.03433	1.03897	1.03897	0.000	0.44885	60.00000	Averaged
189 Caprolactam	0.07313	0.07820	0.07820	0.000	6.93169	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.14668	1.14668	0.000	8.19727	60.00000	Averaged
207 Atrazine	0.02060	0.02454	0.02454	0.000	19.14280	60.00000	Averaged
77 Benzidine	0.13169	0.08089	0.08089	0.000	-38.57488	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.27627	0.27627	0.000	2.12244	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.33600	0.33600	0.000	20.61484	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.19248	0.19248	0.000	14.84568	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.84583	0.84583	0.000	23.74639	60.00000	Averaged
105 2-Picoline	1.04139	1.00530	1.00530	0.000	-3.46598	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.36760	0.36760	0.000	2.37797	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.50459	0.50459	0.000	12.15234	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.35101	0.35101	0.000	-2.46475	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.67398	0.67398	0.000	25.68542	60.00000	Averaged
110 Pentachloroethane	0.32008	0.45290	0.45290	0.000	41.49317	60.00000	Averaged
111 N-Nitrosopyrrolidine	36.47218	40.00000	0.33578	0.000	-8.81956	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.37347	0.37347	0.000	-1.43685	60.00000	Averaged
114 o-Toluidine	1.42745	1.44299	1.44299	0.000	1.08876	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.11246	0.11246	0.000	-1.36442	60.00000	Averaged
116 a,a-Dimethylphenethylamine	38.19678	40.00000	0.46202	0.000	-4.50804	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.21709	0.21709	0.000	4.74185	60.00000	Averaged
119 Hexachloropropene	0.12260	0.18393	0.18393	0.000	50.01830	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.10774	0.10774	0.000	13.27805	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.14117	0.13700	0.13700	0.000	-2.95714	60.00000	Averaged
122 Safrole	0.19879	0.23876	0.23876	0.000	20.10710	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.51426	0.51426	0.000	10.09541	60.00000	Averaged
124 Isosafrole	0.31092	0.42686	0.42686	0.000	37.28900	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.33682	0.33682	0.000	24.00722	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.45613	0.45613	0.000	6.48820	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.70896	0.70896	0.000	-0.46534	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.51413	0.51413	0.000	-19.50189	60.00000	Averaged
131 5-Nitro-o-toluidine	38.89551	40.00000	0.24906	0.000	-2.76124	60.00000	Linear
136 1,3,5-Trinitrobenzene	45.79543	40.00000	0.10675	0.000	14.48858	60.00000	Linear
137 Phenacetin	0.22007	0.24075	0.24075	0.000	9.39579	60.00000	Averaged
138 Diallate	0.17747	0.17603	0.17603	0.000	-0.81534	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s5k3038.d
Analysis Type: WATER
Lab Sample ID: WBN091111-08.1
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

Injection Date: 01-DEC-2009 00:10
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.22410	0.22410	0.000	34.86393	60.00000	Averaged
213 Trans Diallate	0.20879	0.20709	0.20709	0.000	-0.81534	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.31377	0.31377	0.000	-5.40004	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08582	0.08582	0.000	9.90245	60.00000	Averaged
142 Pronamide	0.25257	0.28719	0.28719	0.000	13.70900	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01196	0.01196	0.000	20.41909	60.00000	Averaged
147 Methapyrilene	0.25201	0.29827	0.29827	0.000	18.35726	60.00000	Averaged
148 Isodrin	0.09860	0.09378	0.09378	0.000	-4.88678	60.00000	Averaged
149 Aramite	0.04052	0.04013	0.04013	0.000	-0.95220	60.00000	Averaged
150 Kepone	0.07629	0.06942	0.06942	0.000	-9.00509	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.21652	0.21652	0.000	4.09057	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.26342	0.26342	0.000	-0.59569	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.33149	0.33149	0.000	-8.26293	60.00000	Averaged
155 2-Acetylaminofluorene	38.79550	40.00000	0.27601	0.000	-3.01125	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.43251	0.43251	0.000	2.23307	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.40112	0.40112	0.000	9.45325	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s113009.b/s5k3038.d
Lab Smp Id: WBN091111-08.1 Client Smp ID: AP12ICV
Inj Date : 01-DEC-2009 00:10
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091111-08.1|50 PPM|1|SVM|1|AP12ICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 02-Dec-2009 13:38 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 12:54 Cal File: s5k3048.d
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.948	3.948	(1.000)	321448	40.0000	
* 29 Naphthalene-d8	136	4.825	4.825	(1.000)	1142641	40.0000	
* 46 Acenaphthene-d10	164	6.084	6.084	(1.000)	698479	40.0000	
* 67 Phenanthrene-d10	188	7.260	7.260	(1.000)	1290991	40.0000	
* 91 Chrysene-d12	240	9.683	9.683	(1.000)	1365925	40.0000	
* 98 Perylene-d12	264	11.407	11.407	(1.000)	1246471	40.0000	
209 Benzaldehyde	77	3.672	3.672	(0.930)	209081	40.0000	35.1
16 Acetophenone	105	4.201	4.201	(1.064)	333975	40.0000	40.2
189 Caprolactam	113	5.095	5.095	(1.056)	89358	40.0000	42.8
208 1,1'-Biphenyl	154	5.648	5.648	(0.928)	800935	40.0000	43.3
207 Atrazine	173	6.954	6.954	(0.958)	31680	40.0000	47.6
77 Benzidine	184	8.419	8.419	(0.869)	110489	40.0000	24.6
90 3,3'-Dichlorobenzidine	252	9.619	9.619	(0.993)	377361	40.0000	40.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.260	2.260	(0.572)	108007	40.0000	48.2
103 Methyl methacrylate	100	2.254	2.254	(0.571)	61872	40.0000	45.9
104 Ethyl methacrylate	69	2.637	2.637	(0.668)	271891	40.0000	49.5
105 2-Picoline	93	2.837	2.837	(0.718)	323151	40.0000	38.6
106 N-Nitrosomethylethylamine	88	2.884	2.884	(0.730)	118164	40.0000	41.0
107 Methyl methanesulfonate	80	3.037	3.037	(0.769)	162199	40.0000	44.9
108 N-Nitrosodiethylamine	102	3.278	3.278	(0.830)	112832	40.0000	39.0
109 Ethyl Methanesulfonate	79	3.431	3.431	(0.869)	216648	40.0000	50.3
110 Pentachloroethane	167	3.778	3.778	(0.957)	145583	40.0000	56.6
111 N-Nitrosopyrrolidine	100	4.190	4.190	(1.061)	107937	40.0000	36.5
113 N-Nitrosomorpholine	56	4.207	4.207	(1.066)	120050	40.0000	39.4
114 o-Toluidine	106	4.231	4.231	(1.071)	463846	40.0000	40.4
115 N-Nitrosopiperidine	114	4.431	4.431	(0.918)	128504	40.0000	39.4
116 a,a-Dimethylphenethylamine	58	4.737	4.737	(0.982)	527921	40.0000	38.2
118 2,6-Dichlorophenol	162	4.866	4.866	(1.009)	248053	40.0000	41.9
119 Hexachloropropene	213	4.895	4.895	(1.015)	210163	40.0000	60.0
120 p-Phenylenediamine	108	5.101	5.101	(1.057)	123106	40.0000	45.3
121 N-Nitrosodi-n-butylamine	84	5.066	5.066	(1.050)	156538	40.0000	38.8(T)
122 Safrole	162	5.237	5.237	(1.085)	272812	40.0000	48.0
123 1,2,4,5-Tetrachlorobenzene	216	5.437	5.437	(0.894)	359203	40.0000	44.0
124 Isosafrole	162	5.607	5.607	(0.922)	298154	40.0000	54.9
125 1,4-Naphthoquinone	158	5.795	5.795	(0.953)	235264	40.0000	49.6
127 Pentachlorobenzene	250	6.201	6.201	(1.019)	318599	40.0000	42.6
128 1-Naphthylamine	143	6.290	6.290	(1.034)	495191	40.0000	39.8
129 2-Naphthylamine	143	6.342	6.342	(1.043)	359107	40.0000	32.2
131 5-Nitro-o-toluidine	152	6.484	6.484	(1.066)	173960	40.0000	38.9
136 1,3,5-Trinitrobenzene	75	6.737	6.737	(0.928)	137808	40.0000	45.8
137 Phenacetin	108	6.778	6.778	(0.934)	310807	40.0000	43.8
138 Diallate	86	6.772	6.772	(0.933)	227250	40.0000	39.7
212 Cis Diallate	86	6.848	6.848	(0.943)	43397	6.00000	8.1(a)
213 Trans Diallate	86	6.772	6.772	(0.933)	227250	34.0000	33.7
140 4-Aminobiphenyl	169	7.072	7.072	(0.974)	405072	40.0000	37.8
141 Pentachloronitrobenzene	237	7.095	7.095	(0.977)	110788	40.0000	44.0
142 Pronamide	173	7.089	7.089	(0.976)	370764	40.0000	45.5
146 4-Nitroquinoline-1-oxide	101	7.936	7.936	(1.093)	15434	40.0000	48.2
147 Methapyrilene	58	7.972	7.972	(1.098)	385063	40.0000	47.3
148 Isodrin	193	8.195	8.195	(1.129)	121070	40.0000	38.0
149 Aramite	185	8.595	8.595	(1.184)	51810	40.0000	39.6
150 Kepone	272	9.183	9.183	(1.265)	89616	40.0000	36.4
151 p-(Dimethylamino)azobenzene	120	8.778	8.778	(0.906)	295751	40.0000	41.6
152 Chlorobenzilate	251	8.807	8.807	(0.909)	359810	40.0000	39.8
153 3,3'-Dimethylbenzidine	212	9.089	9.089	(0.939)	452784	40.0000	36.7
155 2-Acetylaminofluorene	181	9.342	9.342	(0.965)	377007	40.0000	38.8
157 7,12Dimethylbenz(a)anthracene	256	10.848	10.848	(0.951)	539106	40.0000	40.9
158 3-Methylcholanthrene	268	11.824	11.824	(1.037)	499987	40.0000	43.8

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/MSD5.i/s113009.b/s5K3038.d
Date : 01-DEC-2009 00:10
Client ID: AP12ICV
Sample Info: IWBN091111-08.1:50 PPM11SVM11AP12ICV
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

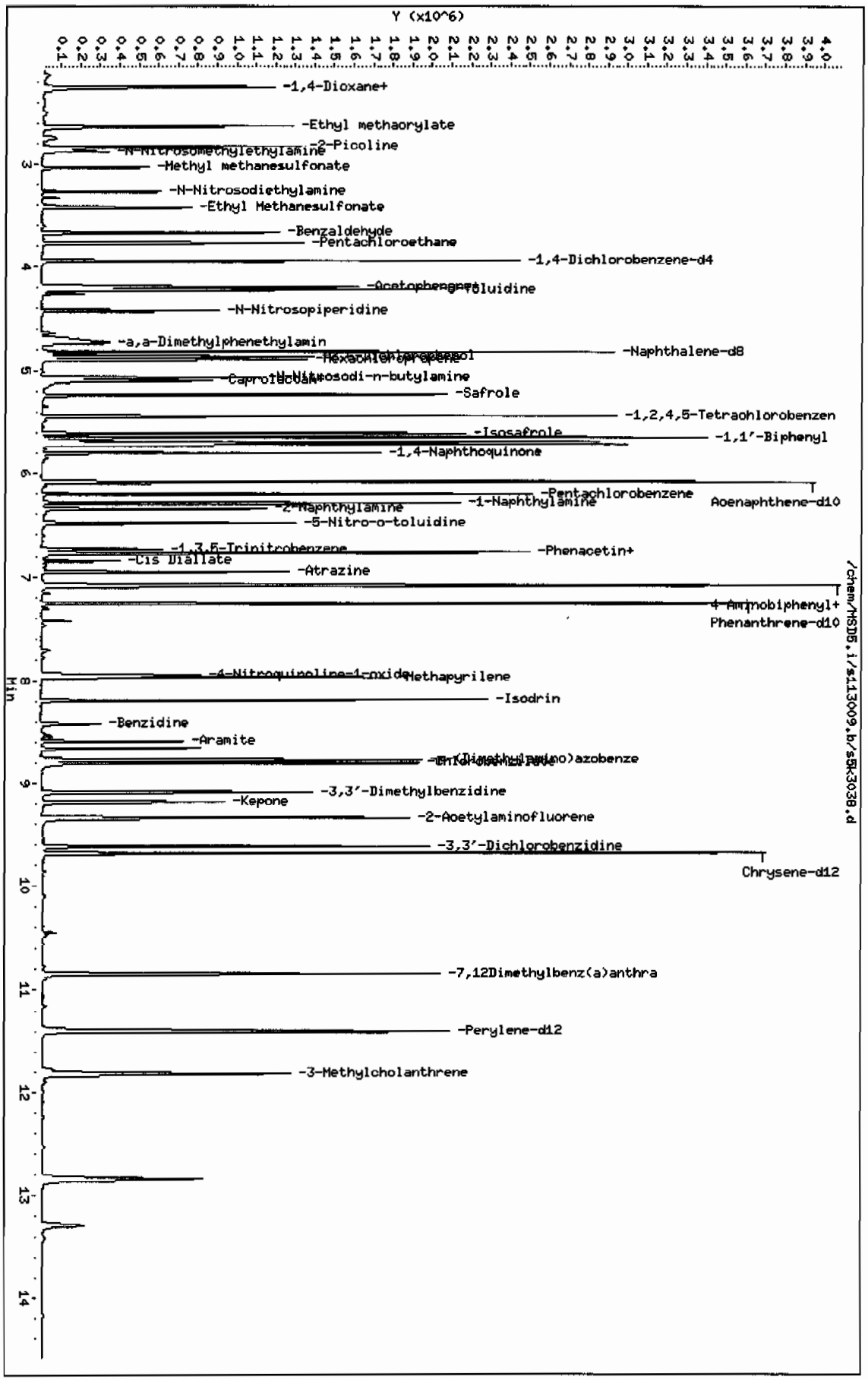

Page 1

Data File: /chem/MSD5.i/s120409.b/s510402.d
Report Date: 05-Dec-2009 10:44

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510402.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

Injection Date: 04-DEC-2009 10:38
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.86505	0.86505	0.000	4.42974	60.00000	Averaged
$ 5 Phenol-d5	1.02741	1.07433	1.07433	0.000	4.56745	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.26681	0.26681	0.000	4.32977	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.08612	1.08612	0.000	7.48163	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.16090	0.16090	0.000	8.74176	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.64993	0.64993	0.000	13.61563	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.50568	0.50568	0.000	10.11945	60.00000	Averaged
2 Pyridine	0.65138	0.67090	0.67090	0.000	2.99812	60.00000	Averaged
4 Aniline	0.40115	0.42894	0.42894	0.000	6.92907	60.00000	Averaged
6 Phenol	1.07292	1.10926	1.10926	0.001	3.38685	20.00000	Averaged
7 bis(2-Chloroethyl) ether	0.63389	0.68532	0.68532	0.000	8.11428	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.96636	0.96636	0.000	5.02156	60.00000	Averaged
203 n-Decane	0.83349	0.90664	0.90664	0.000	8.77652	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.15388	1.15388	0.000	4.72220	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11854	1.16243	1.16243	0.001	3.92470	20.00000	Averaged
13 1,2-Dichlorobenzene	1.05853	1.09341	1.09341	0.000	3.29462	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	1.08867	1.08867	0.000	8.05017	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.59918	0.59918	0.000	3.21059	60.00000	Averaged
15 o-Cresol	0.73443	0.73801	0.73801	0.000	0.48797	60.00000	Averaged
18 m,p-Cresols	0.93489	0.95897	0.95897	0.000	2.57505	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.58592	0.58592	0.050	21.35641	60.00000	Averaged
19 Hexachloroethane	0.41297	0.41626	0.41626	0.000	0.79649	60.00000	Averaged
21 Nitrobenzene	0.23812	0.26776	0.26776	0.000	12.44567	60.00000	Averaged
22 Isophorone	0.44222	0.47366	0.47366	0.000	7.10740	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.13061	0.13061	0.001	5.32062	20.00000	Averaged
24 2,4-Dimethylphenol	0.21392	0.23550	0.23550	0.000	10.08587	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.27956	0.27956	0.000	12.98776	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.23398	0.23398	0.001	17.29026	20.00000	Averaged
27 Benzoic acid	0.11033	0.11207	0.11207	0.000	1.58255	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.28107	0.28107	0.000	12.44293	60.00000	Averaged
30 Naphthalene	0.69229	0.75408	0.75408	0.000	8.92489	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.17933	0.17933	0.000	10.97443	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.34220	0.34220	0.000	23.44491	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.18048	0.18048	0.001	11.00900	20.00000	Averaged
33 4-Chloro-3-methylphenol	0.19655	0.21521	0.21521	0.001	9.49679	20.00000	Averaged
34 2-Methylnaphthalene	0.47745	0.52404	0.52404	0.000	9.75872	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510402.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

Injection Date: 04-DEC-2009 10:38
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.46395	0.51006	0.51006	0.000	9.93759	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16140	0.17696	0.17696	0.050	9.64521	60.00000	Averaged
205 2,3-Dichloroaniline	0.46121	0.49428	0.49428	0.000	7.17036	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.29051	0.31517	0.31517	0.001	8.48992	20.00000	Averaged
38 2,4,5-Trichlorophenol	0.30357	0.33142	0.33142	0.000	9.17362	60.00000	Averaged
40 2-Chloronaphthalene	0.84403	0.89319	0.89319	0.000	5.82494	60.00000	Averaged
42 o-Nitroaniline	0.22389	0.23173	0.23173	0.000	3.50199	60.00000	Averaged
41 m-Nitroaniline	52.81762	40.00000	0.19560	0.000	32.04405	60.00000	Linear
43 Dimethylphthalate	0.99502	1.04245	1.04245	0.000	4.76712	60.00000	Averaged
44 2,6-Dinitrotoluene	0.23251	0.23924	0.23924	0.000	2.89412	60.00000	Averaged
50 2,4-Dinitrotoluene	0.29743	0.30180	0.30180	0.000	1.47170	60.00000	Averaged
45 Acenaphthylene	1.28545	1.38367	1.38367	0.000	7.64154	60.00000	Averaged
47 Acenaphthene	0.82864	0.88358	0.88358	0.001	6.63018	20.00000	Averaged
48 2,4-Dinitrophenol	43.18597	40.00000	0.09046	0.050	7.96492	60.00000	Linear
49 Dibenzofuran	1.20211	1.24994	1.24994	0.000	3.97820	60.00000	Averaged
51 Diethylphthalate	0.99012	1.00217	1.00217	0.000	1.21732	60.00000	Averaged
52 4-Nitrophenol	45.85289	40.00000	0.16628	0.050	14.63222	60.00000	Linear
53 Fluorene	0.99445	1.04903	1.04903	0.000	5.48883	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54736	0.56104	0.56104	0.000	2.49946	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	39.88357	40.00000	0.07822	0.000	-0.29108	60.00000	Linear
56 p-Nitroaniline	0.09976	0.14952	0.14952	0.000	49.88470	60.00000	Averaged
133 Diphenylamine	0.39311	0.45738	0.45738	0.001	16.34842	20.00000	Averaged
58 1,2-Diphenylhydrazine	0.48769	0.54230	0.54230	0.000	11.19777	60.00000	Averaged
61 4-Bromophenylphenylether	0.18052	0.19942	0.19942	0.000	10.46490	60.00000	Averaged
63 Hexachlorobenzene	0.19191	0.20897	0.20897	0.000	8.88844	60.00000	Averaged
65 Pentachlorophenol	45.27662	40.00000	0.10947	0.001	13.19155	20.00000	Linear
206 n-Octadecane	0.26436	0.29051	0.29051	0.000	9.89209	60.00000	Averaged
68 Phenanthrene	0.75124	0.81034	0.81034	0.000	7.86698	60.00000	Averaged
69 Anthracene	0.74720	0.81968	0.81968	0.000	9.70027	60.00000	Averaged
72 Di-n-butylphthalate	0.85957	0.93402	0.93402	0.000	8.66051	60.00000	Averaged
76 Fluoranthene	0.82257	0.91017	0.91017	0.001	10.64985	20.00000	Averaged
79 Pyrene	0.81023	0.95166	0.95166	0.000	17.45501	60.00000	Averaged
85 Butylbenzylphthalate	0.36001	0.40367	0.40367	0.000	12.12826	60.00000	Averaged
89 Benzo(a)anthracene	0.80663	0.87763	0.87763	0.000	8.80183	60.00000	Averaged
92 Chrysene	0.73533	0.79334	0.79334	0.000	7.88891	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	42.78967	40.00000	0.57316	0.000	6.97418	60.00000	Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510402.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

Injection Date: 04-DEC-2009 10:38
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	94 Di-n-octylphthalate	0.86642	1.00352	1.00352	0.001	15.82375	20.00000	Averaged
	95 Benzo(b)fluoranthene	0.83820	0.95213	0.95213	0.000	13.59206	60.00000	Averaged
	96 Benzo(k)fluoranthene	0.83669	0.89754	0.89754	0.000	7.27169	60.00000	Averaged
	97 Benzo(a)pyrene	0.73906	0.82969	0.82969	0.001	12.26370	20.00000	Averaged
	99 Indeno(1,2,3-cd)pyrene	39.40709	40.00000	0.81511	0.000	-1.48228	60.00000	Linear
	100 Dibenzo(a,h)anthracene	38.51909	40.00000	0.66919	0.000	-3.70227	60.00000	Linear
	101 Benzo(ghi)perylene	0.65031	0.67876	0.67876	0.000	4.37420	60.00000	Averaged
	126 m-Dinitrobenzene	0.16356	0.16448	0.16448	0.000	0.56132	60.00000	Averaged
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.28733	0.28733	0.000	9.82953	60.00000	Averaged
	143 Dinoseb	37.89885	40.00000	0.11293	0.000	-5.25288	60.00000	Linear
	173 Carbazole	52.07900	40.00000	0.49871	0.000	30.19751	60.00000	Linear
	184 p-Benzoquinone	30.00885	40.00000	0.07500	0.000	-24.97787	60.00000	Linear
	192 Methoxychlor	0.45776	0.50181	0.50181	0.000	9.62422	60.00000	Averaged
	211 p-Toluidine	46.13186	40.00000	0.79111	0.000	15.32965	60.00000	Linear
	210 m-Toluidine	1.03581	1.11173	1.11173	0.000	7.32972	60.00000	Averaged
	26 Phthalic anhydride	0.08702	0.09470	0.09470	0.000	8.82903	60.00000	Averaged
	179 Dibenzo(a,e)pyrene	0.39346	0.41648	0.41648	0.000	5.85043	60.00000	Averaged
	214 1,4-Dinitrobenzene	0.15903	0.16474	0.16474	0.000	3.59202	60.00000	Averaged
	215 2-Ethoxyethanol	0.40133	0.43057	0.43057	0.000	7.28591	60.00000	Averaged
	216 Methylenebis(2-chloroanilin	0.09926	0.11765	0.11765	0.000	18.52814	60.00000	Averaged
M	225 Trichlorophenols	0.29704	0.32329	0.32329	0.000	8.83925	60.00000	Averaged
M	226 Tetrachlorophenols	0.26162	0.28733	0.28733	0.000	9.82953	60.00000	Averaged
M	227 Benzo(b,k)fluoranthene	0.83745	0.92484	0.92484	0.000	10.43471	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510402.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 04-DEC-2009 10:38
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:44 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.921	3.921	(1.000)	413613	40.0000	
* 29 Naphthalene-d8	136	4.792	4.792	(1.000)	1545687	40.0000	
* 46 Acenaphthene-d10	164	6.049	6.049	(1.000)	886910	40.0000	
* 67 Phenanthrene-d10	188	7.224	7.224	(1.000)	1593509	40.0000	
* 91 Chrysene-d12	240	9.641	9.641	(1.000)	1621115	40.0000	
* 98 Perylene-d12	264	11.331	11.331	(1.000)	1429948	40.0000	
$ 3 2-Fluorophenol	112	3.102	3.102	(0.791)	357795	40.0000	41.8
$ 5 Phenol-d5	99	3.632	3.632	(0.926)	444358	40.0000	41.8
$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)	412407	40.0000	41.7
$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.915)	963287	40.0000	43.0
$ 60 2,4,6-Tribromophenol	329	6.651	6.651	(1.099)	142701	40.0000	43.5
$ 81 p-Terphenyl-d14	244	8.606	8.606	(0.893)	1053607	40.0000	45.4
1 N-Methyl-N-nitrosomethylamine	74	2.399	2.399	(0.612)	209154	40.0000	44.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.433	2.433	(0.620)	277495	40.0000	41.2
4 Aniline	66	3.704	3.704	(0.945)	177416	40.0000	42.8
6 Phenol	94	3.641	3.641	(0.929)	458804	40.0000	41.4(Q)
7 bis(2-Chloroethyl) ether	63	3.718	3.718	(0.948)	283459	40.0000	43.2
8 2-Chlorophenol	128	3.786	3.786	(0.966)	399698	40.0000	42.0
203 n-Decane	43	3.771	3.771	(0.962)	375000	40.0000	43.5
9 1,3-Dichlorobenzene	146	3.887	3.887	(0.991)	477260	40.0000	41.9
11 1,4-Dichlorobenzene	146	3.935	3.935	(1.004)	480798	40.0000	41.6
13 1,2-Dichlorobenzene	146	4.036	4.036	(1.029)	452247	40.0000	41.3
14 bis(2-Chloroisopropyl)ether	45	4.065	4.065	(1.037)	450290	40.0000	43.2
12 Benzyl alcohol	108	3.988	3.988	(1.017)	247830	40.0000	41.3
15 o-Cresol	107	4.041	4.041	(1.031)	305251	40.0000	40.2
18 m,p-Cresols	107	4.142	4.142	(1.056)	396642	40.0000	41.0
17 N-Nitrosodipropylamine	70	4.161	4.161	(1.061)	242344	40.0000	48.5
19 Hexachloroethane	117	4.267	4.267	(1.088)	172172	40.0000	40.3
21 Nitrobenzene	77	4.301	4.301	(0.898)	413869	40.0000	45.0
22 Isophorone	82	4.455	4.455	(0.930)	732123	40.0000	42.8
23 2-Nitrophenol	139	4.513	4.513	(0.942)	201886	40.0000	42.1
24 2,4-Dimethylphenol	122	4.508	4.508	(0.941)	364011	40.0000	44.0
25 bis(2-Chloroethoxy)methane	93	4.576	4.576	(0.955)	432105	40.0000	45.2
26 2,4-Dichlorophenol	162	4.677	4.677	(0.976)	361667	40.0000	46.9
27 Benzoic acid	105	4.566	4.566	(0.953)	173229	40.0000	40.6
28 1,2,4-Trichlorobenzene	180	4.744	4.744	(0.990)	434447	40.0000	45.0
30 Naphthalene	128	4.807	4.807	(1.003)	1165568	40.0000	43.6(Q)
204 alpha-Terpineol	59	4.783	4.783	(0.998)	277191	40.0000	44.4
31 4-Chloroaniline	127	4.821	4.821	(1.006)	528938	40.0000	49.4
32 Hexachlorobutadiene	225	4.869	4.869	(1.016)	278969	40.0000	44.4
33 4-Chloro-3-methylphenol	107	5.134	5.134	(1.071)	332653	40.0000	43.8
34 2-Methylnaphthalene	142	5.288	5.288	(1.103)	810006	40.0000	43.9
35 1-Methylnaphthalene	142	5.365	5.365	(1.120)	788388	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.394	5.394	(0.892)	156952	40.0000	43.8
205 2,3-Dichloroaniline	161	5.486	5.486	(0.907)	438383	40.0000	42.9
37 2,4,6-Trichlorophenol	196	5.476	5.476	(0.905)	279528	40.0000	43.4(H)
38 2,4,5-Trichlorophenol	196	5.505	5.505	(0.910)	293939	40.0000	43.7
40 2-Chloronaphthalene	162	5.645	5.645	(0.933)	792180	40.0000	42.3
42 o-Nitroaniline	65	5.702	5.702	(0.943)	205524	40.0000	41.4
41 m-Nitroaniline	138	5.996	5.996	(0.991)	173483	40.0000	52.8
43 Dimethylphthalate	163	5.808	5.808	(0.960)	924563	40.0000	41.9
44 2,6-Dinitrotoluene	165	5.866	5.866	(0.970)	212183	40.0000	41.2
50 2,4-Dinitrotoluene	165	6.165	6.165	(1.019)	267672	40.0000	40.6
45 Acenaphthylene	152	5.953	5.953	(0.984)	1227194	40.0000	43.0
47 Acenaphthene	154	6.078	6.078	(1.005)	783655	40.0000	42.6
48 2,4-Dinitrophenol	184	6.073	6.073	(1.004)	80230	40.0000	43.2
49 Dibenzofuran	168	6.198	6.198	(1.025)	1108581	40.0000	41.6
51 Diethylphthalate	149	6.319	6.319	(1.045)	888836	40.0000	40.5
52 4-Nitrophenol	139	6.088	6.088	(1.006)	147471	40.0000	45.8
53 Fluorene	166	6.463	6.463	(1.068)	930397	40.0000	42.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.434	6.434	(1.064)	497592	40.0000	41.0
55 2-Methyl-4,6-dinitrophenol	198	6.478	6.478	(0.897)	124649	40.0000	39.9
56 p-Nitroaniline	138	6.458	6.458	(1.068)	132611	40.0000	60.0
133 Diphenylamine	169	6.526	6.526	(0.903)	728841	40.0000	46.5
58 1,2-Diphenylhydrazine	77	6.564	6.564	(0.909)	864162	40.0000	44.5
61 4-Bromophenylphenylether	248	6.824	6.824	(0.945)	317772	40.0000	44.2
63 Hexachlorobenzene	284	6.901	6.901	(0.955)	332988	40.0000	43.6
65 Pentachlorophenol	266	7.046	7.046	(0.975)	174444	40.0000	45.3
206 n-Octadecane	57	7.036	7.036	(0.974)	462927	40.0000	44.0
68 Phenanthrene	178	7.243	7.243	(1.003)	1291285	40.0000	43.1
69 Anthracene	178	7.287	7.287	(1.009)	1306160	40.0000	43.9
72 Di-n-butylphthalate	149	7.643	7.643	(1.058)	1488366	40.0000	43.5
76 Fluoranthene	202	8.288	8.288	(1.147)	1450371	40.0000	44.2
79 Pyrene	202	8.505	8.505	(0.882)	1542748	40.0000	47.0(H)
85 Butylbenzylphthalate	149	9.035	9.035	(0.937)	654398	40.0000	44.8(H)
89 Benzo(a)anthracene	228	9.632	9.632	(0.999)	1422743	40.0000	43.5
92 Chrysene	228	9.670	9.670	(1.003)	1286092	40.0000	43.2
93 bis(2-Ethylhexyl)phthalate	149	9.559	9.559	(0.992)	929158	40.0000	42.8
94 Di-n-octylphthalate	149	10.214	10.214	(0.901)	1434978	40.0000	46.3
95 Benzo(b)fluoranthene	252	10.807	10.807	(0.954)	1361502	40.0000	45.4(H)
96 Benzo(k)fluoranthene	252	10.845	10.845	(0.957)	1283431	40.0000	42.9
97 Benzo(a)pyrene	252	11.250	11.250	(0.993)	1186418	40.0000	44.9
99 Indeno(1,2,3-cd)pyrene	276	13.118	13.118	(1.158)	1165566	40.0000	39.4
100 Dibenzo(a,h)anthracene	278	13.137	13.137	(1.159)	956908	40.0000	38.5
101 Benzo(ghi)perylene	276	13.667	13.667	(1.206)	970593	40.0000	41.7
126 m-Dinitrobenzene	168	5.852	5.852	(0.967)	145880	40.0000	40.2
130 2,3,4,6-Tetrachlorophenol	232	6.280	6.280	(1.038)	254838	40.0000	43.9
143 Dinoseb	211	7.171	7.171	(0.993)	179948	40.0000	37.9
173 Carbazole	167	7.402	7.402	(1.025)	794703	40.0000	52.1
184 p-Benzoquinone	54	3.405	3.405	(0.869)	31019	40.0000	30.0
192 Methoxychlor	227	9.511	9.511	(0.986)	813496	40.0000	43.8
211 p-Toluidine	106	4.200	4.200	(1.071)	327212	40.0000	46.1(H)
210 m-Toluidine	106	4.224	4.224	(1.077)	459825	40.0000	42.9
26 Phthalic anhydride	104	5.322	5.322	(1.111)	146381	40.0000	43.5
179 Dibenzo(a,e)pyrene	302	17.851	17.851	(1.575)	595539	40.0000	42.3(H)
214 1,4-Dinitrobenzene	75	5.794	5.794	(0.958)	146112	40.0000	41.4(H)
215 2-Ethoxyethanol	59	2.240	2.240	(0.571)	178088	40.0000	42.9
216 Methylenebis(2-chloroaniline)	231	9.569	9.569	(0.992)	190732	40.0000	47.4(Q)
M 225 Trichlorophenols	196				573467	80.0000	87.1
M 226 Tetrachlorophenols	232				254838	40.0000	43.9
M 227 Benzo(b,k)fluoranthene	252				2644933	80.0000	88.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s120409.b/s510402.d
Date : 04-DEC-2009 10:38
Client ID: MEGACVS
Sample Info: IWBH091106-05,3:40 PPM|1|SVM|1|MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

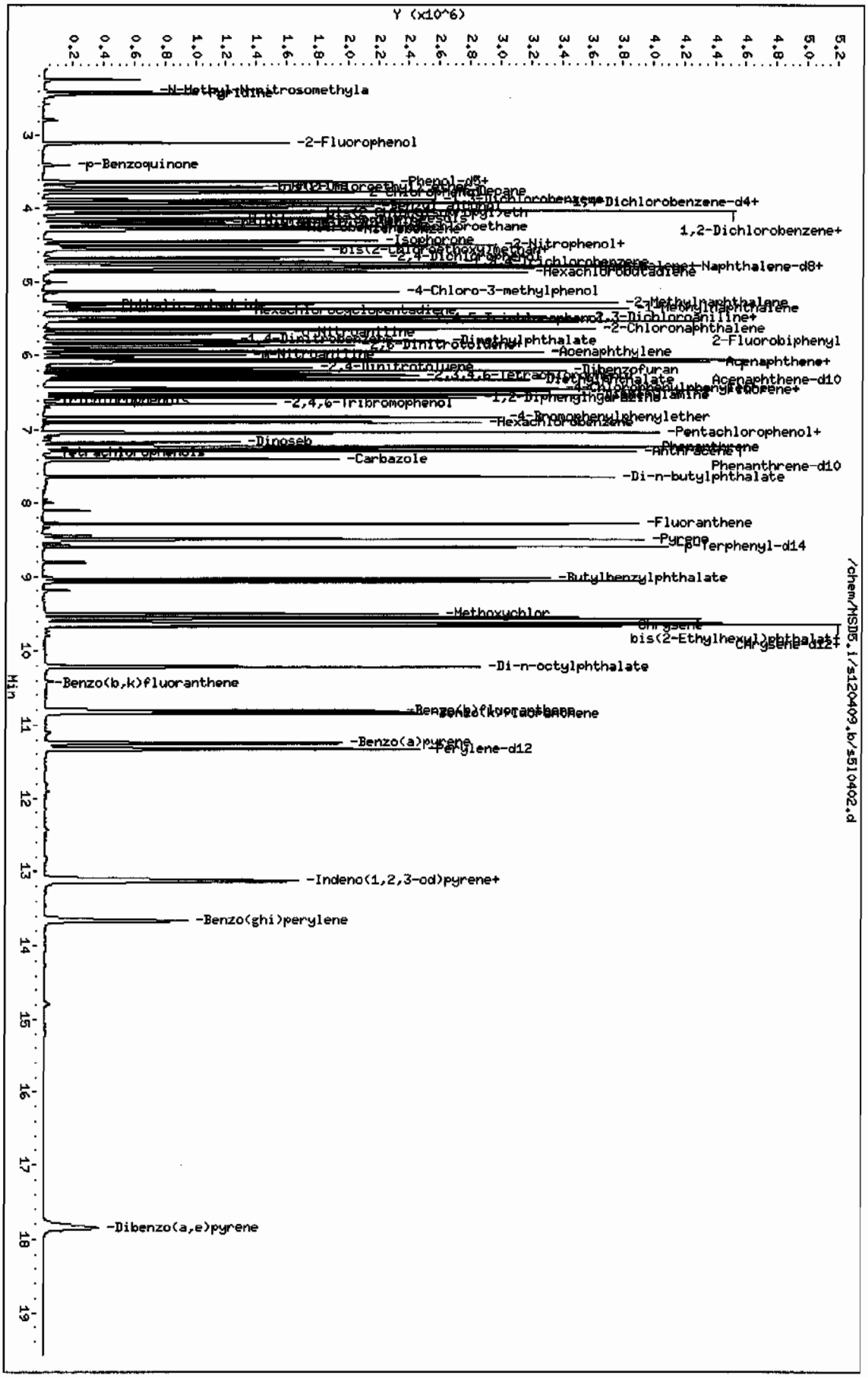

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s510403.d
Analysis Type: WATER
Lab Sample ID: WBN091201-03.4
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

Injection Date: 04-DEC-2009 11:06
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.74164	0.78240	0.78240	0.000	5.49664	60.00000	Averaged
16 Acetophenone	1.03433	1.04930	1.04930	0.000	1.44744	60.00000	Averaged
189 Caprolactam	0.07313	0.07563	0.07563	0.000	3.41672	60.00000	Averaged
208 1,1'-Biphenyl	1.05981	1.13721	1.13721	0.000	7.30307	60.00000	Averaged
207 Atrazine	0.02060	0.03648	0.03648	0.000	77.12343	60.00000	Averaged <-
77 Benzidine	0.13169	0.15634	0.15634	0.000	18.72005	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27053	0.29650	0.29650	0.000	9.60256	60.00000	Averaged
102 1,4-Dioxane	0.27857	0.30856	0.30856	0.000	10.76318	60.00000	Averaged
103 Methyl methacrylate	0.16760	0.17744	0.17744	0.000	5.87361	60.00000	Averaged
104 Ethyl methacrylate	0.68352	0.70639	0.70639	0.000	3.34588	60.00000	Averaged
105 2-Picoline	1.04139	1.07378	1.07378	0.000	3.10962	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.35906	0.37117	0.37117	0.000	3.37340	60.00000	Averaged
107 Methyl methanesulfonate	0.44991	0.43147	0.43147	0.000	-4.09860	60.00000	Averaged
108 N-Nitrosodiethylamine	0.35988	0.37949	0.37949	0.000	5.44943	60.00000	Averaged
109 Ethyl Methanesulfonate	0.53624	0.52561	0.52561	0.000	-1.98258	60.00000	Averaged
110 Pentachloroethane	0.32008	0.31859	0.31859	0.000	-0.46577	60.00000	Averaged
111 N-Nitrosopyrrolidine	41.70424	40.00000	0.38948	0.000	4.26059	60.00000	Linear
113 N-Nitrosomorpholine	0.37891	0.39178	0.39178	0.000	3.39677	60.00000	Averaged
114 o-Toluidine	1.42745	1.40957	1.40957	0.000	-1.25218	60.00000	Averaged
115 N-Nitrosopiperidine	0.11402	0.12255	0.12255	0.000	7.48720	60.00000	Averaged
116 a,a-Dimethylphenethylamine	44.07309	40.00000	0.54333	0.000	10.18271	60.00000	Linear
118 2,6-Dichlorophenol	0.20726	0.23070	0.23070	0.000	11.31110	60.00000	Averaged
119 Hexachloropropene	0.12260	0.12714	0.12714	0.000	3.69988	60.00000	Averaged
120 p-Phenylenediamine	0.09511	0.21271	0.21271	0.000	124	60.00000	Averaged <-
121 N-Nitrosodi-n-butylamine	0.14117	0.15077	0.15077	0.000	6.79860	60.00000	Averaged
122 Safrole	0.19879	0.21428	0.21428	0.000	7.79230	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.46711	0.49162	0.49162	0.000	5.24682	60.00000	Averaged
124 Isosafrole	0.31092	0.34333	0.34333	0.000	10.42467	60.00000	Averaged
125 1,4-Naphthoquinone	0.27162	0.27497	0.27497	0.000	1.23532	60.00000	Averaged
127 Pentachlorobenzene	0.42834	0.45950	0.45950	0.000	7.27361	60.00000	Averaged
128 1-Naphthylamine	0.71227	0.82461	0.82461	0.000	15.77167	60.00000	Averaged
129 2-Naphthylamine	0.63868	0.72852	0.72852	0.000	14.06671	60.00000	Averaged
131 5-Nitro-o-toluidine	42.26640	40.00000	0.27314	0.000	5.66599	60.00000	Linear
136 1,3,5-Trinitrobenzene	42.18135	40.00000	0.09689	0.000	5.45337	60.00000	Linear
137 Phenacetin	0.22007	0.23332	0.23332	0.000	6.02087	60.00000	Averaged
138 Diallate	0.17747	0.19026	0.19026	0.000	7.20477	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 04-DEC-2009 11:06
Lab File ID: s510403.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091201-03.4 Quant Type: ISTD
Method: /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.16617	0.18529	0.18529	0.000	11.50971	60.00000	Averaged
213 Trans Diallate	0.20879	0.22384	0.22384	0.000	7.20477	60.00000	Averaged
140 4-Aminobiphenyl	0.33168	0.45777	0.45777	0.000	38.01478	60.00000	Averaged
141 Pentachloronitrobenzene	0.07808	0.08362	0.08362	0.000	7.09520	60.00000	Averaged
142 Pronamide	0.25257	0.27226	0.27226	0.000	7.79508	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.00993	0.01137	0.01137	0.000	14.50350	60.00000	Averaged
147 Methapyrilene	0.25201	0.27736	0.27736	0.000	10.05876	60.00000	Averaged
148 Isodrin	0.09860	0.10822	0.10822	0.000	9.75842	60.00000	Averaged
149 Aramite	0.04052	0.04484	0.04484	0.000	10.66764	60.00000	Averaged
150 Kepone	0.07629	0.08267	0.08267	0.000	8.36281	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.20801	0.22105	0.22105	0.000	6.26891	60.00000	Averaged
152 Chlorobenzilate	0.26500	0.27992	0.27992	0.000	5.63062	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.36134	0.40864	0.40864	0.000	13.08855	60.00000	Averaged
155 2-Acetylaminofluorene	42.56149	40.00000	0.30765	0.000	6.40374	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.42306	0.44369	0.44369	0.000	4.87654	60.00000	Averaged
158 3-Methylcholanthrene	0.36648	0.40552	0.40552	0.000	10.65300	60.00000	Averaged

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Data file : /chem/MSD5.i/s120409.b/s510403.d
Lab Smp Id: WBN091201-03.4 Client Smp ID: AP12CVS
Inj Date : 04-DEC-2009 11:06
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091201-03.4|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:43 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.919	(1.000)	421873	40.0000	
* 29 Naphthalene-d8	136	4.790	4.790	(1.000)	1425804	40.0000	
* 46 Acenaphthene-d10	164	6.043	6.043	(1.000)	875819	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.219	(1.000)	1617103	40.0000	
* 91 Chrysene-d12	240	9.636	9.636	(1.000)	1757221	40.0000	
* 98 Perylene-d12	264	11.325	11.325	(1.000)	1653166	40.0000	
209 Benzaldehyde	77	3.643	3.643	(0.929)	330075	40.0000	42.2
16 Acetophenone	105	4.172	4.172	(1.065)	442671	40.0000	40.6
189 Caprolactam	113	5.066	5.066	(1.058)	107837	40.0000	41.4
208 1,1'-Biphenyl	154	5.607	5.607	(0.928)	995988	40.0000	42.9
207 Atrazine	173	6.919	6.919	(0.958)	58994	40.0000	70.8
77 Benzidine	184	8.372	8.372	(0.869)	274724	40.0000	47.5
90 3,3'-Dichlorobenzidine	252	9.566	9.566	(0.993)	521022	40.0000	43.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
102 1,4-Dioxane	88	2.243	2.243	(0.572)	130172	40.0000	44.3
103 Methyl methacrylate	100	2.231	2.231	(0.569)	74858	40.0000	42.3
104 Ethyl methacrylate	69	2.613	2.613	(0.667)	298007	40.0000	41.3
105 2-Picoline	93	2.808	2.808	(0.716)	452997	40.0000	41.2
106 N-Nitrosomethylethylamine	88	2.849	2.849	(0.727)	156588	40.0000	41.3
107 Methyl methanesulfonate	80	3.007	3.007	(0.767)	182027	40.0000	38.4
108 N-Nitrosodiethylamine	102	3.243	3.243	(0.827)	160098	40.0000	42.2
109 Ethyl Methanesulfonate	79	3.402	3.402	(0.868)	221740	40.0000	39.2
110 Pentachloroethane	167	3.743	3.743	(0.955)	134406	40.0000	39.8
111 N-Nitrosopyrrolidine	100	4.160	4.160	(1.062)	164311	40.0000	41.7
113 N-Nitrosomorpholine	56	4.178	4.178	(1.066)	165282	40.0000	41.4
114 o-Toluidine	106	4.196	4.196	(1.071)	594661	40.0000	39.5
115 N-Nitrosopiperidine	114	4.396	4.396	(0.918)	174739	40.0000	43.0
116 a,a-Dimethylphenethylamine	58	4.666	4.666	(0.974)	774680	40.0000	44.1
118 2,6-Dichlorophenol	162	4.831	4.831	(1.009)	328937	40.0000	44.5
119 Hexachloropropene	213	4.854	4.854	(1.014)	181276	40.0000	41.5
120 p-Phenylenediamine	108	5.066	5.066	(1.058)	303286	40.0000	89.4
121 N-Nitrosodi-n-butylamine	84	5.031	5.031	(1.050)	214967	40.0000	42.7(T)
122 Safrole	162	5.196	5.196	(1.085)	305515	40.0000	43.1
123 1,2,4,5-Tetrachlorobenzene	216	5.401	5.401	(0.894)	430567	40.0000	42.1
124 Isosafrole	162	5.572	5.572	(0.922)	300699	40.0000	44.2
125 1,4-Naphthoquinone	158	5.760	5.760	(0.953)	240825	40.0000	40.5
127 Pentachlorobenzene	250	6.160	6.160	(1.019)	402436	40.0000	42.9
128 1-Naphthylamine	143	6.248	6.248	(1.034)	722207	40.0000	46.3
129 2-Naphthylamine	143	6.307	6.307	(1.044)	638055	40.0000	45.6
131 5-Nitro-o-toluidine	152	6.448	6.448	(1.067)	239220	40.0000	42.3
136 1,3,5-Trinitrobenzene	75	6.707	6.707	(0.929)	156684	40.0000	42.2
137 Phenacetin	108	6.743	6.743	(0.934)	377308	40.0000	42.4
138 Diallate	86	6.731	6.731	(0.932)	307672	40.0000	42.9
212 Cis Diallate	86	6.807	6.807	(0.943)	44946	6.00000	6.7(a)
213 Trans Diallate	86	6.731	6.731	(0.932)	307672	34.0000	36.4
140 4-Aminobiphenyl	169	7.031	7.031	(0.974)	740255	40.0000	55.2
141 Pentachloronitrobenzene	237	7.054	7.054	(0.977)	135229	40.0000	42.8
142 Pronamide	173	7.048	7.048	(0.976)	440267	40.0000	43.1
146 4-Nitroquinoline-1-oxide	101	7.890	7.890	(1.093)	18383	40.0000	45.8
147 Methapyrilene	58	7.925	7.925	(1.098)	448514	40.0000	44.0
148 Isodrin	193	8.148	8.148	(1.129)	175004	40.0000	43.9
149 Aramite	185	8.548	8.548	(1.184)	72511	40.0000	44.3
150 Kepone	272	9.136	9.136	(1.266)	133679	40.0000	43.3
151 p-(Dimethylamino)azobenzene	120	8.725	8.725	(0.905)	388437	40.0000	42.5
152 Chlorobenzilate	251	8.754	8.754	(0.908)	491878	40.0000	42.2
153 3,3'-Dimethylbenzidine	212	9.042	9.042	(0.938)	718066	40.0000	45.2
155 2-Acetylaminofluorene	181	9.295	9.295	(0.965)	540611	40.0000	42.6
157 7,12Dimethylbenz(a)anthracene	256	10.778	10.778	(0.952)	733492	40.0000	42.0
158 3-Methylcholanthrene	268	11.730	11.730	(1.036)	670390	40.0000	44.3

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/MSD5.i/s120409.b/s510403.d
Date : 04-DEC-2009 11:06
Client ID: AP12CVS
Sample Info: IWBN091201-03.4140 PPM11SVH11AP12CVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

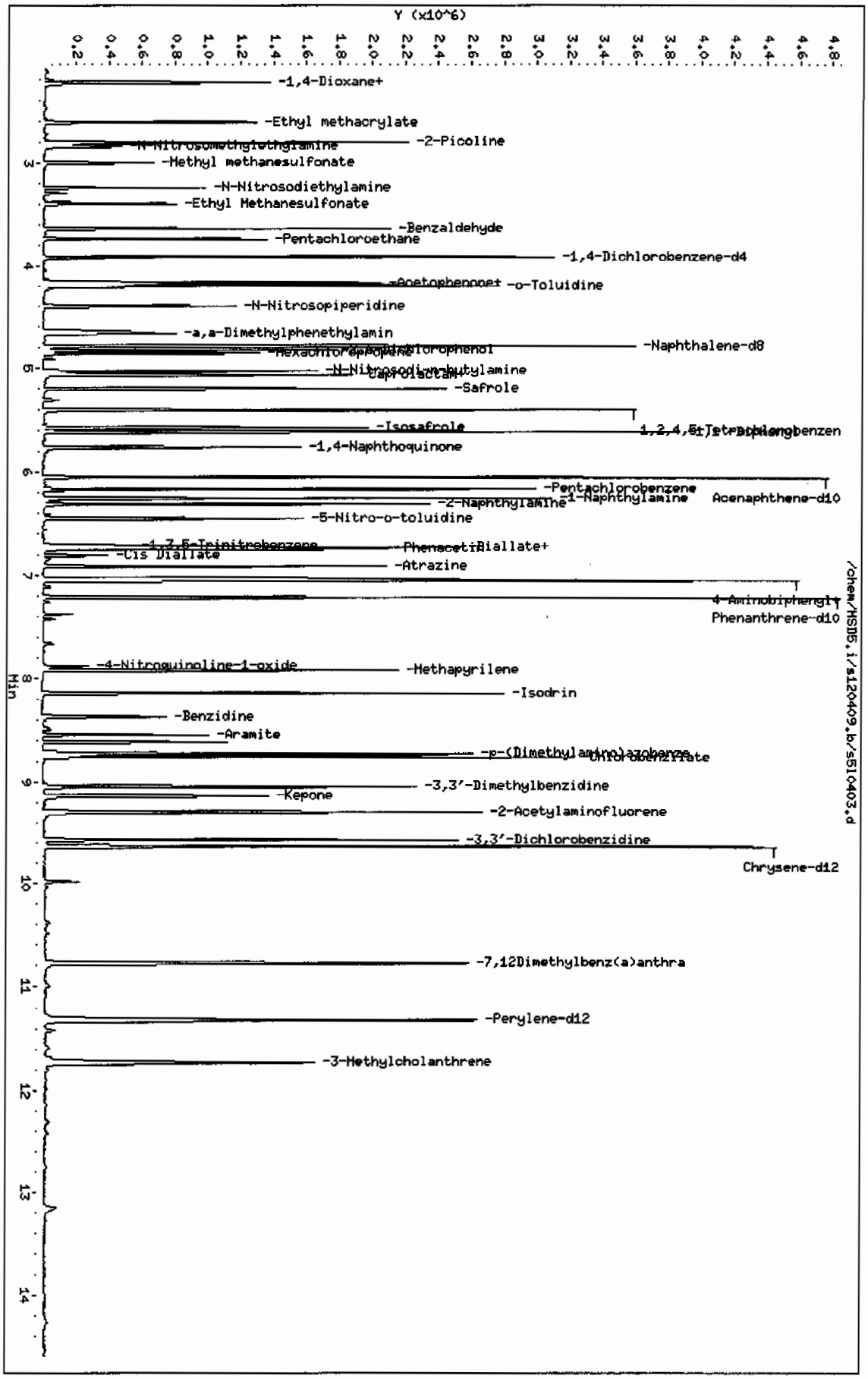

Page 1

QC Data

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

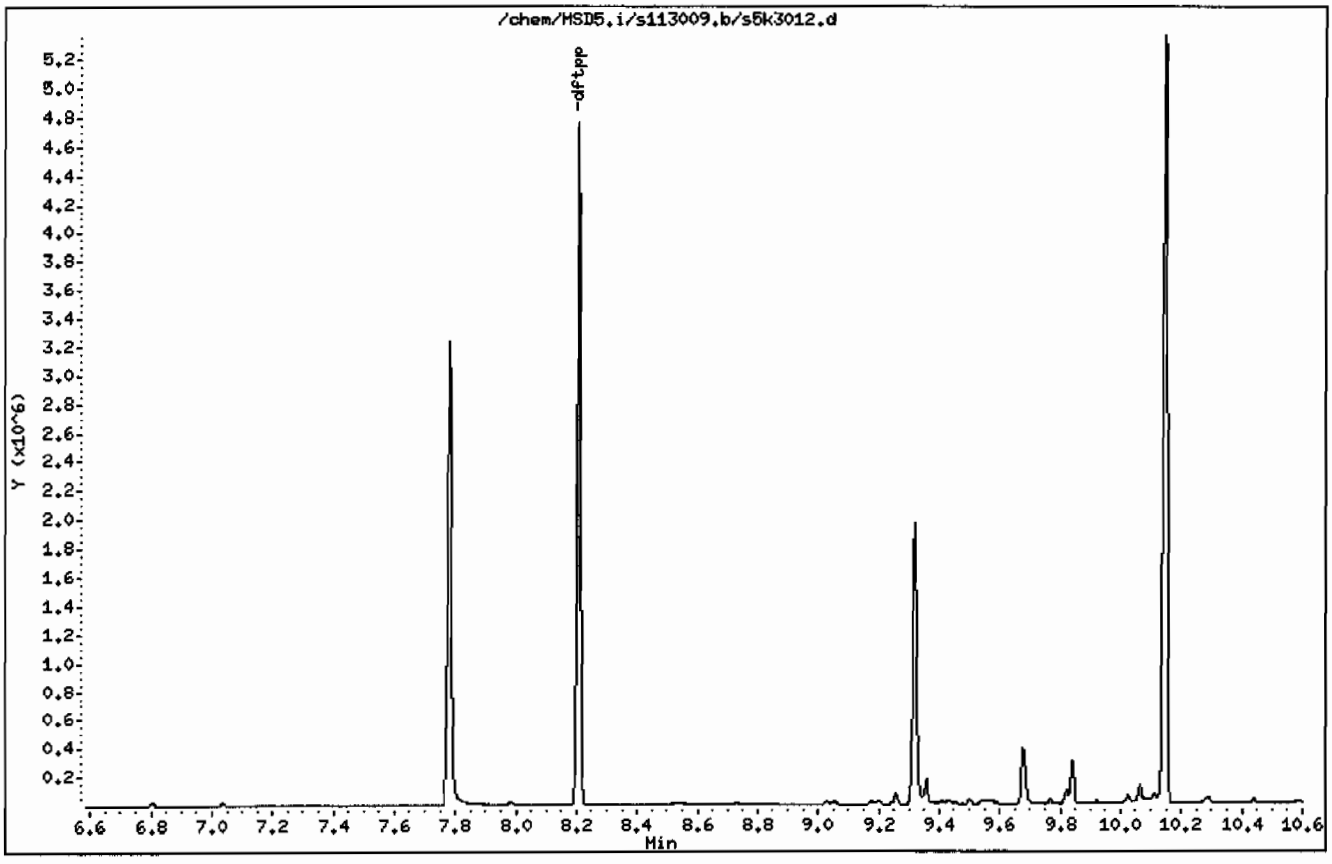

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

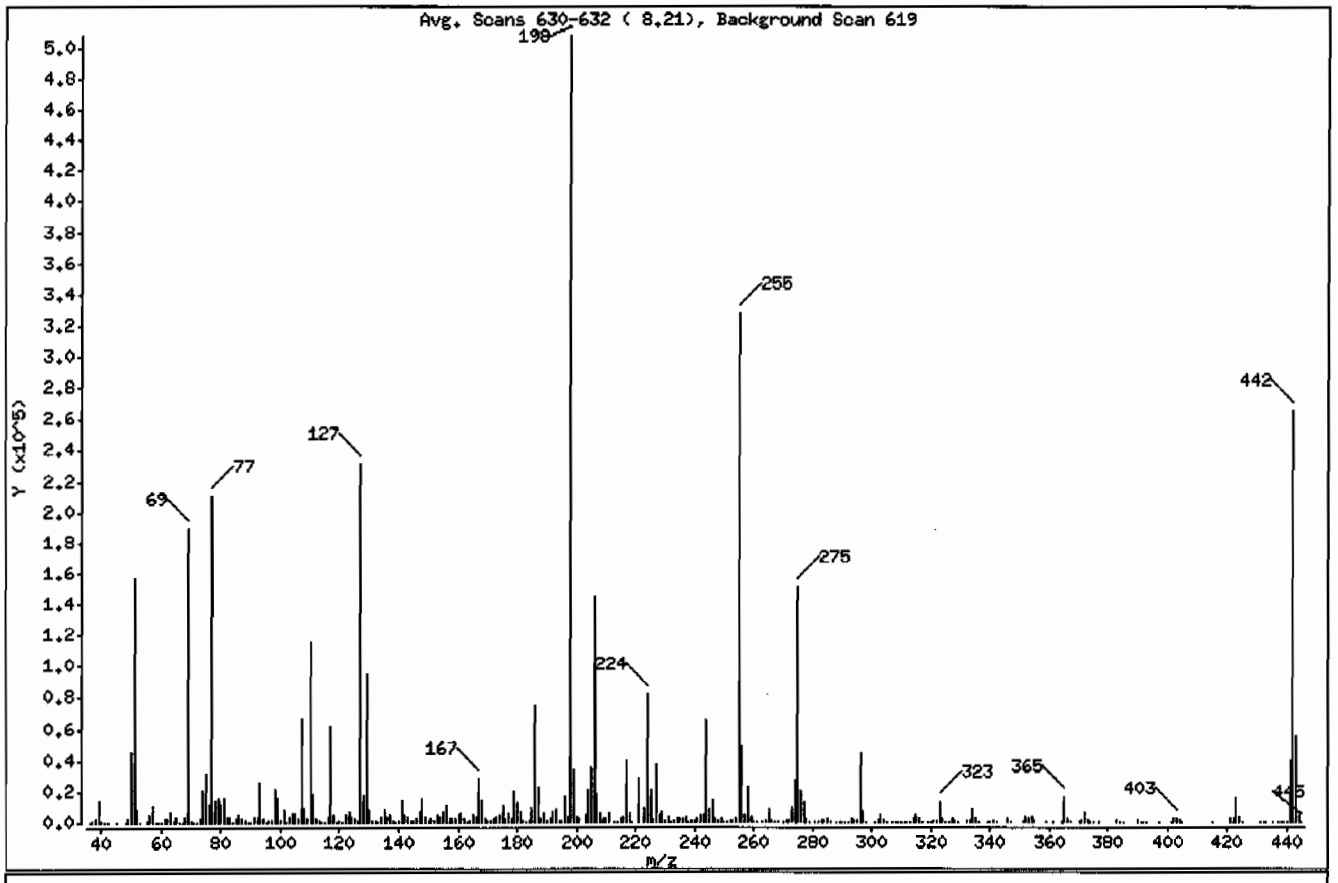

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	30.79
68	Less than 2.00% of mass 69	0.58 (1.57)
69	Mass 69 relative abundance	37.28
70	Less than 2.00% of mass 69	0.19 (0.51)
127	40.00 - 60.00% of mass 198	45.60
197	Less than 1.00% of mass 198	0.70
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	29.60
365	Greater than 1.00% of mass 198	3.10
441	Present, but less than mass 443	7.74
442	Greater than 40.00% of mass 198	52.24
443	17.00 - 23.00% of mass 442	10.70 (20.48)

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d

Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	125	126.00	680	213.00	464	307.00	50
37.00	987	127.00	231616	214.00	157	308.00	501
38.00	2716	128.00	17920	215.00	1808	309.00	450
39.00	13632	129.00	94528	216.00	3180	310.00	506
40.00	706	130.00	7593	217.00	39768	311.00	48
41.00	445	131.00	1598	218.00	5515	312.00	106
42.00	45	132.00	1119	219.00	464	313.00	308
45.00	260	133.00	463	221.00	28528	314.00	1959
48.00	107	134.00	3180	223.00	8943	315.00	4843
49.00	1759	135.00	8128	224.00	82288	316.00	2594
50.00	46048	136.00	3126	225.00	21312	317.00	470
51.00	156416	137.00	4122	226.00	2341	319.00	122
52.00	7789	138.00	895	227.00	37768	320.00	161
53.00	334	139.00	564	228.00	5098	321.00	1232
55.00	910	140.00	1328	229.00	7275	322.00	651
56.00	4777	141.00	13534	230.00	1075	323.00	12618
57.00	10418	142.00	4180	231.00	2968	324.00	2388
58.00	476	143.00	3277	232.00	577	325.00	236
59.00	113	144.00	760	233.00	743	326.00	206
60.00	309	145.00	649	234.00	2540	327.00	2542
61.00	2312	146.00	2181	235.00	2704	328.00	1058
62.00	2701	147.00	6737	236.00	1787	329.00	194
63.00	7253	148.00	15544	237.00	2968	332.00	1010
64.00	840	149.00	3108	238.00	525	333.00	1207
65.00	3370	150.00	944	239.00	1667	334.00	8064
66.00	347	151.00	2363	240.00	1214	335.00	1901
67.00	386	152.00	899	241.00	2080	336.00	205
68.00	2964	153.00	4270	242.00	4897	339.00	105
69.00	189376	154.00	3325	243.00	4687	340.00	196
70.00	963	155.00	7175	244.00	65392	341.00	1323
71.00	55	156.00	10369	245.00	8442	342.00	450
72.00	236	157.00	2283	246.00	13909	346.00	2820
73.00	1852	158.00	2547	247.00	2750	347.00	441
74.00	21008	159.00	1763	248.00	604	351.00	300
75.00	31368	160.00	4127	249.00	2266	352.00	3392

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	11187	161.00	6032	250.00	324	353.00	2458
77.00	210112	162.00	1867	251.00	428	354.00	3352
78.00	13990	163.00	483	252.00	693	355.00	682
79.00	15435	164.00	669	253.00	1399	359.00	140
80.00	11406	165.00	5171	254.00	2631	361.00	68
81.00	14908	166.00	3857	255.00	327168	364.00	54
82.00	3682	167.00	27936	256.00	48920	365.00	15765
83.00	3239	168.00	13823	257.00	4149	366.00	2273
84.00	304	169.00	2332	258.00	21704	367.00	171
85.00	2673	170.00	964	259.00	3552	370.00	223
86.00	4546	171.00	1326	260.00	516	371.00	611
87.00	2199	172.00	2399	261.00	573	372.00	5622
88.00	779	173.00	3174	263.00	216	373.00	1163
89.00	404	174.00	5250	264.00	756	374.00	207
90.00	46	175.00	10362	265.00	8624	375.00	46
91.00	3378	176.00	2819	266.00	1292	377.00	57
92.00	3994	177.00	5390	267.00	158	383.00	1213
93.00	26184	178.00	1798	268.00	96	384.00	220
94.00	1810	179.00	20272	270.00	353	385.00	62
95.00	353	180.00	13307	271.00	742	390.00	764
96.00	1108	181.00	6536	272.00	994	391.00	439
97.00	629	182.00	917	273.00	9575	392.00	334
98.00	21264	183.00	578	274.00	27024	393.00	51
99.00	15464	184.00	1707	275.00	150336	397.00	55
100.00	1213	185.00	9598	276.00	20064	401.00	130
101.00	7941	186.00	75040	277.00	13332	402.00	1809
102.00	407	187.00	21824	278.00	2250	403.00	2548
103.00	3032	188.00	2208	279.00	421	404.00	780
104.00	5846	189.00	5334	281.00	219	405.00	122
105.00	5629	190.00	872	282.00	258	415.00	50
106.00	1800	191.00	2140	283.00	1655	421.00	1997
107.00	67056	192.00	6866	284.00	1098	422.00	1842
108.00	9675	193.00	8056	285.00	2171	423.00	15273
109.00	2337	194.00	1522	286.00	558	424.00	3590
110.00	115352	195.00	1001	288.00	235	425.00	219

Date : 30-NOV-2009 13:32

Client ID: DFTPP Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 Operator: rmb

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	17720	196.00	16896	289.00	389	431.00	58
112.00	2652	197.00	3561	290.00	463	432.00	65
113.00	730	198.00	507968	291.00	366	433.00	52
114.00	171	199.00	33816	292.00	523	435.00	55
115.00	254	200.00	2938	293.00	2767	437.00	294
116.00	3878	201.00	2726	294.00	806	438.00	170
117.00	62200	203.00	4278	295.00	870	439.00	365
118.00	4275	204.00	21168	296.00	44632	440.00	62
119.00	548	205.00	35144	297.00	6459	441.00	39312
120.00	883	206.00	144384	298.00	439	442.00	265344
121.00	352	207.00	19096	301.00	457	443.00	54336
122.00	4776	208.00	5385	302.00	797	444.00	5092
123.00	7064	209.00	2007	303.00	4856	445.00	267
124.00	2977	210.00	2161	304.00	1329		
125.00	2892	211.00	5880	305.00	86		

Data File: /ohem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

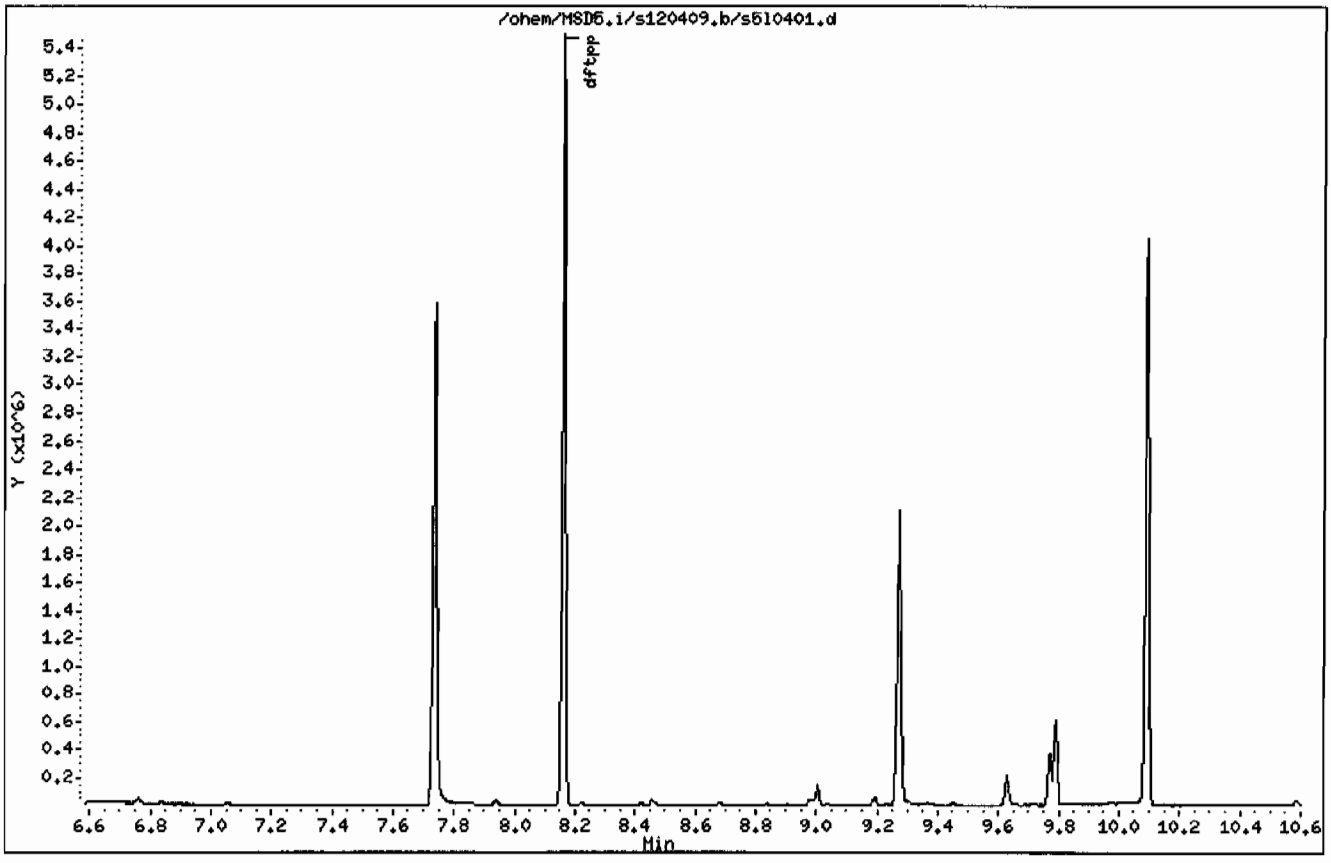

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

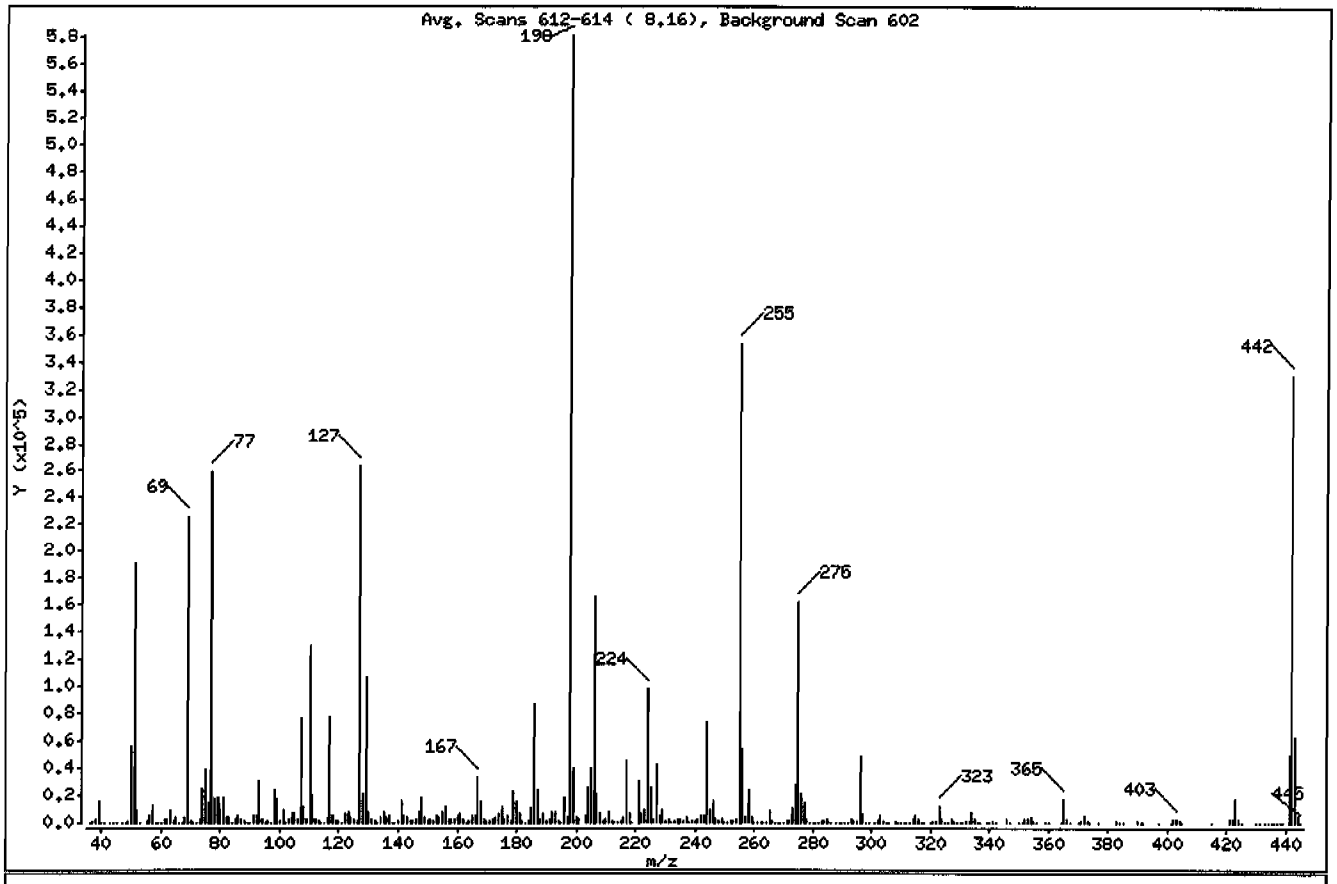

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.83
68	Less than 2.00% of mass 69	0.68 (1.74)
69	Mass 69 relative abundance	38.79
70	Less than 2.00% of mass 69	0.24 (0.61)
127	40.00 - 60.00% of mass 198	45.37
197	Less than 1.00% of mass 198	0.59
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	27.79
365	Greater than 1.00% of mass 198	2.92
441	Present, but less than mass 443	8.42
442	Greater than 40.00% of mass 198	56.81
443	17.00 - 23.00% of mass 442	10.79 (18.99)

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP | Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: rmb

Column phase: Phenomenex ZB-5MS | Column diameter: 0.20

Data File: s510401.d
Spectrum: Avg. Scans 612-614 (8.16), Background Scan 602
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	184	127.00	263808	216.00	4238	308.00	741
37.00	1283	128.00	21032	217.00	46104	309.00	344
38.00	3312	129.00	106472	218.00	6223	310.00	619
39.00	15927	130.00	8469	219.00	524	311.00	95
40.00	535	131.00	2227	221.00	30520	312.00	118
41.00	470	132.00	1132	222.00	7074	313.00	360
43.00	266	133.00	603	223.00	9981	314.00	2056
44.00	104	134.00	3403	224.00	97280	315.00	5313
45.00	191	135.00	8527	225.00	24984	316.00	2910
47.00	45	136.00	3840	226.00	2509	317.00	664
48.00	62	137.00	4916	227.00	43416	318.00	44
49.00	1796	138.00	660	228.00	6001	320.00	142
50.00	55736	139.00	631	229.00	9051	321.00	1308
51.00	190912	140.00	1365	230.00	1436	322.00	768
52.00	9427	141.00	15443	231.00	3218	323.00	12312
53.00	389	142.00	4954	232.00	583	324.00	2404
55.00	897	143.00	3382	233.00	848	325.00	269
56.00	5896	144.00	882	234.00	3073	326.00	186
57.00	12828	145.00	796	235.00	3131	327.00	2791
58.00	614	146.00	2894	236.00	1980	328.00	1052
59.00	41	147.00	8073	237.00	3533	329.00	189
60.00	240	148.00	19352	238.00	424	330.00	63
61.00	2567	149.00	3546	239.00	1834	331.00	70
62.00	3075	150.00	1052	240.00	1487	332.00	1171
63.00	8740	151.00	2166	241.00	2463	333.00	1349
64.00	1115	152.00	1527	242.00	4964	334.00	7706
65.00	3972	153.00	4917	243.00	5490	335.00	2083
66.00	221	154.00	3444	244.00	73368	336.00	283
67.00	486	155.00	8528	245.00	9971	337.00	52
68.00	3933	156.00	12662	246.00	15761	339.00	214
69.00	225536	157.00	2304	247.00	3311	340.00	196
70.00	1370	158.00	3065	248.00	690	341.00	1628
71.00	133	159.00	2304	249.00	2482	342.00	484
72.00	117	160.00	5240	250.00	531	346.00	3138
73.00	2347	161.00	7152	251.00	616	347.00	534

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510401.d
Spectrum: Avg. Scans 612-614 (8.16), Background Scan 602
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	25560	162.00	2128	252.00	760	350.00	168
75.00	38792	163.00	601	253.00	1760	351.00	162
76.00	14334	164.00	825	254.00	2890	352.00	3324
77.00	259264	165.00	5720	255.00	353088	353.00	2460
78.00	17864	166.00	4782	256.00	53472	354.00	3853
79.00	18568	167.00	33168	257.00	4392	355.00	744
80.00	13483	168.00	16552	258.00	23632	356.00	52
81.00	18720	169.00	2813	259.00	3942	359.00	299
82.00	4228	170.00	1220	260.00	624	360.00	100
83.00	4065	171.00	1455	261.00	577	364.00	46
84.00	477	172.00	3286	262.00	48	365.00	16960
85.00	2982	173.00	3899	263.00	378	366.00	2449
86.00	5664	174.00	6468	264.00	310	367.00	61
87.00	2350	175.00	11440	265.00	9449	370.00	284
88.00	1036	176.00	3137	266.00	1603	371.00	945
89.00	445	177.00	5764	267.00	72	372.00	5442
90.00	111	178.00	1976	268.00	213	373.00	1328
91.00	4841	179.00	23136	269.00	56	374.00	122
92.00	4929	180.00	15649	270.00	544	377.00	55
93.00	30744	181.00	7301	271.00	819	383.00	1655
94.00	2238	182.00	1085	272.00	1001	384.00	421
95.00	595	183.00	585	273.00	10432	385.00	61
96.00	1328	184.00	1692	274.00	28016	390.00	951
97.00	462	185.00	10942	275.00	161600	391.00	347
98.00	24040	186.00	86568	276.00	21552	392.00	370
99.00	17344	187.00	24672	277.00	14620	397.00	70
100.00	1526	188.00	2523	278.00	2071	401.00	320
101.00	9637	189.00	6285	279.00	394	402.00	2008
102.00	569	190.00	1055	280.00	53	403.00	2568
103.00	3333	191.00	3031	281.00	77	404.00	843
104.00	6682	192.00	7634	282.00	381	405.00	97
105.00	6496	193.00	8541	283.00	1749	415.00	133
106.00	2242	194.00	1749	284.00	1303	421.00	2585
107.00	76248	195.00	450	285.00	2557	422.00	2298
108.00	11768	196.00	18176	286.00	297	423.00	17344

Data File: /chem/MSD5.i/s120409.b/s510401.d

Date : 04-DEC-2009 10:24

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s510401.d
Spectrum: Avg. Scans 612-614 (8.16), Background Scan 602
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
109.00	2693	197.00	3448	288.00	218	424.00	3245
110.00	129464	198.00	581440	289.00	609	425.00	297
111.00	20624	199.00	40352	290.00	300	430.00	45
112.00	2723	200.00	3450	291.00	264	431.00	45
113.00	1037	201.00	3033	292.00	646	433.00	119
114.00	307	203.00	4856	293.00	3284	434.00	124
115.00	272	204.00	25272	294.00	927	435.00	158
116.00	4451	205.00	40056	295.00	974	436.00	303
117.00	77792	206.00	165952	296.00	48608	437.00	280
118.00	5706	207.00	21720	297.00	6898	438.00	203
119.00	772	208.00	6190	298.00	614	439.00	230
120.00	979	209.00	1960	299.00	93	441.00	48936
121.00	436	210.00	2662	301.00	496	442.00	330304
122.00	6108	211.00	7370	302.00	671	443.00	62712
123.00	8130	212.00	1053	303.00	5692	444.00	5798
124.00	3625	213.00	529	304.00	1407	445.00	309
125.00	3169	214.00	247	305.00	196		
126.00	1166	215.00	1902	306.00	44		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670			Matrix:	SOIL
Lab Sample ID:	1201984850				
Client Sample:	QC for batch 928248	Client:	LANL010	Project:	QC
Client ID:	MB for batch 928248	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 11:37	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s5l0404-2.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	333	ug/kg	66.7	333
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984850**				
Client Sample:	**QC for batch 928248**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 928248**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928249**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:37**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 22:31**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510404-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	1030	ug/kg		J
	Unknown Aldol Condensate	2.94	209	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510404-2.d
Lab Smp Id: 1201984850 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:37
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984850|928249|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	443813	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1533750	40.0000	
* 46 Acenaphthene-d10	164	6.043	6.049	(1.000)	954698	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1694929	40.0000	
* 91 Chrysene-d12	240	9.631	9.641	(1.000)	1707181	40.0000	
* 98 Perylene-d12	264	11.319	11.331	(1.000)	1540320	40.0000	
$ 3 2-Fluorophenol	112	3.102	3.102	(0.793)	807642	87.8745	2930
$ 5 Phenol-d5	99	3.625	3.632	(0.926)	929507	81.5399	2720
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	444962	45.3766	1510
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	1082420	44.8795	1500
$ 60 2,4,6-Tribromophenol	329	6.642	6.651	(1.099)	307554	87.0892	2900
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1345075	55.0935	1840

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510404-2.d
Lab Smp Id: 1201984850 Client Smp ID: SBLK01
Inj Date : 04-DEC-2009 11:37
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984850|928249|1|SVMF|1|SBLK01
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.913	2590229	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.025	1998050	30.8551757	1030	0		0	10
Unknown Aldol Condensate				CAS #:			
2.943	406732	6.28102251	209	0		0	10

Data File: /chem/MSD5.i/s120409.b/s510404-2.d
Date : 04-DEC-2009 11:37
Client ID: SBLK01
Sample Info: |1201984850192824911|SVMF|1|SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

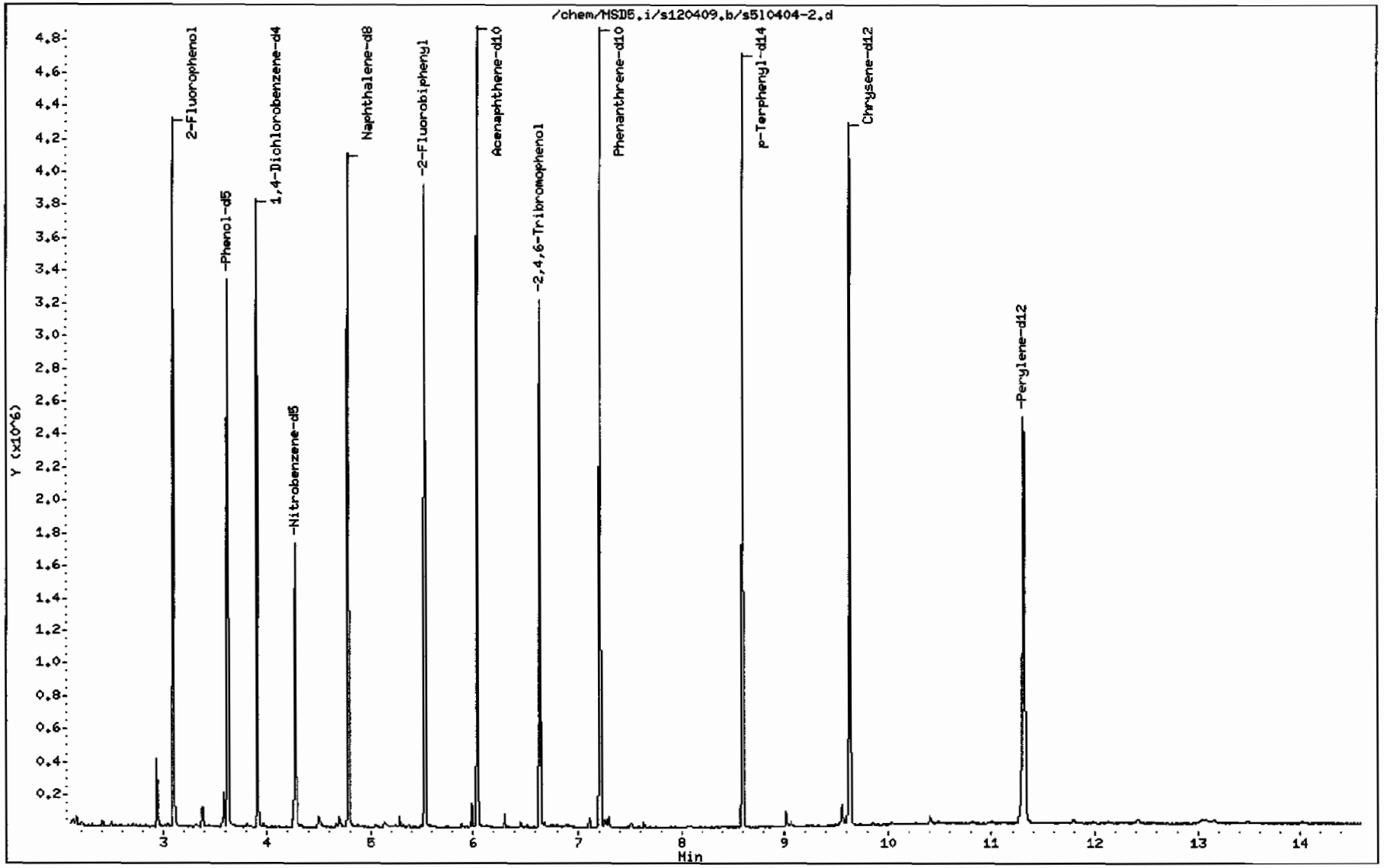

Data File: /chem/MSD5.i/s120409.b/s510404-2.d

Date : 04-DEC-2009 11:37

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: |120198485019282491|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	50	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	9	C3H7NO	73
2-Hydroxy-2-methylbutyric acid	3739-30-8	NIST05.L	8447	9	C5H10O3	118

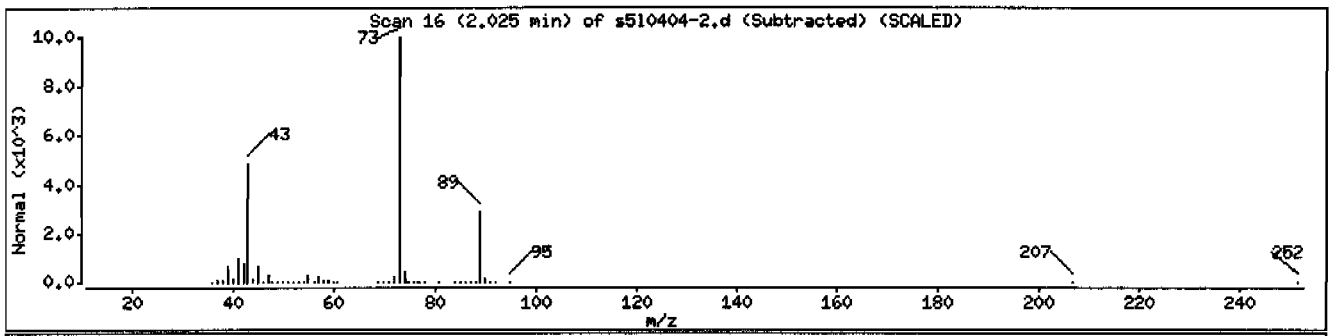

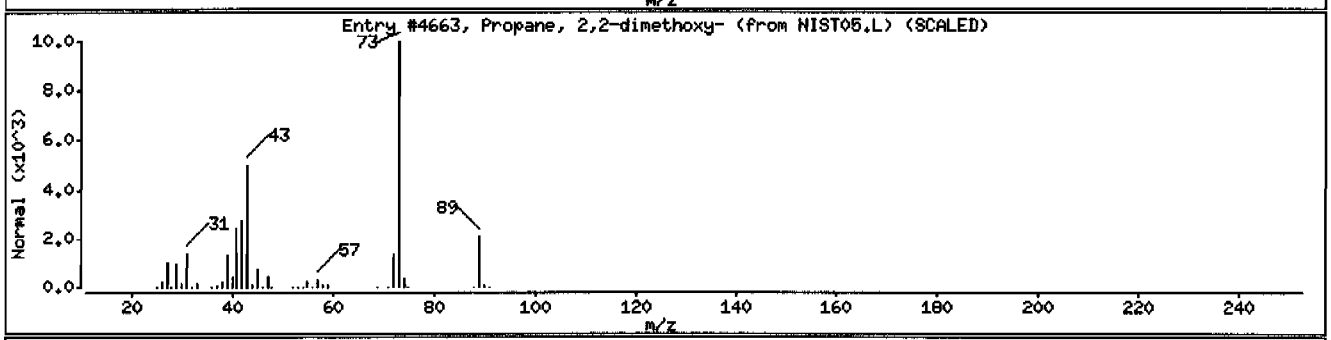

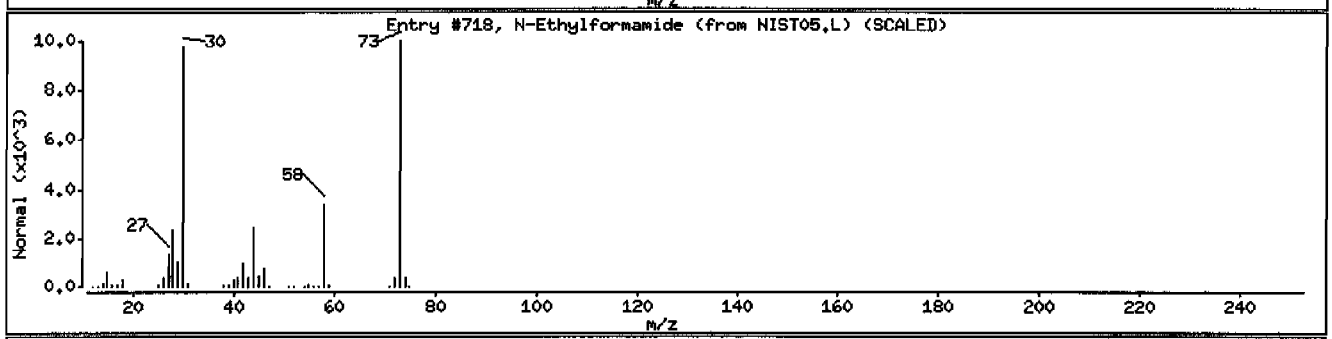

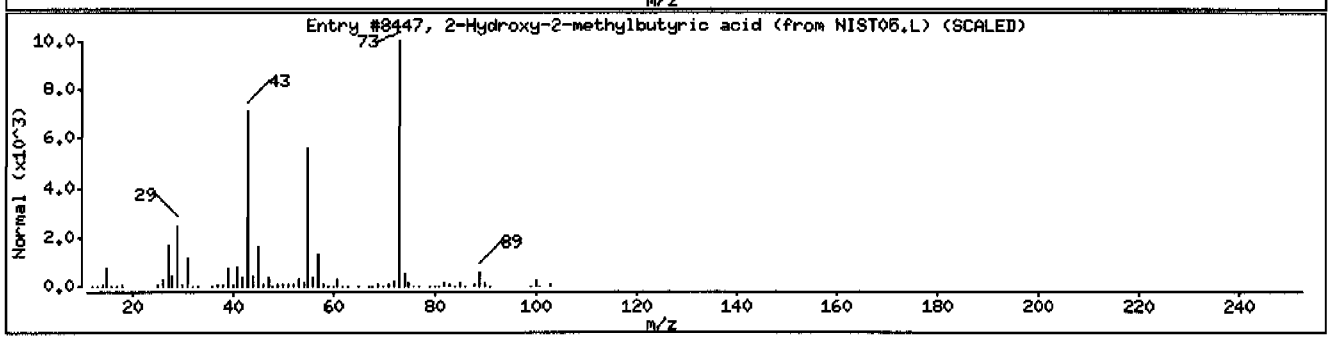

Data File: /ohem/MSD5.i/s120409.b/s510404-2.d

Date : 04-DEC-2009 11:37

Client ID: SBLK01 Instrument: MSD5.i

Sample Info: |1201984850|928249|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116

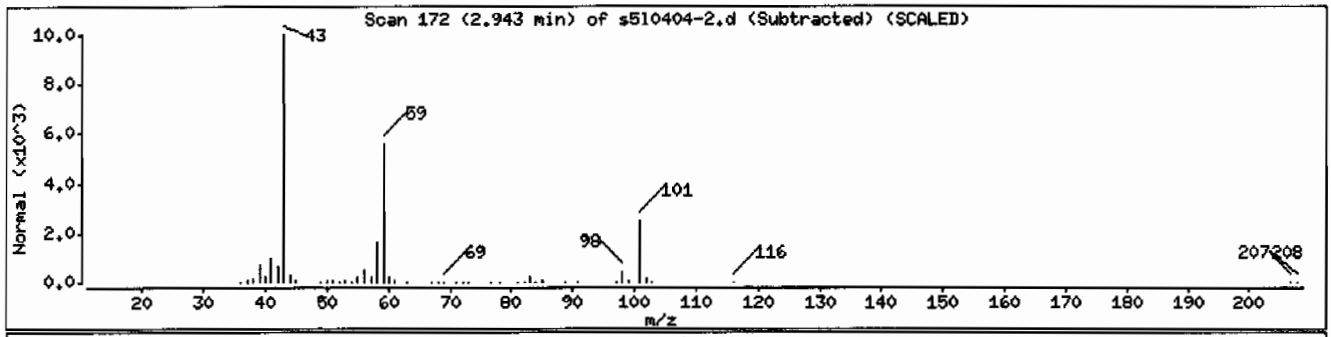

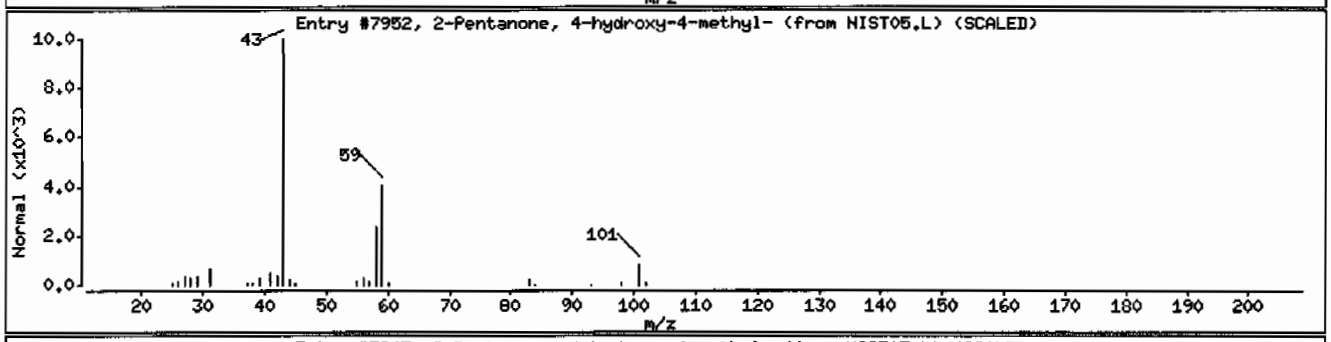

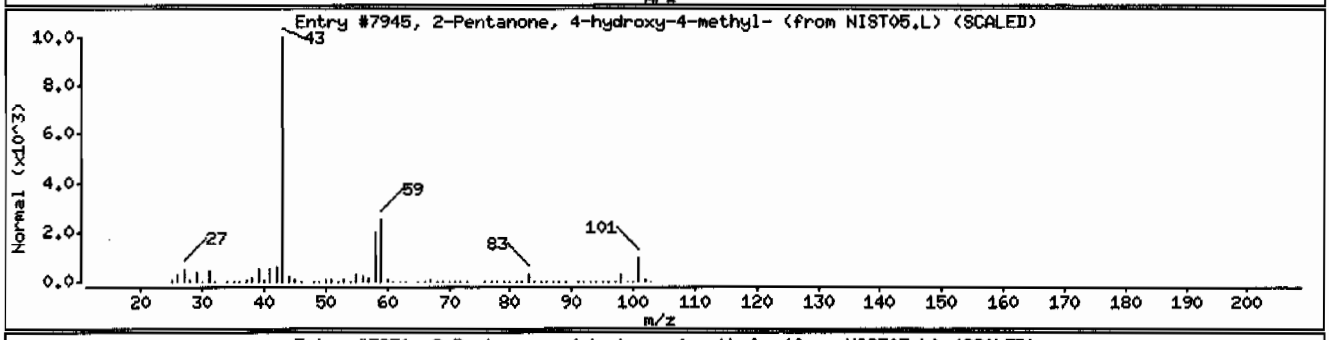

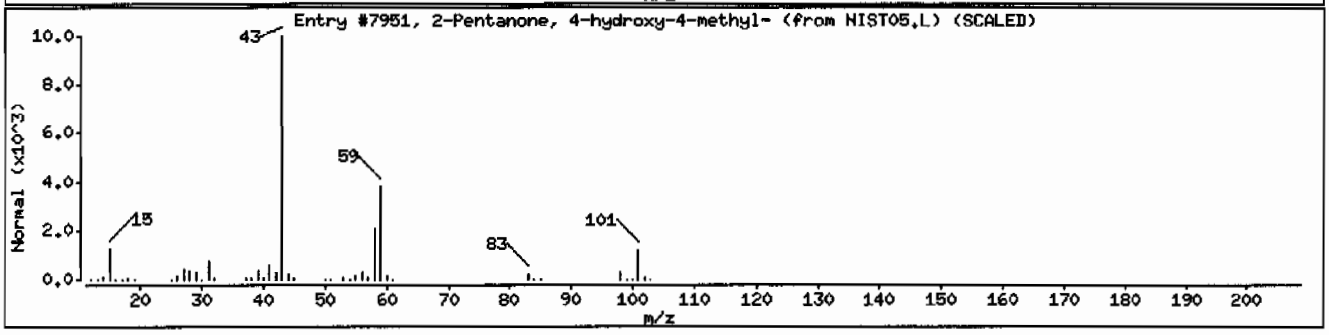

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984851**				
Client Sample:	**QC for batch 928248**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928248**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**928249**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/04/2009 11:59**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/02/2009 22:31**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s510405-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1320	ug/kg	66.7	333
108-95-2	Phenol		1250	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1220	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1200	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1460	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1330	ug/kg	66.7	333
83-32-9	Acenaphthene		1350	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1400	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1480	ug/kg	110	333
87-86-5	Pentachlorophenol		1570	ug/kg	83.3	333
129-00-0	Pyrene		1570	ug/kg	10.0	33.3
110-86-1	Pyridine		1250	ug/kg	66.7	333
62-53-3	Aniline		1250	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1240	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1200	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1460	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1210	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1320	ug/kg	66.7	333
95-48-7	o-Cresol		1140	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1310	ug/kg	100	333
67-72-1	Hexachloroethane		1140	ug/kg	66.7	333
98-95-3	Nitrobenzene		1430	ug/kg	66.7	333
78-59-1	Isophorone		1370	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1240	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1380	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1330	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1360	ug/kg	66.7	333
65-85-0	Benzoic acid		3730	ug/kg	167	667
91-20-3	Naphthalene		1350	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1460	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1360	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1410	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1430	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1380	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1330	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1320	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1280	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1740	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-670			Matrix:	SOIL
Lab Sample ID:	1201984851				
Client Sample:	QC for batch 928248	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 928248	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	928249	Inst:	MSD5.I	Dilution:	1
Run Date:	12/04/2009 11:59	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	12/02/2009 22:31	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s510405-2.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1410	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1380	ug/kg	33.3	333
208-96-8	Acenaphthylene		1410	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1380	ug/kg	127	667
132-64-9	Dibenzofuran		1600	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1400	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1380	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1250	ug/kg	66.7	333
100-01-6	4-Nitroaniline		2550	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1570	ug/kg	66.7	333
122-66-7	Azobenzene		1500	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1450	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1400	ug/kg	66.7	333
85-01-8	Phenanthrene		1430	ug/kg	10.0	33.3
120-12-7	Anthracene		1470	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1530	ug/kg	66.7	333
206-44-0	Fluoranthene		1510	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1650	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1530	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1260	ug/kg	100	333
218-01-9	Chrysene		1470	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1610	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1680	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1580	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1490	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1540	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1340	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1320	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1430	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1320	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510405-2.d
Lab Smp Id: 1201984851 Client Smp ID: SBLK01LCS
Inj Date : 04-DEC-2009 11:59
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984851|928249|1|SVMF|1|SBLK01LCS
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 04-Dec-2009 11:55 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	433913	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1604371	40.0000	
* 46 Acenaphthene-d10	164	6.048	6.049	(1.000)	904978	40.0000	
* 67 Phenanthrene-d10	188	7.219	7.224	(1.000)	1639318	40.0000	
* 91 Chrysene-d12	240	9.636	9.641	(1.000)	1639884	40.0000	
* 98 Perylene-d12	264	11.325	11.331	(1.000)	1442784	40.0000	
$ 3 2-Fluorophenol	112	3.102	3.102	(0.793)	700128	77.9146	2600
$ 5 Phenol-d5	99	3.631	3.632	(0.928)	814025	73.0387	2430
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.893)	440492	42.9435	1430
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.914)	942726	41.2350	1370
$ 60 2,4,6-Tribromophenol	329	6.648	6.651	(1.099)	294329	87.9233	2930
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.893)	1204630	51.3658	1710

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.637	3.641	(0.929)	435157	37.3883	1250(Q)
8 2-Chlorophenol	128	3.778	3.786	(0.965)	366510	36.7184	1220
11 1,4-Dichlorobenzene	146	3.925	3.935	(1.003)	438579	36.1456	1200
17 N-Nitrosodipropylamine	70	4.154	4.161	(1.062)	229149	43.7522	1460(Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.744	(0.989)	395924	39.4897	1320
33 4-Chloro-3-methylphenol	107	5.137	5.134	(1.072)	315300	39.9955	1330
47 Acenaphthene	154	6.072	6.078	(1.004)	758162	40.4407	1350
50 2,4-Dinitrotoluene	165	6.160	6.165	(1.018)	281793	41.8768	1400
52 4-Nitrophenol	139	6.090	6.088	(1.007)	145202	44.4592	1480
65 Pentachlorophenol	266	7.048	7.046	(0.976)	187801	47.0785	1570
79 Pyrene	202	8.501	8.505	(0.882)	1561616	47.0123	1570
2 Pyridine	79	2.460	2.433	(0.629)	264766	37.4704	1250
4 Aniline	66	3.696	3.704	(0.944)	163019	37.4622	1250(Q)
7 bis(2-Chloroethyl) ether	63	3.713	3.718	(0.949)	256475	37.2983	1240(Q)
9 1,3-Dichlorobenzene	146	3.878	3.887	(0.991)	430828	36.0445	1200
12 Benzyl alcohol	108	3.984	3.988	(1.018)	276691	43.9356	1460
13 1,2-Dichlorobenzene	146	4.031	4.036	(1.030)	417124	36.3261	1210
14 bis(2-Chloroisopropyl)ether	45	4.060	4.065	(1.038)	434376	39.7421	1320
15 o-Cresol	107	4.037	4.041	(1.032)	273532	34.3334	1140
18 m,p-Cresols	107	4.131	4.142	(1.056)	398726	39.3160	1310
19 Hexachloroethane	117	4.260	4.267	(1.089)	153418	34.2461	1140
21 Nitrobenzene	77	4.296	4.301	(0.897)	408438	42.7644	1420
22 Isophorone	82	4.449	4.455	(0.929)	731301	41.2295	1370
23 2-Nitrophenol	139	4.507	4.513	(0.941)	185640	37.3212	1240
24 2,4-Dimethylphenol	122	4.502	4.508	(0.940)	356400	41.5367	1380
25 bis(2-Chloroethoxy)methane	93	4.566	4.576	(0.953)	396315	39.9355	1330
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	326637	40.8221	1360
27 Benzoic acid	105	4.584	4.566	(0.957)	494578	111.766	3720
30 Naphthalene	128	4.801	4.807	(1.002)	1120910	40.3680	1340
31 4-Chloroaniline	127	4.819	4.821	(1.006)	488501	43.9350	1460
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	265319	40.6862	1360
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	807395	42.1613	1400
36 Hexachlorocyclopentadiene	237	5.390	5.394	(0.891)	156425	42.8381	1430
37 2,4,6-Trichlorophenol	196	5.478	5.476	(0.906)	271957	41.3777	1380
38 2,4,5-Trichlorophenol	196	5.507	5.505	(0.911)	273985	39.8923	1330
40 2-Chloronaphthalene	162	5.643	5.645	(0.933)	753350	39.4514	1320
42 o-Nitroaniline	65	5.696	5.702	(0.942)	194747	38.4466	1280
41 m-Nitroaniline	138	5.996	5.996	(0.991)	174178	52.1857	1740
43 Dimethylphthalate	163	5.801	5.808	(0.959)	953434	42.3527	1410
44 2,6-Dinitrotoluene	165	5.860	5.866	(0.969)	217604	41.3665	1380
45 Acenaphthylene	152	5.948	5.953	(0.983)	1229967	42.2923	1410
48 2,4-Dinitrophenol	184	6.066	6.073	(1.003)	77312	41.4978	1380
49 Dibenzofuran	168	6.196	6.198	(1.024)	1305804	48.0125	1600
51 Diethylphthalate	149	6.319	6.319	(1.045)	945705	42.2173	1410
53 Fluorene	166	6.460	6.463	(1.068)	943674	41.9432	1400
54 4-Chlorophenylphenylether	204	6.431	6.434	(1.063)	513510	41.4666	1380
55 2-Methyl-4,6-dinitrophenol	198	6.472	6.478	(0.897)	119139	37.6184	1250

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.454	6.458	(1.067)	172802	76.5646	2550(R)
133 Diphenylamine	169	6.525	6.526	(0.904)	756720	46.9693	1560
58 1,2-Diphenylhydrazine	77	6.560	6.564	(0.909)	897443	44.9013	1500
61 4-Bromophenylphenylether	248	6.825	6.824	(0.945)	321604	43.4692	1450
63 Hexachlorobenzene	284	6.895	6.901	(0.955)	330068	41.9670	1400
68 Phenanthrene	178	7.243	7.243	(1.003)	1324198	43.0101	1430
69 Anthracene	178	7.284	7.287	(1.009)	1349930	44.0833	1470
72 Di-n-butylphthalate	149	7.642	7.643	(1.059)	1612492	45.7732	1520
76 Fluoranthene	202	8.284	8.288	(1.147)	1530855	45.4106	1510
85 Butylbenzylphthalate	149	9.031	9.035	(0.937)	729859	49.4507	1650
89 Benzo(a)anthracene	228	9.625	9.632	(0.999)	1514764	45.8053	1530
90 3,3'-Dichlorobenzidine	252	9.572	9.566	(0.993)	420472	37.9118	1260
92 Chrysene	228	9.666	9.670	(1.003)	1333560	44.2362	1470
93 bis(2-Ethylhexyl)phthalate	149	9.554	9.559	(0.991)	1059479	48.1678	1600
94 Di-n-octylphthalate	149	10.213	10.214	(0.902)	1576946	50.4601	1680
95 Benzo(b)fluoranthene	252	10.801	10.807	(0.954)	1434978	47.4629	1580
96 Benzo(k)fluoranthene	252	10.836	10.845	(0.957)	1351745	44.7905	1490
97 Benzo(a)pyrene	252	11.248	11.250	(0.993)	1229517	46.1227	1540
99 Indeno(1,2,3-cd)pyrene	276	13.113	13.118	(1.158)	1199572	40.1739	1340
100 Dibenzo(a,h)anthracene	278	13.130	13.137	(1.159)	996027	39.7008	1320
101 Benzo(ghi)perylene	276	13.660	13.667	(1.206)	1004199	42.8109	1430
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.399	(0.618)	196770	39.5010	1320

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD5.i/s120409.b/s510405-2.d
Date : 04-DEC-2009 11:59
Client ID: SBLK01LCS
Sample Info: 1120198485119282491|1|SMF1|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

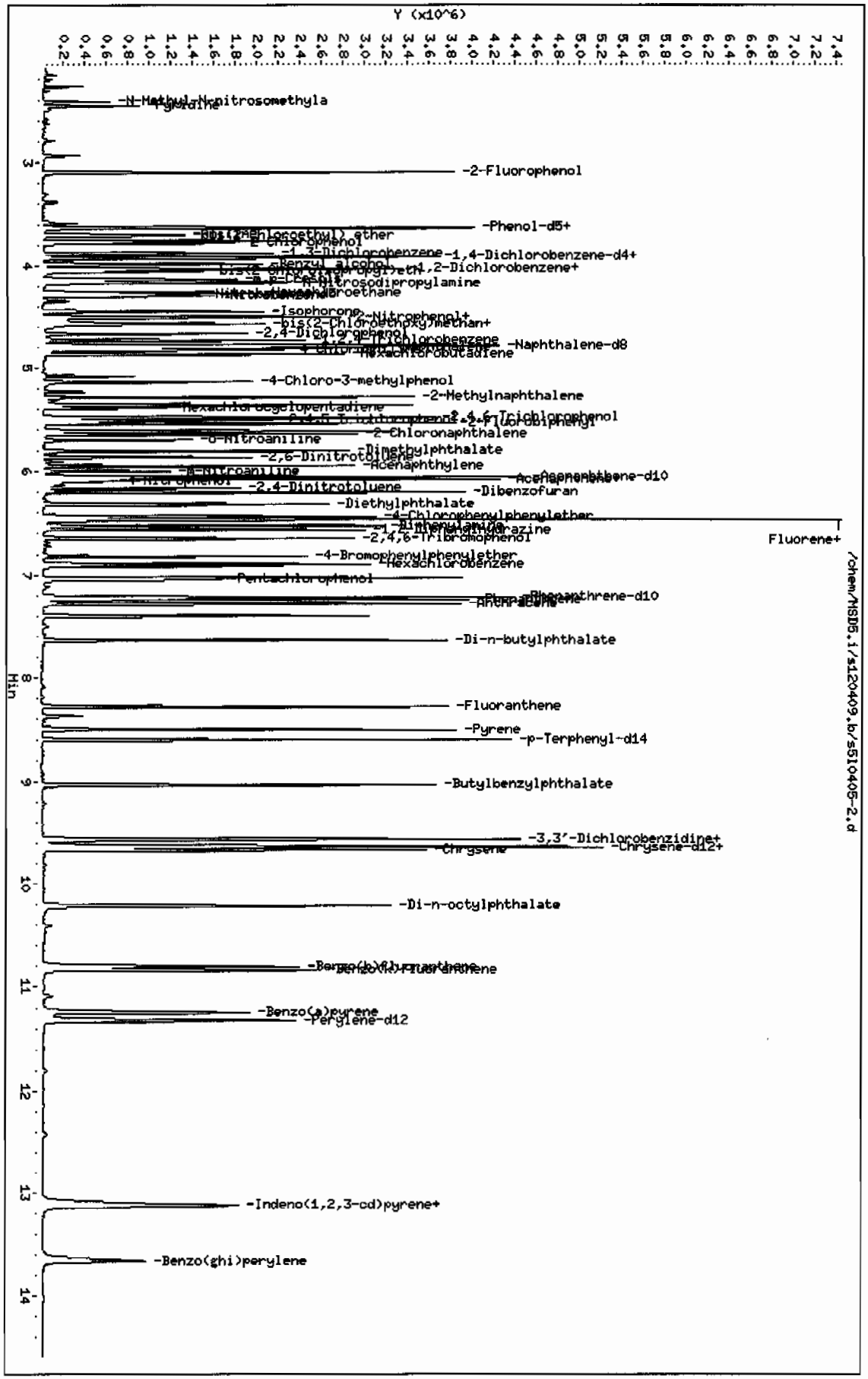

Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 928248 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984850 MB	02-DEC-2009 22:31:00	30	1	0.03333
1201984851 LCS	02-DEC-2009 22:31:00	30	1	0.03333
241827001	02-DEC-2009 22:31:00	30.12	1	0.0332
241827004	02-DEC-2009 22:31:00	30.18	1	0.03313
241827005	02-DEC-2009 22:31:00	30.14	1	0.03318
241827006	02-DEC-2009 22:31:00	30.01	1	0.03332
241838002	02-DEC-2009 22:31:00	30.05	1	0.03328
241900001	02-DEC-2009 22:31:00	30.02	1	0.03331
241900002	02-DEC-2009 22:31:00	30.14	1	0.03318
241900003	02-DEC-2009 22:31:00	30.01	1	0.03332
241900004	02-DEC-2009 22:31:00	30.09	1	0.03323
241900006	02-DEC-2009 22:31:00	30.19	1	0.03312
241903002	02-DEC-2009 22:31:00	30.02	1	0.03331
241907001	02-DEC-2009 22:31:00	30.17	1	0.03315
241907002	02-DEC-2009 22:31:00	30.05	1	0.03328
241911001	02-DEC-2009 22:31:00	30.14	1	0.03318
1201984852 MS (241911001)	02-DEC-2009 22:31:00	30.12	1	0.0332
1201984853 MSD (241911001)	02-DEC-2009 22:31:00	30.03	1	0.0333
241911002	02-DEC-2009 22:31:00	30.01	1	0.03332

Type	Sample Id	Descriptiou	Serial Number	Spike Amt	Units
LCS	1201984851	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
LCS	1201984851	BENZIDINE LCS	UE091201-21	1	mL
MS	1201984852	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MS	1201984852	BENZIDINE LCS	UE091201-21	1	mL
MSD	1201984853	BNA LCS w/o Benzidine 50ppm	UE091117-12	1	mL
MSD	1201984853	BENZIDINE LCS	UE091201-21	1	mL
SURR	All	BNA for all Surrogate	UE091117-10	1	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	Methylene Chloride	1236611-D	150	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 12/04/2009 METHOD:8270C MSD5-DFTPPx.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s510401.d	WBN091128-01	rmb	04-DEC-2009 10:24	50PPM	s120409	1.0	DFTPP	
s510402.d	WBN091106-05.3	RMB	04-DEC-2009 10:38	40 PPM	s120409	1.0	MEGACVS	413613
s510403.d	WBN091201-03.4	RMB	04-DEC-2009 11:06	40 PPM	s120409	1.0	AP12CVS	
s510404-2.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-670	1.0	SBLK01	
s510404-3.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-688	1.0	SBLK01	
s510404-4.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-690	1.0	SBLK01	
s510404-5.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-692	1.0	SBLK01	
s510404-6.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-694	1.0	SBLK01	
s510404.d	1201984850	RMB	04-DEC-2009 11:37	928249	10-668	1.0	SBLK01	
s510405-2.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-670	1.0	SBLK01LCS	
s510405-3.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-688	1.0	SBLK01LCS	
s510405-4.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-690	1.0	SBLK01LCS	
s510405-5.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-692	1.0	SBLK01LCS	
s510405-6.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-694	1.0	SBLK01LCS	
s510405.d	1201984851	RMB	04-DEC-2009 11:59	928249	10-668	1.0	SBLK01LCS	
s510406.d	241604001	RMB	04-DEC-2009 12:22	926641	10-638	1.0	LANL	DUSE: rerun of s510321 - still fails
s510407.d	241609002	RMB	04-DEC-2009 12:45	926641	10-640	1.0	LANL	DUSE: fails ISTD - confirmation for s510326
s510408.d	241827001	RMB	04-DEC-2009 13:08	928249	10-668	1.0	LANL	
s510409.d	241827004	RMB	04-DEC-2009 13:30	928249	10-668	1.0	LANL	

s510410.d	241827005	RMB	04-DEC-2009 13:53	928249	10-668		1.0	LANL
s510411.d	241827006	RMB	04-DEC-2009 14:16	928249	10-668		1.0	LANL
s510412.d	241838002	RMB	04-DEC-2009 14:39	928249	10-670		1.0	LANL
s510413.d	241900001	RMB	04-DEC-2009 15:02	928249	10-688		1.0	LANL
s510414.d	241900002	RMB	04-DEC-2009 15:25	928249	10-688		1.0	LANL
s510415.d	241900003	RMB	04-DEC-2009 15:47	928249	10-688		1.0	LANL
s510416.d	241900004	RMB	04-DEC-2009 16:10	928249	10-688		1.0	LANL
s510417.d	241900006	RMB	04-DEC-2009 16:33	928249	10-688		1.0	LANL
s510418.d	241903002	RMB	04-DEC-2009 16:56	928249	10-690		1.0	LANL
s510419.d	241907001	RMB	04-DEC-2009 17:19	928249	10-692		1.0	LANL
s510420.d	241907002	RMB	04-DEC-2009 17:42	928249	10-692		1.0	LANL
s510421.d	241911001	RMB	04-DEC-2009 18:04	928249	10-694		1.0	LANL
s510422.d	1201984852	RMB	04-DEC-2009 18:27	928249	10-694		1.0	LANL11001MS
s510423.d	1201984853	RMB	04-DEC-2009 18:50	928249	10-694		1.0	LANL11001MSD
s510424.d	241911002	RMB	04-DEC-2009 19:13	928249	10-694		1.0	LANL

Instrument Batch: /chem/MSD5.i/s120409.b

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 11/30/2009 METHOD:8270C MSD5-DFTPP8270D.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3001-D.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3001.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3002.d	instrument blank	RMB	30-NOV-2009 08:11		s113009	1.0		DUSE
s5k3003.d	WBN091106-08	RMB	30-NOV-2009 08:34	1 PPM	s113009	1.0	MEGAICAL001	DUSE
s5k3004.d	WBN091106-07	RMB	30-NOV-2009 09:02	10 PPM	s113009	1.0	MEGAICAL010	DUSE
s5k3005.d	WBN091106-06	RMB	30-NOV-2009 09:30	20 PPM	s113009	1.0	MEGAICAL020	DUSE
s5k3006.d	WBN091106-05.1	RMB	30-NOV-2009 09:58	40 PPM	s113009	1.0	MEGAICAL040	DUSE
s5k3007.d	WBN091106-04	RMB	30-NOV-2009 10:27	50 PPM	s113009	1.0	MEGAICAL050	DUSE
s5k3008.d	WBN091106-03	RMB	30-NOV-2009 10:55	80 PPM	s113009	1.0	MEGAICAL080	DUSE
s5k3009.d	WBN091106-02	RMB	30-NOV-2009 11:24	100 PPM	s113009	1.0	MEGAICAL100	DUSE
s5k3010.d	WBN091106-01	RMB	30-NOV-2009 12:23	120 PPM	s113009	1.0	MEGAICAL120	DUSE
s5k3011.d	instrument blank	RMB	30-NOV-2009 12:51		s113009	1.0		DUSE
s5k3012-D.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3012.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3013.d	instrument blank	RMB	30-NOV-2009 13:46		s113009	1.0		
s5k3014-TEST.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3014.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3015-TEST.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	
s5k3015.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	

s5k3016.d	WBN091106-06	RMB	30-NOV-2009 15:06	20 PPM	s113009	1.0	MEGAICAL020	
s5k3017.d	WBN091106-05.1	RMB	30-NOV-2009 15:34	40 PPM	s113009	1.0	MEGAICAL040	
s5k3018.d	WBN091106-04	RMB	30-NOV-2009 16:02	50 PPM	s113009	1.0	MEGAICAL050	
s5k3019.d	WBN091106-03	RMB	30-NOV-2009 16:31	80 PPM	s113009	1.0	MEGAICAL080	
s5k3020.d	WBN091106-02	RMB	30-NOV-2009 16:59	100 PPM	s113009	1.0	MEGAICAL100	
s5k3021.d	WBN091106-01	RMB	30-NOV-2009 17:28	120 PPM	s113009	1.0	MEGAICAL120	
s5k3022.d	instrument blank	RMB	30-NOV-2009 17:56		s113009	1.0		
s5k3023-625.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - 625 - 113009
s5k3023-8270D.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - 8270D - 113009
s5k3023-BOE.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - BOE - 113009
s5k3023.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - 8270C - 113009
s5k3024-TEST.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009	1.0	AP12ICAL010	
s5k3024.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009	1.0	AP12ICAL010	
s5k3025.d	WBN091111-02	RMB	30-NOV-2009 19:10	20 PPM	s113009	1.0	AP12ICAL020	
s5k3026.d	WBN091111-03.3	RMB	30-NOV-2009 19:34	40 PPM	s113009	1.0	AP12ICAL040	
s5k3027.d	WBN091111-04	RMB	30-NOV-2009 19:57	50 PPM	s113009	1.0	AP12ICAL050	
s5k3028.d	WBN091111-05	RMB	30-NOV-2009 20:20	80 PPM	s113009	1.0	AP12ICAL080	
s5k3029.d	WBN091111-06	RMB	30-NOV-2009 20:42	100 PPM	s113009	1.0	AP12ICAL100	
s5k3030.d	WBN091111-07	RMB	30-NOV-2009 21:05	120 PPM	s113009	1.0	AP12ICAL120	
s5k3031-TEST.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009	1.0	NEVADAICAL010	
s5k3031.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009	1.0	NEVADAICAL010	
s5k3032.d	UBN091117-02	RMB	30-NOV-2009 21:51	20 PPM	s113009	1.0	NEVADAICAL020	

Instrument Batch: /chem/MSD5.i/s113009.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3033.d	UBN091117-03	RMB	30-NOV-2009 22:14	40 PPM	s113009	1.0	NEVADAICAL040	
s5k3034.d	UBN091117-04	RMB	30-NOV-2009 22:38	50 PPM	s113009	1.0	NEVADAICAL050	
s5k3035.d	UBN091117-05	RMB	30-NOV-2009 23:01	80 PPM	s113009	1.0	NEVADAICAL080	

s5k3036.d	UBN091117-06	RMB	30-NOV-2009 23:23	100 PPM	s113009	1.0	NEVADAICAL100	
s5k3037.d	UBN091117-07	RMB	30-NOV-2009 23:46	120 PPM	s113009	1.0	NEVADAICAL120	
s5k3038-625.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009	1.0	AP12ICV	AP12ICV - 625 - 113009
s5k3038-8270D.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009	1.0	AP12ICV	AP12ICV - 8270D - 113009
s5k3038.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009	1.0	AP12ICV	AP12ICV - 8270C - 113009
Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3039-D.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009	1.0	DFTPP	
s5k3039.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009	1.0	DFTPP	
s5k3040.d	instrument blank	RMB	01-DEC-2009 09:52		s113009	1.0		
s5k3041.d	WBN091029-25	RMB	01-DEC-2009 10:15	10 PPM	s113009	1.0	PESTICAL010	
s5k3042.d	WBN091029-24	RMB	01-DEC-2009 10:38	20 PPM	s113009	1.0	PESTICAL020	
s5k3043.d	WBN091029-23.1	RMB	01-DEC-2009 11:00	40 PPM	s113009	1.0	PESTICAL040	
s5k3044.d	WBN091029-22	RMB	01-DEC-2009 11:23	50 PPM	s113009	1.0	PESTICAL050	
s5k3045.d	WBN091029-21	RMB	01-DEC-2009 11:46	80 PPM	s113009	1.0	PESTICAL080	
s5k3046.d	WBN091029-20	RMB	01-DEC-2009 12:09	100 PPM	s113009	1.0	PESTICAL100	
s5k3047.d	WBN091029-19	RMB	01-DEC-2009 12:32	120 PPM	s113009	1.0	PESTICAL120	
s5k3048-TEST.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009	1.0	HEXICAL500	
s5k3048.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009	1.0	HEXICAL500	
s5k3049.d	WBN091016-15	RMB	01-DEC-2009 13:18	1000 PPM	s113009	1.0	HEXICAL1000	
s5k3050.d	WBN091016-14	RMB	01-DEC-2009 13:41	1250 PPM	s113009	1.0	HEXICAL1250	
s5k3051.d	WBN091016-13	RMB	01-DEC-2009 14:03	1500 PPM	s113009	1.0	HEXICAL1500	
s5k3052.d	WBN091016-12	RMB	01-DEC-2009 14:25	1750 PPM	s113009	1.0	HEXICAL1750	
s5k3053.d	UBN090828-02	RMB	01-DEC-2009 14:48	2000 PPM	s113009	1.0	HEXICAL2000	
s5k3054-625.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009	1.0	PESTICV	PESTICV - 625 - 113009
s5k3054-8270D.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009	1.0	PESTICV	PESTICV - 8270D - 113009
s5k3054.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009	1.0	PESTICV	PESTICV - 8270C - 113009
s5k3055-625.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 625 - 113009

s5k3055-8270D.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 8270D - 113009
s5k3055.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 8270C - 11300

Instrument Batch: /chem/MSD5.i/s113009.b

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Solid	LANL
Batch ID:	**Sample Numbers:**		
928249	See Below		

Potentially affected work order(s)(SDG): 241827(10-668),241838(10-670),241900(10-688),241903(10-690),241907(10-692),241911(10-694)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for LCS/LCSD

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS(1201984851) recovered p-Nitroaniline at 153%. The limits are 44%-139%.	1. Since the LCS was biased high for p-Nitroaniline, and there were no hits of the analyte in any of the samples, the data results have been reported.
2. The MS(1201984852) and MSD(201984853) recovered p-Nitroaniline at 158% and 158%, respectively. The limits are 35%-139%.	2. Since the MS and MSD were biased high for p-Nitroaniline, and the analyte was not detected in the associated parent sample, the data results have been reported.

Originator's Name:

Richard Bomar 07-DEC-09

Data Validator/Group Leader:

Barbara Bailey 07-DEC-09

GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510422.d
Lab Smp Id: 1201984852 Client Smp ID: WST49-10-5432MS
Inj Date : 04-DEC-2009 18:27
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984852|928249|1|SVMF|1|LANL11001MS
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:44 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 22 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-694.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	1.46490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.913	3.921	(1.000)	454512	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1667628	40.0000	
* 46 Acenaphthene-d10	164	6.048	6.049	(1.000)	971331	40.0000	
* 67 Phenanthrene-d10	188	7.225	7.224	(1.000)	1785027	40.0000	
* 91 Chrysene-d12	240	9.642	9.641	(1.000)	1591164	40.0000	
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1138673	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.793)	641923	68.1996	2300
$ 5 Phenol-d5	99	3.631	3.632	(0.928)	798557	68.4035	2300
$ 20 Nitrobenzene-d5	82	4.284	4.287	(0.894)	405138	37.9986	1280
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.914)	931403	37.9567	1280
$ 60 2,4,6-Tribromophenol	329	6.648	6.651	(1.099)	284896	79.2917	2670
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.892)	1146631	50.3897	1700

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.643	3.641	(0.931)	416541	34.1668	1150(Q)
8 2-Chlorophenol	128	3.784	3.786	(0.967)	341947	32.7050	1100
11 1,4-Dichlorobenzene	146	3.925	3.935	(1.003)	389338	30.6332	1030
17 N-Nitrosodipropylamine	70	4.154	4.161	(1.062)	218721	39.8685	1340(Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.744	(0.989)	363942	34.9229	1180
33 4-Chloro-3-methylphenol	107	5.142	5.134	(1.074)	314321	38.3589	1290
47 Acenaphthene	154	6.072	6.078	(1.004)	726219	36.0907	1220
50 2,4-Dinitrotoluene	165	6.160	6.165	(1.018)	273359	37.8484	1280
52 4-Nitrophenol	139	6.101	6.088	(1.009)	115283	34.4707	1160
65 Pentachlorophenol	266	7.054	7.046	(0.976)	145033	35.2837	1190
79 Pyrene	202	8.501	8.505	(0.882)	1483563	46.0300	1550
2 Pyridine	79	2.448	2.433	(0.626)	209553	28.3124	954
4 Aniline	66	3.695	3.704	(0.944)	162157	35.5752	1200
7 bis(2-Chloroethyl) ether	63	3.713	3.718	(0.949)	240696	33.4172	1120
9 1,3-Dichlorobenzene	146	3.884	3.887	(0.992)	382493	30.5503	1030
12 Benzyl alcohol	108	3.990	3.988	(1.020)	167599	25.4068	856
13 1,2-Dichlorobenzene	146	4.031	4.036	(1.030)	368046	30.5994	1030
14 bis(2-Chloroisopropyl)ether	45	4.060	4.065	(1.038)	398847	34.8376	1170
15 o-Cresol	107	4.037	4.041	(1.032)	308367	36.9516	1240
18 m,p-Cresols	107	4.137	4.142	(1.057)	428199	40.3086	1360
19 Hexachloroethane	117	4.260	4.267	(1.089)	129235	27.5405	928
21 Nitrobenzene	77	4.295	4.301	(0.897)	382865	38.5663	1300
22 Isophorone	82	4.448	4.455	(0.929)	707618	38.3810	1290
23 2-Nitrophenol	139	4.507	4.513	(0.941)	162482	31.4264	1060
24 2,4-Dimethylphenol	122	4.501	4.508	(0.940)	330715	37.0812	1250
25 bis(2-Chloroethoxy)methane	93	4.566	4.576	(0.953)	382794	37.1099	1250
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	325062	39.0842	1320
27 Benzoic acid	105	4.560	4.566	(0.952)	204590	44.4800	1500
30 Naphthalene	128	4.801	4.807	(1.002)	1048417	36.3250	1220(Q)
31 4-Chloroaniline	127	4.819	4.821	(1.006)	497499	43.0470	1450
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	234974	34.6661	1170
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	783884	39.3808	1330
36 Hexachlorocyclopentadiene	237	5.389	5.394	(0.891)	71485	18.2394	614
37 2,4,6-Trichlorophenol	196	5.478	5.476	(0.906)	257105	36.4457	1230
38 2,4,5-Trichlorophenol	196	5.513	5.505	(0.912)	299769	40.6649	1370
40 2-Chloronaphthalene	162	5.642	5.645	(0.933)	739117	36.0620	1220
42 o-Nitroaniline	65	5.695	5.702	(0.942)	196188	36.0853	1220
41 m-Nitroaniline	138	5.995	5.996	(0.991)	185464	51.8779	1750
43 Dimethylphthalate	163	5.801	5.808	(0.959)	954197	39.4911	1330
44 2,6-Dinitrotoluene	165	5.860	5.866	(0.969)	211745	37.5030	1260
45 Acenaphthylene	152	5.948	5.953	(0.983)	1232359	39.4799	1330
48 2,4-Dinitrophenol	184	6.072	6.073	(1.004)	17250	18.7884	633(aQ)
49 Dibenzofuran	168	6.195	6.198	(1.024)	1299279	44.5092	1500
51 Diethylphthalate	149	6.319	6.319	(1.045)	939030	39.0557	1320
53 Fluorene	166	6.460	6.463	(1.068)	931992	38.5943	1300
54 4-Chlorophenylphenylether	204	6.436	6.434	(1.064)	505763	38.0511	1280
55 2-Methyl-4,6-dinitrophenol	198	6.478	6.478	(0.897)	48546	19.0460	642

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.460	6.458	(1.068)	191267	78.9569	2660(R)
133 Diphenylamine	169	6.525	6.526	(0.903)	767568	43.7537	1470
58 1,2-Diphenylhydrazine	77	6.560	6.564	(0.908)	905671	41.6142	1400
61 4-Bromophenylphenylether	248	6.825	6.824	(0.945)	310658	38.5621	1300
63 Hexachlorobenzene	284	6.895	6.901	(0.954)	321695	37.5636	1260
68 Phenanthrene	178	7.242	7.243	(1.002)	1301794	38.8310	1310
69 Anthracene	178	7.283	7.287	(1.008)	1331360	39.9279	1340
72 Di-n-butylphthalate	149	7.642	7.643	(1.058)	1569454	40.9148	1380
76 Fluoranthene	202	8.289	8.288	(1.147)	1460576	39.7892	1340
85 Butylbenzylphthalate	149	9.030	9.035	(0.937)	676562	47.2432	1590
89 Benzo(a)anthracene	228	9.624	9.632	(0.998)	1281035	39.9236	1340
90 3,3'-Dichlorobenzidine	252	9.572	9.566	(0.993)	424642	39.4602	1330
92 Chrysene	228	9.666	9.670	(1.002)	1149863	39.3106	1320
93 bis(2-Ethylhexyl)phthalate	149	9.554	9.559	(0.991)	970361	45.4956	1530
94 Di-n-octylphthalate	149	10.213	10.214	(0.902)	1408388	57.1026	1920
95 Benzo(b)fluoranthene	252	10.801	10.807	(0.954)	1027417	43.0584	1450
96 Benzo(k)fluoranthene	252	10.836	10.845	(0.957)	1041449	43.7252	1470
97 Benzo(a)pyrene	252	11.248	11.250	(0.993)	870101	41.3573	1390
99 Indeno(1,2,3-cd)pyrene	276	13.107	13.118	(1.157)	733136	31.3589	1060
100 Dibenzo(a,h)anthracene	278	13.124	13.137	(1.159)	626236	31.8612	1070
101 Benzo(ghi)perylene	276	13.654	13.667	(1.206)	576229	31.1266	1050
1 N-Methyl-N-nitrosomethylamine	74	2.407	2.399	(0.615)	170429	32.6626	1100

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD5.i/s120409.b/s10422.d
Date : 04-DEC-2009 18:27
Client ID: MST49-10-5432MS
Sample Info: 1120198485219282491|SVHF|1|LANL11001MS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RHB
Column diameter: 0.20

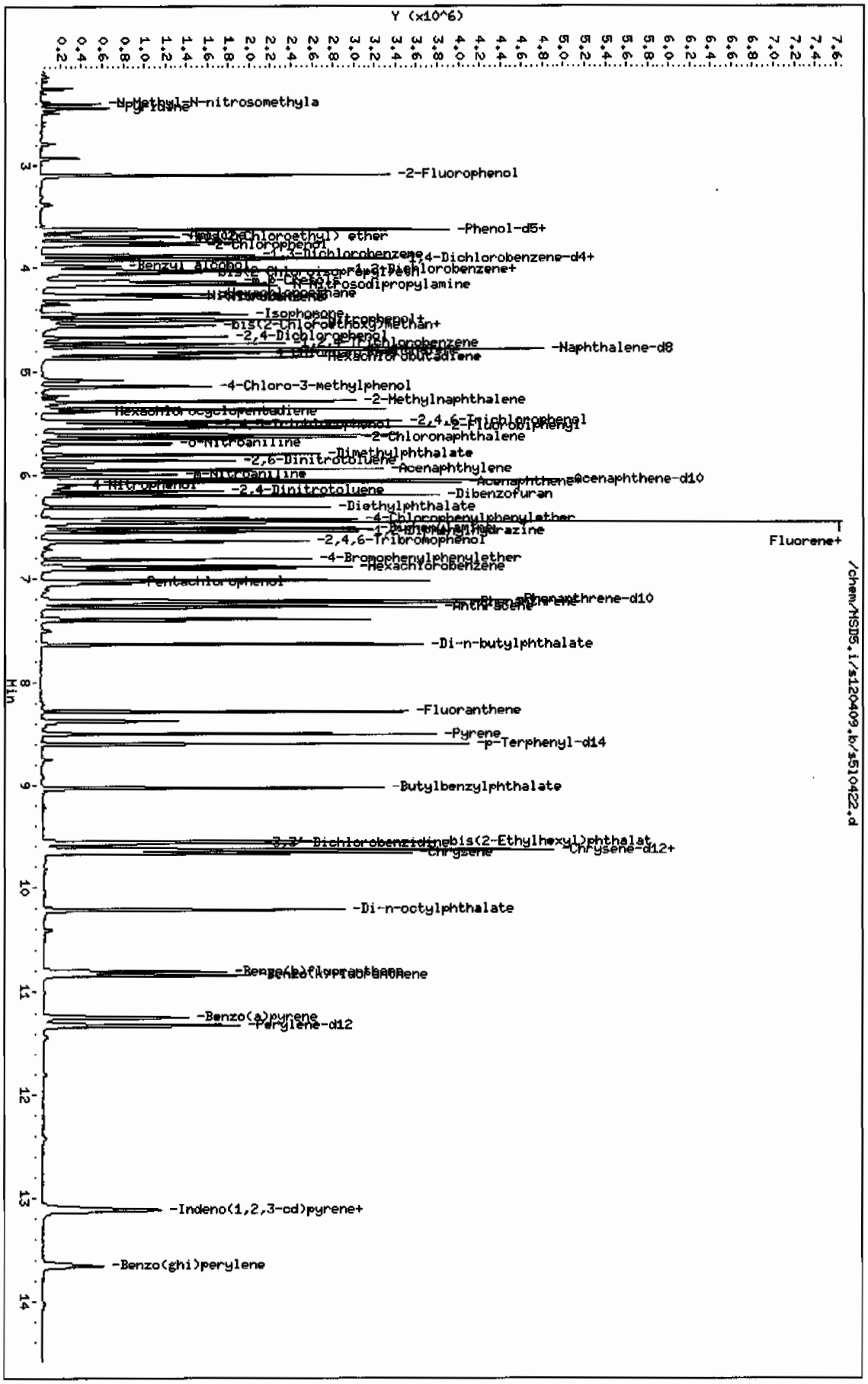

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s120409.b/s510423.d
Lab Smp Id: 1201984853 Client Smp ID: WST49-10-5432MSD
Inj Date : 04-DEC-2009 18:50
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201984853|928249|1|SVMF|1|LANL11001MSD
Misc Info : |MSD8270_SF|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s120409.b/MSD5-M8270C-113009.m
Meth Date : 05-Dec-2009 10:44 hnm Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 23 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-694.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf *Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	1.46490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.921	(1.000)	457622	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1688982	40.0000	
* 46 Acenaphthene-d10	164	6.048	6.049	(1.000)	992789	40.0000	
* 67 Phenanthrene-d10	188	7.225	7.224	(1.000)	1823412	40.0000	
* 91 Chrysene-d12	240	9.642	9.641	(1.000)	1541029	40.0000	
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1001963	40.0000	
$ 3 2-Fluorophenol	112	3.101	3.102	(0.791)	647393	68.3133	2310
$ 5 Phenol-d5	99	3.631	3.632	(0.926)	808701	68.8016	2320
$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.893)	413512	38.2937	1290
$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.914)	945649	37.7043	1270
$ 60 2,4,6-Tribromophenol	329	6.648	6.651	(1.099)	294617	80.2250	2710
$ 81 p-Terphenyl-d14	244	8.601	8.606	(0.892)	1177576	53.4332	1800

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.643	3.641	(0.929)	420780	34.2800	1160(Q)
8 2-Chlorophenol	128	3.784	3.786	(0.965)	346037	32.8713	1110
11 1,4-Dichlorobenzene	146	3.925	3.935	(1.002)	402464	31.4507	1060
17 N-Nitrosodipropylamine	70	4.154	4.161	(1.060)	219549	39.7474	1340(Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.744	(0.989)	368421	34.9057	1180
33 4-Chloro-3-methylphenol	107	5.143	5.134	(1.074)	325972	39.2778	1330
47 Acenaphthene	154	6.072	6.078	(1.004)	745069	36.2272	1220
50 2,4-Dinitrotoluene	165	6.160	6.165	(1.018)	282400	38.2551	1290
52 4-Nitrophenol	139	6.101	6.088	(1.009)	111067	32.8414	1110
65 Pentachlorophenol	266	7.054	7.046	(0.976)	142789	34.2423	1160
79 Pyrene	202	8.501	8.505	(0.882)	1513046	48.4721	1640
2 Pyridine	79	2.454	2.433	(0.626)	216485	29.0502	982
4 Aniline	66	3.696	3.704	(0.943)	166869	36.3602	1230
7 bis(2-Chloroethyl) ether	63	3.713	3.718	(0.947)	246162	33.9439	1150
9 1,3-Dichlorobenzene	146	3.884	3.887	(0.991)	399292	31.6754	1070
12 Benzyl alcohol	108	3.990	3.988	(1.018)	159003	23.9399	809
13 1,2-Dichlorobenzene	146	4.031	4.036	(1.029)	382183	31.5588	1070
14 bis(2-Chloroisopropyl)ether	45	4.060	4.065	(1.036)	409273	35.5053	1200
15 o-Cresol	107	4.037	4.041	(1.030)	304423	36.2311	1220
18 m,p-Cresols	107	4.137	4.142	(1.056)	425237	39.7577	1340
19 Hexachloroethane	117	4.260	4.267	(1.087)	130414	27.6029	933
21 Nitrobenzene	77	4.296	4.301	(0.897)	392359	39.0229	1320
22 Isophorone	82	4.448	4.455	(0.929)	729357	39.0600	1320
23 2-Nitrophenol	139	4.507	4.513	(0.941)	167065	31.9043	1080
24 2,4-Dimethylphenol	122	4.501	4.508	(0.940)	331017	36.6458	1240
25 bis(2-Chloroethoxy)methane	93	4.566	4.576	(0.953)	385674	36.9164	1250
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	329644	39.1340	1320
27 Benzoic acid	105	4.554	4.566	(0.951)	174628	37.4860	1270
30 Naphthalene	128	4.801	4.807	(1.002)	1062873	36.3603	1230
31 4-Chloroaniline	127	4.819	4.821	(1.006)	515717	44.0592	1490
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	245374	35.7427	1210
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	785732	38.9746	1320
36 Hexachlorocyclopentadiene	237	5.390	5.394	(0.891)	62418	15.5817	526
37 2,4,6-Trichlorophenol	196	5.478	5.476	(0.906)	261473	36.2638	1220
38 2,4,5-Trichlorophenol	196	5.513	5.505	(0.912)	311475	41.3396	1400
40 2-Chloronaphthalene	162	5.643	5.645	(0.933)	757821	36.1754	1220
42 o-Nitroaniline	65	5.695	5.702	(0.942)	204099	36.7290	1240
41 m-Nitroaniline	138	5.995	5.996	(0.991)	191320	52.2347	1760
43 Dimethylphthalate	163	5.801	5.808	(0.959)	994028	40.2504	1360
44 2,6-Dinitrotoluene	165	5.860	5.866	(0.969)	220801	38.2616	1290
45 Acenaphthylene	152	5.948	5.953	(0.983)	1268182	39.7494	1340
48 2,4-Dinitrophenol	184	6.072	6.073	(1.004)	15399	18.0339	609(aQ)
49 Dibenzofuran	168	6.195	6.198	(1.024)	1334446	44.7258	1510
51 Diethylphthalate	149	6.319	6.319	(1.045)	967785	39.3817	1330
53 Fluorene	166	6.460	6.463	(1.068)	963243	39.0262	1320
54 4-Chlorophenylphenylether	204	6.431	6.434	(1.063)	528320	38.8891	1310
55 2-Methyl-4,6-dinitrophenol	198	6.478	6.478	(0.897)	46089	18.2619	617

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	6.460	6.458	(1.068)	195363	78.9047	2670(R)
133 Diphenylamine	169	6.525	6.526	(0.903)	790204	44.0957	1490
58 1,2-Diphenylhydrazine	77	6.560	6.564	(0.908)	924998	41.6075	1410
61 4-Bromophenylphenylether	248	6.825	6.824	(0.945)	331652	40.3015	1360
63 Hexachlorobenzene	284	6.895	6.901	(0.954)	337241	38.5499	1300
68 Phenanthrene	178	7.242	7.243	(1.002)	1346929	39.3315	1330
69 Anthracene	178	7.284	7.287	(1.008)	1390328	40.8186	1380
72 Di-n-butylphthalate	149	7.642	7.643	(1.058)	1618056	41.2938	1400
76 Fluoranthene	202	8.289	8.288	(1.147)	1495592	39.8855	1350
85 Butylbenzylphthalate	149	9.031	9.035	(0.937)	698725	50.3782	1700
89 Benzo(a)anthracene	228	9.625	9.632	(0.998)	1280061	41.1911	1390
90 3,3'-Dichlorobenzidine	252	9.572	9.566	(0.993)	428932	41.1556	1390
92 Chrysene	228	9.666	9.670	(1.002)	1122167	39.6119	1340
93 bis(2-Ethylhexyl)phthalate	149	9.554	9.559	(0.991)	974880	47.1754	1590
94 Di-n-octylphthalate	149	10.213	10.214	(0.902)	1417046	65.2927	2210
95 Benzo(b)fluoranthene	252	10.801	10.807	(0.954)	954057	45.4394	1540
96 Benzo(k)fluoranthene	252	10.842	10.845	(0.957)	973642	46.4559	1570
97 Benzo(a)pyrene	252	11.248	11.250	(0.993)	778881	42.0728	1420
99 Indeno(1,2,3-cd)pyrene	276	13.107	13.118	(1.157)	609706	29.6981	1000
100 Dibenzo(a,h)anthracene	278	13.124	13.137	(1.159)	512489	29.7120	1000
101 Benzo(ghi)perylene	276	13.654	13.667	(1.206)	469410	28.8162	974
1 N-Methyl-N-nitrosomethylamine	74	2.413	2.399	(0.616)	170880	32.5264	1100

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD5.i/s120409.b/s510423.d
Date : 04-DEC-2009 18:50
Client ID: WST49-10-5432MSD
Sample Info: 1120198485319282491|1|SVHF|1|LANL11001MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

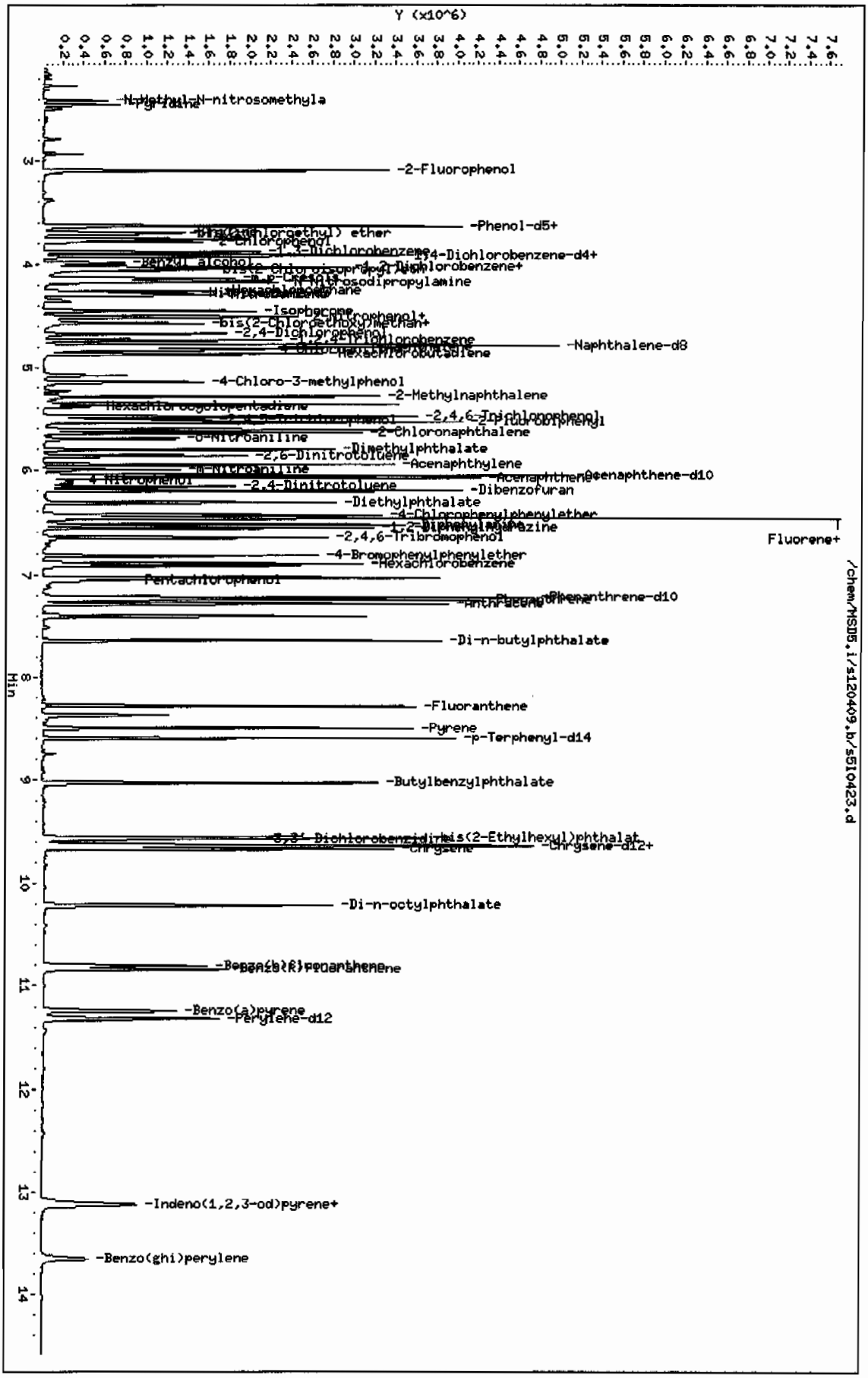

Page 1

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670-1

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3510C
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	932028
Prep Batch Number:	932027
TCLP Prep Batch Number:	930033

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
241839001	WST03-10-2134
1201988990	TCLP Blank (TB)
1201993737	Method Blank (MB)
1201993738	Laboratory Control Sample (LCS)
1201993739	241839001(WST03-10-2134) Matrix Spike (MS)
1201993740	241839001(WST03-10-2134) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 22.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various

calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241839001 (WST03-10-2134) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD5.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

Reviewer: [illegible] **Date:** 12-18-09

Roadmap for LANL 10-670-1 SVOA

This roadmap was analyzed by rmb on 12-15-2009, 10:11.
This roadmap was reviewed by bar00895 on 12-15-2009, 12:12.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s121209.b/s511216.d	241839001	12-DEC-2009	14:45	10-670-1.sub	WST03-10-2134	1	932028	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD5.i/s121209.b/s511208.d	1201988990	tb	12-DEC-2009	11:45	10-670-1.sub	TCLPBLANK	1	932028	
☐	Y	/chem/MSD5.i/s121209.b/s511210.d	1201993737	mb	12-DEC-2009	12:30	10-670-1.sub	SBLK01	1.00000	932028	
☐	Y	/chem/MSD5.i/s121209.b/s511211.d	1201993738	lcs	12-DEC-2009	12:52	10-670-1.sub	SBLK01LCS	1.00000	932028	
☐	Y	/chem/MSD5.i/s121209.b/s511217.d	1201993739	ms	12-DEC-2009	15:08	10-670-1.sub	WST03-10-2134MS	1.00000	932028	
☐	Y	/chem/MSD5.i/s121209.b/s511218.d	1201993740	msd	12-DEC-2009	15:30	10-670-1.sub	WST03-10-2134MSD	1.00000	932028	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241839001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 14:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s511216.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene	U	0.010	mg/L	0.002	0.010
87-86-5	Pentachlorophenol	U	0.010	mg/L	0.002	0.010
110-86-1	Pyridine	U	0.010	mg/L	0.003	0.010
95-48-7	o-Cresol	U	0.010	mg/L	0.002	0.010
65794-96-9	m,p-Cresols	U	0.010	mg/L	0.003	0.010
67-72-1	Hexachloroethane	U	0.010	mg/L	0.002	0.010
98-95-3	Nitrobenzene	U	0.010	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene	U	0.010	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol	U	0.010	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol	U	0.010	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene	U	0.010	mg/L	0.002	0.010

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-670-1

Matrix Type: TCLP SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1201988990	TB for batch 930033	51	29	86	76	97	121
1201993737	MB for batch 932027	49	29	86	75	91	109
1201993738	LCS for batch 932027	55	31	93	85	103	118
241839001	WST03-10-2134	48	28	91	75	94	113
1201993739	WST03-10-2134MS	57	34	97	85	103	113
1201993740	WST03-10-2134MSD	52	31	93	84	106	118

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(25%-92%)
PHL	=	Phenol-d5	(15%-73%)
NBZ	=	Nitrobenzene-d5	(40%-112%)
FBP	=	2-Fluorobiphenyl	(35%-100%)
TBP	=	2,4,6-Tribromophenol	(39%-115%)
TPH	=	p-Terphenyl-d14	(46%-130%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: LCS for batch 932027
Lab Sample ID: 1201993738
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/12/2009 12:52
Dilution: 1
Prep Batch ID: 932027
Batch ID: 932028

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
106-46-7	LCS	1,4-Dichlorobenzene	0.100	0.0	0.0713	71	38-88
121-14-2	LCS	2,4-Dinitrotoluene	0.100	0.0	0.0864	86	55-108
87-86-5	LCS	Pentachlorophenol	0.100	0.0	0.0996	100	44-121
110-86-1	LCS	Pyridine	0.100	0.0	0.0769	77	26-103
95-48-7	LCS	o-Cresol	0.100	0.0	0.0664	66	41-94
65794-96-9	LCS	m,p-Cresols	0.100	0.0	0.0626	63	38-96
67-72-1	LCS	Hexachloroethane	0.100	0.0	0.0687	69	35-92
98-95-3	LCS	Nitrobenzene	0.100	0.0	0.098	98	48-112
87-68-3	LCS	Hexachlorobutadiene	0.100	0.0	0.086	86	33-98
88-06-2	LCS	2,4,6-Trichlorophenol	0.100	0.0	0.0941	94	54-111
95-95-4	LCS	2,4,5-Trichlorophenol	0.100	0.0	0.0924	92	50-111
118-74-1	LCS	Hexachlorobenzene	0.100	0.0	0.102	102	53-115

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134MS
Lab Sample ID: 1201993739
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: TCLP R
Analysis Date: 12/12/2009 15:08
Dilution: 1
Prep Batch ID: 932027
Batch ID: 932028

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
106-46-7	MS	1,4-Dichlorobenzene	0.100	0.00	U	0.0756	76	37-91
121-14-2	MS	2,4-Dinitrotoluene	0.100	0.00	U	0.0872	87	50-109
87-86-5	MS	Pentachlorophenol	0.100	0.00	U	0.106	106	38-131
110-86-1	MS	Pyridine	0.100	0.00	U	0.0854	85	28-110
95-48-7	MS	o-Cresol	0.100	0.00	U	0.0698	70	37-105
65794-96-9	MS	m,p-Cresols	0.100	0.00	U	0.0673	67	33-110
67-72-1	MS	Hexachloroethane	0.100	0.00	U	0.0721	72	34-95
98-95-3	MS	Nitrobenzene	0.100	0.00	U	0.104	104	43-118
87-68-3	MS	Hexachlorobutadiene	0.100	0.00	U	0.0886	89	31-106
88-06-2	MS	2,4,6-Trichlorophenol	0.100	0.00	U	0.0961	96	46-114
95-95-4	MS	2,4,5-Trichlorophenol	0.100	0.00	U	0.103	103	46-117
118-74-1	MS	Hexachlorobenzene	0.100	0.00	U	0.0994	99	47-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134MSD
Lab Sample ID: 1201993740
Instrument: MSD5.I
Analyst: RMB
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP R
Analysis Date: 12/12/2009 15:30
Dilution: 1
Prep Batch ID: 932027
Batch ID: 932028

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
106-46-7	MSD 1,4-Dichlorobenzene	0.100	0.00	U	0.0696	70	37-91	8	0-25
121-14-2	MSD 2,4-Dinitrotoluene	0.100	0.00	U	0.0885	88	50-109	2	0-25
87-86-5	MSD Pentachlorophenol	0.100	0.00	U	0.113	113	38-131	7	0-25
110-86-1	MSD Pyridine	0.100	0.00	U	0.0853	85	28-110	0	0-25
95-48-7	MSD o-Cresol	0.100	0.00	U	0.0657	66	37-105	6	0-25
65794-96-9	MSD m,p-Cresols	0.100	0.00	U	0.0605	61	33-110	11	0-25
67-72-1	MSD Hexachloroethane	0.100	0.00	U	0.0668	67	34-95	8	0-25
98-95-3	MSD Nitrobenzene	0.100	0.00	U	0.0984	98	43-118	6	0-25
87-68-3	MSD Hexachlorobutadiene	0.100	0.00	U	0.0831	83	31-106	6	0-25
88-06-2	MSD 2,4,6-Trichlorophenol	0.100	0.00	U	0.0946	95	46-114	2	0-25
95-95-4	MSD 2,4,5-Trichlorophenol	0.100	0.00	U	0.0913	91	46-117	12	0-25
118-74-1	MSD Hexachlorobenzene	0.100	0.00	U	0.104	104	47-120	4	0-25

Method Blank Summary

SDG Number:	10-670-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 932027	Instrument ID:	MSD5.I	Data File:	s5l1210-2.d
Lab Sample ID:	1201993737	Prep Date:	12/11/2009 21:42	Analyzed:	12/12/09 12:30
Column:	J&W DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	TB for batch 930033	1201988990	s5l1208.d	12/12/09	1145
02	LCS for batch 932027	1201993738	s5l1211-2.d	12/12/09	1252
03	WST03-10-2134	241839001	s5l1216.d	12/12/09	1445
04	WST03-10-2134MS	1201993739	s5l1217.d	12/12/09	1508
05	WST03-10-2134MSD	1201993740	s5l1218.d	12/12/09	1530

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-670-1

Instrument ID: MSD5.I **Injection Date/Time:** 12-DEC-09 08:53

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s121209.b/s511201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	37.1
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	42.8
197	0 - 1% of mass 198	0.6
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	28.2
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	74.2
442	Greater than 40% of mass 198	56.9
443	17 - 23% of mass 442	19.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091106-05.3	/chem/MSD5.i/s121209.b/s511204	12-DEC-09 09:57
TCLPBLANK	1201988990	/chem/MSD5.i/s121209.b/s511208	12-DEC-09 11:45
SBLK01	1201993737	/chem/MSD5.i/s121209.b/s511210	12-DEC-09 12:30
SBLK01LCS	1201993738	/chem/MSD5.i/s121209.b/s511211	12-DEC-09 12:52
WST03-10-2134	241839001	/chem/MSD5.i/s121209.b/s511216	12-DEC-09 14:45
WST03-10-2134MS	1201993739	/chem/MSD5.i/s121209.b/s511217	12-DEC-09 15:08
WST03-10-2134MSD	1201993740	/chem/MSD5.i/s121209.b/s511218	12-DEC-09 15:30

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-670-1

Instrument ID: MSD5.I **Injection Date/Time:** 30-NOV-09 13:32

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD5.i/s113009.b/s5k3012.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	30.8
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	37.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	52.2
443	17 - 23% of mass 442	20.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN091106-08	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:09
MEGAICAL010	WBN091106-07	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 14:38
MEGAICAL020	WBN091106-06	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:06
MEGAICAL040	WBN091106-05.1	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 15:34
MEGAICAL050	WBN091106-04	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:02
MEGAICAL080	WBN091106-03	/chem/MSD5.i/s113009.b/s5k301	30-NOV-09 16:31
MEGAICAL100	WBN091106-02	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 16:59
MEGAICAL120	WBN091106-01	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 17:28
MEGAICV	WBN091106-09.3	/chem/MSD5.i/s113009.b/s5k302	30-NOV-09 18:20

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: MSD5.I

GC Column: J&W DB-5MS

Client SDG: 10-670-1

STD Analysis Time: 12-DEC-09 09:57

Data File: s511204.d

	1,4-Dichlorobenzene-d4				Naphthalene-d8				Acenaphthene-d10				Phenanthrene-d10				Chrysene-d12				Perylene-d12			
	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12 Hour STD	355607		3.78		1316914		4.64		746114		5.9		1383790		7.05		1431683		9.44		1257814		11.0	
Upper Limit	711214		4.28		2633828		5.14		1492228		6.4		2767580		7.55		2863366		9.94		2515628		11.5	
Lower Limit	177804		3.28		658457		4.14		373057		5.4		691895		6.55		715842		8.94		628907		10.5	
Sample ID																								
TBLK01	325999		3.77		1078207		4.64		671853		5.89		1203852		7.04		1147094		9.44		979138		11.0	
BLK01	360391		3.77		1192925		4.64		756764		5.89		1367163		7.04		1338399		9.44		1182742		11.0	
BLK01LCS	318926		3.77		1051000		4.64		670905		5.89		1199693		7.04		1158304		9.44		995232		11.0	
WST03-10-2134	315706		3.77		1049799		4.64		668214		5.89		1214329		7.04		1183638		9.44		1008207		11.0	
WST03-10-2134MS	318926		3.77		1050221		4.64		675579		5.89		1227900		7.04		1231995		9.44		1121221		11.0	
WST03-10-2134MSD	369757		3.77		1215845		4.64		768657		5.89		1373018		7.04		1344333		9.44		1227302		11.0	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241839001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 14:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s511216.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene	U	0.010	mg/L	0.002	0.010
87-86-5	Pentachlorophenol	U	0.010	mg/L	0.002	0.010
110-86-1	Pyridine	U	0.010	mg/L	0.003	0.010
95-48-7	o-Cresol	U	0.010	mg/L	0.002	0.010
65794-96-9	m,p-Cresols	U	0.010	mg/L	0.003	0.010
67-72-1	Hexachloroethane	U	0.010	mg/L	0.002	0.010
98-95-3	Nitrobenzene	U	0.010	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene	U	0.010	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol	U	0.010	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol	U	0.010	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene	U	0.010	mg/L	0.002	0.010

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121209.b/s511216.d
Lab Smp Id: 241839001 Client Smp ID: WST03-10-2134
Inj Date : 12-DEC-2009 14:45
Operator : RMB Inst ID: MSD5.i
Smp Info : |241839001|932028|1|SVMF|1|LANL
Misc Info : |MSDTCLP_L|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 10:12 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	3.772	3.776	(1.000)	315706	40.0000	
* 29 Naphthalene-d8	136	4.637	4.643	(1.000)	1049799	40.0000	
* 46 Acenaphthene-d10	164	5.889	5.895	(1.000)	668214	40.0000	
* 67 Phenanthrene-d10	188	7.042	7.046	(1.000)	1214329	40.0000	
* 91 Chrysene-d12	240	9.436	9.444	(1.000)	1183638	40.0000	
* 98 Perylene-d12	264	11.013	11.023	(1.000)	1008207	40.0000	
$ 3 2-Fluorophenol	112	2.960	2.963	(0.785)	314612	48.1212	0.048
$ 5 Phenol-d5	99	3.490	3.497	(0.925)	225281	27.7817	0.028
$ 20 Nitrobenzene-d5	82	4.137	4.142	(0.892)	304567	45.3775	0.045
$ 39 2-Fluorobiphenyl	172	5.378	5.385	(0.913)	632171	37.4487	0.037
$ 60 2,4,6-Tribromophenol	329	6.478	6.482	(1.100)	232828	94.1951	0.094
$ 81 p-Terphenyl-d14	244	8.419	8.418	(0.892)	954810	56.4068	0.056

ION RATIO REPORT

SV REPORT

Data file: s511216.d
Report Date: 12/14/2009 08:16
Lab. ID: 241839001 SampleType: SAMPLE
Injection Date: 12-DEC-2009 14:45
Operator: RMB Instrument: MSD5.i
Sample Info: |241839001|932028|1|SVMF|1|LANL
Miscellaneous Info: |MSDTCLP_L|WBN091128-02
Comment:
Method used: /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-670-1
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	90074	5.89	6.01	80-120	100	(T)
89	1294	5.89	6.01	37- 97	1	(QT)
63	1045	5.89	6.01	16- 76	1	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD5.i/s121209.b/s511216.d
Date : 12-DEC-2009 14:45
Client ID: WST03-10-2134
Sample Info: |2418390011932028|1|SVMF|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

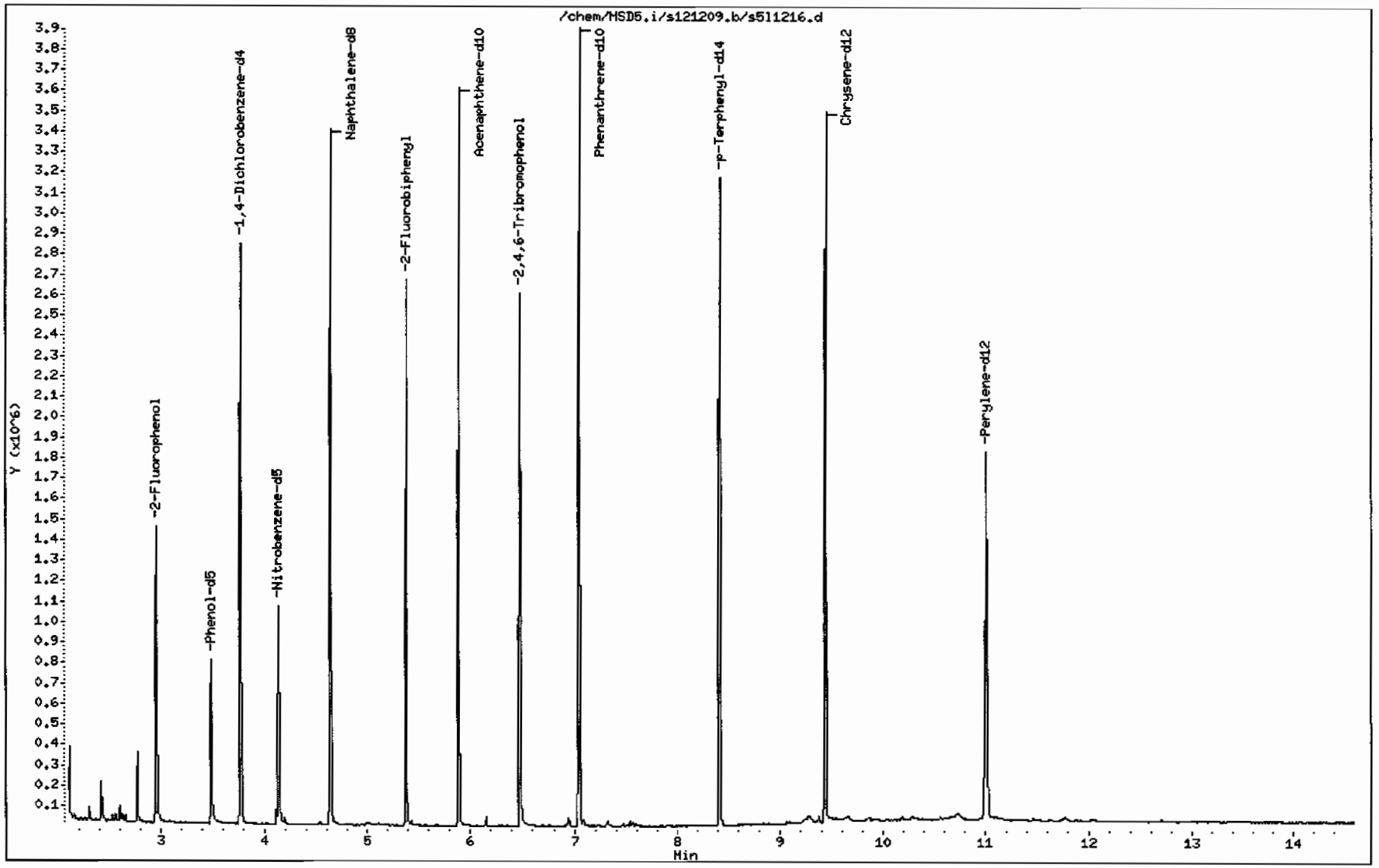

Standard Data

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether	1	10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120

2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1	10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C//8270D/EPA 625

Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120

Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	1500	1750	2000	
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120

SW846 8270C//8270D/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothio anisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalamide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
Level 1 may be included at request of client
(06/08)

Report Date: 12-Dec-2009 10:14

Calibration History

Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Start Cal Date: 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
30-NOV-2009 14:09	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3014.d
Cal Level: 2 , Cal Amount: 10.00000		
01-DEC-2009 12:54	hex	/chem/MSD5.i/s113009.b/s5k3048.d
01-DEC-2009 10:15	pest	/chem/MSD5.i/s113009.b/s5k3041.d
30-NOV-2009 21:28	nev	/chem/MSD5.i/s113009.b/s5k3031.d
30-NOV-2009 18:48	ap12	/chem/MSD5.i/s113009.b/s5k3024.d
30-NOV-2009 14:38	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3015.d
Cal Level: 3 , Cal Amount: 20.00000		
01-DEC-2009 13:18	hex	/chem/MSD5.i/s113009.b/s5k3049.d
01-DEC-2009 10:38	pest	/chem/MSD5.i/s113009.b/s5k3042.d
30-NOV-2009 21:51	nev	/chem/MSD5.i/s113009.b/s5k3032.d
30-NOV-2009 19:10	ap12	/chem/MSD5.i/s113009.b/s5k3025.d
30-NOV-2009 15:06	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3016.d
Cal Level: 4 , Cal Amount: 40.00000		
01-DEC-2009 13:41	hex	/chem/MSD5.i/s113009.b/s5k3050.d
01-DEC-2009 11:00	pest	/chem/MSD5.i/s113009.b/s5k3043.d
30-NOV-2009 22:14	nev	/chem/MSD5.i/s113009.b/s5k3033.d
30-NOV-2009 19:34	ap12	/chem/MSD5.i/s113009.b/s5k3026.d
30-NOV-2009 15:34	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3017.d
Cal Level: 5 , Cal Amount: 50.00000		
01-DEC-2009 14:03	hex	/chem/MSD5.i/s113009.b/s5k3051.d
01-DEC-2009 11:23	pest	/chem/MSD5.i/s113009.b/s5k3044.d
30-NOV-2009 22:38	nev	/chem/MSD5.i/s113009.b/s5k3034.d
30-NOV-2009 19:57	ap12	/chem/MSD5.i/s113009.b/s5k3027.d
30-NOV-2009 16:02	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3018.d
Cal Level: 6 , Cal Amount: 80.00000		
01-DEC-2009 14:25	hex	/chem/MSD5.i/s113009.b/s5k3052.d
01-DEC-2009 11:46	pest	/chem/MSD5.i/s113009.b/s5k3045.d
30-NOV-2009 23:01	nev	/chem/MSD5.i/s113009.b/s5k3035.d
30-NOV-2009 20:20	ap12	/chem/MSD5.i/s113009.b/s5k3028.d
30-NOV-2009 16:31	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3019.d
Cal Level: 7 , Cal Amount: 100.00000		

01-DEC-2009 14:48	hex	/chem/MSD5.i/s113009.b/s5k3053.d
01-DEC-2009 12:09	pest	/chem/MSD5.i/s113009.b/s5k3046.d
30-NOV-2009 23:23	nev	/chem/MSD5.i/s113009.b/s5k3036.d
30-NOV-2009 20:42	ap12	/chem/MSD5.i/s113009.b/s5k3029.d
30-NOV-2009 16:59	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3020.d

Cal Level: 8 , Cal Amount: 120.00000		
01-DEC-2009 12:32	pest	/chem/MSD5.i/s113009.b/s5k3047.d
30-NOV-2009 23:46	nev	/chem/MSD5.i/s113009.b/s5k3037.d
30-NOV-2009 21:05	ap12	/chem/MSD5.i/s113009.b/s5k3030.d
30-NOV-2009 17:28	MEGAIICARE	/chem/MSD5.i/s113009.b/s5k3021.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
12-DEC-2009 09:57	MEGAIICARE	/chem/MSD5.i/s121209.b/s511204.d

Ccal Level: 4 , Ccal Amount: 40.0		
12-DEC-2009 09:34	ap12	/chem/MSD5.i/s121209.b/s511203.d

Ccal Level: 4 , Ccal Amount: 40.0		
12-DEC-2009 09:07	MEGAIICARE	/chem/MSD5.i/s121209.b/s511202.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Calibration File Names:
Level 1: /chem/MSD5.i/s113009.b/s5k3014.d
Level 2: /chem/MSD5.i/s113009.b/s5k3048.d
Level 3: /chem/MSD5.i/s113009.b/s5k3049.d
Level 4: /chem/MSD5.i/s113009.b/s5k3050.d
Level 5: /chem/MSD5.i/s113009.b/s5k3051.d
Level 6: /chem/MSD5.i/s113009.b/s5k3052.d
Level 7: /chem/MSD5.i/s113009.b/s5k3053.d
Level 8: /chem/MSD5.i/s113009.b/s5k3047.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.43200	0.48159	0.46738	0.44822	0.47531					
	0.43671	0.47324					AVRG		0.45921		4.34760
2 Pyridine	+++++	0.63985	0.64672	0.62506	0.69334	0.71690					
	0.67003	0.56775					AVRG		0.65138		7.47986
4 Aniline	+++++	0.38715	0.40911	0.40667	0.39891	0.39925					
	0.39855	0.40838					AVRG		0.40115		1.92425
209 Benzaldehyde	+++++	0.75175	0.80370	+++++	+++++	0.73680					
	0.71705	0.69889					AVRG		0.74164		5.39700
6 Phenol	+++++	0.99962	1.09329	1.11449	1.08724	1.08038					
	1.05465	1.08077					AVRG		1.07292		3.43976

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Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.59944	0.61498	0.62541	0.67247	0.65894	0.63803					
	0.62832	0.63351					AVRG		0.63389		3.66603
8 2-Chlorophenol	+++++	0.87217	0.92912	0.93403	0.92801	0.92624					
	0.91350	0.93801					AVRG		0.92015		2.44524
203 n-Decane	+++++	0.88013	0.89146	0.85550	0.84815	0.81672					
	0.77891	0.76359					AVRG		0.83349		5.87400
9 1,3-Dichlorobenzene	+++++	1.09685	1.13817	1.12405	1.11357	1.09144					
	1.06829	1.08058					AVRG		1.10185		2.24200
11 1,4-Dichlorobenzene	+++++	1.11385	1.14638	1.14426	1.12409	1.10651					
	1.09004	1.10462					AVRG		1.11854		1.87546
12 Benzyl alcohol	+++++	0.51602	0.57510	0.61563	0.58809	0.58621					
	0.58334	0.59941					AVRG		0.58054		5.39098
13 1,2-Dichlorobenzene	+++++	1.04255	1.08183	1.08505	1.06637	1.06273					
	1.03252	1.03867					AVRG		1.05853		1.98597
14 bis(2-Chloroisopropyl)ether	+++++	1.03868	1.06626	1.05750	1.03794	0.97107					
	0.95293	0.92855					AVRG		1.00756		5.49466
15 o-Cresol	+++++	0.69067	0.73824	0.77014	0.74119	0.73428					
	0.72745	0.73902					AVRG		0.73443		3.20276

GEL Laboratories LLC

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Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	0.99878	1.06200	+++++	+++++	1.04834					
	1.01728	1.04524					AVRG		1.03433		2.48185
17 N-Nitrosodipropylamine	0.39105	0.46274	0.53774	0.54714	0.48085	0.50719					
	0.46219	0.47357					AVRG		0.48281		10.23361
18 m,p-Cresols	+++++	0.87022	0.92832	0.99766	0.95002	0.92840					
	0.92726	0.94238					AVRG		0.93489		4.03823
19 Hexachloroethane	+++++	0.38940	0.41936	0.42131	0.41952	0.41531					
	0.40832	0.41760					AVRG		0.41297		2.72046
21 Nitrobenzene	+++++	0.24845	0.26680	0.25685	0.24412	0.23043					
	0.21217	0.20803					AVRG		0.23812		9.31912
22 Isophorone	+++++	0.45816	0.49226	0.49029	0.45241	0.41992					
	0.39415	0.38838					AVRG		0.44222		9.62880
23 2-Nitrophenol	+++++	0.11547	0.14223	0.13108	0.12558	0.12127					
	0.11523	0.11724					AVRG		0.12401		7.98047
24 2,4-Dimethylphenol	+++++	0.21966	0.23281	0.23194	0.21573	0.20764					
	0.19429	0.19541					AVRG		0.21392		7.35461
25 bis(2-Chloroethoxy)methane	+++++	0.25854	0.27287	0.27115	0.25218	0.23628					
	0.22333	0.21759					AVRG		0.24742		8.96356

GEL Laboratories LLC

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Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.19659	0.21717	0.21714	0.20372	0.19511					
	0.18313	0.18359					AVRG		0.19949		7.05929
27 Benzoic acid	+++++	+++++	0.09002	0.11803	0.10197	0.11586					
	0.10794	0.12814					AVRG		0.11033		12.12819
28 1,2,4-Trichlorobenzene	+++++	0.26481	0.27523	0.26908	0.25466	0.24111					
	0.22459	0.22030					AVRG		0.24997		8.71723
30 Naphthalene	0.81705	0.74573	0.76657	0.72847	0.68863	0.63949					
	0.59297	0.55942					AVRG		0.69229		12.86965
204 alpha-Terpineol	+++++	0.17262	0.18143	0.17832	0.16468	0.15346					
	0.14288	0.13778					AVRG		0.16160		10.68187
31 4-Chloroaniline	+++++	0.26766	0.22783	0.30909	0.29015	0.28897					
	0.27710	0.27967					AVRG		0.27721		9.14686
189 Caprolactam	+++++	0.06063	0.07077	+++++	+++++	0.07699					
	0.07770	0.07957					AVRG		0.07313		10.57301
32 Hexachlorobutadiene	+++++	0.16663	0.17799	0.17401	0.16606	0.15880					
	0.14863	0.14597					AVRG		0.16258		7.45567
33 4-Chloro-3-methylphenol	+++++	0.19010	0.21662	0.21855	0.20067	0.19059					
	0.18078	0.17853					AVRG		0.19655		8.18892

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.51678	0.50700	0.52401	0.52107	0.47972	0.44344					
	0.42192	0.40565					AVRG		0.47745		9.97925
35 1-Methylnaphthalene	0.49817	0.48888	0.50948	0.50950	0.46873	0.43532					
	0.40747	0.39405					AVRG		0.46395		9.93014
36 Hexachlorocyclopentadiene	+++++	0.11559	0.14894	0.17638	0.16699	0.17517					
	0.15973	0.18699					AVRG		0.16140		14.65548
208 1,1'-Biphenyl	+++++	1.06821	1.07871	+++++	+++++	1.07139					
	1.04410	1.03663					AVRG		1.05981		1.73080
205 2,3-Dichloroaniline	+++++	0.42334	0.44162	0.48367	0.45837	0.47569					
	0.46389	0.48191					AVRG		0.46121		4.82890
37 2,4,6-Trichlorophenol	+++++	0.24410	0.27355	0.30569	0.28842	0.30698					
	0.30109	0.31371					AVRG		0.29051		8.42918
38 2,4,5-Trichlorophenol	+++++	0.26102	0.29598	0.31509	0.31354	0.30818					
	0.30243	0.32875					AVRG		0.30357		7.06061
40 2-Chloronaphthalene	0.79673	0.82048	0.87010	0.90775	0.85133	0.85068					
	0.82317	0.83198					AVRG		0.84403		4.05738
42 o-Nitroaniline	+++++	0.19115	0.21865	0.24505	0.22880	0.22737					
	0.22383	0.23238					AVRG		0.22389		7.41961

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	14483	15051	82754	119707	239651					
	283774	430579					LINR	0.33554	0.19860		0.99002
43 Dimethylphthalate	+++++	0.95484	1.02595	1.06444	0.99695	0.99604					
	0.94535	0.98159					AVRG		0.99502		4.11153
44 2,6-Dinitrotoluene	+++++	0.20821	0.23299	0.24910	0.23478	0.23887					
	0.22604	0.23758					AVRG		0.23251		5.49531
45 Acenaphthylene	1.14802	1.28799	1.36835	1.40207	1.30955	1.28653					
	1.24364	1.23741					AVRG		1.28545		6.16797
47 Acenaphthene	0.74181	0.78832	0.85183	0.88393	0.83890	0.85177					
	0.82987	0.84268					AVRG		0.82864		5.31903
48 2,4-Dinitrophenol	+++++	+++++	21200	54725	74212	150262					
	173409	+++++					LINR	0.32072	0.11919		0.99343
49 Dibenzofuran	+++++	1.18297	1.25042	1.30282	1.21056	1.17947					
	1.14114	1.14741					AVRG		1.20211		4.81916
50 2,4-Dinitrotoluene	+++++	0.25307	0.29824	0.31858	0.30040	0.30633					
	0.29555	0.30981					AVRG		0.29743		7.08057
51 Diethylphthalate	+++++	0.94215	1.02610	1.07432	0.99980	0.98701					
	0.95141	0.95004					AVRG		0.99012		4.86022

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	14071	43969	105849	128396	217824					
	255018	390419					LINR	0.15210	0.16724		0.99652
53 Fluorene	0.89941	0.94917	1.03641	1.08233	1.01112	1.00641					
	0.97983	0.99090					AVRG		0.99445		5.53573
54 4-Chlorophenylphenylether	+++++	0.51413	0.55022	0.58370	0.54287	0.55212					
	0.53675	0.55173					AVRG		0.54736		3.80860
55 2-Methyl-4,6-dinitrophenol	+++++	12837	44459	104894	133773	234249					
	277848	423559					LINR	0.19850	0.09795		0.99570
56 p-Nitroaniline	+++++	0.09524	0.09753	0.09849	0.08778	0.10616					
	0.11333	+++++					AVRG		0.09976		8.91814
133 Diphenylamine	+++++	0.41220	0.39607	0.40064	0.37402	0.38072					
	0.37482	0.41332					AVRG		0.39311		4.27057
58 1,2-Diphenylhydrazine	+++++	0.47390	0.51146	0.53163	0.49408	0.48123					
	0.45859	0.46295					AVRG		0.48769		5.44241
59 Tributylphosphate	+++++	0.93611	1.00727	1.01733	1.06767	1.06421					
	1.07800	1.05488					AVRG		1.03221		4.83912
61 4-Bromophenylphenylether	+++++	0.16555	0.17995	0.19299	0.18038	0.18154					
	0.17572	0.18754					AVRG		0.18052		4.81438

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INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
63 Hexachlorobenzene	+++++	0.18110	0.19756	0.20396	0.19230	0.19237						
	0.18432	0.19174					AVRG		0.19191		3.99111	
207 Atrazine	+++++	0.03457	0.03304	+++++	+++++	0.01580						
	0.01516	0.00441					AVRG		0.02060		62.59737	<-
65 Pentachlorophenol	+++++	17155	54261	133219	158706	275325						
	328732	490942					LINR	0.16286	0.11297		0.99712	
206 n-Octadecane	+++++	0.25432	0.27323	0.28870	0.26891	0.26490						
	0.25081	0.24964					AVRG		0.26436		5.33437	
68 Phenanthrene	0.73862	0.73226	0.78776	0.80554	0.76127	0.74608						
	0.70950	0.72888					AVRG		0.75124		4.26078	
69 Anthracene	0.68052	0.72323	0.79165	0.82251	0.76761	0.74693						
	0.71967	0.72544					AVRG		0.74720		6.05239	
72 Di-n-butylphthalate	+++++	0.80580	0.90274	0.94252	0.89139	0.85974						
	0.81610	0.79872					AVRG		0.85957		6.41454	
76 Fluoranthene	0.68758	0.79740	0.87718	0.92162	0.85800	0.83122						
	0.80482	0.80275					AVRG		0.82257		8.43347	
77 Benzidine	+++++	0.14241	0.11832	+++++	+++++	0.11685						
	0.13749	0.14337					AVRG		0.13169		9.93091	

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Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	0.74327	0.79248	0.86122	0.90593	0.82217	0.81621					
	0.77247	0.76811					AVRG		0.81023		6.58630
85 Butylbenzylphthalate	+++++	0.30152	0.35532	0.39574	0.36768	0.37392					
	0.36173	0.36416					AVRG		0.36001		8.01244
89 Benzo(a)anthracene	0.79661	0.75905	0.83143	0.88224	0.81756	0.80052					
	0.77503	0.79063					AVRG		0.80663		4.71092
90 3,3'-Dichlorobenzidine	+++++	0.22472	0.25680	+++++	+++++	0.28651					
	0.28815	0.29645					AVRG		0.27053		10.97312
92 Chrysene	0.71796	0.71455	0.77592	0.80262	0.74759	0.72786					
	0.70016	0.69597					AVRG		0.73533		5.11466
93 bis(2-Ethylhexyl)phthalate	7926	152141	400766	842654	992598	1555489					
	+++++	+++++					LINR	0.01278	0.54227		0.99788
94 Di-n-octylphthalate	+++++	0.69447	0.85556	0.97066	0.89544	0.90662					
	0.87221	0.86997					AVRG		0.86642		9.77684
95 Benzo(b)fluoranthene	0.64856	0.76776	0.86873	0.91742	0.84122	0.88072					
	0.82904	0.95219					AVRG		0.83820		11.32092
96 Benzo(k)fluoranthene	0.75511	0.78301	0.85963	0.94418	0.88393	0.83753					
	0.84838	0.78179					AVRG		0.83669		7.42267

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.49746	0.67779	0.77735	0.83560	0.78424	0.78360					
	0.76362	0.79281					AVRG		0.73906		14.50348
99 Indeno(1,2,3-cd)pyrene	13655	230839	571625	1119329	1485270	2231964					
	2740272	3942157					LINR	0.02754	0.85117		0.99928
100 Dibenzo(a,h)anthracene	11383	194289	484055	941279	1242196	1871982					
	2304325	3322133					LINR	0.02870	0.71627		0.99919
101 Benzo(ghi)perylene	0.45435	0.62075	0.67088	0.67953	0.70274	0.68415					
	0.68870	0.70141					AVRG		0.65031		12.80349
102 1,4-Dioxane	+++++	0.24634	0.28025	+++++	+++++	0.30356					
	0.29319	0.26953					AVRG		0.27857		7.94884
103 Methyl methacrylate	+++++	0.16872	0.16444	+++++	+++++	0.16505					
	0.18086	0.15892					AVRG		0.16760		4.89346
104 Ethyl methacrylate	+++++	0.66031	0.70980	+++++	+++++	0.69504					
	0.68531	0.66714					AVRG		0.68352		2.95664
105 2-Picoline	+++++	1.01746	1.07832	+++++	+++++	1.04828					
	1.03935	1.02355					AVRG		1.04139		2.30595
106 N-Nitrosomethylethylamine	+++++	0.31757	0.35447	+++++	+++++	0.37185					
	0.37790	0.37352					AVRG		0.35906		6.92083

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.44871	0.47910	+++++	+++++	0.44075					
	0.43643	0.44457					AVRG		0.44991		3.76452
108 N-Nitrosodiethylamine	+++++	0.30410	0.36077	+++++	+++++	0.37459					
	0.37925	0.38070					AVRG		0.35988		8.93633
109 Ethyl Methanesulfonate	+++++	0.52387	0.54987	+++++	+++++	0.53861					
	0.52806	0.54078					AVRG		0.53624		1.93775
110 Pentachloroethane	+++++	0.30723	0.32723	+++++	+++++	0.32393					
	0.32208	0.31995					AVRG		0.32008		2.39449
111 N-Nitrosopyrrolidine	+++++	18119	50578	+++++	+++++	275191					
	347837	418958					LINR	0.09385	0.41052		0.99979
113 N-Nitrosomorpholine	+++++	0.31286	0.38027	+++++	+++++	0.40465					
	0.39989	0.39689					AVRG		0.37891		10.04075
114 o-Toluidine	+++++	1.35701	1.45906	+++++	+++++	1.45255					
	1.43423	1.43439					AVRG		1.42745		2.86402
115 N-Nitrosopiperidine	+++++	0.09506	0.11290	+++++	+++++	0.12040					
	0.12000	0.12173					AVRG		0.11402		9.77130
116 a,a-Dimethylphenethylamine	+++++	67223	221950	+++++	+++++	1304888					
	1645063	1941742					LINR	0.12017	0.55348		0.99966

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
117 Triethylphosphorothioate	+++++	0.16537	0.16522	0.16826	0.17549	0.18113						
	0.18346	0.18351					AVRG		0.17464		4.76002	
118 2,6-Dichlorophenol	+++++	0.17667	0.20374	+++++	+++++	0.21733						
	0.21628	0.22228					AVRG		0.20726		8.88487	
119 Hexachloropropene	+++++	0.09341	0.12175	+++++	+++++	0.12774						
	0.13457	0.13555					AVRG		0.12260		14.06913	
120 p-Phenylenediamine	+++++	0.04451	0.09259	+++++	+++++	0.11802						
	0.14321	0.07722					AVRG		0.09511		39.77786	<-
121 N-Nitrosodi-n-butylamine	+++++	0.12388	0.14468	+++++	+++++	0.14675						
	0.14779	0.14275					AVRG		0.14117		6.98114	
122 Safrole	+++++	0.18511	0.20314	+++++	+++++	0.20383						
	0.19860	0.20325					AVRG		0.19879		3.98688	
123 1,2,4,5-Tetrachlorobenzene	+++++	0.44675	0.47581	+++++	+++++	0.47640						
	0.47142	0.46516					AVRG		0.46711		2.61935	
124 Isosafrole	+++++	0.28246	0.31435	+++++	+++++	0.32006						
	0.31708	0.32066					AVRG		0.31092		5.18056	
125 1,4-Naphthoquinone	+++++	0.26279	0.33670	+++++	+++++	0.28475						
	0.25902	0.21482					AVRG		0.27162		16.33213	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.13426	0.16096	0.17529	0.16515	0.17075					
	0.16615	0.17238					AVRG		0.16356		8.43299
127 Pentachlorobenzene	+++++	0.41386	0.44358	+++++	+++++	0.43445					
	0.42287	0.42694					AVRG		0.42834		2.63934
128 1-Naphthylamine	+++++	0.64290	0.71157	+++++	+++++	0.72798					
	0.75065	0.72826					AVRG		0.71227		5.78366
129 2-Naphthylamine	+++++	0.63606	0.67439	+++++	+++++	0.58978					
	0.64536	0.64782					AVRG		0.63868		4.82722
130 2,3,4,6-Tetrachlorophenol	+++++	0.22059	0.24692	0.28284	0.26774	0.26616					
	0.26891	0.27816					AVRG		0.26162		8.15946
131 5-Nitro-o-toluidine	+++++	27455	74724	+++++	+++++	413995					
	505367	634837					LINR	0.10089	0.28578		0.99956
132 Thionazin	+++++	0.13988	0.14775	0.15045	0.15424	0.15690					
	0.16203	0.16237					AVRG		0.15337		5.26573
134 Sulfotepp	+++++	0.11412	0.11494	0.11319	0.11600	0.11480					
	0.11400	0.11009					AVRG		0.11388		1.65743
135 Phorate	+++++	0.28388	0.29681	0.29037	0.30244	0.30088					
	0.30582	0.29054					AVRG		0.29582		2.65683

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	+++++	13955	48364	+++++	+++++	268631					
	340694	456398					LINR	0.16614	0.10906		0.99628
137 Phenacetin	+++++	0.17628	0.21001	+++++	+++++	0.23782					
	0.23708	0.23917					AVRG		0.22007		12.41888
138 Diallate	+++++	0.16761	0.18197	+++++	+++++	0.18302					
	0.17779	0.17698					AVRG		0.17747		3.43512
139 Dimethoate	+++++	0.13778	0.14938	0.15610	0.16928	0.17565					
	0.17871	0.17715					AVRG		0.16343		9.72135
140 4-Aminobiphenyl	+++++	0.37135	0.35332	+++++	+++++	0.32358					
	0.31870	0.29146					AVRG		0.33168		9.40668
141 Pentachloronitrobenzene	+++++	0.07139	0.07657	+++++	+++++	0.08321					
	0.08092	0.07832					AVRG		0.07808		5.77895
142 Pronamide	+++++	0.22821	0.24842	+++++	+++++	0.26720					
	0.25993	0.25910					AVRG		0.25257		6.00962
143 Dinoseb	+++++	17592	65243	160618	206017	370757					
	432801	653659					LINR	0.20878	0.15287		0.99661
144 Disulfoton	+++++	0.23435	0.24175	0.24250	0.25185	0.25151					
	0.25868	0.24626					AVRG		0.24670		3.25947

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
145 Methyl parathion	+++++	0.10756	0.12574	0.13745	0.15086	0.15374					
	0.16380	0.16473					AVRG		0.14341		14.69707
146 4-Nitroquinoline-1-oxide	+++++	0.00937	0.01228	+++++	+++++	0.00993					
	0.00944	0.00861					AVRG		0.00993		14.10180
147 Methapyrilene	+++++	0.23032	0.26350	+++++	+++++	0.25837					
	0.25388	0.25397					AVRG		0.25201		5.05822
148 Isodrin	+++++	0.08985	0.09732	+++++	+++++	0.10370					
	0.10020	0.10192					AVRG		0.09860		5.50608
149 Aramite	+++++	0.03284	0.03952	+++++	+++++	0.04489					
	0.04319	0.04214					AVRG		0.04052		11.63768
150 Kepone	+++++	0.07101	0.07864	+++++	+++++	0.07592					
	0.07559	0.08027					AVRG		0.07629		4.63038
151 p-(Dimethylamino)azobenzene	+++++	0.17522	0.21262	+++++	+++++	0.22053					
	0.21845	0.21324					AVRG		0.20801		8.95997
152 Chlorobenzilate	+++++	0.23225	0.25848	+++++	+++++	0.28615					
	0.27698	0.27112					AVRG		0.26500		7.87735
153 3,3'-Dimethylbenzidine	+++++	0.33926	0.36462	+++++	+++++	0.35940					
	0.37441	0.36902					AVRG		0.36134		3.74367

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
154 Famphur	+++++	0.25103	0.28114	0.28876	0.31048	0.31944					
	0.33910	0.31592					AVRG		0.30084		9.73369
155 2-Acetylaminofluorene	+++++	47120	145263	+++++	+++++	949702					
	1100767	1503747					LINR	0.14865	0.33609		0.99853
157 7,12Dimethylbenz(a)anthracene	+++++	0.38032	0.42131	+++++	+++++	0.44350					
	0.44038	0.42979					AVRG		0.42306		6.01820
158 3-Methylcholanthrene	+++++	0.30375	0.34529	+++++	+++++	0.39857					
	0.39085	0.39392					AVRG		0.36648		11.21865
26 Phthalic anhydride	+++++	0.07507	0.06934	0.09549	0.09747	0.09550					
	0.08993	0.08635					AVRG		0.08702		12.56366
173 Carbazole	14837	139367	246691	487385	568160	1090154					
	1254429	+++++					LINR	0.04109	0.39552		0.99187
174 Hexachlorophene	+++++	435932	2361068	+++++	4538044	4556630					
	4552314	+++++					LINR	9.14609	0.09969		0.99353
179 Dibenzo(a,e)pyrene	+++++	0.31362	0.35554	0.33118	0.43912	0.41638					
	0.44192	0.45643					AVRG		0.39346		14.89785
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

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	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	4343	14231	37456	44264	71290					
	83708	+++++					LINR	0.08539	0.11280		0.99437
191 Parathion	+++++	0.06337	0.07126	0.07805	0.08155	0.08375					
	0.08775	0.08748					AVRG		0.07903		11.34928
192 Methoxychlor	+++++	0.37316	0.43593	0.46907	0.48881	0.49691					
	0.47438	0.46605					AVRG		0.45776		9.18359
210 m-Toluidine	+++++	1.01730	0.95828	1.04153	1.07045	1.03819					
	1.06035	1.06455					AVRG		1.03581		3.74343
211 p-Toluidine	+++++	49683	78529	211799	266816	507067					
	569514	+++++					LINR	0.14181	0.78212		0.99497
212 Cis Diallate	+++++	0.14773	0.16624	+++++	+++++	0.17545					
	0.17147	0.16996					AVRG		0.16617		6.51318
213 Trans Diallate	+++++	0.19719	0.21409	+++++	+++++	0.21532					
	0.20917	0.20821					AVRG		0.20879		3.43512
214 1,4-Dinitrobenzene	+++++	0.12784	0.15121	0.16974	0.15587	0.16620					
	0.16695	0.17540					AVRG		0.15903		10.07655
215 2-Ethoxyethanol	+++++	0.38685	0.41544	0.41160	0.40973	0.41987					
	0.40092	0.36487					AVRG		0.40133		4.83383

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	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	0.09027	0.07877	0.09631	0.10183	0.11537					
	0.11302	+++++					AVRG		0.09926		13.99534
229 2,2'-Dichlorobenzil	+++++	0.40624	0.44915	0.45206	0.46835	0.49924					
	0.50127	0.49121					AVRG		0.46679		7.33567
230 4-Chlorothioanisole	+++++	0.23519	0.25134	0.25866	0.26118	0.27506					
	0.27431	0.27443					AVRG		0.26145		5.67051
231 4-Chlorothiophenol	+++++	33730	109582	208710	270504	591872					
	637096	698168					LINR	0.16729	0.22127		0.99837
232 bis(p-Chlorophenyl)sulfone	+++++	0.27790	0.28817	0.28727	0.29340	0.31372					
	0.31573	0.30820					AVRG		0.29777		4.94706
233 bis(p-Chlorophenyl)disulfide	+++++	0.08649	0.09716	0.09996	0.10104	0.11282					
	0.11321	0.11036					AVRG		0.10301		9.49989
234 Diphenyl disulfide	+++++	0.17703	0.18827	0.19313	0.19397	0.19743					
	0.19934	0.19498					AVRG		0.19202		3.89349
235 Diphenyl sulfide	+++++	0.73815	0.76067	0.76884	0.77583	0.77384					
	0.77835	0.76108					AVRG		0.76525		1.80366
236 Phenyl sulfone	+++++	0.32490	0.33335	0.34401	0.34629	0.34828					
	0.35151	0.34243					AVRG		0.34154		2.72169

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
237 Hydroxymethyl phthalimide	+++++	0.15868	0.13541	0.13994	0.13819	0.13830						
	0.13473	0.14129					AVRG		0.14093		5.78993	
238 Phthalic acid	+++++	34594	90147	182251	231472	444665						
	541872	587383					LINR	0.16006	0.18293		0.99675	
239 Thiophenol	+++++	0.64619	0.81626	0.89508	0.92244	0.99432						
	1.00016	1.00671					AVRG		0.89731		14.54651	
240 bis(Chloromethyl)ether	+++++	0.74313	0.76318	0.75550	0.73293	0.77257						
	0.73038	0.75865					AVRG		0.75091		2.10971	
241 Octachlorostyrene	+++++	0.08120	0.08332	0.08290	0.08503	0.08678						
	0.08899	0.08481					AVRG		0.08472		3.05713	
M 225 Trichlorophenols	+++++	0.25256	0.28477	0.31039	0.30098	0.30758						
	0.30176	0.32123					AVRG		0.29704		7.57948	
M 226 Tetrachlorophenols	+++++	0.22059	0.24692	0.28284	0.26774	0.26616						
	0.26891	0.27816					AVRG		0.26162		8.15946	
M 227 Benzo(b,k)fluoranthene	0.70183	0.77538	0.86418	0.93080	0.86257	0.85913						
	0.83871	0.86699					AVRG		0.83745		8.27901	
M 228 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
$ 3 2-Fluorophenol	+++++	0.77799	0.82940	0.84165	0.83307	0.84646						
	0.82089	0.84901					AVRG		0.82835		2.93507	
$ 5 Phenol-d5	+++++	0.94004	1.02783	1.06321	1.02953	1.04638						
	1.02443	1.06043					AVRG		1.02741		4.04817	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.27903	0.29718	0.29088	0.25443	0.23402						
	0.21749	0.21713					AVRG		0.25574		13.28145	
$ 39 2-Fluorobiphenyl	+++++	0.99517	1.04673	1.06867	1.00896	1.00442						
	0.97367	0.97597					AVRG		1.01051		3.50349	
$ 60 2,4,6-Tribromophenol	+++++	0.12029	0.14713	0.16005	0.15035	0.15227						
	0.14829	0.15735					AVRG		0.14796		8.83326	
$ 81 p-Terphenyl-d14	+++++	0.54698	0.59094	0.62904	0.57872	0.57377						
	0.54438	0.54045					AVRG		0.57204		5.54873	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 30-NOV-2009 14:09
End Cal Date : 01-DEC-2009 14:48
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Cal Date : 12-Dec-2009 10:12 rmb

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.83029	0.83029	0.000	0.23433	60.00000	Averaged
$ 5 Phenol-d5	1.02741	0.99434	0.99434	0.000	-3.21879	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.27844	0.27844	0.000	8.87699	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.03773	1.03773	0.000	2.69384	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.14657	0.14657	0.000	-0.93966	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.62712	0.62712	0.000	9.62917	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.42939	0.42939	0.000	-6.49389	60.00000	Averaged
2 Pyridine	0.65138	0.55949	0.55949	0.000	-14.10583	60.00000	Averaged
4 Aniline	0.40115	0.39878	0.39878	0.000	-0.58986	60.00000	Averaged
6 Phenol	1.07292	1.03238	1.03238	0.001	-3.77875	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.63389	0.62332	0.62332	0.000	-1.66734	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.89132	0.89132	0.000	-3.13291	60.00000	Averaged
203 n-Decane	0.83349	0.87112	0.87112	0.000	4.51494	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.09484	1.09484	0.000	-0.63588	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11853	1.10496	1.10496	0.001	-1.21340	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.05853	1.04676	1.04676	0.000	-1.11250	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	0.99850	0.99850	0.000	-0.89937	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.55960	0.55960	0.000	-3.60740	60.00000	Averaged
15 o-Cresol	0.73443	0.71543	0.71543	0.000	-2.58644	60.00000	Averaged
18 m,p-Cresols	0.93489	0.91075	0.91075	0.000	-2.58249	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.48060	0.48060	0.050	-0.45716	60.00000	Averaged spcc
19 Hexachloroethane	0.41297	0.38700	0.38700	0.000	-6.28851	60.00000	Averaged
21 Nitrobenzene	0.23812	0.24737	0.24737	0.000	3.88288	60.00000	Averaged
22 Isophorone	0.44222	0.44350	0.44350	0.000	0.28843	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.11747	0.11747	0.001	-5.27545	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21392	0.21469	0.21469	0.000	0.35583	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.23888	0.23888	0.000	-3.45098	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.19843	0.19843	0.001	-0.53268	20.00000	Averaged ccc
27 Benzoic acid	0.11033	0.11800	0.11800	0.000	6.95226	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.24504	0.24504	0.000	-1.97055	60.00000	Averaged
30 Naphthalene	0.69229	0.76058	0.76058	0.000	9.86346	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.15093	0.15093	0.000	-6.60421	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.26915	0.26915	0.000	-2.90716	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.16847	0.16847	0.001	3.62286	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19655	0.18982	0.18982	0.001	-3.42299	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.47745	0.54686	0.54686	0.000	14.53758	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.46395	0.51084	0.51084	0.000	10.10698	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16140	0.11816	0.11816	0.050	-26.78720	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.46121	0.43794	0.43794	0.000	-5.04574	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.29051	0.26846	0.26846	0.001	-7.58993	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.30357	0.30531	0.30531	0.000	0.57382	60.00000	Averaged	
40 2-Chloronaphthalene	0.84403	0.82711	0.82711	0.000	-2.00427	60.00000	Averaged	
42 o-Nitroaniline	0.22389	0.21429	0.21429	0.000	-4.28607	60.00000	Averaged	
41 m-Nitroaniline	32.25605	40.00000	0.09351	0.000	-19.35986	60.00000	Linear	
43 Dimethylphthalate	0.99502	1.00014	1.00014	0.000	0.51409	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.23251	0.22347	0.22347	0.000	-3.88808	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.29743	0.29372	0.29372	0.000	-1.24745	60.00000	Averaged	
45 Acenaphthylene	1.28545	1.44563	1.44563	0.000	12.46144	60.00000	Averaged	
47 Acenaphthene	0.82864	0.86500	0.86500	0.001	4.38855	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	31.49171	40.00000	0.05561	0.050	-21.27072	60.00000	Linear	spcc
49 Dibenzofuran	1.20211	1.19562	1.19562	0.000	-0.53995	60.00000	Averaged	
51 Diethylphthalate	0.99012	1.00550	1.00550	0.000	1.55350	60.00000	Averaged	
52 4-Nitrophenol	35.69942	40.00000	0.12382	0.050	-10.75144	60.00000	Linear	spcc
53 Fluorene	0.99445	1.07305	1.07305	0.000	7.90438	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.54736	0.53200	0.53200	0.000	-2.80637	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	39.60786	40.00000	0.07755	0.000	-0.98036	60.00000	Linear	
56 p-Nitroaniline	0.09976	0.09283	0.09283	0.000	-6.94521	60.00000	Averaged	
133 Diphenylamine	0.39311	0.36704	0.36704	0.001	-6.63338	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.48769	0.48502	0.48502	0.000	-0.54741	60.00000	Averaged	
61 4-Bromophenylphenylether	0.18052	0.17126	0.17126	0.000	-5.13387	60.00000	Averaged	
63 Hexachlorobenzene	0.19191	0.18523	0.18523	0.000	-3.47929	60.00000	Averaged	
65 Pentachlorophenol	36.05605	40.00000	0.08343	0.001	-9.85987	20.00000	Linear	ccc
206 n-Octadecane	0.26436	0.25557	0.25557	0.000	-3.32275	60.00000	Averaged	
68 Phenanthrene	0.75124	0.80888	0.80888	0.000	7.67214	60.00000	Averaged	
69 Anthracene	0.74720	0.83500	0.83500	0.000	11.75132	60.00000	Averaged	
72 Di-n-butylphthalate	0.85957	0.89892	0.89892	0.000	4.57698	60.00000	Averaged	
76 Fluoranthene	0.82257	0.93022	0.93022	0.001	13.08693	20.00000	Averaged	ccc
79 Pyrene	0.81023	0.89526	0.89526	0.000	10.49463	60.00000	Averaged	
85 Butylbenzylphthalate	0.36001	0.36740	0.36740	0.000	2.05224	60.00000	Averaged	
89 Benzo(a)anthracene	0.80663	0.86024	0.86024	0.000	6.64603	60.00000	Averaged	
92 Chrysene	0.73533	0.80028	0.80028	0.000	8.83303	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	39.93372	40.00000	0.53444	0.000	-0.16569	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 30-NOV-2009 18:20
Lab File ID: s5k3023.d Init. Cal. Date(s): 30-NOV-2009 30-NOV-2009
Analysis Type: WATER Init. Cal. Times: 14:09 17:28
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD
Method: /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	0.87303	0.87303	0.001	0.76265	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.92559	0.92559	0.000	10.42552	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.89887	0.89887	0.000	7.43117	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.83326	0.83326	0.001	12.74672	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	42.59286	40.00000	0.88290	0.000	6.48214	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	42.30047	40.00000	0.73690	0.000	5.75119	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.75185	0.75185	0.000	15.61349	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.15432	0.15432	0.000	-5.65249	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
	143 Dinoseb	32.63928	40.00000	0.09282	0.000	-18.40180	60.00000	Linear	
	173 Carbazole	38.13875	40.00000	0.36087	0.000	-4.65311	60.00000	Linear	
	184 p-Benzoquinone	36.94068	40.00000	0.09454	0.000	-7.64830	60.00000	Linear	
	192 Methoxychlor	0.45776	0.42935	0.42935	0.000	-6.20645	60.00000	Averaged	
	211 p-Toluidine	36.08309	40.00000	0.59462	0.000	-9.79228	60.00000	Linear	
	210 m-Toluidine	1.03581	0.92304	0.92304	0.000	-10.88701	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.10069	0.10069	0.000	15.70689	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.28402	0.28402	0.000	-27.81494	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.15861	0.15861	0.000	-0.26496	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.33769	0.33769	0.000	-15.85683	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.08744	0.08744	0.000	-11.91594	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.28689	0.28689	0.000	-3.41833	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.23761	0.23761	0.000	-9.17470	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.91223	0.91223	0.000	8.92968	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD5.i/s113009.b/s5k3023.d
Lab Smp Id: WBN091106-09.3 Client Smp ID: MEGAICV
Inj Date : 30-NOV-2009 18:20
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-09.3|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN091117-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s113009.b/MSD5-M8270C-113009.m
Meth Date : 01-Dec-2009 07:52 rmb Quant Type: ISTD
Cal Date : 30-NOV-2009 17:28 Cal File: s5k3021.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	241000	40.0000	
* 29 Naphthalene-d8	136	4.826	4.826	(1.000)	918322	40.0000	
* 46 Acenaphthene-d10	164	6.088	6.088	(1.000)	516156	40.0000	
* 67 Phenanthrene-d10	188	7.268	7.268	(1.000)	970034	40.0000	
* 91 Chrysene-d12	240	9.694	9.694	(1.000)	1047303	40.0000	
* 98 Perylene-d12	264	11.414	11.414	(1.000)	981599	40.0000	
$ 3 2-Fluorophenol	112	3.126	3.126	(0.791)	200101	40.0000	40.1
$ 5 Phenol-d5	99	3.661	3.661	(0.926)	239635	40.0000	38.7
$ 20 Nitrobenzene-d5	82	4.321	4.321	(0.895)	255698	40.0000	43.6
$ 39 2-Fluorobiphenyl	172	5.568	5.568	(0.915)	535633	40.0000	41.1
$ 60 2,4,6-Tribromophenol	329	6.685	6.685	(1.098)	75654	40.0000	39.6
$ 81 p-Terphenyl-d14	244	8.650	8.650	(0.892)	656788	40.0000	43.8
1 N-Methyl-N-nitrosomethylamine	74	2.419	2.419	(0.612)	103482	40.0000	37.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.452	2.452	(0.620)	134838	40.0000	34.4
4 Aniline	66	3.738	3.738	(0.945)	96106	40.0000	39.8
6 Phenol	94	3.670	3.670	(0.928)	248803	40.0000	38.5(Q)
7 bis(2-Chloroethyl) ether	63	3.752	3.752	(0.949)	150220	40.0000	39.3
8 2-Chlorophenol	128	3.820	3.820	(0.966)	214809	40.0000	38.7
203 n-Decane	43	3.800	3.800	(0.961)	209941	40.0000	41.8
9 1,3-Dichlorobenzene	146	3.921	3.921	(0.991)	263857	40.0000	39.7
11 1,4-Dichlorobenzene	146	3.964	3.964	(1.002)	266296	40.0000	39.5
13 1,2-Dichlorobenzene	146	4.070	4.070	(1.029)	252268	40.0000	39.6
14 bis(2-Chloroisopropyl)ether	45	4.099	4.099	(1.037)	240639	40.0000	39.6
12 Benzyl alcohol	108	4.017	4.017	(1.016)	134864	40.0000	38.6
15 o-Cresol	107	4.070	4.070	(1.029)	172419	40.0000	39.0
18 m,p-Cresols	107	4.166	4.166	(1.054)	219491	40.0000	39.0
17 N-Nitrosodipropylamine	70	4.191	4.191	(1.060)	115825	40.0000	39.8(H)
19 Hexachloroethane	117	4.301	4.301	(1.088)	93268	40.0000	37.5
21 Nitrobenzene	77	4.330	4.330	(0.897)	227163	40.0000	41.6
22 Isophorone	82	4.484	4.484	(0.929)	407276	40.0000	40.1
23 2-Nitrophenol	139	4.547	4.547	(0.942)	107877	40.0000	37.9
24 2,4-Dimethylphenol	122	4.537	4.537	(0.940)	197151	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.605	4.605	(0.954)	219371	40.0000	38.6
26 2,4-Dichlorophenol	162	4.706	4.706	(0.975)	182222	40.0000	39.8
27 Benzoic acid	105	4.590	4.590	(0.951)	108359	40.0000	42.8
28 1,2,4-Trichlorobenzene	180	4.773	4.773	(0.989)	225027	40.0000	39.2
30 Naphthalene	128	4.841	4.841	(1.003)	698453	40.0000	43.9
204 alpha-Terpineol	59	4.812	4.812	(0.997)	138598	40.0000	37.4
31 4-Chloroaniline	127	4.841	4.841	(1.003)	247168	40.0000	38.8
32 Hexachlorobutadiene	225	4.908	4.908	(1.017)	154713	40.0000	41.4
33 4-Chloro-3-methylphenol	107	5.163	5.163	(1.070)	174316	40.0000	38.6
34 2-Methylnaphthalene	142	5.322	5.322	(1.103)	502193	40.0000	45.8
35 1-Methylnaphthalene	142	5.399	5.399	(1.119)	469118	40.0000	44.0
36 Hexachlorocyclopentadiene	237	5.428	5.428	(0.892)	60991	40.0000	29.3
205 2,3-Dichloroaniline	161	5.520	5.520	(0.907)	226045	40.0000	38.0
37 2,4,6-Trichlorophenol	196	5.510	5.510	(0.905)	138566	40.0000	37.0
38 2,4,5-Trichlorophenol	196	5.539	5.539	(0.910)	157589	40.0000	40.2
40 2-Chloronaphthalene	162	5.678	5.678	(0.933)	426918	40.0000	39.2
42 o-Nitroaniline	65	5.736	5.736	(0.942)	110609	40.0000	38.3
41 m-Nitroaniline	138	6.035	6.035	(0.991)	48268	40.0000	32.2
43 Dimethylphthalate	163	5.842	5.842	(0.960)	516226	40.0000	40.2
44 2,6-Dinitrotoluene	165	5.900	5.900	(0.969)	115345	40.0000	38.4
50 2,4-Dinitrotoluene	165	6.199	6.199	(1.018)	151603	40.0000	39.5
45 Acenaphthylene	152	5.987	5.987	(0.983)	746171	40.0000	45.0
47 Acenaphthene	154	6.112	6.112	(1.004)	446477	40.0000	41.8
48 2,4-Dinitrophenol	184	6.102	6.102	(1.002)	28705	40.0000	31.5
49 Dibenzofuran	168	6.237	6.237	(1.025)	617128	40.0000	39.8
51 Diethylphthalate	149	6.353	6.353	(1.044)	518995	40.0000	40.6
52 4-Nitrophenol	139	6.117	6.117	(1.005)	63912	40.0000	35.7
53 Fluorene	166	6.502	6.502	(1.068)	553863	40.0000	43.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.473	6.473	(1.063)	274594	40.0000	38.9
55 2-Methyl-4,6-dinitrophenol	198	6.512	6.512	(0.896)	75224	40.0000	39.6
56 p-Nitroaniline	138	6.497	6.497	(1.067)	47914	40.0000	37.2
133 Diphenylamine	169	6.564	6.564	(0.903)	356038	40.0000	37.3
58 1,2-Diphenylhydrazine	77	6.598	6.598	(0.908)	470487	40.0000	39.8
61 4-Bromophenylphenylether	248	6.868	6.868	(0.945)	166125	40.0000	37.9
63 Hexachlorobenzene	284	6.940	6.940	(0.955)	179680	40.0000	38.6
65 Pentachlorophenol	266	7.089	7.089	(0.975)	80931	40.0000	36.0
206 n-Octadecane	57	7.075	7.075	(0.973)	247915	40.0000	38.7
68 Phenanthrene	178	7.287	7.287	(1.003)	784638	40.0000	43.1
69 Anthracene	178	7.330	7.330	(1.009)	809979	40.0000	44.7
72 Di-n-butylphthalate	149	7.686	7.686	(1.058)	871980	40.0000	41.8
76 Fluoranthene	202	8.337	8.337	(1.147)	902346	40.0000	45.2
79 Pyrene	202	8.553	8.553	(0.882)	937612	40.0000	44.2
85 Butylbenzylphthalate	149	9.083	9.083	(0.937)	384776	40.0000	40.8
89 Benzo(a)anthracene	228	9.680	9.680	(0.998)	900935	40.0000	42.6
92 Chrysene	228	9.719	9.719	(1.002)	838136	40.0000	43.5
93 bis(2-Ethylhexyl)phthalate	149	9.608	9.608	(0.991)	559723	40.0000	39.9
94 Di-n-octylphthalate	149	10.277	10.277	(0.900)	856961	40.0000	40.3
95 Benzo(b)fluoranthene	252	10.879	10.879	(0.953)	908560	40.0000	44.2(H)
96 Benzo(k)fluoranthene	252	10.918	10.918	(0.957)	882331	40.0000	43.0
97 Benzo(a)pyrene	252	11.332	11.332	(0.993)	817930	40.0000	45.1
99 Indeno(1,2,3-cd)pyrene	276	13.239	13.239	(1.160)	866655	40.0000	42.6
100 Dibenzo(a,h)anthracene	278	13.253	13.253	(1.161)	723343	40.0000	42.3
101 Benzo(ghi)perylene	276	13.797	13.797	(1.209)	738017	40.0000	46.2
126 m-Dinitrobenzene	168	5.881	5.881	(0.966)	79652	40.0000	37.7
130 2,3,4,6-Tetrachlorophenol	232	6.314	6.314	(1.037)	122646	40.0000	36.3
143 Dinoseb	211	7.210	7.210	(0.992)	90043	40.0000	32.6
173 Carbazole	167	7.446	7.446	(1.024)	350056	40.0000	38.1
184 p-Benzoquinone	54	3.435	3.435	(0.868)	22785	40.0000	36.9
192 Methoxychlor	227	9.560	9.560	(0.986)	449656	40.0000	37.5
211 p-Toluidine	106	4.229	4.229	(1.069)	143304	40.0000	36.1
210 m-Toluidine	106	4.253	4.253	(1.075)	222452	40.0000	35.6
26 Phthalic anhydride	104	5.351	5.351	(1.109)	92464	40.0000	46.3
179 Dibenzo(a,e)pyrene	302	18.054	18.054	(1.582)	278791	40.0000	28.9(H)
214 1,4-Dinitrobenzene	75	5.823	5.823	(0.956)	81867	40.0000	39.9
215 2-Ethoxyethanol	59	2.255	2.255	(0.570)	81383	40.0000	33.6
216 Methylenebis(2-chloroaniline)	231	9.622	9.622	(0.993)	91571	40.0000	35.2(Q)
M 225 Trichlorophenols	196				296155	80.0000	77.3
M 226 Tetrachlorophenols	232				122646	40.0000	36.3
M 227 Benzo(b,k)fluoranthene	252				1790891	80.0000	87.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD5.i/s113009.b/s5k3023.d
Date : 30-NOV-2009 18:20
Client ID: MEGAICV
Sample Info: IWBN091106-09,3140 PPM!1!SVM!1!MEGAICV
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

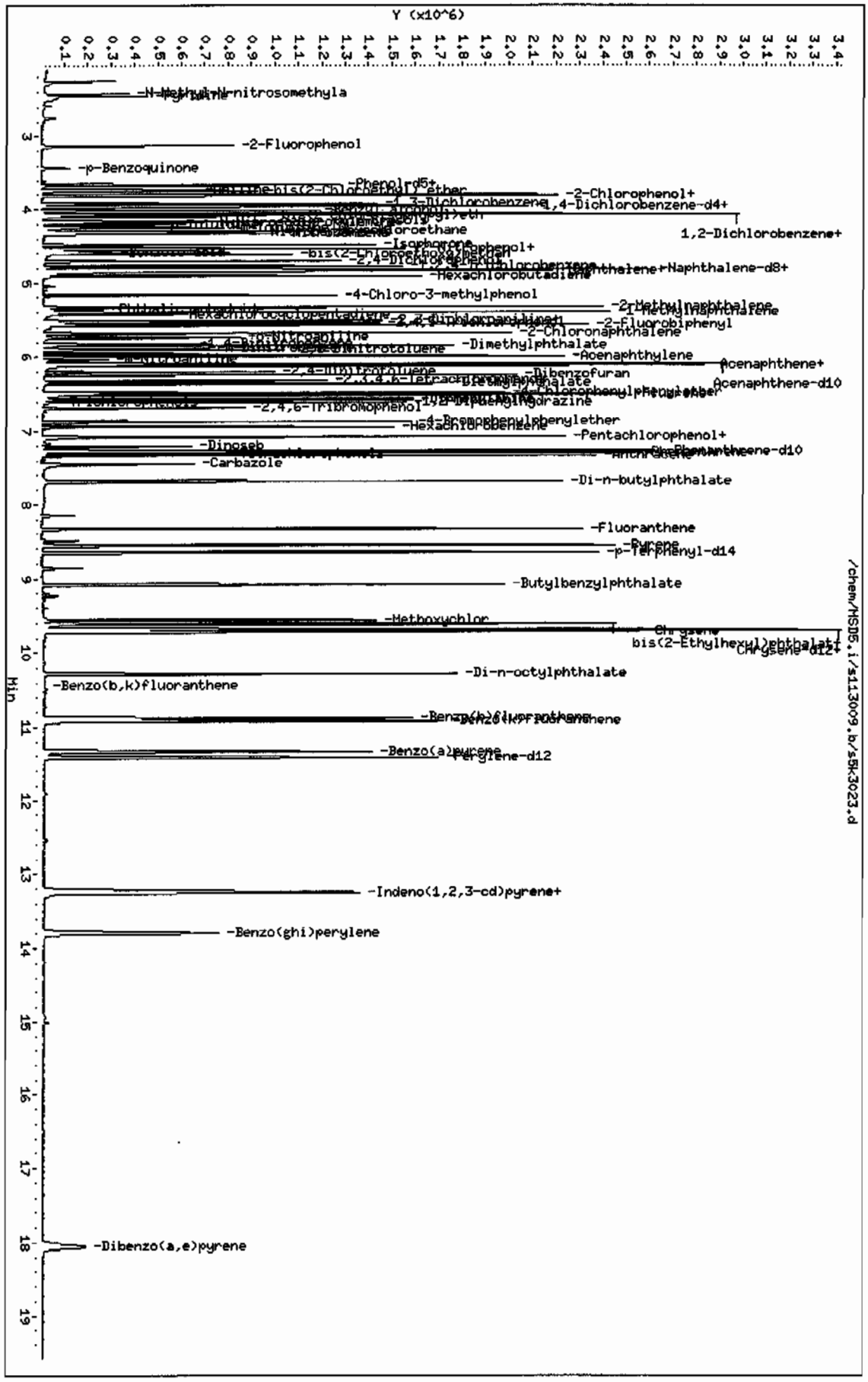

Page 1

Data File: /chem/MSD5.i/s121209.b/s511204.d
Report Date: 12-Dec-2009 10:12

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s511204.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m

Injection Date: 12-DEC-2009 09:57
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.82835	0.86101	0.86101	0.000	3.94266	60.00000	Averaged
$ 5 Phenol-d5	1.02741	1.07532	1.07532	0.000	4.66348	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.25574	0.27602	0.27602	0.000	7.92907	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.01051	1.08291	1.08291	0.000	7.16409	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.14796	0.16766	0.16766	0.000	13.31355	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.57204	0.62878	0.62878	0.000	9.91926	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.45921	0.54003	0.54003	0.000	17.60014	60.00000	Averaged
2 Pyridine	0.65138	0.66522	0.66522	0.000	2.12586	60.00000	Averaged
4 Aniline	0.40115	0.43398	0.43398	0.000	8.18547	60.00000	Averaged
6 Phenol	1.07292	1.10434	1.10434	0.001	2.92853	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.63389	0.68882	0.68882	0.000	8.66539	60.00000	Averaged
8 2-Chlorophenol	0.92015	0.95323	0.95323	0.000	3.59436	60.00000	Averaged
203 n-Decane	0.83349	1.13571	1.13571	0.000	36.25858	60.00000	Averaged
9 1,3-Dichlorobenzene	1.10185	1.14627	1.14627	0.000	4.03112	60.00000	Averaged
11 1,4-Dichlorobenzene	1.11854	1.18561	1.18561	0.001	5.99664	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.05853	1.10268	1.10268	0.000	4.17069	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.00756	1.36131	1.36131	0.000	35.10869	60.00000	Averaged
12 Benzyl alcohol	0.58054	0.57092	0.57092	0.000	-1.65858	60.00000	Averaged
15 o-Cresol	0.73443	0.73653	0.73653	0.000	0.28642	60.00000	Averaged
18 m,p-Cresols	0.93489	0.92355	0.92355	0.000	-1.21383	60.00000	Averaged
17 N-Nitrosodipropylamine	0.48281	0.57391	0.57391	0.050	18.86829	60.00000	Averaged spcc
19 Hexachloroethane	0.41297	0.43336	0.43336	0.000	4.93627	60.00000	Averaged
21 Nitrobenzene	0.23812	0.27294	0.27294	0.000	14.62100	60.00000	Averaged
22 Isophorone	0.44222	0.47336	0.47336	0.000	7.04011	60.00000	Averaged
23 2-Nitrophenol	0.12401	0.13283	0.13283	0.001	7.10737	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.21392	0.23239	0.23239	0.000	8.63111	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.24742	0.27639	0.27639	0.000	11.70693	60.00000	Averaged
26 2,4-Dichlorophenol	0.19949	0.22873	0.22873	0.001	14.65613	20.00000	Averaged ccc
27 Benzoic acid	0.11033	0.08277	0.08277	0.000	-24.97483	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24997	0.27881	0.27881	0.000	11.54061	60.00000	Averaged
30 Naphthalene	0.69229	0.73507	0.73507	0.000	6.17877	60.00000	Averaged
204 alpha-Terpineol	0.16160	0.20144	0.20144	0.000	24.65673	60.00000	Averaged
31 4-Chloroaniline	0.27721	0.31202	0.31202	0.000	12.55606	60.00000	Averaged
32 Hexachlorobutadiene	0.16258	0.18719	0.18719	0.001	15.13330	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.19655	0.20775	0.20775	0.001	5.70024	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.47745	0.51755	0.51755	0.000	8.39907	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 12-DEC-2009 09:57
Lab File ID: s511204.d Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Analysis Type: WATER Init. Cal. Times: 14:09 14:48
Lab Sample ID: WBN091106-05.3 Quant Type: ISTD
Method: /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.46395	0.50258	0.50258	0.000	8.32565	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.16140	0.17081	0.17081	0.050	5.82983	60.00000	Averaged	spcc
205 2,3-Dichloroaniline	0.46121	0.48468	0.48468	0.000	5.08915	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.29051	0.32116	0.32116	0.001	10.55055	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.30357	0.33238	0.33238	0.000	9.49088	60.00000	Averaged	
40 2-Chloronaphthalene	0.84403	0.89019	0.89019	0.000	5.46978	60.00000	Averaged	
42 o-Nitroaniline	0.22389	0.24768	0.24768	0.000	10.62717	60.00000	Averaged	
41 m-Nitroaniline	45.34211	40.00000	0.15849	0.000	13.35528	60.00000	Linear	
43 Dimethylphthalate	0.99502	1.03281	1.03281	0.000	3.79778	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.23251	0.23958	0.23958	0.000	3.04168	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.29743	0.30271	0.30271	0.000	1.77565	60.00000	Averaged	
45 Acenaphthylene	1.28545	1.39082	1.39082	0.000	8.19716	60.00000	Averaged	
47 Acenaphthene	0.82864	0.87271	0.87271	0.001	5.31800	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	39.60300	40.00000	0.07978	0.050	-0.99250	60.00000	Linear	spcc
49 Dibenzofuran	1.20211	1.27418	1.27418	0.000	5.99466	60.00000	Averaged	
51 Diethylphthalate	0.99012	1.04368	1.04368	0.000	5.40961	60.00000	Averaged	
52 4-Nitrophenol	35.62826	40.00000	0.12353	0.050	-10.92934	60.00000	Linear	spcc
53 Fluorene	0.99445	1.06071	1.06071	0.000	6.66360	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.54736	0.57171	0.57171	0.000	4.44910	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	35.80953	40.00000	0.06825	0.000	-10.47618	60.00000	Linear	
56 p-Nitroaniline	0.09976	0.11036	0.11036	0.000	10.63091	60.00000	Averaged	
133 Diphenylamine	0.39311	0.43387	0.43387	0.001	10.36704	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.48769	0.53157	0.53157	0.000	8.99667	60.00000	Averaged	
61 4-Bromophenylphenylether	0.18052	0.19438	0.19438	0.000	7.67316	60.00000	Averaged	
63 Hexachlorobenzene	0.19191	0.20570	0.20570	0.000	7.18736	60.00000	Averaged	
65 Pentachlorophenol	42.83287	40.00000	0.10257	0.001	7.08217	20.00000	Linear	ccc
206 n-Octadecane	0.26436	0.33513	0.33513	0.000	26.77233	60.00000	Averaged	
68 Phenanthrene	0.75124	0.81003	0.81003	0.000	7.82589	60.00000	Averaged	
69 Anthracene	0.74720	0.80348	0.80348	0.000	7.53276	60.00000	Averaged	
72 Di-n-butylphthalate	0.85957	0.93004	0.93004	0.000	8.19818	60.00000	Averaged	
76 Fluoranthene	0.82257	0.90524	0.90524	0.001	10.05053	20.00000	Averaged	ccc
79 Pyrene	0.81023	0.92715	0.92715	0.000	14.43006	60.00000	Averaged	
85 Butylbenzylphthalate	0.36001	0.39965	0.39965	0.000	11.01139	60.00000	Averaged	
89 Benzo(a)anthracene	0.80663	0.84987	0.84987	0.000	5.36027	60.00000	Averaged	
92 Chrysene	0.73533	0.77546	0.77546	0.000	5.45726	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	43.45667	40.00000	0.58220	0.000	8.64167	60.00000	Linear	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i
Lab File ID: s511204.d
Analysis Type: WATER
Lab Sample ID: WBN091106-05.3
Method: /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m

Injection Date: 12-DEC-2009 09:57
Init. Cal. Date(s): 30-NOV-2009 01-DEC-2009
Init. Cal. Times: 14:09 14:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	0.86642	1.03897	1.03897	0.001	19.91616	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.83820	0.92188	0.92188	0.000	9.98247	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.83669	0.92886	0.92886	0.000	11.01545	60.00000	Averaged	
	97 Benzo(a)pyrene	0.73906	0.81669	0.81669	0.001	10.50396	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	38.90194	40.00000	0.80436	0.000	-2.74514	60.00000	Linear	
	100 Dibenzo(a,h)anthracene	37.61872	40.00000	0.65307	0.000	-5.95319	60.00000	Linear	
	101 Benzo(ghi)perylene	0.65031	0.66532	0.66532	0.000	2.30674	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16356	0.16706	0.16706	0.000	2.13505	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.26162	0.29308	0.29308	0.000	12.02714	60.00000	Averaged	
	143 Dinoseb	36.26506	40.00000	0.10668	0.000	-9.33734	60.00000	Linear	
	173 Carbazole	43.17039	40.00000	0.41062	0.000	7.92597	60.00000	Linear	
	184 p-Benzoquinone	28.94337	40.00000	0.07199	0.000	-27.64157	60.00000	Linear	
	192 Methoxychlor	0.45776	0.53246	0.53246	0.000	16.32039	60.00000	Averaged	
	211 p-Toluidine	43.21886	40.00000	0.73415	0.000	8.04715	60.00000	Linear	
	210 m-Toluidine	1.03581	1.00759	1.00759	0.000	-2.72416	60.00000	Averaged	
	26 Phthalic anhydride	0.08702	0.08463	0.08463	0.000	-2.74101	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.39346	0.33019	0.33019	0.000	-16.07885	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.15903	0.17101	0.17101	0.000	7.53547	60.00000	Averaged	
	215 2-Ethoxyethanol	0.40133	0.45504	0.45504	0.000	13.38402	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	0.09926	0.10221	0.10221	0.000	2.96434	60.00000	Averaged	
M	225 Trichlorophenols	0.29704	0.32677	0.32677	0.000	10.00903	60.00000	Averaged	
M	226 Tetrachlorophenols	0.26162	0.29308	0.29308	0.000	12.02714	60.00000	Averaged	
M	227 Benzo(b,k)fluoranthene	0.83745	0.92537	0.92537	0.000	10.49848	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121209.b/s511204.d
Lab Smp Id: WBN091106-05.3 Client Smp ID: MEGACVS
Inj Date : 12-DEC-2009 09:57
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091106-05.3|40 PPM|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 10:12 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.776	3.776	(1.000)	355607	40.0000	
* 29 Naphthalene-d8	136	4.643	4.643	(1.000)	1316914	40.0000	
* 46 Acenaphthene-d10	164	5.895	5.895	(1.000)	746114	40.0000	
* 67 Phenanthrene-d10	188	7.046	7.046	(1.000)	1383790	40.0000	
* 91 Chrysene-d12	240	9.444	9.444	(1.000)	1431683	40.0000	
* 98 Perylene-d12	264	11.023	11.023	(1.000)	1257814	40.0000	
$ 3 2-Fluorophenol	112	2.963	2.963	(0.784)	306182	40.0000	41.6
$ 5 Phenol-d5	99	3.497	3.497	(0.926)	382391	40.0000	41.9
$ 20 Nitrobenzene-d5	82	4.142	4.142	(0.892)	363489	40.0000	43.2
$ 39 2-Fluorobiphenyl	172	5.385	5.385	(0.913)	807972	40.0000	42.9
$ 60 2,4,6-Tribromophenol	329	6.482	6.482	(1.100)	125094	40.0000	45.3
$ 81 p-Terphenyl-d14	244	8.418	8.418	(0.891)	900217	40.0000	44.0
1 N-Methyl-N-nitrosomethylamine	74	2.269	2.269	(0.601)	192037	40.0000	47.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
2 Pyridine	79	2.298	2.298	(0.609)	236558	40.0000	40.8
4 Aniline	66	3.560	3.560	(0.943)	154327	40.0000	43.3
6 Phenol	94	3.502	3.502	(0.927)	392712	40.0000	41.2(Q)
7 bis(2-Chloroethyl) ether	63	3.579	3.579	(0.948)	244948	40.0000	43.5
8 2-Chlorophenol	128	3.641	3.641	(0.964)	338974	40.0000	41.4
203 n-Decane	43	3.627	3.627	(0.960)	403865	40.0000	54.5
9 1,3-Dichlorobenzene	146	3.743	3.743	(0.991)	407620	40.0000	41.6
11 1,4-Dichlorobenzene	146	3.786	3.786	(1.003)	421611	40.0000	42.4
13 1,2-Dichlorobenzene	146	3.892	3.892	(1.031)	392121	40.0000	41.7
14 bis(2-Chloroisopropyl)ether	45	3.921	3.921	(1.038)	484090	40.0000	54.0
12 Benzyl alcohol	108	3.844	3.844	(1.018)	203021	40.0000	39.3
15 o-Cresol	107	3.897	3.897	(1.032)	261915	40.0000	40.1
18 m,p-Cresols	107	3.998	3.998	(1.059)	328420	40.0000	39.5
17 N-Nitrosodipropylamine	70	4.017	4.017	(1.064)	204085	40.0000	47.5
19 Hexachloroethane	117	4.118	4.118	(1.091)	154106	40.0000	42.0
21 Nitrobenzene	77	4.152	4.152	(0.894)	359434	40.0000	45.8
22 Isophorone	82	4.306	4.306	(0.927)	623371	40.0000	42.8
23 2-Nitrophenol	139	4.369	4.369	(0.941)	174923	40.0000	42.8
24 2,4-Dimethylphenol	122	4.364	4.364	(0.940)	306036	40.0000	43.4
25 bis(2-Chloroethoxy)methane	93	4.431	4.431	(0.954)	363977	40.0000	44.7
26 2,4-Dichlorophenol	162	4.527	4.527	(0.975)	301217	40.0000	45.9
27 Benzoic acid	105	4.417	4.417	(0.951)	109004	40.0000	30.0
28 1,2,4-Trichlorobenzene	180	4.590	4.590	(0.989)	367175	40.0000	44.6
30 Naphthalene	128	4.657	4.657	(1.003)	968019	40.0000	42.5
204 alpha-Terpineol	59	4.633	4.633	(0.998)	265282	40.0000	49.9
31 4-Chloroaniline	127	4.677	4.677	(1.007)	410900	40.0000	45.0
32 Hexachlorobutadiene	225	4.720	4.720	(1.017)	246510	40.0000	46.0
33 4-Chloro-3-methylphenol	107	4.990	4.990	(1.075)	273591	40.0000	42.3
34 2-Methylnaphthalene	142	5.139	5.139	(1.107)	681570	40.0000	43.4
35 1-Methylnaphthalene	142	5.211	5.211	(1.122)	661852	40.0000	43.3
36 Hexachlorocyclopentadiene	237	5.240	5.240	(0.889)	127441	40.0000	42.3
205 2,3-Dichloroaniline	161	5.336	5.336	(0.905)	361628	40.0000	42.0
37 2,4,6-Trichlorophenol	196	5.327	5.327	(0.904)	239619	40.0000	44.2
38 2,4,5-Trichlorophenol	196	5.356	5.356	(0.908)	247995	40.0000	43.8
40 2-Chloronaphthalene	162	5.491	5.491	(0.931)	664185	40.0000	42.2
42 o-Nitroaniline	65	5.548	5.548	(0.941)	184799	40.0000	44.2
41 m-Nitroaniline	138	5.847	5.847	(0.992)	118249	40.0000	45.3
43 Dimethylphthalate	163	5.659	5.659	(0.960)	770593	40.0000	41.5
44 2,6-Dinitrotoluene	165	5.717	5.717	(0.970)	178755	40.0000	41.2
50 2,4-Dinitrotoluene	165	6.011	6.011	(1.020)	225853	40.0000	40.7
45 Acenaphthylene	152	5.794	5.794	(0.983)	1037707	40.0000	43.3
47 Acenaphthene	154	5.919	5.919	(1.004)	651138	40.0000	42.1
48 2,4-Dinitrophenol	184	5.919	5.919	(1.004)	59527	40.0000	39.6
49 Dibenzofuran	168	6.040	6.040	(1.024)	950681	40.0000	42.4
51 Diethylphthalate	149	6.165	6.165	(1.046)	778704	40.0000	42.2
52 4-Nitrophenol	139	5.938	5.938	(1.007)	92164	40.0000	35.6
53 Fluorene	166	6.300	6.300	(1.069)	791414	40.0000	42.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.275	6.275	(1.065)	426562	40.0000	41.8
55 2-Methyl-4,6-dinitrophenol	198	6.319	6.319	(0.897)	94438	40.0000	35.8
56 p-Nitroaniline	138	6.300	6.300	(1.069)	82342	40.0000	44.2
133 Diphenylamine	169	6.362	6.362	(0.903)	600381	40.0000	44.1
58 1,2-Diphenylhydrazine	77	6.401	6.401	(0.908)	735577	40.0000	43.6
61 4-Bromophenylphenylether	248	6.661	6.661	(0.945)	268976	40.0000	43.1
63 Hexachlorobenzene	284	6.728	6.728	(0.955)	284646	40.0000	42.9
65 Pentachlorophenol	266	6.877	6.877	(0.976)	141935	40.0000	42.8
206 n-Octadecane	57	6.873	6.873	(0.975)	463752	40.0000	50.7
68 Phenanthrene	178	7.070	7.070	(1.003)	1120914	40.0000	43.1
69 Anthracene	178	7.113	7.113	(1.010)	1111847	40.0000	43.0
72 Di-n-butylphthalate	149	7.474	7.474	(1.061)	1286986	40.0000	43.3
76 Fluoranthene	202	8.100	8.100	(1.150)	1252668	40.0000	44.0
79 Pyrene	202	8.317	8.317	(0.881)	1327384	40.0000	45.8
85 Butylbenzylphthalate	149	8.852	8.852	(0.937)	572173	40.0000	44.4
89 Benzo(a)anthracene	228	9.434	9.434	(0.999)	1216747	40.0000	42.1
92 Chrysene	228	9.468	9.468	(1.003)	1110209	40.0000	42.2
93 bis(2-Ethylhexyl)phthalate	149	9.377	9.377	(0.993)	833529	40.0000	43.4
94 Di-n-octylphthalate	149	10.002	10.002	(0.907)	1306837	40.0000	48.0
95 Benzo(b)fluoranthene	252	10.537	10.537	(0.956)	1159551	40.0000	44.0
96 Benzo(k)fluoranthene	252	10.571	10.571	(0.959)	1168334	40.0000	44.4
97 Benzo(a)pyrene	252	10.946	10.946	(0.993)	1027241	40.0000	44.2
99 Indeno(1,2,3-cd)pyrene	276	12.665	12.665	(1.149)	1011737	40.0000	38.9
100 Dibenzo(a,h)anthracene	278	12.680	12.680	(1.150)	821438	40.0000	37.6
101 Benzo(ghi)perylene	276	13.166	13.166	(1.194)	836844	40.0000	40.9
126 m-Dinitrobenzene	168	5.702	5.702	(0.967)	124642	40.0000	40.8
130 2,3,4,6-Tetrachlorophenol	232	6.121	6.121	(1.038)	218672	40.0000	44.8
143 Dinoseb	211	6.998	6.998	(0.993)	147625	40.0000	36.3
173 Carbazole	167	7.229	7.229	(1.026)	568216	40.0000	43.2
184 p-Benzoquinone	54	3.266	3.266	(0.865)	25600	40.0000	28.9
192 Methoxychlor	227	9.324	9.324	(0.987)	762321	40.0000	46.5
211 p-Toluidine	106	4.056	4.056	(1.074)	261068	40.0000	43.2
210 m-Toluidine	106	4.075	4.075	(1.079)	358306	40.0000	38.9
26 Phthalic anhydride	104	5.173	5.173	(1.114)	111456	40.0000	38.9
179 Dibenzo(a,e)pyrene	302	16.985	16.985	(1.541)	415322	40.0000	33.6
214 1,4-Dinitrobenzene	75	5.645	5.645	(0.958)	127595	40.0000	43.0
215 2-Ethoxyethanol	59	2.110	2.110	(0.559)	161815	40.0000	45.4
216 Methylenebis(2-chloroaniline)	231	9.381	9.381	(0.993)	146326	40.0000	41.2(Q)
M 225 Trichlorophenols	196				487614	80.0000	88.0
M 226 Tetrachlorophenols	232				218672	40.0000	44.8
M 227 Benzo(b,k)fluoranthene	252				2327886	80.0000	88.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.i/s121209.b/s511204.d
Date : 12-DEC-2009 09:57
Client ID: MEGACVS
Sample Info: IWBN091106-05,3140 PPM14:SVM14:MEGACVS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

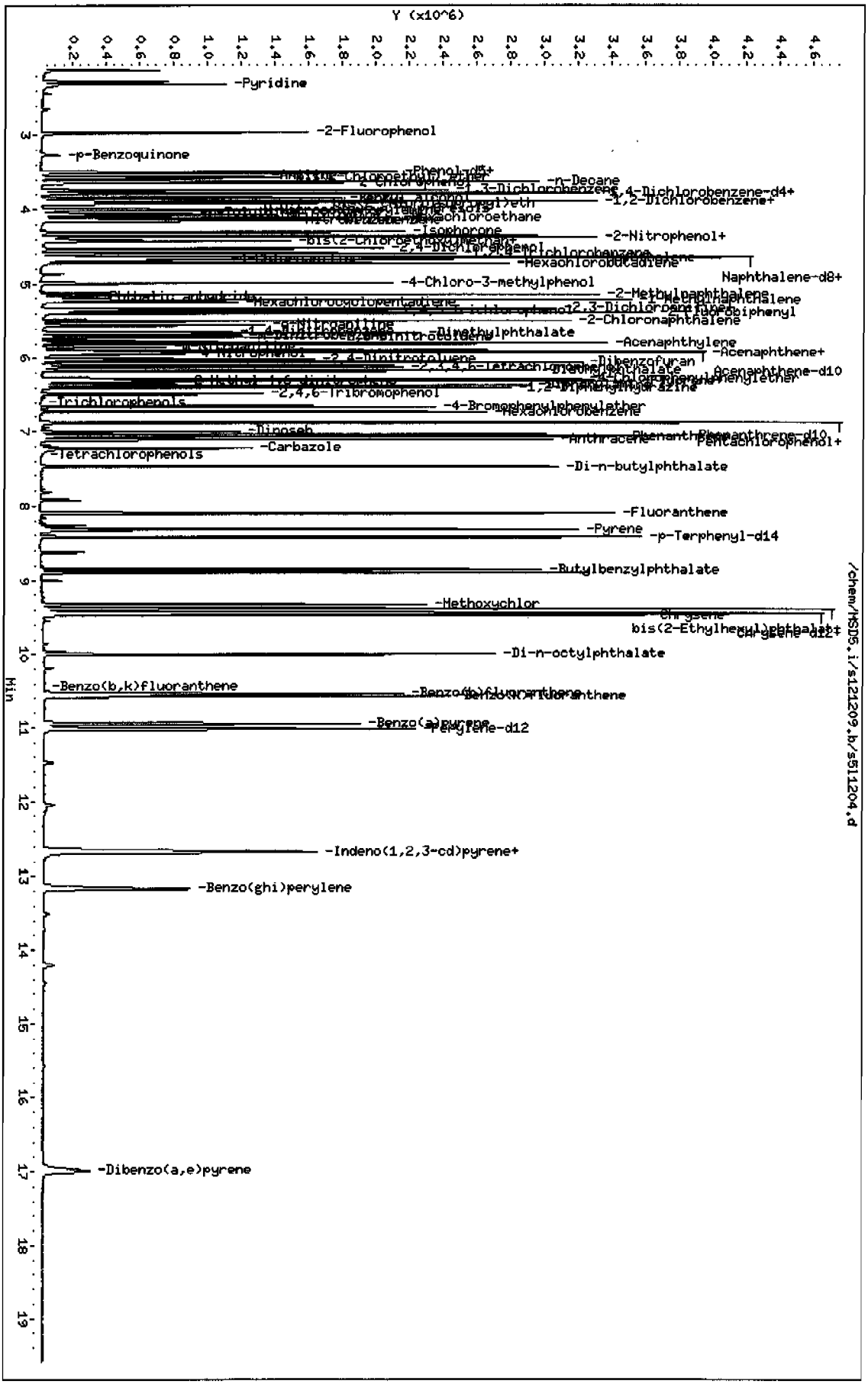

Page 1

QC Data

Data File: /chem/HSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

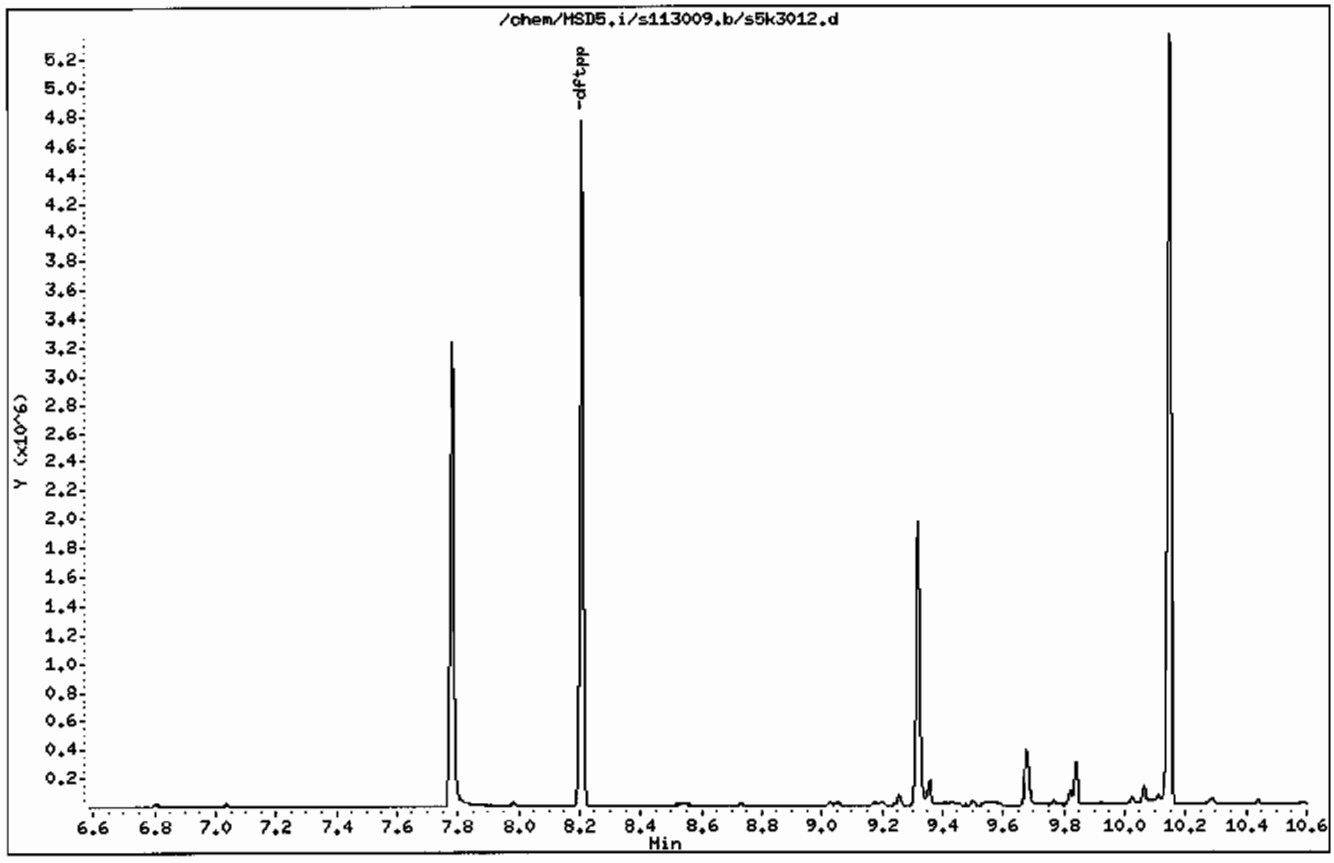

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

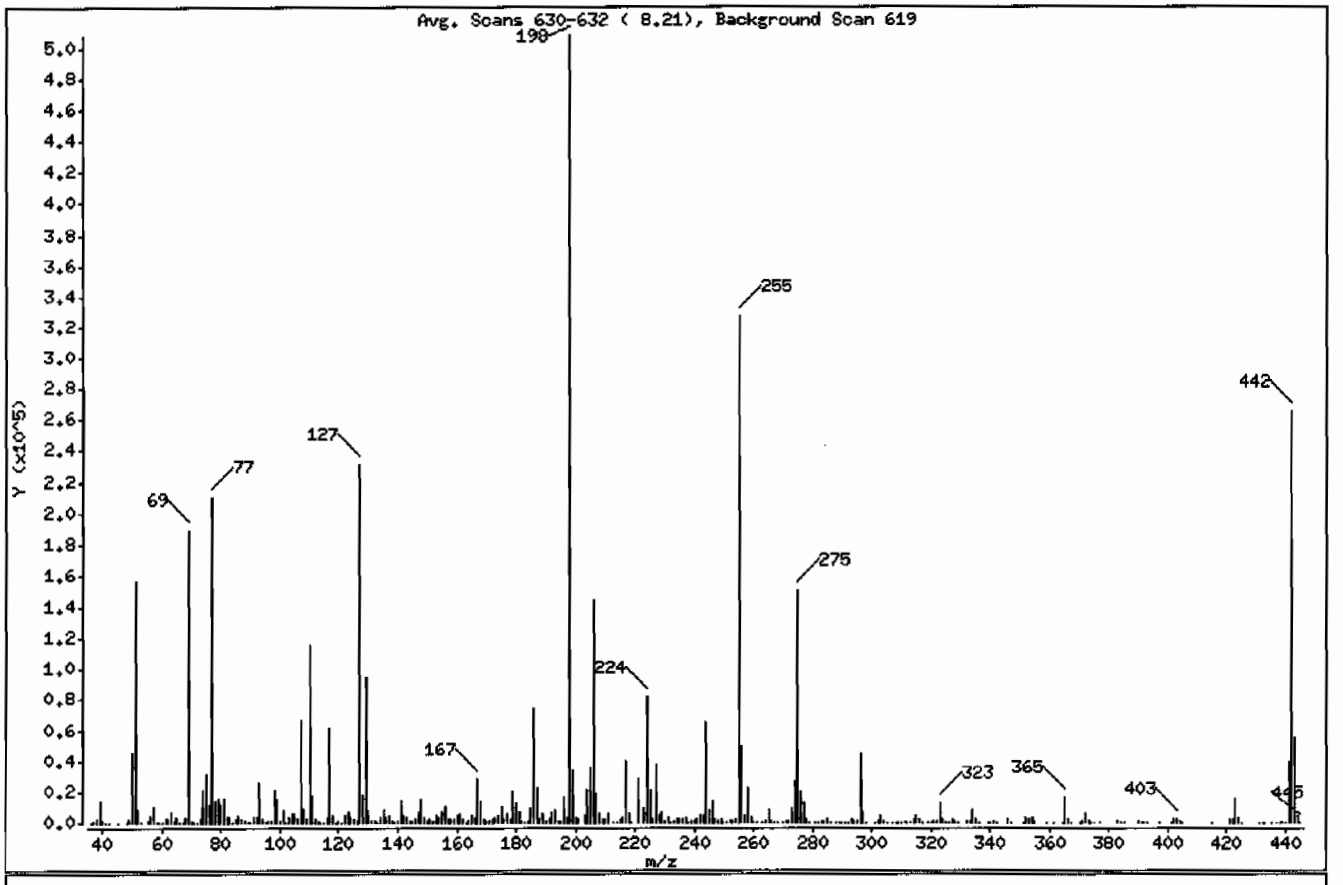

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	30.79
68	Less than 2.00% of mass 69	0.58 (1.57)
69	Mass 69 relative abundance	37.28
70	Less than 2.00% of mass 69	0.19 (0.51)
127	40.00 - 60.00% of mass 198	45.60
197	Less than 1.00% of mass 198	0.70
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	29.60
365	Greater than 1.00% of mass 198	3.10
441	Present, but less than mass 443	7.74
442	Greater than 40.00% of mass 198	52.24
443	17.00 - 23.00% of mass 442	10.70 (20.48)

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	125	126.00	680	213.00	464	307.00	50
37.00	987	127.00	231616	214.00	157	308.00	501
38.00	2716	128.00	17920	215.00	1808	309.00	450
39.00	13632	129.00	94528	216.00	3180	310.00	506
40.00	706	130.00	7593	217.00	39768	311.00	48
41.00	445	131.00	1598	218.00	5515	312.00	106
42.00	45	132.00	1119	219.00	464	313.00	308
45.00	260	133.00	463	221.00	28528	314.00	1959
48.00	107	134.00	3180	223.00	8943	315.00	4843
49.00	1759	135.00	8128	224.00	82288	316.00	2594
50.00	46048	136.00	3126	225.00	21312	317.00	470
51.00	156416	137.00	4122	226.00	2341	319.00	122
52.00	7789	138.00	895	227.00	37768	320.00	161
53.00	334	139.00	564	228.00	5098	321.00	1232
55.00	910	140.00	1328	229.00	7275	322.00	651
56.00	4777	141.00	13534	230.00	1075	323.00	12618
57.00	10418	142.00	4180	231.00	2958	324.00	2388
58.00	476	143.00	3277	232.00	577	325.00	236
59.00	113	144.00	760	233.00	743	326.00	206
60.00	309	145.00	649	234.00	2540	327.00	2542
61.00	2312	146.00	2181	235.00	2704	328.00	1058
62.00	2701	147.00	6737	236.00	1787	329.00	194
63.00	7253	148.00	15544	237.00	2968	332.00	1010
64.00	840	149.00	3108	238.00	525	333.00	1207
65.00	3370	150.00	944	239.00	1657	334.00	8064
66.00	347	151.00	2363	240.00	1214	335.00	1901
67.00	386	152.00	899	241.00	2080	336.00	205
68.00	2964	153.00	4270	242.00	4897	339.00	105
69.00	189376	154.00	3325	243.00	4687	340.00	196
70.00	963	155.00	7175	244.00	65392	341.00	1323
71.00	55	156.00	10369	245.00	8442	342.00	450
72.00	236	157.00	2283	246.00	13909	346.00	2820
73.00	1852	158.00	2547	247.00	2750	347.00	441
74.00	21008	159.00	1763	248.00	604	351.00	300
75.00	31368	160.00	4127	249.00	2266	352.00	3392

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d
Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	11187	161.00	6032	250.00	324	353.00	2458
77.00	210112	162.00	1867	251.00	428	354.00	3352
78.00	13990	163.00	483	252.00	693	355.00	682
79.00	15435	164.00	669	253.00	1399	359.00	140
80.00	11406	165.00	5171	254.00	2631	361.00	68
81.00	14908	166.00	3857	255.00	327168	364.00	54
82.00	3682	167.00	27936	256.00	48920	365.00	16765
83.00	3239	168.00	13823	257.00	4149	366.00	2273
84.00	304	169.00	2332	258.00	21704	367.00	171
85.00	2673	170.00	964	259.00	3552	370.00	223
86.00	4546	171.00	1326	260.00	516	371.00	611
87.00	2199	172.00	2399	261.00	573	372.00	5622
88.00	779	173.00	3174	263.00	216	373.00	1163
89.00	404	174.00	5250	264.00	756	374.00	207
90.00	45	175.00	10362	265.00	8624	375.00	45
91.00	3378	176.00	2819	266.00	1292	377.00	57
92.00	3994	177.00	5390	267.00	158	383.00	1213
93.00	26184	178.00	1798	268.00	96	384.00	220
94.00	1810	179.00	20272	270.00	353	385.00	62
95.00	353	180.00	13307	271.00	742	390.00	764
96.00	1108	181.00	6536	272.00	994	391.00	439
97.00	629	182.00	917	273.00	9575	392.00	334
98.00	21264	183.00	578	274.00	27024	393.00	51
99.00	15464	184.00	1707	275.00	150336	397.00	55
100.00	1213	185.00	9598	276.00	20064	401.00	130
101.00	7941	186.00	75040	277.00	13332	402.00	1809
102.00	407	187.00	21824	278.00	2250	403.00	2548
103.00	3032	188.00	2208	279.00	421	404.00	780
104.00	5846	189.00	5334	281.00	219	405.00	122
105.00	5629	190.00	872	282.00	258	415.00	50
106.00	1800	191.00	2140	283.00	1655	421.00	1997
107.00	67056	192.00	6866	284.00	1098	422.00	1842
108.00	9675	193.00	8056	285.00	2171	423.00	15273
109.00	2337	194.00	1522	286.00	558	424.00	3590
110.00	115352	195.00	1001	288.00	235	425.00	219

Data File: /chem/MSD5.i/s113009.b/s5k3012.d

Date : 30-NOV-2009 13:32

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091101-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5k3012.d

Spectrum: Avg. Scans 630-632 (8.21), Background Scan 619

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	17720	196.00	16896	289.00	389	431.00	58
112.00	2652	197.00	3561	290.00	463	432.00	65
113.00	730	198.00	507968	291.00	366	433.00	62
114.00	171	199.00	33816	292.00	523	435.00	55
115.00	254	200.00	2938	293.00	2767	437.00	294
116.00	3878	201.00	2726	294.00	806	438.00	170
117.00	62200	203.00	4278	295.00	870	439.00	365
118.00	4275	204.00	21168	296.00	44632	440.00	62
119.00	548	205.00	35144	297.00	6459	441.00	39312
120.00	883	206.00	144384	298.00	439	442.00	265344
121.00	352	207.00	19096	301.00	457	443.00	54336
122.00	4776	208.00	5385	302.00	797	444.00	5092
123.00	7064	209.00	2007	303.00	4856	445.00	267
124.00	2977	210.00	2161	304.00	1329		
125.00	2892	211.00	5880	305.00	86		

Data File: /chem/MSD5.i/s121209.b/s511201.d

Date : 12-DEC-2009 08:53

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

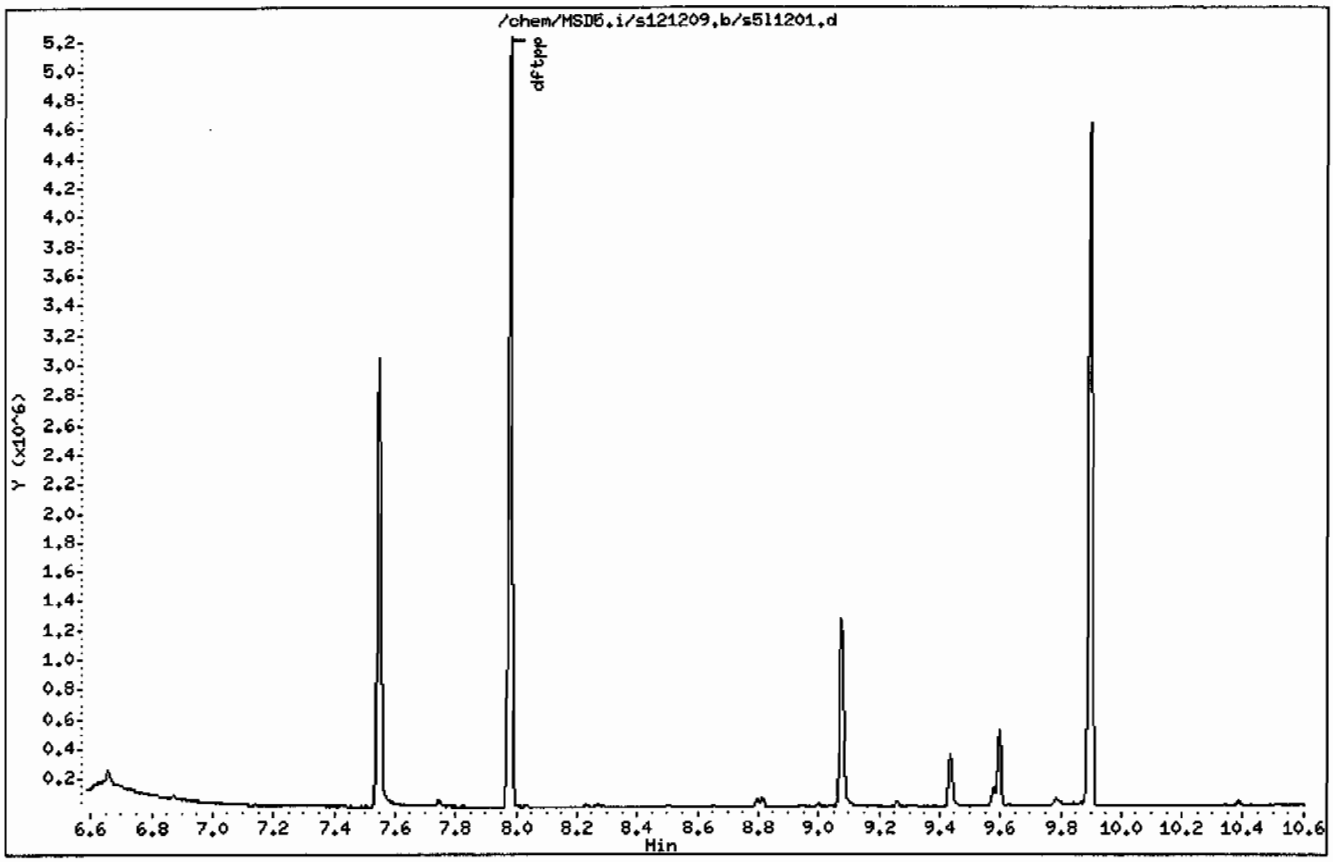

Data File: /chem/MSD5.i/s121209.b/s511201.d

Date : 12-DEC-2009 08:53

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp

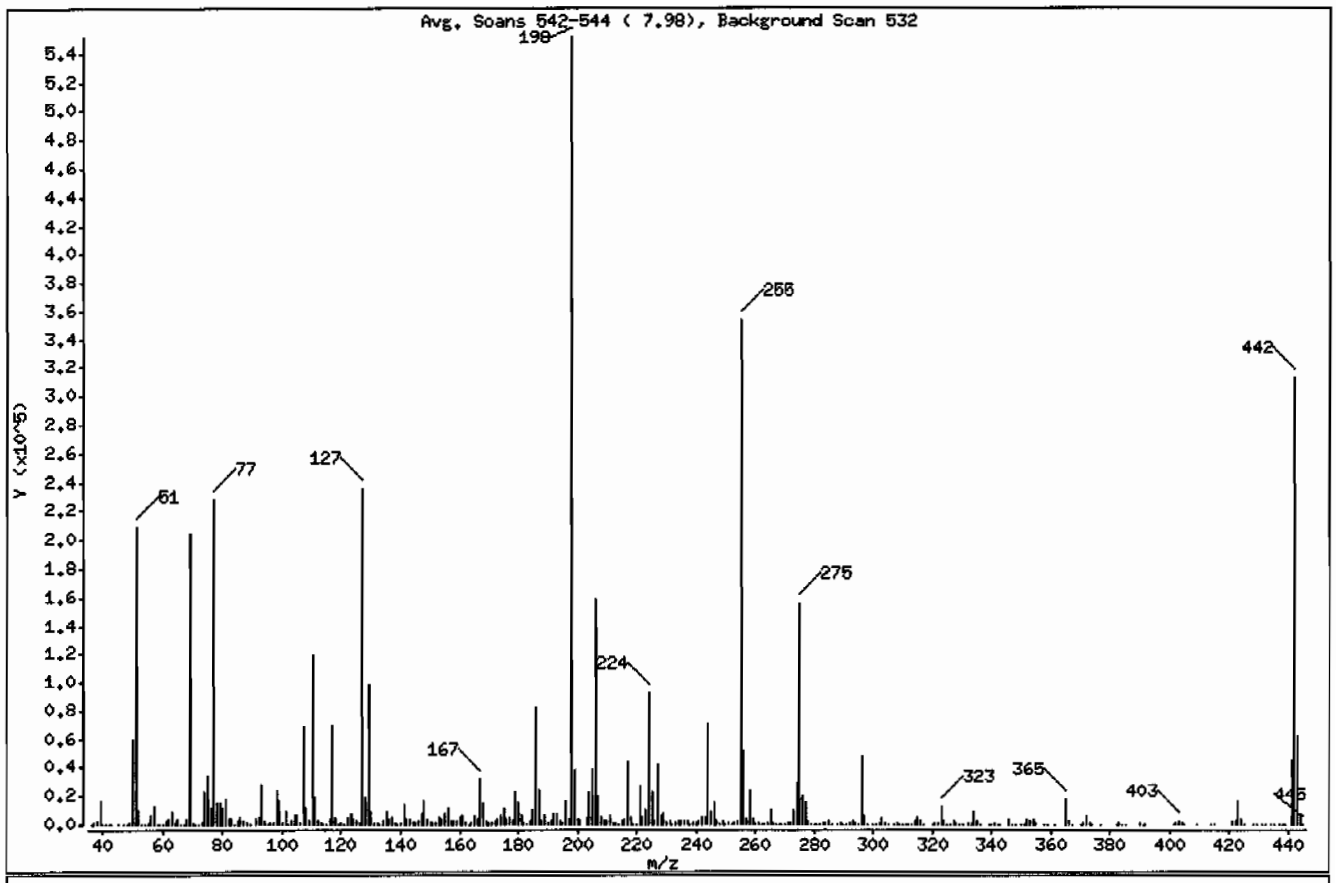

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.03
68	Less than 2.00% of mass 69	0.61 (1.66)
69	Mass 69 relative abundance	37.12
70	Less than 2.00% of mass 69	0.17 (0.45)
127	40.00 - 60.00% of mass 198	42.79
197	Less than 1.00% of mass 198	0.58
199	5.00 - 9.00% of mass 198	6.88
275	10.00 - 30.00% of mass 198	28.20
365	Greater than 1.00% of mass 198	3.28
441	Present, but less than mass 443	8.28
442	Greater than 40.00% of mass 198	56.87
443	17.00 - 23.00% of mass 442	11.16 (19.61)

Data File: /chem/MSD5.i/s121209.b/s511201.d

Date : 12-DEC-2009 08:53

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s511201.d
Spectrum: Avg. Scans 542-544 (7.98), Background Scan 532
Location of Maximum: 198.00
Number of points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	230	127.00	235840	216.00	3827	307.00	108
37.00	1098	128.00	18744	217.00	43848	308.00	639
38.00	3117	129.00	98776	218.00	5542	309.00	472
39.00	16928	130.00	8558	219.00	494	310.00	532
40.00	461	131.00	1693	220.00	330	311.00	53
41.00	460	132.00	1006	221.00	27016	312.00	148
42.00	252	133.00	394	222.00	4448	313.00	421
43.00	101	134.00	3127	223.00	10193	314.00	2143
45.00	513	135.00	8396	224.00	92032	315.00	5295
47.00	102	136.00	3439	225.00	22712	316.00	2778
48.00	154	137.00	4475	226.00	2106	317.00	458
49.00	1875	138.00	1111	227.00	42176	320.00	160
50.00	58960	139.00	614	228.00	6210	321.00	1361
51.00	209600	140.00	1416	229.00	7815	322.00	649
52.00	10692	141.00	13867	230.00	1070	323.00	12503
53.00	221	142.00	4061	231.00	2981	324.00	2136
54.00	122	143.00	3201	232.00	578	325.00	217
55.00	1259	144.00	990	233.00	646	326.00	299
56.00	5968	145.00	786	234.00	2455	327.00	2980
57.00	12793	146.00	2623	235.00	2997	328.00	1339
58.00	615	147.00	7214	236.00	1904	329.00	187
59.00	143	148.00	16888	237.00	2969	330.00	49
60.00	223	149.00	3438	238.00	391	332.00	1070
61.00	2635	150.00	1002	239.00	1679	333.00	1155
62.00	3178	151.00	1774	240.00	1166	334.00	8281
63.00	8424	152.00	768	241.00	2488	335.00	2076
64.00	1123	153.00	4952	242.00	5216	336.00	194
65.00	4140	154.00	3598	243.00	4732	339.00	275
66.00	398	155.00	7329	244.00	70712	340.00	191
67.00	372	156.00	11261	245.00	9388	341.00	1709
68.00	3389	157.00	2285	246.00	14926	342.00	510
69.00	204608	158.00	2339	247.00	3100	343.00	46
70.00	920	159.00	2173	248.00	608	346.00	3219
71.00	205	160.00	4688	249.00	2612	347.00	473
72.00	53	161.00	6297	250.00	391	348.00	107

Date : 12-DEC-2009 08:53

Client ID: DFTPP Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 Operator: rmb

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s511201.d
Spectrum: Avg. Scans 542-544 (7.98), Background Scan 532
Location of Maximum: 198.00
Number of points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	1553	162.00	1834	251.00	659	350.00	44
74.00	23088	163.00	578	252.00	613	351.00	370
75.00	34688	164.00	769	253.00	1668	352.00	3767
76.00	11802	165.00	5768	254.00	2259	353.00	2566
77.00	228288	166.00	4154	255.00	353920	354.00	3560
78.00	15050	167.00	32024	256.00	51656	355.00	923
79.00	15748	168.00	15377	257.00	3848	358.00	136
80.00	11962	169.00	2510	258.00	23824	359.00	329
81.00	17384	170.00	1106	259.00	4237	361.00	46
82.00	3775	171.00	1552	260.00	537	365.00	18096
83.00	3771	172.00	2451	261.00	733	366.00	2454
84.00	256	173.00	3259	262.00	53	367.00	47
85.00	2655	174.00	6172	263.00	69	370.00	334
86.00	5140	175.00	11697	264.00	769	371.00	986
87.00	2114	176.00	3700	265.00	9836	372.00	6007
88.00	789	177.00	5504	266.00	1245	373.00	1295
89.00	463	178.00	1938	267.00	100	374.00	103
91.00	4132	179.00	22520	268.00	238	377.00	198
92.00	4636	180.00	14650	269.00	106	382.00	42
93.00	28392	181.00	6952	270.00	477	383.00	1507
94.00	2179	182.00	1160	271.00	759	384.00	209
95.00	455	183.00	607	272.00	970	385.00	165
96.00	1350	184.00	2076	273.00	10482	390.00	665
97.00	640	185.00	10679	274.00	28936	391.00	470
98.00	23448	186.00	82912	275.00	155456	392.00	517
99.00	16912	187.00	24224	276.00	20520	401.00	398
100.00	1486	188.00	2318	277.00	15446	402.00	1829
101.00	8814	189.00	5736	278.00	2390	403.00	2896
102.00	339	190.00	1083	279.00	468	404.00	1079
103.00	2993	191.00	2461	280.00	48	405.00	187
104.00	5719	192.00	7279	281.00	360	409.00	46
105.00	6010	193.00	7685	282.00	494	414.00	57
106.00	1815	194.00	1925	283.00	1587	415.00	118
107.00	68984	195.00	1020	284.00	1105	421.00	2249
108.00	10904	196.00	16808	285.00	2619	422.00	2004

Data File: /chem/MSD5.i/s121209.b/s511201.d

Date : 12-DEC-2009 08:53

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: |WBN091128-01|50PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s511201.d

Spectrum: Avg. Scans 542-544 (7.98), Background Scan 532

Location of Maximum: 198.00

Number of points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
109.00	2540	197.00	3191	286.00	466	423.00	16488
110.00	119728	198.00	551168	288.00	228	424.00	3483
111.00	18672	199.00	37912	289.00	646	425.00	179
112.00	2606	200.00	3265	290.00	480	428.00	55
113.00	753	201.00	2516	291.00	319	429.00	46
114.00	300	203.00	4762	292.00	724	431.00	53
115.00	425	204.00	23440	293.00	2738	432.00	65
116.00	4272	205.00	39168	294.00	763	434.00	98
117.00	70248	206.00	158848	295.00	540	435.00	105
118.00	4816	207.00	20776	296.00	48216	437.00	206
119.00	483	208.00	5571	297.00	6644	438.00	176
120.00	1018	209.00	1913	298.00	569	439.00	173
121.00	344	210.00	2711	300.00	42	441.00	45624
122.00	4593	211.00	6701	301.00	604	442.00	313472
123.00	7244	212.00	1136	302.00	828	443.00	61464
124.00	3181	213.00	692	303.00	5126	444.00	5821
125.00	2717	214.00	62	304.00	1555	445.00	149
126.00	1286	215.00	2049	305.00	180		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201988990**				
Client Sample:	**QC for batch 930033**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**TB for batch 930033**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 11:45**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**200 mL**	**Final Volume:**	**1 mL**
Data File:	**s511208.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.050	mg/L	0.010	0.050
121-14-2	2,4-Dinitrotoluene	U	0.050	mg/L	0.010	0.050
87-86-5	Pentachlorophenol	U	0.050	mg/L	0.010	0.050
110-86-1	Pyridine	U	0.050	mg/L	0.015	0.050
95-48-7	o-Cresol	U	0.050	mg/L	0.010	0.050
65794-96-9	m,p-Cresols	U	0.050	mg/L	0.015	0.050
67-72-1	Hexachloroethane	U	0.050	mg/L	0.010	0.050
98-95-3	Nitrobenzene	U	0.050	mg/L	0.015	0.050
87-68-3	Hexachlorobutadiene	U	0.050	mg/L	0.010	0.050
88-06-2	2,4,6-Trichlorophenol	U	0.050	mg/L	0.010	0.050
95-95-4	2,4,5-Trichlorophenol	U	0.050	mg/L	0.010	0.050
118-74-1	Hexachlorobenzene	U	0.050	mg/L	0.010	0.050

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121209.b/s511208.d
Lab Smp Id: 1201988990 Client Smp ID: TCLPBLANK
Inj Date : 12-DEC-2009 11:45
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201988990|932028|1|SVMF|1|TCLPBLANK
Misc Info : |MSDTCLP_L|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 10:12 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 8 QC Sample: TB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	200.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	3.772	3.776	(1.000)	325999	40.0000	
* 29 Naphthalene-d8	136	4.637	4.643	(1.000)	1078207	40.0000	
* 46 Acenaphthene-d10	164	5.890	5.895	(1.000)	671853	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.046	(1.000)	1203852	40.0000	
* 91 Chrysene-d12	240	9.436	9.444	(1.000)	1147094	40.0000	
* 98 Perylene-d12	264	11.007	11.023	(1.000)	979138	40.0000	
$ 3 2-Fluorophenol	112	2.960	2.963	(0.785)	345099	51.1177	0.26
$ 5 Phenol-d5	99	3.490	3.497	(0.925)	242303	28.9374	0.14
$ 20 Nitrobenzene-d5	82	4.131	4.142	(0.891)	295941	42.9306	0.21
$ 39 2-Fluorobiphenyl	172	5.378	5.385	(0.913)	645738	38.0452	0.19
$ 60 2,4,6-Tribromophenol	329	6.478	6.482	(1.100)	242148	97.4351	0.49
$ 81 p-Terphenyl-d14	244	8.413	8.418	(0.892)	996237	60.7291	0.30

Data File: /chem/MSD5.i/s121209.b/s511208.d

Date : 12-DEC-2009 11:45

Client ID: TCLPBLANK

Sample Info: |120198899019320281|1|SVMF|1|TCLPBLANK

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

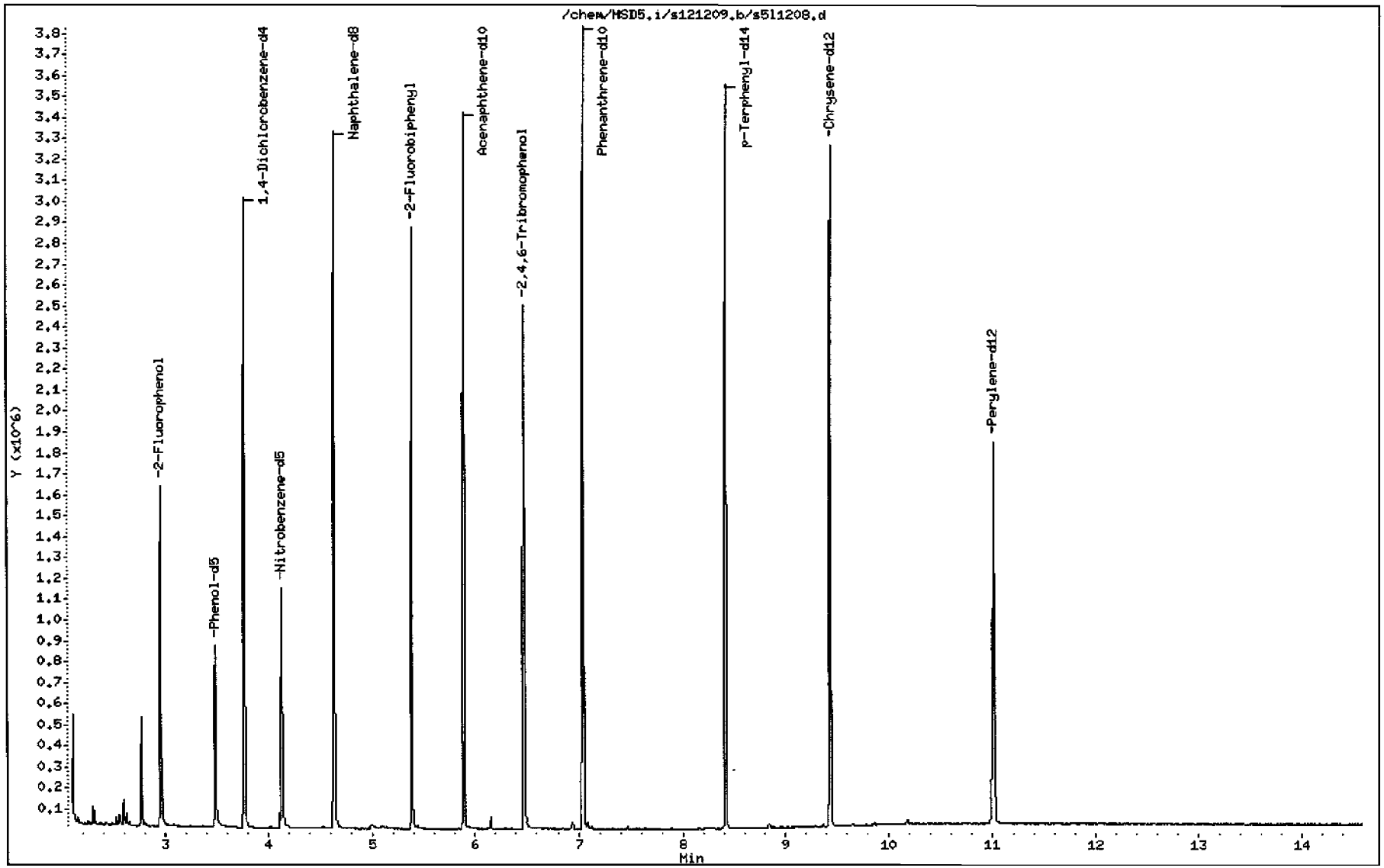

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201993737**				
Client Sample:	**QC for batch 932027**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 932027**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilntion:**	**1**
Run Date:	**12/12/2009 12:30**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s511210-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene	U	0.010	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene	U	0.010	mg/L	0.002	0.010
87-86-5	Pentachlorophenol	U	0.010	mg/L	0.002	0.010
110-86-1	Pyridine	U	0.010	mg/L	0.003	0.010
95-48-7	o-Cresol	U	0.010	mg/L	0.002	0.010
65794-96-9	m,p-Cresols	U	0.010	mg/L	0.003	0.010
67-72-1	Hexachloroethane	U	0.010	mg/L	0.002	0.010
98-95-3	Nitrobenzene	U	0.010	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene	U	0.010	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol	U	0.010	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol	U	0.010	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene	U	0.010	mg/L	0.002	0.010

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121209.b/s511210.d
Lab Smp Id: 1201993737 Client Smp ID: SBLK01
Inj Date : 12-DEC-2009 12:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201993737|932028|1|SVMF|1|SBLK01
Misc Info : |MSDTCLP_L|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 10:12 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 10 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	3.772	3.776	(1.000)	360391	40.0000	
* 29 Naphthalene-d8	136	4.637	4.643	(1.000)	1192925	40.0000	
* 46 Acenaphthene-d10	164	5.890	5.895	(1.000)	756764	40.0000	
* 67 Phenanthrene-d10	188	7.042	7.046	(1.000)	1367163	40.0000	
* 91 Chrysene-d12	240	9.436	9.444	(1.000)	1338399	40.0000	
* 98 Perylene-d12	264	11.013	11.023	(1.000)	1182742	40.0000	
$ 3 2-Fluorophenol	112	2.960	2.963	(0.785)	369123	49.4585	0.049
$ 5 Phenol-d5	99	3.490	3.497	(0.925)	264722	28.5979	0.028
$ 20 Nitrobenzene-d5	82	4.131	4.142	(0.891)	327539	42.9451	0.043
$ 39 2-Fluorobiphenyl	172	5.378	5.385	(0.913)	717179	37.5133	0.038
$ 60 2,4,6-Tribromophenol	329	6.478	6.482	(1.100)	254715	90.9919	0.091
$ 81 p-Terphenyl-d14	244	8.419	8.418	(0.892)	1046017	54.6495	0.055

Data File: /chem/MSD5.i/s121209.b/s511210.d

Date : 12-DEC-2009 12:30

Client ID: SBLK01

Sample Info: |120199373719320281|1|SVMF|1|SBLK01

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

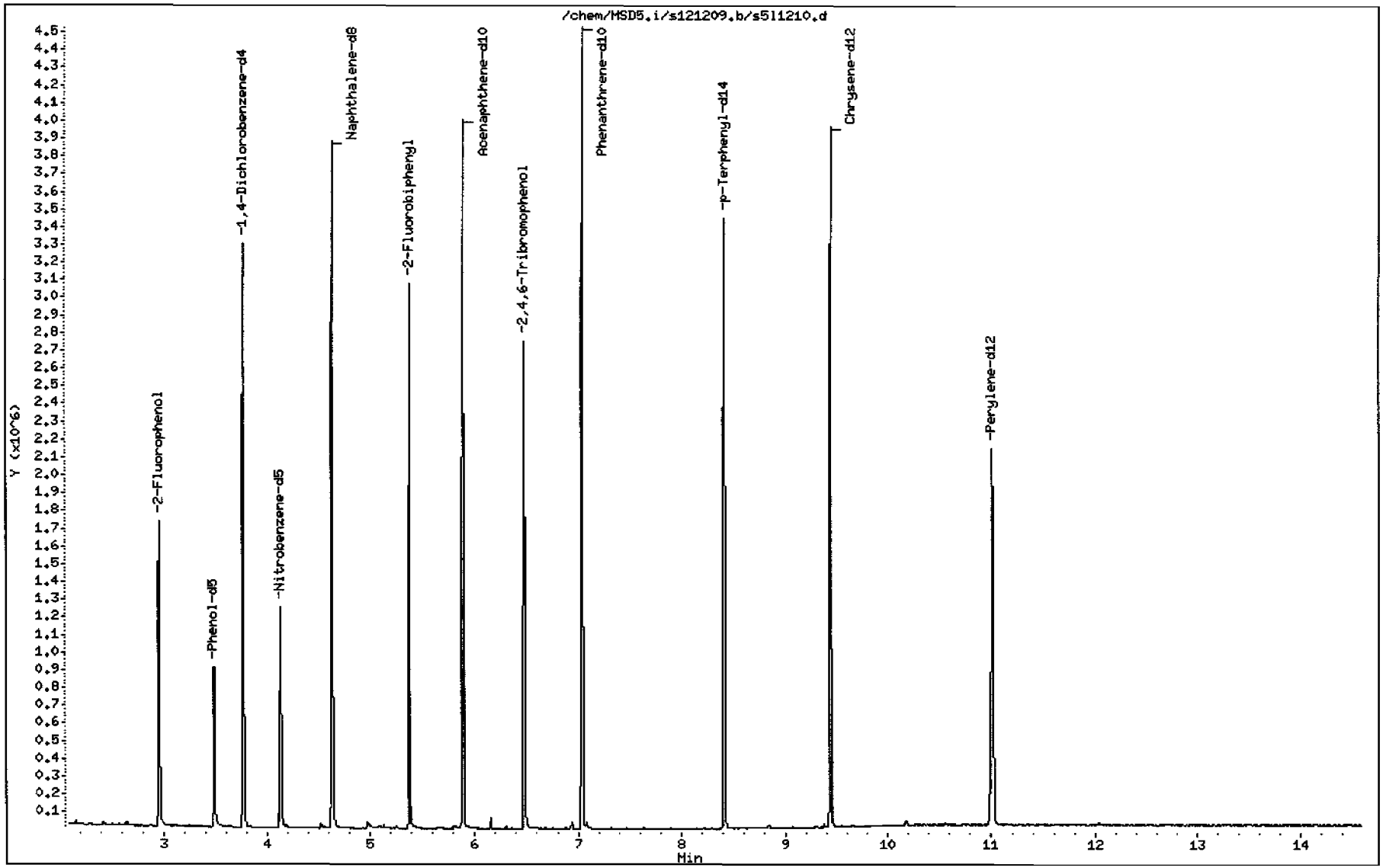

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201993738**				
Client Sample:	**QC for batch 932027**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 932027**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 12:52**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s511211-2.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene		0.0713	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene		0.0864	mg/L	0.002	0.010
87-86-5	Pentachlorophenol		0.0996	mg/L	0.002	0.010
110-86-1	Pyridine		0.0769	mg/L	0.003	0.010
95-48-7	o-Cresol		0.0664	mg/L	0.002	0.010
65794-96-9	m,p-Cresols		0.0626	mg/L	0.003	0.010
67-72-1	Hexachloroethane		0.0687	mg/L	0.002	0.010
98-95-3	Nitrobenzene		0.098	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene		0.086	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol		0.0941	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol		0.0924	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene		0.102	mg/L	0.002	0.010

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Data file : /chem/MSD5.i/s121209.b/s511211.d
Lab Smp Id: 1201993738 Client Smp ID: SBLK01LCS
Inj Date : 12-DEC-2009 12:52
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201993738|932028|1|SVMF|1|SBLK01LCS
Misc Info : |MSDTCLP_L|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 10:12 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	3.772	3.776	(1.000)	318926	40.0000	
* 29 Naphthalene-d8	136	4.637	4.643	(1.000)	1051000	40.0000	
* 46 Acenaphthene-d10	164	5.889	5.895	(1.000)	670905	40.0000	
* 67 Phenanthrene-d10	188	7.042	7.046	(1.000)	1199693	40.0000	
* 91 Chrysene-d12	240	9.436	9.444	(1.000)	1158304	40.0000	
* 98 Perylene-d12	264	11.013	11.023	(1.000)	995232	40.0000	
$ 3 2-Fluorophenol	112	2.960	2.963	(0.785)	360075	54.5190	0.054
$ 5 Phenol-d5	99	3.490	3.497	(0.925)	254993	31.1284	0.031
$ 20 Nitrobenzene-d5	82	4.137	4.142	(0.892)	311574	46.3684	0.046
$ 39 2-Fluorobiphenyl	172	5.378	5.385	(0.913)	716558	42.2774	0.042
$ 60 2,4,6-Tribromophenol	329	6.478	6.482	(1.100)	254760	102.655	0.10
$ 81 p-Terphenyl-d14	244	8.419	8.418	(0.892)	977105	58.9864	0.059
11 1,4-Dichlorobenzene	146	3.784	3.786	(1.003)	636123	71.3282	0.071

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	6.007	6.011	(1.020)	430993	86.3954	0.086
65 Pentachlorophenol	266	6.872	6.877	(0.976)	315315	99.5786	0.100
2 Pyridine	79	2.290	2.298	(0.607)	399510	76.9249	0.077
15 o-Cresol	107	3.895	3.897	(1.033)	388744	66.3874	0.066
18 m,p-Cresols	107	3.995	3.998	(1.059)	466796	62.6231	0.063
19 Hexachloroethane	117	4.113	4.118	(1.090)	226325	68.7356	0.069
21 Nitrobenzene	77	4.154	4.152	(0.896)	612973	97.9716	0.098
32 Hexachlorobutadiene	225	4.719	4.720	(1.018)	367488	86.0250	0.086
37 2,4,6-Trichlorophenol	196	5.325	5.327	(0.904)	458535	94.1056	0.094
38 2,4,5-Trichlorophenol	196	5.354	5.356	(0.909)	470538	92.4132	0.092
63 Hexachlorobenzene	284	6.725	6.728	(0.955)	588009	102.160	0.10

Data File: /chem/MSD5.i/s121209.b/s511211.d
Date : 12-DEC-2009 12:52
Client ID: SBLK01LCS
Sample Info: 1|120199373819320281|1|SVMF|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB
Column diameter: 0.20

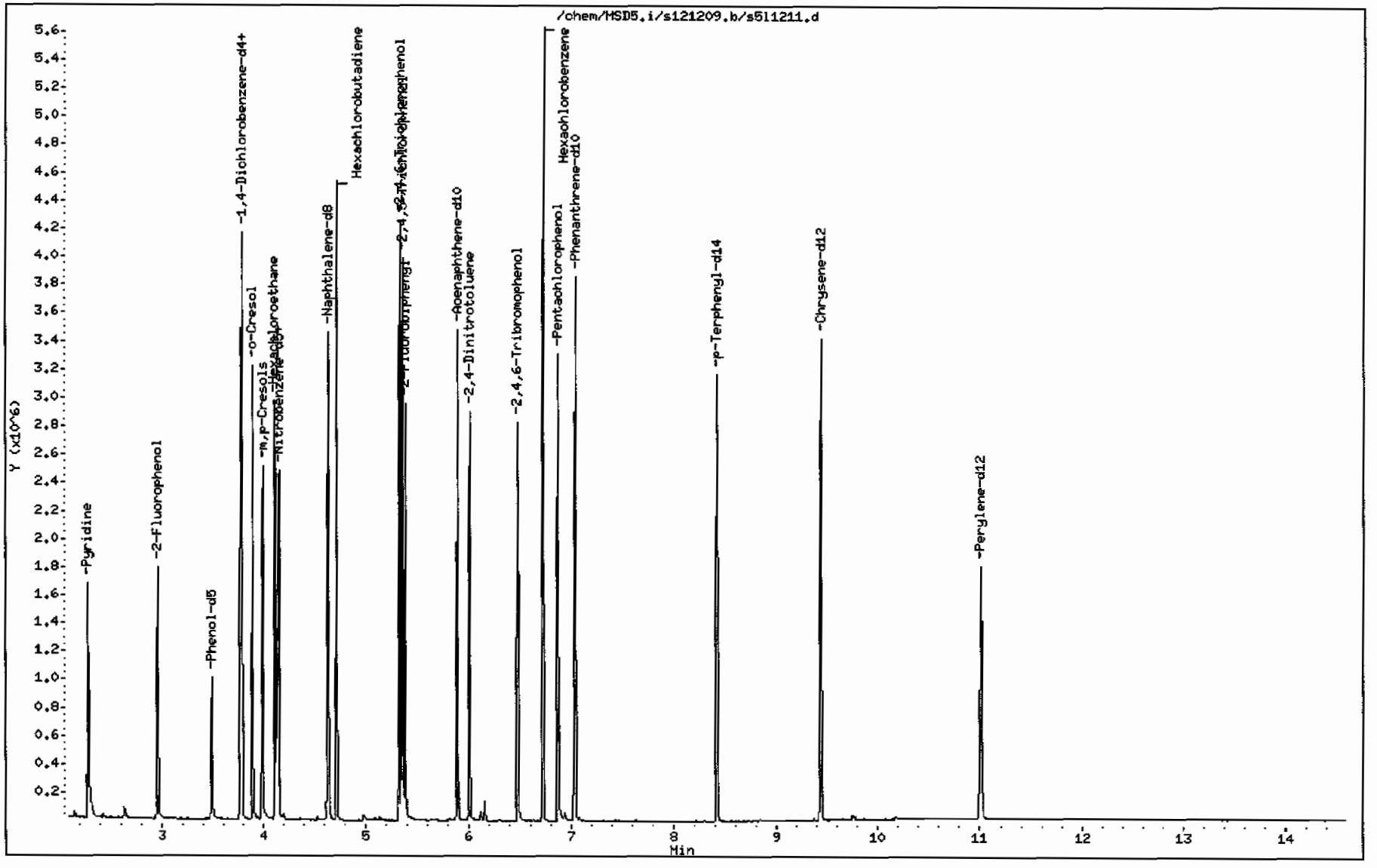

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**1201993739**	**Date Received:**	**11/25/2009 09:10**		
Client Sample:	**QC for batch 932027**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**WST03-10-2134MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 15:08**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s5l1217.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene		0.0756	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene		0.0872	mg/L	0.002	0.010
87-86-5	Pentachlorophenol		0.106	mg/L	0.002	0.010
110-86-1	Pyridine		0.0854	mg/L	0.003	0.010
95-48-7	o-Cresol		0.0698	mg/L	0.002	0.010
65794-96-9	m,p-Cresols		0.0673	mg/L	0.003	0.010
67-72-1	Hexachloroethane		0.0721	mg/L	0.002	0.010
98-95-3	Nitrobenzene		0.104	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene		0.0886	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol		0.0961	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol		0.103	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene		0.0994	mg/L	0.002	0.010

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121209.b/s511217.d
Lab Smp Id: 1201993739 Client Smp ID: WST03-10-2134MS
Inj Date : 12-DEC-2009 15:08
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201993739|932028|1|SVMF|1|LANL39001MS
Misc Info : |MSDTCLP_L|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 10:12 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	3.772	3.776	(1.000)	318926	40.0000	
* 29 Naphthalene-d8	136	4.637	4.643	(1.000)	1050221	40.0000	
* 46 Acenaphthene-d10	164	5.890	5.895	(1.000)	675579	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.046	(1.000)	1227900	40.0000	
* 91 Chrysene-d12	240	9.436	9.444	(1.000)	1231995	40.0000	
* 98 Perylene-d12	264	11.013	11.023	(1.000)	1121221	40.0000	
$ 3 2-Fluorophenol	112	2.960	2.963	(0.785)	373232	56.5110	0.056
$ 5 Phenol-d5	99	3.490	3.497	(0.925)	280069	34.1895	0.034
$ 20 Nitrobenzene-d5	82	4.137	4.142	(0.892)	326468	48.6210	0.049
$ 39 2-Fluorobiphenyl	172	5.378	5.385	(0.913)	722639	42.3412	0.042
$ 60 2,4,6-Tribromophenol	329	6.478	6.482	(1.100)	257236	102.935	0.10
$ 81 p-Terphenyl-d14	244	8.419	8.418	(0.892)	993057	56.3636	0.056
11 1,4-Dichlorobenzene	146	3.784	3.786	(1.003)	673987	75.5738	0.076

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	6.007	6.011	(1.020)	437865	87.1657	0.087
65 Pentachlorophenol	266	6.872	6.877	(0.976)	343978	105.706	0.10
2 Pyridine	79	2.296	2.298	(0.609)	443488	85.3924	0.085
15 o-Cresol	107	3.896	3.897	(1.033)	408964	69.8402	0.070
18 m,p-Cresols	107	3.996	3.998	(1.059)	501730	67.3096	0.067
19 Hexachloroethane	117	4.113	4.118	(1.090)	237417	72.1040	0.072
21 Nitrobenzene	77	4.154	4.152	(0.896)	652630	104.387	0.10
32 Hexachlorobutadiene	225	4.719	4.720	(1.018)	378227	88.6046	0.089
37 2,4,6-Trichlorophenol	196	5.325	5.327	(0.904)	471294	96.0548	0.096
38 2,4,5-Trichlorophenol	196	5.354	5.356	(0.909)	525975	102.586	0.10
63 Hexachlorobenzene	284	6.725	6.728	(0.955)	585683	99.4187	0.099

Data File: /chem/MSD5.i/s121209.b/s511217.d

Date : 12-DEC-2009 15:08

Client ID: WST03-10-2134MS

Sample Info: |1201993739|932028|1|SVMF|1|LANL39001MS

Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

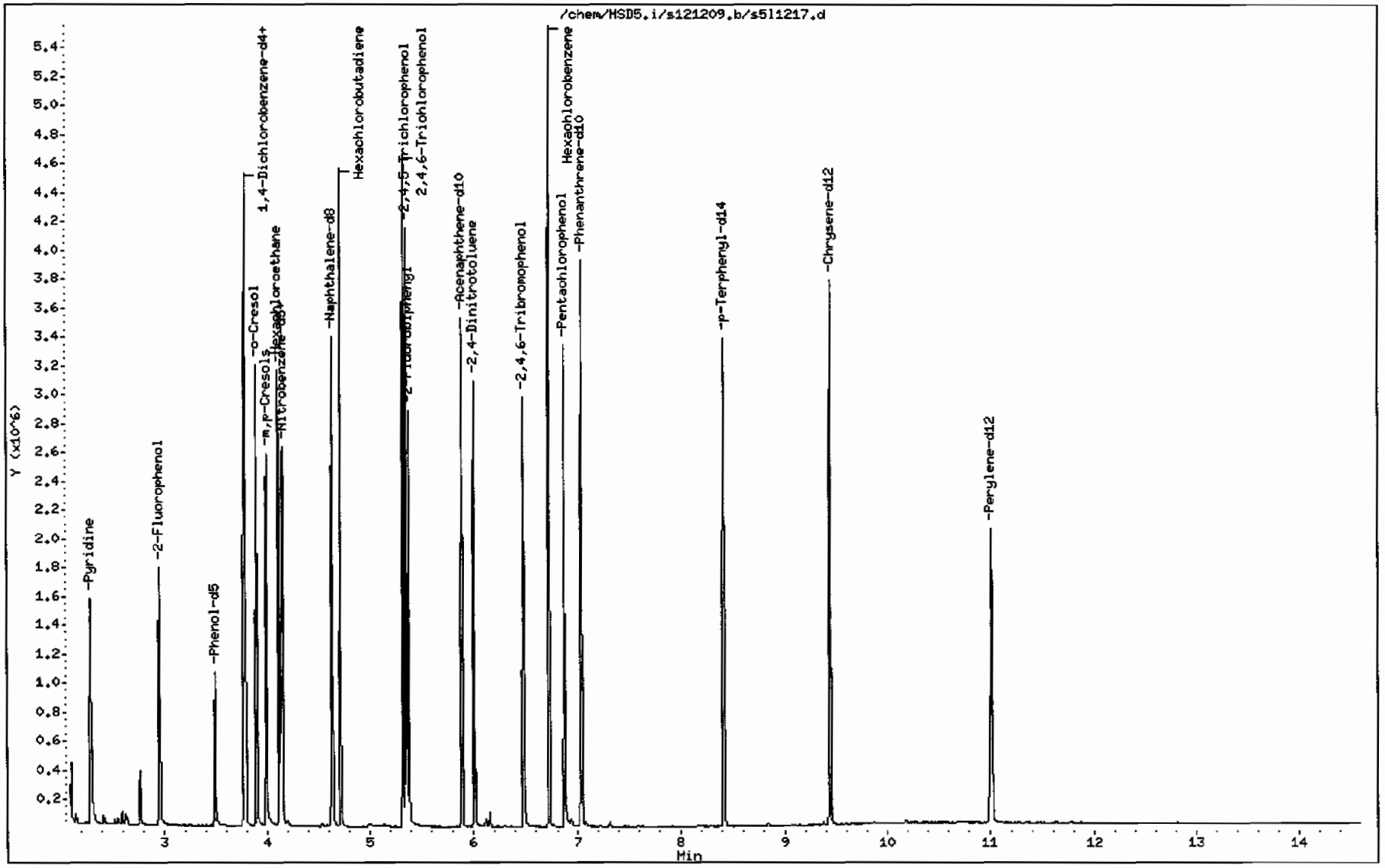

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**1201993740**	**Date Received:**	**11/25/2009 09:10**		
Client Sample:	**QC for batch 932027**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**WST03-10-2134MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**932028**	**Inst:**	**MSD5.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 15:30**	**Analyst:**	**RMB**	**Inj. Vol:**	**.5 uL**
Prep Date:	**12/11/2009 21:42**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s5l1218.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
106-46-7	1,4-Dichlorobenzene		0.0696	mg/L	0.002	0.010
121-14-2	2,4-Dinitrotoluene		0.0885	mg/L	0.002	0.010
87-86-5	Pentachlorophenol		0.113	mg/L	0.002	0.010
110-86-1	Pyridine		0.0853	mg/L	0.003	0.010
95-48-7	o-Cresol		0.0657	mg/L	0.002	0.010
65794-96-9	m,p-Cresols		0.0605	mg/L	0.003	0.010
67-72-1	Hexachloroethane		0.0668	mg/L	0.002	0.010
98-95-3	Nitrobenzene		0.0984	mg/L	0.003	0.010
87-68-3	Hexachlorobutadiene		0.0831	mg/L	0.002	0.010
88-06-2	2,4,6-Trichlorophenol		0.0946	mg/L	0.002	0.010
95-95-4	2,4,5-Trichlorophenol		0.0913	mg/L	0.002	0.010
118-74-1	Hexachlorobenzene		0.104	mg/L	0.002	0.010

GEL Laboratories LLC

Data file : /chem/MSD5.i/s121209.b/s511218.d
Lab Smp Id: 1201993740 Client Smp ID: WST03-10-2134MSD
Inj Date : 12-DEC-2009 15:30
Operator : RMB Inst ID: MSD5.i
Smp Info : |1201993740|932028|1|SVMF|1|LANL39001MSD
Misc Info : |MSDTCLP_L|WBN091128-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s121209.b/MSD5-M8270C-113009.m
Meth Date : 12-Dec-2009 10:12 rmb Quant Type: ISTD
Cal Date : 01-DEC-2009 14:48 Cal File: s5k3053.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-670-1.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.50000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
* 10 1,4-Dichlorobenzene-d4	152	3.772	3.776	(1.000)	369757	40.0000	
* 29 Naphthalene-d8	136	4.637	4.643	(1.000)	1215845	40.0000	
* 46 Acenaphthene-d10	164	5.889	5.895	(1.000)	768657	40.0000	
* 67 Phenanthrene-d10	188	7.042	7.046	(1.000)	1373018	40.0000	
* 91 Chrysene-d12	240	9.436	9.444	(1.000)	1344333	40.0000	
* 98 Perylene-d12	264	11.013	11.023	(1.000)	1227302	40.0000	
$ 3 2-Fluorophenol	112	2.960	2.963	(0.785)	396812	51.8218	0.052
$ 5 Phenol-d5	99	3.490	3.497	(0.925)	293744	30.9293	0.031
$ 20 Nitrobenzene-d5	82	4.137	4.142	(0.892)	361719	46.5326	0.046
$ 39 2-Fluorobiphenyl	172	5.384	5.385	(0.914)	814869	41.9637	0.042
$ 60 2,4,6-Tribromophenol	329	6.478	6.482	(1.100)	302805	106.498	0.11
$ 81 p-Terphenyl-d14	244	8.419	8.418	(0.892)	1134422	59.0067	0.059
11 1,4-Dichlorobenzene	146	3.784	3.786	(1.003)	719594	69.5954	0.070

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (mg/L)
50 2,4-Dinitrotoluene	165	6.007	6.011	(1.020)	505709	88.4809	0.088
65 Pentachlorophenol	266	6.878	6.877	(0.977)	412365	112.859	0.11
2 Pyridine	79	2.296	2.298	(0.609)	513826	85.3350	0.085
15 o-Cresol	107	3.896	3.897	(1.033)	445828	65.6692	0.066
18 m,p-Cresols	107	3.995	3.998	(1.059)	523149	60.5349	0.060
19 Hexachloroethane	117	4.113	4.118	(1.090)	255108	66.8259	0.067
21 Nitrobenzene	77	4.154	4.152	(0.896)	711888	98.3546	0.098
32 Hexachlorobutadiene	225	4.719	4.720	(1.018)	410642	83.0940	0.083
37 2,4,6-Trichlorophenol	196	5.325	5.327	(0.904)	528017	94.5843	0.094
38 2,4,5-Trichlorophenol	196	5.354	5.356	(0.909)	532494	91.2814	0.091
63 Hexachlorobenzene	284	6.725	6.728	(0.955)	683197	103.714	0.10

Data File: /chem/MSD5.i/s121209.b/s511218.d
Date : 12-DEC-2009 15:30
Client ID: WST03-10-2134MSD
Sample Info: |120199374019320281|1|SVMF|1|LANL39001MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

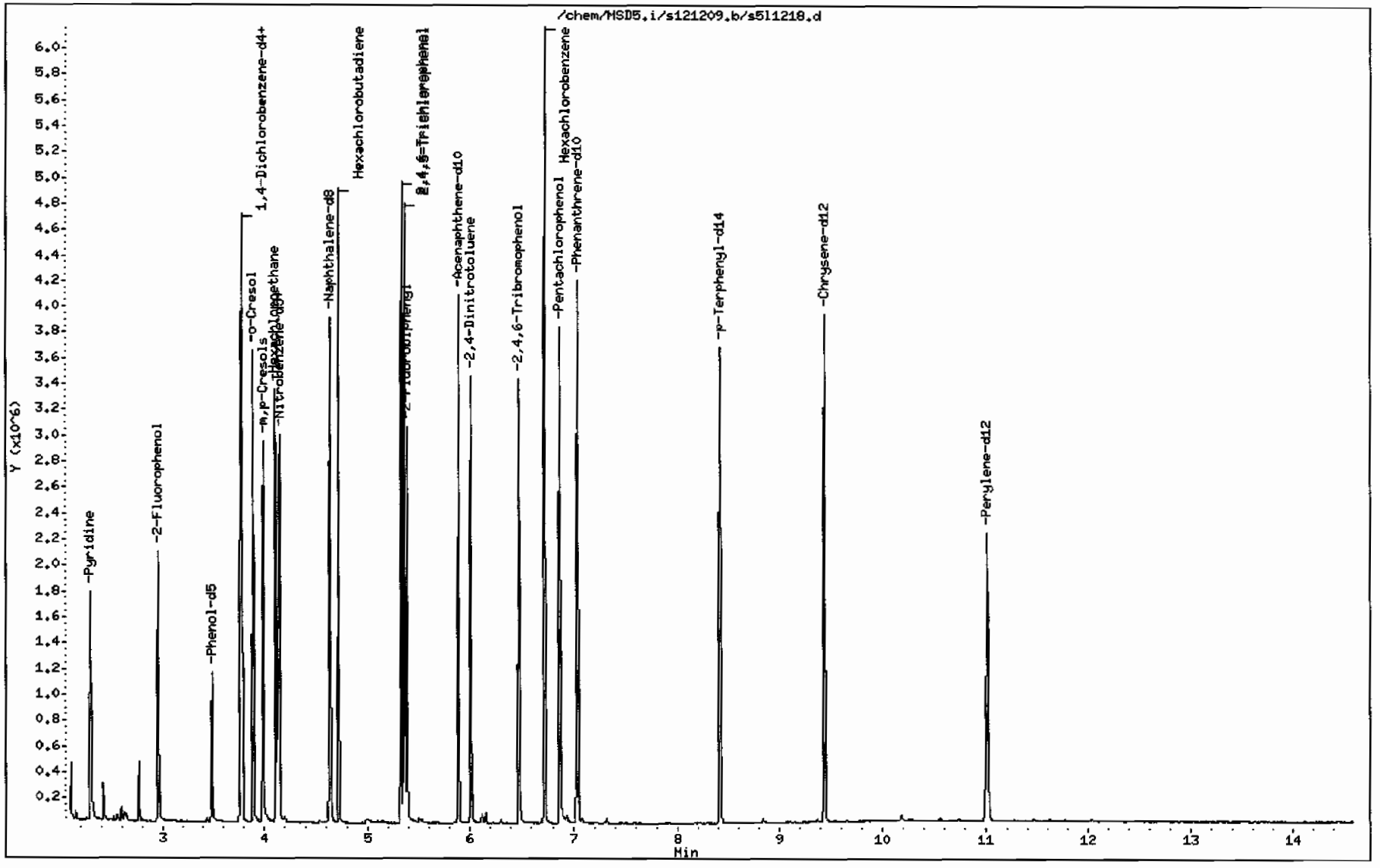

Miscellaneous Data

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930033 **Verified by:** _____
Analyst: Monifa Morant-Basdeo
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler # 101

Sample ID	1201988990 TB	241839001
Analysis Start Date	07-DEC-2009 15:00:00	07-DEC-2009 15:00:00
100% Solid Y/N		Y
(I) Sub Sample Aliquot I=G-H (g)		100
Initial pH (su)	4.98	8.74
pH Temperature (celsius)		50
Filtrate pH (su)	4.98	6
Final pH (su)	4.98	1.85
Tumbler Speed	28	28
Sample Properties <>/= Water	tclp#1	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000
Filtrate Volume (mL)	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:22
Filtration End Date: 08-DEC-09 13:30:22
Bottle Lot Number: h929301db
Filter Lot Number: 9125016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 932027 **Verified by:** _____

Analyst: Sequan Smalls

Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 21

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Sec Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201988990 TB	11-DEC-2009 21:42:39	200	5	1	13	1	0.005
1201991315 TB	11-DEC-2009 21:42:39	1000	5	1	13	1	0.001
1201993737 MB	11-DEC-2009 21:42:39	1000	5	1	13	1	0.001
1201993738 LCS	11-DEC-2009 21:42:39	1000	5	1	13	1	0.001
241839001	11-DEC-2009 21:42:39	1000	5	1	13	1	0.001
1201993739 MS (241839001)	11-DEC-2009 21:42:39	1000	5	1	13	1	0.001
1201993740 MSD (241839001)	11-DEC-2009 21:42:39	1000	5	1	13	1	0.001
242326001	11-DEC-2009 21:42:39	1000	5	1	13	1	0.001

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201993738	8270 TCLP Spiking Solution	UE091121-16	1	mL
MS	1201993739	8270 TCLP Spiking Solution	UE091121-16	1	mL
MSD	1201993740	8270 TCLP Spiking Solution	UE091121-16	1	mL
SURR	All	BNA for all Surrogate	UE091130-10	1	mL
REGNT	All	Sulfuric Acid Sol., 1:1	1236751	2	mL
REGNT	All	Methylene Chloride	1238037-D	360	mL
REGNT	All	10 N Sodium Hydroxide Solution	1240840	10	mL
SOURC	All	SODIUM SULFATE	1237406	30	g

Comments:

Verified By: TRA

Final Solvent: CH2CL2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 12/12/2009 METHOD:8270C MSD5-DFTPP8270D.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091128-01 Internal Std ID: WBN091208-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s121209.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s511201-D.d	WBN091128-01	rmb	12-DEC-2009 08:53	50PPM	s121209	1.0	DFTPP	
s511201.d	WBN091128-01	rmb	12-DEC-2009 08:53	50PPM	s121209	1.0	DFTPP	
s511202.d	WBN091106-05.3	RMB	12-DEC-2009 09:07	40 PPM	s121209	1.0	MEGACVS	DUSE - fail
s511203.d	WBN091201-03.4	RMB	12-DEC-2009 09:34	40 PPM	s121209	1.0	AP12CVS	
s511204-D.d	WBN091106-05.3	RMB	12-DEC-2009 09:57	40 PPM	EUI-7410	1.0	MEGACVS	355607
s511204.d	WBN091106-05.3	RMB	12-DEC-2009 09:57	40 PPM	s121209	1.0	MEGACVS	355607
s511205-2.d	1201992628	RMB	12-DEC-2009 10:37	931535	MWR09-020	1.0	SBLK01	
s511205.d	1201992628	RMB	12-DEC-2009 10:37	931535	MWR09-022	1.0	SBLK01	
s511206-2.d	1201992629	RMB	12-DEC-2009 11:00	931535	MWR09-020	1.0	SBLK01LCS	
s511206.d	1201992629	RMB	12-DEC-2009 11:00	931535	MWR09-022	1.0	SBLK01LCS	
s511207-2.d	1201992630	RMB	12-DEC-2009 11:22	931535	MWR09-020	1.0	SBLK01LCSD	
s511207.d	1201992630	RMB	12-DEC-2009 11:22	931535	MWR09-022	1.0	SBLK01LCSD	
s511208.d	1201988990	RMB	12-DEC-2009 11:45	932028	10-670-1	1.0	TCLPBLANK	
s511209.d	1201991315	RMB	12-DEC-2009 12:07	932028	10-813-1	1.0	TCLPBLANK	
s511210-2.d	1201993737	RMB	12-DEC-2009 12:30	932028	10-813-1	1.0	SBLK01	
s511210.d	1201993737	RMB	12-DEC-2009 12:30	932028	10-670-1	1.0	SBLK01	
s511211-2.d	1201993738	RMB	12-DEC-2009 12:52	932028	10-813-1	1.0	SBLK01LCS	
s511211.d	1201993738	RMB	12-DEC-2009 12:52	932028	10-670-1	1.0	SBLK01LCS	
s511212.d	1201992597	RMB	12-DEC-2009 13:15	931531	EUI-7410	1.0	SBLK01	Fail SS - waste oil

s511213.d	1201992598	RMB	12-DEC-2009 13:37	931531	EUI-7410	1.0	SBLK01LCS	Fail SS/spike - waste oil
s511214.d	1201992627	RMB	12-DEC-2009 14:00	931531	EUI-7410	1.0	SBLK01LCSD	Fail SS/spike - waste oil
s511215.d	242305006	RMB	12-DEC-2009 14:22	930728	10-786	2.0	LANL	
s511216.d	241839001	RMB	12-DEC-2009 14:45	932028	10-670-1	1.0	LANL	
s511217.d	1201993739	RMB	12-DEC-2009 15:08	932028	10-670-1	1.0	LANL39001MS	
s511218.d	1201993740	RMB	12-DEC-2009 15:30	932028	10-670-1	1.0	LANL39001MSD	
s511219.d	242326001	RMB	12-DEC-2009 15:53	932028	10-813-1	1.0	LANL	
s511220.d	242442001	RMB	12-DEC-2009 16:16	931535	MWR09-022	1.0	PAES	DUSE - use as screen
s511221.d	242442004	RMB	12-DEC-2009 16:38	931535	MWR09-022	1.0	PAES	DUSE - use as screen
s511222.d	242444002	RMB	12-DEC-2009 17:01	931535	MWR09-020	10.0	PAES	Fail IS - rr
s511223.d	242030001	RMB	12-DEC-2009 17:24	931531	EUI-7410	100.0	CARE	SS diluted out

Instrument Batch: /chem/MSD5.i/s121209.b

Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD5

DATE: 11/30/2009 METHOD:8270C MSD5-DFTPP8270D.m OPERATOR:rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1202440-D
Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN091101-01 Internal Std ID: WBN091117-01
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 22 Sequence Number: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3001-D.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3001.d	WBN091101-01	rmb	30-NOV-2009 07:57	50PPM	s113009	1.0	DFTPP	DUSE
s5k3002.d	instrument blank	RMB	30-NOV-2009 08:11		s113009	1.0		DUSE
s5k3003.d	WBN091106-08	RMB	30-NOV-2009 08:34	1 PPM	s113009	1.0	MEGAICAL001	DUSE
s5k3004.d	WBN091106-07	RMB	30-NOV-2009 09:02	10 PPM	s113009	1.0	MEGAICAL010	DUSE
s5k3005.d	WBN091106-06	RMB	30-NOV-2009 09:30	20 PPM	s113009	1.0	MEGAICAL020	DUSE
s5k3006.d	WBN091106-05.1	RMB	30-NOV-2009 09:58	40 PPM	s113009	1.0	MEGAICAL040	DUSE
s5k3007.d	WBN091106-04	RMB	30-NOV-2009 10:27	50 PPM	s113009	1.0	MEGAICAL050	DUSE
s5k3008.d	WBN091106-03	RMB	30-NOV-2009 10:55	80 PPM	s113009	1.0	MEGAICAL080	DUSE
s5k3009.d	WBN091106-02	RMB	30-NOV-2009 11:24	100 PPM	s113009	1.0	MEGAICAL100	DUSE
s5k3010.d	WBN091106-01	RMB	30-NOV-2009 12:23	120 PPM	s113009	1.0	MEGAICAL120	DUSE
s5k3011.d	instrument blank	RMB	30-NOV-2009 12:51		s113009	1.0		DUSE
s5k3012-D.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3012.d	WBN091101-01	rmb	30-NOV-2009 13:32	50PPM	s113009	1.0	DFTPP	
s5k3013.d	instrument blank	RMB	30-NOV-2009 13:46		s113009	1.0		
s5k3014-TEST.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3014.d	WBN091106-08	RMB	30-NOV-2009 14:09	1 PPM	s113009	1.0	MEGAICAL001	
s5k3015-TEST.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	
s5k3015.d	WBN091106-07	RMB	30-NOV-2009 14:38	10 PPM	s113009	1.0	MEGAICAL010	

s5k3016.d	WBN091106-06	RMB	30-NOV-2009 15:06	20 PPM	s113009	1.0	MEGAICAL020	
s5k3017.d	WBN091106-05.1	RMB	30-NOV-2009 15:34	40 PPM	s113009	1.0	MEGAICAL040	
s5k3018.d	WBN091106-04	RMB	30-NOV-2009 16:02	50 PPM	s113009	1.0	MEGAICAL050	
s5k3019.d	WBN091106-03	RMB	30-NOV-2009 16:31	80 PPM	s113009	1.0	MEGAICAL080	
s5k3020.d	WBN091106-02	RMB	30-NOV-2009 16:59	100 PPM	s113009	1.0	MEGAICAL100	
s5k3021.d	WBN091106-01	RMB	30-NOV-2009 17:28	120 PPM	s113009	1.0	MEGAICAL120	
s5k3022.d	instrument blank	RMB	30-NOV-2009 17:56		s113009	1.0		
s5k3023-625.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - 625 - 113009
s5k3023-8270D.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - 8270D - 113009
s5k3023-BOE.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - BOE - 113009
s5k3023.d	WBN091106-09.3	RMB	30-NOV-2009 18:20	40 PPM	s113009	1.0	MEGAICV	MEGAICV - 8270C - 113009
s5k3024-TEST.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009	1.0	AP12ICAL010	
s5k3024.d	WBN091111-01	RMB	30-NOV-2009 18:48	10 PPM	s113009	1.0	AP12ICAL010	
s5k3025.d	WBN091111-02	RMB	30-NOV-2009 19:10	20 PPM	s113009	1.0	AP12ICAL020	
s5k3026.d	WBN091111-03.3	RMB	30-NOV-2009 19:34	40 PPM	s113009	1.0	AP12ICAL040	
s5k3027.d	WBN091111-04	RMB	30-NOV-2009 19:57	50 PPM	s113009	1.0	AP12ICAL050	
s5k3028.d	WBN091111-05	RMB	30-NOV-2009 20:20	80 PPM	s113009	1.0	AP12ICAL080	
s5k3029.d	WBN091111-06	RMB	30-NOV-2009 20:42	100 PPM	s113009	1.0	AP12ICAL100	
s5k3030.d	WBN091111-07	RMB	30-NOV-2009 21:05	120 PPM	s113009	1.0	AP12ICAL120	
s5k3031-TEST.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009	1.0	NEVADAICAL010	
s5k3031.d	UBN091117-01	RMB	30-NOV-2009 21:28	10 PPM	s113009	1.0	NEVADAICAL010	
s5k3032.d	UBN091117-02	RMB	30-NOV-2009 21:51	20 PPM	s113009	1.0	NEVADAICAL020	

Instrument Batch: /chem/MSD5.i/s113009.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3033.d	UBN091117-03	RMB	30-NOV-2009 22:14	40 PPM	s113009	1.0	NEVADAICAL040	
s5k3034.d	UBN091117-04	RMB	30-NOV-2009 22:38	50 PPM	s113009	1.0	NEVADAICAL050	
s5k3035.d	UBN091117-05	RMB	30-NOV-2009 23:01	80 PPM	s113009	1.0	NEVADAICAL080	

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5k3036.d	UBN091117-06	RMB	30-NOV-2009 23:23	100 PPM	s113009	1.0	NEVADAICAL100	
s5k3037.d	UBN091117-07	RMB	30-NOV-2009 23:46	120 PPM	s113009	1.0	NEVADAICAL120	
s5k3038-625.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009	1.0	AP12ICV	AP12ICV - 625 - 113009
s5k3038-8270D.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009	1.0	AP12ICV	AP12ICV - 8270D - 113009
s5k3038.d	WBN091111-08.1	RMB	01-DEC-2009 00:10	50 PPM	s113009	1.0	AP12ICV	AP12ICV - 8270C - 113009
s5k3039-D.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009	1.0	DFTPP	
s5k3039.d	WBN091101-01	rmb	01-DEC-2009 09:39	50PPM	s113009	1.0	DFTPP	
s5k3040.d	instrument blank	RMB	01-DEC-2009 09:52		s113009	1.0		
s5k3041.d	WBN091029-25	RMB	01-DEC-2009 10:15	10 PPM	s113009	1.0	PESTICAL010	
s5k3042.d	WBN091029-24	RMB	01-DEC-2009 10:38	20 PPM	s113009	1.0	PESTICAL020	
s5k3043.d	WBN091029-23.1	RMB	01-DEC-2009 11:00	40 PPM	s113009	1.0	PESTICAL040	
s5k3044.d	WBN091029-22	RMB	01-DEC-2009 11:23	50 PPM	s113009	1.0	PESTICAL050	
s5k3045.d	WBN091029-21	RMB	01-DEC-2009 11:46	80 PPM	s113009	1.0	PESTICAL080	
s5k3046.d	WBN091029-20	RMB	01-DEC-2009 12:09	100 PPM	s113009	1.0	PESTICAL100	
s5k3047.d	WBN091029-19	RMB	01-DEC-2009 12:32	120 PPM	s113009	1.0	PESTICAL120	
s5k3048-TEST.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009	1.0	HEXICAL500	
s5k3048.d	WBN091016-16	RMB	01-DEC-2009 12:54	500 PPM	s113009	1.0	HEXICAL500	
s5k3049.d	WBN091016-15	RMB	01-DEC-2009 13:18	1000 PPM	s113009	1.0	HEXICAL1000	
s5k3050.d	WBN091016-14	RMB	01-DEC-2009 13:41	1250 PPM	s113009	1.0	HEXICAL1250	
s5k3051.d	WBN091016-13	RMB	01-DEC-2009 14:03	1500 PPM	s113009	1.0	HEXICAL1500	
s5k3052.d	WBN091016-12	RMB	01-DEC-2009 14:25	1750 PPM	s113009	1.0	HEXICAL1750	
s5k3053.d	UBN090828-02	RMB	01-DEC-2009 14:48	2000 PPM	s113009	1.0	HEXICAL2000	
s5k3054-625.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009	1.0	PESTICV	PESTICV - 625 - 113009
s5k3054-8270D.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009	1.0	PESTICV	PESTICV - 8270D - 113009
s5k3054.d	WBN091029-26.1	RMB	01-DEC-2009 15:11	40 PPM	s113009	1.0	PESTICV	PESTICV - 8270C - 113009
s5k3055-625.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 625 - 113009

s5k3055-8270D.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 8270D - 113009
s5k3055.d	WBN090827-10.4	RMB	01-DEC-2009 15:34	1250 PPM	s113009	1.0	HEXICV	HEXICV - 8270C - 11300

Instrument Batch: /chem/MSD5.i/s113009.b

GC SEMIVOLATILE DRO ANALYSIS

FID Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure:	**Analysis of Non-Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector**
Analytical Method:	SW846 8015A/B SVOC
Prep Method:	SW846 3550B
Analytical Batch Number:	927990
Prep Batch Number:	927989

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8015A/B SVOC:

Sample ID	Client ID
241838002	WST03-10-2134
1201984266	Method Blank (MB)
1201984267	Laboratory Control Sample (LCS)
1201984268	241911001(WST49-10-5432) Matrix Spike (MS)
1201984269	241911001(WST49-10-5432) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-003 REV# 17.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix from another SDG (10-694) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery was within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The GC-FID analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
FID5.I	Agilent Gas Chromatograph	Agilent 6890N GC/FID	DB-5MS	30m x 0.25mm, 0.25um(J&W)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock **Date:** 12-14-2009

Roadmap for LANL 10-670 DRO

This roadmap was analyzed by kev01577 on 12-04-2009, 13:11.
This roadmap was reviewed by jcb on 12-07-2009, 10:54.
This roadmap was packaged by jim01140 on 12-11-2009, 15:05.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/120209dr/012f1201.d	241838002	02-DEC-2009	22:29	10-670.sub	WST03-10-2134	1.00000	927990	USE

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/fid5.i/120209dr/006f0601a.d	1201984266	mb	02-DEC-2009	18:38	10-670.sub	DBLK01	1.00000	927990	
☐	N	/chem/fid5.i/120209dr/007f0701a.d	1201984267	lcs	02-DEC-2009	19:17	10-670.sub	DBLK01LCS	1.00000	927990	

SAMPLE DATA SUMMARY

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 22:29	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.64	mg/kg	2.31	7.11

QUALITY CONTROL SUMMARY

Flame Ionization Detector

Surrogate Recovery Report

SDG Number: 10–670

Matrix Type: SOLID

CAP Column (1) : DB–5MS

Sample ID	Client ID	OTP %REC
1201984266	MB for batch 927989	59
1201984267	LCS for batch 927989	75
241838002	WST03–10–2134	59

Surrogate	Acceptance Limits
OTP = o–Terphenyl	(24%–124%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number: 10-670 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 927989 **Matrix:** SOIL

Lab Sample ID: 1201984267

Instrument: FID5.I **Analysis Date:** 12/02/2009 19:17 **Dilution:** 1

Analyst: KXR2 **Prep Batch ID** 927989

Inj. Vol: 1 uL **Batch ID:** 927990

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg	Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	LCS	Diesel Range Organics	33.3	0.0	26.1	78	53-114

Flame Ionization Detector

Quality Control Summary

Spike Recovery Report

SDG Number:	**10–694**	**Sample Type:**	**Matrix Spike**
Client ID:	**WST49–10–5432MS**	**Matrix:**	**S**
Lab Sample ID:	**1201984268**	**%Moisture:**	**1.5**
Instrument:	**FID5.I**	**Analysis Date:**	**12/03/2009 02:57**
Analyst:	**KXR2**	**Prep Batch ID:**	**927989**
Inj. Vol:	**1 uL**	**Batch ID:**	**927990**

Dilution: 1

CAS No		Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits
DRO	MS	Diesel Range Organics	33.8	0.00	U	23.5	69	21–122

Flame Ionization Detector
Quality Control Summary
Spike Recovery Report

SDG Number:	**10–694**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**WST49–10–5432MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201984269**	**%Moisture:**	**1.5**
Instrument:	**FID5.I**	**Analysis Date:**	**12/03/2009 03:36**
Analyst:	**KXR2**	**Prep Batch ID:**	**927989**
Inj. Vol:	**1 uL**	**Batch ID:**	**927990**

Dilution: 1

CAS No	Parmname	Amount Added mg/kg	Sample Conc. mg/kg		Spike Conc. mg/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
DRO	MSD Diesel Range Organics	33.6	0.00	U	20.6	61	21–122	13	0–30

Method Blank Summary

SDG Number:	10-670	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927989	Instrument ID:	FID5.I	Data File:	006f0601.d
Lab Sample ID:	1201984266	Prep Date:	12/01/2009 22:46	Analyzed:	12/02/09 18:38
Column:	DB-5MS	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927989	1201984267	007f0701.d	12/02/09	1917
02 WST03-10-2134	241838002	012f1201.d	12/02/09	2229

SAMPLE DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL–OA–E–003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 22:29	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	012f1201.d	**Column:**	DB–5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	J	2.64	mg/kg	2.31	7.11

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/012f1201.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 02-DEC-2009 22:29
Operator : KXR2 Inst ID: fid5.i
Smp Info : |241838002|1|
Misc Info : |FIDDRO_S|927990|FID|LANL|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weigth of sample extracted (g)
M	6.76260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)	
S 1 Diesel Range Organics					CAS #:	
8.008- 18.916			9997587	74.2575	2.6	(a)
$ 2 o-Terphenyl					CAS #: 84-15-1	
14.139	14.145	-0.006	2495956	11.7415	0.42	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/fid5.i/120209dr/012f1201.d
Date : 02-DEC-2009 22:29
Client ID: WST03-10-2134
Sample Info: !241838002!1!
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KKR2
Column diameter: 0.25

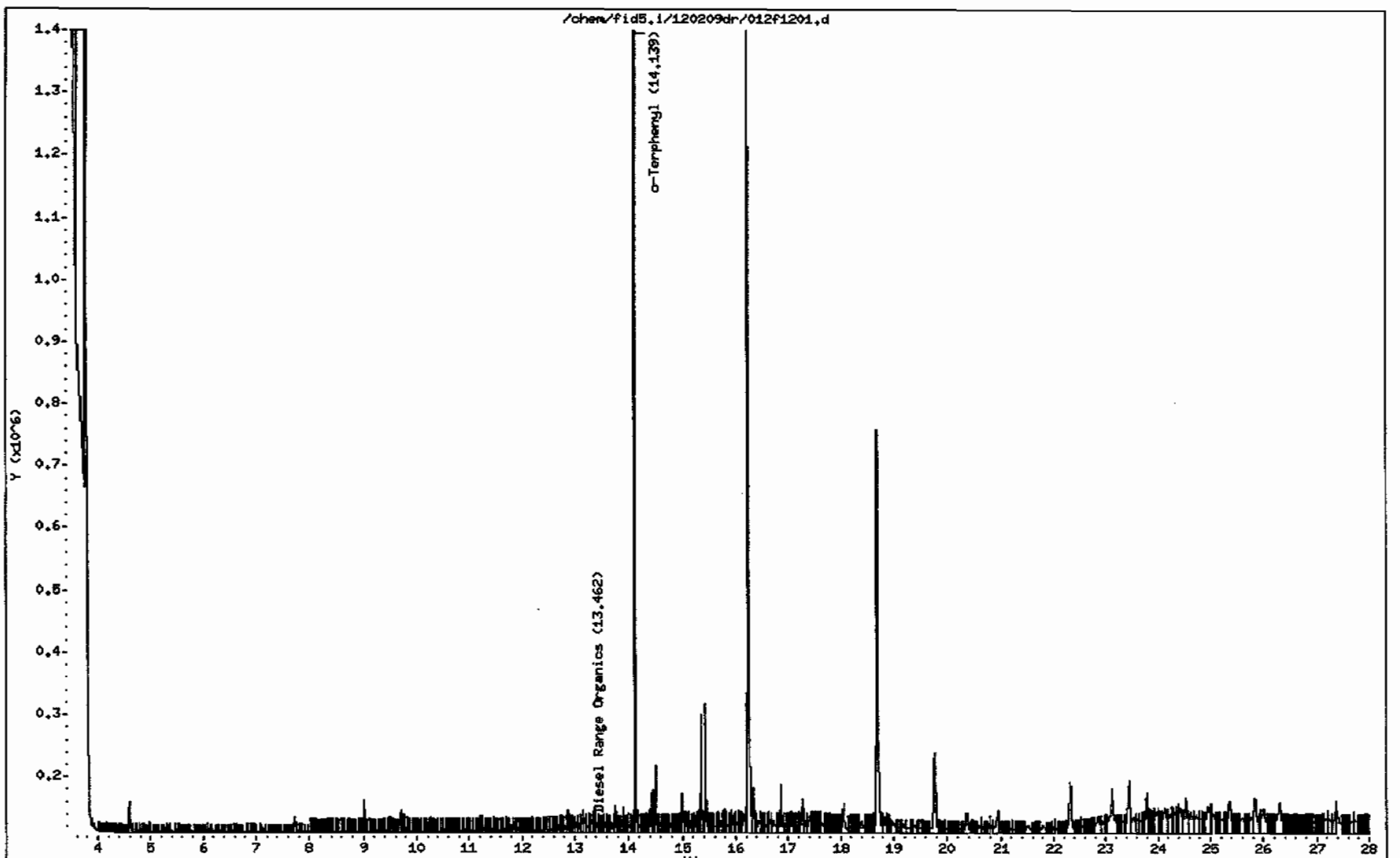

Bchm KTL 12/4/2009

Data File: /chem/fid5.i/120209dr/012f1201.d
Injection Date: 02-DEC-2009 22:29
Instrument: fid5.i
Client Sample ID: WST03-10-2134

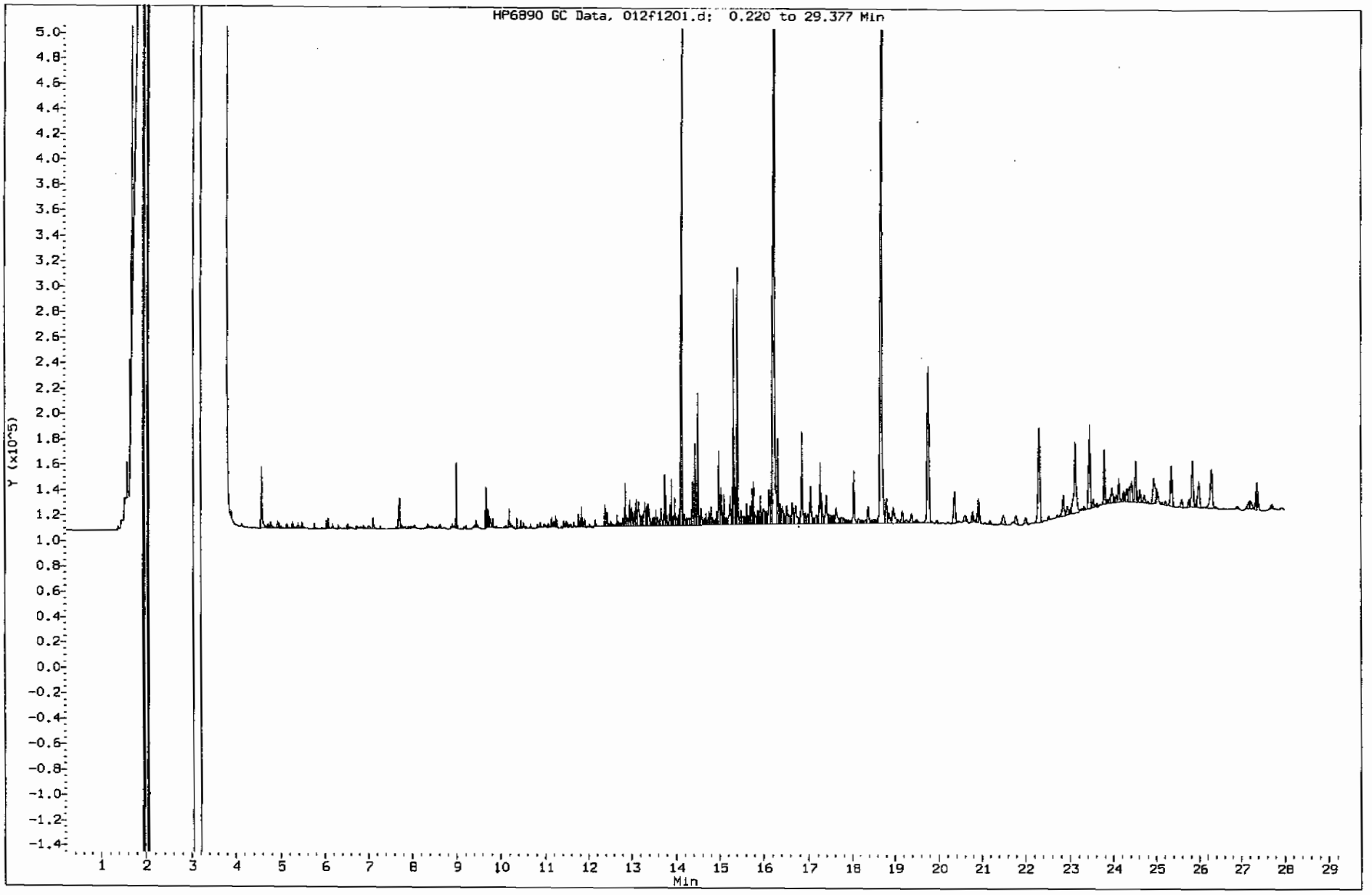

Data File: /chem/fid5.i/120209dr/012f1201.d
Injection Date: 02-DEC-2009 22:29
Instrument: fid5.i
Client Sample ID: WST03-10-2134

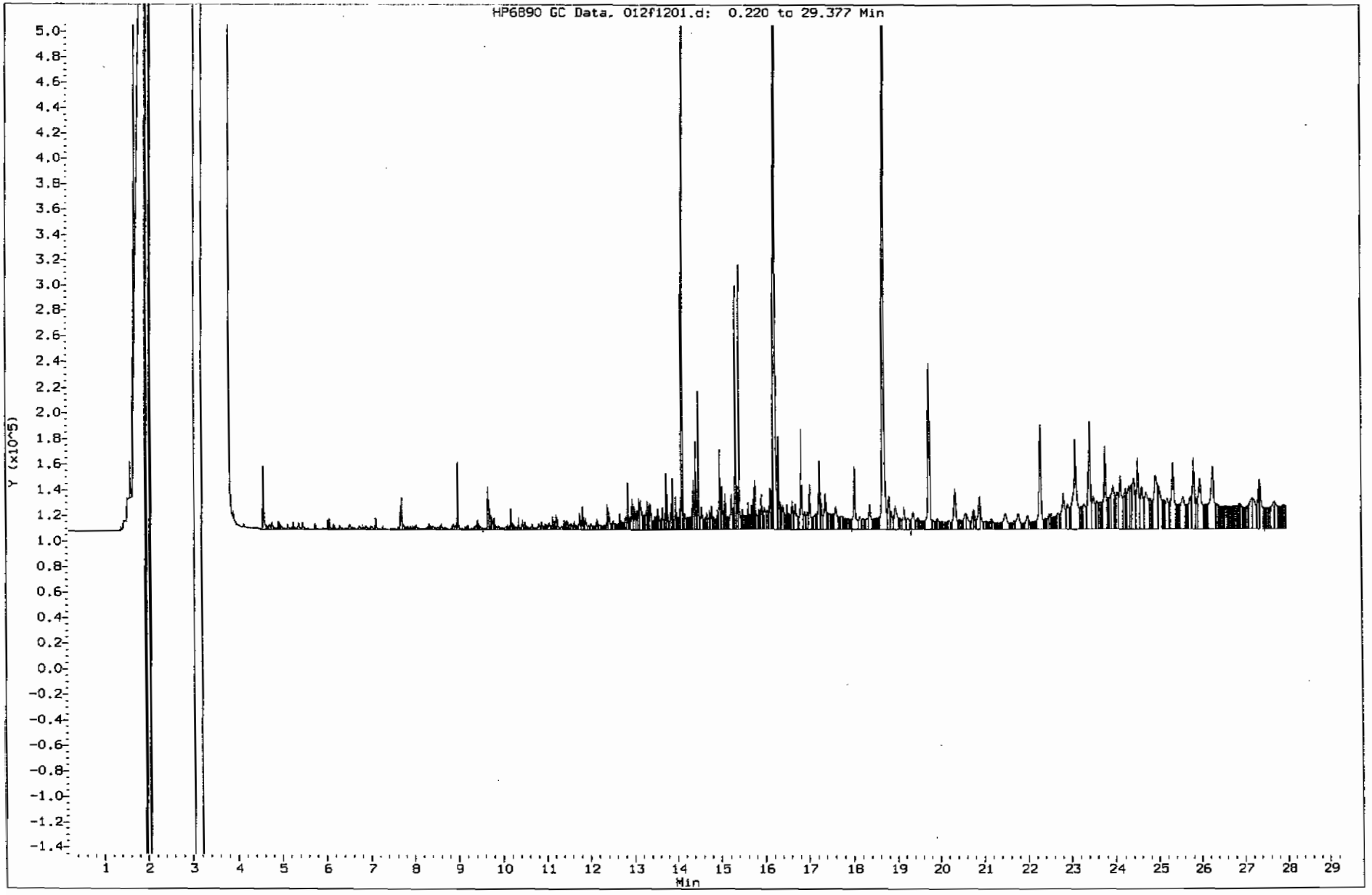

STANDARDS DATA

Report Date: 04-Dec-2009 12:29

Calibration History

Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Start Cal Date: 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 200.00000		
17-NOV-2009 13:11	dro	/chem/fid5.i/111709dr/003f0301.d
Cal Level: 4 , Cal Amount: 500.00000		
17-NOV-2009 13:48	dro	/chem/fid5.i/111709dr/004f0401.d
Cal Level: 5 , Cal Amount: 1000.00000		
17-NOV-2009 14:26	dro	/chem/fid5.i/111709dr/005f0501.d
Cal Level: 6 , Cal Amount: 2000.00000		
17-NOV-2009 15:05	dro	/chem/fid5.i/111709dr/006f0601.d
Cal Level: 7 , Cal Amount: 5000.00000		
17-NOV-2009 15:42	dro	/chem/fid5.i/111709dr/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 15:41	dro	/chem/fid5.i/120209dr/039f3901.d
Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 11:53	dro	/chem/fid5.i/120209dr/033f3301.d
Ccal Level: 5 , Ccal Amount: 1000		
03-DEC-2009 04:52	dro	/chem/fid5.i/120209dr/022f2201.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 23:07	dro	/chem/fid5.i/120209dr/013f1301.d
Ccal Level: 5 , Ccal Amount: 1000		
02-DEC-2009 16:44	dro	/chem/fid5.i/120209dr/003f0301.d

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COMPOUND LISTING

Method file : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 12:16 Number of Cpnds : 6
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1.000000
Initial:End Threshold	0.500000
Initial:Area Threshold	5.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000
7.000:Force Cluster ON	n/a
20.000:Force Cluster OFF	n/a

	Compound	RT	RT Window	RF
	3 Decane (C10)	8.032	8.002-8.062	
S	1 Diesel Range Organics	13.462	8.008-18.916	1.346e+05
$	2 o-Terphenyl	14.145	14.115-14.175	2.126e+05
	4 Octacosane (C28)	18.881	18.851-18.911	
S	75 JP-4	6.750	3.500-10.000	
S	76 Motor oil	17.000	14.000-20.000	

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INITIAL CALIBRATION DATA

Start Cal Date : 17-NOV-2009 13:11
End Cal Date : 17-NOV-2009 15:42
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Cal Date : 04-Dec-2009 12:16 kev01577
Curve Type : Average

Calibration File Names:
Level 3: /chem/fid5.i/111709dr/003f0301.d
Level 4: /chem/fid5.i/111709dr/004f0401.d
Level 5: /chem/fid5.i/111709dr/005f0501.d
Level 6: /chem/fid5.i/111709dr/006f0601.d
Level 7: /chem/fid5.i/111709dr/007f0701.d

	Compound	200.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	5000.000 Level 7	RRF	% RSD
	3 Decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	1 Diesel Range Organics	137841	132555	137002	134298	131474	134634	2.044
	4 Octacosane (C28)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	75 JP-4	+++++	+++++	+++++	+++++	+++++	+++++	+++++
S	76 Motor oil	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 o-Terphenyl	205186	210841	210169	211640	225045	212576	3.487

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: FID5 Calibration Date: 12/02/09 Time: 1644

Lab File ID: 003F0301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	129486.64	0.01	-3.8	15.0
o-Terphenyl	212576.33	188363.99	0.01	-11.4	15.0

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: FID5 Calibration Date: 12/02/09 Time: 2307

Lab File ID: 013F1301 Init. Calib. Date(s): 11/17/09 11/17/09

Init. Calib. Times: 1311 1542

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Diesel Range Organics	134634.07	131039.94	0.01	-2.7	15.0
o-Terphenyl	212576.33	190996.71	0.01	-10.2	15.0

FORM VII SV

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/003f0301.d
Lab Smp Id: UFI091118-01 D1 Client Smp ID: DSTD01
Inj Date : 02-DEC-2009 16:44
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D1
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	8.008- 18.916			129486643	1000.00		962
$	2 o-Terphenyl						CAS #: 84-15-1
	14.145	14.145	0.000	4709099	25.0000		22.2

Data File: /chem/fid5.i/120209dr/003f0301.d
Date : 02-DEC-2009 16:44
Client ID: DSTD01
Sample Info: HUFI091118-01 D1

Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

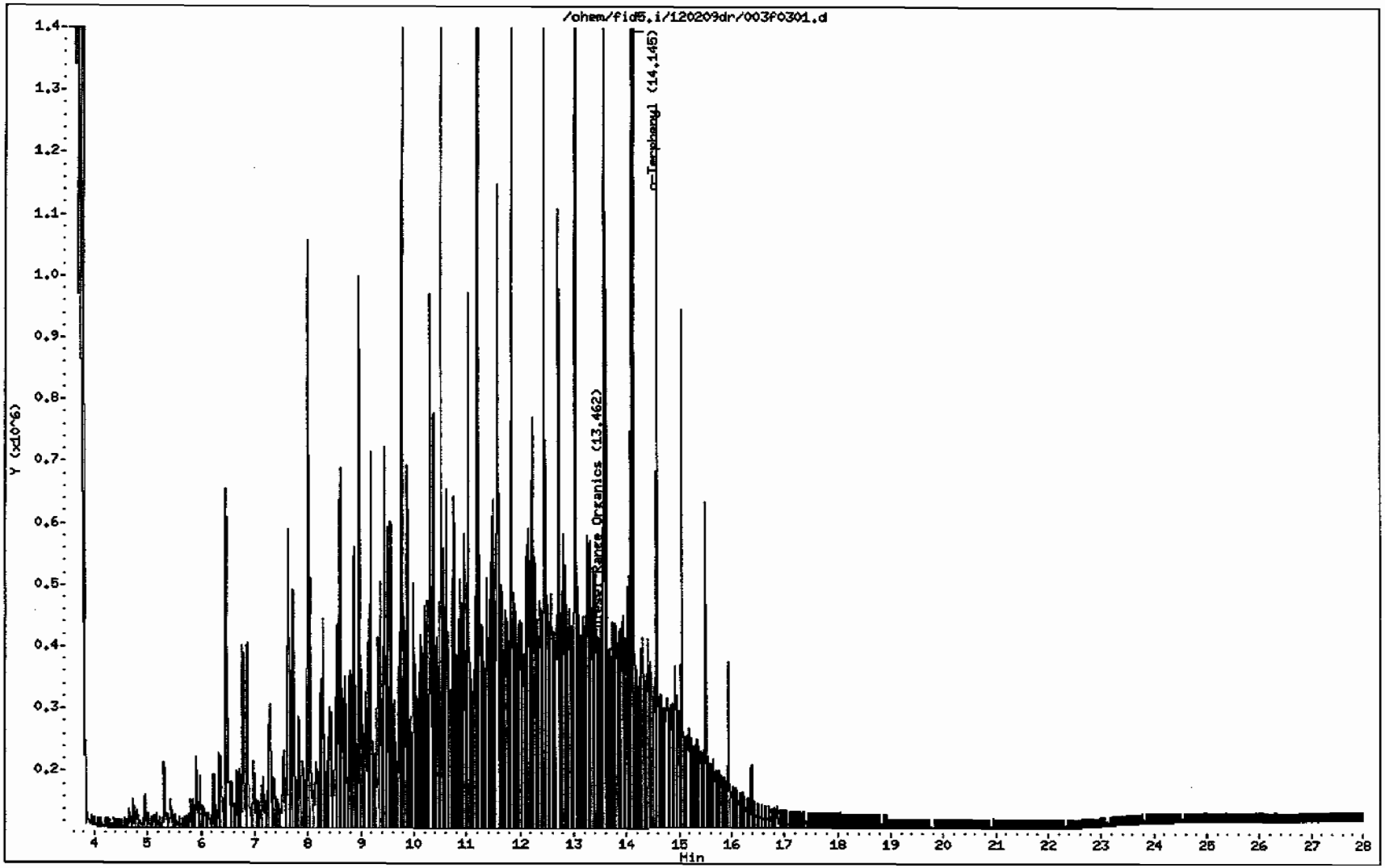

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DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/013f1301.d
Lab Smp Id: UFI091118-01 D2 Client Smp ID: DSTD02
Inj Date : 02-DEC-2009 23:07
Operator : KXR2 Inst ID: fid5.i
Smp Info : |UFI091118-01 D2
Misc Info :
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dro.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	
S	1 Diesel Range Organics						CAS #:
	8.008- 18.916			131039936	1000.00		973
$	2 o-Terphenyl						CAS #: 84-15-1
	14.144	14.145	-0.001	4774917	25.0000		22.5

Data File: /chem/fid5.i/120209dr/013f1301.d
Date : 02-DEC-2009 23:07
Client ID: DSTD02
Sample Info: 1UFI091118-01 D2

Column phase: DB-5MS

Page 1

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

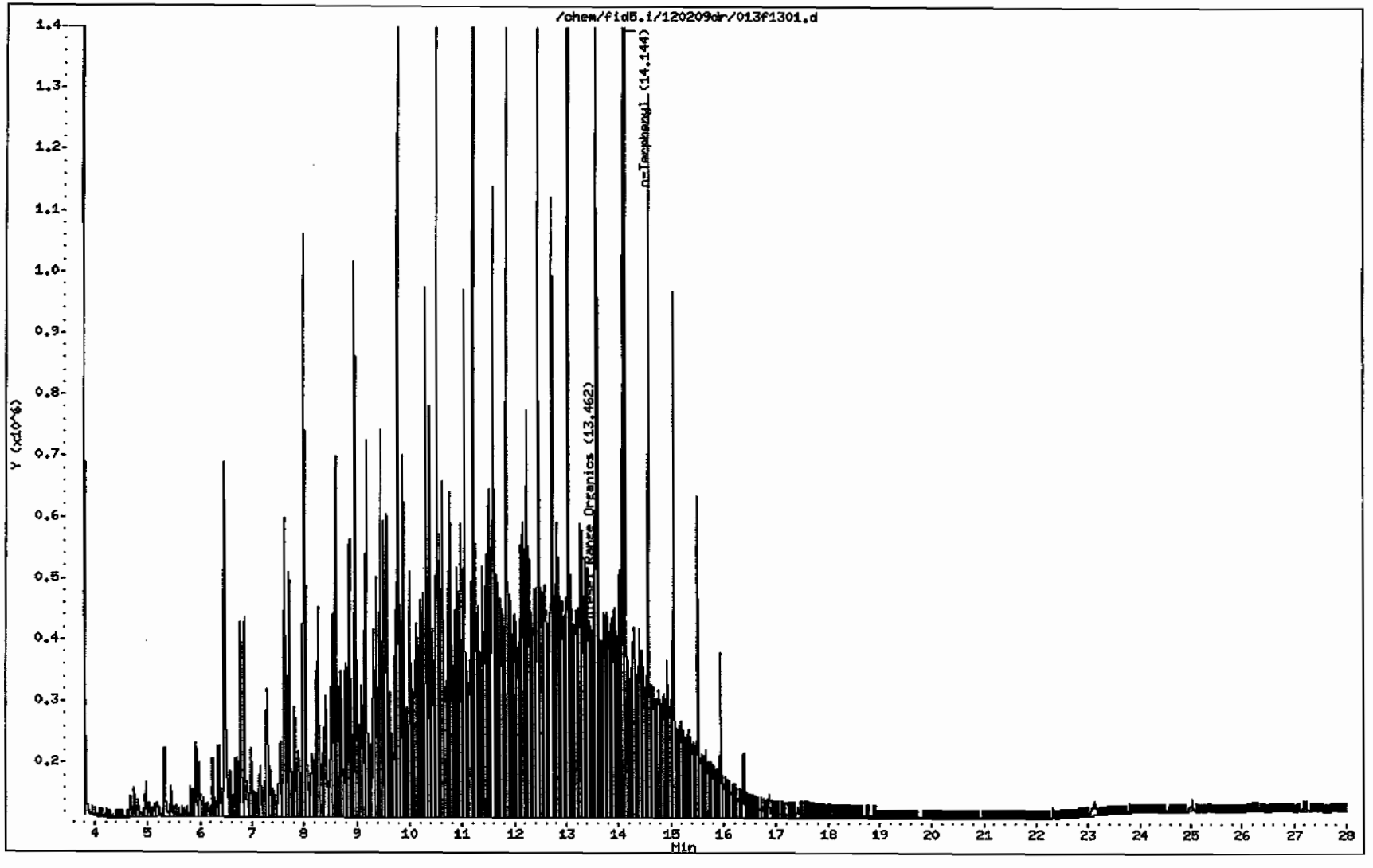

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI090723-06	11/17/09	1155	14.14	
02	RTMARKER	UFI091013-03	11/17/09	1232		
03	CSTD01	UFI090827-10	11/17/09	1311	14.14	
04	CSTD02	UFI090827-11	11/17/09	1348	14.14	
05	CSTD03	UFI090827-12	11/17/09	1426	14.15	
06	CSTD04	UFI090827-13	11/17/09	1505	14.16	
07	CSTD05	UFI090827-14	11/17/09	1542	14.17	
08	DSTD01	UFI090911-02	11/17/09	1620	14.15	
09	DIBLK02	WFI090723-06	11/17/09	1657	14.14	
10	ZZZZZ	ZZZZZ	11/17/09	1735	14.14	
11	ZZZZZ	ZZZZZ	11/17/09	1813	14.14	
12	ZZZZZ	ZZZZZ	11/17/09	1851	14.15	
13	ZZZZZ	ZZZZZ	11/17/09	1929	14.15	
14	ZZZZZ	ZZZZZ	11/17/09	2007	14.15	
15	DSTD02	UFI090911-02	11/17/09	2045	14.15	
16	DIBLK03	WFI090723-06	11/17/09	2124	14.14	
17	ZZZZZ	ZZZZZ	11/17/09	2202	14.14	
18	ZZZZZ	ZZZZZ	11/17/09	2240	14.14	
19	ZZZZZ	ZZZZZ	11/17/09	2318	14.15	
20	ZZZZZ	ZZZZZ	11/17/09	2356	14.14	
21	ZZZZZ	ZZZZZ	11/18/09	0035	14.14	
22	ZZZZZ	ZZZZZ	11/18/09	0113	14.14	
23	ZZZZZ	ZZZZZ	11/18/09	0151	14.14	
24	ZZZZZ	ZZZZZ	11/18/09	0229	14.14	
25	DSTD03	UFI090911-02	11/18/09	0308	14.15	
26	DIBLK04	WFI090723-06	11/18/09	0346	14.14	
27	ZZZZZ	ZZZZZ	11/18/09	0425	14.14	
28	ZZZZZ	ZZZZZ	11/18/09	0503	14.14	
29	ZZZZZ	ZZZZZ	11/18/09	0541	14.14	
30	ZZZZZ	ZZZZZ	11/18/09	0619	14.14	
31	ZZZZZ	ZZZZZ	11/18/09	0658	14.14	
32	ZZZZZ	ZZZZZ	11/18/09	0736	14.14	

S1 = o-Terphenyl

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
DRO ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: DB-5MS ID: 0.25 (mm) Init. Calib. Date(s): 11/17/09 11/17/09

Instrument ID: FID5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 14.14

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT
01	DIBLK01	WFI091130-06	12/02/09	1528	14.14	
02	RTMARKER	UFI091013-03	12/02/09	1606		
03	DSTD01	UFI091118-01	12/02/09	1644	14.14	
04	DIBLK02	WFI091130-06	12/02/09	1722	14.14	
05	ZZZZZ	ZZZZZ	12/02/09	1800	14.14	
06	DBLK01	1201984266	12/02/09	1838	14.14	
07	DBLK01LCS	1201984267	12/02/09	1917	14.14	
08	ZZZZZ	ZZZZZ	12/02/09	1955	14.14	
09	ZZZZZ	ZZZZZ	12/02/09	2033	14.14	
10	ZZZZZ	ZZZZZ	12/02/09	2111	14.14	
11	ZZZZZ	ZZZZZ	12/02/09	2150	14.14	
12	WST03-10-2134	241838002	12/02/09	2229	14.14	
13	DSTD02	UFI091118-01	12/02/09	2307	14.14	
14	DIBLK03	WFI091130-06	12/02/09	2345	14.14	
15	ZZZZZ	ZZZZZ	12/03/09	0024	14.13	
16	ZZZZZ	ZZZZZ	12/03/09	0102	14.14	
17	ZZZZZ	ZZZZZ	12/03/09	0140	14.14	
18	ZZZZZ	ZZZZZ	12/03/09	0219	14.14	
19	ZZZZZ	ZZZZZ	12/03/09	0257	14.14	
20	ZZZZZ	ZZZZZ	12/03/09	0336	14.14	
21	ZZZZZ	ZZZZZ	12/03/09	0415	14.14	
22	DSTD03	UFI091118-01	12/03/09	0452	14.14	
23	DIBLK04	WFI091130-06	12/03/09	0531	14.14	
24	ZZZZZ	ZZZZZ	12/03/09	0609	14.14	
25	ZZZZZ	ZZZZZ	12/03/09	0648	14.14	
26	ZZZZZ	ZZZZZ	12/03/09	0727	14.14	
27	ZZZZZ	ZZZZZ	12/03/09	0805	14.16	
28	ZZZZZ	ZZZZZ	12/03/09	0843	14.14	
29	ZZZZZ	ZZZZZ	12/03/09	0921	14.14	
30	ZZZZZ	ZZZZZ	12/03/09	0959	14.14	
31	ZZZZZ	ZZZZZ	12/03/09	1037	14.14	
32	ZZZZZ	ZZZZZ	12/03/09	1115	14.14	

S1 = o-Terphenyl QC LIMITS (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

QUALITY CONTROL DATA

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10–670			Matrix:	SOIL
Lab Sample ID:	1201984266				
Client Sample:	QC for batch 927989	Client:	LANL010	Project:	QC
Client ID:	MB for batch 927989	Method:	SW846 8015A/B SVOC	SOP Ref:	GL–OA–E–003
Batch ID:	927990	Inst:	FID5.I	Dilution:	1
Run Date:	12/02/2009 18:38	Analyst:	KXR2	Inj. Vol:	1 uL
Prep Date:	12/01/2009 22:46	Aliquot:	30 g	Final Volume:	1 mL
Data File:	006f0601.d	Column:	DB–5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics	U	6.67	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/006f0601a.d
Lab Smp Id: 1201984266 Client Smp ID: DBLK01
Inj Date : 02-DEC-2009 18:38
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984266|1|
Misc Info : |FIDDRO_S|927990|FID|MB|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
$ 2 o-Terphenyl					CAS #: 84-15-1
14.140	14.145	-0.005	2497720	11.7498	0.39

Data File: /chem/fid5.i/120209dr/006f0601a.d
Date : 02-DEC-2009 18:38
Client ID: DBLK01
Sample Info: |120198426611|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

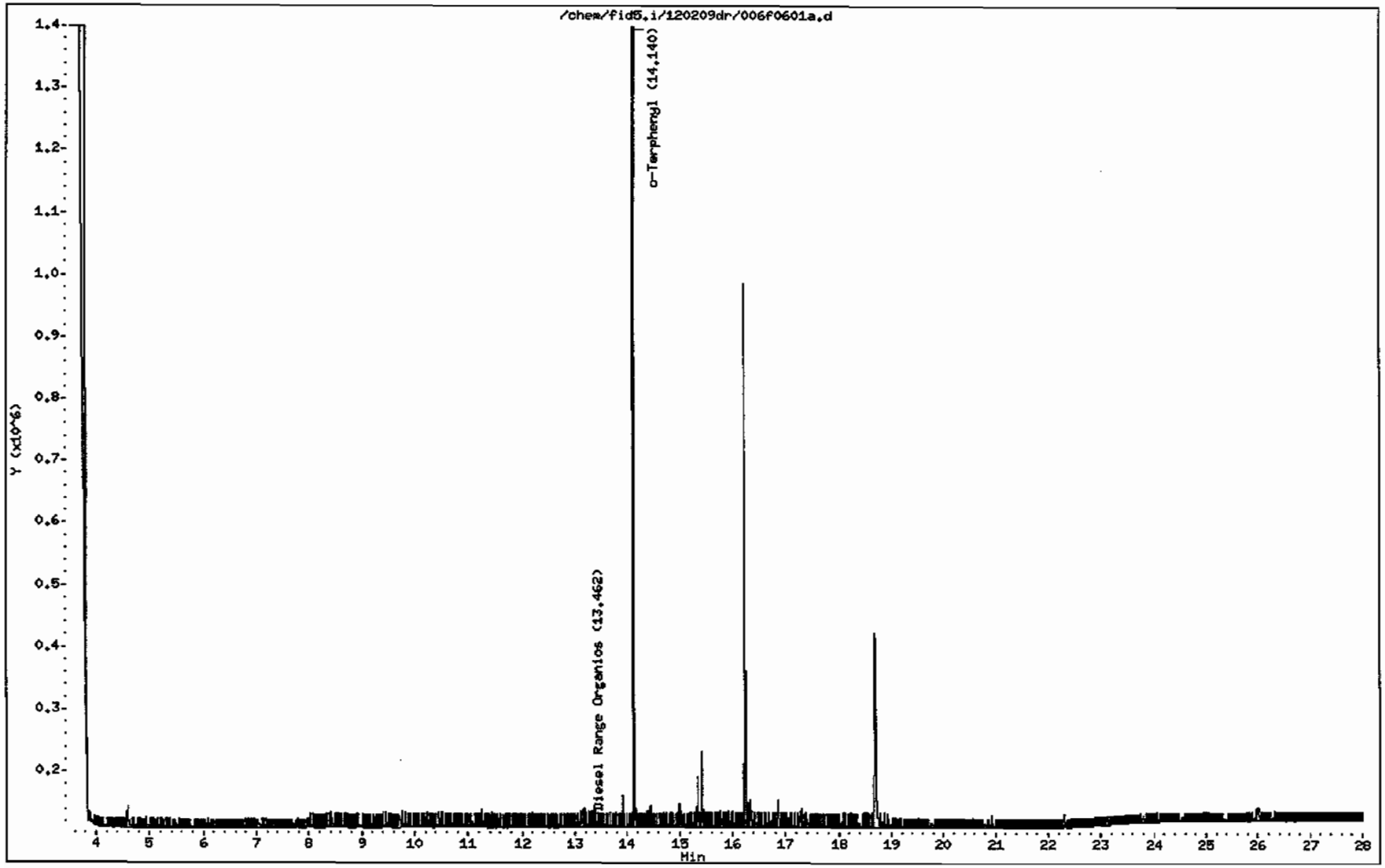

Flame Ionization Detector
Certificate of Analysis
Sample Summary

SDG Number:	10-670			**Matrix:**	SOIL
Lab Sample ID:	1201984267				
Client Sample:	QC for batch 927989	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927989	**Method:**	SW846 8015A/B SVOC	**SOP Ref:**	GL-OA-E-003
Batch ID:	927990	**Inst:**	FID5.I	**Dilution:**	1
Run Date:	12/02/2009 19:17	**Analyst:**	KXR2	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 22:46	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	007f0701.d	**Column:**	DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
DRO	Diesel Range Organics		26.1	mg/kg	2.17	6.67

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/007f0701a.d
Lab Smp Id: 1201984267 Client Smp ID: DBLK01LCS
Inj Date : 02-DEC-2009 19:17
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984267|1|
Misc Info : |FIDDRO_S|927990|FID|LCS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			105373528	782.666	26.1
$ 2 o-Terphenyl					CAS #: 84-15-1
14.142	14.145	-0.003	3197113	15.0398	0.50

Data File: /chem/fid5.i/120209dr/007f0701a.d
Date : 02-DEC-2009 19:17
Client ID: DBLK01LCS
Sample Info: |1201984267|1|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

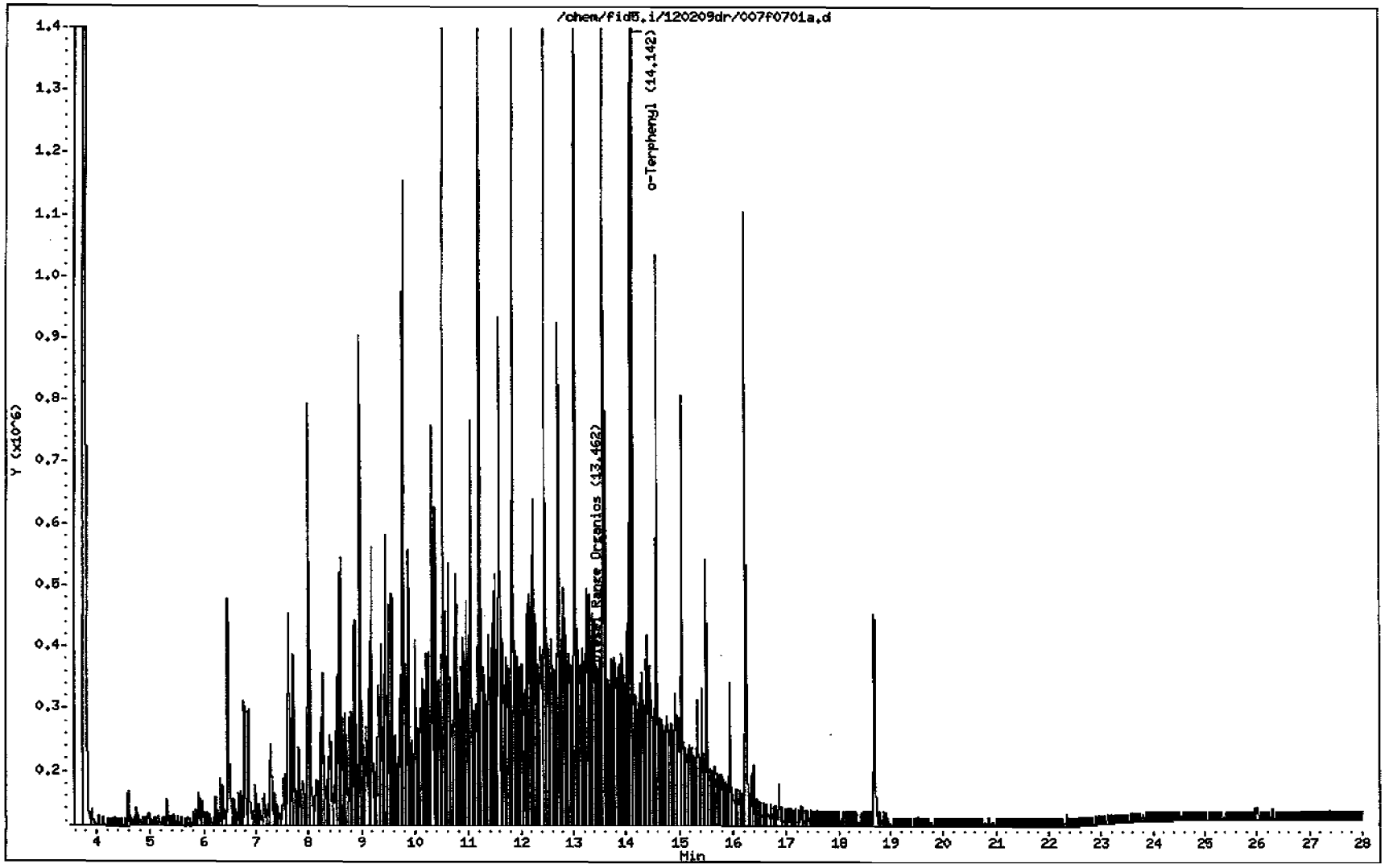

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.i

DATE: 11/19/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number:111709DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI090723-06 B1	KXR2	17-NOV-2009 11:55		SDGa26875	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	17-NOV-2009 12:32		SDGa26875	1.0		RTMARKER
003f0301.d	UFI090827-10 200	KXR2	17-NOV-2009 13:11		SDGa26875	1.0		CAL. LEVEL 1
004f0401.d	UFI090827-11 500	KXR2	17-NOV-2009 13:48		SDGa26875	1.0		CAL. LEVEL 2
005f0501.d	UFI090827-12 1000	KXR2	17-NOV-2009 14:26		SDGa26875	1.0		CAL. LEVEL 3
006f0601.d	UFI090827-13 2000	KXR2	17-NOV-2009 15:05		SDGa26875	1.0		CAL. LEVEL 4
007f0701.d	UFI090827-14 5000	KXR2	17-NOV-2009 15:42		SDGa26875	1.0		CAL. LEVEL 5
008f0801.d	UFI090911-02 D1	KXR2	17-NOV-2009 16:20		SDGa26875	1.0		PASSES
009f0901.d	WFI090723-06 B2	KXR2	17-NOV-2009 16:57		SDGa26875	1.0		CLEAN
010f1001.d	1201973642	KXR2	17-NOV-2009 17:35	923306	240978	1.0	MB	USE
011f1101.d	1201973643	KXR2	17-NOV-2009 18:13	923306	240978	1.0	LCS	USE
012f1201.d	240978001	KXR2	17-NOV-2009 18:51	923306	240978	10.0	NORH	USE,DILUTED DUE TO STRONG GASOLINE SMELL
013f1301.d	1201973644	KXR2	17-NOV-2009 19:29	923306	240978	10.0	MS	USE
014f1401.d	1201973645	KXR2	17-NOV-2009 20:07	923306	240978	10.0	MBSD	USE
015f1501.d	UFI090911-02 D2	KXR2	17-NOV-2009 20:45		SDGa26875	1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WFI090723-06 B3	KXR2	17-NOV-2009 21:24		SDGa26875	1.0		CLEAN

017f1701.d	1201971991	KXR2	17-NOV-2009 22:02	922705	10-359		1.0	MB	USE
018f1801.d	1201971992	KXR2	17-NOV-2009 22:40	922705	10-359		1.0	LCS	USE
019f1901.d	240580001	KXR2	17-NOV-2009 23:18	922705	10-359		1.0	LANL	DUSE,OVERRANGE RERUN @10X SEE FILE 74
020f2001.d	240580002	KXR2	17-NOV-2009 23:56	922705	10-359		1.0	LANL	USE
021f2101.d	240580003	KXR2	18-NOV-2009 00:35	922705	10-359		1.0	LANL	USE
022f2201.d	240580004	KXR2	18-NOV-2009 01:13	922705	10-359		1.0	LANL	USE
023f2301.d	240580005	KXR2	18-NOV-2009 01:51	922705	10-359		1.0	LANL	USE
024f2401.d	240580006	KXR2	18-NOV-2009 02:29	922705	10-359		1.0	LANL	USE
025f2501.d	UFI090911-02 D3	KXR2	18-NOV-2009 03:08		SDGa26875		1.0		PASSES
026f2601.d	WFI090723-06 B4	KXR2	18-NOV-2009 03:46		SDGa26875		1.0		CLEAN
027f2701.d	240580007	KXR2	18-NOV-2009 04:25	922705	10-359		1.0	LANL	USE
028f2801.d	240580008	KXR2	18-NOV-2009 05:03	922705	10-359		1.0	LANL	USE
029f2901.d	240580009	KXR2	18-NOV-2009 05:41	922705	10-359		1.0	LANL	USE
030f3001.d	240580010	KXR2	18-NOV-2009 06:19	922705	10-359		1.0	LANL	USE
031f3101.d	240580011	KXR2	18-NOV-2009 06:58	922705	10-359		1.0	LANL	USE
032f3201.d	240580012	KXR2	18-NOV-2009 07:36	922705	10-359		1.0	LANL	USE
033f3301.d	240580013	KXR2	18-NOV-2009 08:14	922705	10-359		1.0	LANL	DUSE,RE-EXTRACT SURROGATE FAILS LOW
034f3401.d	240580014	KXR2	18-NOV-2009 08:51	922705	10-359		1.0	LANL	DUSE,RE-EXTRACT SURROGATE FAILS LOW
035f3501.d	UFI090911-02 D4	KXR2	18-NOV-2009 09:29		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WFI090723-06 B5	KXR2	18-NOV-2009 10:08		SDGa26875	1.0		CLEAN
037f3701.d	240580015	KXR2	18-NOV-2009 10:46	922705	10-359	1.0	LANL	USE
038f3801.d	240580016	KXR2	18-NOV-2009 11:24	922705	10-359	1.0	LANL	USE
039f3901.d	240580017	KXR2	18-NOV-2009 12:01	922705	10-359	1.0	LANL	USE
040f4001.d	240580018	KXR2	18-NOV-2009 12:39	922705	10-359	1.0	LANL	USE
041f4101.d	240738002	KXR2	18-NOV-2009 13:18	922705	10-406	1.0	LANL	USE

042f4201.d	1201971993	KXR2	18-NOV-2009 13:55	922705	10-406		1.0	MS	USE
043f4301.d	1201971994	KXR2	18-NOV-2009 14:33	922705	10-406		1.0	MSD	USE
044f4401.d	UFI090911-02 D5	KXR2	18-NOV-2009 15:10		SDGa26875		1.0		PASSES
045f4501.d	WFI090723-06 B6	KXR2	18-NOV-2009 15:48		SDGa26875		1.0		CLEAN
046f4601.d	WE091118-04	KXR2	18-NOV-2009 16:26		SDGa26875		1.0		SURROGATE SCREEN
047f4701.d	1201973650	KXR2	18-NOV-2009 17:04	923310	10-385		1.0	MB	USE
048f4801.d	1201973651	KXR2	18-NOV-2009 17:42	923310	10-385		1.0	LCS	USE
049f4901.d	240630001	KXR2	18-NOV-2009 18:20	923310	10-385		1.0	LANL	USE
050f5001.d	240630002	KXR2	18-NOV-2009 18:59	923310	10-385		1.0	LANL	USE
051f5101.d	240630003	KXR2	18-NOV-2009 19:37	923310	10-385		1.0	LANL	USE
052f5201.d	240630004	KXR2	18-NOV-2009 20:15	923310	10-385		1.0	LANL	USE
053f5301.d	240630005	KXR2	18-NOV-2009 20:54	923310	10-385		1.0	LANL	USE
054f5401.d	240630006	KXR2	18-NOV-2009 21:32	923310	10-385		1.0	LANL	USE
055f5501.d	240630007	KXR2	18-NOV-2009 22:10	923310	10-385		1.0	LANL	USE

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	240630008	KXR2	18-NOV-2009 22:47	923310	10-385	1.0	LANL	USE
057f5701.d	240630009	KXR2	18-NOV-2009 23:26	923310	10-385	1.0	LANL	USE
058f5801.d	UFI090911-02 D6	KXR2	19-NOV-2009 00:03		SDGa26875	1.0		PASSES
059f5901.d	WFI090723-06 B7	KXR2	19-NOV-2009 00:42		SDGa26875	1.0		CLEAN
060f6001.d	240630010	KXR2	19-NOV-2009 01:20	923310	10-385	1.0	LANL	USE
061f6101.d	240740001	KXR2	19-NOV-2009 01:58	923310	10-407	1.0	LANL	USE
062f6201.d	1201973652	KXR2	19-NOV-2009 02:36	923310	10-407	1.0	MS	USE
063f6301.d	1201973653	KXR2	19-NOV-2009 03:15	923310	10-407	1.0	MSD	USE
064f6401.d	240740002	KXR2	19-NOV-2009 03:53	923310	10-407	1.0	LANL	USE
065f6501.d	240740003	KXR2	19-NOV-2009 04:31	923310	10-407	1.0	LANL	USE

066f6601.d	240740004	KXR2	19-NOV-2009 05:09	923310	10-407		1.0	LANL	USE
067f6701.d	240740005	KXR2	19-NOV-2009 05:48	923310	10-407		20.0	LANL	USE
068f6801.d	240740006	KXR2	19-NOV-2009 06:26	923310	10-407		1.0	LANL	USE
069f6901.d	240740008	KXR2	19-NOV-2009 07:04	923310	10-407		1.0	LANL	USE
070f7001.d	UFI090911-02 D7	KXR2	19-NOV-2009 07:42		SDGa26875		1.0		PASSES
071f7101.d	WFI090723-06 B8	KXR2	19-NOV-2009 08:20		SDGa26875		1.0		CLEAN
072f7201.d	WFI090723-06 B9	KXR2	19-NOV-2009 08:58		SDGa26875		1.0		CLEAN
073f7301.d	UFI090911-02 D8	KXR2	19-NOV-2009 09:35		SDGa26875		1.0		PASSES
074f7401.d	240580001	KXR2	19-NOV-2009 10:13	922705	10-359		10.0	LANL	USE
075f7501.d	UFI090911-02 D9	KXR2	19-NOV-2009 10:50		SDGa26875		1.0		PASSES

Instrument Batch: /chem/fid5.i/111709dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	WFI090723-06 B10	KXR2	19-NOV-2009 11:29		SDGa26875	1.0		CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: FID5.1

DATE: 12/04/2009 METHOD: FID5a.i_b_DRO_111709.m OPERATOR:KXR2 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 Solvent REMAT ID:CH2CL2

Calibration & QC Information
GC Column: DB-WAX 30m x 0.53um
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
FID analysis of GEL SOP:GL-OA-E-003

Sequence Number: 120209DR Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WFI091130-06 B1	KXR2	02-DEC-2009 15:28		SDGa17585	1.0		CLEAN
002f0201.d	UFI091013-03 RT	KXR2	02-DEC-2009 16:06		SDGa03904	1.0		RTMARKER
003f0301.d	UFI091118-01 D1	KXR2	02-DEC-2009 16:44		SDGa03904	1.0		PASSES
004f0401.d	WFI091130-06 B2	KXR2	02-DEC-2009 17:22		SDGa17585	1.0		CLEAN
005f0501.d	CH2CL2	KXR2	02-DEC-2009 18:00		SDGa17585	1.0		METHYLENE CHLORIDE SCREEN
006f0601.d	1201984266	KXR2	02-DEC-2009 18:38	927990	10-668	1.0	MB	USE
007f0701.d	1201984267	KXR2	02-DEC-2009 19:17	927990	10-668	1.0	LCS	USE
008f0801.d	241827001	KXR2	02-DEC-2009 19:55	927990	10-668	1.0	LANL	USE
009f0901.d	241827004	KXR2	02-DEC-2009 20:33	927990	10-668	1.0	LANL	USE
010f1001.d	241827005	KXR2	02-DEC-2009 21:11	927990	10-668	1.0	LANL	USE
011f1101.d	241827006	KXR2	02-DEC-2009 21:50	927990	10-668	1.0	LANL	USE
012f1201.d	241838002	KXR2	02-DEC-2009 22:29	927990	10-670	1.0	LANL	USE
013f1301.d	UFI091118-01 D2	KXR2	02-DEC-2009 23:07		SDGa17585	1.0		PASSES
014f1401.d	WFI091130-06 B3	KXR2	02-DEC-2009 23:45		SDGa17585	1.0		CLEAN
015f1501.d	241903002	KXR2	03-DEC-2009 00:24	927990	10-690	20.0	LANL	USE

Instrument Batch: /chem/fid5.i/120209dr Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241907001	KXR2	03-DEC-2009 01:02	927990	10-692	1.0	LANL	USE

017f1701.d	241907002	KXR2	03-DEC-2009 01:40	927990	10-692	1.0	LANL	USE
018f1801.d	241911001	KXR2	03-DEC-2009 02:19	927990	10-694	1.0	LANL	USE
019f1901.d	1201984268	KXR2	03-DEC-2009 02:57	927990	10-694	1.0	MS	USE
020f2001.d	1201984269	KXR2	03-DEC-2009 03:36	927990	10-694	1.0	MSD	USE
021f2101.d	241911002	KXR2	03-DEC-2009 04:15	927990	10-694	1.0	LANL	USE
022f2201.d	UFI091118-01 D3	KXR2	03-DEC-2009 04:52		SDGa17585	1.0		PASSES
023f2301.d	WFI091130-06 B4	KXR2	03-DEC-2009 05:31		SDGa17585	1.0		CLEAN
024f2401.d	1201983724	KXR2	03-DEC-2009 06:09	927728	10-698	1.0	MB	USE
025f2501.d	1201983725	KXR2	03-DEC-2009 06:48	927728	10-698	1.0	LCS	USE
026f2601.d	241895017	KXR2	03-DEC-2009 07:27	927728	10-698	1.0	LANL	USE
027f2701.d	241895019	KXR2	03-DEC-2009 08:05	927728	10-698	1.0	LANL	DUSE,OVERRANGE RERUN @10X
028f2801.d	241895021	KXR2	03-DEC-2009 08:43	927728	10-698	1.0	LANL	DUSE,RERUN
029f2901.d	1201983726	KXR2	03-DEC-2009 09:21	927728	10-698	1.0	MS	USE
030f3001.d	1201983727	KXR2	03-DEC-2009 09:59	927728	10-698	1.0	MSD	USE
031f3101.d	241895023	KXR2	03-DEC-2009 10:37	927728	10-698	1.0	LANL	DUSE,OVERRANGE RERUN @ 2X
032f3201.d	241918001	KXR2	03-DEC-2009 11:15	927728	10-701	1.0	LANL	DUSE,OVERRANGE RERUN @ 2X
033f3301.d	UFI091118-01 D4	KXR2	03-DEC-2009 11:53		SDGa17585	1.0		PASSES
034f3401.d	WFI091130-06 B5	KXR2	03-DEC-2009 12:31		SDGa17585	1.0		CLEAN
035f3501.d	241895019	KXR2	03-DEC-2009 13:09	927728	10-698	10.0	LANL	USE

Instrument Batch: /chem/fid5.i/120209dr

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241895021	KXR2	03-DEC-2009 13:47	927728	10-698	1.0	LANL	USE
037f3701.d	241895023	KXR2	03-DEC-2009 14:24	927728	10-698	2.0	LANL	USE
038f3801.d	241918001	KXR2	03-DEC-2009 15:02	927728	10-701	2.0	LANL	USE
039f3901.d	UFI091118-01 D5	KXR2	03-DEC-2009 15:41		SDGa17585	1.0		PASSES
040f4001.d	WFI091130-06 B6	KXR2	03-DEC-2009 16:19		SDGa17585	1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927989 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984266 MB	01–DEC–2009 22:46:50	30	1	0.03333
1201984267 LCS	01–DEC–2009 22:46:50	30	1	0.03333
241827001	01–DEC–2009 22:46:50	30.06	1	0.03327
241827004	01–DEC–2009 22:46:50	30.03	1	0.0333
241827005	01–DEC–2009 22:46:50	30.01	1	0.03332
241827006	01–DEC–2009 22:46:50	30.15	1	0.03317
241838002	01–DEC–2009 22:46:50	30.17	1	0.03315
241903002	01–DEC–2009 22:46:50	30.11	1	0.03321
241907001	01–DEC–2009 22:46:50	30.07	1	0.03326
241907002	01–DEC–2009 22:46:50	30.16	1	0.03316
241911001	01–DEC–2009 22:46:50	30.04	1	0.03329
1201984268 MS (241911001)	01–DEC–2009 22:46:50	30.04	1	0.03329
1201984269 MSD (241911001)	01–DEC–2009 22:46:50	30.18	1	0.03313
241911002	01–DEC–2009 22:46:50	30.05	1	0.03328

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984267	TPH DRO LCS	UE091030–08	1	mL
MS	1201984268	TPH DRO LCS	UE091030–08	1	mL
MSD	1201984269	TPH DRO LCS	UE091030–08	1	mL
SURR	All	20 ppm surrogate	WE091121–04	1	mL
REGNT	All	Methylene Chloride	1236611–D	300	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Verified By: AJS

Final Solvent: CH2Cl2

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/019f1901.d
Lab Smp Id: 1201984268 Client Smp ID: WST49-10-5432MS
Inj Date : 03-DEC-2009 02:57
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984268|1|
Misc Info : |FIDDRO_S|927990|FID|MS|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 19 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			93506451	694.523	23.5
$ 2 o-Terphenyl					CAS #: 84-15-1
14.141	14.145	-0.004	2871501	13.5081	0.46

Data File: /chem/fid5.i/120209dr/019f1901.d
Date : 03-DEC-2009 02:57
Client ID: WST49-10-5432MS
Sample Info: |120198426811|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

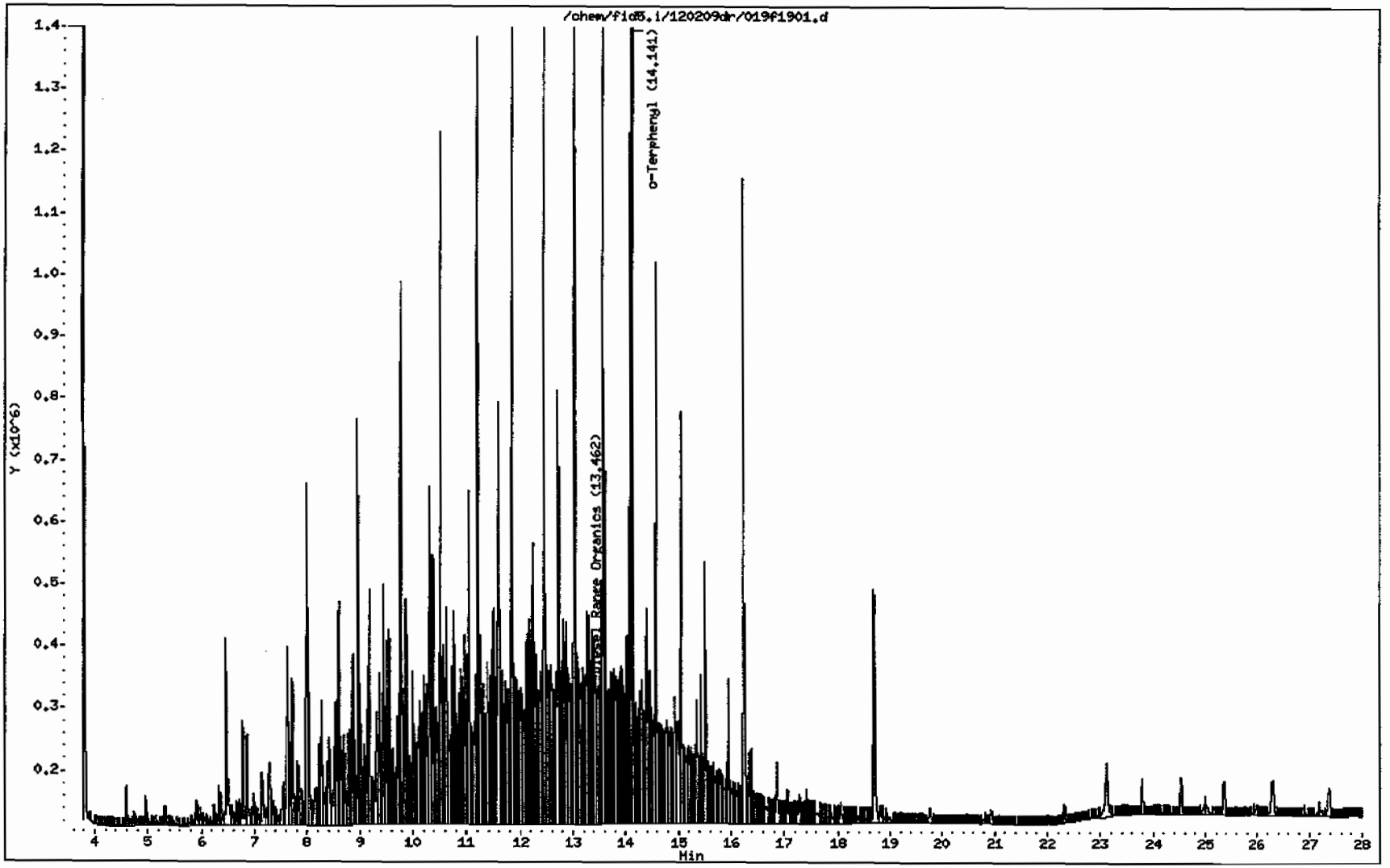

GEL Laboratories LLC

DB-5MS .25mm

Data file : /chem/fid5.i/120209dr/020f2001.d
Lab Smp Id: 1201984269 Client Smp ID: WST49-10-5432MSD
Inj Date : 03-DEC-2009 03:36
Operator : KXR2 Inst ID: fid5.i
Smp Info : |1201984269|1|
Misc Info : |FIDDRO_S|927990|FID|MSD|
Comment : 45C for 4 min; 20C/min ramp; 280C for 4 min.
Method : /chem/fid5.i/120209dr/FID5a.i_b_DRO_111709.m
Meth Date : 04-Dec-2009 12:16 kev01577 Quant Type: ESTD
Cal Date : 17-NOV-2009 15:42 Cal File: 007f0701.d
Als bottle: 20 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (mg/L)	FINAL (mg/Kg)
S 1 Diesel Range Organics					CAS #:
8.008- 18.916			82474016	612.579	20.6
$ 2 o-Terphenyl					CAS #: 84-15-1
14.139	14.145	-0.006	2603091	12.2454	0.41

Data File: /chem/fid5.i/120209dr/020f2001.d
Date : 03-DEC-2009 03:36
Client ID: WST49-10-5432MSD
Sample Info: |120198426911|
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: fid5.i

Operator: KXR2
Column diameter: 0.25

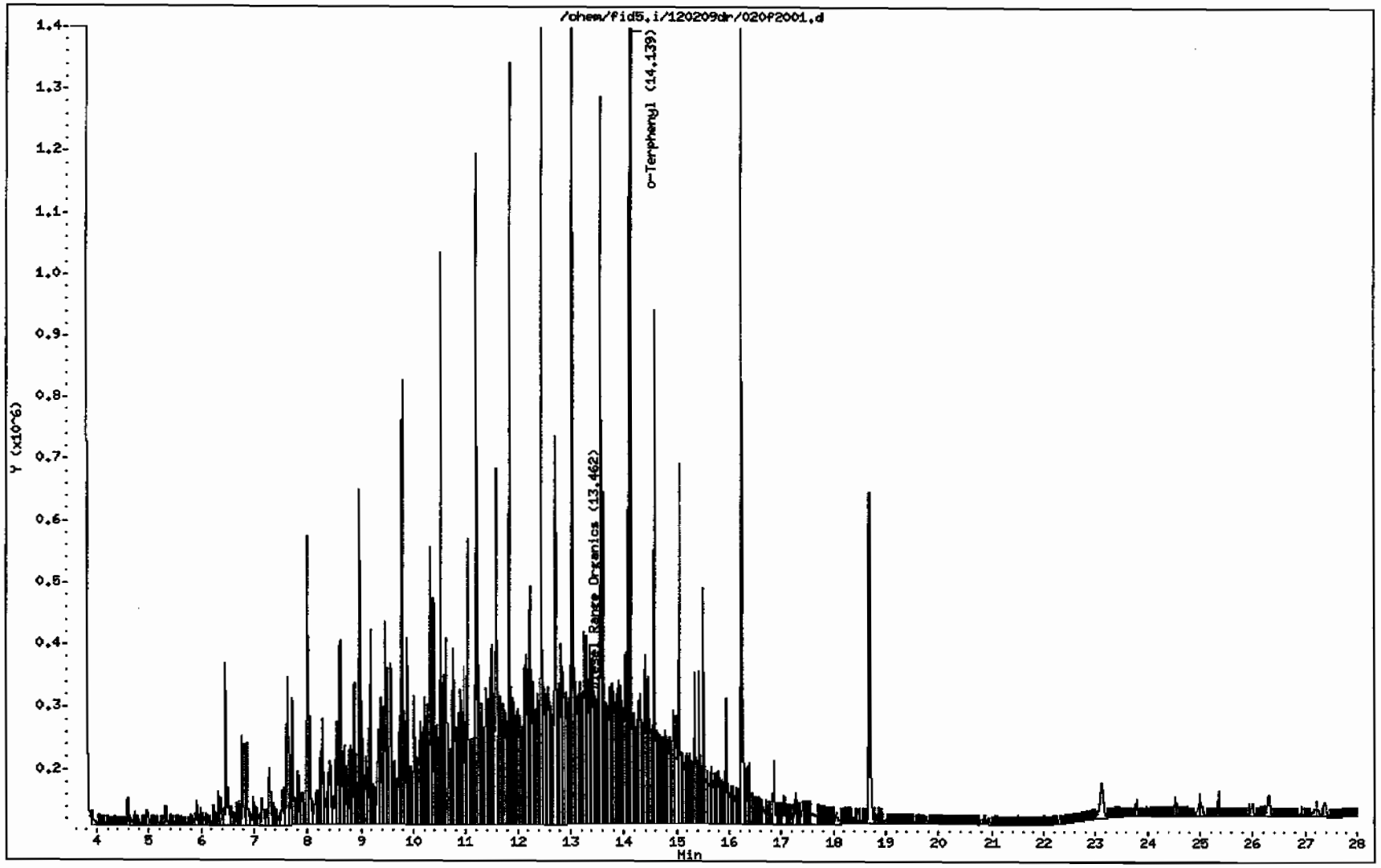

GC Volatile GRO Analysis

GC Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure:	Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector
Analytical Method:	SW846 8015B VOC
Prep Method:	SW846 8015B PREP
Analytical Batch Number:	930378
Prep Batch Number:	930377

Sample Analysis
The following client and quality control samples were analyzed to complete this sample delivery group/work order using the methods referenced in the Analysis Information section:

Sample ID	Client ID
241838002	WST03-10-2134
1201989890	Method Blank (MB)
1201989894	Laboratory Control Sample (LCS)
1201989892	241903002(WST03-10-2136) Post Spike (PS)
1201989893	241903002(WST03-10-2136) Post Spike Duplicate (PSD)

The samples in this SDG were analyzed on a "dry weight" basis.

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Gasoline Range Organics will be designated as GRO throughout this case narrative.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 20.2.6.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-004 REV# 18.

Calibration Information
Due to the limited capacity of software, all of the current initial calibration files may not be displayed. If necessary, a calibration history report was inserted, prior to the appropriate Form 6, in the Standards section in the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the

independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries, in all samples and quality control samples, were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241903002 (WST03-10-2136) was selected for analysis as the matrix spike.

Matrix Spike (PS) Recovery Statement
The GRO recovery was within the acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The GRO recovery was within the acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD between the matrix spike pair met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A NCR was not required for this sample delivery group/work order.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check(s), and samples may have been manually integrated to correct misidentification of peaks by the integration software.

Additional Comments
Additional comments were not required for this SDG.

System Configuration
The GRO Organics analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOC4A.I	Agilent 6890N FID	HP6890N GC/FID	DB-624	0.53mm x 3.0u x 15m	Tekmar #1

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____ Date: 12/15/09

Roadmap for LANL 10-670 GRO

This roadmap was analyzed by ACJ on 12-09-2009, 16:58.
This roadmap was reviewed by kel00587 on 12-10-2009, 09:56.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/voc4a.i/120709/4o100016.d	241838002	07-DEC-2009	23:58	GRO.sub	WST03-10-2134	1	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/voc4a.i/120709/4o100015bl.d	1201989890	mb	07-DEC-2009	23:18	GRO.sub	BLANK	1	
☐	N	/chem/voc4a.i/120709/4o100011ll.d	1201989894	lcs	07-DEC-2009	21:19	GRO.sub	LCS	1	

Sample Data Summary

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241838002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8015A/B VOC**	**SOP Ref:**	**GL-OA-E-004**
Batch ID:	**930378**	**Inst:**	**VOC4A.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 23:58**	**Analyst:**	**ACJ**	**Aliquot:**	**5 mL**
Prep Date:	**12/07/2009 23:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o100016.d**	**Column:**	**Rtx-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		71.1	ug/kg	12.0	53.6

QC Summary

GC Volatiles (GRO)

Surrogate Recovery Report

SDG Number: 10-670

Matrix Type: SOLID

CAP Column (1) : Rtx-Volatiles

Sample ID	Client ID	BFB %REC
1201989894	LCS for batch 930377	89
1201989890	MB for batch 930377	92
241838002	WST03-10-2134	88

Surrogate	Acceptance Limits
BFB = Bromofluorobenzene	(26%-143%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number:	**10-670**	**Sample Type:**	**Post Spike**	
Client ID:	**WST03-10-2136PS**	**Matrix:**	**R**	
Lab Sample ID:	**1201989892**	**%Moisture:**	**14.8**	
Instrument:	**VOC4A.I**	**Analysis Date:**	**12/08/2009 18:41**	**Dilution: 1**
Analyst:	**ACJ**	**Prep Batch ID:**	**930377**	
Aliquot:	**5 mL**	**Batch ID:**	**930378**	

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
	PS	Gasoline Range Organics	500	15.9	J	452	87	5-138

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number: 10-670
Client ID: WST03-10-2136PSD
Lab Sample ID: 1201989893
Instrument: VOC4A.I
Analyst: ACJ
Aliquot: 5 mL

Sample Type: Post Spike Duplicate
Matrix: R
%Moisture: 14.8
Analysis Date: 12/08/2009 19:11
Dilution: 1
Prep Batch ID: 930377
Batch ID: 930378

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
PSD	Gasoline Range Organics	500	15.9	J	384	74	5-138	16	0-30

GC Volatiles (GRO)

Quality Control Summary

Spike Recovery Report

SDG Number: 10-670

Client ID: LCS for batch 930377

Lab Sample ID: 1201989894

Instrument: VOC4A.I

Analyst: ACJ

Aliquot: 5 mL

Sample Type: Laboratory Control Sample

Matrix: SOIL

Analysis Date: 12/07/2009 21:19

Dilution: 1

Prep Batch ID: 930377

Batch ID: 930378

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
LCS	Gasoline Range Organics	500	0.0	496	99	85-123

Method Blank Summary

SDG Number:	10-670	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 930377	Instrument ID:	VOC4A.I	Data File:	4o100015bl.d
Lab Sample ID:	1201989890	Prep Date:	12/07/2009 20:30	Analyzed:	12/07/09 23:18
Column:	Rtx-Volatiles	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 930377	1201989894	4o100011ll.d	12/07/09	2119
02	WST03-10-2134	241838002	4o100016.d	12/07/09	2358

Sample Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	930378	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/07/2009 23:58	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/07/2009 23:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4o100016.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		71.1	ug/kg	12.0	53.6

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SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120709/4o100016.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 07-DEC-2009 23:58
Operator : ACJ Inst ID: voc4a.i
Smp Info : |241838002|1|
Misc Info : |VOC8015_LF|930378|GROF|
Comment : FID
Method : /chem/voc4a.i/120709/8015GRO-120709.m
Meth Date : 08-Dec-2009 01:39 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.76260	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.859- 10.941			67788850	66.2508	71.0
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.510	9.507	0.003	35155766	43.8088	47.0

Data File: /chem/voc4a.i/120709/4o100016.d

Date : 07-DEC-2009 23:58

Client ID: WST03-10-2134

Sample Info: |241838002|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

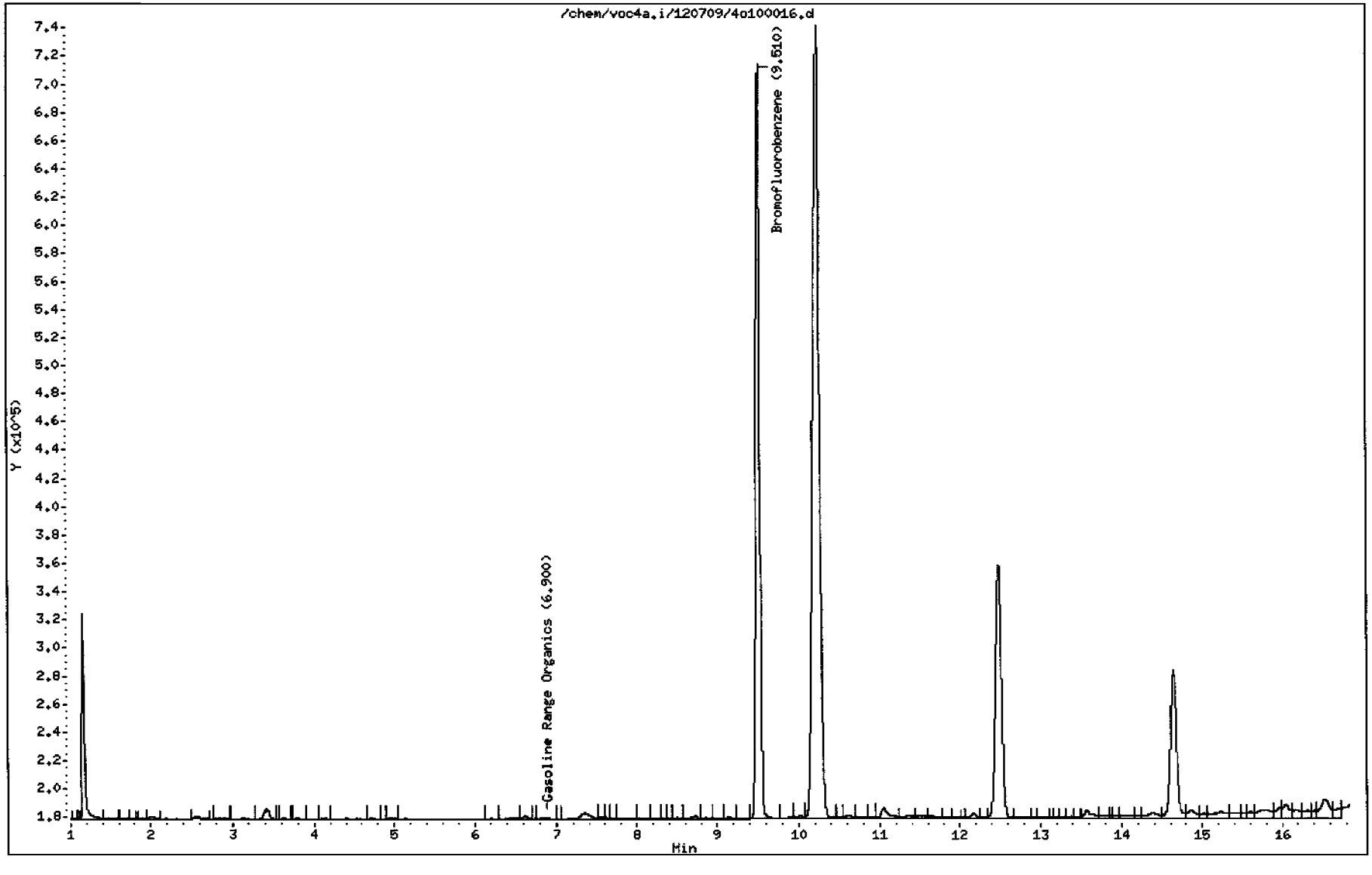

Standard Data

Report Date: 09-Dec-2009 16:37

Calibration History

Method : /chem/voc4a.i/120709/8015GRO-120709.m
Start Cal Date: 07-DEC-2009 16:47
End Cal Date : 07-DEC-2009 19:47

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 50.00000		
07-DEC-2009 16:47	GRO	/chem/voc4a.i/120709/4o100002.d
Cal Level: 2 , Cal Amount: 100.00000		
07-DEC-2009 17:17	GRO	/chem/voc4a.i/120709/4o100003.d
Cal Level: 3 , Cal Amount: 250.00000		
07-DEC-2009 17:48	GRO	/chem/voc4a.i/120709/4o100004.d
Cal Level: 4 , Cal Amount: 500.00000		
07-DEC-2009 18:18	GRO	/chem/voc4a.i/120709/4o100005.d
Cal Level: 5 , Cal Amount: 750.00000		
07-DEC-2009 18:48	GRO	/chem/voc4a.i/120709/4o100006.d
Cal Level: 6 , Cal Amount: 1000.00000		
07-DEC-2009 19:17	GRO	/chem/voc4a.i/120709/4o100007.d
Cal Level: 7 , Cal Amount: 2000.00000		
07-DEC-2009 19:47	GRO	/chem/voc4a.i/120709/4o100008.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 500		
08-DEC-2009 01:27	GRO	/chem/voc4a.i/120709/4o100019.d
Ccal Level: 4 , Ccal Amount: 500		
07-DEC-2009 20:47	GRO	/chem/voc4a.i/120709/4o100010CCV.d
Ccal Level: 4 , Ccal Amount: 500		
07-DEC-2009 20:47	GRO	/chem/voc4a.i/120709/4o100010.d
Ccal Level: 4 , Ccal Amount: 500		

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 07-DEC-2009 16:47
End Cal Date : 07-DEC-2009 19:47
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem/voc4a.i/120709/8015GRO-120709.m
Cal Date : 08-Dec-2009 01:39 amj
Curve Type : Average

Calibration File Names:
Level 1: /chem/voc4a.i/120709/4o100002.d
Level 2: /chem/voc4a.i/120709/4o100003.d
Level 3: /chem/voc4a.i/120709/4o100004.d
Level 4: /chem/voc4a.i/120709/4o100005.d
Level 5: /chem/voc4a.i/120709/4o100006.d
Level 6: /chem/voc4a.i/120709/4o100007.d
Level 7: /chem/voc4a.i/120709/4o100008.d

Compound	50.000 Level 1	100.000 Level 2	250.000 Level 3	500.000 Level 4	750.000 Level 5	1000.000 Level 6	2000.000 Level 7	RRF	% RSD
S 1 Gasoline Range Organics	1082682	1001230	981010	1065173	1033194	941533	1057684	1023215	4.971
2 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 3 Bromofluorobenzene	+++++	857128	835052	792622	785837	766662	777588	802481	4.432

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i Injection Date: 07-DEC-2009 20:47
Lab File ID: 4o100010CCV.d Init. Cal. Date(s): 07-DEC-2009 07-DEC-2009
Analysis Type: WATER Init. Cal. Times: 16:47 19:47
Lab Sample ID: GROICV Quant Type: ESTD
Method: /chem/voc4a.i/120709/8015GRO-120709.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1023215	1052132	0.010	2.82609	15.00000	Averaged
$ 3 Bromofluorobenzene	802481	794937	0.010	-0.94007	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120709/4o100010CCV.d
Lab Smp Id: GROICV Client Smp ID: VSTD0500
Inj Date : 07-DEC-2009 20:47
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROICV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/120709/8015GRO-120709.m
Meth Date : 08-Dec-2009 01:39 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics					CAS #:
2.859-	10.941		526065994	500.000	514
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.510	9.507	0.003	39746867	50.0000	49.5

Data File: /chem/voc4a.i/120709/4o100010CCV.d

Date : 07-DEC-2009 20:47

Client ID: VSTD0500

Sample Info: !GROICV!

Purge Volume: 5.0

Column phase: Rtx-Volatiles

Instrument: voo4a.i

Operator: ACJ

Column diameter: 0.25

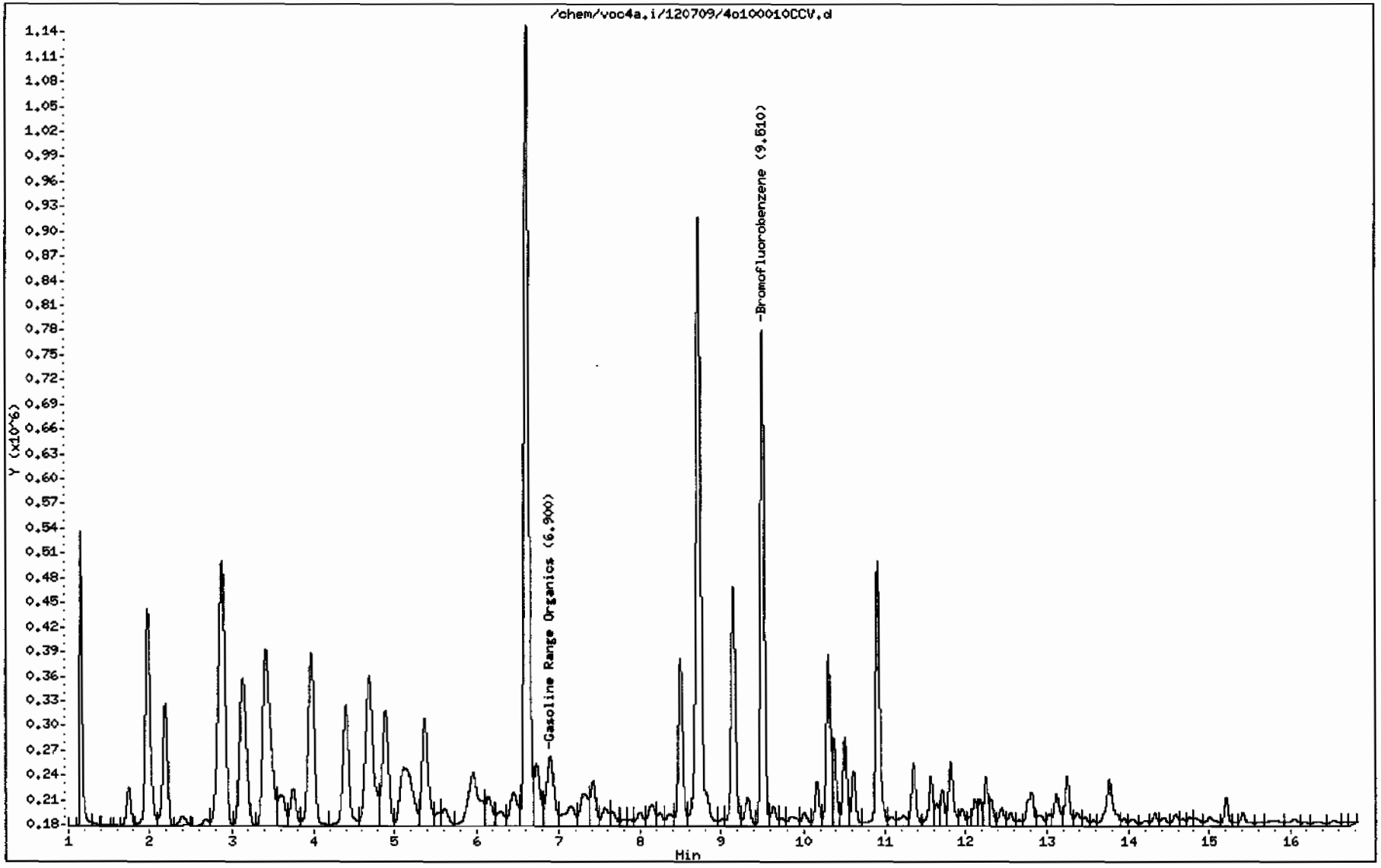

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: voc4a.i Injection Date: 08-DEC-2009 01:27
Lab File ID: 4o100019.d Init. Cal. Date(s): 07-DEC-2009 07-DEC-2009
Analysis Type: WATER Init. Cal. Times: 16:47 19:47
Lab Sample ID: GROCCV Quant Type: ESTD
Method: /chem/voc4a.i/120709/8015GRO-120709.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S 1 Gasoline Range Organics	1023215	1049838	0.010	2.60185	15.00000	Averaged
$ 3 Bromofluorobenzene	802481	734285	0.010	-8.49821	15.00000	Averaged

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120709/4o100019.d
Lab Smp Id: GROCCV Client Smp ID: VSTD0500
Inj Date : 08-DEC-2009 01:27
Operator : ACJ Inst ID: voc4a.i
Smp Info : |GROCCV|
Misc Info : |VOC8015_LF|-----|GROF|
Comment : FID
Method : /chem/voc4a.i/120709/8015GRO-120709.m
Meth Date : 08-Dec-2009 01:39 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * (Vt/Vo)*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Purge Volume
Vo	5.00000	Initial sample volume
Uf	1.00000	Unit Correction Factor

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S 1 Gasoline Range Organics					CAS #:
2.859-	10.941		524918793	500.000	513
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.510	9.507	0.003	36714237	50.0000	45.8

Data File: /chem/voc4a.i/120709/4c100019.d
Date : 08-DEC-2009 01:27
Client ID: VSTD0500
Sample Info: |GROCCV|
Purge Volume: 5.0
Column phase: Rtx-Volatiles

Instrument: voc4a.i
Operator: ACJ
Column diameter: 0.25

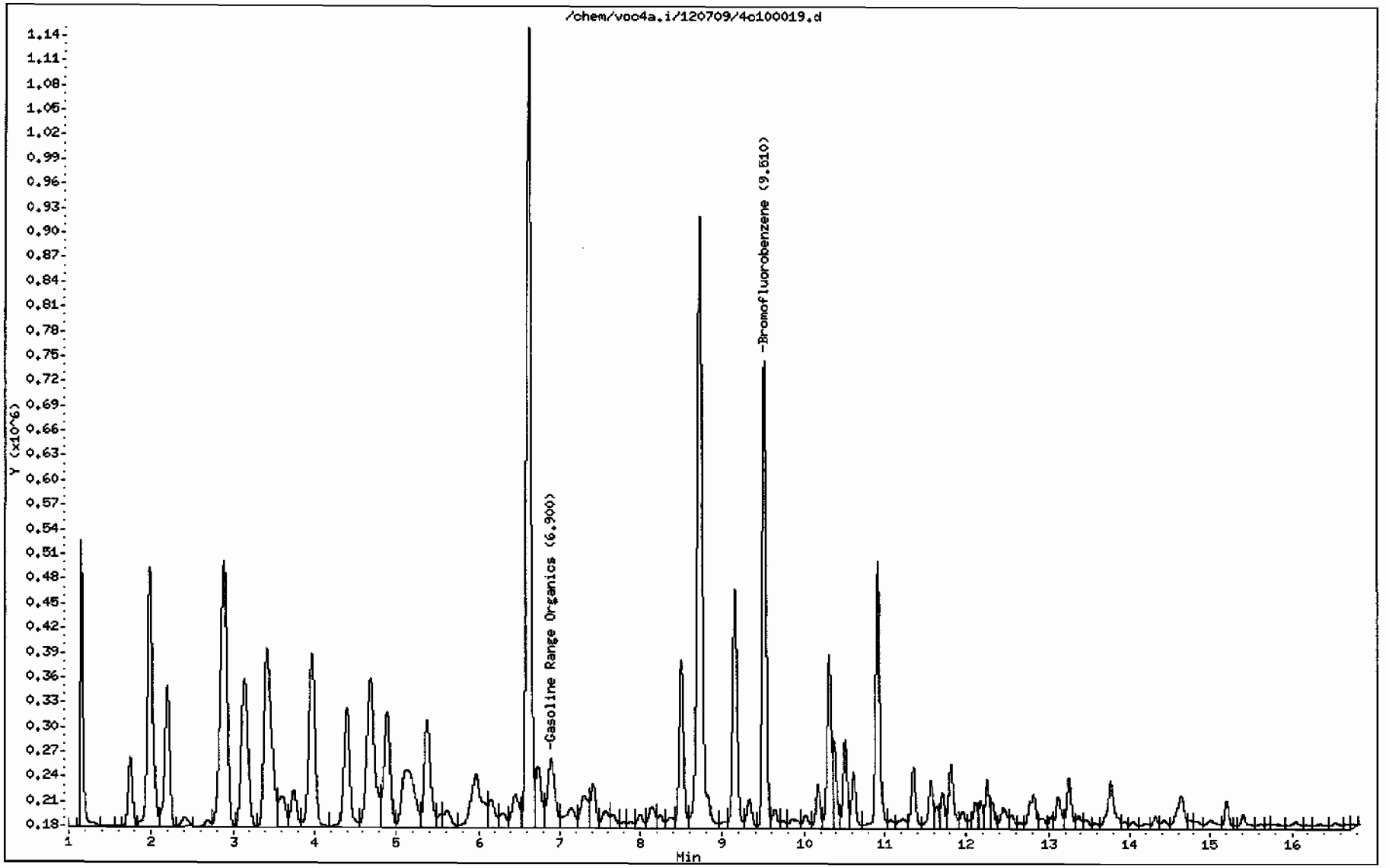

Analytical Sequence

Lab Name: GEL Laboratories LLC **Client SDG:** 10-670

GC Column: Rtx-Volatiles **Init. Calibration Dates:** 07-DEC-09 16:47 - 07-DEC-09 19:47

Instrument ID: VOC4A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

	Mean Surrogate RT From Initial Calibration:			9.51
	RT Range Based on Calibration Verification:			9.48 9.54 #
	Sample Number	**Lab Sample ID**	**Analysis Date**	**Bromofluorobenzene**
1	VSTD0050	VSTD0050	07-DEC-09 16:47	9.51
2	VSTD0100	VSTD0100	07-DEC-09 17:17	9.51
3	VSTD0250	VSTD0250	07-DEC-09 17:48	9.51
4	VSTD0500	VSTD0500	07-DEC-09 18:18	9.51
5	VSTD0750	VSTD0750	07-DEC-09 18:48	9.51
6	VSTD1000	VSTD1000	07-DEC-09 19:17	9.51
7	VSTD2000	VSTD2000	07-DEC-09 19:47	9.51
8	ZZZZZZZ	ZZZZZZZ	07-DEC-09 20:17	ZZZZ
9	VSTD0500	GROICV	07-DEC-09 20:47	9.51
10	BLK01LCS	1201989894	07-DEC-09 21:19	9.51
11	ZZZZZZZ	ZZZZZZZ	07-DEC-09 21:19	9.51
12	ZZZZZZZ	ZZZZZZZ	07-DEC-09 21:49	ZZZZ
13	ZZZZZZZ	ZZZZZZZ	07-DEC-09 22:18	ZZZZ
14	ZZZZZZZ	ZZZZZZZ	07-DEC-09 22:48	9.51
15	BLANK	1201989890	07-DEC-09 23:18	9.51
16	ZZZZZZZ	ZZZZZZZ	07-DEC-09 23:18	9.51
17	WST03-10-2134	241838002	07-DEC-09 23:58	9.51
18	ZZZZZZZ	ZZZZZZZ	08-DEC-09 00:28	9.51
19	ZZZZZZZ	ZZZZZZZ	08-DEC-09 00:58	9.51
20	VSTD0500	GROCCV	08-DEC-09 01:27	9.51

Column used to flag retention time values with an asterisk.

QC Data

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201989890**				
Client Sample:	**QC for batch 930377**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 930377**	**Method:**	**SW846 8015A/B VOC**	**SOP Ref:**	**GL-OA-E-004**
Batch ID:	**930378**	**Inst:**	**VOC4A.I**	**Dilution:**	**1**
Run Date:	**12/07/2009 23:18**	**Analyst:**	**ACJ**	**Aliquot:**	**5 mL**
Prep Date:	**12/07/2009 20:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4o100015bl.d**	**Column:**	**Rtx-Volatiles**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics	U	50.0	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120709/4o100015bl.d
Lab Smp Id: 1201989890 Client Smp ID: BLANK
Inj Date : 07-DEC-2009 23:18
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201989890|1|
Misc Info : |VOC8015_LF|930378|GROF|
Comment : FID
Method : /chem/voc4a.i/120709/8015GRO-120709.m
Meth Date : 08-Dec-2009 01:39 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 15 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.511	9.507	0.004	36935733	46.0269	46.0

Data File: /chem/voc4a.i/120709/4o100015bl.d
Date : 07-DEC-2009 23:18
Client ID: BLANK
Sample Info: |120198989011|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

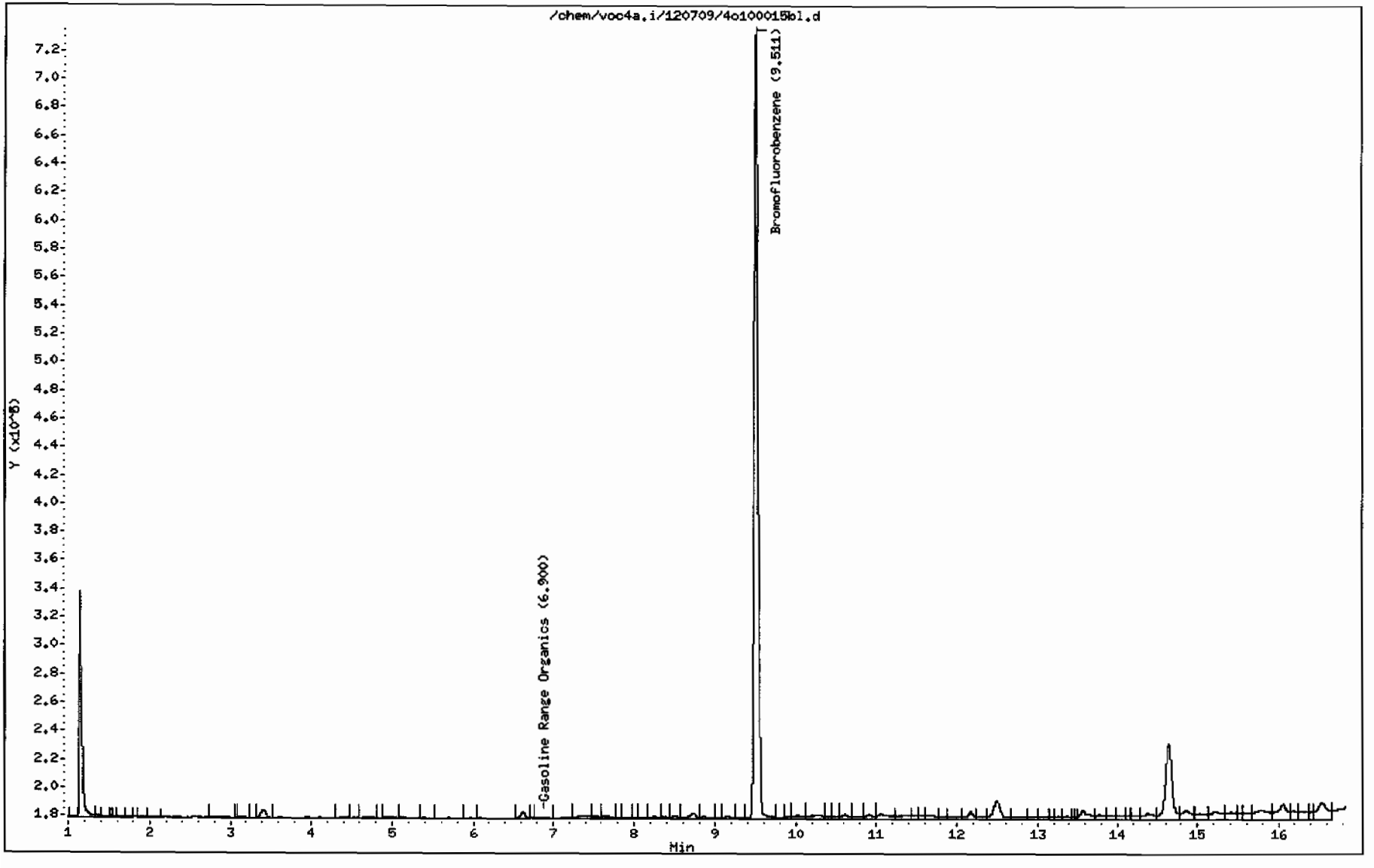

GC Volatiles (GRO)
Certificate of Analysis
Sample Summary

SDG Number:	10-670			**Matrix:**	SOIL
Lab Sample ID:	1201989894				
Client Sample:	QC for batch 930377	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 930377	**Method:**	SW846 8015A/B VOC	**SOP Ref:**	GL-OA-E-004
Batch ID:	930378	**Inst:**	VOC4A.I	**Dilution:**	1
Run Date:	12/07/2009 21:19	**Analyst:**	ACJ	**Aliquot:**	5 mL
Prep Date:	12/07/2009 20:00	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	4o100011ll.d	**Column:**	Rtx-Volatiles	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
TPH-GRO	Gasoline Range Organics		496	ug/kg	11.2	50.0

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120709/4o10001111.d
Lab Smp Id: 1201989894 Client Smp ID: LCS
Inj Date : 07-DEC-2009 21:19
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201989894|1|
Misc Info : |VOC8015_LF|930378|GROF|
Comment : FID
Method : /chem/voc4a.i/120709/8015GRO-120709.m
Meth Date : 08-Dec-2009 01:39 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 1 Gasoline Range Organics					CAS #:
2.859-	10.941		507741991	496.222	496
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.509	9.507	0.002	35719501	44.5113	44.5

Data File: /chem/voc4a.i/120709/4o10001111.d

Date : 07-DEC-2009 21:19

Client ID: LCS

Sample Info: |1201989894|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

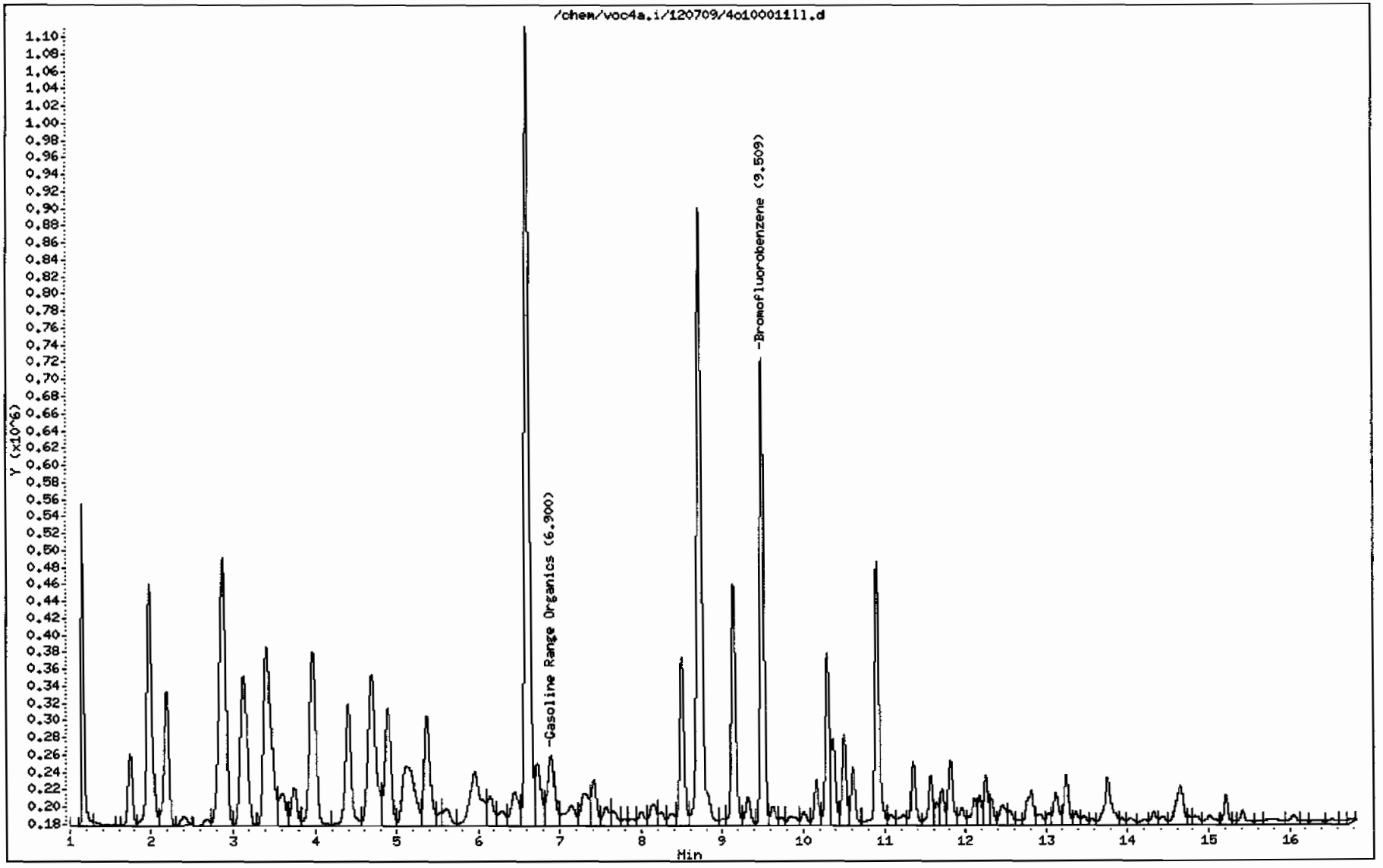

Miscellaneous Data

Prep Logbook

Volatile Total Petroleum Hydrocarbons by Flame Ionization Detector

Batch ID: **930377** Verified by: _____

Analyst: Amy Jamison

Method: SW846 8015A/B PREP

Lab SOP: GL-OA-E-004 REV# 18

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1201989894 LCS	07-DEC-2009 20:00:00	Soil	5	5	1	
1201989890 MB	07-DEC-2009 20:30:00	Soil	5	5	1	
241838002	07-DEC-2009 23:40:00	Soil	5	5	1	
1201989895 LCS	08-DEC-2009 14:00:00	Soil	5	5	1	
1201989891 MB	08-DEC-2009 14:30:00	Soil	5	5	1	
241903002	08-DEC-2009 15:11:00	Soil	5	5	1	
1201989892 PS (241903002)	08-DEC-2009 15:12:00	Soil	5	5	1	
1201989893 PSD (241903002)	08-DEC-2009 15:13:00	Soil	5	5	1	
241907001	08-DEC-2009 15:14:00	Soil	5	5	1	
241907002	08-DEC-2009 15:15:00	Soil	5	5	1	
241911001	08-DEC-2009 15:16:00	Soil	5	5	1	
241911002	08-DEC-2009 15:17:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 12/7/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 12/7/2009

(See pg. 129 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

Sequence Number: VOC4A 120709

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG091112-01A		5		
IS	N/A				
SS	UVG091022-01D	2.5	2.5	2.5	2.5
LCS/MS	UVG091112-01A			5	
RTCHECK	WVG091207-01				5+5
C5/C12 RTCHECK	N/A				5

Purge Amount

5	Water Purge Vol:
VARIED	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
12/7/2009 16:17	4O100001.D	WVG091207-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
12/7/2009 16:47	4O100002.D	VSTD0050	GEL	ICAL	5ML	1	N/A	2	W	ACJ	N/A	O	UVG090915-01C/UVG091022-01D
12/7/2009 17:17	4O100003.D	VSTD0100	GEL	ICAL	5ML	1	N/A	3	W	ACJ	N/A	O	UVG090915-01C/UVG091022-01D
12/7/2009 17:48	4O100004.D	VSTD0250	GEL	ICAL	5ML	1	N/A	4	W	ACJ	N/A	O	UVG090915-01C/UVG091022-01D
12/7/2009 18:18	4O100005.D	VSTD0500	GEL	ICAL	5ML	1	N/A	5	W	ACJ	N/A	O	UVG090915-01C/UVG091022-01D
12/7/2009 18:48	4O100006.D	VSTD0750	GEL	ICAL	5ML	1	N/A	6	W	ACJ	N/A	O	UVG090915-01C/UVG091022-01D
12/7/2009 19:17	4O100007.D	VSTD1000	GEL	ICAL	5ML	1	N/A	7	W	ACJ	N/A	O	UVG090915-01C/UVG091022-01D
12/7/2009 19:47	4O100008.D	VSTD2000	GEL	ICAL	5ML	1	N/A	8	W	ACJ	N/A	O	UVG090915-01C/UVG091022-01D
12/7/2009 20:17	4O100009.D	BLANK	GEL	BLANK	5ML	1	N/A	9	W	ACJ	N/A	X	
12/7/2009 20:47	4O100010.D	UVG091112-01A	GEL	ICV	5ML	1	N/A	10	W	ACJ	N/A	O	
12/7/2009 21:19	4O100011.D	UVG091112-01A	GEL	LCS	5G	1	N/A	11	S	ACJ	N/A	O	
12/7/2009 21:49	4O100012.D	UVG091112-01A	GEL	LCSD	5G	1	N/A	12	S	ACJ	N/A	X	SPIKED USING 2.5UL
12/7/2009 22:18	4O100013.D	BLANK	GEL	BLANK	5G	1	N/A	13	S	ACJ	N/A	X	
12/7/2009 22:48	4O100014.D	UVG091112-01A	GEL	LCSD	5G	1	N/A	14	S	ACJ	N/A	O	
12/7/2009 23:18	4O100015.D	BLANK	GEL	BLANK	5G	1	N/A	15	S	ACJ	N/A	O	
12/7/2009 23:58	4O100016.D	241238002	LANL	930378	5G	1	N/A	16	S	ACJ	N/A	O	
12/8/2009 0:28	4O100017.D	242247001	SLAC	929818	5.4G	1	N/A	17	S	ACJ	N/A	O	
12/8/2009 0:58	4O100018.D	242247002	SLAC	929818	5.4G	1	N/A	18	S	ACJ	N/A	O	
12/8/2009 1:27	4O100019.D	UVG091112-01A	GEL	CCV	5ML	1	N/A	19	W	ACJ	N/A	O	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOC4A

Date: 12/8/2009 Method 8015 Operator ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: N/A

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 12/7/2009

(See pg. 129 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # N/A

C5/C12

Sequence Number: VOC4A 120809

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	RT
CCV	UVG090915-01C		5		
IS	N/A				
SS	UVG091022-01D	2.5	2.5	2.5	2.5
LCS/MS	UVG091112-01A			5	
RTCHECK	WVG091208-01				5+5
RTCHECK	N/A				5

Purge Amount

5ML	Water Purge Vol:
5G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(√/X)	Comments
12/8/2009 14:12	4O200001.D	WVG091208-01	GEL	RTCHECK	5ML	1	N/A	1	W	ACJ	N/A	O	UVG090909-01A/UVG081212-02B
12/8/2009 14:42	4O200002.D	UVG090915-01C	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	O	
12/8/2009 15:12	4O200003.D	UVG091112-01A	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	
12/8/2009 15:42	4O200004.D	BLANK	GEL	BLANK	5G	1	N/A	4	S	ACJ	N/A	O	
12/8/2009 16:12	4O200005.D	241903002	LANL	930378	5G	1	N/A	5	S	ACJ	N/A	O	
12/8/2009 16:42	4O200006.D	241907001	LANL	930378	5G	1	N/A	6	S	ACJ	N/A	O	
12/8/2009 17:11	4O200007.D	241907002	LANL	930378	5G	1	N/A	7	S	ACJ	N/A	O	
12/8/2009 17:41	4O200008.D	241911001	LANL	930378	5G	1	N/A	8	S	ACJ	N/A	O	
12/8/2009 18:11	4O200009.D	241911002	LANL	930378	5G	1	N/A	9	S	ACJ	N/A	O	
12/8/2009 18:41	4O200010.D	1201989892	LANL	930378	5G	1	N/A	10	S	ACJ	N/A	O	
12/8/2009 19:11	4O200011.D	1201989893	LANL	930378	5G	1	N/A	11	S	ACJ	N/A	O	
12/8/2009 19:42	4O200012.D	UVG090915-01C	GEL	CCV	5ML	1	N/A	12	W	ACJ	N/A	O	

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120809/4o200005.d
Lab Smp Id: 241903002 Client Smp ID: WST03-10-2136
Inj Date : 08-DEC-2009 16:12
Operator : ACJ Inst ID: voc4a.i
Smp Info : |241903002|1|
Misc Info : |VOC8015_LF|930378|GROF|
Comment : FID
Method : /chem/voc4a.i/120809/8015GRO-120709.m
Meth Date : 08-Dec-2009 19:53 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.79410	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
S 1 Gasoline Range Organics					CAS #:	
2.859-	10.941		16218016	15.8501	18.6	(a)
$ 3 Bromofluorobenzene					CAS #: 460-00-4	
9.509	9.507	0.002	32454380	40.4425	47.5	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/voc4a.i/120809/4o200005.d
Date : 08-DEC-2009 16:12
Client ID: WST03-10-2136
Sample Info: |241903002|1|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

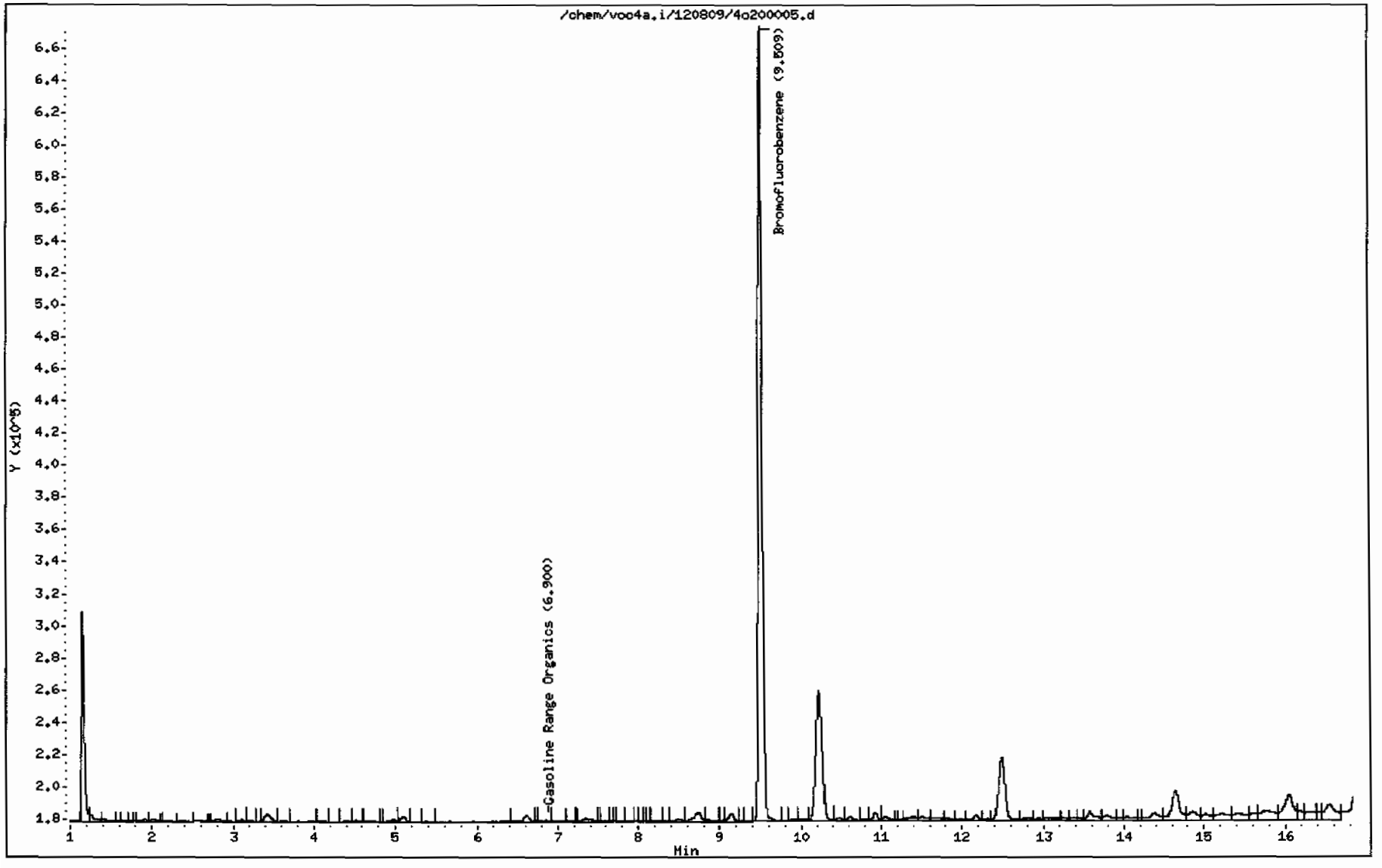

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120809/4o200010.d
Lab Smp Id: 1201989892 Client Smp ID: WST03-10-2136MS
Inj Date : 08-DEC-2009 18:41
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201989892|1|
Misc Info : |VOC8015_LF|930378|GROF|
Comment : FID
Method : /chem/voc4a.i/120809/8015GRO-120709.m
Meth Date : 08-Dec-2009 19:53 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.79410	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 1 Gasoline Range Organics					CAS #:
2.859- 10.941			462176981	451.691	530
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.510	9.507	0.003	30415588	37.9019	44.5

Data File: /chem/voc4a.i/120809/4o200010.d

Date : 08-DEC-2009 18:41

Client ID: WST03-10-2136MS

Sample Info: |120198989211|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ

Column diameter: 0.25

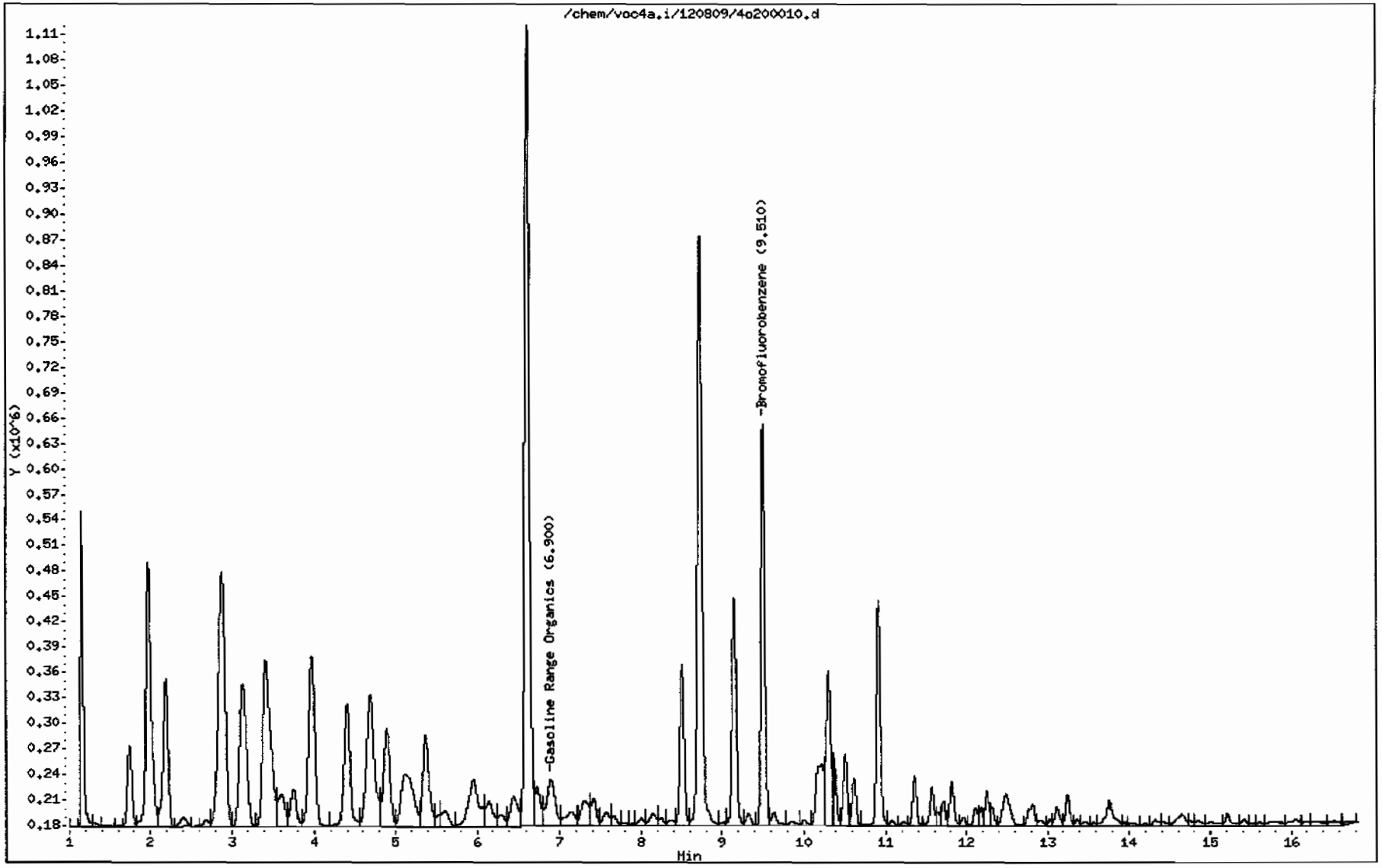

GEL Laboratories LLC

SW-846 3rd edition 8015 Modified

Data file : /chem/voc4a.i/120809/4o200011.d
Lab Smp Id: 1201989893 Client Smp ID: WST03-10-2136MSD
Inj Date : 08-DEC-2009 19:11
Operator : ACJ Inst ID: voc4a.i
Smp Info : |1201989893|1|
Misc Info : |VOC8015_LF|930378|GROF|
Comment : FID
Method : /chem/voc4a.i/120809/8015GRO-120709.m
Meth Date : 08-Dec-2009 19:53 amj Quant Type: ESTD
Cal Date : 07-DEC-2009 19:47 Cal File: 4o100008.d
Als bottle: 11 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: GRO.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * (100/(100-M)*(Vt/Ws))*Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.79410	% Moisture
Vt	5.00000	Purge Volume (mL)
Ws	5.00000	Weight of sample (g)
Uf	1.00000	Unit Correction Factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
S 1 Gasoline Range Organics					CAS #:
2.859-	10.941		393078049	384.160	451
$ 3 Bromofluorobenzene					CAS #: 460-00-4
9.509	9.507	0.002	28487222	35.4989	41.7

Data File: /chem/voc4a.i/120809/4o200011.d
Date : 08-DEC-2009 19:11
Client ID: WST03-10-2136MSD
Sample Info: |120198989311|

Column phase: Rtx-Volatiles

Instrument: voc4a.i

Operator: ACJ
Column diameter: 0.25

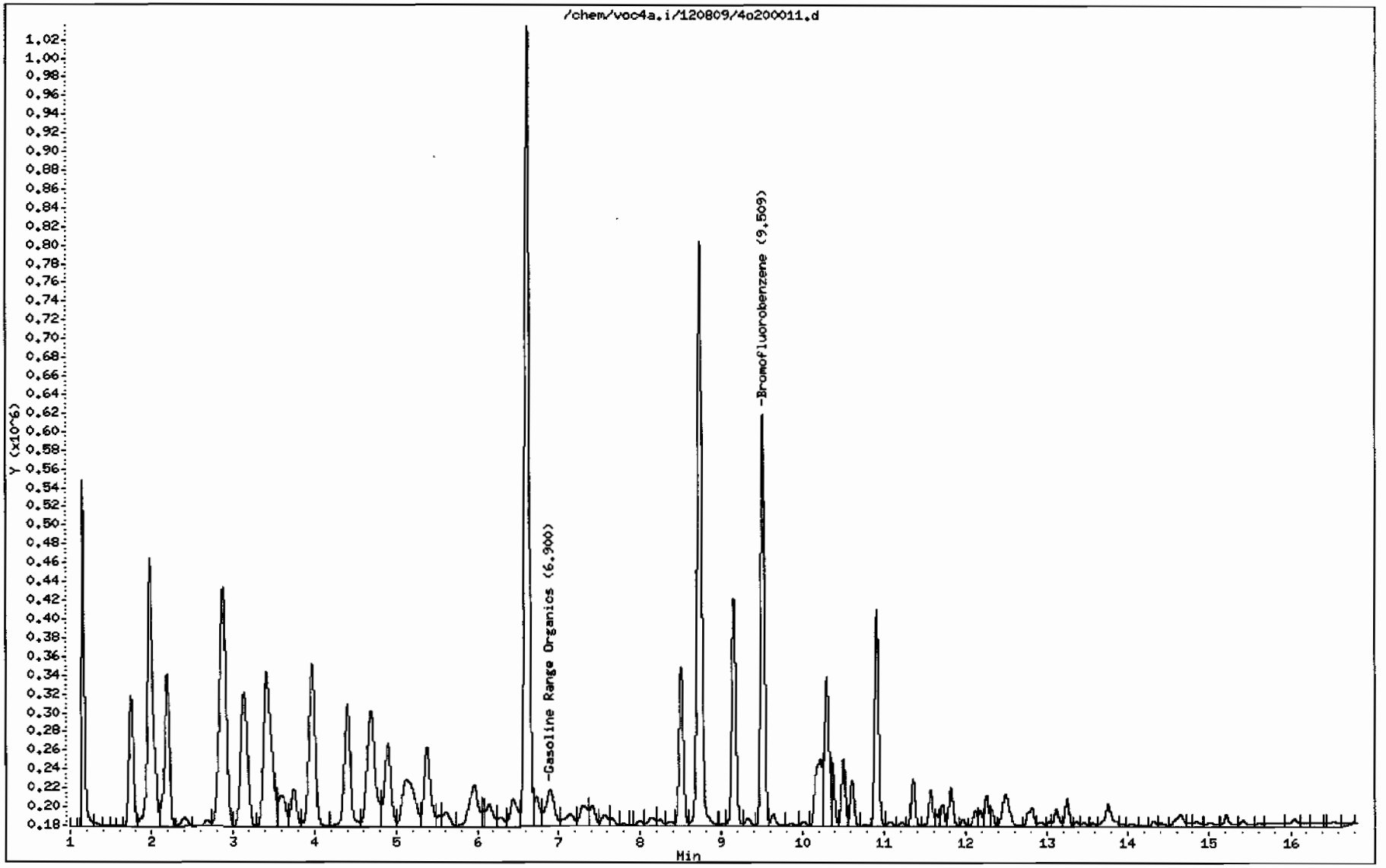

GC SEMIVOLATILE PESTICIDE ANALYSIS

Pesticide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure: **Analysis of Organochlorine Pesticides and Chlorinated Hydrocarbons by ECD**

Analytical Method: SW846 8081A

Prep Method: SW846 3550B

Analytical Batch Number: 928403

Prep Batch Number: 928402

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8081A:

Sample ID	Client ID
241838002	WST03-10-2134
1201985185	Method Blank (MB)
1201985186	Laboratory Control Sample (LCS)
1201985189	Laboratory Control Sample (LCS)-Toxaphene LCS Only
1201985187	241911001(WST49-10-5432) Matrix Spike (MS)
1201985188	241911001(WST49-10-5432) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 10.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

4,4'-DDTand Endrin ketone recovered outside of the acceptance limits with positive bias in the standards bracketing the samples in this SDG. The positive bias for the analytical data is a result of instrument response increasing after the initial calibration. These target analytes were not detected in the associated samples; therefore, the non-compliance has no adverse effects on the data.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-694) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the reuslts.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
Sample 241838002 (WST03-10-2134) was diluted at 1:10 due to their bright yellow hue, strong odor, the presence of sulfur within the sample matrices.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information:

Electronic Package Comment

This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The lower results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD5A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD5A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock Date: 12-21-2009

Roadmap for LANL 10-670 PEST

This roadmap was analyzed by hea01125 on 12-07-2009, 15:55.
This roadmap was reviewed by jcb on 12-08-2009, 09:01.
This roadmap was packaged by yml on 12-17-2009, 19:38.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120409b.b/032f3201.d	241838002	sample	05-DEC-2009	04:51	10-670.sub	WSTU3-10-2134	10.00000	928403	USE, uploaded both columns, reporting lower result

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120409b.b/032b3201.d	241838002	sample	05-DEC-2009	04:51	10-670.sub	WSTU3-10-2134	10.00000	928403	USE, uploaded both columns, reporting lower result

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120409b.b/029f2901.d	1201985185	mb	05-DEC-2009	04:15	10-670.sub	PBLK01	1.00000	928403	USE, uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120409b.b/030f3001.d	1201985186	lcs	05-DEC-2009	04:27	10-670.sub	PBLK01LCS	1.00000	928403	USE, uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120409b.b/031f3101.d	1201985189	lcs	05-DEC-2009	04:39	10-670.sub	PBLK01TLCS	1.00000	928403	USE, uploaded both columns, reporting lower result

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/120409b.b/029b2901.d	1201985185	mb	05-DEC-2009	04:15	10-670.sub	PBLK01	1.00000	928403	USE, uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120409b.b/030b3001.d	1201985186	lcs	05-DEC-2009	04:27	10-670.sub	PBLK01LCS	1.00000	928403	USE, uploaded both columns, reporting lower result
☐	N	/chem/ecd5a.i/120409b.b/031b3101.d	1201985189	lcs	05-DEC-2009	04:39	10-670.sub	PBLK01TLCS	1.00000	928403	USE, uploaded both columns, reporting lower result

SAMPLE DATA SUMMARY

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	928403	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/05/2009 04:51	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	12/03/2009 10:03	**Aliquot:**	30.03 g	**Final Volume:**	5 mL
Data File:	032f3201.d	**Column:**	1 CLP-1	**Level:**	LOW
	032b3201.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.14	ug/kg	1.79	7.14	1
58-89-9	gamma-BHC (Lindane)	U	7.14	ug/kg	1.79	7.14	1
319-85-7	beta-BHC	U	7.14	ug/kg	1.79	7.14	1
319-86-8	delta-BHC	U	7.14	ug/kg	1.79	7.14	1
76-44-8	Heptachlor	U	7.14	ug/kg	1.79	7.14	1
309-00-2	Aldrin	U	7.14	ug/kg	1.79	7.14	1
1024-57-3	Heptachlor epoxide	U	7.14	ug/kg	2.23	7.14	1
5103-74-2	gamma-Chlordane	U	7.14	ug/kg	1.79	7.14	1
5103-71-9	alpha-Chlordane	U	7.14	ug/kg	1.79	7.14	1
959-98-8	Endosulfan I	U	7.14	ug/kg	1.79	7.14	1
72-55-9	4,4'-DDE	U	14.3	ug/kg	3.57	14.3	1
60-57-1	Dieldrin	U	14.3	ug/kg	3.57	14.3	1
72-20-8	Endrin	U	14.3	ug/kg	3.57	14.3	1
72-54-8	4,4'-DDD	U	14.3	ug/kg	3.57	14.3	1
33213-65-9	Endosulfan II	U	14.3	ug/kg	3.57	14.3	1
7421-93-4	Endrin aldehyde	U	14.3	ug/kg	3.57	14.3	1
50-29-3	4,4'-DDT	U	14.3	ug/kg	3.57	14.3	1
1031-07-8	Endosulfan sulfate	U	14.3	ug/kg	3.57	14.3	1
72-43-5	Methoxychlor	U	71.4	ug/kg	17.9	71.4	1
53494-70-5	Endrin ketone	U	14.3	ug/kg	3.57	14.3	1
8001-35-2	Toxaphene	U	179	ug/kg	59.5	179	1

QUALITY CONTROL SUMMARY

Pesticide

Surrogate Recovery Report

SDG Number: 10–670

Matrix Type: SOLID

CAP Column (1) : CLP–1 **CAP Column (2) : CLP–2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201985185	MB for batch 928402	88	84	101	113
1201985186	LCS for batch 928402	94	91	108	115
1201985189	LCS for batch 928402	92	88	101	110
241838002	WST03–10–2134	79 D	89 D	90 D	95 D

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%–105%)
DCB = Decachlorobiphenyl	(33%–115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928402
Lab Sample ID: 1201985186
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 04:27
Dilution: 1
Prep Batch ID: 928402
Batch ID: 928403

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
319-84-6	LCS	alpha-BHC	16.7	0.0	15.7	94	56-129
58-89-9	LCS	gamma-BHC (Lindane)	16.7	0.0	16.0	96	56-127
319-85-7	LCS	beta-BHC	16.7	0.0	15.1	90	54-117
319-86-8	LCS	delta-BHC	16.7	0.0	16.1	97	60-129
76-44-8	LCS	Heptachlor	16.7	0.0	15.1	90	55-127
309-00-2	LCS	Aldrin	16.7	0.0	14.4	86	54-123
1024-57-3	LCS	Heptachlor epoxide	16.7	0.0	15.0	90	58-122
5103-74-2	LCS	gamma-Chlordane	16.7	0.0	15.8	95	55-124
5103-71-9	LCS	alpha-Chlordane	16.7	0.0	15.7	94	56-120
959-98-8	LCS	Endosulfan I	16.7	0.0	14.9	89	51-119
72-55-9	LCS	4,4'-DDE	41.7	0.0	39.4	95	60-128
60-57-1	LCS	Dieldrin	41.7	0.0	37.1	89	59-119
72-20-8	LCS	Endrin	41.7	0.0	35.8	86	63-131
72-54-8	LCS	4,4'-DDD	41.7	0.0	35.8	86	61-131
33213-65-9	LCS	Endosulfan II	41.7	0.0	36.9	88	59-120
7421-93-4	LCS	Endrin aldehyde	41.7	0.0	35.2	84	55-125
50-29-3	LCS	4,4'-DDT	41.7	0.0	49.7	119	63-139
1031-07-8	LCS	Endosulfan sulfate	41.7	0.0	41.2	99	60-127
72-43-5	LCS	Methoxychlor	167	0.0	195	117	59-143
53494-70-5	LCS	Endrin ketone	41.7	0.0	48.2	116	59-132

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 928402
Lab Sample ID: 1201985189
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 04:39
Dilution: 1
Prep Batch ID: 928402
Batch ID: 928403

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
8001-35-2	LCS Toxaphene	133	0.0	127	95	48-131

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–670**	**Sample Type:**	**Matrix Spike**
Client ID:	**WST49–10–5432MS**	**Matrix:**	**S**
Lab Sample ID:	**1201985187**	**%Moisture:**	**1.5**
Instrument:	**ECD5A.I**	**Analysis Date:**	**12/05/2009 06:27**
Analyst:	**HXJ1**	**Prep Batch ID:**	**928402**
Inj. Vol:	**1 uL**	**Batch ID:**	**928403**

Dilution: 10

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
319–84–6	MS	alpha–BHC	16.9	0.00	U	14.9	88	41–132
58–89–9	MS	gamma–BHC (Lindane)	16.9	0.00	U	16.3	96	43–127
319–85–7	MS	beta–BHC	16.9	0.00	U	20.3	120	36–130
319–86–8	MS	delta–BHC	16.9	0.00	U	19.3	115	39–134
76–44–8	MS	Heptachlor	16.9	0.00	U	21.0	125	41–133
309–00–2	MS	Aldrin	16.9	0.00	U	14.3	85	41–128
1024–57–3	MS	Heptachlor epoxide	16.9	0.00	U	15.9	94	39–133
5103–74–2	MS	gamma–Chlordane	16.9	0.00	U	16.7	99	37–133
5103–71–9	MS	alpha–Chlordane	16.9	0.00	U	18.6	110	40–122
959–98–8	MS	Endosulfan I	16.9	0.00	U	15.3	91	32–126
72–55–9	MS	4,4'–DDE	42.2	0.00	U	39.2	93	42–138
60–57–1	MS	Dieldrin	42.2	0.00	U	38.1	90	38–132
72–20–8	MS	Endrin	42.2	0.00	U	42.5	101	45–139
72–54–8	MS	4,4'–DDD	42.2	0.00	U	38.8	92	41–139
33213–65–9	MS	Endosulfan II	42.2	0.00	U	37.0	88	35–130
7421–93–4	MS	Endrin aldehyde	42.2	0.00	U	34.0	81	29–126
50–29–3	MS	4,4'–DDT	42.2	0.00	U	48.2	114	38–155
1031–07–8	MS	Endosulfan sulfate	42.2	0.00	U	44.0	104	39–131
72–43–5	MS	Methoxychlor	169	0.00	U	140	83	44–153
53494–70–5	MS	Endrin ketone	42.2	0.00	U	36.5	86	41–133

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number:	**10–670**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**WST49–10–5432MSD**	**Matrix:**	**S**
Lab Sample ID:	**1201985188**	**%Moisture:**	**1.5**
Instrument:	**ECD5A.I**	**Analysis Date:**	**12/05/2009 06:39**
Analyst:	**HXJ1**	**Prep Batch ID:**	**928402**
Inj. Vol:	**1 uL**	**Batch ID:**	**928403**

Dilution: 10

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
319–84–6	MSD alpha–BHC	16.9	0.00	U	14.3	84	41–132	4	0–30
58–89–9	MSD gamma–BHC (Lindane)	16.9	0.00	U	15.7	93	43–127	3	0–30
319–85–7	MSD beta–BHC	16.9	0.00	U	16.3	96	36–130	22	0–30
319–86–8	MSD delta–BHC	16.9	0.00	U	19.8	117	39–134	2	0–30
76–44–8	MSD Heptachlor	16.9	0.00	U	16.2	95	41–133	26	0–30
309–00–2	MSD Aldrin	16.9	0.00	U	14.7	87	41–128	3	0–30
1024–57–3	MSD Heptachlor epoxide	16.9	0.00	U	16.2	96	39–133	1	0–30
5103–74–2	MSD gamma–Chlordane	16.9	0.00	U	15.0	88	37–133	11	0–30
5103–71–9	MSD alpha–Chlordane	16.9	0.00	U	17.1	101	40–122	9	0–30
959–98–8	MSD Endosulfan I	16.9	0.00	U	15.7	93	32–126	3	0–30
72–55–9	MSD 4,4'–DDE	42.3	0.00	U	40.3	95	42–138	3	0–30
60–57–1	MSD Dieldrin	42.3	0.00	U	37.0	88	38–132	3	0–30
72–20–8	MSD Endrin	42.3	0.00	U	40.2	95	45–139	5	0–30
72–54–8	MSD 4,4'–DDD	42.3	0.00	U	39.0	92	41–139	1	0–30
33213–65–9	MSD Endosulfan II	42.3	0.00	U	37.4	88	35–130	1	0–30
7421–93–4	MSD Endrin aldehyde	42.3	0.00	U	33.5	79	29–126	2	0–30
50–29–3	MSD 4,4'–DDT	42.3	0.00	U	40.8	97	38–155	17	0–30
1031–07–8	MSD Endosulfan sulfate	42.3	0.00	U	38.9	92	39–131	12	0–30
72–43–5	MSD Methoxychlor	169	0.00	U	134	79	44–153	5	0–30
53494–70–5	MSD Endrin ketone	42.3	0.00	U	35.8	85	41–133	2	0–30

Method Blank Summary

SDG Number:	10–670	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 928402	Instrument ID:	ECD5A.I_2 ECD5A.I_1	Data File:	029b2901.d 029f2901.d
Lab Sample ID:	1201985185				
Column:	CLP–2 CLP–1	Prep Date:	12/03/2009 10:03	Analyzed:	12/05/09 04:15
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 928402	1201985186	030f3001.d 030b3001.d	12/05/09	0427
02 LCS for batch 928402	1201985189	031f3101.d 031b3101.d	12/05/09	0439
03 WST03–10–2134	241838002	032f3201.d 032b3201.d	12/05/09	0451

SAMPLE DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	928403	**Inst:**	ECD5A.I	**Dilution:**	10
Run Date:	12/05/2009 04:51	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	12/03/2009 10:03	**Aliquot:**	30.03 g	**Final Volume:**	5 mL
Data File:	032f3201.d	**Column:**	1 CLP-1	**Level:**	LOW
	032b3201.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	7.14	ug/kg	1.79	7.14	1
58-89-9	gamma-BHC (Lindane)	U	7.14	ug/kg	1.79	7.14	1
319-85-7	beta-BHC	U	7.14	ug/kg	1.79	7.14	1
319-86-8	delta-BHC	U	7.14	ug/kg	1.79	7.14	1
76-44-8	Heptachlor	U	7.14	ug/kg	1.79	7.14	1
309-00-2	Aldrin	U	7.14	ug/kg	1.79	7.14	1
1024-57-3	Heptachlor epoxide	U	7.14	ug/kg	2.23	7.14	1
5103-74-2	gamma-Chlordane	U	7.14	ug/kg	1.79	7.14	1
5103-71-9	alpha-Chlordane	U	7.14	ug/kg	1.79	7.14	1
959-98-8	Endosulfan I	U	7.14	ug/kg	1.79	7.14	1
72-55-9	4,4'-DDE	U	14.3	ug/kg	3.57	14.3	1
60-57-1	Dieldrin	U	14.3	ug/kg	3.57	14.3	1
72-20-8	Endrin	U	14.3	ug/kg	3.57	14.3	1
72-54-8	4,4'-DDD	U	14.3	ug/kg	3.57	14.3	1
33213-65-9	Endosulfan II	U	14.3	ug/kg	3.57	14.3	1
7421-93-4	Endrin aldehyde	U	14.3	ug/kg	3.57	14.3	1
50-29-3	4,4'-DDT	U	14.3	ug/kg	3.57	14.3	1
1031-07-8	Endosulfan sulfate	U	14.3	ug/kg	3.57	14.3	1
72-43-5	Methoxychlor	U	71.4	ug/kg	17.9	71.4	1
53494-70-5	Endrin ketone	U	14.3	ug/kg	3.57	14.3	1
8001-35-2	Toxaphene	U	179	ug/kg	59.5	179	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120409b.b/032f3201.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 05-DEC-2009 04:51
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241838002|10|
Misc Info : |ECD81A_1S|928403|SVPF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 22:02 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 32
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	6.76260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.720	2.720	0.000	6076405	15.8688	28.3	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.620	6.617	0.003	3690561	17.9108	32.0	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/032f3201.d

Page 1

Date : 05-DEC-2009 04:51

Client ID: WST03-10-2134

Instrument: ecd5a.i

Sample Info: 1241838002110|

Volume Injected (uL): 1.0

Operator: HXJ1

Column phase: CLP-1

Column diameter: 0.25

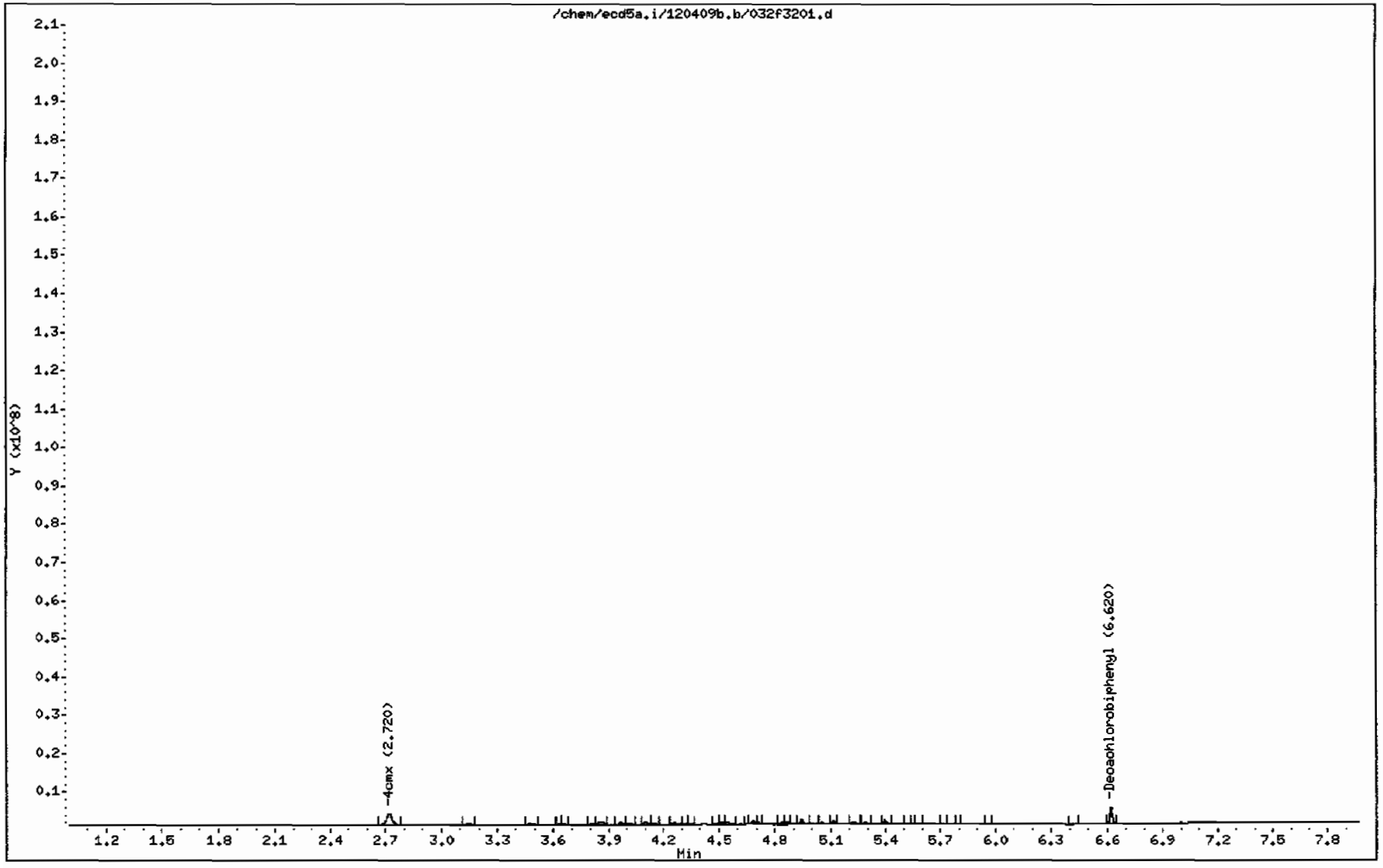

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/032b3201.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 05-DEC-2009 04:51
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |241838002|10|
Misc Info : |ECD81A_1S|928403|SVPF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 22:00 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 32
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weigth of sample extracted (g)
M	6.76260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.107	2.108	-0.001	77741894	17.7737	31.7	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.258	6.256	0.002	39471999	19.0634	34.0	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/032b3201.d

Date : 05-DEC-2009 04:51

Client ID: WST03-10-2134

Sample Info: |2418380021101

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

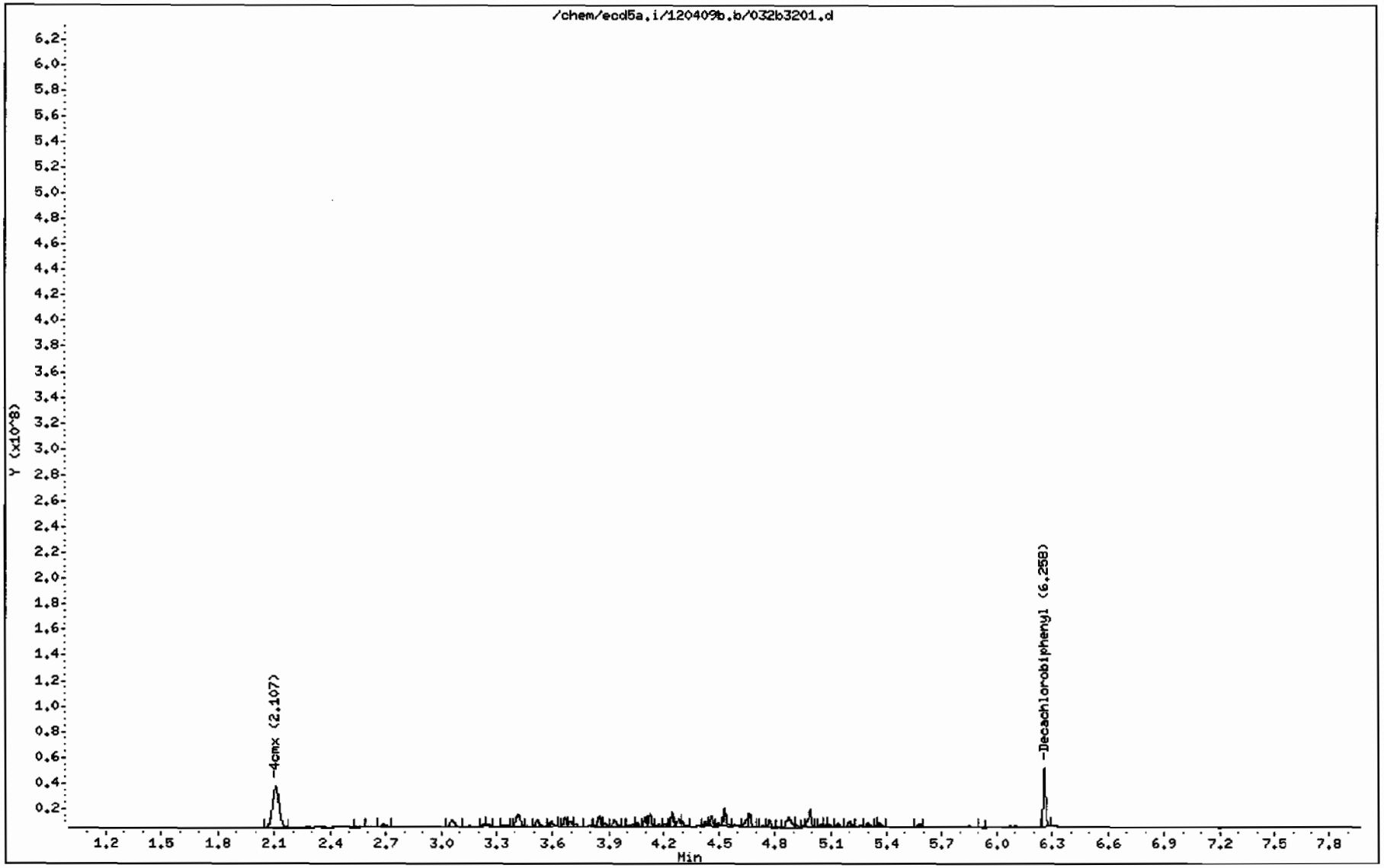

STANDARDS DATA

Report Date: 05-Dec-2009 21:12

Calibration History

Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
05-DEC-2009 02:40	gapa	/chem/ecd5a.i/120409b.b/021f2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006f0601.d
05-DEC-2009 01:28	chlor	/chem/ecd5a.i/120409b.b/015f1501.d
05-DEC-2009 00:16	tox	/chem/ecd5a.i/120409b.b/009f0901.d
04-DEC-2009 23:05	indab	/chem/ecd5a.i/120409b.b/003f0301.d
Cal Level: 2 , Cal Amount: 10.00000		
05-DEC-2009 02:52	gapa	/chem/ecd5a.i/120409b.b/022f2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007f0701.d
05-DEC-2009 01:40	chlor	/chem/ecd5a.i/120409b.b/016f1601.d
05-DEC-2009 00:28	tox	/chem/ecd5a.i/120409b.b/010f1001.d
04-DEC-2009 23:17	indab	/chem/ecd5a.i/120409b.b/004f0401.d
Cal Level: 3 , Cal Amount: 50.00000		
05-DEC-2009 03:04	gapa	/chem/ecd5a.i/120409b.b/023f2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008f0801.d
05-DEC-2009 01:52	chlor	/chem/ecd5a.i/120409b.b/017f1701.d
05-DEC-2009 00:40	tox	/chem/ecd5a.i/120409b.b/011f1101.d
04-DEC-2009 23:29	indab	/chem/ecd5a.i/120409b.b/005f0501.d
Cal Level: 4 , Cal Amount: 100.00000		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024f2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024f2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023f2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022f2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015f1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013f1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009f0901.d
05-DEC-2009 02:04	chlor	/chem/ecd5a.i/120409b.b/018f1801.d
05-DEC-2009 00:52	tox	/chem/ecd5a.i/120409b.b/012f1201.d
04-DEC-2009 23:41	indab	/chem/ecd5a.i/120409b.b/006f0601.d
Cal Level: 5 , Cal Amount: 200.00000		
05-DEC-2009 03:28	gapa	/chem/ecd5a.i/120409b.b/025f2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010f1001.d
05-DEC-2009 02:16	chlor	/chem/ecd5a.i/120409b.b/019f1901.d
05-DEC-2009 01:04	tox	/chem/ecd5a.i/120409b.b/013f1301.d
04-DEC-2009 23:52	indab	/chem/ecd5a.i/120409b.b/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 12:13	indab	/chem/ecd5a.i/120409b.b/069f6901.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 16:12	indab	/chem/ecd5a.i/120409b.b/089f8901.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 14:36	indab	/chem/ecd5a.i/120409b.b/081f8101.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 09:49	indab	/chem/ecd5a.i/120409b.b/057f5701.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 07:14	indab	/chem/ecd5a.i/120409b.b/044f4401.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 05:51	indab	/chem/ecd5a.i/120409b.b/037f3701.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 03:39	gapa	/chem/ecd5a.i/120409b.b/026f2601.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024f2401.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 02:28	chlor	/chem/ecd5a.i/120409b.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 02:04	chlor	/chem/ecd5a.i/120409b.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 01:16	tox	/chem/ecd5a.i/120409b.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 00:52	tox	/chem/ecd5a.i/120409b.b/012f1201.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 00:04	indab	/chem/ecd5a.i/120409b.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 100		
04-DEC-2009 23:41	indab	/chem/ecd5a.i/120409b.b/006f0601.d

Report Date: 05-Dec-2009 21:12

Calibration History

Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Start Cal Date: 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
05-DEC-2009 02:40	gapa	/chem/ecd5a.i/120409b.b/021b2101.d
03-NOV-2009 15:03	ar1660	/chem/ecd5a.i/110309.b/006b0601.d
05-DEC-2009 01:28	chlor	/chem/ecd5a.i/120409b.b/015b1501.d
05-DEC-2009 00:16	tox	/chem/ecd5a.i/120409b.b/009b0901.d
04-DEC-2009 23:05	indab	/chem/ecd5a.i/120409b.b/003b0301.d
Cal Level: 2 , Cal Amount: 10.00000		
05-DEC-2009 02:52	gapa	/chem/ecd5a.i/120409b.b/022b2201.d
03-NOV-2009 15:15	ar1660	/chem/ecd5a.i/110309.b/007b0701.d
05-DEC-2009 01:40	chlor	/chem/ecd5a.i/120409b.b/016b1601.d
05-DEC-2009 00:28	tox	/chem/ecd5a.i/120409b.b/010b1001.d
04-DEC-2009 23:17	indab	/chem/ecd5a.i/120409b.b/004b0401.d
Cal Level: 3 , Cal Amount: 50.00000		
05-DEC-2009 03:04	gapa	/chem/ecd5a.i/120409b.b/023b2301.d
03-NOV-2009 15:26	ar1660	/chem/ecd5a.i/110309.b/008b0801.d
05-DEC-2009 01:52	chlor	/chem/ecd5a.i/120409b.b/017b1701.d
05-DEC-2009 00:40	tox	/chem/ecd5a.i/120409b.b/011b1101.d
04-DEC-2009 23:29	indab	/chem/ecd5a.i/120409b.b/005b0501.d
Cal Level: 4 , Cal Amount: 100.00000		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024b2401.d
03-NOV-2009 18:34	ar1254	/chem/ecd5a.i/110309.b/024b2401.d
03-NOV-2009 18:22	ar1248	/chem/ecd5a.i/110309.b/023b2301.d
03-NOV-2009 18:10	ar1242	/chem/ecd5a.i/110309.b/022b2201.d
03-NOV-2009 16:48	ar1232	/chem/ecd5a.i/110309.b/015b1501.d
03-NOV-2009 16:25	ar1221	/chem/ecd5a.i/110309.b/013b1301.d
03-NOV-2009 15:38	ar1660	/chem/ecd5a.i/110309.b/009b0901.d
05-DEC-2009 02:04	chlor	/chem/ecd5a.i/120409b.b/018b1801.d
05-DEC-2009 00:52	tox	/chem/ecd5a.i/120409b.b/012b1201.d
04-DEC-2009 23:41	indab	/chem/ecd5a.i/120409b.b/006b0601.d
Cal Level: 5 , Cal Amount: 200.00000		
05-DEC-2009 03:28	gapa	/chem/ecd5a.i/120409b.b/025b2501.d
03-NOV-2009 15:50	ar1660	/chem/ecd5a.i/110309.b/010b1001.d
05-DEC-2009 02:16	chlor	/chem/ecd5a.i/120409b.b/019b1901.d
05-DEC-2009 01:04	tox	/chem/ecd5a.i/120409b.b/013b1301.d
04-DEC-2009 23:52	indab	/chem/ecd5a.i/120409b.b/007b0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 16:12	indab	/chem/ecd5a.i/120409b.b/089b8901.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 14:36	indab	/chem/ecd5a.i/120409b.b/081b8101.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 09:49	indab	/chem/ecd5a.i/120409b.b/057b5701.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 07:14	indab	/chem/ecd5a.i/120409b.b/044b4401.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 12:13	indab	/chem/ecd5a.i/120409b.b/069b6901.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 05:51	indab	/chem/ecd5a.i/120409b.b/037b3701.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 03:39	gapa	/chem/ecd5a.i/120409b.b/026b2601.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 03:16	gapa	/chem/ecd5a.i/120409b.b/024b2401.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 02:28	chlor	/chem/ecd5a.i/120409b.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 02:04	chlor	/chem/ecd5a.i/120409b.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 01:16	tox	/chem/ecd5a.i/120409b.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 00:52	tox	/chem/ecd5a.i/120409b.b/012b1201.d
Ccal Level: 4 , Ccal Amount: 100		
05-DEC-2009 00:04	indab	/chem/ecd5a.i/120409b.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 100		
04-DEC-2009 23:41	indab	/chem/ecd5a.i/120409b.b/006b0601.d

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COMPOUND LISTING

Method file : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Quant Method : ESTD Target Version : 3.50
Last Update : 05-Dec-2009 21:01 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.720	2.690-2.750	3.829e+05
63 2,4,5-Trichlorophenol	1.476	1.376-1.576	
59 Hexachlorobenzene	3.159	3.059-3.259	3.882e+05
2 Aroclor-1221	2.631	2.601-2.661	5.910e+03
	2.767	2.736-2.796	3.363e+03
	2.802	2.772-2.832	1.422e+04
3 Aroclor-1016	3.102	3.072-3.132	1.760e+04
	3.460	3.430-3.490	2.200e+04
	3.686	3.656-3.716	8.402e+03
	3.702	3.672-3.732	8.144e+03
	3.839	3.809-3.869	1.168e+04
4 Aroclor-1232	3.104	3.074-3.134	7.998e+03
	3.248	3.218-3.278	2.167e+03
	3.459	3.430-3.490	1.042e+04
	3.555	3.525-3.585	6.943e+03
	4.119	4.089-4.149	4.959e+03
5 alpha-BHC	3.333	3.303-3.363	4.979e+05
6 Aroclor-1242	3.103	3.003-3.203	1.426e+04
	3.460	3.360-3.560	1.830e+04
	3.600	3.500-3.700	7.474e+03
	4.118	4.018-4.218	9.828e+03
	4.137	4.037-4.237	9.417e+03
7 gamma-BHC (Lindane)	3.624	3.594-3.654	4.294e+05

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COMPOUND LISTING

Method file : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.947	3.847-4.047	1.535e+04
	4.334	4.234-4.434	1.443e+04
	4.737	4.637-4.837	4.577e+04
	4.821	4.721-4.921	7.074e+04
	5.308	5.208-5.408	8.090e+03
9 Aroclor-1248	3.686	3.586-3.786	1.281e+04
	3.839	3.739-3.939	1.679e+04
	3.897	3.797-3.997	1.095e+04
	4.119	4.019-4.219	2.029e+04
	4.509	4.409-4.609	9.814e+03
10 Heptachlor	4.007	3.977-4.037	3.669e+05
11 Aldrin	4.230	4.200-4.260	4.119e+05
12 beta-BHC	3.702	3.672-3.732	2.002e+05
13 delta-BHC	3.846	3.816-3.876	4.502e+05
14 Heptachlor epoxide	4.653	4.623-4.683	3.671e+05
15 Aroclor-1254	4.090	4.060-4.120	1.481e+04
	4.257	4.227-4.287	2.571e+04
	4.509	4.479-4.539	2.679e+04
	4.679	4.649-4.709	2.010e+04
	4.960	4.930-4.990	2.920e+04
16 Endosulfan I	4.911	4.881-4.941	3.350e+05
17 gamma-Chlordane	4.735	4.705-4.765	3.619e+05
18 alpha-Chlordane	4.821	4.791-4.851	3.584e+05
19 4,4'-DDE	4.867	4.837-4.897	3.481e+05
20 Dieldrin	5.063	5.033-5.093	3.556e+05
21 Aroclor-1260	4.621	4.521-4.721	2.245e+04
	4.788	4.688-4.888	3.535e+04
	4.866	4.766-4.966	1.482e+04
	4.960	4.860-5.060	3.945e+04
	5.358	5.258-5.458	4.235e+04
22 Endrin	5.209	5.179-5.239	3.017e+05
23 Toxaphene	4.921	4.891-4.951	3.923e+03
	5.067	5.037-5.097	6.641e+03
	5.124	5.094-5.154	6.253e+03
	5.162	5.132-5.192	1.066e+04
	5.344	5.314-5.374	1.571e+04
24 Endosulfan II	5.348	5.318-5.378	3.117e+05
25 4,4'-DDD	5.238	5.208-5.268	2.882e+05
26 4,4'-DDT	5.406	5.376-5.436	1.762e+05
27 Endrin aldehyde	5.599	5.569-5.629	2.458e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.686	5.656-5.716	8.698e+04
	29 Endosulfan sulfate	5.859	5.829-5.889	2.569e+05
	30 Aroclor-1268	5.050	4.950-5.150	
		5.067	4.967-5.167	
		5.185	5.085-5.285	
		5.378	5.278-5.478	
		5.531	5.431-5.631	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	6.032	6.002-6.062	2.445e+05
	51 Mirex	5.805	5.775-5.835	2.290e+05
	52 C-Nonachlor	5.228	5.198-5.258	3.943e+05
	53 O-Chlordane	4.586	4.556-4.616	3.128e+05
	54 T-Nonachlor	4.811	4.781-4.841	3.369e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.647	4.617-4.677	2.204e+05
	58 2,4-DDD	4.979	4.949-5.008	1.978e+05
	57 2,4-DDT	5.136	5.106-5.166	1.547e+05
$	32 Decachlorobiphenyl	6.617	6.587-6.647	2.061e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Quant Method : ESTD Target Version : 3.50
Last Update : 05-Dec-2009 21:10 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	92700.000000
Initial:End Threshold	46350.000000
Initial:Area Threshold	927000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.108	2.078-2.138	4.374e+06
61 2,4,5-Trichlorophenol	1.631	1.531-1.731	
59 Hexachlorobenzene	2.657	2.627-2.687	4.557e+06
2 Aroclor-1221	3.136	3.107-3.167	3.819e+04
	3.255	3.225-3.285	2.282e+04
	3.304	3.274-3.334	7.878e+04
3 Aroclor-1016	3.947	3.917-3.977	1.293e+05
	4.040	4.010-4.070	8.559e+04
	4.110	4.080-4.140	5.407e+04
	4.171	4.141-4.201	5.109e+04
	4.351	4.321-4.381	6.850e+04
4 Aroclor-1232	3.304	3.275-3.334	5.230e+04
	3.949	3.919-3.979	5.701e+04
	4.040	4.010-4.070	3.929e+04
	4.350	4.320-4.380	3.045e+04
	4.622	4.592-4.652	3.317e+04
5 alpha-BHC	2.818	2.788-2.848	6.082e+06
6 Aroclor-1242	3.618	3.588-3.648	8.644e+04
	4.040	4.010-4.070	6.791e+04
	4.109	4.079-4.139	4.340e+04
	4.350	4.320-4.380	5.437e+04
	4.430	4.400-4.460	5.974e+04
7 gamma-BHC (Lindane)	3.141	3.111-3.171	5.266e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.375	3.345-3.405	1.680e+05
	3.839	3.809-3.869	1.173e+05
	4.099	4.069-4.129	9.373e+04
	4.172	4.142-4.202	9.382e+04
	4.336	4.306-4.366	3.454e+05
9 Aroclor-1248	4.172	4.142-4.202	7.431e+04
	4.351	4.321-4.381	9.433e+04
	4.431	4.401-4.461	1.002e+05
	4.592	4.562-4.622	1.083e+05
	4.768	4.738-4.798	1.138e+05
10 Heptachlor	3.486	3.456-3.516	4.347e+06
11 Aldrin	3.719	3.689-3.749	4.683e+06
12 beta-BHC	3.224	3.194-3.254	2.313e+06
13 delta-BHC	3.452	3.422-3.482	5.263e+06
14 Heptachlor epoxide	4.118	4.088-4.148	4.036e+06
15 Aroclor-1254	4.619	4.589-4.649	9.484e+04
	4.734	4.704-4.764	1.078e+05
	5.023	4.993-5.053	1.477e+05
	5.158	5.128-5.188	1.045e+05
	5.481	5.451-5.511	1.267e+05
16 Endosulfan I	4.368	4.338-4.398	3.546e+06
17 gamma-Chlordane	4.241	4.211-4.271	4.137e+06
18 alpha-Chlordane	4.336	4.306-4.366	3.968e+06
19 4,4'-DDE	4.448	4.418-4.478	3.809e+06
20 Dieldrin	4.542	4.512-4.572	3.729e+06
21 Aroclor-1260	5.043	5.013-5.073	6.157e+04
	5.140	5.110-5.170	1.370e+05
	5.261	5.231-5.291	1.523e+05
	5.481	5.451-5.511	1.467e+05
	6.079	6.049-6.109	1.563e+05
22 Endrin	4.728	4.698-4.758	3.222e+06
23 Toxaphene	4.529	4.499-4.559	7.369e+04
	4.602	4.572-4.632	4.509e+04
	4.714	4.684-4.744	7.876e+04
	4.832	4.802-4.862	6.124e+04
	4.852	4.822-4.882	9.232e+04
24 Endosulfan II	4.858	4.828-4.888	3.076e+06
25 4,4'-DDD	4.800	4.770-4.830	3.153e+06
26 4,4'-DDT	4.986	4.956-5.016	1.587e+06
27 Endrin aldehyde	5.059	5.029-5.089	2.537e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m

Compound	RT	RT Window	RF
28 Methoxychlor	5.391	5.361-5.421	7.115e+05
29 Endosulfan sulfate	5.223	5.193-5.253	2.773e+06
30 Aroclor-1268	5.217	5.187-5.247	
	5.596	5.566-5.626	
	5.628	5.598-5.658	
	5.769	5.739-5.799	
	6.149	6.119-6.179	
60 Aroclor-1262	4.689	4.589-4.789	
	4.779	4.679-4.879	
	5.074	4.974-5.174	
	5.224	5.124-5.324	
	5.396	5.296-5.496	
31 Endrin ketone	5.540	5.510-5.570	2.227e+06
51 Mirex	5.518	5.488-5.548	2.494e+06
52 C-Nonachlor	4.782	4.752-4.812	4.546e+06
53 O-Chlordane	4.058	4.028-4.088	3.680e+06
54 T-Nonachlor	4.303	4.274-4.333	3.953e+06
55 1,2-Dichlorobenzene	6.619	6.589-6.649	
56 2,4-DDE	4.251	4.221-4.281	2.053e+06
58 2,4-DDD	4.572	4.542-4.602	2.283e+06
57 2,4-DDT	4.757	4.727-4.787	2.076e+06
$ 32 Decachlorobiphenyl	6.256	6.226-6.286	2.071e+06

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Cal Date : 05-Dec-2009 21:01 hea01125
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/120409b.b/021f2101.d
Level 2: /chem/ecd5a.i/120409b.b/022f2201.d
Level 3: /chem/ecd5a.i/120409b.b/023f2301.d
Level 4: /chem/ecd5a.i/120409b.b/024f2401.d
Level 5: /chem/ecd5a.i/120409b.b/025f2501.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	451162	387986	367027	366085	368958	388243	9.351
2 Aroclor-1221(1)	+++++	+++++	+++++	5910	+++++	5910	0.000
(2)	+++++	+++++	+++++	3363	+++++	3363	0.000
(3)	+++++	+++++	+++++	14218	+++++	14218	0.000
3 Aroclor-1016(1)	18316	18455	17930	17404	15906	17602	5.863
(2)	21725	22828	22310	22663	20456	21996	4.360
(3)	8841	8543	8438	8235	7951	8402	3.973
(4)	8274	8363	8182	8166	7736	8144	2.968
(5)	11759	11851	11816	11833	11120	11676	2.678
4 Aroclor-1232(1)	+++++	+++++	+++++	7998	+++++	7998	0.000
(2)	+++++	+++++	+++++	2167	+++++	2167	0.000
(3)	+++++	+++++	+++++	10425	+++++	10425	0.000
(4)	+++++	+++++	+++++	6943	+++++	6943	0.000
(5)	+++++	+++++	+++++	4959	+++++	4959	0.000
5 alpha-BHC	477782	472671	500137	513325	525452	497873	4.540
6 Aroclor-1242(1)	+++++	+++++	+++++	14263	+++++	14263	0.000
(2)	+++++	+++++	+++++	18303	+++++	18303	0.000
(3)	+++++	+++++	+++++	7474	+++++	7474	0.000
(4)	+++++	+++++	+++++	9828	+++++	9828	0.000
(5)	+++++	+++++	+++++	9417	+++++	9417	0.000
7 gamma-BHC (Lindane)	417156	408707	427508	442320	451542	429447	4.098
8 Chlordane (tech.)(1)	16162	15617	14941	14771	15237	15346	3.637
(2)	15662	15277	13852	13461	13885	14427	6.761
(3)	44911	46297	45578	45824	46229	45768	1.229
(4)	69510	71929	70699	70768	70775	70736	1.210
(5)	8006	7964	7479	8071	8930	8090	6.485

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Cal Date : 05-Dec-2009 21:01 hea01125
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	12812	+++++	12812	0.000
(2)	+++++	+++++	+++++	16794	+++++	16794	0.000
(3)	+++++	+++++	+++++	10955	+++++	10955	0.000
(4)	+++++	+++++	+++++	20294	+++++	20294	0.000
(5)	+++++	+++++	+++++	9814	+++++	9814	0.000
10 Heptachlor	375648	357352	363452	366055	371802	366862	1.948
11 Aldrin	402331	399921	416254	421296	419757	411912	2.440
12 beta-BHC	214046	201852	194139	194416	196475	200186	4.168
13 delta-BHC	429160	427329	452375	464745	477628	450247	4.884
14 Heptachlor epoxide	375351	366332	366988	365674	360958	367061	1.418
15 Aroclor-1254(1)	+++++	+++++	+++++	14812	+++++	14812	0.000
(2)	+++++	+++++	+++++	25713	+++++	25713	0.000
(3)	+++++	+++++	+++++	26786	+++++	26786	0.000
(4)	+++++	+++++	+++++	20102	+++++	20102	0.000
(5)	+++++	+++++	+++++	29201	+++++	29201	0.000
16 Endosulfan I	341677	336041	334383	333032	329716	334970	1.317
17 gamma-Chlordane	358394	352965	361729	367453	368802	361869	1.805
18 alpha-Chlordane	370856	353647	353318	356389	357638	358370	2.013
19 4,4'-DDE	342238	344156	357159	353624	343338	348103	1.955
20 Dieldrin	353186	354191	365581	357573	347497	355605	1.871
21 Aroclor-1260(1)	22983	23321	22940	22516	20469	22446	5.085
(2)	35726	36888	36310	35624	32213	35352	5.167
(3)	14778	14965	14903	14964	14487	14820	1.354
(4)	39548	40617	40289	39914	36902	39454	3.756
(5)	42946	43953	43513	42694	38645	42350	5.027
22 Endrin	301276	300717	310320	302183	294249	301749	1.898
23 Toxaphene(1)	4890	3975	3478	3540	3732	3923	14.642
(2)	8250	6627	5983	5913	6431	6641	14.280
(3)	7545	6199	5572	5751	6198	6253	12.367
(4)	12363	10310	9753	9913	10937	10655	9.933
(5)	18193	14984	14344	14929	16115	15713	9.721
24 Endosulfan II	316121	310464	318159	310886	302781	311682	1.918
25 4,4'-DDD	278134	280734	297093	294900	290370	288246	2.932

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Cal Date : 05-Dec-2009 21:01 hea01125
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	___ RRF	% RSD
	26 4,4'-DDT	164064	151543	176752	188495	199942	176159	10.884
	27 Endrin aldehyde	252819	245195	246727	244733	239680	245831	1.920
	28 Methoxychlor	79447	78903	90161	92093	94285	86978	8.362
	29 Endosulfan sulfate	259416	252274	256043	258888	258017	256928	1.129
	30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	61 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	31 Endrin ketone	223726	225805	252751	259917	260503	244540	7.493
	51 Mirex	259962	231947	216366	218180	218649	229021	8.025
	52 C-Nonachlor	409160	392847	392123	390875	386731	394347	2.184
	53 O-Chlordane	343864	315598	305572	301977	297134	312829	5.954
	54 T-Nonachlor	358283	334318	332927	330171	328873	336914	3.603
	55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	56 2,4-DDE	240672	221856	219006	214175	206476	220437	5.772
	58 2,4-DDD	206130	201318	196461	194071	191092	197814	3.017
	57 2,4-DDT	143151	148792	152919	162534	166019	154683	6.141
M	62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	1 4cmx	396312	381894	378646	378690	379030	382914	1.988
$	32 Decachlorobiphenyl	220943	207363	201501	201304	199151	206053	4.302

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Cal Date : 05-Dec-2009 21:10 hea01125

Calibration File Names:
Level 1: /chem/ecd5a.i/120409b.b/021b2101.d
Level 2: /chem/ecd5a.i/120409b.b/022b2201.d
Level 3: /chem/ecd5a.i/120409b.b/023b2301.d
Level 4: /chem/ecd5a.i/120409b.b/024b2401.d
Level 5: /chem/ecd5a.i/120409b.b/025b2501.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	5845652	4719180	4103250	4027456	4087067	AVRG		4556521		16.97872
2 Aroclor-1221 (1)	+++++	+++++	+++++	38194	+++++	AVRG		38194		0.000e+00
(2)	+++++	+++++	+++++	22822	+++++	AVRG		22822		0.000e+00
(3)	+++++	+++++	+++++	78778	+++++	AVRG		78778		0.000e+00
3 Aroclor-1016 (1)	135228	136032	131291	128421	115286	AVRG		129252		6.49152
(2)	94115	91053	86081	82205	74492	AVRG		85590		9.00075
(3)	59100	56752	54061	51882	48540	AVRG		54067		7.61842
(4)	56717	54302	51105	48729	44616	AVRG		51094		9.25654
(5)	75245	71571	68782	66056	60864	AVRG		68504		7.97140
4 Aroclor-1232 (1)	+++++	+++++	+++++	52302	+++++	AVRG		52302		0.000e+00
(2)	+++++	+++++	+++++	57011	+++++	AVRG		57011		0.000e+00
(3)	+++++	+++++	+++++	39294	+++++	AVRG		39294		0.000e+00
(4)	+++++	+++++	+++++	30449	+++++	AVRG		30449		0.000e+00
(5)	+++++	+++++	+++++	33167	+++++	AVRG		33167		0.000e+00
5 alpha-BHC	6742048	6292133	5747698	5754340	5874305	AVRG		6082105		7.08174
6 Aroclor-1242 (1)	+++++	+++++	+++++	86436	+++++	AVRG		86436		0.000e+00
(2)	+++++	+++++	+++++	67908	+++++	AVRG		67908		0.000e+00
(3)	+++++	+++++	+++++	43403	+++++	AVRG		43403		0.000e+00
(4)	+++++	+++++	+++++	54366	+++++	AVRG		54366		0.000e+00
(5)	+++++	+++++	+++++	59740	+++++	AVRG		59740		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Cal Date : 05-Dec-2009 21:10 hea01125

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	5859635	5440727	4983290	4982703	5062373	AVRG		5265746		7.25991
8 Chlordane (tech.) (1)	12513259	23850379	98010707	182293037	510753138	LINR	-55.03166	167999		0.99949
(2)	10357525	19144298	73904527	132859402	358920555	LINR	-85.03665	117274		0.99872
(3)	7686064	14549381	58324887	104264832	286292934	LINR	-75.21808	93735		0.99894
(4)	6495957	12992246	53293414	101045696	284652917	LINR	-47.35035	93821		0.99960
(5)	24007879	44787855	188736475	360712244	1.046e+09	LINR	-33.62510	345381		0.99991
9 Aroclor-1248 (1)	+++++	+++++	+++++	74311	+++++	AVRG		74311		0.000e+00
(2)	+++++	+++++	+++++	94327	+++++	AVRG		94327		0.000e+00
(3)	+++++	+++++	+++++	100218	+++++	AVRG		100218		0.000e+00
(4)	+++++	+++++	+++++	108276	+++++	AVRG		108276		0.000e+00
(5)	+++++	+++++	+++++	113831	+++++	AVRG		113831		0.000e+00
10 Heptachlor	5129824	4611142	4075302	4014082	3902775	AVRG		4346625		11.86877
11 Aldrin	5304071	4932227	4467358	4398498	4313276	AVRG		4683086		9.00891
12 beta-BHC	2773233	2544798	2150493	2063673	2034561	AVRG		2313351		14.20012
13 delta-BHC	5853339	5407087	4956493	5000037	5097840	AVRG		5262959		7.10710
14 Heptachlor epoxide	4740275	4406135	3837260	3691689	3504232	AVRG		4035918		12.83793
15 Aroclor-1254 (1)	+++++	+++++	+++++	94842	+++++	AVRG		94842		0.000e+00
(2)	+++++	+++++	+++++	107760	+++++	AVRG		107760		0.000e+00
(3)	+++++	+++++	+++++	147710	+++++	AVRG		147710		0.000e+00
(4)	+++++	+++++	+++++	104486	+++++	AVRG		104486		0.000e+00
(5)	+++++	+++++	+++++	126738	+++++	AVRG		126738		0.000e+00
16 Endosulfan I	4230129	3845320	3347020	3228008	3081709	AVRG		3546437		13.47807
17 gamma-Chlordane	4706981	4313684	3912291	3886211	3866670	AVRG		4137167		8.90209
18 alpha-Chlordane	4540832	4161999	3740364	3709891	3685092	AVRG		3967636		9.46613

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Cal Date : 05-Dec-2009 21:10 hea01125

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	4314178	3935192	3690250	3622087	3482670	AVRG		3808875		8.57460
20 Dieldrin	4342767	3969613	3617002	3463768	3252156	AVRG		3729061		11.57211
21 Aroclor-1260(1)	67909	63594	61133	58501	56721	AVRG		61572		7.14408
(2)	154760	142644	136554	130696	120581	AVRG		137047		9.34993
(3)	163780	157424	151415	148508	140329	AVRG		152291		5.84087
(4)	154736	148501	147397	143879	139185	AVRG		146740		3.92572
(5)	161375	159022	154521	152918	153834	AVRG		156334		2.34679
22 Endrin	3868632	3464525	3122092	2923627	2732725	AVRG		3222320		14.01112
23 Toxaphene(1)	12107627	42488697	79339139	146783474	228300162	LINR	-61.46615	73693		0.99880
(2)	6487548	24335565	47322848	87895604	138673612	LINR	-31.67152	45087		0.99834
(3)	11694561	44407638	82406196	153906635	243185490	LINR	-40.05305	78762		0.99814
(4)	8326481	31561094	59755788	113907467	188021920	LINR	8.61985	61244		0.99526
(5)	12179803	47422646	94072392	184307674	280127601	LINR	-19.08625	92318		0.99983
24 Endosulfan II	3617715	3326432	2955484	2817963	2661136	AVRG		3075746		12.69017
25 4,4'-DDD	3605377	3260217	3040141	2970917	2889604	AVRG		3153251		9.12837
26 4,4'-DDT	20563080	39013694	176764481	330872508	642770602	LINR	-6.88995	1586969		0.99966
27 Endrin aldehyde	3100926	2779957	2388465	2269781	2143740	AVRG		2536574		15.58543
28 Methoxychlor	52327178	93667579	373086864	694427579	1.452e+09	LINR	-21.31611	711548		0.99896
29 Endosulfan sulfate	3346503	2992515	2608240	2502408	2415390	AVRG		2773011		14.02876
30 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Cal Date : 05-Dec-2009 21:10 hea01125

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	30488210	63513048	262796116	490380483	902683509	LINR	-11.57860	2226590		0.99810
51 Mirex	3034376	2586762	2271014	2269682	2306378	AVRG		2493642		13.23750
52 C-Nonachlor	5434147	4569347	4237619	4239635	4247988	AVRG		4545747		11.36243
53 O-Chlordane	4621772	3807865	3391569	3315709	3261404	AVRG		3679664		15.45956
54 T-Nonachlor	4810064	4005490	3650418	3617452	3681149	AVRG		3952915		12.74570
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	13446243	55335831	233676302	440290648	828617791	LINR	-8.28053	2052994		0.99881
58 2,4-DDD	2867792	2442281	2094342	2052175	1958044	AVRG		2282927		16.41635
57 2,4-DDT	2385124	2200116	1922405	1948754	1925922	AVRG		2076464		10.02315
$ 1 4cmx	5085248	4644470	4096832	4014989	4028350	AVRG		4373978		10.86997
$ 32 Decachlorobiphenyl	2194048	2004113	2001926	2062233	2090485	AVRG		2070561		3.80601

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-2009 20:07
End Cal Date : 05-DEC-2009 03:28
Quant Method : ESTD
Target Version : 3.50
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Method file : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Cal Date : 05-Dec-2009 21:10 hea01125

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/04/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2253

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.23	4.20	4.26	129	100	29.0
4,4'-DDE						
Endrin	5.21	5.18	5.24	124	100	24.0
4,4'-DDD						
4,4'-DDT	5.41	5.38	5.44	148	100	48.0
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 1.10 Endrin % breakdown (1): 1.40

Combined % breakdown (1): 2.50

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/04/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2253

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.72	3.69	3.75	119	100	19.0
4,4'-DDE						
Endrin	4.73	4.70	4.76	124	100	24.0
4,4'-DDD						
4,4'-DDT	4.99	4.96	5.02	196	100	96.0
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 2.00 Endrin % breakdown (1): 2.10

Combined % breakdown (1): 4.10

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/05/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :0403

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.23	4.20	4.26	125	100	25.0
4,4'-DDE						
Endrin	5.21	5.18	5.24	116	100	16.0
4,4'-DDD						
4,4'-DDT	5.41	5.38	5.44	84.4	100	-15.6
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 3.40 Endrin % breakdown (1): 2.20

Combined % breakdown (1): 5.60

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/05/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :0403

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.72	3.69	3.75	124	100	24.0
4,4'-DDE						
Endrin	4.73	4.70	4.76	120	100	20.0
4,4'-DDD						
4,4'-DDT	4.99	4.96	5.02	126	100	26.0
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 3.10 Endrin % breakdown (1): 3.20

Combined % breakdown (1): 6.30

FORM VII PEST-1 OLM03.0

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD5A Calibration Date: 12/05/09 Time: 0004

Lab File ID: 008F0801 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 2305 2352

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
alpha-BHC	497873.44	532100.40	0.01	6.9	15.0
beta-BHC	200185.55	200832.73	0.01	0.3	15.0
delta-BHC	450247.18	480079.41	0.01	6.6	15.0
gamma-BHC (Lindane)	429446.52	471124.85	0.01	9.7	15.0
Heptachlor	366861.87	362356.90	0.01	-1.2	15.0
Aldrin	411911.83	418383.45	0.01	1.6	15.0
Heptachlor epoxide	367060.52	376622.11	0.01	2.6	15.0
Endosulfan I	334969.85	356407.51	0.01	6.4	15.0
Dieldrin	355605.44	367546.34	0.01	3.4	15.0
4,4'-DDE	348103.02	365403.43	0.01	5.0	15.0
Endrin	301748.80	326765.40	0.01	8.3	15.0
Endosulfan II	311682.28	324028.27	0.01	4.0	15.0
4,4'-DDD	288246.38	300741.48	0.01	4.3	15.0
Endosulfan sulfate	256927.56	261014.81	0.01	1.6	15.0
4,4'-DDT	176159.11	195960.24	0.01	11.2	15.0
Methoxychlor	86977.862	93379.385	0.01	7.4	15.0
Endrin ketone	244540.41	254530.96	0.01	4.1	15.0
Endrin aldehyde	245830.95	246156.95	0.01	0.1	15.0
gamma-Chlordane	361868.77	396992.95	0.01	9.7	15.0
alpha-Chlordane	358369.96	343837.21	0.01	-4.0	15.0
4cmx	382914.45	387563.41	0.01	1.2	15.0
Decachlorobiphenyl	206052.61	204907.04	0.01	-0.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD5A Calibration Date: 12/05/09 Time: 0004

Lab File ID: 008B0801 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 2305 2352

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
alpha-BHC	98.9	100	AVRG	-1.1	15.0
beta-BHC	92.6	100	AVRG	-7.4	15.0
delta-BHC	98.2	100	AVRG	-1.8	15.0
gamma-BHC (Lindane)	102	100	AVRG	2.0	15.0
Heptachlor	89.9	100	AVRG	-10.1	15.0
Aldrin	93.6	100	AVRG	-6.4	15.0
Heptachlor epoxide	95.3	100	AVRG	-4.7	15.0
Endosulfan I	97.0	100	AVRG	-3.0	15.0
Dieldrin	189	200	AVRG	-5.5	15.0
4,4'-DDE	196	200	AVRG	-2.0	15.0
Endrin	196	200	AVRG	-2.0	15.0
Endosulfan II	193	200	AVRG	-3.5	15.0
4,4'-DDD	193	200	AVRG	-3.5	15.0
Endosulfan sulfate	187	200	AVRG	-6.5	15.0
4,4'-DDT	170	200	LINR	-15.0	15.0
Methoxychlor	869	1000	LINR	-13.1	15.0
Endrin ketone	195	200	LINR	-2.5	15.0
Endrin aldehyde	185	200	AVRG	-7.5	15.0
gamma-Chlordane	101	100	AVRG	1.0	15.0
alpha-Chlordane	90.2	100	AVRG	-9.8	15.0
4cmx	190	200	AVRG	-5.0	15.0
Decachlorobiphenyl	212	200	AVRG	6.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD5A Calibration Date: 12/05/09 Time: 0116

Lab File ID: 014F1401 Init. Calib. Date(s): 12/05/09 12/05/09

Heated Purge: (Y/N) N Init. Calib. Times: 0016 0104

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Toxaphene	3923.032	4361.157	0.01	11.2	15.0
(2)	6640.668	6113.214	0.01	-7.9	15.0
(3)	6253.090	5890.165	0.01	-5.8	15.0
(4)	10655.295	9314.778	0.01	-12.6	15.0
(5)	15713.071	13785.618	0.01	-12.3	15.0
4cmx	382914.45	392648.85	0.01	2.5	15.0
Decachlorobiphenyl	206052.61	209597.20	0.01	1.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD5A Calibration Date: 12/05/09 Time: 0116

Lab File ID: 014B1401 Init. Calib. Date(s): 12/05/09 12/05/09

Heated Purge: (Y/N) N Init. Calib. Times: 0016 0104

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Toxaphene	2180	2000	LINR	9.0	15.0
(2)	2110	2000	LINR	5.5	15.0
(3)	1990	2000	LINR	-0.5	15.0
(4)	1730	2000	LINR	-13.5	15.0
(5)	1720	2000	LINR	-14.0	15.0
4cmx	194	200	AVRG	-3.0	15.0
Decachlorobiphenyl	214	200	AVRG	7.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD5A Calibration Date: 12/05/09 Time: 0551

Lab File ID: 037F3701 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 2305 2352

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
alpha-BHC	497873.44	539689.42	0.01	8.4	15.0
beta-BHC	200185.55	205846.51	0.01	2.8	15.0
delta-BHC	450247.18	489459.37	0.01	8.7	15.0
gamma-BHC (Lindane)	429446.52	478476.81	0.01	11.4	15.0
Heptachlor	366861.87	366627.43	0.01	-0.1	15.0
Aldrin	411911.83	423071.06	0.01	2.7	15.0
Heptachlor epoxide	367060.52	379873.24	0.01	3.5	15.0
Endosulfan I	334969.85	359952.05	0.01	7.4	15.0
Dieldrin	355605.44	370865.97	0.01	4.3	15.0
4,4'-DDE	348103.02	370336.53	0.01	6.4	15.0
Endrin	301748.80	324620.93	0.01	7.6	15.0
Endosulfan II	311682.28	325550.52	0.01	4.4	15.0
4,4'-DDD	288246.38	310293.45	0.01	7.6	15.0
Endosulfan sulfate	256927.56	263578.41	0.01	2.6	15.0
4,4'-DDT	176159.11	191678.10	0.01	8.8	15.0
Methoxychlor	86977.862	91758.140	0.01	5.5	15.0
Endrin ketone	244540.41	265537.29	0.01	8.6	15.0
Endrin aldehyde	245830.95	252782.71	0.01	2.8	15.0
gamma-Chlordane	361868.77	397209.37	0.01	9.8	15.0
alpha-Chlordane	358369.96	345019.26	0.01	-3.7	15.0
4cmx	382914.45	391869.54	0.01	2.3	15.0
Decachlorobiphenyl	206052.61	210444.57	0.01	2.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD5A Calibration Date: 12/05/09 Time: 0551

Lab File ID: 037B3701 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 2305 2352

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	104	100	AVRG	4.0	15.0	
beta-BHC	97.8	100	AVRG	-2.2	15.0	
delta-BHC	104	100	AVRG	4.0	15.0	
gamma-BHC (Lindane)	107	100	AVRG	7.0	15.0	
Heptachlor	95.5	100	AVRG	-4.5	15.0	
Aldrin	98.6	100	AVRG	-1.4	15.0	
Heptachlor epoxide	101	100	AVRG	1.0	15.0	
Endosulfan I	99.0	100	AVRG	-1.0	15.0	
Dieldrin	192	200	AVRG	-4.0	15.0	
4,4'-DDE	198	200	AVRG	-1.0	15.0	
Endrin	196	200	AVRG	-2.0	15.0	
Endosulfan II	191	200	AVRG	-4.5	15.0	
4,4'-DDD	195	200	AVRG	-2.5	15.0	
Endosulfan sulfate	192	200	AVRG	-4.0	15.0	
4,4'-DDT	270	200	LINR	35.0	15.0	<-
Methoxychlor	1150	1000	LINR	15.0	15.0	
Endrin ketone	237	200	LINR	18.5	15.0	<-
Endrin aldehyde	188	200	AVRG	-6.0	15.0	
gamma-Chlordane	107	100	AVRG	7.0	15.0	
alpha-Chlordane	92.1	100	AVRG	-7.9	15.0	
4cmx	197	200	AVRG	-1.5	15.0	
Decachlorobiphenyl	226	200	AVRG	13.0	15.0	

FORM VII PEST

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120409b.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 04-DEC-2009 22:53
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 21:01 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.228	4.230	-0.002	53247369	129.269	129	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.866	4.867	-0.001	107720	0.30945	0.309	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.208	5.209	-0.001	37582147	124.548	124	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
5.232	5.238	-0.006	194700	0.67547	0.675	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.601	5.599	0.002	86734	0.35282	0.353	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.405	5.406	-0.001	26012382	147.664	148	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.033	6.032	0.001	425444	1.73977	1.74	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.718	2.720	-0.002	84403102	220.423	220	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.616	6.617	-0.001	45740043	221.982	222	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/002f0201.d
Date : 04-DEC-2009 22:53
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

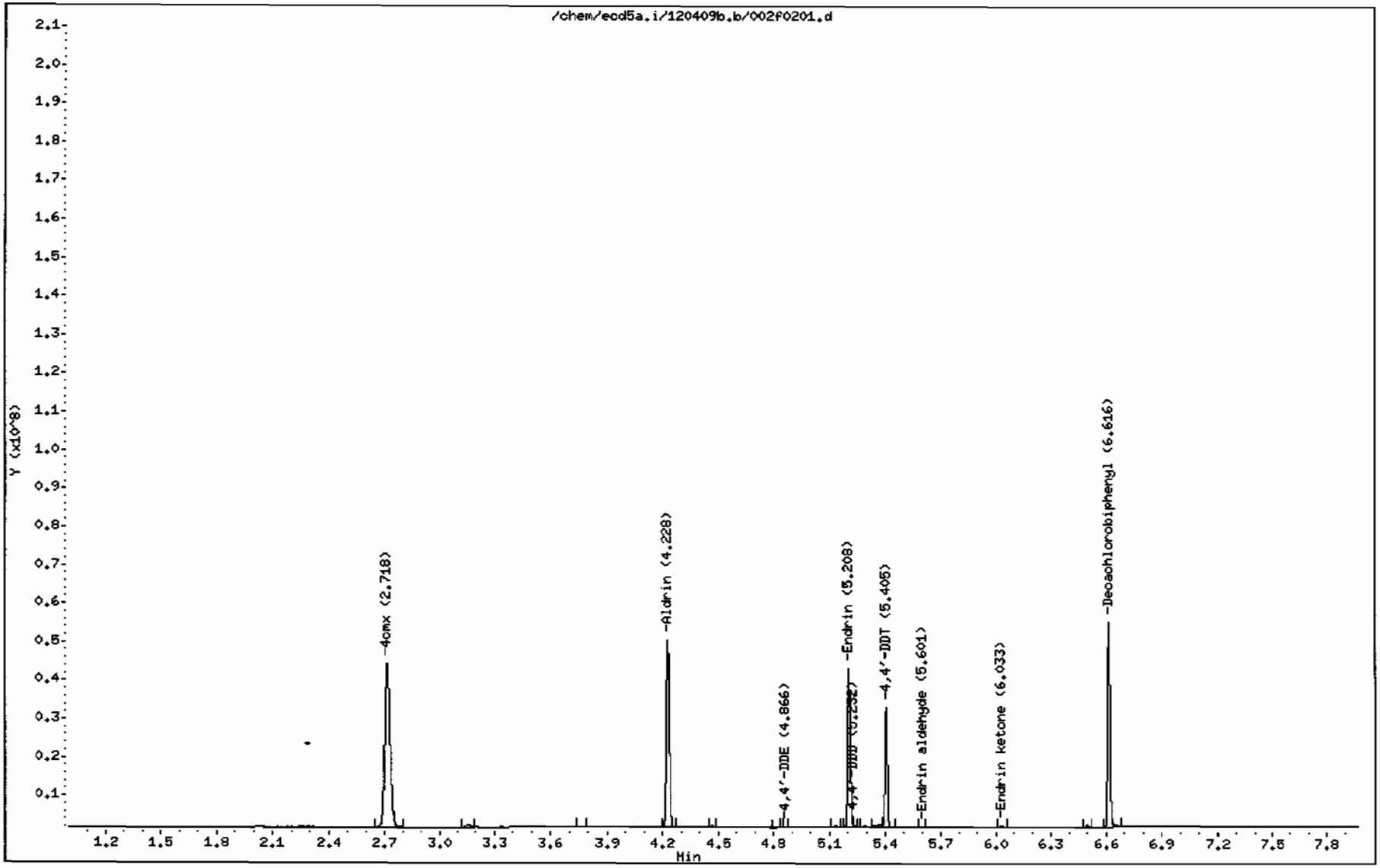

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 04-DEC-2009 22:53
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.718	3.719	-0.001	556029664	118.731	119	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.446	4.448	-0.002	1589865	0.41741	0.417	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.727	4.728	-0.001	398289016	123.603	124	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.799	4.800	-0.001	5083897	1.61227	1.61	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.061	5.059	0.002	1060070	0.41791	0.418	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.985	4.986	-0.001	321286496	195.563	196	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.541	5.540	0.001	7513299			80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.106	2.108	-0.002	862131755	197.105	197	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.257	6.256	0.001	460451648	222.380	222	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/002b0201.d
Date : 04-DEC-2009 22:53
Client ID: PEM01
Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

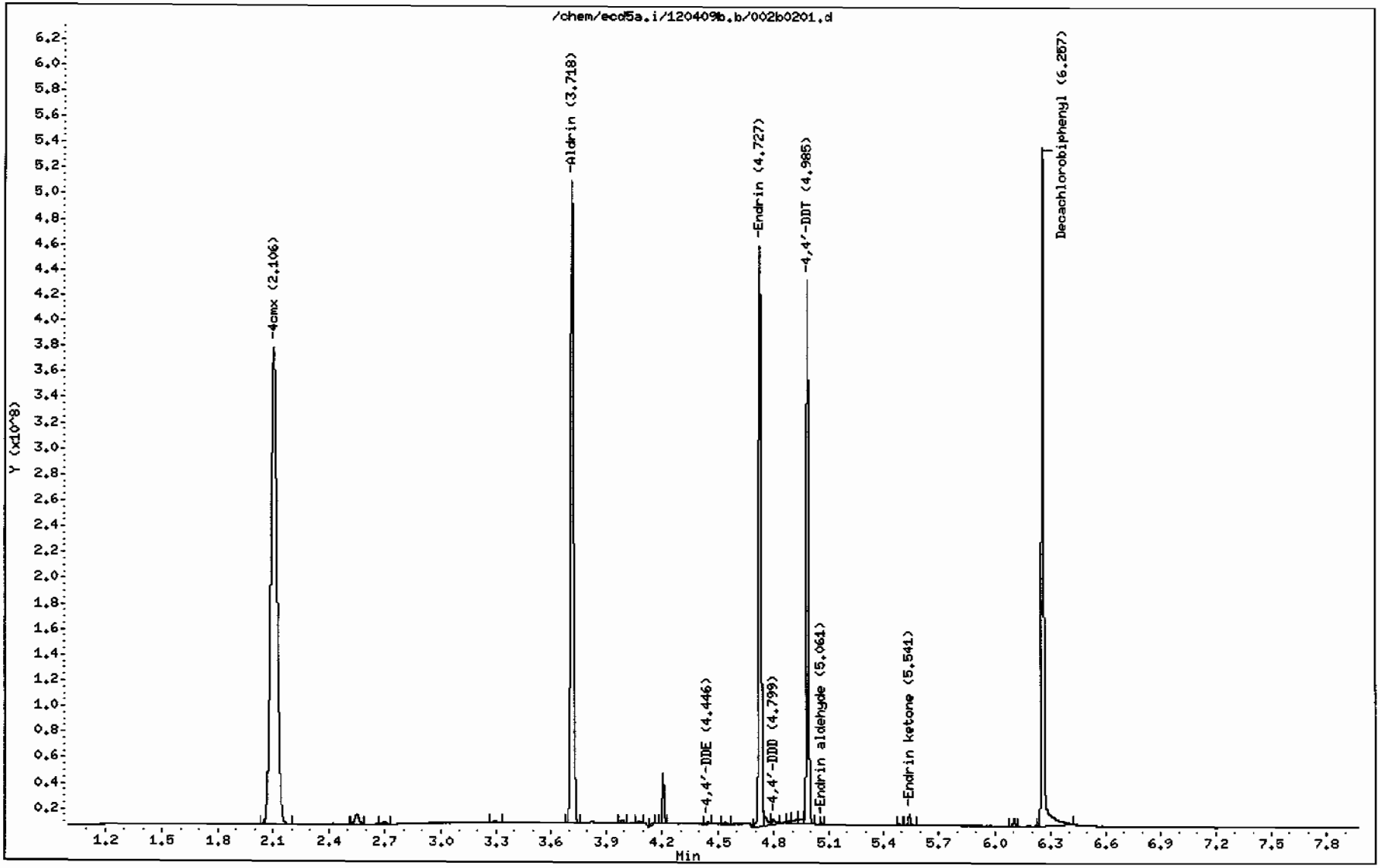

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120409b.b/028f2801.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 05-DEC-2009 04:03
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 21:01 hea01125 Quant Type: ESTD
Cal Date : 04-DEC-2009 00:41 Cal File: 025f2501.d
Als bottle: 28 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.233	4.230	0.003	51632781	125.349	125	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.868	4.867	0.001	131424	0.37754	0.378	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.212	5.209	0.003	34919194	115.723	116	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
5.240	5.238	0.002	394076	1.36715	1.37	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.604	5.599	0.005	237326	0.96540	0.965	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.409	5.406	0.003	14861410	84.3636	84.4	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.037	6.032	0.005	528361	2.16063	2.16	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.720	2.720	0.000	82081200	214.359	214	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.619	6.617	0.002	45152344	219.130	219	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/028f2801.d
Date : 05-DEC-2009 04:03
Client ID: PEM02
Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

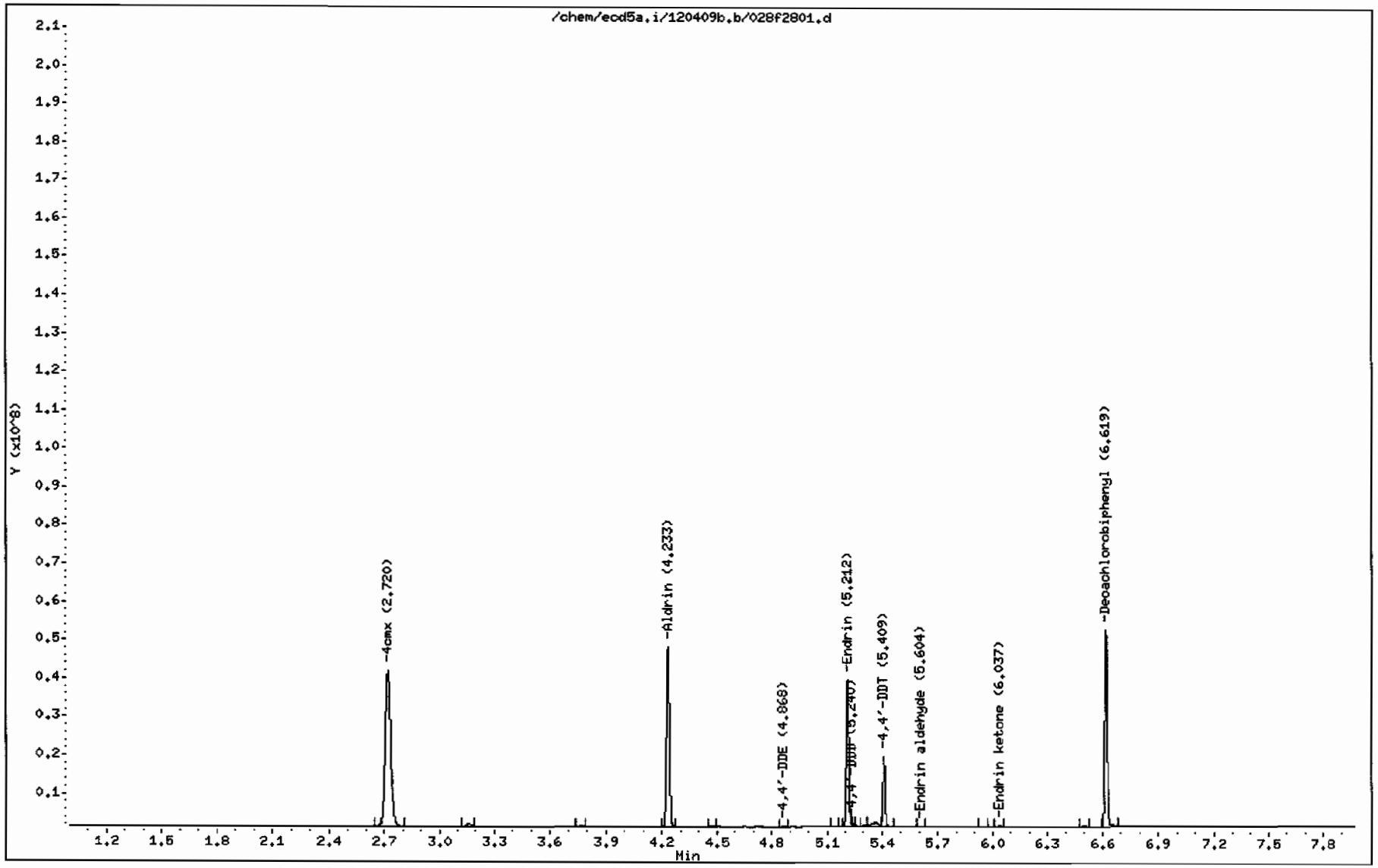

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/028b2801.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 05-DEC-2009 04:03
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 28 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.720	3.719	0.001	581520825	124.175	124	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.450	4.448	0.002	1893414	0.49711	0.497	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.730	4.728	0.002	387978018	120.403	120	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.802	4.800	0.002	4932120	1.56414	1.56	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.064	5.059	0.005	3176934	1.25245	1.25	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.989	4.986	0.003	210915346	126.015	126	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.543	5.540	0.003	9622504			80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.108	2.108	0.000	904369788	206.761	207	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.258	6.256	0.002	541400712	261.475	261	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/028b2801.d
Date : 05-DEC-2009 04:03
Client ID: PEN02
Sample Info: IWPE091109-99DC
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

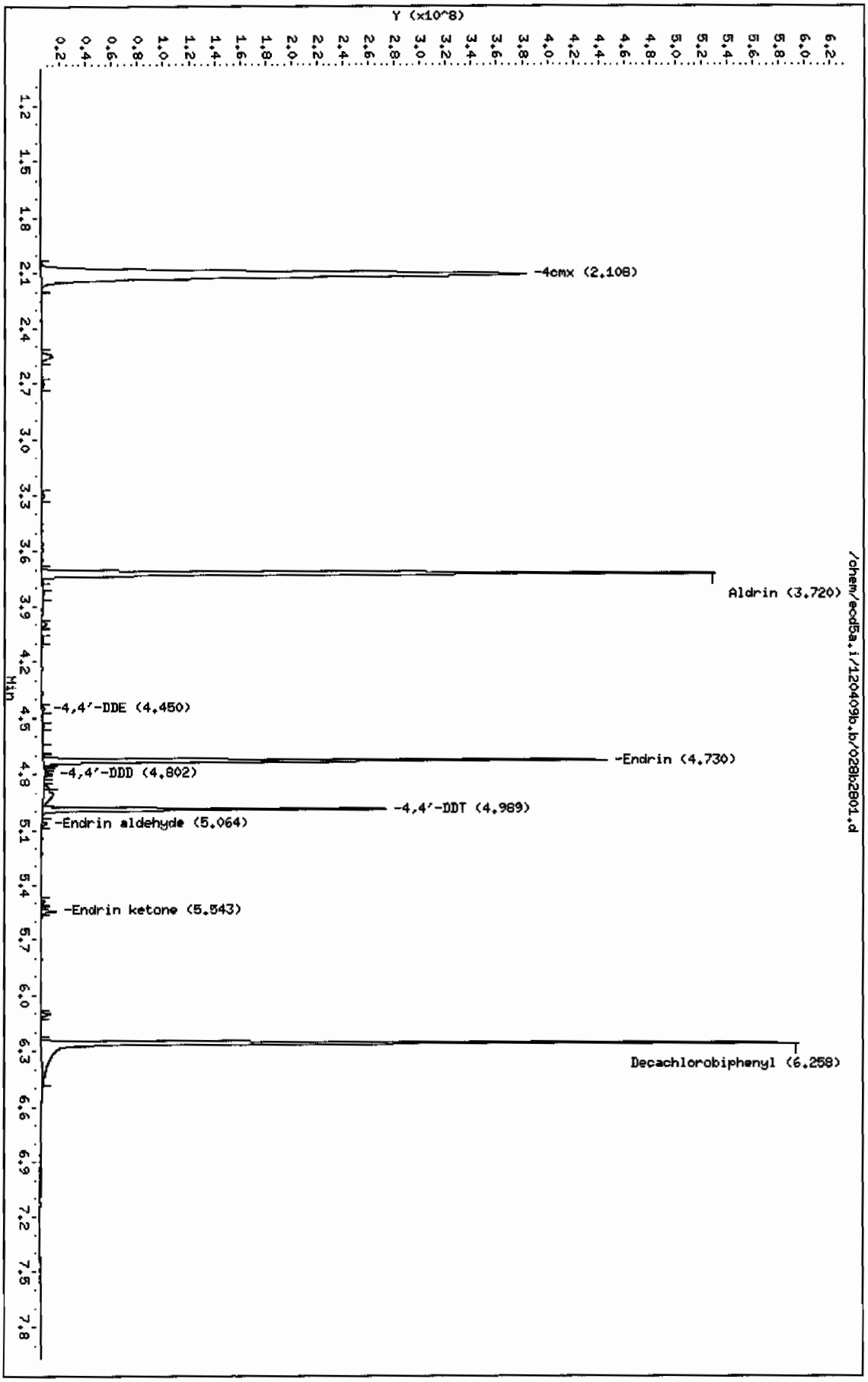

Page 1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120409b.b/008f0801.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 05-DEC-2009 00:04
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 21:01 hea01125 Quant Type: ESTD
Cal Date : 04-DEC-2009 00:41 Cal File: 025f2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.333	3.333	0.000	53210040	100.000	107	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.624	3.624	0.000	47112485	100.000	110	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.702	3.702	0.000	20083273	100.000	100	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.007	4.007	0.000	36235690	100.000	98.8	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.846	3.846	0.000	48007941	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.230	4.230	0.000	41838345	100.000	102	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.653	4.653	0.000	37662211	100.000	103	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.735	4.735	0.000	39699295	100.000	110	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.821	4.821	0.000	34383721	100.000	95.9	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.911	4.911	0.000	35640751	100.000	106	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.867	4.867	0.000	73080687	200.000	210	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.063	5.063	0.000	73509267	200.000	207	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.209	5.209	0.000	65353079	200.000	216	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.238	5.238	0.000	60148296	200.000	209	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.348	5.348	0.000	64805653	200.000	208	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.599	5.599	0.000	49231390	200.000	200	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.406	5.406	0.000	39192048	200.000	222	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.859	5.859	0.000	52202962	200.000	203	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.686	5.686	0.000	93379385	1000.00	1070	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.032	6.032	0.000	50906192	200.000	208	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.720	2.720	0.000	77512681	200.000	202	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.617	6.617	0.000	40981408	200.000	199	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/008f0801.d

Date : 05-DEC-2009 00:04

Client ID: INDAB01

Sample Info: IWPE091123-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

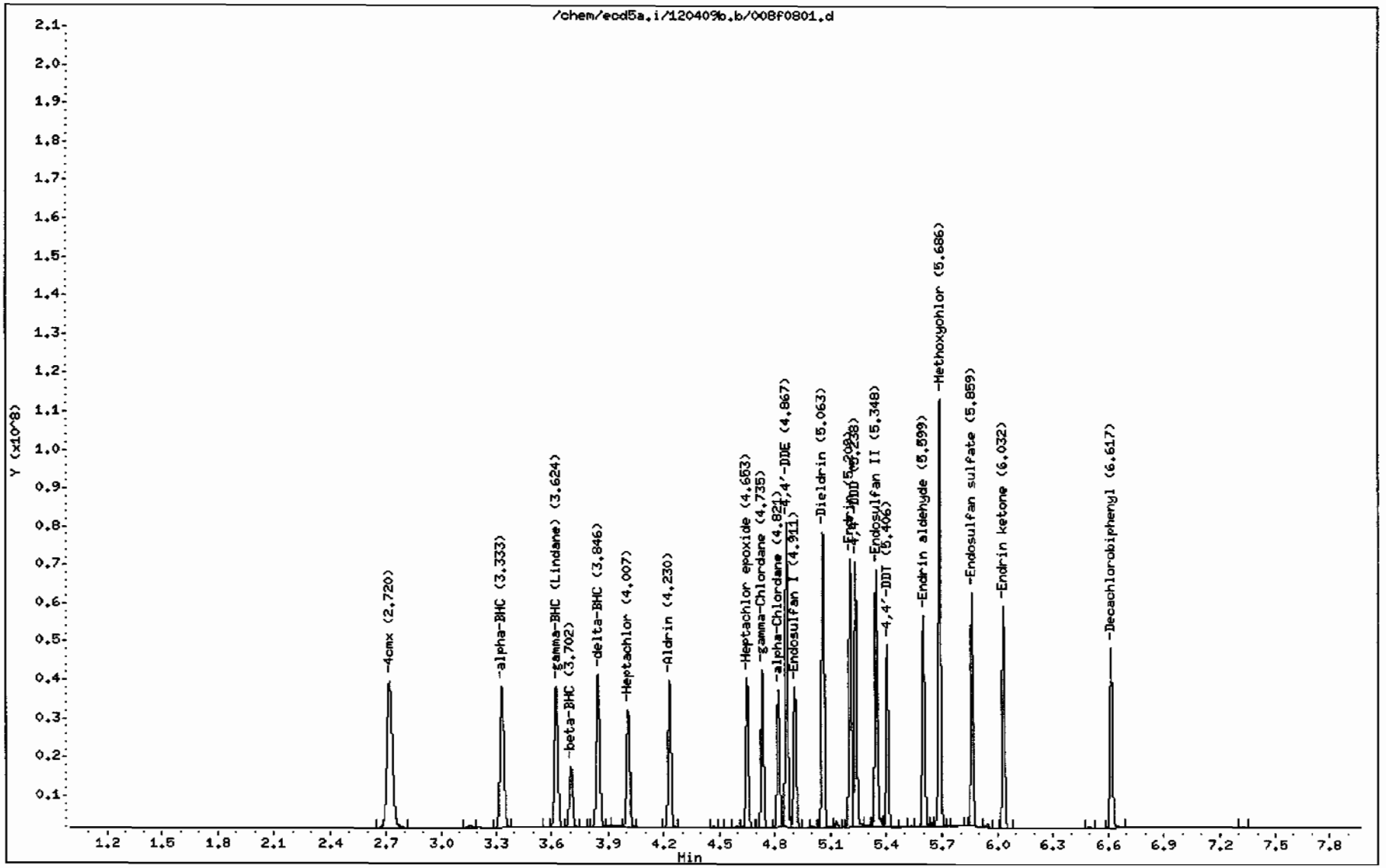

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/008b0801.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB01
Inj Date : 05-DEC-2009 00:04
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 04-DEC-2009 00:41 Cal File: 025b2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.818	2.818	0.000	601591500	100.000	98.9	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.141	3.141	0.000	535602818	100.000	102	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.224	3.224	0.000	214157825	100.000	92.6	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.486	3.486	0.000	390678858	100.000	89.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.452	3.452	0.000	516902641	100.000	98.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.719	3.719	0.000	438173131	100.000	93.6	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.118	4.118	0.000	384524749	100.000	95.3	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.241	4.241	0.000	419493814	100.000	101	80.00- 120.00	100.00(M)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.336	4.336	0.000	357913636	100.000	90.2	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.368	4.368	0.000	344191973	100.000	97.0	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
4.448	4.448	0.000	746615010	200.000	196	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.542	4.542	0.000	703953534	200.000	189	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.728	4.728	0.000	631466879	200.000	196	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.800	4.800	0.000	607618871	200.000	193	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.858	4.858	0.000	593166704	200.000	193	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.059	5.059	0.000	469963432	200.000	185	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.986	4.986	0.000	281251306	200.000	170	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.223	5.223	0.000	518893116	200.000	187	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.391	5.391	0.000	633677019	1000.00	869	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.540	5.540	0.000	459383353	200.000	195	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.108	2.108	0.000	829285572	200.000	190	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.256	6.256	0.000	439887135	200.000	212	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/1204090.b/0080c0801.d
Date : 05-DEC-2009 00:04
Client ID: INDAB01
Sample Info: IWPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

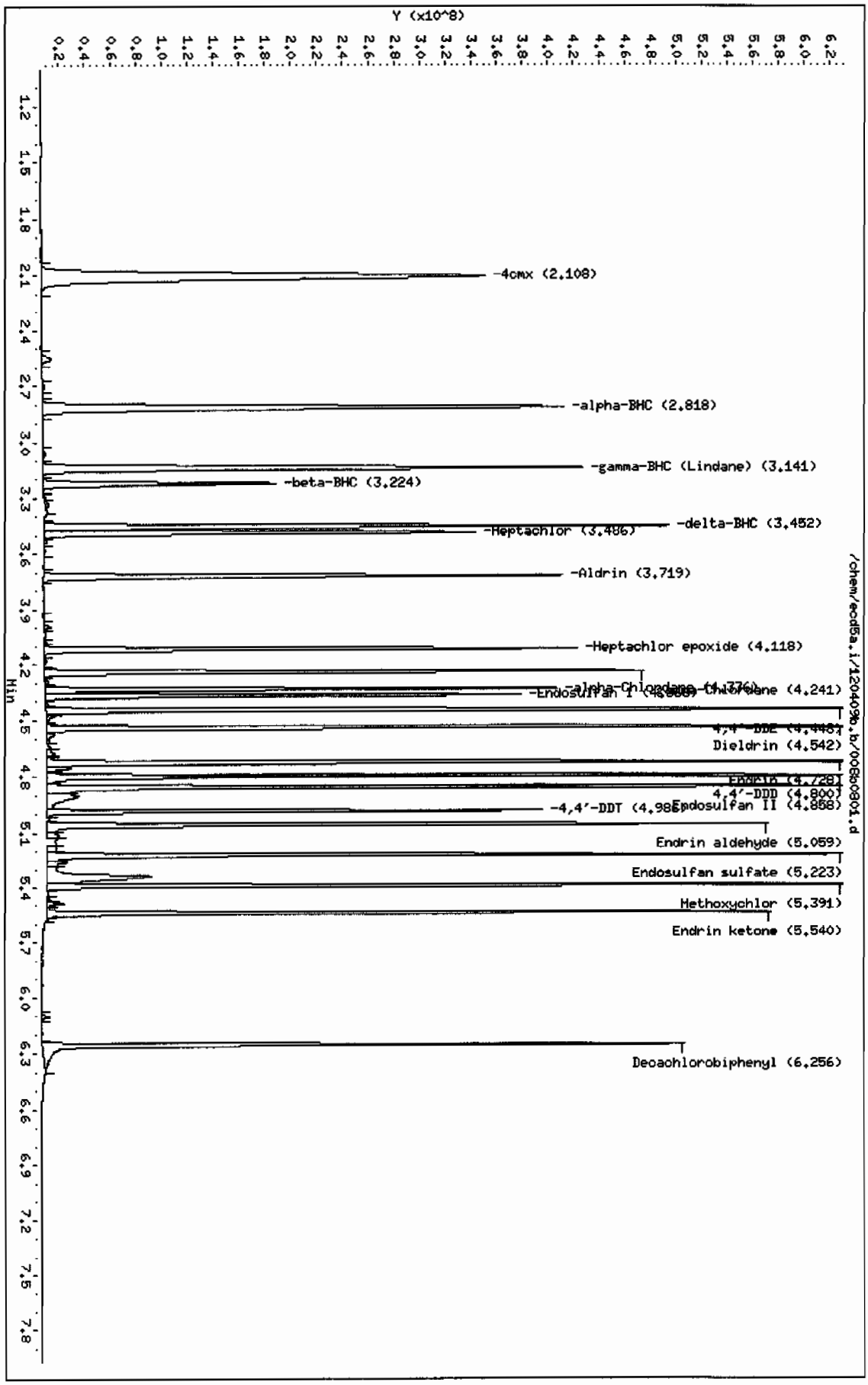

Page 1

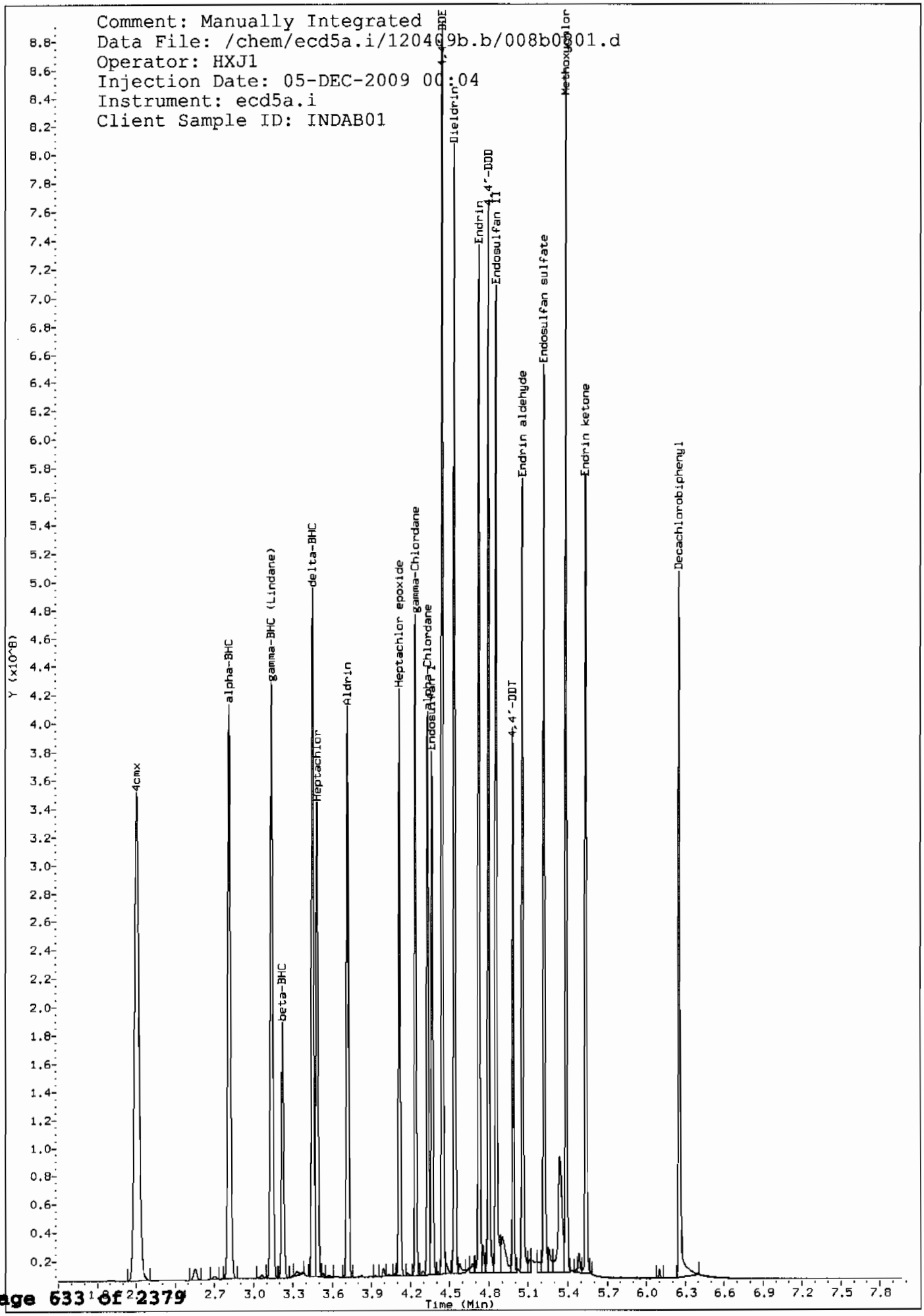
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Operator: HXJ1
Injection Date: 05-DEC-2009 00:04
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

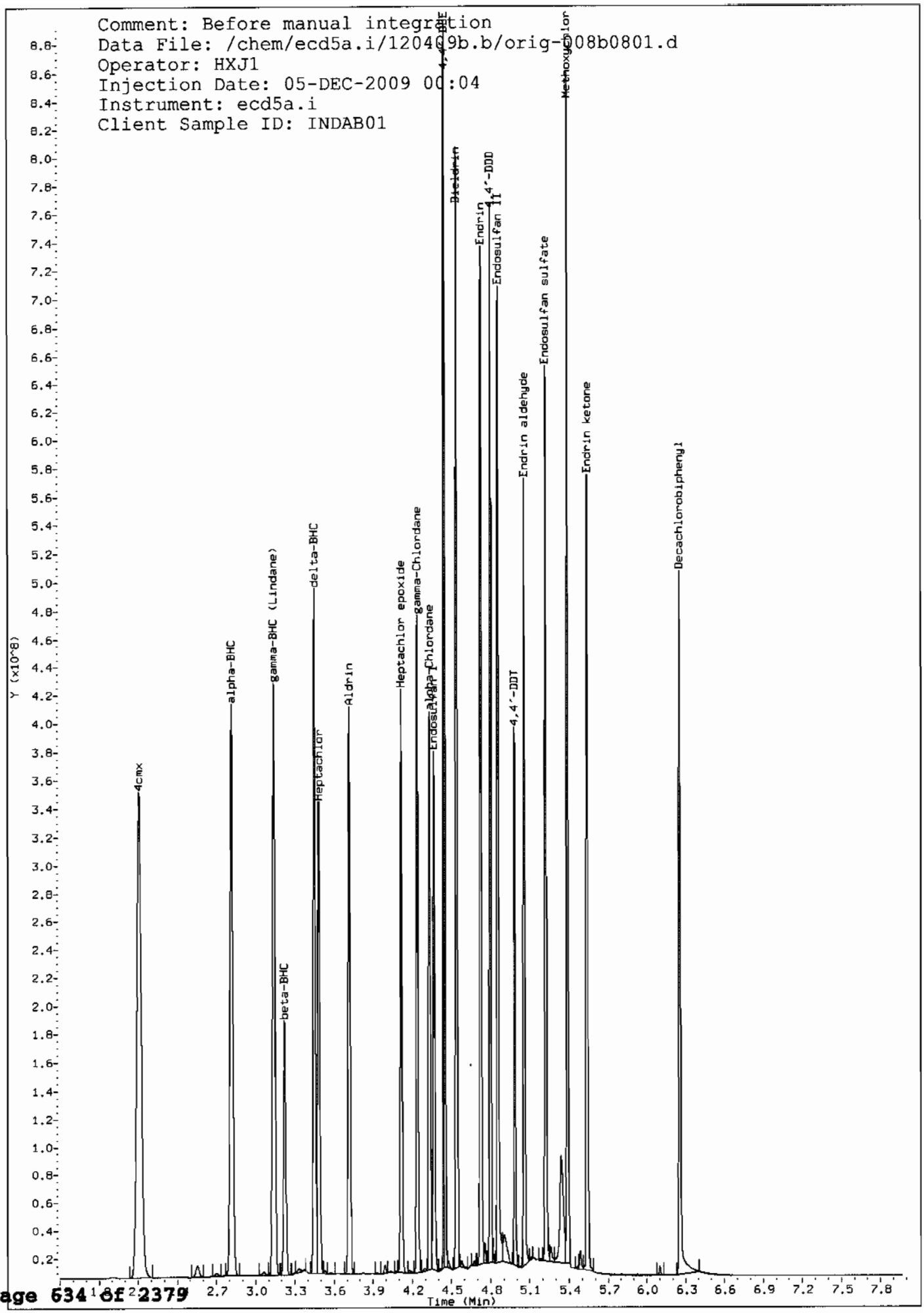
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Operator: HXJ1
Injection Date: 05-DEC-2009 00:04
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120409b.b/014f1401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 05-DEC-2009 01:16
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 21:01 hea01125 Quant Type: ESTD
Cal Date : 04-DEC-2009 00:41 Cal File: 025f2501.d
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.921	4.921	0.000	8722314	2000.00	2220	80.00- 120.00	100.00(M)
5.067	5.067	0.000	12226429	2000.00	1840	120.17- 160.17	140.17
5.124	5.124	0.000	11780330	2000.00	1880	115.06- 155.06	135.06
5.162	5.162	0.000	18629557	2000.00	1750	193.59- 233.59	213.59
5.344	5.344	0.000	27571237	2000.00	1750	296.10- 336.10	316.10
Average of Peak Amounts =					1.89e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.722	2.720	0.002	78529771	200.000	205	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.620	6.617	0.003	41919441	200.000	203	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/014f1401.d
Date : 05-DEC-2009 01:16
Client ID: TOXAPH01
Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

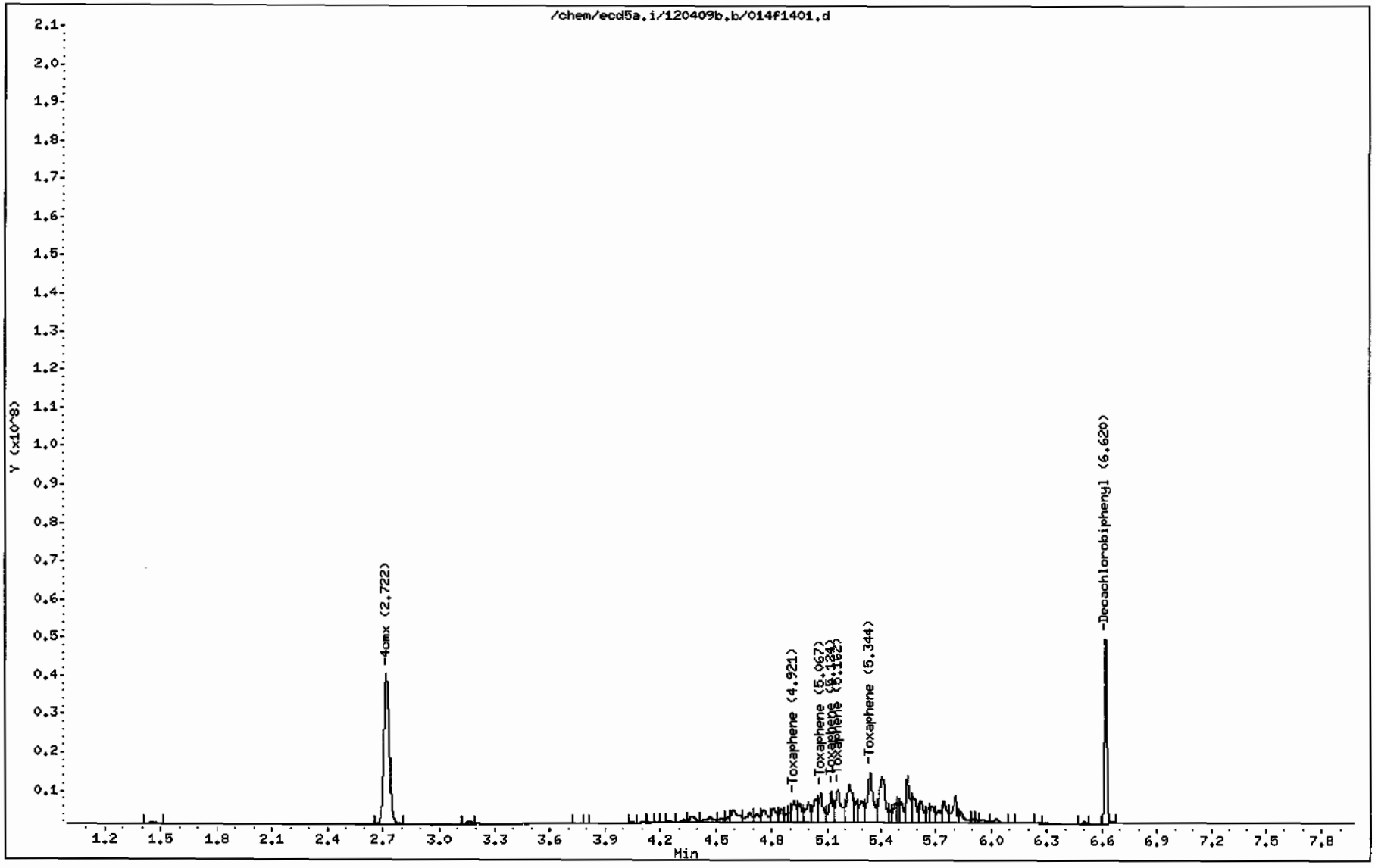

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120409b.b/014f1401.d
Operator: HXJ1
Injection Date: 05-DEC-2009 01:16
Instrument: ecd5a.i
Client Sample ID: TOXAPH01

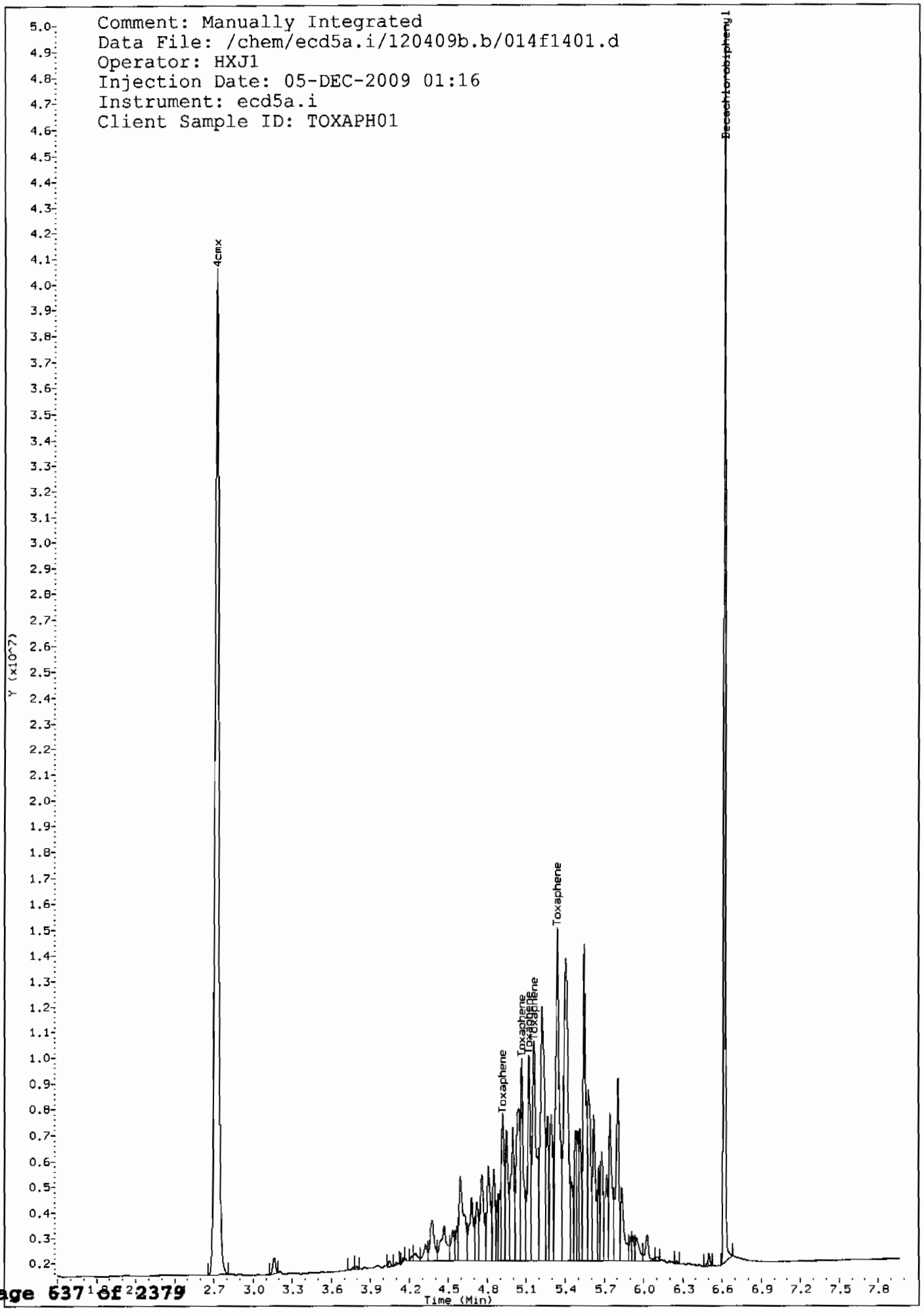

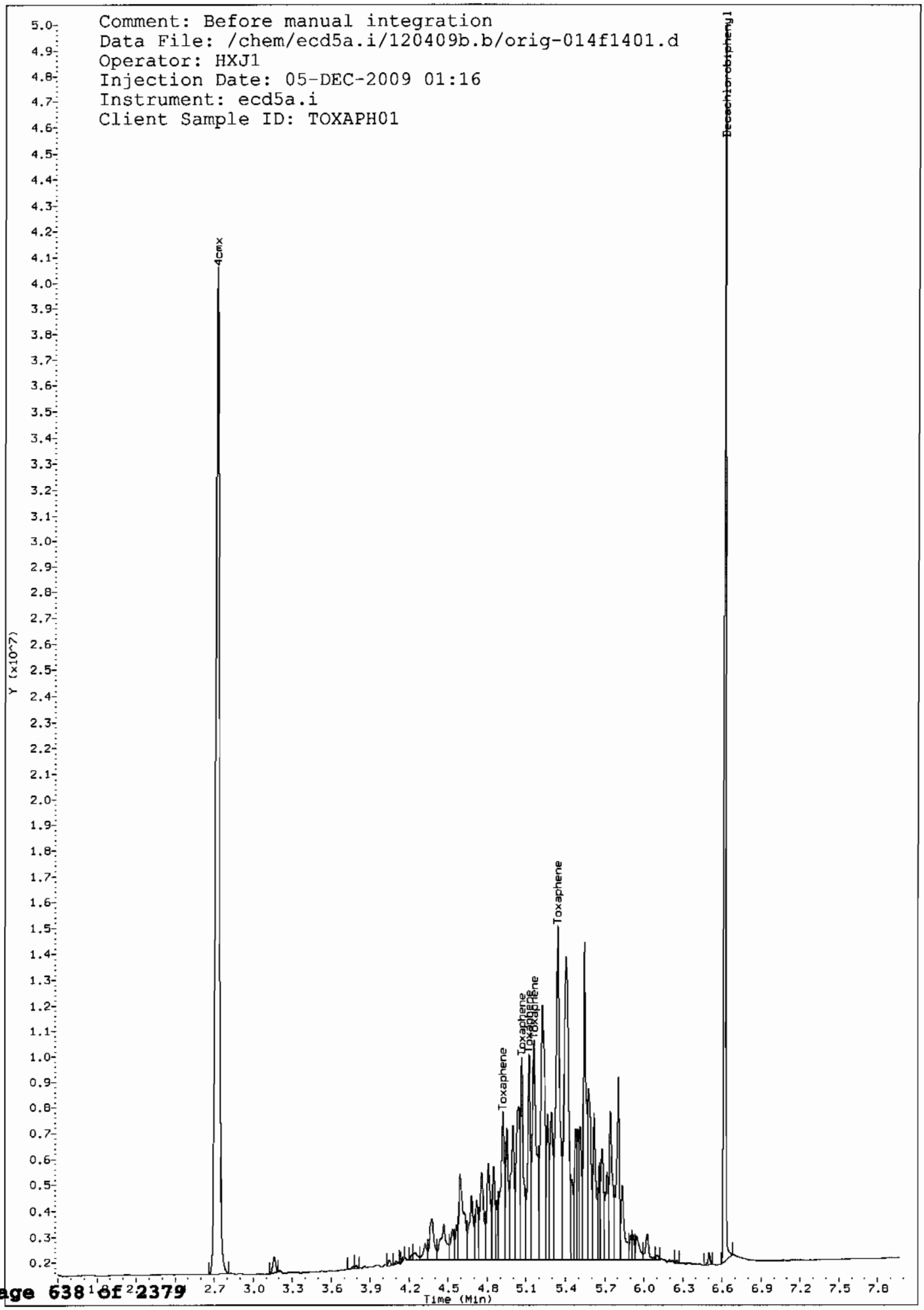
Comment: Before manual integration
Data File: /chem/ecd5a.i/120409b.b/orig-014f1401.d
Operator: HXJ1
Injection Date: 05-DEC-2009 01:16
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/014b1401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 05-DEC-2009 01:16
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.529	4.529	0.000	165327394	2000.00	2180	80.00- 120.00	100.00
4.602	4.602	0.000	96560870	2000.00	2110	38.41- 78.41	58.41
4.714	4.714	0.000	159667670	2000.00	1990	76.58- 116.58	96.58
4.832	4.832	0.000	105485527	2000.00	1730	43.80- 83.80	63.80
4.852	4.852	0.000	160759366	2000.00	1720	77.24- 117.24	97.24
Average of Peak Amounts =					1.95e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.109	2.108	0.001	847681276	200.000	194	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.259	6.256	0.003	442344895	200.000	214	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/014b1401.d

Date : 05-DEC-2009 01:16

Client ID: TOXAPH01

Sample Info: IWPE091104-52TX

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

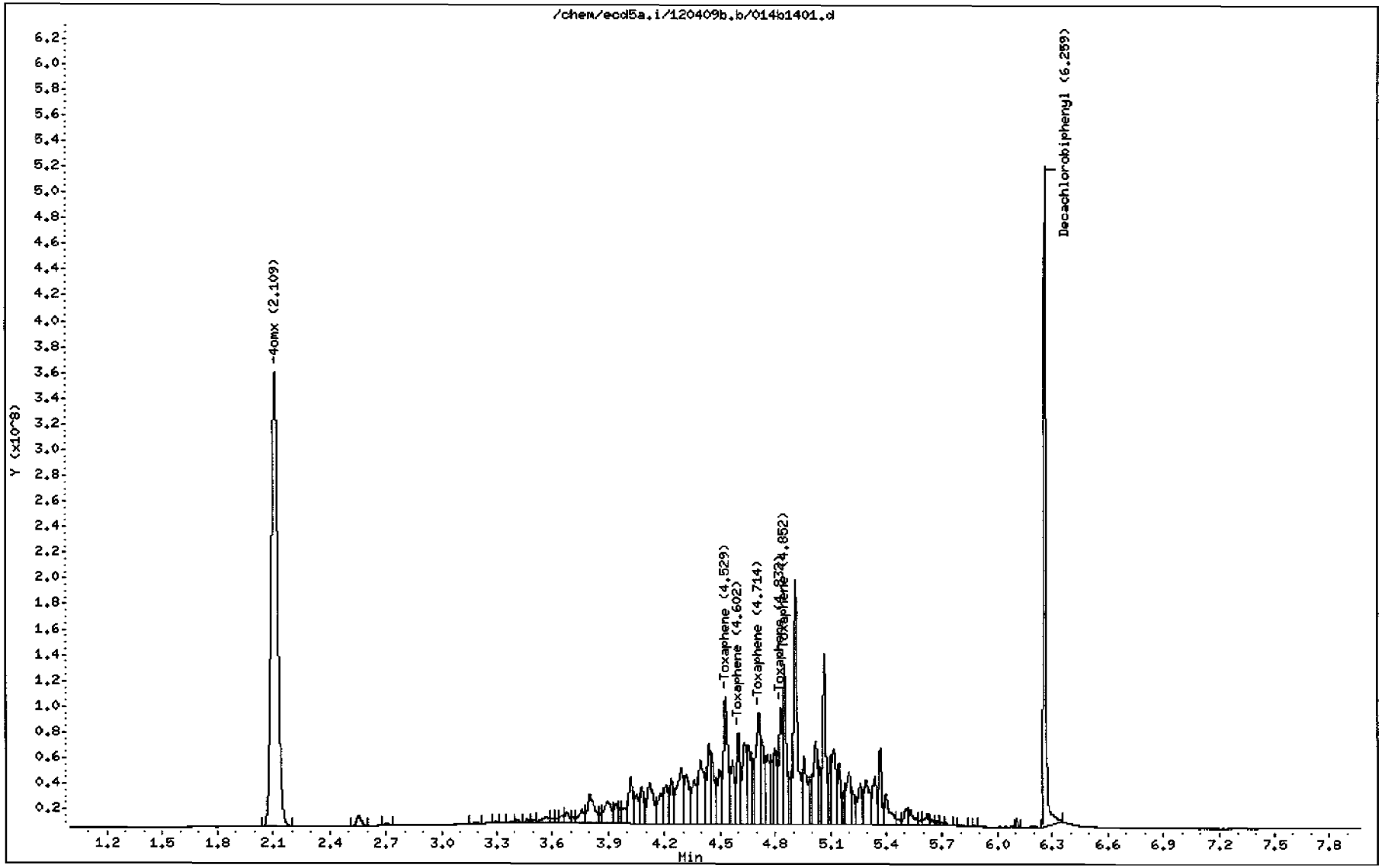

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CLP-1

Data file : /chem/ecd5a.i/120409b.b/037f3701.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB02
Inj Date : 05-DEC-2009 05:51
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 21:01 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 37 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.334	3.333	0.001	53968942	100.000	108	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.624	3.624	0.000	47847680	100.000	111	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.704	3.702	0.002	20584650	100.000	103	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.008	4.007	0.001	36662743	100.000	99.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.848	3.846	0.002	48945937	100.000	109	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.232	4.230	0.002	42307106	100.000	103	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.654	4.653	0.001	37987323	100.000	103	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.736	4.735	0.001	39720936	100.000	110	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.823	4.821	0.002	34501926	100.000	96.3	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.912	4.911	0.001	35995205	100.000	107	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.868	4.867	0.001	74067305	200.000	213	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.064	5.063	0.001	74173194	200.000	208	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.211	5.209	0.002	64924185	200.000	215	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.239	5.238	0.001	62058689	200.000	215	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.349	5.348	0.001	65110103	200.000	209	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.601	5.599	0.002	50556541	200.000	206	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.408	5.406	0.002	38335620	200.000	218	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.860	5.859	0.001	52715681	200.000	205	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.687	5.686	0.001	91758139	1000.00	1050	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.034	6.032	0.002	53107457	200.000	217	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.721	2.720	0.001	78373908	200.000	205	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.619	6.617	0.002	42088913	200.000	204	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/037f3701.d

Date : 05-DEC-2009 05:51

Client ID: INDAB02

Sample Info: IWPE091123-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

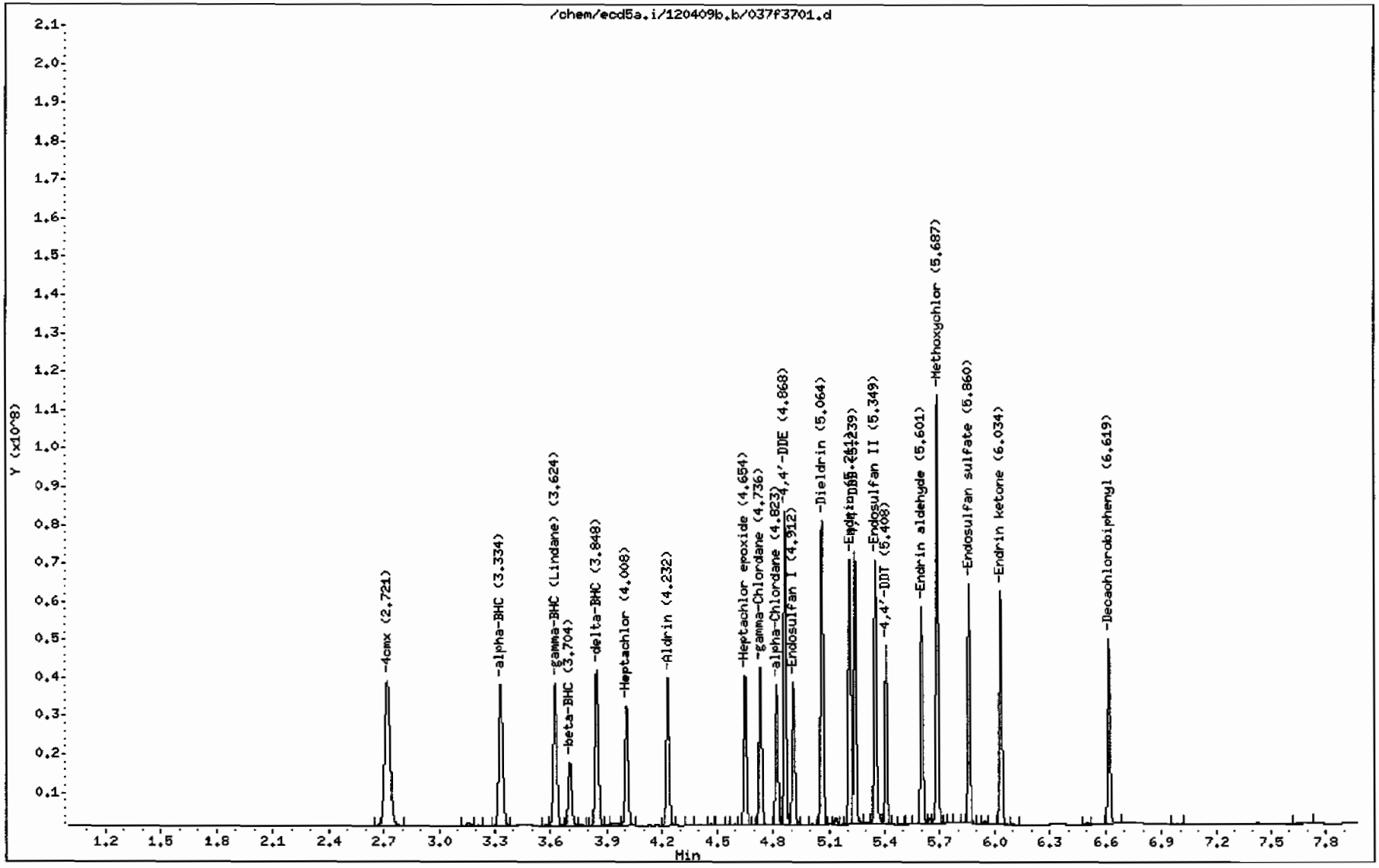

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/037b3701.d
Lab Smp Id: WPE091123-10AB Client Smp ID: INDAB02
Inj Date : 05-DEC-2009 05:51
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE091123-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 37 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.818	2.818	0.000	630687440	100.000	104	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.141	3.141	0.000	565170878	100.000	107	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.224	3.224	0.000	226355470	100.000	97.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.486	3.486	0.000	414972983	100.000	95.5	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.452	3.452	0.000	546924010	100.000	104	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.720	3.719	0.001	461985113	100.000	98.6	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.118	4.118	0.000	407088430	100.000	101	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.242	4.241	0.001	441394547	100.000	107	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.335	4.336	-0.001	365305305	100.000	92.1	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.369	4.368	0.001	351308686	100.000	99.0	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.447	4.448	-0.001	755412031	200.000	198	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.541	4.542	-0.001	714898691	200.000	192	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.729	4.728	0.001	633375904	200.000	196	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.799	4.800	-0.001	613688337	200.000	195	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.858	4.858	0.000	588465707	200.000	191	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.060	5.059	0.001	477001818	200.000	188	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.987	4.986	0.001	439321552	200.000	270	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.224	5.223	0.001	531379337	200.000	192	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.389	5.391	-0.002	830781976	1000.00	1150	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.540	5.540	0.000	553202784	200.000	237	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.106	2.108	-0.002	861511969	200.000	197	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.258	6.256	0.002	468323859	200.000	226	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/037b3701.d
Date : 05-DEC-2009 05:51
Client ID: INDAB02
Sample Info: INPE091123-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

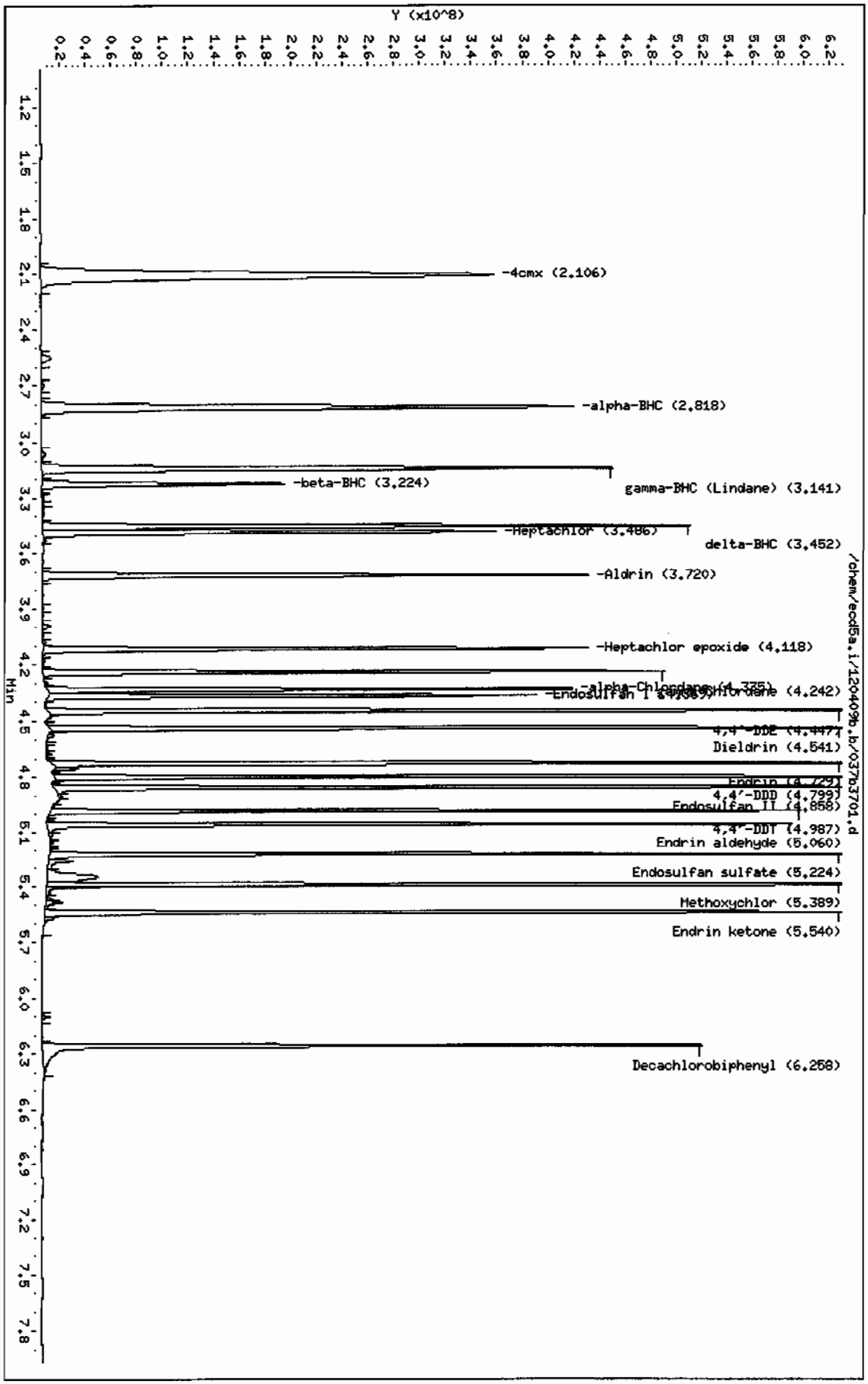

Page 1

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.72 DCB: 6.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/04/09	2241	2.71	6.61
02	PEM01	WPE091109-99	12/04/09	2253	2.72	6.62
03	INDAB01	WPE091204-01	12/04/09	2305	2.72	6.62
04	INDAB02	WPE091204-02	12/04/09	2317	2.72	6.62
05	INDAB03	WPE091204-03	12/04/09	2329	2.72	6.62
06	INDAB04	WPE091204-04	12/04/09	2341	2.72	6.62
07	INDAB05	IPE091005-02	12/04/09	2352	2.72	6.62
08	INDAB01	WPE091123-10	12/05/09	0004	2.72	6.62
09	TOXAPH01	WPE091204-11	12/05/09	0016	2.72	6.62
10	TOXAPH02	WPE091204-12	12/05/09	0028	2.72	6.62
11	TOXAPH03	WPE091204-13	12/05/09	0040	2.72	6.62
12	TOXAPH04	WPE091204-14	12/05/09	0052	2.72	6.62
13	TOXAPH05	IPE091121-40	12/05/09	0104	2.72	6.62
14	TOXAPH01	WPE091104-52	12/05/09	0116	2.72	6.62
15	CHLOR01	WPE091204-21	12/05/09	0128	2.72	6.62
16	CHLOR02	WPE091204-22	12/05/09	0140	2.72	6.62
17	CHLOR03	WPE091204-23	12/05/09	0152	2.72	6.62
18	CHLOR04	WPE091204-24	12/05/09	0204	2.72	6.62
19	CHLOR05	IPE091029-06	12/05/09	0216	2.72	6.62
20	CHLOR01	WPE091021-00	12/05/09	0228	2.72	6.62
21	GAPA01	WPE091204-31	12/05/09	0240	2.72	6.62
22	GAPA02	WPE091204-32	12/05/09	0252	2.72	6.62
23	GAPA03	WPE091204-33	12/05/09	0304	2.72	6.62
24	GAPA04	WPE091204-34	12/05/09	0316	2.72	6.62
25	GAPA05	IPE091110-01	12/05/09	0328	2.72	6.62
26	GAPA01	WPE091021-05	12/05/09	0339	2.72	6.62
27	PIBLK02	WAR090914-99	12/05/09	0351	2.72	6.62
28	PEM02	WPE091109-99	12/05/09	0403	2.72	6.62
29	PBLK01	1201985185	12/05/09	0415	2.72	6.62
30	PBLK01LCS	1201985186	12/05/09	0427	2.72	6.62
31	PBLK01TLCS	1201985189	12/05/09	0439	2.72	6.62
32	WST03-10-2134	241838002	12/05/09	0451	2.72	6.62

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.72 DCB: 6.62

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/05/09	0503	2.72	6.62
02	ZZZZZ	ZZZZZ	12/05/09	0515	2.72	6.62
03	ZZZZZ	ZZZZZ	12/05/09	0527	2.72	6.62
04	PIBLK03	WAR090914-99	12/05/09	0539	2.72	6.62
05	INDAB02	WPE091123-10	12/05/09	0551	2.72	6.62
06	PIBLK04	WAR090914-99	12/05/09	0603	2.72	6.62
07	ZZZZZ	ZZZZZ	12/05/09	0615	2.72	6.62
08	ZZZZZ	ZZZZZ	12/05/09	0627	2.72	6.62
09	ZZZZZ	ZZZZZ	12/05/09	0639	2.72	6.62
10	ZZZZZ	ZZZZZ	12/05/09	0651	2.72	6.62
11	PIBLK05	WAR090914-99	12/05/09	0702	2.72	6.62
12	INDAB03	WPE091123-10	12/05/09	0714	2.72	6.62
13	PIBLK06	WAR090914-99	12/05/09	0726	2.72	6.62
14	ZZZZZ	ZZZZZ	12/05/09	0738	2.72	6.62
15	ZZZZZ	ZZZZZ	12/05/09	0750	2.72	6.62
16	ZZZZZ	ZZZZZ	12/05/09	0802	2.72	6.62
17	ZZZZZ	ZZZZZ	12/05/09	0814	2.72	6.62
18	ZZZZZ	ZZZZZ	12/05/09	0826	2.72	6.62
19	ZZZZZ	ZZZZZ	12/05/09	0838	2.72	6.62
20	ZZZZZ	ZZZZZ	12/05/09	0850	2.72	6.62
21	ZZZZZ	ZZZZZ	12/05/09	0902	2.72	6.62
22	ZZZZZ	ZZZZZ	12/05/09	0914	2.72	6.62
23	ZZZZZ	ZZZZZ	12/05/09	0926	2.72	6.62
24	PIBLK07	WAR090914-99	12/05/09	0938	2.72	6.62
25	INDAB04	WPE091123-10	12/05/09	0949	2.72	6.62
26	PIBLK08	WAR090914-99	12/05/09	1001	2.72	6.62
27	ZZZZZ	ZZZZZ	12/05/09	1013	2.73	6.62
28	ZZZZZ	ZZZZZ	12/05/09	1025	2.72	6.62
29	ZZZZZ	ZZZZZ	12/05/09	1037	2.73	6.62
30	ZZZZZ	ZZZZZ	12/05/09	1049	2.72	6.62
31	ZZZZZ	ZZZZZ	12/05/09	1101	2.72	6.62
32	ZZZZZ	ZZZZZ	12/05/09	1113	2.72	6.62

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.11 DCB: 6.26

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090914-99	12/04/09	2241	2.11	6.25
02	PEM01	WPE091109-99	12/04/09	2253	2.11	6.26
03	INDAB01	WPE091204-01	12/04/09	2305	2.11	6.26
04	INDAB02	WPE091204-02	12/04/09	2317	2.11	6.26
05	INDAB03	WPE091204-03	12/04/09	2329	2.11	6.26
06	INDAB04	WPE091204-04	12/04/09	2341	2.11	6.26
07	INDAB05	IPE091005-02	12/04/09	2352	2.11	6.26
08	INDAB01	WPE091123-10	12/05/09	0004	2.11	6.26
09	TOXAPH01	WPE091204-11	12/05/09	0016	2.11	6.26
10	TOXAPH02	WPE091204-12	12/05/09	0028	2.11	6.26
11	TOXAPH03	WPE091204-13	12/05/09	0040	2.11	6.26
12	TOXAPH04	WPE091204-14	12/05/09	0052	2.11	6.26
13	TOXAPH05	IPE091121-40	12/05/09	0104	2.11	6.26
14	TOXAPH01	WPE091104-52	12/05/09	0116	2.11	6.26
15	CHLOR01	WPE091204-21	12/05/09	0128	2.11	6.26
16	CHLOR02	WPE091204-22	12/05/09	0140	2.11	6.26
17	CHLOR03	WPE091204-23	12/05/09	0152	2.11	6.26
18	CHLOR04	WPE091204-24	12/05/09	0204	2.11	6.26
19	CHLOR05	IPE091029-06	12/05/09	0216	2.11	6.26
20	CHLOR01	WPE091021-00	12/05/09	0228	2.11	6.26
21	GAPA01	WPE091204-31	12/05/09	0240	2.11	6.26
22	GAPA02	WPE091204-32	12/05/09	0252	2.11	6.26
23	GAPA03	WPE091204-33	12/05/09	0304	2.11	6.26
24	GAPA04	WPE091204-34	12/05/09	0316	2.11	6.26
25	GAPA05	IPE091110-01	12/05/09	0328	2.11	6.26
26	GAPA01	WPE091021-05	12/05/09	0339	2.11	6.26
27	PIBLK02	WAR090914-99	12/05/09	0351	2.11	6.26
28	PEM02	WPE091109-99	12/05/09	0403	2.11	6.26
29	PBLK01	1201985185	12/05/09	0415	2.11	6.26
30	PBLK01LCS	1201985186	12/05/09	0427	2.11	6.26
31	PBLK01TLCS	1201985189	12/05/09	0439	2.11	6.26
32	WST03-10-2134	241838002	12/05/09	0451	2.11	6.26

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/05/09

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.11 DCB: 6.26

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/05/09	0503	2.11	6.26
02	ZZZZZ	ZZZZZ	12/05/09	0515	2.11	6.26
03	ZZZZZ	ZZZZZ	12/05/09	0527	2.11	6.26
04	PIBLK03	WAR090914-99	12/05/09	0539	2.11	6.26
05	INDAB02	WPE091123-10	12/05/09	0551	2.11	6.26
06	PIBLK04	WAR090914-99	12/05/09	0603	2.11	6.26
07	ZZZZZ	ZZZZZ	12/05/09	0615	2.11	6.26
08	ZZZZZ	ZZZZZ	12/05/09	0627	2.11	6.26
09	ZZZZZ	ZZZZZ	12/05/09	0639	2.11	6.26
10	ZZZZZ	ZZZZZ	12/05/09	0651	2.11	6.26
11	PIBLK05	WAR090914-99	12/05/09	0702	2.11	6.26
12	INDAB03	WPE091123-10	12/05/09	0714	2.11	6.26
13	PIBLK06	WAR090914-99	12/05/09	0726	2.11	6.26
14	ZZZZZ	ZZZZZ	12/05/09	0738	2.11	6.26
15	ZZZZZ	ZZZZZ	12/05/09	0750	2.11	6.26
16	ZZZZZ	ZZZZZ	12/05/09	0802	2.11	6.26
17	ZZZZZ	ZZZZZ	12/05/09	0814	2.11	6.26
18	ZZZZZ	ZZZZZ	12/05/09	0826	2.11	6.26
19	ZZZZZ	ZZZZZ	12/05/09	0838	2.11	6.26
20	ZZZZZ	ZZZZZ	12/05/09	0850	2.11	6.26
21	ZZZZZ	ZZZZZ	12/05/09	0902	2.11	6.26
22	ZZZZZ	ZZZZZ	12/05/09	0914	2.11	6.26
23	ZZZZZ	ZZZZZ	12/05/09	0926	2.11	6.26
24	PIBLK07	WAR090914-99	12/05/09	0938	2.11	6.26
25	INDAB04	WPE091123-10	12/05/09	0949	2.11	6.26
26	PIBLK08	WAR090914-99	12/05/09	1001	2.11	6.26
27	ZZZZZ	ZZZZZ	12/05/09	1013	2.11	6.26
28	ZZZZZ	ZZZZZ	12/05/09	1025	2.11	6.26
29	ZZZZZ	ZZZZZ	12/05/09	1037	2.11	6.26
30	ZZZZZ	ZZZZZ	12/05/09	1049	2.11	6.25
31	ZZZZZ	ZZZZZ	12/05/09	1101	2.11	6.26
32	ZZZZZ	ZZZZZ	12/05/09	1113	2.11	6.26

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 928402

Lab Sample ID: 1201985186

Data File:	030f3001.d	**Data File:**	030b3001.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	05–DEC–09 04:27	**Analyzed:**	05–DEC–09 04:27

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha–BHC							5.95
Column 1	1	3.33	3.3 – 3.36	16.6		ug/kg	
Column 2	1	2.82	2.79 – 2.85	15.7		ug/kg	
gamma–BHC (Lindane)							7.04
Column 1	1	3.62	3.59 – 3.65	17.2		ug/kg	
Column 2	1	3.14	3.11 – 3.17	16		ug/kg	
beta–BHC							7.88
Column 1	1	3.7	3.67 – 3.73	16.3		ug/kg	
Column 2	1	3.22	3.19 – 3.25	15.1		ug/kg	
delta–BHC							7.16
Column 1	1	3.85	3.82 – 3.88	17.3		ug/kg	
Column 2	1	3.45	3.42 – 3.48	16.1		ug/kg	
Heptachlor							8.2
Column 1	1	4.01	3.98 – 4.04	16.4		ug/kg	
Column 2	1	3.49	3.46 – 3.52	15.1		ug/kg	

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 928402

Lab Sample ID: 1201985186

Data File:	030f3001.d	**Data File:**	030b3001.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	05–DEC–09 04:27	**Analyzed:**	05–DEC–09 04:27

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aldrin							5.07
Column 1	1	4.23	4.2 – 4.26	15.1		ug/kg	
Column 2	1	3.72	3.69 – 3.75	14.4		ug/kg	
Heptachlor epoxide							9.39
Column 1	1	4.65	4.62 – 4.68	16.5		ug/kg	
Column 2	1	4.12	4.09 – 4.15	15		ug/kg	
gamma–Chlordane							2.91
Column 1	1	4.74	4.71 – 4.77	16.3		ug/kg	
Column 2	1	4.24	4.21 – 4.27	15.8		ug/kg	
alpha–Chlordane							5.9
Column 1	1	4.82	4.79 – 4.85	16.7		ug/kg	
Column 2	1	4.34	4.31 – 4.37	15.7		ug/kg	
Endosulfan I							8.46
Column 1	1	4.91	4.88 – 4.94	16.2		ug/kg	
Column 2	1	4.37	4.34 – 4.4	14.9		ug/kg	

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 928402

Lab Sample ID: 1201985186

Data File:	030f3001.d	**Data File:**	030b3001.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	05–DEC–09 04:27	**Analyzed:**	05–DEC–09 04:27

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'–DDE								4.72
	Column 1	1	4.87	4.84 – 4.9	41.3		ug/kg	
	Column 2	1	4.45	4.42 – 4.48	39.4		ug/kg	
Dieldrin								6.81
	Column 1	1	5.06	5.03 – 5.09	39.7		ug/kg	
	Column 2	1	4.54	4.51 – 4.57	37.1		ug/kg	
Endrin								20.4
	Column 1	1	5.21	5.18 – 5.24	44		ug/kg	
	Column 2	1	4.73	4.7 – 4.76	35.8		ug/kg	
4,4'–DDD								21.9
	Column 1	1	5.24	5.21 – 5.27	44.6		ug/kg	
	Column 2	1	4.8	4.77 – 4.83	35.8		ug/kg	
Endosulfan II								18.1
	Column 1	1	5.35	5.32 – 5.38	44.2		ug/kg	
	Column 2	1	4.86	4.83 – 4.89	36.9		ug/kg	

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 928402

Lab Sample ID: 1201985186

Data File:	030f3001.d	**Data File:**	030b3001.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	05–DEC–09 04:27	**Analyzed:**	05–DEC–09 04:27

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Endrin aldehyde							10.9
Column 1	1	5.6	5.57 – 5.63	39.2		ug/kg	
Column 2	1	5.06	5.03 – 5.09	35.2		ug/kg	
4,4'–DDT							16.4
Column 1	1	5.41	5.38 – 5.44	49.7		ug/kg	
Column 2	1	4.99	4.96 – 5.02	58.5		ug/kg	
Endosulfan sulfate							17.3
Column 1	1	5.86	5.83 – 5.89	49		ug/kg	
Column 2	1	5.22	5.19 – 5.25	41.2		ug/kg	
Methoxychlor							.195
Column 1	1	5.69	5.66 – 5.72	195		ug/kg	
Column 2	1	5.39	5.36 – 5.42	195		ug/kg	
Endrin ketone							10.5
Column 1	1	6.03	6 – 6.06	48.2		ug/kg	
Column 2	1	5.54	5.51 – 5.57	53.6		ug/kg	

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 928402

Lab Sample ID: 1201985189

Data File: 031f3101.d **Data File:** 031b3101.d

Inst: ECD5A.I_1 **Inst:** ECD5A.I_2

Column: CLP–1 **Column:** CLP–2

Analyzed: 05–DEC–09 04:39 **Analyzed:** 05–DEC–09 04:39

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							.635
Column 1	1	4.92	4.89 – 4.95	150		ug/kg	
	2	5.07	5.04 – 5.1	118		ug/kg	
	3	5.12	5.09 – 5.15	125		ug/kg	
	4	5.16	5.13 – 5.19	121		ug/kg	
	5	5.34	5.31 – 5.37	123		ug/kg	
					127		
Column 2	1	4.53	4.5 – 4.56	130		ug/kg	
	2	4.6	4.57 – 4.63	133		ug/kg	
	3	4.71	4.68 – 4.74	123		ug/kg	
	4	4.83	4.8 – 4.86	132		ug/kg	
	5	4.85	4.82 – 4.88	124		ug/kg	
					128		

QUALITY CONTROL DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–670			**Matrix:**	SOIL
Lab Sample ID:	1201985185				
Client Sample:	QC for batch 928402	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 928402	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	928403	**Inst:**	ECD5A.I	**Dilution:**	1
Run Date:	12/05/2009 04:15	**Analyst:**	HXJ1	**Inj. Vol:**	1 uL
Prep Date:	12/03/2009 10:03	**Aliquot:**	30 g	**Final Volume:**	5 mL
Data File:	029f2901.d	**Column:**	1 CLP–1	**Level:**	LOW
	029b2901.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319–84–6	alpha–BHC	U	0.667	ug/kg	0.167	0.667	1
58–89–9	gamma–BHC (Lindane)	U	0.667	ug/kg	0.167	0.667	1
319–85–7	beta–BHC	U	0.667	ug/kg	0.167	0.667	1
319–86–8	delta–BHC	U	0.667	ug/kg	0.167	0.667	1
76–44–8	Heptachlor	U	0.667	ug/kg	0.167	0.667	1
309–00–2	Aldrin	U	0.667	ug/kg	0.167	0.667	1
1024–57–3	Heptachlor epoxide	U	0.667	ug/kg	0.208	0.667	1
5103–74–2	gamma–Chlordane	U	0.667	ug/kg	0.167	0.667	1
5103–71–9	alpha–Chlordane	U	0.667	ug/kg	0.167	0.667	1
959–98–8	Endosulfan I	U	0.667	ug/kg	0.167	0.667	1
72–55–9	4,4'–DDE	U	1.33	ug/kg	0.333	1.33	1
60–57–1	Dieldrin	U	1.33	ug/kg	0.333	1.33	1
72–20–8	Endrin	U	1.33	ug/kg	0.333	1.33	1
72–54–8	4,4'–DDD	U	1.33	ug/kg	0.333	1.33	1
33213–65–9	Endosulfan II	U	1.33	ug/kg	0.333	1.33	1
7421–93–4	Endrin aldehyde	U	1.33	ug/kg	0.333	1.33	1
50–29–3	4,4'–DDT	U	1.33	ug/kg	0.333	1.33	1
1031–07–8	Endosulfan sulfate	U	1.33	ug/kg	0.333	1.33	1
72–43–5	Methoxychlor	U	6.67	ug/kg	1.67	6.67	1
53494–70–5	Endrin ketone	U	1.33	ug/kg	0.333	1.33	1
8001–35–2	Toxaphene	U	16.7	ug/kg	5.55	16.7	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120409b.b/029f2901.d
Lab Smp Id: 1201985185 Client Smp ID: PBLK01
Inj Date : 05-DEC-2009 04:15
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985185|1|
Misc Info : |ECD81A_1S|928403|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 21:01 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 29 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.721	2.720	0.001	67210027	175.522	29.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.620	6.617	0.003	41638251	202.076	33.7	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/029f2901.d

Page 1

Date : 05-DEC-2009 04:15

Client ID: PBLK01

Instrument: ecd5a.i

Sample Info: |120198518511|

Volume Injected (uL): 1.0

Operator: HXJ1

Column phase: CLP-1

Column diameter: 0.25

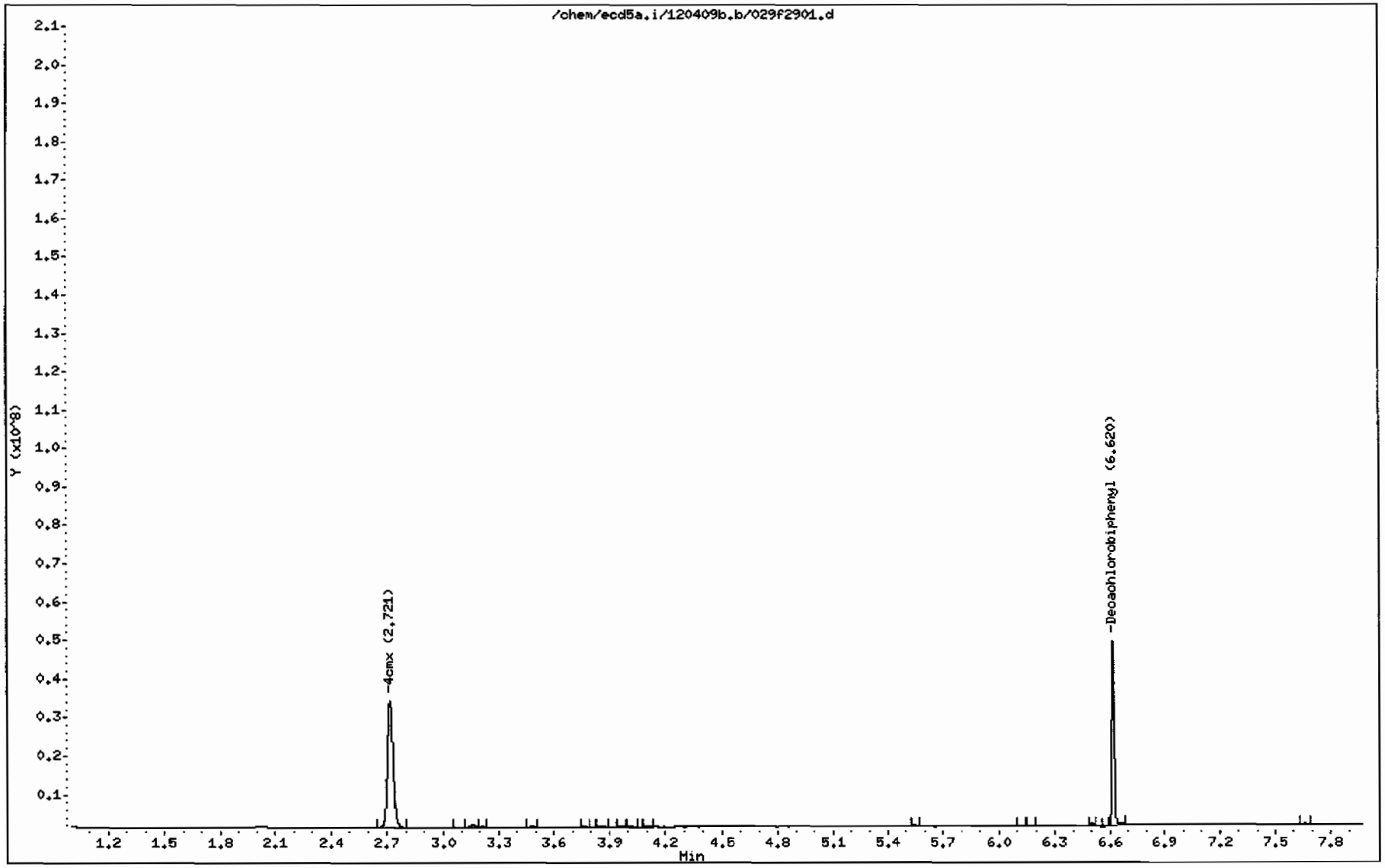

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/029b2901.d
Lab Smp Id: 1201985185 Client Smp ID: PBLK01
Inj Date : 05-DEC-2009 04:15
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985185|1|
Misc Info : |ECD81A_1S|928403|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 29 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.106	2.108	-0.002	737184869	168.539	28.1	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.259	6.256	0.003	466325616	225.217	37.5	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/029b2901.d
Date : 05-DEC-2009 04:15
Client ID: PBLK01
Sample Info: |120198518511|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

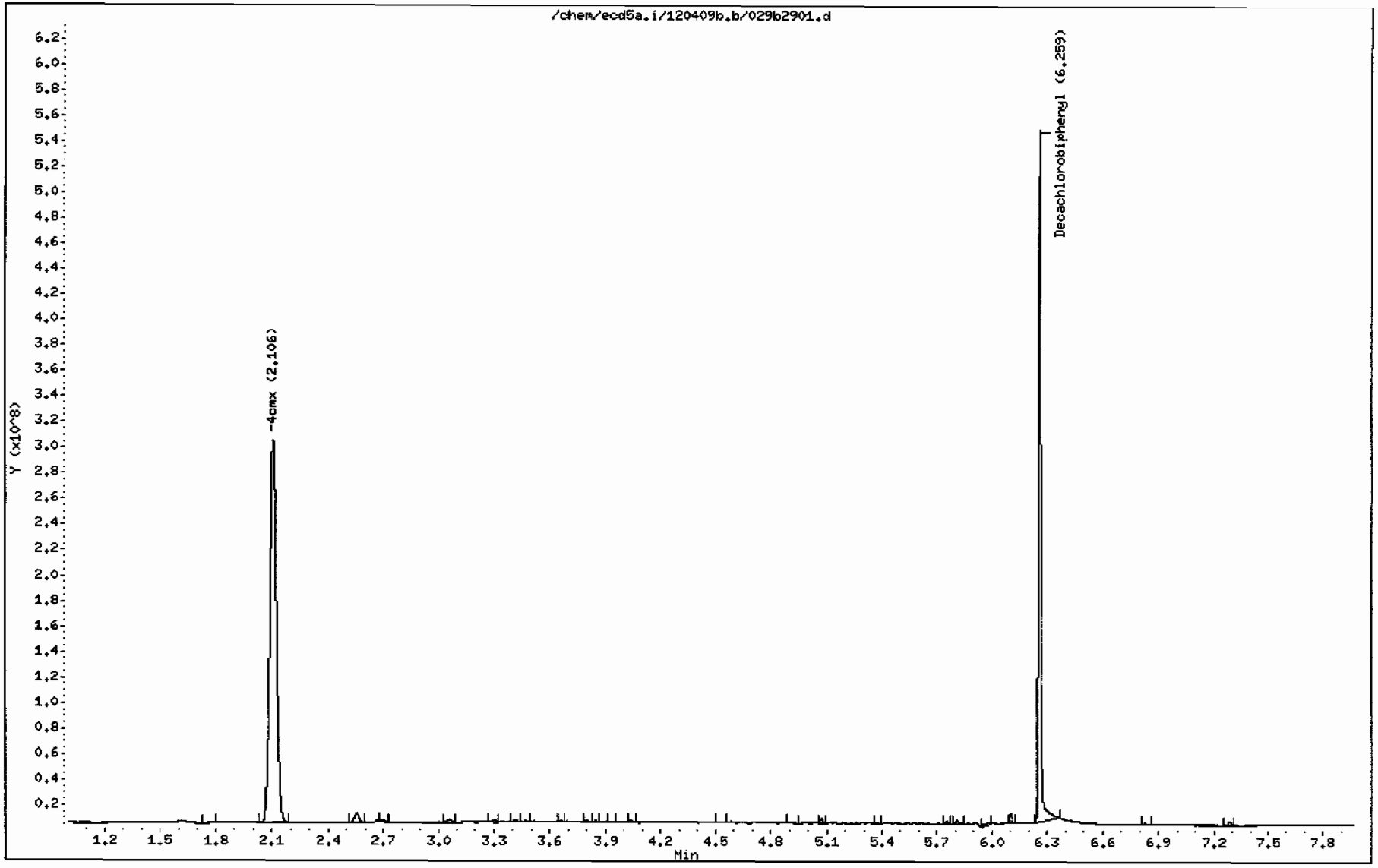

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985186**				
Client Sample:	**QC for batch 928402**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928402**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**928403**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 04:27**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/03/2009 10:03**	**Aliquot:**	**30 g**	**Final Volume:**	**5 mL**
Data File:	**030f3001.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	030b3001.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC		15.7	ug/kg	0.167	0.667	2
58-89-9	gamma-BHC (Lindane)		16.0	ug/kg	0.167	0.667	2
319-85-7	beta-BHC		15.1	ug/kg	0.167	0.667	2
319-86-8	delta-BHC		16.1	ug/kg	0.167	0.667	2
76-44-8	Heptachlor		15.1	ug/kg	0.167	0.667	2
309-00-2	Aldrin		14.4	ug/kg	0.167	0.667	2
1024-57-3	Heptachlor epoxide		15.0	ug/kg	0.208	0.667	2
5103-74-2	gamma-Chlordane		15.8	ug/kg	0.167	0.667	2
5103-71-9	alpha-Chlordane		15.7	ug/kg	0.167	0.667	2
959-98-8	Endosulfan I		14.9	ug/kg	0.167	0.667	2
72-55-9	4,4'-DDE		39.4	ug/kg	0.333	1.33	2
60-57-1	Dieldrin		37.1	ug/kg	0.333	1.33	2
72-20-8	Endrin		35.8	ug/kg	0.333	1.33	2
72-54-8	4,4'-DDD		35.8	ug/kg	0.333	1.33	2
33213-65-9	Endosulfan II		36.9	ug/kg	0.333	1.33	2
7421-93-4	Endrin aldehyde		35.2	ug/kg	0.333	1.33	2
50-29-3	4,4'-DDT		49.7	ug/kg	0.333	1.33	1
1031-07-8	Endosulfan sulfate		41.2	ug/kg	0.333	1.33	2
72-43-5	Methoxychlor		195	ug/kg	1.67	6.67	2
53494-70-5	Endrin ketone		48.2	ug/kg	0.333	1.33	1
8001-35-2	Toxaphene	U	16.7	ug/kg	5.55	16.7	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120409b.b/030f3001.d
Lab Smp Id: 1201985186 Client Smp ID: PBLK01LCS
Inj Date : 05-DEC-2009 04:27
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985186|1|
Misc Info : |ECD81A_1S|928403|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 22:02 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 30 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.720	2.720	0.000	72049936	188.162	31.4	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.618	6.617	0.001	44681350	216.844	36.1	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.334	3.333	0.001	49630840	99.6857	16.6	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.625	3.624	0.001	44296742	103.148	17.2	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.703	3.702	0.001	19601350	97.9159	16.3	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.847	3.846	0.001	46687804	103.694	17.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.008	4.007	0.001	36017755	98.1780	16.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.231	4.230	0.001	37329702	90.6255	15.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.654	4.653	0.001	36348926	99.0271	16.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.736	4.735	0.001	35406004	97.8421	16.3	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.822	4.821	0.001	35824220	99.9643	16.7	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.912	4.911	0.001	32563963	97.2146	16.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.867	4.867	0.000	86305551	247.931	41.3	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.063	5.063	0.000	84737385	238.290	39.7	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.210	5.209	0.001	79654546	263.976	44.0	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.239	5.238	0.001	77191021	267.795	44.6	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.348	5.348	0.000	82622839	265.087	44.2	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.601	5.599	0.002	57870513	235.408	39.2	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.407	5.406	0.001	52481366	297.920	49.6	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.860	5.859	0.001	75584092	294.184	49.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.686	5.686	0.000	101740323	1169.73	195	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.033	6.032	0.001	70757856	289.350	48.2	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/030f3001.d

Date : 05-DEC-2009 04:27

Client ID: PBLK01LCS

Sample Info: |120198518611|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

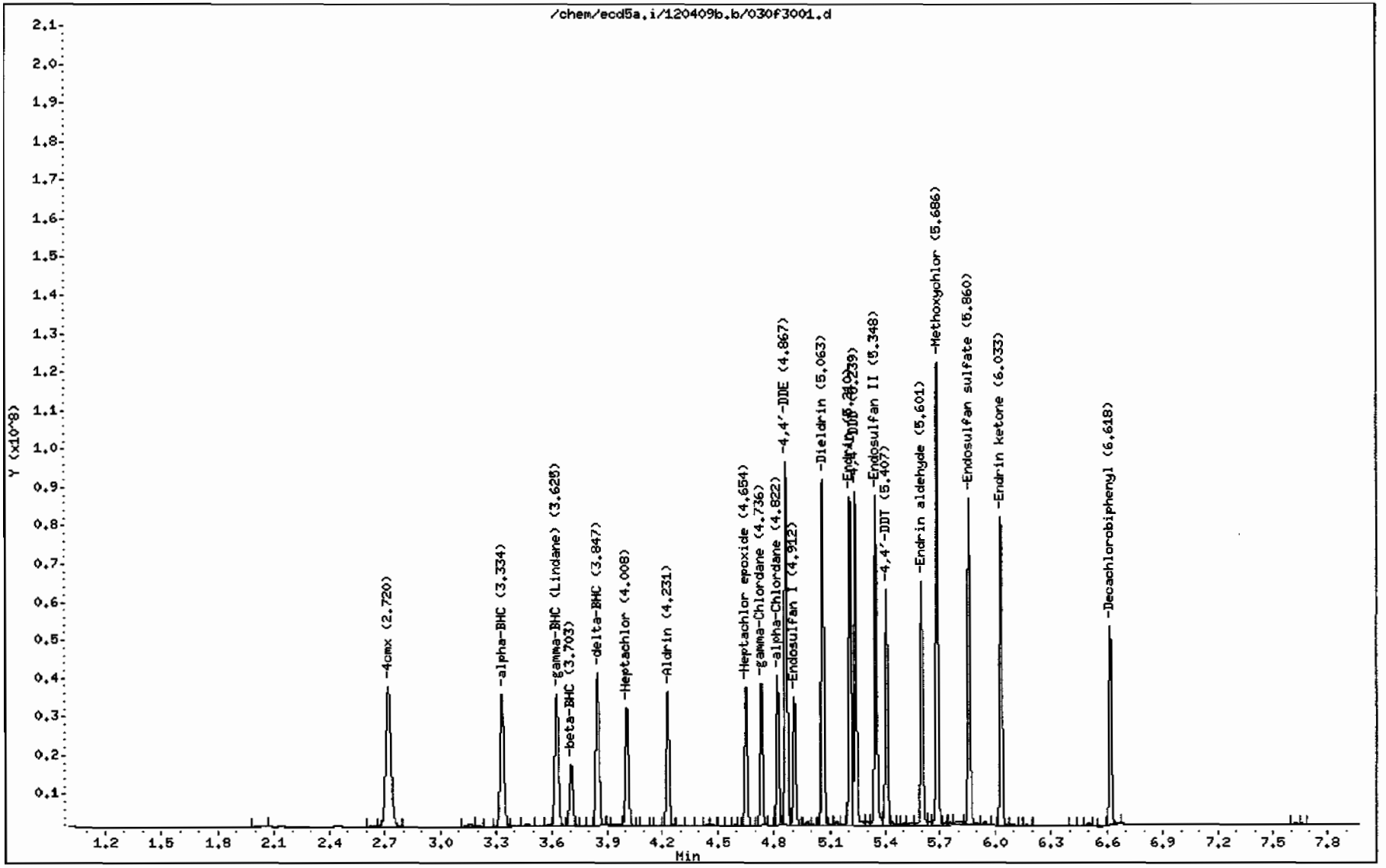

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CLP-2

Data file : /chem/ecd5a.i/120409b.b/030b3001.d
Lab Smp Id: 1201985186 Client Smp ID: PBLK01LCS
Inj Date : 05-DEC-2009 04:27
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985186|1|
Misc Info : |ECD81A_1S|928403|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 22:00 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 30 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.110	2.108	0.002	791819272	181.030	30.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.257	6.256	0.001	475242357	229.523	38.2	80.00- 120.00	100.00(M)
5 alpha-BHC					CAS #: 319-84-6		
2.819	2.818	0.001	571249204	93.9229	15.6	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.141	3.141	0.000	506231116	96.1366	16.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.224	3.224	0.000	209333299	90.4892	15.1	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.452	3.452	0.000	507999942	96.5236	16.1	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.487	3.486	0.001	393123131	90.4433	15.1	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.720	3.719	0.001	403420956	86.1443	14.4	80.00- 120.00	100.00(M)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.119	4.118	0.001	363823893	90.1465	15.0	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.242	4.241	0.001	393165479	95.0325	15.8	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.336	4.336	0.000	373902723	94.2382	15.7	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.370	4.368	0.002	316789913	89.3262	14.9	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.449	4.448	0.001	900767252	236.492	39.4	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.541	4.542	-0.001	830047693	222.589	37.1	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.728	4.728	0.000	693018873	215.068	35.8	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
4.800	4.800	0.000	677631068	214.899	35.8	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
4.858	4.858	0.000	680250314	221.166	36.9	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.060	5.059	0.001	535265332	211.019	35.2	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.986	4.986	0.000	568033212	351.046	58.5	80.00- 120.00	100.00(RM)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.224	5.223	0.001	686007093	247.387	41.2	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.391	5.391	0.000	845861840	1167.45	194	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.540	5.540	0.000	741653862	321.511	53.6	80.00- 120.00	100.00(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/1204090b.b/030b3001.d
Date : 05-DEC-2009 04:27
Client ID: PBLK01LCS
Sample Info: 1120198518611
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

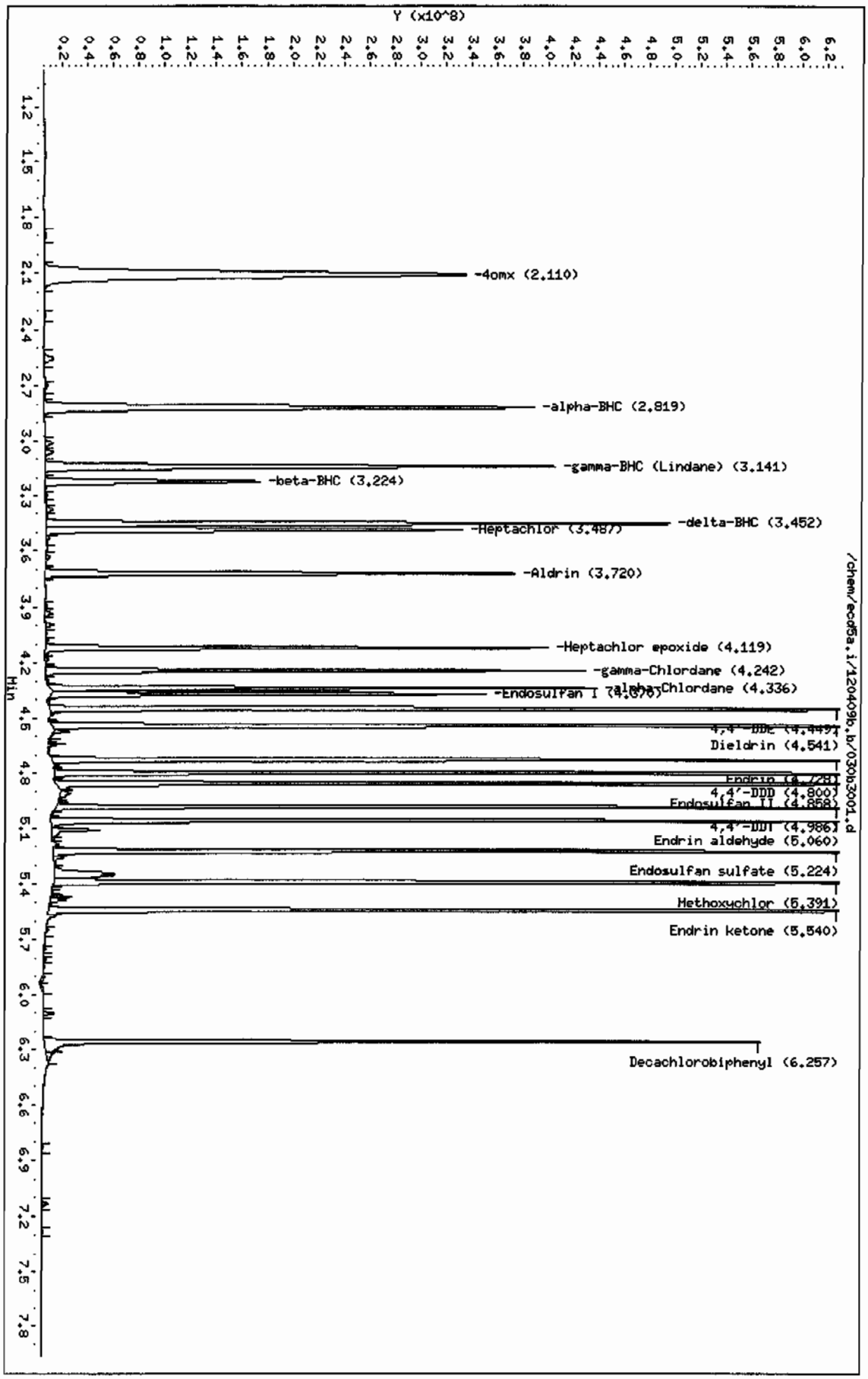

Page 1

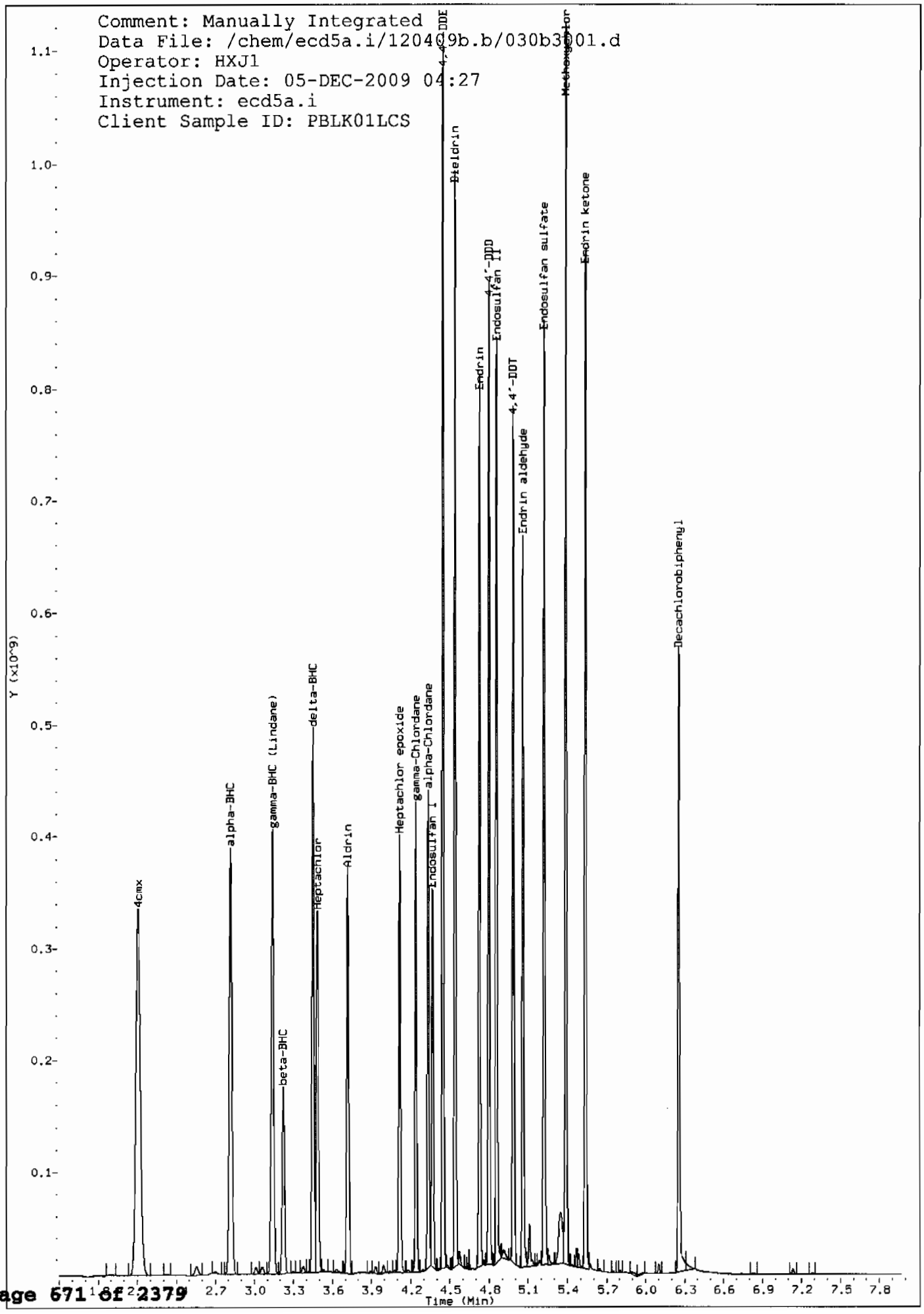
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Data File: /chem/ecd5a.i/120409b.b/030b3001.d
Operator: HXJ1
Injection Date: 05-DEC-2009 04:27
Instrument: ecd5a.i
Client Sample ID: PBLK01LCS
4,4'-DDE
Dieldrin
Methoxychlor
Endrin ketone
Endosulfan sulfate
4,4'-DDD
Endosulfan II
Endrin
4,4'-DDT
Endrin aldehyde
Decachlorobiphenyl
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Y (x10^9)
Time (Min)

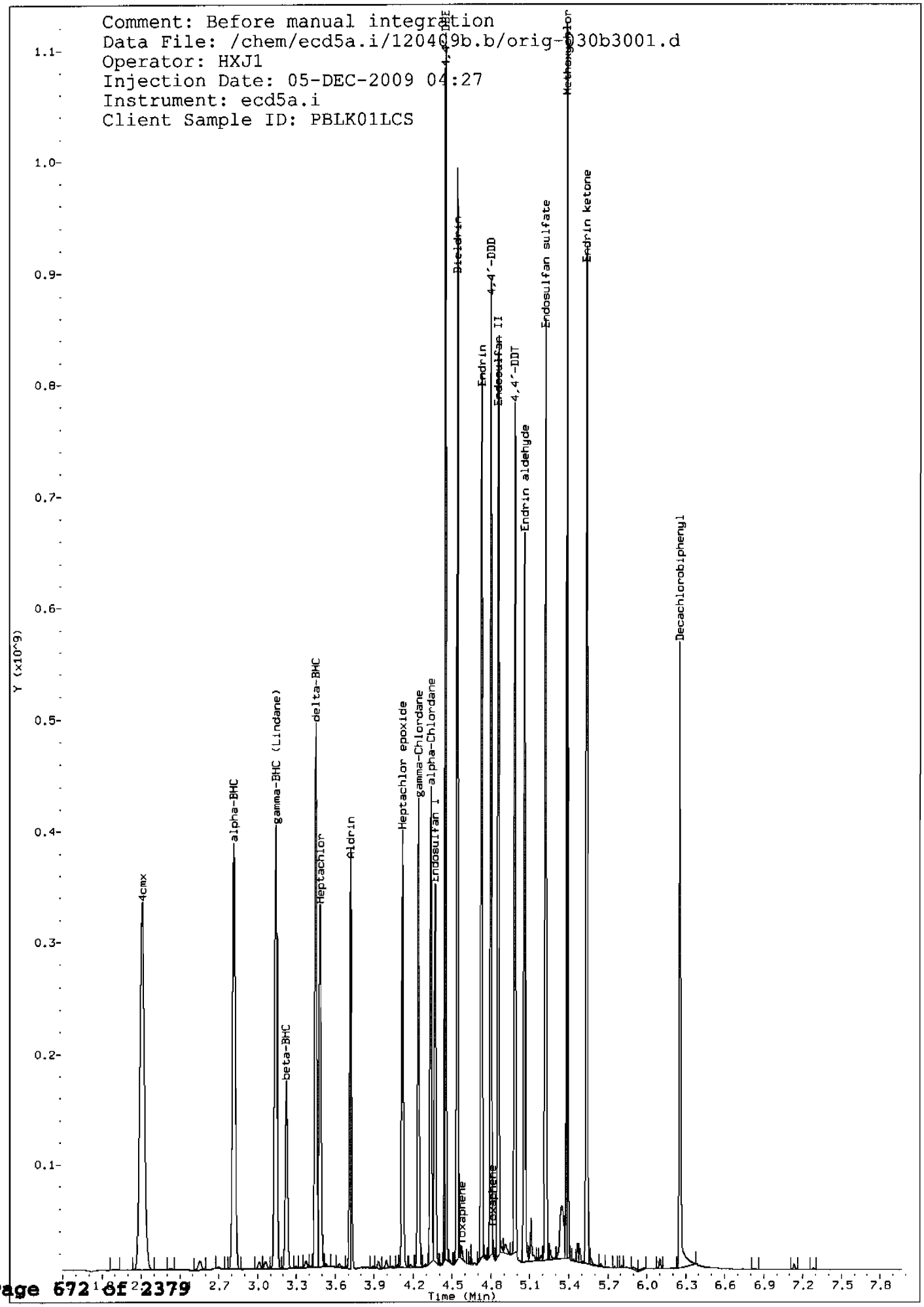
Comment: Before manual integration
Data File: /chem/ecd5a.i/120409b.b/orig-030b3001.d
Operator: HXJ1
Injection Date: 05-DEC-2009 04:27
Instrument: ecd5a.i
Client Sample ID: PBLK01LCS
Y (x10^9)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Toxaphene
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201985189**				
Client Sample:	**QC for batch 928402**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 928402**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**928403**	**Inst:**	**ECD5A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 04:39**	**Analyst:**	**HXJ1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/03/2009 10:03**	**Aliquot:**	**30 g**	**Final Volume:**	**5 mL**
Data File:	**031f3101.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	031b3101.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.667	ug/kg	0.167	0.667	1
58-89-9	gamma-BHC (Lindane)	U	0.667	ug/kg	0.167	0.667	1
319-85-7	beta-BHC	U	0.667	ug/kg	0.167	0.667	1
319-86-8	delta-BHC	U	0.667	ug/kg	0.167	0.667	1
76-44-8	Heptachlor	U	0.667	ug/kg	0.167	0.667	1
309-00-2	Aldrin	U	0.667	ug/kg	0.167	0.667	1
1024-57-3	Heptachlor epoxide	U	0.667	ug/kg	0.208	0.667	1
5103-74-2	gamma-Chlordane	U	0.667	ug/kg	0.167	0.667	1
5103-71-9	alpha-Chlordane	U	0.667	ug/kg	0.167	0.667	1
959-98-8	Endosulfan I	U	0.667	ug/kg	0.167	0.667	1
72-55-9	4,4'-DDE	U	1.33	ug/kg	0.333	1.33	1
60-57-1	Dieldrin	U	1.33	ug/kg	0.333	1.33	1
72-20-8	Endrin	U	1.33	ug/kg	0.333	1.33	1
72-54-8	4,4'-DDD	U	1.33	ug/kg	0.333	1.33	1
33213-65-9	Endosulfan II	U	1.33	ug/kg	0.333	1.33	1
7421-93-4	Endrin aldehyde	U	1.33	ug/kg	0.333	1.33	1
50-29-3	4,4'-DDT	U	1.33	ug/kg	0.333	1.33	1
1031-07-8	Endosulfan sulfate	U	1.33	ug/kg	0.333	1.33	1
72-43-5	Methoxychlor	U	6.67	ug/kg	1.67	6.67	1
53494-70-5	Endrin ketone	U	1.33	ug/kg	0.333	1.33	1
8001-35-2	Toxaphene		127	ug/kg	5.55	16.7	1

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CLP-1

Data file : /chem/ecd5a.i/120409b.b/031f3101.d
Lab Smp Id: 1201985189 Client Smp ID: PBLK01TLCS
Inj Date : 05-DEC-2009 04:39
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985189|1|
Misc Info : |ECD81A_1S|928403|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 22:02 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 31 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.722	2.720	0.002	70556506	184.262	30.7	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.619	6.617	0.002	41789614	202.810	33.8	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.921	4.921	0.000	3533929	900.816	150	80.00- 120.00	100.00(M)
5.066	5.067	-0.001	4687766	705.918	118	120.17- 160.17	132.65
5.122	5.124	-0.002	4672731	747.268	124	115.06- 155.06	132.22
5.160	5.162	-0.002	7754905	727.798	121	193.59- 233.59	219.44
5.341	5.344	-0.003	11610258	738.892	123	296.10- 336.10	328.54
			Average of Peak Concentrations =		127		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/031f3101.d

Page 1

Date : 05-DEC-2009 04:39

Client ID: PBLK01TLCS

Instrument: ecd5a.i

Sample Info: |120198518911|

Volume Injected (uL): 1.0

Operator: HXJ1

Column phase: CLP-1

Column diameter: 0.25

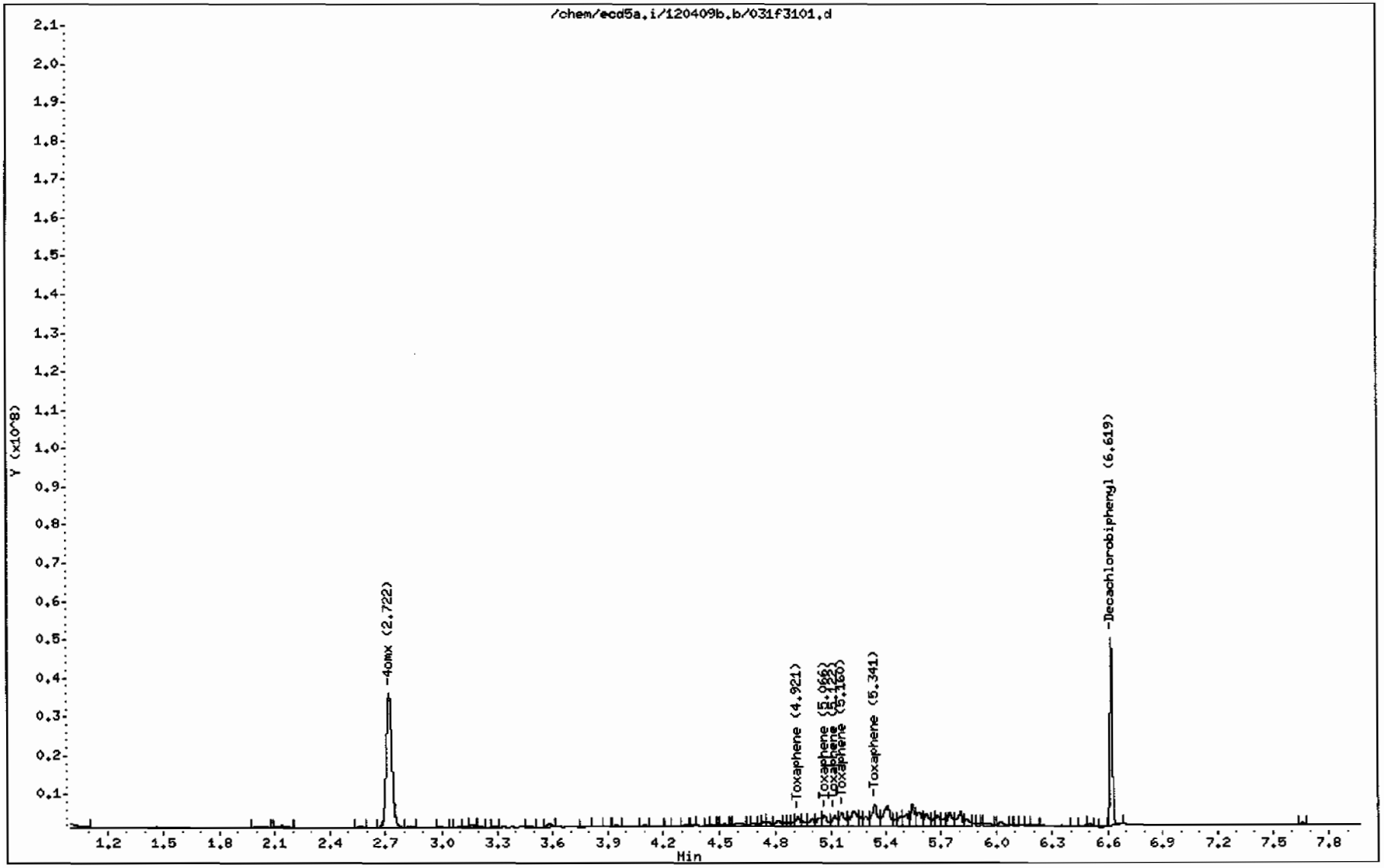

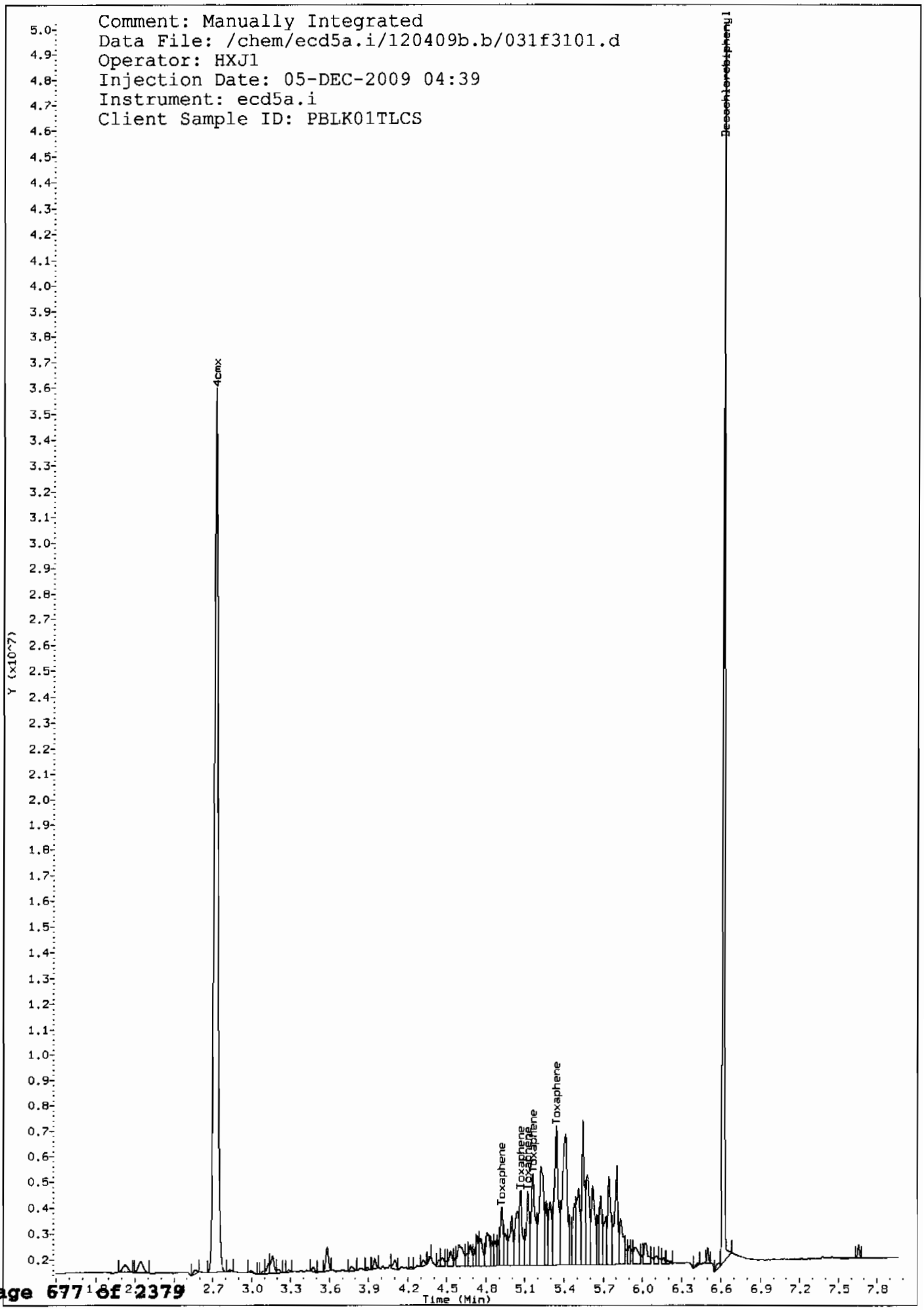
Comment: Manually Integrated
Data File: /chem/ecd5a.i/120409b.b/031f3101.d
Operator: HXJ1
Injection Date: 05-DEC-2009 04:39
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

Comment: Before manual integration
Data File: /chem/ecd5a.i/120409b.b/orig-031f3101.d
Operator: HXJ1
Injection Date: 05-DEC-2009 04:39
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

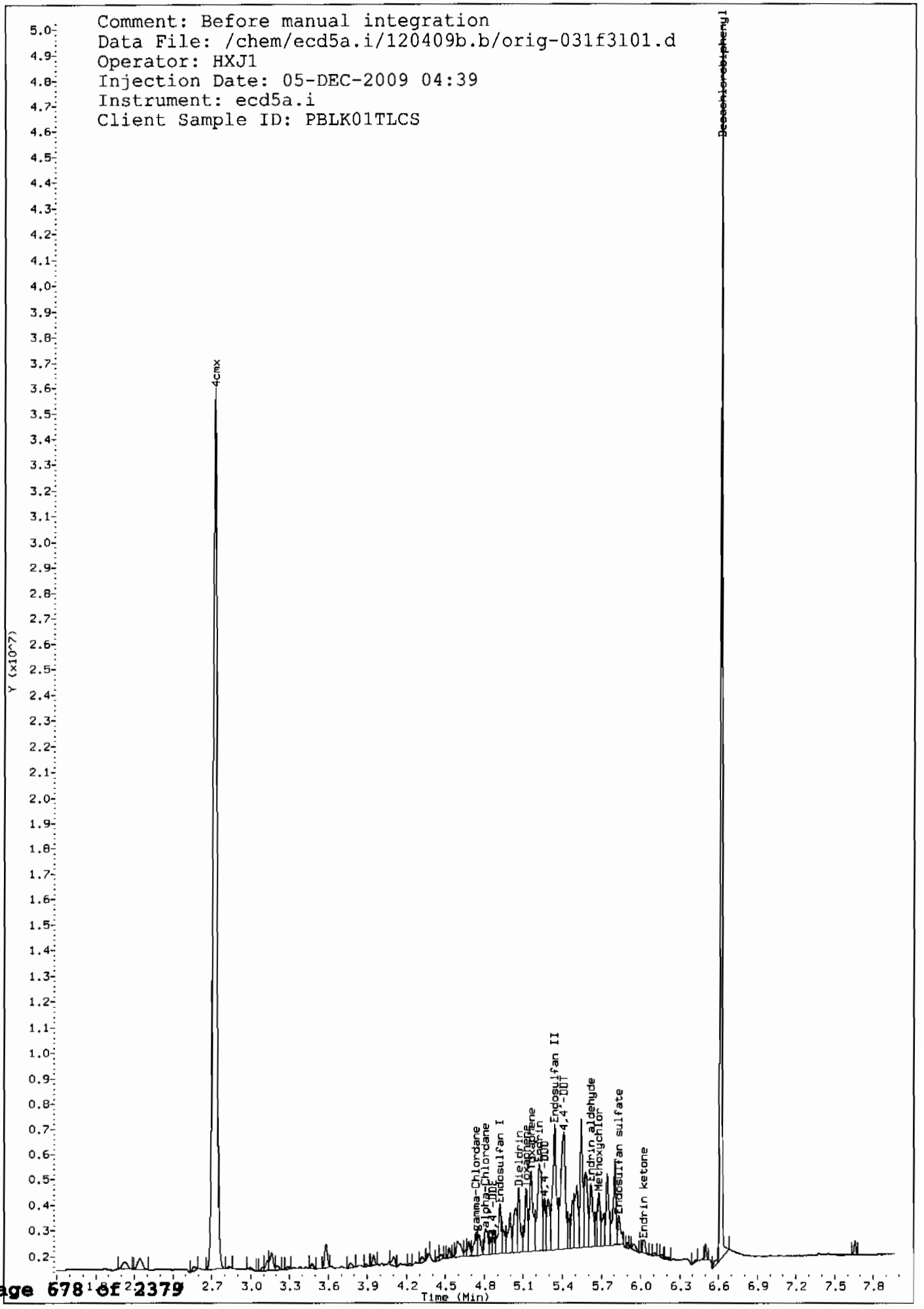

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/031b3101.d
Lab Smp Id: 1201985189 Client Smp ID: PBLK01TLCS
Inj Date : 05-DEC-2009 04:39
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985189|1|
Misc Info : |ECD81A_1S|928403|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 22:00 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 31 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.109	2.108	0.001	772149395	176.533	29.4	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.258	6.256	0.002	455444026	219.962	36.7	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.529	4.529	0.000	61824108	777.480	130	80.00- 120.00	100.00(M)
4.601	4.602	-0.001	37309222	795.819	133	38.41- 78.41	60.35
4.713	4.714	-0.001	61223584	737.274	123	76.58- 116.58	99.03
4.829	4.832	-0.003	48065348	793.433	132	43.80- 83.80	77.75
4.849	4.852	-0.003	70173304	741.038	124	77.24- 117.24	113.50
			Average of Peak Concentrations =		128		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/031b3101.d
Date : 05-DEC-2009 04:39
Client ID: PBLK01TLCS
Sample Info: |120198518|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

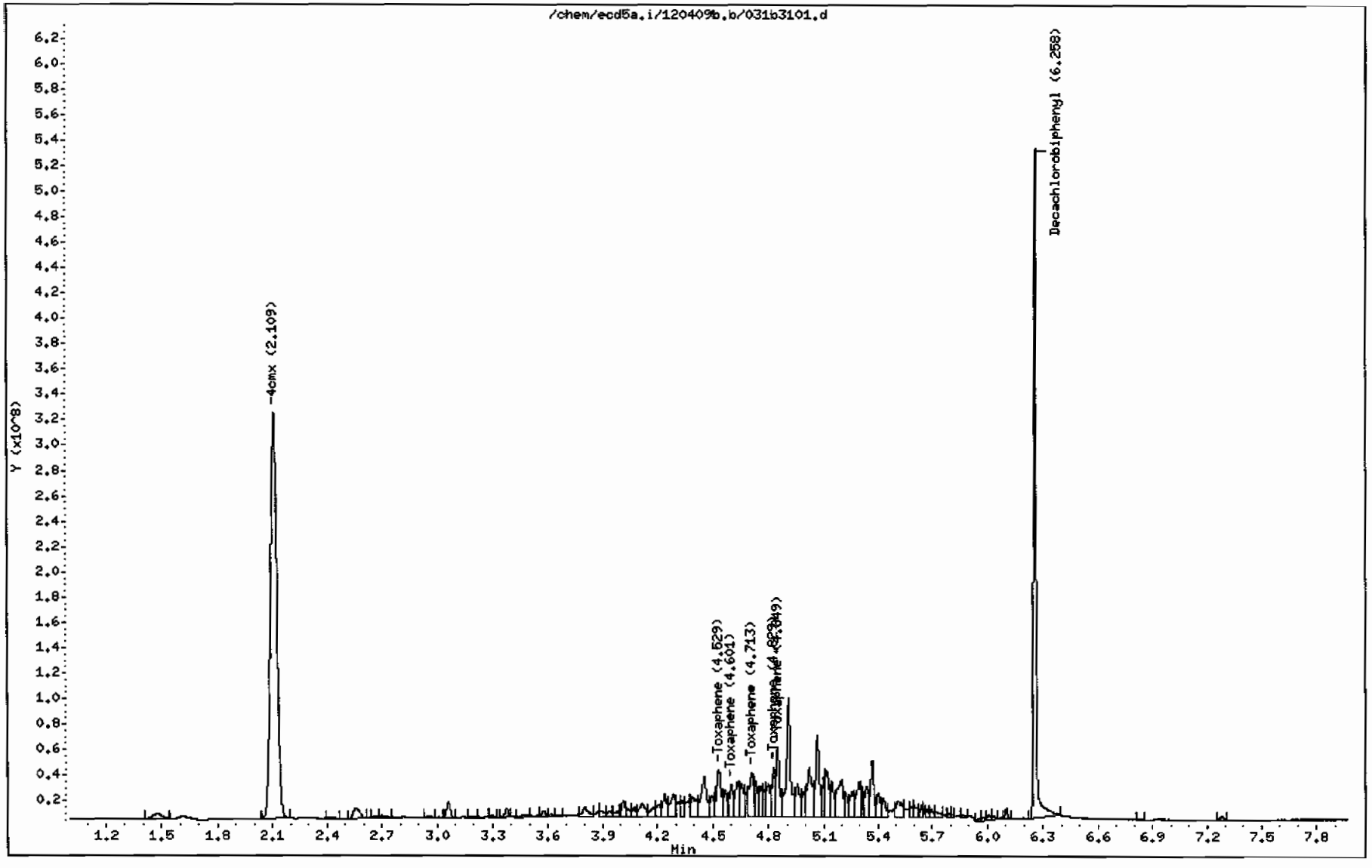

Comment: Manually Integrated
Data File: /chem/ecd5a.i/120409b.b/031b3101.d
Operator: HXJ1
Injection Date: 05-DEC-2009 04:39
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS

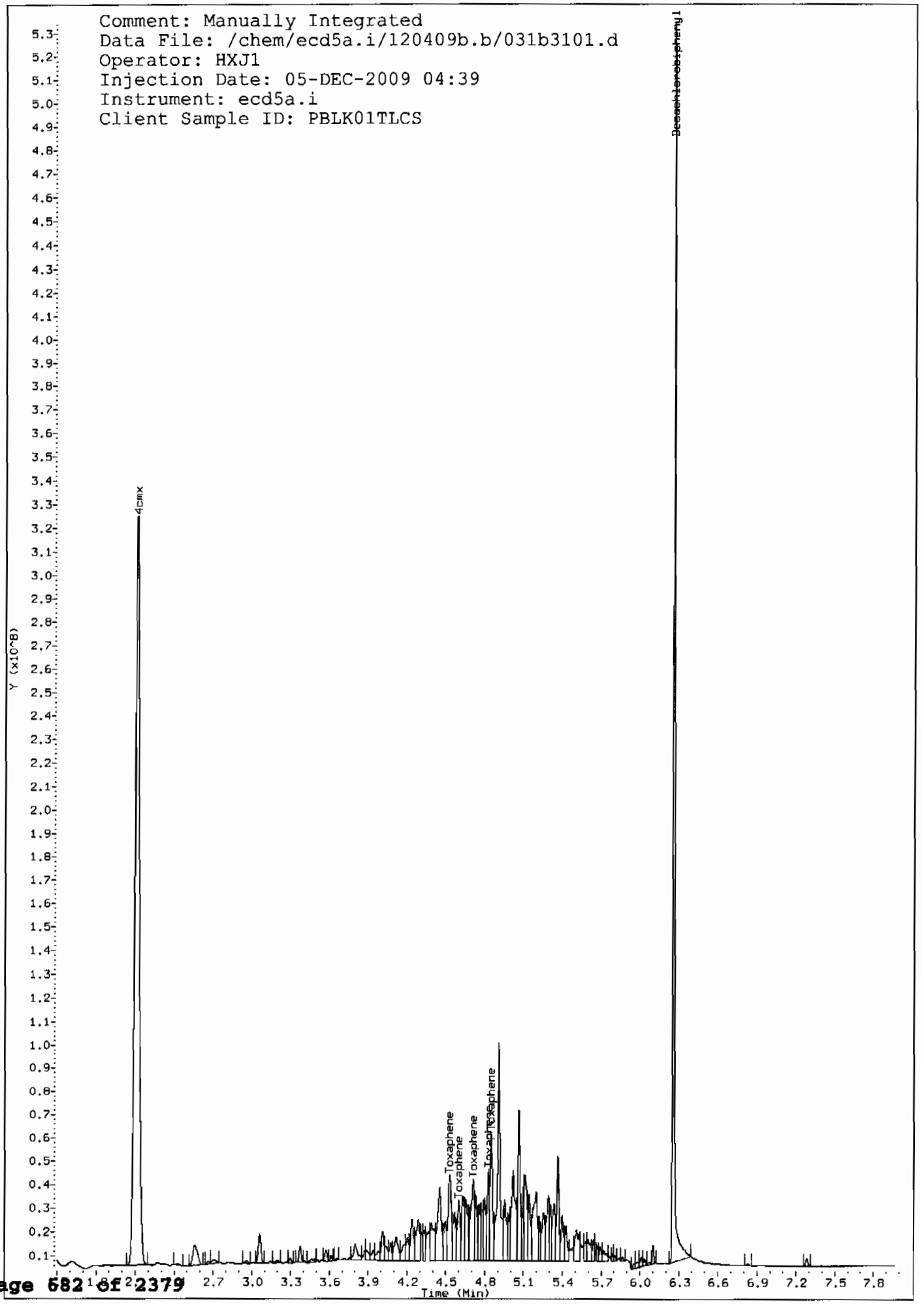

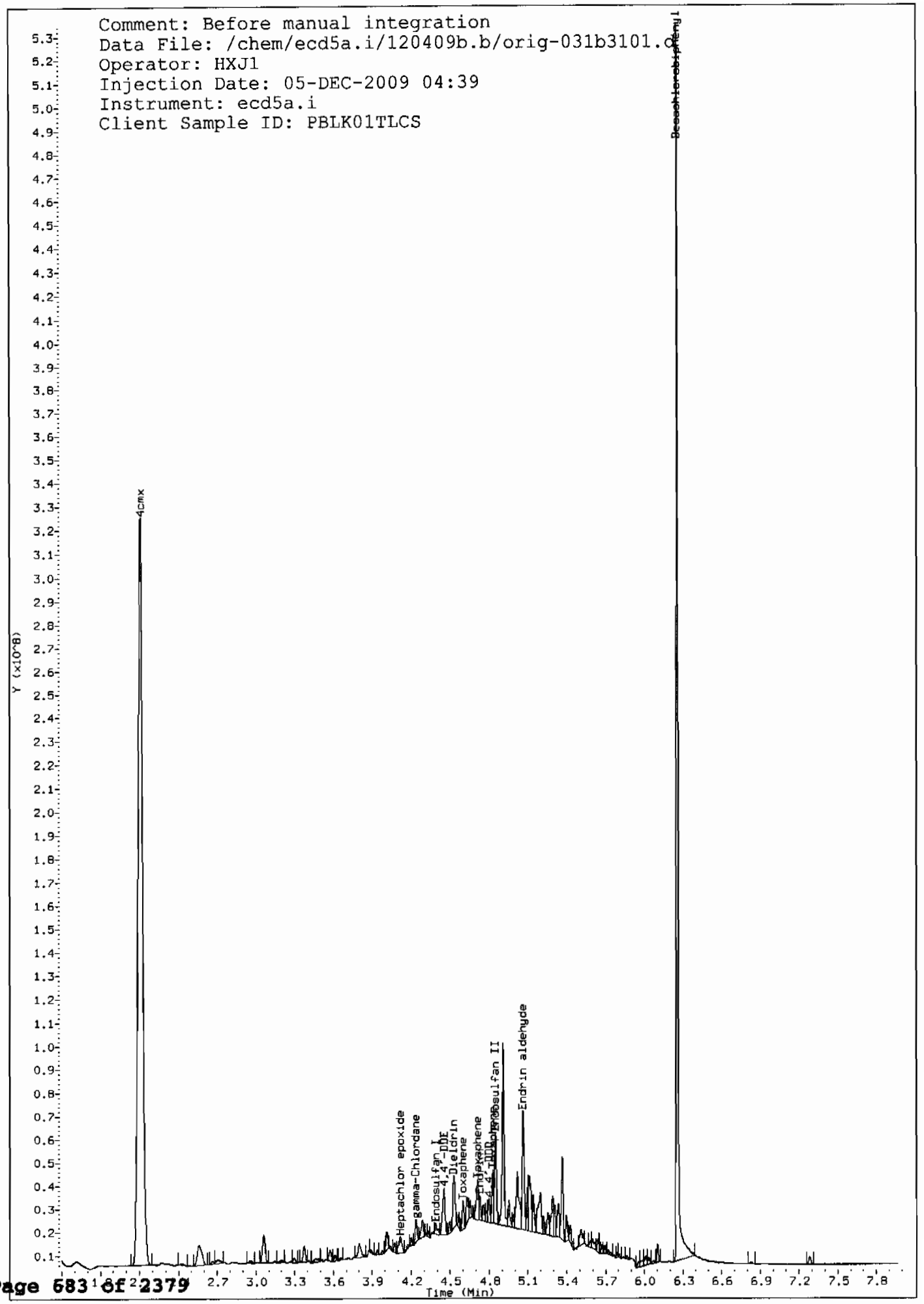
Comment: Before manual integration
Data File: /chem/ecd5a.i/120409b.b/orig-031b3101.d
Operator: HXJ1
Injection Date: 05-DEC-2009 04:39
Instrument: ecd5a.i
Client Sample ID: PBLK01TLCS
4cmx
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Toxaphene
Endrin aldehyde
Endosulfan II
Y (x10^8)
Time (Min)

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/07/2009 METHOD: ECD5-B-8081-120409b.m OPERATOR:HXJ1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454
COPPER LOT 906110-AS

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons : 8081A,B
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
SP-Split Peak, DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/120409b.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR090914-99IB	HXJ1	04-DEC-2009 22:41		120409b	1.0		Clean
002b0201.d	WPE091109-99DG	HXJ1	04-DEC-2009 22:53		120409b	1.0		(b) DDT 2.0%, Endrin 2.1%; (f) DDT 1.1%, Endrin 1.4%
003b0301.d	WPE091204-01AB	HXJ1	04-DEC-2009 23:05		120409b	1.0		INDAB ICAL level 1
004b0401.d	WPE091204-02AB	HXJ1	04-DEC-2009 23:17		120409b	1.0		INDAB ICAL level 2
005b0501.d	WPE091204-03AB	HXJ1	04-DEC-2009 23:29		120409b	1.0		INDAB ICAL level 3
006b0601.d	WPE091204-04AB	HXJ1	04-DEC-2009 23:41		120409b	1.0		INDAB ICAL level 4
007b0701.d	IPE091005-02AB	HXJ1	04-DEC-2009 23:52		120409b	1.0		INDAB ICAL level 5
008b0801.d	WPE091123-10AB	HXJ1	05-DEC-2009 00:04		120409b	1.0		All okay
009b0901.d	WPE091204-11TX	HXJ1	05-DEC-2009 00:16		120409b	1.0		TOXAPH ICAL level 1
010b1001.d	WPE091204-12TX	HXJ1	05-DEC-2009 00:28		120409b	1.0		TOXAPH ICAL level 2
011b1101.d	WPE091204-13TX	HXJ1	05-DEC-2009 00:40		120409b	1.0		TOXAPH ICAL level 3
012b1201.d	WPE091204-14TX	HXJ1	05-DEC-2009 00:52		120409b	1.0		TOXAPH ICAL level 4
013b1301.d	IPE091121-40TX	HXJ1	05-DEC-2009 01:04		120409b	1.0		TOXAPH ICAL level 5
014b1401.d	WPE091104-52TX	HXJ1	05-DEC-2009 01:16		120409b	1.0		All okay
015b1501.d	WPE091204-21CL	HXJ1	05-DEC-2009 01:28		120409b	1.0		CHLOR ICAL level 1

Instrument Batch: /chem/ecd5a.i/120409b.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE091204-22CL	HXJ1	05-DEC-2009 01:40		120409b	1.0		CHLOR ICAL level 2

017b1701.d	WPE091204-23CL	HXJ1	05-DEC-2009 01:52		120409b		1.0		CHLOR ICAL level 3
018b1801.d	WPE091204-24CL	HXJ1	05-DEC-2009 02:04		120409b		1.0		CHLOR ICAL level 4
019b1901.d	IPE091029-06CL	HXJ1	05-DEC-2009 02:16		120409b		1.0		CHLOR ICAL level 5
020b2001.d	WPE091021-00CL	HXJ1	05-DEC-2009 02:28		120409b		1.0		All okay
021b2101.d	WPE091204-31GA	HXJ1	05-DEC-2009 02:40		120409b		1.0		GAPA ICAL level 1
022b2201.d	WPE091204-32GA	HXJ1	05-DEC-2009 02:52		120409b		1.0		GAPA ICAL level 2
023b2301.d	WPE091204-33GA	HXJ1	05-DEC-2009 03:04		120409b		1.0		GAPA ICAL level 3
024b2401.d	WPE091204-34GA	HXJ1	05-DEC-2009 03:16		120409b		1.0		GAPA ICAL level 4
025b2501.d	IPE091110-01GA	HXJ1	05-DEC-2009 03:28		120409b		1.0		GAPA ICAL level 5
026b2601.d	WPE091021-05GA	HXJ1	05-DEC-2009 03:39		120409b		1.0		All okay
027b2701.d	WAR090914-99IB	HXJ1	05-DEC-2009 03:51		120409b		1.0		Clean
028b2801.d	WPE091109-99DG	HXJ1	05-DEC-2009 04:03		120409b		1.0		(b) DDT 3.1%, Endrin 3.2%; (f) DDT 3.4%, Endrin 2.2%
029b2901.d	1201985185	HXJ1	05-DEC-2009 04:15	928403	10-670		1.0	MB	USE, uploaded both columns, reporting lower result
030b3001.d	1201985186	HXJ1	05-DEC-2009 04:27	928403	10-670		1.0	LCS	USE, uploaded both columns, reporting lower result NCR - DDT elevated - no hits
031b3101.d	1201985189	HXJ1	05-DEC-2009 04:39	928403	10-670		1.0	TLCS	USE, uploaded both columns, reporting lower result
032b3201.d	241838002	HXJ1	05-DEC-2009 04:51	928403	10-670		10.0	LANL	USE, uploaded both columns, reporting lower result
033b3301.d	241903002	HXJ1	05-DEC-2009 05:03	928403	10-690		10.0	LANL	USE, uploaded both columns, reporting lower result
034b3401.d	241907001	HXJ1	05-DEC-2009 05:15	928403	10-692		10.0	LANL	USE, uploaded both columns, reporting lower result
035b3501.d	241907002	HXJ1	05-DEC-2009 05:27	928403	10-692		10.0	LANL	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/120409b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR090914-99IB	HXJ1	05-DEC-2009 05:39		120409b		1.0		Clean
037b3701.d	WPE091123-10AB	HXJ1	05-DEC-2009 05:51		120409b		1.0		(b) DDT, Ketone elevated; (f) All okay
038b3801.d	WAR090914-99IB	HXJ1	05-DEC-2009 06:03		120409b		1.0		Clean
039b3901.d	241911001	HXJ1	05-DEC-2009 06:15	928403	10-694		10.0	LANL	USE, uploaded both columns, reporting lower result
040b4001.d	1201985187	HXJ1	05-DEC-2009 06:27	928403	10-694		10.0	MS	USE, uploaded both columns, reporting lower result

041b4101.d	1201985188	HXJ1	05-DEC-2009 06:39	928403	10-694	10.0	MSD	USE, uploaded both columns, reporting lower result
042b4201.d	241911002	HXJ1	05-DEC-2009 06:51	928403	10-694	10.0	LANL	USE, uploaded both columns, reporting lower result
043b4301.d	WAR090914-99IB	HXJ1	05-DEC-2009 07:02		120409b	1.0		Clean
044b4401.d	WPE091123-10AB	HXJ1	05-DEC-2009 07:14		120409b	1.0		(b) DDT, Methoxychlor, Ketone elevated; (f) All okay
045b4501.d	WAR090914-99IB	HXJ1	05-DEC-2009 07:26		120409b	1.0		Clean
046b4601.d	1201985510	HXJ1	05-DEC-2009 07:38	928526	EUI-7402	1.0	MB	USE, uploaded both columns, reporting higher result
047b4701.d	1201985511	HXJ1	05-DEC-2009 07:50	928526	EUI-7402	1.0	LCS	USE, uploaded both columns, reporting higher result NCR - DDT elevated - not detected in samples
048b4801.d	1201985514	HXJ1	05-DEC-2009 08:02	928526	EUI-7402	1.0	LCSD	USE, uploaded both columns, reporting higher result
049b4901.d	241701001	HXJ1	05-DEC-2009 08:14	928526	EUI-7402	20.0	CARE	USE, uploaded both columns, reporting higher result
050b5001.d	241705001	HXJ1	05-DEC-2009 08:26	928526	EUI-7403	20.0	CARE	USE, uploaded both columns, reporting higher result
051b5101.d	241706001	HXJ1	05-DEC-2009 08:38	928526	EUI-7404	20.0	CARE	USE, uploaded both columns, reporting higher result NCR - 4cmx elevated on front - matrix and dilution
052b5201.d	241797001	HXJ1	05-DEC-2009 08:50	928526	EUI-7408	2.0	CARE	USE, uploaded both columns, reporting higher result
053b5301.d	1201985512	HXJ1	05-DEC-2009 09:02	928526	EUI-7404	2.0	MS	USE, uploaded both columns, reporting higher result
054b5401.d	1201985513	HXJ1	05-DEC-2009 09:14	928526	EUI-7404	2.0	MSD	USE, uploaded both columns, reporting higher result
055b5501.d	242027001	HXJ1	05-DEC-2009 09:26	928526	EUI-7409	20.0	CARE	USE, uploaded both columns, reporting higher result

Instrument Batch: /chem/ecd5a.i/120409b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	WAR090914-99IB	HXJ1	05-DEC-2009 09:38		120409b	1.0		Clean
057b5701.d	WPE091123-10AB	HXJ1	05-DEC-2009 09:49		120409b	1.0		(b) DDT elevated, Methoxychlor low; (f) All okay
058b5801.d	WAR090914-99IB	HXJ1	05-DEC-2009 10:01		120409b	1.0		Clean
059b5901.d	241866002	HXJ1	05-DEC-2009 10:13	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
060b6001.d	241866003	HXJ1	05-DEC-2009 10:25	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
061b6101.d	241866004	HXJ1	05-DEC-2009 10:37	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
062b6201.d	241866005	HXJ1	05-DEC-2009 10:49	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
063b6301.d	241866006	HXJ1	05-DEC-2009 11:01	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result

064b6401.d	241866007	HXJ1	05-DEC-2009 11:13	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
065b6501.d	241866009	HXJ1	05-DEC-2009 11:25	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
066b6601.d	241866010	HXJ1	05-DEC-2009 11:37	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
067b6701.d	241866011	HXJ1	05-DEC-2009 11:49	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
068b6801.d	241866012	HXJ1	05-DEC-2009 12:01	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
069b6901.d	WPE091123-10AB	HXJ1	05-DEC-2009 12:13		120409b	1.0		(b) DDT elevated; (f) gamma-BHC, delta-BHC, gamma-Chlordane, Methoxychlor elevated
070b7001.d	WAR090914-99IB	HXJ1	05-DEC-2009 12:25		120409b	1.0		Clean
071b7101.d	1201986717	HXJ1	05-DEC-2009 12:37	929009	241866	1.0	MS	USE, uploaded both columns, reporting higher result
072b7201.d	1201986720	HXJ1	05-DEC-2009 12:49	929009	241866	1.0	MSD	USE, uploaded both columns, reporting higher result
073b7301.d	1201986718	HXJ1	05-DEC-2009 13:01	929009	241866	1.0	TMS	USE, uploaded both columns, reporting higher result
074b7401.d	1201986721	HXJ1	05-DEC-2009 13:13	929009	241866	1.0	TMSD	USE, uploaded both columns, reporting higher result
075b7501.d	1201986719	HXJ1	05-DEC-2009 13:25	929009	241866	1.0	CMS	USE, uploaded both columns, reporting higher result

Instrument Batch: /chem/ecd5a.i/120409b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076b7601.d	1201986722	HXJ1	05-DEC-2009 13:37	929009	241866	1.0	CMSD	USE, uploaded both columns, reporting higher result
077b7701.d	241866013	HXJ1	05-DEC-2009 13:48	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
078b7801.d	241866014	HXJ1	05-DEC-2009 14:00	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
079b7901.d	241866015	HXJ1	05-DEC-2009 14:12	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
080b8001.d	241866016	HXJ1	05-DEC-2009 14:24	929009	241866	1.0	NREA	USE, uploaded both columns, reporting higher result
081b8101.d	WPE091123-10AB	HXJ1	05-DEC-2009 14:36		120409b	1.0		(b) DDT, Methoxychlor, Ketone low - LEAK?; (f) Multiple analytes elevated
082b8201.d	WAR090914-99IB	HXJ1	05-DEC-2009 14:48		120409b	1.0		Clean
083b8301.d	1201984100	HXJ1	05-DEC-2009 15:00	929009	241866	1.0	TB	USE, uploaded both columns, reporting higher result
084b8401.d	1201986716	HXJ1	05-DEC-2009 15:12	929009	241866	1.0	MB	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in samples and matrix QC
085b8501.d	1201986723	HXJ1	05-DEC-2009 15:24	929009	241866	1.0	LCS	USE, uploaded both columns, reporting higher result NCR - 4cmx low - passes in samples and matrix QC - spikes pass
086b8601.d	1201986724	HXJ1	05-DEC-2009 15:36	929009	241866	1.0	TLCS	USE, uploaded both columns, reporting higher result

									NCR - 4cmx low - passes in samples and matrix QC - spikes pass
087b8701.d	1201986725	HXJ1	05-DEC-2009 15:48	929009	241866		1.0	CLCS	USE, uploaded both columns, reporting higher result
088b8801.d	WAR090914-99IB	HXJ1	05-DEC-2009 16:00		120409b		1.0		Clean
089b8901.d	WPE091123-10AB	HXJ1	05-DEC-2009 16:12		120409b		1.0		(b) DDT, Methoxychlor, Ketone low - LEAK?; (f) Multiple analytes elevated
090b9001.d	WAR090914-99IB	HXJ1	05-DEC-2009 16:24		120409b		1.0		Clean
091b9101.d	WAR090914-99IB	HXJ1	05-DEC-2009 16:36		120409b		1.0		Clean
092b9201.d	WE091204-11SCR	HXJ1	05-DEC-2009 16:48		120409b		1.0		TCLPTOXLCS screen
093b9301.d	WE091204-04SCR	HXJ1	05-DEC-2009 17:00		120409b		1.0		TCLPCHLLCS screen
094b9401.d	UE091204-04SCR	HXJ1	05-DEC-2009 17:11		120409b		1.0		PEST LCS screen
095b9501.d	WPE091123-10AB	HXJ1	05-DEC-2009 17:23		120409b		1.0		(b) DDT, Endosulfan sulfate, Methoxychlor, Endrin ketone low; (f) DDT low, several analytes elevated

Instrument Batch: /chem/ecd5a.i/120409b.b Page: 5

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
096b9601.d	UE091204-04BSCR	HXJ1	05-DEC-2009 18:42		120409b		1.0		PEST LCS screen

Instrument Batch: /chem/ecd5a.i/120409b.b Page: 6

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120409b.b/040b4001.d
Lab Smp Id: 1201985187 Client Smp ID: WST49-10-5432MS
Inj Date : 05-DEC-2009 06:27
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985187|10|
Misc Info : |ECD81A_1S|928403|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 40 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.110	2.108	0.002	81930995	18.7315	31.6	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.257	6.256	0.001	39248828	18.9556	32.0	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.819	2.818	0.001	54507400	8.96193	15.1	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.142	3.141	0.001	48579247	9.22552	15.6	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.225	3.224	0.001	21528590	9.30623	15.7	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.453	3.452	0.001	52345028	9.94593	16.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.486	3.486	0.000	49780214	11.4526	19.3	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.719	3.719	0.000	45779292	9.77545	16.5	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.118	4.118	0.000	44452132	11.0141	18.6	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.242	4.241	0.001	51702927	12.4972	21.1	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.336	4.336	0.000	37025972	9.33200	15.8	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.370	4.368	0.002	32732999	9.22983	15.6	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.448	4.448	0.000	90109499	23.6578	39.9	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.542	4.542	0.000	99068725	26.5667	44.9	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.729	4.728	0.001	78070059	24.2279	40.9	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.800	4.800	0.000	69216305	21.9508	37.1	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.859	4.858	0.001	87201991	28.3515	47.9	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.061	5.059	0.002	57822024	22.7953	38.5	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.987	4.986	0.001	60902863	31.4869	53.2	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.226	5.223	0.003	66839991	24.1038	40.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.391	5.391	0.000	80122473	91.2869	154	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.542	5.540	0.002	73858607	21.5926	36.5	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/040b4001.d

Date : 05-DEC-2009 06:27

Client ID: WST49-10-5432MS

Sample Info: |1201985187|10|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

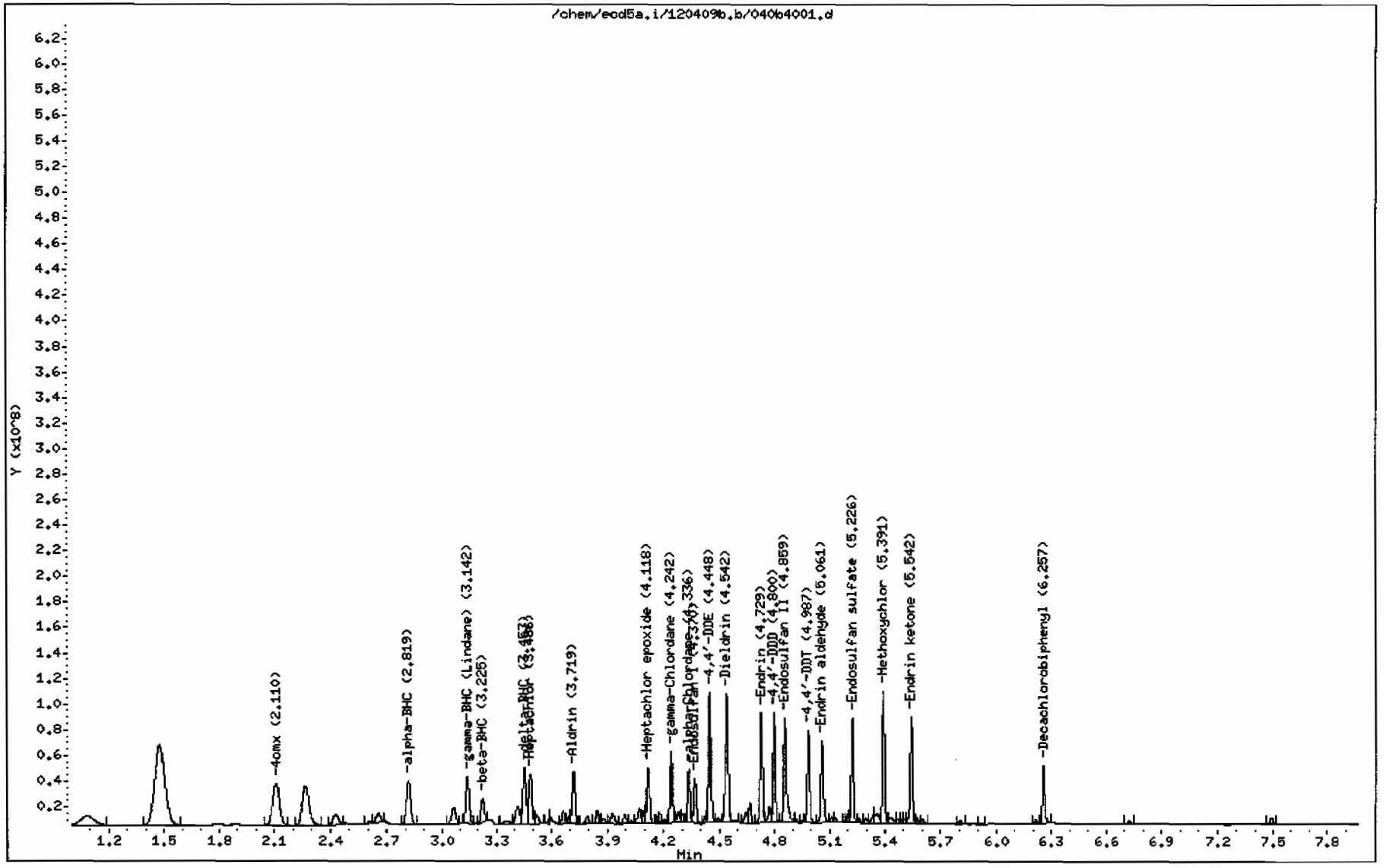

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CLP-1

Data file : /chem/ecd5a.i/120409b.b/040f4001.d
Lab Smp Id: 1201985187 Client Smp ID: WST49-10-5432MS
Inj Date : 05-DEC-2009 06:27
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985187|10|
Misc Info : |ECD81A_1S|928403|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 21:01 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 40 QC Sample: MS
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.721	2.720	0.001	7165300	18.7125	31.6	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.619	6.617	0.002	4044282	19.6274	33.1	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.334	3.333	0.001	4386523	8.81052	14.9	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.626	3.624	0.002	4132948	9.62389	16.2	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.704	3.702	0.002	2403301	12.0054	20.3	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.848	3.846	0.002	5157492	11.4548	19.3	80.00- 120.00	100.00(M)
10 Heptachlor					CAS #: 76-44-8		
4.008	4.007	0.001	4568062	12.4517	21.0	80.00- 120.00	100.00(M)
11 Aldrin					CAS #: 309-00-2		
4.232	4.230	0.002	3483830	8.45771	14.3	80.00- 120.00	100.00(M)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.655	4.653	0.002	3462929	9.43422	15.9	80.00- 120.00	100.00(M)
17 gamma-Chlordane					CAS #: 5103-74-2		
4.737	4.735	0.002	3572132	9.87135	16.7	80.00- 120.00	100.00(M)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.823	4.821	0.002	3956395	11.0400	18.6	80.00- 120.00	100.00(M)
16 Endosulfan I					CAS #: 959-98-8		
4.913	4.911	0.002	3035101	9.06082	15.3	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
4.868	4.867	0.001	8074305	23.1952	39.2	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
5.065	5.063	0.002	8031790	22.5862	38.1	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.212	5.209	0.003	7589531	25.1518	42.5	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.239	5.238	0.001	6625659	22.9861	38.8	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.351	5.348	0.003	6825138	21.8977	37.0	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.602	5.599	0.003	4949427	20.1335	34.0	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.408	5.406	0.002	5032037	28.5653	48.2	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.862	5.859	0.003	6690938	26.0421	44.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.687	5.686	0.001	7236177	83.1956	140	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.036	6.032	0.004	5283879	21.6074	36.5	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120409b.b/040f4001.d

Date : 05-DEC-2009 06:27

Client ID: WST49-10-5432MS

Sample Info: |1201985187|10|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

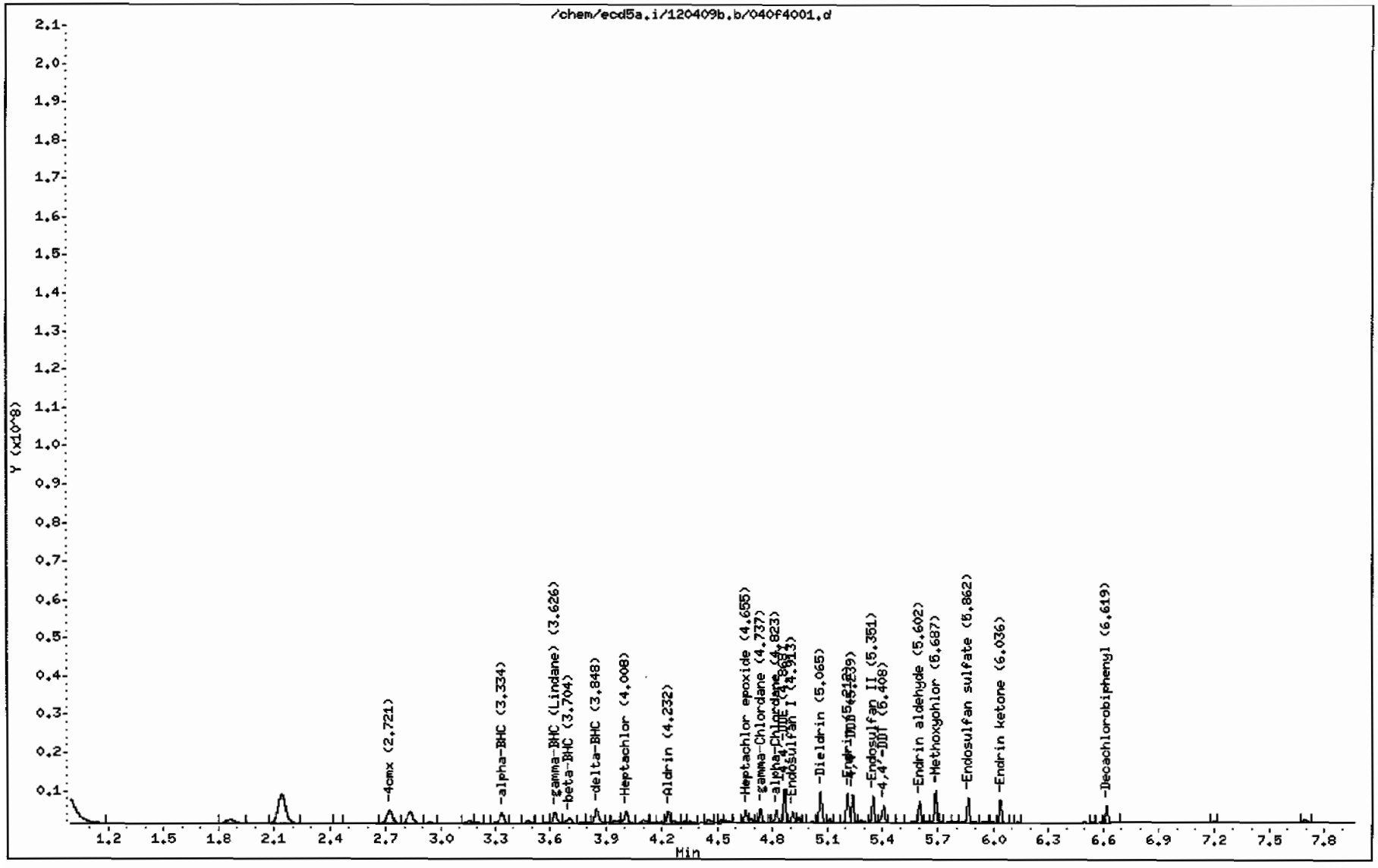

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CLP-2

Data file : /chem/ecd5a.i/120409b.b/041b4101.d
Lab Smp Id: 1201985188 Client Smp ID: WST49-10-5432MSD
Inj Date : 05-DEC-2009 06:39
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985188|10|
Misc Info : |ECD81A_1S|928403|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-B-8081-120409b.m
Meth Date : 05-Dec-2009 21:10 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025b2501.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.108	2.108	0.000	83958654	19.1950	32.5	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.258	6.256	0.002	43287036	20.9059	35.4	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.818	2.818	0.000	57488136	9.45201	16.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.142	3.141	0.001	52671249	10.0026	16.9	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.225	3.224	0.001	26659463	11.5242	19.5	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.452	3.452	0.000	49624243	9.42896	15.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.485	3.486	-0.001	40846097	9.39720	15.9	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.719	3.719	0.000	47505238	10.1440	17.2	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.119	4.118	0.001	48683152	12.0625	20.4	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.243	4.241	0.002	47324461	11.4389	19.3	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.336	4.336	0.000	37937225	9.56167	16.2	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.369	4.368	0.001	35114205	9.90126	16.7	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.448	4.448	0.000	93646758	24.5865	41.6	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.542	4.542	0.000	96092998	25.7687	43.6	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.728	4.728	0.000	81483415	25.2872	42.8	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.799	4.800	-0.001	73561610	23.3288	39.4	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.858	4.858	0.000	89770290	29.1865	49.4	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.061	5.059	0.002	60467882	23.8384	40.3	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.987	4.986	0.001	55978906	28.3841	48.0	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.224	5.223	0.001	69883114	25.2012	42.6	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.390	5.391	-0.001	75267917	84.4643	143	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.541	5.540	0.001	71259947	20.4255	34.5	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/041b4101.d
Date : 05-DEC-2009 06:39
Client ID: WST49-10-5432HSD
Sample Info: 1120196518811011
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25

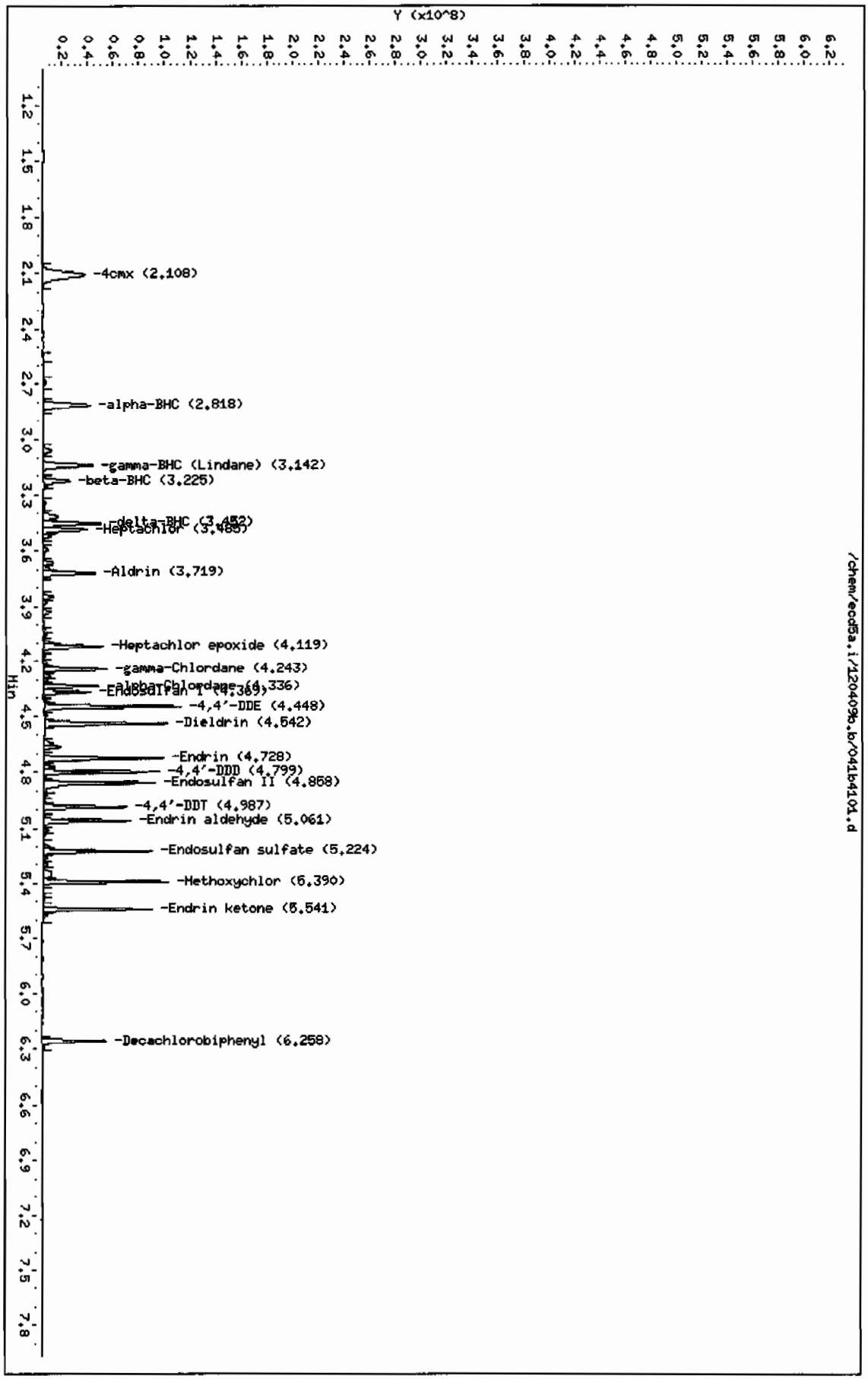

Page 1

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CLP-1

Data file : /chem/ecd5a.i/120409b.b/041f4101.d
Lab Smp Id: 1201985188 Client Smp ID: WST49-10-5432MSD
Inj Date : 05-DEC-2009 06:39
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201985188|10|
Misc Info : |ECD81A_1S|928403|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd5a.i/120409b.b/ECD5-F-8081-120409b.m
Meth Date : 05-Dec-2009 22:02 hea01125 Quant Type: ESTD
Cal Date : 05-DEC-2009 03:28 Cal File: 025f2501.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weigth of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.720	2.720	0.000	6636136	17.3306	29.3	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.619	6.617	0.002	3919547	19.0221	32.2	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
3.334	3.333	0.001	4200444	8.43677	14.3	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.624	3.624	0.000	3992931	9.29785	15.7	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
12 beta-BHC					CAS #: 319-85-7		
3.703	3.702	0.001	1931443	9.64826	16.3	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.848	3.846	0.002	5260330	11.6832	19.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.008	4.007	0.001	3503060	9.54872	16.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.232	4.230	0.002	3575205	8.67954	14.7	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.653	4.653	0.000	3508337	9.55793	16.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.736	4.735	0.001	3198698	8.83939	15.0	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.823	4.821	0.002	3624544	10.1140	17.1	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.913	4.911	0.002	3118677	9.31032	15.7	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.868	4.867	0.001	8290988	23.8176	40.3	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.063	5.063	0.000	7778927	21.8752	37.0	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.211	5.209	0.002	7177934	23.7878	40.2	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.238	5.238	0.000	6648440	23.0651	39.0	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.349	5.348	0.001	6882929	22.0832	37.4	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.601	5.599	0.002	4862231	19.7788	33.4	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.407	5.406	0.001	4253281	24.1445	40.8	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.861	5.859	0.002	5911651	23.0090	38.9	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.687	5.686	0.001	6878916	79.0881	134	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.035	6.032	0.003	5179387	21.1801	35.8	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/120409b.b/041f4101.d

Page 1

Date : 05-DEC-2009 06:39

Client ID: WST49-10-5432MSD

Instrument: ecd5a.i

Sample Info: |1201985188|10|

Volume Injected (uL): 1.0

Operator: HXJ1

Column phase: CLP-1

Column diameter: 0.25

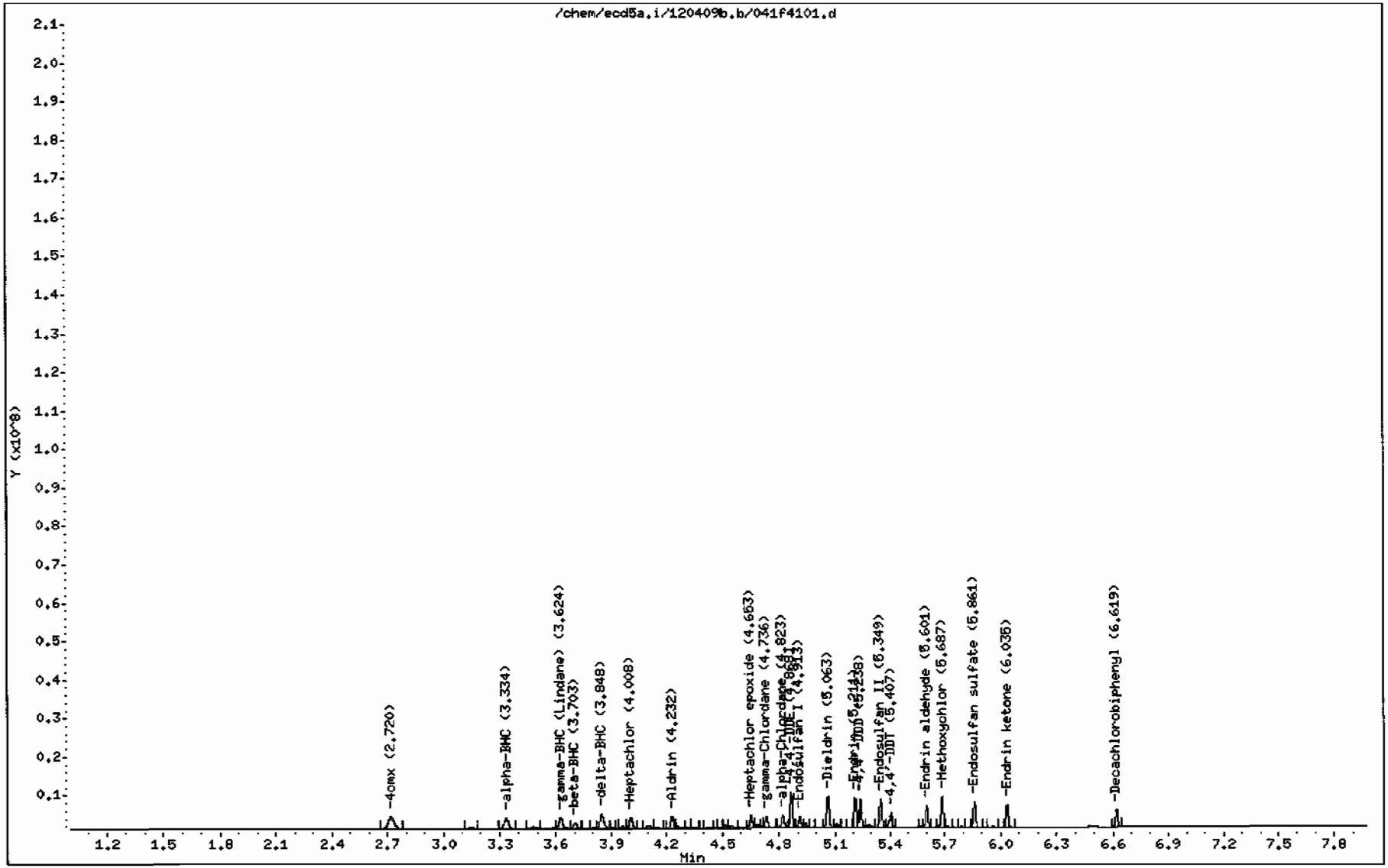

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 928402 **Verified by:** _____

Analyst: Robin Hunt

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201985185 MB	03–DEC–2009 10:03:18	30	Florisil	5	1	10	5	0.16667
1201985186 LCS	03–DEC–2009 10:03:18	30	Florisil	5	1	10	5	0.16667
1201985189 LCS	03–DEC–2009 10:03:18	30	Florisil	5	1	10	5	0.16667
241838002	03–DEC–2009 10:03:18	30.03	Florisil	5	1	10	5	0.1665
241903002	03–DEC–2009 10:03:18	30.03	Florisil	5	1	10	5	0.1665
241907001	03–DEC–2009 10:03:18	30.02	Florisil	5	1	10	5	0.16656
241907002	03–DEC–2009 10:03:18	30.09	Florisil	5	1	10	5	0.16617
241911001	03–DEC–2009 10:03:18	30	Florisil	5	1	10	5	0.16667
1201985187 MS (241911001)	03–DEC–2009 10:03:18	30.05	Florisil	5	1	10	5	0.16639
1201985188 MSD (241911001)	03–DEC–2009 10:03:18	30	Florisil	5	1	10	5	0.16667
241911002	03–DEC–2009 10:03:18	30	Florisil	5	1	10	5	0.16667

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201985186	PESTSPIKE	UE091121–02	1	mL
LCS	1201985189	Toxaphene TCLP LCS	WE091028–11	2	mL
MS	1201985187	PESTSPIKE	UE091121–02	1	mL
MSD	1201985188	PESTSPIKE	UE091121–02	1	mL
SURR	All	PEST SURROGATE 1000 UG/L	UE091114–07	1	mL
REGNT	All	Florisil cartridge 1000mg per cartridge	1103846–28	1	g
REGNT	All	Acetone	1219765	150	mL
REGNT	All	Hexane	1233925–B2	150	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Clean up Date: 12/03/2009

Clean up Initials: RWH

Verified By: JAM

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–036

GC SEMIVOLATILE PESTICIDE ANALYSIS

Pesticide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670-1

Method/Analysis Information

Procedure:	**Analysis of Organochlorine Pesticides and Chlorinated Hydrocarbons by ECD**
Analytical Method:	SW846 8081A
Prep Method:	SW846 3510C
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	933214
Prep Batch Number:	933213
TCLP Prep Batch Number:	930033

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8081A:

Sample ID	**Client ID**
241839001	WST03-10-2134
1201988990	TCLP Blank (TB)
1201996510	Method Blank (MB)
1201996517	Laboratory Control Sample (LCS)
1201996518	Laboratory Control Sample (LCS)-Toxaphene LCS Only
1201996519	Laboratory Control Sample (LCS)-Chlordane (tech.) LCS Only
1201996511	241839001(WST03-10-2134) Matrix Spike (MS)
1201996512	241839001(WST03-10-2134) Matrix Spike (MS)-Toxaphene MS Only
1201996513	241839001(WST03-10-2134) Matrix Spike (MS)-Chlordane (tech.) MS Only
1201996514	241839001(WST03-10-2134) Matrix Spike Duplicate (MSD)
1201996515	241839001(WST03-10-2134) Matrix Spike Duplicate (MSD)-Toxaphene MSD Only
1201996516	241839001(WST03-10-2134) Matrix Spike Duplicate (MSD)-Chlordane (tech.) MSD Only

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 10.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

Methoxychlor recovery failed to meet the acceptance criteria with positive bias on both columns in one of standards and failed with negative bias on one column in one of the standards. However, this had no adverse effects on the data as Methoxychlor was not detected on either of the columns in the associated samples.

Heptachlor recovery failed to meet the acceptance criteria with negative bias on both analytical columns in the standard bracketing the sample in this SDG. All associated samples in this SDG were s re-analyzed and the bracketing standard failed in the same manner. Therefore the failure is attributed to sample matrix interference. The confirmation data were included in the Miscellaneous Data section.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241839001 (WST03-10-2134) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Sample 241839001 (WST03-10-2134) and its MS/MSD were re-analyzed due to failing bracketing standard. The re-analysis failed standard in the same manner; therefore, the failure is attributed to matrix interference. The confirmation data is located in the Miscellaneous Data section.

Miscellaneous Information:

Electronic Package Comment

This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The lower results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated

using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD7A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide I)
ECD7A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock Date: 12-21-2009

Roadmap for LANL 10-670-1 PEST

This roadmap was analyzed by jam00798 on 12-18-2009, 08:34.
This roadmap was reviewed by jcb on 12-18-2009, 09:20.
This roadmap was validated by yml on 12-21-2009, 12:34.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ccd7a.i/121709.b/037f3701.d	241839001	sample	17-DEC-2009	23:37	10-670-1.sub	WST03-10-2134	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/037f3701.d	241839001	sample	16-DEC-2009	23:20	10-670-1.sub	WST03-10-2134	1.00000	933214	USE: LOWER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ccd7a.i/121709.b/037b3701.d	241839001	sample	17-DEC-2009	23:37	10-670-1.sub	WST03-10-2134	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/037b3701.d	241839001	sample	16-DEC-2009	23:20	10-670-1.sub	WST03-10-2134	1.00000	933214	USE: LOWER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ccd7a.i/121609.b/047f4701.d	1201988990	tb	17-DEC-2009	01:48	10-670-1.sub	TBLK01	1.00000	933214	USE: LOWER
□	N	/chem/ccd7a.i/121609.b/049f4901.d	1201996510	mb	17-DEC-2009	02:18	10-670-1.sub	PBLK01	1.00000	933214	USE: LOWER
□	N	/chem/ccd7a.i/121609.b/050f5001.d	1201996517	lcs	17-DEC-2009	02:33	10-670-1.sub	PBLK01LCS	1.00000	933214	USE: LOWER
□	N	/chem/ccd7a.i/121609.b/051f5101.d	1201996518	lcs	17-DEC-2009	02:47	10-670-1.sub	PBLK01TLCS	1.00000	933214	USE: LOWER
□	N	/chem/ccd7a.i/121609.b/052f5201.d	1201996519	lcs	17-DEC-2009	03:02	10-670-1.sub	PBLK01CLCS	1.00000	933214	USE: LOWER
■	N	/chem/ccd7a.i/121709.b/038f3801.d	1201996511	ms	17-DEC-2009	23:52	10-670-1.sub	WST03-10-2134MS	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/038f3801.d	1201996511	ms	16-DEC-2009	23:35	10-670-1.sub	WST03-10-2134MS	1.00000	933214	USE: LOWER
■	N	/chem/ccd7a.i/121709.b/040f4001.d	1201996512	ms	18-DEC-2009	00:22	10-670-1.sub	WST03-10-2134TMS	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/040f4001.d	1201996512	ms	17-DEC-2009	00:04	10-670-1.sub	WST03-10-2134TMS	1.00000	933214	USE: LOWER
■	N	/chem/ccd7a.i/121709.b/042f4201.d	1201996513	ms	18-DEC-2009	00:51	10-670-1.sub	WST03-10-2134CMS	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/042f4201.d	1201996513	ms	17-DEC-2009	00:34	10-670-1.sub	WST03-10-2134CMS	1.00000	933214	USE: LOWER
■	N	/chem/ccd7a.i/121709.b/039f3901.d	1201996514	msd	18-DEC-2009	00:07	10-670-1.sub	WST03-10-2134MSD	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/039f3901.d	1201996514	msd	16-DEC-2009	23:49	10-670-1.sub	WST03-10-2134MSD	1.00000	933214	USE: LOWER
■	N	/chem/ccd7a.i/121709.b/041f4101.d	1201996515	msd	18-DEC-2009	00:37	10-670-1.sub	WST03-10-2134TMSD	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/041f4101.d	1201996515	msd	17-DEC-2009	00:19	10-670-1.sub	WST03-10-2134TMSD	1.00000	933214	USE: LOWER
■	N	/chem/ccd7a.i/121709.b/043f4301.d	1201996516	msd	18-DEC-2009	01:06	10-670-1.sub	WST03-10-2134MSD	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
□	N	/chem/ccd7a.i/121609.b/043f4301.d	1201996516	msd	17-DEC-2009	00:49	10-670-1.sub	WST03-10-2134CMSD	1.00000	933214	USE: LOWER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd7a.i/121609.b/047b4701.d	1201988990	tb	17-DEC-2009	01:48	10-670-1.sub	TBLK01	1.00000	933214	USE: LOWER
☐	N	/chem/ecd7a.i/121609.b/049b4901.d	1201996510	mb	17-DEC-2009	02:18	10-670-1.sub	PBLK01	1.00000	933214	USE: LOWER
☐	N	/chem/ecd7a.i/121609.b/050b5001.d	1201996517	lcs	17-DEC-2009	02:33	10-670-1.sub	PBLK01LCS	1.00000	933214	USE: LOWER
☐	N	/chem/ecd7a.i/121609.b/051b5101.d	1201996518	lcs	17-DEC-2009	02:47	10-670-1.sub	PBLK01TLCS	1.00000	933214	USE: LOWER
☐	N	/chem/ecd7a.i/121609.b/052b5201.d	1201996519	lcs	17-DEC-2009	03:02	10-670-1.sub	PBLK01CLCS	1.00000	933214	USE: LOWER
■	N	/chem/ecd7a.i/121709.b/038b3801.d	1201996511	ms	17-DEC-2009	23:52	10-670-1.sub	WST03-10-2134MS	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
☐	N	/chem/ecd7a.i/121609.b/038b3801.d	1201996511	ms	16-DEC-2009	23:35	10-670-1.sub	WST03-10-2134MS	1.00000	933214	USE: LOWER
■	N	/chem/ecd7a.i/121709.b/040b4001.d	1201996512	ms	18-DEC-2009	00:22	10-670-1.sub	WST03-10-2134TMS	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
☐	N	/chem/ecd7a.i/121609.b/040b4001.d	1201996512	ms	17-DEC-2009	00:04	10-670-1.sub	WST03-10-2134TMS	1.00000	933214	USE: LOWER
■	N	/chem/ecd7a.i/121709.b/042b4201.d	1201996513	ms	18-DEC-2009	00:51	10-670-1.sub	WST03-10-2134CMS	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
☐	N	/chem/ecd7a.i/121609.b/042b4201.d	1201996513	ms	17-DEC-2009	00:34	10-670-1.sub	WST03-10-2134CMS	1.00000	933214	USE: LOWER
■	N	/chem/ecd7a.i/121709.b/039b3901.d	1201996514	msd	18-DEC-2009	00:07	10-670-1.sub	WST03-10-2134MSD	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
☐	N	/chem/ecd7a.i/121609.b/039b3901.d	1201996514	msd	16-DEC-2009	23:49	10-670-1.sub	WST03-10-2134MSD	1.00000	933214	USE: LOWER
■	N	/chem/ecd7a.i/121709.b/041b4101.d	1201996515	msd	18-DEC-2009	00:37	10-670-1.sub	WST03-10-2134TMSD	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
☐	N	/chem/ecd7a.i/121609.b/041b4101.d	1201996515	msd	17-DEC-2009	00:19	10-670-1.sub	WST03-10-2134TMSD	1.00000	933214	USE: LOWER
■	N	/chem/ecd7a.i/121709.b/043b4301.d	1201996516	msd	18-DEC-2009	01:06	10-670-1.sub	WST03-10-2134CMSD	1.00000	933214	DUSE: CONFIRMS CHECK FAILURE
☐	N	/chem/ecd7a.i/121609.b/043b4301.d	1201996516	msd	17-DEC-2009	00:49	10-670-1.sub	WST03-10-2134CMSD	1.00000	933214	USE: LOWER

SAMPLE DATA SUMMARY

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10–670–1**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**TCLP R**
Lab Sample ID:	**241839001**	**Date Received:**	**11/25/2009 09:10**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03–10–2134**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL–OA–E–041**
Batch ID:	**933214**	**Inst:**	**ECD7A.I**	**Dilution:**	**1**
Run Date:	**12/16/2009 23:20**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/15/2009 19:49**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**037f3701.d**	**Column:**	**1 CLP–1**	**Level:**	**LOW**
	037b3701.d		**2 CLP–2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72–20–8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

QUALITY CONTROL SUMMARY

Pesticide

Surrogate Recovery Report

SDG Number: 10–670–1

Matrix Type: TCLP SOLID

CAP Column (1) : CLP–1 **CAP Column (2) : CLP–2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
241839001	WST03–10–2134	53	57	70	71
1201996511	WST03–10–2134MS	41	45	67	65
1201996514	WST03–10–2134MSD	34	38	63	62
1201996512	WST03–10–2134MS	46	49	72	73
1201996515	WST03–10–2134MSD	48	52	68	71
1201996513	WST03–10–2134MS	42	44	64	61
1201996516	WST03–10–2134MSD	49	52	62	63
1201988990	TB for batch 930033	51	52	79	81
1201996510	MB for batch 933213	52	57	73	73
1201996517	LCS for batch 933213	44	47	76	74
1201996518	LCS for batch 933213	49	52	86	83
1201996519	LCS for batch 933213	48	52	75	72

Surrogate	Acceptance Limits
4CMX = 4cmx	(29%–103%)
DCB = Decachlorobiphenyl	(34%–118%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: LCS for batch 933213
Lab Sample ID: 1201996519
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/17/2009 03:02
Prep Batch ID: 933213
Batch ID: 933214
Dilution: 1

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
57-74-9	LCS Chlordane (tech.)	0.100	0.0	0.0624	62	38-131

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–670–1
Client ID: LCS for batch 933213
Lab Sample ID: 1201996517
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/17/2009 02:33
Dilution: 1
Prep Batch ID: 933213
Batch ID: 933214

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
58–89–9	LCS	gamma–BHC (Lindane)	0.005	0.0	0.00306	61	49–138
76–44–8	LCS	Heptachlor	0.005	0.0	0.00283	57	38–132
1024–57–3	LCS	Heptachlor epoxide	0.005	0.0	0.00308	62	49–134
72–20–8	LCS	Endrin	0.005	0.0	0.00377	75	56–145
72–43–5	LCS	Methoxychlor	0.050	0.0	0.0419	84	53–151

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–670–1
Client ID: LCS for batch 933213
Lab Sample ID: 1201996518
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/17/2009 02:47
Dilution: 1
Prep Batch ID: 933213
Batch ID: 933214

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
8001–35–2	LCS Toxaphene	0.100	0.0	0.0653	65	41–143

Pesticide

Quality Control Summary

Spike Recovery Report

SDG Number: 10–670–1

Client ID: WST03–10–2134MS

Lab Sample ID: 1201996513

Instrument: ECD7A.I

Analyst: JXM

Inj. Vol: 1 uL

Sample Type: Matrix Spike

Matrix: TCLP R

Analysis Date: 12/17/2009 00:34

Prep Batch ID: 933213

Batch ID: 933214

Dilution: 1

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
57–74–9	MS	Chlordane (tech.)	0.100	0.00	U	0.0579	58	38–134

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134MSD
Lab Sample ID: 1201996516
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP R
Analysis Date: 12/17/2009 00:49
Prep Batch ID: 933213
Batch ID: 933214
Dilution: 1

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
57-74-9	MSD Chlordane (tech.)	0.100	0.00	U	0.0658	66	38-134	13	0-30

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134MS
Lab Sample ID: 1201996511
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP R
Analysis Date: 12/16/2009 23:35
Prep Batch ID: 933213
Batch ID: 933214
Dilution: 1

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
58-89-9	MS	gamma-BHC (Lindane)	0.005	0.00	U	0.00373	75	46-132
76-44-8	MS	Heptachlor	0.005	0.00	U	0.00346	69	37-127
1024-57-3	MS	Heptachlor epoxide	0.005	0.00	U	0.00341	68	44-129
72-20-8	MS	Endrin	0.005	0.00	U	0.00424	85	48-145
72-43-5	MS	Methoxychlor	0.050	0.00	U	0.0576	115	47-156

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–670–1
Client ID: WST03–10–2134MSD
Lab Sample ID: 1201996514
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP R
Analysis Date: 12/16/2009 23:49
Dilution: 1
Prep Batch ID: 933213
Batch ID: 933214

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
58–89–9	MSD gamma–BHC (Lindane)	0.005	0.00	U	0.00332	66	46–132	12	0–30
76–44–8	MSD Heptachlor	0.005	0.00	U	0.00309	62	37–127	12	0–30
1024–57–3	MSD Heptachlor epoxide	0.005	0.00	U	0.0032	64	44–129	6	0–30
72–20–8	MSD Endrin	0.005	0.00	U	0.004	80	48–145	6	0–30
72–43–5	MSD Methoxychlor	0.050	0.00	U	0.0531	106	47–156	8	0–30

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134MS
Lab Sample ID: 1201996512
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP R
Analysis Date: 12/17/2009 00:04
Prep Batch ID: 933213
Batch ID: 933214
Dilution: 1

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
8001-35-2	MS	Toxaphene	0.100	0.00	U	0.0662	66	38-138

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–670–1
Client ID: WST03–10–2134MSD
Lab Sample ID: 1201996515
Instrument: ECD7A.I
Analyst: JXM
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP R
Analysis Date: 12/17/2009 00:19
Prep Batch ID: 933213
Batch ID: 933214
Dilution: 1

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
8001–35–2	MSD Toxaphene	0.100	0.00	U	0.067	67	38–138	1	0–30

Method Blank Summary

SDG Number:	10-670-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 933213	Instrument ID:	ECD7A.I_2 ECD7A.I_1	Data File:	049b4901.d 049f4901.d
Lab Sample ID:	1201996510			Analyzed:	12/17/09 02:18
Column:	CLP-2 CLP-1	Prep Date:	12/15/2009 19:49		
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 WST03-10-2134	241839001	037f3701.d 037b3701.d	12/16/09	2320
02 WST03-10-2134MS	1201996511	038f3801.d 038b3801.d	12/16/09	2335
03 WST03-10-2134MSD	1201996514	039f3901.d 039b3901.d	12/16/09	2349
04 WST03-10-2134MS	1201996512	040f4001.d 040b4001.d	12/17/09	0004
05 WST03-10-2134MSD	1201996515	041f4101.d 041b4101.d	12/17/09	0019
06 WST03-10-2134MS	1201996513	042f4201.d 042b4201.d	12/17/09	0034
07 WST03-10-2134MSD	1201996516	043f4301.d 043b4301.d	12/17/09	0049
08 TB for batch 930033	1201988990	047f4701.d 047b4701.d	12/17/09	0148
09 LCS for batch 933213	1201996517	050f5001.d 050b5001.d	12/17/09	0233
10 LCS for batch 933213	1201996518	051f5101.d 051b5101.d	12/17/09	0247
11 LCS for batch 933213	1201996519	052f5201.d 052b5201.d	12/17/09	0302

SAMPLE
DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241839001	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/16/2009 23:20	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	037f3701.d	**Column:**	1 CLP-1	**Level:**	LOW
	037b3701.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd7a.i/121609.b/037f3701.d
Lab Smp Id: 241839001 Client Smp ID: WST03-10-2134
Inj Date : 16-DEC-2009 23:20
Operator : JXM Inst ID: ecd7a.i
Smp Info : |241839001|1|
Misc Info : |ECDPTL_1L|933214|SVPF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.813	2.810	0.003	254232819	106.834	0.00534	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.506	6.515	-0.009	194273680	140.102	0.00700	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/037f3701.d
Date : 16-DEC-2009 23:20
Client ID: WST03-10-2134
Sample Info: |24183900111|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

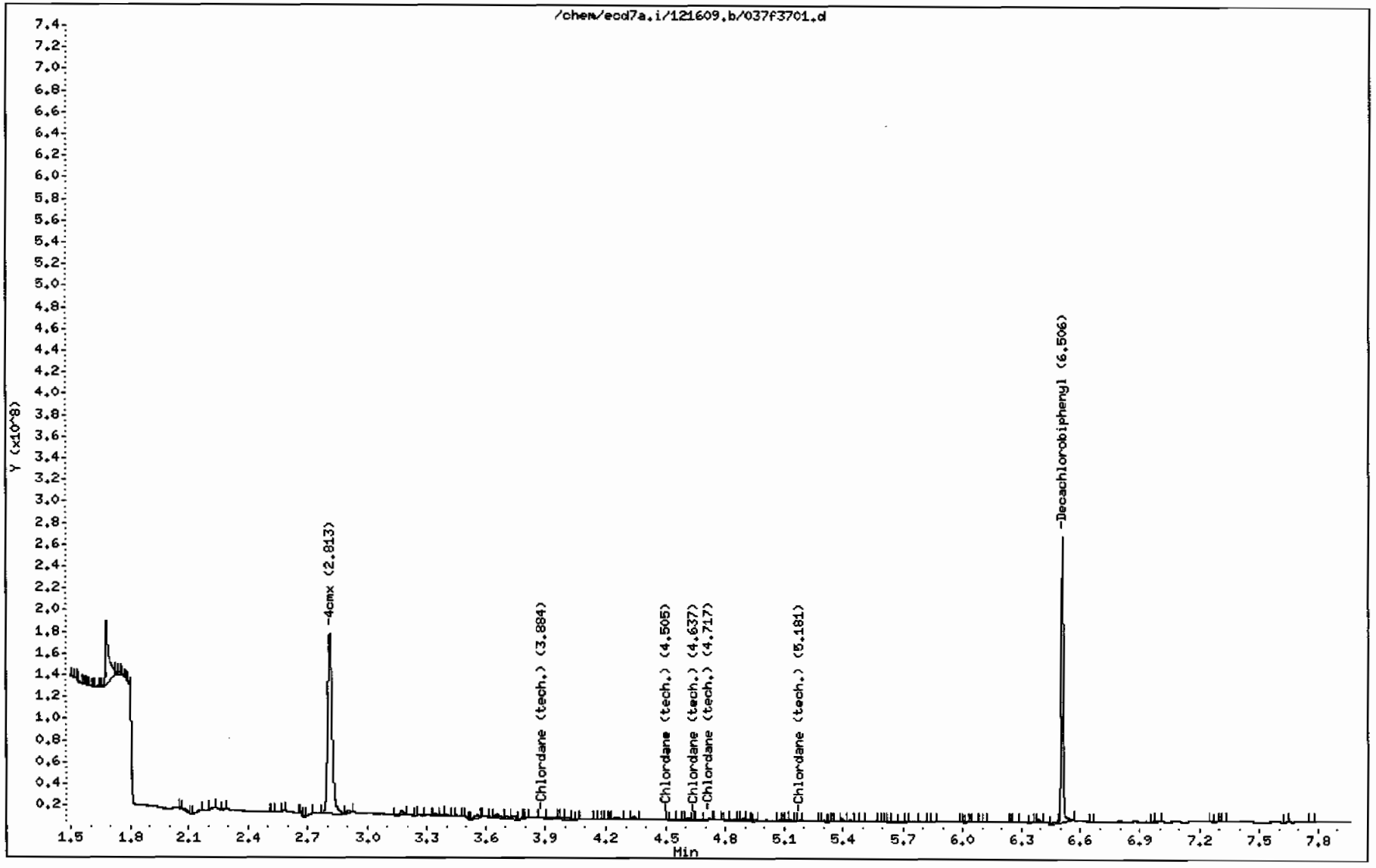

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CLP-2

Data file : /chem/ecd7a.i/121609.b/037b3701.d
Lab Smp Id: 241839001 Client Smp ID: WST03-10-2134
Inj Date : 16-DEC-2009 23:20
Operator : JXM Inst ID: ecd7a.i
Smp Info : |241839001|1|
Misc Info : |ECDPTL_1L|933214|SVPF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.063	0.002	320467609	113.298	0.00566	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.018	7.025	-0.007	218111744	142.896	0.00714	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/037b3701.d

Date : 16-DEC-2009 23:20

Client ID: WST03-10-2134

Sample Info: |241839001|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

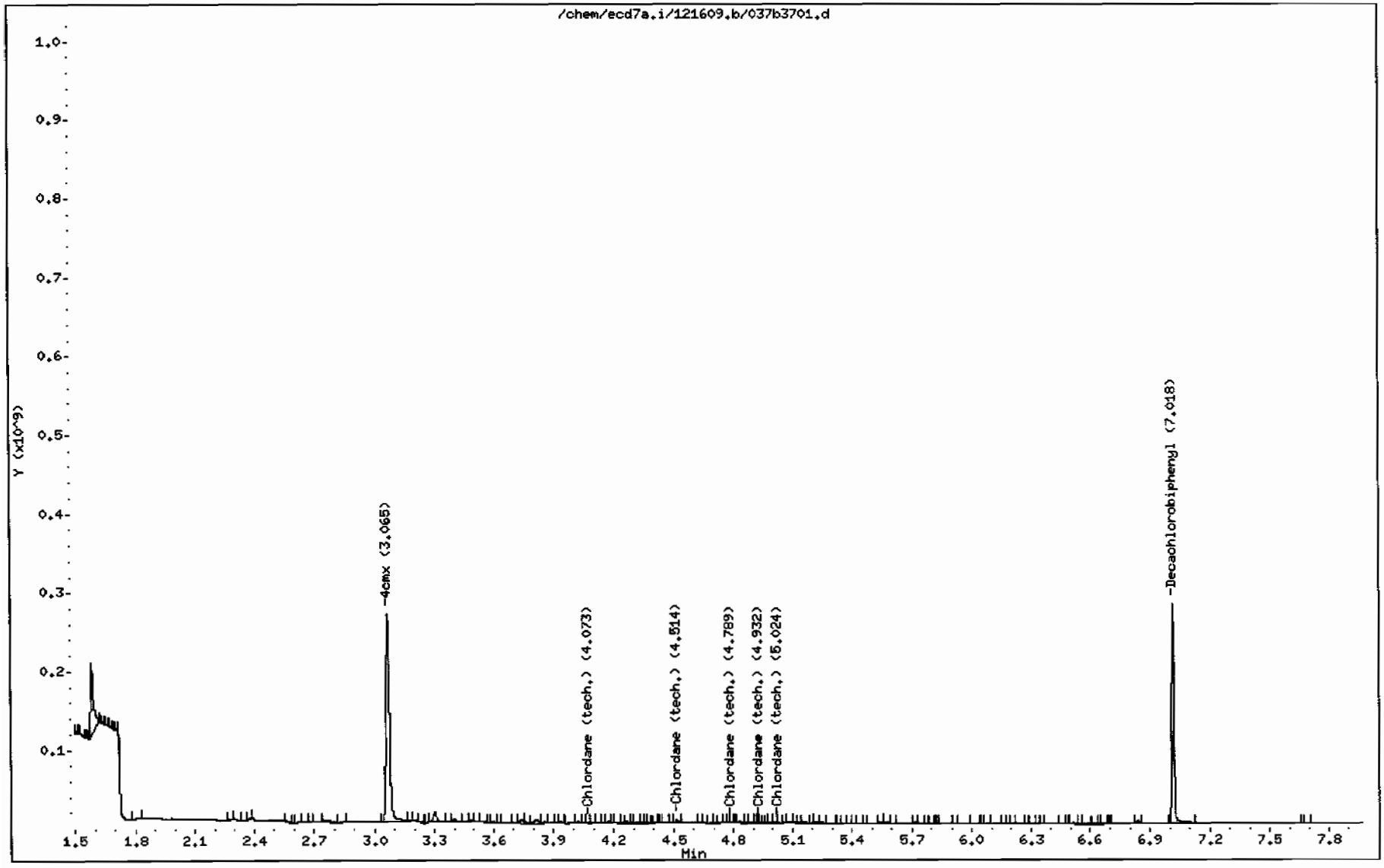

STANDARDS DATA

Report Date: 17-Dec-2009 07:40

Calibration History

Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Start Cal Date: 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
09-DEC-2009 13:58	ar1660	/chem/ecd7a.i/120909-608.b/021f2101.d
14-DEC-2009 16:09	gapa	/chem/ecd7a.i/121409.b/007f0701.d
16-DEC-2009 17:44	chlor	/chem/ecd7a.i/121609.b/015f1501.d
16-DEC-2009 16:15	tox	/chem/ecd7a.i/121609.b/009f0901.d
16-DEC-2009 14:46	indab	/chem/ecd7a.i/121609.b/003f0301.d
Cal Level: 2 , Cal Amount: 10.00000		
09-DEC-2009 14:13	ar1660	/chem/ecd7a.i/120909-608.b/022f2201.d
14-DEC-2009 16:24	gapa	/chem/ecd7a.i/121409.b/008f0801.d
16-DEC-2009 17:59	chlor	/chem/ecd7a.i/121609.b/016f1601.d
16-DEC-2009 16:30	tox	/chem/ecd7a.i/121609.b/010f1001.d
16-DEC-2009 15:00	indab	/chem/ecd7a.i/121609.b/004f0401.d
Cal Level: 3 , Cal Amount: 50.00000		
09-DEC-2009 14:27	ar1660	/chem/ecd7a.i/120909-608.b/023f2301.d
14-DEC-2009 16:39	gapa	/chem/ecd7a.i/121409.b/009f0901.d
16-DEC-2009 18:14	chlor	/chem/ecd7a.i/121609.b/017f1701.d
16-DEC-2009 16:44	tox	/chem/ecd7a.i/121609.b/011f1101.d
16-DEC-2009 15:15	indab	/chem/ecd7a.i/121609.b/005f0501.d
Cal Level: 4 , Cal Amount: 100.00000		
09-DEC-2009 16:26	ar1221	/chem/ecd7a.i/120909-608.b/031f3101.d
09-DEC-2009 16:11	ar1232	/chem/ecd7a.i/120909-608.b/030f3001.d
09-DEC-2009 15:57	ar1248	/chem/ecd7a.i/120909-608.b/029f2901.d
09-DEC-2009 15:42	ar1242	/chem/ecd7a.i/120909-608.b/028f2801.d
09-DEC-2009 15:27	ar1254	/chem/ecd7a.i/120909-608.b/027f2701.d
09-DEC-2009 14:42	ar1660	/chem/ecd7a.i/120909-608.b/024f2401.d
14-DEC-2009 16:54	gapa	/chem/ecd7a.i/121409.b/010f1001.d
16-DEC-2009 18:29	chlor	/chem/ecd7a.i/121609.b/018f1801.d
16-DEC-2009 16:59	tox	/chem/ecd7a.i/121609.b/012f1201.d
16-DEC-2009 15:30	indab	/chem/ecd7a.i/121609.b/006f0601.d
Cal Level: 5 , Cal Amount: 200.00000		
09-DEC-2009 14:57	ar1660	/chem/ecd7a.i/120909-608.b/025f2501.d
14-DEC-2009 17:09	gapa	/chem/ecd7a.i/121409.b/011f1101.d
16-DEC-2009 18:43	chlor	/chem/ecd7a.i/121609.b/019f1901.d
16-DEC-2009 17:14	tox	/chem/ecd7a.i/121609.b/013f1301.d
16-DEC-2009 15:45	indab	/chem/ecd7a.i/121609.b/007f0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 18:58	chlor	/chem/ecd7a.i/121609.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 18:29	chlor	/chem/ecd7a.i/121609.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 17:29	tox	/chem/ecd7a.i/121609.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 16:59	tox	/chem/ecd7a.i/121609.b/012f1201.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 16:00	indab	/chem/ecd7a.i/121609.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 15:30	indab	/chem/ecd7a.i/121609.b/006f0601.d

Report Date: 17-Dec-2009 07:38

Calibration History

Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Start Cal Date: 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
09-DEC-2009 13:58	ar1660	/chem/ecd7a.i/120909-608.b/021b2101.d
14-DEC-2009 16:09	gapa	/chem/ecd7a.i/121409.b/007b0701.d
16-DEC-2009 17:44	chlor	/chem/ecd7a.i/121609.b/015b1501.d
16-DEC-2009 16:15	tox	/chem/ecd7a.i/121609.b/009b0901.d
16-DEC-2009 14:46	indab	/chem/ecd7a.i/121609.b/003b0301.d

Cal Level: 2 , Cal Amount: 10.00000		
09-DEC-2009 14:13	ar1660	/chem/ecd7a.i/120909-608.b/022b2201.d
14-DEC-2009 16:24	gapa	/chem/ecd7a.i/121409.b/008b0801.d
16-DEC-2009 17:59	chlor	/chem/ecd7a.i/121609.b/016b1601.d
16-DEC-2009 16:30	tox	/chem/ecd7a.i/121609.b/010b1001.d
16-DEC-2009 15:00	indab	/chem/ecd7a.i/121609.b/004b0401.d

Cal Level: 3 , Cal Amount: 50.00000		
09-DEC-2009 14:27	ar1660	/chem/ecd7a.i/120909-608.b/023b2301.d
14-DEC-2009 16:39	gapa	/chem/ecd7a.i/121409.b/009b0901.d
16-DEC-2009 18:14	chlor	/chem/ecd7a.i/121609.b/017b1701.d
16-DEC-2009 16:44	tox	/chem/ecd7a.i/121609.b/011b1101.d
16-DEC-2009 15:15	indab	/chem/ecd7a.i/121609.b/005b0501.d

Cal Level: 4 , Cal Amount: 100.00000		
09-DEC-2009 16:26	ar1221	/chem/ecd7a.i/120909-608.b/031b3101.d
09-DEC-2009 16:11	ar1232	/chem/ecd7a.i/120909-608.b/030b3001.d
09-DEC-2009 15:57	ar1248	/chem/ecd7a.i/120909-608.b/029b2901.d
09-DEC-2009 15:42	ar1242	/chem/ecd7a.i/120909-608.b/028b2801.d
09-DEC-2009 15:27	ar1254	/chem/ecd7a.i/120909-608.b/027b2701.d
09-DEC-2009 14:42	ar1660	/chem/ecd7a.i/120909-608.b/024b2401.d
14-DEC-2009 16:54	gapa	/chem/ecd7a.i/121409.b/010b1001.d
16-DEC-2009 18:29	chlor	/chem/ecd7a.i/121609.b/018b1801.d
16-DEC-2009 16:59	tox	/chem/ecd7a.i/121609.b/012b1201.d
16-DEC-2009 15:30	indab	/chem/ecd7a.i/121609.b/006b0601.d

Cal Level: 5 , Cal Amount: 200.00000		
09-DEC-2009 14:57	ar1660	/chem/ecd7a.i/120909-608.b/025b2501.d
14-DEC-2009 17:09	gapa	/chem/ecd7a.i/121409.b/011b1101.d
16-DEC-2009 18:43	chlor	/chem/ecd7a.i/121609.b/019b1901.d
16-DEC-2009 17:14	tox	/chem/ecd7a.i/121609.b/013b1301.d
16-DEC-2009 15:45	indab	/chem/ecd7a.i/121609.b/007b0701.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 18:58	chlor	/chem/ecd7a.i/121609.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 18:29	chlor	/chem/ecd7a.i/121609.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 17:29	tox	/chem/ecd7a.i/121609.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 16:59	tox	/chem/ecd7a.i/121609.b/012b1201.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 16:00	indab	/chem/ecd7a.i/121609.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 100		
16-DEC-2009 15:30	indab	/chem/ecd7a.i/121609.b/006b0601.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Quant Method : ESTD Target Version : 3.50
Last Update : 17-Dec-2009 07:40 Number of Cpnds : 42
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	10005.000000
Initial:End Threshold	5002.500000
Initial:Area Threshold	100050.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.810	2.780-2.840	2.380e+06
61 2,4,5-TCP	2.900	2.800-3.000	
59 Hexachlorobenzene	3.201	3.101-3.301	1.992e+06
2 Aroclor-1221	3.026	2.996-3.056	2.919e+04
	3.157	3.127-3.187	1.659e+04
	3.192	3.162-3.222	6.918e+04
3 Aroclor-1016	3.481	3.451-3.511	8.990e+04
	3.829	3.799-3.859	1.094e+05
	3.924	3.894-3.954	7.492e+04
	4.051	4.021-4.081	4.065e+04
	4.204	4.174-4.234	5.694e+04
4 Aroclor-1232	3.192	3.162-3.222	5.238e+04
	3.481	3.451-3.511	4.516e+04
	3.830	3.800-3.860	5.693e+04
	3.924	3.894-3.954	3.760e+04
	3.968	3.938-3.998	2.347e+04
5 alpha-BHC	3.318	3.288-3.348	3.052e+06
6 Aroclor-1242	3.479	3.379-3.579	7.349e+04
	3.829	3.729-3.929	8.658e+04
	3.924	3.824-4.024	6.036e+04
	4.203	4.103-4.303	4.627e+04
	4.497	4.397-4.597	4.689e+04
7 gamma-BHC (Lindane)	3.576	3.546-3.606	2.608e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.873	3.773-3.973	8.869e+04
	4.509	4.409-4.609	5.077e+04
	4.632	4.532-4.732	2.822e+05
	4.716	4.616-4.816	2.059e+05
	5.195	5.095-5.295	4.998e+04
9 Aroclor-1248	3.814	3.714-3.914	5.908e+04
	4.050	3.950-4.150	7.451e+04
	4.202	4.102-4.302	9.423e+04
	4.478	4.378-4.578	1.091e+05
	4.623	4.523-4.723	8.393e+04
10 Heptachlor	3.930	3.900-3.960	2.042e+06
11 Aldrin	4.143	4.113-4.173	2.653e+06
12 beta-BHC	3.645	3.615-3.675	1.155e+06
13 delta-BHC	3.780	3.750-3.810	2.703e+06
14 Heptachlor epoxide	4.551	4.521-4.581	2.327e+06
15 Aroclor-1254	4.452	4.422-4.482	7.648e+04
	4.616	4.586-4.646	1.321e+05
	4.868	4.838-4.898	1.322e+05
	5.037	5.007-5.067	9.968e+04
	5.318	5.288-5.348	1.279e+05
16 Endosulfan I	4.805	4.775-4.835	2.078e+06
17 gamma-Chlordane	4.631	4.601-4.661	2.265e+06
18 alpha-Chlordane	4.716	4.686-4.746	2.235e+06
19 4,4'-DDE	4.760	4.730-4.790	2.310e+06
20 Dieldrin	4.955	4.925-4.985	2.236e+06
21 Aroclor-1260	4.978	4.878-5.078	1.063e+05
	5.144	5.044-5.244	1.609e+05
	5.533	5.433-5.633	9.296e+04
	5.715	5.615-5.815	1.864e+05
	5.887	5.787-5.987	8.245e+04
22 Endrin	5.100	5.070-5.130	1.848e+06
23 Toxaphene	4.956	4.926-4.986	2.512e+04
	5.011	4.981-5.041	3.279e+04
	5.049	5.019-5.079	4.226e+04
	5.113	5.083-5.143	4.061e+04
	5.232	5.202-5.262	7.314e+04
24 Endosulfan II	5.238	5.208-5.268	1.780e+06
25 4,4'-DDD	5.129	5.099-5.159	1.811e+06
26 4,4'-DDT	5.298	5.268-5.328	1.291e+06
27 Endrin aldehyde	5.491	5.461-5.521	1.456e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.581	5.551-5.611	4.407e+05
	29 Endosulfan sulfate	5.754	5.724-5.784	1.535e+06
	30 Aroclor-1268	13.480	13.380-13.580	
		13.587	13.487-13.687	
		13.984	13.884-14.084	
		14.586	14.486-14.686	
		15.182	15.082-15.282	
	31 Endrin ketone	5.928	5.898-5.958	1.348e+06
	51 Mirex	5.716	5.686-5.746	1.277e+06
	52 C-Nonachlor	5.140	5.110-5.170	2.152e+06
	53 O-Chlordane	4.509	4.479-4.539	1.650e+06
	54 T-Nonachlor	4.728	4.698-4.758	1.831e+06
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.566	4.536-4.596	1.179e+06
	58 2,4-DDD	4.893	4.863-4.923	1.059e+06
	57 2,4-DDT	5.049	5.019-5.079	1.001e+06
$	32 Decachlorobiphenyl	6.515	6.485-6.545	1.387e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Quant Method : ESTD Target Version : 3.50
Last Update : 17-Dec-2009 07:16 Number of Cpnds : 42
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	9270.000000
Initial:End Threshold	4635.000000
Initial:Area Threshold	92700.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	3.063	3.033-3.093	2.829e+06
60 2,4,5-TCP	3.116	3.016-3.216	
59 Hexachlorobenzene	3.518	3.488-3.548	2.275e+06
2 Aroclor-1221	3.367	3.337-3.397	3.419e+04
	3.483	3.453-3.513	2.072e+04
	3.532	3.502-3.562	8.006e+04
3 Aroclor-1016	3.841	3.811-3.871	1.018e+05
	4.170	4.140-4.200	1.251e+05
	4.262	4.232-4.292	7.914e+04
	4.572	4.542-4.602	6.135e+04
	4.652	4.622-4.682	5.591e+04
4 Aroclor-1232	3.532	3.502-3.562	6.151e+04
	3.842	3.812-3.872	5.320e+04
	4.170	4.140-4.200	6.300e+04
	4.262	4.232-4.292	3.998e+04
	4.332	4.302-4.362	2.525e+04
5 alpha-BHC	3.601	3.571-3.631	3.823e+06
6 Aroclor-1242	3.841	3.811-3.871	8.271e+04
	4.170	4.140-4.200	1.011e+05
	4.261	4.231-4.291	6.384e+04
	4.572	4.542-4.602	4.908e+04
	4.842	4.812-4.872	5.595e+04
7 gamma-BHC (Lindane)	3.880	3.850-3.910	3.228e+06

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COMPOUND LISTING

Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	4.102	4.072-4.132	1.209e+05
	4.530	4.500-4.560	9.587e+04
	4.785	4.755-4.815	6.849e+04
	4.931	4.901-4.961	3.213e+05
	5.023	4.993-5.053	2.735e+05
9 Aroclor-1248	4.156	4.126-4.186	6.462e+04
	4.391	4.361-4.421	7.759e+04
	4.571	4.541-4.601	9.998e+04
	4.842	4.812-4.872	1.259e+05
	4.988	4.958-5.018	1.157e+05
10 Heptachlor	4.207	4.177-4.237	2.308e+06
11 Aldrin	4.436	4.406-4.466	3.373e+06
12 beta-BHC	3.939	3.909-3.969	1.377e+06
13 delta-BHC	4.155	4.125-4.185	3.297e+06
14 Heptachlor epoxide	4.811	4.781-4.841	2.858e+06
15 Aroclor-1254	4.841	4.811-4.871	9.425e+04
	4.955	4.925-4.985	1.024e+05
	5.245	5.215-5.275	1.513e+05
	5.380	5.350-5.410	1.067e+05
	5.707	5.677-5.737	1.157e+05
16 Endosulfan I	5.065	5.035-5.095	2.473e+06
17 gamma-Chlordane	4.931	4.901-4.961	2.838e+06
18 alpha-Chlordane	5.023	4.993-5.053	2.753e+06
19 4,4'-DDE	5.111	5.081-5.141	2.693e+06
20 Dieldrin	5.235	5.205-5.265	2.749e+06
21 Aroclor-1260	5.362	5.332-5.392	1.161e+05
	5.482	5.452-5.512	1.326e+05
	5.940	5.910-5.970	1.042e+05
	6.084	6.054-6.114	2.264e+05
	6.316	6.286-6.346	1.525e+05
22 Endrin	5.425	5.395-5.455	2.187e+06
23 Toxaphene	5.212	5.182-5.242	4.586e+04
	5.289	5.259-5.319	2.673e+04
	5.326	5.296-5.356	4.536e+04
	5.400	5.370-5.430	3.952e+04
	5.543	5.513-5.573	5.671e+04
24 Endosulfan II	5.551	5.521-5.581	2.087e+06
25 4,4'-DDD	5.464	5.434-5.494	2.022e+06
26 4,4'-DDT	5.657	5.627-5.687	1.149e+06
27 Endrin aldehyde	5.753	5.723-5.783	1.707e+06

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m

Compound	RT	RT Window	RF
28 Methoxychlor	6.059	6.029-6.089	3.824e+05
29 Endosulfan sulfate	5.922	5.892-5.952	1.740e+06
30 Aroclor-1268	13.562	13.532-13.592	
	13.571	13.541-13.601	
	13.999	13.969-14.029	
	14.579	14.549-14.609	
	15.083	15.053-15.113	
31 Endrin ketone	6.260	6.230-6.290	1.532e+06
51 Mirex	6.277	6.247-6.307	1.301e+06
52 C-Nonachlor	5.496	5.466-5.526	2.457e+06
53 O-Chlordane	4.782	4.752-4.812	1.941e+06
54 T-Nonachlor	5.019	4.989-5.049	2.157e+06
55 1,2-Dichlorobenzene	6.621	6.591-6.651	
56 2,4-DDE	4.949	4.919-4.979	1.337e+06
58 2,4-DDD	5.267	5.237-5.297	1.165e+06
57 2,4-DDT	5.457	5.427-5.487	8.706e+05
$ 32 Decachlorobiphenyl	7.025	6.995-7.055	1.526e+06

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INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Cal Date : 17-Dec-2009 07:40 jam00798

Calibration File Names:
Level 1: /chem/ecd7a.i/120909-608.b/021f2101.d
Level 2: /chem/ecd7a.i/120909-608.b/022f2201.d
Level 3: /chem/ecd7a.i/120909-608.b/023f2301.d
Level 4: /chem/ecd7a.i/120909-608.b/031f3101.d
Level 5: /chem/ecd7a.i/120909-608.b/025f2501.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-TCP	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	2007002	2020317	1952080	1978473	1999998	AVRG		1991574		1.34417
2 Aroclor-1221 (1)	+++++	+++++	+++++	29193	+++++	AVRG		29193		0.000e+00
(2)	+++++	+++++	+++++	16594	+++++	AVRG		16594		0.000e+00
(3)	+++++	+++++	+++++	69180	+++++	AVRG		69180		0.000e+00
3 Aroclor-1016 (1)	104348	95347	91208	84571	74006	AVRG		89896		12.69747
(2)	122894	114543	109892	103378	96206	AVRG		109383		9.35825
(3)	85200	77993	75629	71606	64174	AVRG		74921		10.38360
(4)	46425	42086	40843	38760	35141	AVRG		40651		10.24430
(5)	65341	59291	57121	54034	48905	AVRG		56938		10.72395
4 Aroclor-1232 (1)	+++++	+++++	+++++	52379	+++++	AVRG		52379		0.000e+00
(2)	+++++	+++++	+++++	45164	+++++	AVRG		45164		0.000e+00
(3)	+++++	+++++	+++++	56932	+++++	AVRG		56932		0.000e+00
(4)	+++++	+++++	+++++	37597	+++++	AVRG		37597		0.000e+00
(5)	+++++	+++++	+++++	23469	+++++	AVRG		23469		0.000e+00
5 alpha-BHC	3113758	3144741	2990322	3013211	2997789	AVRG		3051964		2.35496
6 Aroclor-1242 (1)	+++++	+++++	+++++	73486	+++++	AVRG		73486		0.000e+00
(2)	+++++	+++++	+++++	86584	+++++	AVRG		86584		0.000e+00
(3)	+++++	+++++	+++++	60363	+++++	AVRG		60363		0.000e+00
(4)	+++++	+++++	+++++	46269	+++++	AVRG		46269		0.000e+00
(5)	+++++	+++++	+++++	46891	+++++	AVRG		46891		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Cal Date : 17-Dec-2009 07:40 jam00798

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	2617680	2689567	2544846	2577230	2611479	AVRG		2608160		2.07310
8 Chlordane (tech.) (1)	93211	91913	87567	86290	84462	AVRG		88688		4.20858
(2)	53670	52781	50120	49370	47922	AVRG		50773		4.71753
(3)	302668	295316	273624	271357	267923	AVRG		282177		5.56375
(4)	226955	213695	199891	195071	194069	AVRG		205936		6.85616
(5)	61914	47497	44736	45921	49844	AVRG		49982		13.88207
9 Aroclor-1248 (1)	+++++	+++++	+++++	59084	+++++	AVRG		59084		0.000e+00
(2)	+++++	+++++	+++++	74512	+++++	AVRG		74512		0.000e+00
(3)	+++++	+++++	+++++	94226	+++++	AVRG		94226		0.000e+00
(4)	+++++	+++++	+++++	109058	+++++	AVRG		109058		0.000e+00
(5)	+++++	+++++	+++++	83930	+++++	AVRG		83930		0.000e+00
10 Heptachlor	1975154	2068780	2020606	2057788	2088188	AVRG		2042104		2.19349
11 Aldrin	2795634	2799682	2577979	2565872	2527971	AVRG		2653428		5.01078
12 beta-BHC	1246460	1230391	1114929	1096507	1087302	AVRG		1155118		6.65795
13 delta-BHC	2782444	2802339	2633183	2642549	2654923	AVRG		2703088		3.04053
14 Heptachlor epoxide	2551304	2503817	2259302	2202255	2118498	AVRG		2327035		8.18731
15 Aroclor-1254 (1)	+++++	+++++	+++++	76483	+++++	AVRG		76483		0.000e+00
(2)	+++++	+++++	+++++	132138	+++++	AVRG		132138		0.000e+00
(3)	+++++	+++++	+++++	132199	+++++	AVRG		132199		0.000e+00
(4)	+++++	+++++	+++++	99681	+++++	AVRG		99681		0.000e+00
(5)	+++++	+++++	+++++	127852	+++++	AVRG		127852		0.000e+00
16 Endosulfan I	2264199	2246397	2019302	1967064	1894352	AVRG		2078263		8.06972
17 gamma-Chlordane	2376534	2384052	2182581	2188138	2193211	AVRG		2264903		4.65524
18 alpha-Chlordane	2415582	2332164	2147875	2142583	2137122	AVRG		2235065		5.82336

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Cal Date : 17-Dec-2009 07:40 jam00798

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	2454921	2441221	2253651	2230995	2168403	AVRG		2309838		5.63175
20 Dieldrin	2422888	2400421	2189772	2139106	2025959	AVRG		2235629		7.66973
21 Aroclor-1260 (1)	121346	110515	106432	100070	93289	AVRG		106330		10.00022
(2)	183248	166423	160901	151699	142223	AVRG		160899		9.64557
(3)	104426	95248	92939	88167	84011	AVRG		92958		8.32859
(4)	199030	185258	185634	181021	181127	AVRG		186414		3.96155
(5)	95121	86347	81409	76048	73344	AVRG		82454		10.51616
22 Endrin	2051761	1987997	1813251	1741124	1643501	AVRG		1847527		9.20016
23 Toxaphene (1)	28684	26318	24868	23436	22300	AVRG		25121		9.95017
(2)	36357	34897	32210	30939	29552	AVRG		32791		8.54629
(3)	46449	46402	41623	39252	37590	AVRG		42263		9.60816
(4)	43820	42751	40771	38565	37141	AVRG		40609		6.86977
(5)	78346	75823	73427	70552	67572	AVRG		73144		5.80378
24 Endosulfan II	1970063	1849248	1758420	1716469	1605951	AVRG		1780030		7.72913
25 4,4'-DDD	1956420	1788268	1791628	1782355	1738586	AVRG		1811451		4.62715
26 4,4'-DDT	5931092	17638777	103861877	233065353	509675920	LINR	10.83202	1291365		0.99753
27 Endrin aldehyde	1617148	1582140	1397508	1388285	1297032	AVRG		1456423		9.41166
28 Methoxychlor	319072	409849	468234	492977	513167	AVRG		440660		17.75584
29 Endosulfan sulfate	1630004	1627911	1503091	1497275	1414222	AVRG		1534501		6.06845
30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Cal Date : 17-Dec-2009 07:40 jam00798

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
31 Endrin ketone	1230664	1376191	1355303	1384606	1392625	AVRG		1347878		4.96956
51 Mirex	1328039	1281209	1249002	1261241	1265846	AVRG		1277067		2.40692
52 C-Nonachlor	2163808	2149036	2147904	2168574	2131084	AVRG		2152081		0.68810
53 O-Chlordane	1719073	1697078	1643517	1627444	1564810	AVRG		1650384		3.68502
54 T-Nonachlor	1853670	1836627	1816727	1833804	1812109	AVRG		1830587		0.91131
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	1232354	1226443	1188933	1156005	1089930	AVRG		1178733		4.95732
58 2,4-DDD	1101342	1109161	1059112	1038438	988839	AVRG		1059378		4.63728
57 2,4-DDT	901262	995044	1027656	1047047	1032676	AVRG		1000737		5.87294
$ 1 4cmx	2473469	2480656	2307407	2295107	2341914	AVRG		2379711		3.80494
$ 32 Decachlorobiphenyl	1506022	1434547	1326325	1347975	1318402	AVRG		1386654		5.85168

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Cal Date : 17-Dec-2009 07:40 jam00798

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Cal Date : 17-Dec-2009 09:53 jam00798

Calibration File Names:
Level 1: /chem/ecd7a.i/120909-608.b/021b2101.d
Level 2: /chem/ecd7a.i/120909-608.b/022b2201.d
Level 3: /chem/ecd7a.i/120909-608.b/023b2301.d
Level 4: /chem/ecd7a.i/120909-608.b/031b3101.d
Level 5: /chem/ecd7a.i/120909-608.b/025b2501.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 2,4,5-TCP	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
59 Hexachlorobenzene	2281278	2236710	2260360	2324602	2273484	AVRG		2275287		1.42113
2 Aroclor-1221 (1)	+++++	+++++	+++++	34191	+++++	AVRG		34191		0.000e+00
(2)	+++++	+++++	+++++	20721	+++++	AVRG		20721		0.000e+00
(3)	+++++	+++++	+++++	80059	+++++	AVRG		80059		0.000e+00
3 Aroclor-1016 (1)	116215	107107	103460	95973	86475	AVRG		101846		11.05997
(2)	133102	124137	128063	123766	116373	AVRG		125089		4.92277
(3)	86743	80572	80072	76640	71657	AVRG		79137		7.00642
(4)	68497	63234	60952	58428	55636	AVRG		61349		7.98408
(5)	62917	57118	55690	53149	50689	AVRG		55913		8.26811
4 Aroclor-1232 (1)	+++++	+++++	+++++	61513	+++++	AVRG		61513		0.000e+00
(2)	+++++	+++++	+++++	53196	+++++	AVRG		53196		0.000e+00
(3)	+++++	+++++	+++++	63001	+++++	AVRG		63001		0.000e+00
(4)	+++++	+++++	+++++	39985	+++++	AVRG		39985		0.000e+00
(5)	+++++	+++++	+++++	25246	+++++	AVRG		25246		0.000e+00
5 alpha-BHC	3801190	3891674	3761893	3792334	3865601	AVRG		3822538		1.41365
6 Aroclor-1242 (1)	+++++	+++++	+++++	82712	+++++	AVRG		82712		0.000e+00
(2)	+++++	+++++	+++++	101114	+++++	AVRG		101114		0.000e+00
(3)	+++++	+++++	+++++	63840	+++++	AVRG		63840		0.000e+00
(4)	+++++	+++++	+++++	49077	+++++	AVRG		49077		0.000e+00
(5)	+++++	+++++	+++++	55954	+++++	AVRG		55954		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Cal Date : 17-Dec-2009 09:53 jam00798

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	3198915	3288849	3152656	3213535	3287804	AVRG		3228352		1.83321
8 Chlordane (tech.) (1)	127934	128150	116447	116725	115438	AVRG		120939		5.37641
(2)	104892	106334	90104	90163	87832	AVRG		95865		9.34915
(3)	69957	75792	64662	66347	65703	AVRG		68492		6.62995
(4)	334714	332879	307472	313025	318408	AVRG		321300		3.75440
(5)	284964	285305	261467	266849	268758	AVRG		273469		4.01541
9 Aroclor-1248 (1)	+++++	+++++	+++++	64622	+++++	AVRG		64622		0.000e+00
(2)	+++++	+++++	+++++	77590	+++++	AVRG		77590		0.000e+00
(3)	+++++	+++++	+++++	99978	+++++	AVRG		99978		0.000e+00
(4)	+++++	+++++	+++++	125903	+++++	AVRG		125903		0.000e+00
(5)	+++++	+++++	+++++	115712	+++++	AVRG		115712		0.000e+00
10 Heptachlor	2154638	2311646	2288390	2354344	2428723	AVRG		2307548		4.36806
11 Aldrin	3475380	3491132	3321158	3305981	3269372	AVRG		3372605		3.05107
12 beta-BHC	1488068	1454707	1321589	1307905	1313394	AVRG		1377133		6.31628
13 delta-BHC	3335220	3389611	3228312	3268482	3262504	AVRG		3296826		1.96334
14 Heptachlor epoxide	3052409	3057021	2789511	2729074	2663845	AVRG		2858372		6.46068
15 Aroclor-1254 (1)	+++++	+++++	+++++	94253	+++++	AVRG		94253		0.000e+00
(2)	+++++	+++++	+++++	102390	+++++	AVRG		102390		0.000e+00
(3)	+++++	+++++	+++++	151299	+++++	AVRG		151299		0.000e+00
(4)	+++++	+++++	+++++	106672	+++++	AVRG		106672		0.000e+00
(5)	+++++	+++++	+++++	115708	+++++	AVRG		115708		0.000e+00
16 Endosulfan I	2647926	2636598	2405158	2374710	2298651	AVRG		2472609		6.45900
17 gamma-Chlordane	2894389	2922334	2757064	2786322	2831523	AVRG		2838326		2.46340
18 alpha-Chlordane	2861332	2838057	2660021	2693450	2713766	AVRG		2753325		3.28390

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Cal Date : 17-Dec-2009 09:53 jam00798

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	2742384	2841543	2652513	2640606	2587458	AVRG		2692900		3.71473
20 Dieldrin	2883240	2880005	2705789	2681059	2595736	AVRG		2749166		4.64243
21 Aroclor-1260 (1)	129558	118075	115237	108483	109268	AVRG		116124		7.33796
(2)	144149	132671	130346	128861	127206	AVRG		132647		5.07862
(3)	113955	104198	102576	99167	101242	AVRG		104227		5.50914
(4)	242680	224898	223961	218966	221679	AVRG		226437		4.13563
(5)	166256	148923	147610	146027	153712	AVRG		152506		5.38015
22 Endrin	2315515	2369448	2143768	2079091	2025273	AVRG		2186619		6.83974
23 Toxaphene (1)	54732	47196	44398	42245	40738	AVRG		45862		12.03889
(2)	31719	27291	26236	24648	23753	AVRG		26730		11.62817
(3)	52930	46217	44329	42404	40898	AVRG		45355		10.32665
(4)	44731	40528	38477	37257	36595	AVRG		39518		8.29105
(5)	63154	56982	54809	54921	53691	AVRG		56711		6.68669
24 Endosulfan II	2158274	2218017	2062442	2038018	1959415	AVRG		2087233		4.88153
25 4,4'-DDD	2025296	2093194	1972891	2000406	2016331	AVRG		2021624		2.21060
26 4,4'-DDT	4446789	13393479	83743114	193478442	451392666	LINR	15.61947	1148564		0.99383
27 Endrin aldehyde	1848308	1827109	1651838	1628534	1579646	AVRG		1707087		7.16327
28 Methoxychlor	282191	351282	393711	427799	457121	AVRG		382421		17.91861
29 Endosulfan sulfate	1703802	1799926	1633994	1845515	1718085	AVRG		1740264		4.78633
30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Cal Date : 17-Dec-2009 09:53 jam00798

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
31 Endrin ketone	1486768	1534760	1502779	1547287	1586020	AVRG		1531523		2.54106
51 Mirex	1318924	1263711	1270066	1317758	1335477	AVRG		1301187		2.47187
52 C-Nonachlor	2408581	2408511	2458580	2511261	2496607	AVRG		2456708		1.95325
53 O-Chlordane	1931258	1961192	1940355	1959538	1914262	AVRG		1941321		1.01763
54 T-Nonachlor	2113155	2114048	2152410	2200361	2207350	AVRG		2157465		2.09894
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	1394243	1378788	1334906	1314864	1260538	AVRG		1336668		3.98746
58 2,4-DDD	1175848	1171111	1160893	1167609	1147739	AVRG		1164640		0.93667
57 2,4-DDT	751310	818332	880426	924140	978940	AVRG		870630		10.21906
$ 1 4cmx	2895116	2889788	2760409	2795337	2802039	AVRG		2828538		2.13813
$ 32 Decachlorobiphenyl	1627432	1579114	1454972	1470064	1500267	AVRG		1526370		4.85261

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 08-SEP-2009 19:34
End Cal Date : 16-DEC-2009 18:43
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Cal Date : 17-Dec-2009 09:53 jam00798

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/16/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1431

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.14	4.11	4.17	126	100	26.0
4,4'-DDE						
Endrin	5.10	5.07	5.13	121	100	21.0
4,4'-DDD						
4,4'-DDT	5.30	5.27	5.33	86.2	100	-13.8
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 4.40 Endrin % breakdown (1): 1.70

Combined % breakdown (1): 6.10

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/16/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :1431

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.43	4.41	4.47	131	100	31.0
4,4'-DDE						
Endrin	5.42	5.40	5.46	122	100	22.0
4,4'-DDD						
4,4'-DDT	5.66	5.63	5.69	81.4	100	-18.6
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 5.40 Endrin % breakdown (1): 1.80

Combined % breakdown (1): 7.20

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/16/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2022

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.14	4.11	4.17	125	100	25.0
4,4'-DDE						
Endrin	5.10	5.07	5.13	118	100	18.0
4,4'-DDD						
4,4'-DDT	5.30	5.27	5.33	112	100	12.0
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 3.90 Endrin % breakdown (1): 2.90

Combined % breakdown (1): 6.80

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/16/09

Lab Sample ID (PEM): WPE091109-99 Time Analyzed :2022

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	4.43	4.41	4.47	125	100	25.0
4,4'-DDE						
Endrin	5.42	5.40	5.46	119	100	19.0
4,4'-DDD						
4,4'-DDT	5.66	5.63	5.69	122	100	22.0
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 7.20 Endrin % breakdown (1): 3.30

Combined % breakdown (1): 10.50

FORM VII PEST-1 OLM03.0

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 1600

Lab File ID: 008F0801 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	99.5	100	AVRG	-0.5	15.0
Heptachlor	94.4	100	AVRG	-5.6	15.0
Heptachlor epoxide	92.6	100	AVRG	-7.4	15.0
Endrin	194	200	AVRG	-3.0	15.0
Methoxychlor	1090	1000	AVRG	9.0	15.0
4cmx	194	200	AVRG	-3.0	15.0
Decachlorobiphenyl	190	200	AVRG	-5.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 1600

Lab File ID: 008B0801 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	101	100	AVRG	1.0	15.0
Heptachlor	95.6	100	AVRG	-4.4	15.0
Heptachlor epoxide	94.7	100	AVRG	-5.3	15.0
Endrin	202	200	AVRG	1.0	15.0
Methoxychlor	1140	1000	AVRG	14.0	15.0
4cmx	192	200	AVRG	-4.0	15.0
Decachlorobiphenyl	195	200	AVRG	-2.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 1729

Lab File ID: 014F1401 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1615 1714

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D
Toxaphene	25121.201	25673.848	0.01	2.2	15.0
(2)	32790.941	34900.416	0.01	6.4	15.0
(3)	42263.271	39654.386	0.01	-6.2	15.0
(4)	40609.318	40705.670	0.01	0.2	15.0
(5)	73143.881	64057.122	0.01	-12.4	15.0
4cmx	2379710.6	2345116.6	0.01	-1.4	15.0
Decachlorobiphenyl	1386654.3	1357728.7	0.01	-2.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 1729

Lab File ID: 014B1401 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1615 1714

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Toxaphene	45861.761	47684.646	0.01	4.0	15.0
(2)	26729.616	26435.210	0.01	-1.1	15.0
(3)	45355.439	41762.213	0.01	-7.9	15.0
(4)	39517.696	38629.139	0.01	-2.2	15.0
(5)	56711.495	51536.302	0.01	-9.1	15.0
4cmx	2828537.8	2662529.7	0.01	-5.9	15.0
Decachlorobiphenyl	1526370.0	1484687.8	0.01	-2.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 1858

Lab File ID: 020F2001 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1744 1843

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	88688.482	78402.610	0.01	-11.6	15.0
(2)	50772.517	45957.062	0.01	-9.5	15.0
(3)	282177.31	244084.53	0.01	-13.5	15.0
(4)	205936.32	191131.80	0.01	-7.2	15.0
(5)	49982.416	49782.572	0.01	-0.4	15.0
4cmx	2379710.6	2321451.0	0.01	-2.4	15.0
Decachlorobiphenyl	1386654.3	1385693.8	0.01	-0.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 1858

Lab File ID: 020B2001 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1744 1843

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Chlordane (tech.)	120938.66	108286.43	0.01	-10.5	15.0
(2)	95865.013	98467.674	0.01	2.7	15.0
(3)	68492.176	61978.237	0.01	-9.5	15.0
(4)	321299.61	282865.56	0.01	-12.0	15.0
(5)	273468.75	244485.65	0.01	-10.6	15.0
4cmx	2828537.8	2836597.7	0.01	0.3	15.0
Decachlorobiphenyl	1526370.0	1514769.9	0.01	-0.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 2250

Lab File ID: 035F3501 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	109	100	AVRG	9.0	15.0	
Heptachlor	107	100	AVRG	7.0	15.0	
Heptachlor epoxide	97.5	100	AVRG	-2.5	15.0	
Endrin	202	200	AVRG	1.0	15.0	
Methoxychlor	1210	1000	AVRG	21.0	15.0	<-
4cmx	210	200	AVRG	5.0	15.0	
Decachlorobiphenyl	198	200	AVRG	-1.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/16/09 Time: 2250

Lab File ID: 035B3501 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	109	100	AVRG	9.0	15.0	
Heptachlor	110	100	AVRG	10.0	15.0	
Heptachlor epoxide	98.2	100	AVRG	-1.8	15.0	
Endrin	210	200	AVRG	5.0	15.0	
Methoxychlor	1410	1000	AVRG	41.0	15.0	<-
4cmx	202	200	AVRG	1.0	15.0	
Decachlorobiphenyl	201	200	AVRG	0.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/17/09 Time: 0118

Lab File ID: 045F4501 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	95.6	100	AVRG	-4.4	15.0	
Heptachlor	69.4	100	AVRG	-30.6	15.0	<-
Heptachlor epoxide	89.0	100	AVRG	-11.0	15.0	
Endrin	189	200	AVRG	-5.5	15.0	
Methoxychlor	818	1000	AVRG	-18.2	15.0	<-
4cmx	182	200	AVRG	-9.0	15.0	
Decachlorobiphenyl	192	200	AVRG	-4.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/17/09 Time: 0118

Lab File ID: 045B4501 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	97.3	100	AVRG	-2.7	15.0	
Heptachlor	83.4	100	AVRG	-16.6	15.0	<-
Heptachlor epoxide	88.5	100	AVRG	-11.5	15.0	
Endrin	189	200	AVRG	-5.5	15.0	
Methoxychlor	981	1000	AVRG	-1.9	15.0	
4cmx	186	200	AVRG	-7.0	15.0	
Decachlorobiphenyl	186	200	AVRG	-7.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/17/09 Time: 0332

Lab File ID: 054F5401 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
gamma-BHC (Lindane)	97.2	100	AVRG	-2.8	15.0	
Heptachlor	83.2	100	AVRG	-16.8	15.0	<-
Heptachlor epoxide	90.2	100	AVRG	-9.8	15.0	
Endrin	191	200	AVRG	-4.5	15.0	
Methoxychlor	912	1000	AVRG	-8.8	15.0	
4cmx	185	200	AVRG	-7.5	15.0	
Decachlorobiphenyl	197	200	AVRG	-1.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD7A Calibration Date: 12/17/09 Time: 0332

Lab File ID: 054B5401 Init. Calib. Date(s): 12/16/09 12/16/09

Heated Purge: (Y/N) N Init. Calib. Times: 1446 1545

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
gamma-BHC (Lindane)	103	100	AVRG	3.0	15.0
Heptachlor	93.8	100	AVRG	-6.2	15.0
Heptachlor epoxide	94.3	100	AVRG	-5.7	15.0
Endrin	199	200	AVRG	-0.5	15.0
Methoxychlor	1010	1000	AVRG	1.0	15.0
4cmx	193	200	AVRG	-3.5	15.0
Decachlorobiphenyl	200	200	AVRG	0.0	15.0

FORM VII PEST

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/002f0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 16-DEC-2009 14:31
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 08:58 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 13:58 Cal File: 021f2101.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.140	4.143	-0.003	305625072	126.580	126	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.757	4.760	-0.003	817151	0.39195	0.392	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.096	5.100	-0.004	205351487	121.458	121	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.127	5.129	-0.002	3721555	2.20687	2.21	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.492	5.491	0.001	1415276	1.04858	1.05	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.297	5.298	-0.001	99584090	86.1779	86.2	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.932	5.928	0.004	2072085	1.55040	1.55	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.808	2.810	-0.002	483343402	222.598	222	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.520	6.515	0.005	283897251	229.896	230	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/002f0201.d

Date : 16-DEC-2009 14:31

Client ID: PEM01

Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

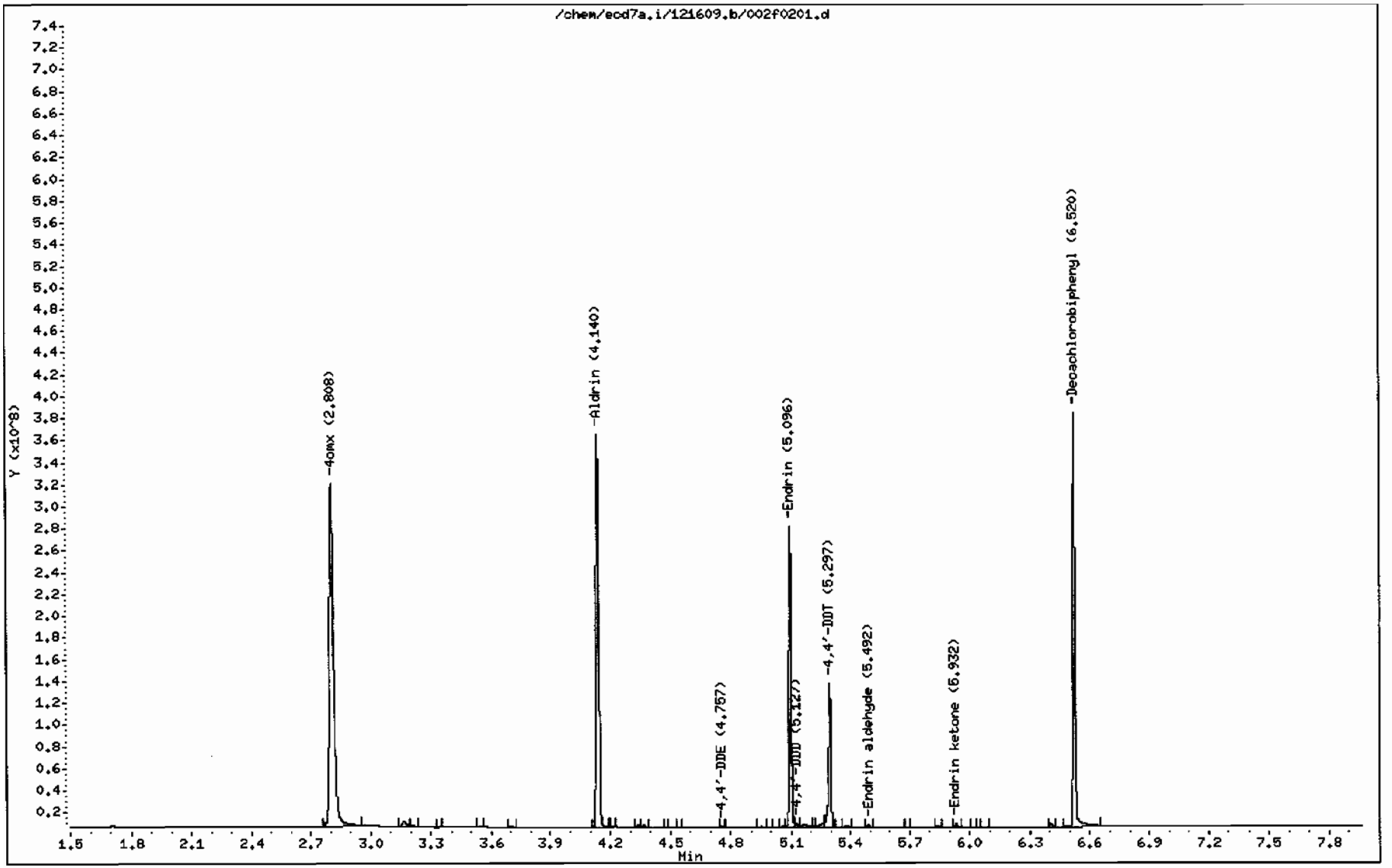

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/002b0201.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM01
Inj Date : 16-DEC-2009 14:31
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 08:38 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 13:58 Cal File: 021b2101.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.431	4.436	-0.005	383180879	130.827	131	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.107	5.111	-0.004	1023183	0.43331	0.433	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.423	5.425	-0.002	233186727	121.579	122	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.462	5.464	-0.002	3287627	1.80093	1.80	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.754	5.753	0.001	1606521	1.04514	1.04	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.657	5.657	0.000	75477597	81.4264	81.4	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.265	6.260	0.005	2776548	1.85700	1.86	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.059	3.063	-0.004	576252814	227.129	227	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.030	7.025	0.005	303504747	233.986	234	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/002b0201.d

Date : 16-DEC-2009 14:31

Client ID: PEM01

Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

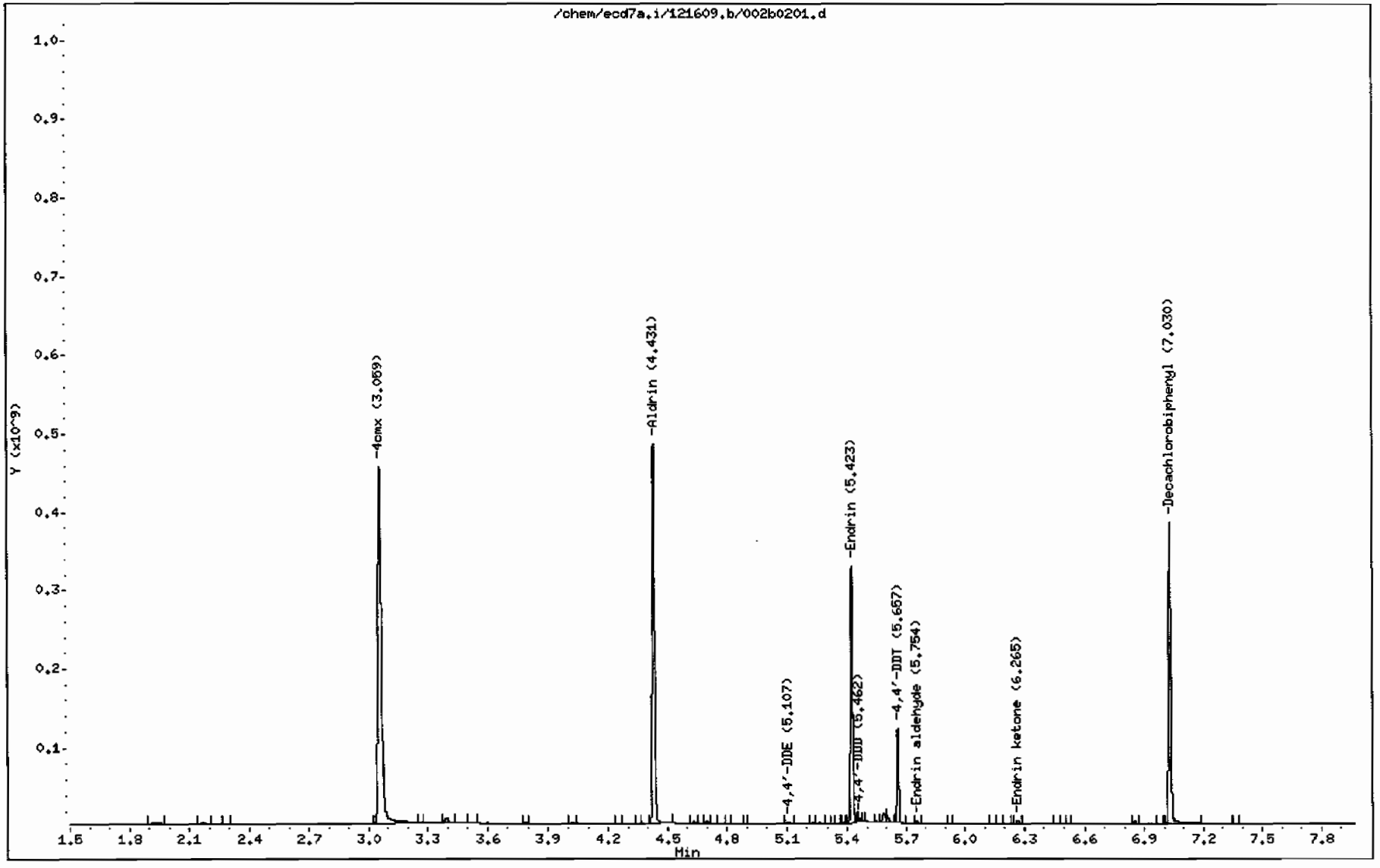

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/025f2501.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 16-DEC-2009 20:22
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:15 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 25 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.142	4.143	-0.001	331567532	124.958	125	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.760	4.760	0.000	922758	0.39949	0.399	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.099	5.100	-0.001	217705644	117.836	118	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.128	5.129	-0.001	4380869	2.41843	2.42	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.491	5.491	0.000	2310725	1.58658	1.59	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.297	5.298	-0.001	130594017	111.961	112	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.925	5.928	-0.003	4277451	3.17347	3.17	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.808	2.810	-0.002	518275030	217.789	218	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.508	6.515	-0.007	311168358	224.402	224	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/025f2501.d

Date : 16-DEC-2009 20:22

Client ID: PEM02

Sample Info: IWPE091109-99DG

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXH

Column diameter: 0.25

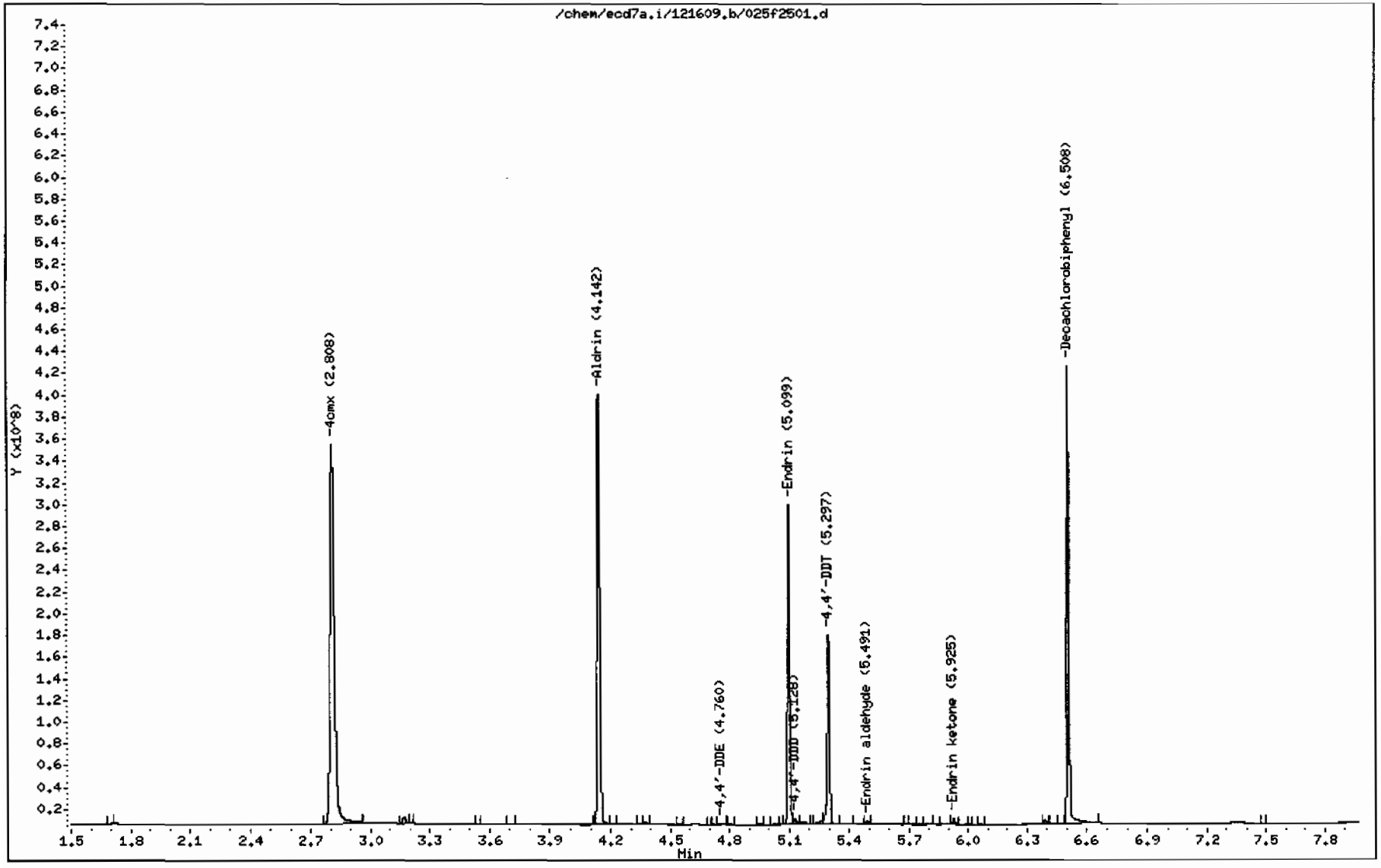

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/025b2501.d
Lab Smp Id: WPE091109-99DG Client Smp ID: PEM02
Inj Date : 16-DEC-2009 20:22
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091109-99DG
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:15 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 25 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
4.434	4.436	-0.002	420229523	124.601	125	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.110	5.111	-0.001	1063233	0.39483	0.395	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.424	5.425	-0.001	260475121	119.122	119	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.463	5.464	-0.001	8416384	4.16318	4.16	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.750	5.753	-0.003	3113230	1.82371	1.82	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.655	5.657	-0.002	121660475	121.543	122	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.253	6.260	-0.007	5868294	3.83167	3.83	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.062	3.063	-0.001	619700517	219.089	219	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.019	7.025	-0.006	339690909	222.548	222	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/025b2501.d

Date : 16-DEC-2009 20:22

Client ID: PEM02

Sample Info: IWPE091109-99DG

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

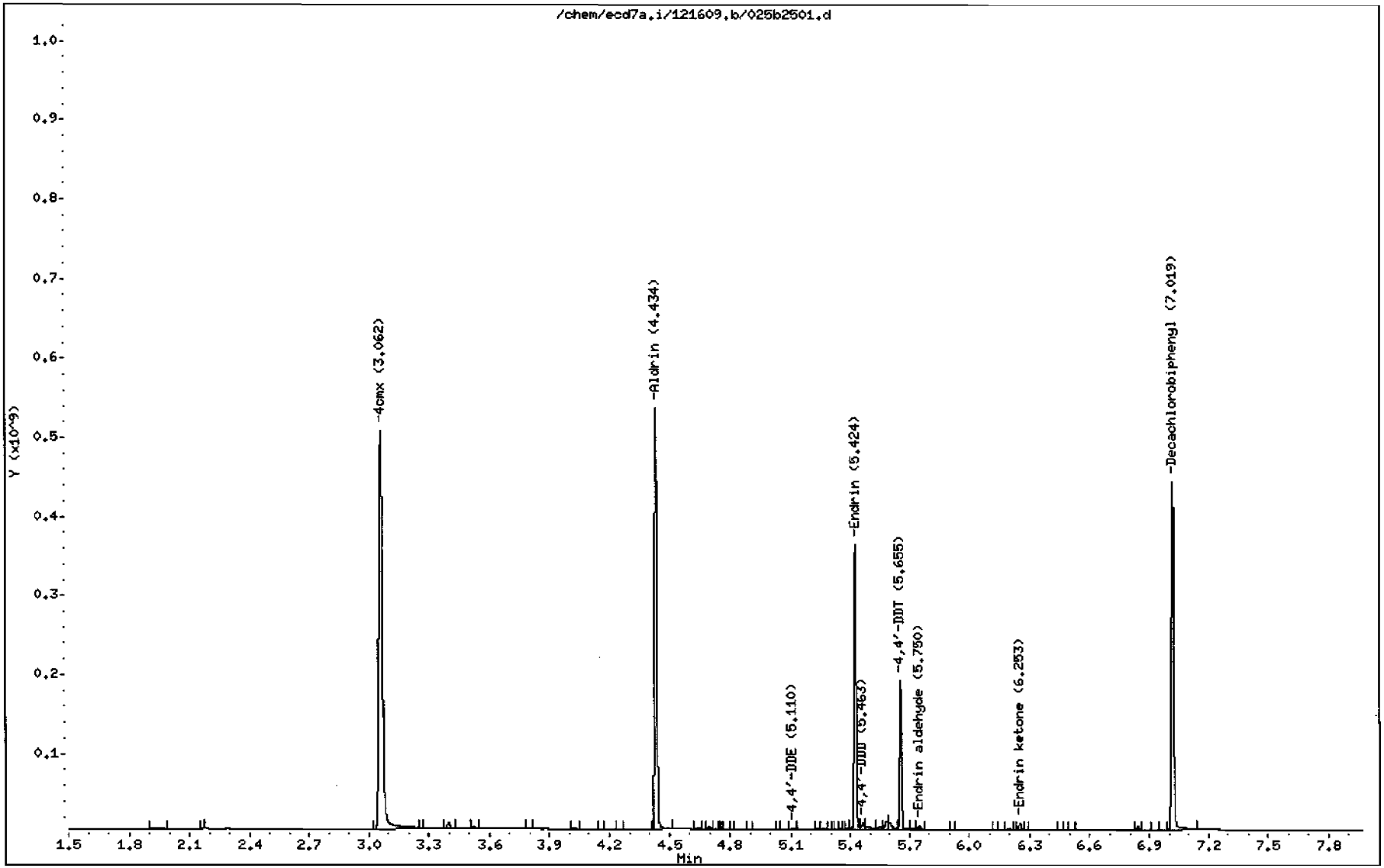

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/008f0801.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB01
Inj Date : 16-DEC-2009 16:00
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 08:58 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.318	3.318	0.000	289019776	100.000	94.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.576	3.576	0.000	259631876	100.000	99.5	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.645	3.645	0.000	106908163	100.000	92.6	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.930	3.930	0.000	192836980	100.000	94.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.780	3.780	0.000	254750000	100.000	94.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.143	4.143	0.000	241805579	100.000	91.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.551	4.551	0.000	215405734	100.000	92.6	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.631	4.631	0.000	224420186	100.000	99.1	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.716	4.716	0.000	196504341	100.000	87.9	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.805	4.805	0.000	201143286	100.000	96.8	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.760	4.760	0.000	438760094	200.000	190	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.955	4.955	0.000	416007146	200.000	186	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.100	5.100	0.000	359271746	200.000	194	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.129	5.129	0.000	345272528	200.000	191	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.238	5.238	0.000	334690128	200.000	188	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.491	5.491	0.000	257216773	200.000	177	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.298	5.298	0.000	247832980	200.000	203	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.754	5.754	0.000	286416979	200.000	187	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.581	5.581	0.000	482016796	1000.00	1090	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.928	5.928	0.000	269447909	200.000	200	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.810	2.810	0.000	460669173	200.000	194	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.515	6.515	0.000	263333528	200.000	190	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/008f0801.d
Date : 16-DEC-2009 16:00
Client ID: INDAB01
Sample Info: IWPE091207-10AB

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

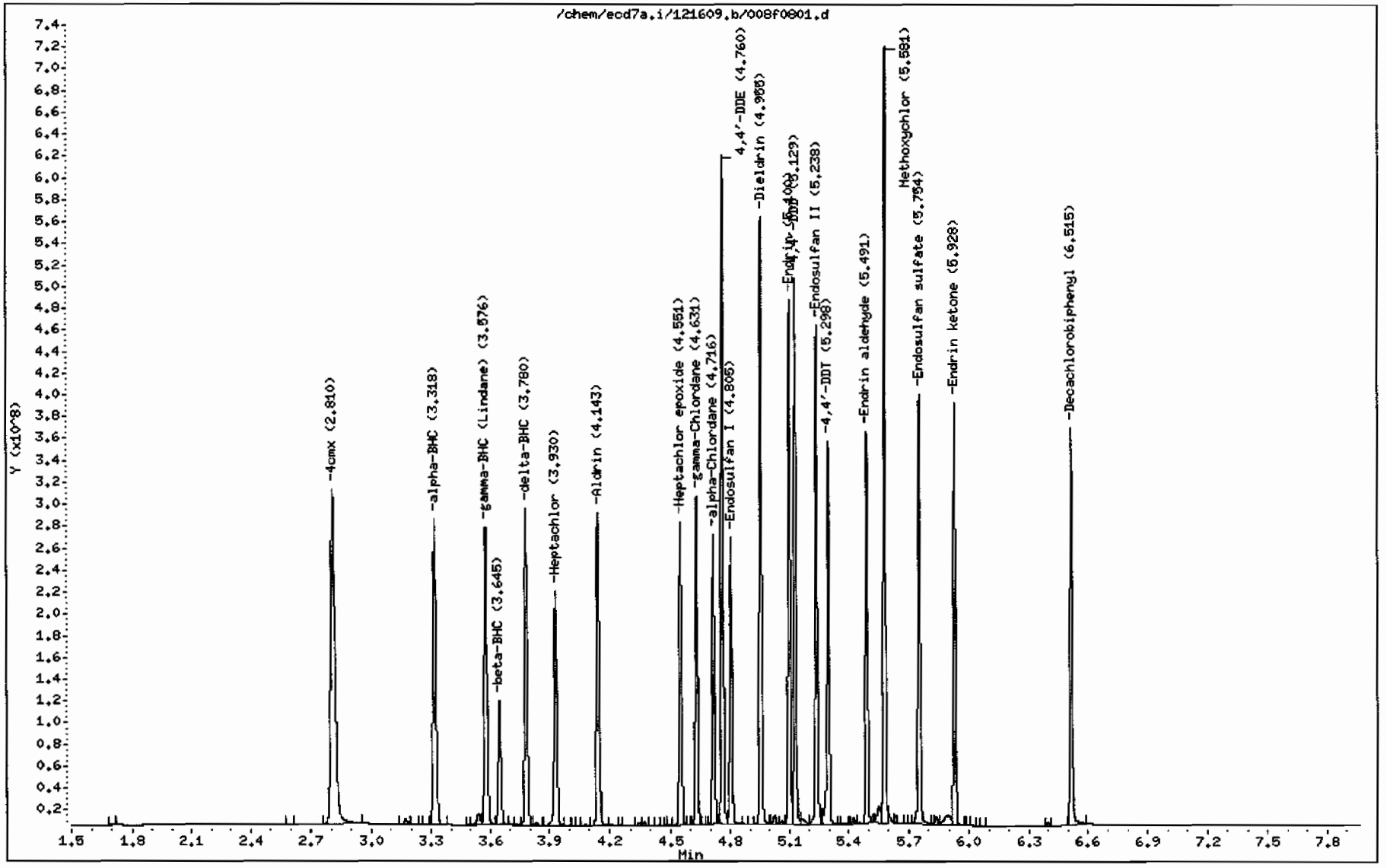

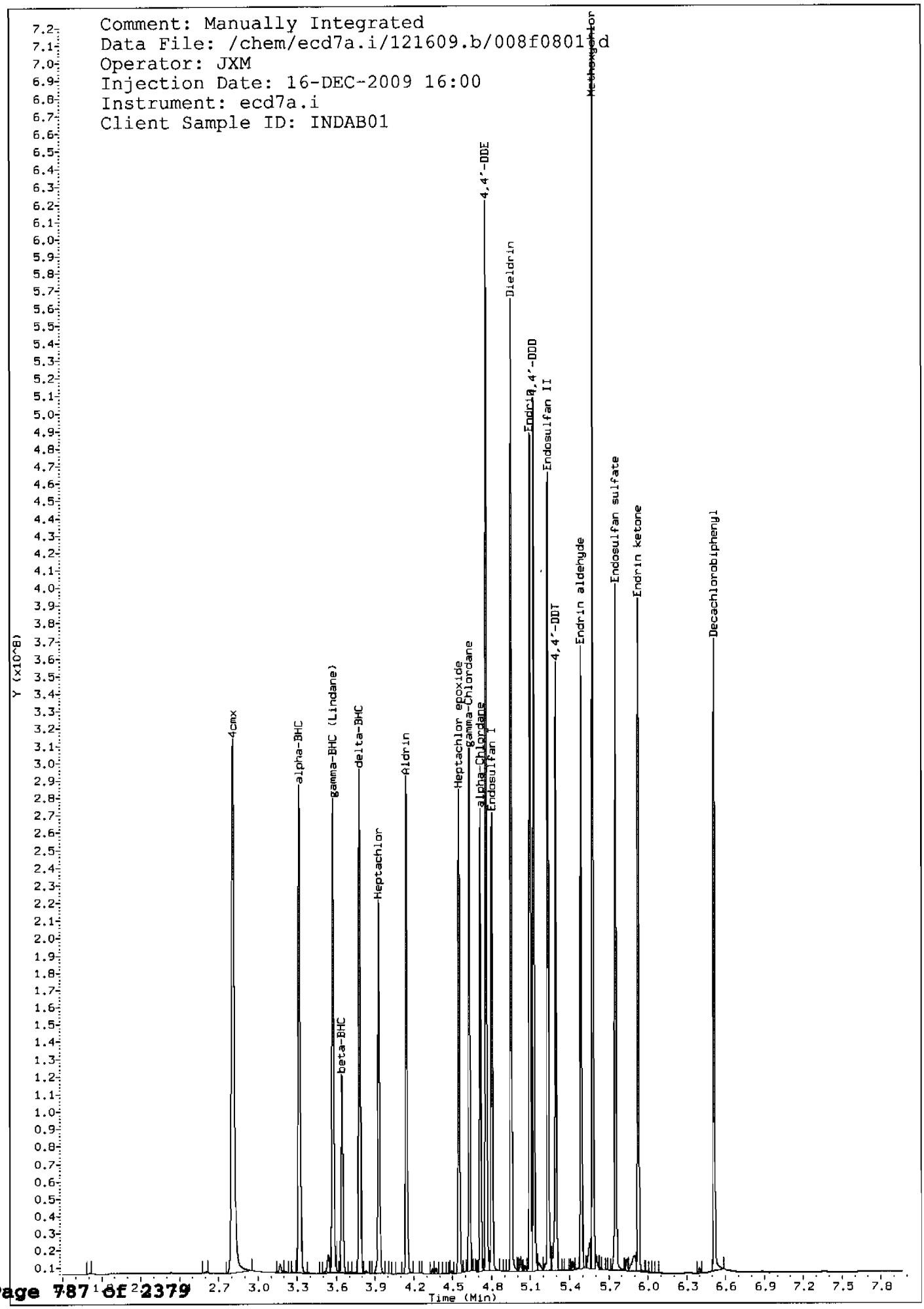
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Data File: /chem/ecd7a.i/121609.b/008f0801.d
Operator: JXM
Injection Date: 16-DEC-2009 16:00
Instrument: ecd7a.i
Client Sample ID: INDAB01
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl

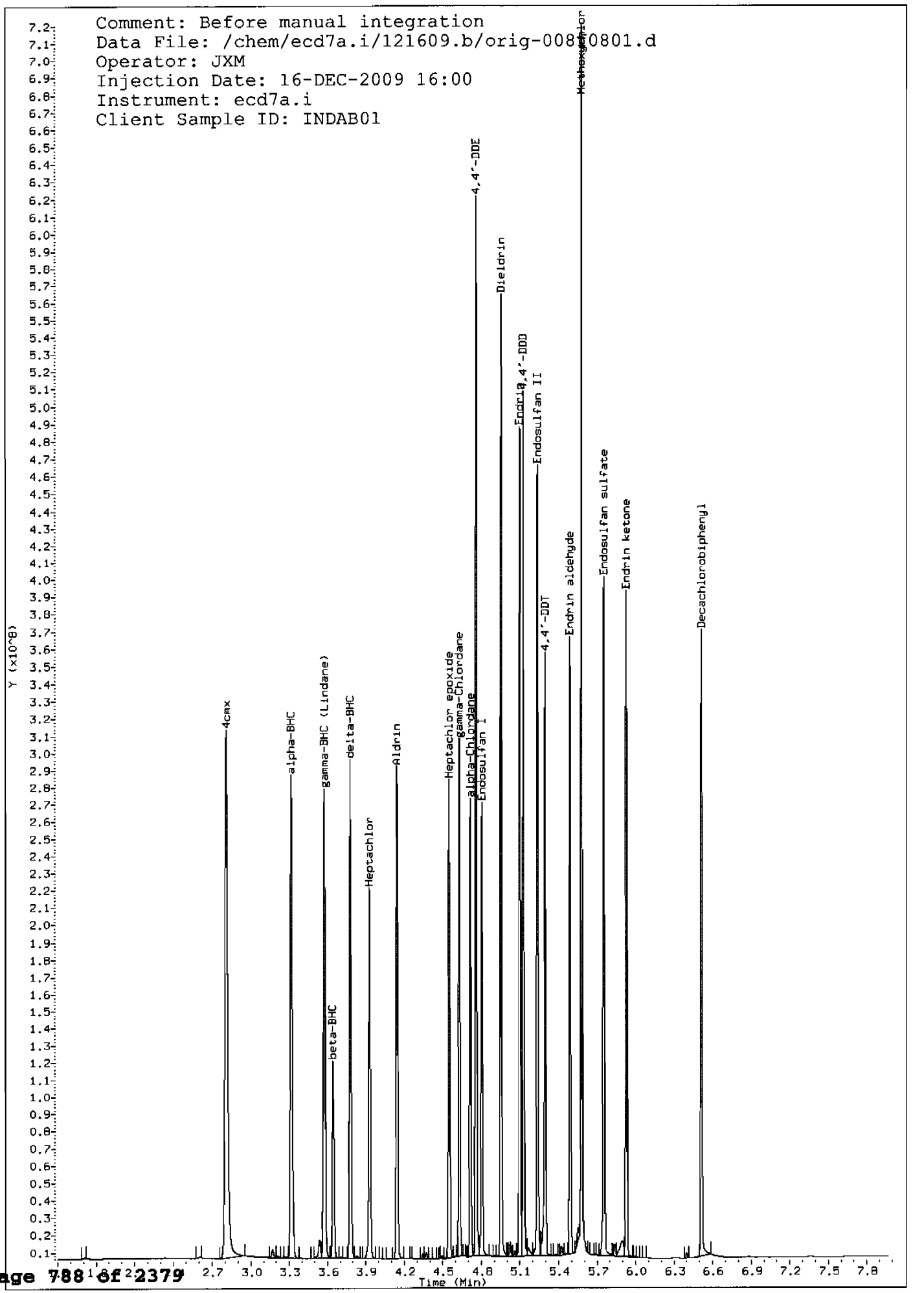
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Operator: JXM
Injection Date: 16-DEC-2009 16:00
Instrument: ecd7a.i
Client Sample ID: INDAB01
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/008b0801.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB01
Inj Date : 16-DEC-2009 16:00
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 08:38 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.601	3.601	0.000	372327968	100.000	97.4	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.880	3.880	0.000	324995525	100.000	101	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.939	3.939	0.000	128140082	100.000	93.0	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.207	4.207	0.000	220701963	100.000	95.6	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.155	4.155	0.000	314899985	100.000	95.5	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.436	4.436	0.000	311803111	100.000	92.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.811	4.811	0.000	270721363	100.000	94.7	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.931	4.931	0.000	287338134	100.000	101	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.023	5.023	0.000	248934561	100.000	90.4	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.065	5.065	0.000	243314384	100.000	98.4	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.111	5.111	0.000	522688938	200.000	194	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
5.235	5.235	0.000	523001672	200.000	190	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.425	5.425	0.000	441811918	200.000	202	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.464	5.464	0.000	398966701	200.000	197	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.551	5.551	0.000	409100863	200.000	196	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.753	5.753	0.000	312872356	200.000	183	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.657	5.657	0.000	215722977	200.000	203	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.922	5.922	0.000	353816724	200.000	203	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
6.059	6.059	0.000	436086071	1000.00	1140	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
6.260	6.260	0.000	304954563	200.000	199	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.063	3.063	0.000	543006989	200.000	192	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.025	7.025	0.000	297230107	200.000	195	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/008b0801.d
Date : 16-DEC-2009 16:00
Client ID: INDAB01
Sample Info: IWPE091207-10AB

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

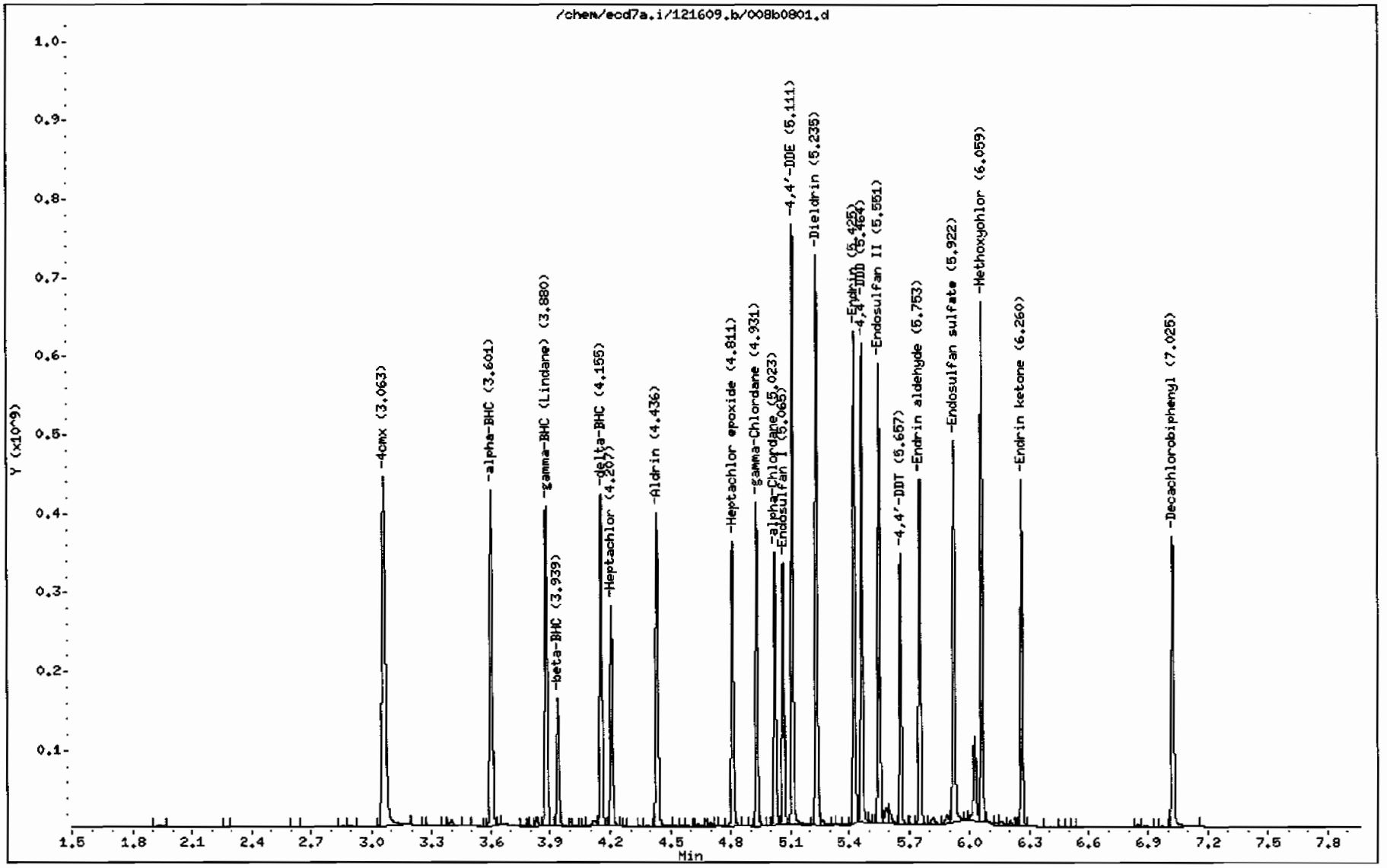

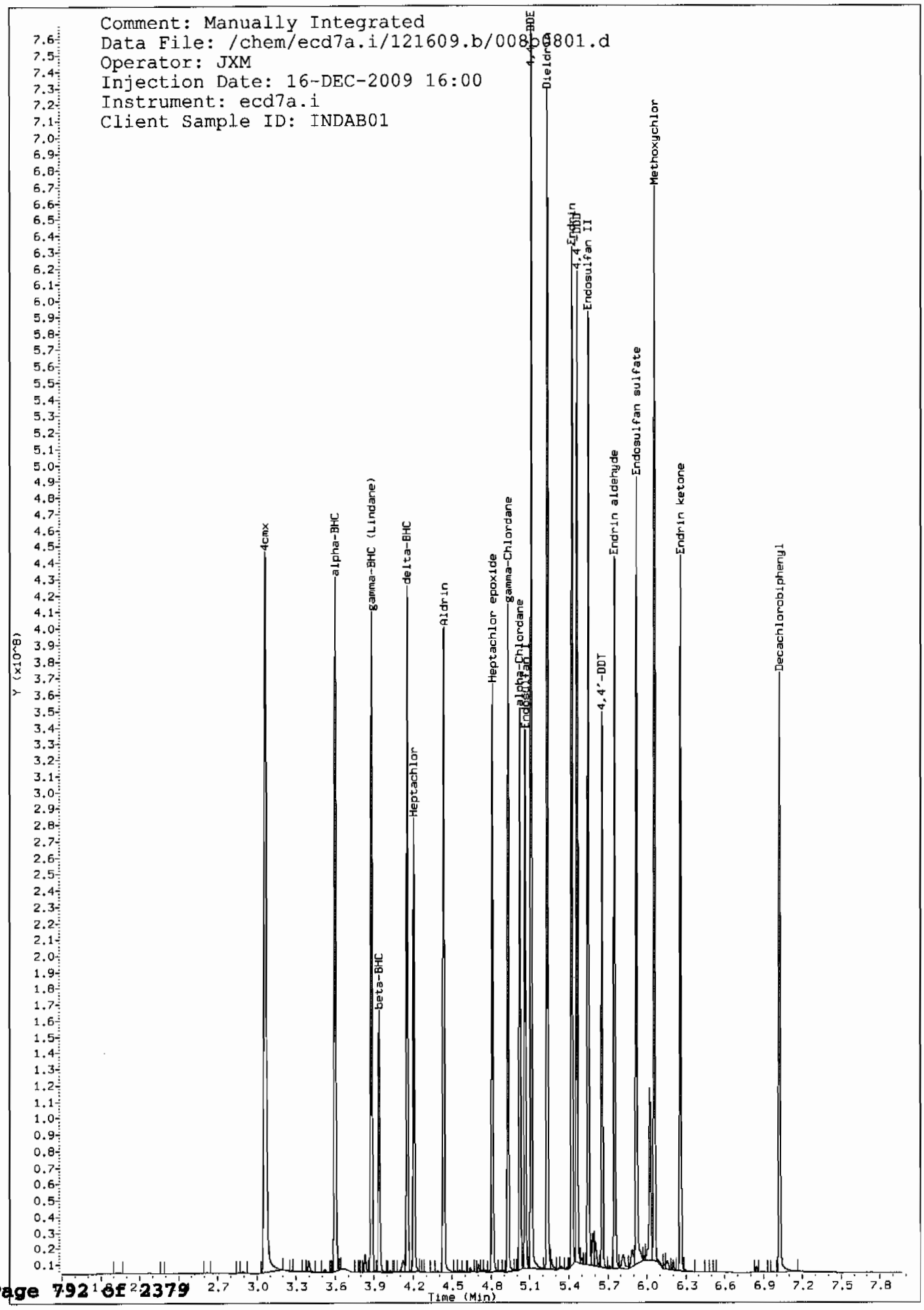
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/008b0801.d
Operator: JXM
Injection Date: 16-DEC-2009 16:00
Instrument: ecd7a.i
Client Sample ID: INDAB01
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

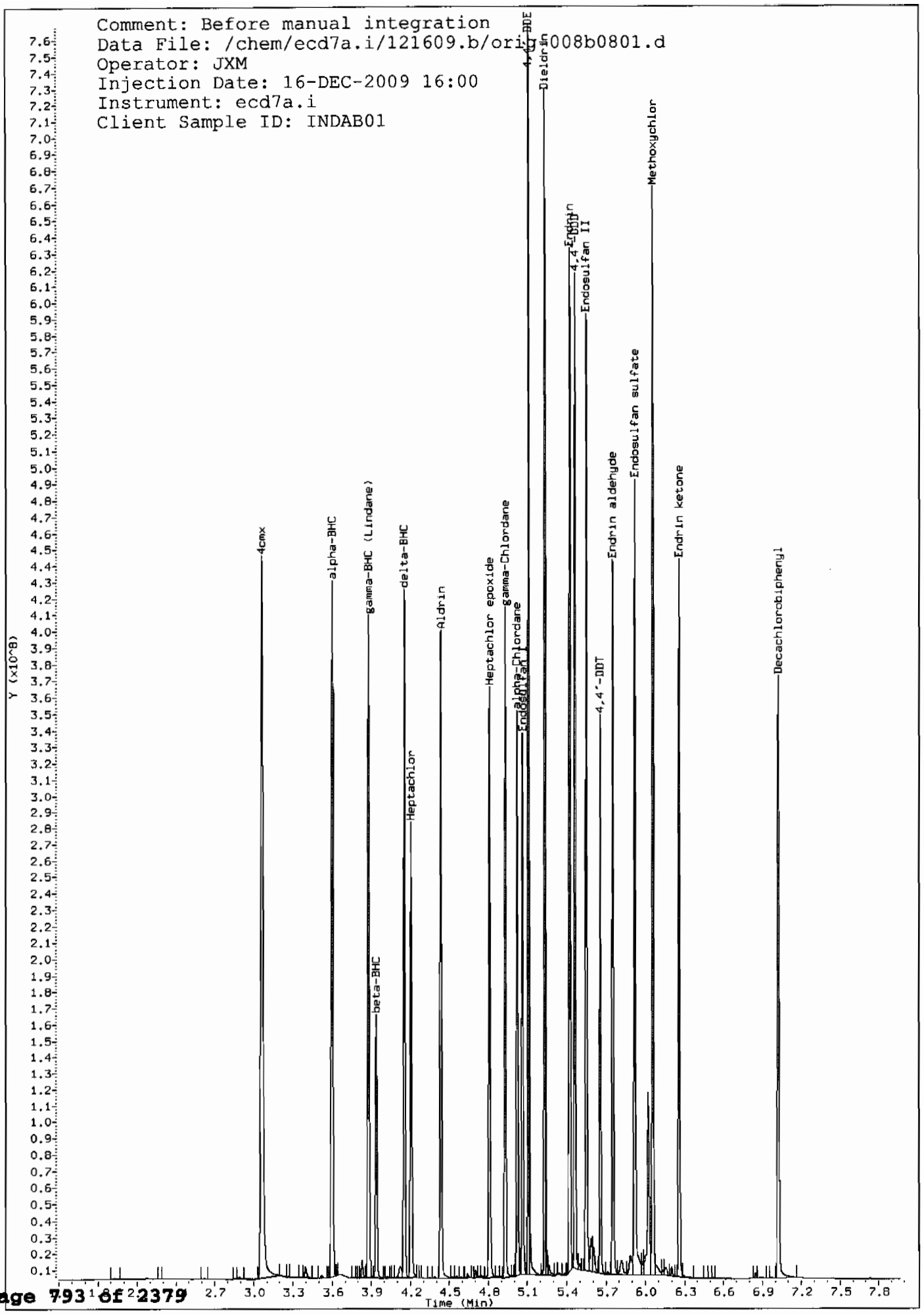
Comment: Before manual integration
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Operator: JXM
Injection Date: 16-DEC-2009 16:00
Instrument: ecd7a.i
Client Sample ID: INDAB01
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/014f1401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 16-DEC-2009 17:29
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:15 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.956	4.956	0.000	51347697	2000.00	2040	80.00- 120.00	100.00(M)
5.011	5.011	0.000	69800832	2000.00	2130	115.94- 155.94	135.94
5.049	5.049	0.000	79308772	2000.00	1880	134.45- 174.45	154.45
5.113	5.113	0.000	81411341	2000.00	2000	138.55- 178.55	158.55
5.232	5.232	0.000	128114244	2000.00	1750	229.50- 269.50	249.50
Average of Peak Amounts =					1.96e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.811	2.810	0.001	469023317	200.000	197	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.510	6.515	-0.005	271545731	200.000	196	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/014f1401.d

Date : 16-DEC-2009 17:29

Client ID: TOXAPH01

Sample Info: IWPE091104-52TX

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

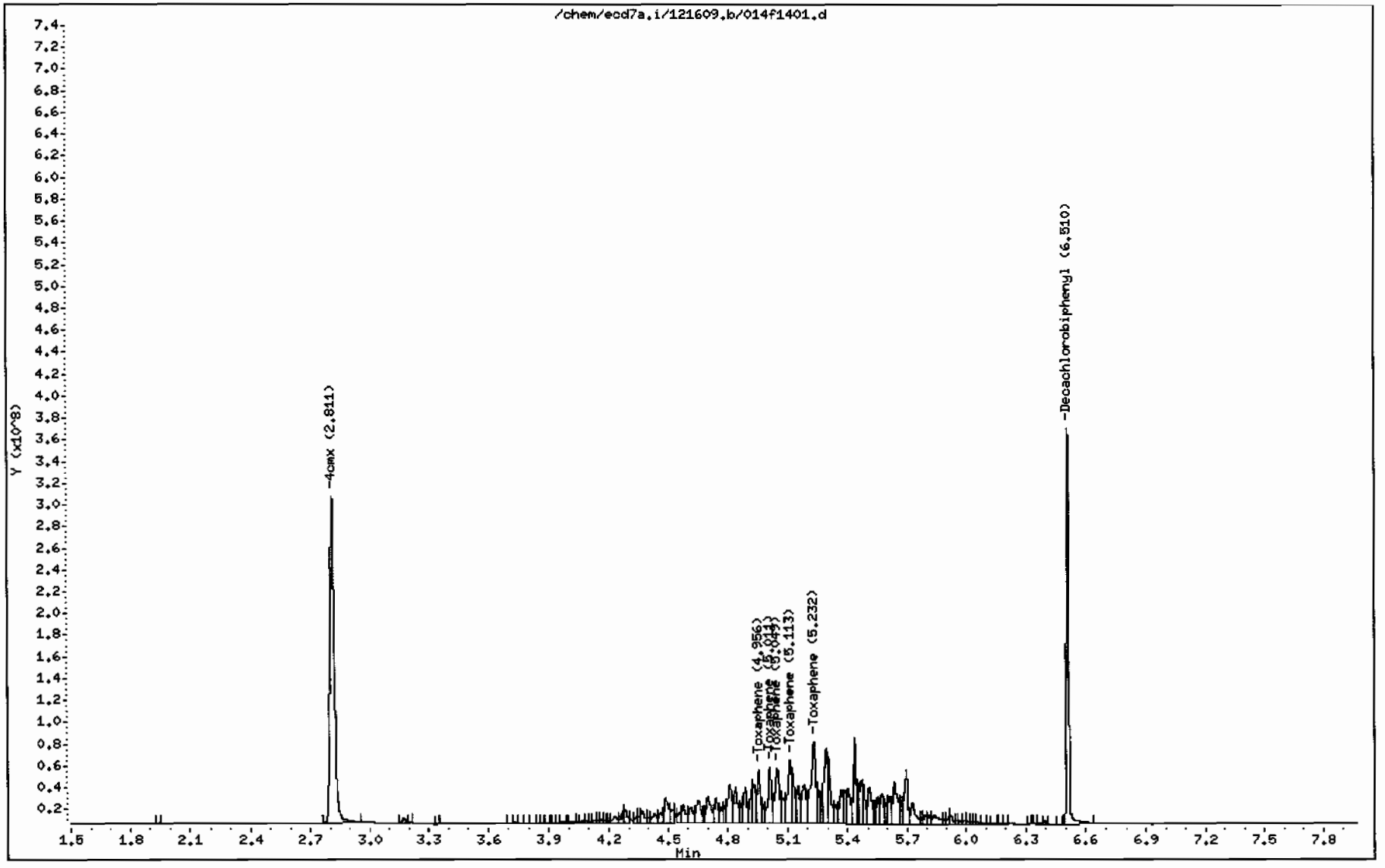

Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/014f1401.d
Operator: JXM
Injection Date: 16-DEC-2009 17:29
Instrument: ecd7a.i
Client Sample ID: TOXAPH01

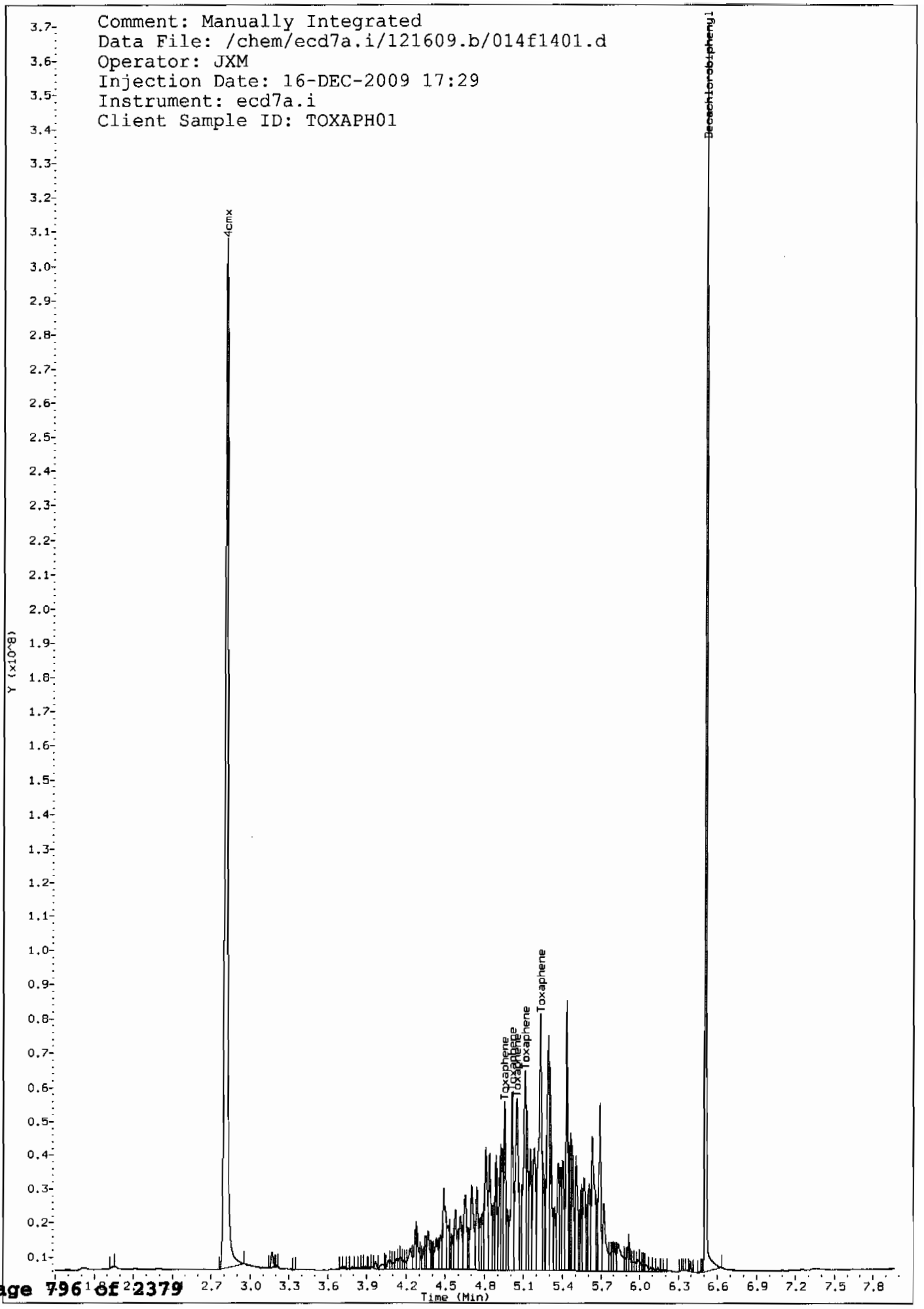

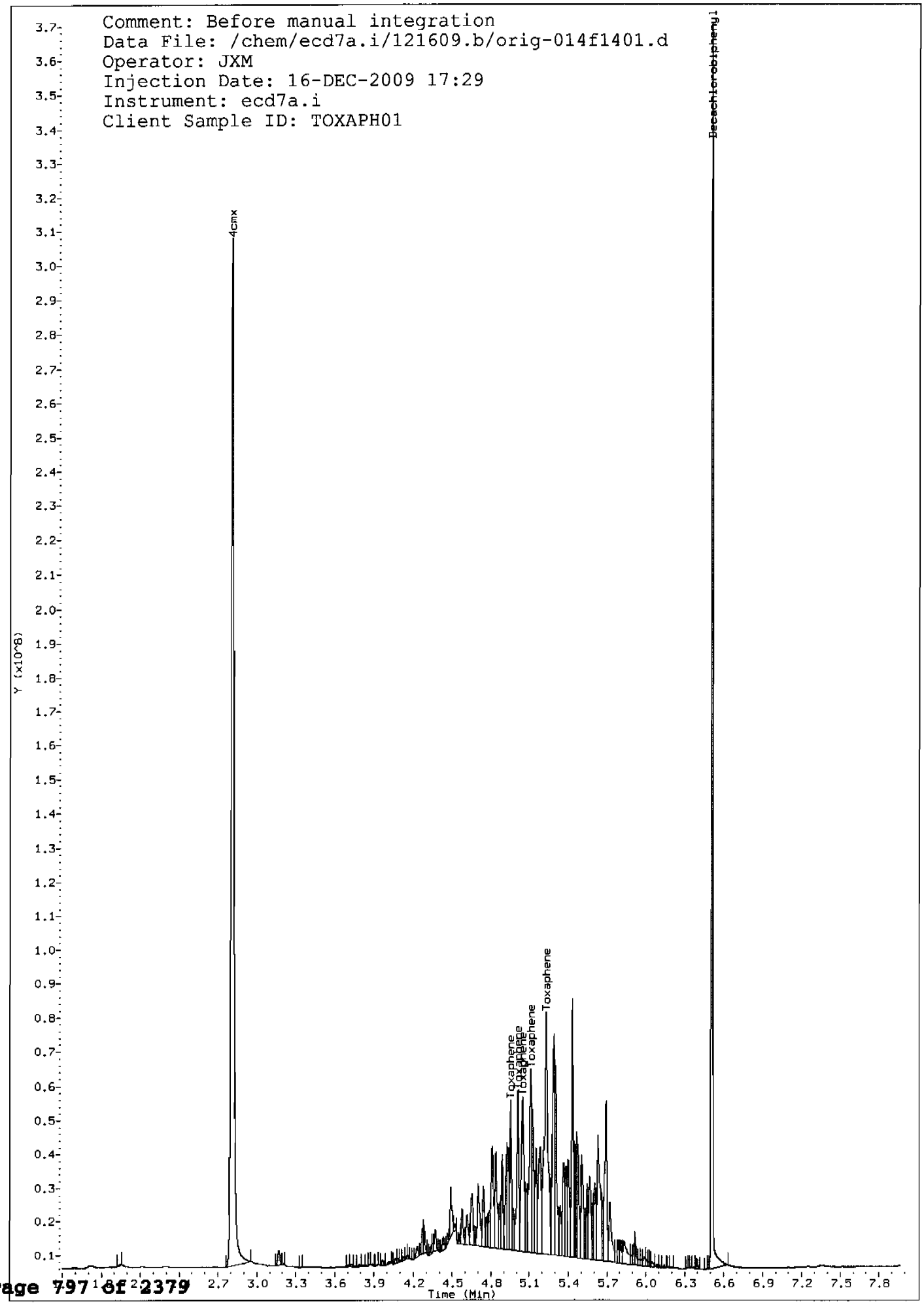
Comment: Before manual integration
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Operator: JXM
Injection Date: 16-DEC-2009 17:29
Instrument: ecd7a.i
Client Sample ID: TOXAPH01
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/014b1401.d
Lab Smp Id: WPE091104-52TX Client Smp ID: TOXAPH01
Inj Date : 16-DEC-2009 17:29
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091104-52TX
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:15 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
5.212	5.212	0.000	95369292	2000.00	2080	80.00- 120.00	100.00(M)
5.289	5.289	0.000	52870421	2000.00	1980	35.44- 75.44	55.44
5.326	5.326	0.000	83524426	2000.00	1840	67.58- 107.58	87.58
5.400	5.400	0.000	77258278	2000.00	1960	61.01- 101.01	81.01
5.543	5.543	0.000	103072605	2000.00	1820	88.08- 128.08	108.08
Average of Peak Amounts =					1.93e+03		
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	532505943	200.000	188	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.020	7.025	-0.005	296937555	200.000	194	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/014b1401.d

Date : 16-DEC-2009 17:29

Client ID: TOXAPH01

Sample Info: IWPE091104-52TX

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

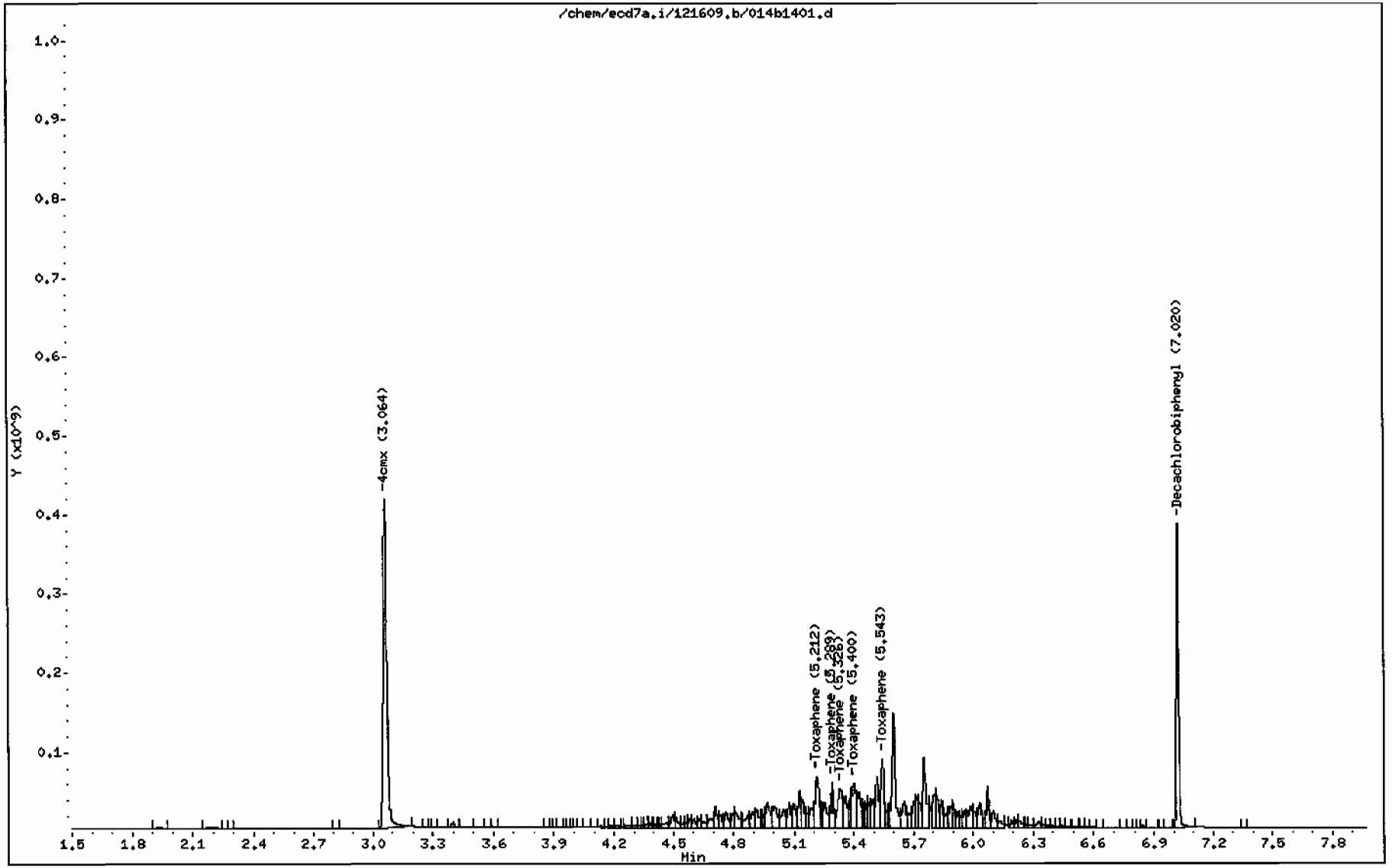

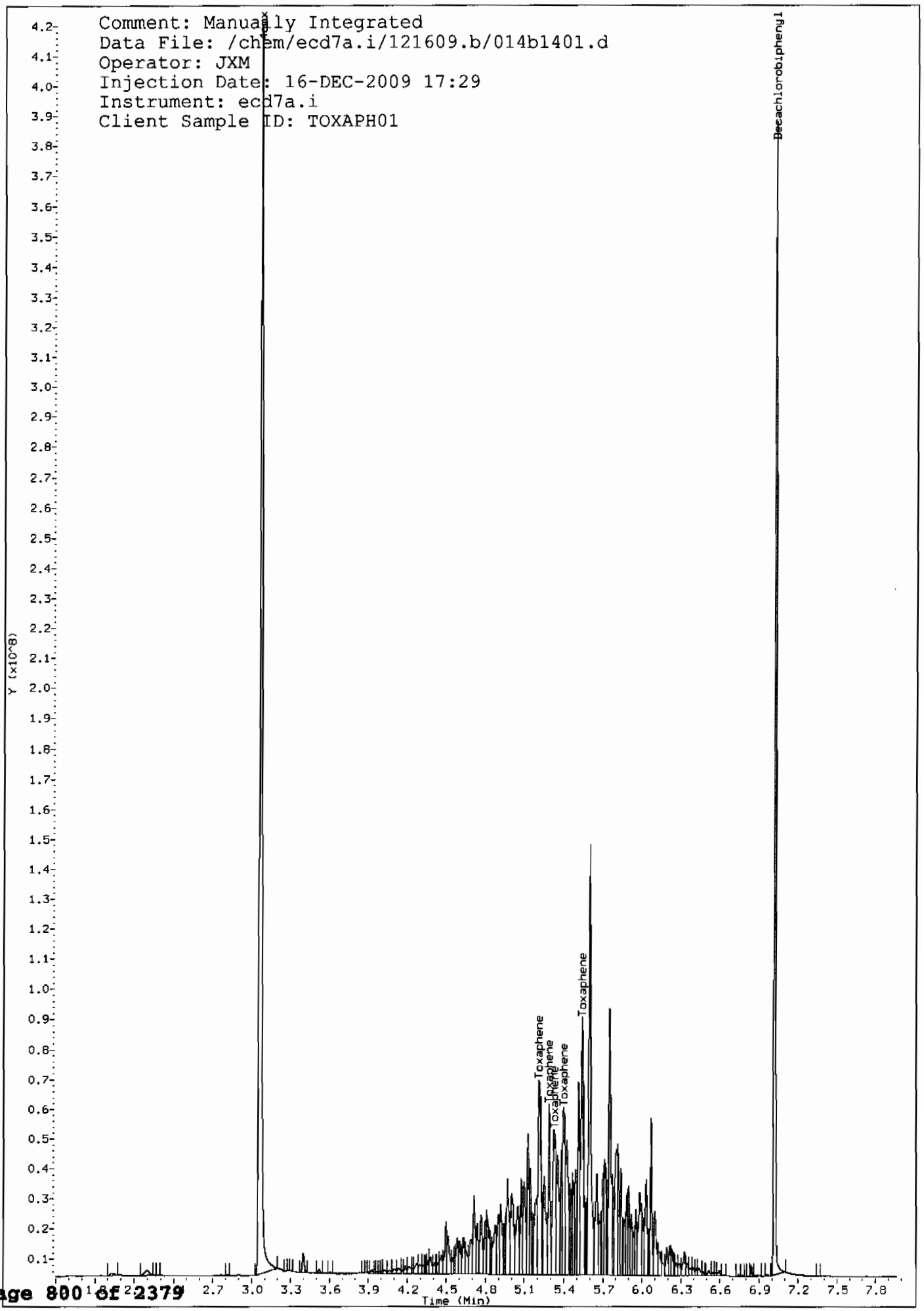
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Operator: JXM
Injection Date: 16-DEC-2009 17:29
Instrument: ecd7a.i
Client Sample ID: TOXAPH01
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

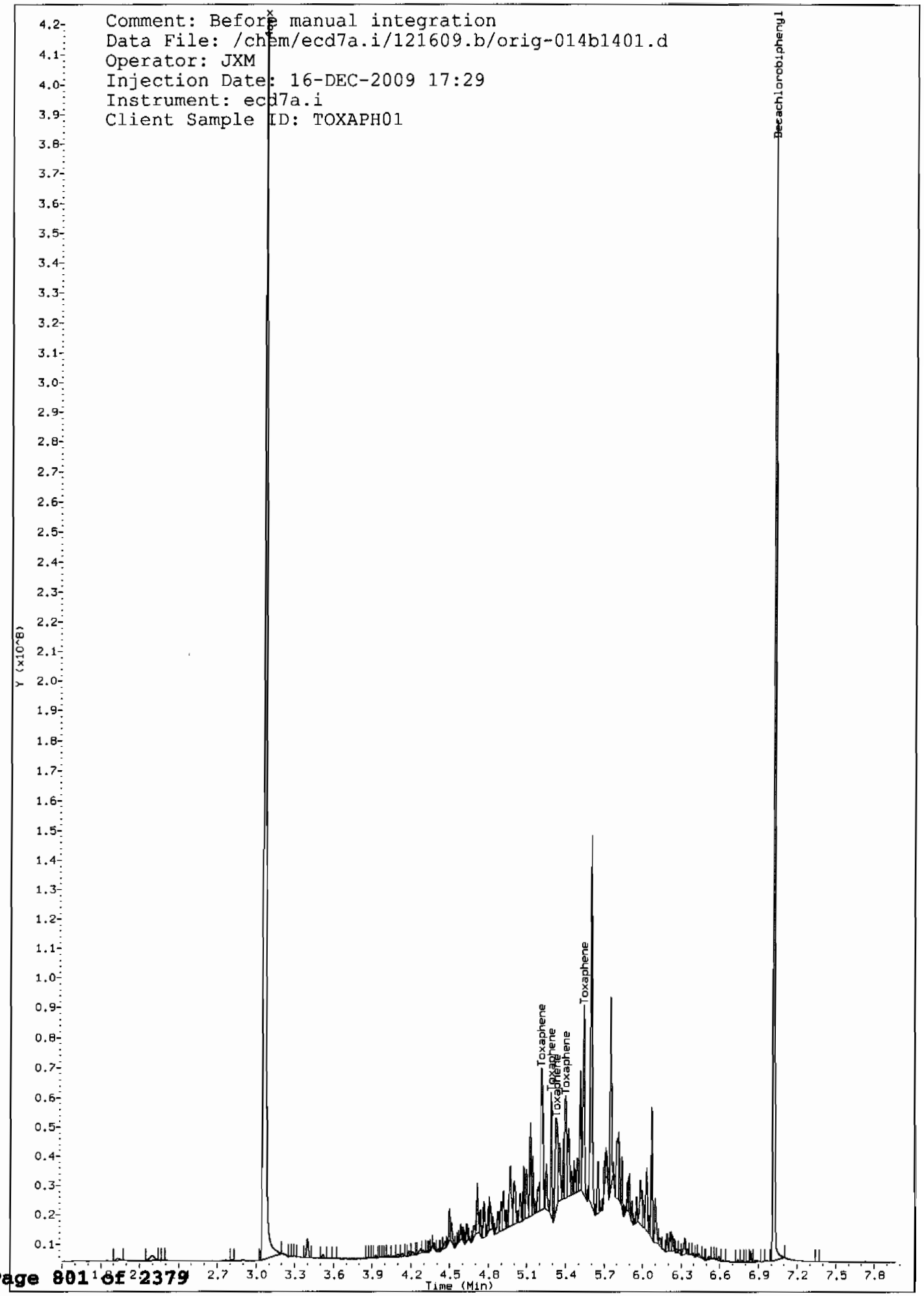
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig~014b1401.d
Operator: JXM
Injection Date: 16-DEC-2009 17:29
Instrument: ecd7a.i
Client Sample ID: TOXAPH01
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/020f2001.d
Lab Smp Id: WPE090916-00CL Client Smp ID: CHLOR01
Inj Date : 16-DEC-2009 18:58
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE090916-00CL
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:15 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.873	3.873	0.000	78402610	1000.00	884	80.00- 120.00	100.00(M)
4.509	4.509	0.000	45957062	1000.00	905	38.62- 78.62	58.62
4.632	4.632	0.000	244084527	1000.00	865	291.32- 331.32	311.32
4.716	4.716	0.000	191131800	1000.00	928	223.78- 263.78	243.78
5.195	5.195	0.000	49782572	1000.00	996	43.50- 83.50	63.50
Average of Peak Amounts =					916		
$ 1 4cmx					CAS #: 877-09-8		
2.811	2.810	0.001	464290193	200.000	195	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.509	6.515	-0.006	277138761	200.000	200	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/020f2001.d
Date : 16-DEC-2009 18:58
Client ID: CHLOR01
Sample Info: IWPE090916-00CL

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

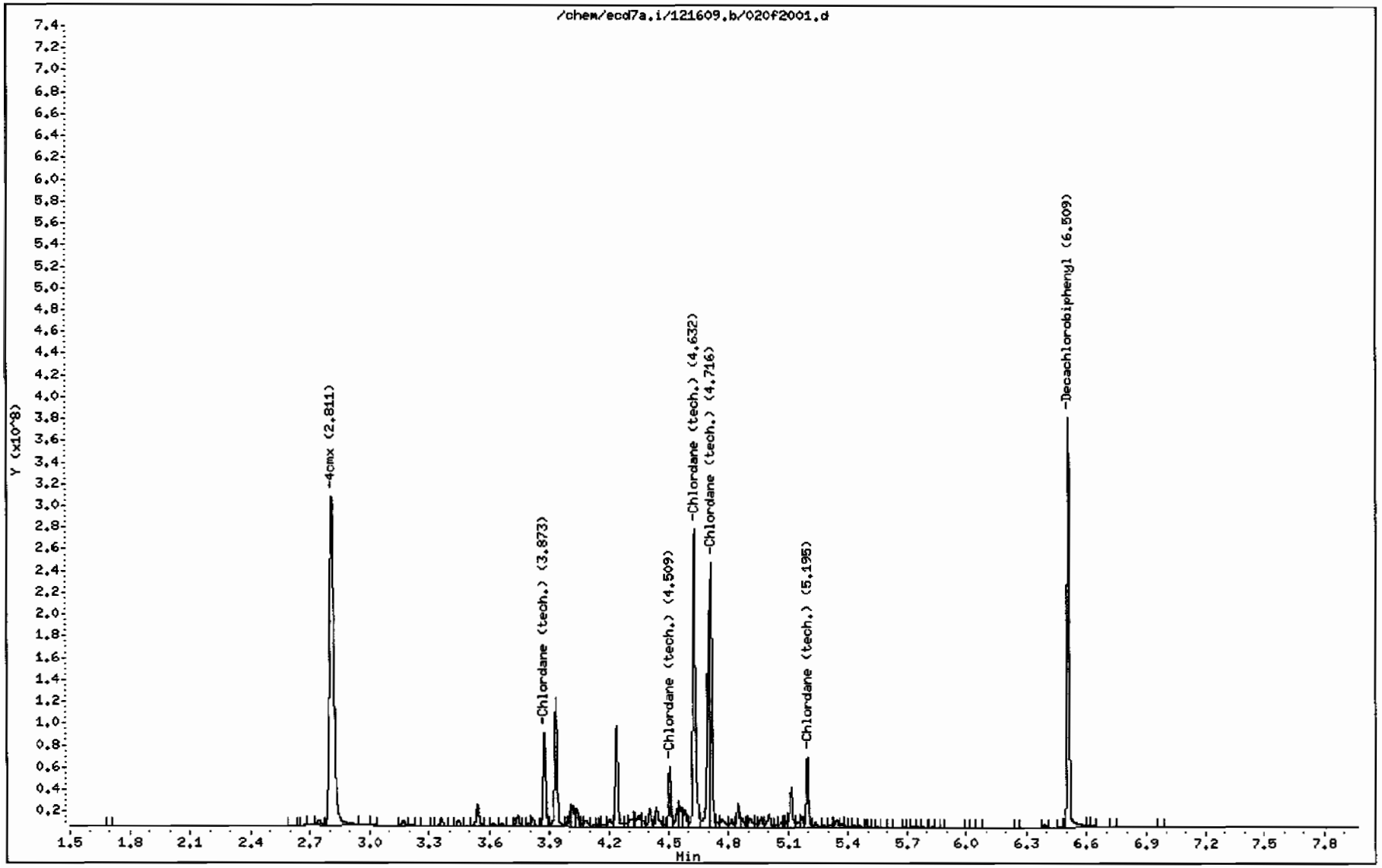

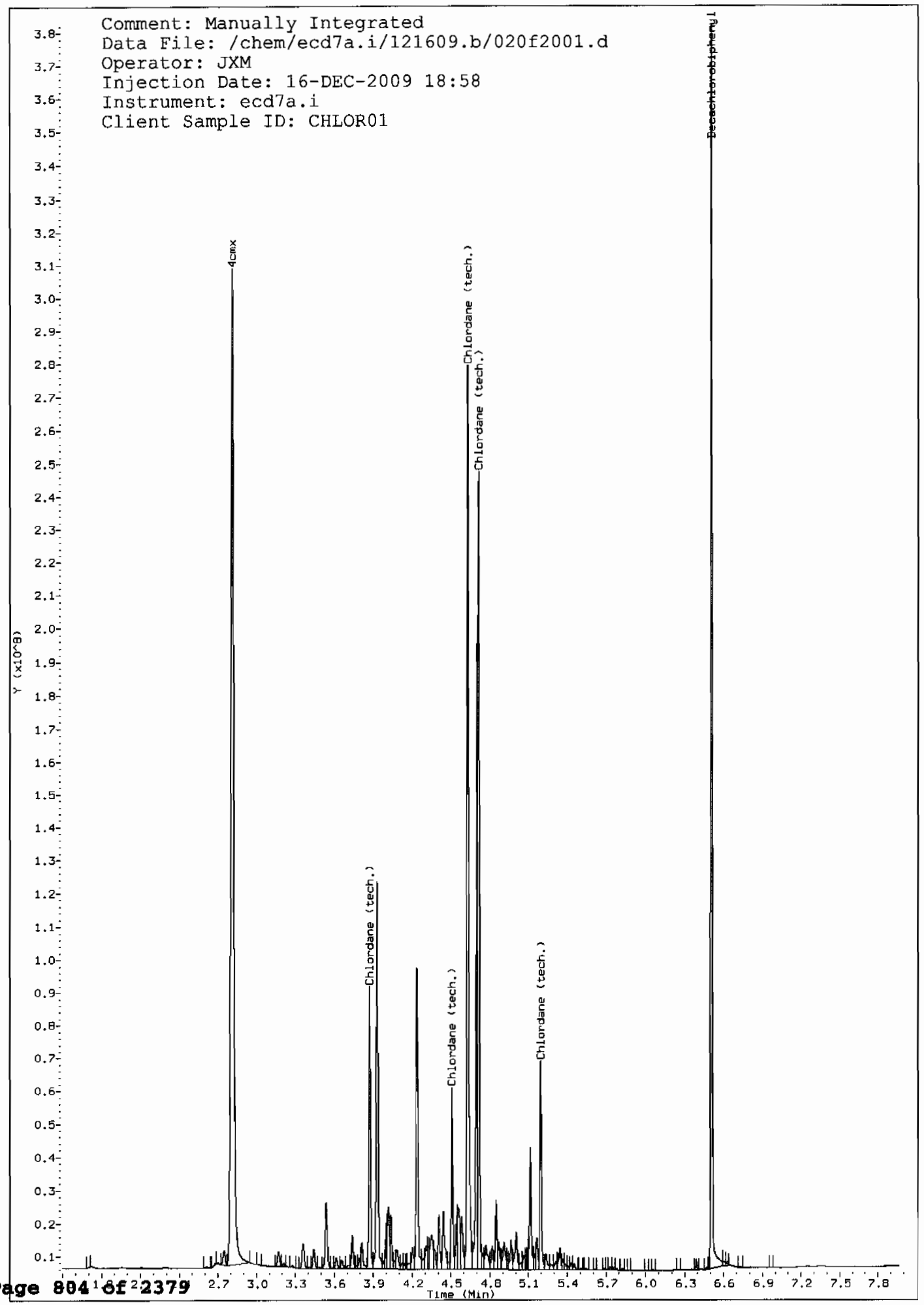
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Operator: JXM
Injection Date: 16-DEC-2009 18:58
Instrument: ecd7a.i
Client Sample ID: CHLOR01
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

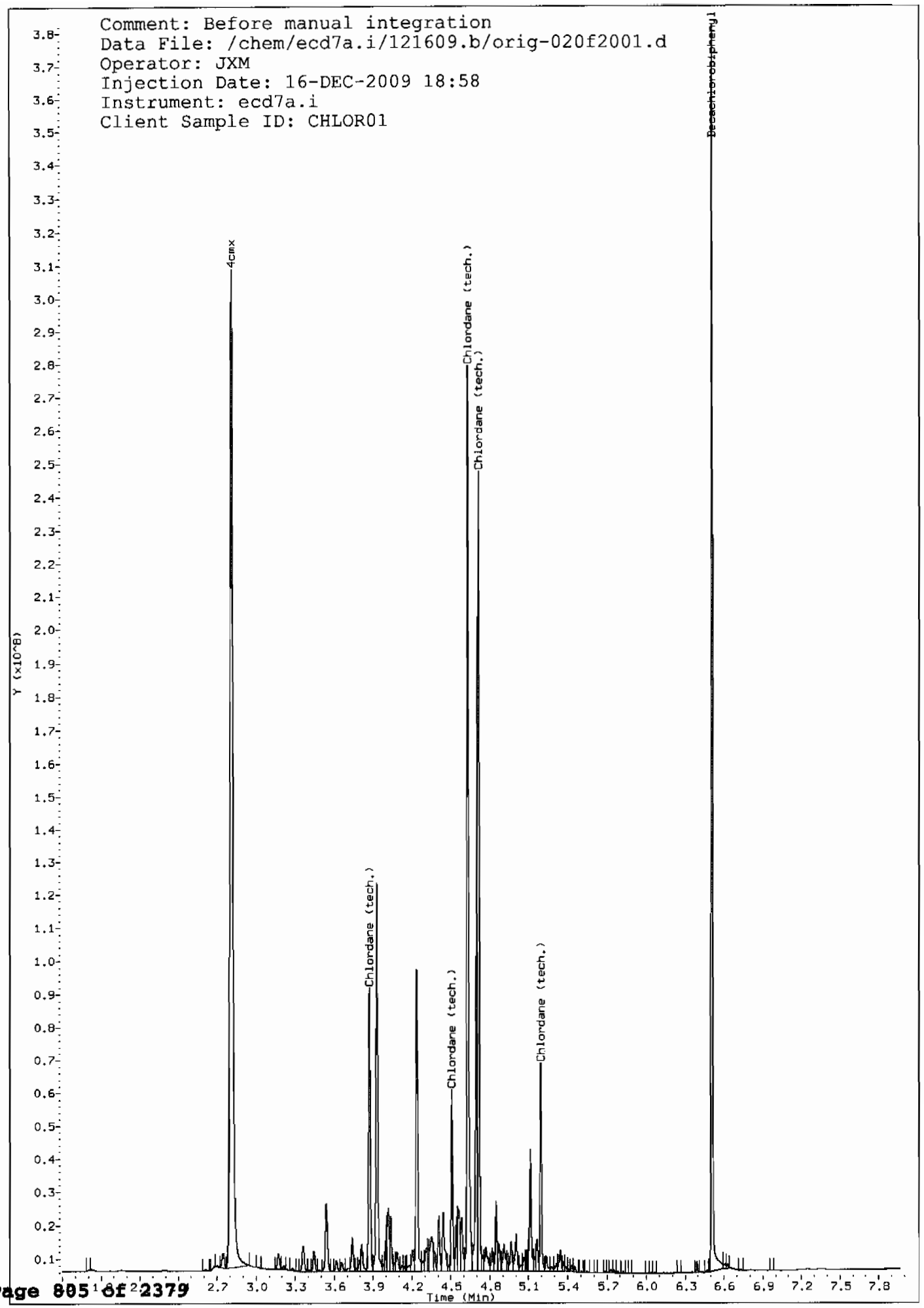
Comment: Before manual integration
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Operator: JXM
Injection Date: 16-DEC-2009 18:58
Instrument: ecd7a.i
Client Sample ID: CHLOR01
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/020b2001.d
Lab Smp Id: WPE090916-00CL Client Smp ID: CHLOR01
Inj Date : 16-DEC-2009 18:58
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE090916-00CL
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:15 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.102	4.102	0.000	108286430	1000.00	895	80.00- 120.00	100.00(M)
4.530	4.530	0.000	98467674	1000.00	1030	70.93- 110.93	90.93
4.785	4.785	0.000	61978237	1000.00	905	37.24- 77.24	57.24
4.931	4.931	0.000	282865563	1000.00	880	241.22- 281.22	261.22
5.023	5.023	0.000	244485650	1000.00	894	205.78- 245.78	225.78
Average of Peak Amounts =					920		
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	567319545	200.000	200	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.019	7.025	-0.006	302953990	200.000	198	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/020b2001.d

Page 1

Date : 16-DEC-2009 18:58

Client ID: CHLOR01

Instrument: ecd7a.i

Sample Info: IWPE090916-00CL

Operator: JXM

Column phase: CLP-2

Column diameter: 0.25

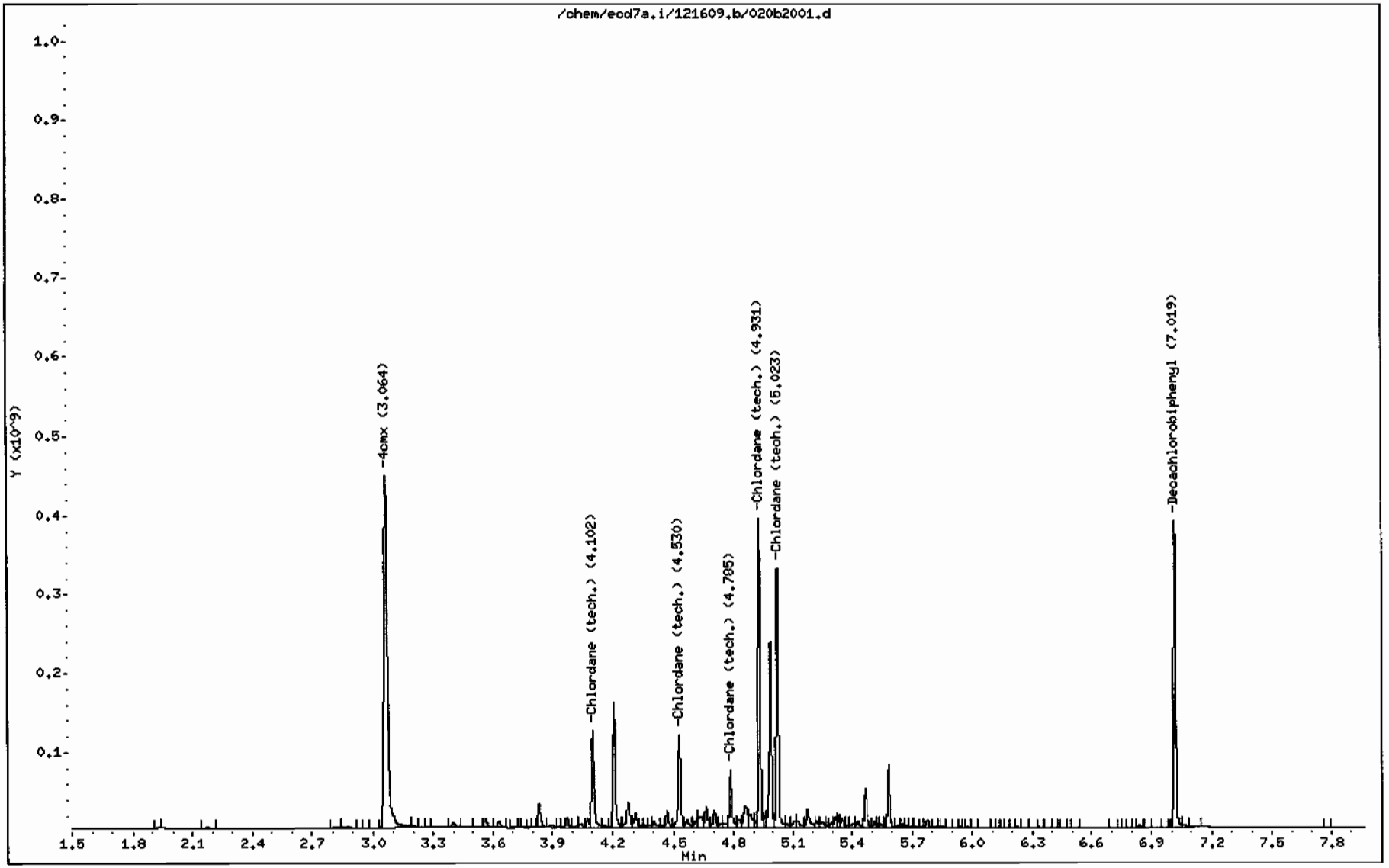

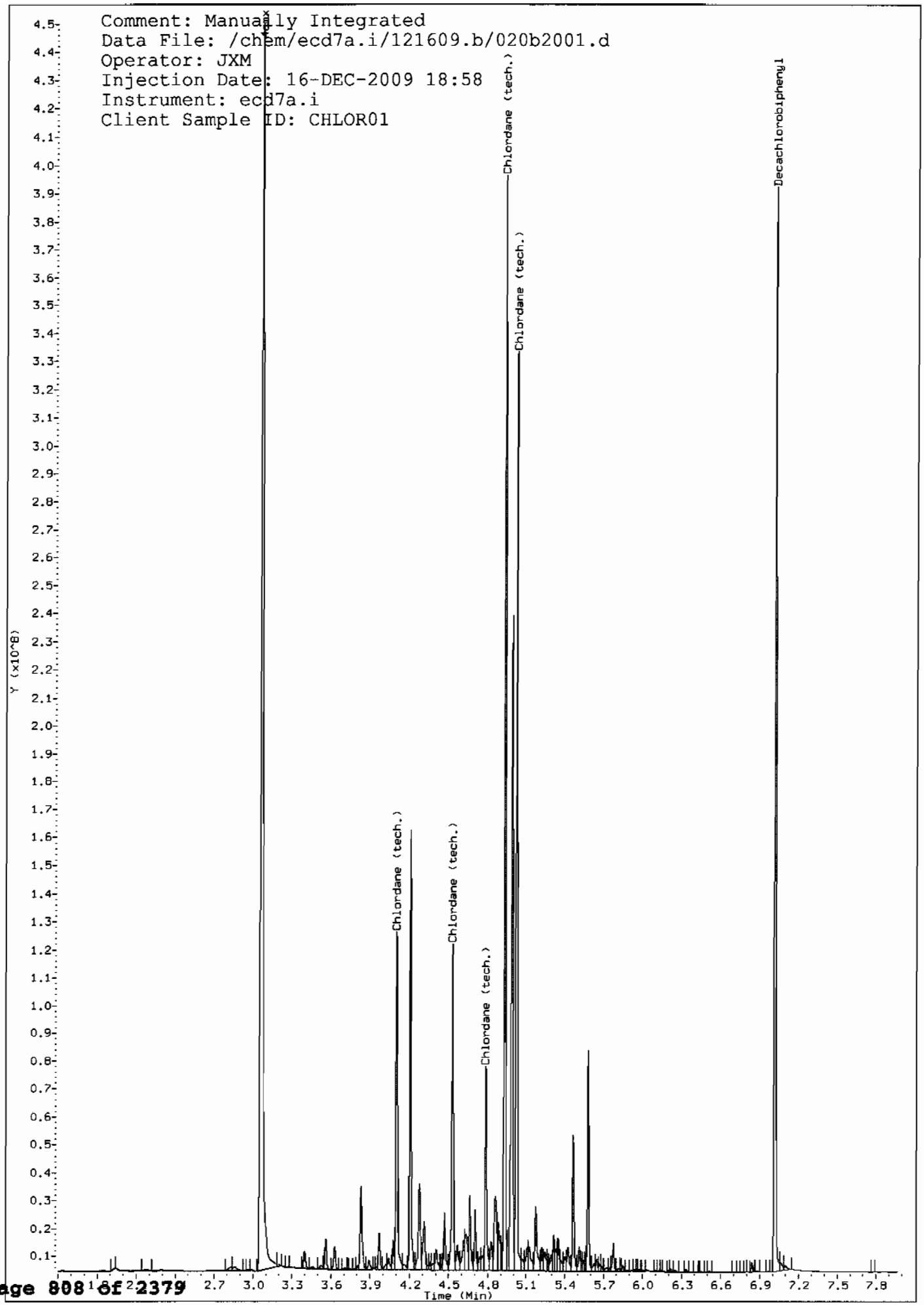
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Operator: JXM
Injection Date: 16-DEC-2009 18:58
Instrument: ecd7a.i
Client Sample ID: CHLOR01
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Y (x10^8)
Time (Min)

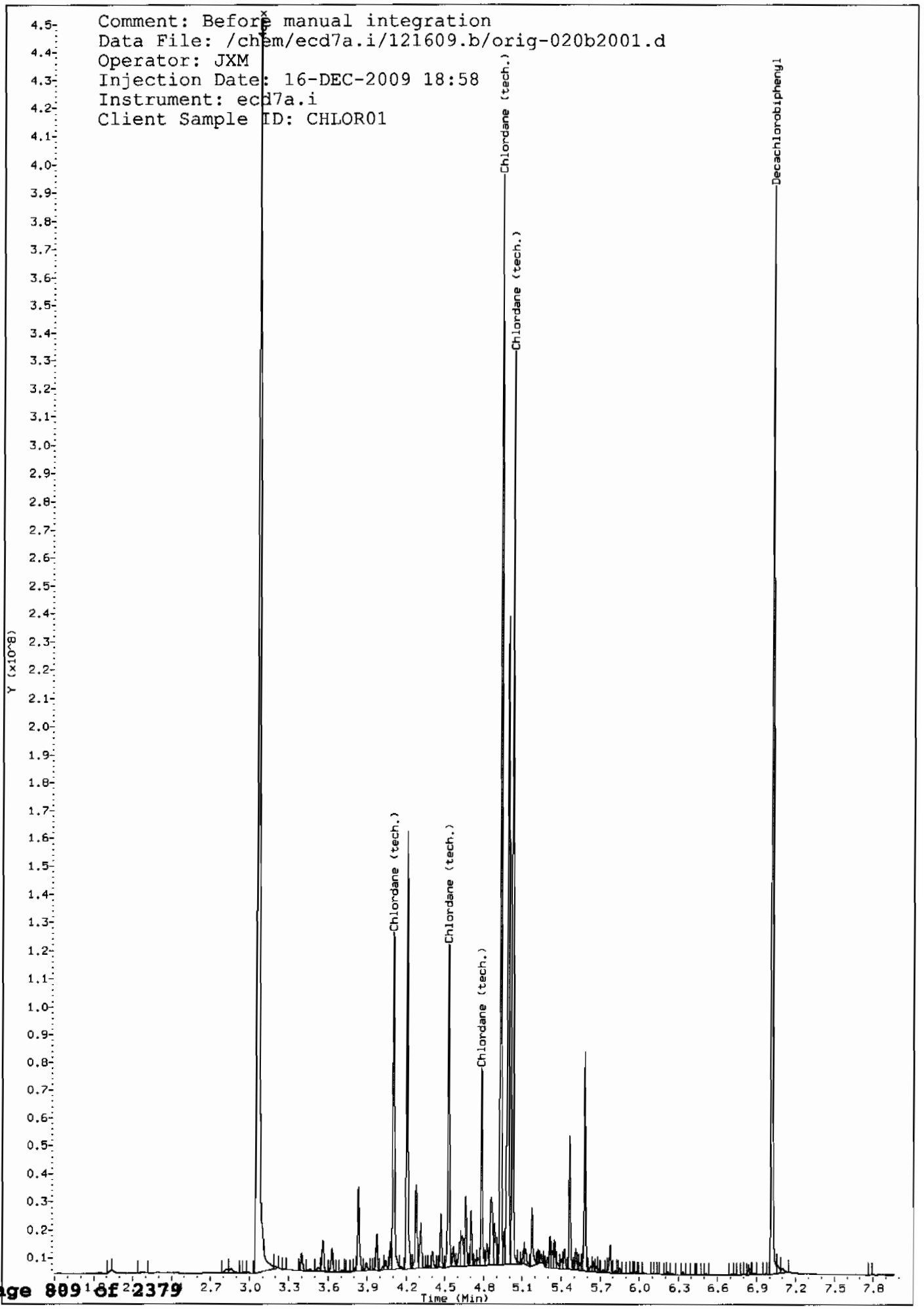
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Operator: JXM
Injection Date: 16-DEC-2009 18:58
Instrument: ecd7a.i
Client Sample ID: CHLOR01
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Y (x10^8)
Time (Min)

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CLP-1

Data file : /chem/ecd7a.i/121609.b/035f3501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB03
Inj Date : 16-DEC-2009 22:50
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.316	3.318	-0.002	310545936	100.000	102	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.575	3.576	-0.001	284272106	100.000	109	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.645	3.645	0.000	115292941	100.000	99.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.929	3.930	-0.001	217865653	100.000	107	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.779	3.780	-0.001	274065912	100.000	101	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.142	4.143	-0.001	255023231	100.000	96.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.550	4.551	-0.001	226935049	100.000	97.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.630	4.631	-0.001	238239411	100.000	105	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.714	4.716	-0.002	205782029	100.000	92.1	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.803	4.805	-0.002	207642217	100.000	99.9	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.759	4.760	-0.001	456931334	200.000	198	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.953	4.955	-0.002	430827468	200.000	193	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.098	5.100	-0.002	373267360	200.000	202	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.128	5.129	-0.001	361178844	200.000	199	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.236	5.238	-0.002	332462740	200.000	187	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.489	5.491	-0.002	262221623	200.000	180	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.296	5.298	-0.002	268359381	200.000	219	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.749	5.754	-0.005	291568678	200.000	190	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.578	5.581	-0.003	532357295	1000.00	1210	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.922	5.928	-0.006	298359805	200.000	221	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.809	2.810	-0.001	499867619	200.000	210	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.506	6.515	-0.009	275063324	200.000	198	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/035f3501.d
Date : 16-DEC-2009 22:50
Client ID: INDA803
Sample Info: IWPE091207-10AB
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

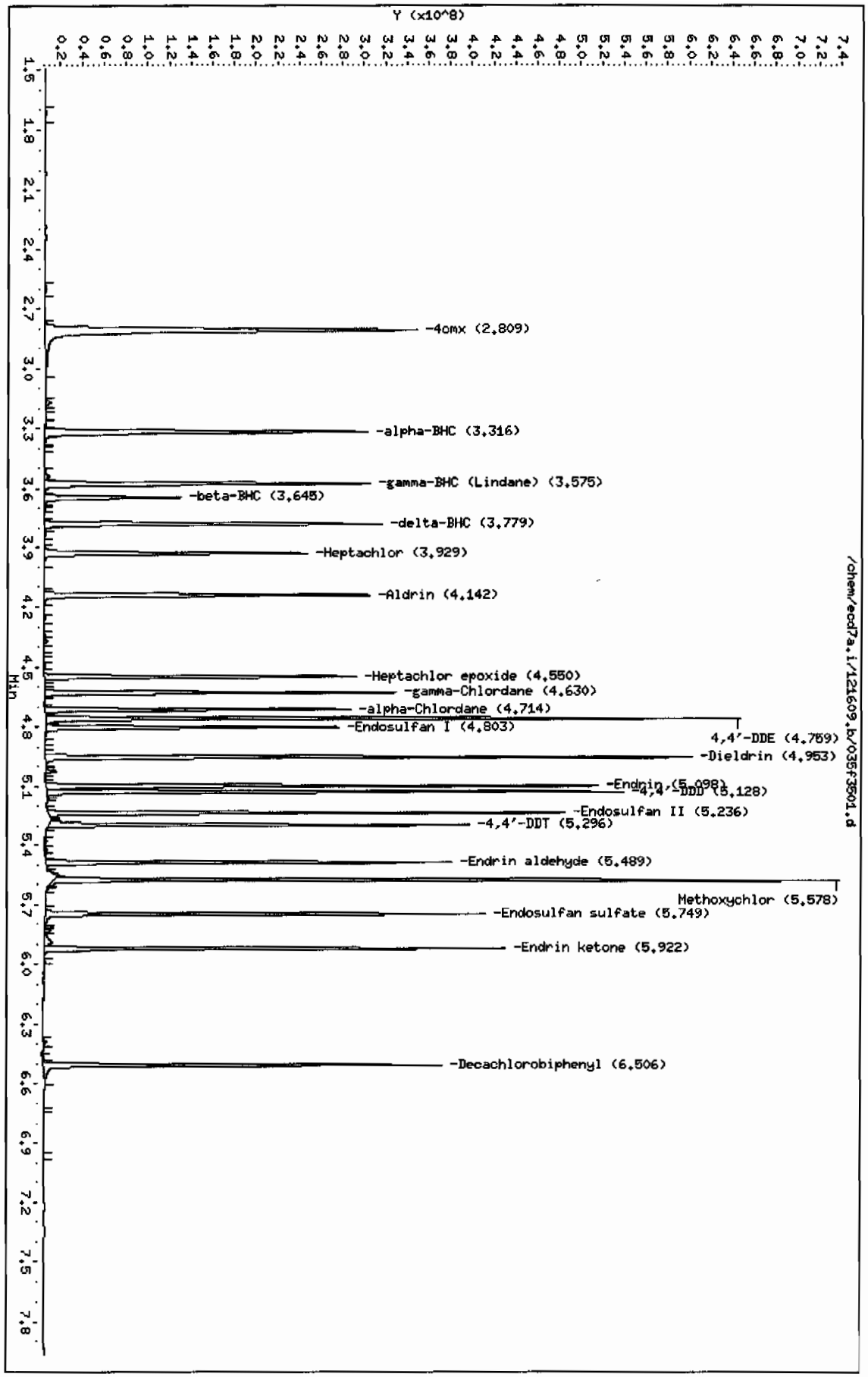

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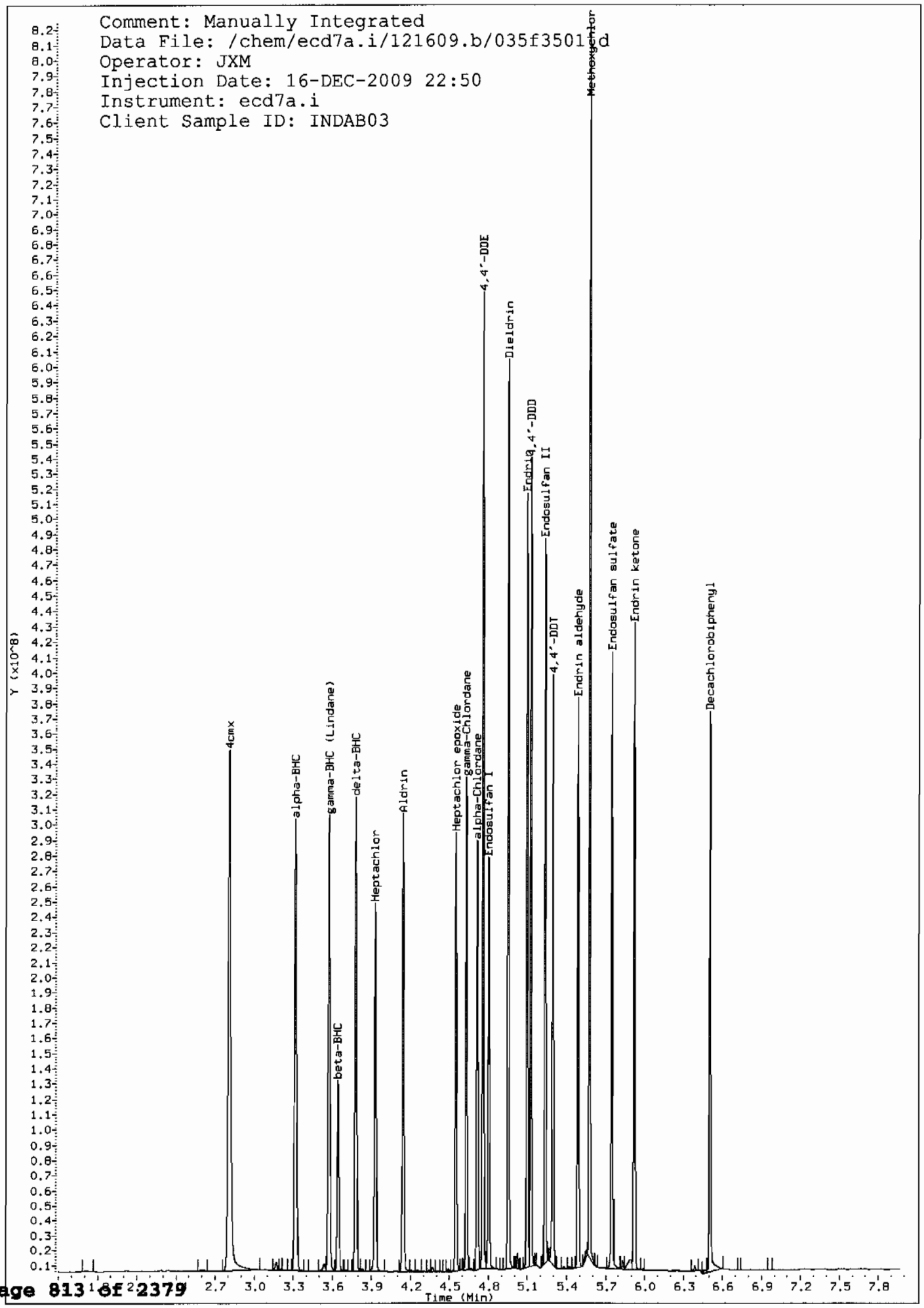
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/035f3501.d
Operator: JXM
Injection Date: 16-DEC-2009 22:50
Instrument: ecd7a.i
Client Sample ID: INDAB03
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl

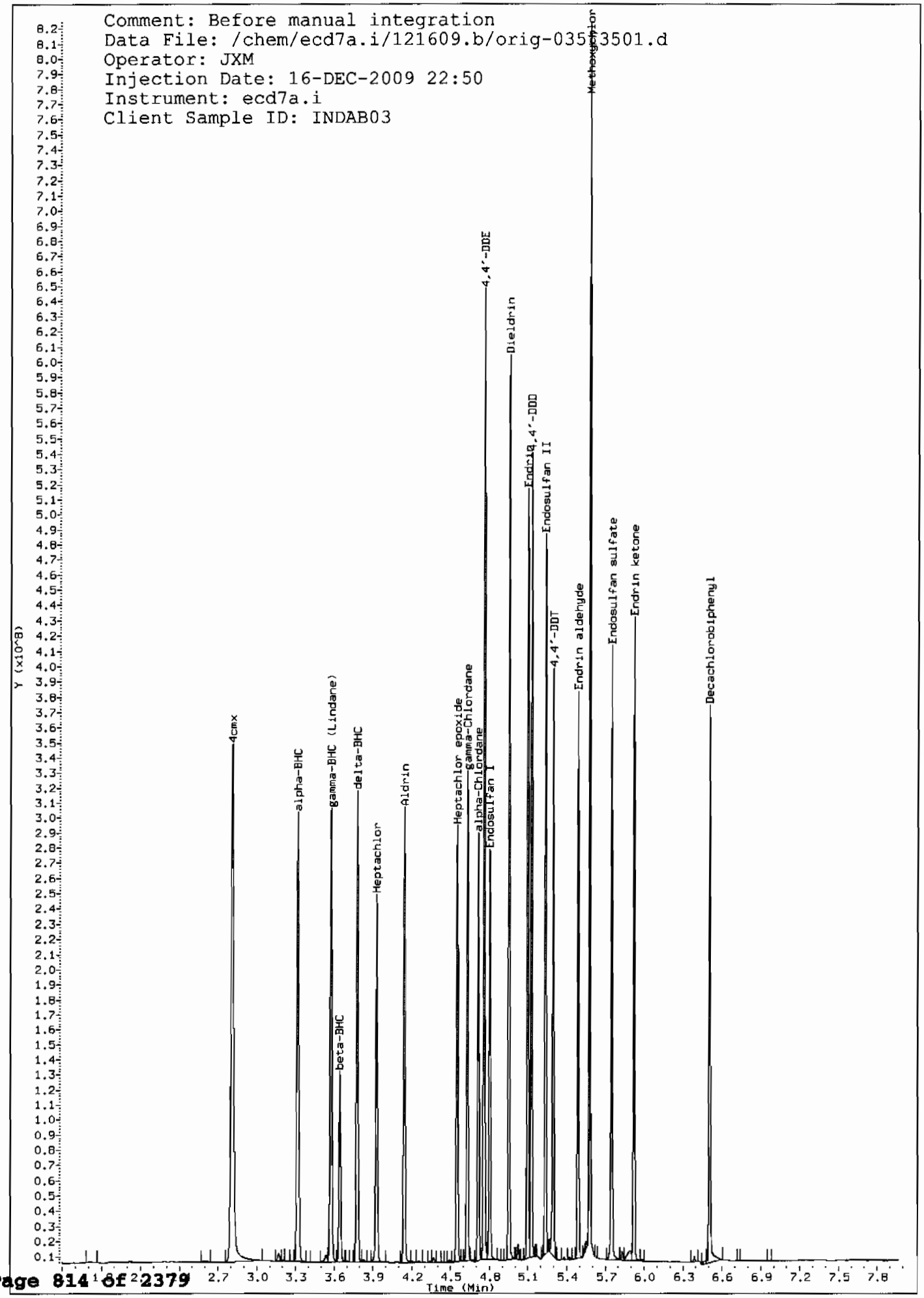
Comment: Before manual integration
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Operator: JXM
Injection Date: 16-DEC-2009 22:50
Instrument: ecd7a.i
Client Sample ID: INDAB03
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl

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Data file : /chem/ecd7a.i/121609.b/035b3501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB03
Inj Date : 16-DEC-2009 22:50
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.600	3.601	-0.001	395269438	100.000	103	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.880	3.880	0.000	351649272	100.000	109	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.939	3.939	0.000	137032601	100.000	99.5	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.206	4.207	-0.001	254988926	100.000	110	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.155	4.155	0.000	333460857	100.000	101	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.435	4.436	-0.001	324669246	100.000	96.3	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.810	4.811	-0.001	280560879	100.000	98.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.930	4.931	-0.001	298550322	100.000	105	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.022	5.023	-0.001	253577932	100.000	92.1	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.064	5.065	-0.001	249695957	100.000	101	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.110	5.111	-0.001	537709378	200.000	200	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
5.234	5.235	-0.001	542754453	200.000	197	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.424	5.425	-0.001	460085358	200.000	210	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.463	5.464	-0.001	424569796	200.000	210	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.549	5.551	-0.002	419703803	200.000	201	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.749	5.753	-0.004	314706600	200.000	184	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.655	5.657	-0.002	270208645	200.000	251	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.915	5.922	-0.007	358325493	200.000	206	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.051	6.059	-0.008	539813170	1000.00	1410	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
6.250	6.260	-0.010	355853318	200.000	232	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
3.063	3.063	0.000	572208580	200.000	202	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.016	7.025	-0.009	306746292	200.000	201	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/035b3501.d

Date : 16-DEC-2009 22:50

Client ID: INDAB03

Sample Info: !WPE091207-10AB

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

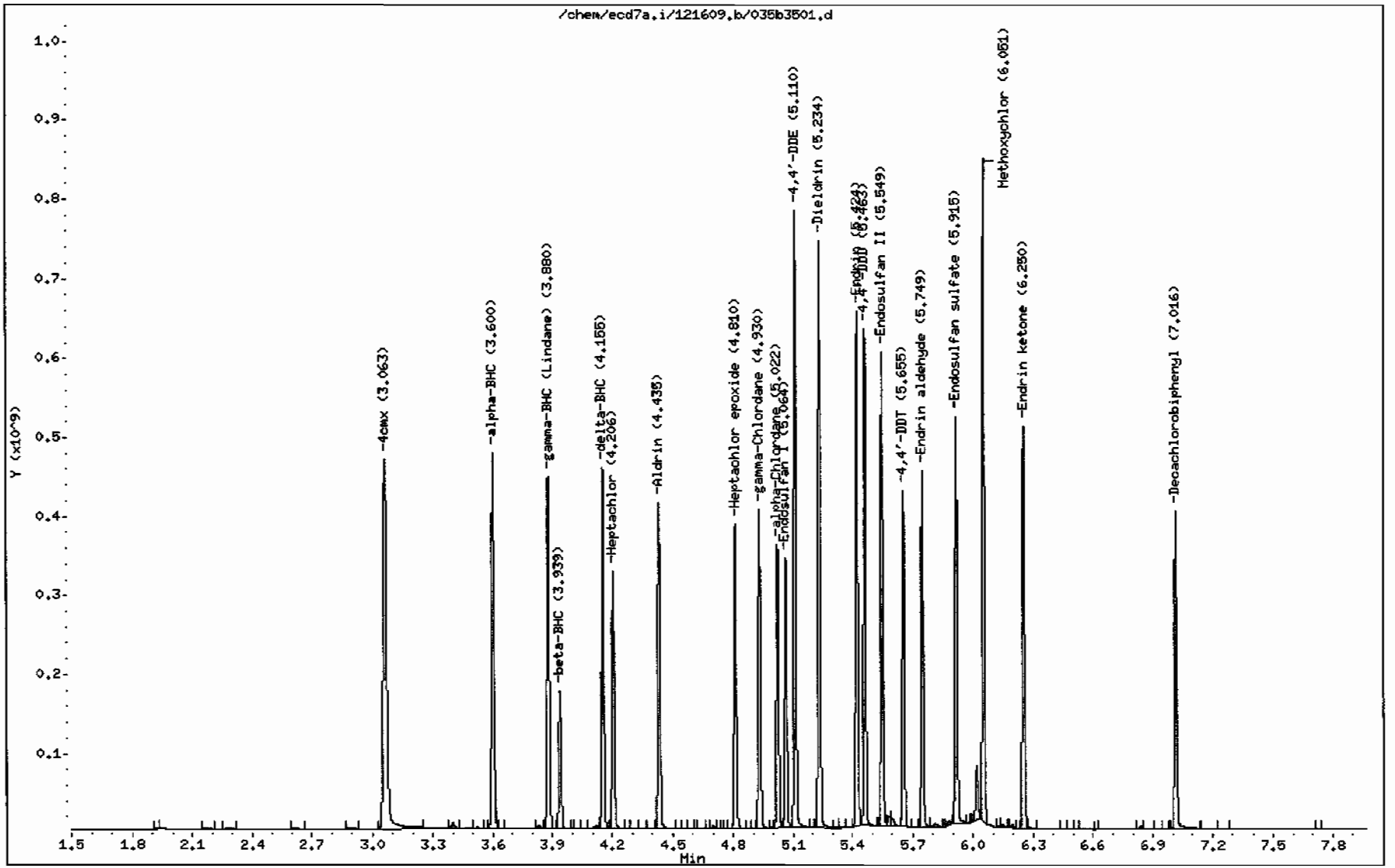

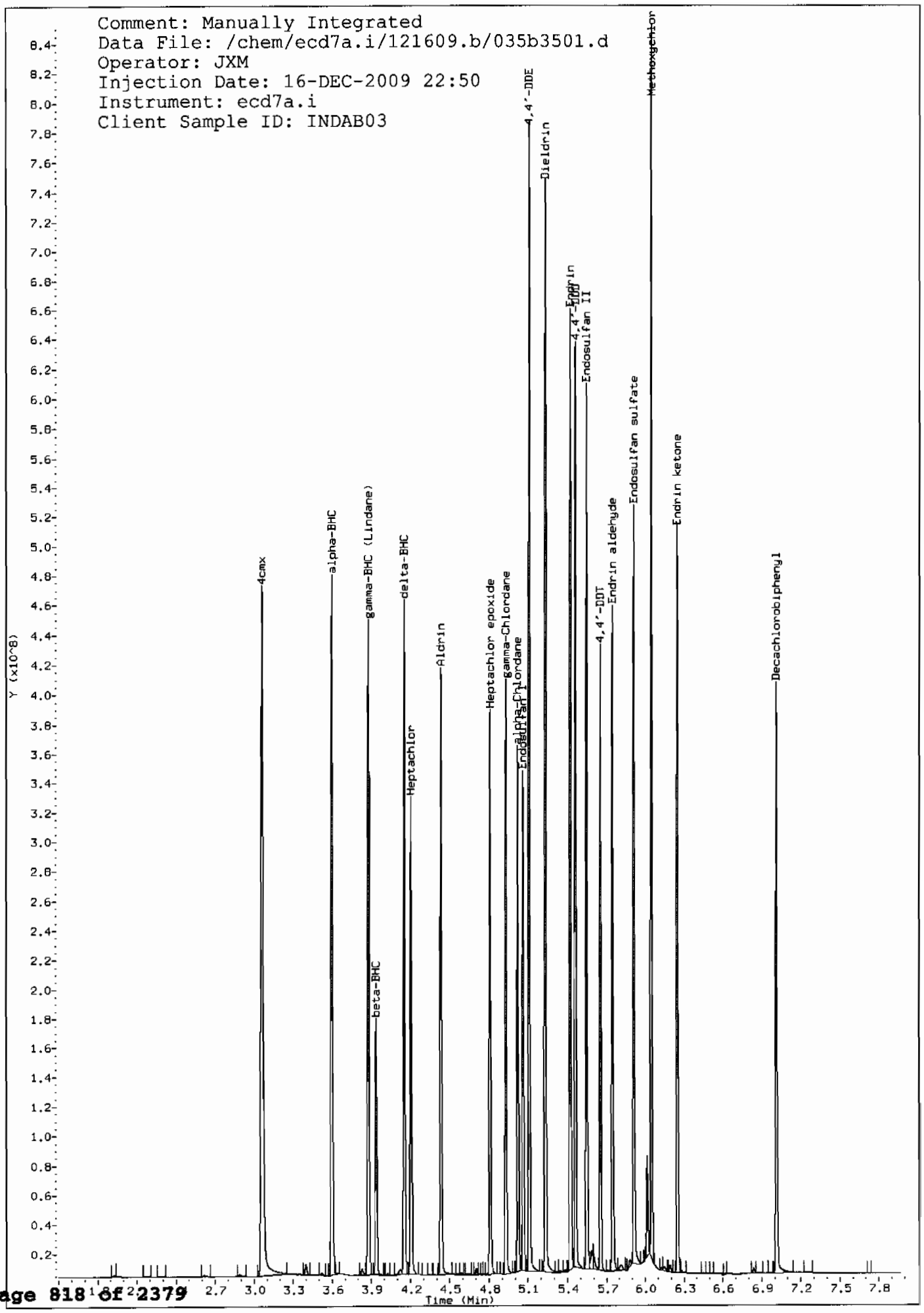
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Operator: JXM
Injection Date: 16-DEC-2009 22:50
Instrument: ecd7a.i
Client Sample ID: INDAB03
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

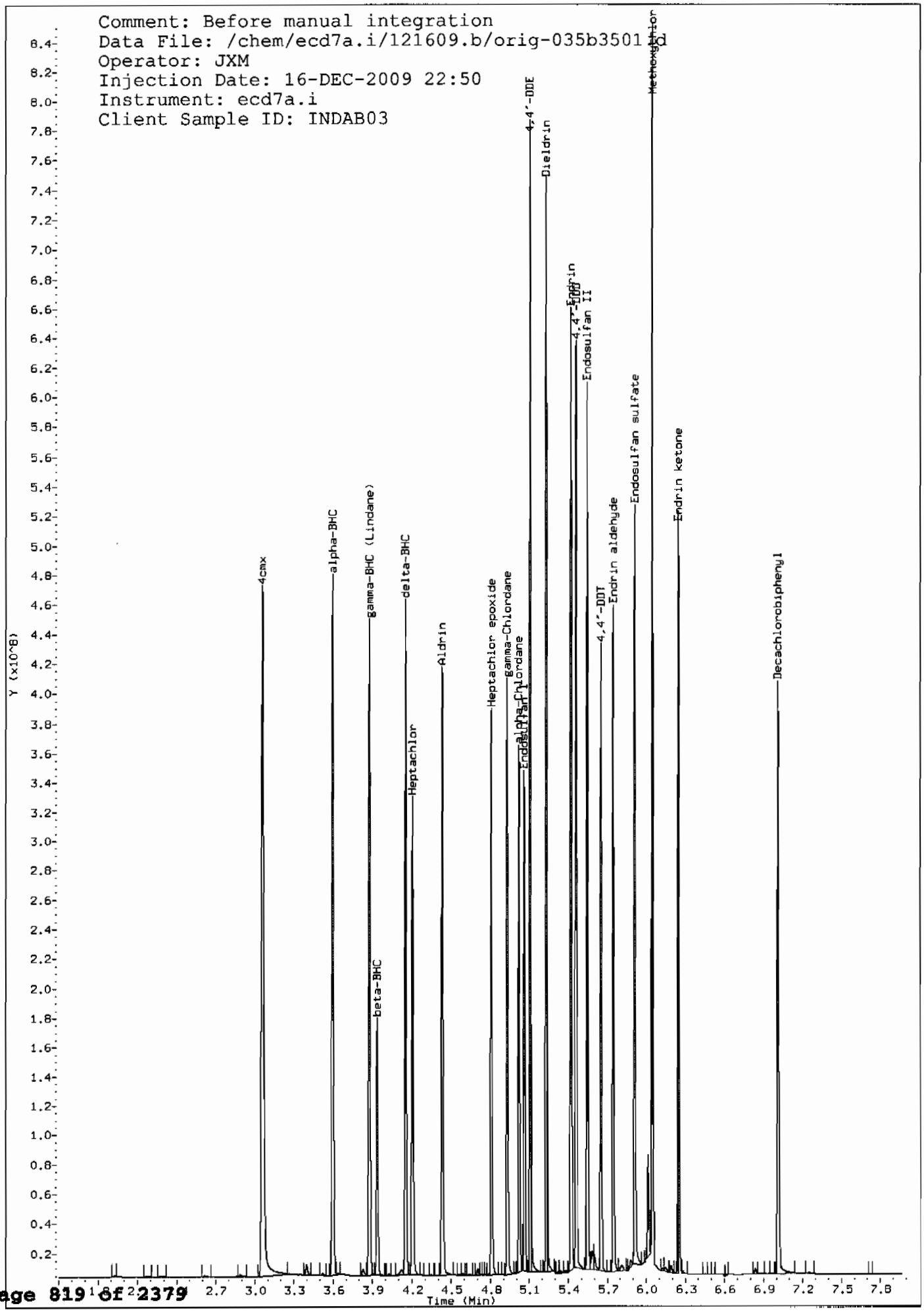
Comment: Before manual integration
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Operator: JXM
Injection Date: 16-DEC-2009 22:50
Instrument: ecd7a.i
Client Sample ID: INDAB03
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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Data file : /chem/ecd7a.i/121609.b/045f4501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB04
Inj Date : 17-DEC-2009 01:18
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.318	3.318	0.000	262181076	100.000	85.9	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.576	3.576	0.000	249393261	100.000	95.6	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.646	3.645	0.001	105829923	100.000	91.6	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.930	3.930	0.000	141653986	100.000	69.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.780	3.780	0.000	251547126	100.000	93.0	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.143	4.143	0.000	230505735	100.000	86.9	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.551	4.551	0.000	207057757	100.000	89.0	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.631	4.631	0.000	214052713	100.000	94.5	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.716	4.716	0.000	188099913	100.000	84.2	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.804	4.805	-0.001	192198123	100.000	92.5	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.759	4.760	-0.001	422120898	200.000	183	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.954	4.955	-0.001	401369067	200.000	180	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.099	5.100	-0.001	348538672	200.000	189	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.129	5.129	0.000	354325808	200.000	196	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.237	5.238	-0.001	336528595	200.000	189	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.489	5.491	-0.002	246814103	200.000	169	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.297	5.298	-0.001	135273634	200.000	116	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.750	5.754	-0.004	275484566	200.000	180	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.579	5.581	-0.002	360321360	1000.00	818	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.923	5.928	-0.005	233852217	200.000	173	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	432554101	200.000	182	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.508	6.515	-0.007	266209563	200.000	192	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/045f4501.d
Date : 17-DEC-2009 01:18
Client ID: INDAB04
Sample Info: IWPE091207-10AB
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

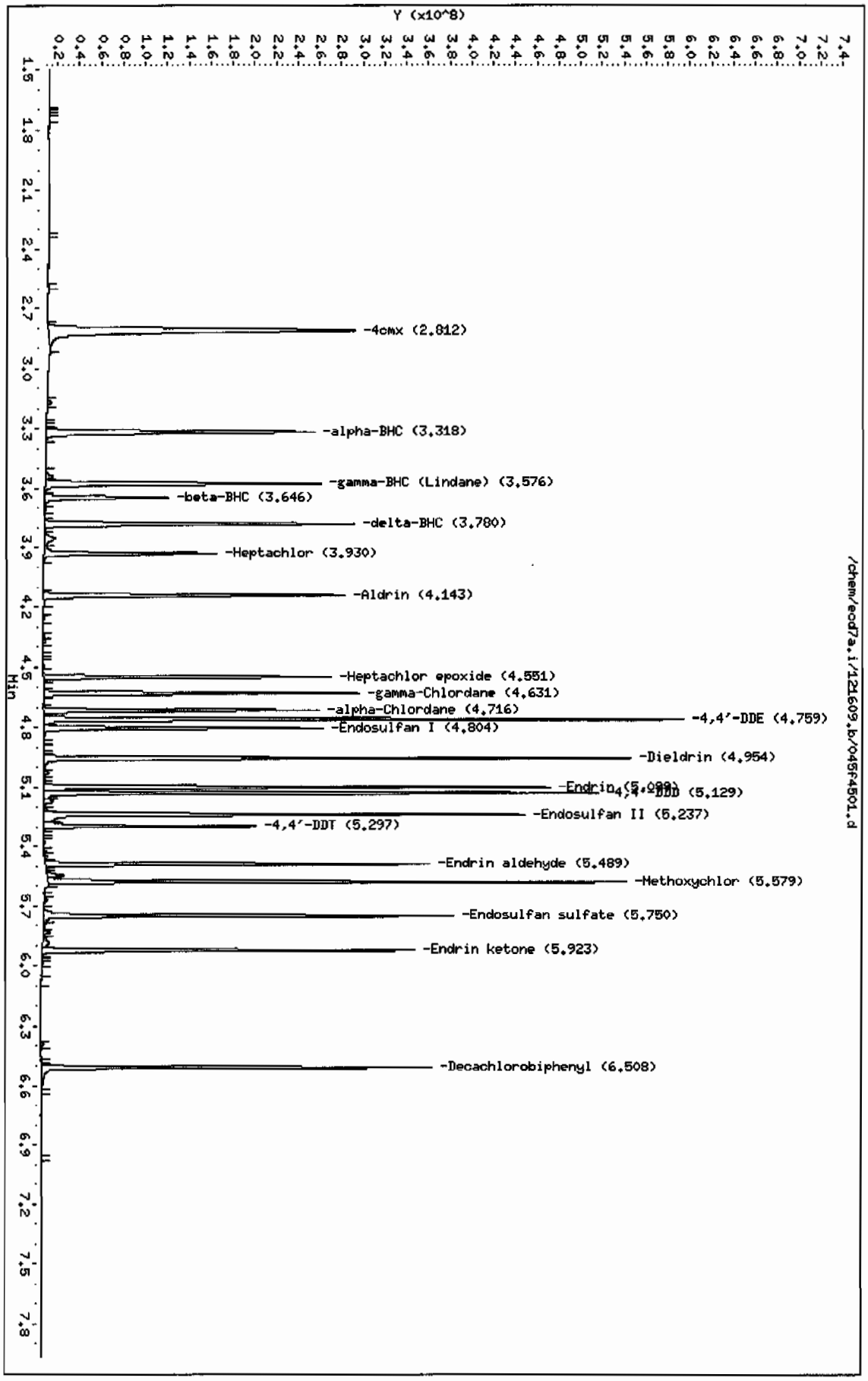

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CLP-2

Data file : /chem/ecd7a.i/121609.b/045b4501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB04
Inj Date : 17-DEC-2009 01:18
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.601	3.601	0.000	363930571	100.000	95.2	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.880	3.880	0.000	314279682	100.000	97.3	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.939	3.939	0.000	122225516	100.000	88.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.208	4.207	0.001	192492835	100.000	83.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.155	4.155	0.000	307539944	100.000	93.3	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.435	4.436	-0.001	290395619	100.000	86.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.811	4.811	0.000	253084770	100.000	88.5	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.931	4.931	0.000	262333781	100.000	92.4	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.023	5.023	0.000	228459372	100.000	83.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.064	5.065	-0.001	227779623	100.000	92.1	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.112	5.111	0.001	488032868	200.000	181	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
5.235	5.235	0.000	491337073	200.000	179	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.425	5.425	0.000	414259668	200.000	189	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.464	5.464	0.000	393332758	200.000	194	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.550	5.551	-0.001	396922565	200.000	190	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.750	5.753	-0.003	296747009	200.000	174	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.656	5.657	-0.001	157990752	200.000	153	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.917	5.922	-0.005	345751443	200.000	199	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.053	6.059	-0.006	375019842	1000.00	981	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.252	6.260	-0.008	300673366	200.000	196	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.063	0.002	525968437	200.000	186	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.019	7.025	-0.006	284574020	200.000	186	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/045b4501.d
Date : 17-DEC-2009 01:18
Client ID: INDAB04
Sample Info: IWPE091207-10AB

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

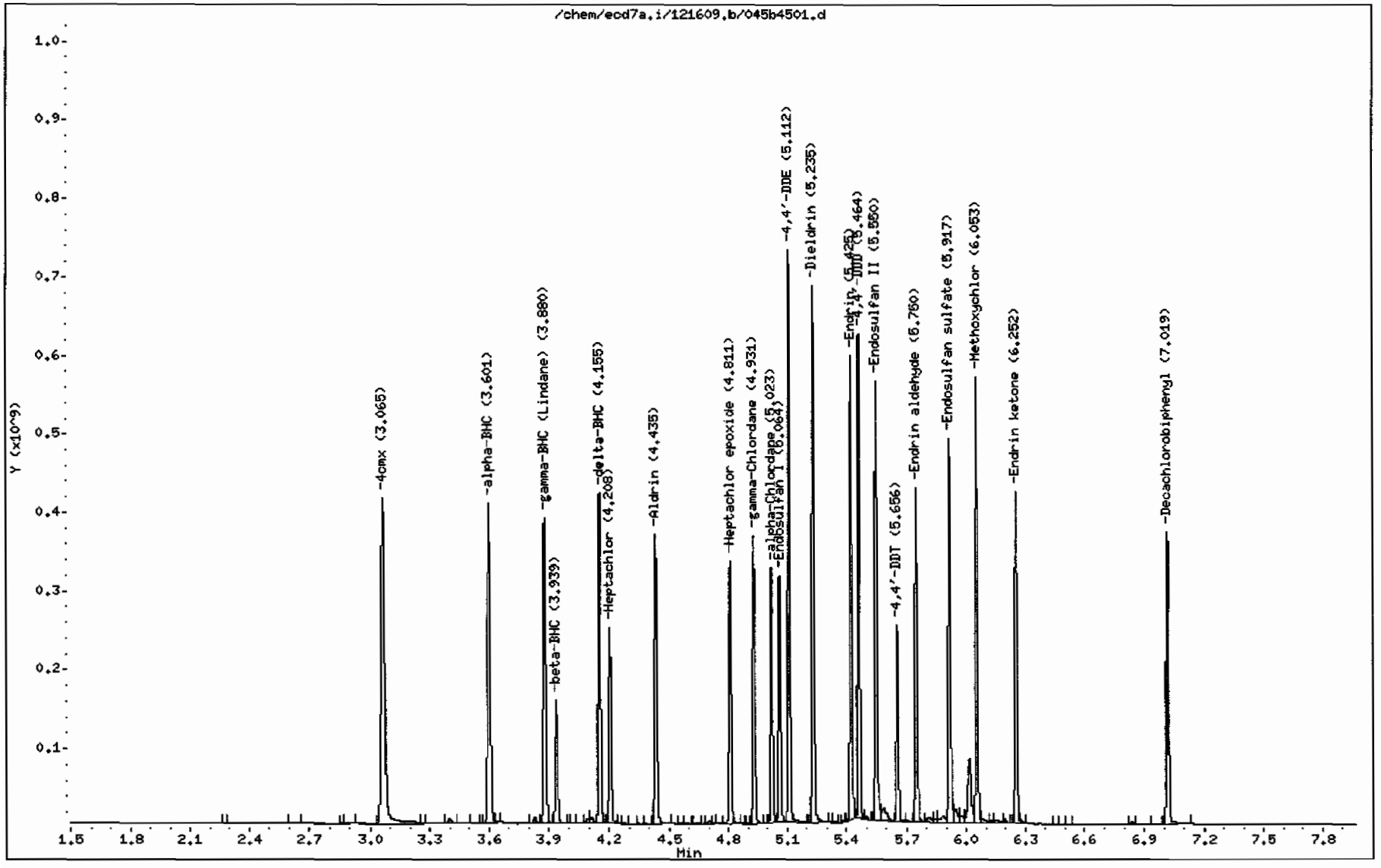

Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/04504501.d
Operator: JXM
Injection Date: 17-DEC-2009 01:18
Instrument: ecd7a.i
Client Sample ID: INDAB04

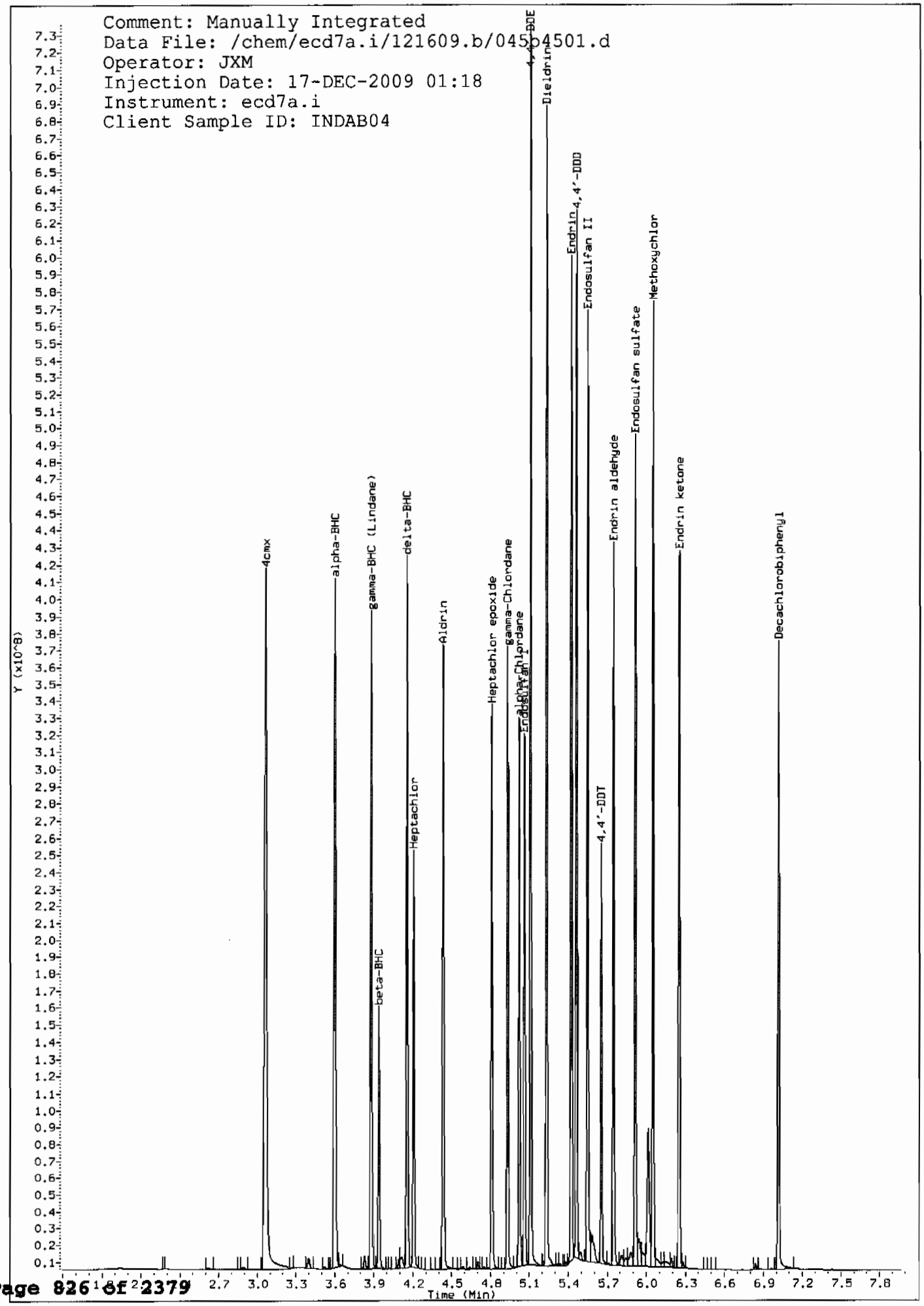

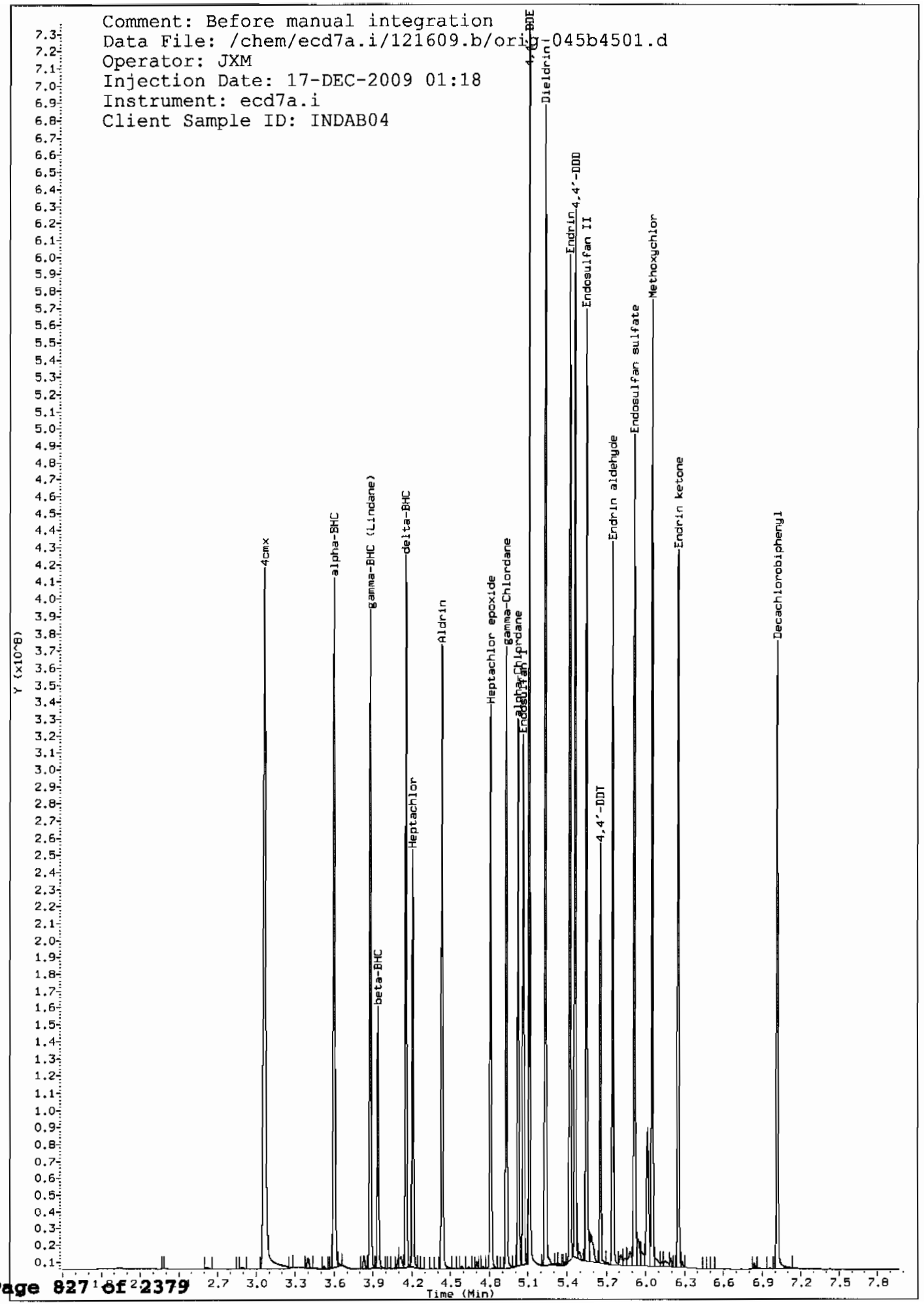
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-045b4501.d
Operator: JXM
Injection Date: 17-DEC-2009 01:18
Instrument: ecd7a.i
Client Sample ID: INDAB04
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/054f5401.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB05
Inj Date : 17-DEC-2009 03:32
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 54 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.317	3.318	-0.001	276962189	100.000	90.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.575	3.576	-0.001	253425170	100.000	97.2	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.645	3.645	0.000	106134244	100.000	91.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.929	3.930	-0.001	169991203	100.000	83.2	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.779	3.780	-0.001	253459981	100.000	93.8	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.142	4.143	-0.001	235402869	100.000	88.7	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.550	4.551	-0.001	209967559	100.000	90.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.630	4.631	-0.001	218238963	100.000	96.4	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.715	4.716	-0.001	190840925	100.000	85.4	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.804	4.805	-0.001	194884001	100.000	93.8	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.759	4.760	-0.001	431105256	200.000	187	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.953	4.955	-0.002	406300151	200.000	182	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.098	5.100	-0.002	352388076	200.000	191	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.128	5.129	-0.001	356291764	200.000	197	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.236	5.238	-0.002	335232696	200.000	188	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.489	5.491	-0.002	251523096	200.000	173	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.296	5.298	-0.002	178288308	200.000	149	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.750	5.754	-0.004	283344276	200.000	185	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.578	5.581	-0.003	401754304	1000.00	912	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.922	5.928	-0.006	246596734	200.000	183	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.810	2.810	0.000	441355191	200.000	185	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.506	6.515	-0.009	273225296	200.000	197	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/0S4F5401.d
Date : 17-DEC-2009 03:32
Client ID: INDABO5
Sample Info: IWPE091207-10AB

Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXH
Column diameter: 0.25

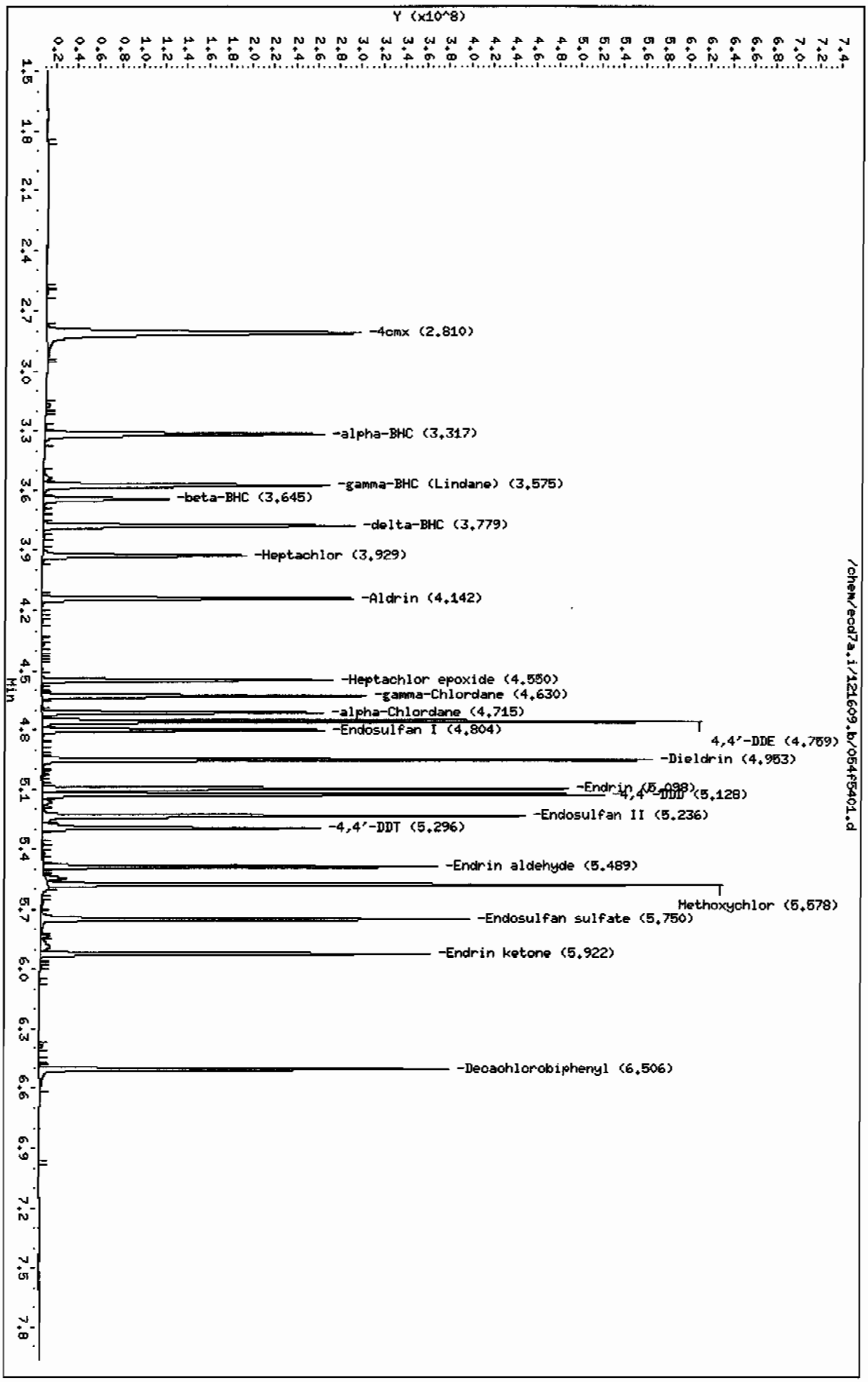

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/054b5401.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB05
Inj Date : 17-DEC-2009 03:32
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 54 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.600	3.601	-0.001	387268546	100.000	101	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.880	3.880	0.000	332280821	100.000	103	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.939	3.939	0.000	129129150	100.000	93.8	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.206	4.207	-0.001	216406929	100.000	93.8	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.154	4.155	-0.001	327763069	100.000	99.4	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.435	4.436	-0.001	309855055	100.000	91.9	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.810	4.811	-0.001	269597108	100.000	94.3	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.930	4.931	-0.001	286816975	100.000	101	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.022	5.023	-0.001	245169498	100.000	89.0	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.063	5.065	-0.002	242126903	100.000	97.9	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.110	5.111	-0.001	521774820	200.000	194	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
5.234	5.235	-0.001	521984115	200.000	190	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.423	5.425	-0.002	434457226	200.000	199	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.463	5.464	-0.001	419778976	200.000	208	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.549	5.551	-0.002	408154259	200.000	196	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.749	5.753	-0.004	313841946	200.000	184	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.655	5.657	-0.002	171494620	200.000	165	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.916	5.922	-0.006	359546971	200.000	207	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.051	6.059	-0.008	385046476	1000.00	1010	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.250	6.260	-0.010	312020749	200.000	204	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.063	3.063	0.000	545724976	200.000	193	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.025	-0.008	305132294	200.000	200	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/054b5401.d
Date : 17-DEC-2009 03:32
Client ID: INDAB05
Sample Info: IWPE091207-10AB

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

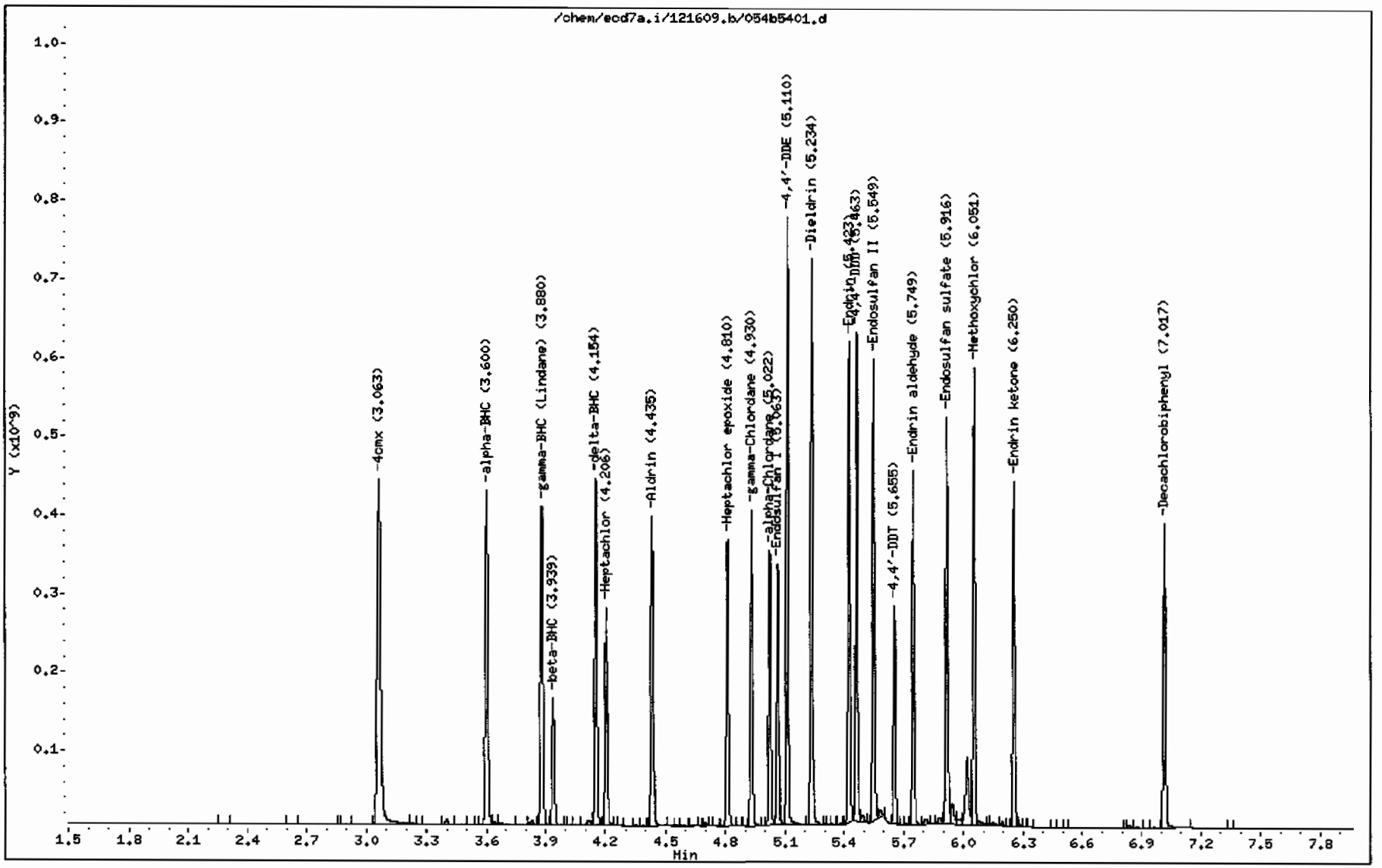

Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/05405401.d
Operator: JXM
Injection Date: 17-DEC-2009 03:32
Instrument: ecd7a.i
Client Sample ID: INDAB05

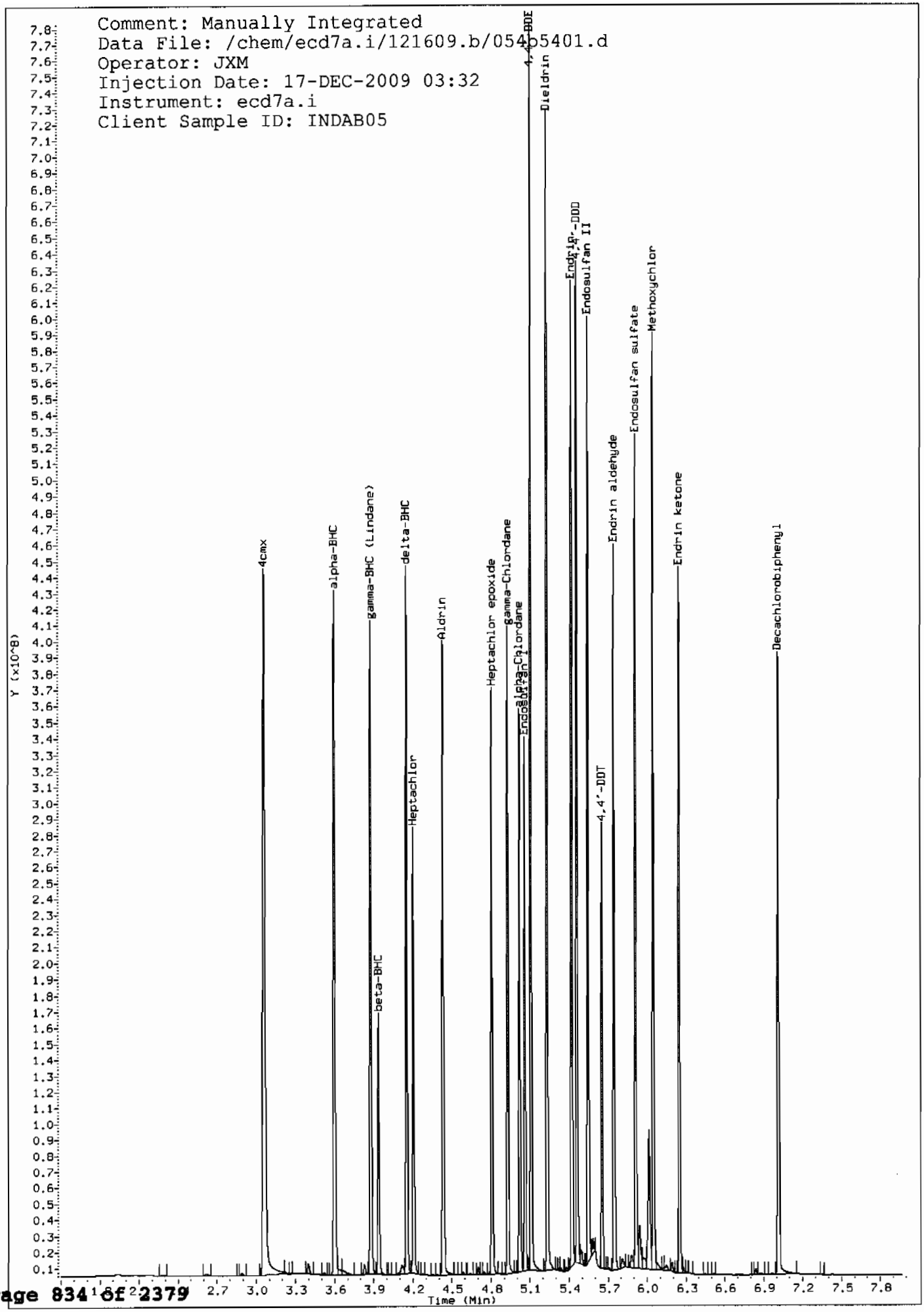

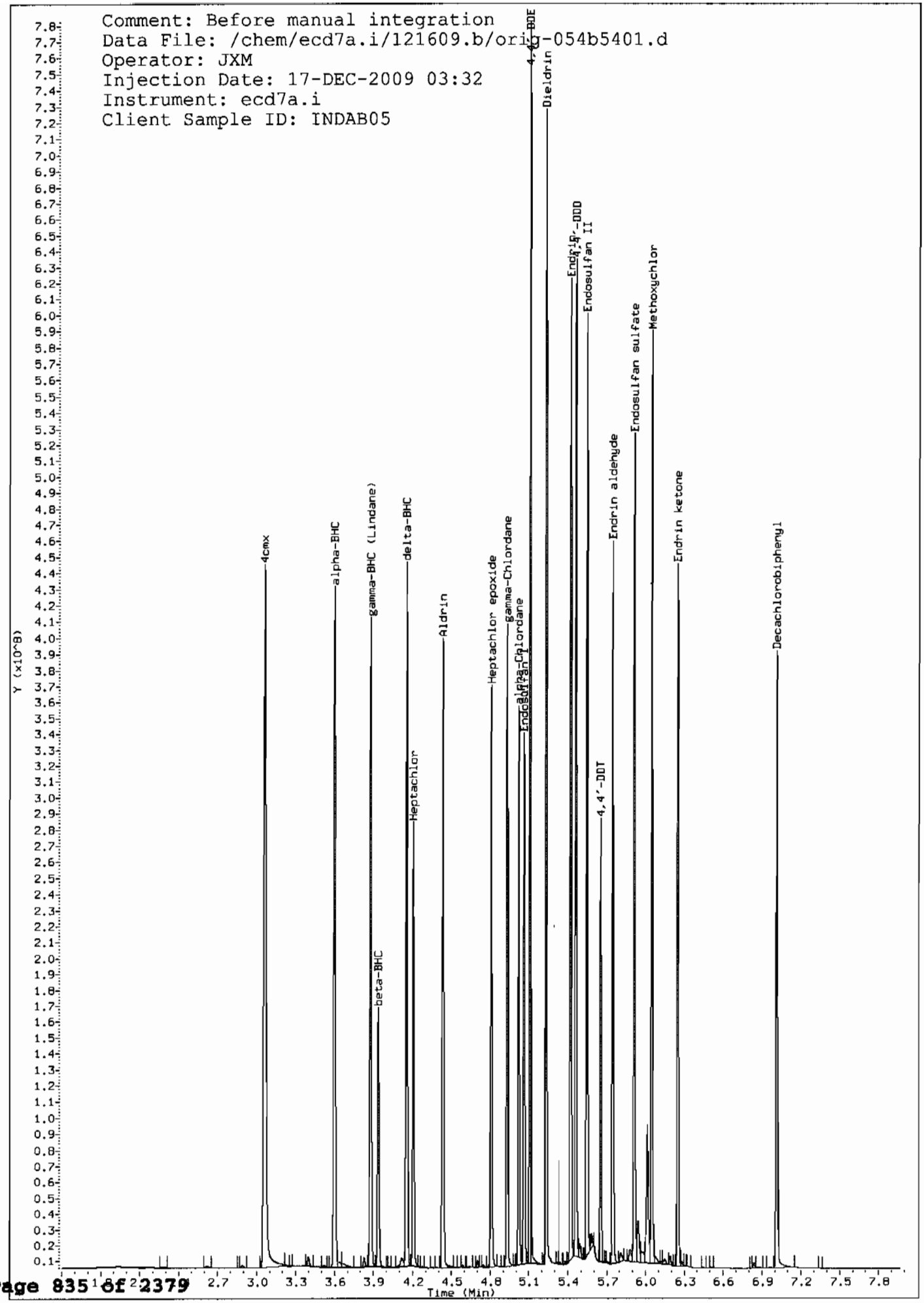
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-054b5401.d
Operator: JXM
Injection Date: 17-DEC-2009 03:32
Instrument: ecd7a.i
Client Sample ID: INDAB05
Y (x10^8)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

Instrument ID: ECD7A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.81 DCB: 6.51

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR091130-99	12/16/09	1416	2.81	6.53
02	PEM01	WPE091109-99	12/16/09	1431	2.81	6.52
03	INDAB01	WPE091216-01	12/16/09	1446	2.81	6.51
04	INDAB02	WPE091216-02	12/16/09	1500	2.81	6.51
05	INDAB03	WPE091216-03	12/16/09	1515	2.81	6.51
06	INDAB04	WPE091216-04	12/16/09	1530	2.81	6.51
07	INDAB05	IPE091128-02	12/16/09	1545	2.81	6.51
08	INDAB01	WPE091207-10	12/16/09	1600	2.81	6.52
09	TOXAPH01	WPE091216-11	12/16/09	1615	2.81	6.51
10	TOXAPH02	WPE091216-12	12/16/09	1630	2.81	6.51
11	TOXAPH03	WPE091216-13	12/16/09	1644	2.81	6.51
12	TOXAPH04	WPE091216-14	12/16/09	1659	2.81	6.51
13	TOXAPH05	IPE091121-40	12/16/09	1714	2.81	6.51
14	TOXAPH01	WPE091104-52	12/16/09	1729	2.81	6.51
15	CHLOR01	WPE091216-21	12/16/09	1744	2.81	6.51
16	CHLOR02	WPE091216-22	12/16/09	1759	2.81	6.51
17	CHLOR03	WPE091216-23	12/16/09	1814	2.81	6.51
18	CHLOR04	WPE091216-24	12/16/09	1829	2.81	6.51
19	CHLOR05	IPE091029-06	12/16/09	1843	2.81	6.51
20	CHLOR01	WPE090916-00	12/16/09	1858	2.81	6.51
21	PIBLK02	WAR091130-99	12/16/09	1913	2.81	6.51
22	ZZZZZ	ZZZZZ	12/16/09	1928	2.81	6.51
23	INDAB02	WPE091207-10	12/16/09	1952	2.81	6.52
24	PIBLK03	WAR091130-99	12/16/09	2007	2.81	6.51
25	PEM02	WPE091109-99	12/16/09	2022	2.81	6.51
26	ZZZZZ	ZZZZZ	12/16/09	2037	2.81	6.51
27	ZZZZZ	ZZZZZ	12/16/09	2051	2.81	6.51
28	ZZZZZ	ZZZZZ	12/16/09	2106	2.81	6.51
29	ZZZZZ	ZZZZZ	12/16/09	2121	2.81	6.51
30	ZZZZZ	ZZZZZ	12/16/09	2136	2.81	6.51
31	ZZZZZ	ZZZZZ	12/16/09	2151	2.81	6.51
32	ZZZZZ	ZZZZZ	12/16/09	2206	2.81	6.51

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

Instrument ID: ECD7A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.81 DCB: 6.51

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/16/09	2220	2.81	6.51
02	PIBLK04	WAR091130-99	12/16/09	2235	2.81	6.51
03	INDAB03	WPE091207-10	12/16/09	2250	2.81	6.51
04	PIBLK05	WAR091130-99	12/16/09	2305	2.81	6.51
05	WST03-10-2134	241839001	12/16/09	2320	2.81	6.51
06	WST03-10-2134MS	1201996511	12/16/09	2335	2.81	6.51
07	WST03-10-2134MSD	1201996514	12/16/09	2349	2.81	6.51
08	WST03-10-2134TMS	1201996512	12/17/09	0004	2.81	6.51
09	WST03-10-2134TMSD	1201996515	12/17/09	0019	2.81	6.51
10	WST03-10-2134CMS	1201996513	12/17/09	0034	2.81	6.51
11	WST03-10-2134CMSD	1201996516	12/17/09	0049	2.81	6.51
12	ZZZZZ	ZZZZZ	12/17/09	0104	2.81	6.51
13	INDAB04	WPE091207-10	12/17/09	0118	2.81	6.51
14	PIBLK06	WAR091130-99	12/17/09	0133	2.81	6.51
15	TBLK01	1201988990	12/17/09	0148	2.81	6.51
16	ZZZZZ	ZZZZZ	12/17/09	0203	2.81	6.51
17	PBLK01	1201996510	12/17/09	0218	2.81	6.51
18	PBLK01LCS	1201996517	12/17/09	0233	2.81	6.50
19	PBLK01TLCS	1201996518	12/17/09	0247	2.81	6.51
20	PBLK01CLCS	1201996519	12/17/09	0302	2.81	6.51
21	PIBLK07	WAR091130-99	12/17/09	0317	2.81	6.51
22	INDAB05	WPE091207-10	12/17/09	0332	2.81	6.51
23	PIBLK08	WAR091130-99	12/17/09	0347	2.81	6.51
24	ZZZZZ	ZZZZZ	12/17/09	0401	2.81	6.51
25	ZZZZZ	ZZZZZ	12/17/09	0416	2.81	6.51
26	ZZZZZ	ZZZZZ	12/17/09	0431	2.81	6.51
27	ZZZZZ	ZZZZZ	12/17/09	0446	2.81	6.51
28	ZZZZZ	ZZZZZ	12/17/09	0501	2.81	6.51
29	PIBLK09	WAR091130-99	12/17/09	0515	2.81	6.51
30	INDAB06	WPE091207-10	12/17/09	0530	2.81	6.51
31	PIBLK10	WAR091130-99	12/17/09	0545	2.81	6.51
32	ZZZZZ	ZZZZZ	12/17/09	0600	2.81	6.51

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

Instrument ID: ECD7A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.06 DCB: 7.03

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR091130-99	12/16/09	1416	3.06	7.04
02	PEM01	WPE091109-99	12/16/09	1431	3.06	7.03
03	INDAB01	WPE091216-01	12/16/09	1446	3.06	7.02
04	INDAB02	WPE091216-02	12/16/09	1500	3.06	7.02
05	INDAB03	WPE091216-03	12/16/09	1515	3.06	7.02
06	INDAB04	WPE091216-04	12/16/09	1530	3.06	7.02
07	INDAB05	IPE091128-02	12/16/09	1545	3.06	7.02
08	INDAB01	WPE091207-10	12/16/09	1600	3.06	7.03
09	TOXAPH01	WPE091216-11	12/16/09	1615	3.06	7.02
10	TOXAPH02	WPE091216-12	12/16/09	1630	3.07	7.02
11	TOXAPH03	WPE091216-13	12/16/09	1644	3.06	7.02
12	TOXAPH04	WPE091216-14	12/16/09	1659	3.06	7.02
13	TOXAPH05	IPE091121-40	12/16/09	1714	3.06	7.02
14	TOXAPH01	WPE091104-52	12/16/09	1729	3.06	7.02
15	CHLOR01	WPE091216-21	12/16/09	1744	3.06	7.02
16	CHLOR02	WPE091216-22	12/16/09	1759	3.06	7.02
17	CHLOR03	WPE091216-23	12/16/09	1814	3.06	7.02
18	CHLOR04	WPE091216-24	12/16/09	1829	3.06	7.02
19	CHLOR05	IPE091029-06	12/16/09	1843	3.06	7.02
20	CHLOR01	WPE090916-00	12/16/09	1858	3.06	7.02
21	PIBLK02	WAR091130-99	12/16/09	1913	3.06	7.02
22	ZZZZZ	ZZZZZ	12/16/09	1928	3.06	7.02
23	INDAB02	WPE091207-10	12/16/09	1952	3.06	7.03
24	PIBLK03	WAR091130-99	12/16/09	2007	3.06	7.02
25	PEM02	WPE091109-99	12/16/09	2022	3.06	7.02
26	ZZZZZ	ZZZZZ	12/16/09	2037	3.06	7.02
27	ZZZZZ	ZZZZZ	12/16/09	2051	3.06	7.02
28	ZZZZZ	ZZZZZ	12/16/09	2106	3.06	7.02
29	ZZZZZ	ZZZZZ	12/16/09	2121	3.06	7.02
30	ZZZZZ	ZZZZZ	12/16/09	2136	3.06	7.02
31	ZZZZZ	ZZZZZ	12/16/09	2151	3.06	7.02
32	ZZZZZ	ZZZZZ	12/16/09	2206	3.06	7.02

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/16/09 12/16/09

Instrument ID: ECD7A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.06 DCB: 7.03

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/16/09	2220	3.06	7.02
02	PIBLK04	WAR091130-99	12/16/09	2235	3.06	7.02
03	INDAB03	WPE091207-10	12/16/09	2250	3.06	7.02
04	PIBLK05	WAR091130-99	12/16/09	2305	3.06	7.02
05	WST03-10-2134	241839001	12/16/09	2320	3.06	7.02
06	WST03-10-2134MS	1201996511	12/16/09	2335	3.06	7.02
07	WST03-10-2134MSD	1201996514	12/16/09	2349	3.07	7.02
08	WST03-10-2134TMS	1201996512	12/17/09	0004	3.06	7.02
09	WST03-10-2134TMSD	1201996515	12/17/09	0019	3.06	7.02
10	WST03-10-2134CMS	1201996513	12/17/09	0034	3.06	7.02
11	WST03-10-2134CMSD	1201996516	12/17/09	0049	3.06	7.02
12	ZZZZZ	ZZZZZ	12/17/09	0104	3.07	7.02
13	INDAB04	WPE091207-10	12/17/09	0118	3.06	7.02
14	PIBLK06	WAR091130-99	12/17/09	0133	3.06	7.02
15	TBLK01	1201988990	12/17/09	0148	3.06	7.02
16	ZZZZZ	ZZZZZ	12/17/09	0203	3.06	7.02
17	PBLK01	1201996510	12/17/09	0218	3.06	7.02
18	PBLK01LCS	1201996517	12/17/09	0233	3.06	7.01
19	PBLK01TLCS	1201996518	12/17/09	0247	3.06	7.02
20	PBLK01CLCS	1201996519	12/17/09	0302	3.06	7.02
21	PIBLK07	WAR091130-99	12/17/09	0317	3.06	7.02
22	INDAB05	WPE091207-10	12/17/09	0332	3.06	7.02
23	PIBLK08	WAR091130-99	12/17/09	0347	3.06	7.02
24	ZZZZZ	ZZZZZ	12/17/09	0401	3.06	7.02
25	ZZZZZ	ZZZZZ	12/17/09	0416	3.06	7.02
26	ZZZZZ	ZZZZZ	12/17/09	0431	3.06	7.02
27	ZZZZZ	ZZZZZ	12/17/09	0446	3.06	7.02
28	ZZZZZ	ZZZZZ	12/17/09	0501	3.06	7.02
29	PIBLK09	WAR091130-99	12/17/09	0515	3.06	7.02
30	INDAB06	WPE091207-10	12/17/09	0530	3.06	7.02
31	PIBLK10	WAR091130-99	12/17/09	0545	3.06	7.02
32	ZZZZZ	ZZZZZ	12/17/09	0600	3.06	7.02

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

Identification Summary

SDG Number: 10–670–1 **Client ID:** LCS for batch 933213

Lab Sample ID: 1201996517

Data File:	050f5001.d	**Data File:**	050b5001.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	17–DEC–09 02:33	**Analyzed:**	17–DEC–09 02:33

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
gamma–BHC (Lindane)							9.28
Column 1	1	3.58	3.55 – 3.61	.00306		mg/L	
Column 2	1	3.88	3.85 – 3.91	.00336		mg/L	
Heptachlor							15
Column 1	1	3.93	3.9 – 3.96	.00283		mg/L	
Column 2	1	4.21	4.18 – 4.24	.00328		mg/L	
Heptachlor epoxide							6.68
Column 1	1	4.55	4.52 – 4.58	.00308		mg/L	
Column 2	1	4.81	4.78 – 4.84	.0033		mg/L	
Endrin							5.96
Column 1	1	5.1	5.07 – 5.13	.00377		mg/L	
Column 2	1	5.42	5.4 – 5.46	.004		mg/L	
Methoxychlor							9.73
Column 1	1	5.58	5.55 – 5.61	.0419		mg/L	
Column 2	1	6.05	6.03 – 6.09	.0461		mg/L	

Identification Summary

SDG Number: 10–670–1 **Client ID:** LCS for batch 933213

Lab Sample ID: 1201996519

Data File:	052f5201.d	**Data File:**	052b5201.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	17–DEC–09 03:02	**Analyzed:**	17–DEC–09 03:02

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Chlordane (tech.)							7.94
Column 1	1	3.87	3.77 – 3.97	.0547		mg/L	
	2	4.51	4.41 – 4.61	.0596		mg/L	
	3	4.63	4.53 – 4.73	.0609		mg/L	
	4	4.72	4.62 – 4.82	.0664		mg/L	
	5	5.19	5.1 – 5.3	.0702		mg/L	
					.0624		
Column 2	1	4.1	4.07 – 4.13	.059		mg/L	
	2	4.53	4.5 – 4.56	.0753		mg/L	
	3	4.78	4.75 – 4.81	.0676		mg/L	
	4	4.93	4.9 – 4.96	.0673		mg/L	
	5	5.02	4.99 – 5.05	.0684		mg/L	
					.0675		

Identification Summary

SDG Number: 10–670–1 **Client ID:** LCS for batch 933213

Lab Sample ID: 1201996518

Data File:	051f5101.d	**Data File:**	051b5101.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	17–DEC–09 02:47	**Analyzed:**	17–DEC–09 02:47

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							20
Column 1	1	4.96	4.93 – 4.99	.0635		mg/L	
	2	5.01	4.98 – 5.04	.0602		mg/L	
	3	5.05	5.02 – 5.08	.0663		mg/L	
	4	5.11	5.08 – 5.14	.0678		mg/L	
	5	5.23	5.2 – 5.26	.0688		mg/L	
					.0653		
Column 2	1	5.22	5.18 – 5.24	.08		mg/L	
	2	5.29	5.26 – 5.32	.0785		mg/L	
	3	5.32	5.3 – 5.36	.0794		mg/L	
	4	5.4	5.37 – 5.43	.0773		mg/L	
	5	5.54	5.51 – 5.57	.084		mg/L	
					.0798		

Identification Summary

SDG Number: 10–670–1 **Client ID:** WST03–10–2134MS

Lab Sample ID: 1201996511

Data File:	038f3801.d	**Data File:**	038b3801.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	16–DEC–09 23:35	**Analyzed:**	16–DEC–09 23:35

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
gamma–BHC (Lindane)							6.02
Column 1	1	3.58	3.55 – 3.61	.00373		mg/L	
Column 2	1	3.88	3.85 – 3.91	.00397		mg/L	
Heptachlor							9.89
Column 1	1	3.93	3.9 – 3.96	.00346		mg/L	
Column 2	1	4.21	4.18 – 4.24	.00382		mg/L	
Heptachlor epoxide							5.04
Column 1	1	4.55	4.52 – 4.58	.00341		mg/L	
Column 2	1	4.81	4.78 – 4.84	.00358		mg/L	
Endrin							2.92
Column 1	1	5.1	5.07 – 5.13	.00424		mg/L	
Column 2	1	5.42	5.4 – 5.46	.00436		mg/L	
Methoxychlor							12.6
Column 1	1	5.58	5.55 – 5.61	.0576		mg/L	
Column 2	1	6.05	6.03 – 6.09	.0653		mg/L	

Identification Summary

SDG Number: 10–670–1 **Client ID:** WST03–10–2134MSD

Lab Sample ID: 1201996514

Data File:	039f3901.d	**Data File:**	039b3901.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	16–DEC–09 23:49	**Analyzed:**	16–DEC–09 23:49

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
gamma–BHC (Lindane)							8.45
Column 1	1	3.58	3.55 – 3.61	.00332		mg/L	
Column 2	1	3.88	3.85 – 3.91	.00362		mg/L	
Heptachlor							10.6
Column 1	1	3.93	3.9 – 3.96	.00309		mg/L	
Column 2	1	4.21	4.18 – 4.24	.00343		mg/L	
Heptachlor epoxide							8.23
Column 1	1	4.55	4.52 – 4.58	.0032		mg/L	
Column 2	1	4.81	4.78 – 4.84	.00348		mg/L	
Endrin							5.06
Column 1	1	5.1	5.07 – 5.13	.004		mg/L	
Column 2	1	5.42	5.4 – 5.46	.0042		mg/L	
Methoxychlor							12.5
Column 1	1	5.58	5.55 – 5.61	.0531		mg/L	
Column 2	1	6.05	6.03 – 6.09	.0602		mg/L	

Identification Summary

SDG Number: 10–670–1 **Client ID:** WST03–10–2134MS

Lab Sample ID: 1201996513

Data File:	042f4201.d	**Data File:**	042b4201.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	17–DEC–09 00:34	**Analyzed:**	17–DEC–09 00:34

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Chlordane (tech.)							.894
Column 1	1	3.87	3.77 – 3.97	.049		mg/L	
	2	4.51	4.41 – 4.61	.0588		mg/L	
	3	4.63	4.53 – 4.73	.0477		mg/L	
	4	4.71	4.62 – 4.82	.0538		mg/L	
	5	5.19	5.1 – 5.3	.0804		mg/L	
					.058		
Column 2	1	4.1	4.07 – 4.13	.0455		mg/L	
	2	4.53	4.5 – 4.56	.0667		mg/L	
	3	4.78	4.75 – 4.81	.06		mg/L	
	4	4.93	4.9 – 4.96	.0592		mg/L	
	5	5.02	4.99 – 5.05	.0609		mg/L	
					.0585		

Identification Summary

SDG Number: 10-670-1 **Client ID:** WST03-10-2134MSD

Lab Sample ID: 1201996516

Data File:	043f4301.d	**Data File:**	043b4301.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	17-DEC-09 00:49	**Analyzed:**	17-DEC-09 00:49

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Chlordane (tech.)							.812
Column 1	1	3.87	3.77 – 3.97	.0524		mg/L	
	2	4.51	4.41 – 4.61	.0648		mg/L	
	3	4.63	4.53 – 4.73	.0579		mg/L	
	4	4.72	4.62 – 4.82	.06		mg/L	
	5	5.19	5.1 – 5.3	.094		mg/L	
					.0658		
Column 2	1	4.1	4.07 – 4.13	.051		mg/L	
	2	4.53	4.5 – 4.56	.0747		mg/L	
	3	4.78	4.75 – 4.81	.0678		mg/L	
	4	4.93	4.9 – 4.96	.0681		mg/L	
	5	5.02	4.99 – 5.05	.0701		mg/L	
					.0663		

Identification Summary

SDG Number: 10–670–1 **Client ID:** WST03–10–2134MS

Lab Sample ID: 1201996512

Data File:	040f4001.d	**Data File:**	040b4001.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	17–DEC–09 00:04	**Analyzed:**	17–DEC–09 00:04

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							9.28
Column 1	1	4.96	4.93 – 4.99	.0628		mg/L	
	2	5.01	4.98 – 5.04	.0621		mg/L	
	3	5.05	5.02 – 5.08	.0644		mg/L	
	4	5.11	5.08 – 5.14	.067		mg/L	
	5	5.23	5.2 – 5.26	.0749		mg/L	
					.0663		
Column 2	1	5.22	5.18 – 5.24	.0711		mg/L	
	2	5.29	5.26 – 5.32	.0639		mg/L	
	3	5.32	5.3 – 5.36	.0691		mg/L	
	4	5.4	5.37 – 5.43	.0702		mg/L	
	5	5.54	5.51 – 5.57	.0892		mg/L	
					.0727		

Identification Summary

SDG Number: 10–670–1 **Client ID:** WST03–10–2134MSD

Lab Sample ID: 1201996515

Data File:	041f4101.d	**Data File:**	041b4101.d
Inst:	ECD7A.I_1	**Inst:**	ECD7A.I_2
Column:	CLP–1	**Column:**	CLP–2
Analyzed:	17–DEC–09 00:19	**Analyzed:**	17–DEC–09 00:19

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							12.8
Column 1	1	4.96	4.93 – 4.99	.0639		mg/L	
	2	5.01	4.98 – 5.04	.0627		mg/L	
	3	5.05	5.02 – 5.08	.0669		mg/L	
	4	5.11	5.08 – 5.14	.0666		mg/L	
	5	5.23	5.2 – 5.26	.0747		mg/L	
					.067		
Column 2	1	5.22	5.18 – 5.24	.0826		mg/L	
	2	5.29	5.26 – 5.32	.0667		mg/L	
	3	5.33	5.3 – 5.36	.0708		mg/L	
	4	5.4	5.37 – 5.43	.0713		mg/L	
	5	5.54	5.51 – 5.57	.0892		mg/L	
					.0761		

QUALITY CONTROL DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201988990				
Client Sample:	QC for batch 930033	**Client:**	LANL010	**Project:**	QC
Client ID:	TB for batch 930033	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/17/2009 01:48	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	047f4701.d	**Column:**	1 CLP-1	**Level:**	LOW
	047b4701.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/047f4701.d
Lab Smp Id: 1201988990 Client Smp ID: TBLK01
Inj Date : 17-DEC-2009 01:48
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201988990|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 47 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.813	2.810	0.003	244903499	102.913	0.00514	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.506	6.515	-0.009	220392811	158.939	0.00795	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/047f4701.d
Date : 17-DEC-2009 01:48
Client ID: TBLK01
Sample Info: |120198899011|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

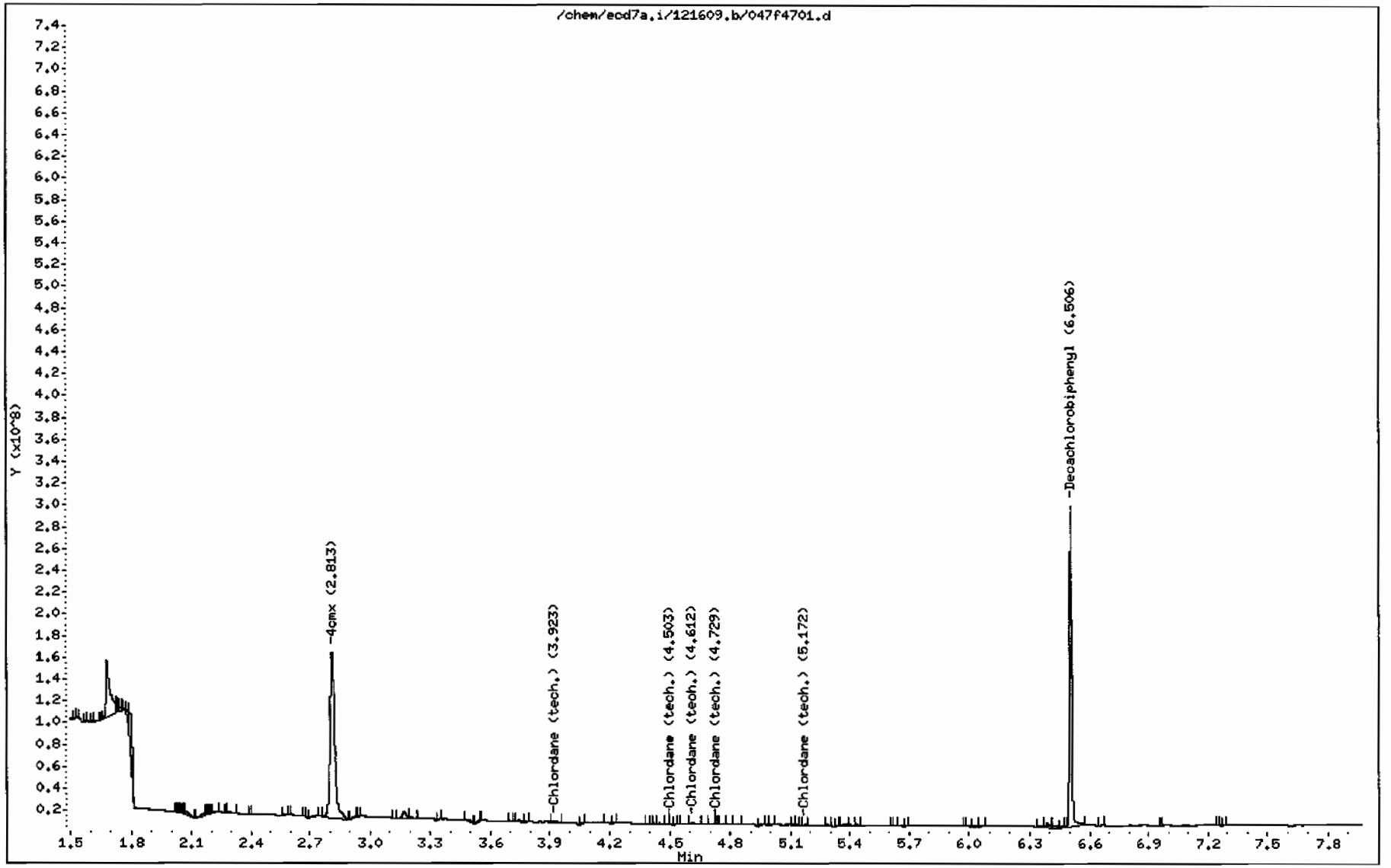

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/047b4701.d
Lab Smp Id: 1201988990 Client Smp ID: TBLK01
Inj Date : 17-DEC-2009 01:48
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201988990|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 47 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.063	0.002	292225237	103.313	0.00516	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.016	7.025	-0.009	246005389	161.170	0.00806	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/047b4701.d
Date : 17-DEC-2009 01:48
Client ID: TBLK01
Sample Info: |120198899011|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

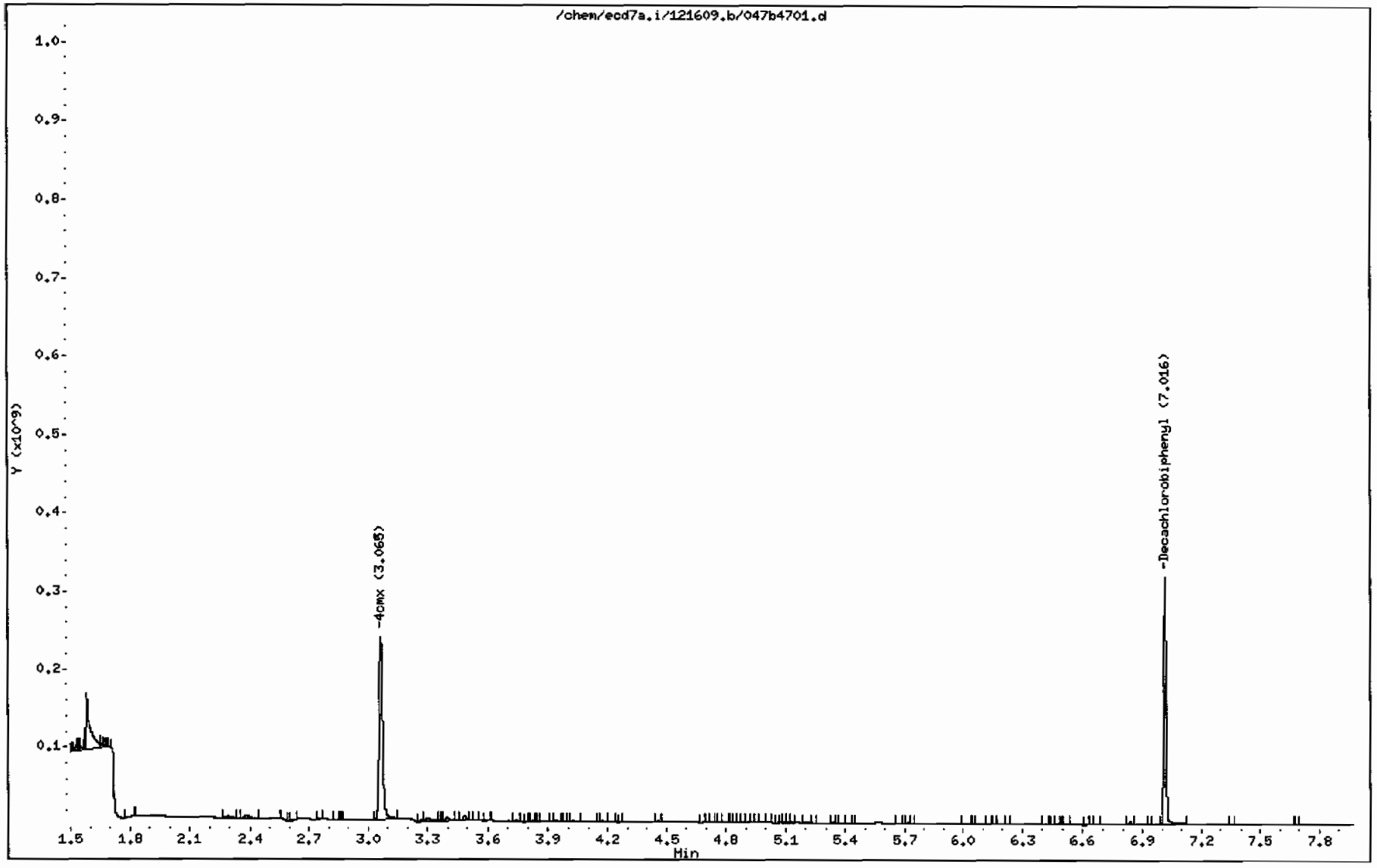

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201996510				
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 933213	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/17/2009 02:18	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	049f4901.d	**Column:**	1 CLP–1	**Level:**	LOW
	049b4901.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72–20–8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/049f4901.d
Lab Smp Id: 1201996510 Client Smp ID: PBLK01
Inj Date : 17-DEC-2009 02:18
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996510|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 49 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	247847602	104.150	0.00521	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.506	6.515	-0.009	201282673	145.157	0.00726	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/049f4901.d
Date : 17-DEC-2009 02:18
Client ID: PBLK01
Sample Info: |1201996510|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

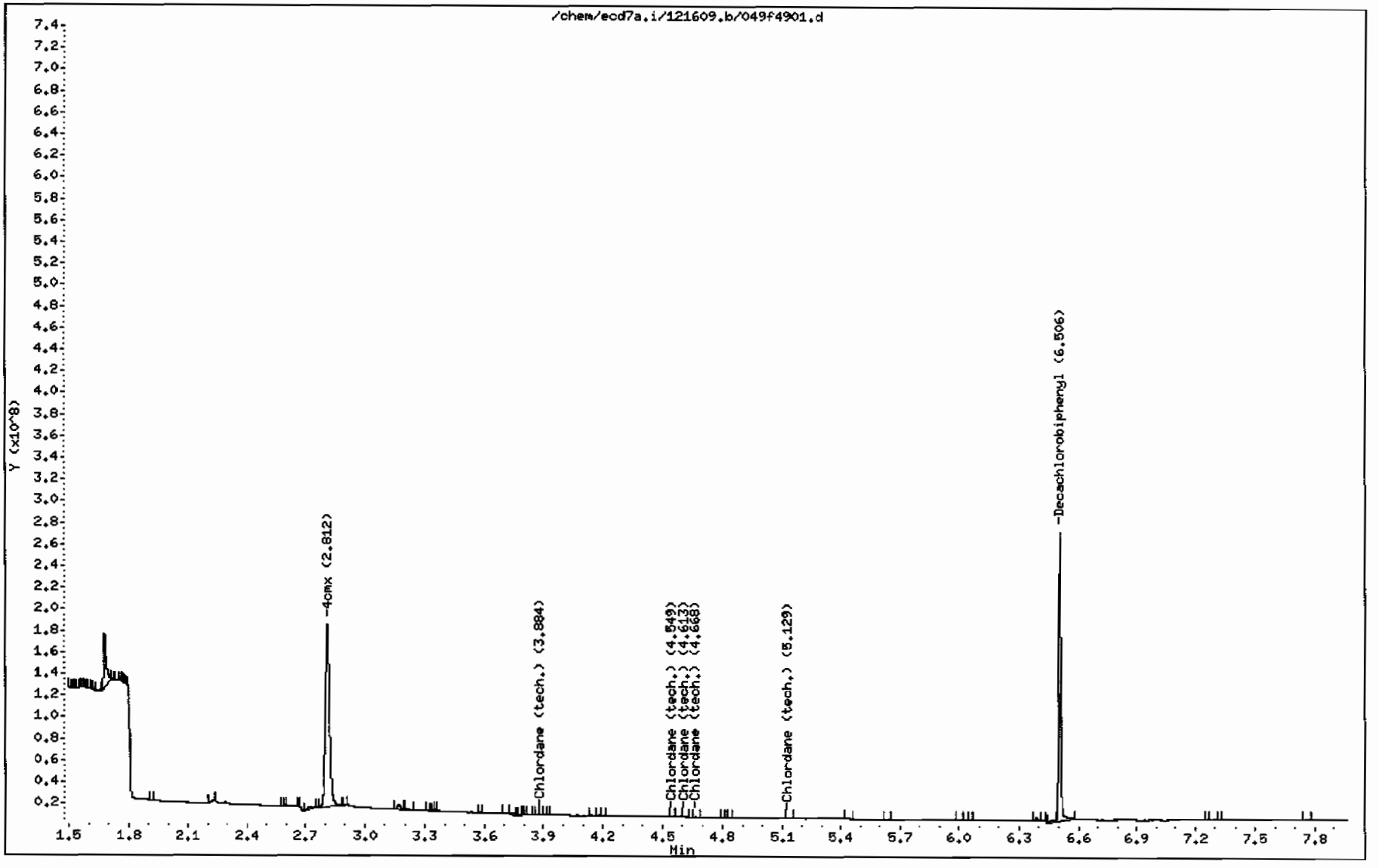

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/049b4901.d
Lab Smp Id: 1201996510 Client Smp ID: PBLK01
Inj Date : 17-DEC-2009 02:18
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996510|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 49 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.063	0.002	322929469	114.168	0.00571	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.025	-0.008	222487508	145.763	0.00729	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/049b4901.d

Date : 17-DEC-2009 02:18

Client ID: PBLK01

Sample Info: |120199651011|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

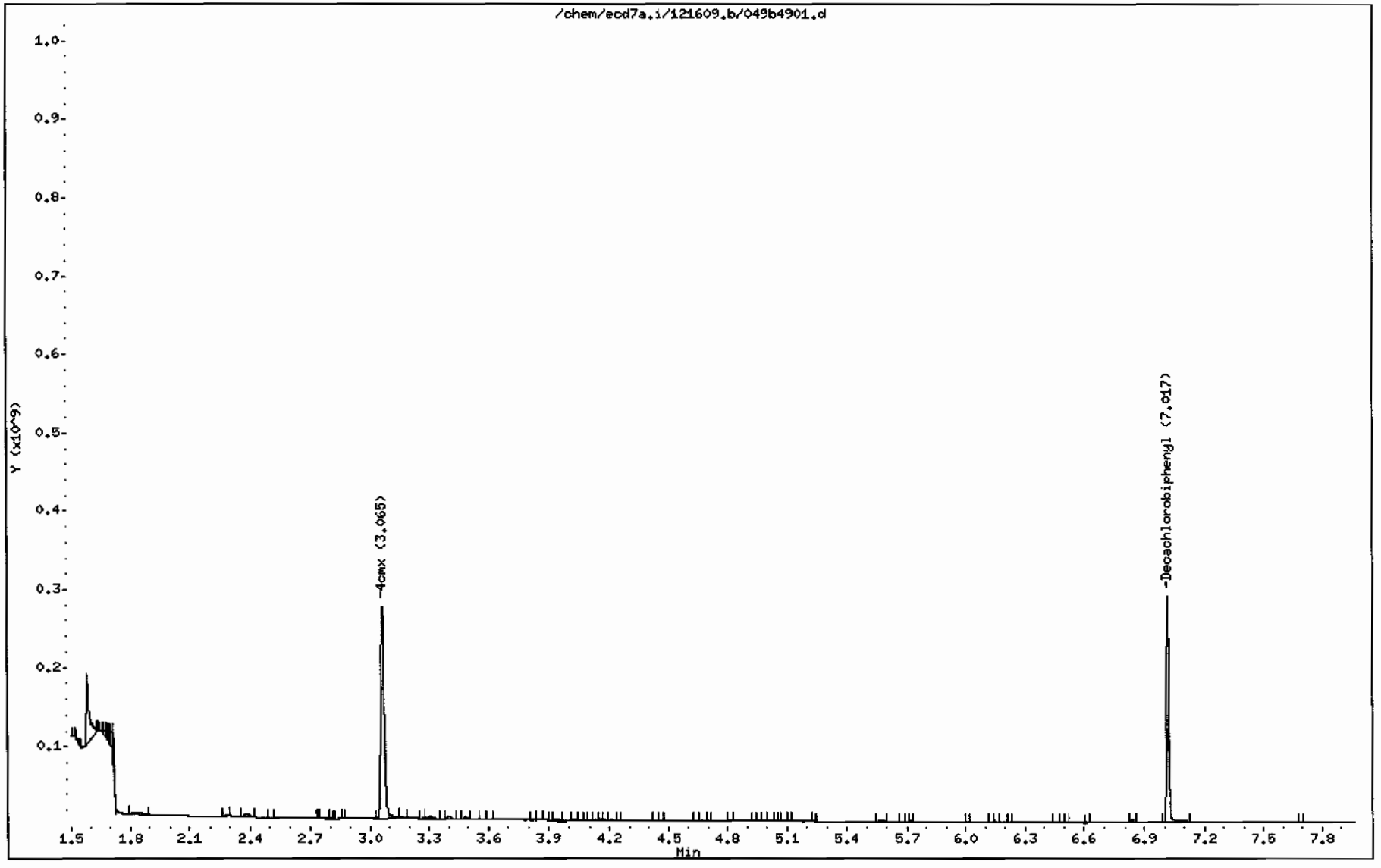

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201996519**				
Client Sample:	**QC for batch 933213**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 933213**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**933214**	**Inst:**	**ECD7A.I**	**Dilution:**	**1**
Run Date:	**12/17/2009 03:02**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/15/2009 19:49**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**052f5201.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	052b5201.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)		0.0624	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd7a.i/121609.b/052f5201.d
Lab Smp Id: 1201996519 Client Smp ID: PBLK01CLCS
Inj Date : 17-DEC-2009 03:02
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996519|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CLCS|SOIL|CLCS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.811	2.810	0.001	229065318	96.2576	0.00481	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.506	6.515	-0.009	209275812	150.921	0.00755	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.873	3.873	0.000	96973065	1093.41	0.0547	80.00- 120.00	100.00
4.509	4.509	0.000	60549804	1192.57	0.0596	38.62- 78.62	62.44
4.631	4.632	-0.001	343743710	1218.18	0.0609	291.32- 331.32	354.47
4.715	4.716	-0.001	273625369	1328.69	0.0664	223.78- 263.78	282.17
5.195	5.195	0.000	70201254	1404.52	0.0702	43.50- 83.50	72.39

Average of Peak Concentrations = 0.0624

Data File: /chem/ecd7a.i/121609.b/052f5201.d

Date : 17-DEC-2009 03:02

Client ID: PBLK01CLCS

Sample Info: |1201996519|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

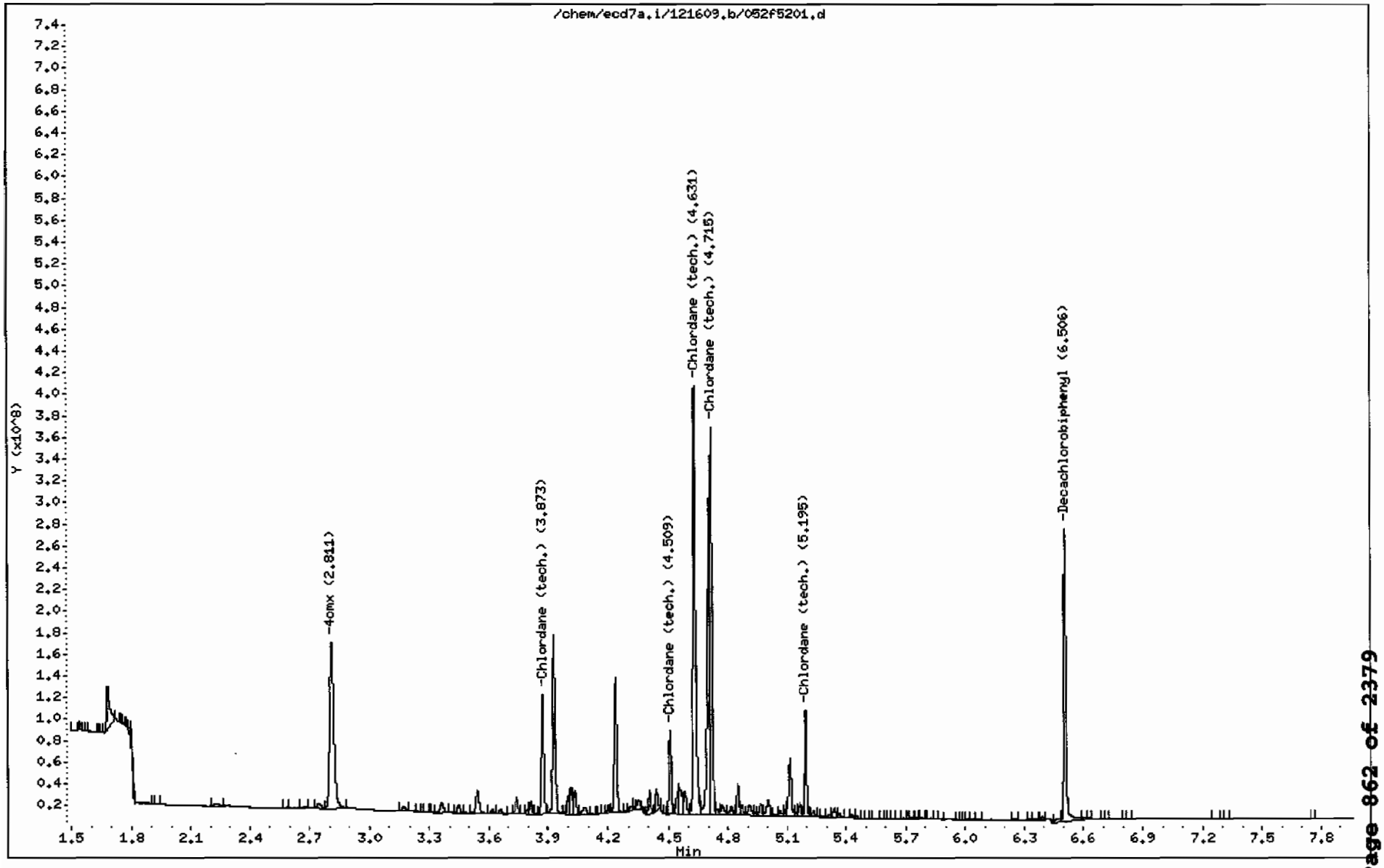

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/052b5201.d
Lab Smp Id: 1201996519 Client Smp ID: PBLK01CLCS
Inj Date : 17-DEC-2009 03:02
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996519|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CLCS|SOIL|CLCS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 52 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	294921248	104.266	0.00521	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.025	-0.008	220862854	144.698	0.00723	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.102	4.102	0.000	142689840	1179.85	0.0590	80.00- 120.00	100.00
4.530	4.530	0.000	144458808	1506.90	0.0753	70.93- 110.93	101.24
4.784	4.785	-0.001	92636482	1352.51	0.0676	37.24- 77.24	64.92
4.932	4.931	0.001	432219493	1345.22	0.0673	241.22- 281.22	302.91
5.023	5.023	0.000	374218151	1368.41	0.0684	205.78- 245.78	262.26

Average of Peak Concentrations = 0.0675

Data File: /chem/ecd7a.i/121609.b/052b5201.d
Date : 17-DEC-2009 03:02
Client ID: PBLK01CLCS
Sample Info: |1201996519|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXH
Column diameter: 0.25

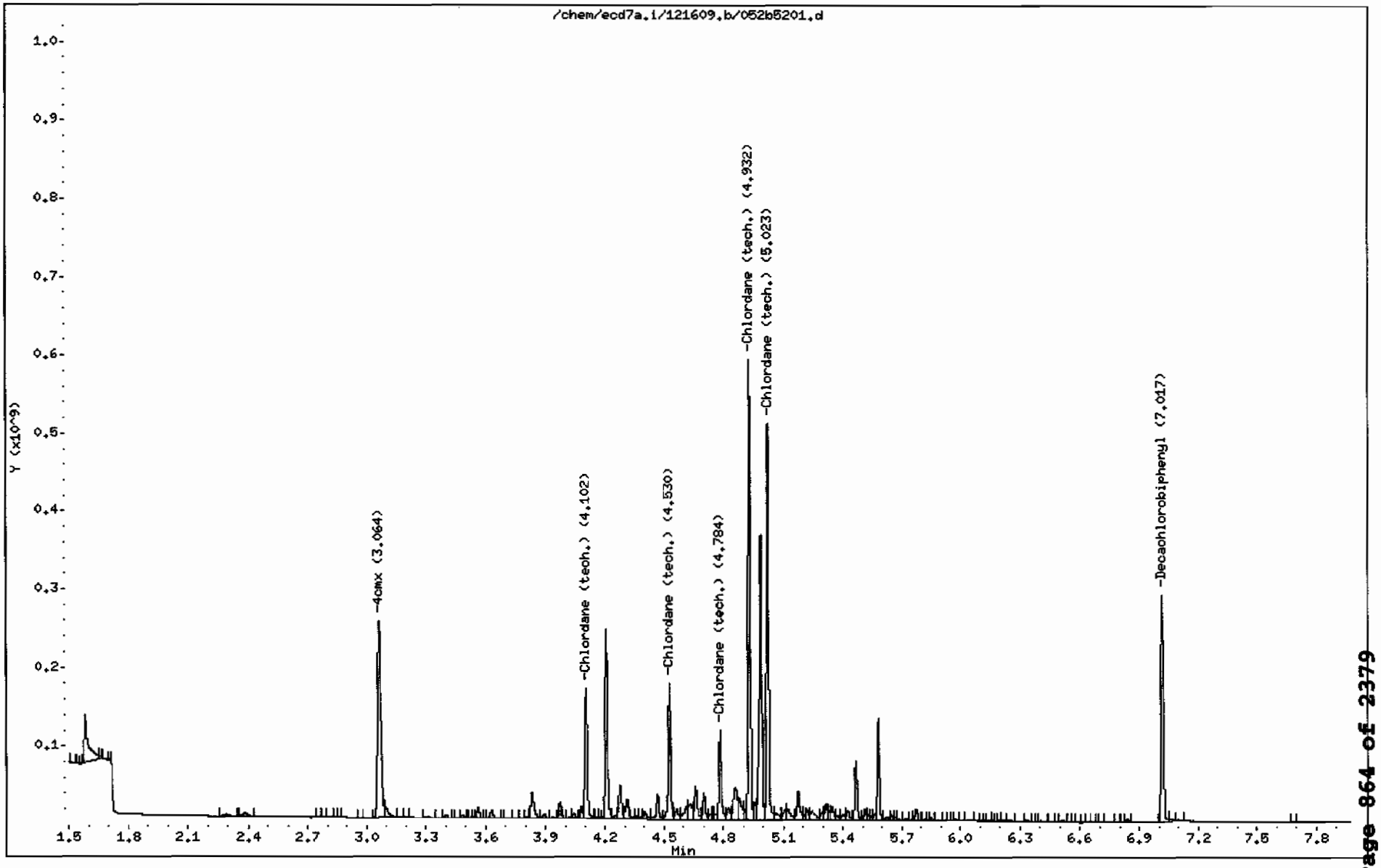

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201996517				
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 933213	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/17/2009 02:33	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	050f5001.d	**Column:**	1 CLP-1	**Level:**	LOW
	050b5001.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)		0.00306	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor		0.00283	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide		0.00308	mg/L	0.00005	0.0002	1
72-20-8	Endrin		0.00377	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor		0.0419	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd7a.i/121609.b/050f5001.d
Lab Smp Id: 1201996517 Client Smp ID: PBLK01LCS
Inj Date : 17-DEC-2009 02:33
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996517|1|
Misc Info : |ECDPTL_1L|933214|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 50 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	208552730	87.6379	0.00438	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.505	6.515	-0.010	209603858	151.158	0.00756	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.576	3.576	0.000	159792262	61.2663	0.00306	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.930	3.930	0.000	115385212	56.5031	0.00282	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.550	4.551	-0.001	143540083	61.6837	0.00308	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.098	5.100	-0.002	139245859	75.3688	0.00377	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.578	5.581	-0.003	368995342	837.370	0.0419	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/050f5001.d
Date : 17-DEC-2009 02:33
Client ID: PBLK01LCS
Sample Info: !120199651711!
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

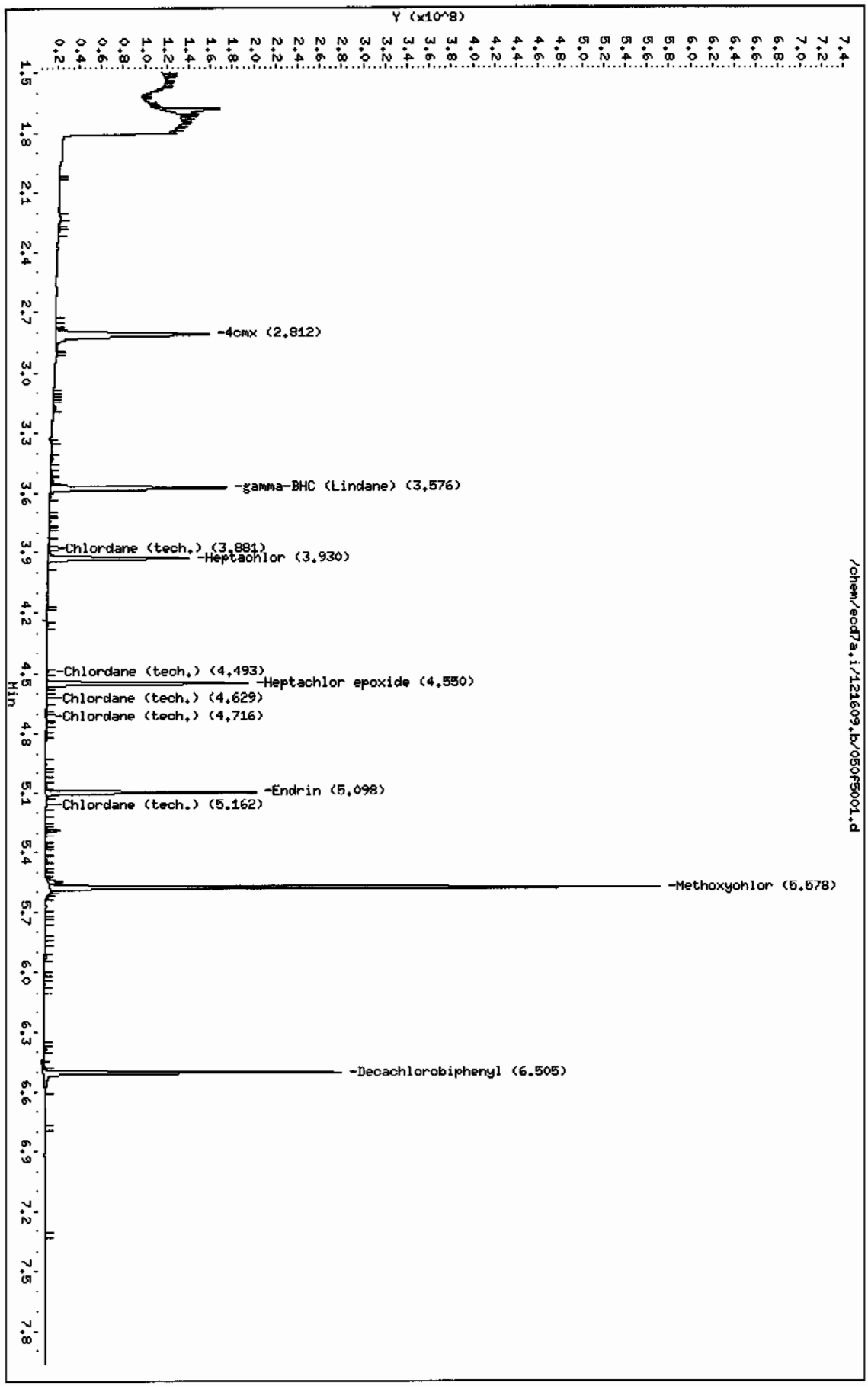

Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/050b5001.d
Lab Smp Id: 1201996517 Client Smp ID: PBLK01LCS
Inj Date : 17-DEC-2009 02:33
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996517|1|
Misc Info : |ECDPTL_1L|933214|SVPF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 50 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	264644403	93.5623	0.00468	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.015	7.025	-0.010	225426414	147.688	0.00738	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.880	3.880	0.000	217034449	67.2276	0.00336	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.207	4.207	0.000	151559390	65.6798	0.00328	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.810	4.811	-0.001	188498993	65.9463	0.00330	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.424	5.425	-0.001	174932840	80.0015	0.00400	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.050	6.059	-0.009	352969271	922.987	0.0461	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121609.b/050b5001.d
Date : 17-DEC-2009 02:33
Client ID: PBLK01LCS
Sample Info: !1201996517!1!
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

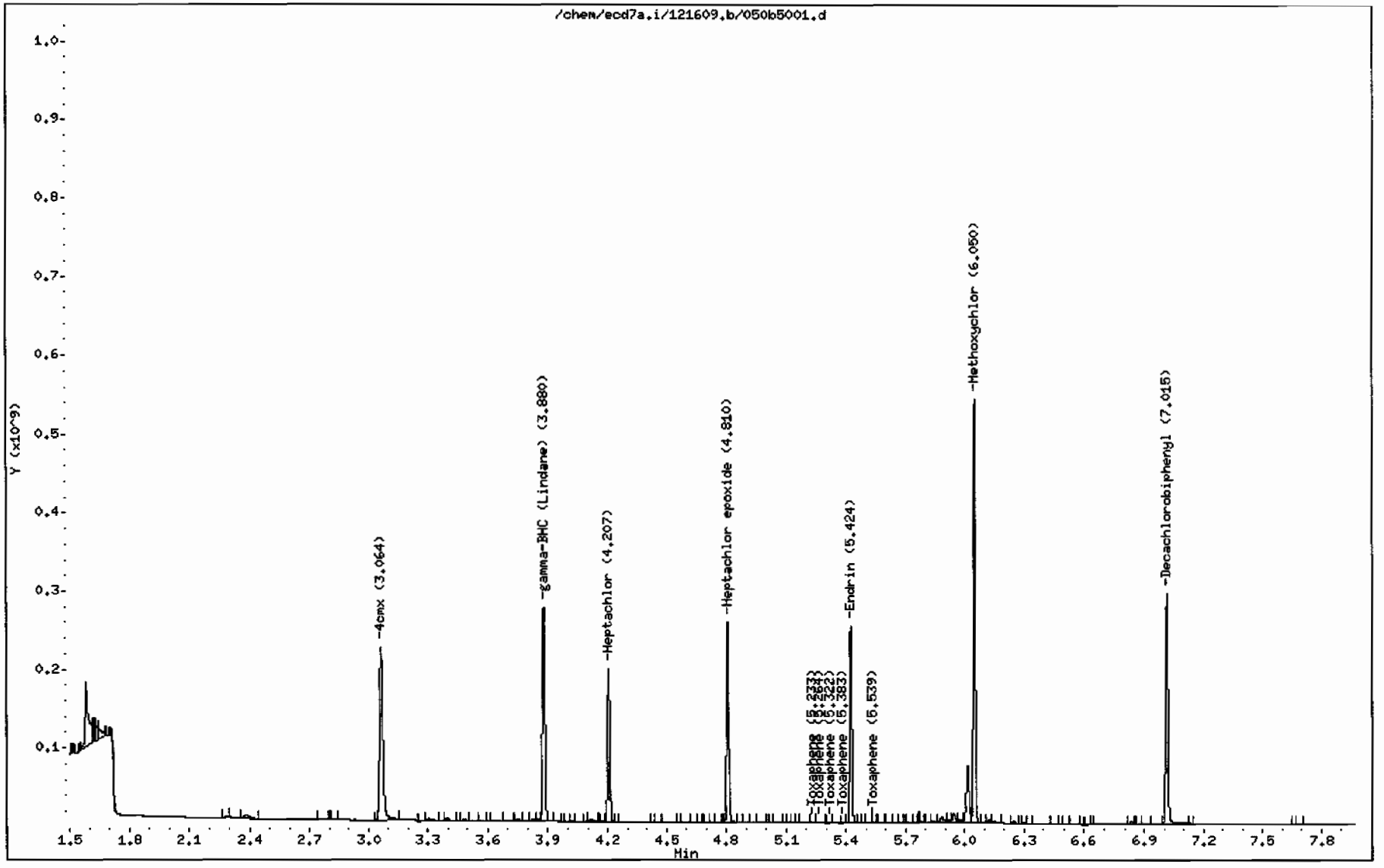

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201996518**				
Client Sample:	**QC for batch 933213**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 933213**	**Method:**	**SW846 8081A**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**933214**	**Inst:**	**ECD7A.I**	**Dilution:**	**1**
Run Date:	**12/17/2009 02:47**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/15/2009 19:49**	**Aliquot:**	**20 mL**	**Final Volume:**	**1 mL**
Data File:	**051f5101.d**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	051b5101.d		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene		0.0653	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/051f5101.d
Lab Smp Id: 1201996518 Client Smp ID: PBLK01TLCS
Inj Date : 17-DEC-2009 02:47
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996518|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 51 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.813	2.810	0.003	232678294	97.7759	0.00489	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.506	6.515	-0.009	238426591	171.944	0.00860	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.956	4.956	0.000	31881352	1269.10	0.0634	80.00- 120.00	100.00(M)
5.011	5.011	0.000	39486274	1204.18	0.0602	115.94- 155.94	123.85
5.050	5.049	0.001	56080706	1326.94	0.0663	134.45- 174.45	175.90
5.110	5.113	-0.003	55094565	1356.70	0.0678	138.55- 178.55	172.81
5.230	5.232	-0.002	100589676	1375.23	0.0688	229.50- 269.50	315.51

Average of Peak Concentrations = 0.0653

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/051f5101.d

Date : 17-DEC-2009 02:47

Client ID: PBLK01TLCS

Sample Info: |1201996518|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

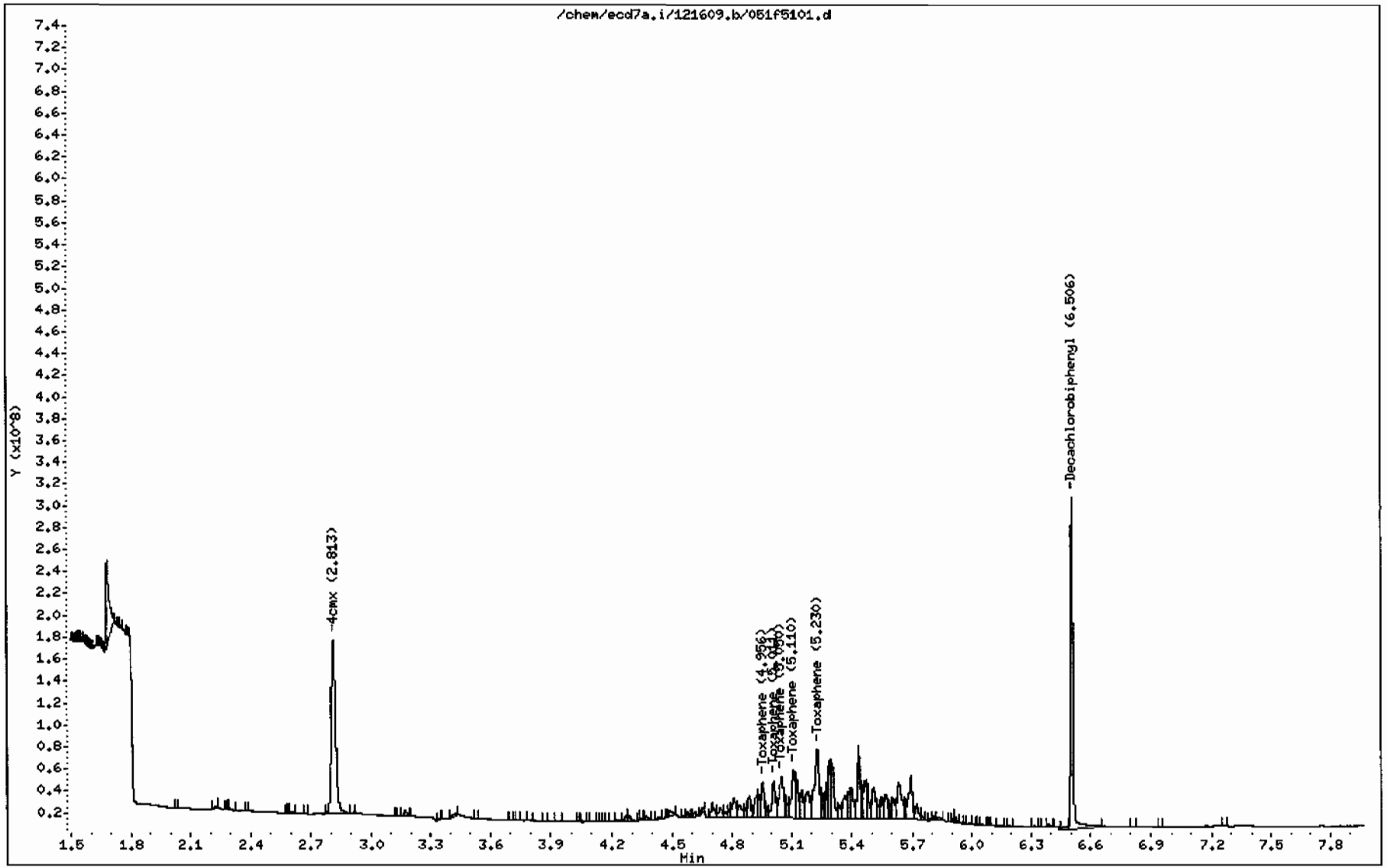

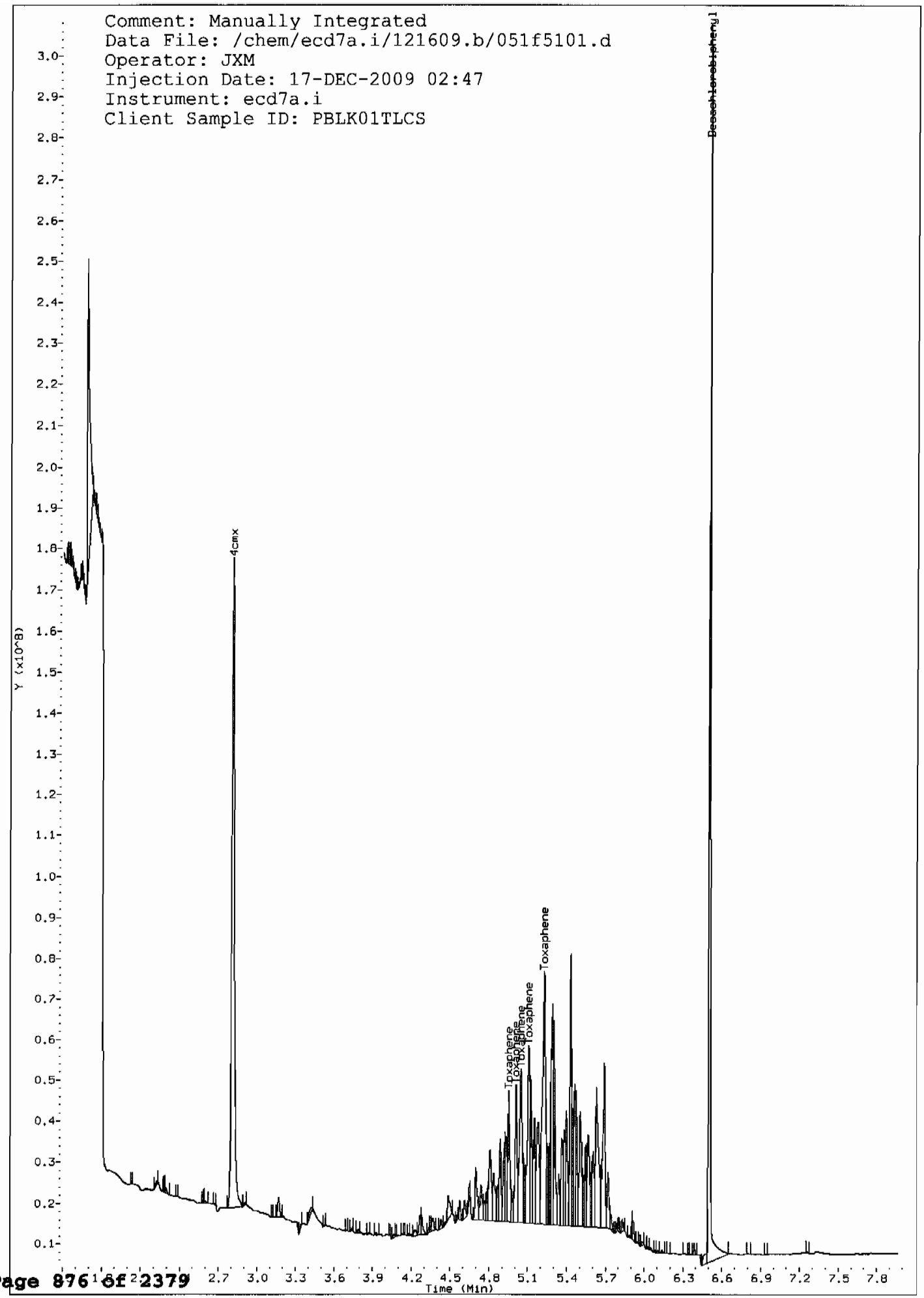
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/051f5101.d
Operator: JXM
Injection Date: 17-DEC-2009 02:47
Instrument: ecd7a.i
Client Sample ID: PBLK01TLCS
Decachlorobiphenyl
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

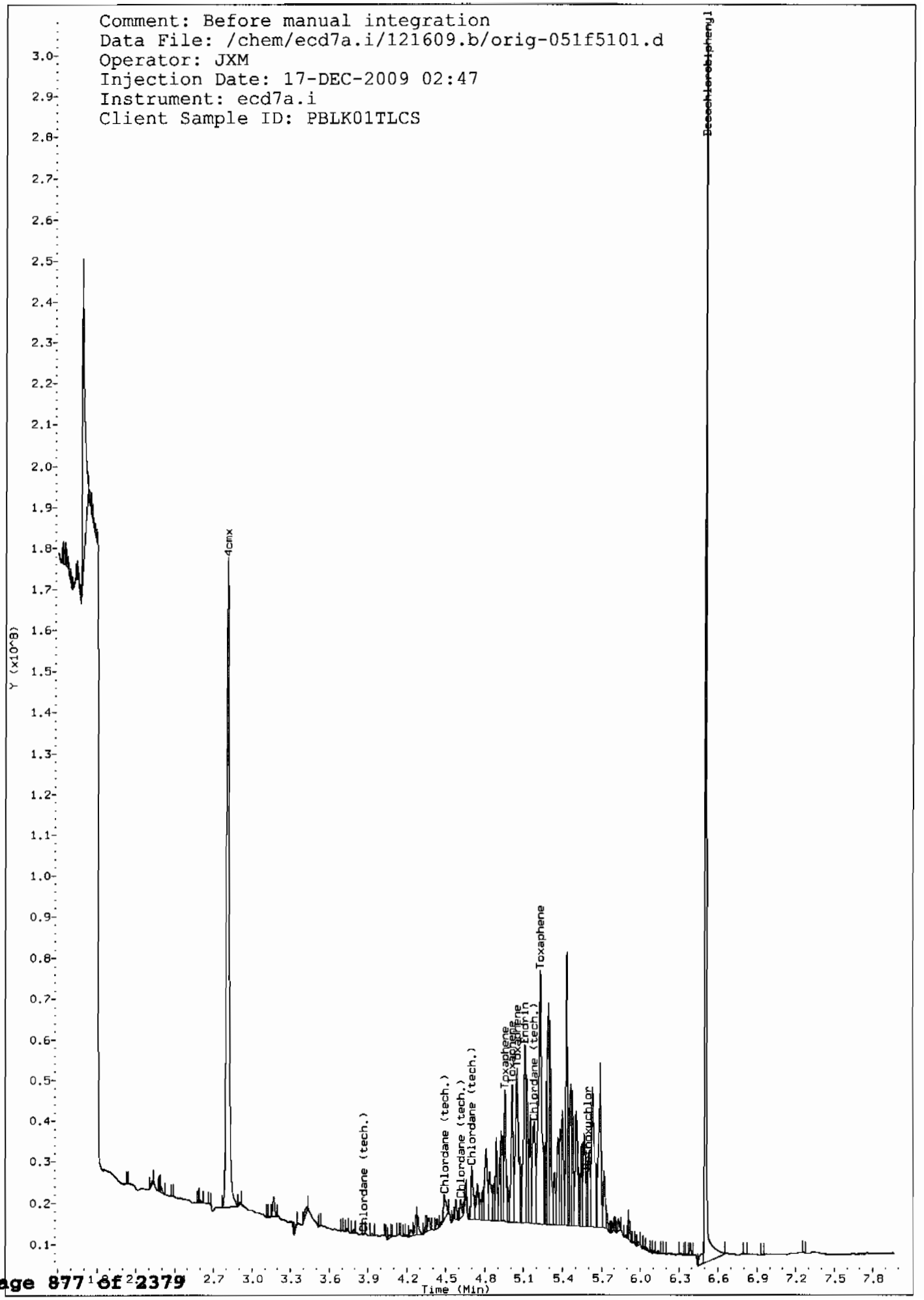
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-051f5101.d
Operator: JXM
Injection Date: 17-DEC-2009 02:47
Instrument: ecd7a.i
Client Sample ID: PBLK01TLCS
Decachlorobiphenyl
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Endrin
Chlordane (tech.)
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

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CLP-2

Data file : /chem/ecd7a.i/121609.b/051b5101.d
Lab Smp Id: 1201996518 Client Smp ID: PBLK01TLCS
Inj Date : 17-DEC-2009 02:47
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996518|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TLCS|SOIL|TLCS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 51 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.063	0.002	294307339	104.049	0.00520	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.016	7.025	-0.009	254136720	166.497	0.00832	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
5.218	5.212	0.006	73362937	1599.65	0.0800	80.00- 120.00	100.00(M)
5.288	5.289	-0.001	41965707	1570.01	0.0785	38.31- 78.31	57.20
5.325	5.326	-0.001	72059217	1588.77	0.0794	80.39- 120.39	98.22
5.397	5.400	-0.003	61063354	1545.22	0.0773	69.83- 109.83	83.23
5.543	5.543	0.000	95268411	1679.88	0.0840	111.80- 151.80	129.86

Average of Peak Concentrations = 0.0798

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/051b5101.d

Date : 17-DEC-2009 02:47

Client ID: PBLK01TLCS

Sample Info: |120199651811|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

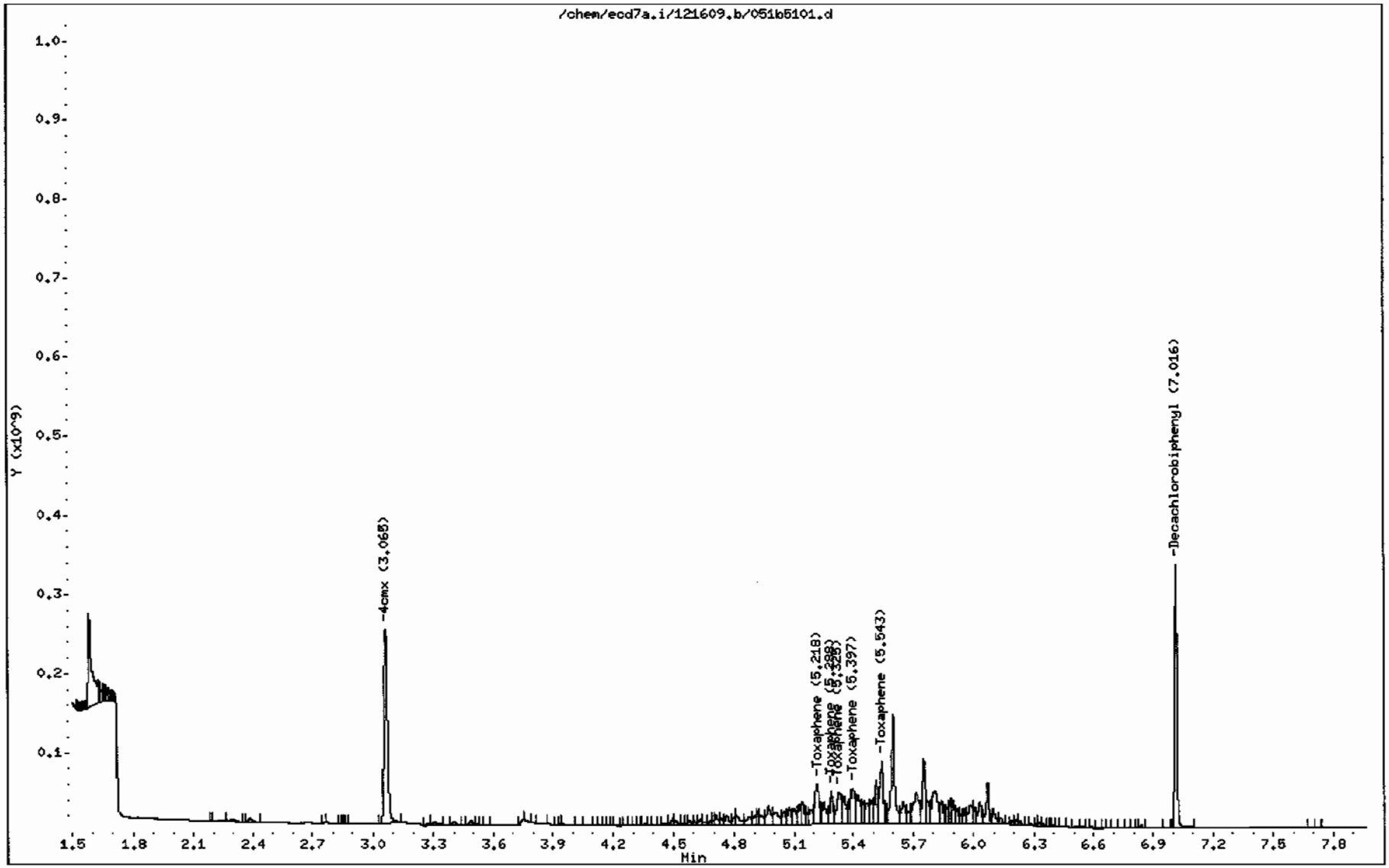

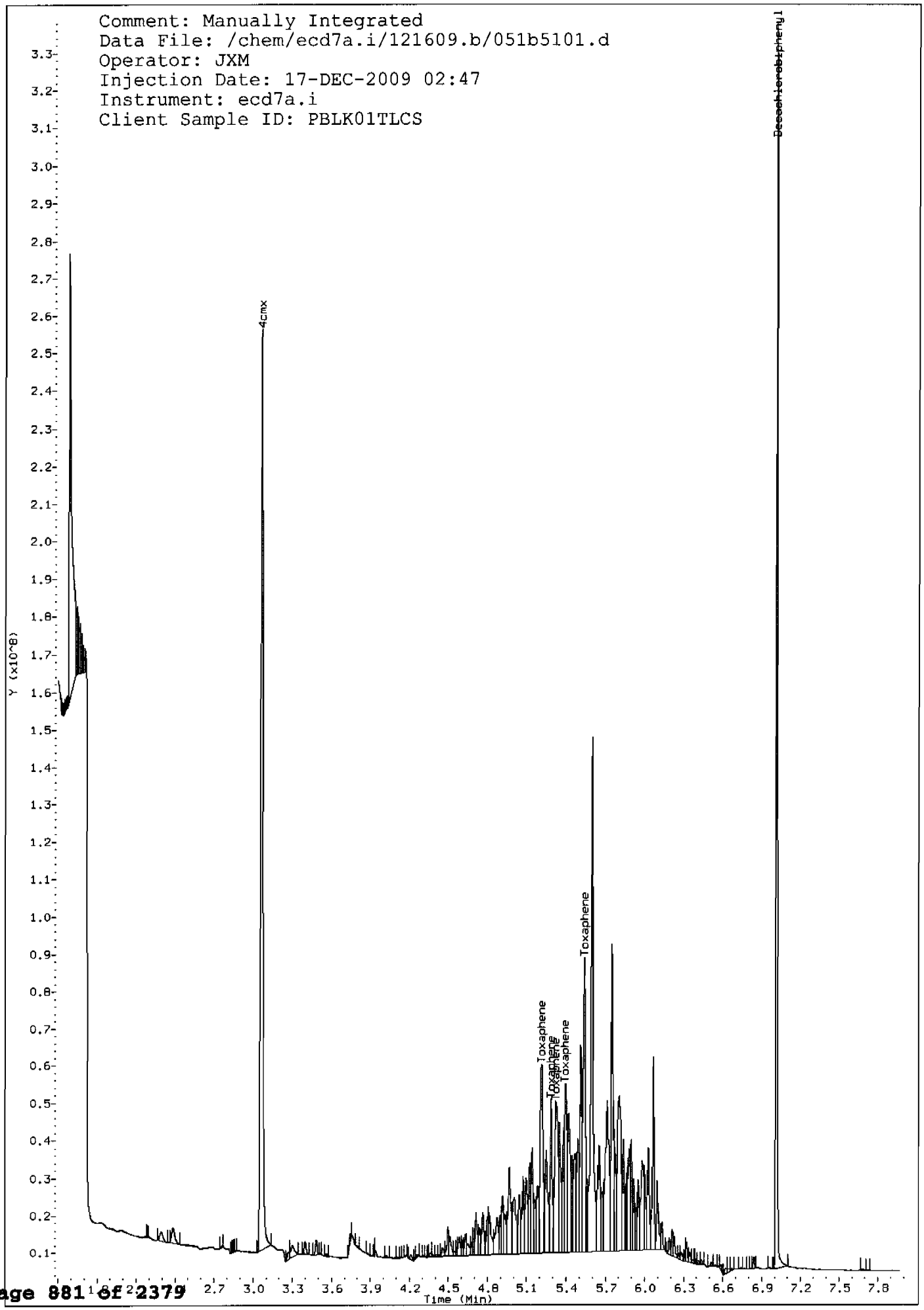
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/051b5101.d
Operator: JXM
Injection Date: 17-DEC-2009 02:47
Instrument: ecd7a.i
Client Sample ID: PBLK01TLCS
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^8)
Time (Min)

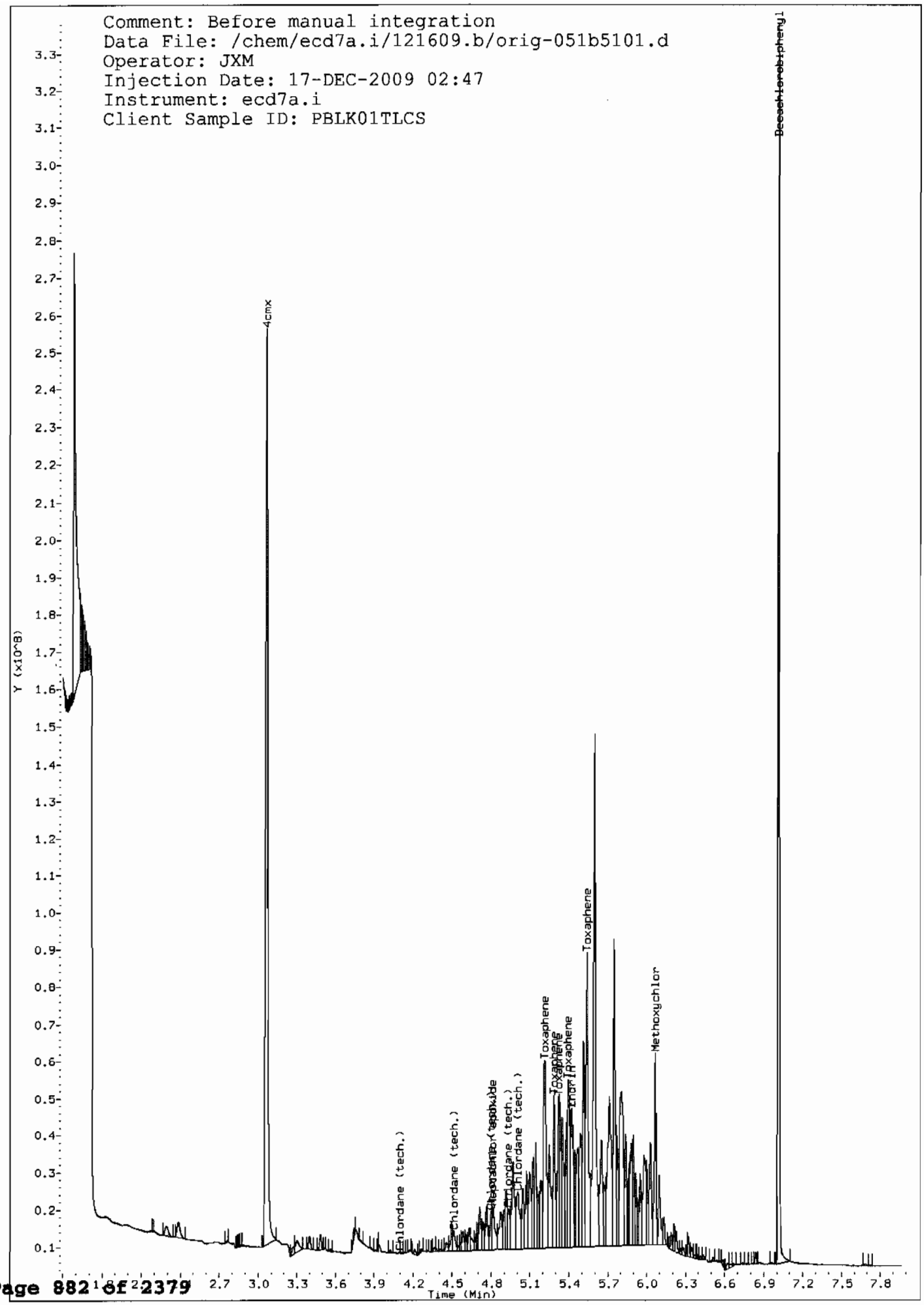
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-051b5101.d
Operator: JXM
Injection Date: 17-DEC-2009 02:47
Instrument: ecd7a.i
Client Sample ID: PBLK01TLCS
Decachlorobiphenyl
4cmx
Toxaphene
Methoxychlor
Chlordane (tech.)
Y (x10^8)
Time (Min)

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201996513	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2134MS	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/17/2009 00:34	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	042f4201.d	**Column:**	1 CLP-1	**Level:**	LOW
	042b4201.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)		0.0579	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd7a.i/121609.b/042f4201.d
Lab Smp Id: 1201996513 Client Smp ID: WST03-10-2134CMS
Inj Date : 17-DEC-2009 00:34
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996513|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMS|SOIL|CMS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 42 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	202023603	84.8942	0.00424	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.510	6.515	-0.005	177838627	128.250	0.00641	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.873	3.873	0.000	86951913	980.419	0.0490	80.00- 120.00	100.00(M)
4.509	4.509	0.000	59713454	1176.10	0.0588	38.62- 78.62	68.67
4.631	4.632	-0.001	269207618	954.037	0.0477	291.32- 331.32	309.61
4.715	4.716	-0.001	221633165	1076.22	0.0538	223.78- 263.78	254.89
5.194	5.195	-0.001	80386125	1608.29	0.0804	43.50- 83.50	92.45

Average of Peak Concentrations = 0.0579

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/042f4201.d

Date : 17-DEC-2009 00:34

Client ID: WST03-10-2134CMS

Sample Info: |120199651311|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

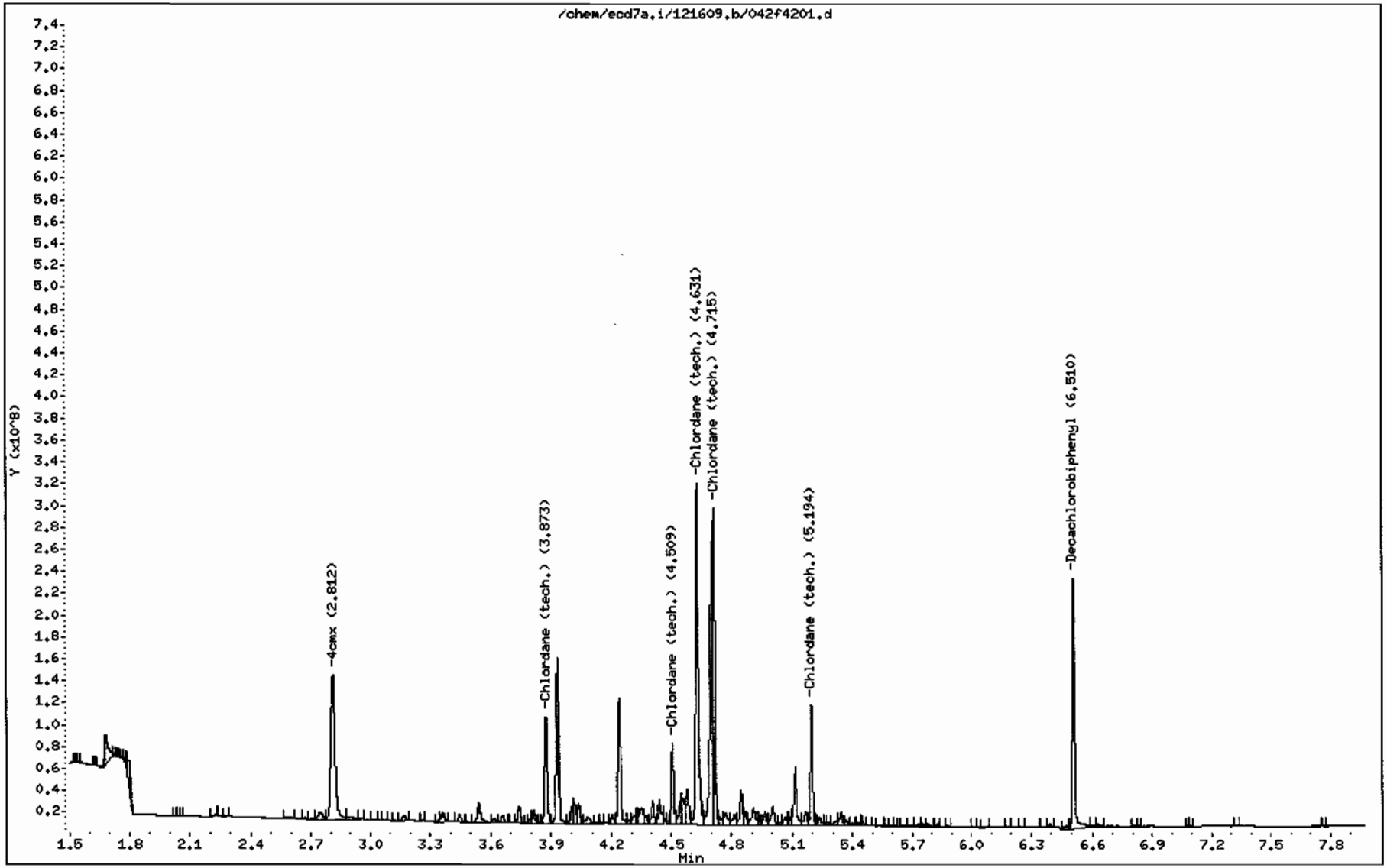

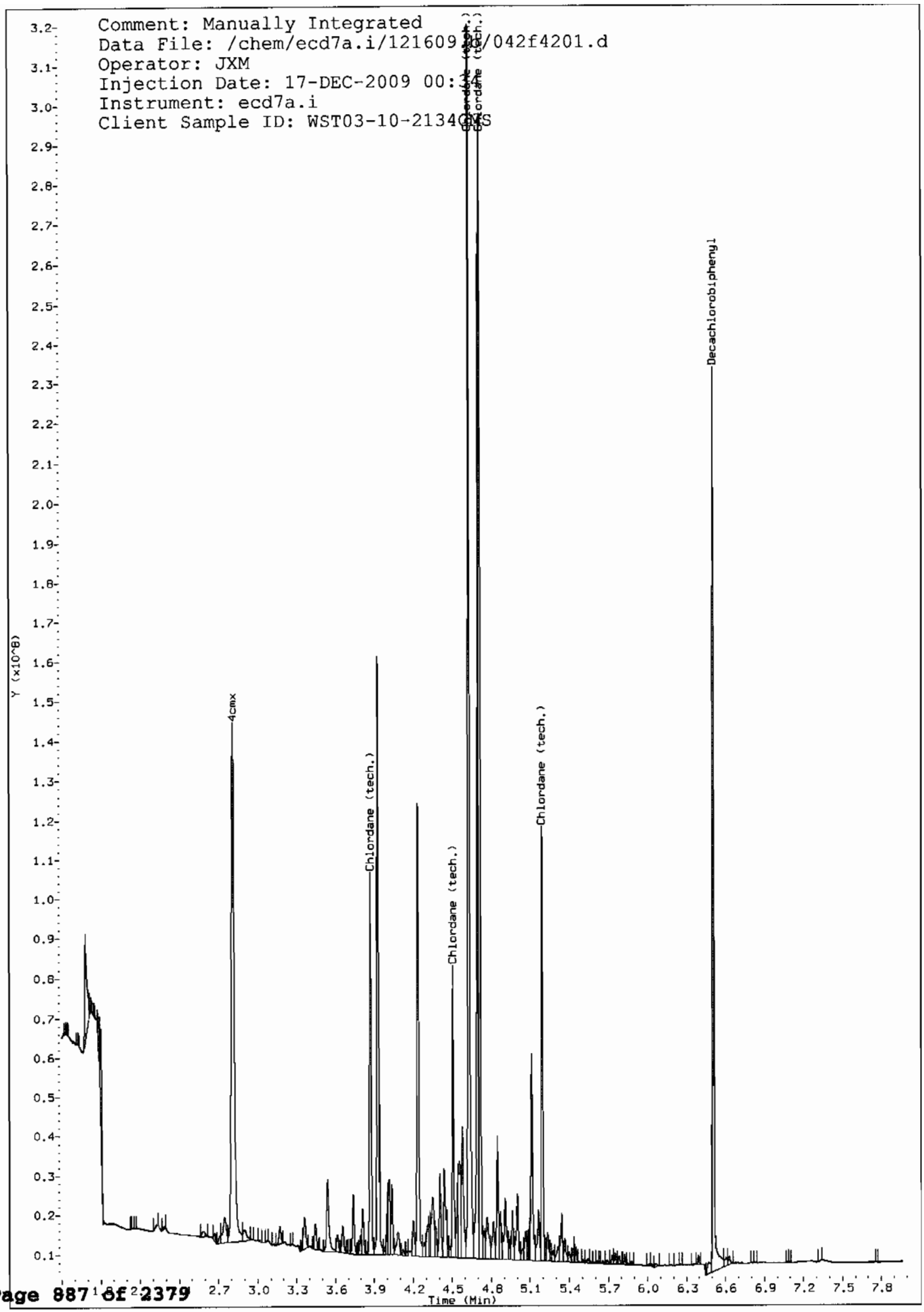
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/042f4201.d
Operator: JXM
Injection Date: 17-DEC-2009 00:
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

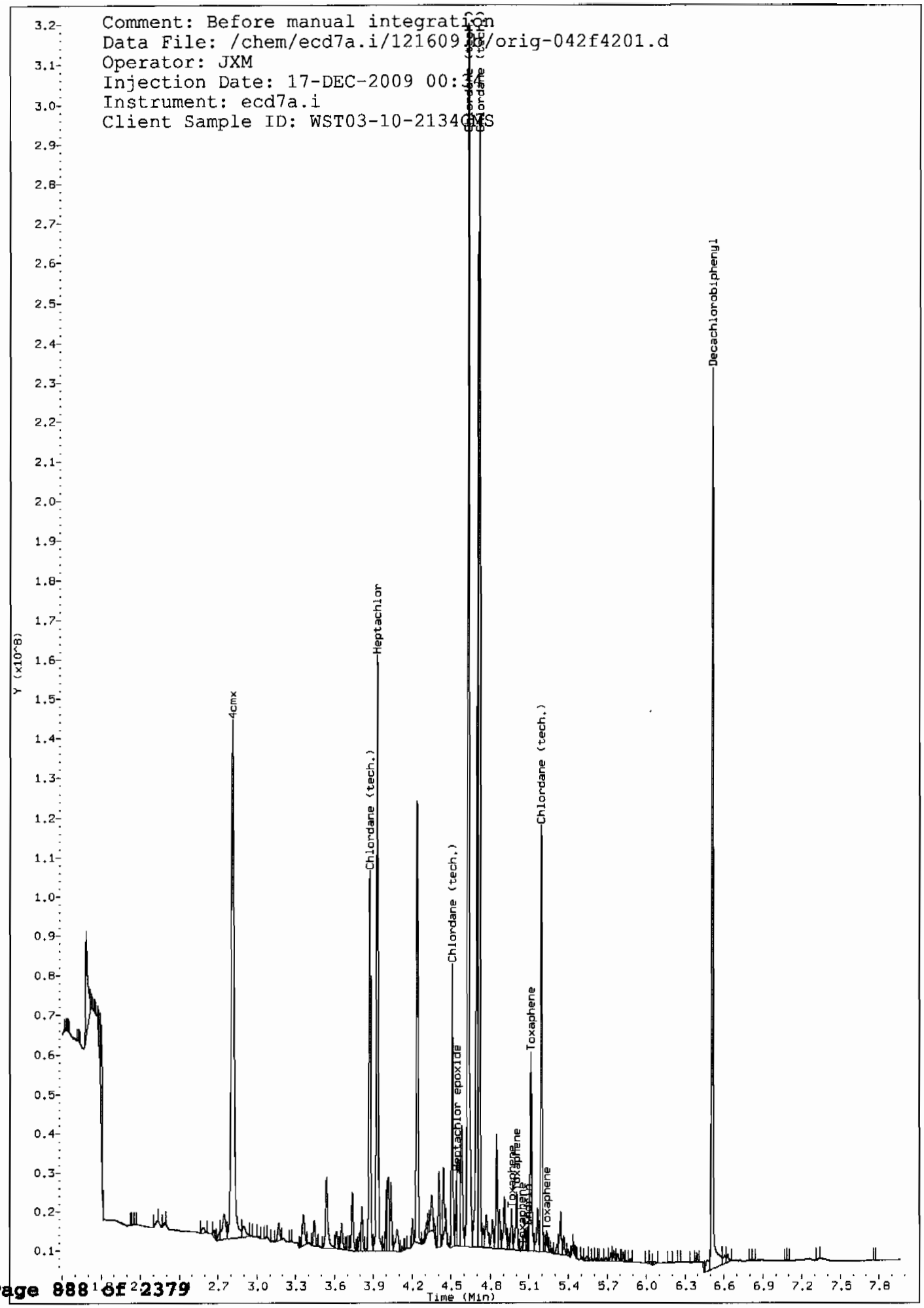
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-042f4201.d
Operator: JXM
Injection Date: 17-DEC-2009 00:3
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134GMS
Y (x10^8)
Time (Min)
4cmx
Chlordane (tech.)
Heptachlor
Chlordane (tech.)
Heptachlor epoxide
Chlordane (tech.)
Toxaphene
Chlordane (tech.)
Toxaphene
Decachlorobiphenyl

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/042b4201.d
Lab Smp Id: 1201996513 Client Smp ID: WST03-10-2134CMS
Inj Date : 17-DEC-2009 00:34
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996513|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMS|SOIL|CMS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 42 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	247469359	87.4902	0.00437	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.021	7.025	-0.004	185305197	121.403	0.00607	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.102	4.102	0.000	110135049	910.669	0.0455	80.00- 120.00	100.00
4.530	4.530	0.000	127883782	1334.00	0.0667	70.93- 110.93	116.12
4.784	4.785	-0.001	82200779	1200.15	0.0600	37.24- 77.24	74.64
4.932	4.931	0.001	380351911	1183.79	0.0592	241.22- 281.22	345.35
5.023	5.023	0.000	333214561	1218.47	0.0609	205.78- 245.78	302.55

Average of Peak Concentrations = 0.0585

Data File: /chem/ecd7a.i/121609.b/042b4201.d

Date : 17-DEC-2009 00:34

Client ID: WST03-10-2134CMS

Sample Info: |120199651311|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

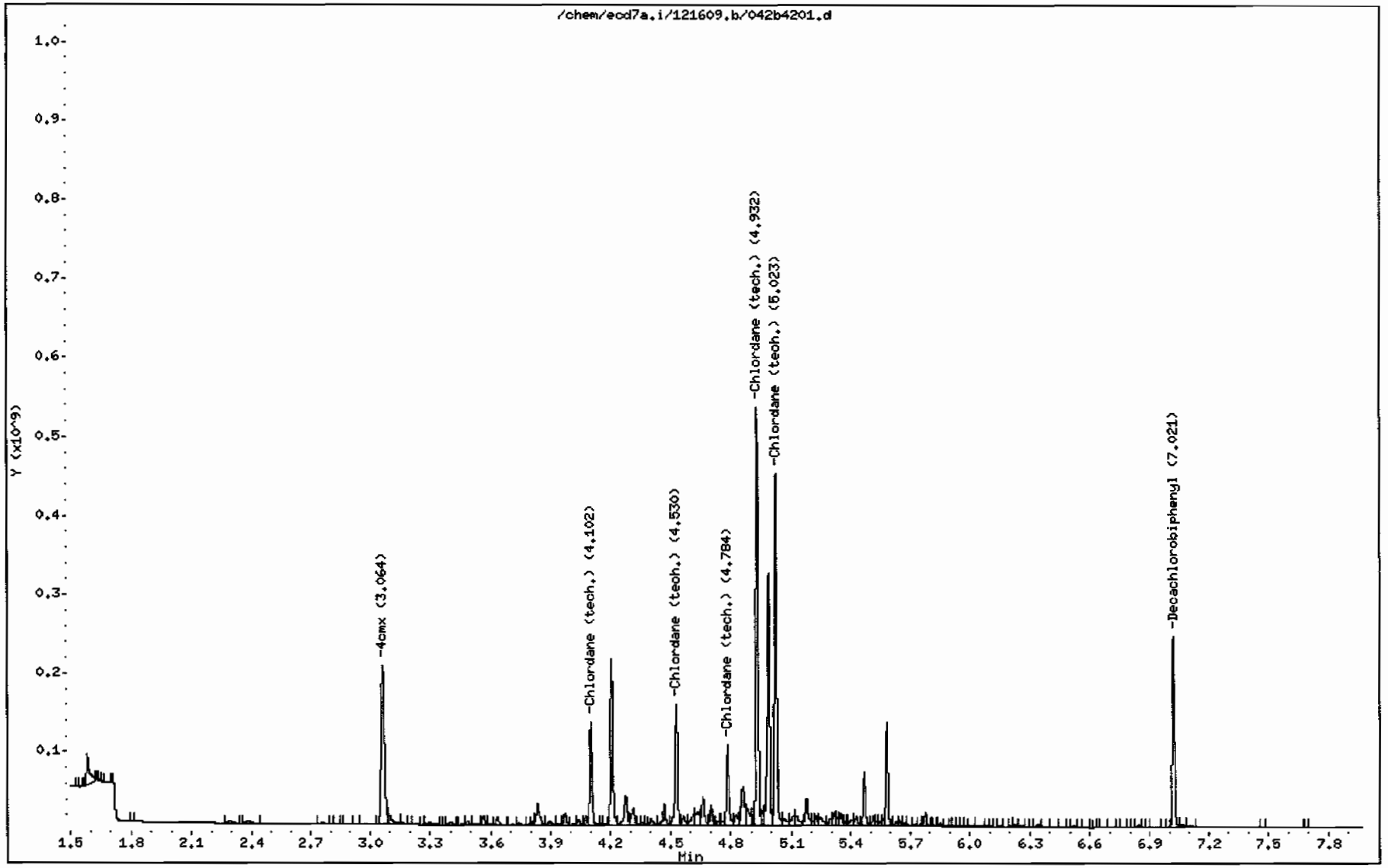

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201996511	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2134MS	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/16/2009 23:35	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	038f3801.d	**Column:**	1 CLP–1	**Level:**	LOW
	038b3801.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)		0.00373	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor		0.00346	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide		0.00341	mg/L	0.00005	0.0002	1
72–20–8	Endrin		0.00424	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor		0.0576	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/038f3801.d
Lab Smp Id: 1201996511 Client Smp ID: WST03-10-2134MS
Inj Date : 16-DEC-2009 23:35
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996511|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 38 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	196988857	82.7785	0.00414	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.508	6.515	-0.007	186100228	134.208	0.00671	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.577	3.576	0.001	194819307	74.6961	0.00373	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.931	3.930	0.001	141453649	69.2686	0.00346	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.550	4.551	-0.001	158495752	68.1106	0.00340	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.099	5.100	-0.001	156564550	84.7428	0.00424	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.579	5.581	-0.002	507618991	1151.95	0.0576	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/038F3801.d
Date : 16-DEC-2009 23:35
Client ID: WST03-10-2134MS
Sample Info: 1120199651111
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXH
Column diameter: 0.25

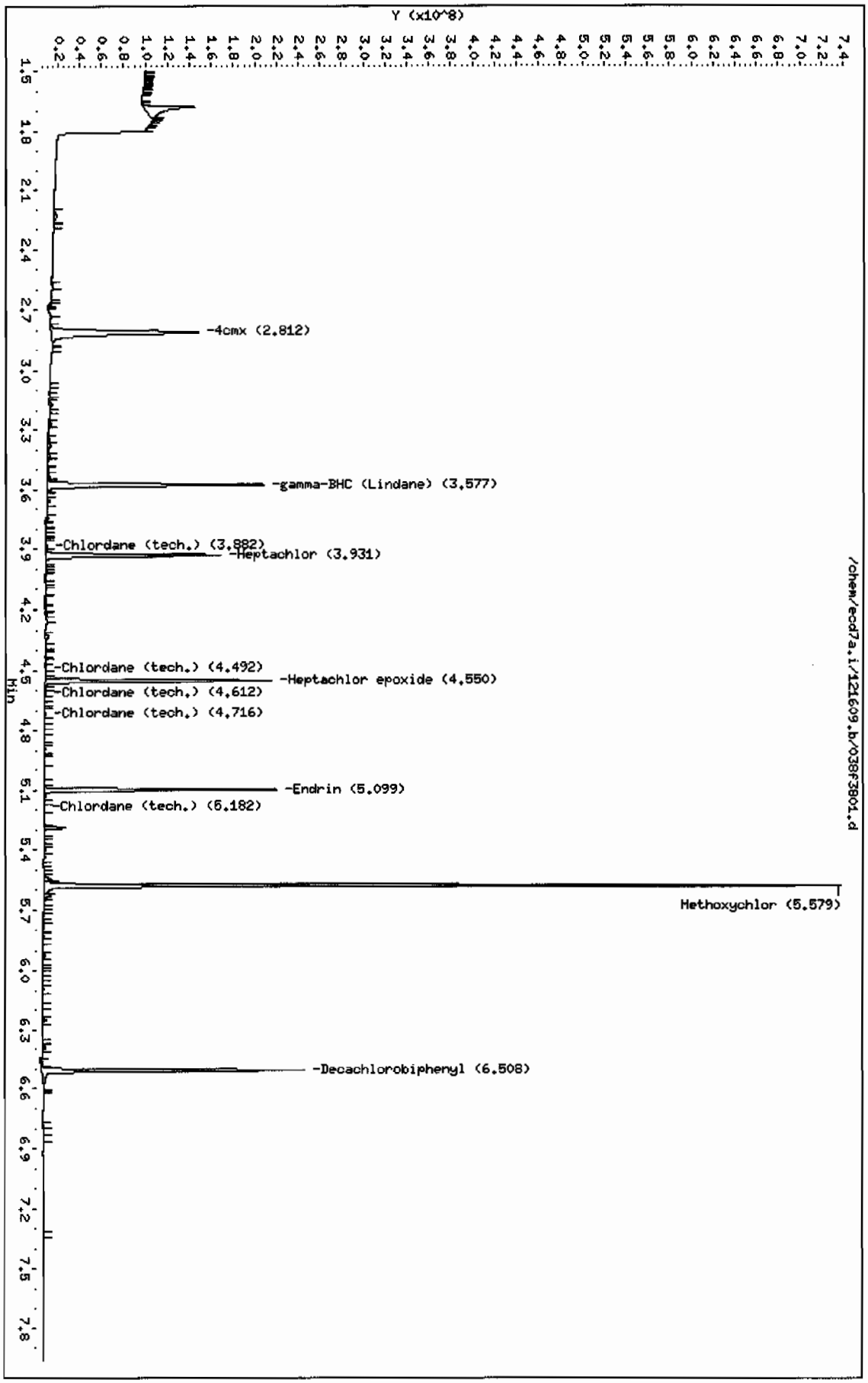

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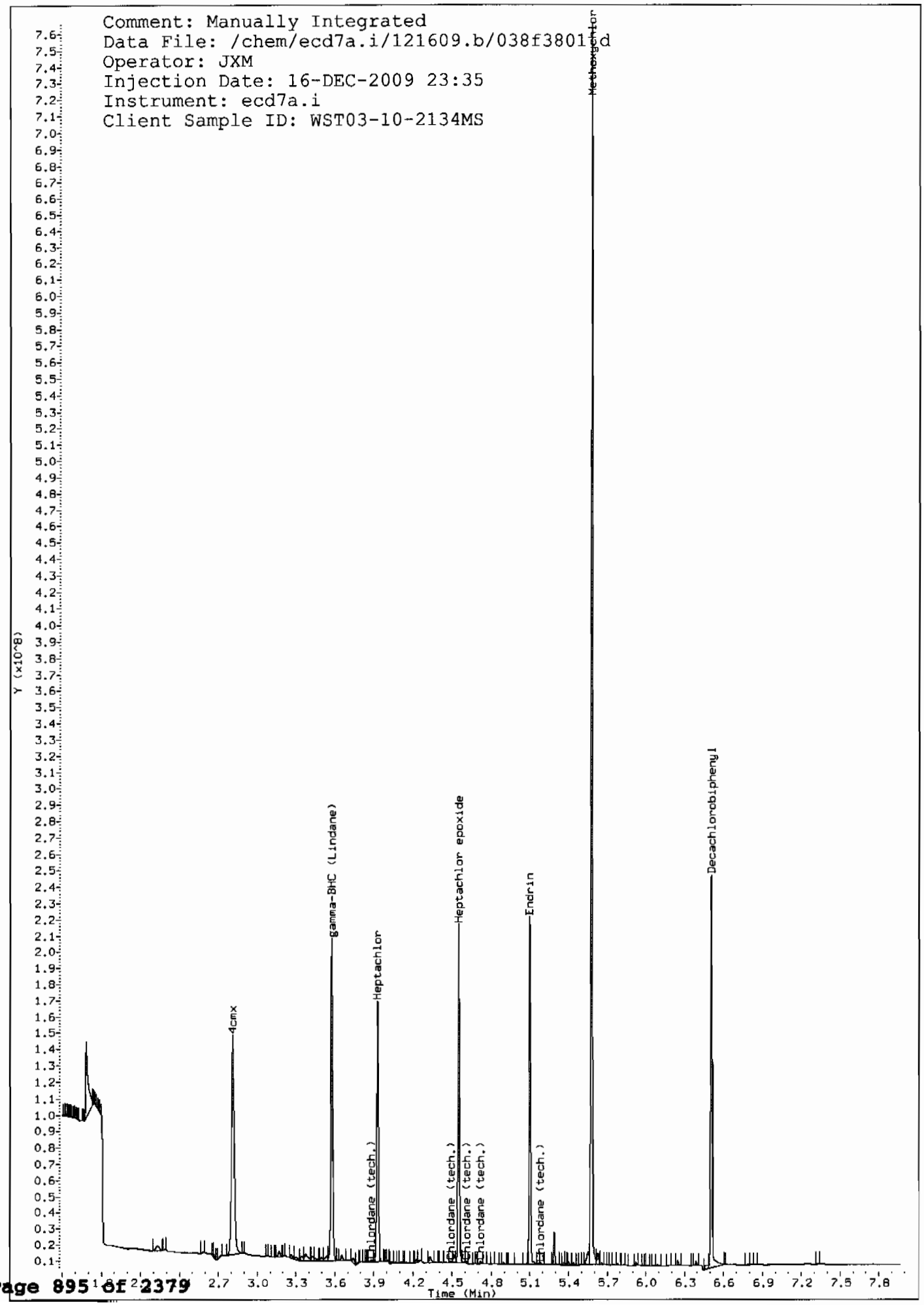
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/038f3801.d
Operator: JXM
Injection Date: 16-DEC-2009 23:35
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MS
Y (x10^8)
Time (Min)
4cmx
gamma-BHC (Lindane)
Heptachlor
Heptachlor epoxide
Endrin
Methoxychlor
Decachlorobiphenyl
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)

Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-03803801.d
Operator: JXM
Injection Date: 16-DEC-2009 23:35
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MS

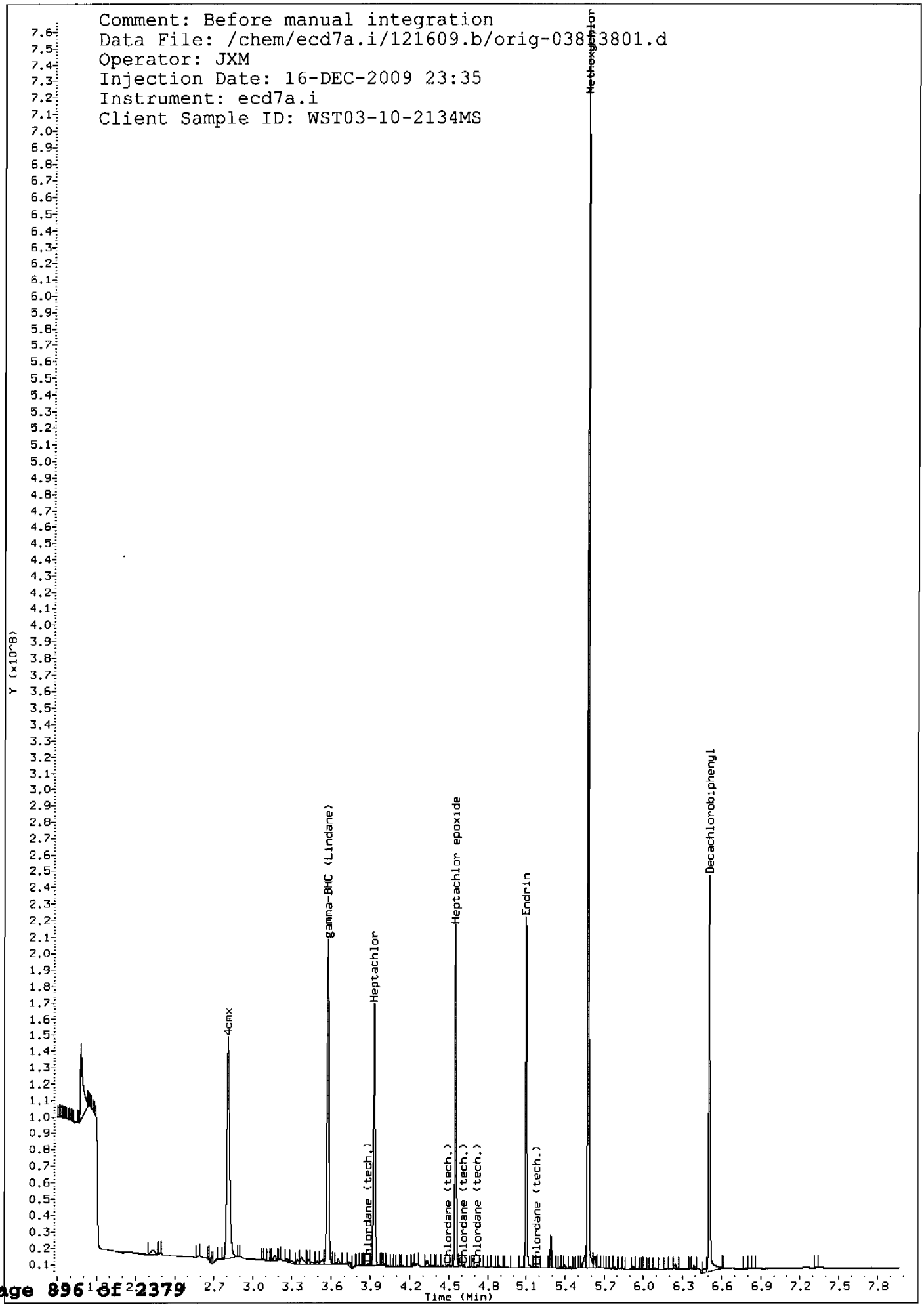

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CLP-2

Data file : /chem/ecd7a.i/121609.b/038b3801.d
Lab Smp Id: 1201996511 Client Smp ID: WST03-10-2134MS
Inj Date : 16-DEC-2009 23:35
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996511|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 38 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.063	0.002	254730427	90.0573	0.00450	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.018	7.025	-0.007	197077234	129.115	0.00646	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.880	3.880	0.000	256117887	79.3339	0.00397	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.207	4.207	0.000	176477221	76.4782	0.00382	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.810	4.811	-0.001	204756057	71.6338	0.00358	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.424	5.425	-0.001	190781701	87.2496	0.00436	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.053	6.059	-0.006	499803051	1306.95	0.0653	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/038b3801.d
Date : 16-DEC-2009 23:35
Client ID: WSTC3-10-2134MS
Sample Info: 1120199651111
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

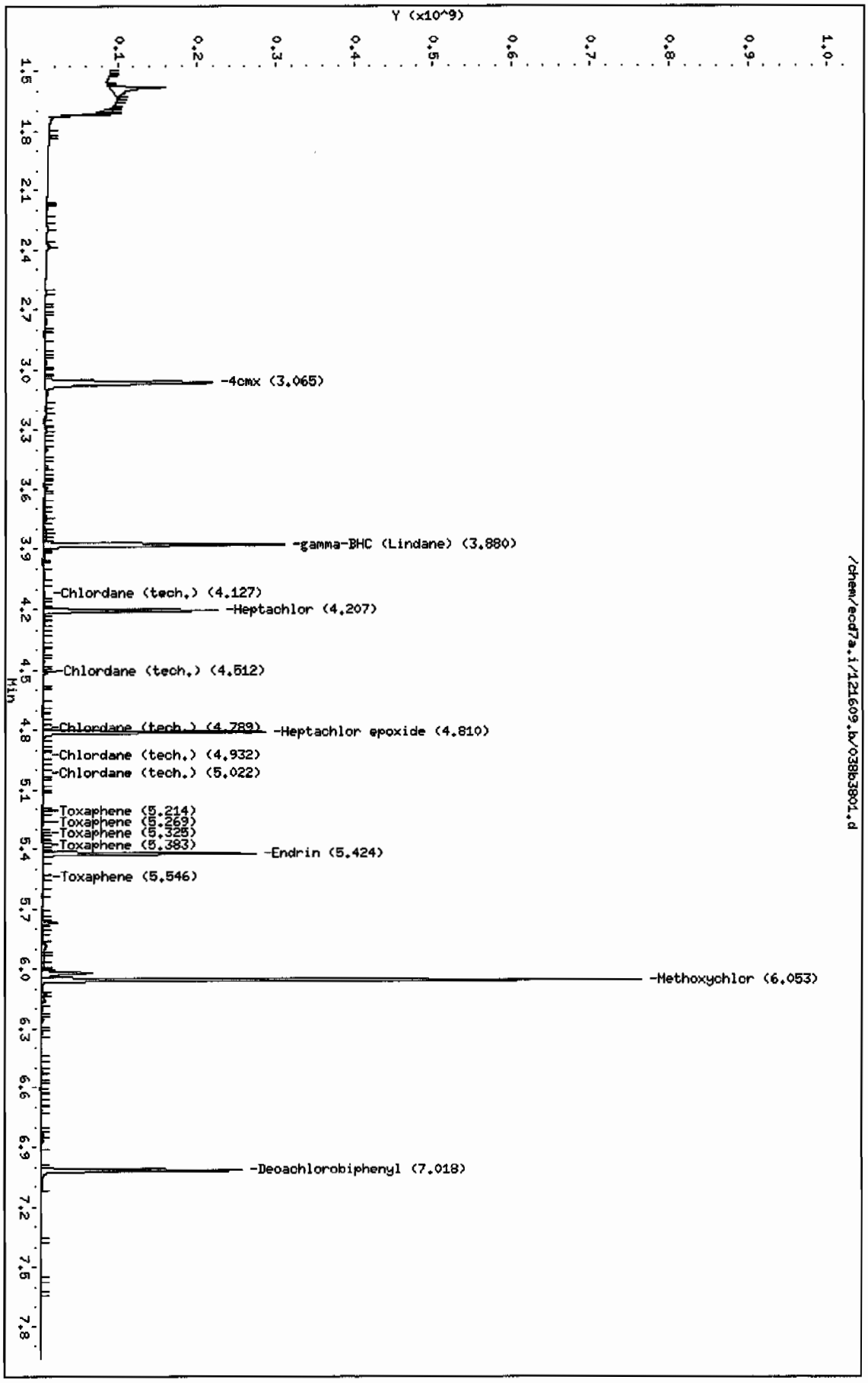

Page 1

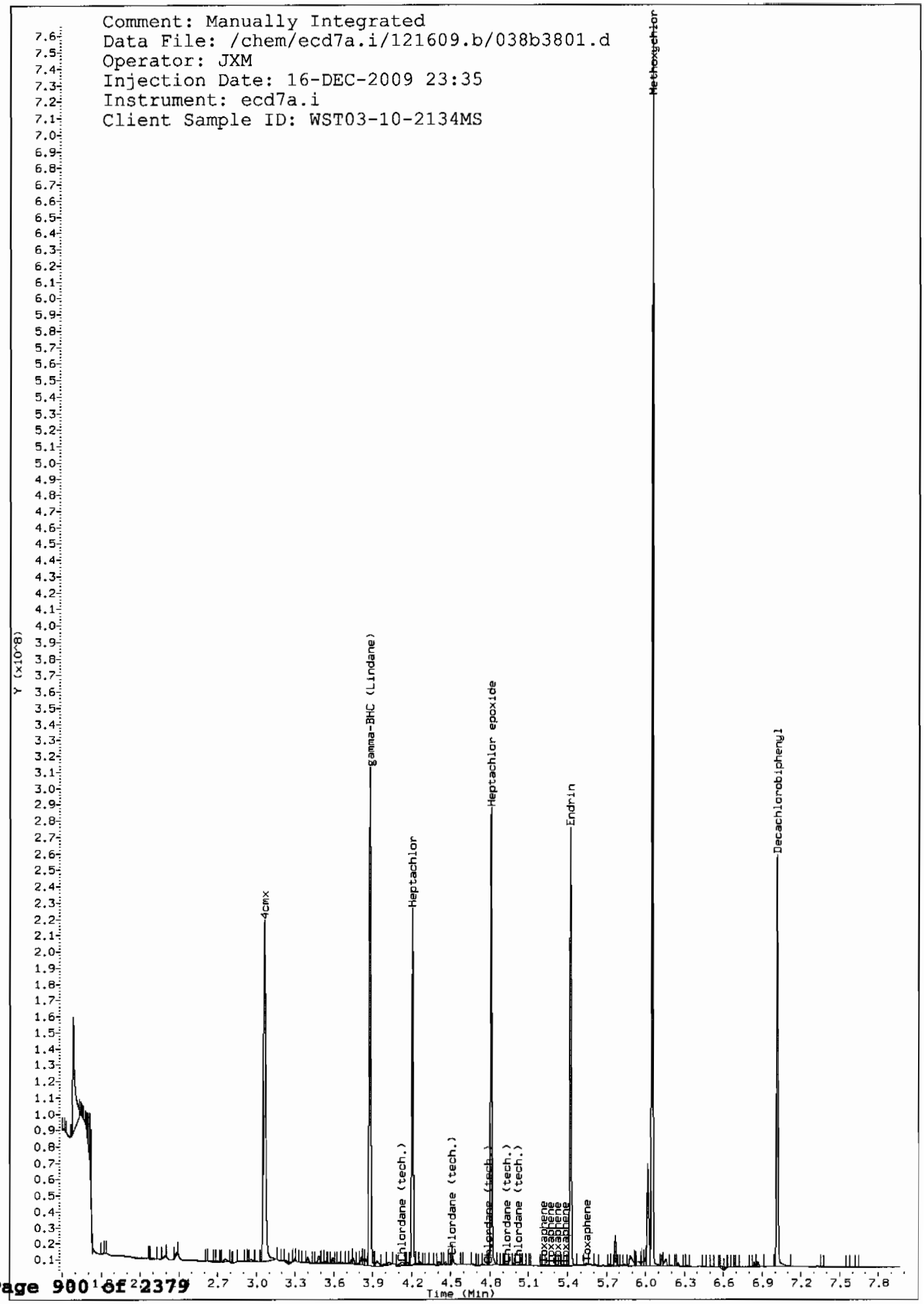
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/038b3801.d
Operator: JXM
Injection Date: 16-DEC-2009 23:35
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MS
Y (x10^8)
Time (Min)
4cmx
gamma-BHC (Lindane)
Heptachlor
Chlordane (tech.)
Chlordane (tech.)
Heptachlor epoxide
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Endrin
Toxaphene
Methoxychlor
Decachlorobiphenyl

Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-038b3801.d
Operator: JXM
Injection Date: 16-DEC-2009 23:35
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MS

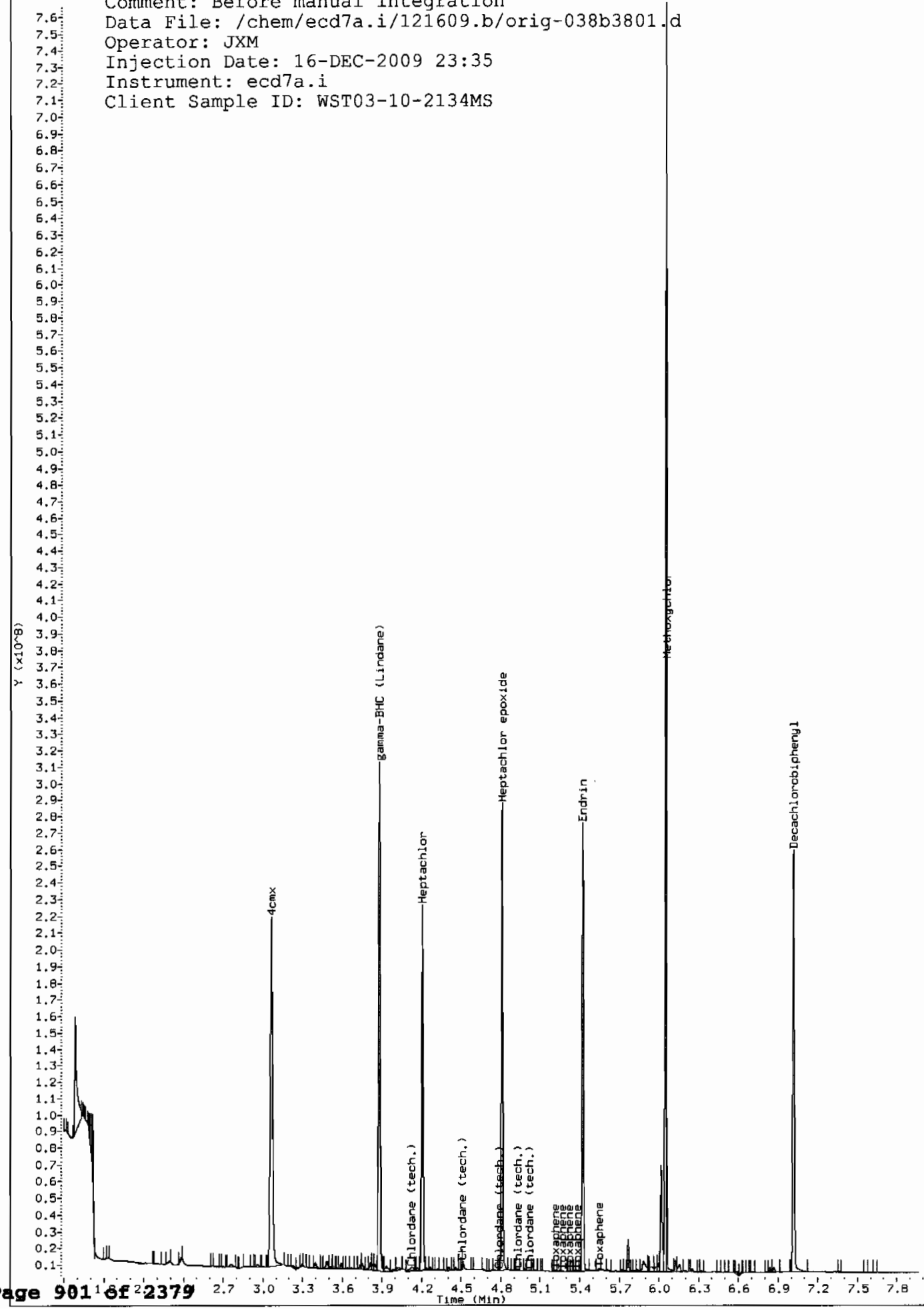

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201996512	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2134MS	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/17/2009 00:04	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	040f4001.d	**Column:**	1 CLP–1	**Level:**	LOW
	040b4001.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72–20–8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene		0.0662	mg/L	0.0015	0.005	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121609.b/040f4001.d
Lab Smp Id: 1201996512 Client Smp ID: WST03-10-2134TMS
Inj Date : 17-DEC-2009 00:04
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996512|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMS|SOIL|TMS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.810	2.810	0.000	217744445	91.5004	0.00458	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.515	-0.008	200473940	144.574	0.00723	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.955	4.956	-0.001	31543629	1255.66	0.0628	80.00- 120.00	100.00(M)
5.011	5.011	0.000	40752787	1242.81	0.0621	115.94- 155.94	129.19
5.049	5.049	0.000	54429251	1287.86	0.0644	134.45- 174.45	172.55
5.111	5.113	-0.002	54455740	1340.97	0.0670	138.55- 178.55	172.64
5.230	5.232	-0.002	109558476	1497.85	0.0749	229.50- 269.50	347.32

Average of Peak Concentrations = 0.0662

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/040f4001.d
Date : 17-DEC-2009 00:04
Client ID: WST03-10-2134THS
Sample Info: |1201996512|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

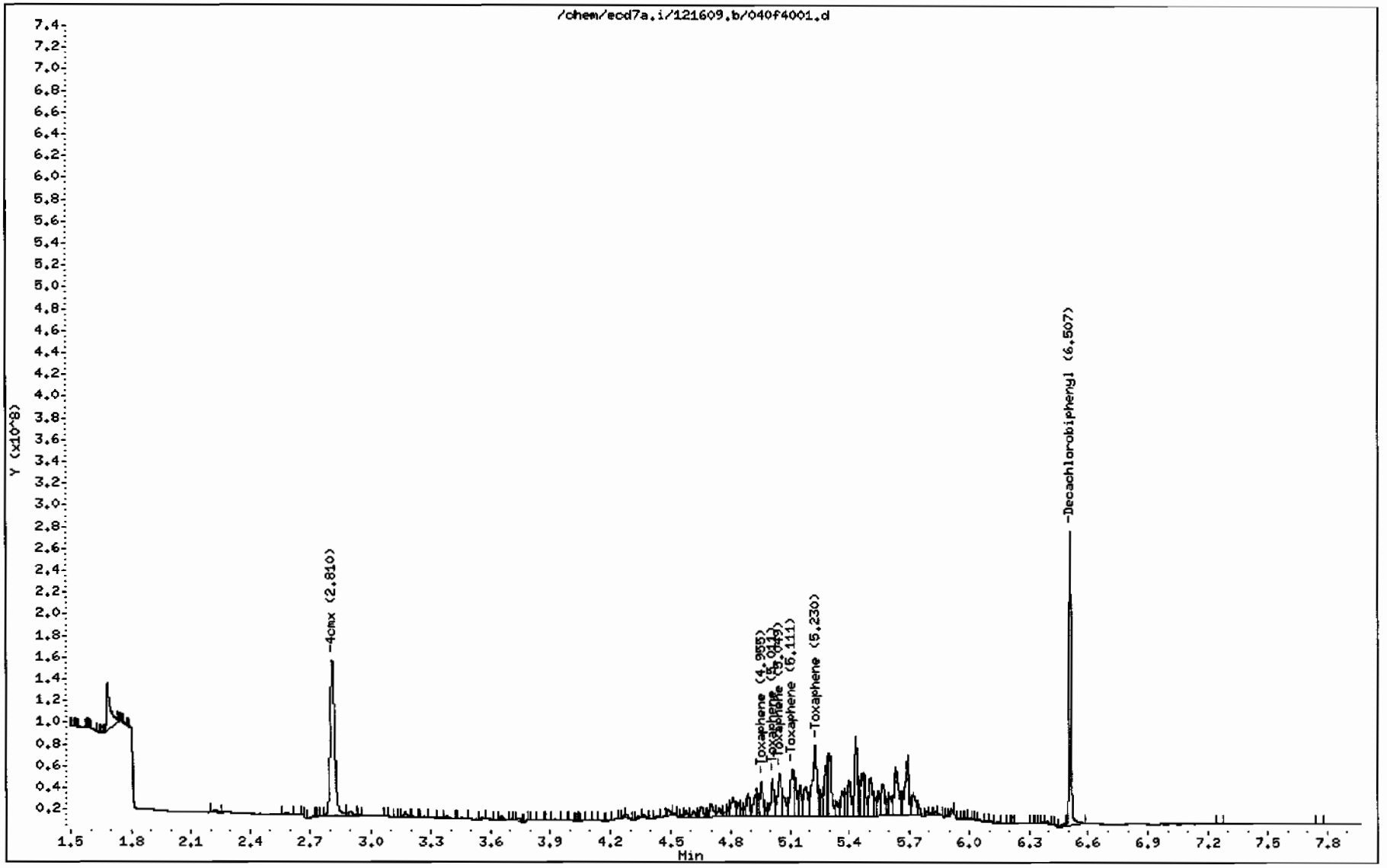

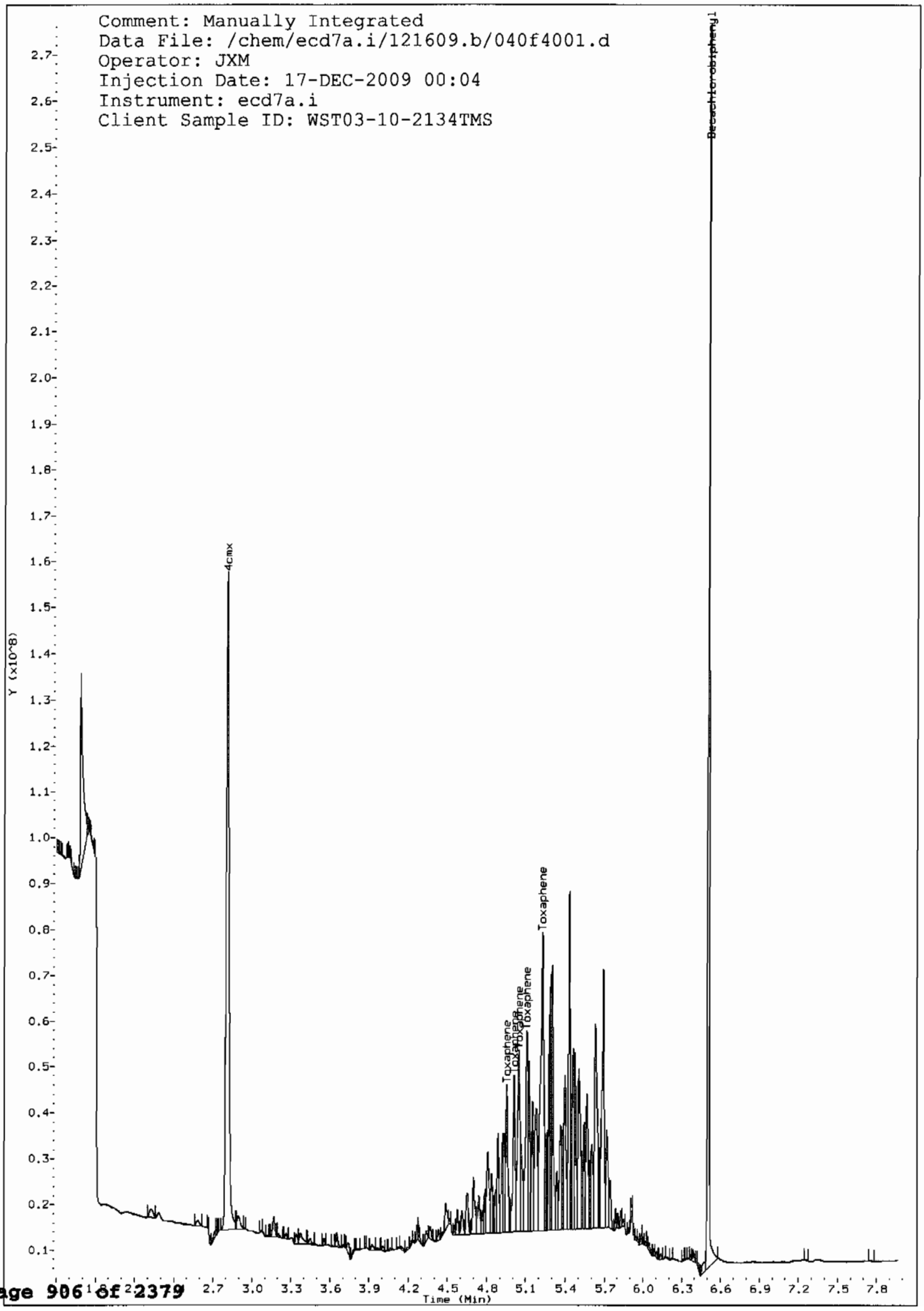
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Operator: JXM
Injection Date: 17-DEC-2009 00:04
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134TMS
Decachlorobiphenyl
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

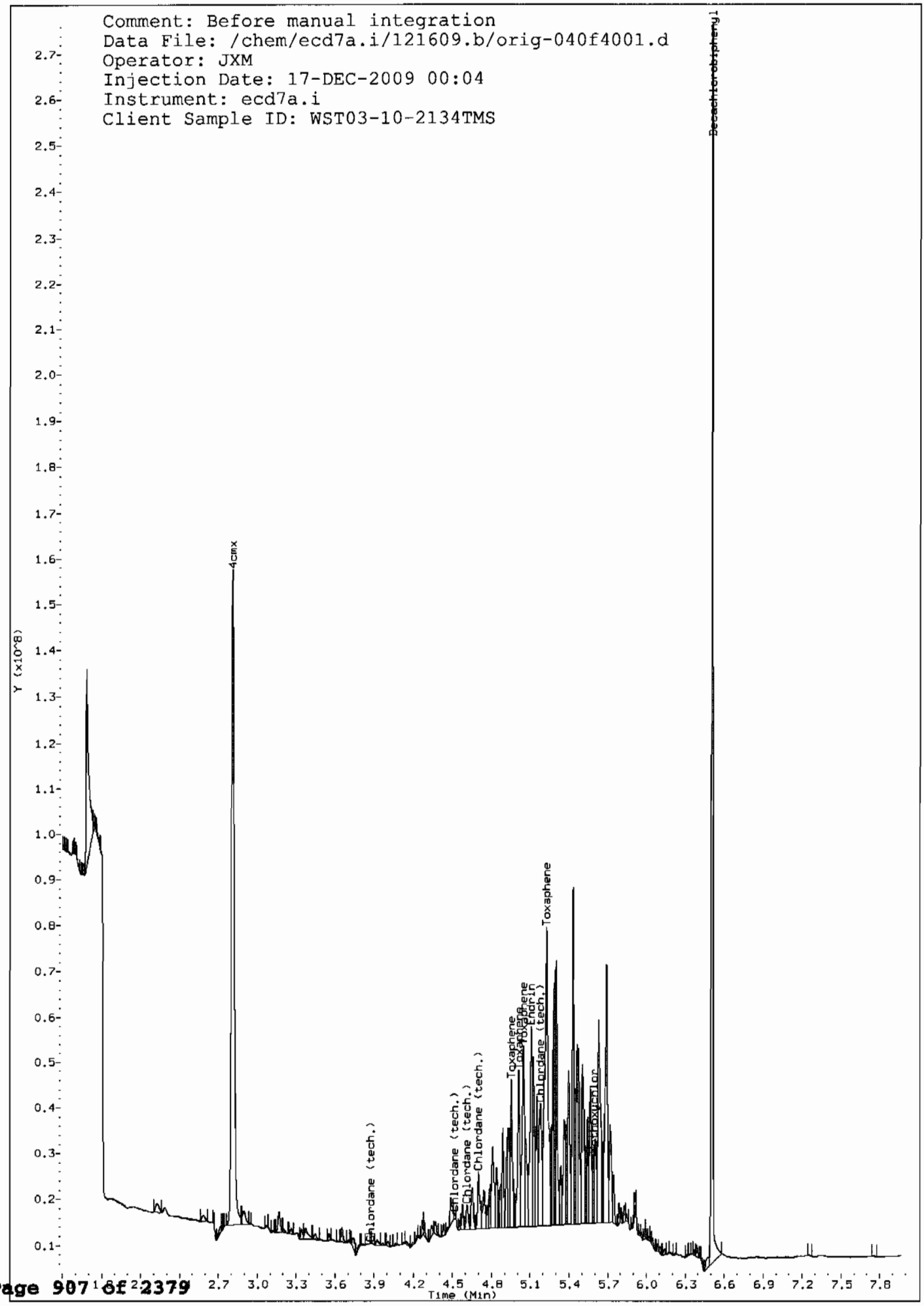
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-040f4001.d
Operator: JXM
Injection Date: 17-DEC-2009 00:04
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134TMS
Y (x10^8)
Time (Min)
4cmx
Decachlorobiphenyl
Toxaphene
Chlordane (tech.)
Endrin
Methoxychlor

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121609.b/040b4001.d
Lab Smp Id: 1201996512 Client Smp ID: WST03-10-2134TMS
Inj Date : 17-DEC-2009 00:04
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996512|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMS|SOIL|TMS|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	275451282	97.3829	0.00487	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.018	7.025	-0.007	222261442	145.614	0.00728	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
5.217	5.212	0.005	65194937	1421.55	0.0711	80.00- 120.00	100.00(M)
5.288	5.289	-0.001	34141145	1277.28	0.0639	38.31- 78.31	52.37
5.325	5.326	-0.001	62701128	1382.44	0.0691	80.39- 120.39	96.17
5.398	5.400	-0.002	55511271	1404.72	0.0702	69.83- 109.83	85.15
5.543	5.543	0.000	101166696	1783.88	0.0892	111.80- 151.80	155.18

Average of Peak Concentrations = 0.0727

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/040b4001.d
Date : 17-DEC-2009 00:04
Client ID: WST03-10-2134TMS
Sample Info: |120199651211|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

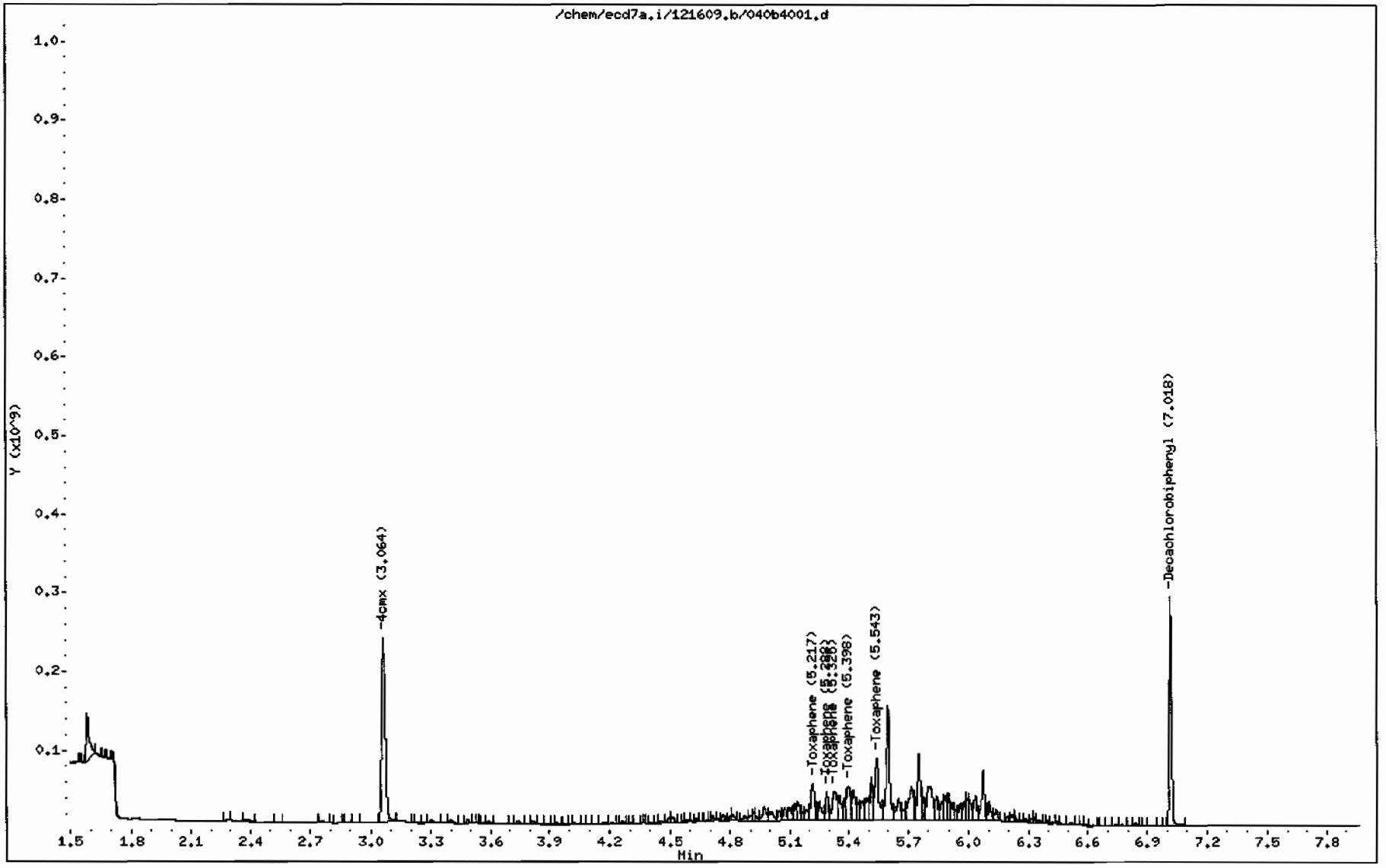

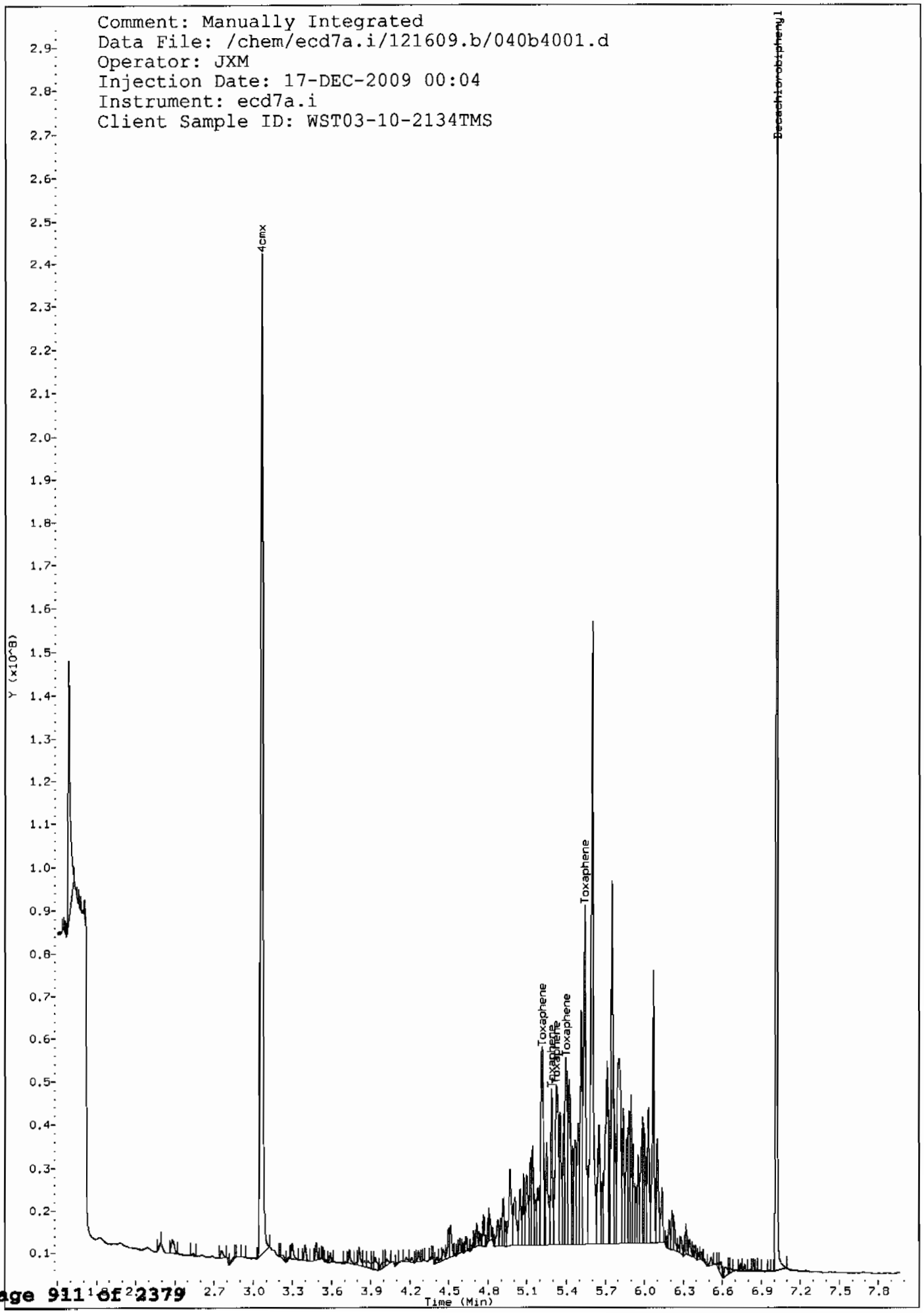
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Data File: /chem/ecd7a.i/121609.b/040b4001.d
Operator: JXM
Injection Date: 17-DEC-2009 00:04
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134TMS
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

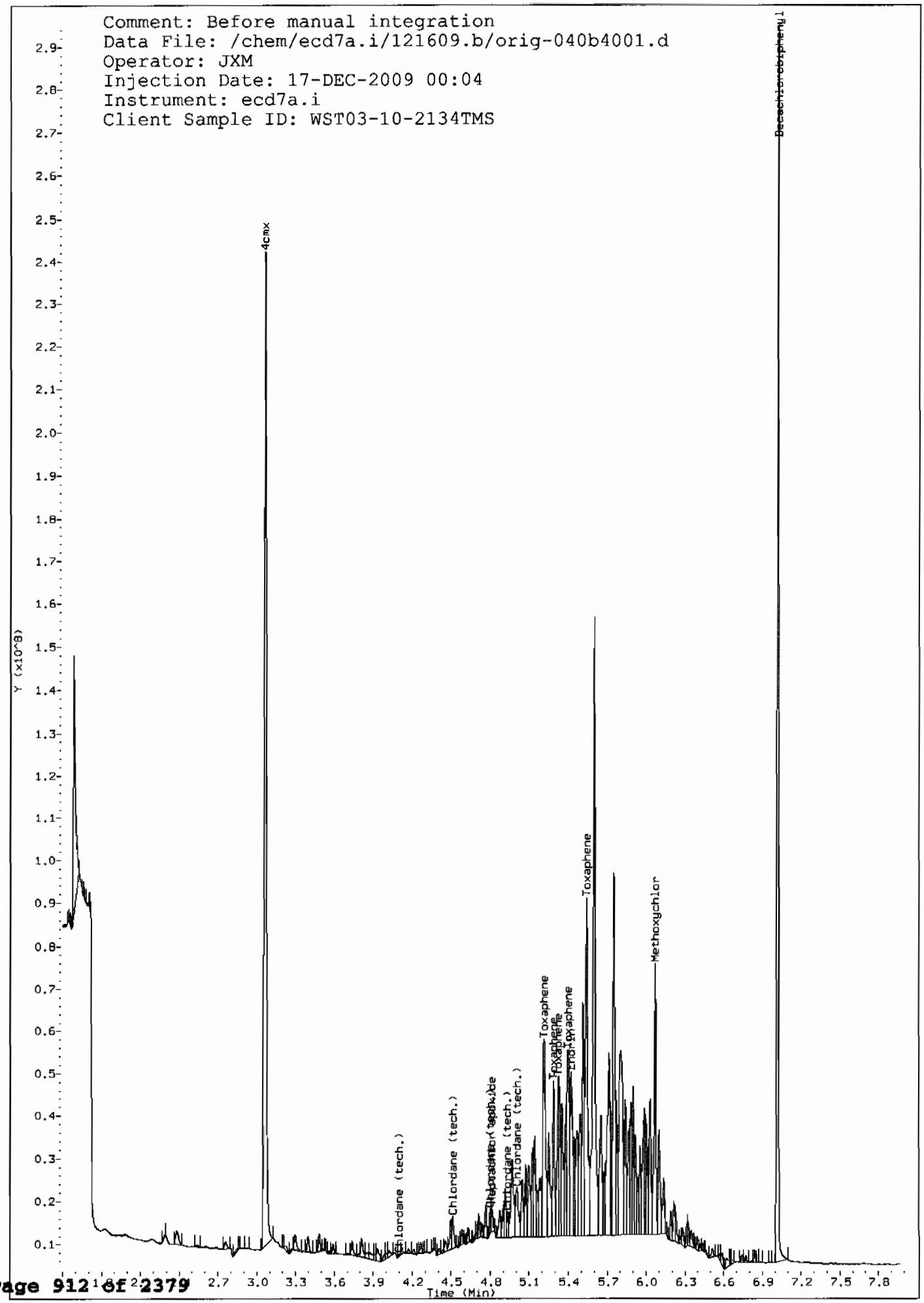
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-040b4001.d
Operator: JXM
Injection Date: 17-DEC-2009 00:04
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134TMS
4cmx
Decachlorobiphenyl
Toxaphene
Methoxychlor
Chlordane (tech.)
Y (x10^8)
Time (Min)

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201996516	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2134MSD	**Method:**	SW846 8081A	**SOP Ref:**	GL-OA-E-041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/17/2009 00:49	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	043f4301.d	**Column:**	1 CLP-1	**Level:**	LOW
	043b4301.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58-89-9	gamma-BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76-44-8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024-57-3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72-20-8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72-43-5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57-74-9	Chlordane (tech.)		0.0658	mg/L	0.000765	0.0025	1
8001-35-2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd7a.i/121609.b/043f4301.d
Lab Smp Id: 1201996516 Client Smp ID: WST03-10-2134CMSD
Inj Date : 17-DEC-2009 00:49
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996516|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMSD|SOIL|CMSD|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 43 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	232108781	97.5366	0.00488	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.515	-0.008	171963999	124.014	0.00620	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.873	3.873	0.000	92998989	1048.60	0.0524	80.00- 120.00	100.00(M)
4.509	4.509	0.000	65754817	1295.09	0.0648	38.62- 78.62	70.70
4.631	4.632	-0.001	326552246	1157.26	0.0579	291.32- 331.32	351.14
4.715	4.716	-0.001	247131388	1200.04	0.0600	223.78- 263.78	265.74
5.194	5.195	-0.001	93923700	1879.13	0.0940	43.50- 83.50	100.99
Average of Peak Concentrations =					0.0658		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/043f4301.d

Date : 17-DEC-2009 00:49

Client ID: WST03-10-2134CMSD

Sample Info: |120199651611|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

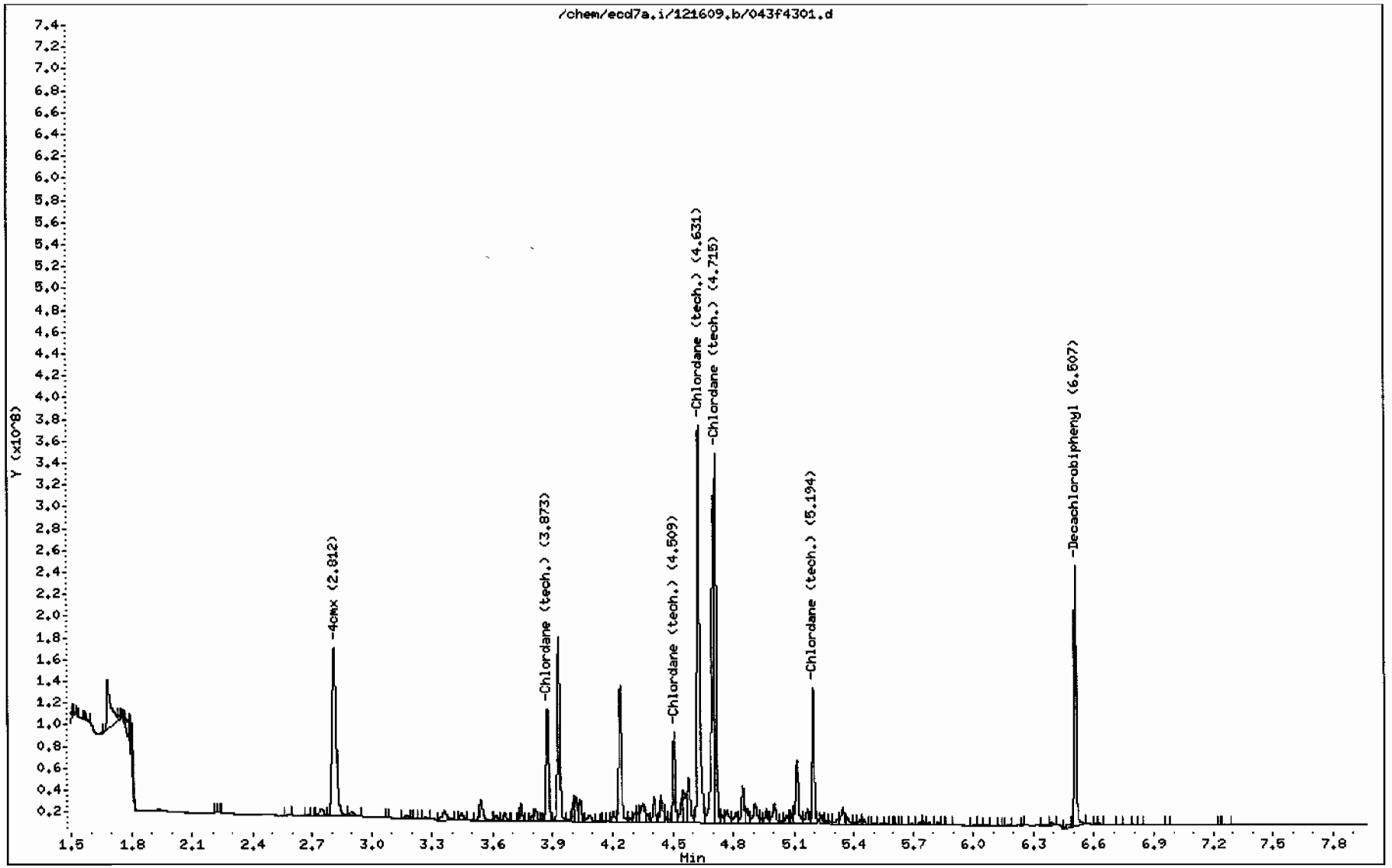

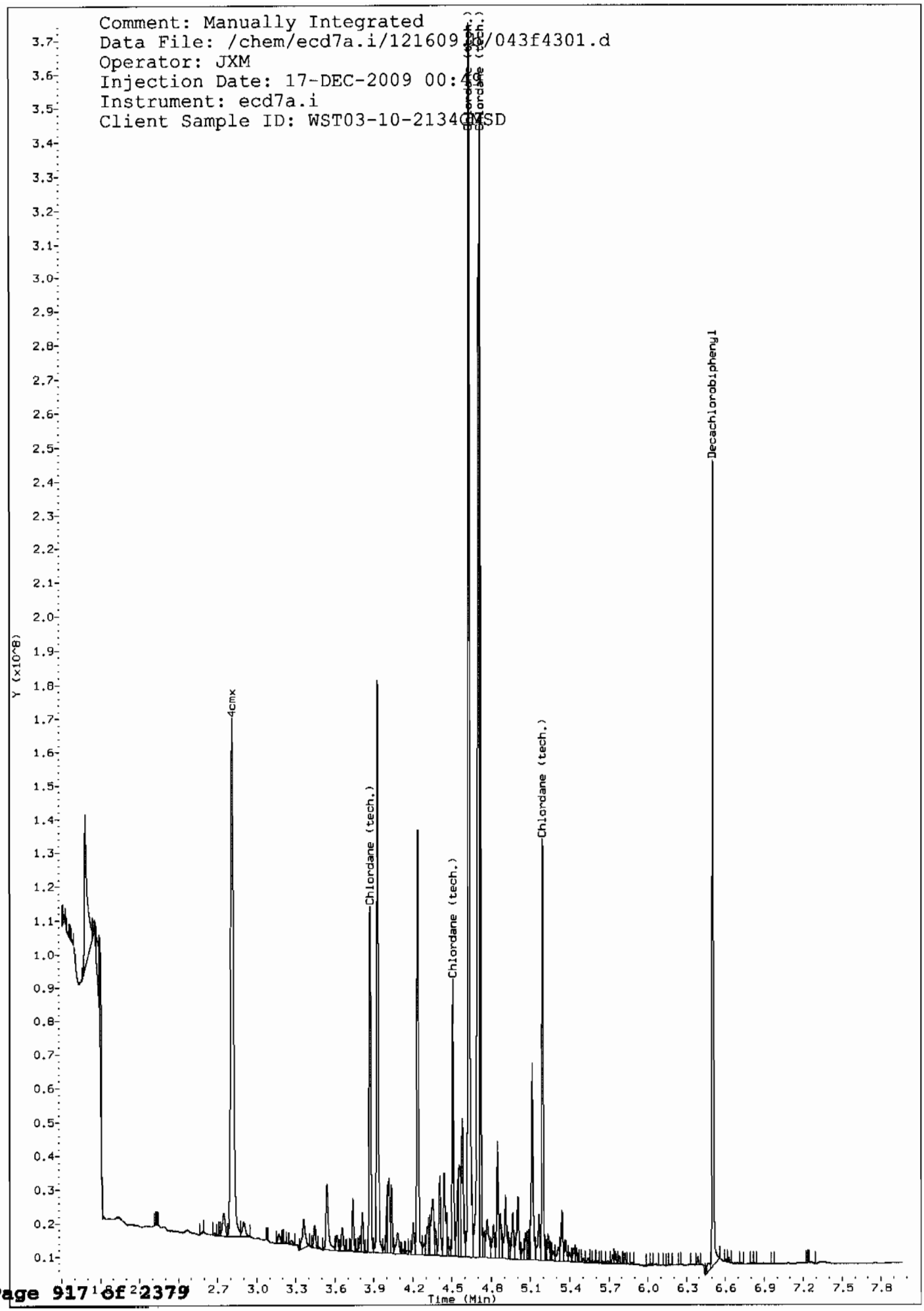
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609 00/043f4301.d
Operator: JXM
Injection Date: 17-DEC-2009 00:49
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134CMSD
4cmx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^8)
Time (Min)

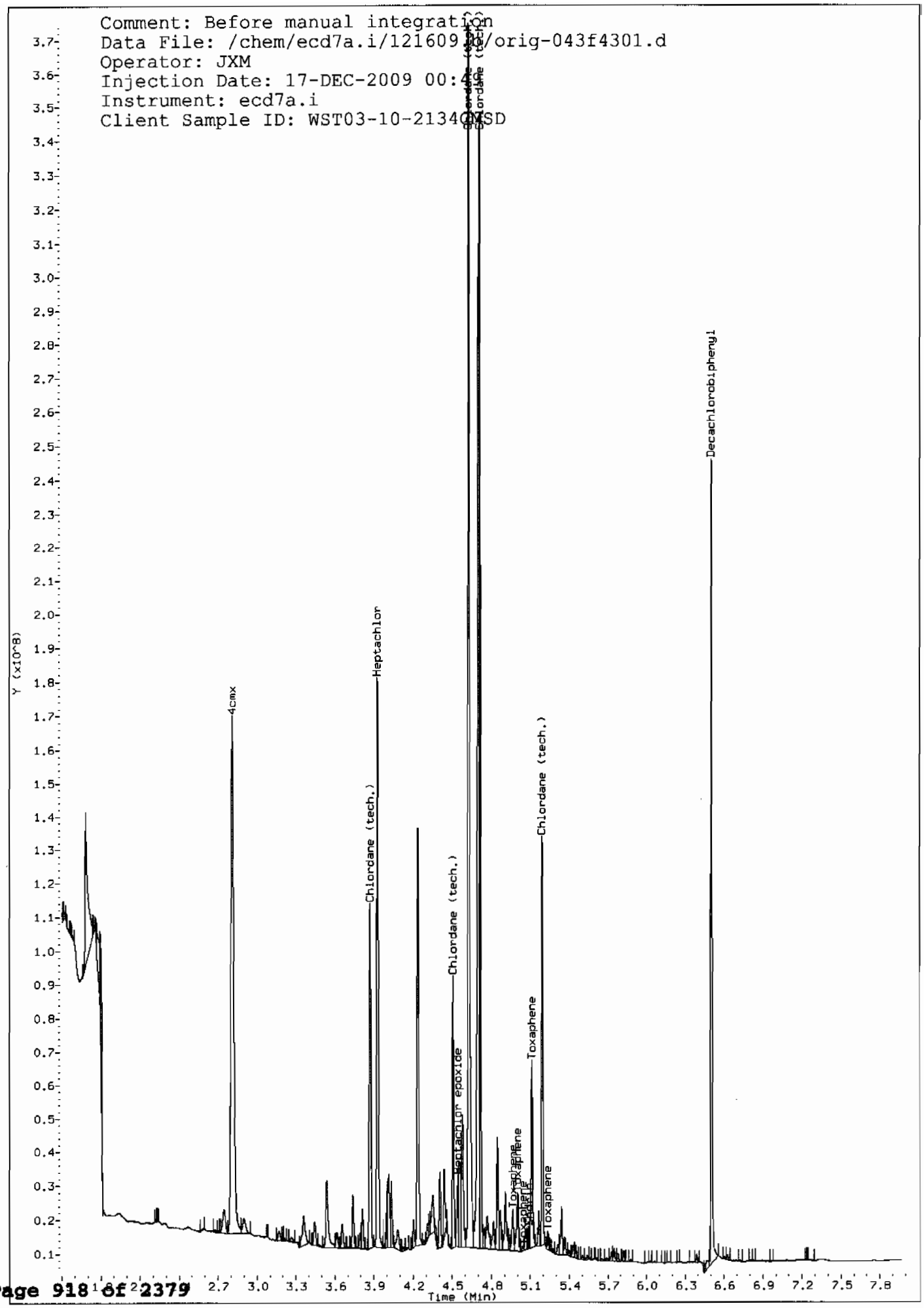
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-043f4301.d
Operator: JXM
Injection Date: 17-DEC-2009 00:4
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134
Y (x10^8)
Time (Min)
4cmx
Heptachlor
Chlordane (tech.)
Chlordane (tech.)
Heptachlor epoxide
Toxaphene
Chlordane (tech.)
Toxaphene
Decachlorobiphenyl

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CLP-2

Data file : /chem/ecd7a.i/121609.b/043b4301.d
Lab Smp Id: 1201996516 Client Smp ID: WST03-10-2134CMSD
Inj Date : 17-DEC-2009 00:49
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996516|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMSD|SOIL|CMSD|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 43 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	295812589	104.581	0.00523	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.018	7.025	-0.007	193262555	126.616	0.00633	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.102	4.102	0.000	123328732	1019.76	0.0510	80.00- 120.00	100.00
4.530	4.530	0.000	143264087	1494.44	0.0747	70.93- 110.93	116.16
4.784	4.785	-0.001	92886699	1356.17	0.0678	37.24- 77.24	75.32
4.931	4.931	0.000	437552955	1361.82	0.0681	241.22- 281.22	354.79
5.023	5.023	0.000	383286943	1401.57	0.0701	205.78- 245.78	310.78

Average of Peak Concentrations = 0.0663

Data File: /chem/ecd7a.i/121609.b/043b4301.d
Date : 17-DEC-2009 00:49
Client ID: WST03-10-2134CMSD
Sample Info: !1201996516!1!
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

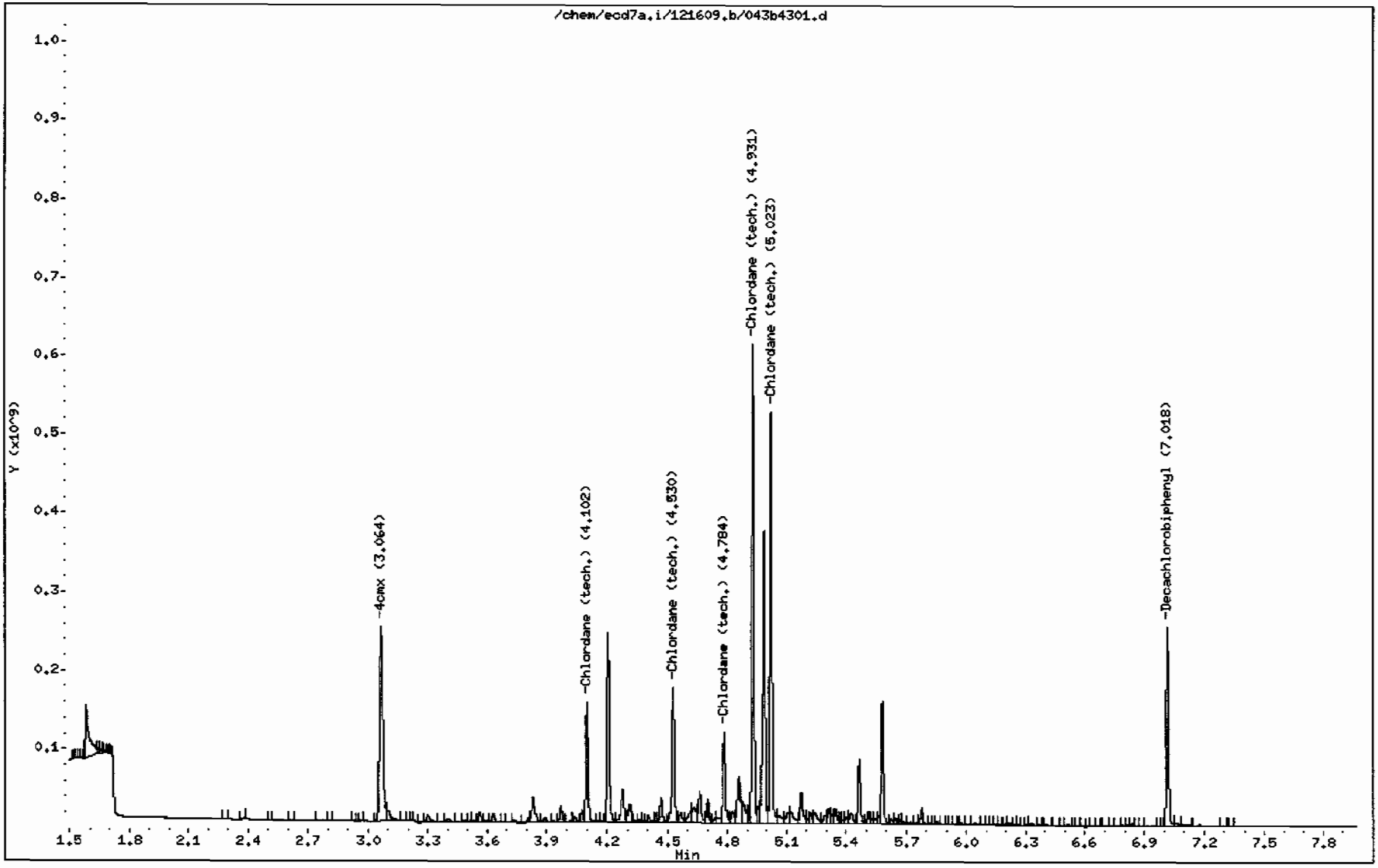

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201996514	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2134MSD	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/16/2009 23:49	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	039f3901.d	**Column:**	1 CLP–1	**Level:**	LOW
	039b3901.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)		0.00332	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor		0.00309	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide		0.0032	mg/L	0.00005	0.0002	1
72–20–8	Endrin		0.004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor		0.0531	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene	U	0.005	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd7a.i/121609.b/039f3901.d
Lab Smp Id: 1201996514 Client Smp ID: WST03-10-2134MSD
Inj Date : 16-DEC-2009 23:49
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996514|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 39 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	162232614	68.1733	0.00341	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.515	-0.008	175511041	126.572	0.00633	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.577	3.576	0.001	173348485	66.4639	0.00332	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.930	3.930	0.000	126003235	61.7027	0.00308	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.551	4.551	0.000	149063905	64.0574	0.00320	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.099	5.100	-0.001	147673810	79.9305	0.00400	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.579	5.581	-0.002	468081055	1062.23	0.0531	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/039f3901.d
Date : 16-DEC-2009 23:49
Client ID: WST03-10-2134MSD
Sample Info: 1120199651411
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

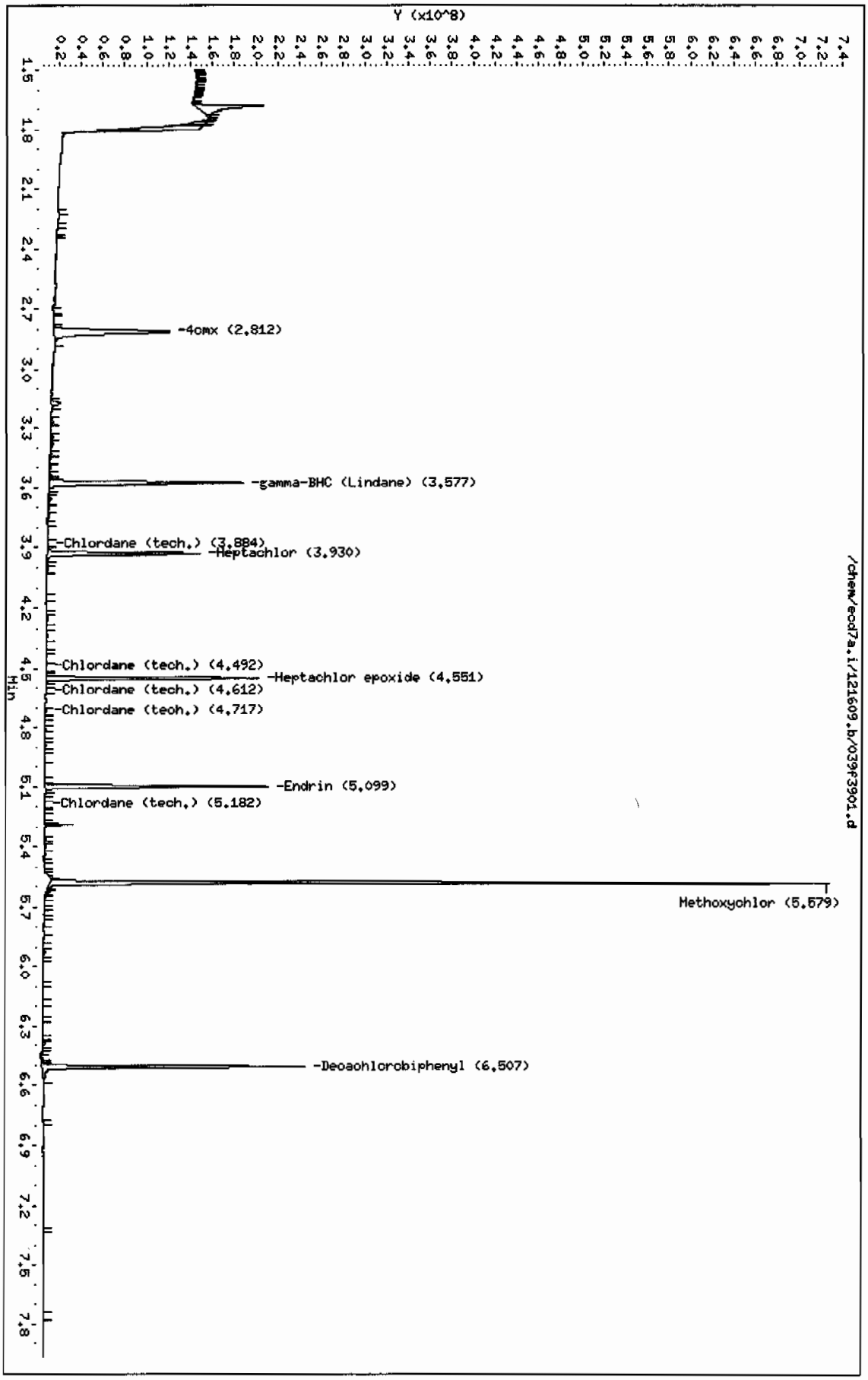

Page 1

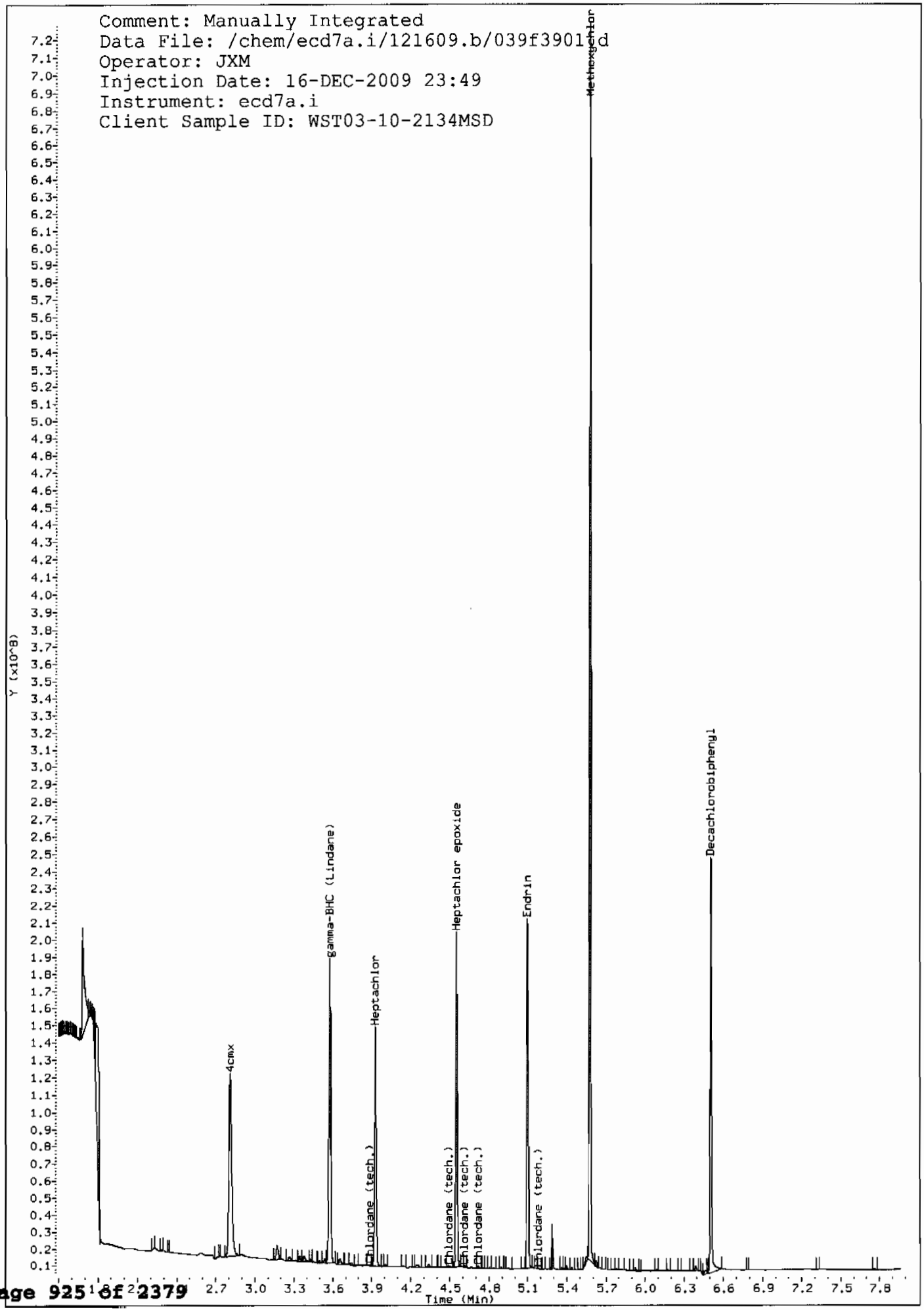
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Data File: /chem/ecd7a.i/121609.b/039f3901.d
Operator: JXM
Injection Date: 16-DEC-2009 23:49
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MSD
Y (x10^8)
Time (Min)
4cmx
gamma-BHC (Lindane)
Heptachlor
Chlordane (tech.)
Heptachlor epoxide
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Endrin
Chlordane (tech.)
Methoxychlor
Decachlorobiphenyl

Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-0393901.d
Operator: JXM
Injection Date: 16-DEC-2009 23:49
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MSD

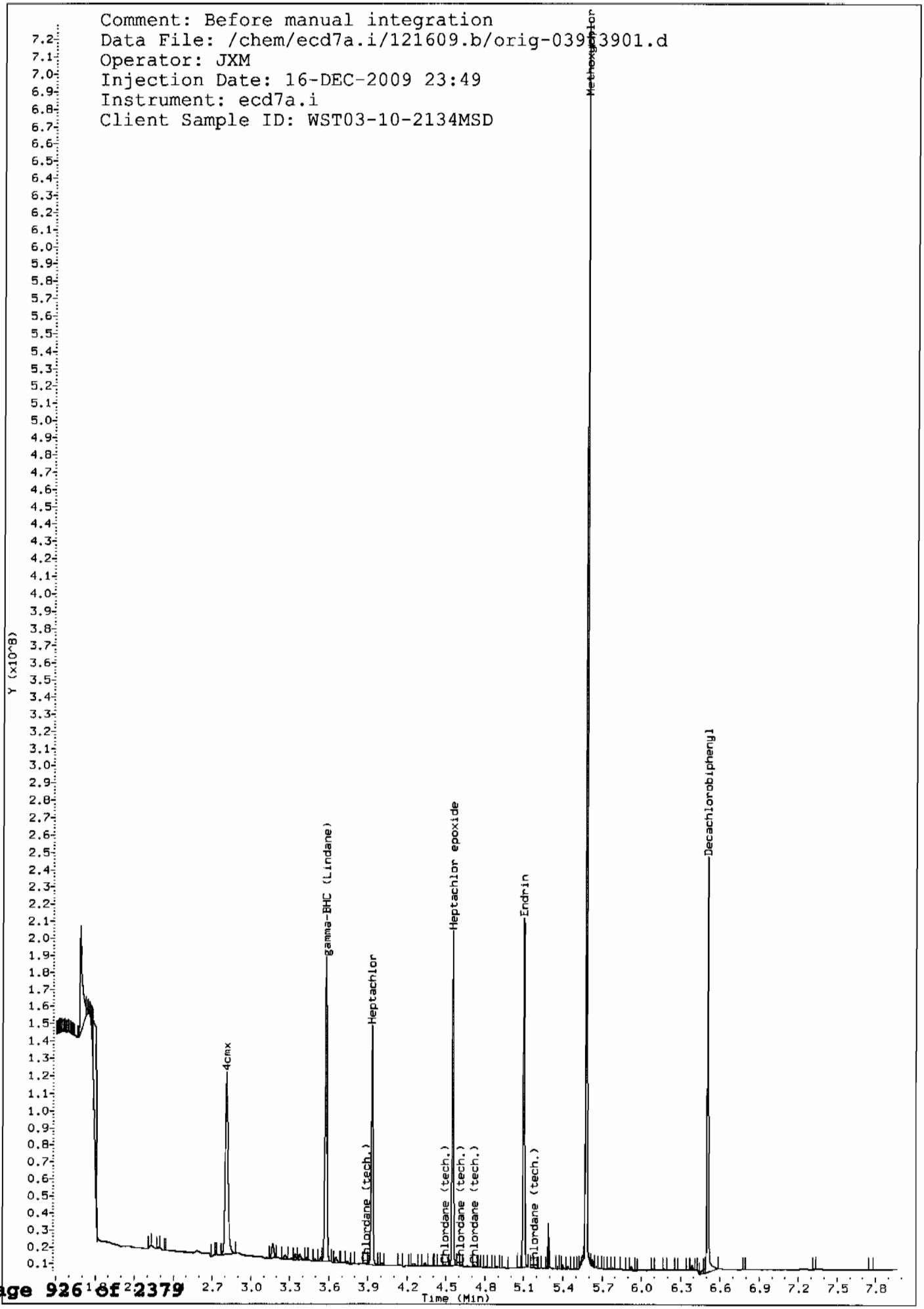

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CLP-2

Data file : /chem/ecd7a.i/121609.b/039b3901.d
Lab Smp Id: 1201996514 Client Smp ID: WST03-10-2134MSD
Inj Date : 16-DEC-2009 23:49
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996514|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 39 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.063	0.002	213005293	75.3058	0.00376	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.025	-0.008	189911859	124.421	0.00622	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.881	3.880	0.001	233502700	72.3288	0.00362	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.207	4.207	0.000	158298327	68.6002	0.00343	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.810	4.811	-0.001	198821720	69.5577	0.00348	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.425	5.425	0.000	183859993	84.0842	0.00420	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.052	6.059	-0.007	460370414	1203.83	0.0602	80.00- 120.00	100.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/039b3901.d
Date : 16-DEC-2009 23:49
Client ID: WST03-10-2134MSD
Sample Info: |120199651411|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

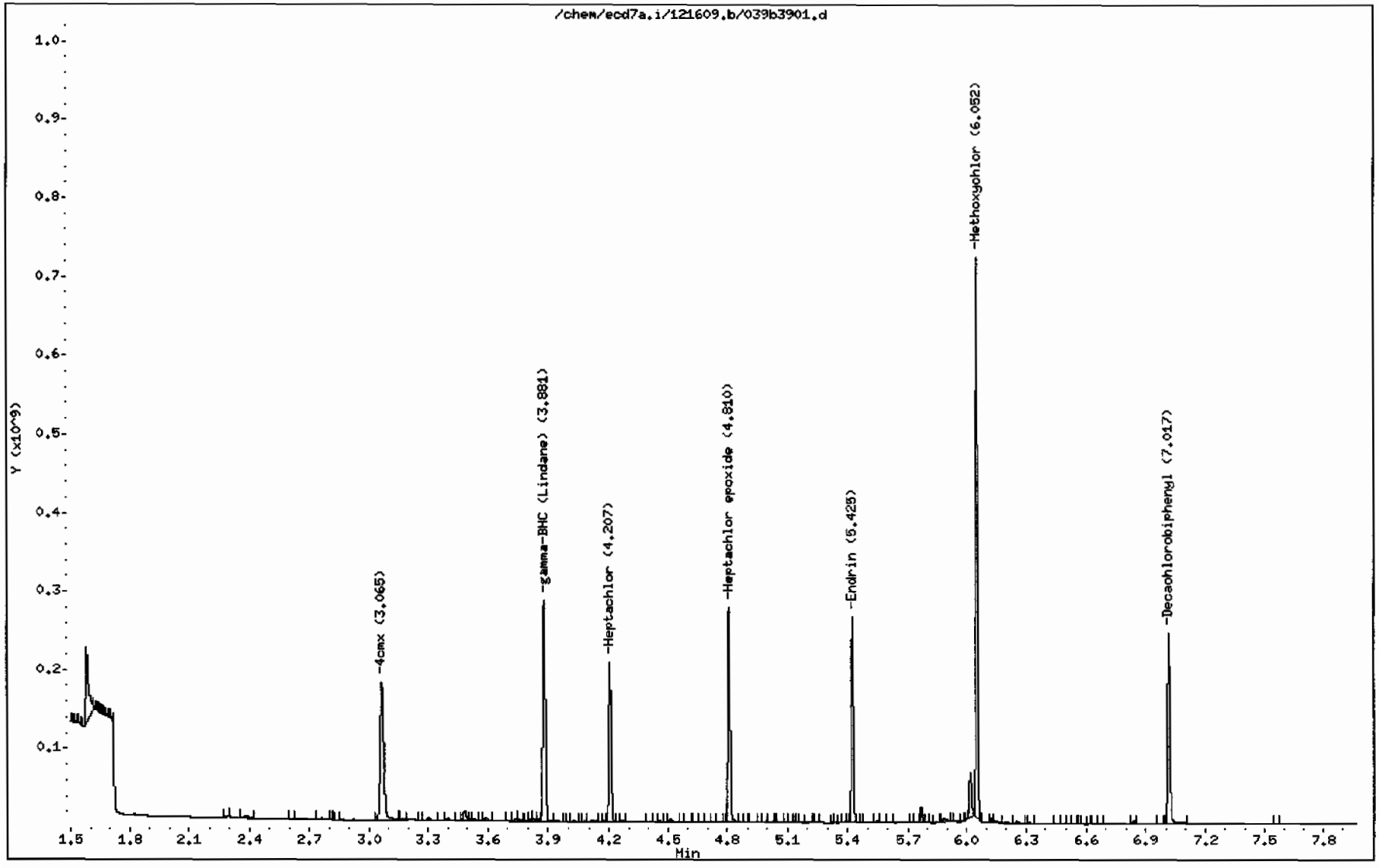

Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/039b3901.d
Operator: JXM
Injection Date: 16-DEC-2009 23:49
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MSD

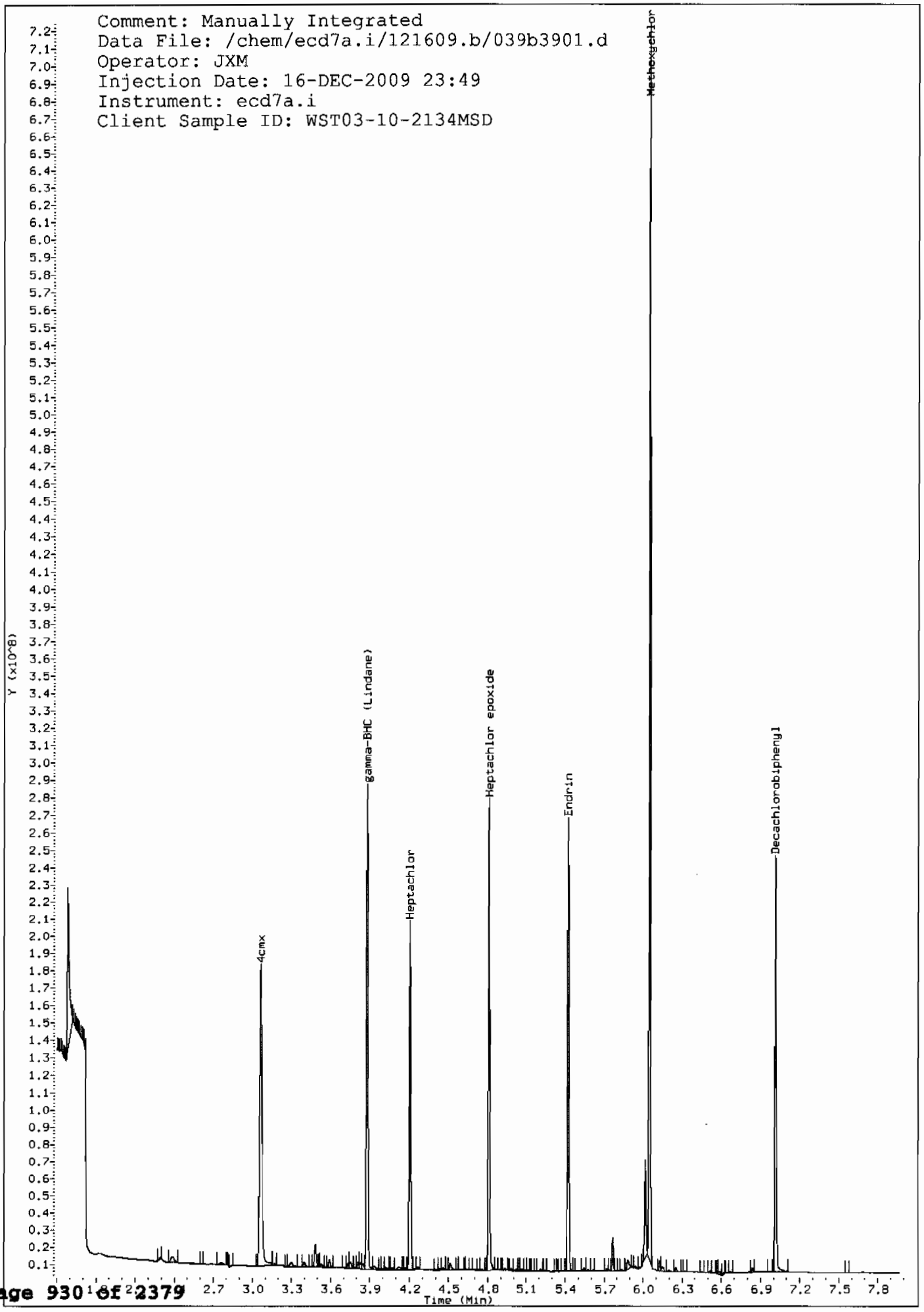

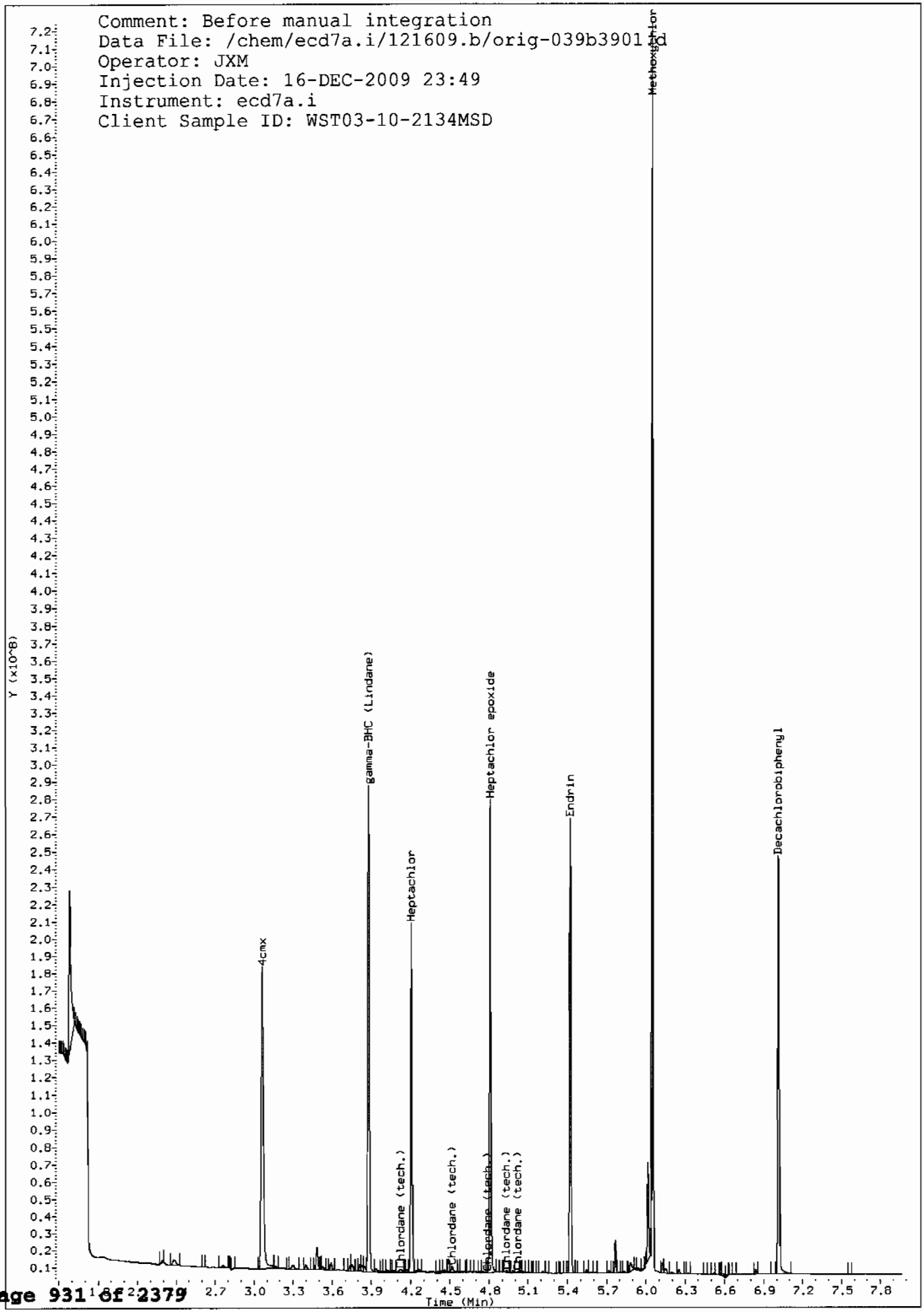
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-039b3901.d
Operator: JXM
Injection Date: 16-DEC-2009 23:49
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134MSD
Y (x10^8)
Time (Min)
4cmx
gamma-BHC (Lindane)
Heptachlor
Heptachlor epoxide
Endrin
Methoxychlor
Decachlorobiphenyl

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201996515	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 933213	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2134MSD	**Method:**	SW846 8081A	**SOP Ref:**	GL–OA–E–041
Batch ID:	933214	**Inst:**	ECD7A.I	**Dilution:**	1
Run Date:	12/17/2009 00:19	**Analyst:**	JXM	**Inj. Vol:**	1 uL
Prep Date:	12/15/2009 19:49	**Aliquot:**	20 mL	**Final Volume:**	1 mL
Data File:	041f4101.d	**Column:**	1 CLP–1	**Level:**	LOW
	041b4101.d		2 CLP–2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
58–89–9	gamma–BHC (Lindane)	U	0.0002	mg/L	0.00005	0.0002	1
76–44–8	Heptachlor	U	0.0002	mg/L	0.00005	0.0002	1
1024–57–3	Heptachlor epoxide	U	0.0002	mg/L	0.00005	0.0002	1
72–20–8	Endrin	U	0.0004	mg/L	0.0001	0.0004	1
72–43–5	Methoxychlor	U	0.002	mg/L	0.0005	0.002	1
57–74–9	Chlordane (tech.)	U	0.0025	mg/L	0.000765	0.0025	1
8001–35–2	Toxaphene		0.067	mg/L	0.0015	0.005	1

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CLP-1

Data file : /chem/ecd7a.i/121609.b/041f4101.d
Lab Smp Id: 1201996515 Client Smp ID: WST03-10-2134TMSD
Inj Date : 17-DEC-2009 00:19
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996515|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMSD|SOIL|TMSD|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-F-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.810	0.002	229961773	96.6343	0.00483	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.509	6.515	-0.006	188013411	135.588	0.00678	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
4.955	4.956	-0.001	32110552	1278.23	0.0639	80.00- 120.00	100.00(M)
5.011	5.011	0.000	41096154	1253.28	0.0627	115.94- 155.94	127.98
5.048	5.049	-0.001	56570937	1338.54	0.0669	134.45- 174.45	176.18
5.111	5.113	-0.002	54074462	1331.58	0.0666	138.55- 178.55	168.40
5.230	5.232	-0.002	109250851	1493.64	0.0747	229.50- 269.50	340.23
			Average of Peak Concentrations =		0.0670		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121609.b/041f4101.d

Date : 17-DEC-2009 00:19

Client ID: WST03-10-2134TMSD

Sample Info: |120199651511|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

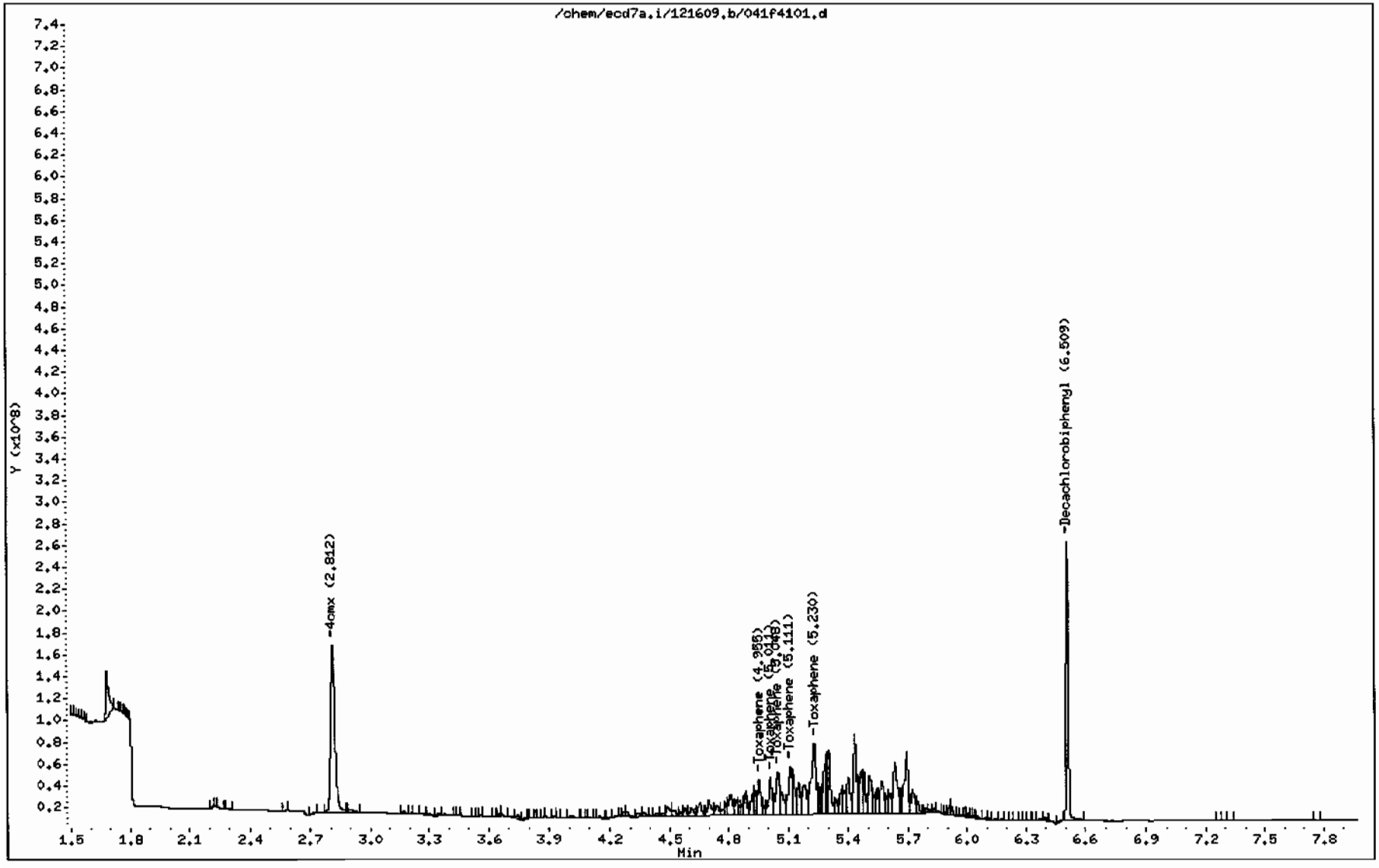

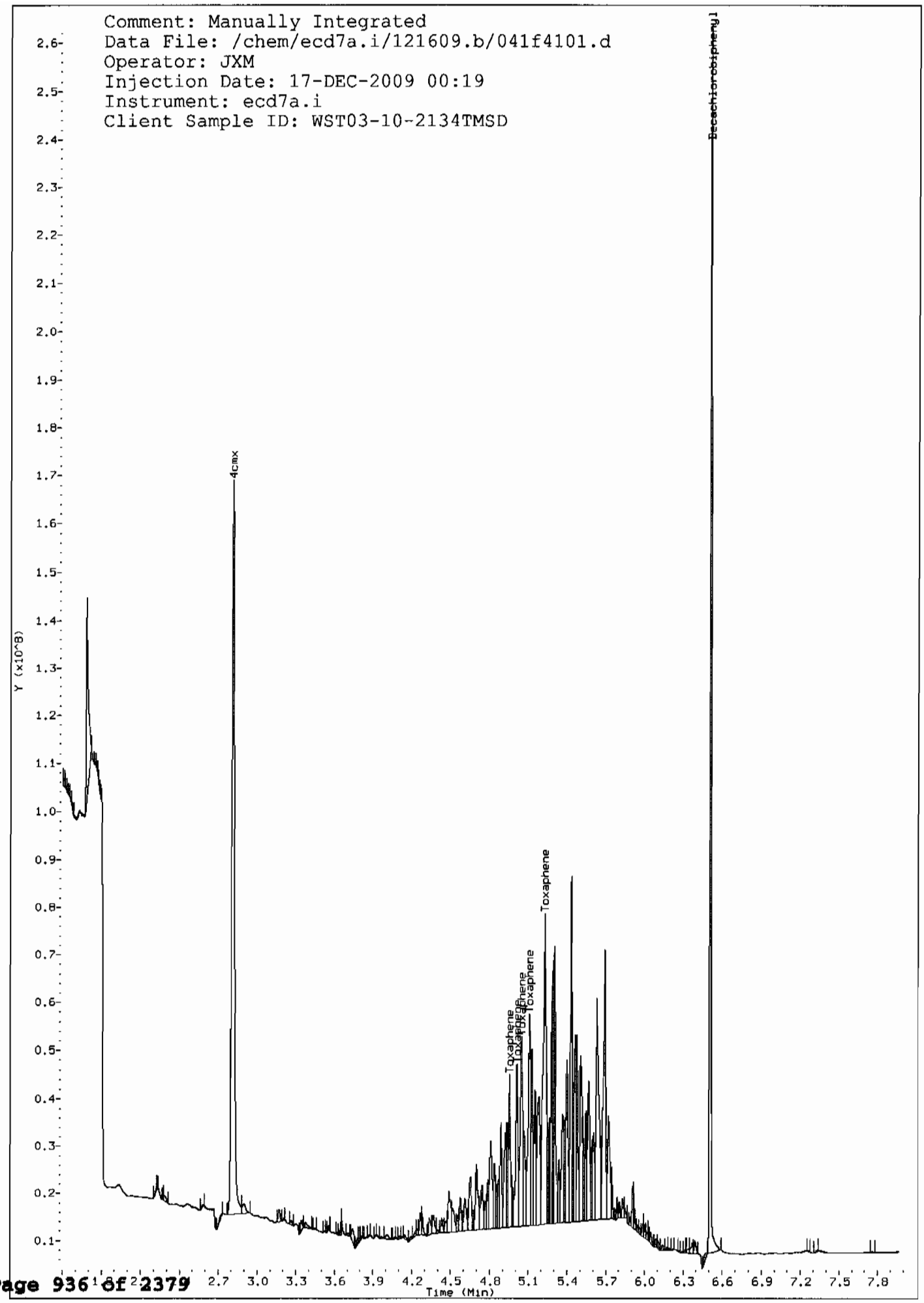
Comment: Manually Integrated
Data File: /chem/ecd7a.i/121609.b/041f4101.d
Operator: JXM
Injection Date: 17-DEC-2009 00:19
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134TMSD
Decachlorobiphenyl
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

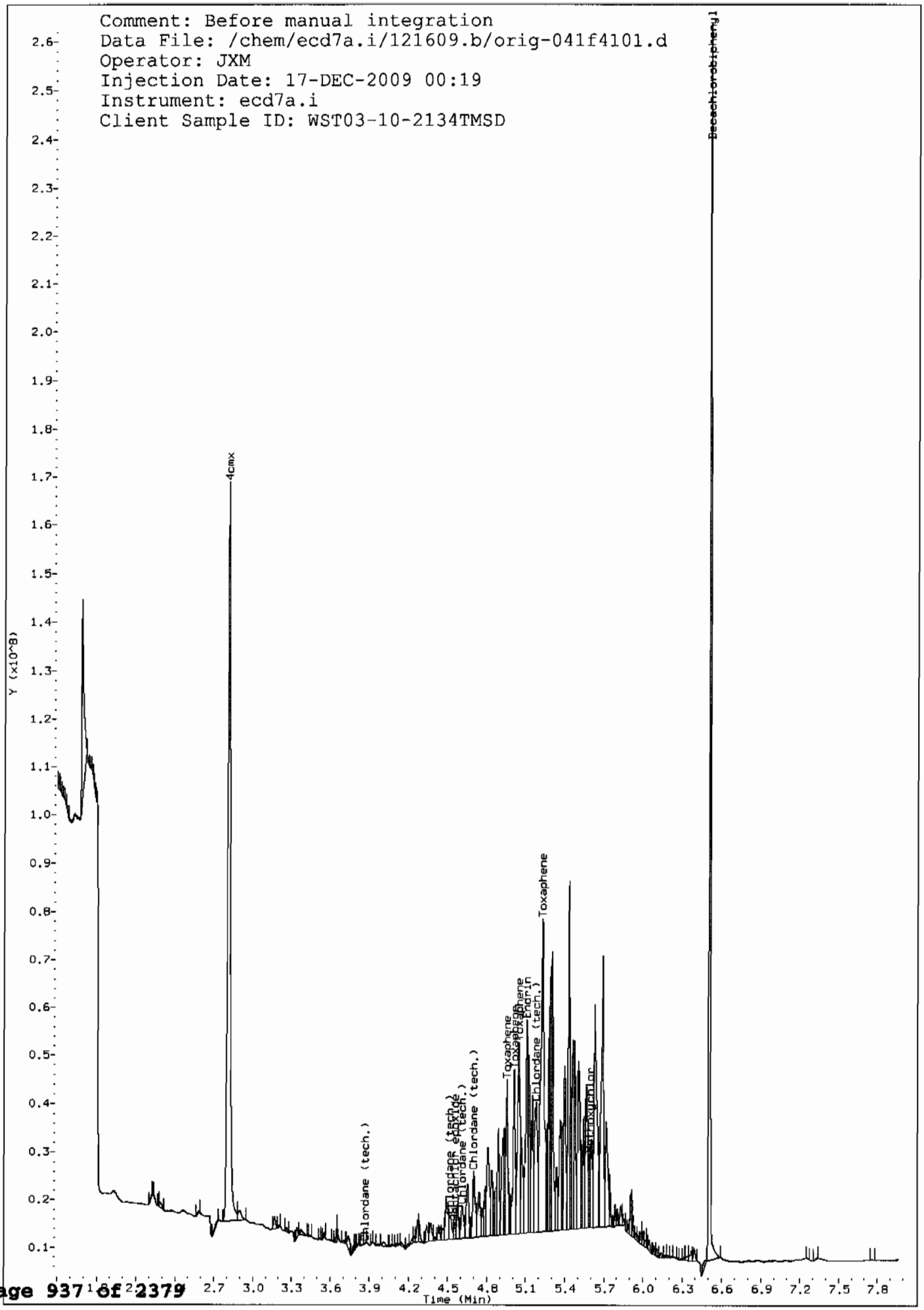
Comment: Before manual integration
Data File: /chem/ecd7a.i/121609.b/orig-041f4101.d
Operator: JXM
Injection Date: 17-DEC-2009 00:19
Instrument: ecd7a.i
Client Sample ID: WST03-10-2134TMSD
Decachlorobiphenyl
4cmx
Toxaphene
Chlordane (tech.)
Y (x10^8)
Time (Min)

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CLP-2

Data file : /chem/ecd7a.i/121609.b/041b4101.d
Lab Smp Id: 1201996515 Client Smp ID: WST03-10-2134TMSD
Inj Date : 17-DEC-2009 00:19
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996515|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMSD|SOIL|TMSD|||
Comment :
Method : /chem/ecd7a.i/121609.b/ECD7-B-8081-121609.m
Meth Date : 17-Dec-2009 09:53 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	0.00100	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (mg/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.063	0.001	292318306	103.346	0.00517	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.020	7.025	-0.005	218027149	142.840	0.00714	80.00- 120.00	100.00
23 Toxaphene					CAS #: 8001-35-2		
5.217	5.212	0.005	75804492	1652.89	0.0826	80.00- 120.00	100.00
5.288	5.289	-0.001	35681713	1334.91	0.0667	38.31- 78.31	47.07
5.325	5.326	-0.001	64205468	1415.61	0.0708	80.39- 120.39	84.70
5.398	5.400	-0.002	56318116	1425.14	0.0712	69.83- 109.83	74.29
5.543	5.543	0.000	101192846	1784.34	0.0892	111.80- 151.80	133.49

Average of Peak Concentrations = 0.0761

Data File: /chem/ecd7a.i/121609.b/041b4101.d
Date : 17-DEC-2009 00:19
Client ID: WST03-10-2134TMSD
Sample Info: |120199651511|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

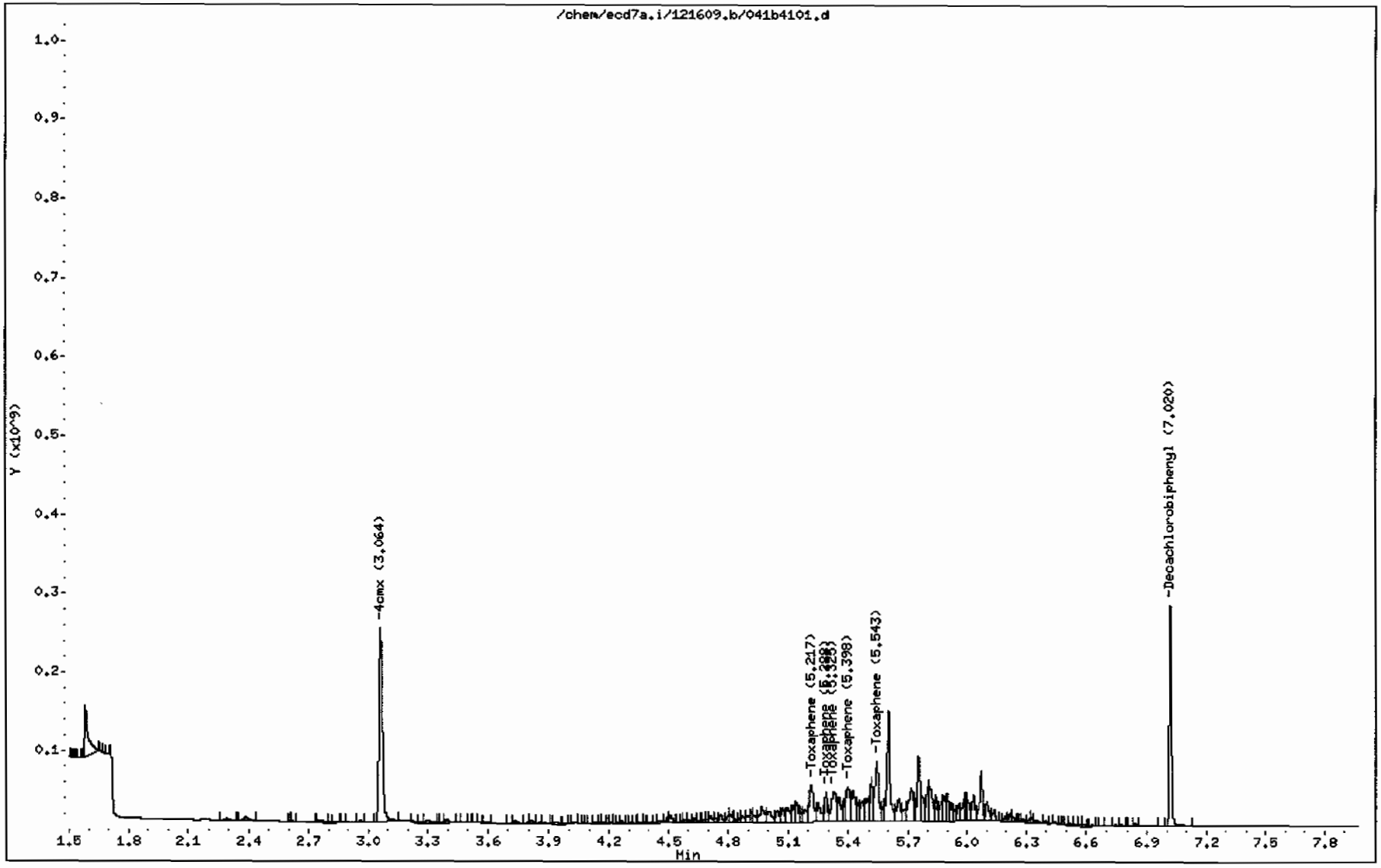

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD7

DATE: 12/16/2009 METHOD: ECD7-B-8081-121609.m OPERATOR:JXM REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT
MERCURY LOT

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-041 Organochlorine Pesticides and Chlorinated Hydrocarbons: EPA 8081
8121
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, BD-Percent Endrin and 4,4'-DDT Breakdown, DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time, BF-Before, AF-After.

Sequence Number: /chem/ecd7a.i/121609.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR091130-99IB	JXM	16-DEC-2009 14:16		121609	1.0		CLEAN
002b0201.d	WPE091109-99DG	JXM	16-DEC-2009 14:31		121609	1.0		(B)DDT 5.4, ENDRIN 1.8 (F)DDT 4.4, ENDRIN 1.7
003b0301.d	WPE091216-01AB	JXM	16-DEC-2009 14:46		121609	1.0		INDAB LEVEL 1
004b0401.d	WPE091216-02AB	JXM	16-DEC-2009 15:00		121609	1.0		INDAB LEVEL 2
005b0501.d	WPE091216-03AB	JXM	16-DEC-2009 15:15		121609	1.0		INDAB LEVEL 3
006b0601.d	WPE091216-04AB	JXM	16-DEC-2009 15:30		121609	1.0		INDAB LEVEL 4
007b0701.d	IPE091128-02AB	JXM	16-DEC-2009 15:45		121609	1.0		INDAB LEVEL 5
008b0801.d	WPE091207-10AB	JXM	16-DEC-2009 16:00		121609	1.0		PASSES BOTH COLUMNS
009b0901.d	WPE091216-11TX	JXM	16-DEC-2009 16:15		121609	1.0		TOXAPH LEVEL 1
010b1001.d	WPE091216-12TX	JXM	16-DEC-2009 16:30		121609	1.0		TOXAPH LEVEL 2
011b1101.d	WPE091216-13TX	JXM	16-DEC-2009 16:44		121609	1.0		TOXAPH LEVEL 3
012b1201.d	WPE091216-14TX	JXM	16-DEC-2009 16:59		121609	1.0		TOXAPH LEVEL 4
013b1301.d	IPE091121-40TX	JXM	16-DEC-2009 17:14		121609	1.0		TOXAPH LEVEL 5
014b1401.d	WPE091104-52TX	JXM	16-DEC-2009 17:29		121609	1.0		PASSES BOTH COLUMNS
015b1501.d	WPE091216-21CL	JXM	16-DEC-2009 17:44		121609	1.0		CHLOR LEVEL 1

Instrument Batch: /chem/ecd7a.i/121609.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016b1601.d	WPE091216-22CL	JXM	16-DEC-2009 17:59		121609	1.0		CHLOR LEVEL 2
017b1701.d	WPE091216-23CL	JXM	16-DEC-2009 18:14		121609	1.0		CHLOR LEVEL 3
018b1801.d	WPE091216-24CL	JXM	16-DEC-2009 18:29		121609	1.0		CHLOR LEVEL 4
019b1901.d	IPE091029-06CL	JXM	16-DEC-2009 18:43		121609	1.0		CHLOR LEVEL 5
020b2001.d	WPE090916-00CL	JXM	16-DEC-2009 18:58		121609	1.0		PASSES BOTH COLUMNS
021b2101.d	WAR091130-99IB	JXM	16-DEC-2009 19:13		121609	1.0		CLEAN
022b2201.d	1201987886	JXM	16-DEC-2009 19:28	929523	10-753	1.0	LCS	USE: LOWER
023b2301.d	WPE091207-10AB	JXM	16-DEC-2009 19:52		121609	1.0		METHOXYCHLOR HIGH ON BACK
024b2401.d	WAR091130-99IB	JXM	16-DEC-2009 20:07		121609	1.0		CLEAN
025b2501.d	WPE091109-99DG	JXM	16-DEC-2009 20:22		121609	1.0		(B)DDT 7.2, ENDRIN 3.3 (F)DDT 3.9, ENDRIN 2.9
026b2601.d	1201995977	JXM	16-DEC-2009 20:37	932994	10-832	1.0	MB	USE: LOWER
027b2701.d	1201995978	JXM	16-DEC-2009 20:51	932994	10-832	1.0	LCS	USE: LOWER
028b2801.d	1201995981	JXM	16-DEC-2009 21:06	932994	10-832	1.0	TLCS	USE: LOWER
029b2901.d	242445002	JXM	16-DEC-2009 21:21	932994	10-832	5.0	LANL	USE: LOWER
030b3001.d	242784003	JXM	16-DEC-2009 21:36	932994	10-899	5.0	LANL	USE: LOWER
031b3101.d	1201995979	JXM	16-DEC-2009 21:51	932994	10-899	5.0	MS	USE: LOWER
032b3201.d	1201995980	JXM	16-DEC-2009 22:06	932994	10-899	5.0	MSD	USE: LOWER
033b3301.d	242784004	JXM	16-DEC-2009 22:20	932994	10-899	5.0	LANL	USE: LOWER
034b3401.d	WAR091130-99IB	JXM	16-DEC-2009 22:35		121609	1.0		CLEAN
035b3501.d	WPE091207-10AB	JXM	16-DEC-2009 22:50		121609	1.0		(B)DDT, METH. AND KETONE HIGH (F)METH. HIGH

Instrument Batch: /chem/ecd7a.i/121609.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	WAR091130-99IB	JXM	16-DEC-2009 23:05		121609	1.0		CLEAN
037b3701.d	241839001	JXM	16-DEC-2009 23:20	933214	10-670-1	1.0	LANL	USE: LOWER
038b3801.d	1201996511	JXM	16-DEC-2009 23:35	933214	10-670-1	1.0	MS	USE: LOWER
039b3901.d	1201996514	JXM	16-DEC-2009 23:49	933214	10-670-1	1.0	MSD	USE: LOWER
040b4001.d	1201996512	JXM	17-DEC-2009 00:04	933214	10-670-1	1.0	TMS	USE: LOWER

041b4101.d	1201996515	JXM	17-DEC-2009 00:19	933214	10-670-1	1.0	TMSD	USE: LOWER
042b4201.d	1201996513	JXM	17-DEC-2009 00:34	933214	10-670-1	1.0	CMS	USE: LOWER
043b4301.d	1201996516	JXM	17-DEC-2009 00:49	933214	10-670-1	1.0	CMSD	USE: LOWER
044b4401.d	242326001	JXM	17-DEC-2009 01:04	933214	10-813-1	1.0	LANL	USE: LOWER
045b4501.d	WPE091207-10AB	JXM	17-DEC-2009 01:18		121609	1.0		HEPTACHLOR AND DDT LOW ON BOTH COLUMNS
046b4601.d	WAR091130-99IB	JXM	17-DEC-2009 01:33		121609	1.0		CLEAN
047b4701.d	1201988990	JXM	17-DEC-2009 01:48	933214	10-670-1	1.0	TB	USE: LOWER
048b4801.d	1201991315	JXM	17-DEC-2009 02:03	933214	10-813-1	1.0	TB	USE: LOWER
049b4901.d	1201996510	JXM	17-DEC-2009 02:18	933214	10-670-1	1.0	MB	USE: LOWER
050b5001.d	1201996517	JXM	17-DEC-2009 02:33	933214	10-670-1	1.0	LCS	USE: LOWER
051b5101.d	1201996518	JXM	17-DEC-2009 02:47	933214	10-670-1	1.0	TLCS	USE: LOWER
052b5201.d	1201996519	JXM	17-DEC-2009 03:02	933214	10-670-1	1.0	CLCS	USE: LOWER
053b5301.d	WAR091130-99IB	JXM	17-DEC-2009 03:17		121609	1.0		CLEAN
054b5401.d	WPE091207-10AB	JXM	17-DEC-2009 03:32		121609	1.0		(B)DDT LOW (F)HEPTACHLOR AND DDT LOW
055b5501.d	WAR091130-99IB	JXM	17-DEC-2009 03:47		121609	1.0		CLEAN

Instrument Batch: /chem/ecd7a.i/121609.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201995982	JXM	17-DEC-2009 04:01	932997	242801	1.0	MB	DUSE: BRACKETING CHECK FAILS
057b5701.d	1201995983	JXM	17-DEC-2009 04:16	932997	242801	1.0	LCS	DUSE: BRACKETING CHECK FAILS
058b5801.d	242801001	JXM	17-DEC-2009 04:31	932997	242801	1.0	BRKL	DUSE: BRACKETING CHECK FAILS
059b5901.d	1201995984	JXM	17-DEC-2009 04:46	932997	242801	1.0	MS	DUSE: BRACKETING CHECK FAILS
060b6001.d	1201995985	JXM	17-DEC-2009 05:01	932997	242801	1.0	MSD	DUSE: BRACKETING CHECK FAILS
061b6101.d	WAR091130-99IB	JXM	17-DEC-2009 05:15		121609	1.0		CLEAN
062b6201.d	WPE091207-10AB	JXM	17-DEC-2009 05:30		121609	1.0		METHOXYCHLOR AND ENDRIN KETONE HIGH ON BACK
063b6301.d	WAR091130-99IB	JXM	17-DEC-2009 05:45		121609	1.0		CLEAN
064b6401.d	1201994026	JXM	17-DEC-2009 06:00	932188	242528	1.0	MB	USE: HIGHER, CONTAMINATED WITH AB

065b6501.d	1201994027	JXM	17-DEC-2009 06:14	932188	242528	1.0	LCS	USE: HIGHER
066b6601.d	242528002	JXM	17-DEC-2009 06:29	932188	242528	1.0	DVBA	USE: HIGHER
067b6701.d	1201994028	JXM	17-DEC-2009 06:44	932188	242528	1.0	MS	USE: HIGHER
068b6801.d	1201994029	JXM	17-DEC-2009 06:59	932188	242528	1.0	MSD	USE: HIGHER
069b6901.d	242528003	JXM	17-DEC-2009 07:14	932188	242528	1.0	DVBA	USE: HIGHER, REEXTRACT DUE TO CONTAMINATION
070b7001.d	242705001	JXM	17-DEC-2009 07:28	932188	242705	1.0	DVBA	USE: HIGHER
071b7101.d	WAR091130-99IB	JXM	17-DEC-2009 07:43		121609	1.0		CLEAN
072b7201.d	WPE091207-10AB	JXM	17-DEC-2009 07:58		121609	1.0		DDT LOW ON FRONT
073b7301.d	WAR091130-99IB	JXM	17-DEC-2009 08:13		121609	1.0		CLEAN

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CLP-2

Data file : /chem/ecd7a.i/121709.b/035b3501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB03
Inj Date : 17-DEC-2009 23:08
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 17-Dec-2009 23:21 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.600	3.601	-0.001	440874003	100.000	115	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.879	3.880	-0.001	386563908	100.000	116	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.938	3.939	-0.001	153524252	100.000	110	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.205	4.207	-0.002	237768974	100.000	85.1	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.154	4.155	-0.001	380872661	100.000	114	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.434	4.435	-0.001	367598965	100.000	110	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.809	4.810	-0.001	321562599	100.000	112	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.929	4.931	-0.002	346375255	100.000	122	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.021	5.023	-0.002	299568611	100.000	107	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.062	5.064	-0.002	293301200	100.000	118	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
5.110	5.111	-0.001	623001477	200.000	233	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
5.233	5.234	-0.001	614264133	200.000	223	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.423	5.425	-0.002	525872259	200.000	232	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
5.463	5.464	-0.001	494885983	200.000	230	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
5.548	5.549	-0.001	475613902	200.000	206	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.749	5.751	-0.002	369949997	200.000	207	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.654	5.656	-0.002	191631721	200.000	121	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.916	5.918	-0.002	418323517	200.000	218	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.053	6.055	-0.002	435644541	1000.00	726	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.252	6.254	-0.002	371444311	200.000	184	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.063	3.064	-0.001	628940633	200.000	233	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.018	7.020	-0.002	365277187	200.000	235	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121709.b/035b3501.d
Date : 17-DEC-2009 23:08
Client ID: INDABD3
Sample Info: IWPE091207-10AB
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXH
Column diameter: 0.25

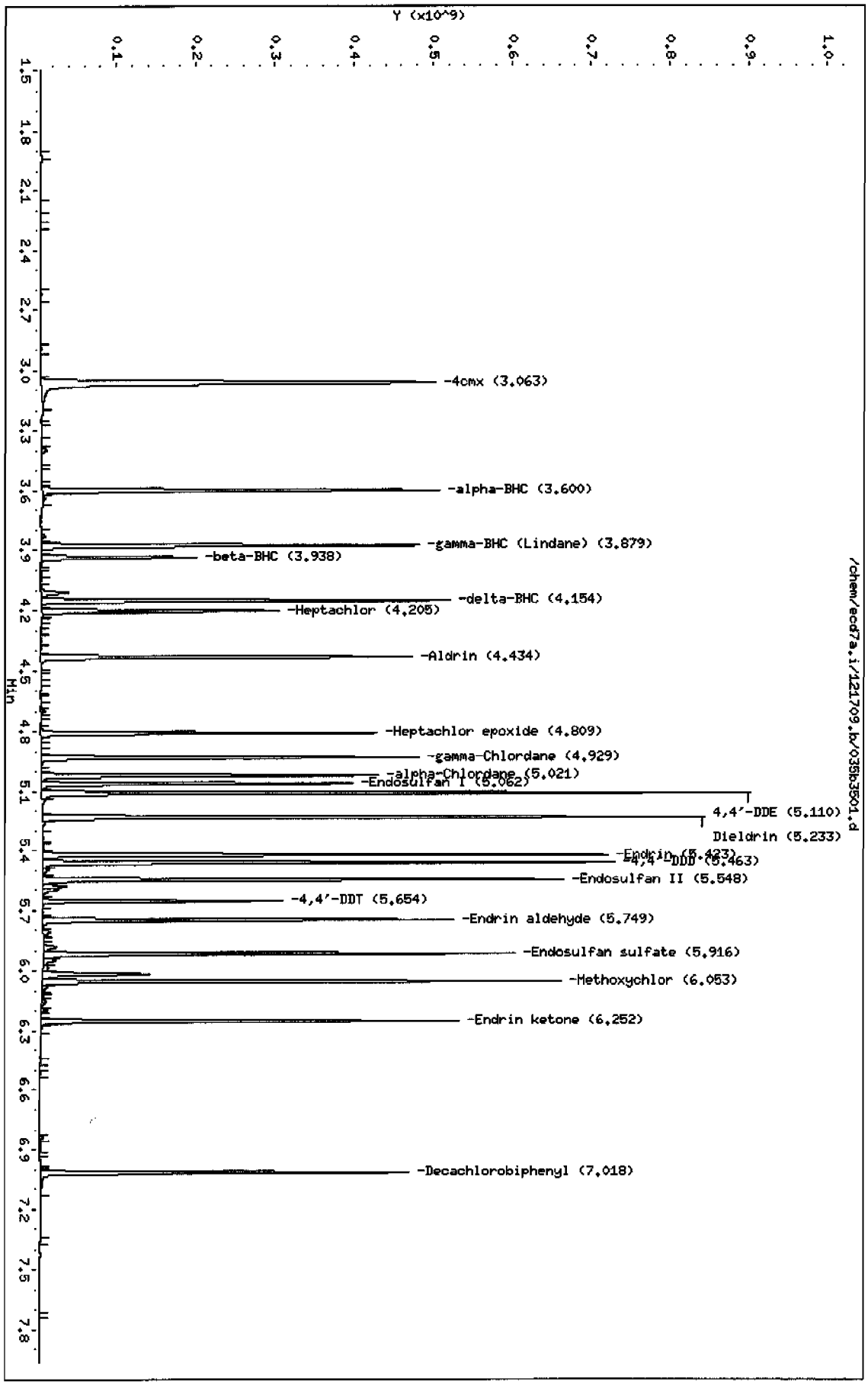

Page 1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/035f3501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB03
Inj Date : 17-DEC-2009 23:08
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.316	3.317	-0.001	298330892	100.000	101	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.575	3.576	-0.001	294183334	100.000	111	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.644	3.646	-0.002	122948128	100.000	105	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.929	3.930	-0.001	214199134	100.000	92.8	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.779	3.780	-0.001	294851902	100.000	109	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.142	4.143	-0.001	274785411	100.000	105	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.549	4.550	-0.001	246299987	100.000	107	80.00- 120.00	100.00(M)
17 gamma-Chlordane					CAS #: 5103-74-2		
4.629	4.630	-0.001	258453968	100.000	116	80.00- 120.00	100.00(M)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.714	4.715	-0.001	224116681	100.000	97.7	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.803	4.803	0.000	229561087	100.000	112	80.00- 120.00	100.00(M)
19 4,4'-DDE					CAS #: 72-55-9		
4.758	4.759	-0.001	499669644	200.000	221	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.953	4.954	-0.001	472458945	200.000	213	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.098	5.099	-0.001	411592703	200.000	220	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
5.127	5.128	-0.001	401667887	200.000	223	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
5.235	5.236	-0.001	382470976	200.000	208	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.488	5.489	-0.001	298513250	200.000	201	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
5.296	5.297	-0.001	230118436	200.000	170	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.750	5.751	-0.001	333337057	200.000	211	80.00- 120.00	100.00(M)
28 Methoxychlor					CAS #: 72-43-5		
5.578	5.578	0.000	509593945	1000.00	933	80.00- 120.00	100.00(M)
31 Endrin ketone					CAS #: 53494-70-5		
5.923	5.925	-0.002	301156456	200.000	182	80.00- 120.00	100.00(M)
$ 1 4cmx					CAS #: 877-09-8		
2.810	2.812	-0.002	523479901	200.000	227	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.508	6.510	-0.002	313233878	200.000	222	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121709.b/035f3501.d
Date : 17-DEC-2009 23:08
Client ID: INDAB03
Sample Info: IWPE091207-10AB

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

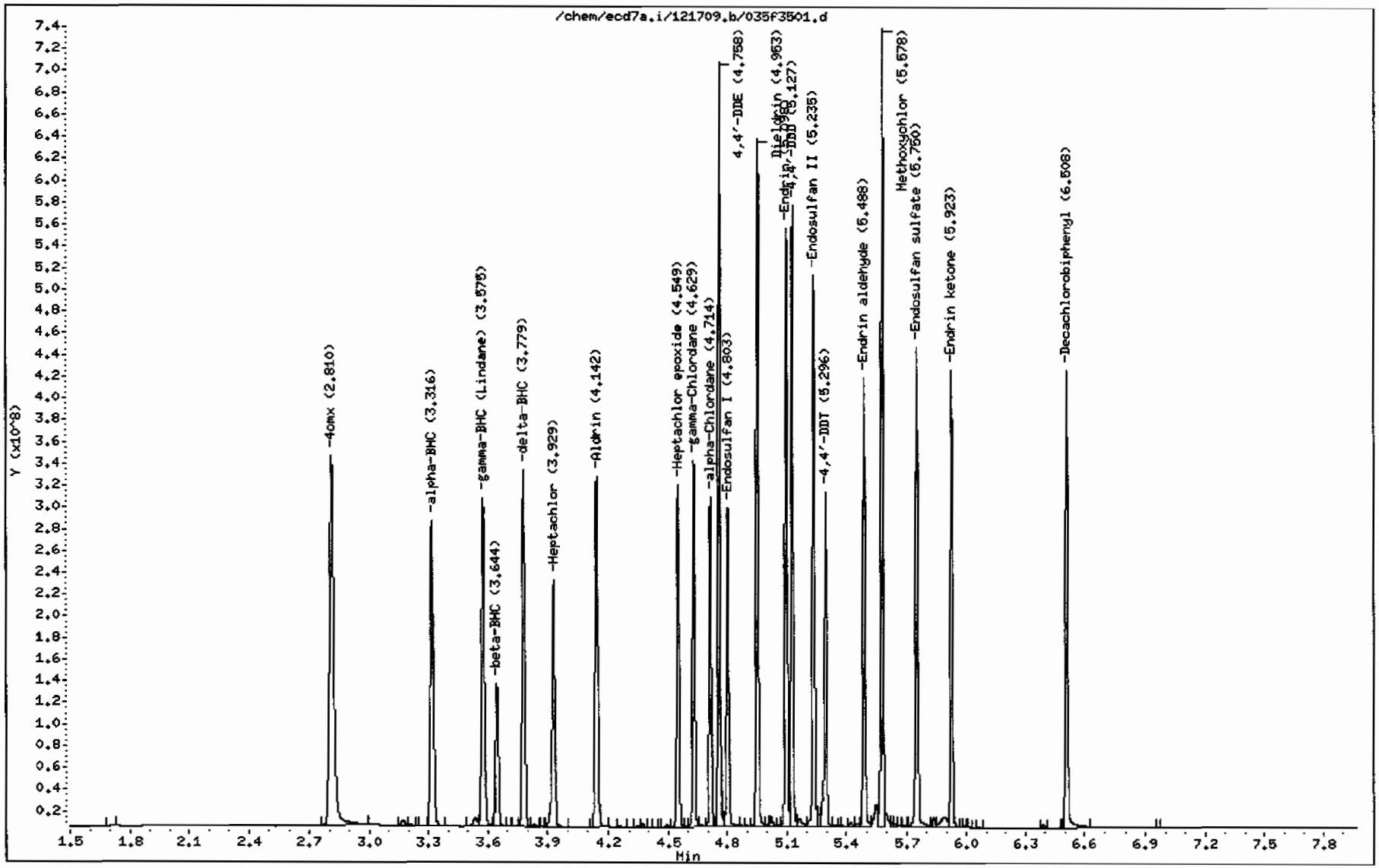

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/037b3701.d
Lab Smp Id: 241839001 Client Smp ID: WST03-10-2134
Inj Date : 17-DEC-2009 23:37
Operator : JXM Inst ID: ecd7a.i
Smp Info : |241839001|1|
Misc Info : |ECDPTL_1L|933214|SVPF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.064	0.000	355161515	131.443	6.57	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.015	7.020	-0.005	272225918	175.161	8.76	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.788	4.810	-0.022	4165709	1.45714	0.0728	80.00- 120.00	100.00(a)
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.128	4.102	0.026	1056352	8.73461	0.437	80.00- 120.00	100.00(a)
4.512	4.529	-0.017	5426729	56.6080	2.83	77.42- 117.42	513.72
4.788	4.783	0.005	4165709	60.8202	3.04	39.01- 79.01	394.35

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.) (continued)							
4.935	4.930	0.005	558792	1.73916	0.0870	253.71- 293.71	52.90
5.021	5.022	-0.001	1518960	5.55442	0.278	216.46- 256.46	143.79
Average of Peak Concentrations =					1.33		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/037b3701.d
Date : 17-DEC-2009 23:37
Client ID: WST03-10-2134
Sample Info: |241839001|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

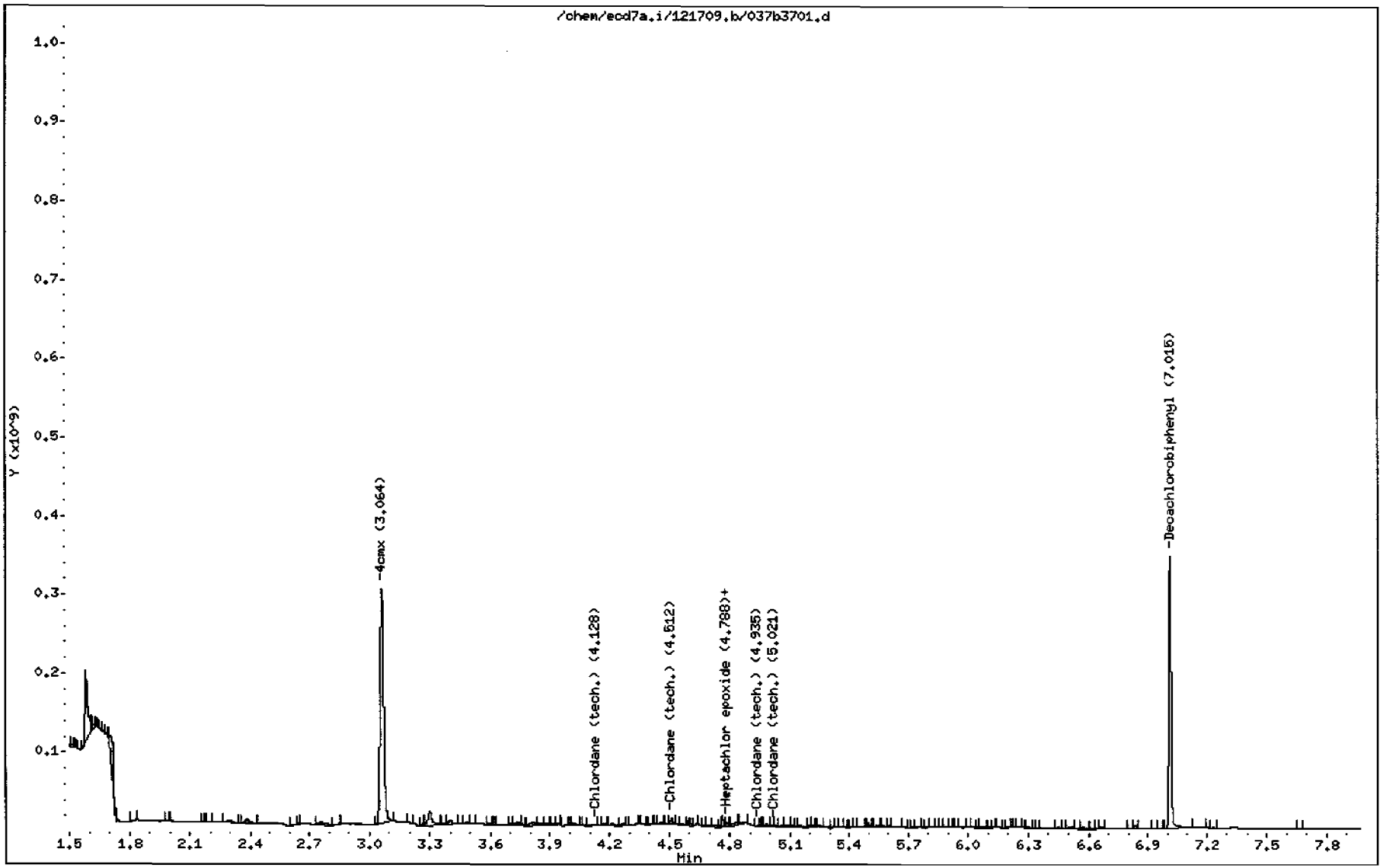

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/037f3701.d
Lab Smp Id: 241839001 Client Smp ID: WST03-10-2134
Inj Date : 17-DEC-2009 23:37
Operator : JXM Inst ID: ecd7a.i
Smp Info : |241839001|1|
Misc Info : |ECDPTL_1L|933214|SVPF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.812	0.000	285226711	123.734	6.19	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.505	6.510	-0.005	241682637	171.651	8.58	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.535	4.550	-0.015	4019951	1.75049	0.0875	80.00- 120.00	100.00(a)
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.850	3.872	-0.022	702829	7.92470	0.396	80.00- 120.00	100.00(a)
4.502	4.508	-0.006	1284622	25.3015	1.26	38.54- 78.54	182.78
4.613	4.630	-0.017	4262513	15.1058	0.755	293.96- 333.96	606.48

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.) (continued)							
4.716	4.714	0.002	8739354	42.4372	2.12	216.20- 256.20	1243.45
5.177	5.194	-0.017	286136	5.72474	0.286	47.13- 87.13	40.71
Average of Peak Concentrations =					0.963		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/037f3701.d

Date : 17-DEC-2009 23:37

Client ID: WST03-10-2134

Sample Info: |241839001|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

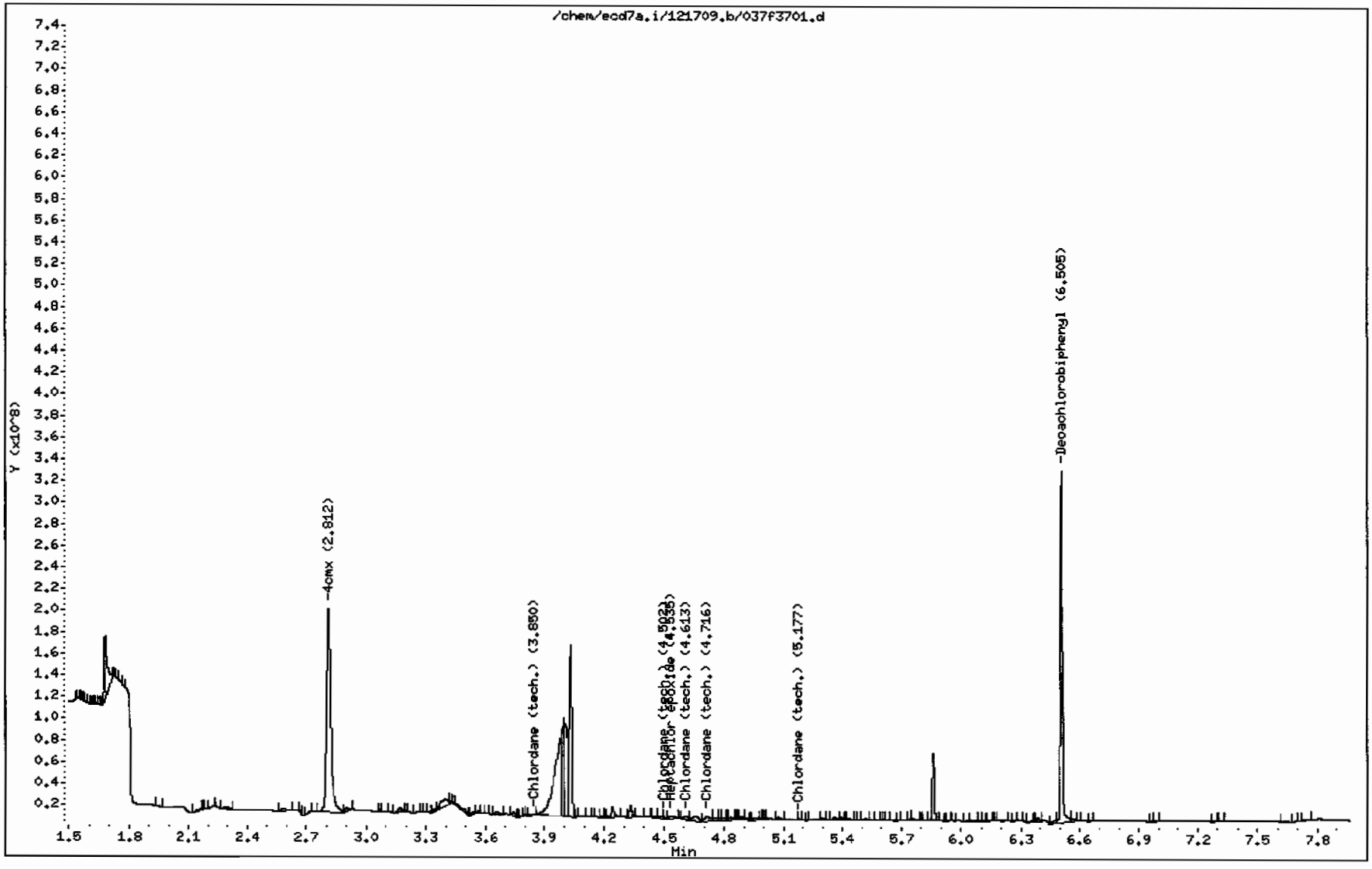

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/038b3801.d
Lab Smp Id: 1201996511 Client Smp ID: WST03-10-2134MS
Inj Date : 17-DEC-2009 23:52
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996511|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 38 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.064	0.000	298439723	110.451	5.52	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.020	-0.003	254110975	163.506	8.18	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.879	3.880	-0.001	306352150	91.5736	4.58	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.206	4.207	-0.001	181516166	64.9590	3.25	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.809	4.810	-0.001	242601980	84.8608	4.24	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
22 Endrin					CAS #: 72-20-8		
5.423	5.425	-0.002	235106288	103.862	5.19	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.051	6.055	-0.004	404253070	673.471	33.7	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.118	4.102	0.016	13186877	109.038	5.45	80.00- 120.00	100.00(a)
4.512	4.529	-0.017	6664754	69.5223	3.48	77.42- 117.42	50.54
4.784	4.783	0.001	864415	12.6206	0.631	39.01- 79.01	6.56
4.933	4.930	0.003	382436	1.19028	0.0595	253.71- 293.71	2.90
5.021	5.022	-0.001	1835782	6.71295	0.336	216.46- 256.46	13.92
Average of Peak Concentrations =					1.99		
23 Toxaphene					CAS #: 8001-35-2		
5.211	5.212	-0.001	2309936	50.3674	2.52	80.00- 120.00	100.00(a)
5.265	5.287	-0.022	2133351	79.8123	3.99	35.99- 75.99	92.36
5.322	5.325	-0.003	1050448	23.1604	1.16	64.85- 104.85	45.48
5.382	5.397	-0.015	344125	8.70813	0.435	57.44- 97.44	14.90
5.545	5.543	0.002	2394402	42.2208	2.11	98.60- 138.60	103.66
Average of Peak Concentrations =					2.04		

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/038b3801.d
Date : 17-DEC-2009 23:52
Client ID: WST03-10-2134MS
Sample Info: |1201996511|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

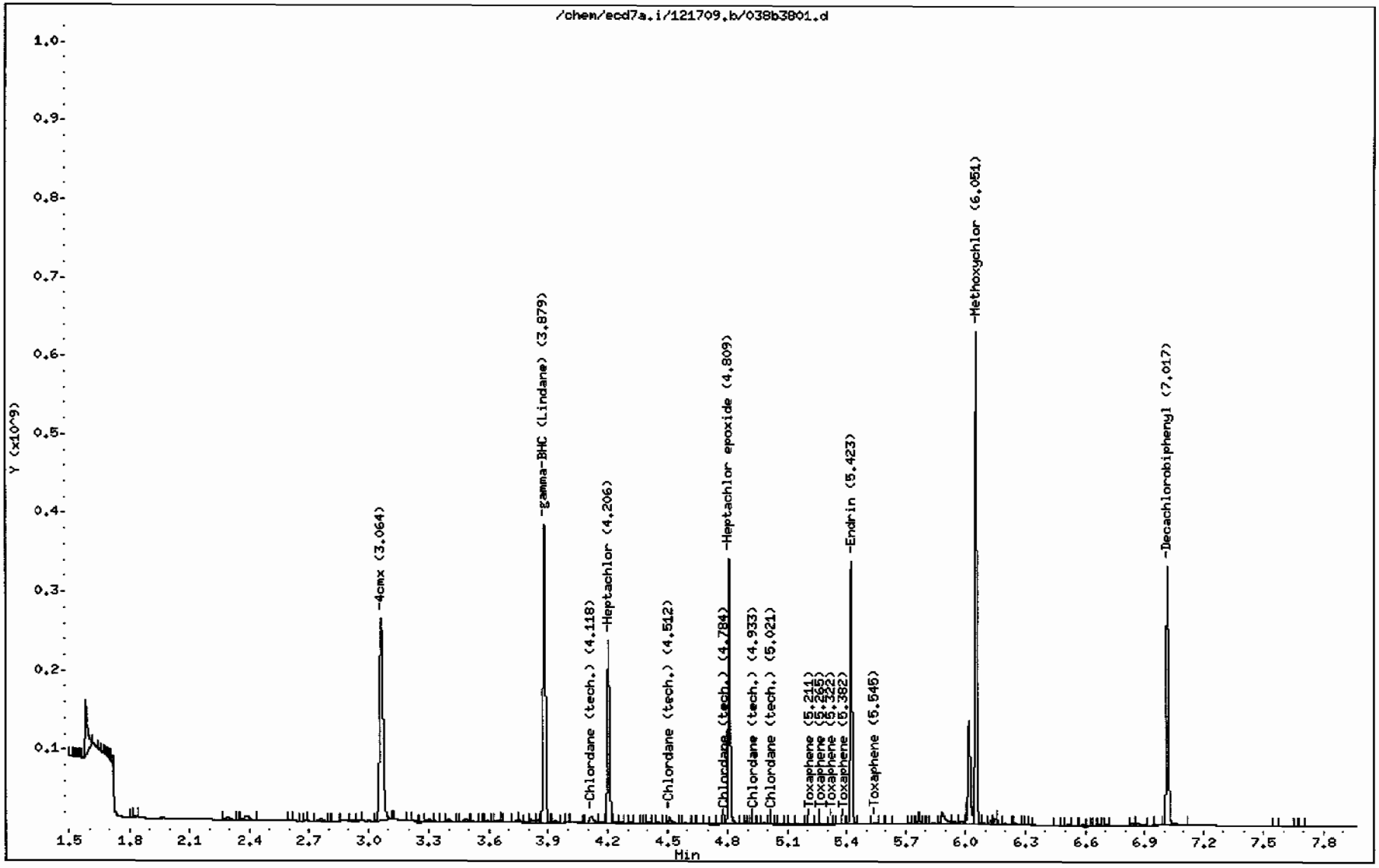

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/038f3801.d
Lab Smp Id: 1201996511 Client Smp ID: WST03-10-2134MS
Inj Date : 17-DEC-2009 23:52
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996511|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 38 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.814	2.812	0.002	230753411	100.103	5.00	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.510	-0.003	221205097	157.107	7.86	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.577	3.576	0.001	222673566	83.9291	4.20	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.930	3.930	0.000	166571036	72.2094	3.61	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.550	4.550	0.000	187816275	81.7845	4.09	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
22 Endrin					CAS #: 72-20-8		
5.098	5.099	-0.001	183426422	97.9757	4.90	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.579	5.578	0.001	309550508	566.639	28.3	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.881	3.872	0.009	4156589	46.8673	2.34	80.00- 120.00	100.00(a)
4.511	4.508	0.003	290336	5.71837	0.286	38.54- 78.54	6.98
4.634	4.630	0.004	585323	2.07431	0.104	293.96- 333.96	14.08
4.716	4.714	0.002	2177477	10.5735	0.529	216.20- 256.20	52.39
5.181	5.194	-0.013	838870	16.7833	0.839	47.13- 87.13	20.18
			Average of Peak Concentrations =		0.820		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/038f3801.d

Date : 17-DEC-2009 23:52

Client ID: WST03-10-2134MS

Sample Info: |120199651111|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

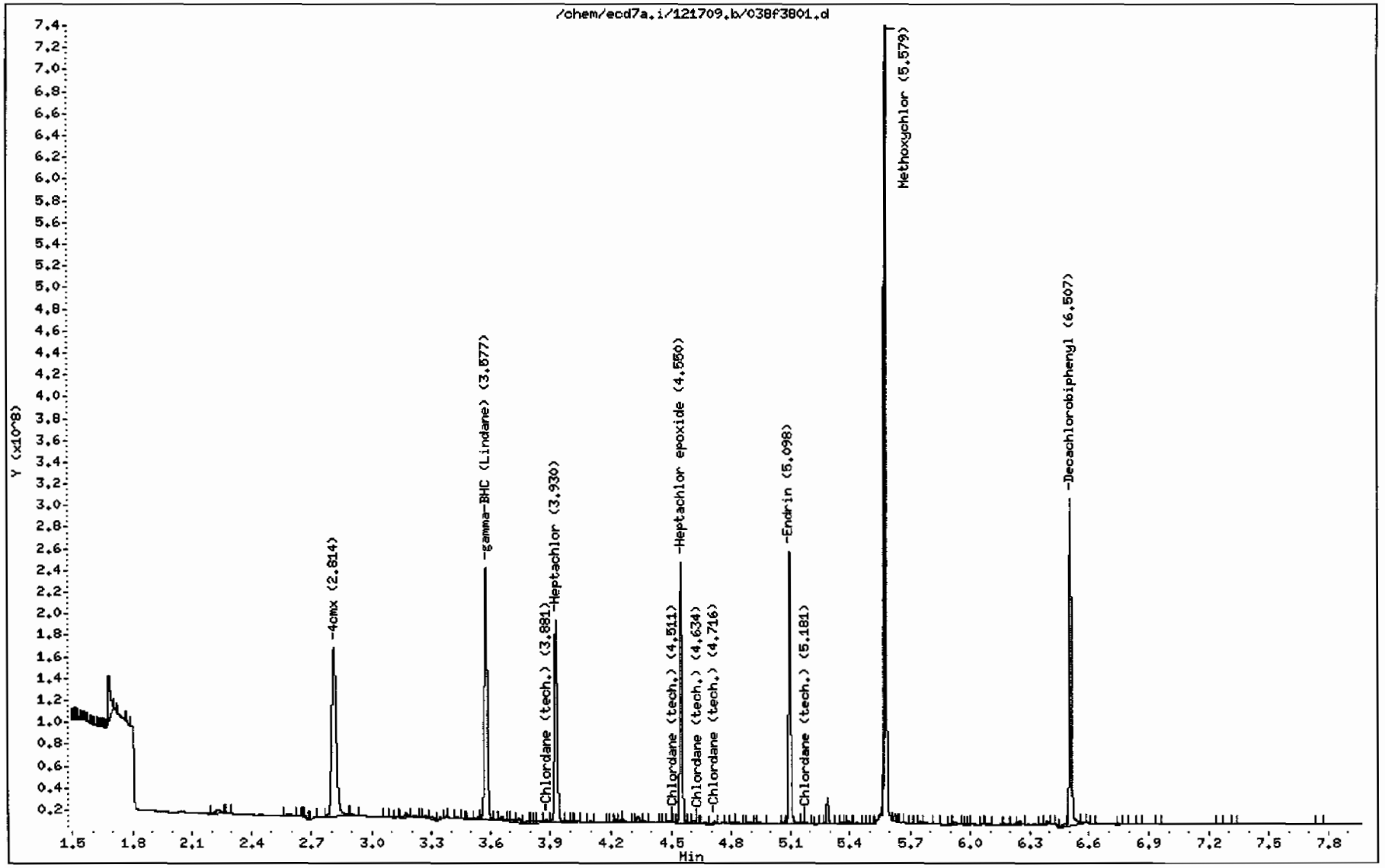

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/039b3901.d
Lab Smp Id: 1201996514 Client Smp ID: WST03-10-2134MSD
Inj Date : 18-DEC-2009 00:07
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996514|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 39 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.064	0.001	238213964	88.1618	4.41	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.019	7.020	-0.001	236276176	152.030	7.60	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.880	3.880	0.000	265838459	79.4634	3.97	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.206	4.207	-0.001	162105566	58.0126	2.90	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.809	4.810	-0.001	241090857	84.3322	4.22	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
22 Endrin					CAS #: 72-20-8		
5.423	5.425	-0.002	219555329	96.9920	4.85	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.053	6.055	-0.002	348311068	580.274	29.0	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.117	4.102	0.015	13405237	110.843	5.54	80.00- 120.00	100.00(a)
4.512	4.529	-0.017	8984484	93.7202	4.69	77.42- 117.42	67.02
4.785	4.783	0.002	1398905	20.4243	1.02	39.01- 79.01	10.44
4.930	4.930	0.000	2969713	9.24282	0.462	253.71- 293.71	22.15
5.021	5.022	-0.001	1898560	6.94251	0.347	216.46- 256.46	14.16
			Average of Peak Concentrations =		2.41		
23 Toxaphene					CAS #: 8001-35-2		
5.212	5.212	0.000	2792882	60.8979	3.04	80.00- 120.00	100.00(a)
5.263	5.287	-0.024	3979922	148.896	7.44	35.99- 75.99	142.50
5.322	5.325	-0.003	2252803	49.6700	2.48	64.85- 104.85	80.66
5.382	5.397	-0.015	1821876	46.1028	2.30	57.44- 97.44	65.23
5.546	5.543	0.003	2179685	38.4346	1.92	98.60- 138.60	78.04
			Average of Peak Concentrations =		3.44		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/039b3901.d

Date : 18-DEC-2009 00:07

Client ID: WST03-10-2134MSD

Sample Info: |1201996514|1|

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

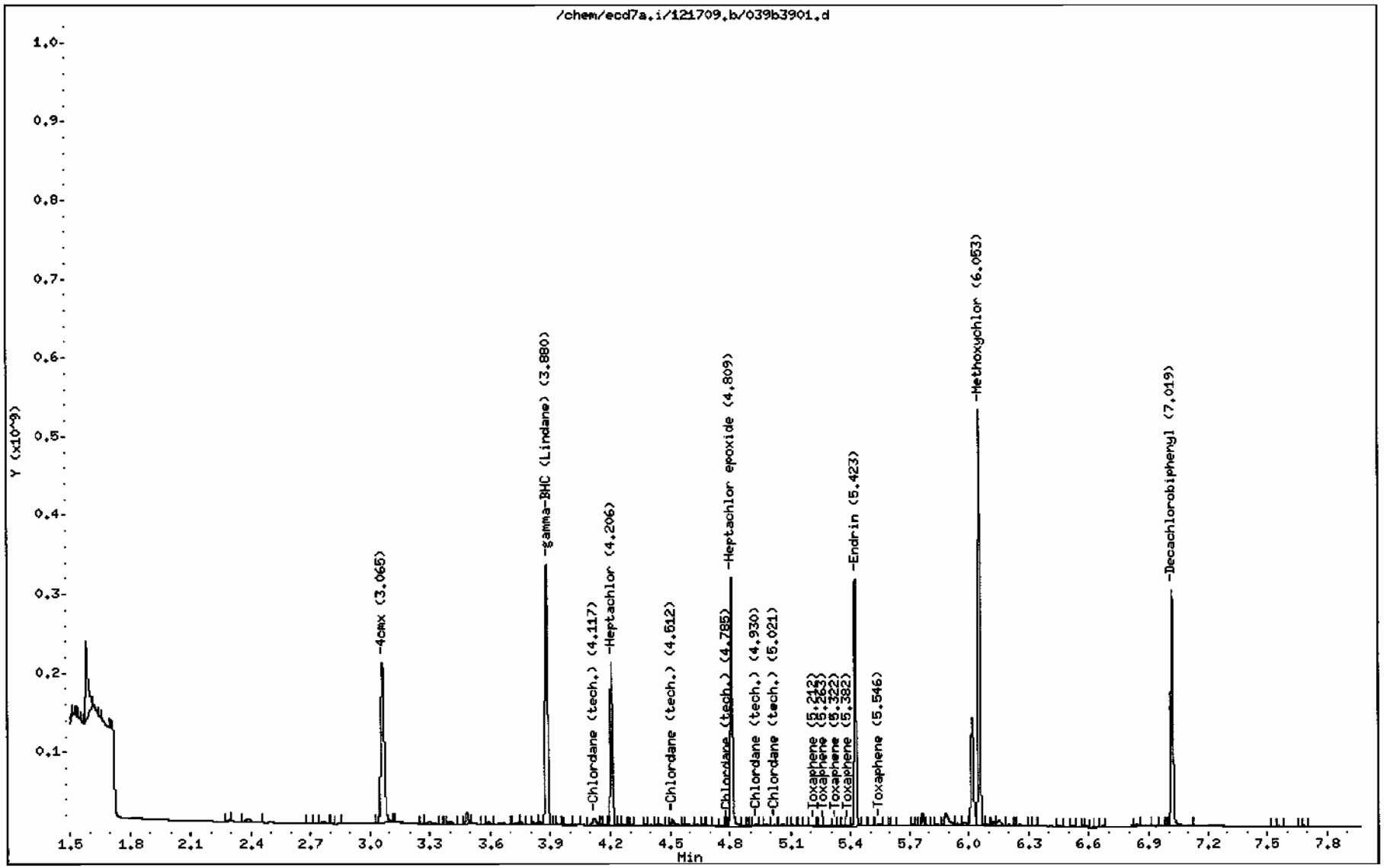

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/039f3901.d
Lab Smp Id: 1201996514 Client Smp ID: WST03-10-2134MSD
Inj Date : 18-DEC-2009 00:07
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996514|1|
Misc Info : |ECDPTL_1L|933214|SVPF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 39 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.814	2.812	0.002	179781083	77.9905	3.90	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.509	6.510	-0.001	205404205	145.885	7.29	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.577	3.576	0.001	190413494	71.7698	3.59	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.930	3.930	0.000	138092127	59.8636	2.99	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.550	4.550	0.000	171114417	74.5117	3.72	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
22 Endrin					CAS #: 72-20-8		
5.098	5.099	-0.001	168981491	90.2601	4.51	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.578	5.578	0.000	443859638	812.495	40.6	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.883	3.872	0.011	1793916	20.2272	1.01	80.00- 120.00	100.00(a)
4.493	4.508	-0.015	1710304	33.6856	1.68	38.54- 78.54	95.34
4.634	4.630	0.004	623619	2.21003	0.110	293.96- 333.96	34.76
4.717	4.714	0.003	6645706	32.2707	1.61	216.20- 256.20	370.46
5.181	5.194	-0.013	1000725	20.0215	1.00	47.13- 87.13	55.78
Average of Peak Concentrations =					1.08		

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/039f3901.d

Date : 18-DEC-2009 00:07

Client ID: WST03-10-2134MSD

Sample Info: |120199651411|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

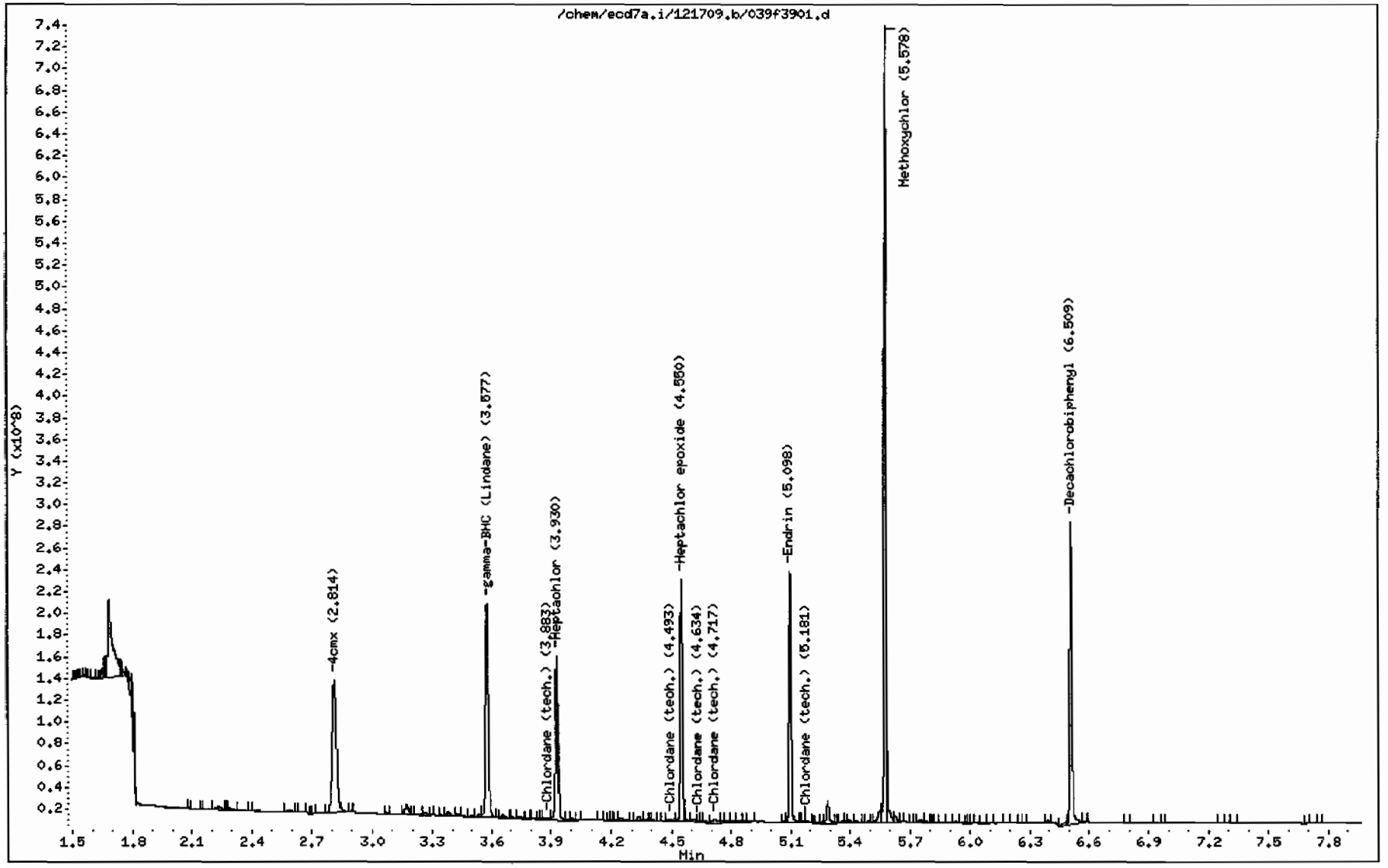

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/040b4001.d
Lab Smp Id: 1201996512 Client Smp ID: WST03-10-2134TMS
Inj Date : 18-DEC-2009 00:22
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996512|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMS|SOIL|TMS|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.064	0.001	341770056	126.487	6.32	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.020	-0.003	292179304	188.000	9.40	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.810	4.810	0.000	8359204	2.92400	0.146	80.00- 120.00	100.00(a)
22 Endrin					CAS #: 72-20-8		
5.421	5.425	-0.004	46860935	20.7016	1.04	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.069	6.055	0.014	42880140	71.4368	3.57	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.100	4.102	-0.002	366718	3.03227	0.152	80.00- 120.00	100.00
4.512	4.529	-0.017	9096600	94.8897	4.74	77.42- 117.42	2480.54
4.800	4.783	0.017	4373723	63.8573	3.19	39.01- 79.01	1192.67
4.932	4.930	0.002	1056160	3.28715	0.164	253.71- 293.71	288.00
5.003	5.022	-0.019	24529184	89.6965	4.48	216.46- 256.46	6688.84
Average of Peak Concentrations =					2.54		
23 Toxaphene					CAS #: 8001-35-2		
5.216	5.212	0.004	80974958	1765.63	88.3	80.00- 120.00	100.00
5.287	5.287	0.000	45224838	1691.94	84.6	35.99- 75.99	55.85
5.324	5.325	-0.001	43855767	966.935	48.3	64.85- 104.85	54.16
5.398	5.397	0.001	67794846	1715.56	85.8	57.44- 97.44	83.72
5.541	5.543	-0.002	119143635	2100.87	105	98.60- 138.60	147.14
Average of Peak Concentrations =					82.4		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/040b4001.d
Date : 18-DEC-2009 00:22
Client ID: WST03-10-2134TMS
Sample Info: |120199651211|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

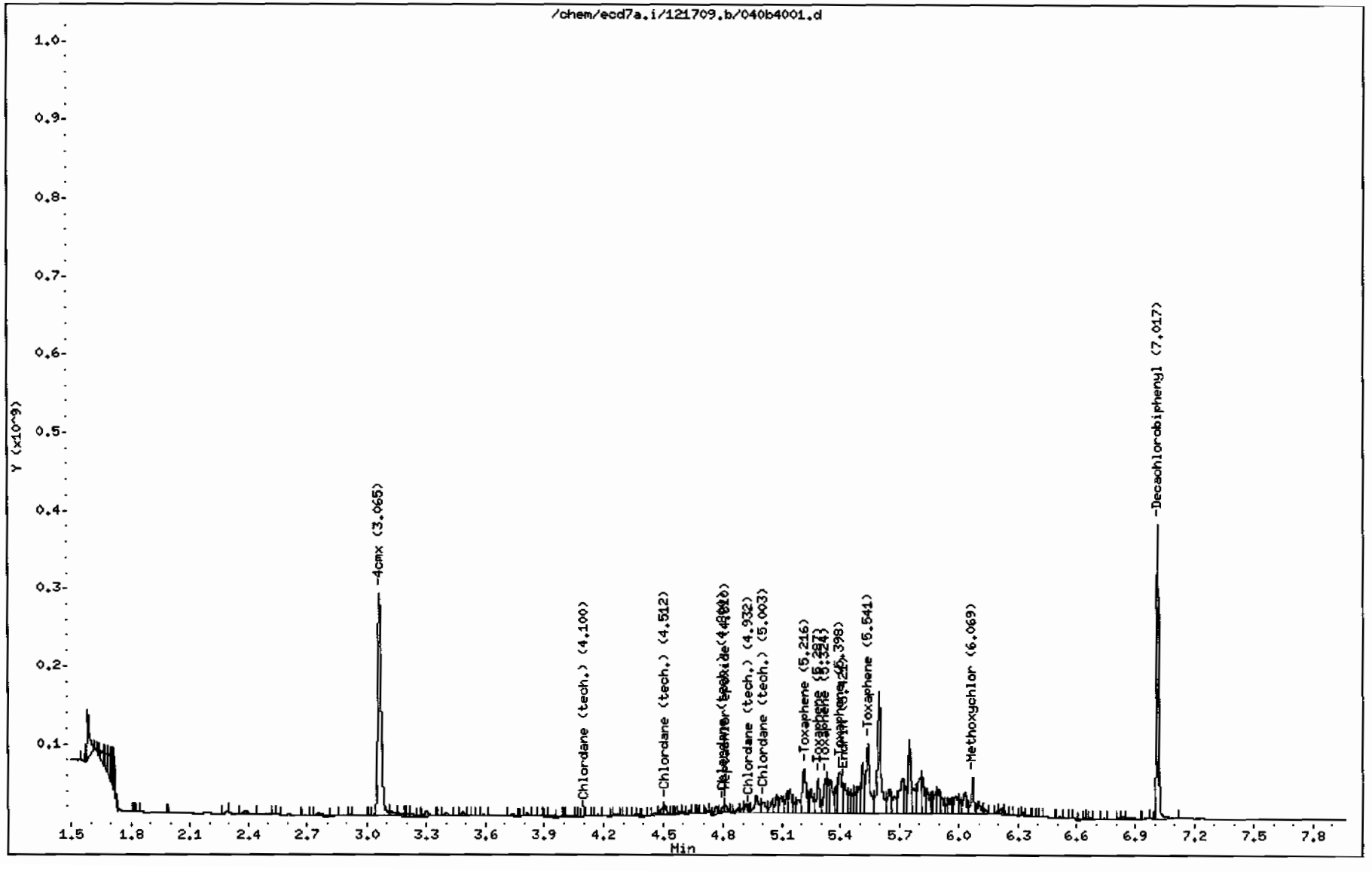

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/040f4001.d
Lab Smp Id: 1201996512 Client Smp ID: WST03-10-2134TMS
Inj Date : 18-DEC-2009 00:22
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996512|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMS|SOIL|TMS|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.813	2.812	0.001	262668771	113.948	5.70	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.510	-0.003	240540427	170.840	8.54	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.110	5.099	0.011	37301269	19.9242	0.996	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.568	5.578	-0.010	24478514	44.8085	2.24	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.843	3.872	-0.029	304034	3.42812	0.171	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.) (continued)							
4.516	4.508	0.008	2272050	44.7496	2.24	38.54- 78.54	747.30
4.611	4.630	-0.019	4886615	17.3175	0.866	293.96- 333.96	1607.25
4.700	4.714	-0.014	12765596	61.9881	3.10	216.20- 256.20	4198.73
5.182	5.194	-0.012	26078042	521.744	26.1	47.13- 87.13	8577.32
Average of Peak Concentrations =					6.50		
23 Toxaphene					CAS #: 8001-35-2		
4.955	4.954	0.001	23972448	954.272	47.7	80.00- 120.00	100.00
5.010	5.010	0.000	26836296	818.406	40.9	114.57- 154.57	111.95
5.048	5.047	0.001	35164503	832.035	41.6	139.14- 179.14	146.69
5.110	5.110	0.000	37301269	918.540	45.9	139.10- 179.10	155.60
5.230	5.229	0.001	70061553	957.859	47.9	241.80- 281.80	292.26
Average of Peak Concentrations =					44.8		

Data File: /chem/ecd7a.i/121709.b/040f4001.d
Date : 18-DEC-2009 00:22
Client ID: WST03-10-2134TMS
Sample Info: |1201996512|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

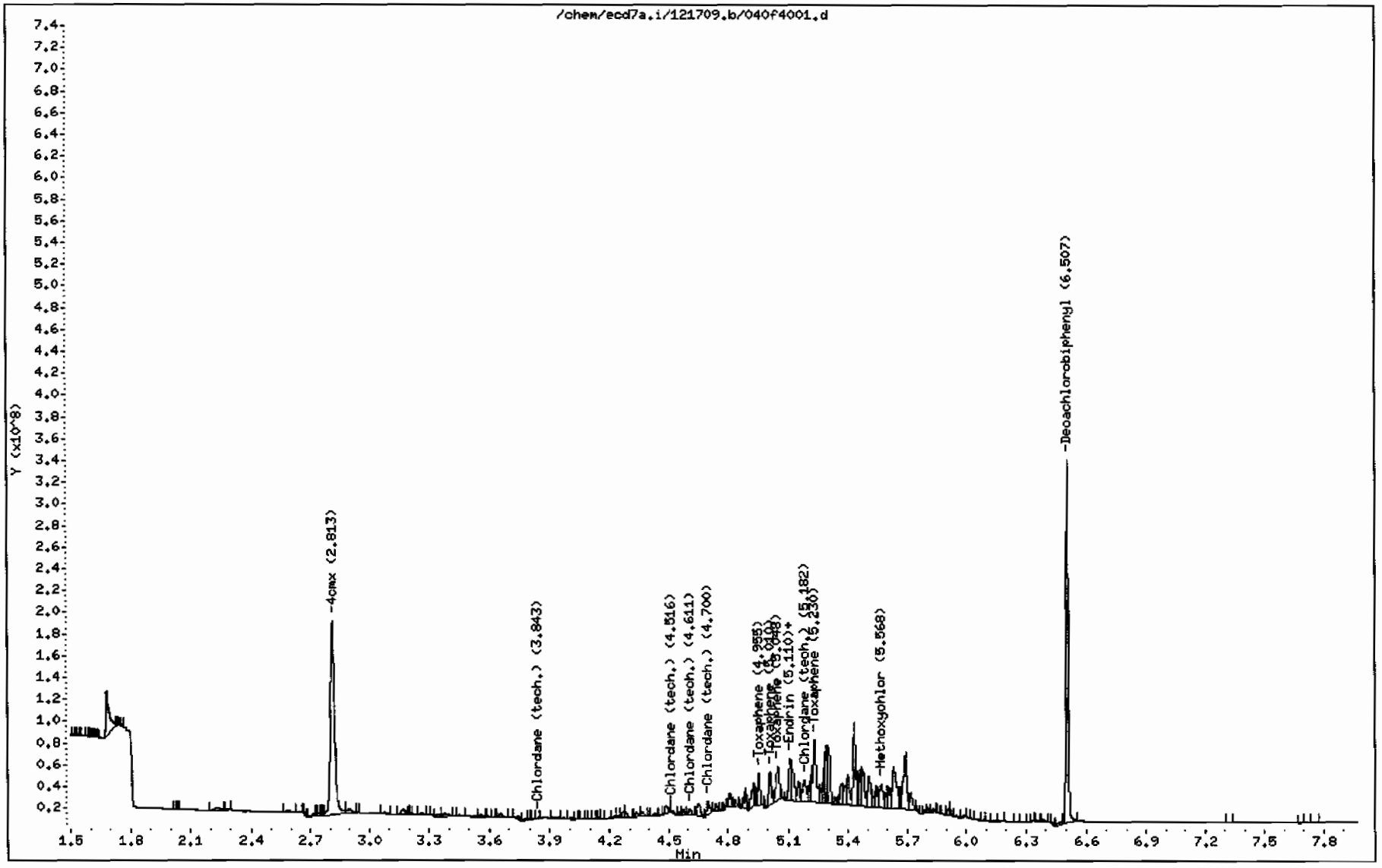

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/041b4101.d
Lab Smp Id: 1201996515 Client Smp ID: WST03-10-2134TMSD
Inj Date : 18-DEC-2009 00:37
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996515|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMSD|SOIL|TMSD|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.064	0.001	338951821	125.444	6.27	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.020	-0.003	274034678	176.325	8.82	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.881	3.880	0.001	3523982	1.05337	0.0527	80.00- 120.00	100.00(a)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.810	4.810	0.000	5998197	2.09813	0.105	80.00- 120.00	100.00(a)
22 Endrin					CAS #: 72-20-8		
5.423	5.425	-0.002	23566235	10.4108	0.520	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
6.070	6.055	0.015	85413636	142.296	7.11	80.00- 120.00	100.00
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.099	4.102	-0.003	1113591	9.20790	0.460	80.00- 120.00	100.00(a)
4.512	4.529	-0.017	10447474	108.981	5.45	77.42- 117.42	938.18
4.801	4.783	0.018	3593908	52.4718	2.62	39.01- 79.01	322.73
4.916	4.930	-0.014	6232545	19.3979	0.970	253.71- 293.71	559.68
5.006	5.022	-0.016	5260467	19.2361	0.962	216.46- 256.46	472.39
Average of Peak Concentrations =					2.09		
23 Toxaphene					CAS #: 8001-35-2		
5.217	5.212	0.005	51834536	1130.23	56.5	80.00- 120.00	100.00
5.287	5.287	0.000	25061773	937.603	46.9	35.99- 75.99	48.35
5.325	5.325	0.000	42493727	936.905	46.8	64.85- 104.85	81.98
5.397	5.397	0.000	31658607	801.125	40.0	57.44- 97.44	61.08
5.542	5.543	-0.001	74683310	1316.90	65.8	98.60- 138.60	144.08
Average of Peak Concentrations =					51.2		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/041b4101.d
Date : 18-DEC-2009 00:37
Client ID: WST03-10-2134THSD
Sample Info: |1201996515|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

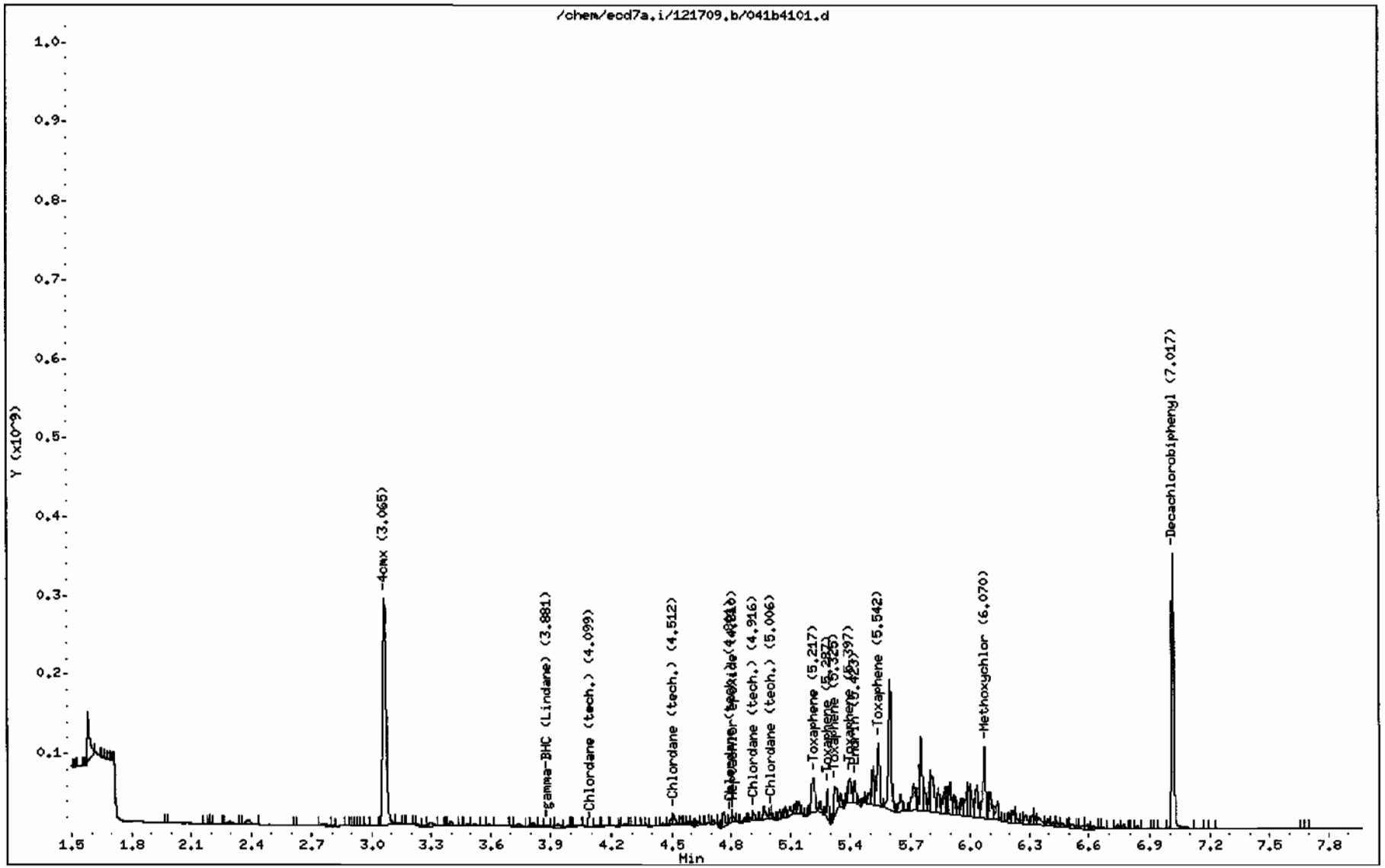

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/041f4101.d
Lab Smp Id: 1201996515 Client Smp ID: WST03-10-2134TMSD
Inj Date : 18-DEC-2009 00:37
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996515|1|
Misc Info : |ECDPTL_1L|933214|SVPF|TMSD|SOIL|TMSD|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.814	2.812	0.002	272050843	118.018	5.90	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.510	-0.003	233569039	165.889	8.29	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.927	3.930	-0.003	2379139	1.03137	0.0516	80.00- 120.00	100.00(a)
22 Endrin					CAS #: 72-20-8		
5.110	5.099	0.011	84298998	45.0276	2.25	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.567	5.578	-0.011	41978880	76.8433	3.84	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.873	3.872	0.001	303447	3.42150	0.171	80.00- 120.00	100.00
4.517	4.508	0.009	6575766	129.514	6.48	38.54- 78.54	2167.02
4.611	4.630	-0.019	8074130	28.6137	1.43	293.96- 333.96	2660.80
4.701	4.714	-0.013	14966785	72.6768	3.63	216.20- 256.20	4932.25
5.207	5.194	0.013	25554334	511.266	25.6	47.13- 87.13	8421.34
Average of Peak Concentrations =					7.46		
23 Toxaphene					CAS #: 8001-35-2		
4.955	4.954	0.001	32523351	1294.66	64.7	80.00- 120.00	100.00
5.010	5.010	0.000	40544644	1236.46	61.8	114.57- 154.57	124.66
5.049	5.047	0.002	58460743	1383.25	69.2	139.14- 179.14	179.75
5.110	5.110	0.000	84298998	2075.85	104	139.10- 179.10	259.20
5.232	5.229	0.003	74980340	1025.11	51.2	241.80- 281.80	230.54
Average of Peak Concentrations =					70.2		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/041f4101.d

Date : 18-DEC-2009 00:37

Client ID: WST03-10-2134TMSD

Sample Info: |1201996515|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

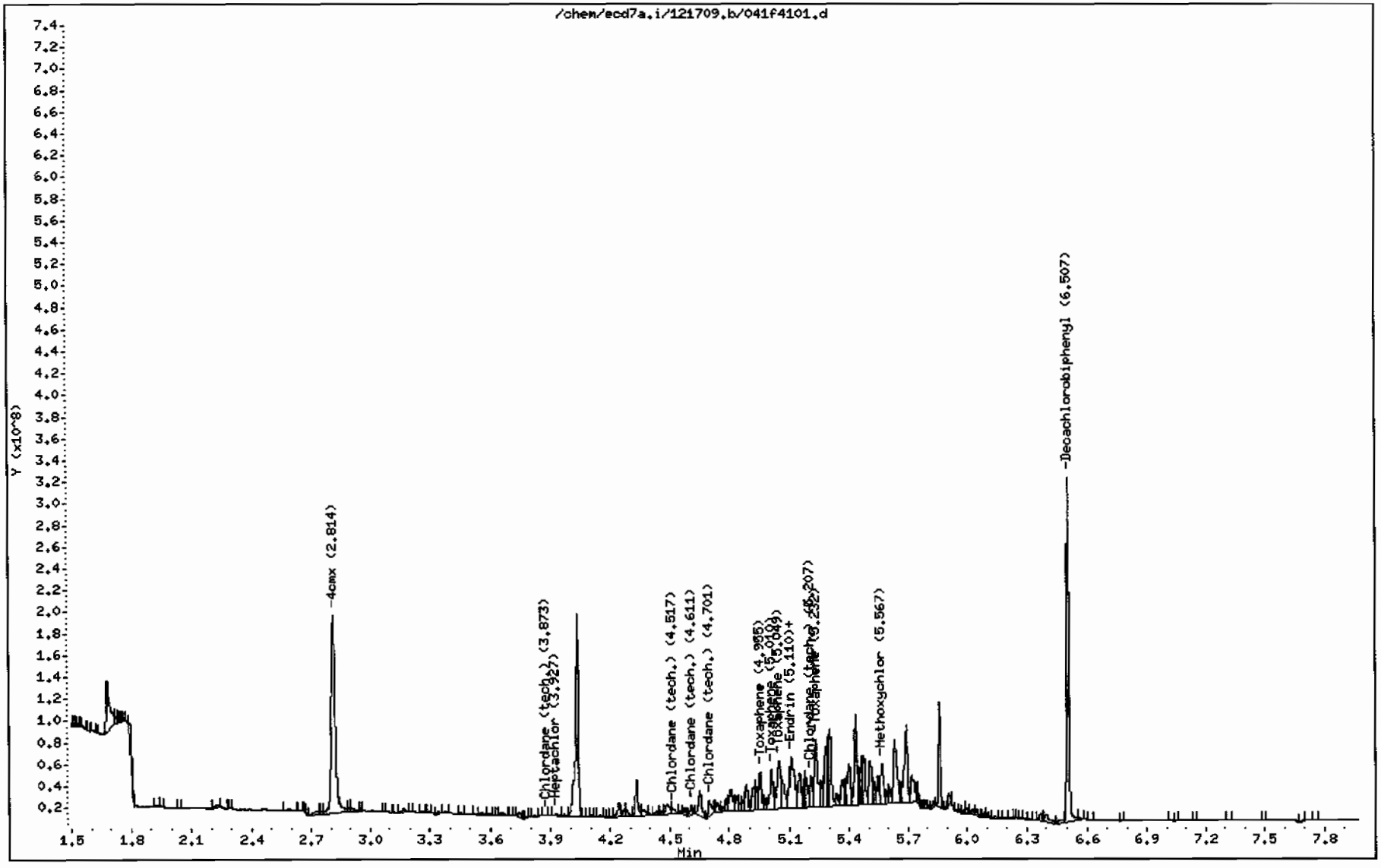

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/042b4201.d
Lab Smp Id: 1201996513 Client Smp ID: WST03-10-2134CMS
Inj Date : 18-DEC-2009 00:51
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996513|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMS|SOIL|CMS|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 42 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.064	0.000	295503294	109.364	5.47	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.019	7.020	-0.001	231129264	148.718	7.44	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.891	3.880	0.011	4603277	1.37599	0.0688	80.00- 120.00	100.00(a)
10 Heptachlor					CAS #: 76-44-8		
4.206	4.207	-0.001	180539399	64.6095	3.23	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.824	4.810	0.014	10436752	3.65072	0.182	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
22 Endrin					CAS #: 72-20-8		
5.425	5.425	0.000	8622039	3.80892	0.190	80.00- 120.00	100.00(a)
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.101	4.102	-0.001	130471963	1078.83	53.9	80.00- 120.00	100.00
4.528	4.529	-0.001	148911635	1553.35	77.7	77.42- 117.42	114.13
4.782	4.783	-0.001	86635338	1264.89	63.2	39.01- 79.01	66.40
4.930	4.930	0.000	405449919	1261.91	63.1	253.71- 293.71	310.76
5.022	5.022	0.000	385777613	1410.68	70.5	216.46- 256.46	295.68
Average of Peak Concentrations =					65.7		
23 Toxaphene					CAS #: 8001-35-2		
5.219	5.212	0.007	6185760	134.878	6.74	80.00- 120.00	100.00
5.291	5.287	0.004	3436894	128.580	6.43	35.99- 75.99	55.56
5.314	5.325	-0.011	27175970	599.178	30.0	64.85- 104.85	439.33
5.401	5.397	0.004	4718250	119.396	5.97	57.44- 97.44	76.28
5.545	5.543	0.002	4653867	82.0621	4.10	98.60- 138.60	75.24
Average of Peak Concentrations =					10.6		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/042b4201.d
Date : 18-DEC-2009 00:51
Client ID: WST03-10-2134CMS
Sample Info: |120199651311|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

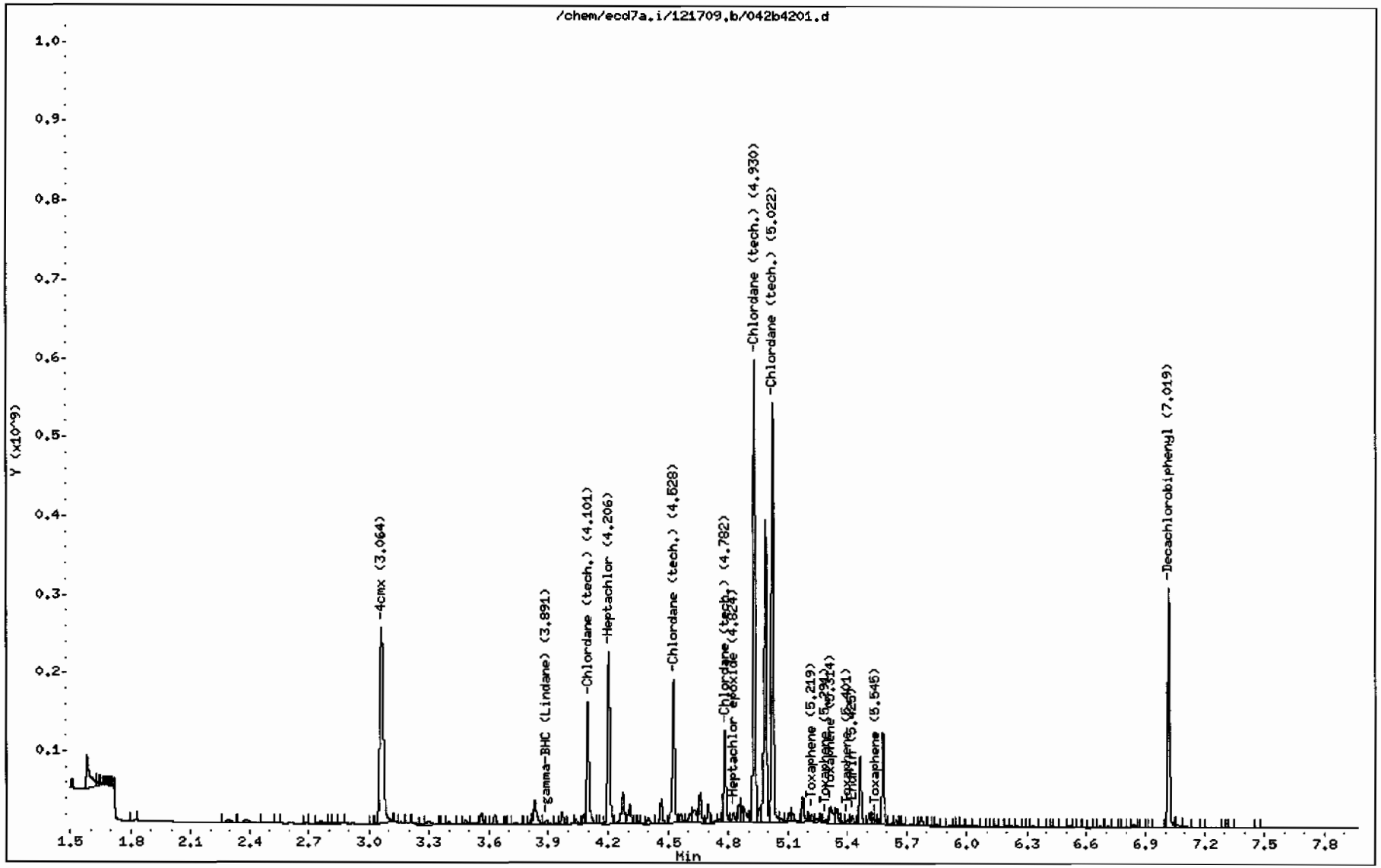

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/042f4201.d
Lab Smp Id: 1201996513 Client Smp ID: WST03-10-2134CMS
Inj Date : 18-DEC-2009 00:51
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996513|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMS|SOIL|CMS|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 42 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.812	0.000	220476874	95.6447	4.78	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.508	6.510	-0.002	206618079	146.747	7.34	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.929	3.930	-0.001	161695555	70.0958	3.50	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.545	4.550	-0.005	21153179	9.21114	0.460	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.092	5.099	-0.007	6144074	3.28181	0.164	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.871	3.872	-0.001	101356943	1142.84	57.1	80.00- 120.00	100.00
4.507	4.508	-0.001	69934245	1377.40	68.9	38.54- 78.54	69.00
4.630	4.630	0.000	301029214	1066.81	53.3	293.96- 333.96	297.00
4.714	4.714	0.000	254599409	1236.30	61.8	216.20- 256.20	251.19
5.193	5.194	-0.001	91633297	1833.31	91.7	47.13- 87.13	90.41
Average of Peak Concentrations =					66.6		
23 Toxaphene					CAS #: 8001-35-2		
4.963	4.954	0.009	14474873	576.201	28.8	80.00- 120.00	100.00
5.003	5.010	-0.007	23291240	710.295	35.5	114.57- 154.57	160.91
5.041	5.047	-0.006	3927937	92.9398	4.65	139.14- 179.14	27.14
5.113	5.110	0.003	55735641	1372.48	68.6	139.10- 179.10	385.05
5.234	5.229	0.005	6837484	93.4799	4.67	241.80- 281.80	47.24
Average of Peak Concentrations =					28.4		

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/042f4201.d

Date : 18-DEC-2009 00:51

Client ID: WST03-10-2134CMS

Sample Info: |1201996513|1|

Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

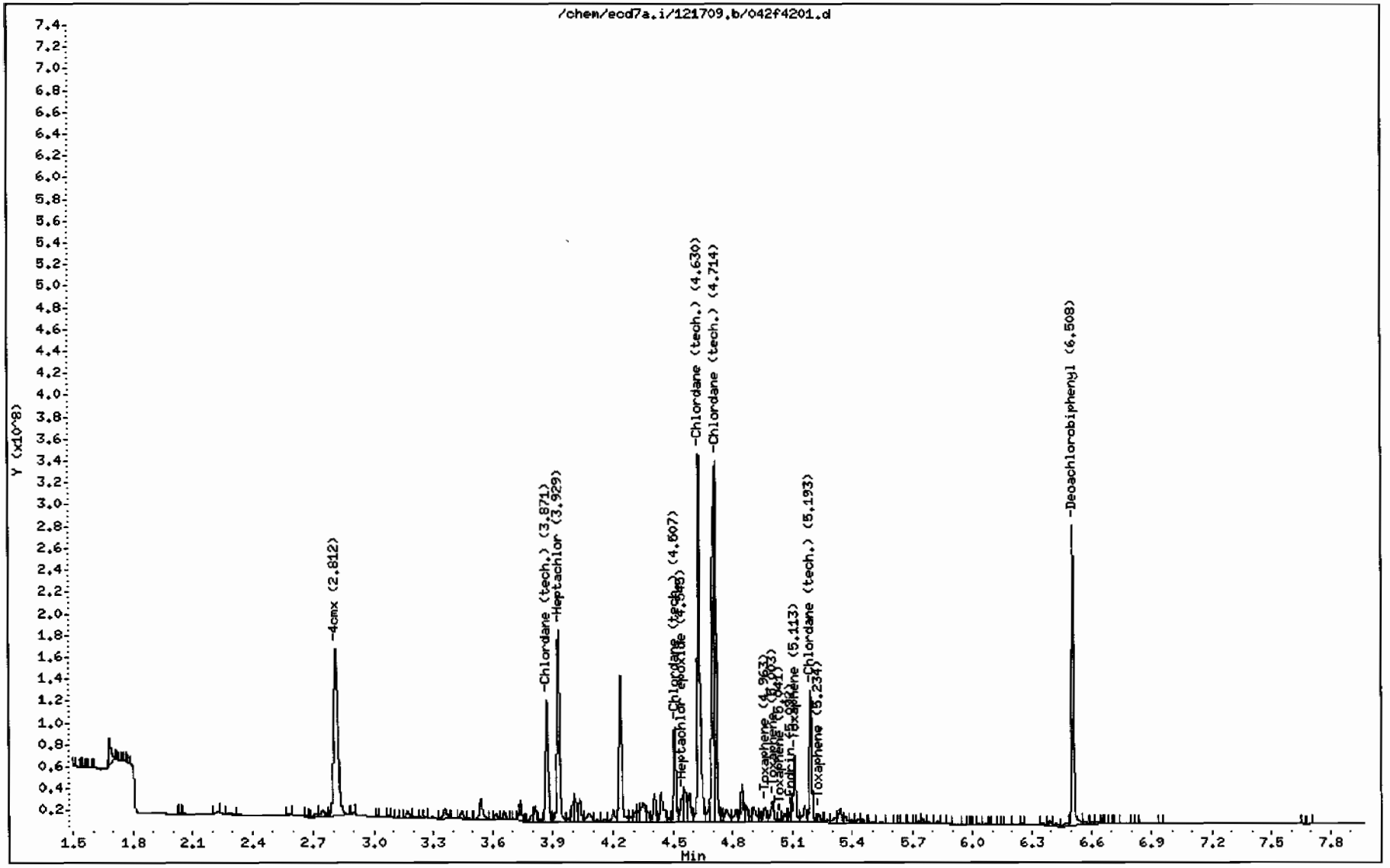

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/043b4301.d
Lab Smp Id: 1201996516 Client Smp ID: WST03-10-2134CMSD
Inj Date : 18-DEC-2009 01:06
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996516|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMSD|SOIL|CMSD|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 43 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.065	3.064	0.001	323671904	119.789	5.99	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.017	7.020	-0.003	241140537	155.160	7.76	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.890	3.880	0.010	6943091	2.07540	0.104	80.00- 120.00	100.00(a)
10 Heptachlor					CAS #: 76-44-8		
4.206	4.207	-0.001	248721370	89.0097	4.45	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.823	4.810	0.013	9128781	3.19320	0.160	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
22 Endrin					CAS #: 72-20-8		
5.424	5.425	-0.001	7054349	3.11637	0.156	80.00- 120.00	100.00(a)
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.101	4.102	-0.001	129397540	1069.94	53.5	80.00- 120.00	100.00
4.528	4.529	-0.001	164476670	1715.71	85.8	77.42- 117.42	127.11
4.783	4.783	0.000	85831747	1253.16	62.6	39.01- 79.01	66.33
4.930	4.930	0.000	265914402	827.621	41.4	253.71- 293.71	205.50
5.021	5.022	-0.001	420181202	1536.49	76.8	216.46- 256.46	324.72
Average of Peak Concentrations =					64.0		
23 Toxaphene					CAS #: 8001-35-2		
5.218	5.212	0.006	3441055	75.0310	3.75	80.00- 120.00	100.00
5.288	5.287	0.001	5365042	200.715	10.0	35.99- 75.99	155.91
5.329	5.325	0.004	1083411	23.8871	1.19	64.85- 104.85	31.48
5.403	5.397	0.006	6282234	158.973	7.95	57.44- 97.44	182.57
5.544	5.543	0.001	2784016	49.0909	2.45	98.60- 138.60	80.91
Average of Peak Concentrations =					5.07		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd7a.i/121709.b/043b4301.d

Date : 18-DEC-2009 01:06

Client ID: WST03-10-2134CMSD

Sample Info: !120199651611

Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM

Column diameter: 0.25

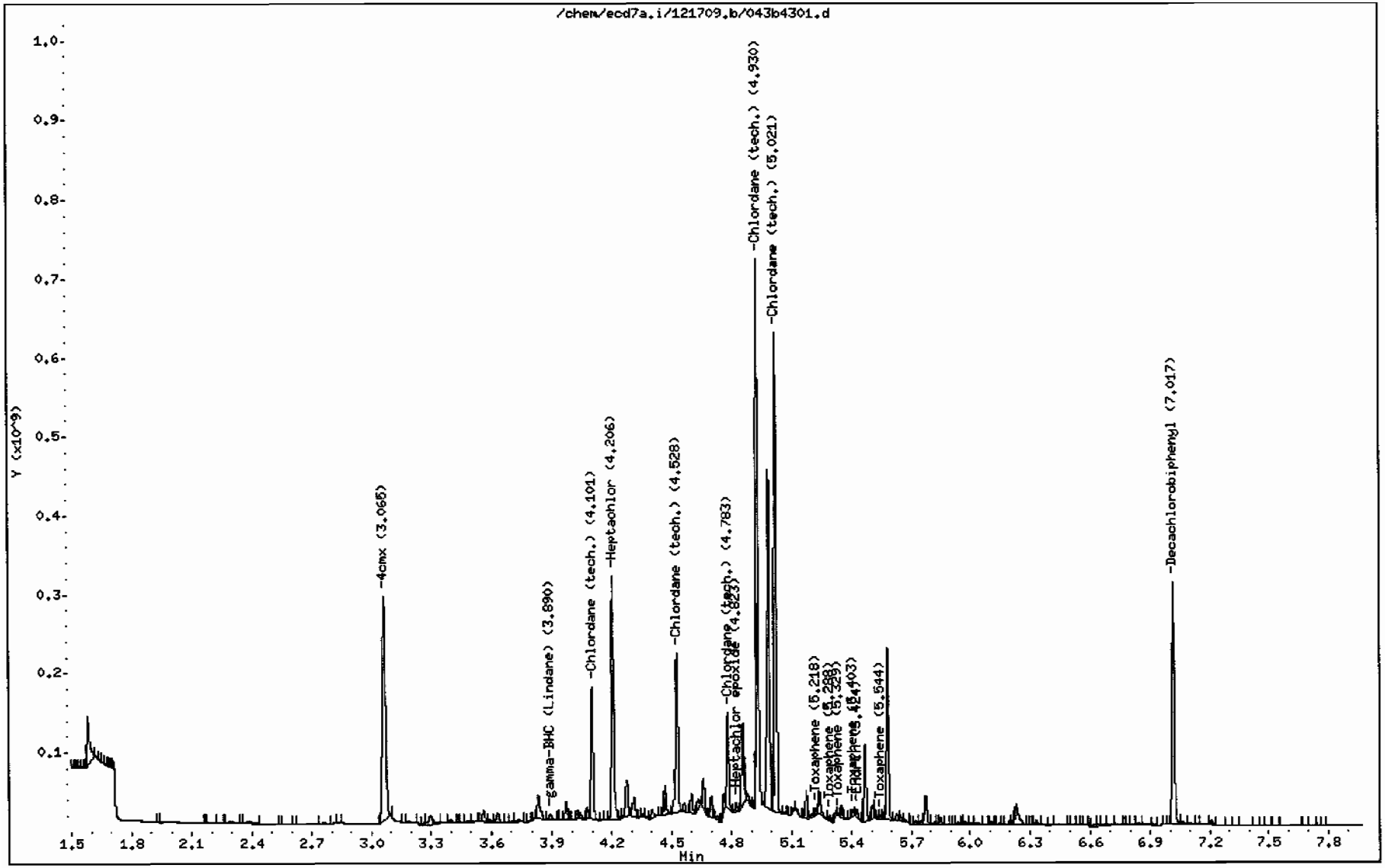

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/043f4301.d
Lab Smp Id: 1201996516 Client Smp ID: WST03-10-2134MSD
Inj Date : 18-DEC-2009 01:06
Operator : JXM Inst ID: ecd7a.i
Smp Info : |1201996516|1|
Misc Info : |ECDPTL_1L|933214|SVPF|CMSD|SOIL|CMSD|||
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 43 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	20.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.814	2.812	0.002	257734902	111.808	5.59	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.510	-0.003	223009242	158.389	7.92	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.929	3.930	-0.001	168623515	73.0991	3.65	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.554	4.550	0.004	19146632	8.33739	0.417	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.092	5.099	-0.007	6463350	3.45234	0.173	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.872	3.872	0.000	100572420	1134.00	56.7	80.00- 120.00	100.00
4.507	4.508	-0.001	68417086	1347.52	67.4	38.54- 78.54	68.03
4.630	4.630	0.000	327587740	1160.93	58.0	293.96- 333.96	325.72
4.714	4.714	0.000	268294985	1302.81	65.1	216.20- 256.20	266.77
5.193	5.194	-0.001	121791308	2436.68	122	47.13- 87.13	121.10
Average of Peak Concentrations =					73.8		
23 Toxaphene					CAS #: 8001-35-2		
4.964	4.954	0.010	14034611	558.676	27.9	80.00- 120.00	100.00
5.003	5.010	-0.007	27799567	847.782	42.4	114.57- 154.57	198.08
5.041	5.047	-0.006	3444776	81.5076	4.08	139.14- 179.14	24.54
5.113	5.110	0.003	57627370	1419.07	71.0	139.10- 179.10	410.61
5.234	5.229	0.005	6006697	82.1217	4.11	241.80- 281.80	42.80
Average of Peak Concentrations =					29.9		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /ohem/ecd7a.i/121709.b/043f4301.d
Date : 18-DEC-2009 01:06
Client ID: WST03-10-2134MSD
Sample Info: |1201996516|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

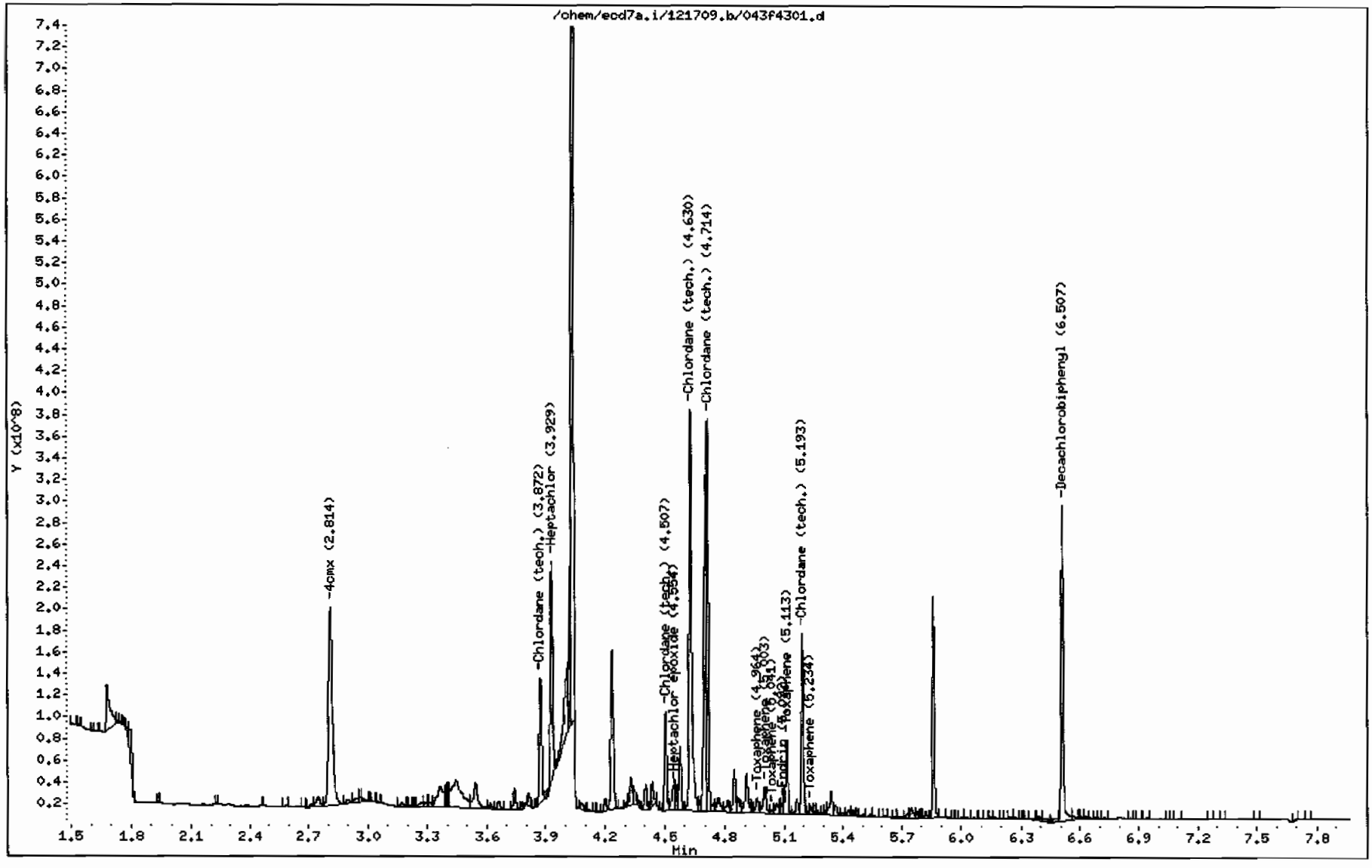

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd7a.i/121709.b/045b4501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB04
Inj Date : 18-DEC-2009 01:36
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-B-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025b2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.600	3.601	-0.001	452527472	100.000	118	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.879	3.880	-0.001	377836547	100.000	113	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.938	3.939	-0.001	152904798	100.000	110	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.206	4.207	-0.001	167534766	100.000	60.0	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.154	4.155	-0.001	391194834	100.000	117	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.434	4.435	-0.001	367443838	100.000	110	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.809	4.810	-0.001	313624611	100.000	110	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.930	4.931	-0.001	306449362	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.021	5.023	-0.002	285029775	100.000	102	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.062	5.064	-0.002	282786291	100.000	113	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.111	5.111	0.000	623700957	200.000	233	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
5.233	5.234	-0.001	602225974	200.000	219	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
5.424	5.425	-0.001	517675886	200.000	229	80.00- 120.00	100.00(M)
25 4,4'-DDD					CAS #: 72-54-8		
5.463	5.464	-0.001	483970361	200.000	225	80.00- 120.00	100.00(M)
24 Endosulfan II					CAS #: 33213-65-9		
5.548	5.549	-0.001	510088162	200.000	221	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.749	5.751	-0.002	355772011	200.000	199	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.654	5.656	-0.002	71111546	200.000	51.6	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.915	5.918	-0.003	407201411	200.000	212	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
6.051	6.055	-0.004	242571510	1000.00	404	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.250	6.254	-0.004	279370119	200.000	139	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.064	3.064	0.000	628941108	200.000	233	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.016	7.020	-0.004	354456775	200.000	228	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd7a.i/121709.b/045b4501.d
Date : 18-DEC-2009 01:36
Client ID: INDAB04
Sample Info: IWPE091207-10AB

Column phase: CLP-2

Instrument: ecd7a.i

Operator: JXM
Column diameter: 0.25

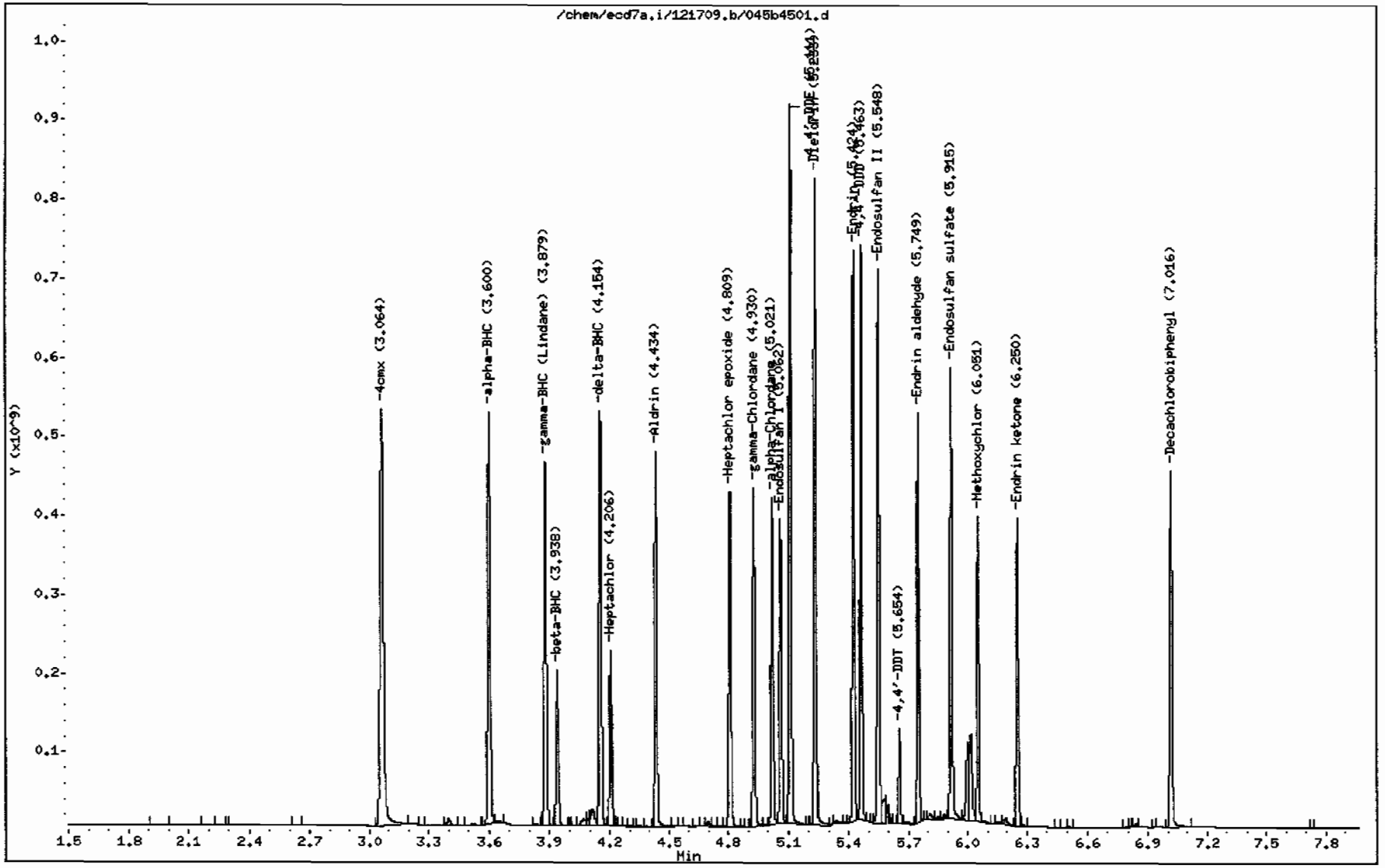

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd7a.i/121709.b/045f4501.d
Lab Smp Id: WPE091207-10AB Client Smp ID: INDAB04
Inj Date : 18-DEC-2009 01:36
Operator : JXM Inst ID: ecd7a.i
Smp Info : |WPE091207-10AB
Misc Info :
Comment :
Method : /chem/ecd7a.i/121709.b/ECD7-F-8081-121709.m
Meth Date : 18-Dec-2009 05:35 jam00798 Quant Type: ESTD
Cal Date : 09-DEC-2009 14:57 Cal File: 025f2501.d
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.318	3.317	0.001	315492390	100.000	107	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.576	3.576	0.000	271811353	100.000	102	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.646	3.646	0.000	116625095	100.000	100	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.931	3.930	0.001	46628994	100.000	20.2	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.779	3.780	-0.001	289828960	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.143	4.143	0.000	261236636	100.000	100	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.550	4.550	0.000	230837951	100.000	100	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.630	4.630	0.000	239804551	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.715	4.715	0.000	209270472	100.000	91.2	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.804	4.803	0.001	213066628	100.000	104	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.759	4.759	0.000	472365569	200.000	209	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.953	4.954	-0.001	447616305	200.000	202	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
5.099	5.099	0.000	380219749	200.000	203	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.128	5.128	0.000	367461401	200.000	204	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.237	5.236	0.001	398770584	200.000	217	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.489	5.489	0.000	271829591	200.000	183	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.297	5.297	0.000	15985466	200.000	11.8	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.751	5.751	0.000	294331407	200.000	186	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.578	5.578	0.000	110294166	1000.00	202	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.923	5.925	-0.002	126145398	200.000	76.3	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.812	2.812	0.000	487490344	200.000	211	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.507	6.510	-0.003	295525913	200.000	210	80.00- 120.00	100.00

Data File: /chem/ecd7a.i/121709.b/045f4501.d
Date : 18-DEC-2009 01:36
Client ID: INDA804
Sample Info: IWPE091207-10AB

Instrument: ecd7a.i
Operator: JXM
Column diameter: 0.25

Column phase: CLP-1

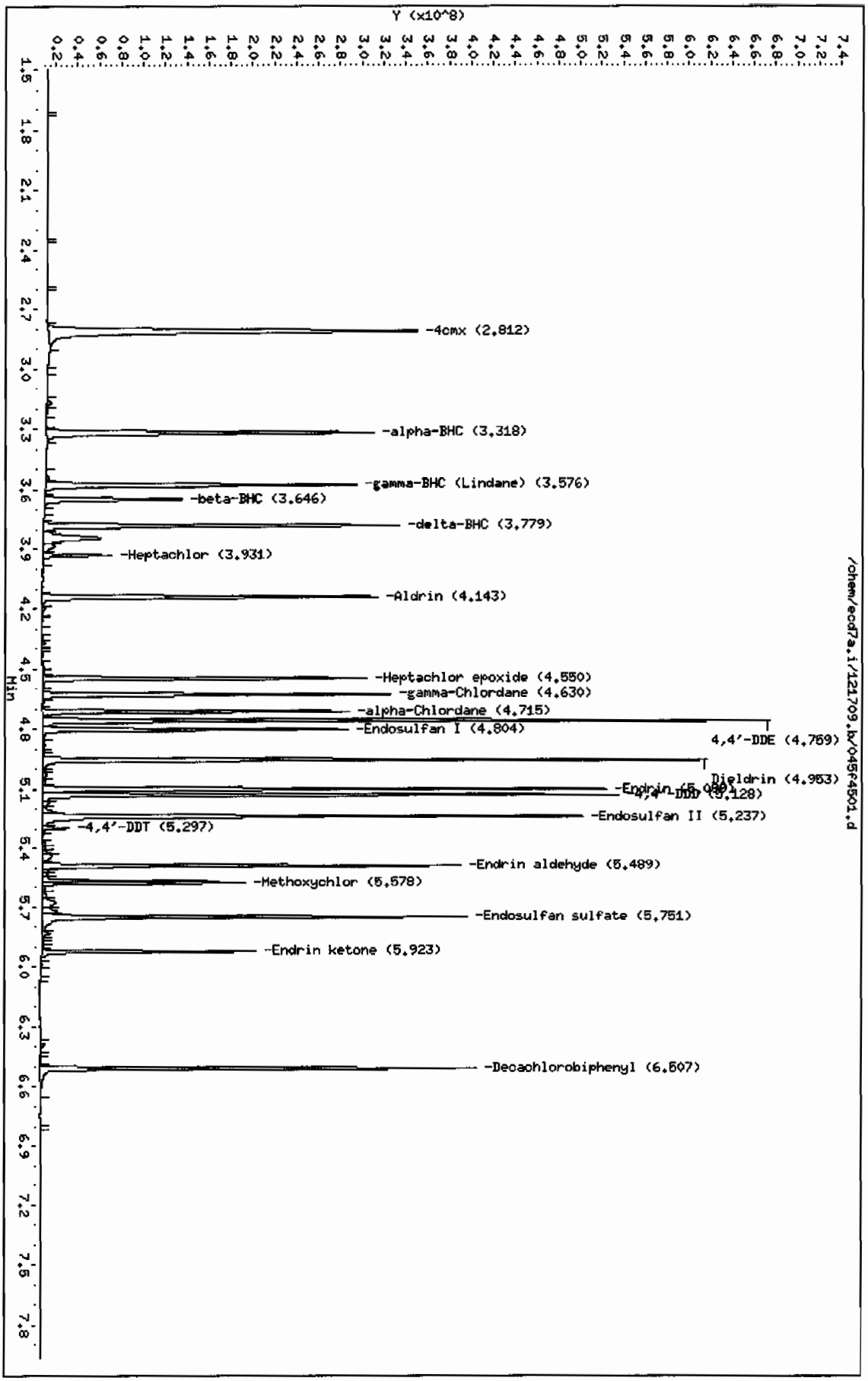

Page 1

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 933213 **Verified by:** _____

Analyst: Alton Willis

Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 21

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201988990 TB	15-DEC-2009 19:49:17	20	5	1	0.05
1201991315 TB	15-DEC-2009 19:49:17	20	5	1	0.05
1201996510 MB	15-DEC-2009 19:49:17	20	5	1	0.05
1201996517 LCS	15-DEC-2009 19:49:17	20	5	1	0.05
1201996518 LCS	15-DEC-2009 19:49:17	20	5	1	0.05
1201996519 LCS	15-DEC-2009 19:49:17	20	5	1	0.05
241839001	15-DEC-2009 19:49:17	20	5	1	0.05
1201996511 MS (241839001)	15-DEC-2009 19:49:17	20	5	1	0.05
1201996514 MSD (241839001)	15-DEC-2009 19:49:17	20	5	1	0.05
1201996512 MS (241839001)	15-DEC-2009 19:49:17	20	5	1	0.05
1201996515 MSD (241839001)	15-DEC-2009 19:49:17	20	5	1	0.05
1201996513 MS (241839001)	15-DEC-2009 19:49:17	20	5	1	0.05
1201996516 MSD (241839001)	15-DEC-2009 19:49:17	20	5	1	0.05
242326001	15-DEC-2009 19:49:17	20	5	1	0.05

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201996517	PESTICIDE TCLP LCS	UE091207-06A	1	mL
LCS	1201996518	Toxaphene TCLP LCS	WE091204-11	1	mL
LCS	1201996519	Chlordane TCLP LCS	WE091111-04	1	mL
MS	1201996511	PESTICIDE TCLP LCS	UE091207-06A	1	mL
MS	1201996512	Toxaphene TCLP LCS	WE091204-11	1	mL
MS	1201996513	Chlordane TCLP LCS	WE091111-04	1	mL
MSD	1201996514	PESTICIDE TCLP LCS	UE091207-06A	1	mL
MSD	1201996515	Toxaphene TCLP LCS	WE091204-11	1	mL
MSD	1201996516	Chlordane TCLP LCS	WE091111-04	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091130-15	1	mL
REGNT	All	Hexane	091117-B2	5	mL
REGNT	All	Methylene Chloride	1242565-D	180	mL
SOURC	All	SODIUM SULFATE	1237406	30	g

Comments:

Verified By: MJS

Final Solvent: HEXANE

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930033 **Verified by:** _____

Analyst: Monifa Morant-Basdeo

Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13

Instrument: TCLP Tumbler # 101

Sample ID	1201988990 TB	241839001
Analysis Start Date	07-DEC-2009 15:00:00	07-DEC-2009 15:00:00
100% Solid Y/N		Y
(I) Sub Sample Aliquot I=G-H (g)		100
Initial pH (su)	4.98	8.74
pH Temperature (celsius)		50
Filtrate pH (su)	4.98	6
Final pH (su)	4.98	1.85
Tumbler Speed	28	28
Sample Properties <>/= Water	tclp#1	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000
Filtrate Volume (mL)	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:22
Filtration End Date: 08-DEC-09 13:30:22
Bottle Lot Number: h929301db
Filter Lot Number: 9125016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	927953
Prep Batch Number:	927948

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
241838002	WST03-10-2134
1201984179	Method Blank (MB)
1201984180	Laboratory Control Sample (LCS)
1201984181	241911001(WST49-10-5432) Matrix Spike (MS)
1201984182	241911001(WST49-10-5432) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria for the Aroclors.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this non-compliance has no adverse effects on the data as the surrogate recovery was well within the acceptance range in the samples in this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-694) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock Date: 12-21-2009

Roadmap for LANL 10-670 PCB

This roadmap was analyzed by jen01212 on 12-07-2009, 12:54.
This roadmap was reviewed by jos00786 on 12-07-2009, 15:15.
This roadmap was packaged by yml on 12-21-2009, 11:22.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/077f7701.d	241838002	sample	04-DEC-2009	22:30	10-670.sub	WST03-10-2134	1.00000	927953	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/077b7701.d	241838002	sample	04-DEC-2009	22:30	10-670.sub	WST03-10-2134	1.00000	927953	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/071f7101-1.d	1201984179	mb	04-DEC-2009	21:23	10-670.sub	PBLK01	1.00000	927953	
☐	N	/chem/ecd2a.i/120409.b/072f7201-1.d	1201984180	lcs	04-DEC-2009	21:34	10-670.sub	PBLK01LCS	1.00000	927953	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd2a.i/120409.b/071b7101-1.d	1201984179	mb	04-DEC-2009	21:23	10-670.sub	PBLK01	1.00000	927953	
☐	N	/chem/ecd2a.i/120409.b/072b7201-1.d	1201984180	lcs	04-DEC-2009	21:34	10-670.sub	PBLK01LCS	1.00000	927953	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 22:30	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.56	ug/kg	1.18	3.56	1
11104–28–2	Aroclor–1221	U	3.56	ug/kg	1.18	3.56	1
11141–16–5	Aroclor–1232	U	3.56	ug/kg	1.18	3.56	1
53469–21–9	Aroclor–1242	U	3.56	ug/kg	1.18	3.56	1
12672–29–6	Aroclor–1248	U	3.56	ug/kg	1.18	3.56	1
11097–69–1	Aroclor–1254	U	3.56	ug/kg	1.18	3.56	1
11096–82–5	Aroclor–1260	U	3.56	ug/kg	1.18	3.56	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10–670

Matrix Type: SOLID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201984179	MB for batch 927948	77	83	67	71
1201984180	LCS for batch 927948	68	73	56	60
241838002	WST03–10–2134	61	64	52	59

Surrogate	Acceptance Limits
4CMX = 4cmx	(34%–105%)
DCB = Decachlorobiphenyl	(33%–115%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 927948
Lab Sample ID: 1201984180
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/04/2009 21:34
Dilution: 1
Prep Batch ID: 927948
Batch ID: 927953

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	33.3	0.0	22.3	67	41-110
11096-82-5	LCS	Aroclor-1260	33.3	0.0	23.8	71	48-110

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-694
Client ID: WST49-10-5432MS
Lab Sample ID: 1201984181
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 1.5
Analysis Date: 12/05/2009 00:43
Prep Batch ID: 927948
Batch ID: 927953

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	33.7	0.00	U	20.1	60	23-117
11096-82-5	MS	Aroclor-1260	33.7	0.00	U	22.8	68	27-116

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10–694
Client ID: WST49–10–5432MSD
Lab Sample ID: 1201984182
Instrument: ECD2A.I
Analyst: JAOC
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: 1.5
Analysis Date: 12/05/2009 00:55
Prep Batch ID: 927948
Batch ID: 927953
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674–11–2	MSD Aroclor–1016	33.7	0.00	U	19.5	58	23–117	3	0–30
11096–82–5	MSD Aroclor–1260	33.7	0.00	U	23.1	69	27–116	1	0–30

Method Blank Summary

SDG Number:	10–670	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927948	Instrument ID:	ECD2A.I_2 ECD2A.I_1	Data File:	071b7101–1.d 071f7101–1.d
Lab Sample ID:	1201984179				
Column:	CLP2 CLP1	Prep Date:	12/01/2009 20:14	Analyzed:	12/04/09 21:23
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927948	1201984180	072f7201–1.d 072b7201–1.d	12/04/09	2134
02 WST03–10–2134	241838002	077f7701.d 077b7701.d	12/04/09	2230

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 22:30	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	077f7701.d	**Column:**	1 CLP1	**Level:**	LOW
	077b7701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	3.56	ug/kg	1.18	3.56	1
11104–28–2	Aroclor–1221	U	3.56	ug/kg	1.18	3.56	1
11141–16–5	Aroclor–1232	U	3.56	ug/kg	1.18	3.56	1
53469–21–9	Aroclor–1242	U	3.56	ug/kg	1.18	3.56	1
12672–29–6	Aroclor–1248	U	3.56	ug/kg	1.18	3.56	1
11097–69–1	Aroclor–1254	U	3.56	ug/kg	1.18	3.56	1
11096–82–5	Aroclor–1260	U	3.56	ug/kg	1.18	3.56	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/077f7701.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 04-DEC-2009 22:30
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241838002|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	6.76260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	7083640	122.743	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.611	-0.001	5745596	104.791	3.7	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/077f7701.d
Date : 04-DEC-2009 22:30
Client ID: WST03-10-2134
Sample Info: 1241838002111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

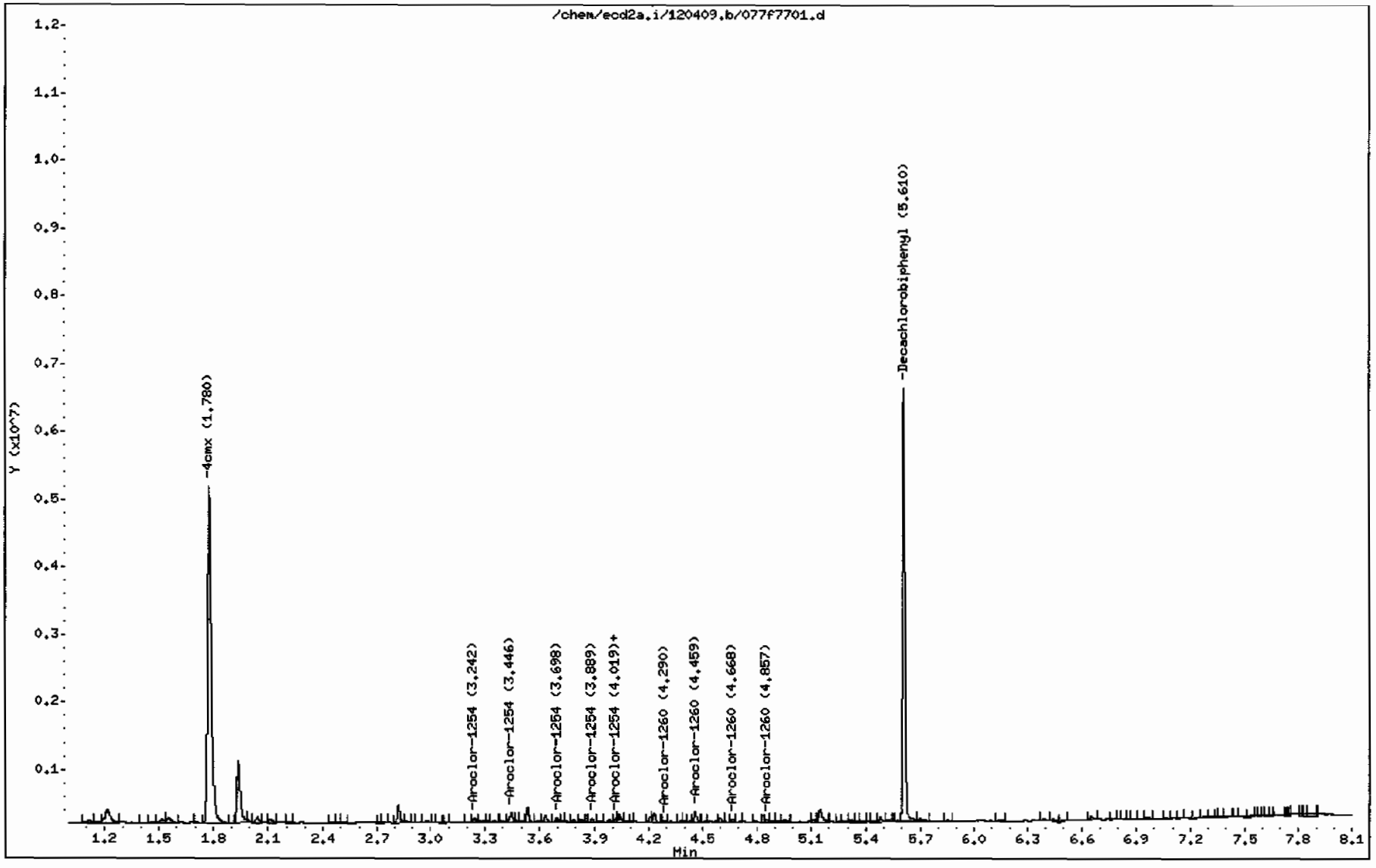

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/077b7701.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 04-DEC-2009 22:30
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |241838002|1|
Misc Info : |ECD82P_1S|927953|SVAF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	6.76260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	15244575	128.973	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	12927075	118.988	4.2	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/077b7701.d
Date : 04-DEC-2009 22:30
Client ID: WST03-10-2134
Sample Info: |241838002|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

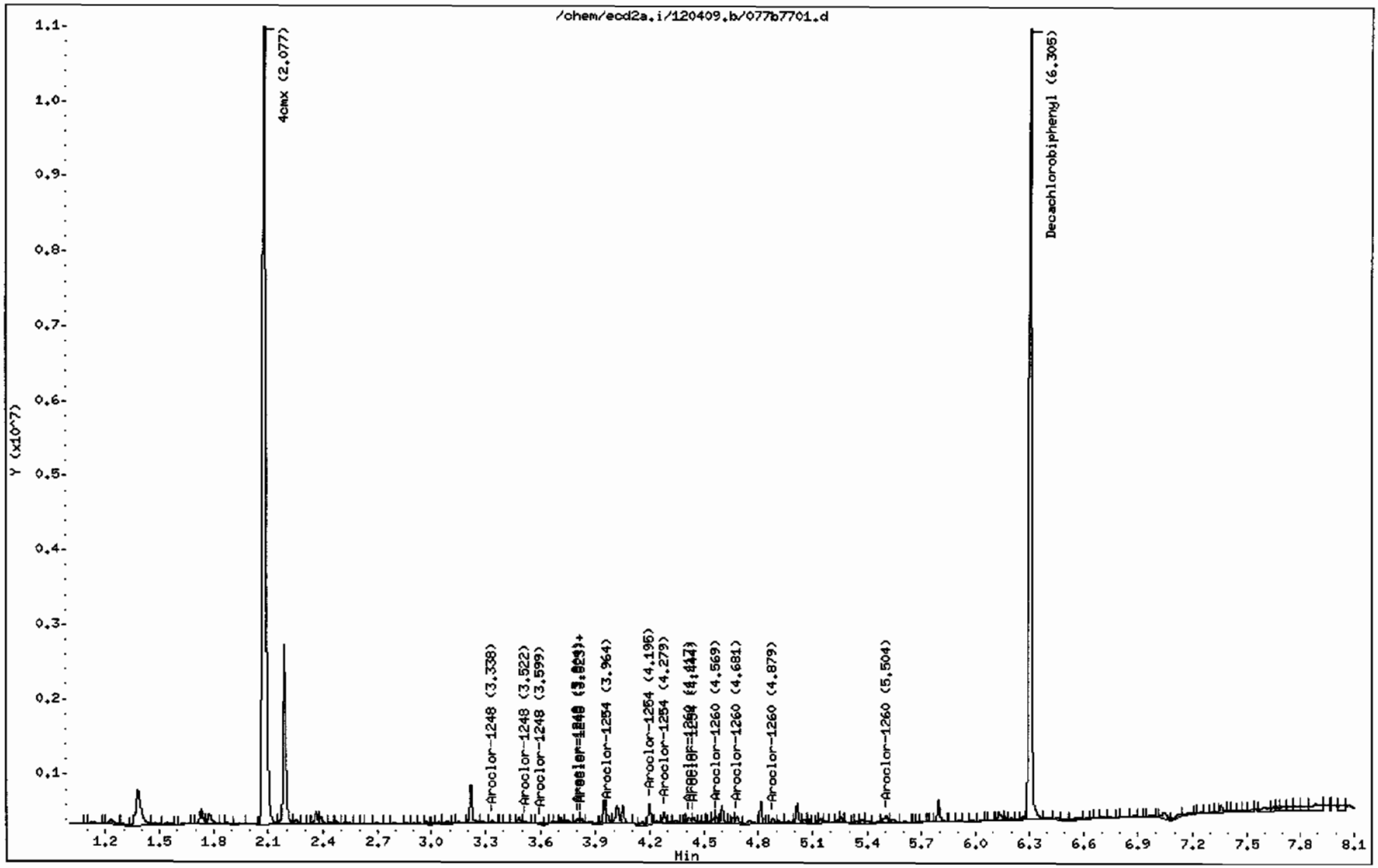

STANDARDS DATA

Report Date: 20-Dec-2009 08:25

Calibration History

Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035f3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009f0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036f3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010f1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037f3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011f1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038f3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039f3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d

12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
05-DEC-2009 01:17	AR1660	/chem/ecd2a.i/120409.b/092f9201.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 23:14	AR1660	/chem/ecd2a.i/120409.b/081f8101.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 21:01	AR1660	/chem/ecd2a.i/120409.b/069f6901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 19:05	AR1660	/chem/ecd2a.i/120409.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 17:21	AR1660	/chem/ecd2a.i/120409.b/050f5001.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 15:03	AR1660	/chem/ecd2a.i/120409.b/038f3801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 12:44	AR1660	/chem/ecd2a.i/120409.b/026f2601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:31	AR1660	/chem/ecd2a.i/120409.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:36	AR1268	/chem/ecd2a.i/120409.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:25	AR1262	/chem/ecd2a.i/120409.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:14	AR1221	/chem/ecd2a.i/120409.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:02	AR1232	/chem/ecd2a.i/120409.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:51	AR1248	/chem/ecd2a.i/120409.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:40	AR1242	/chem/ecd2a.i/120409.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:29	AR1254	/chem/ecd2a.i/120409.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:18	AR1660	/chem/ecd2a.i/120409.b/002f0201.d

Report Date: 04-Dec-2009 11:50

Calibration History

Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
12-NOV-2009 16:22	AR1268	/chem/ecd2a.i/111209a.b/035b3501.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
18-NOV-2009 10:19	AR1660	/chem/ecd2a.i/111809.b/009b0901.d
Cal Level: 2 , Cal Amount: 250.00000		
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
12-NOV-2009 16:33	AR1268	/chem/ecd2a.i/111209a.b/036b3601.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
18-NOV-2009 10:30	AR1660	/chem/ecd2a.i/111809.b/010b1001.d
Cal Level: 3 , Cal Amount: 500.00000		
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
12-NOV-2009 16:44	AR1268	/chem/ecd2a.i/111209a.b/037b3701.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
18-NOV-2009 10:41	AR1660	/chem/ecd2a.i/111809.b/011b1101.d
Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
18-NOV-2009 10:53	AR1660	/chem/ecd2a.i/111809.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
12-NOV-2009 16:55	AR1268	/chem/ecd2a.i/111209a.b/038b3801.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
12-NOV-2009 11:00	AR1232	/chem/ecd2a.i/111209a.b/006b0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
12-NOV-2009 17:07	AR1268	/chem/ecd2a.i/111209a.b/039b3901.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d

12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
18-NOV-2009 11:04	AR1660	/chem/ecd2a.i/111809.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 10:31	AR1660	/chem/ecd2a.i/120409.b/014b1401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:36	AR1268	/chem/ecd2a.i/120409.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:25	AR1262	/chem/ecd2a.i/120409.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:14	AR1221	/chem/ecd2a.i/120409.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 09:02	AR1232	/chem/ecd2a.i/120409.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:51	AR1248	/chem/ecd2a.i/120409.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:40	AR1242	/chem/ecd2a.i/120409.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:29	AR1254	/chem/ecd2a.i/120409.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
04-DEC-2009 08:18	AR1660	/chem/ecd2a.i/120409.b/002b0201.d

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COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 10:54 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	500.000000
Initial:End Threshold	250.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.100000
8.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.282	2.252-2.312	2.100e+03
	2.604	2.574-2.634	4.505e+03
	2.695	2.665-2.725	1.820e+03
	2.830	2.800-2.860	9.329e+02
	2.980	2.950-3.010	1.378e+03
2 Aroclor-1221	1.446	1.416-1.476	4.641e+02
	1.906	1.876-1.936	6.570e+02
	2.005	1.975-2.035	3.467e+02
3 Aroclor-1232	2.035	2.005-2.065	1.165e+03
	2.281	2.251-2.311	9.314e+02
	2.694	2.664-2.724	8.004e+02
	2.737	2.707-2.767	5.102e+02
	2.980	2.950-3.010	5.840e+02
4 Aroclor-1242	2.282	2.252-2.312	1.733e+03
	2.695	2.665-2.725	1.484e+03
	2.737	2.707-2.767	9.058e+02
	2.830	2.800-2.860	7.269e+02
	2.980	2.950-3.010	1.120e+03
5 Aroclor-1248	2.829	2.799-2.859	1.527e+03
	2.980	2.950-3.010	2.027e+03
	3.039	3.009-3.069	1.571e+03
	3.274	3.244-3.304	2.218e+03
	3.427	3.397-3.457	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.246	3.216-3.276	2.080e+03
		3.429	3.399-3.459	2.772e+03
		3.698	3.668-3.728	3.742e+03
		3.890	3.860-3.920	2.783e+03
		4.019	3.989-4.049	2.760e+03
	7 Aroclor-1260	4.019	3.989-4.049	4.067e+03
		4.290	4.260-4.320	2.528e+03
		4.456	4.426-4.486	2.583e+03
		4.668	4.638-4.698	6.036e+03
		4.857	4.827-4.887	2.912e+03
	8 Aroclor-1262	3.828	3.798-3.858	2.273e+03
		4.019	3.989-4.049	3.072e+03
		4.290	4.261-4.320	4.004e+03
		4.455	4.426-4.486	3.573e+03
		4.857	4.827-4.887	2.501e+03
	9 Aroclor-1268	4.887	4.857-4.917	9.392e+03
		4.913	4.883-4.943	9.361e+03
		5.046	5.016-5.076	7.073e+03
		5.284	5.254-5.314	3.056e+03
		5.481	5.451-5.511	2.201e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	1.781	1.751-1.811	5.771e+04
$	12 Decachlorobiphenyl	5.611	5.581-5.641	5.483e+04
	13 4,4'-DDT	4.238	4.218-4.258	5.006e+04
	14 4,4'-DDD	4.044	4.024-4.064	7.298e+04
	15 4,4'-DDE	3.639	3.619-3.659	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Quant Method : ESTD Target Version : 3.50
Last Update : 04-Dec-2009 10:52 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	500.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	3.000000
Initial:Negative Peaks	OFF
Initial:Tension	4.000000
4.200:Tension	1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.752	2.722-2.782	4.258e+03
	3.185	3.155-3.215	3.445e+03
	3.336	3.306-3.366	1.979e+03
	3.365	3.335-3.395	2.061e+03
	3.524	3.494-3.554	2.754e+03
2 Aroclor-1221	2.298	2.268-2.328	1.263e+03
	2.404	2.374-2.434	7.739e+02
	2.448	2.418-2.478	3.051e+03
3 Aroclor-1232	2.449	2.419-2.479	2.061e+03
	2.752	2.722-2.782	1.960e+03
	3.186	3.156-3.216	1.498e+03
	3.258	3.228-3.288	9.309e+02
	3.523	3.493-3.553	1.107e+03
4 Aroclor-1242	2.752	2.722-2.782	3.445e+03
	3.186	3.156-3.216	2.681e+03
	3.258	3.228-3.288	1.637e+03
	3.337	3.307-3.367	1.508e+03
	3.524	3.494-3.554	2.145e+03
5 Aroclor-1248	3.337	3.307-3.367	3.282e+03
	3.523	3.493-3.553	4.187e+03
	3.609	3.579-3.639	4.451e+03
	3.798	3.768-3.828	4.697e+03
	3.828	3.798-3.858	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.823	3.793-3.853	4.985e+03
	3.965	3.935-3.995	5.799e+03
	4.200	4.170-4.230	4.023e+03
	4.281	4.251-4.311	7.731e+03
	4.445	4.415-4.475	5.608e+03
7 Aroclor-1260	4.420	4.390-4.450	5.513e+03
	4.570	4.540-4.600	7.132e+03
	4.682	4.652-4.712	4.731e+03
	4.880	4.850-4.910	5.801e+03
	5.505	5.475-5.535	9.041e+03
8 Aroclor-1262	4.420	4.390-4.450	4.703e+03
	4.571	4.541-4.601	5.853e+03
	4.879	4.849-4.909	8.946e+03
	5.080	5.050-5.110	7.772e+03
	5.258	5.228-5.288	1.672e+04
9 Aroclor-1268	5.504	5.474-5.534	2.032e+04
	5.536	5.506-5.566	2.018e+04
	5.707	5.677-5.737	1.496e+04
	5.907	5.877-5.937	6.438e+03
	6.131	6.101-6.161	4.409e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.077	2.047-2.107	1.182e+05
$ 12 Decachlorobiphenyl	6.305	6.275-6.335	1.086e+05
13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Cal Date : 04-Dec-2009 10:54 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008f0801.d
Level 2: /chem/ecd2a.i/120209.b/009f0901.d
Level 3: /chem/ecd2a.i/120209.b/010f1001.d
Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
Level 5: /chem/ecd2a.i/120209.b/012f1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	2379	2179	2062	2036	1843	2100	9.399
(2)	4800	4519	4424	4463	4317	4505	4.018
(3)	2033	1882	1779	1745	1662	1820	7.834
(4)	1057	955	926	879	848	933	8.655
(5)	1484	1424	1382	1293	1308	1378	5.799
2 Aroclor-1221(1)	+++++	+++++	+++++	464	+++++	464	0.000
(2)	+++++	+++++	+++++	657	+++++	657	0.000
(3)	+++++	+++++	+++++	347	+++++	347	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1165	+++++	1165	0.000
(2)	+++++	+++++	+++++	931	+++++	931	0.000
(3)	+++++	+++++	+++++	800	+++++	800	0.000
(4)	+++++	+++++	+++++	510	+++++	510	0.000
(5)	+++++	+++++	+++++	584	+++++	584	0.000
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Cal Date : 04-Dec-2009 10:54 jen01212
Curve Type : Average

	Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	___ RRF	% RSD
	7 Aroclor-1260(1)	4169	4015	4009	4109	4033	4067	1.718
	(2)	2598	2539	2501	2535	2469	2528	1.903
	(3)	2625	2577	2548	2609	2557	2583	1.287
	(4)	5914	5894	5999	6196	6179	6036	2.381
	(5)	2944	2846	2851	2940	2978	2912	2.044
	8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
	(2)	3295	3066	3031	3051	2917	3072	4.482
	(3)	4237	3997	3977	3997	3815	4004	3.763
	(4)	3754	3532	3556	3594	3430	3573	3.295
	(5)	2578	2453	2481	2538	2454	2501	2.217
	9 Aroclor-1268(1)	9077	9136	9272	9373	10103	9392	4.409
	(2)	9332	9272	9238	9197	9765	9361	2.470
	(3)	6985	6923	6953	6984	7523	7073	3.568
	(4)	3112	3015	2984	2964	3207	3056	3.331
	(5)	21397	21592	21760	21851	23464	22013	3.767
M	10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
	14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
	15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
$	11 4cmx	58040	57606	57793	58690	56427	57711	1.432
$	12 Decachlorobiphenyl	56927	54235	54224	54803	53958	54829	2.212

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Cal Date : 04-Dec-2009 10:52 jen01212
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd2a.i/120209.b/008b0801.d
Level 2: /chem/ecd2a.i/120209.b/009b0901.d
Level 3: /chem/ecd2a.i/120209.b/010b1001.d
Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
Level 5: /chem/ecd2a.i/120209.b/012b1201.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	4471	4316	4264	4300	3939	4258	4.589
(2)	3720	3372	3380	3455	3296	3445	4.751
(3)	2065	1961	1954	1998	1919	1979	2.800
(4)	2146	2044	2035	2081	2000	2061	2.680
(5)	2771	2705	2734	2825	2736	2754	1.669
2 Aroclor-1221(1)	+++++	+++++	+++++	1263	+++++	1263	0.000
(2)	+++++	+++++	+++++	774	+++++	774	0.000
(3)	+++++	+++++	+++++	3051	+++++	3051	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2061	+++++	2061	0.000
(2)	+++++	+++++	+++++	1960	+++++	1960	0.000
(3)	+++++	+++++	+++++	1498	+++++	1498	0.000
(4)	+++++	+++++	+++++	931	+++++	931	0.000
(5)	+++++	+++++	+++++	1107	+++++	1107	0.000
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
End Cal Date : 02-DEC-2009 07:50
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Cal Date : 04-Dec-2009 10:52 jen01212
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	5423	5365	5511	5713	5551	5513	2.420
(2)	6898	6848	7135	7508	7271	7132	3.815
(3)	4626	4556	4689	4954	4832	4731	3.396
(4)	5662	5630	5786	6052	5873	5801	2.951
(5)	8536	8630	8927	9561	9550	9041	5.437
8 Aroclor-1262(1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268(1)	18829	19584	20101	20533	22559	20321	6.904
(2)	18822	19343	20333	20389	22025	20182	6.077
(3)	13874	14365	14864	15141	16565	14962	6.808
(4)	5734	6115	6404	6840	7097	6438	8.497
(5)	40707	42777	43856	44408	48724	44094	6.689
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
$ 11 4cmx	112878	116094	118968	122768	120292	118200	3.238
$ 12 Decachlorobiphenyl	104348	106099	108507	112328	111925	108642	3.231

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0818

Lab File ID: 002F0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2099.804	2071.757	0.01	-1.3	15.0
(2)	4504.513	4297.144	0.01	-4.6	15.0
(3)	1820.211	1704.431	0.01	-6.4	15.0
(4)	932.883	860.050	0.01	-7.8	15.0
(5)	1378.125	1252.180	0.01	-9.1	15.0
Aroclor-1260	4066.794	4085.124	0.01	0.4	15.0
(2)	2528.317	2494.262	0.01	-1.3	15.0
(3)	2583.202	2561.196	0.01	-0.8	15.0
(4)	6036.106	6040.775	0.01	0.1	15.0
(5)	2911.947	2863.737	0.01	-1.6	15.0
4cmx	57711.247	61632.170	0.01	6.8	15.0
Decachlorobiphenyl	54829.246	47372.580	0.01	-13.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 0818

Lab File ID: 002B0201 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4258.051	4225.102	0.01	-0.8	15.0
(2)	3444.681	3391.994	0.01	-1.5	15.0
(3)	1979.487	1966.559	0.01	-0.6	15.0
(4)	2061.253	2066.552	0.01	0.2	15.0
(5)	2754.170	2798.287	0.01	1.6	15.0
Aroclor-1260	5512.644	5841.697	0.01	6.0	15.0
(2)	7131.968	7492.876	0.01	5.1	15.0
(3)	4731.365	5012.957	0.01	6.0	15.0
(4)	5800.657	5917.428	0.01	2.0	15.0
(5)	9040.681	9352.254	0.01	3.4	15.0
4cmx	118199.83	133352.68	0.01	12.8	15.0
Decachlorobiphenyl	108641.52	98848.300	0.01	-9.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2101

Lab File ID: 069F6901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	1991.713	0.01	-5.1	15.0	
(2)	4504.513	4359.721	0.01	-3.2	15.0	
(3)	1820.211	1718.140	0.01	-5.6	15.0	
(4)	932.883	863.079	0.01	-7.5	15.0	
(5)	1378.125	1308.503	0.01	-5.0	15.0	
Aroclor-1260	4066.794	4195.536	0.01	3.2	15.0	
(2)	2528.317	2568.166	0.01	1.6	15.0	
(3)	2583.202	2610.134	0.01	1.0	15.0	
(4)	6036.106	6137.058	0.01	1.7	15.0	
(5)	2911.947	2905.494	0.01	-0.2	15.0	
4cmx	57711.247	62243.020	0.01	7.8	15.0	
Decachlorobiphenyl	54829.246	46427.640	0.01	-15.3	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2101

Lab File ID: 069B6901 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4346.886	0.01	2.1	15.0	
(2)	3444.681	3515.637	0.01	2.0	15.0	
(3)	1979.487	2035.326	0.01	2.8	15.0	
(4)	2061.253	2112.762	0.01	2.5	15.0	
(5)	2754.170	2896.483	0.01	5.2	15.0	
Aroclor-1260	5512.644	6026.178	0.01	9.3	15.0	
(2)	7131.968	7661.315	0.01	7.4	15.0	
(3)	4731.365	5099.145	0.01	7.8	15.0	
(4)	5800.657	6036.822	0.01	4.1	15.0	
(5)	9040.681	9406.378	0.01	4.0	15.0	
4cmx	118199.83	136576.95	0.01	15.5	15.0	<-
Decachlorobiphenyl	108641.52	95012.880	0.01	-12.5	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2314

Lab File ID: 081F8101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	2099.804	2026.301	0.01	-3.5	15.0	
(2)	4504.513	4489.109	0.01	-0.3	15.0	
(3)	1820.211	1764.591	0.01	-3.0	15.0	
(4)	932.883	858.313	0.01	-8.0	15.0	
(5)	1378.125	1322.592	0.01	-4.0	15.0	
Aroclor-1260	4066.794	4246.070	0.01	4.4	15.0	
(2)	2528.317	2567.686	0.01	1.6	15.0	
(3)	2583.202	2617.795	0.01	1.3	15.0	
(4)	6036.106	6176.760	0.01	2.3	15.0	
(5)	2911.947	2914.128	0.01	0.1	15.0	
4cmx	57711.247	63814.830	0.01	10.6	15.0	
Decachlorobiphenyl	54829.246	44704.110	0.01	-18.5	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD2A Calibration Date: 12/04/09 Time: 2314

Lab File ID: 081B8101 Init. Calib. Date(s): 11/18/09 11/18/09

Heated Purge: (Y/N) N Init. Calib. Times: 1019 1104

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	4258.051	4397.293	0.01	3.3	15.0	
(2)	3444.681	3566.977	0.01	3.6	15.0	
(3)	1979.487	2050.811	0.01	3.6	15.0	
(4)	2061.253	2131.643	0.01	3.4	15.0	
(5)	2754.170	2915.510	0.01	5.8	15.0	
Aroclor-1260	5512.644	5967.374	0.01	8.2	15.0	
(2)	7131.968	7545.490	0.01	5.8	15.0	
(3)	4731.365	5001.322	0.01	5.7	15.0	
(4)	5800.657	5804.649	0.01	0.1	15.0	
(5)	9040.681	8954.035	0.01	-1.0	15.0	
4cmx	118199.83	139067.58	0.01	17.6	15.0	<-
Decachlorobiphenyl	108641.52	90054.490	0.01	-17.1	15.0	<-

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/002f0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 08:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6163217	100.000	107	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	4737258	100.000	86.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.282	0.000	2071757	1000.00	987	80.00- 120.00	100.00(M)
2.604	2.604	0.000	4297144	1000.00	954	195.38- 235.38	207.42
2.695	2.695	0.000	1704431	1000.00	936	66.88- 106.88	82.27
2.830	2.830	0.000	860050	1000.00	922	23.48- 63.48	41.51
2.980	2.980	0.000	1252180	1000.00	909	45.19- 85.19	60.44
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	4085124	1000.00	1000	80.00- 120.00	100.00
4.290	4.290	0.000	2494262	1000.00	986	41.10- 81.10	61.06
4.456	4.456	0.000	2561196	1000.00	991	42.35- 82.35	62.70
4.668	4.668	0.000	6040775	1000.00	1000	126.34- 166.34	147.87
4.857	4.857	0.000	2863737	1000.00	983	49.78- 89.78	70.10
Average of Peak Amounts =					993		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/002f0201.d

Date : 04-DEC-2009 08:18

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

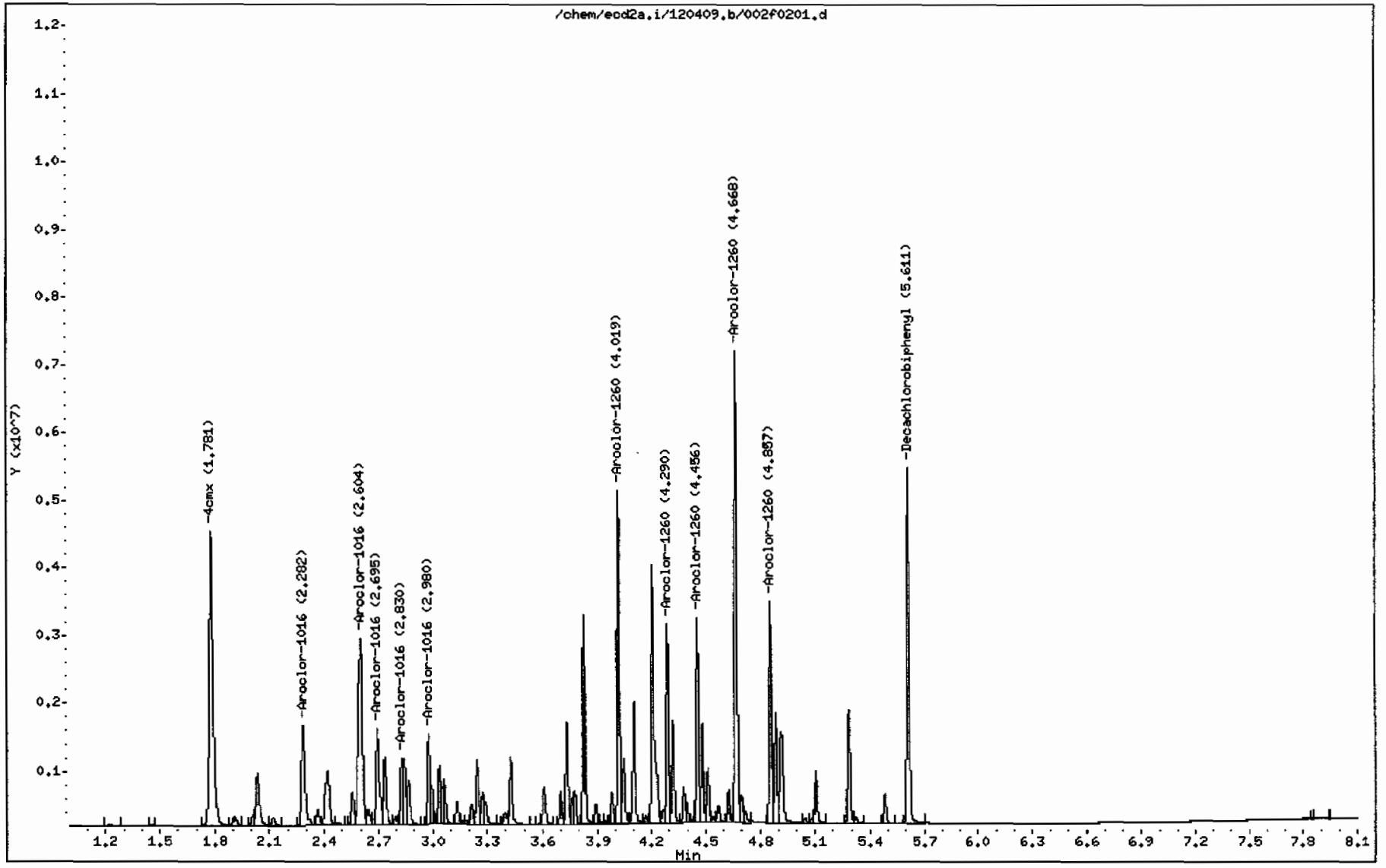

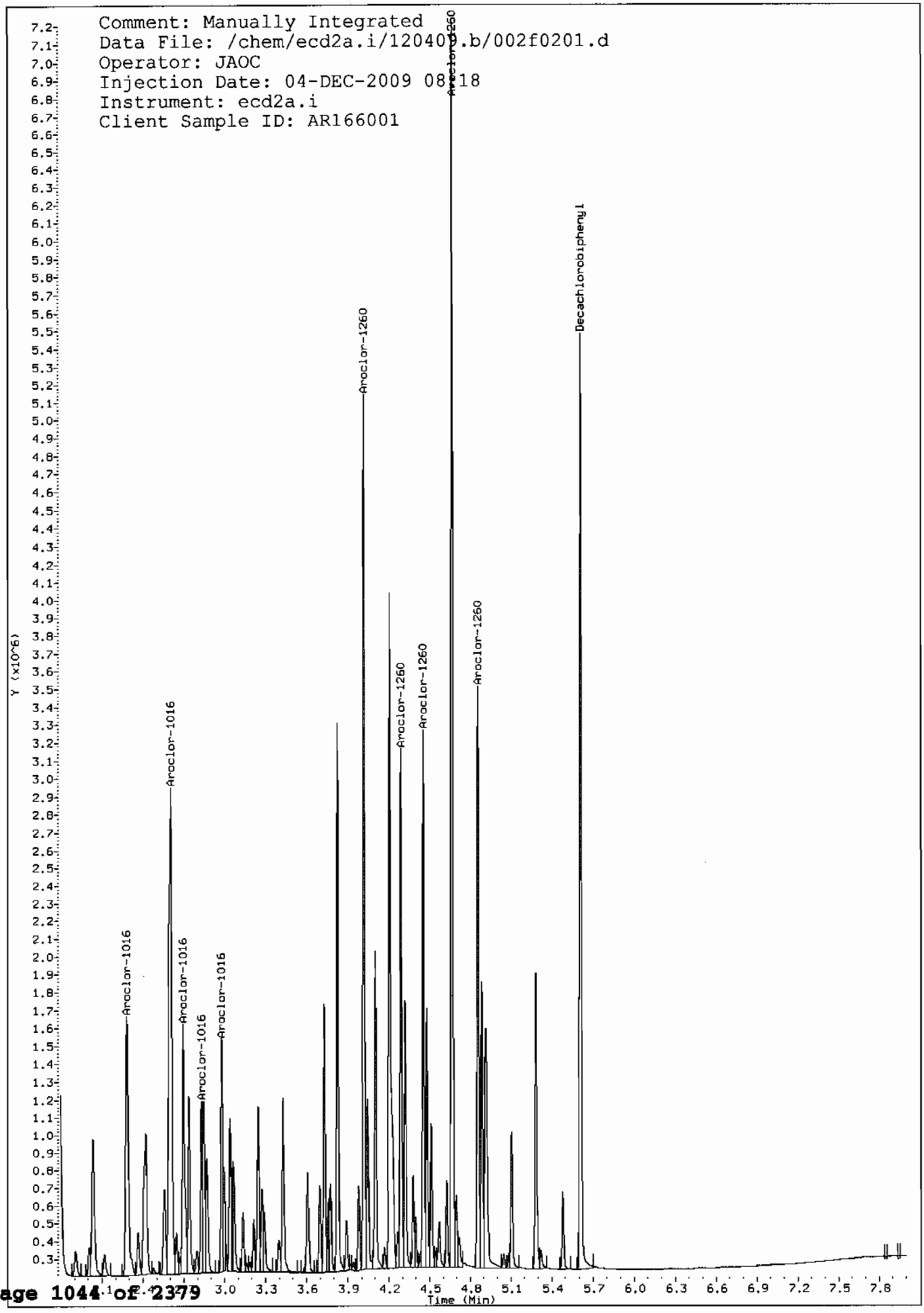
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Data File: /chem/ecd2a.i/120409.b/002f0201.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:18
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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Decachlorobiphenyl
Y (x10^6)
Time (Min)

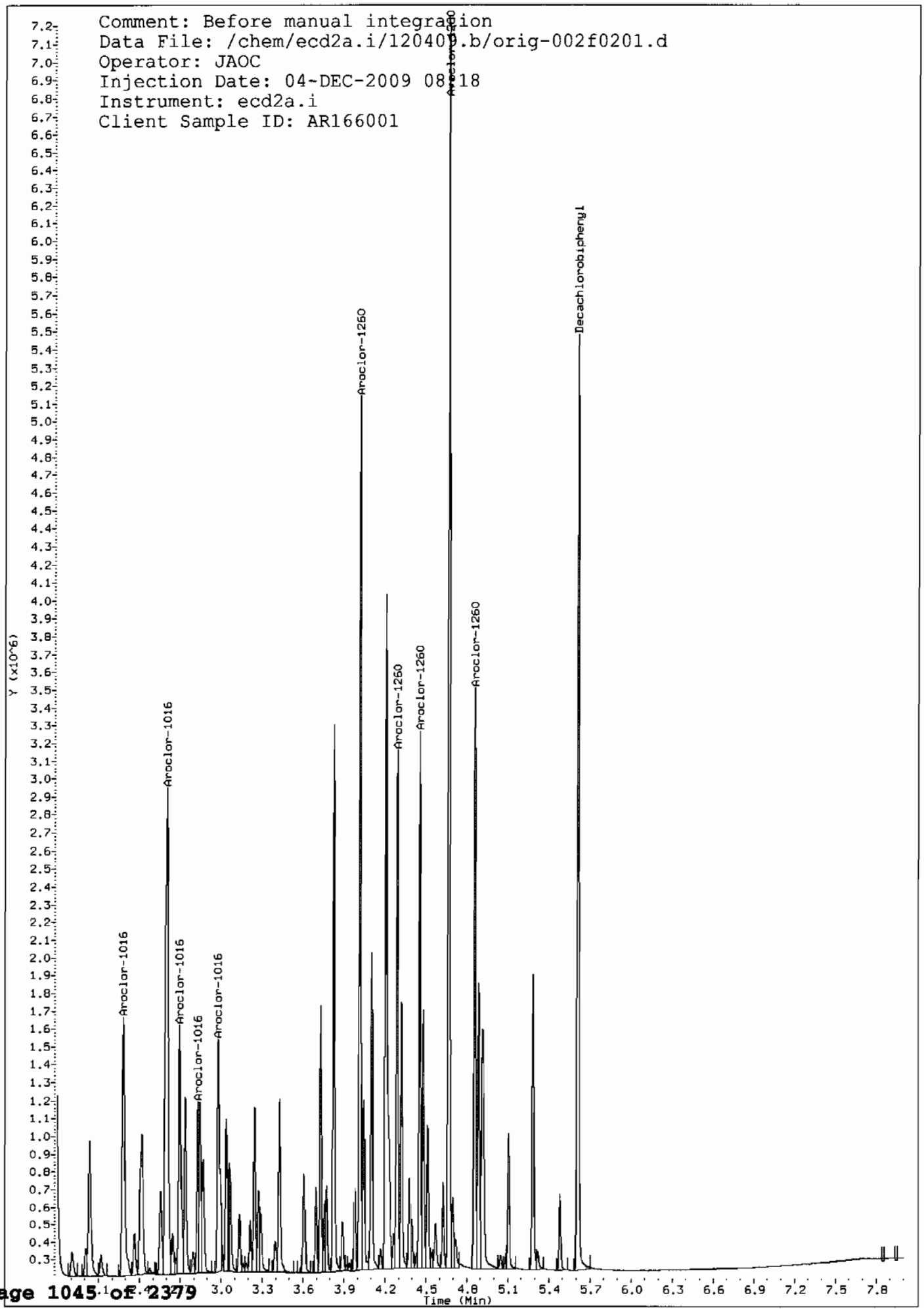
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-002f0201.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:18
Instrument: ecd2a.i
Client Sample ID: AR166001
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/002b0201.d
Lab Smp Id: WAR091119-60 01 Client Smp ID: AR166001
Inj Date : 04-DEC-2009 08:18
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 01
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	13335268	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9884830	100.000	91.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	4225101	1000.00	992	80.00- 120.00	100.00
3.185	3.185	0.000	3391993	1000.00	985	60.93- 100.93	80.28
3.336	3.336	0.000	1966559	1000.00	993	26.64- 66.64	46.54
3.365	3.365	0.000	2066552	1000.00	1000	28.47- 68.47	48.91
3.524	3.524	0.000	2798286	1000.00	1020	46.57- 86.57	66.23
Average of Peak Amounts =					998		
7 Aroclor-1260					CAS #: 11096-82-5		
4.420	4.420	0.000	5841696	1000.00	1060	80.00- 120.00	100.00
4.570	4.570	0.000	7492875	1000.00	1050	107.74- 147.74	128.27
4.682	4.682	0.000	5012957	1000.00	1060	64.97- 104.97	85.81
4.880	4.880	0.000	5917427	1000.00	1020	79.48- 119.48	101.30
5.505	5.505	0.000	9352254	1000.00	1030	137.38- 177.38	160.09
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120409.b/002b0201.d

Date : 04-DEC-2009 08:18

Client ID: AR166001

Sample Info: IWAR091119-60 01

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

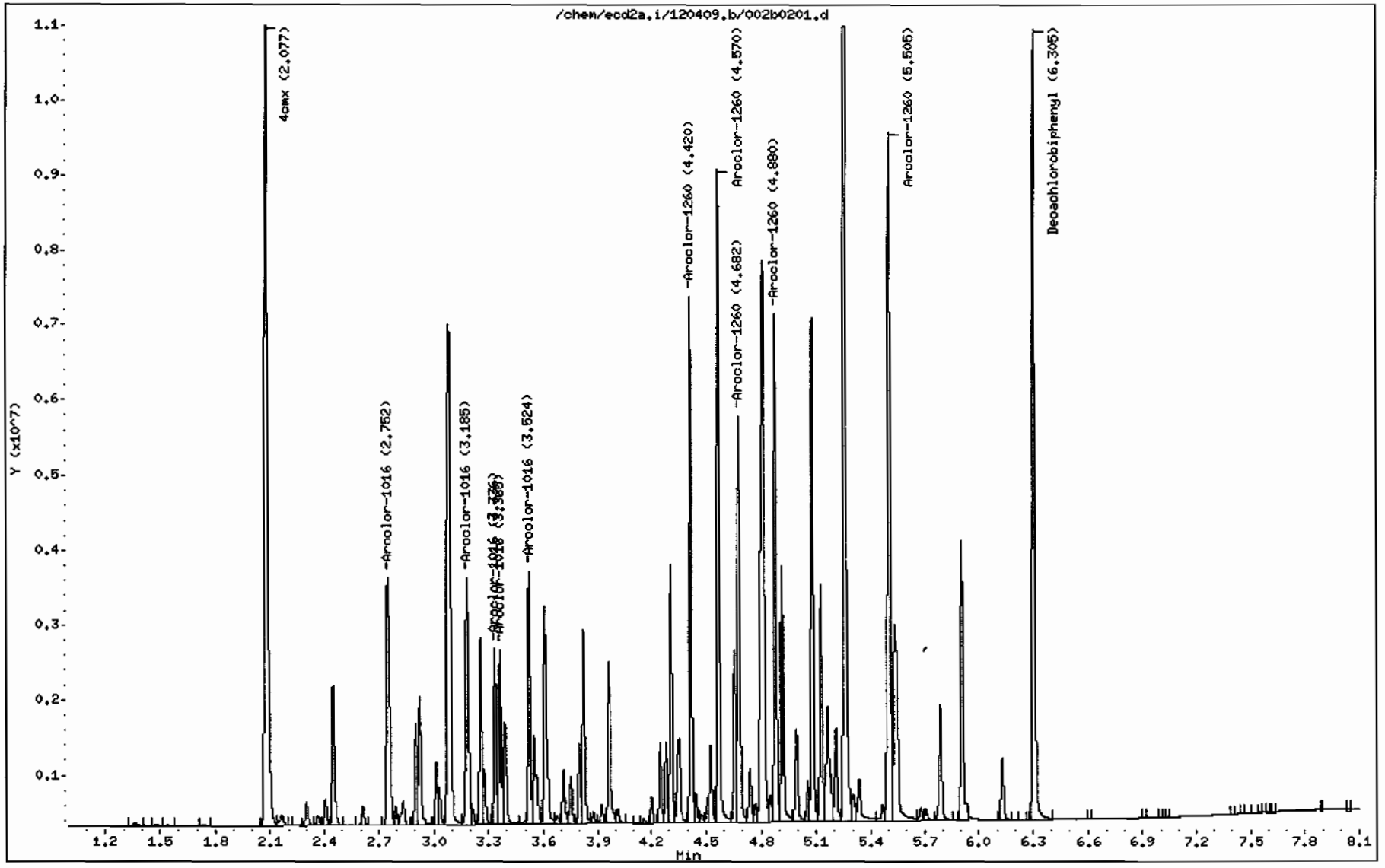

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/003f0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 08:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.782	1.781	0.001	6531630	100.000	113	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	4917627	100.000	89.7	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.246	3.246	0.000	1983592	1000.00	954	80.00- 120.00	100.00
3.429	3.429	0.000	2669351	1000.00	963	114.57- 154.57	134.57
3.698	3.698	0.000	3658874	1000.00	978	164.46- 204.46	184.46
3.890	3.890	0.000	2704227	1000.00	972	116.33- 156.33	136.33
4.019	4.019	0.000	2559579	1000.00	927	109.04- 149.04	129.04
Average of Peak Amounts =					959		

Data File: /chem/ecd2a.i/120409.b/003f0301.d
Date : 04-DEC-2009 08:29
Client ID: AR125401
Sample Info: IWAR091102-54

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

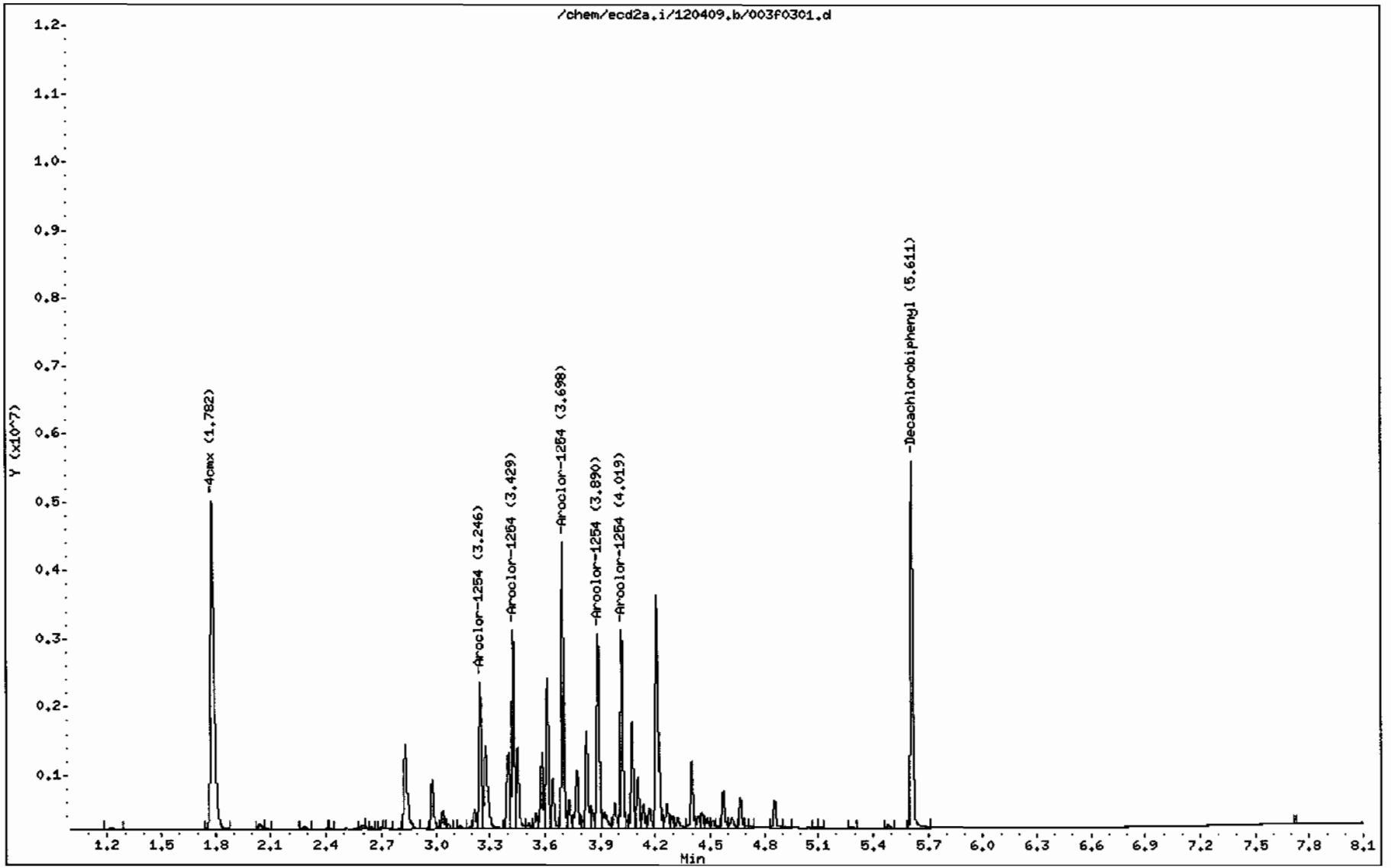

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/003b0301.d
Lab Smp Id: WAR091102-54 Client Smp ID: AR125401
Inj Date : 04-DEC-2009 08:29
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-54
Misc Info : |PCB_CVS|1254||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.077	0.001	14274103	100.000	121	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	10205427	100.000	93.9	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.823	3.823	0.000	5022044	1000.00	1010	80.00- 120.00	100.00
3.965	3.965	0.000	5851683	1000.00	1010	96.52- 136.52	116.52
4.200	4.200	0.000	4134285	1000.00	1030	62.32- 102.32	82.32
4.281	4.281	0.000	7930966	1000.00	1020	137.92- 177.92	157.92
4.445	4.445	0.000	5531600	1000.00	986	90.15- 130.15	110.15

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd2a.i/120409.b/003b0301.d

Date : 04-DEC-2009 08:29

Client ID: AR125401

Sample Info: IWAR091102-54

Column phase: CLP2

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25

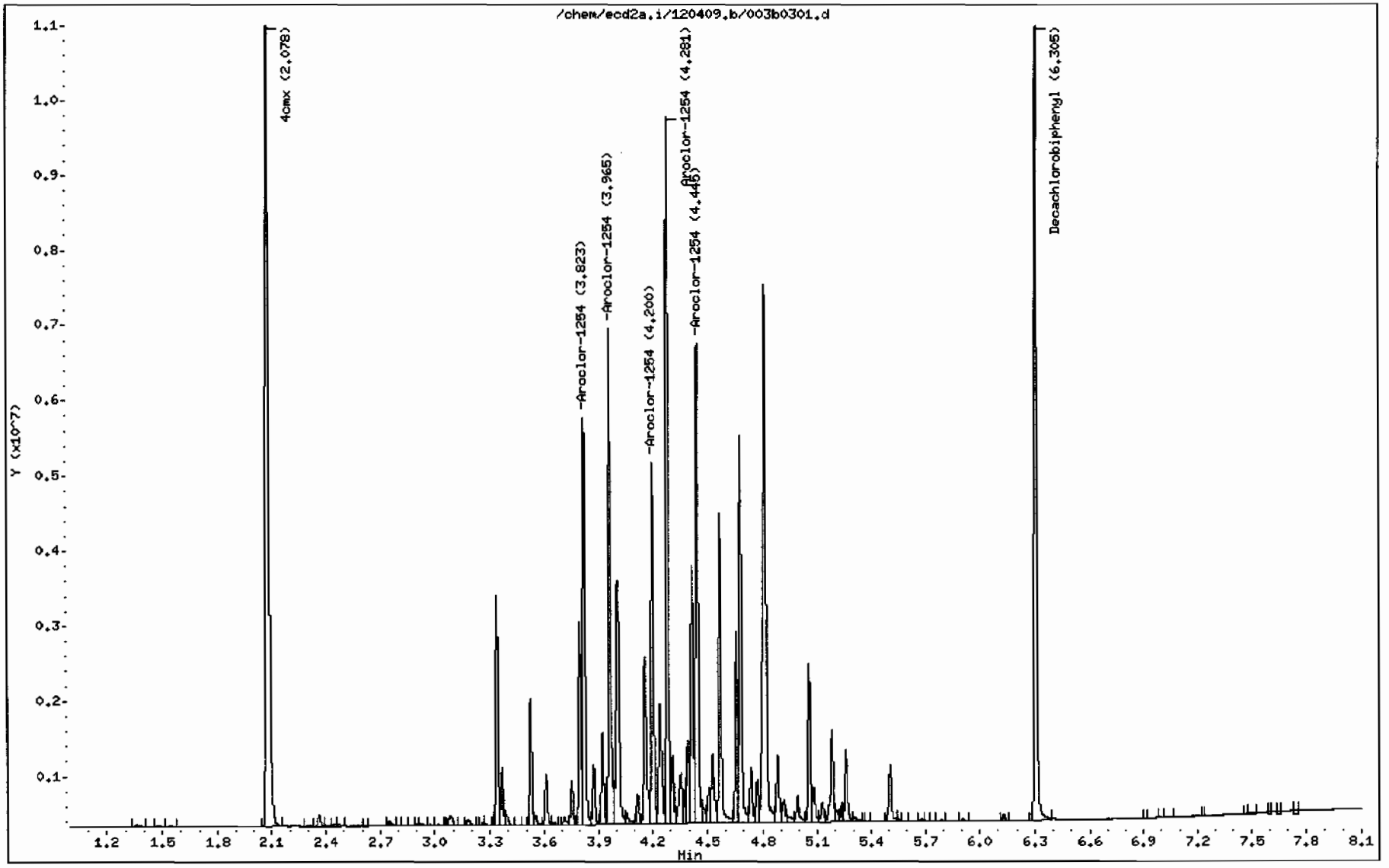

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/004f0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 08:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	6486468	100.000	112	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5102418	100.000	93.1	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.282	2.282	0.000	1755609	1000.00	1010	80.00- 120.00	100.00(M)
2.695	2.695	0.000	1482642	1000.00	999	64.45- 104.45	84.45
2.737	2.737	0.000	919294	1000.00	1010	32.36- 72.36	52.36
2.830	2.830	0.000	731419	1000.00	1010	21.66- 61.66	41.66
2.980	2.980	0.000	1074276	1000.00	960	41.19- 81.19	61.19
Average of Peak Amounts =					998		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/004f0401.d

Date : 04-DEC-2009 08:40

Client ID: AR124201

Sample Info: !WAR091102-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

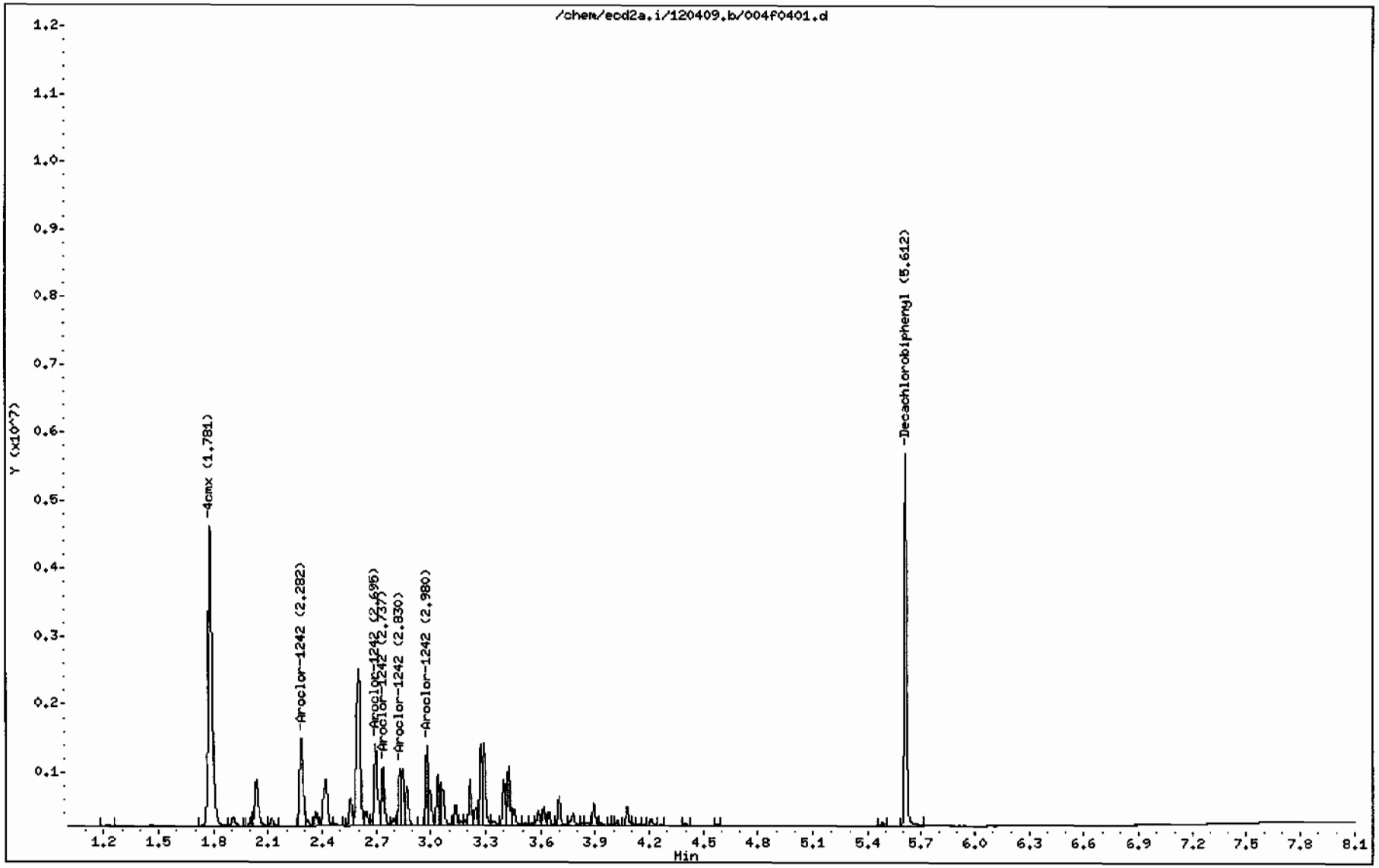

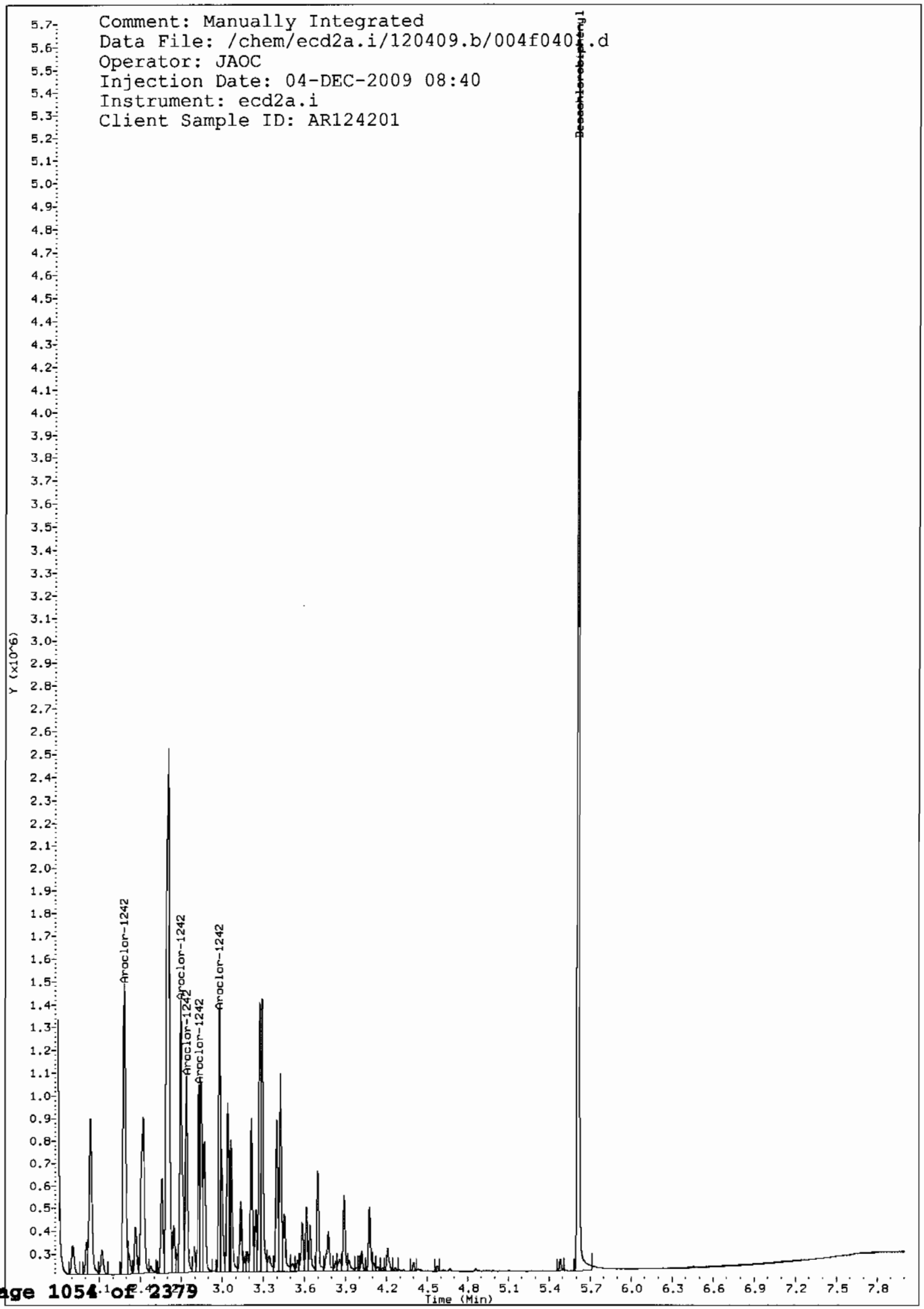
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/004f0401.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:40
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

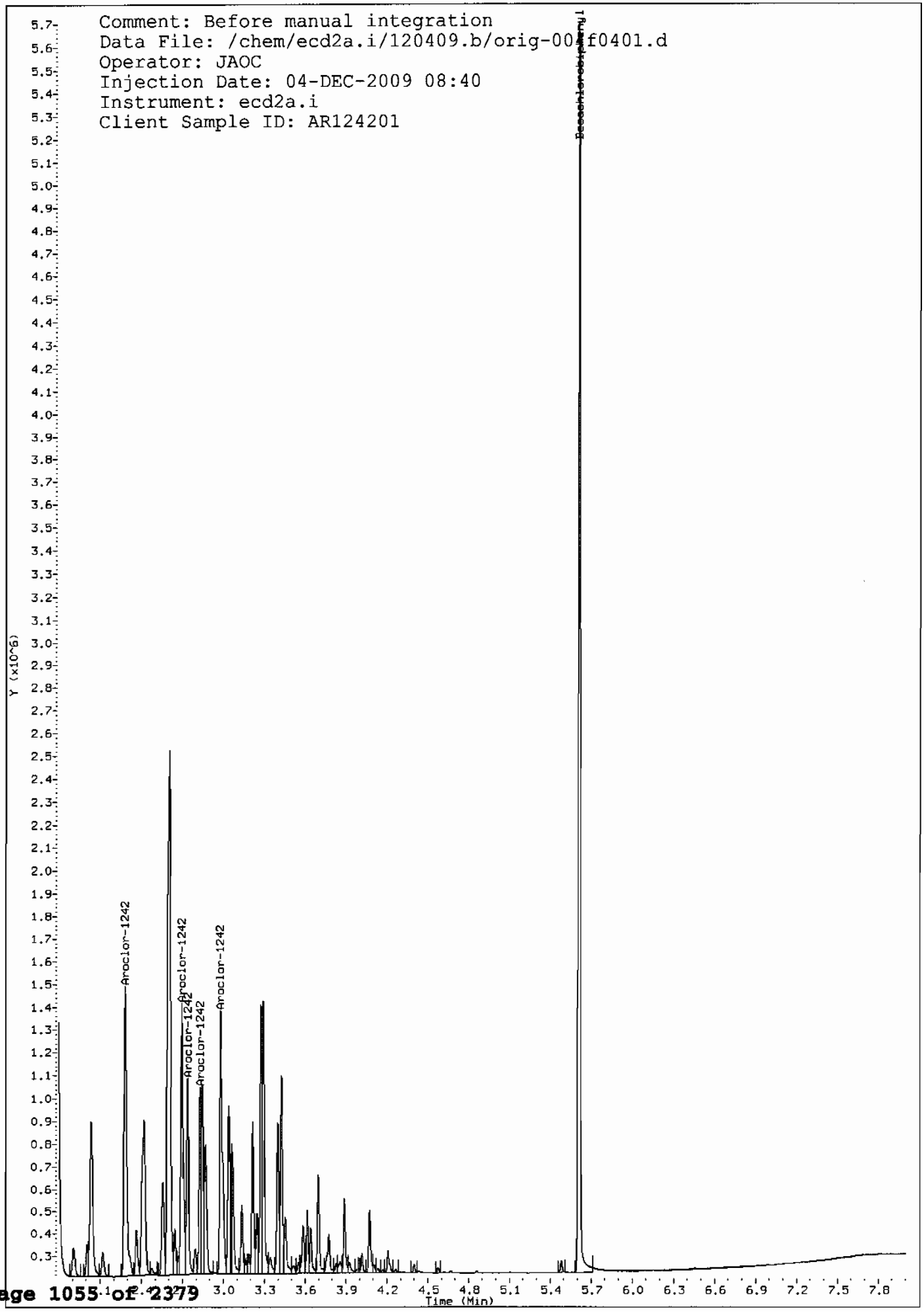
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-00f0401.d
Operator: JAOC
Injection Date: 04-DEC-2009 08:40
Instrument: ecd2a.i
Client Sample ID: AR124201
Decachlorobiphenyl
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/004b0401.d
Lab Smp Id: WAR091102-42 Client Smp ID: AR124201
Inj Date : 04-DEC-2009 08:40
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091102-42
Misc Info : |PCB_CVS|1242||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	14080772	100.000	119	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	10639536	100.000	97.9	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.752	2.752	0.000	3708980	1000.00	1080	80.00- 120.00	100.00
3.186	3.186	0.000	2900924	1000.00	1080	58.21- 98.21	78.21
3.258	3.258	0.000	1759638	1000.00	1080	27.44- 67.44	47.44
3.337	3.337	0.000	1642557	1000.00	1090	24.29- 64.29	44.29
3.524	3.524	0.000	2418759	1000.00	1130	45.21- 85.21	65.21

Average of Peak Amounts = 1.09e+03

Data File: /chem/ecd2a.i/120409.b/004b0401.d
Date : 04-DEC-2009 08:40
Client ID: AR124201
Sample Info: IWAR091102-42

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

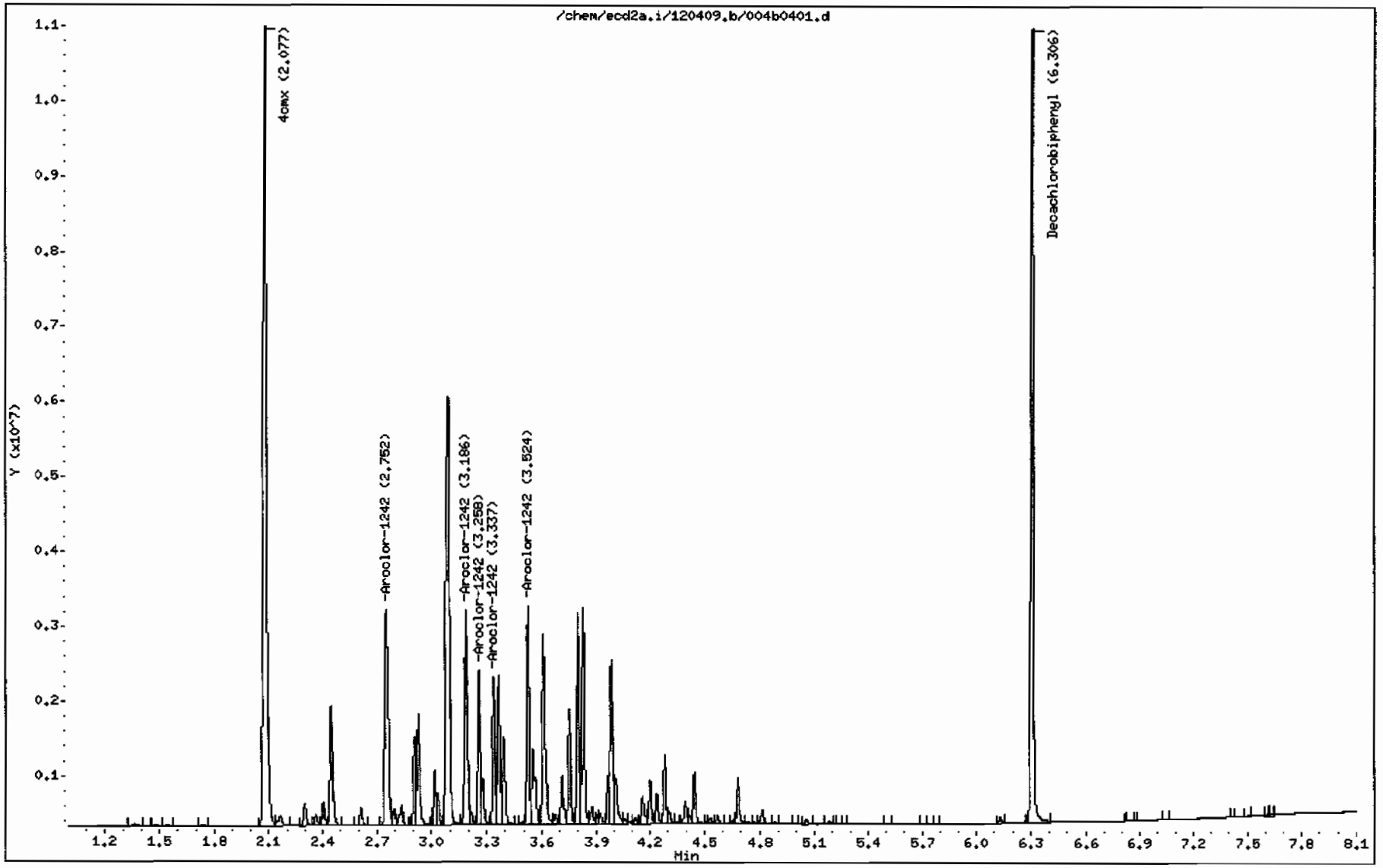

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/005f0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 08:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	7149591	100.000	124	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5747701	100.000	105	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
2.829	2.829	0.000	1497108	1000.00	980	80.00- 120.00	100.00(M)
2.980	2.980	0.000	2034290	1000.00	1000	115.88- 155.88	135.88
3.039	3.039	0.000	1541525	1000.00	981	82.97- 122.97	102.97
3.274	3.274	0.000	2243178	1000.00	1010	129.83- 169.83	149.83
3.427	3.427	0.000	1886569	1000.00	986	106.01- 146.01	126.01
			Average of Peak Amounts =		993		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/005f0501.d
Date : 04-DEC-2009 08:51
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC
Column diameter: 0.25

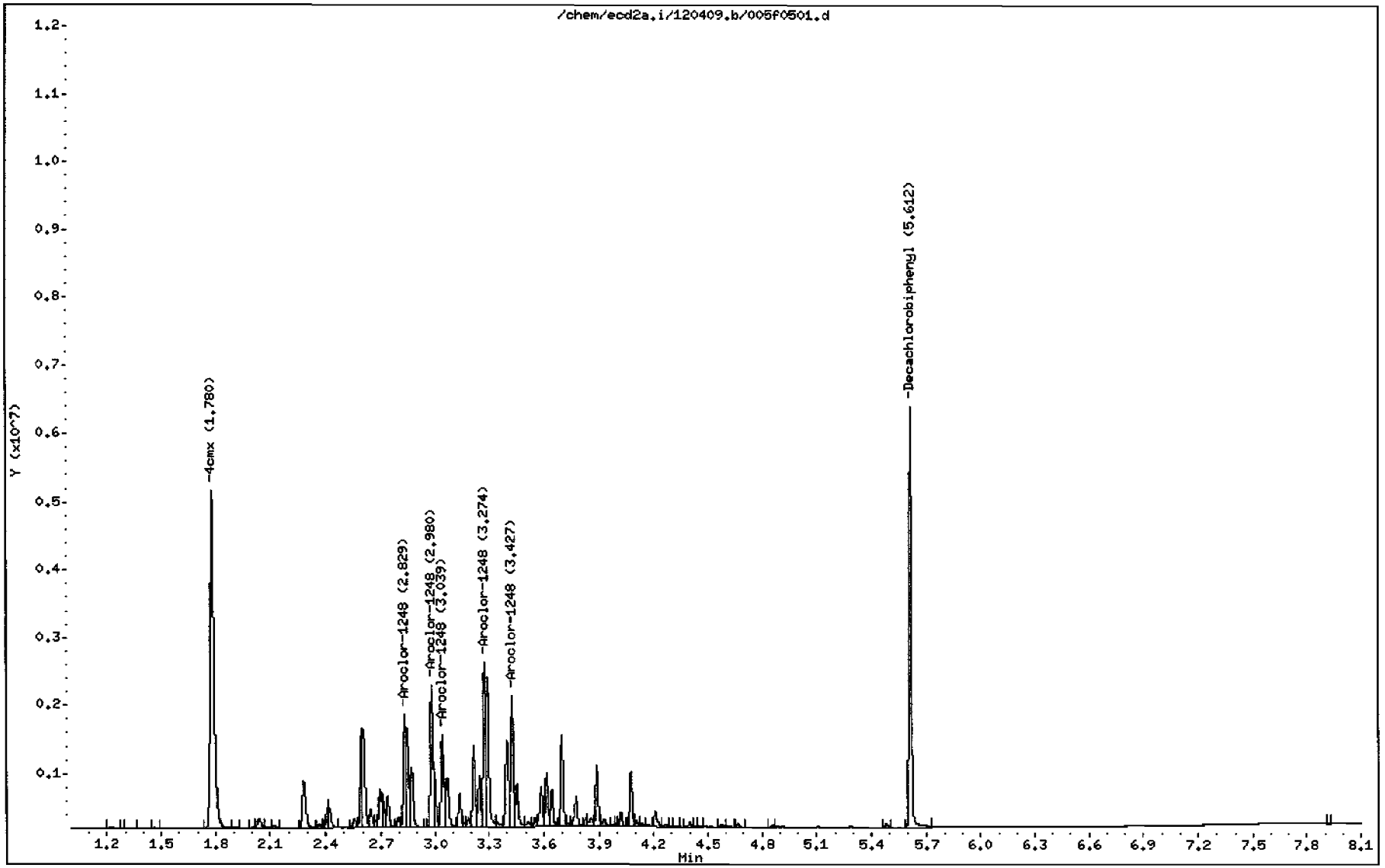

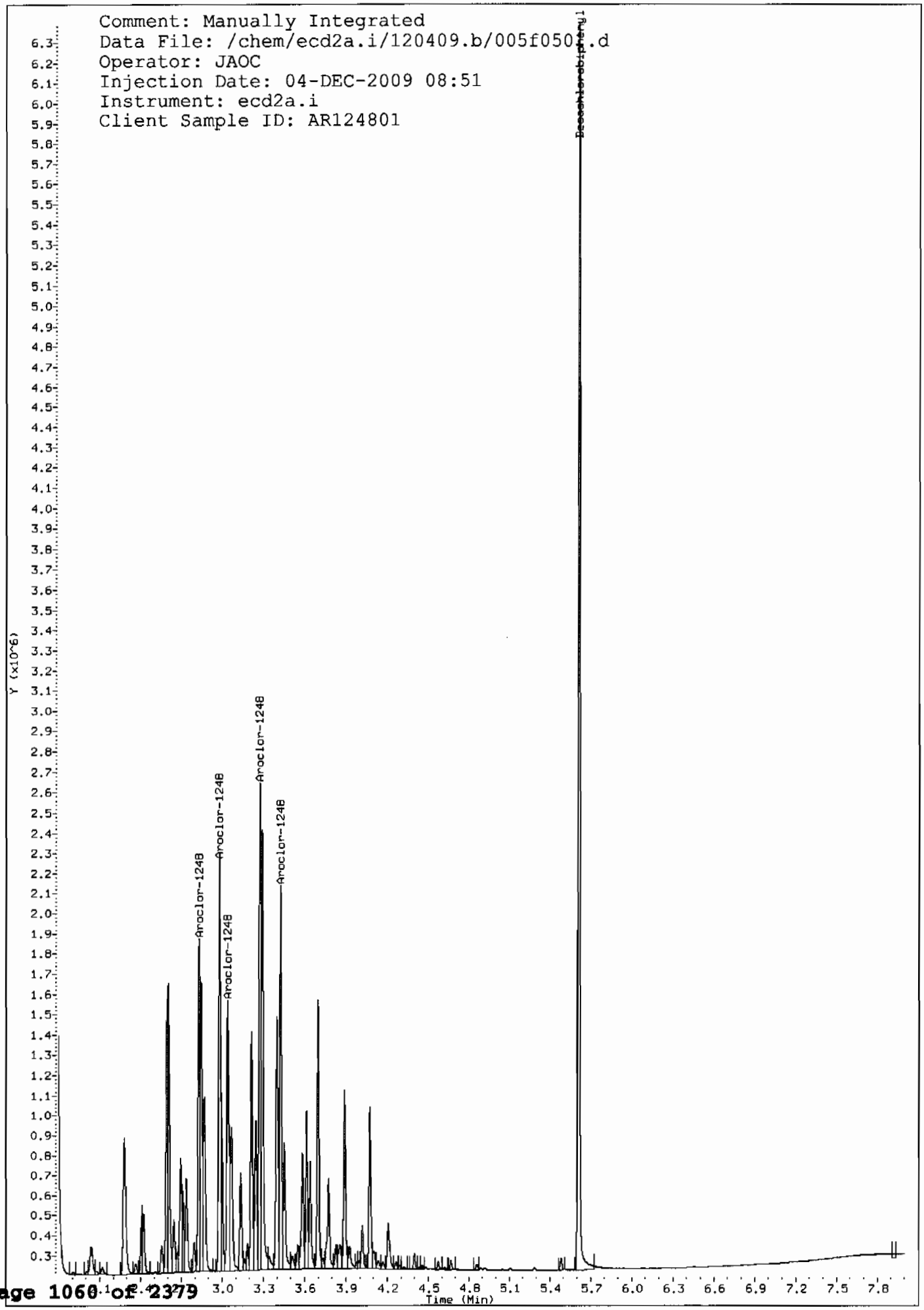
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Operator: JAOC
Injection Date: 04-DEC-2009 08:51
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

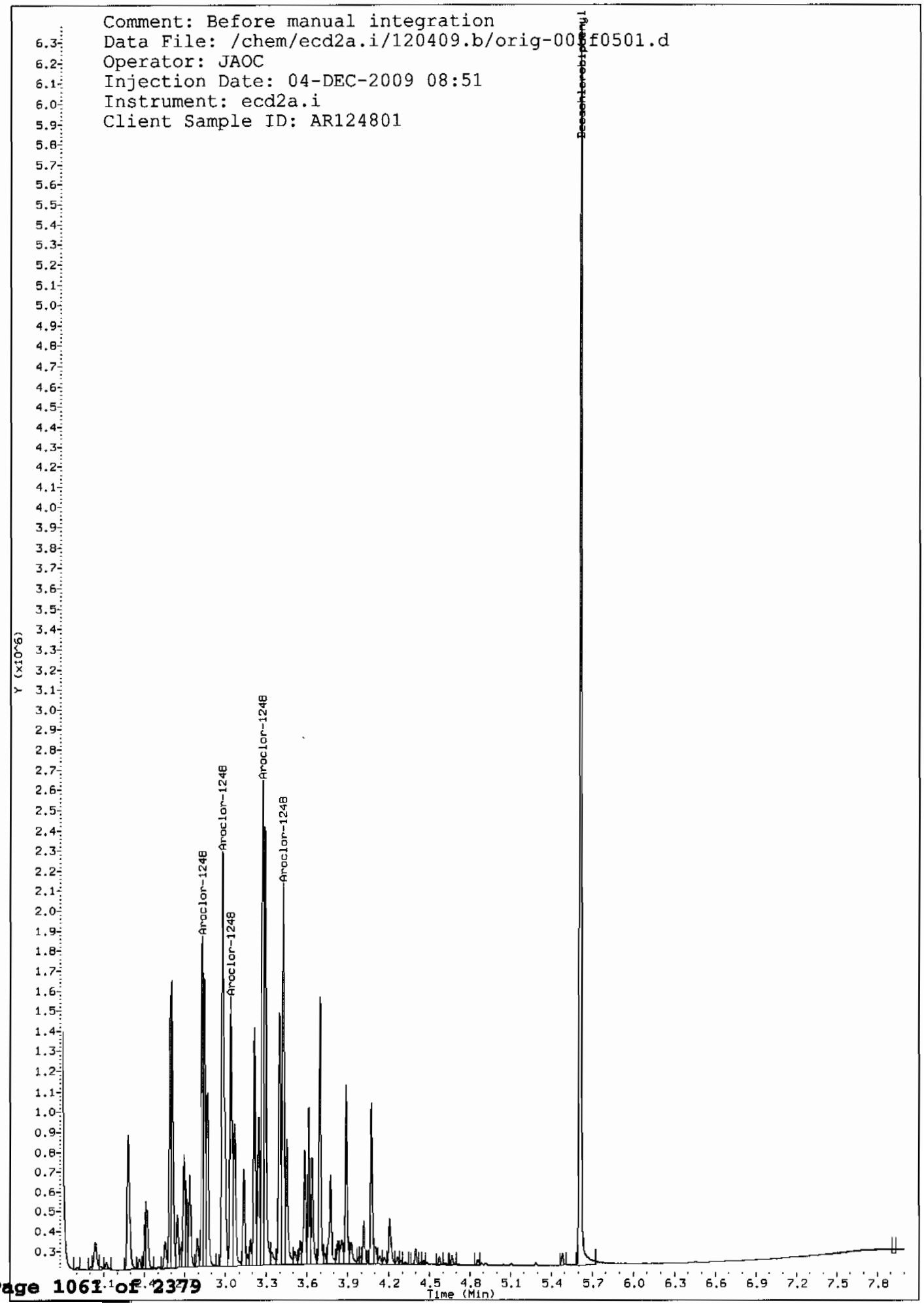
Comment: Before manual integration
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Operator: JAOC
Injection Date: 04-DEC-2009 08:51
Instrument: ecd2a.i
Client Sample ID: AR124801
Decachlorobiphenyl
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/005b0501.d
Lab Smp Id: WAR091027-48 Client Smp ID: AR124801
Inj Date : 04-DEC-2009 08:51
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091027-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	15582216	100.000	132	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	11985221	100.000	110	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.337	3.337	0.000	3392581	1000.00	1030	80.00- 120.00	100.00
3.523	3.523	0.000	4371454	1000.00	1040	108.85- 148.85	128.85
3.609	3.609	0.000	4618983	1000.00	1040	116.15- 156.15	136.15
3.798	3.798	0.000	4893749	1000.00	1040	124.25- 164.25	144.25
3.828	3.828	0.000	5579765	1000.00	1040	144.47- 184.47	164.47

Average of Peak Amounts = 1.04e+03

Data File: /chem/ecd2a.i/120409.b/005b0501.d
Date : 04-DEC-2009 08:51
Client ID: AR124801
Sample Info: IWAR091027-48

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

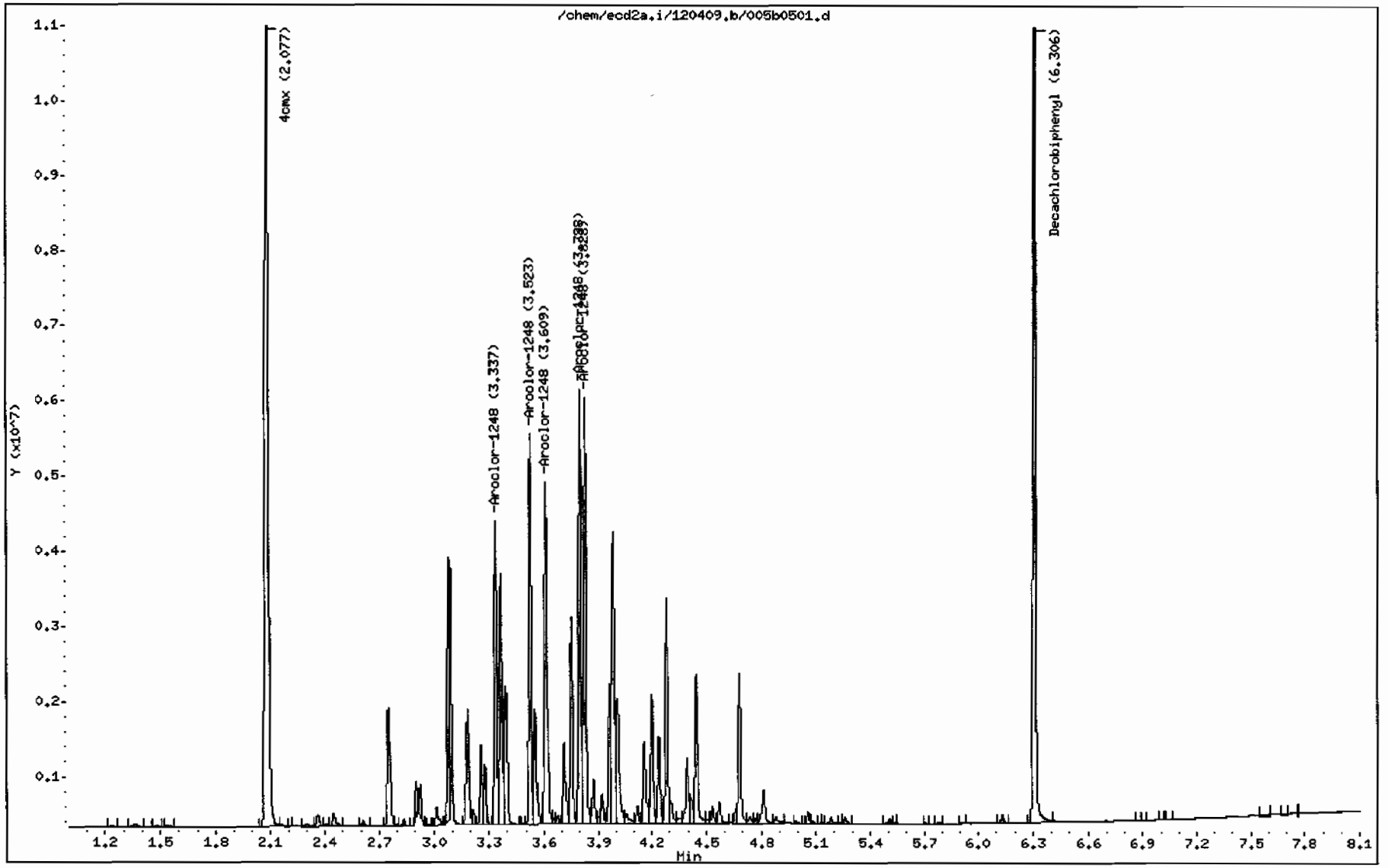

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/006f0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	8621267	100.000	149	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	6506644	100.000	119	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.035	2.035	0.000	1384275	1000.00	1190	80.00- 120.00	100.00
2.281	2.281	0.000	1104806	1000.00	1190	59.81- 99.81	79.81
2.694	2.694	0.000	941781	1000.00	1180	48.03- 88.03	68.03
2.737	2.737	0.000	600816	1000.00	1180	23.40- 63.40	43.40
2.980	2.980	0.000	943613	1000.00	1620	48.17- 88.17	68.17

Average of Peak Amounts = 1.27e+03

Data File: /chem/ecd2a.i/120409.b/006f0601.d

Date : 04-DEC-2009 09:02

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

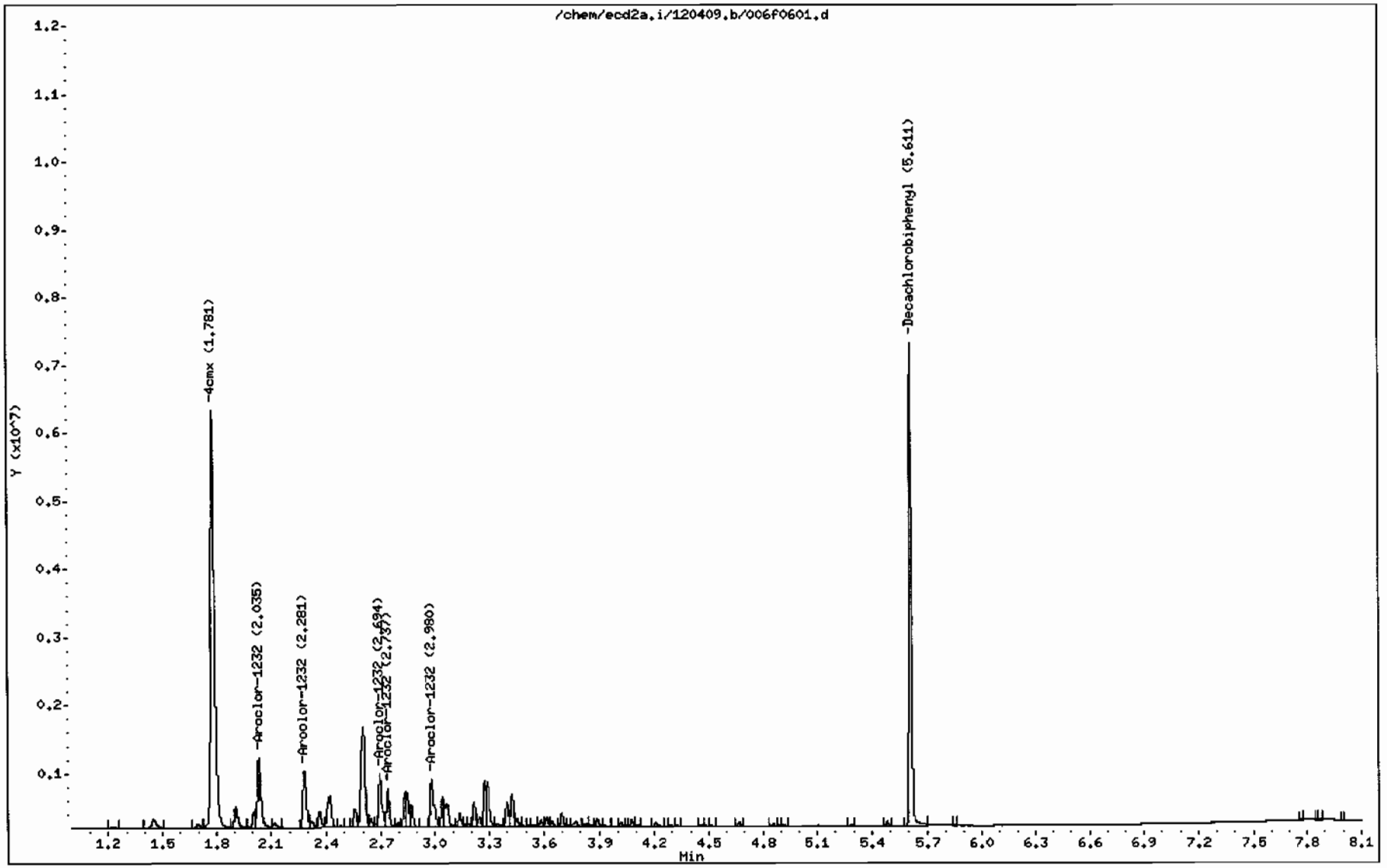

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/006b0601.d
Lab Smp Id: WAR090930-32 Client Smp ID: AR123201
Inj Date : 04-DEC-2009 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR090930-32
Misc Info : |PCB_CVS|1232||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	18754881	100.000	159	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	13758950	100.000	127	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.449	2.449	0.000	2472780	1000.00	1200	80.00- 120.00	100.00
2.752	2.752	0.000	2370965	1000.00	1210	75.88- 115.88	95.88
3.186	3.186	0.000	1903861	1000.00	1270	56.99- 96.99	76.99
3.258	3.258	0.000	1122766	1000.00	1210	25.41- 65.41	45.41
3.523	3.523	0.000	1380121	1000.00	1250	35.81- 75.81	55.81

Average of Peak Amounts = 1.23e+03

Data File: /chem/ecd2a.i/120409.b/006b0601.d

Date : 04-DEC-2009 09:02

Client ID: AR123201

Sample Info: IWAR090930-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

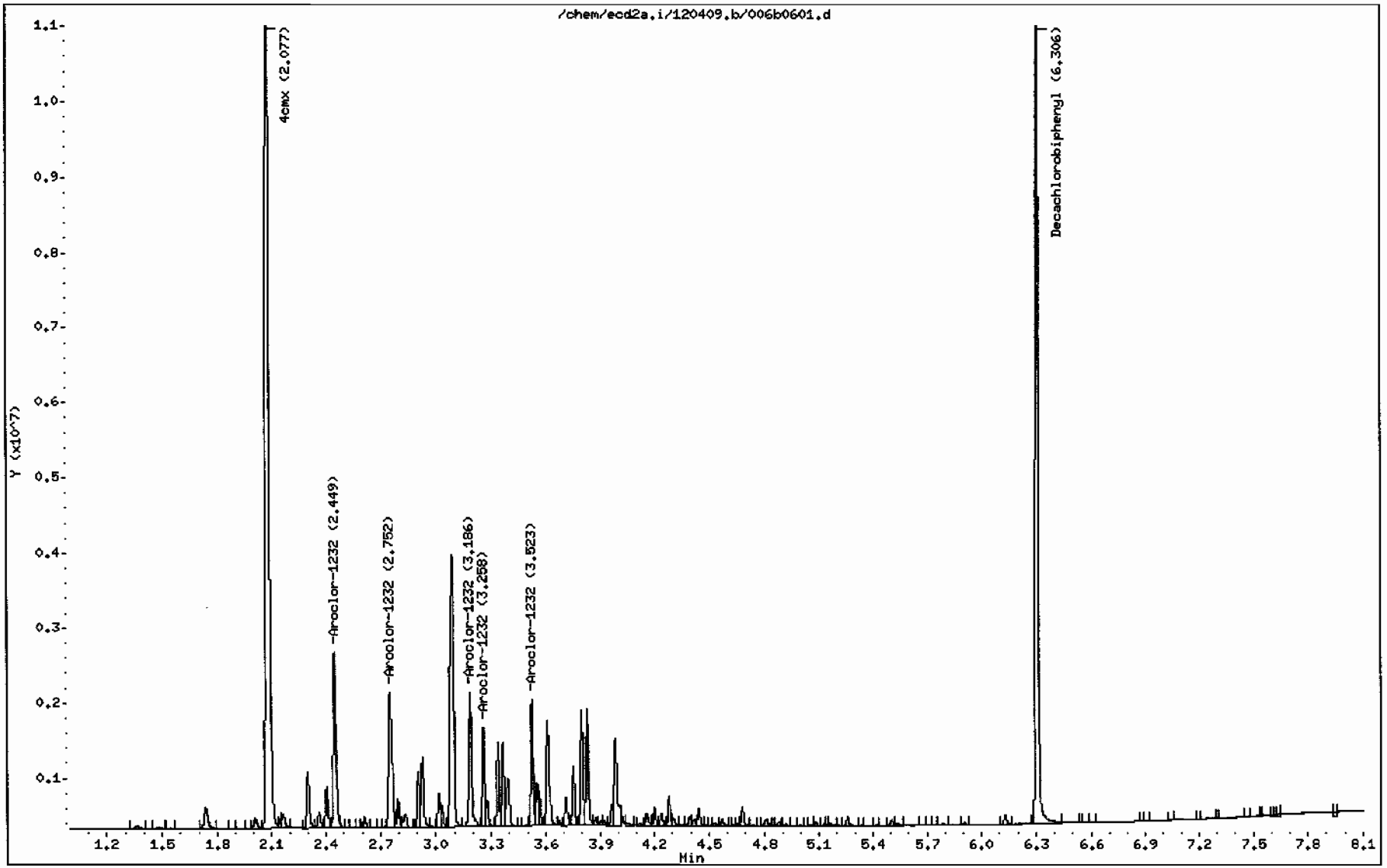

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/007f0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 09:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 04-Dec-2009 10:54 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	6580063	100.000	114	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.612	5.611	0.001	5053731	100.000	92.2	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
1.446	1.446	0.000	540584	1000.00	1160	80.00- 120.00	100.00
1.906	1.906	0.000	754634	1000.00	1150	119.60- 159.60	139.60
2.005	2.005	0.000	376013	1000.00	1080	49.56- 89.56	69.56

Average of Peak Amounts = 1.13e+03

Data File: /chem/ecd2a.i/120409.b/007f0701.d

Date : 04-DEC-2009 09:14

Client ID: AR122101

Sample Info: IWAR091111-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

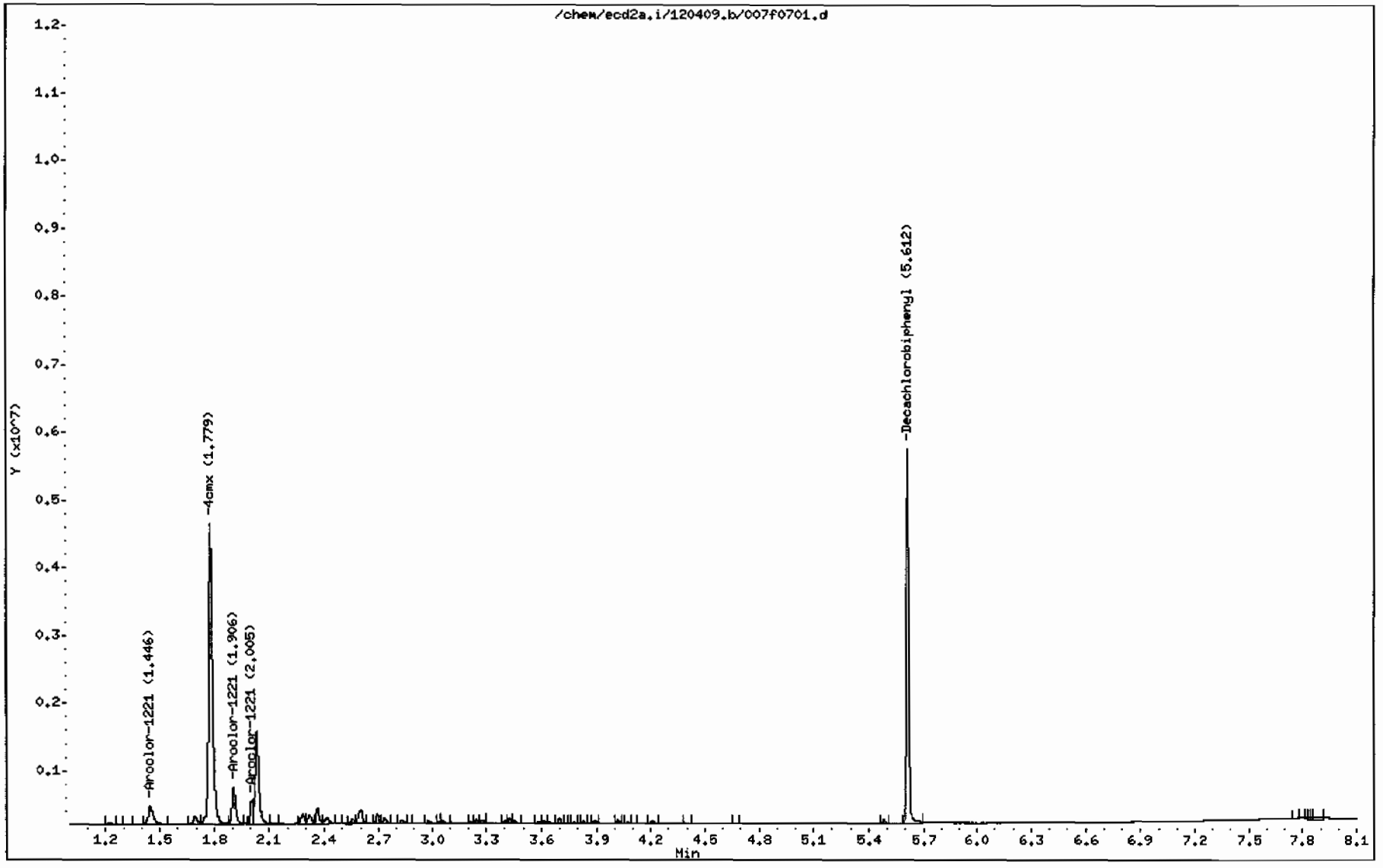

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/007b0701.d
Lab Smp Id: WAR091111-21 Client Smp ID: AR122101
Inj Date : 04-DEC-2009 09:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091111-21
Misc Info : |PCB_CVS|1262||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 04-Dec-2009 10:52 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	14002245	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.306	6.305	0.001	10613265	100.000	97.7	80.00- 120.00	100.00
2 Aroclor-1221					CAS #: 11104-28-2		
2.298	2.298	0.000	1409536	1000.00	1120	80.00- 120.00	100.00
2.404	2.404	0.000	866738	1000.00	1120	41.49- 81.49	61.49
2.448	2.448	0.000	3431998	1000.00	1120	223.48- 263.48	243.48

Average of Peak Amounts = 1.12e+03

Data File: /chem/ecd2a.i/120409.b/007b0701.d
Date : 04-DEC-2009 09:14
Client ID: AR122101
Sample Info: IWAR091111-21

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

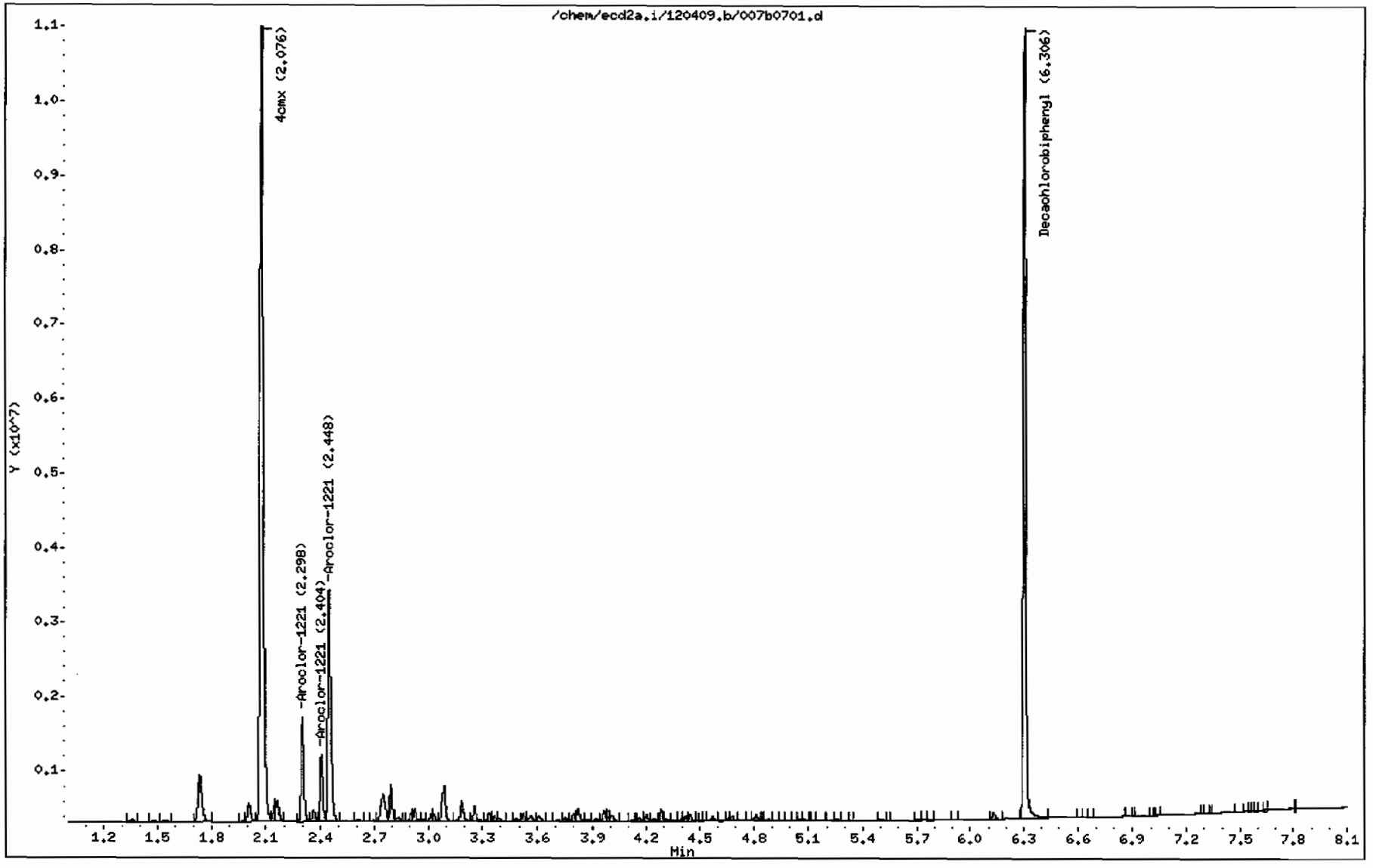

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/069f6901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 21:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 69 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	6224302	100.000	108	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.608	5.611	-0.003	4642764	100.000	84.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.279	2.282	-0.003	1991713	1000.00	948	80.00- 120.00	100.00(M)
2.600	2.604	-0.004	4359721	1000.00	968	200.13- 240.13	218.89
2.692	2.695	-0.003	1718140	1000.00	944	67.04- 107.04	86.26
2.827	2.830	-0.003	863079	1000.00	925	22.75- 62.75	43.33
2.978	2.980	-0.002	1308503	1000.00	949	47.01- 87.01	65.70
Average of Peak Amounts =					947		
7 Aroclor-1260					CAS #: 11096-82-5		
4.015	4.019	-0.004	4195536	1000.00	1030	80.00- 120.00	100.00
4.287	4.290	-0.003	2568166	1000.00	1020	40.62- 80.62	61.21
4.453	4.456	-0.003	2610134	1000.00	1010	41.94- 81.94	62.21
4.664	4.668	-0.004	6137058	1000.00	1020	125.52- 165.52	146.28
4.854	4.857	-0.003	2905494	1000.00	998	48.68- 88.68	69.25
Average of Peak Amounts =					1.01e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/069f6901.d
Date : 04-DEC-2009 21:01
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

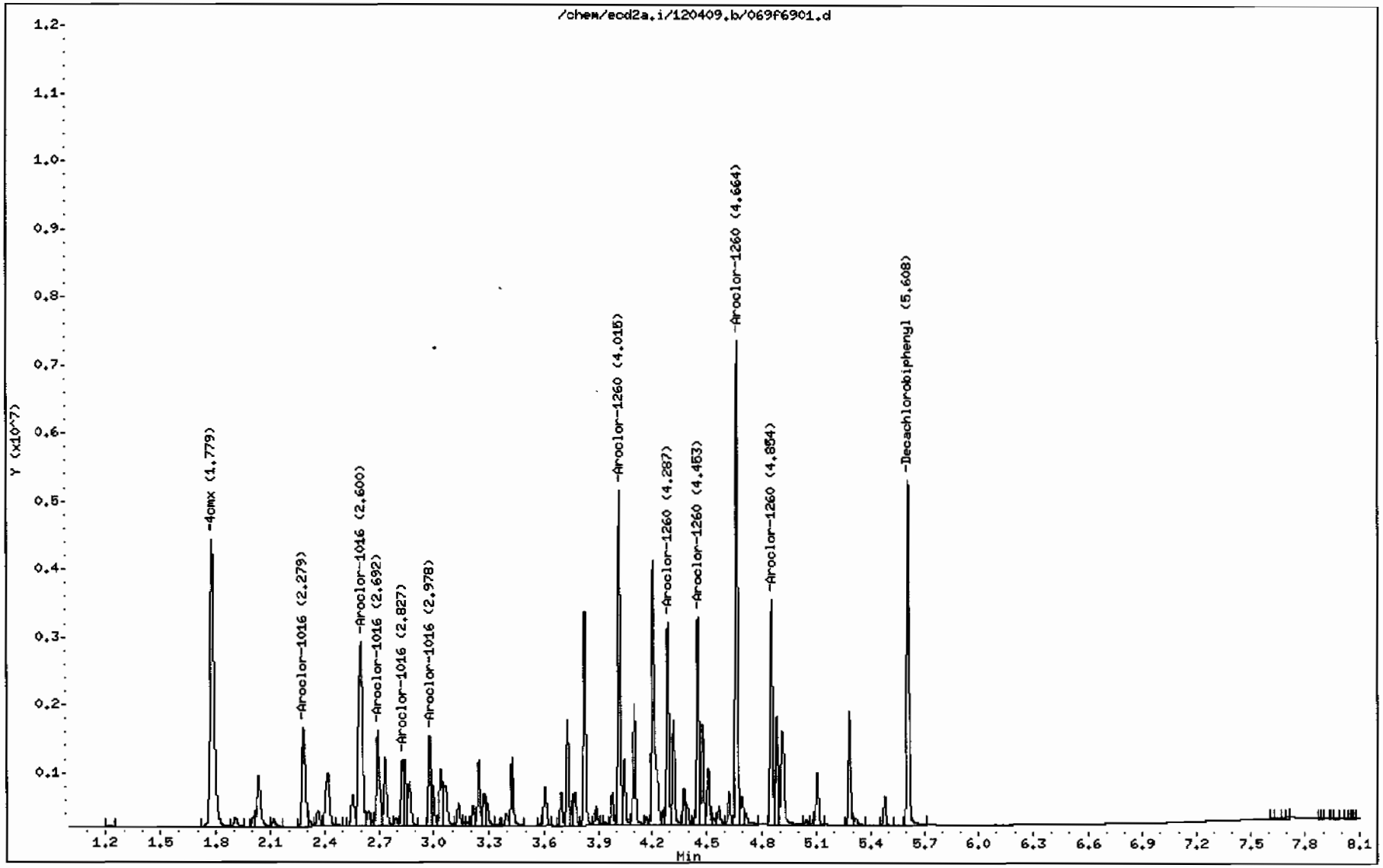

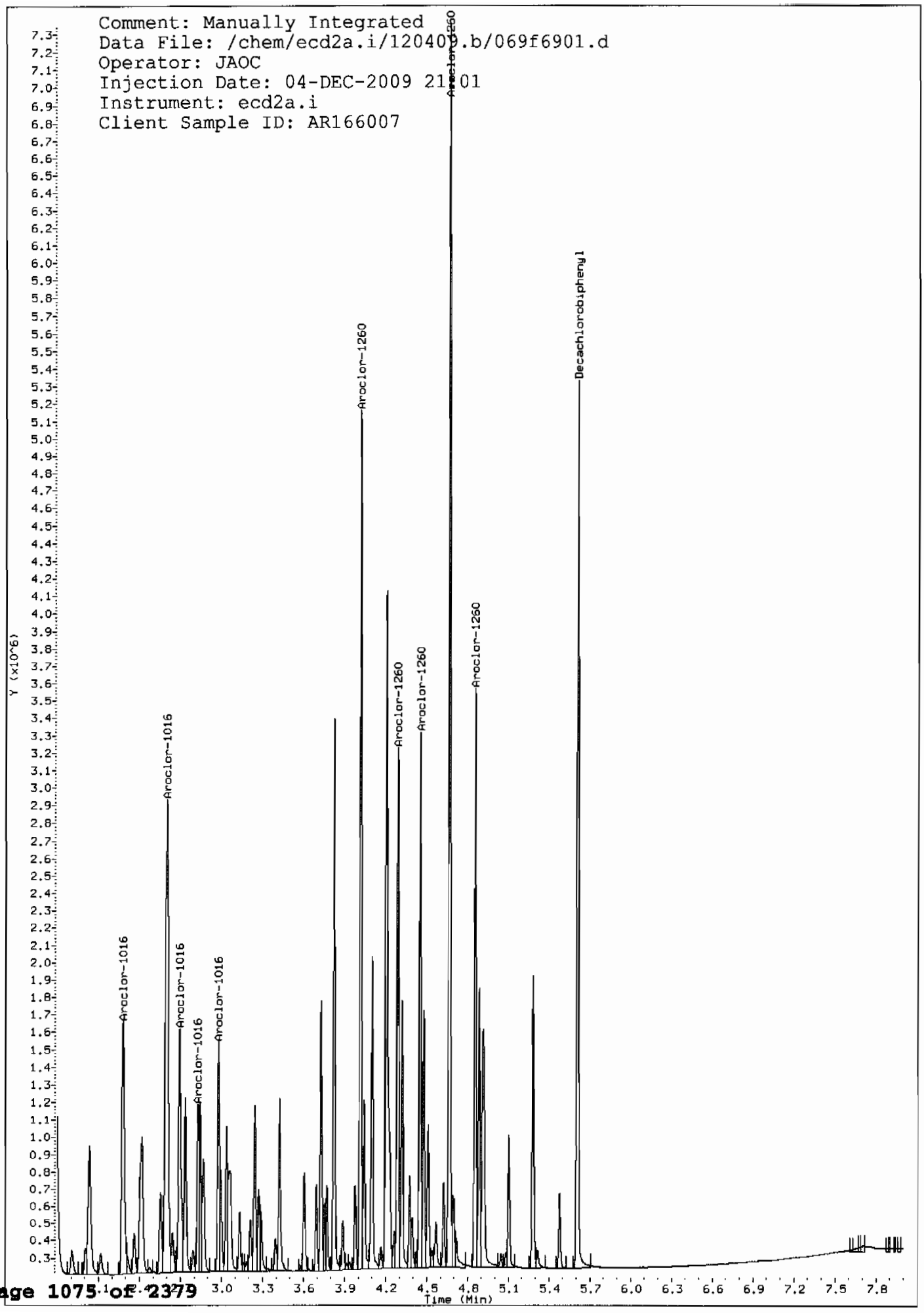
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/069f6901.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:01
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

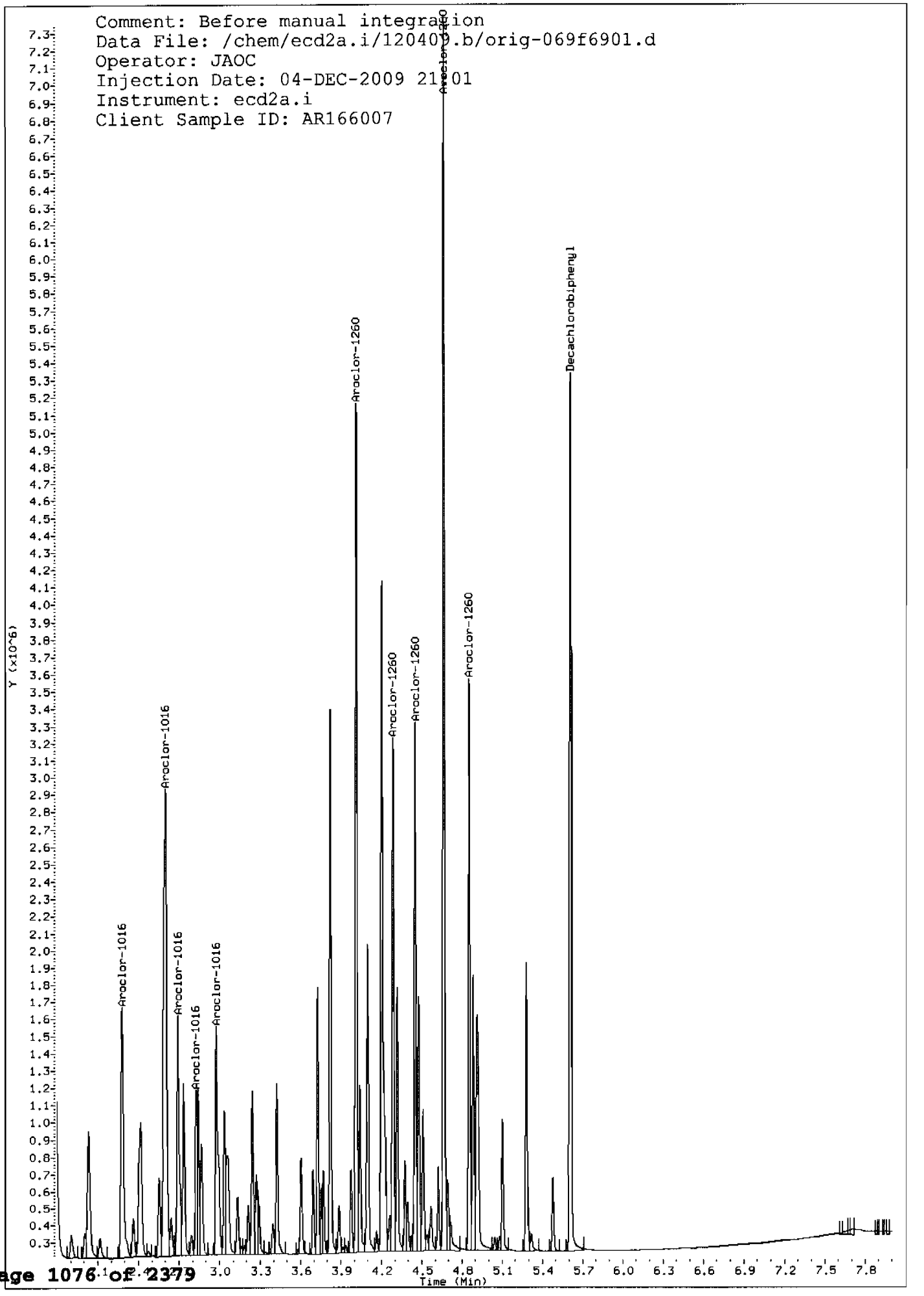
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-069f6901.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:01
Instrument: ecd2a.i
Client Sample ID: AR166007
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/069b6901.d
Lab Smp Id: WAR091119-60 07 Client Smp ID: AR166007
Inj Date : 04-DEC-2009 21:01
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 07
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 69 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	13657695	100.000	116	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	9501288	100.000	87.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.749	2.752	-0.003	4346885	1000.00	1020	80.00- 120.00	100.00
3.184	3.185	-0.001	3515636	1000.00	1020	61.42- 101.42	80.88
3.334	3.336	-0.002	2035326	1000.00	1030	27.15- 67.15	46.82
3.363	3.365	-0.002	2112762	1000.00	1020	28.91- 68.91	48.60
3.521	3.524	-0.003	2896482	1000.00	1050	47.18- 87.18	66.63
Average of Peak Amounts =					1.03e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.417	4.420	-0.003	6026178	1000.00	1090	80.00- 120.00	100.00
4.569	4.570	-0.001	7661314	1000.00	1070	106.73- 146.73	127.13
4.680	4.682	-0.002	5099145	1000.00	1080	63.73- 103.73	84.62
4.877	4.880	-0.003	6036822	1000.00	1040	78.70- 118.70	100.18
5.504	5.505	-0.001	9406378	1000.00	1040	133.18- 173.18	156.09
Average of Peak Amounts =					1.07e+03		

Data File: /chem/ecd2a.i/120409.b/069b6901.d
Date : 04-DEC-2009 21:01
Client ID: AR166007
Sample Info: IWAR091119-60 07

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

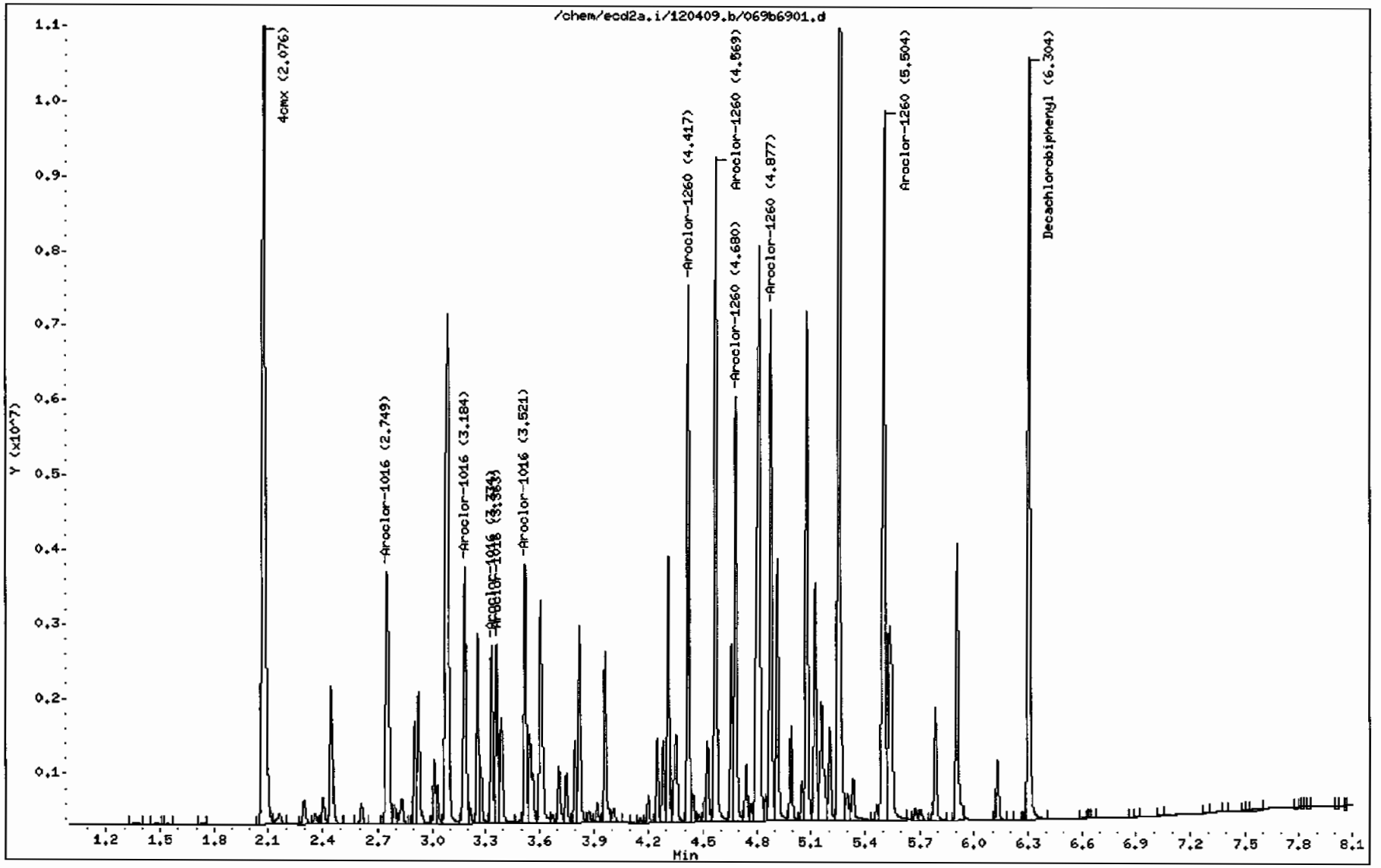

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/081f8101.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 04-DEC-2009 23:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 81 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.782	1.781	0.001	6381483	100.000	110	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.611	-0.001	4470411	100.000	81.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.283	2.282	0.001	2026301	1000.00	965	80.00- 120.00	100.00(M)
2.603	2.604	-0.001	4489109	1000.00	996	200.13- 240.13	221.54
2.694	2.695	-0.001	1764591	1000.00	969	67.04- 107.04	87.08
2.830	2.830	0.000	858313	1000.00	920	22.75- 62.75	42.36
2.980	2.980	0.000	1322592	1000.00	960	47.01- 87.01	65.27
Average of Peak Amounts =					962		
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.019	-0.001	4246070	1000.00	1040	80.00- 120.00	100.00
4.290	4.290	0.000	2567686	1000.00	1020	40.62- 80.62	60.47
4.456	4.456	0.000	2617795	1000.00	1010	41.94- 81.94	61.65
4.668	4.668	0.000	6176760	1000.00	1020	125.52- 165.52	145.47
4.857	4.857	0.000	2914128	1000.00	1000	48.68- 88.68	68.63
Average of Peak Amounts =					1.02e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/081f8101.d
Date : 04-DEC-2009 23:14
Client ID: AR166008
Sample Info: IWAR091119-60 08

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

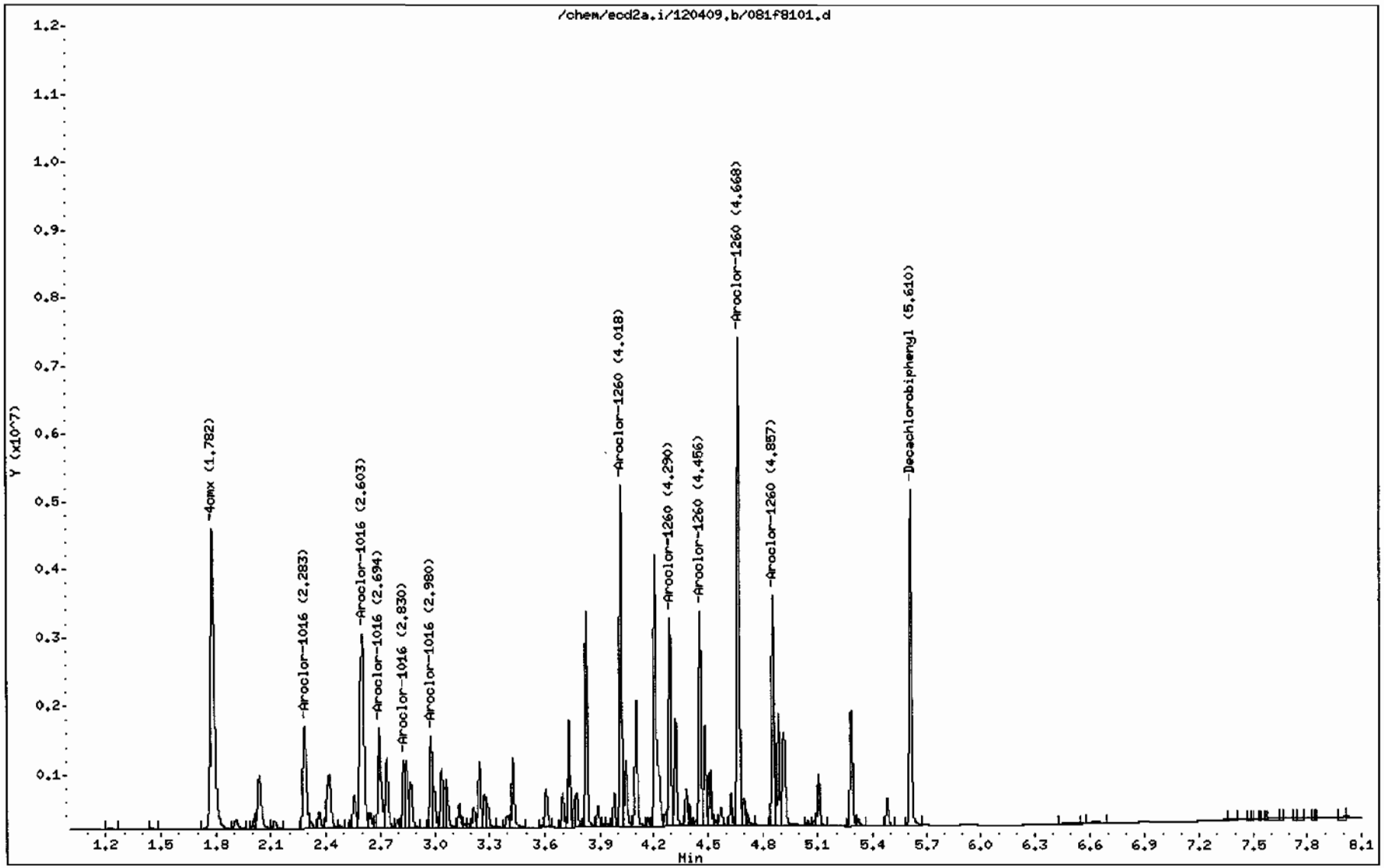

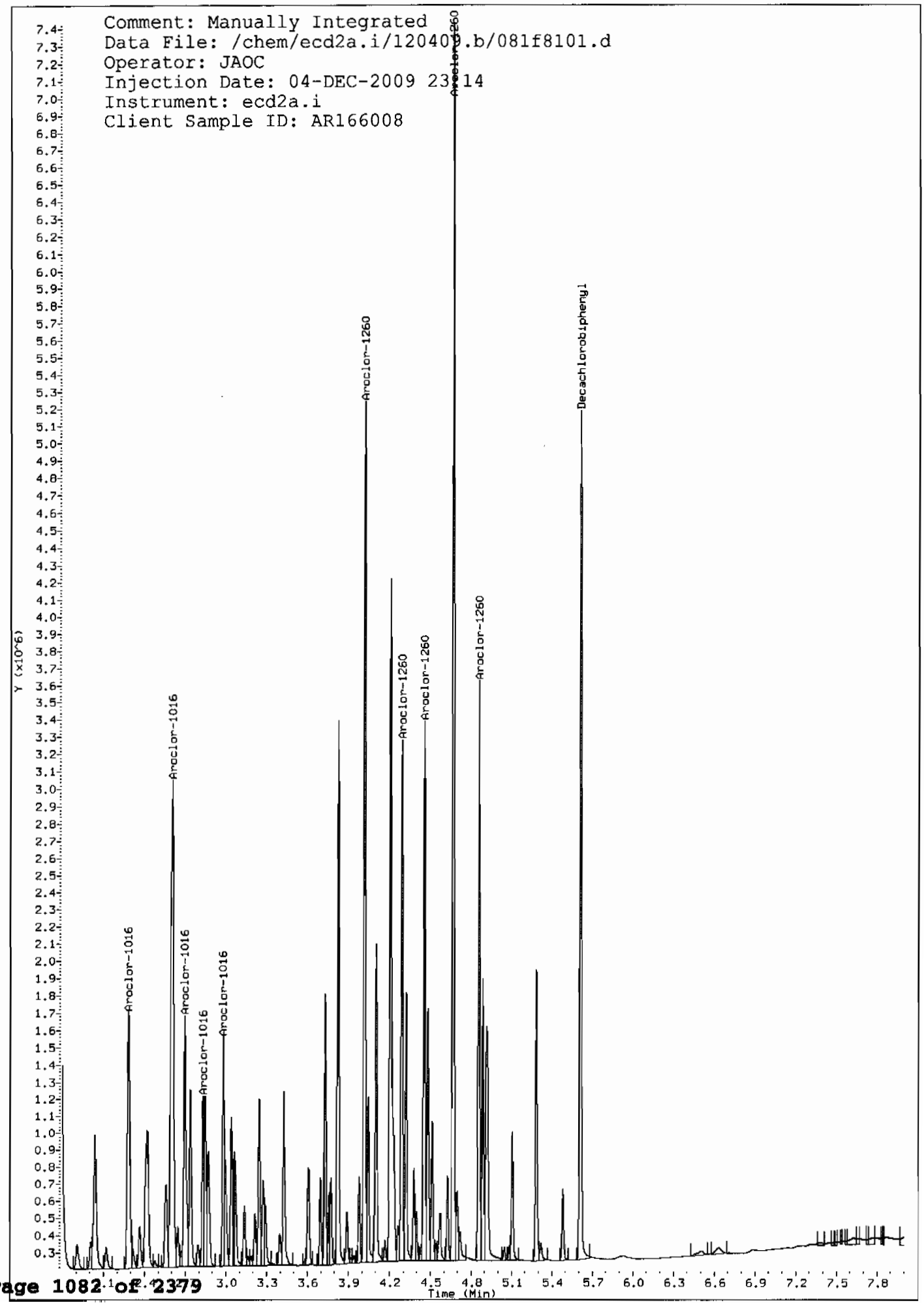
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/081f8101.d
Operator: JAOC
Injection Date: 04-DEC-2009 23:14
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

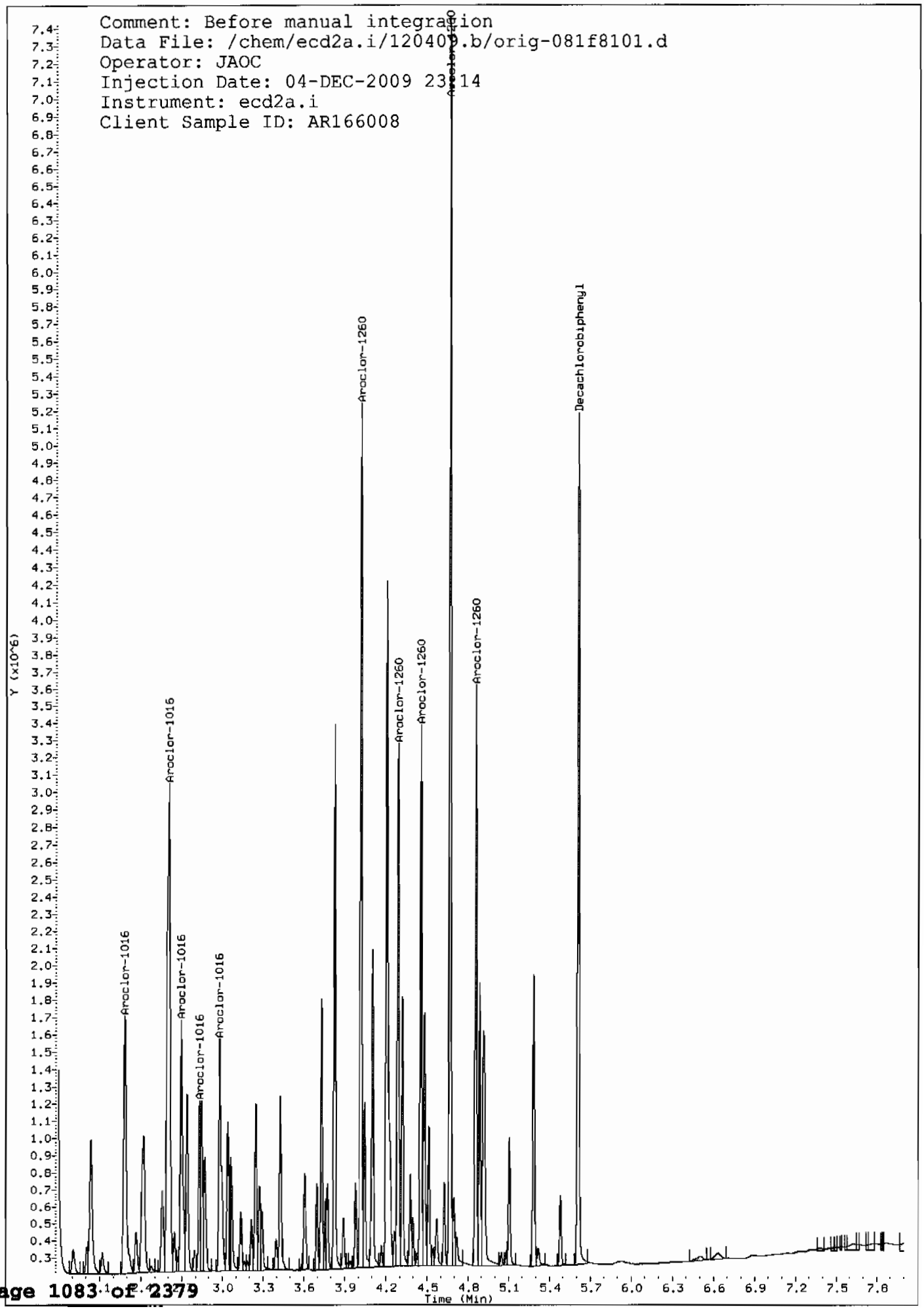
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-081f8101.d
Operator: JAOC
Injection Date: 04-DEC-2009 23:14
Instrument: ecd2a.i
Client Sample ID: AR166008
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/081b8101.d
Lab Smp Id: WAR091119-60 08 Client Smp ID: AR166008
Inj Date : 04-DEC-2009 23:14
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR091119-60 08
Misc Info : |PCB_CVS|1660||CVS|
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 81 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.078	2.077	0.001	13906758	100.000	118	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	9005449	100.000	82.9	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.753	2.752	0.001	4397292	1000.00	1030	80.00- 120.00	100.00
3.186	3.185	0.001	3566976	1000.00	1040	61.42- 101.42	81.12
3.337	3.336	0.001	2050811	1000.00	1040	27.15- 67.15	46.64
3.365	3.365	0.000	2131643	1000.00	1030	28.91- 68.91	48.48
3.523	3.524	-0.001	2915509	1000.00	1060	47.18- 87.18	66.30
Average of Peak Amounts =					1.04e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	5967374	1000.00	1080	80.00- 120.00	100.00
4.571	4.570	0.001	7545489	1000.00	1060	106.73- 146.73	126.45
4.682	4.682	0.000	5001321	1000.00	1060	63.73- 103.73	83.81
4.879	4.880	-0.001	5804649	1000.00	1000	78.70- 118.70	97.27
5.505	5.505	0.000	8954034	1000.00	990	133.18- 173.18	150.05
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd2a.i/120409.b/081b8101.d
Date : 04-DEC-2009 23:14
Client ID: AR166008
Sample Info: IWAR091119-60 08

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

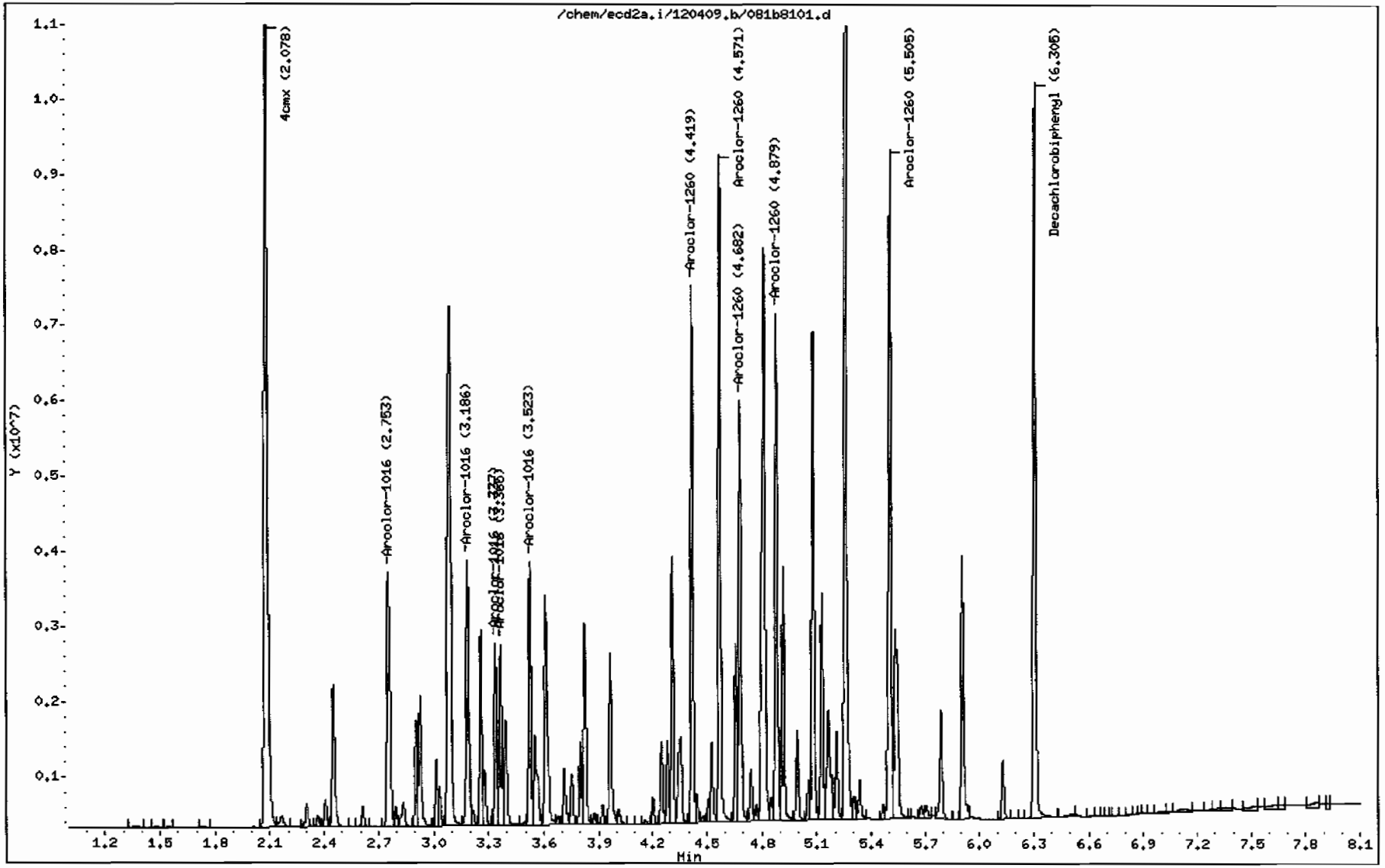

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	1.78	5.61
02	ZZZZZ	ZZZZZ	11/18/09	0902	1.78	5.61
03	AR125401	WAR091102-54	11/18/09	0913	1.78	5.61
04	AR124201	WAR091102-42	11/18/09	0924	1.78	5.61
05	ZZZZZ	ZZZZZ	11/18/09	0935	1.78	5.61
06	AR123201	WAR090930-32	11/18/09	0946	1.78	5.61
07	AR124801	WAR091113-48	11/18/09	0957	1.78	5.61
08	AR122101	WAR091111-21	11/18/09	1008	1.78	5.61
09	AR166001	WAR091117-01	11/18/09	1019	1.78	5.61
10	AR166002	WAR091117-02	11/18/09	1030	1.78	5.61
11	AR166003	WAR091117-03	11/18/09	1041	1.78	5.61
12	AR166004	WAR091117-04	11/18/09	1053	1.78	5.61
13	AR166005	IAR091102-01	11/18/09	1104	1.78	5.61
14	AR166001	WAR091102-60	11/18/09	1115	1.78	5.61
15	AR126201	WAR090803-62	11/18/09	1126	1.78	5.61
16	AR126801	WAR091106-68	11/18/09	1137	1.78	5.61
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	1.78	5.61
19	ZZZZZ	ZZZZZ	11/18/09	1210	1.78	5.61
20	ZZZZZ	ZZZZZ	11/18/09	1221	1.78	5.61
21	ZZZZZ	ZZZZZ	11/18/09	1232	1.78	5.61
22	ZZZZZ	ZZZZZ	11/18/09	1243	1.78	5.61
23	ZZZZZ	ZZZZZ	11/18/09	1254	1.78	5.61
24	ZZZZZ	ZZZZZ	11/18/09	1306	1.78	5.61
25	ZZZZZ	ZZZZZ	11/18/09	1317	1.78	5.61
26	ZZZZZ	ZZZZZ	11/18/09	1328	1.78	5.61
27	ZZZZZ	ZZZZZ	11/18/09	1339	1.78	5.61
28	ZZZZZ	ZZZZZ	11/18/09	1350	1.78	5.61
29	AR166002	WAR091102-60	11/18/09	1401	1.78	5.61
30	PIBLK03	WAR090916-99	11/18/09	1412	1.78	5.61
31	ZZZZZ	ZZZZZ	11/18/09	1423	1.78	5.61
32	ZZZZZ	ZZZZZ	11/18/09	1434	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/18/09	0851	2.07	6.30
02	ZZZZZ	ZZZZZ	11/18/09	0902	2.08	6.30
03	AR125401	WAR091102-54	11/18/09	0913	2.08	6.31
04	AR124201	WAR091102-42	11/18/09	0924	2.08	6.31
05	ZZZZZ	ZZZZZ	11/18/09	0935	2.08	6.31
06	AR123201	WAR090930-32	11/18/09	0946	2.08	6.30
07	AR124801	WAR091113-48	11/18/09	0957	2.08	6.30
08	AR122101	WAR091111-21	11/18/09	1008	2.08	6.31
09	AR166001	WAR091117-01	11/18/09	1019	2.07	6.31
10	AR166002	WAR091117-02	11/18/09	1030	2.08	6.30
11	AR166003	WAR091117-03	11/18/09	1041	2.08	6.30
12	AR166004	WAR091117-04	11/18/09	1053	2.08	6.31
13	AR166005	IAR091102-01	11/18/09	1104	2.07	6.30
14	AR166001	WAR091102-60	11/18/09	1115	2.08	6.30
15	AR126201	WAR090803-62	11/18/09	1126	2.08	6.30
16	AR126801	WAR091106-68	11/18/09	1137	2.07	6.30
17	DDTANALOGSTD	WAR091020-DD	11/18/09	1148		
18	PIBLK02	WAR090916-99	11/18/09	1159	2.08	6.30
19	ZZZZZ	ZZZZZ	11/18/09	1210	2.07	6.31
20	ZZZZZ	ZZZZZ	11/18/09	1221	2.07	6.30
21	ZZZZZ	ZZZZZ	11/18/09	1232	2.08	6.31
22	ZZZZZ	ZZZZZ	11/18/09	1243	2.08	6.30
23	ZZZZZ	ZZZZZ	11/18/09	1254	2.07	6.30
24	ZZZZZ	ZZZZZ	11/18/09	1306	2.08	6.31
25	ZZZZZ	ZZZZZ	11/18/09	1317	2.08	6.31
26	ZZZZZ	ZZZZZ	11/18/09	1328	2.08	6.30
27	ZZZZZ	ZZZZZ	11/18/09	1339	2.08	6.30
28	ZZZZZ	ZZZZZ	11/18/09	1350	2.08	6.30
29	AR166002	WAR091102-60	11/18/09	1401	2.08	6.31
30	PIBLK03	WAR090916-99	11/18/09	1412	2.08	6.30
31	ZZZZZ	ZZZZZ	11/18/09	1423	2.08	6.30
32	ZZZZZ	ZZZZZ	11/18/09	1434	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0807	1.78	5.61
02	AR166001	WAR091119-60	12/04/09	0818	1.78	5.61
03	AR125401	WAR091102-54	12/04/09	0829	1.78	5.61
04	AR124201	WAR091102-42	12/04/09	0840	1.78	5.61
05	AR124801	WAR091027-48	12/04/09	0851	1.78	5.61
06	AR123201	WAR090930-32	12/04/09	0902	1.78	5.61
07	AR122101	WAR091111-21	12/04/09	0914	1.78	5.61
08	AR126201	WAR091111-62	12/04/09	0925	1.78	5.61
09	AR126801	WAR091106-68	12/04/09	0936	1.78	5.61
10	DDTANALOGSTD	WAR091020-DD	12/04/09	0947		
11	PIBLK02	WAR090916-99	12/04/09	0958	1.78	5.61
12	ZZZZZ	ZZZZZ	12/04/09	1009	1.78	5.61
13	ZZZZZ	ZZZZZ	12/04/09	1020	1.78	5.61
14	AR166002	WAR091119-60	12/04/09	1031	1.78	5.61
15	PIBLK03	WAR090916-99	12/04/09	1042	1.78	5.61
16	ZZZZZ	ZZZZZ	12/04/09	1054	1.78	5.61
17	ZZZZZ	ZZZZZ	12/04/09	1105	1.78	5.61
18	ZZZZZ	ZZZZZ	12/04/09	1116	1.78	5.61
19	ZZZZZ	ZZZZZ	12/04/09	1127	1.78	5.61
20	ZZZZZ	ZZZZZ	12/04/09	1138	1.78	5.61
21	ZZZZZ	ZZZZZ	12/04/09	1149	1.78	5.61
22	ZZZZZ	ZZZZZ	12/04/09	1200	1.78	5.61
23	ZZZZZ	ZZZZZ	12/04/09	1211	1.78	5.61
24	ZZZZZ	ZZZZZ	12/04/09	1222	1.78	5.61
25	ZZZZZ	ZZZZZ	12/04/09	1233	1.78	5.61
26	AR166003	WAR091119-60	12/04/09	1244	1.78	5.61
27	PIBLK04	WAR090916-99	12/04/09	1255	1.78	5.61
28	ZZZZZ	ZZZZZ	12/04/09	1307	1.78	5.61
29	ZZZZZ	ZZZZZ	12/04/09	1318	1.78	5.61
30	ZZZZZ	ZZZZZ	12/04/09	1329	1.78	5.61
31	ZZZZZ	ZZZZZ	12/04/09	1340	1.78	5.61
32	ZZZZZ	ZZZZZ	12/04/09	1351	1.78	5.61

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	1402	1.78	5.61
02	ZZZZZ	ZZZZZ	12/04/09	1413	1.78	5.61
03	ZZZZZ	ZZZZZ	12/04/09	1424	1.78	5.61
04	ZZZZZ	ZZZZZ	12/04/09	1435	1.78	5.61
05	ZZZZZ	ZZZZZ	12/04/09	1452	1.77	5.61
06	AR166004	WAR091119-60	12/04/09	1503	1.78	5.61
07	PIBLK05	WAR090916-99	12/04/09	1514	1.78	5.61
08	ZZZZZ	ZZZZZ	12/04/09	1525	1.78	5.61
09	ZZZZZ	ZZZZZ	12/04/09	1536	1.78	5.61
10	ZZZZZ	ZZZZZ	12/04/09	1547	1.78	5.61
11	ZZZZZ	ZZZZZ	12/04/09	1559	1.78	5.61
12	ZZZZZ	ZZZZZ	12/04/09	1610	1.78	5.61
13	ZZZZZ	ZZZZZ	12/04/09	1621	1.78	5.61
14	ZZZZZ	ZZZZZ	12/04/09	1632	1.78	5.61
15	ZZZZZ	ZZZZZ	12/04/09	1643	1.78	5.61
16	ZZZZZ	ZZZZZ	12/04/09	1654	1.78	5.61
17	ZZZZZ	ZZZZZ	12/04/09	1705	1.78	5.61
18	AR166005	WAR091119-60	12/04/09	1721	1.78	5.61
19	PIBLK06	WAR090916-99	12/04/09	1732	1.78	5.61
20	ZZZZZ	ZZZZZ	12/04/09	1743	1.78	5.61
21	ZZZZZ	ZZZZZ	12/04/09	1754	1.78	5.61
22	ZZZZZ	ZZZZZ	12/04/09	1805	1.78	5.61
23	ZZZZZ	ZZZZZ	12/04/09	1816	1.78	5.61
24	ZZZZZ	ZZZZZ	12/04/09	1827	1.78	5.61
25	ZZZZZ	ZZZZZ	12/04/09	1838	1.78	5.61
26	ZZZZZ	ZZZZZ	12/04/09	1850	1.78	5.61
27	AR166006	WAR091119-60	12/04/09	1905	1.78	5.61
28	PIBLK07	WAR090916-99	12/04/09	1916	1.78	5.61
29	ZZZZZ	ZZZZZ	12/04/09	1927	1.78	5.61
30	ZZZZZ	ZZZZZ	12/04/09	1939	1.78	5.61
31	ZZZZZ	ZZZZZ	12/04/09	1950	1.78	5.61
32	ZZZZZ	ZZZZZ	12/04/09	2001	1.78	5.61

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.78 DCB: 5.61

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	2012	1.78	5.61
02	ZZZZZ	ZZZZZ	12/04/09	2023	1.78	5.61
03	ZZZZZ	ZZZZZ	12/04/09	2034	1.78	5.61
04	ZZZZZ	ZZZZZ	12/04/09	2045	1.78	5.61
05	AR166007	WAR091119-60	12/04/09	2101	1.78	5.61
06	PIBLK08	WAR090916-99	12/04/09	2112	1.78	5.61
07	PBLK01	1201984179	12/04/09	2123	1.78	5.61
08	PBLK01LCS	1201984180	12/04/09	2134	1.78	5.61
09	ZZZZZ	ZZZZZ	12/04/09	2145	1.78	5.61
10	ZZZZZ	ZZZZZ	12/04/09	2157	1.78	5.61
11	ZZZZZ	ZZZZZ	12/04/09	2208	1.78	5.61
12	ZZZZZ	ZZZZZ	12/04/09	2219	1.78	5.61
13	WST03-10-2134	241838002	12/04/09	2230	1.78	5.61
14	ZZZZZ	ZZZZZ	12/04/09	2241	1.78	5.61
15	ZZZZZ	ZZZZZ	12/04/09	2252	1.78	5.61
16	ZZZZZ	ZZZZZ	12/04/09	2303	1.78	5.61
17	AR166008	WAR091119-60	12/04/09	2314	1.78	5.61
18	PIBLK09	WAR090916-99	12/04/09	2326	1.78	5.61
19	ZZZZZ	ZZZZZ	12/04/09	2337	1.78	5.61
20	ZZZZZ	ZZZZZ	12/04/09	2348	1.78	5.61
21	ZZZZZ	ZZZZZ	12/04/09	2359	1.78	5.61
22	ZZZZZ	ZZZZZ	12/05/09	0010	1.78	5.61
23	ZZZZZ	ZZZZZ	12/05/09	0021	1.78	5.61
24	ZZZZZ	ZZZZZ	12/05/09	0032	1.78	5.61
25	ZZZZZ	ZZZZZ	12/05/09	0043	1.78	5.61
26	ZZZZZ	ZZZZZ	12/05/09	0055	1.78	5.61
27	ZZZZZ	ZZZZZ	12/05/09	0106	1.78	5.61
28	AR166009	WAR091119-60	12/05/09	0117	1.78	5.61
29	ZZZZZ	ZZZZZ	12/05/09	0128	1.78	5.61
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	12/04/09	0807	2.08	6.31
02	AR166001	WAR091119-60	12/04/09	0818	2.08	6.31
03	AR125401	WAR091102-54	12/04/09	0829	2.08	6.31
04	AR124201	WAR091102-42	12/04/09	0840	2.08	6.31
05	AR124801	WAR091027-48	12/04/09	0851	2.08	6.31
06	AR123201	WAR090930-32	12/04/09	0902	2.08	6.31
07	AR122101	WAR091111-21	12/04/09	0914	2.08	6.31
08	AR126201	WAR091111-62	12/04/09	0925	2.08	6.31
09	AR126801	WAR091106-68	12/04/09	0936	2.08	6.30
10	DDTANALOGSTD	WAR091020-DD	12/04/09	0947		
11	PIBLK02	WAR090916-99	12/04/09	0958	2.08	6.30
12	ZZZZZ	ZZZZZ	12/04/09	1009	2.08	6.31
13	ZZZZZ	ZZZZZ	12/04/09	1020	2.08	6.31
14	AR166002	WAR091119-60	12/04/09	1031	2.08	6.30
15	PIBLK03	WAR090916-99	12/04/09	1042	2.08	6.31
16	ZZZZZ	ZZZZZ	12/04/09	1054	2.08	6.31
17	ZZZZZ	ZZZZZ	12/04/09	1105	2.08	6.30
18	ZZZZZ	ZZZZZ	12/04/09	1116	2.08	6.30
19	ZZZZZ	ZZZZZ	12/04/09	1127	2.08	6.30
20	ZZZZZ	ZZZZZ	12/04/09	1138	2.08	6.30
21	ZZZZZ	ZZZZZ	12/04/09	1149	2.08	6.30
22	ZZZZZ	ZZZZZ	12/04/09	1200	2.08	6.30
23	ZZZZZ	ZZZZZ	12/04/09	1211	2.08	6.30
24	ZZZZZ	ZZZZZ	12/04/09	1222	2.08	6.31
25	ZZZZZ	ZZZZZ	12/04/09	1233	2.08	6.30
26	AR166003	WAR091119-60	12/04/09	1244	2.08	6.30
27	PIBLK04	WAR090916-99	12/04/09	1255	2.08	6.31
28	ZZZZZ	ZZZZZ	12/04/09	1307	2.08	6.30
29	ZZZZZ	ZZZZZ	12/04/09	1318	2.08	6.30
30	ZZZZZ	ZZZZZ	12/04/09	1329	2.08	6.30
31	ZZZZZ	ZZZZZ	12/04/09	1340	2.07	6.30
32	ZZZZZ	ZZZZZ	12/04/09	1351	2.08	6.30

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	1402	2.08	6.30
02	ZZZZZ	ZZZZZ	12/04/09	1413	2.08	6.30
03	ZZZZZ	ZZZZZ	12/04/09	1424	2.08	6.31
04	ZZZZZ	ZZZZZ	12/04/09	1435	2.08	6.31
05	ZZZZZ	ZZZZZ	12/04/09	1452	2.07	6.30
06	AR166004	WAR091119-60	12/04/09	1503	2.08	6.31
07	PIBLK05	WAR090916-99	12/04/09	1514	2.08	6.30
08	ZZZZZ	ZZZZZ	12/04/09	1525	2.08	6.30
09	ZZZZZ	ZZZZZ	12/04/09	1536	2.08	6.30
10	ZZZZZ	ZZZZZ	12/04/09	1547	2.08	6.30
11	ZZZZZ	ZZZZZ	12/04/09	1559	2.08	6.30
12	ZZZZZ	ZZZZZ	12/04/09	1610	2.08	6.30
13	ZZZZZ	ZZZZZ	12/04/09	1621	2.08	6.31
14	ZZZZZ	ZZZZZ	12/04/09	1632	2.08	6.30
15	ZZZZZ	ZZZZZ	12/04/09	1643	2.08	6.30
16	ZZZZZ	ZZZZZ	12/04/09	1654	2.08	6.31
17	ZZZZZ	ZZZZZ	12/04/09	1705	2.08	6.31
18	AR166005	WAR091119-60	12/04/09	1721	2.07	6.30
19	PIBLK06	WAR090916-99	12/04/09	1732	2.08	6.30
20	ZZZZZ	ZZZZZ	12/04/09	1743	2.08	6.30
21	ZZZZZ	ZZZZZ	12/04/09	1754	2.08	6.30
22	ZZZZZ	ZZZZZ	12/04/09	1805	2.08	6.30
23	ZZZZZ	ZZZZZ	12/04/09	1816	2.08	6.30
24	ZZZZZ	ZZZZZ	12/04/09	1827	2.08	6.30
25	ZZZZZ	ZZZZZ	12/04/09	1838	2.08	6.30
26	ZZZZZ	ZZZZZ	12/04/09	1850	2.08	6.31
27	AR166006	WAR091119-60	12/04/09	1905	2.08	6.30
28	PIBLK07	WAR090916-99	12/04/09	1916	2.08	6.30
29	ZZZZZ	ZZZZZ	12/04/09	1927	2.08	6.31
30	ZZZZZ	ZZZZZ	12/04/09	1939	2.08	6.31
31	ZZZZZ	ZZZZZ	12/04/09	1950	2.08	6.30
32	ZZZZZ	ZZZZZ	12/04/09	2001	2.08	6.30

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/18/09 11/18/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.08 DCB: 6.30

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	12/04/09	2012	2.08	6.31
02	ZZZZZ	ZZZZZ	12/04/09	2023	2.08	6.31
03	ZZZZZ	ZZZZZ	12/04/09	2034	2.08	6.31
04	ZZZZZ	ZZZZZ	12/04/09	2045	2.08	6.31
05	AR166007	WAR091119-60	12/04/09	2101	2.08	6.30
06	PIBLK08	WAR090916-99	12/04/09	2112	2.08	6.31
07	PBLK01	1201984179	12/04/09	2123	2.08	6.31
08	PBLK01LCS	1201984180	12/04/09	2134	2.08	6.30
09	ZZZZZ	ZZZZZ	12/04/09	2145	2.08	6.30
10	ZZZZZ	ZZZZZ	12/04/09	2157	2.08	6.30
11	ZZZZZ	ZZZZZ	12/04/09	2208	2.08	6.31
12	ZZZZZ	ZZZZZ	12/04/09	2219	2.08	6.30
13	WST03-10-2134	241838002	12/04/09	2230	2.08	6.31
14	ZZZZZ	ZZZZZ	12/04/09	2241	2.08	6.30
15	ZZZZZ	ZZZZZ	12/04/09	2252	2.08	6.30
16	ZZZZZ	ZZZZZ	12/04/09	2303	2.08	6.31
17	AR166008	WAR091119-60	12/04/09	2314	2.08	6.31
18	PIBLK09	WAR090916-99	12/04/09	2326	2.08	6.31
19	ZZZZZ	ZZZZZ	12/04/09	2337	2.08	6.30
20	ZZZZZ	ZZZZZ	12/04/09	2348	2.08	6.31
21	ZZZZZ	ZZZZZ	12/04/09	2359	2.08	6.31
22	ZZZZZ	ZZZZZ	12/05/09	0010	2.08	6.31
23	ZZZZZ	ZZZZZ	12/05/09	0021	2.08	6.31
24	ZZZZZ	ZZZZZ	12/05/09	0032	2.08	6.31
25	ZZZZZ	ZZZZZ	12/05/09	0043	2.08	6.30
26	ZZZZZ	ZZZZZ	12/05/09	0055	2.08	6.31
27	ZZZZZ	ZZZZZ	12/05/09	0106	2.08	6.31
28	AR166009	WAR091119-60	12/05/09	0117	2.08	6.31
29	PIBLK10	WAR090916-99	12/05/09	0128	2.08	6.31
30						
31						
32						

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 927948

Lab Sample ID: 1201984180

Data File:	072f7201.d	**Data File:**	072b7201.d
Inst:	ECD2A.I_1	**Inst:**	ECD2A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	04–DEC–09 21:34	**Analyzed:**	04–DEC–09 21:34

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							5.71
Column 1	1	2.28	2.25 – 2.31	21.2		ug/kg	
	2	2.6	2.57 – 2.63	21.3		ug/kg	
	3	2.69	2.66 – 2.72	21.2		ug/kg	
	4	2.83	2.8 – 2.86	20.3		ug/kg	
	5	2.98	2.95 – 3.01	21.2		ug/kg	
					21.1		
Column 2	1	2.75	2.72 – 2.78	22.3		ug/kg	
	2	3.19	3.16 – 3.22	22.3		ug/kg	
	3	3.34	3.31 – 3.37	22.8		ug/kg	
	4	3.36	3.33 – 3.39	21.3		ug/kg	
	5	3.52	3.49 – 3.55	22.7		ug/kg	
					22.3		
Aroclor–1260							2.95
Column 1	1	4.02	3.99 – 4.05	23.3		ug/kg	
	2	4.29	4.26 – 4.32	22.9		ug/kg	
	3	4.46	4.43 – 4.49	23.1		ug/kg	
	4	4.67	4.64 – 4.7	23.4		ug/kg	
	5	4.86	4.83 – 4.89	22.9		ug/kg	
					23.1		
Column 2	1	4.42	4.39 – 4.45	24.3		ug/kg	
	2	4.57	4.54 – 4.6	24		ug/kg	
	3	4.68	4.65 – 4.71	23.9		ug/kg	
	4	4.88	4.85 – 4.91	23.2		ug/kg	
	5	5.5	5.48 – 5.54	23.6		ug/kg	
					23.8		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10--670			**Matrix:**	SOIL
Lab Sample ID:	1201984179				
Client Sample:	QC for batch 927948	**Client:**	LANL010	**Project:**	QC
Client ID:	MB for batch 927948	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 21:23	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	071f7101-1.d	**Column:**	1 CLP1	**Level:**	LOW
	071b7101-1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/071f7101-1.d
Lab Smp Id: 1201984179 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 21:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984179|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 71 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.779	1.781	-0.002	8868277	153.666	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	7333895	133.759	4.4	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/071f7101-1.d
Date : 04-DEC-2009 21:23
Client ID: PBLK01
Sample Info: |120198417911|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

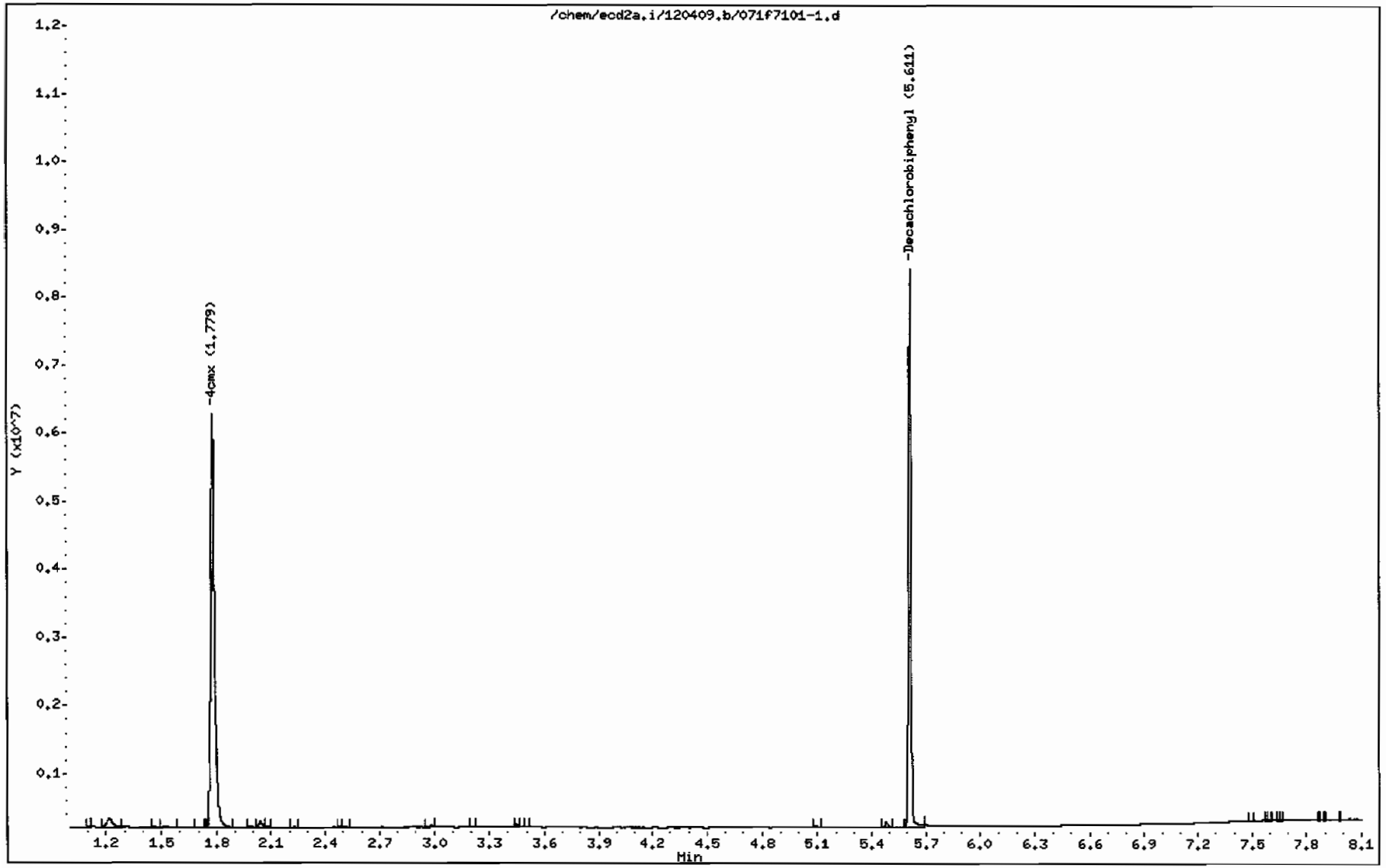

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/071b7101-1.d
Lab Smp Id: 1201984179 Client Smp ID: PBLK01
Inj Date : 04-DEC-2009 21:23
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984179|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 71 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	19549468	165.393	5.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	15517120	142.829	4.8	80.00- 120.00	100.00

Data File: /chem/ecd2a.i/120409.b/071b7101-1.d
Date : 04-DEC-2009 21:23
Client ID: PBLK01
Sample Info: |120198417911|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

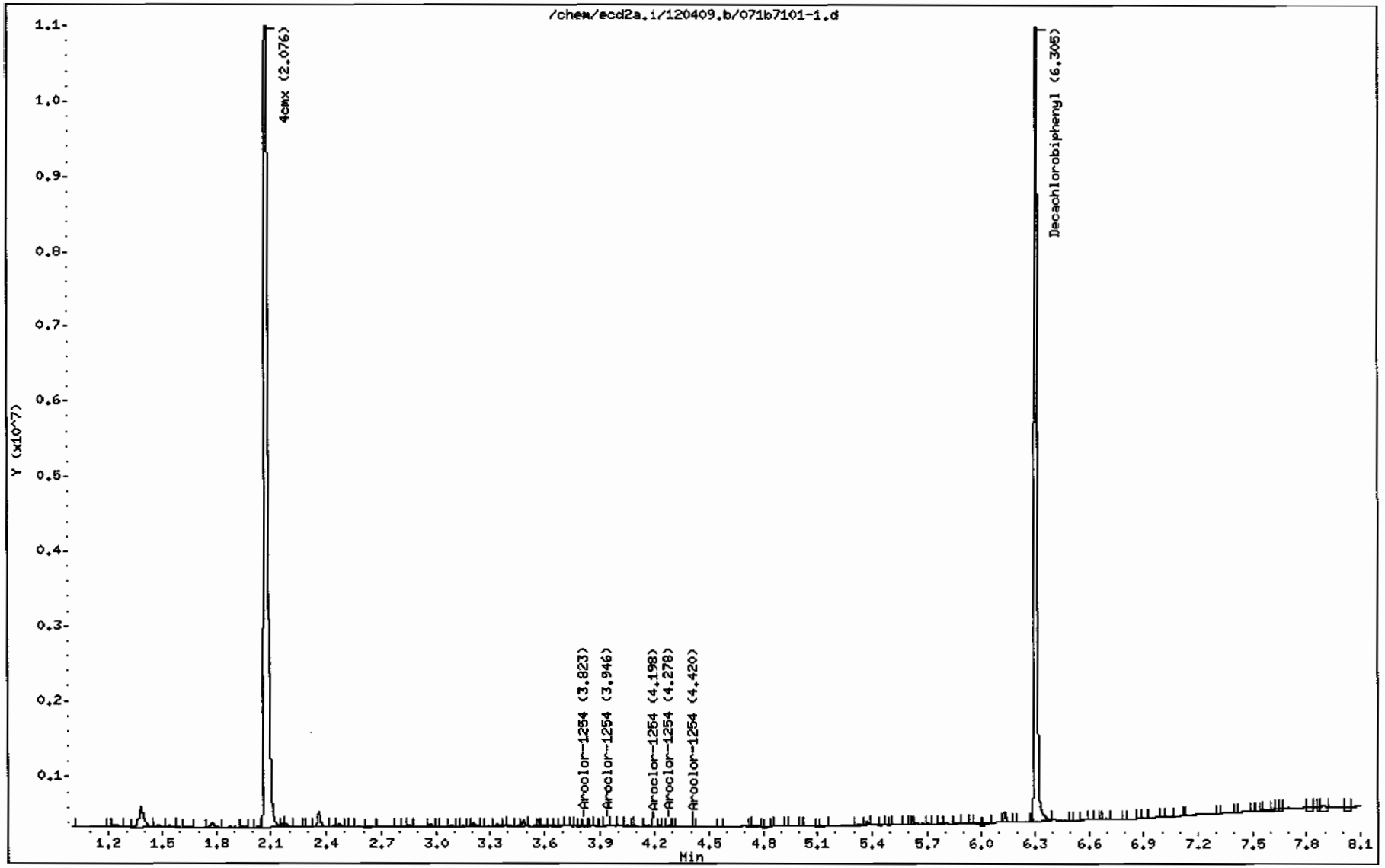

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-670			**Matrix:**	SOIL
Lab Sample ID:	1201984180				
Client Sample:	QC for batch 927948	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 927948	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	927953	**Inst:**	ECD2A.I	**Dilution:**	1
Run Date:	12/04/2009 21:34	**Analyst:**	JAOC	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:14	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	072f7201-1.d	**Column:**	1 CLP1	**Level:**	LOW
	072b7201-1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		22.3	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		23.8	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/072f7201-1.d
Lab Smp Id: 1201984180 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 21:34
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984180|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 72 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	7865243	136.286	4.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.610	5.611	-0.001	6184829	112.802	3.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.282	-0.001	1338462	637.422	21.2	80.00- 120.00	100.00(M)
2.604	2.604	0.000	2876819	638.653	21.3	200.13- 240.13	214.93
2.694	2.695	-0.001	1159874	637.220	21.2	67.04- 107.04	86.66
2.829	2.830	-0.001	567148	607.952	20.3	22.75- 62.75	42.37

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.980	2.980	0.000	878018	637.111	21.2	47.01- 87.01	65.60
Average of Peak Concentrations =					21.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	2841902	698.806	23.3	80.00- 120.00	100.00
4.289	4.290	-0.001	1735637	686.479	22.9	40.62- 80.62	61.07
4.455	4.456	-0.001	1788964	692.537	23.1	41.94- 81.94	62.95
4.668	4.668	0.000	4236252	701.819	23.4	125.52- 165.52	149.06
4.856	4.857	-0.001	2004914	688.513	23.0	48.68- 88.68	70.55
Average of Peak Concentrations =					23.1		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/072f7201-1.d
Date : 04-DEC-2009 21:34
Client ID: PBLK01LCS
Sample Info: |120198418011|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAOC
Column diameter: 0.25

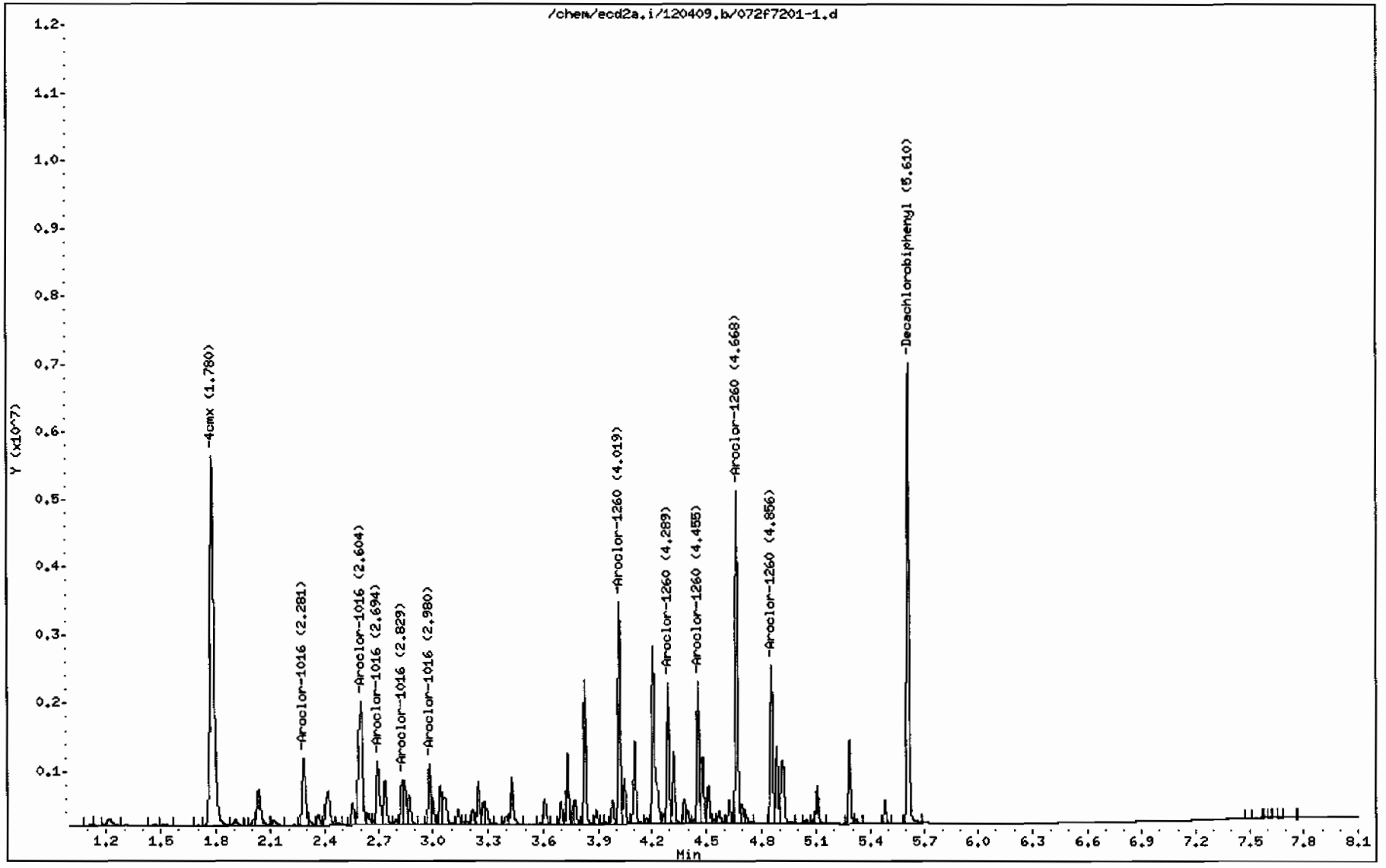

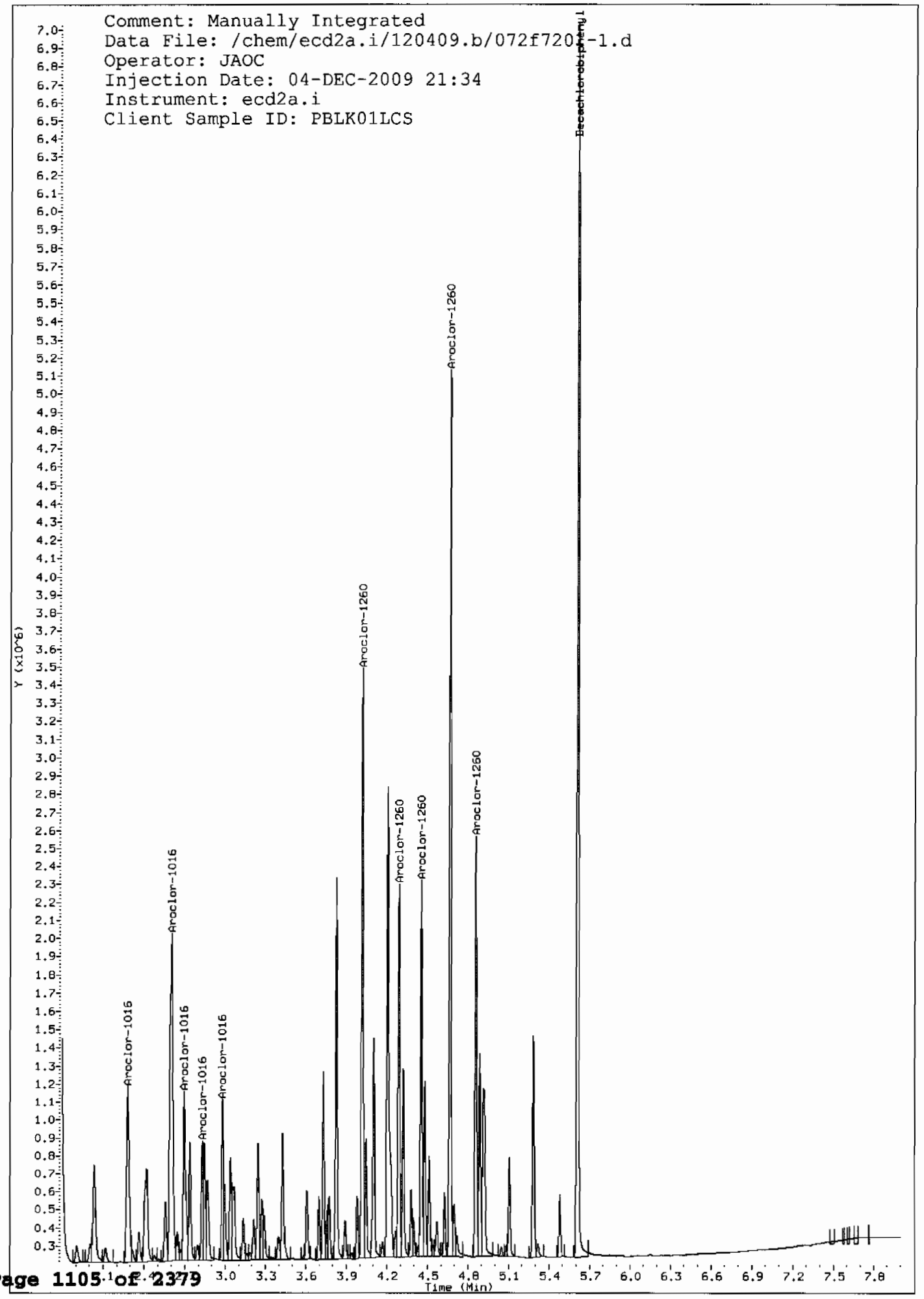
Comment: Manually Integrated
Data File: /chem/ecd2a.i/120409.b/072f720-1.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:34
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^6)
Time (Min)

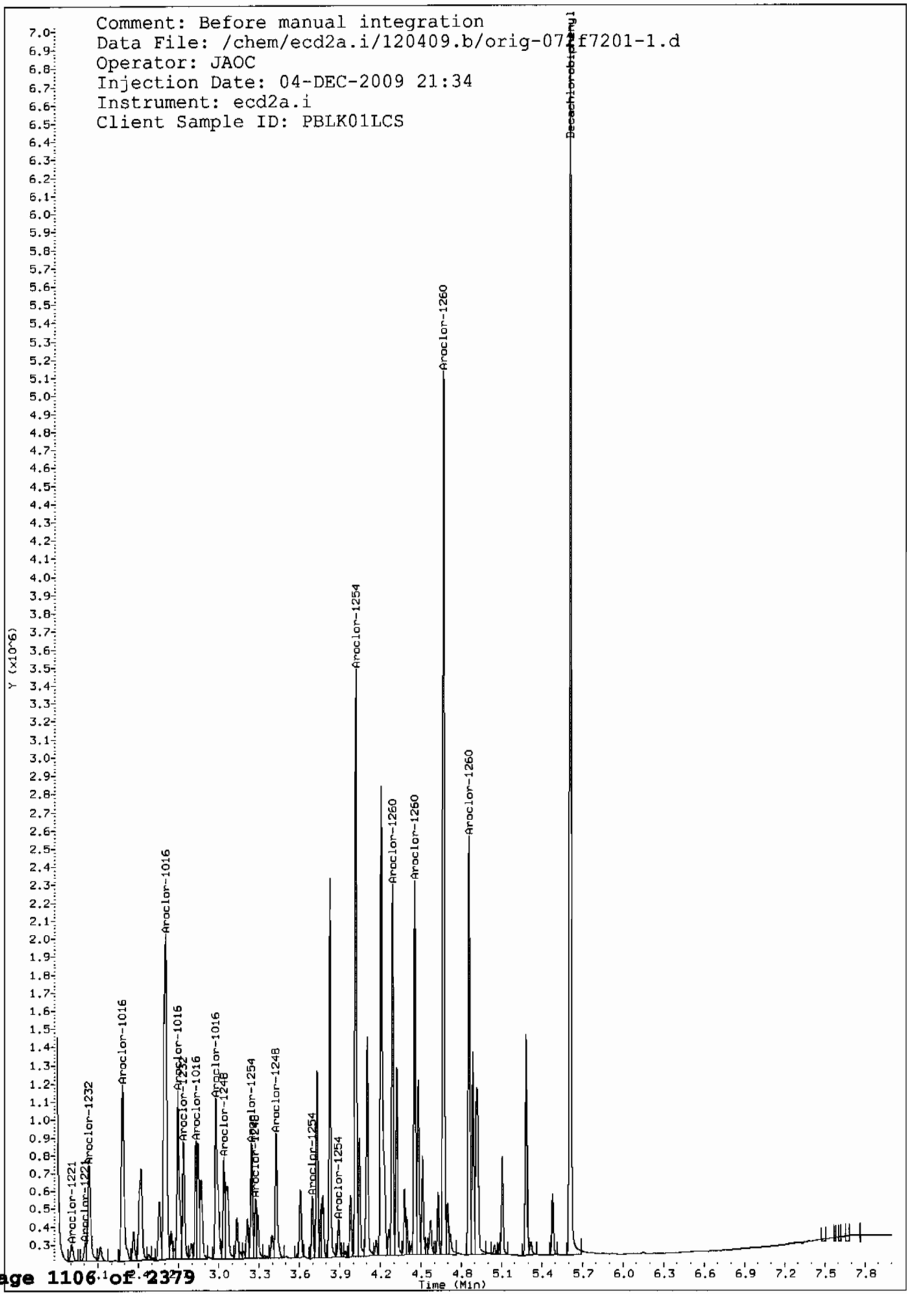
Comment: Before manual integration
Data File: /chem/ecd2a.i/120409.b/orig-07f7201-1.d
Operator: JAOC
Injection Date: 04-DEC-2009 21:34
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1254
Aroclor-1016
Aroclor-1248
Aroclor-1232
Aroclor-1221
Y (x10^6)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/072b7201-1.d
Lab Smp Id: 1201984180 Client Smp ID: PBLK01LCS
Inj Date : 04-DEC-2009 21:34
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984180|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 72 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	17292482	146.299	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.304	6.305	-0.001	13080299	120.399	4.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	2850023	669.326	22.3	80.00- 120.00	100.00
3.185	3.185	0.000	2306701	669.641	22.3	61.42- 101.42	80.94
3.336	3.336	0.000	1354827	684.433	22.8	27.15- 67.15	47.54
3.364	3.365	-0.001	1317836	639.337	21.3	28.91- 68.91	46.24

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.523	3.524	-0.001	1876560	681.352	22.7	47.18- 87.18	65.84
Average of Peak Concentrations =					22.3		
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	4012668	727.903	24.3	80.00- 120.00	100.00
4.570	4.570	0.000	5144082	721.271	24.0	106.73- 146.73	128.20
4.682	4.682	0.000	3396174	717.800	23.9	63.73- 103.73	84.64
4.879	4.880	-0.001	4034274	695.486	23.2	78.70- 118.70	100.54
5.504	5.505	-0.001	6413956	709.455	23.6	133.18- 173.18	159.84
Average of Peak Concentrations =					23.8		

Data File: /chem/ecd2a.i/120409.b/072b7201-1.d
Date : 04-DEC-2009 21:34
Client ID: PBLK01LCS
Sample Info: |120198418011|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

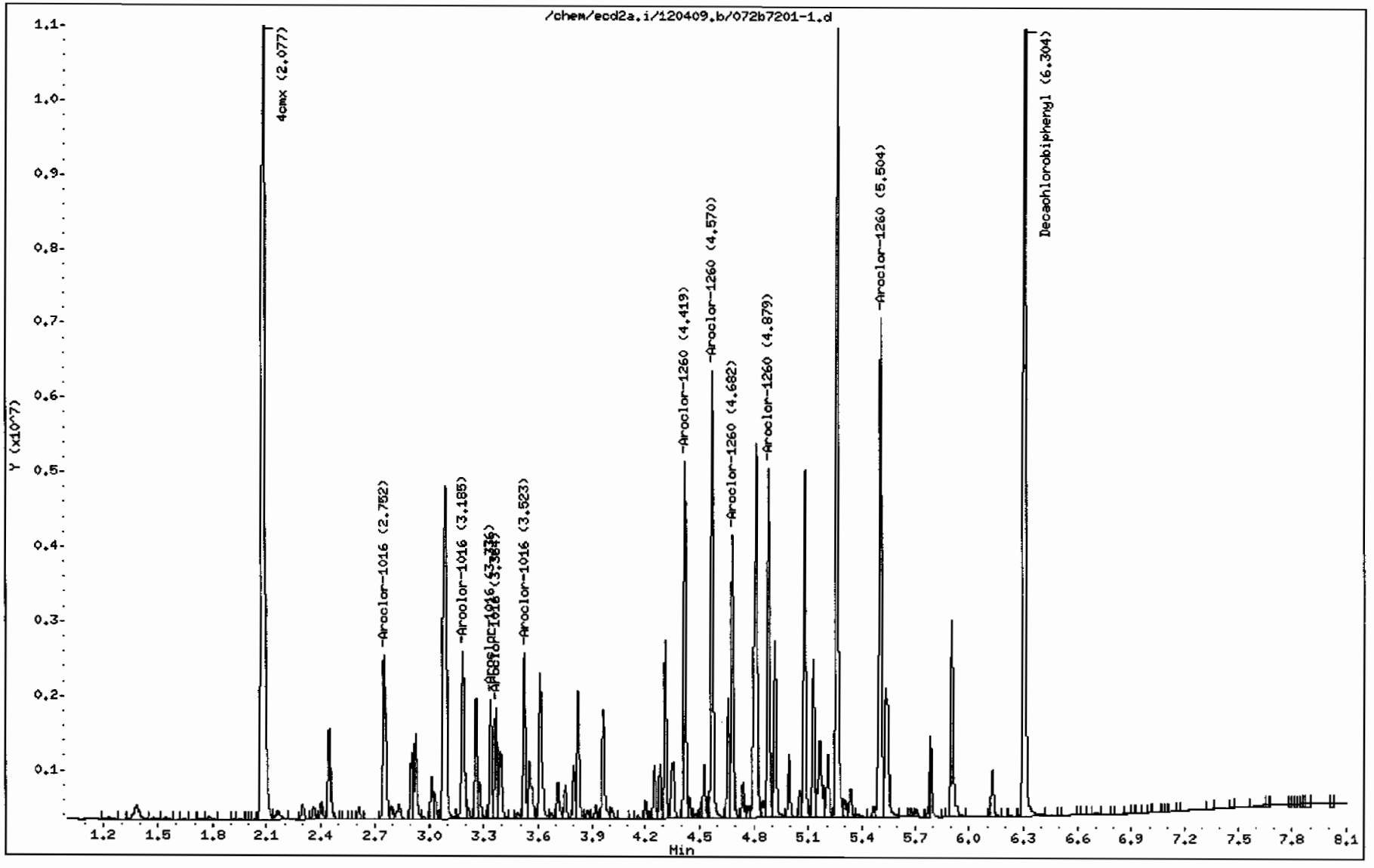

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 11/19/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ600
ALUMINA LOT:1193715-A
COPPER LOT:091020-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:111809 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	18-NOV-2009 08:51		111809	1.0		CLEAN
002f0201.d	WAR091102-60 01	JAOC	18-NOV-2009 09:02		111809	1.0		DUSE
003f0301.d	WAR091102-54	JAOC	18-NOV-2009 09:13		111809	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	18-NOV-2009 09:24		111809	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	18-NOV-2009 09:35		111809	1.0		DUSE
006f0601.d	WAR090930-32	JAOC	18-NOV-2009 09:46		111809	1.0		PATTERN ONLY
007f0701.d	WAR091113-48	JAOC	18-NOV-2009 09:57		111809	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR091111-21	JAOC	18-NOV-2009 10:08		111809	1.0		PATTERN ONLY
009f0901.d	WAR091117-01 60	JAOC	18-NOV-2009 10:19		111809	1.0		1660 LEVEL 1
010f1001.d	WAR091117-02 60	JAOC	18-NOV-2009 10:30		111809	1.0		1660 LEVEL 2
011f1101.d	WAR091117-03 60	JAOC	18-NOV-2009 10:41		111809	1.0		1660 LEVEL 3
012f1201.d	WAR091117-04 60	JAOC	18-NOV-2009 10:53		111809	1.0		1660 LEVEL 4
013f1301.d	IAR091102-01 60	JAOC	18-NOV-2009 11:04		111809	1.0		1660 LEVEL 5
014f1401.d	WAR091102-60 1	JAOC	18-NOV-2009 11:15		111809	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090803-62	JAOC	18-NOV-2009 11:26		111809	1.0		PATTERN ONLY

Instrument Batch: /chem/ecd2a.i/111809.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091106-68	JAOC	18-NOV-2009 11:37		111809	1.0		PATTERN ONLY

017f1701.d	WAR091020-DDT	JAOC	18-NOV-2009 11:48		111809		1.0	DDT
018f1801.d	WAR090916-99 02	JAOC	18-NOV-2009 11:59		111809		1.0	CLEAN
019f1901.d	1201973999	JAOC	18-NOV-2009 12:10	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
020f2001.d	1201974000	JAOC	18-NOV-2009 12:21	923493	10-356		1.0	QC A UPLOAD BOTH, USE HIGHER
021f2101.d	240576001	JAOC	18-NOV-2009 12:32	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
022f2201.d	240576002	JAOC	18-NOV-2009 12:43	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
023f2301.d	240576003	JAOC	18-NOV-2009 12:54	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
024f2401.d	240576004	JAOC	18-NOV-2009 13:06	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
025f2501.d	240576005	JAOC	18-NOV-2009 13:17	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
026f2601.d	240576006	JAOC	18-NOV-2009 13:28	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
027f2701.d	240576007	JAOC	18-NOV-2009 13:39	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
028f2801.d	240576008	JAOC	18-NOV-2009 13:50	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
029f2901.d	WAR091102-60 02	JAOC	18-NOV-2009 14:01		111809		1.0	PASSES BOTH COLUMNS
030f3001.d	WAR090916-99 03	JAOC	18-NOV-2009 14:12		111809		1.0	CLEAN
031f3101.d	240576009	JAOC	18-NOV-2009 14:23	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
032f3201.d	240576010	JAOC	18-NOV-2009 14:34	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
033f3301.d	240576011	JAOC	18-NOV-2009 14:45	923493	10-356		5.0	LANL UPLOAD BOTH, USE HIGHER
034f3401.d	240576012	JAOC	18-NOV-2009 14:56	923493	10-356		1.0	LANL UPLOAD BOTH, USE HIGHER
035f3501.d	240587003	JAOC	18-NOV-2009 15:07	923493	10-362		1.0	LANL UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/111809.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1201974001	JAOC	18-NOV-2009 15:18	923493	10-362		1.0	QC A UPLOAD BOTH, USE HIGHER
037f3701.d	1201974002	JAOC	18-NOV-2009 15:30	923493	10-362		1.0	QC A UPLOAD BOTH, USE HIGHER
038f3801.d	240587004	JAOC	18-NOV-2009 15:41	923493	10-362		1.0	LANL UPLOAD BOTH, USE HIGHER
039f3901.d	WAR091102-60 03	JAOC	18-NOV-2009 15:52		111809		1.0	PASSES BOTH COLUMNS
040f4001.d	WAR090916-99 04	JAOC	18-NOV-2009 16:03		111809		1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD2

DATE: 12/07/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR:JAOC REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:CZ454
ALUMINA LOT:1230997-A
COPPER LOT:207783-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number:120409 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	04-DEC-2009 08:07		120409	1.0		CLEAN
002f0201.d	WAR091119-60 01	JAOC	04-DEC-2009 08:18		120409	1.0		PASSES BOTH COLUMNS
003f0301.d	WAR091102-54	JAOC	04-DEC-2009 08:29		120409	1.0		PASSES BOTH COLUMNS
004f0401.d	WAR091102-42	JAOC	04-DEC-2009 08:40		120409	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091027-48	JAOC	04-DEC-2009 08:51		120409	1.0		PASSES BOTH COLUMNS
006f0601.d	WAR090930-32	JAOC	04-DEC-2009 09:02		120409	1.0		PATTERN ONLY
007f0701.d	WAR091111-21	JAOC	04-DEC-2009 09:14		120409	1.0		PATTERN ONLY
008f0801.d	WAR091111-62	JAOC	04-DEC-2009 09:25		120409	1.0		PATTERN ONLY
009f0901.d	WAR091106-68	JAOC	04-DEC-2009 09:36		120409	1.0		PATTERN ONLY
010f1001.d	WAR091020-DDT	JAOC	04-DEC-2009 09:47		120409	1.0		DDT
011f1101.d	WAR090916-99 02	JAOC	04-DEC-2009 09:58		120409	1.0		CLEAN
012f1201.d	241423004	JAOC	04-DEC-2009 10:09	926729	10-578	50.0	LANL	UPLOAD BOTH, USE HIGHER
013f1301.d	241423005	JAOC	04-DEC-2009 10:20	926729	10-578	1.0	LANL	UPLOAD BOTH, USE HIGHER
014f1401.d	WAR091119-60 02	JAOC	04-DEC-2009 10:31		120409	1.0		PASSES BOTH COLUMNS
015f1501.d	WAR090916-99 03	JAOC	04-DEC-2009 10:42		120409	1.0		CLEAN

Instrument Batch: /chem/ecd2a.i/120409.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1201982181	JAOC	04-DEC-2009 10:54	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES (MB FAILS LIMITS ON ONE COLUMN)

017f1701.d	1201982184	JAOC	04-DEC-2009 11:05	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
018f1801.d	241451001	JAOC	04-DEC-2009 11:16	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
019f1901.d	241451002	JAOC	04-DEC-2009 11:27	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
020f2001.d	241451003	JAOC	04-DEC-2009 11:38	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
021f2101.d	1201982182	JAOC	04-DEC-2009 11:49	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
022f2201.d	1201982183	JAOC	04-DEC-2009 12:00	927105	241451	1.0	QC A	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
023f2301.d	241451004	JAOC	04-DEC-2009 12:11	927105	241451	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
024f2401.d	241591001	JAOC	04-DEC-2009 12:22	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
025f2501.d	241591002	JAOC	04-DEC-2009 12:33	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
026f2601.d	WAR091119-60 03	JAOC	04-DEC-2009 12:44		120409	1.0		PASSES BOTH COLUMNS
027f2701.d	WAR090916-99 04	JAOC	04-DEC-2009 12:55		120409	1.0		CLEAN
028f2801.d	241591003	JAOC	04-DEC-2009 13:07	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
029f2901.d	241591004	JAOC	04-DEC-2009 13:18	927105	241591	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
030f3001.d	241616001	JAOC	04-DEC-2009 13:29	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
031f3101.d	241616002	JAOC	04-DEC-2009 13:40	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
032f3201.d	241616003	JAOC	04-DEC-2009 13:51	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
033f3301.d	241616004	JAOC	04-DEC-2009 14:02	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
034f3401.d	241616005	JAOC	04-DEC-2009 14:13	927105	241616	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
035f3501.d	241649001	JAOC	04-DEC-2009 14:24	927105	241649	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES

Instrument Batch: /chem/ecd2a.i/120409.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241649002	JAOC	04-DEC-2009 14:35	927105	241649	1.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
037f3701.d	241649001	JAOC	04-DEC-2009 14:52	927105	241649	5.0	SAIC	DUSE, SENT FOR RE DUE TO SURROGATE FAILURES
038f3801.d	WAR091119-60 04	JAOC	04-DEC-2009 15:03		120409	1.0		PASSES BOTH COLUMNS
039f3901.d	WAR090916-99 05	JAOC	04-DEC-2009 15:14		120409	1.0		CLEAN
040f4001.d	1201982189	JAOC	04-DEC-2009 15:25	927108	241765	1.0	QC A	UPLOAD BOTH, USE HIGHER

041f4101.d	1201982192	JAOC	04-DEC-2009 15:36	927108	241765	1.0	QC A	UPLOAD BOTH, USE HIGHER
042f4201.d	241765001	JAOC	04-DEC-2009 15:47	927108	241765	5.0	SAIC	UPLOAD BOTH, USE HIGHER
043f4301.d	241765002	JAOC	04-DEC-2009 15:59	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
044f4401.d	241765003	JAOC	04-DEC-2009 16:10	927108	241765	25.0	SAIC	UPLOAD BOTH, USE HIGHER
045f4501.d	241765004	JAOC	04-DEC-2009 16:21	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
046f4601.d	241765005	JAOC	04-DEC-2009 16:32	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
047f4701.d	241765006	JAOC	04-DEC-2009 16:43	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
048f4801.d	241765007	JAOC	04-DEC-2009 16:54	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
049f4901.d	241765008	JAOC	04-DEC-2009 17:05	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
050f5001.d	WAR091119-60 05	JAOC	04-DEC-2009 17:21		120409	1.0		PASSES BOTH COLUMNS
051f5101.d	WAR090916-99 06	JAOC	04-DEC-2009 17:32		120409	1.0		CLEAN
052f5201.d	241765009	JAOC	04-DEC-2009 17:43	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
053f5301.d	241765010	JAOC	04-DEC-2009 17:54	927108	241765	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
054f5401.d	241853001	JAOC	04-DEC-2009 18:05	927108	241853	5.0	SAIC	UPLOAD BOTH, USE HIGHER
055f5501.d	241853002	JAOC	04-DEC-2009 18:16	927108	241853	5.0	SAIC	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241853003	JAOC	04-DEC-2009 18:27	927108	241853	1.0	SAIC	UPLOAD BOTH, USE HIGHER
057f5701.d	1201982190	JAOC	04-DEC-2009 18:38	927108	241853	1.0	QC A	UPLOAD BOTH, USE HIGHER
058f5801.d	1201982191	JAOC	04-DEC-2009 18:50	927108	241853	1.0	QC A	UPLOAD BOTH, USE HIGHER
059f5901.d	WAR091119-60 06	JAOC	04-DEC-2009 19:05		120409	1.0		PASSES BOTH COLUMNS
060f6001.d	WAR090916-99 07	JAOC	04-DEC-2009 19:16		120409	1.0		CLEAN
061f6101.d	1201982301	JAOC	04-DEC-2009 19:27	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER (HAS HITS BELOW PQL BUT ABOVE MDL, NO HITS IN SAMPLES)
062f6201.d	1201982304	JAOC	04-DEC-2009 19:39	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
063f6301.d	241886001	JAOC	04-DEC-2009 19:50	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER
064f6401.d	241886002	JAOC	04-DEC-2009 20:01	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER

065f6501.d	241886003	JAOC	04-DEC-2009 20:12	927182	241886	1.0	SAIC	SENT FOR RE TO CONFRIM SURROGATE FAILURE
066f6601.d	241886004	JAOC	04-DEC-2009 20:23	927182	241886	1.0	SAIC	UPLOAD BOTH, USE HIGHER
067f6701.d	1201982302	JAOC	04-DEC-2009 20:34	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
068f6801.d	1201982303	JAOC	04-DEC-2009 20:45	927182	241886	1.0	QC A	UPLOAD BOTH, USE HIGHER
069f6901.d	WAR091119-60 07	JAOC	04-DEC-2009 21:01		120409	1.0		PASSES BOTH COLUMNS
070f7001.d	WAR090916-99 08	JAOC	04-DEC-2009 21:12		120409	1.0		CLEAN
071f7101.d	1201984179	JAOC	04-DEC-2009 21:23	927953	10-668	1.0	QC A	UPLOAD BOTH, USE HIGHER
072f7201.d	1201984180	JAOC	04-DEC-2009 21:34	927953	10-668	1.0	QC A	UPLOAD BOTH, USE HIGHER
073f7301.d	241827001	JAOC	04-DEC-2009 21:45	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
074f7401.d	241827004	JAOC	04-DEC-2009 21:57	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
075f7501.d	241827005	JAOC	04-DEC-2009 22:08	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/120409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	241827006	JAOC	04-DEC-2009 22:19	927953	10-668	1.0	LANL	UPLOAD BOTH, USE HIGHER
077f7701.d	241838002	JAOC	04-DEC-2009 22:30	927953	10-670	1.0	LANL	UPLOAD BOTH, USE HIGHER
078f7801.d	241900001	JAOC	04-DEC-2009 22:41	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
079f7901.d	241900002	JAOC	04-DEC-2009 22:52	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
080f8001.d	241900003	JAOC	04-DEC-2009 23:03	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
081f8101.d	WAR091119-60 08	JAOC	04-DEC-2009 23:14		120409	1.0		PASSES BOTH COLUMNS
082f8201.d	WAR090916-99 09	JAOC	04-DEC-2009 23:26		120409	1.0		CLEAN
083f8301.d	241900004	JAOC	04-DEC-2009 23:37	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
084f8401.d	241900006	JAOC	04-DEC-2009 23:48	927953	10-688	1.0	LANL	UPLOAD BOTH, USE HIGHER
085f8501.d	241903002	JAOC	04-DEC-2009 23:59	927953	10-690	5.0	LANL	UPLOAD BOTH, USE HIGHER
086f8601.d	241907001	JAOC	05-DEC-2009 00:10	927953	10-692	1.0	LANL	UPLOAD BOTH, USE HIGHER
087f8701.d	241907002	JAOC	05-DEC-2009 00:21	927953	10-692	1.0	LANL	UPLOAD BOTH, USE HIGHER
088f8801.d	241911001	JAOC	05-DEC-2009 00:32	927953	10-694	1.0	LANL	UPLOAD BOTH, USE HIGHER
089f8901.d	1201984181	JAOC	05-DEC-2009 00:43	927953	10-694	1.0	QC A	UPLOAD BOTH, USE HIGHER

090f9001.d	1201984182	JAOC	05-DEC-2009 00:55	927953	10-694		1.0	QC A	UPLOAD BOTH, USE HIGHER
091f9101.d	241911002	JAOC	05-DEC-2009 01:06	927953	10-694		1.0	LANL	UPLOAD BOTH, USE HIGHER
092f9201.d	WAR091119-60 09	JAOC	05-DEC-2009 01:17		120409		1.0		PASSES BOTH COLUMNS
093f9301.d	WAR090916-99 10	JAOC	05-DEC-2009 01:28		120409		1.0		CLEAN

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/089b8901.d
Lab Smp Id: 1201984181 Client Smp ID: WST49-10-5432MS
Inj Date : 05-DEC-2009 00:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984181|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 89 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.077	2.077	0.000	15978556	135.183	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	11724476	107.919	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	2565077	602.406	20.3	80.00- 120.00	100.00
3.186	3.185	0.001	2267683	658.314	22.2	61.42- 101.42	88.41
3.336	3.336	0.000	1256029	634.523	21.4	27.15- 67.15	48.97
3.365	3.365	0.000	1288685	625.195	21.0	28.91- 68.91	50.24
3.523	3.524	-0.001	1783806	647.675	21.8	47.18- 87.18	69.54

Average of Peak Concentrations = 21.3

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	3930398	712.979	24.0	80.00- 120.00	100.00
4.571	4.570	0.001	4998630	700.877	23.6	106.73- 146.73	127.18
4.681	4.682	-0.001	3264150	689.896	23.2	63.73- 103.73	83.05
4.879	4.880	-0.001	3881897	669.217	22.5	78.70- 118.70	98.77
5.505	5.505	0.000	6056414	669.907	22.5	133.18- 173.18	154.09
			Average of Peak Concentrations =		23.2		

Data File: /chem/ecd2a.i/120409.b/089b8901.d
Date : 05-DEC-2009 00:43
Client ID: WST49-10-5432MS
Sample Info: |120198418111|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

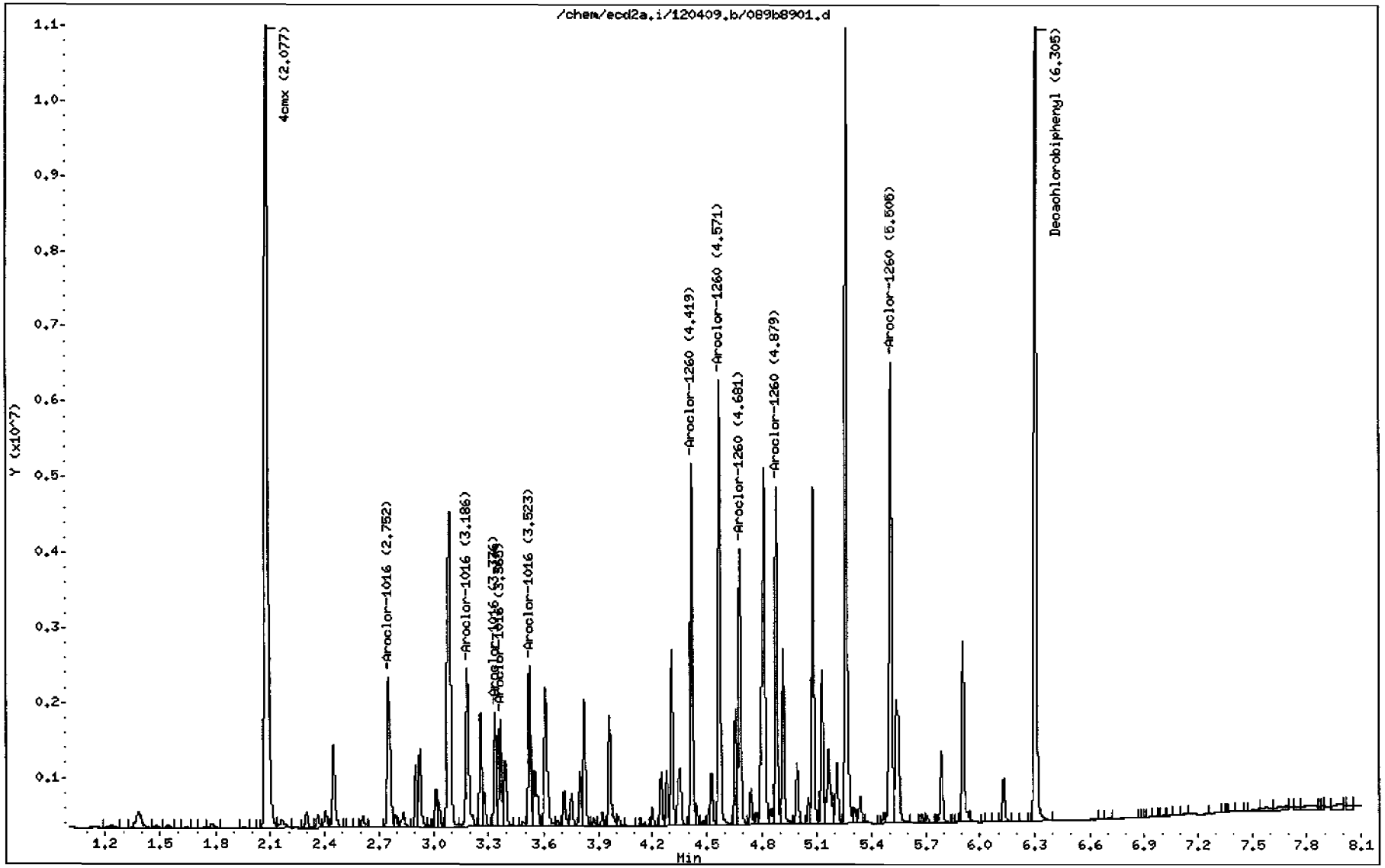

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/089f8901.d
Lab Smp Id: 1201984181 Client Smp ID: WST49-10-5432MS
Inj Date : 05-DEC-2009 00:43
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984181|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 89 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.781	1.781	0.000	7244638	125.533	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	5823110	106.204	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.282	2.282	0.000	1228331	584.974	19.7	80.00- 120.00	100.00(M)
2.604	2.604	0.000	2691657	597.547	20.1	200.13- 240.13	207.09
2.695	2.695	0.000	1083526	595.275	20.0	67.04- 107.04	83.36
2.830	2.830	0.000	551253	590.913	19.9	22.75- 62.75	42.41
2.981	2.980	0.001	844782	612.994	20.6	47.01- 87.01	90.28
			Average of Peak Concentrations =		20.1		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.019	0.000	2814596	692.092	23.3	80.00- 120.00	100.00
4.290	4.290	0.000	1706030	674.769	22.7	40.62- 80.62	60.61
4.456	4.456	0.000	1745924	675.876	22.8	41.94- 81.94	62.03
4.668	4.668	0.000	4108778	680.700	22.9	125.52- 165.52	145.98
4.857	4.857	0.000	1928854	662.393	22.3	48.68- 88.68	68.53
			Average of Peak Concentrations =		22.8		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/089f8901.d

Date : 05-DEC-2009 00:43

Client ID: WST49-10-5432MS

Sample Info: |120198418|1|

Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC

Column diameter: 0.25

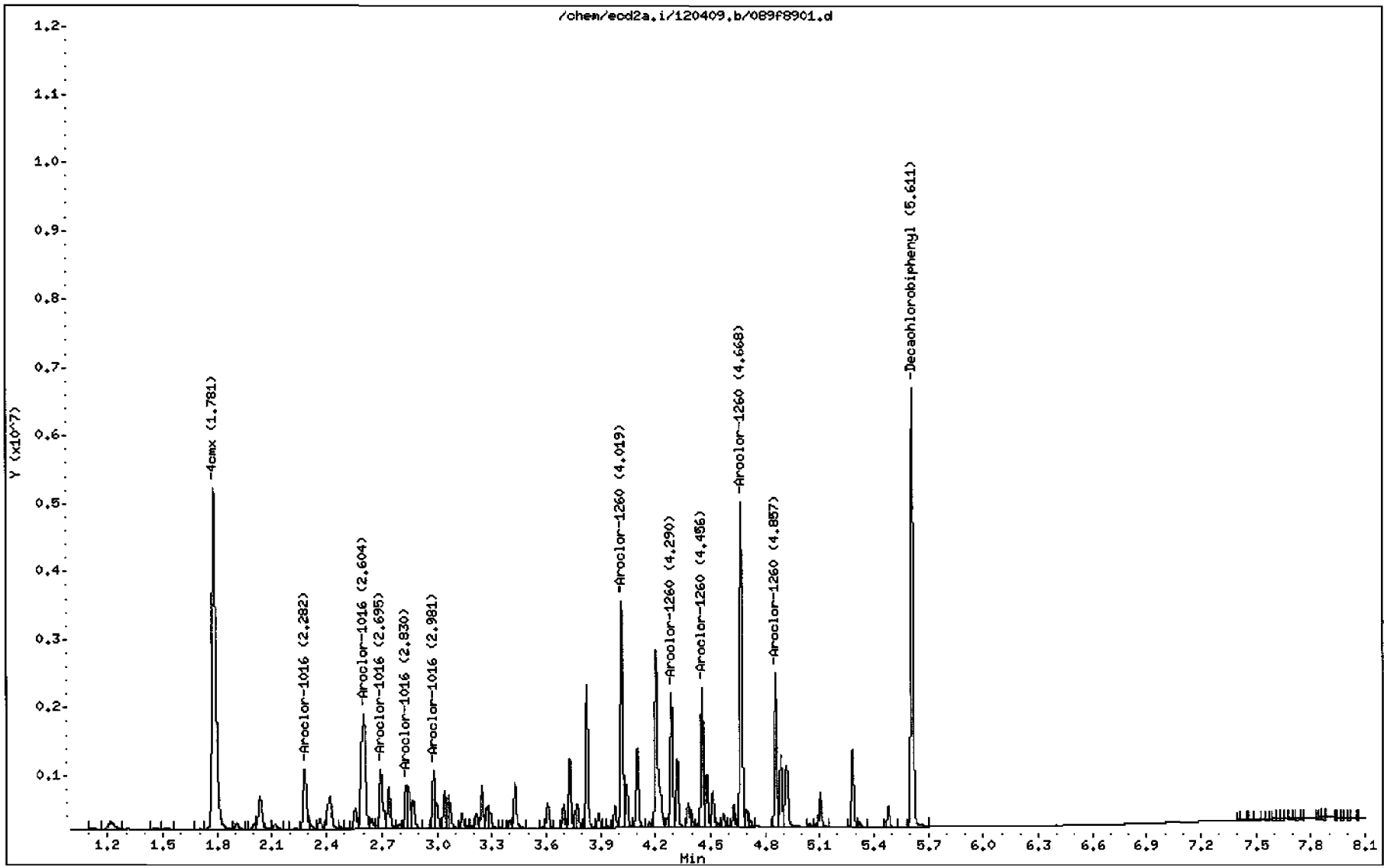

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/090b9001.d
Lab Smp Id: 1201984182 Client Smp ID: WST49-10-5432MSD
Inj Date : 05-DEC-2009 00:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984182|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-B-8082-111209A.m
Meth Date : 07-Dec-2009 08:26 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012b1201.d
Als bottle: 90 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.076	2.077	-0.001	15284426	129.310	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.305	6.305	0.000	12147721	111.815	3.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.752	2.752	0.000	2510644	589.623	19.9	80.00- 120.00	100.00
3.185	3.185	0.000	2196486	637.646	21.5	61.42- 101.42	87.49
3.336	3.336	0.000	1228634	620.683	20.9	27.15- 67.15	48.94
3.365	3.365	0.000	1144843	555.411	18.7	28.91- 68.91	45.60
3.523	3.524	-0.001	1734417	629.742	21.2	47.18- 87.18	69.08
Average of Peak Concentrations =					20.4		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.419	4.420	-0.001	3943402	715.338	24.1	80.00- 120.00	100.00
4.570	4.570	0.000	5047795	707.770	23.8	106.73- 146.73	128.01
4.681	4.682	-0.001	3308572	699.285	23.6	63.73- 103.73	83.90
4.880	4.880	0.000	3948546	680.707	22.9	78.70- 118.70	100.13
5.505	5.505	0.000	6140643	679.224	22.9	133.18- 173.18	155.72
			Average of Peak Concentrations =		23.5		

Data File: /chem/ecd2a.i/120409.b/090b9001.d
Date : 05-DEC-2009 00:55
Client ID: WST49-10-5432MSD
Sample Info: |1201984182|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

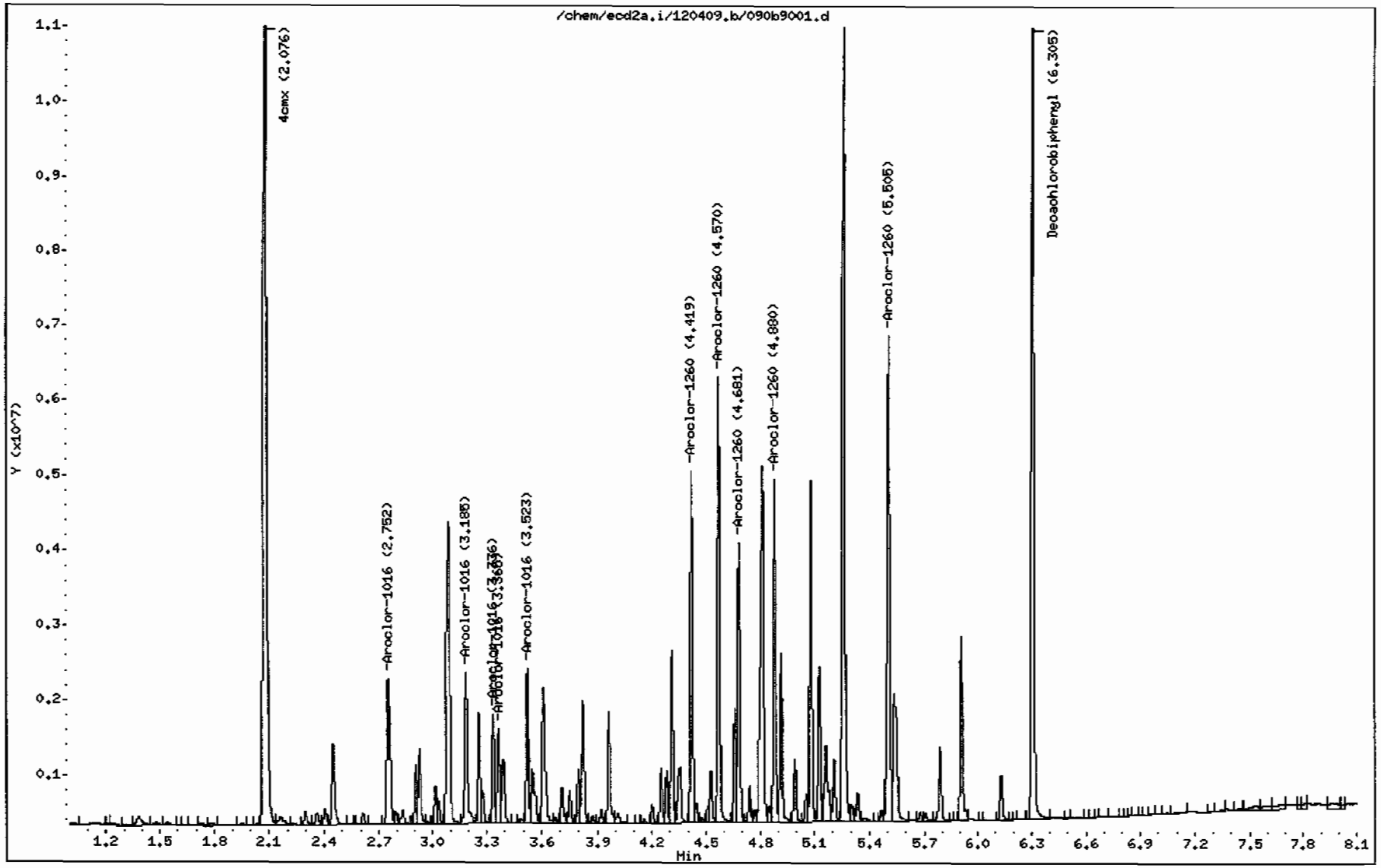

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/120409.b/090f9001.d
Lab Smp Id: 1201984182 Client Smp ID: WST49-10-5432MSD
Inj Date : 05-DEC-2009 00:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1201984182|1|
Misc Info : |ECD82P_1S|927953|SVAF|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd2a.i/120409.b/ECD2-F-8082-111209A.m
Meth Date : 07-Dec-2009 09:02 jen01212 Quant Type: ESTD
Cal Date : 02-DEC-2009 07:50 Cal File: 012f1201.d
Als bottle: 90 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-694.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	1.46490	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.780	1.781	-0.001	6988316	121.091	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.611	5.611	0.000	5781303	105.442	3.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.281	2.282	-0.001	1195422	569.302	19.2	80.00- 120.00	100.00(M)
2.603	2.604	-0.001	2609380	579.281	19.5	200.13- 240.13	207.11
2.694	2.695	-0.001	1048737	576.162	19.4	67.04- 107.04	83.24
2.830	2.830	0.000	531217	569.436	19.2	22.75- 62.75	42.16
2.980	2.980	0.000	828791	601.390	20.3	47.01- 87.01	92.46

Average of Peak Concentrations = 19.5

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.018	4.019	-0.001	2826618	695.048	23.4	80.00- 120.00	100.00
4.290	4.290	0.000	1718838	679.835	22.9	40.62- 80.62	60.81
4.455	4.456	-0.001	1764728	683.155	23.0	41.94- 81.94	62.43
4.667	4.668	-0.001	4178157	692.194	23.3	125.52- 165.52	147.81
4.856	4.857	-0.001	1968285	675.934	22.8	48.68- 88.68	69.63
			Average of Peak Concentrations =		23.1		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd2a.i/120409.b/090f9001.d
Date : 05-DEC-2009 00:55
Client ID: WST49-10-5432MSD
Sample Info: |120198418211|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i

Operator: JAOC
Column diameter: 0.25

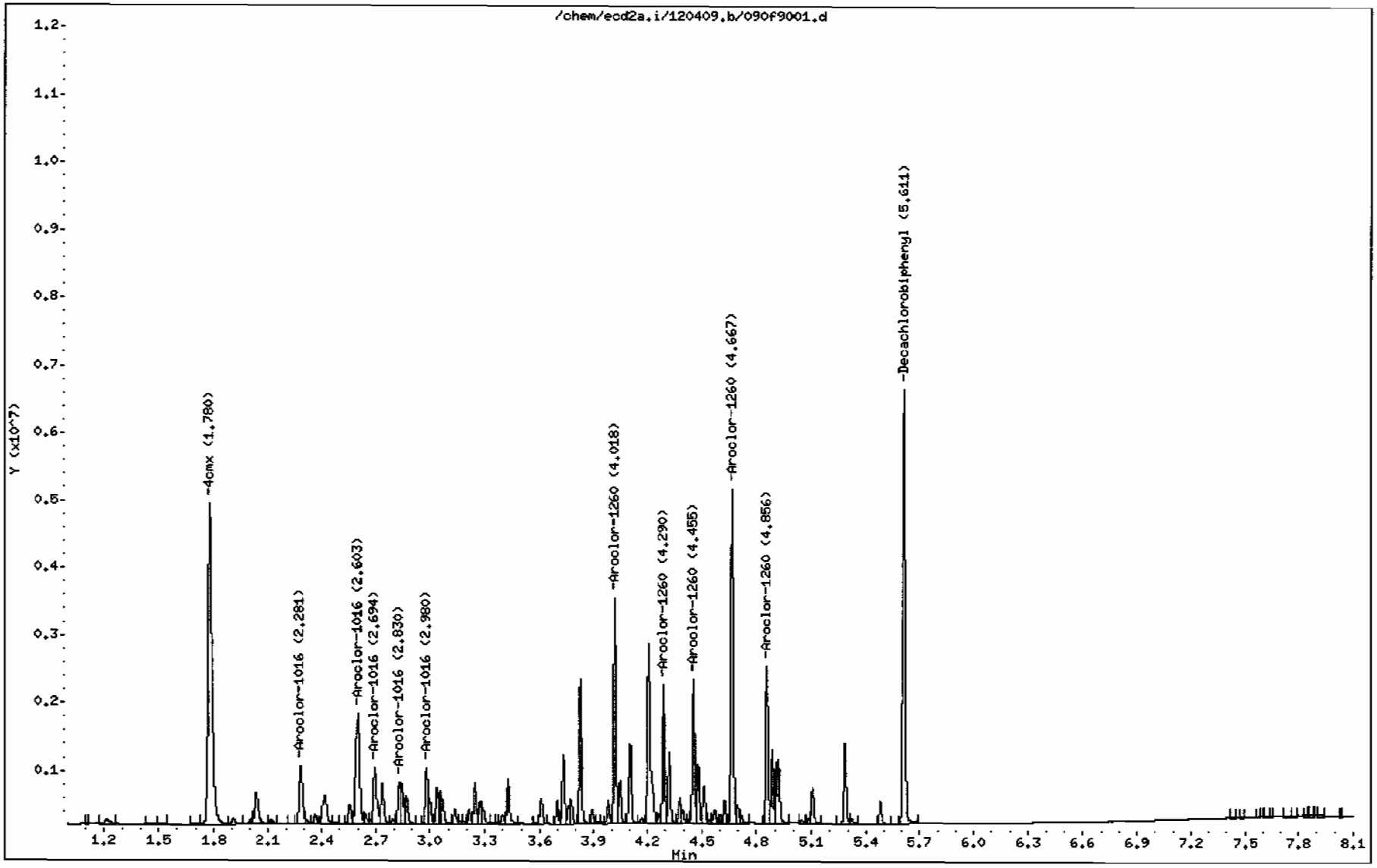

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 927948 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984179 MB	01–DEC–2009 20:14:33	30	H2SO4/KMn2		2	9	1	0.03333
1201984180 LCS	01–DEC–2009 20:14:33	30	H2SO4/KMn2		2	9	1	0.03333
241827001	01–DEC–2009 20:14:33	30.17	H2SO4/KMn2		2	9	1	0.03315
241827004	01–DEC–2009 20:14:33	30.14	H2SO4/KMn2		2	9	1	0.03318
241827005	01–DEC–2009 20:14:33	30.05	H2SO4/KMn2		2	9	1	0.03328
241827006	01–DEC–2009 20:14:33	30.14	H2SO4/KMn2		2	9	1	0.03318
241838002	01–DEC–2009 20:14:33	30.14	H2SO4/KMn2		2	9	1	0.03318
241900001	01–DEC–2009 20:14:33	30.05	H2SO4/KMn2		2	9	1	0.03328
241900002	01–DEC–2009 20:14:33	30.18	H2SO4/KMn2		2	9	1	0.03313
241900003	01–DEC–2009 20:14:33	30.14	H2SO4/KMn2		2	9	1	0.03318
241900004	01–DEC–2009 20:14:33	30.14	H2SO4/KMn2		2	9	1	0.03318
241900006	01–DEC–2009 20:14:33	30.12	H2SO4/KMn2		2	9	1	0.0332
241903002	01–DEC–2009 20:14:33	30.14	H2SO4/KMn2		2	9	1	0.03318
241907001	01–DEC–2009 20:14:33	30.01	H2SO4/KMn2		2	9	1	0.03332
241907002	01–DEC–2009 20:14:33	30.05	H2SO4/KMn2		2	9	1	0.03328
241911001	01–DEC–2009 20:14:33	30.12	H2SO4/KMn2		2	9	1	0.0332
1201984181 MS (241911001)	01–DEC–2009 20:14:33	30.15	H2SO4/KMn2		2	9	1	0.03317
1201984182 MSD (241911001)	01–DEC–2009 20:14:33	30.12	H2SO4/KMn2		2	9	1	0.0332
241911002	01–DEC–2009 20:14:33	30.04	H2SO4/KMn2		2	9	1	0.03329

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984180	PCB Laboratory Control	WE091120–07	1	mL
MS	1201984181	PCB Laboratory Control	WE091120–07	1	mL
MSD	1201984182	PCB Laboratory Control	WE091120–07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091117–15	1	mL
REGNT	All	1:1 sulfuric acid	1133264a	5	mL
REGNT	All	Hexane	1233925–B2	150	mL
REGNT	All	Acetone	1233927	150	mL
REGNT	All	5% Potassium Permanganate	B1202457–F	5	mL
SOURC	All	SODIUM SULFATE	1236563	30	g

Comments:

Clean up Date: 12/01/09

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–037

HERBICIDE ANALYSIS

Herbicide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure:	**Analysis of Chlorophenoxy Acid Herbicides by ECD**
Analytical Method:	SW846 8151A
Prep Method:	SW846 8151A
Analytical Batch Number:	927988
Prep Batch Number:	927987

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8151A:

Sample ID	Client ID
241838002	WST03-10-2134
1201984261	Method Blank (MB)
1201984264	Laboratory Control Sample (LCS)
1201984265	Laboratory Control Sample Duplicate (LCSD)
1201984262	241907002(WST49-10-6923) Matrix Spike (MS)
1201984263	241907002(WST49-10-6923) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-011 REV# 18.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 21.7.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

Several target analytes failed acceptance criteria with a positive bias in the standards bracketing the samples in this SDG. The positive bias for the analytical data is a result of instrument response increasing after the initial calibration. These target analytes were not detected in the samples; therefore, the non-compliance has no adverse effects on the data.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this had no adverse effects on the data as the surrogate recovery was well within the acceptance range in the sample in this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD between the LCS and LCSD met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-692) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD were not within the acceptance limits for 2,4,5-T due to low spike recovery in the MS. .

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Report (NCR) Documentation

Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration

Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this Herbicide fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-HERB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD6A.I_1	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD6A.I_2	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whitlock Date: 12-17-2009

Roadmap for LANL 10-670 HERB

This roadmap was analyzed by reb01393 on 12-07-2009, 14:29.
This roadmap was reviewed by jos00786 on 12-07-2009, 15:42.
This roadmap was packaged by yml on 12-16-2009, 11:55.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120409a.b/037f3701.d	241838002	sample	05-DEC-2009	05:41	10-670.sub	WST03-10-2134	1.00000	927988	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120409a.b/037b3701.d	241838002	sample	05-DEC-2009	05:41	10-670.sub	WST03-10-2134	1.00000	927988	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120409a.b/032f3201c.d	1201984261	mb	05-DEC-2009	03:18	10-670.sub	HBLK01	1.00000	927988	
☐	N	/chem/ecd6a.i/120409a.b/033f3301c.d	1201984264	lcs	05-DEC-2009	03:47	10-670.sub	HBLK01LCS	1.00000	927988	
☐	N	/chem/ecd6a.i/120409a.b/034f3401c.d	1201984265	lcsd	05-DEC-2009	04:15	10-670.sub	HBLK01LCSD	1.00000	927988	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/120409a.b/032b3201c.d	1201984261	mb	05-DEC-2009	03:18	10-670.sub	HBLK01	1.00000	927988	
☐	N	/chem/ecd6a.i/120409a.b/033b3301c.d	1201984264	lcs	05-DEC-2009	03:47	10-670.sub	HBLK01LCS	1.00000	927988	
☐	N	/chem/ecd6a.i/120409a.b/034b3401c.d	1201984265	lcsd	05-DEC-2009	04:15	10-670.sub	HBLK01LCSD	1.00000	927988	

SAMPLE DATA SUMMARY

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–670	**Date Collected:**	11/23/2009 12:00	**Matrix:**	R
Lab Sample ID:	241838002	**Date Received:**	11/25/2009 09:10	**%Moisture:**	6.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	927988	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/05/2009 05:41	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/01/2009 20:01	**Aliquot:**	50.12 g	**Final Volume:**	10 mL
Data File:	037f3701.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	037b3701.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon	U	107	ug/kg	21.4	107	1
1918–00–9	Dicamba	U	5.35	ug/kg	1.78	5.35	1
93–65–2	MCPP	U	1070	ug/kg	214	1070	1
94–74–6	MCPA	U	1070	ug/kg	246	1070	1
120–36–5	Dichlorprop	U	5.35	ug/kg	1.78	5.35	1
94–75–7	2,4–D	U	5.35	ug/kg	1.78	5.35	1
93–72–1	2,4,5–TP	U	5.35	ug/kg	1.78	5.35	1
93–76–5	2,4,5–T	U	5.35	ug/kg	1.78	5.35	1
94–82–6	2,4–DB	U	5.35	ug/kg	1.78	5.35	1
88–85–7	Dinoseb	U	5.35	ug/kg	1.78	5.35	1

QUALITY CONTROL SUMMARY

Herbicide

Surrogate Recovery Report

SDG Number: 10–670

Matrix Type: SOLID

CAP Column (1) : Rtx–CLP **CAP Column (2) : Rtx–CLPII**

Sample ID	Client ID	DCAA 1 %REC #	DCAA 2 %REC #
1201984261	MB for batch 927987	57	59
1201984264	LCS for batch 927987	91	87
1201984265	LCSD for batch 927987	104	103
241838002	WST03–10–2134	76	75

Surrogate	Acceptance Limits
DCAA = 2,4–Dichlorophenylacetic acid	(30%–126%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670
Client ID: LCS for batch 927987
Lab Sample ID: 1201984264
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 12/05/2009 03:47
Dilution: 1
Prep Batch ID: 927987
Batch ID: 927988

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-99-0	LCS	Dalapon	400	0.0	196	49	30-96
1918-00-9	LCS	Dicamba	40.0	0.0	34.7	87	51-105
93-65-2	LCS	MCPP	4000	0.0	3790	95	49-127
94-74-6	LCS	MCPA	4000	0.0	3440	86	47-125
120-36-5	LCS	Dichlorprop	40.0	0.0	37.8	94	56-109
94-75-7	LCS	2,4-D	40.0	0.0	36.1	90	39-125
93-72-1	LCS	2,4,5-TP	40.0	0.0	39.9	100	48-120
93-76-5	LCS	2,4,5-T	40.0	0.0	37.5	94	42-127
94-82-6	LCS	2,4-DB	40.0	0.0	40.2	100	56-128
88-85-7	LCS	Dinoseb	40.0	0.0	34.5	86	30-121

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–670
Client ID: LCSD for batch 927987
Lab Sample ID: 1201984265
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample Duplicate
Matrix: SOIL
Analysis Date: 12/05/2009 04:15
Dilution: 1
Prep Batch ID: 927987
Batch ID: 927988

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75–99–0	LCSD Dalapon	400	0.0	224	56	30–96	13	0–25
1918–00–9	LCSD Dicamba	40.0	0.0	39.2	98	51–105	12	0–25
93–65–2	LCSD MCPP	4000	0.0	4400	110	49–127	15	0–25
94–74–6	LCSD MCPA	4000	0.0	3950	99	47–125	14	0–25
120–36–5	LCSD Dichlorprop	40.0	0.0	43.3	108	56–109	14	0–25
94–75–7	LCSD 2,4–D	40.0	0.0	41.4	104	39–125	14	0–25
93–72–1	LCSD 2,4,5–TP	40.0	0.0	43.5	109	48–120	9	0–25
93–76–5	LCSD 2,4,5–T	40.0	0.0	43.4	108	42–127	15	0–25
94–82–6	LCSD 2,4–DB	40.0	0.0	47.8	120	56–128	17	0–25
88–85–7	LCSD Dinoseb	40.0	0.0	34.6	87	30–121	0	0–25

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-692
Client ID: WST49-10-6923MS
Lab Sample ID: 1201984262
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: .9
Analysis Date: 12/05/2009 08:30
Prep Batch ID: 927987
Batch ID: 927988

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-99-0	MS	Dalapon	402	0.00	U	198	49	30-94
1918-00-9	MS	Dicamba	40.2	0.00	U	30.7	76	30-100
93-65-2	MS	MCPP	4020	0.00	U	3870	96	30-111
94-74-6	MS	MCPA	4020	0.00	U	3540	88	30-109
120-36-5	MS	Dichlorprop	40.2	0.00	U	37.0	92	30-111
94-75-7	MS	2,4-D	40.2	0.00	U	34.3	85	30-148
93-72-1	MS	2,4,5-TP	40.2	0.00	U	34.3	85	30-118
93-76-5	MS	2,4,5-T	40.2	0.00	U	29.1	72	30-123
94-82-6	MS	2,4-DB	40.2	0.00	U	44.0	109	30-119
88-85-7	MS	Dinoseb	40.2	0.00	U	39.0	97	30-140

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10–692
Client ID: WST49–10–6923MSD
Lab Sample ID: 1201984263
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: S
%Moisture: .9
Analysis Date: 12/05/2009 08:58
Prep Batch ID: 927987
Batch ID: 927988
Dilution: 1

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75–99–0	MSD Dalapon	403	0.00	U	212	53	30–94	7	0–25
1918–00–9	MSD Dicamba	40.3	0.00	U	37.4	93	30–100	20	0–25
93–65–2	MSD MCPP	4030	0.00	U	4390	109	30–111	13	0–25
94–74–6	MSD MCPA	4030	0.00	U	4070	101	30–109	14	0–25
120–36–5	MSD Dichlorprop	40.3	0.00	U	39.6	98	30–111	7	0–25
94–75–7	MSD 2,4–D	40.3	0.00	U	41.7	104	30–148	20	0–25
93–72–1	MSD 2,4,5–TP	40.3	0.00	U	41.1	102	30–118	18	0–25
93–76–5	MSD 2,4,5–T	40.3	0.00	U	39.9	99	30–123	31 *	0–25
94–82–6	MSD 2,4–DB	40.3	0.00	U	44.9	112	30–119	2	0–25
88–85–7	MSD Dinoseb	40.3	0.00	U	39.7	99	30–140	2	0–25

Method Blank Summary

SDG Number:	10–670	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 927987	Instrument ID:	ECD6A.I_2 ECD6A.I_1	Data File:	032b3201.d 032f3201.d
Lab Sample ID:	1201984261				
Column:	Rtx–CLPII Rtx–CLP	Prep Date:	12/01/2009 20:01	Analyzed:	12/05/09 03:18
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 927987	1201984264	033f3301.d 033b3301.d	12/05/09	0347
02 LCSD for batch 927987	1201984265	034f3401.d 034b3401.d	12/05/09	0415
03 WST03–10–2134	241838002	037f3701.d 037b3701.d	12/05/09	0541

SAMPLE
DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-670**	**Date Collected:**	**11/23/2009 12:00**	**Matrix:**	**R**
Lab Sample ID:	**241838002**	**Date Received:**	**11/25/2009 09:10**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**WST03-10-2134**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**927988**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 05:41**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:01**	**Aliquot:**	**50.12 g**	**Final Volume:**	**10 mL**
Data File:	**037f3701.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	037b3701.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75-99-0	Dalapon	U	107	ug/kg	21.4	107	1
1918-00-9	Dicamba	U	5.35	ug/kg	1.78	5.35	1
93-65-2	MCPP	U	1070	ug/kg	214	1070	1
94-74-6	MCPA	U	1070	ug/kg	246	1070	1
120-36-5	Dichlorprop	U	5.35	ug/kg	1.78	5.35	1
94-75-7	2,4-D	U	5.35	ug/kg	1.78	5.35	1
93-72-1	2,4,5-TP	U	5.35	ug/kg	1.78	5.35	1
93-76-5	2,4,5-T	U	5.35	ug/kg	1.78	5.35	1
94-82-6	2,4-DB	U	5.35	ug/kg	1.78	5.35	1
88-85-7	Dinoseb	U	5.35	ug/kg	1.78	5.35	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/037f3701.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 05-DEC-2009 05:41
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241838002|1|
Misc Info : |ECD51H_1S|927988|SVHF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 06-Dec-2009 12:13 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.12000	Weight of sample extracted (g)
M	6.76260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.719	10.703	0.016	38131988	379.959	81.3

Data File: /chem/ecd6a.i/120409a.b/037f3701.d

Page 1

Date : 05-DEC-2009 05:41

Client ID: WST03-10-2134

Instrument: ecd6a.i

Sample Info: |241838002|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLP

Column diameter: 0.25

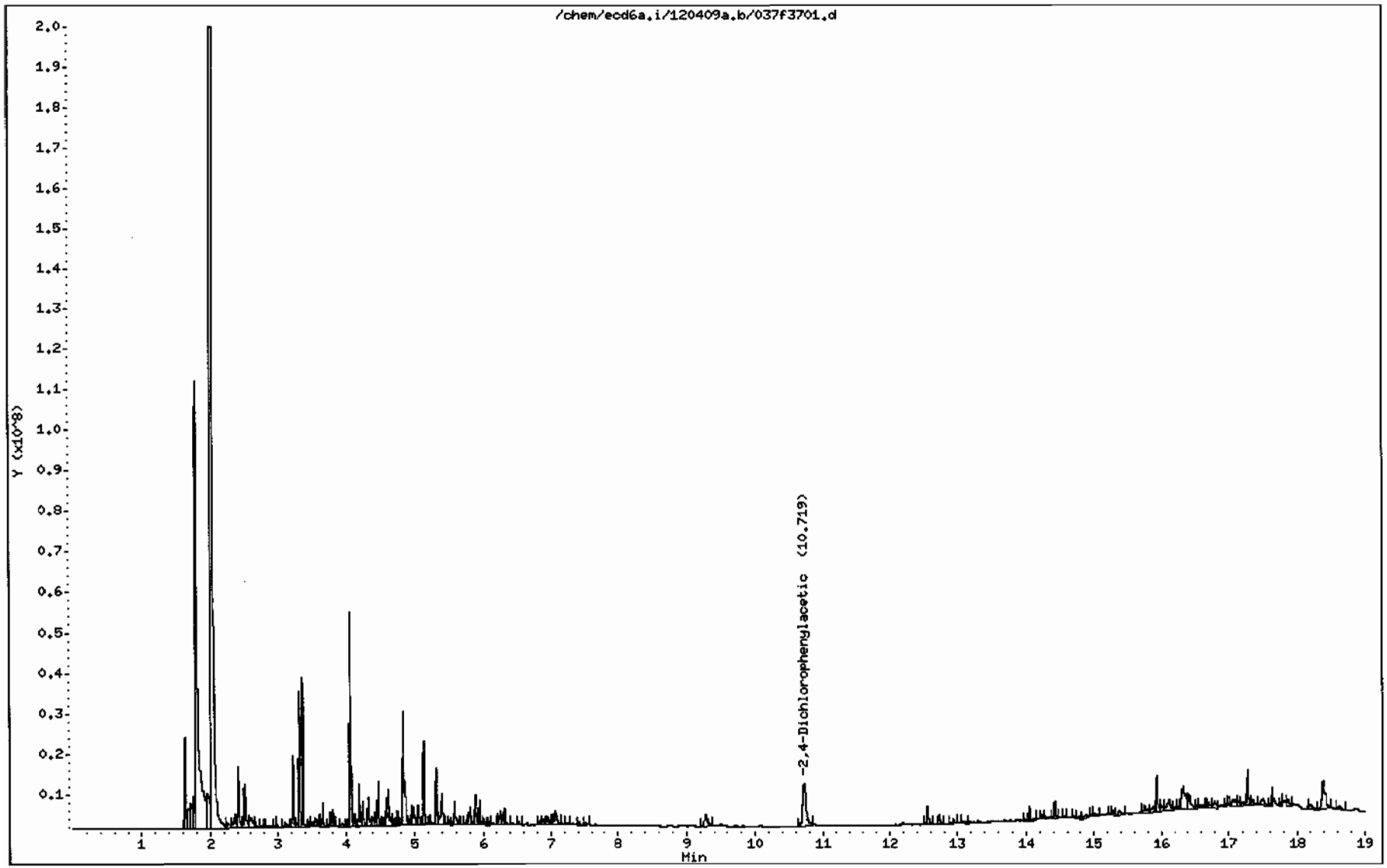

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/037b3701.d
Lab Smp Id: 241838002 Client Smp ID: WST03-10-2134
Inj Date : 05-DEC-2009 05:41
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241838002|1|
Misc Info : |ECD51H_1S|927988|SVHF|LANL|SOIL|WST03-10-2134|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 06-Dec-2009 12:16 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.12000	Weight of sample extracted (g)
M	6.76260	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.721	11.716	0.005	40952258	374.113	80.0

Data File: /chem/ecd6a.i/120409a.b/037b3701.d
Date : 05-DEC-2009 05:41
Client ID: WST03-10-2134
Sample Info: |2418380021|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

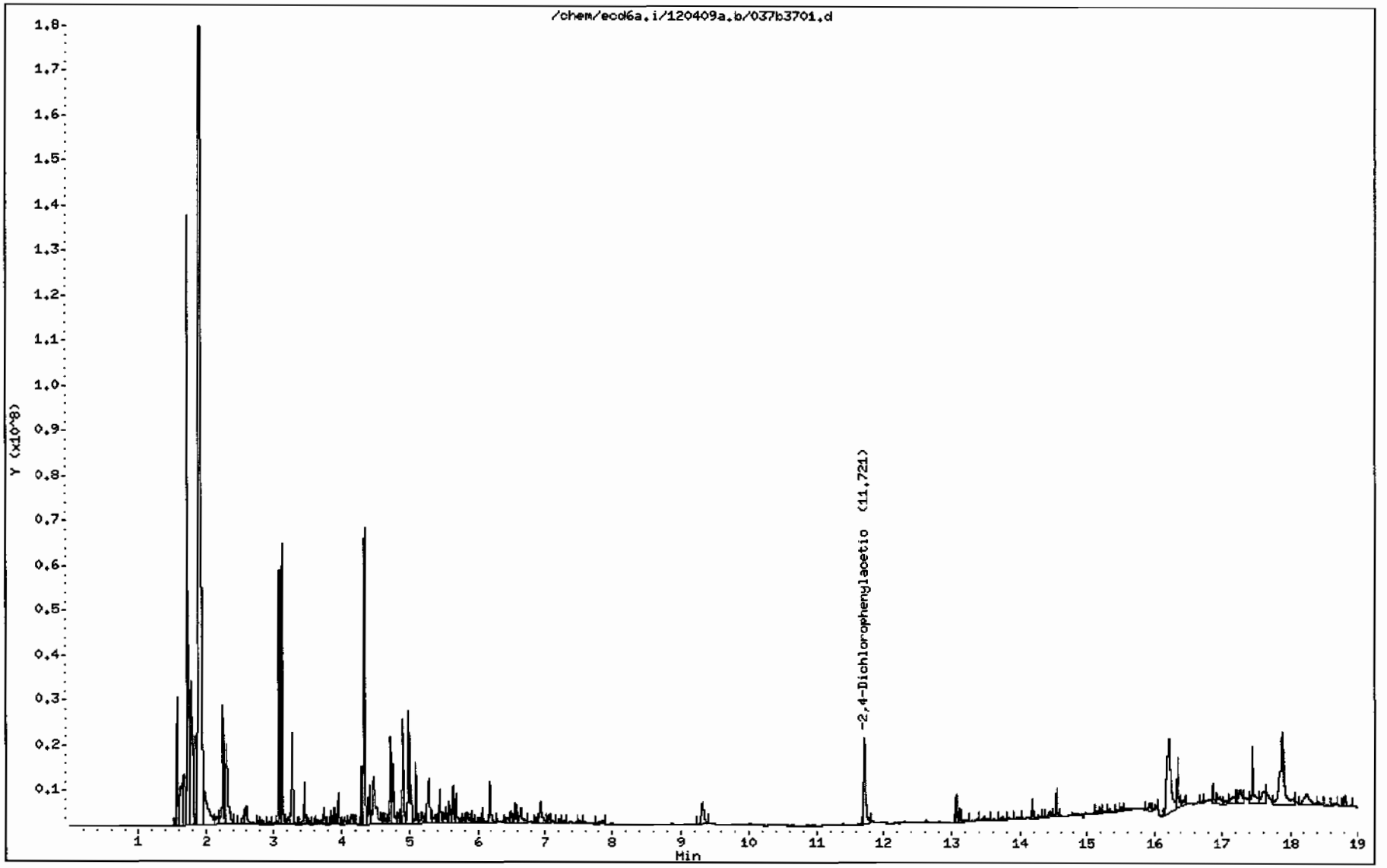

STANDARDS DATA

Report Date: 06-Dec-2009 14:14

Calibration History

Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 04-DEC-2009 16:29

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
04-DEC-2009 13:39	all	/chem/ecd6a.i/120409a.b/003f0301.d
Cal Level: 2 , Cal Amount: 50.00000		
04-DEC-2009 14:07	all	/chem/ecd6a.i/120409a.b/004f0401.d
Cal Level: 3 , Cal Amount: 100.00000		
04-DEC-2009 14:36	all	/chem/ecd6a.i/120409a.b/005f0501.d
Cal Level: 4 , Cal Amount: 150.00000		
04-DEC-2009 15:04	all	/chem/ecd6a.i/120409a.b/006f0601.d
Cal Level: 5 , Cal Amount: 200.00000		
04-DEC-2009 15:33	all	/chem/ecd6a.i/120409a.b/007f0701.d
Cal Level: 6 , Cal Amount: 300.00000		
04-DEC-2009 16:01	all	/chem/ecd6a.i/120409a.b/008f0801.d
Cal Level: 7 , Cal Amount: 400.00000		
04-DEC-2009 16:29	all	/chem/ecd6a.i/120409a.b/009f0901.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
05-DEC-2009 10:24	all	/chem/ecd6a.i/120409a.b/047f4701.d
Ccal Level: 5 , Ccal Amount: 200		
05-DEC-2009 06:37	all	/chem/ecd6a.i/120409a.b/039f3901.d

Ccal Level: 5 , Ccal Amount: 200		
05-DEC-2009 02:22	all	/chem/ecd6a.i/120409a.b/030f3001.d
Ccal Level: 5 , Ccal Amount: 200		
04-DEC-2009 21:37	all	/chem/ecd6a.i/120409a.b/020f2001.d
Ccal Level: 5 , Ccal Amount: 200		
04-DEC-2009 16:56	all	/chem/ecd6a.i/120409a.b/010f1001.d
Ccal Level: 5 , Ccal Amount: 200		
04-DEC-2009 15:33	all	/chem/ecd6a.i/120409a.b/007f0701.d

Report Date: 06-Dec-2009 14:14

Calibration History

Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 04-DEC-2009 16:29

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
04-DEC-2009 13:39	all	/chem/ecd6a.i/120409a.b/003b0301.d
Cal Level: 2 , Cal Amount: 50.00000		
04-DEC-2009 14:07	all	/chem/ecd6a.i/120409a.b/004b0401.d
Cal Level: 3 , Cal Amount: 100.00000		
04-DEC-2009 14:36	all	/chem/ecd6a.i/120409a.b/005b0501.d
Cal Level: 4 , Cal Amount: 150.00000		
04-DEC-2009 15:04	all	/chem/ecd6a.i/120409a.b/006b0601.d
Cal Level: 5 , Cal Amount: 200.00000		
04-DEC-2009 15:33	all	/chem/ecd6a.i/120409a.b/007b0701.d
Cal Level: 6 , Cal Amount: 300.00000		
04-DEC-2009 16:01	all	/chem/ecd6a.i/120409a.b/008b0801.d
Cal Level: 7 , Cal Amount: 400.00000		
04-DEC-2009 16:29	all	/chem/ecd6a.i/120409a.b/009b0901.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
05-DEC-2009 02:22	all	/chem/ecd6a.i/120409a.b/030b3001.d
Ccal Level: 5 , Ccal Amount: 200		
04-DEC-2009 21:37	all	/chem/ecd6a.i/120409a.b/020b2001.d
Ccal Level: 5 , Ccal Amount: 200		
05-DEC-2009 10:24	all	/chem/ecd6a.i/120409a.b/047b4701.d

Ccal Level: 5 , Ccal Amount: 200		
05-DEC-2009 06:37	all	/chem/ecd6a.i/120409a.b/039b3901.d
Ccal Level: 5 , Ccal Amount: 200		
04-DEC-2009 16:56	all	/chem/ecd6a.i/120409a.b/010b1001.d
Ccal Level: 5 , Ccal Amount: 200		
04-DEC-2009 15:33	all	/chem/ecd6a.i/120409a.b/007b0701.d

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COMPOUND LISTING

Method file : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Quant Method : ESTD Target Version : 3.50
Last Update : 06-Dec-2009 12:13 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	72858.000000
Initial:End Threshold	36429.000000
Initial:Area Threshold	728580.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	20.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000

	Compound	RT	RT Window	RF
	1 Dalapon	4.005	3.975-4.035	8.285e+04
$	2 2,4-Dichlorophenylacetic a	10.703	10.643-10.763	1.004e+05
	3 Dicamba	11.220	11.160-11.280	3.712e+05
	4 MCPP	11.732	11.672-11.792	3.053e+02
	5 MCPA	12.001	11.941-12.061	5.647e+02
	6 Dichlorprop	12.514	12.454-12.574	9.415e+04
	7 2,4-D	12.779	12.719-12.839	9.782e+04
	43 Pentachlorophenol	12.927	12.907-12.947	1.057e+06
	8 2,4,5-TP	13.514	13.484-13.544	4.762e+05
	9 2,4,5-T	13.718	13.678-13.758	4.195e+05
	10 2,4-DB	14.069	14.029-14.109	4.651e+04
	11 Dinoseb	14.640	14.610-14.670	2.719e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Quant Method : ESTD Target Version : 3.50
Last Update : 06-Dec-2009 12:16 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	105244.000000
Initial:End Threshold	52622.000000
Initial:Area Threshold	1052440.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	25.000000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

	Compound	RT	RT Window	RF
	1 Dalapon	3.968	3.938-3.998	1.051e+05
$	2 2,4-Dichlorophenylacetic a	11.716	11.656-11.776	1.095e+05
	3 MCPP	12.247	12.187-12.307	3.353e+02
	4 Dicamba	12.001	11.941-12.061	4.014e+05
	5 MCPA	12.552	12.492-12.612	6.387e+02
	6 Dichlorprop	12.927	12.867-12.987	1.071e+05
	7 2,4-D	13.218	13.158-13.278	1.297e+05
	43 Pentachlorophenol	13.488	13.468-13.508	1.341e+06
	8 2,4,5-TP	13.827	13.797-13.857	5.464e+05
	9 2,4,5-T	14.067	14.037-14.097	4.697e+05
	10 Dinoseb	14.520	14.490-14.550	2.584e+05
	11 2,4-DB	14.357	14.317-14.397	6.075e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 04-DEC-2009 16:29
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Cal Date : 06-Dec-2009 12:13 reb01393
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120409a.b/003f0301.d
Level 2: /chem/ecd6a.i/120409a.b/004f0401.d
Level 3: /chem/ecd6a.i/120409a.b/005f0501.d
Level 4: /chem/ecd6a.i/120409a.b/006f0601.d
Level 5: /chem/ecd6a.i/120409a.b/007f0701.d
Level 6: /chem/ecd6a.i/120409a.b/008f0801.d
Level 7: /chem/ecd6a.i/120409a.b/009f0901.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
1 Dalapon	+++++	83201	74370	90321	79817	84634		
	84735						82846	6.473
3 Dicamba	371109	386079	367228	379800	372163	361490		
	360622						371213	2.504
4 MCPP	+++++	268	285	313	317	320		
	329						305	7.762
5 MCPA	+++++	582	550	569	564	563		
	560						565	1.895
6 Dichlorprop	98167	100542	91572	95248	93095	89908		
	90502						94148	4.276
7 2,4-D	83684	98088	92872	103987	100717	101956		
	103412						97817	7.457
43 Pentachlorophenol	1083294	1135614	1041430	1076475	1043395	1016294		
	1004917						1057346	4.238

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 04-DEC-2009 16:29
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Cal Date : 06-Dec-2009 12:13 reb01393
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	400.000 Level 7	RRF	% RSD
8 2,4,5-TP	480376	501631	466363	487981	476442	463278	457153	476175	3.242
9 2,4,5-T	393399	417002	395831	442691	431673	427911	428053	419509	4.436
10 2,4-DB	34601	42549	42740	50635	51732	52140	51146	46506	14.403
11 Dinoseb	278297	294515	265321	267033	267905	267383	262871	271904	4.077
$ 2 2,4-Dichlorophenylacetic acid	97684	105901	100816	104862	100636	96703	95905	100358	3.894

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 04-DEC-2009 16:29
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Cal Date : 06-Dec-2009 12:16 reb01393
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120409a.b/003b0301.d
Level 2: /chem/ecd6a.i/120409a.b/004b0401.d
Level 3: /chem/ecd6a.i/120409a.b/005b0501.d
Level 4: /chem/ecd6a.i/120409a.b/006b0601.d
Level 5: /chem/ecd6a.i/120409a.b/007b0701.d
Level 6: /chem/ecd6a.i/120409a.b/008b0801.d
Level 7: /chem/ecd6a.i/120409a.b/009b0901.d

Compound	25.000 Level 1 / 400.000 Level 7	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
1 Dalapon	+++++	98680	90400	114475	101623	111994		
	113639						105135	9.297
3 MCPP	+++++	277	306	337	351	362		
	380						335	11.407
4 Dicamba	372745	394725	381973	412198	411035	412572		
	424334						401369	4.665
5 MCPA	+++++	627	606	649	644	645		
	661						639	3.048
6 Dichlorprop	98850	111839	103949	108146	108370	107855		
	110621						107090	4.108
7 2,4-D	117890	128674	123517	135141	132019	132547		
	138433						129746	5.433
43 Pentachlorophenol	1229886	1345674	1271719	1369401	1363222	1382162		
	1426542						1341229	5.046

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 04-DEC-2009 16:29
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Cal Date : 06-Dec-2009 12:16 reb01393
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
8 2,4,5-TP	517635	540587	521110	551972	559238	560331		
	574262						546448	3.858
9 2,4,5-T	416267	442975	423930	502392	484498	501373		
	516337						469682	8.748
10 Dinoseb	182918	270511	240631	257206	269731	290555		
	297568						258446	14.867
11 2,4-DB	61541	63709	57368	59470	60244	60322		
	62583						60748	3.444
$ 2 2,4-Dichlorophenylacetic acid	106785	110497	106650	111197	108969	108428		
	113728						109465	2.319

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD6A Calibration Date: 12/04/09 Time: 1656

Lab File ID: 010F1001 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 1339 1629

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
Dalapon	82846.352	78697.170	0.005	-5.0	15.0
MCPA	564.701	544.151	0.005	-3.6	15.0
2,4-D	97816.533	98941.488	0.005	1.2	15.0
2,4,5-T	419508.56	430255.10	0.005	2.6	15.0
Dinoseb	271903.55	288476.92	0.005	6.1	15.0
MCPP	305.287	309.213	0.01	1.3	15.0
Dichlorprop	94147.599	89883.771	0.01	-4.5	15.0
2,4,5-TP	476174.95	469702.23	0.01	-1.4	15.0
Dicamba	371212.97	365887.18	0.01	-1.4	15.0
2,4-DB	46506.156	48559.152	0.01	4.4	15.0
Pentachlorophenol	1057345.7	1022962.9	0.01	-3.2	15.0
2,4-Dichlorophenylacetic aci	100358.18	102360.38	0.01	2.0	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD6A Calibration Date: 12/04/09 Time: 1656

Lab File ID: 010B1001 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 1339 1629

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
Dalapon	105135.20	100216.36	0.005	-4.7	15.0
MCPA	638.686	609.326	0.005	-4.6	15.0
2,4-D	129745.75	130342.18	0.005	0.4	15.0
2,4,5-T	469681.66	479505.92	0.005	2.1	15.0
Dinoseb	258445.92	266451.12	0.005	3.1	15.0
MCPP	335.322	343.135	0.01	2.3	15.0
Dichlorprop	107090.05	101079.40	0.01	-5.6	15.0
2,4,5-TP	546447.89	595349.33	0.01	8.9	15.0
Dicamba	401368.71	401927.84	0.01	0.1	15.0
2,4-DB	60748.075	58698.655	0.01	-3.4	15.0
Pentachlorophenol	1341229.4	1290614.4	0.01	-3.8	15.0
2,4-Dichlorophenylacetic aci	109464.97	106648.02	0.01	-2.6	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD6A Calibration Date: 12/05/09 Time: 0222

Lab File ID: 030F3001 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 1339 1629

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	82846.352	89825.138	0.005	8.4	15.0	
MCPA	564.701	619.616	0.005	9.7	15.0	
2,4-D	97816.533	113292.15	0.005	15.8	15.0	<-
2,4,5-T	419508.56	478207.65	0.005	14.0	15.0	
Dinoseb	271903.55	301958.43	0.005	11.0	15.0	
MCPP	305.287	358.140	0.01	17.3	15.0	<-
Dichlorprop	94147.599	102771.62	0.01	9.2	15.0	
2,4,5-TP	476174.95	530374.78	0.01	11.4	15.0	
Dicamba	371212.97	412844.08	0.01	11.2	15.0	
2,4-DB	46506.156	53112.105	0.01	14.2	15.0	
Pentachlorophenol	1057345.7	1161835.1	0.01	9.9	15.0	
2,4-Dichlorophenylacetic aci	100358.18	113563.72	0.01	13.2	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD6A Calibration Date: 12/05/09 Time: 0222

Lab File ID: 030B3001 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 1339 1629

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	105135.20	116118.25	0.005	10.4	15.0	
MCPA	638.686	704.934	0.005	10.4	15.0	
2,4-D	129745.75	149976.67	0.005	15.6	15.0	<-
2,4,5-T	469681.66	536240.02	0.005	14.2	15.0	
Dinoseb	258445.92	334644.82	0.005	29.5	15.0	<-
MCPP	335.322	405.991	0.01	21.1	15.0	<-
Dichlorprop	107090.05	119134.66	0.01	11.2	15.0	
2,4,5-TP	546447.89	618145.69	0.01	13.1	15.0	
Dicamba	401368.71	460508.89	0.01	14.7	15.0	
2,4-DB	60748.075	67886.425	0.01	11.8	15.0	
Pentachlorophenol	1341229.4	1539050.7	0.01	14.7	15.0	
2,4-Dichlorophenylacetic aci	109464.97	125173.01	0.01	14.3	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD6A Calibration Date: 12/05/09 Time: 0637

Lab File ID: 039F3901 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 1339 1629

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	82846.352	76722.110	0.005	-7.4	15.0	
MCPA	564.701	665.208	0.005	17.8	15.0	<-
2,4-D	97816.533	121628.55	0.005	24.3	15.0	<-
2,4,5-T	419508.56	465917.66	0.005	11.1	15.0	
Dinoseb	271903.55	307551.61	0.005	13.1	15.0	
MCPP	305.287	402.600	0.01	31.9	15.0	<-
Dichlorprop	94147.599	113823.35	0.01	20.9	15.0	<-
2,4,5-TP	476174.95	546712.31	0.01	14.8	15.0	
Dicamba	371212.97	434992.09	0.01	17.2	15.0	<-
2,4-DB	46506.156	58240.500	0.01	25.2	15.0	<-
Pentachlorophenol	1057345.7	1197092.0	0.01	13.2	15.0	
2,4-Dichlorophenylacetic aci	100358.18	118274.31	0.01	17.8	15.0	<-

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

Instrument ID: ECD6A Calibration Date: 12/05/09 Time: 0637

Lab File ID: 039B3901 Init. Calib. Date(s): 12/04/09 12/04/09

Heated Purge: (Y/N) N Init. Calib. Times: 1339 1629

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
Dalapon	105135.20	97613.662	0.005	-7.2	15.0	
MCPA	638.686	764.174	0.005	19.6	15.0	<-
2,4-D	129745.75	157271.22	0.005	21.2	15.0	<-
2,4,5-T	469681.66	497028.66	0.005	5.8	15.0	
Dinoseb	258445.92	396903.30	0.005	53.6	15.0	<-
MCPP	335.322	473.292	0.01	41.1	15.0	<-
Dichlorprop	107090.05	133684.65	0.01	24.8	15.0	<-
2,4,5-TP	546447.89	644905.05	0.01	18.0	15.0	<-
Dicamba	401368.71	497138.82	0.01	23.9	15.0	<-
2,4-DB	60748.075	73990.745	0.01	21.8	15.0	<-
Pentachlorophenol	1341229.4	1563545.9	0.01	16.6	15.0	<-
2,4-Dichlorophenylacetic aci	109464.97	134172.20	0.01	22.6	15.0	<-

FORM VII HERBICIDE

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/010f1001.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 04-DEC-2009 16:56
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 06-Dec-2009 11:26 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dalapon					CAS #: 75-99-0
	4.005	4.005	0.000	157394341	2000.00	1900
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
	10.703	10.703	0.000	51180189	500.000	510
	3 Dicamba					CAS #: 6597-78-0
	11.220	11.220	0.000	73177435	200.000	197
	4 MCPP					CAS #: 7085-19-0
	11.732	11.732	0.000	6184260	20000.0	20200
	5 MCPA					CAS #: 94-74-6
	12.001	12.001	0.000	10883019	20000.0	19300
	6 Dichlorprop					CAS #: 120-36-5
	12.514	12.514	0.000	17976754	200.000	191
	7 2,4-D					CAS #: 94-75-7
	12.779	12.779	0.000	19788297	200.000	202
	43 Pentachlorophenol					CAS #: 87-86-5
	12.927	12.927	0.000	204592573	200.000	193
	8 2,4,5-TP					CAS #: 93-72-1
	13.514	13.514	0.000	93940445	200.000	197

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
9 2,4,5-T					CAS #: 93-76-5
13.718	13.718	0.000	86051020	200.000	205
10 2,4-DB					CAS #: 94-82-6
14.069	14.069	0.000	9711830	200.000	209
11 Dinoseb					CAS #: 88-85-7
14.640	14.640	0.000	57695384	200.000	212

Data File: /chem/ecd6a.i/120409a.b/010f1001.d
Date : 04-DEC-2009 16:56
Client ID: HSTD01
Sample Info: IWHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

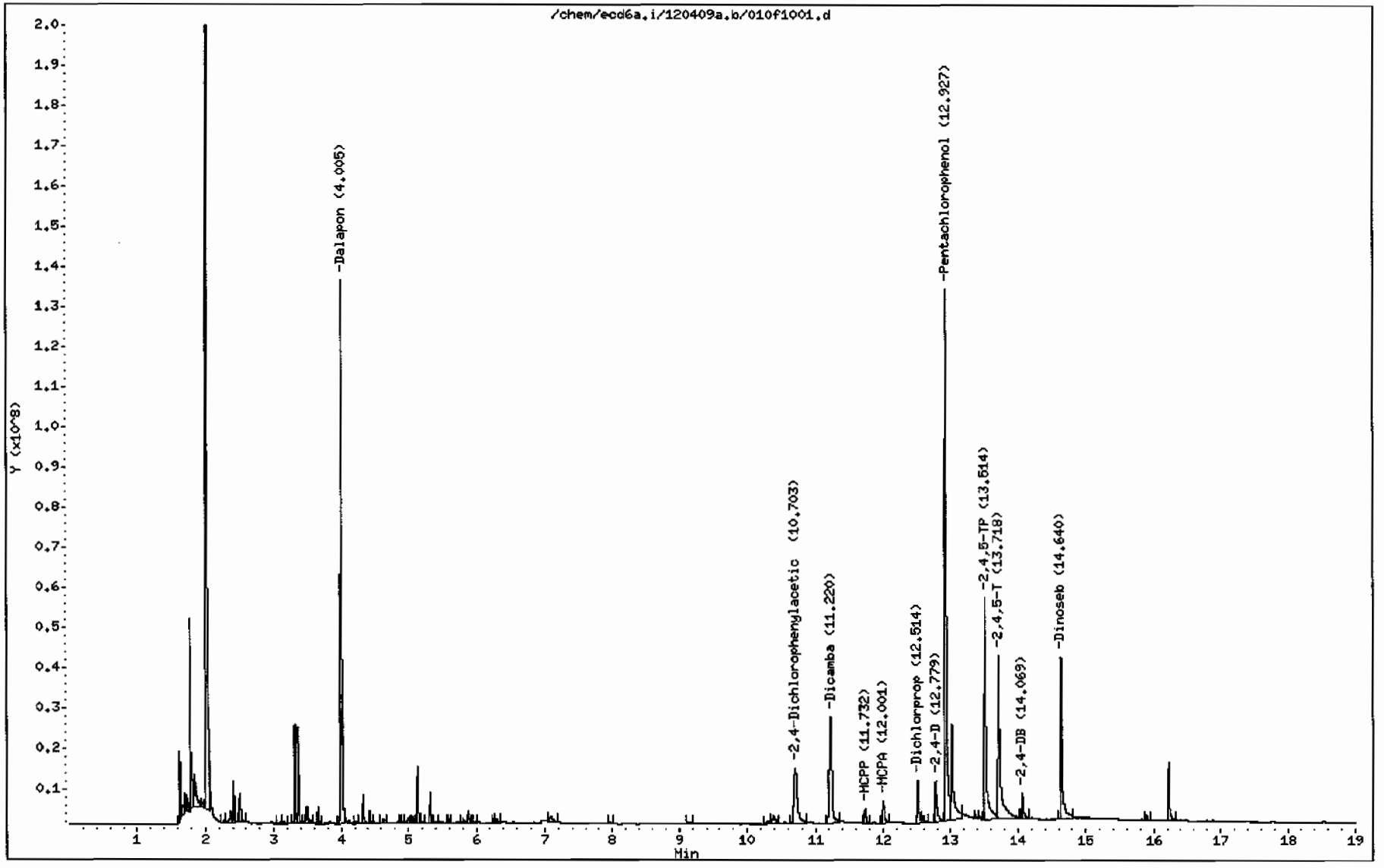

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/010b1001.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 04-DEC-2009 16:56
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 06-Dec-2009 12:14 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dalapon					CAS #: 88-85-7
	3.968	3.968	0.000	200432729	2000.00	1910
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
	11.716	11.716	0.000	53324009	500.000	487
	3 MCPP					CAS #: 7085-19-0
	12.247	12.247	0.000	6862702	20000.0	20500
	4 Dicamba					CAS #: 6597-78-0
	12.001	12.001	0.000	80385567	200.000	200
	5 MCPA					CAS #: 94-74-6
	12.552	12.552	0.000	12186531	20000.0	19100
	6 Dichlorprop					CAS #: 120-36-5
	12.927	12.927	0.000	20215880	200.000	189
	7 2,4-D					CAS #: 94-75-7
	13.218	13.218	0.000	26068435	200.000	201
	43 Pentachlorophenol					CAS #: 87-86-5
	13.488	13.488	0.000	258122886	200.000	192
	8 2,4,5-TP					CAS #: 93-72-1
	13.827	13.827	0.000	119069867	200.000	218

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
9 2,4,5-T					CAS #: 93-76-5
14.067	14.067	0.000	95901184	200.000	204
10 Dinoseb					CAS #: 88-85-7
14.520	14.520	0.000	53290224	200.000	206
11 2,4-DB					CAS #: 94-82-6
14.357	14.357	0.000	11739731	200.000	193

Data File: /chem/ecd6a.i/120409a.b/010b1001.d
Date : 04-DEC-2009 16:56
Client ID: HSTD01
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

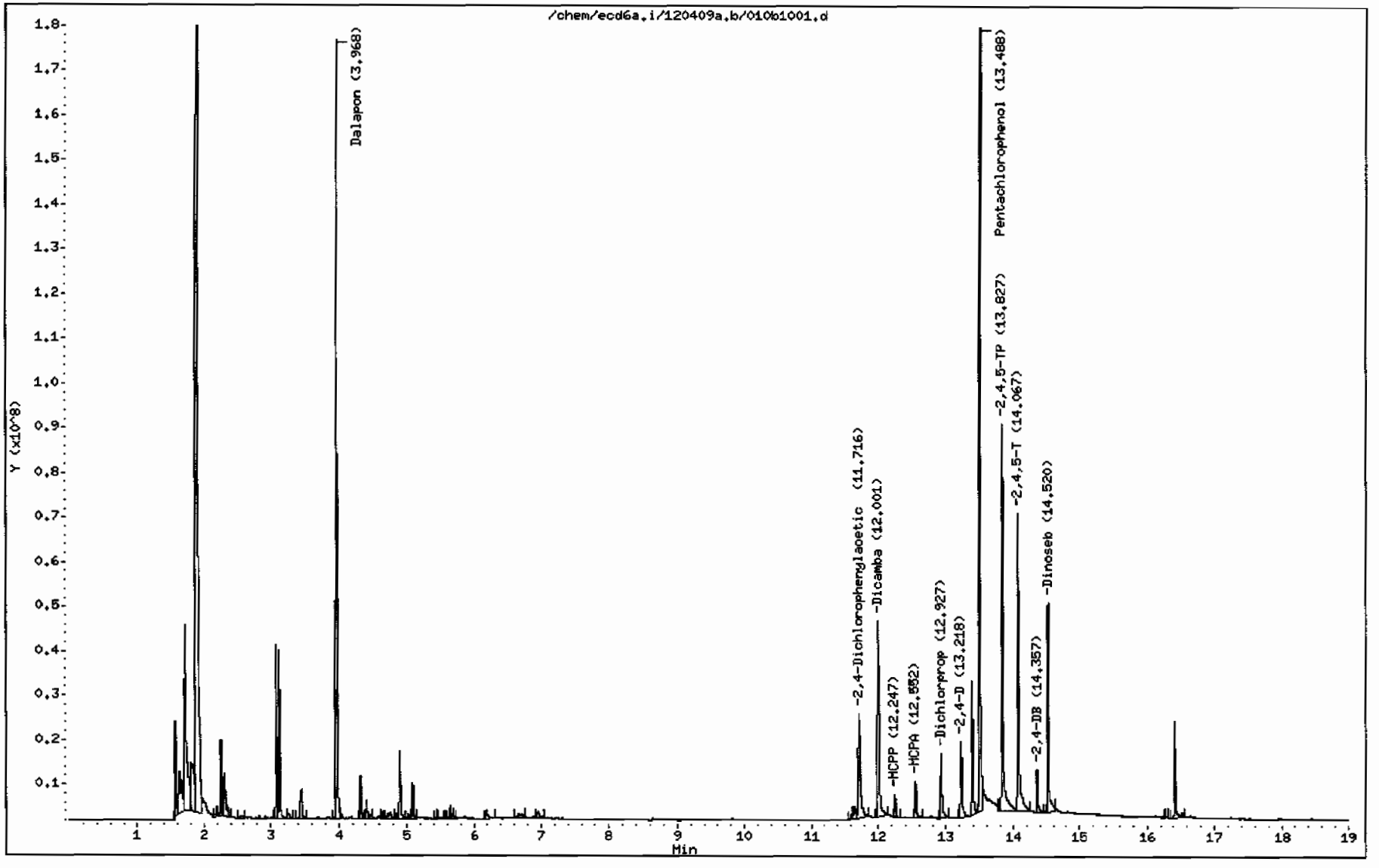

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/030f3001.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD03
Inj Date : 05-DEC-2009 02:22
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 06-Dec-2009 12:13 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
	1 Dalapon					CAS #: 75-99-0		
	4.005	4.005	0.000	179650277	2000.00	2170		
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9		
	10.704	10.703	0.001	56781862	500.000	566		
	3 Dicamba					CAS #: 6597-78-0		
	11.218	11.220	-0.002	82568815	200.000	222		
	4 MCPP					CAS #: 7085-19-0		
	11.731	11.732	-0.001	7162810	20000.0	23500		
	5 MCPA					CAS #: 94-74-6		
	12.002	12.001	0.001	12392323	20000.0	21900		
	6 Dichlorprop					CAS #: 120-36-5		
	12.514	12.514	0.000	20554324	200.000	218		
	7 2,4-D					CAS #: 94-75-7		
	12.778	12.779	-0.001	22658431	200.000	232		
	43 Pentachlorophenol					CAS #: 87-86-5		
	12.927	12.927	0.000	232367015	200.000	220		(M)
	8 2,4,5-TP					CAS #: 93-72-1		
	13.514	13.514	0.000	106074956	200.000	223		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.718	13.718	0.000	95641529	200.000	228		(M)
10 2,4-DB					CAS #: 94-82-6		
14.069	14.069	0.000	10622421	200.000	228		(M)
11 Dinoseb					CAS #: 88-85-7		
14.640	14.640	0.000	60391687	200.000	222		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/030f3001.d
Date : 05-DEC-2009 02:22
Client ID: HSTD03
Sample Info: |WHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

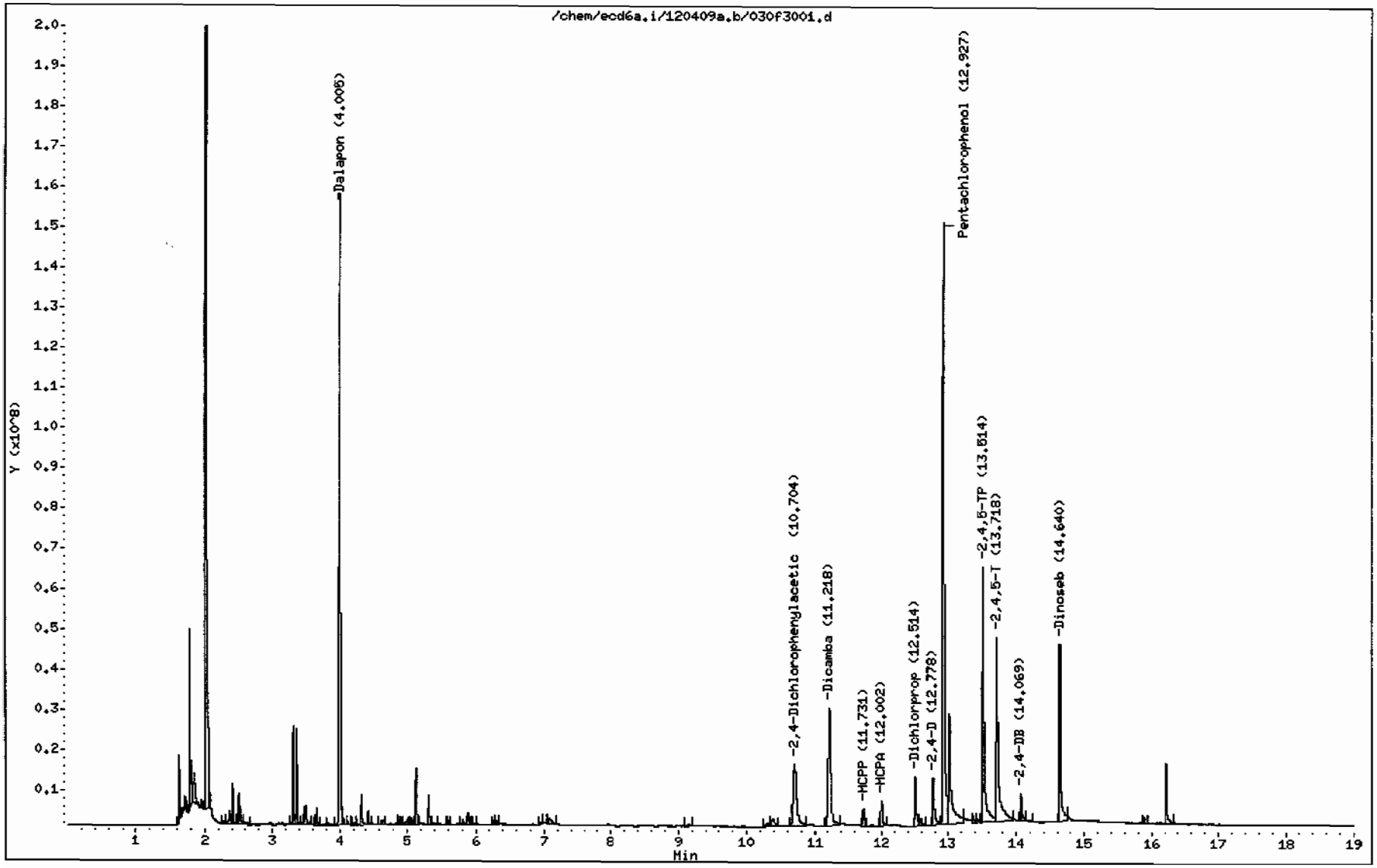

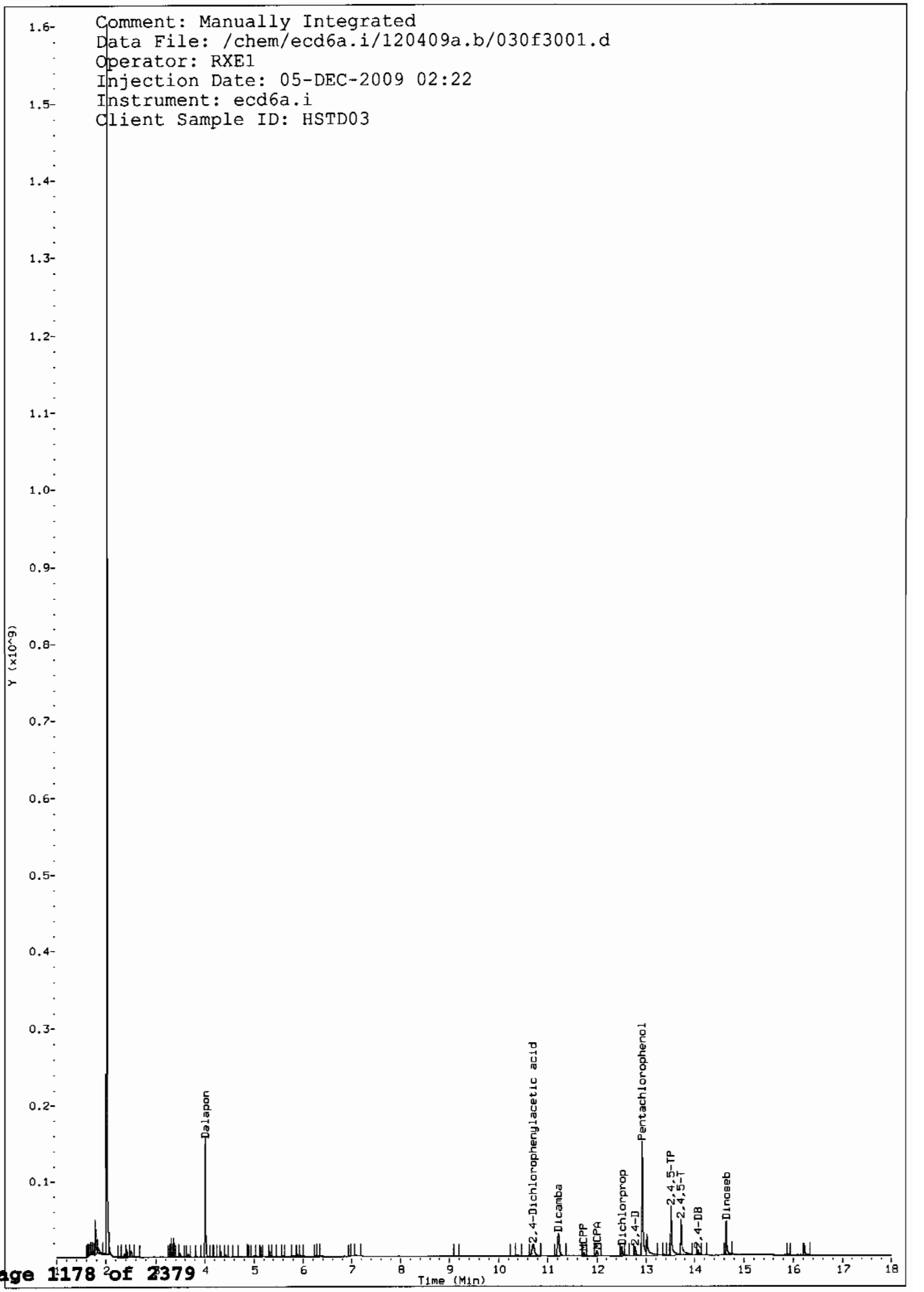
Comment: Manually Integrated
Data File: /chem/ecd6a.i/120409a.b/030f3001.d
Operator: RXE1
Injection Date: 05-DEC-2009 02:22
Instrument: ecd6a.i
Client Sample ID: HSTD03
Y (x10^9)
Time (Min)
Dalapon
2,4-Dichlorophenylacetic acid
Dicamba
MCPP
MCPA
Dichlorprop
2,4-D
Pentachlorophenol
2,4,5-TP
2,4,5-T
2,4-DB
Dinoseb

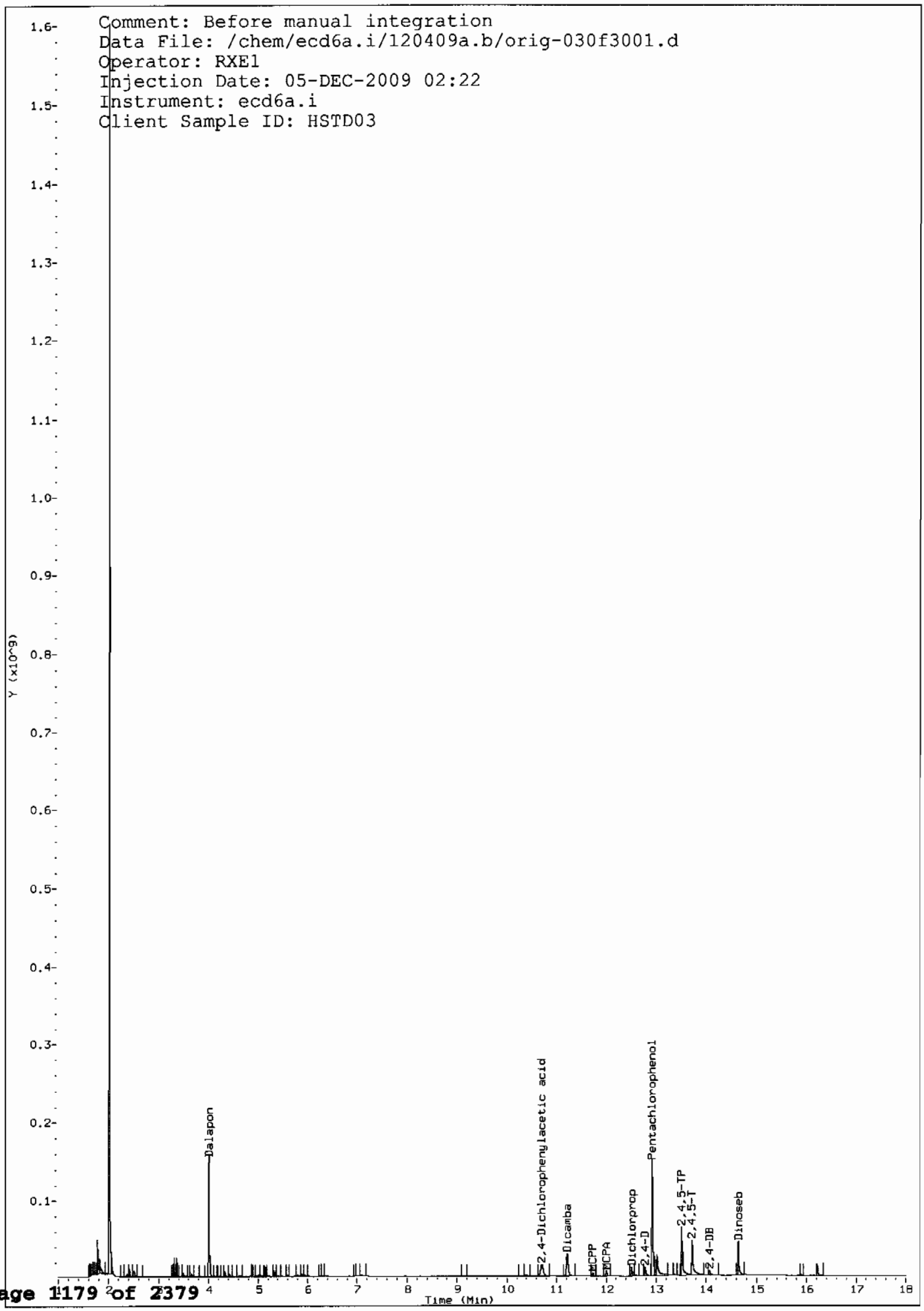
Comment: Before manual integration
Data File: /chem/ecd6a.i/120409a.b/orig-030f3001.d
Operator: RXE1
Injection Date: 05-DEC-2009 02:22
Instrument: ecd6a.i
Client Sample ID: HSTD03
Y (x10^9)
Dalapon
2,4-Dichlorophenylacetic acid
Dicamba
MCPP
MCPA
Dichlorprop
2,4-D
Pentachlorophenol
2,4,5-TP
2,4,5-T
2,4-DB
Dinoseb
Time (Min)

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/030b3001.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD03
Inj Date : 05-DEC-2009 02:22
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 06-Dec-2009 12:16 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 88-85-7	
	3.968	3.968	0.000	232236500	2000.00	2210	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	11.715	11.716	-0.001	62586504	500.000	572	
	3 MCPP					CAS #: 7085-19-0	
	12.246	12.247	-0.001	8119827	20000.0	24200	(M)
	4 Dicamba					CAS #: 6597-78-0	
	12.000	12.001	-0.001	92101777	200.000	229	
	5 MCPA					CAS #: 94-74-6	
	12.553	12.552	0.001	14098682	20000.0	22100	
	6 Dichlorprop					CAS #: 120-36-5	
	12.927	12.927	0.000	23826933	200.000	222	
	7 2,4-D					CAS #: 94-75-7	
	13.217	13.218	-0.001	29995335	200.000	231	(M)
	43 Pentachlorophenol					CAS #: 87-86-5	
	13.487	13.488	-0.001	307810142	200.000	229	(M)
	8 2,4,5-TP					CAS #: 93-72-1	
	13.826	13.827	-0.001	123629138	200.000	226	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.067	14.067	0.000	107248004	200.000	228		(M)
10 Dinoseb					CAS #: 88-85-7		
14.520	14.520	0.000	66928964	200.000	259		(M)
11 2,4-DB					CAS #: 94-82-6		
14.357	14.357	0.000	13577285	200.000	224		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/030b3001.d
Date : 05-DEC-2009 02:22
Client ID: WSTD03
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

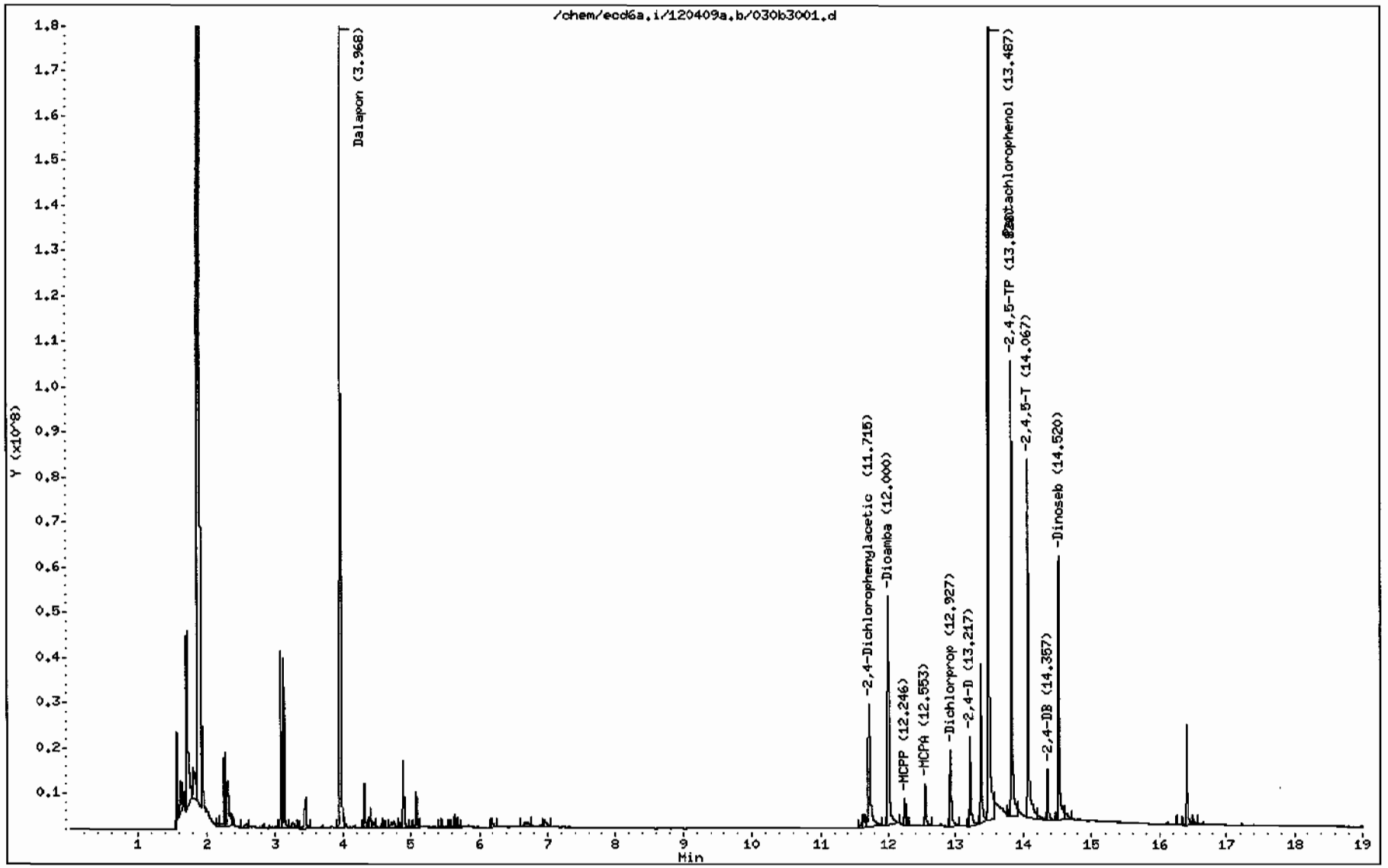

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120409a.b/030b3001.d
Operator: RXE1
Injection Date: 05-DEC-2009 02:22
Instrument: ecd6a.i
Client Sample ID: HSTD03

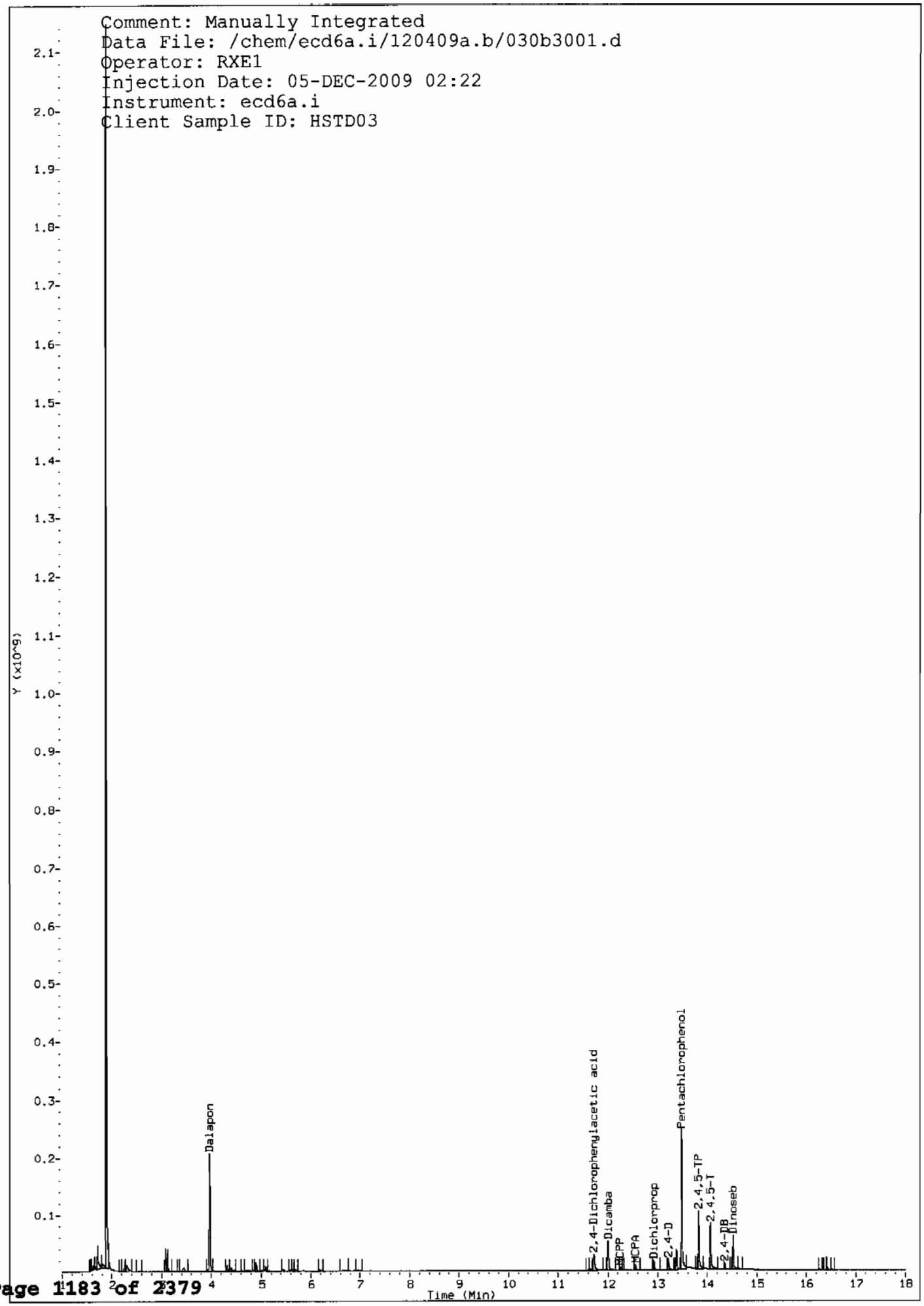

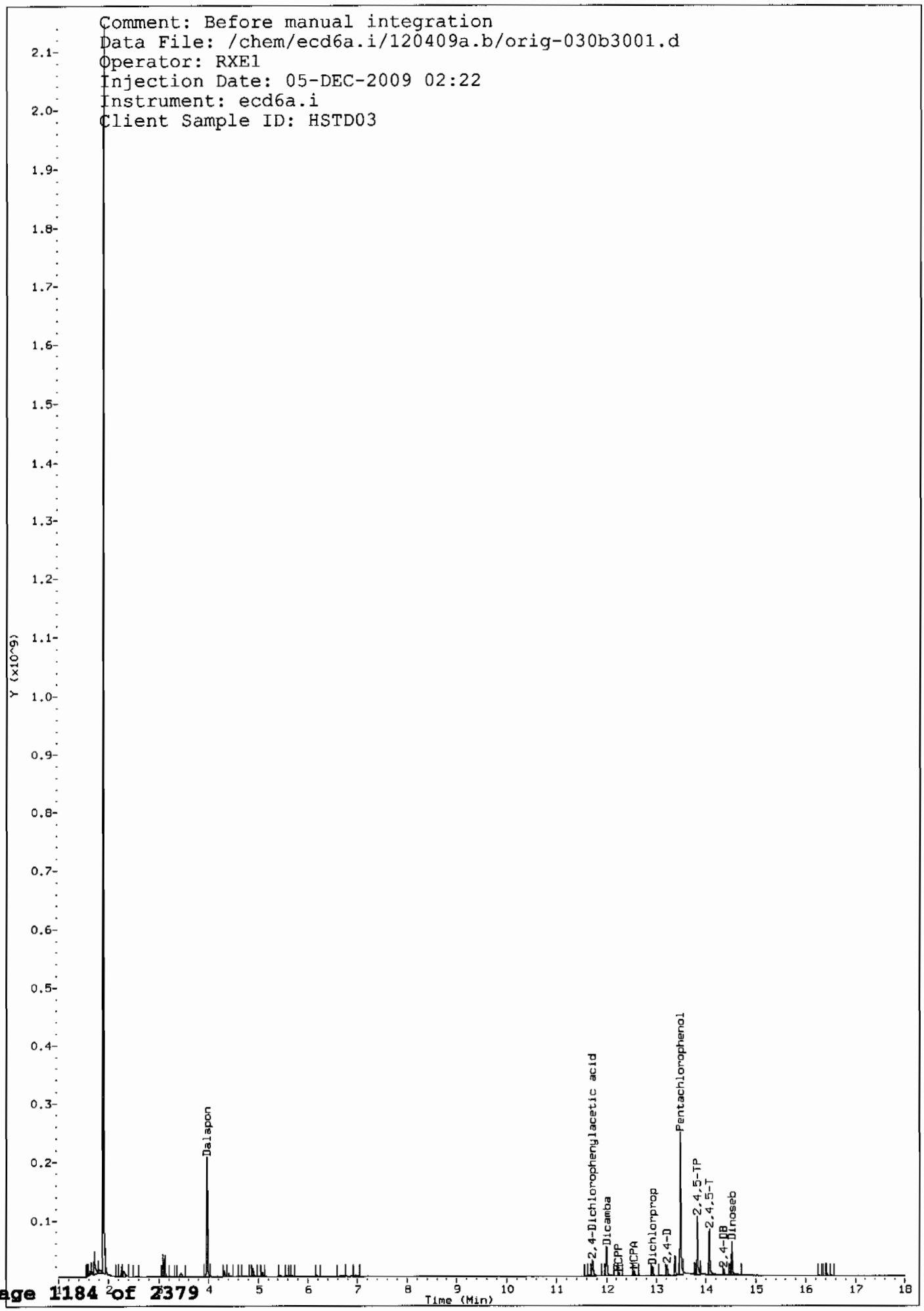
Comment: Before manual integration
Data File: /chem/ecd6a.i/120409a.b/orig-030b3001.d
Operator: RXE1
Injection Date: 05-DEC-2009 02:22
Instrument: ecd6a.i
Client Sample ID: HSTD03
Y (x10^-9)
Time (Min)
Dalapon
2,4-Dichlorophenylacetic acid
Dicamba
MCPP
MCPA
Dichlorprop
2,4-D
Pentachlorophenol
2,4,5-TP
2,4,5-T
2,4-DB
Dinoseb

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/039f3901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD04
Inj Date : 05-DEC-2009 06:37
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 06-Dec-2009 12:13 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 39 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
	1 Dalapon						CAS #: 75-99-0	
	4.001	4.005	-0.004	153444219	2000.00	1850		
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9	
	10.691	10.703	-0.012	59137155	500.000	589		
	3 Dicamba						CAS #: 6597-78-0	
	11.208	11.220	-0.012	86998417	200.000	234		
	4 MCPP						CAS #: 7085-19-0	
	11.726	11.732	-0.006	8052002	20000.0	26400		
	5 MCPA						CAS #: 94-74-6	
	11.997	12.001	-0.004	13304169	20000.0	23600		
	6 Dichlorprop						CAS #: 120-36-5	
	12.506	12.514	-0.008	22764671	200.000	242		
	7 2,4-D						CAS #: 94-75-7	
	12.770	12.779	-0.009	24325710	200.000	249		
	43 Pentachlorophenol						CAS #: 87-86-5	
	12.923	12.927	-0.004	239418393	200.000	226		(M)
	8 2,4,5-TP						CAS #: 93-72-1	
	13.509	13.514	-0.005	109342462	200.000	230		(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
13.711	13.718	-0.007	93183533	200.000	222		(M)
10 2,4-DB					CAS #: 94-82-6		
14.061	14.069	-0.008	11648100	200.000	250		(M)
11 Dinoseb					CAS #: 88-85-7		
14.637	14.640	-0.003	61510323	200.000	226		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/039f3901.d
Date : 05-DEC-2009 06:37
Client ID: HSTD04
Sample Info: IWHB091030-12
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

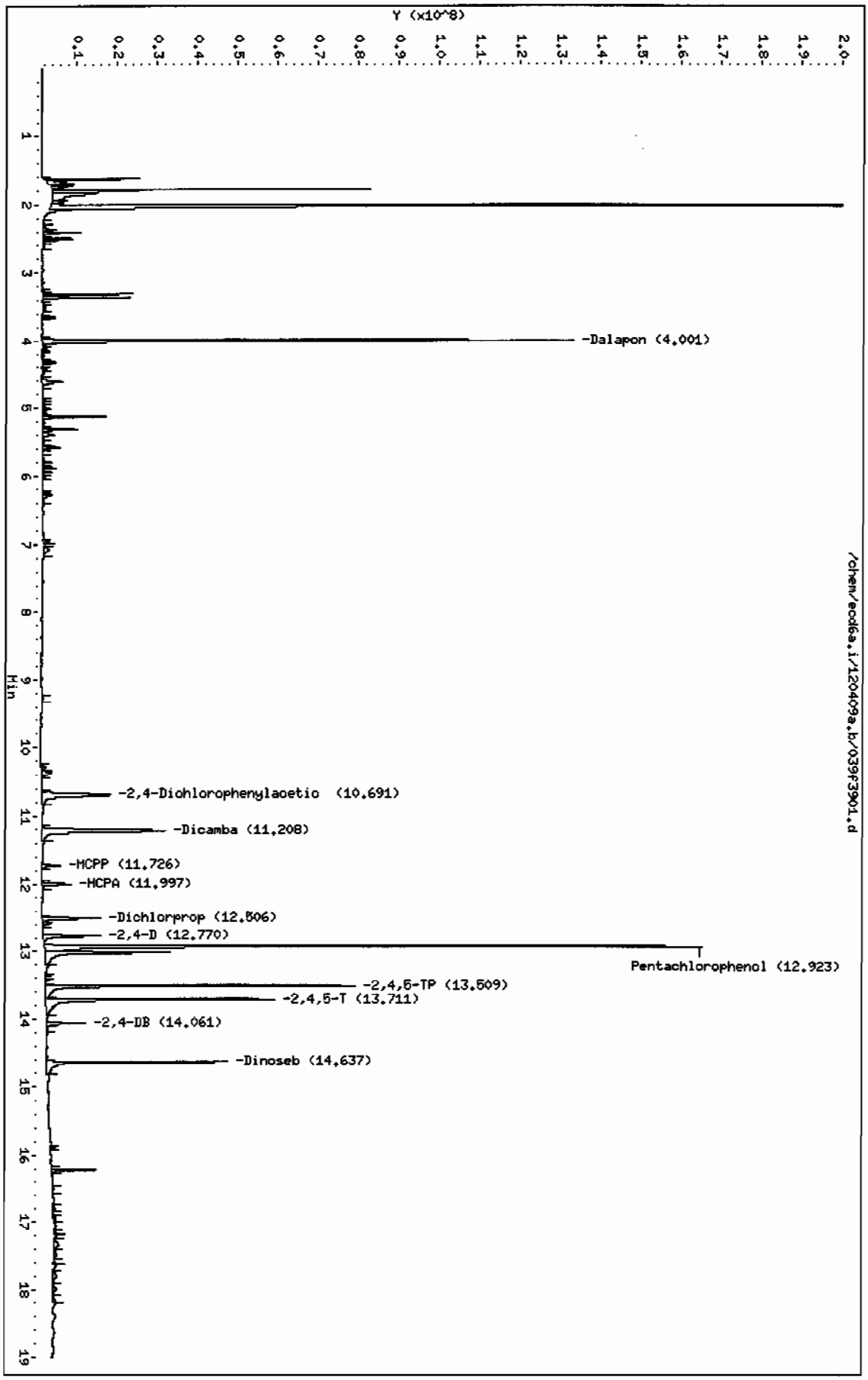

Page 1

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120409a.b/039f3901.d
Operator: RXE1
Injection Date: 05-DEC-2009 06:37
Instrument: ecd6a.i
Client Sample ID: HSTD04

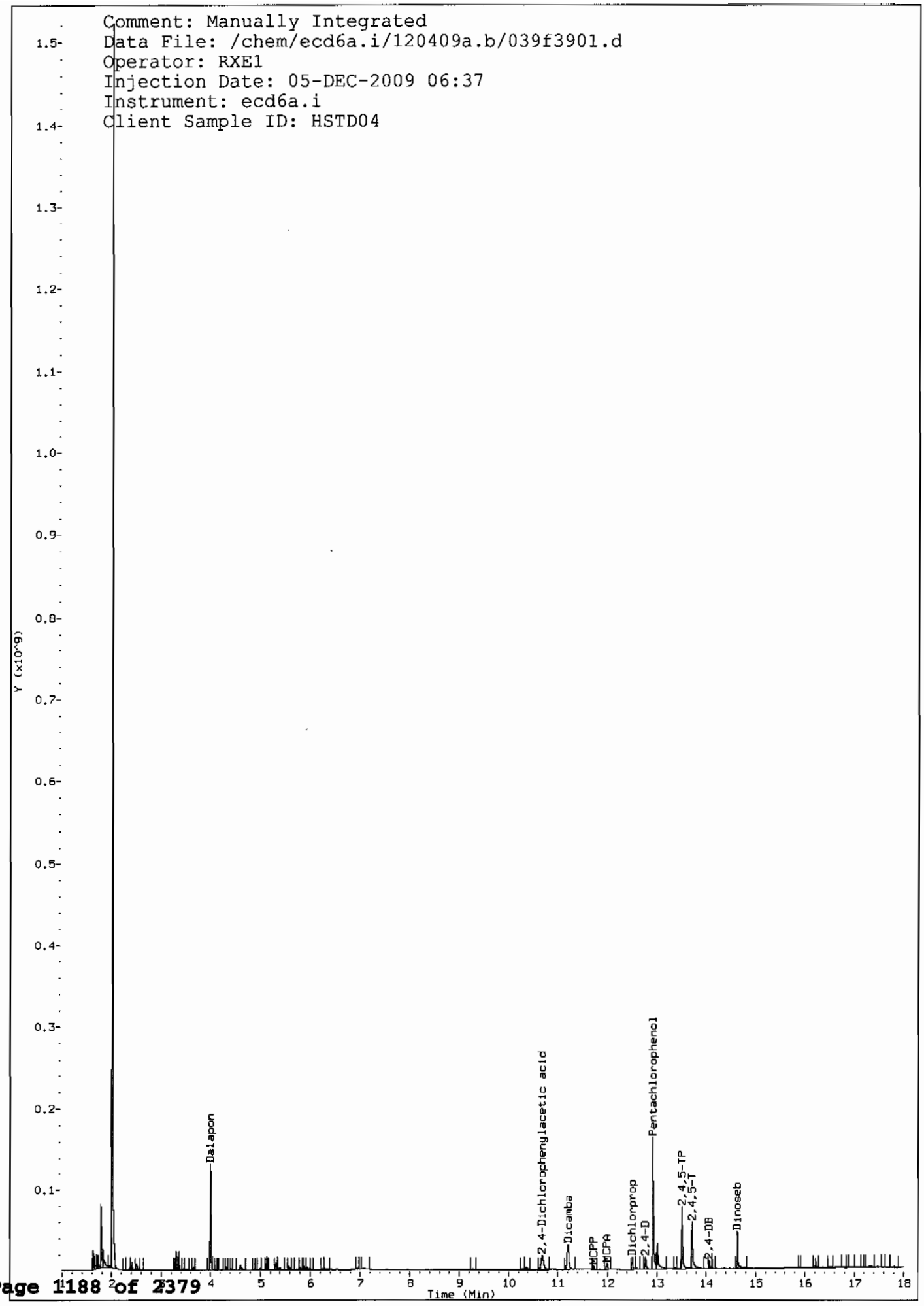

Comment: Before manual integration
Data File: /chem/ecd6a.i/120409a.b/orig-039f3901.d
Operator: RXE1
Injection Date: 05-DEC-2009 06:37
Instrument: ecd6a.i
Client Sample ID: HSTD04

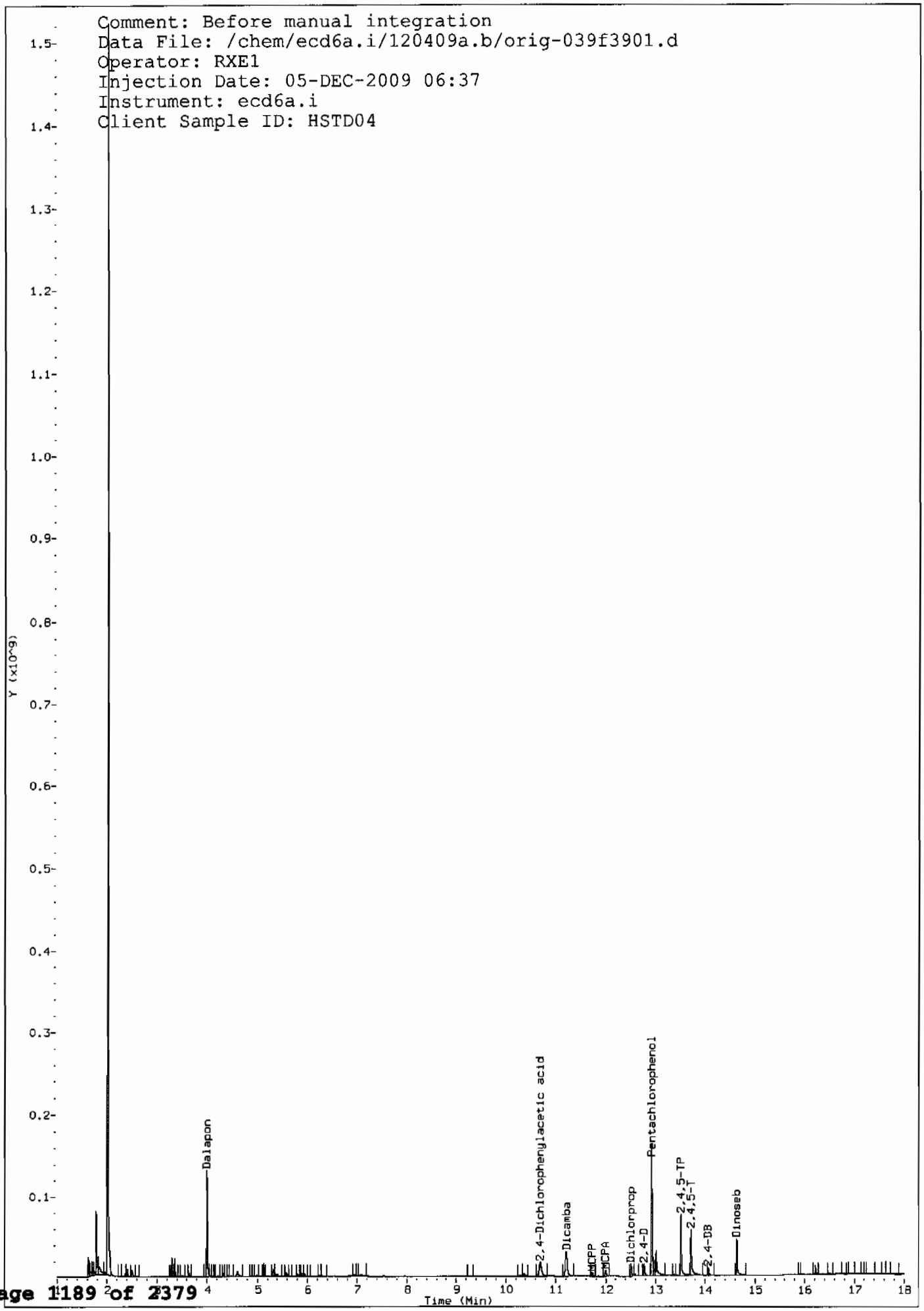

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/039b3901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD04
Inj Date : 05-DEC-2009 06:37
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 06-Dec-2009 12:16 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 39 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon						CAS #: 88-85-7
	3.960	3.968	-0.008	195227324	2000.00	1860	
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.709	11.716	-0.007	67086102	500.000	613	
	3 MCPP						CAS #: 7085-19-0
	12.242	12.247	-0.005	9465839	20000.0	28200	
	4 Dicamba						CAS #: 6597-78-0
	11.994	12.001	-0.007	99427764	200.000	248	
	5 MCPA						CAS #: 94-74-6
	12.549	12.552	-0.003	15283484	20000.0	23900	
	6 Dichlorprop						CAS #: 120-36-5
	12.920	12.927	-0.007	26736930	200.000	250	
	7 2,4-D						CAS #: 94-75-7
	13.210	13.218	-0.008	31454244	200.000	242	
	43 Pentachlorophenol						CAS #: 87-86-5
	13.484	13.488	-0.004	312709188	200.000	233	
	8 2,4,5-TP						CAS #: 93-72-1
	13.822	13.827	-0.005	128981009	200.000	236	

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
9 2,4,5-T					CAS #: 93-76-5
14.062	14.067	-0.005	99405731	200.000	212
10 Dinoseb					CAS #: 88-85-7
14.516	14.520	-0.004	79380661	200.000	307
11 2,4-DB					CAS #: 94-82-6
14.351	14.357	-0.006	14798149	200.000	244

Data File: /chem/ecd6a.i/120409a.b/039b3901.d
Date : 05-DEC-2009 06:37
Client ID: HSTD04
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

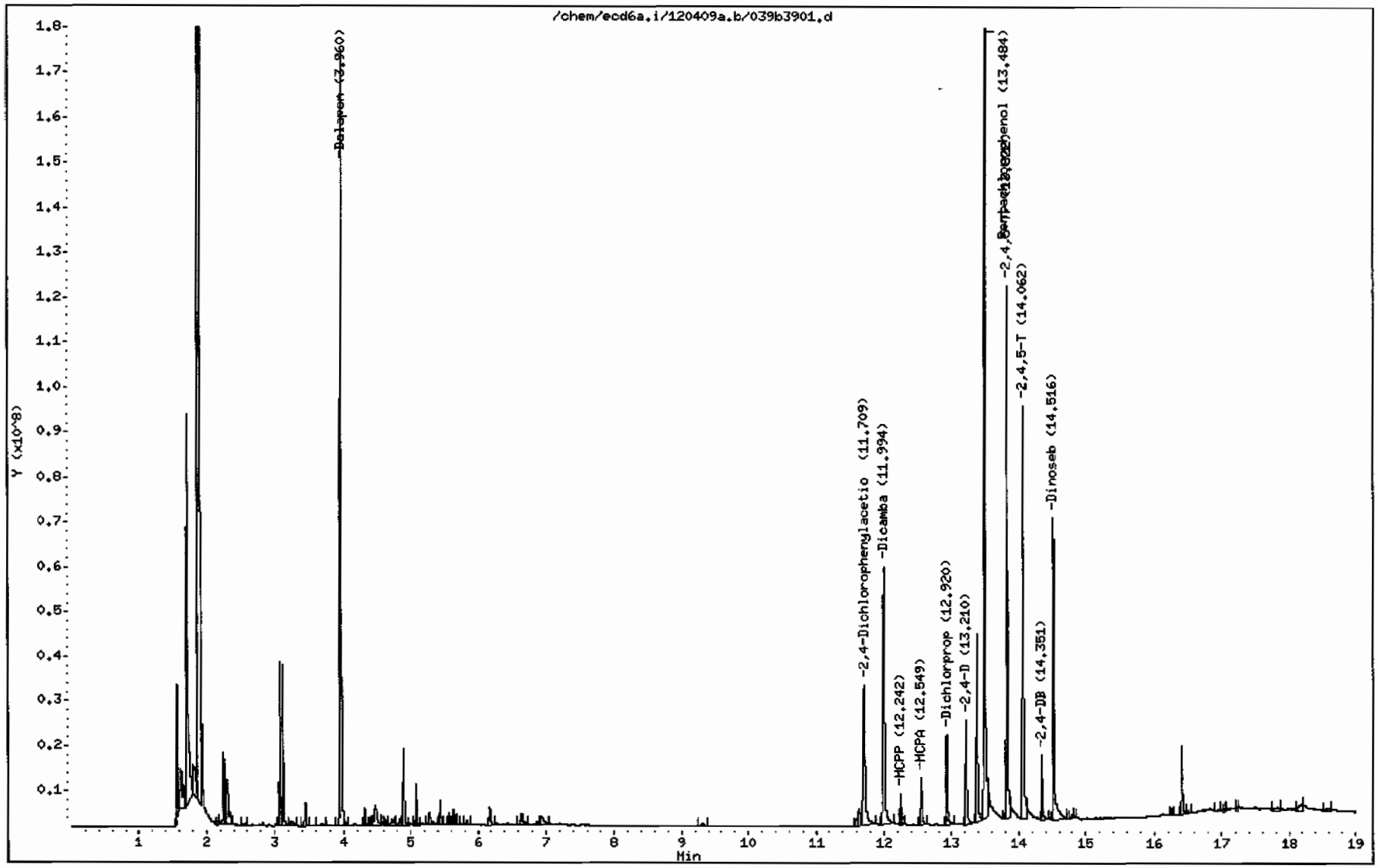

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/04/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/04/09	1242	10.69	
02	HIBLK01	WHB091117-02	12/04/09	1310	10.75	
03	HSTD01	WHB091030-01	12/04/09	1339	10.75	
04	HSTD02	WHB091030-02	12/04/09	1407	10.73	
05	HSTD03	WHB091030-03	12/04/09	1436	10.72	
06	HSTD04	WHB091030-04	12/04/09	1504	10.71	
07	HSTD05	WHB091030-05	12/04/09	1533	10.71	
08	HSTD06	WHB091030-06	12/04/09	1601	10.70	
09	HSTD07	WHB091030-07	12/04/09	1629	10.70	
10	HSTD01	WHB091030-12	12/04/09	1656	10.70	
11	HIBLK02	WHB091117-02	12/04/09	1723	10.75	
12	ZZZZZ	ZZZZZ	12/04/09	1751	10.74	
13	ZZZZZ	ZZZZZ	12/04/09	1819	10.70	
14	ZZZZZ	ZZZZZ	12/04/09	1848	10.74	
15	ZZZZZ	ZZZZZ	12/04/09	1916	10.74	
16	ZZZZZ	ZZZZZ	12/04/09	1944	10.75	
17	ZZZZZ	ZZZZZ	12/04/09	2012	10.74	
18	ZZZZZ	ZZZZZ	12/04/09	2040	10.74	
19	ZZZZZ	ZZZZZ	12/04/09	2108	10.76	
20	HSTD02	WHB091030-12	12/04/09	2137	10.70	
21	HIBLK03	WHB091117-02	12/04/09	2205	10.76	
22	ZZZZZ	ZZZZZ	12/04/09	2233	10.74	
23	ZZZZZ	ZZZZZ	12/04/09	2302	10.75	
24	ZZZZZ	ZZZZZ	12/04/09	2330	10.75	
25	ZZZZZ	ZZZZZ	12/05/09	0000	10.75	
26	ZZZZZ	ZZZZZ	12/05/09	0028	10.74	
27	ZZZZZ	ZZZZZ	12/05/09	0057	10.75	
28	ZZZZZ	ZZZZZ	12/05/09	0125	10.71	
29	ZZZZZ	ZZZZZ	12/05/09	0154	10.71	
30	HSTD03	WHB091030-12	12/05/09	0222	10.70	
31	HIBLK04	WHB091117-02	12/05/09	0251	10.75	
32	HBLK01	1201984261	12/05/09	0318	10.74	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/04/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.70

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HBLK01LCS	1201984264	12/05/09	0347	10.71	
02	HBLK01LCSD	1201984265	12/05/09	0415	10.71	
03	ZZZZZ	ZZZZZ	12/05/09	0444	10.74	
04	ZZZZZ	ZZZZZ	12/05/09	0512		
05	WST03-10-2134	241838002	12/05/09	0541	10.72	
06	ZZZZZ	ZZZZZ	12/05/09	0609	10.72	
07	HSTD04	WHB091030-12	12/05/09	0637	10.69	
08	HIBLK05	WHB091117-02	12/05/09	0706	10.73	
09	ZZZZZ	ZZZZZ	12/05/09	0734	10.72	
10	ZZZZZ	ZZZZZ	12/05/09	0802	10.72	
11	ZZZZZ	ZZZZZ	12/05/09	0830	10.70	
12	ZZZZZ	ZZZZZ	12/05/09	0858	10.70	
13	ZZZZZ	ZZZZZ	12/05/09	0927	10.73	
14	ZZZZZ	ZZZZZ	12/05/09	0955	10.73	
15	HSTD05	WHB091030-12	12/05/09	1024	10.70	
16	HIBLK06	WHB091117-02	12/05/09	1052	10.73	
17	ZZZZZ	ZZZZZ	12/05/09	1121	10.74	
18	ZZZZZ	ZZZZZ	12/05/09	1149	10.70	
19	ZZZZZ	ZZZZZ	12/05/09	1217	10.70	
20	ZZZZZ	ZZZZZ	12/05/09	1245	10.72	
21	ZZZZZ	ZZZZZ	12/05/09	1313	10.71	
22	ZZZZZ	ZZZZZ	12/05/09	1342	10.72	
23	ZZZZZ	ZZZZZ	12/05/09	1410	10.71	
24	HSTD06	WHB091030-12	12/05/09	1438	10.70	
25	HIBLK07	WHB091117-02	12/05/09	1506	10.74	
26	ZZZZZ	ZZZZZ	12/05/09	1535	10.72	
27	ZZZZZ	ZZZZZ	12/05/09	1603	10.72	
28	ZZZZZ	ZZZZZ	12/05/09	1631	10.70	
29	ZZZZZ	ZZZZZ	12/05/09	1700	10.72	
30	ZZZZZ	ZZZZZ	12/05/09	1728		
31	ZZZZZ	ZZZZZ	12/05/09	1756	10.72	
32	ZZZZZ	ZZZZZ	12/05/09	1825	10.73	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/04/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/04/09	1242	11.71	
02	HIBLK01	WHB091117-02	12/04/09	1310	11.74	
03	HSTD01	WHB091030-01	12/04/09	1339	11.74	
04	HSTD02	WHB091030-02	12/04/09	1407	11.73	
05	HSTD03	WHB091030-03	12/04/09	1436	11.72	
06	HSTD04	WHB091030-04	12/04/09	1504	11.72	
07	HSTD05	WHB091030-05	12/04/09	1533	11.71	
08	HSTD06	WHB091030-06	12/04/09	1601	11.71	
09	HSTD07	WHB091030-07	12/04/09	1629	11.71	
10	HSTD01	WHB091030-12	12/04/09	1656	11.72	
11	HIBLK02	WHB091117-02	12/04/09	1723	11.74	
12	ZZZZZ	ZZZZZ	12/04/09	1751	11.73	
13	ZZZZZ	ZZZZZ	12/04/09	1819	11.72	
14	ZZZZZ	ZZZZZ	12/04/09	1848	11.73	
15	ZZZZZ	ZZZZZ	12/04/09	1916	11.73	
16	ZZZZZ	ZZZZZ	12/04/09	1944	11.73	
17	ZZZZZ	ZZZZZ	12/04/09	2012	11.73	
18	ZZZZZ	ZZZZZ	12/04/09	2040	11.73	
19	ZZZZZ	ZZZZZ	12/04/09	2108	11.74	
20	HSTD02	WHB091030-12	12/04/09	2137	11.71	
21	HIBLK03	WHB091117-02	12/04/09	2205	11.74	
22	ZZZZZ	ZZZZZ	12/04/09	2233	11.73	
23	ZZZZZ	ZZZZZ	12/04/09	2302	11.74	
24	ZZZZZ	ZZZZZ	12/04/09	2330	11.74	
25	ZZZZZ	ZZZZZ	12/05/09	0000	11.74	
26	ZZZZZ	ZZZZZ	12/05/09	0028	11.73	
27	ZZZZZ	ZZZZZ	12/05/09	0057	11.73	
28	ZZZZZ	ZZZZZ	12/05/09	0125	11.72	
29	ZZZZZ	ZZZZZ	12/05/09	0154	11.72	
30	HSTD03	WHB091030-12	12/05/09	0222	11.72	
31	HIBLK04	WHB091117-02	12/05/09	0251	11.74	
32	HBLK01	1201984261	12/05/09	0318	11.73	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/04/09 12/04/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HBLK01LCS	1201984264	12/05/09	0347	11.72	
02	HBLK01LCSD	1201984265	12/05/09	0415	11.72	
03	ZZZZZ	ZZZZZ	12/05/09	0444	11.73	
04	ZZZZZ	ZZZZZ	12/05/09	0512		
05	WST03-10-2134	241838002	12/05/09	0541	11.72	
06	ZZZZZ	ZZZZZ	12/05/09	0609	11.72	
07	HSTD04	WHB091030-12	12/05/09	0637	11.71	
08	HIBLK05	WHB091117-02	12/05/09	0706	11.72	
09	ZZZZZ	ZZZZZ	12/05/09	0734	11.72	
10	ZZZZZ	ZZZZZ	12/05/09	0802	11.72	
11	ZZZZZ	ZZZZZ	12/05/09	0830	11.71	
12	ZZZZZ	ZZZZZ	12/05/09	0858	11.71	
13	ZZZZZ	ZZZZZ	12/05/09	0927	11.73	
14	ZZZZZ	ZZZZZ	12/05/09	0955	11.73	
15	HSTD05	WHB091030-12	12/05/09	1024	11.71	
16	HIBLK06	WHB091117-02	12/05/09	1052	11.72	
17	ZZZZZ	ZZZZZ	12/05/09	1121	11.73	
18	ZZZZZ	ZZZZZ	12/05/09	1149	11.71	
19	ZZZZZ	ZZZZZ	12/05/09	1217	11.71	
20	ZZZZZ	ZZZZZ	12/05/09	1245	11.72	
21	ZZZZZ	ZZZZZ	12/05/09	1313	11.72	
22	ZZZZZ	ZZZZZ	12/05/09	1342	11.72	
23	ZZZZZ	ZZZZZ	12/05/09	1410	11.72	
24	HSTD06	WHB091030-12	12/05/09	1438	11.71	
25	HIBLK07	WHB091117-02	12/05/09	1506	11.73	
26	ZZZZZ	ZZZZZ	12/05/09	1535	11.72	
27	ZZZZZ	ZZZZZ	12/05/09	1603	11.72	
28	ZZZZZ	ZZZZZ	12/05/09	1631	11.71	
29	ZZZZZ	ZZZZZ	12/05/09	1700	11.72	
30	ZZZZZ	ZZZZZ	12/05/09	1728	11.75	
31	ZZZZZ	ZZZZZ	12/05/09	1756	11.72	
32	ZZZZZ	ZZZZZ	12/05/09	1825	11.72	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 2 of 2

FORM VIII HERBICIDE

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 927987

Lab Sample ID: 1201984264

Data File:	033f3301.d	**Data File:**	033b3301.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	05–DEC–09 03:47	**Analyzed:**	05–DEC–09 03:47

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dalapon								5.39
	Column 1	1	4.01	3.98 – 4.04	186		ug/kg	
	Column 2	1	3.97	3.94 – 4	196		ug/kg	
Dicamba								3.49
	Column 1	1	11.22	11.16 – 11.28	33.5		ug/kg	
	Column 2	1	12	11.94 – 12.06	34.7		ug/kg	
MCPP								3.44
	Column 1	1	11.73	11.67 – 11.79	3670		ug/kg	
	Column 2	1	12.25	12.19 – 12.31	3790		ug/kg	
MCPA								2.36
	Column 1	1	12	11.94 – 12.06	3440		ug/kg	
	Column 2	1	12.55	12.49 – 12.61	3360		ug/kg	
Dichlorprop								4.55
	Column 1	1	12.51	12.45 – 12.57	36.1		ug/kg	
	Column 2	1	12.93	12.87 – 12.99	37.8		ug/kg	

Identification Summary

SDG Number: 10–670 **Client ID:** LCS for batch 927987

Lab Sample ID: 1201984264

Data File:	033f3301.d	**Data File:**	033b3301.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	05–DEC–09 03:47	**Analyzed:**	05–DEC–09 03:47

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								.851
	Column 1	1	12.78	12.72 – 12.84	36.1		ug/kg	
	Column 2	1	13.22	13.16 – 13.28	35.8		ug/kg	
2,4,5–TP								9.53
	Column 1	1	13.51	13.48 – 13.54	36.3		ug/kg	
	Column 2	1	13.82	13.8 – 13.86	39.9		ug/kg	
2,4,5–T								3.85
	Column 1	1	13.72	13.68 – 13.76	36.1		ug/kg	
	Column 2	1	14.06	14.04 – 14.1	37.5		ug/kg	
2,4–DB								14.4
	Column 1	1	14.06	14.03 – 14.11	34.8		ug/kg	
	Column 2	1	14.35	14.32 – 14.4	40.2		ug/kg	
Dinoseb								4
	Column 1	1	14.64	14.61 – 14.67	33.1		ug/kg	
	Column 2	1	14.52	14.49 – 14.55	34.5		ug/kg	

Identification Summary

SDG Number: 10–670 **Client ID:** LCSD for batch 927987

Lab Sample ID: 1201984265

Data File:	034f3401.d	**Data File:**	034b3401.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	05–DEC–09 04:15	**Analyzed:**	05–DEC–09 04:15

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dalapon								9.92
	Column 1	1	4.01	3.98 – 4.04	203		ug/kg	
	Column 2	1	3.97	3.94 – 4	224		ug/kg	
Dicamba								5.73
	Column 1	1	11.22	11.16 – 11.28	37		ug/kg	
	Column 2	1	12	11.94 – 12.06	39.2		ug/kg	
MCPP								2.36
	Column 1	1	11.73	11.67 – 11.79	4290		ug/kg	
	Column 2	1	12.25	12.19 – 12.31	4400		ug/kg	
MCPA								2.16
	Column 1	1	12	11.94 – 12.06	3950		ug/kg	
	Column 2	1	12.55	12.49 – 12.61	3870		ug/kg	
Dichlorprop								2.96
	Column 1	1	12.51	12.45 – 12.57	42		ug/kg	
	Column 2	1	12.93	12.87 – 12.99	43.3		ug/kg	

Identification Summary

SDG Number: 10–670 **Client ID:** LCSD for batch 927987

Lab Sample ID: 1201984265

Data File:	034f3401.d	**Data File:**	034b3401.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	05–DEC–09 04:15	**Analyzed:**	05–DEC–09 04:15

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								3.95
	Column 1	1	12.78	12.72 – 12.84	41.4		ug/kg	
	Column 2	1	13.22	13.16 – 13.28	39.8		ug/kg	
2,4,5–TP								2.46
	Column 1	1	13.51	13.48 – 13.54	42.4		ug/kg	
	Column 2	1	13.82	13.8 – 13.86	43.5		ug/kg	
2,4,5–T								6.04
	Column 1	1	13.72	13.68 – 13.76	40.8		ug/kg	
	Column 2	1	14.07	14.04 – 14.1	43.4		ug/kg	
2,4–DB								4.71
	Column 1	1	14.07	14.03 – 14.11	45.6		ug/kg	
	Column 2	1	14.35	14.32 – 14.4	47.8		ug/kg	
Dinoseb								4.75
	Column 1	1	14.64	14.61 – 14.67	33		ug/kg	
	Column 2	1	14.52	14.49 – 14.55	34.6		ug/kg	

QUALITY CONTROL DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984261**				
Client Sample:	**QC for batch 927987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 927987**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**927988**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 03:18**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:01**	**Aliquot:**	**50 g**	**Final Volume:**	**10 mL**
Data File:	**032f3201.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	032b3201.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon	U	100	ug/kg	20.0	100	1
1918–00–9	Dicamba	U	5.00	ug/kg	1.66	5.00	1
93–65–2	MCPP	U	1000	ug/kg	200	1000	1
94–74–6	MCPA	U	1000	ug/kg	230	1000	1
120–36–5	Dichlorprop	U	5.00	ug/kg	1.66	5.00	1
94–75–7	2,4–D	U	5.00	ug/kg	1.66	5.00	1
93–72–1	2,4,5–TP	U	5.00	ug/kg	1.66	5.00	1
93–76–5	2,4,5–T	U	5.00	ug/kg	1.66	5.00	1
94–82–6	2,4–DB	U	5.00	ug/kg	1.66	5.00	1
88–85–7	Dinoseb	U	5.00	ug/kg	1.66	5.00	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/032f3201c.d
Lab Smp Id: 1201984261 Client Smp ID: HBLK01
Inj Date : 05-DEC-2009 03:18
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984261|1|
Misc Info : |ECD51H_1S|927988|SVH|MB|SOIL|MB|||
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 07-Dec-2009 11:39 tif01533 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 32 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.743	10.703	0.040	28474160	283.725	56.7

Data File: /chem/ecd6a.i/120409a.b/032f3201c.d

Date : 05-DEC-2009 03:18

Client ID: HBLK01

Sample Info: |1201984261|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

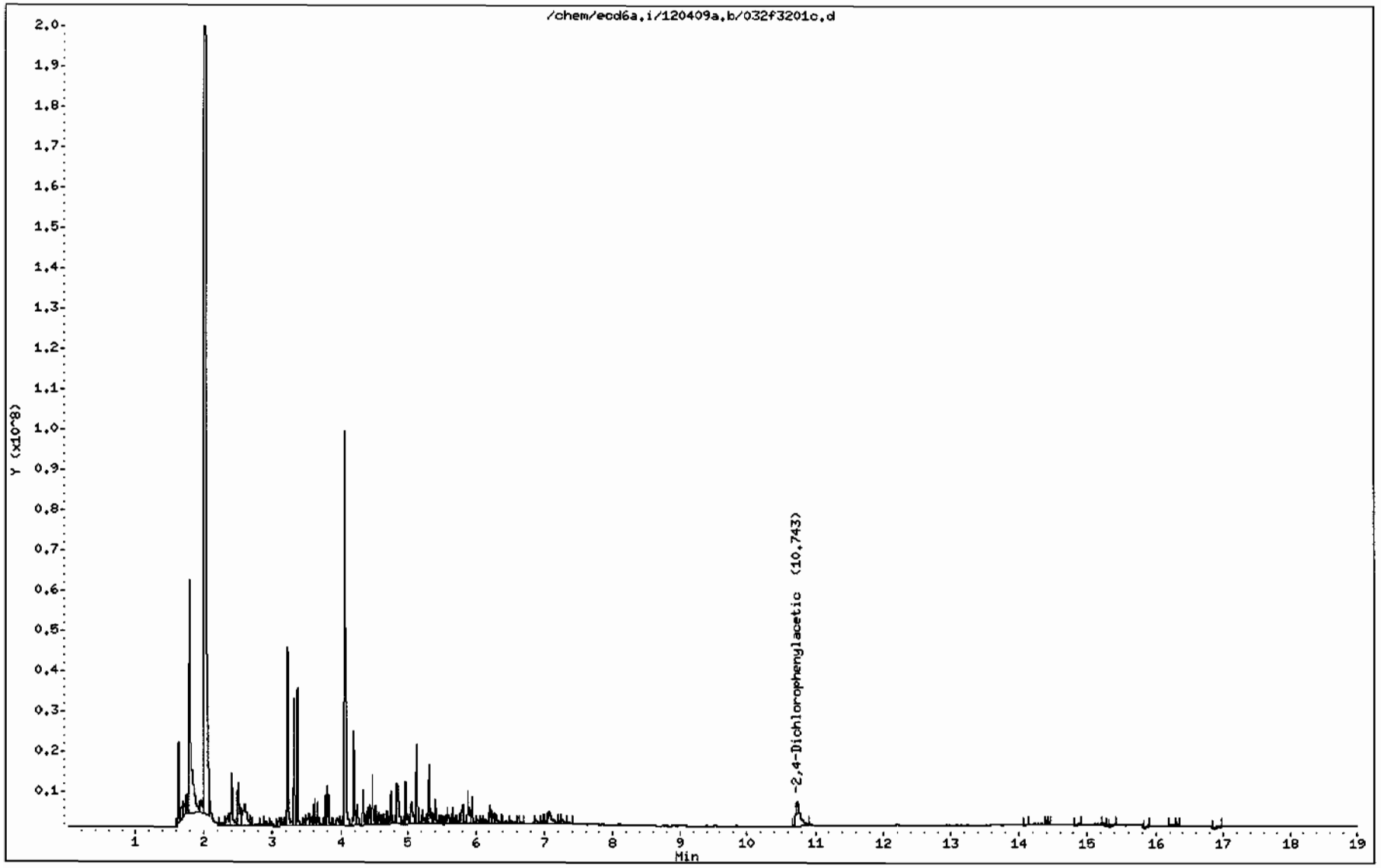

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/032b3201c.d
Lab Smp Id: 1201984261 Client Smp ID: HBLK01
Inj Date : 05-DEC-2009 03:18
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984261|1|
Misc Info : |ECD51H_1S|927988|SVH|MB|SOIL|MB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 07-Dec-2009 11:39 tif01533 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 32 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.733	11.716	0.017	32234029	294.469	58.9

Data File: /chem/ecd6a.i/120409a.b/032b3201c.d

Page 1

Date : 05-DEC-2009 03:18

Client ID: HBLK01

Instrument: ecd6a.i

Sample Info: |1201984261:1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLPII

Column diameter: 0.25

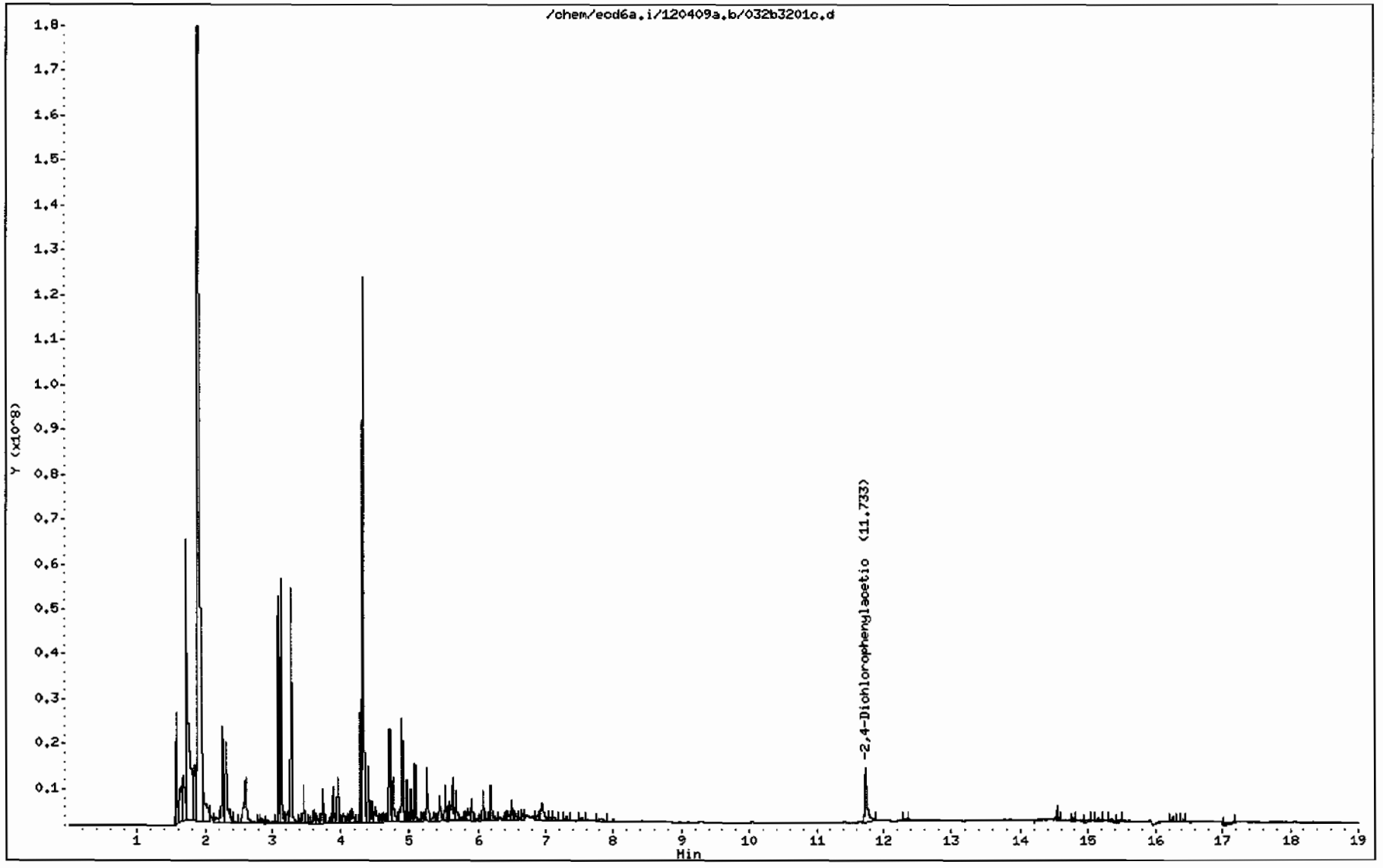

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984264**				
Client Sample:	**QC for batch 927987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 927987**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**927988**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 03:47**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:01**	**Aliquot:**	**50 g**	**Final Volume:**	**10 mL**
Data File:	**033f3301.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	033b3301.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon		196	ug/kg	20.0	100	2
1918–00–9	Dicamba		34.7	ug/kg	1.66	5.00	2
93–65–2	MCPP		3790	ug/kg	200	1000	2
94–74–6	MCPA		3440	ug/kg	230	1000	1
120–36–5	Dichlorprop		37.8	ug/kg	1.66	5.00	2
94–75–7	2,4–D		36.1	ug/kg	1.66	5.00	1
93–72–1	2,4,5–TP		39.9	ug/kg	1.66	5.00	2
93–76–5	2,4,5–T		37.5	ug/kg	1.66	5.00	2
94–82–6	2,4–DB		40.2	ug/kg	1.66	5.00	2
88–85–7	Dinoseb		34.5	ug/kg	1.66	5.00	2

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/033f3301c.d
Lab Smp Id: 1201984264 Client Smp ID: HBLK01LCS
Inj Date : 05-DEC-2009 03:47
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984264|1|
Misc Info : |ECD51H_1S|927988|SVH|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 07-Dec-2009 11:39 tif01533 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 33 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.706	10.703	0.003	45528049	453.656	90.7
1 Dalapon					CAS #: 75-99-0
4.010	4.005	0.005	76886235	928.058	186
3 Dicamba					CAS #: 6597-78-0
11.219	11.220	-0.001	62115403	167.331	33.5
4 MCPP					CAS #: 7085-19-0
11.732	11.732	0.000	5594783	18326.3	3660

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
5 MCPA					CAS #: 94-74-6
12.001	12.001	0.000	9707646	17190.8	3440
6 Dichlorprop					CAS #: 120-36-5
12.511	12.514	-0.003	16995733	180.522	36.1
7 2,4-D					CAS #: 94-75-7
12.776	12.779	-0.003	17635716	180.294	36.0
8 2,4,5-TP					CAS #: 93-72-1
13.511	13.514	-0.003	86424216	181.497	36.3
9 2,4,5-T					CAS #: 93-76-5
13.716	13.718	-0.002	75702435	180.455	36.1
10 2,4-DB					CAS #: 94-82-6
14.063	14.069	-0.006	8088604	173.925	34.8
11 Dinoseb					CAS #: 88-85-7
14.639	14.640	-0.001	45053645	165.697	33.1

Data File: /chem/ecd6a.i/120409a.b/033f3301c.d
Date : 05-DEC-2009 03:47
Client ID: HBLK01LCS
Sample Info: |1201984264|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

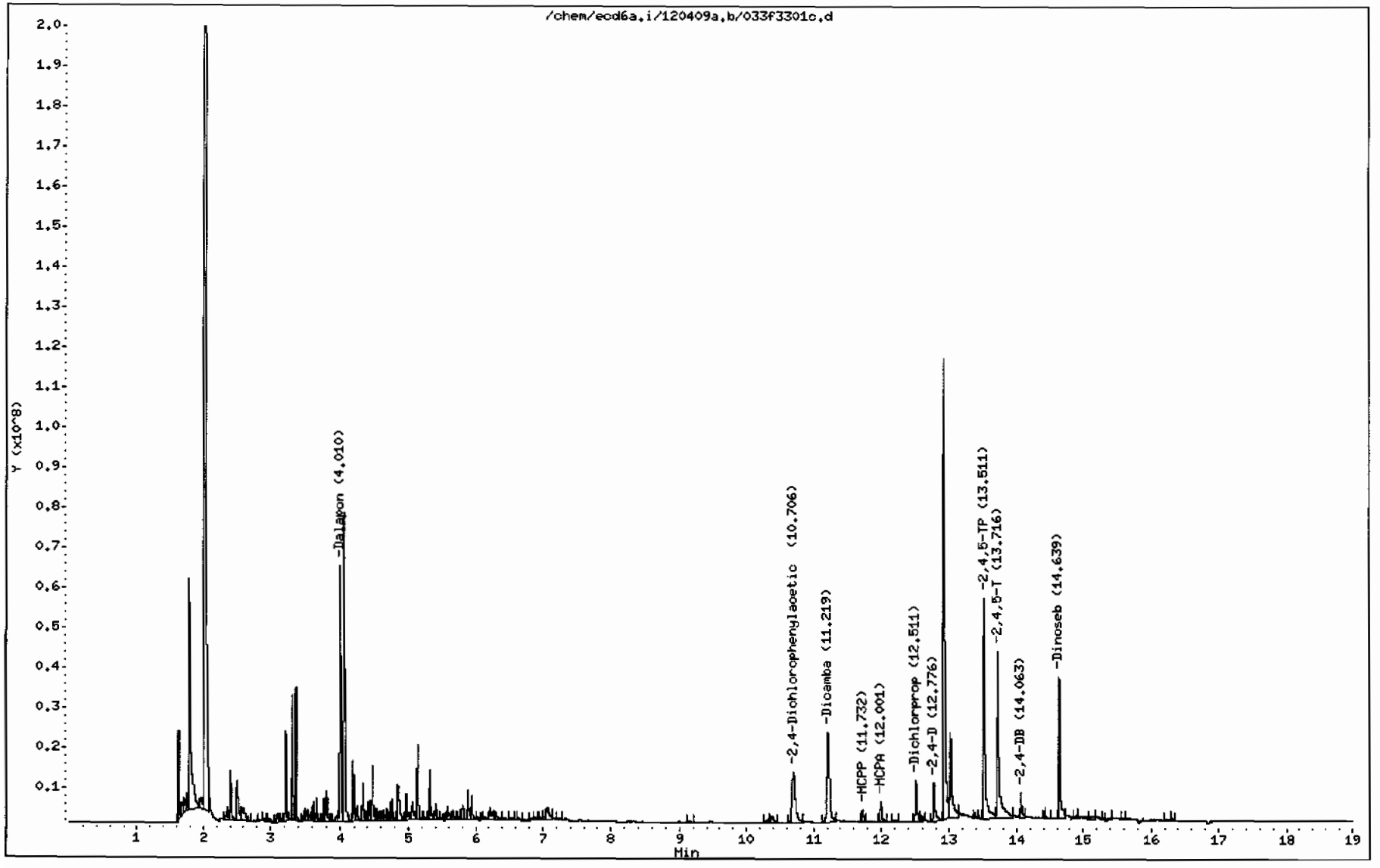

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/033b3301c.d
Lab Smp Id: 1201984264 Client Smp ID: HBLK01LCS
Inj Date : 05-DEC-2009 03:47
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984264|1|
Misc Info : |ECD51H_1S|927988|SVH|LCS|SOIL|LCS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 07-Dec-2009 11:39 tif01533 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 33 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.716	11.716	0.000	47568455	434.554	86.9	
1 Dalapon					CAS #: 88-85-7	
3.972	3.968	0.004	102972799	979.432	196	
4 Dicamba					CAS #: 6597-78-0	
12.000	12.001	-0.001	69546224	173.273	34.6	
3 MCPP					CAS #: 7085-19-0	
12.246	12.247	-0.001	6360095	18967.1	3790	(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.552	12.552	0.000	10723266	16789.6	3360	
6 Dichlorprop					CAS #: 120-36-5	
12.925	12.927	-0.002	20232085	188.926	37.8	
7 2,4-D					CAS #: 94-75-7	
13.216	13.218	-0.002	23194226	178.767	35.8	
8 2,4,5-TP					CAS #: 93-72-1	
13.824	13.827	-0.003	109101323	199.655	39.9	
9 2,4,5-T					CAS #: 93-76-5	
14.065	14.067	-0.002	88081354	187.534	37.5	
11 2,4-DB					CAS #: 94-82-6	
14.353	14.357	-0.004	12201301	200.851	40.2	
10 Dinoseb					CAS #: 88-85-7	
14.519	14.520	-0.001	44572150	172.462	34.5	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/033b3301c.d

Page 1

Date : 05-DEC-2009 03:47

Client ID: HBLK01LCS

Instrument: ecd6a.i

Sample Info: |1201984264|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLPII

Column diameter: 0.25

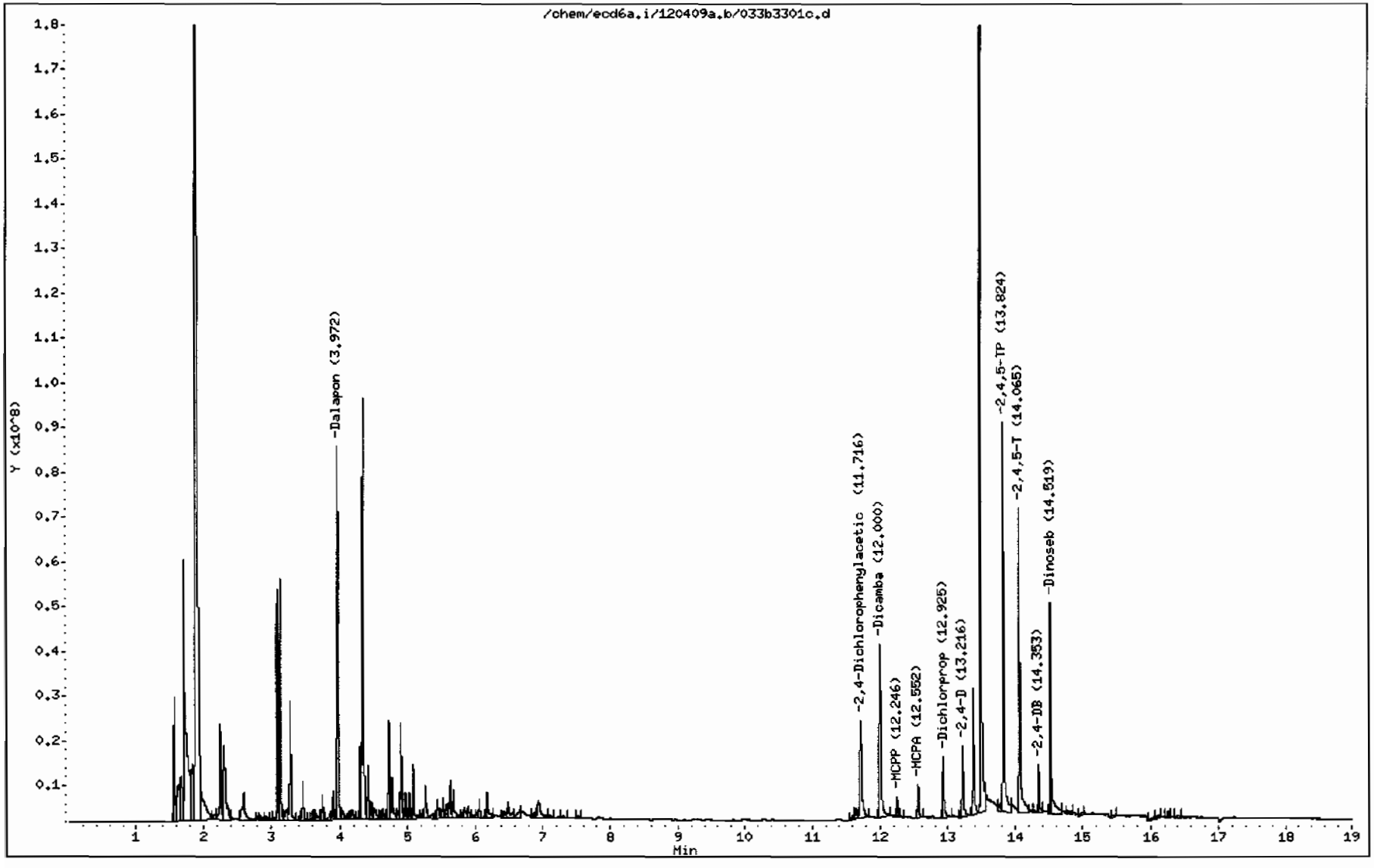

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120409a.b/033b3301c.d
Operator: RXE1
Injection Date: 05-DEC-2009 03:47
Instrument: ecd6a.i
Client Sample ID: HBLK01LCS

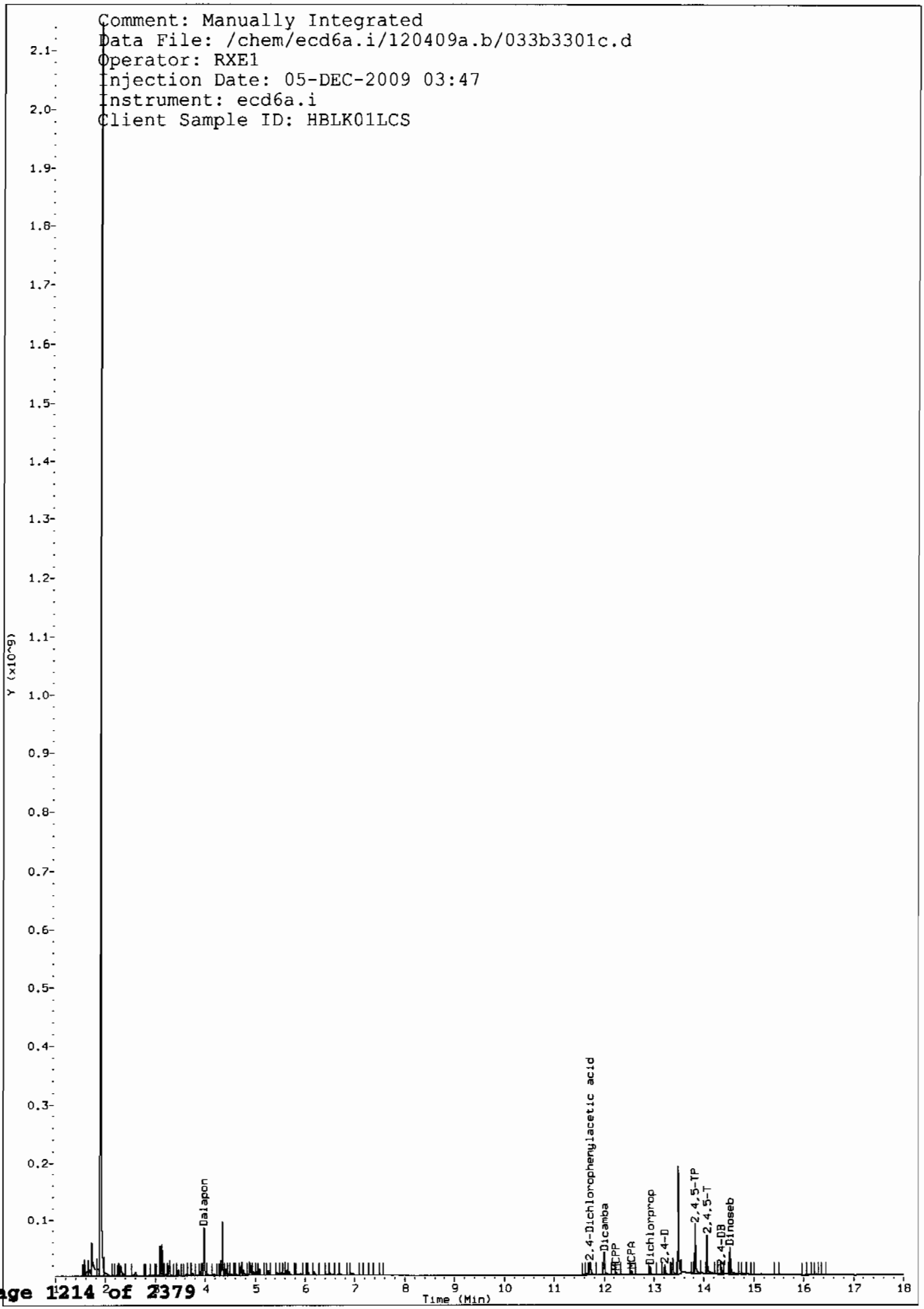

Comment: Before manual integration
Data File: /chem/ecd6a.i/120409a.b/orig-033b3301c.d
Operator: RXE1
Injection Date: 05-DEC-2009 03:47
Instrument: ecd6a.i
Client Sample ID: HBLK01LCS

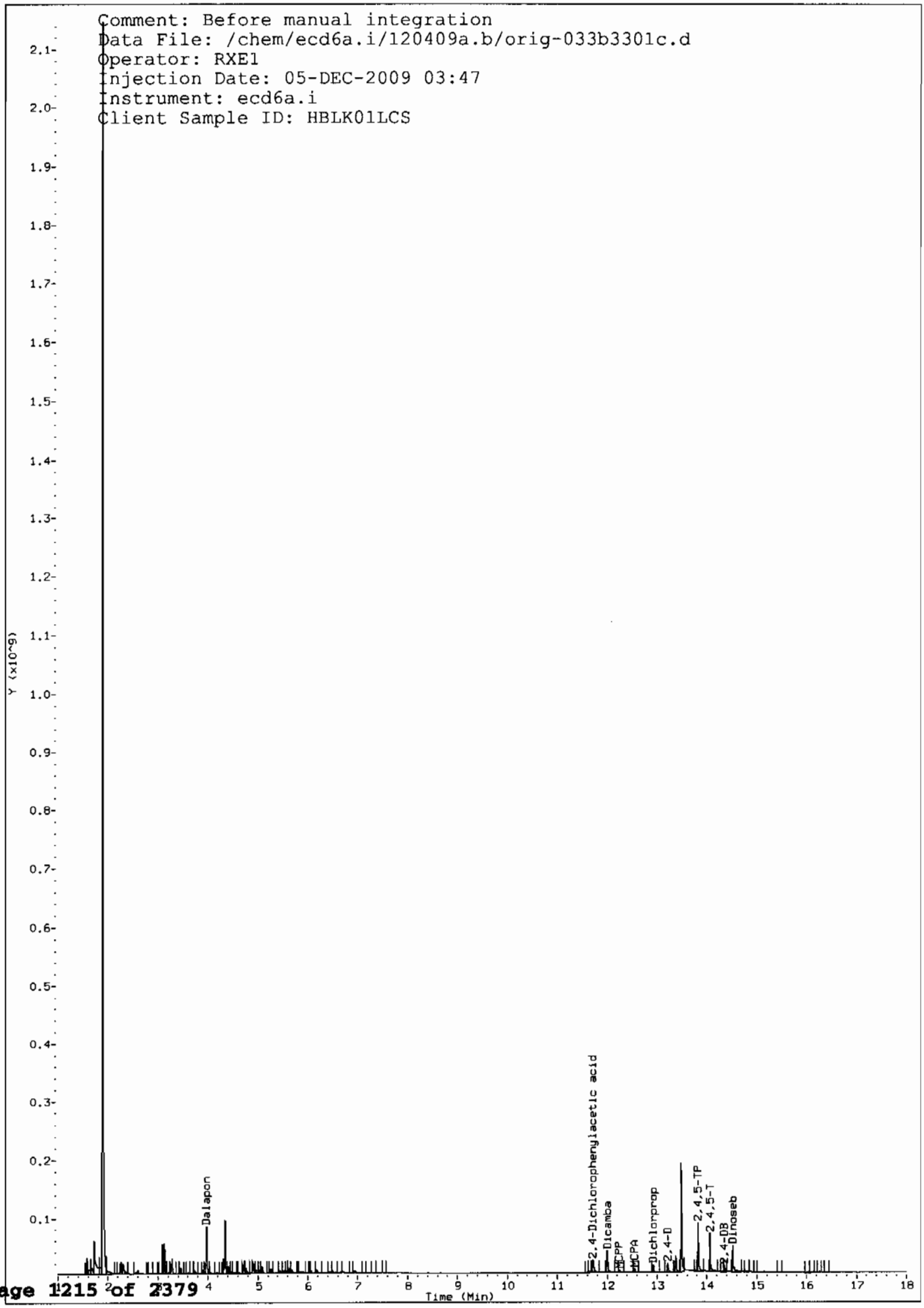

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–670**			**Matrix:**	**SOIL**
Lab Sample ID:	**1201984265**				
Client Sample:	**QC for batch 927987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCSD for batch 927987**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**927988**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/05/2009 04:15**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/01/2009 20:01**	**Aliquot:**	**50 g**	**Final Volume:**	**10 mL**
Data File:	**034f3401.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	034b3401.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
75–99–0	Dalapon		224	ug/kg	20.0	100	2
1918–00–9	Dicamba		39.2	ug/kg	1.66	5.00	2
93–65–2	MCPP		4400	ug/kg	200	1000	2
94–74–6	MCPA		3950	ug/kg	230	1000	1
120–36–5	Dichlorprop		43.3	ug/kg	1.66	5.00	2
94–75–7	2,4–D		41.4	ug/kg	1.66	5.00	1
93–72–1	2,4,5–TP		43.5	ug/kg	1.66	5.00	2
93–76–5	2,4,5–T		43.4	ug/kg	1.66	5.00	2
94–82–6	2,4–DB		47.8	ug/kg	1.66	5.00	2
88–85–7	Dinoseb		34.6	ug/kg	1.66	5.00	2

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/034f3401c.d
Lab Smp Id: 1201984265 Client Smp ID: HBLK01LCSD
Inj Date : 05-DEC-2009 04:15
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984265|1|
Misc Info : |ECD51H_1S|927988|SVH|LCSD|SOIL|LCSD|||
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 07-Dec-2009 11:39 tif01533 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 34 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.706	10.703	0.003	52201028	520.147	104
1 Dalapon					CAS #: 75-99-0
4.011	4.005	0.006	83980838	1013.69	203
3 Dicamba					CAS #: 6597-78-0
11.222	11.220	0.002	68748394	185.199	37.0
4 MCPP					CAS #: 7085-19-0
11.733	11.732	0.001	6554055	21468.5	4290

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
5 MCPA					CAS #: 94-74-6
12.003	12.001	0.002	11158874	19760.7	3950
6 Dichlorprop					CAS #: 120-36-5
12.512	12.514	-0.002	19793907	210.243	42.0
7 2,4-D					CAS #: 94-75-7
12.777	12.779	-0.002	20266588	207.190	41.4
8 2,4,5-TP					CAS #: 93-72-1
13.513	13.514	-0.001	101001721	212.111	42.4
9 2,4,5-T					CAS #: 93-76-5
13.718	13.718	0.000	85677140	204.232	40.8
10 2,4-DB					CAS #: 94-82-6
14.065	14.069	-0.004	10603989	228.013	45.6
11 Dinoseb					CAS #: 88-85-7
14.640	14.640	0.000	44874172	165.037	33.0

Data File: /chem/ecd6a.i/120409a.b/034f3401c.d

Date : 05-DEC-2009 04:15

Client ID: HBLK01LCSD

Sample Info: |1201984265|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

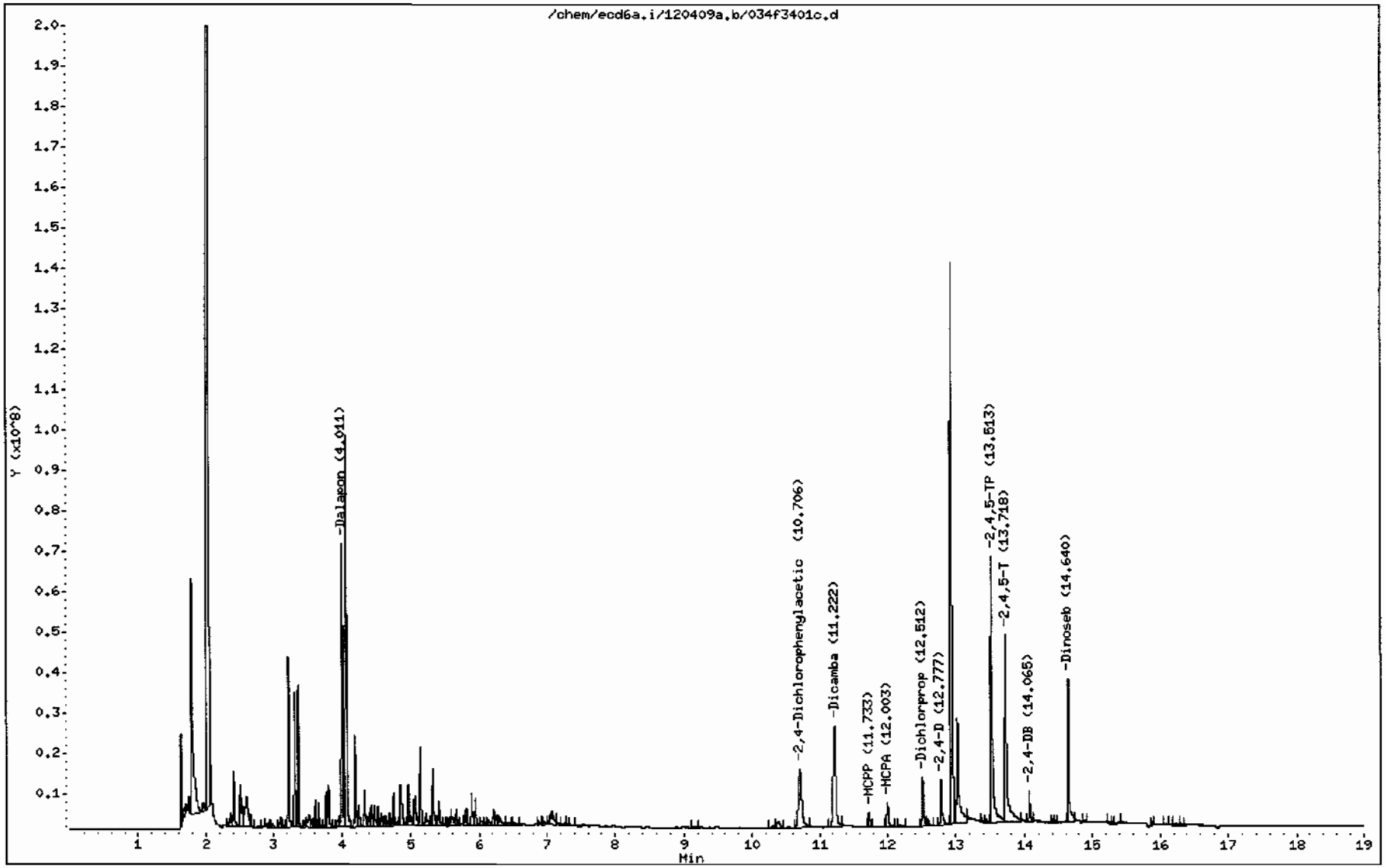

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/034b3401c.d
Lab Smp Id: 1201984265 Client Smp ID: HBLK01LCSD
Inj Date : 05-DEC-2009 04:15
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984265|1|
Misc Info : |ECD51H_1S|927988|SVH|LCSD|SOIL|LCSD|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 07-Dec-2009 11:39 tif01533 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 34 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.715	11.716	-0.001	56380920	515.059	103	
1 Dalapon					CAS #: 88-85-7	
3.973	3.968	0.005	117699673	1119.51	224	
4 Dicamba					CAS #: 6597-78-0	
12.001	12.001	0.000	78720209	196.129	39.2	
3 MCPP					CAS #: 7085-19-0	
12.246	12.247	-0.001	7370807	21981.3	4400	(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.553	12.552	0.001	12350757	19337.8	3870	
6 Dichlorprop					CAS #: 120-36-5	
12.927	12.927	0.000	23191569	216.561	43.3	(M)
7 2,4-D					CAS #: 94-75-7	
13.216	13.218	-0.002	25839656	199.156	39.8	(M)
8 2,4,5-TP					CAS #: 93-72-1	
13.825	13.827	-0.002	118795827	217.396	43.5	
9 2,4,5-T					CAS #: 93-76-5	
14.066	14.067	-0.001	101893978	216.943	43.4	
11 2,4-DB					CAS #: 94-82-6	
14.354	14.357	-0.003	14519662	239.014	47.8	
10 Dinoseb					CAS #: 88-85-7	
14.519	14.520	-0.001	44728998	173.069	34.6	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/034b3401c.d
Date : 05-DEC-2009 04:15
Client ID: HBLK01LCSD
Sample Info: |1201984265|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

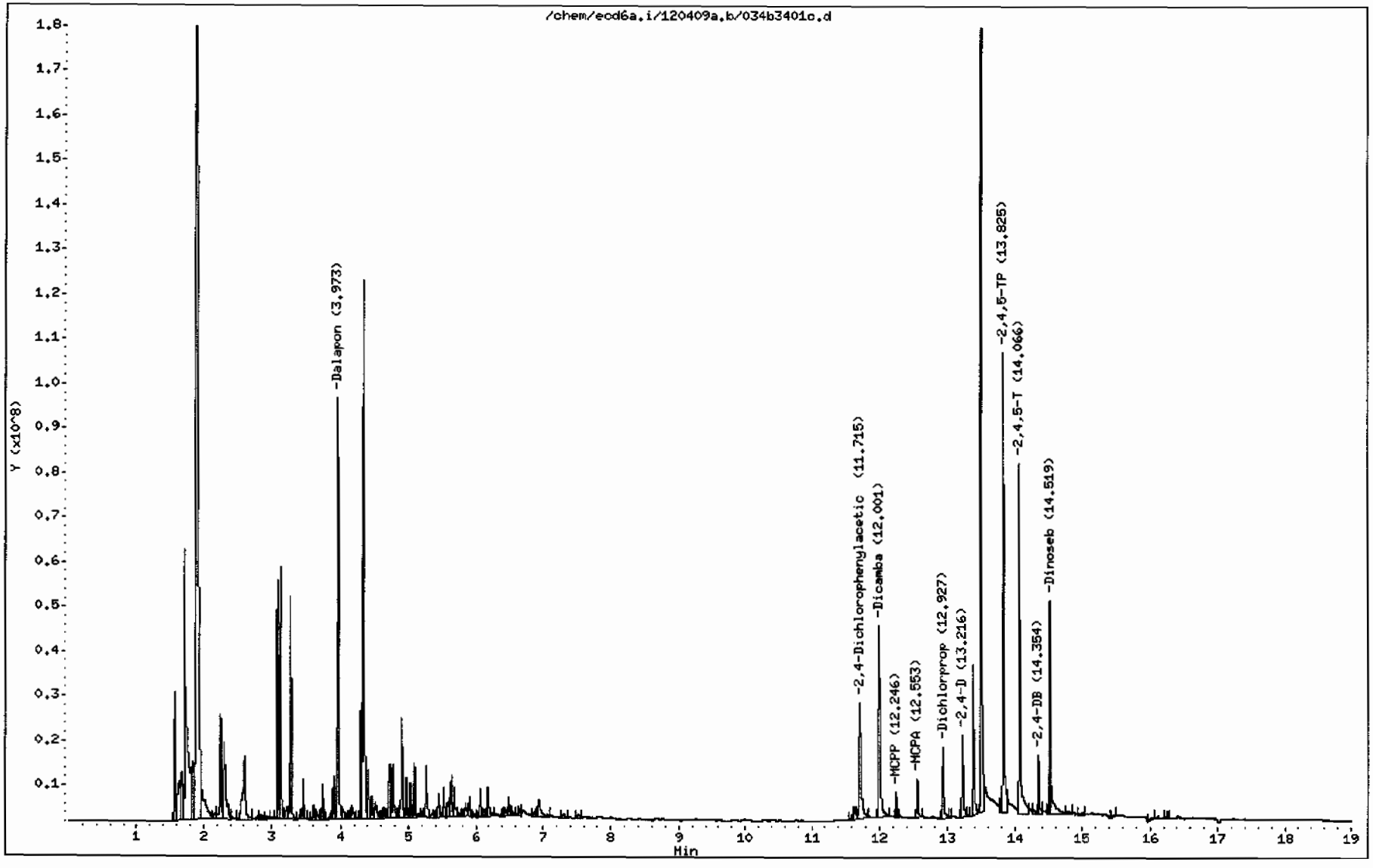

Comment: Manually Integrated
Data File: /chem/ecd6a.i/120409a.b/034b3401c.d
Operator: RXE1
Injection Date: 05-DEC-2009 04:15
Instrument: ecd6a.i
Client Sample ID: HBLK01LCSD

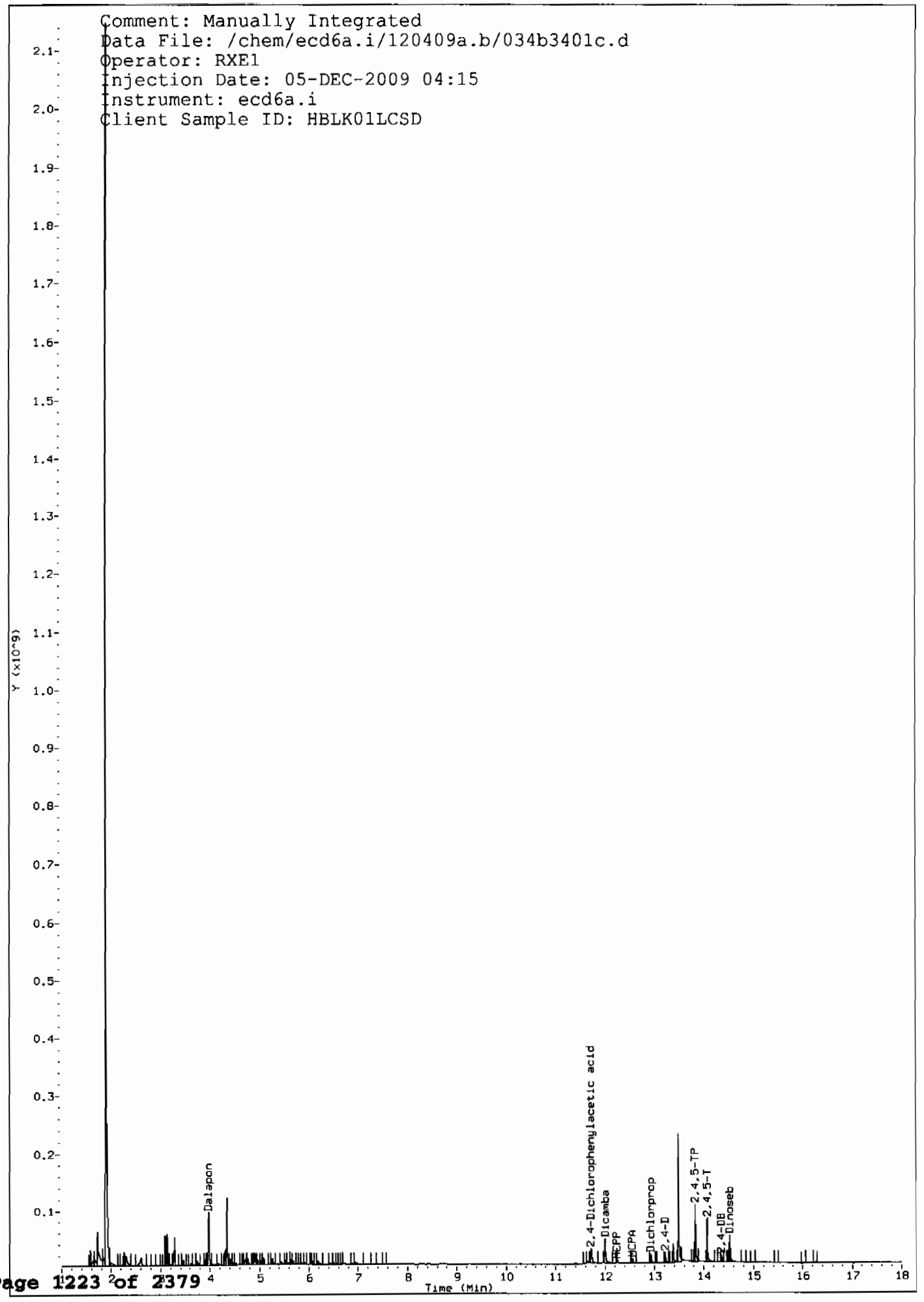

Comment: Before manual integration
Data File: /chem/ecd6a.i/120409a.b/orig-034b3401c.d
Operator: RXE1
Injection Date: 05-DEC-2009 04:15
Instrument: ecd6a.i
Client Sample ID: HBLK01LCSD

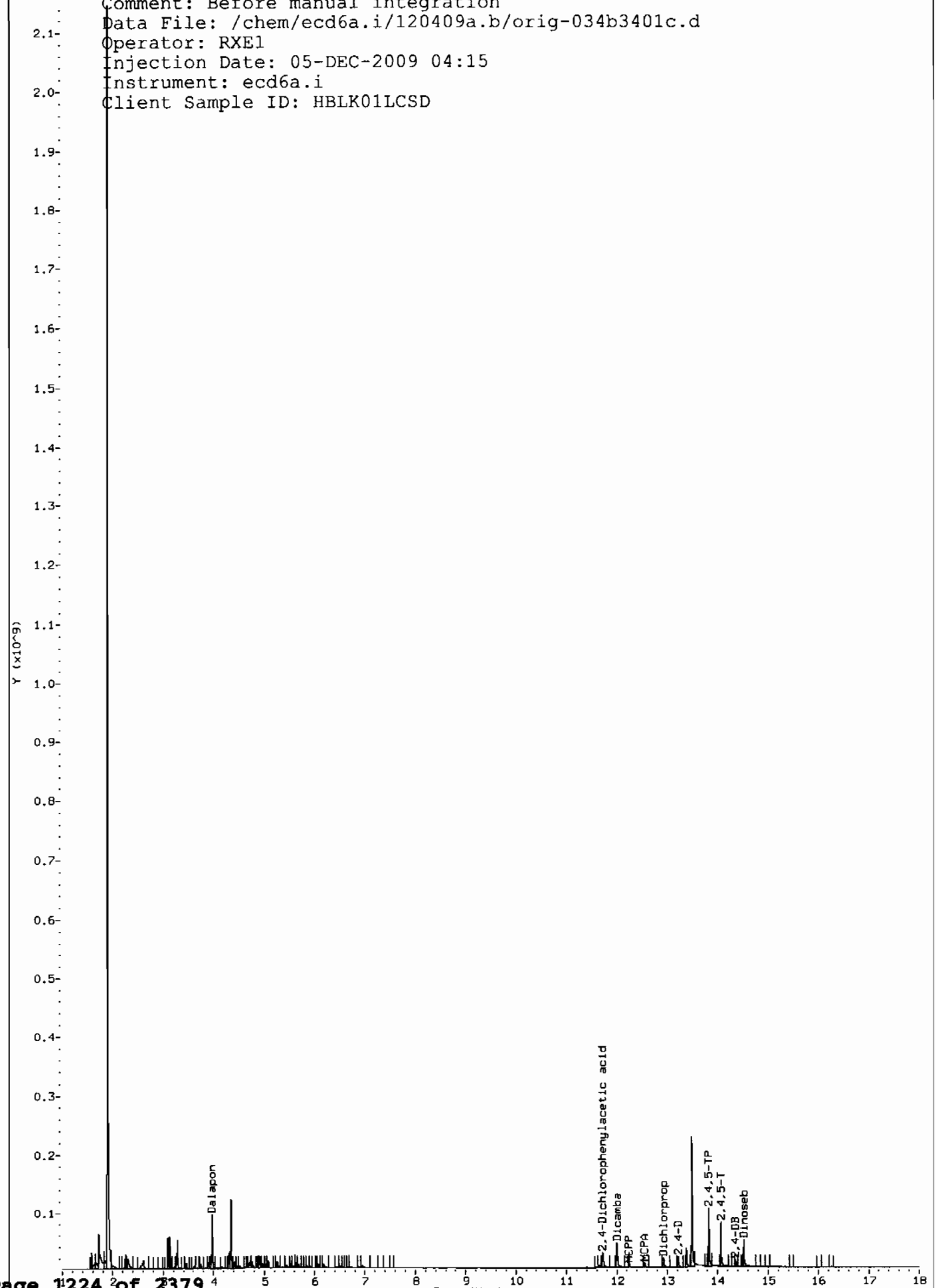

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD6

DATE: 12/06/2009 METHOD: ECD6-F-8151A-120409.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-011 Analysis of Chlorophenoxy Herbicides by ECD
EPA Method: 8151A Chlorinated Herbicides by GC Using Derivation
Sequence Number:120409 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	PRIMER	RXE1	04-DEC-2009 12:42		120409a	1.0	PRIMER	DUSE
002f0201.d	WHB091117-02	RXE1	04-DEC-2009 13:10		120409a	1.0	INSTBLK	CLEAN
003f0301.d	WHB091030-01	RXE1	04-DEC-2009 13:39		120409a	1.0	HSTD01	ICAL 1
004f0401.d	WHB091030-02	RXE1	04-DEC-2009 14:07		120409a	1.0	HSTD02	ICAL 2
005f0501.d	WHB091030-03	RXE1	04-DEC-2009 14:36		120409a	1.0	HSTD03	ICAL 3
006f0601.d	WHB091030-04	RXE1	04-DEC-2009 15:04		120409a	1.0	HSTD04	ICAL 4
007f0701.d	WHB091030-05	RXE1	04-DEC-2009 15:33		120409a	1.0	HSTD05	ICAL 5
008f0801.d	WHB091030-06	RXE1	04-DEC-2009 16:01		120409a	1.0	HSTD06	ICAL 6
009f0901.d	WHB091030-07	RXE1	04-DEC-2009 16:29		120409a	1.0	HSTD07	ICAL 7
010f1001.d	WHB091030-12	RXE1	04-DEC-2009 16:56		120409a	1.0	HSTD01	USE. ICV. ALL ANALYTES PASSING BOTH COLUMNS.
011f1101.d	WHB091117-02	RXE1	04-DEC-2009 17:23		120409a	1.0	INSTBLK	CLEAN
012f1201.d	1201986550	RXE1	04-DEC-2009 17:51	928919	10-655	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
013f1301.d	1201986551	RXE1	04-DEC-2009 18:19	928919	10-655	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
014f1401.d	241718001	RXE1	04-DEC-2009 18:48	928919	10-653	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
015f1501.d	241728002	RXE1	04-DEC-2009 19:16	928919	10-654	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120409a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241750002	RXE1	04-DEC-2009 19:44	928919	10-655	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
017f1701.d	241750003	RXE1	04-DEC-2009 20:12	928919	10-655	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

018f1801.d	241750004	RXE1	04-DEC-2009 20:40	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
019f1901.d	241750005	RXE1	04-DEC-2009 21:08	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
020f2001.d	WHB091030-12	RXE1	04-DEC-2009 21:37		120409a		1.0	HSTD02	USE. CCV. DINO HI (B), PASSING (F).
021f2101.d	WHB091117-02	RXE1	04-DEC-2009 22:05		120409a		1.0	INSTBLK	CLEAN
022f2201.d	241750006	RXE1	04-DEC-2009 22:33	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
023f2301.d	241750007	RXE1	04-DEC-2009 23:02	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
024f2401.d	241750008	RXE1	04-DEC-2009 23:30	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
025f2501.d	241750009	RXE1	05-DEC-2009 00:00	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
026f2601.d	241750010	RXE1	05-DEC-2009 00:28	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
027f2701.d	241750011	RXE1	05-DEC-2009 00:57	928919	10-655		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
028f2801.d	1201986552	RXE1	05-DEC-2009 01:25	928919	10-655		1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
029f2901.d	1201986553	RXE1	05-DEC-2009 01:54	928919	10-655		1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
030f3001.d	WHB091030-12	RXE1	05-DEC-2009 02:22		120409a		1.0	HSTD03	USE. CCV. MCPP/D/DINO HI (B), MCPP/D HI (F).
031f3101.d	WHB091117-02	RXE1	05-DEC-2009 02:51		120409a		1.0	INSTBLK	CLEAN
032f3201.d	1201984261	RXE1	05-DEC-2009 03:18	927988	10-692		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
033f3301.d	1201984264	RXE1	05-DEC-2009 03:47	927988	10-692		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
034f3401.d	1201984265	RXE1	05-DEC-2009 04:15	927988	10-692		1.0	LCSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
035f3501.d	241773001	RXE1	05-DEC-2009 04:44	927988	241773		1.0	DSSI	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120409a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241797001	RXE1	05-DEC-2009 05:12	927988	EUI-7408	1.0	CARE	USE. $ LOW, CONFIRMED BY RE-EXTRACT.
037f3701.d	241838002	RXE1	05-DEC-2009 05:41	927988	10-670	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
038f3801.d	241903002	RXE1	05-DEC-2009 06:09	927988	10-690	2.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
039f3901.d	WHB091030-12	RXE1	05-DEC-2009 06:37		120409a	1.0	HSTD04	USE. CCV. MULTIPLE ANALYTES FAILING BOTH COLUMNS HI.
040f4001.d	WHB091117-02	RXE1	05-DEC-2009 07:06		120409a	1.0	INSTBLK	CLEAN
041f4101.d	241907001	RXE1	05-DEC-2009 07:34	927988	10-692	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

042f4201.d	241907002	RXE1	05-DEC-2009 08:02	927988	10-692	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
043f4301.d	1201984262	RXE1	05-DEC-2009 08:30	927988	10-692	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
044f4401.d	1201984263	RXE1	05-DEC-2009 08:58	927988	10-692	1.0	MSD	USE. MCPP/DB HI (B), PASSING (F).
045f4501.d	241911001	RXE1	05-DEC-2009 09:27	927988	10-694	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
046f4601.d	241911002	RXE1	05-DEC-2009 09:55	927988	10-694	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
047f4701.d	WHB091030-12	RXE1	05-DEC-2009 10:24		120409a	1.0	HSTD05	USE. CCV. MULTIPLE ANALYTES FAILING BOTH COLUMNS HI.
048f4801.d	WHB091117-02	RXE1	05-DEC-2009 10:52		120409a	1.0	INSTBLK	CLEAN
049f4901.d	1201985576	RXE1	05-DEC-2009 11:21	928565	EUI-7409	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
050f5001.d	1201985579	RXE1	05-DEC-2009 11:49	928565	EUI-7409	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
051f5101.d	1201985580	RXE1	05-DEC-2009 12:17	928565	EUI-7409	1.0	LCSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

10H

Instrument Batch: /chem/ecd6a.i/120409a.b

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
052f5201.d	241437003	RXE1	05-DEC-2009 12:45	928565	241437	1.0	PCGE	DUSE. CONFIRMS $ FAILURE.
053f5301.d	1201985577	RXE1	05-DEC-2009 13:13	928565	241437	1.0	MS	DUSE. CONFIRMS $ FAILURE.
054f5401.d	1201985578	RXE1	05-DEC-2009 13:42	928565	241437	1.0	MSD	DUSE. CONFIRMS $ FAILURE.
055f5501.d	242027001	RXE1	05-DEC-2009 14:10	928565	EUI-7409	1.0	CARE	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
056f5601.d	WHB091030-12	RXE1	05-DEC-2009 14:38		120409a	1.0	HSTD06	USE. CCV. MULTIPLE ANALYTES FAILING BOTH COLUMNS HI.
057f5701.d	WHB091117-02	RXE1	05-DEC-2009 15:06		120409a	1.0	INSTBLK	CLEAN
058f5801.d	1201983837	RXE1	05-DEC-2009 15:35	928570	10-690-1	1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
059f5901.d	1201985581	RXE1	05-DEC-2009 16:03	928570	10-690-1	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
060f6001.d	1201985582	RXE1	05-DEC-2009 16:31	928570	10-690-1	1.0	LCS	USE. $ HI (B) D HI (F), NO HITS IN SAMPLES.
061f6101.d	241904001	RXE1	05-DEC-2009 17:00	928570	10-690-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
062f6201.d	241908001	RXE1	05-DEC-2009 17:28	928570	10-692-1	1.0	LANL	DUSE. $ FAILS LOW BOTH COLUMNS, RE-EXTRACT.
063f6301.d	241908002	RXE1	05-DEC-2009 17:56	928570	10-692-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
064f6401.d	241912001	RXE1	05-DEC-2009 18:25	928570	10-694-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
065f6501.d	241912002	RXE1	05-DEC-2009 18:53	928570	10-694-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
066f6601.d	1201985583	RXE1	05-DEC-2009 19:22	928570	10-694-1	1.0	MS	USE. $, D, HI (B)(F) NO HITS IN SAMPLES.

067f6701.d	1201985584	RXE1	05-DEC-2009 19:50	928570	10-694-1		1.0	MSD	USE. D HI (B)(F) NO HITS IN SAMPLES.
068f6801.d	WHB091030-12	RXE1	05-DEC-2009 20:19		120409a		1.0	HSTD07	USE. CCV. MULTIPLE ANALYTES FAILING BOTH COLUMNS HI.
069f6901.d	WHB091117-02	RXE1	05-DEC-2009 20:47		120409a		1.0	INSTBLK	CLEAN
070f7001.d	1201985935	RXE1	05-DEC-2009 21:15	928742	10-698		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
071f7101.d	1201985936	RXE1	05-DEC-2009 21:44	928742	10-698		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

10H

Instrument Batch: /chem/ecd6a.i/120409a.b Page: 4

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
072f7201.d	1201985937	RXE1	05-DEC-2009 22:12	928742	10-698		1.0	LCSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
073f7301.d	241895011	RXE1	05-DEC-2009 22:40	928742	10-698		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
074f7401.d	WHB091030-12	RXE1	05-DEC-2009 23:08		120409a		1.0	HSTD08	USE. CCV. MULTIPLE ANALYTES FAILING BOTH COLUMNS HI.
075f7501.d	WHB091117-02	RXE1	05-DEC-2009 23:37		120409a		1.0	INSTBLK	CLEAN

Instrument Batch: /chem/ecd6a.i/120409a.b Page: 4

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201984100	RXE1	06-DEC-2009 00:05	928933	241866		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
077f7701.d	1201986584	RXE1	06-DEC-2009 00:33	928933	241866		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
078f7801.d	1201986585	RXE1	06-DEC-2009 01:01	928933	241866		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
079f7901.d	241866002	RXE1	06-DEC-2009 01:29	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
080f8001.d	241866003	RXE1	06-DEC-2009 01:57	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
081f8101.d	241866004	RXE1	06-DEC-2009 02:25	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
082f8201.d	241866005	RXE1	06-DEC-2009 02:53	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
083f8301.d	241866006	RXE1	06-DEC-2009 03:21	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
084f8401.d	241866007	RXE1	06-DEC-2009 03:49	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
085f8501.d	WHB091030-12	RXE1	06-DEC-2009 04:17		120409a		1.0		USE. CCV. MULTIPLE ANALYTES FAILING BOTH COLUMNS HI.
086f8601.d	WHB091117-02	RXE1	06-DEC-2009 04:44		120409a		1.0		CLEAN
087f8701.d	241866009	RXE1	06-DEC-2009 05:12	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
088f8801.d	241866010	RXE1	06-DEC-2009 05:40	928933	241866		1.0	NREA	USE. $ HI (B), NO HITS IN SAMPLES.

089f8901.d	241866011	RXE1	06-DEC-2009 06:07	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
090f9001.d	241866012	RXE1	06-DEC-2009 06:35	928933	241866		1.0	NREA	USE. $ HI (B), NO HITS IN SAMPLES.
091f9101.d	241866013	RXE1	06-DEC-2009 07:03	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
092f9201.d	241866014	RXE1	06-DEC-2009 07:30	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
093f9301.d	241866015	RXE1	06-DEC-2009 07:58	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
094f9401.d	241866016	RXE1	06-DEC-2009 08:26	928933	241866		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
095f9501.d	1201986586	RXE1	06-DEC-2009 08:53	928933	241866		1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Instrument Batch: /chem/ecd6a.i/120409a.b Page: 5

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
096f9601.d	1201986587	RXE1	06-DEC-2009 09:21	928933	241866	1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
097f9701.d	WHB091030-12	RXE1	06-DEC-2009 09:49		120409a	1.0		USE. CCV. MULTIPLE ANALYTES FAILING BOTH COLUMNS HI.
098f9801.d	WHB091117-02	RXE1	06-DEC-2009 10:17		120409a	1.0		CLEAN

Instrument Batch: /chem/ecd6a.i/120409a.b Page: 6

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/043b4301.d
Lab Smp Id: 1201984262 Client Smp ID: WST49-10-6923MS
Inj Date : 05-DEC-2009 08:30
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984262|1|
Misc Info : |ECD51H_1S|927988|SVHF|MS|SOIL|MS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 06-Dec-2009 12:16 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 43 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-692.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.18000	Weight of sample extracted (g)
M	0.93110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.712	11.716	-0.004	41313982	377.417	75.9	
1 Dalapon					CAS #: 88-85-7	
3.970	3.968	0.002	101587395	966.255	194	
4 Dicamba					CAS #: 6597-78-0	
11.998	12.001	-0.003	64789119	161.420	32.5	
3 MCPP					CAS #: 7085-19-0	
12.244	12.247	-0.003	7114878	21218.1	4270	(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.550	12.552	-0.002	10931100	17115.0	3440	
6 Dichlorprop					CAS #: 120-36-5	
12.922	12.927	-0.005	18607670	173.757	35.0	
7 2,4-D					CAS #: 94-75-7	
13.212	13.218	-0.006	21642333	166.806	33.6	
8 2,4,5-TP					CAS #: 93-72-1	
13.823	13.827	-0.004	106968231	195.752	39.4	(M)
9 2,4,5-T					CAS #: 93-76-5	
14.063	14.067	-0.004	77392481	164.776	33.1	(M)
11 2,4-DB					CAS #: 94-82-6	
14.351	14.357	-0.006	14299839	235.396	47.4	
10 Dinoseb					CAS #: 88-85-7	
14.517	14.520	-0.003	55218438	213.656	43.0	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/043b4301.d

Date : 05-DEC-2009 08:30

Client ID: WST49-10-6923MS

Sample Info: |1201984262|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

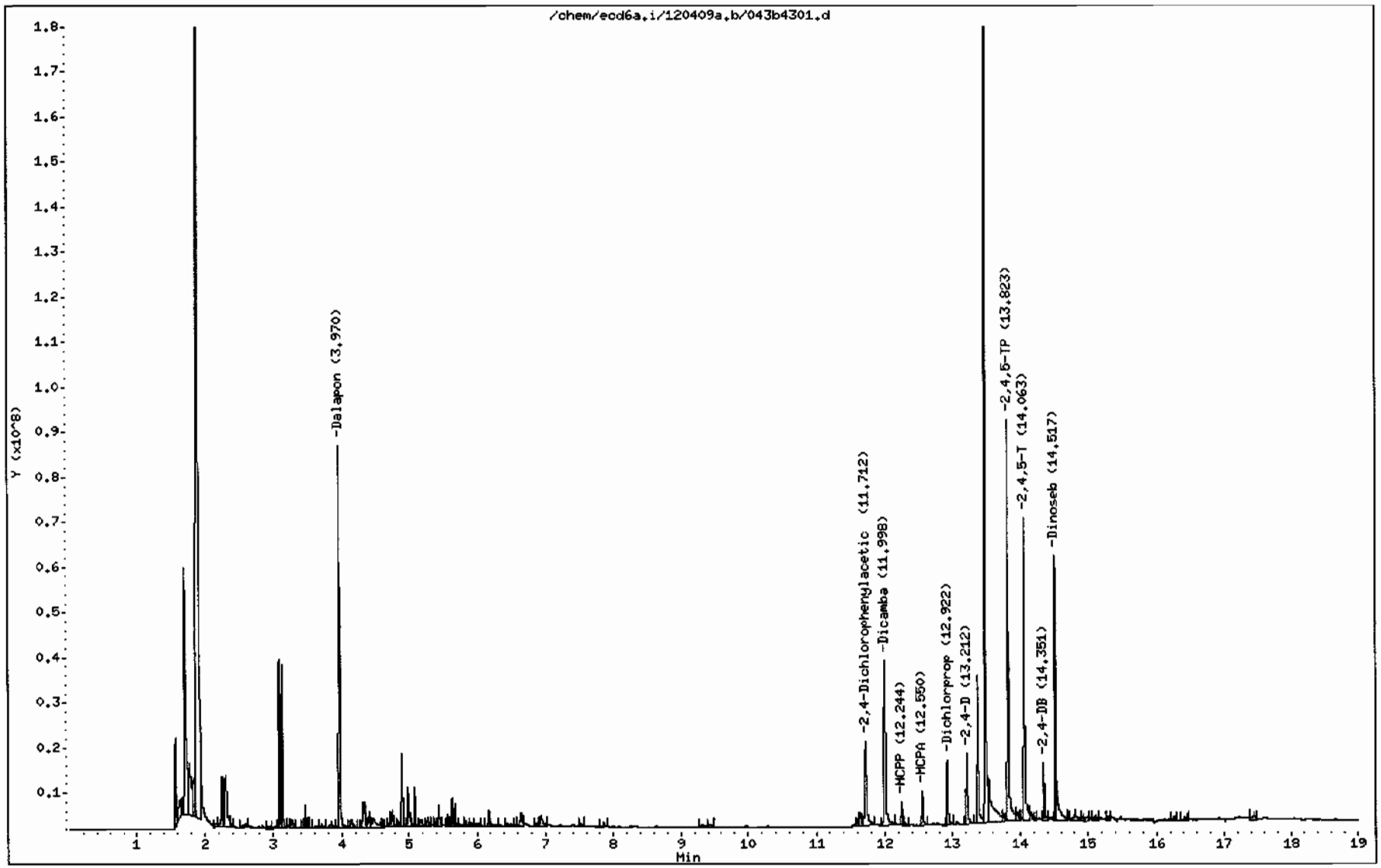

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/043f4301.d
Lab Smp Id: 1201984262 Client Smp ID: WST49-10-6923MS
Inj Date : 05-DEC-2009 08:30
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984262|1|
Misc Info : |ECD51H_1S|927988|SVHF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 06-Dec-2009 12:13 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 43 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-692.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.18000	Weight of sample extracted (g)
M	0.93110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.699	10.703	-0.004	37897109	377.619	76.0
1 Dalapon					CAS #: 75-99-0
4.009	4.005	0.004	81353567	981.981	198
3 Dicamba					CAS #: 6597-78-0
11.215	11.220	-0.005	56617984	152.522	30.7
4 MCPP					CAS #: 7085-19-0
11.730	11.732	-0.002	5873662	19239.8	3870

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
5 MCPA					CAS #: 94-74-6
11.998	12.001	-0.003	9949051	17618.3	3540
6 Dichlorprop					CAS #: 120-36-5
12.508	12.514	-0.006	17337241	184.150	37.0
7 2,4-D					CAS #: 94-75-7
12.771	12.779	-0.008	16693830	170.665	34.3
8 2,4,5-TP					CAS #: 93-72-1
13.509	13.514	-0.005	81135315	170.390	34.3
9 2,4,5-T					CAS #: 93-76-5
13.712	13.718	-0.006	60633420	144.534	29.1
10 2,4-DB					CAS #: 94-82-6
14.061	14.069	-0.008	10174553	218.779	44.0
11 Dinoseb					CAS #: 88-85-7
14.638	14.640	-0.002	52699770	193.818	39.0

Data File: /chem/ecd6a.i/120409a.b/043f4301.d
Date : 05-DEC-2009 08:30
Client ID: WST49-10-6923MS
Sample Info: |1201984262|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

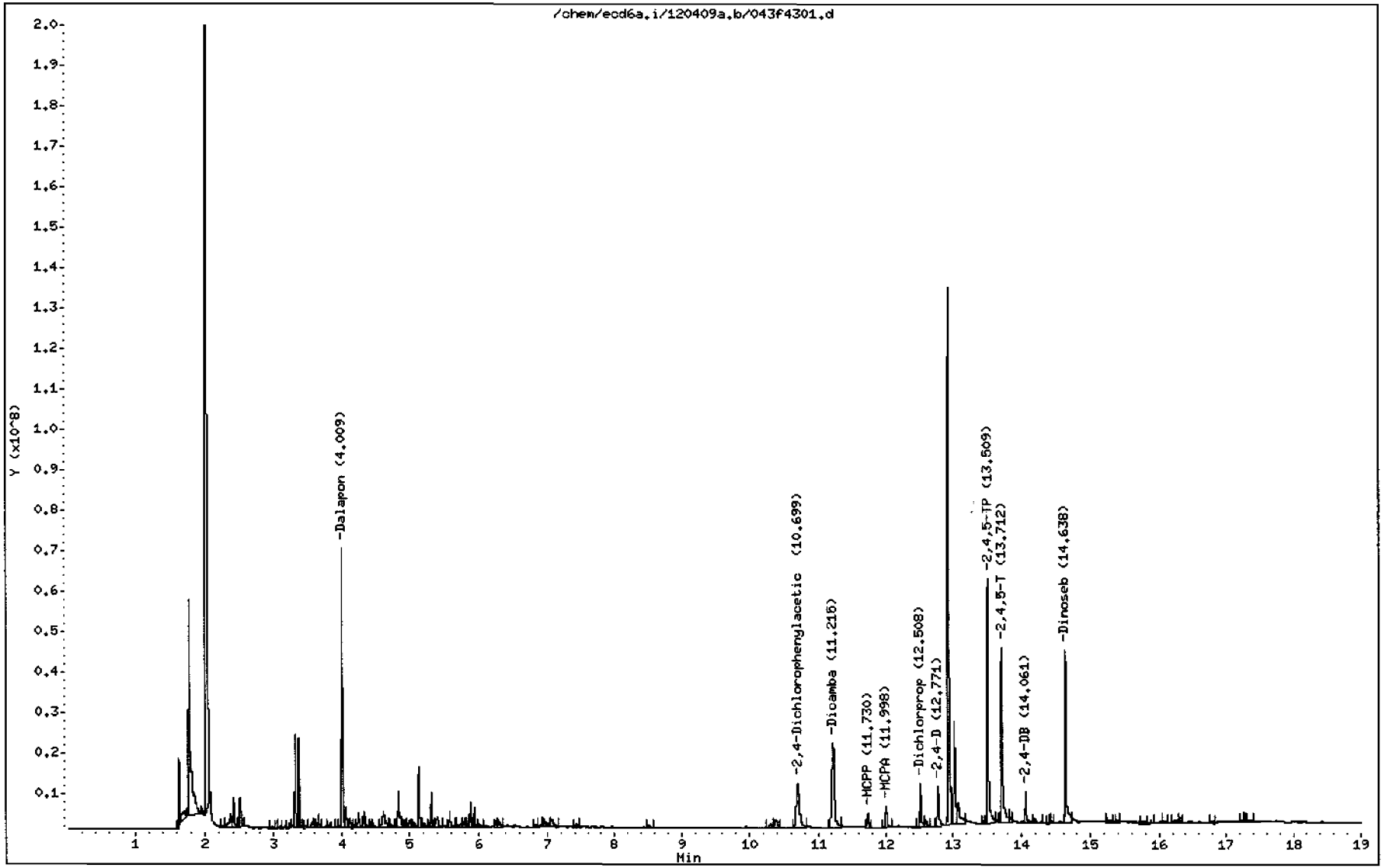

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/120409a.b/044b4401.d
Lab Smp Id: 1201984263 Client Smp ID: WST49-10-6923MSD
Inj Date : 05-DEC-2009 08:58
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984263|1|
Misc Info : |ECD51H_1S|927988|SVHF|MSD|SOIL|MSD|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/120409a.b/ECD6-B-8151A-120409.m
Meth Date : 06-Dec-2009 12:16 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003b0301.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-692.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.15000	Weight of sample extracted (g)
M	0.93110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
11.711	11.716	-0.005	53987050	493.190	99.3	
1 Dalapon					CAS #: 88-85-7	
3.969	3.968	0.001	113355404	1078.19	217	
4 Dicamba					CAS #: 6597-78-0	
11.996	12.001	-0.005	79957046	199.211	40.1	
3 MCPP					CAS #: 7085-19-0	
12.243	12.247	-0.004	8166789	24355.1	4900	(RM)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
12.550	12.552	-0.002	13194255	20658.4	4160	(M)
6 Dichlorprop					CAS #: 120-36-5	
12.922	12.927	-0.005	23116572	215.861	43.4	
7 2,4-D					CAS #: 94-75-7	
13.212	13.218	-0.006	25570651	197.083	39.7	
8 2,4,5-TP					CAS #: 93-72-1	
13.822	13.827	-0.005	117575333	215.163	43.3	
9 2,4,5-T					CAS #: 93-76-5	
14.063	14.067	-0.004	96806755	206.111	41.5	
11 2,4-DB					CAS #: 94-82-6	
14.351	14.357	-0.006	14841278	244.309	49.2	(RM)
10 Dinoseb					CAS #: 88-85-7	
14.517	14.520	-0.003	57203861	221.338	44.5	(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/044b4401.d

Date : 05-DEC-2009 08:58

Client ID: WST49-10-6923MSD

Sample Info: |1201984263|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

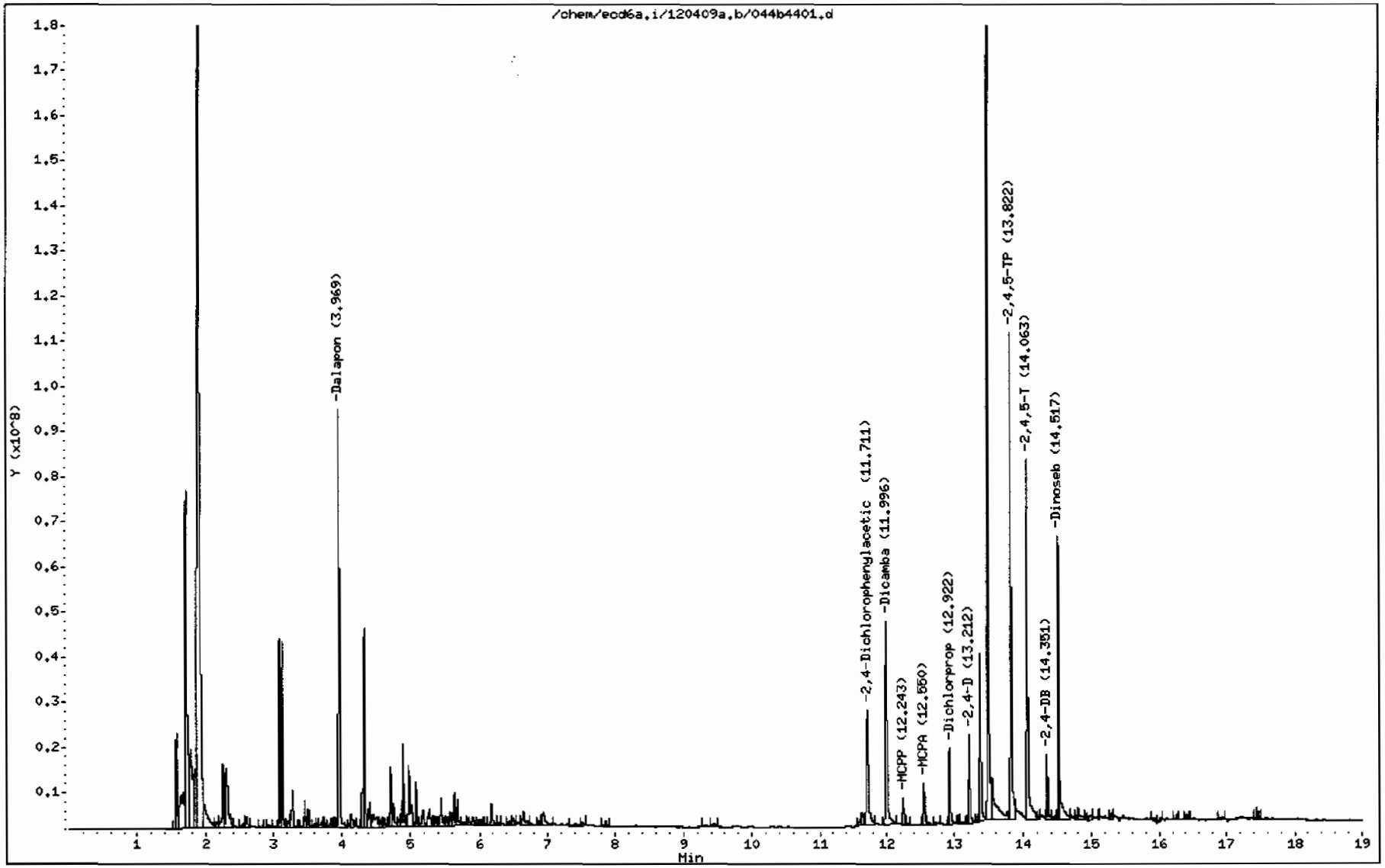

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/120409a.b/044f4401.d
Lab Smp Id: 1201984263 Client Smp ID: WST49-10-6923MSD
Inj Date : 05-DEC-2009 08:58
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201984263|1|
Misc Info : |ECD51H_1S|927988|SVHF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd6a.i/120409a.b/ECD6-F-8151A-120409.m
Meth Date : 06-Dec-2009 12:13 reb01393 Quant Type: ESTD
Cal Date : 04-DEC-2009 13:39 Cal File: 003f0301.d
Als bottle: 44 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-692.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	50.15000	Weight of sample extracted (g)
M	0.93110	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.698	10.703	-0.005	49959026	497.807	100
1 Dalapon					CAS #: 75-99-0
4.009	4.005	0.004	87119684	1051.58	212
3 Dicamba					CAS #: 6597-78-0
11.214	11.220	-0.006	68921188	185.665	37.4
4 MCPP					CAS #: 7085-19-0
11.728	11.732	-0.004	6654971	21799.1	4390

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	
5 MCPA					CAS #: 94-74-6	
11.998	12.001	-0.003	11430812	20242.2	4070	
6 Dichlorprop					CAS #: 120-36-5	
12.507	12.514	-0.007	18532571	196.846	39.6	(M)
7 2,4-D					CAS #: 94-75-7	
12.772	12.779	-0.007	20285027	207.378	41.7	
8 2,4,5-TP					CAS #: 93-72-1	
13.509	13.514	-0.005	97258291	204.249	41.1	
9 2,4,5-T					CAS #: 93-76-5	
13.713	13.718	-0.005	83091187	198.068	39.9	
10 2,4-DB					CAS #: 94-82-6	
14.060	14.069	-0.009	10378180	223.157	44.9	
11 Dinoseb					CAS #: 88-85-7	
14.638	14.640	-0.002	53661742	197.356	39.7	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/120409a.b/044f4401.d

Date : 05-DEC-2009 08:58

Client ID: WST49-10-6923MSD

Sample Info: |120198426311|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

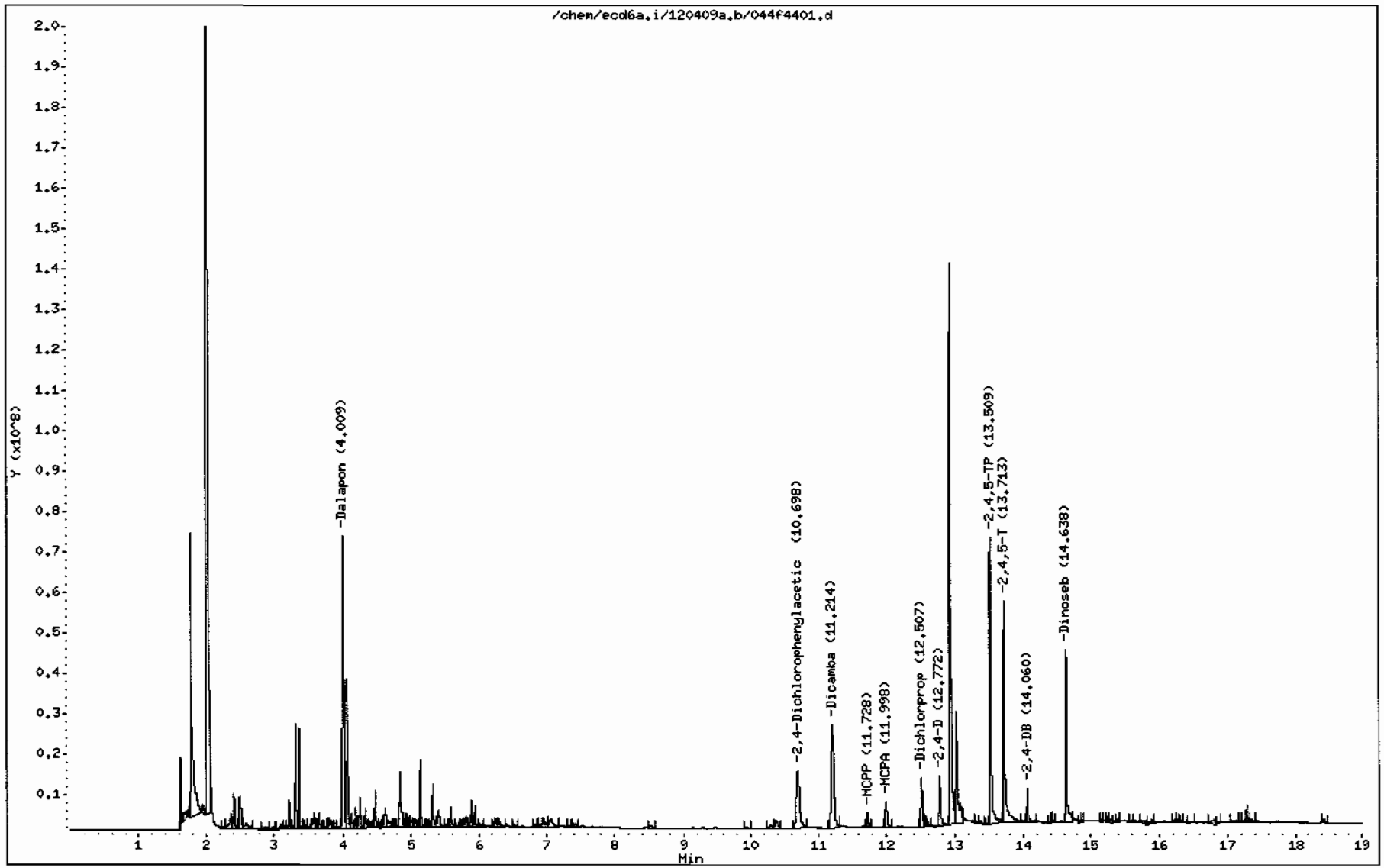

Prep Logbook

The Extraction of Herbicides from Soil and Sludge Samples

Batch ID: 927987 **Verified by:** _____

Analyst: Andrew Schwemin

Method: SW846 8151A

Lab SOP: GL-OA-E-027 REV# 8

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1201984261 MB	01-DEC-2009 20:01:56	50	10	0.2
1201984264 LCS	01-DEC-2009 20:01:56	50	10	0.2
1201984265 LCSD	01-DEC-2009 20:01:56	50	10	0.2
241773001	01-DEC-2009 20:01:56	1.032	10	9.68992
241797001	01-DEC-2009 20:01:56	10.01	10	0.999
241838002	01-DEC-2009 20:01:56	50.12	10	0.19952
241903002	01-DEC-2009 20:01:56	50.13	10	0.19948
241907001	01-DEC-2009 20:01:56	50.02	10	0.19992
241907002	01-DEC-2009 20:01:56	50.14	10	0.19944
1201984262 MS (241907002)	01-DEC-2009 20:01:56	50.18	10	0.19928
1201984263 MSD (241907002)	01-DEC-2009 20:01:56	50.15	10	0.1994
241911001	01-DEC-2009 20:01:56	50.08	10	0.19968
241911002	01-DEC-2009 20:01:56	50.02	10	0.19992

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201984264	HERBICIDE LCS	WE091110-02	1	mL
LCSD	1201984265	HERBICIDE LCS	WE091110-02	1	mL
MS	1201984262	HERBICIDE LCS	WE091110-02	1	mL
MSD	1201984263	HERBICIDE LCS	WE091110-02	1	mL
SURR	All	HERBICIDE SURROGATE	WE091110-03	.05	mL
REGNT	All	Methanol	091117-C	.5	mL
REGNT	All	Iso-octane	1106542-A	1	mL
REGNT	All	Hexane	1233925-B2	50	mL
REGNT	All	Acetone	1233927	50	mL
REGNT	All	N-METHYL-N-NITROSO-P-TOLUENESULFON-AMIDE	1236127A	2	mL
REGNT	All	Methylene Chloride	1236611-D	250	mL
SOURC	All	SODIUM SULFATE	1236563	50	g

Comments:

Verified By: AV

Final Solvent: Hexane

HERBICIDE ANALYSIS

Herbicide Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670-1

Method/Analysis Information

Procedure:	**Analysis of Chlorophenoxy Acid Herbicides by ECD**
Analytical Method:	SW846 8151A
Prep Method:	SW846 8151A Prep
TCLP Prep Method :	SW846 1311
Analytical Batch Number:	931362
Prep Batch Number:	931361
TCLP Prep Batch Number:	930033

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8151A:

Sample ID	Client ID
241839001	WST03-10-2134
1201988990	TCLP Blank (TB)
1201992187	Method Blank (MB)
1201992188	Laboratory Control Sample (LCS)
1201992189	241839001(WST03-10-2134) Matrix Spike (MS)
1201992190	241839001(WST03-10-2134) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-011 REV# 18.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 21.7.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is

adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

2,4-D failed acceptance criteria with a positive bias on one analytical column in the standards bracketing the samples in this SDG. The positive bias for the analytical data is a result of instrument response increasing after the initial calibration. 2,4-D was not detected in the samples; therefore, the non-compliance has no adverse effects on the data.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 241839001 (WST03-10-2134) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Report (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and QC samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this Herbicide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-HERB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD6A.I_1	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD6A.I_2	HP Gas Chromatograph	HP6890 Series GC/ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Andy Whatlock Date: 12-17-2009

Roadmap for LANL 10-670-1 HERB

This roadmap was analyzed by reb01393 on 12-14-2009, 14:56.
This roadmap was reviewed by jcb on 12-15-2009, 10:30.
This roadmap was packaged by yml on 12-16-2009, 12:01.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/121009.b/0949401.d	241839001	sample	12-DEC-2009	05:21	10-670-1.sub	WST03-10-2134	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/121009.b/0949401.d	241839001	sample	12-DEC-2009	05:21	10-670-1.sub	WST03-10-2134	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/121009.b/0919101.d	1201988990	tb	12-DEC-2009	04:00	10-670-1.sub	TBLK01	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0929201.d	1201992187	mb	12-DEC-2009	04:27	10-670-1.sub	HBLK01	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0939301.d	1201992188	lcs	12-DEC-2009	04:54	10-670-1.sub	HBLK01LCS	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0959501.d	1201992189	ms	12-DEC-2009	05:48	10-670-1.sub	WST03-10-2134MS	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0969601.d	1201992190	msd	12-DEC-2009	06:15	10-670-1.sub	WST03-10-2134MSD	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd6a.i/121009.b/0919101.d	1201988990	tb	12-DEC-2009	04:00	10-670-1.sub	TBLK01	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0929201.d	1201992187	mb	12-DEC-2009	04:27	10-670-1.sub	HBLK01	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0939301.d	1201992188	lcs	12-DEC-2009	04:54	10-670-1.sub	HBLK01LCS	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0959501.d	1201992189	ms	12-DEC-2009	05:48	10-670-1.sub	WST03-10-2134MS	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
☐	N	/chem/ecd6a.i/121009.b/0969601.d	1201992190	msd	12-DEC-2009	06:15	10-670-1.sub	WST03-10-2134MSD	1.00000	931362	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

SAMPLE DATA SUMMARY

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241839001	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03–10–2134	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	931362	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/12/2009 05:21	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/10/2009 21:28	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	094f9401.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	094b9401.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.050	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP	U	0.050	mg/L	0.0166	0.050	1

QUALITY CONTROL SUMMARY

Herbicide

Surrogate Recovery Report

SDG Number: 10–670–1

Matrix Type: TCLP SOLID

CAP Column (1) : Rtx–CLP **CAP Column (2) : Rtx–CLPII**

Sample ID	Client ID	DCAA 1 %REC #	DCAA 2 %REC #
1201988990	TB for batch 930033	69	75
1201992187	MB for batch 931361	53	61
1201992188	LCS for batch 931361	87	85
241839001	WST03–10–2134	64	73
1201992189	WST03–10–2134MS	73	72
1201992190	WST03–10–2134MSD	78	78

Surrogate	Acceptance Limits
DCAA = 2,4–Dichlorophenylacetic acid	(47%–122%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: LCS for batch 931361
Lab Sample ID: 1201992188
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: TCLP SOIL
Analysis Date: 12/12/2009 04:54
Dilution: 1
Prep Batch ID: 931361
Batch ID: 931362

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L	Spike Conc. mg/L	Recovery %	Acceptance Limits
94-75-7	LCS 2,4-D	0.002	0.0	0.00189	94	43-131
93-72-1	LCS 2,4,5-TP	0.002	0.0	0.00175	87	41-122

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134MS
Lab Sample ID: 1201992189
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: TCLP R
Analysis Date: 12/12/2009 05:48
Prep Batch ID: 931361
Batch ID: 931362
Dilution: 1

CAS No		Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits
94-75-7	MS	2,4-D	0.400	0.00	U	0.334	84	48-125
93-72-1	MS	2,4,5-TP	0.400	0.00	U	0.306	77	24-131

Herbicide

Quality Control Summary
Spike Recovery Report

SDG Number: 10-670-1
Client ID: WST03-10-2134MSD
Lab Sample ID: 1201992190
Instrument: ECD6A.I
Analyst: RXE1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: TCLP R
Analysis Date: 12/12/2009 06:15
Dilution: 1
Prep Batch ID: 931361
Batch ID: 931362

CAS No	Parmname	Amount Added mg/L	Sample Conc. mg/L		Spike Conc. mg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
94-75-7	MSD 2,4-D	0.400	0.00	U	0.352	88	48-125	5	0-20
93-72-1	MSD 2,4,5-TP	0.400	0.00	U	0.320	80	24-131	4	0-20

Method Blank Summary

SDG Number:	10-670-1	Client:	LANL010	Matrix:	TCLP SOIL
Client ID:	MB for batch 931361	Instrument ID:	ECD6A.I_2 ECD6A.I_1	Data File:	092b9201.d 092f9201.d
Lab Sample ID:	1201992187				
Column:	Rtx-CLPII Rtx-CLP	Prep Date:	12/10/2009 21:28	Analyzed:	12/12/09 04:27
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	TB for batch 930033	1201988990	091f9101.d 091b9101.d	12/12/09	0400
02	LCS for batch 931361	1201992188	093f9301.d 093b9301.d	12/12/09	0454
03	WST03-10-2134	241839001	094f9401.d 094b9401.d	12/12/09	0521
04	WST03-10-2134MS	1201992189	095f9501.d 095b9501.d	12/12/09	0548
05	WST03-10-2134MSD	1201992190	096f9601.d 096b9601.d	12/12/09	0615

SAMPLE
DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	241839001	**Date Received:**	11/25/2009 09:10		
		Client:	LANL010	**Project:**	LANL01004
Client ID:	WST03-10-2134	**Method:**	SW846 8151A	**SOP Ref:**	GL-OA-E-011
Batch ID:	931362	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/12/2009 05:21	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/10/2009 21:28	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	094f9401.d	**Column:**	1 Rtx-CLP	**Level:**	LOW
	094b9401.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.050	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP	U	0.050	mg/L	0.0166	0.050	1

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Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/094f9401.d
Lab Smp Id: 241839001 Client Smp ID: WST03-10-2134
Inj Date : 12-DEC-2009 05:21
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241839001|1|
Misc Info : |ECDTPH_1L|931362|SVHF|LANL|SOIL|WST03-10-2134|||
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 94
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
RT	EXP RT	DLT RT	RESPONSE		
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.493	10.481	0.012	39303327	320.361	641

Data File: /chem/ecd6a.i/121009.b/094f9401.d

Date : 12-DEC-2009 05:21

Client ID: WST03-10-2134

Sample Info: |24183900|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

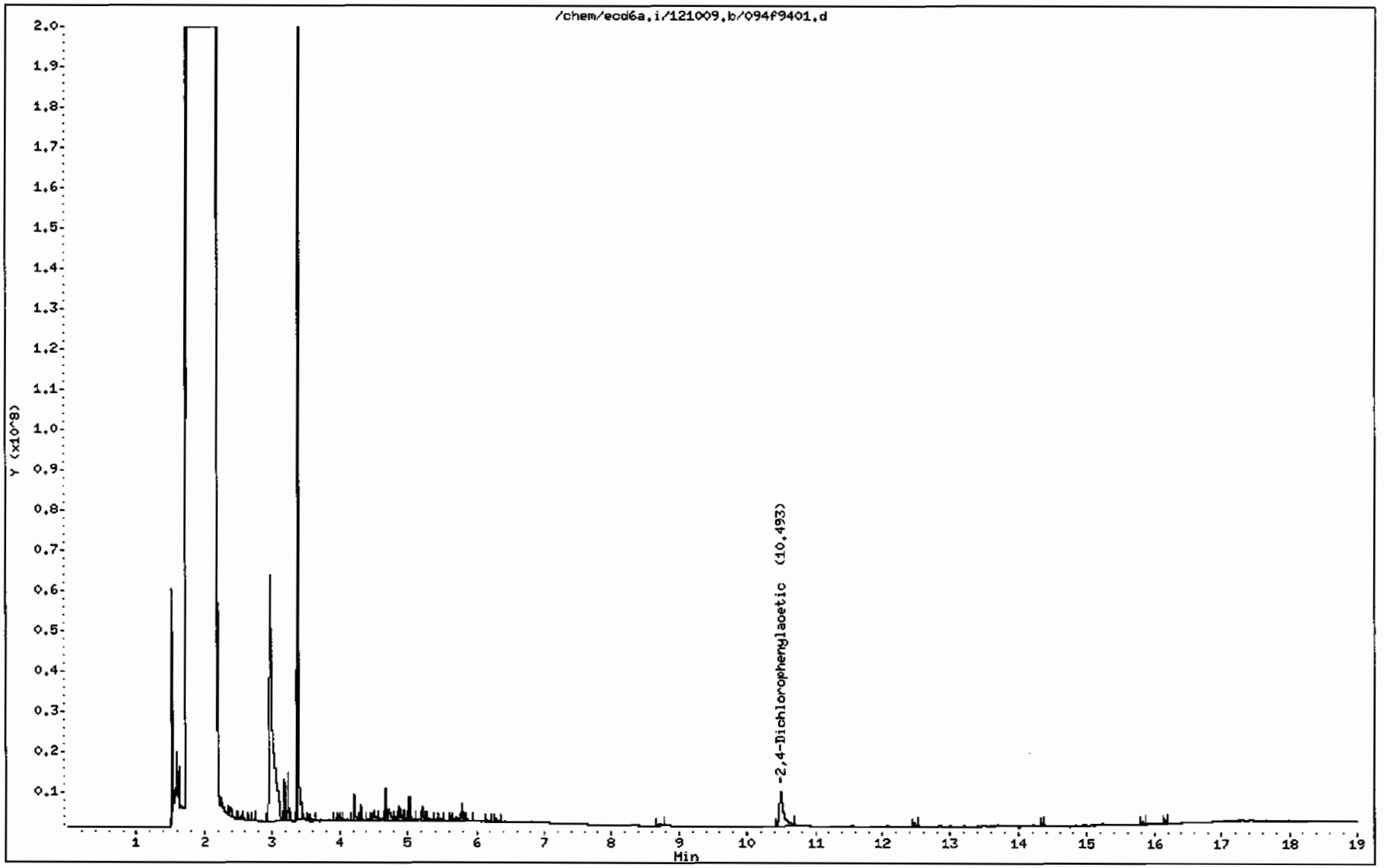

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Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/094b9401.d
Lab Smp Id: 241839001 Client Smp ID: WST03-10-2134
Inj Date : 12-DEC-2009 05:21
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |241839001|1|
Misc Info : |ECDTPH_1L|931362|SVHF|LANL|SOIL|WST03-10-2134|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 94
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.579	11.579	0.000	53680631	364.465	729

Data File: /ohem/eod6a.i/121009.b/094b9401.d

Date : 12-DEC-2009 05:21

Client ID: WST03-10-2134

Sample Info: |241839001|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: eod6a.i

Operator: RXE1

Column diameter: 0.25

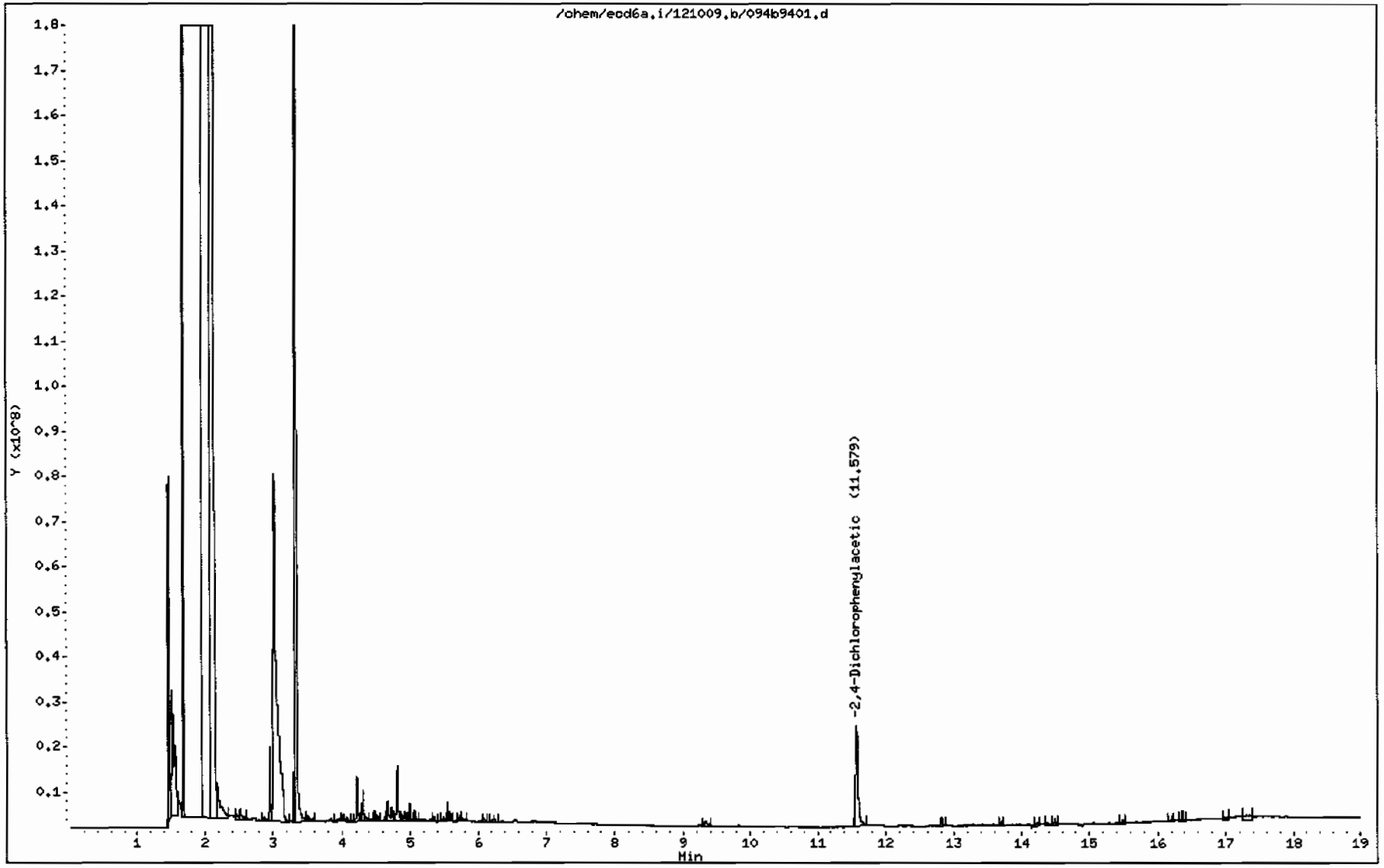

STANDARDS DATA

Report Date: 11-Dec-2009 12:48

Calibration History

Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 08-DEC-2009 21:11

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
08-DEC-2009 18:23	all	/chem/ecd6a.i/120809a.b/003f0301.d
Cal Level: 2 , Cal Amount: 50.00000		
08-DEC-2009 18:51	all	/chem/ecd6a.i/120809a.b/004f0401.d
Cal Level: 3 , Cal Amount: 100.00000		
08-DEC-2009 19:20	all	/chem/ecd6a.i/120809a.b/005f0501.d
Cal Level: 4 , Cal Amount: 150.00000		
08-DEC-2009 19:48	all	/chem/ecd6a.i/120809a.b/006f0601.d
Cal Level: 5 , Cal Amount: 200.00000		
08-DEC-2009 20:15	all	/chem/ecd6a.i/120809a.b/007f0701.d
Cal Level: 6 , Cal Amount: 300.00000		
08-DEC-2009 20:44	all	/chem/ecd6a.i/120809a.b/008f0801.d
Cal Level: 7 , Cal Amount: 400.00000		
08-DEC-2009 21:11	all	/chem/ecd6a.i/120809a.b/009f0901.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level	Ccal Amount	
Ccal Level: 5 , Ccal Amount: 200		
11-DEC-2009 08:57	all	/chem/ecd6a.i/121009.b/050f5001.d
Ccal Level: 5 , Ccal Amount: 200		
11-DEC-2009 00:16	all	/chem/ecd6a.i/121009.b/031f3101.d

Ccal Level: 5 , Ccal Amount: 200		
11-DEC-2009 04:25	all	/chem/ecd6a.i/121009.b/040f4001.d
Ccal Level: 5 , Ccal Amount: 200		
10-DEC-2009 20:04	all	/chem/ecd6a.i/121009.b/022f2201.d
Ccal Level: 5 , Ccal Amount: 200		
10-DEC-2009 14:26	all	/chem/ecd6a.i/121009.b/010f1001.d
Ccal Level: 5 , Ccal Amount: 200		
10-DEC-2009 10:42	all	/chem/ecd6a.i/121009.b/002f0201.d

Report Date: 11-Dec-2009 12:48

Calibration History

Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Start Cal Date: 11-NOV-2009 16:39
End Cal Date : 08-DEC-2009 21:11

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 25.00000		
08-DEC-2009 18:23	all	/chem/ecd6a.i/120809a.b/003b0301.d
Cal Level: 2 , Cal Amount: 50.00000		
08-DEC-2009 18:51	all	/chem/ecd6a.i/120809a.b/004b0401.d
Cal Level: 3 , Cal Amount: 100.00000		
08-DEC-2009 19:20	all	/chem/ecd6a.i/120809a.b/005b0501.d
Cal Level: 4 , Cal Amount: 150.00000		
08-DEC-2009 19:48	all	/chem/ecd6a.i/120809a.b/006b0601.d
Cal Level: 5 , Cal Amount: 200.00000		
08-DEC-2009 20:15	all	/chem/ecd6a.i/120809a.b/007b0701.d
Cal Level: 6 , Cal Amount: 300.00000		
08-DEC-2009 20:44	all	/chem/ecd6a.i/120809a.b/008b0801.d
Cal Level: 7 , Cal Amount: 400.00000		
08-DEC-2009 21:11	all	/chem/ecd6a.i/120809a.b/009b0901.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 200		
11-DEC-2009 08:57	all	/chem/ecd6a.i/121009.b/050b5001.d
Ccal Level: 5 , Ccal Amount: 200		
11-DEC-2009 04:25	all	/chem/ecd6a.i/121009.b/040b4001.d
Ccal Level: 5 , Ccal Amount: 200		
11-DEC-2009 00:16	all	/chem/ecd6a.i/121009.b/031b3101.d

```
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|10-DEC-2009 20:04 |all              |/chem/ecd6a.i/121009.b/022b2201.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|10-DEC-2009 14:26 |all              |/chem/ecd6a.i/121009.b/010b1001.d            |
+------------------+-----------------+---------------------------------------------+
| Ccal Level: 5 , Ccal Amount: 200                                                |
+=================================================================================+
|10-DEC-2009 10:42 |all              |/chem/ecd6a.i/121009.b/002b0201.d            |
+------------------+-----------------+---------------------------------------------+
```

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COMPOUND LISTING

Method file : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 11-Dec-2009 12:24 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	72858.000000
Initial:End Threshold	36429.000000
Initial:Area Threshold	728580.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	20.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000

	Compound	RT	RT Window	RF
	1 Dalapon	3.896	3.866-3.926	1.140e+05
$	2 2,4-Dichlorophenylacetic a	10.481	10.421-10.541	1.227e+05
	3 Dicamba	11.008	10.948-11.068	4.777e+05
	4 MCPP	11.596	11.536-11.656	4.046e+02
	5 MCPA	11.884	11.824-11.944	7.079e+02
	6 Dichlorprop	12.422	12.362-12.482	1.136e+05
	7 2,4-D	12.695	12.635-12.755	1.080e+05
	43 Pentachlorophenol	12.839	12.819-12.859	1.265e+06
	8 2,4,5-TP	13.445	13.415-13.475	5.551e+05
	9 2,4,5-T	13.653	13.613-13.693	4.643e+05
	10 2,4-DB	14.007	13.967-14.047	4.870e+04
	11 Dinoseb	14.579	14.549-14.609	2.723e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Quant Method : ESTD Target Version : 3.50
Last Update : 11-Dec-2009 12:24 Number of Cpnds : 12
Data Type : GC DATA

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	105244.000000
Initial:End Threshold	52622.000000
Initial:Area Threshold	1052440.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	25.000000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

	Compound	RT	RT Window	RF
	1 Dalapon	3.862	3.832-3.892	1.432e+05
$	2 2,4-Dichlorophenylacetic a	11.579	11.519-11.639	1.473e+05
	3 MCPP	12.147	12.087-12.207	5.117e+02
	4 Dicamba	11.885	11.825-11.945	5.547e+05
	5 MCPA	12.466	12.406-12.526	9.232e+02
	6 Dichlorprop	12.851	12.791-12.911	1.482e+05
	7 2,4-D	13.148	13.088-13.208	1.820e+05
	43 Pentachlorophenol	13.421	13.401-13.441	1.800e+06
	8 2,4,5-TP	13.767	13.737-13.797	7.002e+05
	9 2,4,5-T	14.010	13.980-14.040	5.733e+05
	10 Dinoseb	14.467	14.437-14.497	3.903e+05
	11 2,4-DB	14.302	14.262-14.342	7.658e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 08-DEC-2009 21:11
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Cal Date : 11-Dec-2009 12:24 reb01393
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120809a.b/003f0301.d
Level 2: /chem/ecd6a.i/120809a.b/004f0401.d
Level 3: /chem/ecd6a.i/120809a.b/005f0501.d
Level 4: /chem/ecd6a.i/120809a.b/006f0601.d
Level 5: /chem/ecd6a.i/120809a.b/007f0701.d
Level 6: /chem/ecd6a.i/120809a.b/008f0801.d
Level 7: /chem/ecd6a.i/120809a.b/009f0901.d

Compound	25.000 Level 1 / 400.000 Level 7	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
1 Dalapon	+++++ / 117227	107101	105086	127378	111602	115791	114031	7.075
3 Dicamba	465505 / 480184	481821	467306	488048	482101	479002	477709	1.726
4 MCPP	+++++ / 445	348	378	414	417	426	405	8.727
5 MCPA	+++++ / 721	674	693	730	714	716	708	2.893
6 Dichlorprop	121595 / 108427	118866	113487	114045	111101	107778	113614	4.527
7 2,4-D	94052 / 114036	106096	104279	114837	111213	111821	108048	6.760
43 Pentachlorophenol	1319540 / 1202600	1312564	1278028	1287527	1251353	1202296	1264844	3.809

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 08-DEC-2009 21:11
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Cal Date : 11-Dec-2009 12:24 reb01393
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
8 2,4,5-TP	572823	574005	557246	567869	551245	532568		
	530104						555123	3.278
9 2,4,5-T	435381	452844	453227	493758	471990	468769		
	473979						464278	4.059
10 2,4-DB	33175	42886	47734	54508	53916	54112		
	54563						48699	16.773
11 Dinoseb	288246	284429	275798	270375	272772	256137		
	258309						272295	4.434
$ 2 2,4-Dichlorophenylacetic acid	121291	126103	124372	127540	121567	118235		
	119683						122684	2.786

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 08-DEC-2009 21:11
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Cal Date : 11-Dec-2009 12:24 reb01393
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd6a.i/120809a.b/003b0301.d
Level 2: /chem/ecd6a.i/120809a.b/004b0401.d
Level 3: /chem/ecd6a.i/120809a.b/005b0501.d
Level 4: /chem/ecd6a.i/120809a.b/006b0601.d
Level 5: /chem/ecd6a.i/120809a.b/007b0701.d
Level 6: /chem/ecd6a.i/120809a.b/008b0801.d
Level 7: /chem/ecd6a.i/120809a.b/009b0901.d

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
1 Dalapon	+++++	122387	124963	160628	140963	152392		
	158062						143232	11.598
3 MCPP	+++++	448	474	518	528	538		
	564						512	8.356
4 Dicamba	527475	537398	545383	577004	567718	560585		
	567091						554665	3.277
5 MCPA	+++++	914	911	928	922	922		
	943						923	1.215
6 Dichlorprop	149905	154372	145689	148436	146939	145736		
	146625						148243	2.088
7 2,4-D	174228	184554	169745	187333	179697	186086		
	192472						182016	4.356
43 Pentachlorophenol	1715440	1770617	1785272	1839809	1826021	1814967		
	1849866						1800284	2.606

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INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-2009 16:39
End Cal Date : 08-DEC-2009 21:11
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Cal Date : 11-Dec-2009 12:24 reb01393
Curve Type : Average

Compound	25.000 Level 1	50.000 Level 2	100.000 Level 3	150.000 Level 4	200.000 Level 5	300.000 Level 6	RRF	% RSD
	400.000 Level 7							
8 2,4,5-TP	649514	681377	694801	712196	720405	713523		
	729793						700230	3.936
9 2,4,5-T	515356	536214	545172	615457	586259	595941		
	618974						573339	7.145
10 Dinoseb	408328	390824	387037	392797	385861	383956		
	383632						390348	2.210
11 2,4-DB	78154	76013	72214	76800	76608	76596		
	79702						76584	2.999
$ 2 2,4-Dichlorophenylacetic acid	147036	146417	142638	151338	147905	146930		
	148738						147286	1.785

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD6A Calibration Date: 12/10/09 Time: 1042

Lab File ID: 002F0201 Init. Calib. Date(s): 12/08/09 12/08/09

Heated Purge: (Y/N) N Init. Calib. Times: 1823 2111

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	108047.72	104619.88	0.005	-3.2	15.0
2,4,5-TP	555122.92	512940.03	0.01	-7.6	15.0
2,4-Dichlorophenylacetic aci	122684.45	117135.67	0.01	-4.5	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD6A Calibration Date: 12/10/09 Time: 1042

Lab File ID: 002B0201 Init. Calib. Date(s): 12/08/09 12/08/09

Heated Purge: (Y/N) N Init. Calib. Times: 1823 2111

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	182016.34	166430.89	0.005	-8.6	15.0
2,4,5-TP	700229.92	669244.39	0.01	-4.4	15.0
2,4-Dichlorophenylacetic aci	147285.93	137578.46	0.01	-6.6	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD6A Calibration Date: 12/12/09 Time: 0305

Lab File ID: 089F8901 Init. Calib. Date(s): 12/08/09 12/08/09

Heated Purge: (Y/N) N Init. Calib. Times: 1823 2111

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D	
2,4-D	108047.72	125137.82	0.005	15.8	15.0	<-
2,4,5-TP	555122.92	592726.88	0.01	6.8	15.0	
2,4-Dichlorophenylacetic aci	122684.45	127265.25	0.01	3.7	15.0	

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD6A Calibration Date: 12/12/09 Time: 0305

Lab File ID: 089B8901 Init. Calib. Date(s): 12/08/09 12/08/09

Heated Purge: (Y/N) N Init. Calib. Times: 1823 2111

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	182016.34	191328.22	0.005	5.1	15.0
2,4,5-TP	700229.92	779551.51	0.01	11.3	15.0
2,4-Dichlorophenylacetic aci	147285.93	154055.11	0.01	4.6	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD6A Calibration Date: 12/12/09 Time: 0642

Lab File ID: 097F9701 Init. Calib. Date(s): 11/11/09 12/08/09

Heated Purge: (Y/N) N Init. Calib. Times: 1639 2111

GC Column: RTX-CLP ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF200	MIN RRF	%D	MAX %D
2,4-D	108047.72	124313.76	0.005	15.0	15.0
2,4,5-TP	555122.92	595235.10	0.01	7.2	15.0
2,4-Dichlorophenylacetic aci	122684.45	128798.59	0.01	5.0	15.0

FORM VII HERBICIDE

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

Instrument ID: ECD6A Calibration Date: 12/12/09 Time: 0642

Lab File ID: 097B9701 Init. Calib. Date(s): 12/08/09 12/08/09

Heated Purge: (Y/N) N Init. Calib. Times: 1823 2111

GC Column: RTX-CLPII ID: 0.25 (mm)

COMPOUND	RRF	RRF200	MIN RRF	%D	MAX %D
2,4-D	182016.34	190303.87	0.005	4.6	15.0
2,4,5-TP	700229.92	789997.32	0.01	12.8	15.0
2,4-Dichlorophenylacetic aci	147285.93	156312.22	0.01	6.1	15.0

FORM VII HERBICIDE

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/002f0201.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 10-DEC-2009 10:42
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 10-Dec-2009 11:56 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon						CAS #: 75-99-0
	3.896	3.896	0.000	212794774	2000.00	1870	
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	10.481	10.481	0.000	58567836	500.000	477	
	3 Dicamba						CAS #: 6597-78-0
	11.008	11.008	0.000	89560061	200.000	187	
	4 MCPP						CAS #: 7085-19-0
	11.596	11.596	0.000	7799622	20000.0	19300	
	5 MCPA						CAS #: 94-74-6
	11.884	11.884	0.000	13410574	20000.0	18900	
	6 Dichlorprop						CAS #: 120-36-5
	12.422	12.422	0.000	21999343	200.000	194	
	7 2,4-D						CAS #: 94-75-7
	12.695	12.695	0.000	20923976	200.000	194	
	43 Pentachlorophenol						CAS #: 87-86-5
	12.839	12.839	0.000	221453695	200.000	175	
	8 2,4,5-TP						CAS #: 93-72-1
	13.445	13.445	0.000	102588007	200.000	185	

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.653	13.653	0.000	83653975	200.000	180	
10 2,4-DB					CAS #: 94-82-6	
14.007	14.007	0.000	9559561	200.000	196	
11 Dinoseb					CAS #: 88-85-7	
14.579	14.579	0.000	54592746	200.000	200	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/121009.b/002f0201.d
Date : 10-DEC-2009 10:42
Client ID: HSTD01
Sample Info: WHB091030-12

Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

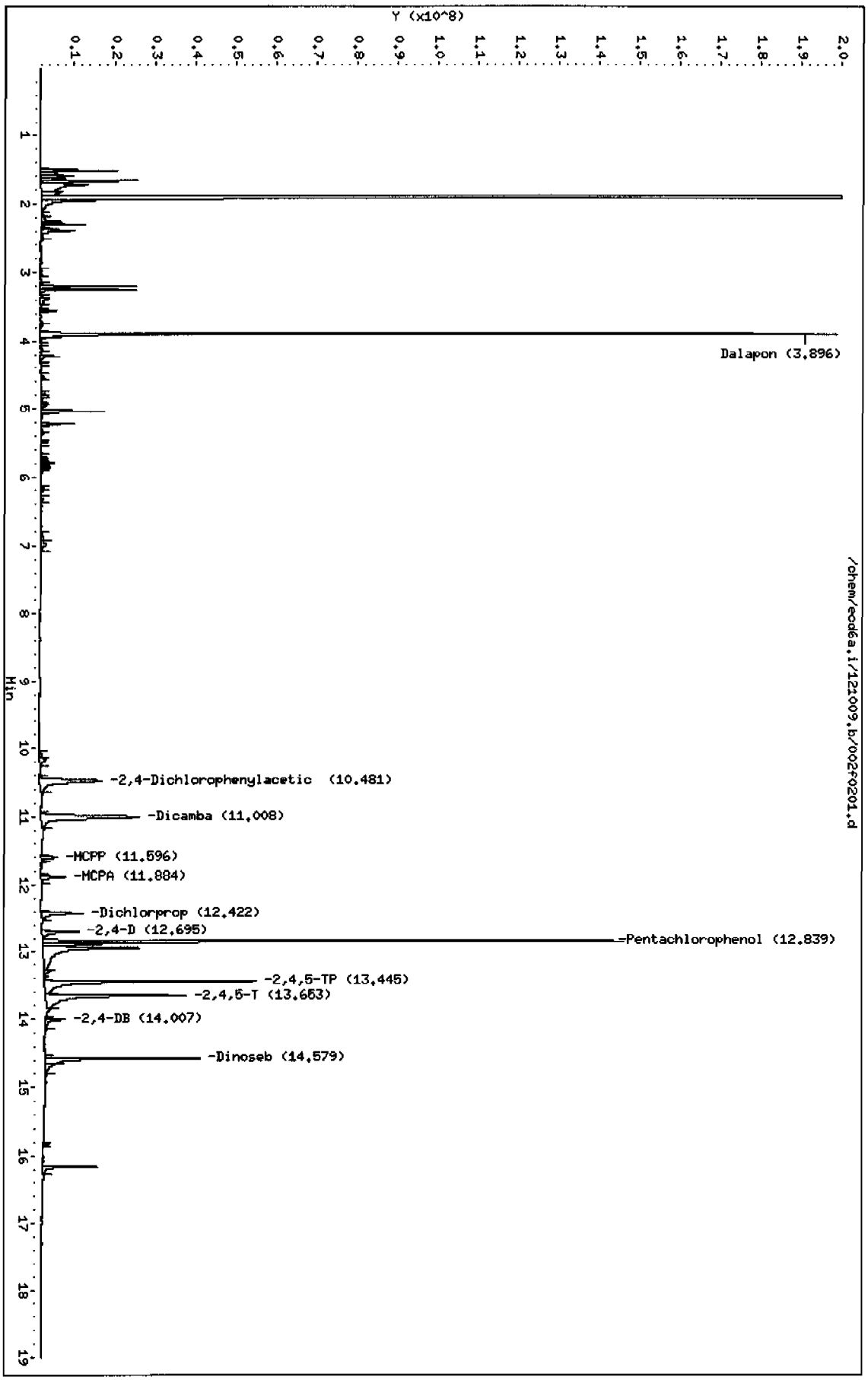

Page 1

Comment: Manually Integrated
Data File: /chem/ecd6a.i/121009.b/002f0201.d
Operator: RXE1
Injection Date: 10-DEC-2009 10:42
Instrument: ecd6a.i
Client Sample ID: HSTD01

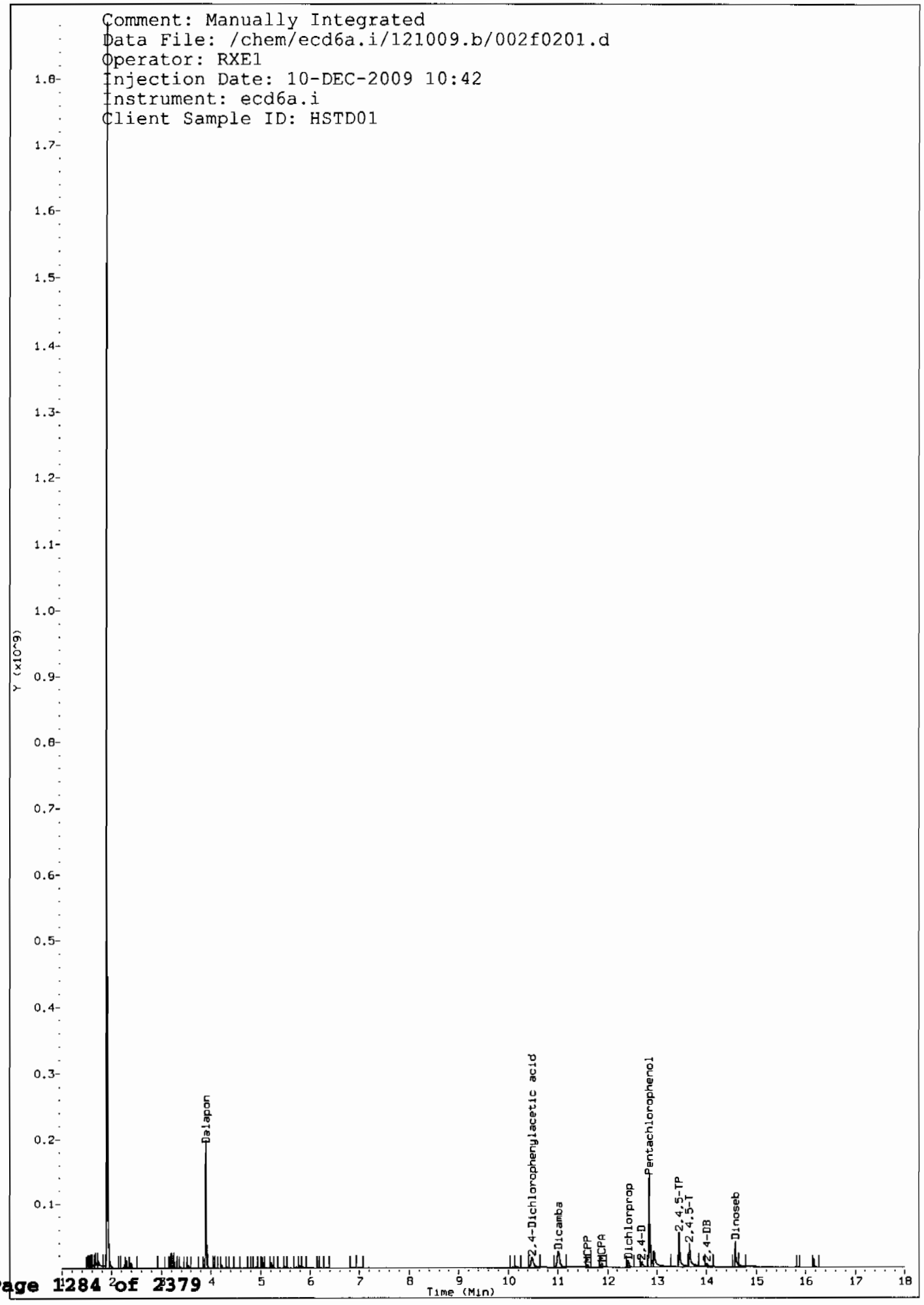

Comment: Before manual integration
Data File: /chem/ecd6a.i/121009.b/orig-002f0201.d
Operator: RXE1
Injection Date: 10-DEC-2009 10:42
Instrument: ecd6a.i
Client Sample ID: HSTD01

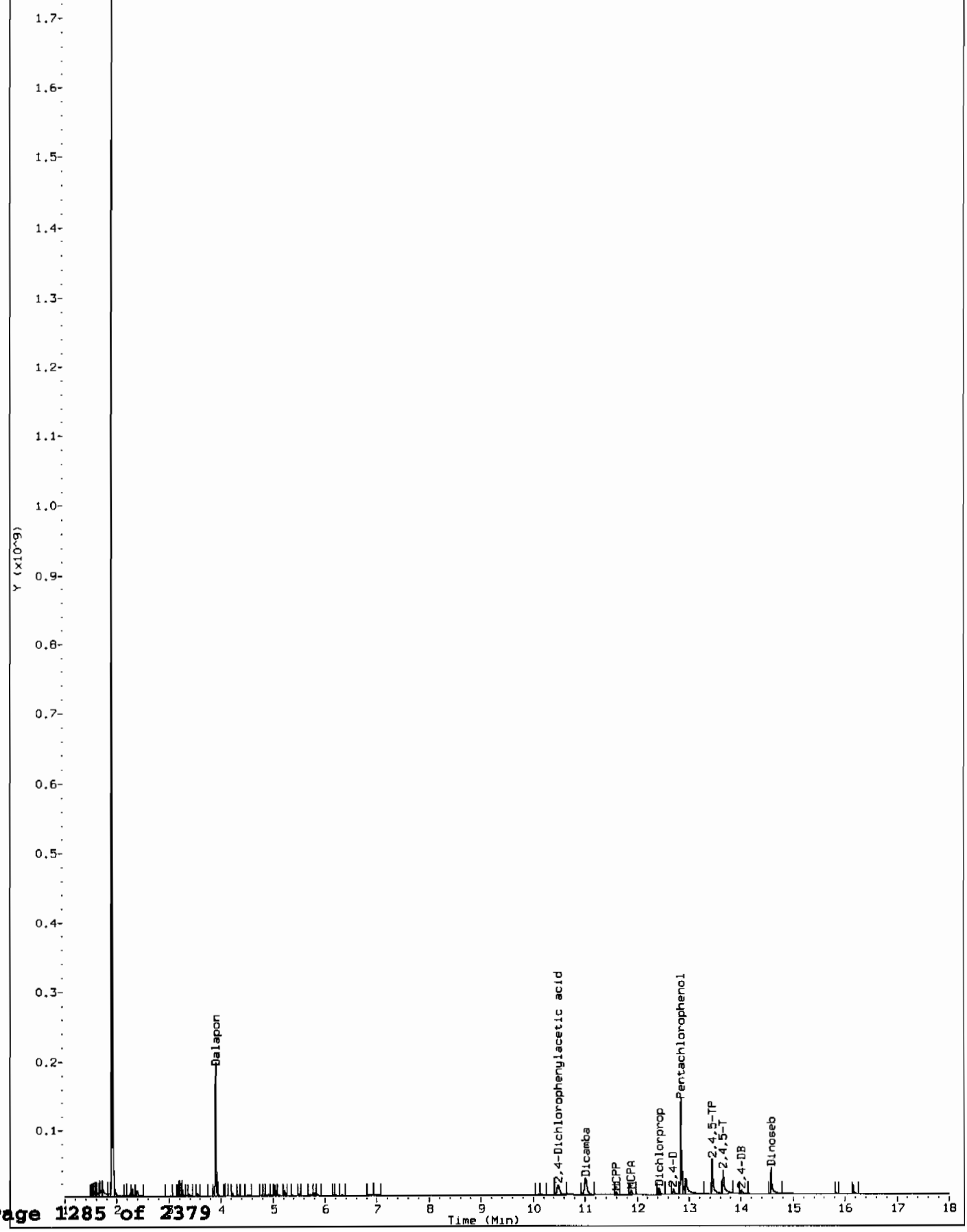

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/002b0201.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD01
Inj Date : 10-DEC-2009 10:42
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 10-Dec-2009 11:56 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon						CAS #: 88-85-7
	3.862	3.862	0.000	275217573	2000.00	1920	
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.579	11.579	0.000	68789229	500.000	467	
	3 MCPP						CAS #: 7085-19-0
	12.147	12.147	0.000	9530166	20000.0	18600	
	4 Dicamba						CAS #: 6597-78-0
	11.885	11.885	0.000	103198394	200.000	186	
	5 MCPA						CAS #: 94-74-6
	12.466	12.466	0.000	16739390	20000.0	18100	
	6 Dichlorprop						CAS #: 120-36-5
	12.851	12.851	0.000	26384980	200.000	178	
	7 2,4-D						CAS #: 94-75-7
	13.148	13.148	0.000	33286178	200.000	183	
	43 Pentachlorophenol						CAS #: 87-86-5
	13.421	13.421	0.000	357773841	200.000	199	
	8 2,4,5-TP						CAS #: 93-72-1
	13.767	13.767	0.000	133848878	200.000	191	

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.010	14.010	0.000	111631579	200.000	195		
10 Dinoseb					CAS #: 88-85-7		
14.467	14.467	0.000	85848088	200.000	220		(M)
11 2,4-DB					CAS #: 94-82-6		
14.302	14.302	0.000	15812739	200.000	206		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/121009.b/002b0201.d

Date : 10-DEC-2009 10:42

Client ID: HSTD01

Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

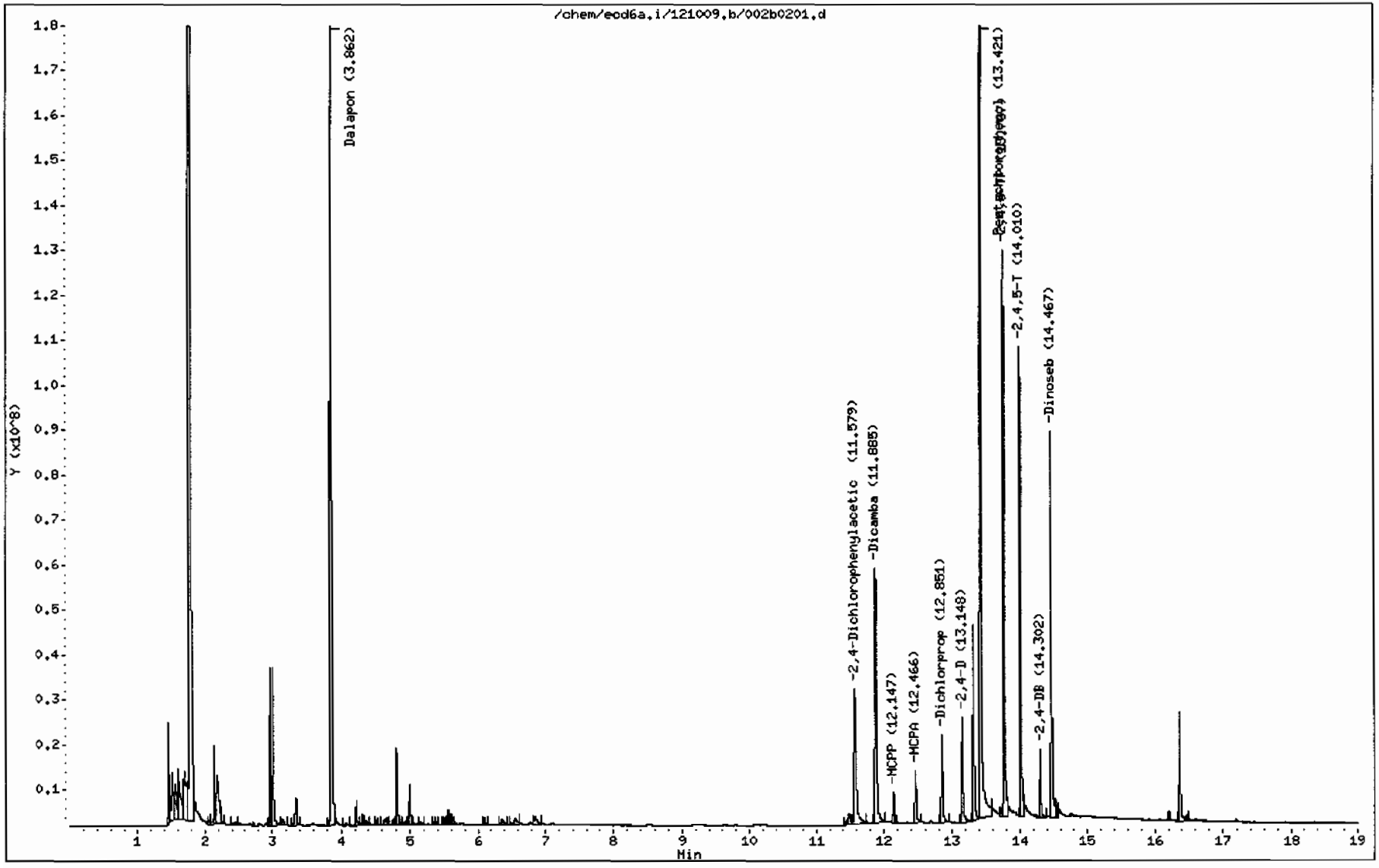

Comment: Manually Integrated
Data File: /chem/ecd6a.i/121009.b/002b0201.d
Operator: RXE1
Injection Date: 10-DEC-2009 10:42
Instrument: ecd6a.i
Client Sample ID: HSTD01

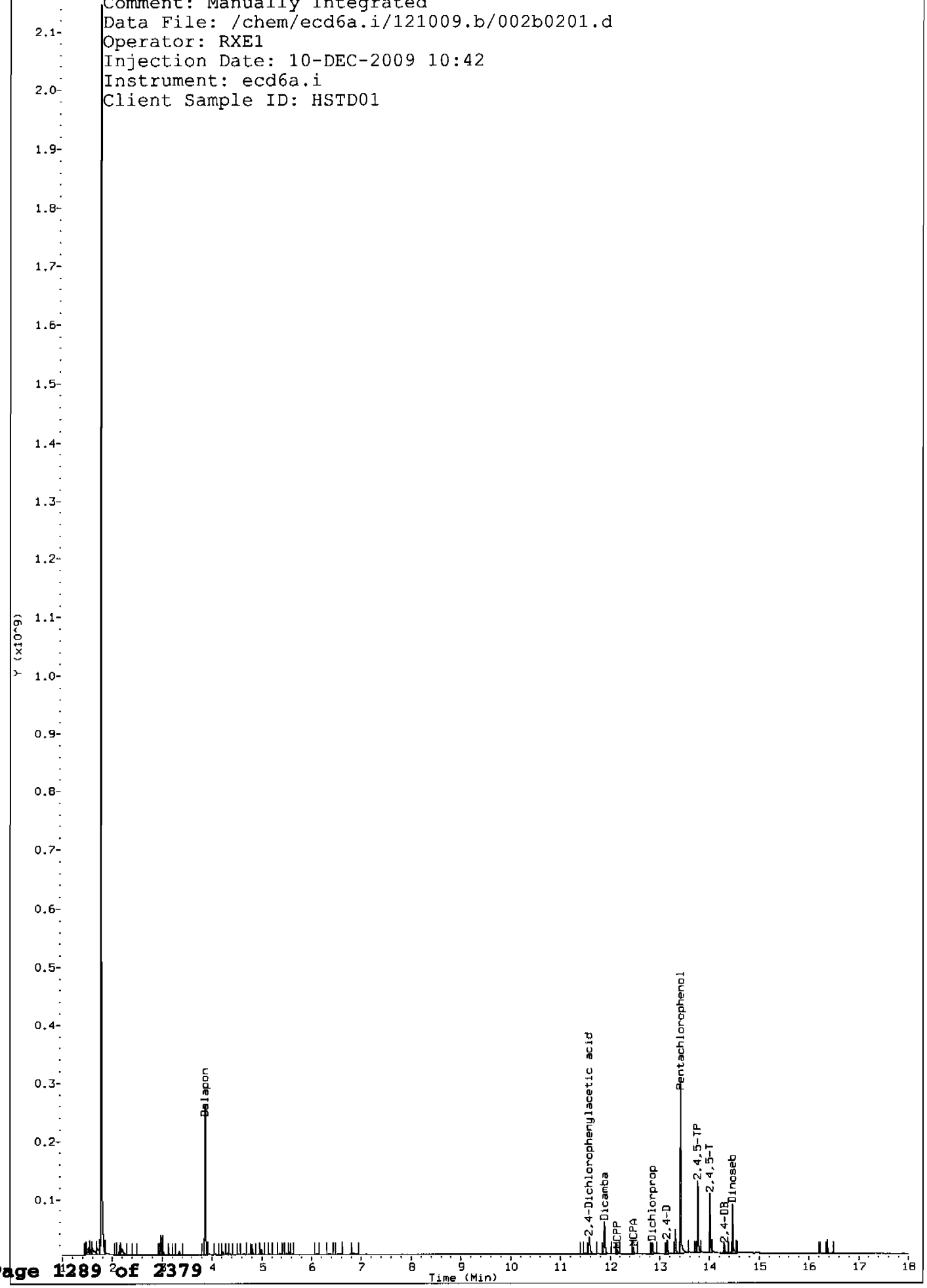

Comment: Before manual integration
Data File: /chem/ecd6a.i/121009.b/orig-002b0201.d
Operator: RXE1
Injection Date: 10-DEC-2009 10:42
Instrument: ecd6a.i
Client Sample ID: HSTD01

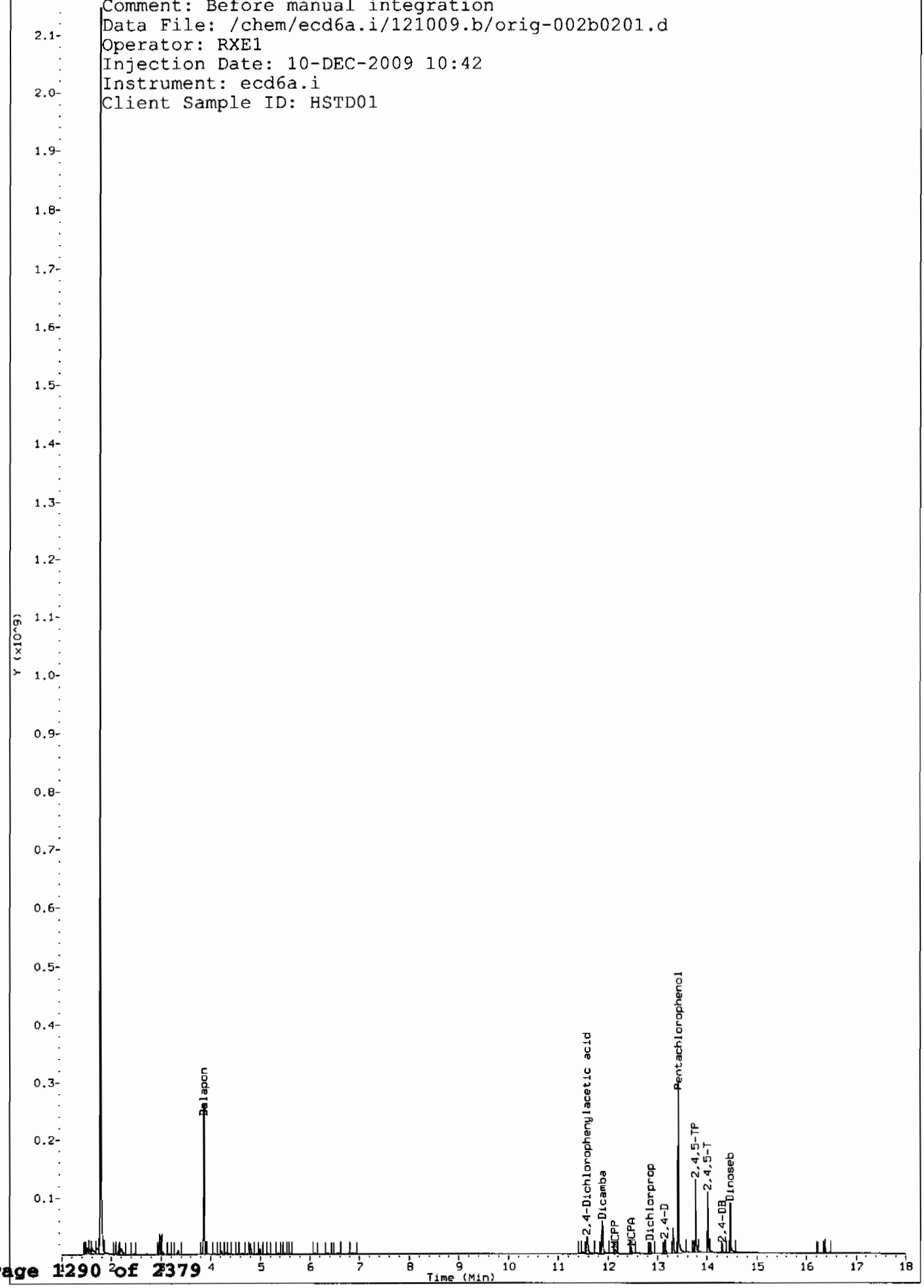

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/089f8901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD10
Inj Date : 12-DEC-2009 03:05
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 89 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon					CAS #: 75-99-0	
	3.890	3.896	-0.006	228352610	2000.00	2000	
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9	
	10.460	10.481	-0.021	63632626	500.000	519	
	3 Dicamba					CAS #: 6597-78-0	
	10.987	11.008	-0.021	100152870	200.000	210	
	4 MCPP					CAS #: 7085-19-0	
	11.586	11.596	-0.010	8865901	20000.0	21900	
	5 MCPA					CAS #: 94-74-6	
	11.877	11.884	-0.007	14313180	20000.0	20200	
	6 Dichlorprop					CAS #: 120-36-5	
	12.412	12.422	-0.010	24488171	200.000	216	
	7 2,4-D					CAS #: 94-75-7	
	12.686	12.695	-0.009	25027563	200.000	232	
	43 Pentachlorophenol					CAS #: 87-86-5	
	12.831	12.839	-0.008	251616091	200.000	199	
	8 2,4,5-TP					CAS #: 93-72-1	
	13.437	13.445	-0.008	118545376	200.000	214	(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
9 2,4,5-T					CAS #: 93-76-5	
13.645	13.653	-0.008	100381507	200.000	216	(M)
10 2,4-DB					CAS #: 94-82-6	
13.997	14.007	-0.010	11694577	200.000	240	(M)
11 Dinoseb					CAS #: 88-85-7	
14.574	14.579	-0.005	60995085	200.000	224	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/121009.b/0896f8901.d
Date : 12-DEC-2009 03:05
Client ID: HSTD10
Sample Info: IWHB091030-12
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

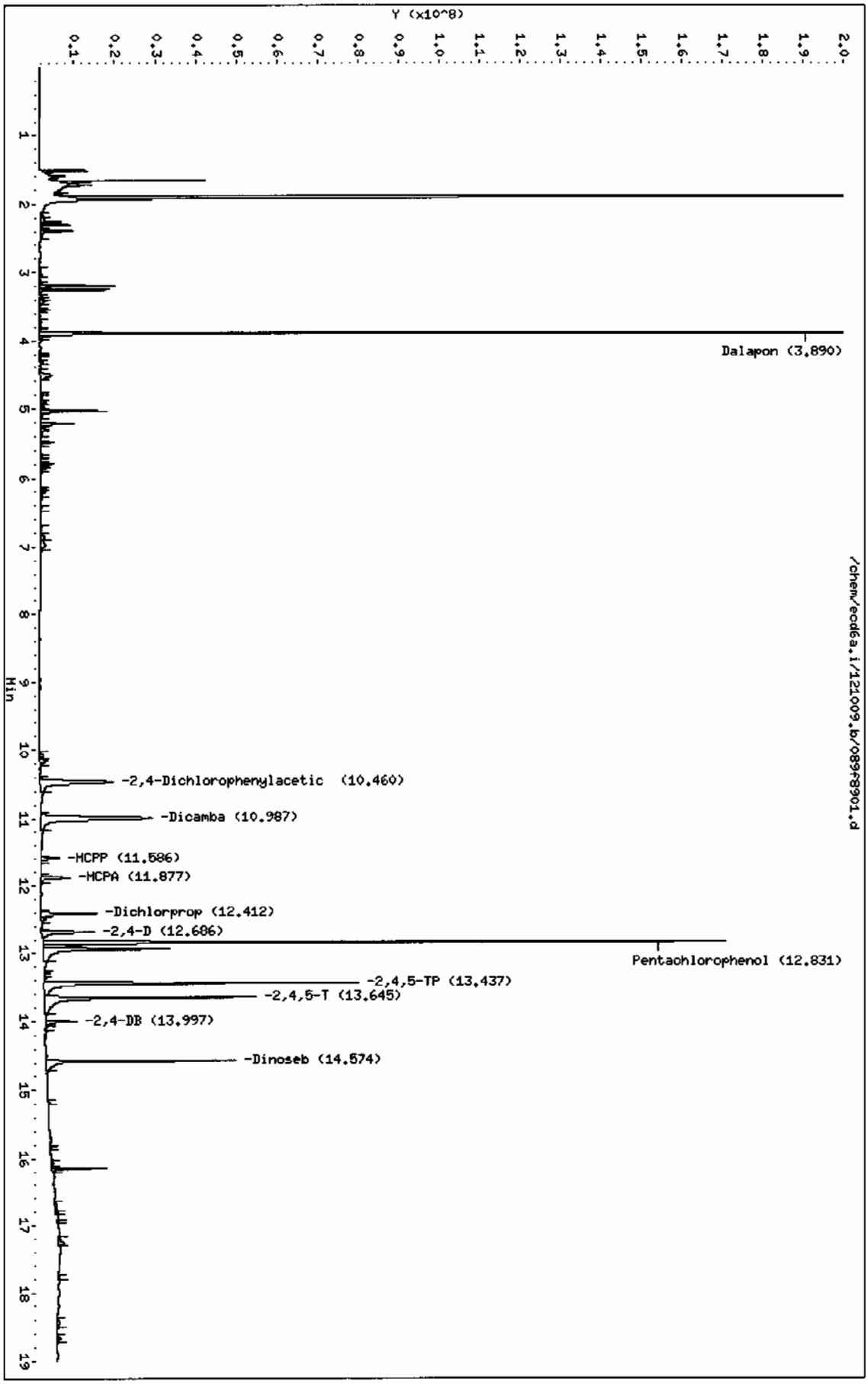

Page 1

Comment: Manually Integrated
Data File: /chem/ecd6a.i/121009.b/089f8901.d
Operator: RXE1
Injection Date: 12-DEC-2009 03:05
Instrument: ecd6a.i
Client Sample ID: HSTD10

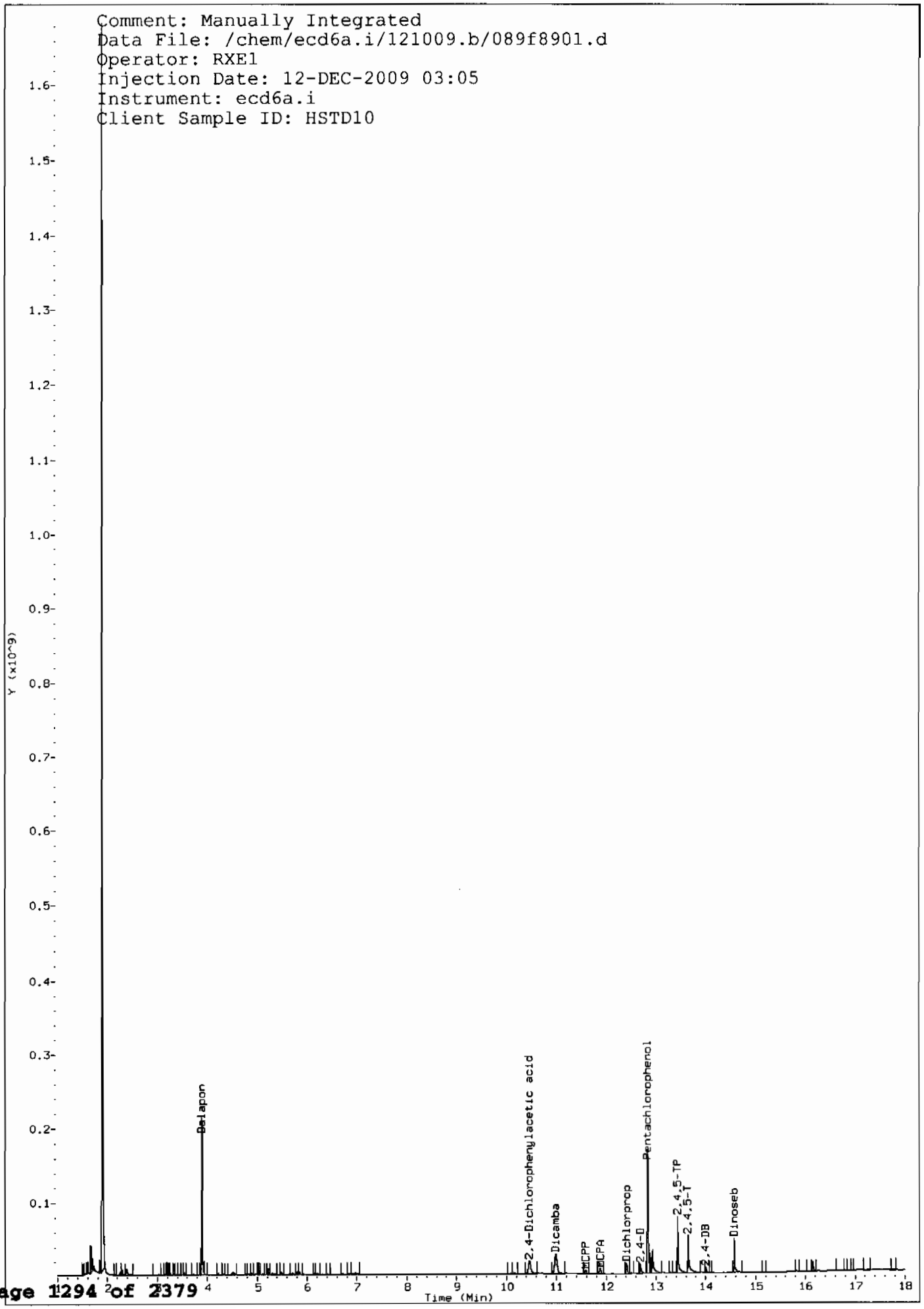

Comment: Before manual integration
Data File: /chem/ecd6a.i/121009.b/orig-089f8901.d
Operator: RXE1
Injection Date: 12-DEC-2009 03:05
Instrument: ecd6a.i
Client Sample ID: HSTD10

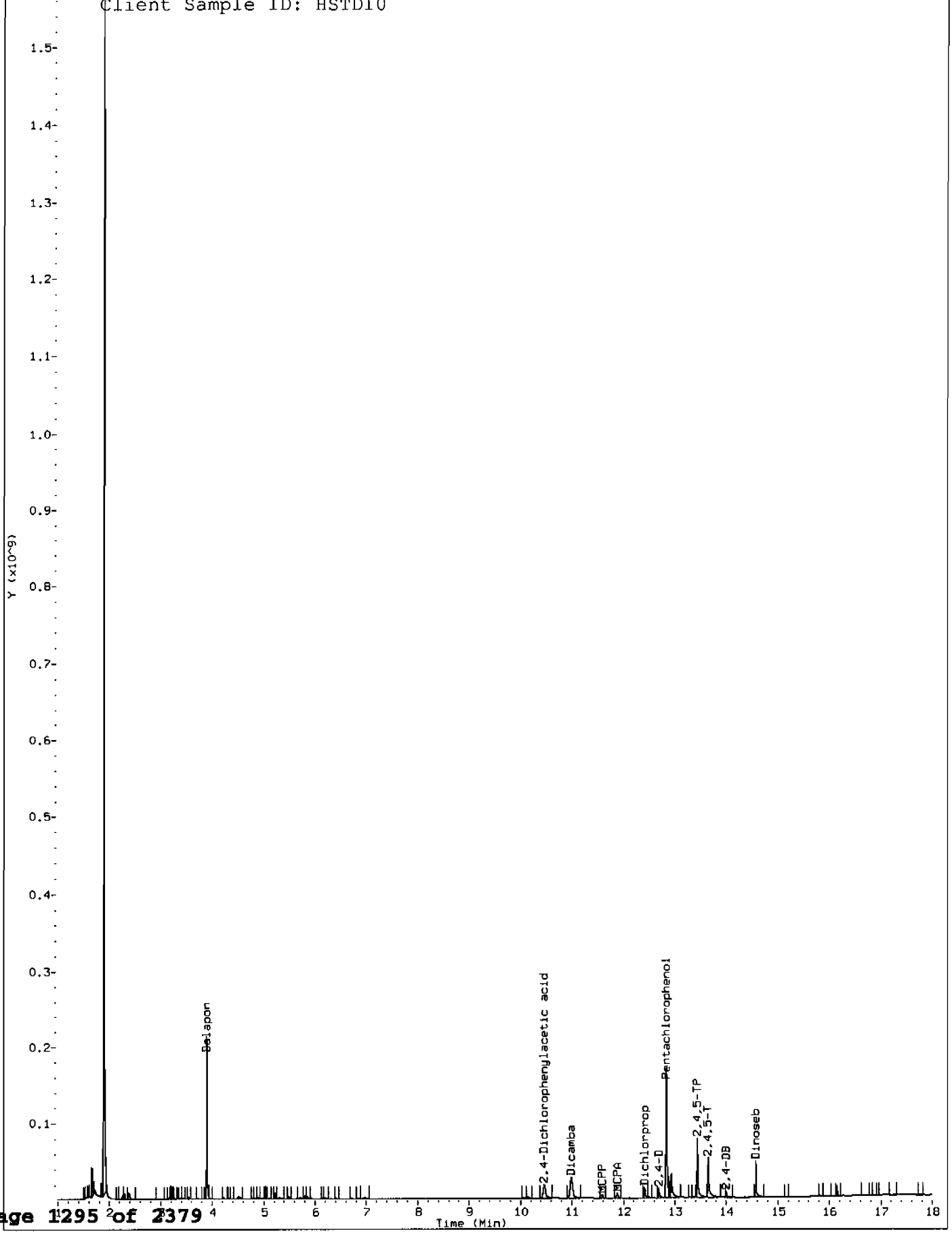

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/089b8901.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD10
Inj Date : 12-DEC-2009 03:05
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : ¦WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 89 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	1 Dalapon						CAS #: 88-85-7
	3.857	3.862	-0.005	302089677	2000.00	2110	
$	2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.567	11.579	-0.012	77027554	500.000	523	
	3 MCPP						CAS #: 7085-19-0
	12.142	12.147	-0.005	11209325	20000.0	21900	
	4 Dicamba						CAS #: 6597-78-0
	11.875	11.885	-0.010	115536919	200.000	208	
	5 MCPA						CAS #: 94-74-6
	12.461	12.466	-0.005	18108078	20000.0	19600	
	6 Dichlorprop						CAS #: 120-36-5
	12.844	12.851	-0.007	31141275	200.000	210	
	7 2,4-D						CAS #: 94-75-7
	13.142	13.148	-0.006	38265644	200.000	210	
	43 Pentachlorophenol						CAS #: 87-86-5
	13.415	13.421	-0.006	377408779	200.000	210	
	8 2,4,5-TP						CAS #: 93-72-1
	13.762	13.767	-0.005	155910301	200.000	223	

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.005	14.010	-0.005	130983609	200.000	228		
10 Dinoseb					CAS #: 88-85-7		
14.463	14.467	-0.004	83085909	200.000	213		(M)
11 2,4-DB					CAS #: 94-82-6		
14.297	14.302	-0.005	18198695	200.000	238		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/121009.b/089b8901.d
Date : 12-DEC-2009 03:05
Client ID: HSTD10
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

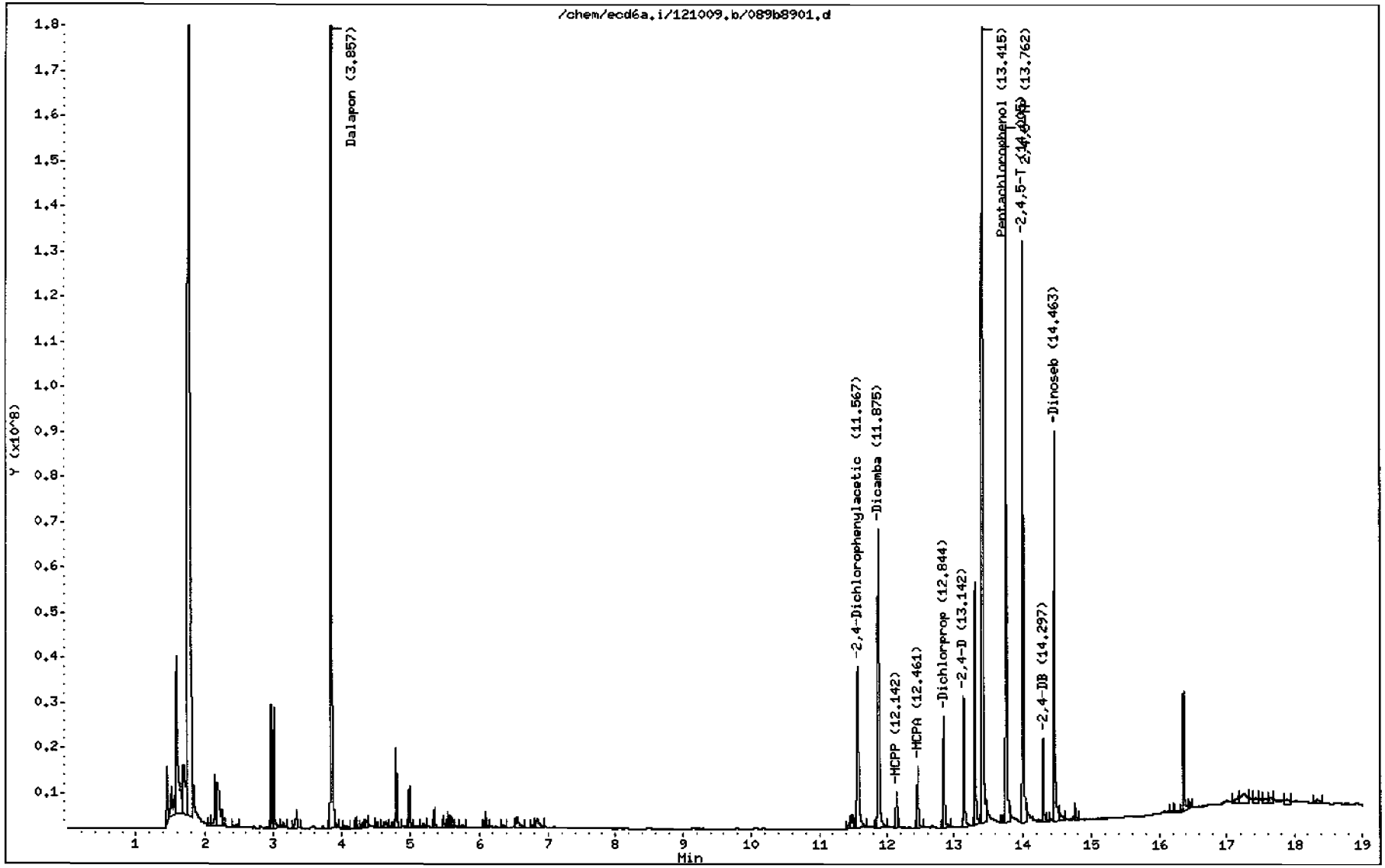

Comment: Manually Integrated
Data File: /chem/ecd6a.i/121009.b/089b8901.d
Operator: RXE1
Injection Date: 12-DEC-2009 03:05
Instrument: ecd6a.i
Client Sample ID: HSTD10

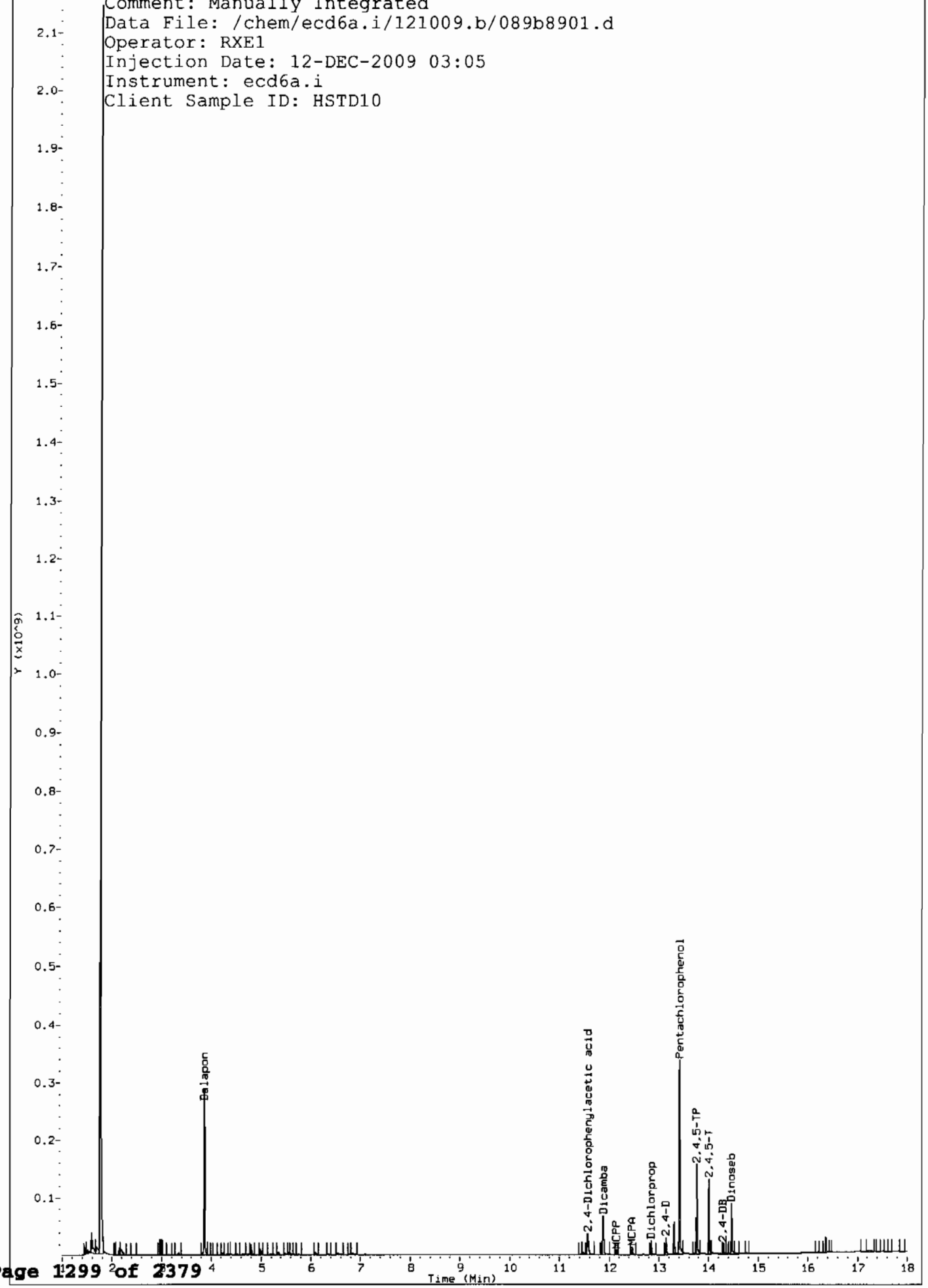

Comment: Before manual integration
Data File: /chem/ecd6a.i/121009.b/orig-089b8901.d
Operator: RXE1
Injection Date: 12-DEC-2009 03:05
Instrument: ecd6a.i
Client Sample ID: HSTD10

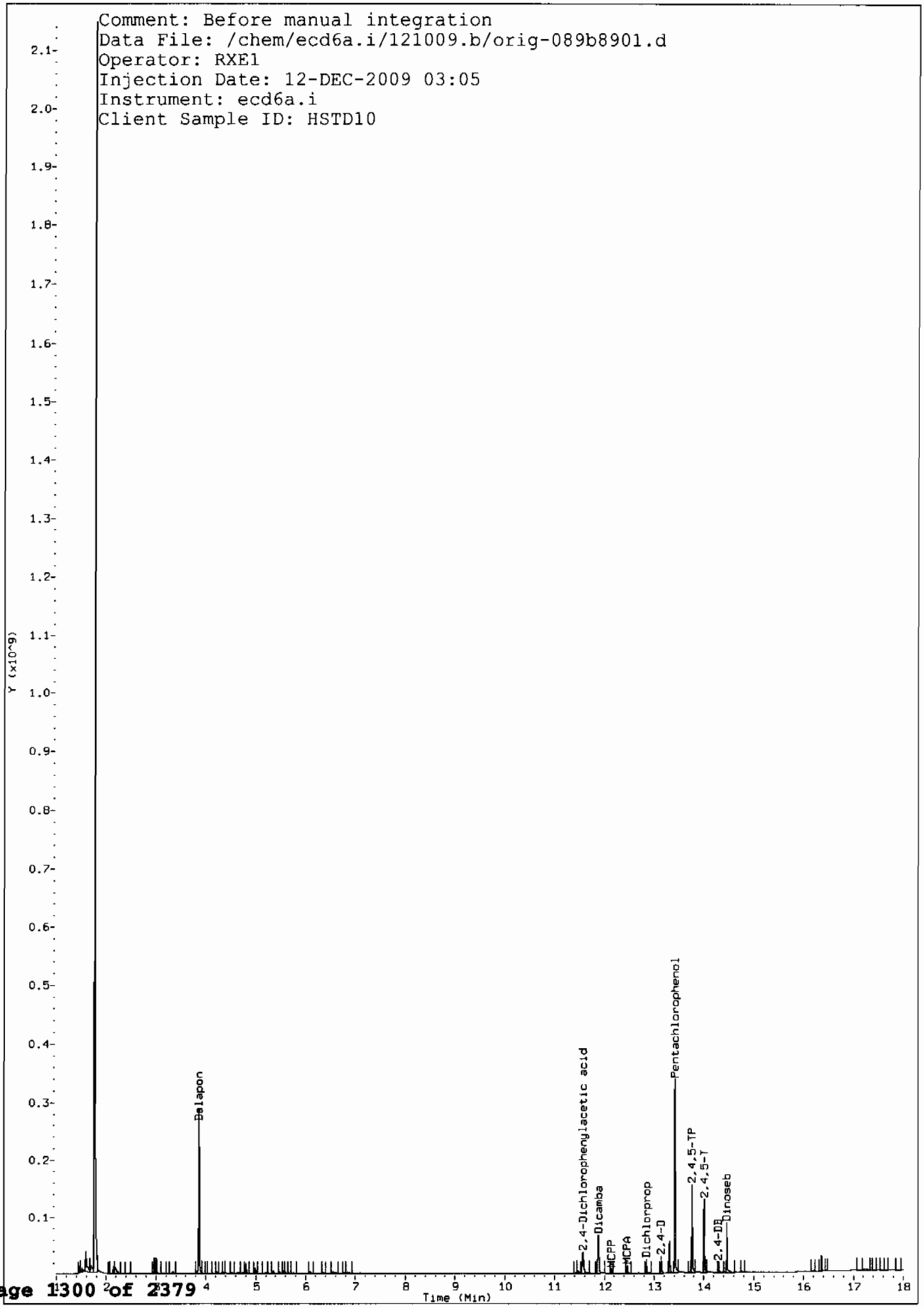

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/097f9701.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD11
Inj Date : 12-DEC-2009 06:42
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 97 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dalapon					CAS #: 75-99-0
	3.889	3.896	-0.007	239223533	2000.00	2100
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
	10.459	10.481	-0.022	64399297	500.000	525
	3 Dicamba					CAS #: 6597-78-0
	10.987	11.008	-0.021	100556583	200.000	210
	4 MCPP					CAS #: 7085-19-0
	11.585	11.596	-0.011	8764371	20000.0	21700
	5 MCPA					CAS #: 94-74-6
	11.876	11.884	-0.008	14312310	20000.0	20200
	6 Dichlorprop					CAS #: 120-36-5
	12.411	12.422	-0.011	25450037	200.000	224
	7 2,4-D					CAS #: 94-75-7
	12.688	12.695	-0.007	24862751	200.000	230
	43 Pentachlorophenol					CAS #: 87-86-5
	12.831	12.839	-0.008	253912973	200.000	201
	8 2,4,5-TP					CAS #: 93-72-1
	13.437	13.445	-0.008	119047020	200.000	214

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
9 2,4,5-T					CAS #: 93-76-5
13.644	13.653	-0.009	101642493	200.000	219
10 2,4-DB					CAS #: 94-82-6
13.998	14.007	-0.009	11449586	200.000	235
11 Dinoseb					CAS #: 88-85-7
14.573	14.579	-0.006	62036670	200.000	228

Data File: /chem/ecd6a.i/121009.b/097f9701.d
Date : 12-DEC-2009 06:42
Client ID: HSTD11
Sample Info: IWHB091030-12
Column phase: Rtx-CLP

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

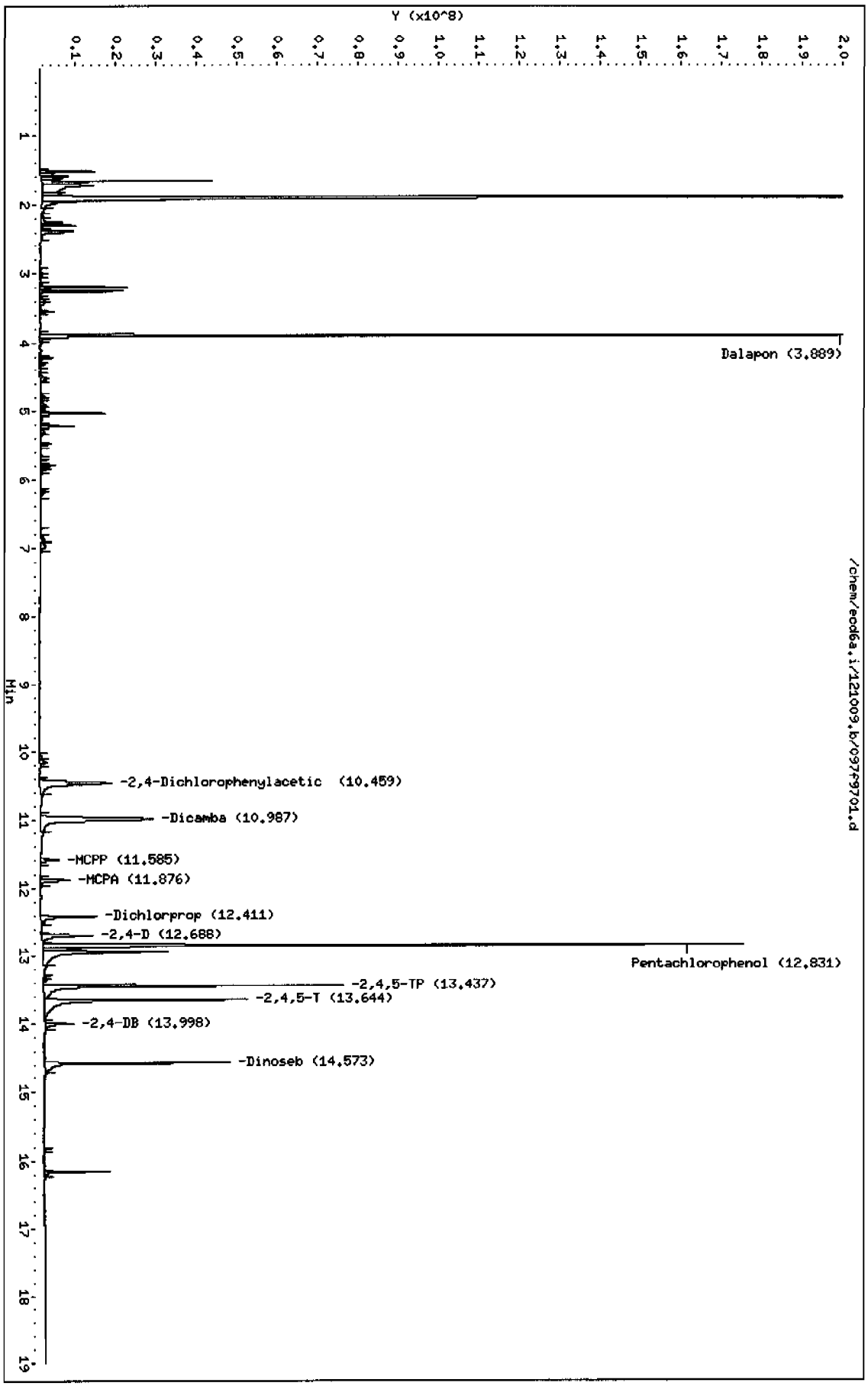

Page 1

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/097b9701.d
Lab Smp Id: WHB091030-12 Client Smp ID: HSTD11
Inj Date : 12-DEC-2009 06:42
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |WHB091030-12
Misc Info : CHECK
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 97 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dalapon					CAS #: 88-85-7
	3.852	3.862	-0.010	316298870	2000.00	2210
$	2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
	11.567	11.579	-0.012	78156112	500.000	531
	3 MCPP					CAS #: 7085-19-0
	12.140	12.147	-0.007	10657045	20000.0	20800
	4 Dicamba					CAS #: 6597-78-0
	11.875	11.885	-0.010	117600823	200.000	212
	5 MCPA					CAS #: 94-74-6
	12.460	12.466	-0.006	17434047	20000.0	18900
	6 Dichlorprop					CAS #: 120-36-5
	12.844	12.851	-0.007	31182355	200.000	210
	7 2,4-D					CAS #: 94-75-7
	13.141	13.148	-0.007	38060774	200.000	209
	43 Pentachlorophenol					CAS #: 87-86-5
	13.413	13.421	-0.008	382107850	200.000	212
	8 2,4,5-TP					CAS #: 93-72-1
	13.762	13.767	-0.005	157999465	200.000	226

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)		
9 2,4,5-T					CAS #: 93-76-5		
14.004	14.010	-0.006	132926417	200.000	232		
10 Dinoseb					CAS #: 88-85-7		
14.463	14.467	-0.004	84573579	200.000	217		(M)
11 2,4-DB					CAS #: 94-82-6		
14.297	14.302	-0.005	18827348	200.000	246		(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd6a.i/121009.b/097b9701.d
Date : 12-DEC-2009 06:42
Client ID: HSTD11
Sample Info: IWHB091030-12

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

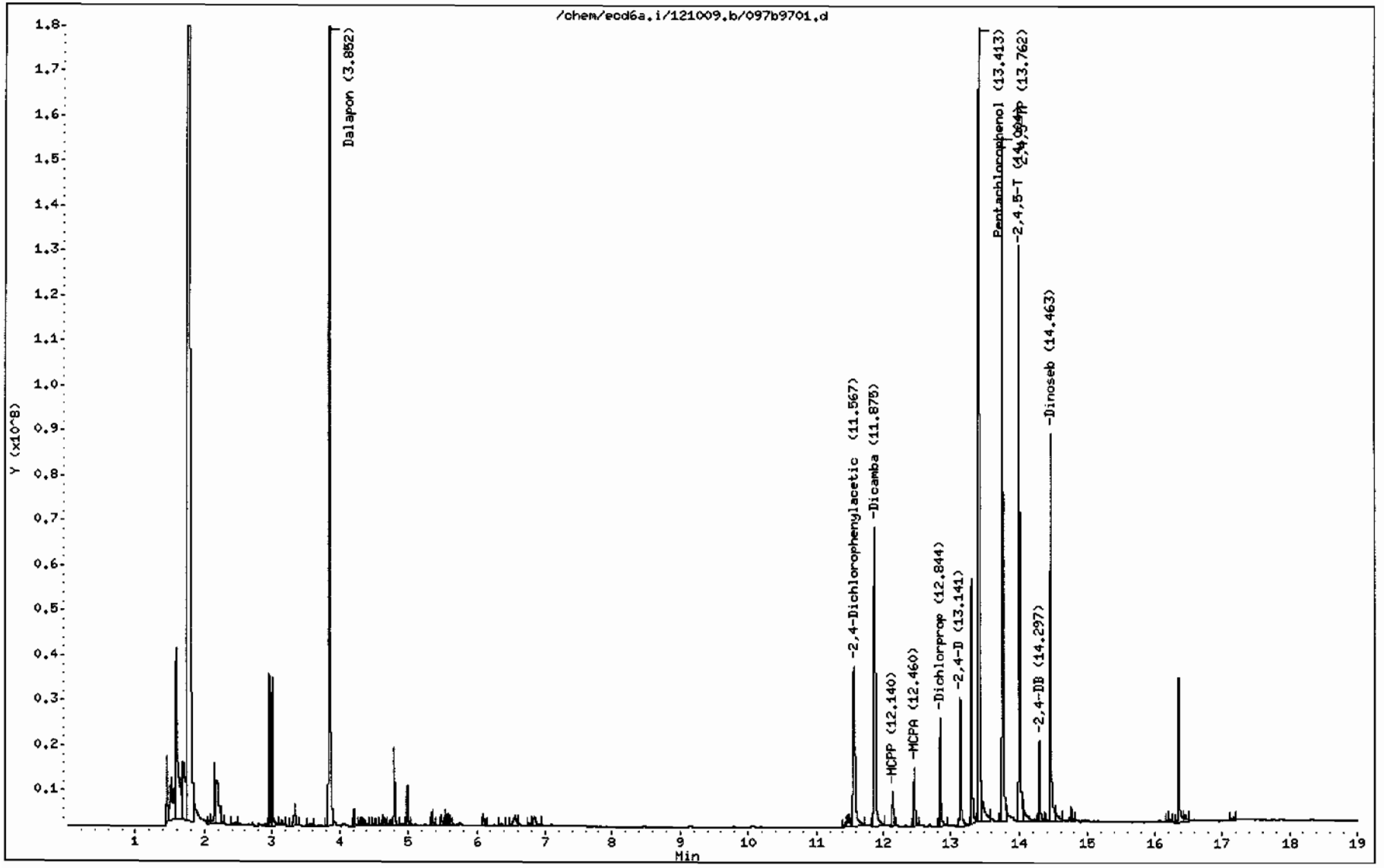

Comment: Manually Integrated
Data File: /chem/ecd6a.i/121009.b/097b9701.d
Operator: RXE1
Injection Date: 12-DEC-2009 06:42
Instrument: ecd6a.i
Client Sample ID: HSTD11

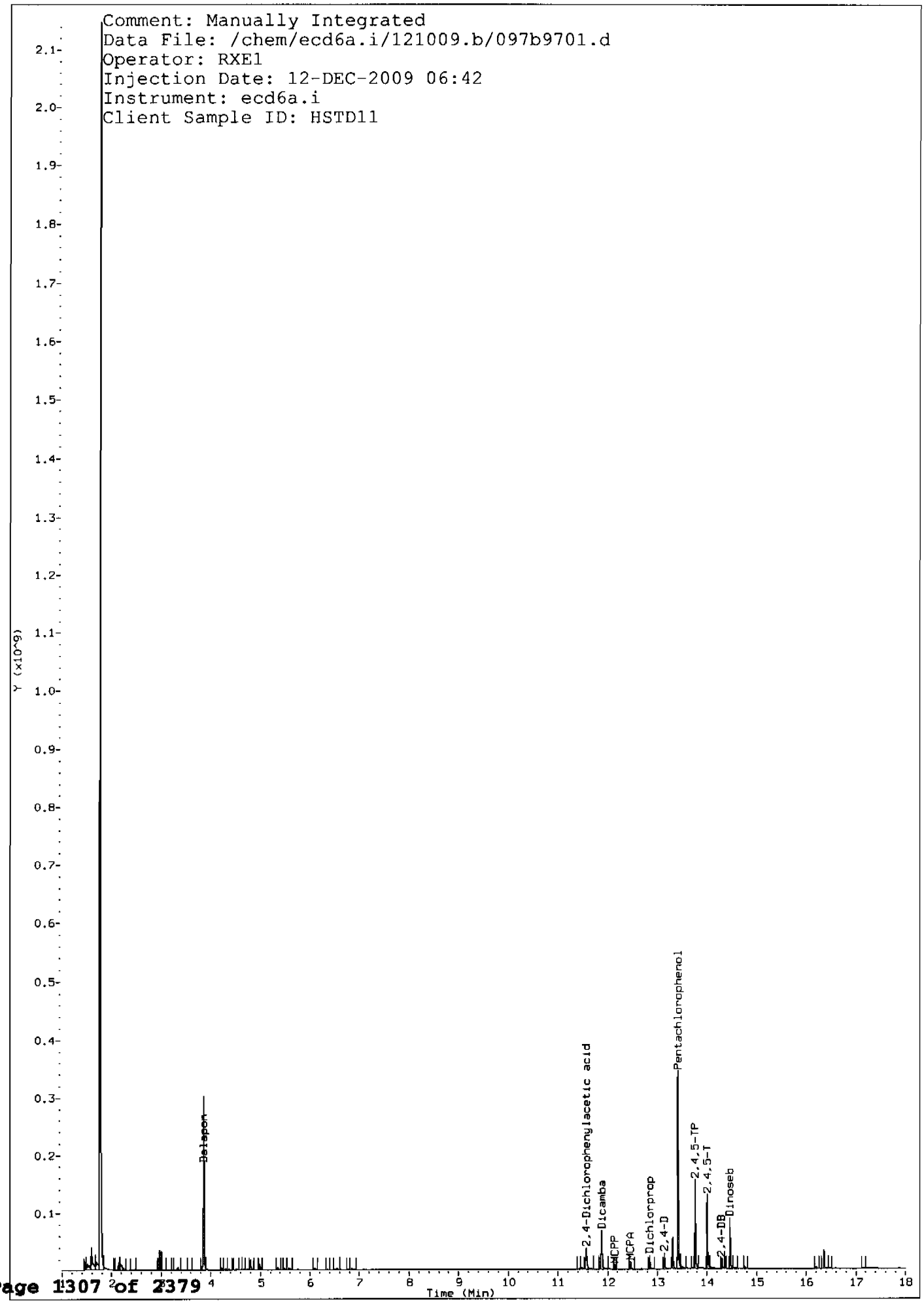

Comment: Before manual integration
Data File: /chem/ecd6a.i/121009.b/orig-097b9701.d
Operator: RXE1
Injection Date: 12-DEC-2009 06:42
Instrument: ecd6a.i
Client Sample ID: HSTD11

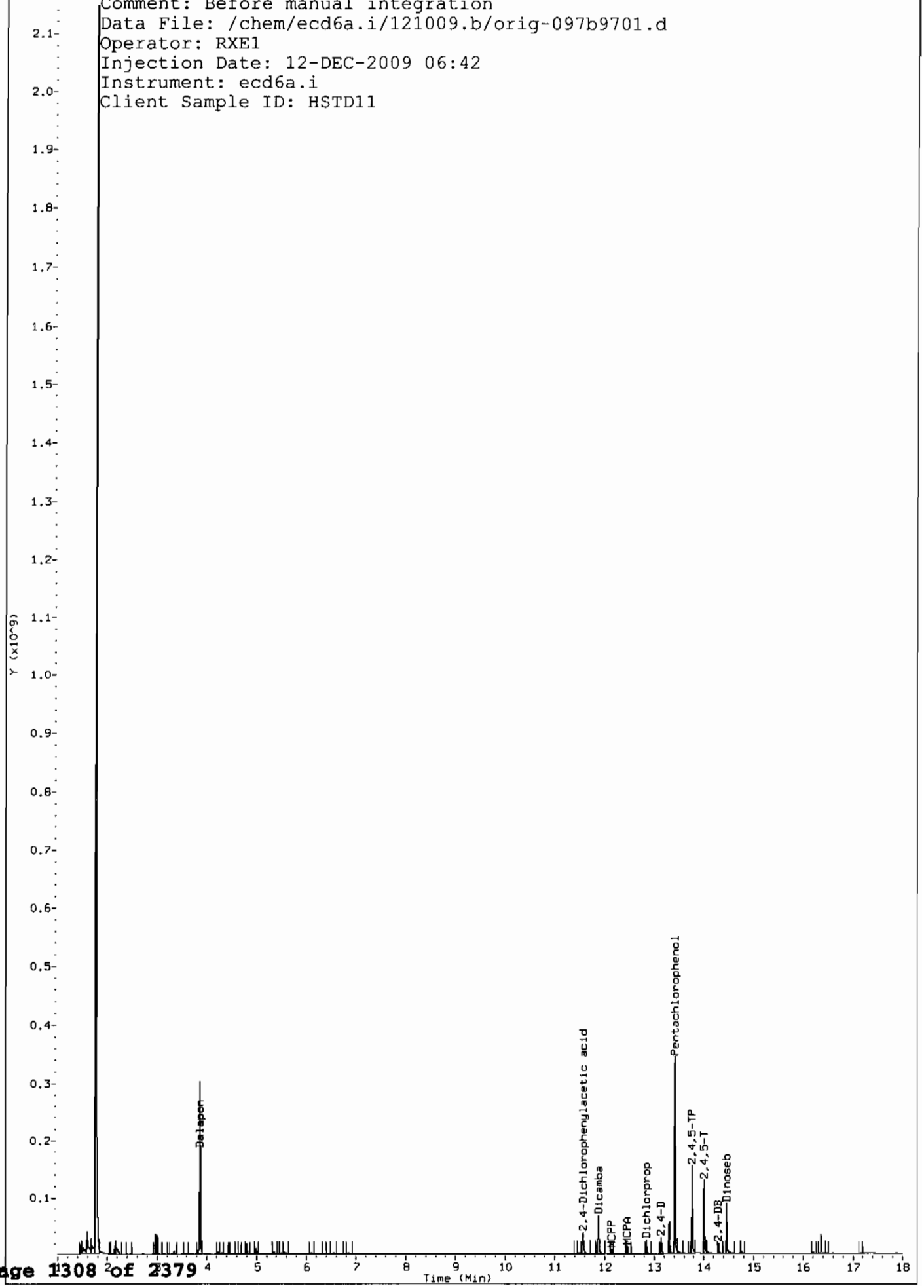

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.46

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/08/09	1727		
02	HIBLK01	WHB091117-02	12/08/09	1755	10.50	
03	HSTD01	WHB091030-01	12/08/09	1823	10.50	
04	HSTD02	WHB091030-02	12/08/09	1851	10.49	
05	HSTD03	WHB091030-03	12/08/09	1920	10.47	
06	HSTD04	WHB091030-04	12/08/09	1948	10.47	
07	HSTD05	WHB091030-05	12/08/09	2015	10.46	
08	HSTD06	WHB091030-06	12/08/09	2044	10.46	
09	HSTD07	WHB091030-07	12/08/09	2111	10.45	
10	HSTD01	WHB091030-12	12/08/09	2140	10.46	
11	HIBLK02	WHB091117-02	12/08/09	2207	10.50	
12	ZZZZZ	ZZZZZ	12/08/09	2236	10.49	
13	ZZZZZ	ZZZZZ	12/08/09	2304	10.46	
14	ZZZZZ	ZZZZZ	12/08/09	2332	10.45	
15	ZZZZZ	ZZZZZ	12/09/09	0000		
16	HSTD02	WHB091030-12	12/09/09	0028	10.45	
17	HIBLK03	WHB091117-02	12/09/09	0056	10.48	
18	ZZZZZ	ZZZZZ	12/09/09	0125	10.47	
19	ZZZZZ	ZZZZZ	12/09/09	0152	10.45	
20	ZZZZZ	ZZZZZ	12/09/09	0221	10.47	
21	ZZZZZ	ZZZZZ	12/09/09	0248	10.45	
22	ZZZZZ	ZZZZZ	12/09/09	0316	10.45	
23	HSTD03	WHB091030-12	12/09/09	0345	10.46	
24	HIBLK04	WHB091117-02	12/09/09	0413	10.48	
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.57

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/08/09	1727		
02	HIBLK01	WHB091117-02	12/08/09	1755	11.59	
03	HSTD01	WHB091030-01	12/08/09	1823	11.59	
04	HSTD02	WHB091030-02	12/08/09	1851	11.58	
05	HSTD03	WHB091030-03	12/08/09	1920	11.58	
06	HSTD04	WHB091030-04	12/08/09	1948	11.57	
07	HSTD05	WHB091030-05	12/08/09	2015	11.57	
08	HSTD06	WHB091030-06	12/08/09	2044	11.57	
09	HSTD07	WHB091030-07	12/08/09	2111	11.56	
10	HSTD01	WHB091030-12	12/08/09	2140	11.57	
11	HIBLK02	WHB091117-02	12/08/09	2207	11.58	
12	ZZZZZ	ZZZZZ	12/08/09	2236	11.58	
13	ZZZZZ	ZZZZZ	12/08/09	2304	11.57	
14	ZZZZZ	ZZZZZ	12/08/09	2332	11.57	
15	ZZZZZ	ZZZZZ	12/09/09	0000		
16	HSTD02	WHB091030-12	12/09/09	0028	11.56	
17	HIBLK03	WHB091117-02	12/09/09	0056	11.58	
18	ZZZZZ	ZZZZZ	12/09/09	0125	11.58	
19	ZZZZZ	ZZZZZ	12/09/09	0152	11.57	
20	ZZZZZ	ZZZZZ	12/09/09	0221	11.57	
21	ZZZZZ	ZZZZZ	12/09/09	0248	11.57	
22	ZZZZZ	ZZZZZ	12/09/09	0316	11.56	
23	HSTD03	WHB091030-12	12/09/09	0345	11.57	
24	HIBLK04	WHB091117-02	12/09/09	0413	11.58	
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.48

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/10/09	1014	10.51	
02	HSTD01	WHB091030-12	12/10/09	1042	10.48	
03	HIBLK02	WHB091117-02	12/10/09	1111	10.52	
04	ZZZZZ	ZZZZZ	12/10/09	1139	10.51	
05	ZZZZZ	ZZZZZ	12/10/09	1207	10.50	
06	ZZZZZ	ZZZZZ	12/10/09	1235	10.48	
07	ZZZZZ	ZZZZZ	12/10/09	1302	10.51	
08	ZZZZZ	ZZZZZ	12/10/09	1330	10.48	
09	ZZZZZ	ZZZZZ	12/10/09	1358	10.48	
10	HSTD02	WHB091030-12	12/10/09	1426	10.48	
11	HIBLK03	WHB091117-02	12/10/09	1454	10.52	
12	ZZZZZ	ZZZZZ	12/10/09	1523	10.51	
13	ZZZZZ	ZZZZZ	12/10/09	1551	10.50	
14	ZZZZZ	ZZZZZ	12/10/09	1619	10.48	
15	ZZZZZ	ZZZZZ	12/10/09	1647	10.50	
16	ZZZZZ	ZZZZZ	12/10/09	1716	10.50	
17	ZZZZZ	ZZZZZ	12/10/09	1743	10.50	
18	ZZZZZ	ZZZZZ	12/10/09	1811	10.50	
19	ZZZZZ	ZZZZZ	12/10/09	1839	10.51	
20	ZZZZZ	ZZZZZ	12/10/09	1907	10.48	
21	ZZZZZ	ZZZZZ	12/10/09	1936	10.48	
22	HSTD03	WHB091030-12	12/10/09	2004	10.48	
23	HIBLK04	WHB091117-02	12/10/09	2032	10.52	
24	ZZZZZ	ZZZZZ	12/10/09	2100	10.51	
25	ZZZZZ	ZZZZZ	12/10/09	2128	10.50	
26	ZZZZZ	ZZZZZ	12/10/09	2156	10.51	
27	ZZZZZ	ZZZZZ	12/10/09	2224	10.50	
28	ZZZZZ	ZZZZZ	12/10/09	2253	10.50	
29	ZZZZZ	ZZZZZ	12/10/09	2320	10.50	
30	ZZZZZ	ZZZZZ	12/10/09	2348	10.50	
31	HSTD04	WHB091030-12	12/11/09	0016	10.48	
32	HIBLK05	WHB091117-02	12/11/09	0044	10.52	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.48

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/11/09	0112	10.50	
02	ZZZZZ	ZZZZZ	12/11/09	0139	10.50	
03	ZZZZZ	ZZZZZ	12/11/09	0207	10.51	
04	ZZZZZ	ZZZZZ	12/11/09	0235	10.50	
05	ZZZZZ	ZZZZZ	12/11/09	0303	10.49	
06	ZZZZZ	ZZZZZ	12/11/09	0330	10.50	
07	ZZZZZ	ZZZZZ	12/11/09	0357	10.50	
08	HSTD05	WHB091030-12	12/11/09	0425	10.48	
09	HIBLK06	WHB091117-02	12/11/09	0452	10.51	
10	ZZZZZ	ZZZZZ	12/11/09	0519	10.50	
11	ZZZZZ	ZZZZZ	12/11/09	0546	10.49	
12	ZZZZZ	ZZZZZ	12/11/09	0614	10.46	
13	ZZZZZ	ZZZZZ	12/11/09	0641	10.49	
14	ZZZZZ	ZZZZZ	12/11/09	0708	10.49	
15	ZZZZZ	ZZZZZ	12/11/09	0736	10.49	
16	ZZZZZ	ZZZZZ	12/11/09	0803	10.50	
17	ZZZZZ	ZZZZZ	12/11/09	0830	10.50	
18	HSTD06	WHB091030-12	12/11/09	0857	10.47	
19	HIBLK07	WHB091117-02	12/11/09	0925	10.51	
20	ZZZZZ	ZZZZZ	12/11/09	0953	10.50	
21	ZZZZZ	ZZZZZ	12/11/09	1021	10.49	
22	ZZZZZ	ZZZZZ	12/11/09	1049	10.50	
23	ZZZZZ	ZZZZZ	12/11/09	1117	10.49	
24	ZZZZZ	ZZZZZ	12/11/09	1145	10.49	
25	ZZZZZ	ZZZZZ	12/11/09	1213	10.49	
26	ZZZZZ	ZZZZZ	12/11/09	1241	10.49	
27	ZZZZZ	ZZZZZ	12/11/09	1309	10.50	
28	HSTD07	WHB091030-12	12/11/09	1337	10.48	
29	HIBLK08	WHB091117-02	12/11/09	1405	10.52	
30	ZZZZZ	ZZZZZ	12/11/09	1433	10.50	
31	ZZZZZ	ZZZZZ	12/11/09	1501	10.47	
32	ZZZZZ	ZZZZZ	12/11/09	1530	10.47	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.48

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/11/09	1558	10.49	
02	ZZZZZ	ZZZZZ	12/11/09	1626	10.50	
03	ZZZZZ	ZZZZZ	12/11/09	1654	10.49	
04	ZZZZZ	ZZZZZ	12/11/09	1722	10.49	
05	ZZZZZ	ZZZZZ	12/11/09	1750	10.49	
06	ZZZZZ	ZZZZZ	12/11/09	1819	10.49	
07	HSTD08	WHB091030-12	12/11/09	1847	10.47	
08	HIBLK09	WHB091117-02	12/11/09	1914	10.51	
09	ZZZZZ	ZZZZZ	12/11/09	1942	10.51	
10	ZZZZZ	ZZZZZ	12/11/09	2010	10.47	
11	ZZZZZ	ZZZZZ	12/11/09	2038		
12	ZZZZZ	ZZZZZ	12/11/09	2106	10.50	
13	ZZZZZ	ZZZZZ	12/11/09	2134	10.50	
14	ZZZZZ	ZZZZZ	12/11/09	2201	10.51	
15	ZZZZZ	ZZZZZ	12/11/09	2229	10.50	
16	HSTD09	WHB091030-12	12/11/09	2257	10.47	
17	HIBLK10	WHB091117-02	12/11/09	2324	10.51	
18	ZZZZZ	ZZZZZ	12/11/09	2352	10.49	
19	ZZZZZ	ZZZZZ	12/12/09	0019	10.48	
20	ZZZZZ	ZZZZZ	12/12/09	0047	10.48	
21	ZZZZZ	ZZZZZ	12/12/09	0115	10.51	
22	ZZZZZ	ZZZZZ	12/12/09	0142	10.48	
23	ZZZZZ	ZZZZZ	12/12/09	0210	10.46	
24	ZZZZZ	ZZZZZ	12/12/09	0237	10.46	
25	HSTD10	WHB091030-12	12/12/09	0305	10.46	
26	HIBLK11	WHB091117-02	12/12/09	0332	10.49	
27	TBLK01	1201988990	12/12/09	0400	10.49	
28	HBLK01	1201992187	12/12/09	0427	10.49	
29	HBLK01LCS	1201992188	12/12/09	0454	10.46	
30	WST03-10-2134	241839001	12/12/09	0521	10.49	
31	WST03-10-2134MS	1201992189	12/12/09	0548	10.46	
32	WST03-10-2134MSD	1201992190	12/12/09	0615	10.46	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLP ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.48

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HSTD11	WHB091030-12	12/12/09	0642	10.46	
02	HIBLK12	WHB091117-02	12/12/09	0709	10.49	
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.58

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HIBLK01	WHB091117-02	12/10/09	1014	11.59	
02	HSTD01	WHB091030-12	12/10/09	1042	11.58	
03	HIBLK02	WHB091117-02	12/10/09	1111	11.59	
04	ZZZZZ	ZZZZZ	12/10/09	1139	11.59	
05	ZZZZZ	ZZZZZ	12/10/09	1207	11.59	
06	ZZZZZ	ZZZZZ	12/10/09	1235	11.58	
07	ZZZZZ	ZZZZZ	12/10/09	1302	11.59	
08	ZZZZZ	ZZZZZ	12/10/09	1330	11.58	
09	ZZZZZ	ZZZZZ	12/10/09	1358	11.58	
10	HSTD02	WHB091030-12	12/10/09	1426	11.58	
11	HIBLK03	WHB091117-02	12/10/09	1454	11.59	
12	ZZZZZ	ZZZZZ	12/10/09	1523	11.59	
13	ZZZZZ	ZZZZZ	12/10/09	1551	11.59	
14	ZZZZZ	ZZZZZ	12/10/09	1619	11.58	
15	ZZZZZ	ZZZZZ	12/10/09	1647	11.59	
16	ZZZZZ	ZZZZZ	12/10/09	1716	11.59	
17	ZZZZZ	ZZZZZ	12/10/09	1743	11.59	
18	ZZZZZ	ZZZZZ	12/10/09	1811	11.59	
19	ZZZZZ	ZZZZZ	12/10/09	1839	11.59	
20	ZZZZZ	ZZZZZ	12/10/09	1907	11.58	
21	ZZZZZ	ZZZZZ	12/10/09	1936	11.58	
22	HSTD03	WHB091030-12	12/10/09	2004	11.58	
23	HIBLK04	WHB091117-02	12/10/09	2032	11.60	
24	ZZZZZ	ZZZZZ	12/10/09	2100	11.59	
25	ZZZZZ	ZZZZZ	12/10/09	2128	11.59	
26	ZZZZZ	ZZZZZ	12/10/09	2156	11.59	
27	ZZZZZ	ZZZZZ	12/10/09	2224	11.59	
28	ZZZZZ	ZZZZZ	12/10/09	2253	11.59	
29	ZZZZZ	ZZZZZ	12/10/09	2320	11.59	
30	ZZZZZ	ZZZZZ	12/10/09	2348	11.59	
31	HSTD04	WHB091030-12	12/11/09	0016	11.58	
32	HIBLK05	WHB091117-02	12/11/09	0044	11.59	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.58

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/11/09	0112	11.59	
02	ZZZZZ	ZZZZZ	12/11/09	0139	11.59	
03	ZZZZZ	ZZZZZ	12/11/09	0207	11.59	
04	ZZZZZ	ZZZZZ	12/11/09	0235	11.59	
05	ZZZZZ	ZZZZZ	12/11/09	0303	11.58	
06	ZZZZZ	ZZZZZ	12/11/09	0330	11.59	
07	ZZZZZ	ZZZZZ	12/11/09	0357	11.58	
08	HSTD05	WHB091030-12	12/11/09	0425	11.58	
09	HIBLK06	WHB091117-02	12/11/09	0452	11.59	
10	ZZZZZ	ZZZZZ	12/11/09	0519	11.58	
11	ZZZZZ	ZZZZZ	12/11/09	0546	11.58	
12	ZZZZZ	ZZZZZ	12/11/09	0614	11.57	
13	ZZZZZ	ZZZZZ	12/11/09	0641	11.58	
14	ZZZZZ	ZZZZZ	12/11/09	0708	11.58	
15	ZZZZZ	ZZZZZ	12/11/09	0736	11.58	
16	ZZZZZ	ZZZZZ	12/11/09	0803	11.58	
17	ZZZZZ	ZZZZZ	12/11/09	0830	11.58	
18	HSTD06	WHB091030-12	12/11/09	0857	11.57	
19	HIBLK07	WHB091117-02	12/11/09	0925	11.59	
20	ZZZZZ	ZZZZZ	12/11/09	0953	11.58	
21	ZZZZZ	ZZZZZ	12/11/09	1021	11.58	
22	ZZZZZ	ZZZZZ	12/11/09	1049	11.58	
23	ZZZZZ	ZZZZZ	12/11/09	1117	11.58	
24	ZZZZZ	ZZZZZ	12/11/09	1145	11.58	
25	ZZZZZ	ZZZZZ	12/11/09	1213	11.58	
26	ZZZZZ	ZZZZZ	12/11/09	1241	11.58	
27	ZZZZZ	ZZZZZ	12/11/09	1309	11.58	
28	HSTD07	WHB091030-12	12/11/09	1337	11.58	
29	HIBLK08	WHB091117-02	12/11/09	1405	11.59	
30	ZZZZZ	ZZZZZ	12/11/09	1433	11.59	
31	ZZZZZ	ZZZZZ	12/11/09	1501	11.57	
32	ZZZZZ	ZZZZZ	12/11/09	1530	11.57	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.58

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	ZZZZZ	ZZZZZ	12/11/09	1558	11.58	
02	ZZZZZ	ZZZZZ	12/11/09	1626	11.58	
03	ZZZZZ	ZZZZZ	12/11/09	1654	11.58	
04	ZZZZZ	ZZZZZ	12/11/09	1722	11.58	
05	ZZZZZ	ZZZZZ	12/11/09	1750	11.58	
06	ZZZZZ	ZZZZZ	12/11/09	1819	11.58	
07	HSTD08	WHB091030-12	12/11/09	1847	11.57	
08	HIBLK09	WHB091117-02	12/11/09	1914	11.59	
09	ZZZZZ	ZZZZZ	12/11/09	1942	11.59	
10	ZZZZZ	ZZZZZ	12/11/09	2010	11.57	
11	ZZZZZ	ZZZZZ	12/11/09	2038		
12	ZZZZZ	ZZZZZ	12/11/09	2106	11.58	
13	ZZZZZ	ZZZZZ	12/11/09	2134	11.58	
14	ZZZZZ	ZZZZZ	12/11/09	2201	11.58	
15	ZZZZZ	ZZZZZ	12/11/09	2229	11.58	
16	HSTD09	WHB091030-12	12/11/09	2257	11.57	
17	HIBLK10	WHB091117-02	12/11/09	2324	11.59	
18	ZZZZZ	ZZZZZ	12/11/09	2352	11.58	
19	ZZZZZ	ZZZZZ	12/12/09	0019	11.58	
20	ZZZZZ	ZZZZZ	12/12/09	0047	11.57	
21	ZZZZZ	ZZZZZ	12/12/09	0115	11.59	
22	ZZZZZ	ZZZZZ	12/12/09	0142	11.58	
23	ZZZZZ	ZZZZZ	12/12/09	0210	11.57	
24	ZZZZZ	ZZZZZ	12/12/09	0237	11.57	
25	HSTD10	WHB091030-12	12/12/09	0305	11.57	
26	HIBLK11	WHB091117-02	12/12/09	0332	11.58	
27	TBLK01	1201988990	12/12/09	0400	11.58	
28	HBLK01	1201992187	12/12/09	0427	11.58	
29	HBLK01LCS	1201992188	12/12/09	0454	11.56	
30	WST03-10-2134	241839001	12/12/09	0521	11.58	
31	WST03-10-2134MS	1201992189	12/12/09	0548	11.57	
32	WST03-10-2134MSD	1201992190	12/12/09	0615	11.57	

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

FORM 8
HERBICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-670-1

GC Column: RTX-CLPII ID: 0.25 (mm) Init. Calib. Date(s): 12/08/09 12/08/09

Instrument ID: ECD6A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.58

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HSTD11	WHB091030-12	12/12/09	0642	11.57	
02	HIBLK12	WHB091117-02	12/12/09	0709	11.58	
03						
04						
05						
06						
07						
08						
09						
10						
11						
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27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = 2,4-Dichlorophenylacet (+/- 0.06 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII HERBICIDE

Identification Summary

SDG Number: 10-670-1 **Client ID:** LCS for batch 931361

Lab Sample ID: 1201992188

Data File:	093f9301.d	**Data File:**	093b9301.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx-CLP	**Column:**	Rtx-CLPII
Analyzed:	12-DEC-09 04:54	**Analyzed:**	12-DEC-09 04:54

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4-D								9.81
	Column 1	1	12.68	12.64 – 12.76	.00189		mg/L	
	Column 2	1	13.14	13.09 – 13.21	.00171		mg/L	
2,4,5-TP								1.78
	Column 1	1	13.43	13.41 – 13.47	.00172		mg/L	
	Column 2	1	13.76	13.74 – 13.8	.00175		mg/L	

Identification Summary

SDG Number: 10–670–1 **Client ID:** WST03–10–2134MS

Lab Sample ID: 1201992189

Data File:	095f9501.d	**Data File:**	095b9501.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	12–DEC–09 05:48	**Analyzed:**	12–DEC–09 05:48

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								10.2
	Column 1	1	12.68	12.64 – 12.76	.334		mg/L	
	Column 2	1	13.14	13.09 – 13.21	.302		mg/L	
2,4,5–TP								.801
	Column 1	1	13.44	13.41 – 13.47	.306		mg/L	
	Column 2	1	13.76	13.74 – 13.8	.309		mg/L	

Identification Summary

SDG Number: 10–670–1 **Client ID:** WST03–10–2134MSD

Lab Sample ID: 1201992190

Data File:	096f9601.d	**Data File:**	096b9601.d
Inst:	ECD6A.I_1	**Inst:**	ECD6A.I_2
Column:	Rtx–CLP	**Column:**	Rtx–CLPII
Analyzed:	12–DEC–09 06:15	**Analyzed:**	12–DEC–09 06:15

Analyte		Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
2,4–D								12.3
	Column 1	1	12.69	12.64 – 12.76	.352		mg/L	
	Column 2	1	13.14	13.09 – 13.21	.311		mg/L	
2,4,5–TP								1.67
	Column 1	1	13.44	13.41 – 13.47	.32		mg/L	
	Column 2	1	13.76	13.74 – 13.8	.326		mg/L	

QUALITY CONTROL DATA

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1			**Matrix:**	TCLP SOIL
Lab Sample ID:	1201988990				
Client Sample:	QC for batch 930033	**Client:**	LANL010	**Project:**	QC
Client ID:	TB for batch 930033	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	931362	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/12/2009 04:00	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/10/2009 21:28	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	091f9101.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	091b9101.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D	U	0.050	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP	U	0.050	mg/L	0.0166	0.050	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/091f9101.d
Lab Smp Id: 1201988990 Client Smp ID: TBLK01
Inj Date : 12-DEC-2009 04:00
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201988990|1|
Misc Info : |ECDTPH_1L|931362|SVHF|TB|SOIL|TB|||
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 91 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
RT	EXP RT	DLT RT	RESPONSE		
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.487	10.481	0.006	42234165	344.250	688

Data File: /chem/ecd6a.i/121009.b/091f9101.d

Date : 12-DEC-2009 04:00

Client ID: TBLK01

Sample Info: |1201988990|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

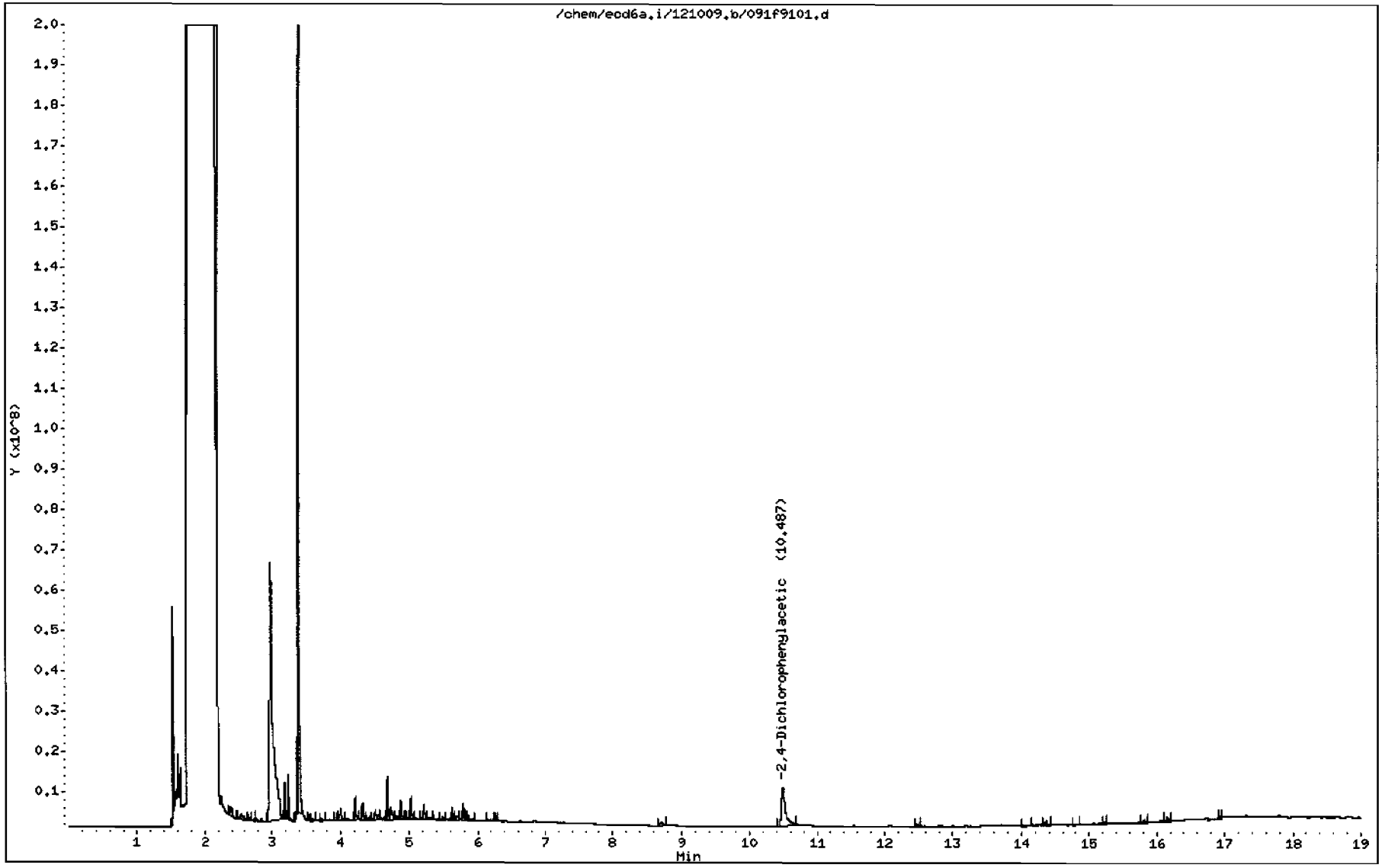

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/091b9101.d
Lab Smp Id: 1201988990 Client Smp ID: TBLK01
Inj Date : 12-DEC-2009 04:00
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201988990|1|
Misc Info : |ECDTPH_1L|931362|SVHF|TB|SOIL|TB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 91 QC Sample: TB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.579	11.579	0.000	55052090	373.777	748

Data File: /chem/ecd6a.i/121009.b/091b9101.d

Date : 12-DEC-2009 04:00

Client ID: TBLK01

Sample Info: |1201988990|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

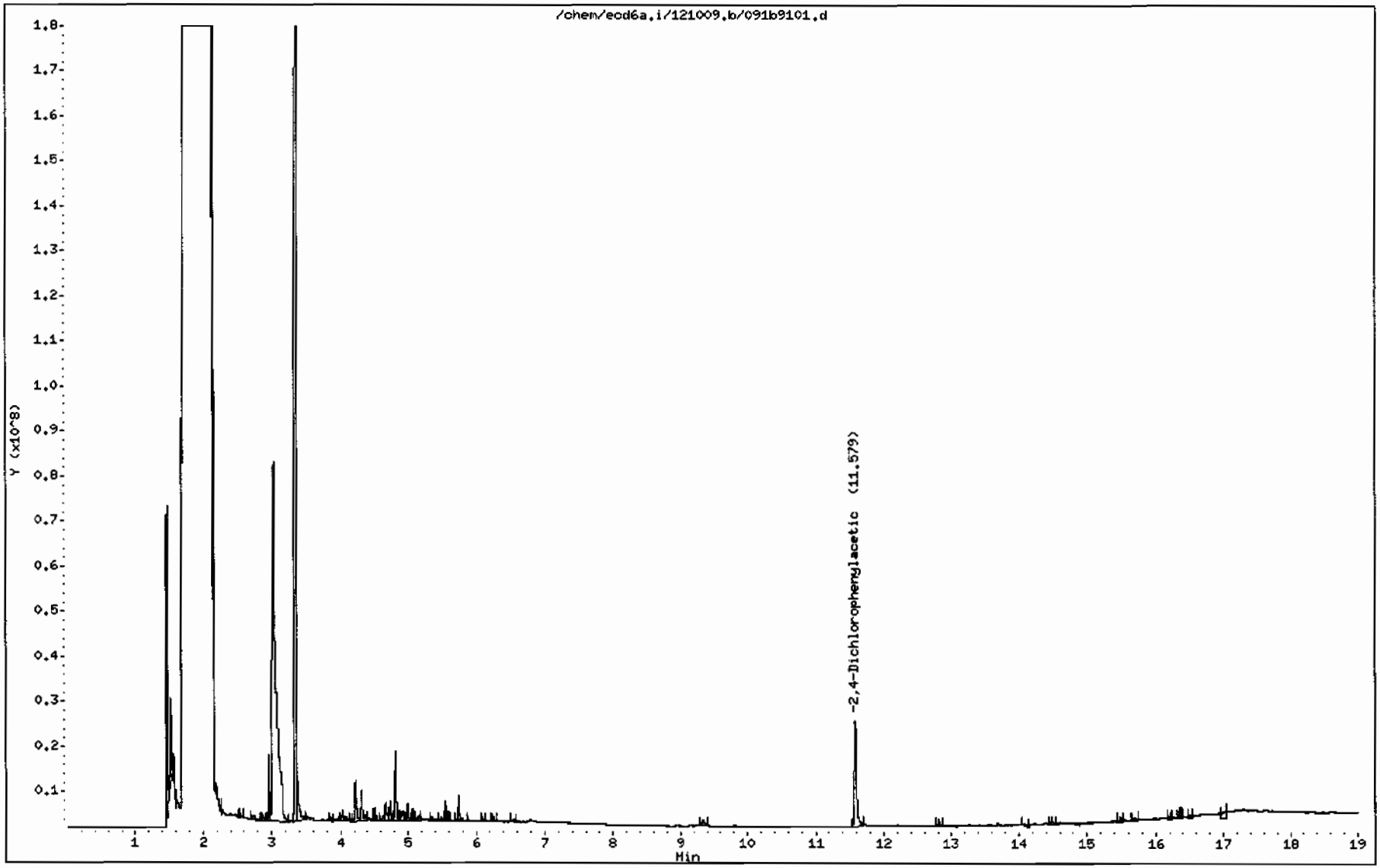

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10-670-1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201992187**				
Client Sample:	**QC for batch 931361**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 931361**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL-OA-E-011**
Batch ID:	**931362**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 04:27**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/10/2009 21:28**	**Aliquot:**	**1000 mL**	**Final Volume:**	**10 mL**
Data File:	**092f9201.d**	**Column:**	**1 Rtx-CLP**	**Level:**	**LOW**
	092b9201.d		**2 Rtx-CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D	U	0.00025	mg/L	0.000083	0.00025	1
93-72-1	2,4,5-TP	U	0.00025	mg/L	0.000083	0.00025	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/092f9201.d
Lab Smp Id: 1201992187 Client Smp ID: HBLK01
Inj Date : 12-DEC-2009 04:27
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992187|1|
Misc Info : |ECDTPH_1L|931362|SVHF|MB|SOIL|MB|||
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 92 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.491	10.481	0.010	32597708	265.704	2.6

Data File: /chem/ecd6a.i/121009.b/092f9201.d

Page 1

Date : 12-DEC-2009 04:27

Client ID: HBLK01

Instrument: ecd6a.i

Sample Info: |1201992187|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLP

Column diameter: 0.25

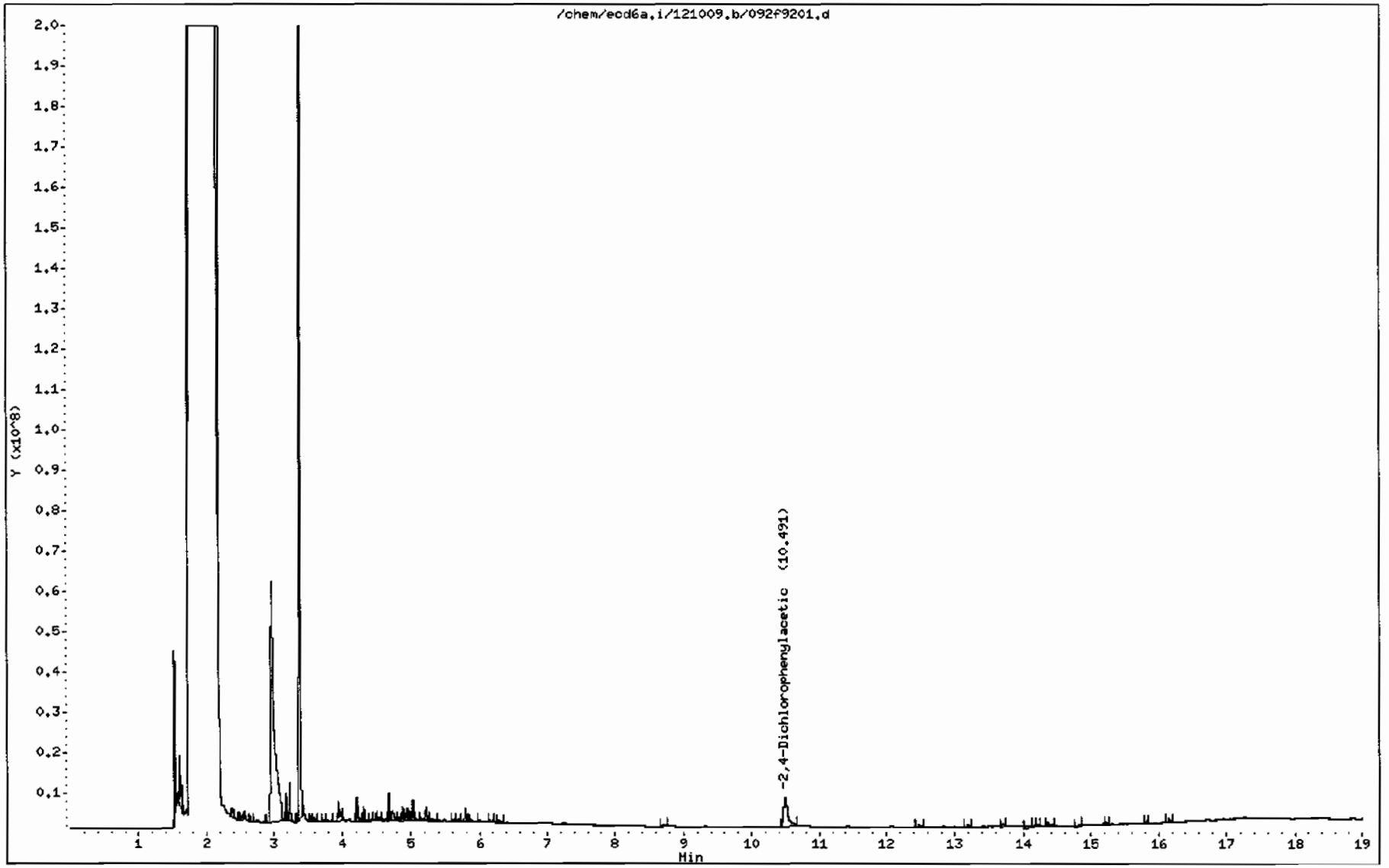

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/092b9201.d
Lab Smp Id: 1201992187 Client Smp ID: HBLK01
Inj Date : 12-DEC-2009 04:27
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992187|1|
Misc Info : |ECDTPH_1L|931362|SVHF|MB|SOIL|MB|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 92 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.579	11.579	0.000	44728313	303.684	3.0

Data File: /chem/ecd6a.i/121009.b/092b9201.d

Page 1

Date : 12-DEC-2009 04:27

Client ID: HBLK01

Instrument: ecd6a.i

Sample Info: |1201992187|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: Rtx-CLPII

Column diameter: 0.25

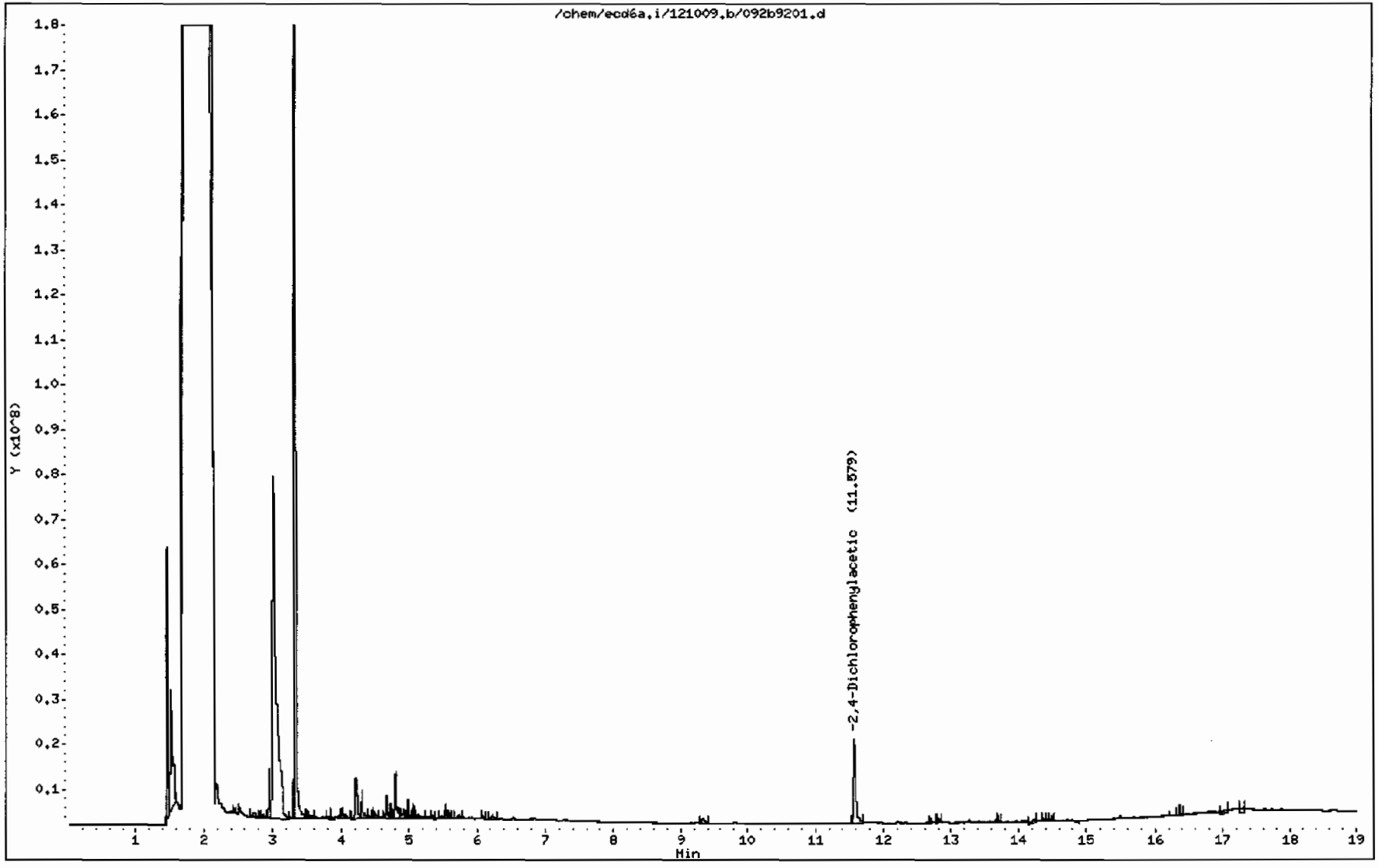

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	**10–670–1**			**Matrix:**	**TCLP SOIL**
Lab Sample ID:	**1201992188**				
Client Sample:	**QC for batch 931361**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 931361**	**Method:**	**SW846 8151A**	**SOP Ref:**	**GL–OA–E–011**
Batch ID:	**931362**	**Inst:**	**ECD6A.I**	**Dilution:**	**1**
Run Date:	**12/12/2009 04:54**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/10/2009 21:28**	**Aliquot:**	**1000 mL**	**Final Volume:**	**10 mL**
Data File:	**093f9301.d**	**Column:**	**1 Rtx–CLP**	**Level:**	**LOW**
	093b9301.d		**2 Rtx–CLPII**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D		0.00189	mg/L	0.000083	0.00025	1
93–72–1	2,4,5–TP		0.00175	mg/L	0.000083	0.00025	2

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/093f9301.d
Lab Smp Id: 1201992188 Client Smp ID: HBLK01LCS
Inj Date : 12-DEC-2009 04:54
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992188|1|
Misc Info : |ECDTPH_1L|931362|SVHF|LCS|SOIL|LCS|||
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 93 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.460	10.481	-0.021	53510290	436.162	4.4
7 2,4-D					CAS #: 94-75-7
12.685	12.695	-0.010	20403350	188.836	1.9
8 2,4,5-TP					CAS #: 93-72-1
13.435	13.445	-0.010	95226751	171.542	1.7

Data File: /chem/ecd6a.i/121009.b/093f9301.d
Date : 12-DEC-2009 04:54
Client ID: HBLK01LCS
Sample Info: |1201992188|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

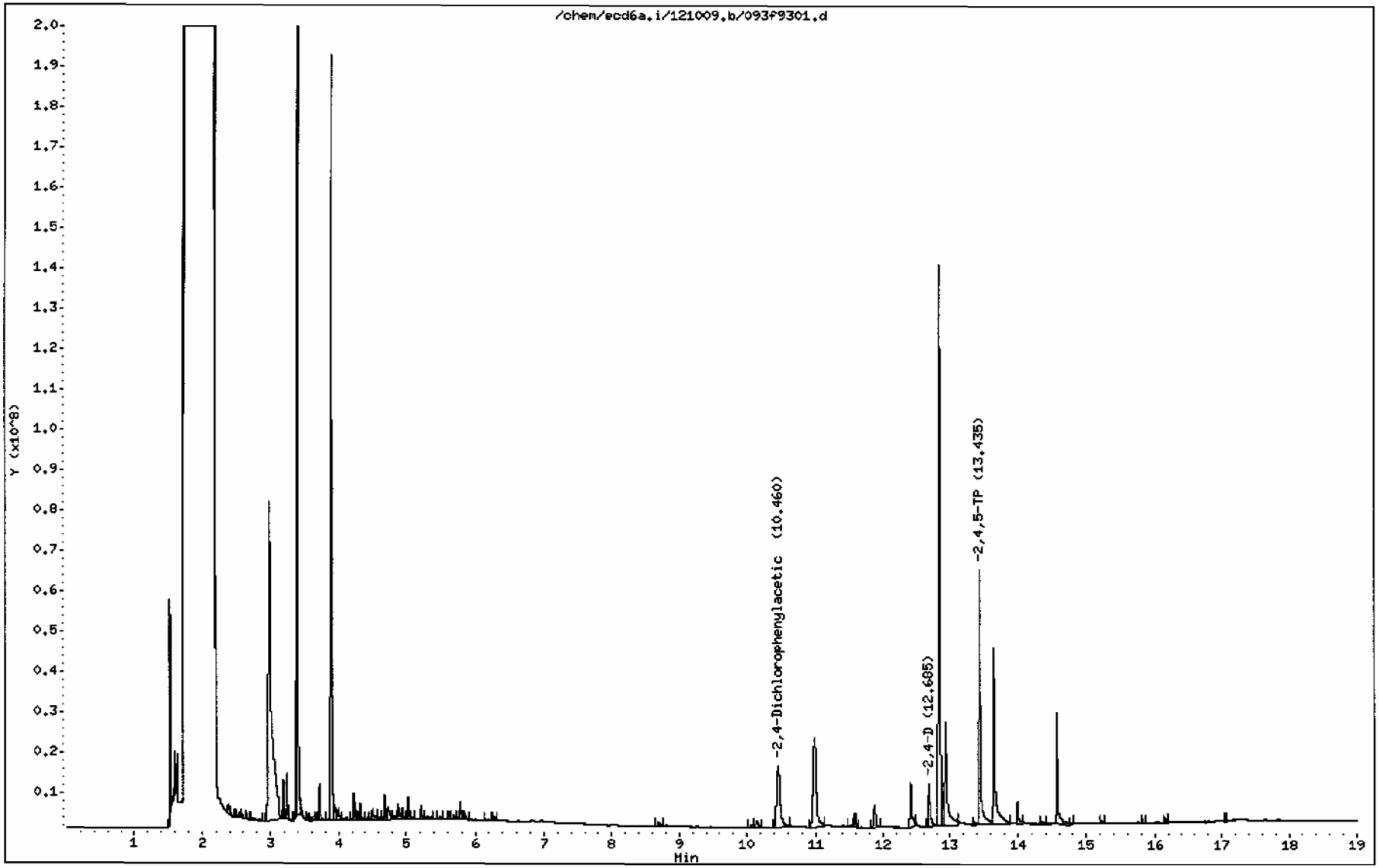

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/093b9301.d
Lab Smp Id: 1201992188 Client Smp ID: HBLK01LCS
Inj Date : 12-DEC-2009 04:54
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992188|1|
Misc Info : |ECDTPH_1L|931362|SVHF|LCS|SOIL|LCS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 93 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.565	11.579	-0.014	62498900	424.337	4.2
7 2,4-D					CAS #: 94-75-7
13.140	13.148	-0.008	31157075	171.177	1.7
8 2,4,5-TP					CAS #: 93-72-1
13.761	13.767	-0.006	122274858	174.621	1.7

Data File: /chem/ecd6a.i/121009.b/093b9301.d

Date : 12-DEC-2009 04:54

Client ID: HBLK01LCS

Sample Info: |120199218811|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

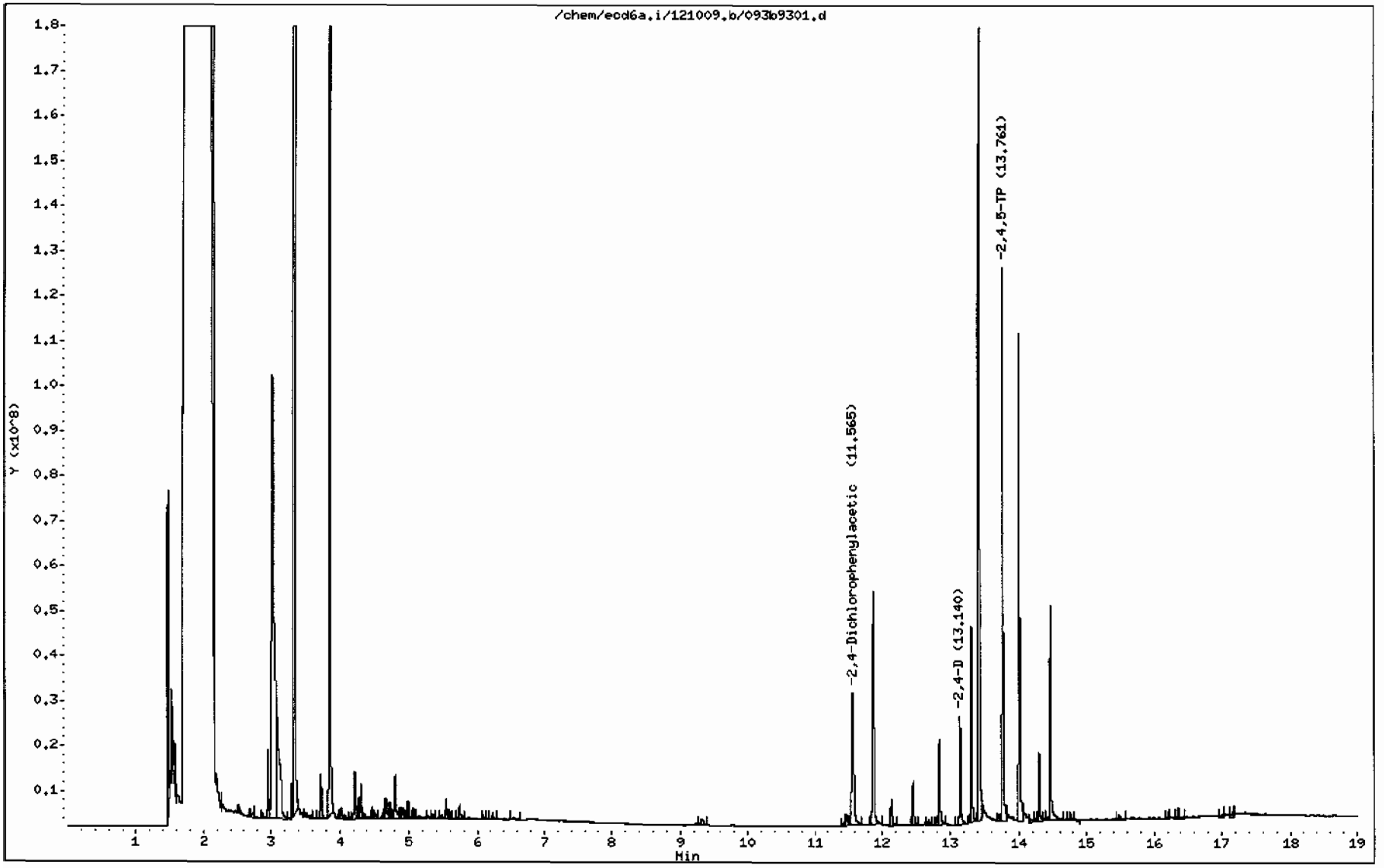

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10–670–1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201992189	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 931361	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03–10–2134MS	**Method:**	SW846 8151A	**SOP Ref:**	GL–OA–E–011
Batch ID:	931362	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/12/2009 05:48	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/10/2009 21:28	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	095f9501.d	**Column:**	1 Rtx–CLP	**Level:**	LOW
	095b9501.d		2 Rtx–CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94–75–7	2,4–D		0.334	mg/L	0.0166	0.050	1
93–72–1	2,4,5–TP		0.306	mg/L	0.0166	0.050	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/095f9501.d
Lab Smp Id: 1201992189 Client Smp ID: WST03-10-2134MS
Inj Date : 12-DEC-2009 05:48
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992189|1|
Misc Info : |ECDTPH_1L|931362|SVHF|MS|SOIL|MS|||
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 95 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.463	10.481	-0.018	44942030	366.322	733
7 2,4-D					CAS #: 94-75-7
12.685	12.695	-0.010	18065915	167.203	334
8 2,4,5-TP					CAS #: 93-72-1
13.436	13.445	-0.009	85043999	153.199	306

Data File: /chem/ecd6a.i/121009.b/095f9501.d
Date : 12-DEC-2009 05:48
Client ID: WST03-10-2134MS
Sample Info: |1201992189|1|
Volume Injected (uL): 1.0
Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1
Column diameter: 0.25

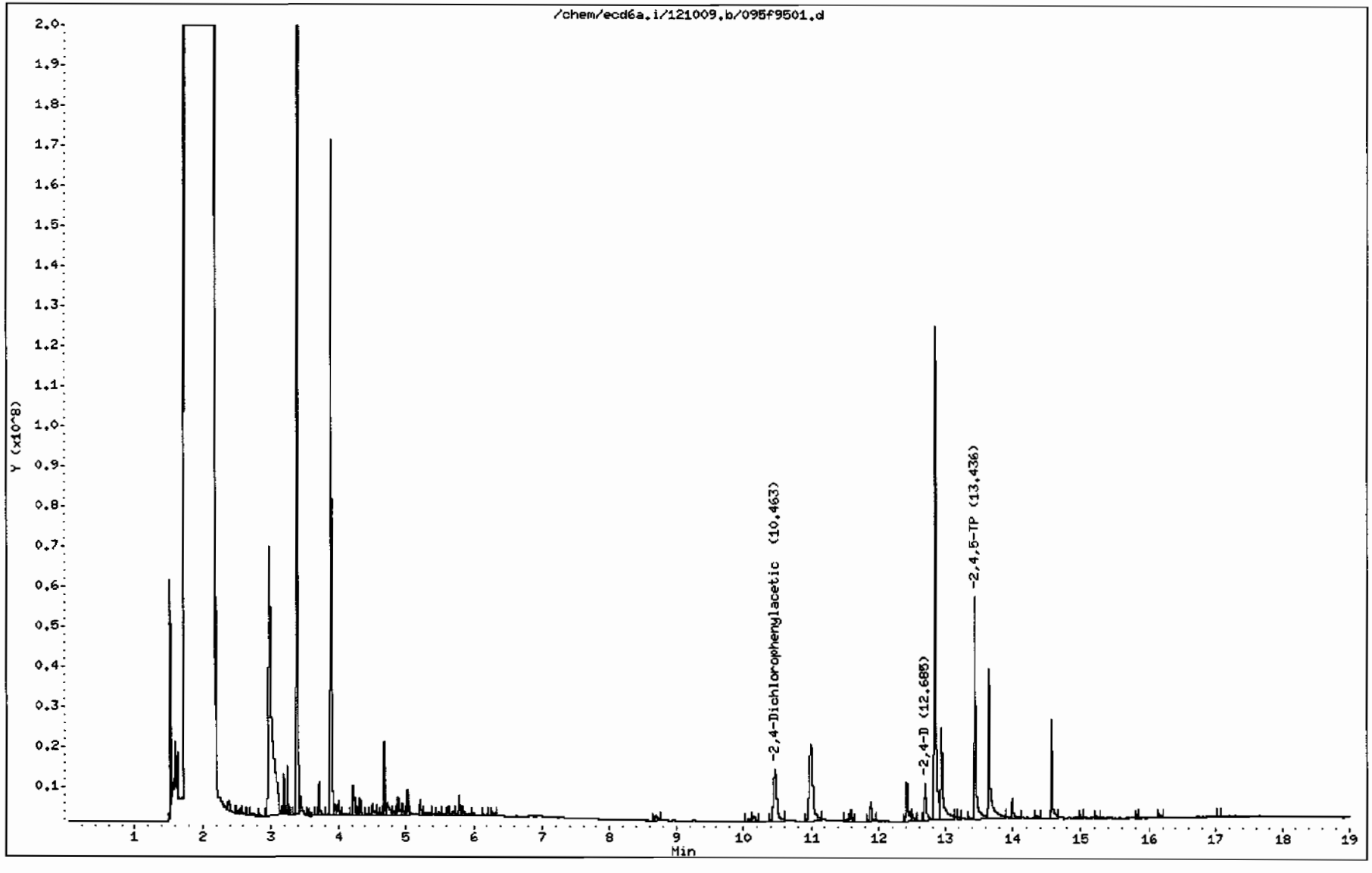

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/095b9501.d
Lab Smp Id: 1201992189 Client Smp ID: WST03-10-2134MS
Inj Date : 12-DEC-2009 05:48
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992189|1|
Misc Info : |ECDTPH_1L|931362|SVHF|MS|SOIL|MS|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 95 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid						CAS #: 19719-28-9
	11.568	11.579	-0.011	52673156	357.625	715
7 2,4-D						CAS #: 94-75-7
	13.141	13.148	-0.007	27477998	150.964	302
8 2,4,5-TP						CAS #: 93-72-1
	13.762	13.767	-0.005	108136675	154.430	309

Data File: /chem/ecd6a.i/121009.b/095b9501.d
Date : 12-DEC-2009 05:48
Client ID: WST03-10-2134MS
Sample Info: |120199218911|
Volume Injected (uL): 1.0
Column phase: Rtx-CLPII

Instrument: ecd6a.i
Operator: RXE1
Column diameter: 0.25

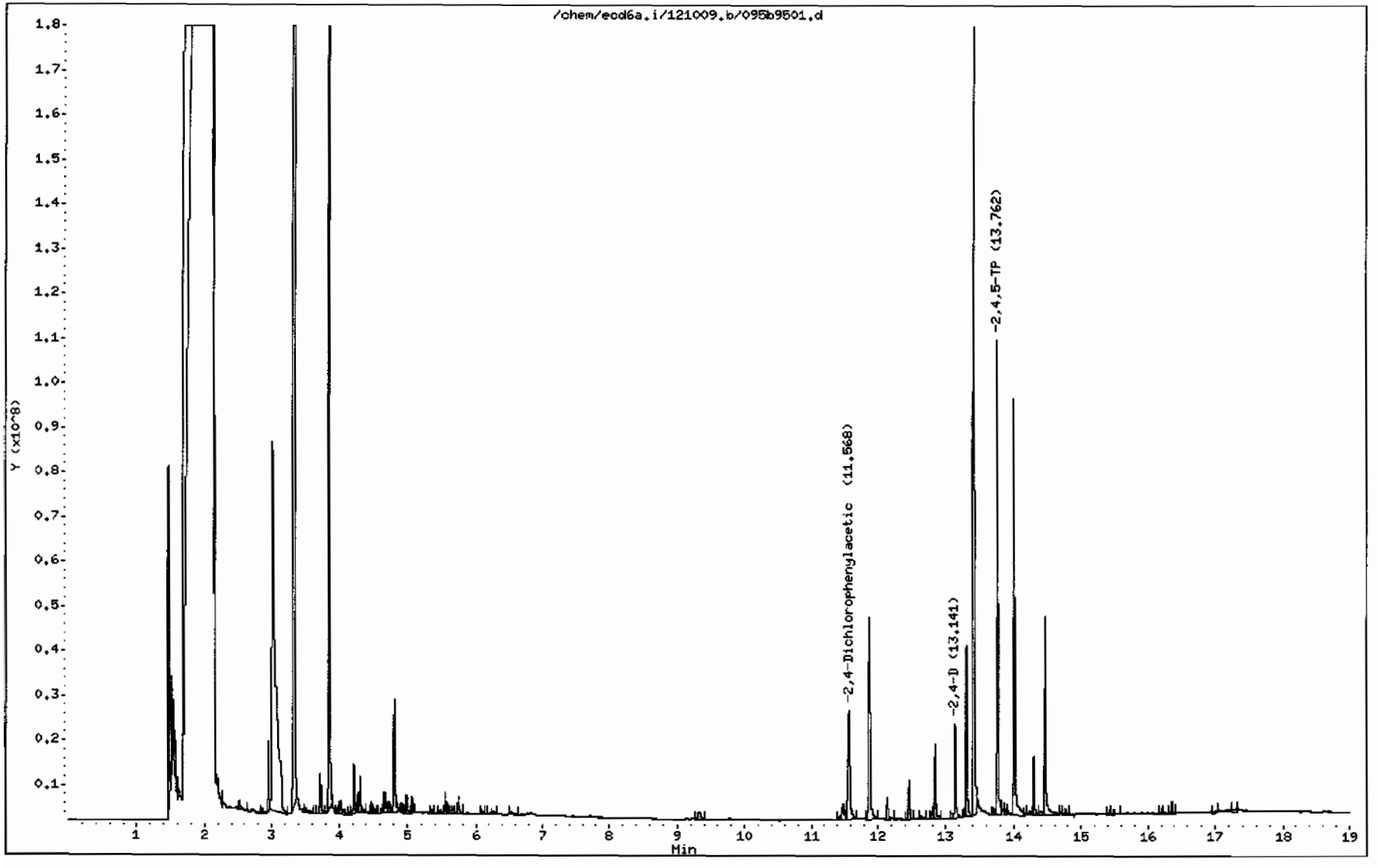

Herbicide
Certificate of Analysis
Sample Summary

SDG Number:	10-670-1	**Date Collected:**	11/23/2009 12:00	**Matrix:**	TCLP R
Lab Sample ID:	1201992190	**Date Received:**	11/25/2009 09:10		
Client Sample:	QC for batch 931361	**Client:**	LANL010	**Project:**	QC
Client ID:	WST03-10-2134MSD	**Method:**	SW846 8151A	**SOP Ref:**	GL-OA-E-011
Batch ID:	931362	**Inst:**	ECD6A.I	**Dilution:**	1
Run Date:	12/12/2009 06:15	**Analyst:**	RXE1	**Inj. Vol:**	1 uL
Prep Date:	12/10/2009 21:28	**Aliquot:**	5 mL	**Final Volume:**	10 mL
Data File:	096f9601.d	**Column:**	1 Rtx-CLP	**Level:**	LOW
	096b9601.d		2 Rtx-CLPII		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
94-75-7	2,4-D		0.352	mg/L	0.0166	0.050	1
93-72-1	2,4,5-TP		0.320	mg/L	0.0166	0.050	1

GEL Laboratories LLC

Column: RtxCLP 0.25mm x 30 m Inj Vol: 2 ul

Data file : /chem/ecd6a.i/121009.b/096f9601.d
Lab Smp Id: 1201992190 Client Smp ID: WST03-10-2134MSD
Inj Date : 12-DEC-2009 06:15
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992190|1|
Misc Info : |ECDTPH_1L|931362|SVHF|MSD|SOIL|MSD|||
Comment :
Method : /chem/ecd6a.i/121009.b/ECD6-F-8151A-120809.m
Meth Date : 14-Dec-2009 11:01 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 20:44 Cal File: 008f0801.d
Als bottle: 96 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
10.464	10.481	-0.017	47976340	391.055	782
7 2,4-D					CAS #: 94-75-7
12.685	12.695	-0.010	19008400	175.926	352
8 2,4,5-TP					CAS #: 93-72-1
13.435	13.445	-0.010	88858119	160.069	320

Data File: /chem/ecd6a.i/121009.b/096f9601.d

Date : 12-DEC-2009 06:15

Client ID: WST03-10-2134MSD

Sample Info: |120199219011|

Volume Injected (uL): 1.0

Column phase: Rtx-CLP

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

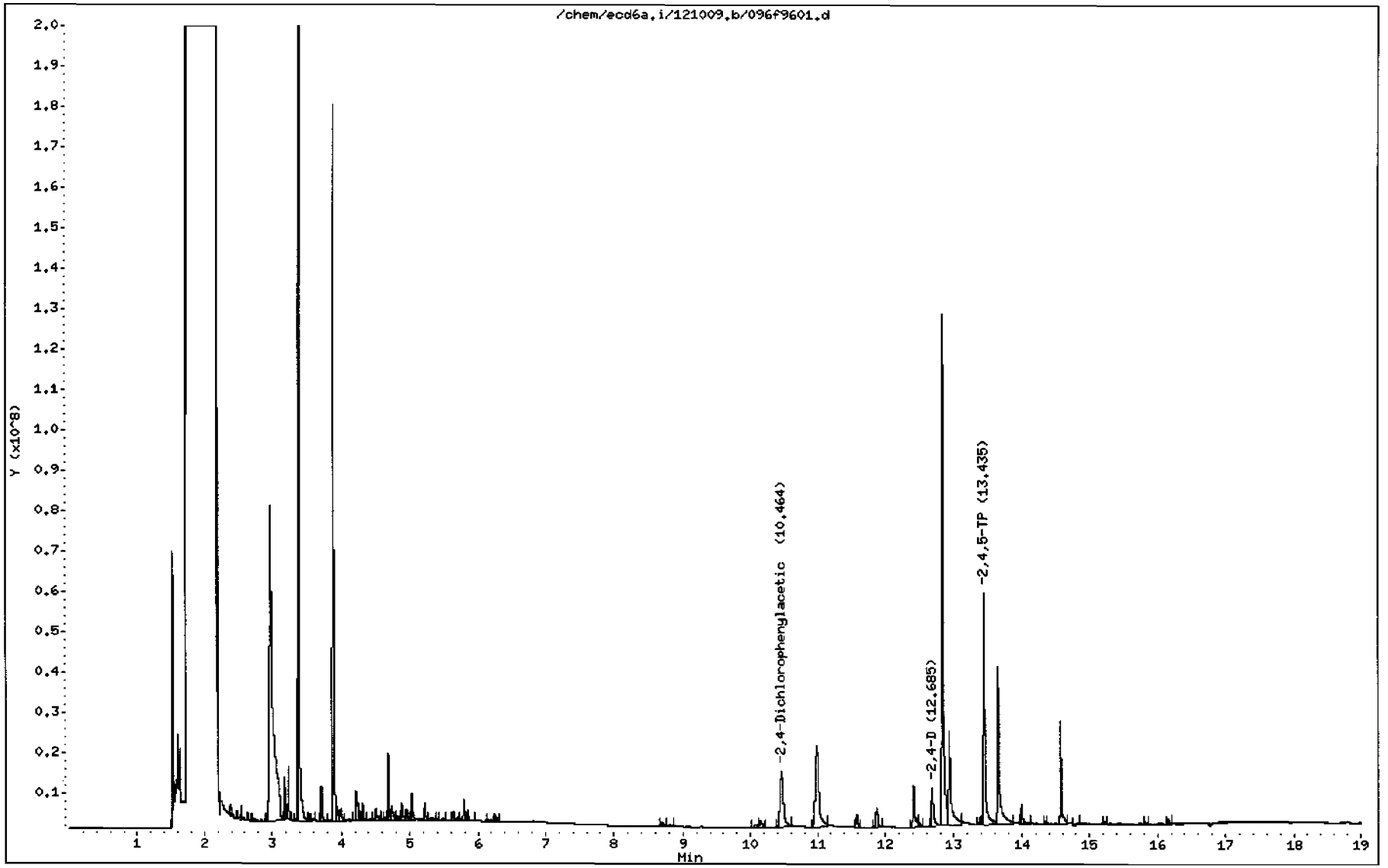

GEL Laboratories LLC

Column: RtxCLPII 0.25mm x 30 m Inj Vol: 2ul

Data file : /chem/ecd6a.i/121009.b/096b9601.d
Lab Smp Id: 1201992190 Client Smp ID: WST03-10-2134MSD
Inj Date : 12-DEC-2009 06:15
Operator : RXE1 Inst ID: ecd6a.i
Smp Info : |1201992190|1|
Misc Info : |ECDTPH_1L|931362|SVHF|MSD|SOIL|MSD|||
Comment : RtxCLPII
Method : /chem/ecd6a.i/121009.b/ECD6-B-8151A-120809.m
Meth Date : 14-Dec-2009 10:59 reb01393 Quant Type: ESTD
Cal Date : 08-DEC-2009 18:23 Cal File: 003b0301.d
Als bottle: 96 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-670-1.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	10.00000	Volume of final extract (mL)
Vo	5.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
$ 2 2,4-Dichlorophenylacetic acid					CAS #: 19719-28-9
11.568	11.579	-0.011	57456650	390.103	780
7 2,4-D					CAS #: 94-75-7
13.141	13.148	-0.007	28302813	155.496	311
8 2,4,5-TP					CAS #: 93-72-1
13.761	13.767	-0.006	113977544	162.772	326

Data File: /chem/ecd6a.i/121009.b/096b9601.d

Date : 12-DEC-2009 06:15

Client ID: WST03-10-2134MSD

Sample Info: |1201992190|1|

Volume Injected (uL): 1.0

Column phase: Rtx-CLPII

Instrument: ecd6a.i

Operator: RXE1

Column diameter: 0.25

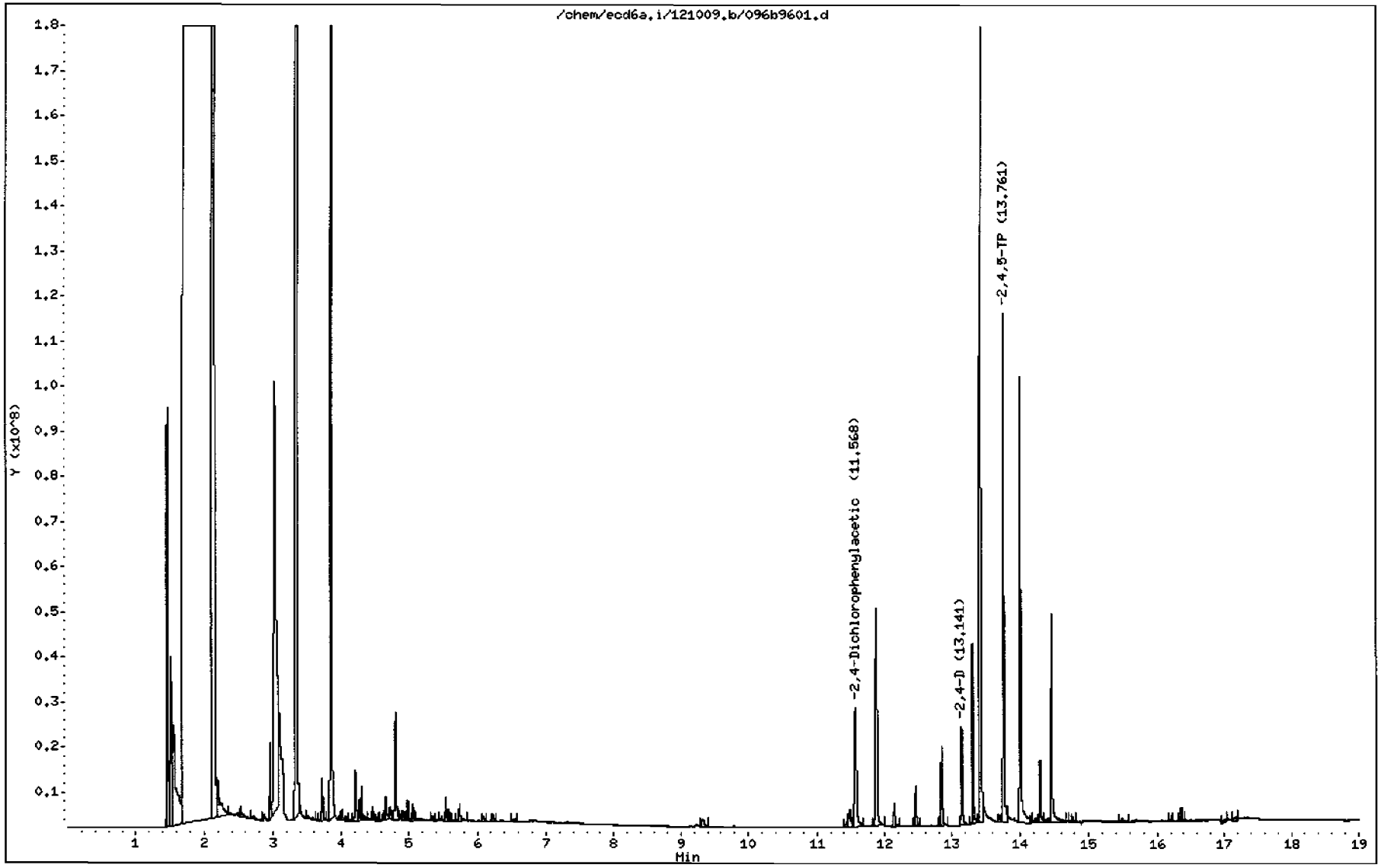

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD6

DATE: 12/09/2009 METHOD: ECD6-F-8151A-120809.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-011 Analysis of Chlorophenoxy Herbicides by ECD
EPA Method: 8151A Chlorinated Herbicides by GC Using Derivation
Sequence Number:120809A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	PRIMER	RXE1	08-DEC-2009 17:27		120809a	1.0	PRIMER	DUSE
002f0201.d	WHB091117-02	RXE1	08-DEC-2009 17:55		120809a	1.0	INSTBLK	CLEAN
003f0301.d	WHB091030-01	RXE1	08-DEC-2009 18:23		120809a	1.0	HSTD01	ICAL LVL 1
004f0401.d	WHB091030-02	RXE1	08-DEC-2009 18:51		120809a	1.0	HSTD02	ICAL LVL 2
005f0501.d	WHB091030-03	RXE1	08-DEC-2009 19:20		120809a	1.0	HSTD03	ICAL LVL 3
006f0601.d	WHB091030-04	RXE1	08-DEC-2009 19:48		120809a	1.0	HSTD04	ICAL LVL 4
007f0701.d	WHB091030-05	RXE1	08-DEC-2009 20:15		120809a	1.0	HSTD05	ICAL LVL 5
008f0801.d	WHB091030-06	RXE1	08-DEC-2009 20:44		120809a	1.0	HSTD06	ICAL LVL 6
009f0901.d	WHB091030-07	RXE1	08-DEC-2009 21:11		120809a	1.0	HSTD07	ICAL LVL 7
010f1001.d	WHB091030-12	RXE1	08-DEC-2009 21:40		120809a	1.0	HSTD01	USE. ICV. ALL ANALYTES PASSING BOTH COLUMNS.
011f1101.d	WHB091117-02	RXE1	08-DEC-2009 22:07		120809a	1.0	INSTBLK	CLEAN
012f1201.d	1201988979	RXE1	08-DEC-2009 22:36	930030	EUI-7408	1.0	MB	DUSE
013f1301.d	1201988980	RXE1	08-DEC-2009 23:04	930030	EUI-7408	1.0	LCS	DUSE
014f1401.d	1201988983	RXE1	08-DEC-2009 23:32	930030	EUI-7408	1.0	LCSD	DUSE
015f1501.d	241797001	RXE1	09-DEC-2009 00:00	930030	EUI-7408	1.0	CARE	DUSE - CONFIRMS $ FAILURE.

Instrument Batch: /chem/ecd6a.i/120809a.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WHB091030-12	RXE1	09-DEC-2009 00:28		120809a	1.0	HSTD02	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
017f1701.d	WHB091117-02	RXE1	09-DEC-2009 00:56		120809a	1.0	INSTBLK	CLEAN

018f1801.d	1201987911	RXE1	09-DEC-2009 01:25	929532	10-739		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
019f1901.d	1201987912	RXE1	09-DEC-2009 01:52	929532	10-739		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
020f2001.d	242144005	RXE1	09-DEC-2009 02:21	929532	10-739		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
021f2101.d	1201987913	RXE1	09-DEC-2009 02:48	929532	10-739		1.0	MS	USE. FAILING MULTIPLE ANALYTES, CONFIRMED BY MSD.
022f2201.d	1201987914	RXE1	09-DEC-2009 03:16	929532	10-739		1.0	MSD	USE. FAILING MULTIPLE ANALYTES, CONFIRMED BY MS.
023f2301.d	WHB091030-12	RXE1	09-DEC-2009 03:45		120809a		1.0	HSTD03	USE. CCV. DB/DINO HI (B), DINO HI (F).
024f2401.d	WHB091117-02	RXE1	09-DEC-2009 04:13		120809a		1.0	INSTBLK	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD6

DATE: 12/10/2009 METHOD: ECD6-F-8151A-120809.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CZ454

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-011 Analysis of Chlorophenoxy Herbicides by ECD
EPA Method: 8151A Chlorinated Herbicides by GC Using Derivation
Sequence Number:121009 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WHB091117-02	RXE1	10-DEC-2009 10:14		121009	1.0	INSTBLK	CLEAN
002f0201.d	WHB091030-12	RXE1	10-DEC-2009 10:42		121009	1.0	HSTD01	USE. ICV. ALL ANALYTES PASSING BOTH COLUMNS.
003f0301.d	WHB091117-02	RXE1	10-DEC-2009 11:11		121009	1.0	INSTBLK	CLEAN
004f0401.d	1201989180	RXE1	10-DEC-2009 11:39	930890	EUI-7414	1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
005f0501.d	1201991061	RXE1	10-DEC-2009 12:07	930890	EUI-7414	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
006f0601.d	1201991062	RXE1	10-DEC-2009 12:35	930890	EUI-7414	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
007f0701.d	242216001	RXE1	10-DEC-2009 13:02	930890	EUI-7414	1.0	CARE	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
008f0801.d	1201991063	RXE1	10-DEC-2009 13:30	930890	EUI-7414	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
009f0901.d	1201991064	RXE1	10-DEC-2009 13:58	930890	EUI-7414	1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
010f1001.d	WHB091030-12	RXE1	10-DEC-2009 14:26		121009	1.0	HSTD02	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
011f1101.d	WHB091117-02	RXE1	10-DEC-2009 14:54		121009	1.0	INSTBLK	CLEAN
012f1201.d	1201986536	RXE1	10-DEC-2009 15:23	930622	241863	1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
013f1301.d	1201990450	RXE1	10-DEC-2009 15:51	930622	241863	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
014f1401.d	1201990451	RXE1	10-DEC-2009 16:19	930622	241863	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
015f1501.d	241863001	RXE1	10-DEC-2009 16:47	930622	241863	1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

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Instrument Batch: /chem/ecd6a.i/121009.b Page: 1
10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	241863002	RXE1	10-DEC-2009 17:16	930622	241863	1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
017f1701.d	241863003	RXE1	10-DEC-2009 17:43	930622	241863	1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

018f1801.d	241863004	RXE1	10-DEC-2009 18:11	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
019f1901.d	241863005	RXE1	10-DEC-2009 18:39	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
020f2001.d	1201990452	RXE1	10-DEC-2009 19:07	930622	241863		1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
021f2101.d	1201990453	RXE1	10-DEC-2009 19:36	930622	241863		1.0	MSD	USE. $ HI BOTH COLUMNS, PASSING SPIKE.
022f2201.d	WHB091030-12	RXE1	10-DEC-2009 20:04		121009		1.0	HSTD03	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
023f2301.d	WHB091117-02	RXE1	10-DEC-2009 20:32		121009		1.0	INSTBLK	CLEAN
024f2401.d	241863006	RXE1	10-DEC-2009 21:00	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
025f2501.d	241863007	RXE1	10-DEC-2009 21:28	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
026f2601.d	241863008	RXE1	10-DEC-2009 21:56	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
027f2701.d	241863009	RXE1	10-DEC-2009 22:24	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
028f2801.d	241863010	RXE1	10-DEC-2009 22:53	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
029f2901.d	241863011	RXE1	10-DEC-2009 23:20	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
030f3001.d	241863012	RXE1	10-DEC-2009 23:48	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
031f3101.d	WHB091030-12	RXE1	11-DEC-2009 00:16		121009		1.0	HSTD04	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
032f3201.d	WHB091117-02	RXE1	11-DEC-2009 00:44		121009		1.0	INSTBLK	CLEAN
033f3301.d	241863013	RXE1	11-DEC-2009 01:12	930622	241863		1.0	NREA	USE. $ HI BOTH COLUMNS, NO HITS.
034f3401.d	241863014	RXE1	11-DEC-2009 01:39	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
035f3501.d	241863015	RXE1	11-DEC-2009 02:07	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

10H

Instrument Batch: /chem/ecd6a.i/121009.b Page: 2

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	241863016	RXE1	11-DEC-2009 02:35	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
037f3701.d	241863017	RXE1	11-DEC-2009 03:03	930622	241863		1.0	NREA	USE. $ HI BOTH COLUMNS, NO HITS.
038f3801.d	241863018	RXE1	11-DEC-2009 03:30	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
039f3901.d	241863019	RXE1	11-DEC-2009 03:57	930622	241863		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
040f4001.d	WHB091030-12	RXE1	11-DEC-2009 04:25		121009		1.0	HSTD05	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
041f4101.d	WHB091117-02	RXE1	11-DEC-2009 04:52		121009		1.0	INSTBLK	CLEAN

042f4201.d	1201985134	RXE1	11-DEC-2009 05:19	930283	241856		1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
043f4301.d	1201989687	RXE1	11-DEC-2009 05:46	930283	241856		1.0	MB	USE. $ HI (B), PASSING (F).
044f4401.d	1201989688	RXE1	11-DEC-2009 06:14	930283	241856		1.0	LCS	USE. $ HI (B), PASSING (F).
045f4501.d	241856001	RXE1	11-DEC-2009 06:41	930283	241856		1.0	NREA	USE. $ HI BOTH COLUMNS, NO HITS.
046f4601.d	241856002	RXE1	11-DEC-2009 07:08	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
047f4701.d	241856003	RXE1	11-DEC-2009 07:36	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
048f4801.d	241856004	RXE1	11-DEC-2009 08:03	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
049f4901.d	241856005	RXE1	11-DEC-2009 08:30	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
050f5001.d	WHB091030-12	RXE1	11-DEC-2009 08:57		121009		1.0	HSTD06	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
051f5101.d	WHB091117-02	RXE1	11-DEC-2009 09:25		121009		1.0	INSTBLK	CLEAN
052f5201.d	241856006	RXE1	11-DEC-2009 09:53	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
053f5301.d	241856007	RXE1	11-DEC-2009 10:21	930283	241856		1.0	NREA	USE. $ HI (B), PASSING (F).
054f5401.d	241856008	RXE1	11-DEC-2009 10:49	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
055f5501.d	241856009	RXE1	11-DEC-2009 11:17	930283	241856		1.0	NREA	USE. $ HI (B), PASSING (F).

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Instrument Batch: /chem/ecd6a.i/121009.b

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	241856010	RXE1	11-DEC-2009 11:45	930283	241856		1.0	NREA	USE. $ HI BOTH COLUMNS, NO HITS.
057f5701.d	241856011	RXE1	11-DEC-2009 12:13	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
058f5801.d	241856012	RXE1	11-DEC-2009 12:41	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
059f5901.d	241856013	RXE1	11-DEC-2009 13:09	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
060f6001.d	WHB091030-12	RXE1	11-DEC-2009 13:37		121009		1.0	HSTD07	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
061f6101.d	WHB091117-02	RXE1	11-DEC-2009 14:05		121009		1.0	INSTBLK	CLEAN
062f6201.d	241856014	RXE1	11-DEC-2009 14:33	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
063f6301.d	1201989689	RXE1	11-DEC-2009 15:01	930283	241856		1.0	MS	USE. $ HI BOTH, D SLIGHTLY HI (F).
064f6401.d	1201989690	RXE1	11-DEC-2009 15:30	930283	241856		1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
065f6501.d	241856015	RXE1	11-DEC-2009 15:58	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
066f6601.d	241856016	RXE1	11-DEC-2009 16:26	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

067f6701.d	241856017	RXE1	11-DEC-2009 16:54	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
068f6801.d	241856018	RXE1	11-DEC-2009 17:22	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
069f6901.d	241856019	RXE1	11-DEC-2009 17:50	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
070f7001.d	241856020	RXE1	11-DEC-2009 18:19	930283	241856		1.0	NREA	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
071f7101.d	WHB091030-12	RXE1	11-DEC-2009 18:47		121009		1.0	HSTD08	USE. CCV. ALL ANALYTES PASSING BOTH COLUMNS.
072f7201.d	WHB091117-02	RXE1	11-DEC-2009 19:14		121009		1.0	INSTBLK	CLEAN
073f7301.d	1201991092	RXE1	11-DEC-2009 19:42	930907	10-832		1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
074f7401.d	1201991093	RXE1	11-DEC-2009 20:10	930907	10-832		1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
075f7501.d	242167003	RXE1	11-DEC-2009 20:38	930907	10-753		1.0	LANL	DUSE. BAD INJECTION.

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Instrument Batch: /chem/ecd6a.i/121009.b Page: 4
10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	242167004	RXE1	11-DEC-2009 21:06	930907	10-753		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
077f7701.d	242293001	RXE1	11-DEC-2009 21:34	930907	10-783		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
078f7801.d	242293002	RXE1	11-DEC-2009 22:01	930907	10-783		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
079f7901.d	242293003	RXE1	11-DEC-2009 22:29	930907	10-783		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
080f8001.d	WHB091030-12	RXE1	11-DEC-2009 22:57		121009		1.0	HSTD09	USE. CCV. DB HI (B), PASSING (F).
081f8101.d	WHB091117-02	RXE1	11-DEC-2009 23:24		121009		1.0	INSTBLK	CLEAN
082f8201.d	242305004	RXE1	11-DEC-2009 23:52	930907	10-786		1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
083f8301.d	242305005	RXE1	12-DEC-2009 00:19	930907	10-786		1.0	LANL	USE. $ HI BOTH COLUMNS, NO HITS.
084f8401.d	242305006	RXE1	12-DEC-2009 00:47	930907	10-786		5.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
085f8501.d	242325002	RXE1	12-DEC-2009 01:15	930907	10-813		10.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
086f8601.d	242445002	RXE1	12-DEC-2009 01:42	930907	10-832		1.0	LANL	USE. $ HI (B), PASSING (F).
087f8701.d	1201991094	RXE1	12-DEC-2009 02:10	930907	10-832		1.0	MS	USE. MULTIPLE ANALYTES HI BOTH.
088f8801.d	1201991095	RXE1	12-DEC-2009 02:37	930907	10-832		1.0	MSD	USE. DB HI (B), PASSING (F).
089f8901.d	WHB091030-12	RXE1	12-DEC-2009 03:05		121009		1.0	HSTD10	USE. CCV. DB HI BOTH, D HI (F).
090f9001.d	WHB091117-02	RXE1	12-DEC-2009 03:32		121009		1.0	INSTBLK	CLEAN

091f9101.d	1201988990	RXE1	12-DEC-2009 04:00	931362	10-670-1	1.0	TB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
092f9201.d	1201992187	RXE1	12-DEC-2009 04:27	931362	10-670-1	1.0	MB	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
093f9301.d	1201992188	RXE1	12-DEC-2009 04:54	931362	10-670-1	1.0	LCS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
094f9401.d	241839001	RXE1	12-DEC-2009 05:21	931362	10-670-1	1.0	LANL	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
095f9501.d	1201992189	RXE1	12-DEC-2009 05:48	931362	10-670-1	1.0	MS	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.

10H

Instrument Batch: /chem/ecd6a.i/121009.b

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
096f9601.d	1201992190	RXE1	12-DEC-2009 06:15	931362	10-670-1	1.0	MSD	USE. PASSING BOTH COLUMNS, UPLOAD HIGHER RESULT.
097f9701.d	WHB091030-12	RXE1	12-DEC-2009 06:42		121009	1.0	HSTD11	USE. CCV. T/DB HI (B), D/DB HI (F).
098f9801.d	WHB091117-02	RXE1	12-DEC-2009 07:09		121009	1.0	INSTBLK	CLEAN

Prep Logbook

The Extraction of Herbicides from Groundwater, Wastewater and Other Aqueous Samples

Batch ID: 931361 **Verified by:** _____

Analyst: Alton Willis

Method: SW846 8151A Prep

Lab SOP: GL-OA-E-015 REV# 12

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Sec Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201988990 TB	10-DEC-2009 21:28:45	5	5	13	1	10	2
1201992187 MB	10-DEC-2009 21:28:45	1000	5	13	1	10	0.01
1201992188 LCS	10-DEC-2009 21:28:45	1000	5	13	1	10	0.01
241839001	10-DEC-2009 21:28:45	5	5	13	1	10	2
1201992189 MS (241839001)	10-DEC-2009 21:28:45	5	5	13	1	10	2
1201992190 MSD (241839001)	10-DEC-2009 21:28:45	5	5	13	1	10	2

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201992188	HERBICIDE LCS	WE091201-02	1	mL
MS	1201992189	HERBICIDE LCS	WE091201-02	1	mL
MSD	1201992190	HERBICIDE LCS	WE091201-02	1	mL
SURR	All	HERBICIDE SURROGATE	WE091110-03	.05	mL
REGNT	All	Hexane	091117-B2	4	mL
REGNT	All	Methanol	091117-C	.5	mL
REGNT	All	Iso-octane	1106542-A	1	mL
REGNT	All	Methylene Chloride	1238037-D	180	mL
REGNT	All	Sodium hydroxide sol., 6N	1239976	17	mL
REGNT	All	Sulfuric Acid Sol., 12N For Herbicides	1239979	17	mL
REGNT	All	N-METHYL-N-NITROSO-P-TOLUENESULFON-AMIDE	1240796A	2	mL
REGNT	All	Ethyl ether	UN1237014a	240	mL

Comments:

Verified By: SSS

Final Solvent: HEXANE

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930033 **Verified by:** _____

Analyst: Monifa Morant-Basdeo

Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13

Instrument: TCLP Tumbler # 101

Sample ID	1201988990 TB	241839001
Analysis Start Date	07-DEC-2009 15:00:00	07-DEC-2009 15:00:00
100% Solid Y/N		Y
(I) Sub Sample Aliquot I=G-H (g)		100
Initial pH (su)	4.98	8.74
pH Temperature (celsius)		50
Filtrate pH (su)	4.98	6
Final pH (su)	4.98	1.85
Tumbler Speed	28	28
Sample Properties <>/= Water	tclp#1	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000
Filtrate Volume (mL)	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:22
Filtration End Date: 08-DEC-09 13:30:22
Bottle Lot Number: h929301db
Filter Lot Number: 9125016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Sample Analysis

Sample ID	Client ID
241838002	WST03-10-2134
1201985642	Method Blank (MB) **ICP**
1201997323	Method Blank (MB) **ICP**
1201985643	Laboratory Control Sample (LCS)
1201997324	Laboratory Control Sample (LCS)
1201985646	241838002(WST03-10-2134L) Serial Dilution (SD)
1201985644	241838002(WST03-10-2134D) Sample Duplicate (DUP)
1201985645	241838002(WST03-10-2134S) Matrix Spike (MS)
1201985647	241838002(WST03-10-2134SD) Matrix Spike Duplicate (MSD)
1201985796	Method Blank (MB) **ICP-MS**
1201985797	Laboratory Control Sample (LCS)
1201985800	241901001(RE03-09-13923L) Serial Dilution (SD)
1201985798	241901001(RE03-09-13923D) Sample Duplicate (DUP)
1201985799	241901001(RE03-09-13923S) Matrix Spike (MS)
1201985801	241901001(RE03-09-13923SD) Matrix Spike Duplicate (MSD)
1201984341	Method Blank (MB) **CVAA**
1201984342	Laboratory Control Sample (LCS)
1201984345	241838002(WST03-10-2134L) Serial Dilution (SD)
1201984343	241838002(WST03-10-2134D) Sample Duplicate (DUP)
1201984344	241838002(WST03-10-2134S) Matrix Spike (MS)
1201984346	241838002(WST03-10-2134SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	928613, 933564, 928677 and 928047
Prep Batch :	928612, 933563, 928676 and 928046
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 20 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 241838002 and 241901001 S.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of calcium, magnesium and potassium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of calcium, magnesium, potassium and nickel, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of manganese, as indicated by the "*" qualifier.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of barium, as indicated by the "*" qualifier.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCRs were generated for this SDG: 768907, 770093 and 772335. A copy of each NCR is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson **Date:** 12/21/09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-670 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241838002 **BASIS:** Dry Weight **DATE COLLECTED** 23-NOV-09

CLIENT ID: WST03-10-2134 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: SOIL **%SOLIDS:** 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5410000	ug/Kg		7250	21300	21300	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-36-0	Antimony	838	ug/Kg	J	331	1000	1000	1	P	HSC	12/18/09 11:22	121809A-1	933564
7440-38-2	Arsenic	1360	ug/kg		207	1040	1040	2	MS	RMJ	12/10/09 21:46	091209-5	928677
7440-39-3	Barium	80200	ug/Kg	*	107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-41-7	Beryllium	583	ug/kg		20.7	104	104	2	MS	RMJ	12/07/09 12:45	091206-4	928677
7440-43-9	Cadmium	533	ug/Kg	U	107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-70-2	Calcium	1480000	ug/Kg	N	8020	25100	25100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7440-47-3	Chromium	6610	ug/Kg		160	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-48-4	Cobalt	2170	ug/Kg		160	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-50-8	Copper	4920	ug/Kg		320	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-89-6	Iron	10300000	ug/Kg		8530	26700	26700	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-92-1	Lead	8090	ug/Kg		267	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-95-4	Magnesium	889000	ug/Kg	N	8520	30100	30100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7439-96-5	Manganese	311000	ug/Kg	*	213	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613
7439-97-6	Mercury	10.2	ug/kg	J	4.07	12	12	1	AV	JXL1	12/09/09 13:36	120909S1-6	928047
7440-02-0	Nickel	4670	ug/kg		104	415	415	2	MS	RMJ	12/07/09 12:45	091206-4	928677
7440-09-7	Potassium	583000	ug/Kg	N	6420	25100	25100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7782-49-2	Selenium	1040	ug/kg	U	519	1040	1040	2	MS	RMJ	12/07/09 12:45	091206-4	928677
7440-22-4	Silver	365	ug/Kg	J	107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-23-5	Sodium	137000	ug/Kg		7020	25100	25100	1	P	HSC	12/18/09 11:22	121809A-1	933564
7440-28-0	Thallium	153	ug/kg	J	62.2	207	207	2	MS	BAJ	12/08/09 22:38	091208-3	928677
7440-62-2	Vanadium	11600	ug/Kg		107	533	533	1	P	HSC	12/11/09 20:20	121109A-2	928613
7440-66-6	Zinc	33400	ug/Kg		352	1070	1070	1	P	HSC	12/11/09 20:20	121109A-2	928613

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
928047	928046	SW846 7471A Prep	0.538	g	30	mL	12/08/09	TXB3
928613	928612	SW846 3050B	0.503	g	50	mL	12/04/09	BXA1
928677	928676	SW846 3050B	0.517	g	50	mL	12/04/09	BXA1
933564	933563	SW846 3050B	0.535	g	50	mL	12/16/09	FGA

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Beryllium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	07-DEC-09 11:10	091206-4
	Nickel	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	07-DEC-09 11:10	091206-4
	Selenium	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	07-DEC-09 11:10	091206-4
	Thallium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	08-DEC-09 21:39	091208-3
	Mercury	5.14	ug/L	5	ug/L	102.9	90.0 – 110.0	AV	09-DEC-09 09:59	120909S1-6
	Arsenic	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	10-DEC-09 18:37	091209-5
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Barium	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Cadmium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Copper	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Lead	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Silver	263	ug/L	250	ug/L	105.1	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Vanadium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Zinc	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11-DEC-09 11:07	121109A-2
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	18-DEC-09 02:49	121809A-1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	18-DEC-09 02:49	121809A-1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	18-DEC-09 02:49	121809A-1
	Potassium	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	18-DEC-09 02:49	121809A-1
	Sodium	2560	ug/L	2500	ug/L	102.3	90.0 – 110.0	P	18-DEC-09 02:49	121809A-1
CCV01										
	Beryllium	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	07-DEC-09 11:40	091206-4
	Nickel	50.3	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	07-DEC-09 11:40	091206-4
	Selenium	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	07-DEC-09 11:40	091206-4
	Thallium	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	08-DEC-09 22:01	091208-3
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	09-DEC-09 10:04	120909S1-6
	Arsenic	48.5	ug/L	50	ug/L	97	90.0 – 110.0	MS	10-DEC-09 19:06	091209-5

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Barium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Cadmium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Chromium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Lead	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Zinc	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 11:53	121109A–2
	Antimony	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Potassium	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
	Sodium	10200	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	18–DEC–09 03:12	121809A–1
CCV02										
	Beryllium	52.9	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4
	Nickel	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4
	Selenium	48.3	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	07–DEC–09 12:09	091206–4
	Thallium	51.9	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	08–DEC–09 22:42	091208–3
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09–DEC–09 10:24	120909S1–6
	Arsenic	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	10–DEC–09 19:24	091209–5
	Aluminum	4510	ug/L	5000	ug/L	90.2	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Barium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Cadmium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Chromium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11–DEC–09 12:09	121109A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	4900	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	11-DEC-09 12:09	121109A-2
	Lead	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	11-DEC-09 12:09	121109A-2
	Manganese	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	11-DEC-09 12:09	121109A-2
	Silver	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	11-DEC-09 12:09	121109A-2
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	11-DEC-09 12:09	121109A-2
	Zinc	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	11-DEC-09 12:09	121109A-2
	Antimony	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	18-DEC-09 03:46	121809A-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	18-DEC-09 03:46	121809A-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	18-DEC-09 03:46	121809A-1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	18-DEC-09 03:46	121809A-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 - 110.0	P	18-DEC-09 03:46	121809A-1
CCV03										
	Beryllium	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	07-DEC-09 12:50	091206-4
	Nickel	49	ug/L	50	ug/L	97.9	90.0 - 110.0	MS	07-DEC-09 12:50	091206-4
	Selenium	46.6	ug/L	50	ug/L	93.2	90.0 - 110.0	MS	07-DEC-09 12:50	091206-4
	Thallium	52.1	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	08-DEC-09 23:14	091208-3
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 - 120.0	AV	09-DEC-09 10:44	120909S1-6
	Arsenic	50	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	10-DEC-09 20:05	091209-5
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Barium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Cadmium	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Chromium	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Copper	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Lead	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Manganese	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Silver	505	ug/L	500	ug/L	101	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2
	Zinc	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	11-DEC-09 12:30	121109A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Antimony	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	18–DEC–09 03:57	121809A–1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18–DEC–09 03:57	121809A–1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18–DEC–09 03:57	121809A–1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18–DEC–09 03:57	121809A–1
	Sodium	10100	ug/L	10000	ug/L	100.8	90.0 – 110.0	P	18–DEC–09 03:57	121809A–1
CCV04										
	Beryllium	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	07–DEC–09 13:55	091206–4
	Nickel	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	07–DEC–09 13:55	091206–4
	Selenium	45.6	ug/L	50	ug/L	91.2	90.0 – 110.0	MS	07–DEC–09 13:55	091206–4
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	09–DEC–09 11:04	120909S1–6
	Arsenic	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	10–DEC–09 20:59	091209–5
	Aluminum	4770	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Barium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Chromium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Lead	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Manganese	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11–DEC–09 13:02	121109A–2
	Antimony	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	18–DEC–09 04:39	121809A–1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	18–DEC–09 04:39	121809A–1
	Magnesium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	18–DEC–09 04:39	121809A–1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	18–DEC–09 04:39	121809A–1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 – 110.0	P	18–DEC–09 04:39	121809A–1
CCV05										
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	09–DEC–09 11:24	120909S1–6

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	10–DEC–09 21:52	091209–5
	Aluminum	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Cobalt	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Copper	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Iron	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Lead	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Manganese	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Zinc	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11–DEC–09 13:24	121109A–2
	Antimony	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Potassium	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
	Sodium	11100	ug/L	10000	ug/L	111.2	90.0 – 110.0	P	18–DEC–09 05:12	121809A–1
CCV06										
	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	09–DEC–09 11:45	120909S1–6
	Arsenic	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	10–DEC–09 22:57	091209–5
	Aluminum	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Barium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Cadmium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Copper	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Iron	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Lead	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Manganese	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Vanadium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Zinc	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11–DEC–09 14:40	121109A–2
	Antimony	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Calcium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Magnesium	5520	ug/L	5000	ug/L	110.4	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
	Sodium	10600	ug/L	10000	ug/L	105.5	90.0 – 110.0	P	18–DEC–09 05:50	121809A–1
CCV07										
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	09–DEC–09 12:05	120909S1–6
	Aluminum	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Cadmium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Cobalt	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Copper	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Lead	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Silver	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Vanadium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Zinc	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11–DEC–09 15:57	121109A–2
	Antimony	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Potassium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
	Sodium	10600	ug/L	10000	ug/L	105.8	90.0 – 110.0	P	18–DEC–09 06:30	121809A–1
CCV08										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	09–DEC–09 12:25	120909S1–6
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 17:08	121109A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Chromium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Copper	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Iron	5280	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Manganese	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-DEC-09 17:08	121109A-2
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Magnesium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Potassium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
	Sodium	10400	ug/L	10000	ug/L	104	90.0 – 110.0	P	18-DEC-09 06:55	121809A-1
CCV09										
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 – 120.0	AV	09-DEC-09 12:45	120909S1-6
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Barium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Cadmium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Chromium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Cobalt	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Copper	515	ug/L	500	ug/L	103	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Lead	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Manganese	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Silver	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Vanadium	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	11-DEC-09 18:09	121109A-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Antimony	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Calcium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Potassium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 – 110.0	P	18–DEC–09 07:34	121809A–1
CCV10										
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	09–DEC–09 13:06	120909S1–6
	Aluminum	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Cadmium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Chromium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Iron	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Lead	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Manganese	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11–DEC–09 19:11	121109A–2
	Antimony	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Calcium	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Potassium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 – 110.0	P	18–DEC–09 08:14	121809A–1
CCV11										
	Mercury	5.08	ug/L	5	ug/L	101.5	80.0 – 120.0	AV	09–DEC–09 13:26	120909S1–6
	Aluminum	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2
	Chromium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11–DEC–09 20:06	121109A–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Copper	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Lead	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Manganese	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Silver	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Vanadium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Zinc	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11-DEC-09 20:06	121109A-2
	Antimony	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	18-DEC-09 08:46	121809A-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	18-DEC-09 08:46	121809A-1
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	18-DEC-09 08:46	121809A-1
	Potassium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	18-DEC-09 08:46	121809A-1
	Sodium	10200	ug/L	10000	ug/L	102.4	90.0 – 110.0	P	18-DEC-09 08:46	121809A-1
CCV12										
	Mercury	5.17	ug/L	5	ug/L	103.3	80.0 – 120.0	AV	09-DEC-09 13:46	120909S1-6
	Aluminum	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Barium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Cadmium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Chromium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Cobalt	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Copper	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Iron	5350	ug/L	5000	ug/L	106.9	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Lead	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Silver	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Vanadium	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Zinc	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11-DEC-09 20:55	121109A-2
	Antimony	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	18-DEC-09 09:08	121809A-1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	18-DEC-09 09:08	121809A-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	18-DEC-09 09:08	121809A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
	Sodium	10300	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	18–DEC–09 09:08	121809A–1
CCV13										
	Antimony	495	ug/L	500	ug/L	99	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Calcium	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Potassium	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	18–DEC–09 09:55	121809A–1
CCV14										
	Antimony	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
	Sodium	10200	ug/L	10000	ug/L	101.9	90.0 – 110.0	P	18–DEC–09 10:33	121809A–1
CCV15										
	Antimony	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Magnesium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Potassium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	18–DEC–09 11:08	121809A–1
CCV16										
	Antimony	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Calcium	4830	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Potassium	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	18–DEC–09 11:40	121809A–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,JCPMS5,JCPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.11	ug/L	2	ug/L	105.5	70.0 – 130.0	MS	07–DEC–09 11:22	091206–4
	Beryllium	.462	ug/L	.5	ug/L	92.4	70.0 – 130.0	MS	07–DEC–09 11:22	091206–4
	Selenium	5.06	ug/L	5	ug/L	101.1	70.0 – 130.0	MS	07–DEC–09 11:22	091206–4
	Thallium	1.26	ug/L	1	ug/L	125.9	70.0 – 130.0	MS	08–DEC–09 21:48	091208–3
	Mercury	.174	ug/L	.2	ug/L	87	70.0 – 130.0	AV	09–DEC–09 10:02	120909S1–6
	Arsenic	5.56	ug/L	5	ug/L	111.2	70.0 – 130.0	MS	10–DEC–09 18:49	091209–5
PQL01										
	Aluminum	226	ug/L	200	ug/L	113	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Iron	130	ug/L	100	ug/L	129.8	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Lead	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Manganese	10.3	ug/L	10	ug/L	102.9	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Silver	5.23	ug/L	5	ug/L	104.6	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Barium	5.03	ug/L	5	ug/L	100.6	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Cadmium	4.97	ug/L	5	ug/L	99.4	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Chromium	4.91	ug/L	5	ug/L	98.2	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Cobalt	4.82	ug/L	5	ug/L	96.3	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Copper	9.84	ug/L	10	ug/L	98.4	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Vanadium	4.82	ug/L	5	ug/L	96.4	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Zinc	9.96	ug/L	10	ug/L	99.6	70.0 – 130.0	P	11–DEC–09 11:21	121109A–2
	Magnesium	300	ug/L	300	ug/L	100	70.0 – 130.0	P	18–DEC–09 02:57	121809A–1
	Potassium	178	ug/L	150	ug/L	118.6	70.0 – 130.0	P	18–DEC–09 02:57	121809A–1
	Sodium	305	ug/L	300	ug/L	101.7	70.0 – 130.0	P	18–DEC–09 02:57	121809A–1
	Antimony	9.77	ug/L	10	ug/L	97.7	70.0 – 130.0	P	18–DEC–09 02:57	121809A–1
	Calcium	178	ug/L	200	ug/L	89.2	70.0 – 130.0	P	18–DEC–09 02:57	121809A–1
PQL02										
	Magnesium	282	ug/L	300	ug/L	93.9	70.0 – 130.0	P	18–DEC–09 03:49	121809A–1
	Potassium	185	ug/L	150	ug/L	123.4	70.0 – 130.0	P	18–DEC–09 03:49	121809A–1
	Sodium	312	ug/L	300	ug/L	104	70.0 – 130.0	P	18–DEC–09 03:49	121809A–1
	Antimony	9.54	ug/L	10	ug/L	95.4	70.0 – 130.0	P	18–DEC–09 03:49	121809A–1
	Calcium	179	ug/L	200	ug/L	89.4	70.0 – 130.0	P	18–DEC–09 03:49	121809A–1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-670

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
PQL03										
	Magnesium	295	ug/L	300	ug/L	98.4	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Potassium	184	ug/L	150	ug/L	122.6	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Sodium	304	ug/L	300	ug/L	101.4	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Antimony	10.8	ug/L	10	ug/L	107.7	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
	Calcium	180	ug/L	200	ug/L	89.9	70.0 - 130.0	P	18-DEC-09 04:01	121809A-1
PQL04										
	Magnesium	312	ug/L	300	ug/L	103.9	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Potassium	161	ug/L	150	ug/L	107.5	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Sodium	339	ug/L	300	ug/L	113.1	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Antimony	7.46	ug/L	10	ug/L	74.6	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1
	Calcium	178	ug/L	200	ug/L	88.8	70.0 - 130.0	P	18-DEC-09 04:42	121809A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	07-DEC-09 11:16	091206-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 11:16	091206-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 11:16	091206-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	08-DEC-09 21:43	091208-3
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:01	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 18:43	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 11:14	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 11:14	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 11:14	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 11:14	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 02:53	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 02:53	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 02:53	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 02:53	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 02:53	121809A-1
CCB01										
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	07-DEC-09 11:46	091206-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 11:46	091206-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 11:46	091206-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	08-DEC-09 22:06	091208-3
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:06	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 19:12	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 12:00	121109A-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 12:00	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:00	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 12:00	121109A–2
	Antimony	3.99	+/–10	J	3.3	10.0	SOL	P	18–DEC–09 03:16	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 03:16	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 03:16	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 03:16	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 03:16	121809A–1
CCB02										
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	07–DEC–09 12:15	091206–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–DEC–09 12:15	091206–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	07–DEC–09 12:15	091206–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	08–DEC–09 22:47	091208–3
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 10:26	120909S1–6
	Arsenic	1.26	+/–5	J	1.0	5.0	SOL	MS	10–DEC–09 19:30	091209–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 12:16	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 12:16	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 12:16	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 12:16	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 12:16	121109A–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 12:16	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:16	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 12:16	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 03:53	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 03:53	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 03:53	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 03:53	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 03:53	121809A-1
CCB03										
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	07-DEC-09 12:56	091206-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 12:56	091206-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 12:56	091206-4
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	08-DEC-09 23:18	091208-3
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 10:46	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 20:11	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 12:37	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 12:37	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 12:37	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 12:37	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 04:04	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 04:04	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 04:04	121809A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 04:04	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 04:04	121809A-1
CCB04										
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	07-DEC-09 14:01	091206-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	07-DEC-09 14:01	091206-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	07-DEC-09 14:01	091206-4
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 11:06	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 21:04	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 13:09	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 13:09	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 13:09	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 13:09	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 13:09	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:09	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 13:09	121109A-2
	Antimony	-3.87	+/-10	J	3.3	10.0	SOL	P	18-DEC-09 04:46	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 04:46	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 04:46	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 04:46	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 04:46	121809A-1
CCB05										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 11:26	120909S1-6
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	10-DEC-09 21:58	091209-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 13:31	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:31	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 13:31	121109A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 13:31	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 13:31	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 13:31	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 05:15	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 05:15	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 05:15	121809A–1
	Potassium	192.14	+/–250	J	64.0	250	SOL	P	18–DEC–09 05:15	121809A–1
	Sodium	450.93	+/–250		70.0	250	SOL	P	18–DEC–09 05:15	121809A–1
CCB06										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 11:46	120909S1–6
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	10–DEC–09 23:03	091209–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 14:47	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 14:47	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 14:47	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 14:47	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 14:47	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 14:47	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 14:47	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 05:54	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 05:54	121809A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 05:54	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 05:54	121809A-1
	Sodium	92.26	+/-250	J	70.0	250	SOL	P	18-DEC-09 05:54	121809A-1
CCB07										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 12:06	120909S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 16:04	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 16:04	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 16:04	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 16:04	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 06:33	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 06:33	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 06:33	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 06:33	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 06:33	121809A-1
CCB08										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 12:27	120909S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 17:15	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 17:15	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 17:15	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 17:15	121109A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–670

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 17:15	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 17:15	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 17:15	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 17:15	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 17:15	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 06:58	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 06:58	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 06:58	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 06:58	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 06:58	121809A–1
CCB09										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 12:47	120909S1–6
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	11–DEC–09 18:16	121109A–2
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 18:16	121109A–2
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 18:16	121109A–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 18:16	121109A–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	11–DEC–09 18:16	121109A–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	11–DEC–09 18:16	121109A–2
	Iron	80.0	+/–250	U	80.0	250	SOL	P	11–DEC–09 18:16	121109A–2
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	11–DEC–09 18:16	121109A–2
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	11–DEC–09 18:16	121109A–2
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 18:16	121109A–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–DEC–09 18:16	121109A–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–DEC–09 18:16	121109A–2
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 07:38	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 07:38	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 07:38	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 07:38	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 07:38	121809A–1
CCB10										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	09–DEC–09 13:07	120909S1–6

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 19:18	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 19:18	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 19:18	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 19:18	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 19:18	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 19:18	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 19:18	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 19:18	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 19:18	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 19:18	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 19:18	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 19:18	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 08:18	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 08:18	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 08:18	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 08:18	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 08:18	121809A-1
CCB11										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 13:28	120909S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 20:13	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 20:13	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 20:13	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 20:13	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 20:13	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 20:13	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 20:13	121109A-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 08:50	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 08:50	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 08:50	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 08:50	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 08:50	121809A-1
CCB12										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	09-DEC-09 13:48	120909S1-6
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-DEC-09 21:02	121109A-2
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-DEC-09 21:02	121109A-2
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-DEC-09 21:02	121109A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-DEC-09 21:02	121109A-2
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-DEC-09 21:02	121109A-2
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-DEC-09 21:02	121109A-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-DEC-09 21:02	121109A-2
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 09:12	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 09:12	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 09:12	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 09:12	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 09:12	121809A-1
CCB13										
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	18-DEC-09 09:59	121809A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	18-DEC-09 09:59	121809A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	18-DEC-09 09:59	121809A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	18-DEC-09 09:59	121809A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	18-DEC-09 09:59	121809A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–670

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB14										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 10:37	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 10:37	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 10:37	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 10:37	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 10:37	121809A–1
CCB15										
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	18–DEC–09 11:11	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 11:11	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 11:11	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 11:11	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 11:11	121809A–1
CCB16										
	Antimony	–4.25	+/–10	J	3.3	10.0	SOL	P	18–DEC–09 11:43	121809A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	18–DEC–09 11:43	121809A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	18–DEC–09 11:43	121809A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	18–DEC–09 11:43	121809A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	18–DEC–09 11:43	121809A–1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–670
Contract: LANL01004
Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201984341								
	Mercury	3.78	ug/kg	+/–11.132	U	AV	3.78	11.1
1201985642								
	Lead	239	ug/Kg	+/–954.198	U	P	239	954
	Manganese	227	ug/Kg	+/–954.198	J	P	191	954
	Silver	95.4	ug/Kg	+/–477.099	U	P	95.4	477
	Vanadium	95.4	ug/Kg	+/–477.099	U	P	95.4	477
	Aluminum	6490	ug/Kg	+/–19083.969	U	P	6490	19100
	Cadmium	95.4	ug/Kg	+/–477.099	U	P	95.4	477
	Cobalt	143	ug/Kg	+/–477.099	U	P	143	477
	Copper	373	ug/Kg	+/–954.198	J	P	286	954
	Chromium	143	ug/Kg	+/–477.099	U	P	143	477
	Barium	239	ug/Kg	+/–477.099	J	P	95.4	477
	Iron	7630	ug/Kg	+/–23854.962	U	P	7630	23900
	Zinc	602	ug/Kg	+/–954.198	J	P	315	954
1201985796								
	Arsenic	0.197	mg/kg	+/–0.986	U	MS	0.197	0.986
	Beryllium	0.0197	mg/kg	+/–0.099	U	MS	0.0197	0.0986
	Nickel	0.0986	mg/kg	+/–0.394	U	MS	0.0986	0.394
	Selenium	0.493	mg/kg	+/–0.986	U	MS	0.493	0.986
	Thallium	0.0592	mg/kg	+/–0.197	U	MS	0.0592	0.197
1201997323								
	Antimony	314	ug/Kg	+/–952.381	U	P	314	952
	Calcium	7620	ug/Kg	+/–23809.524	U	P	7620	23800
	Magnesium	8100	ug/Kg	+/–28571.429	U	P	8100	28600
	Potassium	6100	ug/Kg	+/–23809.524	U	P	6100	23800
	Sodium	6670	ug/Kg	+/–23809.524	U	P	6670	23800

METALS
–4–
Interference Check Sample

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	–1.71	ug/L					18–DEC–09 03:00	121809A–1
	Calcium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	18–DEC–09 03:00	121809A–1
	Magnesium	491000	ug/L	500000	ug/L	98.2	80.0 – 120.0	18–DEC–09 03:00	121809A–1
	Potassium	6.92	ug/L					18–DEC–09 03:00	121809A–1
	Sodium	23.0	ug/L					18–DEC–09 03:00	121809A–1
ICSAB01									
	Antimony	486	ug/L	500	ug/L	97.1	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Calcium	485000	ug/L	500000	ug/L	97.1	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Magnesium	489000	ug/L	500000	ug/L	97.7	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Potassium	5190	ug/L	5000	ug/L	104	80.0 – 120.0	18–DEC–09 03:03	121809A–1
	Sodium	5150	ug/L	5000	ug/L	103	80.0 – 120.0	18–DEC–09 03:03	121809A–1

METALS
–4–
Interference Check Sample

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	511000	ug/L	500000	ug/L	102	80.0 – 120.0	11–DEC–09 11:28	121109A–2
	Barium	2.33	ug/L					11–DEC–09 11:28	121109A–2
	Cadmium	0.083	ug/L					11–DEC–09 11:28	121109A–2
	Chromium	1.51	ug/L					11–DEC–09 11:28	121109A–2
	Cobalt	–1.55	ug/L					11–DEC–09 11:28	121109A–2
	Copper	3.84	ug/L					11–DEC–09 11:28	121109A–2
	Iron	190000	ug/L	200000	ug/L	95	80.0 – 120.0	11–DEC–09 11:28	121109A–2
	Lead	–0.399	ug/L					11–DEC–09 11:28	121109A–2
	Manganese	10.7	ug/L					11–DEC–09 11:28	121109A–2
	Silver	–0.31	ug/L					11–DEC–09 11:28	121109A–2
	Vanadium	–0.315	ug/L					11–DEC–09 11:28	121109A–2
	Zinc	–8.01	ug/L					11–DEC–09 11:28	121109A–2
ICSAB01									
	Aluminum	513000	ug/L	500000	ug/L	103	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Barium	497	ug/L	500	ug/L	99.5	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Cadmium	470	ug/L	500	ug/L	93.9	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Chromium	483	ug/L	500	ug/L	96.5	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Cobalt	447	ug/L	500	ug/L	89.4	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Copper	559	ug/L	500	ug/L	112	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Iron	191000	ug/L	200000	ug/L	95.3	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Lead	463	ug/L	500	ug/L	92.7	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Manganese	490	ug/L	500	ug/L	98.1	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Silver	275	ug/L	250	ug/L	110	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Vanadium	507	ug/L	500	ug/L	101	80.0 – 120.0	11–DEC–09 11:34	121109A–2
	Zinc	484	ug/L	500	ug/L	96.7	80.0 – 120.0	11–DEC–09 11:34	121109A–2

METALS
-4-
Interference Check Sample

SDG No: 10-670

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	-0.022	ug/L					08-DEC-09 21:52	091208-3
ICSAB01									
	Thallium	22.9	ug/L	20	ug/L	114	80.0 - 120.0	08-DEC-09 21:57	091208-3

METALS
–4–
Interference Check Sample

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS6

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.053	ug/L					07–DEC–09 11:28	091206–4
	Nickel	3.29	ug/L					07–DEC–09 11:28	091206–4
	Selenium	–0.982	ug/L					07–DEC–09 11:28	091206–4
ICSAB01									
	Beryllium	20.5	ug/L	20	ug/L	102	80.0 – 120.0	07–DEC–09 11:34	091206–4
	Nickel	23.1	ug/L	22.7	ug/L	102	80.0 – 120.0	07–DEC–09 11:34	091206–4
	Selenium	21.2	ug/L	20	ug/L	106	80.0 – 120.0	07–DEC–09 11:34	091206–4

METALS
–4–
Interference Check Sample

SDG No: 10–670

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS6

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	–0.912	ug/L					10–DEC–09 18:55	091209–5
ICSAB01									
	Arsenic	21.6	ug/L	20	ug/L	108	80.0 – 120.0	10–DEC–09 19:00	091209–5

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-670 **Client ID** WST03-10-2134S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201984344

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	126		10.2	J	111	105		AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–670 **Client ID** WST03–10–2134SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201984346

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	142		10.2	J	123	107		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–670 **Client ID** WST03–10–2134S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201985645

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		8870000		5410000		525000	659	N/A	P
Antimony	ug/Kg	75–125	46000		838	J	51100	88.3		P
Barium	ug/Kg	75–125	142000		80200		52500	118		P
Cadmium	ug/Kg	75–125	53800		107	U	52500	102		P
Calcium	ug/Kg	75–125	2680000		1480000		511000	235	N	P
Chromium	ug/Kg	75–125	61300		6610		52500	104		P
Cobalt	ug/Kg	75–125	56500		2170		52500	103		P
Copper	ug/Kg	75–125	62700		4920		52500	110		P
Iron	ug/Kg		13100000		10300000		525000	540	N/A	P
Lead	ug/Kg	75–125	64600		8090		52500	108		P
Magnesium	ug/Kg	75–125	2070000		889000		511000	231	N	P
Manganese	ug/Kg		471000		311000		52500	306	N/A	P
Potassium	ug/Kg	75–125	1520000		583000		511000	184	N	P
Silver	ug/Kg	75–125	56400		365	J	52500	107		P
Sodium	ug/Kg	75–125	663000		137000		511000	103		P
Vanadium	ug/Kg	75–125	68400		11600		52500	108		P
Zinc	ug/Kg	75–125	93700		33400		52500	115		P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–670 **Client ID** WST03–10–2134SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 241838002 **Spike ID:** 1201985647

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cobalt	ug/Kg	75–125	52500		2170		52100	96.6		P
Copper	ug/Kg	75–125	60700		4920		52100	107		P
Iron	ug/Kg		10900000		10300000		521000	122	N/A	P
Lead	ug/Kg	75–125	59500		8090		52100	98.8		P
Magnesium	ug/Kg	75–125	1790000		889000		520000	174	N	P
Manganese	ug/Kg		325000		311000		52100	27.2	N/A	P
Potassium	ug/Kg	75–125	1340000		583000		520000	146	N	P
Silver	ug/Kg	75–125	53900		365	J	52100	103		P
Sodium	ug/Kg	75–125	651000		137000		520000	99		P
Vanadium	ug/Kg	75–125	65400		11600		52100	103		P
Zinc	ug/Kg	75–125	83800		33400		52100	96.7		P
Aluminum	ug/Kg		9470000		5410000		521000	779	N/A	P
Antimony	ug/Kg	75–125	47000		838	J	52000	88.8		P
Barium	ug/Kg	75–125	133000		80200		52100	101		P
Cadmium	ug/Kg	75–125	51600		107	U	52100	99.2		P
Calcium	ug/Kg	75–125	2210000		1480000		520000	140	N	P
Chromium	ug/Kg	75–125	59100		6610		52100	101		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–670 **Client ID** RE03–09–13923S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 81

Sample ID: 241901001 **Spike ID:** 1201985799

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	12		2.36		9.57	100		MS
Beryllium	mg/kg	75–125	6.76		1.17		5.98	93.5		MS
Nickel	mg/kg	75–125	13.1		7.88		5.98	87.3		MS
Selenium	mg/kg	75–125	2.04		0.599	U	2.39	85.4		MS
Thallium	mg/kg	75–125	13.2		0.719		12	104		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–670 **Client ID** RE03–09–13923SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 81

Sample ID: 241901001 **Spike ID:** 1201985801

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	11		2.36		9.59	90.5		MS
Beryllium	mg/kg	75–125	6.31		1.17		5.99	85.8		MS
Nickel	mg/kg	75–125	12		7.88		5.99	68	N	MS
Selenium	mg/kg	75–125	1.86		0.599	U	2.4	77.7		MS
Thallium	mg/kg	75–125	12.3		0.719		12	96.7		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134D

Sample ID: 241838002 **Duplicate ID:** 1201984343 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–11.4	10.2	J	8.63	J	16.9		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134SD

Sample ID: 1201984344 **Duplicate ID:** 1201984346 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	126		142		11.5		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134D

Sample ID: 241838002 **Duplicate ID:** 1201985644 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	5410000		4610000		16		P
Antimony	ug/Kg	+/–1050	838	J	993	J	16.9		P
Barium	ug/Kg	+/–20%	80200		65500		20.2	*	P
Cadmium	ug/Kg		107	U	105	U			P
Calcium	ug/Kg	+/–20%	1480000		1480000		.552		P
Chromium	ug/Kg	+/–20%	6610		6980		5.48		P
Cobalt	ug/Kg	+/–526	2170		1800		18.6		P
Copper	ug/Kg	+/–1050	4920		4230		15		P
Iron	ug/Kg	+/–20%	10300000		9210000		10.8		P
Lead	ug/Kg	+/–20%	8090		7190		11.7		P
Magnesium	ug/Kg	+/–20%	889000		943000		5.87		P
Manganese	ug/Kg	+/–20%	311000		279000		10.7		P
Potassium	ug/Kg	+/–20%	583000		580000		.499		P
Silver	ug/Kg	+/–526	365	J	310	J	16.4		P
Sodium	ug/Kg	+/–20%	137000		132000		3.92		P
Vanadium	ug/Kg	+/–20%	11600		9560		19.3		P
Zinc	ug/Kg	+/–20%	33400		31300		6.6		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** WST03–10–2134SD

Sample ID: 1201985645 **Duplicate ID:** 1201985647 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	8870000		9470000		6.54		P
Antimony	ug/Kg	+/–20	46000		47000		2.24		P
Barium	ug/Kg	+/–20	142000		133000		6.64		P
Cadmium	ug/Kg	+/–20	53800		51600		4.05		P
Calcium	ug/Kg	+/–20	2680000		2210000		19.1		P
Chromium	ug/Kg	+/–20	61300		59100		3.77		P
Cobalt	ug/Kg	+/–20	56500		52500		7.33		P
Copper	ug/Kg	+/–20	62700		60700		3.3		P
Iron	ug/Kg	+/–20	13100000		10900000		18.3		P
Lead	ug/Kg	+/–20	64600		59500		8.24		P
Magnesium	ug/Kg	+/–20	2070000		1790000		14.3		P
Manganese	ug/Kg	+/–20	471000		325000		36.8	*	P
Potassium	ug/Kg	+/–20	1520000		1340000		12.4		P
Silver	ug/Kg	+/–20	56400		53900		4.51		P
Sodium	ug/Kg	+/–20	663000		651000		1.73		P
Vanadium	ug/Kg	+/–20	68400		65400		4.62		P
Zinc	ug/Kg	+/–20	93700		83800		11.2		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13923D

Sample ID: 241901001 **Duplicate ID:** 1201985798 **Percent Solids for Dup:** 81

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.2	2.36		2.18		7.91		MS
Beryllium	mg/kg	+/–20%	1.17		1.12		3.95		MS
Nickel	mg/kg	+/–20%	7.88		7.11		10.3		MS
Selenium	mg/kg		0.599	U	0.599	U			MS
Thallium	mg/kg	+/–.24	0.719		0.61		16.4		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE03–09–13923SD

Sample ID: 1201985799 **Duplicate ID:** 1201985801 **Percent Solids for Dup:** 81

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	12		11		8.14		MS
Beryllium	mg/kg	+/–20	6.76		6.31		6.87		MS
Nickel	mg/kg	+/–20	13.1		12		9.14		MS
Selenium	mg/kg	+/–20	2.04*		1.86		9.28		MS
Thallium	mg/kg	+/–20	13.2		12.3		7.03		MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-670

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201984342								
	Mercury	ug/kg	5150	5370		104	71.6-128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-670

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985643								
	Aluminum	ug/Kg	7730000	6710000		86.8	56-144	P
	Barium	ug/Kg	472000	461000		97.7	80-120	P
	Cadmium	ug/Kg	117000	117000		99.9	81-120	P
	Chromium	ug/Kg	72800	73500		101	80-120	P
	Cobalt	ug/Kg	82500	78400		95	81-120	P
	Copper	ug/Kg	100000	99600		99.6	81-118	P
	Iron	ug/Kg	14500000	17800000		123	51-149	P
	Lead	ug/Kg	166000	162000		97.3	79-121	P
	Manganese	ug/Kg	374000	355000		94.9	81-119	P
	Silver	ug/Kg	123000	130000		105	66-134	P
	Vanadium	ug/Kg	138000	146000		106	79-121	P
	Zinc	ug/Kg	201000	190000		94.7	80-121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-670

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201985797								
	Arsenic	mg/kg	255	302		119	83-120	MS
	Beryllium	mg/kg	86.4	96.8		112	81.2-126.8	MS
	Nickel	mg/kg	101	113		112	83.3-121.4	MS
	Selenium	mg/kg	171	188		110	80.2-125.9	MS
	Thallium	mg/kg	203	242		119	78-123.2	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-670

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201997324								
	Antimony	ug/Kg	173000	158000		91.5	71-130	P
	Calcium	ug/Kg	9870000	9440000		95.6	83-117	P
	Magnesium	ug/Kg	4000000	3840000		96.1	79-122	P
	Potassium	ug/Kg	4300000	4050000		94.2	74-127	P
	Sodium	ug/Kg	1020000	972000		95.3	74-127	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-670 **Client ID** WST03-10-2134L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241838002 **Serial Dilution ID:** 1201984345

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.171	J	.34	U	100			AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-670 **Client ID** WST03-10-2134L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241838002 **Serial Dilution ID:** 1201985646

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	50700		50500		.394		10	P
Antimony	8.36	J	16.5	U	100			P
Barium	752		780		3.72		10	P
Cadmium	1	U	5	U				P
Calcium	14800		14700		.676		10	P
Chromium	62		63.5		2.42			P
Cobalt	20.4		22.1	J	8.33			P
Copper	46.1		44.6	J	3.36			P
Iron	96300		98000		1.77		10	P
Lead	75.9		71.5		5.8			P
Magnesium	8870		8850		.225		10	P
Manganese	2910		3070		5.33		10	P
Potassium	5810		5950		2.41		10	P
Silver	3.43	J	5	U	100			P
Sodium	1370		1340		2.55			P
Vanadium	109		107		2.29		10	P
Zinc	313		316		.958		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-670 **Client ID** RE03-09-13923L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 241901001 **Serial Dilution ID:** 1201985800

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	9.82		11.5	J	16.6			MS
Beryllium	4.88		5.3		8.61			MS
Nickel	32.9		37.1		12.8			MS
Selenium	2.5	U	12.5	U				MS
Thallium	3		3.69	J	22.8			MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-670 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 928612							
1201985642	MB for batch 928612	MB	S	04-DEC-09	.524g	50mL	
1201985643	LCS for batch 928612	LCS	S	04-DEC-09	.51g	50mL	
1201985645	WST03-10-2134S	MS	S	04-DEC-09	.511g	50mL	
1201985647	WST03-10-2134SD	MSD	S	04-DEC-09	.515g	50mL	
1201985644	WST03-10-2134D	DUP	S	04-DEC-09	.51g	50mL	
241838002	WST03-10-2134	SAMPLE	S	04-DEC-09	.503g	50mL	
Batch Number 933563							
1201997323	MB for batch 933563	MB	S	16-DEC-09	.525g	50mL	
1201997324	LCS for batch 933563	LCS	S	16-DEC-09	.503g	50mL	
1201985645	WST03-10-2134S	MS	S	16-DEC-09	.525g	50mL	
1201985647	WST03-10-2134SD	MSD	S	16-DEC-09	.516g	50mL	
1201985644	WST03-10-2134D	DUP	S	16-DEC-09	.511g	50mL	
241838002	WST03-10-2134	SAMPLE	S	16-DEC-09	.535g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-670 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 928676							
1201985796	MB for batch 928676	MB	S	04-DEC-09	.507g	50mL	
1201985797	LCS for batch 928676	LCS	S	04-DEC-09	.523g	50mL	
1201985799	RE03-09-13923S	MS	S	04-DEC-09	.513g	50mL	
1201985801	RE03-09-13923SD	MSD	S	04-DEC-09	.512g	50mL	
1201985798	RE03-09-13923D	DUP	S	04-DEC-09	.512g	50mL	
241838002	WST03-10-2134	SAMPLE	S	04-DEC-09	.517g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-670 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	928046						
1201984341	MB for batch 928046	MB	S	08-DEC-09	.539g	30mL	
1201984342	LCS for batch 928046	LCS	S	08-DEC-09	.203g	30mL	
1201984344	WST03-10-2134S	MS	S	08-DEC-09	.579g	30mL	
1201984346	WST03-10-2134SD	MSD	S	08-DEC-09	.524g	30mL	
1201984343	WST03-10-2134D	DUP	S	08-DEC-09	.563g	30mL	
241838002	WST03-10-2134	SAMPLE	S	08-DEC-09	.538g	30mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 08–DEC–09 **End Date:** 08–DEC–09

Client Sdg: 10–670
Method MS
Data File: 091208–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	21:26																					X		
S10	1	21:30																					X		
S100	1	21:34																					X		
ICV01	1	21:39																					X		
ICB01	1	21:43																					X		
CRDL01	1	21:48																					X		
ICSA01	1	21:52																					X		
ICSAB01	1	21:57																					X		
CCV01	1	22:01																					X		
CCB01	1	22:06																					X		
1201985796	2	22:10																					X		
1201985797	40	22:15																					X		
ZZZZZZ	2	22:19																							
ZZZZZZ	2	22:24																							
ZZZZZZ	2	22:28																							
ZZZZZZ	2	22:33																							
241838002	2	22:38																					X		
CCV02	1	22:42																					X		
CCB02	1	22:47																					X		
ZZZZZZ	2	22:51																							
1201985798	2	22:56																					X		
1201985799	2	23:00																					X		
1201985801	2	23:05																					X		
1201985800	10	23:09																					X		
CCV03	1	23:14																					X		
CCB03	1	23:18																					X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS6
Start Date: 07-DEC-09 **End Date:** 07-DEC-09

Client Sdg: 10-670
Method MS
Data File: 091206-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	10:52					X											X		X					
S10	1	10:58					X											X		X					
S100	1	11:04					X											X		X					
ICV01	1	11:10					X											X		X					
ICB01	1	11:16					X											X		X					
CRDL01	1	11:22					X											X		X					
ICSA01	1	11:28					X											X		X					
ICSAB01	1	11:34					X											X		X					
CCV01	1	11:40					X											X		X					
CCB01	1	11:46					X											X		X					
1201985796	2	11:51					X											X		X					
1201985797	40	11:57					X											X		X					
ZZZZZZ	20	12:03																							
CCV02	1	12:09					X											X		X					
CCB02	1	12:15					X											X		X					
ZZZZZZ	2	12:21																							
ZZZZZZ	2	12:27																							
ZZZZZZ	2	12:33																							
ZZZZZZ	2	12:39																							
241838002	2	12:45					X											X		X					
CCV03	1	12:50					X											X		X					
CCB03	1	12:56					X											X		X					
ZZZZZZ	2	13:02																							
1201985798	2	13:08					X											X		X					
1201985799	2	13:14					X											X		X					
1201985801	2	13:20					X											X		X					
1201985800	10	13:26					X											X		X					
ZZZZZZ	2	13:32																							
ZZZZZZ	2	13:38																							
ZZZZZZ	2	13:44																							
ZZZZZZ	2	13:49																							
CCV04	1	13:55					X											X		X					
CCB04	1	14:01					X											X		X					

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS6
Start Date: 10–DEC–09 **End Date:** 10–DEC–09

Client Sdg: 10–670
Method MS
Data File: 091209–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	18:19			X																				
S10	1	18:25			X																				
S100	1	18:31			X																				
ICV01	1	18:37			X																				
ICB01	1	18:43			X																				
CRDL01	1	18:49			X																				
ICSA01	1	18:55			X																				
ICSAB01	1	19:00			X																				
CCV01	1	19:06			X																				
CCB01	1	19:12			X																				
LR01	1	19:18			X																				
CCV02	1	19:24			X																				
CCB02	1	19:30			X																				
ZZZZZZ	1	19:36																							
ZZZZZZ	1	19:42																							
ZZZZZZ	1	19:48																							
ZZZZZZ	1	19:54																							
ZZZZZZ	5	20:00																							
CCV03	1	20:05			X																				
CCB03	1	20:11			X																				
ZZZZZZ	1	20:17																							
ZZZZZZ	1	20:23																							
ZZZZZZ	1	20:29																							
ZZZZZZ	1	20:35																							
ZZZZZZ	1	20:41																							
ZZZZZZ	1	20:47																							
ZZZZZZ	1	20:53																							
CCV04	1	20:59			X																				
CCB04	1	21:04			X																				
1201985796	2	21:10			X																				
1201985797	40	21:16			X																				
ZZZZZZ	2	21:22																							
ZZZZZZ	2	21:28																							
ZZZZZZ	2	21:34																							
ZZZZZZ	2	21:40																							
241838002	2	21:46			X																				
CCV05	1	21:52			X																				
CCB05	1	21:58			X																				
ZZZZZZ	2	22:04																							
1201985798	2	22:09			X																				

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
1201985799	2	22:15			X																				
1201985801	2	22:21			X																				
1201985800	10	22:27			X																				
ZZZZZZ	2	22:33																							
ZZZZZZ	2	22:39																							
ZZZZZZ	2	22:45																							
ZZZZZZ	2	22:51																							
CCV06	1	22:57			X																				
CCB06	1	23:03			X																				

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 11–DEC–09 **End Date:** 11–DEC–09

Client Sdg: 10–670
Method P
Data File: 121109A–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	10:35	X			X		X		X	X	X	X	X		X					X			X	X
S0.1	1	10:41				X		X		X	X	X		X		X					X			X	X
S0.5	1	10:48	X			X		X		X	X	X		X		X					X			X	X
SCAL	1	10:55	X			X		X		X	X	X	X	X		X					X			X	X
S10	1	11:02	X										X												
ICV01	1	11:07	X			X		X		X	X	X	X	X		X					X			X	X
ICB01	1	11:14	X			X		X		X	X	X	X	X		X					X			X	X
PQL01	1	11:21	X			X		X		X	X	X	X	X		X					X			X	X
ICSA01	1	11:28	X			X		X		X	X	X	X	X		X					X			X	X
ICSAB01	1	11:34	X			X		X		X	X	X	X	X		X					X			X	X
LR01	1	11:40	X			X		X		X	X	X	X	X		X					X			X	X
LR02	1	11:46	X			X		X		X	X	X	X	X		X					X			X	X
CCV01	1	11:53	X			X		X		X	X	X	X	X		X					X			X	X
CCB01	1	12:00	X			X		X		X	X	X	X	X		X					X			X	X
CCV02	1	12:09	X			X		X		X	X	X	X	X		X					X			X	X
CCB02	1	12:16	X			X		X		X	X	X	X	X		X					X			X	X
LR03	1	12:23	X			X		X		X	X	X	X	X		X					X			X	X
CCV03	1	12:30	X			X		X		X	X	X	X	X		X					X			X	X
CCB03	1	12:37	X			X		X		X	X	X	X	X		X					X			X	X
ZZZZZZ	5	12:47																							
ZZZZZZ	5	12:54																							
CCV04	1	13:02	X			X		X		X	X	X	X	X		X					X			X	X
CCB04	1	13:09	X			X		X		X	X	X	X	X		X					X			X	X
CCV05	1	13:24	X			X		X		X	X	X	X	X		X					X			X	X
CCB05	1	13:31	X			X		X		X	X	X	X	X		X					X			X	X
ZZZZZZ	1	13:38																							
ZZZZZZ	2	13:45																							
ZZZZZZ	1	13:52																							
ZZZZZZ	1	13:58																							
ZZZZZZ	1	14:05																							
ZZZZZZ	1	14:12																							
ZZZZZZ	5	14:19																							
ZZZZZZ	1	14:26																							
ZZZZZZ	1	14:33																							
CCV06	1	14:40	X			X		X		X	X	X	X	X		X					X			X	X
CCB06	1	14:47	X			X		X		X	X	X	X	X		X					X			X	X
ZZZZZZ	1	14:54																							
ZZZZZZ	1	15:01																							
ZZZZZZ	1	15:08																							
ZZZZZZ	1	15:15																							

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	15:22																							
ZZZZZZ	1	15:29																							
ZZZZZZ	1	15:36																							
ZZZZZZ	1	15:43																							
ZZZZZZ	1	15:50																							
CCV07	1	15:57	X			X		X		X	X	X	X	X		X					X			X	X
CCB07	1	16:04	X			X		X		X	X	X	X	X		X					X			X	X
ZZZZZZ	1	16:11																							
ZZZZZZ	1	16:18																							
ZZZZZZ	1	16:25																							
ZZZZZZ	1	16:32																							
ZZZZZZ	1	16:39																							
ZZZZZZ	1	16:46																							
ZZZZZZ	1	16:53																							
ZZZZZZ	1	17:01																							
CCV08	1	17:08	X			X		X		X	X	X	X	X		X					X			X	X
CCB08	1	17:15	X			X		X		X	X	X	X	X		X					X			X	X
ZZZZZZ	1	17:21																							
ZZZZZZ	1	17:28																							
ZZZZZZ	1	17:35																							
ZZZZZZ	1	17:42																							
ZZZZZZ	1	17:49																							
ZZZZZZ	5	17:56																							
ZZZZZZ	1	18:02																							
CCV09	1	18:09	X			X		X		X	X	X	X	X		X					X			X	X
CCB09	1	18:16	X			X		X		X	X	X	X	X		X					X			X	X
ZZZZZZ	1	18:23																							
ZZZZZZ	1	18:30																							
ZZZZZZ	1	18:37																							
ZZZZZZ	1	18:43																							
ZZZZZZ	1	18:50																							
ZZZZZZ	5	18:57																							
ZZZZZZ	1	19:04																							
CCV10	1	19:11	X			X		X		X	X	X	X	X		X					X			X	X
CCB10	1	19:18	X			X		X		X	X	X	X	X		X					X			X	X
1201985642	1	19:25	X			X		X		X	X	X	X	X		X					X			X	X
1201985643	2	19:31	X			X		X		X	X	X	X	X		X					X			X	X
ZZZZZZ	1	19:38																							
ZZZZZZ	1	19:45																							
ZZZZZZ	1	19:52																							

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
ZZZZZZ	1	19:59																							
CCV11	1	20:06	X			X		X		X	X	X	X	X		X					X			X	X
CCB11	1	20:13	X			X		X		X	X	X	X	X		X					X			X	X
241838002	1	20:20	X			X		X		X	X	X	X	X		X					X			X	X
1201985644	1	20:27	X			X		X		X	X	X	X	X		X					X			X	X
1201985645	1	20:34	X			X		X		X	X	X	X	X		X					X			X	X
1201985647	1	20:41	X			X		X		X	X	X	X	X		X					X			X	X
1201985646	5	20:48	X			X		X		X	X	X	X	X		X					X			X	X
CCV12	1	20:55	X			X		X		X	X	X	X	X		X					X			X	X
CCB12	1	21:02	X			X		X		X	X	X	X	X		X					X			X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 09–DEC–09 **End Date:** 09–DEC–09

Client Sdg: 10–670
Method AV
Data File: 120909S1–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	09:49															X								
S0.2	1	09:51															X								
S0.5	1	09:52															X								
S2.0	1	09:54															X								
S5.0	1	09:56															X								
S10.0	1	09:57															X								
ICV01	1	09:59															X								
ICB01	1	10:01															X								
CRDL01	1	10:02															X								
CCV01	1	10:04															X								
CCB01	1	10:06															X								
ZZZZZZ	1	10:07																							
ZZZZZZ	1	10:09																							
ZZZZZZ	1	10:11																							
ZZZZZZ	1	10:12																							
ZZZZZZ	1	10:14																							
ZZZZZZ	1	10:16																							
ZZZZZZ	1	10:17																							
ZZZZZZ	1	10:19																							
ZZZZZZ	1	10:21																							
ZZZZZZ	1	10:22																							
CCV02	1	10:24															X								
CCB02	1	10:26															X								
ZZZZZZ	5	10:27																							
ZZZZZZ	1	10:29																							
ZZZZZZ	1	10:31																							
ZZZZZZ	1	10:32																							
ZZZZZZ	1	10:34																							
ZZZZZZ	1	10:36																							
ZZZZZZ	1	10:37																							
ZZZZZZ	1	10:39																							
ZZZZZZ	1	10:41																							
ZZZZZZ	1	10:42																							
CCV03	1	10:44															X								
CCB03	1	10:46															X								
ZZZZZZ	1	10:47																							
ZZZZZZ	1	10:49																							
ZZZZZZ	1	10:51																							
ZZZZZZ	1	10:53																							
ZZZZZZ	5	10:54																							

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																						
ZZZZZZ	1	10:56																						
ZZZZZZ	1	10:58																						
ZZZZZZ	1	10:59																						
ZZZZZZ	1	11:01																						
ZZZZZZ	1	11:03																						
CCV04	1	11:04														X								
CCB04	1	11:06														X								
ZZZZZZ	1	11:08																						
ZZZZZZ	5	11:09																						
ZZZZZZ	1	11:11																						
ZZZZZZ	1	11:13																						
ZZZZZZ	1	11:14																						
ZZZZZZ	1	11:16																						
ZZZZZZ	10	11:18																						
ZZZZZZ	1	11:19																						
ZZZZZZ	1	11:21																						
ZZZZZZ	1	11:23																						
CCV05	1	11:24														X								
CCB05	1	11:26														X								
ZZZZZZ	1	11:28																						
ZZZZZZ	1	11:29																						
ZZZZZZ	1	11:31																						
ZZZZZZ	1	11:33																						
ZZZZZZ	1	11:34																						
ZZZZZZ	1	11:36																						
ZZZZZZ	1	11:38																						
ZZZZZZ	1	11:39																						
ZZZZZZ	1	11:41																						
ZZZZZZ	1	11:43																						
CCV06	1	11:45														X								
CCB06	1	11:46														X								
ZZZZZZ	1	11:48																						
ZZZZZZ	1	11:50																						
ZZZZZZ	5	11:51																						
ZZZZZZ	1	11:53																						
ZZZZZZ	1	11:55																						
ZZZZZZ	1	11:56																						
ZZZZZZ	1	11:58																						
ZZZZZZ	1	12:00																						
ZZZZZZ	1	12:01																						

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
ZZZZZZ	1	12:03																							
CCV07	1	12:05															X								
CCB07	1	12:06															X								
ZZZZZZ	10	12:08																							
ZZZZZZ	1	12:10																							
ZZZZZZ	1	12:11																							
ZZZZZZ	1	12:13																							
ZZZZZZ	1	12:15																							
ZZZZZZ	5	12:17																							
ZZZZZZ	1	12:18																							
ZZZZZZ	1	12:20																							
ZZZZZZ	1	12:22																							
ZZZZZZ	1	12:23																							
CCV08	1	12:25															X								
CCB08	1	12:27															X								
ZZZZZZ	1	12:28																							
ZZZZZZ	1	12:30																							
ZZZZZZ	1	12:32																							
ZZZZZZ	10	12:33																							
ZZZZZZ	1	12:35																							
ZZZZZZ	1	12:37																							
ZZZZZZ	1	12:38																							
ZZZZZZ	1	12:40																							
ZZZZZZ	5	12:42																							
ZZZZZZ	1	12:44																							
CCV09	1	12:45															X								
CCB09	1	12:47															X								
ZZZZZZ	1	12:49																							
ZZZZZZ	1	12:50																							
ZZZZZZ	1	12:52																							
ZZZZZZ	1	12:54																							
ZZZZZZ	1	12:55																							
ZZZZZZ	1	12:57																							
ZZZZZZ	1	12:59																							
ZZZZZZ	1	13:00																							
ZZZZZZ	1	13:02																							
ZZZZZZ	1	13:04																							
CCV10	1	13:06															X								
CCB10	1	13:07															X								
ZZZZZZ	1	13:09																							

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																						
ZZZZZZ	1	13:11																						
ZZZZZZ	1	13:12																						
ZZZZZZ	1	13:14																						
ZZZZZZ	1	13:16																						
ZZZZZZ	1	13:17																						
ZZZZZZ	1	13:19																						
ZZZZZZ	1	13:21																						
1201984341	1	13:23														X								
1201984342	10	13:24														X								
CCV11	1	13:26														X								
CCB11	1	13:28														X								
ZZZZZZ	1	13:29																						
ZZZZZZ	1	13:31																						
ZZZZZZ	1	13:33																						
ZZZZZZ	1	13:34																						
241838002	1	13:36														X								
1201984343	1	13:38														X								
1201984344	1	13:40														X								
1201984346	1	13:41														X								
1201984345	5	13:43														X								
ZZZZZZ	1	13:45																						
CCV12	1	13:46														X								
CCB12	1	13:48														X								

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 18-DEC-09 **End Date:** 18-DEC-09

Client Sdg: 10-670
Method P
Data File: 121809A-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	02:34		X					X						X				X			X			
S0.1	1	02:38		X															X						
S0.5	1	02:41		X					X						X				X						
SCAL	1	02:44		X					X						X				X			X			
S10	1	02:48							X						X							X			
ICV01	1	02:49		X					X						X				X			X			
ICB01	1	02:53		X					X						X				X			X			
PQL01	1	02:57		X					X						X				X			X			
ICSA01	1	03:00		X					X						X				X			X			
ICSAB01	1	03:03		X					X						X				X			X			
LR01	1	03:06		X					X						X				X			X			
LR02	1	03:09		X					X						X				X			X			
CCV01	1	03:12		X					X						X				X			X			
CCB01	1	03:16		X					X						X				X			X			
ZZZZZZ	100	03:24																							
ZZZZZZ	100	03:28																							
ZZZZZZ	100	03:31																							
ZZZZZZ	100	03:35																							
ZZZZZZ	100	03:38																							
ZZZZZZ	500	03:42																							
CCV02	1	03:46		X					X						X				X			X			
PQL02	1	03:49		X					X						X				X			X			
CCB02	1	03:53		X					X						X				X			X			
CCV03	1	03:57		X					X						X				X			X			
PQL03	1	04:01		X					X						X				X			X			
CCB03	1	04:04		X					X						X				X			X			
ZZZZZZ	1	04:08																							
ZZZZZZ	1	04:12																							
ZZZZZZ	1	04:15																							
ZZZZZZ	1	04:19																							
ZZZZZZ	1	04:23																							
ZZZZZZ	1	04:27																							
ZZZZZZ	1	04:31																							
ZZZZZZ	5	04:35																							
CCV04	1	04:39		X					X						X				X			X			
PQL04	1	04:42		X					X						X				X			X			
CCB04	1	04:46		X					X						X				X			X			
ZZZZZZ	1	04:50																							
ZZZZZZ	1	04:53																							
ZZZZZZ	1	04:57																							

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																					
ZZZZZZ	1	05:00																					
ZZZZZZ	1	05:04																					
ZZZZZZ	5	05:08																					
CCV05	1	05:12		X				X					X				X			X			
CCB05	1	05:15		X				X					X				X			X			
ZZZZZZ	1	05:19																					
ZZZZZZ	1	05:23																					
ZZZZZZ	1	05:26																					
ZZZZZZ	1	05:30																					
ZZZZZZ	1	05:34																					
ZZZZZZ	5	05:37																					
ZZZZZZ	1	05:41																					
ZZZZZZ	1	05:45																					
ZZZZZZ	1	05:47																					
CCV06	1	05:50		X				X					X				X			X			
CCB06	1	05:54		X				X					X				X			X			
ZZZZZZ	1	05:57																					
ZZZZZZ	1	06:01																					
ZZZZZZ	1	06:04																					
ZZZZZZ	1	06:08																					
ZZZZZZ	1	06:12																					
ZZZZZZ	5	06:15																					
ZZZZZZ	1	06:19																					
ZZZZZZ	1	06:22																					
ZZZZZZ	1	06:26																					
CCV07	1	06:30		X				X					X				X			X			
CCB07	1	06:33		X				X					X				X			X			
CCV08	1	06:55		X				X					X				X			X			
CCB08	1	06:58		X				X					X				X			X			
ZZZZZZ	1	07:02																					
ZZZZZZ	1	07:06																					
ZZZZZZ	1	07:09																					
ZZZZZZ	1	07:12																					
ZZZZZZ	1	07:16																					
ZZZZZZ	1	07:19																					
ZZZZZZ	5	07:23																					
ZZZZZZ	1	07:27																					
ZZZZZZ	1	07:30																					
CCV09	1	07:34		X				X					X				X			X			
CCB09	1	07:38		X				X					X				X			X			

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
ZZZZZZ	1	07:41																							
ZZZZZZ	1	07:45																							
ZZZZZZ	1	07:49																							
ZZZZZZ	1	07:52																							
ZZZZZZ	1	07:56																							
ZZZZZZ	1	08:00																							
ZZZZZZ	1	08:03																							
ZZZZZZ	1	08:07																							
ZZZZZZ	1	08:10																							
CCV10	1	08:14		X					X						X				X			X			
CCB10	1	08:18		X					X						X				X			X			
ZZZZZZ	1	08:21																							
ZZZZZZ	1	08:25																							
ZZZZZZ	1	08:28																							
ZZZZZZ	1	08:32																							
ZZZZZZ	1	08:35																							
ZZZZZZ	1	08:39																							
ZZZZZZ	5	08:43																							
CCV11	1	08:46		X					X						X				X			X			
CCB11	1	08:50		X					X						X				X			X			
ZZZZZZ	1	08:53																							
ZZZZZZ	1	08:57																							
ZZZZZZ	1	09:01																							
ZZZZZZ	1	09:04																							
CCV12	1	09:08		X					X						X				X			X			
CCB12	1	09:12		X					X						X				X			X			
ZZZZZZ	1	09:24																							
ZZZZZZ	1	09:28																							
ZZZZZZ	1	09:31																							
ZZZZZZ	1	09:34																							
ZZZZZZ	1	09:38																							
ZZZZZZ	1	09:41																							
ZZZZZZ	5	09:45																							
ZZZZZZ	1	09:49																							
ZZZZZZ	1	09:51																							
CCV13	1	09:55		X					X						X				X			X			
CCB13	1	09:59		X					X						X				X			X			
ZZZZZZ	1	10:02																							
ZZZZZZ	1	10:06																							
ZZZZZZ	1	10:10																							

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																					
ZZZZZZ	1	10:13																					
ZZZZZZ	1	10:16																					
ZZZZZZ	1	10:20																					
ZZZZZZ	1	10:23																					
ZZZZZZ	1	10:27																					
ZZZZZZ	1	10:30																					
CCV14	1	10:33		X				X					X				X		X				
CCB14	1	10:37		X				X					X				X		X				
ZZZZZZ	1	10:40																					
ZZZZZZ	1	10:44																					
ZZZZZZ	1	10:47																					
ZZZZZZ	1	10:51																					
ZZZZZZ	1	10:54																					
ZZZZZZ	1	10:58																					
ZZZZZZ	1	11:01																					
ZZZZZZ	1	11:04																					
CCV15	1	11:08		X				X					X				X		X				
CCB15	1	11:11		X				X					X				X		X				
1201997323	1	11:15		X				X					X				X		X				
1201997324	1	11:19		X				X					X				X		X				
241838002	1	11:22		X				X					X				X		X				
1201985644	1	11:25		X				X					X				X		X				
1201985645	1	11:29		X				X					X				X		X				
1201985647	1	11:32		X				X					X				X		X				
1201985646	5	11:36		X				X					X				X		X				
CCV16	1	11:40		X				X					X				X		X				
CCB16	1	11:43		X				X					X				X		X				

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–670

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–670

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-670

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02738	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.44940	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.22121	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.38952	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-670
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phospborous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.08714	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.36980	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02864	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	4.75140	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-33.0980	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.36057
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.03970	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	122.96
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.07230	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.45160

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10–670
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	38.0301
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	1.47380
Arsenic	188.979	–0.82061	0.00000	0.00000	0.00000	1.83900
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.31446	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.07749	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	–2.33110
Copper	324.752	–0.24488	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.01248	0.00000	0.00000	0.00000	–2.95230
Magnesium	279.077	1.47510	0.00000	0.00000	0.00000	–24.9658
Manganese	257.61	–0.12666	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	–0.03930	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	1.17810	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	–0.61937	0.00000	0.41160	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.0660
Silver	328.068	–0.07890	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14830	0.00000	0.14260	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	–4.63400	0.00000
Tin	189.927	–0.09214	0.00000	–0.16050	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.18670	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	–0.08158	0.00000	0.00000	0.00000	–6.97050
Zinc	213.857	0.06940	0.00000	0.02727	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-670
Contract: LANL01004
Instrument: OPTIMA1 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-1.09390	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	5.19130	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-670
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-3.74360	-0.55870
Arsenic	188.979	0.00000	0.00000	0.00000	-2.71110	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.37024	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	-0.71290
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08900	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.84100
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-21.8313	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	38.5869	36.0710	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-7.24690	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.61770
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-670
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-2.10080	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-2.34600	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.85200	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
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Linear Ranges

SDG NO. 10-670

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Zinc	1000	2500	ug/L	01-NOV-09
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–670

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS6

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–670

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–670

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

Raw Data

Method: Hg_ReAlign
Result: 122109

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

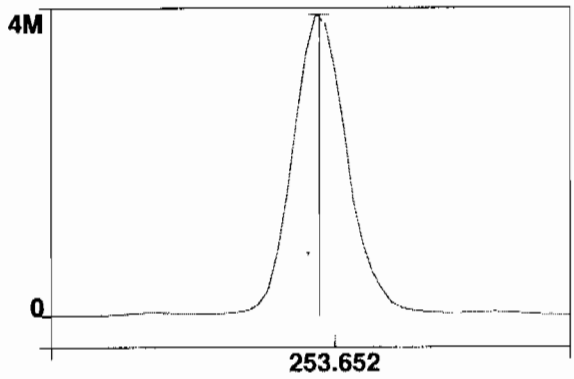

Intensity: 4017578.4 cps
Conc:

1

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Analysis Begun

Start Time: 12/18/2009 02:34:42 **Plasma On Time: 12/17/2009 20:21:18**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121609H.SIF
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/18/2009 02:34:44**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	111933.3	111933.3	99.5	%	02:35:25
1	Al 396.153Radial†	236.3	237.5	[0.00]	µg/L	02:35:25
1	Ca 317.933Radial†	505.5	508.0	[0.00]	µg/L	02:35:45
1	Fe 238.204 Radial†	10.3	10.4	[0.00]	µg/L	02:35:45
1	K 766.490 Radial†	661.9	665.1	[0.00]	µg/L	02:35:25
1	Mg 279.077 IEC†	21.3	21.4	[0.00]	µg/L	02:35:45
1	Na 589.592 Radial†	-675.3	-678.6	[0.00]	µg/L	02:35:25
1	Sr 421.552†	-45.9	-46.1	[0.00]	µg/L	02:35:25
1	Sc 361.383	2052346.2	2052346.2	99.786	%	02:36:47
1	Y 371.029	1249951.6	1249951.6	99.808	%	02:36:47
1	Ag 328.068†	-86.6	-86.7	[0.00]	µg/L	02:36:53
1	As 188.979†	4.9	4.9	[0.00]	µg/L	02:37:13
1	B 249.677†	164.3	164.6	[0.00]	µg/L	02:36:53
1	Ba 233.527†	-87.7	-87.9	[0.00]	µg/L	02:37:13
1	Be 313.107†	3594.6	3602.3	[0.00]	µg/L	02:36:53
1	Cd 226.502†	-90.7	-90.9	[0.00]	µg/L	02:37:13
1	Co 228.616†	-71.8	-72.0	[0.00]	µg/L	02:37:13
1	Cr 267.716†	-120.2	-120.5	[0.00]	µg/L	02:36:53
1	Cu 324.752†	3356.6	3363.8	[0.00]	µg/L	02:36:53
1	Mn 257.610†	-222.8	-223.3	[0.00]	µg/L	02:37:13
1	Mo 202.031†	-9.0	-9.0	[0.00]	µg/L	02:37:13
1	Ni 231.604†	296.4	297.0	[0.00]	µg/L	02:37:13
1	P 214.914†	204.5	204.9	[0.00]	µg/L	02:37:13
1	Pb 220.353†	58.5	58.6	[0.00]	µg/L	02:37:13
1	S 181.975 Axial†	24.6	24.7	[0.00]	µg/L	02:37:13
1	Sb 206.836†	18.6	18.6	[0.00]	µg/L	02:37:13
1	Se 196.026†	11.9	11.9	[0.00]	µg/L	02:37:13
1	SiO2†	1975.5	1979.7	[0.00]	µg/L	02:36:53
1	Si 251.611†	343.9	344.6	[0.00]	µg/L	02:37:13
1	Sn 189.927†	20.7	20.7	[0.00]	µg/L	02:37:13
1	Ti 334.940†	669.0	670.4	[0.00]	µg/L	02:36:53
1	Tl 190.801†	-21.5	-21.6	[0.00]	µg/L	02:37:13
1	U 409.014†	615.1	616.4	[0.00]	µg/L	02:36:53
1	V 292.402†	-72.1	-72.3	[0.00]	µg/L	02:36:53
1	Zn 213.857†	553.3	554.5	[0.00]	µg/L	02:37:13
2	Sc RADIAL	113026.6	113026.6	100	%	02:35:51
2	Al 396.153Radial†	240.4	239.2	[0.00]	µg/L	02:35:51
2	Ca 317.933Radial†	486.8	484.4	[0.00]	µg/L	02:36:11
2	Fe 238.204 Radial†	13.1	13.1	[0.00]	µg/L	02:36:11
2	K 766.490 Radial†	732.8	729.3	[0.00]	µg/L	02:35:51
2	Mg 279.077 IEC†	21.1	21.0	[0.00]	µg/L	02:36:11
2	Na 589.592 Radial†	-699.4	-696.1	[0.00]	µg/L	02:35:51
2	Sr 421.552†	-81.0	-80.6	[0.00]	µg/L	02:35:51
2	Sc 361.383	2060012.5	2060012.5	100.16	%	02:37:19
2	Y 371.029	1254105.4	1254105.4	100.14	%	02:37:19
2	Ag 328.068†	5.3	5.3	[0.00]	µg/L	02:37:25
2	As 188.979†	4.7	4.7	[0.00]	µg/L	02:37:45

2	B 249.677†	142.4	142.2	[0.00]	µg/L	02:37:25
2	Ba 233.527†	-78.4	-78.3	[0.00]	µg/L	02:37:45
2	Be 313.107†	3629.4	3623.7	[0.00]	µg/L	02:37:25
2	Cd 226.502†	-107.5	-107.4	[0.00]	µg/L	02:37:45
2	Co 228.616†	-69.8	-69.6	[0.00]	µg/L	02:37:45
2	Cr 267.716†	-106.2	-106.0	[0.00]	µg/L	02:37:25
2	Cu 324.752†	3410.2	3404.8	[0.00]	µg/L	02:37:25
2	Mn 257.610†	-229.3	-228.9	[0.00]	µg/L	02:37:45
2	Mo 202.031†	-10.8	-10.8	[0.00]	µg/L	02:37:45
2	Ni 231.604†	293.4	292.9	[0.00]	µg/L	02:37:45
2	P 214.914†	207.9	207.6	[0.00]	µg/L	02:37:45
2	Pb 220.353†	47.7	47.7	[0.00]	µg/L	02:37:45
2	S 181.975 Axial†	22.1	22.1	[0.00]	µg/L	02:37:45
2	Sb 206.836†	23.9	23.8	[0.00]	µg/L	02:37:45
2	Se 196.026†	19.1	19.0	[0.00]	µg/L	02:37:45
2	SiO2†	1998.3	1995.2	[0.00]	µg/L	02:37:25
2	Si 251.611†	353.4	352.8	[0.00]	µg/L	02:37:45
2	Sn 189.927†	24.3	24.3	[0.00]	µg/L	02:37:45
2	Ti 334.940†	772.0	770.7	[0.00]	µg/L	02:37:25
2	Tl 190.801†	-19.5	-19.4	[0.00]	µg/L	02:37:45
2	U 409.014†	678.5	677.4	[0.00]	µg/L	02:37:25
2	V 292.402†	-83.8	-83.6	[0.00]	µg/L	02:37:25
2	Zn 213.857†	544.0	543.1	[0.00]	µg/L	02:37:45
3	Sc RADIAL	112480.5	112480.5	100	%	02:36:17
3	Al 396.153Radial†	212.8	212.8	[0.00]	µg/L	02:36:17
3	Ca 317.933Radial†	493.9	493.9	[0.00]	µg/L	02:36:37
3	Fe 238.204 Radial†	10.2	10.2	[0.00]	µg/L	02:36:37
3	K 766.490 Radial†	690.1	690.1	[0.00]	µg/L	02:36:17
3	Mg 279.077 IEC†	17.1	17.1	[0.00]	µg/L	02:36:37
3	Na 589.592 Radial†	-737.1	-737.1	[0.00]	µg/L	02:36:17
3	Sr 421.552†	-64.6	-64.6	[0.00]	µg/L	02:36:17
3	Sc 361.383	2057873.5	2057873.5	100.05	%	02:37:51
3	Y 371.029	1253017.5	1253017.5	100.05	%	02:37:51
3	Ag 328.068†	-3.5	-3.5	[0.00]	µg/L	02:37:57
3	As 188.979†	-2.1	-2.1	[0.00]	µg/L	02:38:17
3	B 249.677†	160.3	160.2	[0.00]	µg/L	02:37:57
3	Ba 233.527†	-75.9	-75.9	[0.00]	µg/L	02:38:17
3	Be 313.107†	3610.5	3608.5	[0.00]	µg/L	02:37:57
3	Cd 226.502†	-104.5	-104.4	[0.00]	µg/L	02:38:17
3	Co 228.616†	-73.6	-73.5	[0.00]	µg/L	02:38:17
3	Cr 267.716†	-141.9	-141.8	[0.00]	µg/L	02:37:57
3	Cu 324.752†	3386.2	3384.4	[0.00]	µg/L	02:37:57
3	Mn 257.610†	-215.9	-215.7	[0.00]	µg/L	02:38:17
3	Mo 202.031†	-3.9	-3.9	[0.00]	µg/L	02:38:17
3	Ni 231.604†	308.4	308.3	[0.00]	µg/L	02:38:17
3	P 214.914†	205.6	205.5	[0.00]	µg/L	02:38:17
3	Pb 220.353†	56.1	56.1	[0.00]	µg/L	02:38:17
3	S 181.975 Axial†	25.3	25.3	[0.00]	µg/L	02:38:17
3	Sb 206.836†	19.2	19.2	[0.00]	µg/L	02:38:17
3	Se 196.026†	11.3	11.3	[0.00]	µg/L	02:38:17
3	SiO2†	1971.2	1970.1	[0.00]	µg/L	02:37:57
3	Si 251.611†	351.7	351.5	[0.00]	µg/L	02:38:17
3	Sn 189.927†	22.4	22.3	[0.00]	µg/L	02:38:17
3	Ti 334.940†	715.8	715.4	[0.00]	µg/L	02:37:57
3	Tl 190.801†	-23.3	-23.2	[0.00]	µg/L	02:38:17
3	U 409.014†	744.2	743.8	[0.00]	µg/L	02:37:57
3	V 292.402†	-120.0	-120.0	[0.00]	µg/L	02:37:57
3	Zn 213.857†	553.1	552.8	[0.00]	µg/L	02:38:17

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2056744.1	3955.94	0.19%	100.00	%
Sc RADIAL	112480.1	546.64	0.49%	100	%
Y 371.029	1252358.2	2153.95	0.17%	100.000	%
Ag 328.068†	-28.3	50.80	179.42%	[0.00]	µg/L
Al 396.153Radial†	229.8	14.81	6.44%	[0.00]	µg/L
As 188.979†	2.5	4.00	160.84%	[0.00]	µg/L
B 249.677†	155.7	11.87	7.63%	[0.00]	µg/L
Ba 233.527†	-80.7	6.36	7.88%	[0.00]	µg/L

Be 313.107†	3611.5	10.97	0.30%	[0.00] µg/L
Ca 317.933Radial†	495.4	11.86	2.39%	[0.00] µg/L
Cd 226.502†	-100.9	8.77	8.69%	[0.00] µg/L
Co 228.616†	-71.7	1.95	2.72%	[0.00] µg/L
Cr 267.716†	-122.8	18.02	14.68%	[0.00] µg/L
Cu 324.752†	3384.3	20.51	0.61%	[0.00] µg/L
Fe 238.204 Radial†	11.2	1.61	14.36%	[0.00] µg/L
K 766.490 Radial†	694.8	32.34	4.65%	[0.00] µg/L
Mg 279.077 IEC†	19.8	2.40	12.08%	[0.00] µg/L
Mn 257.610†	-222.6	6.61	2.97%	[0.00] µg/L
Mo 202.031†	-7.9	3.56	44.98%	[0.00] µg/L
Na 589.592 Radial†	-703.9	30.01	4.26%	[0.00] µg/L
Ni 231.604†	299.4	7.94	2.65%	[0.00] µg/L
P 214.914†	206.0	1.40	0.68%	[0.00] µg/L
Pb 220.353†	54.1	5.73	10.58%	[0.00] µg/L
S 181.975 Axial†	24.0	1.71	7.10%	[0.00] µg/L
Sb 206.836†	20.5	2.85	13.85%	[0.00] µg/L
Se 196.026†	14.1	4.28	30.36%	[0.00] µg/L
SiO2†	1981.7	12.64	0.64%	[0.00] µg/L
Si 251.611†	349.6	4.41	1.26%	[0.00] µg/L
Sn 189.927†	22.5	1.80	8.02%	[0.00] µg/L
Sr 421.552†	-63.8	17.25	27.05%	[0.00] µg/L
Ti 334.940†	718.9	50.24	6.99%	[0.00] µg/L
Tl 190.801†	-21.4	1.91	8.90%	[0.00] µg/L
U 409.014†	679.2	63.72	9.38%	[0.00] µg/L
V 292.402†	-92.0	24.90	27.08%	[0.00] µg/L
Zn 213.857†	550.2	6.15	1.12%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/18/2009 02:38:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115622.2	115622.2	103	%	02:39:01
1	K 766.490 Radial†	2691.0	1923.1	[1000]	µg/L	02:39:01
1	Sr 421.552†	18558.8	18118.2	[100]	µg/L	02:39:01
1	Sc 361.383	2055514.3	2055514.3	99.940	%	02:39:23
1	Y 371.029	1251166.3	1251166.3	99.905	%	02:39:23
1	Ag 328.068†	11482.0	11517.2	[100]	µg/L	02:39:29
1	As 188.979†	57.9	55.4	[100]	µg/L	02:39:49
1	B 249.677†	2373.3	2219.0	[100]	µg/L	02:39:29
1	Ba 233.527†	3953.1	4036.2	[100]	µg/L	02:39:29
1	Be 313.107†	165026.0	161513.2	[100]	µg/L	02:39:23
1	Cd 226.502†	3823.3	3926.5	[100]	µg/L	02:39:29
1	Co 228.616†	2026.4	2099.3	[100]	µg/L	02:39:49
1	Cr 267.716†	4789.0	4914.7	[100]	µg/L	02:39:29
1	Cu 324.752†	17934.9	14561.3	[100]	µg/L	02:39:29
1	Mn 257.610†	32268.6	32510.6	[100]	µg/L	02:39:29
1	Mo 202.031†	900.1	908.6	[100]	µg/L	02:39:49
1	Ni 231.604†	2224.8	1926.7	[100]	µg/L	02:39:29
1	P 214.914†	432.4	226.7	[500]	µg/L	02:39:49
1	Pb 220.353†	463.5	409.6	[100]	µg/L	02:39:49
1	S 181.975 Axial†	55.9	31.8	[200]	µg/L	02:39:49
1	Sb 206.836†	123.3	102.8	[100]	µg/L	02:39:49
1	Se 196.026†	84.4	70.4	[100]	µg/L	02:39:49
1	SiO2†	7652.5	5675.4	[1069.5]	µg/L	02:39:29
1	Si 251.611†	6926.8	6581.3	[500]	µg/L	02:39:29
1	Sn 189.927†	231.8	209.5	[100]	µg/L	02:39:49
1	Ti 334.940†	45669.6	44978.0	[100]	µg/L	02:39:29
1	Tl 190.801†	49.0	70.5	[100]	µg/L	02:39:49
1	U 409.014†	1712.0	1033.8	[100]	µg/L	02:39:29
1	V 292.402†	8832.7	8930.0	[100]	µg/L	02:39:29
1	Zn 213.857†	4438.7	3891.2	[100]	µg/L	02:39:29
2	Sc RADIAL	115249.4	115249.4	102	%	02:39:07
2	K 766.490 Radial†	2681.7	1922.4	[1000]	µg/L	02:39:07
2	Sr 421.552†	18519.2	18138.0	[100]	µg/L	02:39:07
2	Sc 361.383	2062183.2	2062183.2	100.26	%	02:39:55
2	Y 371.029	1255826.6	1255826.6	100.28	%	02:39:55
2	Ag 328.068†	11492.5	11490.5	[100]	µg/L	02:40:01
2	As 188.979†	57.1	54.5	[100]	µg/L	02:40:21
2	B 249.677†	2373.1	2211.1	[100]	µg/L	02:40:01
2	Ba 233.527†	3982.2	4052.4	[100]	µg/L	02:40:01
2	Be 313.107†	164842.0	160795.7	[100]	µg/L	02:39:55
2	Cd 226.502†	3804.4	3895.2	[100]	µg/L	02:40:01
2	Co 228.616†	2039.1	2105.4	[100]	µg/L	02:40:21
2	Cr 267.716†	4799.2	4909.3	[100]	µg/L	02:40:01
2	Cu 324.752†	18019.7	14587.9	[100]	µg/L	02:40:01
2	Mn 257.610†	32329.9	32467.3	[100]	µg/L	02:40:01
2	Mo 202.031†	898.2	903.7	[100]	µg/L	02:40:21
2	Ni 231.604†	2208.1	1902.9	[100]	µg/L	02:40:01
2	P 214.914†	444.5	237.3	[500]	µg/L	02:40:21
2	Pb 220.353†	462.8	407.4	[100]	µg/L	02:40:21
2	S 181.975 Axial†	59.4	35.2	[200]	µg/L	02:40:21
2	Sb 206.836†	124.0	103.1	[100]	µg/L	02:40:21
2	Se 196.026†	88.9	74.5	[100]	µg/L	02:40:21
2	SiO2†	7632.3	5630.5	[1069.5]	µg/L	02:40:01
2	Si 251.611†	6955.7	6587.7	[500]	µg/L	02:40:01
2	Sn 189.927†	230.0	206.9	[100]	µg/L	02:40:21
2	Ti 334.940†	45653.4	44814.2	[100]	µg/L	02:40:01
2	Tl 190.801†	51.3	72.5	[100]	µg/L	02:40:21
2	U 409.014†	1789.1	1105.2	[100]	µg/L	02:40:01
2	V 292.402†	8941.5	9009.9	[100]	µg/L	02:40:01

2	Zn 213.857†	4433.2	3871.4	[100]	µg/L	02:40:01
3	Sc RADIAL	116357.5	116357.5	103	%	02:39:13
3	K 766.490 Radial†	2663.3	1879.7	[1000]	µg/L	02:39:13
3	Sr 421.552†	18628.3	18071.3	[100]	µg/L	02:39:13
3	Sc 361.383	2063107.8	2063107.8	100.31	%	02:40:28
3	Y 371.029	1255506.0	1255506.0	100.25	%	02:40:28
3	Ag 328.068†	11445.8	11438.8	[100]	µg/L	02:40:33
3	As 188.979†	52.9	50.2	[100]	µg/L	02:40:54
3	B 249.677†	2405.7	2242.6	[100]	µg/L	02:40:33
3	Ba 233.527†	3994.9	4063.2	[100]	µg/L	02:40:33
3	Be 313.107†	165370.1	161248.5	[100]	µg/L	02:40:28
3	Cd 226.502†	3833.4	3922.4	[100]	µg/L	02:40:33
3	Co 228.616†	2042.5	2108.0	[100]	µg/L	02:40:54
3	Cr 267.716†	4762.7	4870.8	[100]	µg/L	02:40:33
3	Cu 324.752†	18011.4	14571.5	[100]	µg/L	02:40:33
3	Mn 257.610†	32411.3	32534.0	[100]	µg/L	02:40:33
3	Mo 202.031†	898.4	903.6	[100]	µg/L	02:40:54
3	Ni 231.604†	2221.2	1914.9	[100]	µg/L	02:40:33
3	P 214.914†	440.5	233.1	[500]	µg/L	02:40:54
3	Pb 220.353†	462.5	407.0	[100]	µg/L	02:40:54
3	S 181.975 Axial†	61.3	37.1	[200]	µg/L	02:40:54
3	Sb 206.836†	125.5	104.5	[100]	µg/L	02:40:54
3	Se 196.026†	82.4	68.1	[100]	µg/L	02:40:54
3	SiO2†	7612.4	5607.3	[1069.5]	µg/L	02:40:33
3	Si 251.611†	6999.4	6628.2	[500]	µg/L	02:40:33
3	Sn 189.927†	231.8	208.7	[100]	µg/L	02:40:54
3	Ti 334.940†	45819.1	44958.9	[100]	µg/L	02:40:33
3	Tl 190.801†	48.8	70.1	[100]	µg/L	02:40:54
3	U 409.014†	1752.1	1067.4	[100]	µg/L	02:40:33
3	V 292.402†	8937.8	9002.2	[100]	µg/L	02:40:33
3	Zn 213.857†	4442.5	3878.6	[100]	µg/L	02:40:33

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2060268.4	4143.06	0.20%	100.17	%
Sc RADIAL	115743.0	563.84	0.49%	103	%
Y 371.029	1254166.3	2603.02	0.21%	100.14	%
Ag 328.068†	11482.2	39.85	0.35%	[100]	µg/L
As 188.979†	53.4	2.79	5.22%	[100]	µg/L
B 249.677†	2224.2	16.36	0.74%	[100]	µg/L
Ba 233.527†	4050.6	13.62	0.34%	[100]	µg/L
Be 313.107†	161185.8	362.82	0.23%	[100]	µg/L
Cd 226.502†	3914.7	17.01	0.43%	[100]	µg/L
Co 228.616†	2104.2	4.45	0.21%	[100]	µg/L
Cr 267.716†	4898.2	23.92	0.49%	[100]	µg/L
Cu 324.752†	14573.6	13.42	0.09%	[100]	µg/L
K 766.490 Radial†	1908.4	24.84	1.30%	[1000]	µg/L
Mn 257.610†	32504.0	33.83	0.10%	[100]	µg/L
Mo 202.031†	905.3	2.86	0.32%	[100]	µg/L
Ni 231.604†	1914.9	11.89	0.62%	[100]	µg/L
P 214.914†	232.4	5.35	2.30%	[500]	µg/L
Pb 220.353†	408.0	1.42	0.35%	[100]	µg/L
S 181.975 Axial†	34.7	2.66	7.67%	[200]	µg/L
Sb 206.836†	103.5	0.91	0.88%	[100]	µg/L
Se 196.026†	71.0	3.27	4.61%	[100]	µg/L
SiO2†	5637.7	34.65	0.61%	[1069.5]	µg/L
Si 251.611†	6599.1	25.43	0.39%	[500]	µg/L
Sn 189.927†	208.4	1.32	0.63%	[100]	µg/L
Sr 421.552†	18109.2	34.23	0.19%	[100]	µg/L
Ti 334.940†	44917.0	89.59	0.20%	[100]	µg/L
Tl 190.801†	71.0	1.32	1.86%	[100]	µg/L
U 409.014†	1068.8	35.72	3.34%	[100]	µg/L
V 292.402†	8980.7	44.10	0.49%	[100]	µg/L
Zn 213.857†	3880.4	10.03	0.26%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/18/2009 02:41:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	115848.8	115848.8	103	%	02:41:36
1	Al 396.153Radial†	10331.0	9800.8	[5000]	µg/L	02:41:36
1	Ca 317.933Radial†	13236.7	12356.3	[5000]	µg/L	02:41:56
1	K 766.490 Radial†	10034.5	9047.9	[5000]	µg/L	02:41:36
1	Mg 279.077 IEC†	961.3	913.5	[5000]	µg/L	02:41:56
1	Sr 421.552†	90081.0	87525.3	[500]	µg/L	02:41:36
1	Sc 361.383	2076720.1	2076720.1	100.97	%	02:43:00
1	Y 371.029	1255720.5	1255720.5	100.27	%	02:43:00
1	Ag 328.068†	55550.8	55044.8	[500]	µg/L	02:43:06
1	As 188.979†	262.2	257.2	[500]	µg/L	02:43:26
1	B 249.677†	11333.1	11068.4	[500]	µg/L	02:43:06
1	Ba 233.527†	19714.5	19605.6	[500]	µg/L	02:43:06
1	Be 313.107†	785440.5	774273.8	[500]	µg/L	02:43:00
1	Cd 226.502†	18750.9	18671.4	[500]	µg/L	02:43:06
1	Co 228.616†	10269.6	10242.5	[500]	µg/L	02:43:06
1	Cr 267.716†	23661.6	23556.8	[500]	µg/L	02:43:06
1	Cu 324.752†	74086.1	69989.2	[500]	µg/L	02:43:06
1	Mn 257.610†	155175.5	153905.5	[500]	µg/L	02:43:00
1	Mo 202.031†	4372.0	4337.9	[500]	µg/L	02:43:26
1	Ni 231.604†	9447.2	9057.0	[500]	µg/L	02:43:06
1	P 214.914†	1348.9	1129.9	[2500]	µg/L	02:43:26
1	Pb 220.353†	2014.8	1941.3	[500]	µg/L	02:43:26
1	S 181.975 Axial†	212.8	186.7	[1000]	µg/L	02:43:26
1	Sb 206.836†	521.9	496.4	[500]	µg/L	02:43:26
1	Se 196.026†	356.7	339.2	[500]	µg/L	02:43:26
1	SiO2†	30034.0	27763.4	[5347.5]	µg/L	02:43:06
1	Si 251.611†	33108.4	32440.3	[2500]	µg/L	02:43:06
1	Sn 189.927†	1040.8	1008.3	[500]	µg/L	02:43:26
1	Ti 334.940†	222258.8	219402.0	[500]	µg/L	02:43:00
1	Tl 190.801†	311.3	329.7	[500]	µg/L	02:43:26
1	U 409.014†	5930.8	5194.6	[500]	µg/L	02:43:06
1	V 292.402†	43871.1	43541.0	[500]	µg/L	02:43:06
1	Zn 213.857†	19277.5	18542.0	[500]	µg/L	02:43:06
2	Sc RADIAL	115231.9	115231.9	102	%	02:42:02
2	Al 396.153Radial†	10369.1	9891.6	[5000]	µg/L	02:42:02
2	Ca 317.933Radial†	13261.6	12449.5	[5000]	µg/L	02:42:22
2	K 766.490 Radial†	10043.4	9108.8	[5000]	µg/L	02:42:02
2	Mg 279.077 IEC†	956.4	913.8	[5000]	µg/L	02:42:22
2	Sr 421.552†	90233.5	88142.4	[500]	µg/L	02:42:02
2	Sc 361.383	2056699.0	2056699.0	99.998	%	02:43:33
2	Y 371.029	1244872.8	1244872.8	99.402	%	02:43:33
2	Ag 328.068†	55581.5	55611.0	[500]	µg/L	02:43:39
2	As 188.979†	264.8	262.4	[500]	µg/L	02:44:00
2	B 249.677†	11264.2	11108.7	[500]	µg/L	02:43:39
2	Ba 233.527†	19673.4	19754.5	[500]	µg/L	02:43:39
2	Be 313.107†	784759.2	781164.9	[500]	µg/L	02:43:33
2	Cd 226.502†	18780.1	18881.4	[500]	µg/L	02:43:39
2	Co 228.616†	10277.3	10349.3	[500]	µg/L	02:43:39
2	Cr 267.716†	23626.5	23749.8	[500]	µg/L	02:43:39
2	Cu 324.752†	74093.8	70711.1	[500]	µg/L	02:43:39
2	Mn 257.610†	155352.9	155579.0	[500]	µg/L	02:43:33
2	Mo 202.031†	4393.5	4401.5	[500]	µg/L	02:44:00
2	Ni 231.604†	9451.0	9151.8	[500]	µg/L	02:43:39
2	P 214.914†	1354.2	1148.2	[2500]	µg/L	02:44:00
2	Pb 220.353†	2022.1	1968.1	[500]	µg/L	02:44:00
2	S 181.975 Axial†	218.0	193.9	[1000]	µg/L	02:44:00
2	Sb 206.836†	522.0	501.4	[500]	µg/L	02:44:00
2	Se 196.026†	363.4	349.3	[500]	µg/L	02:44:00
2	SiO2†	30017.9	28036.9	[5347.5]	µg/L	02:43:39

2	Si 251.611†	33069.1	32720.1	[2500]	µg/L	02:43:39
2	Sn 189.927†	1038.1	1015.6	[500]	µg/L	02:44:00
2	Ti 334.940†	222518.5	221804.5	[500]	µg/L	02:43:33
2	Tl 190.801†	308.5	329.9	[500]	µg/L	02:44:00
2	U 409.014†	5876.2	5197.1	[500]	µg/L	02:43:39
2	V 292.402†	43860.0	43952.9	[500]	µg/L	02:43:39
2	Zn 213.857†	19232.6	18682.8	[500]	µg/L	02:43:39
3	Sc RADIAL	116000.4	116000.4	103	%	02:42:28
3	Al 396.153Radial†	10302.5	9760.1	[5000]	µg/L	02:42:28
3	Ca 317.933Radial†	12767.7	11884.7	[5000]	µg/L	02:42:48
3	K 766.490 Radial†	10020.7	9021.7	[5000]	µg/L	02:42:28
3	Mg 279.077 IEC†	921.9	874.1	[5000]	µg/L	02:42:48
3	Sr 421.552†	90025.2	87357.0	[500]	µg/L	02:42:28
3	Sc 361.383	2068573.4	2068573.4	100.58	%	02:44:07
3	Y 371.029	1252864.9	1252864.9	100.04	%	02:44:07
3	Ag 328.068†	55948.5	55656.9	[500]	µg/L	02:44:12
3	As 188.979†	263.1	259.1	[500]	µg/L	02:44:33
3	B 249.677†	11346.8	11126.2	[500]	µg/L	02:44:12
3	Ba 233.527†	19754.2	19721.9	[500]	µg/L	02:44:12
3	Be 313.107†	791423.9	783286.5	[500]	µg/L	02:44:07
3	Cd 226.502†	18928.7	18921.4	[500]	µg/L	02:44:12
3	Co 228.616†	10351.4	10363.9	[500]	µg/L	02:44:12
3	Cr 267.716†	23779.5	23766.2	[500]	µg/L	02:44:12
3	Cu 324.752†	74353.8	70544.3	[500]	µg/L	02:44:12
3	Mn 257.610†	156684.0	156010.6	[500]	µg/L	02:44:07
3	Mo 202.031†	4320.8	4304.0	[500]	µg/L	02:44:33
3	Ni 231.604†	9497.0	9143.3	[500]	µg/L	02:44:12
3	P 214.914†	1333.1	1119.5	[2500]	µg/L	02:44:33
3	Pb 220.353†	1998.1	1932.6	[500]	µg/L	02:44:33
3	S 181.975 Axial†	212.9	187.7	[1000]	µg/L	02:44:33
3	Sb 206.836†	510.0	486.5	[500]	µg/L	02:44:33
3	Se 196.026†	350.6	334.5	[500]	µg/L	02:44:33
3	SiO2†	30300.1	28145.2	[5347.5]	µg/L	02:44:12
3	Si 251.611†	33286.2	32746.2	[2500]	µg/L	02:44:12
3	Sn 189.927†	1019.2	990.9	[500]	µg/L	02:44:33
3	Ti 334.940†	224099.5	222099.1	[500]	µg/L	02:44:07
3	Tl 190.801†	305.2	324.8	[500]	µg/L	02:44:33
3	U 409.014†	6080.1	5366.1	[500]	µg/L	02:44:12
3	V 292.402†	44125.4	43965.1	[500]	µg/L	02:44:12
3	Zn 213.857†	19377.5	18716.5	[500]	µg/L	02:44:12

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2067330.8	10068.20	0.49%	100.51	%
Sc RADIAL	115693.7	407.07	0.35%	103	%
Y 371.029	1251152.8	5622.88	0.45%	99.904	%
Ag 328.068†	55437.6	340.92	0.61%	[500]	µg/L
Al 396.153Radial†	9817.5	67.36	0.69%	[5000]	µg/L
As 188.979†	259.6	2.60	1.00%	[500]	µg/L
B 249.677†	11101.1	29.64	0.27%	[500]	µg/L
Ba 233.527†	19694.0	78.31	0.40%	[500]	µg/L
Be 313.107†	779575.1	4712.00	0.60%	[500]	µg/L
Ca 317.933Radial†	12230.2	302.76	2.48%	[5000]	µg/L
Cd 226.502†	18824.7	134.25	0.71%	[500]	µg/L
Co 228.616†	10318.6	66.27	0.64%	[500]	µg/L
Cr 267.716†	23690.9	116.45	0.49%	[500]	µg/L
Cu 324.752†	70414.8	377.97	0.54%	[500]	µg/L
K 766.490 Radial†	9059.4	44.67	0.49%	[5000]	µg/L
Mg 279.077 IEC†	900.4	22.83	2.54%	[5000]	µg/L
Mn 257.610†	155165.0	1111.96	0.72%	[500]	µg/L
Mo 202.031†	4347.8	49.50	1.14%	[500]	µg/L
Ni 231.604†	9117.4	52.47	0.58%	[500]	µg/L
P 214.914†	1132.6	14.54	1.28%	[2500]	µg/L
Pb 220.353†	1947.3	18.50	0.95%	[500]	µg/L
S 181.975 Axial†	189.4	3.92	2.07%	[1000]	µg/L
Sb 206.836†	494.8	7.58	1.53%	[500]	µg/L
Se 196.026†	341.0	7.59	2.23%	[500]	µg/L
SiO2†	27981.8	196.76	0.70%	[5347.5]	µg/L
Si 251.611†	32635.5	169.58	0.52%	[2500]	µg/L

Sn 189.927†	1004.9	12.69	1.26%	[500] µg/L
Sr 421.552†	87674.9	413.55	0.47%	[500] µg/L
Ti 334.940†	221101.8	1479.45	0.67%	[500] µg/L
Tl 190.801†	328.1	2.87	0.87%	[500] µg/L
U 409.014†	5252.6	98.32	1.87%	[500] µg/L
V 292.402†	43819.7	241.39	0.55%	[500] µg/L
Zn 213.857†	18647.1	92.60	0.50%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/18/2009 02:44:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	113958.5	113958.5	101	%	02:45:15
1	Al 396.153Radial†	20456.2	19961.0	[10000]	µg/L	02:45:15
1	Ca 317.933Radial†	26297.3	25460.7	[10000]	µg/L	02:45:36
1	Fe 238.204 Radial†	1957.5	1920.9	[10000]	µg/L	02:45:36
1	K 766.490 Radial†	19446.8	18499.7	[10000]	µg/L	02:45:15
1	Mg 279.077 IEC†	1898.7	1854.2	[10000]	µg/L	02:45:36
1	Na 589.592 Radial†	36445.0	36676.2	[10000]	µg/L	02:45:15
1	Sr 421.552†	179836.5	177567.3	[1000]	µg/L	02:45:15
1	Sc 361.383	2044115.6	2044115.6	99.386	%	02:46:40
1	Y 371.029	1235076.9	1235076.9	98.620	%	02:46:40
1	Ag 328.068†	111750.4	112469.1	[1000]	µg/L	02:46:45
1	As 188.979†	537.3	538.1	[1000]	µg/L	02:47:06
1	B 249.677†	22658.3	22642.6	[1000]	µg/L	02:46:45
1	Ba 233.527†	39654.0	39979.6	[1000]	µg/L	02:46:45
1	Be 313.107†	1576685.5	1582814.7	[1000]	µg/L	02:46:40
1	Cd 226.502†	37558.9	37891.8	[1000]	µg/L	02:46:45
1	Co 228.616†	20655.5	20854.9	[1000]	µg/L	02:46:45
1	Cr 267.716†	47806.1	48224.2	[1000]	µg/L	02:46:45
1	Cu 324.752†	145140.2	142652.6	[1000]	µg/L	02:46:45
1	Mn 257.610†	313458.4	315617.6	[1000]	µg/L	02:46:40
1	Mo 202.031†	8991.0	9054.4	[1000]	µg/L	02:46:45
1	Ni 231.604†	18572.8	18388.2	[1000]	µg/L	02:46:45
1	P 214.914†	2536.6	2346.3	[5000]	µg/L	02:47:06
1	Pb 220.353†	4032.9	4003.7	[1000]	µg/L	02:47:06
1	S 181.975 Axial†	413.5	392.0	[2000]	µg/L	02:47:06
1	Sb 206.836†	1044.3	1030.2	[1000]	µg/L	02:47:06
1	Se 196.026†	710.6	700.9	[1000]	µg/L	02:47:06
1	SiO2†	57742.3	56117.3	[10695]	µg/L	02:46:45
1	Si 251.611†	65310.8	65364.7	[5000]	µg/L	02:46:45
1	Sn 189.927†	2109.5	2100.1	[1000]	µg/L	02:47:06
1	Ti 334.940†	450682.2	452747.6	[1000]	µg/L	02:46:40
1	Tl 190.801†	647.2	672.6	[1000]	µg/L	02:47:06
1	U 409.014†	11316.0	10706.7	[1000]	µg/L	02:46:45
1	V 292.402†	88383.7	89021.7	[1000]	µg/L	02:46:45
1	Zn 213.857†	37710.4	37393.3	[1000]	µg/L	02:46:45
2	Sc RADIAL	115689.4	115689.4	103	%	02:45:41
2	Al 396.153Radial†	20851.7	20043.5	[10000]	µg/L	02:45:41
2	Ca 317.933Radial†	26352.2	25125.7	[10000]	µg/L	02:46:01
2	Fe 238.204 Radial†	1974.9	1908.9	[10000]	µg/L	02:46:01
2	K 766.490 Radial†	19797.9	18553.8	[10000]	µg/L	02:45:41
2	Mg 279.077 IEC†	1900.9	1828.3	[10000]	µg/L	02:46:01
2	Na 589.592 Radial†	37145.5	36819.0	[10000]	µg/L	02:45:41
2	Sr 421.552†	183355.2	178332.5	[1000]	µg/L	02:45:41
2	Sc 361.383	2060569.5	2060569.5	100.19	%	02:47:13
2	Y 371.029	1245012.0	1245012.0	99.413	%	02:47:13
2	Ag 328.068†	112525.1	112344.5	[1000]	µg/L	02:47:18
2	As 188.979†	528.0	524.6	[1000]	µg/L	02:47:39
2	B 249.677†	22875.6	22677.4	[1000]	µg/L	02:47:18
2	Ba 233.527†	40001.1	40007.6	[1000]	µg/L	02:47:18
2	Be 313.107†	1595573.2	1588999.5	[1000]	µg/L	02:47:13
2	Cd 226.502†	37992.7	38023.0	[1000]	µg/L	02:47:18
2	Co 228.616†	20857.3	20890.2	[1000]	µg/L	02:47:18
2	Cr 267.716†	48306.0	48339.1	[1000]	µg/L	02:47:18
2	Cu 324.752†	146449.7	142793.5	[1000]	µg/L	02:47:18
2	Mn 257.610†	317171.6	316805.4	[1000]	µg/L	02:47:13
2	Mo 202.031†	9026.6	9017.8	[1000]	µg/L	02:47:18
2	Ni 231.604†	18720.1	18386.0	[1000]	µg/L	02:47:18
2	P 214.914†	2529.1	2318.4	[5000]	µg/L	02:47:39
2	Pb 220.353†	4037.9	3976.3	[1000]	µg/L	02:47:39

2	S 181.975 Axial†	420.7	395.9	[2000]	µg/L	02:47:39
2	Sb 206.836†	1033.0	1010.6	[1000]	µg/L	02:47:39
2	Se 196.026†	700.7	685.3	[1000]	µg/L	02:47:39
2	SiO2†	58219.8	56130.1	[10695]	µg/L	02:47:18
2	Si 251.611†	65907.3	65435.3	[5000]	µg/L	02:47:18
2	Sn 189.927†	2090.4	2064.0	[1000]	µg/L	02:47:39
2	Ti 334.940†	455664.5	454099.7	[1000]	µg/L	02:47:13
2	Tl 190.801†	640.9	661.1	[1000]	µg/L	02:47:39
2	U 409.014†	11413.4	10713.0	[1000]	µg/L	02:47:18
2	V 292.402†	89276.9	89203.1	[1000]	µg/L	02:47:18
2	Zn 213.857†	38015.3	37394.5	[1000]	µg/L	02:47:18
3	Sc RADIAL	114563.9	114563.9	102	%	02:46:07
3	Al 396.153Radial†	20740.6	20133.5	[10000]	µg/L	02:46:07
3	Ca 317.933Radial†	26374.4	25399.2	[10000]	µg/L	02:46:27
3	Fe 238.204 Radial†	1972.3	1925.2	[10000]	µg/L	02:46:27
3	K 766.490 Radial†	19551.9	18501.4	[10000]	µg/L	02:46:07
3	Mg 279.077 IEC†	1908.8	1854.2	[10000]	µg/L	02:46:27
3	Na 589.592 Radial†	36789.4	36824.1	[10000]	µg/L	02:46:07
3	Sr 421.552†	181445.7	178209.2	[1000]	µg/L	02:46:07
3	Sc 361.383	2053274.5	2053274.5	99.831	%	02:47:46
3	Y 371.029	1241325.7	1241325.7	99.119	%	02:47:46
3	Ag 328.068†	111600.7	111817.6	[1000]	µg/L	02:47:52
3	As 188.979†	516.7	515.1	[1000]	µg/L	02:48:12
3	B 249.677†	22645.6	22528.2	[1000]	µg/L	02:47:52
3	Ba 233.527†	39604.9	39752.5	[1000]	µg/L	02:47:52
3	Be 313.107†	1586898.6	1585968.6	[1000]	µg/L	02:47:46
3	Cd 226.502†	37554.1	37718.5	[1000]	µg/L	02:47:52
3	Co 228.616†	20643.3	20749.9	[1000]	µg/L	02:47:52
3	Cr 267.716†	47818.4	48022.0	[1000]	µg/L	02:47:52
3	Cu 324.752†	144971.8	141832.5	[1000]	µg/L	02:47:52
3	Mn 257.610†	315419.0	316174.6	[1000]	µg/L	02:47:46
3	Mo 202.031†	8994.6	9017.7	[1000]	µg/L	02:47:52
3	Ni 231.604†	18626.1	18358.1	[1000]	µg/L	02:47:52
3	P 214.914†	2474.1	2272.3	[5000]	µg/L	02:48:12
3	Pb 220.353†	3936.1	3888.7	[1000]	µg/L	02:48:12
3	S 181.975 Axial†	412.4	389.0	[2000]	µg/L	02:48:12
3	Sb 206.836†	1014.7	995.9	[1000]	µg/L	02:48:12
3	Se 196.026†	689.1	676.2	[1000]	µg/L	02:48:12
3	SiO2†	57673.0	55788.7	[10695]	µg/L	02:47:52
3	Si 251.611†	65277.7	65038.4	[5000]	µg/L	02:47:52
3	Sn 189.927†	2038.3	2019.3	[1000]	µg/L	02:48:12
3	Ti 334.940†	453287.2	453334.3	[1000]	µg/L	02:47:46
3	Tl 190.801†	635.4	657.9	[1000]	µg/L	02:48:12
3	U 409.014†	11291.8	10631.7	[1000]	µg/L	02:47:52
3	V 292.402†	88411.7	88653.0	[1000]	µg/L	02:47:52
3	Zn 213.857†	37645.0	37158.5	[1000]	µg/L	02:47:52

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2052653.2	8244.53	0.40%	99.801	%
Sc RADIAL	114737.3	878.38	0.77%	102	%
Y 371.029	1240471.5	5022.31	0.40%	99.051	%
Ag 328.068†	112210.4	345.83	0.31%	[1000]	µg/L
Al 396.153Radial†	20046.0	86.32	0.43%	[10000]	µg/L
As 188.979†	525.9	11.59	2.20%	[1000]	µg/L
B 249.677†	22616.0	78.08	0.35%	[1000]	µg/L
Ba 233.527†	39913.2	139.88	0.35%	[1000]	µg/L
Be 313.107†	1585927.6	3092.63	0.20%	[1000]	µg/L
Ca 317.933Radial†	25328.5	178.34	0.70%	[10000]	µg/L
Cd 226.502†	37877.8	152.74	0.40%	[1000]	µg/L
Co 228.616†	20831.7	73.00	0.35%	[1000]	µg/L
Cr 267.716†	48195.1	160.54	0.33%	[1000]	µg/L
Cu 324.752†	142426.2	518.97	0.36%	[1000]	µg/L
Fe 238.204 Radial†	1918.4	8.45	0.44%	[10000]	µg/L
K 766.490 Radial†	18518.3	30.79	0.17%	[10000]	µg/L
Mg 279.077 IEC†	1845.6	14.96	0.81%	[10000]	µg/L
Mn 257.610†	316199.2	594.30	0.19%	[1000]	µg/L
Mo 202.031†	9030.0	21.18	0.23%	[1000]	µg/L
Na 589.592 Radial†	36773.1	83.99	0.23%	[10000]	µg/L

Ni 231.604†	18377.4	16.75	0.09%	[1000]	µg/L
P 214.914†	2312.3	37.35	1.62%	[5000]	µg/L
Pb 220.353†	3956.2	60.07	1.52%	[1000]	µg/L
S 181.975 Axial†	392.3	3.43	0.87%	[2000]	µg/L
Sb 206.836†	1012.2	17.21	1.70%	[1000]	µg/L
Se 196.026†	687.5	12.49	1.82%	[1000]	µg/L
SiO2†	56012.0	193.49	0.35%	[10695]	µg/L
Si 251.611†	65279.4	211.76	0.32%	[5000]	µg/L
Sn 189.927†	2061.1	40.50	1.96%	[1000]	µg/L
Sr 421.552†	178036.3	410.89	0.23%	[1000]	µg/L
Ti 334.940†	453393.8	678.00	0.15%	[1000]	µg/L
Tl 190.801†	663.9	7.73	1.16%	[1000]	µg/L
U 409.014†	10683.8	45.26	0.42%	[1000]	µg/L
V 292.402†	88959.3	280.28	0.32%	[1000]	µg/L
Zn 213.857†	37315.4	135.92	0.36%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/18/2009 02:48:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	114030.2	114030.2	101	%	02:48:54
1	Al 396.153Radial†	99804.8	98218.2	[50000]	µg/L	02:48:54
1	Ca 317.933Radial†	127284.3	125058.6	[50000]	µg/L	02:48:54
1	Fe 238.204 Radial†	3883.8	3819.8	[20000]	µg/L	02:48:59
1	Mg 279.077 IEC†	9157.3	9013.0	[50000]	µg/L	02:48:59
1	Na 589.592 Radial†	71583.1	71314.0	[20000]	µg/L	02:48:54
1	Sc 361.383	2065892.8	2065892.8	100.44	%	02:49:33
1	Y 371.029	1239483.0	1239483.0	98.972	%	02:49:33
2	Sc RADIAL	114120.2	114120.2	101	%	02:49:04
2	Al 396.153Radial†	101068.2	99385.9	[50000]	µg/L	02:49:04
2	Ca 317.933Radial†	128949.9	126601.2	[50000]	µg/L	02:49:04
2	Fe 238.204 Radial†	3851.6	3785.0	[20000]	µg/L	02:49:10
2	Mg 279.077 IEC†	9165.1	9013.5	[50000]	µg/L	02:49:10
2	Na 589.592 Radial†	72424.1	72087.2	[20000]	µg/L	02:49:04
2	Sc 361.383	2050241.8	2050241.8	99.684	%	02:49:40
2	Y 371.029	1230369.3	1230369.3	98.244	%	02:49:40
3	Sc RADIAL	114219.7	114219.7	102	%	02:49:15
3	Al 396.153Radial†	100837.5	99071.9	[50000]	µg/L	02:49:15
3	Ca 317.933Radial†	128701.1	126245.6	[50000]	µg/L	02:49:15
3	Fe 238.204 Radial†	3865.3	3795.2	[20000]	µg/L	02:49:21
3	Mg 279.077 IEC†	9150.7	8991.5	[50000]	µg/L	02:49:21
3	Na 589.592 Radial†	72140.9	71746.1	[20000]	µg/L	02:49:15
3	Sc 361.383	2063002.0	2063002.0	100.30	%	02:49:48
3	Y 371.029	1238175.0	1238175.0	98.867	%	02:49:48

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2059712.2	8328.01	0.40%	100.14	%
Sc RADIAL	114123.4	94.78	0.08%	101	%
Y 371.029	1236009.1	4927.83	0.40%	98.695	%
Al 396.153Radial†	98892.0	604.26	0.61%	[50000]	µg/L
Ca 317.933Radial†	125968.5	807.79	0.64%	[50000]	µg/L
Fe 238.204 Radial†	3800.0	17.90	0.47%	[20000]	µg/L
Mg 279.077 IEC†	9006.0	12.58	0.14%	[50000]	µg/L
Na 589.592 Radial†	71715.7	387.48	0.54%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	112.0	0.00000	0.999986	
Al 396.153Radial	3	Lin Thru 0	0.0	1.979	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	0.5246	0.00000	0.999985	
B 249.677	3	Lin Thru 0	0.0	22.53	0.00000	0.999973	
Ba 233.527	3	Lin Thru 0	0.0	39.81	0.00000	0.999985	
Be 313.107	3	Lin Thru 0	0.0	1581	0.00000	0.999976	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.519	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	37.84	0.00000	0.999992	
Co 228.616	3	Lin Thru 0	0.0	20.79	0.00000	0.999992	
Cr 267.716	3	Lin Thru 0	0.0	48.04	0.00000	0.999976	
Cu 324.752	3	Lin Thru 0	0.0	142.1	0.00000	0.999987	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1904	0.00000	0.999993	
K 766.490 Radial	3	Lin Thru 0	0.0	1.844	0.00000	0.999958	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1803	0.00000	0.999989	
Mn 257.610	3	Lin Thru 0	0.0	315.1	0.00000	0.999968	
Mo 202.031	3	Lin Thru 0	0.0	8.964	0.00000	0.999889	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.604	0.00000	0.999948	

Ni 231.604	3	Lin Thru 0	0.0	18.36	0.00000	0.999988
P 214.914	3	Lin Thru 0	0.0	0.4606	0.00000	0.999966
Pb 220.353	3	Lin Thru 0	0.0	3.945	0.00000	0.999976
S 181.975 Axial	3	Lin Thru 0	0.0	0.1946	0.00000	0.999858
Sb 206.836	3	Lin Thru 0	0.0	1.008	0.00000	0.999957
Se 196.026	3	Lin Thru 0	0.0	0.6866	0.00000	0.999990
SiO2	3	Lin Thru 0	0.0	5.237	0.00000	1.000000
Si 251.611	3	Lin Thru 0	0.0	13.06	0.00000	1.000000
Sn 189.927	3	Lin Thru 0	0.0	2.051	0.00000	0.999949
Sr 421.552	3	Lin Thru 0	0.0	177.5	0.00000	0.999980
Ti 334.940	3	Lin Thru 0	0.0	451.1	0.00000	0.999951
Tl 190.801	3	Lin Thru 0	0.0	0.6627	0.00000	0.999969
U 409.014	3	Lin Thru 0	0.0	10.65	0.00000	0.999978
V 292.402	3	Lin Thru 0	0.0	88.70	0.00000	0.999982
Zn 213.857	3	Lin Thru 0	0.0	37.32	0.00000	0.999994

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/18/2009 02:49:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112073.1	112073.1	99.6	%			02:50:31
1	Al 396.153Radial†	10502.5	10310.9	5191.0	µg/L	5191.0	ppb	02:50:31
1	Ca 317.933Radial†	13060.4	12612.4	5006.5	µg/L	5006.5	ppb	02:50:51
1	Fe 238.204 Radial†	989.0	981.4	5172.2	µg/L	5172.2	ppb	02:50:51
1	K 766.490 Radial†	5127.7	4451.5	2413.6	µg/L	2413.6	ppb	02:50:31
1	Mg 279.077 IEC†	963.0	946.7	5256.5	µg/L	5256.5	ppb	02:50:51
1	Na 589.592 Radial†	8545.0	9280.0	2574.8	µg/L	2574.8	ppb	02:50:31
1	Sr 421.552†	93596.9	94000.6	529.50	µg/L	529.50	ppb	02:50:31
1	Sc 361.383	2041394.9	2041394.9	99.254	%			02:51:55
1	Y 371.029	1238031.3	1238031.3	98.856	%			02:51:55
1	Ag 328.068†	28120.8	28360.5	257.11	µg/L	257.11	ppb	02:52:00
1	As 188.979†	256.2	255.6	486.07	µg/L	486.07	ppb	02:52:21
1	B 249.677†	11715.8	11648.2	515.37	µg/L	515.37	ppb	02:52:00
1	Ba 233.527†	19941.9	20172.6	507.72	µg/L	507.72	ppb	02:52:00
1	Be 313.107†	409705.1	409174.2	258.66	µg/L	258.66	ppb	02:51:55
1	Cd 226.502†	18663.5	18904.7	500.04	µg/L	500.04	ppb	02:52:00
1	Co 228.616†	10439.6	10589.8	509.45	µg/L	509.45	ppb	02:52:00
1	Cr 267.716†	23203.1	23500.4	490.35	µg/L	490.35	ppb	02:52:00
1	Cu 324.752†	75106.8	72287.2	509.69	µg/L	509.69	ppb	02:52:00
1	Mn 257.610†	157989.6	159400.2	506.51	µg/L	506.51	ppb	02:51:55
1	Mo 202.031†	4647.9	4690.8	523.51	µg/L	523.51	ppb	02:52:21
1	Ni 231.604†	9222.0	8991.9	489.86	µg/L	489.86	ppb	02:52:00
1	P 214.914†	1377.6	1181.9	2510.8	µg/L	2510.8	ppb	02:52:21
1	Pb 220.353†	2032.5	1993.7	506.21	µg/L	506.21	ppb	02:52:21
1	S 181.975 Axial†	505.4	485.2	2491.4	µg/L	2491.4	ppb	02:52:21
1	Sb 206.836†	509.2	492.5	487.19	µg/L	487.19	ppb	02:52:21
1	Se 196.026†	1792.3	1791.7	2611.9	µg/L	2611.9	ppb	02:52:21
1	SiO2†	56918.7	55365.0	10573	µg/L	10573	ppb	02:52:00
1	Si 251.611†	64250.6	64384.1	4883.3	µg/L	4883.3	ppb	02:52:00
1	Sn 189.927†	1094.1	1079.9	529.26	µg/L	529.26	ppb	02:52:21
1	Ti 334.940†	219592.5	220524.7	488.54	µg/L	488.54	ppb	02:51:55
1	Tl 190.801†	326.6	350.4	531.07	µg/L	531.07	ppb	02:52:21
1	U 409.014†	5755.8	5119.9	479.97	µg/L	479.97	ppb	02:52:00
1	V 292.402†	43738.6	44159.4	502.67	µg/L	502.67	ppb	02:52:00
1	Zn 213.857†	19230.3	18824.8	500.40	µg/L	500.40	ppb	02:52:00
2	Sc RADIAL	113303.1	113303.1	101	%			02:50:57
2	Al 396.153Radial†	10599.3	10292.5	5181.6	µg/L	5181.6	ppb	02:50:57
2	Ca 317.933Radial†	13126.6	12535.9	4976.2	µg/L	4976.2	ppb	02:51:17
2	Fe 238.204 Radial†	998.6	980.2	5165.7	µg/L	5165.7	ppb	02:51:17
2	K 766.490 Radial†	5354.6	4620.9	2505.4	µg/L	2505.4	ppb	02:50:57
2	Mg 279.077 IEC†	958.3	931.5	5172.2	µg/L	5172.2	ppb	02:51:17
2	Na 589.592 Radial†	8568.5	9210.2	2555.5	µg/L	2555.5	ppb	02:50:57
2	Sr 421.552†	95194.1	94566.5	532.69	µg/L	532.69	ppb	02:50:57
2	Sc 361.383	2024904.6	2024904.6	98.452	%			02:52:28
2	Y 371.029	1227501.2	1227501.2	98.015	%			02:52:28
2	Ag 328.068†	28071.4	28541.1	258.74	µg/L	258.74	ppb	02:52:34
2	As 188.979†	257.0	258.6	491.74	µg/L	491.74	ppb	02:52:54
2	B 249.677†	11639.5	11666.8	516.19	µg/L	516.19	ppb	02:52:34
2	Ba 233.527†	19922.2	20316.1	511.33	µg/L	511.33	ppb	02:52:34
2	Be 313.107†	407458.7	410254.0	259.34	µg/L	259.34	ppb	02:52:28
2	Cd 226.502†	18595.6	18988.9	502.27	µg/L	502.27	ppb	02:52:34
2	Co 228.616†	10402.1	10637.4	511.74	µg/L	511.74	ppb	02:52:34
2	Cr 267.716†	23115.0	23601.3	492.46	µg/L	492.46	ppb	02:52:34
2	Cu 324.752†	74782.0	72573.5	511.70	µg/L	511.70	ppb	02:52:34
2	Mn 257.610†	157143.9	159837.4	507.90	µg/L	507.90	ppb	02:52:28
2	Mo 202.031†	4634.7	4715.4	526.26	µg/L	526.26	ppb	02:52:54
2	Ni 231.604†	9236.7	9082.5	494.80	µg/L	494.80	ppb	02:52:34
2	P 214.914†	1369.0	1184.6	2516.5	µg/L	2516.5	ppb	02:52:54
2	Pb 220.353†	2018.5	1996.1	506.83	µg/L	506.83	ppb	02:52:54

2	S 181.975 Axial†	491.9	475.6	2442.2 µg/L	2442.2 ppb	02:52:54
2	Sb 206.836†	518.4	506.0	500.53 µg/L	500.53 ppb	02:52:54
2	Se 196.026†	1796.8	1811.0	2639.9 µg/L	2639.9 ppb	02:52:54
2	SiO2†	56656.5	55565.6	10611 µg/L	10611 ppb	02:52:34
2	Si 251.611†	63994.9	64651.5	4903.4 µg/L	4903.4 ppb	02:52:34
2	Sn 189.927†	1098.8	1093.6	535.91 µg/L	535.91 ppb	02:52:54
2	Ti 334.940†	218641.6	221360.6	490.39 µg/L	490.39 ppb	02:52:28
2	Tl 190.801†	317.6	344.0	521.30 µg/L	521.30 ppb	02:52:54
2	U 409.014†	5688.8	5099.0	478.01 µg/L	478.01 ppb	02:52:34
2	V 292.402†	43629.5	44407.5	505.49 µg/L	505.49 ppb	02:52:34
2	Zn 213.857†	19218.0	18970.0	504.27 µg/L	504.27 ppb	02:52:34
3	Sc RADIAL	113162.5	113162.5	101 %		02:51:23
3	Al 396.153Radial†	10525.3	10232.0	5151.3 µg/L	5151.3 ppb	02:51:23
3	Ca 317.933Radial†	13062.6	12488.4	4957.3 µg/L	4957.3 ppb	02:51:43
3	Fe 238.204 Radial†	987.1	970.0	5112.4 µg/L	5112.4 ppb	02:51:43
3	K 766.490 Radial†	5280.7	4554.0	2469.1 µg/L	2469.1 ppb	02:51:23
3	Mg 279.077 IEC†	958.3	932.6	5178.5 µg/L	5178.5 ppb	02:51:43
3	Na 589.592 Radial†	8519.3	9171.8	2544.8 µg/L	2544.8 ppb	02:51:23
3	Sr 421.552†	94942.9	94434.1	531.94 µg/L	531.94 ppb	02:51:23
3	Sc 361.383	2029438.9	2029438.9	98.672 %		02:53:01
3	Y 371.029	1230066.2	1230066.2	98.220 %		02:53:01
3	Ag 328.068†	28252.0	28660.4	259.83 µg/L	259.83 ppb	02:53:07
3	As 188.979†	254.1	255.0	484.90 µg/L	484.90 ppb	02:53:27
3	B 249.677†	11720.2	11722.2	518.67 µg/L	518.67 ppb	02:53:07
3	Ba 233.527†	20126.9	20478.4	515.41 µg/L	515.41 ppb	02:53:07
3	Be 313.107†	407625.7	409498.6	258.86 µg/L	258.86 ppb	02:53:01
3	Cd 226.502†	18778.1	19131.6	506.05 µg/L	506.05 ppb	02:53:07
3	Co 228.616†	10500.6	10713.6	515.40 µg/L	515.40 ppb	02:53:07
3	Cr 267.716†	23272.5	23708.4	494.70 µg/L	494.70 ppb	02:53:07
3	Cu 324.752†	75356.0	72985.6	514.59 µg/L	514.59 ppb	02:53:07
3	Mn 257.610†	157266.9	159605.5	507.16 µg/L	507.16 ppb	02:53:01
3	Mo 202.031†	4588.3	4658.0	519.84 µg/L	519.84 ppb	02:53:27
3	Ni 231.604†	9253.5	9078.6	494.58 µg/L	494.58 ppb	02:53:07
3	P 214.914†	1356.6	1168.8	2481.7 µg/L	2481.7 ppb	02:53:27
3	Pb 220.353†	2014.0	1987.0	504.49 µg/L	504.49 ppb	02:53:27
3	S 181.975 Axial†	501.0	483.7	2483.9 µg/L	2483.9 ppb	02:53:27
3	Sb 206.836†	513.5	499.9	494.47 µg/L	494.47 ppb	02:53:27
3	Se 196.026†	1780.8	1790.7	2610.4 µg/L	2610.4 ppb	02:53:27
3	SiO2†	57128.1	55915.1	10678 µg/L	10678 ppb	02:53:07
3	Si 251.611†	64496.0	65014.1	4931.8 µg/L	4931.8 ppb	02:53:07
3	Sn 189.927†	1076.5	1068.5	523.67 µg/L	523.67 ppb	02:53:27
3	Ti 334.940†	218640.7	220863.5	489.29 µg/L	489.29 ppb	02:53:01
3	Tl 190.801†	320.3	346.1	524.47 µg/L	524.47 ppb	02:53:27
3	U 409.014†	5808.8	5207.8	488.23 µg/L	488.23 ppb	02:53:07
3	V 292.402†	44027.9	44712.2	508.89 µg/L	508.89 ppb	02:53:07
3	Zn 213.857†	19352.8	19063.0	506.76 µg/L	506.76 ppb	02:53:07

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2031912.8	98.793	%	0.4142				0.42%
Sc RADIAL	112846.2	100	%	0.6				0.60%
Y 371.029	1231866.2	98.364	%	0.4384				0.45%
Ag 328.068†	28520.7	258.56	µg/L	1.367	258.56	ppb	1.367	0.53%
QC value within limits for Ag 328.068 Recovery = 103.43%								
Al 396.153Radial†	10278.5	5174.6	µg/L	20.75	5174.6	ppb	20.75	0.40%
QC value within limits for Al 396.153Radial Recovery = 103.49%								
As 188.979†	256.4	487.57	µg/L	3.660	487.57	ppb	3.660	0.75%
QC value within limits for As 188.979 Recovery = 97.51%								
B 249.677†	11679.1	516.74	µg/L	1.718	516.74	ppb	1.718	0.33%
QC value within limits for B 249.677 Recovery = 103.35%								
Ba 233.527†	20322.4	511.49	µg/L	3.850	511.49	ppb	3.850	0.75%
QC value within limits for Ba 233.527 Recovery = 102.30%								
Be 313.107†	409642.3	258.95	µg/L	0.350	258.95	ppb	0.350	0.14%
QC value within limits for Be 313.107 Recovery = 103.58%								
Ca 317.933Radial†	12545.6	4980.0	µg/L	24.84	4980.0	ppb	24.84	0.50%
QC value within limits for Ca 317.933Radial Recovery = 99.60%								
Cd 226.502†	19008.4	502.79	µg/L	3.040	502.79	ppb	3.040	0.60%
QC value within limits for Cd 226.502 Recovery = 100.56%								
Co 228.616†	10646.9	512.20	µg/L	2.999	512.20	ppb	2.999	0.59%

QC value within limits for Co 228.616 Recovery = 102.44%

Cr 267.716†	23603.3	492.50 µg/L	2.173	492.50 ppb	2.173	0.44%

QC value within limits for Cr 267.716 Recovery = 98.50%

Cu 324.752†	72615.4	511.99 µg/L	2.463	511.99 ppb	2.463	0.48%

QC value within limits for Cu 324.752 Recovery = 102.40%

Fe 238.204 Radial†	977.2	5150.1 µg/L	32.83	5150.1 ppb	32.83	0.64%

QC value within limits for Fe 238.204 Radial Recovery = 103.00%

K 766.490 Radial†	4542.1	2462.7 µg/L	46.25	2462.7 ppb	46.25	1.88%

QC value within limits for K 766.490 Radial Recovery = 98.51%

Mg 279.077 IEC†	937.0	5202.4 µg/L	46.94	5202.4 ppb	46.94	0.90%

QC value within limits for Mg 279.077 IEC Recovery = 104.05%

Mn 257.610†	159614.4	507.19 µg/L	0.694	507.19 ppb	0.694	0.14%

QC value within limits for Mn 257.610 Recovery = 101.44%

Mo 202.031†	4688.1	523.20 µg/L	3.219	523.20 ppb	3.219	0.62%

QC value within limits for Mo 202.031 Recovery = 104.64%

Na 589.592 Radial†	9220.7	2558.4 µg/L	15.21	2558.4 ppb	15.21	0.59%

QC value within limits for Na 589.592 Radial Recovery = 102.34%

Ni 231.604†	9051.0	493.08 µg/L	2.789	493.08 ppb	2.789	0.57%

QC value within limits for Ni 231.604 Recovery = 98.62%

P 214.914†	1178.4	2503.0 µg/L	18.65	2503.0 ppb	18.65	0.75%

QC value within limits for P 214.914 Recovery = 100.12%

Pb 220.353†	1992.3	505.85 µg/L	1.210	505.85 ppb	1.210	0.24%

QC value within limits for Pb 220.353 Recovery = 101.17%

S 181.975 Axial†	481.5	2472.5 µg/L	26.47	2472.5 ppb	26.47	1.07%

QC value within limits for S 181.975 Axial Recovery = 98.90%

Sb 206.836†	499.5	494.06 µg/L	6.679	494.06 ppb	6.679	1.35%

QC value within limits for Sb 206.836 Recovery = 98.81%

Se 196.026†	1797.8	2620.7 µg/L	16.66	2620.7 ppb	16.66	0.64%

QC value within limits for Se 196.026 Recovery = 104.83%

SiO2†	55615.3	10621 µg/L	53.2	10621 ppb	53.2	0.50%

QC value within limits for SiO2 Recovery = 99.30%

Si 251.611†	64683.2	4906.2 µg/L	24.36	4906.2 ppb	24.36	0.50%

QC value within limits for Si 251.611 Recovery = 98.12%

Sn 189.927†	1080.7	529.61 µg/L	6.124	529.61 ppb	6.124	1.16%

QC value within limits for Sn 189.927 Recovery = 105.92%

Sr 421.552†	94333.7	531.38 µg/L	1.667	531.38 ppb	1.667	0.31%

QC value within limits for Sr 421.552 Recovery = 106.28%

Ti 334.940†	220916.3	489.40 µg/L	0.933	489.40 ppb	0.933	0.19%

QC value within limits for Ti 334.940 Recovery = 97.88%

Tl 190.801†	346.8	525.61 µg/L	4.986	525.61 ppb	4.986	0.95%

QC value within limits for Tl 190.801 Recovery = 105.12%

U 409.014†	5142.2	482.07 µg/L	5.427	482.07 ppb	5.427	1.13%

QC value within limits for U 409.014 Recovery = 96.41%

V 292.402†	44426.4	505.68 µg/L	3.112	505.68 ppb	3.112	0.62%

QC value within limits for V 292.402 Recovery = 101.14%

Zn 213.857†	18952.6	503.81 µg/L	3.205	503.81 ppb	3.205	0.64%

QC value within limits for Zn 213.857 Recovery = 100.76%

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/18/2009 02:53:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110159.2	110159.2	97.9	%			02:54:09
1	Al 396.153Radial†	212.5	-12.8	-6.4963	µg/L	-6.4963	ppb	02:54:09
1	Ca 317.933Radial†	428.7	-57.7	-22.890	µg/L	-22.890	ppb	02:54:30
1	Fe 238.204 Radial†	7.3	-3.7	-19.631	µg/L	-19.631	ppb	02:54:30
1	K 766.490 Radial†	666.5	-14.3	-7.7500	µg/L	-7.7500	ppb	02:54:09
1	Mg 279.077 IEC†	15.9	-3.6	-20.044	µg/L	-20.044	ppb	02:54:30
1	Na 589.592 Radial†	-676.1	13.6	3.7765	µg/L	3.7765	ppb	02:54:09
1	Sr 421.552†	77.2	142.6	0.8031	µg/L	0.8031	ppb	02:54:09
1	Sc 361.383	2007570.5	2007570.5	97.609	%			02:55:32
1	Y 371.029	1219230.8	1219230.8	97.355	%			02:55:32
1	Ag 328.068†	85.7	116.1	1.0352	µg/L	1.0352	ppb	02:55:37
1	As 188.979†	1.5	-1.0	-1.8089	µg/L	-1.8089	ppb	02:55:58
1	B 249.677†	152.5	0.5	0.0302	µg/L	0.0302	ppb	02:55:58
1	Ba 233.527†	-78.8	-0.1	-0.0023	µg/L	-0.0023	ppb	02:55:58
1	Be 313.107†	3773.3	254.2	0.1607	µg/L	0.1607	ppb	02:55:37
1	Cd 226.502†	-83.0	15.9	0.4356	µg/L	0.4356	ppb	02:55:58
1	Co 228.616†	-66.6	3.5	0.1704	µg/L	0.1704	ppb	02:55:58
1	Cr 267.716†	-109.4	10.7	0.2229	µg/L	0.2229	ppb	02:55:37
1	Cu 324.752†	3281.1	-22.8	-0.1647	µg/L	-0.1647	ppb	02:55:37
1	Mn 257.610†	-171.3	47.2	0.1472	µg/L	0.1472	ppb	02:55:58
1	Mo 202.031†	-2.6	5.2	0.5800	µg/L	0.5800	ppb	02:55:58
1	Ni 231.604†	302.5	10.5	0.5742	µg/L	0.5742	ppb	02:55:58
1	P 214.914†	203.1	2.1	4.4838	µg/L	4.4838	ppb	02:55:58
1	Pb 220.353†	68.9	16.5	4.1686	µg/L	4.1686	ppb	02:55:58
1	S 181.975 Axial†	21.6	-1.9	-9.9508	µg/L	-9.9508	ppb	02:55:58
1	Sb 206.836†	21.1	1.0	1.0292	µg/L	1.0292	ppb	02:55:58
1	Se 196.026†	14.9	1.2	1.7313	µg/L	1.7313	ppb	02:55:58
1	SiO2†	1984.1	51.0	9.7463	µg/L	9.7463	ppb	02:55:37
1	Si 251.611†	379.3	39.0	2.9824	µg/L	2.9824	ppb	02:55:58
1	Sn 189.927†	21.1	-0.8	-0.4167	µg/L	-0.4167	ppb	02:55:58
1	Ti 334.940†	846.6	148.5	0.3304	µg/L	0.3304	ppb	02:55:37
1	Tl 190.801†	-20.0	1.0	1.4465	µg/L	1.4465	ppb	02:55:58
1	U 409.014†	857.0	198.7	18.668	µg/L	18.668	ppb	02:55:37
1	V 292.402†	-93.7	-4.1	-0.0131	µg/L	-0.0131	ppb	02:55:37
1	Zn 213.857†	545.3	8.5	0.2269	µg/L	0.2269	ppb	02:55:58
2	Sc RADIAL	110505.7	110505.7	98.2	%			02:54:35
2	Al 396.153Radial†	200.5	-25.7	-13.041	µg/L	-13.041	ppb	02:54:35
2	Ca 317.933Radial†	424.2	-63.6	-25.264	µg/L	-25.264	ppb	02:54:56
2	Fe 238.204 Radial†	10.7	-0.3	-1.4548	µg/L	-1.4548	ppb	02:54:56
2	K 766.490 Radial†	741.2	59.6	32.300	µg/L	32.300	ppb	02:54:35
2	Mg 279.077 IEC†	17.2	-2.3	-12.743	µg/L	-12.743	ppb	02:54:56
2	Na 589.592 Radial†	-644.1	48.3	13.394	µg/L	13.394	ppb	02:54:35
2	Sr 421.552†	-5.2	58.5	0.3293	µg/L	0.3293	ppb	02:54:35
2	Sc 361.383	1992128.4	1992128.4	96.858	%			02:56:03
2	Y 371.029	1209681.6	1209681.6	96.592	%			02:56:03
2	Ag 328.068†	6.4	34.9	0.3126	µg/L	0.3126	ppb	02:56:09
2	As 188.979†	1.9	-0.5	-0.9483	µg/L	-0.9483	ppb	02:56:29
2	B 249.677†	161.4	10.9	0.4860	µg/L	0.4860	ppb	02:56:29
2	Ba 233.527†	-71.7	6.6	0.1670	µg/L	0.1670	ppb	02:56:29
2	Be 313.107†	3769.5	280.3	0.1772	µg/L	0.1772	ppb	02:56:09
2	Cd 226.502†	-82.8	15.4	0.4257	µg/L	0.4257	ppb	02:56:29
2	Co 228.616†	-68.9	0.6	0.0290	µg/L	0.0290	ppb	02:56:29
2	Cr 267.716†	-89.4	30.4	0.6338	µg/L	0.6338	ppb	02:56:09
2	Cu 324.752†	3282.8	5.0	0.0348	µg/L	0.0348	ppb	02:56:09
2	Mn 257.610†	-166.0	51.2	0.1623	µg/L	0.1623	ppb	02:56:29
2	Mo 202.031†	1.8	9.8	1.0928	µg/L	1.0928	ppb	02:56:29
2	Ni 231.604†	299.8	10.2	0.5534	µg/L	0.5534	ppb	02:56:29
2	P 214.914†	210.6	11.4	24.763	µg/L	24.763	ppb	02:56:29
2	Pb 220.353†	57.7	5.5	1.3735	µg/L	1.3735	ppb	02:56:29

2	S 181.975 Axial†	22.3	-1.0	-5.0530	µg/L	-5.0530 ppb	02:56:29
2	Sb 206.836†	20.3	0.4	0.3978	µg/L	0.3978 ppb	02:56:29
2	Se 196.026†	7.7	-6.1	-8.9218	µg/L	-8.9218 ppb	02:56:29
2	SiO2†	1957.3	39.1	7.4744	µg/L	7.4744 ppb	02:56:09
2	Si 251.611†	382.8	45.6	3.4089	µg/L	3.4089 ppb	02:56:29
2	Sn 189.927†	24.0	2.3	1.1044	µg/L	1.1044 ppb	02:56:29
2	Ti 334.940†	810.6	118.0	0.2629	µg/L	0.2629 ppb	02:56:09
2	Tl 190.801†	-17.6	3.3	4.9329	µg/L	4.9329 ppb	02:56:29
2	U 409.014†	903.7	253.8	23.830	µg/L	23.830 ppb	02:56:09
2	V 292.402†	-77.9	11.6	0.1763	µg/L	0.1763 ppb	02:56:09
2	Zn 213.857†	550.8	18.5	0.4940	µg/L	0.4940 ppb	02:56:29
3	Sc RADIAL	110146.2	110146.2	97.9	%		02:55:01
3	Al 396.153Radial†	221.4	-3.7	-1.9010	µg/L	-1.9010 ppb	02:55:01
3	Ca 317.933Radial†	414.0	-72.6	-28.837	µg/L	-28.837 ppb	02:55:22
3	Fe 238.204 Radial†	10.5	-0.5	-2.5918	µg/L	-2.5918 ppb	02:55:22
3	K 766.490 Radial†	749.7	70.7	38.345	µg/L	38.345 ppb	02:55:01
3	Mg 279.077 IEC†	16.0	-3.5	-19.193	µg/L	-19.193 ppb	02:55:22
3	Na 589.592 Radial†	-671.0	18.7	5.1904	µg/L	5.1904 ppb	02:55:01
3	Sr 421.552†	-1.5	62.3	0.3507	µg/L	0.3507 ppb	02:55:01
3	Sc 361.383	2014186.5	2014186.5	97.931	%		02:56:35
3	Y 371.029	1223550.1	1223550.1	97.700	%		02:56:35
3	Ag 328.068†	48.9	78.3	0.7011	µg/L	0.7011 ppb	02:56:40
3	As 188.979†	2.1	-0.4	-0.7424	µg/L	-0.7424 ppb	02:57:01
3	B 249.677†	153.8	1.3	0.0593	µg/L	0.0593 ppb	02:57:01
3	Ba 233.527†	-69.5	9.7	0.2436	µg/L	0.2436 ppb	02:57:01
3	Be 313.107†	3673.5	139.6	0.0882	µg/L	0.0882 ppb	02:56:40
3	Cd 226.502†	-90.8	8.2	0.2308	µg/L	0.2308 ppb	02:57:01
3	Co 228.616†	-71.6	-1.4	-0.0674	µg/L	-0.0674 ppb	02:57:01
3	Cr 267.716†	-111.6	8.8	0.1841	µg/L	0.1841 ppb	02:56:40
3	Cu 324.752†	3260.5	-54.9	-0.3867	µg/L	-0.3867 ppb	02:56:40
3	Mn 257.610†	-168.8	50.3	0.1593	µg/L	0.1593 ppb	02:57:01
3	Mo 202.031†	-2.5	5.3	0.5965	µg/L	0.5965 ppb	02:57:01
3	Ni 231.604†	297.0	3.9	0.2103	µg/L	0.2103 ppb	02:57:01
3	P 214.914†	202.8	1.1	2.4456	µg/L	2.4456 ppb	02:57:01
3	Pb 220.353†	57.5	4.6	1.1468	µg/L	1.1468 ppb	02:57:01
3	S 181.975 Axial†	21.7	-1.9	-9.6576	µg/L	-9.6576 ppb	02:57:01
3	Sb 206.836†	18.8	-1.4	-1.3584	µg/L	-1.3584 ppb	02:57:01
3	Se 196.026†	13.6	-0.2	-0.2659	µg/L	-0.2659 ppb	02:57:01
3	SiO2†	1981.2	41.4	7.9096	µg/L	7.9096 ppb	02:56:40
3	Si 251.611†	361.1	19.1	1.3821	µg/L	1.3821 ppb	02:57:01
3	Sn 189.927†	24.2	2.2	1.0735	µg/L	1.0735 ppb	02:57:01
3	Ti 334.940†	869.5	169.0	0.3763	µg/L	0.3763 ppb	02:56:40
3	Tl 190.801†	-15.1	6.0	9.0341	µg/L	9.0341 ppb	02:57:01
3	U 409.014†	858.8	197.8	18.571	µg/L	18.571 ppb	02:56:40
3	V 292.402†	-62.4	28.2	0.3521	µg/L	0.3521 ppb	02:56:40
3	Zn 213.857†	550.7	12.1	0.3254	µg/L	0.3254 ppb	02:57:01

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2004628.5	97.466	%	0.5504				0.56%
Sc RADIAL	110270.4	98.0	%	0.18				0.18%
Y 371.029	1217487.5	97.216	%	0.5667				0.58%
Ag 328.068†	76.4	0.6830	µg/L	0.36161	0.6830	ppb	0.36161	52.95%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.1	-7.1459	µg/L	5.59812	-7.1459	ppb	5.59812	78.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-1.1665	µg/L	0.56578	-1.1665	ppb	0.56578	48.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4.3	0.1918	µg/L	0.25518	0.1918	ppb	0.25518	133.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.4	0.1361	µg/L	0.12580	0.1361	ppb	0.12580	92.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	224.7	0.1420	µg/L	0.04736	0.1420	ppb	0.04736	33.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-64.7	-25.663	µg/L	2.9935	-25.663	ppb	2.9935	11.66%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.2	0.3641	µg/L	0.11551	0.3641	ppb	0.11551	31.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.9	0.0440	µg/L	0.11963	0.0440	ppb	0.11963	272.00%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.7      0.3469 µg/L       0.24921      0.3469 ppb        0.24921  71.83%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -24.2     -0.1722 µg/L       0.21082     -0.1722 ppb        0.21082 122.42%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -7.8924 µg/L      10.18140     -7.8924 ppb       10.18140 129.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          38.7      20.965 µg/L       25.0508      20.965 ppb        25.0508 119.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.1     -17.327 µg/L        3.9922     -17.327 ppb         3.9922  23.04%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                49.6      0.1563 µg/L       0.00801      0.1563 ppb        0.00801   5.13%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.8      0.7564 µg/L       0.29141      0.7564 ppb        0.29141  38.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         26.9      7.4538 µg/L       5.19301      7.4538 ppb        5.19301  69.67%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.2      0.4460 µg/L       0.20434      0.4460 ppb        0.20434  45.82%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.8      10.564 µg/L       12.3387      10.564 ppb        12.3387 116.80%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 8.9      2.2297 µg/L       1.68300      2.2297 ppb        1.68300  75.48%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.6     -8.2205 µg/L       2.74699     -8.2205 ppb        2.74699  33.42%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.0      0.0229 µg/L       1.23717      0.0229 ppb        1.23717 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.7     -2.4855 µg/L       5.66280     -2.4855 ppb        5.66280 227.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      43.9      8.3767 µg/L       1.20583      8.3767 ppb        1.20583  14.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                34.6      2.5911 µg/L       1.06852      2.5911 ppb        1.06852  41.24%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.5871 µg/L       0.86943      0.5871 ppb        0.86943 148.10%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                87.8      0.4944 µg/L       0.26757      0.4944 ppb        0.26757  54.12%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               145.2      0.3232 µg/L       0.05703      0.3232 ppb        0.05703  17.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.4      5.1379 µg/L       3.79795      5.1379 ppb        3.79795  73.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                216.8      20.356 µg/L        3.0085      20.356 ppb         3.0085  14.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 11.9      0.1717 µg/L       0.18263      0.1717 ppb        0.18263 106.34%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                13.0      0.3488 µg/L       0.13506      0.3488 ppb        0.13506  38.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 02:57:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109670.6	109670.6	97.5	%			02:57:43
1	Al 396.153Radial†	579.7	364.7	183.92	µg/L	183.92	ppb	02:57:43
1	Ca 317.933Radial†	925.4	453.6	180.08	µg/L	180.08	ppb	02:58:04
1	Fe 238.204 Radial†	29.1	18.6	97.895	µg/L	97.895	ppb	02:58:04
1	K 766.490 Radial†	1047.0	378.9	205.46	µg/L	205.46	ppb	02:57:43
1	Mg 279.077 IEC†	73.3	55.4	307.32	µg/L	307.32	ppb	02:58:04
1	Na 589.592 Radial†	384.7	1098.5	304.78	µg/L	304.78	ppb	02:57:43
1	Sr 421.552†	862.3	948.1	5.3409	µg/L	5.3409	ppb	02:57:43
1	Sc 361.383	2020682.7	2020682.7	98.247	%			02:59:06
1	Y 371.029	1230392.5	1230392.5	98.246	%			02:59:06
1	Ag 328.068†	580.5	619.2	5.5741	µg/L	5.5741	ppb	02:59:11
1	As 188.979†	13.3	11.1	21.089	µg/L	21.089	ppb	02:59:32
1	B 249.677†	1277.3	1144.4	50.762	µg/L	50.762	ppb	02:59:11
1	Ba 233.527†	119.1	201.9	5.0818	µg/L	5.0818	ppb	02:59:32
1	Be 313.107†	11549.7	8144.3	5.1500	µg/L	5.1500	ppb	02:59:11
1	Cd 226.502†	88.5	191.0	5.0816	µg/L	5.0816	ppb	02:59:32
1	Co 228.616†	22.8	94.9	4.5785	µg/L	4.5785	ppb	02:59:32
1	Cr 267.716†	102.0	226.6	4.7301	µg/L	4.7301	ppb	02:59:11
1	Cu 324.752†	4685.2	1384.5	9.7617	µg/L	9.7617	ppb	02:59:11
1	Mn 257.610†	2986.4	3262.3	10.365	µg/L	10.365	ppb	02:59:11
1	Mo 202.031†	81.3	90.7	10.123	µg/L	10.123	ppb	02:59:32
1	Ni 231.604†	391.9	99.5	5.4226	µg/L	5.4226	ppb	02:59:32
1	P 214.914†	269.6	68.4	147.50	µg/L	147.50	ppb	02:59:32
1	Pb 220.353†	91.6	39.1	9.9059	µg/L	9.9059	ppb	02:59:32
1	S 181.975 Axial†	34.0	10.5	53.947	µg/L	53.947	ppb	02:59:32
1	Sb 206.836†	23.7	3.6	3.5796	µg/L	3.5796	ppb	02:59:32
1	Se 196.026†	26.4	12.8	18.593	µg/L	18.593	ppb	02:59:32
1	SiO2†	3071.6	1144.8	218.61	µg/L	218.61	ppb	02:59:11
1	Si 251.611†	1652.1	1331.9	101.25	µg/L	101.25	ppb	02:59:32
1	Sn 189.927†	39.2	17.5	8.6411	µg/L	8.6411	ppb	02:59:32
1	Ti 334.940†	2983.4	2317.8	5.1276	µg/L	5.1276	ppb	02:59:11
1	Tl 190.801†	-10.1	11.1	16.753	µg/L	16.753	ppb	02:59:32
1	U 409.014†	1204.9	547.2	51.372	µg/L	51.372	ppb	02:59:11
1	V 292.402†	374.0	472.7	5.4902	µg/L	5.4902	ppb	02:59:11
1	Zn 213.857†	927.3	393.7	10.488	µg/L	10.488	ppb	02:59:32
2	Sc RADIAL	110712.5	110712.5	98.4	%			02:58:09
2	Al 396.153Radial†	594.5	374.2	188.75	µg/L	188.75	ppb	02:58:09
2	Ca 317.933Radial†	930.5	449.9	178.58	µg/L	178.58	ppb	02:58:29
2	Fe 238.204 Radial†	30.8	20.0	105.43	µg/L	105.43	ppb	02:58:29
2	K 766.490 Radial†	1006.9	328.1	177.89	µg/L	177.89	ppb	02:58:09
2	Mg 279.077 IEC†	75.0	56.3	312.49	µg/L	312.49	ppb	02:58:29
2	Na 589.592 Radial†	404.9	1115.3	309.47	µg/L	309.47	ppb	02:58:09
2	Sr 421.552†	890.8	968.8	5.4574	µg/L	5.4574	ppb	02:58:09
2	Sc 361.383	2019005.8	2019005.8	98.165	%			02:59:38
2	Y 371.029	1229319.2	1229319.2	98.160	%			02:59:38
2	Ag 328.068†	495.9	533.4	4.8088	µg/L	4.8088	ppb	02:59:43
2	As 188.979†	17.3	15.2	28.872	µg/L	28.872	ppb	03:00:04
2	B 249.677†	1208.9	1075.8	47.716	µg/L	47.716	ppb	02:59:43
2	Ba 233.527†	128.9	212.0	5.3362	µg/L	5.3362	ppb	03:00:04
2	Be 313.107†	11423.6	8025.7	5.0750	µg/L	5.0750	ppb	02:59:43
2	Cd 226.502†	97.0	199.7	5.3109	µg/L	5.3109	ppb	03:00:04
2	Co 228.616†	22.1	94.3	4.5431	µg/L	4.5431	ppb	03:00:04
2	Cr 267.716†	144.0	269.4	5.6208	µg/L	5.6208	ppb	02:59:43
2	Cu 324.752†	4664.4	1367.3	9.6423	µg/L	9.6423	ppb	02:59:43
2	Mn 257.610†	2994.7	3273.4	10.401	µg/L	10.401	ppb	02:59:43
2	Mo 202.031†	72.9	82.1	9.1688	µg/L	9.1688	ppb	03:00:04
2	Ni 231.604†	402.8	110.9	6.0428	µg/L	6.0428	ppb	03:00:04
2	P 214.914†	281.0	80.3	173.25	µg/L	173.25	ppb	03:00:04
2	Pb 220.353†	90.2	37.8	9.5651	µg/L	9.5651	ppb	03:00:04

2	S 181.975 Axial†	42.7	19.5	99.918 µg/L	99.918 ppb	03:00:04
2	Sb 206.836†	34.2	14.3	14.150 µg/L	14.150 ppb	03:00:04
2	Se 196.026†	29.7	16.1	23.488 µg/L	23.488 ppb	03:00:04
2	SiO2†	3103.0	1179.3	225.21 µg/L	225.21 ppb	02:59:43
2	Si 251.611†	1622.8	1303.5	99.008 µg/L	99.008 ppb	03:00:04
2	Sn 189.927†	43.7	22.0	10.861 µg/L	10.861 ppb	03:00:04
2	Ti 334.940†	3018.4	2356.0	5.2122 µg/L	5.2122 ppb	02:59:43
2	Tl 190.801†	-5.3	16.0	24.217 µg/L	24.217 ppb	03:00:04
2	U 409.014†	1171.2	513.8	48.240 µg/L	48.240 ppb	02:59:43
2	V 292.402†	370.2	469.1	5.4391 µg/L	5.4391 ppb	02:59:43
2	Zn 213.857†	923.6	390.7	10.404 µg/L	10.404 ppb	03:00:04
3	Sc RADIAL	110532.5	110532.5	98.3 %		02:58:35
3	Al 396.153Radial†	599.5	380.2	191.75 µg/L	191.75 ppb	02:58:35
3	Ca 317.933Radial†	924.1	444.9	176.62 µg/L	176.62 ppb	02:58:56
3	Fe 238.204 Radial†	31.2	20.5	107.94 µg/L	107.94 ppb	02:58:56
3	K 766.490 Radial†	955.5	277.4	150.43 µg/L	150.43 ppb	02:58:35
3	Mg 279.077 IEC†	69.1	50.5	280.24 µg/L	280.24 ppb	02:58:56
3	Na 589.592 Radial†	374.9	1085.5	301.18 µg/L	301.18 ppb	02:58:35
3	Sr 421.552†	848.9	927.6	5.2251 µg/L	5.2251 ppb	02:58:35
3	Sc 361.383	2016302.3	2016302.3	98.034 %		03:00:10
3	Y 371.029	1227337.6	1227337.6	98.002 %		03:00:10
3	Ag 328.068†	554.3	593.7	5.3440 µg/L	5.3440 ppb	03:00:16
3	As 188.979†	13.1	10.8	20.619 µg/L	20.619 ppb	03:00:36
3	B 249.677†	1213.3	1081.9	47.985 µg/L	47.985 ppb	03:00:16
3	Ba 233.527†	122.2	205.4	5.1681 µg/L	5.1681 ppb	03:00:36
3	Be 313.107†	11444.9	8063.0	5.0985 µg/L	5.0985 ppb	03:00:16
3	Cd 226.502†	91.8	194.5	5.1733 µg/L	5.1733 ppb	03:00:36
3	Co 228.616†	28.0	100.3	4.8378 µg/L	4.8378 ppb	03:00:36
3	Cr 267.716†	135.9	261.4	5.4529 µg/L	5.4529 ppb	03:00:16
3	Cu 324.752†	4659.8	1369.0	9.6545 µg/L	9.6545 ppb	03:00:16
3	Mn 257.610†	3027.0	3310.4	10.519 µg/L	10.519 ppb	03:00:16
3	Mo 202.031†	88.2	97.9	10.928 µg/L	10.928 ppb	03:00:36
3	Ni 231.604†	392.1	100.6	5.4794 µg/L	5.4794 ppb	03:00:36
3	P 214.914†	276.9	76.5	165.10 µg/L	165.10 ppb	03:00:36
3	Pb 220.353†	104.9	52.8	13.386 µg/L	13.386 ppb	03:00:36
3	S 181.975 Axial†	43.1	20.0	102.54 µg/L	102.54 ppb	03:00:36
3	Sb 206.836†	31.6	11.7	11.582 µg/L	11.582 ppb	03:00:36
3	Se 196.026†	38.7	25.4	37.011 µg/L	37.011 ppb	03:00:36
3	SiO2†	3051.4	1130.9	215.96 µg/L	215.96 ppb	03:00:16
3	Si 251.611†	1636.6	1319.8	100.20 µg/L	100.20 ppb	03:00:36
3	Sn 189.927†	45.2	23.6	11.620 µg/L	11.620 ppb	03:00:36
3	Ti 334.940†	3054.5	2396.9	5.3031 µg/L	5.3031 ppb	03:00:16
3	Tl 190.801†	2.1	23.5	35.541 µg/L	35.541 ppb	03:00:36
3	U 409.014†	1185.8	530.4	49.795 µg/L	49.795 ppb	03:00:16
3	V 292.402†	328.4	426.9	4.9787 µg/L	4.9787 ppb	03:00:16
3	Zn 213.857†	922.2	390.6	10.403 µg/L	10.403 ppb	03:00:36

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2018663.6	98.149	%	0.1075				0.11%
Sc RADIAL	110305.2	98.1	%	0.50				0.50%
Y 371.029	1229016.5	98.136	%	0.1238				0.13%
Ag 328.068†	582.1	5.2423	µg/L	0.39264	5.2423	ppb	0.39264	7.49%
QC value within limits for Ag 328.068 Recovery = 104.85%								
Al 396.153Radial†	373.0	188.14	µg/L	3.946	188.14	ppb	3.946	2.10%
QC value within limits for Al 396.153Radial Recovery = 94.07%								
As 188.979†	12.4	23.527	µg/L	4.6353	23.527	ppb	4.6353	19.70%
QC value within limits for As 188.979 Recovery = 78.42%								
B 249.677†	1100.7	48.821	µg/L	1.6864	48.821	ppb	1.6864	3.45%
QC value within limits for B 249.677 Recovery = 97.64%								
Ba 233.527†	206.4	5.1954	µg/L	0.12941	5.1954	ppb	0.12941	2.49%
QC value within limits for Ba 233.527 Recovery = 103.91%								
Be 313.107†	8077.6	5.1078	µg/L	0.03839	5.1078	ppb	0.03839	0.75%
QC value within limits for Be 313.107 Recovery = 102.16%								
Ca 317.933Radial†	449.5	178.42	µg/L	1.733	178.42	ppb	1.733	0.97%
QC value within limits for Ca 317.933Radial Recovery = 89.21%								
Cd 226.502†	195.1	5.1886	µg/L	0.11543	5.1886	ppb	0.11543	2.22%
QC value within limits for Cd 226.502 Recovery = 103.77%								
Co 228.616†	96.5	4.6531	µg/L	0.16088	4.6531	ppb	0.16088	3.46%

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   QC value within limits for Co 228.616  Recovery = 93.06%
Cr 267.716†              252.5      5.2679 µg/L       0.47331      5.2679 ppb        0.47331   8.98%
   QC value within limits for Cr 267.716  Recovery = 105.36%
Cu 324.752†             1373.6      9.6862 µg/L       0.06573      9.6862 ppb        0.06573   0.68%
   QC value within limits for Cu 324.752  Recovery = 96.86%
Fe 238.204 Radial†        19.7      103.75 µg/L         5.226      103.75 ppb          5.226   5.04%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.75%
K 766.490 Radial†        328.2      177.93 µg/L        27.515      177.93 ppb         27.515  15.46%
   QC value within limits for K 766.490 Radial  Recovery = 118.62%
Mg 279.077 IEC†           54.1      300.01 µg/L        17.320      300.01 ppb         17.320   5.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.00%
Mn 257.610†             3282.0      10.429 µg/L        0.0804      10.429 ppb         0.0804   0.77%
   QC value within limits for Mn 257.610  Recovery = 104.29%
Mo 202.031†               90.3      10.073 µg/L        0.8807      10.073 ppb         0.8807   8.74%
   QC value within limits for Mo 202.031  Recovery = 100.73%
Na 589.592 Radial†      1099.8      305.14 µg/L         4.156      305.14 ppb          4.156   1.36%
   QC value within limits for Na 589.592 Radial  Recovery = 101.71%
Ni 231.604†              103.7      5.6482 µg/L       0.34283      5.6482 ppb        0.34283   6.07%
   QC value within limits for Ni 231.604  Recovery = 112.96%
P 214.914†                75.1      161.95 µg/L        13.157      161.95 ppb         13.157   8.12%
   QC value within limits for P 214.914  Recovery = 107.97%
Pb 220.353†               43.2      10.952 µg/L        2.1146      10.952 ppb         2.1146  19.31%
   QC value within limits for Pb 220.353  Recovery = 109.52%
S 181.975 Axial†          16.6      85.467 µg/L       27.3281      85.467 ppb        27.3281  31.98%
   QC value within limits for S 181.975 Axial  Recovery = 85.47%
Sb 206.836†                9.9      9.7703 µg/L       5.51287      9.7703 ppb        5.51287  56.42%
   QC value within limits for Sb 206.836  Recovery = 97.70%
Se 196.026†               18.1      26.364 µg/L        9.5396      26.364 ppb         9.5396  36.18%
   QC value within limits for Se 196.026  Recovery = 87.88%
SiO2†                   1151.7      219.93 µg/L         4.760      219.93 ppb          4.760   2.16%
   QC value within limits for SiO2  Recovery = 103.25%
Si 251.611†             1318.4      100.15 µg/L         1.120      100.15 ppb          1.120   1.12%
   QC value within limits for Si 251.611  Recovery = 100.15%
Sn 189.927†               21.0      10.374 µg/L        1.5479      10.374 ppb         1.5479  14.92%
   QC value within limits for Sn 189.927  Recovery = 103.74%
Sr 421.552†              948.2      5.3411 µg/L       0.11619      5.3411 ppb        0.11619   2.18%
   QC value within limits for Sr 421.552  Recovery = 106.82%
Ti 334.940†             2356.9      5.2143 µg/L       0.08778      5.2143 ppb        0.08778   1.68%
   QC value within limits for Ti 334.940  Recovery = 104.29%
Tl 190.801†               16.9      25.504 µg/L        9.4597      25.504 ppb         9.4597  37.09%
   QC value within limits for Tl 190.801  Recovery = 127.52%
U 409.014†               530.5      49.802 µg/L        1.5664      49.802 ppb         1.5664   3.15%
   QC value within limits for U 409.014  Recovery = 99.60%
V 292.402†               456.2      5.3026 µg/L       0.28173      5.3026 ppb        0.28173   5.31%
   QC value within limits for V 292.402  Recovery = 106.05%
Zn 213.857†              391.7      10.432 µg/L        0.0490      10.432 ppb         0.0490   0.47%
   QC value within limits for Zn 213.857  Recovery = 104.32%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/18/2009 03:00:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105082.1	105082.1	93.4	%			03:01:27
1	Al 396.153Radial†	960820.1	1028234.1	519650	µg/L	519650	ppb	03:01:21
1	Ca 317.933Radial†	1157144.9	1238114.9	491470	µg/L	491470	ppb	03:01:21
1	Fe 238.204 Radial†	33779.0	36145.9	189870	µg/L	189870	ppb	03:01:27
1	K 766.490 Radial†	640.2	-9.5	-5.1731	µg/L	-5.1731	ppb	03:01:27
1	Mg 279.077 IEC†	82664.0	88463.9	490400	µg/L	490400	ppb	03:01:27
1	Na 589.592 Radial†	-594.8	67.2	18.648	µg/L	18.648	ppb	03:01:27
1	Sr 421.552†	545.7	647.9	3.6493	µg/L	3.6493	ppb	03:01:27
1	Sc 361.383	1871245.0	1871245.0	90.981	%			03:02:00
1	Y 371.029	1122914.4	1122914.4	89.664	%			03:02:00
1	Ag 328.068†	-1914.8	-2076.3	-3.6589	µg/L	-3.6589	ppb	03:02:06
1	As 188.979†	34.2	35.1	-35.279	µg/L	-35.279	ppb	03:02:26
1	B 249.677†	1956.6	1994.9	28.831	µg/L	28.831	ppb	03:02:06
1	Ba 233.527†	138.5	232.9	5.8205	µg/L	5.8205	ppb	03:02:26
1	Be 313.107†	2628.1	-722.9	-0.4668	µg/L	-0.4668	ppb	03:02:06
1	Cd 226.502†	490.2	639.7	2.1876	µg/L	2.1876	ppb	03:02:26
1	Co 228.616†	-94.0	-31.6	-1.6045	µg/L	-1.6045	ppb	03:02:26
1	Cr 267.716†	-224.9	-124.4	-2.6227	µg/L	-2.6227	ppb	03:02:26
1	Cu 324.752†	-1289.9	-4802.1	6.9992	µg/L	6.9992	ppb	03:02:06
1	Mn 257.610†	-2211.8	-2208.4	16.859	µg/L	16.859	ppb	03:02:06
1	Mo 202.031†	-109.4	-112.3	-5.0662	µg/L	-5.0662	ppb	03:02:26
1	Ni 231.604†	252.3	-22.1	-1.2044	µg/L	-1.2044	ppb	03:02:26
1	P 214.914†	212.1	27.1	26.694	µg/L	26.694	ppb	03:02:26
1	Pb 220.353†	-48.0	-106.9	15.827	µg/L	15.827	ppb	03:02:26
1	S 181.975 Axial†	60.1	42.0	117.72	µg/L	117.72	ppb	03:02:26
1	Sb 206.836†	60.5	45.9	-0.4258	µg/L	-0.4258	ppb	03:02:26
1	Se 196.026†	16.6	4.2	5.7054	µg/L	5.7054	ppb	03:02:26
1	SiO2†	1699.0	-114.3	-21.825	µg/L	-21.825	ppb	03:02:26
1	Si 251.611†	426.4	119.0	17.012	µg/L	17.012	ppb	03:02:26
1	Sn 189.927†	-396.0	-457.7	6.3150	µg/L	6.3150	ppb	03:02:26
1	Ti 334.940†	11211.3	11603.8	-1.9145	µg/L	-1.9145	ppb	03:02:06
1	Tl 190.801†	15.7	38.6	-7.2325	µg/L	-7.2325	ppb	03:02:26
1	U 409.014†	594.5	-25.8	-26.230	µg/L	-26.230	ppb	03:02:06
1	V 292.402†	-1211.6	-1239.8	1.4219	µg/L	1.4219	ppb	03:02:06
1	Zn 213.857†	1695.7	1313.6	1.6535	µg/L	1.6535	ppb	03:02:26
2	Sc RADIAL	105611.6	105611.6	93.9	%			03:01:38
2	Al 396.153Radial†	967678.1	1030382.0	520730	µg/L	520730	ppb	03:01:33
2	Ca 317.933Radial†	1165292.7	1240582.9	492450	µg/L	492450	ppb	03:01:33
2	Fe 238.204 Radial†	34094.3	36300.4	190680	µg/L	190680	ppb	03:01:38
2	K 766.490 Radial†	639.4	-13.9	-7.5348	µg/L	-7.5348	ppb	03:01:38
2	Mg 279.077 IEC†	83115.2	88500.9	490600	µg/L	490600	ppb	03:01:38
2	Na 589.592 Radial†	-567.7	99.3	27.546	µg/L	27.546	ppb	03:01:38
2	Sr 421.552†	534.1	632.6	3.5634	µg/L	3.5634	ppb	03:01:38
2	Sc 361.383	1856741.7	1856741.7	90.276	%			03:02:32
2	Y 371.029	1115518.0	1115518.0	89.073	%			03:02:32
2	Ag 328.068†	-1958.2	-2140.8	-4.1710	µg/L	-4.1710	ppb	03:02:38
2	As 188.979†	47.4	50.1	-6.9862	µg/L	-6.9862	ppb	03:02:59
2	B 249.677†	1954.5	2009.4	29.220	µg/L	29.220	ppb	03:02:38
2	Ba 233.527†	133.8	228.9	5.7201	µg/L	5.7201	ppb	03:02:59
2	Be 313.107†	2728.2	-589.5	-0.3825	µg/L	-0.3825	ppb	03:02:38
2	Cd 226.502†	476.1	628.3	1.8202	µg/L	1.8202	ppb	03:02:59
2	Co 228.616†	-90.5	-28.5	-1.4605	µg/L	-1.4605	ppb	03:02:59
2	Cr 267.716†	-209.1	-108.8	-2.2981	µg/L	-2.2981	ppb	03:02:59
2	Cu 324.752†	-1316.5	-4842.6	6.8888	µg/L	6.8888	ppb	03:02:38
2	Mn 257.610†	-2183.2	-2195.7	17.001	µg/L	17.001	ppb	03:02:38
2	Mo 202.031†	-123.0	-128.3	-6.8238	µg/L	-6.8238	ppb	03:02:59
2	Ni 231.604†	261.0	-10.3	-0.5628	µg/L	-0.5628	ppb	03:02:59
2	P 214.914†	211.1	27.9	27.751	µg/L	27.751	ppb	03:02:59
2	Pb 220.353†	-49.0	-108.4	15.538	µg/L	15.538	ppb	03:02:59

2	S 181.975 Axial†	63.2	45.9	137.65 µg/L	137.65 ppb	03:02:59
2	Sb 206.836†	54.1	39.4	-7.0564 µg/L	-7.0564 ppb	03:02:59
2	Se 196.026†	29.7	18.8	27.608 µg/L	27.608 ppb	03:02:59
2	SiO2†	1708.4	-89.2	-17.033 µg/L	-17.033 ppb	03:02:59
2	Si 251.611†	425.1	121.2	17.297 µg/L	17.297 ppb	03:02:59
2	Sn 189.927†	-397.5	-462.8	4.1757 µg/L	4.1757 ppb	03:02:59
2	Ti 334.940†	11270.3	11765.5	-1.6113 µg/L	-1.6113 ppb	03:02:38
2	Tl 190.801†	14.3	37.2	-9.4730 µg/L	-9.4730 ppb	03:02:59
2	U 409.014†	524.3	-98.4	-33.178 µg/L	-33.178 ppb	03:02:38
2	V 292.402†	-1201.8	-1239.2	1.4709 µg/L	1.4709 ppb	03:02:38
2	Zn 213.857†	1682.8	1313.9	1.5651 µg/L	1.5651 ppb	03:02:59
3	Sc RADIAL	105395.1	105395.1	93.7 %		03:01:50
3	Al 396.153Radial†	963653.3	1028203.0	519630 µg/L	519630 ppb	03:01:45
3	Ca 317.933Radial†	1161357.8	1238932.2	491800 µg/L	491800 ppb	03:01:45
3	Fe 238.204 Radial†	34063.5	36342.1	190900 µg/L	190900 ppb	03:01:50
3	K 766.490 Radial†	708.9	61.7	33.456 µg/L	33.456 ppb	03:01:50
3	Mg 279.077 IEC†	83232.2	88807.5	492300 µg/L	492300 ppb	03:01:50
3	Na 589.592 Radial†	-582.9	81.8	22.702 µg/L	22.702 ppb	03:01:50
3	Sr 421.552†	542.0	642.2	3.6176 µg/L	3.6176 ppb	03:01:50
3	Sc 361.383	1856111.4	1856111.4	90.245 %		03:03:05
3	Y 371.029	1115169.1	1115169.1	89.046 %		03:03:05
3	Ag 328.068†	-1993.8	-2181.0	-4.5132 µg/L	-4.5132 ppb	03:03:11
3	As 188.979†	41.2	43.2	-20.063 µg/L	-20.063 ppb	03:03:31
3	B 249.677†	1882.2	1929.9	25.626 µg/L	25.626 ppb	03:03:11
3	Ba 233.527†	128.3	222.9	5.5684 µg/L	5.5684 ppb	03:03:31
3	Be 313.107†	2630.2	-697.0	-0.4506 µg/L	-0.4506 ppb	03:03:11
3	Cd 226.502†	493.7	648.0	2.3232 µg/L	2.3232 ppb	03:03:31
3	Co 228.616†	-96.4	-35.1	-1.7734 µg/L	-1.7734 ppb	03:03:31
3	Cr 267.716†	-193.4	-91.5	-1.9374 µg/L	-1.9374 ppb	03:03:31
3	Cu 324.752†	-1254.5	-4774.4	7.4156 µg/L	7.4156 ppb	03:03:11
3	Mn 257.610†	-2248.9	-2269.4	16.795 µg/L	16.795 ppb	03:03:11
3	Mo 202.031†	-109.8	-113.8	-5.1900 µg/L	-5.1900 ppb	03:03:31
3	Ni 231.604†	273.3	3.4	0.1854 µg/L	0.1854 ppb	03:03:31
3	P 214.914†	217.6	35.2	42.891 µg/L	42.891 ppb	03:03:31
3	Pb 220.353†	-52.7	-112.6	14.380 µg/L	14.380 ppb	03:03:31
3	S 181.975 Axial†	49.2	30.5	58.207 µg/L	58.207 ppb	03:03:31
3	Sb 206.836†	62.6	48.8	2.3384 µg/L	2.3384 ppb	03:03:31
3	Se 196.026†	14.8	2.3	2.8944 µg/L	2.8944 ppb	03:03:31
3	SiO2†	1692.7	-106.0	-20.238 µg/L	-20.238 ppb	03:03:31
3	Si 251.611†	422.8	118.8	16.869 µg/L	16.869 ppb	03:03:31
3	Sn 189.927†	-388.1	-452.5	9.4310 µg/L	9.4310 ppb	03:03:31
3	Ti 334.940†	11360.6	11869.7	-1.3434 µg/L	-1.3434 ppb	03:03:11
3	Tl 190.801†	17.7	41.1	-3.6115 µg/L	-3.6115 ppb	03:03:31
3	U 409.014†	518.3	-104.9	-33.838 µg/L	-33.838 ppb	03:03:11
3	V 292.402†	-1205.0	-1243.3	1.4537 µg/L	1.4537 ppb	03:03:11
3	Zn 213.857†	1702.2	1336.1	2.0851 µg/L	2.0851 ppb	03:03:31

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1861366.0	90.501	%	0.4163				0.46%
Sc RADIAL	105362.9	93.7	%	0.24				0.25%
Y 371.029	1117867.2	89.261	%	0.3493				0.39%
Ag 328.068†	-2132.7	-4.1144	µg/L	0.42992	-4.1144	ppb	0.42992	10.45%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1028939.7	520000	µg/L	631.3	520000	ppb	631.3	0.12%
QC value within limits for Al 396.153Radial Recovery = 104.00%								
As 188.979†	42.8	-20.776	µg/L	14.1599	-20.776	ppb	14.1599	68.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1978.1	27.892	µg/L	1.9725	27.892	ppb	1.9725	7.07%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	228.2	5.7030	µg/L	0.12691	5.7030	ppb	0.12691	2.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-669.8	-0.4333	µg/L	0.04472	-0.4333	ppb	0.04472	10.32%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1239210.0	491910	µg/L	499.1	491910	ppb	499.1	0.10%
QC value within limits for Ca 317.933Radial Recovery = 98.38%								
Cd 226.502†	638.7	2.1103	µg/L	0.26028	2.1103	ppb	0.26028	12.33%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-31.8	-1.6128	µg/L	0.15661	-1.6128	ppb	0.15661	9.71%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -108.2     -2.2861 µg/L      0.34282     -2.2861 ppb       0.34282  15.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -4806.4      7.1012 µg/L      0.27783      7.1012 ppb       0.27783   3.91%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    36262.8      190490 µg/L        542.9      190490 ppb         542.9   0.29%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.24%
K 766.490 Radial†        12.8      6.9161 µg/L     23.01463      6.9161 ppb      23.01463 332.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       88590.7      491100 µg/L       1045.7      491100 ppb        1045.7   0.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.22%
Mn 257.610†           -2224.5      16.885 µg/L       0.1056      16.885 ppb        0.1056   0.63%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -118.1     -5.6934 µg/L      0.98098     -5.6934 ppb       0.98098  17.23%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       82.8      22.965 µg/L       4.4547      22.965 ppb        4.4547  19.40%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -9.7     -0.5273 µg/L      0.69556     -0.5273 ppb      0.69556 131.91%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               30.1      32.445 µg/L       9.0619      32.445 ppb        9.0619  27.93%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -109.3      15.248 µg/L       0.7660      15.248 ppb        0.7660   5.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         39.5      104.52 µg/L       41.332      104.52 ppb        41.332  39.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              44.7     -1.7146 µg/L      4.82816     -1.7146 ppb      4.82816 281.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               8.4      12.069 µg/L      13.5300      12.069 ppb      13.5300 112.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                  -103.2     -19.699 µg/L       2.4410     -19.699 ppb       2.4410  12.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             119.7      17.059 µg/L       0.2175      17.059 ppb        0.2175   1.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -457.6      6.6406 µg/L      2.64274      6.6406 ppb       2.64274  39.80%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             640.9      3.6101 µg/L      0.04342      3.6101 ppb       0.04342   1.20%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           11746.3     -1.6231 µg/L      0.28578     -1.6231 ppb       0.28578  17.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              39.0     -6.7723 µg/L      2.95775     -6.7723 ppb       2.95775  43.67%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -76.4     -31.082 µg/L       4.2150     -31.082 ppb        4.2150  13.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -1240.8      1.4488 µg/L      0.02484      1.4488 ppb       0.02484   1.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            1321.2      1.7679 µg/L      0.27821      1.7679 ppb       0.27821  15.74%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 12/18/2009 03:03:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106602.5	106602.5	94.8	%			03:04:20
1	Al 396.153Radial†	963195.1	1016071.8	513480	µg/L	513480	ppb	03:04:14
1	Ca 317.933Radial†	1163172.8	1226809.8	486990	µg/L	486990	ppb	03:04:14
1	Fe 238.204 Radial†	33843.1	35697.9	187530	µg/L	187530	ppb	03:04:20
1	K 766.490 Radial†	9690.6	9530.1	5167.2	µg/L	5167.2	ppb	03:04:20
1	Mg 279.077 IEC†	83078.7	87639.5	485840	µg/L	485840	ppb	03:04:20
1	Na 589.592 Radial†	16838.3	18470.7	5124.9	µg/L	5124.9	ppb	03:04:20
1	Sr 421.552†	83714.6	88394.0	497.92	µg/L	497.92	ppb	03:04:20
1	Sc 361.383	1856577.2	1856577.2	90.268	%			03:04:54
1	Y 371.029	1117609.1	1117609.1	89.240	%			03:04:54
1	Ag 328.068†	24283.9	26930.4	258.66	µg/L	258.66	ppb	03:05:00
1	As 188.979†	276.9	304.3	479.35	µg/L	479.35	ppb	03:05:20
1	B 249.677†	12255.4	13421.0	536.70	µg/L	536.70	ppb	03:05:00
1	Ba 233.527†	17454.9	19417.5	488.73	µg/L	488.73	ppb	03:05:00
1	Be 313.107†	341165.8	374337.0	236.61	µg/L	236.61	ppb	03:04:54
1	Cd 226.502†	16096.0	17932.3	460.14	µg/L	460.14	ppb	03:05:00
1	Co 228.616†	7834.1	8750.5	420.80	µg/L	420.80	ppb	03:05:20
1	Cr 267.716†	20255.5	22562.1	470.80	µg/L	470.80	ppb	03:05:00
1	Cu 324.752†	68446.9	72442.2	549.95	µg/L	549.95	ppb	03:05:00
1	Mn 257.610†	129310.5	143474.7	478.90	µg/L	478.90	ppb	03:05:00
1	Mo 202.031†	3736.2	4146.9	470.00	µg/L	470.00	ppb	03:05:20
1	Ni 231.604†	7299.6	7787.2	424.23	µg/L	424.23	ppb	03:05:20
1	P 214.914†	1240.6	1168.3	2448.6	µg/L	2448.6	ppb	03:05:20
1	Pb 220.353†	1588.3	1705.5	474.98	µg/L	474.98	ppb	03:05:20
1	S 181.975 Axial†	507.6	538.3	2668.3	µg/L	2668.3	ppb	03:05:20
1	Sb 206.836†	500.6	534.1	483.45	µg/L	483.45	ppb	03:05:20
1	Se 196.026†	1450.8	1593.2	2319.7	µg/L	2319.7	ppb	03:05:20
1	SiO2†	52819.2	56532.2	10796	µg/L	10796	ppb	03:05:00
1	Si 251.611†	60014.1	66134.9	5026.6	µg/L	5026.6	ppb	03:05:00
1	Sn 189.927†	508.7	541.1	491.06	µg/L	491.06	ppb	03:05:20
1	Ti 334.940†	210792.5	232800.2	488.64	µg/L	488.64	ppb	03:05:00
1	Tl 190.801†	285.9	338.2	448.54	µg/L	448.54	ppb	03:05:20
1	U 409.014†	5256.6	5144.1	459.62	µg/L	459.62	ppb	03:05:00
1	V 292.402†	38916.2	43203.9	506.36	µg/L	506.36	ppb	03:05:00
1	Zn 213.857†	17505.3	18842.5	468.68	µg/L	468.68	ppb	03:05:00
2	Sc RADIAL	107246.4	107246.4	95.3	%			03:04:31
2	Al 396.153Radial†	962620.4	1009367.5	510090	µg/L	510090	ppb	03:04:26
2	Ca 317.933Radial†	1158715.6	1214766.7	482210	µg/L	482210	ppb	03:04:26
2	Fe 238.204 Radial†	34318.1	35981.6	189020	µg/L	189020	ppb	03:04:31
2	K 766.490 Radial†	9741.2	9521.7	5162.6	µg/L	5162.6	ppb	03:04:31
2	Mg 279.077 IEC†	83975.0	88053.2	488130	µg/L	488130	ppb	03:04:31
2	Na 589.592 Radial†	17025.4	18560.1	5149.7	µg/L	5149.7	ppb	03:04:31
2	Sr 421.552†	84642.2	88836.6	500.41	µg/L	500.41	ppb	03:04:31
2	Sc 361.383	1848072.7	1848072.7	89.854	%			03:05:26
2	Y 371.029	1111409.3	1111409.3	88.745	%			03:05:26
2	Ag 328.068†	24359.3	27138.1	260.66	µg/L	260.66	ppb	03:05:32
2	As 188.979†	269.7	297.6	467.15	µg/L	467.15	ppb	03:05:53
2	B 249.677†	12320.8	13556.3	542.24	µg/L	542.24	ppb	03:05:32
2	Ba 233.527†	17473.5	19527.2	491.50	µg/L	491.50	ppb	03:05:32
2	Be 313.107†	343176.4	378314.0	239.12	µg/L	239.12	ppb	03:05:26
2	Cd 226.502†	16134.7	18057.4	463.34	µg/L	463.34	ppb	03:05:32
2	Co 228.616†	7841.9	8799.1	423.14	µg/L	423.14	ppb	03:05:53
2	Cr 267.716†	20352.9	22773.7	475.21	µg/L	475.21	ppb	03:05:32
2	Cu 324.752†	68598.0	72959.3	553.91	µg/L	553.91	ppb	03:05:32
2	Mn 257.610†	129575.0	144428.4	482.11	µg/L	482.11	ppb	03:05:32
2	Mo 202.031†	3746.0	4176.9	473.40	µg/L	473.40	ppb	03:05:53
2	Ni 231.604†	7299.1	7823.8	426.23	µg/L	426.23	ppb	03:05:53
2	P 214.914†	1236.4	1170.0	2448.7	µg/L	2448.7	ppb	03:05:53
2	Pb 220.353†	1581.0	1705.4	474.67	µg/L	474.67	ppb	03:05:53

2	S 181.975 Axial†	498.7	530.9	2630.2 µg/L	2630.2 ppb	03:05:53
2	Sb 206.836†	503.9	540.2	489.98 µg/L	489.98 ppb	03:05:53
2	Se 196.026†	1456.0	1606.3	2338.4 µg/L	2338.4 ppb	03:05:53
2	SiO2†	52879.7	56868.8	10860 µg/L	10860 ppb	03:05:32
2	Si 251.611†	60097.8	66533.9	5057.2 µg/L	5057.2 ppb	03:05:32
2	Sn 189.927†	496.8	530.5	485.46 µg/L	485.46 ppb	03:05:53
2	Ti 334.940†	211106.2	234224.0	492.07 µg/L	492.07 ppb	03:05:32
2	Tl 190.801†	278.2	331.1	438.52 µg/L	438.52 ppb	03:05:53
2	U 409.014†	5212.1	5121.4	457.09 µg/L	457.09 ppb	03:05:32
2	V 292.402†	39120.1	43629.3	511.30 µg/L	511.30 ppb	03:05:32
2	Zn 213.857†	17650.2	19093.0	475.16 µg/L	475.16 ppb	03:05:32
3	Sc RADIAL	106254.6	106254.6	94.5 %		03:04:43
3	Al 396.153Radial†	962908.6	1019096.0	515010 µg/L	515010 ppb	03:04:37
3	Ca 317.933Radial†	1159845.6	1227306.0	487180 µg/L	487180 ppb	03:04:37
3	Fe 238.204 Radial†	34116.9	36104.7	189670 µg/L	189670 ppb	03:04:43
3	K 766.490 Radial†	9776.9	9654.9	5234.9 µg/L	5234.9 ppb	03:04:43
3	Mg 279.077 IEC†	83805.9	88696.3	491700 µg/L	491700 ppb	03:04:43
3	Na 589.592 Radial†	16986.4	18685.5	5184.5 µg/L	5184.5 ppb	03:04:43
3	Sr 421.552†	84442.2	89453.5	503.89 µg/L	503.89 ppb	03:04:43
3	Sc 361.383	1850222.1	1850222.1	89.959 %		03:05:59
3	Y 371.029	1113553.8	1113553.8	88.917 %		03:05:59
3	Ag 328.068†	24108.3	26827.6	257.89 µg/L	257.89 ppb	03:06:05
3	As 188.979†	277.7	306.2	482.71 µg/L	482.71 ppb	03:06:26
3	B 249.677†	12153.2	13354.1	533.06 µg/L	533.06 ppb	03:06:05
3	Ba 233.527†	17278.6	19287.9	485.47 µg/L	485.47 ppb	03:06:05
3	Be 313.107†	340734.2	375155.4	237.13 µg/L	237.13 ppb	03:05:59
3	Cd 226.502†	15972.3	17856.1	457.96 µg/L	457.96 ppb	03:06:05
3	Co 228.616†	7827.3	8772.7	421.88 µg/L	421.88 ppb	03:06:26
3	Cr 267.716†	20083.7	22448.2	468.42 µg/L	468.42 ppb	03:06:05
3	Cu 324.752†	67984.3	72188.3	548.62 µg/L	548.62 ppb	03:06:05
3	Mn 257.610†	128012.6	142524.0	476.15 µg/L	476.15 ppb	03:06:05
3	Mo 202.031†	3733.5	4158.2	471.34 µg/L	471.34 ppb	03:06:26
3	Ni 231.604†	7283.2	7796.8	424.76 µg/L	424.76 ppb	03:06:26
3	P 214.914†	1232.7	1164.3	2438.1 µg/L	2438.1 ppb	03:06:26
3	Pb 220.353†	1559.8	1679.8	468.60 µg/L	468.60 ppb	03:06:26
3	S 181.975 Axial†	508.5	541.2	2682.2 µg/L	2682.2 ppb	03:06:26
3	Sb 206.836†	499.1	534.2	483.60 µg/L	483.60 ppb	03:06:26
3	Se 196.026†	1453.6	1601.7	2331.4 µg/L	2331.4 ppb	03:06:26
3	SiO2†	52282.5	56136.6	10720 µg/L	10720 ppb	03:06:05
3	Si 251.611†	59422.2	65705.3	4993.7 µg/L	4993.7 ppb	03:06:05
3	Sn 189.927†	509.7	544.1	494.02 µg/L	494.02 ppb	03:06:26
3	Ti 334.940†	209119.9	231743.1	486.29 µg/L	486.29 ppb	03:06:05
3	Tl 190.801†	285.9	339.3	450.15 µg/L	450.15 ppb	03:06:26
3	U 409.014†	5173.3	5071.5	452.40 µg/L	452.40 ppb	03:06:05
3	V 292.402†	38623.5	43026.6	504.53 µg/L	504.53 ppb	03:06:05
3	Zn 213.857†	17390.8	18781.7	466.67 µg/L	466.67 ppb	03:06:05

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1851624.0	90.027	%	0.2150				0.24%
Sc RADIAL	106701.2	94.9	%	0.45				0.47%
Y 371.029	1114190.7	88.967	%	0.2514				0.28%
Ag 328.068†	26965.4	259.07	µg/L	1.430	259.07	ppb	1.430	0.55%
QC value within limits for Ag 328.068 Recovery = 103.63%								
Al 396.153Radial†	1014845.1	512860	µg/L	2516.3	512860	ppb	2516.3	0.49%
QC value within limits for Al 396.153Radial Recovery = 102.57%								
As 188.979†	302.7	476.40	µg/L	8.185	476.40	ppb	8.185	1.72%
QC value within limits for As 188.979 Recovery = 95.28%								
B 249.677†	13443.8	537.33	µg/L	4.621	537.33	ppb	4.621	0.86%
QC value within limits for B 249.677 Recovery = 107.47%								
Ba 233.527†	19410.9	488.57	µg/L	3.015	488.57	ppb	3.015	0.62%
QC value within limits for Ba 233.527 Recovery = 97.71%								
Be 313.107†	375935.5	237.62	µg/L	1.328	237.62	ppb	1.328	0.56%
QC value within limits for Be 313.107 Recovery = 95.05%								
Ca 317.933Radial†	1222960.8	485460	µg/L	2818.6	485460	ppb	2818.6	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.09%								
Cd 226.502†	17948.6	460.48	µg/L	2.704	460.48	ppb	2.704	0.59%
QC value within limits for Cd 226.502 Recovery = 92.10%								
Co 228.616†	8774.1	421.94	µg/L	1.169	421.94	ppb	1.169	0.28%

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   QC value within limits for Co 228.616  Recovery = 84.39%
Cr 267.716†            22594.7      471.48 µg/L        3.446      471.48 ppb        3.446   0.73%
   QC value within limits for Cr 267.716  Recovery = 94.30%
Cu 324.752†            72529.9      550.83 µg/L        2.750      550.83 ppb        2.750   0.50%
   QC value within limits for Cu 324.752  Recovery = 110.17%
Fe 238.204 Radial†     35928.1      188740 µg/L       1095.9      188740 ppb       1095.9   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.37%
K 766.490 Radial†       9568.9      5188.2 µg/L        40.46      5188.2 ppb        40.46   0.78%
   QC value within limits for K 766.490 Radial  Recovery = 103.76%
Mg 279.077 IEC†        88129.7      488560 µg/L       2952.3      488560 ppb       2952.3   0.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.71%
Mn 257.610†           143475.7      479.05 µg/L        2.984      479.05 ppb        2.984   0.62%
   QC value within limits for Mn 257.610  Recovery = 95.81%
Mo 202.031†             4160.7      471.58 µg/L        1.713      471.58 ppb        1.713   0.36%
   QC value within limits for Mo 202.031  Recovery = 94.32%
Na 589.592 Radial†     18572.1      5153.1 µg/L        29.95      5153.1 ppb        29.95   0.58%
   QC value within limits for Na 589.592 Radial  Recovery = 103.06%
Ni 231.604†             7802.6      425.07 µg/L        1.035      425.07 ppb        1.035   0.24%
   QC value within limits for Ni 231.604  Recovery = 85.01%
P 214.914†              1167.6      2445.1 µg/L         6.06      2445.1 ppb         6.06   0.25%
   QC value within limits for P 214.914  Recovery = 97.80%
Pb 220.353†             1696.9      472.75 µg/L        3.594      472.75 ppb        3.594   0.76%
   QC value within limits for Pb 220.353  Recovery = 94.55%
S 181.975 Axial†         536.8      2660.2 µg/L        26.95      2660.2 ppb        26.95   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 106.41%
Sb 206.836†              536.2      485.68 µg/L        3.726      485.68 ppb        3.726   0.77%
   QC value within limits for Sb 206.836  Recovery = 97.14%
Se 196.026†             1600.4      2329.8 µg/L         9.40      2329.8 ppb         9.40   0.40%
   QC value within limits for Se 196.026  Recovery = 93.19%
SiO2†                  56512.5       10792 µg/L         70.0       10792 ppb         70.0   0.65%
   QC value within limits for SiO2  Recovery = 100.91%
Si 251.611†            66124.7      5025.8 µg/L        31.76      5025.8 ppb        31.76   0.63%
   QC value within limits for Si 251.611  Recovery = 100.52%
Sn 189.927†              538.6      490.18 µg/L        4.345      490.18 ppb        4.345   0.89%
   QC value within limits for Sn 189.927  Recovery = 98.04%
Sr 421.552†            88894.7      500.74 µg/L        2.997      500.74 ppb        2.997   0.60%
   QC value within limits for Sr 421.552  Recovery = 100.15%
Ti 334.940†           232922.4      489.00 µg/L        2.906      489.00 ppb        2.906   0.59%
   QC value within limits for Ti 334.940  Recovery = 97.80%
Tl 190.801†              336.2      445.74 µg/L        6.302      445.74 ppb        6.302   1.41%
   QC value within limits for Tl 190.801  Recovery = 89.15%
U 409.014†              5112.3      456.37 µg/L        3.659      456.37 ppb        3.659   0.80%
   QC value within limits for U 409.014  Recovery = 91.27%
V 292.402†             43286.6      507.40 µg/L        3.499      507.40 ppb        3.499   0.69%
   QC value within limits for V 292.402  Recovery = 101.48%
Zn 213.857†            18905.8      470.17 µg/L        4.436      470.17 ppb        4.436   0.94%
   QC value within limits for Zn 213.857  Recovery = 94.03%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/18/2009 03:06:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106697.5	106697.5	94.9	%			03:07:15
1	Al 396.153Radial†	943125.6	994009.7	502350	µg/L	502350	ppb	03:07:10
1	Ca 317.933Radial†	1139824.0	1201102.7	476780	µg/L	476780	ppb	03:07:10
1	Fe 238.204 Radial†	82968.3	87453.6	459390	µg/L	459390	ppb	03:07:15
1	K 766.490 Radial†	603.9	-58.2	-31.550	µg/L	-31.550	ppb	03:07:15
1	Mg 279.077 IEC†	83141.6	87627.7	485360	µg/L	485360	ppb	03:07:15
1	Na 589.592 Radial†	1662396.9	1753196.5	486450	µg/L	486450	ppb	03:07:10
1	Sr 421.552†	905.0	1017.8	5.7334	µg/L	5.7334	ppb	03:07:15
1	Sc 361.383	1806040.8	1806040.8	87.811	%			03:07:52
1	Y 371.029	1075642.8	1075642.8	85.889	%			03:07:52
1	Ag 328.068†	-3775.9	-4271.7	-2.2685	µg/L	-2.2685	ppb	03:07:52
1	As 188.979†	37.3	40.0	-62.851	µg/L	-62.851	ppb	03:08:13
1	B 249.677†	4456.3	4919.2	73.871	µg/L	73.871	ppb	03:07:52
1	Ba 233.527†	271.5	389.9	9.6824	µg/L	9.6824	ppb	03:08:13
1	Be 313.107†	-2108.4	-6012.5	-3.8184	µg/L	-3.8184	ppb	03:07:52
1	Cd 226.502†	1234.2	1506.4	14.546	µg/L	14.546	ppb	03:07:52
1	Co 228.616†	50.7	129.4	6.0842	µg/L	6.0842	ppb	03:08:13
1	Cr 267.716†	-246.2	-157.6	-3.4040	µg/L	-3.4040	ppb	03:08:13
1	Cu 324.752†	-8173.2	-12692.1	9.3817	µg/L	9.3817	ppb	03:07:52
1	Mn 257.610†	-13032.2	-14618.5	11.353	µg/L	11.353	ppb	03:07:52
1	Mo 202.031†	-195.6	-214.9	-5.9171	µg/L	-5.9171	ppb	03:08:13
1	Ni 231.604†	259.4	-4.0	-0.2160	µg/L	-0.2160	ppb	03:08:13
1	P 214.914†	369.5	214.8	116.24	µg/L	116.24	ppb	03:08:13
1	Pb 220.353†	31.9	-17.8	21.391	µg/L	21.391	ppb	03:08:13
1	S 181.975 Axial†	53.7	37.1	52.984	µg/L	52.984	ppb	03:08:13
1	Sb 206.836†	48.2	34.4	-2.3419	µg/L	-2.3419	ppb	03:08:13
1	Se 196.026†	-90.0	-116.6	18.436	µg/L	18.436	ppb	03:08:13
1	SiO2†	1534.2	-234.5	-44.788	µg/L	-44.788	ppb	03:08:13
1	Si 251.611†	-246.9	-630.8	-39.322	µg/L	-39.322	ppb	03:08:13
1	Sn 189.927†	-448.3	-533.0	-2.9884	µg/L	-2.9884	ppb	03:08:13
1	Ti 334.940†	16654.9	18248.0	13.639	µg/L	13.639	ppb	03:07:52
1	Tl 190.801†	6.2	28.5	-20.609	µg/L	-20.609	ppb	03:08:13
1	U 409.014†	136179.4	154403.7	14426	µg/L	14426	ppb	03:07:52
1	V 292.402†	-4203.9	-4695.5	7.8324	µg/L	7.8324	ppb	03:07:52
1	Zn 213.857†	2844.1	2688.8	10.001	µg/L	10.001	ppb	03:08:13
2	Sc RADIAL	106266.2	106266.2	94.5	%			03:07:28
2	Al 396.153Radial†	942329.4	997201.7	503960	µg/L	503960	ppb	03:07:23
2	Ca 317.933Radial†	1138415.1	1204487.8	478130	µg/L	478130	ppb	03:07:23
2	Fe 238.204 Radial†	82995.1	87837.0	461410	µg/L	461410	ppb	03:07:28
2	K 766.490 Radial†	597.4	-62.5	-33.909	µg/L	-33.909	ppb	03:07:28
2	Mg 279.077 IEC†	82991.9	87825.0	486450	µg/L	486450	ppb	03:07:28
2	Na 589.592 Radial†	1663512.5	1761489.4	488750	µg/L	488750	ppb	03:07:23
2	Sr 421.552†	877.9	993.0	5.5935	µg/L	5.5935	ppb	03:07:28
2	Sc 361.383	1807413.3	1807413.3	87.877	%			03:08:20
2	Y 371.029	1076926.1	1076926.1	85.992	%			03:08:20
2	Ag 328.068†	-3828.8	-4328.7	-2.6202	µg/L	-2.6202	ppb	03:08:20
2	As 188.979†	33.8	35.9	-71.081	µg/L	-71.081	ppb	03:08:41
2	B 249.677†	4505.0	4970.8	75.527	µg/L	75.527	ppb	03:08:20
2	Ba 233.527†	252.6	368.1	9.1340	µg/L	9.1340	ppb	03:08:41
2	Be 313.107†	-2039.3	-5932.1	-3.7678	µg/L	-3.7678	ppb	03:08:20
2	Cd 226.502†	1235.8	1507.2	14.442	µg/L	14.442	ppb	03:08:20
2	Co 228.616†	36.8	113.6	5.3190	µg/L	5.3190	ppb	03:08:41
2	Cr 267.716†	-238.3	-148.4	-3.2143	µg/L	-3.2143	ppb	03:08:41
2	Cu 324.752†	-8396.2	-12938.8	8.0788	µg/L	8.0788	ppb	03:08:20
2	Mn 257.610†	-13052.1	-14629.9	11.570	µg/L	11.570	ppb	03:08:20
2	Mo 202.031†	-196.7	-215.9	-5.9529	µg/L	-5.9529	ppb	03:08:41
2	Ni 231.604†	257.8	-6.1	-0.3303	µg/L	-0.3303	ppb	03:08:41
2	P 214.914†	371.2	216.4	118.31	µg/L	118.31	ppb	03:08:41
2	Pb 220.353†	20.7	-30.5	18.237	µg/L	18.237	ppb	03:08:41

2	S 181.975 Axial†	46.8	29.2	12.025	µg/L	12.025 ppb	03:08:41
2	Sb 206.836†	62.0	50.0	13.090	µg/L	13.090 ppb	03:08:41
2	Se 196.026†	-96.8	-124.2	8.5246	µg/L	8.5246 ppb	03:08:41
2	SiO2†	1568.1	-197.3	-37.671	µg/L	-37.671 ppb	03:08:41
2	Si 251.611†	-247.6	-631.4	-39.630	µg/L	-39.630 ppb	03:08:41
2	Sn 189.927†	-437.6	-520.4	3.9081	µg/L	3.9081 ppb	03:08:41
2	Ti 334.940†	16998.6	18624.7	14.399	µg/L	14.399 ppb	03:08:20
2	Tl 190.801†	7.1	29.4	-19.398	µg/L	-19.398 ppb	03:08:41
2	U 409.014†	136683.3	154859.4	14468	µg/L	14468 ppb	03:08:20
2	V 292.402†	-4223.0	-4713.5	7.8619	µg/L	7.8619 ppb	03:08:20
2	Zn 213.857†	2866.5	2711.7	10.375	µg/L	10.375 ppb	03:08:41
3	Sc RADIAL	106248.4	106248.4	94.5	%		03:07:41
3	Al 396.153Radial†	947724.0	1003080.2	506930	µg/L	506930 ppb	03:07:36
3	Ca 317.933Radial†	1146477.4	1213225.2	481590	µg/L	481590 ppb	03:07:36
3	Fe 238.204 Radial†	83302.1	88176.8	463190	µg/L	463190 ppb	03:07:41
3	K 766.490 Radial†	743.1	91.8	49.785	µg/L	49.785 ppb	03:07:41
3	Mg 279.077 IEC†	83447.8	88322.3	489210	µg/L	489210 ppb	03:07:41
3	Na 589.592 Radial†	1667848.4	1766375.2	490100	µg/L	490100 ppb	03:07:36
3	Sr 421.552†	867.1	981.7	5.5301	µg/L	5.5301 ppb	03:07:41
3	Sc 361.383	1797604.9	1797604.9	87.401	%		03:08:48
3	Y 371.029	1070859.7	1070859.7	85.507	%		03:08:48
3	Ag 328.068†	-3792.8	-4311.3	-2.3282	µg/L	-2.3282 ppb	03:08:48
3	As 188.979†	48.3	52.8	-39.695	µg/L	-39.695 ppb	03:09:08
3	B 249.677†	4520.9	5017.0	77.015	µg/L	77.015 ppb	03:08:48
3	Ba 233.527†	253.3	370.5	9.1924	µg/L	9.1924 ppb	03:09:08
3	Be 313.107†	-2016.3	-5918.4	-3.7592	µg/L	-3.7592 ppb	03:08:48
3	Cd 226.502†	1215.8	1491.9	13.920	µg/L	13.920 ppb	03:08:48
3	Co 228.616†	30.9	107.0	4.9985	µg/L	4.9985 ppb	03:09:08
3	Cr 267.716†	-244.7	-157.3	-3.3998	µg/L	-3.3998 ppb	03:09:08
3	Cu 324.752†	-8262.4	-12837.9	9.1721	µg/L	9.1721 ppb	03:08:48
3	Mn 257.610†	-12944.8	-14588.2	11.927	µg/L	11.927 ppb	03:08:48
3	Mo 202.031†	-216.7	-240.0	-8.5697	µg/L	-8.5697 ppb	03:09:08
3	Ni 231.604†	262.4	0.9	0.0465	µg/L	0.0465 ppb	03:09:08
3	P 214.914†	377.8	226.3	138.49	µg/L	138.49 ppb	03:09:08
3	Pb 220.353†	43.6	-4.3	25.099	µg/L	25.099 ppb	03:09:08
3	S 181.975 Axial†	53.3	36.9	51.086	µg/L	51.086 ppb	03:09:08
3	Sb 206.836†	59.1	47.1	9.8208	µg/L	9.8208 ppb	03:09:08
3	Se 196.026†	-87.0	-113.7	24.535	µg/L	24.535 ppb	03:09:08
3	SiO2†	1582.9	-170.6	-32.571	µg/L	-32.571 ppb	03:09:08
3	Si 251.611†	-231.7	-614.8	-38.162	µg/L	-38.162 ppb	03:09:08
3	Sn 189.927†	-443.9	-530.4	0.5630	µg/L	0.5630 ppb	03:09:08
3	Ti 334.940†	16946.6	18670.7	14.306	µg/L	14.306 ppb	03:08:48
3	Tl 190.801†	7.5	30.0	-18.980	µg/L	-18.980 ppb	03:09:08
3	U 409.014†	136212.0	155168.8	14497	µg/L	14497 ppb	03:08:48
3	V 292.402†	-4253.7	-4775.0	7.3433	µg/L	7.3433 ppb	03:08:48
3	Zn 213.857†	2861.1	2723.4	10.420	µg/L	10.420 ppb	03:09:08

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1803686.3	87.696	%	0.2582				0.29%
Sc RADIAL	106404.1	94.6	%	0.23				0.24%
Y 371.029	1074476.2	85.796	%	0.2553				0.30%
Ag 328.068†	-4303.9	-2.4056	µg/L	0.18820	-2.4056	ppb	0.18820	7.82%
Al 396.153Radial†	998097.2	504420	µg/L	2325.3	504420	ppb	2325.3	0.46%
QC value within limits for Al 396.153Radial Recovery = 100.88%								
As 188.979†	42.9	-57.875	µg/L	16.2738	-57.875	ppb	16.2738	28.12%
B 249.677†	4969.0	75.471	µg/L	1.5727	75.471	ppb	1.5727	2.08%
Ba 233.527†	376.2	9.3362	µg/L	0.30120	9.3362	ppb	0.30120	3.23%
Be 313.107†	-5954.4	-3.7818	µg/L	0.03197	-3.7818	ppb	0.03197	0.85%
Ca 317.933Radial†	1206271.9	478830	µg/L	2483.0	478830	ppb	2483.0	0.52%
QC value within limits for Ca 317.933Radial Recovery = 95.77%								
Cd 226.502†	1501.9	14.303	µg/L	0.3354	14.303	ppb	0.3354	2.35%
Co 228.616†	116.7	5.4672	µg/L	0.55778	5.4672	ppb	0.55778	10.20%
Cr 267.716†	-154.4	-3.3394	µg/L	0.10831	-3.3394	ppb	0.10831	3.24%
Cu 324.752†	-12822.9	8.8775	µg/L	0.69959	8.8775	ppb	0.69959	7.88%
Fe 238.204 Radial†	87822.5	461330	µg/L	1900.4	461330	ppb	1900.4	0.41%
QC value within limits for Fe 238.204 Radial Recovery = 92.27%								
K 766.490 Radial†	-9.6	-5.2244	µg/L	47.65455	-5.2244	ppb	47.65455	912.16%
Mg 279.077 IEC†	87925.0	487010	µg/L	1982.7	487010	ppb	1982.7	0.41%

QC value within limits for Mg 279.077 IEC Recovery = 97.40%

Mn 257.610†	-14612.2	11.616 µg/L	0.2897	11.616 ppb	0.2897	2.49%
Mo 202.031†	-223.6	-6.8133 µg/L	1.52127	-6.8133 ppb	1.52127	22.33%
Na 589.592 Radial†	1760353.7	488430 µg/L	1848.6	488430 ppb	1848.6	0.38%

QC value within limits for Na 589.592 Radial Recovery = 97.69%

Ni 231.604†	-3.1	-0.1666 µg/L	0.19319	-0.1666 ppb	0.19319	115.98%
P 214.914†	219.2	124.35 µg/L	12.290	124.35 ppb	12.290	9.88%
Pb 220.353†	-17.5	21.575 µg/L	3.4349	21.575 ppb	3.4349	15.92%
S 181.975 Axial†	34.4	38.698 µg/L	23.1193	38.698 ppb	23.1193	59.74%
Sb 206.836†	43.8	6.8562 µg/L	8.13173	6.8562 ppb	8.13173	118.60%
Se 196.026†	-118.2	17.165 µg/L	8.0804	17.165 ppb	8.0804	47.07%
SiO2†	-200.8	-38.344 µg/L	6.1361	-38.344 ppb	6.1361	16.00%
Si 251.611†	-625.6	-39.038 µg/L	0.7741	-39.038 ppb	0.7741	1.98%
Sn 189.927†	-527.9	0.4942 µg/L	3.44877	0.4942 ppb	3.44877	697.80%
Sr 421.552†	997.5	5.6190 µg/L	0.10405	5.6190 ppb	0.10405	1.85%
Ti 334.940†	18514.4	14.114 µg/L	0.4142	14.114 ppb	0.4142	2.93%
Tl 190.801†	29.3	-19.662 µg/L	0.8458	-19.662 ppb	0.8458	4.30%
U 409.014†	154810.7	14464 µg/L	35.8	14464 ppb	35.8	0.25%

QC value within limits for U 409.014 Recovery = 96.42%

V 292.402†	-4728.0	7.6792 µg/L	0.29131	7.6792 ppb	0.29131	3.79%
Zn 213.857†	2708.0	10.265 µg/L	0.2297	10.265 ppb	0.2297	2.24%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/18/2009 03:09:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111887.3	111887.3	99.5	%			03:10:00
1	Al 396.153Radial†	904.7	679.7	-24.452	µg/L	-24.452	ppb	03:10:00
1	Ca 317.933Radial†	768.8	277.5	110.14	µg/L	110.14	ppb	03:10:20
1	Fe 238.204 Radial†	2.6	-8.6	271.11	µg/L	271.11	ppb	03:10:20
1	K 766.490 Radial†	542789.4	544970.3	295480	µg/L	295480	ppb	03:09:54
1	Mg 279.077 IEC†	-34.2	-54.2	-58.865	µg/L	-58.865	ppb	03:10:20
1	Na 589.592 Radial†	-101.9	601.5	166.89	µg/L	166.89	ppb	03:10:00
1	Sr 421.552†	1706285.2	1715388.7	9662.7	µg/L	9662.7	ppb	03:09:54
1	Sc 361.383	2018061.1	2018061.1	98.119	%			03:11:52
1	Y 371.029	1209279.4	1209279.4	96.560	%			03:11:52
1	Ag 328.068†	-7178.5	-7287.7	3.5837	µg/L	3.5837	ppb	03:11:52
1	As 188.979†	5061.1	5155.6	9835.7	µg/L	9835.7	ppb	03:11:57
1	B 249.677†	108665.5	110592.7	4908.5	µg/L	4908.5	ppb	03:11:52
1	Ba 233.527†	565241.5	576157.0	14492	µg/L	14492	ppb	03:11:52
1	Be 313.107†	4485313.7	4567678.4	2885.8	µg/L	2885.8	ppb	03:11:41
1	Cd 226.502†	360538.5	367550.3	9723.3	µg/L	9723.3	ppb	03:11:52
1	Co 228.616†	194888.4	198695.8	9557.3	µg/L	9557.3	ppb	03:11:52
1	Cr 267.716†	1138108.6	1160047.1	24171	µg/L	24171	ppb	03:11:52
1	Cu 324.752†	2870512.1	2922150.9	20559	µg/L	20559	ppb	03:11:52
1	Mn 257.610†	2914248.4	2970332.5	9426.5	µg/L	9426.5	ppb	03:11:52
1	Mo 202.031†	85084.9	86723.8	9674.9	µg/L	9674.9	ppb	03:11:52
1	Ni 231.604†	175426.0	178489.2	9723.8	µg/L	9723.8	ppb	03:11:52
1	P 214.914†	8327.6	8281.3	15678	µg/L	15678	ppb	03:11:57
1	Pb 220.353†	96397.6	98191.3	24891	µg/L	24891	ppb	03:11:52
1	S 181.975 Axial†	9765.1	9928.2	51010	µg/L	51010	ppb	03:11:57
1	Sb 206.836†	9863.5	10032.1	9860.8	µg/L	9860.8	ppb	03:11:57
1	Se 196.026†	6643.1	6756.3	9841.0	µg/L	9841.0	ppb	03:11:57
1	SiO2†	510622.6	518428.7	99001	µg/L	99001	ppb	03:11:52
1	Si 251.611†	591450.7	602438.2	45113	µg/L	45113	ppb	03:11:52
1	Sn 189.927†	20918.0	21296.5	10383	µg/L	10383	ppb	03:11:57
1	Ti 334.940†	4308512.2	4390380.5	9731.7	µg/L	9731.7	ppb	03:11:41
1	Tl 190.801†	6168.7	6308.3	9578.1	µg/L	9578.1	ppb	03:11:57
1	U 409.014†	1784.0	1139.0	106.97	µg/L	106.97	ppb	03:11:52
1	V 292.402†	872250.0	889061.6	10090	µg/L	10090	ppb	03:11:52
1	Zn 213.857†	544892.9	554787.4	14784	µg/L	14784	ppb	03:11:52
2	Sc RADIAL	111969.4	111969.4	99.5	%			03:10:32
2	Al 396.153Radial†	817.0	590.9	-71.580	µg/L	-71.580	ppb	03:10:32
2	Ca 317.933Radial†	706.3	214.0	84.962	µg/L	84.962	ppb	03:10:52
2	Fe 238.204 Radial†	-3.6	-14.8	240.82	µg/L	240.82	ppb	03:10:52
2	K 766.490 Radial†	552286.6	554110.6	300440	µg/L	300440	ppb	03:10:26
2	Mg 279.077 IEC†	-42.4	-62.4	-103.13	µg/L	-103.13	ppb	03:10:52
2	Na 589.592 Radial†	-331.5	370.9	102.92	µg/L	102.92	ppb	03:10:32
2	Sr 421.552†	1741202.4	1749207.4	9853.2	µg/L	9853.2	ppb	03:10:26
2	Sc 361.383	2024215.2	2024215.2	98.418	%			03:12:17
2	Y 371.029	1213136.1	1213136.1	96.868	%			03:12:17
2	Ag 328.068†	-7329.7	-7419.2	2.8986	µg/L	2.8986	ppb	03:12:17
2	As 188.979†	5161.9	5242.4	10001	µg/L	10001	ppb	03:12:22
2	B 249.677†	109893.8	111504.1	4948.9	µg/L	4948.9	ppb	03:12:17
2	Ba 233.527†	570885.9	580140.7	14593	µg/L	14593	ppb	03:12:17
2	Be 313.107†	4569513.7	4639333.7	2931.1	µg/L	2931.1	ppb	03:12:06
2	Cd 226.502†	364355.9	370312.0	9796.4	µg/L	9796.4	ppb	03:12:17
2	Co 228.616†	196903.2	200139.1	9626.6	µg/L	9626.6	ppb	03:12:17
2	Cr 267.716†	1149587.7	1168184.2	24341	µg/L	24341	ppb	03:12:17
2	Cu 324.752†	2899438.0	2942647.3	20703	µg/L	20703	ppb	03:12:17
2	Mn 257.610†	2942755.1	2990267.5	9489.7	µg/L	9489.7	ppb	03:12:17
2	Mo 202.031†	85872.0	87259.8	9734.7	µg/L	9734.7	ppb	03:12:17
2	Ni 231.604†	177085.8	179632.1	9786.0	µg/L	9786.0	ppb	03:12:17
2	P 214.914†	8508.8	8439.6	16008	µg/L	16008	ppb	03:12:22
2	Pb 220.353†	97342.5	98852.6	25058	µg/L	25058	ppb	03:12:17

2	S 181.975 Axial†	9943.8	10079.5	51787	µg/L	51787 ppb	03:12:22
2	Sb 206.836†	10049.3	10190.2	10017	µg/L	10017 ppb	03:12:22
2	Se 196.026†	6735.5	6829.6	9947.7	µg/L	9947.7 ppb	03:12:22
2	SiO2†	515360.7	521660.8	99618	µg/L	99618 ppb	03:12:17
2	Si 251.611†	597240.0	606488.0	45407	µg/L	45407 ppb	03:12:17
2	Sn 189.927†	21378.5	21699.6	10579	µg/L	10579 ppb	03:12:22
2	Ti 334.940†	4387455.3	4457242.3	9879.9	µg/L	9879.9 ppb	03:12:06
2	Tl 190.801†	6276.7	6399.0	9715.9	µg/L	9715.9 ppb	03:12:22
2	U 409.014†	1817.6	1167.6	109.66	µg/L	109.66 ppb	03:12:17
2	V 292.402†	881168.3	895420.6	10162	µg/L	10162 ppb	03:12:17
2	Zn 213.857†	549844.2	558130.0	14873	µg/L	14873 ppb	03:12:17
3	Sc RADIAL	111242.2	111242.2	98.9	%		03:11:04
3	Al 396.153Radial†	815.6	594.8	-67.575	µg/L	-67.575 ppb	03:11:04
3	Ca 317.933Radial†	666.8	178.8	70.981	µg/L	70.981 ppb	03:11:24
3	Fe 238.204 Radial†	-8.0	-19.3	215.33	µg/L	215.33 ppb	03:11:24
3	K 766.490 Radial†	552154.6	557604.3	302330	µg/L	302330 ppb	03:10:58
3	Mg 279.077 IEC†	-39.6	-59.8	-90.012	µg/L	-90.012 ppb	03:11:24
3	Na 589.592 Radial†	-405.6	293.8	81.531	µg/L	81.531 ppb	03:11:04
3	Sr 421.552†	1741255.5	1760696.3	9917.9	µg/L	9917.9 ppb	03:10:58
3	Sc 361.383	2024518.1	2024518.1	98.433	%		03:12:42
3	Y 371.029	1214301.7	1214301.7	96.961	%		03:12:42
3	Ag 328.068†	-7280.9	-7368.5	2.9290	µg/L	2.9290 ppb	03:12:42
3	As 188.979†	5168.4	5248.2	10012	µg/L	10012 ppb	03:12:47
3	B 249.677†	109206.9	110789.5	4917.2	µg/L	4917.2 ppb	03:12:42
3	Ba 233.527†	567959.4	577080.7	14516	µg/L	14516 ppb	03:12:42
3	Be 313.107†	4525940.4	4594372.2	2902.7	µg/L	2902.7 ppb	03:12:31
3	Cd 226.502†	362404.5	368274.1	9742.5	µg/L	9742.5 ppb	03:12:42
3	Co 228.616†	195692.4	198879.1	9566.0	µg/L	9566.0 ppb	03:12:42
3	Cr 267.716†	1142567.2	1160877.2	24188	µg/L	24188 ppb	03:12:42
3	Cu 324.752†	2880479.7	2922946.5	20564	µg/L	20564 ppb	03:12:42
3	Mn 257.610†	2928495.2	2975333.3	9442.3	µg/L	9442.3 ppb	03:12:42
3	Mo 202.031†	85416.3	86783.9	9681.6	µg/L	9681.6 ppb	03:12:42
3	Ni 231.604†	176195.4	178700.7	9735.3	µg/L	9735.3 ppb	03:12:42
3	P 214.914†	8465.0	8393.7	15925	µg/L	15925 ppb	03:12:47
3	Pb 220.353†	96806.1	98293.0	24917	µg/L	24917 ppb	03:12:42
3	S 181.975 Axial†	9913.4	10047.2	51621	µg/L	51621 ppb	03:12:47
3	Sb 206.836†	9997.7	10136.2	9964.3	µg/L	9964.3 ppb	03:12:47
3	Se 196.026†	6746.8	6840.1	9962.9	µg/L	9962.9 ppb	03:12:47
3	SiO2†	512972.9	519156.6	99140	µg/L	99140 ppb	03:12:42
3	Si 251.611†	594367.1	603478.5	45182	µg/L	45182 ppb	03:12:42
3	Sn 189.927†	21296.2	21612.7	10537	µg/L	10537 ppb	03:12:47
3	Ti 334.940†	4347702.8	4416190.0	9789.0	µg/L	9789.0 ppb	03:12:31
3	Tl 190.801†	6271.8	6393.1	9706.4	µg/L	9706.4 ppb	03:12:47
3	U 409.014†	1789.7	1139.0	106.98	µg/L	106.98 ppb	03:12:42
3	V 292.402†	875943.2	889978.3	10101	µg/L	10101 ppb	03:12:42
3	Zn 213.857†	546993.2	555150.0	14794	µg/L	14794 ppb	03:12:42

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2022264.8	98.324	%	0.1772				0.18%
Sc RADIAL	111699.7	99.3	%	0.35				0.36%
Y 371.029	1212239.0	96.797	%	0.2099				0.22%
Ag 328.068†	-7358.5	3.1371	µg/L	0.38705	3.1371	ppb	0.38705	12.34%
Al 396.153Radial†	621.8	-54.536	µg/L	26.1298	-54.536	ppb	26.1298	47.91%
As 188.979†	5215.4	9949.8	µg/L	98.97	9949.8	ppb	98.97	0.99%
QC value within limits for As 188.979 Recovery = 99.50%								
B 249.677†	110962.1	4924.9	µg/L	21.29	4924.9	ppb	21.29	0.43%
QC value within limits for B 249.677 Recovery = 98.50%								
Ba 233.527†	577792.8	14534	µg/L	52.5	14534	ppb	52.5	0.36%
QC value within limits for Ba 233.527 Recovery = 96.89%								
Be 313.107†	4600461.4	2906.5	µg/L	22.88	2906.5	ppb	22.88	0.79%
QC value within limits for Be 313.107 Recovery = 96.88%								
Ca 317.933Radial†	223.4	88.694	µg/L	19.8445	88.694	ppb	19.8445	22.37%
Cd 226.502†	368712.2	9754.1	µg/L	37.88	9754.1	ppb	37.88	0.39%
QC value within limits for Cd 226.502 Recovery = 97.54%								
Co 228.616†	199238.0	9583.3	µg/L	37.71	9583.3	ppb	37.71	0.39%
QC value within limits for Co 228.616 Recovery = 95.83%								
Cr 267.716†	1163036.2	24233	µg/L	93.3	24233	ppb	93.3	0.38%
QC value within limits for Cr 267.716 Recovery = 96.93%								

```
Cu 324.752†          2929248.2       20609 µg/L          81.7       20609 ppb          81.7   0.40%
   QC value within limits for Cu 324.752  Recovery = 103.04%
Fe 238.204 Radial†       -14.2      242.42 µg/L        27.928      242.42 ppb        27.928  11.52%
K 766.490 Radial†     552228.4      299420 µg/L        3537.2      299420 ppb        3537.2   1.18%
   QC value within limits for K 766.490 Radial  Recovery = 99.81%
Mg 279.077 IEC†          -58.8     -84.001 µg/L       22.7354     -84.001 ppb       22.7354  27.07%
Mn 257.610†          2978644.4      9452.9 µg/L         32.91      9452.9 ppb         32.91   0.35%
   QC value within limits for Mn 257.610  Recovery = 94.53%
Mo 202.031†            86922.5      9697.1 µg/L         32.76      9697.1 ppb         32.76   0.34%
   QC value within limits for Mo 202.031  Recovery = 96.97%
Na 589.592 Radial†       422.1      117.11 µg/L        44.413      117.11 ppb        44.413  37.92%
Ni 231.604†           178940.7      9748.4 µg/L         33.13      9748.4 ppb         33.13   0.34%
   QC value within limits for Ni 231.604  Recovery = 97.48%
P 214.914†              8371.5      15870 µg/L         171.7       15870 ppb         171.7   1.08%
   QC value within limits for P 214.914  Recovery = 105.80%
Pb 220.353†            98445.6      24955 µg/L          90.3       24955 ppb          90.3   0.36%
   QC value within limits for Pb 220.353  Recovery = 99.82%
S 181.975 Axial†       10018.3      51473 µg/L         409.4       51473 ppb         409.4   0.80%
   QC value within limits for S 181.975 Axial  Recovery = 102.95%
Sb 206.836†            10119.5      9947.5 µg/L         79.64      9947.5 ppb         79.64   0.80%
   QC value within limits for Sb 206.836  Recovery = 99.48%
Se 196.026†             6808.7      9917.2 µg/L         66.46      9917.2 ppb         66.46   0.67%
   QC value within limits for Se 196.026  Recovery = 99.17%
SiO2†                 519748.7      99253 µg/L         323.8       99253 ppb         323.8   0.33%
   QC value within limits for SiO2  Recovery = 92.76%
Si 251.611†           604134.9      45234 µg/L         154.0       45234 ppb         154.0   0.34%
   QC value within limits for Si 251.611  Recovery = 90.47%
Sn 189.927†            21536.3      10500 µg/L         103.4       10500 ppb         103.4   0.98%
   QC value within limits for Sn 189.927  Recovery = 105.00%
Sr 421.552†          1741764.1      9811.2 µg/L        132.67      9811.2 ppb        132.67   1.35%
   QC value within limits for Sr 421.552  Recovery = 98.11%
Ti 334.940†          4421270.9      9800.2 µg/L         74.74      9800.2 ppb         74.74   0.76%
   QC value within limits for Ti 334.940  Recovery = 98.00%
Tl 190.801†             6366.8      9666.8 µg/L         76.93      9666.8 ppb         76.93   0.80%
   QC value within limits for Tl 190.801  Recovery = 96.67%
U 409.014†              1148.5      107.87 µg/L         1.551      107.87 ppb         1.551   1.44%
V 292.402†            891486.8      10118 µg/L          39.0       10118 ppb          39.0   0.39%
   QC value within limits for V 292.402  Recovery = 101.18%
Zn 213.857†           556022.5      14817 µg/L          48.9       14817 ppb          48.9   0.33%
   QC value within limits for Zn 213.857  Recovery = 98.78%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 03:12:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	114633.1	114633.1	102	%			03:13:34
1	Al 396.153Radial†	10448.9	10022.9	5046.5	µg/L	5046.5	ppb	03:13:34
1	Ca 317.933Radial†	13327.2	12581.4	4994.3	µg/L	4994.3	ppb	03:13:55
1	Fe 238.204 Radial†	994.3	964.4	5082.5	µg/L	5082.5	ppb	03:13:55
1	K 766.490 Radial†	10272.1	9384.4	5088.2	µg/L	5088.2	ppb	03:13:34
1	Mg 279.077 IEC†	968.5	930.5	5165.9	µg/L	5165.9	ppb	03:13:55
1	Na 589.592 Radial†	36587.9	36604.7	10156	µg/L	10156	ppb	03:13:34
1	Sr 421.552†	90411.4	88777.0	500.07	µg/L	500.07	ppb	03:13:34
1	Sc 361.383	2072418.5	2072418.5	100.76	%			03:14:58
1	Y 371.029	1255835.6	1255835.6	100.28	%			03:14:58
1	Ag 328.068†	55942.8	55548.0	499.92	µg/L	499.92	ppb	03:15:04
1	As 188.979†	268.7	264.2	502.53	µg/L	502.53	ppb	03:15:24
1	B 249.677†	11464.8	11222.4	496.50	µg/L	496.50	ppb	03:15:04
1	Ba 233.527†	19893.5	19823.8	498.96	µg/L	498.96	ppb	03:15:04
1	Be 313.107†	798687.2	789035.0	498.95	µg/L	498.95	ppb	03:14:58
1	Cd 226.502†	18973.6	18931.0	500.77	µg/L	500.77	ppb	03:15:04
1	Co 228.616†	10394.2	10387.3	499.63	µg/L	499.63	ppb	03:15:04
1	Cr 267.716†	23926.5	23868.3	498.01	µg/L	498.01	ppb	03:15:04
1	Cu 324.752†	75013.7	71062.1	501.05	µg/L	501.05	ppb	03:15:04
1	Mn 257.610†	158267.8	157293.4	499.81	µg/L	499.81	ppb	03:14:58
1	Mo 202.031†	4469.7	4443.8	495.94	µg/L	495.94	ppb	03:15:24
1	Ni 231.604†	9538.2	9166.7	499.39	µg/L	499.39	ppb	03:15:04
1	P 214.914†	1368.4	1152.0	2446.4	µg/L	2446.4	ppb	03:15:24
1	Pb 220.353†	2074.2	2004.4	508.82	µg/L	508.82	ppb	03:15:24
1	S 181.975 Axial†	220.8	195.1	1001.1	µg/L	1001.1	ppb	03:15:24
1	Sb 206.836†	535.6	511.0	505.56	µg/L	505.56	ppb	03:15:24
1	Se 196.026†	365.1	348.2	509.29	µg/L	509.29	ppb	03:15:24
1	SiO2†	30460.9	28248.8	5394.5	µg/L	5394.5	ppb	03:15:04
1	Si 251.611†	33517.7	32914.6	2473.3	µg/L	2473.3	ppb	03:15:04
1	Sn 189.927†	1054.7	1024.3	502.09	µg/L	502.09	ppb	03:15:24
1	Ti 334.940†	227531.3	225091.5	498.66	µg/L	498.66	ppb	03:14:58
1	Tl 190.801†	317.8	336.8	510.63	µg/L	510.63	ppb	03:15:24
1	U 409.014†	6032.2	5307.4	497.60	µg/L	497.60	ppb	03:15:04
1	V 292.402†	44312.7	44069.5	501.49	µg/L	501.49	ppb	03:15:04
1	Zn 213.857†	19540.7	18842.8	500.86	µg/L	500.86	ppb	03:15:04
2	Sc RADIAL	113233.8	113233.8	101	%			03:14:00
2	Al 396.153Radial†	10503.4	10203.7	5137.8	µg/L	5137.8	ppb	03:14:00
2	Ca 317.933Radial†	13321.4	12737.3	5056.1	µg/L	5056.1	ppb	03:14:21
2	Fe 238.204 Radial†	994.0	976.2	5144.5	µg/L	5144.5	ppb	03:14:21
2	K 766.490 Radial†	10239.6	9476.6	5138.1	µg/L	5138.1	ppb	03:14:00
2	Mg 279.077 IEC†	975.1	948.7	5267.2	µg/L	5267.2	ppb	03:14:21
2	Na 589.592 Radial†	36638.4	37098.4	10293	µg/L	10293	ppb	03:14:00
2	Sr 421.552†	90481.6	89943.2	506.64	µg/L	506.64	ppb	03:14:00
2	Sc 361.383	2046520.4	2046520.4	99.503	%			03:15:31
2	Y 371.029	1240511.5	1240511.5	99.054	%			03:15:31
2	Ag 328.068†	55744.1	56050.8	504.44	µg/L	504.44	ppb	03:15:37
2	As 188.979†	265.1	263.9	502.04	µg/L	502.04	ppb	03:15:58
2	B 249.677†	11417.0	11318.3	500.73	µg/L	500.73	ppb	03:15:37
2	Ba 233.527†	19773.2	19952.6	502.20	µg/L	502.20	ppb	03:15:37
2	Be 313.107†	796145.9	796511.6	503.67	µg/L	503.67	ppb	03:15:31
2	Cd 226.502†	18825.7	19020.7	503.14	µg/L	503.14	ppb	03:15:37
2	Co 228.616†	10351.4	10474.9	503.83	µg/L	503.83	ppb	03:15:37
2	Cr 267.716†	23808.7	24050.4	501.81	µg/L	501.81	ppb	03:15:37
2	Cu 324.752†	74592.7	71581.1	504.71	µg/L	504.71	ppb	03:15:37
2	Mn 257.610†	157938.3	158949.9	505.08	µg/L	505.08	ppb	03:15:31
2	Mo 202.031†	4430.9	4460.9	497.86	µg/L	497.86	ppb	03:15:58
2	Ni 231.604†	9475.5	9223.5	502.48	µg/L	502.48	ppb	03:15:37
2	P 214.914†	1355.3	1156.1	2454.9	µg/L	2454.9	ppb	03:15:58
2	Pb 220.353†	2054.2	2010.3	510.34	µg/L	510.34	ppb	03:15:58

2	S 181.975 Axial†	218.6	195.6	1003.6 µg/L	1003.6 ppb	03:15:58
2	Sb 206.836†	524.9	507.0	501.60 µg/L	501.60 ppb	03:15:58
2	Se 196.026†	362.3	350.0	511.99 µg/L	511.99 ppb	03:15:58
2	SiO2†	30273.7	28443.3	5431.6 µg/L	5431.6 ppb	03:15:37
2	Si 251.611†	33385.6	33202.8	2494.9 µg/L	2494.9 ppb	03:15:37
2	Sn 189.927†	1050.7	1033.5	506.66 µg/L	506.66 ppb	03:15:58
2	Ti 334.940†	226776.6	227190.6	503.31 µg/L	503.31 ppb	03:15:31
2	Tl 190.801†	315.4	338.4	513.05 µg/L	513.05 ppb	03:15:58
2	U 409.014†	6024.5	5375.3	503.97 µg/L	503.97 ppb	03:15:37
2	V 292.402†	44043.9	44355.9	504.75 µg/L	504.75 ppb	03:15:37
2	Zn 213.857†	19433.9	18980.8	504.53 µg/L	504.53 ppb	03:15:37
3	Sc RADIAL	115035.5	115035.5	102 %		03:14:26
3	Al 396.153Radial†	10588.2	10123.1	5097.1 µg/L	5097.1 ppb	03:14:26
3	Ca 317.933Radial†	13296.7	12505.8	4964.2 µg/L	4964.2 ppb	03:14:47
3	Fe 238.204 Radial†	996.1	962.8	5074.4 µg/L	5074.4 ppb	03:14:47
3	K 766.490 Radial†	10263.8	9341.0	5064.6 µg/L	5064.6 ppb	03:14:26
3	Mg 279.077 IEC†	966.6	925.3	5137.1 µg/L	5137.1 ppb	03:14:47
3	Na 589.592 Radial†	36945.0	36828.2	10218 µg/L	10218 ppb	03:14:26
3	Sr 421.552†	91205.8	89243.5	502.70 µg/L	502.70 ppb	03:14:26
3	Sc 361.383	2049335.6	2049335.6	99.640 %		03:16:05
3	Y 371.029	1240755.8	1240755.8	99.074 %		03:16:05
3	Ag 328.068†	56363.9	56596.0	509.34 µg/L	509.34 ppb	03:16:10
3	As 188.979†	266.6	265.1	504.19 µg/L	504.19 ppb	03:16:31
3	B 249.677†	11498.3	11384.2	503.68 µg/L	503.68 ppb	03:16:10
3	Ba 233.527†	20054.7	20207.9	508.63 µg/L	508.63 ppb	03:16:10
3	Be 313.107†	796154.1	795420.7	502.98 µg/L	502.98 ppb	03:16:05
3	Cd 226.502†	19039.3	19209.0	508.13 µg/L	508.13 ppb	03:16:10
3	Co 228.616†	10487.4	10597.1	509.71 µg/L	509.71 ppb	03:16:10
3	Cr 267.716†	24220.0	24430.4	509.73 µg/L	509.73 ppb	03:16:10
3	Cu 324.752†	75467.4	72355.9	510.15 µg/L	510.15 ppb	03:16:10
3	Mn 257.610†	158033.8	158827.8	504.68 µg/L	504.68 ppb	03:16:05
3	Mo 202.031†	4438.5	4462.5	498.03 µg/L	498.03 ppb	03:16:31
3	Ni 231.604†	9628.7	9364.1	510.14 µg/L	510.14 ppb	03:16:10
3	P 214.914†	1366.4	1165.3	2474.3 µg/L	2474.3 ppb	03:16:31
3	Pb 220.353†	2055.8	2009.1	510.01 µg/L	510.01 ppb	03:16:31
3	S 181.975 Axial†	218.2	195.0	1000.2 µg/L	1000.2 ppb	03:16:31
3	Sb 206.836†	524.4	505.8	500.35 µg/L	500.35 ppb	03:16:31
3	Se 196.026†	361.9	349.1	510.59 µg/L	510.59 ppb	03:16:31
3	SiO2†	30615.1	28744.1	5489.1 µg/L	5489.1 ppb	03:16:10
3	Si 251.611†	33780.4	33552.8	2521.9 µg/L	2521.9 ppb	03:16:10
3	Sn 189.927†	1045.0	1026.3	503.10 µg/L	503.10 ppb	03:16:31
3	Ti 334.940†	226779.8	226880.8	502.63 µg/L	502.63 ppb	03:16:05
3	Tl 190.801†	312.3	334.8	507.59 µg/L	507.59 ppb	03:16:31
3	U 409.014†	6110.2	5453.0	511.27 µg/L	511.27 ppb	03:16:10
3	V 292.402†	44645.3	44898.7	510.87 µg/L	510.87 ppb	03:16:10
3	Zn 213.857†	19680.2	19201.1	510.39 µg/L	510.39 ppb	03:16:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2056091.5	99.968	%	0.6909				0.69%
Sc RADIAL	114300.8	102	%	0.8				0.83%
Y 371.029	1245701.0	99.468	%	0.7009				0.70%
Ag 328.068†	56064.9	504.56	µg/L	4.713	504.56	ppb	4.713	0.93%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	10116.6	5093.8	µg/L	45.75	5093.8	ppb	45.75	0.90%
QC value within limits for Al 396.153Radial Recovery = 101.88%								
As 188.979†	264.4	502.92	µg/L	1.125	502.92	ppb	1.125	0.22%
QC value within limits for As 188.979 Recovery = 100.58%								
B 249.677†	11308.3	500.30	µg/L	3.610	500.30	ppb	3.610	0.72%
QC value within limits for B 249.677 Recovery = 100.06%								
Ba 233.527†	19994.8	503.26	µg/L	4.921	503.26	ppb	4.921	0.98%
QC value within limits for Ba 233.527 Recovery = 100.65%								
Be 313.107†	793655.8	501.87	µg/L	2.554	501.87	ppb	2.554	0.51%
QC value within limits for Be 313.107 Recovery = 100.37%								
Ca 317.933Radial†	12608.2	5004.9	µg/L	46.85	5004.9	ppb	46.85	0.94%
QC value within limits for Ca 317.933Radial Recovery = 100.10%								
Cd 226.502†	19053.5	504.01	µg/L	3.761	504.01	ppb	3.761	0.75%
QC value within limits for Cd 226.502 Recovery = 100.80%								
Co 228.616†	10486.4	504.39	µg/L	5.064	504.39	ppb	5.064	1.00%

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   QC value within limits for Co 228.616  Recovery = 100.88%
Cr 267.716†            24116.4      503.18 µg/L        5.981      503.18 ppb          5.981   1.19%
   QC value within limits for Cr 267.716  Recovery = 100.64%
Cu 324.752†            71666.3      505.30 µg/L        4.579      505.30 ppb          4.579   0.91%
   QC value within limits for Cu 324.752  Recovery = 101.06%
Fe 238.204 Radial†       967.8      5100.5 µg/L       38.37      5100.5 ppb         38.37   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.01%
K 766.490 Radial†       9400.6      5097.0 µg/L       37.55      5097.0 ppb         37.55   0.74%
   QC value within limits for K 766.490 Radial  Recovery = 101.94%
Mg 279.077 IEC†          934.8      5190.1 µg/L       68.34      5190.1 ppb         68.34   1.32%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.80%
Mn 257.610†           158357.0      503.19 µg/L        2.932      503.19 ppb          2.932   0.58%
   QC value within limits for Mn 257.610  Recovery = 100.64%
Mo 202.031†             4455.7      497.28 µg/L        1.160      497.28 ppb          1.160   0.23%
   QC value within limits for Mo 202.031  Recovery = 99.46%
Na 589.592 Radial†     36843.8       10223 µg/L         68.6       10223 ppb           68.6   0.67%
   QC value within limits for Na 589.592 Radial  Recovery = 102.23%
Ni 231.604†             9251.4      504.00 µg/L        5.537      504.00 ppb          5.537   1.10%
   QC value within limits for Ni 231.604  Recovery = 100.80%
P 214.914†              1157.8      2458.5 µg/L       14.27      2458.5 ppb         14.27   0.58%
   QC value within limits for P 214.914  Recovery = 98.34%
Pb 220.353†             2007.9      509.73 µg/L        0.799      509.73 ppb          0.799   0.16%
   QC value within limits for Pb 220.353  Recovery = 101.95%
S 181.975 Axial†         195.2      1001.6 µg/L        1.78      1001.6 ppb           1.78   0.18%
   QC value within limits for S 181.975 Axial  Recovery = 100.16%
Sb 206.836†              507.9      502.50 µg/L        2.720      502.50 ppb          2.720   0.54%
   QC value within limits for Sb 206.836  Recovery = 100.50%
Se 196.026†              349.1      510.62 µg/L        1.350      510.62 ppb          1.350   0.26%
   QC value within limits for Se 196.026  Recovery = 102.12%
SiO2†                  28478.7      5438.4 µg/L       47.65      5438.4 ppb         47.65   0.88%
   QC value within limits for SiO2  Recovery = 101.70%
Si 251.611†            33223.4      2496.7 µg/L       24.38      2496.7 ppb         24.38   0.98%
   QC value within limits for Si 251.611  Recovery = 99.87%
Sn 189.927†             1028.0      503.95 µg/L        2.400      503.95 ppb          2.400   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.79%
Sr 421.552†            89321.2      503.14 µg/L        3.306      503.14 ppb          3.306   0.66%
   QC value within limits for Sr 421.552  Recovery = 100.63%
Ti 334.940†           226387.6      501.53 µg/L        2.511      501.53 ppb          2.511   0.50%
   QC value within limits for Ti 334.940  Recovery = 100.31%
Tl 190.801†              336.7      510.42 µg/L        2.733      510.42 ppb          2.733   0.54%
   QC value within limits for Tl 190.801  Recovery = 102.08%
U 409.014†              5378.6      504.28 µg/L        6.844      504.28 ppb          6.844   1.36%
   QC value within limits for U 409.014  Recovery = 100.86%
V 292.402†             44441.4      505.70 µg/L        4.764      505.70 ppb          4.764   0.94%
   QC value within limits for V 292.402  Recovery = 101.14%
Zn 213.857†            19008.2      505.26 µg/L        4.809      505.26 ppb          4.809   0.95%
   QC value within limits for Zn 213.857  Recovery = 101.05%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 03:16:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111978.7	111978.7	99.6	%			03:17:12
1	Al 396.153Radial†	201.1	-27.8	-14.075	µg/L	-14.075	ppb	03:17:12
1	Ca 317.933Radial†	481.7	-11.6	-4.5894	µg/L	-4.5894	ppb	03:17:33
1	Fe 238.204 Radial†	12.4	1.2	6.5019	µg/L	6.5019	ppb	03:17:33
1	K 766.490 Radial†	744.3	52.8	28.624	µg/L	28.624	ppb	03:17:12
1	Mg 279.077 IEC†	19.3	-0.4	-2.2236	µg/L	-2.2236	ppb	03:17:33
1	Na 589.592 Radial†	-594.9	106.4	29.512	µg/L	29.512	ppb	03:17:12
1	Sr 421.552†	63.6	127.7	0.7192	µg/L	0.7192	ppb	03:17:12
1	Sc 361.383	2034736.0	2034736.0	98.930	%			03:18:34
1	Y 371.029	1239053.5	1239053.5	98.938	%			03:18:34
1	Ag 328.068†	-33.2	-5.2	-0.0435	µg/L	-0.0435	ppb	03:18:40
1	As 188.979†	8.2	5.9	11.157	µg/L	11.157	ppb	03:19:01
1	B 249.677†	205.8	52.3	2.3188	µg/L	2.3188	ppb	03:18:40
1	Ba 233.527†	-57.4	22.6	0.5693	µg/L	0.5693	ppb	03:19:01
1	Be 313.107†	3864.8	295.1	0.1863	µg/L	0.1863	ppb	03:18:40
1	Cd 226.502†	-53.8	46.5	1.2272	µg/L	1.2272	ppb	03:19:01
1	Co 228.616†	-63.7	7.3	0.3487	µg/L	0.3487	ppb	03:19:01
1	Cr 267.716†	-66.4	55.7	1.1599	µg/L	1.1599	ppb	03:18:40
1	Cu 324.752†	3482.8	136.2	0.9594	µg/L	0.9594	ppb	03:18:40
1	Mn 257.610†	-75.8	146.1	0.4644	µg/L	0.4644	ppb	03:19:01
1	Mo 202.031†	-6.0	1.9	0.2110	µg/L	0.2110	ppb	03:19:01
1	Ni 231.604†	305.2	9.1	0.4937	µg/L	0.4937	ppb	03:19:01
1	P 214.914†	210.4	6.7	14.403	µg/L	14.403	ppb	03:19:01
1	Pb 220.353†	69.8	16.4	4.1690	µg/L	4.1690	ppb	03:19:01
1	S 181.975 Axial†	24.5	0.7	3.5474	µg/L	3.5474	ppb	03:19:01
1	Sb 206.836†	27.3	7.1	7.0385	µg/L	7.0385	ppb	03:19:01
1	Se 196.026†	18.2	4.3	6.1975	µg/L	6.1975	ppb	03:19:01
1	SiO2†	1998.7	38.6	7.3738	µg/L	7.3738	ppb	03:18:40
1	Si 251.611†	396.5	51.1	3.9248	µg/L	3.9248	ppb	03:19:01
1	Sn 189.927†	19.0	-3.2	-1.5677	µg/L	-1.5677	ppb	03:19:01
1	Ti 334.940†	1185.4	479.3	1.0627	µg/L	1.0627	ppb	03:18:40
1	Tl 190.801†	-21.9	-0.7	-1.0384	µg/L	-1.0384	ppb	03:19:01
1	U 409.014†	637.2	-35.1	-3.2988	µg/L	-3.2988	ppb	03:18:40
1	V 292.402†	-54.2	37.1	0.4153	µg/L	0.4153	ppb	03:18:40
1	Zn 213.857†	590.6	46.8	1.2492	µg/L	1.2492	ppb	03:19:01
2	Sc RADIAL	111820.9	111820.9	99.4	%			03:17:38
2	Al 396.153Radial†	241.9	13.5	6.7807	µg/L	6.7807	ppb	03:17:38
2	Ca 317.933Radial†	461.3	-31.4	-12.483	µg/L	-12.483	ppb	03:17:59
2	Fe 238.204 Radial†	12.2	1.0	5.4016	µg/L	5.4016	ppb	03:17:59
2	K 766.490 Radial†	653.8	-37.2	-20.145	µg/L	-20.145	ppb	03:17:38
2	Mg 279.077 IEC†	15.0	-4.8	-26.475	µg/L	-26.475	ppb	03:17:59
2	Na 589.592 Radial†	-691.7	8.2	2.2623	µg/L	2.2623	ppb	03:17:38
2	Sr 421.552†	-28.4	35.2	0.1984	µg/L	0.1984	ppb	03:17:38
2	Sc 361.383	2050897.2	2050897.2	99.716	%			03:19:06
2	Y 371.029	1247948.1	1247948.1	99.648	%			03:19:06
2	Ag 328.068†	-28.2	0.1	0.0046	µg/L	0.0046	ppb	03:19:12
2	As 188.979†	4.7	2.2	4.2460	µg/L	4.2460	ppb	03:19:33
2	B 249.677†	203.4	48.3	2.1423	µg/L	2.1423	ppb	03:19:12
2	Ba 233.527†	-55.4	25.2	0.6330	µg/L	0.6330	ppb	03:19:33
2	Be 313.107†	3883.5	283.0	0.1787	µg/L	0.1787	ppb	03:19:12
2	Cd 226.502†	-63.9	36.8	0.9748	µg/L	0.9748	ppb	03:19:33
2	Co 228.616†	-59.8	11.7	0.5647	µg/L	0.5647	ppb	03:19:33
2	Cr 267.716†	-82.9	39.6	0.8265	µg/L	0.8265	ppb	03:19:12
2	Cu 324.752†	3461.0	86.6	0.6104	µg/L	0.6104	ppb	03:19:12
2	Mn 257.610†	-99.8	122.5	0.3896	µg/L	0.3896	ppb	03:19:33
2	Mo 202.031†	0.0	8.0	0.8875	µg/L	0.8875	ppb	03:19:33
2	Ni 231.604†	308.3	9.8	0.5345	µg/L	0.5345	ppb	03:19:33
2	P 214.914†	215.8	10.5	22.683	µg/L	22.683	ppb	03:19:33
2	Pb 220.353†	78.9	25.0	6.3484	µg/L	6.3484	ppb	03:19:33

2	S 181.975 Axial†	24.6	0.6	3.3414	µg/L	3.3414 ppb	03:19:33
2	Sb 206.836†	20.6	0.1	0.1238	µg/L	0.1238 ppb	03:19:33
2	Se 196.026†	8.3	-5.7	-8.3259	µg/L	-8.3259 ppb	03:19:33
2	SiO2†	2029.3	53.5	10.207	µg/L	10.207 ppb	03:19:12
2	Si 251.611†	391.6	43.1	3.2083	µg/L	3.2083 ppb	03:19:33
2	Sn 189.927†	25.3	2.9	1.3975	µg/L	1.3975 ppb	03:19:33
2	Ti 334.940†	1104.4	388.6	0.8622	µg/L	0.8622 ppb	03:19:12
2	Tl 190.801†	-17.9	3.4	5.1862	µg/L	5.1862 ppb	03:19:33
2	U 409.014†	695.7	18.4	1.7292	µg/L	1.7292 ppb	03:19:12
2	V 292.402†	-46.0	45.9	0.5267	µg/L	0.5267 ppb	03:19:12
2	Zn 213.857†	576.8	28.3	0.7546	µg/L	0.7546 ppb	03:19:33
3	Sc RADIAL	111379.5	111379.5	99.0	%		03:18:04
3	Al 396.153Radial†	210.5	-17.3	-8.7766	µg/L	-8.7766 ppb	03:18:04
3	Ca 317.933Radial†	467.9	-22.9	-9.0931	µg/L	-9.0931 ppb	03:18:24
3	Fe 238.204 Radial†	14.0	2.9	15.302	µg/L	15.302 ppb	03:18:24
3	K 766.490 Radial†	706.4	18.6	10.075	µg/L	10.075 ppb	03:18:04
3	Mg 279.077 IEC†	18.2	-1.4	-7.9693	µg/L	-7.9693 ppb	03:18:24
3	Na 589.592 Radial†	-636.3	61.3	17.017	µg/L	17.017 ppb	03:18:04
3	Sr 421.552†	29.9	94.0	0.5294	µg/L	0.5294 ppb	03:18:04
3	Sc 361.383	2012119.5	2012119.5	97.830	%		03:19:39
3	Y 371.029	1225196.2	1225196.2	97.831	%		03:19:39
3	Ag 328.068†	-45.7	-18.4	-0.1603	µg/L	-0.1603 ppb	03:19:44
3	As 188.979†	4.9	2.6	4.8806	µg/L	4.8806 ppb	03:20:05
3	B 249.677†	192.0	40.5	1.7948	µg/L	1.7948 ppb	03:19:44
3	Ba 233.527†	-59.1	20.3	0.5112	µg/L	0.5112 ppb	03:20:05
3	Be 313.107†	3909.5	384.7	0.2429	µg/L	0.2429 ppb	03:19:44
3	Cd 226.502†	-81.2	17.9	0.4728	µg/L	0.4728 ppb	03:20:05
3	Co 228.616†	-63.4	7.0	0.3349	µg/L	0.3349 ppb	03:20:05
3	Cr 267.716†	-62.1	59.3	1.2362	µg/L	1.2362 ppb	03:19:44
3	Cu 324.752†	3504.6	198.1	1.3967	µg/L	1.3967 ppb	03:19:44
3	Mn 257.610†	-98.8	121.7	0.3880	µg/L	0.3880 ppb	03:20:05
3	Mo 202.031†	2.0	10.0	1.1118	µg/L	1.1118 ppb	03:20:05
3	Ni 231.604†	313.3	20.9	1.1377	µg/L	1.1377 ppb	03:20:05
3	P 214.914†	207.6	6.3	13.421	µg/L	13.421 ppb	03:20:05
3	Pb 220.353†	66.3	13.7	3.4689	µg/L	3.4689 ppb	03:20:05
3	S 181.975 Axial†	21.3	-2.3	-11.588	µg/L	-11.588 ppb	03:20:05
3	Sb 206.836†	24.9	4.9	4.8134	µg/L	4.8134 ppb	03:20:05
3	Se 196.026†	14.0	0.2	0.3333	µg/L	0.3333 ppb	03:20:05
3	SiO2†	2030.0	93.3	17.821	µg/L	17.821 ppb	03:19:44
3	Si 251.611†	396.2	55.3	4.0965	µg/L	4.0965 ppb	03:20:05
3	Sn 189.927†	26.0	4.2	2.0281	µg/L	2.0281 ppb	03:20:05
3	Ti 334.940†	1195.0	502.6	1.1147	µg/L	1.1147 ppb	03:19:44
3	Tl 190.801†	-17.5	3.6	5.3967	µg/L	5.3967 ppb	03:20:05
3	U 409.014†	667.4	3.0	0.2741	µg/L	0.2741 ppb	03:19:44
3	V 292.402†	-48.7	42.2	0.4853	µg/L	0.4853 ppb	03:19:44
3	Zn 213.857†	578.4	41.1	1.0911	µg/L	1.0911 ppb	03:20:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2032584.2	98.825	%	0.9470				0.96%
Sc RADIAL	111726.4	99.3	%	0.28				0.28%
Y 371.029	1237399.3	98.806	%	0.9155				0.93%
Ag 328.068†	-7.9	-0.0664	µg/L	0.08482	-0.0664	ppb	0.08482	127.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.5	-5.3568	µg/L	10.84006	-5.3568	ppb	10.84006	202.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.5	6.7613	µg/L	3.82014	6.7613	ppb	3.82014	56.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	47.0	2.0853	µg/L	0.26664	2.0853	ppb	0.26664	12.79%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.7	0.5712	µg/L	0.06094	0.5712	ppb	0.06094	10.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	320.9	0.2026	µg/L	0.03508	0.2026	ppb	0.03508	17.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-22.0	-8.7219	µg/L	3.95991	-8.7219	ppb	3.95991	45.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	33.7	0.8916	µg/L	0.38400	0.8916	ppb	0.38400	43.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	8.7	0.4161	µg/L	0.12891	0.4161	ppb	0.12891	30.98%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 51.6      1.0742 µg/L       0.21789      1.0742 ppb        0.21789  20.28%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                140.3      0.9888 µg/L       0.39398      0.9888 ppb        0.39398  39.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.7      9.0685 µg/L       5.42631      9.0685 ppb        5.42631  59.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†           11.4      6.1844 µg/L      24.61606      6.1844 ppb       24.61606 398.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             -2.2     -12.223 µg/L       12.6729     -12.223 ppb        12.6729 103.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                130.1      0.4140 µg/L       0.04364      0.4140 ppb        0.04364  10.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                  6.6      0.7368 µg/L       0.46892      0.7368 ppb        0.46892  63.65%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†          58.6      16.263 µg/L       13.6403      16.263 ppb        13.6403  83.87%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 13.3      0.7220 µg/L       0.36064      0.7220 ppb        0.36064  49.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                   7.8      16.836 µg/L        5.0879      16.836 ppb         5.0879  30.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 18.4      4.6621 µg/L       1.50175      4.6621 ppb        1.50175  32.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            -0.3     -1.5664 µg/L       8.67963     -1.5664 ppb        8.67963 554.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                  4.0      3.9919 µg/L       3.52981      3.9919 ppb        3.52981  88.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 -0.4     -0.5983 µg/L       7.30640     -0.5983 ppb        7.30640 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                       61.8      11.801 µg/L        5.4028      11.801 ppb         5.4028  45.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                 49.9      3.7432 µg/L       0.47111      3.7432 ppb        0.47111  12.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                  1.3      0.6193 µg/L       1.92003      0.6193 ppb        1.92003 310.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 85.6      0.4823 µg/L       0.26355      0.4823 ppb        0.26355  54.64%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                456.9      1.0132 µg/L       0.13334      1.0132 ppb        0.13334  13.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                  2.1      3.1815 µg/L       3.65606      3.1815 ppb        3.65606 114.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  -4.6     -0.4318 µg/L       2.58727     -0.4318 ppb        2.58727 599.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  41.7      0.4758 µg/L       0.05630      0.4758 ppb        0.05630  11.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 38.7      1.0316 µg/L       0.25258      1.0316 ppb        0.25258  24.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 03:46:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113927.2	113927.2	101	%			03:46:42
1	Al 396.153Radial†	10279.7	9919.3	4994.2	µg/L	4994.2	ppb	03:46:42
1	Ca 317.933Radial†	13112.5	12450.5	4942.3	µg/L	4942.3	ppb	03:47:02
1	Fe 238.204 Radial†	989.8	966.0	5091.2	µg/L	5091.2	ppb	03:47:02
1	K 766.490 Radial†	9935.8	9114.7	4942.0	µg/L	4942.0	ppb	03:46:42
1	Mg 279.077 IEC†	952.0	920.1	5108.3	µg/L	5108.3	ppb	03:47:02
1	Na 589.592 Radial†	36121.0	36366.1	10090	µg/L	10090	ppb	03:46:42
1	Sr 421.552†	88884.5	87819.3	494.68	µg/L	494.68	ppb	03:46:42
1	Sc 361.383	2053475.1	2053475.1	99.841	%			03:48:05
1	Y 371.029	1243185.3	1243185.3	99.268	%			03:48:05
1	Ag 328.068†	56288.9	56406.8	507.63	µg/L	507.63	ppb	03:48:11
1	As 188.979†	259.7	257.6	490.02	µg/L	490.02	ppb	03:48:31
1	B 249.677†	11455.9	11318.4	500.75	µg/L	500.75	ppb	03:48:11
1	Ba 233.527†	19963.5	20075.9	505.30	µg/L	505.30	ppb	03:48:11
1	Be 313.107†	796231.8	793887.8	502.01	µg/L	502.01	ppb	03:48:05
1	Cd 226.502†	19066.6	19197.9	507.83	µg/L	507.83	ppb	03:48:11
1	Co 228.616†	10412.7	10501.0	505.09	µg/L	505.09	ppb	03:48:11
1	Cr 267.716†	23981.6	24142.6	503.73	µg/L	503.73	ppb	03:48:11
1	Cu 324.752†	74953.3	71688.3	505.46	µg/L	505.46	ppb	03:48:11
1	Mn 257.610†	157751.8	158225.6	502.77	µg/L	502.77	ppb	03:48:05
1	Mo 202.031†	4410.6	4425.5	493.91	µg/L	493.91	ppb	03:48:31
1	Ni 231.604†	9574.7	9290.6	506.13	µg/L	506.13	ppb	03:48:11
1	P 214.914†	1352.0	1148.2	2437.4	µg/L	2437.4	ppb	03:48:31
1	Pb 220.353†	2030.9	1980.0	502.62	µg/L	502.62	ppb	03:48:31
1	S 181.975 Axial†	217.1	193.4	992.26	µg/L	992.26	ppb	03:48:31
1	Sb 206.836†	519.8	500.1	494.73	µg/L	494.73	ppb	03:48:31
1	Se 196.026†	371.6	358.1	523.66	µg/L	523.66	ppb	03:48:31
1	SiO2†	30507.1	28574.0	5456.6	µg/L	5456.6	ppb	03:48:11
1	Si 251.611†	33622.7	33326.6	2504.9	µg/L	2504.9	ppb	03:48:11
1	Sn 189.927†	1044.0	1023.2	501.56	µg/L	501.56	ppb	03:48:31
1	Ti 334.940†	225750.8	225391.3	499.33	µg/L	499.33	ppb	03:48:05
1	Tl 190.801†	305.6	327.5	496.51	µg/L	496.51	ppb	03:48:31
1	U 409.014†	6054.3	5384.7	504.86	µg/L	504.86	ppb	03:48:11
1	V 292.402†	44469.1	44631.8	507.83	µg/L	507.83	ppb	03:48:11
1	Zn 213.857†	19502.9	18983.8	504.60	µg/L	504.60	ppb	03:48:11
2	Sc RADIAL	113882.5	113882.5	101	%			03:47:08
2	Al 396.153Radial†	10363.9	10006.4	5038.2	µg/L	5038.2	ppb	03:47:08
2	Ca 317.933Radial†	13143.0	12485.7	4956.3	µg/L	4956.3	ppb	03:47:28
2	Fe 238.204 Radial†	992.6	969.2	5107.9	µg/L	5107.9	ppb	03:47:28
2	K 766.490 Radial†	10108.8	9289.4	5036.7	µg/L	5036.7	ppb	03:47:08
2	Mg 279.077 IEC†	954.6	923.0	5124.5	µg/L	5124.5	ppb	03:47:28
2	Na 589.592 Radial†	36245.1	36502.7	10128	µg/L	10128	ppb	03:47:08
2	Sr 421.552†	89309.9	88273.9	497.24	µg/L	497.24	ppb	03:47:08
2	Sc 361.383	2034621.2	2034621.2	98.924	%			03:48:38
2	Y 371.029	1232721.4	1232721.4	98.432	%			03:48:38
2	Ag 328.068†	55319.3	55949.1	503.52	µg/L	503.52	ppb	03:48:44
2	As 188.979†	266.8	267.2	508.33	µg/L	508.33	ppb	03:49:05
2	B 249.677†	11185.3	11151.2	493.33	µg/L	493.33	ppb	03:48:44
2	Ba 233.527†	19637.1	19931.3	501.66	µg/L	501.66	ppb	03:48:44
2	Be 313.107†	788746.2	793710.9	501.90	µg/L	501.90	ppb	03:48:38
2	Cd 226.502†	18640.6	18944.2	501.11	µg/L	501.11	ppb	03:48:44
2	Co 228.616†	10232.7	10415.6	500.99	µg/L	500.99	ppb	03:48:44
2	Cr 267.716†	23567.7	23946.7	499.64	µg/L	499.64	ppb	03:48:44
2	Cu 324.752†	73773.6	71191.4	501.96	µg/L	501.96	ppb	03:48:44
2	Mn 257.610†	156476.0	158400.1	503.33	µg/L	503.33	ppb	03:48:38
2	Mo 202.031†	4385.1	4440.6	495.60	µg/L	495.60	ppb	03:49:05
2	Ni 231.604†	9435.4	9238.6	503.30	µg/L	503.30	ppb	03:48:44
2	P 214.914†	1347.5	1156.2	2455.4	µg/L	2455.4	ppb	03:49:05
2	Pb 220.353†	2026.9	1994.8	506.41	µg/L	506.41	ppb	03:49:05

2	S 181.975 Axial†	214.4	192.7	988.56 µg/L	988.56 ppb	03:49:05
2	Sb 206.836†	513.7	498.7	493.37 µg/L	493.37 ppb	03:49:05
2	Se 196.026†	360.3	350.1	512.12 µg/L	512.12 ppb	03:49:05
2	SiO2†	29991.1	28335.5	5411.1 µg/L	5411.1 ppb	03:48:44
2	Si 251.611†	33012.7	33022.0	2481.4 µg/L	2481.4 ppb	03:48:44
2	Sn 189.927†	1040.8	1029.6	504.70 µg/L	504.70 ppb	03:49:05
2	Ti 334.940†	223999.0	225715.7	500.04 µg/L	500.04 ppb	03:48:38
2	Tl 190.801†	312.2	337.0	510.99 µg/L	510.99 ppb	03:49:05
2	U 409.014†	5857.2	5241.6	491.41 µg/L	491.41 ppb	03:48:44
2	V 292.402†	43690.5	44257.5	503.60 µg/L	503.60 ppb	03:48:44
2	Zn 213.857†	19151.1	18809.2	499.94 µg/L	499.94 ppb	03:48:44
3	Sc RADIAL	113273.9	113273.9	101 %		03:47:34
3	Al 396.153Radial†	10271.6	9969.8	5019.6 µg/L	5019.6 ppb	03:47:34
3	Ca 317.933Radial†	13202.0	12614.0	5007.2 µg/L	5007.2 ppb	03:47:54
3	Fe 238.204 Radial†	994.4	976.3	5145.1 µg/L	5145.1 ppb	03:47:54
3	K 766.490 Radial†	9858.4	9094.5	4931.0 µg/L	4931.0 ppb	03:47:34
3	Mg 279.077 IEC†	966.7	940.1	5219.2 µg/L	5219.2 ppb	03:47:54
3	Na 589.592 Radial†	35835.0	36287.8	10068 µg/L	10068 ppb	03:47:34
3	Sr 421.552†	88381.9	87826.3	494.72 µg/L	494.72 ppb	03:47:34
3	Sc 361.383	2028971.2	2028971.2	98.650 %		03:49:12
3	Y 371.029	1228618.1	1228618.1	98.104 %		03:49:12
3	Ag 328.068†	55473.9	56261.5	506.34 µg/L	506.34 ppb	03:49:18
3	As 188.979†	265.3	266.4	506.78 µg/L	506.78 ppb	03:49:38
3	B 249.677†	11294.8	11293.7	499.64 µg/L	499.64 ppb	03:49:18
3	Ba 233.527†	19674.8	20024.8	504.02 µg/L	504.02 ppb	03:49:18
3	Be 313.107†	786144.5	793293.9	501.64 µg/L	501.64 ppb	03:49:12
3	Cd 226.502†	18676.7	19033.3	503.48 µg/L	503.48 ppb	03:49:18
3	Co 228.616†	10276.5	10488.9	504.52 µg/L	504.52 ppb	03:49:18
3	Cr 267.716†	23654.1	24100.6	502.86 µg/L	502.86 ppb	03:49:18
3	Cu 324.752†	74058.9	71688.3	505.47 µg/L	505.47 ppb	03:49:18
3	Mn 257.610†	155886.4	158242.8	502.84 µg/L	502.84 ppb	03:49:12
3	Mo 202.031†	4392.9	4460.9	497.86 µg/L	497.86 ppb	03:49:38
3	Ni 231.604†	9421.7	9251.3	503.99 µg/L	503.99 ppb	03:49:18
3	P 214.914†	1349.3	1161.7	2466.9 µg/L	2466.9 ppb	03:49:38
3	Pb 220.353†	2025.7	1999.3	507.53 µg/L	507.53 ppb	03:49:38
3	S 181.975 Axial†	220.2	199.2	1022.0 µg/L	1022.0 ppb	03:49:38
3	Sb 206.836†	525.4	512.0	506.59 µg/L	506.59 ppb	03:49:38
3	Se 196.026†	364.4	355.3	519.71 µg/L	519.71 ppb	03:49:38
3	SiO2†	30083.7	28513.8	5445.1 µg/L	5445.1 ppb	03:49:18
3	Si 251.611†	33192.0	33296.7	2502.5 µg/L	2502.5 ppb	03:49:18
3	Sn 189.927†	1034.7	1026.4	503.17 µg/L	503.17 ppb	03:49:38
3	Ti 334.940†	223139.6	225475.1	499.51 µg/L	499.51 ppb	03:49:12
3	Tl 190.801†	312.3	338.0	512.43 µg/L	512.43 ppb	03:49:38
3	U 409.014†	6005.7	5408.7	507.10 µg/L	507.10 ppb	03:49:18
3	V 292.402†	43923.0	44616.2	507.69 µg/L	507.69 ppb	03:49:18
3	Zn 213.857†	19230.5	18943.6	503.52 µg/L	503.52 ppb	03:49:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2039022.5	99.138	%	0.6239				0.63%
Sc RADIAL	113694.5	101	%	0.3				0.32%
Y 371.029	1234841.6	98.601	%	0.5998				0.61%
Ag 328.068†	56205.8	505.83	µg/L	2.104	505.83	ppb	2.104	0.42%
QC value within limits for Ag 328.068 Recovery = 101.17%								
Al 396.153Radial†	9965.2	5017.3	µg/L	22.07	5017.3	ppb	22.07	0.44%
QC value within limits for Al 396.153Radial Recovery = 100.35%								
As 188.979†	263.8	501.71	µg/L	10.155	501.71	ppb	10.155	2.02%
QC value within limits for As 188.979 Recovery = 100.34%								
B 249.677†	11254.4	497.91	µg/L	4.005	497.91	ppb	4.005	0.80%
QC value within limits for B 249.677 Recovery = 99.58%								
Ba 233.527†	20010.7	503.66	µg/L	1.847	503.66	ppb	1.847	0.37%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 313.107†	793630.9	501.85	µg/L	0.193	501.85	ppb	0.193	0.04%
QC value within limits for Be 313.107 Recovery = 100.37%								
Ca 317.933Radial†	12516.7	4968.6	µg/L	34.16	4968.6	ppb	34.16	0.69%
QC value within limits for Ca 317.933Radial Recovery = 99.37%								
Cd 226.502†	19058.4	504.14	µg/L	3.408	504.14	ppb	3.408	0.68%
QC value within limits for Cd 226.502 Recovery = 100.83%								
Co 228.616†	10468.5	503.53	µg/L	2.222	503.53	ppb	2.222	0.44%

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   QC value within limits for Co 228.616  Recovery = 100.71%
Cr 267.716†            24063.3      502.08 µg/L        2.153      502.08 ppb          2.153   0.43%
   QC value within limits for Cr 267.716  Recovery = 100.42%
Cu 324.752†            71522.7      504.29 µg/L        2.020      504.29 ppb          2.020   0.40%
   QC value within limits for Cu 324.752  Recovery = 100.86%
Fe 238.204 Radial†       970.5      5114.7 µg/L       27.58      5114.7 ppb          27.58   0.54%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.29%
K 766.490 Radial†       9166.2      4969.9 µg/L       58.11      4969.9 ppb          58.11   1.17%
   QC value within limits for K 766.490 Radial  Recovery = 99.40%
Mg 279.077 IEC†          927.7      5150.7 µg/L       59.93      5150.7 ppb          59.93   1.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.01%
Mn 257.610†           158289.5      502.98 µg/L       0.305      502.98 ppb          0.305   0.06%
   QC value within limits for Mn 257.610  Recovery = 100.60%
Mo 202.031†             4442.4      495.79 µg/L       1.983      495.79 ppb          1.983   0.40%
   QC value within limits for Mo 202.031  Recovery = 99.16%
Na 589.592 Radial†     36385.5       10096 µg/L        30.2       10096 ppb           30.2   0.30%
   QC value within limits for Na 589.592 Radial  Recovery = 100.96%
Ni 231.604†             9260.2      504.48 µg/L       1.475      504.48 ppb          1.475   0.29%
   QC value within limits for Ni 231.604  Recovery = 100.90%
P 214.914†              1155.4      2453.2 µg/L       14.86      2453.2 ppb          14.86   0.61%
   QC value within limits for P 214.914  Recovery = 98.13%
Pb 220.353†             1991.4      505.52 µg/L       2.572      505.52 ppb          2.572   0.51%
   QC value within limits for Pb 220.353  Recovery = 101.10%
S 181.975 Axial†         195.1      1000.9 µg/L       18.33      1000.9 ppb          18.33   1.83%
   QC value within limits for S 181.975 Axial  Recovery = 100.09%
Sb 206.836†              503.6      498.23 µg/L       7.271      498.23 ppb          7.271   1.46%
   QC value within limits for Sb 206.836  Recovery = 99.65%
Se 196.026†              354.5      518.50 µg/L       5.865      518.50 ppb          5.865   1.13%
   QC value within limits for Se 196.026  Recovery = 103.70%
SiO2†                  28474.4      5437.6 µg/L       23.68      5437.6 ppb          23.68   0.44%
   QC value within limits for SiO2  Recovery = 101.68%
Si 251.611†            33215.1      2496.3 µg/L       12.95      2496.3 ppb          12.95   0.52%
   QC value within limits for Si 251.611  Recovery = 99.85%
Sn 189.927†             1026.4      503.14 µg/L       1.569      503.14 ppb          1.569   0.31%
   QC value within limits for Sn 189.927  Recovery = 100.63%
Sr 421.552†            87973.2      495.55 µg/L       1.467      495.55 ppb          1.467   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.11%
Ti 334.940†           225527.4      499.63 µg/L       0.373      499.63 ppb          0.373   0.07%
   QC value within limits for Ti 334.940  Recovery = 99.93%
Tl 190.801†              334.2      506.64 µg/L       8.807      506.64 ppb          8.807   1.74%
   QC value within limits for Tl 190.801  Recovery = 101.33%
U 409.014†              5345.0      501.12 µg/L       8.482      501.12 ppb          8.482   1.69%
   QC value within limits for U 409.014  Recovery = 100.22%
V 292.402†             44501.9      506.37 µg/L       2.402      506.37 ppb          2.402   0.47%
   QC value within limits for V 292.402  Recovery = 101.27%
Zn 213.857†            18912.2      502.68 µg/L       2.440      502.68 ppb          2.440   0.49%
   QC value within limits for Zn 213.857  Recovery = 100.54%
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 03:49:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111094.3	111094.3	98.8	%			03:50:22
1	Al 396.153Radial†	614.8	392.6	198.04	µg/L	198.04	ppb	03:50:22
1	Ca 317.933Radial†	932.9	449.1	178.27	µg/L	178.27	ppb	03:50:43
1	Fe 238.204 Radial†	29.1	18.2	95.963	µg/L	95.963	ppb	03:50:43
1	K 766.490 Radial†	1057.5	375.8	203.77	µg/L	203.77	ppb	03:50:22
1	Mg 279.077 IEC†	69.7	50.8	281.69	µg/L	281.69	ppb	03:50:43
1	Na 589.592 Radial†	465.4	1175.2	326.06	µg/L	326.06	ppb	03:50:22
1	Sr 421.552†	847.0	921.3	5.1899	µg/L	5.1899	ppb	03:50:22
1	Sc 361.383	2038146.3	2038146.3	99.096	%			03:51:44
1	Y 371.029	1241543.0	1241543.0	99.136	%			03:51:44
1	Ag 328.068†	589.5	623.2	5.6089	µg/L	5.6089	ppb	03:51:50
1	As 188.979†	18.2	15.9	30.227	µg/L	30.227	ppb	03:52:11
1	B 249.677†	1263.2	1119.0	49.635	µg/L	49.635	ppb	03:51:50
1	Ba 233.527†	122.2	204.0	5.1357	µg/L	5.1357	ppb	03:52:11
1	Be 313.107†	11610.2	8104.6	5.1249	µg/L	5.1249	ppb	03:51:50
1	Cd 226.502†	93.3	195.1	5.1938	µg/L	5.1938	ppb	03:52:11
1	Co 228.616†	33.8	105.8	5.0995	µg/L	5.0995	ppb	03:52:11
1	Cr 267.716†	128.6	252.6	5.2692	µg/L	5.2692	ppb	03:51:50
1	Cu 324.752†	4758.1	1417.2	9.9912	µg/L	9.9912	ppb	03:51:50
1	Mn 257.610†	3094.4	3345.3	10.628	µg/L	10.628	ppb	03:51:50
1	Mo 202.031†	80.0	88.7	9.8959	µg/L	9.8959	ppb	03:52:11
1	Ni 231.604†	392.1	96.3	5.2474	µg/L	5.2474	ppb	03:52:11
1	P 214.914†	274.0	70.5	151.90	µg/L	151.90	ppb	03:52:11
1	Pb 220.353†	99.5	46.3	11.723	µg/L	11.723	ppb	03:52:11
1	S 181.975 Axial†	43.1	19.4	99.803	µg/L	99.803	ppb	03:52:11
1	Sb 206.836†	29.0	8.7	8.6136	µg/L	8.6136	ppb	03:52:11
1	Se 196.026†	41.2	27.4	39.938	µg/L	39.938	ppb	03:52:11
1	SiO2†	3153.2	1200.3	229.21	µg/L	229.21	ppb	03:51:50
1	Si 251.611†	1655.7	1321.2	100.45	µg/L	100.45	ppb	03:52:11
1	Sn 189.927†	38.4	16.3	8.0588	µg/L	8.0588	ppb	03:52:11
1	Ti 334.940†	3101.5	2410.9	5.3340	µg/L	5.3340	ppb	03:51:50
1	Tl 190.801†	-8.2	13.2	19.921	µg/L	19.921	ppb	03:52:11
1	U 409.014†	1265.2	597.5	56.098	µg/L	56.098	ppb	03:51:50
1	V 292.402†	362.6	457.9	5.3292	µg/L	5.3292	ppb	03:51:50
1	Zn 213.857†	924.9	383.2	10.208	µg/L	10.208	ppb	03:52:11
2	Sc RADIAL	111548.5	111548.5	99.2	%			03:50:48
2	Al 396.153Radial†	610.5	385.8	194.58	µg/L	194.58	ppb	03:50:48
2	Ca 317.933Radial†	939.5	451.9	179.40	µg/L	179.40	ppb	03:51:08
2	Fe 238.204 Radial†	30.7	19.8	103.90	µg/L	103.90	ppb	03:51:08
2	K 766.490 Radial†	1072.8	386.9	209.76	µg/L	209.76	ppb	03:50:48
2	Mg 279.077 IEC†	65.8	46.5	257.90	µg/L	257.90	ppb	03:51:08
2	Na 589.592 Radial†	387.1	1094.2	303.61	µg/L	303.61	ppb	03:50:48
2	Sr 421.552†	850.3	921.1	5.1887	µg/L	5.1887	ppb	03:50:48
2	Sc 361.383	2036202.8	2036202.8	99.001	%			03:52:17
2	Y 371.029	1240677.7	1240677.7	99.067	%			03:52:17
2	Ag 328.068†	517.2	550.7	4.9651	µg/L	4.9651	ppb	03:52:22
2	As 188.979†	16.4	14.0	26.718	µg/L	26.718	ppb	03:52:43
2	B 249.677†	1237.2	1093.9	48.520	µg/L	48.520	ppb	03:52:22
2	Ba 233.527†	126.2	208.2	5.2406	µg/L	5.2406	ppb	03:52:43
2	Be 313.107†	11605.5	8111.1	5.1290	µg/L	5.1290	ppb	03:52:22
2	Cd 226.502†	95.8	197.7	5.2555	µg/L	5.2555	ppb	03:52:43
2	Co 228.616†	23.2	95.2	4.5910	µg/L	4.5910	ppb	03:52:43
2	Cr 267.716†	160.1	284.5	5.9350	µg/L	5.9350	ppb	03:52:22
2	Cu 324.752†	4639.7	1302.2	9.1842	µg/L	9.1842	ppb	03:52:22
2	Mn 257.610†	3066.6	3320.2	10.550	µg/L	10.550	ppb	03:52:22
2	Mo 202.031†	83.9	92.6	10.339	µg/L	10.339	ppb	03:52:43
2	Ni 231.604†	385.9	90.4	4.9225	µg/L	4.9225	ppb	03:52:43
2	P 214.914†	280.9	77.7	167.80	µg/L	167.80	ppb	03:52:43
2	Pb 220.353†	108.5	55.5	14.053	µg/L	14.053	ppb	03:52:43

2	S 181.975 Axial†	43.0	19.4	99.730 µg/L	99.730 ppb	03:52:43
2	Sb 206.836†	35.2	15.0	14.881 µg/L	14.881 ppb	03:52:43
2	Se 196.026†	31.6	17.8	25.943 µg/L	25.943 ppb	03:52:43
2	SiO2†	3143.5	1193.6	227.93 µg/L	227.93 ppb	03:52:22
2	Si 251.611†	1677.7	1345.0	102.19 µg/L	102.19 ppb	03:52:43
2	Sn 189.927†	41.7	19.7	9.7036 µg/L	9.7036 ppb	03:52:43
2	Ti 334.940†	3086.7	2398.9	5.3074 µg/L	5.3074 ppb	03:52:22
2	Tl 190.801†	-10.9	10.4	15.759 µg/L	15.759 ppb	03:52:43
2	U 409.014†	1190.5	523.3	49.124 µg/L	49.124 ppb	03:52:22
2	V 292.402†	401.0	497.0	5.7631 µg/L	5.7631 ppb	03:52:22
2	Zn 213.857†	933.7	393.0	10.473 µg/L	10.473 ppb	03:52:43
3	Sc RADIAL	111700.6	111700.6	99.3 %		03:51:14
3	Al 396.153Radial†	594.8	369.2	186.16 µg/L	186.16 ppb	03:51:14
3	Ca 317.933Radial†	938.3	449.5	178.41 µg/L	178.41 ppb	03:51:34
3	Fe 238.204 Radial†	29.3	18.3	96.264 µg/L	96.264 ppb	03:51:34
3	K 766.490 Radial†	949.9	261.7	141.89 µg/L	141.89 ppb	03:51:14
3	Mg 279.077 IEC†	74.4	55.1	305.72 µg/L	305.72 ppb	03:51:34
3	Na 589.592 Radial†	396.2	1102.9	306.02 µg/L	306.02 ppb	03:51:14
3	Sr 421.552†	857.5	927.2	5.2230 µg/L	5.2230 ppb	03:51:14
3	Sc 361.383	2041519.0	2041519.0	99.260 %		03:52:49
3	Y 371.029	1242687.6	1242687.6	99.228 %		03:52:49
3	Ag 328.068†	532.8	565.1	5.0898 µg/L	5.0898 ppb	03:52:54
3	As 188.979†	16.3	13.9	26.521 µg/L	26.521 ppb	03:53:15
3	B 249.677†	1264.7	1118.4	49.609 µg/L	49.609 ppb	03:52:54
3	Ba 233.527†	124.7	206.3	5.1936 µg/L	5.1936 ppb	03:53:15
3	Be 313.107†	11509.5	7983.9	5.0485 µg/L	5.0485 ppb	03:52:54
3	Cd 226.502†	91.1	192.6	5.1279 µg/L	5.1279 ppb	03:53:15
3	Co 228.616†	32.5	104.5	5.0385 µg/L	5.0385 ppb	03:53:15
3	Cr 267.716†	126.9	250.6	5.2285 µg/L	5.2285 ppb	03:52:54
3	Cu 324.752†	4693.2	1343.9	9.4753 µg/L	9.4753 ppb	03:52:54
3	Mn 257.610†	3116.1	3362.0	10.682 µg/L	10.682 ppb	03:52:54
3	Mo 202.031†	87.7	96.3	10.747 µg/L	10.747 ppb	03:53:15
3	Ni 231.604†	383.0	86.5	4.7124 µg/L	4.7124 ppb	03:53:15
3	P 214.914†	277.1	73.2	157.96 µg/L	157.96 ppb	03:53:15
3	Pb 220.353†	107.6	54.2	13.738 µg/L	13.738 ppb	03:53:15
3	S 181.975 Axial†	40.7	16.9	86.936 µg/L	86.936 ppb	03:53:15
3	Sb 206.836†	25.5	5.2	5.1246 µg/L	5.1246 ppb	03:53:15
3	Se 196.026†	34.7	20.9	30.421 µg/L	30.421 ppb	03:53:15
3	SiO2†	3148.8	1190.6	227.36 µg/L	227.36 ppb	03:52:54
3	Si 251.611†	1652.9	1315.6	99.963 µg/L	99.963 ppb	03:53:15
3	Sn 189.927†	42.0	19.8	9.7884 µg/L	9.7884 ppb	03:53:15
3	Ti 334.940†	3060.1	2364.0	5.2301 µg/L	5.2301 ppb	03:52:54
3	Tl 190.801†	-5.1	16.2	24.523 µg/L	24.523 ppb	03:53:15
3	U 409.014†	1259.0	589.1	55.313 µg/L	55.313 ppb	03:52:54
3	V 292.402†	359.9	454.6	5.2969 µg/L	5.2969 ppb	03:52:54
3	Zn 213.857†	933.5	390.3	10.401 µg/L	10.401 ppb	03:53:15

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2038622.7	99.119	%	0.1308				0.13%
Sc RADIAL	111447.8	99.1	%	0.28				0.28%
Y 371.029	1241636.1	99.144	%	0.0805				0.08%
Ag 328.068†	579.7	5.2213	µg/L	0.34141	5.2213	ppb	0.34141	6.54%
QC value within limits for Ag 328.068 Recovery = 104.43%								
Al 396.153Radial†	382.5	192.93	µg/L	6.110	192.93	ppb	6.110	3.17%
QC value within limits for Al 396.153Radial Recovery = 96.46%								
As 188.979†	14.6	27.822	µg/L	2.0850	27.822	ppb	2.0850	7.49%
QC value within limits for As 188.979 Recovery = 92.74%								
B 249.677†	1110.5	49.255	µg/L	0.6361	49.255	ppb	0.6361	1.29%
QC value within limits for B 249.677 Recovery = 98.51%								
Ba 233.527†	206.2	5.1900	µg/L	0.05255	5.1900	ppb	0.05255	1.01%
QC value within limits for Ba 233.527 Recovery = 103.80%								
Be 313.107†	8066.5	5.1008	µg/L	0.04532	5.1008	ppb	0.04532	0.89%
QC value within limits for Be 313.107 Recovery = 102.02%								
Ca 317.933Radial†	450.2	178.69	µg/L	0.613	178.69	ppb	0.613	0.34%
QC value within limits for Ca 317.933Radial Recovery = 89.35%								
Cd 226.502†	195.1	5.1924	µg/L	0.06381	5.1924	ppb	0.06381	1.23%
QC value within limits for Cd 226.502 Recovery = 103.85%								
Co 228.616†	101.8	4.9097	µg/L	0.27763	4.9097	ppb	0.27763	5.65%

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   QC value within limits for Co 228.616  Recovery = 98.19%
Cr 267.716†              262.5      5.4776 µg/L       0.39668      5.4776 ppb        0.39668   7.24%
   QC value within limits for Cr 267.716  Recovery = 109.55%
Cu 324.752†             1354.4      9.5503 µg/L       0.40871      9.5503 ppb        0.40871   4.28%
   QC value within limits for Cu 324.752  Recovery = 95.50%
Fe 238.204 Radial†        18.8      98.710 µg/L        4.5000     98.710 ppb         4.5000   4.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.71%
K 766.490 Radial†        341.5      185.14 µg/L        37.572     185.14 ppb         37.572  20.29%
   QC value within limits for K 766.490 Radial  Recovery = 123.43%
Mg 279.077 IEC†           50.8      281.77 µg/L        23.911     281.77 ppb         23.911   8.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 93.92%
Mn 257.610†             3342.5      10.620 µg/L        0.0663     10.620 ppb         0.0663   0.62%
   QC value within limits for Mn 257.610  Recovery = 106.20%
Mo 202.031†               92.5      10.327 µg/L        0.4258     10.327 ppb         0.4258   4.12%
   QC value within limits for Mo 202.031  Recovery = 103.27%
Na 589.592 Radial†      1124.1      311.90 µg/L        12.325     311.90 ppb         12.325   3.95%
   QC value within limits for Na 589.592 Radial  Recovery = 103.97%
Ni 231.604†               91.1      4.9608 µg/L       0.26956     4.9608 ppb        0.26956   5.43%
   QC value within limits for Ni 231.604  Recovery = 99.22%
P 214.914†                73.8      159.22 µg/L         8.024     159.22 ppb         8.024   5.04%
   QC value within limits for P 214.914  Recovery = 106.15%
Pb 220.353†               52.0      13.171 µg/L        1.2643     13.171 ppb         1.2643   9.60%
   QC value greater than the upper limit for Pb 220.353  Recovery = 131.71%
S 181.975 Axial†          18.6      95.490 µg/L        7.4077     95.490 ppb         7.4077   7.76%
   QC value within limits for S 181.975 Axial  Recovery = 95.49%
Sb 206.836†                9.6      9.5397 µg/L       4.94367     9.5397 ppb        4.94367  51.82%
   QC value within limits for Sb 206.836  Recovery = 95.40%
Se 196.026†               22.1      32.101 µg/L        7.1472     32.101 ppb         7.1472  22.26%
   QC value within limits for Se 196.026  Recovery = 107.00%
SiO2†                   1194.8      228.17 µg/L         0.949     228.17 ppb          0.949   0.42%
   QC value within limits for SiO2  Recovery = 107.12%
Si 251.611†             1327.3      100.87 µg/L         1.173     100.87 ppb          1.173   1.16%
   QC value within limits for Si 251.611  Recovery = 100.87%
Sn 189.927†               18.6      9.1836 µg/L       0.97499     9.1836 ppb        0.97499  10.62%
   QC value within limits for Sn 189.927  Recovery = 91.84%
Sr 421.552†              923.2      5.2005 µg/L       0.01949     5.2005 ppb        0.01949   0.37%
   QC value within limits for Sr 421.552  Recovery = 104.01%
Ti 334.940†             2391.3      5.2905 µg/L       0.05398     5.2905 ppb        0.05398   1.02%
   QC value within limits for Ti 334.940  Recovery = 105.81%
Tl 190.801†               13.3      20.068 µg/L        4.3840     20.068 ppb         4.3840  21.85%
   QC value within limits for Tl 190.801  Recovery = 100.34%
U 409.014†               570.0      53.512 µg/L        3.8201     53.512 ppb         3.8201   7.14%
   QC value within limits for U 409.014  Recovery = 107.02%
V 292.402†               469.8      5.4631 µg/L       0.26035     5.4631 ppb        0.26035   4.77%
   QC value within limits for V 292.402  Recovery = 109.26%
Zn 213.857†              388.9      10.361 µg/L        0.1370     10.361 ppb         0.1370   1.32%
   QC value within limits for Zn 213.857  Recovery = 103.61%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 03:53:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111244.0	111244.0	98.9	%			03:53:58
1	Al 396.153Radial†	197.5	-30.1	-15.244	µg/L	-15.244	ppb	03:53:58
1	Ca 317.933Radial†	425.1	-65.6	-26.039	µg/L	-26.039	ppb	03:54:18
1	Fe 238.204 Radial†	8.5	-2.6	-13.434	µg/L	-13.434	ppb	03:54:18
1	K 766.490 Radial†	641.5	-46.2	-25.035	µg/L	-25.035	ppb	03:53:58
1	Mg 279.077 IEC†	16.5	-3.1	-17.387	µg/L	-17.387	ppb	03:54:18
1	Na 589.592 Radial†	-713.8	-17.8	-4.9340	µg/L	-4.9340	ppb	03:53:58
1	Sr 421.552†	-40.9	22.4	0.1263	µg/L	0.1263	ppb	03:53:58
1	Sc 361.383	2031588.4	2031588.4	98.777	%			03:55:20
1	Y 371.029	1236665.2	1236665.2	98.747	%			03:55:20
1	Ag 328.068†	-41.8	-14.0	-0.1256	µg/L	-0.1256	ppb	03:55:26
1	As 188.979†	5.0	2.6	4.9491	µg/L	4.9491	ppb	03:55:46
1	B 249.677†	163.1	9.5	0.4242	µg/L	0.4242	ppb	03:55:26
1	Ba 233.527†	-80.4	-0.7	-0.0172	µg/L	-0.0172	ppb	03:55:46
1	Be 313.107†	3648.7	82.4	0.0521	µg/L	0.0521	ppb	03:55:26
1	Cd 226.502†	-94.1	5.6	0.1502	µg/L	0.1502	ppb	03:55:46
1	Co 228.616†	-75.2	-4.4	-0.2091	µg/L	-0.2091	ppb	03:55:46
1	Cr 267.716†	-127.5	-6.4	-0.1322	µg/L	-0.1322	ppb	03:55:26
1	Cu 324.752†	3389.4	47.0	0.3279	µg/L	0.3279	ppb	03:55:26
1	Mn 257.610†	-221.5	-1.6	-0.0069	µg/L	-0.0069	ppb	03:55:46
1	Mo 202.031†	-2.6	5.3	0.5879	µg/L	0.5879	ppb	03:55:46
1	Ni 231.604†	293.6	-2.2	-0.1193	µg/L	-0.1193	ppb	03:55:46
1	P 214.914†	211.5	8.1	17.570	µg/L	17.570	ppb	03:55:46
1	Pb 220.353†	65.3	12.0	3.0465	µg/L	3.0465	ppb	03:55:46
1	S 181.975 Axial†	21.8	-1.9	-9.9643	µg/L	-9.9643	ppb	03:55:46
1	Sb 206.836†	16.8	-3.6	-3.5524	µg/L	-3.5524	ppb	03:55:46
1	Se 196.026†	17.8	4.0	5.7664	µg/L	5.7664	ppb	03:55:46
1	SiO2†	1963.5	6.1	1.1670	µg/L	1.1670	ppb	03:55:26
1	Si 251.611†	342.0	-3.4	-0.1961	µg/L	-0.1961	ppb	03:55:46
1	Sn 189.927†	18.7	-3.5	-1.7372	µg/L	-1.7372	ppb	03:55:46
1	Ti 334.940†	704.8	-5.4	-0.0104	µg/L	-0.0104	ppb	03:55:26
1	Tl 190.801†	-22.8	-1.6	-2.4755	µg/L	-2.4755	ppb	03:55:46
1	U 409.014†	678.5	7.7	0.7216	µg/L	0.7216	ppb	03:55:26
1	V 292.402†	-84.8	6.1	0.0731	µg/L	0.0731	ppb	03:55:26
1	Zn 213.857†	539.3	-4.2	-0.1104	µg/L	-0.1104	ppb	03:55:46
2	Sc RADIAL	111179.0	111179.0	98.8	%			03:54:24
2	Al 396.153Radial†	204.4	-23.0	-11.631	µg/L	-11.631	ppb	03:54:24
2	Ca 317.933Radial†	432.0	-58.3	-23.162	µg/L	-23.162	ppb	03:54:44
2	Fe 238.204 Radial†	11.1	0.0	0.0765	µg/L	0.0765	ppb	03:54:44
2	K 766.490 Radial†	724.5	38.2	20.703	µg/L	20.703	ppb	03:54:24
2	Mg 279.077 IEC†	20.3	0.7	3.8132	µg/L	3.8132	ppb	03:54:44
2	Na 589.592 Radial†	-719.0	-23.5	-6.5094	µg/L	-6.5094	ppb	03:54:24
2	Sr 421.552†	-109.7	-47.2	-0.2660	µg/L	-0.2660	ppb	03:54:24
2	Sc 361.383	2052409.6	2052409.6	99.789	%			03:55:52
2	Y 371.029	1248450.0	1248450.0	99.688	%			03:55:52
2	Ag 328.068†	9.8	38.2	0.3412	µg/L	0.3412	ppb	03:55:58
2	As 188.979†	0.7	-1.8	-3.4745	µg/L	-3.4745	ppb	03:56:18
2	B 249.677†	128.1	-27.3	-1.2109	µg/L	-1.2109	ppb	03:55:58
2	Ba 233.527†	-72.7	7.8	0.1956	µg/L	0.1956	ppb	03:56:18
2	Be 313.107†	3638.2	34.4	0.0217	µg/L	0.0217	ppb	03:55:58
2	Cd 226.502†	-83.7	17.0	0.4526	µg/L	0.4526	ppb	03:56:18
2	Co 228.616†	-66.4	5.2	0.2483	µg/L	0.2483	ppb	03:56:18
2	Cr 267.716†	-118.5	4.1	0.0847	µg/L	0.0847	ppb	03:55:58
2	Cu 324.752†	3364.2	-13.0	-0.0914	µg/L	-0.0914	ppb	03:55:58
2	Mn 257.610†	-223.6	-1.4	-0.0044	µg/L	-0.0044	ppb	03:56:18
2	Mo 202.031†	-6.2	1.7	0.1850	µg/L	0.1850	ppb	03:56:18
2	Ni 231.604†	292.9	-5.9	-0.3189	µg/L	-0.3189	ppb	03:56:18
2	P 214.914†	203.7	-1.9	-4.0422	µg/L	-4.0422	ppb	03:56:18
2	Pb 220.353†	64.7	10.7	2.7023	µg/L	2.7023	ppb	03:56:18

2	S 181.975 Axial†	22.8	-1.1	-5.8998 µg/L	-5.8998 ppb	03:56:18
2	Sb 206.836†	27.2	6.7	6.6560 µg/L	6.6560 ppb	03:56:18
2	Se 196.026†	12.8	-1.3	-1.8851 µg/L	-1.8851 ppb	03:56:18
2	SiO2†	2038.6	61.3	11.697 µg/L	11.697 ppb	03:55:58
2	Si 251.611†	357.8	8.9	0.6747 µg/L	0.6747 ppb	03:56:18
2	Sn 189.927†	21.7	-0.7	-0.3291 µg/L	-0.3291 ppb	03:56:18
2	Ti 334.940†	787.0	69.8	0.1560 µg/L	0.1560 ppb	03:55:58
2	Tl 190.801†	-15.1	6.3	9.4451 µg/L	9.4451 ppb	03:56:18
2	U 409.014†	734.2	56.6	5.3120 µg/L	5.3120 ppb	03:55:58
2	V 292.402†	-87.1	4.7	0.0624 µg/L	0.0624 ppb	03:55:58
2	Zn 213.857†	539.0	-10.0	-0.2671 µg/L	-0.2671 ppb	03:56:18
3	Sc RADIAL	111160.1	111160.1	98.8 %		03:54:49
3	Al 396.153Radial†	156.8	-71.1	-35.976 µg/L	-35.976 ppb	03:54:49
3	Ca 317.933Radial†	427.2	-63.1	-25.067 µg/L	-25.067 ppb	03:55:10
3	Fe 238.204 Radial†	8.4	-2.7	-14.000 µg/L	-14.000 ppb	03:55:10
3	K 766.490 Radial†	724.0	37.7	20.461 µg/L	20.461 ppb	03:54:49
3	Mg 279.077 IEC†	10.9	-8.8	-48.594 µg/L	-48.594 ppb	03:55:10
3	Na 589.592 Radial†	-703.9	-8.3	-2.3161 µg/L	-2.3161 ppb	03:54:49
3	Sr 421.552†	-72.5	-9.6	-0.0539 µg/L	-0.0539 ppb	03:54:49
3	Sc 361.383	2041907.0	2041907.0	99.279 %		03:56:24
3	Y 371.029	1242379.5	1242379.5	99.203 %		03:56:24
3	Ag 328.068†	4.9	33.3	0.2956 µg/L	0.2956 ppb	03:56:30
3	As 188.979†	6.1	3.6	6.9521 µg/L	6.9521 ppb	03:56:50
3	B 249.677†	169.3	14.8	0.6624 µg/L	0.6624 ppb	03:56:30
3	Ba 233.527†	-82.1	-2.0	-0.0515 µg/L	-0.0515 ppb	03:56:50
3	Be 313.107†	3638.3	53.2	0.0336 µg/L	0.0336 ppb	03:56:30
3	Cd 226.502†	-92.9	7.4	0.2008 µg/L	0.2008 ppb	03:56:50
3	Co 228.616†	-73.4	-2.2	-0.1048 µg/L	-0.1048 ppb	03:56:50
3	Cr 267.716†	-120.0	1.9	0.0391 µg/L	0.0391 ppb	03:56:30
3	Cu 324.752†	3359.6	-0.3	-0.0053 µg/L	-0.0053 ppb	03:56:30
3	Mn 257.610†	-207.6	13.6	0.0414 µg/L	0.0414 ppb	03:56:50
3	Mo 202.031†	-3.4	4.4	0.4953 µg/L	0.4953 ppb	03:56:50
3	Ni 231.604†	282.4	-14.9	-0.8132 µg/L	-0.8132 ppb	03:56:50
3	P 214.914†	201.8	-2.7	-5.9402 µg/L	-5.9402 ppb	03:56:50
3	Pb 220.353†	67.4	13.8	3.4938 µg/L	3.4938 ppb	03:56:50
3	S 181.975 Axial†	23.8	-0.0	-0.2234 µg/L	-0.2234 ppb	03:56:50
3	Sb 206.836†	20.0	-0.4	-0.3605 µg/L	-0.3605 ppb	03:56:50
3	Se 196.026†	8.4	-5.6	-8.1707 µg/L	-8.1707 ppb	03:56:50
3	SiO2†	1995.2	28.0	5.3489 µg/L	5.3489 ppb	03:56:30
3	Si 251.611†	376.4	29.5	2.3255 µg/L	2.3255 ppb	03:56:50
3	Sn 189.927†	17.9	-4.4	-2.1598 µg/L	-2.1598 ppb	03:56:50
3	Ti 334.940†	755.4	42.0	0.0946 µg/L	0.0946 ppb	03:56:30
3	Tl 190.801†	-19.3	2.0	3.0319 µg/L	3.0319 ppb	03:56:50
3	U 409.014†	766.6	93.0	8.7360 µg/L	8.7360 ppb	03:56:30
3	V 292.402†	-98.0	-6.8	-0.0597 µg/L	-0.0597 ppb	03:56:30
3	Zn 213.857†	542.3	-3.9	-0.0984 µg/L	-0.0984 ppb	03:56:50

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2041968.3	99.282	%	0.5062				0.51%
Sc RADIAL	111194.4	98.9	%	0.04				0.04%
Y 371.029	1242498.2	99.213	%	0.4706				0.47%
Ag 328.068†	19.2	0.1704	µg/L	0.25739	0.1704	ppb	0.25739	151.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-41.4	-20.950	µg/L	13.1373	-20.950	ppb	13.1373	62.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	2.8089	µg/L	5.53297	2.8089	ppb	5.53297	196.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-1.0	-0.0414	µg/L	1.01974	-0.0414	ppb	1.01974	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0423	µg/L	0.13388	0.0423	ppb	0.13388	316.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	56.7	0.0358	µg/L	0.01534	0.0358	ppb	0.01534	42.83%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-62.4	-24.756	µg/L	1.4636	-24.756	ppb	1.4636	5.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.0	0.2679	µg/L	0.16195	0.2679	ppb	0.16195	60.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.5	-0.0219	µg/L	0.23973	-0.0219	ppb	0.23973	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -0.1     -0.0028 µg/L      0.11437     -0.0028 ppb       0.11437 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              11.2      0.0770 µg/L      0.22143      0.0770 ppb       0.22143 287.39%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.7     -9.1191 µg/L      7.96867     -9.1191 ppb       7.96867  87.38%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         9.9      5.3761 µg/L     26.33729      5.3761 ppb      26.33729 489.89%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -3.7     -20.723 µg/L      26.3622     -20.723 ppb       26.3622 127.21%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               3.5      0.0100 µg/L      0.02717      0.0100 ppb       0.02717 271.35%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               3.8      0.4228 µg/L      0.21100      0.4228 ppb       0.21100  49.91%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -16.5     -4.5865 µg/L      2.11812     -4.5865 ppb       2.11812  46.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -7.7     -0.4171 µg/L      0.35721     -0.4171 ppb       0.35721  85.64%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                1.2      2.5291 µg/L     13.06006      2.5291 ppb      13.06006 516.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              12.2      3.0809 µg/L      0.39690      3.0809 ppb       0.39690  12.88%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.0     -5.3625 µg/L      4.89263     -5.3625 ppb       4.89263  91.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               0.9      0.9143 µg/L      5.22225      0.9143 ppb       5.22225 571.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.0     -1.4298 µg/L      6.97972     -1.4298 ppb       6.97972 488.16%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    31.8      6.0710 µg/L      5.30197      6.0710 ppb       5.30197  87.33%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              11.7      0.9347 µg/L      1.28074      0.9347 ppb       1.28074 137.02%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -2.9     -1.4087 µg/L      0.95858     -1.4087 ppb       0.95858  68.05%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -11.5     -0.0645 µg/L      0.19641     -0.0645 ppb       0.19641 304.35%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              35.5      0.0800 µg/L      0.08416      0.0800 ppb       0.08416 105.13%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.2      3.3338 µg/L      5.96605      3.3338 ppb       5.96605 178.96%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               52.4      4.9232 µg/L      4.02130      4.9232 ppb       4.02130  81.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                1.3      0.0253 µg/L      0.07374      0.0253 ppb       0.07374 292.00%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -6.1     -0.1586 µg/L      0.09414     -0.1586 ppb       0.09414  59.34%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 12/18/2009 03:57:38 **Plasma On Time: 12/17/2009 20:21:18**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121609H.SIF
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/18/2009 03:57:40**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	113225.2	113225.2	101	%			03:58:14
1	Al 396.153Radial†	10212.2	9915.2	4992.2	µg/L	4992.2	ppb	03:58:14
1	Ca 317.933Radial†	13134.0	12552.1	4982.6	µg/L	4982.6	ppb	03:58:34
1	Fe 238.204 Radial†	990.8	973.1	5128.2	µg/L	5128.2	ppb	03:58:34
1	K 766.490 Radial†	9903.2	9143.1	4957.4	µg/L	4957.4	ppb	03:58:14
1	Mg 279.077 IEC†	950.7	924.6	5133.4	µg/L	5133.4	ppb	03:58:34
1	Na 589.592 Radial†	35684.4	36153.5	10031	µg/L	10031	ppb	03:58:14
1	Sr 421.552†	88051.0	87535.4	493.08	µg/L	493.08	ppb	03:58:14
1	Sc 361.383	2059590.1	2059590.1	100.14	%			03:59:38
1	Y 371.029	1247790.1	1247790.1	99.635	%			03:59:38
1	Ag 328.068†	55549.0	55500.5	499.49	µg/L	499.49	ppb	03:59:43
1	As 188.979†	273.6	270.8	515.07	µg/L	515.07	ppb	04:00:04
1	B 249.677†	11323.6	11152.2	493.37	µg/L	493.37	ppb	03:59:43
1	Ba 233.527†	19728.0	19781.4	497.89	µg/L	497.89	ppb	03:59:43
1	Be 313.107†	800498.4	795780.7	503.21	µg/L	503.21	ppb	03:59:38
1	Cd 226.502†	18801.0	18875.9	499.31	µg/L	499.31	ppb	03:59:43
1	Co 228.616†	10268.1	10325.7	496.66	µg/L	496.66	ppb	03:59:43
1	Cr 267.716†	23705.1	23795.1	496.48	µg/L	496.48	ppb	03:59:43
1	Cu 324.752†	73953.4	70466.9	496.87	µg/L	496.87	ppb	03:59:43
1	Mn 257.610†	158680.5	158683.8	504.23	µg/L	504.23	ppb	03:59:38
1	Mo 202.031†	4414.6	4416.4	492.90	µg/L	492.90	ppb	04:00:04
1	Ni 231.604†	9489.9	9177.4	499.97	µg/L	499.97	ppb	03:59:43
1	P 214.914†	1366.6	1158.7	2461.3	µg/L	2461.3	ppb	04:00:04
1	Pb 220.353†	2040.3	1983.3	503.49	µg/L	503.49	ppb	04:00:04
1	S 181.975 Axial†	218.4	194.0	995.48	µg/L	995.48	ppb	04:00:04
1	Sb 206.836†	524.3	503.0	497.70	µg/L	497.70	ppb	04:00:04
1	Se 196.026†	361.1	346.5	506.81	µg/L	506.81	ppb	04:00:04
1	SiO2†	30172.4	28149.0	5375.4	µg/L	5375.4	ppb	03:59:43
1	Si 251.611†	33199.4	32803.9	2465.1	µg/L	2465.1	ppb	03:59:43
1	Sn 189.927†	1035.4	1011.5	495.89	µg/L	495.89	ppb	04:00:04
1	Ti 334.940†	226194.1	225162.7	498.82	µg/L	498.82	ppb	03:59:38
1	Tl 190.801†	309.1	330.1	500.46	µg/L	500.46	ppb	04:00:04
1	U 409.014†	5972.6	5285.2	495.50	µg/L	495.50	ppb	03:59:43
1	V 292.402†	43935.4	43966.7	500.31	µg/L	500.31	ppb	03:59:43
1	Zn 213.857†	19278.9	18702.1	497.09	µg/L	497.09	ppb	03:59:43
2	Sc RADIAL	113434.0	113434.0	101	%			03:58:40
2	Al 396.153Radial†	10340.8	10024.1	5047.1	µg/L	5047.1	ppb	03:58:40
2	Ca 317.933Radial†	13180.1	12573.8	4991.2	µg/L	4991.2	ppb	03:59:00
2	Fe 238.204 Radial†	994.4	974.8	5137.4	µg/L	5137.4	ppb	03:59:00
2	K 766.490 Radial†	9975.3	9196.6	4986.3	µg/L	4986.3	ppb	03:58:40
2	Mg 279.077 IEC†	950.7	922.9	5123.8	µg/L	5123.8	ppb	03:59:00
2	Na 589.592 Radial†	36123.8	36523.9	10134	µg/L	10134	ppb	03:58:40
2	Sr 421.552†	89326.6	88639.2	499.30	µg/L	499.30	ppb	03:58:40
2	Sc 361.383	2058533.2	2058533.2	100.09	%			04:00:11
2	Y 371.029	1242568.5	1242568.5	99.218	%			04:00:11
2	Ag 328.068†	55604.1	55584.1	500.24	µg/L	500.24	ppb	04:00:17
2	As 188.979†	270.8	268.1	509.96	µg/L	509.96	ppb	04:00:37

2	B 249.677†	11286.6	11121.1	491.98 µg/L	491.98 ppb	04:00:17
2	Ba 233.527†	19711.5	19775.1	497.73 µg/L	497.73 ppb	04:00:17
2	Be 313.107†	799692.1	795385.6	502.96 µg/L	502.96 ppb	04:00:11
2	Cd 226.502†	18779.5	18864.1	498.99 µg/L	498.99 ppb	04:00:17
2	Co 228.616†	10322.9	10385.7	499.55 µg/L	499.55 ppb	04:00:17
2	Cr 267.716†	23746.5	23848.6	497.60 µg/L	497.60 ppb	04:00:17
2	Cu 324.752†	74181.5	70732.7	498.74 µg/L	498.74 ppb	04:00:17
2	Mn 257.610†	158756.1	158840.8	504.73 µg/L	504.73 ppb	04:00:11
2	Mo 202.031†	4436.3	4440.4	495.57 µg/L	495.57 ppb	04:00:37
2	Ni 231.604†	9491.4	9183.8	500.32 µg/L	500.32 ppb	04:00:17
2	P 214.914†	1374.7	1167.5	2480.2 µg/L	2480.2 ppb	04:00:37
2	Pb 220.353†	2045.5	1989.6	505.08 µg/L	505.08 ppb	04:00:37
2	S 181.975 Axial†	215.4	191.1	980.54 µg/L	980.54 ppb	04:00:37
2	Sb 206.836†	526.8	505.8	500.39 µg/L	500.39 ppb	04:00:37
2	Se 196.026†	365.9	351.5	514.12 µg/L	514.12 ppb	04:00:37
2	SiO2†	30231.6	28223.7	5389.7 µg/L	5389.7 ppb	04:00:17
2	Si 251.611†	33271.4	32892.8	2471.6 µg/L	2471.6 ppb	04:00:17
2	Sn 189.927†	1048.8	1025.4	502.64 µg/L	502.64 ppb	04:00:37
2	Ti 334.940†	226450.0	225534.3	499.64 µg/L	499.64 ppb	04:00:11
2	Tl 190.801†	313.1	334.2	506.78 µg/L	506.78 ppb	04:00:37
2	U 409.014†	5974.2	5289.8	495.93 µg/L	495.93 ppb	04:00:17
2	V 292.402†	44015.0	44068.7	501.48 µg/L	501.48 ppb	04:00:17
2	Zn 213.857†	19342.5	18775.5	499.05 µg/L	499.05 ppb	04:00:17
3	Sc RADIAL	113583.8	113583.8	101 %		03:59:06
3	Al 396.153Radial†	10279.6	9949.9	5009.6 µg/L	5009.6 ppb	03:59:06
3	Ca 317.933Radial†	13170.9	12547.5	4980.8 µg/L	4980.8 ppb	03:59:26
3	Fe 238.204 Radial†	1000.2	979.3	5160.5 µg/L	5160.5 ppb	03:59:26
3	K 766.490 Radial†	10025.2	9232.9	5006.0 µg/L	5006.0 ppb	03:59:06
3	Mg 279.077 IEC†	954.6	925.5	5138.2 µg/L	5138.2 ppb	03:59:26
3	Na 589.592 Radial†	35933.8	36288.5	10069 µg/L	10069 ppb	03:59:06
3	Sr 421.552†	88869.7	88069.9	496.09 µg/L	496.09 ppb	03:59:06
3	Sc 361.383	2055803.8	2055803.8	99.954 %		04:00:44
3	Y 371.029	1244049.6	1244049.6	99.337 %		04:00:44
3	Ag 328.068†	55529.9	55583.6	500.23 µg/L	500.23 ppb	04:00:50
3	As 188.979†	268.7	266.3	506.61 µg/L	506.61 ppb	04:01:10
3	B 249.677†	11231.8	11081.2	490.20 µg/L	490.20 ppb	04:00:50
3	Ba 233.527†	19683.9	19773.6	497.69 µg/L	497.69 ppb	04:00:50
3	Be 313.107†	791543.4	788293.9	498.48 µg/L	498.48 ppb	04:00:44
3	Cd 226.502†	18740.0	18849.5	498.61 µg/L	498.61 ppb	04:00:50
3	Co 228.616†	10277.6	10354.0	498.03 µg/L	498.03 ppb	04:00:50
3	Cr 267.716†	23644.4	23778.0	496.12 µg/L	496.12 ppb	04:00:50
3	Cu 324.752†	74053.8	70703.4	498.54 µg/L	498.54 ppb	04:00:50
3	Mn 257.610†	156897.8	157192.2	499.50 µg/L	499.50 ppb	04:00:44
3	Mo 202.031†	4429.3	4439.2	495.44 µg/L	495.44 ppb	04:01:10
3	Ni 231.604†	9462.9	9167.8	499.45 µg/L	499.45 ppb	04:00:50
3	P 214.914†	1363.8	1158.5	2460.6 µg/L	2460.6 ppb	04:01:10
3	Pb 220.353†	2039.6	1986.4	504.26 µg/L	504.26 ppb	04:01:10
3	S 181.975 Axial†	217.6	193.7	993.48 µg/L	993.48 ppb	04:01:10
3	Sb 206.836†	529.9	509.6	504.23 µg/L	504.23 ppb	04:01:10
3	Se 196.026†	367.2	353.3	516.80 µg/L	516.80 ppb	04:01:10
3	SiO2†	30051.0	28083.1	5362.9 µg/L	5362.9 ppb	04:00:50
3	Si 251.611†	33121.7	32787.2	2463.6 µg/L	2463.6 ppb	04:00:50
3	Sn 189.927†	1048.8	1026.8	503.32 µg/L	503.32 ppb	04:01:10
3	Ti 334.940†	224162.7	223546.3	495.23 µg/L	495.23 ppb	04:00:44
3	Tl 190.801†	313.2	334.8	507.50 µg/L	507.50 ppb	04:01:10
3	U 409.014†	6081.2	5404.8	506.73 µg/L	506.73 ppb	04:00:50
3	V 292.402†	43835.2	43947.2	500.13 µg/L	500.13 ppb	04:00:50
3	Zn 213.857†	19270.0	18728.7	497.80 µg/L	497.80 ppb	04:00:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2057975.7	100.06	%	0.095				0.09%
Sc RADIAL	113414.3	101	%	0.2				0.16%
Y 371.029	1244802.7	99.397	%	0.2149				0.22%
Ag 328.068†	55556.1	499.99	µg/L	0.433	499.99	ppb	0.433	0.09%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 396.153Radial†	9963.1	5016.3	µg/L	28.06	5016.3	ppb	28.06	0.56%
QC value within limits for Al 396.153Radial Recovery = 100.33%								
As 188.979†	268.4	510.55	µg/L	4.260	510.55	ppb	4.260	0.83%

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   QC value within limits for As 188.979  Recovery = 102.11%
B 249.677†            11118.2      491.85 µg/L        1.585      491.85 ppb          1.585   0.32%
   QC value within limits for B 249.677  Recovery = 98.37%
Ba 233.527†           19776.7      497.77 µg/L        0.103      497.77 ppb          0.103   0.02%
   QC value within limits for Ba 233.527  Recovery = 99.55%
Be 313.107†          793153.4      501.55 µg/L        2.664      501.55 ppb          2.664   0.53%
   QC value within limits for Be 313.107  Recovery = 100.31%
Ca 317.933Radial†     12557.8      4984.9 µg/L         5.59      4984.9 ppb           5.59   0.11%
   QC value within limits for Ca 317.933Radial  Recovery = 99.70%
Cd 226.502†           18863.2      498.97 µg/L        0.348      498.97 ppb          0.348   0.07%
   QC value within limits for Cd 226.502  Recovery = 99.79%
Co 228.616†           10355.1      498.08 µg/L        1.446      498.08 ppb          1.446   0.29%
   QC value within limits for Co 228.616  Recovery = 99.62%
Cr 267.716†           23807.2      496.73 µg/L        0.768      496.73 ppb          0.768   0.15%
   QC value within limits for Cr 267.716  Recovery = 99.35%
Cu 324.752†           70634.3      498.05 µg/L        1.028      498.05 ppb          1.028   0.21%
   QC value within limits for Cu 324.752  Recovery = 99.61%
Fe 238.204 Radial†      975.7      5142.0 µg/L        16.66      5142.0 ppb          16.66   0.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.84%
K 766.490 Radial†      9190.9      4983.3 µg/L        24.48      4983.3 ppb          24.48   0.49%
   QC value within limits for K 766.490 Radial  Recovery = 99.67%
Mg 279.077 IEC†         924.3      5131.8 µg/L         7.36      5131.8 ppb           7.36   0.14%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.64%
Mn 257.610†          158238.9      502.82 µg/L        2.886      502.82 ppb          2.886   0.57%
   QC value within limits for Mn 257.610  Recovery = 100.56%
Mo 202.031†            4432.0      494.64 µg/L        1.509      494.64 ppb          1.509   0.31%
   QC value within limits for Mo 202.031  Recovery = 98.93%
Na 589.592 Radial†    36322.0       10078 µg/L         52.0       10078 ppb           52.0   0.52%
   QC value within limits for Na 589.592 Radial  Recovery = 100.78%
Ni 231.604†            9176.3      499.91 µg/L        0.438      499.91 ppb          0.438   0.09%
   QC value within limits for Ni 231.604  Recovery = 99.98%
P 214.914†             1161.6      2467.4 µg/L        11.14      2467.4 ppb          11.14   0.45%
   QC value within limits for P 214.914  Recovery = 98.70%
Pb 220.353†            1986.4      504.28 µg/L        0.799      504.28 ppb          0.799   0.16%
   QC value within limits for Pb 220.353  Recovery = 100.86%
S 181.975 Axial†        192.9      989.83 µg/L        8.111      989.83 ppb          8.111   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 98.98%
Sb 206.836†             506.2      500.78 µg/L        3.283      500.78 ppb          3.283   0.66%
   QC value within limits for Sb 206.836  Recovery = 100.16%
Se 196.026†             350.4      512.58 µg/L        5.173      512.58 ppb          5.173   1.01%
   QC value within limits for Se 196.026  Recovery = 102.52%
SiO2†                  28151.9      5376.0 µg/L        13.43      5376.0 ppb          13.43   0.25%
   QC value within limits for SiO2  Recovery = 100.53%
Si 251.611†            32828.0      2466.8 µg/L         4.23      2466.8 ppb           4.23   0.17%
   QC value within limits for Si 251.611  Recovery = 98.67%
Sn 189.927†            1021.2      500.62 µg/L        4.111      500.62 ppb          4.111   0.82%
   QC value within limits for Sn 189.927  Recovery = 100.12%
Sr 421.552†            88081.5      496.16 µg/L        3.109      496.16 ppb          3.109   0.63%
   QC value within limits for Sr 421.552  Recovery = 99.23%
Ti 334.940†           224747.8      497.90 µg/L        2.343      497.90 ppb          2.343   0.47%
   QC value within limits for Ti 334.940  Recovery = 99.58%
Tl 190.801†             333.0      504.91 µg/L        3.874      504.91 ppb          3.874   0.77%
   QC value within limits for Tl 190.801  Recovery = 100.98%
U 409.014†             5326.6      499.39 µg/L        6.360      499.39 ppb          6.360   1.27%
   QC value within limits for U 409.014  Recovery = 99.88%
V 292.402†             43994.2      500.64 µg/L        0.734      500.64 ppb          0.734   0.15%
   QC value within limits for V 292.402  Recovery = 100.13%
Zn 213.857†            18735.5      497.98 µg/L        0.993      497.98 ppb          0.993   0.20%
   QC value within limits for Zn 213.857  Recovery = 99.60%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 04:01:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111731.7	111731.7	99.3	%			04:01:55
1	Al 396.153Radial†	586.8	360.9	182.00	µg/L	182.00	ppb	04:01:55
1	Ca 317.933Radial†	946.4	457.3	181.53	µg/L	181.53	ppb	04:02:15
1	Fe 238.204 Radial†	29.4	18.4	96.915	µg/L	96.915	ppb	04:02:15
1	K 766.490 Radial†	974.6	286.2	155.20	µg/L	155.20	ppb	04:01:55
1	Mg 279.077 IEC†	72.7	53.3	295.85	µg/L	295.85	ppb	04:02:15
1	Na 589.592 Radial†	357.3	1063.6	295.11	µg/L	295.11	ppb	04:01:55
1	Sr 421.552†	846.2	915.6	5.1576	µg/L	5.1576	ppb	04:01:55
1	Sc 361.383	2032203.5	2032203.5	98.807	%			04:03:18
1	Y 371.029	1236025.4	1236025.4	98.696	%			04:03:18
1	Ag 328.068†	524.8	559.4	5.0406	µg/L	5.0406	ppb	04:03:23
1	As 188.979†	19.4	17.2	32.697	µg/L	32.697	ppb	04:03:44
1	B 249.677†	1237.5	1096.7	48.646	µg/L	48.646	ppb	04:03:23
1	Ba 233.527†	122.6	204.8	5.1550	µg/L	5.1550	ppb	04:03:44
1	Be 313.107†	11527.0	8054.7	5.0933	µg/L	5.0933	ppb	04:03:23
1	Cd 226.502†	101.6	203.7	5.4217	µg/L	5.4217	ppb	04:03:44
1	Co 228.616†	36.5	108.7	5.2388	µg/L	5.2388	ppb	04:03:44
1	Cr 267.716†	114.8	238.9	4.9861	µg/L	4.9861	ppb	04:03:23
1	Cu 324.752†	4729.0	1401.8	9.8830	µg/L	9.8830	ppb	04:03:23
1	Mn 257.610†	3036.6	3295.9	10.472	µg/L	10.472	ppb	04:03:23
1	Mo 202.031†	84.1	93.0	10.377	µg/L	10.377	ppb	04:03:44
1	Ni 231.604†	397.6	103.0	5.6100	µg/L	5.6100	ppb	04:03:44
1	P 214.914†	281.7	79.1	170.69	µg/L	170.69	ppb	04:03:44
1	Pb 220.353†	102.6	49.7	12.582	µg/L	12.582	ppb	04:03:44
1	S 181.975 Axial†	39.4	15.8	81.352	µg/L	81.352	ppb	04:03:44
1	Sb 206.836†	30.2	10.0	9.8939	µg/L	9.8939	ppb	04:03:44
1	Se 196.026†	28.4	14.7	21.371	µg/L	21.371	ppb	04:03:44
1	SiO2†	3098.5	1154.3	220.42	µg/L	220.42	ppb	04:03:23
1	Si 251.611†	1650.4	1320.7	100.36	µg/L	100.36	ppb	04:03:44
1	Sn 189.927†	41.5	19.6	9.6450	µg/L	9.6450	ppb	04:03:44
1	Ti 334.940†	3104.0	2422.6	5.3598	µg/L	5.3598	ppb	04:03:23
1	Tl 190.801†	-6.2	15.1	22.841	µg/L	22.841	ppb	04:03:44
1	U 409.014†	1248.2	584.0	54.833	µg/L	54.833	ppb	04:03:23
1	V 292.402†	377.2	473.7	5.5096	µg/L	5.5096	ppb	04:03:23
1	Zn 213.857†	935.5	396.6	10.565	µg/L	10.565	ppb	04:03:44
2	Sc RADIAL	112010.0	112010.0	99.6	%			04:02:21
2	Al 396.153Radial†	594.7	367.4	185.27	µg/L	185.27	ppb	04:02:21
2	Ca 317.933Radial†	942.4	450.9	178.97	µg/L	178.97	ppb	04:02:41
2	Fe 238.204 Radial†	29.7	18.6	97.789	µg/L	97.789	ppb	04:02:41
2	K 766.490 Radial†	1034.7	344.2	186.61	µg/L	186.61	ppb	04:02:21
2	Mg 279.077 IEC†	75.7	56.2	311.66	µg/L	311.66	ppb	04:02:41
2	Na 589.592 Radial†	419.2	1124.9	312.11	µg/L	312.11	ppb	04:02:21
2	Sr 421.552†	852.6	920.0	5.1822	µg/L	5.1822	ppb	04:02:21
2	Sc 361.383	2036893.6	2036893.6	99.035	%			04:03:50
2	Y 371.029	1240537.7	1240537.7	99.056	%			04:03:50
2	Ag 328.068†	514.9	548.2	4.9412	µg/L	4.9412	ppb	04:03:55
2	As 188.979†	12.8	10.5	19.916	µg/L	19.916	ppb	04:04:16
2	B 249.677†	1233.7	1090.0	48.348	µg/L	48.348	ppb	04:03:55
2	Ba 233.527†	126.7	208.6	5.2502	µg/L	5.2502	ppb	04:04:16
2	Be 313.107†	11459.1	7959.3	5.0330	µg/L	5.0330	ppb	04:03:55
2	Cd 226.502†	98.2	200.1	5.3274	µg/L	5.3274	ppb	04:04:16
2	Co 228.616†	37.8	109.9	5.2978	µg/L	5.2978	ppb	04:04:16
2	Cr 267.716†	126.0	250.0	5.2175	µg/L	5.2175	ppb	04:03:55
2	Cu 324.752†	4744.0	1405.9	9.9121	µg/L	9.9121	ppb	04:03:55
2	Mn 257.610†	3027.3	3279.5	10.420	µg/L	10.420	ppb	04:03:55
2	Mo 202.031†	87.3	96.0	10.715	µg/L	10.715	ppb	04:04:16
2	Ni 231.604†	390.3	94.7	5.1602	µg/L	5.1602	ppb	04:04:16
2	P 214.914†	267.8	64.4	138.87	µg/L	138.87	ppb	04:04:16
2	Pb 220.353†	106.3	53.2	13.473	µg/L	13.473	ppb	04:04:16

2	S 181.975 Axial†	38.8	15.1	77.769 µg/L	77.769 ppb	04:04:16
2	Sb 206.836†	33.4	13.2	13.077 µg/L	13.077 ppb	04:04:16
2	Se 196.026†	34.1	20.3	29.529 µg/L	29.529 ppb	04:04:16
2	SiO2†	3116.2	1164.9	222.46 µg/L	222.46 ppb	04:03:55
2	Si 251.611†	1646.0	1312.4	99.681 µg/L	99.681 ppb	04:04:16
2	Sn 189.927†	42.8	20.8	10.246 µg/L	10.246 ppb	04:04:16
2	Ti 334.940†	3055.4	2366.3	5.2350 µg/L	5.2350 ppb	04:03:55
2	Tl 190.801†	-3.5	17.9	27.060 µg/L	27.060 ppb	04:04:16
2	U 409.014†	1300.3	633.8	59.506 µg/L	59.506 ppb	04:03:55
2	V 292.402†	389.9	485.7	5.6544 µg/L	5.6544 ppb	04:03:55
2	Zn 213.857†	940.0	399.0	10.631 µg/L	10.631 ppb	04:04:16
3	Sc RADIAL	111506.6	111506.6	99.1 %		04:02:47
3	Al 396.153Radial†	622.4	398.1	200.78 µg/L	200.78 ppb	04:02:47
3	Ca 317.933Radial†	938.3	451.1	179.05 µg/L	179.05 ppb	04:03:07
3	Fe 238.204 Radial†	29.4	18.5	97.349 µg/L	97.349 ppb	04:03:07
3	K 766.490 Radial†	1072.3	386.8	209.71 µg/L	209.71 ppb	04:02:47
3	Mg 279.077 IEC†	69.3	50.1	278.00 µg/L	278.00 ppb	04:03:07
3	Na 589.592 Radial†	394.2	1101.6	305.65 µg/L	305.65 ppb	04:02:47
3	Sr 421.552†	875.1	946.5	5.3317 µg/L	5.3317 ppb	04:02:47
3	Sc 361.383	2035292.1	2035292.1	98.957 %		04:04:22
3	Y 371.029	1239662.0	1239662.0	98.986 %		04:04:22
3	Ag 328.068†	534.8	568.8	5.1228 µg/L	5.1228 ppb	04:04:27
3	As 188.979†	12.8	10.4	19.787 µg/L	19.787 ppb	04:04:48
3	B 249.677†	1251.7	1109.2	49.200 µg/L	49.200 ppb	04:04:27
3	Ba 233.527†	125.1	207.1	5.2120 µg/L	5.2120 ppb	04:04:48
3	Be 313.107†	11540.4	8050.5	5.0907 µg/L	5.0907 ppb	04:04:27
3	Cd 226.502†	95.6	197.5	5.2573 µg/L	5.2573 ppb	04:04:48
3	Co 228.616†	29.4	101.4	4.8905 µg/L	4.8905 ppb	04:04:48
3	Cr 267.716†	94.8	218.6	4.5616 µg/L	4.5616 ppb	04:04:27
3	Cu 324.752†	4787.3	1453.5	10.247 µg/L	10.247 ppb	04:04:27
3	Mn 257.610†	3060.4	3315.3	10.534 µg/L	10.534 ppb	04:04:27
3	Mo 202.031†	81.9	90.7	10.122 µg/L	10.122 ppb	04:04:48
3	Ni 231.604†	384.4	89.1	4.8523 µg/L	4.8523 ppb	04:04:48
3	P 214.914†	279.4	76.4	164.66 µg/L	164.66 ppb	04:04:48
3	Pb 220.353†	118.7	65.8	16.664 µg/L	16.664 ppb	04:04:48
3	S 181.975 Axial†	38.5	14.9	76.352 µg/L	76.352 ppb	04:04:48
3	Sb 206.836†	29.7	9.4	9.3443 µg/L	9.3443 ppb	04:04:48
3	Se 196.026†	30.3	16.5	23.978 µg/L	23.978 ppb	04:04:48
3	SiO2†	3119.3	1170.5	223.52 µg/L	223.52 ppb	04:04:27
3	Si 251.611†	1631.6	1299.1	98.727 µg/L	98.727 ppb	04:04:48
3	Sn 189.927†	39.9	17.8	8.8048 µg/L	8.8048 ppb	04:04:48
3	Ti 334.940†	3016.0	2328.9	5.1522 µg/L	5.1522 ppb	04:04:27
3	Tl 190.801†	-8.1	13.2	19.944 µg/L	19.944 ppb	04:04:48
3	U 409.014†	1269.8	604.0	56.705 µg/L	56.705 ppb	04:04:27
3	V 292.402†	359.6	455.3	5.3033 µg/L	5.3033 ppb	04:04:27
3	Zn 213.857†	924.4	384.0	10.231 µg/L	10.231 ppb	04:04:48

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2034796.4	98.933	%	0.1159				0.12%
Sc RADIAL	111749.4	99.4	%	0.22				0.23%
Y 371.029	1238741.7	98.913	%	0.1911				0.19%
Ag 328.068†	558.8	5.0349	µg/L	0.09092	5.0349	ppb	0.09092	1.81%
QC value within limits for Ag 328.068 Recovery = 100.70%								
Al 396.153Radial†	375.5	189.35	µg/L	10.034	189.35	ppb	10.034	5.30%
QC value within limits for Al 396.153Radial Recovery = 94.68%								
As 188.979†	12.7	24.133	µg/L	7.4166	24.133	ppb	7.4166	30.73%
QC value within limits for As 188.979 Recovery = 80.44%								
B 249.677†	1098.7	48.731	µg/L	0.4327	48.731	ppb	0.4327	0.89%
QC value within limits for B 249.677 Recovery = 97.46%								
Ba 233.527†	206.8	5.2057	µg/L	0.04791	5.2057	ppb	0.04791	0.92%
QC value within limits for Ba 233.527 Recovery = 104.11%								
Be 313.107†	8021.5	5.0723	µg/L	0.03411	5.0723	ppb	0.03411	0.67%
QC value within limits for Be 313.107 Recovery = 101.45%								
Ca 317.933Radial†	453.1	179.85	µg/L	1.452	179.85	ppb	1.452	0.81%
QC value within limits for Ca 317.933Radial Recovery = 89.93%								
Cd 226.502†	200.4	5.3354	µg/L	0.08251	5.3354	ppb	0.08251	1.55%
QC value within limits for Cd 226.502 Recovery = 106.71%								
Co 228.616†	106.7	5.1424	µg/L	0.22007	5.1424	ppb	0.22007	4.28%

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   QC value within limits for Co 228.616  Recovery = 102.85%
Cr 267.716†              235.8      4.9217 µg/L       0.33264      4.9217 ppb        0.33264   6.76%
   QC value within limits for Cr 267.716  Recovery = 98.43%
Cu 324.752†             1420.4      10.014 µg/L        0.2022      10.014 ppb         0.2022   2.02%
   QC value within limits for Cu 324.752  Recovery = 100.14%
Fe 238.204 Radial†        18.5      97.351 µg/L        0.4373      97.351 ppb         0.4373   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.35%
K 766.490 Radial†        339.1      183.84 µg/L        27.360      183.84 ppb         27.360  14.88%
   QC value within limits for K 766.490 Radial  Recovery = 122.56%
Mg 279.077 IEC†           53.2      295.17 µg/L        16.839      295.17 ppb         16.839   5.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.39%
Mn 257.610†             3296.9      10.475 µg/L        0.0569      10.475 ppb         0.0569   0.54%
   QC value within limits for Mn 257.610  Recovery = 104.75%
Mo 202.031†               93.2      10.405 µg/L        0.2971      10.405 ppb         0.2971   2.86%
   QC value within limits for Mo 202.031  Recovery = 104.05%
Na 589.592 Radial†      1096.7      304.29 µg/L         8.581      304.29 ppb          8.581   2.82%
   QC value within limits for Na 589.592 Radial  Recovery = 101.43%
Ni 231.604†               95.6      5.2075 µg/L       0.38110      5.2075 ppb        0.38110   7.32%
   QC value within limits for Ni 231.604  Recovery = 104.15%
P 214.914†                73.3      158.07 µg/L        16.904      158.07 ppb         16.904  10.69%
   QC value within limits for P 214.914  Recovery = 105.38%
Pb 220.353†               56.2      14.240 µg/L        2.1466      14.240 ppb         2.1466  15.07%
   QC value greater than the upper limit for Pb 220.353  Recovery = 142.40%
S 181.975 Axial†          15.3      78.491 µg/L        2.5769      78.491 ppb         2.5769   3.28%
   QC value within limits for S 181.975 Axial  Recovery = 78.49%
Sb 206.836†               10.9      10.772 µg/L        2.0151      10.772 ppb         2.0151  18.71%
   QC value within limits for Sb 206.836  Recovery = 107.72%
Se 196.026†               17.2      24.959 µg/L        4.1668      24.959 ppb         4.1668  16.69%
   QC value within limits for Se 196.026  Recovery = 83.20%
SiO2†                   1163.2      222.13 µg/L         1.574      222.13 ppb          1.574   0.71%
   QC value within limits for SiO2  Recovery = 104.29%
Si 251.611†             1310.7      99.588 µg/L        0.8189      99.588 ppb         0.8189   0.82%
   QC value within limits for Si 251.611  Recovery = 99.59%
Sn 189.927†               19.4      9.5653 µg/L       0.72404      9.5653 ppb        0.72404   7.57%
   QC value within limits for Sn 189.927  Recovery = 95.65%
Sr 421.552†              927.4      5.2238 µg/L       0.09422      5.2238 ppb        0.09422   1.80%
   QC value within limits for Sr 421.552  Recovery = 104.48%
Ti 334.940†             2372.6      5.2490 µg/L       0.10451      5.2490 ppb        0.10451   1.99%
   QC value within limits for Ti 334.940  Recovery = 104.98%
Tl 190.801†               15.4      23.282 µg/L        3.5783      23.282 ppb         3.5783  15.37%
   QC value within limits for Tl 190.801  Recovery = 116.41%
U 409.014†               607.3      57.015 µg/L        2.3517      57.015 ppb         2.3517   4.12%
   QC value within limits for U 409.014  Recovery = 114.03%
V 292.402†               471.6      5.4891 µg/L       0.17643      5.4891 ppb        0.17643   3.21%
   QC value within limits for V 292.402  Recovery = 109.78%
Zn 213.857†              393.2      10.476 µg/L        0.2143      10.476 ppb         0.2143   2.05%
   QC value within limits for Zn 213.857  Recovery = 104.76%
QC Failed.  Continue with analysis.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 04:04:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112440.9	112440.9	100.0	%			04:05:31
1	Al 396.153Radial†	193.5	-36.2	-18.318	µg/L	-18.318	ppb	04:05:31
1	Ca 317.933Radial†	430.8	-64.5	-25.584	µg/L	-25.584	ppb	04:05:51
1	Fe 238.204 Radial†	9.0	-2.2	-11.287	µg/L	-11.287	ppb	04:05:51
1	K 766.490 Radial†	701.5	6.9	3.7212	µg/L	3.7212	ppb	04:05:31
1	Mg 279.077 IEC†	17.4	-2.4	-13.400	µg/L	-13.400	ppb	04:05:51
1	Na 589.592 Radial†	-714.8	-11.2	-3.0979	µg/L	-3.0979	ppb	04:05:31
1	Sr 421.552†	-74.7	-11.0	-0.0617	µg/L	-0.0617	ppb	04:05:31
1	Sc 361.383	2038676.1	2038676.1	99.122	%			04:06:53
1	Y 371.029	1240980.7	1240980.7	99.092	%			04:06:53
1	Ag 328.068†	-55.3	-27.4	-0.2446	µg/L	-0.2446	ppb	04:06:58
1	As 188.979†	1.1	-1.4	-2.6029	µg/L	-2.6029	ppb	04:07:19
1	B 249.677†	146.6	-7.8	-0.3405	µg/L	-0.3405	ppb	04:06:58
1	Ba 233.527†	-79.3	0.7	0.0182	µg/L	0.0182	ppb	04:07:19
1	Be 313.107†	3639.1	59.8	0.0378	µg/L	0.0378	ppb	04:06:58
1	Cd 226.502†	-97.4	2.7	0.0758	µg/L	0.0758	ppb	04:07:19
1	Co 228.616†	-63.8	7.3	0.3530	µg/L	0.3530	ppb	04:07:19
1	Cr 267.716†	-106.7	15.1	0.3145	µg/L	0.3145	ppb	04:06:58
1	Cu 324.752†	3455.4	101.7	0.7129	µg/L	0.7129	ppb	04:06:58
1	Mn 257.610†	-195.7	25.2	0.0786	µg/L	0.0786	ppb	04:07:19
1	Mo 202.031†	-3.3	4.6	0.5109	µg/L	0.5109	ppb	04:07:19
1	Ni 231.604†	291.5	-5.3	-0.2901	µg/L	-0.2901	ppb	04:07:19
1	P 214.914†	204.5	0.3	0.6666	µg/L	0.6666	ppb	04:07:19
1	Pb 220.353†	56.1	2.5	0.6201	µg/L	0.6201	ppb	04:07:19
1	S 181.975 Axial†	24.4	0.6	3.1634	µg/L	3.1634	ppb	04:07:19
1	Sb 206.836†	24.1	3.8	3.7753	µg/L	3.7753	ppb	04:07:19
1	Se 196.026†	11.6	-2.4	-3.5551	µg/L	-3.5551	ppb	04:07:19
1	SiO2†	1972.7	8.5	1.6295	µg/L	1.6295	ppb	04:06:58
1	Si 251.611†	354.0	7.5	0.5174	µg/L	0.5174	ppb	04:07:19
1	Sn 189.927†	24.3	2.1	1.0176	µg/L	1.0176	ppb	04:07:19
1	Ti 334.940†	758.0	45.8	0.1030	µg/L	0.1030	ppb	04:06:58
1	Tl 190.801†	-20.6	0.7	0.9976	µg/L	0.9976	ppb	04:07:19
1	U 409.014†	743.4	70.8	6.6469	µg/L	6.6469	ppb	04:06:58
1	V 292.402†	-73.0	18.3	0.2199	µg/L	0.2199	ppb	04:06:58
1	Zn 213.857†	544.7	-0.7	-0.0160	µg/L	-0.0160	ppb	04:07:19
2	Sc RADIAL	111514.8	111514.8	99.1	%			04:05:56
2	Al 396.153Radial†	181.0	-47.2	-23.882	µg/L	-23.882	ppb	04:05:56
2	Ca 317.933Radial†	433.0	-58.7	-23.283	µg/L	-23.283	ppb	04:06:17
2	Fe 238.204 Radial†	5.3	-5.9	-30.906	µg/L	-30.906	ppb	04:06:17
2	K 766.490 Radial†	669.9	-19.1	-10.380	µg/L	-10.380	ppb	04:05:56
2	Mg 279.077 IEC†	15.8	-3.9	-21.599	µg/L	-21.599	ppb	04:06:17
2	Na 589.592 Radial†	-722.0	-24.3	-6.7369	µg/L	-6.7369	ppb	04:05:56
2	Sr 421.552†	-19.4	44.2	0.2491	µg/L	0.2491	ppb	04:05:56
2	Sc 361.383	2044956.8	2044956.8	99.427	%			04:07:25
2	Y 371.029	1243594.2	1243594.2	99.300	%			04:07:25
2	Ag 328.068†	-59.8	-31.8	-0.2848	µg/L	-0.2848	ppb	04:07:30
2	As 188.979†	0.2	-2.3	-4.3644	µg/L	-4.3644	ppb	04:07:51
2	B 249.677†	148.6	-6.3	-0.2680	µg/L	-0.2680	ppb	04:07:30
2	Ba 233.527†	-78.6	1.6	0.0416	µg/L	0.0416	ppb	04:07:51
2	Be 313.107†	3674.6	84.3	0.0532	µg/L	0.0532	ppb	04:07:30
2	Cd 226.502†	-85.2	15.2	0.4101	µg/L	0.4101	ppb	04:07:51
2	Co 228.616†	-77.7	-6.4	-0.3089	µg/L	-0.3089	ppb	04:07:51
2	Cr 267.716†	-126.3	-4.3	-0.0887	µg/L	-0.0887	ppb	04:07:30
2	Cu 324.752†	3457.1	92.8	0.6459	µg/L	0.6459	ppb	04:07:30
2	Mn 257.610†	-209.5	12.0	0.0340	µg/L	0.0340	ppb	04:07:51
2	Mo 202.031†	-5.5	2.4	0.2638	µg/L	0.2638	ppb	04:07:51
2	Ni 231.604†	288.9	-8.8	-0.4819	µg/L	-0.4819	ppb	04:07:51
2	P 214.914†	204.4	-0.4	-0.9974	µg/L	-0.9974	ppb	04:07:51
2	Pb 220.353†	66.1	12.4	3.1283	µg/L	3.1283	ppb	04:07:51

2	S 181.975 Axial†	21.6	-2.3	-11.909 µg/L	-11.909 ppb		04:07:51
2	Sb 206.836†	25.5	5.1	5.0283 µg/L	5.0283 ppb		04:07:51
2	Se 196.026†	12.5	-1.5	-2.2561 µg/L	-2.2561 ppb		04:07:51
2	SiO2†	2051.5	81.6	15.586 µg/L	15.586 ppb		04:07:30
2	Si 251.611†	350.9	3.3	0.2881 µg/L	0.2881 ppb		04:07:51
2	Sn 189.927†	19.8	-2.6	-1.2736 µg/L	-1.2736 ppb		04:07:51
2	Ti 334.940†	840.4	126.4	0.2815 µg/L	0.2815 ppb		04:07:30
2	Tl 190.801†	-24.7	-3.4	-5.1321 µg/L	-5.1321 ppb		04:07:51
2	U 409.014†	759.5	84.7	7.9606 µg/L	7.9606 ppb		04:07:30
2	V 292.402†	-69.1	22.5	0.2654 µg/L	0.2654 ppb		04:07:30
2	Zn 213.857†	542.7	-4.4	-0.1113 µg/L	-0.1113 ppb		04:07:51
3	Sc RADIAL	111448.5	111448.5	99.1 %			04:06:22
3	Al 396.153Radial†	197.0	-31.0	-15.666 µg/L	-15.666 ppb		04:06:22
3	Ca 317.933Radial†	430.0	-61.4	-24.382 µg/L	-24.382 ppb		04:06:43
3	Fe 238.204 Radial†	7.6	-3.6	-18.762 µg/L	-18.762 ppb		04:06:43
3	K 766.490 Radial†	721.1	33.0	17.872 µg/L	17.872 ppb		04:06:22
3	Mg 279.077 IEC†	13.1	-6.6	-36.364 µg/L	-36.364 ppb		04:06:43
3	Na 589.592 Radial†	-698.7	-1.2	-0.3411 µg/L	-0.3411 ppb		04:06:22
3	Sr 421.552†	-74.7	-11.6	-0.0655 µg/L	-0.0655 ppb		04:06:22
3	Sc 361.383	2038572.5	2038572.5	99.116 %			04:07:57
3	Y 371.029	1242225.0	1242225.0	99.191 %			04:07:57
3	Ag 328.068†	-53.5	-25.7	-0.2295 µg/L	-0.2295 ppb		04:08:02
3	As 188.979†	5.0	2.6	4.9360 µg/L	4.9360 ppb		04:08:23
3	B 249.677†	159.4	5.1	0.2342 µg/L	0.2342 ppb		04:08:02
3	Ba 233.527†	-76.3	3.7	0.0935 µg/L	0.0935 ppb		04:08:23
3	Be 313.107†	3666.5	87.7	0.0554 µg/L	0.0554 ppb		04:08:02
3	Cd 226.502†	-86.8	13.3	0.3499 µg/L	0.3499 ppb		04:08:23
3	Co 228.616†	-76.0	-4.9	-0.2365 µg/L	-0.2365 ppb		04:08:23
3	Cr 267.716†	-128.7	-7.1	-0.1468 µg/L	-0.1468 ppb		04:08:02
3	Cu 324.752†	3437.8	84.2	0.5882 µg/L	0.5882 ppb		04:08:02
3	Mn 257.610†	-221.3	-0.6	-0.0042 µg/L	-0.0042 ppb		04:08:23
3	Mo 202.031†	-2.6	5.3	0.5858 µg/L	0.5858 ppb		04:08:23
3	Ni 231.604†	290.2	-6.6	-0.3602 µg/L	-0.3602 ppb		04:08:23
3	P 214.914†	207.7	3.5	7.6241 µg/L	7.6241 ppb		04:08:23
3	Pb 220.353†	55.4	1.8	0.4519 µg/L	0.4519 ppb		04:08:23
3	S 181.975 Axial†	24.4	0.6	3.0624 µg/L	3.0624 ppb		04:08:23
3	Sb 206.836†	20.6	0.2	0.2483 µg/L	0.2483 ppb		04:08:23
3	Se 196.026†	13.6	-0.3	-0.4850 µg/L	-0.4850 ppb		04:08:23
3	SiO2†	2025.2	61.5	11.754 µg/L	11.754 ppb		04:08:02
3	Si 251.611†	349.8	3.3	0.2027 µg/L	0.2027 ppb		04:08:23
3	Sn 189.927†	23.4	1.1	0.5317 µg/L	0.5317 ppb		04:08:23
3	Ti 334.940†	817.0	105.4	0.2351 µg/L	0.2351 ppb		04:08:02
3	Tl 190.801†	-21.8	-0.6	-0.8511 µg/L	-0.8511 ppb		04:08:23
3	U 409.014†	625.9	-47.7	-4.4762 µg/L	-4.4762 ppb		04:08:02
3	V 292.402†	-73.8	17.5	0.1928 µg/L	0.1928 ppb		04:08:02
3	Zn 213.857†	532.2	-13.2	-0.3490 µg/L	-0.3490 ppb		04:08:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2040735.1	99.222	%	0.1778				0.18%
Sc RADIAL	111801.4	99.4	%	0.49				0.50%
Y 371.029	1242266.6	99.194	%	0.1044				0.11%
Ag 328.068†	-28.3	-0.2530	µg/L	0.02858	-0.2530	ppb	0.02858	11.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-38.1	-19.289	µg/L	4.1928	-19.289	ppb	4.1928	21.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.6771	µg/L	4.94025	-0.6771	ppb	4.94025	729.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.0	-0.1247	µg/L	0.31300	-0.1247	ppb	0.31300	250.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0511	µg/L	0.03854	0.0511	ppb	0.03854	75.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.3	0.0488	µg/L	0.00959	0.0488	ppb	0.00959	19.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-61.5	-24.416	µg/L	1.1511	-24.416	ppb	1.1511	4.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.4	0.2786	µg/L	0.17817	0.2786	ppb	0.17817	63.95%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.3	-0.0641	µg/L	0.36306	-0.0641	ppb	0.36306	566.11%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.2      0.0263 µg/L       0.25120      0.0263 ppb        0.25120 953.43%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               92.9      0.6490 µg/L       0.06244      0.6490 ppb        0.06244   9.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -3.9     -20.318 µg/L        9.9017     -20.318 ppb         9.9017  48.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          6.9      3.7378 µg/L      14.12617      3.7378 ppb       14.12617 377.93%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.3     -23.788 µg/L       11.6374     -23.788 ppb        11.6374  48.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               12.2      0.0361 µg/L       0.04145      0.0361 ppb        0.04145 114.70%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.1      0.4535 µg/L       0.16851      0.4535 ppb        0.16851  37.16%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -12.2     -3.3920 µg/L       3.20801     -3.3920 ppb        3.20801  94.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -6.9     -0.3774 µg/L       0.09705     -0.3774 ppb        0.09705  25.71%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.1      2.4311 µg/L       4.57361      2.4311 ppb        4.57361 188.13%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                5.5      1.4001 µg/L       1.49901      1.4001 ppb        1.49901 107.07%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.4     -1.8942 µg/L       8.67281     -1.8942 ppb        8.67281 457.85%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                3.0      3.0173 µg/L       2.47851      3.0173 ppb        2.47851  82.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.4     -2.0987 µg/L       1.54106     -2.0987 ppb        1.54106  73.43%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     50.6      9.6562 µg/L       7.21056      9.6562 ppb        7.21056  74.67%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                4.7      0.3361 µg/L       0.16273      0.3361 ppb        0.16273  48.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.2      0.0919 µg/L       1.20726      0.0919 ppb        1.20726 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                7.2      0.0406 µg/L       0.18053      0.0406 ppb        0.18053 444.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               92.6      0.2065 µg/L       0.09259      0.2065 ppb        0.09259  44.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.1     -1.6619 µg/L       3.14427     -1.6619 ppb        3.14427 189.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                35.9      3.3771 µg/L       6.83282      3.3771 ppb        6.83282 202.33%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.4      0.2260 µg/L       0.03666      0.2260 ppb        0.03666  16.22%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.1     -0.1588 µg/L       0.17150     -0.1588 ppb        0.17150 108.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 04:39:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112993.3	112993.3	100	%			04:39:44
1	Al 396.153Radial†	10308.5	10031.9	5051.0	µg/L	5051.0	ppb	04:39:44
1	Ca 317.933Radial†	13009.8	12455.3	4944.2	µg/L	4944.2	ppb	04:40:05
1	Fe 238.204 Radial†	985.2	969.5	5109.4	µg/L	5109.4	ppb	04:40:05
1	K 766.490 Radial†	10019.8	9279.5	5031.3	µg/L	5031.3	ppb	04:39:44
1	Mg 279.077 IEC†	949.0	924.9	5134.7	µg/L	5134.7	ppb	04:40:05
1	Na 589.592 Radial†	36175.1	36714.7	10187	µg/L	10187	ppb	04:39:44
1	Sr 421.552†	88731.2	88392.0	497.91	µg/L	497.91	ppb	04:39:44
1	Sc 361.383	2039191.5	2039191.5	99.147	%			04:41:08
1	Y 371.029	1235363.7	1235363.7	98.643	%			04:41:08
1	Ag 328.068†	55450.8	55956.4	503.58	µg/L	503.58	ppb	04:41:14
1	As 188.979†	263.5	263.3	500.81	µg/L	500.81	ppb	04:41:34
1	B 249.677†	11157.1	11097.4	490.94	µg/L	490.94	ppb	04:41:14
1	Ba 233.527†	19561.5	19810.6	498.63	µg/L	498.63	ppb	04:41:14
1	Be 313.107†	786500.8	789659.2	499.34	µg/L	499.34	ppb	04:41:08
1	Cd 226.502†	18567.7	18828.4	498.06	µg/L	498.06	ppb	04:41:14
1	Co 228.616†	10187.7	10347.1	497.70	µg/L	497.70	ppb	04:41:14
1	Cr 267.716†	23560.6	23886.1	498.38	µg/L	498.38	ppb	04:41:14
1	Cu 324.752†	73878.4	71130.0	501.53	µg/L	501.53	ppb	04:41:14
1	Mn 257.610†	156127.4	157693.9	501.09	µg/L	501.09	ppb	04:41:08
1	Mo 202.031†	4407.5	4453.4	497.02	µg/L	497.02	ppb	04:41:34
1	Ni 231.604†	9378.1	9159.5	498.99	µg/L	498.99	ppb	04:41:14
1	P 214.914†	1349.5	1155.2	2453.0	µg/L	2453.0	ppb	04:41:34
1	Pb 220.353†	2015.1	1978.3	502.22	µg/L	502.22	ppb	04:41:34
1	S 181.975 Axial†	221.2	199.0	1021.0	µg/L	1021.0	ppb	04:41:34
1	Sb 206.836†	525.7	509.6	504.22	µg/L	504.22	ppb	04:41:34
1	Se 196.026†	358.0	347.0	507.51	µg/L	507.51	ppb	04:41:34
1	SiO2†	29976.4	28252.8	5395.3	µg/L	5395.3	ppb	04:41:14
1	Si 251.611†	32961.3	32895.4	2472.1	µg/L	2472.1	ppb	04:41:14
1	Sn 189.927†	1026.7	1013.1	496.64	µg/L	496.64	ppb	04:41:34
1	Ti 334.940†	223221.8	224424.4	497.18	µg/L	497.18	ppb	04:41:08
1	Tl 190.801†	305.0	329.0	498.90	µg/L	498.90	ppb	04:41:34
1	U 409.014†	5986.7	5359.0	502.43	µg/L	502.43	ppb	04:41:14
1	V 292.402†	43808.8	44277.8	503.86	µg/L	503.86	ppb	04:41:14
1	Zn 213.857†	19147.0	18761.7	498.68	µg/L	498.68	ppb	04:41:14
2	Sc RADIAL	112481.1	112481.1	100	%			04:40:10
2	Al 396.153Radial†	10363.0	10133.0	5102.2	µg/L	5102.2	ppb	04:40:10
2	Ca 317.933Radial†	13046.8	12551.2	4982.3	µg/L	4982.3	ppb	04:40:31
2	Fe 238.204 Radial†	988.9	977.7	5152.5	µg/L	5152.5	ppb	04:40:31
2	K 766.490 Radial†	9980.7	9285.8	5034.7	µg/L	5034.7	ppb	04:40:10
2	Mg 279.077 IEC†	952.8	933.0	5179.7	µg/L	5179.7	ppb	04:40:31
2	Na 589.592 Radial†	36303.3	37006.9	10268	µg/L	10268	ppb	04:40:10
2	Sr 421.552†	88574.2	88637.1	499.29	µg/L	499.29	ppb	04:40:10
2	Sc 361.383	2045235.5	2045235.5	99.440	%			04:41:42
2	Y 371.029	1238335.7	1238335.7	98.880	%			04:41:42
2	Ag 328.068†	55677.9	56019.5	504.15	µg/L	504.15	ppb	04:41:47
2	As 188.979†	258.3	257.3	489.39	µg/L	489.39	ppb	04:42:08
2	B 249.677†	11236.0	11143.5	492.97	µg/L	492.97	ppb	04:41:47
2	Ba 233.527†	19676.8	19868.2	500.08	µg/L	500.08	ppb	04:41:47
2	Be 313.107†	793198.5	794050.3	502.12	µg/L	502.12	ppb	04:41:42
2	Cd 226.502†	18640.3	18846.1	498.52	µg/L	498.52	ppb	04:41:47
2	Co 228.616†	10259.7	10389.2	499.72	µg/L	499.72	ppb	04:41:47
2	Cr 267.716†	23640.1	23895.9	498.59	µg/L	498.59	ppb	04:41:47
2	Cu 324.752†	74292.2	71325.9	502.92	µg/L	502.92	ppb	04:41:47
2	Mn 257.610†	157559.8	158669.0	504.19	µg/L	504.19	ppb	04:41:42
2	Mo 202.031†	4409.5	4442.2	495.77	µg/L	495.77	ppb	04:42:08
2	Ni 231.604†	9413.3	9166.8	499.39	µg/L	499.39	ppb	04:41:47
2	P 214.914†	1358.1	1159.7	2462.8	µg/L	2462.8	ppb	04:42:08
2	Pb 220.353†	2025.4	1982.7	503.32	µg/L	503.32	ppb	04:42:08

2	S 181.975 Axial†	216.7	193.9	994.57 µg/L	994.57 ppb	04:42:08
2	Sb 206.836†	524.4	506.8	501.46 µg/L	501.46 ppb	04:42:08
2	Se 196.026†	358.9	346.8	507.31 µg/L	507.31 ppb	04:42:08
2	SiO2†	30143.2	28331.2	5410.2 µg/L	5410.2 ppb	04:41:47
2	Si 251.611†	33096.5	32933.1	2474.7 µg/L	2474.7 ppb	04:41:47
2	Sn 189.927†	1037.5	1020.9	500.48 µg/L	500.48 ppb	04:42:08
2	Ti 334.940†	225311.1	225860.0	500.36 µg/L	500.36 ppb	04:41:42
2	Tl 190.801†	308.1	331.3	502.30 µg/L	502.30 ppb	04:42:08
2	U 409.014†	6015.4	5370.0	503.46 µg/L	503.46 ppb	04:41:47
2	V 292.402†	43926.8	44265.9	503.72 µg/L	503.72 ppb	04:41:47
2	Zn 213.857†	19223.1	18781.1	499.20 µg/L	499.20 ppb	04:41:47
3	Sc RADIAL	113543.2	113543.2	101 %		04:40:36
3	Al 396.153Radial†	10367.4	10040.5	5055.6 µg/L	5055.6 ppb	04:40:36
3	Ca 317.933Radial†	13114.0	12495.8	4960.3 µg/L	4960.3 ppb	04:40:57
3	Fe 238.204 Radial†	990.1	969.6	5109.8 µg/L	5109.8 ppb	04:40:57
3	K 766.490 Radial†	10041.3	9252.4	5016.6 µg/L	5016.6 ppb	04:40:36
3	Mg 279.077 IEC†	957.9	929.1	5158.2 µg/L	5158.2 ppb	04:40:57
3	Na 589.592 Radial†	36293.6	36657.7	10171 µg/L	10171 ppb	04:40:36
3	Sr 421.552†	88900.5	88132.0	496.44 µg/L	496.44 ppb	04:40:36
3	Sc 361.383	2046115.8	2046115.8	99.483 %		04:42:15
3	Y 371.029	1239632.0	1239632.0	98.984 %		04:42:15
3	Ag 328.068†	55928.8	56247.6	506.20 µg/L	506.20 ppb	04:42:20
3	As 188.979†	259.3	258.1	491.01 µg/L	491.01 ppb	04:42:41
3	B 249.677†	11266.9	11169.7	494.15 µg/L	494.15 ppb	04:42:20
3	Ba 233.527†	19792.6	19976.1	502.79 µg/L	502.79 ppb	04:42:20
3	Be 313.107†	791154.4	791652.5	500.60 µg/L	500.60 ppb	04:42:15
3	Cd 226.502†	18741.7	18939.9	501.01 µg/L	501.01 ppb	04:42:20
3	Co 228.616†	10321.2	10446.5	502.46 µg/L	502.46 ppb	04:42:20
3	Cr 267.716†	23779.4	24025.7	501.29 µg/L	501.29 ppb	04:42:20
3	Cu 324.752†	74591.4	71594.5	504.80 µg/L	504.80 ppb	04:42:20
3	Mn 257.610†	157110.4	158149.1	502.53 µg/L	502.53 ppb	04:42:15
3	Mo 202.031†	4362.6	4393.2	490.31 µg/L	490.31 ppb	04:42:41
3	Ni 231.604†	9508.6	9258.6	504.39 µg/L	504.39 ppb	04:42:20
3	P 214.914†	1340.7	1141.7	2423.4 µg/L	2423.4 ppb	04:42:41
3	Pb 220.353†	2003.7	1960.0	497.54 µg/L	497.54 ppb	04:42:41
3	S 181.975 Axial†	214.5	191.6	982.76 µg/L	982.76 ppb	04:42:41
3	Sb 206.836†	519.5	501.6	496.29 µg/L	496.29 ppb	04:42:41
3	Se 196.026†	360.6	348.4	509.56 µg/L	509.56 ppb	04:42:41
3	SiO2†	30289.4	28465.0	5435.8 µg/L	5435.8 ppb	04:42:20
3	Si 251.611†	33316.8	33140.2	2491.0 µg/L	2491.0 ppb	04:42:20
3	Sn 189.927†	1024.6	1007.5	493.92 µg/L	493.92 ppb	04:42:41
3	Ti 334.940†	224788.7	225237.5	498.98 µg/L	498.98 ppb	04:42:15
3	Tl 190.801†	304.8	327.8	496.99 µg/L	496.99 ppb	04:42:41
3	U 409.014†	6083.7	5436.1	509.68 µg/L	509.68 ppb	04:42:20
3	V 292.402†	44119.4	44440.6	505.66 µg/L	505.66 ppb	04:42:20
3	Zn 213.857†	19331.4	18881.6	501.86 µg/L	501.86 ppb	04:42:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2043514.3	99.357	%	0.1833				0.18%
Sc RADIAL	113005.9	100	%	0.5				0.47%
Y 371.029	1237777.1	98.836	%	0.1747				0.18%
Ag 328.068†	56074.5	504.64	µg/L	1.375	504.64	ppb	1.375	0.27%
QC value within limits for Ag 328.068 Recovery = 100.93%								
Al 396.153Radial†	10068.5	5069.6	µg/L	28.31	5069.6	ppb	28.31	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.39%								
As 188.979†	259.6	493.74	µg/L	6.179	493.74	ppb	6.179	1.25%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	11136.9	492.69	µg/L	1.623	492.69	ppb	1.623	0.33%
QC value within limits for B 249.677 Recovery = 98.54%								
Ba 233.527†	19885.0	500.50	µg/L	2.112	500.50	ppb	2.112	0.42%
QC value within limits for Ba 233.527 Recovery = 100.10%								
Be 313.107†	791787.3	500.69	µg/L	1.390	500.69	ppb	1.390	0.28%
QC value within limits for Be 313.107 Recovery = 100.14%								
Ca 317.933Radial†	12500.8	4962.2	µg/L	19.11	4962.2	ppb	19.11	0.39%
QC value within limits for Ca 317.933Radial Recovery = 99.24%								
Cd 226.502†	18871.5	499.20	µg/L	1.590	499.20	ppb	1.590	0.32%
QC value within limits for Cd 226.502 Recovery = 99.84%								
Co 228.616†	10394.3	499.96	µg/L	2.390	499.96	ppb	2.390	0.48%

```
   QC value within limits for Co 228.616  Recovery = 99.99%
Cr 267.716†            23935.9      499.42 µg/L        1.624      499.42 ppb          1.624   0.33%
   QC value within limits for Cr 267.716  Recovery = 99.88%
Cu 324.752†            71350.2      503.08 µg/L        1.640      503.08 ppb          1.640   0.33%
   QC value within limits for Cu 324.752  Recovery = 100.62%
Fe 238.204 Radial†       972.3      5123.9 µg/L       24.77      5123.9 ppb         24.77   0.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.48%
K 766.490 Radial†       9272.6      5027.5 µg/L        9.61      5027.5 ppb          9.61   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 100.55%
Mg 279.077 IEC†          929.0      5157.5 µg/L       22.49      5157.5 ppb         22.49   0.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.15%
Mn 257.610†           158170.7      502.60 µg/L        1.551      502.60 ppb          1.551   0.31%
   QC value within limits for Mn 257.610  Recovery = 100.52%
Mo 202.031†             4429.6      494.36 µg/L        3.569      494.36 ppb          3.569   0.72%
   QC value within limits for Mo 202.031  Recovery = 98.87%
Na 589.592 Radial†     36793.1       10209 µg/L       52.0        10209 ppb         52.0   0.51%
   QC value within limits for Na 589.592 Radial  Recovery = 102.09%
Ni 231.604†             9195.0      500.93 µg/L        3.010      500.93 ppb          3.010   0.60%
   QC value within limits for Ni 231.604  Recovery = 100.19%
P 214.914†              1152.2      2446.4 µg/L       20.56      2446.4 ppb         20.56   0.84%
   QC value within limits for P 214.914  Recovery = 97.86%
Pb 220.353†             1973.7      501.03 µg/L        3.069      501.03 ppb          3.069   0.61%
   QC value within limits for Pb 220.353  Recovery = 100.21%
S 181.975 Axial†         194.8      999.44 µg/L       19.582      999.44 ppb         19.582   1.96%
   QC value within limits for S 181.975 Axial  Recovery = 99.94%
Sb 206.836†              506.0      500.66 µg/L        4.025      500.66 ppb          4.025   0.80%
   QC value within limits for Sb 206.836  Recovery = 100.13%
Se 196.026†              347.4      508.13 µg/L        1.246      508.13 ppb          1.246   0.25%
   QC value within limits for Se 196.026  Recovery = 101.63%
SiO2†                  28349.7      5413.8 µg/L       20.49      5413.8 ppb         20.49   0.38%
   QC value within limits for SiO2  Recovery = 101.24%
Si 251.611†            32989.5      2479.3 µg/L       10.24      2479.3 ppb         10.24   0.41%
   QC value within limits for Si 251.611  Recovery = 99.17%
Sn 189.927†             1013.8      497.01 µg/L        3.297      497.01 ppb          3.297   0.66%
   QC value within limits for Sn 189.927  Recovery = 99.40%
Sr 421.552†            88387.0      497.88 µg/L        1.423      497.88 ppb          1.423   0.29%
   QC value within limits for Sr 421.552  Recovery = 99.58%
Ti 334.940†           225174.0      498.84 µg/L        1.595      498.84 ppb          1.595   0.32%
   QC value within limits for Ti 334.940  Recovery = 99.77%
Tl 190.801†              329.4      499.40 µg/L        2.687      499.40 ppb          2.687   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.88%
U 409.014†              5388.4      505.19 µg/L        3.919      505.19 ppb          3.919   0.78%
   QC value within limits for U 409.014  Recovery = 101.04%
V 292.402†             44328.1      504.41 µg/L        1.081      504.41 ppb          1.081   0.21%
   QC value within limits for V 292.402  Recovery = 100.88%
Zn 213.857†            18808.2      499.92 µg/L        1.707      499.92 ppb          1.707   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.98%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 12/18/2009 04:42:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	112133.3	112133.3	99.7	%			04:43:24
1	Al 396.153Radial†	617.8	389.9	196.61	µg/L	196.61	ppb	04:43:24
1	Ca 317.933Radial†	945.6	453.1	179.84	µg/L	179.84	ppb	04:43:45
1	Fe 238.204 Radial†	33.1	22.0	115.97	µg/L	115.97	ppb	04:43:45
1	K 766.490 Radial†	977.5	285.6	154.87	µg/L	154.87	ppb	04:43:24
1	Mg 279.077 IEC†	72.8	53.2	295.04	µg/L	295.04	ppb	04:43:45
1	Na 589.592 Radial†	529.1	1234.7	342.57	µg/L	342.57	ppb	04:43:24
1	Sr 421.552†	868.8	935.3	5.2684	µg/L	5.2684	ppb	04:43:24
1	Sc 361.383	2041230.8	2041230.8	99.246	%			04:44:47
1	Y 371.029	1243098.4	1243098.4	99.261	%			04:44:47
1	Ag 328.068†	536.3	568.7	5.1262	µg/L	5.1262	ppb	04:44:52
1	As 188.979†	20.4	18.0	34.326	µg/L	34.326	ppb	04:45:13
1	B 249.677†	1263.9	1117.8	49.577	µg/L	49.577	ppb	04:44:52
1	Ba 233.527†	118.9	200.5	5.0478	µg/L	5.0478	ppb	04:45:13
1	Be 313.107†	11576.7	8053.2	5.0924	µg/L	5.0924	ppb	04:44:52
1	Cd 226.502†	91.1	192.7	5.1287	µg/L	5.1287	ppb	04:45:13
1	Co 228.616†	29.9	101.8	4.9098	µg/L	4.9098	ppb	04:45:13
1	Cr 267.716†	123.8	247.5	5.1657	µg/L	5.1657	ppb	04:44:52
1	Cu 324.752†	4752.1	1403.9	9.9020	µg/L	9.9020	ppb	04:44:52
1	Mn 257.610†	3088.7	3334.8	10.598	µg/L	10.598	ppb	04:44:52
1	Mo 202.031†	88.3	96.9	10.818	µg/L	10.818	ppb	04:45:13
1	Ni 231.604†	375.1	78.5	4.2790	µg/L	4.2790	ppb	04:45:13
1	P 214.914†	274.7	70.8	152.55	µg/L	152.55	ppb	04:45:13
1	Pb 220.353†	103.2	49.8	12.612	µg/L	12.612	ppb	04:45:13
1	S 181.975 Axial†	41.0	17.2	88.519	µg/L	88.519	ppb	04:45:13
1	Sb 206.836†	27.6	7.2	7.1874	µg/L	7.1874	ppb	04:45:13
1	Se 196.026†	38.1	24.3	35.441	µg/L	35.441	ppb	04:45:13
1	SiO2†	3183.1	1225.7	234.06	µg/L	234.06	ppb	04:44:52
1	Si 251.611†	1655.6	1318.6	100.23	µg/L	100.23	ppb	04:45:13
1	Sn 189.927†	39.6	17.5	8.6280	µg/L	8.6280	ppb	04:45:13
1	Ti 334.940†	3028.9	2333.1	5.1614	µg/L	5.1614	ppb	04:44:52
1	Tl 190.801†	-8.1	13.2	19.986	µg/L	19.986	ppb	04:45:13
1	U 409.014†	1297.9	628.6	59.015	µg/L	59.015	ppb	04:44:52
1	V 292.402†	397.0	491.9	5.7261	µg/L	5.7261	ppb	04:44:52
1	Zn 213.857†	924.7	381.5	10.165	µg/L	10.165	ppb	04:45:13
2	Sc RADIAL	112501.3	112501.3	100	%			04:43:50
2	Al 396.153Radial†	589.5	359.5	181.31	µg/L	181.31	ppb	04:43:50
2	Ca 317.933Radial†	941.1	445.5	176.83	µg/L	176.83	ppb	04:44:11
2	Fe 238.204 Radial†	29.4	18.2	95.539	µg/L	95.539	ppb	04:44:11
2	K 766.490 Radial†	993.4	298.3	161.76	µg/L	161.76	ppb	04:43:50
2	Mg 279.077 IEC†	76.7	56.9	315.57	µg/L	315.57	ppb	04:44:11
2	Na 589.592 Radial†	488.0	1191.8	330.68	µg/L	330.68	ppb	04:43:50
2	Sr 421.552†	794.3	857.9	4.8327	µg/L	4.8327	ppb	04:43:50
2	Sc 361.383	2045883.3	2045883.3	99.472	%			04:45:19
2	Y 371.029	1246286.3	1246286.3	99.515	%			04:45:19
2	Ag 328.068†	545.3	576.5	5.1913	µg/L	5.1913	ppb	04:45:25
2	As 188.979†	18.2	15.8	30.101	µg/L	30.101	ppb	04:45:45
2	B 249.677†	1256.7	1107.7	49.134	µg/L	49.134	ppb	04:45:25
2	Ba 233.527†	120.0	201.4	5.0682	µg/L	5.0682	ppb	04:45:45
2	Be 313.107†	11696.1	8146.7	5.1515	µg/L	5.1515	ppb	04:45:25
2	Cd 226.502†	96.2	197.6	5.2575	µg/L	5.2575	ppb	04:45:45
2	Co 228.616†	29.8	101.7	4.9032	µg/L	4.9032	ppb	04:45:45
2	Cr 267.716†	120.1	243.5	5.0796	µg/L	5.0796	ppb	04:45:25
2	Cu 324.752†	4702.4	1343.0	9.4693	µg/L	9.4693	ppb	04:45:25
2	Mn 257.610†	3087.5	3326.6	10.569	µg/L	10.569	ppb	04:45:25
2	Mo 202.031†	82.9	91.2	10.181	µg/L	10.181	ppb	04:45:45
2	Ni 231.604†	388.8	91.5	4.9823	µg/L	4.9823	ppb	04:45:45
2	P 214.914†	280.5	76.0	164.06	µg/L	164.06	ppb	04:45:45
2	Pb 220.353†	98.1	44.5	11.277	µg/L	11.277	ppb	04:45:45

2	S 181.975 Axial†	43.0	19.2	98.694 µg/L	98.694 ppb	04:45:45
2	Sb 206.836†	29.1	8.7	8.6700 µg/L	8.6700 ppb	04:45:45
2	Se 196.026†	36.7	22.8	33.131 µg/L	33.131 ppb	04:45:45
2	SiO2†	3156.9	1192.0	227.63 µg/L	227.63 ppb	04:45:25
2	Si 251.611†	1658.6	1317.8	100.17 µg/L	100.17 ppb	04:45:45
2	Sn 189.927†	39.8	17.6	8.6932 µg/L	8.6932 ppb	04:45:45
2	Ti 334.940†	3080.8	2378.3	5.2617 µg/L	5.2617 ppb	04:45:25
2	Tl 190.801†	-2.8	18.6	28.066 µg/L	28.066 ppb	04:45:45
2	U 409.014†	1251.5	578.9	54.351 µg/L	54.351 ppb	04:45:25
2	V 292.402†	353.2	447.1	5.2068 µg/L	5.2068 ppb	04:45:25
2	Zn 213.857†	935.0	389.8	10.387 µg/L	10.387 ppb	04:45:45
3	Sc RADIAL	110974.7	110974.7	98.7 %		04:44:16
3	Al 396.153Radial†	609.4	387.8	195.61 µg/L	195.61 ppb	04:44:16
3	Ca 317.933Radial†	926.5	443.6	176.10 µg/L	176.10 ppb	04:44:37
3	Fe 238.204 Radial†	27.5	16.7	87.644 µg/L	87.644 ppb	04:44:37
3	K 766.490 Radial†	989.2	307.8	166.88 µg/L	166.88 ppb	04:44:16
3	Mg 279.077 IEC†	77.3	58.5	324.66 µg/L	324.66 ppb	04:44:37
3	Na 589.592 Radial†	531.2	1242.4	344.71 µg/L	344.71 ppb	04:44:16
3	Sr 421.552†	817.5	892.3	5.0264 µg/L	5.0264 ppb	04:44:16
3	Sc 361.383	2051852.5	2051852.5	99.762 %		04:45:51
3	Y 371.029	1249540.9	1249540.9	99.775 %		04:45:51
3	Ag 328.068†	520.4	550.0	4.9517 µg/L	4.9517 ppb	04:45:57
3	As 188.979†	17.4	15.0	28.554 µg/L	28.554 ppb	04:46:17
3	B 249.677†	1285.0	1132.4	50.232 µg/L	50.232 ppb	04:45:57
3	Ba 233.527†	121.9	202.9	5.1057 µg/L	5.1057 ppb	04:46:17
3	Be 313.107†	11635.7	8051.9	5.0916 µg/L	5.0916 ppb	04:45:57
3	Cd 226.502†	89.9	191.0	5.0839 µg/L	5.0839 ppb	04:46:17
3	Co 228.616†	34.4	106.2	5.1191 µg/L	5.1191 ppb	04:46:17
3	Cr 267.716†	115.7	238.7	4.9806 µg/L	4.9806 ppb	04:45:57
3	Cu 324.752†	4744.8	1371.8	9.6704 µg/L	9.6704 ppb	04:45:57
3	Mn 257.610†	3080.3	3310.3	10.517 µg/L	10.517 ppb	04:45:57
3	Mo 202.031†	82.7	90.8	10.137 µg/L	10.137 ppb	04:46:17
3	Ni 231.604†	386.0	87.5	4.7673 µg/L	4.7673 ppb	04:46:17
3	P 214.914†	282.9	77.5	167.31 µg/L	167.31 ppb	04:46:17
3	Pb 220.353†	97.9	44.0	11.133 µg/L	11.133 ppb	04:46:17
3	S 181.975 Axial†	49.1	25.2	129.49 µg/L	129.49 ppb	04:46:17
3	Sb 206.836†	27.1	6.6	6.5112 µg/L	6.5112 ppb	04:46:17
3	Se 196.026†	27.4	13.3	19.368 µg/L	19.368 ppb	04:46:17
3	SiO2†	3118.1	1143.8	218.43 µg/L	218.43 ppb	04:45:57
3	Si 251.611†	1659.0	1313.3	99.875 µg/L	99.875 ppb	04:46:17
3	Sn 189.927†	37.8	15.4	7.6379 µg/L	7.6379 ppb	04:46:17
3	Ti 334.940†	3049.1	2337.5	5.1715 µg/L	5.1715 ppb	04:45:57
3	Tl 190.801†	-7.6	13.8	20.814 µg/L	20.814 ppb	04:46:17
3	U 409.014†	1247.5	571.3	53.640 µg/L	53.640 ppb	04:45:57
3	V 292.402†	333.3	426.1	4.9678 µg/L	4.9678 ppb	04:45:57
3	Zn 213.857†	932.9	385.0	10.258 µg/L	10.258 ppb	04:46:17

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	2046322.2	99.493	%	0.2589				0.26%
Sc RADIAL	111869.8	99.5	%	0.71				0.71%
Y 371.029	1246308.5	99.517	%	0.2572				0.26%
Ag 328.068†	565.1	5.0897	µg/L	0.12390	5.0897	ppb	0.12390	2.43%
QC value within limits for Ag 328.068 Recovery = 101.79%								
Al 396.153Radial†	379.1	191.18	µg/L	8.559	191.18	ppb	8.559	4.48%
QC value within limits for Al 396.153Radial Recovery = 95.59%								
As 188.979†	16.3	30.994	µg/L	2.9882	30.994	ppb	2.9882	9.64%
QC value within limits for As 188.979 Recovery = 103.31%								
B 249.677†	1119.3	49.647	µg/L	0.5523	49.647	ppb	0.5523	1.11%
QC value within limits for B 249.677 Recovery = 99.29%								
Ba 233.527†	201.6	5.0739	µg/L	0.02936	5.0739	ppb	0.02936	0.58%
QC value within limits for Ba 233.527 Recovery = 101.48%								
Be 313.107†	8083.9	5.1118	µg/L	0.03436	5.1118	ppb	0.03436	0.67%
QC value within limits for Be 313.107 Recovery = 102.24%								
Ca 317.933Radial†	447.4	177.59	µg/L	1.982	177.59	ppb	1.982	1.12%
QC value within limits for Ca 317.933Radial Recovery = 88.80%								
Cd 226.502†	193.7	5.1567	µg/L	0.09015	5.1567	ppb	0.09015	1.75%
QC value within limits for Cd 226.502 Recovery = 103.13%								
Co 228.616†	103.2	4.9774	µg/L	0.12278	4.9774	ppb	0.12278	2.47%

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   QC value within limits for Co 228.616  Recovery = 99.55%
Cr 267.716†              243.2      5.0753 µg/L       0.09264      5.0753 ppb        0.09264   1.83%
   QC value within limits for Cr 267.716  Recovery = 101.51%
Cu 324.752†             1372.9      9.6806 µg/L       0.21654      9.6806 ppb        0.21654   2.24%
   QC value within limits for Cu 324.752  Recovery = 96.81%
Fe 238.204 Radial†        19.0      99.717 µg/L       14.6172      99.717 ppb        14.6172  14.66%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.72%
K 766.490 Radial†        297.3      161.17 µg/L         6.026      161.17 ppb          6.026   3.74%
   QC value within limits for K 766.490 Radial  Recovery = 107.45%
Mg 279.077 IEC†           56.2      311.76 µg/L        15.177      311.76 ppb         15.177   4.87%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.92%
Mn 257.610†             3323.9      10.561 µg/L        0.0411      10.561 ppb         0.0411   0.39%
   QC value within limits for Mn 257.610  Recovery = 105.61%
Mo 202.031†               93.0      10.379 µg/L        0.3809      10.379 ppb         0.3809   3.67%
   QC value within limits for Mo 202.031  Recovery = 103.79%
Na 589.592 Radial†      1222.9      339.32 µg/L         7.562      339.32 ppb          7.562   2.23%
   QC value within limits for Na 589.592 Radial  Recovery = 113.11%
Ni 231.604†               85.8      4.6762 µg/L       0.36043      4.6762 ppb        0.36043   7.71%
   QC value within limits for Ni 231.604  Recovery = 93.52%
P 214.914†                74.8      161.31 µg/L         7.753      161.31 ppb          7.753   4.81%
   QC value within limits for P 214.914  Recovery = 107.54%
Pb 220.353†               46.1      11.674 µg/L        0.8158      11.674 ppb         0.8158   6.99%
   QC value within limits for Pb 220.353  Recovery = 116.74%
S 181.975 Axial†          20.6      105.57 µg/L        21.334      105.57 ppb         21.334  20.21%
   QC value within limits for S 181.975 Axial  Recovery = 105.57%
Sb 206.836†                7.5      7.4562 µg/L       1.10419      7.4562 ppb        1.10419  14.81%
   QC value within limits for Sb 206.836  Recovery = 74.56%
Se 196.026†               20.1      29.313 µg/L        8.6901      29.313 ppb         8.6901  29.65%
   QC value within limits for Se 196.026  Recovery = 97.71%
SiO2†                   1187.2      226.71 µg/L         7.854      226.71 ppb          7.854   3.46%
   QC value within limits for SiO2  Recovery = 106.44%
Si 251.611†             1316.6      100.09 µg/L         0.191      100.09 ppb          0.191   0.19%
   QC value within limits for Si 251.611  Recovery = 100.09%
Sn 189.927†               16.8      8.3197 µg/L       0.59135      8.3197 ppb        0.59135   7.11%
   QC value within limits for Sn 189.927  Recovery = 83.20%
Sr 421.552†              895.2      5.0425 µg/L       0.21825      5.0425 ppb        0.21825   4.33%
   QC value within limits for Sr 421.552  Recovery = 100.85%
Ti 334.940†             2349.6      5.1982 µg/L       0.05523      5.1982 ppb        0.05523   1.06%
   QC value within limits for Ti 334.940  Recovery = 103.96%
Tl 190.801†               15.2      22.955 µg/L        4.4455      22.955 ppb         4.4455  19.37%
   QC value within limits for Tl 190.801  Recovery = 114.78%
U 409.014†               592.9      55.669 µg/L        2.9195      55.669 ppb         2.9195   5.24%
   QC value within limits for U 409.014  Recovery = 111.34%
V 292.402†               455.0      5.3002 µg/L       0.38769      5.3002 ppb        0.38769   7.31%
   QC value within limits for V 292.402  Recovery = 106.00%
Zn 213.857†              385.5      10.270 µg/L        0.1113      10.270 ppb         0.1113   1.08%
   QC value within limits for Zn 213.857  Recovery = 102.70%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 04:46:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	111132.5	111132.5	98.8	%			04:47:00
1	Al 396.153Radial†	173.2	-54.5	-27.561	µg/L	-27.561	ppb	04:47:00
1	Ca 317.933Radial†	415.1	-75.3	-29.896	µg/L	-29.896	ppb	04:47:20
1	Fe 238.204 Radial†	12.2	1.2	6.2193	µg/L	6.2193	ppb	04:47:20
1	K 766.490 Radial†	712.5	26.3	14.246	µg/L	14.246	ppb	04:47:00
1	Mg 279.077 IEC†	16.9	-2.7	-15.222	µg/L	-15.222	ppb	04:47:20
1	Na 589.592 Radial†	-618.4	78.0	21.645	µg/L	21.645	ppb	04:47:00
1	Sr 421.552†	-45.3	17.9	0.1011	µg/L	0.1011	ppb	04:47:00
1	Sc 361.383	2043596.3	2043596.3	99.361	%			04:48:22
1	Y 371.029	1244766.0	1244766.0	99.394	%			04:48:22
1	Ag 328.068†	-27.6	0.5	0.0068	µg/L	0.0068	ppb	04:48:28
1	As 188.979†	-0.1	-2.6	-4.8902	µg/L	-4.8902	ppb	04:48:48
1	B 249.677†	156.7	2.0	0.0870	µg/L	0.0870	ppb	04:48:48
1	Ba 233.527†	-85.6	-5.5	-0.1368	µg/L	-0.1368	ppb	04:48:48
1	Be 313.107†	3651.2	63.2	0.0399	µg/L	0.0399	ppb	04:48:28
1	Cd 226.502†	-102.5	-2.2	-0.0526	µg/L	-0.0526	ppb	04:48:48
1	Co 228.616†	-79.0	-7.7	-0.3709	µg/L	-0.3709	ppb	04:48:48
1	Cr 267.716†	-127.3	-5.4	-0.1116	µg/L	-0.1116	ppb	04:48:28
1	Cu 324.752†	3406.6	44.2	0.3124	µg/L	0.3124	ppb	04:48:28
1	Mn 257.610†	-207.1	14.2	0.0458	µg/L	0.0458	ppb	04:48:48
1	Mo 202.031†	-0.2	7.8	0.8657	µg/L	0.8657	ppb	04:48:48
1	Ni 231.604†	303.5	6.0	0.3277	µg/L	0.3277	ppb	04:48:48
1	P 214.914†	206.3	1.7	3.5538	µg/L	3.5538	ppb	04:48:48
1	Pb 220.353†	69.7	16.0	4.0568	µg/L	4.0568	ppb	04:48:48
1	S 181.975 Axial†	20.4	-3.5	-18.126	µg/L	-18.126	ppb	04:48:48
1	Sb 206.836†	18.0	-2.4	-2.3942	µg/L	-2.3942	ppb	04:48:48
1	Se 196.026†	10.0	-4.0	-5.8076	µg/L	-5.8076	ppb	04:48:48
1	SiO2†	1999.2	30.3	5.7956	µg/L	5.7956	ppb	04:48:28
1	Si 251.611†	363.5	16.2	1.2519	µg/L	1.2519	ppb	04:48:48
1	Sn 189.927†	20.5	-1.8	-0.8735	µg/L	-0.8735	ppb	04:48:48
1	Ti 334.940†	763.3	49.3	0.1111	µg/L	0.1111	ppb	04:48:28
1	Tl 190.801†	-13.2	8.2	12.350	µg/L	12.350	ppb	04:48:48
1	U 409.014†	773.2	98.9	9.2874	µg/L	9.2874	ppb	04:48:28
1	V 292.402†	-71.1	20.4	0.2521	µg/L	0.2521	ppb	04:48:28
1	Zn 213.857†	542.7	-4.0	-0.1088	µg/L	-0.1088	ppb	04:48:48
2	Sc RADIAL	111052.2	111052.2	98.7	%			04:47:26
2	Al 396.153Radial†	155.5	-72.3	-36.571	µg/L	-36.571	ppb	04:47:26
2	Ca 317.933Radial†	429.0	-60.9	-24.179	µg/L	-24.179	ppb	04:47:46
2	Fe 238.204 Radial†	10.4	-0.7	-3.6556	µg/L	-3.6556	ppb	04:47:46
2	K 766.490 Radial†	738.8	53.4	28.964	µg/L	28.964	ppb	04:47:26
2	Mg 279.077 IEC†	12.0	-7.7	-42.509	µg/L	-42.509	ppb	04:47:46
2	Na 589.592 Radial†	-637.7	58.1	16.110	µg/L	16.110	ppb	04:47:26
2	Sr 421.552†	-40.8	22.4	0.1263	µg/L	0.1263	ppb	04:47:26
2	Sc 361.383	2040034.5	2040034.5	99.188	%			04:48:54
2	Y 371.029	1241351.3	1241351.3	99.121	%			04:48:54
2	Ag 328.068†	-47.7	-19.7	-0.1743	µg/L	-0.1743	ppb	04:49:00
2	As 188.979†	3.5	1.1	2.0751	µg/L	2.0751	ppb	04:49:21
2	B 249.677†	140.1	-14.4	-0.6401	µg/L	-0.6401	ppb	04:49:21
2	Ba 233.527†	-72.3	7.8	0.1971	µg/L	0.1971	ppb	04:49:21
2	Be 313.107†	3636.7	55.0	0.0348	µg/L	0.0348	ppb	04:49:00
2	Cd 226.502†	-89.1	11.1	0.2887	µg/L	0.2887	ppb	04:49:21
2	Co 228.616†	-73.1	-2.0	-0.0927	µg/L	-0.0927	ppb	04:49:21
2	Cr 267.716†	-89.0	33.0	0.6876	µg/L	0.6876	ppb	04:49:00
2	Cu 324.752†	3324.3	-32.8	-0.2315	µg/L	-0.2315	ppb	04:49:00
2	Mn 257.610†	-212.4	8.5	0.0266	µg/L	0.0266	ppb	04:49:21
2	Mo 202.031†	-2.6	5.2	0.5851	µg/L	0.5851	ppb	04:49:21
2	Ni 231.604†	274.7	-22.5	-1.2251	µg/L	-1.2251	ppb	04:49:21
2	P 214.914†	211.8	7.5	16.364	µg/L	16.364	ppb	04:49:21
2	Pb 220.353†	66.5	12.9	3.2804	µg/L	3.2804	ppb	04:49:21

2	S 181.975 Axial†	20.8	-3.1	-15.740	µg/L	-15.740 ppb	04:49:21
2	Sb 206.836†	17.5	-2.9	-2.9205	µg/L	-2.9205 ppb	04:49:21
2	Se 196.026†	19.7	5.8	8.3872	µg/L	8.3872 ppb	04:49:21
2	SiO2†	1944.6	-21.1	-4.0292	µg/L	-4.0292 ppb	04:49:00
2	Si 251.611†	351.3	4.5	0.2867	µg/L	0.2867 ppb	04:49:21
2	Sn 189.927†	24.3	2.0	0.9601	µg/L	0.9601 ppb	04:49:21
2	Ti 334.940†	729.3	16.4	0.0376	µg/L	0.0376 ppb	04:49:00
2	Tl 190.801†	-18.8	2.4	3.6937	µg/L	3.6937 ppb	04:49:21
2	U 409.014†	628.2	-45.9	-4.3103	µg/L	-4.3103 ppb	04:49:00
2	V 292.402†	-61.1	30.4	0.3396	µg/L	0.3396 ppb	04:49:00
2	Zn 213.857†	547.5	1.8	0.0569	µg/L	0.0569 ppb	04:49:21
3	Sc RADIAL	113198.0	113198.0	101	%		04:47:51
3	Al 396.153Radial†	215.1	-16.1	-8.1660	µg/L	-8.1660 ppb	04:47:51
3	Ca 317.933Radial†	427.3	-70.8	-28.112	µg/L	-28.112 ppb	04:48:12
3	Fe 238.204 Radial†	9.4	-1.9	-9.8518	µg/L	-9.8518 ppb	04:48:12
3	K 766.490 Radial†	717.9	18.5	10.049	µg/L	10.049 ppb	04:47:51
3	Mg 279.077 IEC†	15.6	-4.3	-24.091	µg/L	-24.091 ppb	04:48:12
3	Na 589.592 Radial†	-672.3	35.9	9.9519	µg/L	9.9519 ppb	04:47:51
3	Sr 421.552†	-40.3	23.7	0.1337	µg/L	0.1337 ppb	04:47:51
3	Sc 361.383	2064037.0	2064037.0	100.35	%		04:49:27
3	Y 371.029	1257007.1	1257007.1	100.37	%		04:49:27
3	Ag 328.068†	-23.9	4.5	0.0412	µg/L	0.0412 ppb	04:49:32
3	As 188.979†	0.8	-1.7	-3.2766	µg/L	-3.2766 ppb	04:49:53
3	B 249.677†	124.3	-31.8	-1.4085	µg/L	-1.4085 ppb	04:49:53
3	Ba 233.527†	-76.0	4.9	0.1236	µg/L	0.1236 ppb	04:49:53
3	Be 313.107†	3672.0	47.5	0.0300	µg/L	0.0300 ppb	04:49:32
3	Cd 226.502†	-89.1	12.1	0.3255	µg/L	0.3255 ppb	04:49:53
3	Co 228.616†	-70.4	1.6	0.0772	µg/L	0.0772 ppb	04:49:53
3	Cr 267.716†	-122.4	0.8	0.0170	µg/L	0.0170 ppb	04:49:32
3	Cu 324.752†	3445.0	48.5	0.3393	µg/L	0.3393 ppb	04:49:32
3	Mn 257.610†	-204.1	19.3	0.0600	µg/L	0.0600 ppb	04:49:53
3	Mo 202.031†	-3.7	4.2	0.4704	µg/L	0.4704 ppb	04:49:53
3	Ni 231.604†	280.2	-20.2	-1.0995	µg/L	-1.0995 ppb	04:49:53
3	P 214.914†	213.3	6.6	14.187	µg/L	14.187 ppb	04:49:53
3	Pb 220.353†	60.8	6.5	1.6413	µg/L	1.6413 ppb	04:49:53
3	S 181.975 Axial†	19.8	-4.3	-22.249	µg/L	-22.249 ppb	04:49:53
3	Sb 206.836†	14.2	-6.4	-6.2998	µg/L	-6.2998 ppb	04:49:53
3	Se 196.026†	5.4	-8.7	-12.644	µg/L	-12.644 ppb	04:49:53
3	SiO2†	2033.5	44.6	8.5253	µg/L	8.5253 ppb	04:49:32
3	Si 251.611†	363.9	13.0	1.0618	µg/L	1.0618 ppb	04:49:53
3	Sn 189.927†	18.1	-4.4	-2.1510	µg/L	-2.1510 ppb	04:49:53
3	Ti 334.940†	745.4	23.9	0.0546	µg/L	0.0546 ppb	04:49:32
3	Tl 190.801†	-24.4	-2.9	-4.3994	µg/L	-4.3994 ppb	04:49:53
3	U 409.014†	783.5	101.5	9.5319	µg/L	9.5319 ppb	04:49:32
3	V 292.402†	-70.4	21.8	0.2633	µg/L	0.2633 ppb	04:49:32
3	Zn 213.857†	545.2	-6.8	-0.1763	µg/L	-0.1763 ppb	04:49:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	2049222.6	99.634	%	0.6298				0.63%
Sc RADIAL	111794.2	99.4	%	1.08				1.09%
Y 371.029	1247708.1	99.629	%	0.6573				0.66%
Ag 328.068†	-4.9	-0.0421	µg/L	0.11576	-0.0421	ppb	0.11576	275.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-47.6	-24.099	µg/L	14.5153	-24.099	ppb	14.5153	60.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.1	-2.0306	µg/L	3.64601	-2.0306	ppb	3.64601	179.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-14.7	-0.6539	µg/L	0.74783	-0.6539	ppb	0.74783	114.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.4	0.0613	µg/L	0.17546	0.0613	ppb	0.17546	286.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	55.2	0.0349	µg/L	0.00495	0.0349	ppb	0.00495	14.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.0	-27.396	µg/L	2.9252	-27.396	ppb	2.9252	10.68%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.0	0.1872	µg/L	0.20848	0.1872	ppb	0.20848	111.35%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.7	-0.1288	µg/L	0.22622	-0.1288	ppb	0.22622	175.67%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 9.5      0.1977 µg/L       0.42914      0.1977 ppb        0.42914 217.07%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.0      0.1400 µg/L       0.32209      0.1400 ppb        0.32209 229.98%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -2.4293 µg/L       8.10545     -2.4293 ppb        8.10545 333.65%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          32.7      17.753 µg/L        9.9333      17.753 ppb         9.9333  55.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.9     -27.274 µg/L       13.9191     -27.274 ppb        13.9191  51.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                14.0      0.0441 µg/L       0.01678      0.0441 ppb        0.01678  38.04%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.7      0.6404 µg/L       0.20334      0.6404 ppb        0.20334  31.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.3      15.902 µg/L        5.8494      15.902 ppb         5.8494  36.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -12.2     -0.6656 µg/L       0.86252     -0.6656 ppb        0.86252 129.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.3      11.368 µg/L        6.8544      11.368 ppb         6.8544  60.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.8      2.9928 µg/L       1.23316      2.9928 ppb        1.23316  41.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.6     -18.705 µg/L        3.2931     -18.705 ppb         3.2931  17.61%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -3.9     -3.8715 µg/L       2.11937     -3.8715 ppb        2.11937  54.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.3     -3.3549 µg/L      10.72815     -3.3549 ppb       10.72815 319.78%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      18.0      3.4306 µg/L       6.60295      3.4306 ppb        6.60295 192.47%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                11.2      0.8668 µg/L       0.51128      0.8668 ppb        0.51128  58.99%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.4     -0.6881 µg/L       1.56382     -0.6881 ppb        1.56382 227.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                21.4      0.1203 µg/L       0.01710      0.1203 ppb        0.01710  14.21%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                29.9      0.0678 µg/L       0.03845      0.0678 ppb        0.03845  56.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.6      3.8816 µg/L       8.37651      3.8816 ppb        8.37651 215.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 51.5      4.8363 µg/L       7.92219      4.8363 ppb        7.92219 163.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 24.2      0.2850 µg/L       0.04765      0.2850 ppb        0.04765  16.72%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -3.0     -0.0761 µg/L       0.11999     -0.0761 ppb        0.11999 157.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 05:12:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	110928.3	110928.3	98.6	%			05:12:50
1	Al 396.153Radial†	10053.7	9964.5	5017.3	µg/L	5017.3	ppb	05:12:50
1	Ca 317.933Radial†	12906.6	12591.7	4998.3	µg/L	4998.3	ppb	05:13:11
1	Fe 238.204 Radial†	960.0	962.3	5070.9	µg/L	5070.9	ppb	05:13:11
1	K 766.490 Radial†	10152.8	9600.0	5205.1	µg/L	5205.1	ppb	05:12:50
1	Mg 279.077 IEC†	922.9	916.0	5085.3	µg/L	5085.3	ppb	05:13:11
1	Na 589.592 Radial†	39107.8	40358.8	11198	µg/L	11198	ppb	05:12:50
1	Sr 421.552†	86143.4	87412.3	492.39	µg/L	492.39	ppb	05:12:50
1	Sc 361.383	1994002.9	1994002.9	96.949	%			05:14:14
1	Y 371.029	1208577.2	1208577.2	96.504	%			05:14:14
1	Ag 328.068†	53405.7	55114.4	495.99	µg/L	495.99	ppb	05:14:20
1	As 188.979†	250.8	256.2	487.34	µg/L	487.34	ppb	05:14:41
1	B 249.677†	10742.3	10924.6	483.28	µg/L	483.28	ppb	05:14:20
1	Ba 233.527†	18711.2	19380.6	487.81	µg/L	487.81	ppb	05:14:20
1	Be 313.107†	766540.2	787047.9	497.69	µg/L	497.69	ppb	05:14:14
1	Cd 226.502†	17668.7	18325.6	484.75	µg/L	484.75	ppb	05:14:20
1	Co 228.616†	9792.7	10172.5	489.28	µg/L	489.28	ppb	05:14:20
1	Cr 267.716†	22520.6	23352.0	487.24	µg/L	487.24	ppb	05:14:20
1	Cu 324.752†	71406.0	70268.5	495.46	µg/L	495.46	ppb	05:14:20
1	Mn 257.610†	152416.7	157435.2	500.26	µg/L	500.26	ppb	05:14:14
1	Mo 202.031†	4219.6	4360.2	486.63	µg/L	486.63	ppb	05:14:41
1	Ni 231.604†	8980.5	8963.7	488.33	µg/L	488.33	ppb	05:14:20
1	P 214.914†	1310.4	1145.6	2432.8	µg/L	2432.8	ppb	05:14:41
1	Pb 220.353†	1928.9	1935.5	491.34	µg/L	491.34	ppb	05:14:41
1	S 181.975 Axial†	358.1	345.3	1772.5	µg/L	1772.5	ppb	05:14:41
1	Sb 206.836†	503.4	498.6	493.38	µg/L	493.38	ppb	05:14:41
1	Se 196.026†	354.4	351.5	514.06	µg/L	514.06	ppb	05:14:41
1	SiO2†	29013.8	27945.0	5336.5	µg/L	5336.5	ppb	05:14:20
1	Si 251.611†	31838.0	32490.1	2441.5	µg/L	2441.5	ppb	05:14:20
1	Sn 189.927†	983.7	992.2	486.47	µg/L	486.47	ppb	05:14:41
1	Ti 334.940†	218796.1	224961.7	498.37	µg/L	498.37	ppb	05:14:14
1	Tl 190.801†	295.1	325.8	493.98	µg/L	493.98	ppb	05:14:41
1	U 409.014†	5765.0	5267.2	493.82	µg/L	493.82	ppb	05:14:20
1	V 292.402†	41916.2	43327.1	493.05	µg/L	493.05	ppb	05:14:20
1	Zn 213.857†	183à1.9	18368.9	488.23	µg/L	488.23	ppb	05:14:20
2	Sc RADIAL	110539.3	110539.3	98.3	%			05:13:16
2	Al 396.153Radial†	10112.8	10060.5	5065.5	µg/L	5065.5	ppb	05:13:16
2	Ca 317.933Radial†	12808.5	12538.0	4977.0	µg/L	4977.0	ppb	05:13:37
2	Fe 238.204 Radial†	956.8	962.4	5072.0	µg/L	5072.0	ppb	05:13:37
2	K 766.490 Radial†	10282.5	9768.2	5296.3	µg/L	5296.3	ppb	05:13:16
2	Mg 279.077 IEC†	931.7	928.2	5153.2	µg/L	5153.2	ppb	05:13:37
2	Na 589.592 Radial†	38692.0	40075.3	11119	µg/L	11119	ppb	05:13:16
2	Sr 421.552†	86894.8	88484.2	498.43	µg/L	498.43	ppb	05:13:16
2	Sc 361.383	1965054.8	1965054.8	95.542	%			05:14:48
2	Y 371.029	1190172.7	1190172.7	95.035	%			05:14:48
2	Ag 328.068†	53739.1	56274.9	506.42	µg/L	506.42	ppb	05:14:53
2	As 188.979†	249.0	258.1	490.89	µg/L	490.89	ppb	05:15:14
2	B 249.677†	10781.0	11128.4	492.33	µg/L	492.33	ppb	05:14:53
2	Ba 233.527†	18790.6	19748.0	497.06	µg/L	497.06	ppb	05:14:53
2	Be 313.107†	756517.2	788204.7	498.42	µg/L	498.42	ppb	05:14:48
2	Cd 226.502†	17731.3	18659.6	493.60	µg/L	493.60	ppb	05:14:53
2	Co 228.616†	9783.1	10311.3	495.97	µg/L	495.97	ppb	05:14:53
2	Cr 267.716†	22618.9	23797.1	496.53	µg/L	496.53	ppb	05:14:53
2	Cu 324.752†	71836.3	71803.8	506.26	µg/L	506.26	ppb	05:14:53
2	Mn 257.610†	150573.7	157822.1	501.49	µg/L	501.49	ppb	05:14:48
2	Mo 202.031†	4231.5	4436.9	495.17	µg/L	495.17	ppb	05:15:14
2	Ni 231.604†	9005.1	9125.9	497.16	µg/L	497.16	ppb	05:14:53
2	P 214.914†	1301.2	1155.9	2454.1	µg/L	2454.1	ppb	05:15:14
2	Pb 220.353†	1945.7	1982.4	503.23	µg/L	503.23	ppb	05:15:14

2	S 181.975 Axial†	344.8	336.9	1729.4 µg/L	1729.4 ppb	05:15:14
2	Sb 206.836†	505.8	508.8	503.45 µg/L	503.45 ppb	05:15:14
2	Se 196.026†	347.2	349.3	510.92 µg/L	510.92 ppb	05:15:14
2	SiO2†	29148.7	28527.1	5447.6 µg/L	5447.6 ppb	05:14:53
2	Si 251.611†	31990.4	33133.4	2490.1 µg/L	2490.1 ppb	05:14:53
2	Sn 189.927†	992.4	1016.2	498.17 µg/L	498.17 ppb	05:15:14
2	Ti 334.940†	216174.6	225542.4	499.66 µg/L	499.66 ppb	05:14:48
2	Tl 190.801†	297.0	332.3	503.83 µg/L	503.83 ppb	05:15:14
2	U 409.014†	5834.6	5427.6	508.89 µg/L	508.89 ppb	05:14:53
2	V 292.402†	42154.7	44213.6	503.13 µg/L	503.13 ppb	05:14:53
2	Zn 213.857†	18454.3	18765.2	498.79 µg/L	498.79 ppb	05:14:53
3	Sc RADIAL	109471.1	109471.1	97.3 %		05:13:42
3	Al 396.153Radial†	10017.7	10063.2	5067.1 µg/L	5067.1 ppb	05:13:42
3	Ca 317.933Radial†	12690.2	12543.6	4979.2 µg/L	4979.2 ppb	05:14:03
3	Fe 238.204 Radial†	949.2	964.0	5080.5 µg/L	5080.5 ppb	05:14:03
3	K 766.490 Radial†	10081.7	9663.9	5239.7 µg/L	5239.7 ppb	05:13:42
3	Mg 279.077 IEC†	921.1	926.6	5144.4 µg/L	5144.4 ppb	05:14:03
3	Na 589.592 Radial†	38073.4	39823.8	11050 µg/L	11050 ppb	05:13:42
3	Sr 421.552†	85843.0	88266.3	497.20 µg/L	497.20 ppb	05:13:42
3	Sc 361.383	1971880.6	1971880.6	95.874 %		05:15:21
3	Y 371.029	1194123.8	1194123.8	95.350 %		05:15:21
3	Ag 328.068†	53903.7	56251.9	506.21 µg/L	506.21 ppb	05:15:27
3	As 188.979†	252.3	260.7	495.79 µg/L	495.79 ppb	05:15:47
3	B 249.677†	10849.4	11160.7	493.76 µg/L	493.76 ppb	05:15:27
3	Ba 233.527†	18905.6	19799.9	498.36 µg/L	498.36 ppb	05:15:27
3	Be 313.107†	759370.2	788439.6	498.57 µg/L	498.57 ppb	05:15:21
3	Cd 226.502†	17797.0	18663.8	493.71 µg/L	493.71 ppb	05:15:27
3	Co 228.616†	9820.5	10314.9	496.13 µg/L	496.13 ppb	05:15:27
3	Cr 267.716†	22786.2	23889.6	498.45 µg/L	498.45 ppb	05:15:27
3	Cu 324.752†	72034.0	71749.8	505.89 µg/L	505.89 ppb	05:15:27
3	Mn 257.610†	151086.2	157811.2	501.46 µg/L	501.46 ppb	05:15:21
3	Mo 202.031†	4200.0	4388.6	489.79 µg/L	489.79 ppb	05:15:47
3	Ni 231.604†	9042.2	9131.9	497.49 µg/L	497.49 ppb	05:15:27
3	P 214.914†	1291.1	1140.7	2421.0 µg/L	2421.0 ppb	05:15:47
3	Pb 220.353†	1918.7	1947.1	494.29 µg/L	494.29 ppb	05:15:47
3	S 181.975 Axial†	325.8	315.8	1621.0 µg/L	1621.0 ppb	05:15:47
3	Sb 206.836†	500.7	501.7	496.32 µg/L	496.32 ppb	05:15:47
3	Se 196.026†	343.3	344.0	503.16 µg/L	503.16 ppb	05:15:47
3	SiO2†	29181.5	28455.7	5434.0 µg/L	5434.0 ppb	05:15:27
3	Si 251.611†	32056.3	33086.2	2486.8 µg/L	2486.8 ppb	05:15:27
3	Sn 189.927†	986.2	1006.2	493.27 µg/L	493.27 ppb	05:15:47
3	Ti 334.940†	216790.6	225401.7	499.35 µg/L	499.35 ppb	05:15:21
3	Tl 190.801†	297.1	331.3	502.34 µg/L	502.34 ppb	05:15:47
3	U 409.014†	5761.9	5330.7	499.78 µg/L	499.78 ppb	05:15:27
3	V 292.402†	42260.6	44171.4	502.60 µg/L	502.60 ppb	05:15:27
3	Zn 213.857†	18525.6	18772.8	498.99 µg/L	498.99 ppb	05:15:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1976979.5	96.122	%	0.7358				0.77%
Sc RADIAL	110312.9	98.1	%	0.67				0.68%
Y 371.029	1197624.5	95.630	%	0.7736				0.81%
Ag 328.068†	55880.4	502.87	µg/L	5.964	502.87	ppb	5.964	1.19%
QC value within limits for Ag 328.068 Recovery = 100.57%								
Al 396.153Radial†	10029.4	5050.0	µg/L	28.28	5050.0	ppb	28.28	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.00%								
As 188.979†	258.3	491.34	µg/L	4.241	491.34	ppb	4.241	0.86%
QC value within limits for As 188.979 Recovery = 98.27%								
B 249.677†	11071.2	489.79	µg/L	5.679	489.79	ppb	5.679	1.16%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	19642.8	494.41	µg/L	5.752	494.41	ppb	5.752	1.16%
QC value within limits for Ba 233.527 Recovery = 98.88%								
Be 313.107†	787897.4	498.23	µg/L	0.471	498.23	ppb	0.471	0.09%
QC value within limits for Be 313.107 Recovery = 99.65%								
Ca 317.933Radial†	12557.8	4984.9	µg/L	11.73	4984.9	ppb	11.73	0.24%
QC value within limits for Ca 317.933Radial Recovery = 99.70%								
Cd 226.502†	18549.6	490.69	µg/L	5.138	490.69	ppb	5.138	1.05%
QC value within limits for Cd 226.502 Recovery = 98.14%								
Co 228.616†	10266.2	493.79	µg/L	3.909	493.79	ppb	3.909	0.79%

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   QC value within limits for Co 228.616  Recovery = 98.76%
Cr 267.716†            23679.6      494.07 µg/L        5.997      494.07 ppb         5.997   1.21%
   QC value within limits for Cr 267.716  Recovery = 98.81%
Cu 324.752†            71274.1      502.54 µg/L        6.130      502.54 ppb         6.130   1.22%
   QC value within limits for Cu 324.752  Recovery = 100.51%
Fe 238.204 Radial†       962.9      5074.5 µg/L         5.29      5074.5 ppb          5.29   0.10%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.49%
K 766.490 Radial†       9677.4      5247.0 µg/L        46.03      5247.0 ppb         46.03   0.88%
   QC value within limits for K 766.490 Radial  Recovery = 104.94%
Mg 279.077 IEC†          923.6      5127.7 µg/L        36.94      5127.7 ppb         36.94   0.72%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.55%
Mn 257.610†           157689.5      501.07 µg/L        0.699      501.07 ppb         0.699   0.14%
   QC value within limits for Mn 257.610  Recovery = 100.21%
Mo 202.031†             4395.2      490.53 µg/L        4.320      490.53 ppb         4.320   0.88%
   QC value within limits for Mo 202.031  Recovery = 98.11%
Na 589.592 Radial†     40086.0       11122 µg/L         74.3       11122 ppb          74.3   0.67%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 111.22%
Ni 231.604†             9073.9      494.33 µg/L        5.199      494.33 ppb         5.199   1.05%
   QC value within limits for Ni 231.604  Recovery = 98.87%
P 214.914†              1147.4      2436.0 µg/L        16.78      2436.0 ppb         16.78   0.69%
   QC value within limits for P 214.914  Recovery = 97.44%
Pb 220.353†             1955.0      496.29 µg/L        6.192      496.29 ppb         6.192   1.25%
   QC value within limits for Pb 220.353  Recovery = 99.26%
S 181.975 Axial†         332.7      1707.7 µg/L        78.09      1707.7 ppb         78.09   4.57%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 170.77%
Sb 206.836†              503.0      497.72 µg/L        5.174      497.72 ppb         5.174   1.04%
   QC value within limits for Sb 206.836  Recovery = 99.54%
Se 196.026†              348.3      509.38 µg/L        5.612      509.38 ppb         5.612   1.10%
   QC value within limits for Se 196.026  Recovery = 101.88%
SiO2†                  28309.3      5406.0 µg/L        60.63      5406.0 ppb         60.63   1.12%
   QC value within limits for SiO2  Recovery = 101.09%
Si 251.611†            32903.3      2472.8 µg/L        27.15      2472.8 ppb         27.15   1.10%
   QC value within limits for Si 251.611  Recovery = 98.91%
Sn 189.927†             1004.9      492.64 µg/L        5.878      492.64 ppb         5.878   1.19%
   QC value within limits for Sn 189.927  Recovery = 98.53%
Sr 421.552†            88054.3      496.00 µg/L        3.191      496.00 ppb         3.191   0.64%
   QC value within limits for Sr 421.552  Recovery = 99.20%
Ti 334.940†           225301.9      499.13 µg/L        0.672      499.13 ppb         0.672   0.13%
   QC value within limits for Ti 334.940  Recovery = 99.83%
Tl 190.801†              329.8      500.05 µg/L        5.308      500.05 ppb         5.308   1.06%
   QC value within limits for Tl 190.801  Recovery = 100.01%
U 409.014†              5341.8      500.83 µg/L        7.588      500.83 ppb         7.588   1.52%
   QC value within limits for U 409.014  Recovery = 100.17%
V 292.402†             43904.0      499.59 µg/L        5.673      499.59 ppb         5.673   1.14%
   QC value within limits for V 292.402  Recovery = 99.92%
Zn 213.857†            18635.6      495.33 µg/L        6.152      495.33 ppb         6.152   1.24%
   QC value within limits for Zn 213.857  Recovery = 99.07%
QC Failed.  Continue with analysis.
```

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 05:15:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106486.4	106486.4	94.7	%			05:16:30
1	Al 396.153Radial†	164.7	-55.9	-28.240	µg/L	-28.240	ppb	05:16:30
1	Ca 317.933Radial†	463.4	-5.9	-2.3519	µg/L	-2.3519	ppb	05:16:51
1	Fe 238.204 Radial†	7.8	-2.9	-15.496	µg/L	-15.496	ppb	05:16:51
1	K 766.490 Radial†	992.3	353.3	191.57	µg/L	191.57	ppb	05:16:30
1	Mg 279.077 IEC†	14.5	-4.5	-25.057	µg/L	-25.057	ppb	05:16:51
1	Na 589.592 Radial†	1031.4	1793.4	497.59	µg/L	497.59	ppb	05:16:30
1	Sr 421.552†	-13.9	49.1	0.2766	µg/L	0.2766	ppb	05:16:30
1	Sc 361.383	1956069.2	1956069.2	95.105	%			05:17:52
1	Y 371.029	1190726.9	1190726.9	95.079	%			05:17:52
1	Ag 328.068†	-17.7	9.7	0.0863	µg/L	0.0863	ppb	05:17:58
1	As 188.979†	1.8	-0.6	-1.0929	µg/L	-1.0929	ppb	05:18:18
1	B 249.677†	168.4	21.4	0.9545	µg/L	0.9545	ppb	05:17:58
1	Ba 233.527†	-70.4	6.7	0.1678	µg/L	0.1678	ppb	05:18:18
1	Be 313.107†	3704.1	283.2	0.1790	µg/L	0.1790	ppb	05:17:58
1	Cd 226.502†	-98.0	-2.2	-0.0516	µg/L	-0.0516	ppb	05:18:18
1	Co 228.616†	-68.5	-0.3	-0.0133	µg/L	-0.0133	ppb	05:18:18
1	Cr 267.716†	-119.2	-2.6	-0.0541	µg/L	-0.0541	ppb	05:17:58
1	Cu 324.752†	3310.4	96.4	0.6752	µg/L	0.6752	ppb	05:17:58
1	Mn 257.610†	-179.4	34.0	0.1059	µg/L	0.1059	ppb	05:18:18
1	Mo 202.031†	-4.7	2.9	0.3258	µg/L	0.3258	ppb	05:18:18
1	Ni 231.604†	285.4	0.7	0.0359	µg/L	0.0359	ppb	05:18:18
1	P 214.914†	209.5	14.3	30.890	µg/L	30.890	ppb	05:18:18
1	Pb 220.353†	57.4	6.3	1.5811	µg/L	1.5811	ppb	05:18:18
1	S 181.975 Axial†	94.9	75.7	389.07	µg/L	389.07	ppb	05:18:18
1	Sb 206.836†	21.4	1.9	1.9186	µg/L	1.9186	ppb	05:18:18
1	Se 196.026†	12.4	-1.0	-1.4826	µg/L	-1.4826	ppb	05:18:18
1	SiO2†	1987.1	107.7	20.559	µg/L	20.559	ppb	05:17:58
1	Si 251.611†	407.2	78.5	5.9416	µg/L	5.9416	ppb	05:18:18
1	Sn 189.927†	20.6	-0.8	-0.3924	µg/L	-0.3924	ppb	05:18:18
1	Ti 334.940†	811.9	134.8	0.2989	µg/L	0.2989	ppb	05:17:58
1	Tl 190.801†	-18.5	2.0	3.0271	µg/L	3.0271	ppb	05:18:18
1	U 409.014†	720.5	78.3	7.3581	µg/L	7.3581	ppb	05:17:58
1	V 292.402†	-76.1	11.9	0.1472	µg/L	0.1472	ppb	05:17:58
1	Zn 213.857†	534.2	11.5	0.3090	µg/L	0.3090	ppb	05:18:18
2	Sc RADIAL	106211.8	106211.8	94.4	%			05:16:56
2	Al 396.153Radial†	175.9	-43.5	-21.993	µg/L	-21.993	ppb	05:16:56
2	Ca 317.933Radial†	441.9	-27.4	-10.885	µg/L	-10.885	ppb	05:17:16
2	Fe 238.204 Radial†	8.7	-1.9	-10.243	µg/L	-10.243	ppb	05:17:16
2	K 766.490 Radial†	1006.7	371.3	201.30	µg/L	201.30	ppb	05:16:56
2	Mg 279.077 IEC†	11.2	-8.0	-44.438	µg/L	-44.438	ppb	05:17:16
2	Na 589.592 Radial†	824.4	1577.0	437.56	µg/L	437.56	ppb	05:16:56
2	Sr 421.552†	-10.2	53.0	0.2987	µg/L	0.2987	ppb	05:16:56
2	Sc 361.383	1962817.7	1962817.7	95.433	%			05:18:24
2	Y 371.029	1193988.9	1193988.9	95.339	%			05:18:24
2	Ag 328.068†	-7.0	21.0	0.1853	µg/L	0.1853	ppb	05:18:30
2	As 188.979†	2.9	0.6	1.1192	µg/L	1.1192	ppb	05:18:50
2	B 249.677†	151.1	2.6	0.1197	µg/L	0.1197	ppb	05:18:30
2	Ba 233.527†	-66.5	11.0	0.2761	µg/L	0.2761	ppb	05:18:50
2	Be 313.107†	3684.8	249.7	0.1578	µg/L	0.1578	ppb	05:18:30
2	Cd 226.502†	-96.7	-0.4	-0.0091	µg/L	-0.0091	ppb	05:18:50
2	Co 228.616†	-74.9	-6.8	-0.3262	µg/L	-0.3262	ppb	05:18:50
2	Cr 267.716†	-121.4	-4.4	-0.0926	µg/L	-0.0926	ppb	05:18:30
2	Cu 324.752†	3332.1	107.2	0.7519	µg/L	0.7519	ppb	05:18:30
2	Mn 257.610†	-165.7	49.0	0.1543	µg/L	0.1543	ppb	05:18:50
2	Mo 202.031†	-4.5	3.2	0.3612	µg/L	0.3612	ppb	05:18:50
2	Ni 231.604†	289.5	3.9	0.2142	µg/L	0.2142	ppb	05:18:50
2	P 214.914†	208.3	12.2	26.465	µg/L	26.465	ppb	05:18:50
2	Pb 220.353†	71.5	20.8	5.2711	µg/L	5.2711	ppb	05:18:50

2	S 181.975 Axial†	90.7	71.0	364.86 µg/L	364.86 ppb	05:18:50
2	Sb 206.836†	20.2	0.6	0.5978 µg/L	0.5978 ppb	05:18:50
2	Se 196.026†	6.5	-7.3	-10.623 µg/L	-10.623 ppb	05:18:50
2	SiO2†	2029.7	145.1	27.710 µg/L	27.710 ppb	05:18:30
2	Si 251.611†	410.4	80.4	6.0367 µg/L	6.0367 ppb	05:18:50
2	Sn 189.927†	22.7	1.4	0.6583 µg/L	0.6583 ppb	05:18:50
2	Ti 334.940†	814.1	134.2	0.2981 µg/L	0.2981 ppb	05:18:30
2	Tl 190.801†	-14.0	6.8	10.216 µg/L	10.216 ppb	05:18:50
2	U 409.014†	659.7	12.0	1.1305 µg/L	1.1305 ppb	05:18:30
2	V 292.402†	-106.7	-19.9	-0.2205 µg/L	-0.2205 ppb	05:18:30
2	Zn 213.857†	527.1	2.2	0.0579 µg/L	0.0579 ppb	05:18:50
3	Sc RADIAL	106409.1	106409.1	94.6 %		05:17:22
3	Al 396.153Radial†	208.8	-9.1	-4.6269 µg/L	-4.6269 ppb	05:17:22
3	Ca 317.933Radial†	450.4	-19.4	-7.6860 µg/L	-7.6860 ppb	05:17:42
3	Fe 238.204 Radial†	10.3	-0.3	-1.6326 µg/L	-1.6326 ppb	05:17:42
3	K 766.490 Radial†	977.6	338.6	183.57 µg/L	183.57 ppb	05:17:22
3	Mg 279.077 IEC†	15.6	-3.3	-18.527 µg/L	-18.527 ppb	05:17:42
3	Na 589.592 Radial†	758.0	1505.2	417.63 µg/L	417.63 ppb	05:17:22
3	Sr 421.552†	-55.1	5.6	0.0314 µg/L	0.0314 ppb	05:17:22
3	Sc 361.383	1961134.5	1961134.5	95.351 %		05:18:56
3	Y 371.029	1194043.2	1194043.2	95.344 %		05:18:56
3	Ag 328.068†	-26.3	0.7	0.0072 µg/L	0.0072 ppb	05:19:02
3	As 188.979†	1.1	-1.3	-2.4914 µg/L	-2.4914 ppb	05:19:22
3	B 249.677†	151.6	3.3	0.1466 µg/L	0.1466 ppb	05:19:02
3	Ba 233.527†	-73.3	3.8	0.0963 µg/L	0.0963 ppb	05:19:22
3	Be 313.107†	3690.3	258.7	0.1635 µg/L	0.1635 ppb	05:19:02
3	Cd 226.502†	-86.4	10.3	0.2695 µg/L	0.2695 ppb	05:19:22
3	Co 228.616†	-84.9	-17.3	-0.8317 µg/L	-0.8317 ppb	05:19:22
3	Cr 267.716†	-74.2	44.9	0.9350 µg/L	0.9350 ppb	05:19:02
3	Cu 324.752†	3296.8	73.2	0.5146 µg/L	0.5146 ppb	05:19:02
3	Mn 257.610†	-161.5	53.3	0.1689 µg/L	0.1689 ppb	05:19:22
3	Mo 202.031†	-2.6	5.2	0.5816 µg/L	0.5816 ppb	05:19:22
3	Ni 231.604†	272.6	-13.6	-0.7387 µg/L	-0.7387 ppb	05:19:22
3	P 214.914†	199.4	3.1	6.6844 µg/L	6.6844 ppb	05:19:22
3	Pb 220.353†	63.6	12.6	3.1918 µg/L	3.1918 ppb	05:19:22
3	S 181.975 Axial†	88.3	68.5	352.12 µg/L	352.12 ppb	05:19:22
3	Sb 206.836†	22.0	2.5	2.4880 µg/L	2.4880 ppb	05:19:22
3	Se 196.026†	14.4	1.0	1.5253 µg/L	1.5253 ppb	05:19:22
3	SiO2†	1980.4	95.2	18.188 µg/L	18.188 ppb	05:19:02
3	Si 251.611†	412.3	82.7	6.2930 µg/L	6.2930 ppb	05:19:22
3	Sn 189.927†	18.9	-2.6	-1.2712 µg/L	-1.2712 ppb	05:19:22
3	Ti 334.940†	831.2	152.8	0.3392 µg/L	0.3392 ppb	05:19:02
3	Tl 190.801†	-16.7	3.9	5.8411 µg/L	5.8411 ppb	05:19:22
3	U 409.014†	611.4	-38.0	-3.5673 µg/L	-3.5673 ppb	05:19:02
3	V 292.402†	-79.7	8.3	0.0922 µg/L	0.0922 ppb	05:19:02
3	Zn 213.857†	531.1	6.9	0.1877 µg/L	0.1877 ppb	05:19:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1960007.1	95.297	%	0.1708				0.18%
Sc RADIAL	106369.1	94.6	%	0.13				0.13%
Y 371.029	1192919.7	95.254	%	0.1516				0.16%
Ag 328.068†	10.5	0.0929	µg/L	0.08923	0.0929	ppb	0.08923	96.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-36.2	-18.287	µg/L	12.2350	-18.287	ppb	12.2350	66.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.8217	µg/L	1.82053	-0.8217	ppb	1.82053	221.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	9.1	0.4069	µg/L	0.47438	0.4069	ppb	0.47438	116.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.2	0.1801	µg/L	0.09050	0.1801	ppb	0.09050	50.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	263.9	0.1668	µg/L	0.01098	0.1668	ppb	0.01098	6.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-17.6	-6.9741	µg/L	4.31065	-6.9741	ppb	4.31065	61.81%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.6	0.0696	µg/L	0.17443	0.0696	ppb	0.17443	250.52%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.1	-0.3904	µg/L	0.41294	-0.3904	ppb	0.41294	105.78%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                12.6      0.2628 µg/L       0.58251      0.2628 ppb        0.58251 221.69%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                92.3      0.6472 µg/L       0.12113      0.6472 ppb        0.12113  18.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.7     -9.1240 µg/L       6.99920     -9.1240 ppb        6.99920  76.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         354.4      192.14 µg/L         8.877      192.14 ppb          8.877   4.62%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -5.3     -29.341 µg/L       13.4765     -29.341 ppb        13.4765  45.93%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                45.4      0.1431 µg/L       0.03298      0.1431 ppb        0.03298  23.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.8      0.4229 µg/L       0.13862      0.4229 ppb        0.13862  32.78%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       1625.2      450.93 µg/L        41.623      450.93 ppb         41.623   9.23%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -3.0     -0.1628 µg/L       0.50661     -0.1628 ppb        0.50661 311.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.9      21.347 µg/L       12.8892      21.347 ppb        12.8892  60.38%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                13.2      3.3480 µg/L       1.84997      3.3480 ppb        1.84997  55.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           71.8      368.68 µg/L        18.772      368.68 ppb         18.772   5.09%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.7      1.6681 µg/L       0.96971      1.6681 ppb        0.96971  58.13%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.4     -3.5267 µg/L       6.32675     -3.5267 ppb        6.32675 179.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     116.0      22.152 µg/L        4.9570      22.152 ppb         4.9570  22.38%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                80.5      6.0905 µg/L       0.18177      6.0905 ppb        0.18177   2.98%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.7     -0.3351 µg/L       0.96604     -0.3351 ppb        0.96604 288.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                35.9      0.2022 µg/L       0.14834      0.2022 ppb        0.14834  73.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               140.6      0.3121 µg/L       0.02351      0.3121 ppb        0.02351   7.53%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.2      6.3615 µg/L       3.62274      6.3615 ppb        3.62274  56.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 17.5      1.6404 µg/L       5.48051      1.6404 ppb        5.48051 334.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  0.1      0.0063 µg/L       0.19833      0.0063 ppb        0.19833 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 6.8      0.1848 µg/L       0.12559      0.1848 ppb        0.12559  67.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 05:50:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106902.1	106902.1	95.0	%			05:50:56
1	Al 396.153Radial†	10678.3	11005.7	5542.8	µg/L	5542.8	ppb	05:50:56
1	Ca 317.933Radial†	13120.8	13310.0	5283.5	µg/L	5283.5	ppb	05:51:17
1	Fe 238.204 Radial†	972.4	1011.9	5332.6	µg/L	5332.6	ppb	05:51:17
1	K 766.490 Radial†	9761.0	9575.4	5191.8	µg/L	5191.8	ppb	05:50:56
1	Mg 279.077 IEC†	965.2	995.7	5527.7	µg/L	5527.7	ppb	05:51:17
1	Na 589.592 Radial†	35394.6	37945.3	10528	µg/L	10528	ppb	05:50:56
1	Sr 421.552†	85748.5	90286.5	508.58	µg/L	508.58	ppb	05:50:56
1	Sc 361.383	1937977.1	1937977.1	94.225	%			05:52:20
1	Y 371.029	1173517.6	1173517.6	93.705	%			05:52:20
1	Ag 328.068†	53958.3	57293.4	515.60	µg/L	515.60	ppb	05:52:26
1	As 188.979†	258.0	271.3	515.98	µg/L	515.98	ppb	05:52:46
1	B 249.677†	10833.7	11342.0	501.72	µg/L	501.72	ppb	05:52:26
1	Ba 233.527†	18966.2	20209.2	508.66	µg/L	508.66	ppb	05:52:26
1	Be 313.107†	761122.3	804155.4	508.51	µg/L	508.51	ppb	05:52:20
1	Cd 226.502†	17859.4	19054.8	504.05	µg/L	504.05	ppb	05:52:26
1	Co 228.616†	9903.7	10582.4	509.01	µg/L	509.01	ppb	05:52:26
1	Cr 267.716†	22727.3	24242.9	505.83	µg/L	505.83	ppb	05:52:26
1	Cu 324.752†	71963.3	72989.2	514.66	µg/L	514.66	ppb	05:52:26
1	Mn 257.610†	151504.1	161011.5	511.65	µg/L	511.65	ppb	05:52:20
1	Mo 202.031†	4251.1	4519.5	504.41	µg/L	504.41	ppb	05:52:46
1	Ni 231.604†	9092.7	9350.6	509.40	µg/L	509.40	ppb	05:52:26
1	P 214.914†	1312.6	1187.1	2520.9	µg/L	2520.9	ppb	05:52:46
1	Pb 220.353†	1955.9	2021.6	513.23	µg/L	513.23	ppb	05:52:46
1	S 181.975 Axial†	237.9	228.5	1172.4	µg/L	1172.4	ppb	05:52:46
1	Sb 206.836†	503.6	513.9	508.44	µg/L	508.44	ppb	05:52:46
1	Se 196.026†	344.8	351.8	514.61	µg/L	514.61	ppb	05:52:46
1	SiO2†	29052.1	28850.9	5509.5	µg/L	5509.5	ppb	05:52:26
1	Si 251.611†	32002.9	33614.6	2526.0	µg/L	2526.0	ppb	05:52:26
1	Sn 189.927†	1002.3	1041.3	510.57	µg/L	510.57	ppb	05:52:46
1	Ti 334.940†	217104.7	229690.9	508.84	µg/L	508.84	ppb	05:52:20
1	Tl 190.801†	296.9	336.5	510.17	µg/L	510.17	ppb	05:52:46
1	U 409.014†	5907.5	5590.4	524.13	µg/L	524.13	ppb	05:52:26
1	V 292.402†	42396.5	45086.7	513.08	µg/L	513.08	ppb	05:52:26
1	Zn 213.857†	18509.9	19094.1	507.48	µg/L	507.48	ppb	05:52:26
2	Sc RADIAL	107824.3	107824.3	95.9	%			05:51:22
2	Al 396.153Radial†	10560.6	10786.7	5432.3	µg/L	5432.3	ppb	05:51:22
2	Ca 317.933Radial†	13046.4	13114.2	5205.8	µg/L	5205.8	ppb	05:51:43
2	Fe 238.204 Radial†	971.3	1002.1	5280.8	µg/L	5280.8	ppb	05:51:43
2	K 766.490 Radial†	9814.6	9543.6	5174.5	µg/L	5174.5	ppb	05:51:22
2	Mg 279.077 IEC†	970.0	992.1	5507.4	µg/L	5507.4	ppb	05:51:43
2	Na 589.592 Radial†	35769.6	38018.1	10549	µg/L	10549	ppb	05:51:22
2	Sr 421.552†	86640.1	90444.9	509.47	µg/L	509.47	ppb	05:51:22
2	Sc 361.383	1947869.6	1947869.6	94.706	%			05:52:53
2	Y 371.029	1179996.1	1179996.1	94.222	%			05:52:53
2	Ag 328.068†	54430.7	57501.4	517.46	µg/L	517.46	ppb	05:52:59
2	As 188.979†	251.9	263.5	501.10	µg/L	501.10	ppb	05:53:19
2	B 249.677†	10895.3	11348.6	502.03	µg/L	502.03	ppb	05:52:59
2	Ba 233.527†	19096.3	20244.3	509.55	µg/L	509.55	ppb	05:52:59
2	Be 313.107†	762973.1	802007.4	507.15	µg/L	507.15	ppb	05:52:53
2	Cd 226.502†	17988.3	19094.6	505.10	µg/L	505.10	ppb	05:52:59
2	Co 228.616†	9973.7	10602.9	509.99	µg/L	509.99	ppb	05:52:59
2	Cr 267.716†	22922.1	24326.0	507.57	µg/L	507.57	ppb	05:52:59
2	Cu 324.752†	72550.5	73221.4	516.28	µg/L	516.28	ppb	05:52:59
2	Mn 257.610†	151702.9	160404.9	509.71	µg/L	509.71	ppb	05:52:53
2	Mo 202.031†	4254.2	4499.9	502.22	µg/L	502.22	ppb	05:53:19
2	Ni 231.604†	9109.9	9319.7	507.72	µg/L	507.72	ppb	05:52:59
2	P 214.914†	1314.2	1181.7	2508.9	µg/L	2508.9	ppb	05:53:19
2	Pb 220.353†	1948.2	2003.0	508.49	µg/L	508.49	ppb	05:53:19

2	S 181.975 Axial†	238.6	227.9	1169.5 µg/L	1169.5 ppb	05:53:19
2	Sb 206.836†	508.0	515.9	510.38 µg/L	510.38 ppb	05:53:19
2	Se 196.026†	349.1	354.5	518.48 µg/L	518.48 ppb	05:53:19
2	SiO2†	29350.9	29009.8	5539.8 µg/L	5539.8 ppb	05:52:59
2	Si 251.611†	32270.3	33724.4	2534.8 µg/L	2534.8 ppb	05:52:59
2	Sn 189.927†	993.1	1026.1	503.15 µg/L	503.15 ppb	05:53:19
2	Ti 334.940†	217691.5	229140.3	507.62 µg/L	507.62 ppb	05:52:53
2	Tl 190.801†	294.0	331.9	503.17 µg/L	503.17 ppb	05:53:19
2	U 409.014†	5907.2	5558.1	521.11 µg/L	521.11 ppb	05:52:59
2	V 292.402†	42693.0	45171.2	514.01 µg/L	514.01 ppb	05:52:59
2	Zn 213.857†	18696.3	19191.1	510.10 µg/L	510.10 ppb	05:52:59
3	Sc RADIAL	106612.4	106612.4	94.8 %		05:51:48
3	Al 396.153Radial†	10397.3	10739.7	5408.5 µg/L	5408.5 ppb	05:51:48
3	Ca 317.933Radial†	12951.9	13169.3	5227.6 µg/L	5227.6 ppb	05:52:09
3	Fe 238.204 Radial†	969.9	1012.1	5333.4 µg/L	5333.4 ppb	05:52:09
3	K 766.490 Radial†	9764.1	9606.6	5208.7 µg/L	5208.7 ppb	05:51:48
3	Mg 279.077 IEC†	962.5	995.7	5527.2 µg/L	5527.2 ppb	05:52:09
3	Na 589.592 Radial†	35497.1	38154.7	10586 µg/L	10586 ppb	05:51:48
3	Sr 421.552†	85727.1	90509.1	509.83 µg/L	509.83 ppb	05:51:48
3	Sc 361.383	1938192.0	1938192.0	94.236 %		05:53:27
3	Y 371.029	1173788.6	1173788.6	93.726 %		05:53:27
3	Ag 328.068†	54127.1	57466.2	517.16 µg/L	517.16 ppb	05:53:32
3	As 188.979†	259.1	272.5	518.30 µg/L	518.30 ppb	05:53:53
3	B 249.677†	10834.0	11341.0	501.68 µg/L	501.68 ppb	05:53:32
3	Ba 233.527†	18969.4	20210.3	508.69 µg/L	508.69 ppb	05:53:32
3	Be 313.107†	760643.0	803557.2	508.13 µg/L	508.13 ppb	05:53:27
3	Cd 226.502†	17903.2	19099.2	505.22 µg/L	505.22 ppb	05:53:32
3	Co 228.616†	9893.9	10570.8	508.45 µg/L	508.45 ppb	05:53:32
3	Cr 267.716†	22820.0	24338.6	507.83 µg/L	507.83 ppb	05:53:32
3	Cu 324.752†	72387.0	73430.4	517.76 µg/L	517.76 ppb	05:53:32
3	Mn 257.610†	151317.9	160796.1	510.96 µg/L	510.96 ppb	05:53:27
3	Mo 202.031†	4236.6	4503.6	502.63 µg/L	502.63 ppb	05:53:53
3	Ni 231.604†	9072.4	9328.0	508.17 µg/L	508.17 ppb	05:53:32
3	P 214.914†	1301.8	1175.4	2495.0 µg/L	2495.0 ppb	05:53:53
3	Pb 220.353†	1931.8	1995.8	506.66 µg/L	506.66 ppb	05:53:53
3	S 181.975 Axial†	237.8	228.3	1171.5 µg/L	1171.5 ppb	05:53:53
3	Sb 206.836†	500.9	511.0	505.55 µg/L	505.55 ppb	05:53:53
3	Se 196.026†	351.0	358.3	524.10 µg/L	524.10 ppb	05:53:53
3	SiO2†	29219.5	29025.0	5542.7 µg/L	5542.7 ppb	05:53:32
3	Si 251.611†	32183.2	33802.1	2540.6 µg/L	2540.6 ppb	05:53:32
3	Sn 189.927†	991.9	1030.1	505.09 µg/L	505.09 ppb	05:53:53
3	Ti 334.940†	217384.6	229962.3	509.44 µg/L	509.44 ppb	05:53:27
3	Tl 190.801†	298.2	337.9	512.27 µg/L	512.27 ppb	05:53:53
3	U 409.014†	5929.2	5612.6	526.22 µg/L	526.22 ppb	05:53:32
3	V 292.402†	42527.3	45220.5	514.58 µg/L	514.58 ppb	05:53:32
3	Zn 213.857†	18580.2	19166.5	509.43 µg/L	509.43 ppb	05:53:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941346.3	94.389	%	0.2747				0.29%
Sc RADIAL	107112.9	95.2	%	0.56				0.59%
Y 371.029	1175767.4	93.884	%	0.2926				0.31%
Ag 328.068†	57420.3	516.74	µg/L	0.997	516.74	ppb	0.997	0.19%
QC value within limits for Ag 328.068 Recovery = 103.35%								
Al 396.153Radial†	10844.0	5461.2	µg/L	71.69	5461.2	ppb	71.69	1.31%
QC value within limits for Al 396.153Radial Recovery = 109.22%								
As 188.979†	269.1	511.79	µg/L	9.332	511.79	ppb	9.332	1.82%
QC value within limits for As 188.979 Recovery = 102.36%								
B 249.677†	11343.9	501.81	µg/L	0.193	501.81	ppb	0.193	0.04%
QC value within limits for B 249.677 Recovery = 100.36%								
Ba 233.527†	20221.3	508.97	µg/L	0.501	508.97	ppb	0.501	0.10%
QC value within limits for Ba 233.527 Recovery = 101.79%								
Be 313.107†	803240.0	507.93	µg/L	0.701	507.93	ppb	0.701	0.14%
QC value within limits for Be 313.107 Recovery = 101.59%								
Ca 317.933Radial†	13197.8	5238.9	µg/L	40.08	5238.9	ppb	40.08	0.76%
QC value within limits for Ca 317.933Radial Recovery = 104.78%								
Cd 226.502†	19082.9	504.79	µg/L	0.645	504.79	ppb	0.645	0.13%
QC value within limits for Cd 226.502 Recovery = 100.96%								
Co 228.616†	10585.4	509.15	µg/L	0.783	509.15	ppb	0.783	0.15%

```
   QC value within limits for Co 228.616  Recovery = 101.83%
Cr 267.716†            24302.5      507.08 µg/L        1.084      507.08 ppb          1.084   0.21%
   QC value within limits for Cr 267.716  Recovery = 101.42%
Cu 324.752†            73213.7      516.24 µg/L        1.552      516.24 ppb          1.552   0.30%
   QC value within limits for Cu 324.752  Recovery = 103.25%
Fe 238.204 Radial†      1008.7      5315.6 µg/L       30.11      5315.6 ppb         30.11   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.31%
K 766.490 Radial†       9575.2      5191.6 µg/L       17.10      5191.6 ppb         17.10   0.33%
   QC value within limits for K 766.490 Radial  Recovery = 103.83%
Mg 279.077 IEC†          994.5      5520.8 µg/L       11.58      5520.8 ppb         11.58   0.21%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 110.42%
Mn 257.610†           160737.5      510.77 µg/L        0.979      510.77 ppb          0.979   0.19%
   QC value within limits for Mn 257.610  Recovery = 102.15%
Mo 202.031†             4507.7      503.09 µg/L        1.163      503.09 ppb          1.163   0.23%
   QC value within limits for Mo 202.031  Recovery = 100.62%
Na 589.592 Radial†     38039.4       10554 µg/L         29.5       10554 ppb           29.5   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 105.54%
Ni 231.604†             9332.7      508.43 µg/L        0.871      508.43 ppb          0.871   0.17%
   QC value within limits for Ni 231.604  Recovery = 101.69%
P 214.914†              1181.4      2508.3 µg/L       12.94      2508.3 ppb         12.94   0.52%
   QC value within limits for P 214.914  Recovery = 100.33%
Pb 220.353†             2006.8      509.46 µg/L        3.388      509.46 ppb          3.388   0.67%
   QC value within limits for Pb 220.353  Recovery = 101.89%
S 181.975 Axial†         228.2      1171.1 µg/L         1.49      1171.1 ppb          1.49   0.13%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 117.11%
Sb 206.836†              513.6      508.12 µg/L        2.429      508.12 ppb         2.429   0.48%
   QC value within limits for Sb 206.836  Recovery = 101.62%
Se 196.026†              354.9      519.07 µg/L        4.771      519.07 ppb         4.771   0.92%
   QC value within limits for Se 196.026  Recovery = 103.81%
SiO2†                  28961.9      5530.7 µg/L       18.42      5530.7 ppb         18.42   0.33%
   QC value within limits for SiO2  Recovery = 103.43%
Si 251.611†            33713.7      2533.8 µg/L        7.34      2533.8 ppb          7.34   0.29%
   QC value within limits for Si 251.611  Recovery = 101.35%
Sn 189.927†             1032.5      506.27 µg/L        3.852      506.27 ppb         3.852   0.76%
   QC value within limits for Sn 189.927  Recovery = 101.25%
Sr 421.552†            90413.5      509.29 µg/L        0.645      509.29 ppb         0.645   0.13%
   QC value within limits for Sr 421.552  Recovery = 101.86%
Ti 334.940†           229597.8      508.63 µg/L        0.927      508.63 ppb         0.927   0.18%
   QC value within limits for Ti 334.940  Recovery = 101.73%
Tl 190.801†              335.4      508.54 µg/L        4.762      508.54 ppb         4.762   0.94%
   QC value within limits for Tl 190.801  Recovery = 101.71%
U 409.014†              5587.0      523.82 µg/L        2.568      523.82 ppb         2.568   0.49%
   QC value within limits for U 409.014  Recovery = 104.76%
V 292.402†             45159.5      513.89 µg/L        0.757      513.89 ppb         0.757   0.15%
   QC value within limits for V 292.402  Recovery = 102.78%
Zn 213.857†            19150.6      509.00 µg/L        1.357      509.00 ppb         1.357   0.27%
   QC value within limits for Zn 213.857  Recovery = 101.80%
QC Failed.  Continue with analysis.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 05:54:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105233.3	105233.3	93.6	%			05:54:34
1	Al 396.153Radial†	364.1	159.3	80.497	µg/L	80.497	ppb	05:54:34
1	Ca 317.933Radial†	564.6	108.0	42.886	µg/L	42.886	ppb	05:54:54
1	Fe 238.204 Radial†	16.4	6.4	33.426	µg/L	33.426	ppb	05:54:54
1	K 766.490 Radial†	756.8	114.1	61.846	µg/L	61.846	ppb	05:54:34
1	Mg 279.077 IEC†	31.5	13.8	76.643	µg/L	76.643	ppb	05:54:54
1	Na 589.592 Radial†	-345.0	335.2	93.011	µg/L	93.011	ppb	05:54:34
1	Sr 421.552†	-43.6	17.2	0.0970	µg/L	0.0970	ppb	05:54:34
1	Sc 361.383	1937519.7	1937519.7	94.203	%			05:55:56
1	Y 371.029	1180395.0	1180395.0	94.254	%			05:55:56
1	Ag 328.068†	-48.1	-22.7	-0.2002	µg/L	-0.2002	ppb	05:56:02
1	As 188.979†	2.7	0.4	0.7145	µg/L	0.7145	ppb	05:56:22
1	B 249.677†	152.9	6.6	0.2828	µg/L	0.2828	ppb	05:56:22
1	Ba 233.527†	-78.9	-3.1	-0.0767	µg/L	-0.0767	ppb	05:56:22
1	Be 313.107†	3708.0	324.7	0.2053	µg/L	0.2053	ppb	05:56:02
1	Cd 226.502†	-86.6	9.0	0.2402	µg/L	0.2402	ppb	05:56:22
1	Co 228.616†	-74.6	-7.5	-0.3605	µg/L	-0.3605	ppb	05:56:22
1	Cr 267.716†	-103.0	13.4	0.2794	µg/L	0.2794	ppb	05:56:02
1	Cu 324.752†	3168.2	-21.2	-0.1417	µg/L	-0.1417	ppb	05:56:02
1	Mn 257.610†	-183.7	27.7	0.0920	µg/L	0.0920	ppb	05:56:22
1	Mo 202.031†	-2.3	5.5	0.6160	µg/L	0.6160	ppb	05:56:22
1	Ni 231.604†	283.7	1.8	0.0969	µg/L	0.0969	ppb	05:56:22
1	P 214.914†	217.0	24.4	53.006	µg/L	53.006	ppb	05:56:22
1	Pb 220.353†	61.8	11.5	2.9238	µg/L	2.9238	ppb	05:56:22
1	S 181.975 Axial†	47.6	26.5	136.20	µg/L	136.20	ppb	05:56:22
1	Sb 206.836†	19.4	0.0	0.0108	µg/L	0.0108	ppb	05:56:22
1	Se 196.026†	15.0	1.9	2.6964	µg/L	2.6964	ppb	05:56:22
1	SiO2†	1977.1	117.1	22.353	µg/L	22.353	ppb	05:56:02
1	Si 251.611†	368.8	41.9	3.1239	µg/L	3.1239	ppb	05:56:22
1	Sn 189.927†	23.0	2.0	0.9948	µg/L	0.9948	ppb	05:56:22
1	Ti 334.940†	808.5	139.4	0.3065	µg/L	0.3065	ppb	05:56:02
1	Tl 190.801†	-19.6	0.6	0.8882	µg/L	0.8882	ppb	05:56:22
1	U 409.014†	710.1	74.6	6.9990	µg/L	6.9990	ppb	05:56:02
1	V 292.402†	-86.0	0.6	0.0254	µg/L	0.0254	ppb	05:56:02
1	Zn 213.857†	529.2	11.6	0.3061	µg/L	0.3061	ppb	05:56:22
2	Sc RADIAL	105934.7	105934.7	94.2	%			05:55:00
2	Al 396.153Radial†	239.7	24.7	12.440	µg/L	12.440	ppb	05:55:00
2	Ca 317.933Radial†	545.9	84.2	33.408	µg/L	33.408	ppb	05:55:20
2	Fe 238.204 Radial†	15.5	5.3	27.628	µg/L	27.628	ppb	05:55:20
2	K 766.490 Radial†	740.3	91.2	49.422	µg/L	49.422	ppb	05:55:00
2	Mg 279.077 IEC†	26.6	8.4	46.347	µg/L	46.347	ppb	05:55:20
2	Na 589.592 Radial†	-350.1	332.2	92.168	µg/L	92.168	ppb	05:55:00
2	Sr 421.552†	-31.7	30.1	0.1694	µg/L	0.1694	ppb	05:55:00
2	Sc 361.383	1940159.6	1940159.6	94.332	%			05:56:28
2	Y 371.029	1180719.9	1180719.9	94.280	%			05:56:28
2	Ag 328.068†	-18.2	9.0	0.0828	µg/L	0.0828	ppb	05:56:34
2	As 188.979†	4.8	2.6	4.8782	µg/L	4.8782	ppb	05:56:55
2	B 249.677†	151.2	4.5	0.1930	µg/L	0.1930	ppb	05:56:55
2	Ba 233.527†	-85.3	-9.8	-0.2455	µg/L	-0.2455	ppb	05:56:55
2	Be 313.107†	3635.8	242.7	0.1534	µg/L	0.1534	ppb	05:56:34
2	Cd 226.502†	-94.8	0.3	0.0087	µg/L	0.0087	ppb	05:56:55
2	Co 228.616†	-63.2	4.8	0.2306	µg/L	0.2306	ppb	05:56:55
2	Cr 267.716†	-89.1	28.3	0.5897	µg/L	0.5897	ppb	05:56:34
2	Cu 324.752†	3206.9	15.2	0.1131	µg/L	0.1131	ppb	05:56:34
2	Mn 257.610†	-180.0	31.9	0.1046	µg/L	0.1046	ppb	05:56:55
2	Mo 202.031†	2.2	10.2	1.1422	µg/L	1.1422	ppb	05:56:55
2	Ni 231.604†	295.6	14.0	0.7629	µg/L	0.7629	ppb	05:56:55
2	P 214.914†	205.0	11.3	24.484	µg/L	24.484	ppb	05:56:55
2	Pb 220.353†	68.0	18.0	4.5542	µg/L	4.5542	ppb	05:56:55

2	S 181.975 Axial†	50.6	29.6	151.87 µg/L	151.87 ppb	05:56:55
2	Sb 206.836†	22.7	3.5	3.5006 µg/L	3.5006 ppb	05:56:55
2	Se 196.026†	25.3	12.7	18.468 µg/L	18.468 ppb	05:56:55
2	SiO2†	1992.2	130.2	24.867 µg/L	24.867 ppb	05:56:34
2	Si 251.611†	371.1	43.8	3.2454 µg/L	3.2454 ppb	05:56:55
2	Sn 189.927†	24.1	3.0	1.5032 µg/L	1.5032 ppb	05:56:55
2	Ti 334.940†	818.6	148.9	0.3283 µg/L	0.3283 ppb	05:56:34
2	Tl 190.801†	-16.7	3.7	5.5803 µg/L	5.5803 ppb	05:56:55
2	U 409.014†	652.7	12.7	1.1851 µg/L	1.1851 ppb	05:56:34
2	V 292.402†	-83.1	3.8	0.0554 µg/L	0.0554 ppb	05:56:34
2	Zn 213.857†	529.0	10.6	0.2757 µg/L	0.2757 ppb	05:56:55
3	Sc RADIAL	106144.5	106144.5	94.4 %		05:55:26
3	Al 396.153Radial†	249.8	34.9	17.589 µg/L	17.589 ppb	05:55:26
3	Ca 317.933Radial†	534.2	70.7	28.057 µg/L	28.057 ppb	05:55:46
3	Fe 238.204 Radial†	15.7	5.4	28.444 µg/L	28.444 ppb	05:55:46
3	K 766.490 Radial†	722.6	70.8	38.408 µg/L	38.408 ppb	05:55:26
3	Mg 279.077 IEC†	28.6	10.4	57.838 µg/L	57.838 ppb	05:55:46
3	Na 589.592 Radial†	-352.7	330.1	91.597 µg/L	91.597 ppb	05:55:26
3	Sr 421.552†	-70.8	-11.2	-0.0633 µg/L	-0.0633 ppb	05:55:26
3	Sc 361.383	1954045.7	1954045.7	95.007 %		05:57:01
3	Y 371.029	1189661.4	1189661.4	94.994 %		05:57:01
3	Ag 328.068†	-43.7	-17.7	-0.1515 µg/L	-0.1515 ppb	05:57:06
3	As 188.979†	2.9	0.5	1.0110 µg/L	1.0110 ppb	05:57:27
3	B 249.677†	161.5	14.3	0.6262 µg/L	0.6262 ppb	05:57:27
3	Ba 233.527†	-73.8	3.0	0.0754 µg/L	0.0754 ppb	05:57:27
3	Be 313.107†	3734.2	318.9	0.2016 µg/L	0.2016 ppb	05:57:06
3	Cd 226.502†	-91.3	4.8	0.1274 µg/L	0.1274 ppb	05:57:27
3	Co 228.616†	-78.4	-10.8	-0.5196 µg/L	-0.5196 ppb	05:57:27
3	Cr 267.716†	-146.7	-31.7	-0.6579 µg/L	-0.6579 ppb	05:57:06
3	Cu 324.752†	3132.0	-87.7	-0.6112 µg/L	-0.6112 ppb	05:57:06
3	Mn 257.610†	-177.1	36.2	0.1186 µg/L	0.1186 ppb	05:57:27
3	Mo 202.031†	-0.4	7.5	0.8335 µg/L	0.8335 ppb	05:57:27
3	Ni 231.604†	291.9	7.8	0.4273 µg/L	0.4273 ppb	05:57:27
3	P 214.914†	213.2	18.4	40.005 µg/L	40.005 ppb	05:57:27
3	Pb 220.353†	58.1	7.1	1.7916 µg/L	1.7916 ppb	05:57:27
3	S 181.975 Axial†	45.5	23.9	122.71 µg/L	122.71 ppb	05:57:27
3	Sb 206.836†	14.4	-5.4	-5.3330 µg/L	-5.3330 ppb	05:57:27
3	Se 196.026†	15.2	1.9	2.7521 µg/L	2.7521 ppb	05:57:27
3	SiO2†	1954.0	75.0	14.329 µg/L	14.329 ppb	05:57:06
3	Si 251.611†	371.2	41.0	3.1170 µg/L	3.1170 ppb	05:57:27
3	Sn 189.927†	20.5	-0.8	-0.3855 µg/L	-0.3855 ppb	05:57:27
3	Ti 334.940†	818.0	142.2	0.3135 µg/L	0.3135 ppb	05:57:06
3	Tl 190.801†	-19.9	0.4	0.6621 µg/L	0.6621 ppb	05:57:27
3	U 409.014†	668.0	23.9	2.2376 µg/L	2.2376 ppb	05:57:06
3	V 292.402†	-37.0	53.0	0.6097 µg/L	0.6097 ppb	05:57:06
3	Zn 213.857†	542.2	20.5	0.5444 µg/L	0.5444 ppb	05:57:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943908.4	94.514	%	0.4316				0.46%
Sc RADIAL	105770.8	94.0	%	0.42				0.45%
Y 371.029	1183592.1	94.509	%	0.4199				0.44%
Ag 328.068†	-10.5	-0.0896	µg/L	0.15131	-0.0896	ppb	0.15131	168.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	73.0	36.842	µg/L	37.8938	36.842	ppb	37.8938	102.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	2.2012	µg/L	2.32302	2.2012	ppb	2.32302	105.53%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	8.5	0.3673	µg/L	0.22863	0.3673	ppb	0.22863	62.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.3	-0.0823	µg/L	0.16049	-0.0823	ppb	0.16049	195.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	295.5	0.1868	µg/L	0.02894	0.1868	ppb	0.02894	15.49%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	87.6	34.784	µg/L	7.5096	34.784	ppb	7.5096	21.59%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.7	0.1254	µg/L	0.11572	0.1254	ppb	0.11572	92.26%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.5	-0.2165	µg/L	0.39526	-0.2165	ppb	0.39526	182.56%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.4      0.0704 µg/L       0.64952      0.0704 ppb        0.64952 922.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -31.2     -0.2133 µg/L       0.36744     -0.2133 ppb        0.36744 172.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          5.7      29.833 µg/L        3.1384      29.833 ppb         3.1384  10.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          92.0      49.892 µg/L       11.7257      49.892 ppb        11.7257  23.50%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            10.9      60.276 µg/L       15.2946      60.276 ppb        15.2946  25.37%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                31.9      0.1050 µg/L       0.01330      0.1050 ppb        0.01330  12.66%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.7      0.8639 µg/L       0.26443      0.8639 ppb        0.26443  30.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        332.5      92.259 µg/L        0.7113      92.259 ppb         0.7113   0.77%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.9      0.4290 µg/L       0.33300      0.4290 ppb        0.33300  77.61%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 18.0      39.165 µg/L       14.2798      39.165 ppb        14.2798  36.46%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.2      3.0899 µg/L       1.38874      3.0899 ppb        1.38874  44.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           26.7      136.92 µg/L        14.595      136.92 ppb         14.595  10.66%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.6     -0.6072 µg/L       4.44911     -0.6072 ppb        4.44911 732.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.5      7.9722 µg/L       9.08970      7.9722 ppb        9.08970 114.02%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     107.4      20.516 µg/L        5.5037      20.516 ppb         5.5037  26.83%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                42.2      3.1621 µg/L       0.07222      3.1621 ppb        0.07222   2.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.4      0.7042 µg/L       0.97735      0.7042 ppb        0.97735 138.80%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                12.0      0.0677 µg/L       0.11906      0.0677 ppb        0.11906 175.92%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               143.5      0.3161 µg/L       0.01110      0.3161 ppb        0.01110   3.51%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.6      2.3769 µg/L       2.77657      2.3769 ppb        2.77657 116.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 37.0      3.4739 µg/L       3.09785      3.4739 ppb        3.09785  89.17%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.2      0.2302 µg/L       0.32902      0.2302 ppb        0.32902 142.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                14.3      0.3754 µg/L       0.14715      0.3754 ppb        0.14715  39.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 06:30:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106958.4	106958.4	95.1	%			06:30:38
1	Al 396.153Radial†	10124.3	10417.2	5245.7	µg/L	5245.7	ppb	06:30:38
1	Ca 317.933Radial†	12427.7	12573.8	4991.2	µg/L	4991.2	ppb	06:30:59
1	Fe 238.204 Radial†	940.9	978.2	5155.1	µg/L	5155.1	ppb	06:30:59
1	K 766.490 Radial†	9803.4	9614.7	5213.0	µg/L	5213.0	ppb	06:30:38
1	Mg 279.077 IEC†	918.5	946.1	5252.7	µg/L	5252.7	ppb	06:30:59
1	Na 589.592 Radial†	35443.8	37977.5	10537	µg/L	10537	ppb	06:30:38
1	Sr 421.552†	85629.5	90114.0	507.61	µg/L	507.61	ppb	06:30:38
1	Sc 361.383	1950090.7	1950090.7	94.814	%			06:32:03
1	Y 371.029	1181754.8	1181754.8	94.362	%			06:32:03
1	Ag 328.068†	53887.7	56863.2	511.72	µg/L	511.72	ppb	06:32:08
1	As 188.979†	249.4	260.5	495.58	µg/L	495.58	ppb	06:32:29
1	B 249.677†	10762.5	11195.4	495.28	µg/L	495.28	ppb	06:32:08
1	Ba 233.527†	18829.0	19939.4	501.88	µg/L	501.88	ppb	06:32:08
1	Be 313.107†	758974.9	796872.8	503.90	µg/L	503.90	ppb	06:32:03
1	Cd 226.502†	17629.3	18694.3	494.52	µg/L	494.52	ppb	06:32:08
1	Co 228.616†	9805.7	10413.7	500.89	µg/L	500.89	ppb	06:32:08
1	Cr 267.716†	22631.9	23992.5	500.61	µg/L	500.61	ppb	06:32:08
1	Cu 324.752†	71909.0	72457.5	510.88	µg/L	510.88	ppb	06:32:08
1	Mn 257.610†	151305.2	159803.0	507.79	µg/L	507.79	ppb	06:32:03
1	Mo 202.031†	4216.2	4454.7	497.17	µg/L	497.17	ppb	06:32:29
1	Ni 231.604†	8967.3	9158.3	498.93	µg/L	498.93	ppb	06:32:08
1	P 214.914†	1303.7	1169.0	2482.0	µg/L	2482.0	ppb	06:32:29
1	Pb 220.353†	1927.6	1978.9	502.35	µg/L	502.35	ppb	06:32:29
1	S 181.975 Axial†	223.1	211.2	1083.8	µg/L	1083.8	ppb	06:32:29
1	Sb 206.836†	499.3	506.0	500.69	µg/L	500.69	ppb	06:32:29
1	Se 196.026†	356.2	361.6	528.81	µg/L	528.81	ppb	06:32:29
1	SiO2†	28979.7	28582.9	5458.3	µg/L	5458.3	ppb	06:32:08
1	Si 251.611†	31937.1	33334.2	2505.1	µg/L	2505.1	ppb	06:32:08
1	Sn 189.927†	991.0	1022.7	501.37	µg/L	501.37	ppb	06:32:29
1	Ti 334.940†	217004.4	228153.8	505.45	µg/L	505.45	ppb	06:32:03
1	Tl 190.801†	291.4	328.7	498.51	µg/L	498.51	ppb	06:32:29
1	U 409.014†	5918.1	5562.5	521.54	µg/L	521.54	ppb	06:32:08
1	V 292.402†	42265.4	44668.9	508.30	µg/L	508.30	ppb	06:32:08
1	Zn 213.857†	18455.8	18915.0	502.77	µg/L	502.77	ppb	06:32:08
2	Sc RADIAL	106770.8	106770.8	94.9	%			06:31:04
2	Al 396.153Radial†	10169.1	10483.1	5278.9	µg/L	5278.9	ppb	06:31:04
2	Ca 317.933Radial†	12384.7	12551.6	4982.4	µg/L	4982.4	ppb	06:31:25
2	Fe 238.204 Radial†	946.8	986.3	5197.4	µg/L	5197.4	ppb	06:31:25
2	K 766.490 Radial†	9816.7	9646.8	5230.4	µg/L	5230.4	ppb	06:31:04
2	Mg 279.077 IEC†	924.7	954.3	5297.8	µg/L	5297.8	ppb	06:31:25
2	Na 589.592 Radial†	35888.0	38511.0	10685	µg/L	10685	ppb	06:31:04
2	Sr 421.552†	86226.9	90901.4	512.04	µg/L	512.04	ppb	06:31:04
2	Sc 361.383	1956710.6	1956710.6	95.136	%			06:32:36
2	Y 371.029	1186480.4	1186480.4	94.740	%			06:32:36
2	Ag 328.068†	54276.3	57079.3	513.66	µg/L	513.66	ppb	06:32:41
2	As 188.979†	252.8	263.3	500.75	µg/L	500.75	ppb	06:33:02
2	B 249.677†	10837.6	11236.0	497.06	µg/L	497.06	ppb	06:32:41
2	Ba 233.527†	18985.2	20036.5	504.32	µg/L	504.32	ppb	06:32:41
2	Be 313.107†	764115.0	799567.6	505.60	µg/L	505.60	ppb	06:32:36
2	Cd 226.502†	17828.2	18840.5	498.38	µg/L	498.38	ppb	06:32:41
2	Co 228.616†	9899.9	10477.8	503.97	µg/L	503.97	ppb	06:32:41
2	Cr 267.716†	22783.2	24070.7	502.24	µg/L	502.24	ppb	06:32:41
2	Cu 324.752†	72484.5	72805.9	513.34	µg/L	513.34	ppb	06:32:41
2	Mn 257.610†	152312.8	160322.2	509.44	µg/L	509.44	ppb	06:32:36
2	Mo 202.031†	4242.4	4467.2	498.56	µg/L	498.56	ppb	06:33:02
2	Ni 231.604†	9095.9	9261.6	504.55	µg/L	504.55	ppb	06:32:41
2	P 214.914†	1299.6	1160.0	2462.0	µg/L	2462.0	ppb	06:33:02
2	Pb 220.353†	1918.0	1961.9	498.06	µg/L	498.06	ppb	06:33:02

2	S 181.975 Axial†	225.0	212.5	1090.1 µg/L	1090.1 ppb	06:33:02
2	Sb 206.836†	491.7	496.3	490.99 µg/L	490.99 ppb	06:33:02
2	Se 196.026†	340.4	343.7	502.78 µg/L	502.78 ppb	06:33:02
2	SiO2†	29206.5	28717.9	5484.1 µg/L	5484.1 ppb	06:32:41
2	Si 251.611†	32137.7	33431.0	2512.7 µg/L	2512.7 ppb	06:32:41
2	Sn 189.927†	982.4	1010.1	495.24 µg/L	495.24 ppb	06:33:02
2	Ti 334.940†	218671.9	229132.2	507.62 µg/L	507.62 ppb	06:32:36
2	Tl 190.801†	296.2	332.8	504.62 µg/L	504.62 ppb	06:33:02
2	U 409.014†	5859.3	5479.6	513.75 µg/L	513.75 ppb	06:32:41
2	V 292.402†	42579.2	44848.0	510.32 µg/L	510.32 ppb	06:32:41
2	Zn 213.857†	18543.8	18941.7	503.45 µg/L	503.45 ppb	06:32:41
3	Sc RADIAL	106886.7	106886.7	95.0 %		06:31:30
3	Al 396.153Radial†	10072.3	10369.6	5221.4 µg/L	5221.4 ppb	06:31:30
3	Ca 317.933Radial†	12428.3	12583.2	4995.0 µg/L	4995.0 ppb	06:31:51
3	Fe 238.204 Radial†	952.3	991.0	5222.4 µg/L	5222.4 ppb	06:31:51
3	K 766.490 Radial†	9796.6	9614.4	5212.9 µg/L	5212.9 ppb	06:31:30
3	Mg 279.077 IEC†	928.9	957.7	5317.0 µg/L	5317.0 ppb	06:31:51
3	Na 589.592 Radial†	35373.2	37928.3	10524 µg/L	10524 ppb	06:31:30
3	Sr 421.552†	85661.3	90207.8	508.13 µg/L	508.13 ppb	06:31:30
3	Sc 361.383	1927746.4	1927746.4	93.728 %		06:33:09
3	Y 371.029	1166780.5	1166780.5	93.167 %		06:33:09
3	Ag 328.068†	54248.6	57907.0	521.10 µg/L	521.10 ppb	06:33:15
3	As 188.979†	252.2	266.6	507.01 µg/L	507.01 ppb	06:33:35
3	B 249.677†	10860.2	11431.2	505.72 µg/L	505.72 ppb	06:33:15
3	Ba 233.527†	18998.6	20350.6	512.22 µg/L	512.22 ppb	06:33:15
3	Be 313.107†	750158.3	796744.6	503.82 µg/L	503.82 ppb	06:33:09
3	Cd 226.502†	17815.2	19108.3	505.47 µg/L	505.47 ppb	06:33:15
3	Co 228.616†	9884.0	10617.1	510.68 µg/L	510.68 ppb	06:33:15
3	Cr 267.716†	22774.7	24421.5	509.56 µg/L	509.56 ppb	06:33:15
3	Cu 324.752†	72347.7	73804.6	520.37 µg/L	520.37 ppb	06:33:15
3	Mn 257.610†	149630.9	159866.3	508.00 µg/L	508.00 ppb	06:33:09
3	Mo 202.031†	4215.0	4504.9	502.77 µg/L	502.77 ppb	06:33:35
3	Ni 231.604†	9083.4	9391.8	511.65 µg/L	511.65 ppb	06:33:15
3	P 214.914†	1290.8	1171.2	2485.6 µg/L	2485.6 ppb	06:33:35
3	Pb 220.353†	1921.9	1996.4	506.80 µg/L	506.80 ppb	06:33:35
3	S 181.975 Axial†	223.5	214.4	1100.1 µg/L	1100.1 ppb	06:33:35
3	Sb 206.836†	502.1	515.2	509.70 µg/L	509.70 ppb	06:33:35
3	Se 196.026†	343.4	352.2	515.22 µg/L	515.22 ppb	06:33:35
3	SiO2†	29200.7	29173.1	5571.0 µg/L	5571.0 ppb	06:33:15
3	Si 251.611†	32158.1	33960.3	2553.0 µg/L	2553.0 ppb	06:33:15
3	Sn 189.927†	978.4	1021.4	500.73 µg/L	500.73 ppb	06:33:35
3	Ti 334.940†	215031.4	228701.6	506.66 µg/L	506.66 ppb	06:33:09
3	Tl 190.801†	296.2	337.4	511.58 µg/L	511.58 ppb	06:33:35
3	U 409.014†	5872.8	5586.6	523.79 µg/L	523.79 ppb	06:33:15
3	V 292.402†	42518.6	45455.8	517.22 µg/L	517.22 ppb	06:33:15
3	Zn 213.857†	18593.6	19287.7	512.67 µg/L	512.67 ppb	06:33:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944849.2	94.560	%	0.7379				0.78%
Sc RADIAL	106871.9	95.0	%	0.08				0.09%
Y 371.029	1178338.5	94.090	%	0.8212				0.87%
Ag 328.068†	57283.2	515.49	µg/L	4.955	515.49	ppb	4.955	0.96%
QC value within limits for Ag 328.068 Recovery = 103.10%								
Al 396.153Radial†	10423.3	5248.7	µg/L	28.87	5248.7	ppb	28.87	0.55%
QC value within limits for Al 396.153Radial Recovery = 104.97%								
As 188.979†	263.5	501.11	µg/L	5.726	501.11	ppb	5.726	1.14%
QC value within limits for As 188.979 Recovery = 100.22%								
B 249.677†	11287.6	499.35	µg/L	5.586	499.35	ppb	5.586	1.12%
QC value within limits for B 249.677 Recovery = 99.87%								
Ba 233.527†	20108.8	506.14	µg/L	5.407	506.14	ppb	5.407	1.07%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	797728.3	504.44	µg/L	1.008	504.44	ppb	1.008	0.20%
QC value within limits for Be 313.107 Recovery = 100.89%								
Ca 317.933Radial†	12569.5	4989.5	µg/L	6.45	4989.5	ppb	6.45	0.13%
QC value within limits for Ca 317.933Radial Recovery = 99.79%								
Cd 226.502†	18881.0	499.46	µg/L	5.553	499.46	ppb	5.553	1.11%
QC value within limits for Cd 226.502 Recovery = 99.89%								
Co 228.616†	10502.9	505.18	µg/L	5.005	505.18	ppb	5.005	0.99%

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   QC value within limits for Co 228.616  Recovery = 101.04%
Cr 267.716†            24161.6      504.14 µg/L        4.767      504.14 ppb          4.767   0.95%
   QC value within limits for Cr 267.716  Recovery = 100.83%
Cu 324.752†            73022.6      514.86 µg/L        4.926      514.86 ppb          4.926   0.96%
   QC value within limits for Cu 324.752  Recovery = 102.97%
Fe 238.204 Radial†       985.1      5191.7 µg/L       34.01      5191.7 ppb         34.01   0.66%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.83%
K 766.490 Radial†       9625.3      5218.8 µg/L       10.09      5218.8 ppb         10.09   0.19%
   QC value within limits for K 766.490 Radial  Recovery = 104.38%
Mg 279.077 IEC†          952.7      5289.2 µg/L       33.03      5289.2 ppb         33.03   0.62%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.78%
Mn 257.610†           159997.2      508.41 µg/L       0.900      508.41 ppb         0.900   0.18%
   QC value within limits for Mn 257.610  Recovery = 101.68%
Mo 202.031†             4475.6      499.50 µg/L       2.919      499.50 ppb         2.919   0.58%
   QC value within limits for Mo 202.031  Recovery = 99.90%
Na 589.592 Radial†     38138.9       10582 µg/L        89.7       10582 ppb          89.7   0.85%
   QC value within limits for Na 589.592 Radial  Recovery = 105.82%
Ni 231.604†             9270.6      505.04 µg/L       6.374      505.04 ppb         6.374   1.26%
   QC value within limits for Ni 231.604  Recovery = 101.01%
P 214.914†              1166.7      2476.5 µg/L       12.67      2476.5 ppb         12.67   0.51%
   QC value within limits for P 214.914  Recovery = 99.06%
Pb 220.353†             1979.1      502.40 µg/L       4.370      502.40 ppb         4.370   0.87%
   QC value within limits for Pb 220.353  Recovery = 100.48%
S 181.975 Axial†         212.7      1091.4 µg/L        8.18      1091.4 ppb         8.18   0.75%
   QC value within limits for S 181.975 Axial  Recovery = 109.14%
Sb 206.836†              505.8      500.46 µg/L       9.357      500.46 ppb         9.357   1.87%
   QC value within limits for Sb 206.836  Recovery = 100.09%
Se 196.026†              352.5      515.60 µg/L      13.017      515.60 ppb        13.017   2.52%
   QC value within limits for Se 196.026  Recovery = 103.12%
SiO2†                  28824.6      5504.5 µg/L       59.04      5504.5 ppb         59.04   1.07%
   QC value within limits for SiO2  Recovery = 102.94%
Si 251.611†            33575.2      2523.6 µg/L       25.72      2523.6 ppb         25.72   1.02%
   QC value within limits for Si 251.611  Recovery = 100.94%
Sn 189.927†             1018.1      499.11 µg/L       3.368      499.11 ppb         3.368   0.67%
   QC value within limits for Sn 189.927  Recovery = 99.82%
Sr 421.552†            90407.7      509.26 µg/L       2.423      509.26 ppb         2.423   0.48%
   QC value within limits for Sr 421.552  Recovery = 101.85%
Ti 334.940†           228662.6      506.57 µg/L       1.087      506.57 ppb         1.087   0.21%
   QC value within limits for Ti 334.940  Recovery = 101.31%
Tl 190.801†              333.0      504.90 µg/L       6.540      504.90 ppb         6.540   1.30%
   QC value within limits for Tl 190.801  Recovery = 100.98%
U 409.014†              5542.9      519.69 µg/L       5.267      519.69 ppb         5.267   1.01%
   QC value within limits for U 409.014  Recovery = 103.94%
V 292.402†             44990.9      511.95 µg/L       4.677      511.95 ppb         4.677   0.91%
   QC value within limits for V 292.402  Recovery = 102.39%
Zn 213.857†            19048.1      506.30 µg/L       5.530      506.30 ppb         5.530   1.09%
   QC value within limits for Zn 213.857  Recovery = 101.26%
All analyte(s) passed QC.
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Sequence No.: 44
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 06:33:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105634.2	105634.2	93.9	%			06:34:17
1	Al 396.153Radial†	206.9	-9.5	-4.8236	µg/L	-4.8236	ppb	06:34:17
1	Ca 317.933Radial†	394.3	-75.6	-30.013	µg/L	-30.013	ppb	06:34:37
1	Fe 238.204 Radial†	11.7	1.3	6.8501	µg/L	6.8501	ppb	06:34:37
1	K 766.490 Radial†	715.4	66.9	36.265	µg/L	36.265	ppb	06:34:17
1	Mg 279.077 IEC†	16.9	-1.8	-10.230	µg/L	-10.230	ppb	06:34:37
1	Na 589.592 Radial†	-547.2	121.3	33.660	µg/L	33.660	ppb	06:34:17
1	Sr 421.552†	-7.5	55.8	0.3143	µg/L	0.3143	ppb	06:34:17
1	Sc 361.383	1946795.9	1946795.9	94.654	%			06:35:40
1	Y 371.029	1183615.8	1183615.8	94.511	%			06:35:40
1	Ag 328.068†	-109.1	-87.0	-0.7756	µg/L	-0.7756	ppb	06:35:45
1	As 188.979†	-2.2	-4.8	-9.1954	µg/L	-9.1954	ppb	06:36:06
1	B 249.677†	155.6	8.7	0.3841	µg/L	0.3841	ppb	06:36:06
1	Ba 233.527†	-76.4	-0.1	-0.0015	µg/L	-0.0015	ppb	06:36:06
1	Be 313.107†	3779.5	381.5	0.2412	µg/L	0.2412	ppb	06:35:45
1	Cd 226.502†	-92.3	3.4	0.0917	µg/L	0.0917	ppb	06:36:06
1	Co 228.616†	-74.6	-7.1	-0.3399	µg/L	-0.3399	ppb	06:36:06
1	Cr 267.716†	-128.6	-13.1	-0.2720	µg/L	-0.2720	ppb	06:35:45
1	Cu 324.752†	3116.1	-92.2	-0.6471	µg/L	-0.6471	ppb	06:35:45
1	Mn 257.610†	-174.8	38.0	0.1214	µg/L	0.1214	ppb	06:36:06
1	Mo 202.031†	-7.1	0.4	0.0504	µg/L	0.0504	ppb	06:36:06
1	Ni 231.604†	295.6	12.9	0.7042	µg/L	0.7042	ppb	06:36:06
1	P 214.914†	209.5	15.4	33.475	µg/L	33.475	ppb	06:36:06
1	Pb 220.353†	61.8	11.2	2.8272	µg/L	2.8272	ppb	06:36:06
1	S 181.975 Axial†	38.0	16.1	82.525	µg/L	82.525	ppb	06:36:06
1	Sb 206.836†	26.1	7.1	7.0234	µg/L	7.0234	ppb	06:36:06
1	Se 196.026†	15.6	2.4	3.5197	µg/L	3.5197	ppb	06:36:06
1	SiO2†	1925.3	52.4	10.004	µg/L	10.004	ppb	06:35:45
1	Si 251.611†	362.2	33.0	2.4395	µg/L	2.4395	ppb	06:36:06
1	Sn 189.927†	24.5	3.5	1.6896	µg/L	1.6896	ppb	06:36:06
1	Ti 334.940†	812.8	139.9	0.3117	µg/L	0.3117	ppb	06:35:45
1	Tl 190.801†	-24.7	-4.7	-7.1081	µg/L	-7.1081	ppb	06:36:06
1	U 409.014†	680.4	39.6	3.7176	µg/L	3.7176	ppb	06:35:45
1	V 292.402†	-81.0	6.3	0.0784	µg/L	0.0784	ppb	06:35:45
1	Zn 213.857†	547.2	28.0	0.7467	µg/L	0.7467	ppb	06:36:06
2	Sc RADIAL	105019.2	105019.2	93.4	%			06:34:43
2	Al 396.153Radial†	209.4	-5.6	-2.8460	µg/L	-2.8460	ppb	06:34:43
2	Ca 317.933Radial†	404.5	-62.2	-24.688	µg/L	-24.688	ppb	06:35:03
2	Fe 238.204 Radial†	8.7	-1.9	-9.7804	µg/L	-9.7804	ppb	06:35:03
2	K 766.490 Radial†	670.9	23.8	12.883	µg/L	12.883	ppb	06:34:43
2	Mg 279.077 IEC†	11.6	-7.4	-41.254	µg/L	-41.254	ppb	06:35:03
2	Na 589.592 Radial†	-557.4	106.9	29.662	µg/L	29.662	ppb	06:34:43
2	Sr 421.552†	-34.4	27.0	0.1518	µg/L	0.1518	ppb	06:34:43
2	Sc 361.383	1925193.6	1925193.6	93.604	%			06:36:12
2	Y 371.029	1171697.4	1171697.4	93.559	%			06:36:12
2	Ag 328.068†	-31.0	-4.8	-0.0420	µg/L	-0.0420	ppb	06:36:17
2	As 188.979†	3.4	1.1	2.1564	µg/L	2.1564	ppb	06:36:38
2	B 249.677†	159.8	15.1	0.6722	µg/L	0.6722	ppb	06:36:38
2	Ba 233.527†	-77.4	-2.0	-0.0504	µg/L	-0.0504	ppb	06:36:38
2	Be 313.107†	3749.4	394.1	0.2492	µg/L	0.2492	ppb	06:36:17
2	Cd 226.502†	-90.5	4.2	0.1118	µg/L	0.1118	ppb	06:36:38
2	Co 228.616†	-63.6	3.8	0.1819	µg/L	0.1819	ppb	06:36:38
2	Cr 267.716†	-102.3	13.5	0.2808	µg/L	0.2808	ppb	06:36:17
2	Cu 324.752†	3150.8	-18.2	-0.1301	µg/L	-0.1301	ppb	06:36:17
2	Mn 257.610†	-171.7	39.2	0.1231	µg/L	0.1231	ppb	06:36:38
2	Mo 202.031†	-1.9	5.9	0.6564	µg/L	0.6564	ppb	06:36:38
2	Ni 231.604†	278.3	-2.0	-0.1108	µg/L	-0.1108	ppb	06:36:38
2	P 214.914†	205.8	13.8	30.090	µg/L	30.090	ppb	06:36:38
2	Pb 220.353†	62.2	12.3	3.1274	µg/L	3.1274	ppb	06:36:38

2	S 181.975 Axial†	41.2	20.0	102.52	µg/L	102.52 ppb	06:36:38
2	Sb 206.836†	20.4	1.2	1.1998	µg/L	1.1998 ppb	06:36:38
2	Se 196.026†	7.8	-5.7	-8.3360	µg/L	-8.3360 ppb	06:36:38
2	SiO2†	1910.1	58.9	11.250	µg/L	11.250 ppb	06:36:17
2	Si 251.611†	357.7	32.5	2.4369	µg/L	2.4369 ppb	06:36:38
2	Sn 189.927†	22.4	1.5	0.7076	µg/L	0.7076 ppb	06:36:38
2	Ti 334.940†	775.3	109.4	0.2440	µg/L	0.2440 ppb	06:36:17
2	Tl 190.801†	-19.3	0.8	1.1392	µg/L	1.1392 ppb	06:36:38
2	U 409.014†	648.2	13.3	1.2531	µg/L	1.2531 ppb	06:36:17
2	V 292.402†	-66.0	21.4	0.2475	µg/L	0.2475 ppb	06:36:17
2	Zn 213.857†	544.1	31.1	0.8365	µg/L	0.8365 ppb	06:36:38
3	Sc RADIAL	104850.9	104850.9	93.2	%		06:35:09
3	Al 396.153Radial†	180.2	-36.5	-18.464	µg/L	-18.464 ppb	06:35:09
3	Ca 317.933Radial†	396.8	-69.7	-27.675	µg/L	-27.675 ppb	06:35:29
3	Fe 238.204 Radial†	10.5	0.1	0.4325	µg/L	0.4325 ppb	06:35:29
3	K 766.490 Radial†	686.2	41.3	22.401	µg/L	22.401 ppb	06:35:09
3	Mg 279.077 IEC†	13.7	-5.2	-28.601	µg/L	-28.601 ppb	06:35:29
3	Na 589.592 Radial†	-563.5	99.4	27.588	µg/L	27.588 ppb	06:35:09
3	Sr 421.552†	-11.0	52.0	0.2927	µg/L	0.2927 ppb	06:35:09
3	Sc 361.383	1946562.8	1946562.8	94.643	%		06:36:44
3	Y 371.029	1183797.4	1183797.4	94.525	%		06:36:44
3	Ag 328.068†	-44.5	-18.7	-0.1644	µg/L	-0.1644 ppb	06:36:49
3	As 188.979†	3.5	1.2	2.3208	µg/L	2.3208 ppb	06:37:10
3	B 249.677†	160.9	14.3	0.6342	µg/L	0.6342 ppb	06:37:10
3	Ba 233.527†	-74.5	2.0	0.0502	µg/L	0.0502 ppb	06:37:10
3	Be 313.107†	3702.4	300.4	0.1899	µg/L	0.1899 ppb	06:36:49
3	Cd 226.502†	-87.1	8.9	0.2417	µg/L	0.2417 ppb	06:37:10
3	Co 228.616†	-78.8	-11.5	-0.5534	µg/L	-0.5534 ppb	06:37:10
3	Cr 267.716†	-96.4	20.9	0.4356	µg/L	0.4356 ppb	06:36:49
3	Cu 324.752†	3141.1	-65.4	-0.4602	µg/L	-0.4602 ppb	06:36:49
3	Mn 257.610†	-178.5	34.0	0.1080	µg/L	0.1080 ppb	06:37:10
3	Mo 202.031†	-3.0	4.7	0.5274	µg/L	0.5274 ppb	06:37:10
3	Ni 231.604†	281.7	-1.8	-0.0968	µg/L	-0.0968 ppb	06:37:10
3	P 214.914†	210.9	16.9	36.689	µg/L	36.689 ppb	06:37:10
3	Pb 220.353†	60.2	9.5	2.4055	µg/L	2.4055 ppb	06:37:10
3	S 181.975 Axial†	35.3	13.2	67.960	µg/L	67.960 ppb	06:37:10
3	Sb 206.836†	10.9	-9.0	-8.9033	µg/L	-8.9033 ppb	06:37:10
3	Se 196.026†	11.4	-2.1	-2.9972	µg/L	-2.9972 ppb	06:37:10
3	SiO2†	1941.4	69.6	13.287	µg/L	13.287 ppb	06:36:49
3	Si 251.611†	371.3	42.7	3.2689	µg/L	3.2689 ppb	06:37:10
3	Sn 189.927†	19.9	-1.4	-0.7135	µg/L	-0.7135 ppb	06:37:10
3	Ti 334.940†	791.1	117.0	0.2609	µg/L	0.2609 ppb	06:36:49
3	Tl 190.801†	-20.7	-0.4	-0.6659	µg/L	-0.6659 ppb	06:37:10
3	U 409.014†	749.9	113.1	10.622	µg/L	10.622 ppb	06:36:49
3	V 292.402†	-59.2	29.4	0.3529	µg/L	0.3529 ppb	06:36:49
3	Zn 213.857†	544.3	25.0	0.6711	µg/L	0.6711 ppb	06:37:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1939517.5	94.300	%	0.6032				0.64%
Sc RADIAL	105168.1	93.5	%	0.37				0.39%
Y 371.029	1179703.5	94.199	%	0.5537				0.59%
Ag 328.068†	-36.8	-0.3273	µg/L	0.39297	-0.3273	ppb	0.39297	120.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-17.2	-8.7112	µg/L	8.50385	-8.7112	ppb	8.50385	97.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-1.5727	µg/L	6.60192	-1.5727	ppb	6.60192	419.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	12.7	0.5635	µg/L	0.15651	0.5635	ppb	0.15651	27.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.0	-0.0006	µg/L	0.05032	-0.0006	ppb	0.05032	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	358.7	0.2268	µg/L	0.03216	0.2268	ppb	0.03216	14.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.2	-27.459	µg/L	2.6689	-27.459	ppb	2.6689	9.72%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.5	0.1484	µg/L	0.08142	0.1484	ppb	0.08142	54.85%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.9	-0.2371	µg/L	0.37829	-0.2371	ppb	0.37829	159.53%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.1      0.1481 µg/L       0.37199      0.1481 ppb        0.37199 251.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -58.6     -0.4125 µg/L       0.26178     -0.4125 ppb        0.26178  63.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.2     -0.8326 µg/L       8.38712     -0.8326 ppb        8.38712 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          44.0      23.850 µg/L       11.7581      23.850 ppb        11.7581  49.30%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.8     -26.695 µg/L       15.5998     -26.695 ppb        15.5998  58.44%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                37.1      0.1175 µg/L       0.00828      0.1175 ppb        0.00828   7.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.7      0.4114 µg/L       0.31922      0.4114 ppb        0.31922  77.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        109.2      30.303 µg/L        3.0864      30.303 ppb         3.0864  10.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 3.0      0.1656 µg/L       0.46656      0.1656 ppb        0.46656 281.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.4      33.418 µg/L        3.2996      33.418 ppb         3.2996   9.87%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.0      2.7867 µg/L       0.36264      2.7867 ppb        0.36264  13.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           16.4      84.335 µg/L       17.3517      84.335 ppb        17.3517  20.57%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.2     -0.2267 µg/L       8.05859     -0.2267 ppb        8.05859 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -2.6045 µg/L       5.93763     -2.6045 ppb        5.93763 227.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      60.3      11.513 µg/L        1.6576      11.513 ppb         1.6576  14.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                36.1      2.7151 µg/L       0.47963      2.7151 ppb        0.47963  17.67%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.5612 µg/L       1.20822      0.5612 ppb        1.20822 215.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                44.9      0.2529 µg/L       0.08822      0.2529 ppb        0.08822  34.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               122.1      0.2722 µg/L       0.03525      0.2722 ppb        0.03525  12.95%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.5     -2.2116 µg/L       4.33547     -2.2116 ppb        4.33547 196.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 55.3      5.1974 µg/L       4.85647      5.1974 ppb        4.85647  93.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.1      0.2263 µg/L       0.13848      0.2263 ppb        0.13848  61.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                28.0      0.7514 µg/L       0.08282      0.7514 ppb        0.08282  11.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/18/2009 06:55:16 **Plasma On Time: 12/17/2009 20:21:18**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\121809C.sif
Batch ID:
Results Data Set: 121809A
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/18/2009 06:55:18**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106945.8	106945.8	95.1	%			06:55:52
1	Al 396.153Radial†	10044.5	10334.4	5203.8	µg/L	5203.8	ppb	06:55:52
1	Ca 317.933Radial†	12363.8	12508.2	4965.2	µg/L	4965.2	ppb	06:56:13
1	Fe 238.204 Radial†	946.3	984.0	5185.7	µg/L	5185.7	ppb	06:56:13
1	K 766.490 Radial†	9719.8	9527.9	5166.0	µg/L	5166.0	ppb	06:55:52
1	Mg 279.077 IEC†	913.6	941.0	5224.2	µg/L	5224.2	ppb	06:56:13
1	Na 589.592 Radial†	34929.8	37441.3	10389	µg/L	10389	ppb	06:55:52
1	Sr 421.552†	85564.5	90056.1	507.28	µg/L	507.28	ppb	06:55:52
1	Sc 361.383	1934781.8	1934781.8	94.070	%			06:57:16
1	Y 371.029	1171080.0	1171080.0	93.510	%			06:57:16
1	Ag 328.068†	53582.4	56988.4	512.85	µg/L	512.85	ppb	06:57:22
1	As 188.979†	253.3	266.8	507.45	µg/L	507.45	ppb	06:57:42
1	B 249.677†	10682.2	11199.8	495.46	µg/L	495.46	ppb	06:57:22
1	Ba 233.527†	18798.5	20064.2	505.01	µg/L	505.01	ppb	06:57:22
1	Be 313.107†	753733.3	797634.6	504.38	µg/L	504.38	ppb	06:57:16
1	Cd 226.502†	17655.1	18868.9	499.13	µg/L	499.13	ppb	06:57:22
1	Co 228.616†	9747.0	10433.1	501.83	µg/L	501.83	ppb	06:57:22
1	Cr 267.716†	22508.2	24049.8	501.81	µg/L	501.81	ppb	06:57:22
1	Cu 324.752†	71461.0	72581.3	511.76	µg/L	511.76	ppb	06:57:22
1	Mn 257.610†	150498.5	160208.0	509.08	µg/L	509.08	ppb	06:57:16
1	Mo 202.031†	4205.5	4478.5	499.82	µg/L	499.82	ppb	06:57:42
1	Ni 231.604†	8978.2	9244.7	503.64	µg/L	503.64	ppb	06:57:22
1	P 214.914†	1298.0	1173.9	2492.5	µg/L	2492.5	ppb	06:57:42
1	Pb 220.353†	1932.4	2000.1	507.73	µg/L	507.73	ppb	06:57:42
1	S 181.975 Axial†	216.7	206.3	1058.6	µg/L	1058.6	ppb	06:57:42
1	Sb 206.836†	497.2	508.0	502.66	µg/L	502.66	ppb	06:57:42
1	Se 196.026†	349.3	357.2	522.45	µg/L	522.45	ppb	06:57:42
1	SiO2†	28752.4	28583.2	5458.4	µg/L	5458.4	ppb	06:57:22
1	Si 251.611†	31785.4	33439.4	2513.1	µg/L	2513.1	ppb	06:57:22
1	Sn 189.927†	985.1	1024.8	502.36	µg/L	502.36	ppb	06:57:42
1	Ti 334.940†	215774.0	228656.8	506.56	µg/L	506.56	ppb	06:57:16
1	Tl 190.801†	292.1	331.9	503.36	µg/L	503.36	ppb	06:57:42
1	U 409.014†	5788.7	5474.4	513.26	µg/L	513.26	ppb	06:57:22
1	V 292.402†	42097.2	44842.8	510.27	µg/L	510.27	ppb	06:57:22
1	Zn 213.857†	18407.1	19017.3	505.48	µg/L	505.48	ppb	06:57:22
2	Sc RADIAL	107463.3	107463.3	95.5	%			06:56:18
2	Al 396.153Radial†	10047.5	10286.8	5179.7	µg/L	5179.7	ppb	06:56:18
2	Ca 317.933Radial†	12376.8	12459.1	4945.7	µg/L	4945.7	ppb	06:56:39
2	Fe 238.204 Radial†	941.9	974.7	5136.8	µg/L	5136.8	ppb	06:56:39
2	K 766.490 Radial†	9754.3	9514.8	5158.9	µg/L	5158.9	ppb	06:56:18
2	Mg 279.077 IEC†	919.1	942.1	5230.6	µg/L	5230.6	ppb	06:56:39
2	Na 589.592 Radial†	35095.2	37437.5	10388	µg/L	10388	ppb	06:56:18
2	Sr 421.552†	85730.9	89796.9	505.82	µg/L	505.82	ppb	06:56:18
2	Sc 361.383	1940235.3	1940235.3	94.335	%			06:57:49
2	Y 371.029	1174862.6	1174862.6	93.812	%			06:57:49
2	Ag 328.068†	53778.5	57036.1	513.27	µg/L	513.27	ppb	06:57:55
2	As 188.979†	252.5	265.2	504.37	µg/L	504.37	ppb	06:58:15

2	B 249.677†	10719.7	11207.7	495.83 µg/L	495.83 ppb	06:57:55
2	Ba 233.527†	18814.7	20025.2	504.03 µg/L	504.03 ppb	06:57:55
2	Be 313.107†	753213.8	794831.8	502.61 µg/L	502.61 ppb	06:57:49
2	Cd 226.502†	17721.4	18886.4	499.61 µg/L	499.61 ppb	06:57:55
2	Co 228.616†	9830.4	10492.4	504.68 µg/L	504.68 ppb	06:57:55
2	Cr 267.716†	22623.6	24104.9	502.95 µg/L	502.95 ppb	06:57:55
2	Cu 324.752†	71838.6	72768.1	513.06 µg/L	513.06 ppb	06:57:55
2	Mn 257.610†	150352.3	159603.4	507.15 µg/L	507.15 ppb	06:57:49
2	Mo 202.031†	4209.8	4470.5	498.93 µg/L	498.93 ppb	06:58:15
2	Ni 231.604†	9046.6	9290.5	506.13 µg/L	506.13 ppb	06:57:55
2	P 214.914†	1301.3	1173.5	2491.6 µg/L	2491.6 ppb	06:58:15
2	Pb 220.353†	1928.5	1990.2	505.21 µg/L	505.21 ppb	06:58:15
2	S 181.975 Axial†	216.1	205.1	1052.1 µg/L	1052.1 ppb	06:58:15
2	Sb 206.836†	495.7	504.9	499.57 µg/L	499.57 ppb	06:58:15
2	Se 196.026†	337.7	343.9	502.98 µg/L	502.98 ppb	06:58:15
2	SiO2†	28902.9	28656.8	5472.4 µg/L	5472.4 ppb	06:57:55
2	Si 251.611†	31854.8	33418.0	2511.5 µg/L	2511.5 ppb	06:57:55
2	Sn 189.927†	990.9	1028.0	503.92 µg/L	503.92 ppb	06:58:15
2	Ti 334.940†	215459.3	227678.5	504.40 µg/L	504.40 ppb	06:57:49
2	Tl 190.801†	289.5	328.3	497.85 µg/L	497.85 ppb	06:58:15
2	U 409.014†	5868.8	5542.0	519.61 µg/L	519.61 ppb	06:57:55
2	V 292.402†	42194.2	44819.9	510.01 µg/L	510.01 ppb	06:57:55
2	Zn 213.857†	18434.8	18991.7	504.79 µg/L	504.79 ppb	06:57:55
3	Sc RADIAL	106773.0	106773.0	94.9 %		06:56:44
3	Al 396.153Radial†	10042.0	10348.9	5211.2 µg/L	5211.2 ppb	06:56:44
3	Ca 317.933Radial†	12455.8	12626.1	5012.0 µg/L	5012.0 ppb	06:57:04
3	Fe 238.204 Radial†	948.9	988.4	5208.9 µg/L	5208.9 ppb	06:57:04
3	K 766.490 Radial†	9735.2	9560.7	5183.8 µg/L	5183.8 ppb	06:56:44
3	Mg 279.077 IEC†	907.1	935.7	5194.8 µg/L	5194.8 ppb	06:57:04
3	Na 589.592 Radial†	35014.9	37590.4	10430 µg/L	10430 ppb	06:56:44
3	Sr 421.552†	85619.4	90259.6	508.43 µg/L	508.43 ppb	06:56:44
3	Sc 361.383	1934679.9	1934679.9	94.065 %		06:58:23
3	Y 371.029	1171841.1	1171841.1	93.571 %		06:58:23
3	Ag 328.068†	53604.9	57015.3	513.09 µg/L	513.09 ppb	06:58:28
3	As 188.979†	250.6	264.0	502.10 µg/L	502.10 ppb	06:58:49
3	B 249.677†	10734.6	11256.2	497.95 µg/L	497.95 ppb	06:58:28
3	Ba 233.527†	18778.9	20044.4	504.52 µg/L	504.52 ppb	06:58:28
3	Be 313.107†	756998.9	801148.6	506.60 µg/L	506.60 ppb	06:58:23
3	Cd 226.502†	17679.0	18895.3	499.83 µg/L	499.83 ppb	06:58:28
3	Co 228.616†	9777.9	10466.6	503.43 µg/L	503.43 ppb	06:58:28
3	Cr 267.716†	22628.1	24178.5	504.49 µg/L	504.49 ppb	06:58:28
3	Cu 324.752†	71530.9	72659.7	512.31 µg/L	512.31 ppb	06:58:28
3	Mn 257.610†	151157.8	160917.4	511.33 µg/L	511.33 ppb	06:58:23
3	Mo 202.031†	4194.4	4466.9	498.53 µg/L	498.53 ppb	06:58:49
3	Ni 231.604†	9009.7	9278.7	505.49 µg/L	505.49 ppb	06:58:28
3	P 214.914†	1294.0	1169.6	2483.0 µg/L	2483.0 ppb	06:58:49
3	Pb 220.353†	1919.0	1986.0	504.15 µg/L	504.15 ppb	06:58:49
3	S 181.975 Axial†	219.3	209.1	1072.6 µg/L	1072.6 ppb	06:58:49
3	Sb 206.836†	498.3	509.2	503.75 µg/L	503.75 ppb	06:58:49
3	Se 196.026†	347.9	355.8	520.42 µg/L	520.42 ppb	06:58:49
3	SiO2†	28840.5	28678.5	5476.6 µg/L	5476.6 ppb	06:58:28
3	Si 251.611†	31810.9	33468.3	2515.4 µg/L	2515.4 ppb	06:58:28
3	Sn 189.927†	976.4	1015.6	497.88 µg/L	497.88 ppb	06:58:49
3	Ti 334.940†	216158.2	229077.4	507.49 µg/L	507.49 ppb	06:58:23
3	Tl 190.801†	295.1	335.1	508.14 µg/L	508.14 ppb	06:58:49
3	U 409.014†	5810.0	5497.3	515.41 µg/L	515.41 ppb	06:58:28
3	V 292.402†	42072.4	44818.8	509.99 µg/L	509.99 ppb	06:58:28
3	Zn 213.857†	18433.1	19045.9	506.24 µg/L	506.24 ppb	06:58:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1936565.7	94.157	%	0.1545				0.16%
Sc RADIAL	107060.7	95.2	%	0.32				0.34%
Y 371.029	1172594.6	93.631	%	0.1598				0.17%
Ag 328.068†	57013.3	513.07	µg/L	0.211	513.07	ppb	0.211	0.04%
QC value within limits for Ag 328.068 Recovery = 102.61%								
Al 396.153Radial†	10323.4	5198.2	µg/L	16.44	5198.2	ppb	16.44	0.32%
QC value within limits for Al 396.153Radial Recovery = 103.96%								
As 188.979†	265.3	504.64	µg/L	2.682	504.64	ppb	2.682	0.53%

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   QC value within limits for As 188.979  Recovery = 100.93%
B 249.677†            11221.2      496.41 µg/L        1.346      496.41 ppb          1.346   0.27%
   QC value within limits for B 249.677  Recovery = 99.28%
Ba 233.527†           20044.6      504.52 µg/L        0.490      504.52 ppb          0.490   0.10%
   QC value within limits for Ba 233.527  Recovery = 100.90%
Be 313.107†          797871.7      504.53 µg/L        2.002      504.53 ppb          2.002   0.40%
   QC value within limits for Be 313.107  Recovery = 100.91%
Ca 317.933Radial†     12531.1      4974.3 µg/L       34.07      4974.3 ppb         34.07   0.68%
   QC value within limits for Ca 317.933Radial  Recovery = 99.49%
Cd 226.502†           18883.6      499.52 µg/L        0.357      499.52 ppb          0.357   0.07%
   QC value within limits for Cd 226.502  Recovery = 99.90%
Co 228.616†           10464.0      503.31 µg/L        1.430      503.31 ppb          1.430   0.28%
   QC value within limits for Co 228.616  Recovery = 100.66%
Cr 267.716†           24111.1      503.08 µg/L        1.345      503.08 ppb          1.345   0.27%
   QC value within limits for Cr 267.716  Recovery = 100.62%
Cu 324.752†           72669.7      512.38 µg/L        0.654      512.38 ppb          0.654   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.48%
Fe 238.204 Radial†      982.4      5177.1 µg/L       36.80      5177.1 ppb         36.80   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.54%
K 766.490 Radial†      9534.5      5169.5 µg/L       12.81      5169.5 ppb         12.81   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 103.39%
Mg 279.077 IEC†         939.6      5216.5 µg/L       19.08      5216.5 ppb         19.08   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.33%
Mn 257.610†          160242.9      509.19 µg/L        2.092      509.19 ppb          2.092   0.41%
   QC value within limits for Mn 257.610  Recovery = 101.84%
Mo 202.031†            4472.0      499.10 µg/L        0.661      499.10 ppb          0.661   0.13%
   QC value within limits for Mo 202.031  Recovery = 99.82%
Na 589.592 Radial†    37489.7       10402 µg/L         24.2       10402 ppb           24.2   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 104.02%
Ni 231.604†            9271.3      505.08 µg/L        1.295      505.08 ppb          1.295   0.26%
   QC value within limits for Ni 231.604  Recovery = 101.02%
P 214.914†             1172.3      2489.0 µg/L        5.21       2489.0 ppb           5.21   0.21%
   QC value within limits for P 214.914  Recovery = 99.56%
Pb 220.353†            1992.1      505.70 µg/L        1.836      505.70 ppb          1.836   0.36%
   QC value within limits for Pb 220.353  Recovery = 101.14%
S 181.975 Axial†        206.8      1061.1 µg/L       10.48      1061.1 ppb         10.48   0.99%
   QC value within limits for S 181.975 Axial  Recovery = 106.11%
Sb 206.836†             507.4      501.99 µg/L        2.166      501.99 ppb          2.166   0.43%
   QC value within limits for Sb 206.836  Recovery = 100.40%
Se 196.026†             352.3      515.28 µg/L       10.703      515.28 ppb         10.703   2.08%
   QC value within limits for Se 196.026  Recovery = 103.06%
SiO2†                  28639.5      5469.1 µg/L        9.54      5469.1 ppb           9.54   0.17%
   QC value within limits for SiO2  Recovery = 102.27%
Si 251.611†            33441.9      2513.3 µg/L        2.00      2513.3 ppb           2.00   0.08%
   QC value within limits for Si 251.611  Recovery = 100.53%
Sn 189.927†            1022.8      501.39 µg/L        3.137      501.39 ppb          3.137   0.63%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†            90037.6      507.18 µg/L        1.306      507.18 ppb          1.306   0.26%
   QC value within limits for Sr 421.552  Recovery = 101.44%
Ti 334.940†           228470.9      506.15 µg/L        1.589      506.15 ppb          1.589   0.31%
   QC value within limits for Ti 334.940  Recovery = 101.23%
Tl 190.801†             331.8      503.12 µg/L        5.147      503.12 ppb          5.147   1.02%
   QC value within limits for Tl 190.801  Recovery = 100.62%
U 409.014†             5504.6      516.09 µg/L        3.232      516.09 ppb          3.232   0.63%
   QC value within limits for U 409.014  Recovery = 103.22%
V 292.402†             44827.2      510.09 µg/L        0.154      510.09 ppb          0.154   0.03%
   QC value within limits for V 292.402  Recovery = 102.02%
Zn 213.857†            19018.3      505.50 µg/L        0.726      505.50 ppb          0.726   0.14%
   QC value within limits for Zn 213.857  Recovery = 101.10%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 06:58:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105477.4	105477.4	93.8	%			06:59:31
1	Al 396.153Radial†	199.7	-16.8	-8.5139	µg/L	-8.5139	ppb	06:59:31
1	Ca 317.933Radial†	399.5	-69.5	-27.573	µg/L	-27.573	ppb	06:59:51
1	Fe 238.204 Radial†	6.5	-4.3	-22.702	µg/L	-22.702	ppb	06:59:51
1	K 766.490 Radial†	712.0	64.4	34.937	µg/L	34.937	ppb	06:59:31
1	Mg 279.077 IEC†	12.4	-6.6	-36.446	µg/L	-36.446	ppb	06:59:51
1	Na 589.592 Radial†	-641.5	19.8	5.5067	µg/L	5.5067	ppb	06:59:31
1	Sr 421.552†	-45.8	14.9	0.0839	µg/L	0.0839	ppb	06:59:31
1	Sc 361.383	1950567.4	1950567.4	94.838	%			07:00:54
1	Y 371.029	1186545.2	1186545.2	94.745	%			07:00:54
1	Ag 328.068†	-25.2	1.8	0.0199	µg/L	0.0199	ppb	07:00:59
1	As 188.979†	3.5	1.2	2.2153	µg/L	2.2153	ppb	07:01:20
1	B 249.677†	147.0	-0.7	-0.0260	µg/L	-0.0260	ppb	07:01:20
1	Ba 233.527†	-77.0	-0.5	-0.0109	µg/L	-0.0109	ppb	07:01:20
1	Be 313.107†	3870.5	469.7	0.2970	µg/L	0.2970	ppb	07:00:59
1	Cd 226.502†	-89.0	7.1	0.1934	µg/L	0.1934	ppb	07:01:20
1	Co 228.616†	-76.1	-8.5	-0.4110	µg/L	-0.4110	ppb	07:01:20
1	Cr 267.716†	-123.7	-7.7	-0.1583	µg/L	-0.1583	ppb	07:00:59
1	Cu 324.752†	3193.5	-17.0	-0.1245	µg/L	-0.1245	ppb	07:00:59
1	Mn 257.610†	-185.3	27.3	0.0836	µg/L	0.0836	ppb	07:01:20
1	Mo 202.031†	-5.6	2.0	0.2247	µg/L	0.2247	ppb	07:01:20
1	Ni 231.604†	287.4	3.6	0.1976	µg/L	0.1976	ppb	07:01:20
1	P 214.914†	211.9	17.4	37.853	µg/L	37.853	ppb	07:01:20
1	Pb 220.353†	64.4	13.8	3.4934	µg/L	3.4934	ppb	07:01:20
1	S 181.975 Axial†	35.5	13.3	68.594	µg/L	68.594	ppb	07:01:20
1	Sb 206.836†	16.3	-3.4	-3.3257	µg/L	-3.3257	ppb	07:01:20
1	Se 196.026†	15.1	1.9	2.7226	µg/L	2.7226	ppb	07:01:20
1	SiO2†	1975.1	100.9	19.270	µg/L	19.270	ppb	07:00:59
1	Si 251.611†	352.7	22.3	1.6348	µg/L	1.6348	ppb	07:01:20
1	Sn 189.927†	23.3	2.1	1.0278	µg/L	1.0278	ppb	07:01:20
1	Ti 334.940†	845.5	172.6	0.3842	µg/L	0.3842	ppb	07:00:59
1	Tl 190.801†	-21.6	-1.4	-2.0760	µg/L	-2.0760	ppb	07:01:20
1	U 409.014†	706.8	66.1	6.2103	µg/L	6.2103	ppb	07:00:59
1	V 292.402†	-16.1	75.0	0.8547	µg/L	0.8547	ppb	07:00:59
1	Zn 213.857†	530.3	9.0	0.2446	µg/L	0.2446	ppb	07:01:20
2	Sc RADIAL	104628.2	104628.2	93.0	%			06:59:57
2	Al 396.153Radial†	176.7	-39.8	-20.156	µg/L	-20.156	ppb	06:59:57
2	Ca 317.933Radial†	384.9	-81.7	-32.413	µg/L	-32.413	ppb	07:00:17
2	Fe 238.204 Radial†	10.2	-0.2	-1.2771	µg/L	-1.2771	ppb	07:00:17
2	K 766.490 Radial†	730.0	89.9	48.767	µg/L	48.767	ppb	06:59:57
2	Mg 279.077 IEC†	18.6	0.1	0.6928	µg/L	0.6928	ppb	07:00:17
2	Na 589.592 Radial†	-596.2	63.0	17.478	µg/L	17.478	ppb	06:59:57
2	Sr 421.552†	-55.4	4.2	0.0239	µg/L	0.0239	ppb	06:59:57
2	Sc 361.383	1932770.3	1932770.3	93.972	%			07:01:26
2	Y 371.029	1175769.9	1175769.9	93.884	%			07:01:26
2	Ag 328.068†	-37.6	-11.7	-0.1017	µg/L	-0.1017	ppb	07:01:31
2	As 188.979†	6.1	4.0	7.5633	µg/L	7.5633	ppb	07:01:52
2	B 249.677†	151.5	5.5	0.2446	µg/L	0.2446	ppb	07:01:52
2	Ba 233.527†	-73.4	2.6	0.0656	µg/L	0.0656	ppb	07:01:52
2	Be 313.107†	3632.5	254.1	0.1606	µg/L	0.1606	ppb	07:01:31
2	Cd 226.502†	-97.9	-3.3	-0.0851	µg/L	-0.0851	ppb	07:01:52
2	Co 228.616†	-67.1	0.3	0.0137	µg/L	0.0137	ppb	07:01:52
2	Cr 267.716†	-139.2	-25.4	-0.5272	µg/L	-0.5272	ppb	07:01:31
2	Cu 324.752†	3135.3	-47.9	-0.3370	µg/L	-0.3370	ppb	07:01:31
2	Mn 257.610†	-188.2	22.4	0.0708	µg/L	0.0708	ppb	07:01:52
2	Mo 202.031†	-3.2	4.5	0.5004	µg/L	0.5004	ppb	07:01:52
2	Ni 231.604†	267.6	-14.6	-0.7975	µg/L	-0.7975	ppb	07:01:52
2	P 214.914†	204.0	11.1	24.291	µg/L	24.291	ppb	07:01:52
2	Pb 220.353†	56.7	6.2	1.5785	µg/L	1.5785	ppb	07:01:52

2	S 181.975 Axial†	35.4	13.6	69.997 µg/L	69.997 ppb		07:01:52
2	Sb 206.836†	23.9	4.9	4.8553 µg/L	4.8553 ppb		07:01:52
2	Se 196.026†	8.3	-5.2	-7.6518 µg/L	-7.6518 ppb		07:01:52
2	SiO2†	1945.5	88.6	16.914 µg/L	16.914 ppb		07:01:31
2	Si 251.611†	338.1	10.1	0.6308 µg/L	0.6308 ppb		07:01:52
2	Sn 189.927†	26.6	5.9	2.8455 µg/L	2.8455 ppb		07:01:52
2	Ti 334.940†	763.5	93.6	0.2093 µg/L	0.2093 ppb		07:01:31
2	Tl 190.801†	-24.5	-4.7	-7.0617 µg/L	-7.0617 ppb		07:01:52
2	U 409.014†	666.6	30.1	2.8267 µg/L	2.8267 ppb		07:01:31
2	V 292.402†	-48.3	40.5	0.4647 µg/L	0.4647 ppb		07:01:31
2	Zn 213.857†	524.8	8.3	0.2263 µg/L	0.2263 ppb		07:01:52
3	Sc RADIAL	105590.3	105590.3	93.9 %			07:00:23
3	Al 396.153Radial†	182.7	-35.2	-17.768 µg/L	-17.768 ppb		07:00:23
3	Ca 317.933Radial†	396.7	-72.9	-28.920 µg/L	-28.920 ppb		07:00:43
3	Fe 238.204 Radial†	8.8	-1.8	-9.5354 µg/L	-9.5354 ppb		07:00:43
3	K 766.490 Radial†	746.9	100.7	54.621 µg/L	54.621 ppb		07:00:23
3	Mg 279.077 IEC†	16.7	-2.0	-11.243 µg/L	-11.243 ppb		07:00:43
3	Na 589.592 Radial†	-579.6	86.6	24.015 µg/L	24.015 ppb		07:00:23
3	Sr 421.552†	-70.2	-11.0	-0.0622 µg/L	-0.0622 ppb		07:00:23
3	Sc 361.383	1941750.9	1941750.9	94.409 %			07:01:58
3	Y 371.029	1179520.3	1179520.3	94.184 %			07:01:58
3	Ag 328.068†	-43.3	-17.5	-0.1576 µg/L	-0.1576 ppb		07:02:03
3	As 188.979†	-0.4	-2.9	-5.4643 µg/L	-5.4643 ppb		07:02:24
3	B 249.677†	133.7	-14.1	-0.6228 µg/L	-0.6228 ppb		07:02:24
3	Ba 233.527†	-72.2	4.2	0.1052 µg/L	0.1052 ppb		07:02:24
3	Be 313.107†	3636.9	240.7	0.1522 µg/L	0.1522 ppb		07:02:03
3	Cd 226.502†	-93.9	1.5	0.0392 µg/L	0.0392 ppb		07:02:24
3	Co 228.616†	-72.9	-5.4	-0.2631 µg/L	-0.2631 ppb		07:02:24
3	Cr 267.716†	-94.9	22.2	0.4623 µg/L	0.4623 ppb		07:02:03
3	Cu 324.752†	3162.3	-34.8	-0.2466 µg/L	-0.2466 ppb		07:02:03
3	Mn 257.610†	-191.8	19.5	0.0608 µg/L	0.0608 ppb		07:02:24
3	Mo 202.031†	-10.6	-3.3	-0.3671 µg/L	-0.3671 ppb		07:02:24
3	Ni 231.604†	277.1	-5.9	-0.3199 µg/L	-0.3199 ppb		07:02:24
3	P 214.914†	206.4	12.7	27.562 µg/L	27.562 ppb		07:02:24
3	Pb 220.353†	57.9	7.2	1.8223 µg/L	1.8223 ppb		07:02:24
3	S 181.975 Axial†	37.1	15.3	78.450 µg/L	78.450 ppb		07:02:24
3	Sb 206.836†	16.2	-3.4	-3.3903 µg/L	-3.3903 ppb		07:02:24
3	Se 196.026†	14.2	1.0	1.4190 µg/L	1.4190 ppb		07:02:24
3	SiO2†	1885.3	15.3	2.9244 µg/L	2.9244 ppb		07:02:03
3	Si 251.611†	338.1	8.5	0.6142 µg/L	0.6142 ppb		07:02:24
3	Sn 189.927†	22.1	0.9	0.4320 µg/L	0.4320 ppb		07:02:24
3	Ti 334.940†	742.0	67.1	0.1504 µg/L	0.1504 ppb		07:02:03
3	Tl 190.801†	-19.8	0.5	0.7221 µg/L	0.7221 ppb		07:02:24
3	U 409.014†	634.2	-7.5	-0.7000 µg/L	-0.7000 ppb		07:02:03
3	V 292.402†	-88.5	-1.7	-0.0240 µg/L	-0.0240 ppb		07:02:03
3	Zn 213.857†	528.2	9.3	0.2520 µg/L	0.2520 ppb		07:02:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941696.2	94.406	%	0.4327				0.46%
Sc RADIAL	105232.0	93.6	%	0.47				0.50%
Y 371.029	1180611.8	94.271	%	0.4368				0.46%
Ag 328.068†	-9.2	-0.0798	µg/L	0.09073	-0.0798	ppb	0.09073	113.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-30.6	-15.479	µg/L	6.1491	-15.479	ppb	6.1491	39.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	1.4381	µg/L	6.54851	1.4381	ppb	6.54851	455.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.1	-0.1347	µg/L	0.44380	-0.1347	ppb	0.44380	329.45%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0533	µg/L	0.05905	0.0533	ppb	0.05905	110.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	321.5	0.2033	µg/L	0.08126	0.2033	ppb	0.08126	39.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-74.7	-29.635	µg/L	2.4981	-29.635	ppb	2.4981	8.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.8	0.0491	µg/L	0.13952	0.0491	ppb	0.13952	283.98%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.6	-0.2201	µg/L	0.21559	-0.2201	ppb	0.21559	97.95%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -3.6     -0.0744 µg/L       0.50006     -0.0744 ppb        0.50006 671.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -33.2     -0.2360 µg/L       0.10664     -0.2360 ppb        0.10664  45.18%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -2.1     -11.171 µg/L       10.8056     -11.171 ppb        10.8056  96.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          85.0      46.108 µg/L       10.1080      46.108 ppb        10.1080  21.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.8     -15.665 µg/L       18.9603     -15.665 ppb        18.9603 121.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                23.0      0.0717 µg/L       0.01146      0.0717 ppb        0.01146  15.98%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.1      0.1193 µg/L       0.44327      0.1193 ppb        0.44327 371.50%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         56.5      15.667 µg/L        9.3860      15.667 ppb         9.3860  59.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.6     -0.3066 µg/L       0.49767     -0.3066 ppb        0.49767 162.33%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 13.7      29.902 µg/L        7.0774      29.902 ppb         7.0774  23.67%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 9.1      2.2981 µg/L       1.04233      2.2981 ppb        1.04233  45.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           14.1      72.347 µg/L        5.3316      72.347 ppb         5.3316   7.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.6     -0.6202 µg/L       4.74205     -0.6202 ppb        4.74205 764.55%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.8     -1.1701 µg/L       5.65107     -1.1701 ppb        5.65107 482.97%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      68.3      13.036 µg/L        8.8359      13.036 ppb         8.8359  67.78%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                13.6      0.9599 µg/L       0.58449      0.9599 ppb        0.58449  60.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      1.4351 µg/L       1.25728      1.4351 ppb        1.25728  87.61%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 2.7      0.0152 µg/L       0.07343      0.0152 ppb        0.07343 483.34%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               111.1      0.2479 µg/L       0.12165      0.2479 ppb        0.12165  49.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.9     -2.8052 µg/L       3.94280     -2.8052 ppb        3.94280 140.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.6      2.7790 µg/L       3.45539      2.7790 ppb        3.45539 124.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 37.9      0.4318 µg/L       0.44027      0.4318 ppb        0.44027 101.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 8.9      0.2410 µg/L       0.01321      0.2410 ppb        0.01321   5.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 07:34:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108426.9	108426.9	96.4	%			07:35:07
1	Al 396.153Radial†	10160.7	10310.7	5191.9	µg/L	5191.9	ppb	07:35:07
1	Ca 317.933Radial†	12371.7	12338.7	4897.9	µg/L	4897.9	ppb	07:35:28
1	Fe 238.204 Radial†	948.4	972.6	5125.9	µg/L	5125.9	ppb	07:35:28
1	K 766.490 Radial†	9790.3	9461.4	5129.9	µg/L	5129.9	ppb	07:35:07
1	Mg 279.077 IEC†	919.5	934.1	5185.9	µg/L	5185.9	ppb	07:35:28
1	Na 589.592 Radial†	35081.2	37096.5	10293	µg/L	10293	ppb	07:35:07
1	Sr 421.552†	85995.3	89273.8	502.87	µg/L	502.87	ppb	07:35:07
1	Sc 361.383	1943880.1	1943880.1	94.512	%			07:36:31
1	Y 371.029	1177912.6	1177912.6	94.056	%			07:36:31
1	Ag 328.068†	54085.1	57253.7	515.21	µg/L	515.21	ppb	07:36:37
1	As 188.979†	248.6	260.6	495.69	µg/L	495.69	ppb	07:36:57
1	B 249.677†	10796.1	11267.3	498.47	µg/L	498.47	ppb	07:36:37
1	Ba 233.527†	18895.7	20073.5	505.25	µg/L	505.25	ppb	07:36:37
1	Be 313.107†	750166.4	790110.4	499.62	µg/L	499.62	ppb	07:36:31
1	Cd 226.502†	17681.9	18809.4	497.57	µg/L	497.57	ppb	07:36:37
1	Co 228.616†	9830.8	10473.4	503.76	µg/L	503.76	ppb	07:36:37
1	Cr 267.716†	22731.2	24173.7	504.39	µg/L	504.39	ppb	07:36:37
1	Cu 324.752†	72230.7	73040.2	514.97	µg/L	514.97	ppb	07:36:37
1	Mn 257.610†	149988.6	158919.7	504.98	µg/L	504.98	ppb	07:36:31
1	Mo 202.031†	4202.9	4454.9	497.18	µg/L	497.18	ppb	07:36:57
1	Ni 231.604†	9001.1	9224.3	502.53	µg/L	502.53	ppb	07:36:37
1	P 214.914†	1292.8	1161.8	2465.9	µg/L	2465.9	ppb	07:36:57
1	Pb 220.353†	1918.0	1975.3	501.43	µg/L	501.43	ppb	07:36:57
1	S 181.975 Axial†	217.2	205.7	1055.5	µg/L	1055.5	ppb	07:36:57
1	Sb 206.836†	497.0	505.3	499.95	µg/L	499.95	ppb	07:36:57
1	Se 196.026†	340.3	346.0	506.11	µg/L	506.11	ppb	07:36:57
1	SiO2†	29458.5	29187.2	5573.7	µg/L	5573.7	ppb	07:36:37
1	Si 251.611†	32421.3	33954.0	2552.8	µg/L	2552.8	ppb	07:36:37
1	Sn 189.927†	982.2	1016.7	498.41	µg/L	498.41	ppb	07:36:57
1	Ti 334.940†	215791.7	227601.9	504.23	µg/L	504.23	ppb	07:36:31
1	Tl 190.801†	290.6	328.9	498.71	µg/L	498.71	ppb	07:36:57
1	U 409.014†	5926.8	5591.7	524.29	µg/L	524.29	ppb	07:36:37
1	V 292.402†	42282.3	44829.2	510.11	µg/L	510.11	ppb	07:36:37
1	Zn 213.857†	18527.0	19052.6	506.44	µg/L	506.44	ppb	07:36:37
2	Sc RADIAL	107319.2	107319.2	95.4	%			07:35:33
2	Al 396.153Radial†	10093.7	10349.3	5211.5	µg/L	5211.5	ppb	07:35:33
2	Ca 317.933Radial†	12329.3	12426.8	4932.8	µg/L	4932.8	ppb	07:35:54
2	Fe 238.204 Radial†	949.8	984.3	5186.7	µg/L	5186.7	ppb	07:35:54
2	K 766.490 Radial†	9685.8	9456.8	5127.4	µg/L	5127.4	ppb	07:35:33
2	Mg 279.077 IEC†	906.1	929.9	5162.4	µg/L	5162.4	ppb	07:35:54
2	Na 589.592 Radial†	35103.1	37495.1	10403	µg/L	10403	ppb	07:35:33
2	Sr 421.552†	85392.1	89562.4	504.50	µg/L	504.50	ppb	07:35:33
2	Sc 361.383	1957099.2	1957099.2	95.155	%			07:37:04
2	Y 371.029	1185312.9	1185312.9	94.646	%			07:37:04
2	Ag 328.068†	53891.6	56663.8	509.92	µg/L	509.92	ppb	07:37:10
2	As 188.979†	255.2	265.7	505.37	µg/L	505.37	ppb	07:37:31
2	B 249.677†	10746.3	11137.8	492.71	µg/L	492.71	ppb	07:37:10
2	Ba 233.527†	18818.1	19856.9	499.80	µg/L	499.80	ppb	07:37:10
2	Be 313.107†	756322.5	791218.9	500.32	µg/L	500.32	ppb	07:37:04
2	Cd 226.502†	17711.4	18714.1	495.03	µg/L	495.03	ppb	07:37:10
2	Co 228.616†	9788.5	10358.6	498.23	µg/L	498.23	ppb	07:37:10
2	Cr 267.716†	22603.6	23877.2	498.20	µg/L	498.20	ppb	07:37:10
2	Cu 324.752†	71903.5	72180.1	508.94	µg/L	508.94	ppb	07:37:10
2	Mn 257.610†	151351.0	159279.6	506.13	µg/L	506.13	ppb	07:37:04
2	Mo 202.031†	4203.6	4425.5	493.91	µg/L	493.91	ppb	07:37:31
2	Ni 231.604†	8999.1	9157.9	498.91	µg/L	498.91	ppb	07:37:10
2	P 214.914†	1293.1	1153.0	2447.3	µg/L	2447.3	ppb	07:37:31
2	Pb 220.353†	1926.9	1970.9	500.33	µg/L	500.33	ppb	07:37:31

2	S 181.975 Axial†	221.2	208.5	1069.5 µg/L	1069.5 ppb	07:37:31
2	Sb 206.836†	502.8	507.8	502.45 µg/L	502.45 ppb	07:37:31
2	Se 196.026†	340.2	343.5	502.44 µg/L	502.44 ppb	07:37:31
2	SiO2†	29245.7	28753.0	5490.8 µg/L	5490.8 ppb	07:37:10
2	Si 251.611†	32194.3	33483.8	2517.0 µg/L	2517.0 ppb	07:37:10
2	Sn 189.927†	978.1	1005.4	492.91 µg/L	492.91 ppb	07:37:31
2	Ti 334.940†	217320.3	227666.2	504.37 µg/L	504.37 ppb	07:37:04
2	Tl 190.801†	291.4	327.6	496.80 µg/L	496.80 ppb	07:37:31
2	U 409.014†	5780.0	5395.1	505.81 µg/L	505.81 ppb	07:37:10
2	V 292.402†	42159.9	44398.4	505.21 µg/L	505.21 ppb	07:37:10
2	Zn 213.857†	18433.2	18821.6	500.27 µg/L	500.27 ppb	07:37:10
3	Sc RADIAL	108101.0	108101.0	96.1 %		07:35:59
3	Al 396.153Radial†	10161.9	10343.7	5208.7 µg/L	5208.7 ppb	07:35:59
3	Ca 317.933Radial†	12389.7	12396.1	4920.7 µg/L	4920.7 ppb	07:36:20
3	Fe 238.204 Radial†	961.6	989.3	5213.5 µg/L	5213.5 ppb	07:36:20
3	K 766.490 Radial†	9814.5	9517.2	5160.2 µg/L	5160.2 ppb	07:35:59
3	Mg 279.077 IEC†	921.1	938.6	5210.7 µg/L	5210.7 ppb	07:36:20
3	Na 589.592 Radial†	35141.4	37268.9	10341 µg/L	10341 ppb	07:35:59
3	Sr 421.552†	86142.1	89695.4	505.25 µg/L	505.25 ppb	07:35:59
3	Sc 361.383	1956426.1	1956426.1	95.122 %		07:37:38
3	Y 371.029	1184365.1	1184365.1	94.571 %		07:37:38
3	Ag 328.068†	53763.0	56548.0	508.89 µg/L	508.89 ppb	07:37:43
3	As 188.979†	255.0	265.6	505.23 µg/L	505.23 ppb	07:38:04
3	B 249.677†	10764.2	11160.5	493.71 µg/L	493.71 ppb	07:37:43
3	Ba 233.527†	18818.6	19864.2	499.98 µg/L	499.98 ppb	07:37:43
3	Be 313.107†	755598.8	790731.5	500.02 µg/L	500.02 ppb	07:37:38
3	Cd 226.502†	17636.1	18641.3	493.11 µg/L	493.11 ppb	07:37:43
3	Co 228.616†	9802.2	10376.6	499.10 µg/L	499.10 ppb	07:37:43
3	Cr 267.716†	22566.2	23846.1	497.55 µg/L	497.55 ppb	07:37:43
3	Cu 324.752†	71907.0	72209.8	509.15 µg/L	509.15 ppb	07:37:43
3	Mn 257.610†	150911.4	158872.2	504.84 µg/L	504.84 ppb	07:37:38
3	Mo 202.031†	4211.8	4435.6	495.04 µg/L	495.04 ppb	07:38:04
3	Ni 231.604†	9017.6	9180.6	500.14 µg/L	500.14 ppb	07:37:43
3	P 214.914†	1306.0	1167.0	2477.6 µg/L	2477.6 ppb	07:38:04
3	Pb 220.353†	1923.9	1968.5	499.71 µg/L	499.71 ppb	07:38:04
3	S 181.975 Axial†	222.7	210.1	1077.8 µg/L	1077.8 ppb	07:38:04
3	Sb 206.836†	495.2	500.1	494.80 µg/L	494.80 ppb	07:38:04
3	Se 196.026†	351.1	355.0	519.20 µg/L	519.20 ppb	07:38:04
3	SiO2†	29228.0	28745.0	5489.3 µg/L	5489.3 ppb	07:37:43
3	Si 251.611†	32162.1	33461.6	2515.2 µg/L	2515.2 ppb	07:37:43
3	Sn 189.927†	982.5	1010.5	495.38 µg/L	495.38 ppb	07:38:04
3	Ti 334.940†	217003.3	227411.5	503.81 µg/L	503.81 ppb	07:37:38
3	Tl 190.801†	288.8	325.0	492.93 µg/L	492.93 ppb	07:38:04
3	U 409.014†	5870.4	5492.2	514.93 µg/L	514.93 ppb	07:37:43
3	V 292.402†	42161.4	44415.2	505.42 µg/L	505.42 ppb	07:37:43
3	Zn 213.857†	18431.9	18826.8	500.40 µg/L	500.40 ppb	07:37:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1952468.5	94.930	%	0.3620				0.38%
Sc RADIAL	107949.0	96.0	%	0.51				0.53%
Y 371.029	1182530.2	94.424	%	0.3215				0.34%
Ag 328.068†	56821.8	511.34	µg/L	3.395	511.34	ppb	3.395	0.66%
QC value within limits for Ag 328.068 Recovery = 102.27%								
Al 396.153Radial†	10334.6	5204.0	µg/L	10.62	5204.0	ppb	10.62	0.20%
QC value within limits for Al 396.153Radial Recovery = 104.08%								
As 188.979†	264.0	502.09	µg/L	5.550	502.09	ppb	5.550	1.11%
QC value within limits for As 188.979 Recovery = 100.42%								
B 249.677†	11188.5	494.96	µg/L	3.081	494.96	ppb	3.081	0.62%
QC value within limits for B 249.677 Recovery = 98.99%								
Ba 233.527†	19931.6	501.68	µg/L	3.095	501.68	ppb	3.095	0.62%
QC value within limits for Ba 233.527 Recovery = 100.34%								
Be 313.107†	790686.9	499.99	µg/L	0.351	499.99	ppb	0.351	0.07%
QC value within limits for Be 313.107 Recovery = 100.00%								
Ca 317.933Radial†	12387.2	4917.1	µg/L	17.75	4917.1	ppb	17.75	0.36%
QC value within limits for Ca 317.933Radial Recovery = 98.34%								
Cd 226.502†	18721.6	495.24	µg/L	2.237	495.24	ppb	2.237	0.45%
QC value within limits for Cd 226.502 Recovery = 99.05%								
Co 228.616†	10402.8	500.36	µg/L	2.973	500.36	ppb	2.973	0.59%

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   QC value within limits for Co 228.616  Recovery = 100.07%
Cr 267.716†            23965.7      500.05 µg/L        3.771      500.05 ppb          3.771   0.75%
   QC value within limits for Cr 267.716  Recovery = 100.01%
Cu 324.752†            72476.7      511.02 µg/L        3.426      511.02 ppb          3.426   0.67%
   QC value within limits for Cu 324.752  Recovery = 102.20%
Fe 238.204 Radial†       982.1      5175.4 µg/L       44.88      5175.4 ppb         44.88   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.51%
K 766.490 Radial†       9478.5      5139.2 µg/L       18.25      5139.2 ppb         18.25   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 102.78%
Mg 279.077 IEC†          934.2      5186.3 µg/L       24.11      5186.3 ppb         24.11   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.73%
Mn 257.610†           159023.8      505.32 µg/L       0.708      505.32 ppb         0.708   0.14%
   QC value within limits for Mn 257.610  Recovery = 101.06%
Mo 202.031†             4438.7      495.38 µg/L       1.661      495.38 ppb         1.661   0.34%
   QC value within limits for Mo 202.031  Recovery = 99.08%
Na 589.592 Radial†     37286.8       10346 µg/L        55.5       10346 ppb          55.5   0.54%
   QC value within limits for Na 589.592 Radial  Recovery = 103.46%
Ni 231.604†             9187.6      500.53 µg/L       1.839      500.53 ppb         1.839   0.37%
   QC value within limits for Ni 231.604  Recovery = 100.11%
P 214.914†              1160.6      2463.6 µg/L       15.30      2463.6 ppb         15.30   0.62%
   QC value within limits for P 214.914  Recovery = 98.54%
Pb 220.353†             1971.6      500.49 µg/L       0.869      500.49 ppb         0.869   0.17%
   QC value within limits for Pb 220.353  Recovery = 100.10%
S 181.975 Axial†         208.1      1067.6 µg/L       11.27      1067.6 ppb         11.27   1.06%
   QC value within limits for S 181.975 Axial  Recovery = 106.76%
Sb 206.836†              504.4      499.07 µg/L       3.903      499.07 ppb         3.903   0.78%
   QC value within limits for Sb 206.836  Recovery = 99.81%
Se 196.026†              348.1      509.25 µg/L       8.807      509.25 ppb         8.807   1.73%
   QC value within limits for Se 196.026  Recovery = 101.85%
SiO2†                  28895.1      5517.9 µg/L       48.32      5517.9 ppb         48.32   0.88%
   QC value within limits for SiO2  Recovery = 103.19%
Si 251.611†            33633.1      2528.4 µg/L       21.18      2528.4 ppb         21.18   0.84%
   QC value within limits for Si 251.611  Recovery = 101.13%
Sn 189.927†             1010.9      495.57 µg/L       2.755      495.57 ppb         2.755   0.56%
   QC value within limits for Sn 189.927  Recovery = 99.11%
Sr 421.552†            89510.5      504.21 µg/L       1.214      504.21 ppb         1.214   0.24%
   QC value within limits for Sr 421.552  Recovery = 100.84%
Ti 334.940†           227559.9      504.13 µg/L       0.294      504.13 ppb         0.294   0.06%
   QC value within limits for Ti 334.940  Recovery = 100.83%
Tl 190.801†              327.2      496.15 µg/L       2.945      496.15 ppb         2.945   0.59%
   QC value within limits for Tl 190.801  Recovery = 99.23%
U 409.014†              5493.0      515.01 µg/L       9.240      515.01 ppb         9.240   1.79%
   QC value within limits for U 409.014  Recovery = 103.00%
V 292.402†             44547.6      506.91 µg/L       2.772      506.91 ppb         2.772   0.55%
   QC value within limits for V 292.402  Recovery = 101.38%
Zn 213.857†            18900.3      502.37 µg/L       3.524      502.37 ppb         3.524   0.70%
   QC value within limits for Zn 213.857  Recovery = 100.47%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 07:38:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105823.4	105823.4	94.1	%			07:38:47
1	Al 396.153Radial†	217.3	1.1	0.5826	µg/L	0.5826	ppb	07:38:47
1	Ca 317.933Radial†	399.2	-71.2	-28.247	µg/L	-28.247	ppb	07:39:07
1	Fe 238.204 Radial†	12.9	2.5	12.992	µg/L	12.992	ppb	07:39:07
1	K 766.490 Radial†	734.7	86.1	46.681	µg/L	46.681	ppb	07:38:47
1	Mg 279.077 IEC†	13.5	-5.5	-30.716	µg/L	-30.716	ppb	07:39:07
1	Na 589.592 Radial†	-635.5	28.5	7.8991	µg/L	7.8991	ppb	07:38:47
1	Sr 421.552†	-40.7	20.5	0.1156	µg/L	0.1156	ppb	07:38:47
1	Sc 361.383	1948076.6	1948076.6	94.717	%			07:40:08
1	Y 371.029	1183421.0	1183421.0	94.495	%			07:40:08
1	Ag 328.068†	-81.5	-57.7	-0.5119	µg/L	-0.5119	ppb	07:40:14
1	As 188.979†	2.2	-0.2	-0.3853	µg/L	-0.3853	ppb	07:40:35
1	B 249.677†	171.2	25.1	1.1098	µg/L	1.1098	ppb	07:40:35
1	Ba 233.527†	-78.2	-1.9	-0.0477	µg/L	-0.0477	ppb	07:40:35
1	Be 313.107†	3612.6	202.6	0.1280	µg/L	0.1280	ppb	07:40:14
1	Cd 226.502†	-101.6	-6.3	-0.1606	µg/L	-0.1606	ppb	07:40:35
1	Co 228.616†	-69.6	-1.7	-0.0855	µg/L	-0.0855	ppb	07:40:35
1	Cr 267.716†	-116.4	-0.1	-0.0008	µg/L	-0.0008	ppb	07:40:14
1	Cu 324.752†	3135.4	-74.0	-0.5180	µg/L	-0.5180	ppb	07:40:14
1	Mn 257.610†	-138.3	76.6	0.2448	µg/L	0.2448	ppb	07:40:35
1	Mo 202.031†	-9.9	-2.5	-0.2826	µg/L	-0.2826	ppb	07:40:35
1	Ni 231.604†	276.6	-7.4	-0.4027	µg/L	-0.4027	ppb	07:40:35
1	P 214.914†	211.9	17.7	38.467	µg/L	38.467	ppb	07:40:35
1	Pb 220.353†	65.6	15.1	3.8204	µg/L	3.8204	ppb	07:40:35
1	S 181.975 Axial†	33.2	11.0	56.464	µg/L	56.464	ppb	07:40:35
1	Sb 206.836†	18.5	-1.0	-1.0207	µg/L	-1.0207	ppb	07:40:35
1	Se 196.026†	11.3	-2.1	-3.1090	µg/L	-3.1090	ppb	07:40:35
1	SiO2†	2085.7	220.4	42.081	µg/L	42.081	ppb	07:40:14
1	Si 251.611†	457.7	133.6	10.214	µg/L	10.214	ppb	07:40:35
1	Sn 189.927†	20.9	-0.4	-0.2051	µg/L	-0.2051	ppb	07:40:35
1	Ti 334.940†	852.7	181.4	0.4036	µg/L	0.4036	ppb	07:40:14
1	Tl 190.801†	-20.1	0.2	0.2471	µg/L	0.2471	ppb	07:40:35
1	U 409.014†	762.7	126.1	11.835	µg/L	11.835	ppb	07:40:14
1	V 292.402†	-55.6	33.3	0.3937	µg/L	0.3937	ppb	07:40:14
1	Zn 213.857†	532.7	12.3	0.3312	µg/L	0.3312	ppb	07:40:35
2	Sc RADIAL	105947.7	105947.7	94.2	%			07:39:12
2	Al 396.153Radial†	186.6	-31.7	-16.053	µg/L	-16.053	ppb	07:39:12
2	Ca 317.933Radial†	395.0	-76.1	-30.192	µg/L	-30.192	ppb	07:39:33
2	Fe 238.204 Radial†	11.5	1.0	5.1471	µg/L	5.1471	ppb	07:39:33
2	K 766.490 Radial†	662.4	8.4	4.5367	µg/L	4.5367	ppb	07:39:12
2	Mg 279.077 IEC†	14.5	-4.4	-24.485	µg/L	-24.485	ppb	07:39:33
2	Na 589.592 Radial†	-639.3	25.2	7.0044	µg/L	7.0044	ppb	07:39:12
2	Sr 421.552†	-31.3	30.6	0.1723	µg/L	0.1723	ppb	07:39:12
2	Sc 361.383	1937833.6	1937833.6	94.219	%			07:40:40
2	Y 371.029	1176787.2	1176787.2	93.966	%			07:40:40
2	Ag 328.068†	-80.1	-56.7	-0.5023	µg/L	-0.5023	ppb	07:40:46
2	As 188.979†	-0.3	-2.8	-5.3117	µg/L	-5.3117	ppb	07:41:06
2	B 249.677†	151.7	5.3	0.2327	µg/L	0.2327	ppb	07:41:06
2	Ba 233.527†	-80.0	-4.2	-0.1039	µg/L	-0.1039	ppb	07:41:06
2	Be 313.107†	3605.3	215.0	0.1359	µg/L	0.1359	ppb	07:40:46
2	Cd 226.502†	-90.1	5.3	0.1465	µg/L	0.1465	ppb	07:41:06
2	Co 228.616†	-71.1	-3.7	-0.1802	µg/L	-0.1802	ppb	07:41:06
2	Cr 267.716†	-129.8	-15.0	-0.3114	µg/L	-0.3114	ppb	07:40:46
2	Cu 324.752†	3194.8	6.5	0.0469	µg/L	0.0469	ppb	07:40:46
2	Mn 257.610†	-129.3	85.4	0.2716	µg/L	0.2716	ppb	07:41:06
2	Mo 202.031†	-5.2	2.3	0.2614	µg/L	0.2614	ppb	07:41:06
2	Ni 231.604†	275.4	-7.0	-0.3840	µg/L	-0.3840	ppb	07:41:06
2	P 214.914†	215.0	22.2	48.210	µg/L	48.210	ppb	07:41:06
2	Pb 220.353†	58.3	7.7	1.9527	µg/L	1.9527	ppb	07:41:06

2	S 181.975 Axial†	36.3	14.4	74.145 µg/L	74.145 ppb	07:41:06
2	Sb 206.836†	21.0	1.8	1.7742 µg/L	1.7742 ppb	07:41:06
2	Se 196.026†	14.2	1.0	1.4712 µg/L	1.4712 ppb	07:41:06
2	SiO2†	2029.9	172.8	32.994 µg/L	32.994 ppb	07:40:46
2	Si 251.611†	455.4	133.7	10.209 µg/L	10.209 ppb	07:41:06
2	Sn 189.927†	21.7	0.6	0.2787 µg/L	0.2787 ppb	07:41:06
2	Ti 334.940†	800.4	130.6	0.2913 µg/L	0.2913 ppb	07:40:46
2	Tl 190.801†	-15.9	4.5	6.8548 µg/L	6.8548 ppb	07:41:06
2	U 409.014†	745.4	112.0	10.514 µg/L	10.514 ppb	07:40:46
2	V 292.402†	-39.8	49.7	0.5799 µg/L	0.5799 ppb	07:40:46
2	Zn 213.857†	522.7	4.6	0.1248 µg/L	0.1248 ppb	07:41:06
3	Sc RADIAL	106727.8	106727.8	94.9 %		07:39:38
3	Al 396.153Radial†	236.4	19.3	9.7456 µg/L	9.7456 ppb	07:39:38
3	Ca 317.933Radial†	401.0	-72.8	-28.910 µg/L	-28.910 ppb	07:39:59
3	Fe 238.204 Radial†	8.9	-1.8	-9.5269 µg/L	-9.5269 ppb	07:39:59
3	K 766.490 Radial†	677.7	19.4	10.526 µg/L	10.526 ppb	07:39:38
3	Mg 279.077 IEC†	15.6	-3.4	-18.703 µg/L	-18.703 ppb	07:39:59
3	Na 589.592 Radial†	-636.9	32.7	9.0618 µg/L	9.0618 ppb	07:39:38
3	Sr 421.552†	-64.2	-3.9	-0.0219 µg/L	-0.0219 ppb	07:39:38
3	Sc 361.383	1951593.7	1951593.7	94.888 %		07:41:12
3	Y 371.029	1185614.0	1185614.0	94.671 %		07:41:12
3	Ag 328.068†	-37.9	-11.6	-0.1024 µg/L	-0.1024 ppb	07:41:17
3	As 188.979†	4.9	2.6	5.0218 µg/L	5.0218 ppb	07:41:38
3	B 249.677†	127.1	-21.8	-0.9632 µg/L	-0.9632 ppb	07:41:38
3	Ba 233.527†	-65.3	11.9	0.2995 µg/L	0.2995 ppb	07:41:38
3	Be 313.107†	3685.0	272.1	0.1720 µg/L	0.1720 ppb	07:41:17
3	Cd 226.502†	-94.9	0.9	0.0404 µg/L	0.0404 ppb	07:41:38
3	Co 228.616†	-67.2	0.9	0.0445 µg/L	0.0445 ppb	07:41:38
3	Cr 267.716†	-113.1	3.6	0.0759 µg/L	0.0759 ppb	07:41:17
3	Cu 324.752†	3152.5	-62.0	-0.4380 µg/L	-0.4380 ppb	07:41:17
3	Mn 257.610†	-134.7	80.7	0.2549 µg/L	0.2549 ppb	07:41:38
3	Mo 202.031†	-3.5	4.2	0.4688 µg/L	0.4688 ppb	07:41:38
3	Ni 231.604†	279.5	-4.8	-0.2641 µg/L	-0.2641 ppb	07:41:38
3	P 214.914†	201.4	6.3	13.708 µg/L	13.708 ppb	07:41:38
3	Pb 220.353†	60.8	10.0	2.5169 µg/L	2.5169 ppb	07:41:38
3	S 181.975 Axial†	29.9	7.5	38.310 µg/L	38.310 ppb	07:41:38
3	Sb 206.836†	23.0	3.7	3.6874 µg/L	3.6874 ppb	07:41:38
3	Se 196.026†	6.2	-7.6	-11.007 µg/L	-11.007 ppb	07:41:38
3	SiO2†	2035.4	163.4	31.207 µg/L	31.207 ppb	07:41:17
3	Si 251.611†	476.7	152.7	11.616 µg/L	11.616 ppb	07:41:38
3	Sn 189.927†	24.1	2.9	1.4235 µg/L	1.4235 ppb	07:41:38
3	Ti 334.940†	863.8	191.4	0.4260 µg/L	0.4260 ppb	07:41:17
3	Tl 190.801†	-20.9	-0.6	-0.9330 µg/L	-0.9330 ppb	07:41:38
3	U 409.014†	883.2	251.6	23.630 µg/L	23.630 ppb	07:41:17
3	V 292.402†	-63.5	25.0	0.3230 µg/L	0.3230 ppb	07:41:17
3	Zn 213.857†	530.9	9.3	0.2539 µg/L	0.2539 ppb	07:41:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945834.6	94.608	%	0.3476				0.37%
Sc RADIAL	106166.3	94.4	%	0.44				0.46%
Y 371.029	1181940.8	94.377	%	0.3670				0.39%
Ag 328.068†	-42.0	-0.3722	µg/L	0.23373	-0.3722	ppb	0.23373	62.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.8	-1.9081	µg/L	13.07821	-1.9081	ppb	13.07821	685.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.2251	µg/L	5.16864	-0.2251	ppb	5.16864	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2.9	0.1264	µg/L	1.04060	0.1264	ppb	1.04060	823.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.9	0.0493	µg/L	0.21847	0.0493	ppb	0.21847	443.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	229.9	0.1453	µg/L	0.02344	0.1453	ppb	0.02344	16.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-73.3	-29.116	µg/L	0.9887	-29.116	ppb	0.9887	3.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.1	0.0088	µg/L	0.15596	0.0088	ppb	0.15596	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.5	-0.0737	µg/L	0.11283	-0.0737	ppb	0.11283	153.04%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.8     -0.0787 µg/L       0.20510     -0.0787 ppb        0.20510 260.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -43.2     -0.3030 µg/L       0.30570     -0.3030 ppb        0.30570 100.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.5      2.8708 µg/L      11.43087      2.8708 ppb       11.43087 398.17%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        38.0      20.581 µg/L       22.8006      20.581 ppb        22.8006 110.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -4.4     -24.635 µg/L        6.0078     -24.635 ppb         6.0078  24.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              80.9      0.2571 µg/L       0.01353      0.2571 ppb        0.01353   5.26%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.3      0.1492 µg/L       0.38810      0.1492 ppb        0.38810 260.11%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       28.8      7.9884 µg/L       1.03163      7.9884 ppb        1.03163  12.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -6.4     -0.3503 µg/L       0.07521     -0.3503 ppb        0.07521  21.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               15.4      33.462 µg/L       17.7875      33.462 ppb        17.7875  53.16%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.9      2.7633 µg/L       0.95793      2.7633 ppb        0.95793  34.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         11.0      56.307 µg/L       17.9180      56.307 ppb        17.9180  31.82%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               1.5      1.4803 µg/L       2.36777      1.4803 ppb        2.36777 159.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -2.9     -4.2149 µg/L       6.31212     -4.2149 ppb        6.31212 149.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   185.5      35.427 µg/L        5.8311      35.427 ppb         5.8311  16.46%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             140.0      10.680 µg/L        0.8110      10.680 ppb         0.8110   7.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.0      0.4990 µg/L       0.83633      0.4990 ppb        0.83633 167.59%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              15.7      0.0886 µg/L       0.09987      0.0886 ppb        0.09987 112.67%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             167.8      0.3736 µg/L       0.07219      0.3736 ppb        0.07219  19.32%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.4      2.0563 µg/L       4.19734      2.0563 ppb        4.19734 204.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              163.2      15.326 µg/L        7.2210      15.326 ppb         7.2210  47.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               36.0      0.4322 µg/L       0.13272      0.4322 ppb        0.13272  30.71%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               8.7      0.2366 µg/L       0.10423      0.2366 ppb        0.10423  44.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 08:14:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106636.1	106636.1	94.8	%			08:15:15
1	Al 396.153Radial†	10179.8	10507.8	5291.7	µg/L	5291.7	ppb	08:15:15
1	Ca 317.933Radial†	12435.1	12621.1	5010.0	µg/L	5010.0	ppb	08:15:35
1	Fe 238.204 Radial†	961.0	1002.4	5282.4	µg/L	5282.4	ppb	08:15:35
1	K 766.490 Radial†	9808.1	9650.7	5232.6	µg/L	5232.6	ppb	08:15:15
1	Mg 279.077 IEC†	926.1	957.1	5313.1	µg/L	5313.1	ppb	08:15:35
1	Na 589.592 Radial†	34804.8	37416.2	10382	µg/L	10382	ppb	08:15:15
1	Sr 421.552†	85869.5	90639.1	510.56	µg/L	510.56	ppb	08:15:15
1	Sc 361.383	1960382.6	1960382.6	95.315	%			08:16:38
1	Y 371.029	1186590.5	1186590.5	94.748	%			08:16:38
1	Ag 328.068†	54368.6	57069.4	513.57	µg/L	513.57	ppb	08:16:44
1	As 188.979†	251.3	261.2	496.78	µg/L	496.78	ppb	08:17:05
1	B 249.677†	10816.9	11192.9	495.12	µg/L	495.12	ppb	08:16:44
1	Ba 233.527†	19008.6	20023.6	503.99	µg/L	503.99	ppb	08:16:44
1	Be 313.107†	758104.7	791757.4	500.67	µg/L	500.67	ppb	08:16:38
1	Cd 226.502†	17842.5	18820.4	497.85	µg/L	497.85	ppb	08:16:44
1	Co 228.616†	9890.9	10448.8	502.57	µg/L	502.57	ppb	08:16:44
1	Cr 267.716†	22854.9	24101.1	502.87	µg/L	502.87	ppb	08:16:44
1	Cu 324.752†	72609.9	72794.7	513.28	µg/L	513.28	ppb	08:16:44
1	Mn 257.610†	151498.4	159167.8	505.79	µg/L	505.79	ppb	08:16:38
1	Mo 202.031†	4207.8	4422.5	493.58	µg/L	493.58	ppb	08:17:05
1	Ni 231.604†	9072.7	9219.3	502.25	µg/L	502.25	ppb	08:16:44
1	P 214.914†	1297.9	1155.7	2452.5	µg/L	2452.5	ppb	08:17:05
1	Pb 220.353†	1926.8	1967.4	499.42	µg/L	499.42	ppb	08:17:05
1	S 181.975 Axial†	219.3	206.0	1057.1	µg/L	1057.1	ppb	08:17:05
1	Sb 206.836†	500.8	504.9	499.53	µg/L	499.53	ppb	08:17:05
1	Se 196.026†	341.5	344.1	503.46	µg/L	503.46	ppb	08:17:05
1	SiO2†	29488.5	28956.3	5529.6	µg/L	5529.6	ppb	08:16:44
1	Si 251.611†	32522.2	33771.2	2539.0	µg/L	2539.0	ppb	08:16:44
1	Sn 189.927†	981.0	1006.8	493.62	µg/L	493.62	ppb	08:17:05
1	Ti 334.940†	217576.4	227552.3	504.11	µg/L	504.11	ppb	08:16:38
1	Tl 190.801†	297.3	333.3	505.35	µg/L	505.35	ppb	08:17:05
1	U 409.014†	5917.6	5529.3	518.40	µg/L	518.40	ppb	08:16:44
1	V 292.402†	42552.1	44735.7	509.03	µg/L	509.03	ppb	08:16:44
1	Zn 213.857†	18590.7	18954.3	503.79	µg/L	503.79	ppb	08:16:44
2	Sc RADIAL	108077.7	108077.7	96.1	%			08:15:41
2	Al 396.153Radial†	10222.4	10409.0	5241.6	µg/L	5241.6	ppb	08:15:41
2	Ca 317.933Radial†	12392.9	12402.2	4923.1	µg/L	4923.1	ppb	08:16:01
2	Fe 238.204 Radial†	954.8	982.5	5177.6	µg/L	5177.6	ppb	08:16:01
2	K 766.490 Radial†	9899.7	9608.1	5209.5	µg/L	5209.5	ppb	08:15:41
2	Mg 279.077 IEC†	913.8	931.1	5169.4	µg/L	5169.4	ppb	08:16:01
2	Na 589.592 Radial†	35160.5	37296.6	10348	µg/L	10348	ppb	08:15:41
2	Sr 421.552†	86808.6	90408.5	509.26	µg/L	509.26	ppb	08:15:41
2	Sc 361.383	1954927.8	1954927.8	95.050	%			08:17:12
2	Y 371.029	1183832.8	1183832.8	94.528	%			08:17:12
2	Ag 328.068†	54017.9	56859.6	511.69	µg/L	511.69	ppb	08:17:17
2	As 188.979†	251.5	262.1	498.56	µg/L	498.56	ppb	08:17:38
2	B 249.677†	10811.5	11218.9	496.31	µg/L	496.31	ppb	08:17:17
2	Ba 233.527†	18917.1	19983.0	502.97	µg/L	502.97	ppb	08:17:17
2	Be 313.107†	757399.4	793234.7	501.60	µg/L	501.60	ppb	08:17:12
2	Cd 226.502†	17685.6	18707.6	494.87	µg/L	494.87	ppb	08:17:17
2	Co 228.616†	9840.1	10424.3	501.39	µg/L	501.39	ppb	08:17:17
2	Cr 267.716†	22709.1	24014.6	501.07	µg/L	501.07	ppb	08:17:17
2	Cu 324.752†	72066.3	72435.4	510.73	µg/L	510.73	ppb	08:17:17
2	Mn 257.610†	151570.7	159687.4	507.42	µg/L	507.42	ppb	08:17:12
2	Mo 202.031†	4215.3	4442.8	495.84	µg/L	495.84	ppb	08:17:38
2	Ni 231.604†	9055.2	9227.4	502.69	µg/L	502.69	ppb	08:17:17
2	P 214.914†	1300.9	1162.6	2468.1	µg/L	2468.1	ppb	08:17:38
2	Pb 220.353†	1934.5	1981.2	502.94	µg/L	502.94	ppb	08:17:38

2	S 181.975 Axial†	214.9	202.0	1036.3 µg/L	1036.3 ppb	08:17:38
2	Sb 206.836†	494.0	499.2	493.87 µg/L	493.87 ppb	08:17:38
2	Se 196.026†	340.5	344.1	503.43 µg/L	503.43 ppb	08:17:38
2	SiO2†	29363.7	28911.4	5521.0 µg/L	5521.0 ppb	08:17:17
2	Si 251.611†	32405.9	33744.0	2536.8 µg/L	2536.8 ppb	08:17:17
2	Sn 189.927†	979.1	1007.7	494.00 µg/L	494.00 ppb	08:17:38
2	Ti 334.940†	217301.3	227899.9	504.89 µg/L	504.89 ppb	08:17:12
2	Tl 190.801†	295.5	332.3	503.84 µg/L	503.84 ppb	08:17:38
2	U 409.014†	5835.3	5460.0	511.91 µg/L	511.91 ppb	08:17:17
2	V 292.402†	42365.0	44663.4	508.22 µg/L	508.22 ppb	08:17:17
2	Zn 213.857†	18481.2	18893.6	502.18 µg/L	502.18 ppb	08:17:17
3	Sc RADIAL	107003.3	107003.3	95.1 %		08:16:06
3	Al 396.153Radial†	10050.6	10335.2	5204.4 µg/L	5204.4 ppb	08:16:06
3	Ca 317.933Radial†	12362.2	12499.4	4961.7 µg/L	4961.7 ppb	08:16:27
3	Fe 238.204 Radial†	956.4	994.2	5239.1 µg/L	5239.1 ppb	08:16:27
3	K 766.490 Radial†	9700.9	9502.6	5152.2 µg/L	5152.2 ppb	08:16:06
3	Mg 279.077 IEC†	912.6	939.5	5215.4 µg/L	5215.4 ppb	08:16:27
3	Na 589.592 Radial†	34688.6	37168.0	10313 µg/L	10313 ppb	08:16:06
3	Sr 421.552†	85220.4	89646.0	504.97 µg/L	504.97 ppb	08:16:06
3	Sc 361.383	1963447.0	1963447.0	95.464 %		08:17:45
3	Y 371.029	1188473.7	1188473.7	94.899 %		08:17:45
3	Ag 328.068†	54372.8	56984.7	512.82 µg/L	512.82 ppb	08:17:50
3	As 188.979†	246.2	255.4	485.84 µg/L	485.84 ppb	08:18:11
3	B 249.677†	10890.6	11252.4	497.78 µg/L	497.78 ppb	08:17:50
3	Ba 233.527†	19047.9	20033.6	504.25 µg/L	504.25 ppb	08:17:50
3	Be 313.107†	760193.3	792703.8	501.26 µg/L	501.26 ppb	08:17:45
3	Cd 226.502†	17918.4	18870.8	499.18 µg/L	499.18 ppb	08:17:50
3	Co 228.616†	9923.4	10466.7	503.43 µg/L	503.43 ppb	08:17:50
3	Cr 267.716†	22899.0	24109.9	503.06 µg/L	503.06 ppb	08:17:50
3	Cu 324.752†	72604.9	72670.5	512.40 µg/L	512.40 ppb	08:17:50
3	Mn 257.610†	151870.2	159309.3	506.23 µg/L	506.23 ppb	08:17:45
3	Mo 202.031†	4208.0	4415.9	492.84 µg/L	492.84 ppb	08:18:11
3	Ni 231.604†	9070.8	9202.4	501.33 µg/L	501.33 ppb	08:17:50
3	P 214.914†	1308.6	1164.8	2472.5 µg/L	2472.5 ppb	08:18:11
3	Pb 220.353†	1939.8	1977.9	502.08 µg/L	502.08 ppb	08:18:11
3	S 181.975 Axial†	222.1	208.6	1070.2 µg/L	1070.2 ppb	08:18:11
3	Sb 206.836†	497.2	500.3	494.99 µg/L	494.99 ppb	08:18:11
3	Se 196.026†	347.8	350.2	512.32 µg/L	512.32 ppb	08:18:11
3	SiO2†	29558.7	28981.6	5534.4 µg/L	5534.4 ppb	08:17:50
3	Si 251.611†	32587.1	33785.9	2540.0 µg/L	2540.0 ppb	08:17:50
3	Sn 189.927†	990.9	1015.5	497.85 µg/L	497.85 ppb	08:18:11
3	Ti 334.940†	218041.1	227682.9	504.40 µg/L	504.40 ppb	08:17:45
3	Tl 190.801†	297.0	332.5	504.19 µg/L	504.19 ppb	08:18:11
3	U 409.014†	5932.0	5534.7	518.91 µg/L	518.91 ppb	08:17:50
3	V 292.402†	42726.3	44848.5	510.30 µg/L	510.30 ppb	08:17:50
3	Zn 213.857†	18625.5	18960.3	503.96 µg/L	503.96 ppb	08:17:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1959585.8	95.276	%	0.2098				0.22%
Sc RADIAL	107239.0	95.3	%	0.67				0.70%
Y 371.029	1186299.0	94.725	%	0.1864				0.20%
Ag 328.068†	56971.2	512.69	µg/L	0.950	512.69	ppb	0.950	0.19%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	10417.4	5245.9	µg/L	43.76	5245.9	ppb	43.76	0.83%
QC value within limits for Al 396.153Radial Recovery = 104.92%								
As 188.979†	259.6	493.73	µg/L	6.887	493.73	ppb	6.887	1.39%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	11221.4	496.40	µg/L	1.329	496.40	ppb	1.329	0.27%
QC value within limits for B 249.677 Recovery = 99.28%								
Ba 233.527†	20013.4	503.74	µg/L	0.676	503.74	ppb	0.676	0.13%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	792565.3	501.18	µg/L	0.473	501.18	ppb	0.473	0.09%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	12507.6	4964.9	µg/L	43.53	4964.9	ppb	43.53	0.88%
QC value within limits for Ca 317.933Radial Recovery = 99.30%								
Cd 226.502†	18799.6	497.30	µg/L	2.206	497.30	ppb	2.206	0.44%
QC value within limits for Cd 226.502 Recovery = 99.46%								
Co 228.616†	10446.6	502.46	µg/L	1.020	502.46	ppb	1.020	0.20%

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   QC value within limits for Co 228.616  Recovery = 100.49%
Cr 267.716†            24075.2      502.33 µg/L        1.098      502.33 ppb          1.098   0.22%
   QC value within limits for Cr 267.716  Recovery = 100.47%
Cu 324.752†            72633.5      512.14 µg/L        1.295      512.14 ppb          1.295   0.25%
   QC value within limits for Cu 324.752  Recovery = 102.43%
Fe 238.204 Radial†       993.0      5233.0 µg/L       52.67      5233.0 ppb         52.67   1.01%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.66%
K 766.490 Radial†       9587.1      5198.1 µg/L       41.36      5198.1 ppb         41.36   0.80%
   QC value within limits for K 766.490 Radial  Recovery = 103.96%
Mg 279.077 IEC†          942.6      5232.6 µg/L       73.34      5232.6 ppb         73.34   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.65%
Mn 257.610†           159388.2      506.48 µg/L        0.846      506.48 ppb         0.846   0.17%
   QC value within limits for Mn 257.610  Recovery = 101.30%
Mo 202.031†             4427.1      494.09 µg/L        1.560      494.09 ppb         1.560   0.32%
   QC value within limits for Mo 202.031  Recovery = 98.82%
Na 589.592 Radial†     37293.6       10348 µg/L         34.4       10348 ppb          34.4   0.33%
   QC value within limits for Na 589.592 Radial  Recovery = 103.48%
Ni 231.604†             9216.3      502.09 µg/L        0.693      502.09 ppb         0.693   0.14%
   QC value within limits for Ni 231.604  Recovery = 100.42%
P 214.914†              1161.0      2464.4 µg/L       10.50      2464.4 ppb         10.50   0.43%
   QC value within limits for P 214.914  Recovery = 98.57%
Pb 220.353†             1975.5      501.48 µg/L        1.832      501.48 ppb         1.832   0.37%
   QC value within limits for Pb 220.353  Recovery = 100.30%
S 181.975 Axial†         205.5      1054.5 µg/L       17.07      1054.5 ppb         17.07   1.62%
   QC value within limits for S 181.975 Axial  Recovery = 105.45%
Sb 206.836†              501.5      496.13 µg/L        2.994      496.13 ppb         2.994   0.60%
   QC value within limits for Sb 206.836  Recovery = 99.23%
Se 196.026†              346.2      506.40 µg/L        5.128      506.40 ppb         5.128   1.01%
   QC value within limits for Se 196.026  Recovery = 101.28%
SiO2†                  28949.8      5528.4 µg/L         6.79      5528.4 ppb          6.79   0.12%
   QC value within limits for SiO2  Recovery = 103.38%
Si 251.611†            33767.0      2538.6 µg/L         1.61      2538.6 ppb          1.61   0.06%
   QC value within limits for Si 251.611  Recovery = 101.54%
Sn 189.927†             1010.0      495.16 µg/L        2.340      495.16 ppb         2.340   0.47%
   QC value within limits for Sn 189.927  Recovery = 99.03%
Sr 421.552†            90231.2      508.27 µg/L        2.928      508.27 ppb         2.928   0.58%
   QC value within limits for Sr 421.552  Recovery = 101.65%
Ti 334.940†           227711.7      504.47 µg/L        0.392      504.47 ppb         0.392   0.08%
   QC value within limits for Ti 334.940  Recovery = 100.89%
Tl 190.801†              332.7      504.46 µg/L        0.790      504.46 ppb         0.790   0.16%
   QC value within limits for Tl 190.801  Recovery = 100.89%
U 409.014†              5508.0      516.40 µg/L        3.903      516.40 ppb         3.903   0.76%
   QC value within limits for U 409.014  Recovery = 103.28%
V 292.402†             44749.2      509.18 µg/L        1.049      509.18 ppb         1.049   0.21%
   QC value within limits for V 292.402  Recovery = 101.84%
Zn 213.857†            18936.1      503.31 µg/L        0.984      503.31 ppb         0.984   0.20%
   QC value within limits for Zn 213.857  Recovery = 100.66%
All analyte(s) passed QC.
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Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 08:18:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105928.2	105928.2	94.2	%			08:18:53
1	Al 396.153Radial†	201.0	-16.4	-8.3098	µg/L	-8.3098	ppb	08:18:53
1	Ca 317.933Radial†	395.3	-75.7	-30.059	µg/L	-30.059	ppb	08:19:14
1	Fe 238.204 Radial†	13.9	3.6	18.808	µg/L	18.808	ppb	08:19:14
1	K 766.490 Radial†	648.7	-6.0	-3.2491	µg/L	-3.2491	ppb	08:18:53
1	Mg 279.077 IEC†	18.5	-0.1	-0.7973	µg/L	-0.7973	ppb	08:19:14
1	Na 589.592 Radial†	-659.9	3.2	0.8988	µg/L	0.8988	ppb	08:18:53
1	Sr 421.552†	-29.2	32.8	0.1846	µg/L	0.1846	ppb	08:18:53
1	Sc 361.383	1938026.0	1938026.0	94.228	%			08:20:16
1	Y 371.029	1179572.6	1179572.6	94.188	%			08:20:16
1	Ag 328.068†	-54.2	-29.2	-0.2579	µg/L	-0.2579	ppb	08:20:21
1	As 188.979†	-2.0	-4.6	-8.7008	µg/L	-8.7008	ppb	08:20:42
1	B 249.677†	152.7	6.4	0.2764	µg/L	0.2764	ppb	08:20:42
1	Ba 233.527†	-68.0	8.5	0.2137	µg/L	0.2137	ppb	08:20:42
1	Be 313.107†	3620.7	231.0	0.1459	µg/L	0.1459	ppb	08:20:21
1	Cd 226.502†	-96.6	-1.6	-0.0368	µg/L	-0.0368	ppb	08:20:42
1	Co 228.616†	-68.0	-0.5	-0.0225	µg/L	-0.0225	ppb	08:20:42
1	Cr 267.716†	-118.7	-3.2	-0.0660	µg/L	-0.0660	ppb	08:20:21
1	Cu 324.752†	3120.6	-72.6	-0.5067	µg/L	-0.5067	ppb	08:20:21
1	Mn 257.610†	-147.5	66.1	0.2122	µg/L	0.2122	ppb	08:20:42
1	Mo 202.031†	0.0	7.9	0.8870	µg/L	0.8870	ppb	08:20:42
1	Ni 231.604†	290.5	8.8	0.4820	µg/L	0.4820	ppb	08:20:42
1	P 214.914†	211.1	18.1	39.274	µg/L	39.274	ppb	08:20:42
1	Pb 220.353†	62.0	11.6	2.9448	µg/L	2.9448	ppb	08:20:42
1	S 181.975 Axial†	31.6	9.5	48.593	µg/L	48.593	ppb	08:20:42
1	Sb 206.836†	18.0	-1.5	-1.4673	µg/L	-1.4673	ppb	08:20:42
1	Se 196.026†	18.6	5.6	8.2257	µg/L	8.2257	ppb	08:20:42
1	SiO2†	2111.3	258.9	49.446	µg/L	49.446	ppb	08:20:21
1	Si 251.611†	484.3	164.3	12.503	µg/L	12.503	ppb	08:20:42
1	Sn 189.927†	23.8	2.8	1.3440	µg/L	1.3440	ppb	08:20:42
1	Ti 334.940†	885.6	221.0	0.4915	µg/L	0.4915	ppb	08:20:21
1	Tl 190.801†	-18.1	2.2	3.3800	µg/L	3.3800	ppb	08:20:42
1	U 409.014†	727.3	92.6	8.6946	µg/L	8.6946	ppb	08:20:21
1	V 292.402†	-64.7	23.3	0.2843	µg/L	0.2843	ppb	08:20:21
1	Zn 213.857†	526.9	9.0	0.2374	µg/L	0.2374	ppb	08:20:42
2	Sc RADIAL	106040.1	106040.1	94.3	%			08:19:19
2	Al 396.153Radial†	207.9	-9.3	-4.7454	µg/L	-4.7454	ppb	08:19:19
2	Ca 317.933Radial†	395.1	-76.4	-30.312	µg/L	-30.312	ppb	08:19:39
2	Fe 238.204 Radial†	10.5	-0.0	-0.0914	µg/L	-0.0914	ppb	08:19:39
2	K 766.490 Radial†	672.1	18.1	9.7975	µg/L	9.7975	ppb	08:19:19
2	Mg 279.077 IEC†	13.1	-5.9	-32.842	µg/L	-32.842	ppb	08:19:39
2	Na 589.592 Radial†	-610.3	56.6	15.709	µg/L	15.709	ppb	08:19:19
2	Sr 421.552†	-63.1	-3.2	-0.0178	µg/L	-0.0178	ppb	08:19:19
2	Sc 361.383	1940376.0	1940376.0	94.342	%			08:20:48
2	Y 371.029	1181884.3	1181884.3	94.373	%			08:20:48
2	Ag 328.068†	-88.5	-65.4	-0.5771	µg/L	-0.5771	ppb	08:20:53
2	As 188.979†	0.8	-1.7	-3.1516	µg/L	-3.1516	ppb	08:21:14
2	B 249.677†	134.6	-13.0	-0.5776	µg/L	-0.5776	ppb	08:21:14
2	Ba 233.527†	-80.5	-4.7	-0.1148	µg/L	-0.1148	ppb	08:21:14
2	Be 313.107†	3577.3	180.3	0.1139	µg/L	0.1139	ppb	08:20:53
2	Cd 226.502†	-82.7	13.2	0.3567	µg/L	0.3567	ppb	08:21:14
2	Co 228.616†	-69.8	-2.3	-0.1104	µg/L	-0.1104	ppb	08:21:14
2	Cr 267.716†	-104.8	11.6	0.2449	µg/L	0.2449	ppb	08:20:53
2	Cu 324.752†	3168.5	-25.8	-0.1816	µg/L	-0.1816	ppb	08:20:53
2	Mn 257.610†	-150.0	63.6	0.2019	µg/L	0.2019	ppb	08:21:14
2	Mo 202.031†	-0.9	6.9	0.7713	µg/L	0.7713	ppb	08:21:14
2	Ni 231.604†	284.5	2.2	0.1172	µg/L	0.1172	ppb	08:21:14
2	P 214.914†	211.5	18.2	39.415	µg/L	39.415	ppb	08:21:14
2	Pb 220.353†	56.9	6.2	1.5603	µg/L	1.5603	ppb	08:21:14

2	S 181.975 Axial†	33.6	11.6	59.656 µg/L	59.656	ppb	08:21:14
2	Sb 206.836†	17.0	-2.5	-2.4928 µg/L	-2.4928	ppb	08:21:14
2	Se 196.026†	9.6	-3.9	-5.7070 µg/L	-5.7070	ppb	08:21:14
2	SiO2†	2008.2	147.0	28.065 µg/L	28.065	ppb	08:20:53
2	Si 251.611†	458.1	135.9	10.481 µg/L	10.481	ppb	08:21:14
2	Sn 189.927†	15.8	-5.7	-2.7771 µg/L	-2.7771	ppb	08:21:14
2	Ti 334.940†	916.6	252.7	0.5617 µg/L	0.5617	ppb	08:20:53
2	Tl 190.801†	-21.8	-1.7	-2.5972 µg/L	-2.5972	ppb	08:21:14
2	U 409.014†	739.1	104.2	9.7830 µg/L	9.7830	ppb	08:20:53
2	V 292.402†	3.8	96.0	1.1037 µg/L	1.1037	ppb	08:20:53
2	Zn 213.857†	533.5	15.3	0.4101 µg/L	0.4101	ppb	08:21:14
3	Sc RADIAL	106371.7	106371.7	94.6 %			08:19:45
3	Al 396.153Radial†	211.4	-6.2	-3.1802 µg/L	-3.1802	ppb	08:19:45
3	Ca 317.933Radial†	408.1	-64.0	-25.386 µg/L	-25.386	ppb	08:20:05
3	Fe 238.204 Radial†	13.4	2.9	15.419 µg/L	15.419	ppb	08:20:05
3	K 766.490 Radial†	715.6	61.9	33.553 µg/L	33.553	ppb	08:19:45
3	Mg 279.077 IEC†	11.9	-7.3	-40.254 µg/L	-40.254	ppb	08:20:05
3	Na 589.592 Radial†	-651.6	14.9	4.1347 µg/L	4.1347	ppb	08:19:45
3	Sr 421.552†	-41.2	20.3	0.1141 µg/L	0.1141	ppb	08:19:45
3	Sc 361.383	1946402.3	1946402.3	94.635 %			08:21:20
3	Y 371.029	1184827.0	1184827.0	94.608 %			08:21:20
3	Ag 328.068†	-28.4	-1.7	-0.0133 µg/L	-0.0133	ppb	08:21:25
3	As 188.979†	-0.5	-3.0	-5.7726 µg/L	-5.7726	ppb	08:21:46
3	B 249.677†	134.6	-13.4	-0.6013 µg/L	-0.6013	ppb	08:21:46
3	Ba 233.527†	-74.2	2.3	0.0571 µg/L	0.0571	ppb	08:21:46
3	Be 313.107†	3605.8	198.7	0.1256 µg/L	0.1256	ppb	08:21:25
3	Cd 226.502†	-99.9	-4.7	-0.1213 µg/L	-0.1213	ppb	08:21:46
3	Co 228.616†	-70.3	-2.6	-0.1233 µg/L	-0.1233	ppb	08:21:46
3	Cr 267.716†	-111.4	5.1	0.1066 µg/L	0.1066	ppb	08:21:25
3	Cu 324.752†	3145.6	-60.4	-0.4217 µg/L	-0.4217	ppb	08:21:25
3	Mn 257.610†	-141.3	73.3	0.2346 µg/L	0.2346	ppb	08:21:46
3	Mo 202.031†	-0.2	7.7	0.8615 µg/L	0.8615	ppb	08:21:46
3	Ni 231.604†	271.3	-12.8	-0.6947 µg/L	-0.6947	ppb	08:21:46
3	P 214.914†	211.2	17.2	37.396 µg/L	37.396	ppb	08:21:46
3	Pb 220.353†	63.5	13.0	3.2926 µg/L	3.2926	ppb	08:21:46
3	S 181.975 Axial†	32.7	10.5	53.835 µg/L	53.835	ppb	08:21:46
3	Sb 206.836†	18.3	-1.2	-1.1444 µg/L	-1.1444	ppb	08:21:46
3	Se 196.026†	10.6	-2.9	-4.1633 µg/L	-4.1633	ppb	08:21:46
3	SiO2†	2038.3	172.1	32.874 µg/L	32.874	ppb	08:21:25
3	Si 251.611†	475.8	153.1	11.742 µg/L	11.742	ppb	08:21:46
3	Sn 189.927†	18.6	-2.8	-1.3662 µg/L	-1.3662	ppb	08:21:46
3	Ti 334.940†	782.1	107.6	0.2399 µg/L	0.2399	ppb	08:21:25
3	Tl 190.801†	-18.1	2.3	3.4613 µg/L	3.4613	ppb	08:21:46
3	U 409.014†	697.7	58.0	5.4466 µg/L	5.4466	ppb	08:21:25
3	V 292.402†	-73.8	14.0	0.1736 µg/L	0.1736	ppb	08:21:25
3	Zn 213.857†	525.2	4.8	0.1332 µg/L	0.1332	ppb	08:21:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1941601.4	94.402	%	0.2101				0.22%
Sc RADIAL	106113.3	94.3	%	0.21				0.22%
Y 371.029	1182094.6	94.390	%	0.2103				0.22%
Ag 328.068†	-32.1	-0.2828	µg/L	0.28272	-0.2828	ppb	0.28272	99.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.6	-5.4118	µg/L	2.62891	-5.4118	ppb	2.62891	48.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.1	-5.8750	µg/L	2.77601	-5.8750	ppb	2.77601	47.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-6.7	-0.3008	µg/L	0.50005	-0.3008	ppb	0.50005	166.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0520	µg/L	0.16429	0.0520	ppb	0.16429	315.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.3	0.1285	µg/L	0.01623	0.1285	ppb	0.01623	12.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-72.0	-28.586	µg/L	2.7738	-28.586	ppb	2.7738	9.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.3	0.0662	µg/L	0.25510	0.0662	ppb	0.25510	385.34%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.8	-0.0854	µg/L	0.05486	-0.0854	ppb	0.05486	64.25%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.5      0.0952 µg/L       0.15575      0.0952 ppb        0.15575 163.66%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -52.9     -0.3700 µg/L       0.16864     -0.3700 ppb        0.16864  45.58%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.2      11.379 µg/L       10.0769      11.379 ppb        10.0769  88.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          24.7      13.367 µg/L       18.6590      13.367 ppb        18.6590 139.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.4     -24.631 µg/L       20.9706     -24.631 ppb        20.9706  85.14%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                67.7      0.2162 µg/L       0.01672      0.2162 ppb        0.01672   7.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.5      0.8400 µg/L       0.06080      0.8400 ppb        0.06080   7.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         24.9      6.9141 µg/L       7.78635      6.9141 ppb        7.78635 112.62%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.6     -0.0318 µg/L       0.60233     -0.0318 ppb        0.60233 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 17.8      38.695 µg/L        1.1272      38.695 ppb         1.1272   2.91%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.3      2.5992 µg/L       0.91636      2.5992 ppb        0.91636  35.25%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           10.5      54.028 µg/L        5.5344      54.028 ppb         5.5344  10.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -1.7     -1.7015 µg/L       0.70405     -1.7015 ppb        0.70405  41.38%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.4     -0.5482 µg/L       7.63756     -0.5482 ppb        7.63756 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     192.7      36.795 µg/L       11.2169      36.795 ppb        11.2169  30.49%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               151.1      11.575 µg/L        1.0212      11.575 ppb         1.0212   8.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.9     -0.9331 µg/L       2.09438     -0.9331 ppb        2.09438 224.45%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                16.6      0.0936 µg/L       0.10273      0.0936 ppb        0.10273 109.74%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               193.7      0.4311 µg/L       0.16919      0.4311 ppb        0.16919  39.25%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      1.4147 µg/L       3.47466      1.4147 ppb        3.47466 245.61%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 84.9      7.9747 µg/L       2.25605      7.9747 ppb        2.25605  28.29%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 44.4      0.5205 µg/L       0.50805      0.5205 ppb        0.50805  97.61%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.7      0.2602 µg/L       0.13987      0.2602 ppb        0.13987  53.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 08:46:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108953.8	108953.8	96.9	%			08:47:17
1	Al 396.153Radial†	10076.3	10172.6	5121.8	µg/L	5121.8	ppb	08:47:17
1	Ca 317.933Radial†	12481.4	12389.9	4918.2	µg/L	4918.2	ppb	08:47:38
1	Fe 238.204 Radial†	965.8	985.8	5195.5	µg/L	5195.5	ppb	08:47:38
1	K 766.490 Radial†	9792.0	9414.0	5104.2	µg/L	5104.2	ppb	08:47:17
1	Mg 279.077 IEC†	926.0	936.1	5197.4	µg/L	5197.4	ppb	08:47:38
1	Na 589.592 Radial†	34431.2	36249.5	10058	µg/L	10058	ppb	08:47:17
1	Sr 421.552†	85744.4	88583.3	498.98	µg/L	498.98	ppb	08:47:17
1	Sc 361.383	1939482.4	1939482.4	94.299	%			08:48:42
1	Y 371.029	1175148.4	1175148.4	93.835	%			08:48:42
1	Ag 328.068†	54233.9	57541.2	517.82	µg/L	517.82	ppb	08:48:47
1	As 188.979†	255.1	268.0	509.77	µg/L	509.77	ppb	08:49:08
1	B 249.677†	10769.8	11265.3	498.36	µg/L	498.36	ppb	08:48:47
1	Ba 233.527†	19054.8	20287.5	510.63	µg/L	510.63	ppb	08:48:47
1	Be 313.107†	755329.0	797384.9	504.22	µg/L	504.22	ppb	08:48:42
1	Cd 226.502†	17900.3	19083.5	504.82	µg/L	504.82	ppb	08:48:47
1	Co 228.616†	9910.6	10581.5	508.97	µg/L	508.97	ppb	08:48:47
1	Cr 267.716†	22847.4	24351.5	508.10	µg/L	508.10	ppb	08:48:47
1	Cu 324.752†	72237.6	73220.8	516.26	µg/L	516.26	ppb	08:48:47
1	Mn 257.610†	151134.2	160494.5	509.99	µg/L	509.99	ppb	08:48:42
1	Mo 202.031†	4259.9	4525.4	505.06	µg/L	505.06	ppb	08:49:08
1	Ni 231.604†	9117.3	9369.1	510.41	µg/L	510.41	ppb	08:48:47
1	P 214.914†	1318.8	1192.6	2532.6	µg/L	2532.6	ppb	08:49:08
1	Pb 220.353†	1955.9	2020.1	512.79	µg/L	512.79	ppb	08:49:08
1	S 181.975 Axial†	219.8	209.1	1072.8	µg/L	1072.8	ppb	08:49:08
1	Sb 206.836†	499.2	508.9	503.46	µg/L	503.46	ppb	08:49:08
1	Se 196.026†	348.1	355.0	519.32	µg/L	519.32	ppb	08:49:08
1	SiO2†	29463.6	29263.3	5588.2	µg/L	5588.2	ppb	08:48:47
1	Si 251.611†	32458.8	34071.6	2561.2	µg/L	2561.2	ppb	08:48:47
1	Sn 189.927†	997.7	1035.5	507.59	µg/L	507.59	ppb	08:49:08
1	Ti 334.940†	216514.8	228886.5	507.07	µg/L	507.07	ppb	08:48:42
1	Tl 190.801†	300.5	340.1	515.58	µg/L	515.58	ppb	08:49:08
1	U 409.014†	5906.7	5584.6	523.61	µg/L	523.61	ppb	08:48:47
1	V 292.402†	42561.7	45227.0	514.65	µg/L	514.65	ppb	08:48:47
1	Zn 213.857†	18548.4	19119.7	508.18	µg/L	508.18	ppb	08:48:47
2	Sc RADIAL	108500.9	108500.9	96.5	%			08:47:43
2	Al 396.153Radial†	10266.9	10413.6	5243.8	µg/L	5243.8	ppb	08:47:43
2	Ca 317.933Radial†	12471.4	12433.3	4935.4	µg/L	4935.4	ppb	08:48:04
2	Fe 238.204 Radial†	959.1	983.0	5180.5	µg/L	5180.5	ppb	08:48:04
2	K 766.490 Radial†	9895.3	9563.4	5185.2	µg/L	5185.2	ppb	08:47:43
2	Mg 279.077 IEC†	923.4	937.4	5204.2	µg/L	5204.2	ppb	08:48:04
2	Na 589.592 Radial†	35227.0	37222.8	10328	µg/L	10328	ppb	08:47:43
2	Sr 421.552†	87204.8	90466.8	509.59	µg/L	509.59	ppb	08:47:43
2	Sc 361.383	1944927.5	1944927.5	94.563	%			08:49:15
2	Y 371.029	1177045.7	1177045.7	93.986	%			08:49:15
2	Ag 328.068†	54051.6	57187.4	514.64	µg/L	514.64	ppb	08:49:20
2	As 188.979†	255.7	267.9	509.69	µg/L	509.69	ppb	08:49:41
2	B 249.677†	10755.0	11217.7	496.25	µg/L	496.25	ppb	08:49:20
2	Ba 233.527†	18919.4	20087.8	505.61	µg/L	505.61	ppb	08:49:20
2	Be 313.107†	757398.1	797330.5	504.19	µg/L	504.19	ppb	08:49:15
2	Cd 226.502†	17757.8	18879.6	499.42	µg/L	499.42	ppb	08:49:20
2	Co 228.616†	9818.6	10454.8	502.86	µg/L	502.86	ppb	08:49:20
2	Cr 267.716†	22722.3	24151.4	503.92	µg/L	503.92	ppb	08:49:20
2	Cu 324.752†	72120.2	72882.2	513.87	µg/L	513.87	ppb	08:49:20
2	Mn 257.610†	151571.9	160508.7	510.03	µg/L	510.03	ppb	08:49:15
2	Mo 202.031†	4220.5	4471.0	498.99	µg/L	498.99	ppb	08:49:41
2	Ni 231.604†	9068.7	9290.6	506.14	µg/L	506.14	ppb	08:49:20
2	P 214.914†	1315.3	1184.9	2516.2	µg/L	2516.2	ppb	08:49:41
2	Pb 220.353†	1955.9	2014.2	511.32	µg/L	511.32	ppb	08:49:41

2	S 181.975 Axial†	215.5	203.9	1045.9 µg/L	1045.9 ppb	08:49:41
2	Sb 206.836†	502.0	510.3	504.89 µg/L	504.89 ppb	08:49:41
2	Se 196.026†	346.4	352.2	515.22 µg/L	515.22 ppb	08:49:41
2	SiO2†	29279.8	28981.5	5534.4 µg/L	5534.4 ppb	08:49:20
2	Si 251.611†	32238.4	33742.2	2536.2 µg/L	2536.2 ppb	08:49:20
2	Sn 189.927†	994.7	1029.4	504.60 µg/L	504.60 ppb	08:49:41
2	Ti 334.940†	217120.6	228884.2	507.07 µg/L	507.07 ppb	08:49:15
2	Tl 190.801†	294.1	332.5	504.16 µg/L	504.16 ppb	08:49:41
2	U 409.014†	5794.8	5448.7	510.85 µg/L	510.85 ppb	08:49:20
2	V 292.402†	42440.7	44972.6	511.72 µg/L	511.72 ppb	08:49:20
2	Zn 213.857†	18546.8	19063.0	506.69 µg/L	506.69 ppb	08:49:20
3	Sc RADIAL	107051.7	107051.7	95.2 %		08:48:09
3	Al 396.153Radial†	10104.3	10386.9	5230.4 µg/L	5230.4 ppb	08:48:09
3	Ca 317.933Radial†	12518.3	12657.6	5024.5 µg/L	5024.5 ppb	08:48:30
3	Fe 238.204 Radial†	961.2	998.8	5263.1 µg/L	5263.1 ppb	08:48:30
3	K 766.490 Radial†	9746.9	9546.3	5176.0 µg/L	5176.0 ppb	08:48:09
3	Mg 279.077 IEC†	923.9	950.9	5278.9 µg/L	5278.9 ppb	08:48:30
3	Na 589.592 Radial†	34802.8	37271.5	10341 µg/L	10341 ppb	08:48:09
3	Sr 421.552†	85653.2	90060.3	507.30 µg/L	507.30 ppb	08:48:09
3	Sc 361.383	1952241.5	1952241.5	94.919 %		08:49:48
3	Y 371.029	1182332.9	1182332.9	94.409 %		08:49:48
3	Ag 328.068†	53688.7	56590.9	509.28 µg/L	509.28 ppb	08:49:54
3	As 188.979†	254.1	265.2	504.43 µg/L	504.43 ppb	08:50:14
3	B 249.677†	10708.8	11126.3	492.17 µg/L	492.17 ppb	08:49:54
3	Ba 233.527†	18826.4	19914.9	501.26 µg/L	501.26 ppb	08:49:54
3	Be 313.107†	759861.6	796925.1	503.93 µg/L	503.93 ppb	08:49:48
3	Cd 226.502†	17663.5	18709.9	494.92 µg/L	494.92 ppb	08:49:54
3	Co 228.616†	9778.5	10373.7	498.96 µg/L	498.96 ppb	08:49:54
3	Cr 267.716†	22575.9	23907.2	498.83 µg/L	498.83 ppb	08:49:54
3	Cu 324.752†	71673.1	72125.5	508.57 µg/L	508.57 ppb	08:49:54
3	Mn 257.610†	152048.2	160409.9	509.73 µg/L	509.73 ppb	08:49:48
3	Mo 202.031†	4224.1	4458.1	497.55 µg/L	497.55 ppb	08:50:14
3	Ni 231.604†	8987.4	9169.1	499.52 µg/L	499.52 ppb	08:49:54
3	P 214.914†	1302.5	1166.2	2476.1 µg/L	2476.1 ppb	08:50:14
3	Pb 220.353†	1938.4	1988.0	504.68 µg/L	504.68 ppb	08:50:14
3	S 181.975 Axial†	218.7	206.4	1058.8 µg/L	1058.8 ppb	08:50:14
3	Sb 206.836†	506.5	513.1	507.71 µg/L	507.71 ppb	08:50:14
3	Se 196.026†	339.4	343.5	502.52 µg/L	502.52 ppb	08:50:14
3	SiO2†	29177.3	28757.5	5491.6 µg/L	5491.6 ppb	08:49:54
3	Si 251.611†	32038.7	33404.1	2510.4 µg/L	2510.4 ppb	08:49:54
3	Sn 189.927†	993.1	1023.8	501.94 µg/L	501.94 ppb	08:50:14
3	Ti 334.940†	217632.3	228563.2	506.35 µg/L	506.35 ppb	08:49:48
3	Tl 190.801†	294.3	331.4	502.60 µg/L	502.60 ppb	08:50:14
3	U 409.014†	5890.1	5526.2	518.11 µg/L	518.11 ppb	08:49:54
3	V 292.402†	42154.3	44502.7	506.43 µg/L	506.43 ppb	08:49:54
3	Zn 213.857†	18388.6	18822.7	500.29 µg/L	500.29 ppb	08:49:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945550.5	94.594	%	0.3113				0.33%
Sc RADIAL	108168.8	96.2	%	0.88				0.92%
Y 371.029	1178175.7	94.077	%	0.2973				0.32%
Ag 328.068†	57106.5	513.91	µg/L	4.315	513.91	ppb	4.315	0.84%
QC value within limits for Ag 328.068 Recovery = 102.78%								
Al 396.153Radial†	10324.4	5198.7	µg/L	66.91	5198.7	ppb	66.91	1.29%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	267.0	507.97	µg/L	3.059	507.97	ppb	3.059	0.60%
QC value within limits for As 188.979 Recovery = 101.59%								
B 249.677†	11203.1	495.60	µg/L	3.146	495.60	ppb	3.146	0.63%
QC value within limits for B 249.677 Recovery = 99.12%								
Ba 233.527†	20096.7	505.83	µg/L	4.692	505.83	ppb	4.692	0.93%
QC value within limits for Ba 233.527 Recovery = 101.17%								
Be 313.107†	797213.5	504.12	µg/L	0.159	504.12	ppb	0.159	0.03%
QC value within limits for Be 313.107 Recovery = 100.82%								
Ca 317.933Radial†	12493.6	4959.4	µg/L	57.04	4959.4	ppb	57.04	1.15%
QC value within limits for Ca 317.933Radial Recovery = 99.19%								
Cd 226.502†	18891.0	499.72	µg/L	4.953	499.72	ppb	4.953	0.99%
QC value within limits for Cd 226.502 Recovery = 99.94%								
Co 228.616†	10470.0	503.60	µg/L	5.047	503.60	ppb	5.047	1.00%

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   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†            24136.7      503.62 µg/L        4.641      503.62 ppb          4.641   0.92%
   QC value within limits for Cr 267.716  Recovery = 100.72%
Cu 324.752†            72742.8      512.90 µg/L        3.937      512.90 ppb          3.937   0.77%
   QC value within limits for Cu 324.752  Recovery = 102.58%
Fe 238.204 Radial†      989.2       5213.0 µg/L        44.01      5213.0 ppb          44.01   0.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.26%
K 766.490 Radial†       9507.9      5155.2 µg/L        44.33      5155.2 ppb          44.33   0.86%
   QC value within limits for K 766.490 Radial  Recovery = 103.10%
Mg 279.077 IEC†         941.5       5226.8 µg/L        45.22      5226.8 ppb          45.22   0.87%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.54%
Mn 257.610†           160471.0      509.92 µg/L        0.164      509.92 ppb          0.164   0.03%
   QC value within limits for Mn 257.610  Recovery = 101.98%
Mo 202.031†             4484.8      500.53 µg/L        3.982      500.53 ppb          3.982   0.80%
   QC value within limits for Mo 202.031  Recovery = 100.11%
Na 589.592 Radial†     36914.6       10242 µg/L        160.0       10242 ppb          160.0   1.56%
   QC value within limits for Na 589.592 Radial  Recovery = 102.42%
Ni 231.604†             9276.3      505.36 µg/L        5.491      505.36 ppb          5.491   1.09%
   QC value within limits for Ni 231.604  Recovery = 101.07%
P 214.914†              1181.2      2508.3 µg/L        29.07      2508.3 ppb          29.07   1.16%
   QC value within limits for P 214.914  Recovery = 100.33%
Pb 220.353†             2007.4      509.60 µg/L        4.323      509.60 ppb          4.323   0.85%
   QC value within limits for Pb 220.353  Recovery = 101.92%
S 181.975 Axial†         206.4      1059.2 µg/L        13.43      1059.2 ppb          13.43   1.27%
   QC value within limits for S 181.975 Axial  Recovery = 105.92%
Sb 206.836†              510.8      505.35 µg/L        2.161      505.35 ppb          2.161   0.43%
   QC value within limits for Sb 206.836  Recovery = 101.07%
Se 196.026†              350.3      512.35 µg/L        8.759      512.35 ppb          8.759   1.71%
   QC value within limits for Se 196.026  Recovery = 102.47%
SiO2†                  29000.8      5538.1 µg/L        48.41      5538.1 ppb          48.41   0.87%
   QC value within limits for SiO2  Recovery = 103.56%
Si 251.611†            33739.3      2535.9 µg/L        25.39      2535.9 ppb          25.39   1.00%
   QC value within limits for Si 251.611  Recovery = 101.44%
Sn 189.927†             1029.6      504.71 µg/L        2.825      504.71 ppb          2.825   0.56%
   QC value within limits for Sn 189.927  Recovery = 100.94%
Sr 421.552†            89703.5      505.29 µg/L        5.583      505.29 ppb          5.583   1.10%
   QC value within limits for Sr 421.552  Recovery = 101.06%
Ti 334.940†           228778.0      506.83 µg/L        0.416      506.83 ppb          0.416   0.08%
   QC value within limits for Ti 334.940  Recovery = 101.37%
Tl 190.801†              334.7      507.44 µg/L        7.085      507.44 ppb          7.085   1.40%
   QC value within limits for Tl 190.801  Recovery = 101.49%
U 409.014†              5519.8      517.52 µg/L        6.400      517.52 ppb          6.400   1.24%
   QC value within limits for U 409.014  Recovery = 103.50%
V 292.402†             44900.8      510.94 µg/L        4.166      510.94 ppb          4.166   0.82%
   QC value within limits for V 292.402  Recovery = 102.19%
Zn 213.857†            19001.8      505.05 µg/L        4.196      505.05 ppb          4.196   0.83%
   QC value within limits for Zn 213.857  Recovery = 101.01%
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 08:50:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106273.5	106273.5	94.5	%			08:50:56
1	Al 396.153Radial†	223.6	6.8	3.4063	µg/L	3.4063	ppb	08:50:56
1	Ca 317.933Radial†	404.2	-67.7	-26.860	µg/L	-26.860	ppb	08:51:16
1	Fe 238.204 Radial†	13.2	2.8	14.556	µg/L	14.556	ppb	08:51:16
1	K 766.490 Radial†	659.5	3.2	1.7395	µg/L	1.7395	ppb	08:50:56
1	Mg 279.077 IEC†	14.2	-4.9	-26.903	µg/L	-26.903	ppb	08:51:16
1	Na 589.592 Radial†	-613.4	54.7	15.172	µg/L	15.172	ppb	08:50:56
1	Sr 421.552†	19.9	84.9	0.4781	µg/L	0.4781	ppb	08:50:56
1	Sc 361.383	1943628.6	1943628.6	94.500	%			08:52:18
1	Y 371.029	1180713.0	1180713.0	94.279	%			08:52:18
1	Ag 328.068†	-102.5	-80.2	-0.7147	µg/L	-0.7147	ppb	08:52:24
1	As 188.979†	-3.2	-5.9	-11.215	µg/L	-11.215	ppb	08:52:44
1	B 249.677†	156.6	10.1	0.4424	µg/L	0.4424	ppb	08:52:44
1	Ba 233.527†	-79.1	-3.0	-0.0752	µg/L	-0.0752	ppb	08:52:44
1	Be 313.107†	3658.4	259.8	0.1643	µg/L	0.1643	ppb	08:52:24
1	Cd 226.502†	-93.7	1.7	0.0545	µg/L	0.0545	ppb	08:52:44
1	Co 228.616†	-66.0	1.9	0.0937	µg/L	0.0937	ppb	08:52:44
1	Cr 267.716†	-109.8	6.6	0.1368	µg/L	0.1368	ppb	08:52:24
1	Cu 324.752†	3111.3	-91.9	-0.6438	µg/L	-0.6438	ppb	08:52:24
1	Mn 257.610†	-165.6	47.4	0.1523	µg/L	0.1523	ppb	08:52:44
1	Mo 202.031†	-0.7	7.1	0.7977	µg/L	0.7977	ppb	08:52:44
1	Ni 231.604†	281.1	-1.9	-0.1032	µg/L	-0.1032	ppb	08:52:44
1	P 214.914†	211.9	18.2	39.711	µg/L	39.711	ppb	08:52:44
1	Pb 220.353†	62.5	12.0	3.0375	µg/L	3.0375	ppb	08:52:44
1	S 181.975 Axial†	25.1	2.5	12.800	µg/L	12.800	ppb	08:52:44
1	Sb 206.836†	20.4	1.1	1.0831	µg/L	1.0831	ppb	08:52:44
1	Se 196.026†	12.3	-1.0	-1.5015	µg/L	-1.5015	ppb	08:52:44
1	SiO2†	2054.1	192.0	36.663	µg/L	36.663	ppb	08:52:24
1	Si 251.611†	491.9	170.9	12.980	µg/L	12.980	ppb	08:52:44
1	Sn 189.927†	25.4	4.4	2.1381	µg/L	2.1381	ppb	08:52:44
1	Ti 334.940†	795.3	122.7	0.2735	µg/L	0.2735	ppb	08:52:24
1	Tl 190.801†	-14.0	6.6	9.9714	µg/L	9.9714	ppb	08:52:44
1	U 409.014†	790.7	157.5	14.784	µg/L	14.784	ppb	08:52:24
1	V 292.402†	-85.5	1.4	0.0470	µg/L	0.0470	ppb	08:52:24
1	Zn 213.857†	534.7	15.7	0.4203	µg/L	0.4203	ppb	08:52:44
2	Sc RADIAL	106051.9	106051.9	94.3	%			08:51:22
2	Al 396.153Radial†	204.8	-12.6	-6.4006	µg/L	-6.4006	ppb	08:51:22
2	Ca 317.933Radial†	402.1	-69.0	-27.385	µg/L	-27.385	ppb	08:51:42
2	Fe 238.204 Radial†	10.2	-0.4	-2.2583	µg/L	-2.2583	ppb	08:51:42
2	K 766.490 Radial†	636.5	-19.8	-10.737	µg/L	-10.737	ppb	08:51:22
2	Mg 279.077 IEC†	13.6	-5.4	-29.880	µg/L	-29.880	ppb	08:51:42
2	Na 589.592 Radial†	-639.6	25.6	7.1035	µg/L	7.1035	ppb	08:51:22
2	Sr 421.552†	-36.6	25.0	0.1406	µg/L	0.1406	ppb	08:51:22
2	Sc 361.383	1950729.9	1950729.9	94.846	%			08:52:50
2	Y 371.029	1185734.0	1185734.0	94.680	%			08:52:50
2	Ag 328.068†	-76.0	-51.8	-0.4622	µg/L	-0.4622	ppb	08:52:55
2	As 188.979†	2.1	-0.3	-0.5988	µg/L	-0.5988	ppb	08:53:16
2	B 249.677†	151.3	3.9	0.1716	µg/L	0.1716	ppb	08:53:16
2	Ba 233.527†	-80.1	-3.7	-0.0938	µg/L	-0.0938	ppb	08:53:16
2	Be 313.107†	3580.7	163.8	0.1034	µg/L	0.1034	ppb	08:52:55
2	Cd 226.502†	-95.0	0.8	0.0316	µg/L	0.0316	ppb	08:53:16
2	Co 228.616†	-64.6	3.6	0.1748	µg/L	0.1748	ppb	08:53:16
2	Cr 267.716†	-89.4	28.5	0.5937	µg/L	0.5937	ppb	08:52:55
2	Cu 324.752†	3176.5	-35.1	-0.2478	µg/L	-0.2478	ppb	08:52:55
2	Mn 257.610†	-154.7	59.5	0.1887	µg/L	0.1887	ppb	08:53:16
2	Mo 202.031†	-3.3	4.5	0.4977	µg/L	0.4977	ppb	08:53:16
2	Ni 231.604†	282.3	-1.8	-0.0974	µg/L	-0.0974	ppb	08:53:16
2	P 214.914†	203.8	8.9	19.385	µg/L	19.385	ppb	08:53:16
2	Pb 220.353†	58.5	7.6	1.9137	µg/L	1.9137	ppb	08:53:16

2	S 181.975 Axial†	33.2	11.0	56.325 µg/L	56.325 ppb		08:53:16
2	Sb 206.836†	18.2	-1.3	-1.2959 µg/L	-1.2959 ppb		08:53:16
2	Se 196.026†	12.5	-1.0	-1.3996 µg/L	-1.3996 ppb		08:53:16
2	SiO2†	2057.5	187.7	35.835 µg/L	35.835 ppb		08:52:55
2	Si 251.611†	476.5	152.8	11.664 µg/L	11.664 ppb		08:53:16
2	Sn 189.927†	22.0	0.8	0.3597 µg/L	0.3597 ppb		08:53:16
2	Ti 334.940†	893.7	223.3	0.4966 µg/L	0.4966 ppb		08:52:55
2	Tl 190.801†	-21.3	-1.0	-1.5650 µg/L	-1.5650 ppb		08:53:16
2	U 409.014†	805.1	169.6	15.932 µg/L	15.932 ppb		08:52:55
2	V 292.402†	-75.5	12.4	0.1684 µg/L	0.1684 ppb		08:52:55
2	Zn 213.857†	530.1	8.7	0.2362 µg/L	0.2362 ppb		08:53:16
3	Sc RADIAL	106508.4	106508.4	94.7 %			08:51:48
3	Al 396.153Radial†	201.8	-16.7	-8.4917 µg/L	-8.4917 ppb		08:51:48
3	Ca 317.933Radial†	400.2	-72.8	-28.884 µg/L	-28.884 ppb		08:52:08
3	Fe 238.204 Radial†	12.0	1.5	7.6192 µg/L	7.6192 ppb		08:52:08
3	K 766.490 Radial†	665.0	7.5	4.0535 µg/L	4.0535 ppb		08:51:48
3	Mg 279.077 IEC†	15.4	-3.6	-19.924 µg/L	-19.924 ppb		08:52:08
3	Na 589.592 Radial†	-633.8	34.5	9.5841 µg/L	9.5841 ppb		08:51:48
3	Sr 421.552†	-60.9	-0.6	-0.0031 µg/L	-0.0031 ppb		08:51:48
3	Sc 361.383	1941399.4	1941399.4	94.392 %			08:53:21
3	Y 371.029	1180781.6	1180781.6	94.285 %			08:53:21
3	Ag 328.068†	-85.5	-62.3	-0.5518 µg/L	-0.5518 ppb		08:53:27
3	As 188.979†	2.0	-0.3	-0.6466 µg/L	-0.6466 ppb		08:53:47
3	B 249.677†	156.8	10.4	0.4591 µg/L	0.4591 ppb		08:53:47
3	Ba 233.527†	-81.2	-5.3	-0.1323 µg/L	-0.1323 ppb		08:53:47
3	Be 313.107†	3589.7	191.5	0.1210 µg/L	0.1210 ppb		08:53:27
3	Cd 226.502†	-99.1	-4.1	-0.0946 µg/L	-0.0946 ppb		08:53:47
3	Co 228.616†	-73.4	-6.1	-0.2916 µg/L	-0.2916 ppb		08:53:47
3	Cr 267.716†	-125.2	-9.9	-0.2041 µg/L	-0.2041 ppb		08:53:27
3	Cu 324.752†	3191.8	-2.9	-0.0187 µg/L	-0.0187 ppb		08:53:27
3	Mn 257.610†	-161.1	52.0	0.1659 µg/L	0.1659 ppb		08:53:47
3	Mo 202.031†	-1.5	6.3	0.7067 µg/L	0.7067 ppb		08:53:47
3	Ni 231.604†	273.7	-9.5	-0.5167 µg/L	-0.5167 ppb		08:53:47
3	P 214.914†	214.0	20.7	44.843 µg/L	44.843 ppb		08:53:47
3	Pb 220.353†	59.3	8.7	2.1792 µg/L	2.1792 ppb		08:53:47
3	S 181.975 Axial†	28.5	6.1	31.558 µg/L	31.558 ppb		08:53:47
3	Sb 206.836†	25.7	6.7	6.6822 µg/L	6.6822 ppb		08:53:47
3	Se 196.026†	5.4	-8.3	-12.152 µg/L	-12.152 ppb		08:53:47
3	SiO2†	2066.5	207.6	39.643 µg/L	39.643 ppb		08:53:27
3	Si 251.611†	482.7	161.8	12.438 µg/L	12.438 ppb		08:53:47
3	Sn 189.927†	17.4	-4.0	-1.9519 µg/L	-1.9519 ppb		08:53:47
3	Ti 334.940†	828.7	159.0	0.3541 µg/L	0.3541 ppb		08:53:27
3	Tl 190.801†	-24.0	-4.0	-6.0782 µg/L	-6.0782 ppb		08:53:47
3	U 409.014†	849.7	220.9	20.745 µg/L	20.745 ppb		08:53:27
3	V 292.402†	-38.0	51.7	0.6216 µg/L	0.6216 ppb		08:53:27
3	Zn 213.857†	529.1	10.4	0.2816 µg/L	0.2816 ppb		08:53:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945252.7	94.579	%	0.2369				0.25%
Sc RADIAL	106277.9	94.5	%	0.20				0.21%
Y 371.029	1182409.5	94.415	%	0.2299				0.24%
Ag 328.068†	-64.8	-0.5762	µg/L	0.12802	-0.5762	ppb	0.12802	22.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.5	-3.8287	µg/L	6.35232	-3.8287	ppb	6.35232	165.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.2	-4.1536	µg/L	6.11573	-4.1536	ppb	6.11573	147.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	8.1	0.3577	µg/L	0.16137	0.3577	ppb	0.16137	45.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.0	-0.1004	µg/L	0.02914	-0.1004	ppb	0.02914	29.01%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	205.1	0.1296	µg/L	0.03130	0.1296	ppb	0.03130	24.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-69.8	-27.710	µg/L	1.0504	-27.710	ppb	1.0504	3.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.5	-0.0028	µg/L	0.08030	-0.0028	ppb	0.08030	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.2	-0.0077	µg/L	0.24919	-0.0077	ppb	0.24919	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 8.4      0.1755 µg/L       0.40030      0.1755 ppb        0.40030 228.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -43.3     -0.3034 µg/L       0.31623     -0.3034 ppb        0.31623 104.22%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      6.6389 µg/L       8.44989      6.6389 ppb        8.44989 127.28%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -3.0     -1.6480 µg/L       7.95590     -1.6480 ppb        7.95590 482.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.6     -25.569 µg/L        5.1106     -25.569 ppb         5.1106  19.99%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                53.0      0.1690 µg/L       0.01835      0.1690 ppb        0.01835  10.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.0      0.6674 µg/L       0.15382      0.6674 ppb        0.15382  23.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         38.3      10.620 µg/L        4.1330      10.620 ppb         4.1330  38.92%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.4     -0.2391 µg/L       0.24045     -0.2391 ppb        0.24045 100.57%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.9      34.646 µg/L       13.4633      34.646 ppb        13.4633  38.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 9.4      2.3768 µg/L       0.58737      2.3768 ppb        0.58737  24.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            6.5      33.561 µg/L       21.8319      33.561 ppb        21.8319  65.05%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.2      2.1564 µg/L       4.09591      2.1564 ppb        4.09591 189.94%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.5     -5.0179 µg/L       6.17891     -5.0179 ppb        6.17891 123.14%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     195.7      37.380 µg/L        2.0026      37.380 ppb         2.0026   5.36%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               161.8      12.361 µg/L        0.6613      12.361 ppb         0.6613   5.35%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.4      0.1819 µg/L       2.05080      0.1819 ppb        2.05080 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                36.4      0.2052 µg/L       0.24701      0.2052 ppb        0.24701 120.38%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               168.4      0.3748 µg/L       0.11296      0.3748 ppb        0.11296  30.14%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.5      0.7761 µg/L       8.27697      0.7761 ppb        8.27697 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                182.7      17.154 µg/L        3.1627      17.154 ppb         3.1627  18.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 21.8      0.2790 µg/L       0.30285      0.2790 ppb        0.30285 108.55%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                11.6      0.3127 µg/L       0.09589      0.3127 ppb        0.09589  30.67%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 38
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 09:08:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107199.1	107199.1	95.3	%			09:09:12
1	Al 396.153Radial†	10137.9	10407.6	5240.8	µg/L	5240.8	ppb	09:09:12
1	Ca 317.933Radial†	12453.4	12571.5	4990.3	µg/L	4990.3	ppb	09:09:32
1	Fe 238.204 Radial†	966.6	1003.0	5285.2	µg/L	5285.2	ppb	09:09:32
1	K 766.490 Radial†	9792.3	9579.9	5194.2	µg/L	5194.2	ppb	09:09:12
1	Mg 279.077 IEC†	914.8	940.0	5218.7	µg/L	5218.7	ppb	09:09:32
1	Na 589.592 Radial†	34720.8	37135.2	10304	µg/L	10304	ppb	09:09:12
1	Sr 421.552†	85778.5	90068.0	507.35	µg/L	507.35	ppb	09:09:12
1	Sc 361.383	1944921.8	1944921.8	94.563	%			09:10:36
1	Y 371.029	1179205.9	1179205.9	94.159	%			09:10:36
1	Ag 328.068†	53690.0	56805.2	511.21	µg/L	511.21	ppb	09:10:42
1	As 188.979†	251.2	263.2	500.62	µg/L	500.62	ppb	09:11:02
1	B 249.677†	10695.2	11154.4	493.41	µg/L	493.41	ppb	09:10:42
1	Ba 233.527†	18852.2	20016.8	503.82	µg/L	503.82	ppb	09:10:42
1	Be 313.107†	755457.0	795280.1	502.89	µg/L	502.89	ppb	09:10:36
1	Cd 226.502†	17672.9	18789.9	497.03	µg/L	497.03	ppb	09:10:42
1	Co 228.616†	9788.1	10422.6	501.32	µg/L	501.32	ppb	09:10:42
1	Cr 267.716†	22643.5	24068.1	502.18	µg/L	502.18	ppb	09:10:42
1	Cu 324.752†	71817.2	72562.0	511.64	µg/L	511.64	ppb	09:10:42
1	Mn 257.610†	150959.4	159861.4	507.99	µg/L	507.99	ppb	09:10:36
1	Mo 202.031†	4211.1	4461.2	497.89	µg/L	497.89	ppb	09:11:02
1	Ni 231.604†	9000.8	9218.9	502.23	µg/L	502.23	ppb	09:10:42
1	P 214.914†	1313.7	1183.2	2512.7	µg/L	2512.7	ppb	09:11:02
1	Pb 220.353†	1933.0	1990.0	505.19	µg/L	505.19	ppb	09:11:02
1	S 181.975 Axial†	211.3	199.4	1022.9	µg/L	1022.9	ppb	09:11:02
1	Sb 206.836†	502.8	511.2	505.76	µg/L	505.76	ppb	09:11:02
1	Se 196.026†	335.7	340.9	498.71	µg/L	498.71	ppb	09:11:02
1	SiO2†	29355.5	29061.6	5549.7	µg/L	5549.7	ppb	09:10:42
1	Si 251.611†	32356.6	33867.3	2545.9	µg/L	2545.9	ppb	09:10:42
1	Sn 189.927†	990.9	1025.4	502.67	µg/L	502.67	ppb	09:11:02
1	Ti 334.940†	216684.0	228423.3	506.04	µg/L	506.04	ppb	09:10:36
1	Tl 190.801†	291.2	329.4	499.50	µg/L	499.50	ppb	09:11:02
1	U 409.014†	5739.3	5390.1	505.32	µg/L	505.32	ppb	09:10:42
1	V 292.402†	42174.1	44690.8	508.54	µg/L	508.54	ppb	09:10:42
1	Zn 213.857†	18397.4	18905.0	502.47	µg/L	502.47	ppb	09:10:42
2	Sc RADIAL	106278.0	106278.0	94.5	%			09:09:38
2	Al 396.153Radial†	10081.6	10440.1	5257.2	µg/L	5257.2	ppb	09:09:38
2	Ca 317.933Radial†	12431.9	12661.9	5026.2	µg/L	5026.2	ppb	09:09:58
2	Fe 238.204 Radial†	961.5	1006.4	5303.2	µg/L	5303.2	ppb	09:09:58
2	K 766.490 Radial†	9680.4	9550.5	5178.2	µg/L	5178.2	ppb	09:09:38
2	Mg 279.077 IEC†	924.0	958.1	5319.1	µg/L	5319.1	ppb	09:09:58
2	Na 589.592 Radial†	34486.4	37202.8	10322	µg/L	10322	ppb	09:09:38
2	Sr 421.552†	85282.7	90323.4	508.79	µg/L	508.79	ppb	09:09:38
2	Sc 361.383	1946465.9	1946465.9	94.638	%			09:11:09
2	Y 371.029	1180269.8	1180269.8	94.244	%			09:11:09
2	Ag 328.068†	54244.5	57346.1	516.07	µg/L	516.07	ppb	09:11:15
2	As 188.979†	257.2	269.3	512.23	µg/L	512.23	ppb	09:11:35
2	B 249.677†	10778.1	11233.0	496.90	µg/L	496.90	ppb	09:11:15
2	Ba 233.527†	18914.9	20067.3	505.09	µg/L	505.09	ppb	09:11:15
2	Be 313.107†	755950.3	795167.6	502.82	µg/L	502.82	ppb	09:11:09
2	Cd 226.502†	17853.7	18966.1	501.69	µg/L	501.69	ppb	09:11:15
2	Co 228.616†	9859.9	10490.2	504.57	µg/L	504.57	ppb	09:11:15
2	Cr 267.716†	22783.9	24197.5	504.89	µg/L	504.89	ppb	09:11:15
2	Cu 324.752†	72292.1	73003.5	514.75	µg/L	514.75	ppb	09:11:15
2	Mn 257.610†	151276.2	160069.4	508.65	µg/L	508.65	ppb	09:11:09
2	Mo 202.031†	4231.6	4479.2	499.91	µg/L	499.91	ppb	09:11:35
2	Ni 231.604†	9037.1	9249.8	503.91	µg/L	503.91	ppb	09:11:15
2	P 214.914†	1307.6	1175.6	2495.8	µg/L	2495.8	ppb	09:11:35
2	Pb 220.353†	1953.9	2010.5	510.37	µg/L	510.37	ppb	09:11:35

2	S 181.975 Axial†	216.5	204.7	1050.1 µg/L	1050.1 ppb	09:11:35
2	Sb 206.836†	497.8	505.4	500.03 µg/L	500.03 ppb	09:11:35
2	Se 196.026†	353.2	359.1	525.30 µg/L	525.30 ppb	09:11:35
2	SiO2†	29587.2	29281.8	5591.8 µg/L	5591.8 ppb	09:11:15
2	Si 251.611†	32616.7	34115.0	2564.9 µg/L	2564.9 ppb	09:11:15
2	Sn 189.927†	987.1	1020.5	500.34 µg/L	500.34 ppb	09:11:35
2	Ti 334.940†	216806.3	228370.7	505.93 µg/L	505.93 ppb	09:11:09
2	Tl 190.801†	293.8	331.9	503.26 µg/L	503.26 ppb	09:11:35
2	U 409.014†	5791.9	5440.9	510.09 µg/L	510.09 ppb	09:11:15
2	V 292.402†	42523.1	45024.3	512.32 µg/L	512.32 ppb	09:11:15
2	Zn 213.857†	18565.7	19067.4	506.81 µg/L	506.81 ppb	09:11:15
3	Sc RADIAL	107553.0	107553.0	95.6 %		09:10:04
3	Al 396.153Radial†	10192.5	10429.6	5252.1 µg/L	5252.1 ppb	09:10:04
3	Ca 317.933Radial†	12404.4	12477.2	4952.9 µg/L	4952.9 ppb	09:10:24
3	Fe 238.204 Radial†	961.5	994.4	5239.8 µg/L	5239.8 ppb	09:10:24
3	K 766.490 Radial†	9808.7	9563.2	5185.1 µg/L	5185.1 ppb	09:10:04
3	Mg 279.077 IEC†	910.3	932.2	5175.3 µg/L	5175.3 ppb	09:10:24
3	Na 589.592 Radial†	34964.3	37270.0	10341 µg/L	10341 ppb	09:10:04
3	Sr 421.552†	86489.4	90515.3	509.87 µg/L	509.87 ppb	09:10:04
3	Sc 361.383	1951079.9	1951079.9	94.863 %		09:11:42
3	Y 371.029	1182285.4	1182285.4	94.405 %		09:11:42
3	Ag 328.068†	53725.4	56663.3	509.93 µg/L	509.93 ppb	09:11:48
3	As 188.979†	253.1	264.3	502.69 µg/L	502.69 ppb	09:12:09
3	B 249.677†	10701.0	11124.8	492.11 µg/L	492.11 ppb	09:11:48
3	Ba 233.527†	18846.2	19947.5	502.07 µg/L	502.07 ppb	09:11:48
3	Be 313.107†	758536.2	796004.5	503.35 µg/L	503.35 ppb	09:11:42
3	Cd 226.502†	17668.2	18726.0	495.35 µg/L	495.35 ppb	09:11:48
3	Co 228.616†	9750.0	10349.7	497.80 µg/L	497.80 ppb	09:11:48
3	Cr 267.716†	22623.1	23971.1	500.16 µg/L	500.16 ppb	09:11:48
3	Cu 324.752†	71837.6	72343.8	510.10 µg/L	510.10 ppb	09:11:48
3	Mn 257.610†	151798.4	160242.0	509.19 µg/L	509.19 ppb	09:11:42
3	Mo 202.031†	4200.3	4435.7	495.05 µg/L	495.05 ppb	09:12:09
3	Ni 231.604†	8995.6	9183.4	500.29 µg/L	500.29 ppb	09:11:48
3	P 214.914†	1302.9	1167.4	2478.6 µg/L	2478.6 ppb	09:12:09
3	Pb 220.353†	1923.8	1973.8	501.07 µg/L	501.07 ppb	09:12:09
3	S 181.975 Axial†	212.7	200.2	1027.0 µg/L	1027.0 ppb	09:12:09
3	Sb 206.836†	501.6	508.2	502.81 µg/L	502.81 ppb	09:12:09
3	Se 196.026†	346.7	351.4	514.05 µg/L	514.05 ppb	09:12:09
3	SiO2†	29309.8	28915.4	5521.8 µg/L	5521.8 ppb	09:11:48
3	Si 251.611†	32354.8	33757.4	2537.7 µg/L	2537.7 ppb	09:11:48
3	Sn 189.927†	986.3	1017.3	498.70 µg/L	498.70 ppb	09:12:09
3	Ti 334.940†	217481.4	228540.7	506.31 µg/L	506.31 ppb	09:11:42
3	Tl 190.801†	289.0	326.0	494.44 µg/L	494.44 ppb	09:12:09
3	U 409.014†	5841.8	5479.0	513.68 µg/L	513.68 ppb	09:11:48
3	V 292.402†	42155.2	44530.1	506.72 µg/L	506.72 ppb	09:11:48
3	Zn 213.857†	18427.1	18874.9	501.69 µg/L	501.69 ppb	09:11:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1947489.2	94.688	%	0.1558				0.16%
Sc RADIAL	107010.0	95.1	%	0.59				0.62%
Y 371.029	1180587.0	94.269	%	0.1249				0.13%
Ag 328.068†	56938.2	512.40	µg/L	3.239	512.40	ppb	3.239	0.63%
QC value within limits for Ag 328.068 Recovery = 102.48%								
Al 396.153Radial†	10425.8	5250.0	µg/L	8.39	5250.0	ppb	8.39	0.16%
QC value within limits for Al 396.153Radial Recovery = 105.00%								
As 188.979†	265.6	505.18	µg/L	6.191	505.18	ppb	6.191	1.23%
QC value within limits for As 188.979 Recovery = 101.04%								
B 249.677†	11170.8	494.14	µg/L	2.473	494.14	ppb	2.473	0.50%
QC value within limits for B 249.677 Recovery = 98.83%								
Ba 233.527†	20010.5	503.66	µg/L	1.516	503.66	ppb	1.516	0.30%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 313.107†	795484.1	503.02	µg/L	0.287	503.02	ppb	0.287	0.06%
QC value within limits for Be 313.107 Recovery = 100.60%								
Ca 317.933Radial†	12570.2	4989.8	µg/L	36.65	4989.8	ppb	36.65	0.73%
QC value within limits for Ca 317.933Radial Recovery = 99.80%								
Cd 226.502†	18827.3	498.02	µg/L	3.285	498.02	ppb	3.285	0.66%
QC value within limits for Cd 226.502 Recovery = 99.60%								
Co 228.616†	10420.9	501.23	µg/L	3.385	501.23	ppb	3.385	0.68%

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   QC value within limits for Co 228.616  Recovery = 100.25%
Cr 267.716†            24078.9      502.41 µg/L        2.371      502.41 ppb          2.371   0.47%
   QC value within limits for Cr 267.716  Recovery = 100.48%
Cu 324.752†            72636.4      512.17 µg/L        2.371      512.17 ppb          2.371   0.46%
   QC value within limits for Cu 324.752  Recovery = 102.43%
Fe 238.204 Radial†      1001.2      5276.1 µg/L       32.69      5276.1 ppb         32.69   0.62%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.52%
K 766.490 Radial†       9564.5      5185.8 µg/L        7.99      5185.8 ppb          7.99   0.15%
   QC value within limits for K 766.490 Radial  Recovery = 103.72%
Mg 279.077 IEC†          943.5      5237.7 µg/L       73.75      5237.7 ppb         73.75   1.41%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.75%
Mn 257.610†           160057.6      508.61 µg/L       0.602      508.61 ppb         0.602   0.12%
   QC value within limits for Mn 257.610  Recovery = 101.72%
Mo 202.031†            4458.7      497.62 µg/L       2.443      497.62 ppb         2.443   0.49%
   QC value within limits for Mo 202.031  Recovery = 99.52%
Na 589.592 Radial†    37202.7       10322 µg/L        18.7       10322 ppb          18.7   0.18%
   QC value within limits for Na 589.592 Radial  Recovery = 103.22%
Ni 231.604†            9217.3      502.14 µg/L       1.810      502.14 ppb         1.810   0.36%
   QC value within limits for Ni 231.604  Recovery = 100.43%
P 214.914†             1175.4      2495.7 µg/L       17.04      2495.7 ppb         17.04   0.68%
   QC value within limits for P 214.914  Recovery = 99.83%
Pb 220.353†            1991.5      505.55 µg/L       4.662      505.55 ppb         4.662   0.92%
   QC value within limits for Pb 220.353  Recovery = 101.11%
S 181.975 Axial†        201.4      1033.4 µg/L       14.68      1033.4 ppb         14.68   1.42%
   QC value within limits for S 181.975 Axial  Recovery = 103.34%
Sb 206.836†             508.3      502.87 µg/L       2.864      502.87 ppb         2.864   0.57%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†             350.5      512.69 µg/L      13.345      512.69 ppb        13.345   2.60%
   QC value within limits for Se 196.026  Recovery = 102.54%
SiO2†                  29086.3      5554.4 µg/L       35.22      5554.4 ppb         35.22   0.63%
   QC value within limits for SiO2  Recovery = 103.87%
Si 251.611†            33913.2      2549.5 µg/L       13.98      2549.5 ppb         13.98   0.55%
   QC value within limits for Si 251.611  Recovery = 101.98%
Sn 189.927†            1021.1      500.57 µg/L       1.996      500.57 ppb         1.996   0.40%
   QC value within limits for Sn 189.927  Recovery = 100.11%
Sr 421.552†            90302.2      508.67 µg/L       1.264      508.67 ppb         1.264   0.25%
   QC value within limits for Sr 421.552  Recovery = 101.73%
Ti 334.940†           228444.9      506.09 µg/L       0.195      506.09 ppb         0.195   0.04%
   QC value within limits for Ti 334.940  Recovery = 101.22%
Tl 190.801†             329.1      499.07 µg/L       4.426      499.07 ppb         4.426   0.89%
   QC value within limits for Tl 190.801  Recovery = 99.81%
U 409.014†             5436.7      509.70 µg/L       4.192      509.70 ppb         4.192   0.82%
   QC value within limits for U 409.014  Recovery = 101.94%
V 292.402†             44748.4      509.19 µg/L       2.859      509.19 ppb         2.859   0.56%
   QC value within limits for V 292.402  Recovery = 101.84%
Zn 213.857†            18949.1      503.65 µg/L       2.758      503.65 ppb         2.758   0.55%
   QC value within limits for Zn 213.857  Recovery = 100.73%
All analyte(s) passed QC.
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Sequence No.: 39
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 09:12:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105125.0	105125.0	93.5	%			09:12:50
1	Al 396.153Radial†	223.1	8.9	4.4733	µg/L	4.4733	ppb	09:12:50
1	Ca 317.933Radial†	393.7	-74.2	-29.458	µg/L	-29.458	ppb	09:13:10
1	Fe 238.204 Radial†	13.1	2.8	14.855	µg/L	14.855	ppb	09:13:10
1	K 766.490 Radial†	671.2	23.3	12.650	µg/L	12.650	ppb	09:12:50
1	Mg 279.077 IEC†	17.0	-1.7	-9.4232	µg/L	-9.4232	ppb	09:13:10
1	Na 589.592 Radial†	-648.8	9.7	2.7000	µg/L	2.7000	ppb	09:12:50
1	Sr 421.552†	-96.7	-39.7	-0.2234	µg/L	-0.2234	ppb	09:12:50
1	Sc 361.383	1938982.6	1938982.6	94.274	%			09:14:12
1	Y 371.029	1178534.0	1178534.0	94.105	%			09:14:12
1	Ag 328.068†	-98.0	-75.6	-0.6703	µg/L	-0.6703	ppb	09:14:18
1	As 188.979†	5.2	3.0	5.7479	µg/L	5.7479	ppb	09:14:38
1	B 249.677†	152.9	6.5	0.2834	µg/L	0.2834	ppb	09:14:38
1	Ba 233.527†	-63.7	13.1	0.3309	µg/L	0.3309	ppb	09:14:38
1	Be 313.107†	3739.1	354.7	0.2242	µg/L	0.2242	ppb	09:14:18
1	Cd 226.502†	-78.8	17.3	0.4712	µg/L	0.4712	ppb	09:14:38
1	Co 228.616†	-73.1	-5.8	-0.2785	µg/L	-0.2785	ppb	09:14:38
1	Cr 267.716†	-105.3	11.1	0.2321	µg/L	0.2321	ppb	09:14:18
1	Cu 324.752†	3121.4	-73.3	-0.5127	µg/L	-0.5127	ppb	09:14:18
1	Mn 257.610†	-127.1	87.9	0.2807	µg/L	0.2807	ppb	09:14:38
1	Mo 202.031†	-0.8	7.1	0.7886	µg/L	0.7886	ppb	09:14:38
1	Ni 231.604†	276.6	-6.0	-0.3245	µg/L	-0.3245	ppb	09:14:38
1	P 214.914†	212.8	19.8	43.019	µg/L	43.019	ppb	09:14:38
1	Pb 220.353†	68.5	18.5	4.6760	µg/L	4.6760	ppb	09:14:38
1	S 181.975 Axial†	28.4	6.1	31.331	µg/L	31.331	ppb	09:14:38
1	Sb 206.836†	19.9	0.6	0.6076	µg/L	0.6076	ppb	09:14:38
1	Se 196.026†	19.2	6.3	9.2079	µg/L	9.2079	ppb	09:14:38
1	SiO2†	2124.1	271.4	51.829	µg/L	51.829	ppb	09:14:18
1	Si 251.611†	559.2	243.5	18.475	µg/L	18.475	ppb	09:14:38
1	Sn 189.927†	28.5	7.8	3.7749	µg/L	3.7749	ppb	09:14:38
1	Ti 334.940†	846.7	179.3	0.3990	µg/L	0.3990	ppb	09:14:18
1	Tl 190.801†	-19.6	0.6	0.8749	µg/L	0.8749	ppb	09:14:38
1	U 409.014†	851.6	224.1	21.044	µg/L	21.044	ppb	09:14:18
1	V 292.402†	-38.8	50.8	0.6130	µg/L	0.6130	ppb	09:14:18
1	Zn 213.857†	532.3	14.5	0.3901	µg/L	0.3901	ppb	09:14:38
2	Sc RADIAL	105792.8	105792.8	94.1	%			09:13:16
2	Al 396.153Radial†	218.0	1.9	0.9269	µg/L	0.9269	ppb	09:13:16
2	Ca 317.933Radial†	389.6	-81.2	-32.234	µg/L	-32.234	ppb	09:13:36
2	Fe 238.204 Radial†	11.8	1.4	7.2317	µg/L	7.2317	ppb	09:13:36
2	K 766.490 Radial†	675.2	23.0	12.497	µg/L	12.497	ppb	09:13:16
2	Mg 279.077 IEC†	9.5	-9.7	-53.806	µg/L	-53.806	ppb	09:13:36
2	Na 589.592 Radial†	-675.8	-14.6	-4.0603	µg/L	-4.0603	ppb	09:13:16
2	Sr 421.552†	-31.6	30.2	0.1701	µg/L	0.1701	ppb	09:13:16
2	Sc 361.383	1924425.0	1924425.0	93.567	%			09:14:44
2	Y 371.029	1169712.8	1169712.8	93.401	%			09:14:44
2	Ag 328.068†	-87.4	-65.1	-0.5819	µg/L	-0.5819	ppb	09:14:49
2	As 188.979†	-0.0	-2.5	-4.8259	µg/L	-4.8259	ppb	09:15:10
2	B 249.677†	140.3	-5.8	-0.2581	µg/L	-0.2581	ppb	09:15:10
2	Ba 233.527†	-65.8	10.3	0.2589	µg/L	0.2589	ppb	09:15:10
2	Be 313.107†	3736.1	381.5	0.2411	µg/L	0.2411	ppb	09:14:49
2	Cd 226.502†	-82.5	12.7	0.3540	µg/L	0.3540	ppb	09:15:10
2	Co 228.616†	-71.6	-4.8	-0.2299	µg/L	-0.2299	ppb	09:15:10
2	Cr 267.716†	-101.7	14.1	0.2937	µg/L	0.2937	ppb	09:14:49
2	Cu 324.752†	3106.9	-63.8	-0.4472	µg/L	-0.4472	ppb	09:14:49
2	Mn 257.610†	-104.1	111.4	0.3545	µg/L	0.3545	ppb	09:15:10
2	Mo 202.031†	3.6	11.7	1.3067	µg/L	1.3067	ppb	09:15:10
2	Ni 231.604†	278.9	-1.3	-0.0710	µg/L	-0.0710	ppb	09:15:10
2	P 214.914†	215.7	24.5	53.311	µg/L	53.311	ppb	09:15:10
2	Pb 220.353†	63.4	13.7	3.4460	µg/L	3.4460	ppb	09:15:10

2	S 181.975 Axial†	26.5	4.2	21.801	µg/L	21.801 ppb	09:15:10
2	Sb 206.836†	18.4	-0.8	-0.8221	µg/L	-0.8221 ppb	09:15:10
2	Se 196.026†	14.4	1.2	1.8368	µg/L	1.8368 ppb	09:15:10
2	SiO2†	2076.2	237.3	45.322	µg/L	45.322 ppb	09:14:49
2	Si 251.611†	524.8	211.2	15.951	µg/L	15.951 ppb	09:15:10
2	Sn 189.927†	29.7	9.3	4.5048	µg/L	4.5048 ppb	09:15:10
2	Ti 334.940†	931.2	276.4	0.6144	µg/L	0.6144 ppb	09:14:49
2	Tl 190.801†	-22.0	-2.0	-3.0737	µg/L	-3.0737 ppb	09:15:10
2	U 409.014†	891.6	273.7	25.701	µg/L	25.701 ppb	09:14:49
2	V 292.402†	-94.3	-8.8	-0.0483	µg/L	-0.0483 ppb	09:14:49
2	Zn 213.857†	528.8	14.9	0.4022	µg/L	0.4022 ppb	09:15:10
3	Sc RADIAL	105866.6	105866.6	94.1	%		09:13:42
3	Al 396.153Radial†	239.8	25.0	12.608	µg/L	12.608 ppb	09:13:42
3	Ca 317.933Radial†	394.8	-76.0	-30.173	µg/L	-30.173 ppb	09:14:02
3	Fe 238.204 Radial†	10.2	-0.4	-2.1180	µg/L	-2.1180 ppb	09:14:02
3	K 766.490 Radial†	640.9	-13.9	-7.5352	µg/L	-7.5352 ppb	09:13:42
3	Mg 279.077 IEC†	15.9	-3.0	-16.530	µg/L	-16.530 ppb	09:14:02
3	Na 589.592 Radial†	-675.2	-13.5	-3.7417	µg/L	-3.7417 ppb	09:13:42
3	Sr 421.552†	-48.3	12.4	0.0699	µg/L	0.0699 ppb	09:13:42
3	Sc 361.383	1937341.1	1937341.1	94.195	%		09:15:15
3	Y 371.029	1176865.6	1176865.6	93.972	%		09:15:15
3	Ag 328.068†	-108.3	-86.6	-0.7726	µg/L	-0.7726 ppb	09:15:21
3	As 188.979†	2.9	0.6	1.2181	µg/L	1.2181 ppb	09:15:41
3	B 249.677†	139.0	-8.1	-0.3589	µg/L	-0.3589 ppb	09:15:41
3	Ba 233.527†	-71.3	5.0	0.1248	µg/L	0.1248 ppb	09:15:41
3	Be 313.107†	3775.2	396.4	0.2506	µg/L	0.2506 ppb	09:15:21
3	Cd 226.502†	-95.3	-0.3	-0.0026	µg/L	-0.0026 ppb	09:15:41
3	Co 228.616†	-73.5	-6.4	-0.3052	µg/L	-0.3052 ppb	09:15:41
3	Cr 267.716†	-131.0	-16.3	-0.3388	µg/L	-0.3388 ppb	09:15:21
3	Cu 324.752†	3146.2	-44.2	-0.3115	µg/L	-0.3115 ppb	09:15:21
3	Mn 257.610†	-92.8	124.1	0.3936	µg/L	0.3936 ppb	09:15:41
3	Mo 202.031†	-3.0	4.7	0.5275	µg/L	0.5275 ppb	09:15:41
3	Ni 231.604†	271.4	-11.2	-0.6115	µg/L	-0.6115 ppb	09:15:41
3	P 214.914†	213.7	20.9	45.403	µg/L	45.403 ppb	09:15:41
3	Pb 220.353†	64.5	14.3	3.6328	µg/L	3.6328 ppb	09:15:41
3	S 181.975 Axial†	25.6	3.1	16.182	µg/L	16.182 ppb	09:15:41
3	Sb 206.836†	17.1	-2.4	-2.3768	µg/L	-2.3768 ppb	09:15:41
3	Se 196.026†	15.0	1.9	2.7127	µg/L	2.7127 ppb	09:15:41
3	SiO2†	2100.5	248.3	47.418	µg/L	47.418 ppb	09:15:21
3	Si 251.611†	511.2	193.0	14.745	µg/L	14.745 ppb	09:15:41
3	Sn 189.927†	22.0	0.9	0.4515	µg/L	0.4515 ppb	09:15:41
3	Ti 334.940†	863.6	198.0	0.4405	µg/L	0.4405 ppb	09:15:21
3	Tl 190.801†	-22.6	-2.6	-3.8874	µg/L	-3.8874 ppb	09:15:41
3	U 409.014†	731.6	97.5	9.1584	µg/L	9.1584 ppb	09:15:21
3	V 292.402†	-70.1	17.5	0.2158	µg/L	0.2158 ppb	09:15:21
3	Zn 213.857†	538.3	21.3	0.5758	µg/L	0.5758 ppb	09:15:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933582.9	94.012	%	0.3877				0.41%
Sc RADIAL	105594.8	93.9	%	0.36				0.39%
Y 371.029	1175037.5	93.826	%	0.3742				0.40%
Ag 328.068†	-75.8	-0.6750	µg/L	0.09547	-0.6750	ppb	0.09547	14.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.9	6.0029	µg/L	5.98914	6.0029	ppb	5.98914	99.77%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.4	0.7134	µg/L	5.30495	0.7134	ppb	5.30495	743.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-2.5	-0.1112	µg/L	0.34546	-0.1112	ppb	0.34546	310.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.5	0.2382	µg/L	0.10458	0.2382	ppb	0.10458	43.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	377.5	0.2386	µg/L	0.01333	0.2386	ppb	0.01333	5.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-77.1	-30.622	µg/L	1.4410	-30.622	ppb	1.4410	4.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.9	0.2742	µg/L	0.24675	0.2742	ppb	0.24675	89.99%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.7	-0.2712	µg/L	0.03819	-0.2712	ppb	0.03819	14.08%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.0      0.0623 µg/L       0.34874      0.0623 ppb        0.34874 559.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -60.4     -0.4238 µg/L       0.10260     -0.4238 ppb        0.10260  24.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      6.6562 µg/L       8.50109      6.6562 ppb        8.50109 127.72%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          10.8      5.8705 µg/L      11.60989      5.8705 ppb       11.60989 197.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.8     -26.586 µg/L       23.8388     -26.586 ppb        23.8388  89.67%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               107.8      0.3429 µg/L       0.05734      0.3429 ppb        0.05734  16.72%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.8      0.8743 µg/L       0.39659      0.8743 ppb        0.39659  45.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         -6.1     -1.7007 µg/L       3.81441     -1.7007 ppb        3.81441 224.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.2     -0.3357 µg/L       0.27044     -0.3357 ppb        0.27044  80.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 21.7      47.244 µg/L        5.3873      47.244 ppb         5.3873  11.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                15.5      3.9183 µg/L       0.66284      3.9183 ppb        0.66284  16.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            4.5      23.105 µg/L        7.6580      23.105 ppb         7.6580  33.14%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.9     -0.8638 µg/L       1.49262     -0.8638 ppb        1.49262 172.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.1      4.5858 µg/L       4.02678      4.5858 ppb        4.02678  87.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     252.3      48.190 µg/L        3.3214      48.190 ppb         3.3214   6.89%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               215.9      16.390 µg/L        1.9031      16.390 ppb         1.9031  11.61%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.0      2.9104 µg/L       2.16053      2.9104 ppb        2.16053  74.24%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 1.0      0.0055 µg/L       0.20448      0.0055 ppb        0.20448 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               217.9      0.4846 µg/L       0.11427      0.4846 ppb        0.11427  23.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.4     -2.0287 µg/L       2.54735     -2.0287 ppb        2.54735 125.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                198.4      18.634 µg/L        8.5304      18.634 ppb         8.5304  45.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.8      0.2602 µg/L       0.33287      0.2602 ppb        0.33287 127.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                16.9      0.4560 µg/L       0.10387      0.4560 ppb        0.10387  22.78%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 09:55:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107034.2	107034.2	95.2	%			09:56:11
1	Al 396.153Radial†	9951.4	10227.9	5150.2	µg/L	5150.2	ppb	09:56:11
1	Ca 317.933Radial†	12201.8	12327.1	4893.3	µg/L	4893.3	ppb	09:56:31
1	Fe 238.204 Radial†	961.3	999.0	5264.3	µg/L	5264.3	ppb	09:56:31
1	K 766.490 Radial†	9565.3	9357.1	5073.4	µg/L	5073.4	ppb	09:56:11
1	Mg 279.077 IEC†	898.5	924.4	5131.9	µg/L	5131.9	ppb	09:56:31
1	Na 589.592 Radial†	33950.0	36381.3	10094	µg/L	10094	ppb	09:56:11
1	Sr 421.552†	84720.4	89094.7	501.86	µg/L	501.86	ppb	09:56:11
1	Sc 361.383	1934927.1	1934927.1	94.077	%			09:57:35
1	Y 371.029	1172426.0	1172426.0	93.617	%			09:57:35
1	Ag 328.068†	52986.8	56351.0	507.11	µg/L	507.11	ppb	09:57:40
1	As 188.979†	251.6	265.0	504.07	µg/L	504.07	ppb	09:58:01
1	B 249.677†	10489.2	10993.8	486.29	µg/L	486.29	ppb	09:57:40
1	Ba 233.527†	18509.2	19755.1	497.24	µg/L	497.24	ppb	09:57:40
1	Be 313.107†	745362.2	788676.4	498.72	µg/L	498.72	ppb	09:57:35
1	Cd 226.502†	17289.4	18478.8	488.81	µg/L	488.81	ppb	09:57:40
1	Co 228.616†	9618.9	10296.2	495.24	µg/L	495.24	ppb	09:57:40
1	Cr 267.716†	22220.2	23741.9	495.38	µg/L	495.38	ppb	09:57:40
1	Cu 324.752†	70701.1	71767.9	506.05	µg/L	506.05	ppb	09:57:40
1	Mn 257.610†	149641.4	159285.0	506.16	µg/L	506.16	ppb	09:57:35
1	Mo 202.031†	4149.3	4418.4	493.12	µg/L	493.12	ppb	09:58:01
1	Ni 231.604†	8872.4	9131.5	497.47	µg/L	497.47	ppb	09:57:40
1	P 214.914†	1296.6	1172.2	2489.3	µg/L	2489.3	ppb	09:58:01
1	Pb 220.353†	1900.1	1965.6	498.96	µg/L	498.96	ppb	09:58:01
1	S 181.975 Axial†	208.8	197.9	1015.4	µg/L	1015.4	ppb	09:58:01
1	Sb 206.836†	494.2	504.8	499.46	µg/L	499.46	ppb	09:58:01
1	Se 196.026†	328.1	334.7	489.71	µg/L	489.71	ppb	09:58:01
1	SiO2†	28581.2	28398.9	5423.2	µg/L	5423.2	ppb	09:57:40
1	Si 251.611†	31474.7	33106.6	2488.4	µg/L	2488.4	ppb	09:57:40
1	Sn 189.927†	962.5	1000.7	490.59	µg/L	490.59	ppb	09:58:01
1	Ti 334.940†	213887.3	226634.2	502.08	µg/L	502.08	ppb	09:57:35
1	Tl 190.801†	285.7	325.1	493.09	µg/L	493.09	ppb	09:58:01
1	U 409.014†	5768.6	5452.6	511.19	µg/L	511.19	ppb	09:57:40
1	V 292.402†	41481.7	44185.2	502.81	µg/L	502.81	ppb	09:57:40
1	Zn 213.857†	18105.3	18694.9	496.88	µg/L	496.88	ppb	09:57:40
2	Sc RADIAL	105933.7	105933.7	94.2	%			09:56:37
2	Al 396.153Radial†	9918.4	10301.6	5187.3	µg/L	5187.3	ppb	09:56:37
2	Ca 317.933Radial†	12234.7	12495.3	4960.1	µg/L	4960.1	ppb	09:56:57
2	Fe 238.204 Radial†	962.1	1010.3	5323.8	µg/L	5323.8	ppb	09:56:57
2	K 766.490 Radial†	9620.8	9520.5	5162.0	µg/L	5162.0	ppb	09:56:37
2	Mg 279.077 IEC†	899.6	935.3	5192.6	µg/L	5192.6	ppb	09:56:57
2	Na 589.592 Radial†	33799.4	36592.0	10153	µg/L	10153	ppb	09:56:37
2	Sr 421.552†	84228.1	89496.9	504.13	µg/L	504.13	ppb	09:56:37
2	Sc 361.383	1930795.6	1930795.6	93.876	%			09:58:08
2	Y 371.029	1169518.3	1169518.3	93.385	%			09:58:08
2	Ag 328.068†	53183.1	56680.6	510.08	µg/L	510.08	ppb	09:58:14
2	As 188.979†	250.3	264.1	502.41	µg/L	502.41	ppb	09:58:34
2	B 249.677†	10520.3	11050.8	488.80	µg/L	488.80	ppb	09:58:14
2	Ba 233.527†	18601.4	19895.5	500.77	µg/L	500.77	ppb	09:58:14
2	Be 313.107†	741220.4	785959.8	497.00	µg/L	497.00	ppb	09:58:08
2	Cd 226.502†	17395.0	18630.5	492.82	µg/L	492.82	ppb	09:58:14
2	Co 228.616†	9667.5	10369.8	498.79	µg/L	498.79	ppb	09:58:14
2	Cr 267.716†	22293.8	23870.9	498.07	µg/L	498.07	ppb	09:58:14
2	Cu 324.752†	70962.4	72207.0	509.15	µg/L	509.15	ppb	09:58:14
2	Mn 257.610†	148775.4	158702.8	504.32	µg/L	504.32	ppb	09:58:08
2	Mo 202.031†	4174.6	4454.8	497.19	µg/L	497.19	ppb	09:58:34
2	Ni 231.604†	8876.1	9155.7	498.78	µg/L	498.78	ppb	09:58:14
2	P 214.914†	1294.8	1173.3	2491.2	µg/L	2491.2	ppb	09:58:34
2	Pb 220.353†	1898.6	1968.3	499.68	µg/L	499.68	ppb	09:58:34

2	S 181.975 Axial†	212.5	202.3	1037.8 µg/L	1037.8 ppb	09:58:34
2	Sb 206.836†	492.7	504.2	498.89 µg/L	498.89 ppb	09:58:34
2	Se 196.026†	334.7	342.4	500.99 µg/L	500.99 ppb	09:58:34
2	SiO2†	28660.6	28548.5	5451.7 µg/L	5451.7 ppb	09:58:14
2	Si 251.611†	31645.6	33360.3	2507.6 µg/L	2507.6 ppb	09:58:14
2	Sn 189.927†	967.4	1008.1	494.22 µg/L	494.22 ppb	09:58:34
2	Ti 334.940†	212775.9	225936.8	500.53 µg/L	500.53 ppb	09:58:08
2	Tl 190.801†	293.1	333.7	505.91 µg/L	505.91 ppb	09:58:34
2	U 409.014†	5745.4	5440.9	510.09 µg/L	510.09 ppb	09:58:14
2	V 292.402†	41658.7	44468.1	506.03 µg/L	506.03 ppb	09:58:14
2	Zn 213.857†	18197.2	18834.0	500.59 µg/L	500.59 ppb	09:58:14
3	Sc RADIAL	107600.7	107600.7	95.7 %		09:57:03
3	Al 396.153Radial†	10075.1	10302.2	5187.9 µg/L	5187.9 ppb	09:57:03
3	Ca 317.933Radial†	12194.2	12251.7	4863.4 µg/L	4863.4 ppb	09:57:23
3	Fe 238.204 Radial†	956.8	989.0	5211.8 µg/L	5211.8 ppb	09:57:23
3	K 766.490 Radial†	9684.0	9428.3	5112.0 µg/L	5112.0 ppb	09:57:03
3	Mg 279.077 IEC†	897.9	918.7	5100.4 µg/L	5100.4 ppb	09:57:23
3	Na 589.592 Radial†	34421.8	36686.6	10179 µg/L	10179 ppb	09:57:03
3	Sr 421.552†	85540.9	89483.8	504.06 µg/L	504.06 ppb	09:57:03
3	Sc 361.383	1943496.4	1943496.4	94.494 %		09:58:41
3	Y 371.029	1177687.4	1177687.4	94.038 %		09:58:41
3	Ag 328.068†	53379.9	56518.7	508.62 µg/L	508.62 ppb	09:58:47
3	As 188.979†	242.5	254.1	483.37 µg/L	483.37 ppb	09:59:08
3	B 249.677†	10618.4	11081.4	490.20 µg/L	490.20 ppb	09:58:47
3	Ba 233.527†	18682.7	19852.0	499.67 µg/L	499.67 ppb	09:58:47
3	Be 313.107†	748040.5	788017.3	498.30 µg/L	498.30 ppb	09:58:41
3	Cd 226.502†	17514.4	18635.9	492.97 µg/L	492.97 ppb	09:58:47
3	Co 228.616†	9700.6	10337.5	497.21 µg/L	497.21 ppb	09:58:47
3	Cr 267.716†	22418.7	23847.8	497.59 µg/L	497.59 ppb	09:58:47
3	Cu 324.752†	71220.8	71986.6	507.58 µg/L	507.58 ppb	09:58:47
3	Mn 257.610†	150021.8	158986.2	505.20 µg/L	505.20 ppb	09:58:41
3	Mo 202.031†	4118.9	4366.8	487.37 µg/L	487.37 ppb	09:59:08
3	Ni 231.604†	8910.8	9130.6	497.42 µg/L	497.42 ppb	09:58:47
3	P 214.914†	1283.2	1151.9	2445.0 µg/L	2445.0 ppb	09:59:08
3	Pb 220.353†	1895.6	1952.0	495.50 µg/L	495.50 ppb	09:59:08
3	S 181.975 Axial†	205.7	193.6	993.25 µg/L	993.25 ppb	09:59:08
3	Sb 206.836†	484.7	492.4	487.18 µg/L	487.18 ppb	09:59:08
3	Se 196.026†	332.1	337.4	493.59 µg/L	493.59 ppb	09:59:08
3	SiO2†	28848.0	28547.3	5451.5 µg/L	5451.5 ppb	09:58:47
3	Si 251.611†	31812.0	33316.0	2504.7 µg/L	2504.7 ppb	09:58:47
3	Sn 189.927†	954.6	987.7	484.26 µg/L	484.26 ppb	09:59:08
3	Ti 334.940†	214541.2	226323.7	501.40 µg/L	501.40 ppb	09:58:41
3	Tl 190.801†	285.7	323.8	491.02 µg/L	491.02 ppb	09:59:08
3	U 409.014†	5908.1	5573.1	522.52 µg/L	522.52 ppb	09:58:47
3	V 292.402†	41841.4	44371.4	504.88 µg/L	504.88 ppb	09:58:47
3	Zn 213.857†	18282.7	18797.8	499.64 µg/L	499.64 ppb	09:58:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1936406.4	94.149	%	0.3150				0.33%
Sc RADIAL	106856.2	95.0	%	0.75				0.79%
Y 371.029	1173210.6	93.680	%	0.3306				0.35%
Ag 328.068†	56516.8	508.61	µg/L	1.485	508.61	ppb	1.485	0.29%
QC value within limits for Ag 328.068 Recovery = 101.72%								
Al 396.153Radial†	10277.2	5175.1	µg/L	21.59	5175.1	ppb	21.59	0.42%
QC value within limits for Al 396.153Radial Recovery = 103.50%								
As 188.979†	261.1	496.62	µg/L	11.500	496.62	ppb	11.500	2.32%
QC value within limits for As 188.979 Recovery = 99.32%								
B 249.677†	11042.0	488.43	µg/L	1.979	488.43	ppb	1.979	0.41%
QC value within limits for B 249.677 Recovery = 97.69%								
Ba 233.527†	19834.2	499.23	µg/L	1.808	499.23	ppb	1.808	0.36%
QC value within limits for Ba 233.527 Recovery = 99.85%								
Be 313.107†	787551.2	498.01	µg/L	0.896	498.01	ppb	0.896	0.18%
QC value within limits for Be 313.107 Recovery = 99.60%								
Ca 317.933Radial†	12358.1	4905.6	µg/L	49.51	4905.6	ppb	49.51	1.01%
QC value within limits for Ca 317.933Radial Recovery = 98.11%								
Cd 226.502†	18581.7	491.53	µg/L	2.360	491.53	ppb	2.360	0.48%
QC value within limits for Cd 226.502 Recovery = 98.31%								
Co 228.616†	10334.5	497.08	µg/L	1.780	497.08	ppb	1.780	0.36%

```
   QC value within limits for Co 228.616  Recovery = 99.42%
Cr 267.716†            23820.2      497.01 µg/L        1.435      497.01 ppb          1.435   0.29%
   QC value within limits for Cr 267.716  Recovery = 99.40%
Cu 324.752†            71987.1      507.60 µg/L        1.551      507.60 ppb          1.551   0.31%
   QC value within limits for Cu 324.752  Recovery = 101.52%
Fe 238.204 Radial†       999.5      5266.6 µg/L       56.02      5266.6 ppb         56.02   1.06%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.33%
K 766.490 Radial†       9435.3      5115.8 µg/L       44.41      5115.8 ppb         44.41   0.87%
   QC value within limits for K 766.490 Radial  Recovery = 102.32%
Mg 279.077 IEC†          926.2      5141.6 µg/L       46.88      5141.6 ppb         46.88   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.83%
Mn 257.610†           158991.4      505.23 µg/L        0.920      505.23 ppb          0.920   0.18%
   QC value within limits for Mn 257.610  Recovery = 101.05%
Mo 202.031†             4413.4      492.56 µg/L        4.935      492.56 ppb          4.935   1.00%
   QC value within limits for Mo 202.031  Recovery = 98.51%
Na 589.592 Radial†     36553.3       10142 µg/L         43.4       10142 ppb           43.4   0.43%
   QC value within limits for Na 589.592 Radial  Recovery = 101.42%
Ni 231.604†             9139.3      497.89 µg/L        0.773      497.89 ppb          0.773   0.16%
   QC value within limits for Ni 231.604  Recovery = 99.58%
P 214.914†              1165.8      2475.1 µg/L       26.16      2475.1 ppb         26.16   1.06%
   QC value within limits for P 214.914  Recovery = 99.01%
Pb 220.353†             1962.0      498.05 µg/L        2.240      498.05 ppb          2.240   0.45%
   QC value within limits for Pb 220.353  Recovery = 99.61%
S 181.975 Axial†         197.9      1015.5 µg/L       22.28      1015.5 ppb         22.28   2.19%
   QC value within limits for S 181.975 Axial  Recovery = 101.55%
Sb 206.836†              500.5      495.17 µg/L        6.931      495.17 ppb          6.931   1.40%
   QC value within limits for Sb 206.836  Recovery = 99.03%
Se 196.026†              338.1      494.76 µg/L        5.730      494.76 ppb          5.730   1.16%
   QC value within limits for Se 196.026  Recovery = 98.95%
SiO2†                   28498.2      5442.1 µg/L       16.43      5442.1 ppb         16.43   0.30%
   QC value within limits for SiO2  Recovery = 101.77%
Si 251.611†             33261.0      2500.2 µg/L       10.38      2500.2 ppb         10.38   0.42%
   QC value within limits for Si 251.611  Recovery = 100.01%
Sn 189.927†              998.8      489.69 µg/L        5.041      489.69 ppb          5.041   1.03%
   QC value within limits for Sn 189.927  Recovery = 97.94%
Sr 421.552†             89358.5      503.35 µg/L        1.287      503.35 ppb          1.287   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.67%
Ti 334.940†            226298.2      501.34 µg/L        0.776      501.34 ppb          0.776   0.15%
   QC value within limits for Ti 334.940  Recovery = 100.27%
Tl 190.801†              327.5      496.67 µg/L        8.064      496.67 ppb          8.064   1.62%
   QC value within limits for Tl 190.801  Recovery = 99.33%
U 409.014†              5488.9      514.60 µg/L        6.882      514.60 ppb          6.882   1.34%
   QC value within limits for U 409.014  Recovery = 102.92%
V 292.402†              44341.6      504.58 µg/L        1.633      504.58 ppb          1.633   0.32%
   QC value within limits for V 292.402  Recovery = 100.92%
Zn 213.857†             18775.6      499.04 µg/L        1.927      499.04 ppb          1.927   0.39%
   QC value within limits for Zn 213.857  Recovery = 99.81%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 09:59:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104773.5	104773.5	93.1	%			09:59:49
1	Al 396.153Radial†	242.8	30.9	15.568	µg/L	15.568	ppb	09:59:49
1	Ca 317.933Radial†	394.6	-71.9	-28.524	µg/L	-28.524	ppb	10:00:09
1	Fe 238.204 Radial†	15.0	5.0	26.022	µg/L	26.022	ppb	10:00:09
1	K 766.490 Radial†	580.2	-72.0	-39.046	µg/L	-39.046	ppb	09:59:49
1	Mg 279.077 IEC†	12.0	-6.9	-38.485	µg/L	-38.485	ppb	10:00:09
1	Na 589.592 Radial†	-622.8	35.4	9.8091	µg/L	9.8091	ppb	09:59:49
1	Sr 421.552†	-8.2	55.0	0.3096	µg/L	0.3096	ppb	09:59:49
1	Sc 361.383	1927013.2	1927013.2	93.692	%			10:01:11
1	Y 371.029	1172783.1	1172783.1	93.646	%			10:01:11
1	Ag 328.068†	-85.7	-63.2	-0.5601	µg/L	-0.5601	ppb	10:01:17
1	As 188.979†	0.3	-2.2	-4.1517	µg/L	-4.1517	ppb	10:01:37
1	B 249.677†	141.5	-4.6	-0.2136	µg/L	-0.2136	ppb	10:01:37
1	Ba 233.527†	-70.5	5.4	0.1369	µg/L	0.1369	ppb	10:01:37
1	Be 313.107†	3721.1	360.1	0.2277	µg/L	0.2277	ppb	10:01:17
1	Cd 226.502†	-91.0	3.8	0.1046	µg/L	0.1046	ppb	10:01:37
1	Co 228.616†	-62.8	4.7	0.2262	µg/L	0.2262	ppb	10:01:37
1	Cr 267.716†	-89.1	27.7	0.5767	µg/L	0.5767	ppb	10:01:37
1	Cu 324.752†	3135.5	-37.8	-0.2602	µg/L	-0.2602	ppb	10:01:17
1	Mn 257.610†	-119.3	95.4	0.3059	µg/L	0.3059	ppb	10:01:37
1	Mo 202.031†	0.6	8.6	0.9583	µg/L	0.9583	ppb	10:01:37
1	Ni 231.604†	269.6	-11.6	-0.6341	µg/L	-0.6341	ppb	10:01:37
1	P 214.914†	210.6	18.7	40.692	µg/L	40.692	ppb	10:01:37
1	Pb 220.353†	59.3	9.2	2.3273	µg/L	2.3273	ppb	10:01:37
1	S 181.975 Axial†	25.7	3.4	17.654	µg/L	17.654	ppb	10:01:37
1	Sb 206.836†	23.7	4.8	4.7379	µg/L	4.7379	ppb	10:01:37
1	Se 196.026†	9.4	-4.0	-5.8435	µg/L	-5.8435	ppb	10:01:37
1	SiO2†	2017.6	171.8	32.809	µg/L	32.809	ppb	10:01:17
1	Si 251.611†	412.7	90.8	6.9475	µg/L	6.9475	ppb	10:01:37
1	Sn 189.927†	20.8	-0.3	-0.1510	µg/L	-0.1510	ppb	10:01:37
1	Ti 334.940†	838.6	176.2	0.3921	µg/L	0.3921	ppb	10:01:17
1	Tl 190.801†	-21.8	-1.8	-2.7488	µg/L	-2.7488	ppb	10:01:37
1	U 409.014†	728.2	98.0	9.1978	µg/L	9.1978	ppb	10:01:17
1	V 292.402†	-59.3	28.7	0.3472	µg/L	0.3472	ppb	10:01:17
1	Zn 213.857†	531.3	16.9	0.4555	µg/L	0.4555	ppb	10:01:37
2	Sc RADIAL	105663.4	105663.4	93.9	%			10:00:15
2	Al 396.153Radial†	213.8	-2.2	-1.1507	µg/L	-1.1507	ppb	10:00:15
2	Ca 317.933Radial†	398.6	-71.2	-28.254	µg/L	-28.254	ppb	10:00:35
2	Fe 238.204 Radial†	13.2	2.9	15.194	µg/L	15.194	ppb	10:00:35
2	K 766.490 Radial†	683.3	32.5	17.648	µg/L	17.648	ppb	10:00:15
2	Mg 279.077 IEC†	14.7	-4.2	-23.122	µg/L	-23.122	ppb	10:00:35
2	Na 589.592 Radial†	-642.8	19.6	5.4450	µg/L	5.4450	ppb	10:00:15
2	Sr 421.552†	-39.6	21.6	0.1218	µg/L	0.1218	ppb	10:00:15
2	Sc 361.383	1937661.4	1937661.4	94.210	%			10:01:43
2	Y 371.029	1179396.0	1179396.0	94.174	%			10:01:43
2	Ag 328.068†	-89.4	-66.6	-0.5912	µg/L	-0.5912	ppb	10:01:49
2	As 188.979†	1.8	-0.6	-1.1844	µg/L	-1.1844	ppb	10:02:09
2	B 249.677†	156.6	10.5	0.4633	µg/L	0.4633	ppb	10:02:09
2	Ba 233.527†	-84.2	-8.7	-0.2174	µg/L	-0.2174	ppb	10:02:09
2	Be 313.107†	3711.1	327.6	0.2071	µg/L	0.2071	ppb	10:01:49
2	Cd 226.502†	-89.5	5.9	0.1556	µg/L	0.1556	ppb	10:02:09
2	Co 228.616†	-74.3	-7.1	-0.3430	µg/L	-0.3430	ppb	10:02:09
2	Cr 267.716†	-104.0	12.4	0.2588	µg/L	0.2588	ppb	10:02:09
2	Cu 324.752†	3175.9	-13.2	-0.0895	µg/L	-0.0895	ppb	10:01:49
2	Mn 257.610†	-133.5	80.9	0.2587	µg/L	0.2587	ppb	10:02:09
2	Mo 202.031†	-2.0	5.8	0.6464	µg/L	0.6464	ppb	10:02:09
2	Ni 231.604†	275.6	-6.9	-0.3762	µg/L	-0.3762	ppb	10:02:09
2	P 214.914†	213.9	21.1	45.736	µg/L	45.736	ppb	10:02:09
2	Pb 220.353†	62.8	12.5	3.1775	µg/L	3.1775	ppb	10:02:09

2	S 181.975 Axial†	27.5	5.2	26.676	µg/L	26.676 ppb	10:02:09
2	Sb 206.836†	14.3	-5.4	-5.3276	µg/L	-5.3276 ppb	10:02:09
2	Se 196.026†	3.0	-10.9	-15.841	µg/L	-15.841 ppb	10:02:09
2	SiO2†	1987.3	127.8	24.405	µg/L	24.405 ppb	10:01:49
2	Si 251.611†	384.7	58.7	4.4810	µg/L	4.4810 ppb	10:02:09
2	Sn 189.927†	20.1	-1.1	-0.5509	µg/L	-0.5509 ppb	10:02:09
2	Ti 334.940†	846.2	179.3	0.3990	µg/L	0.3990 ppb	10:01:49
2	Tl 190.801†	-18.4	1.9	2.8127	µg/L	2.8127 ppb	10:02:09
2	U 409.014†	662.8	24.3	2.2795	µg/L	2.2795 ppb	10:01:49
2	V 292.402†	-59.0	29.4	0.3403	µg/L	0.3403 ppb	10:01:49
2	Zn 213.857†	522.5	4.5	0.1210	µg/L	0.1210 ppb	10:02:09
3	Sc RADIAL	105429.6	105429.6	93.7	%		10:00:40
3	Al 396.153Radial†	236.8	22.8	11.517	µg/L	11.517 ppb	10:00:40
3	Ca 317.933Radial†	386.0	-83.7	-33.212	µg/L	-33.212 ppb	10:01:01
3	Fe 238.204 Radial†	12.9	2.6	13.533	µg/L	13.533 ppb	10:01:01
3	K 766.490 Radial†	635.2	-17.1	-9.2919	µg/L	-9.2919 ppb	10:00:40
3	Mg 279.077 IEC†	16.7	-2.0	-11.257	µg/L	-11.257 ppb	10:01:01
3	Na 589.592 Radial†	-656.5	3.5	0.9707	µg/L	0.9707 ppb	10:00:40
3	Sr 421.552†	-73.9	-15.1	-0.0851	µg/L	-0.0851 ppb	10:00:40
3	Sc 361.383	1951055.2	1951055.2	94.861	%		10:02:15
3	Y 371.029	1186776.5	1186776.5	94.763	%		10:02:15
3	Ag 328.068†	-164.3	-144.8	-1.2902	µg/L	-1.2902 ppb	10:02:21
3	As 188.979†	1.4	-1.0	-1.8689	µg/L	-1.8689 ppb	10:02:42
3	B 249.677†	139.7	-8.4	-0.3770	µg/L	-0.3770 ppb	10:02:42
3	Ba 233.527†	-80.0	-3.7	-0.0910	µg/L	-0.0910 ppb	10:02:42
3	Be 313.107†	3574.0	156.1	0.0986	µg/L	0.0986 ppb	10:02:21
3	Cd 226.502†	-85.0	11.3	0.2990	µg/L	0.2990 ppb	10:02:42
3	Co 228.616†	-73.2	-5.4	-0.2604	µg/L	-0.2604 ppb	10:02:42
3	Cr 267.716†	-101.6	15.7	0.3277	µg/L	0.3277 ppb	10:02:42
3	Cu 324.752†	3128.3	-86.6	-0.6062	µg/L	-0.6062 ppb	10:02:21
3	Mn 257.610†	-133.1	82.3	0.2630	µg/L	0.2630 ppb	10:02:42
3	Mo 202.031†	-7.7	-0.2	-0.0244	µg/L	-0.0244 ppb	10:02:42
3	Ni 231.604†	269.0	-15.9	-0.8640	µg/L	-0.8640 ppb	10:02:42
3	P 214.914†	219.3	25.2	54.738	µg/L	54.738 ppb	10:02:42
3	Pb 220.353†	69.9	19.5	4.9506	µg/L	4.9506 ppb	10:02:42
3	S 181.975 Axial†	26.8	4.2	21.712	µg/L	21.712 ppb	10:02:42
3	Sb 206.836†	12.5	-7.3	-7.2839	µg/L	-7.2839 ppb	10:02:42
3	Se 196.026†	11.1	-2.4	-3.5096	µg/L	-3.5096 ppb	10:02:42
3	SiO2†	2011.7	139.0	26.549	µg/L	26.549 ppb	10:02:21
3	Si 251.611†	400.7	72.7	5.5258	µg/L	5.5258 ppb	10:02:42
3	Sn 189.927†	23.2	2.0	0.9652	µg/L	0.9652 ppb	10:02:42
3	Ti 334.940†	828.0	153.9	0.3431	µg/L	0.3431 ppb	10:02:21
3	Tl 190.801†	-17.9	2.6	3.9056	µg/L	3.9056 ppb	10:02:42
3	U 409.014†	666.9	23.8	2.2285	µg/L	2.2285 ppb	10:02:21
3	V 292.402†	-57.7	31.2	0.3559	µg/L	0.3559 ppb	10:02:21
3	Zn 213.857†	520.1	-1.9	-0.0462	µg/L	-0.0462 ppb	10:02:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1938576.6	94.255	%	0.5857				0.62%
Sc RADIAL	105288.8	93.6	%	0.41				0.44%
Y 371.029	1179651.8	94.194	%	0.5590				0.59%
Ag 328.068†	-91.5	-0.8139	µg/L	0.41283	-0.8139	ppb	0.41283	50.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.1	8.6450	µg/L	8.72175	8.6450	ppb	8.72175	100.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-2.4016	µg/L	1.55374	-2.4016	ppb	1.55374	64.69%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-0.8	-0.0424	µg/L	0.44551	-0.0424	ppb	0.44551	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.3	-0.0572	µg/L	0.17956	-0.0572	ppb	0.17956	313.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	281.3	0.1778	µg/L	0.06936	0.1778	ppb	0.06936	39.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-75.6	-29.997	µg/L	2.7879	-29.997	ppb	2.7879	9.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.0	0.1864	µg/L	0.10081	0.1864	ppb	0.10081	54.09%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.6	-0.1257	µg/L	0.30758	-0.1257	ppb	0.30758	244.64%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.6      0.3878 µg/L       0.16726      0.3878 ppb        0.16726  43.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -45.8     -0.3186 µg/L       0.26326     -0.3186 ppb        0.26326  82.62%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          3.5      18.250 µg/L        6.7821      18.250 ppb         6.7821  37.16%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -18.9     -10.230 µg/L       28.3584     -10.230 ppb        28.3584 277.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -4.4     -24.288 µg/L       13.6515     -24.288 ppb        13.6515  56.21%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                86.2      0.2759 µg/L       0.02610      0.2759 ppb        0.02610   9.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.7      0.5268 µg/L       0.50218      0.5268 ppb        0.50218  95.33%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         19.5      5.4082 µg/L       4.41931      5.4082 ppb        4.41931  81.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -11.5     -0.6248 µg/L       0.24401     -0.6248 ppb        0.24401  39.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 21.7      47.056 µg/L        7.1153      47.056 ppb         7.1153  15.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                13.8      3.4851 µg/L       1.33839      3.4851 ppb        1.33839  38.40%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            4.3      22.014 µg/L        4.5185      22.014 ppb         4.5185  20.53%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -2.6     -2.6245 µg/L       6.45063     -2.6245 ppb        6.45063 245.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.8     -8.3980 µg/L       6.55054     -8.3980 ppb        6.55054  78.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     146.2      27.921 µg/L        4.3669      27.921 ppb         4.3669  15.64%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                74.1      5.6514 µg/L       1.23802      5.6514 ppb        1.23802  21.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.2      0.0878 µg/L       0.78575      0.0878 ppb        0.78575 895.36%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                20.5      0.1154 µg/L       0.19742      0.1154 ppb        0.19742 171.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               169.8      0.3781 µg/L       0.03047      0.3781 ppb        0.03047   8.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      1.3232 µg/L       3.56849      1.3232 ppb        3.56849 269.70%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 48.7      4.5686 µg/L       4.00908      4.5686 ppb        4.00908  87.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 29.7      0.3478 µg/L       0.00779      0.3478 ppb        0.00779   2.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 6.5      0.1768 µg/L       0.25548      0.1768 ppb        0.25548 144.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 10:33:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107036.0	107036.0	95.2	%			10:33:56
1	Al 396.153Radial†	10264.5	10556.8	5316.2	µg/L	5316.2	ppb	10:33:56
1	Ca 317.933Radial†	12330.4	12462.1	4946.9	µg/L	4946.9	ppb	10:34:17
1	Fe 238.204 Radial†	980.3	1019.0	5369.3	µg/L	5369.3	ppb	10:34:17
1	K 766.490 Radial†	9630.1	9425.1	5110.2	µg/L	5110.2	ppb	10:33:56
1	Mg 279.077 IEC†	906.8	933.1	5180.3	µg/L	5180.3	ppb	10:34:17
1	Na 589.592 Radial†	34277.5	36724.8	10190	µg/L	10190	ppb	10:33:56
1	Sr 421.552†	85107.1	89499.7	504.15	µg/L	504.15	ppb	10:33:56
1	Sc 361.383	1926894.3	1926894.3	93.687	%			10:35:20
1	Y 371.029	1166554.9	1166554.9	93.149	%			10:35:20
1	Ag 328.068†	53665.1	57309.8	515.75	µg/L	515.75	ppb	10:35:25
1	As 188.979†	248.9	263.2	500.59	µg/L	500.59	ppb	10:35:46
1	B 249.677†	10670.6	11234.0	496.92	µg/L	496.92	ppb	10:35:25
1	Ba 233.527†	18781.1	20127.4	506.61	µg/L	506.61	ppb	10:35:25
1	Be 313.107†	749703.8	796613.4	503.73	µg/L	503.73	ppb	10:35:20
1	Cd 226.502†	17577.2	18862.5	498.96	µg/L	498.96	ppb	10:35:25
1	Co 228.616†	9724.6	10451.6	502.70	µg/L	502.70	ppb	10:35:25
1	Cr 267.716†	22560.3	24203.3	505.01	µg/L	505.01	ppb	10:35:25
1	Cu 324.752†	71590.1	73030.1	514.96	µg/L	514.96	ppb	10:35:25
1	Mn 257.610†	151911.4	162371.1	515.97	µg/L	515.97	ppb	10:35:20
1	Mo 202.031†	4172.8	4462.0	497.99	µg/L	497.99	ppb	10:35:46
1	Ni 231.604†	8979.2	9284.9	505.82	µg/L	505.82	ppb	10:35:25
1	P 214.914†	1305.3	1187.2	2520.8	µg/L	2520.8	ppb	10:35:46
1	Pb 220.353†	1922.3	1997.7	507.12	µg/L	507.12	ppb	10:35:46
1	S 181.975 Axial†	208.7	198.7	1019.6	µg/L	1019.6	ppb	10:35:46
1	Sb 206.836†	495.5	508.3	502.97	µg/L	502.97	ppb	10:35:46
1	Se 196.026†	342.0	350.9	513.43	µg/L	513.43	ppb	10:35:46
1	SiO2†	28973.1	28943.9	5527.2	µg/L	5527.2	ppb	10:35:25
1	Si 251.611†	31972.1	33777.0	2539.0	µg/L	2539.0	ppb	10:35:25
1	Sn 189.927†	971.2	1014.2	497.22	µg/L	497.22	ppb	10:35:46
1	Ti 334.940†	216621.1	230499.9	510.65	µg/L	510.65	ppb	10:35:20
1	Tl 190.801†	289.6	330.5	501.21	µg/L	501.21	ppb	10:35:46
1	U 409.014†	5866.7	5582.8	523.41	µg/L	523.41	ppb	10:35:25
1	V 292.402†	42061.0	44987.3	511.92	µg/L	511.92	ppb	10:35:25
1	Zn 213.857†	18286.6	18968.8	504.15	µg/L	504.15	ppb	10:35:25
2	Sc RADIAL	107989.3	107989.3	96.0	%			10:34:22
2	Al 396.153Radial†	10301.3	10499.9	5287.4	µg/L	5287.4	ppb	10:34:22
2	Ca 317.933Radial†	12461.9	12484.7	4955.9	µg/L	4955.9	ppb	10:34:43
2	Fe 238.204 Radial†	984.2	1013.9	5342.8	µg/L	5342.8	ppb	10:34:43
2	K 766.490 Radial†	9784.9	9497.0	5149.2	µg/L	5149.2	ppb	10:34:22
2	Mg 279.077 IEC†	919.6	938.0	5207.1	µg/L	5207.1	ppb	10:34:43
2	Na 589.592 Radial†	34565.2	36706.5	10185	µg/L	10185	ppb	10:34:22
2	Sr 421.552†	86625.6	90291.8	508.61	µg/L	508.61	ppb	10:34:22
2	Sc 361.383	1926617.9	1926617.9	93.673	%			10:35:52
2	Y 371.029	1165343.1	1165343.1	93.052	%			10:35:52
2	Ag 328.068†	53477.5	57117.7	514.02	µg/L	514.02	ppb	10:35:57
2	As 188.979†	251.1	265.6	505.13	µg/L	505.13	ppb	10:36:18
2	B 249.677†	10595.2	11155.1	493.43	µg/L	493.43	ppb	10:35:57
2	Ba 233.527†	18765.3	20113.4	506.25	µg/L	506.25	ppb	10:35:57
2	Be 313.107†	745689.5	792442.8	501.10	µg/L	501.10	ppb	10:35:52
2	Cd 226.502†	17493.0	18775.3	496.65	µg/L	496.65	ppb	10:35:57
2	Co 228.616†	9711.0	10438.6	502.08	µg/L	502.08	ppb	10:35:57
2	Cr 267.716†	22469.7	24110.1	503.06	µg/L	503.06	ppb	10:35:57
2	Cu 324.752†	71394.6	72832.3	513.56	µg/L	513.56	ppb	10:35:57
2	Mn 257.610†	150952.1	161370.3	512.79	µg/L	512.79	ppb	10:35:52
2	Mo 202.031†	4177.4	4467.4	498.59	µg/L	498.59	ppb	10:36:18
2	Ni 231.604†	8898.3	9199.9	501.20	µg/L	501.20	ppb	10:35:57
2	P 214.914†	1306.5	1188.8	2524.3	µg/L	2524.3	ppb	10:36:18
2	Pb 220.353†	1908.6	1983.4	503.49	µg/L	503.49	ppb	10:36:18

2	S 181.975 Axial†	208.7	198.7	1019.4 µg/L	1019.4 ppb	10:36:18
2	Sb 206.836†	491.5	504.2	498.83 µg/L	498.83 ppb	10:36:18
2	Se 196.026†	326.1	334.0	488.79 µg/L	488.79 ppb	10:36:18
2	SiO2†	28888.7	28858.2	5510.9 µg/L	5510.9 ppb	10:35:57
2	Si 251.611†	31796.6	33594.6	2525.2 µg/L	2525.2 ppb	10:35:57
2	Sn 189.927†	970.5	1013.6	496.91 µg/L	496.91 ppb	10:36:18
2	Ti 334.940†	215418.0	229248.7	507.88 µg/L	507.88 ppb	10:35:52
2	Tl 190.801†	290.8	331.9	503.26 µg/L	503.26 ppb	10:36:18
2	U 409.014†	5820.2	5534.1	518.83 µg/L	518.83 ppb	10:35:57
2	V 292.402†	41893.7	44815.2	509.97 µg/L	509.97 ppb	10:35:57
2	Zn 213.857†	18243.8	18925.8	503.03 µg/L	503.03 ppb	10:35:57
3	Sc RADIAL	108045.9	108045.9	96.1 %		10:34:48
3	Al 396.153Radial†	10255.5	10446.6	5260.5 µg/L	5260.5 ppb	10:34:48
3	Ca 317.933Radial†	12453.2	12468.8	4949.6 µg/L	4949.6 ppb	10:35:09
3	Fe 238.204 Radial†	986.6	1015.9	5353.4 µg/L	5353.4 ppb	10:35:09
3	K 766.490 Radial†	9770.1	9476.2	5138.0 µg/L	5138.0 ppb	10:34:48
3	Mg 279.077 IEC†	911.9	929.5	5160.0 µg/L	5160.0 ppb	10:35:09
3	Na 589.592 Radial†	34625.0	36750.0	10197 µg/L	10197 ppb	10:34:48
3	Sr 421.552†	86280.4	89885.0	506.32 µg/L	506.32 ppb	10:34:48
3	Sc 361.383	1920586.2	1920586.2	93.380 %		10:36:24
3	Y 371.029	1162251.6	1162251.6	92.805 %		10:36:24
3	Ag 328.068†	53783.5	57624.7	518.58 µg/L	518.58 ppb	10:36:30
3	As 188.979†	242.4	257.1	489.04 µg/L	489.04 ppb	10:36:50
3	B 249.677†	10645.6	11244.6	497.39 µg/L	497.39 ppb	10:36:30
3	Ba 233.527†	18848.7	20265.6	510.08 µg/L	510.08 ppb	10:36:30
3	Be 313.107†	744062.2	793200.1	501.58 µg/L	501.58 ppb	10:36:24
3	Cd 226.502†	17609.6	18958.9	501.51 µg/L	501.51 ppb	10:36:30
3	Co 228.616†	9783.8	10549.2	507.40 µg/L	507.40 ppb	10:36:30
3	Cr 267.716†	22591.8	24316.2	507.36 µg/L	507.36 ppb	10:36:30
3	Cu 324.752†	71859.6	73569.6	518.75 µg/L	518.75 ppb	10:36:30
3	Mn 257.610†	150460.5	161349.9	512.72 µg/L	512.72 ppb	10:36:24
3	Mo 202.031†	4167.5	4470.9	498.98 µg/L	498.98 ppb	10:36:50
3	Ni 231.604†	8989.0	9326.9	508.11 µg/L	508.11 ppb	10:36:30
3	P 214.914†	1293.5	1179.2	2502.9 µg/L	2502.9 ppb	10:36:50
3	Pb 220.353†	1923.2	2005.4	509.07 µg/L	509.07 ppb	10:36:50
3	S 181.975 Axial†	210.5	201.4	1033.4 µg/L	1033.4 ppb	10:36:50
3	Sb 206.836†	493.9	508.4	502.98 µg/L	502.98 ppb	10:36:50
3	Se 196.026†	331.3	340.7	498.56 µg/L	498.56 ppb	10:36:50
3	SiO2†	29125.0	29208.1	5577.7 µg/L	5577.7 ppb	10:36:30
3	Si 251.611†	32019.2	33939.5	2551.4 µg/L	2551.4 ppb	10:36:30
3	Sn 189.927†	975.6	1022.3	501.15 µg/L	501.15 ppb	10:36:50
3	Ti 334.940†	214834.2	229345.7	508.09 µg/L	508.09 ppb	10:36:24
3	Tl 190.801†	297.1	339.6	514.86 µg/L	514.86 ppb	10:36:50
3	U 409.014†	5912.5	5652.4	529.95 µg/L	529.95 ppb	10:36:30
3	V 292.402†	42194.4	45277.6	515.21 µg/L	515.21 ppb	10:36:30
3	Zn 213.857†	18373.2	19125.6	508.34 µg/L	508.34 ppb	10:36:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1924699.5	93.580	%	0.1733				0.19%
Sc RADIAL	107690.4	95.7	%	0.50				0.53%
Y 371.029	1164716.5	93.002	%	0.1772				0.19%
Ag 328.068†	57350.7	516.11	µg/L	2.304	516.11	ppb	2.304	0.45%
QC value within limits for Ag 328.068 Recovery = 103.22%								
Al 396.153Radial†	10501.1	5288.1	µg/L	27.87	5288.1	ppb	27.87	0.53%
QC value within limits for Al 396.153Radial Recovery = 105.76%								
As 188.979†	262.0	498.26	µg/L	8.298	498.26	ppb	8.298	1.67%
QC value within limits for As 188.979 Recovery = 99.65%								
B 249.677†	11211.2	495.91	µg/L	2.166	495.91	ppb	2.166	0.44%
QC value within limits for B 249.677 Recovery = 99.18%								
Ba 233.527†	20168.8	507.65	µg/L	2.118	507.65	ppb	2.118	0.42%
QC value within limits for Ba 233.527 Recovery = 101.53%								
Be 313.107†	794085.5	502.14	µg/L	1.405	502.14	ppb	1.405	0.28%
QC value within limits for Be 313.107 Recovery = 100.43%								
Ca 317.933Radial†	12471.9	4950.8	µg/L	4.62	4950.8	ppb	4.62	0.09%
QC value within limits for Ca 317.933Radial Recovery = 99.02%								
Cd 226.502†	18865.6	499.04	µg/L	2.433	499.04	ppb	2.433	0.49%
QC value within limits for Cd 226.502 Recovery = 99.81%								
Co 228.616†	10479.8	504.06	µg/L	2.908	504.06	ppb	2.908	0.58%

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   QC value within limits for Co 228.616  Recovery = 100.81%
Cr 267.716†            24209.9      505.14 µg/L        2.154      505.14 ppb          2.154   0.43%
   QC value within limits for Cr 267.716  Recovery = 101.03%
Cu 324.752†            73144.0      515.75 µg/L        2.685      515.75 ppb          2.685   0.52%
   QC value within limits for Cu 324.752  Recovery = 103.15%
Fe 238.204 Radial†      1016.3      5355.2 µg/L       13.34      5355.2 ppb         13.34   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.10%
K 766.490 Radial†       9466.1      5132.5 µg/L       20.07      5132.5 ppb         20.07   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 102.65%
Mg 279.077 IEC†          933.5      5182.4 µg/L       23.64      5182.4 ppb         23.64   0.46%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.65%
Mn 257.610†           161697.1      513.82 µg/L        1.854      513.82 ppb          1.854   0.36%
   QC value within limits for Mn 257.610  Recovery = 102.76%
Mo 202.031†             4466.8      498.52 µg/L        0.502      498.52 ppb          0.502   0.10%
   QC value within limits for Mo 202.031  Recovery = 99.70%
Na 589.592 Radial†     36727.1       10190 µg/L          6.1       10190 ppb            6.1   0.06%
   QC value within limits for Na 589.592 Radial  Recovery = 101.90%
Ni 231.604†             9270.6      505.04 µg/L        3.524      505.04 ppb          3.524   0.70%
   QC value within limits for Ni 231.604  Recovery = 101.01%
P 214.914†              1185.1      2516.0 µg/L       11.46      2516.0 ppb         11.46   0.46%
   QC value within limits for P 214.914  Recovery = 100.64%
Pb 220.353†             1995.5      506.56 µg/L        2.830      506.56 ppb          2.830   0.56%
   QC value within limits for Pb 220.353  Recovery = 101.31%
S 181.975 Axial†         199.6      1024.1 µg/L        8.01      1024.1 ppb          8.01   0.78%
   QC value within limits for S 181.975 Axial  Recovery = 102.41%
Sb 206.836†              507.0      501.60 µg/L        2.392      501.60 ppb          2.392   0.48%
   QC value within limits for Sb 206.836  Recovery = 100.32%
Se 196.026†              341.9      500.26 µg/L       12.406      500.26 ppb         12.406   2.48%
   QC value within limits for Se 196.026  Recovery = 100.05%
SiO2†                  29003.4      5538.6 µg/L       34.83      5538.6 ppb         34.83   0.63%
   QC value within limits for SiO2  Recovery = 103.57%
Si 251.611†            33770.3      2538.5 µg/L       13.13      2538.5 ppb         13.13   0.52%
   QC value within limits for Si 251.611  Recovery = 101.54%
Sn 189.927†             1016.7      498.43 µg/L        2.360      498.43 ppb          2.360   0.47%
   QC value within limits for Sn 189.927  Recovery = 99.69%
Sr 421.552†            89892.2      506.36 µg/L        2.231      506.36 ppb          2.231   0.44%
   QC value within limits for Sr 421.552  Recovery = 101.27%
Ti 334.940†           229698.1      508.87 µg/L        1.543      508.87 ppb          1.543   0.30%
   QC value within limits for Ti 334.940  Recovery = 101.77%
Tl 190.801†              334.0      506.44 µg/L        7.359      506.44 ppb          7.359   1.45%
   QC value within limits for Tl 190.801  Recovery = 101.29%
U 409.014†              5589.8      524.06 µg/L        5.585      524.06 ppb          5.585   1.07%
   QC value within limits for U 409.014  Recovery = 104.81%
V 292.402†             45026.7      512.36 µg/L        2.646      512.36 ppb          2.646   0.52%
   QC value within limits for V 292.402  Recovery = 102.47%
Zn 213.857†            19006.7      505.17 µg/L        2.798      505.17 ppb          2.798   0.55%
   QC value within limits for Zn 213.857  Recovery = 101.03%
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 10:37:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	105456.7	105456.7	93.8	%			10:37:32
1	Al 396.153Radial†	256.6	43.9	22.168	µg/L	22.168	ppb	10:37:32
1	Ca 317.933Radial†	407.0	-61.3	-24.328	µg/L	-24.328	ppb	10:37:53
1	Fe 238.204 Radial†	16.5	6.4	33.738	µg/L	33.738	ppb	10:37:53
1	K 766.490 Radial†	700.8	52.7	28.558	µg/L	28.558	ppb	10:37:32
1	Mg 279.077 IEC†	15.5	-3.3	-18.370	µg/L	-18.370	ppb	10:37:53
1	Na 589.592 Radial†	-653.1	7.4	2.0469	µg/L	2.0469	ppb	10:37:32
1	Sr 421.552†	14.1	78.9	0.4442	µg/L	0.4442	ppb	10:37:32
1	Sc 361.383	1948615.0	1948615.0	94.743	%			10:38:55
1	Y 371.029	1185171.9	1185171.9	94.635	%			10:38:55
1	Ag 328.068†	-118.3	-96.5	-0.8578	µg/L	-0.8578	ppb	10:39:00
1	As 188.979†	0.9	-1.6	-2.9877	µg/L	-2.9877	ppb	10:39:21
1	B 249.677†	148.9	1.5	0.0541	µg/L	0.0541	ppb	10:39:21
1	Ba 233.527†	-73.8	2.7	0.0693	µg/L	0.0693	ppb	10:39:21
1	Be 313.107†	3783.3	381.7	0.2413	µg/L	0.2413	ppb	10:39:00
1	Cd 226.502†	-87.0	9.1	0.2421	µg/L	0.2421	ppb	10:39:21
1	Co 228.616†	-70.1	-2.2	-0.1075	µg/L	-0.1075	ppb	10:39:21
1	Cr 267.716†	-101.7	15.4	0.3207	µg/L	0.3207	ppb	10:39:21
1	Cu 324.752†	3169.7	-38.7	-0.2653	µg/L	-0.2653	ppb	10:39:00
1	Mn 257.610†	-50.1	169.8	0.5430	µg/L	0.5430	ppb	10:39:21
1	Mo 202.031†	-5.9	1.6	0.1846	µg/L	0.1846	ppb	10:39:21
1	Ni 231.604†	276.9	-7.2	-0.3909	µg/L	-0.3909	ppb	10:39:21
1	P 214.914†	209.1	14.7	31.861	µg/L	31.861	ppb	10:39:21
1	Pb 220.353†	63.7	13.2	3.3325	µg/L	3.3325	ppb	10:39:21
1	S 181.975 Axial†	25.9	3.3	16.794	µg/L	16.794	ppb	10:39:21
1	Sb 206.836†	16.6	-3.0	-2.9912	µg/L	-2.9912	ppb	10:39:21
1	Se 196.026†	13.5	0.1	0.1931	µg/L	0.1931	ppb	10:39:21
1	SiO2†	1988.4	117.1	22.354	µg/L	22.354	ppb	10:39:00
1	Si 251.611†	386.6	58.4	4.3842	µg/L	4.3842	ppb	10:39:21
1	Sn 189.927†	24.1	3.0	1.4630	µg/L	1.4630	ppb	10:39:21
1	Ti 334.940†	892.7	223.3	0.4964	µg/L	0.4964	ppb	10:39:00
1	Tl 190.801†	-18.1	2.3	3.5411	µg/L	3.5411	ppb	10:39:21
1	U 409.014†	706.9	66.9	6.2739	µg/L	6.2739	ppb	10:39:00
1	V 292.402†	-69.6	18.6	0.2233	µg/L	0.2233	ppb	10:39:00
1	Zn 213.857†	528.6	7.8	0.2077	µg/L	0.2077	ppb	10:39:21
2	Sc RADIAL	105635.2	105635.2	93.9	%			10:37:58
2	Al 396.153Radial†	251.3	37.8	19.059	µg/L	19.059	ppb	10:37:58
2	Ca 317.933Radial†	412.6	-56.1	-22.275	µg/L	-22.275	ppb	10:38:18
2	Fe 238.204 Radial†	12.9	2.5	13.360	µg/L	13.360	ppb	10:38:18
2	K 766.490 Radial†	689.5	39.3	21.323	µg/L	21.323	ppb	10:37:58
2	Mg 279.077 IEC†	11.2	-7.9	-43.802	µg/L	-43.802	ppb	10:38:18
2	Na 589.592 Radial†	-665.9	-5.1	-1.4279	µg/L	-1.4279	ppb	10:37:58
2	Sr 421.552†	-5.7	57.7	0.3249	µg/L	0.3249	ppb	10:37:58
2	Sc 361.383	1934628.3	1934628.3	94.063	%			10:39:27
2	Y 371.029	1177528.6	1177528.6	94.025	%			10:39:27
2	Ag 328.068†	-145.4	-126.3	-1.1243	µg/L	-1.1243	ppb	10:39:32
2	As 188.979†	-2.8	-5.5	-10.441	µg/L	-10.441	ppb	10:39:53
2	B 249.677†	135.0	-12.2	-0.5452	µg/L	-0.5452	ppb	10:39:53
2	Ba 233.527†	-71.3	4.9	0.1228	µg/L	0.1228	ppb	10:39:53
2	Be 313.107†	3656.2	275.5	0.1741	µg/L	0.1741	ppb	10:39:32
2	Cd 226.502†	-90.1	5.1	0.1349	µg/L	0.1349	ppb	10:39:53
2	Co 228.616†	-69.4	-2.0	-0.0986	µg/L	-0.0986	ppb	10:39:53
2	Cr 267.716†	-114.4	1.1	0.0240	µg/L	0.0240	ppb	10:39:53
2	Cu 324.752†	3130.3	-56.5	-0.3945	µg/L	-0.3945	ppb	10:39:32
2	Mn 257.610†	-49.1	170.5	0.5427	µg/L	0.5427	ppb	10:39:53
2	Mo 202.031†	-3.1	4.7	0.5203	µg/L	0.5203	ppb	10:39:53
2	Ni 231.604†	286.6	5.3	0.2880	µg/L	0.2880	ppb	10:39:53
2	P 214.914†	213.4	20.9	45.501	µg/L	45.501	ppb	10:39:53
2	Pb 220.353†	52.2	1.3	0.3385	µg/L	0.3385	ppb	10:39:53

2	S 181.975 Axial†	23.8	1.2	6.2223	µg/L	6.2223 ppb	10:39:53
2	Sb 206.836†	23.7	4.7	4.6376	µg/L	4.6376 ppb	10:39:53
2	Se 196.026†	12.8	-0.5	-0.7488	µg/L	-0.7488 ppb	10:39:53
2	SiO2†	2020.6	166.5	31.787	µg/L	31.787 ppb	10:39:32
2	Si 251.611†	391.2	66.3	4.9730	µg/L	4.9730 ppb	10:39:53
2	Sn 189.927†	24.3	3.4	1.6482	µg/L	1.6482 ppb	10:39:53
2	Ti 334.940†	947.5	288.5	0.6407	µg/L	0.6407 ppb	10:39:32
2	Tl 190.801†	-21.9	-1.9	-2.8520	µg/L	-2.8520 ppb	10:39:53
2	U 409.014†	667.3	30.3	2.8378	µg/L	2.8378 ppb	10:39:32
2	V 292.402†	-52.9	35.7	0.4116	µg/L	0.4116 ppb	10:39:32
2	Zn 213.857†	536.8	20.5	0.5494	µg/L	0.5494 ppb	10:39:53
3	Sc RADIAL	105111.7	105111.7	93.4	%		10:38:24
3	Al 396.153Radial†	284.2	74.3	37.571	µg/L	37.571 ppb	10:38:24
3	Ca 317.933Radial†	388.5	-79.7	-31.652	µg/L	-31.652 ppb	10:38:44
3	Fe 238.204 Radial†	16.6	6.6	34.398	µg/L	34.398 ppb	10:38:44
3	K 766.490 Radial†	639.5	-10.5	-5.6822	µg/L	-5.6822 ppb	10:38:24
3	Mg 279.077 IEC†	18.9	0.4	2.0033	µg/L	2.0033 ppb	10:38:44
3	Na 589.592 Radial†	-680.0	-23.7	-6.5888	µg/L	-6.5888 ppb	10:38:24
3	Sr 421.552†	-12.7	50.2	0.2826	µg/L	0.2826 ppb	10:38:24
3	Sc 361.383	1948487.9	1948487.9	94.737	%		10:39:59
3	Y 371.029	1186163.3	1186163.3	94.714	%		10:39:59
3	Ag 328.068†	-109.5	-87.3	-0.7753	µg/L	-0.7753 ppb	10:40:05
3	As 188.979†	3.3	1.0	1.8219	µg/L	1.8219 ppb	10:40:25
3	B 249.677†	146.1	-1.5	-0.0760	µg/L	-0.0760 ppb	10:40:25
3	Ba 233.527†	-71.1	5.6	0.1407	µg/L	0.1407 ppb	10:40:25
3	Be 313.107†	3710.2	304.8	0.1927	µg/L	0.1927 ppb	10:40:05
3	Cd 226.502†	-79.2	17.3	0.4603	µg/L	0.4603 ppb	10:40:25
3	Co 228.616†	-78.0	-10.6	-0.5113	µg/L	-0.5113 ppb	10:40:25
3	Cr 267.716†	-111.8	4.7	0.0994	µg/L	0.0994 ppb	10:40:25
3	Cu 324.752†	3136.5	-73.6	-0.5101	µg/L	-0.5101 ppb	10:40:05
3	Mn 257.610†	-53.3	166.4	0.5325	µg/L	0.5325 ppb	10:40:25
3	Mo 202.031†	-6.8	0.8	0.0866	µg/L	0.0866 ppb	10:40:25
3	Ni 231.604†	268.6	-15.8	-0.8633	µg/L	-0.8633 ppb	10:40:25
3	P 214.914†	207.9	13.4	29.204	µg/L	29.204 ppb	10:40:25
3	Pb 220.353†	69.9	19.7	4.9898	µg/L	4.9898 ppb	10:40:25
3	S 181.975 Axial†	25.3	2.6	13.566	µg/L	13.566 ppb	10:40:25
3	Sb 206.836†	17.7	-1.8	-1.8152	µg/L	-1.8152 ppb	10:40:25
3	Se 196.026†	8.6	-5.0	-7.2176	µg/L	-7.2176 ppb	10:40:25
3	SiO2†	2012.2	142.3	27.180	µg/L	27.180 ppb	10:40:05
3	Si 251.611†	384.1	55.8	4.2093	µg/L	4.2093 ppb	10:40:25
3	Sn 189.927†	23.7	2.6	1.2514	µg/L	1.2514 ppb	10:40:25
3	Ti 334.940†	887.8	218.3	0.4857	µg/L	0.4857 ppb	10:40:05
3	Tl 190.801†	-20.8	-0.5	-0.7808	µg/L	-0.7808 ppb	10:40:25
3	U 409.014†	723.6	84.6	7.9346	µg/L	7.9346 ppb	10:40:05
3	V 292.402†	-67.0	21.2	0.2558	µg/L	0.2558 ppb	10:40:05
3	Zn 213.857†	516.8	-4.7	-0.1242	µg/L	-0.1242 ppb	10:40:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943910.4	94.514	%	0.3908				0.41%
Sc RADIAL	105401.2	93.7	%	0.24				0.25%
Y 371.029	1182954.6	94.458	%	0.3773				0.40%
Ag 328.068†	-103.4	-0.9192	µg/L	0.18240	-0.9192	ppb	0.18240	19.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	52.0	26.266	µg/L	9.9129	26.266	ppb	9.9129	37.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-3.8688	µg/L	6.17858	-3.8688	ppb	6.17858	159.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-4.1	-0.1890	µg/L	0.31523	-0.1890	ppb	0.31523	166.76%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.4	0.1109	µg/L	0.03713	0.1109	ppb	0.03713	33.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	320.7	0.2027	µg/L	0.03470	0.2027	ppb	0.03470	17.12%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-65.7	-26.085	µg/L	4.9291	-26.085	ppb	4.9291	18.90%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.5	0.2791	µg/L	0.16580	0.2791	ppb	0.16580	59.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.0	-0.2391	µg/L	0.23572	-0.2391	ppb	0.23572	98.57%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                7.1      0.1480 µg/L       0.15422      0.1480 ppb        0.15422 104.17%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -56.3     -0.3899 µg/L       0.12244     -0.3899 ppb        0.12244  31.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         5.2      27.165 µg/L       11.9605      27.165 ppb        11.9605  44.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         27.2      14.733 µg/L       18.0462      14.733 ppb        18.0462 122.49%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -3.6     -20.056 µg/L       22.9493     -20.056 ppb        22.9493 114.42%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              168.9      0.5394 µg/L       0.00597      0.5394 ppb        0.00597   1.11%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.4      0.2638 µg/L       0.22746      0.2638 ppb        0.22746  86.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -7.2     -1.9899 µg/L       4.34516     -1.9899 ppb        4.34516 218.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -5.9     -0.3221 µg/L       0.57876     -0.3221 ppb        0.57876 179.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                16.3      35.522 µg/L        8.7436      35.522 ppb         8.7436  24.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               11.4      2.8869 µg/L       2.35742      2.8869 ppb        2.35742  81.66%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.4      12.194 µg/L        5.4177      12.194 ppb         5.4177  44.43%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.1     -0.0563 µg/L       4.10731     -0.0563 ppb        4.10731 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.8     -2.5911 µg/L       4.03427     -2.5911 ppb        4.03427 155.70%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    141.9      27.107 µg/L        4.7168      27.107 ppb         4.7168  17.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               60.2      4.5222 µg/L       0.40010      4.5222 ppb        0.40010   8.85%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                3.0      1.4542 µg/L       0.19852      1.4542 ppb        0.19852  13.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               62.2      0.3506 µg/L       0.08384      0.3506 ppb        0.08384  23.91%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              243.4      0.5409 µg/L       0.08656      0.5409 ppb        0.08656  16.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.0     -0.0306 µg/L       3.26189     -0.0306 ppb        3.26189 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                60.6      5.6821 µg/L       2.59942      5.6821 ppb        2.59942  45.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                25.2      0.2969 µg/L       0.10061      0.2969 ppb        0.10061  33.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                7.9      0.2110 µg/L       0.33681      0.2110 ppb        0.33681 159.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 11:08:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107618.4	107618.4	95.7	%			11:08:50
1	Al 396.153Radial†	10050.2	10274.4	5173.4	µg/L	5173.4	ppb	11:08:50
1	Ca 317.933Radial†	12272.9	12331.9	4895.2	µg/L	4895.2	ppb	11:09:10
1	Fe 238.204 Radial†	967.7	1000.2	5270.8	µg/L	5270.8	ppb	11:09:10
1	K 766.490 Radial†	9721.4	9465.8	5132.3	µg/L	5132.3	ppb	11:08:50
1	Mg 279.077 IEC†	908.8	930.0	5163.4	µg/L	5163.4	ppb	11:09:10
1	Na 589.592 Radial†	34023.2	36264.2	10062	µg/L	10062	ppb	11:08:50
1	Sr 421.552†	85596.5	89527.2	504.30	µg/L	504.30	ppb	11:08:50
1	Sc 361.383	1917199.6	1917199.6	93.215	%			11:10:13
1	Y 371.029	1161434.1	1161434.1	92.740	%			11:10:13
1	Ag 328.068†	53323.7	57233.2	515.05	µg/L	515.05	ppb	11:10:18
1	As 188.979†	253.1	269.1	511.82	µg/L	511.82	ppb	11:10:39
1	B 249.677†	10610.8	11227.5	496.66	µg/L	496.66	ppb	11:10:18
1	Ba 233.527†	18734.8	20179.1	507.90	µg/L	507.90	ppb	11:10:18
1	Be 313.107†	748688.9	799571.1	505.61	µg/L	505.61	ppb	11:10:13
1	Cd 226.502†	17597.9	18979.6	502.06	µg/L	502.06	ppb	11:10:18
1	Co 228.616†	9711.1	10489.7	504.54	µg/L	504.54	ppb	11:10:18
1	Cr 267.716†	22450.9	24207.8	505.10	µg/L	505.10	ppb	11:10:18
1	Cu 324.752†	71026.3	72811.7	513.40	µg/L	513.40	ppb	11:10:18
1	Mn 257.610†	151246.2	162477.4	516.29	µg/L	516.29	ppb	11:10:13
1	Mo 202.031†	4179.6	4491.7	501.30	µg/L	501.30	ppb	11:10:39
1	Ni 231.604†	8959.8	9312.5	507.33	µg/L	507.33	ppb	11:10:18
1	P 214.914†	1316.5	1206.3	2562.6	µg/L	2562.6	ppb	11:10:39
1	Pb 220.353†	1932.5	2019.0	512.53	µg/L	512.53	ppb	11:10:39
1	S 181.975 Axial†	208.6	199.7	1024.7	µg/L	1024.7	ppb	11:10:39
1	Sb 206.836†	495.4	510.9	505.51	µg/L	505.51	ppb	11:10:39
1	Se 196.026†	335.7	346.0	506.24	µg/L	506.24	ppb	11:10:39
1	SiO2†	28820.0	28936.0	5525.7	µg/L	5525.7	ppb	11:10:18
1	Si 251.611†	31751.4	33712.8	2533.9	µg/L	2533.9	ppb	11:10:18
1	Sn 189.927†	976.6	1025.2	502.57	µg/L	502.57	ppb	11:10:39
1	Ti 334.940†	215025.2	229957.0	509.45	µg/L	509.45	ppb	11:10:13
1	Tl 190.801†	287.5	329.9	500.29	µg/L	500.29	ppb	11:10:39
1	U 409.014†	5811.9	5555.7	520.88	µg/L	520.88	ppb	11:10:18
1	V 292.402†	41852.6	44990.8	511.97	µg/L	511.97	ppb	11:10:18
1	Zn 213.857†	18256.0	19034.6	505.92	µg/L	505.92	ppb	11:10:18
2	Sc RADIAL	106132.8	106132.8	94.4	%			11:09:16
2	Al 396.153Radial†	9941.7	10306.4	5189.7	µg/L	5189.7	ppb	11:09:16
2	Ca 317.933Radial†	12324.8	12566.5	4988.3	µg/L	4988.3	ppb	11:09:36
2	Fe 238.204 Radial†	965.0	1011.5	5330.1	µg/L	5330.1	ppb	11:09:36
2	K 766.490 Radial†	9650.3	9532.6	5168.6	µg/L	5168.6	ppb	11:09:16
2	Mg 279.077 IEC†	908.9	943.4	5237.3	µg/L	5237.3	ppb	11:09:36
2	Na 589.592 Radial†	33874.5	36604.3	10156	µg/L	10156	ppb	11:09:16
2	Sr 421.552†	84647.3	89773.4	505.69	µg/L	505.69	ppb	11:09:16
2	Sc 361.383	1928639.5	1928639.5	93.771	%			11:10:45
2	Y 371.029	1165407.6	1165407.6	93.057	%			11:10:45
2	Ag 328.068†	53685.1	57279.3	515.49	µg/L	515.49	ppb	11:10:51
2	As 188.979†	243.4	257.1	489.04	µg/L	489.04	ppb	11:11:11
2	B 249.677†	10675.6	11229.0	496.71	µg/L	496.71	ppb	11:10:51
2	Ba 233.527†	18917.6	20254.8	509.81	µg/L	509.81	ppb	11:10:51
2	Be 313.107†	748826.0	794953.2	502.69	µg/L	502.69	ppb	11:10:45
2	Cd 226.502†	17713.1	18990.6	502.35	µg/L	502.35	ppb	11:10:51
2	Co 228.616†	9799.9	10522.5	506.12	µg/L	506.12	ppb	11:10:51
2	Cr 267.716†	22695.9	24326.2	507.57	µg/L	507.57	ppb	11:10:51
2	Cu 324.752†	71617.0	72989.6	514.66	µg/L	514.66	ppb	11:10:51
2	Mn 257.610†	151219.6	161486.6	513.15	µg/L	513.15	ppb	11:10:45
2	Mo 202.031†	4182.6	4468.3	498.69	µg/L	498.69	ppb	11:11:11
2	Ni 231.604†	9028.1	9328.4	508.20	µg/L	508.20	ppb	11:10:51
2	P 214.914†	1308.2	1189.1	2524.9	µg/L	2524.9	ppb	11:11:11
2	Pb 220.353†	1921.4	1994.9	506.41	µg/L	506.41	ppb	11:11:11

2	S 181.975 Axial†	204.4	193.9	994.84 µg/L	994.84 ppb	11:11:11
2	Sb 206.836†	499.8	512.5	507.05 µg/L	507.05 ppb	11:11:11
2	Se 196.026†	334.1	342.2	500.69 µg/L	500.69 ppb	11:11:11
2	SiO2†	29269.7	29232.2	5582.3 µg/L	5582.3 ppb	11:10:51
2	Si 251.611†	32302.1	34098.1	2563.8 µg/L	2563.8 ppb	11:10:51
2	Sn 189.927†	968.2	1010.1	495.23 µg/L	495.23 ppb	11:11:11
2	Ti 334.940†	215103.4	228672.2	506.60 µg/L	506.60 ppb	11:10:45
2	Tl 190.801†	292.8	333.6	505.93 µg/L	505.93 ppb	11:11:11
2	U 409.014†	5889.4	5601.3	525.15 µg/L	525.15 ppb	11:10:51
2	V 292.402†	42279.8	45180.0	514.09 µg/L	514.09 ppb	11:10:51
2	Zn 213.857†	18444.2	19119.2	508.17 µg/L	508.17 ppb	11:10:51
3	Sc RADIAL	106493.6	106493.6	94.7 %		11:09:42
3	Al 396.153Radial†	10021.7	10355.2	5214.5 µg/L	5214.5 ppb	11:09:42
3	Ca 317.933Radial†	12299.3	12495.3	4960.1 µg/L	4960.1 ppb	11:10:02
3	Fe 238.204 Radial†	960.5	1003.3	5286.8 µg/L	5286.8 ppb	11:10:02
3	K 766.490 Radial†	9703.3	9554.0	5180.1 µg/L	5180.1 ppb	11:09:42
3	Mg 279.077 IEC†	909.1	940.4	5220.6 µg/L	5220.6 ppb	11:10:02
3	Na 589.592 Radial†	34109.9	36731.4	10192 µg/L	10192 ppb	11:09:42
3	Sr 421.552†	85379.8	90243.2	508.33 µg/L	508.33 ppb	11:09:42
3	Sc 361.383	1919746.7	1919746.7	93.339 %		11:11:17
3	Y 371.029	1160703.1	1160703.1	92.681 %		11:11:17
3	Ag 328.068†	53306.7	57139.1	514.21 µg/L	514.21 ppb	11:11:23
3	As 188.979†	247.8	263.0	500.21 µg/L	500.21 ppb	11:11:43
3	B 249.677†	10573.3	11172.1	494.20 µg/L	494.20 ppb	11:11:23
3	Ba 233.527†	18707.4	20123.1	506.49 µg/L	506.49 ppb	11:11:23
3	Be 313.107†	749450.6	799321.6	505.45 µg/L	505.45 ppb	11:11:17
3	Cd 226.502†	17554.9	18908.5	500.18 µg/L	500.18 ppb	11:11:23
3	Co 228.616†	9704.6	10468.8	503.53 µg/L	503.53 ppb	11:11:23
3	Cr 267.716†	22501.1	24229.6	505.55 µg/L	505.55 ppb	11:11:23
3	Cu 324.752†	71069.9	72757.3	513.02 µg/L	513.02 ppb	11:11:23
3	Mn 257.610†	151524.0	162559.7	516.55 µg/L	516.55 ppb	11:11:17
3	Mo 202.031†	4138.7	4441.9	495.75 µg/L	495.75 ppb	11:11:43
3	Ni 231.604†	8946.3	9285.4	505.85 µg/L	505.85 ppb	11:11:23
3	P 214.914†	1295.7	1182.2	2510.2 µg/L	2510.2 ppb	11:11:43
3	Pb 220.353†	1913.3	1995.7	506.60 µg/L	506.60 ppb	11:11:43
3	S 181.975 Axial†	205.3	196.0	1005.3 µg/L	1005.3 ppb	11:11:43
3	Sb 206.836†	489.5	503.8	498.49 µg/L	498.49 ppb	11:11:43
3	Se 196.026†	331.0	340.6	498.28 µg/L	498.28 ppb	11:11:43
3	SiO2†	28802.4	28876.1	5514.3 µg/L	5514.3 ppb	11:11:23
3	Si 251.611†	31727.0	33641.5	2528.8 µg/L	2528.8 ppb	11:11:23
3	Sn 189.927†	965.9	1012.4	496.33 µg/L	496.33 ppb	11:11:43
3	Ti 334.940†	215258.7	229901.2	509.32 µg/L	509.32 ppb	11:11:17
3	Tl 190.801†	290.1	332.2	503.77 µg/L	503.77 ppb	11:11:43
3	U 409.014†	5754.3	5485.7	514.30 µg/L	514.30 ppb	11:11:23
3	V 292.402†	41816.5	44892.6	510.81 µg/L	510.81 ppb	11:11:23
3	Zn 213.857†	18324.4	19081.9	507.19 µg/L	507.19 ppb	11:11:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1921861.9	93.442	%	0.2920				0.31%
Sc RADIAL	106748.2	94.9	%	0.69				0.73%
Y 371.029	1162514.9	92.826	%	0.2021				0.22%
Ag 328.068†	57217.2	514.92	µg/L	0.650	514.92	ppb	0.650	0.13%
QC value within limits for Ag 328.068 Recovery = 102.98%								
Al 396.153Radial†	10312.0	5192.5	µg/L	20.68	5192.5	ppb	20.68	0.40%
QC value within limits for Al 396.153Radial Recovery = 103.85%								
As 188.979†	263.1	500.36	µg/L	11.387	500.36	ppb	11.387	2.28%
QC value within limits for As 188.979 Recovery = 100.07%								
B 249.677†	11209.6	495.86	µg/L	1.436	495.86	ppb	1.436	0.29%
QC value within limits for B 249.677 Recovery = 99.17%								
Ba 233.527†	20185.7	508.07	µg/L	1.664	508.07	ppb	1.664	0.33%
QC value within limits for Ba 233.527 Recovery = 101.61%								
Be 313.107†	797948.6	504.58	µg/L	1.642	504.58	ppb	1.642	0.33%
QC value within limits for Be 313.107 Recovery = 100.92%								
Ca 317.933Radial†	12464.6	4947.9	µg/L	47.73	4947.9	ppb	47.73	0.96%
QC value within limits for Ca 317.933Radial Recovery = 98.96%								
Cd 226.502†	18959.6	501.53	µg/L	1.181	501.53	ppb	1.181	0.24%
QC value within limits for Cd 226.502 Recovery = 100.31%								
Co 228.616†	10493.7	504.73	µg/L	1.307	504.73	ppb	1.307	0.26%

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   QC value within limits for Co 228.616  Recovery = 100.95%
Cr 267.716†            24254.5      506.07 µg/L        1.315      506.07 ppb          1.315   0.26%
   QC value within limits for Cr 267.716  Recovery = 101.21%
Cu 324.752†            72852.9      513.69 µg/L        0.861      513.69 ppb          0.861   0.17%
   QC value within limits for Cu 324.752  Recovery = 102.74%
Fe 238.204 Radial†      1005.0      5295.9 µg/L        30.66      5295.9 ppb          30.66   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.92%
K 766.490 Radial†       9517.5      5160.3 µg/L        24.96      5160.3 ppb          24.96   0.48%
   QC value within limits for K 766.490 Radial  Recovery = 103.21%
Mg 279.077 IEC†          937.9      5207.1 µg/L        38.75      5207.1 ppb          38.75   0.74%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.14%
Mn 257.610†           162174.6      515.33 µg/L        1.892      515.33 ppb          1.892   0.37%
   QC value within limits for Mn 257.610  Recovery = 103.07%
Mo 202.031†             4467.3      498.58 µg/L        2.777      498.58 ppb          2.777   0.56%
   QC value within limits for Mo 202.031  Recovery = 99.72%
Na 589.592 Radial†     36533.3       10137 µg/L         67.0       10137 ppb           67.0   0.66%
   QC value within limits for Na 589.592 Radial  Recovery = 101.37%
Ni 231.604†             9308.8      507.13 µg/L        1.185      507.13 ppb          1.185   0.23%
   QC value within limits for Ni 231.604  Recovery = 101.43%
P 214.914†              1192.6      2532.6 µg/L        27.05      2532.6 ppb          27.05   1.07%
   QC value within limits for P 214.914  Recovery = 101.30%
Pb 220.353†             2003.2      508.51 µg/L        3.479      508.51 ppb          3.479   0.68%
   QC value within limits for Pb 220.353  Recovery = 101.70%
S 181.975 Axial†         196.5      1008.3 µg/L        15.16      1008.3 ppb          15.16   1.50%
   QC value within limits for S 181.975 Axial  Recovery = 100.83%
Sb 206.836†              509.1      503.68 µg/L        4.566      503.68 ppb          4.566   0.91%
   QC value within limits for Sb 206.836  Recovery = 100.74%
Se 196.026†              342.9      501.74 µg/L        4.079      501.74 ppb          4.079   0.81%
   QC value within limits for Se 196.026  Recovery = 100.35%
SiO2†                  29014.8      5540.8 µg/L        36.41      5540.8 ppb          36.41   0.66%
   QC value within limits for SiO2  Recovery = 103.61%
Si 251.611†            33817.4      2542.2 µg/L        18.94      2542.2 ppb          18.94   0.74%
   QC value within limits for Si 251.611  Recovery = 101.69%
Sn 189.927†             1015.9      498.05 µg/L        3.956      498.05 ppb          3.956   0.79%
   QC value within limits for Sn 189.927  Recovery = 99.61%
Sr 421.552†            89847.9      506.11 µg/L        2.049      506.11 ppb          2.049   0.40%
   QC value within limits for Sr 421.552  Recovery = 101.22%
Ti 334.940†           229510.1      508.46 µg/L        1.612      508.46 ppb          1.612   0.32%
   QC value within limits for Ti 334.940  Recovery = 101.69%
Tl 190.801†              331.9      503.33 µg/L        2.847      503.33 ppb          2.847   0.57%
   QC value within limits for Tl 190.801  Recovery = 100.67%
U 409.014†              5547.6      520.11 µg/L        5.466      520.11 ppb          5.466   1.05%
   QC value within limits for U 409.014  Recovery = 104.02%
V 292.402†             45021.2      512.29 µg/L        1.665      512.29 ppb          1.665   0.32%
   QC value within limits for V 292.402  Recovery = 102.46%
Zn 213.857†            19078.6      507.09 µg/L        1.129      507.09 ppb          1.129   0.22%
   QC value within limits for Zn 213.857  Recovery = 101.42%
All analyte(s) passed QC.
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Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 11:11:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104638.5	104638.5	93.0	%			11:12:25
1	Al 396.153Radial†	221.8	8.6	4.3202	µg/L	4.3202	ppb	11:12:25
1	Ca 317.933Radial†	397.9	-67.7	-26.869	µg/L	-26.869	ppb	11:12:45
1	Fe 238.204 Radial†	13.3	3.1	16.205	µg/L	16.205	ppb	11:12:45
1	K 766.490 Radial†	660.6	15.2	8.2488	µg/L	8.2488	ppb	11:12:25
1	Mg 279.077 IEC†	20.0	1.6	9.0439	µg/L	9.0439	ppb	11:12:45
1	Na 589.592 Radial†	-687.2	-34.8	-9.6493	µg/L	-9.6493	ppb	11:12:25
1	Sr 421.552†	-22.8	39.3	0.2215	µg/L	0.2215	ppb	11:12:25
1	Sc 361.383	1899256.4	1899256.4	92.343	%			11:13:47
1	Y 371.029	1153725.2	1153725.2	92.124	%			11:13:47
1	Ag 328.068†	-147.4	-131.4	-1.1690	µg/L	-1.1690	ppb	11:13:52
1	As 188.979†	6.2	4.2	8.0634	µg/L	8.0634	ppb	11:14:13
1	B 249.677†	152.3	9.2	0.4036	µg/L	0.4036	ppb	11:14:13
1	Ba 233.527†	-68.9	6.1	0.1537	µg/L	0.1537	ppb	11:14:13
1	Be 313.107†	3511.4	191.1	0.1207	µg/L	0.1207	ppb	11:13:52
1	Cd 226.502†	-93.8	-0.7	-0.0080	µg/L	-0.0080	ppb	11:14:13
1	Co 228.616†	-79.5	-14.4	-0.6912	µg/L	-0.6912	ppb	11:14:13
1	Cr 267.716†	-98.5	16.1	0.3371	µg/L	0.3371	ppb	11:13:52
1	Cu 324.752†	3115.6	-10.3	-0.0691	µg/L	-0.0691	ppb	11:13:52
1	Mn 257.610†	-149.2	61.0	0.1958	µg/L	0.1958	ppb	11:14:13
1	Mo 202.031†	1.4	9.4	1.0491	µg/L	1.0491	ppb	11:14:13
1	Ni 231.604†	264.8	-12.7	-0.6915	µg/L	-0.6915	ppb	11:14:13
1	P 214.914†	215.1	26.9	58.513	µg/L	58.513	ppb	11:14:13
1	Pb 220.353†	59.5	10.3	2.6090	µg/L	2.6090	ppb	11:14:13
1	S 181.975 Axial†	20.6	-1.7	-8.6567	µg/L	-8.6567	ppb	11:14:13
1	Sb 206.836†	19.2	0.3	0.2615	µg/L	0.2615	ppb	11:14:13
1	Se 196.026†	10.0	-3.2	-4.7170	µg/L	-4.7170	ppb	11:14:13
1	SiO2†	1938.5	117.6	22.452	µg/L	22.452	ppb	11:13:52
1	Si 251.611†	370.4	51.5	3.8618	µg/L	3.8618	ppb	11:14:13
1	Sn 189.927†	23.2	2.6	1.2871	µg/L	1.2871	ppb	11:14:13
1	Ti 334.940†	820.4	169.5	0.3773	µg/L	0.3773	ppb	11:13:52
1	Tl 190.801†	-21.2	-1.6	-2.3812	µg/L	-2.3812	ppb	11:14:13
1	U 409.014†	812.2	200.3	18.806	µg/L	18.806	ppb	11:13:52
1	V 292.402†	-50.3	37.5	0.4621	µg/L	0.4621	ppb	11:13:52
1	Zn 213.857†	519.2	12.1	0.3254	µg/L	0.3254	ppb	11:14:13
2	Sc RADIAL	104779.1	104779.1	93.2	%			11:12:51
2	Al 396.153Radial†	241.9	29.9	15.079	µg/L	15.079	ppb	11:12:51
2	Ca 317.933Radial†	393.0	-73.6	-29.207	µg/L	-29.207	ppb	11:13:11
2	Fe 238.204 Radial†	16.8	6.8	35.725	µg/L	35.725	ppb	11:13:11
2	K 766.490 Radial†	693.5	49.6	26.888	µg/L	26.888	ppb	11:12:51
2	Mg 279.077 IEC†	12.3	-6.6	-36.618	µg/L	-36.618	ppb	11:13:11
2	Na 589.592 Radial†	-698.9	-46.4	-12.864	µg/L	-12.864	ppb	11:12:51
2	Sr 421.552†	-35.4	25.7	0.1449	µg/L	0.1449	ppb	11:12:51
2	Sc 361.383	1900239.3	1900239.3	92.391	%			11:14:19
2	Y 371.029	1155609.3	1155609.3	92.275	%			11:14:19
2	Ag 328.068†	-144.2	-127.8	-1.1348	µg/L	-1.1348	ppb	11:14:24
2	As 188.979†	1.0	-1.4	-2.5961	µg/L	-2.5961	ppb	11:14:45
2	B 249.677†	135.8	-8.7	-0.3963	µg/L	-0.3963	ppb	11:14:45
2	Ba 233.527†	-84.5	-10.7	-0.2688	µg/L	-0.2688	ppb	11:14:45
2	Be 313.107†	3550.3	231.2	0.1462	µg/L	0.1462	ppb	11:14:24
2	Cd 226.502†	-92.3	1.0	0.0375	µg/L	0.0375	ppb	11:14:45
2	Co 228.616†	-70.0	-4.0	-0.1930	µg/L	-0.1930	ppb	11:14:45
2	Cr 267.716†	-114.2	-0.9	-0.0171	µg/L	-0.0171	ppb	11:14:24
2	Cu 324.752†	3102.2	-26.6	-0.1796	µg/L	-0.1796	ppb	11:14:24
2	Mn 257.610†	-149.5	60.8	0.1974	µg/L	0.1974	ppb	11:14:45
2	Mo 202.031†	-0.4	7.5	0.8366	µg/L	0.8366	ppb	11:14:45
2	Ni 231.604†	263.6	-14.1	-0.7660	µg/L	-0.7660	ppb	11:14:45
2	P 214.914†	204.5	15.3	33.242	µg/L	33.242	ppb	11:14:45
2	Pb 220.353†	60.8	11.7	2.9562	µg/L	2.9562	ppb	11:14:45

2	S 181.975 Axial†	27.1	5.3	27.188 µg/L	27.188 ppb		11:14:45
2	Sb 206.836†	20.4	1.5	1.5001 µg/L	1.5001 ppb		11:14:45
2	Se 196.026†	11.1	-2.1	-3.0363 µg/L	-3.0363 ppb		11:14:45
2	SiO2†	1948.9	127.7	24.385 µg/L	24.385 ppb		11:14:24
2	Si 251.611†	333.4	11.2	0.8158 µg/L	0.8158 ppb		11:14:45
2	Sn 189.927†	21.3	0.6	0.2862 µg/L	0.2862 ppb		11:14:45
2	Ti 334.940†	742.2	84.4	0.1888 µg/L	0.1888 ppb		11:14:24
2	Tl 190.801†	-18.5	1.4	2.1507 µg/L	2.1507 ppb		11:14:45
2	U 409.014†	824.2	212.9	19.986 µg/L	19.986 ppb		11:14:24
2	V 292.402†	-40.2	48.4	0.5872 µg/L	0.5872 ppb		11:14:24
2	Zn 213.857†	520.2	12.9	0.3473 µg/L	0.3473 ppb		11:14:45
3	Sc RADIAL	105286.7	105286.7	93.6 %			11:13:17
3	Al 396.153Radial†	277.0	66.1	33.395 µg/L	33.395 ppb		11:13:17
3	Ca 317.933Radial†	409.2	-58.3	-23.153 µg/L	-23.153 ppb		11:13:37
3	Fe 238.204 Radial†	9.7	-0.9	-4.5467 µg/L	-4.5467 ppb		11:13:37
3	K 766.490 Radial†	636.5	-14.9	-8.0831 µg/L	-8.0831 ppb		11:13:17
3	Mg 279.077 IEC†	15.4	-3.4	-18.660 µg/L	-18.660 ppb		11:13:37
3	Na 589.592 Radial†	-649.9	9.6	2.6689 µg/L	2.6689 ppb		11:13:17
3	Sr 421.552†	-81.2	-23.0	-0.1297 µg/L	-0.1297 ppb		11:13:17
3	Sc 361.383	1918953.0	1918953.0	93.301 %			11:14:50
3	Y 371.029	1165783.6	1165783.6	93.087 %			11:14:50
3	Ag 328.068†	-80.1	-57.5	-0.5109 µg/L	-0.5109 ppb		11:14:56
3	As 188.979†	-1.6	-4.2	-7.9126 µg/L	-7.9126 ppb		11:15:16
3	B 249.677†	129.6	-16.8	-0.7438 µg/L	-0.7438 ppb		11:15:16
3	Ba 233.527†	-75.3	-0.0	0.0005 µg/L	0.0005 ppb		11:15:16
3	Be 313.107†	3532.4	174.5	0.1104 µg/L	0.1104 ppb		11:14:56
3	Cd 226.502†	-79.4	15.8	0.4261 µg/L	0.4261 ppb		11:15:16
3	Co 228.616†	-72.3	-5.7	-0.2754 µg/L	-0.2754 ppb		11:15:16
3	Cr 267.716†	-87.7	28.8	0.6005 µg/L	0.6005 ppb		11:14:56
3	Cu 324.752†	3086.4	-76.3	-0.5377 µg/L	-0.5377 ppb		11:14:56
3	Mn 257.610†	-151.8	60.0	0.1898 µg/L	0.1898 ppb		11:15:16
3	Mo 202.031†	-7.1	0.3	0.0323 µg/L	0.0323 ppb		11:15:16
3	Ni 231.604†	266.1	-14.2	-0.7748 µg/L	-0.7748 ppb		11:15:16
3	P 214.914†	223.2	33.2	72.308 µg/L	72.308 ppb		11:15:16
3	Pb 220.353†	65.9	16.5	4.1787 µg/L	4.1787 ppb		11:15:16
3	S 181.975 Axial†	27.6	5.5	28.485 µg/L	28.485 ppb		11:15:16
3	Sb 206.836†	19.7	0.6	0.6153 µg/L	0.6153 ppb		11:15:16
3	Se 196.026†	8.3	-5.2	-7.5222 µg/L	-7.5222 ppb		11:15:16
3	SiO2†	1975.6	135.8	25.928 µg/L	25.928 ppb		11:14:56
3	Si 251.611†	360.0	36.2	2.6911 µg/L	2.6911 ppb		11:15:16
3	Sn 189.927†	24.7	4.1	1.9724 µg/L	1.9724 ppb		11:15:16
3	Ti 334.940†	723.0	56.1	0.1256 µg/L	0.1256 ppb		11:14:56
3	Tl 190.801†	-17.4	2.8	4.2236 µg/L	4.2236 ppb		11:15:16
3	U 409.014†	752.4	127.2	11.949 µg/L	11.949 ppb		11:14:56
3	V 292.402†	-47.5	41.1	0.4825 µg/L	0.4825 ppb		11:14:56
3	Zn 213.857†	515.0	1.8	0.0540 µg/L	0.0540 ppb		11:15:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1906149.6	92.678	%	0.5396				0.58%
Sc RADIAL	104901.4	93.3	%	0.30				0.33%
Y 371.029	1158372.7	92.495	%	0.5180				0.56%
Ag 328.068†	-105.6	-0.9383	µg/L	0.37049	-0.9383	ppb	0.37049	39.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	34.9	17.598	µg/L	14.7002	17.598	ppb	14.7002	83.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.4	-0.8151	µg/L	8.13556	-0.8151	ppb	8.13556	998.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-5.4	-0.2455	µg/L	0.58840	-0.2455	ppb	0.58840	239.67%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.6	-0.0382	µg/L	0.21385	-0.0382	ppb	0.21385	559.59%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	198.9	0.1258	µg/L	0.01843	0.1258	ppb	0.01843	14.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-66.5	-26.410	µg/L	3.0528	-26.410	ppb	3.0528	11.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.4	0.1519	µg/L	0.23857	0.1519	ppb	0.23857	157.10%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.1	-0.3865	µg/L	0.26706	-0.3865	ppb	0.26706	69.09%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                14.7      0.3068 µg/L       0.30988      0.3068 ppb        0.30988 100.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -37.7     -0.2621 µg/L       0.24498     -0.2621 ppb        0.24498  93.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          3.0      15.795 µg/L       20.1391      15.795 ppb        20.1391 127.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          16.6      9.0179 µg/L      17.49824      9.0179 ppb       17.49824 194.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.8     -15.411 µg/L       23.0034     -15.411 ppb        23.0034 149.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                60.6      0.1943 µg/L       0.00402      0.1943 ppb        0.00402   2.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.7      0.6393 µg/L       0.53634      0.6393 ppb        0.53634  83.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -23.8     -6.6150 µg/L       8.19920     -6.6150 ppb        8.19920 123.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -13.7     -0.7441 µg/L       0.04575     -0.7441 ppb        0.04575   6.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 25.2      54.688 µg/L       19.8122      54.688 ppb        19.8122  36.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.9      3.2480 µg/L       0.82454      3.2480 ppb        0.82454  25.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.1      15.672 µg/L       21.0792      15.672 ppb        21.0792 134.50%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.8      0.7923 µg/L       0.63797      0.7923 ppb        0.63797  80.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.5     -5.0918 µg/L       2.26634     -5.0918 ppb        2.26634  44.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     127.0      24.255 µg/L        1.7419      24.255 ppb         1.7419   7.18%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                33.0      2.4562 µg/L       1.53652      2.4562 ppb        1.53652  62.56%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.4      1.1819 µg/L       0.84796      1.1819 ppb        0.84796  71.75%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                14.0      0.0789 µg/L       0.18466      0.0789 ppb        0.18466 234.06%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               103.3      0.2306 µg/L       0.13096      0.2306 ppb        0.13096  56.80%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      1.3310 µg/L       3.37780      1.3310 ppb        3.37780 253.77%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                180.1      16.914 µg/L        4.3400      16.914 ppb         4.3400  25.66%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 42.4      0.5106 µg/L       0.06711      0.5106 ppb        0.06711  13.14%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 8.9      0.2422 µg/L       0.16339      0.2422 ppb        0.16339  67.45%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: 1201997323|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 327
Date Collected: 12/18/2009 11:15:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201997323|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	104127.4	104127.4	92.6	%			11:16:02
1	Al 396.153Radial†	186.4	-28.5	-14.435	µg/L	-14.435	ppb	11:16:02
1	Ca 317.933Radial†	403.5	-59.6	-23.644	µg/L	-23.644	ppb	11:16:23
1	Fe 238.204 Radial†	16.1	6.2	32.436	µg/L	32.436	ppb	11:16:23
1	K 766.490 Radial†	716.5	79.1	42.909	µg/L	42.909	ppb	11:16:02
1	Mg 279.077 IEC†	15.5	-3.1	-17.205	µg/L	-17.205	ppb	11:16:23
1	Na 589.592 Radial†	-648.7	3.2	0.8910	µg/L	0.8910	ppb	11:16:02
1	Sr 421.552†	-84.6	-27.6	-0.1556	µg/L	-0.1556	ppb	11:16:02
1	Sc 361.383	1886633.7	1886633.7	91.729	%			11:17:25
1	Y 371.029	1145198.1	1145198.1	91.443	%			11:17:25
1	Ag 328.068†	-75.6	-54.1	-0.4765	µg/L	-0.4765	ppb	11:17:30
1	As 188.979†	-1.2	-3.8	-7.2238	µg/L	-7.2238	ppb	11:17:51
1	B 249.677†	155.3	13.6	0.5917	µg/L	0.5917	ppb	11:17:51
1	Ba 233.527†	-79.3	-5.8	-0.1431	µg/L	-0.1431	ppb	11:17:51
1	Be 313.107†	3614.6	329.1	0.2079	µg/L	0.2079	ppb	11:17:30
1	Cd 226.502†	-92.5	0.0	0.0125	µg/L	0.0125	ppb	11:17:51
1	Co 228.616†	-75.3	-10.3	-0.4971	µg/L	-0.4971	ppb	11:17:51
1	Cr 267.716†	-99.6	14.2	0.2978	µg/L	0.2978	ppb	11:17:30
1	Cu 324.752†	3054.4	-54.5	-0.3762	µg/L	-0.3762	ppb	11:17:30
1	Mn 257.610†	36.2	262.1	0.8358	µg/L	0.8358	ppb	11:17:51
1	Mo 202.031†	0.0	7.9	0.8875	µg/L	0.8875	ppb	11:17:51
1	Ni 231.604†	270.0	-5.0	-0.2748	µg/L	-0.2748	ppb	11:17:51
1	P 214.914†	217.5	31.1	67.622	µg/L	67.622	ppb	11:17:51
1	Pb 220.353†	64.2	15.9	4.0094	µg/L	4.0094	ppb	11:17:51
1	S 181.975 Axial†	31.6	10.4	53.403	µg/L	53.403	ppb	11:17:51
1	Sb 206.836†	23.0	4.5	4.4559	µg/L	4.4559	ppb	11:17:51
1	Se 196.026†	18.1	5.6	8.2270	µg/L	8.2270	ppb	11:17:51
1	SiO2†	2013.7	213.6	40.794	µg/L	40.794	ppb	11:17:30
1	Si 251.611†	452.8	144.0	10.965	µg/L	10.965	ppb	11:17:51
1	Sn 189.927†	20.9	0.3	0.1568	µg/L	0.1568	ppb	11:17:51
1	Ti 334.940†	955.3	322.6	0.7164	µg/L	0.7164	ppb	11:17:30
1	Tl 190.801†	-22.2	-2.8	-4.1721	µg/L	-4.1721	ppb	11:17:51
1	U 409.014†	828.2	223.7	20.999	µg/L	20.999	ppb	11:17:30
1	V 292.402†	-34.1	54.8	0.6609	µg/L	0.6609	ppb	11:17:30
1	Zn 213.857†	596.1	99.7	2.6708	µg/L	2.6708	ppb	11:17:51
2	Sc RADIAL	104523.5	104523.5	92.9	%			11:16:28
2	Al 396.153Radial†	216.6	3.2	1.6369	µg/L	1.6369	ppb	11:16:28
2	Ca 317.933Radial†	393.4	-72.2	-28.640	µg/L	-28.640	ppb	11:16:49
2	Fe 238.204 Radial†	17.5	7.6	40.158	µg/L	40.158	ppb	11:16:49
2	K 766.490 Radial†	722.4	82.5	44.756	µg/L	44.756	ppb	11:16:28
2	Mg 279.077 IEC†	16.5	-2.1	-11.746	µg/L	-11.746	ppb	11:16:49
2	Na 589.592 Radial†	-648.4	6.1	1.6990	µg/L	1.6990	ppb	11:16:28
2	Sr 421.552†	-65.4	-6.6	-0.0371	µg/L	-0.0371	ppb	11:16:28
2	Sc 361.383	1911033.3	1911033.3	92.915	%			11:17:56
2	Y 371.029	1159484.0	1159484.0	92.584	%			11:17:56
2	Ag 328.068†	-130.9	-112.6	-0.9960	µg/L	-0.9960	ppb	11:18:02
2	As 188.979†	5.3	3.2	6.0382	µg/L	6.0382	ppb	11:18:22
2	B 249.677†	146.8	2.3	0.0881	µg/L	0.0881	ppb	11:18:22
2	Ba 233.527†	-78.0	-3.3	-0.0813	µg/L	-0.0813	ppb	11:18:22
2	Be 313.107†	3620.5	285.1	0.1802	µg/L	0.1802	ppb	11:18:02
2	Cd 226.502†	-94.6	-0.9	-0.0129	µg/L	-0.0129	ppb	11:18:22
2	Co 228.616†	-69.9	-3.5	-0.1687	µg/L	-0.1687	ppb	11:18:22
2	Cr 267.716†	-93.6	22.0	0.4610	µg/L	0.4610	ppb	11:18:02
2	Cu 324.752†	3131.3	-14.3	-0.0918	µg/L	-0.0918	ppb	11:18:02
2	Mn 257.610†	53.9	280.7	0.8957	µg/L	0.8957	ppb	11:18:22
2	Mo 202.031†	-6.2	1.3	0.1427	µg/L	0.1427	ppb	11:18:22
2	Ni 231.604†	287.8	10.3	0.5636	µg/L	0.5636	ppb	11:18:22
2	P 214.914†	228.6	40.0	86.781	µg/L	86.781	ppb	11:18:22
2	Pb 220.353†	60.0	10.4	2.6273	µg/L	2.6273	ppb	11:18:22

2	S 181.975 Axial†	25.0	2.8	14.429 µg/L	14.429 ppb	11:18:22
2	Sb 206.836†	23.9	5.1	5.1079 µg/L	5.1079 ppb	11:18:22
2	Se 196.026†	9.2	-4.2	-6.1148 µg/L	-6.1148 ppb	11:18:22
2	SiO2†	2023.3	195.9	37.412 µg/L	37.412 ppb	11:18:02
2	Si 251.611†	446.1	130.5	9.9795 µg/L	9.9795 ppb	11:18:22
2	Sn 189.927†	19.7	-1.3	-0.6251 µg/L	-0.6251 ppb	11:18:22
2	Ti 334.940†	866.5	213.7	0.4752 µg/L	0.4752 ppb	11:18:02
2	Tl 190.801†	-19.0	1.0	1.4499 µg/L	1.4499 ppb	11:18:22
2	U 409.014†	834.6	219.1	20.564 µg/L	20.564 ppb	11:18:02
2	V 292.402†	-5.6	85.9	1.0058 µg/L	1.0058 ppb	11:18:02
2	Zn 213.857†	580.8	74.9	2.0012 µg/L	2.0012 ppb	11:18:22
3	Sc RADIAL	104184.6	104184.6	92.6 %		11:16:54
3	Al 396.153Radial†	204.9	-8.6	-4.3938 µg/L	-4.3938 ppb	11:16:54
3	Ca 317.933Radial†	400.0	-63.6	-25.231 µg/L	-25.231 ppb	11:17:15
3	Fe 238.204 Radial†	18.4	8.7	45.561 µg/L	45.561 ppb	11:17:15
3	K 766.490 Radial†	662.0	19.8	10.762 µg/L	10.762 ppb	11:16:54
3	Mg 279.077 IEC†	15.2	-3.5	-19.299 µg/L	-19.299 ppb	11:17:15
3	Na 589.592 Radial†	-658.9	-7.4	-2.0482 µg/L	-2.0482 ppb	11:16:54
3	Sr 421.552†	-94.5	-38.2	-0.2153 µg/L	-0.2153 ppb	11:16:54
3	Sc 361.383	1917509.1	1917509.1	93.230 %		11:18:28
3	Y 371.029	1164299.2	1164299.2	92.969 %		11:18:28
3	Ag 328.068†	-195.9	-181.9	-1.6150 µg/L	-1.6150 ppb	11:18:34
3	As 188.979†	-0.7	-3.2	-6.1177 µg/L	-6.1177 ppb	11:18:54
3	B 249.677†	138.1	-7.6	-0.3519 µg/L	-0.3519 ppb	11:18:54
3	Ba 233.527†	-68.2	7.5	0.1910 µg/L	0.1910 ppb	11:18:54
3	Be 313.107†	3536.1	181.4	0.1145 µg/L	0.1145 ppb	11:18:34
3	Cd 226.502†	-84.4	10.3	0.2862 µg/L	0.2862 ppb	11:18:54
3	Co 228.616†	-68.3	-1.5	-0.0717 µg/L	-0.0717 ppb	11:18:54
3	Cr 267.716†	-88.6	27.8	0.5796 µg/L	0.5796 ppb	11:18:34
3	Cu 324.752†	3063.2	-98.6	-0.6842 µg/L	-0.6842 ppb	11:18:34
3	Mn 257.610†	46.0	272.0	0.8689 µg/L	0.8689 ppb	11:18:54
3	Mo 202.031†	0.5	8.4	0.9385 µg/L	0.9385 ppb	11:18:54
3	Ni 231.604†	274.6	-4.8	-0.2641 µg/L	-0.2641 ppb	11:18:54
3	P 214.914†	216.2	25.9	56.303 µg/L	56.303 ppb	11:18:54
3	Pb 220.353†	64.0	14.5	3.6585 µg/L	3.6585 ppb	11:18:54
3	S 181.975 Axial†	33.1	11.4	58.777 µg/L	58.777 ppb	11:18:54
3	Sb 206.836†	16.2	-3.1	-3.1003 µg/L	-3.1003 ppb	11:18:54
3	Se 196.026†	6.6	-7.0	-10.162 µg/L	-10.162 ppb	11:18:54
3	SiO2†	2037.0	203.2	38.810 µg/L	38.810 ppb	11:18:34
3	Si 251.611†	467.2	151.4	11.593 µg/L	11.593 ppb	11:18:54
3	Sn 189.927†	19.2	-1.8	-0.8959 µg/L	-0.8959 ppb	11:18:54
3	Ti 334.940†	902.4	249.0	0.5534 µg/L	0.5534 ppb	11:18:34
3	Tl 190.801†	-25.4	-5.8	-8.7975 µg/L	-8.7975 ppb	11:18:54
3	U 409.014†	870.5	254.5	23.893 µg/L	23.893 ppb	11:18:34
3	V 292.402†	-17.3	73.4	0.8763 µg/L	0.8763 ppb	11:18:34
3	Zn 213.857†	588.8	81.4	2.1788 µg/L	2.1788 ppb	11:18:54

Mean Data: 1201997323|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1905058.7	92.625	%	0.7916				0.85%
Sc RADIAL	104278.5	92.7	%	0.19				0.21%
Y 371.029	1156327.1	92.332	%	0.7932				0.86%
Ag 328.068†	-116.2	-1.0292	µg/L	0.56995	-1.0292	ppb	0.56995	55.38%
Al 396.153Radial†	-11.3	-5.7307	µg/L	8.11906	-5.7307	ppb	8.11906	141.68%
As 188.979†	-1.3	-2.4344	µg/L	7.35834	-2.4344	ppb	7.35834	302.26%
B 249.677†	2.7	0.1093	µg/L	0.47214	0.1093	ppb	0.47214	431.92%
Ba 233.527†	-0.5	-0.0111	µg/L	0.17776	-0.0111	ppb	0.17776	>999.9%
Be 313.107†	265.2	0.1675	µg/L	0.04796	0.1675	ppb	0.04796	28.62%
Ca 317.933Radial†	-65.1	-25.839	µg/L	2.5529	-25.839	ppb	2.5529	9.88%
Cd 226.502†	3.1	0.0953	µg/L	0.16583	0.0953	ppb	0.16583	174.07%
Co 228.616†	-5.1	-0.2458	µg/L	0.22296	-0.2458	ppb	0.22296	90.69%
Cr 267.716†	21.3	0.4462	µg/L	0.14147	0.4462	ppb	0.14147	31.71%
Cu 324.752†	-55.8	-0.3840	µg/L	0.29629	-0.3840	ppb	0.29629	77.15%
Fe 238.204 Radial†	7.5	39.385	µg/L	6.5967	39.385	ppb	6.5967	16.75%
K 766.490 Radial†	60.5	32.809	µg/L	19.1158	32.809	ppb	19.1158	58.26%
Mg 279.077 IEC†	-2.9	-16.083	µg/L	3.8995	-16.083	ppb	3.8995	24.25%
Mn 257.610†	271.6	0.8668	µg/L	0.03003	0.8668	ppb	0.03003	3.47%
Mo 202.031†	5.9	0.6562	µg/L	0.44546	0.6562	ppb	0.44546	67.88%
Na 589.592 Radial†	0.7	0.1806	µg/L	1.97204	0.1806	ppb	1.97204	>999.9%

Ni 231.604†	0.2	0.0082	µg/L	0.48101	0.0082	ppb	0.48101 >999.9%
P 214.914†	32.4	70.235	µg/L	15.4065	70.235	ppb	15.4065 21.94%
Pb 220.353†	13.6	3.4317	µg/L	0.71844	3.4317	ppb	0.71844 20.94%
S 181.975 Axial†	8.2	42.203	µg/L	24.2022	42.203	ppb	24.2022 57.35%
Sb 206.836†	2.2	2.1545	µg/L	4.56246	2.1545	ppb	4.56246 211.77%
Se 196.026†	-1.9	-2.6831	µg/L	9.66269	-2.6831	ppb	9.66269 360.13%
SiO2†	204.3	39.005	µg/L	1.6996	39.005	ppb	1.6996 4.36%
Si 251.611†	142.0	10.846	µg/L	0.8135	10.846	ppb	0.8135 7.50%
Sn 189.927†	-0.9	-0.4548	µg/L	0.54664	-0.4548	ppb	0.54664 120.21%
Sr 421.552†	-24.1	-0.1360	µg/L	0.09074	-0.1360	ppb	0.09074 66.72%
Ti 334.940†	261.7	0.5816	µg/L	0.12303	0.5816	ppb	0.12303 21.15%
Tl 190.801†	-2.6	-3.8399	µg/L	5.13177	-3.8399	ppb	5.13177 133.64%
U 409.014†	232.4	21.819	µg/L	1.8093	21.819	ppb	1.8093 8.29%
V 292.402†	71.4	0.8477	µg/L	0.17423	0.8477	ppb	0.17423 20.55%
Zn 213.857†	85.4	2.2836	µg/L	0.34691	2.2836	ppb	0.34691 15.19%

Sequence No.: 34
Sample ID: 1201997324|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 328
Date Collected: 12/18/2009 11:19:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201997324|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106304.0	106304.0	94.5	%			11:19:36
1	Al 396.153Radial†	161477.9	170629.7	86213	µg/L	86213	ppb	11:19:36
1	Ca 317.933Radial†	225179.5	237766.6	94382	µg/L	94382	ppb	11:19:36
1	Fe 238.204 Radial†	35228.2	37263.7	195780	µg/L	195780	ppb	11:19:42
1	K 766.490 Radial†	71309.3	74757.4	40533	µg/L	40533	ppb	11:19:36
1	Mg 279.077 IEC†	6682.5	7050.9	38833	µg/L	38833	ppb	11:19:42
1	Na 589.592 Radial†	32566.0	35162.0	9756.1	µg/L	9756.1	ppb	11:19:36
1	Sr 421.552†	371134.5	392760.6	2212.4	µg/L	2212.4	ppb	11:19:36
1	Sc 361.383	1898174.2	1898174.2	92.290	%			11:20:17
1	Y 371.029	1168235.3	1168235.3	93.283	%			11:20:17
1	Ag 328.068†	29854.7	32377.0	312.86	µg/L	312.86	ppb	11:20:23
1	As 188.979†	524.4	565.7	1049.3	µg/L	1049.3	ppb	11:20:43
1	B 249.677†	31911.7	34421.9	1466.2	µg/L	1466.2	ppb	11:20:23
1	Ba 233.527†	68783.2	74609.9	1876.5	µg/L	1876.5	ppb	11:20:23
1	Be 313.107†	1153525.5	1246277.4	786.35	µg/L	786.35	ppb	11:20:17
1	Cd 226.502†	20701.1	22531.3	581.69	µg/L	581.69	ppb	11:20:23
1	Co 228.616†	17574.8	19114.7	908.97	µg/L	908.97	ppb	11:20:23
1	Cr 267.716†	104198.7	113026.0	2355.6	µg/L	2355.6	ppb	11:20:23
1	Cu 324.752†	242247.4	259099.9	1865.0	µg/L	1865.0	ppb	11:20:23
1	Mn 257.610†	1565430.1	1696425.8	5408.3	µg/L	5408.3	ppb	11:20:17
1	Mo 202.031†	4157.0	4512.2	511.07	µg/L	511.07	ppb	11:20:43
1	Ni 231.604†	22985.5	24606.3	1340.5	µg/L	1340.5	ppb	11:20:23
1	P 214.914†	3597.5	3692.0	7613.5	µg/L	7613.5	ppb	11:20:43
1	Pb 220.353†	3111.5	3317.3	844.98	µg/L	844.98	ppb	11:20:43
1	S 181.975 Axial†	723.1	759.4	3867.2	µg/L	3867.2	ppb	11:20:43
1	Sb 206.836†	1508.1	1613.6	1600.6	µg/L	1600.6	ppb	11:20:43
1	Se 196.026†	1755.5	1888.0	2884.2	µg/L	2884.2	ppb	11:20:43
1	SiO2†	143516.1	153523.5	29317	µg/L	29317	ppb	11:20:23
1	Si 251.611†	165228.4	178681.6	13427	µg/L	13427	ppb	11:20:23
1	Sn 189.927†	1837.0	1968.0	1011.1	µg/L	1011.1	ppb	11:20:43
1	Ti 334.940†	2275126.3	2464467.1	5457.4	µg/L	5457.4	ppb	11:20:17
1	Tl 190.801†	704.0	784.2	1227.0	µg/L	1227.0	ppb	11:20:43
1	U 409.014†	510.8	-125.7	-46.117	µg/L	-46.117	ppb	11:20:23
1	V 292.402†	98401.6	106713.8	1222.5	µg/L	1222.5	ppb	11:20:23
1	Zn 213.857†	200360.4	216548.0	5770.5	µg/L	5770.5	ppb	11:20:23
2	Sc RADIAL	106681.2	106681.2	94.8	%			11:19:48
2	Al 396.153Radial†	162848.5	171470.7	86638	µg/L	86638	ppb	11:19:48
2	Ca 317.933Radial†	227013.9	238858.3	94816	µg/L	94816	ppb	11:19:48
2	Fe 238.204 Radial†	35146.5	37045.7	194630	µg/L	194630	ppb	11:19:53
2	K 766.490 Radial†	71952.1	75168.3	40756	µg/L	40756	ppb	11:19:48
2	Mg 279.077 IEC†	6674.5	7017.5	38649	µg/L	38649	ppb	11:19:53
2	Na 589.592 Radial†	32701.6	35183.1	9762.0	µg/L	9762.0	ppb	11:19:48
2	Sr 421.552†	374034.2	394429.4	2221.8	µg/L	2221.8	ppb	11:19:48
2	Sc 361.383	1906791.5	1906791.5	92.709	%			11:20:50
2	Y 371.029	1174714.6	1174714.6	93.800	%			11:20:50
2	Ag 328.068†	29954.6	32338.6	312.44	µg/L	312.44	ppb	11:20:56
2	As 188.979†	539.4	579.3	1075.6	µg/L	1075.6	ppb	11:21:17
2	B 249.677†	32188.9	34564.6	1472.9	µg/L	1472.9	ppb	11:20:56
2	Ba 233.527†	69301.2	74831.8	1882.1	µg/L	1882.1	ppb	11:20:56
2	Be 313.107†	1166546.1	1254673.3	791.65	µg/L	791.65	ppb	11:20:50
2	Cd 226.502†	20903.7	22648.5	584.87	µg/L	584.87	ppb	11:20:56
2	Co 228.616†	17659.2	19119.7	909.14	µg/L	909.14	ppb	11:20:56
2	Cr 267.716†	104807.3	113172.3	2358.6	µg/L	2358.6	ppb	11:20:56
2	Cu 324.752†	243402.1	259159.3	1865.1	µg/L	1865.1	ppb	11:20:56
2	Mn 257.610†	1583366.5	1708107.1	5445.2	µg/L	5445.2	ppb	11:20:50
2	Mo 202.031†	4187.5	4524.7	512.43	µg/L	512.43	ppb	11:21:17
2	Ni 231.604†	23182.4	24706.1	1346.0	µg/L	1346.0	ppb	11:20:56
2	P 214.914†	3612.1	3690.1	7610.9	µg/L	7610.9	ppb	11:21:17
2	Pb 220.353†	3118.0	3309.0	842.94	µg/L	842.94	ppb	11:21:17

2	S 181.975 Axial†	730.1	763.5	3888.2	µg/L	3888.2 ppb	11:21:17
2	Sb 206.836†	1505.8	1603.7	1590.8	µg/L	1590.8 ppb	11:21:17
2	Se 196.026†	1750.6	1874.1	2863.3	µg/L	2863.3 ppb	11:21:17
2	SiO2†	144526.3	153910.3	29391	µg/L	29391 ppb	11:20:56
2	Si 251.611†	166484.4	179227.3	13468	µg/L	13468 ppb	11:20:56
2	Sn 189.927†	1843.3	1965.8	1009.9	µg/L	1009.9 ppb	11:21:17
2	Ti 334.940†	2299465.5	2479579.6	5490.9	µg/L	5490.9 ppb	11:20:50
2	Tl 190.801†	709.7	787.0	1231.5	µg/L	1231.5 ppb	11:21:17
2	U 409.014†	477.2	-164.5	-49.536	µg/L	-49.536 ppb	11:20:56
2	V 292.402†	99044.8	106925.7	1224.8	µg/L	1224.8 ppb	11:20:56
2	Zn 213.857†	201586.7	216889.6	5779.7	µg/L	5779.7 ppb	11:20:56
3	Sc RADIAL	106695.5	106695.5	94.9	%		11:19:59
3	Al 396.153Radial†	164004.6	172666.5	87242	µg/L	87242 ppb	11:19:59
3	Ca 317.933Radial†	228948.9	240866.3	95613	µg/L	95613 ppb	11:19:59
3	Fe 238.204 Radial†	35117.2	37009.9	194440	µg/L	194440 ppb	11:20:04
3	K 766.490 Radial†	72400.9	75631.4	41007	µg/L	41007 ppb	11:19:59
3	Mg 279.077 IEC†	6654.2	6995.1	38525	µg/L	38525 ppb	11:20:04
3	Na 589.592 Radial†	32880.7	35367.3	9813.1	µg/L	9813.1 ppb	11:19:59
3	Sr 421.552†	376671.1	397156.6	2237.2	µg/L	2237.2 ppb	11:19:59
3	Sc 361.383	1900378.2	1900378.2	92.397	%		11:21:24
3	Y 371.029	1170630.8	1170630.8	93.474	%		11:21:24
3	Ag 328.068†	30145.2	32653.9	315.30	µg/L	315.30 ppb	11:21:30
3	As 188.979†	536.0	577.7	1072.2	µg/L	1072.2 ppb	11:21:50
3	B 249.677†	32361.6	34868.7	1486.5	µg/L	1486.5 ppb	11:21:30
3	Ba 233.527†	69561.3	75365.6	1895.5	µg/L	1895.5 ppb	11:21:30
3	Be 313.107†	1157743.1	1249392.4	788.32	µg/L	788.32 ppb	11:21:24
3	Cd 226.502†	20978.3	22805.3	589.05	µg/L	589.05 ppb	11:21:30
3	Co 228.616†	17783.4	19318.4	918.75	µg/L	918.75 ppb	11:21:30
3	Cr 267.716†	105184.6	113962.1	2375.1	µg/L	2375.1 ppb	11:21:30
3	Cu 324.752†	244090.3	260790.1	1876.6	µg/L	1876.6 ppb	11:21:30
3	Mn 257.610†	1569660.6	1699037.2	5416.4	µg/L	5416.4 ppb	11:21:24
3	Mo 202.031†	4167.2	4518.0	511.67	µg/L	511.67 ppb	11:21:50
3	Ni 231.604†	23308.8	24927.2	1358.0	µg/L	1358.0 ppb	11:21:30
3	P 214.914†	3615.0	3706.5	7645.6	µg/L	7645.6 ppb	11:21:50
3	Pb 220.353†	3123.3	3326.1	847.31	µg/L	847.31 ppb	11:21:50
3	S 181.975 Axial†	727.6	763.5	3888.2	µg/L	3888.2 ppb	11:21:50
3	Sb 206.836†	1495.7	1598.2	1585.1	µg/L	1585.1 ppb	11:21:50
3	Se 196.026†	1758.7	1889.3	2885.4	µg/L	2885.4 ppb	11:21:50
3	SiO2†	144849.8	154786.6	29559	µg/L	29559 ppb	11:21:30
3	Si 251.611†	166626.0	179986.5	13526	µg/L	13526 ppb	11:21:30
3	Sn 189.927†	1853.1	1983.1	1018.5	µg/L	1018.5 ppb	11:21:50
3	Ti 334.940†	2281672.3	2468692.7	5466.7	µg/L	5466.7 ppb	11:21:24
3	Tl 190.801†	700.3	779.4	1219.6	µg/L	1219.6 ppb	11:21:50
3	U 409.014†	585.4	-45.6	-38.316	µg/L	-38.316 ppb	11:21:30
3	V 292.402†	99391.1	107661.1	1233.1	µg/L	1233.1 ppb	11:21:30
3	Zn 213.857†	202295.3	218390.3	5819.9	µg/L	5819.9 ppb	11:21:30

Mean Data: 1201997324|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1901781.3	92.466	%	0.2177				0.24%
Sc RADIAL	106560.2	94.7	%	0.20				0.21%
Y 371.029	1171193.6	93.519	%	0.2616				0.28%
Ag 328.068†	32456.5	313.53	µg/L	1.544	313.53	ppb	1.544	0.49%
Al 396.153Radial†	171589.0	86698	µg/L	517.3	86698	ppb	517.3	0.60%
As 188.979†	574.2	1065.7	µg/L	14.26	1065.7	ppb	14.26	1.34%
B 249.677†	34618.4	1475.2	µg/L	10.32	1475.2	ppb	10.32	0.70%
Ba 233.527†	74935.8	1884.7	µg/L	9.77	1884.7	ppb	9.77	0.52%
Be 313.107†	1250114.3	788.77	µg/L	2.678	788.77	ppb	2.678	0.34%
Ca 317.933Radial†	239163.7	94937	µg/L	624.1	94937	ppb	624.1	0.66%
Cd 226.502†	22661.7	585.20	µg/L	3.694	585.20	ppb	3.694	0.63%
Co 228.616†	19184.2	912.29	µg/L	5.596	912.29	ppb	5.596	0.61%
Cr 267.716†	113386.8	2363.1	µg/L	10.50	2363.1	ppb	10.50	0.44%
Cu 324.752†	259683.1	1868.9	µg/L	6.65	1868.9	ppb	6.65	0.36%
Fe 238.204 Radial†	37106.5	194950	µg/L	721.4	194950	ppb	721.4	0.37%
K 766.490 Radial†	75185.7	40765	µg/L	237.1	40765	ppb	237.1	0.58%
Mg 279.077 IEC†	7021.2	38669	µg/L	154.8	38669	ppb	154.8	0.40%
Mn 257.610†	1701190.0	5423.3	µg/L	19.41	5423.3	ppb	19.41	0.36%
Mo 202.031†	4518.3	511.72	µg/L	0.680	511.72	ppb	0.680	0.13%
Na 589.592 Radial†	35237.5	9777.1	µg/L	31.35	9777.1	ppb	31.35	0.32%

Ni 231.604†	24746.5	1348.2	µg/L	8.95	1348.2	ppb	8.95	0.66%
P 214.914†	3696.2	7623.3	µg/L	19.35	7623.3	ppb	19.35	0.25%
Pb 220.353†	3317.5	845.08	µg/L	2.182	845.08	ppb	2.182	0.26%
S 181.975 Axial†	762.1	3881.2	µg/L	12.12	3881.2	ppb	12.12	0.31%
Sb 206.836†	1605.2	1592.2	µg/L	7.82	1592.2	ppb	7.82	0.49%
Se 196.026†	1883.8	2877.6	µg/L	12.41	2877.6	ppb	12.41	0.43%
SiO2†	154073.5	29422	µg/L	123.6	29422	ppb	123.6	0.42%
Si 251.611†	179298.5	13474	µg/L	49.8	13474	ppb	49.8	0.37%
Sn 189.927†	1972.3	1013.2	µg/L	4.65	1013.2	ppb	4.65	0.46%
Sr 421.552†	394782.2	2223.8	µg/L	12.50	2223.8	ppb	12.50	0.56%
Ti 334.940†	2470913.1	5471.7	µg/L	17.28	5471.7	ppb	17.28	0.32%
Tl 190.801†	783.5	1226.0	µg/L	5.99	1226.0	ppb	5.99	0.49%
U 409.014†	-112.0	-44.657	µg/L	5.7509	-44.657	ppb	5.7509	12.88%
V 292.402†	107100.2	1226.8	µg/L	5.57	1226.8	ppb	5.57	0.45%
Zn 213.857†	217276.0	5790.0	µg/L	26.26	5790.0	ppb	26.26	0.45%

Sequence No.: 35
Sample ID: 241838002|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 329
Date Collected: 12/18/2009 11:22:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241838002|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107516.4	107516.4	95.6	%			11:22:33
1	Al 396.153Radial†	77422.3	80766.8	40817	µg/L	40817	ppb	11:22:33
1	Ca 317.933Radial†	35853.4	37013.2	14693	µg/L	14693	ppb	11:22:53
1	Fe 238.204 Radial†	16929.1	17699.4	92975	µg/L	92975	ppb	11:22:53
1	K 766.490 Radial†	10908.1	10716.8	5810.6	µg/L	5810.6	ppb	11:22:33
1	Mg 279.077 IEC†	1560.7	1612.9	8809.3	µg/L	8809.3	ppb	11:22:53
1	Na 589.592 Radial†	3966.5	4853.5	1346.7	µg/L	1346.7	ppb	11:22:53
1	Sr 421.552†	21884.5	22958.6	129.32	µg/L	129.32	ppb	11:22:33
1	Sc 361.383	1940637.7	1940637.7	94.355	%			11:23:56
1	Y 371.029	1232667.4	1232667.4	98.428	%			11:23:56
1	Ag 328.068†	-1066.3	-1101.7	-1.8736	µg/L	-1.8736	ppb	11:24:02
1	As 188.979†	20.3	19.0	26.997	µg/L	26.997	ppb	11:24:22
1	B 249.677†	1392.0	1319.6	29.332	µg/L	29.332	ppb	11:24:02
1	Ba 233.527†	24882.6	26452.0	664.59	µg/L	664.59	ppb	11:24:02
1	Be 313.107†	13536.7	10735.1	5.9022	µg/L	5.9022	ppb	11:24:02
1	Cd 226.502†	170.3	281.4	0.2634	µg/L	0.2634	ppb	11:24:22
1	Co 228.616†	436.6	534.4	20.733	µg/L	20.733	ppb	11:24:22
1	Cr 267.716†	2272.8	2531.5	52.912	µg/L	52.912	ppb	11:24:22
1	Cu 324.752†	5900.9	2869.6	40.160	µg/L	40.160	ppb	11:24:02
1	Mn 257.610†	813779.9	862690.1	2749.5	µg/L	2749.5	ppb	11:23:56
1	Mo 202.031†	159.6	177.1	23.412	µg/L	23.412	ppb	11:24:22
1	Ni 231.604†	865.5	617.9	33.660	µg/L	33.660	ppb	11:24:22
1	P 214.914†	584.0	413.0	799.09	µg/L	799.09	ppb	11:24:22
1	Pb 220.353†	336.2	302.2	79.037	µg/L	79.037	ppb	11:24:22
1	S 181.975 Axial†	83.6	64.6	316.82	µg/L	316.82	ppb	11:24:22
1	Sb 206.836†	18.5	-1.0	6.3390	µg/L	6.3390	ppb	11:24:22
1	Se 196.026†	-31.6	-47.6	-5.7685	µg/L	-5.7685	ppb	11:24:22
1	SiO2†	97315.5	101156.1	19317	µg/L	19317	ppb	11:24:02
1	Si 251.611†	111371.2	117684.8	8925.3	µg/L	8925.3	ppb	11:24:02
1	Sn 189.927†	-31.8	-56.2	-11.447	µg/L	-11.447	ppb	11:24:22
1	Ti 334.940†	1022356.8	1082804.5	2399.3	µg/L	2399.3	ppb	11:23:56
1	Tl 190.801†	-31.4	-11.8	8.6699	µg/L	8.6699	ppb	11:24:22
1	U 409.014†	563.1	-82.4	-24.748	µg/L	-24.748	ppb	11:23:56
1	V 292.402†	7616.9	8164.6	99.753	µg/L	99.753	ppb	11:24:02
1	Zn 213.857†	11633.2	11779.0	305.25	µg/L	305.25	ppb	11:24:02
2	Sc RADIAL	106529.1	106529.1	94.7	%			11:22:59
2	Al 396.153Radial†	77439.4	81535.6	41205	µg/L	41205	ppb	11:22:59
2	Ca 317.933Radial†	36035.9	37553.5	14907	µg/L	14907	ppb	11:23:19
2	Fe 238.204 Radial†	16945.3	17880.7	93928	µg/L	93928	ppb	11:23:19
2	K 766.490 Radial†	10836.0	10746.5	5826.7	µg/L	5826.7	ppb	11:22:59
2	Mg 279.077 IEC†	1568.2	1636.0	8936.3	µg/L	8936.3	ppb	11:23:19
2	Na 589.592 Radial†	4058.3	4988.9	1384.2	µg/L	1384.2	ppb	11:23:19
2	Sr 421.552†	21743.9	23022.4	129.68	µg/L	129.68	ppb	11:22:59
2	Sc 361.383	1932234.0	1932234.0	93.946	%			11:24:28
2	Y 371.029	1226433.0	1226433.0	97.930	%			11:24:28
2	Ag 328.068†	-1114.5	-1158.0	-2.2908	µg/L	-2.2908	ppb	11:24:34
2	As 188.979†	13.3	11.6	12.760	µg/L	12.760	ppb	11:24:54
2	B 249.677†	1400.4	1334.9	29.713	µg/L	29.713	ppb	11:24:34
2	Ba 233.527†	25019.6	26712.5	671.13	µg/L	671.13	ppb	11:24:34
2	Be 313.107†	13723.5	10996.3	6.0649	µg/L	6.0649	ppb	11:24:34
2	Cd 226.502†	157.5	268.5	-0.1482	µg/L	-0.1482	ppb	11:24:54
2	Co 228.616†	425.6	524.8	20.255	µg/L	20.255	ppb	11:24:54
2	Cr 267.716†	2268.6	2537.5	53.040	µg/L	53.040	ppb	11:24:54
2	Cu 324.752†	5930.1	2927.9	40.775	µg/L	40.775	ppb	11:24:34
2	Mn 257.610†	811861.6	864399.4	2755.0	µg/L	2755.0	ppb	11:24:28
2	Mo 202.031†	162.7	181.1	23.894	µg/L	23.894	ppb	11:24:54
2	Ni 231.604†	868.7	625.3	34.066	µg/L	34.066	ppb	11:24:54
2	P 214.914†	590.2	422.2	817.99	µg/L	817.99	ppb	11:24:54
2	Pb 220.353†	330.9	298.1	78.025	µg/L	78.025	ppb	11:24:54

2	S 181.975 Axial†	88.4	70.1	344.86	µg/L	344.86 ppb	11:24:54
2	Sb 206.836†	23.5	4.5	11.793	µg/L	11.793 ppb	11:24:54
2	Se 196.026†	-35.4	-51.7	-11.190	µg/L	-11.190 ppb	11:24:54
2	SiO2†	97911.4	102239.0	19524	µg/L	19524 ppb	11:24:34
2	Si 251.611†	112203.4	119083.9	9032.4	µg/L	9032.4 ppb	11:24:34
2	Sn 189.927†	-39.9	-64.9	-15.531	µg/L	-15.531 ppb	11:24:54
2	Ti 334.940†	1020815.3	1085876.1	2406.1	µg/L	2406.1 ppb	11:24:28
2	Tl 190.801†	-33.0	-13.7	5.8272	µg/L	5.8272 ppb	11:24:54
2	U 409.014†	596.4	-44.4	-21.355	µg/L	-21.355 ppb	11:24:28
2	V 292.402†	7701.6	8289.9	101.25	µg/L	101.25 ppb	11:24:34
2	Zn 213.857†	11651.7	11852.3	307.11	µg/L	307.11 ppb	11:24:34
3	Sc RADIAL	106974.5	106974.5	95.1	%		11:23:25
3	Al 396.153Radial†	77611.0	81375.5	41124	µg/L	41124 ppb	11:23:25
3	Ca 317.933Radial†	35961.0	37316.3	14813	µg/L	14813 ppb	11:23:45
3	Fe 238.204 Radial†	16924.2	17784.0	93420	µg/L	93420 ppb	11:23:45
3	K 766.490 Radial†	10847.5	10710.9	5807.4	µg/L	5807.4 ppb	11:23:25
3	Mg 279.077 IEC†	1564.3	1625.0	8876.0	µg/L	8876.0 ppb	11:23:45
3	Na 589.592 Radial†	4019.8	4930.6	1368.1	µg/L	1368.1 ppb	11:23:45
3	Sr 421.552†	21744.2	22927.1	129.15	µg/L	129.15 ppb	11:23:25
3	Sc 361.383	1926605.4	1926605.4	93.673	%		11:25:01
3	Y 371.029	1223622.1	1223622.1	97.705	%		11:25:01
3	Ag 328.068†	-1063.0	-1106.5	-1.8719	µg/L	-1.8719 ppb	11:25:06
3	As 188.979†	18.0	16.7	22.449	µg/L	22.449 ppb	11:25:27
3	B 249.677†	1346.9	1282.2	27.531	µg/L	27.531 ppb	11:25:06
3	Ba 233.527†	24797.1	26552.8	667.12	µg/L	667.12 ppb	11:25:06
3	Be 313.107†	13448.4	10745.3	5.9066	µg/L	5.9066 ppb	11:25:06
3	Cd 226.502†	157.8	269.3	-0.0860	µg/L	-0.0860 ppb	11:25:27
3	Co 228.616†	421.8	522.0	20.125	µg/L	20.125 ppb	11:25:27
3	Cr 267.716†	2272.1	2548.3	53.265	µg/L	53.265 ppb	11:25:27
3	Cu 324.752†	5923.1	2938.9	40.743	µg/L	40.743 ppb	11:25:06
3	Mn 257.610†	808937.2	863802.1	2753.1	µg/L	2753.1 ppb	11:25:01
3	Mo 202.031†	170.0	189.4	24.803	µg/L	24.803 ppb	11:25:27
3	Ni 231.604†	875.6	635.4	34.616	µg/L	34.616 ppb	11:25:27
3	P 214.914†	590.7	424.6	823.65	µg/L	823.65 ppb	11:25:27
3	Pb 220.353†	340.5	309.4	80.886	µg/L	80.886 ppb	11:25:27
3	S 181.975 Axial†	87.1	68.9	338.91	µg/L	338.91 ppb	11:25:27
3	Sb 206.836†	18.9	-0.4	6.9493	µg/L	6.9493 ppb	11:25:27
3	Se 196.026†	-24.0	-39.7	5.9986	µg/L	5.9986 ppb	11:25:27
3	SiO2†	97187.2	101770.3	19434	µg/L	19434 ppb	11:25:06
3	Si 251.611†	111365.8	118538.7	8990.7	µg/L	8990.7 ppb	11:25:06
3	Sn 189.927†	-42.1	-67.3	-16.807	µg/L	-16.807 ppb	11:25:27
3	Ti 334.940†	1017311.8	1085310.5	2404.9	µg/L	2404.9 ppb	11:25:01
3	Tl 190.801†	-34.3	-15.2	3.6969	µg/L	3.6969 ppb	11:25:27
3	U 409.014†	601.8	-36.8	-20.542	µg/L	-20.542 ppb	11:25:01
3	V 292.402†	7674.0	8284.3	101.16	µg/L	101.16 ppb	11:25:06
3	Zn 213.857†	11647.5	11884.1	308.01	µg/L	308.01 ppb	11:25:06

Mean Data: 241838002|933564|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933159.1	93.991	%	0.3433				0.37%
Sc RADIAL	107006.7	95.1	%	0.44				0.46%
Y 371.029	1227574.1	98.021	%	0.3697				0.38%
Ag 328.068†	-1122.1	-2.0121	µg/L	0.24137	-2.0121	ppb	0.24137	12.00%
Al 396.153Radial†	81226.0	41049	µg/L	205.0	41049	ppb	205.0	0.50%
As 188.979†	15.8	20.736	µg/L	7.2715	20.736	ppb	7.2715	35.07%
B 249.677†	1312.2	28.858	µg/L	1.1653	28.858	ppb	1.1653	4.04%
Ba 233.527†	26572.4	667.61	µg/L	3.301	667.61	ppb	3.301	0.49%
Be 313.107†	10825.6	5.9579	µg/L	0.09270	5.9579	ppb	0.09270	1.56%
Ca 317.933Radial†	37294.4	14804	µg/L	107.5	14804	ppb	107.5	0.73%
Cd 226.502†	273.1	0.0097	µg/L	0.22188	0.0097	ppb	0.22188	>999.9%
Co 228.616†	527.1	20.371	µg/L	0.3204	20.371	ppb	0.3204	1.57%
Cr 267.716†	2539.1	53.072	µg/L	0.1785	53.072	ppb	0.1785	0.34%
Cu 324.752†	2912.1	40.559	µg/L	0.3459	40.559	ppb	0.3459	0.85%
Fe 238.204 Radial†	17788.0	93441	µg/L	476.4	93441	ppb	476.4	0.51%
K 766.490 Radial†	10724.7	5814.9	µg/L	10.34	5814.9	ppb	10.34	0.18%
Mg 279.077 IEC†	1624.6	8873.9	µg/L	63.51	8873.9	ppb	63.51	0.72%
Mn 257.610†	863630.5	2752.5	µg/L	2.81	2752.5	ppb	2.81	0.10%
Mo 202.031†	182.5	24.037	µg/L	0.7063	24.037	ppb	0.7063	2.94%
Na 589.592 Radial†	4924.4	1366.3	µg/L	18.85	1366.3	ppb	18.85	1.38%

Ni 231.604†	626.2	34.114	µg/L	0.4797	34.114	ppb	0.4797	1.41%
P 214.914†	419.9	813.58	µg/L	12.864	813.58	ppb	12.864	1.58%
Pb 220.353†	303.2	79.316	µg/L	1.4507	79.316	ppb	1.4507	1.83%
S 181.975 Axial†	67.9	333.53	µg/L	14.776	333.53	ppb	14.776	4.43%
Sb 206.836†	1.0	8.3604	µg/L	2.98824	8.3604	ppb	2.98824	35.74%
Se 196.026†	-46.3	-3.6534	µg/L	8.78748	-3.6534	ppb	8.78748	240.53%
SiO2†	101721.8	19425	µg/L	103.7	19425	ppb	103.7	0.53%
Si 251.611†	118435.8	8982.8	µg/L	53.97	8982.8	ppb	53.97	0.60%
Sn 189.927†	-62.8	-14.595	µg/L	2.8000	-14.595	ppb	2.8000	19.18%
Sr 421.552†	22969.3	129.38	µg/L	0.273	129.38	ppb	0.273	0.21%
Ti 334.940†	1084663.7	2403.4	µg/L	3.62	2403.4	ppb	3.62	0.15%
Tl 190.801†	-13.6	6.0647	µg/L	2.49501	6.0647	ppb	2.49501	41.14%
U 409.014†	-54.5	-22.215	µg/L	2.2307	-22.215	ppb	2.2307	10.04%
V 292.402†	8246.3	100.72	µg/L	0.839	100.72	ppb	0.839	0.83%
Zn 213.857†	11838.5	306.79	µg/L	1.407	306.79	ppb	1.407	0.46%

Sequence No.: 36
Sample ID: 1201985644|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 330
Date Collected: 12/18/2009 11:25:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985644|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108188.5	108188.5	96.2	%			11:26:08
1	Al 396.153Radial†	76455.0	79258.0	40055	µg/L	40055	ppb	11:26:08
1	Ca 317.933Radial†	34237.9	35100.6	13933	µg/L	13933	ppb	11:26:28
1	Fe 238.204 Radial†	15239.6	15832.9	83170	µg/L	83170	ppb	11:26:28
1	K 766.490 Radial†	10364.3	10080.6	5465.7	µg/L	5465.7	ppb	11:26:08
1	Mg 279.077 IEC†	1588.8	1632.0	8929.9	µg/L	8929.9	ppb	11:26:28
1	Na 589.592 Radial†	3623.6	4471.2	1240.6	µg/L	1240.6	ppb	11:26:28
1	Sr 421.552†	21038.6	21937.0	123.57	µg/L	123.57	ppb	11:26:08
1	Sc 361.383	1944692.0	1944692.0	94.552	%			11:27:31
1	Y 371.029	1224384.5	1224384.5	97.766	%			11:27:31
1	Ag 328.068†	-962.6	-989.7	-1.6796	µg/L	-1.6796	ppb	11:27:37
1	As 188.979†	7.8	5.7	2.9773	µg/L	2.9773	ppb	11:27:57
1	B 249.677†	1261.6	1178.6	26.159	µg/L	26.159	ppb	11:27:37
1	Ba 233.527†	23444.0	24875.5	624.98	µg/L	624.98	ppb	11:27:37
1	Be 313.107†	12908.0	10040.2	5.4917	µg/L	5.4917	ppb	11:27:37
1	Cd 226.502†	145.2	254.4	0.2934	µg/L	0.2934	ppb	11:27:57
1	Co 228.616†	397.7	492.4	18.866	µg/L	18.866	ppb	11:27:57
1	Cr 267.716†	2061.6	2303.2	48.147	µg/L	48.147	ppb	11:27:57
1	Cu 324.752†	5810.0	2760.4	37.286	µg/L	37.286	ppb	11:27:37
1	Mn 257.610†	726292.6	768363.8	2448.9	µg/L	2448.9	ppb	11:27:31
1	Mo 202.031†	130.1	145.5	19.499	µg/L	19.499	ppb	11:27:57
1	Ni 231.604†	825.2	573.3	31.233	µg/L	31.233	ppb	11:27:57
1	P 214.914†	612.2	441.5	872.25	µg/L	872.25	ppb	11:27:57
1	Pb 220.353†	315.8	279.8	73.431	µg/L	73.431	ppb	11:27:57
1	S 181.975 Axial†	82.4	63.1	310.70	µg/L	310.70	ppb	11:27:57
1	Sb 206.836†	24.7	5.6	12.649	µg/L	12.649	ppb	11:27:57
1	Se 196.026†	-23.2	-38.6	0.2867	µg/L	0.2867	ppb	11:27:57
1	SiO2†	98641.5	102343.5	19544	µg/L	19544	ppb	11:27:37
1	Si 251.611†	112924.9	119081.9	9035.6	µg/L	9035.6	ppb	11:27:37
1	Sn 189.927†	-42.4	-67.2	-18.146	µg/L	-18.146	ppb	11:27:57
1	Ti 334.940†	990988.2	1047369.5	2320.8	µg/L	2320.8	ppb	11:27:31
1	Tl 190.801†	-35.4	-16.0	0.7245	µg/L	0.7245	ppb	11:27:57
1	U 409.014†	363.5	-294.8	-42.884	µg/L	-42.884	ppb	11:27:37
1	V 292.402†	7231.3	7740.0	94.109	µg/L	94.109	ppb	11:27:37
1	Zn 213.857†	10231.7	10271.1	265.90	µg/L	265.90	ppb	11:27:37
2	Sc RADIAL	106808.3	106808.3	95.0	%			11:26:34
2	Al 396.153Radial†	77352.4	81230.2	41051	µg/L	41051	ppb	11:26:34
2	Ca 317.933Radial†	34414.6	35746.7	14190	µg/L	14190	ppb	11:26:54
2	Fe 238.204 Radial†	15331.3	16134.3	84754	µg/L	84754	ppb	11:26:54
2	K 766.490 Radial†	10372.2	10228.1	5545.6	µg/L	5545.6	ppb	11:26:34
2	Mg 279.077 IEC†	1587.4	1651.9	9037.7	µg/L	9037.7	ppb	11:26:54
2	Na 589.592 Radial†	3669.5	4568.3	1267.5	µg/L	1267.5	ppb	11:26:54
2	Sr 421.552†	21272.1	22465.5	126.55	µg/L	126.55	ppb	11:26:34
2	Sc 361.383	1936812.9	1936812.9	94.169	%			11:28:03
2	Y 371.029	1220037.5	1220037.5	97.419	%			11:28:03
2	Ag 328.068†	-1008.4	-1042.5	-2.0252	µg/L	-2.0252	ppb	11:28:09
2	As 188.979†	11.0	9.2	9.2534	µg/L	9.2534	ppb	11:28:29
2	B 249.677†	1268.4	1191.3	26.221	µg/L	26.221	ppb	11:28:09
2	Ba 233.527†	23321.5	24846.3	624.25	µg/L	624.25	ppb	11:28:09
2	Be 313.107†	12780.6	9960.5	5.4401	µg/L	5.4401	ppb	11:28:09
2	Cd 226.502†	150.4	260.6	0.3353	µg/L	0.3353	ppb	11:28:29
2	Co 228.616†	404.3	501.0	19.276	µg/L	19.276	ppb	11:28:29
2	Cr 267.716†	2078.1	2329.6	48.697	µg/L	48.697	ppb	11:28:29
2	Cu 324.752†	5752.8	2724.7	37.375	µg/L	37.375	ppb	11:28:09
2	Mn 257.610†	724259.1	769329.2	2452.2	µg/L	2452.2	ppb	11:28:03
2	Mo 202.031†	130.7	146.7	19.698	µg/L	19.698	ppb	11:28:29
2	Ni 231.604†	824.1	575.7	31.364	µg/L	31.364	ppb	11:28:29
2	P 214.914†	611.0	442.8	873.61	µg/L	873.61	ppb	11:28:29
2	Pb 220.353†	316.8	282.3	74.118	µg/L	74.118	ppb	11:28:29

2	S 181.975 Axial†	81.7	62.7	308.33 µg/L	308.33 ppb	11:28:29
2	Sb 206.836†	19.3	-0.1	7.0198 µg/L	7.0198 ppb	11:28:29
2	Se 196.026†	-21.3	-36.7	4.1855 µg/L	4.1855 ppb	11:28:29
2	SiO2†	98016.3	102104.0	19498 µg/L	19498 ppb	11:28:09
2	Si 251.611†	112321.2	118926.7	9023.5 µg/L	9023.5 ppb	11:28:09
2	Sn 189.927†	-39.6	-64.5	-16.552 µg/L	-16.552 ppb	11:28:29
2	Ti 334.940†	988334.9	1048815.6	2324.0 µg/L	2324.0 ppb	11:28:03
2	Tl 190.801†	-33.0	-13.6	4.3434 µg/L	4.3434 ppb	11:28:29
2	U 409.014†	396.8	-257.8	-39.700 µg/L	-39.700 ppb	11:28:09
2	V 292.402†	7215.2	7753.9	94.402 µg/L	94.402 ppb	11:28:09
2	Zn 213.857†	10169.9	10249.5	265.15 µg/L	265.15 ppb	11:28:09
3	Sc RADIAL	107092.2	107092.2	95.2 %		11:27:00
3	Al 396.153Radial†	77743.7	81425.2	41150 µg/L	41150 ppb	11:27:00
3	Ca 317.933Radial†	34198.4	35423.5	14062 µg/L	14062 ppb	11:27:20
3	Fe 238.204 Radial†	15257.0	16013.4	84119 µg/L	84119 ppb	11:27:20
3	K 766.490 Radial†	10439.0	10269.3	5568.0 µg/L	5568.0 ppb	11:27:00
3	Mg 279.077 IEC†	1584.6	1644.5	8997.6 µg/L	8997.6 ppb	11:27:20
3	Na 589.592 Radial†	3640.5	4527.6	1256.2 µg/L	1256.2 ppb	11:27:20
3	Sr 421.552†	21292.7	22427.7	126.33 µg/L	126.33 ppb	11:27:00
3	Sc 361.383	1927968.9	1927968.9	93.739 %		11:28:35
3	Y 371.029	1214812.2	1214812.2	97.002 %		11:28:35
3	Ag 328.068†	-1006.9	-1045.9	-2.1005 µg/L	-2.1005 ppb	11:28:41
3	As 188.979†	10.1	8.3	7.7391 µg/L	7.7391 ppb	11:29:01
3	B 249.677†	1254.1	1182.2	26.018 µg/L	26.018 ppb	11:28:41
3	Ba 233.527†	23492.4	25142.2	631.68 µg/L	631.68 ppb	11:28:41
3	Be 313.107†	12817.7	10062.3	5.5047 µg/L	5.5047 ppb	11:28:41
3	Cd 226.502†	137.2	247.3	0.0353 µg/L	0.0353 ppb	11:29:01
3	Co 228.616†	392.3	490.2	18.755 µg/L	18.755 ppb	11:29:01
3	Cr 267.716†	2032.8	2291.4	47.904 µg/L	47.904 ppb	11:29:01
3	Cu 324.752†	5847.7	2854.0	38.148 µg/L	38.148 ppb	11:28:41
3	Mn 257.610†	721661.9	770086.7	2454.5 µg/L	2454.5 ppb	11:28:35
3	Mo 202.031†	123.4	139.6	18.876 µg/L	18.876 ppb	11:29:01
3	Ni 231.604†	828.9	584.9	31.864 µg/L	31.864 ppb	11:29:01
3	P 214.914†	604.6	439.0	865.92 µg/L	865.92 ppb	11:29:01
3	Pb 220.353†	296.4	262.1	69.013 µg/L	69.013 ppb	11:29:01
3	S 181.975 Axial†	86.8	68.5	338.27 µg/L	338.27 ppb	11:29:01
3	Sb 206.836†	20.8	1.6	8.7076 µg/L	8.7076 ppb	11:29:01
3	Se 196.026†	-29.0	-45.1	-8.4697 µg/L	-8.4697 ppb	11:29:01
3	SiO2†	98650.2	103257.7	19718 µg/L	19718 ppb	11:28:41
3	Si 251.611†	113044.0	120244.9	9124.6 µg/L	9124.6 ppb	11:28:41
3	Sn 189.927†	-47.1	-72.7	-20.639 µg/L	-20.639 ppb	11:29:01
3	Ti 334.940†	983588.5	1048566.7	2323.5 µg/L	2323.5 ppb	11:28:35
3	Tl 190.801†	-32.7	-13.4	4.6429 µg/L	4.6429 ppb	11:29:01
3	U 409.014†	409.5	-242.3	-38.131 µg/L	-38.131 ppb	11:28:41
3	V 292.402†	7238.4	7813.8	95.023 µg/L	95.023 ppb	11:28:41
3	Zn 213.857†	10217.1	10349.4	267.89 µg/L	267.89 ppb	11:28:41

Mean Data: 1201985644|933564|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1936491.3	94.153	%	0.4068				0.43%
Sc RADIAL	107363.0	95.5	%	0.65				0.68%
Y 371.029	1219744.7	97.396	%	0.3827				0.39%
Ag 328.068†	-1026.1	-1.9351	µg/L	0.22444	-1.9351	ppb	0.22444	11.60%
Al 396.153Radial†	80637.8	40752	µg/L	605.9	40752	ppb	605.9	1.49%
As 188.979†	7.7	6.6566	µg/L	3.27508	6.6566	ppb	3.27508	49.20%
B 249.677†	1184.0	26.133	µg/L	0.1040	26.133	ppb	0.1040	0.40%
Ba 233.527†	24954.7	626.97	µg/L	4.096	626.97	ppb	4.096	0.65%
Be 313.107†	10021.0	5.4788	µg/L	0.03418	5.4788	ppb	0.03418	0.62%
Ca 317.933Radial†	35423.6	14062	µg/L	128.2	14062	ppb	128.2	0.91%
Cd 226.502†	254.1	0.2213	µg/L	0.16244	0.2213	ppb	0.16244	73.39%
Co 228.616†	494.5	18.966	µg/L	0.2743	18.966	ppb	0.2743	1.45%
Cr 267.716†	2308.0	48.250	µg/L	0.4066	48.250	ppb	0.4066	0.84%
Cu 324.752†	2779.7	37.603	µg/L	0.4742	37.603	ppb	0.4742	1.26%
Fe 238.204 Radial†	15993.5	84014	µg/L	796.8	84014	ppb	796.8	0.95%
K 766.490 Radial†	10192.7	5526.4	µg/L	53.79	5526.4	ppb	53.79	0.97%
Mg 279.077 IEC†	1642.8	8988.4	µg/L	54.51	8988.4	ppb	54.51	0.61%
Mn 257.610†	769259.9	2451.8	µg/L	2.81	2451.8	ppb	2.81	0.11%
Mo 202.031†	143.9	19.358	µg/L	0.4292	19.358	ppb	0.4292	2.22%
Na 589.592 Radial†	4522.4	1254.8	µg/L	13.53	1254.8	ppb	13.53	1.08%

Ni 231.604†	578.0	31.487	µg/L	0.3331	31.487	ppb	0.3331	1.06%
P 214.914†	441.1	870.59	µg/L	4.105	870.59	ppb	4.105	0.47%
Pb 220.353†	274.7	72.187	µg/L	2.7700	72.187	ppb	2.7700	3.84%
S 181.975 Axial†	64.8	319.10	µg/L	16.646	319.10	ppb	16.646	5.22%
Sb 206.836†	2.4	9.4588	µg/L	2.88888	9.4588	ppb	2.88888	30.54%
Se 196.026†	-40.1	-1.3325	µg/L	6.48111	-1.3325	ppb	6.48111	486.39%
SiO2†	102568.4	19587	µg/L	116.3	19587	ppb	116.3	0.59%
Si 251.611†	119417.8	9061.2	µg/L	55.23	9061.2	ppb	55.23	0.61%
Sn 189.927†	-68.1	-18.446	µg/L	2.0602	-18.446	ppb	2.0602	11.17%
Sr 421.552†	22276.7	125.48	µg/L	1.661	125.48	ppb	1.661	1.32%
Ti 334.940†	1048250.6	2322.8	µg/L	1.71	2322.8	ppb	1.71	0.07%
Tl 190.801†	-14.4	3.2369	µg/L	2.18097	3.2369	ppb	2.18097	67.38%
U 409.014†	-265.0	-40.238	µg/L	2.4216	-40.238	ppb	2.4216	6.02%
V 292.402†	7769.2	94.511	µg/L	0.4663	94.511	ppb	0.4663	0.49%
Zn 213.857†	10290.0	266.32	µg/L	1.416	266.32	ppb	1.416	0.53%

Sequence No.: 37
Sample ID: 1201985645|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 331
Date Collected: 12/18/2009 11:29:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985645|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	107963.2	107963.2	96.0	%			11:29:43
1	Al 396.153Radial†	183110.9	190542.0	96277	µg/L	96277	ppb	11:29:43
1	Ca 317.933Radial†	63666.4	65834.6	26133	µg/L	26133	ppb	11:29:43
1	Fe 238.204 Radial†	21549.9	22440.3	117890	µg/L	117890	ppb	11:30:03
1	K 766.490 Radial†	26836.4	27264.3	14783	µg/L	14783	ppb	11:29:43
1	Mg 279.077 IEC†	3550.7	3679.4	20247	µg/L	20247	ppb	11:30:03
1	Na 589.592 Radial†	21642.6	23252.0	6451.6	µg/L	6451.6	ppb	11:29:43
1	Sr 421.552†	113875.7	118703.8	668.65	µg/L	668.65	ppb	11:29:43
1	Sc 361.383	1937901.8	1937901.8	94.222	%			11:31:09
1	Y 371.029	1244760.8	1244760.8	99.393	%			11:31:09
1	Ag 328.068†	51759.8	54962.2	504.34	µg/L	504.34	ppb	11:31:15
1	As 188.979†	269.2	283.3	527.51	µg/L	527.51	ppb	11:31:35
1	B 249.677†	11866.0	12438.0	514.97	µg/L	514.97	ppb	11:31:15
1	Ba 233.527†	51481.5	54719.3	1375.7	µg/L	1375.7	ppb	11:31:15
1	Be 313.107†	764863.0	808156.9	509.91	µg/L	509.91	ppb	11:31:09
1	Cd 226.502†	17277.6	18438.1	479.05	µg/L	479.05	ppb	11:31:15
1	Co 228.616†	9839.2	10514.3	499.37	µg/L	499.37	ppb	11:31:15
1	Cr 267.716†	25837.4	27544.7	574.79	µg/L	574.79	ppb	11:31:15
1	Cu 324.752†	77162.0	78509.6	577.68	µg/L	577.68	ppb	11:31:15
1	Mn 257.610†	1009486.1	1071615.7	3415.6	µg/L	3415.6	ppb	11:31:09
1	Mo 202.031†	4140.0	4401.8	495.70	µg/L	495.70	ppb	11:31:35
1	Ni 231.604†	9499.1	9782.2	532.92	µg/L	532.92	ppb	11:31:15
1	P 214.914†	936.2	787.6	1548.6	µg/L	1548.6	ppb	11:31:35
1	Pb 220.353†	2156.6	2234.7	573.65	µg/L	573.65	ppb	11:31:35
1	S 181.975 Axial†	1031.9	1071.1	5482.9	µg/L	5482.9	ppb	11:31:35
1	Sb 206.836†	434.7	440.8	445.01	µg/L	445.01	ppb	11:31:35
1	Se 196.026†	280.0	283.1	490.12	µg/L	490.12	ppb	11:31:35
1	SiO2†	166087.3	174291.0	33283	µg/L	33283	ppb	11:31:09
1	Si 251.611†	191074.1	202442.1	15346	µg/L	15346	ppb	11:31:09
1	Sn 189.927†	883.2	914.9	469.73	µg/L	469.73	ppb	11:31:35
1	Ti 334.940†	1506759.9	1598443.3	3541.7	µg/L	3541.7	ppb	11:31:09
1	Tl 190.801†	272.4	310.6	502.85	µg/L	502.85	ppb	11:31:35
1	U 409.014†	5882.9	5564.4	501.17	µg/L	501.17	ppb	11:31:09
1	V 292.402†	50637.9	53835.3	620.79	µg/L	620.79	ppb	11:31:15
1	Zn 213.857†	30745.0	32080.3	842.85	µg/L	842.85	ppb	11:31:15
2	Sc RADIAL	108266.0	108266.0	96.3	%			11:30:09
2	Al 396.153Radial†	185625.0	192620.4	97327	µg/L	97327	ppb	11:30:09
2	Ca 317.933Radial†	64230.0	66234.7	26292	µg/L	26292	ppb	11:30:09
2	Fe 238.204 Radial†	21658.7	22490.5	118160	µg/L	118160	ppb	11:30:29
2	K 766.490 Radial†	27146.6	27508.4	14915	µg/L	14915	ppb	11:30:09
2	Mg 279.077 IEC†	3560.1	3678.9	20243	µg/L	20243	ppb	11:30:29
2	Na 589.592 Radial†	21906.0	23462.6	6510.0	µg/L	6510.0	ppb	11:30:09
2	Sr 421.552†	115323.1	119875.7	675.25	µg/L	675.25	ppb	11:30:09
2	Sc 361.383	1946972.5	1946972.5	94.663	%			11:31:44
2	Y 371.029	1251899.6	1251899.6	99.963	%			11:31:44
2	Ag 328.068†	51551.4	54486.3	500.09	µg/L	500.09	ppb	11:31:49
2	As 188.979†	263.2	275.6	512.85	µg/L	512.85	ppb	11:32:10
2	B 249.677†	11878.0	12392.0	512.85	µg/L	512.85	ppb	11:31:49
2	Ba 233.527†	51544.2	54530.9	1370.9	µg/L	1370.9	ppb	11:31:49
2	Be 313.107†	771921.7	811831.6	512.23	µg/L	512.23	ppb	11:31:44
2	Cd 226.502†	17326.1	18403.8	478.12	µg/L	478.12	ppb	11:31:49
2	Co 228.616†	9828.3	10454.1	496.44	µg/L	496.44	ppb	11:31:49
2	Cr 267.716†	25865.9	27447.0	572.75	µg/L	572.75	ppb	11:31:49
2	Cu 324.752†	77094.8	78057.2	574.55	µg/L	574.55	ppb	11:31:49
2	Mn 257.610†	1018857.7	1076524.2	3431.3	µg/L	3431.3	ppb	11:31:44
2	Mo 202.031†	4125.3	4365.8	491.69	µg/L	491.69	ppb	11:32:10
2	Ni 231.604†	9578.7	9819.3	534.94	µg/L	534.94	ppb	11:31:49
2	P 214.914†	934.7	781.4	1535.4	µg/L	1535.4	ppb	11:32:10
2	Pb 220.353†	2160.9	2228.6	572.20	µg/L	572.20	ppb	11:32:10

2	S 181.975 Axial†	1031.8	1065.9	5455.9 µg/L	5455.9 ppb	11:32:10
2	Sb 206.836†	443.9	448.4	452.58 µg/L	452.58 ppb	11:32:10
2	Se 196.026†	287.0	289.1	499.16 µg/L	499.16 ppb	11:32:10
2	SiO2†	167220.5	174666.9	33355 µg/L	33355 ppb	11:31:44
2	Si 251.611†	192573.8	203081.6	15394 µg/L	15394 ppb	11:31:44
2	Sn 189.927†	889.3	917.0	470.83 µg/L	470.83 ppb	11:32:10
2	Ti 334.940†	1518704.2	1603610.8	3553.1 µg/L	3553.1 ppb	11:31:44
2	Tl 190.801†	260.8	296.9	482.41 µg/L	482.41 ppb	11:32:10
2	U 409.014†	5819.3	5468.2	492.09 µg/L	492.09 ppb	11:31:44
2	V 292.402†	50618.6	53564.5	617.72 µg/L	617.72 ppb	11:31:49
2	Zn 213.857†	30711.1	31892.4	837.79 µg/L	837.79 ppb	11:31:49
3	Sc RADIAL	107832.6	107832.6	95.9 %		11:30:35
3	Al 396.153Radial†	185024.4	192769.0	97402 µg/L	97402 ppb	11:30:35
3	Ca 317.933Radial†	64097.3	66364.4	26344 µg/L	26344 ppb	11:30:35
3	Fe 238.204 Radial†	21552.4	22470.1	118050 µg/L	118050 ppb	11:30:55
3	K 766.490 Radial†	27145.2	27620.2	14976 µg/L	14976 ppb	11:30:35
3	Mg 279.077 IEC†	3542.4	3675.2	20223 µg/L	20223 ppb	11:30:55
3	Na 589.592 Radial†	21773.6	23415.9	6497.0 µg/L	6497.0 ppb	11:30:35
3	Sr 421.552†	114879.7	119894.7	675.36 µg/L	675.36 ppb	11:30:35
3	Sc 361.383	1944208.3	1944208.3	94.528 %		11:32:18
3	Y 371.029	1250526.0	1250526.0	99.854 %		11:32:18
3	Ag 328.068†	52205.8	55255.9	507.01 µg/L	507.01 ppb	11:32:23
3	As 188.979†	254.3	266.5	495.62 µg/L	495.62 ppb	11:32:44
3	B 249.677†	11976.1	12513.6	518.28 µg/L	518.28 ppb	11:32:23
3	Ba 233.527†	52078.9	55174.0	1387.1 µg/L	1387.1 ppb	11:32:23
3	Be 313.107†	769905.3	810857.9	511.62 µg/L	511.62 ppb	11:32:18
3	Cd 226.502†	17558.9	18676.1	485.33 µg/L	485.33 ppb	11:32:23
3	Co 228.616†	9948.9	10596.5	503.30 µg/L	503.30 ppb	11:32:23
3	Cr 267.716†	26152.9	27789.4	579.90 µg/L	579.90 ppb	11:32:23
3	Cu 324.752†	78136.2	79274.6	583.09 µg/L	583.09 ppb	11:32:23
3	Mn 257.610†	1016190.0	1075232.3	3427.1 µg/L	3427.1 ppb	11:32:18
3	Mo 202.031†	4145.3	4393.2	494.74 µg/L	494.74 ppb	11:32:44
3	Ni 231.604†	9618.3	9875.7	538.01 µg/L	538.01 ppb	11:32:23
3	P 214.914†	931.5	779.4	1530.3 µg/L	1530.3 ppb	11:32:44
3	Pb 220.353†	2164.5	2235.7	573.99 µg/L	573.99 ppb	11:32:44
3	S 181.975 Axial†	1035.9	1071.8	5486.6 µg/L	5486.6 ppb	11:32:44
3	Sb 206.836†	443.0	448.1	452.18 µg/L	452.18 ppb	11:32:44
3	Se 196.026†	285.5	287.9	497.30 µg/L	497.30 ppb	11:32:44
3	SiO2†	166458.2	174111.5	33249 µg/L	33249 ppb	11:32:18
3	Si 251.611†	191494.5	202229.0	15329 µg/L	15329 ppb	11:32:18
3	Sn 189.927†	892.8	922.0	473.27 µg/L	473.27 ppb	11:32:44
3	Ti 334.940†	1515809.8	1602829.9	3551.4 µg/L	3551.4 ppb	11:32:18
3	Tl 190.801†	260.1	296.5	481.78 µg/L	481.78 ppb	11:32:44
3	U 409.014†	5790.6	5446.6	490.08 µg/L	490.08 ppb	11:32:18
3	V 292.402†	51267.2	54326.6	626.32 µg/L	626.32 ppb	11:32:23
3	Zn 213.857†	31091.1	32340.5	849.78 µg/L	849.78 ppb	11:32:23

Mean Data: 1201985645|933564|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943027.5	94.471	%	0.2260				0.24%
Sc RADIAL	108020.6	96.0	%	0.20				0.21%
Y 371.029	1249062.2	99.737	%	0.3025				0.30%
Ag 328.068†	54901.5	503.82	µg/L	3.492	503.82	ppb	3.492	0.69%
Al 396.153Radial†	191977.1	97002	µg/L	629.3	97002	ppb	629.3	0.65%
As 188.979†	275.1	511.99	µg/L	15.963	511.99	ppb	15.963	3.12%
B 249.677†	12447.9	515.37	µg/L	2.737	515.37	ppb	2.737	0.53%
Ba 233.527†	54808.1	1377.9	µg/L	8.31	1377.9	ppb	8.31	0.60%
Be 313.107†	810282.1	511.26	µg/L	1.202	511.26	ppb	1.202	0.24%
Ca 317.933Radial†	66144.6	26256	µg/L	109.6	26256	ppb	109.6	0.42%
Cd 226.502†	18506.0	480.83	µg/L	3.919	480.83	ppb	3.919	0.82%
Co 228.616†	10521.7	499.70	µg/L	3.442	499.70	ppb	3.442	0.69%
Cr 267.716†	27593.7	575.82	µg/L	3.682	575.82	ppb	3.682	0.64%
Cu 324.752†	78613.8	578.44	µg/L	4.322	578.44	ppb	4.322	0.75%
Fe 238.204 Radial†	22467.0	118030	µg/L	132.7	118030	ppb	132.7	0.11%
K 766.490 Radial†	27464.3	14891	µg/L	98.7	14891	ppb	98.7	0.66%
Mg 279.077 IEC†	3677.8	20238	µg/L	12.7	20238	ppb	12.7	0.06%
Mn 257.610†	1074457.4	3424.7	µg/L	8.09	3424.7	ppb	8.09	0.24%
Mo 202.031†	4386.9	494.05	µg/L	2.092	494.05	ppb	2.092	0.42%
Na 589.592 Radial†	23376.9	6486.2	µg/L	30.70	6486.2	ppb	30.70	0.47%

Ni 231.604†	9825.7	535.29 µg/L	2.563	535.29 ppb	2.563	0.48%
P 214.914†	782.8	1538.1 µg/L	9.43	1538.1 ppb	9.43	0.61%
Pb 220.353†	2233.0	573.28 µg/L	0.952	573.28 ppb	0.952	0.17%
S 181.975 Axial†	1069.6	5475.1 µg/L	16.74	5475.1 ppb	16.74	0.31%
Sb 206.836†	445.8	449.92 µg/L	4.262	449.92 ppb	4.262	0.95%
Se 196.026†	286.7	495.52 µg/L	4.772	495.52 ppb	4.772	0.96%
SiO2†	174356.5	33296 µg/L	54.1	33296 ppb	54.1	0.16%
Si 251.611†	202584.2	15357 µg/L	34.0	15357 ppb	34.0	0.22%
Sn 189.927†	918.0	471.27 µg/L	1.812	471.27 ppb	1.812	0.38%
Sr 421.552†	119491.4	673.09 µg/L	3.843	673.09 ppb	3.843	0.57%
Ti 334.940†	1601628.0	3548.7 µg/L	6.17	3548.7 ppb	6.17	0.17%
Tl 190.801†	301.3	489.01 µg/L	11.989	489.01 ppb	11.989	2.45%
U 409.014†	5493.1	494.45 µg/L	5.910	494.45 ppb	5.910	1.20%
V 292.402†	53908.8	621.61 µg/L	4.358	621.61 ppb	4.358	0.70%
Zn 213.857†	32104.4	843.47 µg/L	6.019	843.47 ppb	6.019	0.71%

Sequence No.: 38
Sample ID: 1201985647|933564|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 332
Date Collected: 12/18/2009 11:32:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985647|933564|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	109275.0	109275.0	97.2	%			11:33:25
1	Al 396.153Radial†	150911.1	155107.6	78369	µg/L	78369	ppb	11:33:25
1	Ca 317.933Radial†	52167.0	53201.7	21119	µg/L	21119	ppb	11:33:25
1	Fe 238.204 Radial†	20443.4	21031.8	110500	µg/L	110500	ppb	11:33:46
1	K 766.490 Radial†	23595.9	23593.1	12792	µg/L	12792	ppb	11:33:25
1	Mg 279.077 IEC†	3065.7	3135.8	17242	µg/L	17242	ppb	11:33:46
1	Na 589.592 Radial†	20985.4	22304.8	6188.7	µg/L	6188.7	ppb	11:33:25
1	Sr 421.552†	109276.8	112545.7	633.96	µg/L	633.96	ppb	11:33:25
1	Sc 361.383	1946069.7	1946069.7	94.619	%			11:34:51
1	Y 371.029	1250839.4	1250839.4	99.879	%			11:34:51
1	Ag 328.068†	52136.5	55129.8	505.23	µg/L	505.23	ppb	11:34:57
1	As 188.979†	264.9	277.4	518.51	µg/L	518.51	ppb	11:35:17
1	B 249.677†	11857.2	12375.8	514.54	µg/L	514.54	ppb	11:34:57
1	Ba 233.527†	48709.1	51559.9	1296.3	µg/L	1296.3	ppb	11:34:57
1	Be 313.107†	765291.5	805202.7	508.01	µg/L	508.01	ppb	11:34:51
1	Cd 226.502†	17547.6	18646.5	485.12	µg/L	485.12	ppb	11:34:57
1	Co 228.616†	10123.8	10771.3	511.53	µg/L	511.53	ppb	11:34:57
1	Cr 267.716†	25477.2	27048.9	564.47	µg/L	564.47	ppb	11:34:57
1	Cu 324.752†	76666.0	77641.7	569.98	µg/L	569.98	ppb	11:34:57
1	Mn 257.610†	1147925.4	1213431.4	3864.8	µg/L	3864.8	ppb	11:34:51
1	Mo 202.031†	4120.6	4362.9	491.06	µg/L	491.06	ppb	11:35:17
1	Ni 231.604†	9514.8	9756.5	531.52	µg/L	531.52	ppb	11:34:57
1	P 214.914†	874.3	718.1	1400.4	µg/L	1400.4	ppb	11:35:17
1	Pb 220.353†	2210.2	2281.8	584.13	µg/L	584.13	ppb	11:35:17
1	S 181.975 Axial†	1033.7	1068.4	5470.4	µg/L	5470.4	ppb	11:35:17
1	Sb 206.836†	446.0	450.8	455.78	µg/L	455.78	ppb	11:35:17
1	Se 196.026†	280.4	282.2	484.28	µg/L	484.28	ppb	11:35:17
1	SiO2†	152920.0	159635.0	30485	µg/L	30485	ppb	11:34:57
1	Si 251.611†	178014.0	187788.1	14221	µg/L	14221	ppb	11:34:51
1	Sn 189.927†	894.1	922.5	470.84	µg/L	470.84	ppb	11:35:17
1	Ti 334.940†	1551286.9	1638790.9	3631.4	µg/L	3631.4	ppb	11:34:51
1	Tl 190.801†	266.2	302.7	493.88	µg/L	493.88	ppb	11:35:17
1	U 409.014†	5813.4	5464.8	493.08	µg/L	493.08	ppb	11:34:51
1	V 292.402†	50541.8	53508.1	616.46	µg/L	616.46	ppb	11:34:57
1	Zn 213.857†	30320.2	31494.4	828.04	µg/L	828.04	ppb	11:34:57
2	Sc RADIAL	108355.9	108355.9	96.3	%			11:33:51
2	Al 396.153Radial†	152359.4	157928.6	79795	µg/L	79795	ppb	11:33:51
2	Ca 317.933Radial†	52454.7	53955.8	21418	µg/L	21418	ppb	11:33:51
2	Fe 238.204 Radial†	20352.4	21115.9	110940	µg/L	110940	ppb	11:34:12
2	K 766.490 Radial†	23798.6	24009.6	13018	µg/L	13018	ppb	11:33:51
2	Mg 279.077 IEC†	3044.3	3140.4	17267	µg/L	17267	ppb	11:34:12
2	Na 589.592 Radial†	21240.2	22752.6	6313.0	µg/L	6313.0	ppb	11:33:51
2	Sr 421.552†	110207.1	114465.5	644.78	µg/L	644.78	ppb	11:33:51
2	Sc 361.383	1947430.8	1947430.8	94.685	%			11:35:25
2	Y 371.029	1252000.1	1252000.1	99.971	%			11:35:25
2	Ag 328.068†	51831.8	54769.6	502.01	µg/L	502.01	ppb	11:35:31
2	As 188.979†	260.5	272.6	509.22	µg/L	509.22	ppb	11:35:51
2	B 249.677†	11744.9	12248.4	508.75	µg/L	508.75	ppb	11:35:31
2	Ba 233.527†	48268.0	51058.0	1283.7	µg/L	1283.7	ppb	11:35:31
2	Be 313.107†	764621.7	803930.0	507.21	µg/L	507.21	ppb	11:35:25
2	Cd 226.502†	17369.3	18445.2	479.77	µg/L	479.77	ppb	11:35:31
2	Co 228.616†	10025.6	10660.0	506.19	µg/L	506.19	ppb	11:35:31
2	Cr 267.716†	25290.2	26832.5	559.95	µg/L	559.95	ppb	11:35:31
2	Cu 324.752†	76162.2	77053.0	565.93	µg/L	565.93	ppb	11:35:31
2	Mn 257.610†	1148041.3	1212705.8	3862.5	µg/L	3862.5	ppb	11:35:25
2	Mo 202.031†	4127.5	4367.1	491.55	µg/L	491.55	ppb	11:35:51
2	Ni 231.604†	9474.8	9707.3	528.84	µg/L	528.84	ppb	11:35:31
2	P 214.914†	878.5	721.9	1409.2	µg/L	1409.2	ppb	11:35:51
2	Pb 220.353†	2215.7	2286.0	585.31	µg/L	585.31	ppb	11:35:51

2	S 181.975 Axial†	1030.2	1064.0	5447.9 µg/L	5447.9 ppb	11:35:51
2	Sb 206.836†	440.4	444.6	449.61 µg/L	449.61 ppb	11:35:51
2	Se 196.026†	291.9	294.2	502.02 µg/L	502.02 ppb	11:35:51
2	SiO2†	151767.0	158304.3	30230 µg/L	30230 ppb	11:35:31
2	Si 251.611†	177240.8	186840.1	14148 µg/L	14148 ppb	11:35:25
2	Sn 189.927†	895.8	923.6	471.53 µg/L	471.53 ppb	11:35:51
2	Ti 334.940†	1550486.6	1636799.7	3626.9 µg/L	3626.9 ppb	11:35:25
2	Tl 190.801†	264.8	301.1	491.31 µg/L	491.31 ppb	11:35:51
2	U 409.014†	5817.5	5464.9	493.01 µg/L	493.01 ppb	11:35:25
2	V 292.402†	50161.1	53068.7	611.54 µg/L	611.54 ppb	11:35:31
2	Zn 213.857†	30129.5	31270.5	822.02 µg/L	822.02 ppb	11:35:31
3	Sc RADIAL	108991.3	108991.3	96.9 %		11:34:17
3	Al 396.153Radial†	152401.0	157049.6	79351 µg/L	79351 ppb	11:34:17
3	Ca 317.933Radial†	52629.0	53818.3	21363 µg/L	21363 ppb	11:34:17
3	Fe 238.204 Radial†	20402.8	21044.7	110560 µg/L	110560 ppb	11:34:38
3	K 766.490 Radial†	23837.4	23905.5	12961 µg/L	12961 ppb	11:34:17
3	Mg 279.077 IEC†	3053.8	3131.8	17220 µg/L	17220 ppb	11:34:38
3	Na 589.592 Radial†	21302.5	22688.3	6295.2 µg/L	6295.2 ppb	11:34:17
3	Sr 421.552†	110240.0	113832.6	641.21 µg/L	641.21 ppb	11:34:17
3	Sc 361.383	1940608.6	1940608.6	94.353 %		11:35:59
3	Y 371.029	1246959.8	1246959.8	99.569 %		11:35:59
3	Ag 328.068†	51561.7	54675.8	501.14 µg/L	501.14 ppb	11:36:05
3	As 188.979†	259.6	272.6	509.25 µg/L	509.25 ppb	11:36:25
3	B 249.677†	11687.5	12231.2	508.10 µg/L	508.10 ppb	11:36:05
3	Ba 233.527†	48034.5	50989.8	1282.0 µg/L	1282.0 ppb	11:36:05
3	Be 313.107†	760384.4	802278.0	506.17 µg/L	506.17 ppb	11:35:59
3	Cd 226.502†	17299.3	18435.4	479.53 µg/L	479.53 ppb	11:36:05
3	Co 228.616†	9996.9	10666.9	506.53 µg/L	506.53 ppb	11:36:05
3	Cr 267.716†	25047.8	26669.6	556.56 µg/L	556.56 ppb	11:36:05
3	Cu 324.752†	75858.9	77014.4	565.58 µg/L	565.58 ppb	11:36:05
3	Mn 257.610†	1142238.6	1210818.3	3856.5 µg/L	3856.5 ppb	11:35:59
3	Mo 202.031†	4131.1	4386.2	493.67 µg/L	493.67 ppb	11:36:25
3	Ni 231.604†	9372.4	9633.9	524.84 µg/L	524.84 ppb	11:36:05
3	P 214.914†	891.7	739.1	1446.9 µg/L	1446.9 ppb	11:36:25
3	Pb 220.353†	2202.2	2279.9	583.73 µg/L	583.73 ppb	11:36:25
3	S 181.975 Axial†	1025.6	1062.9	5442.4 µg/L	5442.4 ppb	11:36:25
3	Sb 206.836†	440.5	446.3	451.31 µg/L	451.31 ppb	11:36:25
3	Se 196.026†	291.6	295.0	502.95 µg/L	502.95 ppb	11:36:25
3	SiO2†	151092.0	158152.4	30201 µg/L	30201 ppb	11:36:05
3	Si 251.611†	176897.5	187134.3	14171 µg/L	14171 ppb	11:35:59
3	Sn 189.927†	898.0	929.3	474.21 µg/L	474.21 ppb	11:36:25
3	Ti 334.940†	1542906.5	1634522.7	3621.9 µg/L	3621.9 ppb	11:35:59
3	Tl 190.801†	260.2	297.2	485.44 µg/L	485.44 ppb	11:36:25
3	U 409.014†	5764.5	5430.3	489.83 µg/L	489.83 ppb	11:35:59
3	V 292.402†	49924.1	53003.8	610.79 µg/L	610.79 ppb	11:36:05
3	Zn 213.857†	29982.2	31226.3	820.89 µg/L	820.89 ppb	11:36:05

Mean Data: 1201985647|933564|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944703.0	94.553	%	0.1755				0.19%
Sc RADIAL	108874.1	96.8	%	0.42				0.43%
Y 371.029	1249933.1	99.806	%	0.2108				0.21%
Ag 328.068†	54858.4	502.79	µg/L	2.154	502.79	ppb	2.154	0.43%
Al 396.153Radial†	156695.3	79172	µg/L	729.5	79172	ppb	729.5	0.92%
As 188.979†	274.2	512.33	µg/L	5.352	512.33	ppb	5.352	1.04%
B 249.677†	12285.2	510.46	µg/L	3.545	510.46	ppb	3.545	0.69%
Ba 233.527†	51202.6	1287.3	µg/L	7.83	1287.3	ppb	7.83	0.61%
Be 313.107†	803803.5	507.13	µg/L	0.926	507.13	ppb	0.926	0.18%
Ca 317.933Radial†	53658.6	21300	µg/L	159.4	21300	ppb	159.4	0.75%
Cd 226.502†	18509.0	481.48	µg/L	3.162	481.48	ppb	3.162	0.66%
Co 228.616†	10699.4	508.08	µg/L	2.989	508.08	ppb	2.989	0.59%
Cr 267.716†	26850.3	560.32	µg/L	3.968	560.32	ppb	3.968	0.71%
Cu 324.752†	77236.4	567.17	µg/L	2.444	567.17	ppb	2.444	0.43%
Fe 238.204 Radial†	21064.1	110670	µg/L	237.8	110670	ppb	237.8	0.21%
K 766.490 Radial†	23836.1	12924	µg/L	117.5	12924	ppb	117.5	0.91%
Mg 279.077 IEC†	3136.0	17243	µg/L	23.6	17243	ppb	23.6	0.14%
Mn 257.610†	1212318.5	3861.3	µg/L	4.28	3861.3	ppb	4.28	0.11%
Mo 202.031†	4372.0	492.09	µg/L	1.385	492.09	ppb	1.385	0.28%
Na 589.592 Radial†	22581.9	6265.6	µg/L	67.18	6265.6	ppb	67.18	1.07%

Ni 231.604†	9699.2	528.40	µg/L	3.362	528.40	ppb	3.362	0.64%
P 214.914†	726.3	1418.8	µg/L	24.70	1418.8	ppb	24.70	1.74%
Pb 220.353†	2282.6	584.39	µg/L	0.819	584.39	ppb	0.819	0.14%
S 181.975 Axial†	1065.1	5453.6	µg/L	14.84	5453.6	ppb	14.84	0.27%
Sb 206.836†	447.2	452.23	µg/L	3.188	452.23	ppb	3.188	0.70%
Se 196.026†	290.5	496.42	µg/L	10.520	496.42	ppb	10.520	2.12%
SiO2†	158697.2	30305	µg/L	155.8	30305	ppb	155.8	0.51%
Si 251.611†	187254.1	14180	µg/L	37.1	14180	ppb	37.1	0.26%
Sn 189.927†	925.1	472.19	µg/L	1.782	472.19	ppb	1.782	0.38%
Sr 421.552†	113614.6	639.98	µg/L	5.511	639.98	ppb	5.511	0.86%
Ti 334.940†	1636704.4	3626.7	µg/L	4.74	3626.7	ppb	4.74	0.13%
Tl 190.801†	300.3	490.21	µg/L	4.329	490.21	ppb	4.329	0.88%
U 409.014†	5453.3	491.97	µg/L	1.857	491.97	ppb	1.857	0.38%
V 292.402†	53193.5	612.93	µg/L	3.078	612.93	ppb	3.078	0.50%
Zn 213.857†	31330.4	823.65	µg/L	3.844	823.65	ppb	3.844	0.47%

Sequence No.: 39
Sample ID: 1201985646|933564|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 333
Date Collected: 12/18/2009 11:36:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985646|933564|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106870.7	106870.7	95.0	%			11:37:07
1	Al 396.153Radial†	15712.8	16307.7	8241.4	µg/L	8241.4	ppb	11:37:07
1	Ca 317.933Radial†	7482.5	7379.8	2929.5	µg/L	2929.5	ppb	11:37:27
1	Fe 238.204 Radial†	3440.0	3609.4	18960	µg/L	18960	ppb	11:37:27
1	K 766.490 Radial†	2765.5	2215.8	1201.4	µg/L	1201.4	ppb	11:37:07
1	Mg 279.077 IEC†	322.3	319.4	1743.6	µg/L	1743.6	ppb	11:37:27
1	Na 589.592 Radial†	245.7	962.5	267.06	µg/L	267.06	ppb	11:37:07
1	Sr 421.552†	4348.7	4640.7	26.141	µg/L	26.141	ppb	11:37:07
1	Sc 361.383	1935463.1	1935463.1	94.103	%			11:38:30
1	Y 371.029	1185757.0	1185757.0	94.682	%			11:38:30
1	Ag 328.068†	-317.5	-309.1	-1.1388	µg/L	-1.1388	ppb	11:38:35
1	As 188.979†	3.1	0.8	-0.2812	µg/L	-0.2812	ppb	11:38:56
1	B 249.677†	436.5	308.2	7.7155	µg/L	7.7155	ppb	11:38:35
1	Ba 233.527†	4955.4	5346.6	134.33	µg/L	134.33	ppb	11:38:35
1	Be 313.107†	5644.5	2386.7	1.3298	µg/L	1.3298	ppb	11:38:35
1	Cd 226.502†	-29.6	69.4	0.3909	µg/L	0.3909	ppb	11:38:56
1	Co 228.616†	24.1	97.3	3.6758	µg/L	3.6758	ppb	11:38:56
1	Cr 267.716†	401.7	549.6	11.483	µg/L	11.483	ppb	11:38:35
1	Cu 324.752†	3650.4	494.8	7.5541	µg/L	7.5541	ppb	11:38:35
1	Mn 257.610†	166073.2	176702.4	563.16	µg/L	563.16	ppb	11:38:30
1	Mo 202.031†	29.5	39.3	5.1241	µg/L	5.1241	ppb	11:38:56
1	Ni 231.604†	384.1	108.8	5.9263	µg/L	5.9263	ppb	11:38:56
1	P 214.914†	294.2	106.7	211.69	µg/L	211.69	ppb	11:38:56
1	Pb 220.353†	127.1	80.9	20.981	µg/L	20.981	ppb	11:38:56
1	S 181.975 Axial†	36.4	14.6	71.991	µg/L	71.991	ppb	11:38:56
1	Sb 206.836†	18.8	-0.6	0.9003	µg/L	0.9003	ppb	11:38:56
1	Se 196.026†	0.5	-13.5	-6.7491	µg/L	-6.7491	ppb	11:38:56
1	SiO2†	21352.0	20708.3	3954.5	µg/L	3954.5	ppb	11:38:35
1	Si 251.611†	22990.2	24081.2	1826.6	µg/L	1826.6	ppb	11:38:35
1	Sn 189.927†	7.8	-14.1	-3.6619	µg/L	-3.6619	ppb	11:38:56
1	Ti 334.940†	207006.1	219258.7	485.85	µg/L	485.85	ppb	11:38:30
1	Tl 190.801†	-21.5	-1.4	3.2519	µg/L	3.2519	ppb	11:38:56
1	U 409.014†	915.0	293.2	24.061	µg/L	24.061	ppb	11:38:30
1	V 292.402†	1441.7	1624.0	19.930	µg/L	19.930	ppb	11:38:35
1	Zn 213.857†	2681.2	2299.0	59.496	µg/L	59.496	ppb	11:38:56
2	Sc RADIAL	106434.5	106434.5	94.6	%			11:37:33
2	Al 396.153Radial†	15687.7	16349.0	8262.2	µg/L	8262.2	ppb	11:37:33
2	Ca 317.933Radial†	7504.5	7435.3	2951.5	µg/L	2951.5	ppb	11:37:53
2	Fe 238.204 Radial†	3452.5	3637.4	19107	µg/L	19107	ppb	11:37:53
2	K 766.490 Radial†	2720.4	2180.1	1182.0	µg/L	1182.0	ppb	11:37:33
2	Mg 279.077 IEC†	329.2	328.1	1791.8	µg/L	1791.8	ppb	11:37:53
2	Na 589.592 Radial†	223.1	939.7	260.72	µg/L	260.72	ppb	11:37:33
2	Sr 421.552†	4315.4	4624.3	26.048	µg/L	26.048	ppb	11:37:33
2	Sc 361.383	1927049.5	1927049.5	93.694	%			11:39:02
2	Y 371.029	1179867.5	1179867.5	94.212	%			11:39:02
2	Ag 328.068†	-326.0	-319.6	-1.2198	µg/L	-1.2198	ppb	11:39:07
2	As 188.979†	3.4	1.1	0.2132	µg/L	0.2132	ppb	11:39:28
2	B 249.677†	392.6	263.3	5.6787	µg/L	5.6787	ppb	11:39:07
2	Ba 233.527†	4967.8	5382.8	135.24	µg/L	135.24	ppb	11:39:07
2	Be 313.107†	5629.3	2396.6	1.3364	µg/L	1.3364	ppb	11:39:07
2	Cd 226.502†	-44.0	53.9	-0.0224	µg/L	-0.0224	ppb	11:39:28
2	Co 228.616†	23.4	96.7	3.6473	µg/L	3.6473	ppb	11:39:28
2	Cr 267.716†	361.2	508.2	10.623	µg/L	10.623	ppb	11:39:07
2	Cu 324.752†	3615.7	474.8	7.4443	µg/L	7.4443	ppb	11:39:07
2	Mn 257.610†	165006.4	176334.4	562.01	µg/L	562.01	ppb	11:39:02
2	Mo 202.031†	29.6	39.5	5.1552	µg/L	5.1552	ppb	11:39:28
2	Ni 231.604†	383.2	109.6	5.9683	µg/L	5.9683	ppb	11:39:28
2	P 214.914†	290.9	104.5	206.95	µg/L	206.95	ppb	11:39:28
2	Pb 220.353†	122.8	76.9	19.950	µg/L	19.950	ppb	11:39:28

2	S 181.975 Axial†	41.7	20.5	102.03 µg/L	102.03 ppb	11:39:28
2	Sb 206.836†	23.6	4.6	6.0780 µg/L	6.0780 ppb	11:39:28
2	Se 196.026†	3.8	-10.1	-1.6365 µg/L	-1.6365 ppb	11:39:28
2	SiO2†	21478.9	20942.8	3999.3 µg/L	3999.3 ppb	11:39:07
2	Si 251.611†	22986.7	24184.1	1834.4 µg/L	1834.4 ppb	11:39:07
2	Sn 189.927†	10.4	-11.3	-2.2591 µg/L	-2.2591 ppb	11:39:28
2	Ti 334.940†	205832.8	218966.9	485.20 µg/L	485.20 ppb	11:39:02
2	Tl 190.801†	-24.7	-4.9	-2.0674 µg/L	-2.0674 ppb	11:39:28
2	U 409.014†	1024.4	414.1	35.390 µg/L	35.390 ppb	11:39:02
2	V 292.402†	1457.9	1648.0	20.231 µg/L	20.231 ppb	11:39:07
2	Zn 213.857†	2693.6	2324.7	60.166 µg/L	60.166 ppb	11:39:28
3	Sc RADIAL	107617.4	107617.4	95.7 %		11:37:59
3	Al 396.153Radial†	15901.7	16390.4	8283.2 µg/L	8283.2 ppb	11:37:59
3	Ca 317.933Radial†	7531.5	7376.3	2928.1 µg/L	2928.1 ppb	11:38:19
3	Fe 238.204 Radial†	3458.8	3603.9	18931 µg/L	18931 ppb	11:38:19
3	K 766.490 Radial†	2758.5	2188.3	1186.5 µg/L	1186.5 ppb	11:37:59
3	Mg 279.077 IEC†	329.8	324.8	1774.0 µg/L	1774.0 ppb	11:38:19
3	Na 589.592 Radial†	266.8	982.8	272.69 µg/L	272.69 ppb	11:37:59
3	Sr 421.552†	4337.6	4597.3	25.896 µg/L	25.896 ppb	11:37:59
3	Sc 361.383	1938812.7	1938812.7	94.266 %		11:39:34
3	Y 371.029	1186548.2	1186548.2	94.745 %		11:39:34
3	Ag 328.068†	-352.3	-345.4	-1.4618 µg/L	-1.4618 ppb	11:39:40
3	As 188.979†	4.8	2.6	3.0775 µg/L	3.0775 ppb	11:40:00
3	B 249.677†	380.2	247.6	5.0352 µg/L	5.0352 ppb	11:39:40
3	Ba 233.527†	4946.6	5328.2	133.87 µg/L	133.87 ppb	11:39:40
3	Be 313.107†	5595.8	2324.7	1.2911 µg/L	1.2911 ppb	11:39:40
3	Cd 226.502†	-39.9	58.6	0.1021 µg/L	0.1021 ppb	11:40:00
3	Co 228.616†	30.1	103.6	3.9815 µg/L	3.9815 ppb	11:40:00
3	Cr 267.716†	379.8	525.7	10.987 µg/L	10.987 ppb	11:39:40
3	Cu 324.752†	3610.4	445.7	7.2024 µg/L	7.2024 ppb	11:39:40
3	Mn 257.610†	166046.8	176369.5	562.10 µg/L	562.10 ppb	11:39:34
3	Mo 202.031†	30.4	40.1	5.2186 µg/L	5.2186 ppb	11:40:00
3	Ni 231.604†	381.1	104.9	5.7128 µg/L	5.7128 ppb	11:40:00
3	P 214.914†	291.4	103.2	204.19 µg/L	204.19 ppb	11:40:00
3	Pb 220.353†	108.9	61.4	16.038 µg/L	16.038 ppb	11:40:00
3	S 181.975 Axial†	38.5	16.8	83.220 µg/L	83.220 ppb	11:40:00
3	Sb 206.836†	18.7	-0.8	0.7424 µg/L	0.7424 ppb	11:40:00
3	Se 196.026†	4.9	-8.9	-0.0185 µg/L	-0.0185 ppb	11:40:00
3	SiO2†	21173.5	20479.7	3910.9 µg/L	3910.9 ppb	11:39:40
3	Si 251.611†	22799.1	23836.2	1807.8 µg/L	1807.8 ppb	11:39:40
3	Sn 189.927†	8.6	-13.3	-3.2728 µg/L	-3.2728 ppb	11:40:00
3	Ti 334.940†	206855.4	218718.9	484.65 µg/L	484.65 ppb	11:39:34
3	Tl 190.801†	-20.1	0.1	5.4734 µg/L	5.4734 ppb	11:40:00
3	U 409.014†	836.7	208.4	16.105 µg/L	16.105 ppb	11:39:34
3	V 292.402†	1493.5	1676.3	20.505 µg/L	20.505 ppb	11:39:40
3	Zn 213.857†	2692.8	2306.4	59.697 µg/L	59.697 ppb	11:40:00

Mean Data: 1201985646|933564|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933775.1	94.021	%	0.2947				0.31%
Sc RADIAL	106974.2	95.1	%	0.53				0.56%
Y 371.029	1184057.6	94.546	%	0.2915				0.31%
Ag 328.068†	-324.7	-1.2735	µg/L	0.16806	-1.2735	ppb	0.16806	13.20%
Al 396.153Radial†	16349.0	8262.2	µg/L	20.90	8262.2	ppb	20.90	0.25%
As 188.979†	1.5	1.0032	µg/L	1.81336	1.0032	ppb	1.81336	180.76%
B 249.677†	273.0	6.1432	µg/L	1.39918	6.1432	ppb	1.39918	22.78%
Ba 233.527†	5352.6	134.48	µg/L	0.698	134.48	ppb	0.698	0.52%
Be 313.107†	2369.3	1.3191	µg/L	0.02448	1.3191	ppb	0.02448	1.86%
Ca 317.933Radial†	7397.2	2936.3	µg/L	13.14	2936.3	ppb	13.14	0.45%
Cd 226.502†	60.6	0.1569	µg/L	0.21203	0.1569	ppb	0.21203	135.16%
Co 228.616†	99.2	3.7682	µg/L	0.18523	3.7682	ppb	0.18523	4.92%
Cr 267.716†	527.8	11.031	µg/L	0.4319	11.031	ppb	0.4319	3.92%
Cu 324.752†	471.8	7.4003	µg/L	0.17992	7.4003	ppb	0.17992	2.43%
Fe 238.204 Radial†	3616.9	19000	µg/L	94.2	19000	ppb	94.2	0.50%
K 766.490 Radial†	2194.7	1190.0	µg/L	10.15	1190.0	ppb	10.15	0.85%
Mg 279.077 IEC†	324.1	1769.8	µg/L	24.36	1769.8	ppb	24.36	1.38%
Mn 257.610†	176468.8	562.42	µg/L	0.640	562.42	ppb	0.640	0.11%
Mo 202.031†	39.6	5.1660	µg/L	0.04812	5.1660	ppb	0.04812	0.93%
Na 589.592 Radial†	961.7	266.82	µg/L	5.984	266.82	ppb	5.984	2.24%

Ni 231.604†	107.7	5.8691	µg/L	0.13704	5.8691	ppb	0.13704	2.33%
P 214.914†	104.8	207.61	µg/L	3.791	207.61	ppb	3.791	1.83%
Pb 220.353†	73.1	18.989	µg/L	2.6077	18.989	ppb	2.6077	13.73%
S 181.975 Axial†	17.3	85.746	µg/L	15.1767	85.746	ppb	15.1767	17.70%
Sb 206.836†	1.1	2.5736	µg/L	3.03594	2.5736	ppb	3.03594	117.97%
Se 196.026†	-10.8	-2.8014	µg/L	3.51324	-2.8014	ppb	3.51324	125.41%
SiO2†	20710.2	3954.9	µg/L	44.21	3954.9	ppb	44.21	1.12%
Si 251.611†	24033.8	1822.9	µg/L	13.66	1822.9	ppb	13.66	0.75%
Sn 189.927†	-12.9	-3.0646	µg/L	0.72418	-3.0646	ppb	0.72418	23.63%
Sr 421.552†	4620.8	26.029	µg/L	0.1234	26.029	ppb	0.1234	0.47%
Ti 334.940†	218981.5	485.23	µg/L	0.599	485.23	ppb	0.599	0.12%
Tl 190.801†	-2.1	2.2193	µg/L	3.87498	2.2193	ppb	3.87498	174.60%
U 409.014†	305.2	25.185	µg/L	9.6918	25.185	ppb	9.6918	38.48%
V 292.402†	1649.4	20.222	µg/L	0.2874	20.222	ppb	0.2874	1.42%
Zn 213.857†	2310.0	59.786	µg/L	0.3438	59.786	ppb	0.3438	0.58%

Sequence No.: 40
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/18/2009 11:40:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	108888.0	108888.0	96.8	%			11:40:49
1	Al 396.153Radial†	9963.9	10062.8	5067.0	µg/L	5067.0	ppb	11:40:49
1	Ca 317.933Radial†	12140.4	12045.4	4781.5	µg/L	4781.5	ppb	11:41:09
1	Fe 238.204 Radial†	960.4	980.8	5168.7	µg/L	5168.7	ppb	11:41:09
1	K 766.490 Radial†	9634.3	9257.3	5019.2	µg/L	5019.2	ppb	11:40:49
1	Mg 279.077 IEC†	900.7	910.5	5055.0	µg/L	5055.0	ppb	11:41:09
1	Na 589.592 Radial†	33654.6	35468.8	9841.3	µg/L	9841.3	ppb	11:40:49
1	Sr 421.552†	85084.9	87955.6	495.45	µg/L	495.45	ppb	11:40:49
1	Sc 361.383	1920952.0	1920952.0	93.398	%			11:42:12
1	Y 371.029	1163002.9	1163002.9	92.865	%			11:42:12
1	Ag 328.068†	52234.9	55955.7	503.57	µg/L	503.57	ppb	11:42:17
1	As 188.979†	244.9	259.7	494.02	µg/L	494.02	ppb	11:42:38
1	B 249.677†	10363.2	10940.1	483.94	µg/L	483.94	ppb	11:42:17
1	Ba 233.527†	18310.8	19685.9	495.49	µg/L	495.49	ppb	11:42:17
1	Be 313.107†	734403.2	782706.6	494.94	µg/L	494.94	ppb	11:42:12
1	Cd 226.502†	17237.7	18557.1	490.88	µg/L	490.88	ppb	11:42:17
1	Co 228.616†	9514.4	10258.7	493.43	µg/L	493.43	ppb	11:42:17
1	Cr 267.716†	21998.0	23675.8	494.00	µg/L	494.00	ppb	11:42:17
1	Cu 324.752†	69990.1	71553.4	504.52	µg/L	504.52	ppb	11:42:17
1	Mn 257.610†	148213.7	158913.5	504.97	µg/L	504.97	ppb	11:42:12
1	Mo 202.031†	4073.6	4369.5	487.66	µg/L	487.66	ppb	11:42:38
1	Ni 231.604†	8760.1	9079.9	494.66	µg/L	494.66	ppb	11:42:17
1	P 214.914†	1284.0	1168.7	2481.9	µg/L	2481.9	ppb	11:42:38
1	Pb 220.353†	1875.0	1953.4	495.88	µg/L	495.88	ppb	11:42:38
1	S 181.975 Axial†	205.2	195.7	1003.9	µg/L	1003.9	ppb	11:42:38
1	Sb 206.836†	479.4	492.8	487.55	µg/L	487.55	ppb	11:42:38
1	Se 196.026†	337.0	346.7	507.22	µg/L	507.22	ppb	11:42:38
1	SiO2†	28031.1	28030.9	5352.9	µg/L	5352.9	ppb	11:42:17
1	Si 251.611†	30793.9	32621.1	2451.6	µg/L	2451.6	ppb	11:42:17
1	Sn 189.927†	949.2	993.9	487.22	µg/L	487.22	ppb	11:42:38
1	Ti 334.940†	209861.2	223977.4	496.20	µg/L	496.20	ppb	11:42:12
1	Tl 190.801†	286.5	328.2	497.68	µg/L	497.68	ppb	11:42:38
1	U 409.014†	5724.7	5450.1	510.98	µg/L	510.98	ppb	11:42:17
1	V 292.402†	41104.7	44102.4	501.83	µg/L	501.83	ppb	11:42:17
1	Zn 213.857†	18043.1	18768.4	498.88	µg/L	498.88	ppb	11:42:17
2	Sc RADIAL	107408.5	107408.5	95.5	%			11:41:15
2	Al 396.153Radial†	9803.3	10036.4	5053.6	µg/L	5053.6	ppb	11:41:15
2	Ca 317.933Radial†	12124.8	12201.8	4843.6	µg/L	4843.6	ppb	11:41:35
2	Fe 238.204 Radial†	954.5	988.4	5208.4	µg/L	5208.4	ppb	11:41:35
2	K 766.490 Radial†	9580.2	9337.7	5062.9	µg/L	5062.9	ppb	11:41:15
2	Mg 279.077 IEC†	900.7	923.4	5126.3	µg/L	5126.3	ppb	11:41:35
2	Na 589.592 Radial†	33359.2	35638.2	9888.3	µg/L	9888.3	ppb	11:41:15
2	Sr 421.552†	84212.6	88252.7	497.12	µg/L	497.12	ppb	11:41:15
2	Sc 361.383	1911669.0	1911669.0	92.946	%			11:42:44
2	Y 371.029	1157089.3	1157089.3	92.393	%			11:42:44
2	Ag 328.068†	52356.4	56358.0	507.19	µg/L	507.19	ppb	11:42:50
2	As 188.979†	248.8	265.2	504.46	µg/L	504.46	ppb	11:43:10
2	B 249.677†	10409.6	11043.9	488.53	µg/L	488.53	ppb	11:42:50
2	Ba 233.527†	18351.6	19825.0	498.99	µg/L	498.99	ppb	11:42:50
2	Be 313.107†	728440.3	780109.5	493.30	µg/L	493.30	ppb	11:42:44
2	Cd 226.502†	17199.5	18605.7	492.17	µg/L	492.17	ppb	11:42:50
2	Co 228.616†	9522.5	10316.9	496.24	µg/L	496.24	ppb	11:42:50
2	Cr 267.716†	22025.2	23819.4	497.00	µg/L	497.00	ppb	11:42:50
2	Cu 324.752†	70155.9	72095.7	508.35	µg/L	508.35	ppb	11:42:50
2	Mn 257.610†	147077.6	158461.8	503.54	µg/L	503.54	ppb	11:42:44
2	Mo 202.031†	4061.8	4377.9	488.60	µg/L	488.60	ppb	11:43:10
2	Ni 231.604†	8761.0	9126.5	497.19	µg/L	497.19	ppb	11:42:50
2	P 214.914†	1281.1	1172.4	2489.3	µg/L	2489.3	ppb	11:43:10
2	Pb 220.353†	1884.0	1972.9	500.79	µg/L	500.79	ppb	11:43:10

2	S 181.975 Axial†	203.0	194.3	996.92 µg/L	996.92 ppb	11:43:10
2	Sb 206.836†	476.4	492.1	486.81 µg/L	486.81 ppb	11:43:10
2	Se 196.026†	335.9	347.3	508.11 µg/L	508.11 ppb	11:43:10
2	SiO2†	28047.8	28194.6	5384.2 µg/L	5384.2 ppb	11:42:50
2	Si 251.611†	30777.7	32763.8	2462.5 µg/L	2462.5 ppb	11:42:50
2	Sn 189.927†	947.2	996.6	488.59 µg/L	488.59 ppb	11:43:10
2	Ti 334.940†	208321.1	223411.6	494.94 µg/L	494.94 ppb	11:42:44
2	Tl 190.801†	285.6	328.7	498.44 µg/L	498.44 ppb	11:43:10
2	U 409.014†	5768.8	5527.4	518.23 µg/L	518.23 ppb	11:42:50
2	V 292.402†	41169.5	44385.8	505.05 µg/L	505.05 ppb	11:42:50
2	Zn 213.857†	18025.5	18843.3	500.86 µg/L	500.86 ppb	11:42:50
3	Sc RADIAL	106908.4	106908.4	95.0 %		11:41:41
3	Al 396.153Radial†	9833.6	10116.3	5094.1 µg/L	5094.1 ppb	11:41:41
3	Ca 317.933Radial†	12148.3	12286.0	4877.0 µg/L	4877.0 ppb	11:42:01
3	Fe 238.204 Radial†	958.6	997.4	5255.6 µg/L	5255.6 ppb	11:42:01
3	K 766.490 Radial†	9573.2	9377.3	5084.3 µg/L	5084.3 ppb	11:41:41
3	Mg 279.077 IEC†	901.1	928.2	5152.9 µg/L	5152.9 ppb	11:42:01
3	Na 589.592 Radial†	33452.9	35900.3	9961.0 µg/L	9961.0 ppb	11:41:41
3	Sr 421.552†	84220.1	88673.1	499.49 µg/L	499.49 ppb	11:41:41
3	Sc 361.383	1923502.9	1923502.9	93.522 %		11:43:16
3	Y 371.029	1164197.3	1164197.3	92.960 %		11:43:16
3	Ag 328.068†	52227.5	55873.6	502.84 µg/L	502.84 ppb	11:43:22
3	As 188.979†	250.5	265.4	504.76 µg/L	504.76 ppb	11:43:42
3	B 249.677†	10412.1	10977.6	485.58 µg/L	485.58 ppb	11:43:22
3	Ba 233.527†	18358.0	19710.3	496.11 µg/L	496.11 ppb	11:43:22
3	Be 313.107†	735765.8	783120.9	495.20 µg/L	495.20 ppb	11:43:16
3	Cd 226.502†	17138.1	18426.2	487.42 µg/L	487.42 ppb	11:43:22
3	Co 228.616†	9512.0	10242.6	492.65 µg/L	492.65 ppb	11:43:22
3	Cr 267.716†	21954.0	23597.5	492.37 µg/L	492.37 ppb	11:43:22
3	Cu 324.752†	70113.1	71585.5	504.77 µg/L	504.77 ppb	11:43:22
3	Mn 257.610†	148789.9	159319.2	506.27 µg/L	506.27 ppb	11:43:16
3	Mo 202.031†	4055.9	4344.8	484.91 µg/L	484.91 ppb	11:43:42
3	Ni 231.604†	8767.7	9075.7	494.43 µg/L	494.43 ppb	11:43:22
3	P 214.914†	1278.2	1160.8	2464.4 µg/L	2464.4 ppb	11:43:42
3	Pb 220.353†	1876.2	1952.1	495.53 µg/L	495.53 ppb	11:43:42
3	S 181.975 Axial†	201.9	191.8	983.95 µg/L	983.95 ppb	11:43:42
3	Sb 206.836†	479.6	492.3	487.06 µg/L	487.06 ppb	11:43:42
3	Se 196.026†	338.2	347.5	508.43 µg/L	508.43 ppb	11:43:42
3	SiO2†	28096.6	28061.2	5358.7 µg/L	5358.7 ppb	11:43:22
3	Si 251.611†	30882.4	32672.0	2455.8 µg/L	2455.8 ppb	11:43:22
3	Sn 189.927†	939.2	981.8	481.37 µg/L	481.37 ppb	11:43:42
3	Ti 334.940†	210234.8	224078.9	496.42 µg/L	496.42 ppb	11:43:16
3	Tl 190.801†	281.6	322.5	489.07 µg/L	489.07 ppb	11:43:42
3	U 409.014†	5718.2	5435.1	509.55 µg/L	509.55 ppb	11:43:22
3	V 292.402†	41117.2	44057.3	501.31 µg/L	501.31 ppb	11:43:22
3	Zn 213.857†	18017.9	18715.8	497.46 µg/L	497.46 ppb	11:43:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1918708.0	93.289	%	0.3028				0.32%
Sc RADIAL	107735.0	95.8	%	0.92				0.96%
Y 371.029	1161429.8	92.739	%	0.3039				0.33%
Ag 328.068†	56062.4	504.53	µg/L	2.328	504.53	ppb	2.328	0.46%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	10071.8	5071.6	µg/L	20.66	5071.6	ppb	20.66	0.41%
QC value within limits for Al 396.153Radial Recovery = 101.43%								
As 188.979†	263.4	501.08	µg/L	6.117	501.08	ppb	6.117	1.22%
QC value within limits for As 188.979 Recovery = 100.22%								
B 249.677†	10987.2	486.02	µg/L	2.329	486.02	ppb	2.329	0.48%
QC value within limits for B 249.677 Recovery = 97.20%								
Ba 233.527†	19740.4	496.86	µg/L	1.869	496.86	ppb	1.869	0.38%
QC value within limits for Ba 233.527 Recovery = 99.37%								
Be 313.107†	781979.0	494.48	µg/L	1.032	494.48	ppb	1.032	0.21%
QC value within limits for Be 313.107 Recovery = 98.90%								
Ca 317.933Radial†	12177.8	4834.0	µg/L	48.46	4834.0	ppb	48.46	1.00%
QC value within limits for Ca 317.933Radial Recovery = 96.68%								
Cd 226.502†	18529.7	490.16	µg/L	2.460	490.16	ppb	2.460	0.50%
QC value within limits for Cd 226.502 Recovery = 98.03%								
Co 228.616†	10272.7	494.10	µg/L	1.887	494.10	ppb	1.887	0.38%

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   QC value within limits for Co 228.616  Recovery = 98.82%
Cr 267.716†            23697.6      494.46 µg/L         2.347      494.46 ppb          2.347   0.47%
   QC value within limits for Cr 267.716  Recovery = 98.89%
Cu 324.752†            71744.9      505.88 µg/L         2.140      505.88 ppb          2.140   0.42%
   QC value within limits for Cu 324.752  Recovery = 101.18%
Fe 238.204 Radial†       988.9      5210.9 µg/L        43.49      5210.9 ppb         43.49   0.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.22%
K 766.490 Radial†       9324.1      5055.5 µg/L        33.16      5055.5 ppb         33.16   0.66%
   QC value within limits for K 766.490 Radial  Recovery = 101.11%
Mg 279.077 IEC†          920.7      5111.4 µg/L        50.63      5111.4 ppb         50.63   0.99%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.23%
Mn 257.610†           158898.2      504.92 µg/L         1.364      504.92 ppb          1.364   0.27%
   QC value within limits for Mn 257.610  Recovery = 100.98%
Mo 202.031†             4364.1      487.06 µg/L         1.918      487.06 ppb          1.918   0.39%
   QC value within limits for Mo 202.031  Recovery = 97.41%
Na 589.592 Radial†     35669.1      9896.8 µg/L        60.32      9896.8 ppb         60.32   0.61%
   QC value within limits for Na 589.592 Radial  Recovery = 98.97%
Ni 231.604†             9094.0      495.43 µg/L         1.536      495.43 ppb          1.536   0.31%
   QC value within limits for Ni 231.604  Recovery = 99.09%
P 214.914†              1167.3      2478.5 µg/L        12.79      2478.5 ppb         12.79   0.52%
   QC value within limits for P 214.914  Recovery = 99.14%
Pb 220.353†             1959.5      497.40 µg/L         2.941      497.40 ppb          2.941   0.59%
   QC value within limits for Pb 220.353  Recovery = 99.48%
S 181.975 Axial†         193.9      994.93 µg/L        10.135      994.93 ppb         10.135   1.02%
   QC value within limits for S 181.975 Axial  Recovery = 99.49%
Sb 206.836†              492.4      487.14 µg/L         0.377      487.14 ppb          0.377   0.08%
   QC value within limits for Sb 206.836  Recovery = 97.43%
Se 196.026†              347.2      507.92 µg/L         0.626      507.92 ppb          0.626   0.12%
   QC value within limits for Se 196.026  Recovery = 101.58%
SiO2†                  28095.6      5365.2 µg/L        16.63      5365.2 ppb         16.63   0.31%
   QC value within limits for SiO2  Recovery = 100.33%
Si 251.611†            32685.6      2456.6 µg/L         5.50      2456.6 ppb          5.50   0.22%
   QC value within limits for Si 251.611  Recovery = 98.27%
Sn 189.927†              990.8      485.73 µg/L         3.833      485.73 ppb          3.833   0.79%
   QC value within limits for Sn 189.927  Recovery = 97.15%
Sr 421.552†            88293.8      497.35 µg/L         2.031      497.35 ppb          2.031   0.41%
   QC value within limits for Sr 421.552  Recovery = 99.47%
Ti 334.940†           223822.7      495.85 µg/L         0.797      495.85 ppb          0.797   0.16%
   QC value within limits for Ti 334.940  Recovery = 99.17%
Tl 190.801†              326.5      495.06 µg/L         5.203      495.06 ppb          5.203   1.05%
   QC value within limits for Tl 190.801  Recovery = 99.01%
U 409.014†              5470.9      512.92 µg/L         4.653      512.92 ppb          4.653   0.91%
   QC value within limits for U 409.014  Recovery = 102.58%
V 292.402†             44181.8      502.73 µg/L         2.025      502.73 ppb          2.025   0.40%
   QC value within limits for V 292.402  Recovery = 100.55%
Zn 213.857†            18775.9      499.07 µg/L         1.709      499.07 ppb          1.709   0.34%
   QC value within limits for Zn 213.857  Recovery = 99.81%
All analyte(s) passed QC.
```

Sequence No.: 41
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/18/2009 11:43:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	106778.8	106778.8	94.9	%			11:44:24
1	Al 396.153Radial†	212.5	-6.0	-3.0389	µg/L	-3.0389	ppb	11:44:24
1	Ca 317.933Radial†	408.0	-65.7	-26.076	µg/L	-26.076	ppb	11:44:45
1	Fe 238.204 Radial†	10.0	-0.7	-3.6746	µg/L	-3.6746	ppb	11:44:45
1	K 766.490 Radial†	687.2	29.1	15.772	µg/L	15.772	ppb	11:44:24
1	Mg 279.077 IEC†	15.1	-3.9	-21.733	µg/L	-21.733	ppb	11:44:45
1	Na 589.592 Radial†	-676.3	-8.5	-2.3566	µg/L	-2.3566	ppb	11:44:24
1	Sr 421.552†	-55.6	5.2	0.0295	µg/L	0.0295	ppb	11:44:24
1	Sc 361.383	1938965.8	1938965.8	94.274	%			11:45:47
1	Y 371.029	1180584.7	1180584.7	94.269	%			11:45:47
1	Ag 328.068†	-123.6	-102.8	-0.9164	µg/L	-0.9164	ppb	11:45:52
1	As 188.979†	3.2	1.0	1.8235	µg/L	1.8235	ppb	11:46:13
1	B 249.677†	136.6	-10.8	-0.4768	µg/L	-0.4768	ppb	11:46:13
1	Ba 233.527†	-75.8	0.2	0.0067	µg/L	0.0067	ppb	11:46:13
1	Be 313.107†	3520.6	123.0	0.0777	µg/L	0.0777	ppb	11:45:52
1	Cd 226.502†	-89.5	6.0	0.1584	µg/L	0.1584	ppb	11:46:13
1	Co 228.616†	-73.1	-5.9	-0.2818	µg/L	-0.2818	ppb	11:46:13
1	Cr 267.716†	-93.2	23.9	0.4981	µg/L	0.4981	ppb	11:46:13
1	Cu 324.752†	3144.0	-49.4	-0.3483	µg/L	-0.3483	ppb	11:45:52
1	Mn 257.610†	-159.5	53.5	0.1693	µg/L	0.1693	ppb	11:46:13
1	Mo 202.031†	-3.5	4.2	0.4636	µg/L	0.4636	ppb	11:46:13
1	Ni 231.604†	275.9	-6.8	-0.3694	µg/L	-0.3694	ppb	11:46:13
1	P 214.914†	218.5	25.8	56.020	µg/L	56.020	ppb	11:46:13
1	Pb 220.353†	75.5	25.9	6.5780	µg/L	6.5780	ppb	11:46:13
1	S 181.975 Axial†	24.8	2.3	11.879	µg/L	11.879	ppb	11:46:13
1	Sb 206.836†	17.6	-1.9	-1.8544	µg/L	-1.8544	ppb	11:46:13
1	Se 196.026†	7.4	-6.2	-9.0382	µg/L	-9.0382	ppb	11:46:13
1	SiO2†	2055.5	198.7	37.950	µg/L	37.950	ppb	11:45:52
1	Si 251.611†	403.4	78.3	5.9948	µg/L	5.9948	ppb	11:46:13
1	Sn 189.927†	20.0	-1.3	-0.6251	µg/L	-0.6251	ppb	11:46:13
1	Ti 334.940†	781.1	109.7	0.2446	µg/L	0.2446	ppb	11:45:52
1	Tl 190.801†	-17.7	2.7	4.0245	µg/L	4.0245	ppb	11:46:13
1	U 409.014†	641.0	0.7	0.0694	µg/L	0.0694	ppb	11:45:52
1	V 292.402†	-64.1	23.9	0.2730	µg/L	0.2730	ppb	11:45:52
1	Zn 213.857†	513.8	-5.1	-0.1340	µg/L	-0.1340	ppb	11:46:13
2	Sc RADIAL	106289.1	106289.1	94.5	%			11:44:50
2	Al 396.153Radial†	186.4	-32.6	-16.511	µg/L	-16.511	ppb	11:44:50
2	Ca 317.933Radial†	405.8	-66.0	-26.210	µg/L	-26.210	ppb	11:45:10
2	Fe 238.204 Radial†	11.3	0.7	3.8481	µg/L	3.8481	ppb	11:45:10
2	K 766.490 Radial†	633.1	-24.9	-13.495	µg/L	-13.495	ppb	11:44:50
2	Mg 279.077 IEC†	11.4	-7.7	-42.919	µg/L	-42.919	ppb	11:45:10
2	Na 589.592 Radial†	-667.3	-2.2	-0.6135	µg/L	-0.6135	ppb	11:44:50
2	Sr 421.552†	-47.9	13.1	0.0739	µg/L	0.0739	ppb	11:44:50
2	Sc 361.383	1953242.1	1953242.1	94.968	%			11:46:19
2	Y 371.029	1189074.3	1189074.3	94.947	%			11:46:19
2	Ag 328.068†	-180.1	-161.3	-1.4372	µg/L	-1.4372	ppb	11:46:24
2	As 188.979†	0.7	-1.7	-3.2383	µg/L	-3.2383	ppb	11:46:45
2	B 249.677†	152.6	4.9	0.2184	µg/L	0.2184	ppb	11:46:45
2	Ba 233.527†	-80.9	-4.5	-0.1129	µg/L	-0.1129	ppb	11:46:45
2	Be 313.107†	3593.7	172.7	0.1091	µg/L	0.1091	ppb	11:46:24
2	Cd 226.502†	-92.6	3.4	0.0910	µg/L	0.0910	ppb	11:46:45
2	Co 228.616†	-79.6	-12.1	-0.5777	µg/L	-0.5777	ppb	11:46:45
2	Cr 267.716†	-97.5	20.1	0.4189	µg/L	0.4189	ppb	11:46:45
2	Cu 324.752†	3141.2	-76.6	-0.5382	µg/L	-0.5382	ppb	11:46:24
2	Mn 257.610†	-149.5	65.2	0.2074	µg/L	0.2074	ppb	11:46:45
2	Mo 202.031†	3.2	11.3	1.2584	µg/L	1.2584	ppb	11:46:45
2	Ni 231.604†	263.6	-21.8	-1.1884	µg/L	-1.1884	ppb	11:46:45
2	P 214.914†	217.4	22.9	49.806	µg/L	49.806	ppb	11:46:45
2	Pb 220.353†	67.0	16.4	4.1599	µg/L	4.1599	ppb	11:46:45

2	S 181.975 Axial†	25.9	3.3	16.741 µg/L	16.741 ppb	11:46:45
2	Sb 206.836†	10.0	-10.0	-9.9184 µg/L	-9.9184 ppb	11:46:45
2	Se 196.026†	13.5	0.1	0.1722 µg/L	0.1722 ppb	11:46:45
2	SiO2†	2028.2	154.0	29.401 µg/L	29.401 ppb	11:46:24
2	Si 251.611†	407.9	79.8	6.1171 µg/L	6.1171 ppb	11:46:45
2	Sn 189.927†	20.0	-1.4	-0.7002 µg/L	-0.7002 ppb	11:46:45
2	Ti 334.940†	771.0	93.0	0.2077 µg/L	0.2077 ppb	11:46:24
2	Tl 190.801†	-19.2	1.2	1.7452 µg/L	1.7452 ppb	11:46:45
2	U 409.014†	697.0	54.7	5.1361 µg/L	5.1361 ppb	11:46:24
2	V 292.402†	-46.6	42.9	0.5009 µg/L	0.5009 ppb	11:46:24
2	Zn 213.857†	509.9	-13.3	-0.3474 µg/L	-0.3474 ppb	11:46:45
3	Sc RADIAL	106583.3	106583.3	94.8 %		11:45:16
3	Al 396.153Radial†	184.9	-34.7	-17.561 µg/L	-17.561 ppb	11:45:16
3	Ca 317.933Radial†	409.9	-62.9	-24.973 µg/L	-24.973 ppb	11:45:36
3	Fe 238.204 Radial†	13.0	2.5	13.246 µg/L	13.246 ppb	11:45:36
3	K 766.490 Radial†	706.0	50.2	27.203 µg/L	27.203 ppb	11:45:16
3	Mg 279.077 IEC†	15.0	-4.0	-22.192 µg/L	-22.192 ppb	11:45:36
3	Na 589.592 Radial†	-693.5	-27.9	-7.7491 µg/L	-7.7491 ppb	11:45:16
3	Sr 421.552†	-44.0	17.3	0.0975 µg/L	0.0975 ppb	11:45:16
3	Sc 361.383	1947815.1	1947815.1	94.704 %		11:46:51
3	Y 371.029	1184783.6	1184783.6	94.604 %		11:46:51
3	Ag 328.068†	-142.7	-122.4	-1.0894 µg/L	-1.0894 ppb	11:46:56
3	As 188.979†	1.8	-0.6	-1.1967 µg/L	-1.1967 ppb	11:47:17
3	B 249.677†	131.9	-16.4	-0.7328 µg/L	-0.7328 ppb	11:47:17
3	Ba 233.527†	-85.4	-9.5	-0.2369 µg/L	-0.2369 ppb	11:47:17
3	Be 313.107†	3542.5	129.1	0.0816 µg/L	0.0816 ppb	11:46:56
3	Cd 226.502†	-96.1	-0.6	-0.0177 µg/L	-0.0177 ppb	11:47:17
3	Co 228.616†	-72.2	-4.5	-0.2165 µg/L	-0.2165 ppb	11:47:17
3	Cr 267.716†	-107.5	9.2	0.1932 µg/L	0.1932 ppb	11:47:17
3	Cu 324.752†	3181.2	-25.2	-0.1746 µg/L	-0.1746 ppb	11:46:56
3	Mn 257.610†	-161.5	52.1	0.1670 µg/L	0.1670 ppb	11:47:17
3	Mo 202.031†	-4.8	2.9	0.3225 µg/L	0.3225 ppb	11:47:17
3	Ni 231.604†	265.5	-19.0	-1.0352 µg/L	-1.0352 ppb	11:47:17
3	P 214.914†	207.0	12.6	27.342 µg/L	27.342 ppb	11:47:17
3	Pb 220.353†	61.2	10.5	2.6672 µg/L	2.6672 ppb	11:47:17
3	S 181.975 Axial†	25.1	2.4	12.391 µg/L	12.391 ppb	11:47:17
3	Sb 206.836†	18.5	-1.0	-0.9708 µg/L	-0.9708 ppb	11:47:17
3	Se 196.026†	14.0	0.7	1.0699 µg/L	1.0699 ppb	11:47:17
3	SiO2†	2045.6	178.3	34.052 µg/L	34.052 ppb	11:46:56
3	Si 251.611†	400.7	73.5	5.6423 µg/L	5.6423 ppb	11:47:17
3	Sn 189.927†	19.2	-2.2	-1.0677 µg/L	-1.0677 ppb	11:47:17
3	Ti 334.940†	780.5	105.2	0.2347 µg/L	0.2347 ppb	11:46:56
3	Tl 190.801†	-15.7	4.9	7.3795 µg/L	7.3795 ppb	11:47:17
3	U 409.014†	657.0	14.5	1.3604 µg/L	1.3604 ppb	11:46:56
3	V 292.402†	-57.2	31.6	0.3614 µg/L	0.3614 ppb	11:46:56
3	Zn 213.857†	517.4	-3.8	-0.0963 µg/L	-0.0963 ppb	11:47:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1946674.3	94.648	%	0.3504				0.37%
Sc RADIAL	106550.4	94.7	%	0.22				0.23%
Y 371.029	1184814.2	94.607	%	0.3390				0.36%
Ag 328.068†	-128.8	-1.1477	µg/L	0.26525	-1.1477	ppb	0.26525	23.11%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-24.4	-12.370	µg/L	8.0984	-12.370	ppb	8.0984	65.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.8705	µg/L	2.54663	-0.8705	ppb	2.54663	292.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-7.4	-0.3304	µg/L	0.49224	-0.3304	ppb	0.49224	148.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.6	-0.1144	µg/L	0.12179	-0.1144	ppb	0.12179	106.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	141.6	0.0895	µg/L	0.01714	0.0895	ppb	0.01714	19.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-64.9	-25.753	µg/L	0.6785	-25.753	ppb	0.6785	2.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.9	0.0772	µg/L	0.08882	0.0772	ppb	0.08882	115.02%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-7.5	-0.3587	µg/L	0.19250	-0.3587	ppb	0.19250	53.67%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.7      0.3701 µg/L       0.15818      0.3701 ppb        0.15818  42.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -50.4     -0.3537 µg/L       0.18189     -0.3537 ppb        0.18189  51.43%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.9      4.4732 µg/L       8.47766      4.4732 ppb        8.47766 189.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          18.1      9.8264 µg/L      20.99029      9.8264 ppb       20.99029 213.61%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -5.2     -28.948 µg/L       12.1012     -28.948 ppb        12.1012  41.80%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                56.9      0.1812 µg/L       0.02268      0.1812 ppb        0.02268  12.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.1      0.6815 µg/L       0.50455      0.6815 ppb        0.50455  74.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -12.9     -3.5731 µg/L       3.72011     -3.5731 ppb        3.72011 104.12%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -15.9     -0.8644 µg/L       0.43542     -0.8644 ppb        0.43542  50.38%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 20.4      44.389 µg/L       15.0867      44.389 ppb        15.0867  33.99%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                17.6      4.4684 µg/L       1.97354      4.4684 ppb        1.97354  44.17%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.7      13.670 µg/L        2.6714      13.670 ppb         2.6714  19.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -4.3     -4.2478 µg/L       4.93065     -4.2478 ppb        4.93065 116.07%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -2.5987 µg/L       5.59478     -2.5987 ppb        5.59478 215.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     177.0      33.801 µg/L        4.2797      33.801 ppb         4.2797  12.66%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                77.2      5.9181 µg/L       0.24654      5.9181 ppb        0.24654   4.17%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.6     -0.7977 µg/L       0.23685     -0.7977 ppb        0.23685  29.69%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.9      0.0670 µg/L       0.03452      0.0670 ppb        0.03452  51.51%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               102.7      0.2290 µg/L       0.01911      0.2290 ppb        0.01911   8.35%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      4.3831 µg/L       2.83423      4.3831 ppb        2.83423  64.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 23.3      2.1886 µg/L       2.63294      2.1886 ppb        2.63294 120.30%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 32.8      0.3784 µg/L       0.11489      0.3784 ppb        0.11489  30.36%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -7.4     -0.1925 µg/L       0.13542     -0.1925 ppb        0.13542  70.33%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 122009

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1

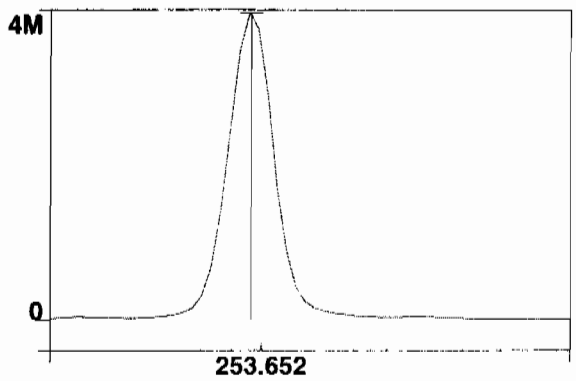

Intensity: 3563147.5 cps
Conc:

1

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 121109
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 121109A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 12/11/2009 12:44:17**
IEC File: 101209.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/11/2009 10:35:01**
Analyst: **Data Type: Reprocessed on 12/11/2009 12:45:49**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	867384.7	867384.7	99.939	%	10:38:11
1	Sc Radial	5608.5	5608.5	101	%	10:36:54
1	Y 371.029	729366.4	729366.4	99.988	%	10:38:11
1	Y RADIAL	6113.1	6113.1	101.2	%	10:36:54
1	Ag 328.068†	291.2	291.4	[0.00]	ug/L	10:38:11

1	Al 396.153Radial†	-27.8	-27.7	[0.00]	ug/L	10:36:54
1	As 188.979†	-33.2	-33.2	[0.00]	ug/L	10:38:31
1	B 249.677†	-500.0	-500.3	[0.00]	ug/L	10:38:31
1	Ba 233.527†	-23.0	-23.0	[0.00]	ug/L	10:38:31
1	Be 313.107†	-4673.8	-4676.6	[0.00]	ug/L	10:38:11
1	Ca 317.933Radial†	18.4	18.3	[0.00]	ug/L	10:37:14
1	Cd 226.502†	-195.7	-195.8	[0.00]	ug/L	10:38:31
1	Co 228.616†	-73.5	-73.5	[0.00]	ug/L	10:38:31
1	Cr 267.716†	98.1	98.1	[0.00]	ug/L	10:38:31
1	Cu 324.752†	6710.6	6714.7	[0.00]	ug/L	10:38:11
1	Fe 238.204 Radial†	11.2	11.2	[0.00]	ug/L	10:37:14
1	K 766.490 Radial†	2781.3	2765.0	[0.00]	ug/L	10:36:54
1	Mg 279.077 IEC†	1.9	1.9	[0.00]	ug/L	10:37:14
1	Mn 257.610†	514.8	515.2	[0.00]	ug/L	10:38:31
1	Mo 202.031†	16.4	16.4	[0.00]	ug/L	10:38:31
1	Na 589.592 Radial†	-1549.4	-1540.3	[0.00]	ug/L	10:36:54
1	Ni 231.604†	92.4	92.4	[0.00]	ug/L	10:38:31
1	P 214.914†	242.5	242.6	[0.00]	ug/L	10:38:31
1	Pb 220.353†	-68.7	-68.7	[0.00]	ug/L	10:38:31
1	S 181.975 Axial†	46.0	46.1	[0.00]	ug/L	10:38:31
1	Sb 206.836†	43.0	43.0	[0.00]	ug/L	10:38:31
1	Se 196.026†	-23.4	-23.4	[0.00]	ug/L	10:38:31
1	Si 251.611†	471.9	472.2	[0.00]	ug/L	10:38:31
1	Sn 189.927†	5.3	5.3	[0.00]	ug/L	10:38:31
1	Sr 421.552†	8.4	8.3	[0.00]	ug/L	10:36:54
1	Ti 334.940†	-1298.5	-1299.3	[0.00]	ug/L	10:38:11
1	Tl 190.801†	-28.3	-28.3	[0.00]	ug/L	10:38:31
1	U 409.014†	-2617.2	-2618.8	[0.00]	ug/L	10:38:11
1	V 292.402†	-1364.9	-1365.7	[0.00]	ug/L	10:38:11
1	Zn 213.857†	737.5	738.0	[0.00]	ug/L	10:38:31
1	SiO2†	543.0	543.4	[0.00]	ug/L	10:39:27
2	Sc 361.383	873164.9	873164.9	100.60	%	10:38:36
2	Sc Radial	5567.4	5567.4	99.9	%	10:37:19
2	Y 371.029	733929.4	733929.4	100.61	%	10:38:36
2	Y RADIAL	6042.1	6042.1	100.0	%	10:37:19
2	Ag 328.068†	268.9	267.3	[0.00]	ug/L	10:38:36
2	Al 396.153Radial†	-36.3	-36.3	[0.00]	ug/L	10:37:19
2	As 188.979†	-30.2	-30.0	[0.00]	ug/L	10:38:56
2	B 249.677†	-501.5	-498.5	[0.00]	ug/L	10:38:56
2	Ba 233.527†	-11.8	-11.7	[0.00]	ug/L	10:38:56
2	Be 313.107†	-4652.0	-4624.1	[0.00]	ug/L	10:38:36
2	Ca 317.933Radial†	14.4	14.4	[0.00]	ug/L	10:37:39
2	Cd 226.502†	-208.8	-207.6	[0.00]	ug/L	10:38:56
2	Co 228.616†	-74.9	-74.4	[0.00]	ug/L	10:38:56
2	Cr 267.716†	76.0	75.5	[0.00]	ug/L	10:38:56
2	Cu 324.752†	6865.2	6823.9	[0.00]	ug/L	10:38:36
2	Fe 238.204 Radial†	8.6	8.6	[0.00]	ug/L	10:37:39
2	K 766.490 Radial†	2732.7	2736.8	[0.00]	ug/L	10:37:19
2	Mg 279.077 IEC†	0.6	0.6	[0.00]	ug/L	10:37:39
2	Mn 257.610†	513.2	510.1	[0.00]	ug/L	10:38:56
2	Mo 202.031†	21.4	21.3	[0.00]	ug/L	10:38:56
2	Na 589.592 Radial†	-1616.8	-1619.2	[0.00]	ug/L	10:37:19
2	Ni 231.604†	82.6	82.1	[0.00]	ug/L	10:38:56
2	P 214.914†	229.0	227.6	[0.00]	ug/L	10:38:56
2	Pb 220.353†	-75.5	-75.1	[0.00]	ug/L	10:38:56
2	S 181.975 Axial†	49.2	48.9	[0.00]	ug/L	10:38:56
2	Sb 206.836†	34.6	34.4	[0.00]	ug/L	10:38:56
2	Se 196.026†	-27.5	-27.3	[0.00]	ug/L	10:38:56
2	Si 251.611†	487.6	484.7	[0.00]	ug/L	10:38:56
2	Sn 189.927†	9.1	9.1	[0.00]	ug/L	10:38:56
2	Sr 421.552†	-10.9	-10.9	[0.00]	ug/L	10:37:19
2	Ti 334.940†	-1175.8	-1168.7	[0.00]	ug/L	10:38:36
2	Tl 190.801†	-31.7	-31.5	[0.00]	ug/L	10:38:56
2	U 409.014†	-2571.7	-2556.3	[0.00]	ug/L	10:38:36
2	V 292.402†	-1358.1	-1349.9	[0.00]	ug/L	10:38:36
2	Zn 213.857†	758.6	754.0	[0.00]	ug/L	10:38:56
2	SiO2†	515.7	512.6	[0.00]	ug/L	10:39:32
3	Sc 361.383	863198.0	863198.0	99.456	%	10:39:02
3	Sc Radial	5551.4	5551.4	99.6	%	10:37:44
3	Y 371.029	725074.5	725074.5	99.399	%	10:39:02
3	Y RADIAL	5962.3	5962.3	98.73	%	10:37:44

3	Ag 328.068†	261.9	263.4	[0.00]	ug/L	10:39:02
3	Al 396.153Radial†	-41.8	-41.9	[0.00]	ug/L	10:37:44
3	As 188.979†	-30.5	-30.7	[0.00]	ug/L	10:39:22
3	B 249.677†	-478.2	-480.8	[0.00]	ug/L	10:39:22
3	Ba 233.527†	1.4	1.4	[0.00]	ug/L	10:39:22
3	Be 313.107†	-4661.7	-4687.2	[0.00]	ug/L	10:39:02
3	Ca 317.933Radial†	18.0	18.0	[0.00]	ug/L	10:38:05
3	Cd 226.502†	-192.4	-193.4	[0.00]	ug/L	10:39:22
3	Co 228.616†	-72.0	-72.4	[0.00]	ug/L	10:39:22
3	Cr 267.716†	84.0	84.5	[0.00]	ug/L	10:39:22
3	Cu 324.752†	6698.3	6734.9	[0.00]	ug/L	10:39:02
3	Fe 238.204 Radial†	9.9	9.9	[0.00]	ug/L	10:38:05
3	K 766.490 Radial†	2704.9	2716.8	[0.00]	ug/L	10:37:44
3	Mg 279.077 IEC†	3.2	3.2	[0.00]	ug/L	10:38:05
3	Mn 257.610†	532.3	535.3	[0.00]	ug/L	10:39:22
3	Mo 202.031†	17.4	17.5	[0.00]	ug/L	10:39:22
3	Na 589.592 Radial†	-1496.3	-1502.9	[0.00]	ug/L	10:37:44
3	Ni 231.604†	82.9	83.3	[0.00]	ug/L	10:39:22
3	P 214.914†	254.4	255.8	[0.00]	ug/L	10:39:22
3	Pb 220.353†	-59.8	-60.1	[0.00]	ug/L	10:39:22
3	S 181.975 Axial†	52.9	53.2	[0.00]	ug/L	10:39:22
3	Sb 206.836†	34.5	34.7	[0.00]	ug/L	10:39:22
3	Se 196.026†	-29.5	-29.6	[0.00]	ug/L	10:39:22
3	Si 251.611†	485.7	488.4	[0.00]	ug/L	10:39:22
3	Sn 189.927†	12.1	12.1	[0.00]	ug/L	10:39:22
3	Sr 421.552†	1.9	1.9	[0.00]	ug/L	10:37:44
3	Ti 334.940†	-1293.7	-1300.8	[0.00]	ug/L	10:39:02
3	Tl 190.801†	-43.7	-43.9	[0.00]	ug/L	10:39:22
3	U 409.014†	-2562.9	-2576.9	[0.00]	ug/L	10:39:02
3	V 292.402†	-1365.1	-1372.6	[0.00]	ug/L	10:39:02
3	Zn 213.857†	765.4	769.6	[0.00]	ug/L	10:39:22
3	SiO2†	514.6	517.4	[0.00]	ug/L	10:39:37

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	867915.8	5004.66	0.58%	100.00	%
Sc Radial	5575.8	29.49	0.53%	100	%
Y 371.029	729456.7	4428.18	0.61%	100.00	%
Y RADIAL	6039.2	75.46	1.25%	100.0	%
Ag 328.068†	274.0	15.19	5.54%	[0.00]	ug/L
Al 396.153Radial†	-35.3	7.20	20.40%	[0.00]	ug/L
As 188.979†	-31.3	1.70	5.42%	[0.00]	ug/L
B 249.677†	-493.2	10.80	2.19%	[0.00]	ug/L
Ba 233.527†	-11.1	12.19	109.76%	[0.00]	ug/L
Be 313.107†	-4662.6	33.82	0.73%	[0.00]	ug/L
Ca 317.933Radial†	16.9	2.17	12.81%	[0.00]	ug/L
Cd 226.502†	-198.9	7.58	3.81%	[0.00]	ug/L
Co 228.616†	-73.4	1.03	1.40%	[0.00]	ug/L
Cr 267.716†	86.0	11.38	13.22%	[0.00]	ug/L
Cu 324.752†	6757.8	58.13	0.86%	[0.00]	ug/L
Fe 238.204 Radial†	9.9	1.30	13.13%	[0.00]	ug/L
K 766.490 Radial†	2739.5	24.23	0.88%	[0.00]	ug/L
Mg 279.077 IEC†	1.9	1.29	67.77%	[0.00]	ug/L
Mn 257.610†	520.2	13.31	2.56%	[0.00]	ug/L
Mo 202.031†	18.4	2.55	13.83%	[0.00]	ug/L
Na 589.592 Radial†	-1554.1	59.38	3.82%	[0.00]	ug/L
Ni 231.604†	85.9	5.65	6.58%	[0.00]	ug/L
P 214.914†	242.0	14.10	5.83%	[0.00]	ug/L
Pb 220.353†	-68.0	7.50	11.03%	[0.00]	ug/L
S 181.975 Axial†	49.4	3.61	7.31%	[0.00]	ug/L
Sb 206.836†	37.4	4.89	13.08%	[0.00]	ug/L
Se 196.026†	-26.8	3.12	11.65%	[0.00]	ug/L
Si 251.611†	481.7	8.49	1.76%	[0.00]	ug/L
Sn 189.927†	8.8	3.41	38.63%	[0.00]	ug/L
Sr 421.552†	-0.2	9.82	>999.9%	[0.00]	ug/L
Ti 334.940†	-1256.2	75.82	6.04%	[0.00]	ug/L
Tl 190.801†	-34.6	8.24	23.82%	[0.00]	ug/L
U 409.014†	-2584.0	31.88	1.23%	[0.00]	ug/L
V 292.402†	-1362.7	11.62	0.85%	[0.00]	ug/L

Zn 213.857†	753.9	15.79	2.09%	[0.00] ug/L
SiO2†	524.5	16.53	3.15%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/11/2009 10:41:48
Data Type: Reprocessed on 12/11/2009 12:45:50
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	875842.7	875842.7	100.91	%	10:44:12
1	Sc Radial	5490.5	5490.5	98.5	%	10:43:46
1	Y 371.029	731965.3	731965.3	100.34	%	10:44:12
1	Y RADIAL	5960.4	5960.4	98.70	%	10:43:46
1	Ag 328.068†	21744.6	21273.8	[100]	ug/L	10:44:17
1	As 188.979†	217.4	246.7	[100]	ug/L	10:44:37
1	B 249.677†	3900.4	4358.3	[100]	ug/L	10:44:17
1	Ba 233.527†	13083.6	12976.3	[100]	ug/L	10:44:17
1	Be 313.107†	259024.2	261342.5	[100]	ug/L	10:44:12
1	Cd 226.502†	9235.0	9350.4	[100]	ug/L	10:44:17
1	Co 228.616†	4935.1	4963.9	[100]	ug/L	10:44:37
1	Cr 267.716†	9393.3	9222.2	[100]	ug/L	10:44:17
1	Cu 324.752†	39672.7	32555.8	[100]	ug/L	10:44:17
1	K 766.490 Radial†	8407.4	5798.4	[1000]	ug/L	10:43:40
1	Mn 257.610†	91938.6	90586.4	[100]	ug/L	10:44:17
1	Mo 202.031†	1522.8	1490.6	[100]	ug/L	10:44:37
1	Ni 231.604†	4178.8	4055.1	[100]	ug/L	10:44:37
1	P 214.914†	1076.2	824.4	[500]	ug/L	10:44:37
1	Pb 220.353†	785.2	846.1	[100]	ug/L	10:44:37
1	S 181.975 Axial†	185.0	134.0	[200]	ug/L	10:44:37
1	Sb 206.836†	324.9	284.5	[100]	ug/L	10:44:37
1	Se 196.026†	139.6	165.1	[100]	ug/L	10:44:37
1	Si 251.611†	16386.5	15756.4	[500]	ug/L	10:44:17
1	Sn 189.927†	584.6	570.5	[100]	ug/L	10:44:37
1	Sr 421.552†	15716.8	15961.0	[100]	ug/L	10:43:46
1	Ti 334.940†	58684.5	59409.6	[100]	ug/L	10:44:17
1	Tl 190.801†	306.5	338.3	[100]	ug/L	10:44:37
1	U 409.014†	652.2	3230.3	[100]	ug/L	10:44:12
1	V 292.402†	13019.5	14264.4	[100]	ug/L	10:44:17
1	Zn 213.857†	12046.1	11183.3	[100]	ug/L	10:44:17
1	SiO2†	16331.5	15659.2	[1069.5]	ug/L	10:45:44
2	Sc 361.383	876251.3	876251.3	100.96	%	10:44:43
2	Sc Radial	5517.6	5517.6	99.0	%	10:43:56
2	Y 371.029	732181.8	732181.8	100.37	%	10:44:43
2	Y RADIAL	6014.9	6014.9	99.60	%	10:43:56
2	Ag 328.068†	21438.3	20960.3	[100]	ug/L	10:44:48
2	As 188.979†	215.7	244.9	[100]	ug/L	10:45:08
2	B 249.677†	3806.3	4263.3	[100]	ug/L	10:44:48
2	Ba 233.527†	12864.3	12753.0	[100]	ug/L	10:44:48
2	Be 313.107†	258711.3	260912.9	[100]	ug/L	10:44:43
2	Cd 226.502†	9036.0	9149.0	[100]	ug/L	10:44:48
2	Co 228.616†	4922.9	4949.5	[100]	ug/L	10:45:08
2	Cr 267.716†	9233.9	9060.1	[100]	ug/L	10:44:48
2	Cu 324.752†	38791.5	31664.6	[100]	ug/L	10:44:48
2	K 766.490 Radial†	8506.7	5856.8	[1000]	ug/L	10:43:51
2	Mn 257.610†	90655.4	89272.9	[100]	ug/L	10:44:48
2	Mo 202.031†	1526.9	1494.0	[100]	ug/L	10:45:08
2	Ni 231.604†	4185.8	4060.0	[100]	ug/L	10:45:08
2	P 214.914†	1063.0	810.8	[500]	ug/L	10:45:08
2	Pb 220.353†	786.4	846.9	[100]	ug/L	10:45:08
2	S 181.975 Axial†	193.4	142.2	[200]	ug/L	10:45:08
2	Sb 206.836†	328.4	287.9	[100]	ug/L	10:45:08
2	Se 196.026†	143.4	168.9	[100]	ug/L	10:45:08
2	Si 251.611†	16134.8	15499.6	[500]	ug/L	10:44:48
2	Sn 189.927†	595.0	580.5	[100]	ug/L	10:45:08
2	Sr 421.552†	15803.8	15970.6	[100]	ug/L	10:43:56
2	Ti 334.940†	57870.5	58576.2	[100]	ug/L	10:44:48
2	Tl 190.801†	304.5	336.2	[100]	ug/L	10:45:08

2	U 409.014†	865.7	3441.5	[100]	ug/L	10:44:43
2	V 292.402†	12746.3	13987.8	[100]	ug/L	10:44:48
2	Zn 213.857†	11880.2	11013.4	[100]	ug/L	10:44:48
2	SiO2†	16234.1	15555.2	[1069.5]	ug/L	10:45:49
3	Sc 361.383	871070.4	871070.4	100.36	%	10:45:13
3	Sc Radial	5463.9	5463.9	98.0	%	10:44:06
3	Y 371.029	728966.6	728966.6	99.933	%	10:45:13
3	Y RADIAL	5953.0	5953.0	98.57	%	10:44:06
3	Ag 328.068†	21625.9	21273.6	[100]	ug/L	10:45:18
3	As 188.979†	218.8	249.3	[100]	ug/L	10:45:38
3	B 249.677†	3831.9	4311.2	[100]	ug/L	10:45:18
3	Ba 233.527†	13046.8	13010.7	[100]	ug/L	10:45:18
3	Be 313.107†	258070.6	261798.7	[100]	ug/L	10:45:13
3	Cd 226.502†	9135.9	9301.8	[100]	ug/L	10:45:18
3	Co 228.616†	4918.9	4974.6	[100]	ug/L	10:45:38
3	Cr 267.716†	9344.1	9224.2	[100]	ug/L	10:45:18
3	Cu 324.752†	39512.1	32611.2	[100]	ug/L	10:45:18
3	K 766.490 Radial†	8464.4	5898.1	[1000]	ug/L	10:44:01
3	Mn 257.610†	91873.8	91020.9	[100]	ug/L	10:45:18
3	Mo 202.031†	1534.5	1510.6	[100]	ug/L	10:45:38
3	Ni 231.604†	4204.2	4103.0	[100]	ug/L	10:45:38
3	P 214.914†	1070.9	824.9	[500]	ug/L	10:45:38
3	Pb 220.353†	786.1	851.2	[100]	ug/L	10:45:38
3	S 181.975 Axial†	186.1	136.0	[200]	ug/L	10:45:38
3	Sb 206.836†	327.2	288.7	[100]	ug/L	10:45:38
3	Se 196.026†	154.0	180.3	[100]	ug/L	10:45:38
3	Si 251.611†	16375.9	15834.9	[500]	ug/L	10:45:18
3	Sn 189.927†	604.1	593.1	[100]	ug/L	10:45:38
3	Sr 421.552†	15771.1	16094.2	[100]	ug/L	10:44:06
3	Ti 334.940†	58689.0	59732.7	[100]	ug/L	10:45:18
3	Tl 190.801†	303.8	337.3	[100]	ug/L	10:45:38
3	U 409.014†	486.0	3068.3	[100]	ug/L	10:45:13
3	V 292.402†	12958.4	14274.2	[100]	ug/L	10:45:18
3	Zn 213.857†	11966.3	11169.1	[100]	ug/L	10:45:18
3	SiO2†	16008.2	15425.8	[1069.5]	ug/L	10:45:54

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	874388.1	2880.49	0.33%	100.75	%
Sc Radial	5490.7	26.84	0.49%	98.5	%
Y 371.029	731037.9	1797.06	0.25%	100.22	%
Y RADIAL	5976.1	33.76	0.56%	98.96	%
Ag 328.068†	21169.2	180.92	0.85%	[100]	ug/L
As 188.979†	247.0	2.22	0.90%	[100]	ug/L
B 249.677†	4310.9	47.50	1.10%	[100]	ug/L
Ba 233.527†	12913.3	139.90	1.08%	[100]	ug/L
Be 313.107†	261351.4	442.96	0.17%	[100]	ug/L
Cd 226.502†	9267.0	105.10	1.13%	[100]	ug/L
Co 228.616†	4962.6	12.57	0.25%	[100]	ug/L
Cr 267.716†	9168.8	94.20	1.03%	[100]	ug/L
Cu 324.752†	32277.2	531.23	1.65%	[100]	ug/L
K 766.490 Radial†	5851.1	50.10	0.86%	[1000]	ug/L
Mn 257.610†	90293.4	910.10	1.01%	[100]	ug/L
Mo 202.031†	1498.4	10.66	0.71%	[100]	ug/L
Ni 231.604†	4072.7	26.39	0.65%	[100]	ug/L
P 214.914†	820.1	8.01	0.98%	[500]	ug/L
Pb 220.353†	848.1	2.78	0.33%	[100]	ug/L
S 181.975 Axial†	137.4	4.26	3.10%	[200]	ug/L
Sb 206.836†	287.0	2.20	0.77%	[100]	ug/L
Se 196.026†	171.4	7.91	4.62%	[100]	ug/L
Si 251.611†	15697.0	175.35	1.12%	[500]	ug/L
Sn 189.927†	581.4	11.35	1.95%	[100]	ug/L
Sr 421.552†	16008.6	74.27	0.46%	[100]	ug/L
Ti 334.940†	59239.5	596.69	1.01%	[100]	ug/L
Tl 190.801†	337.2	1.06	0.31%	[100]	ug/L
U 409.014†	3246.7	187.14	5.76%	[100]	ug/L
V 292.402†	14175.5	162.60	1.15%	[100]	ug/L
Zn 213.857†	11121.9	94.26	0.85%	[100]	ug/L
SiO2†	15546.7	116.97	0.75%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2009 10:48:04
Data Type: Reprocessed on 12/11/2009 12:45:56
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	862154.4	862154.4	99.336	%	10:51:14
1	Sc Radial	5481.4	5481.4	98.3	%	10:49:57
1	Y 371.029	712144.1	712144.1	97.627	%	10:51:14
1	Y RADIAL	5921.2	5921.2	98.05	%	10:49:57
1	Ag 328.068†	113189.5	113671.8	[500]	ug/L	10:51:19
1	Al 396.153Radial†	7182.3	7341.3	[5000]	ug/L	10:49:57
1	As 188.979†	1282.0	1321.9	[500]	ug/L	10:51:39
1	B 249.677†	23230.2	23878.7	[500]	ug/L	10:51:19
1	Ba 233.527†	67975.9	68441.2	[500]	ug/L	10:51:19
1	Be 313.107†	1405181.5	1419234.3	[500]	ug/L	10:51:14
1	Ca 317.933Radial†	3492.8	3536.1	[5000]	ug/L	10:50:17
1	Cd 226.502†	49155.7	49683.2	[500]	ug/L	10:51:19
1	Co 228.616†	26963.6	27217.2	[500]	ug/L	10:51:19
1	Cr 267.716†	48603.2	48842.0	[500]	ug/L	10:51:19
1	Cu 324.752†	179701.3	174144.3	[500]	ug/L	10:51:19
1	K 766.490 Radial†	32539.6	30360.4	[5000]	ug/L	10:49:57
1	Mg 279.077 IEC†	159.8	160.7	[5000]	ug/L	10:50:17
1	Mn 257.610†	480086.9	482774.9	[500]	ug/L	10:51:14
1	Mo 202.031†	8055.5	8090.9	[500]	ug/L	10:51:39
1	Ni 231.604†	22326.2	22389.5	[500]	ug/L	10:51:19
1	P 214.914†	4773.9	4563.8	[2500]	ug/L	10:51:39
1	Pb 220.353†	4475.4	4573.3	[500]	ug/L	10:51:39
1	S 181.975 Axial†	839.9	796.1	[1000]	ug/L	10:51:39
1	Sb 206.836†	1659.7	1633.4	[500]	ug/L	10:51:39
1	Se 196.026†	882.8	915.5	[500]	ug/L	10:51:39
1	Si 251.611†	87899.1	88004.8	[2500]	ug/L	10:51:19
1	Sn 189.927†	3195.2	3207.7	[500]	ug/L	10:51:39
1	Sr 421.552†	85559.7	87033.4	[500]	ug/L	10:49:57
1	Ti 334.940†	315692.6	319058.5	[500]	ug/L	10:51:19
1	Tl 190.801†	1768.4	1814.8	[500]	ug/L	10:51:39
1	U 409.014†	14815.3	17498.3	[500]	ug/L	10:51:19
1	V 292.402†	74574.4	76435.5	[500]	ug/L	10:51:19
1	Zn 213.857†	60376.0	60025.6	[500]	ug/L	10:51:19
1	SiO2†	86990.1	87046.9	[5347.5]	ug/L	10:52:47
2	Sc 361.383	869710.7	869710.7	100.21	%	10:51:45
2	Sc Radial	5365.2	5365.2	96.2	%	10:50:22
2	Y 371.029	718941.2	718941.2	98.558	%	10:51:45
2	Y RADIAL	5826.9	5826.9	96.48	%	10:50:22
2	Ag 328.068†	113787.1	113278.3	[500]	ug/L	10:51:50
2	Al 396.153Radial†	7081.8	7395.0	[5000]	ug/L	10:50:22
2	As 188.979†	1283.1	1311.8	[500]	ug/L	10:52:10
2	B 249.677†	23348.0	23793.0	[500]	ug/L	10:51:50
2	Ba 233.527†	68259.7	68130.0	[500]	ug/L	10:51:50
2	Be 313.107†	1417482.9	1419220.2	[500]	ug/L	10:51:45
2	Ca 317.933Radial†	3479.3	3599.0	[5000]	ug/L	10:50:42
2	Cd 226.502†	49266.7	49363.9	[500]	ug/L	10:51:50
2	Co 228.616†	27019.5	27037.1	[500]	ug/L	10:51:50
2	Cr 267.716†	48764.9	48578.2	[500]	ug/L	10:51:50
2	Cu 324.752†	180993.9	173862.5	[500]	ug/L	10:51:50
2	K 766.490 Radial†	32284.5	30811.7	[5000]	ug/L	10:50:22
2	Mg 279.077 IEC†	158.5	162.8	[5000]	ug/L	10:50:42
2	Mn 257.610†	482638.4	481122.2	[500]	ug/L	10:51:45
2	Mo 202.031†	8034.1	7999.1	[500]	ug/L	10:52:10
2	Ni 231.604†	22414.2	22282.0	[500]	ug/L	10:51:50
2	P 214.914†	4776.3	4524.5	[2500]	ug/L	10:52:10
2	Pb 220.353†	4468.2	4526.9	[500]	ug/L	10:52:10
2	S 181.975 Axial†	825.9	774.7	[1000]	ug/L	10:52:10
2	Sb 206.836†	1651.7	1610.9	[500]	ug/L	10:52:10

2	Se 196.026†	877.5	902.4	[500]	ug/L	10:52:10
2	Si 251.611†	88332.2	87668.2	[2500]	ug/L	10:51:50
2	Sn 189.927†	3195.2	3179.8	[500]	ug/L	10:52:10
2	Sr 421.552†	83941.4	87235.3	[500]	ug/L	10:50:22
2	Ti 334.940†	317719.6	318320.1	[500]	ug/L	10:51:50
2	Tl 190.801†	1766.5	1797.5	[500]	ug/L	10:52:10
2	U 409.014†	15164.8	17717.5	[500]	ug/L	10:51:50
2	V 292.402†	75076.8	76284.6	[500]	ug/L	10:51:50
2	Zn 213.857†	60583.5	59704.6	[500]	ug/L	10:51:50
2	SiO2†	88381.8	87675.0	[5347.5]	ug/L	10:52:52
3	Sc 361.383	879497.5	879497.5	101.33	%	10:52:16
3	Sc Radial	5472.2	5472.2	98.1	%	10:50:47
3	Y 371.029	727729.6	727729.6	99.763	%	10:52:16
3	Y RADIAL	5921.7	5921.7	98.05	%	10:50:47
3	Ag 328.068†	113888.3	112114.5	[500]	ug/L	10:52:21
3	Al 396.153Radial†	7240.2	7412.5	[5000]	ug/L	10:50:47
3	As 188.979†	1290.5	1304.8	[500]	ug/L	10:52:41
3	B 249.677†	23462.3	23646.5	[500]	ug/L	10:52:21
3	Ba 233.527†	68134.9	67248.8	[500]	ug/L	10:52:21
3	Be 313.107†	1436756.2	1422498.9	[500]	ug/L	10:52:16
3	Ca 317.933Radial†	3445.1	3493.4	[5000]	ug/L	10:51:07
3	Cd 226.502†	49122.3	48674.3	[500]	ug/L	10:52:21
3	Co 228.616†	27027.0	26744.5	[500]	ug/L	10:52:21
3	Cr 267.716†	48752.2	48024.1	[500]	ug/L	10:52:21
3	Cu 324.752†	181069.6	171927.4	[500]	ug/L	10:52:21
3	K 766.490 Radial†	32771.2	30651.6	[5000]	ug/L	10:50:47
3	Mg 279.077 IEC†	155.8	156.8	[5000]	ug/L	10:51:07
3	Mn 257.610†	487896.6	480951.6	[500]	ug/L	10:52:16
3	Mo 202.031†	8036.7	7912.5	[500]	ug/L	10:52:41
3	Ni 231.604†	22306.3	21926.6	[500]	ug/L	10:52:21
3	P 214.914†	4778.5	4473.5	[2500]	ug/L	10:52:41
3	Pb 220.353†	4426.8	4436.5	[500]	ug/L	10:52:41
3	S 181.975 Axial†	816.1	756.0	[1000]	ug/L	10:52:41
3	Sb 206.836†	1659.4	1600.2	[500]	ug/L	10:52:41
3	Se 196.026†	884.8	900.0	[500]	ug/L	10:52:41
3	Si 251.611†	88184.8	86541.8	[2500]	ug/L	10:52:21
3	Sn 189.927†	3185.0	3134.3	[500]	ug/L	10:52:41
3	Sr 421.552†	85571.7	87190.7	[500]	ug/L	10:50:47
3	Ti 334.940†	317393.1	314469.8	[500]	ug/L	10:52:21
3	Tl 190.801†	1768.6	1779.8	[500]	ug/L	10:52:41
3	U 409.014†	15098.8	17484.0	[500]	ug/L	10:52:21
3	V 292.402†	74801.1	75178.8	[500]	ug/L	10:52:21
3	Zn 213.857†	60531.6	58980.6	[500]	ug/L	10:52:21
3	SiO2†	87774.3	86094.0	[5347.5]	ug/L	10:52:57

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	870454.2	8695.40	1.00%	100.29	%
Sc Radial	5439.6	64.57	1.19%	97.6	%
Y 371.029	719605.0	7813.91	1.09%	98.649	%
Y RADIAL	5889.9	54.59	0.93%	97.53	%
Ag 328.068†	113021.5	809.76	0.72%	[500]	ug/L
Al 396.153Radial†	7382.9	37.08	0.50%	[5000]	ug/L
As 188.979†	1312.8	8.58	0.65%	[500]	ug/L
B 249.677†	23772.7	117.39	0.49%	[500]	ug/L
Ba 233.527†	67940.0	618.48	0.91%	[500]	ug/L
Be 313.107†	1420317.8	1888.90	0.13%	[500]	ug/L
Ca 317.933Radial†	3542.8	53.11	1.50%	[5000]	ug/L
Cd 226.502†	49240.5	515.63	1.05%	[500]	ug/L
Co 228.616†	26999.6	238.58	0.88%	[500]	ug/L
Cr 267.716†	48481.4	417.42	0.86%	[500]	ug/L
Cu 324.752†	173311.4	1206.87	0.70%	[500]	ug/L
K 766.490 Radial†	30607.9	228.83	0.75%	[5000]	ug/L
Mg 279.077 IEC†	160.1	3.01	1.88%	[5000]	ug/L
Mn 257.610†	481616.2	1007.05	0.21%	[500]	ug/L
Mo 202.031†	8000.8	89.21	1.12%	[500]	ug/L
Ni 231.604†	22199.3	242.25	1.09%	[500]	ug/L
P 214.914†	4520.6	45.26	1.00%	[2500]	ug/L
Pb 220.353†	4512.2	69.56	1.54%	[500]	ug/L

S 181.975 Axial†	775.6	20.09	2.59%	[1000]	ug/L
Sb 206.836†	1614.8	16.98	1.05%	[500]	ug/L
Se 196.026†	906.0	8.34	0.92%	[500]	ug/L
Si 251.611†	87404.9	766.17	0.88%	[2500]	ug/L
Sn 189.927†	3173.9	37.08	1.17%	[500]	ug/L
Sr 421.552†	87153.1	106.08	0.12%	[500]	ug/L
Ti 334.940†	317282.8	2463.95	0.78%	[500]	ug/L
Tl 190.801†	1797.4	17.50	0.97%	[500]	ug/L
U 409.014†	17566.6	130.90	0.75%	[500]	ug/L
V 292.402†	75966.3	686.14	0.90%	[500]	ug/L
Zn 213.857†	59570.3	535.28	0.90%	[500]	ug/L
SiO2†	86938.6	796.02	0.92%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/11/2009 10:55:08
Data Type: Reprocessed on 12/11/2009 12:45:57
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	853185.0	853185.0	98.303	%	10:58:24
1	Sc Radial	5453.9	5453.9	97.8	%	10:57:01
1	Y 371.029	706727.3	706727.3	96.884	%	10:58:24
1	Y RADIAL	5894.8	5894.8	97.61	%	10:57:01
1	Ag 328.068†	216668.2	220135.1	[1000]	ug/L	10:58:24
1	Al 396.153Radial†	13864.0	14209.2	[10000]	ug/L	10:57:01
1	As 188.979†	2487.8	2562.1	[1000]	ug/L	10:58:44
1	B 249.677†	45672.0	46953.8	[1000]	ug/L	10:58:24
1	Ba 233.527†	131213.3	133489.8	[1000]	ug/L	10:58:24
1	Be 313.107†	2694496.8	2745681.6	[1000]	ug/L	10:58:19
1	Ca 317.933Radial†	6738.5	6872.2	[10000]	ug/L	10:57:01
1	Cd 226.502†	94285.2	96112.0	[1000]	ug/L	10:58:24
1	Co 228.616†	51927.8	52897.8	[1000]	ug/L	10:58:24
1	Cr 267.716†	93794.4	95327.8	[1000]	ug/L	10:58:24
1	Cu 324.752†	345381.4	344586.8	[1000]	ug/L	10:58:24
1	Fe 238.204 Radial†	1097.6	1112.3	[10000]	ug/L	10:57:21
1	K 766.490 Radial†	60558.7	59172.9	[10000]	ug/L	10:57:01
1	Mg 279.077 IEC†	298.3	303.0	[10000]	ug/L	10:57:21
1	Mn 257.610†	915562.2	930849.8	[1000]	ug/L	10:58:19
1	Mo 202.031†	15288.8	15534.4	[1000]	ug/L	10:58:44
1	Na 589.592 Radial†	29494.4	31707.9	[10000]	ug/L	10:57:01
1	Ni 231.604†	42800.5	43453.5	[1000]	ug/L	10:58:24
1	P 214.914†	8932.9	8845.1	[5000]	ug/L	10:58:44
1	Pb 220.353†	8650.8	8868.2	[1000]	ug/L	10:58:44
1	S 181.975 Axial†	1510.1	1486.8	[2000]	ug/L	10:58:44
1	Sb 206.836†	3111.7	3128.0	[1000]	ug/L	10:58:44
1	Se 196.026†	1704.5	1760.7	[1000]	ug/L	10:58:44
1	Si 251.611†	164115.4	166467.2	[5000]	ug/L	10:58:24
1	Sn 189.927†	6048.0	6143.6	[1000]	ug/L	10:58:44
1	Sr 421.552†	160418.7	164004.8	[1000]	ug/L	10:57:01
1	Ti 334.940†	616360.4	628258.5	[1000]	ug/L	10:58:19
1	Tl 190.801†	3412.4	3505.9	[1000]	ug/L	10:58:44
1	U 409.014†	31688.2	34819.3	[1000]	ug/L	10:58:24
1	V 292.402†	146096.9	149982.1	[1000]	ug/L	10:58:24
1	Zn 213.857†	114549.0	115772.9	[1000]	ug/L	10:58:24
1	SiO2†	162872.7	165160.3	[10695]	ug/L	10:59:54
2	Sc 361.383	845212.1	845212.1	97.384	%	10:58:56
2	Sc Radial	5375.1	5375.1	96.4	%	10:57:26
2	Y 371.029	702106.8	702106.8	96.251	%	10:58:56
2	Y RADIAL	5817.0	5817.0	96.32	%	10:57:26
2	Ag 328.068†	214228.6	219709.1	[1000]	ug/L	10:58:56
2	Al 396.153Radial†	13767.3	14316.5	[10000]	ug/L	10:57:26
2	As 188.979†	2504.5	2603.1	[1000]	ug/L	10:59:16
2	B 249.677†	44921.9	46621.8	[1000]	ug/L	10:58:56
2	Ba 233.527†	129473.4	132962.3	[1000]	ug/L	10:58:56
2	Be 313.107†	2728112.9	2806057.1	[1000]	ug/L	10:58:51
2	Ca 317.933Radial†	6632.8	6863.5	[10000]	ug/L	10:57:26
2	Cd 226.502†	92841.3	95534.1	[1000]	ug/L	10:58:56
2	Co 228.616†	51178.4	52626.6	[1000]	ug/L	10:58:56
2	Cr 267.716†	92627.1	95029.1	[1000]	ug/L	10:58:56
2	Cu 324.752†	341207.0	343614.6	[1000]	ug/L	10:58:56
2	Fe 238.204 Radial†	1089.7	1120.5	[10000]	ug/L	10:57:46
2	K 766.490 Radial†	59733.1	59223.1	[10000]	ug/L	10:57:26
2	Mg 279.077 IEC†	297.7	306.9	[10000]	ug/L	10:57:46
2	Mn 257.610†	925258.4	949592.2	[1000]	ug/L	10:58:51
2	Mo 202.031†	15392.0	15787.0	[1000]	ug/L	10:59:16
2	Na 589.592 Radial†	28816.5	31446.2	[10000]	ug/L	10:57:26
2	Ni 231.604†	42127.9	43173.6	[1000]	ug/L	10:58:56

2	P 214.914†	9025.3	9025.7	[5000]	ug/L	10:59:16
2	Pb 220.353†	8677.8	8978.9	[1000]	ug/L	10:59:16
2	S 181.975 Axial†	1524.6	1516.2	[2000]	ug/L	10:59:16
2	Sb 206.836†	3130.8	3177.5	[1000]	ug/L	10:59:16
2	Se 196.026†	1708.5	1781.2	[1000]	ug/L	10:59:16
2	Si 251.611†	161974.9	165844.1	[5000]	ug/L	10:58:56
2	Sn 189.927†	6084.3	6238.9	[1000]	ug/L	10:59:16
2	Sr 421.552†	157729.9	163617.5	[1000]	ug/L	10:57:26
2	Ti 334.940†	622983.8	640974.4	[1000]	ug/L	10:58:51
2	Tl 190.801†	3442.1	3569.1	[1000]	ug/L	10:59:16
2	U 409.014†	31177.9	34599.3	[1000]	ug/L	10:58:56
2	V 292.402†	144580.6	149827.0	[1000]	ug/L	10:58:56
2	Zn 213.857†	112917.6	115196.9	[1000]	ug/L	10:58:56
2	SiO2†	162491.3	166331.6	[10695]	ug/L	10:59:59
3	Sc 361.383	853864.7	853864.7	98.381	%	10:59:28
3	Sc Radial	5464.8	5464.8	98.0	%	10:57:51
3	Y 371.029	708211.8	708211.8	97.088	%	10:59:28
3	Y RADIAL	5914.4	5914.4	97.93	%	10:57:51
3	Ag 328.068†	216589.6	219879.7	[1000]	ug/L	10:59:28
3	Al 396.153Radial†	13938.9	14257.2	[10000]	ug/L	10:57:51
3	As 188.979†	2508.7	2581.3	[1000]	ug/L	10:59:48
3	B 249.677†	45602.5	46846.2	[1000]	ug/L	10:59:28
3	Ba 233.527†	131477.4	133652.1	[1000]	ug/L	10:59:28
3	Be 313.107†	2717028.2	2766401.9	[1000]	ug/L	10:59:23
3	Ca 317.933Radial†	6728.8	6848.6	[10000]	ug/L	10:57:51
3	Cd 226.502†	94433.2	96186.1	[1000]	ug/L	10:59:28
3	Co 228.616†	52001.9	52931.1	[1000]	ug/L	10:59:28
3	Cr 267.716†	93825.2	95283.1	[1000]	ug/L	10:59:28
3	Cu 324.752†	344619.5	343532.6	[1000]	ug/L	10:59:28
3	Fe 238.204 Radial†	1090.9	1103.2	[10000]	ug/L	10:58:11
3	K 766.490 Radial†	60752.2	59246.2	[10000]	ug/L	10:57:51
3	Mg 279.077 IEC†	298.0	302.1	[10000]	ug/L	10:58:11
3	Mn 257.610†	921996.7	936648.8	[1000]	ug/L	10:59:23
3	Mo 202.031†	15392.5	15627.4	[1000]	ug/L	10:59:48
3	Na 589.592 Radial†	29549.3	31703.5	[10000]	ug/L	10:57:51
3	Ni 231.604†	42734.9	43352.2	[1000]	ug/L	10:59:28
3	P 214.914†	9045.5	8952.4	[5000]	ug/L	10:59:48
3	Pb 220.353†	8686.4	8897.3	[1000]	ug/L	10:59:48
3	S 181.975 Axial†	1538.7	1514.6	[2000]	ug/L	10:59:48
3	Sb 206.836†	3146.0	3160.4	[1000]	ug/L	10:59:48
3	Se 196.026†	1711.8	1766.8	[1000]	ug/L	10:59:48
3	Si 251.611†	164219.2	166439.8	[5000]	ug/L	10:59:28
3	Sn 189.927†	6088.8	6180.2	[1000]	ug/L	10:59:48
3	Sr 421.552†	160324.3	163579.9	[1000]	ug/L	10:57:51
3	Ti 334.940†	620417.6	631883.3	[1000]	ug/L	10:59:23
3	Tl 190.801†	3452.1	3543.5	[1000]	ug/L	10:59:48
3	U 409.014†	31628.3	34732.7	[1000]	ug/L	10:59:28
3	V 292.402†	146327.9	150098.6	[1000]	ug/L	10:59:28
3	Zn 213.857†	114636.0	115768.6	[1000]	ug/L	10:59:28
3	SiO2†	164626.4	166811.0	[10695]	ug/L	11:00:04

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	850753.9	4811.42	0.57%	98.023	%
Sc Radial	5431.3	48.92	0.90%	97.4	%
Y 371.029	705682.0	3183.94	0.45%	96.741	%
Y RADIAL	5875.4	51.52	0.88%	97.29	%
Ag 328.068†	219908.0	214.38	0.10%	[1000]	ug/L
Al 396.153Radial†	14260.9	53.73	0.38%	[10000]	ug/L
As 188.979†	2582.1	20.52	0.79%	[1000]	ug/L
B 249.677†	46807.3	169.38	0.36%	[1000]	ug/L
Ba 233.527†	133368.1	360.63	0.27%	[1000]	ug/L
Be 313.107†	2772713.6	30678.59	1.11%	[1000]	ug/L
Ca 317.933Radial†	6861.4	11.95	0.17%	[10000]	ug/L
Cd 226.502†	95944.1	356.96	0.37%	[1000]	ug/L
Co 228.616†	52818.5	167.02	0.32%	[1000]	ug/L
Cr 267.716†	95213.3	161.08	0.17%	[1000]	ug/L
Cu 324.752†	343911.3	586.41	0.17%	[1000]	ug/L
Fe 238.204 Radial†	1112.0	8.69	0.78%	[10000]	ug/L

K 766.490 Radial†	59214.1	37.52	0.06%	[10000]	ug/L
Mg 279.077 IEC†	304.0	2.54	0.83%	[10000]	ug/L
Mn 257.610†	939030.3	9595.46	1.02%	[1000]	ug/L
Mo 202.031†	15649.6	127.78	0.82%	[1000]	ug/L
Na 589.592 Radial†	31619.2	149.79	0.47%	[10000]	ug/L
Ni 231.604†	43326.4	141.72	0.33%	[1000]	ug/L
P 214.914†	8941.0	90.83	1.02%	[5000]	ug/L
Pb 220.353†	8914.8	57.38	0.64%	[1000]	ug/L
S 181.975 Axial†	1505.8	16.54	1.10%	[2000]	ug/L
Sb 206.836†	3155.3	25.11	0.80%	[1000]	ug/L
Se 196.026†	1769.6	10.54	0.60%	[1000]	ug/L
Si 251.611†	166250.4	352.13	0.21%	[5000]	ug/L
Sn 189.927†	6187.5	48.07	0.78%	[1000]	ug/L
Sr 421.552†	163734.0	235.21	0.14%	[1000]	ug/L
Ti 334.940†	633705.4	6550.82	1.03%	[1000]	ug/L
Tl 190.801†	3539.5	31.82	0.90%	[1000]	ug/L
U 409.014†	34717.1	110.82	0.32%	[1000]	ug/L
V 292.402†	149969.2	136.25	0.09%	[1000]	ug/L
Zn 213.857†	115579.5	331.33	0.29%	[1000]	ug/L
SiO2†	166101.0	849.19	0.51%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/11/2009 11:02:15
Data Type: Reprocessed on 12/11/2009 12:45:58
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	860963.7	860963.7	99.199	%	11:05:26
1	Sc Radial	5387.2	5387.2	96.6	%	11:04:29
1	Y 371.029	709124.8	709124.8	97.213	%	11:05:26
1	Y RADIAL	5822.0	5822.0	96.40	%	11:04:29
1	Al 396.153Radial†	68975.6	71425.6	[50000]	ug/L	11:04:09
1	Ca 317.933Radial†	32653.3	33779.6	[50000]	ug/L	11:04:09
1	Fe 238.204 Radial†	2164.6	2230.5	[20000]	ug/L	11:04:29
1	Mg 279.077 IEC†	1433.3	1481.6	[50000]	ug/L	11:04:29
1	Na 589.592 Radial†	61862.2	65582.1	[20000]	ug/L	11:04:09
2	Sc 361.383	854136.3	854136.3	98.412	%	11:05:32
2	Sc Radial	5350.4	5350.4	96.0	%	11:04:54
2	Y 371.029	702699.8	702699.8	96.332	%	11:05:32
2	Y RADIAL	5769.4	5769.4	95.53	%	11:04:54
2	Al 396.153Radial†	70067.2	73053.7	[50000]	ug/L	11:04:34
2	Ca 317.933Radial†	32982.7	34355.0	[50000]	ug/L	11:04:34
2	Fe 238.204 Radial†	2153.5	2234.3	[20000]	ug/L	11:04:54
2	Mg 279.077 IEC†	1432.1	1490.5	[50000]	ug/L	11:04:54
2	Na 589.592 Radial†	62754.2	66951.5	[20000]	ug/L	11:04:34
3	Sc 361.383	843792.7	843792.7	97.221	%	11:05:38
3	Sc Radial	5364.3	5364.3	96.2	%	11:05:19
3	Y 371.029	695516.3	695516.3	95.347	%	11:05:38
3	Y RADIAL	5786.0	5786.0	95.81	%	11:05:19
3	Al 396.153Radial†	70617.8	73437.3	[50000]	ug/L	11:04:59
3	Ca 317.933Radial†	33303.8	34599.9	[50000]	ug/L	11:04:59
3	Fe 238.204 Radial†	2163.3	2238.8	[20000]	ug/L	11:05:19
3	Mg 279.077 IEC†	1426.7	1481.1	[50000]	ug/L	11:05:19
3	Na 589.592 Radial†	63458.0	67514.1	[20000]	ug/L	11:04:59

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	852964.2	8645.27	1.01%	98.277	%
Sc Radial	5367.3	18.56	0.35%	96.3	%
Y 371.029	702447.0	6807.78	0.97%	96.297	%
Y RADIAL	5792.4	26.90	0.46%	95.91	%
Al 396.153Radial†	72638.9	1068.08	1.47%	[50000]	ug/L
Ca 317.933Radial†	34244.8	421.13	1.23%	[50000]	ug/L
Fe 238.204 Radial†	2234.5	4.14	0.19%	[20000]	ug/L
Mg 279.077 IEC†	1484.4	5.33	0.36%	[50000]	ug/L
Na 589.592 Radial†	66682.5	993.69	1.49%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	221.1	0.00000	0.999932	
Al 396.153Radial	3	Lin Thru 0	0.0	1.452	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	2.590	0.00000	0.999969	
B 249.677	3	Lin Thru 0	0.0	46.92	0.00000	0.999954	
Ba 233.527	3	Lin Thru 0	0.0	133.8	0.00000	0.999967	
Be 313.107	3	Lin Thru 0	0.0	2785	0.00000	0.999938	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6852	0.00000	0.999994	
Cd 226.502	3	Lin Thru 0	0.0	96.42	0.00000	0.999939	
Co 228.616	3	Lin Thru 0	0.0	53.03	0.00000	0.999944	
Cr 267.716	3	Lin Thru 0	0.0	95.53	0.00000	0.999967	
Cu 324.752	3	Lin Thru 0	0.0	344.3	0.00000	0.999979	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1116	0.00000	0.999998	

K 766.490 Radial	3	Lin Thru 0	0.0	5.961	0.00000	0.999909
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0297	0.00000	0.999961
Mn 257.610	3	Lin Thru 0	0.0	943.5	0.00000	0.999940
Mo 202.031	3	Lin Thru 0	0.0	15.71	0.00000	0.999952
Na 589.592 Radia	2	Lin Thru 0	0.0	3.300	0.00000	0.999782
Ni 231.604	3	Lin Thru 0	0.0	43.52	0.00000	0.999935
P 214.914	3	Lin Thru 0	0.0	1.791	0.00000	0.999962
Pb 220.353	3	Lin Thru 0	0.0	8.933	0.00000	0.999978
S 181.975 Axial	3	Lin Thru 0	0.0	0.7569	0.00000	0.999894
Sb 206.836	3	Lin Thru 0	0.0	3.168	0.00000	0.999921
Se 196.026	3	Lin Thru 0	0.0	1.778	0.00000	0.999950
Si 251.611	3	Lin Thru 0	0.0	33.58	0.00000	0.999777
Sn 189.927	3	Lin Thru 0	0.0	6.216	0.00000	0.999930
Sr 421.552	3	Lin Thru 0	0.0	165.8	0.00000	0.999673
Ti 334.940	3	Lin Thru 0	0.0	633.5	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	3.549	0.00000	0.999971
U 409.014	3	Lin Thru 0	0.0	34.78	0.00000	0.999971
V 292.402	3	Lin Thru 0	0.0	150.3	0.00000	0.999974
Zn 213.857	3	Lin Thru 0	0.0	116.3	0.00000	0.999918
SiO2	3	Lin Thru 0	0.0	15.67	0.00000	0.999808

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 12/11/2009 11:07:49
Data Type: Reprocessed on 12/11/2009 12:45:58

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874645.6	874645.6	100.78	%			11:10:59
1	Sc Radial	5587.3	5587.3	100	%			11:09:42
1	Y 371.029	728574.2	728574.2	99.879	%			11:10:59
1	Y RADIAL	6058.4	6058.4	100.3	%			11:09:42
1	Ag 328.068†	58053.1	57332.4	262.49	ug/L	262.49	ppb	11:10:59
1	Al 396.153Radial†	7264.0	7284.3	4993.5	ug/L	4993.5	ppb	11:09:42
1	As 188.979†	1218.1	1240.0	483.13	ug/L	483.13	ppb	11:11:20
1	B 249.677†	23759.8	24070.2	511.00	ug/L	511.00	ppb	11:10:59
1	Ba 233.527†	68791.2	68273.0	511.47	ug/L	511.47	ppb	11:10:59
1	Be 313.107†	723572.8	722668.1	260.48	ug/L	260.48	ppb	11:10:59
1	Ca 317.933Radial†	3406.8	3382.8	4937.2	ug/L	4937.2	ppb	11:10:02
1	Cd 226.502†	48503.8	48329.6	501.04	ug/L	501.04	ppb	11:10:59
1	Co 228.616†	26736.9	26604.6	502.05	ug/L	502.05	ppb	11:11:20
1	Cr 267.716†	47283.2	46833.4	491.07	ug/L	491.07	ppb	11:10:59
1	Cu 324.752†	182267.7	174107.5	505.97	ug/L	505.97	ppb	11:10:59
1	Fe 238.204 Radial†	582.9	571.8	5139.0	ug/L	5139.0	ppb	11:10:02
1	K 766.490 Radial†	17719.4	14943.3	2501.7	ug/L	2501.7	ppb	11:09:42
1	Mg 279.077 IEC†	162.2	160.0	5385.9	ug/L	5385.9	ppb	11:10:02
1	Mn 257.610†	487398.0	483127.7	512.44	ug/L	512.44	ppb	11:10:59
1	Mo 202.031†	8653.5	8568.5	545.63	ug/L	545.63	ppb	11:11:20
1	Na 589.592 Radial†	6915.1	8455.0	2562.4	ug/L	2562.4	ppb	11:09:42
1	Ni 231.604†	22000.8	21745.5	499.36	ug/L	499.36	ppb	11:11:20
1	P 214.914†	4771.1	4492.3	2432.3	ug/L	2432.3	ppb	11:11:20
1	Pb 220.353†	4457.3	4491.0	504.37	ug/L	504.37	ppb	11:11:20
1	S 181.975 Axial†	1968.6	1904.0	2514.6	ug/L	2514.6	ppb	11:11:20
1	Sb 206.836†	1636.5	1586.5	510.11	ug/L	510.11	ppb	11:11:20
1	Se 196.026†	4530.0	4521.9	2562.2	ug/L	2562.2	ppb	11:11:20
1	Si 251.611†	163300.9	161562.7	4800.0	ug/L	4800.0	ppb	11:10:59
1	Sn 189.927†	3417.0	3381.9	544.62	ug/L	544.62	ppb	11:11:20
1	Sr 421.552†	89500.9	89316.4	538.64	ug/L	538.64	ppb	11:09:42
1	Ti 334.940†	319392.4	318191.1	502.11	ug/L	502.11	ppb	11:10:59
1	Tl 190.801†	1859.2	1879.5	532.82	ug/L	532.82	ppb	11:11:20
1	U 409.014†	14369.1	16842.5	482.64	ug/L	482.64	ppb	11:10:59
1	V 292.402†	75659.8	76440.4	515.94	ug/L	515.94	ppb	11:10:59
1	Zn 213.857†	60676.5	59455.8	506.97	ug/L	506.97	ppb	11:10:59
1	SiO2†	162240.8	160468.0	10216	ug/L	10216	ppb	11:12:17
2	Sc 361.383	878001.3	878001.3	101.16	%			11:11:26
2	Sc Radial	5467.5	5467.5	98.1	%			11:10:07
2	Y 371.029	730239.8	730239.8	100.11	%			11:11:26
2	Y RADIAL	5921.3	5921.3	98.05	%			11:10:07
2	Ag 328.068†	58405.7	57460.7	263.11	ug/L	263.11	ppb	11:11:26
2	Al 396.153Radial†	7160.7	7337.8	5030.5	ug/L	5030.5	ppb	11:10:07
2	As 188.979†	1203.4	1220.8	475.74	ug/L	475.74	ppb	11:11:46
2	B 249.677†	24050.9	24267.9	515.21	ug/L	515.21	ppb	11:11:26
2	Ba 233.527†	69257.7	68473.2	512.97	ug/L	512.97	ppb	11:11:26
2	Be 313.107†	727003.0	723314.6	260.71	ug/L	260.71	ppb	11:11:26
2	Ca 317.933Radial†	3402.8	3453.3	5040.0	ug/L	5040.0	ppb	11:10:27
2	Cd 226.502†	48761.4	48400.2	501.76	ug/L	501.76	ppb	11:11:26
2	Co 228.616†	26605.2	26373.1	497.67	ug/L	497.67	ppb	11:11:46
2	Cr 267.716†	47507.9	46876.1	491.52	ug/L	491.52	ppb	11:11:26
2	Cu 324.752†	183955.9	175085.0	508.82	ug/L	508.82	ppb	11:11:26
2	Fe 238.204 Radial†	581.1	582.8	5236.6	ug/L	5236.6	ppb	11:10:27
2	K 766.490 Radial†	17421.0	15026.4	2515.6	ug/L	2515.6	ppb	11:10:07
2	Mg 279.077 IEC†	160.2	161.5	5437.4	ug/L	5437.4	ppb	11:10:27
2	Mn 257.610†	490051.8	483902.5	513.27	ug/L	513.27	ppb	11:11:26
2	Mo 202.031†	8613.8	8496.5	541.06	ug/L	541.06	ppb	11:11:46
2	Na 589.592 Radial†	6700.5	8387.3	2541.8	ug/L	2541.8	ppb	11:10:07
2	Ni 231.604†	21861.8	21524.8	494.29	ug/L	494.29	ppb	11:11:46

2	P 214.914†	4761.7	4464.9	2416.4 ug/L	2416.4 ppb	11:11:46
2	Pb 220.353†	4437.6	4454.6	500.29 ug/L	500.29 ppb	11:11:46
2	S 181.975 Axial†	1950.1	1878.3	2480.6 ug/L	2480.6 ppb	11:11:46
2	Sb 206.836†	1631.7	1575.5	506.43 ug/L	506.43 ppb	11:11:46
2	Se 196.026†	4526.8	4501.6	2551.0 ug/L	2551.0 ppb	11:11:46
2	Si 251.611†	164658.6	162285.4	4821.6 ug/L	4821.6 ppb	11:11:26
2	Sn 189.927†	3387.7	3339.9	537.87 ug/L	537.87 ppb	11:11:46
2	Sr 421.552†	87524.2	89257.6	538.29 ug/L	538.29 ppb	11:10:07
2	Ti 334.940†	321061.9	318630.1	502.80 ug/L	502.80 ppb	11:11:26
2	Tl 190.801†	1840.7	1854.1	525.70 ug/L	525.70 ppb	11:11:46
2	U 409.014†	14592.1	17008.4	487.40 ug/L	487.40 ppb	11:11:26
2	V 292.402†	76145.1	76633.1	517.15 ug/L	517.15 ppb	11:11:26
2	Zn 213.857†	61065.8	59610.5	508.32 ug/L	508.32 ppb	11:11:26
2	SiO2†	162458.2	160067.6	10191 ug/L	10191 ppb	11:12:22
3	Sc 361.383	870914.4	870914.4	100.35 %		11:11:52
3	Sc Radial	5417.4	5417.4	97.2 %		11:10:32
3	Y 371.029	722870.7	722870.7	99.097 %		11:11:52
3	Y RADIAL	5860.9	5860.9	97.05 %		11:10:32
3	Ag 328.068†	57902.4	57429.0	262.99 ug/L	262.99 ppb	11:11:52
3	Al 396.153Radial†	7053.3	7294.8	5000.5 ug/L	5000.5 ppb	11:10:32
3	As 188.979†	1214.7	1241.8	483.83 ug/L	483.83 ppb	11:12:12
3	B 249.677†	23877.0	24288.0	515.61 ug/L	515.61 ppb	11:11:52
3	Ba 233.527†	68734.2	68508.7	513.24 ug/L	513.24 ppb	11:11:52
3	Be 313.107†	720723.4	722904.6	260.57 ug/L	260.57 ppb	11:11:52
3	Ca 317.933Radial†	3424.3	3507.5	5119.1 ug/L	5119.1 ppb	11:10:52
3	Cd 226.502†	48419.6	48451.8	502.29 ug/L	502.29 ppb	11:11:52
3	Co 228.616†	26795.1	26776.3	505.30 ug/L	505.30 ppb	11:12:12
3	Cr 267.716†	47171.2	46922.8	492.00 ug/L	492.00 ppb	11:11:52
3	Cu 324.752†	182186.1	174800.9	508.00 ug/L	508.00 ppb	11:11:52
3	Fe 238.204 Radial†	587.6	594.9	5345.6 ug/L	5345.6 ppb	11:10:52
3	K 766.490 Radial†	17277.6	15043.0	2518.4 ug/L	2518.4 ppb	11:10:32
3	Mg 279.077 IEC†	161.6	164.4	5535.9 ug/L	5535.9 ppb	11:10:52
3	Mn 257.610†	487073.8	484876.7	514.32 ug/L	514.32 ppb	11:11:52
3	Mo 202.031†	8691.2	8642.8	550.38 ug/L	550.38 ppb	11:12:12
3	Na 589.592 Radial†	6591.4	8338.2	2527.0 ug/L	2527.0 ppb	11:10:32
3	Ni 231.604†	22035.2	21873.4	502.30 ug/L	502.30 ppb	11:12:12
3	P 214.914†	4774.7	4516.2	2445.2 ug/L	2445.2 ppb	11:12:12
3	Pb 220.353†	4472.6	4525.2	508.20 ug/L	508.20 ppb	11:12:12
3	S 181.975 Axial†	1963.5	1907.3	2519.0 ug/L	2519.0 ppb	11:12:12
3	Sb 206.836†	1653.4	1610.3	517.77 ug/L	517.77 ppb	11:12:12
3	Se 196.026†	4555.5	4566.6	2587.9 ug/L	2587.9 ppb	11:12:12
3	Si 251.611†	163499.9	162455.2	4826.4 ug/L	4826.4 ppb	11:11:52
3	Sn 189.927†	3416.9	3396.3	546.95 ug/L	546.95 ppb	11:12:12
3	Sr 421.552†	86670.2	89203.7	537.96 ug/L	537.96 ppb	11:10:32
3	Ti 334.940†	318502.9	318662.5	502.86 ug/L	502.86 ppb	11:11:52
3	Tl 190.801†	1856.3	1884.5	534.22 ug/L	534.22 ppb	11:12:12
3	U 409.014†	14588.1	17121.9	490.65 ug/L	490.65 ppb	11:11:52
3	V 292.402†	75362.7	76466.0	516.16 ug/L	516.16 ppb	11:11:52
3	Zn 213.857†	60732.2	59769.3	509.62 ug/L	509.62 ppb	11:11:52
3	SiO2†	163681.3	162593.3	10352 ug/L	10352 ppb	11:12:28

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874520.4	100.76	%	0.408				0.41%
Sc Radial	5490.7	98.5	%	1.57				1.59%
Y 371.029	727228.3	99.695	%	0.5298				0.53%
Y RADIAL	5946.9	98.47	%	1.676				1.70%
Ag 328.068†	57407.4	262.86	ug/L	0.324	262.86	ppb	0.324	0.12%
QC value within limits for Ag 328.068 Recovery = 105.15%								
Al 396.153Radial†	7305.6	5008.1	ug/L	19.66	5008.1	ppb	19.66	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.16%								
As 188.979†	1234.2	480.90	ug/L	4.484	480.90	ppb	4.484	0.93%
QC value within limits for As 188.979 Recovery = 96.18%								
B 249.677†	24208.7	513.94	ug/L	2.553	513.94	ppb	2.553	0.50%
QC value within limits for B 249.677 Recovery = 102.79%								
Ba 233.527†	68418.3	512.56	ug/L	0.954	512.56	ppb	0.954	0.19%
QC value within limits for Ba 233.527 Recovery = 102.51%								
Be 313.107†	722962.4	260.59	ug/L	0.118	260.59	ppb	0.118	0.05%
QC value within limits for Be 313.107 Recovery = 104.23%								

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Ca 317.933Radial†        3447.9      5032.1 ug/L         91.20      5032.1 ppb          91.20   1.81%
   QC value within limits for Ca 317.933Radial  Recovery = 100.64%
Cd 226.502†             48393.9      501.70 ug/L         0.627      501.70 ppb          0.627   0.13%
   QC value within limits for Cd 226.502  Recovery = 100.34%
Co 228.616†             26584.7      501.67 ug/L         3.827      501.67 ppb          3.827   0.76%
   QC value within limits for Co 228.616  Recovery = 100.33%
Cr 267.716†             46877.4      491.53 ug/L         0.469      491.53 ppb          0.469   0.10%
   QC value within limits for Cr 267.716  Recovery = 98.31%
Cu 324.752†            174664.5      507.60 ug/L         1.464      507.60 ppb          1.464   0.29%
   QC value within limits for Cu 324.752  Recovery = 101.52%
Fe 238.204 Radial†       583.2      5240.4 ug/L        103.38      5240.4 ppb         103.38   1.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.81%
K 766.490 Radial†       15004.3      2511.9 ug/L          8.96      2511.9 ppb           8.96   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 100.48%
Mg 279.077 IEC†          162.0      5453.1 ug/L         76.21      5453.1 ppb          76.21   1.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.06%
Mn 257.610†            483968.9      513.35 ug/L         0.938      513.35 ppb          0.938   0.18%
   QC value within limits for Mn 257.610  Recovery = 102.67%
Mo 202.031†             8569.3      545.69 ug/L         4.661      545.69 ppb          4.661   0.85%
   QC value within limits for Mo 202.031  Recovery = 109.14%
Na 589.592 Radial†      8393.5      2543.7 ug/L         17.76      2543.7 ppb          17.76   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 101.75%
Ni 231.604†             21714.6      498.65 ug/L         4.050      498.65 ppb          4.050   0.81%
   QC value within limits for Ni 231.604  Recovery = 99.73%
P 214.914†              4491.2      2431.3 ug/L         14.43      2431.3 ppb          14.43   0.59%
   QC value within limits for P 214.914  Recovery = 97.25%
Pb 220.353†             4490.3      504.29 ug/L         3.953      504.29 ppb          3.953   0.78%
   QC value within limits for Pb 220.353  Recovery = 100.86%
S 181.975 Axial†        1896.6      2504.7 ug/L         21.01      2504.7 ppb          21.01   0.84%
   QC value within limits for S 181.975 Axial  Recovery = 100.19%
Sb 206.836†             1590.8      511.44 ug/L         5.783      511.44 ppb          5.783   1.13%
   QC value within limits for Sb 206.836  Recovery = 102.29%
Se 196.026†             4530.0      2567.0 ug/L         18.93      2567.0 ppb          18.93   0.74%
   QC value within limits for Se 196.026  Recovery = 102.68%
Si 251.611†            162101.1      4816.0 ug/L         14.10      4816.0 ppb          14.10   0.29%
   QC value within limits for Si 251.611  Recovery = 96.32%
Sn 189.927†             3372.7      543.15 ug/L         4.717      543.15 ppb          4.717   0.87%
   QC value within limits for Sn 189.927  Recovery = 108.63%
Sr 421.552†            89259.2      538.30 ug/L         0.341      538.30 ppb          0.341   0.06%
   QC value within limits for Sr 421.552  Recovery = 107.66%
Ti 334.940†            318494.6      502.59 ug/L         0.418      502.59 ppb          0.418   0.08%
   QC value within limits for Ti 334.940  Recovery = 100.52%
Tl 190.801†             1872.7      530.91 ug/L         4.567      530.91 ppb          4.567   0.86%
   QC value within limits for Tl 190.801  Recovery = 106.18%
U 409.014†             16991.0      486.90 ug/L         4.025      486.90 ppb          4.025   0.83%
   QC value within limits for U 409.014  Recovery = 97.38%
V 292.402†             76513.2      516.42 ug/L         0.645      516.42 ppb          0.645   0.12%
   QC value within limits for V 292.402  Recovery = 103.28%
Zn 213.857†            59611.8      508.30 ug/L         1.325      508.30 ppb          1.325   0.26%
   QC value within limits for Zn 213.857  Recovery = 101.66%
SiO2†                 161043.0       10253 ug/L          86.5       10253 ppb           86.5   0.84%
   QC value within limits for SiO2  Recovery = 95.87%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 12/11/2009 11:14:38
Data Type: Reprocessed on 12/11/2009 12:46:00

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	871028.0	871028.0	100.36	%			11:17:48
1	Sc Radial	5612.3	5612.3	101	%			11:16:31
1	Y 371.029	732501.0	732501.0	100.42	%			11:17:48
1	Y RADIAL	6085.8	6085.8	100.8	%			11:16:31
1	Ag 328.068†	348.8	73.5	0.3353	ug/L	0.3353	ppb	11:17:48
1	Al 396.153Radial†	-12.8	22.6	15.521	ug/L	15.521	ppb	11:16:31
1	As 188.979†	-27.4	3.9	1.5214	ug/L	1.5214	ppb	11:18:08
1	B 249.677†	-289.2	205.0	4.3696	ug/L	4.3696	ppb	11:18:08
1	Ba 233.527†	-12.6	-1.4	-0.0107	ug/L	-0.0107	ppb	11:18:08
1	Be 313.107†	-4511.2	167.5	0.0602	ug/L	0.0602	ppb	11:17:48
1	Ca 317.933Radial†	19.7	2.7	3.9544	ug/L	3.9544	ppb	11:16:51
1	Cd 226.502†	-200.3	-0.7	-0.0070	ug/L	-0.0070	ppb	11:18:08
1	Co 228.616†	-84.2	-10.4	-0.1945	ug/L	-0.1945	ppb	11:18:08
1	Cr 267.716†	88.4	2.1	0.0230	ug/L	0.0230	ppb	11:18:08
1	Cu 324.752†	6779.9	-2.2	-0.0063	ug/L	-0.0063	ppb	11:17:48
1	Fe 238.204 Radial†	9.9	-0.0	-0.0536	ug/L	-0.0536	ppb	11:16:51
1	K 766.490 Radial†	2839.1	81.1	13.610	ug/L	13.610	ppb	11:16:31
1	Mg 279.077 IEC†	4.7	2.8	94.399	ug/L	94.399	ppb	11:16:51
1	Mn 257.610†	522.8	0.8	-0.0009	ug/L	-0.0009	ppb	11:18:08
1	Mo 202.031†	31.5	13.0	0.8243	ug/L	0.8243	ppb	11:18:08
1	Na 589.592 Radial†	-1625.7	-61.0	-18.490	ug/L	-18.490	ppb	11:16:31
1	Ni 231.604†	94.7	8.4	0.1942	ug/L	0.1942	ppb	11:18:08
1	P 214.914†	228.2	-14.7	-8.1967	ug/L	-8.1967	ppb	11:18:08
1	Pb 220.353†	-63.2	5.0	0.5673	ug/L	0.5673	ppb	11:18:08
1	S 181.975 Axial†	48.3	-1.3	-1.7250	ug/L	-1.7250	ppb	11:18:08
1	Sb 206.836†	49.7	12.2	3.8364	ug/L	3.8364	ppb	11:18:08
1	Se 196.026†	-30.8	-3.9	-2.1655	ug/L	-2.1655	ppb	11:18:08
1	Si 251.611†	550.8	67.1	1.9835	ug/L	1.9835	ppb	11:18:08
1	Sn 189.927†	3.0	-5.8	-0.9386	ug/L	-0.9386	ppb	11:18:08
1	Sr 421.552†	-20.8	-20.5	-0.1236	ug/L	-0.1236	ppb	11:16:31
1	Ti 334.940†	-1250.7	10.0	0.0175	ug/L	0.0175	ppb	11:17:48
1	Tl 190.801†	-23.1	11.6	3.2610	ug/L	3.2610	ppb	11:18:08
1	U 409.014†	-2714.8	-121.1	-3.4828	ug/L	-3.4828	ppb	11:17:48
1	V 292.402†	-1376.0	-8.3	-0.0481	ug/L	-0.0481	ppb	11:17:48
1	Zn 213.857†	753.9	-2.6	-0.0268	ug/L	-0.0268	ppb	11:18:08
1	SiO2†	514.4	-11.9	-0.7943	ug/L	-0.7943	ppb	11:19:04
2	Sc 361.383	868979.5	868979.5	100.12	%			11:18:13
2	Sc Radial	5550.9	5550.9	99.6	%			11:16:56
2	Y 371.029	731655.6	731655.6	100.30	%			11:18:13
2	Y RADIAL	6018.6	6018.6	99.66	%			11:16:56
2	Ag 328.068†	291.0	16.6	0.0729	ug/L	0.0729	ppb	11:18:13
2	Al 396.153Radial†	-9.6	25.7	17.661	ug/L	17.661	ppb	11:16:56
2	As 188.979†	-32.4	-1.1	-0.4345	ug/L	-0.4345	ppb	11:18:33
2	B 249.677†	-299.4	194.2	4.1401	ug/L	4.1401	ppb	11:18:33
2	Ba 233.527†	-11.9	-0.8	-0.0064	ug/L	-0.0064	ppb	11:18:33
2	Be 313.107†	-4488.3	179.8	0.0646	ug/L	0.0646	ppb	11:18:13
2	Ca 317.933Radial†	17.4	0.6	0.9006	ug/L	0.9006	ppb	11:17:16
2	Cd 226.502†	-198.1	1.1	0.0125	ug/L	0.0125	ppb	11:18:33
2	Co 228.616†	-81.8	-8.2	-0.1526	ug/L	-0.1526	ppb	11:18:33
2	Cr 267.716†	97.0	10.9	0.1143	ug/L	0.1143	ppb	11:18:33
2	Cu 324.752†	6774.6	8.5	0.0240	ug/L	0.0240	ppb	11:18:13
2	Fe 238.204 Radial†	8.3	-1.6	-14.202	ug/L	-14.202	ppb	11:17:16
2	K 766.490 Radial†	2861.4	134.7	22.618	ug/L	22.618	ppb	11:16:56
2	Mg 279.077 IEC†	4.5	2.6	89.132	ug/L	89.132	ppb	11:17:16
2	Mn 257.610†	557.3	36.5	0.0356	ug/L	0.0356	ppb	11:18:33
2	Mo 202.031†	31.0	12.6	0.8003	ug/L	0.8003	ppb	11:18:33
2	Na 589.592 Radial†	-1655.0	-108.2	-32.804	ug/L	-32.804	ppb	11:16:56
2	Ni 231.604†	91.5	5.5	0.1258	ug/L	0.1258	ppb	11:18:33

2	P 214.914†	235.1	-7.2	-4.0257	ug/L	-4.0257 ppb	11:18:33
2	Pb 220.353†	-70.1	-2.0	-0.2169	ug/L	-0.2169 ppb	11:18:33
2	S 181.975 Axial†	48.6	-0.8	-1.1038	ug/L	-1.1038 ppb	11:18:33
2	Sb 206.836†	24.2	-13.2	-4.1820	ug/L	-4.1820 ppb	11:18:33
2	Se 196.026†	-25.5	1.3	0.6912	ug/L	0.6912 ppb	11:18:33
2	Si 251.611†	542.2	59.8	1.7624	ug/L	1.7624 ppb	11:18:33
2	Sn 189.927†	1.4	-7.5	-1.2016	ug/L	-1.2016 ppb	11:18:33
2	Sr 421.552†	-48.0	-48.0	-0.2897	ug/L	-0.2897 ppb	11:16:56
2	Ti 334.940†	-1247.0	10.8	0.0184	ug/L	0.0184 ppb	11:18:13
2	Tl 190.801†	-32.9	1.7	0.4765	ug/L	0.4765 ppb	11:18:33
2	U 409.014†	-2695.5	-108.2	-3.1097	ug/L	-3.1097 ppb	11:18:13
2	V 292.402†	-1381.9	-17.4	-0.1066	ug/L	-0.1066 ppb	11:18:13
2	Zn 213.857†	749.9	-4.9	-0.0444	ug/L	-0.0444 ppb	11:18:33
2	SiO2†	585.7	60.5	3.8244	ug/L	3.8244 ppb	11:19:09
3	Sc 361.383	873513.7	873513.7	100.64	%		11:18:38
3	Sc Radial	5529.5	5529.5	99.2	%		11:17:21
3	Y 371.029	733605.4	733605.4	100.57	%		11:18:38
3	Y RADIAL	5996.7	5996.7	99.30	%		11:17:21
3	Ag 328.068†	326.3	50.2	0.2326	ug/L	0.2326 ppb	11:18:38
3	Al 396.153Radial†	-32.8	2.3	1.5538	ug/L	1.5538 ppb	11:17:21
3	As 188.979†	-28.7	2.8	1.0687	ug/L	1.0687 ppb	11:18:58
3	B 249.677†	-285.2	209.8	4.4719	ug/L	4.4719 ppb	11:18:58
3	Ba 233.527†	-12.3	-1.1	-0.0082	ug/L	-0.0082 ppb	11:18:58
3	Be 313.107†	-4603.0	89.1	0.0321	ug/L	0.0321 ppb	11:18:38
3	Ca 317.933Radial†	16.9	0.1	0.1833	ug/L	0.1833 ppb	11:17:41
3	Cd 226.502†	-199.6	0.6	0.0061	ug/L	0.0061 ppb	11:18:58
3	Co 228.616†	-76.0	-2.1	-0.0391	ug/L	-0.0391 ppb	11:18:58
3	Cr 267.716†	79.0	-7.6	-0.0771	ug/L	-0.0771 ppb	11:18:58
3	Cu 324.752†	6812.4	10.9	0.0317	ug/L	0.0317 ppb	11:18:38
3	Fe 238.204 Radial†	9.9	0.1	1.1664	ug/L	1.1664 ppb	11:17:41
3	K 766.490 Radial†	2728.0	11.3	1.9062	ug/L	1.9062 ppb	11:17:21
3	Mg 279.077 IEC†	3.0	1.1	38.007	ug/L	38.007 ppb	11:17:41
3	Mn 257.610†	543.0	19.3	0.0199	ug/L	0.0199 ppb	11:18:58
3	Mo 202.031†	19.4	0.8	0.0534	ug/L	0.0534 ppb	11:18:58
3	Na 589.592 Radial†	-1614.2	-73.6	-22.309	ug/L	-22.309 ppb	11:17:21
3	Ni 231.604†	89.0	2.4	0.0563	ug/L	0.0563 ppb	11:18:58
3	P 214.914†	235.9	-7.7	-4.2936	ug/L	-4.2936 ppb	11:18:58
3	Pb 220.353†	-62.0	6.3	0.7110	ug/L	0.7110 ppb	11:18:58
3	S 181.975 Axial†	42.5	-7.2	-9.5340	ug/L	-9.5340 ppb	11:18:58
3	Sb 206.836†	32.1	-5.5	-1.7119	ug/L	-1.7119 ppb	11:18:58
3	Se 196.026†	-31.9	-4.9	-2.7624	ug/L	-2.7624 ppb	11:18:58
3	Si 251.611†	524.2	39.1	1.1628	ug/L	1.1628 ppb	11:18:58
3	Sn 189.927†	12.1	3.2	0.5085	ug/L	0.5085 ppb	11:18:58
3	Sr 421.552†	-25.5	-25.5	-0.1539	ug/L	-0.1539 ppb	11:17:21
3	Ti 334.940†	-1240.4	23.8	0.0402	ug/L	0.0402 ppb	11:18:38
3	Tl 190.801†	-46.1	-11.3	-3.1726	ug/L	-3.1726 ppb	11:18:58
3	U 409.014†	-2816.5	-214.4	-6.1647	ug/L	-6.1647 ppb	11:18:38
3	V 292.402†	-1369.5	2.0	0.0030	ug/L	0.0030 ppb	11:18:38
3	Zn 213.857†	769.9	11.2	0.0941	ug/L	0.0941 ppb	11:18:58
3	SiO2†	579.8	51.6	3.2857	ug/L	3.2857 ppb	11:19:14

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871173.7	100.38	%	0.262				0.26%
Sc Radial	5564.2	99.8	%	0.77				0.77%
Y 371.029	732587.3	100.43	%	0.134				0.13%
Y RADIAL	6033.7	99.91	%	0.768				0.77%
Ag 328.068†	46.8	0.2136	ug/L	0.13224	0.2136	ppb	0.13224	61.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.8	11.578	ug/L	8.7473	11.578	ppb	8.7473	75.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	0.7185	ug/L	1.02385	0.7185	ppb	1.02385	142.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	203.0	4.3272	ug/L	0.16987	4.3272	ppb	0.16987	3.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.1	-0.0084	ug/L	0.00213	-0.0084	ppb	0.00213	25.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.5	0.0523	ug/L	0.01764	0.0523	ppb	0.01764	33.74%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          1.2      1.6794 ug/L       2.00260      1.6794 ppb        2.00260 119.24%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                0.3      0.0039 ug/L       0.00993      0.0039 ppb        0.00993 256.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -6.9     -0.1287 ug/L       0.08042     -0.1287 ppb        0.08042  62.47%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                1.8      0.0201 ug/L       0.09576      0.0201 ppb        0.09576 477.44%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                5.7      0.0165 ug/L       0.02006      0.0165 ppb        0.02006 121.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.5     -4.3629 ug/L       8.54236     -4.3629 ppb        8.54236 195.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         75.7      12.712 ug/L       10.3853      12.712 ppb        10.3853  81.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.2      73.846 ug/L       31.1487      73.846 ppb        31.1487  42.18%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               18.9      0.0182 ug/L       0.01832      0.0182 ppb        0.01832 100.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                8.8      0.5593 ug/L       0.43831      0.5593 ppb        0.43831  78.36%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -81.0     -24.534 ug/L        7.4119     -24.534 ppb         7.4119  30.21%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.5      0.1254 ug/L       0.06896      0.1254 ppb        0.06896  54.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -9.9     -5.5053 ug/L       2.33463     -5.5053 ppb        2.33463  42.41%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.1      0.3538 ug/L       0.49945      0.3538 ppb        0.49945 141.18%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.1     -4.1209 ug/L       4.69812     -4.1209 ppb        4.69812 114.01%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -2.2     -0.6858 ug/L       4.10651     -0.6858 ppb        4.10651 598.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -2.5     -1.4122 ug/L       1.84594     -1.4122 ppb        1.84594 130.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               55.3      1.6362 ug/L       0.42468      1.6362 ppb        0.42468  25.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -3.4     -0.5439 ug/L       0.92085     -0.5439 ppb        0.92085 169.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -31.3     -0.1891 ug/L       0.08845     -0.1891 ppb        0.08845  46.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               14.8      0.0254 ug/L       0.01288      0.0254 ppb        0.01288  50.72%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.7      0.1883 ug/L       3.22645      0.1883 ppb        3.22645 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -147.9     -4.2524 ug/L       1.66656     -4.2524 ppb        1.66656  39.19%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -7.9     -0.0506 ug/L       0.05485     -0.0506 ppb        0.05485 108.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                1.2      0.0076 ug/L       0.07540      0.0076 ppb        0.07540 985.80%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     33.4      2.1053 ug/L       2.52552      2.1053 ppb        2.52552 119.96%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/11/2009 11:21:24
Data Type: Reprocessed on 12/11/2009 12:46:01

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	869577.2	869577.2	100.19	%			11:24:35
1	Sc Radial	4842.6	4842.6	86.9	%			11:23:18
1	Y 371.029	732644.8	732644.8	100.44	%			11:24:35
1	Y RADIAL	5290.9	5290.9	87.61	%			11:23:18
1	Ag 328.068†	1484.8	1207.9	5.4853	ug/L	5.4853	ppb	11:24:35
1	Al 396.153Radial†	270.1	346.3	238.07	ug/L	238.07	ppb	11:23:18
1	As 188.979†	45.7	76.9	29.713	ug/L	29.713	ppb	11:24:55
1	B 249.677†	1805.2	2294.9	48.874	ug/L	48.874	ppb	11:24:35
1	Ba 233.527†	656.4	666.2	4.9940	ug/L	4.9940	ppb	11:24:55
1	Be 313.107†	8959.2	13604.7	4.8949	ug/L	4.8949	ppb	11:24:35
1	Ca 317.933Radial†	156.2	162.9	237.79	ug/L	237.79	ppb	11:23:38
1	Cd 226.502†	291.1	489.5	5.0649	ug/L	5.0649	ppb	11:24:55
1	Co 228.616†	188.2	261.3	4.9417	ug/L	4.9417	ppb	11:24:55
1	Cr 267.716†	549.7	462.6	4.8376	ug/L	4.8376	ppb	11:24:55
1	Cu 324.752†	10209.9	3432.6	9.9779	ug/L	9.9779	ppb	11:24:35
1	Fe 238.204 Radial†	23.2	16.8	150.52	ug/L	150.52	ppb	11:23:38
1	K 766.490 Radial†	3786.4	1620.1	271.59	ug/L	271.59	ppb	11:23:18
1	Mg 279.077 IEC†	11.2	11.0	370.57	ug/L	370.57	ppb	11:23:38
1	Mn 257.610†	10186.4	9646.7	10.232	ug/L	10.232	ppb	11:24:35
1	Mo 202.031†	176.0	157.3	10.020	ug/L	10.020	ppb	11:24:55
1	Na 589.592 Radial†	-576.3	890.6	269.91	ug/L	269.91	ppb	11:23:18
1	Ni 231.604†	329.7	243.2	5.5841	ug/L	5.5841	ppb	11:24:55
1	P 214.914†	488.2	245.2	135.36	ug/L	135.36	ppb	11:24:55
1	Pb 220.353†	16.0	83.9	9.4534	ug/L	9.4534	ppb	11:24:55
1	S 181.975 Axial†	123.8	74.2	97.933	ug/L	97.933	ppb	11:24:55
1	Sb 206.836†	67.5	30.0	9.6730	ug/L	9.6730	ppb	11:24:55
1	Se 196.026†	20.2	47.0	26.973	ug/L	26.973	ppb	11:24:55
1	Si 251.611†	3706.6	3217.8	95.552	ug/L	95.552	ppb	11:24:55
1	Sn 189.927†	52.2	43.3	6.9935	ug/L	6.9935	ppb	11:24:55
1	Sr 421.552†	845.7	974.0	5.8722	ug/L	5.8722	ppb	11:23:18
1	Ti 334.940†	1903.6	3156.2	4.9711	ug/L	4.9711	ppb	11:24:35
1	Tl 190.801†	37.1	71.6	20.243	ug/L	20.243	ppb	11:24:55
1	U 409.014†	-899.4	1686.3	48.455	ug/L	48.455	ppb	11:24:35
1	V 292.402†	-670.0	694.0	4.8329	ug/L	4.8329	ppb	11:24:35
1	Zn 213.857†	1936.5	1179.0	10.067	ug/L	10.067	ppb	11:24:55
1	SiO2†	3854.5	3322.7	211.45	ug/L	211.45	ppb	11:25:51
2	Sc 361.383	867433.3	867433.3	99.944	%			11:25:00
2	Sc Radial	5581.3	5581.3	100	%			11:23:43
2	Y 371.029	729901.6	729901.6	100.06	%			11:25:00
2	Y RADIAL	6092.4	6092.4	100.9	%			11:23:43
2	Ag 328.068†	1380.6	1107.4	5.0231	ug/L	5.0231	ppb	11:25:00
2	Al 396.153Radial†	293.4	328.5	225.78	ug/L	225.78	ppb	11:23:43
2	As 188.979†	51.9	83.2	32.155	ug/L	32.155	ppb	11:25:20
2	B 249.677†	1788.5	2282.7	48.616	ug/L	48.616	ppb	11:25:00
2	Ba 233.527†	665.1	676.6	5.0706	ug/L	5.0706	ppb	11:25:20
2	Be 313.107†	9192.1	13859.8	4.9863	ug/L	4.9863	ppb	11:25:00
2	Ca 317.933Radial†	158.3	141.3	206.21	ug/L	206.21	ppb	11:24:03
2	Cd 226.502†	279.4	478.5	4.9534	ug/L	4.9534	ppb	11:25:20
2	Co 228.616†	178.1	251.7	4.7607	ug/L	4.7607	ppb	11:25:20
2	Cr 267.716†	555.4	469.6	4.9105	ug/L	4.9105	ppb	11:25:20
2	Cu 324.752†	10097.0	3344.8	9.7219	ug/L	9.7219	ppb	11:25:00
2	Fe 238.204 Radial†	24.3	14.4	129.38	ug/L	129.38	ppb	11:24:03
2	K 766.490 Radial†	3728.1	984.8	165.00	ug/L	165.00	ppb	11:23:43
2	Mg 279.077 IEC†	10.0	8.1	272.93	ug/L	272.93	ppb	11:24:03
2	Mn 257.610†	10271.6	9757.1	10.349	ug/L	10.349	ppb	11:25:00
2	Mo 202.031†	178.1	159.8	10.178	ug/L	10.178	ppb	11:25:20
2	Na 589.592 Radial†	-538.0	1016.7	308.11	ug/L	308.11	ppb	11:23:43
2	Ni 231.604†	312.7	226.9	5.2112	ug/L	5.2112	ppb	11:25:20

2	P 214.914†	496.2	254.4	140.61 ug/L	140.61 ppb	11:25:20
2	Pb 220.353†	27.1	95.1	10.699 ug/L	10.699 ppb	11:25:20
2	S 181.975 Axial†	124.6	75.3	99.446 ug/L	99.446 ppb	11:25:20
2	Sb 206.836†	73.8	36.5	11.769 ug/L	11.769 ppb	11:25:20
2	Se 196.026†	26.0	52.8	30.186 ug/L	30.186 ppb	11:25:20
2	Si 251.611†	3692.9	3213.2	95.442 ug/L	95.442 ppb	11:25:20
2	Sn 189.927†	66.8	58.0	9.3598 ug/L	9.3598 ppb	11:25:20
2	Sr 421.552†	852.9	852.3	5.1383 ug/L	5.1383 ppb	11:23:43
2	Ti 334.940†	1843.4	3100.7	4.8813 ug/L	4.8813 ppb	11:25:00
2	Tl 190.801†	30.2	64.8	18.334 ug/L	18.334 ppb	11:25:20
2	U 409.014†	-858.9	1724.6	49.557 ug/L	49.557 ppb	11:25:00
2	V 292.402†	-676.1	686.3	4.7869 ug/L	4.7869 ppb	11:25:00
2	Zn 213.857†	1919.3	1166.5	9.9676 ug/L	9.9676 ppb	11:25:20
2	SiO2†	3846.8	3324.4	211.62 ug/L	211.62 ppb	11:25:56
3	Sc 361.383	881014.9	881014.9	101.51 %		11:25:25
3	Sc Radial	5538.1	5538.1	99.3 %		11:24:08
3	Y 371.029	740744.8	740744.8	101.55 %		11:25:25
3	Y RADIAL	6054.5	6054.5	100.3 %		11:24:08
3	Ag 328.068†	1438.5	1143.1	5.1803 ug/L	5.1803 ppb	11:25:25
3	Al 396.153Radial†	274.4	311.6	214.13 ug/L	214.13 ppb	11:24:08
3	As 188.979†	58.8	89.2	34.480 ug/L	34.480 ppb	11:25:45
3	B 249.677†	1856.1	2321.7	49.451 ug/L	49.451 ppb	11:25:25
3	Ba 233.527†	669.2	670.3	5.0232 ug/L	5.0232 ppb	11:25:45
3	Be 313.107†	9258.8	13783.7	4.9590 ug/L	4.9590 ppb	11:25:25
3	Ca 317.933Radial†	153.8	137.9	201.33 ug/L	201.33 ppb	11:24:28
3	Cd 226.502†	277.4	472.2	4.8893 ug/L	4.8893 ppb	11:25:45
3	Co 228.616†	180.1	250.9	4.7470 ug/L	4.7470 ppb	11:25:45
3	Cr 267.716†	571.0	476.5	4.9824 ug/L	4.9824 ppb	11:25:45
3	Cu 324.752†	10294.2	3383.3	9.8327 ug/L	9.8327 ppb	11:25:25
3	Fe 238.204 Radial†	21.9	12.2	109.35 ug/L	109.35 ppb	11:24:28
3	K 766.490 Radial†	3707.0	992.7	166.32 ug/L	166.32 ppb	11:24:08
3	Mg 279.077 IEC†	11.8	10.0	334.97 ug/L	334.97 ppb	11:24:28
3	Mn 257.610†	10367.7	9693.4	10.278 ug/L	10.278 ppb	11:25:25
3	Mo 202.031†	181.2	160.1	10.198 ug/L	10.198 ppb	11:25:45
3	Na 589.592 Radial†	-596.5	953.6	289.00 ug/L	289.00 ppb	11:24:08
3	Ni 231.604†	309.3	218.8	5.0239 ug/L	5.0239 ppb	11:25:45
3	P 214.914†	479.9	230.7	127.35 ug/L	127.35 ppb	11:25:45
3	Pb 220.353†	37.2	104.6	11.769 ug/L	11.769 ppb	11:25:45
3	S 181.975 Axial†	132.5	81.1	107.13 ug/L	107.13 ppb	11:25:45
3	Sb 206.836†	66.0	27.6	8.9622 ug/L	8.9622 ppb	11:25:45
3	Se 196.026†	27.9	54.3	30.951 ug/L	30.951 ppb	11:25:45
3	Si 251.611†	3731.0	3193.8	94.865 ug/L	94.865 ppb	11:25:45
3	Sn 189.927†	61.6	51.8	8.3624 ug/L	8.3624 ppb	11:25:45
3	Sr 421.552†	820.1	825.9	4.9794 ug/L	4.9794 ppb	11:24:08
3	Ti 334.940†	1869.5	3098.0	4.8776 ug/L	4.8776 ppb	11:25:25
3	Tl 190.801†	30.3	64.4	18.212 ug/L	18.212 ppb	11:25:45
3	U 409.014†	-942.7	1655.3	47.568 ug/L	47.568 ppb	11:25:25
3	V 292.402†	-679.5	693.3	4.8348 ug/L	4.8348 ppb	11:25:25
3	Zn 213.857†	1935.7	1153.1	9.8533 ug/L	9.8533 ppb	11:25:45
3	SiO2†	3816.3	3235.1	205.92 ug/L	205.92 ppb	11:26:01

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	872675.2	100.55	%	0.841				0.84%
Sc Radial	5320.7	95.4	%	7.44				7.79%
Y 371.029	734430.4	100.68	%	0.773				0.77%
Y RADIAL	5812.6	96.25	%	7.488				7.78%
Ag 328.068†	1152.8	5.2296	ug/L	0.23498	5.2296	ppb	0.23498	4.49%
QC value within limits for Ag 328.068 Recovery = 104.59%								
Al 396.153Radial†	328.8	225.99	ug/L	11.970	225.99	ppb	11.970	5.30%
QC value within limits for Al 396.153Radial Recovery = 113.00%								
As 188.979†	83.1	32.116	ug/L	2.3836	32.116	ppb	2.3836	7.42%
QC value within limits for As 188.979 Recovery = 107.05%								
B 249.677†	2299.8	48.981	ug/L	0.4272	48.981	ppb	0.4272	0.87%
QC value within limits for B 249.677 Recovery = 97.96%								
Ba 233.527†	671.1	5.0293	ug/L	0.03861	5.0293	ppb	0.03861	0.77%
QC value within limits for Ba 233.527 Recovery = 100.59%								
Be 313.107†	13749.4	4.9468	ug/L	0.04694	4.9468	ppb	0.04694	0.95%
QC value within limits for Be 313.107 Recovery = 98.94%								

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Ca 317.933Radial†        147.4      215.11 ug/L        19.794      215.11 ppb        19.794   9.20%
   QC value within limits for Ca 317.933Radial  Recovery = 107.56%
Cd 226.502†              480.1      4.9692 ug/L       0.08885      4.9692 ppb       0.08885   1.79%
   QC value within limits for Cd 226.502  Recovery = 99.38%
Co 228.616†              254.6      4.8165 ug/L       0.10864      4.8165 ppb       0.10864   2.26%
   QC value within limits for Co 228.616  Recovery = 96.33%
Cr 267.716†              469.6      4.9101 ug/L       0.07240      4.9101 ppb       0.07240   1.47%
   QC value within limits for Cr 267.716  Recovery = 98.20%
Cu 324.752†             3386.9      9.8442 ug/L       0.12836      9.8442 ppb       0.12836   1.30%
   QC value within limits for Cu 324.752  Recovery = 98.44%
Fe 238.204 Radial†        14.5      129.75 ug/L        20.588      129.75 ppb        20.588  15.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 129.75%
K 766.490 Radial†       1199.2      200.97 ug/L        61.163      200.97 ppb        61.163  30.43%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 133.98%
Mg 279.077 IEC†            9.7      326.16 ug/L        49.410      326.16 ppb        49.410  15.15%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.72%
Mn 257.610†             9699.1      10.286 ug/L        0.0588      10.286 ppb        0.0588   0.57%
   QC value within limits for Mn 257.610  Recovery = 102.86%
Mo 202.031†              159.1      10.132 ug/L        0.0975      10.132 ppb        0.0975   0.96%
   QC value within limits for Mo 202.031  Recovery = 101.32%
Na 589.592 Radial†       953.6      289.00 ug/L        19.101      289.00 ppb        19.101   6.61%
   QC value within limits for Na 589.592 Radial  Recovery = 96.33%
Ni 231.604†              229.6      5.2731 ug/L       0.28518      5.2731 ppb       0.28518   5.41%
   QC value within limits for Ni 231.604  Recovery = 105.46%
P 214.914†               243.5      134.44 ug/L         6.678      134.44 ppb         6.678   4.97%
   QC value within limits for P 214.914  Recovery = 89.63%
Pb 220.353†               94.5      10.641 ug/L        1.1591      10.641 ppb        1.1591  10.89%
   QC value within limits for Pb 220.353  Recovery = 106.41%
S 181.975 Axial†          76.9      101.50 ug/L         4.930      101.50 ppb         4.930   4.86%
   QC value within limits for S 181.975 Axial  Recovery = 101.50%
Sb 206.836†               31.3      10.135 ug/L        1.4595      10.135 ppb        1.4595  14.40%
   QC value within limits for Sb 206.836  Recovery = 101.35%
Se 196.026†               51.4      29.370 ug/L        2.1103      29.370 ppb        2.1103   7.19%
   QC value within limits for Se 196.026  Recovery = 97.90%
Si 251.611†             3208.3      95.286 ug/L        0.3691      95.286 ppb        0.3691   0.39%
   QC value within limits for Si 251.611  Recovery = 95.29%
Sn 189.927†               51.1      8.2386 ug/L       1.18799      8.2386 ppb       1.18799  14.42%
   QC value within limits for Sn 189.927  Recovery = 82.39%
Sr 421.552†              884.1      5.3300 ug/L       0.47629      5.3300 ppb       0.47629   8.94%
   QC value within limits for Sr 421.552  Recovery = 106.60%
Ti 334.940†             3118.3      4.9100 ug/L       0.05293      4.9100 ppb       0.05293   1.08%
   QC value within limits for Ti 334.940  Recovery = 98.20%
Tl 190.801†               66.9      18.930 ug/L        1.1388      18.930 ppb        1.1388   6.02%
   QC value within limits for Tl 190.801  Recovery = 94.65%
U 409.014†              1688.7      48.527 ug/L        0.9963      48.527 ppb        0.9963   2.05%
   QC value within limits for U 409.014  Recovery = 97.05%
V 292.402†               691.2      4.8182 ug/L       0.02710      4.8182 ppb       0.02710   0.56%
   QC value within limits for V 292.402  Recovery = 96.36%
Zn 213.857†             1166.2      9.9626 ug/L       0.10681      9.9626 ppb       0.10681   1.07%
   QC value within limits for Zn 213.857  Recovery = 99.63%
SiO2†                   3294.1      209.67 ug/L         3.241      209.67 ppb         3.241   1.55%
   QC value within limits for SiO2  Recovery = 98.43%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/11/2009 11:28:12
Data Type: Reprocessed on 12/11/2009 12:46:02
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	756993.4	756993.4	87.220	%			11:30:38
1	Sc Radial	4880.9	4880.9	87.5	%			11:30:10
1	Y 371.029	620548.2	620548.2	85.070	%			11:30:38
1	Y RADIAL	5338.7	5338.7	88.40	%			11:30:10
1	Ag 328.068†	-9919.8	-11647.4	1.5150	ug/L	1.5150	ppb	11:30:38
1	Al 396.153Radial†	689990.2	788262.9	542890	ug/L	542890	ppb	11:30:05
1	As 188.979†	-105.2	-89.4	-4.8296	ug/L	-4.8296	ppb	11:30:58
1	B 249.677†	600.4	1181.6	-0.4812	ug/L	-0.4812	ppb	11:30:38
1	Ba 233.527†	-572.8	-645.6	2.3899	ug/L	2.3899	ppb	11:30:58
1	Be 313.107†	-4945.1	-1007.1	-0.4108	ug/L	-0.4108	ppb	11:30:38
1	Ca 317.933Radial†	302719.8	345802.7	504700	ug/L	504700	ppb	11:30:05
1	Cd 226.502†	1418.0	1824.8	-0.4092	ug/L	-0.4092	ppb	11:30:58
1	Co 228.616†	-4.8	68.0	-1.4714	ug/L	-1.4714	ppb	11:30:58
1	Cr 267.716†	-70.1	-166.4	1.7380	ug/L	1.7380	ppb	11:30:58
1	Cu 324.752†	4107.1	-2048.9	3.9153	ug/L	3.9153	ppb	11:30:38
1	Fe 238.204 Radial†	18907.2	21589.2	193420	ug/L	193420	ppb	11:30:10
1	K 766.490 Radial†	2657.0	295.8	66.366	ug/L	66.366	ppb	11:30:05
1	Mg 279.077 IEC†	13012.5	14863.3	499660	ug/L	499660	ppb	11:30:10
1	Mn 257.610†	1219.3	877.7	10.913	ug/L	10.913	ppb	11:30:38
1	Mo 202.031†	-231.7	-284.0	-4.3540	ug/L	-4.3540	ppb	11:30:58
1	Na 589.592 Radial†	-1428.1	-77.3	-23.415	ug/L	-23.415	ppb	11:30:10
1	Ni 231.604†	240.6	189.9	4.3628	ug/L	4.3628	ppb	11:30:58
1	P 214.914†	197.0	-16.2	18.997	ug/L	18.997	ppb	11:30:58
1	Pb 220.353†	-811.3	-862.2	9.3939	ug/L	9.3939	ppb	11:30:58
1	S 181.975 Axial†	76.0	37.7	-56.928	ug/L	-56.928	ppb	11:30:58
1	Sb 206.836†	86.2	61.4	6.2629	ug/L	6.2629	ppb	11:30:58
1	Se 196.026†	-1040.9	-1166.6	19.008	ug/L	19.008	ppb	11:30:58
1	Si 251.611†	466.9	53.5	2.1022	ug/L	2.1022	ppb	11:30:58
1	Sn 189.927†	-357.2	-418.4	-12.019	ug/L	-12.019	ppb	11:30:58
1	Sr 421.552†	575.5	657.7	-0.7113	ug/L	-0.7113	ppb	11:30:10
1	Ti 334.940†	-14931.3	-15862.9	1.2743	ug/L	1.2743	ppb	11:30:38
1	Tl 190.801†	-93.8	-72.9	-5.9073	ug/L	-5.9073	ppb	11:30:58
1	U 409.014†	-1285.6	1110.0	7.5826	ug/L	7.5826	ppb	11:30:38
1	V 292.402†	1155.9	2688.0	-0.4308	ug/L	-0.4308	ppb	11:30:58
1	Zn 213.857†	3322.4	3055.4	-9.3150	ug/L	-9.3150	ppb	11:30:58
1	SiO2†	472.1	16.8	2.1784	ug/L	2.1784	ppb	11:31:54
2	Sc 361.383	748375.7	748375.7	86.227	%			11:31:03
2	Sc Radial	5137.5	5137.5	92.1	%			11:30:21
2	Y 371.029	613588.1	613588.1	84.116	%			11:31:03
2	Y RADIAL	5544.8	5544.8	91.81	%			11:30:21
2	Ag 328.068†	-10027.9	-11903.8	-1.3768	ug/L	-1.3768	ppb	11:31:03
2	Al 396.153Radial†	643630.0	698570.9	481110	ug/L	481110	ppb	11:30:16
2	As 188.979†	-72.9	-53.2	7.9134	ug/L	7.9134	ppb	11:31:23
2	B 249.677†	650.9	1248.1	1.9790	ug/L	1.9790	ppb	11:31:03
2	Ba 233.527†	-566.8	-646.3	2.0929	ug/L	2.0929	ppb	11:31:23
2	Be 313.107†	-5112.7	-1266.8	-0.5041	ug/L	-0.5041	ppb	11:31:03
2	Ca 317.933Radial†	285126.3	309432.5	451610	ug/L	451610	ppb	11:30:16
2	Cd 226.502†	1400.8	1823.5	0.3625	ug/L	0.3625	ppb	11:31:23
2	Co 228.616†	7.3	81.9	-1.0956	ug/L	-1.0956	ppb	11:31:23
2	Cr 267.716†	-95.1	-196.3	1.2811	ug/L	1.2811	ppb	11:31:23
2	Cu 324.752†	4033.3	-2080.2	3.4233	ug/L	3.4233	ppb	11:31:03
2	Fe 238.204 Radial†	19093.0	20711.9	185560	ug/L	185560	ppb	11:30:21
2	K 766.490 Radial†	2667.1	155.0	40.166	ug/L	40.166	ppb	11:30:16
2	Mg 279.077 IEC†	13097.5	14212.9	477790	ug/L	477790	ppb	11:30:21
2	Mn 257.610†	1083.5	736.5	10.386	ug/L	10.386	ppb	11:31:03
2	Mo 202.031†	-226.6	-281.2	-4.7343	ug/L	-4.7343	ppb	11:31:23
2	Na 589.592 Radial†	-1350.8	88.1	26.712	ug/L	26.712	ppb	11:30:21
2	Ni 231.604†	192.9	137.8	3.1652	ug/L	3.1652	ppb	11:31:23

2	P 214.914†	167.9	-47.4	-13.017 ug/L	-13.017 ppb	11:31:23
2	Pb 220.353†	-834.9	-900.3	-8.0877 ug/L	-8.0877 ppb	11:31:23
2	S 181.975 Axial†	68.2	29.7	-55.392 ug/L	-55.392 ppb	11:31:23
2	Sb 206.836†	67.4	40.8	1.3270 ug/L	1.3270 ppb	11:31:23
2	Se 196.026†	-1013.6	-1148.8	-4.2965 ug/L	-4.2965 ppb	11:31:23
2	Si 251.611†	467.8	60.8	2.3247 ug/L	2.3247 ppb	11:31:23
2	Sn 189.927†	-357.8	-423.8	-18.546 ug/L	-18.546 ppb	11:31:23
2	Sr 421.552†	520.6	565.2	-0.7770 ug/L	-0.7770 ppb	11:30:21
2	Ti 334.940†	-14753.1	-15853.5	-1.4837 ug/L	-1.4837 ppb	11:31:03
2	Tl 190.801†	-62.9	-38.4	2.1377 ug/L	2.1377 ppb	11:31:23
2	U 409.014†	-990.6	1435.1	17.919 ug/L	17.919 ppb	11:31:03
2	V 292.402†	1127.3	2670.1	0.1734 ug/L	0.1734 ppb	11:31:23
2	Zn 213.857†	3343.9	3124.2	-7.2162 ug/L	-7.2162 ppb	11:31:23
2	SiO2†	472.1	23.0	2.5906 ug/L	2.5906 ppb	11:31:59
3	Sc 361.383	731671.0	731671.0	84.302 %		11:31:28
3	Sc Radial	5024.3	5024.3	90.1 %		11:30:31
3	Y 371.029	601193.9	601193.9	82.417 %		11:31:28
3	Y RADIAL	5440.1	5440.1	90.08 %		11:30:31
3	Ag 328.068†	-10018.7	-12158.3	-1.0690 ug/L	-1.0690 ppb	11:31:28
3	Al 396.153Radial†	664641.7	737630.5	508020 ug/L	508020 ppb	11:30:26
3	As 188.979†	-72.7	-54.9	8.1410 ug/L	8.1410 ppb	11:31:48
3	B 249.677†	582.2	1183.8	-0.1430 ug/L	-0.1430 ppb	11:31:28
3	Ba 233.527†	-531.7	-619.6	2.5022 ug/L	2.5022 ppb	11:31:48
3	Be 313.107†	-5001.9	-1270.7	-0.5069 ug/L	-0.5069 ppb	11:31:28
3	Ca 317.933Radial†	294034.9	326292.3	476220 ug/L	476220 ppb	11:30:26
3	Cd 226.502†	1410.2	1871.8	0.2962 ug/L	0.2962 ppb	11:31:48
3	Co 228.616†	-32.8	34.5	-2.0714 ug/L	-2.0714 ppb	11:31:48
3	Cr 267.716†	-82.7	-184.1	1.5151 ug/L	1.5151 ppb	11:31:48
3	Cu 324.752†	4076.9	-1921.8	4.1731 ug/L	4.1731 ppb	11:31:28
3	Fe 238.204 Radial†	19243.2	21345.6	191230 ug/L	191230 ppb	11:30:31
3	K 766.490 Radial†	2570.1	112.6	33.988 ug/L	33.988 ppb	11:30:26
3	Mg 279.077 IEC†	13195.9	14642.4	492230 ug/L	492230 ppb	11:30:31
3	Mn 257.610†	1029.6	701.2	10.646 ug/L	10.646 ppb	11:31:28
3	Mo 202.031†	-233.6	-295.5	-5.2381 ug/L	-5.2381 ppb	11:31:48
3	Na 589.592 Radial†	-1340.0	67.0	20.318 ug/L	20.318 ppb	11:30:31
3	Ni 231.604†	214.7	168.8	3.8778 ug/L	3.8778 ppb	11:31:48
3	P 214.914†	163.9	-47.6	-8.7638 ug/L	-8.7638 ppb	11:31:48
3	Pb 220.353†	-816.2	-900.2	-2.5019 ug/L	-2.5019 ppb	11:31:48
3	S 181.975 Axial†	74.1	38.5	-49.071 ug/L	-49.071 ppb	11:31:48
3	Sb 206.836†	58.8	32.3	-2.1131 ug/L	-2.1131 ppb	11:31:48
3	Se 196.026†	-1038.8	-1205.4	-14.715 ug/L	-14.715 ppb	11:31:48
3	Si 251.611†	431.0	29.5	1.4270 ug/L	1.4270 ppb	11:31:48
3	Sn 189.927†	-376.1	-455.0	-20.917 ug/L	-20.917 ppb	11:31:48
3	Sr 421.552†	554.7	615.8	-0.6998 ug/L	-0.6998 ppb	11:30:31
3	Ti 334.940†	-14815.5	-16318.0	-0.9262 ug/L	-0.9262 ppb	11:31:28
3	Tl 190.801†	-106.1	-91.3	-12.048 ug/L	-12.048 ppb	11:31:48
3	U 409.014†	-1449.0	865.2	0.8188 ug/L	0.8188 ppb	11:31:28
3	V 292.402†	1066.8	2628.1	-0.6876 ug/L	-0.6876 ppb	11:31:48
3	Zn 213.857†	3344.7	3213.7	-7.4880 ug/L	-7.4880 ppb	11:31:48
3	SiO2†	364.7	-91.9	-4.6727 ug/L	-4.6727 ppb	11:32:04

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	745680.1	85.916	%	1.4834				1.73%
Sc Radial	5014.2	89.9	%	2.31				2.57%
Y 371.029	611776.7	83.867	%	1.3439				1.60%
Y RADIAL	5441.2	90.10	%	1.707				1.89%
Ag 328.068†	-11903.1	-0.3103	ug/L	1.58818	-0.3103	ppb	1.58818	511.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	741488.1	510670	ug/L	30971.5	510670	ppb	30971.5	6.06%
QC value within limits for Al 396.153Radial Recovery = 102.13%								
As 188.979†	-65.8	3.7416	ug/L	7.42374	3.7416	ppb	7.42374	198.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1204.5	0.4516	ug/L	1.33353	0.4516	ppb	1.33353	295.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-637.1	2.3283	ug/L	0.21149	2.3283	ppb	0.21149	9.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1181.5	-0.4739	ug/L	0.05467	-0.4739	ppb	0.05467	11.53%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†     327175.8      477510 ug/L       26564.5      477510 ppb        26564.5   5.56%
   QC value within limits for Ca 317.933Radial  Recovery = 95.50%
Cd 226.502†             1840.0      0.0832 ug/L       0.42771      0.0832 ppb        0.42771 514.38%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               61.5     -1.5462 ug/L       0.49217     -1.5462 ppb        0.49217  31.83%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -182.3      1.5114 ug/L       0.22845      1.5114 ppb        0.22845  15.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -2017.0      3.8372 ug/L       0.38095      3.8372 ppb        0.38095   9.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     21215.6      190070 ug/L        4057.3      190070 ppb         4057.3   2.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.03%
K 766.490 Radial†        187.8      46.840 ug/L       17.1898      46.840 ppb        17.1898  36.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        14572.9      489890 ug/L       11118.2      489890 ppb        11118.2   2.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.98%
Mn 257.610†              771.8      10.648 ug/L        0.2632      10.648 ppb         0.2632   2.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -286.9     -4.7755 ug/L       0.44349     -4.7755 ppb        0.44349   9.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        26.0      7.8718 ug/L      27.28290      7.8718 ppb       27.28290 346.59%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              165.5      3.8019 ug/L       0.60243      3.8019 ppb        0.60243  15.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -37.1     -0.9278 ug/L      17.38629     -0.9278 ppb       17.38629 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -887.6     -0.3986 ug/L       8.92859     -0.3986 ppb        8.92859 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          35.3     -53.797 ug/L        4.1643     -53.797 ppb         4.1643   7.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               44.9      1.8256 ug/L       4.21020      1.8256 ppb        4.21020 230.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -1173.6     -0.0013 ug/L      17.26716     -0.0013 ppb       17.26716 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               47.9      1.9513 ug/L       0.46751      1.9513 ppb        0.46751  23.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -432.4     -17.161 ug/L        4.6077     -17.161 ppb         4.6077  26.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              612.9     -0.7293 ug/L       0.04164     -0.7293 ppb        0.04164   5.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -16011.5     -0.3785 ug/L       1.45827     -0.3785 ppb        1.45827 385.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -67.5     -5.2725 ug/L       7.11413     -5.2725 ppb        7.11413 134.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               1136.8      8.7736 ug/L       8.61226      8.7736 ppb        8.61226  98.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               2662.1     -0.3150 ug/L       0.44201     -0.3150 ppb        0.44201 140.32%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              3131.1     -8.0064 ug/L       1.14141     -8.0064 ppb        1.14141  14.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -17.3      0.0321 ug/L       4.07969      0.0321 ppb        4.07969 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 12/11/2009 11:34:15
Data Type: Reprocessed on 12/11/2009 12:46:03

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	758951.0	758951.0	87.445	%			11:36:41
1	Sc Radial	4987.2	4987.2	89.4	%			11:36:13
1	Y 371.029	621080.9	621080.9	85.143	%			11:36:41
1	Y RADIAL	5400.8	5400.8	89.43	%			11:36:13
1	Ag 328.068†	42647.1	48496.1	274.60	ug/L	274.60	ppb	11:36:41
1	Al 396.153Radial†	660949.3	738982.6	508930	ug/L	508930	ppb	11:36:08
1	As 188.979†	1049.6	1231.6	508.39	ug/L	508.39	ppb	11:37:01
1	B 249.677†	21526.7	25110.5	508.75	ug/L	508.75	ppb	11:36:41
1	Ba 233.527†	57172.2	65391.7	496.83	ug/L	496.83	ppb	11:36:41
1	Be 313.107†	582917.2	671270.9	242.00	ug/L	242.00	ppb	11:36:41
1	Ca 317.933Radial†	289405.7	323541.3	472210	ug/L	472210	ppb	11:36:08
1	Cd 226.502†	40964.3	47044.6	469.17	ug/L	469.17	ppb	11:36:41
1	Co 228.616†	20702.3	23748.1	445.38	ug/L	445.38	ppb	11:37:01
1	Cr 267.716†	39985.1	45639.8	481.89	ug/L	481.89	ppb	11:36:41
1	Cu 324.752†	171387.9	189236.7	559.36	ug/L	559.36	ppb	11:36:41
1	Fe 238.204 Radial†	19000.6	21233.0	190240	ug/L	190240	ppb	11:36:13
1	K 766.490 Radial†	31877.7	32900.0	5528.6	ug/L	5528.6	ppb	11:36:08
1	Mg 279.077 IEC†	13124.0	14670.8	493200	ug/L	493200	ppb	11:36:13
1	Mn 257.610†	396615.6	453038.6	489.93	ug/L	489.93	ppb	11:36:41
1	Mo 202.031†	6533.4	7453.0	487.78	ug/L	487.78	ppb	11:37:01
1	Na 589.592 Radial†	15252.2	18606.2	5638.8	ug/L	5638.8	ppb	11:36:13
1	Ni 231.604†	17062.5	19426.2	446.10	ug/L	446.10	ppb	11:37:01
1	P 214.914†	4156.3	4511.0	2455.5	ug/L	2455.5	ppb	11:37:01
1	Pb 220.353†	2780.9	3248.2	462.94	ug/L	462.94	ppb	11:37:01
1	S 181.975 Axial†	1860.9	2078.6	2646.2	ug/L	2646.2	ppb	11:37:01
1	Sb 206.836†	1514.6	1694.6	530.20	ug/L	530.20	ppb	11:37:01
1	Se 196.026†	2895.9	3338.4	2540.1	ug/L	2540.1	ppb	11:37:01
1	Si 251.611†	154917.7	176677.9	5250.8	ug/L	5250.8	ppb	11:36:41
1	Sn 189.927†	2316.7	2640.5	476.61	ug/L	476.61	ppb	11:37:01
1	Sr 421.552†	76362.9	85374.7	510.54	ug/L	510.54	ppb	11:36:08
1	Ti 334.940†	268916.2	308781.5	511.62	ug/L	511.62	ppb	11:36:41
1	Tl 190.801†	1350.0	1578.3	461.73	ug/L	461.73	ppb	11:37:01
1	U 409.014†	13317.1	17813.1	487.28	ug/L	487.28	ppb	11:36:41
1	V 292.402†	66843.3	77803.0	506.91	ug/L	506.91	ppb	11:36:41
1	Zn 213.857†	53716.7	60675.1	483.37	ug/L	483.37	ppb	11:36:41
1	SiO2†	156111.1	178000.0	11337	ug/L	11337	ppb	11:37:58
2	Sc 361.383	760073.7	760073.7	87.575	%			11:37:07
2	Sc Radial	5036.8	5036.8	90.3	%			11:36:23
2	Y 371.029	622660.3	622660.3	85.359	%			11:37:07
2	Y RADIAL	5470.1	5470.1	90.58	%			11:36:23
2	Ag 328.068†	42822.9	48624.8	275.06	ug/L	275.06	ppb	11:37:07
2	Al 396.153Radial†	668783.0	740388.7	509890	ug/L	509890	ppb	11:36:18
2	As 188.979†	1057.7	1239.1	511.27	ug/L	511.27	ppb	11:37:27
2	B 249.677†	21772.6	25355.0	514.00	ug/L	514.00	ppb	11:37:07
2	Ba 233.527†	57342.2	65489.2	497.55	ug/L	497.55	ppb	11:37:07
2	Be 313.107†	584422.8	672005.6	242.26	ug/L	242.26	ppb	11:37:07
2	Ca 317.933Radial†	293875.9	325308.4	474790	ug/L	474790	ppb	11:36:18
2	Cd 226.502†	41033.4	47054.3	469.30	ug/L	469.30	ppb	11:37:07
2	Co 228.616†	20775.3	23796.5	446.31	ug/L	446.31	ppb	11:37:27
2	Cr 267.716†	40113.5	45718.9	482.71	ug/L	482.71	ppb	11:37:07
2	Cu 324.752†	171912.4	189546.1	560.25	ug/L	560.25	ppb	11:37:07
2	Fe 238.204 Radial†	19164.0	21205.0	189990	ug/L	189990	ppb	11:36:23
2	K 766.490 Radial†	32285.0	33000.4	5545.3	ug/L	5545.3	ppb	11:36:18
2	Mg 279.077 IEC†	13200.4	14611.1	491190	ug/L	491190	ppb	11:36:23
2	Mn 257.610†	397691.3	453597.1	490.53	ug/L	490.53	ppb	11:37:07
2	Mo 202.031†	6575.2	7489.6	490.09	ug/L	490.09	ppb	11:37:27
2	Na 589.592 Radial†	15268.6	18456.7	5593.5	ug/L	5593.5	ppb	11:36:23
2	Ni 231.604†	17120.7	19463.9	446.97	ug/L	446.97	ppb	11:37:27

2	P 214.914†	4170.4	4520.0	2461.0	ug/L	2461.0 ppb	11:37:27
2	Pb 220.353†	2775.6	3237.4	461.98	ug/L	461.98 ppb	11:37:27
2	S 181.975 Axial†	1850.2	2063.3	2625.7	ug/L	2625.7 ppb	11:37:27
2	Sb 206.836†	1535.4	1715.9	536.97	ug/L	536.97 ppb	11:37:27
2	Se 196.026†	2927.9	3370.1	2557.4	ug/L	2557.4 ppb	11:37:27
2	Si 251.611†	155531.8	177117.5	5263.8	ug/L	5263.8 ppb	11:37:07
2	Sn 189.927†	2340.2	2663.4	480.56	ug/L	480.56 ppb	11:37:27
2	Sr 421.552†	77355.4	85633.9	512.08	ug/L	512.08 ppb	11:36:18
2	Ti 334.940†	269367.0	308842.1	511.85	ug/L	511.85 ppb	11:37:07
2	Tl 190.801†	1353.2	1579.7	462.15	ug/L	462.15 ppb	11:37:27
2	U 409.014†	13457.9	17951.4	491.29	ug/L	491.29 ppb	11:37:07
2	V 292.402†	66938.6	77798.8	506.92	ug/L	506.92 ppb	11:37:07
2	Zn 213.857†	53878.9	60769.5	484.27	ug/L	484.27 ppb	11:37:07
2	SiO2†	154326.5	175698.4	11189	ug/L	11189 ppb	11:38:04
3	Sc 361.383	753121.3	753121.3	86.774	%		11:37:33
3	Sc Radial	4947.8	4947.8	88.7	%		11:36:33
3	Y 371.029	616563.3	616563.3	84.524	%		11:37:33
3	Y RADIAL	5419.6	5419.6	89.74	%		11:36:33
3	Ag 328.068†	42451.5	48648.2	275.53	ug/L	275.53 ppb	11:37:33
3	Al 396.153Radial†	669785.4	754825.5	519840	ug/L	519840 ppb	11:36:28
3	As 188.979†	1063.9	1257.4	518.56	ug/L	518.56 ppb	11:37:53
3	B 249.677†	21521.5	25295.1	512.51	ug/L	512.51 ppb	11:37:33
3	Ba 233.527†	56818.0	65489.6	497.61	ug/L	497.61 ppb	11:37:33
3	Be 313.107†	578443.8	671275.7	242.00	ug/L	242.00 ppb	11:37:33
3	Ca 317.933Radial†	293749.8	331013.8	483110	ug/L	483110 ppb	11:36:28
3	Cd 226.502†	40771.4	47184.9	470.51	ug/L	470.51 ppb	11:37:33
3	Co 228.616†	20701.7	23930.6	448.82	ug/L	448.82 ppb	11:37:53
3	Cr 267.716†	39768.4	45744.0	483.00	ug/L	483.00 ppb	11:37:33
3	Cu 324.752†	169859.6	188992.6	558.72	ug/L	558.72 ppb	11:37:33
3	Fe 238.204 Radial†	18976.5	21375.0	191510	ug/L	191510 ppb	11:36:33
3	K 766.490 Radial†	32308.4	33669.2	5657.9	ug/L	5657.9 ppb	11:36:28
3	Mg 279.077 IEC†	13082.5	14741.0	495550	ug/L	495550 ppb	11:36:33
3	Mn 257.610†	394294.3	453874.5	490.90	ug/L	490.90 ppb	11:37:33
3	Mo 202.031†	6534.9	7512.6	491.66	ug/L	491.66 ppb	11:37:53
3	Na 589.592 Radial†	15175.1	18655.2	5653.6	ug/L	5653.6 ppb	11:36:33
3	Ni 231.604†	17057.9	19572.1	449.45	ug/L	449.45 ppb	11:37:53
3	P 214.914†	4154.4	4545.6	2477.7	ug/L	2477.7 ppb	11:37:53
3	Pb 220.353†	2759.8	3248.5	465.32	ug/L	465.32 ppb	11:37:53
3	S 181.975 Axial†	1869.6	2105.2	2679.0	ug/L	2679.0 ppb	11:37:53
3	Sb 206.836†	1520.7	1715.1	536.53	ug/L	536.53 ppb	11:37:53
3	Se 196.026†	2889.0	3356.2	2555.7	ug/L	2555.7 ppb	11:37:53
3	Si 251.611†	153939.2	176921.7	5257.9	ug/L	5257.9 ppb	11:37:33
3	Sn 189.927†	2327.8	2673.7	483.12	ug/L	483.12 ppb	11:37:53
3	Sr 421.552†	77374.4	87194.4	521.41	ug/L	521.41 ppb	11:36:28
3	Ti 334.940†	267159.7	309137.7	512.75	ug/L	512.75 ppb	11:37:33
3	Tl 190.801†	1350.3	1590.7	465.49	ug/L	465.49 ppb	11:37:53
3	U 409.014†	13410.7	18038.8	493.61	ug/L	493.61 ppb	11:37:33
3	V 292.402†	66385.9	77867.5	507.27	ug/L	507.27 ppb	11:37:33
3	Zn 213.857†	53341.8	60718.6	483.52	ug/L	483.52 ppb	11:37:33
3	SiO2†	156041.1	179301.1	11419	ug/L	11419 ppb	11:38:09

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	757382.0	87.264	%	0.4300				0.49%
Sc Radial	4990.6	89.5	%	0.80				0.89%
Y 371.029	620101.5	85.009	%	0.4338				0.51%
Y RADIAL	5430.1	89.92	%	0.593				0.66%
Ag 328.068†	48589.7	275.06	ug/L	0.465	275.06	ppb	0.465	0.17%
QC value within limits for Ag 328.068 Recovery = 110.02%								
Al 396.153Radial†	744732.3	512880	ug/L	6039.4	512880	ppb	6039.4	1.18%
QC value within limits for Al 396.153Radial Recovery = 102.58%								
As 188.979†	1242.7	512.74	ug/L	5.241	512.74	ppb	5.241	1.02%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	25253.5	511.75	ug/L	2.701	511.75	ppb	2.701	0.53%
QC value within limits for B 249.677 Recovery = 102.35%								
Ba 233.527†	65456.8	497.33	ug/L	0.434	497.33	ppb	0.434	0.09%
QC value within limits for Ba 233.527 Recovery = 99.47%								
Be 313.107†	671517.4	242.08	ug/L	0.152	242.08	ppb	0.152	0.06%
QC value within limits for Be 313.107 Recovery = 96.83%								

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Ca 317.933Radial†     326621.2      476700 ug/L        5699.8      476700 ppb         5699.8   1.20%
   QC value within limits for Ca 317.933Radial  Recovery = 95.34%
Cd 226.502†            47094.6      469.66 ug/L         0.734      469.66 ppb          0.734   0.16%
   QC value within limits for Cd 226.502  Recovery = 93.93%
Co 228.616†            23825.1      446.84 ug/L         1.777      446.84 ppb          1.777   0.40%
   QC value within limits for Co 228.616  Recovery = 89.37%
Cr 267.716†            45700.9      482.54 ug/L         0.577      482.54 ppb          0.577   0.12%
   QC value within limits for Cr 267.716  Recovery = 96.51%
Cu 324.752†           189258.5      559.44 ug/L         0.768      559.44 ppb          0.768   0.14%
   QC value within limits for Cu 324.752  Recovery = 111.89%
Fe 238.204 Radial†     21271.0      190580 ug/L         816.7      190580 ppb          816.7   0.43%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.29%
K 766.490 Radial†      33189.9      5577.3 ug/L         70.35      5577.3 ppb          70.35   1.26%
   QC value within limits for K 766.490 Radial  Recovery = 111.55%
Mg 279.077 IEC†        14674.3      493310 ug/L        2184.9      493310 ppb         2184.9   0.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.66%
Mn 257.610†           453503.4      490.45 ug/L         0.489      490.45 ppb          0.489   0.10%
   QC value within limits for Mn 257.610  Recovery = 98.09%
Mo 202.031†             7485.1      489.84 ug/L         1.955      489.84 ppb          1.955   0.40%
   QC value within limits for Mo 202.031  Recovery = 97.97%
Na 589.592 Radial†     18572.7      5628.6 ug/L         31.33      5628.6 ppb          31.33   0.56%
   QC value within limits for Na 589.592 Radial  Recovery = 112.57%
Ni 231.604†            19487.4      447.51 ug/L         1.739      447.51 ppb          1.739   0.39%
   QC value within limits for Ni 231.604  Recovery = 89.50%
P 214.914†              4525.5      2464.7 ug/L         11.55      2464.7 ppb          11.55   0.47%
   QC value within limits for P 214.914  Recovery = 98.59%
Pb 220.353†             3244.7      463.41 ug/L         1.722      463.41 ppb          1.722   0.37%
   QC value within limits for Pb 220.353  Recovery = 92.68%
S 181.975 Axial†        2082.4      2650.3 ug/L         26.93      2650.3 ppb          26.93   1.02%
   QC value within limits for S 181.975 Axial  Recovery = 106.01%
Sb 206.836†             1708.5      534.57 ug/L         3.789      534.57 ppb          3.789   0.71%
   QC value within limits for Sb 206.836  Recovery = 106.91%
Se 196.026†             3354.9      2551.1 ug/L          9.50      2551.1 ppb           9.50   0.37%
   QC value within limits for Se 196.026  Recovery = 102.04%
Si 251.611†           176905.7      5257.5 ug/L          6.53      5257.5 ppb           6.53   0.12%
   QC value within limits for Si 251.611  Recovery = 105.15%
Sn 189.927†             2659.2      480.10 ug/L         3.278      480.10 ppb          3.278   0.68%
   QC value within limits for Sn 189.927  Recovery = 96.02%
Sr 421.552†            86067.7      514.68 ug/L         5.884      514.68 ppb          5.884   1.14%
   QC value within limits for Sr 421.552  Recovery = 102.94%
Ti 334.940†           308920.4      512.07 ug/L         0.596      512.07 ppb          0.596   0.12%
   QC value within limits for Ti 334.940  Recovery = 102.41%
Tl 190.801†             1582.9      463.12 ug/L         2.059      463.12 ppb          2.059   0.44%
   QC value within limits for Tl 190.801  Recovery = 92.62%
U 409.014†             17934.4      490.73 ug/L         3.200      490.73 ppb          3.200   0.65%
   QC value within limits for U 409.014  Recovery = 98.15%
V 292.402†             77823.1      507.03 ug/L         0.203      507.03 ppb          0.203   0.04%
   QC value within limits for V 292.402  Recovery = 101.41%
Zn 213.857†            60721.1      483.72 ug/L         0.481      483.72 ppb          0.481   0.10%
   QC value within limits for Zn 213.857  Recovery = 96.74%
SiO2†                 177666.5       11315 ug/L         116.4       11315 ppb          116.4   1.03%
   QC value within limits for SiO2  Recovery = 105.80%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 12/11/2009 11:40:18
Data Type: Reprocessed on 12/11/2009 12:46:04

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	740552.4	740552.4	85.325	%			11:42:45
1	Sc Radial	4969.6	4969.6	89.1	%			11:42:16
1	Y 371.029	607165.9	607165.9	83.235	%			11:42:45
1	Y RADIAL	5424.0	5424.0	89.81	%			11:42:16
1	Ag 328.068†	-23489.1	-27802.9	-2.8641	ug/L	-2.8641	ppb	11:42:45
1	Al 396.153Radial†	644142.1	722747.2	497770	ug/L	497770	ppb	11:42:11
1	As 188.979†	-201.4	-204.8	-10.167	ug/L	-10.167	ppb	11:43:05
1	B 249.677†	1984.5	2819.0	0.8022	ug/L	0.8022	ppb	11:42:45
1	Ba 233.527†	-1613.5	-1879.9	2.5961	ug/L	2.5961	ppb	11:43:05
1	Be 313.107†	-11598.1	-8930.2	-3.2347	ug/L	-3.2347	ppb	11:42:45
1	Ca 317.933Radial†	284191.5	318839.1	465340	ug/L	465340	ppb	11:42:11
1	Cd 226.502†	3571.9	4385.1	0.8224	ug/L	0.8224	ppb	11:43:05
1	Co 228.616†	194.7	301.7	-0.7620	ug/L	-0.7620	ppb	11:43:05
1	Cr 267.716†	42.7	-36.0	2.9304	ug/L	2.9304	ppb	11:43:05
1	Cu 324.752†	1283.7	-5253.3	7.5286	ug/L	7.5286	ppb	11:42:45
1	Fe 238.204 Radial†	44449.7	49861.6	446710	ug/L	446710	ppb	11:42:16
1	K 766.490 Radial†	3284.2	945.3	-49.160	ug/L	-49.160	ppb	11:42:11
1	Mg 279.077 IEC†	12857.3	14423.7	484660	ug/L	484660	ppb	11:42:16
1	Mn 257.610†	-23452.1	-28005.7	5.8356	ug/L	5.8356	ppb	11:42:45
1	Mo 202.031†	-533.6	-643.7	-9.2781	ug/L	-9.2781	ppb	11:43:05
1	Na 589.592 Radial†	1542374.9	1732061.6	524920	ug/L	524920	ppb	11:42:11
1	Ni 231.604†	297.4	262.6	6.0309	ug/L	6.0309	ppb	11:43:05
1	P 214.914†	601.0	462.3	67.963	ug/L	67.963	ppb	11:43:05
1	Pb 220.353†	-588.5	-621.7	5.3514	ug/L	5.3514	ppb	11:43:05
1	S 181.975 Axial†	129.4	102.3	37.240	ug/L	37.240	ppb	11:43:05
1	Sb 206.836†	52.1	23.7	-1.0104	ug/L	-1.0104	ppb	11:43:05
1	Se 196.026†	-2373.2	-2754.5	-102.71	ug/L	-102.71	ppb	11:43:05
1	Si 251.611†	-568.9	-1148.5	-33.299	ug/L	-33.299	ppb	11:43:05
1	Sn 189.927†	-412.7	-492.5	-24.674	ug/L	-24.674	ppb	11:43:05
1	Sr 421.552†	806.9	905.5	1.1481	ug/L	1.1481	ppb	11:42:16
1	Ti 334.940†	-8809.8	-9068.7	3.4577	ug/L	3.4577	ppb	11:42:45
1	Tl 190.801†	-125.0	-111.9	-18.286	ug/L	-18.286	ppb	11:43:05
1	U 409.014†	434877.4	512253.5	14671	ug/L	14671	ppb	11:42:45
1	V 292.402†	3110.2	5007.9	4.3404	ug/L	4.3404	ppb	11:42:45
1	Zn 213.857†	6282.7	6609.4	-2.4207	ug/L	-2.4207	ppb	11:43:05
1	SiO2†	-560.3	-1181.2	-73.425	ug/L	-73.425	ppb	11:44:02
2	Sc 361.383	731220.0	731220.0	84.250	%			11:43:10
2	Sc Radial	4811.2	4811.2	86.3	%			11:42:27
2	Y 371.029	599802.7	599802.7	82.226	%			11:43:10
2	Y RADIAL	5273.6	5273.6	87.32	%			11:42:27
2	Ag 328.068†	-22989.1	-27560.7	-0.4938	ug/L	-0.4938	ppb	11:43:10
2	Al 396.153Radial†	654324.4	758342.3	522280	ug/L	522280	ppb	11:42:22
2	As 188.979†	-189.0	-193.1	-4.8776	ug/L	-4.8776	ppb	11:43:31
2	B 249.677†	1680.6	2487.9	-6.9076	ug/L	-6.9076	ppb	11:43:10
2	Ba 233.527†	-1578.3	-1862.2	2.9075	ug/L	2.9075	ppb	11:43:31
2	Be 313.107†	-11555.5	-9053.0	-3.2781	ug/L	-3.2781	ppb	11:43:10
2	Ca 317.933Radial†	287901.6	333636.9	486940	ug/L	486940	ppb	11:42:22
2	Cd 226.502†	3576.5	4444.1	0.9420	ug/L	0.9420	ppb	11:43:31
2	Co 228.616†	205.6	317.5	-0.5340	ug/L	-0.5340	ppb	11:43:31
2	Cr 267.716†	39.3	-39.4	2.9922	ug/L	2.9922	ppb	11:43:31
2	Cu 324.752†	1345.1	-5161.3	8.0471	ug/L	8.0471	ppb	11:43:10
2	Fe 238.204 Radial†	43507.1	50411.2	451630	ug/L	451630	ppb	11:42:27
2	K 766.490 Radial†	3352.4	1145.6	-25.351	ug/L	-25.351	ppb	11:42:22
2	Mg 279.077 IEC†	12571.2	14567.0	489470	ug/L	489470	ppb	11:42:27
2	Mn 257.610†	-23090.5	-27927.3	6.3199	ug/L	6.3199	ppb	11:43:10
2	Mo 202.031†	-519.0	-634.4	-8.3347	ug/L	-8.3347	ppb	11:43:31
2	Na 589.592 Radial†	1563595.8	1813630.2	549640	ug/L	549640	ppb	11:42:22
2	Ni 231.604†	306.0	277.3	6.3685	ug/L	6.3685	ppb	11:43:31

2	P 214.914†	575.4	440.9	60.292 ug/L	60.292 ppb	11:43:31
2	Pb 220.353†	-591.1	-633.6	9.1208 ug/L	9.1208 ppb	11:43:31
2	S 181.975 Axial†	121.8	95.2	23.018 ug/L	23.018 ppb	11:43:31
2	Sb 206.836†	70.4	46.2	5.5298 ug/L	5.5298 ppb	11:43:31
2	Se 196.026†	-2383.3	-2802.0	-110.63 ug/L	-110.63 ppb	11:43:31
2	Si 251.611†	-547.0	-1131.0	-32.801 ug/L	-32.801 ppb	11:43:31
2	Sn 189.927†	-404.0	-488.4	-21.688 ug/L	-21.688 ppb	11:43:31
2	Sr 421.552†	781.2	905.6	0.9485 ug/L	0.9485 ppb	11:42:27
2	Ti 334.940†	-8483.5	-8813.2	5.0026 ug/L	5.0026 ppb	11:43:10
2	Tl 190.801†	-107.4	-92.9	-12.247 ug/L	-12.247 ppb	11:43:31
2	U 409.014†	428397.3	511066.8	14637 ug/L	14637 ppb	11:43:10
2	V 292.402†	2914.2	4821.7	2.4034 ug/L	2.4034 ppb	11:43:10
2	Zn 213.857†	6285.7	6707.0	-2.2191 ug/L	-2.2191 ppb	11:43:31
2	SiO2†	-609.5	-1247.9	-77.734 ug/L	-77.734 ppb	11:44:07
3	Sc 361.383	733959.0	733959.0	84.566 %		11:43:36
3	Sc Radial	4847.4	4847.4	86.9 %		11:42:38
3	Y 371.029	603107.7	603107.7	82.679 %		11:43:36
3	Y RADIAL	5267.1	5267.1	87.22 %		11:42:38
3	Ag 328.068†	-23001.8	-27473.9	0.0752 ug/L	0.0752 ppb	11:43:36
3	Al 396.153Radial†	642180.4	738704.7	508760 ug/L	508760 ppb	11:42:33
3	As 188.979†	-201.1	-206.5	-10.095 ug/L	-10.095 ppb	11:43:56
3	B 249.677†	1627.2	2417.4	-8.3983 ug/L	-8.3983 ppb	11:43:36
3	Ba 233.527†	-1605.5	-1887.4	2.7148 ug/L	2.7148 ppb	11:43:56
3	Be 313.107†	-11402.2	-8820.6	-3.1955 ug/L	-3.1955 ppb	11:43:36
3	Ca 317.933Radial†	282744.6	325210.7	474640 ug/L	474640 ppb	11:42:33
3	Cd 226.502†	3580.9	4433.3	0.8396 ug/L	0.8396 ppb	11:43:56
3	Co 228.616†	208.9	320.5	-0.4742 ug/L	-0.4742 ppb	11:43:56
3	Cr 267.716†	-1.4	-87.7	2.4940 ug/L	2.4940 ppb	11:43:56
3	Cu 324.752†	1152.4	-5395.1	7.3634 ug/L	7.3634 ppb	11:43:36
3	Fe 238.204 Radial†	43826.3	50401.4	451550 ug/L	451550 ppb	11:42:38
3	K 766.490 Radial†	3322.7	1082.4	-30.604 ug/L	-30.604 ppb	11:42:33
3	Mg 279.077 IEC†	12659.1	14559.3	489210 ug/L	489210 ppb	11:42:38
3	Mn 257.610†	-23139.4	-27882.8	6.3632 ug/L	6.3632 ppb	11:43:36
3	Mo 202.031†	-519.4	-632.6	-8.2254 ug/L	-8.2254 ppb	11:43:56
3	Na 589.592 Radial†	1537159.2	1769674.9	536320 ug/L	536320 ppb	11:42:33
3	Ni 231.604†	313.0	284.2	6.5265 ug/L	6.5265 ppb	11:43:56
3	P 214.914†	574.5	437.3	53.897 ug/L	53.897 ppb	11:43:56
3	Pb 220.353†	-582.2	-620.5	7.5575 ug/L	7.5575 ppb	11:43:56
3	S 181.975 Axial†	122.3	95.2	25.688 ug/L	25.688 ppb	11:43:56
3	Sb 206.836†	69.5	44.8	5.4590 ug/L	5.4590 ppb	11:43:56
3	Se 196.026†	-2374.6	-2781.2	-101.23 ug/L	-101.23 ppb	11:43:56
3	Si 251.611†	-568.1	-1153.6	-33.468 ug/L	-33.468 ppb	11:43:56
3	Sn 189.927†	-412.6	-496.7	-24.312 ug/L	-24.312 ppb	11:43:56
3	Sr 421.552†	811.0	933.0	1.2279 ug/L	1.2279 ppb	11:42:38
3	Ti 334.940†	-8748.4	-9088.9	3.9399 ug/L	3.9399 ppb	11:43:36
3	Tl 190.801†	-111.6	-97.4	-13.906 ug/L	-13.906 ppb	11:43:56
3	U 409.014†	429086.3	509984.0	14606 ug/L	14606 ppb	11:43:36
3	V 292.402†	2838.4	4719.2	1.6707 ug/L	1.6707 ppb	11:43:36
3	Zn 213.857†	6258.4	6646.8	-2.7197 ug/L	-2.7197 ppb	11:43:56
3	SiO2†	-683.4	-1332.6	-83.127 ug/L	-83.127 ppb	11:44:12

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	735243.8	84.714	%	0.5527				0.65%
Sc Radial	4876.1	87.5	%	1.49				1.70%
Y 371.029	603358.7	82.713	%	0.5056				0.61%
Y RADIAL	5321.5	88.12	%	1.470				1.67%
Ag 328.068†	-27612.5	-1.0942	ug/L	1.55893	-1.0942	ppb	1.55893	142.47%
Al 396.153Radial†	739931.4	509600	ug/L	12279.1	509600	ppb	12279.1	2.41%
QC value within limits for Al 396.153Radial Recovery = 101.92%								
As 188.979†	-201.5	-8.3797	ug/L	3.03311	-8.3797	ppb	3.03311	36.20%
B 249.677†	2574.8	-4.8346	ug/L	4.93817	-4.8346	ppb	4.93817	102.14%
Ba 233.527†	-1876.5	2.7395	ug/L	0.15716	2.7395	ppb	0.15716	5.74%
Be 313.107†	-8934.6	-3.2361	ug/L	0.04133	-3.2361	ppb	0.04133	1.28%
Ca 317.933Radial†	325895.6	475640	ug/L	10833.3	475640	ppb	10833.3	2.28%
QC value within limits for Ca 317.933Radial Recovery = 95.13%								
Cd 226.502†	4420.8	0.8680	ug/L	0.06461	0.8680	ppb	0.06461	7.44%
Co 228.616†	313.2	-0.5900	ug/L	0.15184	-0.5900	ppb	0.15184	25.73%
Cr 267.716†	-54.4	2.8055	ug/L	0.27155	2.8055	ppb	0.27155	9.68%

Cu 324.752†	-5269.9	7.6464	ug/L	0.35675	7.6464	ppb	0.35675	4.67%
Fe 238.204 Radial†	50224.7	449960	ug/L	2817.5	449960	ppb	2817.5	0.63%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.99%								
K 766.490 Radial†	1057.8	-35.039	ug/L	12.5088	-35.039	ppb	12.5088	35.70%
Mg 279.077 IEC†	14516.7	487780	ug/L	2708.0	487780	ppb	2708.0	0.56%
QC value within limits for Mg 279.077 IEC Recovery = 97.56%								
Mn 257.610†	-27938.6	6.1729	ug/L	0.29292	6.1729	ppb	0.29292	4.75%
Mo 202.031†	-636.9	-8.6128	ug/L	0.57883	-8.6128	ppb	0.57883	6.72%
Na 589.592 Radial†	1771788.9	536960	ug/L	12372.5	536960	ppb	12372.5	2.30%
QC value within limits for Na 589.592 Radial Recovery = 107.39%								
Ni 231.604†	274.7	6.3086	ug/L	0.25318	6.3086	ppb	0.25318	4.01%
P 214.914†	446.9	60.717	ug/L	7.0429	60.717	ppb	7.0429	11.60%
Pb 220.353†	-625.3	7.3432	ug/L	1.89385	7.3432	ppb	1.89385	25.79%
S 181.975 Axial†	97.6	28.649	ug/L	7.5591	28.649	ppb	7.5591	26.39%
Sb 206.836†	38.2	3.3262	ug/L	3.75571	3.3262	ppb	3.75571	112.91%
Se 196.026†	-2779.3	-104.85	ug/L	5.054	-104.85	ppb	5.054	4.82%
Si 251.611†	-1144.3	-33.189	ug/L	0.3467	-33.189	ppb	0.3467	1.04%
Sn 189.927†	-492.6	-23.558	ug/L	1.6298	-23.558	ppb	1.6298	6.92%
Sr 421.552†	914.7	1.1082	ug/L	0.14389	1.1082	ppb	0.14389	12.98%
Ti 334.940†	-8990.3	4.1334	ug/L	0.79042	4.1334	ppb	0.79042	19.12%
Tl 190.801†	-100.8	-14.813	ug/L	3.1200	-14.813	ppb	3.1200	21.06%
U 409.014†	511101.5	14638	ug/L	32.9	14638	ppb	32.9	0.23%
QC value within limits for U 409.014 Recovery = 97.59%								
V 292.402†	4849.6	2.8048	ug/L	1.37938	2.8048	ppb	1.37938	49.18%
Zn 213.857†	6654.4	-2.4532	ug/L	0.25188	-2.4532	ppb	0.25188	10.27%
SiO2†	-1253.9	-78.095	ug/L	4.8613	-78.095	ppb	4.8613	6.22%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 12/11/2009 11:46:21
Data Type: Reprocessed on 12/11/2009 12:46:06

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	837251.0	837251.0	96.467	%			11:49:56
1	Sc Radial	5347.5	5347.5	95.9	%			11:48:19
1	Y 371.029	683255.2	683255.2	93.666	%			11:49:56
1	Y RADIAL	5762.6	5762.6	95.42	%			11:48:19
1	Ag 328.068†	-8049.0	-8617.8	0.3257	ug/L	0.3257	ppb	11:50:01
1	Al 396.153Radial†	621.7	683.6	45.489	ug/L	45.489	ppb	11:48:19
1	As 188.979†	25286.5	26243.9	10217	ug/L	10217	ppb	11:50:01
1	B 249.677†	225772.5	234534.8	4974.0	ug/L	4974.0	ppb	11:49:56
1	Ba 233.527†	1845481.4	1913084.5	14317	ug/L	14317	ppb	11:49:56
1	Be 313.107†	7686962.2	7973164.7	2882.6	ug/L	2882.6	ppb	11:49:50
1	Ca 317.933Radial†	39.3	24.1	35.124	ug/L	35.124	ppb	11:48:39
1	Cd 226.502†	906122.1	939508.4	9750.1	ug/L	9750.1	ppb	11:49:56
1	Co 228.616†	486152.4	504031.5	9507.2	ug/L	9507.2	ppb	11:50:01
1	Cr 267.716†	2213381.5	2294361.9	24034	ug/L	24034	ppb	11:49:56
1	Cu 324.752†	6710633.2	6949656.6	20186	ug/L	20186	ppb	11:49:50
1	Fe 238.204 Radial†	-20.8	-31.6	17.073	ug/L	17.073	ppb	11:48:39
1	K 766.490 Radial†	1732609.8	1803834.1	302550	ug/L	302550	ppb	11:48:14
1	Mg 279.077 IEC†	-4.0	-6.0	-1.3443	ug/L	-1.3443	ppb	11:48:39
1	Mn 257.610†	8551310.9	8863987.9	9394.3	ug/L	9394.3	ppb	11:49:50
1	Mo 202.031†	150610.7	156108.5	9934.2	ug/L	9934.2	ppb	11:50:01
1	Na 589.592 Radial†	-779.4	741.4	224.70	ug/L	224.70	ppb	11:48:19
1	Ni 231.604†	412809.2	427842.6	9825.2	ug/L	9825.2	ppb	11:49:56
1	P 214.914†	33067.1	34036.2	15914	ug/L	15914	ppb	11:50:01
1	Pb 220.353†	211539.7	219355.4	24564	ug/L	24564	ppb	11:50:01
1	S 181.975 Axial†	39022.2	40402.1	53378	ug/L	53378	ppb	11:50:01
1	Sb 206.836†	32817.6	33982.2	10540	ug/L	10540	ppb	11:50:01
1	Se 196.026†	17638.7	18311.5	10332	ug/L	10332	ppb	11:50:01
1	Si 251.611†	1577623.0	1634922.7	48388	ug/L	48388	ppb	11:49:56
1	Sn 189.927†	63790.0	66117.5	10636	ug/L	10636	ppb	11:50:01
1	Sr 421.552†	1570688.8	1637740.6	9877.6	ug/L	9877.6	ppb	11:48:14
1	Ti 334.940†	6094708.6	6319187.5	9965.8	ug/L	9965.8	ppb	11:49:50
1	Tl 190.801†	33633.3	34899.7	9893.2	ug/L	9893.2	ppb	11:50:01
1	U 409.014†	-1295.4	1241.1	-10.671	ug/L	-10.671	ppb	11:50:01
1	V 292.402†	1453895.5	1508508.1	10159	ug/L	10159	ppb	11:49:56
1	Zn 213.857†	1587837.1	1645238.8	14065	ug/L	14065	ppb	11:49:56
1	SiO2†	1596693.8	1654649.3	104940	ug/L	104940	ppb	11:50:49
2	Sc 361.383	842169.8	842169.8	97.034	%			11:50:16
2	Sc Radial	5370.5	5370.5	96.3	%			11:48:49
2	Y 371.029	688325.6	688325.6	94.361	%			11:50:16
2	Y RADIAL	5799.1	5799.1	96.03	%			11:48:49
2	Ag 328.068†	-8067.9	-8588.6	0.4127	ug/L	0.4127	ppb	11:50:21
2	Al 396.153Radial†	619.6	678.6	48.109	ug/L	48.109	ppb	11:48:49
2	As 188.979†	24976.6	25771.4	10035	ug/L	10035	ppb	11:50:21
2	B 249.677†	227113.3	234549.6	4974.7	ug/L	4974.7	ppb	11:50:16
2	Ba 233.527†	1849328.5	1905875.6	14263	ug/L	14263	ppb	11:50:16
2	Be 313.107†	7743416.3	7984803.5	2886.8	ug/L	2886.8	ppb	11:50:10
2	Ca 317.933Radial†	37.1	21.6	31.569	ug/L	31.569	ppb	11:49:09
2	Cd 226.502†	906906.5	934830.6	9701.6	ug/L	9701.6	ppb	11:50:16
2	Co 228.616†	482505.6	497329.7	9380.4	ug/L	9380.4	ppb	11:50:21
2	Cr 267.716†	2219678.0	2287449.9	23962	ug/L	23962	ppb	11:50:16
2	Cu 324.752†	6770226.2	6970441.5	20246	ug/L	20246	ppb	11:50:10
2	Fe 238.204 Radial†	-22.3	-33.0	0.3162	ug/L	0.3162	ppb	11:49:09
2	K 766.490 Radial†	1752650.9	1816897.6	304740	ug/L	304740	ppb	11:48:44
2	Mg 279.077 IEC†	-2.7	-4.8	38.628	ug/L	38.628	ppb	11:49:09
2	Mn 257.610†	8593488.9	8855681.0	9385.5	ug/L	9385.5	ppb	11:50:10
2	Mo 202.031†	149327.0	153873.7	9792.0	ug/L	9792.0	ppb	11:50:21
2	Na 589.592 Radial†	-789.4	734.5	222.61	ug/L	222.61	ppb	11:48:49
2	Ni 231.604†	413677.8	426238.5	9788.4	ug/L	9788.4	ppb	11:50:16

2	P 214.914†	32679.1	33436.1	15567	ug/L	15567 ppb	11:50:21
2	Pb 220.353†	209886.8	216371.2	24230	ug/L	24230 ppb	11:50:21
2	S 181.975 Axial†	38581.7	39711.8	52466	ug/L	52466 ppb	11:50:21
2	Sb 206.836†	32499.6	33455.8	10369	ug/L	10369 ppb	11:50:21
2	Se 196.026†	17411.4	17970.5	10140	ug/L	10140 ppb	11:50:21
2	Si 251.611†	1584599.5	1632560.7	48320	ug/L	48320 ppb	11:50:16
2	Sn 189.927†	63289.6	65215.5	10491	ug/L	10491 ppb	11:50:21
2	Sr 421.552†	1595897.7	1656893.1	9993.2	ug/L	9993.2 ppb	11:48:44
2	Ti 334.940†	6138412.0	6327326.1	9978.7	ug/L	9978.7 ppb	11:50:10
2	Tl 190.801†	33440.6	34497.5	9780.6	ug/L	9780.6 ppb	11:50:21
2	U 409.014†	-1543.1	993.7	-17.644	ug/L	-17.644 ppb	11:50:21
2	V 292.402†	1460677.7	1506694.9	10145	ug/L	10145 ppb	11:50:16
2	Zn 213.857†	1590430.7	1638298.1	14006	ug/L	14006 ppb	11:50:16
2	SiO2†	1605901.9	1654471.6	104930	ug/L	104930 ppb	11:50:56
3	Sc 361.383	837288.5	837288.5	96.471	%		11:50:36
3	Sc Radial	5294.4	5294.4	95.0	%		11:49:20
3	Y 371.029	684764.8	684764.8	93.873	%		11:50:36
3	Y RADIAL	5705.6	5705.6	94.48	%		11:49:20
3	Ag 328.068†	-8049.9	-8618.4	0.2868	ug/L	0.2868 ppb	11:50:41
3	Al 396.153Radial†	638.7	708.0	63.575	ug/L	63.575 ppb	11:49:20
3	As 188.979†	25083.6	26032.4	10135	ug/L	10135 ppb	11:50:41
3	B 249.677†	225219.1	233950.7	4961.7	ug/L	4961.7 ppb	11:50:36
3	Ba 233.527†	1838531.9	1905795.1	14263	ug/L	14263 ppb	11:50:36
3	Be 313.107†	7707648.1	7994250.8	2890.2	ug/L	2890.2 ppb	11:50:29
3	Ca 317.933Radial†	37.4	22.5	32.782	ug/L	32.782 ppb	11:49:40
3	Cd 226.502†	902023.4	935217.7	9705.6	ug/L	9705.6 ppb	11:50:36
3	Co 228.616†	484907.3	502718.3	9482.3	ug/L	9482.3 ppb	11:50:41
3	Cr 267.716†	2209225.0	2289950.7	23988	ug/L	23988 ppb	11:50:36
3	Cu 324.752†	6725933.8	6965205.7	20231	ug/L	20231 ppb	11:50:29
3	Fe 238.204 Radial†	-23.4	-34.5	-10.387	ug/L	-10.387 ppb	11:49:40
3	K 766.490 Radial†	1724455.2	1813374.3	304150	ug/L	304150 ppb	11:49:15
3	Mg 279.077 IEC†	-3.7	-5.8	5.8542	ug/L	5.8542 ppb	11:49:40
3	Mn 257.610†	8548946.0	8861140.0	9391.3	ug/L	9391.3 ppb	11:50:29
3	Mo 202.031†	150164.3	155638.8	9904.3	ug/L	9904.3 ppb	11:50:41
3	Na 589.592 Radial†	-873.1	634.6	192.33	ug/L	192.33 ppb	11:49:20
3	Ni 231.604†	411099.0	426050.8	9784.0	ug/L	9784.0 ppb	11:50:36
3	P 214.914†	32871.0	33831.4	15792	ug/L	15792 ppb	11:50:41
3	Pb 220.353†	210969.1	218754.1	24497	ug/L	24497 ppb	11:50:41
3	S 181.975 Axial†	38817.6	40188.1	53096	ug/L	53096 ppb	11:50:41
3	Sb 206.836†	32632.9	33789.2	10478	ug/L	10478 ppb	11:50:41
3	Se 196.026†	17505.7	18172.8	10254	ug/L	10254 ppb	11:50:41
3	Si 251.611†	1572697.9	1629744.3	48234	ug/L	48234 ppb	11:50:36
3	Sn 189.927†	63614.8	65933.0	10606	ug/L	10606 ppb	11:50:41
3	Sr 421.552†	1564038.8	1647171.2	9934.5	ug/L	9934.5 ppb	11:49:15
3	Ti 334.940†	6103807.6	6328336.6	9980.3	ug/L	9980.3 ppb	11:50:29
3	Tl 190.801†	33596.9	34860.4	9882.4	ug/L	9882.4 ppb	11:50:41
3	U 409.014†	-1533.3	994.6	-17.667	ug/L	-17.667 ppb	11:50:41
3	V 292.402†	1452717.8	1507219.9	10150	ug/L	10150 ppb	11:50:36
3	Zn 213.857†	1581952.4	1639065.2	14013	ug/L	14013 ppb	11:50:36
3	SiO2†	1590163.2	1647805.7	104500	ug/L	104500 ppb	11:51:03

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	838903.1	96.657	%	0.3260				0.34%
Sc Radial	5337.5	95.7	%	0.70				0.73%
Y 371.029	685448.5	93.967	%	0.3569				0.38%
Y RADIAL	5755.8	95.31	%	0.780				0.82%
Ag 328.068†	-8608.3	0.3418	ug/L	0.06447	0.3418	ppb	0.06447	18.86%
Al 396.153Radial†	690.1	52.391	ug/L	9.7738	52.391	ppb	9.7738	18.66%
As 188.979†	26015.9	10129	ug/L	91.3	10129	ppb	91.3	0.90%
QC value within limits for As 188.979 Recovery = 101.29%								
B 249.677†	234345.0	4970.1	ug/L	7.34	4970.1	ppb	7.34	0.15%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	1908251.7	14281	ug/L	31.3	14281	ppb	31.3	0.22%
QC value within limits for Ba 233.527 Recovery = 95.21%								
Be 313.107†	7984073.0	2886.5	ug/L	3.81	2886.5	ppb	3.81	0.13%
QC value within limits for Be 313.107 Recovery = 96.22%								
Ca 317.933Radial†	22.7	33.158	ug/L	1.8072	33.158	ppb	1.8072	5.45%
Cd 226.502†	936518.9	9719.1	ug/L	26.94	9719.1	ppb	26.94	0.28%

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   QC value within limits for Cd 226.502  Recovery = 97.19%
Co 228.616†          501359.9      9456.7 ug/L        67.18      9456.7 ppb         67.18   0.71%
   QC value within limits for Co 228.616  Recovery = 94.57%
Cr 267.716†         2290587.5       23995 ug/L         36.6       23995 ppb          36.6   0.15%
   QC value within limits for Cr 267.716  Recovery = 95.98%
Cu 324.752†         6961767.9       20221 ug/L         31.4       20221 ppb          31.4   0.16%
   QC value within limits for Cu 324.752  Recovery = 101.11%
Fe 238.204 Radial†      -33.0      2.3340 ug/L     13.84073      2.3340 ppb      13.84073 592.99%
K 766.490 Radial†   1811368.7      303810 ug/L       1133.7      303810 ppb        1133.7   0.37%
   QC value within limits for K 766.490 Radial  Recovery = 101.27%
Mg 279.077 IEC†          -5.5      14.379 ug/L      21.3060      14.379 ppb      21.3060 148.17%
Mn 257.610†         8860269.6      9390.4 ug/L         4.47      9390.4 ppb         4.47   0.05%
   QC value within limits for Mn 257.610  Recovery = 93.90%
Mo 202.031†          155207.0      9876.9 ug/L        74.99      9876.9 ppb        74.99   0.76%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†      703.5      213.21 ug/L       18.115      213.21 ppb       18.115   8.50%
Ni 231.604†          426710.6      9799.2 ug/L        22.61      9799.2 ppb        22.61   0.23%
   QC value within limits for Ni 231.604  Recovery = 97.99%
P 214.914†            33767.9       15758 ug/L        175.9       15758 ppb        175.9   1.12%
   QC value within limits for P 214.914  Recovery = 105.05%
Pb 220.353†          218160.3       24430 ug/L        176.9       24430 ppb        176.9   0.72%
   QC value within limits for Pb 220.353  Recovery = 97.72%
S 181.975 Axial†      40100.6       52980 ug/L        466.9       52980 ppb        466.9   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 105.96%
Sb 206.836†           33742.4       10462 ug/L         86.2       10462 ppb         86.2   0.82%
   QC value within limits for Sb 206.836  Recovery = 104.62%
Se 196.026†           18151.6       10242 ug/L         96.7       10242 ppb         96.7   0.94%
   QC value within limits for Se 196.026  Recovery = 102.42%
Si 251.611†         1632409.3       48314 ug/L         77.2       48314 ppb         77.2   0.16%
   QC value within limits for Si 251.611  Recovery = 96.63%
Sn 189.927†           65755.4       10578 ug/L         76.7       10578 ppb         76.7   0.72%
   QC value within limits for Sn 189.927  Recovery = 105.78%
Sr 421.552†         1647268.3      9935.1 ug/L        57.76      9935.1 ppb        57.76   0.58%
   QC value within limits for Sr 421.552  Recovery = 99.35%
Ti 334.940†         6324950.1      9974.9 ug/L         7.93      9974.9 ppb         7.93   0.08%
   QC value within limits for Ti 334.940  Recovery = 99.75%
Tl 190.801†           34752.5      9852.1 ug/L        62.12      9852.1 ppb        62.12   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             1076.5     -15.327 ug/L       4.0323     -15.327 ppb       4.0323  26.31%
V 292.402†          1507474.3       10151 ug/L          7.1       10151 ppb          7.1   0.07%
   QC value within limits for V 292.402  Recovery = 101.51%
Zn 213.857†         1640867.3       14028 ug/L         32.6       14028 ppb         32.6   0.23%
   QC value within limits for Zn 213.857  Recovery = 93.52%
SiO2†               1652308.8      104790 ug/L        250.2      104790 ppb        250.2   0.24%
   QC value within limits for SiO2  Recovery = 97.94%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 11:53:12
Data Type: Reprocessed on 12/11/2009 12:46:07

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	863964.4	863964.4	99.545	%			11:56:22
1	Sc Radial	5504.0	5504.0	98.7	%			11:55:04
1	Y 371.029	714434.9	714434.9	97.941	%			11:56:22
1	Y RADIAL	5955.5	5955.5	98.61	%			11:55:04
1	Ag 328.068†	111593.8	111830.1	508.99	ug/L	508.99	ppb	11:56:27
1	Al 396.153Radial†	7082.6	7210.2	4944.1	ug/L	4944.1	ppb	11:55:04
1	As 188.979†	1327.3	1364.6	531.23	ug/L	531.23	ppb	11:56:47
1	B 249.677†	24139.7	24743.3	525.33	ug/L	525.33	ppb	11:56:27
1	Ba 233.527†	66828.8	67145.6	503.03	ug/L	503.03	ppb	11:56:27
1	Be 313.107†	1371508.7	1382444.2	497.37	ug/L	497.37	ppb	11:56:22
1	Ca 317.933Radial†	3415.6	3443.2	5025.3	ug/L	5025.3	ppb	11:55:24
1	Cd 226.502†	48442.8	48863.3	506.57	ug/L	506.57	ppb	11:56:27
1	Co 228.616†	26549.5	26744.4	504.59	ug/L	504.59	ppb	11:56:27
1	Cr 267.716†	47819.0	47951.7	502.75	ug/L	502.75	ppb	11:56:27
1	Cu 324.752†	177055.2	171107.1	497.26	ug/L	497.26	ppb	11:56:27
1	Fe 238.204 Radial†	580.6	578.3	5196.7	ug/L	5196.7	ppb	11:55:24
1	K 766.490 Radial†	35101.9	32819.8	5497.4	ug/L	5497.4	ppb	11:55:04
1	Mg 279.077 IEC†	157.0	157.1	5288.6	ug/L	5288.6	ppb	11:55:24
1	Mn 257.610†	468210.9	469832.1	498.36	ug/L	498.36	ppb	11:56:22
1	Mo 202.031†	7925.6	7943.4	505.86	ug/L	505.86	ppb	11:56:47
1	Na 589.592 Radial†	32449.4	34426.4	10433	ug/L	10433	ppb	11:55:04
1	Ni 231.604†	21952.5	21967.0	504.45	ug/L	504.45	ppb	11:56:27
1	P 214.914†	4693.5	4473.0	2422.3	ug/L	2422.3	ppb	11:56:47
1	Pb 220.353†	4391.9	4480.0	503.04	ug/L	503.04	ppb	11:56:47
1	S 181.975 Axial†	829.8	784.2	1035.1	ug/L	1035.1	ppb	11:56:47
1	Sb 206.836†	1666.9	1637.2	524.33	ug/L	524.33	ppb	11:56:47
1	Se 196.026†	864.2	895.0	521.77	ug/L	521.77	ppb	11:56:47
1	Si 251.611†	86606.4	86520.8	2564.7	ug/L	2564.7	ppb	11:56:27
1	Sn 189.927†	3156.9	3162.5	509.33	ug/L	509.33	ppb	11:56:47
1	Sr 421.552†	83999.5	85094.4	513.18	ug/L	513.18	ppb	11:55:04
1	Ti 334.940†	310688.6	313365.8	494.49	ug/L	494.49	ppb	11:56:27
1	Tl 190.801†	1750.4	1792.9	508.30	ug/L	508.30	ppb	11:56:47
1	U 409.014†	14719.6	17370.9	497.80	ug/L	497.80	ppb	11:56:27
1	V 292.402†	73286.6	74984.5	505.70	ug/L	505.70	ppb	11:56:27
1	Zn 213.857†	59525.8	59044.2	503.41	ug/L	503.41	ppb	11:56:27
1	SiO2†	86672.4	86544.3	5497.3	ug/L	5497.3	ppb	11:57:54
2	Sc 361.383	867146.6	867146.6	99.911	%			11:56:53
2	Sc Radial	5452.5	5452.5	97.8	%			11:55:30
2	Y 371.029	716354.7	716354.7	98.204	%			11:56:53
2	Y RADIAL	5873.6	5873.6	97.26	%			11:55:30
2	Ag 328.068†	112371.5	112197.2	510.67	ug/L	510.67	ppb	11:56:58
2	Al 396.153Radial†	7048.5	7243.2	4966.9	ug/L	4966.9	ppb	11:55:30
2	As 188.979†	1324.7	1357.2	528.38	ug/L	528.38	ppb	11:57:18
2	B 249.677†	24316.6	24831.4	527.20	ug/L	527.20	ppb	11:56:58
2	Ba 233.527†	67384.3	67455.2	505.35	ug/L	505.35	ppb	11:56:58
2	Be 313.107†	1375274.0	1381156.7	496.92	ug/L	496.92	ppb	11:56:53
2	Ca 317.933Radial†	3411.4	3471.7	5066.9	ug/L	5066.9	ppb	11:55:50
2	Cd 226.502†	48848.4	49090.6	508.93	ug/L	508.93	ppb	11:56:58
2	Co 228.616†	26707.2	26804.4	505.71	ug/L	505.71	ppb	11:56:58
2	Cr 267.716†	48238.9	48195.7	505.31	ug/L	505.31	ppb	11:56:58
2	Cu 324.752†	178605.9	172006.5	499.88	ug/L	499.88	ppb	11:56:58
2	Fe 238.204 Radial†	580.4	583.6	5244.8	ug/L	5244.8	ppb	11:55:50
2	K 766.490 Radial†	34520.6	32561.4	5454.1	ug/L	5454.1	ppb	11:55:30
2	Mg 279.077 IEC†	159.9	161.6	5440.3	ug/L	5440.3	ppb	11:55:50
2	Mn 257.610†	469700.5	469597.0	498.11	ug/L	498.11	ppb	11:56:53
2	Mo 202.031†	7936.3	7924.9	504.69	ug/L	504.69	ppb	11:57:18
2	Na 589.592 Radial†	31804.2	34077.3	10327	ug/L	10327	ppb	11:55:30
2	Ni 231.604†	22133.8	22067.5	506.76	ug/L	506.76	ppb	11:56:58

2	P 214.914†	4705.8	4467.9	2419.0	ug/L	2419.0 ppb	11:57:18
2	Pb 220.353†	4409.9	4481.8	503.24	ug/L	503.24 ppb	11:57:18
2	S 181.975 Axial†	841.2	792.5	1046.0	ug/L	1046.0 ppb	11:57:18
2	Sb 206.836†	1680.1	1644.2	526.44	ug/L	526.44 ppb	11:57:18
2	Se 196.026†	875.2	902.8	526.32	ug/L	526.32 ppb	11:57:18
2	Si 251.611†	87501.2	87097.1	2581.9	ug/L	2581.9 ppb	11:56:58
2	Sn 189.927†	3165.9	3159.9	508.91	ug/L	508.91 ppb	11:57:18
2	Sr 421.552†	82795.3	84667.2	510.60	ug/L	510.60 ppb	11:55:30
2	Ti 334.940†	313440.0	314974.3	497.03	ug/L	497.03 ppb	11:56:58
2	Tl 190.801†	1737.0	1773.1	502.71	ug/L	502.71 ppb	11:57:18
2	U 409.014†	14815.4	17412.5	498.99	ug/L	498.99 ppb	11:56:58
2	V 292.402†	73939.9	75368.2	508.23	ug/L	508.23 ppb	11:56:58
2	Zn 213.857†	60005.1	59304.4	505.62	ug/L	505.62 ppb	11:56:58
2	SiO2†	85548.6	85100.0	5405.2	ug/L	5405.2 ppb	11:58:00
3	Sc 361.383	865766.7	865766.7	99.752	%		11:57:24
3	Sc Radial	5487.2	5487.2	98.4	%		11:55:55
3	Y 371.029	715205.5	715205.5	98.046	%		11:57:24
3	Y RADIAL	5904.0	5904.0	97.76	%		11:55:55
3	Ag 328.068†	111370.8	111373.2	506.94	ug/L	506.94 ppb	11:57:29
3	Al 396.153Radial†	7047.4	7196.4	4934.6	ug/L	4934.6 ppb	11:55:55
3	As 188.979†	1320.8	1355.3	527.66	ug/L	527.66 ppb	11:57:49
3	B 249.677†	24128.9	24682.0	524.02	ug/L	524.02 ppb	11:57:29
3	Ba 233.527†	66953.3	67130.6	502.91	ug/L	502.91 ppb	11:57:29
3	Be 313.107†	1371679.0	1379746.6	496.41	ug/L	496.41 ppb	11:57:24
3	Ca 317.933Radial†	3432.1	3470.6	5065.2	ug/L	5065.2 ppb	11:56:15
3	Cd 226.502†	48351.6	48670.6	504.57	ug/L	504.57 ppb	11:57:29
3	Co 228.616†	26573.8	26713.2	504.00	ug/L	504.00 ppb	11:57:29
3	Cr 267.716†	47762.2	47794.8	501.11	ug/L	501.11 ppb	11:57:29
3	Cu 324.752†	177287.9	170970.2	496.87	ug/L	496.87 ppb	11:57:29
3	Fe 238.204 Radial†	585.1	584.7	5253.8	ug/L	5253.8 ppb	11:56:15
3	K 766.490 Radial†	34816.4	32638.6	5467.0	ug/L	5467.0 ppb	11:55:55
3	Mg 279.077 IEC†	156.0	156.6	5271.2	ug/L	5271.2 ppb	11:56:15
3	Mn 257.610†	468391.6	469034.1	497.52	ug/L	497.52 ppb	11:57:24
3	Mo 202.031†	7936.6	7937.9	505.51	ug/L	505.51 ppb	11:57:49
3	Na 589.592 Radial†	32093.4	34165.3	10354	ug/L	10354 ppb	11:55:55
3	Ni 231.604†	21970.5	21939.1	503.81	ug/L	503.81 ppb	11:57:29
3	P 214.914†	4712.3	4481.9	2427.3	ug/L	2427.3 ppb	11:57:49
3	Pb 220.353†	4397.4	4476.3	502.62	ug/L	502.62 ppb	11:57:49
3	S 181.975 Axial†	824.6	777.3	1025.9	ug/L	1025.9 ppb	11:57:49
3	Sb 206.836†	1662.7	1629.5	521.92	ug/L	521.92 ppb	11:57:49
3	Se 196.026†	871.9	900.8	525.23	ug/L	525.23 ppb	11:57:49
3	Si 251.611†	86694.0	86427.5	2562.0	ug/L	2562.0 ppb	11:57:29
3	Sn 189.927†	3160.2	3159.2	508.80	ug/L	508.80 ppb	11:57:49
3	Sr 421.552†	83348.7	84693.6	510.76	ug/L	510.76 ppb	11:55:55
3	Ti 334.940†	311161.4	313190.1	494.21	ug/L	494.21 ppb	11:57:29
3	Tl 190.801†	1745.5	1784.4	505.88	ug/L	505.88 ppb	11:57:49
3	U 409.014†	14530.8	17150.9	491.47	ug/L	491.47 ppb	11:57:29
3	V 292.402†	73265.1	74809.7	504.52	ug/L	504.52 ppb	11:57:29
3	Zn 213.857†	59407.5	58801.1	501.32	ug/L	501.32 ppb	11:57:29
3	SiO2†	86760.1	86451.0	5491.4	ug/L	5491.4 ppb	11:58:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865625.9	99.736	%	0.1839				0.18%
Sc Radial	5481.3	98.3	%	0.47				0.48%
Y 371.029	715331.7	98.064	%	0.1324				0.14%
Y RADIAL	5911.0	97.88	%	0.685				0.70%
Ag 328.068†	111800.2	508.87	ug/L	1.869	508.87	ppb	1.869	0.37%
QC value within limits for Ag 328.068 Recovery = 101.77%								
Al 396.153Radial†	7216.6	4948.5	ug/L	16.56	4948.5	ppb	16.56	0.33%
QC value within limits for Al 396.153Radial Recovery = 98.97%								
As 188.979†	1359.0	529.09	ug/L	1.890	529.09	ppb	1.890	0.36%
QC value within limits for As 188.979 Recovery = 105.82%								
B 249.677†	24752.3	525.52	ug/L	1.598	525.52	ppb	1.598	0.30%
QC value within limits for B 249.677 Recovery = 105.10%								
Ba 233.527†	67243.8	503.76	ug/L	1.374	503.76	ppb	1.374	0.27%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	1381115.8	496.90	ug/L	0.485	496.90	ppb	0.485	0.10%
QC value within limits for Be 313.107 Recovery = 99.38%								

Ca 317.933Radial†	3461.8	5052.5 ug/L	23.53	5052.5 ppb	23.53	0.47%
QC value within limits for Ca 317.933Radial Recovery = 101.05%						
Cd 226.502†	48874.8	506.69 ug/L	2.182	506.69 ppb	2.182	0.43%
QC value within limits for Cd 226.502 Recovery = 101.34%						
Co 228.616†	26754.0	504.77 ug/L	0.869	504.77 ppb	0.869	0.17%
QC value within limits for Co 228.616 Recovery = 100.95%						
Cr 267.716†	47980.7	503.06 ug/L	2.117	503.06 ppb	2.117	0.42%
QC value within limits for Cr 267.716 Recovery = 100.61%						
Cu 324.752†	171361.3	498.00 ug/L	1.636	498.00 ppb	1.636	0.33%
QC value within limits for Cu 324.752 Recovery = 99.60%						
Fe 238.204 Radial†	582.2	5231.7 ug/L	30.70	5231.7 ppb	30.70	0.59%
QC value within limits for Fe 238.204 Radial Recovery = 104.63%						
K 766.490 Radial†	32673.3	5472.8 ug/L	22.23	5472.8 ppb	22.23	0.41%
QC value within limits for K 766.490 Radial Recovery = 109.46%						
Mg 279.077 IEC†	158.4	5333.3 ug/L	93.05	5333.3 ppb	93.05	1.74%
QC value within limits for Mg 279.077 IEC Recovery = 106.67%						
Mn 257.610†	469487.8	498.00 ug/L	0.432	498.00 ppb	0.432	0.09%
QC value within limits for Mn 257.610 Recovery = 99.60%						
Mo 202.031†	7935.4	505.35 ug/L	0.601	505.35 ppb	0.601	0.12%
QC value within limits for Mo 202.031 Recovery = 101.07%						
Na 589.592 Radial†	34223.0	10372 ug/L	55.0	10372 ppb	55.0	0.53%
QC value within limits for Na 589.592 Radial Recovery = 103.72%						
Ni 231.604†	21991.2	505.01 ug/L	1.551	505.01 ppb	1.551	0.31%
QC value within limits for Ni 231.604 Recovery = 101.00%						
P 214.914†	4474.3	2422.9 ug/L	4.18	2422.9 ppb	4.18	0.17%
QC value within limits for P 214.914 Recovery = 96.92%						
Pb 220.353†	4479.4	502.97 ug/L	0.318	502.97 ppb	0.318	0.06%
QC value within limits for Pb 220.353 Recovery = 100.59%						
S 181.975 Axial†	784.7	1035.7 ug/L	10.06	1035.7 ppb	10.06	0.97%
QC value within limits for S 181.975 Axial Recovery = 103.57%						
Sb 206.836†	1636.9	524.23 ug/L	2.261	524.23 ppb	2.261	0.43%
QC value within limits for Sb 206.836 Recovery = 104.85%						
Se 196.026†	899.5	524.44 ug/L	2.375	524.44 ppb	2.375	0.45%
QC value within limits for Se 196.026 Recovery = 104.89%						
Si 251.611†	86681.8	2569.5 ug/L	10.82	2569.5 ppb	10.82	0.42%
QC value within limits for Si 251.611 Recovery = 102.78%						
Sn 189.927†	3160.5	509.02 ug/L	0.281	509.02 ppb	0.281	0.06%
QC value within limits for Sn 189.927 Recovery = 101.80%						
Sr 421.552†	84818.4	511.52 ug/L	1.444	511.52 ppb	1.444	0.28%
QC value within limits for Sr 421.552 Recovery = 102.30%						
Ti 334.940†	313843.4	495.24 ug/L	1.551	495.24 ppb	1.551	0.31%
QC value within limits for Ti 334.940 Recovery = 99.05%						
Tl 190.801†	1783.5	505.63 ug/L	2.802	505.63 ppb	2.802	0.55%
QC value within limits for Tl 190.801 Recovery = 101.13%						
U 409.014†	17311.4	496.09 ug/L	4.041	496.09 ppb	4.041	0.81%
QC value within limits for U 409.014 Recovery = 99.22%						
V 292.402†	75054.1	506.15 ug/L	1.900	506.15 ppb	1.900	0.38%
QC value within limits for V 292.402 Recovery = 101.23%						
Zn 213.857†	59049.9	503.45 ug/L	2.152	503.45 ppb	2.152	0.43%
QC value within limits for Zn 213.857 Recovery = 100.69%						
SiO2†	86031.8	5464.7 ug/L	51.56	5464.7 ppb	51.56	0.94%
QC value within limits for SiO2 Recovery = 102.19%						

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:00:14
Data Type: Reprocessed on 12/11/2009 12:46:08

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	899225.0	899225.0	103.61	%			12:03:24
1	Sc Radial	5574.2	5574.2	100.0	%			12:02:07
1	Y 371.029	754915.1	754915.1	103.49	%			12:03:24
1	Y RADIAL	6020.5	6020.5	99.69	%			12:02:07
1	Ag 328.068†	314.4	29.5	0.1304	ug/L	0.1304	ppb	12:03:29
1	Al 396.153Radial†	-17.9	17.4	11.952	ug/L	11.952	ppb	12:02:07
1	As 188.979†	14.4	45.2	17.457	ug/L	17.457	ppb	12:03:49
1	B 249.677†	293.3	776.3	16.543	ug/L	16.543	ppb	12:03:29
1	Ba 233.527†	6.6	17.5	0.1304	ug/L	0.1304	ppb	12:03:49
1	Be 313.107†	-4567.3	254.3	0.0916	ug/L	0.0916	ppb	12:03:29
1	Ca 317.933Radial†	17.6	0.7	1.0760	ug/L	1.0760	ppb	12:02:27
1	Cd 226.502†	-176.2	28.9	0.2995	ug/L	0.2995	ppb	12:03:49
1	Co 228.616†	-65.4	10.4	0.1985	ug/L	0.1985	ppb	12:03:49
1	Cr 267.716†	96.4	7.0	0.0723	ug/L	0.0723	ppb	12:03:49
1	Cu 324.752†	6796.9	-197.6	-0.5739	ug/L	-0.5739	ppb	12:03:29
1	Fe 238.204 Radial†	9.9	0.1	0.4846	ug/L	0.4846	ppb	12:02:27
1	K 766.490 Radial†	4296.7	1558.4	261.42	ug/L	261.42	ppb	12:02:07
1	Mg 279.077 IEC†	0.5	-1.4	-46.595	ug/L	-46.595	ppb	12:02:27
1	Mn 257.610†	514.9	-23.2	-0.0237	ug/L	-0.0237	ppb	12:03:49
1	Mo 202.031†	39.3	19.5	1.2426	ug/L	1.2426	ppb	12:03:49
1	Na 589.592 Radial†	-1274.1	279.7	84.765	ug/L	84.765	ppb	12:02:07
1	Ni 231.604†	98.6	9.2	0.2118	ug/L	0.2118	ppb	12:03:49
1	P 214.914†	223.6	-26.2	-14.556	ug/L	-14.556	ppb	12:03:49
1	Pb 220.353†	-60.4	9.7	1.0905	ug/L	1.0905	ppb	12:03:49
1	S 181.975 Axial†	55.7	4.4	5.8074	ug/L	5.8074	ppb	12:03:49
1	Sb 206.836†	46.7	7.7	2.4698	ug/L	2.4698	ppb	12:03:49
1	Se 196.026†	-35.7	-7.6	-4.2827	ug/L	-4.2827	ppb	12:03:49
1	Si 251.611†	600.7	98.1	2.8129	ug/L	2.8129	ppb	12:03:49
1	Sn 189.927†	9.8	0.6	0.0926	ug/L	0.0926	ppb	12:03:49
1	Sr 421.552†	-31.0	-30.8	-0.1858	ug/L	-0.1858	ppb	12:02:07
1	Ti 334.940†	-1214.4	84.2	0.1318	ug/L	0.1318	ppb	12:03:29
1	Tl 190.801†	-38.3	-2.4	-0.6739	ug/L	-0.6739	ppb	12:03:49
1	U 409.014†	-2588.1	86.0	2.4729	ug/L	2.4729	ppb	12:03:24
1	V 292.402†	-1446.3	-33.2	-0.1995	ug/L	-0.1995	ppb	12:03:29
1	Zn 213.857†	841.2	58.1	0.5003	ug/L	0.5003	ppb	12:03:49
1	SiO2†	574.8	30.3	1.6953	ug/L	1.6953	ppb	12:04:55
2	Sc 361.383	856785.8	856785.8	98.718	%			12:03:54
2	Sc Radial	5655.9	5655.9	101	%			12:02:32
2	Y 371.029	718466.2	718466.2	98.493	%			12:03:54
2	Y RADIAL	6136.2	6136.2	101.6	%			12:02:32
2	Ag 328.068†	299.0	28.8	0.1308	ug/L	0.1308	ppb	12:03:59
2	Al 396.153Radial†	-15.1	20.5	14.040	ug/L	14.040	ppb	12:02:32
2	As 188.979†	11.6	43.0	16.603	ug/L	16.603	ppb	12:04:19
2	B 249.677†	232.0	728.2	15.520	ug/L	15.520	ppb	12:03:59
2	Ba 233.527†	-0.0	11.1	0.0824	ug/L	0.0824	ppb	12:04:19
2	Be 313.107†	-4589.5	13.5	0.0048	ug/L	0.0048	ppb	12:03:59
2	Ca 317.933Radial†	14.3	-2.8	-4.0322	ug/L	-4.0322	ppb	12:02:52
2	Cd 226.502†	-158.9	38.0	0.3951	ug/L	0.3951	ppb	12:04:19
2	Co 228.616†	-77.3	-4.8	-0.0877	ug/L	-0.0877	ppb	12:04:19
2	Cr 267.716†	95.3	10.5	0.1112	ug/L	0.1112	ppb	12:04:19
2	Cu 324.752†	6921.7	253.8	0.7367	ug/L	0.7367	ppb	12:03:59
2	Fe 238.204 Radial†	9.0	-1.0	-8.9708	ug/L	-8.9708	ppb	12:02:52
2	K 766.490 Radial†	4372.5	1571.0	263.54	ug/L	263.54	ppb	12:02:32
2	Mg 279.077 IEC†	-0.8	-2.7	-91.143	ug/L	-91.143	ppb	12:02:52
2	Mn 257.610†	528.4	15.1	0.0168	ug/L	0.0168	ppb	12:04:19
2	Mo 202.031†	38.2	20.3	1.2890	ug/L	1.2890	ppb	12:04:19
2	Na 589.592 Radial†	-1331.0	242.0	73.329	ug/L	73.329	ppb	12:02:32
2	Ni 231.604†	98.9	14.2	0.3272	ug/L	0.3272	ppb	12:04:19

2	P 214.914†	223.3	-15.9	-8.9718	ug/L	-8.9718 ppb	12:04:19
2	Pb 220.353†	-72.0	-5.0	-0.5491	ug/L	-0.5491 ppb	12:04:19
2	S 181.975 Axial†	55.5	6.8	8.9914	ug/L	8.9914 ppb	12:04:19
2	Sb 206.836†	43.2	6.4	2.0316	ug/L	2.0316 ppb	12:04:19
2	Se 196.026†	-27.2	-0.8	-0.4531	ug/L	-0.4531 ppb	12:04:19
2	Si 251.611†	626.0	152.4	4.4304	ug/L	4.4304 ppb	12:04:19
2	Sn 189.927†	7.8	-1.0	-0.1582	ug/L	-0.1582 ppb	12:04:19
2	Sr 421.552†	-48.0	-47.1	-0.2843	ug/L	-0.2843 ppb	12:02:32
2	Ti 334.940†	-1259.2	-19.4	-0.0290	ug/L	-0.0290 ppb	12:03:59
2	Tl 190.801†	-31.3	2.9	0.8168	ug/L	0.8168 ppb	12:04:19
2	U 409.014†	-2693.0	-144.0	-4.1394	ug/L	-4.1394 ppb	12:03:54
2	V 292.402†	-1353.6	-8.4	-0.0465	ug/L	-0.0465 ppb	12:03:59
2	Zn 213.857†	856.0	113.3	0.9754	ug/L	0.9754 ppb	12:04:19
2	SiO2†	577.0	60.1	3.5906	ug/L	3.5906 ppb	12:05:00
3	Sc 361.383	880066.8	880066.8	101.40	%		12:04:25
3	Sc Radial	5379.1	5379.1	96.5	%		12:02:57
3	Y 371.029	738261.2	738261.2	101.21	%		12:04:25
3	Y RADIAL	5820.9	5820.9	96.39	%		12:02:57
3	Ag 328.068†	302.6	24.4	0.1168	ug/L	0.1168 ppb	12:04:30
3	Al 396.153Radial†	-28.2	6.1	4.1223	ug/L	4.1223 ppb	12:02:57
3	As 188.979†	1.7	33.0	12.719	ug/L	12.719 ppb	12:04:50
3	B 249.677†	226.9	716.9	15.276	ug/L	15.276 ppb	12:04:30
3	Ba 233.527†	6.0	17.0	0.1280	ug/L	0.1280 ppb	12:04:50
3	Be 313.107†	-4594.7	131.3	0.0474	ug/L	0.0474 ppb	12:04:30
3	Ca 317.933Radial†	17.6	1.3	1.9409	ug/L	1.9409 ppb	12:03:17
3	Cd 226.502†	-167.9	33.3	0.3435	ug/L	0.3435 ppb	12:04:50
3	Co 228.616†	-74.7	-0.3	-0.0019	ug/L	-0.0019 ppb	12:04:50
3	Cr 267.716†	74.1	-12.9	-0.1349	ug/L	-0.1349 ppb	12:04:50
3	Cu 324.752†	6940.3	86.7	0.2527	ug/L	0.2527 ppb	12:04:30
3	Fe 238.204 Radial†	11.8	2.3	20.828	ug/L	20.828 ppb	12:03:17
3	K 766.490 Radial†	4141.7	1553.6	260.63	ug/L	260.63 ppb	12:02:57
3	Mg 279.077 IEC†	3.6	1.9	62.406	ug/L	62.406 ppb	12:03:17
3	Mn 257.610†	548.2	20.4	0.0226	ug/L	0.0226 ppb	12:04:50
3	Mo 202.031†	40.7	21.7	1.3849	ug/L	1.3849 ppb	12:04:50
3	Na 589.592 Radial†	-1288.7	218.3	66.150	ug/L	66.150 ppb	12:02:57
3	Ni 231.604†	81.3	-5.8	-0.1326	ug/L	-0.1326 ppb	12:04:50
3	P 214.914†	240.1	-5.3	-2.9996	ug/L	-2.9996 ppb	12:04:50
3	Pb 220.353†	-70.5	-1.5	-0.1701	ug/L	-0.1701 ppb	12:04:50
3	S 181.975 Axial†	49.8	-0.3	-0.4468	ug/L	-0.4468 ppb	12:04:50
3	Sb 206.836†	51.7	13.6	4.3256	ug/L	4.3256 ppb	12:04:50
3	Se 196.026†	-19.6	7.5	4.2930	ug/L	4.2930 ppb	12:04:50
3	Si 251.611†	567.3	77.7	2.2042	ug/L	2.2042 ppb	12:04:50
3	Sn 189.927†	9.6	0.6	0.0948	ug/L	0.0948 ppb	12:04:50
3	Sr 421.552†	-13.4	-13.6	-0.0822	ug/L	-0.0822 ppb	12:02:57
3	Ti 334.940†	-1193.7	79.0	0.1244	ug/L	0.1244 ppb	12:04:30
3	Tl 190.801†	-35.3	-0.2	-0.0538	ug/L	-0.0538 ppb	12:04:50
3	U 409.014†	-2587.8	31.9	0.9148	ug/L	0.9148 ppb	12:04:25
3	V 292.402†	-1356.8	24.7	0.1838	ug/L	0.1838 ppb	12:04:30
3	Zn 213.857†	818.6	53.4	0.4561	ug/L	0.4561 ppb	12:04:50
3	SiO2†	591.0	58.4	3.4822	ug/L	3.4822 ppb	12:05:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878692.5	101.24	%	2.449				2.42%
Sc Radial	5536.4	99.3	%	2.55				2.57%
Y 371.029	737214.2	101.06	%	2.501				2.48%
Y RADIAL	5992.5	99.23	%	2.641				2.66%
Ag 328.068†	27.5	0.1260	ug/L	0.00800	0.1260	ppb	0.00800	6.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	10.038	ug/L	5.2286	10.038	ppb	5.2286	52.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	40.4	15.593	ug/L	2.5253	15.593	ppb	2.5253	16.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	740.5	15.779	ug/L	0.6721	15.779	ppb	0.6721	4.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.1136	ug/L	0.02706	0.1136	ppb	0.02706	23.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	133.0	0.0479	ug/L	0.04341	0.0479	ppb	0.04341	90.58%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -0.2     -0.3384 ug/L       3.22799     -0.3384 ppb        3.22799 953.84%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                33.4      0.3460 ug/L       0.04784      0.3460 ppb        0.04784  13.82%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.8      0.0363 ug/L       0.14688      0.0363 ppb        0.14688 404.85%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 1.5      0.0162 ug/L       0.13233      0.0162 ppb        0.13233 816.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                47.6      0.1385 ug/L       0.66271      0.1385 ppb        0.66271 478.48%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.1140 ug/L      15.22749      4.1140 ppb       15.22749 370.14%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        1561.0      261.86 ug/L         1.506      261.86 ppb          1.506   0.58%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.7     -25.111 ug/L       78.9972     -25.111 ppb        78.9972 314.60%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 4.1      0.0052 ug/L       0.02523      0.0052 ppb        0.02523 482.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                20.5      1.3055 ug/L       0.07254      1.3055 ppb        0.07254   5.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        246.6     74.748 ug/L        9.3882     74.748 ppb         9.3882  12.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.9      0.1355 ug/L       0.23922      0.1355 ppb        0.23922 176.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.8     -8.8423 ug/L       5.77912     -8.8423 ppb        5.77912  65.36%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.1      0.1238 ug/L       0.85841      0.1238 ppb        0.85841 693.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.6      4.7840 ug/L       4.80157      4.7840 ppb        4.80157 100.37%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.2      2.9423 ug/L       1.21781      2.9423 ppb        1.21781  41.39%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.3     -0.1476 ug/L       4.29600     -0.1476 ppb        4.29600 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               109.4      3.1492 ug/L       1.15055      3.1492 ppb        1.15055  36.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.1      0.0098 ug/L       0.14543      0.0098 ppb        0.14543 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -30.5     -0.1841 ug/L       0.10103     -0.1841 ppb        0.10103  54.87%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                47.9      0.0757 ug/L       0.09077      0.0757 ppb        0.09077 119.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.1      0.0297 ug/L       0.74885      0.0297 ppb        0.74885 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 -8.7     -0.2506 ug/L       3.45672     -0.2506 ppb        3.45672 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.7     -0.0207 ug/L       0.19295     -0.0207 ppb        0.19295 931.30%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                74.9      0.6439 ug/L       0.28788      0.6439 ppb        0.28788  44.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      49.6      2.9227 ug/L       1.06435      2.9227 ppb        1.06435  36.42%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:09:40
Data Type: Reprocessed on 12/11/2009 12:46:09

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	875638.3	875638.3	100.89	%			12:12:50
1	Sc Radial	5429.2	5429.2	97.4	%			12:11:32
1	Y 371.029	723807.3	723807.3	99.226	%			12:12:50
1	Y RADIAL	5896.7	5896.7	97.64	%			12:11:32
1	Ag 328.068†	110582.1	109332.8	497.68	ug/L	497.68	ppb	12:12:55
1	Al 396.153Radial†	7008.0	7232.6	4959.8	ug/L	4959.8	ppb	12:11:32
1	As 188.979†	1277.0	1297.0	505.08	ug/L	505.08	ppb	12:13:15
1	B 249.677†	23016.5	23306.7	494.74	ug/L	494.74	ppb	12:12:55
1	Ba 233.527†	66448.8	65873.9	493.50	ug/L	493.50	ppb	12:12:55
1	Be 313.107†	1392693.8	1385073.8	498.30	ug/L	498.30	ppb	12:12:50
1	Ca 317.933Radial†	3425.4	3501.0	5109.7	ug/L	5109.7	ppb	12:11:52
1	Cd 226.502†	48048.2	47823.4	495.78	ug/L	495.78	ppb	12:12:55
1	Co 228.616†	26374.2	26215.0	494.61	ug/L	494.61	ppb	12:12:55
1	Cr 267.716†	47569.7	47064.2	493.45	ug/L	493.45	ppb	12:12:55
1	Cu 324.752†	175534.7	167228.8	486.00	ug/L	486.00	ppb	12:12:55
1	Fe 238.204 Radial†	578.2	583.9	5247.1	ug/L	5247.1	ppb	12:11:52
1	K 766.490 Radial†	33041.0	31193.5	5224.6	ug/L	5224.6	ppb	12:11:32
1	Mg 279.077 IEC†	153.6	155.9	5246.7	ug/L	5246.7	ppb	12:11:52
1	Mn 257.610†	475093.7	470383.6	498.95	ug/L	498.95	ppb	12:12:50
1	Mo 202.031†	7936.1	7847.7	499.77	ug/L	499.77	ppb	12:13:15
1	Na 589.592 Radial†	31411.3	33813.5	10247	ug/L	10247	ppb	12:11:32
1	Ni 231.604†	21807.3	21529.1	494.39	ug/L	494.39	ppb	12:12:55
1	P 214.914†	4705.5	4422.0	2395.5	ug/L	2395.5	ppb	12:13:15
1	Pb 220.353†	4423.0	4452.0	499.90	ug/L	499.90	ppb	12:13:15
1	S 181.975 Axial†	813.0	756.5	998.44	ug/L	998.44	ppb	12:13:15
1	Sb 206.836†	1660.3	1608.3	515.20	ug/L	515.20	ppb	12:13:15
1	Se 196.026†	867.5	886.7	517.22	ug/L	517.22	ppb	12:13:15
1	Si 251.611†	85830.4	84591.7	2507.5	ug/L	2507.5	ppb	12:12:55
1	Sn 189.927†	3158.9	3122.2	502.85	ug/L	502.85	ppb	12:13:15
1	Sr 421.552†	82692.5	84925.3	512.16	ug/L	512.16	ppb	12:11:32
1	Ti 334.940†	308600.9	307135.5	484.66	ug/L	484.66	ppb	12:12:55
1	Tl 190.801†	1747.6	1766.7	500.92	ug/L	500.92	ppb	12:13:15
1	U 409.014†	14535.8	16991.6	486.91	ug/L	486.91	ppb	12:12:55
1	V 292.402†	72837.9	73558.2	496.11	ug/L	496.11	ppb	12:12:55
1	Zn 213.857†	58972.5	57698.5	491.91	ug/L	491.91	ppb	12:12:55
1	SiO2†	85357.0	84079.8	5340.5	ug/L	5340.5	ppb	12:14:22
2	Sc 361.383	875573.2	875573.2	100.88	%			12:13:21
2	Sc Radial	5960.6	5960.6	107	%			12:11:57
2	Y 371.029	724459.8	724459.8	99.315	%			12:13:21
2	Y RADIAL	6427.7	6427.7	106.4	%			12:11:57
2	Ag 328.068†	111738.3	110487.1	502.78	ug/L	502.78	ppb	12:13:26
2	Al 396.153Radial†	6723.0	6324.3	4334.2	ug/L	4334.2	ppb	12:11:57
2	As 188.979†	1290.9	1310.9	510.41	ug/L	510.41	ppb	12:13:46
2	B 249.677†	23369.6	23658.4	502.28	ug/L	502.28	ppb	12:13:26
2	Ba 233.527†	67099.8	66524.1	498.36	ug/L	498.36	ppb	12:13:26
2	Be 313.107†	1396730.2	1389177.7	499.78	ug/L	499.78	ppb	12:13:21
2	Ca 317.933Radial†	3417.0	3179.6	4640.5	ug/L	4640.5	ppb	12:12:17
2	Cd 226.502†	48317.9	48094.3	498.63	ug/L	498.63	ppb	12:13:26
2	Co 228.616†	26608.6	26449.3	499.03	ug/L	499.03	ppb	12:13:26
2	Cr 267.716†	47929.9	47424.7	497.22	ug/L	497.22	ppb	12:13:26
2	Cu 324.752†	177929.5	169615.6	492.91	ug/L	492.91	ppb	12:13:26
2	Fe 238.204 Radial†	581.1	533.7	4797.4	ug/L	4797.4	ppb	12:12:17
2	K 766.490 Radial†	32020.2	27213.5	4557.4	ug/L	4557.4	ppb	12:11:57
2	Mg 279.077 IEC†	152.9	141.1	4750.6	ug/L	4750.6	ppb	12:12:17
2	Mn 257.610†	474874.7	470201.5	498.72	ug/L	498.72	ppb	12:13:21
2	Mo 202.031†	7963.5	7875.4	501.50	ug/L	501.50	ppb	12:13:46
2	Na 589.592 Radial†	29968.0	29587.5	8966.8	ug/L	8966.8	ppb	12:11:57
2	Ni 231.604†	21971.3	21693.2	498.16	ug/L	498.16	ppb	12:13:26

2	P 214.914†	4711.5	4428.2	2398.0	ug/L	2398.0	ppb	12:13:46
2	Pb 220.353†	4428.3	4457.5	500.41	ug/L	500.41	ppb	12:13:46
2	S 181.975 Axial†	820.7	764.1	1008.6	ug/L	1008.6	ppb	12:13:46
2	Sb 206.836†	1650.6	1598.8	512.15	ug/L	512.15	ppb	12:13:46
2	Se 196.026†	874.7	893.8	519.77	ug/L	519.77	ppb	12:13:46
2	Si 251.611†	86883.9	85642.3	2539.0	ug/L	2539.0	ppb	12:13:26
2	Sn 189.927†	3160.1	3123.7	503.04	ug/L	503.04	ppb	12:13:46
2	Sr 421.552†	78610.6	73536.0	443.47	ug/L	443.47	ppb	12:11:57
2	Ti 334.940†	312119.6	310646.2	490.18	ug/L	490.18	ppb	12:13:26
2	Tl 190.801†	1745.7	1765.0	500.42	ug/L	500.42	ppb	12:13:46
2	U 409.014†	14686.0	17141.6	491.27	ug/L	491.27	ppb	12:13:26
2	V 292.402†	73499.2	74219.2	500.59	ug/L	500.59	ppb	12:13:26
2	Zn 213.857†	59423.7	58150.1	495.82	ug/L	495.82	ppb	12:13:26
2	SiO2†	86519.8	85238.7	5414.9	ug/L	5414.9	ppb	12:14:27
3	Sc 361.383	861169.5	861169.5	99.223	%			12:13:52
3	Sc Radial	6087.9	6087.9	109	%			12:12:22
3	Y 371.029	712398.4	712398.4	97.662	%			12:13:52
3	Y RADIAL	6565.2	6565.2	108.7	%			12:12:22
3	Ag 328.068†	112865.7	113475.9	516.31	ug/L	516.31	ppb	12:13:57
3	Al 396.153Radial†	6721.6	6191.4	4242.3	ug/L	4242.3	ppb	12:12:22
3	As 188.979†	1276.6	1317.9	513.19	ug/L	513.19	ppb	12:14:17
3	B 249.677†	23748.1	24427.3	518.65	ug/L	518.65	ppb	12:13:57
3	Ba 233.527†	67856.0	68398.6	512.39	ug/L	512.39	ppb	12:13:57
3	Be 313.107†	1374575.3	1390006.3	500.11	ug/L	500.11	ppb	12:13:52
3	Ca 317.933Radial†	3396.0	3093.4	4514.8	ug/L	4514.8	ppb	12:12:42
3	Cd 226.502†	49074.6	49657.9	514.87	ug/L	514.87	ppb	12:13:57
3	Co 228.616†	26890.6	27174.7	512.70	ug/L	512.70	ppb	12:13:57
3	Cr 267.716†	48434.3	48727.7	510.88	ug/L	510.88	ppb	12:13:57
3	Cu 324.752†	179617.3	174266.5	506.41	ug/L	506.41	ppb	12:13:57
3	Fe 238.204 Radial†	577.1	518.7	4663.1	ug/L	4663.1	ppb	12:12:42
3	K 766.490 Radial†	32203.3	26754.7	4480.5	ug/L	4480.5	ppb	12:12:22
3	Mg 279.077 IEC†	156.7	141.6	4767.3	ug/L	4767.3	ppb	12:12:42
3	Mn 257.610†	468651.1	471802.3	500.41	ug/L	500.41	ppb	12:13:52
3	Mo 202.031†	7954.1	7998.0	509.30	ug/L	509.30	ppb	12:14:17
3	Na 589.592 Radial†	30250.4	29259.7	8867.4	ug/L	8867.4	ppb	12:12:22
3	Ni 231.604†	22247.5	22335.8	512.92	ug/L	512.92	ppb	12:13:57
3	P 214.914†	4734.4	4529.5	2452.6	ug/L	2452.6	ppb	12:14:17
3	Pb 220.353†	4407.6	4510.2	506.31	ug/L	506.31	ppb	12:14:17
3	S 181.975 Axial†	827.2	784.3	1035.4	ug/L	1035.4	ppb	12:14:17
3	Sb 206.836†	1656.2	1631.8	522.55	ug/L	522.55	ppb	12:14:17
3	Se 196.026†	871.8	905.5	525.93	ug/L	525.93	ppb	12:14:17
3	Si 251.611†	87807.2	88013.3	2609.4	ug/L	2609.4	ppb	12:13:57
3	Sn 189.927†	3156.1	3172.0	510.80	ug/L	510.80	ppb	12:14:17
3	Sr 421.552†	79155.7	72496.9	437.21	ug/L	437.21	ppb	12:12:22
3	Ti 334.940†	315664.1	319393.2	503.97	ug/L	503.97	ppb	12:13:57
3	Tl 190.801†	1759.7	1808.1	512.57	ug/L	512.57	ppb	12:14:17
3	U 409.014†	14688.7	17387.8	498.34	ug/L	498.34	ppb	12:13:57
3	V 292.402†	74374.7	76320.1	514.70	ug/L	514.70	ppb	12:13:57
3	Zn 213.857†	60227.6	59945.6	511.16	ug/L	511.16	ppb	12:13:57
3	SiO2†	85613.7	85760.0	5447.9	ug/L	5447.9	ppb	12:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870793.7	100.33	%	0.960				0.96%
Sc Radial	5825.9	104	%	6.3				6.00%
Y 371.029	720221.8	98.734	%	0.9299				0.94%
Y RADIAL	6296.6	104.3	%	5.85				5.61%
Ag 328.068†	111098.6	505.59	ug/L	9.626	505.59	ppb	9.626	1.90%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 396.153Radial†	6582.8	4512.1	ug/L	390.42	4512.1	ppb	390.42	8.65%
QC value within limits for Al 396.153Radial Recovery = 90.24%								
As 188.979†	1308.6	509.56	ug/L	4.123	509.56	ppb	4.123	0.81%
QC value within limits for As 188.979 Recovery = 101.91%								
B 249.677†	23797.5	505.22	ug/L	12.224	505.22	ppb	12.224	2.42%
QC value within limits for B 249.677 Recovery = 101.04%								
Ba 233.527†	66932.2	501.42	ug/L	9.807	501.42	ppb	9.807	1.96%
QC value within limits for Ba 233.527 Recovery = 100.28%								
Be 313.107†	1388085.9	499.40	ug/L	0.965	499.40	ppb	0.965	0.19%
QC value within limits for Be 313.107 Recovery = 99.88%								

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Ca 317.933Radial†        3258.0      4755.0 ug/L        313.50      4755.0 ppb         313.50   6.59%
   QC value within limits for Ca 317.933Radial  Recovery = 95.10%
Cd 226.502†             48525.2      503.10 ug/L        10.300      503.10 ppb         10.300   2.05%
   QC value within limits for Cd 226.502  Recovery = 100.62%
Co 228.616†             26613.0      502.11 ug/L         9.433      502.11 ppb          9.433   1.88%
   QC value within limits for Co 228.616  Recovery = 100.42%
Cr 267.716†             47738.9      500.52 ug/L         9.171      500.52 ppb          9.171   1.83%
   QC value within limits for Cr 267.716  Recovery = 100.10%
Cu 324.752†            170370.3      495.11 ug/L        10.382      495.11 ppb         10.382   2.10%
   QC value within limits for Cu 324.752  Recovery = 99.02%
Fe 238.204 Radial†        545.5      4902.5 ug/L        305.83      4902.5 ppb         305.83   6.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.05%
K 766.490 Radial†       28387.2      4754.2 ug/L        409.22      4754.2 ppb         409.22   8.61%
   QC value within limits for K 766.490 Radial  Recovery = 95.08%
Mg 279.077 IEC†           146.2      4921.6 ug/L        281.71      4921.6 ppb         281.71   5.72%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.43%
Mn 257.610†            470795.8      499.36 ug/L         0.913      499.36 ppb          0.913   0.18%
   QC value within limits for Mn 257.610  Recovery = 99.87%
Mo 202.031†             7907.0      503.52 ug/L         5.074      503.52 ppb          5.074   1.01%
   QC value within limits for Mo 202.031  Recovery = 100.70%
Na 589.592 Radial†      30886.9      9360.6 ug/L        769.70      9360.6 ppb         769.70   8.22%
   QC value within limits for Na 589.592 Radial  Recovery = 93.61%
Ni 231.604†             21852.7      501.83 ug/L         9.792      501.83 ppb          9.792   1.95%
   QC value within limits for Ni 231.604  Recovery = 100.37%
P 214.914†               4459.9      2415.4 ug/L        32.24      2415.4 ppb          32.24   1.33%
   QC value within limits for P 214.914  Recovery = 96.62%
Pb 220.353†              4473.2      502.21 ug/L         3.560      502.21 ppb          3.560   0.71%
   QC value within limits for Pb 220.353  Recovery = 100.44%
S 181.975 Axial†          768.3      1014.1 ug/L        19.07      1014.1 ppb          19.07   1.88%
   QC value within limits for S 181.975 Axial  Recovery = 101.41%
Sb 206.836†              1612.9      516.63 ug/L         5.345      516.63 ppb          5.345   1.03%
   QC value within limits for Sb 206.836  Recovery = 103.33%
Se 196.026†               895.3      520.97 ug/L         4.475      520.97 ppb          4.475   0.86%
   QC value within limits for Se 196.026  Recovery = 104.19%
Si 251.611†             86082.5      2552.0 ug/L        52.21      2552.0 ppb          52.21   2.05%
   QC value within limits for Si 251.611  Recovery = 102.08%
Sn 189.927†              3139.3      505.56 ug/L         4.534      505.56 ppb          4.534   0.90%
   QC value within limits for Sn 189.927  Recovery = 101.11%
Sr 421.552†             76986.1      464.28 ug/L        41.584      464.28 ppb         41.584   8.96%
   QC value within limits for Sr 421.552  Recovery = 92.86%
Ti 334.940†            312391.7      492.94 ug/L         9.944      492.94 ppb          9.944   2.02%
   QC value within limits for Ti 334.940  Recovery = 98.59%
Tl 190.801†              1780.0      504.64 ug/L         6.878      504.64 ppb          6.878   1.36%
   QC value within limits for Tl 190.801  Recovery = 100.93%
U 409.014†              17173.7      492.17 ug/L         5.768      492.17 ppb          5.768   1.17%
   QC value within limits for U 409.014  Recovery = 98.43%
V 292.402†              74699.2      503.80 ug/L         9.699      503.80 ppb          9.699   1.93%
   QC value within limits for V 292.402  Recovery = 100.76%
Zn 213.857†             58598.1      499.63 ug/L        10.179      499.63 ppb         10.179   2.04%
   QC value within limits for Zn 213.857  Recovery = 99.93%
SiO2†                   85026.1      5401.1 ug/L        55.01      5401.1 ppb          55.01   1.02%
   QC value within limits for SiO2  Recovery = 101.00%
All analyte(s) passed QC.
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Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:16:43
Data Type: Reprocessed on 12/11/2009 12:46:10

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	878516.8	878516.8	101.22	%			12:19:52
1	Sc Radial	5246.4	5246.4	94.1	%			12:18:35
1	Y 371.029	738877.4	738877.4	101.29	%			12:19:52
1	Y RADIAL	5741.2	5741.2	95.07	%			12:18:35
1	Ag 328.068†	305.4	27.7	0.1333	ug/L	0.1333	ppb	12:19:52
1	Al 396.153Radial†	-14.2	20.2	13.882	ug/L	13.882	ppb	12:18:35
1	As 188.979†	-18.9	12.7	4.8840	ug/L	4.8840	ppb	12:20:12
1	B 249.677†	-12.7	480.6	10.239	ug/L	10.239	ppb	12:20:12
1	Ba 233.527†	-12.1	-0.8	-0.0053	ug/L	-0.0053	ppb	12:20:12
1	Be 313.107†	-4609.0	109.3	0.0393	ug/L	0.0393	ppb	12:19:52
1	Ca 317.933Radial†	21.3	5.7	8.3750	ug/L	8.3750	ppb	12:18:55
1	Cd 226.502†	-166.1	34.8	0.3581	ug/L	0.3581	ppb	12:20:12
1	Co 228.616†	-73.8	0.5	0.0115	ug/L	0.0115	ppb	12:20:12
1	Cr 267.716†	73.1	-13.8	-0.1441	ug/L	-0.1441	ppb	12:20:12
1	Cu 324.752†	6826.6	-13.7	-0.0383	ug/L	-0.0383	ppb	12:19:52
1	Fe 238.204 Radial†	12.2	3.1	27.577	ug/L	27.577	ppb	12:18:55
1	K 766.490 Radial†	3558.7	1042.6	174.91	ug/L	174.91	ppb	12:18:35
1	Mg 279.077 IEC†	3.9	2.2	73.687	ug/L	73.687	ppb	12:18:55
1	Mn 257.610†	509.3	-17.0	-0.0166	ug/L	-0.0166	ppb	12:20:12
1	Mo 202.031†	30.7	11.9	0.7590	ug/L	0.7590	ppb	12:20:12
1	Na 589.592 Radial†	-1422.0	42.8	12.984	ug/L	12.984	ppb	12:18:35
1	Ni 231.604†	79.2	-7.7	-0.1779	ug/L	-0.1779	ppb	12:20:12
1	P 214.914†	227.9	-16.8	-9.4048	ug/L	-9.4048	ppb	12:20:12
1	Pb 220.353†	-58.5	10.2	1.1427	ug/L	1.1427	ppb	12:20:12
1	S 181.975 Axial†	54.2	4.2	5.5186	ug/L	5.5186	ppb	12:20:12
1	Sb 206.836†	45.0	7.1	2.2641	ug/L	2.2641	ppb	12:20:12
1	Se 196.026†	-25.5	1.6	0.9949	ug/L	0.9949	ppb	12:20:12
1	Si 251.611†	534.3	46.2	1.3013	ug/L	1.3013	ppb	12:20:12
1	Sn 189.927†	13.2	4.2	0.6808	ug/L	0.6808	ppb	12:20:12
1	Sr 421.552†	-6.1	-6.2	-0.0377	ug/L	-0.0377	ppb	12:18:35
1	Ti 334.940†	-1262.3	9.1	0.0146	ug/L	0.0146	ppb	12:19:52
1	Tl 190.801†	-34.3	0.7	0.1981	ug/L	0.1981	ppb	12:20:12
1	U 409.014†	-2594.1	21.2	0.6055	ug/L	0.6055	ppb	12:19:52
1	V 292.402†	-1385.1	-5.6	-0.0278	ug/L	-0.0278	ppb	12:19:52
1	Zn 213.857†	777.0	13.8	0.1149	ug/L	0.1149	ppb	12:20:12
1	SiO2†	508.9	-21.7	-1.5475	ug/L	-1.5475	ppb	12:21:08
2	Sc 361.383	869660.2	869660.2	100.20	%			12:20:17
2	Sc Radial	5600.5	5600.5	100	%			12:19:00
2	Y 371.029	732581.1	732581.1	100.43	%			12:20:17
2	Y RADIAL	6095.4	6095.4	100.9	%			12:19:00
2	Ag 328.068†	253.6	-21.0	-0.0988	ug/L	-0.0988	ppb	12:20:17
2	Al 396.153Radial†	-17.0	18.4	12.629	ug/L	12.629	ppb	12:19:00
2	As 188.979†	-13.8	17.6	6.7688	ug/L	6.7688	ppb	12:20:37
2	B 249.677†	-24.0	469.2	10.001	ug/L	10.001	ppb	12:20:37
2	Ba 233.527†	-3.7	7.4	0.0550	ug/L	0.0550	ppb	12:20:37
2	Be 313.107†	-4553.9	117.8	0.0422	ug/L	0.0422	ppb	12:20:17
2	Ca 317.933Radial†	15.4	-1.6	-2.3484	ug/L	-2.3484	ppb	12:19:20
2	Cd 226.502†	-174.0	25.3	0.2635	ug/L	0.2635	ppb	12:20:37
2	Co 228.616†	-57.8	15.7	0.2990	ug/L	0.2990	ppb	12:20:37
2	Cr 267.716†	89.4	3.2	0.0333	ug/L	0.0333	ppb	12:20:37
2	Cu 324.752†	6852.1	80.5	0.2333	ug/L	0.2333	ppb	12:20:17
2	Fe 238.204 Radial†	8.6	-1.3	-11.614	ug/L	-11.614	ppb	12:19:20
2	K 766.490 Radial†	3590.6	835.2	140.10	ug/L	140.10	ppb	12:19:00
2	Mg 279.077 IEC†	1.5	-0.5	-15.361	ug/L	-15.361	ppb	12:19:20
2	Mn 257.610†	517.5	-3.7	-0.0048	ug/L	-0.0048	ppb	12:20:37
2	Mo 202.031†	30.9	12.4	0.7895	ug/L	0.7895	ppb	12:20:37
2	Na 589.592 Radial†	-1378.6	181.6	55.033	ug/L	55.033	ppb	12:19:00
2	Ni 231.604†	89.1	3.0	0.0682	ug/L	0.0682	ppb	12:20:37

2	P 214.914†	225.0	-17.5	-9.7541	ug/L	-9.7541 ppb	12:20:37
2	Pb 220.353†	-61.1	7.0	0.7929	ug/L	0.7929 ppb	12:20:37
2	S 181.975 Axial†	43.2	-6.3	-8.3044	ug/L	-8.3044 ppb	12:20:37
2	Sb 206.836†	38.4	1.0	0.3394	ug/L	0.3394 ppb	12:20:37
2	Se 196.026†	-25.2	1.7	0.9088	ug/L	0.9088 ppb	12:20:37
2	Si 251.611†	522.4	39.7	1.1172	ug/L	1.1172 ppb	12:20:37
2	Sn 189.927†	16.4	7.5	1.2041	ug/L	1.2041 ppb	12:20:37
2	Sr 421.552†	-13.3	-13.0	-0.0785	ug/L	-0.0785 ppb	12:19:00
2	Ti 334.940†	-1286.3	-27.5	-0.0436	ug/L	-0.0436 ppb	12:20:17
2	Tl 190.801†	-38.6	-4.0	-1.1227	ug/L	-1.1227 ppb	12:20:37
2	U 409.014†	-2583.2	6.0	0.1727	ug/L	0.1727 ppb	12:20:17
2	V 292.402†	-1371.0	-5.6	-0.0240	ug/L	-0.0240 ppb	12:20:17
2	Zn 213.857†	789.8	34.4	0.2969	ug/L	0.2969 ppb	12:20:37
2	SiO2†	538.3	12.7	0.6702	ug/L	0.6702 ppb	12:21:13
3	Sc 361.383	874124.6	874124.6	100.72	%		12:20:43
3	Sc Radial	5577.2	5577.2	100	%		12:19:25
3	Y 371.029	735292.9	735292.9	100.80	%		12:20:43
3	Y RADIAL	6069.2	6069.2	100.5	%		12:19:25
3	Ag 328.068†	287.0	10.9	0.0521	ug/L	0.0521 ppb	12:20:43
3	Al 396.153Radial†	-29.2	6.1	4.1795	ug/L	4.1795 ppb	12:19:25
3	As 188.979†	-18.2	13.3	5.1209	ug/L	5.1209 ppb	12:21:03
3	B 249.677†	-91.2	402.7	8.5816	ug/L	8.5816 ppb	12:21:03
3	Ba 233.527†	-11.0	0.2	0.0011	ug/L	0.0011 ppb	12:21:03
3	Be 313.107†	-4503.8	190.8	0.0688	ug/L	0.0688 ppb	12:20:43
3	Ca 317.933Radial†	9.5	-7.4	-10.864	ug/L	-10.864 ppb	12:19:45
3	Cd 226.502†	-182.9	17.4	0.1803	ug/L	0.1803 ppb	12:21:03
3	Co 228.616†	-82.9	-8.8	-0.1652	ug/L	-0.1652 ppb	12:21:03
3	Cr 267.716†	90.0	3.3	0.0360	ug/L	0.0360 ppb	12:21:03
3	Cu 324.752†	6801.4	-4.8	-0.0139	ug/L	-0.0139 ppb	12:20:43
3	Fe 238.204 Radial†	9.7	-0.2	-1.6037	ug/L	-1.6037 ppb	12:19:45
3	K 766.490 Radial†	3534.0	793.5	133.11	ug/L	133.11 ppb	12:19:25
3	Mg 279.077 IEC†	2.1	0.1	4.8443	ug/L	4.8443 ppb	12:19:45
3	Mn 257.610†	500.5	-23.2	-0.0249	ug/L	-0.0249 ppb	12:21:03
3	Mo 202.031†	29.8	11.2	0.7112	ug/L	0.7112 ppb	12:21:03
3	Na 589.592 Radial†	-1391.4	163.1	49.427	ug/L	49.427 ppb	12:19:25
3	Ni 231.604†	87.3	0.7	0.0161	ug/L	0.0161 ppb	12:21:03
3	P 214.914†	237.0	-6.7	-3.7174	ug/L	-3.7174 ppb	12:21:03
3	Pb 220.353†	-47.4	20.9	2.3410	ug/L	2.3410 ppb	12:21:03
3	S 181.975 Axial†	48.8	-0.9	-1.2359	ug/L	-1.2359 ppb	12:21:03
3	Sb 206.836†	36.7	-1.0	-0.2826	ug/L	-0.2826 ppb	12:21:03
3	Se 196.026†	-23.7	3.3	1.8454	ug/L	1.8454 ppb	12:21:03
3	Si 251.611†	540.5	54.9	1.5760	ug/L	1.5760 ppb	12:21:03
3	Sn 189.927†	13.9	5.0	0.8044	ug/L	0.8044 ppb	12:21:03
3	Sr 421.552†	-21.1	-20.9	-0.1259	ug/L	-0.1259 ppb	12:19:25
3	Ti 334.940†	-1179.6	85.0	0.1353	ug/L	0.1353 ppb	12:20:43
3	Tl 190.801†	-31.4	3.4	0.9565	ug/L	0.9565 ppb	12:21:03
3	U 409.014†	-2735.1	-131.7	-3.7860	ug/L	-3.7860 ppb	12:20:43
3	V 292.402†	-1376.4	-3.9	-0.0231	ug/L	-0.0231 ppb	12:20:43
3	Zn 213.857†	804.2	44.6	0.3838	ug/L	0.3838 ppb	12:21:03
3	SiO2†	544.3	15.9	0.8859	ug/L	0.8859 ppb	12:21:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874100.5	100.71	%	0.510				0.51%
Sc Radial	5474.7	98.2	%	3.55				3.62%
Y 371.029	735583.8	100.84	%	0.433				0.43%
Y RADIAL	5968.6	98.83	%	3.269				3.31%
Ag 328.068†	5.9	0.0289	ug/L	0.11774	0.0289	ppb	0.11774	407.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.9	10.230	ug/L	5.2772	10.230	ppb	5.2772	51.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	14.5	5.5912	ug/L	1.02664	5.5912	ppb	1.02664	18.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	450.8	9.6072	ug/L	0.89611	9.6072	ppb	0.89611	9.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.3	0.0169	ug/L	0.03314	0.0169	ppb	0.03314	195.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	139.3	0.0501	ug/L	0.01626	0.0501	ppb	0.01626	32.45%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -1.1     -1.6125 ug/L       9.64065     -1.6125 ppb        9.64065 597.87%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                25.8      0.2673 ug/L       0.08895      0.2673 ppb        0.08895  33.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.5      0.0484 ug/L       0.23428      0.0484 ppb        0.23428 483.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -2.4     -0.0249 ug/L       0.10322     -0.0249 ppb        0.10322 414.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                20.7      0.0603 ug/L       0.15025      0.0603 ppb        0.15025 248.96%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.5      4.7863 ug/L      20.36173      4.7863 ppb       20.36173 425.41%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         890.4      149.38 ug/L        22.389      149.38 ppb         22.389  14.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.057 ug/L       46.6852      21.057 ppb        46.6852 221.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -14.6     -0.0154 ug/L       0.01009     -0.0154 ppb        0.01009  65.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                11.8      0.7533 ug/L       0.03947      0.7533 ppb        0.03947   5.24%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        129.2      39.148 ug/L       22.8314      39.148 ppb        22.8314  58.32%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.4     -0.0312 ug/L       0.12971     -0.0312 ppb        0.12971 415.76%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -13.7     -7.6254 ug/L       3.38898     -7.6254 ppb        3.38898  44.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.7      1.4256 ug/L       0.81188      1.4256 ppb        0.81188  56.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0     -1.3406 ug/L       6.91208     -1.3406 ppb        6.91208 515.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7736 ug/L       1.32771      0.7736 ppb        1.32771 171.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.2      1.2497 ug/L       0.51768      1.2497 ppb        0.51768  41.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                46.9      1.3315 ug/L       0.23091      1.3315 ppb        0.23091  17.34%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.6      0.8965 ug/L       0.27351      0.8965 ppb        0.27351  30.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -13.4     -0.0807 ug/L       0.04413     -0.0807 ppb        0.04413  54.68%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                22.2      0.0355 ug/L       0.09123      0.0355 ppb        0.09123 257.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.0      0.0106 ug/L       1.05217      0.0106 ppb        1.05217 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -34.9     -1.0026 ug/L       2.42018     -1.0026 ppb        2.42018 241.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -5.0     -0.0250 ug/L       0.00250     -0.0250 ppb        0.00250  10.03%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.9      0.2652 ug/L       0.13722      0.2652 ppb        0.13722  51.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       2.3      0.0029 ug/L       1.34702      0.0029 ppb        1.34702 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: LR1
Analyst: HSC
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 12/11/2009 12:23:28
Data Type: Reprocessed on 12/11/2009 12:46:11

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	861705.9	861705.9	99.284	%			12:26:39
1	Sc Radial	5356.0	5356.0	96.1	%			12:25:22
1	Y 371.029	718237.7	718237.7	98.462	%			12:26:39
1	Y RADIAL	5821.6	5821.6	96.40	%			12:25:22
1	Ag 328.068†	-25788.0	-26247.8	4.5515	ug/L	4.5515	ppb	12:26:39
1	Al 396.153Radial†	-58.7	-25.8	-16.754	ug/L	-16.754	ppb	12:25:22
1	As 188.979†	-219.6	-189.9	-13.581	ug/L	-13.581	ppb	12:26:59
1	B 249.677†	2608.9	3120.9	15.176	ug/L	15.176	ppb	12:26:39
1	Ba 233.527†	-1736.5	-1737.9	1.4933	ug/L	1.4933	ppb	12:26:39
1	Be 313.107†	-4122.4	510.6	0.1831	ug/L	0.1831	ppb	12:26:39
1	Ca 317.933Radial†	8.8	-7.7	-11.255	ug/L	-11.255	ppb	12:25:42
1	Cd 226.502†	3508.9	3733.1	0.0438	ug/L	0.0438	ppb	12:26:39
1	Co 228.616†	244.3	319.5	0.4449	ug/L	0.4449	ppb	12:26:59
1	Cr 267.716†	-583.7	-673.9	-0.0534	ug/L	-0.0534	ppb	12:26:39
1	Cu 324.752†	453.7	-6300.8	1.4319	ug/L	1.4319	ppb	12:26:39
1	Fe 238.204 Radial†	41486.5	43178.9	386840	ug/L	386840	ppb	12:25:22
1	K 766.490 Radial†	3092.8	480.1	93.208	ug/L	93.208	ppb	12:25:22
1	Mg 279.077 IEC†	15.4	14.1	143.65	ug/L	143.65	ppb	12:25:42
1	Mn 257.610†	-35683.4	-36460.7	-0.0742	ug/L	-0.0742	ppb	12:26:39
1	Mo 202.031†	-356.2	-377.2	3.4378	ug/L	3.4378	ppb	12:26:39
1	Na 589.592 Radial†	-1407.6	88.8	26.914	ug/L	26.914	ppb	12:25:22
1	Ni 231.604†	178.6	93.9	2.1545	ug/L	2.1545	ppb	12:26:59
1	P 214.914†	743.8	507.2	-25.892	ug/L	-25.892	ppb	12:26:59
1	Pb 220.353†	227.0	296.6	1.3987	ug/L	1.3987	ppb	12:26:59
1	S 181.975 Axial†	70.3	21.4	28.312	ug/L	28.312	ppb	12:26:59
1	Sb 206.836†	21.4	-15.9	1.0130	ug/L	1.0130	ppb	12:26:59
1	Se 196.026†	-2056.6	-2044.7	38.448	ug/L	38.448	ppb	12:26:59
1	Si 251.611†	-787.4	-1274.8	-37.562	ug/L	-37.562	ppb	12:26:39
1	Sn 189.927†	-21.3	-30.2	0.3038	ug/L	0.3038	ppb	12:26:59
1	Sr 421.552†	64.7	67.6	0.4076	ug/L	0.4076	ppb	12:25:22
1	Ti 334.940†	-1316.7	-69.9	-0.1365	ug/L	-0.1365	ppb	12:26:39
1	Tl 190.801†	-46.9	-12.7	-3.9619	ug/L	-3.9619	ppb	12:26:59
1	U 409.014†	-376.4	2204.9	14.736	ug/L	14.736	ppb	12:26:39
1	V 292.402†	7414.8	8831.0	-0.2906	ug/L	-0.2906	ppb	12:26:39
1	Zn 213.857†	4916.8	4198.4	-0.8283	ug/L	-0.8283	ppb	12:26:59
1	SiO2†	-780.4	-1310.5	-82.767	ug/L	-82.767	ppb	12:27:57
2	Sc 361.383	860218.2	860218.2	99.113	%			12:27:05
2	Sc Radial	5513.5	5513.5	98.9	%			12:25:47
2	Y 371.029	717273.7	717273.7	98.330	%			12:27:05
2	Y RADIAL	5987.8	5987.8	99.15	%			12:25:47
2	Ag 328.068†	-25878.0	-26383.6	3.2131	ug/L	3.2131	ppb	12:27:05
2	Al 396.153Radial†	-33.1	1.8	2.3584	ug/L	2.3584	ppb	12:25:47
2	As 188.979†	-233.0	-203.8	-19.307	ug/L	-19.307	ppb	12:27:25
2	B 249.677†	2427.4	2942.3	11.675	ug/L	11.675	ppb	12:27:05
2	Ba 233.527†	-1834.7	-1840.0	0.6453	ug/L	0.6453	ppb	12:27:05
2	Be 313.107†	-4135.8	489.8	0.1759	ug/L	0.1759	ppb	12:27:05
2	Ca 317.933Radial†	7.2	-9.6	-14.036	ug/L	-14.036	ppb	12:26:07
2	Cd 226.502†	3495.6	3725.8	0.1960	ug/L	0.1960	ppb	12:27:05
2	Co 228.616†	199.9	275.1	-0.3648	ug/L	-0.3648	ppb	12:27:25
2	Cr 267.716†	-581.4	-672.7	-0.0809	ug/L	-0.0809	ppb	12:27:05
2	Cu 324.752†	320.9	-6434.0	0.9288	ug/L	0.9288	ppb	12:27:05
2	Fe 238.204 Radial†	42455.2	42924.5	384560	ug/L	384560	ppb	12:25:47
2	K 766.490 Radial†	3107.1	402.6	80.127	ug/L	80.127	ppb	12:25:47
2	Mg 279.077 IEC†	12.8	11.1	43.037	ug/L	43.037	ppb	12:26:07
2	Mn 257.610†	-36042.6	-36885.3	-0.7496	ug/L	-0.7496	ppb	12:27:05
2	Mo 202.031†	-385.2	-407.1	1.3735	ug/L	1.3735	ppb	12:27:05
2	Na 589.592 Radial†	-1391.5	147.0	44.541	ug/L	44.541	ppb	12:25:47
2	Ni 231.604†	176.9	92.5	2.1221	ug/L	2.1221	ppb	12:27:25

2	P 214.914†	751.8	516.5	-18.782	ug/L	-18.782	ppb	12:27:25
2	Pb 220.353†	260.1	330.4	5.3728	ug/L	5.3728	ppb	12:27:25
2	S 181.975 Axial†	73.1	24.3	32.140	ug/L	32.140	ppb	12:27:25
2	Sb 206.836†	21.7	-15.5	1.0522	ug/L	1.0522	ppb	12:27:25
2	Se 196.026†	-2057.2	-2048.9	29.075	ug/L	29.075	ppb	12:27:25
2	Si 251.611†	-690.5	-1178.4	-34.651	ug/L	-34.651	ppb	12:27:05
2	Sn 189.927†	-23.0	-32.0	-0.0145	ug/L	-0.0145	ppb	12:27:25
2	Sr 421.552†	111.1	112.5	0.6788	ug/L	0.6788	ppb	12:25:47
2	Ti 334.940†	-1239.0	6.2	-0.0155	ug/L	-0.0155	ppb	12:27:05
2	Tl 190.801†	-45.5	-11.4	-3.5871	ug/L	-3.5871	ppb	12:27:25
2	U 409.014†	-457.8	2122.1	12.643	ug/L	12.643	ppb	12:27:05
2	V 292.402†	7362.4	8791.0	-0.2444	ug/L	-0.2444	ppb	12:27:05
2	Zn 213.857†	4870.6	4160.3	-0.9335	ug/L	-0.9335	ppb	12:27:25
2	SiO2†	-581.7	-1111.4	-69.976	ug/L	-69.976	ppb	12:28:02
3	Sc 361.383	855218.9	855218.9	98.537	%			12:27:31
3	Sc Radial	5682.5	5682.5	102	%			12:26:12
3	Y 371.029	712850.6	712850.6	97.723	%			12:27:31
3	Y RADIAL	6133.6	6133.6	101.6	%			12:26:12
3	Ag 328.068†	-25694.0	-26349.5	-2.5804	ug/L	-2.5804	ppb	12:27:31
3	Al 396.153Radial†	-39.2	-3.2	-1.0218	ug/L	-1.0218	ppb	12:26:12
3	As 188.979†	-227.7	-199.7	-20.616	ug/L	-20.616	ppb	12:27:51
3	B 249.677†	2486.5	3016.7	15.739	ug/L	15.739	ppb	12:27:31
3	Ba 233.527†	-1842.5	-1858.7	-0.1875	ug/L	-0.1875	ppb	12:27:31
3	Be 313.107†	-4027.5	575.4	0.2066	ug/L	0.2066	ppb	12:27:31
3	Ca 317.933Radial†	5.7	-11.3	-16.464	ug/L	-16.464	ppb	12:26:32
3	Cd 226.502†	3457.9	3708.2	1.8822	ug/L	1.8822	ppb	12:27:31
3	Co 228.616†	204.3	280.8	0.0046	ug/L	0.0046	ppb	12:27:51
3	Cr 267.716†	-622.3	-717.5	-0.8845	ug/L	-0.8845	ppb	12:27:31
3	Cu 324.752†	486.8	-6263.8	0.4695	ug/L	0.4695	ppb	12:27:31
3	Fe 238.204 Radial†	41629.6	40838.0	365870	ug/L	365870	ppb	12:26:12
3	K 766.490 Radial†	3141.6	343.1	69.553	ug/L	69.553	ppb	12:26:12
3	Mg 279.077 IEC†	10.9	8.8	-18.363	ug/L	-18.363	ppb	12:26:32
3	Mn 257.610†	-35630.1	-36679.3	-2.3939	ug/L	-2.3939	ppb	12:27:31
3	Mo 202.031†	-403.3	-427.7	-1.2629	ug/L	-1.2629	ppb	12:27:31
3	Na 589.592 Radial†	-1501.4	81.0	24.540	ug/L	24.540	ppb	12:26:12
3	Ni 231.604†	172.6	89.2	2.0466	ug/L	2.0466	ppb	12:27:51
3	P 214.914†	741.7	510.7	-7.0329	ug/L	-7.0329	ppb	12:27:51
3	Pb 220.353†	240.5	312.0	4.8421	ug/L	4.8421	ppb	12:27:51
3	S 181.975 Axial†	62.5	14.0	18.505	ug/L	18.505	ppb	12:27:51
3	Sb 206.836†	35.6	-1.3	5.2054	ug/L	5.2054	ppb	12:27:51
3	Se 196.026†	-2059.5	-2063.3	-36.500	ug/L	-36.500	ppb	12:27:51
3	Si 251.611†	-699.2	-1191.4	-35.013	ug/L	-35.013	ppb	12:27:31
3	Sn 189.927†	-20.5	-29.7	0.1133	ug/L	0.1133	ppb	12:27:51
3	Sr 421.552†	91.2	89.7	0.5413	ug/L	0.5413	ppb	12:26:12
3	Ti 334.940†	-1228.4	9.6	-0.0098	ug/L	-0.0098	ppb	12:27:31
3	Tl 190.801†	-48.5	-14.6	-4.5105	ug/L	-4.5105	ppb	12:27:51
3	U 409.014†	-476.8	2100.1	14.364	ug/L	14.364	ppb	12:27:31
3	V 292.402†	7338.9	8810.5	2.7077	ug/L	2.7077	ppb	12:27:31
3	Zn 213.857†	4894.2	4213.0	1.3067	ug/L	1.3067	ppb	12:27:51
3	SiO2†	-786.8	-1322.9	-83.424	ug/L	-83.424	ppb	12:28:07

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859047.7	98.978	%	0.3915				0.40%
Sc Radial	5517.3	99.0	%	2.93				2.96%
Y 371.029	716120.7	98.172	%	0.3938				0.40%
Y RADIAL	5981.0	99.04	%	2.585				2.61%
Ag 328.068†	-26327.0	1.7281	ug/L	3.79081	1.7281	ppb	3.79081	219.37%
Al 396.153Radial†	-9.1	-5.1393	ug/L	10.20005	-5.1393	ppb	10.20005	198.47%
As 188.979†	-197.8	-17.835	ug/L	3.7414	-17.835	ppb	3.7414	20.98%
B 249.677†	3026.6	14.197	ug/L	2.2019	14.197	ppb	2.2019	15.51%
Ba 233.527†	-1812.2	0.6504	ug/L	0.84043	0.6504	ppb	0.84043	129.22%
Be 313.107†	525.3	0.1886	ug/L	0.01607	0.1886	ppb	0.01607	8.52%
Ca 317.933Radial†	-9.5	-13.918	ug/L	2.6066	-13.918	ppb	2.6066	18.73%
Cd 226.502†	3722.4	0.7073	ug/L	1.02032	0.7073	ppb	1.02032	144.25%
Co 228.616†	291.8	0.0282	ug/L	0.40539	0.0282	ppb	0.40539	>999.9%
Cr 267.716†	-688.0	-0.3396	ug/L	0.47210	-0.3396	ppb	0.47210	139.01%
Cu 324.752†	-6332.9	0.9434	ug/L	0.48134	0.9434	ppb	0.48134	51.02%
Fe 238.204 Radial†	42313.8	379090	ug/L	11507.0	379090	ppb	11507.0	3.04%

K 766.490 Radial†	408.6	80.963	ug/L	11.8498	80.963	ppb	11.8498 14.64%
Mg 279.077 IEC†	11.3	56.108	ug/L	81.7938	56.108	ppb	81.7938 145.78%
Mn 257.610†	-36675.1	-1.0726	ug/L	1.19309	-1.0726	ppb	1.19309 111.24%
Mo 202.031†	-404.0	1.1828	ug/L	2.35610	1.1828	ppb	2.35610 199.20%
Na 589.592 Radial†	105.6	31.999	ug/L	10.9271	31.999	ppb	10.9271 34.15%
Ni 231.604†	91.9	2.1077	ug/L	0.05540	2.1077	ppb	0.05540 2.63%
P 214.914†	511.4	-17.236	ug/L	9.5241	-17.236	ppb	9.5241 55.26%
Pb 220.353†	313.0	3.8712	ug/L	2.15762	3.8712	ppb	2.15762 55.73%
S 181.975 Axial†	19.9	26.319	ug/L	7.0329	26.319	ppb	7.0329 26.72%
Sb 206.836†	-10.9	2.4235	ug/L	2.40924	2.4235	ppb	2.40924 99.41%
Se 196.026†	-2052.3	10.341	ug/L	40.8356	10.341	ppb	40.8356 394.88%
Si 251.611†	-1214.8	-35.742	ug/L	1.5862	-35.742	ppb	1.5862 4.44%
Sn 189.927†	-30.7	0.1342	ug/L	0.16017	0.1342	ppb	0.16017 119.34%
Sr 421.552†	89.9	0.5426	ug/L	0.13561	0.5426	ppb	0.13561 24.99%
Ti 334.940†	-18.1	-0.0539	ug/L	0.07156	-0.0539	ppb	0.07156 132.74%
Tl 190.801†	-12.9	-4.0198	ug/L	0.46438	-4.0198	ppb	0.46438 11.55%
U 409.014†	2142.4	13.914	ug/L	1.1168	13.914	ppb	1.1168 8.03%
V 292.402†	8810.8	0.7242	ug/L	1.71790	0.7242	ppb	1.71790 237.21%
Zn 213.857†	4190.6	-0.1517	ug/L	1.26412	-0.1517	ppb	1.26412 833.32%
SiO2†	-1248.3	-78.722	ug/L	7.5817	-78.722	ppb	7.5817 9.63%

Sequence No.: 18
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 12:30:18
Data Type: Reprocessed on 12/11/2009 12:46:12

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	874709.1	874709.1	100.78	%			12:33:28
1	Sc Radial	5563.9	5563.9	99.8	%			12:32:10
1	Y 371.029	722977.6	722977.6	99.112	%			12:33:28
1	Y RADIAL	6026.8	6026.8	99.79	%			12:32:10
1	Ag 328.068†	111391.2	110252.1	501.81	ug/L	501.81	ppb	12:33:33
1	Al 396.153Radial†	7064.0	7114.4	4878.3	ug/L	4878.3	ppb	12:32:10
1	As 188.979†	1272.7	1294.1	503.96	ug/L	503.96	ppb	12:33:53
1	B 249.677†	23228.1	23541.0	499.74	ug/L	499.74	ppb	12:33:33
1	Ba 233.527†	66804.5	66296.8	496.67	ug/L	496.67	ppb	12:33:33
1	Be 313.107†	1388852.3	1382728.6	497.47	ug/L	497.47	ppb	12:33:28
1	Ca 317.933Radial†	3365.3	3355.5	4897.4	ug/L	4897.4	ppb	12:32:30
1	Cd 226.502†	48309.9	48133.7	499.01	ug/L	499.01	ppb	12:33:33
1	Co 228.616†	26539.2	26406.5	498.22	ug/L	498.22	ppb	12:33:33
1	Cr 267.716†	47776.1	47319.0	496.12	ug/L	496.12	ppb	12:33:33
1	Cu 324.752†	177379.4	169244.0	491.85	ug/L	491.85	ppb	12:33:33
1	Fe 238.204 Radial†	578.8	570.1	5123.5	ug/L	5123.5	ppb	12:32:30
1	K 766.490 Radial†	32804.6	30134.8	5047.0	ug/L	5047.0	ppb	12:32:10
1	Mg 279.077 IEC†	152.2	150.6	5070.1	ug/L	5070.1	ppb	12:32:30
1	Mn 257.610†	473929.3	469728.5	498.25	ug/L	498.25	ppb	12:33:28
1	Mo 202.031†	7939.6	7859.5	500.52	ug/L	500.52	ppb	12:33:53
1	Na 589.592 Radial†	32525.7	34149.0	10349	ug/L	10349	ppb	12:32:10
1	Ni 231.604†	21887.3	21631.3	496.74	ug/L	496.74	ppb	12:33:33
1	P 214.914†	4726.0	4447.3	2408.7	ug/L	2408.7	ppb	12:33:53
1	Pb 220.353†	4384.0	4417.9	496.08	ug/L	496.08	ppb	12:33:53
1	S 181.975 Axial†	821.4	765.6	1010.5	ug/L	1010.5	ppb	12:33:53
1	Sb 206.836†	1643.6	1593.4	510.43	ug/L	510.43	ppb	12:33:53
1	Se 196.026†	863.8	883.9	515.28	ug/L	515.28	ppb	12:33:53
1	Si 251.611†	86522.9	85369.2	2530.7	ug/L	2530.7	ppb	12:33:33
1	Sn 189.927†	3148.6	3115.3	501.72	ug/L	501.72	ppb	12:33:53
1	Sr 421.552†	84421.0	84600.7	510.20	ug/L	510.20	ppb	12:32:10
1	Ti 334.940†	310984.2	309825.2	488.90	ug/L	488.90	ppb	12:33:33
1	Tl 190.801†	1743.6	1764.7	500.33	ug/L	500.33	ppb	12:33:53
1	U 409.014†	14618.2	17088.7	489.71	ug/L	489.71	ppb	12:33:33
1	V 292.402†	73236.0	74030.0	499.28	ug/L	499.28	ppb	12:33:33
1	Zn 213.857†	59285.0	58070.7	495.10	ug/L	495.10	ppb	12:33:33
1	SiO2†	86443.9	85248.1	5415.2	ug/L	5415.2	ppb	12:35:00
2	Sc 361.383	871455.0	871455.0	100.41	%			12:33:59
2	Sc Radial	5511.6	5511.6	98.8	%			12:32:36
2	Y 371.029	721889.3	721889.3	98.963	%			12:33:59
2	Y RADIAL	5973.0	5973.0	98.90	%			12:32:36
2	Ag 328.068†	111979.3	111250.5	506.37	ug/L	506.37	ppb	12:34:04
2	Al 396.153Radial†	7134.0	7252.3	4973.4	ug/L	4973.4	ppb	12:32:36
2	As 188.979†	1267.8	1293.9	503.94	ug/L	503.94	ppb	12:34:24
2	B 249.677†	23257.8	23656.5	502.18	ug/L	502.18	ppb	12:34:04
2	Ba 233.527†	67214.9	66953.0	501.59	ug/L	501.59	ppb	12:34:04
2	Be 313.107†	1382869.5	1381916.0	497.18	ug/L	497.18	ppb	12:33:59
2	Ca 317.933Radial†	3403.2	3425.9	5000.1	ug/L	5000.1	ppb	12:32:56
2	Cd 226.502†	48455.7	48457.8	502.37	ug/L	502.37	ppb	12:34:04
2	Co 228.616†	26689.7	26654.8	502.88	ug/L	502.88	ppb	12:34:04
2	Cr 267.716†	47985.5	47704.6	500.17	ug/L	500.17	ppb	12:34:04
2	Cu 324.752†	177894.6	170414.3	495.25	ug/L	495.25	ppb	12:34:04
2	Fe 238.204 Radial†	582.6	579.5	5207.7	ug/L	5207.7	ppb	12:32:56
2	K 766.490 Radial†	33027.5	30672.4	5137.1	ug/L	5137.1	ppb	12:32:36
2	Mg 279.077 IEC†	152.2	152.0	5118.7	ug/L	5118.7	ppb	12:32:56
2	Mn 257.610†	470267.0	467837.0	496.25	ug/L	496.25	ppb	12:33:59
2	Mo 202.031†	7879.3	7828.8	498.57	ug/L	498.57	ppb	12:34:24
2	Na 589.592 Radial†	32681.8	34616.4	10491	ug/L	10491	ppb	12:32:36
2	Ni 231.604†	21939.9	21764.8	499.81	ug/L	499.81	ppb	12:34:04

2	P 214.914†	4707.7	4446.5	2407.8 ug/L	2407.8 ppb	12:34:24
2	Pb 220.353†	4386.3	4436.5	498.16 ug/L	498.16 ppb	12:34:24
2	S 181.975 Axial†	812.0	759.3	1002.2 ug/L	1002.2 ppb	12:34:24
2	Sb 206.836†	1641.9	1597.9	511.72 ug/L	511.72 ppb	12:34:24
2	Se 196.026†	864.8	888.1	517.90 ug/L	517.90 ppb	12:34:24
2	Si 251.611†	86976.6	86141.7	2553.7 ug/L	2553.7 ppb	12:34:04
2	Sn 189.927†	3145.1	3123.5	503.05 ug/L	503.05 ppb	12:34:24
2	Sr 421.552†	84743.4	85730.0	517.01 ug/L	517.01 ppb	12:32:36
2	Ti 334.940†	312388.6	312376.2	492.93 ug/L	492.93 ppb	12:34:04
2	Tl 190.801†	1740.7	1768.2	501.32 ug/L	501.32 ppb	12:34:24
2	U 409.014†	14640.0	17164.5	491.87 ug/L	491.87 ppb	12:34:04
2	V 292.402†	73801.7	74864.7	504.79 ug/L	504.79 ppb	12:34:04
2	Zn 213.857†	59575.7	58579.9	499.45 ug/L	499.45 ppb	12:34:04
2	SiO2†	86190.0	85315.5	5419.5 ug/L	5419.5 ppb	12:35:06
3	Sc 361.383	868637.4	868637.4	100.08 %		12:34:30
3	Sc Radial	5484.0	5484.0	98.4 %		12:33:01
3	Y 371.029	718522.2	718522.2	98.501 %		12:34:30
3	Y RADIAL	5942.8	5942.8	98.40 %		12:33:01
3	Ag 328.068†	111539.4	111172.7	506.01 ug/L	506.01 ppb	12:34:35
3	Al 396.153Radial†	6980.7	7132.8	4890.9 ug/L	4890.9 ppb	12:33:01
3	As 188.979†	1269.6	1299.8	506.21 ug/L	506.21 ppb	12:34:55
3	B 249.677†	23148.6	23622.6	501.45 ug/L	501.45 ppb	12:34:35
3	Ba 233.527†	67128.5	67083.9	502.56 ug/L	502.56 ppb	12:34:35
3	Be 313.107†	1381302.3	1384817.6	498.22 ug/L	498.22 ppb	12:34:30
3	Ca 317.933Radial†	3378.4	3418.1	4988.7 ug/L	4988.7 ppb	12:33:21
3	Cd 226.502†	48625.2	48783.7	505.75 ug/L	505.75 ppb	12:34:35
3	Co 228.616†	26670.3	26721.6	504.16 ug/L	504.16 ppb	12:34:35
3	Cr 267.716†	47975.8	47849.9	501.69 ug/L	501.69 ppb	12:34:35
3	Cu 324.752†	176857.8	169953.1	493.91 ug/L	493.91 ppb	12:34:35
3	Fe 238.204 Radial†	575.7	575.5	5171.7 ug/L	5171.7 ppb	12:33:21
3	K 766.490 Radial†	32329.9	30131.5	5046.4 ug/L	5046.4 ppb	12:33:01
3	Mg 279.077 IEC†	157.8	158.5	5336.5 ug/L	5336.5 ppb	12:33:21
3	Mn 257.610†	470878.8	469967.5	498.50 ug/L	498.50 ppb	12:34:30
3	Mo 202.031†	7939.5	7914.5	504.02 ug/L	504.02 ppb	12:34:55
3	Na 589.592 Radial†	31935.8	34024.5	10311 ug/L	10311 ppb	12:33:01
3	Ni 231.604†	22062.0	21957.7	504.24 ug/L	504.24 ppb	12:34:35
3	P 214.914†	4718.4	4472.4	2422.5 ug/L	2422.5 ppb	12:34:55
3	Pb 220.353†	4401.9	4466.3	501.49 ug/L	501.49 ppb	12:34:55
3	S 181.975 Axial†	821.4	771.3	1018.1 ug/L	1018.1 ppb	12:34:55
3	Sb 206.836†	1653.3	1614.5	517.12 ug/L	517.12 ppb	12:34:55
3	Se 196.026†	868.2	894.3	521.29 ug/L	521.29 ppb	12:34:55
3	Si 251.611†	86644.6	86090.9	2552.1 ug/L	2552.1 ppb	12:34:35
3	Sn 189.927†	3156.0	3144.6	506.44 ug/L	506.44 ppb	12:34:55
3	Sr 421.552†	83013.6	84403.4	509.01 ug/L	509.01 ppb	12:33:01
3	Ti 334.940†	311422.2	312419.8	492.99 ug/L	492.99 ppb	12:34:35
3	Tl 190.801†	1738.0	1771.1	502.13 ug/L	502.13 ppb	12:34:55
3	U 409.014†	14591.5	17163.4	491.84 ug/L	491.84 ppb	12:34:35
3	V 292.402†	73520.9	74822.6	504.60 ug/L	504.60 ppb	12:34:35
3	Zn 213.857†	59543.0	58739.7	500.79 ug/L	500.79 ppb	12:34:35
3	SiO2†	86642.0	86045.6	5465.9 ug/L	5465.9 ppb	12:35:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871600.5	100.42	%	0.350				0.35%
Sc Radial	5519.8	99.0	%	0.73				0.74%
Y 371.029	721129.7	98.858	%	0.3184				0.32%
Y RADIAL	5980.8	99.03	%	0.704				0.71%
Ag 328.068†	110891.8	504.73	ug/L	2.535	504.73	ppb	2.535	0.50%
QC value within limits for Ag 328.068 Recovery = 100.95%								
Al 396.153Radial†	7166.5	4914.2	ug/L	51.66	4914.2	ppb	51.66	1.05%
QC value within limits for Al 396.153Radial Recovery = 98.28%								
As 188.979†	1296.0	504.71	ug/L	1.305	504.71	ppb	1.305	0.26%
QC value within limits for As 188.979 Recovery = 100.94%								
B 249.677†	23606.7	501.12	ug/L	1.254	501.12	ppb	1.254	0.25%
QC value within limits for B 249.677 Recovery = 100.22%								
Ba 233.527†	66777.9	500.27	ug/L	3.160	500.27	ppb	3.160	0.63%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 313.107†	1383154.1	497.62	ug/L	0.539	497.62	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 99.52%								

Ca 317.933Radial†	3399.8	4962.1 ug/L	56.32	4962.1 ppb	56.32	1.14%
QC value within limits for Ca 317.933Radial Recovery = 99.24%						
Cd 226.502†	48458.4	502.38 ug/L	3.371	502.38 ppb	3.371	0.67%
QC value within limits for Cd 226.502 Recovery = 100.48%						
Co 228.616†	26594.3	501.75 ug/L	3.128	501.75 ppb	3.128	0.62%
QC value within limits for Co 228.616 Recovery = 100.35%						
Cr 267.716†	47624.5	499.32 ug/L	2.877	499.32 ppb	2.877	0.58%
QC value within limits for Cr 267.716 Recovery = 99.86%						
Cu 324.752†	169870.4	493.67 ug/L	1.714	493.67 ppb	1.714	0.35%
QC value within limits for Cu 324.752 Recovery = 98.73%						
Fe 238.204 Radial†	575.0	5167.6 ug/L	42.23	5167.6 ppb	42.23	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 103.35%						
K 766.490 Radial†	30312.9	5076.8 ug/L	52.21	5076.8 ppb	52.21	1.03%
QC value within limits for K 766.490 Radial Recovery = 101.54%						
Mg 279.077 IEC†	153.7	5175.1 ug/L	141.91	5175.1 ppb	141.91	2.74%
QC value within limits for Mg 279.077 IEC Recovery = 103.50%						
Mn 257.610†	469177.7	497.67 ug/L	1.233	497.67 ppb	1.233	0.25%
QC value within limits for Mn 257.610 Recovery = 99.53%						
Mo 202.031†	7867.6	501.04 ug/L	2.761	501.04 ppb	2.761	0.55%
QC value within limits for Mo 202.031 Recovery = 100.21%						
Na 589.592 Radial†	34263.3	10384 ug/L	94.6	10384 ppb	94.6	0.91%
QC value within limits for Na 589.592 Radial Recovery = 103.84%						
Ni 231.604†	21784.6	500.26 ug/L	3.768	500.26 ppb	3.768	0.75%
QC value within limits for Ni 231.604 Recovery = 100.05%						
P 214.914†	4455.4	2413.0 ug/L	8.23	2413.0 ppb	8.23	0.34%
QC value within limits for P 214.914 Recovery = 96.52%						
Pb 220.353†	4440.2	498.58 ug/L	2.732	498.58 ppb	2.732	0.55%
QC value within limits for Pb 220.353 Recovery = 99.72%						
S 181.975 Axial†	765.4	1010.2 ug/L	7.95	1010.2 ppb	7.95	0.79%
QC value within limits for S 181.975 Axial Recovery = 101.02%						
Sb 206.836†	1601.9	513.09 ug/L	3.551	513.09 ppb	3.551	0.69%
QC value within limits for Sb 206.836 Recovery = 102.62%						
Se 196.026†	888.8	518.16 ug/L	3.012	518.16 ppb	3.012	0.58%
QC value within limits for Se 196.026 Recovery = 103.63%						
Si 251.611†	85867.3	2545.5 ug/L	12.85	2545.5 ppb	12.85	0.50%
QC value within limits for Si 251.611 Recovery = 101.82%						
Sn 189.927†	3127.8	503.74 ug/L	2.435	503.74 ppb	2.435	0.48%
QC value within limits for Sn 189.927 Recovery = 100.75%						
Sr 421.552†	84911.4	512.08 ug/L	4.317	512.08 ppb	4.317	0.84%
QC value within limits for Sr 421.552 Recovery = 102.42%						
Ti 334.940†	311540.4	491.61 ug/L	2.346	491.61 ppb	2.346	0.48%
QC value within limits for Ti 334.940 Recovery = 98.32%						
Tl 190.801†	1768.0	501.26 ug/L	0.902	501.26 ppb	0.902	0.18%
QC value within limits for Tl 190.801 Recovery = 100.25%						
U 409.014†	17138.9	491.14 ug/L	1.239	491.14 ppb	1.239	0.25%
QC value within limits for U 409.014 Recovery = 98.23%						
V 292.402†	74572.4	502.89 ug/L	3.128	502.89 ppb	3.128	0.62%
QC value within limits for V 292.402 Recovery = 100.58%						
Zn 213.857†	58463.4	498.45 ug/L	2.974	498.45 ppb	2.974	0.60%
QC value within limits for Zn 213.857 Recovery = 99.69%						
SiO2†	85536.4	5433.5 ug/L	28.13	5433.5 ppb	28.13	0.52%
QC value within limits for SiO2 Recovery = 101.61%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 12:37:20
Data Type: Reprocessed on 12/11/2009 12:46:13

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	847568.2	847568.2	97.656	%			12:40:30
1	Sc Radial	5624.4	5624.4	101	%			12:39:13
1	Y 371.029	713720.6	713720.6	97.843	%			12:40:30
1	Y RADIAL	6144.5	6144.5	101.7	%			12:39:13
1	Ag 328.068†	378.1	113.2	0.5160	ug/L	0.5160	ppb	12:40:30
1	Al 396.153Radial†	-18.5	16.9	11.642	ug/L	11.642	ppb	12:39:13
1	As 188.979†	-22.0	8.7	3.3641	ug/L	3.3641	ppb	12:40:50
1	B 249.677†	-169.4	319.7	6.8141	ug/L	6.8141	ppb	12:40:50
1	Ba 233.527†	-26.0	-15.5	-0.1172	ug/L	-0.1172	ppb	12:40:50
1	Be 313.107†	-4472.9	82.3	0.0296	ug/L	0.0296	ppb	12:40:30
1	Ca 317.933Radial†	13.7	-3.3	-4.8029	ug/L	-4.8029	ppb	12:39:33
1	Cd 226.502†	-181.9	12.7	0.1317	ug/L	0.1317	ppb	12:40:50
1	Co 228.616†	-85.9	-14.5	-0.2722	ug/L	-0.2722	ppb	12:40:50
1	Cr 267.716†	63.8	-20.7	-0.2157	ug/L	-0.2157	ppb	12:40:50
1	Cu 324.752†	6713.9	117.3	0.3406	ug/L	0.3406	ppb	12:40:30
1	Fe 238.204 Radial†	10.0	-0.0	-0.1211	ug/L	-0.1211	ppb	12:39:33
1	K 766.490 Radial†	3088.5	322.2	54.063	ug/L	54.063	ppb	12:39:13
1	Mg 279.077 IEC†	2.0	0.1	3.4114	ug/L	3.4114	ppb	12:39:33
1	Mn 257.610†	485.0	-23.5	-0.0250	ug/L	-0.0250	ppb	12:40:50
1	Mo 202.031†	26.8	9.0	0.5714	ug/L	0.5714	ppb	12:40:50
1	Na 589.592 Radial†	-1538.6	28.8	8.7370	ug/L	8.7370	ppb	12:39:13
1	Ni 231.604†	75.9	-8.2	-0.1882	ug/L	-0.1882	ppb	12:40:50
1	P 214.914†	227.6	-9.0	-5.0728	ug/L	-5.0728	ppb	12:40:50
1	Pb 220.353†	-58.9	7.7	0.8665	ug/L	0.8665	ppb	12:40:50
1	S 181.975 Axial†	54.1	6.0	7.9430	ug/L	7.9430	ppb	12:40:50
1	Sb 206.836†	38.0	1.5	0.4847	ug/L	0.4847	ppb	12:40:50
1	Se 196.026†	-33.4	-7.5	-4.1895	ug/L	-4.1895	ppb	12:40:50
1	Si 251.611†	528.4	59.3	1.7391	ug/L	1.7391	ppb	12:40:50
1	Sn 189.927†	7.8	-0.8	-0.1315	ug/L	-0.1315	ppb	12:40:50
1	Sr 421.552†	-51.0	-50.3	-0.3033	ug/L	-0.3033	ppb	12:39:13
1	Ti 334.940†	-1231.0	-4.3	-0.0037	ug/L	-0.0037	ppb	12:40:30
1	Tl 190.801†	-32.0	1.8	0.4998	ug/L	0.4998	ppb	12:40:50
1	U 409.014†	-2775.7	-258.4	-7.4274	ug/L	-7.4274	ppb	12:40:30
1	V 292.402†	-1414.2	-85.5	-0.5746	ug/L	-0.5746	ppb	12:40:30
1	Zn 213.857†	779.8	44.7	0.3849	ug/L	0.3849	ppb	12:40:50
1	SiO2†	535.2	23.5	1.4416	ug/L	1.4416	ppb	12:41:46
2	Sc 361.383	850980.6	850980.6	98.049	%			12:40:55
2	Sc Radial	5226.4	5226.4	93.7	%			12:39:38
2	Y 371.029	716574.3	716574.3	98.234	%			12:40:55
2	Y RADIAL	5690.7	5690.7	94.23	%			12:39:38
2	Ag 328.068†	348.6	81.5	0.3744	ug/L	0.3744	ppb	12:40:55
2	Al 396.153Radial†	-36.8	-3.9	-2.7236	ug/L	-2.7236	ppb	12:39:38
2	As 188.979†	-23.9	6.9	2.6793	ug/L	2.6793	ppb	12:41:15
2	B 249.677†	-177.9	311.8	6.6422	ug/L	6.6422	ppb	12:41:15
2	Ba 233.527†	-10.5	0.4	0.0019	ug/L	0.0019	ppb	12:41:15
2	Be 313.107†	-4484.6	88.8	0.0319	ug/L	0.0319	ppb	12:40:55
2	Ca 317.933Radial†	13.4	-2.6	-3.7376	ug/L	-3.7376	ppb	12:39:58
2	Cd 226.502†	-190.0	5.2	0.0527	ug/L	0.0527	ppb	12:41:15
2	Co 228.616†	-65.8	6.4	0.1208	ug/L	0.1208	ppb	12:41:15
2	Cr 267.716†	81.6	-2.8	-0.0290	ug/L	-0.0290	ppb	12:41:15
2	Cu 324.752†	6807.4	185.0	0.5381	ug/L	0.5381	ppb	12:40:55
2	Fe 238.204 Radial†	10.7	1.5	13.644	ug/L	13.644	ppb	12:39:58
2	K 766.490 Radial†	3279.1	758.8	127.31	ug/L	127.31	ppb	12:39:38
2	Mg 279.077 IEC†	2.5	0.7	24.525	ug/L	24.525	ppb	12:39:58
2	Mn 257.610†	508.2	-1.8	-0.0010	ug/L	-0.0010	ppb	12:41:15
2	Mo 202.031†	24.8	6.9	0.4417	ug/L	0.4417	ppb	12:41:15
2	Na 589.592 Radial†	-1499.3	-45.4	-13.764	ug/L	-13.764	ppb	12:39:38
2	Ni 231.604†	91.9	7.8	0.1795	ug/L	0.1795	ppb	12:41:15

2	P 214.914†	236.7	-0.7	-0.4870	ug/L	-0.4870 ppb	12:41:15
2	Pb 220.353†	-67.3	-0.7	-0.0795	ug/L	-0.0795 ppb	12:41:15
2	S 181.975 Axial†	47.6	-0.8	-1.0703	ug/L	-1.0703 ppb	12:41:15
2	Sb 206.836†	35.8	-0.9	-0.2940	ug/L	-0.2940 ppb	12:41:15
2	Se 196.026†	-15.0	11.5	6.5280	ug/L	6.5280 ppb	12:41:15
2	Si 251.611†	497.0	25.2	0.7024	ug/L	0.7024 ppb	12:41:15
2	Sn 189.927†	2.4	-6.3	-1.0202	ug/L	-1.0202 ppb	12:41:15
2	Sr 421.552†	-16.5	-17.4	-0.1049	ug/L	-0.1049 ppb	12:39:38
2	Ti 334.940†	-1223.0	8.9	0.0158	ug/L	0.0158 ppb	12:40:55
2	Tl 190.801†	-29.5	4.5	1.2547	ug/L	1.2547 ppb	12:41:15
2	U 409.014†	-2678.8	-148.1	-4.2607	ug/L	-4.2607 ppb	12:40:55
2	V 292.402†	-1420.0	-85.5	-0.5724	ug/L	-0.5724 ppb	12:40:55
2	Zn 213.857†	767.0	28.4	0.2403	ug/L	0.2403 ppb	12:41:15
2	SiO2†	543.1	29.4	1.7730	ug/L	1.7730 ppb	12:41:51
3	Sc 361.383	871743.4	871743.4	100.44	%		12:41:20
3	Sc Radial	5613.5	5613.5	101	%		12:40:03
3	Y 371.029	732016.1	732016.1	100.35	%		12:41:20
3	Y RADIAL	6098.6	6098.6	101.0	%		12:40:03
3	Ag 328.068†	321.4	45.9	0.2161	ug/L	0.2161 ppb	12:41:20
3	Al 396.153Radial†	-14.4	21.0	14.465	ug/L	14.465 ppb	12:40:03
3	As 188.979†	-28.8	2.6	0.9995	ug/L	0.9995 ppb	12:41:40
3	B 249.677†	-175.0	319.0	6.7956	ug/L	6.7956 ppb	12:41:40
3	Ba 233.527†	3.9	15.0	0.1125	ug/L	0.1125 ppb	12:41:40
3	Be 313.107†	-4613.2	69.7	0.0249	ug/L	0.0249 ppb	12:41:20
3	Ca 317.933Radial†	14.9	-2.1	-3.0652	ug/L	-3.0652 ppb	12:40:23
3	Cd 226.502†	-191.1	8.7	0.0878	ug/L	0.0878 ppb	12:41:40
3	Co 228.616†	-73.5	0.2	0.0045	ug/L	0.0045 ppb	12:41:40
3	Cr 267.716†	66.6	-19.7	-0.2057	ug/L	-0.2057 ppb	12:41:40
3	Cu 324.752†	6808.2	20.5	0.0606	ug/L	0.0606 ppb	12:41:20
3	Fe 238.204 Radial†	12.3	2.4	21.114	ug/L	21.114 ppb	12:40:23
3	K 766.490 Radial†	3159.7	398.9	66.917	ug/L	66.917 ppb	12:40:03
3	Mg 279.077 IEC†	3.2	1.3	43.185	ug/L	43.185 ppb	12:40:23
3	Mn 257.610†	509.9	-12.5	-0.0119	ug/L	-0.0119 ppb	12:41:40
3	Mo 202.031†	20.7	2.1	0.1378	ug/L	0.1378 ppb	12:41:40
3	Na 589.592 Radial†	-1474.7	89.3	27.067	ug/L	27.067 ppb	12:40:03
3	Ni 231.604†	71.5	-14.8	-0.3389	ug/L	-0.3389 ppb	12:41:40
3	P 214.914†	230.9	-12.2	-6.8179	ug/L	-6.8179 ppb	12:41:40
3	Pb 220.353†	-60.8	7.4	0.8329	ug/L	0.8329 ppb	12:41:40
3	S 181.975 Axial†	52.2	2.6	3.4239	ug/L	3.4239 ppb	12:41:40
3	Sb 206.836†	43.9	6.3	2.0264	ug/L	2.0264 ppb	12:41:40
3	Se 196.026†	-38.8	-11.8	-6.5690	ug/L	-6.5690 ppb	12:41:40
3	Si 251.611†	527.2	43.2	1.2583	ug/L	1.2583 ppb	12:41:40
3	Sn 189.927†	14.2	5.3	0.8595	ug/L	0.8595 ppb	12:41:40
3	Sr 421.552†	-37.7	-37.2	-0.2243	ug/L	-0.2243 ppb	12:40:03
3	Ti 334.940†	-1298.4	-36.4	-0.0565	ug/L	-0.0565 ppb	12:41:20
3	Tl 190.801†	-27.3	7.4	2.0781	ug/L	2.0781 ppb	12:41:40
3	U 409.014†	-2681.9	-86.1	-2.4777	ug/L	-2.4777 ppb	12:41:20
3	V 292.402†	-1391.1	-22.3	-0.1531	ug/L	-0.1531 ppb	12:41:20
3	Zn 213.857†	776.4	19.1	0.1631	ug/L	0.1631 ppb	12:41:40
3	SiO2†	530.9	4.1	0.2003	ug/L	0.2003 ppb	12:41:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856764.1	98.715	%	1.5075				1.53%
Sc Radial	5488.1	98.4	%	4.07				4.13%
Y 371.029	720770.3	98.809	%	1.3494				1.37%
Y RADIAL	5977.9	98.99	%	4.137				4.18%
Ag 328.068†	80.2	0.3689	ug/L	0.15003	0.3689	ppb	0.15003	40.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.3	7.7943	ug/L	9.21744	7.7943	ppb	9.21744	118.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.1	2.3476	ug/L	1.21668	2.3476	ppb	1.21668	51.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	316.8	6.7506	ug/L	0.09438	6.7506	ppb	0.09438	1.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0009	ug/L	0.11484	-0.0009	ppb	0.11484	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.3	0.0288	ug/L	0.00356	0.0288	ppb	0.00356	12.36%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†          -2.7     -3.8686 ug/L       0.87624     -3.8686 ppb        0.87624  22.65%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.9      0.0907 ug/L       0.03961      0.0907 ppb        0.03961  43.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -2.6     -0.0490 ug/L       0.20189     -0.0490 ppb        0.20189 412.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -14.4     -0.1501 ug/L       0.10498     -0.1501 ppb        0.10498  69.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               107.6      0.3131 ug/L       0.23993      0.3131 ppb        0.23993  76.63%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.3      11.546 ug/L       10.7720      11.546 ppb        10.7720  93.30%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         493.3      82.763 ug/L       39.1107      82.763 ppb        39.1107  47.26%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7      23.707 ug/L       19.8994      23.707 ppb        19.8994  83.94%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -12.6     -0.0127 ug/L       0.01201     -0.0127 ppb        0.01201  94.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.0      0.3837 ug/L       0.22256      0.3837 ppb        0.22256  58.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         24.2      7.3467 ug/L      20.45092      7.3467 ppb       20.45092 278.37%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.0     -0.1159 ug/L       0.26666     -0.1159 ppb        0.26666 230.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.3     -4.1259 ug/L       3.26994     -4.1259 ppb        3.26994  79.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.8      0.5399 ug/L       0.53675      0.5399 ppb        0.53675  99.41%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.6      3.4322 ug/L       4.50668      3.4322 ppb        4.50668 131.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.3      0.7390 ug/L       1.18090      0.7390 ppb        1.18090 159.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.6     -1.4101 ug/L       6.97685     -1.4101 ppb        6.97685 494.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                42.5      1.2332 ug/L       0.51879      1.2332 ppb        0.51879  42.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.6     -0.0974 ug/L       0.94032     -0.0974 ppb        0.94032 965.25%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -35.0     -0.2108 ug/L       0.09986     -0.2108 ppb        0.09986  47.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -10.6     -0.0148 ug/L       0.03737     -0.0148 ppb        0.03737 252.28%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.5      1.2775 ug/L       0.78940      1.2775 ppb        0.78940  61.79%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -164.2     -4.7219 ug/L       2.50685     -4.7219 ppb        2.50685  53.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -64.4     -0.4334 ug/L       0.24273     -0.4334 ppb        0.24273  56.01%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                30.7      0.2628 ug/L       0.11259      0.2628 ppb        0.11259  42.85%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      19.0      1.1383 ug/L       0.82903      1.1383 ppb        0.82903  72.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/11/2009 13:02:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5959.4	5959.4	107	%			13:03:53
1	Y RADIAL	6433.9	6433.9	106.5	%			13:03:53
1	Al 396.153Radial†	6880.1	6472.5	4436.2	ug/L	4436.2	ppb	13:03:53
1	Ca 317.933Radial†	3391.0	3155.8	4605.9	ug/L	4605.9	ppb	13:04:13
1	Fe 238.204 Radial†	580.6	533.3	4793.9	ug/L	4793.9	ppb	13:04:13
1	K 766.490 Radial†	32130.2	27322.1	4575.4	ug/L	4575.4	ppb	13:03:53
1	Mg 279.077 IEC†	154.9	143.0	4815.3	ug/L	4815.3	ppb	13:04:13
1	Na 589.592 Radial†	31940.4	31438.2	9527.6	ug/L	9527.6	ppb	13:03:53
1	Sr 421.552†	82353.6	77051.8	464.68	ug/L	464.68	ppb	13:03:53
1	Sc 361.383	868304.2	868304.2	100.04	%			13:05:11
1	Y 371.029	718002.5	718002.5	98.430	%			13:05:11
1	Ag 328.068†	111566.0	111242.1	506.20	ug/L	506.20	ppb	13:05:16
1	As 188.979†	1272.4	1303.2	507.45	ug/L	507.45	ppb	13:05:36
1	B 249.677†	23032.5	23515.4	499.22	ug/L	499.22	ppb	13:05:16
1	Ba 233.527†	66943.7	66924.9	501.36	ug/L	501.36	ppb	13:05:16
1	Be 313.107†	1385036.2	1389079.4	499.76	ug/L	499.76	ppb	13:05:11
1	Cd 226.502†	48353.2	48530.5	503.16	ug/L	503.16	ppb	13:05:16
1	Co 228.616†	26620.9	26682.5	503.42	ug/L	503.42	ppb	13:05:16
1	Cr 267.716†	47781.5	47674.1	499.84	ug/L	499.84	ppb	13:05:16
1	Cu 324.752†	177423.8	170586.6	495.73	ug/L	495.73	ppb	13:05:16
1	Mn 257.610†	472521.3	471789.8	500.40	ug/L	500.40	ppb	13:05:11
1	Mo 202.031†	7896.7	7874.7	501.46	ug/L	501.46	ppb	13:05:36
1	Ni 231.604†	21927.6	21831.9	501.35	ug/L	501.35	ppb	13:05:16
1	P 214.914†	4708.4	4464.3	2417.8	ug/L	2417.8	ppb	13:05:36
1	Pb 220.353†	4390.4	4456.4	500.31	ug/L	500.31	ppb	13:05:36
1	S 181.975 Axial†	819.1	769.4	1015.6	ug/L	1015.6	ppb	13:05:36
1	Sb 206.836†	1637.0	1598.9	512.13	ug/L	512.13	ppb	13:05:36
1	Se 196.026†	868.5	894.9	520.39	ug/L	520.39	ppb	13:05:36
1	Si 251.611†	86739.6	86219.0	2556.1	ug/L	2556.1	ppb	13:05:16
1	Sn 189.927†	3142.3	3132.1	504.39	ug/L	504.39	ppb	13:05:36
1	Ti 334.940†	311670.3	312787.2	493.55	ug/L	493.55	ppb	13:05:16
1	Tl 190.801†	1745.1	1778.9	504.35	ug/L	504.35	ppb	13:05:36
1	U 409.014†	14952.8	17530.1	502.44	ug/L	502.44	ppb	13:05:16
1	V 292.402†	73449.6	74779.4	504.34	ug/L	504.34	ppb	13:05:16
1	Zn 213.857†	59419.1	58638.7	500.00	ug/L	500.00	ppb	13:05:16
1	SiO2†	86119.9	85556.9	5435.2	ug/L	5435.2	ppb	13:06:43
2	Sc Radial	5427.5	5427.5	97.3	%			13:04:18
2	Y RADIAL	5846.3	5846.3	96.81	%			13:04:18
2	Al 396.153Radial†	6976.9	7202.8	4939.2	ug/L	4939.2	ppb	13:04:18
2	Ca 317.933Radial†	3369.6	3444.7	5027.6	ug/L	5027.6	ppb	13:04:38
2	Fe 238.204 Radial†	578.6	584.5	5252.6	ug/L	5252.6	ppb	13:04:38
2	K 766.490 Radial†	32118.8	30256.5	5067.3	ug/L	5067.3	ppb	13:04:18
2	Mg 279.077 IEC†	152.0	154.3	5194.1	ug/L	5194.1	ppb	13:04:38
2	Na 589.592 Radial†	32122.3	34553.8	10472	ug/L	10472	ppb	13:04:18
2	Sr 421.552†	83110.6	85380.7	514.91	ug/L	514.91	ppb	13:04:18
2	Sc 361.383	868381.1	868381.1	100.05	%			13:05:42
2	Y 371.029	717381.1	717381.1	98.345	%			13:05:42
2	Ag 328.068†	112619.5	112285.1	511.08	ug/L	511.08	ppb	13:05:47
2	As 188.979†	1257.8	1288.4	501.86	ug/L	501.86	ppb	13:06:07
2	B 249.677†	23342.0	23822.7	505.69	ug/L	505.69	ppb	13:05:47
2	Ba 233.527†	67721.2	67696.0	507.15	ug/L	507.15	ppb	13:05:47
2	Be 313.107†	1385484.5	1389404.7	499.88	ug/L	499.88	ppb	13:05:42
2	Cd 226.502†	48926.1	49098.8	509.01	ug/L	509.01	ppb	13:05:47
2	Co 228.616†	26952.7	27011.7	509.61	ug/L	509.61	ppb	13:05:47
2	Cr 267.716†	48407.5	48295.6	506.36	ug/L	506.36	ppb	13:05:47
2	Cu 324.752†	178880.8	172027.1	499.94	ug/L	499.94	ppb	13:05:47
2	Mn 257.610†	474037.8	473263.6	502.01	ug/L	502.01	ppb	13:05:42
2	Mo 202.031†	7887.5	7864.8	500.86	ug/L	500.86	ppb	13:06:07
2	Ni 231.604†	22264.6	22166.7	509.04	ug/L	509.04	ppb	13:05:47

2	P 214.914†	4697.4	4452.8	2410.5	ug/L	2410.5 ppb	13:06:07
2	Pb 220.353†	4377.4	4443.0	498.88	ug/L	498.88 ppb	13:06:07
2	S 181.975 Axial†	810.4	760.6	1003.9	ug/L	1003.9 ppb	13:06:07
2	Sb 206.836†	1617.5	1579.2	505.76	ug/L	505.76 ppb	13:06:07
2	Se 196.026†	870.1	896.5	522.76	ug/L	522.76 ppb	13:06:07
2	Si 251.611†	87756.7	87227.9	2586.0	ug/L	2586.0 ppb	13:05:47
2	Sn 189.927†	3143.0	3132.5	504.51	ug/L	504.51 ppb	13:06:07
2	Ti 334.940†	314645.2	315732.8	498.22	ug/L	498.22 ppb	13:05:47
2	Tl 190.801†	1726.0	1759.6	498.92	ug/L	498.92 ppb	13:06:07
2	U 409.014†	14759.9	17336.0	496.78	ug/L	496.78 ppb	13:05:47
2	V 292.402†	74164.6	75487.6	508.96	ug/L	508.96 ppb	13:05:47
2	Zn 213.857†	60106.5	59320.4	505.75	ug/L	505.75 ppb	13:05:47
2	SiO2†	85989.9	85419.4	5426.1	ug/L	5426.1 ppb	13:06:48
3	Sc Radial	5434.7	5434.7	97.5	%		13:04:43
3	Y RADIAL	5906.3	5906.3	97.80	%		13:04:43
3	Al 396.153Radial†	6977.6	7194.0	4933.5	ug/L	4933.5 ppb	13:04:43
3	Ca 317.933Radial†	3381.9	3452.7	5039.3	ug/L	5039.3 ppb	13:05:03
3	Fe 238.204 Radial†	573.9	578.9	5202.1	ug/L	5202.1 ppb	13:05:03
3	K 766.490 Radial†	32398.3	30499.8	5108.1	ug/L	5108.1 ppb	13:04:43
3	Mg 279.077 IEC†	158.1	160.3	5397.0	ug/L	5397.0 ppb	13:05:03
3	Na 589.592 Radial†	32068.4	34455.0	10442	ug/L	10442 ppb	13:04:43
3	Sr 421.552†	83420.9	85586.6	516.15	ug/L	516.15 ppb	13:04:43
3	Sc 361.383	875985.1	875985.1	100.93	%		13:06:12
3	Y 371.029	723429.5	723429.5	99.174	%		13:06:12
3	Ag 328.068†	112126.0	110819.1	504.41	ug/L	504.41 ppb	13:06:18
3	As 188.979†	1252.0	1271.7	495.36	ug/L	495.36 ppb	13:06:38
3	B 249.677†	23210.9	23490.3	498.64	ug/L	498.64 ppb	13:06:18
3	Ba 233.527†	67343.9	66734.7	499.95	ug/L	499.95 ppb	13:06:18
3	Be 313.107†	1399333.1	1391105.5	500.48	ug/L	500.48 ppb	13:06:12
3	Cd 226.502†	48639.6	48390.5	501.67	ug/L	501.67 ppb	13:06:18
3	Co 228.616†	26704.2	26531.7	500.55	ug/L	500.55 ppb	13:06:18
3	Cr 267.716†	48090.7	47561.6	498.67	ug/L	498.67 ppb	13:06:18
3	Cu 324.752†	177858.7	169462.5	492.49	ug/L	492.49 ppb	13:06:18
3	Mn 257.610†	477719.8	472799.0	501.50	ug/L	501.50 ppb	13:06:12
3	Mo 202.031†	7834.2	7743.6	493.15	ug/L	493.15 ppb	13:06:38
3	Ni 231.604†	22095.0	21805.5	500.74	ug/L	500.74 ppb	13:06:18
3	P 214.914†	4653.0	4368.1	2364.3	ug/L	2364.3 ppb	13:06:38
3	Pb 220.353†	4359.3	4387.1	492.61	ug/L	492.61 ppb	13:06:38
3	S 181.975 Axial†	806.7	749.9	989.80	ug/L	989.80 ppb	13:06:38
3	Sb 206.836†	1607.0	1554.8	497.90	ug/L	497.90 ppb	13:06:38
3	Se 196.026†	864.5	883.3	515.16	ug/L	515.16 ppb	13:06:38
3	Si 251.611†	87004.1	85720.9	2541.3	ug/L	2541.3 ppb	13:06:18
3	Sn 189.927†	3112.4	3074.9	495.24	ug/L	495.24 ppb	13:06:38
3	Ti 334.940†	312623.4	310999.9	490.76	ug/L	490.76 ppb	13:06:18
3	Tl 190.801†	1725.5	1744.2	494.58	ug/L	494.58 ppb	13:06:38
3	U 409.014†	14588.3	17037.9	488.24	ug/L	488.24 ppb	13:06:18
3	V 292.402†	73779.3	74462.4	502.04	ug/L	502.04 ppb	13:06:18
3	Zn 213.857†	59657.7	58354.3	497.50	ug/L	497.50 ppb	13:06:18
3	SiO2†	86650.3	85327.7	5420.5	ug/L	5420.5 ppb	13:06:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870890.1	100.34	%	0.508				0.51%
Sc Radial	5607.2	101	%	5.5				5.44%
Y 371.029	719604.4	98.649	%	0.4561				0.46%
Y RADIAL	6062.2	100.4	%	5.35				5.33%
Ag 328.068†	111448.8	507.23	ug/L	3.451	507.23	ppb	3.451	0.68%
QC value within limits for Ag 328.068 Recovery = 101.45%								
Al 396.153Radial†	6956.4	4769.6	ug/L	288.77	4769.6	ppb	288.77	6.05%
QC value within limits for Al 396.153Radial Recovery = 95.39%								
As 188.979†	1287.8	501.56	ug/L	6.050	501.56	ppb	6.050	1.21%
QC value within limits for As 188.979 Recovery = 100.31%								
B 249.677†	23609.5	501.19	ug/L	3.915	501.19	ppb	3.915	0.78%
QC value within limits for B 249.677 Recovery = 100.24%								
Ba 233.527†	67118.5	502.82	ug/L	3.816	502.82	ppb	3.816	0.76%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1389863.2	500.04	ug/L	0.386	500.04	ppb	0.386	0.08%
QC value within limits for Be 313.107 Recovery = 100.01%								
Ca 317.933Radial†	3351.1	4890.9	ug/L	246.91	4890.9	ppb	246.91	5.05%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.82%
Cd 226.502†            48673.3      504.61 ug/L         3.883      504.61 ppb          3.883   0.77%
   QC value within limits for Cd 226.502  Recovery = 100.92%
Co 228.616†            26741.9      504.53 ug/L         4.628      504.53 ppb          4.628   0.92%
   QC value within limits for Co 228.616  Recovery = 100.91%
Cr 267.716†            47843.8      501.62 ug/L         4.145      501.62 ppb          4.145   0.83%
   QC value within limits for Cr 267.716  Recovery = 100.32%
Cu 324.752†           170692.1      496.05 ug/L         3.736      496.05 ppb          3.736   0.75%
   QC value within limits for Cu 324.752  Recovery = 99.21%
Fe 238.204 Radial†       565.6      5082.9 ug/L        251.53      5082.9 ppb         251.53   4.95%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.66%
K 766.490 Radial†      29359.4      4916.9 ug/L        296.48      4916.9 ppb         296.48   6.03%
   QC value within limits for K 766.490 Radial  Recovery = 98.34%
Mg 279.077 IEC†          152.5      5135.5 ug/L        295.22      5135.5 ppb         295.22   5.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.71%
Mn 257.610†           472617.5      501.30 ug/L         0.819      501.30 ppb          0.819   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.26%
Mo 202.031†             7827.7      498.49 ug/L         4.638      498.49 ppb          4.638   0.93%
   QC value within limits for Mo 202.031  Recovery = 99.70%
Na 589.592 Radial†     33482.3       10147 ug/L         536.7       10147 ppb          536.7   5.29%
   QC value within limits for Na 589.592 Radial  Recovery = 101.47%
Ni 231.604†            21934.7      503.71 ug/L         4.624      503.71 ppb          4.624   0.92%
   QC value within limits for Ni 231.604  Recovery = 100.74%
P 214.914†              4428.4      2397.5 ug/L        29.00      2397.5 ppb         29.00   1.21%
   QC value within limits for P 214.914  Recovery = 95.90%
Pb 220.353†             4428.9      497.27 ug/L         4.095      497.27 ppb          4.095   0.82%
   QC value within limits for Pb 220.353  Recovery = 99.45%
S 181.975 Axial†         760.0      1003.1 ug/L        12.91      1003.1 ppb         12.91   1.29%
   QC value within limits for S 181.975 Axial  Recovery = 100.31%
Sb 206.836†             1577.6      505.26 ug/L         7.131      505.26 ppb          7.131   1.41%
   QC value within limits for Sb 206.836  Recovery = 101.05%
Se 196.026†              891.6      519.44 ug/L         3.887      519.44 ppb          3.887   0.75%
   QC value within limits for Se 196.026  Recovery = 103.89%
Si 251.611†            86389.3      2561.1 ug/L        22.79      2561.1 ppb         22.79   0.89%
   QC value within limits for Si 251.611  Recovery = 102.45%
Sn 189.927†             3113.2      501.38 ug/L         5.315      501.38 ppb          5.315   1.06%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†            82673.1      498.58 ug/L        29.365      498.58 ppb         29.365   5.89%
   QC value within limits for Sr 421.552  Recovery = 99.72%
Ti 334.940†           313173.3      494.18 ug/L         3.771      494.18 ppb          3.771   0.76%
   QC value within limits for Ti 334.940  Recovery = 98.84%
Tl 190.801†             1760.9      499.28 ug/L         4.891      499.28 ppb          4.891   0.98%
   QC value within limits for Tl 190.801  Recovery = 99.86%
U 409.014†             17301.3      495.82 ug/L         7.149      495.82 ppb          7.149   1.44%
   QC value within limits for U 409.014  Recovery = 99.16%
V 292.402†             74909.8      505.11 ug/L         3.526      505.11 ppb          3.526   0.70%
   QC value within limits for V 292.402  Recovery = 101.02%
Zn 213.857†            58771.1      501.08 ug/L         4.231      501.08 ppb          4.231   0.84%
   QC value within limits for Zn 213.857  Recovery = 100.22%
SiO2†                  85434.7      5427.3 ug/L          7.40      5427.3 ppb           7.40   0.14%
   QC value within limits for SiO2  Recovery = 101.49%
All analyte(s) passed QC.
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Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:09:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5692.7	5692.7	102	%			13:10:56
1	Y RADIAL	6161.1	6161.1	102.0	%			13:10:56
1	Al 396.153Radial†	-4.7	30.7	21.091	ug/L	21.091	ppb	13:10:56
1	Ca 317.933Radial†	14.8	-2.4	-3.5139	ug/L	-3.5139	ppb	13:11:16
1	Fe 238.204 Radial†	10.4	0.3	2.2803	ug/L	2.2803	ppb	13:11:16
1	K 766.490 Radial†	3060.7	258.3	43.330	ug/L	43.330	ppb	13:10:56
1	Mg 279.077 IEC†	1.8	-0.2	-5.6613	ug/L	-5.6613	ppb	13:11:16
1	Na 589.592 Radial†	-1535.5	50.2	15.210	ug/L	15.210	ppb	13:10:56
1	Sr 421.552†	-33.8	-32.9	-0.1981	ug/L	-0.1981	ppb	13:10:56
1	Sc 361.383	871003.4	871003.4	100.36	%			13:12:13
1	Y 371.029	732360.3	732360.3	100.40	%			13:12:13
1	Ag 328.068†	372.0	96.6	0.4413	ug/L	0.4413	ppb	13:12:13
1	As 188.979†	-24.9	6.5	2.4896	ug/L	2.4896	ppb	13:12:33
1	B 249.677†	-214.7	279.3	5.9514	ug/L	5.9514	ppb	13:12:33
1	Ba 233.527†	-16.6	-5.5	-0.0405	ug/L	-0.0405	ppb	13:12:33
1	Be 313.107†	-4604.9	74.1	0.0264	ug/L	0.0264	ppb	13:12:13
1	Cd 226.502†	-198.1	1.5	0.0154	ug/L	0.0154	ppb	13:12:33
1	Co 228.616†	-80.2	-6.4	-0.1176	ug/L	-0.1176	ppb	13:12:33
1	Cr 267.716†	77.2	-9.1	-0.0937	ug/L	-0.0937	ppb	13:12:33
1	Cu 324.752†	6713.5	-68.1	-0.1977	ug/L	-0.1977	ppb	13:12:13
1	Mn 257.610†	529.1	7.1	0.0078	ug/L	0.0078	ppb	13:12:33
1	Mo 202.031†	38.8	20.2	1.2860	ug/L	1.2860	ppb	13:12:33
1	Ni 231.604†	88.0	1.7	0.0399	ug/L	0.0399	ppb	13:12:33
1	P 214.914†	228.1	-14.7	-8.1756	ug/L	-8.1756	ppb	13:12:33
1	Pb 220.353†	-68.0	0.3	0.0364	ug/L	0.0364	ppb	13:12:33
1	S 181.975 Axial†	50.5	0.9	1.1638	ug/L	1.1638	ppb	13:12:33
1	Sb 206.836†	41.3	3.8	1.2370	ug/L	1.2370	ppb	13:12:33
1	Se 196.026†	-22.9	4.0	2.2601	ug/L	2.2601	ppb	13:12:33
1	Si 251.611†	525.7	42.1	1.2169	ug/L	1.2169	ppb	13:12:33
1	Sn 189.927†	10.7	1.8	0.2965	ug/L	0.2965	ppb	13:12:33
1	Ti 334.940†	-1314.7	-53.8	-0.0836	ug/L	-0.0836	ppb	13:12:13
1	Tl 190.801†	-30.7	3.9	1.1088	ug/L	1.1088	ppb	13:12:33
1	U 409.014†	-2705.0	-111.4	-3.2038	ug/L	-3.2038	ppb	13:12:13
1	V 292.402†	-1342.9	24.5	0.1751	ug/L	0.1751	ppb	13:12:13
1	Zn 213.857†	767.1	10.5	0.0901	ug/L	0.0901	ppb	13:12:33
1	SiO2†	529.1	2.8	0.0943	ug/L	0.0943	ppb	13:13:29
2	Sc Radial	5700.2	5700.2	102	%			13:11:21
2	Y RADIAL	6213.4	6213.4	102.9	%			13:11:21
2	Al 396.153Radial†	-10.8	24.8	17.055	ug/L	17.055	ppb	13:11:21
2	Ca 317.933Radial†	15.8	-1.5	-2.1535	ug/L	-2.1535	ppb	13:11:41
2	Fe 238.204 Radial†	9.2	-0.9	-7.6609	ug/L	-7.6609	ppb	13:11:41
2	K 766.490 Radial†	2798.1	-2.5	-0.4269	ug/L	-0.4269	ppb	13:11:21
2	Mg 279.077 IEC†	2.7	0.7	24.628	ug/L	24.628	ppb	13:11:41
2	Na 589.592 Radial†	-1529.9	57.6	17.451	ug/L	17.451	ppb	13:11:21
2	Sr 421.552†	-26.4	-25.6	-0.1543	ug/L	-0.1543	ppb	13:11:21
2	Sc 361.383	872038.6	872038.6	100.48	%			13:12:38
2	Y 371.029	733622.4	733622.4	100.57	%			13:12:38
2	Ag 328.068†	320.6	45.1	0.2030	ug/L	0.2030	ppb	13:12:38
2	As 188.979†	-22.8	8.6	3.2992	ug/L	3.2992	ppb	13:12:58
2	B 249.677†	-230.0	264.3	5.6346	ug/L	5.6346	ppb	13:12:58
2	Ba 233.527†	8.3	19.3	0.1443	ug/L	0.1443	ppb	13:12:58
2	Be 313.107†	-4567.0	117.2	0.0416	ug/L	0.0416	ppb	13:12:38
2	Cd 226.502†	-203.4	-3.5	-0.0359	ug/L	-0.0359	ppb	13:12:58
2	Co 228.616†	-81.0	-7.2	-0.1340	ug/L	-0.1340	ppb	13:12:58
2	Cr 267.716†	99.3	12.8	0.1348	ug/L	0.1348	ppb	13:12:58
2	Cu 324.752†	6802.2	12.2	0.0349	ug/L	0.0349	ppb	13:12:38
2	Mn 257.610†	510.0	-12.5	-0.0145	ug/L	-0.0145	ppb	13:12:58
2	Mo 202.031†	24.2	5.6	0.3573	ug/L	0.3573	ppb	13:12:58
2	Ni 231.604†	86.6	0.3	0.0063	ug/L	0.0063	ppb	13:12:58

2	P 214.914†	234.4	-8.7	-4.8677	ug/L	-4.8677 ppb	13:12:58
2	Pb 220.353†	-70.9	-2.5	-0.2794	ug/L	-0.2794 ppb	13:12:58
2	S 181.975 Axial†	55.4	5.8	7.6105	ug/L	7.6105 ppb	13:12:58
2	Sb 206.836†	44.5	6.9	2.1847	ug/L	2.1847 ppb	13:12:58
2	Se 196.026†	-23.7	3.2	1.7875	ug/L	1.7875 ppb	13:12:58
2	Si 251.611†	536.1	51.8	1.5376	ug/L	1.5376 ppb	13:12:58
2	Sn 189.927†	8.9	0.0	0.0028	ug/L	0.0028 ppb	13:12:58
2	Ti 334.940†	-1408.1	-145.2	-0.2288	ug/L	-0.2288 ppb	13:12:38
2	Tl 190.801†	-33.2	1.6	0.4399	ug/L	0.4399 ppb	13:12:58
2	U 409.014†	-2635.5	-39.1	-1.1224	ug/L	-1.1224 ppb	13:12:38
2	V 292.402†	-1352.5	16.7	0.1158	ug/L	0.1158 ppb	13:12:38
2	Zn 213.857†	763.5	6.0	0.0514	ug/L	0.0514 ppb	13:12:58
2	SiO2†	500.5	-26.3	-1.6927	ug/L	-1.6927 ppb	13:13:34
3	Sc Radial	5765.8	5765.8	103	%		13:11:46
3	Y RADIAL	6256.3	6256.3	103.6	%		13:11:46
3	Al 396.153Radial†	-22.4	13.7	9.4289	ug/L	9.4289 ppb	13:11:46
3	Ca 317.933Radial†	17.9	0.5	0.6607	ug/L	0.6607 ppb	13:12:06
3	Fe 238.204 Radial†	12.7	2.4	21.299	ug/L	21.299 ppb	13:12:06
3	K 766.490 Radial†	2860.1	26.2	4.3980	ug/L	4.3980 ppb	13:11:46
3	Mg 279.077 IEC†	-2.3	-4.1	-138.65	ug/L	-138.65 ppb	13:12:06
3	Na 589.592 Radial†	-1539.2	65.6	19.891	ug/L	19.891 ppb	13:11:46
3	Sr 421.552†	-2.4	-2.1	-0.0129	ug/L	-0.0129 ppb	13:11:46
3	Sc 361.383	872446.7	872446.7	100.52	%		13:13:03
3	Y 371.029	732965.3	732965.3	100.48	%		13:13:03
3	Ag 328.068†	318.3	42.6	0.2025	ug/L	0.2025 ppb	13:13:03
3	As 188.979†	-23.2	8.2	3.1715	ug/L	3.1715 ppb	13:13:23
3	B 249.677†	-263.8	230.8	4.9152	ug/L	4.9152 ppb	13:13:23
3	Ba 233.527†	-9.1	2.0	0.0155	ug/L	0.0155 ppb	13:13:23
3	Be 313.107†	-4495.3	190.6	0.0686	ug/L	0.0686 ppb	13:13:03
3	Cd 226.502†	-207.0	-6.9	-0.0741	ug/L	-0.0741 ppb	13:13:23
3	Co 228.616†	-74.5	-0.7	-0.0138	ug/L	-0.0138 ppb	13:13:23
3	Cr 267.716†	100.0	13.5	0.1427	ug/L	0.1427 ppb	13:13:23
3	Cu 324.752†	6737.6	-55.3	-0.1594	ug/L	-0.1594 ppb	13:13:03
3	Mn 257.610†	521.7	-1.1	0.0035	ug/L	0.0035 ppb	13:13:23
3	Mo 202.031†	19.5	0.9	0.0618	ug/L	0.0618 ppb	13:13:23
3	Ni 231.604†	86.5	0.1	0.0035	ug/L	0.0035 ppb	13:13:23
3	P 214.914†	237.5	-5.8	-3.2263	ug/L	-3.2263 ppb	13:13:23
3	Pb 220.353†	-64.6	3.7	0.4120	ug/L	0.4120 ppb	13:13:23
3	S 181.975 Axial†	48.2	-1.4	-1.9171	ug/L	-1.9171 ppb	13:13:23
3	Sb 206.836†	42.0	4.4	1.3982	ug/L	1.3982 ppb	13:13:23
3	Se 196.026†	-31.6	-4.6	-2.5419	ug/L	-2.5419 ppb	13:13:23
3	Si 251.611†	507.6	23.2	0.6874	ug/L	0.6874 ppb	13:13:23
3	Sn 189.927†	10.5	1.6	0.2586	ug/L	0.2586 ppb	13:13:23
3	Ti 334.940†	-1214.3	48.3	0.0781	ug/L	0.0781 ppb	13:13:03
3	Tl 190.801†	-37.5	-2.7	-0.7700	ug/L	-0.7700 ppb	13:13:23
3	U 409.014†	-2746.4	-148.2	-4.2625	ug/L	-4.2625 ppb	13:13:03
3	V 292.402†	-1394.8	-24.8	-0.1789	ug/L	-0.1789 ppb	13:13:03
3	Zn 213.857†	770.0	12.1	0.1071	ug/L	0.1071 ppb	13:13:23
3	SiO2†	529.8	2.6	0.1564	ug/L	0.1564 ppb	13:13:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871829.6	100.45	%	0.086				0.09%
Sc Radial	5719.6	103	%	0.7				0.70%
Y 371.029	732982.7	100.48	%	0.087				0.09%
Y RADIAL	6210.3	102.8	%	0.79				0.77%
Ag 328.068†	61.4	0.2823	ug/L	0.13775	0.2823	ppb	0.13775	48.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.1	15.858	ug/L	5.9224	15.858	ppb	5.9224	37.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.7	2.9868	ug/L	0.43527	2.9868	ppb	0.43527	14.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	258.1	5.5004	ug/L	0.53096	5.5004	ppb	0.53096	9.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.3	0.0398	ug/L	0.09476	0.0398	ppb	0.09476	238.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.3	0.0456	ug/L	0.02136	0.0456	ppb	0.02136	46.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.1	-1.6689	ug/L	2.12910	-1.6689	ppb	2.12910	127.57%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -3.0     -0.0315 ug/L       0.04492     -0.0315 ppb        0.04492 142.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -4.8     -0.0885 ug/L       0.06521     -0.0885 ppb        0.06521  73.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.7      0.0612 ug/L       0.13427      0.0612 ppb        0.13427 219.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -37.1     -0.1074 ug/L       0.12473     -0.1074 ppb        0.12473 116.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      5.3062 ug/L      14.71531      5.3062 ppb       14.71531 277.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          94.0      15.767 ug/L       23.9916      15.767 ppb        23.9916 152.16%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -39.896 ug/L       86.8579     -39.896 ppb        86.8579 217.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -2.2     -0.0011 ug/L       0.01184     -0.0011 ppb        0.01184 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.9      0.5684 ug/L       0.63883      0.5684 ppb        0.63883 112.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         57.8      17.517 ug/L        2.3410      17.517 ppb         2.3410  13.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.7      0.0165 ug/L       0.02025      0.0165 ppb        0.02025 122.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -9.8     -5.4232 ug/L       2.52099     -5.4232 ppb        2.52099  46.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 0.5      0.0564 ug/L       0.34614      0.0564 ppb        0.34614 614.01%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.7      2.2858 ug/L       4.86186      2.2858 ppb        4.86186 212.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.0      1.6066 ug/L       0.50705      1.6066 ppb        0.50705  31.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.9      0.5019 ug/L       2.64660      0.5019 ppb        2.64660 527.33%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                39.0      1.1473 ug/L       0.42932      1.1473 ppb        0.42932  37.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.2      0.1860 ug/L       0.15974      0.1860 ppb        0.15974  85.89%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -20.2     -0.1218 ug/L       0.09679     -0.1218 ppb        0.09679  79.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -50.2     -0.0781 ug/L       0.15353     -0.0781 ppb        0.15353 196.52%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      0.2596 ug/L       0.95230      0.2596 ppb        0.95230 366.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -99.5     -2.8629 ug/L       1.59755     -2.8629 ppb        1.59755  55.80%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  5.5      0.0373 ug/L       0.18959      0.0373 ppb        0.18959 507.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 9.5      0.0829 ug/L       0.02853      0.0829 ppb        0.02853  34.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      -7.0     -0.4806 ug/L       1.05009     -0.4806 ppb        1.05009 218.47%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 12/11/2009 13:24:41 Plasma On Time: 12/7/2009 05:17:52
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\121109A.sif
Batch ID:
Results Data Set: 121109A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/11/2009 13:24:42
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5584.7	5584.7	100	%			13:26:34
1	Y RADIAL	6014.3	6014.3	99.59	%			13:26:34
1	Al 396.153Radial†	7102.9	7126.9	4887.1	ug/L	4887.1	ppb	13:26:34
1	Ca 317.933Radial†	3376.9	3354.7	4896.1	ug/L	4896.1	ppb	13:26:54
1	Fe 238.204 Radial†	568.9	558.1	5016.1	ug/L	5016.1	ppb	13:26:54
1	K 766.490 Radial†	32581.4	29790.0	4989.4	ug/L	4989.4	ppb	13:26:34
1	Mg 279.077 IEC†	152.0	149.9	5045.7	ug/L	5045.7	ppb	13:26:54
1	Na 589.592 Radial†	31162.5	32667.1	9900.1	ug/L	9900.1	ppb	13:26:34
1	Sr 421.552†	82919.5	82787.8	499.27	ug/L	499.27	ppb	13:26:34
1	Sc 361.383	878232.5	878232.5	101.19	%			13:27:52
1	Y 371.029	725784.5	725784.5	99.497	%			13:27:52
1	Ag 328.068†	111857.9	110269.9	501.86	ug/L	501.86	ppb	13:27:57
1	As 188.979†	1263.9	1280.3	498.62	ug/L	498.62	ppb	13:28:17
1	B 249.677†	23090.2	23312.2	494.88	ug/L	494.88	ppb	13:27:57
1	Ba 233.527†	67142.3	66364.6	497.17	ug/L	497.17	ppb	13:27:57
1	Be 313.107†	1378752.5	1367218.9	491.90	ug/L	491.90	ppb	13:27:52
1	Cd 226.502†	48440.8	48070.7	498.37	ug/L	498.37	ppb	13:27:57
1	Co 228.616†	26625.5	26386.1	497.83	ug/L	497.83	ppb	13:27:57
1	Cr 267.716†	47890.8	47242.1	495.31	ug/L	495.31	ppb	13:27:57
1	Cu 324.752†	177617.5	168773.2	490.47	ug/L	490.47	ppb	13:27:57
1	Mn 257.610†	470696.3	464646.9	492.85	ug/L	492.85	ppb	13:27:52
1	Mo 202.031†	7912.8	7801.4	496.81	ug/L	496.81	ppb	13:28:17
1	Ni 231.604†	22004.8	21660.4	497.41	ug/L	497.41	ppb	13:27:57
1	P 214.914†	4714.8	4417.4	2392.3	ug/L	2392.3	ppb	13:28:17
1	Pb 220.353†	4401.0	4417.3	496.00	ug/L	496.00	ppb	13:28:17
1	S 181.975 Axial†	812.3	753.3	994.31	ug/L	994.31	ppb	13:28:17
1	Sb 206.836†	1639.8	1583.2	507.06	ug/L	507.06	ppb	13:28:17
1	Se 196.026†	859.6	876.3	510.64	ug/L	510.64	ppb	13:28:17
1	Si 251.611†	86797.5	85296.1	2528.6	ug/L	2528.6	ppb	13:27:57
1	Sn 189.927†	3138.0	3092.3	498.02	ug/L	498.02	ppb	13:28:17
1	Ti 334.940†	311908.5	309500.7	488.38	ug/L	488.38	ppb	13:27:57
1	Tl 190.801†	1740.3	1754.4	497.41	ug/L	497.41	ppb	13:28:17
1	U 409.014†	14693.6	17105.0	490.19	ug/L	490.19	ppb	13:27:57
1	V 292.402†	73465.3	73965.0	498.81	ug/L	498.81	ppb	13:27:57
1	Zn 213.857†	59549.3	58095.9	495.33	ug/L	495.33	ppb	13:27:57
1	SiO2†	86417.3	84877.7	5391.7	ug/L	5391.7	ppb	13:29:24
2	Sc Radial	5537.3	5537.3	99.3	%			13:26:59
2	Y RADIAL	5945.8	5945.8	98.45	%			13:26:59
2	Al 396.153Radial†	7019.4	7103.4	4870.8	ug/L	4870.8	ppb	13:26:59
2	Ca 317.933Radial†	3402.1	3408.8	4975.1	ug/L	4975.1	ppb	13:27:19
2	Fe 238.204 Radial†	568.8	562.9	5058.6	ug/L	5058.6	ppb	13:27:19
2	K 766.490 Radial†	32189.2	29673.1	4969.8	ug/L	4969.8	ppb	13:26:59
2	Mg 279.077 IEC†	151.7	150.8	5077.8	ug/L	5077.8	ppb	13:27:19
2	Na 589.592 Radial†	30602.9	32369.4	9809.8	ug/L	9809.8	ppb	13:26:59
2	Sr 421.552†	81702.7	82269.8	496.14	ug/L	496.14	ppb	13:26:59
2	Sc 361.383	873262.5	873262.5	100.62	%			13:28:23
2	Y 371.029	721749.2	721749.2	98.943	%			13:28:23

2	Ag 328.068†	110843.8	109891.1	500.15 ug/L	500.15 ppb	13:28:28
2	As 188.979†	1267.3	1290.8	502.68 ug/L	502.68 ppb	13:28:48
2	B 249.677†	22889.2	23242.3	493.38 ug/L	493.38 ppb	13:28:28
2	Ba 233.527†	66633.3	66236.5	496.21 ug/L	496.21 ppb	13:28:28
2	Be 313.107†	1370874.5	1367143.8	491.87 ug/L	491.87 ppb	13:28:23
2	Cd 226.502†	47989.6	47894.7	496.54 ug/L	496.54 ppb	13:28:28
2	Co 228.616†	26424.1	26335.8	496.89 ug/L	496.89 ppb	13:28:28
2	Cr 267.716†	47465.9	47089.3	493.71 ug/L	493.71 ppb	13:28:28
2	Cu 324.752†	175973.8	168138.5	488.63 ug/L	488.63 ppb	13:28:28
2	Mn 257.610†	468396.0	465008.1	493.24 ug/L	493.24 ppb	13:28:23
2	Mo 202.031†	7908.5	7841.6	499.37 ug/L	499.37 ppb	13:28:48
2	Ni 231.604†	21806.3	21586.8	495.72 ug/L	495.72 ppb	13:28:28
2	P 214.914†	4678.0	4407.3	2387.0 ug/L	2387.0 ppb	13:28:48
2	Pb 220.353†	4399.3	4440.3	498.59 ug/L	498.59 ppb	13:28:48
2	S 181.975 Axial†	813.6	759.2	1002.0 ug/L	1002.0 ppb	13:28:48
2	Sb 206.836†	1628.5	1581.1	506.57 ug/L	506.57 ppb	13:28:48
2	Se 196.026†	863.9	885.4	515.93 ug/L	515.93 ppb	13:28:48
2	Si 251.611†	85949.8	84941.9	2518.0 ug/L	2518.0 ppb	13:28:28
2	Sn 189.927†	3136.6	3108.5	500.64 ug/L	500.64 ppb	13:28:48
2	Ti 334.940†	309155.8	308519.2	486.84 ug/L	486.84 ppb	13:28:28
2	Tl 190.801†	1750.7	1774.5	503.08 ug/L	503.08 ppb	13:28:48
2	U 409.014†	14485.8	16981.1	486.63 ug/L	486.63 ppb	13:28:28
2	V 292.402†	72767.0	73684.2	496.97 ug/L	496.97 ppb	13:28:28
2	Zn 213.857†	58962.6	57847.8	493.20 ug/L	493.20 ppb	13:28:28
2	SiO2†	86883.4	85826.9	5452.2 ug/L	5452.2 ppb	13:29:29
3	Sc Radial	5439.0	5439.0	97.5 %		13:27:24
3	Y RADIAL	5906.3	5906.3	97.80 %		13:27:24
3	Al 396.153Radial†	6973.6	7184.2	4926.7 ug/L	4926.7 ppb	13:27:24
3	Ca 317.933Radial†	3371.3	3439.1	5019.4 ug/L	5019.4 ppb	13:27:45
3	Fe 238.204 Radial†	566.0	570.3	5124.8 ug/L	5124.8 ppb	13:27:45
3	K 766.490 Radial†	31991.7	30056.4	5034.1 ug/L	5034.1 ppb	13:27:24
3	Mg 279.077 IEC†	154.5	156.5	5268.9 ug/L	5268.9 ppb	13:27:45
3	Na 589.592 Radial†	30174.7	32487.3	9845.6 ug/L	9845.6 ppb	13:27:24
3	Sr 421.552†	81012.2	83049.0	500.84 ug/L	500.84 ppb	13:27:24
3	Sc 361.383	881292.7	881292.7	101.54 %		13:28:54
3	Y 371.029	728794.8	728794.8	99.909 %		13:28:54
3	Ag 328.068†	110410.6	108460.7	493.69 ug/L	493.69 ppb	13:28:59
3	As 188.979†	1262.4	1274.5	496.33 ug/L	496.33 ppb	13:29:19
3	B 249.677†	22786.5	22933.8	486.82 ug/L	486.82 ppb	13:28:59
3	Ba 233.527†	66290.8	65295.7	489.17 ug/L	489.17 ppb	13:28:59
3	Be 313.107†	1382061.9	1365746.6	491.35 ug/L	491.35 ppb	13:28:54
3	Cd 226.502†	47733.3	47207.7	489.40 ug/L	489.40 ppb	13:28:59
3	Co 228.616†	26230.9	25906.1	488.78 ug/L	488.78 ppb	13:28:59
3	Cr 267.716†	47330.2	46525.8	487.81 ug/L	487.81 ppb	13:28:59
3	Cu 324.752†	175270.6	165852.4	482.00 ug/L	482.00 ppb	13:28:59
3	Mn 257.610†	471375.3	463700.2	491.86 ug/L	491.86 ppb	13:28:54
3	Mo 202.031†	7906.2	7767.7	494.68 ug/L	494.68 ppb	13:29:19
3	Ni 231.604†	21724.0	21308.4	489.33 ug/L	489.33 ppb	13:28:59
3	P 214.914†	4720.5	4406.8	2387.7 ug/L	2387.7 ppb	13:29:19
3	Pb 220.353†	4388.4	4389.8	492.93 ug/L	492.93 ppb	13:29:19
3	S 181.975 Axial†	809.3	747.6	986.80 ug/L	986.80 ppb	13:29:19
3	Sb 206.836†	1633.7	1571.6	503.51 ug/L	503.51 ppb	13:29:19
3	Se 196.026†	864.4	878.0	511.97 ug/L	511.97 ppb	13:29:19
3	Si 251.611†	85631.2	83849.7	2485.6 ug/L	2485.6 ppb	13:28:59
3	Sn 189.927†	3134.2	3077.8	495.70 ug/L	495.70 ppb	13:29:19
3	Ti 334.940†	307876.4	304459.5	480.44 ug/L	480.44 ppb	13:28:59
3	Tl 190.801†	1732.7	1741.0	493.62 ug/L	493.62 ppb	13:29:19
3	U 409.014†	14327.8	16694.3	478.39 ug/L	478.39 ppb	13:28:59
3	V 292.402†	72659.1	72919.0	491.79 ug/L	491.79 ppb	13:28:59
3	Zn 213.857†	58706.5	57061.6	486.48 ug/L	486.48 ppb	13:28:59
3	SiO2†	86081.4	84250.4	5351.8 ug/L	5351.8 ppb	13:29:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877595.9	101.12	%	0.467				0.46%
Sc Radial	5520.3	99.0	%	1.33				1.35%
Y 371.029	725442.8	99.450	%	0.4846				0.49%
Y RADIAL	5955.5	98.61	%	0.905				0.92%
Ag 328.068†	109540.5	498.57	ug/L	4.309	498.57	ppb	4.309	0.86%

```
   QC value within limits for Ag 328.068  Recovery = 99.71%
Al 396.153Radial†       7138.2      4894.9 ug/L        28.74      4894.9 ppb        28.74   0.59%
   QC value within limits for Al 396.153Radial  Recovery = 97.90%
As 188.979†             1281.9      499.21 ug/L        3.213      499.21 ppb        3.213   0.64%
   QC value within limits for As 188.979  Recovery = 99.84%
B 249.677†             23162.8      491.69 ug/L        4.285      491.69 ppb        4.285   0.87%
   QC value within limits for B 249.677  Recovery = 98.34%
Ba 233.527†            65965.6      494.18 ug/L        4.367      494.18 ppb        4.367   0.88%
   QC value within limits for Ba 233.527  Recovery = 98.84%
Be 313.107†          1366703.1      491.70 ug/L        0.306      491.70 ppb        0.306   0.06%
   QC value within limits for Be 313.107  Recovery = 98.34%
Ca 317.933Radial†       3400.9      4963.5 ug/L        62.44      4963.5 ppb        62.44   1.26%
   QC value within limits for Ca 317.933Radial  Recovery = 99.27%
Cd 226.502†            47724.4      494.77 ug/L        4.737      494.77 ppb        4.737   0.96%
   QC value within limits for Cd 226.502  Recovery = 98.95%
Co 228.616†            26209.4      494.50 ug/L        4.972      494.50 ppb        4.972   1.01%
   QC value within limits for Co 228.616  Recovery = 98.90%
Cr 267.716†            46952.4      492.28 ug/L        3.953      492.28 ppb        3.953   0.80%
   QC value within limits for Cr 267.716  Recovery = 98.46%
Cu 324.752†           167588.0      487.03 ug/L        4.459      487.03 ppb        4.459   0.92%
   QC value within limits for Cu 324.752  Recovery = 97.41%
Fe 238.204 Radial†       563.8      5066.5 ug/L        54.81      5066.5 ppb        54.81   1.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.33%
K 766.490 Radial†      29839.8      4997.7 ug/L        32.96      4997.7 ppb        32.96   0.66%
   QC value within limits for K 766.490 Radial  Recovery = 99.95%
Mg 279.077 IEC†          152.4      5130.8 ug/L       120.71      5130.8 ppb       120.71   2.35%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.62%
Mn 257.610†           464451.7      492.65 ug/L        0.714      492.65 ppb        0.714   0.14%
   QC value within limits for Mn 257.610  Recovery = 98.53%
Mo 202.031†             7803.6      496.95 ug/L        2.352      496.95 ppb        2.352   0.47%
   QC value within limits for Mo 202.031  Recovery = 99.39%
Na 589.592 Radial†     32507.9      9851.8 ug/L        45.43      9851.8 ppb        45.43   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 98.52%
Ni 231.604†            21518.5      494.15 ug/L        4.264      494.15 ppb        4.264   0.86%
   QC value within limits for Ni 231.604  Recovery = 98.83%
P 214.914†              4410.5      2389.0 ug/L         2.92      2389.0 ppb         2.92   0.12%
   QC value within limits for P 214.914  Recovery = 95.56%
Pb 220.353†             4415.8      495.84 ug/L        2.831      495.84 ppb        2.831   0.57%
   QC value within limits for Pb 220.353  Recovery = 99.17%
S 181.975 Axial†         753.4      994.38 ug/L        7.617      994.38 ppb        7.617   0.77%
   QC value within limits for S 181.975 Axial  Recovery = 99.44%
Sb 206.836†             1578.6      505.71 ug/L        1.927      505.71 ppb        1.927   0.38%
   QC value within limits for Sb 206.836  Recovery = 101.14%
Se 196.026†              879.9      512.85 ug/L        2.754      512.85 ppb        2.754   0.54%
   QC value within limits for Se 196.026  Recovery = 102.57%
Si 251.611†            84695.9      2510.7 ug/L        22.43      2510.7 ppb        22.43   0.89%
   QC value within limits for Si 251.611  Recovery = 100.43%
Sn 189.927†             3092.9      498.12 ug/L        2.471      498.12 ppb        2.471   0.50%
   QC value within limits for Sn 189.927  Recovery = 99.62%
Sr 421.552†            82702.2      498.75 ug/L        2.392      498.75 ppb        2.392   0.48%
   QC value within limits for Sr 421.552  Recovery = 99.75%
Ti 334.940†           307493.1      485.22 ug/L        4.212      485.22 ppb        4.212   0.87%
   QC value within limits for Ti 334.940  Recovery = 97.04%
Tl 190.801†             1756.6      498.04 ug/L        4.758      498.04 ppb        4.758   0.96%
   QC value within limits for Tl 190.801  Recovery = 99.61%
U 409.014†             16926.8      485.07 ug/L        6.055      485.07 ppb        6.055   1.25%
   QC value within limits for U 409.014  Recovery = 97.01%
V 292.402†             73522.8      495.86 ug/L        3.636      495.86 ppb        3.636   0.73%
   QC value within limits for V 292.402  Recovery = 99.17%
Zn 213.857†            57668.4      491.67 ug/L        4.622      491.67 ppb        4.622   0.94%
   QC value within limits for Zn 213.857  Recovery = 98.33%
SiO2†                  84985.0      5398.6 ug/L        50.58      5398.6 ppb        50.58   0.94%
   QC value within limits for SiO2  Recovery = 100.96%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/11/2009 13:31:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5346.3	5346.3	95.9	%			13:33:38
1	Y RADIAL	5800.0	5800.0	96.04	%			13:33:38
1	Al 396.153Radial†	-26.7	7.5	5.1179	ug/L	5.1179	ppb	13:33:38
1	Ca 317.933Radial†	19.3	3.3	4.7457	ug/L	4.7457	ppb	13:33:58
1	Fe 238.204 Radial†	9.2	-0.3	-2.2396	ug/L	-2.2396	ppb	13:33:58
1	K 766.490 Radial†	2879.5	263.6	44.222	ug/L	44.222	ppb	13:33:38
1	Mg 279.077 IEC†	1.5	-0.4	-12.037	ug/L	-12.037	ppb	13:33:58
1	Na 589.592 Radial†	-1520.7	-31.8	-9.6462	ug/L	-9.6462	ppb	13:33:38
1	Sr 421.552†	-22.5	-23.3	-0.1405	ug/L	-0.1405	ppb	13:33:38
1	Sc 361.383	868207.5	868207.5	100.03	%			13:34:54
1	Y 371.029	729184.9	729184.9	99.963	%			13:34:54
1	Ag 328.068†	356.4	82.3	0.3741	ug/L	0.3741	ppb	13:34:54
1	As 188.979†	-26.8	4.5	1.7496	ug/L	1.7496	ppb	13:35:14
1	B 249.677†	-239.3	254.0	5.4127	ug/L	5.4127	ppb	13:35:14
1	Ba 233.527†	-19.8	-8.7	-0.0655	ug/L	-0.0655	ppb	13:35:14
1	Be 313.107†	-4601.7	62.5	0.0224	ug/L	0.0224	ppb	13:34:54
1	Cd 226.502†	-195.7	3.3	0.0341	ug/L	0.0341	ppb	13:35:14
1	Co 228.616†	-69.4	4.0	0.0772	ug/L	0.0772	ppb	13:35:14
1	Cr 267.716†	88.2	2.2	0.0235	ug/L	0.0235	ppb	13:35:14
1	Cu 324.752†	6735.0	-25.1	-0.0732	ug/L	-0.0732	ppb	13:34:54
1	Mn 257.610†	555.9	35.6	0.0377	ug/L	0.0377	ppb	13:35:14
1	Mo 202.031†	23.7	5.3	0.3364	ug/L	0.3364	ppb	13:35:14
1	Ni 231.604†	89.9	3.9	0.0895	ug/L	0.0895	ppb	13:35:14
1	P 214.914†	223.3	-18.8	-10.470	ug/L	-10.470	ppb	13:35:14
1	Pb 220.353†	-67.2	0.8	0.0948	ug/L	0.0948	ppb	13:35:14
1	S 181.975 Axial†	50.8	1.4	1.8759	ug/L	1.8759	ppb	13:35:14
1	Sb 206.836†	42.7	5.3	1.6775	ug/L	1.6775	ppb	13:35:14
1	Se 196.026†	-33.0	-6.2	-3.5157	ug/L	-3.5157	ppb	13:35:14
1	Si 251.611†	519.5	37.5	1.0981	ug/L	1.0981	ppb	13:35:14
1	Sn 189.927†	8.0	-0.9	-0.1417	ug/L	-0.1417	ppb	13:35:14
1	Ti 334.940†	-1257.3	-0.6	0.0009	ug/L	0.0009	ppb	13:34:54
1	Tl 190.801†	-35.7	-1.1	-0.3026	ug/L	-0.3026	ppb	13:35:14
1	U 409.014†	-2711.5	-126.6	-3.6397	ug/L	-3.6397	ppb	13:34:54
1	V 292.402†	-1375.0	-11.8	-0.0809	ug/L	-0.0809	ppb	13:34:54
1	Zn 213.857†	772.7	18.6	0.1597	ug/L	0.1597	ppb	13:35:14
1	SiO2†	539.4	14.8	0.8991	ug/L	0.8991	ppb	13:36:10
2	Sc Radial	5699.5	5699.5	102	%			13:34:03
2	Y RADIAL	6171.4	6171.4	102.2	%			13:34:03
2	Al 396.153Radial†	-32.7	3.3	2.2838	ug/L	2.2838	ppb	13:34:03
2	Ca 317.933Radial†	20.7	3.4	4.9526	ug/L	4.9526	ppb	13:34:23
2	Fe 238.204 Radial†	8.7	-1.4	-12.324	ug/L	-12.324	ppb	13:34:23
2	K 766.490 Radial†	2859.8	58.2	9.7571	ug/L	9.7571	ppb	13:34:03
2	Mg 279.077 IEC†	2.8	0.8	26.593	ug/L	26.593	ppb	13:34:23
2	Na 589.592 Radial†	-1537.4	50.1	15.173	ug/L	15.173	ppb	13:34:03
2	Sr 421.552†	-12.6	-12.1	-0.0728	ug/L	-0.0728	ppb	13:34:03
2	Sc 361.383	867538.8	867538.8	99.957	%			13:35:20
2	Y 371.029	729479.4	729479.4	100.00	%			13:35:20
2	Ag 328.068†	313.4	39.5	0.1791	ug/L	0.1791	ppb	13:35:20
2	As 188.979†	-30.6	0.7	0.2618	ug/L	0.2618	ppb	13:35:40
2	B 249.677†	-212.3	280.8	5.9857	ug/L	5.9857	ppb	13:35:40
2	Ba 233.527†	-14.4	-3.4	-0.0247	ug/L	-0.0247	ppb	13:35:40
2	Be 313.107†	-4514.4	146.2	0.0526	ug/L	0.0526	ppb	13:35:20
2	Cd 226.502†	-208.2	-9.4	-0.0963	ug/L	-0.0963	ppb	13:35:40
2	Co 228.616†	-78.2	-4.8	-0.0888	ug/L	-0.0888	ppb	13:35:40
2	Cr 267.716†	101.7	15.7	0.1661	ug/L	0.1661	ppb	13:35:40
2	Cu 324.752†	6718.7	-36.3	-0.1060	ug/L	-0.1060	ppb	13:35:20
2	Mn 257.610†	509.6	-10.3	-0.0127	ug/L	-0.0127	ppb	13:35:40
2	Mo 202.031†	25.6	7.2	0.4577	ug/L	0.4577	ppb	13:35:40
2	Ni 231.604†	82.4	-3.5	-0.0809	ug/L	-0.0809	ppb	13:35:40

2	P 214.914†	232.5	-9.4	-5.2314 ug/L	-5.2314 ppb	13:35:40
2	Pb 220.353†	-83.3	-15.4	-1.7197 ug/L	-1.7197 ppb	13:35:40
2	S 181.975 Axial†	47.5	-1.9	-2.5385 ug/L	-2.5385 ppb	13:35:40
2	Sb 206.836†	36.1	-1.2	-0.3980 ug/L	-0.3980 ppb	13:35:40
2	Se 196.026†	-29.6	-2.8	-1.5950 ug/L	-1.5950 ppb	13:35:40
2	Si 251.611†	507.2	25.7	0.7571 ug/L	0.7571 ppb	13:35:40
2	Sn 189.927†	4.7	-4.1	-0.6626 ug/L	-0.6626 ppb	13:35:40
2	Ti 334.940†	-1234.4	21.3	0.0353 ug/L	0.0353 ppb	13:35:20
2	Tl 190.801†	-37.6	-3.1	-0.8684 ug/L	-0.8684 ppb	13:35:40
2	U 409.014†	-2705.5	-122.7	-3.5258 ug/L	-3.5258 ppb	13:35:20
2	V 292.402†	-1311.3	50.9	0.3408 ug/L	0.3408 ppb	13:35:20
2	Zn 213.857†	776.7	23.2	0.2006 ug/L	0.2006 ppb	13:35:40
2	SiO2†	527.5	3.3	0.1901 ug/L	0.1901 ppb	13:36:15
3	Sc Radial	5663.2	5663.2	102 %		13:34:28
3	Y RADIAL	6182.8	6182.8	102.4 %		13:34:28
3	Al 396.153Radial†	-31.4	4.4	3.0200 ug/L	3.0200 ppb	13:34:28
3	Ca 317.933Radial†	19.3	2.1	3.1081 ug/L	3.1081 ppb	13:34:48
3	Fe 238.204 Radial†	6.2	-3.8	-33.863 ug/L	-33.863 ppb	13:34:48
3	K 766.490 Radial†	2949.9	164.8	27.646 ug/L	27.646 ppb	13:34:28
3	Mg 279.077 IEC†	3.9	2.0	66.482 ug/L	66.482 ppb	13:34:48
3	Na 589.592 Radial†	-1531.6	46.1	13.984 ug/L	13.984 ppb	13:34:28
3	Sr 421.552†	-45.2	-44.3	-0.2672 ug/L	-0.2672 ppb	13:34:28
3	Sc 361.383	864816.8	864816.8	99.643 %		13:35:45
3	Y 371.029	727738.8	727738.8	99.764 %		13:35:45
3	Ag 328.068†	314.2	41.3	0.1754 ug/L	0.1754 ppb	13:35:45
3	As 188.979†	-28.2	3.0	1.1584 ug/L	1.1584 ppb	13:36:05
3	B 249.677†	-230.7	261.7	5.5816 ug/L	5.5816 ppb	13:36:05
3	Ba 233.527†	-1.7	9.4	0.0686 ug/L	0.0686 ppb	13:36:05
3	Be 313.107†	-4512.8	133.6	0.0479 ug/L	0.0479 ppb	13:35:45
3	Cd 226.502†	-200.3	-2.1	-0.0182 ug/L	-0.0182 ppb	13:36:05
3	Co 228.616†	-76.0	-2.9	-0.0531 ug/L	-0.0531 ppb	13:36:05
3	Cr 267.716†	75.1	-10.7	-0.1123 ug/L	-0.1123 ppb	13:36:05
3	Cu 324.752†	6740.5	6.8	0.0180 ug/L	0.0180 ppb	13:35:45
3	Mn 257.610†	513.3	-5.0	-0.0099 ug/L	-0.0099 ppb	13:36:05
3	Mo 202.031†	19.5	1.1	0.0693 ug/L	0.0693 ppb	13:36:05
3	Ni 231.604†	99.3	13.7	0.3155 ug/L	0.3155 ppb	13:36:05
3	P 214.914†	235.6	-5.5	-3.0759 ug/L	-3.0759 ppb	13:36:05
3	Pb 220.353†	-72.6	-4.9	-0.5475 ug/L	-0.5475 ppb	13:36:05
3	S 181.975 Axial†	55.0	5.8	7.6569 ug/L	7.6569 ppb	13:36:05
3	Sb 206.836†	37.7	0.5	0.1481 ug/L	0.1481 ppb	13:36:05
3	Se 196.026†	-22.4	4.3	2.3375 ug/L	2.3375 ppb	13:36:05
3	Si 251.611†	506.2	26.3	0.7731 ug/L	0.7731 ppb	13:36:05
3	Sn 189.927†	6.1	-2.7	-0.4327 ug/L	-0.4327 ppb	13:36:05
3	Ti 334.940†	-1275.6	-23.9	-0.0375 ug/L	-0.0375 ppb	13:35:45
3	Tl 190.801†	-35.2	-0.8	-0.2183 ug/L	-0.2183 ppb	13:36:05
3	U 409.014†	-2572.5	2.3	0.0706 ug/L	0.0706 ppb	13:35:45
3	V 292.402†	-1376.4	-18.6	-0.1162 ug/L	-0.1162 ppb	13:35:45
3	Zn 213.857†	759.1	8.0	0.0676 ug/L	0.0676 ppb	13:36:05
3	SiO2†	523.7	1.1	0.0517 ug/L	0.0517 ppb	13:36:21

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866854.4	99.878	%	0.2069				0.21%
Sc Radial	5569.7	99.9	%	3.48				3.49%
Y 371.029	728801.0	99.910	%	0.1277				0.13%
Y RADIAL	6051.4	100.2	%	3.61				3.60%
Ag 328.068†	54.3	0.2429	ug/L	0.11369	0.2429	ppb	0.11369	46.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.1	3.4739	ug/L	1.47053	3.4739	ppb	1.47053	42.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	1.0566	ug/L	0.74908	1.0566	ppb	0.74908	70.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	265.5	5.6600	ug/L	0.29445	5.6600	ppb	0.29445	5.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.9	-0.0072	ug/L	0.06878	-0.0072	ppb	0.06878	955.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	114.1	0.0410	ug/L	0.01621	0.0410	ppb	0.01621	39.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.9	4.2688	ug/L	1.01047	4.2688	ppb	1.01047	23.67%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -2.7     -0.0268 ug/L       0.06560     -0.0268 ppb        0.06560 244.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.2     -0.0216 ug/L       0.08741     -0.0216 ppb        0.08741 405.18%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 2.4      0.0258 ug/L       0.13925      0.0258 ppb        0.13925 540.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -18.2     -0.0537 ug/L       0.06423     -0.0537 ppb        0.06423 119.55%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.8     -16.142 ug/L       16.1538     -16.142 ppb        16.1538 100.07%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         162.2      27.208 ug/L       17.2368      27.208 ppb        17.2368  63.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.8      27.013 ug/L       39.2611      27.013 ppb        39.2611 145.34%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 6.8      0.0050 ug/L       0.02833      0.0050 ppb        0.02833 561.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.5      0.2878 ug/L       0.19869      0.2878 ppb        0.19869  69.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         21.5      6.5034 ug/L      13.99861      6.5034 ppb       13.99861 215.25%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.7      0.1080 ug/L       0.19885      0.1080 ppb        0.19885 184.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -11.2     -6.2590 ug/L       3.80255     -6.2590 ppb        3.80255  60.75%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.5     -0.7241 ug/L       0.92003     -0.7241 ppb        0.92003 127.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.8      2.3314 ug/L       5.11294      2.3314 ppb        5.11294 219.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.5      0.4758 ug/L       1.07586      0.4758 ppb        1.07586 226.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.6     -0.9244 ug/L       2.98365     -0.9244 ppb        2.98365 322.76%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                29.8      0.8761 ug/L       0.19242      0.8761 ppb        0.19242  21.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.6     -0.4123 ug/L       0.26106     -0.4123 ppb        0.26106  63.32%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -26.6     -0.1602 ug/L       0.09867     -0.1602 ppb        0.09867  61.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -1.1     -0.0005 ug/L       0.03644     -0.0005 ppb        0.03644 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.6     -0.4631 ug/L       0.35351     -0.4631 ppb        0.35351  76.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -82.3     -2.3650 ug/L       2.11001     -2.3650 ppb        2.11001  89.22%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  6.8      0.0479 ug/L       0.25428      0.0479 ppb        0.25428 530.63%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                16.6      0.1427 ug/L       0.06814      0.1427 ppb        0.06814  47.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       6.4      0.3803 ug/L       0.45458      0.3803 ppb        0.45458 119.54%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 14:40:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5433.1	5433.1	97.4	%			14:42:08
1	Y RADIAL	5850.2	5850.2	96.87	%			14:42:08
1	Al 396.153Radial†	7030.4	7250.3	4971.6	ug/L	4971.6	ppb	14:42:08
1	Ca 317.933Radial†	3435.1	3508.4	5120.4	ug/L	5120.4	ppb	14:42:28
1	Fe 238.204 Radial†	584.8	590.3	5304.3	ug/L	5304.3	ppb	14:42:28
1	K 766.490 Radial†	32191.1	30296.6	5074.0	ug/L	5074.0	ppb	14:42:08
1	Mg 279.077 IEC†	156.7	158.9	5350.4	ug/L	5350.4	ppb	14:42:28
1	Na 589.592 Radial†	32196.4	34595.8	10485	ug/L	10485	ppb	14:42:08
1	Sr 421.552†	83672.8	85869.5	517.85	ug/L	517.85	ppb	14:42:08
1	Sc 361.383	860112.6	860112.6	99.101	%			14:43:26
1	Y 371.029	711898.8	711898.8	97.593	%			14:43:26
1	Ag 328.068†	112466.5	113212.8	515.30	ug/L	515.30	ppb	14:43:31
1	As 188.979†	1276.5	1319.4	513.89	ug/L	513.89	ppb	14:43:51
1	B 249.677†	23151.6	23854.8	506.38	ug/L	506.38	ppb	14:43:31
1	Ba 233.527†	67283.9	67905.4	508.72	ug/L	508.72	ppb	14:43:31
1	Be 313.107†	1377691.0	1394852.5	501.85	ug/L	501.85	ppb	14:43:26
1	Cd 226.502†	48592.5	49232.3	510.39	ug/L	510.39	ppb	14:43:31
1	Co 228.616†	26584.5	26899.2	507.49	ug/L	507.49	ppb	14:43:31
1	Cr 267.716†	48093.7	48444.0	507.92	ug/L	507.92	ppb	14:43:31
1	Cu 324.752†	178525.6	173387.4	503.89	ug/L	503.89	ppb	14:43:31
1	Mn 257.610†	469476.0	473215.1	501.96	ug/L	501.96	ppb	14:43:26
1	Mo 202.031†	7942.9	7996.6	509.25	ug/L	509.25	ppb	14:43:51
1	Ni 231.604†	22071.3	22185.6	509.47	ug/L	509.47	ppb	14:43:31
1	P 214.914†	4710.5	4511.2	2442.5	ug/L	2442.5	ppb	14:43:51
1	Pb 220.353†	4413.6	4521.6	507.70	ug/L	507.70	ppb	14:43:51
1	S 181.975 Axial†	821.5	779.6	1029.0	ug/L	1029.0	ppb	14:43:51
1	Sb 206.836†	1638.8	1616.3	517.69	ug/L	517.69	ppb	14:43:51
1	Se 196.026†	873.4	908.1	529.48	ug/L	529.48	ppb	14:43:51
1	Si 251.611†	87136.8	87445.6	2592.3	ug/L	2592.3	ppb	14:43:31
1	Sn 189.927†	3154.6	3174.4	511.25	ug/L	511.25	ppb	14:43:51
1	Ti 334.940†	317196.6	321330.6	507.06	ug/L	507.06	ppb	14:43:26
1	Tl 190.801†	1742.9	1793.3	508.49	ug/L	508.49	ppb	14:43:51
1	U 409.014†	14809.1	17527.4	502.28	ug/L	502.28	ppb	14:43:31
1	V 292.402†	73797.5	75829.7	511.35	ug/L	511.35	ppb	14:43:31
1	Zn 213.857†	59645.7	59433.0	506.70	ug/L	506.70	ppb	14:43:31
1	SiO2†	86310.8	86569.4	5499.1	ug/L	5499.1	ppb	14:44:59
2	Sc Radial	5475.6	5475.6	98.2	%			14:42:33
2	Y RADIAL	5916.3	5916.3	97.97	%			14:42:33
2	Al 396.153Radial†	7067.6	7232.1	4959.3	ug/L	4959.3	ppb	14:42:33
2	Ca 317.933Radial†	3425.1	3470.8	5065.7	ug/L	5065.7	ppb	14:42:53
2	Fe 238.204 Radial†	587.3	588.1	5284.9	ug/L	5284.9	ppb	14:42:53
2	K 766.490 Radial†	32480.5	30335.0	5080.4	ug/L	5080.4	ppb	14:42:33
2	Mg 279.077 IEC†	158.6	159.6	5372.7	ug/L	5372.7	ppb	14:42:53
2	Na 589.592 Radial†	32429.1	34576.3	10479	ug/L	10479	ppb	14:42:33
2	Sr 421.552†	84153.5	85692.8	516.79	ug/L	516.79	ppb	14:42:33
2	Sc 361.383	869074.0	869074.0	100.13	%			14:43:57
2	Y 371.029	719098.2	719098.2	98.580	%			14:43:57
2	Ag 328.068†	112778.1	112353.8	511.40	ug/L	511.40	ppb	14:44:02
2	As 188.979†	1278.4	1308.0	509.51	ug/L	509.51	ppb	14:44:22
2	B 249.677†	23343.2	23805.3	505.33	ug/L	505.33	ppb	14:44:02
2	Ba 233.527†	67602.5	67523.5	505.86	ug/L	505.86	ppb	14:44:02
2	Be 313.107†	1396705.8	1399507.1	503.53	ug/L	503.53	ppb	14:43:57
2	Cd 226.502†	48773.5	48907.4	507.02	ug/L	507.02	ppb	14:44:02
2	Co 228.616†	26811.7	26849.4	506.54	ug/L	506.54	ppb	14:44:02
2	Cr 267.716†	48248.4	48098.0	504.29	ug/L	504.29	ppb	14:44:02
2	Cu 324.752†	179308.0	172311.2	500.76	ug/L	500.76	ppb	14:44:02
2	Mn 257.610†	475105.2	473951.8	502.73	ug/L	502.73	ppb	14:43:57
2	Mo 202.031†	7945.1	7916.1	504.13	ug/L	504.13	ppb	14:44:22
2	Ni 231.604†	22158.7	22043.3	506.20	ug/L	506.20	ppb	14:44:02

2	P 214.914†	4740.2	4491.9	2432.2	ug/L	2432.2	ppb	14:44:22
2	Pb 220.353†	4408.4	4470.5	501.97	ug/L	501.97	ppb	14:44:22
2	S 181.975 Axial†	823.6	773.1	1020.4	ug/L	1020.4	ppb	14:44:22
2	Sb 206.836†	1641.2	1601.6	512.98	ug/L	512.98	ppb	14:44:22
2	Se 196.026†	876.3	902.0	525.97	ug/L	525.97	ppb	14:44:22
2	Si 251.611†	87719.2	87120.6	2582.8	ug/L	2582.8	ppb	14:44:02
2	Sn 189.927†	3168.5	3155.4	508.20	ug/L	508.20	ppb	14:44:22
2	Ti 334.940†	321009.1	321837.5	507.86	ug/L	507.86	ppb	14:43:57
2	Tl 190.801†	1747.3	1779.6	504.65	ug/L	504.65	ppb	14:44:22
2	U 409.014†	14724.5	17288.9	495.43	ug/L	495.43	ppb	14:44:02
2	V 292.402†	74077.5	75341.6	508.02	ug/L	508.02	ppb	14:44:02
2	Zn 213.857†	59964.2	59130.4	504.12	ug/L	504.12	ppb	14:44:02
2	SiO2†	86853.3	86213.1	5476.6	ug/L	5476.6	ppb	14:45:04
3	Sc Radial	5529.8	5529.8	99.2	%			14:42:58
3	Y RADIAL	5922.3	5922.3	98.07	%			14:42:58
3	Al 396.153Radial†	7136.7	7231.3	4958.4	ug/L	4958.4	ppb	14:42:58
3	Ca 317.933Radial†	3405.4	3416.8	4986.7	ug/L	4986.7	ppb	14:43:18
3	Fe 238.204 Radial†	582.3	577.3	5187.7	ug/L	5187.7	ppb	14:43:18
3	K 766.490 Radial†	32653.2	30185.1	5055.3	ug/L	5055.3	ppb	14:42:58
3	Mg 279.077 IEC†	155.1	154.5	5200.4	ug/L	5200.4	ppb	14:43:18
3	Na 589.592 Radial†	32642.1	34467.6	10446	ug/L	10446	ppb	14:42:58
3	Sr 421.552†	84661.9	85365.9	514.82	ug/L	514.82	ppb	14:42:58
3	Sc 361.383	859473.2	859473.2	99.027	%			14:44:28
3	Y 371.029	709608.6	709608.6	97.279	%			14:44:28
3	Ag 328.068†	111995.2	112821.3	513.49	ug/L	513.49	ppb	14:44:33
3	As 188.979†	1273.6	1317.4	513.11	ug/L	513.11	ppb	14:44:53
3	B 249.677†	23217.5	23938.8	508.17	ug/L	508.17	ppb	14:44:33
3	Ba 233.527†	67231.2	67902.8	508.69	ug/L	508.69	ppb	14:44:33
3	Be 313.107†	1381011.4	1399239.7	503.43	ug/L	503.43	ppb	14:44:28
3	Cd 226.502†	48643.5	49320.3	511.32	ug/L	511.32	ppb	14:44:33
3	Co 228.616†	26718.8	27054.7	510.43	ug/L	510.43	ppb	14:44:33
3	Cr 267.716†	47958.8	48343.9	506.86	ug/L	506.86	ppb	14:44:33
3	Cu 324.752†	177442.8	172428.0	501.10	ug/L	501.10	ppb	14:44:33
3	Mn 257.610†	472388.4	476508.5	505.44	ug/L	505.44	ppb	14:44:28
3	Mo 202.031†	7973.7	8033.7	511.60	ug/L	511.60	ppb	14:44:53
3	Ni 231.604†	22015.4	22145.7	508.55	ug/L	508.55	ppb	14:44:33
3	P 214.914†	4749.3	4553.9	2467.0	ug/L	2467.0	ppb	14:44:53
3	Pb 220.353†	4428.0	4539.5	509.72	ug/L	509.72	ppb	14:44:53
3	S 181.975 Axial†	829.2	787.9	1040.0	ug/L	1040.0	ppb	14:44:53
3	Sb 206.836†	1652.6	1631.4	522.61	ug/L	522.61	ppb	14:44:53
3	Se 196.026†	870.7	906.1	528.01	ug/L	528.01	ppb	14:44:53
3	Si 251.611†	87060.3	87433.8	2591.9	ug/L	2591.9	ppb	14:44:33
3	Sn 189.927†	3176.0	3198.4	515.10	ug/L	515.10	ppb	14:44:53
3	Ti 334.940†	318210.1	322592.1	509.04	ug/L	509.04	ppb	14:44:28
3	Tl 190.801†	1764.0	1815.9	514.87	ug/L	514.87	ppb	14:44:53
3	U 409.014†	14697.8	17426.2	499.39	ug/L	499.39	ppb	14:44:33
3	V 292.402†	73503.8	75588.6	509.79	ug/L	509.79	ppb	14:44:33
3	Zn 213.857†	59544.2	59375.2	506.23	ug/L	506.23	ppb	14:44:33
3	SiO2†	88039.4	88379.8	5614.6	ug/L	5614.6	ppb	14:45:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862886.6	99.421	%	0.6185				0.62%
Sc Radial	5479.5	98.3	%	0.87				0.88%
Y 371.029	713535.2	97.817	%	0.6788				0.69%
Y RADIAL	5896.3	97.63	%	0.663				0.68%
Ag 328.068†	112796.0	513.39	ug/L	1.951	513.39	ppb	1.951	0.38%
QC value within limits for Ag 328.068 Recovery = 102.68%								
Al 396.153Radial†	7237.9	4963.1	ug/L	7.37	4963.1	ppb	7.37	0.15%
QC value within limits for Al 396.153Radial Recovery = 99.26%								
As 188.979†	1314.9	512.17	ug/L	2.338	512.17	ppb	2.338	0.46%
QC value within limits for As 188.979 Recovery = 102.43%								
B 249.677†	23866.3	506.63	ug/L	1.440	506.63	ppb	1.440	0.28%
QC value within limits for B 249.677 Recovery = 101.33%								
Ba 233.527†	67777.2	507.76	ug/L	1.644	507.76	ppb	1.644	0.32%
QC value within limits for Ba 233.527 Recovery = 101.55%								
Be 313.107†	1397866.4	502.94	ug/L	0.940	502.94	ppb	0.940	0.19%
QC value within limits for Be 313.107 Recovery = 100.59%								
Ca 317.933Radial†	3465.3	5057.6	ug/L	67.21	5057.6	ppb	67.21	1.33%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.15%
Cd 226.502†            49153.3      509.58 ug/L         2.260      509.58 ppb          2.260   0.44%
   QC value within limits for Cd 226.502  Recovery = 101.92%
Co 228.616†            26934.4      508.15 ug/L         2.028      508.15 ppb          2.028   0.40%
   QC value within limits for Co 228.616  Recovery = 101.63%
Cr 267.716†            48295.3      506.36 ug/L         1.865      506.36 ppb          1.865   0.37%
   QC value within limits for Cr 267.716  Recovery = 101.27%
Cu 324.752†           172708.9      501.92 ug/L         1.717      501.92 ppb          1.717   0.34%
   QC value within limits for Cu 324.752  Recovery = 100.38%
Fe 238.204 Radial†       585.2      5259.0 ug/L        62.47      5259.0 ppb          62.47   1.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.18%
K 766.490 Radial†      30272.2      5069.9 ug/L        13.06      5069.9 ppb          13.06   0.26%
   QC value within limits for K 766.490 Radial  Recovery = 101.40%
Mg 279.077 IEC†          157.7      5307.9 ug/L        93.70      5307.9 ppb          93.70   1.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.16%
Mn 257.610†           474558.5      503.38 ug/L         1.827      503.38 ppb          1.827   0.36%
   QC value within limits for Mn 257.610  Recovery = 100.68%
Mo 202.031†             7982.1      508.33 ug/L         3.820      508.33 ppb          3.820   0.75%
   QC value within limits for Mo 202.031  Recovery = 101.67%
Na 589.592 Radial†     34546.6       10470 ug/L          20.9       10470 ppb           20.9   0.20%
   QC value within limits for Na 589.592 Radial  Recovery = 104.70%
Ni 231.604†            22124.9      508.08 ug/L         1.687      508.08 ppb          1.687   0.33%
   QC value within limits for Ni 231.604  Recovery = 101.62%
P 214.914†              4519.0      2447.2 ug/L        17.85      2447.2 ppb          17.85   0.73%
   QC value within limits for P 214.914  Recovery = 97.89%
Pb 220.353†             4510.6      506.46 ug/L         4.019      506.46 ppb          4.019   0.79%
   QC value within limits for Pb 220.353  Recovery = 101.29%
S 181.975 Axial†         780.2      1029.8 ug/L         9.83      1029.8 ppb           9.83   0.95%
   QC value within limits for S 181.975 Axial  Recovery = 102.98%
Sb 206.836†             1616.4      517.76 ug/L         4.817      517.76 ppb          4.817   0.93%
   QC value within limits for Sb 206.836  Recovery = 103.55%
Se 196.026†              905.4      527.82 ug/L         1.764      527.82 ppb          1.764   0.33%
   QC value within limits for Se 196.026  Recovery = 105.56%
Si 251.611†            87333.3      2589.0 ug/L         5.42      2589.0 ppb           5.42   0.21%
   QC value within limits for Si 251.611  Recovery = 103.56%
Sn 189.927†             3176.1      511.51 ug/L         3.455      511.51 ppb          3.455   0.68%
   QC value within limits for Sn 189.927  Recovery = 102.30%
Sr 421.552†            85642.7      516.49 ug/L         1.540      516.49 ppb          1.540   0.30%
   QC value within limits for Sr 421.552  Recovery = 103.30%
Ti 334.940†           321920.1      507.99 ug/L         0.999      507.99 ppb          0.999   0.20%
   QC value within limits for Ti 334.940  Recovery = 101.60%
Tl 190.801†             1796.3      509.34 ug/L         5.164      509.34 ppb          5.164   1.01%
   QC value within limits for Tl 190.801  Recovery = 101.87%
U 409.014†             17414.2      499.03 ug/L         3.438      499.03 ppb          3.438   0.69%
   QC value within limits for U 409.014  Recovery = 99.81%
V 292.402†             75586.6      509.72 ug/L         1.666      509.72 ppb          1.666   0.33%
   QC value within limits for V 292.402  Recovery = 101.94%
Zn 213.857†            59312.9      505.68 ug/L         1.372      505.68 ppb          1.372   0.27%
   QC value within limits for Zn 213.857  Recovery = 101.14%
SiO2†                  87054.1      5530.1 ug/L        74.02      5530.1 ppb          74.02   1.34%
   QC value within limits for SiO2  Recovery = 103.41%
All analyte(s) passed QC.
```

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 14:47:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5612.9	5612.9	101	%			14:49:10
1	Y RADIAL	6085.5	6085.5	100.8	%			14:49:10
1	Al 396.153Radial†	-28.8	6.7	4.5403	ug/L	4.5403	ppb	14:49:10
1	Ca 317.933Radial†	12.6	-4.4	-6.4244	ug/L	-6.4244	ppb	14:49:30
1	Fe 238.204 Radial†	9.3	-0.7	-6.1453	ug/L	-6.1453	ppb	14:49:30
1	K 766.490 Radial†	2798.0	40.0	6.7168	ug/L	6.7168	ppb	14:49:10
1	Mg 279.077 IEC†	0.0	-1.9	-63.848	ug/L	-63.848	ppb	14:49:30
1	Na 589.592 Radial†	-1562.7	1.8	0.5478	ug/L	0.5478	ppb	14:49:10
1	Sr 421.552†	-48.7	-48.1	-0.2901	ug/L	-0.2901	ppb	14:49:10
1	Sc 361.383	860909.6	860909.6	99.193	%			14:50:27
1	Y 371.029	724080.5	724080.5	99.263	%			14:50:27
1	Ag 328.068†	373.1	102.1	0.4681	ug/L	0.4681	ppb	14:50:27
1	As 188.979†	-23.2	7.9	3.0593	ug/L	3.0593	ppb	14:50:47
1	B 249.677†	-203.3	288.2	6.1435	ug/L	6.1435	ppb	14:50:47
1	Ba 233.527†	-5.1	6.0	0.0454	ug/L	0.0454	ppb	14:50:47
1	Be 313.107†	-4524.0	101.8	0.0366	ug/L	0.0366	ppb	14:50:27
1	Cd 226.502†	-191.9	5.5	0.0575	ug/L	0.0575	ppb	14:50:47
1	Co 228.616†	-77.2	-4.4	-0.0806	ug/L	-0.0806	ppb	14:50:47
1	Cr 267.716†	79.2	-6.1	-0.0612	ug/L	-0.0612	ppb	14:50:47
1	Cu 324.752†	6800.8	98.3	0.2852	ug/L	0.2852	ppb	14:50:27
1	Mn 257.610†	517.8	1.8	0.0025	ug/L	0.0025	ppb	14:50:47
1	Mo 202.031†	35.9	17.8	1.1335	ug/L	1.1335	ppb	14:50:47
1	Ni 231.604†	81.4	-3.9	-0.0893	ug/L	-0.0893	ppb	14:50:47
1	P 214.914†	222.9	-17.3	-9.7319	ug/L	-9.7319	ppb	14:50:47
1	Pb 220.353†	-55.9	11.7	1.3108	ug/L	1.3108	ppb	14:50:47
1	S 181.975 Axial†	48.3	-0.7	-0.8888	ug/L	-0.8888	ppb	14:50:47
1	Sb 206.836†	47.0	10.0	3.1845	ug/L	3.1845	ppb	14:50:47
1	Se 196.026†	-32.8	-6.2	-3.5194	ug/L	-3.5194	ppb	14:50:47
1	Si 251.611†	580.8	103.7	3.0696	ug/L	3.0696	ppb	14:50:47
1	Sn 189.927†	5.5	-3.3	-0.5244	ug/L	-0.5244	ppb	14:50:47
1	Ti 334.940†	-1228.0	18.3	0.0318	ug/L	0.0318	ppb	14:50:27
1	Tl 190.801†	-36.6	-2.3	-0.6504	ug/L	-0.6504	ppb	14:50:47
1	U 409.014†	-2817.2	-256.1	-7.3616	ug/L	-7.3616	ppb	14:50:27
1	V 292.402†	-1286.3	66.0	0.4405	ug/L	0.4405	ppb	14:50:27
1	Zn 213.857†	810.9	63.7	0.5506	ug/L	0.5506	ppb	14:50:47
1	SiO2†	608.0	88.5	5.6055	ug/L	5.6055	ppb	14:51:43
2	Sc Radial	5496.3	5496.3	98.6	%			14:49:35
2	Y RADIAL	6010.2	6010.2	99.52	%			14:49:35
2	Al 396.153Radial†	-18.7	16.4	11.247	ug/L	11.247	ppb	14:49:35
2	Ca 317.933Radial†	15.9	-0.8	-1.1546	ug/L	-1.1546	ppb	14:49:55
2	Fe 238.204 Radial†	9.1	-0.6	-5.5103	ug/L	-5.5103	ppb	14:49:55
2	K 766.490 Radial†	2935.1	238.0	39.930	ug/L	39.930	ppb	14:49:35
2	Mg 279.077 IEC†	3.0	1.1	37.240	ug/L	37.240	ppb	14:49:55
2	Na 589.592 Radial†	-1482.0	50.8	15.380	ug/L	15.380	ppb	14:49:35
2	Sr 421.552†	-8.0	-7.9	-0.0477	ug/L	-0.0477	ppb	14:49:35
2	Sc 361.383	855903.7	855903.7	98.616	%			14:50:52
2	Y 371.029	719719.2	719719.2	98.665	%			14:50:52
2	Ag 328.068†	438.2	170.3	0.7711	ug/L	0.7711	ppb	14:50:52
2	As 188.979†	-31.8	-0.9	-0.3704	ug/L	-0.3704	ppb	14:51:12
2	B 249.677†	-220.3	269.8	5.7503	ug/L	5.7503	ppb	14:51:12
2	Ba 233.527†	-5.0	6.0	0.0446	ug/L	0.0446	ppb	14:51:12
2	Be 313.107†	-4496.3	103.2	0.0369	ug/L	0.0369	ppb	14:50:52
2	Cd 226.502†	-200.1	-4.0	-0.0408	ug/L	-0.0408	ppb	14:51:12
2	Co 228.616†	-70.6	1.8	0.0362	ug/L	0.0362	ppb	14:51:12
2	Cr 267.716†	76.5	-8.5	-0.0878	ug/L	-0.0878	ppb	14:51:12
2	Cu 324.752†	6798.2	135.7	0.3940	ug/L	0.3940	ppb	14:50:52
2	Mn 257.610†	526.5	13.7	0.0133	ug/L	0.0133	ppb	14:51:12
2	Mo 202.031†	28.1	10.1	0.6396	ug/L	0.6396	ppb	14:51:12
2	Ni 231.604†	106.0	21.5	0.4952	ug/L	0.4952	ppb	14:51:12

2	P 214.914†	234.9	-3.9	-2.2485	ug/L	-2.2485 ppb	14:51:12
2	Pb 220.353†	-60.9	6.2	0.7019	ug/L	0.7019 ppb	14:51:12
2	S 181.975 Axial†	53.8	5.1	6.7393	ug/L	6.7393 ppb	14:51:12
2	Sb 206.836†	36.9	0.0	-0.0045	ug/L	-0.0045 ppb	14:51:12
2	Se 196.026†	-23.6	2.9	1.6024	ug/L	1.6024 ppb	14:51:12
2	Si 251.611†	594.5	121.1	3.5877	ug/L	3.5877 ppb	14:51:12
2	Sn 189.927†	-3.2	-12.0	-1.9376	ug/L	-1.9376 ppb	14:51:12
2	Ti 334.940†	-1272.8	-34.4	-0.0530	ug/L	-0.0530 ppb	14:50:52
2	Tl 190.801†	-36.0	-2.0	-0.5560	ug/L	-0.5560 ppb	14:51:12
2	U 409.014†	-2651.9	-105.1	-3.0210	ug/L	-3.0210 ppb	14:50:52
2	V 292.402†	-1342.3	1.6	0.0155	ug/L	0.0155 ppb	14:50:52
2	Zn 213.857†	787.3	44.5	0.3783	ug/L	0.3783 ppb	14:51:12
2	SiO2†	578.1	61.7	3.9008	ug/L	3.9008 ppb	14:51:48
3	Sc Radial	5536.5	5536.5	99.3	%		14:50:00
3	Y RADIAL	6020.3	6020.3	99.69	%		14:50:00
3	Al 396.153Radial†	-24.1	11.1	7.6025	ug/L	7.6025 ppb	14:50:00
3	Ca 317.933Radial†	14.7	-2.1	-3.0756	ug/L	-3.0756 ppb	14:50:20
3	Fe 238.204 Radial†	7.7	-2.1	-19.008	ug/L	-19.008 ppb	14:50:20
3	K 766.490 Radial†	2849.5	130.2	21.841	ug/L	21.841 ppb	14:50:00
3	Mg 279.077 IEC†	2.9	1.0	34.320	ug/L	34.320 ppb	14:50:20
3	Na 589.592 Radial†	-1501.5	42.0	12.734	ug/L	12.734 ppb	14:50:00
3	Sr 421.552†	-3.5	-3.3	-0.0201	ug/L	-0.0201 ppb	14:50:00
3	Sc 361.383	866507.0	866507.0	99.838	%		14:51:17
3	Y 371.029	727552.5	727552.5	99.739	%		14:51:17
3	Ag 328.068†	347.8	74.4	0.3326	ug/L	0.3326 ppb	14:51:17
3	As 188.979†	-17.5	13.8	5.3142	ug/L	5.3142 ppb	14:51:37
3	B 249.677†	-230.6	262.3	5.5916	ug/L	5.5916 ppb	14:51:37
3	Ba 233.527†	-7.7	3.4	0.0243	ug/L	0.0243 ppb	14:51:37
3	Be 313.107†	-4653.4	1.7	0.0005	ug/L	0.0005 ppb	14:51:17
3	Cd 226.502†	-187.4	11.2	0.1183	ug/L	0.1183 ppb	14:51:37
3	Co 228.616†	-73.5	-0.2	-0.0007	ug/L	-0.0007 ppb	14:51:37
3	Cr 267.716†	62.3	-23.6	-0.2465	ug/L	-0.2465 ppb	14:51:37
3	Cu 324.752†	6777.7	30.8	0.0886	ug/L	0.0886 ppb	14:51:17
3	Mn 257.610†	508.7	-10.6	-0.0138	ug/L	-0.0138 ppb	14:51:37
3	Mo 202.031†	30.4	12.1	0.7669	ug/L	0.7669 ppb	14:51:37
3	Ni 231.604†	86.2	0.4	0.0083	ug/L	0.0083 ppb	14:51:37
3	P 214.914†	239.0	-2.6	-1.4741	ug/L	-1.4741 ppb	14:51:37
3	Pb 220.353†	-73.2	-5.3	-0.5866	ug/L	-0.5866 ppb	14:51:37
3	S 181.975 Axial†	59.1	9.8	12.990	ug/L	12.990 ppb	14:51:37
3	Sb 206.836†	34.3	-3.0	-0.9262	ug/L	-0.9262 ppb	14:51:37
3	Se 196.026†	-25.3	1.5	0.7743	ug/L	0.7743 ppb	14:51:37
3	Si 251.611†	564.3	83.5	2.4667	ug/L	2.4667 ppb	14:51:37
3	Sn 189.927†	9.5	0.7	0.1080	ug/L	0.1080 ppb	14:51:37
3	Ti 334.940†	-1283.5	-29.4	-0.0453	ug/L	-0.0453 ppb	14:51:17
3	Tl 190.801†	-35.4	-0.9	-0.2625	ug/L	-0.2625 ppb	14:51:37
3	U 409.014†	-2667.7	-88.1	-2.5288	ug/L	-2.5288 ppb	14:51:17
3	V 292.402†	-1362.0	-1.5	-0.0001	ug/L	-0.0001 ppb	14:51:17
3	Zn 213.857†	793.3	40.8	0.3511	ug/L	0.3511 ppb	14:51:37
3	SiO2†	574.4	50.9	3.2023	ug/L	3.2023 ppb	14:51:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861106.8	99.215	%	0.6112				0.62%
Sc Radial	5548.6	99.5	%	1.06				1.07%
Y 371.029	723784.1	99.222	%	0.5381				0.54%
Y RADIAL	6038.7	99.99	%	0.677				0.68%
Ag 328.068†	115.6	0.5239	ug/L	0.22455	0.5239	ppb	0.22455	42.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.4	7.7966	ug/L	3.35753	7.7966	ppb	3.35753	43.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.9	2.6677	ug/L	2.86250	2.6677	ppb	2.86250	107.30%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	273.4	5.8285	ug/L	0.28415	5.8285	ppb	0.28415	4.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.1	0.0381	ug/L	0.01197	0.0381	ppb	0.01197	31.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	68.9	0.0247	ug/L	0.02094	0.0247	ppb	0.02094	84.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-3.5515	ug/L	2.66695	-3.5515	ppb	2.66695	75.09%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.2      0.0450 ug/L       0.08028      0.0450 ppb        0.08028 178.36%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -0.9     -0.0150 ug/L       0.05968     -0.0150 ppb        0.05968 396.81%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.7     -0.1319 ug/L       0.10020     -0.1319 ppb        0.10020  75.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                88.3      0.2559 ug/L       0.15481      0.2559 ppb        0.15481  60.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.1    -10.221 ug/L        7.6162    -10.221 ppb         7.6162  74.51%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         136.1      22.829 ug/L       16.6287      22.829 ppb        16.6287  72.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.1      2.5703 ug/L      57.53886      2.5703 ppb       57.53886 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                1.6      0.0007 ug/L       0.01362      0.0007 ppb        0.01362 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               13.3      0.8467 ug/L       0.25644      0.8467 ppb        0.25644  30.29%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        31.5      9.5539 ug/L       7.91103      9.5539 ppb        7.91103  82.80%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                6.0      0.1381 ug/L       0.31310      0.1381 ppb        0.31310 226.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -8.0     -4.4848 ug/L       4.56058     -4.4848 ppb        4.56058 101.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                4.2      0.4753 ug/L       0.96874      0.4753 ppb        0.96874 203.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.8      6.2800 ug/L       6.95060      6.2800 ppb        6.95060 110.68%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.4      0.7513 ug/L       2.15701      0.7513 ppb        2.15701 287.11%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.6     -0.3809 ug/L       2.74941     -0.3809 ppb        2.74941 721.81%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              102.8      3.0414 ug/L       0.56105      3.0414 ppb        0.56105  18.45%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -4.9     -0.7847 ug/L       1.04734     -0.7847 ppb        1.04734 133.47%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -19.8     -0.1193 ug/L       0.14858     -0.1193 ppb        0.14858 124.56%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -15.2     -0.0222 ug/L       0.04690     -0.0222 ppb        0.04690 211.56%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.7     -0.4896 ug/L       0.20230     -0.4896 ppb        0.20230  41.32%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -149.7     -4.3038 ug/L       2.65954     -4.3038 ppb        2.65954  61.79%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                22.0      0.1520 ug/L       0.25000      0.1520 ppb        0.25000 164.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               49.6      0.4267 ug/L       0.10819      0.4267 ppb        0.10819  25.36%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     67.1      4.2362 ug/L       1.23621      4.2362 ppb        1.23621  29.18%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 15:57:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5558.6	5558.6	99.7	%			15:59:12
1	Y RADIAL	5971.1	5971.1	98.87	%			15:59:12
1	Al 396.153Radial†	7083.3	7140.5	4896.1	ug/L	4896.1	ppb	15:59:12
1	Ca 317.933Radial†	3430.9	3424.7	4998.3	ug/L	4998.3	ppb	15:59:32
1	Fe 238.204 Radial†	588.3	580.2	5214.1	ug/L	5214.1	ppb	15:59:32
1	K 766.490 Radial†	32544.2	29905.5	5008.5	ug/L	5008.5	ppb	15:59:12
1	Mg 279.077 IEC†	157.3	155.8	5246.5	ug/L	5246.5	ppb	15:59:32
1	Na 589.592 Radial†	32184.8	33838.7	10255	ug/L	10255	ppb	15:59:12
1	Sr 421.552†	84145.3	84406.2	509.03	ug/L	509.03	ppb	15:59:12
1	Sc 361.383	869736.0	869736.0	100.21	%			16:00:29
1	Y 371.029	718165.7	718165.7	98.452	%			16:00:29
1	Ag 328.068†	112428.6	111919.3	509.40	ug/L	509.40	ppb	16:00:35
1	As 188.979†	1276.4	1305.0	508.24	ug/L	508.24	ppb	16:00:55
1	B 249.677†	23207.3	23652.0	502.07	ug/L	502.07	ppb	16:00:35
1	Ba 233.527†	67216.3	67086.7	502.59	ug/L	502.59	ppb	16:00:35
1	Be 313.107†	1391057.6	1392809.1	501.10	ug/L	501.10	ppb	16:00:29
1	Cd 226.502†	48541.0	48638.4	504.24	ug/L	504.24	ppb	16:00:35
1	Co 228.616†	26754.9	26772.3	505.11	ug/L	505.11	ppb	16:00:35
1	Cr 267.716†	47906.4	47720.1	500.33	ug/L	500.33	ppb	16:00:35
1	Cu 324.752†	178862.1	171730.0	499.07	ug/L	499.07	ppb	16:00:35
1	Mn 257.610†	475113.1	473598.6	502.36	ug/L	502.36	ppb	16:00:29
1	Mo 202.031†	7974.3	7939.2	505.60	ug/L	505.60	ppb	16:00:55
1	Ni 231.604†	21958.4	21826.5	501.22	ug/L	501.22	ppb	16:00:35
1	P 214.914†	4733.2	4481.3	2426.6	ug/L	2426.6	ppb	16:00:55
1	Pb 220.353†	4419.8	4478.5	502.86	ug/L	502.86	ppb	16:00:55
1	S 181.975 Axial†	822.4	771.3	1018.1	ug/L	1018.1	ppb	16:00:55
1	Sb 206.836†	1648.1	1607.3	514.89	ug/L	514.89	ppb	16:00:55
1	Se 196.026†	873.3	898.3	523.66	ug/L	523.66	ppb	16:00:55
1	Si 251.611†	87277.4	86613.1	2567.6	ug/L	2567.6	ppb	16:00:35
1	Sn 189.927†	3153.7	3138.3	505.43	ug/L	505.43	ppb	16:00:55
1	Ti 334.940†	313418.1	314018.5	495.52	ug/L	495.52	ppb	16:00:35
1	Tl 190.801†	1743.3	1774.2	503.05	ug/L	503.05	ppb	16:00:55
1	U 409.014†	14827.4	17380.4	498.08	ug/L	498.08	ppb	16:00:35
1	V 292.402†	73812.8	75021.1	505.94	ug/L	505.94	ppb	16:00:35
1	Zn 213.857†	59642.5	58763.8	501.01	ug/L	501.01	ppb	16:00:35
1	SiO2†	88264.4	87555.2	5562.3	ug/L	5562.3	ppb	16:02:02
2	Sc Radial	5504.9	5504.9	98.7	%			15:59:37
2	Y RADIAL	5969.3	5969.3	98.84	%			15:59:37
2	Al 396.153Radial†	7134.7	7261.8	4979.6	ug/L	4979.6	ppb	15:59:37
2	Ca 317.933Radial†	3435.2	3462.5	5053.6	ug/L	5053.6	ppb	15:59:57
2	Fe 238.204 Radial†	574.1	571.6	5136.6	ug/L	5136.6	ppb	15:59:57
2	K 766.490 Radial†	32661.5	30342.4	5081.8	ug/L	5081.8	ppb	15:59:37
2	Mg 279.077 IEC†	155.2	155.3	5229.6	ug/L	5229.6	ppb	15:59:57
2	Na 589.592 Radial†	32263.5	34233.0	10375	ug/L	10375	ppb	15:59:37
2	Sr 421.552†	84579.0	85668.1	516.64	ug/L	516.64	ppb	15:59:37
2	Sc 361.383	869177.5	869177.5	100.15	%			16:01:00
2	Y 371.029	718464.4	718464.4	98.493	%			16:01:00
2	Ag 328.068†	112475.0	112037.7	509.92	ug/L	509.92	ppb	16:01:06
2	As 188.979†	1281.0	1310.4	510.31	ug/L	510.31	ppb	16:01:26
2	B 249.677†	23260.1	23719.5	503.53	ug/L	503.53	ppb	16:01:06
2	Ba 233.527†	67346.4	67259.8	503.88	ug/L	503.88	ppb	16:01:06
2	Be 313.107†	1389305.1	1391951.0	500.79	ug/L	500.79	ppb	16:01:00
2	Cd 226.502†	48549.7	48678.1	504.66	ug/L	504.66	ppb	16:01:06
2	Co 228.616†	26651.6	26686.4	503.50	ug/L	503.50	ppb	16:01:06
2	Cr 267.716†	48051.9	47896.1	502.17	ug/L	502.17	ppb	16:01:06
2	Cu 324.752†	178995.2	171977.5	499.79	ug/L	499.79	ppb	16:01:06
2	Mn 257.610†	474312.1	473103.4	501.82	ug/L	501.82	ppb	16:01:00
2	Mo 202.031†	8011.6	7981.6	508.29	ug/L	508.29	ppb	16:01:26
2	Ni 231.604†	22037.2	21919.2	503.35	ug/L	503.35	ppb	16:01:06

2	P 214.914†	4754.5	4505.6	2440.2 ug/L	2440.2 ppb	16:01:26
2	Pb 220.353†	4443.2	4504.7	505.82 ug/L	505.82 ppb	16:01:26
2	S 181.975 Axial†	829.2	778.6	1027.7 ug/L	1027.7 ppb	16:01:26
2	Sb 206.836†	1646.9	1607.1	514.96 ug/L	514.96 ppb	16:01:26
2	Se 196.026†	876.8	902.3	525.71 ug/L	525.71 ppb	16:01:26
2	Si 251.611†	87347.2	86738.7	2571.3 ug/L	2571.3 ppb	16:01:06
2	Sn 189.927†	3192.2	3178.7	511.94 ug/L	511.94 ppb	16:01:26
2	Ti 334.940†	314049.1	314849.5	496.83 ug/L	496.83 ppb	16:01:06
2	Tl 190.801†	1766.2	1798.2	509.82 ug/L	509.82 ppb	16:01:26
2	U 409.014†	14853.4	17415.8	499.10 ug/L	499.10 ppb	16:01:06
2	V 292.402†	73985.1	75240.4	507.45 ug/L	507.45 ppb	16:01:06
2	Zn 213.857†	59643.9	58803.4	501.35 ug/L	501.35 ppb	16:01:06
2	SiO2†	87705.6	87053.8	5530.0 ug/L	5530.0 ppb	16:02:07
3	Sc Radial	5423.1	5423.1	97.3 %		16:00:02
3	Y RADIAL	5814.6	5814.6	96.28 %		16:00:02
3	Al 396.153Radial†	6992.7	7224.9	4953.8 ug/L	4953.8 ppb	16:00:02
3	Ca 317.933Radial†	3449.0	3529.2	5150.8 ug/L	5150.8 ppb	16:00:22
3	Fe 238.204 Radial†	584.9	591.5	5315.5 ug/L	5315.5 ppb	16:00:22
3	K 766.490 Radial†	32100.7	30265.1	5068.8 ug/L	5068.8 ppb	16:00:02
3	Mg 279.077 IEC†	155.7	158.1	5323.8 ug/L	5323.8 ppb	16:00:22
3	Na 589.592 Radial†	31834.9	34285.5	10391 ug/L	10391 ppb	16:00:02
3	Sr 421.552†	82849.3	85182.5	513.71 ug/L	513.71 ppb	16:00:02
3	Sc 361.383	854224.4	854224.4	98.422 %		16:01:31
3	Y 371.029	706974.9	706974.9	96.918 %		16:01:31
3	Ag 328.068†	112475.0	114003.7	518.90 ug/L	518.90 ppb	16:01:37
3	As 188.979†	1282.6	1334.5	519.71 ug/L	519.71 ppb	16:01:57
3	B 249.677†	23152.0	24016.3	509.80 ug/L	509.80 ppb	16:01:37
3	Ba 233.527†	67522.8	68616.2	514.04 ug/L	514.04 ppb	16:01:37
3	Be 313.107†	1368231.9	1394824.4	501.84 ug/L	501.84 ppb	16:01:31
3	Cd 226.502†	48632.3	49610.7	514.32 ug/L	514.32 ppb	16:01:37
3	Co 228.616†	26855.9	27359.7	516.20 ug/L	516.20 ppb	16:01:37
3	Cr 267.716†	48130.6	48816.0	511.82 ug/L	511.82 ppb	16:01:37
3	Cu 324.752†	178719.2	174825.9	508.07 ug/L	508.07 ppb	16:01:37
3	Mn 257.610†	466387.7	473342.8	502.09 ug/L	502.09 ppb	16:01:31
3	Mo 202.031†	7993.6	8103.3	516.04 ug/L	516.04 ppb	16:01:57
3	Ni 231.604†	22087.8	22355.9	513.38 ug/L	513.38 ppb	16:01:37
3	P 214.914†	4762.0	4596.3	2489.4 ug/L	2489.4 ppb	16:01:57
3	Pb 220.353†	4425.3	4564.2	512.48 ug/L	512.48 ppb	16:01:57
3	S 181.975 Axial†	822.1	785.9	1037.3 ug/L	1037.3 ppb	16:01:57
3	Sb 206.836†	1651.4	1640.5	525.51 ug/L	525.51 ppb	16:01:57
3	Se 196.026†	875.3	916.1	534.05 ug/L	534.05 ppb	16:01:57
3	Si 251.611†	87475.0	88395.3	2620.5 ug/L	2620.5 ppb	16:01:37
3	Sn 189.927†	3163.6	3205.5	516.25 ug/L	516.25 ppb	16:01:57
3	Ti 334.940†	314008.5	320297.6	505.43 ug/L	505.43 ppb	16:01:37
3	Tl 190.801†	1751.4	1814.1	514.27 ug/L	514.27 ppb	16:01:57
3	U 409.014†	14617.9	17436.2	499.65 ug/L	499.65 ppb	16:01:37
3	V 292.402†	73997.9	76546.7	516.21 ug/L	516.21 ppb	16:01:37
3	Zn 213.857†	59798.5	60003.1	511.57 ug/L	511.57 ppb	16:01:37
3	SiO2†	88252.0	89142.1	5663.0 ug/L	5663.0 ppb	16:02:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	864379.3	99.593	%	1.0138				1.02%
Sc Radial	5495.5	98.6	%	1.22				1.24%
Y 371.029	714535.0	97.954	%	0.8978				0.92%
Y RADIAL	5918.3	98.00	%	1.488				1.52%
Ag 328.068†	112653.6	512.74	ug/L	5.341	512.74	ppb	5.341	1.04%
QC value within limits for Ag 328.068 Recovery = 102.55%								
Al 396.153Radial†	7209.1	4943.2	ug/L	42.74	4943.2	ppb	42.74	0.86%
QC value within limits for Al 396.153Radial Recovery = 98.86%								
As 188.979†	1316.6	512.75	ug/L	6.112	512.75	ppb	6.112	1.19%
QC value within limits for As 188.979 Recovery = 102.55%								
B 249.677†	23796.0	505.13	ug/L	4.104	505.13	ppb	4.104	0.81%
QC value within limits for B 249.677 Recovery = 101.03%								
Ba 233.527†	67654.2	506.84	ug/L	6.273	506.84	ppb	6.273	1.24%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	1393194.8	501.24	ug/L	0.539	501.24	ppb	0.539	0.11%
QC value within limits for Be 313.107 Recovery = 100.25%								
Ca 317.933Radial†	3472.1	5067.5	ug/L	77.23	5067.5	ppb	77.23	1.52%

QC value within limits for Ca 317.933Radial Recovery = 101.35%

Cd 226.502†	48975.8	507.74 ug/L	5.703	507.74 ppb	5.703	1.12%
QC value within limits for Cd 226.502 Recovery = 101.55%						
Co 228.616†	26939.5	508.27 ug/L	6.913	508.27 ppb	6.913	1.36%
QC value within limits for Co 228.616 Recovery = 101.65%						
Cr 267.716†	48144.1	504.77 ug/L	6.171	504.77 ppb	6.171	1.22%
QC value within limits for Cr 267.716 Recovery = 100.95%						
Cu 324.752†	172844.5	502.31 ug/L	5.001	502.31 ppb	5.001	1.00%
QC value within limits for Cu 324.752 Recovery = 100.46%						
Fe 238.204 Radial†	581.1	5222.1 ug/L	89.73	5222.1 ppb	89.73	1.72%
QC value within limits for Fe 238.204 Radial Recovery = 104.44%						
K 766.490 Radial†	30171.0	5053.0 ug/L	39.11	5053.0 ppb	39.11	0.77%
QC value within limits for K 766.490 Radial Recovery = 101.06%						
Mg 279.077 IEC†	156.4	5266.6 ug/L	50.23	5266.6 ppb	50.23	0.95%
QC value within limits for Mg 279.077 IEC Recovery = 105.33%						
Mn 257.610†	473348.3	502.09 ug/L	0.266	502.09 ppb	0.266	0.05%
QC value within limits for Mn 257.610 Recovery = 100.42%						
Mo 202.031†	8008.0	509.98 ug/L	5.425	509.98 ppb	5.425	1.06%
QC value within limits for Mo 202.031 Recovery = 102.00%						
Na 589.592 Radial†	34119.1	10340 ug/L	74.0	10340 ppb	74.0	0.72%
QC value within limits for Na 589.592 Radial Recovery = 103.40%						
Ni 231.604†	22033.9	505.99 ug/L	6.492	505.99 ppb	6.492	1.28%
QC value within limits for Ni 231.604 Recovery = 101.20%						
P 214.914†	4527.7	2452.1 ug/L	33.06	2452.1 ppb	33.06	1.35%
QC value within limits for P 214.914 Recovery = 98.08%						
Pb 220.353†	4515.8	507.05 ug/L	4.925	507.05 ppb	4.925	0.97%
QC value within limits for Pb 220.353 Recovery = 101.41%						
S 181.975 Axial†	778.6	1027.7 ug/L	9.61	1027.7 ppb	9.61	0.94%
QC value within limits for S 181.975 Axial Recovery = 102.77%						
Sb 206.836†	1618.3	518.45 ug/L	6.110	518.45 ppb	6.110	1.18%
QC value within limits for Sb 206.836 Recovery = 103.69%						
Se 196.026†	905.6	527.81 ug/L	5.503	527.81 ppb	5.503	1.04%
QC value within limits for Se 196.026 Recovery = 105.56%						
Si 251.611†	87249.0	2586.5 ug/L	29.51	2586.5 ppb	29.51	1.14%
QC value within limits for Si 251.611 Recovery = 103.46%						
Sn 189.927†	3174.2	511.21 ug/L	5.449	511.21 ppb	5.449	1.07%
QC value within limits for Sn 189.927 Recovery = 102.24%						
Sr 421.552†	85085.6	513.13 ug/L	3.839	513.13 ppb	3.839	0.75%
QC value within limits for Sr 421.552 Recovery = 102.63%						
Ti 334.940†	316388.5	499.26 ug/L	5.385	499.26 ppb	5.385	1.08%
QC value within limits for Ti 334.940 Recovery = 99.85%						
Tl 190.801†	1795.5	509.05 ug/L	5.649	509.05 ppb	5.649	1.11%
QC value within limits for Tl 190.801 Recovery = 101.81%						
U 409.014†	17410.8	498.94 ug/L	0.797	498.94 ppb	0.797	0.16%
QC value within limits for U 409.014 Recovery = 99.79%						
V 292.402†	75602.7	509.87 ug/L	5.548	509.87 ppb	5.548	1.09%
QC value within limits for V 292.402 Recovery = 101.97%						
Zn 213.857†	59190.1	504.64 ug/L	6.002	504.64 ppb	6.002	1.19%
QC value within limits for Zn 213.857 Recovery = 100.93%						
SiO2†	87917.0	5585.1 ug/L	69.37	5585.1 ppb	69.37	1.24%
QC value within limits for SiO2 Recovery = 104.44%						

All analyte(s) passed QC.

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 16:04:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5548.2	5548.2	99.5	%			16:06:14
1	Y RADIAL	6034.4	6034.4	99.92	%			16:06:14
1	Al 396.153Radial†	-6.6	28.6	19.727	ug/L	19.727	ppb	16:06:14
1	Ca 317.933Radial†	21.4	4.6	6.6582	ug/L	6.6582	ppb	16:06:34
1	Fe 238.204 Radial†	8.9	-0.9	-8.1568	ug/L	-8.1568	ppb	16:06:34
1	K 766.490 Radial†	2838.3	112.9	18.939	ug/L	18.939	ppb	16:06:14
1	Mg 279.077 IEC†	-2.7	-4.7	-156.97	ug/L	-156.97	ppb	16:06:34
1	Na 589.592 Radial†	-1557.0	-10.6	-3.2075	ug/L	-3.2075	ppb	16:06:14
1	Sr 421.552†	-37.3	-37.3	-0.2247	ug/L	-0.2247	ppb	16:06:14
1	Sc 361.383	864632.5	864632.5	99.622	%			16:07:31
1	Y 371.029	726006.4	726006.4	99.527	%			16:07:31
1	Ag 328.068†	288.2	15.3	0.0666	ug/L	0.0666	ppb	16:07:31
1	As 188.979†	-25.1	6.1	2.3693	ug/L	2.3693	ppb	16:07:51
1	B 249.677†	-254.9	237.3	5.0591	ug/L	5.0591	ppb	16:07:51
1	Ba 233.527†	-10.7	0.4	0.0021	ug/L	0.0021	ppb	16:07:51
1	Be 313.107†	-4579.0	66.2	0.0236	ug/L	0.0236	ppb	16:07:31
1	Cd 226.502†	-194.6	3.6	0.0384	ug/L	0.0384	ppb	16:07:51
1	Co 228.616†	-80.6	-7.5	-0.1409	ug/L	-0.1409	ppb	16:07:51
1	Cr 267.716†	93.2	7.5	0.0786	ug/L	0.0786	ppb	16:07:51
1	Cu 324.752†	6844.0	112.2	0.3254	ug/L	0.3254	ppb	16:07:31
1	Mn 257.610†	494.5	-23.7	-0.0231	ug/L	-0.0231	ppb	16:07:51
1	Mo 202.031†	14.6	-3.8	-0.2412	ug/L	-0.2412	ppb	16:07:51
1	Ni 231.604†	83.7	-2.0	-0.0451	ug/L	-0.0451	ppb	16:07:51
1	P 214.914†	241.2	0.1	0.0020	ug/L	0.0020	ppb	16:07:51
1	Pb 220.353†	-60.3	7.4	0.8366	ug/L	0.8366	ppb	16:07:51
1	S 181.975 Axial†	53.6	4.4	5.8658	ug/L	5.8658	ppb	16:07:51
1	Sb 206.836†	41.3	4.0	1.2754	ug/L	1.2754	ppb	16:07:51
1	Se 196.026†	-29.2	-2.5	-1.4380	ug/L	-1.4380	ppb	16:07:51
1	Si 251.611†	573.7	94.2	2.8007	ug/L	2.8007	ppb	16:07:51
1	Sn 189.927†	12.5	3.7	0.6031	ug/L	0.6031	ppb	16:07:51
1	Ti 334.940†	-1296.2	-44.9	-0.0699	ug/L	-0.0699	ppb	16:07:31
1	Tl 190.801†	-33.1	1.4	0.3932	ug/L	0.3932	ppb	16:07:51
1	U 409.014†	-2626.7	-52.7	-1.5140	ug/L	-1.5140	ppb	16:07:31
1	V 292.402†	-1400.5	-43.1	-0.2955	ug/L	-0.2955	ppb	16:07:31
1	Zn 213.857†	794.6	43.8	0.3827	ug/L	0.3827	ppb	16:07:51
1	SiO2†	579.5	57.2	3.6417	ug/L	3.6417	ppb	16:08:47
2	Sc Radial	5527.9	5527.9	99.1	%			16:06:39
2	Y RADIAL	6016.9	6016.9	99.63	%			16:06:39
2	Al 396.153Radial†	-21.1	14.0	9.6624	ug/L	9.6624	ppb	16:06:39
2	Ca 317.933Radial†	17.1	0.4	0.5806	ug/L	0.5806	ppb	16:06:59
2	Fe 238.204 Radial†	12.3	2.5	22.169	ug/L	22.169	ppb	16:06:59
2	K 766.490 Radial†	2794.2	78.8	13.236	ug/L	13.236	ppb	16:06:39
2	Mg 279.077 IEC†	3.1	1.2	41.283	ug/L	41.283	ppb	16:06:59
2	Na 589.592 Radial†	-1630.4	-90.4	-27.393	ug/L	-27.393	ppb	16:06:39
2	Sr 421.552†	-40.5	-40.7	-0.2453	ug/L	-0.2453	ppb	16:06:39
2	Sc 361.383	849624.2	849624.2	97.892	%			16:07:56
2	Y 371.029	714603.2	714603.2	97.964	%			16:07:56
2	Ag 328.068†	416.8	151.8	0.6964	ug/L	0.6964	ppb	16:07:56
2	As 188.979†	-33.5	-3.0	-1.1437	ug/L	-1.1437	ppb	16:08:16
2	B 249.677†	-221.1	267.3	5.6944	ug/L	5.6944	ppb	16:08:16
2	Ba 233.527†	-9.1	1.8	0.0137	ug/L	0.0137	ppb	16:08:16
2	Be 313.107†	-4513.5	52.0	0.0183	ug/L	0.0183	ppb	16:07:56
2	Cd 226.502†	-198.9	-4.3	-0.0467	ug/L	-0.0467	ppb	16:08:16
2	Co 228.616†	-76.7	-5.0	-0.0933	ug/L	-0.0933	ppb	16:08:16
2	Cr 267.716†	103.1	19.2	0.2028	ug/L	0.2028	ppb	16:08:16
2	Cu 324.752†	6678.2	64.1	0.1873	ug/L	0.1873	ppb	16:07:56
2	Mn 257.610†	635.2	128.7	0.1378	ug/L	0.1378	ppb	16:08:16
2	Mo 202.031†	19.8	1.8	0.1164	ug/L	0.1164	ppb	16:08:16
2	Ni 231.604†	70.2	-14.2	-0.3263	ug/L	-0.3263	ppb	16:08:16

2	P 214.914†	231.6	-5.5	-3.1134	ug/L	-3.1134 ppb	16:08:16
2	Pb 220.353†	-62.6	4.0	0.4480	ug/L	0.4480 ppb	16:08:16
2	S 181.975 Axial†	53.7	5.5	7.2283	ug/L	7.2283 ppb	16:08:16
2	Sb 206.836†	43.7	7.3	2.2821	ug/L	2.2821 ppb	16:08:16
2	Se 196.026†	-28.7	-2.5	-1.3229	ug/L	-1.3229 ppb	16:08:16
2	Si 251.611†	567.3	97.7	2.9063	ug/L	2.9063 ppb	16:08:16
2	Sn 189.927†	5.1	-3.6	-0.5764	ug/L	-0.5764 ppb	16:08:16
2	Ti 334.940†	-1329.7	-102.0	-0.1589	ug/L	-0.1589 ppb	16:07:56
2	Tl 190.801†	-41.0	-7.4	-2.0701	ug/L	-2.0701 ppb	16:08:16
2	U 409.014†	-2697.0	-171.1	-4.9210	ug/L	-4.9210 ppb	16:07:56
2	V 292.402†	-1384.3	-51.4	-0.3523	ug/L	-0.3523 ppb	16:07:56
2	Zn 213.857†	792.8	56.0	0.4802	ug/L	0.4802 ppb	16:08:16
2	SiO2†	563.2	50.8	3.2340	ug/L	3.2340 ppb	16:08:52
3	Sc Radial	5638.7	5638.7	101	%		16:07:04
3	Y RADIAL	6129.6	6129.6	101.5	%		16:07:04
3	Al 396.153Radial†	-19.9	15.7	10.777	ug/L	10.777 ppb	16:07:04
3	Ca 317.933Radial†	22.4	5.3	7.6677	ug/L	7.6677 ppb	16:07:24
3	Fe 238.204 Radial†	8.8	-1.2	-10.499	ug/L	-10.499 ppb	16:07:24
3	K 766.490 Radial†	2867.9	96.4	16.174	ug/L	16.174 ppb	16:07:04
3	Mg 279.077 IEC†	4.2	2.2	75.544	ug/L	75.544 ppb	16:07:24
3	Na 589.592 Radial†	-1619.8	-47.6	-14.411	ug/L	-14.411 ppb	16:07:04
3	Sr 421.552†	-4.5	-4.2	-0.0257	ug/L	-0.0257 ppb	16:07:04
3	Sc 361.383	858167.6	858167.6	98.877	%		16:08:21
3	Y 371.029	721928.7	721928.7	98.968	%		16:08:21
3	Ag 328.068†	362.6	92.7	0.4118	ug/L	0.4118 ppb	16:08:21
3	As 188.979†	-20.1	11.0	4.2405	ug/L	4.2405 ppb	16:08:42
3	B 249.677†	-283.5	206.4	4.4010	ug/L	4.4010 ppb	16:08:42
3	Ba 233.527†	3.2	14.4	0.1061	ug/L	0.1061 ppb	16:08:42
3	Be 313.107†	-4623.9	-13.8	-0.0051	ug/L	-0.0051 ppb	16:08:21
3	Cd 226.502†	-192.3	4.5	0.0473	ug/L	0.0473 ppb	16:08:42
3	Co 228.616†	-76.2	-3.6	-0.0659	ug/L	-0.0659 ppb	16:08:42
3	Cr 267.716†	76.2	-9.0	-0.0959	ug/L	-0.0959 ppb	16:08:42
3	Cu 324.752†	6783.0	102.3	0.2965	ug/L	0.2965 ppb	16:08:21
3	Mn 257.610†	529.3	15.2	0.0136	ug/L	0.0136 ppb	16:08:42
3	Mo 202.031†	25.9	7.7	0.4911	ug/L	0.4911 ppb	16:08:42
3	Ni 231.604†	87.3	2.4	0.0544	ug/L	0.0544 ppb	16:08:42
3	P 214.914†	228.7	-10.8	-6.0518	ug/L	-6.0518 ppb	16:08:42
3	Pb 220.353†	-85.8	-18.8	-2.0965	ug/L	-2.0965 ppb	16:08:42
3	S 181.975 Axial†	49.7	0.9	1.1292	ug/L	1.1292 ppb	16:08:42
3	Sb 206.836†	36.8	-0.2	-0.0482	ug/L	-0.0482 ppb	16:08:42
3	Se 196.026†	-37.4	-11.1	-6.2580	ug/L	-6.2580 ppb	16:08:42
3	Si 251.611†	563.5	88.2	2.6135	ug/L	2.6135 ppb	16:08:42
3	Sn 189.927†	6.8	-1.9	-0.3105	ug/L	-0.3105 ppb	16:08:42
3	Ti 334.940†	-1279.5	-37.8	-0.0604	ug/L	-0.0604 ppb	16:08:21
3	Tl 190.801†	-37.5	-3.4	-0.9465	ug/L	-0.9465 ppb	16:08:42
3	U 409.014†	-2460.9	95.1	2.7368	ug/L	2.7368 ppb	16:08:21
3	V 292.402†	-1408.3	-61.6	-0.3941	ug/L	-0.3941 ppb	16:08:21
3	Zn 213.857†	794.1	49.2	0.4214	ug/L	0.4214 ppb	16:08:42
3	SiO2†	567.2	49.2	3.1110	ug/L	3.1110 ppb	16:08:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	857474.8	98.797	%	0.8674				0.88%
Sc Radial	5571.6	99.9	%	1.06				1.06%
Y 371.029	720846.1	98.820	%	0.7921				0.80%
Y RADIAL	6060.3	100.4	%	1.00				1.00%
Ag 328.068†	86.6	0.3916	ug/L	0.31539	0.3916	ppb	0.31539	80.54%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	19.4	13.389	ug/L	5.5170	13.389	ppb	5.5170	41.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.7	1.8220	ug/L	2.73353	1.8220	ppb	2.73353	150.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	237.0	5.0515	ug/L	0.64673	5.0515	ppb	0.64673	12.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.5	0.0406	ug/L	0.05695	0.0406	ppb	0.05695	140.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	34.8	0.0123	ug/L	0.01527	0.0123	ppb	0.01527	124.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.4	4.9689	ug/L	3.83368	4.9689	ppb	3.83368	77.15%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 1.3      0.0130 ug/L       0.05187      0.0130 ppb        0.05187 399.10%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.3     -0.1000 ug/L       0.03794     -0.1000 ppb        0.03794  37.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.9      0.0618 ug/L       0.15009      0.0618 ppb        0.15009 242.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                92.8      0.2697 ug/L       0.07284      0.2697 ppb        0.07284  27.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.1      1.1711 ug/L      18.22225      1.1711 ppb       18.22225 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          96.0     16.116 ug/L        2.8522     16.116 ppb         2.8522  17.70%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4    -13.382 ug/L      125.5279    -13.382 ppb       125.5279 938.02%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                40.0      0.0428 ug/L       0.08431      0.0428 ppb        0.08431 197.02%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.9      0.1221 ug/L       0.36617      0.1221 ppb        0.36617 299.86%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -49.5    -15.004 ug/L       12.1037    -15.004 ppb        12.1037  80.67%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -4.6     -0.1057 ug/L       0.19743     -0.1057 ppb        0.19743 186.82%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -5.4     -3.0544 ug/L       3.02731     -3.0544 ppb        3.02731  99.11%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.4     -0.2707 ug/L       1.59316     -0.2707 ppb        1.59316 588.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.6      4.7411 ug/L       3.20133      4.7411 ppb        3.20133  67.52%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.7      1.1698 ug/L       1.16872      1.1698 ppb        1.16872  99.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.4     -3.0063 ug/L       2.81665     -3.0063 ppb        2.81665  93.69%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                93.4      2.7735 ug/L       0.14826      2.7735 ppb        0.14826   5.35%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.6     -0.0946 ug/L       0.61866     -0.0946 ppb        0.61866 654.09%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -27.4     -0.1652 ug/L       0.12129     -0.1652 ppb        0.12129  73.41%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -61.6     -0.0964 ug/L       0.05435     -0.0964 ppb        0.05435  56.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.1     -0.8745 ug/L       1.23322     -0.8745 ppb        1.23322 141.03%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -42.9     -1.2327 ug/L       3.83663     -1.2327 ppb        3.83663 311.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -52.0     -0.3473 ug/L       0.04949     -0.3473 ppb        0.04949  14.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                49.7      0.4281 ug/L       0.04910      0.4281 ppb        0.04910  11.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      52.4      3.3289 ug/L       0.27774      3.3289 ppb        0.27774   8.34%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 17:08:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5545.8	5545.8	99.5	%			17:10:03
1	Y RADIAL	5973.0	5973.0	98.90	%			17:10:03
1	Al 396.153Radial†	7299.2	7374.0	5056.7	ug/L	5056.7	ppb	17:10:03
1	Ca 317.933Radial†	3474.9	3476.8	5074.4	ug/L	5074.4	ppb	17:10:23
1	Fe 238.204 Radial†	589.1	582.4	5233.4	ug/L	5233.4	ppb	17:10:23
1	K 766.490 Radial†	33057.0	30496.3	5107.6	ug/L	5107.6	ppb	17:10:03
1	Mg 279.077 IEC†	160.6	159.6	5372.2	ug/L	5372.2	ppb	17:10:23
1	Na 589.592 Radial†	32265.0	33993.7	10302	ug/L	10302	ppb	17:10:03
1	Sr 421.552†	85077.8	85538.4	515.86	ug/L	515.86	ppb	17:10:03
1	Sc 361.383	873480.0	873480.0	100.64	%			17:11:22
1	Y 371.029	722647.0	722647.0	99.066	%			17:11:22
1	Ag 328.068†	112725.8	111733.7	508.59	ug/L	508.59	ppb	17:11:22
1	As 188.979†	1284.7	1307.8	509.42	ug/L	509.42	ppb	17:11:42
1	B 249.677†	23215.5	23560.8	500.14	ug/L	500.14	ppb	17:11:22
1	Ba 233.527†	67768.5	67347.9	504.54	ug/L	504.54	ppb	17:11:22
1	Be 313.107†	1406791.2	1402492.3	504.60	ug/L	504.60	ppb	17:11:22
1	Cd 226.502†	48814.6	48702.6	504.90	ug/L	504.90	ppb	17:11:22
1	Co 228.616†	26553.3	26457.6	499.17	ug/L	499.17	ppb	17:11:42
1	Cr 267.716†	48232.9	47839.6	501.59	ug/L	501.59	ppb	17:11:22
1	Cu 324.752†	180837.6	172927.8	502.55	ug/L	502.55	ppb	17:11:22
1	Mn 257.610†	477483.4	473921.6	502.70	ug/L	502.70	ppb	17:11:22
1	Mo 202.031†	8098.1	8028.1	511.25	ug/L	511.25	ppb	17:11:42
1	Ni 231.604†	21964.3	21738.5	499.20	ug/L	499.20	ppb	17:11:42
1	P 214.914†	4776.2	4503.7	2438.6	ug/L	2438.6	ppb	17:11:42
1	Pb 220.353†	4494.2	4533.5	509.06	ug/L	509.06	ppb	17:11:42
1	S 181.975 Axial†	825.9	771.3	1018.0	ug/L	1018.0	ppb	17:11:42
1	Sb 206.836†	1632.8	1585.0	507.97	ug/L	507.97	ppb	17:11:42
1	Se 196.026†	883.8	904.9	527.50	ug/L	527.50	ppb	17:11:42
1	Si 251.611†	87752.8	86712.1	2570.5	ug/L	2570.5	ppb	17:11:22
1	Sn 189.927†	3187.8	3158.6	508.72	ug/L	508.72	ppb	17:11:42
1	Ti 334.940†	322693.5	321894.1	507.96	ug/L	507.96	ppb	17:11:22
1	Tl 190.801†	1778.3	1801.6	510.89	ug/L	510.89	ppb	17:11:42
1	U 409.014†	14099.9	16594.1	475.47	ug/L	475.47	ppb	17:11:22
1	V 292.402†	74235.9	75125.7	506.66	ug/L	506.66	ppb	17:11:22
1	Zn 213.857†	60008.5	58872.3	501.95	ug/L	501.95	ppb	17:11:22
1	SiO2†	88619.4	87530.4	5560.4	ug/L	5560.4	ppb	17:12:43
2	Sc Radial	5463.0	5463.0	98.0	%			17:10:28
2	Y RADIAL	5906.7	5906.7	97.81	%			17:10:28
2	Al 396.153Radial†	7168.5	7351.7	5041.4	ug/L	5041.4	ppb	17:10:28
2	Ca 317.933Radial†	3437.0	3491.1	5095.2	ug/L	5095.2	ppb	17:10:48
2	Fe 238.204 Radial†	580.0	582.0	5230.2	ug/L	5230.2	ppb	17:10:48
2	K 766.490 Radial†	32605.2	30538.6	5114.7	ug/L	5114.7	ppb	17:10:28
2	Mg 279.077 IEC†	152.3	153.5	5167.4	ug/L	5167.4	ppb	17:10:48
2	Na 589.592 Radial†	31607.2	33813.6	10248	ug/L	10248	ppb	17:10:28
2	Sr 421.552†	83627.1	85353.3	514.74	ug/L	514.74	ppb	17:10:28
2	Sc 361.383	872388.4	872388.4	100.52	%			17:11:50
2	Y 371.029	721642.3	721642.3	98.929	%			17:11:50
2	Ag 328.068†	112887.0	112034.2	509.95	ug/L	509.95	ppb	17:11:50
2	As 188.979†	1288.1	1312.8	511.34	ug/L	511.34	ppb	17:12:10
2	B 249.677†	23256.6	23630.6	501.63	ug/L	501.63	ppb	17:11:50
2	Ba 233.527†	67921.7	67584.6	506.31	ug/L	506.31	ppb	17:11:50
2	Be 313.107†	1403602.6	1401069.2	504.09	ug/L	504.09	ppb	17:11:50
2	Cd 226.502†	48909.0	48857.1	506.50	ug/L	506.50	ppb	17:11:50
2	Co 228.616†	26557.1	26494.4	499.86	ug/L	499.86	ppb	17:12:10
2	Cr 267.716†	48281.9	47948.3	502.73	ug/L	502.73	ppb	17:11:50
2	Cu 324.752†	180664.8	172980.7	502.71	ug/L	502.71	ppb	17:11:50
2	Mn 257.610†	477978.3	475007.6	503.85	ug/L	503.85	ppb	17:11:50
2	Mo 202.031†	8089.6	8029.7	511.35	ug/L	511.35	ppb	17:12:10
2	Ni 231.604†	21996.6	21797.8	500.57	ug/L	500.57	ppb	17:12:10

2	P 214.914†	4785.4	4518.8	2447.0 ug/L	2447.0 ppb	17:12:10
2	Pb 220.353†	4476.5	4521.5	507.72 ug/L	507.72 ppb	17:12:10
2	S 181.975 Axial†	821.8	768.2	1013.9 ug/L	1013.9 ppb	17:12:10
2	Sb 206.836†	1661.7	1615.8	517.63 ug/L	517.63 ppb	17:12:10
2	Se 196.026†	869.0	891.4	519.87 ug/L	519.87 ppb	17:12:10
2	Si 251.611†	87904.9	86972.5	2578.2 ug/L	2578.2 ppb	17:11:50
2	Sn 189.927†	3175.0	3149.8	507.30 ug/L	507.30 ppb	17:12:10
2	Ti 334.940†	322604.3	322206.6	508.45 ug/L	508.45 ppb	17:11:50
2	Tl 190.801†	1773.3	1798.8	510.10 ug/L	510.10 ppb	17:12:10
2	U 409.014†	14029.3	16541.4	473.95 ug/L	473.95 ppb	17:11:50
2	V 292.402†	74076.3	75059.3	506.21 ug/L	506.21 ppb	17:11:50
2	Zn 213.857†	60033.7	58972.1	502.81 ug/L	502.81 ppb	17:11:50
2	SiO2†	87360.6	86388.2	5487.5 ug/L	5487.5 ppb	17:12:48
3	Sc Radial	5372.5	5372.5	96.4 %		17:10:53
3	Y RADIAL	5831.4	5831.4	96.56 %		17:10:53
3	Al 396.153Radial†	7114.3	7418.7	5087.6 ug/L	5087.6 ppb	17:10:53
3	Ca 317.933Radial†	3472.1	3586.6	5234.6 ug/L	5234.6 ppb	17:11:13
3	Fe 238.204 Radial†	585.1	597.3	5367.3 ug/L	5367.3 ppb	17:11:13
3	K 766.490 Radial†	32335.7	30819.4	5161.8 ug/L	5161.8 ppb	17:10:53
3	Mg 279.077 IEC†	157.3	161.4	5432.9 ug/L	5432.9 ppb	17:11:13
3	Na 589.592 Radial†	31358.8	34099.2	10334 ug/L	10334 ppb	17:10:53
3	Sr 421.552†	83073.6	86216.4	519.95 ug/L	519.95 ppb	17:10:53
3	Sc 361.383	877526.6	877526.6	101.11 %		17:12:17
3	Y 371.029	724696.9	724696.9	99.347 %		17:12:17
3	Ag 328.068†	113511.6	111994.4	509.81 ug/L	509.81 ppb	17:12:17
3	As 188.979†	1291.4	1308.5	509.73 ug/L	509.73 ppb	17:12:37
3	B 249.677†	23369.2	23606.4	501.09 ug/L	501.09 ppb	17:12:17
3	Ba 233.527†	68501.5	67762.4	507.64 ug/L	507.64 ppb	17:12:17
3	Be 313.107†	1411604.7	1400807.3	504.00 ug/L	504.00 ppb	17:12:17
3	Cd 226.502†	49327.0	48985.7	507.82 ug/L	507.82 ppb	17:12:17
3	Co 228.616†	26732.3	26513.0	500.20 ug/L	500.20 ppb	17:12:37
3	Cr 267.716†	48628.3	48009.7	503.37 ug/L	503.37 ppb	17:12:17
3	Cu 324.752†	182075.7	173323.7	503.71 ug/L	503.71 ppb	17:12:17
3	Mn 257.610†	481503.0	475709.4	504.60 ug/L	504.60 ppb	17:12:17
3	Mo 202.031†	8113.5	8006.2	509.87 ug/L	509.87 ppb	17:12:37
3	Ni 231.604†	22141.8	21813.4	500.92 ug/L	500.92 ppb	17:12:37
3	P 214.914†	4793.1	4498.6	2435.5 ug/L	2435.5 ppb	17:12:37
3	Pb 220.353†	4496.7	4515.5	507.03 ug/L	507.03 ppb	17:12:37
3	S 181.975 Axial†	836.0	777.4	1026.1 ug/L	1026.1 ppb	17:12:37
3	Sb 206.836†	1663.6	1608.0	515.16 ug/L	515.16 ppb	17:12:37
3	Se 196.026†	888.1	905.2	528.08 ug/L	528.08 ppb	17:12:37
3	Si 251.611†	88543.4	87092.0	2581.8 ug/L	2581.8 ppb	17:12:17
3	Sn 189.927†	3203.1	3159.2	508.82 ug/L	508.82 ppb	17:12:37
3	Ti 334.940†	324987.8	322684.8	509.22 ug/L	509.22 ppb	17:12:17
3	Tl 190.801†	1778.8	1793.9	508.74 ug/L	508.74 ppb	17:12:37
3	U 409.014†	14137.6	16566.7	474.66 ug/L	474.66 ppb	17:12:17
3	V 292.402†	74516.6	75063.2	506.20 ug/L	506.20 ppb	17:12:17
3	Zn 213.857†	60534.6	59117.8	504.03 ug/L	504.03 ppb	17:12:17
3	SiO2†	88441.9	86948.8	5523.2 ug/L	5523.2 ppb	17:12:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874465.0	100.75	%	0.312				0.31%
Sc Radial	5460.4	97.9	%	1.55				1.59%
Y 371.029	722995.4	99.114	%	0.2134				0.22%
Y RADIAL	5903.7	97.76	%	1.173				1.20%
Ag 328.068†	111920.8	509.45	ug/L	0.747	509.45	ppb	0.747	0.15%
QC value within limits for Ag 328.068 Recovery = 101.89%								
Al 396.153Radial†	7381.5	5061.9	ug/L	23.54	5061.9	ppb	23.54	0.47%
QC value within limits for Al 396.153Radial Recovery = 101.24%								
As 188.979†	1309.7	510.16	ug/L	1.028	510.16	ppb	1.028	0.20%
QC value within limits for As 188.979 Recovery = 102.03%								
B 249.677†	23599.3	500.95	ug/L	0.753	500.95	ppb	0.753	0.15%
QC value within limits for B 249.677 Recovery = 100.19%								
Ba 233.527†	67565.0	506.16	ug/L	1.556	506.16	ppb	1.556	0.31%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	1401456.3	504.23	ug/L	0.325	504.23	ppb	0.325	0.06%
QC value within limits for Be 313.107 Recovery = 100.85%								
Ca 317.933Radial†	3518.2	5134.7	ug/L	87.12	5134.7	ppb	87.12	1.70%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.69%
Cd 226.502†            48848.5      506.41 ug/L         1.464      506.41 ppb          1.464   0.29%
   QC value within limits for Cd 226.502  Recovery = 101.28%
Co 228.616†            26488.3      499.74 ug/L         0.528      499.74 ppb          0.528   0.11%
   QC value within limits for Co 228.616  Recovery = 99.95%
Cr 267.716†            47932.5      502.56 ug/L         0.902      502.56 ppb          0.902   0.18%
   QC value within limits for Cr 267.716  Recovery = 100.51%
Cu 324.752†           173077.4      502.99 ug/L         0.628      502.99 ppb          0.628   0.12%
   QC value within limits for Cu 324.752  Recovery = 100.60%
Fe 238.204 Radial†       587.3      5277.0 ug/L        78.20      5277.0 ppb         78.20   1.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.54%
K 766.490 Radial†      30618.1      5128.0 ug/L        29.43      5128.0 ppb         29.43   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 102.56%
Mg 279.077 IEC†          158.2      5324.2 ug/L       139.13      5324.2 ppb        139.13   2.61%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.48%
Mn 257.610†           474879.5      503.72 ug/L         0.961      503.72 ppb          0.961   0.19%
   QC value within limits for Mn 257.610  Recovery = 100.74%
Mo 202.031†            8021.3      510.82 ug/L         0.830      510.82 ppb          0.830   0.16%
   QC value within limits for Mo 202.031  Recovery = 102.16%
Na 589.592 Radial†     33968.8       10295 ug/L          43.8       10295 ppb           43.8   0.43%
   QC value within limits for Na 589.592 Radial  Recovery = 102.95%
Ni 231.604†            21783.2      500.23 ug/L         0.908      500.23 ppb          0.908   0.18%
   QC value within limits for Ni 231.604  Recovery = 100.05%
P 214.914†              4507.0      2440.4 ug/L          5.97      2440.4 ppb          5.97   0.24%
   QC value within limits for P 214.914  Recovery = 97.61%
Pb 220.353†             4523.5      507.94 ug/L         1.033      507.94 ppb          1.033   0.20%
   QC value within limits for Pb 220.353  Recovery = 101.59%
S 181.975 Axial†         772.3      1019.3 ug/L          6.22      1019.3 ppb          6.22   0.61%
   QC value within limits for S 181.975 Axial  Recovery = 101.93%
Sb 206.836†             1602.9      513.58 ug/L         5.015      513.58 ppb          5.015   0.98%
   QC value within limits for Sb 206.836  Recovery = 102.72%
Se 196.026†              900.5      525.15 ug/L         4.584      525.15 ppb          4.584   0.87%
   QC value within limits for Se 196.026  Recovery = 105.03%
Si 251.611†            86925.5      2576.8 ug/L          5.79      2576.8 ppb          5.79   0.22%
   QC value within limits for Si 251.611  Recovery = 103.07%
Sn 189.927†             3155.9      508.28 ug/L         0.849      508.28 ppb          0.849   0.17%
   QC value within limits for Sn 189.927  Recovery = 101.66%
Sr 421.552†            85702.7      516.85 ug/L         2.740      516.85 ppb          2.740   0.53%
   QC value within limits for Sr 421.552  Recovery = 103.37%
Ti 334.940†           322261.8      508.54 ug/L         0.633      508.54 ppb          0.633   0.12%
   QC value within limits for Ti 334.940  Recovery = 101.71%
Tl 190.801†             1798.1      509.91 ug/L         1.090      509.91 ppb          1.090   0.21%
   QC value within limits for Tl 190.801  Recovery = 101.98%
U 409.014†             16567.4      474.69 ug/L         0.759      474.69 ppb          0.759   0.16%
   QC value within limits for U 409.014  Recovery = 94.94%
V 292.402†             75082.7      506.36 ug/L         0.262      506.36 ppb          0.262   0.05%
   QC value within limits for V 292.402  Recovery = 101.27%
Zn 213.857†            58987.4      502.93 ug/L         1.048      502.93 ppb          1.048   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.59%
SiO2†                  86955.8      5523.7 ug/L        36.45      5523.7 ppb         36.45   0.66%
   QC value within limits for SiO2  Recovery = 103.29%
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 17:15:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5609.6	5609.6	101	%			17:16:54
1	Y RADIAL	6093.4	6093.4	100.9	%			17:16:54
1	Al 396.153Radial†	-31.4	4.1	2.7902	ug/L	2.7902	ppb	17:16:54
1	Ca 317.933Radial†	23.4	6.3	9.2653	ug/L	9.2653	ppb	17:17:14
1	Fe 238.204 Radial†	9.2	-0.7	-6.3809	ug/L	-6.3809	ppb	17:17:14
1	K 766.490 Radial†	2923.7	166.6	27.957	ug/L	27.957	ppb	17:16:54
1	Mg 279.077 IEC†	0.6	-1.3	-43.876	ug/L	-43.876	ppb	17:17:14
1	Na 589.592 Radial†	-1657.3	-93.2	-28.238	ug/L	-28.238	ppb	17:16:54
1	Sr 421.552†	-42.5	-42.0	-0.2534	ug/L	-0.2534	ppb	17:16:54
1	Sc 361.383	868166.3	868166.3	100.03	%			17:18:11
1	Y 371.029	730614.2	730614.2	100.16	%			17:18:11
1	Ag 328.068†	359.5	85.3	0.3852	ug/L	0.3852	ppb	17:18:11
1	As 188.979†	-25.2	6.1	2.3339	ug/L	2.3339	ppb	17:18:31
1	B 249.677†	-286.5	206.8	4.4085	ug/L	4.4085	ppb	17:18:31
1	Ba 233.527†	-11.2	-0.1	-0.0011	ug/L	-0.0011	ppb	17:18:31
1	Be 313.107†	-4666.5	-2.5	-0.0006	ug/L	-0.0006	ppb	17:18:11
1	Cd 226.502†	-193.5	5.5	0.0584	ug/L	0.0584	ppb	17:18:31
1	Co 228.616†	-70.1	3.3	0.0649	ug/L	0.0649	ppb	17:18:31
1	Cr 267.716†	73.1	-13.0	-0.1355	ug/L	-0.1355	ppb	17:18:31
1	Cu 324.752†	6805.7	45.9	0.1329	ug/L	0.1329	ppb	17:18:11
1	Mn 257.610†	555.2	34.9	0.0372	ug/L	0.0372	ppb	17:18:31
1	Mo 202.031†	31.1	12.7	0.8064	ug/L	0.8064	ppb	17:18:31
1	Ni 231.604†	99.7	13.7	0.3147	ug/L	0.3147	ppb	17:18:31
1	P 214.914†	229.7	-12.4	-6.9214	ug/L	-6.9214	ppb	17:18:31
1	Pb 220.353†	-67.2	0.8	0.0908	ug/L	0.0908	ppb	17:18:31
1	S 181.975 Axial†	47.0	-2.5	-3.2610	ug/L	-3.2610	ppb	17:18:31
1	Sb 206.836†	45.1	7.7	2.4528	ug/L	2.4528	ppb	17:18:31
1	Se 196.026†	-32.6	-5.8	-3.2627	ug/L	-3.2627	ppb	17:18:31
1	Si 251.611†	582.1	100.2	2.9613	ug/L	2.9613	ppb	17:18:31
1	Sn 189.927†	10.4	1.5	0.2480	ug/L	0.2480	ppb	17:18:31
1	Ti 334.940†	-1173.5	83.1	0.1324	ug/L	0.1324	ppb	17:18:11
1	Tl 190.801†	-24.9	9.7	2.7329	ug/L	2.7329	ppb	17:18:31
1	U 409.014†	-2641.7	-56.9	-1.6357	ug/L	-1.6357	ppb	17:18:11
1	V 292.402†	-1363.9	-0.8	0.0030	ug/L	0.0030	ppb	17:18:11
1	Zn 213.857†	799.7	45.6	0.3923	ug/L	0.3923	ppb	17:18:31
1	SiO2†	620.8	96.2	6.0871	ug/L	6.0871	ppb	17:19:27
2	Sc Radial	5558.2	5558.2	99.7	%			17:17:19
2	Y RADIAL	6036.1	6036.1	99.95	%			17:17:19
2	Al 396.153Radial†	-14.4	20.9	14.377	ug/L	14.377	ppb	17:17:19
2	Ca 317.933Radial†	20.0	3.1	4.5610	ug/L	4.5610	ppb	17:17:39
2	Fe 238.204 Radial†	10.7	0.9	7.6278	ug/L	7.6278	ppb	17:17:39
2	K 766.490 Radial†	2898.0	167.7	28.149	ug/L	28.149	ppb	17:17:19
2	Mg 279.077 IEC†	0.9	-1.0	-33.881	ug/L	-33.881	ppb	17:17:39
2	Na 589.592 Radial†	-1655.6	-106.7	-32.347	ug/L	-32.347	ppb	17:17:19
2	Sr 421.552†	-33.5	-33.3	-0.2011	ug/L	-0.2011	ppb	17:17:19
2	Sc 361.383	866834.8	866834.8	99.875	%			17:18:36
2	Y 371.029	728507.0	728507.0	99.870	%			17:18:36
2	Ag 328.068†	325.8	52.2	0.2387	ug/L	0.2387	ppb	17:18:36
2	As 188.979†	-19.9	11.4	4.3868	ug/L	4.3868	ppb	17:18:56
2	B 249.677†	-319.2	173.6	3.6982	ug/L	3.6982	ppb	17:18:56
2	Ba 233.527†	3.8	14.9	0.1106	ug/L	0.1106	ppb	17:18:56
2	Be 313.107†	-4565.1	91.9	0.0330	ug/L	0.0330	ppb	17:18:36
2	Cd 226.502†	-218.8	-20.1	-0.2095	ug/L	-0.2095	ppb	17:18:56
2	Co 228.616†	-71.6	1.7	0.0340	ug/L	0.0340	ppb	17:18:56
2	Cr 267.716†	72.4	-13.6	-0.1418	ug/L	-0.1418	ppb	17:18:56
2	Cu 324.752†	6800.8	51.4	0.1497	ug/L	0.1497	ppb	17:18:36
2	Mn 257.610†	560.5	41.1	0.0449	ug/L	0.0449	ppb	17:18:56
2	Mo 202.031†	26.5	8.1	0.5185	ug/L	0.5185	ppb	17:18:56
2	Ni 231.604†	79.6	-6.2	-0.1428	ug/L	-0.1428	ppb	17:18:56

2	P 214.914†	240.5	-1.3	-0.7334 ug/L	-0.7334 ppb	17:18:56
2	Pb 220.353†	-57.9	10.1	1.1296 ug/L	1.1296 ppb	17:18:56
2	S 181.975 Axial†	50.1	0.8	1.0401 ug/L	1.0401 ppb	17:18:56
2	Sb 206.836†	47.1	9.7	3.0859 ug/L	3.0859 ppb	17:18:56
2	Se 196.026†	-25.3	1.4	0.8294 ug/L	0.8294 ppb	17:18:56
2	Si 251.611†	560.3	79.2	2.3415 ug/L	2.3415 ppb	17:18:56
2	Sn 189.927†	8.9	0.1	0.0150 ug/L	0.0150 ppb	17:18:56
2	Ti 334.940†	-1238.7	16.0	0.0267 ug/L	0.0267 ppb	17:18:36
2	Tl 190.801†	-24.7	9.9	2.7779 ug/L	2.7779 ppb	17:18:56
2	U 409.014†	-2669.6	-88.9	-2.5567 ug/L	-2.5567 ppb	17:18:36
2	V 292.402†	-1434.9	-74.0	-0.4916 ug/L	-0.4916 ppb	17:18:36
2	Zn 213.857†	798.0	45.1	0.3895 ug/L	0.3895 ppb	17:18:56
2	SiO2†	602.9	79.2	5.0123 ug/L	5.0123 ppb	17:19:32
3	Sc Radial	5597.3	5597.3	100 %		17:17:44
3	Y RADIAL	6082.5	6082.5	100.7 %		17:17:44
3	Al 396.153Radial†	-17.0	18.3	12.625 ug/L	12.625 ppb	17:17:44
3	Ca 317.933Radial†	20.4	3.4	5.0215 ug/L	5.0215 ppb	17:18:04
3	Fe 238.204 Radial†	9.7	-0.3	-2.4137 ug/L	-2.4137 ppb	17:18:04
3	K 766.490 Radial†	2753.4	3.3	0.5633 ug/L	0.5633 ppb	17:17:44
3	Mg 279.077 IEC†	-2.1	-4.0	-133.66 ug/L	-133.66 ppb	17:18:04
3	Na 589.592 Radial†	-1571.9	-11.8	-3.5616 ug/L	-3.5616 ppb	17:17:44
3	Sr 421.552†	-0.6	-0.4	-0.0023 ug/L	-0.0023 ppb	17:17:44
3	Sc 361.383	855593.0	855593.0	98.580 %		17:19:02
3	Y 371.029	719053.6	719053.6	98.574 %		17:19:02
3	Ag 328.068†	345.1	76.1	0.3495 ug/L	0.3495 ppb	17:19:02
3	As 188.979†	-30.3	0.6	0.2199 ug/L	0.2199 ppb	17:19:22
3	B 249.677†	-311.8	177.0	3.7718 ug/L	3.7718 ppb	17:19:22
3	Ba 233.527†	-8.4	2.6	0.0181 ug/L	0.0181 ppb	17:19:22
3	Be 313.107†	-4493.9	104.0	0.0372 ug/L	0.0372 ppb	17:19:02
3	Cd 226.502†	-196.4	-0.3	-0.0024 ug/L	-0.0024 ppb	17:19:22
3	Co 228.616†	-75.9	-3.6	-0.0669 ug/L	-0.0669 ppb	17:19:22
3	Cr 267.716†	85.2	0.4	0.0062 ug/L	0.0062 ppb	17:19:22
3	Cu 324.752†	6720.6	59.6	0.1729 ug/L	0.1729 ppb	17:19:02
3	Mn 257.610†	550.6	38.3	0.0429 ug/L	0.0429 ppb	17:19:22
3	Mo 202.031†	20.5	2.3	0.1487 ug/L	0.1487 ppb	17:19:22
3	Ni 231.604†	103.1	18.6	0.4277 ug/L	0.4277 ppb	17:19:22
3	P 214.914†	231.9	-6.8	-3.8262 ug/L	-3.8262 ppb	17:19:22
3	Pb 220.353†	-83.1	-16.4	-1.8272 ug/L	-1.8272 ppb	17:19:22
3	S 181.975 Axial†	48.6	-0.1	-0.1872 ug/L	-0.1872 ppb	17:19:22
3	Sb 206.836†	37.3	0.5	0.1325 ug/L	0.1325 ppb	17:19:22
3	Se 196.026†	-23.8	2.6	1.4819 ug/L	1.4819 ppb	17:19:22
3	Si 251.611†	548.9	75.1	2.2363 ug/L	2.2363 ppb	17:19:22
3	Sn 189.927†	3.0	-5.8	-0.9253 ug/L	-0.9253 ppb	17:19:22
3	Ti 334.940†	-1289.7	-52.1	-0.0779 ug/L	-0.0779 ppb	17:19:02
3	Tl 190.801†	-33.2	0.9	0.2532 ug/L	0.2532 ppb	17:19:22
3	U 409.014†	-2861.8	-319.0	-9.1711 ug/L	-9.1711 ppb	17:19:02
3	V 292.402†	-1405.3	-62.9	-0.4365 ug/L	-0.4365 ppb	17:19:02
3	Zn 213.857†	795.5	53.1	0.4585 ug/L	0.4585 ppb	17:19:22
3	SiO2†	582.3	66.2	4.2273 ug/L	4.2273 ppb	17:19:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863531.4	99.495	%	0.7958				0.80%
Sc Radial	5588.3	100	%	0.5				0.48%
Y 371.029	726058.3	99.534	%	0.8441				0.85%
Y RADIAL	6070.7	100.5	%	0.50				0.50%
Ag 328.068†	71.2	0.3245	ug/L	0.07643	0.3245	ppb	0.07643	23.55%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.4	9.9306	ug/L	6.24547	9.9306	ppb	6.24547	62.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.0	2.3135	ug/L	2.08349	2.3135	ppb	2.08349	90.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	185.8	3.9595	ug/L	0.39059	3.9595	ppb	0.39059	9.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.8	0.0425	ug/L	0.05973	0.0425	ppb	0.05973	140.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	64.5	0.0232	ug/L	0.02074	0.0232	ppb	0.02074	89.42%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.3	6.2826	ug/L	2.59333	6.2826	ppb	2.59333	41.28%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -5.0     -0.0512 ug/L       0.14045     -0.0512 ppb        0.14045 274.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.5      0.0107 ug/L       0.06892      0.0107 ppb        0.06892 645.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -8.7     -0.0903 ug/L       0.08369     -0.0903 ppb        0.08369  92.63%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                52.3      0.1518 ug/L       0.02010      0.1518 ppb        0.02010  13.24%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.0     -0.3889 ug/L       7.22051     -0.3889 ppb        7.22051 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         112.5      18.890 ug/L       15.8716      18.890 ppb        15.8716  84.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.1     -70.473 ug/L       54.9514     -70.473 ppb        54.9514  77.97%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                38.1      0.0416 ug/L       0.00401      0.0416 ppb        0.00401   9.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.7      0.4912 ug/L       0.32972      0.4912 ppb        0.32972  67.13%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -70.6     -21.382 ug/L       15.5690     -21.382 ppb        15.5690  72.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.7      0.1999 ug/L       0.30205      0.1999 ppb        0.30205 151.13%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.8     -3.8270 ug/L       3.09403     -3.8270 ppb        3.09403  80.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.8     -0.2023 ug/L       1.50005     -0.2023 ppb        1.50005 741.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.6     -0.8027 ug/L       2.21563     -0.8027 ppb        2.21563 276.02%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.0      1.8904 ug/L       1.55496      1.8904 ppb        1.55496  82.26%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.6     -0.3171 ug/L       2.57169     -0.3171 ppb        2.57169 810.93%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                84.9      2.5130 ug/L       0.39179      2.5130 ppb        0.39179  15.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.4     -0.2208 ug/L       0.62115     -0.2208 ppb        0.62115 281.33%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -25.2     -0.1523 ug/L       0.13251     -0.1523 ppb        0.13251  87.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                15.7      0.0270 ug/L       0.10513      0.0270 ppb        0.10513 388.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.8      1.9213 ug/L       1.44483      1.9213 ppb        1.44483  75.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -154.9     -4.4545 ug/L       4.11056     -4.4545 ppb        4.11056  92.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -45.9     -0.3084 ug/L       0.27105     -0.3084 ppb        0.27105  87.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                47.9      0.4134 ug/L       0.03904      0.4134 ppb        0.03904   9.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      80.5      5.1089 ug/L       0.93366      5.1089 ppb        0.93366  18.28%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 18:09:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5359.6	5359.6	96.1	%			18:11:31
1	Y RADIAL	5804.1	5804.1	96.11	%			18:11:31
1	Al 396.153Radial†	7083.7	7404.8	5076.4	ug/L	5076.4	ppb	18:11:31
1	Ca 317.933Radial†	3448.9	3571.1	5212.0	ug/L	5212.0	ppb	18:11:51
1	Fe 238.204 Radial†	573.3	586.6	5272.9	ug/L	5272.9	ppb	18:11:51
1	K 766.490 Radial†	31985.3	30536.0	5113.8	ug/L	5113.8	ppb	18:11:31
1	Mg 279.077 IEC†	156.2	160.6	5407.9	ug/L	5407.9	ppb	18:11:51
1	Na 589.592 Radial†	30315.8	33092.9	10029	ug/L	10029	ppb	18:11:31
1	Sr 421.552†	81397.2	84680.9	510.68	ug/L	510.68	ppb	18:11:31
1	Sc 361.383	793615.5	793615.5	91.439	%			18:12:49
1	Y 371.029	657064.0	657064.0	90.076	%			18:12:49
1	Ag 328.068†	113713.8	124085.9	564.63	ug/L	564.63	ppb	18:12:54
1	As 188.979†	1250.1	1398.4	544.70	ug/L	544.70	ppb	18:13:14
1	B 249.677†	23423.4	26109.6	554.30	ug/L	554.30	ppb	18:12:54
1	Ba 233.527†	67968.3	74342.8	556.93	ug/L	556.93	ppb	18:12:54
1	Be 313.107†	1430855.5	1569478.5	564.64	ug/L	564.64	ppb	18:12:49
1	Cd 226.502†	48986.6	53771.8	557.51	ug/L	557.51	ppb	18:12:54
1	Co 228.616†	26974.7	29573.6	557.94	ug/L	557.94	ppb	18:12:54
1	Cr 267.716†	48749.4	53227.4	558.06	ug/L	558.06	ppb	18:12:54
1	Cu 324.752†	180674.2	190831.5	554.56	ug/L	554.56	ppb	18:12:54
1	Mn 257.610†	485442.6	530370.8	562.53	ug/L	562.53	ppb	18:12:49
1	Mo 202.031†	7864.8	8582.7	546.55	ug/L	546.55	ppb	18:13:14
1	Ni 231.604†	22305.9	24308.3	558.22	ug/L	558.22	ppb	18:12:54
1	P 214.914†	4657.2	4851.2	2624.8	ug/L	2624.8	ppb	18:13:14
1	Pb 220.353†	4376.8	4854.6	545.05	ug/L	545.05	ppb	18:13:14
1	S 181.975 Axial†	808.0	834.3	1101.2	ug/L	1101.2	ppb	18:13:14
1	Sb 206.836†	1618.7	1732.8	554.70	ug/L	554.70	ppb	18:13:14
1	Se 196.026†	844.6	950.5	553.35	ug/L	553.35	ppb	18:13:14
1	Si 251.611†	88141.9	95912.2	2843.7	ug/L	2843.7	ppb	18:12:54
1	Sn 189.927†	3112.0	3394.5	546.67	ug/L	546.67	ppb	18:13:14
1	Ti 334.940†	316765.8	347678.4	548.62	ug/L	548.62	ppb	18:12:54
1	Tl 190.801†	1728.4	1924.8	545.86	ug/L	545.86	ppb	18:13:14
1	U 409.014†	14847.3	18821.4	539.39	ug/L	539.39	ppb	18:12:54
1	V 292.402†	74860.3	83231.6	561.15	ug/L	561.15	ppb	18:12:54
1	Zn 213.857†	60284.3	65174.4	555.72	ug/L	555.72	ppb	18:12:54
1	SiO2†	87701.0	95387.3	6060.3	ug/L	6060.3	ppb	18:14:21
2	Sc Radial	5462.1	5462.1	98.0	%			18:11:56
2	Y RADIAL	5895.1	5895.1	97.61	%			18:11:56
2	Al 396.153Radial†	7099.6	7282.6	4993.9	ug/L	4993.9	ppb	18:11:56
2	Ca 317.933Radial†	3439.5	3494.2	5099.8	ug/L	5099.8	ppb	18:12:16
2	Fe 238.204 Radial†	575.6	577.7	5191.7	ug/L	5191.7	ppb	18:12:16
2	K 766.490 Radial†	32460.3	30396.1	5091.0	ug/L	5091.0	ppb	18:11:56
2	Mg 279.077 IEC†	156.7	158.0	5320.3	ug/L	5320.3	ppb	18:12:16
2	Na 589.592 Radial†	30824.3	33019.7	10007	ug/L	10007	ppb	18:11:56
2	Sr 421.552†	82424.1	84139.1	507.42	ug/L	507.42	ppb	18:11:56
2	Sc 361.383	875277.5	875277.5	100.85	%			18:13:20
2	Y 371.029	725514.7	725514.7	99.460	%			18:13:20
2	Ag 328.068†	112410.7	111191.3	506.10	ug/L	506.10	ppb	18:13:25
2	As 188.979†	1290.8	1311.3	510.61	ug/L	510.61	ppb	18:13:45
2	B 249.677†	23123.9	23422.6	497.20	ug/L	497.20	ppb	18:13:25
2	Ba 233.527†	67426.9	66870.9	500.97	ug/L	500.97	ppb	18:13:25
2	Be 313.107†	1400066.2	1392953.3	501.14	ug/L	501.14	ppb	18:13:20
2	Cd 226.502†	48617.5	48407.5	501.85	ug/L	501.85	ppb	18:13:25
2	Co 228.616†	26649.8	26499.1	499.97	ug/L	499.97	ppb	18:13:25
2	Cr 267.716†	48306.9	47814.5	501.32	ug/L	501.32	ppb	18:13:25
2	Cu 324.752†	178062.1	169806.6	493.48	ug/L	493.48	ppb	18:13:25
2	Mn 257.610†	475203.4	470686.4	499.27	ug/L	499.27	ppb	18:13:20
2	Mo 202.031†	8046.1	7960.0	506.91	ug/L	506.91	ppb	18:13:45
2	Ni 231.604†	22153.1	21880.8	502.47	ug/L	502.47	ppb	18:13:25

2	P 214.914†	4759.7	4477.6	2425.5	ug/L	2425.5 ppb	18:13:45
2	Pb 220.353†	4451.8	4482.3	503.32	ug/L	503.32 ppb	18:13:45
2	S 181.975 Axial†	830.3	773.9	1021.5	ug/L	1021.5 ppb	18:13:45
2	Sb 206.836†	1640.5	1589.3	509.24	ug/L	509.24 ppb	18:13:45
2	Se 196.026†	869.7	889.2	518.49	ug/L	518.49 ppb	18:13:45
2	Si 251.611†	87181.5	85966.5	2548.3	ug/L	2548.3 ppb	18:13:25
2	Sn 189.927†	3178.2	3142.7	506.15	ug/L	506.15 ppb	18:13:45
2	Ti 334.940†	312768.8	311394.5	491.38	ug/L	491.38 ppb	18:13:25
2	Tl 190.801†	1765.0	1784.7	505.98	ug/L	505.98 ppb	18:13:45
2	U 409.014†	14595.3	17056.6	488.77	ug/L	488.77 ppb	18:13:25
2	V 292.402†	73952.7	74693.4	503.77	ug/L	503.77 ppb	18:13:25
2	Zn 213.857†	59761.3	58504.9	498.78	ug/L	498.78 ppb	18:13:25
2	SiO2†	86075.6	84827.2	5388.0	ug/L	5388.0 ppb	18:14:27
3	Sc Radial	5405.7	5405.7	96.9	%		18:12:22
3	Y RADIAL	5861.3	5861.3	97.05	%		18:12:22
3	Al 396.153Radial†	7160.1	7420.7	5089.0	ug/L	5089.0 ppb	18:12:22
3	Ca 317.933Radial†	3445.2	3536.7	5161.8	ug/L	5161.8 ppb	18:12:42
3	Fe 238.204 Radial†	577.2	585.5	5261.3	ug/L	5261.3 ppb	18:12:42
3	K 766.490 Radial†	32537.2	30821.5	5162.3	ug/L	5162.3 ppb	18:12:22
3	Mg 279.077 IEC†	155.2	158.2	5326.4	ug/L	5326.4 ppb	18:12:42
3	Na 589.592 Radial†	30929.4	33456.8	10139	ug/L	10139 ppb	18:12:22
3	Sr 421.552†	82796.6	85402.2	515.04	ug/L	515.04 ppb	18:12:22
3	Sc 361.383	874245.2	874245.2	100.73	%		18:13:51
3	Y 371.029	723486.0	723486.0	99.181	%		18:13:51
3	Ag 328.068†	112595.5	111506.3	507.55	ug/L	507.55 ppb	18:13:56
3	As 188.979†	1285.1	1307.1	509.02	ug/L	509.02 ppb	18:14:16
3	B 249.677†	23239.1	23564.1	500.20	ug/L	500.20 ppb	18:13:56
3	Ba 233.527†	67615.3	67136.9	502.96	ug/L	502.96 ppb	18:13:56
3	Be 313.107†	1404432.7	1398927.5	503.29	ug/L	503.29 ppb	18:13:51
3	Cd 226.502†	48802.7	48648.4	504.34	ug/L	504.34 ppb	18:13:56
3	Co 228.616†	26810.7	26690.0	503.57	ug/L	503.57 ppb	18:13:56
3	Cr 267.716†	48312.1	47876.3	501.97	ug/L	501.97 ppb	18:13:56
3	Cu 324.752†	178953.5	170900.1	496.66	ug/L	496.66 ppb	18:13:56
3	Mn 257.610†	476911.0	472938.1	501.66	ug/L	501.66 ppb	18:13:51
3	Mo 202.031†	8055.6	7978.9	508.12	ug/L	508.12 ppb	18:14:16
3	Ni 231.604†	22170.7	21924.2	503.47	ug/L	503.47 ppb	18:13:56
3	P 214.914†	4769.6	4493.1	2433.6	ug/L	2433.6 ppb	18:14:16
3	Pb 220.353†	4453.1	4488.8	504.06	ug/L	504.06 ppb	18:14:16
3	S 181.975 Axial†	829.9	774.5	1022.3	ug/L	1022.3 ppb	18:14:16
3	Sb 206.836†	1658.9	1609.5	515.69	ug/L	515.69 ppb	18:14:16
3	Se 196.026†	880.1	900.6	525.13	ug/L	525.13 ppb	18:14:16
3	Si 251.611†	87632.8	86516.7	2564.7	ug/L	2564.7 ppb	18:13:56
3	Sn 189.927†	3198.5	3166.5	509.98	ug/L	509.98 ppb	18:14:16
3	Ti 334.940†	313915.2	312898.7	493.76	ug/L	493.76 ppb	18:13:56
3	Tl 190.801†	1779.7	1801.4	510.69	ug/L	510.69 ppb	18:14:16
3	U 409.014†	14733.4	17210.7	493.19	ug/L	493.19 ppb	18:13:56
3	V 292.402†	74217.0	75042.4	506.10	ug/L	506.10 ppb	18:13:56
3	Zn 213.857†	60135.3	58946.1	502.56	ug/L	502.56 ppb	18:13:56
3	SiO2†	87945.0	86783.9	5512.8	ug/L	5512.8 ppb	18:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	847712.7	97.672	%	5.3983				5.53%
Sc Radial	5409.1	97.0	%	0.92				0.95%
Y 371.029	702021.6	96.239	%	5.3393				5.55%
Y RADIAL	5853.5	96.93	%	0.761				0.79%
Ag 328.068†	115594.5	526.09	ug/L	33.384	526.09	ppb	33.384	6.35%
QC value within limits for Ag 328.068 Recovery = 105.22%								
Al 396.153Radial†	7369.4	5053.1	ug/L	51.63	5053.1	ppb	51.63	1.02%
QC value within limits for Al 396.153Radial Recovery = 101.06%								
As 188.979†	1338.9	521.44	ug/L	20.157	521.44	ppb	20.157	3.87%
QC value within limits for As 188.979 Recovery = 104.29%								
B 249.677†	24365.4	517.23	ug/L	32.139	517.23	ppb	32.139	6.21%
QC value within limits for B 249.677 Recovery = 103.45%								
Ba 233.527†	69450.2	520.29	ug/L	31.749	520.29	ppb	31.749	6.10%
QC value within limits for Ba 233.527 Recovery = 104.06%								
Be 313.107†	1453786.4	523.02	ug/L	36.056	523.02	ppb	36.056	6.89%
QC value within limits for Be 313.107 Recovery = 104.60%								
Ca 317.933Radial†	3534.0	5157.9	ug/L	56.25	5157.9	ppb	56.25	1.09%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.16%
Cd 226.502†            50275.9      521.23 ug/L        31.442      521.23 ppb        31.442   6.03%
   QC value within limits for Cd 226.502  Recovery = 104.25%
Co 228.616†            27587.6      520.49 ug/L        32.476      520.49 ppb        32.476   6.24%
   QC value within limits for Co 228.616  Recovery = 104.10%
Cr 267.716†            49639.4      520.45 ug/L        32.576      520.45 ppb        32.576   6.26%
   QC value within limits for Cr 267.716  Recovery = 104.09%
Cu 324.752†           177179.4      514.90 ug/L        34.379      514.90 ppb        34.379   6.68%
   QC value within limits for Cu 324.752  Recovery = 102.98%
Fe 238.204 Radial†       583.3      5241.9 ug/L         43.91      5241.9 ppb         43.91   0.84%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.84%
K 766.490 Radial†      30584.5      5122.3 ug/L         36.41      5122.3 ppb         36.41   0.71%
   QC value within limits for K 766.490 Radial  Recovery = 102.45%
Mg 279.077 IEC†          159.0      5351.6 ug/L         48.91      5351.6 ppb         48.91   0.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.03%
Mn 257.610†           491331.8      521.15 ug/L        35.853      521.15 ppb        35.853   6.88%
   QC value within limits for Mn 257.610  Recovery = 104.23%
Mo 202.031†             8173.9      520.53 ug/L        22.542      520.53 ppb        22.542   4.33%
   QC value within limits for Mo 202.031  Recovery = 104.11%
Na 589.592 Radial†     33189.8       10058 ug/L          70.9       10058 ppb          70.9   0.71%
   QC value within limits for Na 589.592 Radial  Recovery = 100.58%
Ni 231.604†            22704.4      521.39 ug/L        31.900      521.39 ppb        31.900   6.12%
   QC value within limits for Ni 231.604  Recovery = 104.28%
P 214.914†              4607.3      2494.6 ug/L        112.81      2494.6 ppb        112.81   4.52%
   QC value within limits for P 214.914  Recovery = 99.79%
Pb 220.353†             4608.6      517.48 ug/L        23.885      517.48 ppb        23.885   4.62%
   QC value within limits for Pb 220.353  Recovery = 103.50%
S 181.975 Axial†         794.2      1048.3 ug/L         45.80      1048.3 ppb         45.80   4.37%
   QC value within limits for S 181.975 Axial  Recovery = 104.83%
Sb 206.836†             1643.9      526.54 ug/L        24.599      526.54 ppb        24.599   4.67%
   QC value within limits for Sb 206.836  Recovery = 105.31%
Se 196.026†              913.4      532.32 ug/L        18.514      532.32 ppb        18.514   3.48%
   QC value within limits for Se 196.026  Recovery = 106.46%
Si 251.611†            89465.1      2652.2 ug/L        166.04      2652.2 ppb        166.04   6.26%
   QC value within limits for Si 251.611  Recovery = 106.09%
Sn 189.927†             3234.5      520.93 ug/L        22.371      520.93 ppb        22.371   4.29%
   QC value within limits for Sn 189.927  Recovery = 104.19%
Sr 421.552†            84740.7      511.05 ug/L         3.822      511.05 ppb         3.822   0.75%
   QC value within limits for Sr 421.552  Recovery = 102.21%
Ti 334.940†           323990.5      511.25 ug/L        32.380      511.25 ppb        32.380   6.33%
   QC value within limits for Ti 334.940  Recovery = 102.25%
Tl 190.801†             1837.0      520.84 ug/L        21.789      520.84 ppb        21.789   4.18%
   QC value within limits for Tl 190.801  Recovery = 104.17%
U 409.014†             17696.2      507.12 ug/L        28.037      507.12 ppb        28.037   5.53%
   QC value within limits for U 409.014  Recovery = 101.42%
V 292.402†             77655.8      523.67 ug/L        32.475      523.67 ppb        32.475   6.20%
   QC value within limits for V 292.402  Recovery = 104.73%
Zn 213.857†            60875.1      519.02 ug/L        31.835      519.02 ppb        31.835   6.13%
   QC value within limits for Zn 213.857  Recovery = 103.80%
SiO2†                  88999.4      5653.7 ug/L        357.59      5653.7 ppb        357.59   6.32%
   QC value within limits for SiO2  Recovery = 105.73%
All analyte(s) passed QC.
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Sequence No.: 43
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 18:16:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5597.8	5597.8	100	%			18:18:33
1	Y RADIAL	6096.4	6096.4	100.9	%			18:18:33
1	Al 396.153Radial†	-27.0	8.4	5.7546	ug/L	5.7546	ppb	18:18:33
1	Ca 317.933Radial†	19.8	2.8	4.0992	ug/L	4.0992	ppb	18:18:53
1	Fe 238.204 Radial†	9.4	-0.5	-4.5312	ug/L	-4.5312	ppb	18:18:53
1	K 766.490 Radial†	2818.3	67.7	11.367	ug/L	11.367	ppb	18:18:33
1	Mg 279.077 IEC†	1.8	-0.1	-4.9736	ug/L	-4.9736	ppb	18:18:53
1	Na 589.592 Radial†	-1653.9	-93.3	-28.271	ug/L	-28.271	ppb	18:18:33
1	Sr 421.552†	-21.2	-20.9	-0.1260	ug/L	-0.1260	ppb	18:18:33
1	Sc 361.383	863666.6	863666.6	99.510	%			18:19:50
1	Y 371.029	726686.5	726686.5	99.620	%			18:19:50
1	Ag 328.068†	324.2	51.7	0.2360	ug/L	0.2360	ppb	18:19:50
1	As 188.979†	-14.0	17.2	6.6403	ug/L	6.6403	ppb	18:20:10
1	B 249.677†	-315.6	176.1	3.7533	ug/L	3.7533	ppb	18:20:10
1	Ba 233.527†	-3.3	7.8	0.0581	ug/L	0.0581	ppb	18:20:10
1	Be 313.107†	-4512.1	128.3	0.0458	ug/L	0.0458	ppb	18:19:50
1	Cd 226.502†	-205.1	-7.1	-0.0735	ug/L	-0.0735	ppb	18:20:10
1	Co 228.616†	-76.7	-3.6	-0.0669	ug/L	-0.0669	ppb	18:20:10
1	Cr 267.716†	88.6	3.0	0.0327	ug/L	0.0327	ppb	18:20:10
1	Cu 324.752†	6800.5	76.1	0.2209	ug/L	0.2209	ppb	18:19:50
1	Mn 257.610†	508.6	-9.0	-0.0099	ug/L	-0.0099	ppb	18:20:10
1	Mo 202.031†	27.0	8.7	0.5557	ug/L	0.5557	ppb	18:20:10
1	Ni 231.604†	93.1	7.7	0.1761	ug/L	0.1761	ppb	18:20:10
1	P 214.914†	225.5	-15.4	-8.6456	ug/L	-8.6456	ppb	18:20:10
1	Pb 220.353†	-71.3	-3.7	-0.4061	ug/L	-0.4061	ppb	18:20:10
1	S 181.975 Axial†	54.1	5.0	6.5474	ug/L	6.5474	ppb	18:20:10
1	Sb 206.836†	39.3	2.1	0.6742	ug/L	0.6742	ppb	18:20:10
1	Se 196.026†	-39.5	-12.9	-7.2806	ug/L	-7.2806	ppb	18:20:10
1	Si 251.611†	552.9	73.8	2.1880	ug/L	2.1880	ppb	18:20:10
1	Sn 189.927†	3.9	-5.0	-0.7984	ug/L	-0.7984	ppb	18:20:10
1	Ti 334.940†	-1336.5	-86.8	-0.1350	ug/L	-0.1350	ppb	18:19:50
1	Tl 190.801†	-35.6	-1.2	-0.3409	ug/L	-0.3409	ppb	18:20:10
1	U 409.014†	-2720.4	-149.8	-4.3062	ug/L	-4.3062	ppb	18:19:50
1	V 292.402†	-1362.9	-6.9	-0.0456	ug/L	-0.0456	ppb	18:19:50
1	Zn 213.857†	792.3	42.4	0.3636	ug/L	0.3636	ppb	18:20:10
1	SiO2†	553.5	31.8	2.0040	ug/L	2.0040	ppb	18:21:06
2	Sc Radial	5584.6	5584.6	100	%			18:18:58
2	Y RADIAL	6084.8	6084.8	100.8	%			18:18:58
2	Al 396.153Radial†	-30.9	4.5	3.0352	ug/L	3.0352	ppb	18:18:58
2	Ca 317.933Radial†	17.5	0.6	0.8612	ug/L	0.8612	ppb	18:19:18
2	Fe 238.204 Radial†	9.2	-0.7	-6.6645	ug/L	-6.6645	ppb	18:19:18
2	K 766.490 Radial†	2790.0	46.1	7.7416	ug/L	7.7416	ppb	18:18:58
2	Mg 279.077 IEC†	2.3	0.4	11.868	ug/L	11.868	ppb	18:19:18
2	Na 589.592 Radial†	-1624.2	-67.5	-20.463	ug/L	-20.463	ppb	18:18:58
2	Sr 421.552†	-22.6	-22.3	-0.1348	ug/L	-0.1348	ppb	18:18:58
2	Sc 361.383	873176.9	873176.9	100.61	%			18:20:15
2	Y 371.029	735042.2	735042.2	100.77	%			18:20:15
2	Ag 328.068†	376.7	100.4	0.4502	ug/L	0.4502	ppb	18:20:15
2	As 188.979†	-27.0	4.4	1.7070	ug/L	1.7070	ppb	18:20:35
2	B 249.677†	-310.9	184.2	3.9263	ug/L	3.9263	ppb	18:20:35
2	Ba 233.527†	4.5	15.6	0.1165	ug/L	0.1165	ppb	18:20:35
2	Be 313.107†	-4519.3	170.5	0.0615	ug/L	0.0615	ppb	18:20:15
2	Cd 226.502†	-196.2	3.9	0.0411	ug/L	0.0411	ppb	18:20:35
2	Co 228.616†	-89.5	-15.5	-0.2909	ug/L	-0.2909	ppb	18:20:35
2	Cr 267.716†	83.1	-3.4	-0.0366	ug/L	-0.0366	ppb	18:20:35
2	Cu 324.752†	6851.3	52.1	0.1511	ug/L	0.1511	ppb	18:20:15
2	Mn 257.610†	489.3	-33.8	-0.0367	ug/L	-0.0367	ppb	18:20:35
2	Mo 202.031†	30.4	11.8	0.7518	ug/L	0.7518	ppb	18:20:35
2	Ni 231.604†	96.5	10.0	0.2292	ug/L	0.2292	ppb	18:20:35

2	P 214.914†	230.4	-13.0	-7.3027	ug/L	-7.3027 ppb	18:20:35
2	Pb 220.353†	-68.4	0.0	0.0079	ug/L	0.0079 ppb	18:20:35
2	S 181.975 Axial†	49.9	0.2	0.2844	ug/L	0.2844 ppb	18:20:35
2	Sb 206.836†	32.9	-4.7	-1.4774	ug/L	-1.4774 ppb	18:20:35
2	Se 196.026†	-28.0	-1.1	-0.6241	ug/L	-0.6241 ppb	18:20:35
2	Si 251.611†	536.5	51.5	1.5216	ug/L	1.5216 ppb	18:20:35
2	Sn 189.927†	3.8	-5.1	-0.8172	ug/L	-0.8172 ppb	18:20:35
2	Ti 334.940†	-1180.1	83.3	0.1305	ug/L	0.1305 ppb	18:20:15
2	Tl 190.801†	-35.4	-0.6	-0.1649	ug/L	-0.1649 ppb	18:20:35
2	U 409.014†	-2522.5	76.7	2.2066	ug/L	2.2066 ppb	18:20:15
2	V 292.402†	-1369.8	1.2	0.0240	ug/L	0.0240 ppb	18:20:15
2	Zn 213.857†	806.3	47.6	0.4080	ug/L	0.4080 ppb	18:20:35
2	SiO2†	569.1	41.2	2.5994	ug/L	2.5994 ppb	18:21:11
3	Sc Radial	5599.7	5599.7	100	%		18:19:23
3	Y RADIAL	6091.0	6091.0	100.9	%		18:19:23
3	Al 396.153Radial†	-42.0	-6.5	-4.4913	ug/L	-4.4913 ppb	18:19:23
3	Ca 317.933Radial†	15.0	-1.9	-2.8321	ug/L	-2.8321 ppb	18:19:43
3	Fe 238.204 Radial†	10.2	0.3	2.4851	ug/L	2.4851 ppb	18:19:43
3	K 766.490 Radial†	2944.0	191.9	32.206	ug/L	32.206 ppb	18:19:23
3	Mg 279.077 IEC†	2.1	0.2	7.5987	ug/L	7.5987 ppb	18:19:43
3	Na 589.592 Radial†	-1617.7	-56.7	-17.172	ug/L	-17.172 ppb	18:19:23
3	Sr 421.552†	-64.8	-64.3	-0.3876	ug/L	-0.3876 ppb	18:19:23
3	Sc 361.383	860699.8	860699.8	99.169	%		18:20:41
3	Y 371.029	724460.4	724460.4	99.315	%		18:20:41
3	Ag 328.068†	327.5	56.3	0.2559	ug/L	0.2559 ppb	18:20:41
3	As 188.979†	-27.6	3.5	1.3341	ug/L	1.3341 ppb	18:21:01
3	B 249.677†	-309.5	181.1	3.8593	ug/L	3.8593 ppb	18:21:01
3	Ba 233.527†	2.8	14.0	0.1042	ug/L	0.1042 ppb	18:21:01
3	Be 313.107†	-4486.9	138.1	0.0494	ug/L	0.0494 ppb	18:20:41
3	Cd 226.502†	-205.9	-8.7	-0.0906	ug/L	-0.0906 ppb	18:21:01
3	Co 228.616†	-80.0	-7.2	-0.1361	ug/L	-0.1361 ppb	18:21:01
3	Cr 267.716†	82.5	-2.9	-0.0300	ug/L	-0.0300 ppb	18:21:01
3	Cu 324.752†	6717.7	16.2	0.0472	ug/L	0.0472 ppb	18:20:41
3	Mn 257.610†	500.8	-15.2	-0.0160	ug/L	-0.0160 ppb	18:21:01
3	Mo 202.031†	17.6	-0.6	-0.0402	ug/L	-0.0402 ppb	18:21:01
3	Ni 231.604†	93.9	8.7	0.2006	ug/L	0.2006 ppb	18:21:01
3	P 214.914†	228.8	-11.3	-6.3106	ug/L	-6.3106 ppb	18:21:01
3	Pb 220.353†	-61.4	6.1	0.6795	ug/L	0.6795 ppb	18:21:01
3	S 181.975 Axial†	49.9	0.9	1.1521	ug/L	1.1521 ppb	18:21:01
3	Sb 206.836†	32.7	-4.4	-1.3854	ug/L	-1.3854 ppb	18:21:01
3	Se 196.026†	-29.5	-3.0	-1.6620	ug/L	-1.6620 ppb	18:21:01
3	Si 251.611†	537.0	59.7	1.7706	ug/L	1.7706 ppb	18:21:01
3	Sn 189.927†	6.6	-2.2	-0.3536	ug/L	-0.3536 ppb	18:21:01
3	Ti 334.940†	-1296.7	-51.3	-0.0806	ug/L	-0.0806 ppb	18:20:41
3	Tl 190.801†	-36.5	-2.2	-0.6337	ug/L	-0.6337 ppb	18:21:01
3	U 409.014†	-2604.1	-41.9	-1.2061	ug/L	-1.2061 ppb	18:20:41
3	V 292.402†	-1369.4	-18.1	-0.1235	ug/L	-0.1235 ppb	18:20:41
3	Zn 213.857†	786.5	39.3	0.3361	ug/L	0.3361 ppb	18:21:01
3	SiO2†	542.6	22.6	1.4247	ug/L	1.4247 ppb	18:21:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865847.7	99.762	%	0.7510				0.75%
Sc Radial	5594.0	100	%	0.1				0.15%
Y 371.029	728729.7	99.900	%	0.7648				0.77%
Y RADIAL	6090.7	100.9	%	0.10				0.10%
Ag 328.068†	69.5	0.3140	ug/L	0.11835	0.3140	ppb	0.11835	37.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.1	1.4328	ug/L	5.30762	1.4328	ppb	5.30762	370.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.4	3.2271	ug/L	2.96178	3.2271	ppb	2.96178	91.78%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	180.4	3.8463	ug/L	0.08723	3.8463	ppb	0.08723	2.27%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.5	0.0929	ug/L	0.03076	0.0929	ppb	0.03076	33.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.7	0.0522	ug/L	0.00822	0.0522	ppb	0.00822	15.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.5	0.7094	ug/L	3.46813	0.7094	ppb	3.46813	488.85%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -4.0     -0.0410 ug/L       0.07160     -0.0410 ppb        0.07160 174.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -8.8     -0.1646 ug/L       0.11468     -0.1646 ppb        0.11468  69.67%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -1.1     -0.0113 ug/L       0.03823     -0.0113 ppb        0.03823 338.49%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              48.2      0.1397 ug/L       0.08738      0.1397 ppb        0.08738  62.54%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.3     -2.9035 ug/L       4.78704     -2.9035 ppb        4.78704 164.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       101.9      17.105 ug/L       13.2028      17.105 ppb        13.2028  77.19%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.1      4.8310 ug/L       8.75528      4.8310 ppb        8.75528 181.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -19.3     -0.0209 ug/L       0.01405     -0.0209 ppb        0.01405  67.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.6      0.4224 ug/L       0.41246      0.4224 ppb        0.41246  97.64%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -72.5     -21.969 ug/L        5.7009     -21.969 ppb         5.7009  25.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               8.8      0.2020 ug/L       0.02659      0.2020 ppb        0.02659  13.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -13.2     -7.4197 ug/L       1.17188     -7.4197 ppb        1.17188  15.79%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               0.8      0.0938 ug/L       0.54786      0.0938 ppb        0.54786 584.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.0      2.6613 ug/L       3.39333      2.6613 ppb        3.39333 127.51%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.3     -0.7296 ug/L       1.21653     -0.7296 ppb        1.21653 166.75%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.7     -3.1889 ug/L       3.58129     -3.1889 ppb        3.58129 112.30%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              61.7      1.8267 ug/L       0.33676      1.8267 ppb        0.33676  18.44%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -4.1     -0.6564 ug/L       0.26241     -0.6564 ppb        0.26241  39.98%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -35.8     -0.2161 ug/L       0.14856     -0.2161 ppb        0.14856  68.74%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -18.3     -0.0283 ug/L       0.14024     -0.0283 ppb        0.14024 494.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.4     -0.3799 ug/L       0.23681     -0.3799 ppb        0.23681  62.34%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -38.3     -1.1019 ug/L       3.25767     -1.1019 ppb        3.25767 295.64%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -7.9     -0.0483 ug/L       0.07381     -0.0483 ppb        0.07381 152.69%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              43.1      0.3693 ug/L       0.03628      0.3693 ppb        0.03628   9.83%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    31.9      2.0094 ug/L       0.58739      2.0094 ppb        0.58739  29.23%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 51
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 19:11:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5465.2	5465.2	98.0	%			19:13:05
1	Y RADIAL	5925.9	5925.9	98.12	%			19:13:05
1	Al 396.153Radial†	7068.0	7246.2	4969.0	ug/L	4969.0	ppb	19:13:05
1	Ca 317.933Radial†	3449.2	3502.1	5111.2	ug/L	5111.2	ppb	19:13:25
1	Fe 238.204 Radial†	580.9	582.7	5236.4	ug/L	5236.4	ppb	19:13:25
1	K 766.490 Radial†	32244.5	30157.0	5050.7	ug/L	5050.7	ppb	19:13:05
1	Mg 279.077 IEC†	155.2	156.4	5265.9	ug/L	5265.9	ppb	19:13:25
1	Na 589.592 Radial†	31645.9	33840.0	10256	ug/L	10256	ppb	19:13:05
1	Sr 421.552†	83105.7	84786.6	511.32	ug/L	511.32	ppb	19:13:05
1	Sc 361.383	876872.1	876872.1	101.03	%			19:14:23
1	Y 371.029	725494.2	725494.2	99.457	%			19:14:23
1	Ag 328.068†	112987.5	111559.4	507.78	ug/L	507.78	ppb	19:14:28
1	As 188.979†	1285.3	1303.5	507.63	ug/L	507.63	ppb	19:14:48
1	B 249.677†	23247.9	23503.7	498.92	ug/L	498.92	ppb	19:14:28
1	Ba 233.527†	67616.1	66936.6	501.46	ug/L	501.46	ppb	19:14:28
1	Be 313.107†	1403483.0	1393810.6	501.45	ug/L	501.45	ppb	19:14:23
1	Cd 226.502†	48681.4	48383.1	501.59	ug/L	501.59	ppb	19:14:28
1	Co 228.616†	26759.5	26559.6	501.10	ug/L	501.10	ppb	19:14:28
1	Cr 267.716†	48417.8	47837.2	501.55	ug/L	501.55	ppb	19:14:28
1	Cu 324.752†	179359.0	170769.2	496.28	ug/L	496.28	ppb	19:14:28
1	Mn 257.610†	477283.9	471888.8	500.55	ug/L	500.55	ppb	19:14:23
1	Mo 202.031†	8017.6	7917.3	504.20	ug/L	504.20	ppb	19:14:48
1	Ni 231.604†	22189.1	21876.5	502.37	ug/L	502.37	ppb	19:14:28
1	P 214.914†	4757.1	4466.5	2418.8	ug/L	2418.8	ppb	19:14:48
1	Pb 220.353†	4458.3	4480.7	503.12	ug/L	503.12	ppb	19:14:48
1	S 181.975 Axial†	837.8	779.8	1029.3	ug/L	1029.3	ppb	19:14:48
1	Sb 206.836†	1656.4	1602.1	513.23	ug/L	513.23	ppb	19:14:48
1	Se 196.026†	890.2	908.0	529.18	ug/L	529.18	ppb	19:14:48
1	Si 251.611†	87631.3	86254.5	2557.0	ug/L	2557.0	ppb	19:14:28
1	Sn 189.927†	3197.7	3156.2	508.33	ug/L	508.33	ppb	19:14:48
1	Ti 334.940†	314245.0	312291.6	492.80	ug/L	492.80	ppb	19:14:28
1	Tl 190.801†	1765.4	1781.9	505.22	ug/L	505.22	ppb	19:14:48
1	U 409.014†	14736.6	17170.1	492.03	ug/L	492.03	ppb	19:14:28
1	V 292.402†	74219.2	74823.9	504.60	ug/L	504.60	ppb	19:14:28
1	Zn 213.857†	60045.6	58678.4	500.27	ug/L	500.27	ppb	19:14:28
1	SiO2†	87791.0	86369.9	5486.6	ug/L	5486.6	ppb	19:15:55
2	Sc Radial	5564.5	5564.5	99.8	%			19:13:30
2	Y RADIAL	6008.9	6008.9	99.50	%			19:13:30
2	Al 396.153Radial†	7202.3	7252.1	4972.9	ug/L	4972.9	ppb	19:13:30
2	Ca 317.933Radial†	3459.0	3449.1	5033.9	ug/L	5033.9	ppb	19:13:50
2	Fe 238.204 Radial†	587.5	578.8	5201.6	ug/L	5201.6	ppb	19:13:50
2	K 766.490 Radial†	32846.4	30173.2	5053.5	ug/L	5053.5	ppb	19:13:30
2	Mg 279.077 IEC†	159.0	157.4	5300.1	ug/L	5300.1	ppb	19:13:50
2	Na 589.592 Radial†	32168.9	33788.0	10240	ug/L	10240	ppb	19:13:30
2	Sr 421.552†	84621.9	84793.1	511.36	ug/L	511.36	ppb	19:13:30
2	Sc 361.383	877539.8	877539.8	101.11	%			19:14:54
2	Y 371.029	726634.8	726634.8	99.613	%			19:14:54
2	Ag 328.068†	112566.1	111057.5	505.49	ug/L	505.49	ppb	19:14:59
2	As 188.979†	1297.2	1314.3	511.79	ug/L	511.79	ppb	19:15:19
2	B 249.677†	23182.2	23421.2	497.17	ug/L	497.17	ppb	19:14:59
2	Ba 233.527†	67375.4	66647.6	499.30	ug/L	499.30	ppb	19:14:59
2	Be 313.107†	1404668.5	1393926.2	501.49	ug/L	501.49	ppb	19:14:54
2	Cd 226.502†	48586.0	48252.1	500.23	ug/L	500.23	ppb	19:14:59
2	Co 228.616†	26640.0	26421.3	498.51	ug/L	498.51	ppb	19:14:59
2	Cr 267.716†	48254.2	47639.0	499.48	ug/L	499.48	ppb	19:14:59
2	Cu 324.752†	178880.1	170160.5	494.51	ug/L	494.51	ppb	19:14:59
2	Mn 257.610†	476207.6	470464.9	499.03	ug/L	499.03	ppb	19:14:54
2	Mo 202.031†	8078.3	7971.3	507.63	ug/L	507.63	ppb	19:15:19
2	Ni 231.604†	22041.4	21713.7	498.63	ug/L	498.63	ppb	19:14:59

2	P 214.914†	4791.5	4496.9	2436.1 ug/L	2436.1 ppb	19:15:19
2	Pb 220.353†	4473.8	4492.7	504.48 ug/L	504.48 ppb	19:15:19
2	S 181.975 Axial†	832.6	774.1	1021.7 ug/L	1021.7 ppb	19:15:19
2	Sb 206.836†	1649.4	1593.9	510.80 ug/L	510.80 ppb	19:15:19
2	Se 196.026†	887.8	904.8	527.32 ug/L	527.32 ppb	19:15:19
2	Si 251.611†	87172.7	85734.9	2541.4 ug/L	2541.4 ppb	19:14:59
2	Sn 189.927†	3204.0	3160.0	508.93 ug/L	508.93 ppb	19:15:19
2	Ti 334.940†	313727.5	311543.1	491.61 ug/L	491.61 ppb	19:14:59
2	Tl 190.801†	1760.8	1776.1	503.56 ug/L	503.56 ppb	19:15:19
2	U 409.014†	14888.3	17309.1	496.03 ug/L	496.03 ppb	19:14:59
2	V 292.402†	74197.3	74746.3	504.14 ug/L	504.14 ppb	19:14:59
2	Zn 213.857†	59742.0	58332.9	497.33 ug/L	497.33 ppb	19:14:59
2	SiO2†	87299.5	85817.6	5451.2 ug/L	5451.2 ppb	19:16:00
3	Sc Radial	5507.7	5507.7	98.8 %		19:13:55
3	Y RADIAL	5939.6	5939.6	98.35 %		19:13:55
3	Al 396.153Radial†	7132.4	7255.9	4975.5 ug/L	4975.5 ppb	19:13:55
3	Ca 317.933Radial†	3448.7	3474.4	5070.9 ug/L	5070.9 ppb	19:14:15
3	Fe 238.204 Radial†	581.2	578.5	5198.5 ug/L	5198.5 ppb	19:14:15
3	K 766.490 Radial†	32653.6	30317.7	5077.7 ug/L	5077.7 ppb	19:13:55
3	Mg 279.077 IEC†	154.2	154.2	5191.3 ug/L	5191.3 ppb	19:14:15
3	Na 589.592 Radial†	31984.3	33933.8	10284 ug/L	10284 ppb	19:13:55
3	Sr 421.552†	83887.8	84925.0	512.16 ug/L	512.16 ppb	19:13:55
3	Sc 361.383	877027.6	877027.6	101.05 %		19:15:25
3	Y 371.029	725676.8	725676.8	99.482 %		19:15:25
3	Ag 328.068†	112388.2	110946.5	504.99 ug/L	504.99 ppb	19:15:30
3	As 188.979†	1276.4	1294.4	504.11 ug/L	504.11 ppb	19:15:50
3	B 249.677†	23199.7	23451.9	497.82 ug/L	497.82 ppb	19:15:30
3	Ba 233.527†	67196.4	66509.4	498.27 ug/L	498.27 ppb	19:15:30
3	Be 313.107†	1401657.1	1391757.5	500.71 ug/L	500.71 ppb	19:15:25
3	Cd 226.502†	48520.9	48215.7	499.85 ug/L	499.85 ppb	19:15:30
3	Co 228.616†	26694.6	26490.7	499.81 ug/L	499.81 ppb	19:15:30
3	Cr 267.716†	48059.7	47474.4	497.75 ug/L	497.75 ppb	19:15:30
3	Cu 324.752†	178863.3	170247.2	494.76 ug/L	494.76 ppb	19:15:30
3	Mn 257.610†	476020.5	470554.8	499.13 ug/L	499.13 ppb	19:15:25
3	Mo 202.031†	8054.5	7952.4	506.43 ug/L	506.43 ppb	19:15:50
3	Ni 231.604†	21993.9	21679.5	497.85 ug/L	497.85 ppb	19:15:30
3	P 214.914†	4770.2	4478.6	2425.8 ug/L	2425.8 ppb	19:15:50
3	Pb 220.353†	4458.1	4479.8	503.02 ug/L	503.02 ppb	19:15:50
3	S 181.975 Axial†	830.1	772.0	1019.0 ug/L	1019.0 ppb	19:15:50
3	Sb 206.836†	1668.3	1613.6	517.01 ug/L	517.01 ppb	19:15:50
3	Se 196.026†	881.4	899.0	524.06 ug/L	524.06 ppb	19:15:50
3	Si 251.611†	87259.8	85871.5	2545.5 ug/L	2545.5 ppb	19:15:30
3	Sn 189.927†	3196.1	3154.1	507.98 ug/L	507.98 ppb	19:15:50
3	Ti 334.940†	313305.1	311306.3	491.24 ug/L	491.24 ppb	19:15:30
3	Tl 190.801†	1762.0	1778.3	504.18 ug/L	504.18 ppb	19:15:50
3	U 409.014†	14851.5	17281.2	495.23 ug/L	495.23 ppb	19:15:30
3	V 292.402†	74030.8	74624.4	503.31 ug/L	503.31 ppb	19:15:30
3	Zn 213.857†	59731.1	58356.7	497.54 ug/L	497.54 ppb	19:15:30
3	SiO2†	87024.1	85595.5	5437.1 ug/L	5437.1 ppb	19:16:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877146.5	101.06	%	0.040				0.04%
Sc Radial	5512.5	98.9	%	0.89				0.90%
Y 371.029	725935.2	99.517	%	0.0840				0.08%
Y RADIAL	5958.1	98.66	%	0.737				0.75%
Ag 328.068†	111187.8	506.09	ug/L	1.487	506.09	ppb	1.487	0.29%
QC value within limits for Ag 328.068 Recovery = 101.22%								
Al 396.153Radial†	7251.4	4972.5	ug/L	3.30	4972.5	ppb	3.30	0.07%
QC value within limits for Al 396.153Radial Recovery = 99.45%								
As 188.979†	1304.1	507.84	ug/L	3.842	507.84	ppb	3.842	0.76%
QC value within limits for As 188.979 Recovery = 101.57%								
B 249.677†	23458.9	497.97	ug/L	0.883	497.97	ppb	0.883	0.18%
QC value within limits for B 249.677 Recovery = 99.59%								
Ba 233.527†	66697.9	499.68	ug/L	1.631	499.68	ppb	1.631	0.33%
QC value within limits for Ba 233.527 Recovery = 99.94%								
Be 313.107†	1393164.7	501.22	ug/L	0.439	501.22	ppb	0.439	0.09%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	3475.2	5072.0	ug/L	38.67	5072.0	ppb	38.67	0.76%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.44%
Cd 226.502†            48283.6      500.56 ug/L         0.912      500.56 ppb          0.912   0.18%
   QC value within limits for Cd 226.502  Recovery = 100.11%
Co 228.616†            26490.5      499.81 ug/L         1.298      499.81 ppb          1.298   0.26%
   QC value within limits for Co 228.616  Recovery = 99.96%
Cr 267.716†            47650.2      499.59 ug/L         1.904      499.59 ppb          1.904   0.38%
   QC value within limits for Cr 267.716  Recovery = 99.92%
Cu 324.752†           170392.3      495.19 ug/L         0.957      495.19 ppb          0.957   0.19%
   QC value within limits for Cu 324.752  Recovery = 99.04%
Fe 238.204 Radial†       580.0      5212.2 ug/L         21.04      5212.2 ppb          21.04   0.40%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.24%
K 766.490 Radial†      30216.0      5060.6 ug/L         14.84      5060.6 ppb          14.84   0.29%
   QC value within limits for K 766.490 Radial  Recovery = 101.21%
Mg 279.077 IEC†          156.0      5252.4 ug/L         55.68      5252.4 ppb          55.68   1.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.05%
Mn 257.610†           470969.5      499.57 ug/L         0.847      499.57 ppb          0.847   0.17%
   QC value within limits for Mn 257.610  Recovery = 99.91%
Mo 202.031†             7947.0      506.09 ug/L         1.743      506.09 ppb          1.743   0.34%
   QC value within limits for Mo 202.031  Recovery = 101.22%
Na 589.592 Radial†     33853.9       10260 ug/L          22.4       10260 ppb           22.4   0.22%
   QC value within limits for Na 589.592 Radial  Recovery = 102.60%
Ni 231.604†            21756.6      499.62 ug/L         2.419      499.62 ppb          2.419   0.48%
   QC value within limits for Ni 231.604  Recovery = 99.92%
P 214.914†              4480.7      2426.9 ug/L          8.70      2426.9 ppb           8.70   0.36%
   QC value within limits for P 214.914  Recovery = 97.08%
Pb 220.353†             4484.4      503.54 ug/L         0.812      503.54 ppb          0.812   0.16%
   QC value within limits for Pb 220.353  Recovery = 100.71%
S 181.975 Axial†         775.3      1023.3 ug/L          5.33      1023.3 ppb           5.33   0.52%
   QC value within limits for S 181.975 Axial  Recovery = 102.33%
Sb 206.836†             1603.2      513.68 ug/L         3.127      513.68 ppb          3.127   0.61%
   QC value within limits for Sb 206.836  Recovery = 102.74%
Se 196.026†              903.9      526.85 ug/L         2.595      526.85 ppb          2.595   0.49%
   QC value within limits for Se 196.026  Recovery = 105.37%
Si 251.611†            85953.6      2548.0 ug/L          8.06      2548.0 ppb           8.06   0.32%
   QC value within limits for Si 251.611  Recovery = 101.92%
Sn 189.927†             3156.8      508.41 ug/L         0.477      508.41 ppb          0.477   0.09%
   QC value within limits for Sn 189.927  Recovery = 101.68%
Sr 421.552†            84834.9      511.61 ug/L         0.471      511.61 ppb          0.471   0.09%
   QC value within limits for Sr 421.552  Recovery = 102.32%
Ti 334.940†           311713.7      491.88 ug/L         0.813      491.88 ppb          0.813   0.17%
   QC value within limits for Ti 334.940  Recovery = 98.38%
Tl 190.801†             1778.8      504.32 ug/L         0.839      504.32 ppb          0.839   0.17%
   QC value within limits for Tl 190.801  Recovery = 100.86%
U 409.014†             17253.5      494.43 ug/L         2.120      494.43 ppb          2.120   0.43%
   QC value within limits for U 409.014  Recovery = 98.89%
V 292.402†             74731.5      504.02 ug/L         0.650      504.02 ppb          0.650   0.13%
   QC value within limits for V 292.402  Recovery = 100.80%
Zn 213.857†            58456.0      498.38 ug/L         1.641      498.38 ppb          1.641   0.33%
   QC value within limits for Zn 213.857  Recovery = 99.68%
SiO2†                  85927.7      5458.3 ug/L         25.51      5458.3 ppb          25.51   0.47%
   QC value within limits for SiO2  Recovery = 102.07%
All analyte(s) passed QC.
```

Sequence No.: 52
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 19:18:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5613.6	5613.6	101	%			19:20:07
1	Y RADIAL	6091.5	6091.5	100.9	%			19:20:07
1	Al 396.153Radial†	-15.8	19.6	13.500	ug/L	13.500	ppb	19:20:07
1	Ca 317.933Radial†	21.6	4.5	6.6224	ug/L	6.6224	ppb	19:20:27
1	Fe 238.204 Radial†	7.6	-2.4	-21.138	ug/L	-21.138	ppb	19:20:27
1	K 766.490 Radial†	2882.4	123.4	20.710	ug/L	20.710	ppb	19:20:07
1	Mg 279.077 IEC†	1.3	-0.6	-21.434	ug/L	-21.434	ppb	19:20:27
1	Na 589.592 Radial†	-1609.1	-44.2	-13.383	ug/L	-13.383	ppb	19:20:07
1	Sr 421.552†	-54.5	-53.9	-0.3251	ug/L	-0.3251	ppb	19:20:07
1	Sc 361.383	854544.2	854544.2	98.459	%			19:21:24
1	Y 371.029	718855.1	718855.1	98.547	%			19:21:24
1	Ag 328.068†	354.5	86.1	0.3858	ug/L	0.3858	ppb	19:21:24
1	As 188.979†	-28.0	2.9	1.0992	ug/L	1.0992	ppb	19:21:44
1	B 249.677†	-311.9	176.4	3.7622	ug/L	3.7622	ppb	19:21:44
1	Ba 233.527†	2.2	13.3	0.0987	ug/L	0.0987	ppb	19:21:44
1	Be 313.107†	-4463.1	129.6	0.0463	ug/L	0.0463	ppb	19:21:24
1	Cd 226.502†	-187.6	8.4	0.0891	ug/L	0.0891	ppb	19:21:44
1	Co 228.616†	-67.2	5.2	0.1001	ug/L	0.1001	ppb	19:21:44
1	Cr 267.716†	67.5	-17.5	-0.1824	ug/L	-0.1824	ppb	19:21:44
1	Cu 324.752†	6694.1	41.0	0.1181	ug/L	0.1181	ppb	19:21:24
1	Mn 257.610†	517.5	5.4	0.0041	ug/L	0.0041	ppb	19:21:44
1	Mo 202.031†	23.9	5.8	0.3707	ug/L	0.3707	ppb	19:21:44
1	Ni 231.604†	92.2	7.7	0.1767	ug/L	0.1767	ppb	19:21:44
1	P 214.914†	230.4	-8.0	-4.4918	ug/L	-4.4918	ppb	19:21:44
1	Pb 220.353†	-75.8	-9.0	-1.0000	ug/L	-1.0000	ppb	19:21:44
1	S 181.975 Axial†	47.2	-1.5	-1.9277	ug/L	-1.9277	ppb	19:21:44
1	Sb 206.836†	39.5	2.8	0.8780	ug/L	0.8780	ppb	19:21:44
1	Se 196.026†	-21.0	5.5	3.0058	ug/L	3.0058	ppb	19:21:44
1	Si 251.611†	533.0	59.6	1.7616	ug/L	1.7616	ppb	19:21:44
1	Sn 189.927†	6.4	-2.3	-0.3680	ug/L	-0.3680	ppb	19:21:44
1	Ti 334.940†	-1325.2	-89.7	-0.1396	ug/L	-0.1396	ppb	19:21:24
1	Tl 190.801†	-42.6	-8.7	-2.4608	ug/L	-2.4608	ppb	19:21:44
1	U 409.014†	-2665.4	-123.1	-3.5354	ug/L	-3.5354	ppb	19:21:24
1	V 292.402†	-1328.9	13.0	0.0882	ug/L	0.0882	ppb	19:21:24
1	Zn 213.857†	804.7	63.4	0.5470	ug/L	0.5470	ppb	19:21:44
1	SiO2†	581.7	66.3	4.2078	ug/L	4.2078	ppb	19:22:40
2	Sc Radial	5561.1	5561.1	99.7	%			19:20:32
2	Y RADIAL	6050.4	6050.4	100.2	%			19:20:32
2	Al 396.153Radial†	-8.1	27.2	18.721	ug/L	18.721	ppb	19:20:32
2	Ca 317.933Radial†	17.9	1.0	1.4621	ug/L	1.4621	ppb	19:20:52
2	Fe 238.204 Radial†	7.2	-2.7	-24.311	ug/L	-24.311	ppb	19:20:52
2	K 766.490 Radial†	2867.9	135.9	22.804	ug/L	22.804	ppb	19:20:32
2	Mg 279.077 IEC†	5.1	3.2	108.32	ug/L	108.32	ppb	19:20:52
2	Na 589.592 Radial†	-1598.1	-48.2	-14.600	ug/L	-14.600	ppb	19:20:32
2	Sr 421.552†	-15.9	-15.7	-0.0949	ug/L	-0.0949	ppb	19:20:32
2	Sc 361.383	873508.4	873508.4	100.64	%			19:21:49
2	Y 371.029	734954.0	734954.0	100.75	%			19:21:49
2	Ag 328.068†	417.6	140.9	0.6307	ug/L	0.6307	ppb	19:21:49
2	As 188.979†	-28.6	2.9	1.1173	ug/L	1.1173	ppb	19:22:10
2	B 249.677†	-308.8	186.4	3.9749	ug/L	3.9749	ppb	19:22:10
2	Ba 233.527†	-1.9	9.2	0.0679	ug/L	0.0679	ppb	19:22:10
2	Be 313.107†	-4497.7	193.7	0.0695	ug/L	0.0695	ppb	19:21:49
2	Cd 226.502†	-204.1	-3.9	-0.0379	ug/L	-0.0379	ppb	19:22:10
2	Co 228.616†	-79.4	-5.5	-0.1030	ug/L	-0.1030	ppb	19:22:10
2	Cr 267.716†	77.3	-9.2	-0.0964	ug/L	-0.0964	ppb	19:22:10
2	Cu 324.752†	6813.6	12.1	0.0340	ug/L	0.0340	ppb	19:21:49
2	Mn 257.610†	483.2	-40.1	-0.0469	ug/L	-0.0469	ppb	19:22:10
2	Mo 202.031†	15.1	-3.4	-0.2194	ug/L	-0.2194	ppb	19:22:10
2	Ni 231.604†	90.1	3.6	0.0832	ug/L	0.0832	ppb	19:22:10

2	P 214.914†	223.0	-20.5	-11.439	ug/L	-11.439	ppb	19:22:10
2	Pb 220.353†	-76.4	-8.0	-0.8856	ug/L	-0.8856	ppb	19:22:10
2	S 181.975 Axial†	49.2	-0.5	-0.6773	ug/L	-0.6773	ppb	19:22:10
2	Sb 206.836†	36.4	-1.2	-0.3881	ug/L	-0.3881	ppb	19:22:10
2	Se 196.026†	-24.6	2.3	1.2388	ug/L	1.2388	ppb	19:22:10
2	Si 251.611†	536.8	51.7	1.5371	ug/L	1.5371	ppb	19:22:10
2	Sn 189.927†	4.9	-4.0	-0.6394	ug/L	-0.6394	ppb	19:22:10
2	Ti 334.940†	-1270.9	-6.6	-0.0100	ug/L	-0.0100	ppb	19:21:49
2	Tl 190.801†	-27.3	7.5	2.1065	ug/L	2.1065	ppb	19:22:10
2	U 409.014†	-2621.5	-20.7	-0.5913	ug/L	-0.5913	ppb	19:21:49
2	V 292.402†	-1354.9	16.5	0.1116	ug/L	0.1116	ppb	19:21:49
2	Zn 213.857†	782.0	23.1	0.1971	ug/L	0.1971	ppb	19:22:10
2	SiO2†	558.4	30.4	1.9348	ug/L	1.9348	ppb	19:22:45
3	Sc Radial	5515.1	5515.1	98.9	%			19:20:57
3	Y RADIAL	5993.0	5993.0	99.24	%			19:20:57
3	Al 396.153Radial†	-0.8	34.5	23.774	ug/L	23.774	ppb	19:20:57
3	Ca 317.933Radial†	17.8	1.1	1.5625	ug/L	1.5625	ppb	19:21:18
3	Fe 238.204 Radial†	7.3	-2.5	-22.581	ug/L	-22.581	ppb	19:21:18
3	K 766.490 Radial†	2988.0	281.4	47.223	ug/L	47.223	ppb	19:20:57
3	Mg 279.077 IEC†	0.1	-1.8	-60.464	ug/L	-60.464	ppb	19:21:18
3	Na 589.592 Radial†	-1634.9	-98.7	-29.926	ug/L	-29.926	ppb	19:20:57
3	Sr 421.552†	4.3	4.6	0.0278	ug/L	0.0278	ppb	19:20:57
3	Sc 361.383	862292.5	862292.5	99.352	%			19:22:15
3	Y 371.029	725511.3	725511.3	99.459	%			19:22:15
3	Ag 328.068†	312.2	40.2	0.1797	ug/L	0.1797	ppb	19:22:15
3	As 188.979†	-28.0	3.1	1.1981	ug/L	1.1981	ppb	19:22:35
3	B 249.677†	-308.0	183.2	3.9058	ug/L	3.9058	ppb	19:22:35
3	Ba 233.527†	0.6	11.7	0.0865	ug/L	0.0865	ppb	19:22:35
3	Be 313.107†	-4544.9	88.1	0.0315	ug/L	0.0315	ppb	19:22:15
3	Cd 226.502†	-197.5	0.1	0.0035	ug/L	0.0035	ppb	19:22:35
3	Co 228.616†	-64.7	8.4	0.1586	ug/L	0.1586	ppb	19:22:35
3	Cr 267.716†	78.0	-7.5	-0.0774	ug/L	-0.0774	ppb	19:22:35
3	Cu 324.752†	6768.6	54.9	0.1583	ug/L	0.1583	ppb	19:22:15
3	Mn 257.610†	487.9	-29.1	-0.0320	ug/L	-0.0320	ppb	19:22:35
3	Mo 202.031†	19.6	1.3	0.0837	ug/L	0.0837	ppb	19:22:35
3	Ni 231.604†	90.1	4.7	0.1080	ug/L	0.1080	ppb	19:22:35
3	P 214.914†	215.6	-25.1	-13.992	ug/L	-13.992	ppb	19:22:35
3	Pb 220.353†	-64.4	3.1	0.3565	ug/L	0.3565	ppb	19:22:35
3	S 181.975 Axial†	61.3	12.3	16.195	ug/L	16.195	ppb	19:22:35
3	Sb 206.836†	33.6	-3.5	-1.1123	ug/L	-1.1123	ppb	19:22:35
3	Se 196.026†	-27.5	-0.8	-0.5418	ug/L	-0.5418	ppb	19:22:35
3	Si 251.611†	528.4	50.1	1.4754	ug/L	1.4754	ppb	19:22:35
3	Sn 189.927†	9.5	0.7	0.1112	ug/L	0.1112	ppb	19:22:35
3	Ti 334.940†	-1290.4	-42.6	-0.0639	ug/L	-0.0639	ppb	19:22:15
3	Tl 190.801†	-47.5	-13.2	-3.7272	ug/L	-3.7272	ppb	19:22:35
3	U 409.014†	-2814.7	-249.1	-7.1582	ug/L	-7.1582	ppb	19:22:15
3	V 292.402†	-1386.4	-32.7	-0.2283	ug/L	-0.2283	ppb	19:22:15
3	Zn 213.857†	800.9	52.3	0.4531	ug/L	0.4531	ppb	19:22:35
3	SiO2†	533.6	12.6	0.7640	ug/L	0.7640	ppb	19:22:50

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863448.4	99.485	%	1.0986				1.10%
Sc Radial	5563.3	99.8	%	0.88				0.89%
Y 371.029	726440.1	99.586	%	1.1090				1.11%
Y RADIAL	6045.0	100.1	%	0.82				0.82%
Ag 328.068†	89.0	0.3987	ug/L	0.22575	0.3987	ppb	0.22575	56.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.1	18.665	ug/L	5.1377	18.665	ppb	5.1377	27.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.0	1.1382	ug/L	0.05269	1.1382	ppb	0.05269	4.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	182.0	3.8810	ug/L	0.10852	3.8810	ppb	0.10852	2.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.4	0.0843	ug/L	0.01554	0.0843	ppb	0.01554	18.42%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	137.2	0.0491	ug/L	0.01918	0.0491	ppb	0.01918	39.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.2	3.2157	ug/L	2.95072	3.2157	ppb	2.95072	91.76%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 1.5      0.0182 ug/L       0.06475      0.0182 ppb        0.06475 355.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.7      0.0519 ug/L       0.13729      0.0519 ppb        0.13729 264.47%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -11.4     -0.1187 ug/L       0.05596     -0.1187 ppb        0.05596  47.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                36.0      0.1035 ug/L       0.06343      0.1035 ppb        0.06343  61.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -2.5     -22.677 ug/L        1.5890     -22.677 ppb         1.5890   7.01%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         180.2      30.246 ug/L       14.7400      30.246 ppb        14.7400  48.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3      8.8080 ug/L      88.36297      8.8080 ppb       88.36297 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -21.3     -0.0250 ug/L       0.02621     -0.0250 ppb        0.02621 105.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.3      0.0783 ug/L       0.29511      0.0783 ppb        0.29511 376.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -63.7     -19.303 ug/L        9.2198     -19.303 ppb         9.2198  47.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.3      0.1226 ug/L       0.04845      0.1226 ppb        0.04845  39.50%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -17.9     -9.9744 ug/L       4.91671     -9.9744 ppb        4.91671  49.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -4.6     -0.5097 ug/L       0.75231     -0.5097 ppb        0.75231 147.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.4      4.5300 ug/L      10.12144      4.5300 ppb       10.12144 223.43%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.7     -0.2075 ug/L       1.00740     -0.2075 ppb        1.00740 485.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.3      1.2343 ug/L       1.77380      1.2343 ppb        1.77380 143.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                53.8      1.5914 ug/L       0.15060      1.5914 ppb        0.15060   9.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -1.9     -0.2987 ug/L       0.38007     -0.2987 ppb        0.38007 127.22%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -21.7     -0.1307 ug/L       0.17914     -0.1307 ppb        0.17914 137.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -46.3     -0.0712 ug/L       0.06512     -0.0712 ppb        0.06512  91.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -4.8     -1.3605 ug/L       3.06853     -1.3605 ppb        3.06853 225.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -130.9     -3.7616 ug/L       3.28930     -3.7616 ppb        3.28930  87.44%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -1.1     -0.0095 ug/L       0.18981     -0.0095 ppb        0.18981 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                46.3      0.3991 ug/L       0.18111      0.3991 ppb        0.18111  45.39%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      36.4      2.3022 ug/L       1.75106      2.3022 ppb        1.75106  76.06%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 53
Sample ID: 1201985642|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 12/11/2009 19:25:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985642|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5544.5	5544.5	99.4	%			19:26:53
1	Y RADIAL	6016.5	6016.5	99.62	%			19:26:53
1	Al 396.153Radial†	-3.9	31.4	21.673	ug/L	21.673	ppb	19:26:53
1	Ca 317.933Radial†	2012.8	2007.2	2929.6	ug/L	2929.6	ppb	19:27:13
1	Fe 238.204 Radial†	14.9	5.1	45.559	ug/L	45.559	ppb	19:27:13
1	K 766.490 Radial†	6408.5	3705.1	620.03	ug/L	620.03	ppb	19:26:53
1	Mg 279.077 IEC†	16.6	14.8	498.70	ug/L	498.70	ppb	19:27:13
1	Na 589.592 Radial†	7600.8	9197.8	2787.5	ug/L	2787.5	ppb	19:26:53
1	Sr 421.552†	1401.1	1409.2	8.4724	ug/L	8.4724	ppb	19:26:53
1	Sc 361.383	864872.0	864872.0	99.649	%			19:28:10
1	Y 371.029	722951.3	722951.3	99.108	%			19:28:10
1	Ag 328.068†	271.6	-1.5	-0.0266	ug/L	-0.0266	ppb	19:28:10
1	As 188.979†	-26.7	4.5	1.7520	ug/L	1.7520	ppb	19:28:30
1	B 249.677†	112.5	606.1	12.912	ug/L	12.912	ppb	19:28:30
1	Ba 233.527†	309.4	321.5	2.4053	ug/L	2.4053	ppb	19:28:30
1	Be 313.107†	-4530.7	116.0	0.0418	ug/L	0.0418	ppb	19:28:10
1	Cd 226.502†	-205.7	-7.4	-0.0809	ug/L	-0.0809	ppb	19:28:30
1	Co 228.616†	-84.9	-11.7	-0.2220	ug/L	-0.2220	ppb	19:28:30
1	Cr 267.716†	124.4	38.8	0.4100	ug/L	0.4100	ppb	19:28:30
1	Cu 324.752†	8080.6	1351.2	3.9271	ug/L	3.9271	ppb	19:28:10
1	Mn 257.610†	2769.3	2258.9	2.3893	ug/L	2.3893	ppb	19:28:30
1	Mo 202.031†	10.5	-7.9	-0.4973	ug/L	-0.4973	ppb	19:28:30
1	Ni 231.604†	142.0	56.5	1.2994	ug/L	1.2994	ppb	19:28:30
1	P 214.914†	361.6	120.8	66.715	ug/L	66.715	ppb	19:28:30
1	Pb 220.353†	-70.0	-2.2	-0.2520	ug/L	-0.2520	ppb	19:28:30
1	S 181.975 Axial†	1444.2	1399.9	1849.5	ug/L	1849.5	ppb	19:28:30
1	Sb 206.836†	36.0	-1.3	-0.5170	ug/L	-0.5170	ppb	19:28:30
1	Se 196.026†	-24.7	2.0	1.2462	ug/L	1.2462	ppb	19:28:30
1	Si 251.611†	22184.4	21780.7	648.54	ug/L	648.54	ppb	19:28:10
1	Sn 189.927†	-25.3	-34.2	-5.1977	ug/L	-5.1977	ppb	19:28:30
1	Ti 334.940†	-1212.0	39.9	0.2193	ug/L	0.2193	ppb	19:28:10
1	Tl 190.801†	-39.2	-4.7	-1.3146	ug/L	-1.3146	ppb	19:28:30
1	U 409.014†	-2855.2	-281.2	-8.0912	ug/L	-8.0912	ppb	19:28:10
1	V 292.402†	-1289.2	68.9	0.4400	ug/L	0.4400	ppb	19:28:30
1	Zn 213.857†	1468.8	720.1	6.1602	ug/L	6.1602	ppb	19:28:30
1	SiO2†	22143.3	21696.8	1384.5	ug/L	1384.5	ppb	19:29:26
2	Sc Radial	5532.9	5532.9	99.2	%			19:27:18
2	Y RADIAL	6069.7	6069.7	100.5	%			19:27:18
2	Al 396.153Radial†	-11.3	23.9	16.441	ug/L	16.441	ppb	19:27:18
2	Ca 317.933Radial†	1995.2	1993.8	2909.9	ug/L	2909.9	ppb	19:27:38
2	Fe 238.204 Radial†	17.3	7.6	67.944	ug/L	67.944	ppb	19:27:38
2	K 766.490 Radial†	6351.4	3661.2	612.64	ug/L	612.64	ppb	19:27:18
2	Mg 279.077 IEC†	16.6	14.8	496.87	ug/L	496.87	ppb	19:27:38
2	Na 589.592 Radial†	7739.2	9353.3	2834.6	ug/L	2834.6	ppb	19:27:18
2	Sr 421.552†	1342.0	1352.7	8.1312	ug/L	8.1312	ppb	19:27:18
2	Sc 361.383	865885.7	865885.7	99.766	%			19:28:35
2	Y 371.029	724378.2	724378.2	99.304	%			19:28:35
2	Ag 328.068†	371.9	98.8	0.4285	ug/L	0.4285	ppb	19:28:35
2	As 188.979†	-21.5	9.8	3.7708	ug/L	3.7708	ppb	19:28:55
2	B 249.677†	84.6	578.0	12.309	ug/L	12.309	ppb	19:28:55
2	Ba 233.527†	327.7	339.5	2.5399	ug/L	2.5399	ppb	19:28:55
2	Be 313.107†	-4544.6	107.3	0.0384	ug/L	0.0384	ppb	19:28:35
2	Cd 226.502†	-195.1	3.3	0.0285	ug/L	0.0285	ppb	19:28:55
2	Co 228.616†	-80.8	-7.5	-0.1391	ug/L	-0.1391	ppb	19:28:55
2	Cr 267.716†	114.2	28.4	0.2999	ug/L	0.2999	ppb	19:28:55
2	Cu 324.752†	7989.6	1250.5	3.6358	ug/L	3.6358	ppb	19:28:35
2	Mn 257.610†	2751.9	2238.2	2.3697	ug/L	2.3697	ppb	19:28:55
2	Mo 202.031†	30.9	12.6	0.8054	ug/L	0.8054	ppb	19:28:55
2	Ni 231.604†	131.3	45.7	1.0503	ug/L	1.0503	ppb	19:28:55

2	P 214.914†	360.3	119.1	65.781	ug/L	65.781	ppb	19:28:55
2	Pb 220.353†	-80.7	-12.9	-1.4464	ug/L	-1.4464	ppb	19:28:55
2	S 181.975 Axial†	1445.2	1399.2	1848.6	ug/L	1848.6	ppb	19:28:55
2	Sb 206.836†	35.4	-1.9	-0.6843	ug/L	-0.6843	ppb	19:28:55
2	Se 196.026†	-25.7	1.0	0.8044	ug/L	0.8044	ppb	19:28:55
2	Si 251.611†	22155.5	21725.8	646.88	ug/L	646.88	ppb	19:28:35
2	Sn 189.927†	-26.4	-35.3	-5.3725	ug/L	-5.3725	ppb	19:28:55
2	Ti 334.940†	-1287.6	-34.4	0.0985	ug/L	0.0985	ppb	19:28:35
2	Tl 190.801†	-37.4	-2.9	-0.8018	ug/L	-0.8018	ppb	19:28:55
2	U 409.014†	-2659.8	-82.1	-2.3689	ug/L	-2.3689	ppb	19:28:35
2	V 292.402†	-1337.3	22.3	0.1559	ug/L	0.1559	ppb	19:28:55
2	Zn 213.857†	1506.2	755.9	6.4678	ug/L	6.4678	ppb	19:28:55
2	SiO2†	22017.7	21544.9	1374.7	ug/L	1374.7	ppb	19:29:31
3	Sc Radial	5559.1	5559.1	99.7	%			19:27:43
3	Y RADIAL	5976.7	5976.7	98.97	%			19:27:43
3	Al 396.153Radial†	20.5	55.9	38.467	ug/L	38.467	ppb	19:27:43
3	Ca 317.933Radial†	1992.7	1981.8	2892.4	ug/L	2892.4	ppb	19:28:03
3	Fe 238.204 Radial†	12.6	2.7	24.386	ug/L	24.386	ppb	19:28:03
3	K 766.490 Radial†	6332.6	3612.0	604.40	ug/L	604.40	ppb	19:27:43
3	Mg 279.077 IEC†	19.1	17.3	580.47	ug/L	580.47	ppb	19:28:03
3	Na 589.592 Radial†	7660.0	9237.0	2799.4	ug/L	2799.4	ppb	19:27:43
3	Sr 421.552†	1337.0	1341.2	8.0626	ug/L	8.0626	ppb	19:27:43
3	Sc 361.383	860177.5	860177.5	99.108	%			19:29:01
3	Y 371.029	720061.1	720061.1	98.712	%			19:29:01
3	Ag 328.068†	356.8	86.0	0.3630	ug/L	0.3630	ppb	19:29:01
3	As 188.979†	-30.8	0.3	0.0965	ug/L	0.0965	ppb	19:29:21
3	B 249.677†	116.7	611.0	13.018	ug/L	13.018	ppb	19:29:21
3	Ba 233.527†	328.2	342.2	2.5589	ug/L	2.5589	ppb	19:29:21
3	Be 313.107†	-4452.0	170.6	0.0612	ug/L	0.0612	ppb	19:29:01
3	Cd 226.502†	-197.5	-0.4	-0.0054	ug/L	-0.0054	ppb	19:29:21
3	Co 228.616†	-71.1	1.7	0.0343	ug/L	0.0343	ppb	19:29:21
3	Cr 267.716†	104.8	19.7	0.2096	ug/L	0.2096	ppb	19:29:21
3	Cu 324.752†	8116.0	1431.2	4.1582	ug/L	4.1582	ppb	19:29:01
3	Mn 257.610†	2752.1	2256.7	2.3833	ug/L	2.3833	ppb	19:29:21
3	Mo 202.031†	23.1	4.9	0.3106	ug/L	0.3106	ppb	19:29:21
3	Ni 231.604†	131.4	46.7	1.0723	ug/L	1.0723	ppb	19:29:21
3	P 214.914†	360.2	121.4	67.027	ug/L	67.027	ppb	19:29:21
3	Pb 220.353†	-79.1	-11.8	-1.3215	ug/L	-1.3215	ppb	19:29:21
3	S 181.975 Axial†	1422.8	1386.2	1831.4	ug/L	1831.4	ppb	19:29:21
3	Sb 206.836†	49.1	12.1	3.7428	ug/L	3.7428	ppb	19:29:21
3	Se 196.026†	-23.6	3.0	1.7825	ug/L	1.7825	ppb	19:29:21
3	Si 251.611†	22011.4	21727.7	646.95	ug/L	646.95	ppb	19:29:01
3	Sn 189.927†	-20.7	-29.8	-4.4873	ug/L	-4.4873	ppb	19:29:21
3	Ti 334.940†	-1273.0	-28.2	0.1100	ug/L	0.1100	ppb	19:29:01
3	Tl 190.801†	-28.2	6.1	1.7420	ug/L	1.7420	ppb	19:29:21
3	U 409.014†	-2847.7	-289.4	-8.3225	ug/L	-8.3225	ppb	19:29:01
3	V 292.402†	-1288.5	62.7	0.4146	ug/L	0.4146	ppb	19:29:21
3	Zn 213.857†	1476.2	735.7	6.2943	ug/L	6.2943	ppb	19:29:21
3	SiO2†	22097.6	21771.9	1389.2	ug/L	1389.2	ppb	19:29:36

Mean Data: 1201985642|928613|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863645.1	99.508	%	0.3509				0.35%
Sc Radial	5545.5	99.5	%	0.24				0.24%
Y 371.029	722463.6	99.041	%	0.3015				0.30%
Y RADIAL	6021.0	99.70	%	0.772				0.77%
Ag 328.068†	61.1	0.2550	ug/L	0.24600	0.2550	ppb	0.24600	96.48%
Al 396.153Radial†	37.1	25.527	ug/L	11.5076	25.527	ppb	11.5076	45.08%
As 188.979†	4.9	1.8731	ug/L	1.84012	1.8731	ppb	1.84012	98.24%
B 249.677†	598.4	12.746	ug/L	0.3821	12.746	ppb	0.3821	3.00%
Ba 233.527†	334.4	2.5014	ug/L	0.08373	2.5014	ppb	0.08373	3.35%
Be 313.107†	131.3	0.0471	ug/L	0.01227	0.0471	ppb	0.01227	26.03%
Ca 317.933Radial†	1994.3	2910.6	ug/L	18.59	2910.6	ppb	18.59	0.64%
Cd 226.502†	-1.5	-0.0193	ug/L	0.05598	-0.0193	ppb	0.05598	290.75%
Co 228.616†	-5.8	-0.1089	ug/L	0.13081	-0.1089	ppb	0.13081	120.08%
Cr 267.716†	29.0	0.3065	ug/L	0.10035	0.3065	ppb	0.10035	32.74%
Cu 324.752†	1344.3	3.9070	ug/L	0.26179	3.9070	ppb	0.26179	6.70%
Fe 238.204 Radial†	5.1	45.963	ug/L	21.7816	45.963	ppb	21.7816	47.39%
K 766.490 Radial†	3659.4	612.36	ug/L	7.817	612.36	ppb	7.817	1.28%

Mg 279.077 IEC†	15.6	525.34	ug/L	47.745	525.34	ppb	47.745	9.09%
Mn 257.610†	2251.3	2.3808	ug/L	0.01006	2.3808	ppb	0.01006	0.42%
Mo 202.031†	3.2	0.2062	ug/L	0.65763	0.2062	ppb	0.65763	318.88%
Na 589.592 Radial†	9262.7	2807.2	ug/L	24.52	2807.2	ppb	24.52	0.87%
Ni 231.604†	49.6	1.1407	ug/L	0.13792	1.1407	ppb	0.13792	12.09%
P 214.914†	120.4	66.507	ug/L	0.6487	66.507	ppb	0.6487	0.98%
Pb 220.353†	-9.0	-1.0066	ug/L	0.65653	-1.0066	ppb	0.65653	65.22%
S 181.975 Axial†	1395.1	1843.2	ug/L	10.19	1843.2	ppb	10.19	0.55%
Sb 206.836†	3.0	0.8472	ug/L	2.50908	0.8472	ppb	2.50908	296.17%
Se 196.026†	2.0	1.2777	ug/L	0.48981	1.2777	ppb	0.48981	38.34%
Si 251.611†	21744.7	647.46	ug/L	0.938	647.46	ppb	0.938	0.14%
Sn 189.927†	-33.1	-5.0192	ug/L	0.46882	-5.0192	ppb	0.46882	9.34%
Sr 421.552†	1367.7	8.2221	ug/L	0.21948	8.2221	ppb	0.21948	2.67%
Ti 334.940†	-7.5	0.1426	ug/L	0.06667	0.1426	ppb	0.06667	46.76%
Tl 190.801†	-0.5	-0.1248	ug/L	1.63689	-0.1248	ppb	1.63689	>999.9%
U 409.014†	-217.5	-6.2609	ug/L	3.37256	-6.2609	ppb	3.37256	53.87%
V 292.402†	51.3	0.3368	ug/L	0.15722	0.3368	ppb	0.15722	46.67%
Zn 213.857†	737.2	6.3074	ug/L	0.15423	6.3074	ppb	0.15423	2.45%
SiO2†	21671.2	1382.8	ug/L	7.39	1382.8	ppb	7.39	0.53%

Sequence No.: 54
Sample ID: 1201985643|928613|2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 12/11/2009 19:31:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985643|928613|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5552.9	5552.9	99.6	%			19:34:01
1	Y RADIAL	6360.7	6360.7	105.3	%			19:34:01
1	Al 396.153Radial†	49378.3	49616.7	34154	ug/L	34154	ppb	19:33:40
1	Ca 317.933Radial†	12684.8	12720.1	18565	ug/L	18565	ppb	19:33:40
1	Fe 238.204 Radial†	10061.6	10093.1	90436	ug/L	90436	ppb	19:33:40
1	K 766.490 Radial†	72108.6	69665.7	11670	ug/L	11670	ppb	19:33:40
1	Mg 279.077 IEC†	452.9	452.8	15159	ug/L	15159	ppb	19:34:01
1	Na 589.592 Radial†	11057.8	12657.5	3836.0	ug/L	3836.0	ppb	19:33:40
1	Sr 421.552†	134140.7	134692.7	812.20	ug/L	812.20	ppb	19:33:40
1	Sc 361.383	880247.7	880247.7	101.42	%			19:35:00
1	Y 371.029	775101.3	775101.3	106.26	%			19:35:00
1	Ag 328.068†	141518.5	139261.8	661.57	ug/L	661.57	ppb	19:35:00
1	As 188.979†	3267.6	3253.2	1284.5	ug/L	1284.5	ppb	19:35:20
1	B 249.677†	32291.6	32332.4	676.00	ug/L	676.00	ppb	19:35:00
1	Ba 233.527†	318971.9	314514.4	2355.1	ug/L	2355.1	ppb	19:35:00
1	Be 313.107†	1245276.5	1232493.4	446.11	ug/L	446.11	ppb	19:35:00
1	Cd 226.502†	59131.2	58501.8	598.01	ug/L	598.01	ppb	19:35:00
1	Co 228.616†	21768.6	21537.1	403.03	ug/L	403.03	ppb	19:35:20
1	Cr 267.716†	36160.4	35567.8	375.30	ug/L	375.30	ppb	19:35:00
1	Cu 324.752†	182208.1	172897.6	506.81	ug/L	506.81	ppb	19:35:00
1	Mn 257.610†	1726872.3	1702159.5	1812.7	ug/L	1812.7	ppb	19:35:00
1	Mo 202.031†	6625.0	6513.8	420.93	ug/L	420.93	ppb	19:35:20
1	Ni 231.604†	22096.8	21701.3	498.41	ug/L	498.41	ppb	19:35:20
1	P 214.914†	6863.4	6525.2	3508.9	ug/L	3508.9	ppb	19:35:20
1	Pb 220.353†	7434.0	7397.8	829.00	ug/L	829.00	ppb	19:35:20
1	S 181.975 Axial†	1390.8	1321.9	1739.8	ug/L	1739.8	ppb	19:35:20
1	Sb 206.836†	1674.0	1613.2	515.95	ug/L	515.95	ppb	19:35:20
1	Se 196.026†	1099.2	1110.6	909.10	ug/L	909.10	ppb	19:35:20
1	Si 251.611†	406270.4	400097.0	11904	ug/L	11904	ppb	19:35:00
1	Sn 189.927†	3374.5	3318.4	536.97	ug/L	536.97	ppb	19:35:20
1	Ti 334.940†	1159793.1	1144801.2	1807.9	ug/L	1807.9	ppb	19:35:00
1	Tl 190.801†	3635.8	3619.5	1041.4	ug/L	1041.4	ppb	19:35:20
1	U 409.014†	-7839.6	-5145.7	-160.04	ug/L	-160.04	ppb	19:35:00
1	V 292.402†	113512.2	113284.6	743.85	ug/L	743.85	ppb	19:35:00
1	Zn 213.857†	116954.8	114562.4	972.53	ug/L	972.53	ppb	19:35:00
1	SiO2†	403469.5	397292.6	25330	ug/L	25330	ppb	19:36:20
2	Sc Radial	5588.7	5588.7	100	%			19:34:26
2	Y RADIAL	6384.3	6384.3	105.7	%			19:34:26
2	Al 396.153Radial†	49444.4	49365.7	33981	ug/L	33981	ppb	19:34:06
2	Ca 317.933Radial†	12711.9	12665.7	18485	ug/L	18485	ppb	19:34:06
2	Fe 238.204 Radial†	10103.6	10070.5	90234	ug/L	90234	ppb	19:34:06
2	K 766.490 Radial†	72269.0	69362.7	11620	ug/L	11620	ppb	19:34:06
2	Mg 279.077 IEC†	456.5	453.6	15183	ug/L	15183	ppb	19:34:26
2	Na 589.592 Radial†	11029.6	12558.3	3805.9	ug/L	3805.9	ppb	19:34:06
2	Sr 421.552†	134193.8	133884.5	807.32	ug/L	807.32	ppb	19:34:06
2	Sc 361.383	889418.3	889418.3	102.48	%			19:35:27
2	Y 371.029	783896.0	783896.0	107.46	%			19:35:27
2	Ag 328.068†	142959.5	139229.3	661.35	ug/L	661.35	ppb	19:35:27
2	As 188.979†	3262.9	3215.3	1269.9	ug/L	1269.9	ppb	19:35:47
2	B 249.677†	32711.2	32413.6	677.77	ug/L	677.77	ppb	19:35:27
2	Ba 233.527†	321750.8	313983.3	2351.1	ug/L	2351.1	ppb	19:35:27
2	Be 313.107†	1259170.4	1233391.5	446.43	ug/L	446.43	ppb	19:35:27
2	Cd 226.502†	59560.1	58319.1	596.13	ug/L	596.13	ppb	19:35:27
2	Co 228.616†	21740.9	21288.7	398.34	ug/L	398.34	ppb	19:35:47
2	Cr 267.716†	36456.6	35489.2	374.48	ug/L	374.48	ppb	19:35:27
2	Cu 324.752†	184298.1	173084.7	507.34	ug/L	507.34	ppb	19:35:27
2	Mn 257.610†	1741465.3	1698843.7	1809.2	ug/L	1809.2	ppb	19:35:27
2	Mo 202.031†	6620.5	6442.0	416.35	ug/L	416.35	ppb	19:35:47
2	Ni 231.604†	22072.8	21453.2	492.71	ug/L	492.71	ppb	19:35:47

2	P 214.914†	6878.0	6469.7	3477.7	ug/L	3477.7	ppb	19:35:47
2	Pb 220.353†	7423.2	7311.7	819.33	ug/L	819.33	ppb	19:35:47
2	S 181.975 Axial†	1386.0	1303.1	1714.9	ug/L	1714.9	ppb	19:35:47
2	Sb 206.836†	1677.7	1599.8	511.54	ug/L	511.54	ppb	19:35:47
2	Se 196.026†	1093.2	1093.5	898.83	ug/L	898.83	ppb	19:35:47
2	Si 251.611†	410015.9	399621.6	11890	ug/L	11890	ppb	19:35:27
2	Sn 189.927†	3369.6	3279.3	530.67	ug/L	530.67	ppb	19:35:47
2	Ti 334.940†	1170531.6	1143489.2	1805.8	ug/L	1805.8	ppb	19:35:27
2	Tl 190.801†	3655.5	3601.7	1036.4	ug/L	1036.4	ppb	19:35:47
2	U 409.014†	-7958.9	-5182.5	-161.07	ug/L	-161.07	ppb	19:35:27
2	V 292.402†	114549.2	113142.6	742.87	ug/L	742.87	ppb	19:35:27
2	Zn 213.857†	117980.3	114374.2	970.97	ug/L	970.97	ppb	19:35:27
2	SiO2†	406444.6	396093.9	25254	ug/L	25254	ppb	19:36:26
3	Sc Radial	5541.0	5541.0	99.4	%			19:34:51
3	Y RADIAL	6345.1	6345.1	105.1	%			19:34:51
3	Al 396.153Radial†	49760.1	50107.5	34492	ug/L	34492	ppb	19:34:31
3	Ca 317.933Radial†	12720.5	12783.4	18657	ug/L	18657	ppb	19:34:31
3	Fe 238.204 Radial†	10139.1	10192.8	91330	ug/L	91330	ppb	19:34:31
3	K 766.490 Radial†	72502.4	70217.6	11763	ug/L	11763	ppb	19:34:31
3	Mg 279.077 IEC†	454.2	455.2	15237	ug/L	15237	ppb	19:34:51
3	Na 589.592 Radial†	11158.5	12782.6	3873.9	ug/L	3873.9	ppb	19:34:31
3	Sr 421.552†	134745.9	135591.4	817.61	ug/L	817.61	ppb	19:34:31
3	Sc 361.383	888361.6	888361.6	102.36	%			19:35:54
3	Y 371.029	782482.0	782482.0	107.27	%			19:35:54
3	Ag 328.068†	142913.2	139350.0	662.25	ug/L	662.25	ppb	19:35:54
3	As 188.979†	3269.6	3225.7	1274.1	ug/L	1274.1	ppb	19:36:15
3	B 249.677†	32683.8	32424.8	677.87	ug/L	677.87	ppb	19:35:54
3	Ba 233.527†	321555.5	314166.0	2352.5	ug/L	2352.5	ppb	19:35:54
3	Be 313.107†	1256809.9	1232547.0	446.13	ug/L	446.13	ppb	19:35:54
3	Cd 226.502†	59363.4	58196.1	594.75	ug/L	594.75	ppb	19:35:54
3	Co 228.616†	21692.4	21266.6	397.90	ug/L	397.90	ppb	19:36:15
3	Cr 267.716†	36424.3	35500.0	374.61	ug/L	374.61	ppb	19:35:54
3	Cu 324.752†	184784.8	173774.2	509.40	ug/L	509.40	ppb	19:35:54
3	Mn 257.610†	1740913.7	1700326.3	1810.9	ug/L	1810.9	ppb	19:35:54
3	Mo 202.031†	6629.9	6458.9	417.50	ug/L	417.50	ppb	19:36:15
3	Ni 231.604†	22035.9	21442.8	492.47	ug/L	492.47	ppb	19:36:15
3	P 214.914†	6878.2	6477.8	3481.3	ug/L	3481.3	ppb	19:36:15
3	Pb 220.353†	7450.2	7346.7	823.27	ug/L	823.27	ppb	19:36:15
3	S 181.975 Axial†	1388.2	1306.8	1719.8	ug/L	1719.8	ppb	19:36:15
3	Sb 206.836†	1673.7	1597.8	510.97	ug/L	510.97	ppb	19:36:15
3	Se 196.026†	1096.4	1098.0	904.79	ug/L	904.79	ppb	19:36:15
3	Si 251.611†	410632.8	400700.3	11922	ug/L	11922	ppb	19:35:54
3	Sn 189.927†	3380.8	3294.1	533.09	ug/L	533.09	ppb	19:36:15
3	Ti 334.940†	1170832.1	1145141.5	1808.4	ug/L	1808.4	ppb	19:35:54
3	Tl 190.801†	3645.7	3596.3	1034.9	ug/L	1034.9	ppb	19:36:15
3	U 409.014†	-7891.2	-5125.6	-159.57	ug/L	-159.57	ppb	19:35:54
3	V 292.402†	114584.8	113310.3	743.83	ug/L	743.83	ppb	19:35:54
3	Zn 213.857†	117746.9	114283.1	970.07	ug/L	970.07	ppb	19:35:54
3	SiO2†	409669.5	399716.5	25485	ug/L	25485	ppb	19:36:31

Mean Data: 1201985643|928613|2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	886009.2	102.08	%	0.578				0.57%
Sc Radial	5560.9	99.7	%	0.44				0.45%
Y 371.029	780493.1	107.00	%	0.647				0.61%
Y RADIAL	6363.4	105.4	%	0.33				0.31%
Ag 328.068†	139280.4	661.72	ug/L	0.468	661.72	ppb	0.468	0.07%
Al 396.153Radial†	49696.6	34209	ug/L	259.9	34209	ppb	259.9	0.76%
As 188.979†	3231.4	1276.2	ug/L	7.55	1276.2	ppb	7.55	0.59%
B 249.677†	32390.3	677.22	ug/L	1.050	677.22	ppb	1.050	0.16%
Ba 233.527†	314221.2	2352.9	ug/L	2.02	2352.9	ppb	2.02	0.09%
Be 313.107†	1232810.6	446.22	ug/L	0.178	446.22	ppb	0.178	0.04%
Ca 317.933Radial†	12723.1	18569	ug/L	86.0	18569	ppb	86.0	0.46%
Cd 226.502†	58339.0	596.30	ug/L	1.638	596.30	ppb	1.638	0.27%
Co 228.616†	21364.1	399.75	ug/L	2.842	399.75	ppb	2.842	0.71%
Cr 267.716†	35519.0	374.80	ug/L	0.444	374.80	ppb	0.444	0.12%
Cu 324.752†	173252.2	507.85	ug/L	1.369	507.85	ppb	1.369	0.27%
Fe 238.204 Radial†	10118.8	90667	ug/L	583.2	90667	ppb	583.2	0.64%
K 766.490 Radial†	69748.7	11684	ug/L	72.7	11684	ppb	72.7	0.62%

Mg 279.077 IEC†	453.9	15193	ug/L	39.5	15193	ppb	39.5	0.26%
Mn 257.610†	1700443.2	1810.9	ug/L	1.77	1810.9	ppb	1.77	0.10%
Mo 202.031†	6471.6	418.26	ug/L	2.383	418.26	ppb	2.383	0.57%
Na 589.592 Radial†	12666.1	3838.6	ug/L	34.06	3838.6	ppb	34.06	0.89%
Ni 231.604†	21532.4	494.53	ug/L	3.361	494.53	ppb	3.361	0.68%
P 214.914†	6490.9	3489.3	ug/L	17.03	3489.3	ppb	17.03	0.49%
Pb 220.353†	7352.1	823.87	ug/L	4.861	823.87	ppb	4.861	0.59%
S 181.975 Axial†	1310.6	1724.8	ug/L	13.21	1724.8	ppb	13.21	0.77%
Sb 206.836†	1603.6	512.82	ug/L	2.727	512.82	ppb	2.727	0.53%
Se 196.026†	1100.7	904.24	ug/L	5.161	904.24	ppb	5.161	0.57%
Si 251.611†	400139.6	11905	ug/L	16.1	11905	ppb	16.1	0.13%
Sn 189.927†	3297.3	533.57	ug/L	3.176	533.57	ppb	3.176	0.60%
Sr 421.552†	134722.9	812.38	ug/L	5.149	812.38	ppb	5.149	0.63%
Ti 334.940†	1144477.3	1807.4	ug/L	1.38	1807.4	ppb	1.38	0.08%
Tl 190.801†	3605.8	1037.6	ug/L	3.40	1037.6	ppb	3.40	0.33%
U 409.014†	-5151.3	-160.23	ug/L	0.767	-160.23	ppb	0.767	0.48%
V 292.402†	113245.9	743.51	ug/L	0.561	743.51	ppb	0.561	0.08%
Zn 213.857†	114406.6	971.19	ug/L	1.243	971.19	ppb	1.243	0.13%
SiO2†	397701.0	25357	ug/L	117.7	25357	ppb	117.7	0.46%

Sequence No.: 59
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 20:06:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5804.7	5804.7	104	%			20:08:37
1	Y RADIAL	6274.5	6274.5	103.9	%			20:08:37
1	Al 396.153Radial†	7143.8	6897.3	4728.7	ug/L	4728.7	ppb	20:08:37
1	Ca 317.933Radial†	3462.2	3308.7	4829.1	ug/L	4829.1	ppb	20:08:57
1	Fe 238.204 Radial†	580.8	548.0	4925.3	ug/L	4925.3	ppb	20:08:57
1	K 766.490 Radial†	32762.9	28731.1	4811.7	ug/L	4811.7	ppb	20:08:37
1	Mg 279.077 IEC†	158.8	150.6	5071.5	ug/L	5071.5	ppb	20:08:57
1	Na 589.592 Radial†	31535.1	31845.5	9651.1	ug/L	9651.1	ppb	20:08:37
1	Sr 421.552†	83189.5	79908.6	481.91	ug/L	481.91	ppb	20:08:37
1	Sc 361.383	886278.6	886278.6	102.12	%			20:09:55
1	Y 371.029	734828.2	734828.2	100.74	%			20:09:55
1	Ag 328.068†	113599.4	110971.8	505.03	ug/L	505.03	ppb	20:10:00
1	As 188.979†	1301.7	1306.0	508.56	ug/L	508.56	ppb	20:10:20
1	B 249.677†	23431.5	23439.2	497.59	ug/L	497.59	ppb	20:10:00
1	Ba 233.527†	68320.5	66916.1	501.30	ug/L	501.30	ppb	20:10:00
1	Be 313.107†	1437156.3	1412042.5	508.00	ug/L	508.00	ppb	20:09:55
1	Cd 226.502†	49460.6	48634.7	504.23	ug/L	504.23	ppb	20:10:00
1	Co 228.616†	27062.3	26575.0	501.41	ug/L	501.41	ppb	20:10:00
1	Cr 267.716†	48904.9	47805.6	501.22	ug/L	501.22	ppb	20:10:00
1	Cu 324.752†	180389.7	169894.4	493.73	ug/L	493.73	ppb	20:10:00
1	Mn 257.610†	486070.5	475479.4	504.32	ug/L	504.32	ppb	20:09:55
1	Mo 202.031†	8123.8	7937.1	505.44	ug/L	505.44	ppb	20:10:20
1	Ni 231.604†	22388.6	21838.8	501.51	ug/L	501.51	ppb	20:10:00
1	P 214.914†	4830.6	4488.5	2431.7	ug/L	2431.7	ppb	20:10:20
1	Pb 220.353†	4534.5	4508.5	506.21	ug/L	506.21	ppb	20:10:20
1	S 181.975 Axial†	838.3	771.6	1018.4	ug/L	1018.4	ppb	20:10:20
1	Sb 206.836†	1671.8	1599.8	512.55	ug/L	512.55	ppb	20:10:20
1	Se 196.026†	899.1	907.2	527.79	ug/L	527.79	ppb	20:10:20
1	Si 251.611†	88419.7	86106.0	2552.6	ug/L	2552.6	ppb	20:10:00
1	Sn 189.927†	3237.8	3161.9	509.21	ug/L	509.21	ppb	20:10:20
1	Ti 334.940†	316432.7	311132.8	490.96	ug/L	490.96	ppb	20:10:00
1	Tl 190.801†	1792.3	1789.7	507.41	ug/L	507.41	ppb	20:10:20
1	U 409.014†	14589.8	16871.5	483.48	ug/L	483.48	ppb	20:10:00
1	V 292.402†	74932.6	74742.8	504.10	ug/L	504.10	ppb	20:10:00
1	Zn 213.857†	60671.2	58660.3	500.16	ug/L	500.16	ppb	20:10:00
1	SiO2†	88040.4	85691.9	5443.4	ug/L	5443.4	ppb	20:11:27
2	Sc Radial	5286.6	5286.6	94.8	%			20:09:02
2	Y RADIAL	5715.4	5715.4	94.64	%			20:09:02
2	Al 396.153Radial†	7042.4	7462.9	5117.9	ug/L	5117.9	ppb	20:09:02
2	Ca 317.933Radial†	3500.7	3675.3	5364.1	ug/L	5364.1	ppb	20:09:22
2	Fe 238.204 Radial†	586.8	609.0	5471.8	ug/L	5471.8	ppb	20:09:22
2	K 766.490 Radial†	31823.4	30824.5	5162.6	ug/L	5162.6	ppb	20:09:02
2	Mg 279.077 IEC†	162.5	169.5	5706.0	ug/L	5706.0	ppb	20:09:22
2	Na 589.592 Radial†	30747.1	33983.0	10299	ug/L	10299	ppb	20:09:02
2	Sr 421.552†	81628.8	86093.7	519.20	ug/L	519.20	ppb	20:09:02
2	Sc 361.383	875854.5	875854.5	100.91	%			20:10:26
2	Y 371.029	724872.0	724872.0	99.371	%			20:10:26
2	Ag 328.068†	114633.7	113320.6	515.85	ug/L	515.85	ppb	20:10:31
2	As 188.979†	1315.7	1335.1	519.92	ug/L	519.92	ppb	20:10:51
2	B 249.677†	23760.8	24038.6	510.26	ug/L	510.26	ppb	20:10:31
2	Ba 233.527†	68789.8	68177.4	510.76	ug/L	510.76	ppb	20:10:31
2	Be 313.107†	1423381.3	1415142.6	509.13	ug/L	509.13	ppb	20:10:26
2	Cd 226.502†	49936.4	49682.7	515.05	ug/L	515.05	ppb	20:10:31
2	Co 228.616†	27293.3	27119.4	511.66	ug/L	511.66	ppb	20:10:31
2	Cr 267.716†	49313.9	48780.8	511.45	ug/L	511.45	ppb	20:10:31
2	Cu 324.752†	181676.5	173271.9	503.56	ug/L	503.56	ppb	20:10:31
2	Mn 257.610†	482948.8	478051.3	507.09	ug/L	507.09	ppb	20:10:26
2	Mo 202.031†	8113.0	8021.0	510.82	ug/L	510.82	ppb	20:10:51
2	Ni 231.604†	22681.2	22389.7	514.16	ug/L	514.16	ppb	20:10:31

2	P 214.914†	4837.0	4551.1	2464.8 ug/L	2464.8 ppb	20:10:51
2	Pb 220.353†	4538.7	4565.5	512.64 ug/L	512.64 ppb	20:10:51
2	S 181.975 Axial†	847.7	790.6	1043.5 ug/L	1043.5 ppb	20:10:51
2	Sb 206.836†	1680.2	1627.6	521.31 ug/L	521.31 ppb	20:10:51
2	Se 196.026†	888.0	906.7	529.27 ug/L	529.27 ppb	20:10:51
2	Si 251.611†	89139.8	87850.1	2604.3 ug/L	2604.3 ppb	20:10:31
2	Sn 189.927†	3238.8	3200.6	515.50 ug/L	515.50 ppb	20:10:51
2	Ti 334.940†	319117.8	317481.6	501.00 ug/L	501.00 ppb	20:10:31
2	Tl 190.801†	1786.4	1804.8	511.69 ug/L	511.69 ppb	20:10:51
2	U 409.014†	14765.0	17215.1	493.27 ug/L	493.27 ppb	20:10:31
2	V 292.402†	75455.6	76134.4	513.37 ug/L	513.37 ppb	20:10:31
2	Zn 213.857†	61101.1	59793.4	509.74 ug/L	509.74 ppb	20:10:31
2	SiO2†	87353.8	86037.6	5465.0 ug/L	5465.0 ppb	20:11:32
3	Sc Radial	5387.9	5387.9	96.6 %		20:09:28
3	Y RADIAL	5837.9	5837.9	96.67 %		20:09:28
3	Al 396.153Radial†	7113.9	7397.3	5072.8 ug/L	5072.8 ppb	20:09:28
3	Ca 317.933Radial†	3437.8	3540.8	5167.7 ug/L	5167.7 ppb	20:09:48
3	Fe 238.204 Radial†	578.7	589.0	5292.7 ug/L	5292.7 ppb	20:09:48
3	K 766.490 Radial†	32314.8	30702.1	5142.2 ug/L	5142.2 ppb	20:09:28
3	Mg 279.077 IEC†	158.5	162.2	5459.0 ug/L	5459.0 ppb	20:09:48
3	Na 589.592 Radial†	30928.5	33561.2	10171 ug/L	10171 ppb	20:09:28
3	Sr 421.552†	82433.0	85307.8	514.47 ug/L	514.47 ppb	20:09:28
3	Sc 361.383	870851.0	870851.0	100.34 %		20:10:57
3	Y 371.029	720926.2	720926.2	98.831 %		20:10:57
3	Ag 328.068†	113356.4	112700.3	512.98 ug/L	512.98 ppb	20:11:02
3	As 188.979†	1290.1	1317.0	512.91 ug/L	512.91 ppb	20:11:22
3	B 249.677†	23451.7	23865.8	506.61 ug/L	506.61 ppb	20:11:02
3	Ba 233.527†	68009.7	67791.6	507.87 ug/L	507.87 ppb	20:11:02
3	Be 313.107†	1411646.7	1411551.5	507.83 ug/L	507.83 ppb	20:10:57
3	Cd 226.502†	49171.0	49204.2	510.10 ug/L	510.10 ppb	20:11:02
3	Co 228.616†	26902.3	26885.1	507.25 ug/L	507.25 ppb	20:11:02
3	Cr 267.716†	48683.7	48433.6	507.81 ug/L	507.81 ppb	20:11:02
3	Cu 324.752†	179880.0	172515.9	501.36 ug/L	501.36 ppb	20:11:02
3	Mn 257.610†	478370.0	476237.5	505.16 ug/L	505.16 ppb	20:10:57
3	Mo 202.031†	8058.1	8012.5	510.27 ug/L	510.27 ppb	20:11:22
3	Ni 231.604†	22335.4	22174.2	509.21 ug/L	509.21 ppb	20:11:02
3	P 214.914†	4783.1	4524.9	2450.6 ug/L	2450.6 ppb	20:11:22
3	Pb 220.353†	4482.8	4535.7	509.30 ug/L	509.30 ppb	20:11:22
3	S 181.975 Axial†	832.0	779.8	1029.3 ug/L	1029.3 ppb	20:11:22
3	Sb 206.836†	1660.1	1617.1	518.01 ug/L	518.01 ppb	20:11:22
3	Se 196.026†	886.0	909.8	530.44 ug/L	530.44 ppb	20:11:22
3	Si 251.611†	87986.1	87207.8	2585.2 ug/L	2585.2 ppb	20:11:02
3	Sn 189.927†	3194.3	3174.7	511.30 ug/L	511.30 ppb	20:11:22
3	Ti 334.940†	315458.0	315651.0	498.10 ug/L	498.10 ppb	20:11:02
3	Tl 190.801†	1770.7	1799.3	510.14 ug/L	510.14 ppb	20:11:22
3	U 409.014†	14730.9	17265.3	494.74 ug/L	494.74 ppb	20:11:02
3	V 292.402†	74648.0	75759.2	510.90 ug/L	510.90 ppb	20:11:02
3	Zn 213.857†	60443.7	59486.1	507.16 ug/L	507.16 ppb	20:11:02
3	SiO2†	87890.1	87069.5	5530.9 ug/L	5530.9 ppb	20:11:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	877661.4	101.12	%	0.907				0.90%
Sc Radial	5493.1	98.5	%	4.92				5.00%
Y 371.029	726875.4	99.646	%	0.9821				0.99%
Y RADIAL	5942.6	98.40	%	4.867				4.95%
Ag 328.068†	112330.9	511.29	ug/L	5.605	511.29	ppb	5.605	1.10%
QC value within limits for Ag 328.068 Recovery = 102.26%								
Al 396.153Radial†	7252.5	4973.1	ug/L	212.91	4973.1	ppb	212.91	4.28%
QC value within limits for Al 396.153Radial Recovery = 99.46%								
As 188.979†	1319.4	513.79	ug/L	5.732	513.79	ppb	5.732	1.12%
QC value within limits for As 188.979 Recovery = 102.76%								
B 249.677†	23781.2	504.82	ug/L	6.526	504.82	ppb	6.526	1.29%
QC value within limits for B 249.677 Recovery = 100.96%								
Ba 233.527†	67628.4	506.64	ug/L	4.850	506.64	ppb	4.850	0.96%
QC value within limits for Ba 233.527 Recovery = 101.33%								
Be 313.107†	1412912.2	508.32	ug/L	0.706	508.32	ppb	0.706	0.14%
QC value within limits for Be 313.107 Recovery = 101.66%								
Ca 317.933Radial†	3508.3	5120.3	ug/L	270.64	5120.3	ppb	270.64	5.29%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.41%
Cd 226.502†            49173.9      509.79 ug/L         5.418      509.79 ppb          5.418   1.06%
   QC value within limits for Cd 226.502  Recovery = 101.96%
Co 228.616†            26859.8      506.77 ug/L         5.142      506.77 ppb          5.142   1.01%
   QC value within limits for Co 228.616  Recovery = 101.35%
Cr 267.716†            48340.0      506.83 ug/L         5.186      506.83 ppb          5.186   1.02%
   QC value within limits for Cr 267.716  Recovery = 101.37%
Cu 324.752†           171894.1      499.55 ug/L         5.163      499.55 ppb          5.163   1.03%
   QC value within limits for Cu 324.752  Recovery = 99.91%
Fe 238.204 Radial†       582.0      5229.9 ug/L        278.57      5229.9 ppb         278.57   5.33%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.60%
K 766.490 Radial†      30085.9      5038.8 ug/L        196.96      5038.8 ppb         196.96   3.91%
   QC value within limits for K 766.490 Radial  Recovery = 100.78%
Mg 279.077 IEC†          160.8      5412.2 ug/L        319.84      5412.2 ppb         319.84   5.91%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.24%
Mn 257.610†           476589.4      505.52 ug/L         1.420      505.52 ppb          1.420   0.28%
   QC value within limits for Mn 257.610  Recovery = 101.10%
Mo 202.031†             7990.2      508.84 ug/L         2.960      508.84 ppb          2.960   0.58%
   QC value within limits for Mo 202.031  Recovery = 101.77%
Na 589.592 Radial†     33129.9       10040 ug/L         343.1       10040 ppb          343.1   3.42%
   QC value within limits for Na 589.592 Radial  Recovery = 100.40%
Ni 231.604†            22134.2      508.29 ug/L         6.375      508.29 ppb          6.375   1.25%
   QC value within limits for Ni 231.604  Recovery = 101.66%
P 214.914†              4521.5      2449.0 ug/L        16.64      2449.0 ppb         16.64   0.68%
   QC value within limits for P 214.914  Recovery = 97.96%
Pb 220.353†             4536.6      509.38 ug/L         3.216      509.38 ppb          3.216   0.63%
   QC value within limits for Pb 220.353  Recovery = 101.88%
S 181.975 Axial†         780.7      1030.4 ug/L        12.57      1030.4 ppb         12.57   1.22%
   QC value within limits for S 181.975 Axial  Recovery = 103.04%
Sb 206.836†             1614.8      517.29 ug/L         4.423      517.29 ppb          4.423   0.86%
   QC value within limits for Sb 206.836  Recovery = 103.46%
Se 196.026†              907.9      529.17 ug/L         1.329      529.17 ppb          1.329   0.25%
   QC value within limits for Se 196.026  Recovery = 105.83%
Si 251.611†            87054.6      2580.7 ug/L        26.15      2580.7 ppb         26.15   1.01%
   QC value within limits for Si 251.611  Recovery = 103.23%
Sn 189.927†             3179.1      512.00 ug/L         3.201      512.00 ppb          3.201   0.63%
   QC value within limits for Sn 189.927  Recovery = 102.40%
Sr 421.552†            83770.0      505.19 ug/L        20.305      505.19 ppb         20.305   4.02%
   QC value within limits for Sr 421.552  Recovery = 101.04%
Ti 334.940†           314755.1      496.69 ug/L         5.168      496.69 ppb          5.168   1.04%
   QC value within limits for Ti 334.940  Recovery = 99.34%
Tl 190.801†             1797.9      509.74 ug/L         2.166      509.74 ppb          2.166   0.42%
   QC value within limits for Tl 190.801  Recovery = 101.95%
U 409.014†             17117.3      490.50 ug/L         6.122      490.50 ppb          6.122   1.25%
   QC value within limits for U 409.014  Recovery = 98.10%
V 292.402†             75545.5      509.46 ug/L         4.800      509.46 ppb          4.800   0.94%
   QC value within limits for V 292.402  Recovery = 101.89%
Zn 213.857†            59313.3      505.69 ug/L         4.957      505.69 ppb          4.957   0.98%
   QC value within limits for Zn 213.857  Recovery = 101.14%
SiO2†                  86266.3      5479.8 ug/L        45.58      5479.8 ppb         45.58   0.83%
   QC value within limits for SiO2  Recovery = 102.47%
All analyte(s) passed QC.
```

Sequence No.: 60
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 20:13:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5511.1	5511.1	98.8	%			20:15:39
1	Y RADIAL	5982.6	5982.6	99.06	%			20:15:39
1	Al 396.153Radial†	-19.5	15.6	10.738	ug/L	10.738	ppb	20:15:39
1	Ca 317.933Radial†	21.2	4.5	6.5979	ug/L	6.5979	ppb	20:15:59
1	Fe 238.204 Radial†	10.5	0.7	6.1864	ug/L	6.1864	ppb	20:15:59
1	K 766.490 Radial†	2806.6	100.0	16.792	ug/L	16.792	ppb	20:15:39
1	Mg 279.077 IEC†	1.6	-0.3	-8.4614	ug/L	-8.4614	ppb	20:15:59
1	Na 589.592 Radial†	-1628.9	-93.9	-28.452	ug/L	-28.452	ppb	20:15:39
1	Sr 421.552†	-15.7	-15.7	-0.0948	ug/L	-0.0948	ppb	20:15:39
1	Sc 361.383	858813.1	858813.1	98.951	%			20:16:56
1	Y 371.029	723042.4	723042.4	99.121	%			20:16:56
1	Ag 328.068†	479.8	210.9	0.9612	ug/L	0.9612	ppb	20:16:56
1	As 188.979†	-32.5	-1.5	-0.5987	ug/L	-0.5987	ppb	20:17:16
1	B 249.677†	-304.5	185.5	3.9529	ug/L	3.9529	ppb	20:17:16
1	Ba 233.527†	-18.2	-7.3	-0.0560	ug/L	-0.0560	ppb	20:17:16
1	Be 313.107†	-4395.7	220.3	0.0790	ug/L	0.0790	ppb	20:16:56
1	Cd 226.502†	-201.4	-4.6	-0.0481	ug/L	-0.0481	ppb	20:17:16
1	Co 228.616†	-77.6	-5.0	-0.0929	ug/L	-0.0929	ppb	20:17:16
1	Cr 267.716†	85.5	0.4	0.0064	ug/L	0.0064	ppb	20:17:16
1	Cu 324.752†	6775.0	89.0	0.2587	ug/L	0.2587	ppb	20:16:56
1	Mn 257.610†	525.0	10.4	0.0118	ug/L	0.0118	ppb	20:17:16
1	Mo 202.031†	24.1	5.9	0.3785	ug/L	0.3785	ppb	20:17:16
1	Ni 231.604†	94.9	10.0	0.2300	ug/L	0.2300	ppb	20:17:16
1	P 214.914†	220.5	-19.2	-10.744	ug/L	-10.744	ppb	20:17:16
1	Pb 220.353†	-58.4	9.0	1.0071	ug/L	1.0071	ppb	20:17:16
1	S 181.975 Axial†	50.7	1.8	2.3833	ug/L	2.3833	ppb	20:17:16
1	Sb 206.836†	42.9	6.0	1.8878	ug/L	1.8878	ppb	20:17:16
1	Se 196.026†	-22.2	4.4	2.5025	ug/L	2.5025	ppb	20:17:16
1	Si 251.611†	558.3	82.5	2.4447	ug/L	2.4447	ppb	20:17:16
1	Sn 189.927†	9.2	0.5	0.0822	ug/L	0.0822	ppb	20:17:16
1	Ti 334.940†	-1280.0	-37.4	-0.0544	ug/L	-0.0544	ppb	20:16:56
1	Tl 190.801†	-28.6	5.6	1.5898	ug/L	1.5898	ppb	20:17:16
1	U 409.014†	-2884.3	-330.9	-9.5145	ug/L	-9.5145	ppb	20:16:56
1	V 292.402†	-1445.9	-98.5	-0.6693	ug/L	-0.6693	ppb	20:16:56
1	Zn 213.857†	807.5	62.2	0.5327	ug/L	0.5327	ppb	20:17:16
1	SiO2†	578.8	60.5	3.8324	ug/L	3.8324	ppb	20:18:12
2	Sc Radial	5528.3	5528.3	99.1	%			20:16:04
2	Y RADIAL	6051.3	6051.3	100.2	%			20:16:04
2	Al 396.153Radial†	-14.5	20.7	14.240	ug/L	14.240	ppb	20:16:04
2	Ca 317.933Radial†	19.3	2.5	3.7032	ug/L	3.7032	ppb	20:16:24
2	Fe 238.204 Radial†	12.0	2.2	20.027	ug/L	20.027	ppb	20:16:24
2	K 766.490 Radial†	2793.5	77.9	13.083	ug/L	13.083	ppb	20:16:04
2	Mg 279.077 IEC†	1.4	-0.5	-16.594	ug/L	-16.594	ppb	20:16:24
2	Na 589.592 Radial†	-1572.0	-31.3	-9.4940	ug/L	-9.4940	ppb	20:16:04
2	Sr 421.552†	-12.0	-11.9	-0.0715	ug/L	-0.0715	ppb	20:16:04
2	Sc 361.383	867544.9	867544.9	99.957	%			20:17:21
2	Y 371.029	730116.0	730116.0	100.09	%			20:17:21
2	Ag 328.068†	372.8	98.9	0.4530	ug/L	0.4530	ppb	20:17:21
2	As 188.979†	-25.3	6.0	2.3144	ug/L	2.3144	ppb	20:17:41
2	B 249.677†	-312.6	180.5	3.8435	ug/L	3.8435	ppb	20:17:41
2	Ba 233.527†	-4.5	6.6	0.0484	ug/L	0.0484	ppb	20:17:41
2	Be 313.107†	-4475.6	185.1	0.0663	ug/L	0.0663	ppb	20:17:21
2	Cd 226.502†	-181.9	17.0	0.1741	ug/L	0.1741	ppb	20:17:41
2	Co 228.616†	-70.2	3.2	0.0618	ug/L	0.0618	ppb	20:17:41
2	Cr 267.716†	89.1	3.1	0.0324	ug/L	0.0324	ppb	20:17:41
2	Cu 324.752†	6737.2	-17.8	-0.0506	ug/L	-0.0506	ppb	20:17:21
2	Mn 257.610†	521.9	2.0	0.0044	ug/L	0.0044	ppb	20:17:41
2	Mo 202.031†	28.1	9.6	0.6153	ug/L	0.6153	ppb	20:17:41
2	Ni 231.604†	103.9	18.0	0.4125	ug/L	0.4125	ppb	20:17:41

2	P 214.914†	234.7	-7.3	-4.0769 ug/L	-4.0769 ppb	20:17:41
2	Pb 220.353†	-78.8	-10.9	-1.2151 ug/L	-1.2151 ppb	20:17:41
2	S 181.975 Axial†	53.4	4.0	5.3264 ug/L	5.3264 ppb	20:17:41
2	Sb 206.836†	24.3	-13.0	-4.1253 ug/L	-4.1253 ppb	20:17:41
2	Se 196.026†	-32.7	-5.9	-3.2636 ug/L	-3.2636 ppb	20:17:41
2	Si 251.611†	549.5	68.0	2.0149 ug/L	2.0149 ppb	20:17:41
2	Sn 189.927†	1.6	-7.3	-1.1695 ug/L	-1.1695 ppb	20:17:41
2	Ti 334.940†	-1321.4	-65.7	-0.1027 ug/L	-0.1027 ppb	20:17:21
2	Tl 190.801†	-20.5	14.1	3.9622 ug/L	3.9622 ppb	20:17:41
2	U 409.014†	-2653.1	-70.2	-2.0206 ug/L	-2.0206 ppb	20:17:21
2	V 292.402†	-1460.0	-97.9	-0.6500 ug/L	-0.6500 ppb	20:17:21
2	Zn 213.857†	801.2	47.7	0.4067 ug/L	0.4067 ppb	20:17:41
2	SiO2†	566.2	42.0	2.6569 ug/L	2.6569 ppb	20:18:17
3	Sc Radial	5483.1	5483.1	98.3 %		20:16:29
3	Y RADIAL	5983.2	5983.2	99.07 %		20:16:29
3	Al 396.153Radial†	-11.5	23.6	16.270 ug/L	16.270 ppb	20:16:29
3	Ca 317.933Radial†	24.3	7.8	11.338 ug/L	11.338 ppb	20:16:49
3	Fe 238.204 Radial†	8.5	-1.3	-11.353 ug/L	-11.353 ppb	20:16:49
3	K 766.490 Radial†	2865.5	174.4	29.272 ug/L	29.272 ppb	20:16:29
3	Mg 279.077 IEC†	1.4	-0.5	-16.017 ug/L	-16.017 ppb	20:16:49
3	Na 589.592 Radial†	-1629.6	-103.0	-31.219 ug/L	-31.219 ppb	20:16:29
3	Sr 421.552†	-32.0	-32.3	-0.1951 ug/L	-0.1951 ppb	20:16:29
3	Sc 361.383	870966.7	870966.7	100.35 %		20:17:47
3	Y 371.029	732621.8	732621.8	100.43 %		20:17:47
3	Ag 328.068†	379.1	103.8	0.4689 ug/L	0.4689 ppb	20:17:47
3	As 188.979†	-25.8	5.6	2.1389 ug/L	2.1389 ppb	20:18:07
3	B 249.677†	-317.2	177.1	3.7749 ug/L	3.7749 ppb	20:18:07
3	Ba 233.527†	-15.1	-3.9	-0.0303 ug/L	-0.0303 ppb	20:18:07
3	Be 313.107†	-4532.6	145.9	0.0524 ug/L	0.0524 ppb	20:17:47
3	Cd 226.502†	-209.0	-9.3	-0.0952 ug/L	-0.0952 ppb	20:18:07
3	Co 228.616†	-68.8	4.9	0.0926 ug/L	0.0926 ppb	20:18:07
3	Cr 267.716†	64.6	-21.6	-0.2253 ug/L	-0.2253 ppb	20:18:07
3	Cu 324.752†	6727.2	-54.2	-0.1580 ug/L	-0.1580 ppb	20:17:47
3	Mn 257.610†	527.4	5.4	0.0048 ug/L	0.0048 ppb	20:18:07
3	Mo 202.031†	19.3	0.8	0.0497 ug/L	0.0497 ppb	20:18:07
3	Ni 231.604†	87.2	1.0	0.0220 ug/L	0.0220 ppb	20:18:07
3	P 214.914†	224.3	-18.5	-10.283 ug/L	-10.283 ppb	20:18:07
3	Pb 220.353†	-72.4	-4.1	-0.4594 ug/L	-0.4594 ppb	20:18:07
3	S 181.975 Axial†	45.8	-3.7	-4.9367 ug/L	-4.9367 ppb	20:18:07
3	Sb 206.836†	33.4	-4.1	-1.2795 ug/L	-1.2795 ppb	20:18:07
3	Se 196.026†	-29.3	-2.4	-1.3833 ug/L	-1.3833 ppb	20:18:07
3	Si 251.611†	551.4	67.7	2.0039 ug/L	2.0039 ppb	20:18:07
3	Sn 189.927†	13.4	4.6	0.7333 ug/L	0.7333 ppb	20:18:07
3	Ti 334.940†	-1270.1	-9.4	-0.0121 ug/L	-0.0121 ppb	20:17:47
3	Tl 190.801†	-42.3	-7.6	-2.1405 ug/L	-2.1405 ppb	20:18:07
3	U 409.014†	-2750.3	-156.6	-4.5018 ug/L	-4.5018 ppb	20:17:47
3	V 292.402†	-1391.4	-23.8	-0.1651 ug/L	-0.1651 ppb	20:17:47
3	Zn 213.857†	804.9	48.3	0.4169 ug/L	0.4169 ppb	20:18:07
3	SiO2†	573.7	47.2	2.9846 ug/L	2.9846 ppb	20:18:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	865774.9	99.753	%	0.7221				0.72%
Sc Radial	5507.5	98.8	%	0.41				0.41%
Y 371.029	728593.4	99.882	%	0.6810				0.68%
Y RADIAL	6005.7	99.45	%	0.653				0.66%
Ag 328.068†	137.9	0.6277	ug/L	0.28896	0.6277	ppb	0.28896	46.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	20.0	13.749	ug/L	2.7986	13.749	ppb	2.7986	20.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.3	1.2849	ug/L	1.63359	1.2849	ppb	1.63359	127.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	181.0	3.8571	ug/L	0.08975	3.8571	ppb	0.08975	2.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.6	-0.0126	ug/L	0.05441	-0.0126	ppb	0.05441	431.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	183.8	0.0659	ug/L	0.01331	0.0659	ppb	0.01331	20.21%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.9	7.2129	ug/L	3.85416	7.2129	ppb	3.85416	53.43%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                1.0      0.0102 ug/L       0.14383      0.0102 ppb        0.14383 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.0      0.0205 ug/L       0.09936      0.0205 ppb        0.09936 484.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -6.0     -0.0622 ug/L       0.14187     -0.0622 ppb        0.14187 228.19%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                5.7      0.0167 ug/L       0.21637      0.0167 ppb        0.21637 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.6      4.9535 ug/L      15.72644      4.9535 ppb       15.72644 317.48%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        117.4      19.716 ug/L        8.4812      19.716 ppb         8.4812  43.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.4     -13.691 ug/L        4.5380     -13.691 ppb         4.5380  33.15%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                5.9      0.0070 ug/L       0.00414      0.0070 ppb        0.00414  59.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.5      0.3479 ug/L       0.28403      0.3479 ppb        0.28403  81.65%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -76.1     -23.055 ug/L       11.8253     -23.055 ppb        11.8253  51.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.6      0.2215 ug/L       0.19538      0.2215 ppb        0.19538  88.20%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -15.0     -8.3680 ug/L       3.72337     -8.3680 ppb        3.72337  44.50%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.0     -0.2225 ug/L       1.12984     -0.2225 ppb        1.12984 507.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.7      0.9243 ug/L       5.28482      0.9243 ppb        5.28482 571.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.7     -1.1723 ug/L       3.00797     -1.1723 ppb        3.00797 256.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.3     -0.7148 ug/L       2.94057     -0.7148 ppb        2.94057 411.39%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               72.7      2.1545 ug/L       0.25139      2.1545 ppb        0.25139  11.67%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.7     -0.1180 ug/L       0.96709     -0.1180 ppb        0.96709 819.63%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -20.0     -0.1205 ug/L       0.06565     -0.1205 ppb        0.06565  54.50%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -37.5     -0.0564 ug/L       0.04530     -0.0564 ppb        0.04530  80.29%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                4.0      1.1372 ug/L       3.07642      1.1372 ppb        3.07642 270.54%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -185.9     -5.3456 ug/L       3.81754     -5.3456 ppb        3.81754  71.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -73.4     -0.4948 ug/L       0.28568     -0.4948 ppb        0.28568  57.73%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               52.7      0.4521 ug/L       0.06998      0.4521 ppb        0.06998  15.48%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     49.9      3.1580 ug/L       0.60661      3.1580 ppb        0.60661  19.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 61
Sample ID: 241838002|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 12/11/2009 20:20:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 241838002|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5631.1	5631.1	101	%			20:22:24
1	Y RADIAL	7333.5	7333.5	121.4	%			20:22:24
1	Al 396.153Radial†	74288.8	73593.6	50684	ug/L	50684	ppb	20:22:24
1	Ca 317.933Radial†	12911.9	12768.0	18635	ug/L	18635	ppb	20:22:24
1	Fe 238.204 Radial†	10908.5	10791.4	96681	ug/L	96681	ppb	20:22:24
1	K 766.490 Radial†	48778.2	45559.0	7613.2	ug/L	7613.2	ppb	20:22:24
1	Mg 279.077 IEC†	329.9	324.7	10838	ug/L	10838	ppb	20:22:44
1	Na 589.592 Radial†	13025.6	14451.7	4379.7	ug/L	4379.7	ppb	20:22:24
1	Sr 421.552†	27324.7	27056.2	163.01	ug/L	163.01	ppb	20:22:24
1	Sc 361.383	886811.6	886811.6	102.18	%			20:23:42
1	Y 371.029	883662.8	883662.8	121.14	%			20:23:42
1	Ag 328.068†	-6033.6	-6179.1	3.2490	ug/L	3.2490	ppb	20:23:47
1	As 188.979†	-50.8	-18.4	32.488	ug/L	32.488	ppb	20:24:07
1	B 249.677†	1499.5	1960.7	28.889	ug/L	28.889	ppb	20:23:47
1	Ba 233.527†	101960.0	99798.6	749.57	ug/L	749.57	ppb	20:23:47
1	Be 313.107†	-8455.9	-3613.1	4.4826	ug/L	4.4826	ppb	20:23:47
1	Cd 226.502†	740.4	923.6	-0.0600	ug/L	-0.0600	ppb	20:24:07
1	Co 228.616†	1418.5	1461.8	20.292	ug/L	20.292	ppb	20:24:07
1	Cr 267.716†	5905.7	5693.8	61.631	ug/L	61.631	ppb	20:23:47
1	Cu 324.752†	21386.5	14173.0	46.099	ug/L	46.099	ppb	20:23:47
1	Mn 257.610†	2798541.3	2738391.0	2911.7	ug/L	2911.7	ppb	20:23:42
1	Mo 202.031†	291.2	266.6	23.821	ug/L	23.821	ppb	20:24:07
1	Ni 231.604†	1943.9	1816.5	41.723	ug/L	41.723	ppb	20:24:07
1	P 214.914†	2161.3	1873.2	978.28	ug/L	978.28	ppb	20:24:07
1	Pb 220.353†	595.2	650.5	76.263	ug/L	76.263	ppb	20:24:07
1	S 181.975 Axial†	1815.1	1727.0	2271.8	ug/L	2271.8	ppb	20:24:07
1	Sb 206.836†	63.7	25.0	-1.0240	ug/L	-1.0240	ppb	20:24:07
1	Se 196.026†	-553.1	-514.6	15.247	ug/L	15.247	ppb	20:24:07
1	Si 251.611†	701016.1	685597.4	20417	ug/L	20417	ppb	20:23:42
1	Sn 189.927†	-91.2	-98.1	-12.522	ug/L	-12.522	ppb	20:24:07
1	Ti 334.940†	1902334.1	1863056.2	2941.7	ug/L	2941.7	ppb	20:23:42
1	Tl 190.801†	-199.4	-160.6	-4.7128	ug/L	-4.7128	ppb	20:24:07
1	U 409.014†	-11353.4	-8527.5	-257.45	ug/L	-257.45	ppb	20:23:42
1	V 292.402†	18023.0	19001.7	108.47	ug/L	108.47	ppb	20:23:47
1	Zn 213.857†	39062.9	37476.7	312.46	ug/L	312.46	ppb	20:23:47
1	SiO2†	697169.3	681789.8	43511	ug/L	43511	ppb	20:25:15
2	Sc Radial	5693.0	5693.0	102	%			20:22:49
2	Y RADIAL	7411.6	7411.6	122.7	%			20:22:49
2	Al 396.153Radial†	75050.4	73539.7	50647	ug/L	50647	ppb	20:22:49
2	Ca 317.933Radial†	13023.8	12738.6	18592	ug/L	18592	ppb	20:22:49
2	Fe 238.204 Radial†	10942.2	10706.9	95924	ug/L	95924	ppb	20:22:49
2	K 766.490 Radial†	49314.1	45558.7	7613.1	ug/L	7613.1	ppb	20:22:49
2	Mg 279.077 IEC†	334.7	325.9	10876	ug/L	10876	ppb	20:23:09
2	Na 589.592 Radial†	13192.7	14475.1	4386.8	ug/L	4386.8	ppb	20:22:49
2	Sr 421.552†	27597.5	27029.3	162.85	ug/L	162.85	ppb	20:22:49
2	Sc 361.383	887444.7	887444.7	102.25	%			20:24:13
2	Y 371.029	883401.9	883401.9	121.10	%			20:24:13
2	Ag 328.068†	-5911.9	-6055.9	3.5664	ug/L	3.5664	ppb	20:24:18
2	As 188.979†	-60.2	-27.5	28.849	ug/L	28.849	ppb	20:24:38
2	B 249.677†	1515.4	1975.2	29.299	ug/L	29.299	ppb	20:24:18
2	Ba 233.527†	102450.6	100207.2	752.59	ug/L	752.59	ppb	20:24:18
2	Be 313.107†	-8470.2	-3621.1	4.4825	ug/L	4.4825	ppb	20:24:18
2	Cd 226.502†	736.6	919.3	-0.0292	ug/L	-0.0292	ppb	20:24:38
2	Co 228.616†	1421.7	1463.9	20.339	ug/L	20.339	ppb	20:24:38
2	Cr 267.716†	5952.4	5735.4	62.053	ug/L	62.053	ppb	20:24:18
2	Cu 324.752†	21382.7	14154.3	46.006	ug/L	46.006	ppb	20:24:18
2	Mn 257.610†	2802986.2	2740784.2	2914.1	ug/L	2914.1	ppb	20:24:13
2	Mo 202.031†	276.8	252.3	22.860	ug/L	22.860	ppb	20:24:38
2	Ni 231.604†	1930.6	1802.2	41.394	ug/L	41.394	ppb	20:24:38

2	P 214.914†	2153.5	1864.1	973.80	ug/L	973.80	ppb	20:24:38
2	Pb 220.353†	581.2	636.4	74.741	ug/L	74.741	ppb	20:24:38
2	S 181.975 Axial†	1799.9	1710.9	2250.4	ug/L	2250.4	ppb	20:24:38
2	Sb 206.836†	58.4	19.8	-2.7185	ug/L	-2.7185	ppb	20:24:38
2	Se 196.026†	-553.0	-514.1	13.182	ug/L	13.182	ppb	20:24:38
2	Si 251.611†	702592.0	686649.2	20448	ug/L	20448	ppb	20:24:13
2	Sn 189.927†	-93.2	-99.9	-12.836	ug/L	-12.836	ppb	20:24:38
2	Ti 334.940†	1904580.5	1863925.0	2943.1	ug/L	2943.1	ppb	20:24:13
2	Tl 190.801†	-183.5	-144.9	-0.2615	ug/L	-0.2615	ppb	20:24:38
2	U 409.014†	-11315.3	-8482.3	-256.06	ug/L	-256.06	ppb	20:24:13
2	V 292.402†	18090.5	19055.2	108.93	ug/L	108.93	ppb	20:24:18
2	Zn 213.857†	39191.8	37575.5	313.38	ug/L	313.38	ppb	20:24:18
2	SiO2†	698020.3	682135.3	43533	ug/L	43533	ppb	20:25:21
3	Sc Radial	5593.1	5593.1	100	%			20:23:15
3	Y RADIAL	7287.4	7287.4	120.7	%			20:23:15
3	Al 396.153Radial†	74010.2	73816.6	50838	ug/L	50838	ppb	20:23:15
3	Ca 317.933Radial†	12814.6	12758.1	18620	ug/L	18620	ppb	20:23:15
3	Fe 238.204 Radial†	10776.6	10733.3	96161	ug/L	96161	ppb	20:23:15
3	K 766.490 Radial†	48402.8	45513.6	7605.6	ug/L	7605.6	ppb	20:23:15
3	Mg 279.077 IEC†	329.8	326.9	10911	ug/L	10911	ppb	20:23:35
3	Na 589.592 Radial†	12889.3	14403.6	4365.1	ug/L	4365.1	ppb	20:23:15
3	Sr 421.552†	27139.8	27056.1	163.01	ug/L	163.01	ppb	20:23:15
3	Sc 361.383	877747.1	877747.1	101.13	%			20:24:44
3	Y 371.029	875073.1	875073.1	119.96	%			20:24:44
3	Ag 328.068†	-5887.6	-6095.7	3.4657	ug/L	3.4657	ppb	20:24:49
3	As 188.979†	-57.3	-25.4	29.685	ug/L	29.685	ppb	20:25:09
3	B 249.677†	1439.9	1917.0	28.027	ug/L	28.027	ppb	20:24:49
3	Ba 233.527†	101545.9	100419.7	754.19	ug/L	754.19	ppb	20:24:49
3	Be 313.107†	-8531.7	-3773.6	4.4178	ug/L	4.4178	ppb	20:24:49
3	Cd 226.502†	749.0	939.6	0.1576	ug/L	0.1576	ppb	20:25:09
3	Co 228.616†	1411.8	1469.4	20.452	ug/L	20.452	ppb	20:25:09
3	Cr 267.716†	5908.9	5756.7	62.283	ug/L	62.283	ppb	20:24:49
3	Cu 324.752†	21245.4	14249.6	46.295	ug/L	46.295	ppb	20:24:49
3	Mn 257.610†	2769619.4	2738077.9	2911.3	ug/L	2911.3	ppb	20:24:44
3	Mo 202.031†	282.3	260.7	23.413	ug/L	23.413	ppb	20:25:09
3	Ni 231.604†	1928.1	1820.5	41.816	ug/L	41.816	ppb	20:25:09
3	P 214.914†	2160.4	1894.2	990.42	ug/L	990.42	ppb	20:25:09
3	Pb 220.353†	592.0	653.3	76.659	ug/L	76.659	ppb	20:25:09
3	S 181.975 Axial†	1809.7	1740.0	2288.8	ug/L	2288.8	ppb	20:25:09
3	Sb 206.836†	59.2	21.2	-2.2442	ug/L	-2.2442	ppb	20:25:09
3	Se 196.026†	-562.7	-529.6	5.2319	ug/L	5.2319	ppb	20:25:09
3	Si 251.611†	692930.4	684687.4	20390	ug/L	20390	ppb	20:24:44
3	Sn 189.927†	-92.1	-99.9	-12.818	ug/L	-12.818	ppb	20:25:09
3	Ti 334.940†	1880522.9	1860716.2	2938.0	ug/L	2938.0	ppb	20:24:44
3	Tl 190.801†	-188.2	-151.5	-2.1881	ug/L	-2.1881	ppb	20:25:09
3	U 409.014†	-11317.2	-8606.5	-259.66	ug/L	-259.66	ppb	20:24:44
3	V 292.402†	17950.2	19111.9	109.28	ug/L	109.28	ppb	20:24:49
3	Zn 213.857†	38819.2	37630.6	313.83	ug/L	313.83	ppb	20:24:49
3	SiO2†	697976.2	689634.0	44012	ug/L	44012	ppb	20:25:26

Mean Data: 241838002|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884001.2	101.85	%	0.625				0.61%
Sc Radial	5639.1	101	%	0.9				0.89%
Y 371.029	880712.6	120.74	%	0.670				0.55%
Y RADIAL	7344.2	121.6	%	1.04				0.85%
Ag 328.068†	-6110.2	3.4271	ug/L	0.16219	3.4271	ppb	0.16219	4.73%
Al 396.153Radial†	73650.0	50723	ug/L	101.1	50723	ppb	101.1	0.20%
As 188.979†	-23.8	30.340	ug/L	1.9062	30.340	ppb	1.9062	6.28%
B 249.677†	1951.0	28.739	ug/L	0.6494	28.739	ppb	0.6494	2.26%
Ba 233.527†	100141.8	752.12	ug/L	2.348	752.12	ppb	2.348	0.31%
Be 313.107†	-3669.3	4.4610	ug/L	0.03740	4.4610	ppb	0.03740	0.84%
Ca 317.933Radial†	12754.9	18616	ug/L	21.8	18616	ppb	21.8	0.12%
Cd 226.502†	927.5	0.0228	ug/L	0.11772	0.0228	ppb	0.11772	515.75%
Co 228.616†	1465.0	20.361	ug/L	0.0822	20.361	ppb	0.0822	0.40%
Cr 267.716†	5728.6	61.989	ug/L	0.3304	61.989	ppb	0.3304	0.53%
Cu 324.752†	14192.3	46.133	ug/L	0.1475	46.133	ppb	0.1475	0.32%
Fe 238.204 Radial†	10743.9	96255	ug/L	387.3	96255	ppb	387.3	0.40%
K 766.490 Radial†	45543.8	7610.7	ug/L	4.36	7610.7	ppb	4.36	0.06%

Mg 279.077 IEC†	325.8	10875	ug/L	36.5	10875	ppb	36.5	0.34%
Mn 257.610†	2739084.4	2912.4	ug/L	1.54	2912.4	ppb	1.54	0.05%
Mo 202.031†	259.9	23.365	ug/L	0.4822	23.365	ppb	0.4822	2.06%
Na 589.592 Radial†	14443.4	4377.2	ug/L	11.05	4377.2	ppb	11.05	0.25%
Ni 231.604†	1813.1	41.644	ug/L	0.2215	41.644	ppb	0.2215	0.53%
P 214.914†	1877.1	980.83	ug/L	8.602	980.83	ppb	8.602	0.88%
Pb 220.353†	646.7	75.887	ug/L	1.0125	75.887	ppb	1.0125	1.33%
S 181.975 Axial†	1726.0	2270.4	ug/L	19.24	2270.4	ppb	19.24	0.85%
Sb 206.836†	22.0	-1.9955	ug/L	0.87417	-1.9955	ppb	0.87417	43.81%
Se 196.026†	-519.4	11.220	ug/L	5.2878	11.220	ppb	5.2878	47.13%
Si 251.611†	685644.7	20419	ug/L	29.2	20419	ppb	29.2	0.14%
Sn 189.927†	-99.3	-12.725	ug/L	0.1763	-12.725	ppb	0.1763	1.39%
Sr 421.552†	27047.2	162.96	ug/L	0.093	162.96	ppb	0.093	0.06%
Ti 334.940†	1862565.8	2941.0	ug/L	2.62	2941.0	ppb	2.62	0.09%
Tl 190.801†	-152.4	-2.3875	ug/L	2.23235	-2.3875	ppb	2.23235	93.50%
U 409.014†	-8538.8	-257.72	ug/L	1.815	-257.72	ppb	1.815	0.70%
V 292.402†	19056.3	108.90	ug/L	0.405	108.90	ppb	0.405	0.37%
Zn 213.857†	37560.9	313.22	ug/L	0.699	313.22	ppb	0.699	0.22%
SiO2†	684519.7	43685	ug/L	282.9	43685	ppb	282.9	0.65%

Sequence No.: 62
Sample ID: 1201985644|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 12/11/2009 20:27:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985644|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5772.4	5772.4	104	%			20:29:30
1	Y RADIAL	7484.6	7484.6	123.9	%			20:29:30
1	Al 396.153Radial†	63054.2	60941.8	41971	ug/L	41971	ppb	20:29:30
1	Ca 317.933Radial†	11322.9	10920.3	15938	ug/L	15938	ppb	20:29:30
1	Fe 238.204 Radial†	9720.7	9379.7	84034	ug/L	84034	ppb	20:29:30
1	K 766.490 Radial†	41974.5	37805.2	6314.5	ug/L	6314.5	ppb	20:29:30
1	Mg 279.077 IEC†	288.9	277.1	9248.1	ug/L	9248.1	ppb	20:29:50
1	Na 589.592 Radial†	12055.7	13199.1	4000.1	ug/L	4000.1	ppb	20:29:30
1	Sr 421.552†	21555.2	20821.2	125.43	ug/L	125.43	ppb	20:29:30
1	Sc 361.383	883546.5	883546.5	101.80	%			20:30:48
1	Y 371.029	881492.8	881492.8	120.84	%			20:30:48
1	Ag 328.068†	-5413.8	-5592.0	1.8375	ug/L	1.8375	ppb	20:30:53
1	As 188.979†	-49.0	-16.9	27.900	ug/L	27.900	ppb	20:31:13
1	B 249.677†	1185.7	1657.9	24.124	ug/L	24.124	ppb	20:30:53
1	Ba 233.527†	84003.4	82528.4	620.01	ug/L	620.01	ppb	20:30:53
1	Be 313.107†	-6945.2	-2159.8	4.2485	ug/L	4.2485	ppb	20:30:53
1	Cd 226.502†	647.1	834.6	0.2786	ug/L	0.2786	ppb	20:31:13
1	Co 228.616†	1191.2	1243.6	17.117	ug/L	17.117	ppb	20:31:13
1	Cr 267.716†	6358.8	6160.2	66.251	ug/L	66.251	ppb	20:30:53
1	Cu 324.752†	19335.3	12235.4	39.825	ug/L	39.825	ppb	20:30:53
1	Mn 257.610†	2544477.5	2498943.6	2656.7	ug/L	2656.7	ppb	20:30:48
1	Mo 202.031†	297.5	273.8	23.385	ug/L	23.385	ppb	20:31:13
1	Ni 231.604†	1761.1	1644.0	37.763	ug/L	37.763	ppb	20:31:13
1	P 214.914†	1862.5	1587.5	826.96	ug/L	826.96	ppb	20:31:13
1	Pb 220.353†	546.8	605.1	70.271	ug/L	70.271	ppb	20:31:13
1	S 181.975 Axial†	1716.7	1636.9	2154.4	ug/L	2154.4	ppb	20:31:13
1	Sb 206.836†	58.9	20.5	-1.4878	ug/L	-1.4878	ppb	20:31:13
1	Se 196.026†	-513.3	-477.4	-4.0264	ug/L	-4.0264	ppb	20:31:13
1	Si 251.611†	701194.1	688307.7	20498	ug/L	20498	ppb	20:30:48
1	Sn 189.927†	-79.2	-86.7	-11.141	ug/L	-11.141	ppb	20:31:13
1	Ti 334.940†	1647272.2	1619386.9	2557.0	ug/L	2557.0	ppb	20:30:48
1	Tl 190.801†	-183.9	-146.1	-5.2306	ug/L	-5.2306	ppb	20:31:13
1	U 409.014†	-11124.5	-8343.7	-250.58	ug/L	-250.58	ppb	20:30:48
1	V 292.402†	14941.0	16039.4	91.091	ug/L	91.091	ppb	20:30:53
1	Zn 213.857†	36888.0	35481.6	296.59	ug/L	296.59	ppb	20:30:53
1	SiO2†	694469.4	681659.3	43504	ug/L	43504	ppb	20:32:21
2	Sc Radial	5534.0	5534.0	99.3	%			20:29:55
2	Y RADIAL	7224.6	7224.6	119.6	%			20:29:55
2	Al 396.153Radial†	64808.0	65333.0	44995	ug/L	44995	ppb	20:29:55
2	Ca 317.933Radial†	11617.3	11688.1	17059	ug/L	17059	ppb	20:29:55
2	Fe 238.204 Radial†	9975.2	10040.6	89955	ug/L	89955	ppb	20:29:55
2	K 766.490 Radial†	42931.5	40516.3	6769.7	ug/L	6769.7	ppb	20:29:55
2	Mg 279.077 IEC†	292.2	292.5	9760.3	ug/L	9760.3	ppb	20:30:15
2	Na 589.592 Radial†	12273.0	13919.9	4218.6	ug/L	4218.6	ppb	20:29:55
2	Sr 421.552†	22187.0	22354.9	134.67	ug/L	134.67	ppb	20:29:55
2	Sc 361.383	882108.0	882108.0	101.64	%			20:31:19
2	Y 371.029	879979.1	879979.1	120.63	%			20:31:19
2	Ag 328.068†	-5466.6	-5652.7	3.4341	ug/L	3.4341	ppb	20:31:24
2	As 188.979†	-50.0	-17.9	28.380	ug/L	28.380	ppb	20:31:44
2	B 249.677†	1191.8	1665.8	23.506	ug/L	23.506	ppb	20:31:24
2	Ba 233.527†	84312.9	82967.5	623.51	ug/L	623.51	ppb	20:31:24
2	Be 313.107†	-6984.3	-2209.3	4.2257	ug/L	4.2257	ppb	20:31:24
2	Cd 226.502†	673.6	861.7	-0.0329	ug/L	-0.0329	ppb	20:31:44
2	Co 228.616†	1201.5	1255.6	17.267	ug/L	17.267	ppb	20:31:44
2	Cr 267.716†	6338.9	6150.9	66.260	ug/L	66.260	ppb	20:31:24
2	Cu 324.752†	19365.7	12296.3	40.305	ug/L	40.305	ppb	20:31:24
2	Mn 257.610†	2538962.7	2497593.4	2655.8	ug/L	2655.8	ppb	20:31:19
2	Mo 202.031†	299.9	276.6	23.984	ug/L	23.984	ppb	20:31:44
2	Ni 231.604†	1693.6	1580.4	36.300	ug/L	36.300	ppb	20:31:44

2	P 214.914†	1863.7	1591.7	825.52	ug/L	825.52 ppb	20:31:44
2	Pb 220.353†	532.4	591.8	68.975	ug/L	68.975 ppb	20:31:44
2	S 181.975 Axial†	1718.6	1641.6	2160.0	ug/L	2160.0 ppb	20:31:44
2	Sb 206.836†	67.8	29.4	1.3405	ug/L	1.3405 ppb	20:31:44
2	Se 196.026†	-518.7	-483.6	11.164	ug/L	11.164 ppb	20:31:44
2	Si 251.611†	699464.6	687729.3	20481	ug/L	20481 ppb	20:31:19
2	Sn 189.927†	-82.0	-89.5	-11.397	ug/L	-11.397 ppb	20:31:44
2	Ti 334.940†	1642945.9	1617769.0	2554.5	ug/L	2554.5 ppb	20:31:19
2	Tl 190.801†	-168.3	-131.0	-0.9384	ug/L	-0.9384 ppb	20:31:44
2	U 409.014†	-11184.7	-8420.7	-253.54	ug/L	-253.54 ppb	20:31:19
2	V 292.402†	14958.8	16080.9	90.479	ug/L	90.479 ppb	20:31:24
2	Zn 213.857†	36947.7	35599.4	297.03	ug/L	297.03 ppb	20:31:24
2	SiO2†	694061.3	682370.2	43549	ug/L	43549 ppb	20:32:27
3	Sc Radial	5506.3	5506.3	98.8	%		20:30:20
3	Y RADIAL	7217.5	7217.5	119.5	%		20:30:20
3	Al 396.153Radial†	63724.1	64563.6	44465	ug/L	44465 ppb	20:30:20
3	Ca 317.933Radial†	11422.9	11550.2	16857	ug/L	16857 ppb	20:30:20
3	Fe 238.204 Radial†	9795.3	9909.0	88775	ug/L	88775 ppb	20:30:20
3	K 766.490 Radial†	42276.6	40070.6	6694.9	ug/L	6694.9 ppb	20:30:20
3	Mg 279.077 IEC†	294.1	295.9	9875.6	ug/L	9875.6 ppb	20:30:40
3	Na 589.592 Radial†	12033.5	13739.5	4163.9	ug/L	4163.9 ppb	20:30:20
3	Sr 421.552†	21723.5	21997.8	132.52	ug/L	132.52 ppb	20:30:20
3	Sc 361.383	882879.0	882879.0	101.72	%		20:31:50
3	Y 371.029	881512.6	881512.6	120.85	%		20:31:50
3	Ag 328.068†	-5357.7	-5540.9	3.5692	ug/L	3.5692 ppb	20:31:55
3	As 188.979†	-40.6	-8.6	31.749	ug/L	31.749 ppb	20:32:15
3	B 249.677†	1178.9	1652.1	23.372	ug/L	23.372 ppb	20:31:55
3	Ba 233.527†	84599.2	83176.5	625.03	ug/L	625.03 ppb	20:31:55
3	Be 313.107†	-7087.6	-2304.9	4.1818	ug/L	4.1818 ppb	20:31:55
3	Cd 226.502†	673.4	860.9	0.0776	ug/L	0.0776 ppb	20:32:15
3	Co 228.616†	1186.8	1240.1	17.001	ug/L	17.001 ppb	20:32:15
3	Cr 267.716†	6385.8	6191.5	66.666	ug/L	66.666 ppb	20:31:55
3	Cu 324.752†	19531.9	12443.0	40.671	ug/L	40.671 ppb	20:31:55
3	Mn 257.610†	2532872.2	2489424.6	2647.0	ug/L	2647.0 ppb	20:31:50
3	Mo 202.031†	288.3	265.0	23.161	ug/L	23.161 ppb	20:32:15
3	Ni 231.604†	1733.1	1617.8	37.160	ug/L	37.160 ppb	20:32:15
3	P 214.914†	1844.4	1571.1	814.71	ug/L	814.71 ppb	20:32:15
3	Pb 220.353†	505.7	565.2	65.970	ug/L	65.970 ppb	20:32:15
3	S 181.975 Axial†	1712.4	1634.0	2150.0	ug/L	2150.0 ppb	20:32:15
3	Sb 206.836†	47.0	8.9	-5.1389	ug/L	-5.1389 ppb	20:32:15
3	Se 196.026†	-528.0	-492.2	2.5942	ug/L	2.5942 ppb	20:32:15
3	Si 251.611†	698101.3	685788.0	20423	ug/L	20423 ppb	20:31:50
3	Sn 189.927†	-78.3	-85.8	-10.841	ug/L	-10.841 ppb	20:32:15
3	Ti 334.940†	1641233.4	1614673.7	2549.6	ug/L	2549.6 ppb	20:31:50
3	Tl 190.801†	-172.8	-135.3	-2.2530	ug/L	-2.2530 ppb	20:32:15
3	U 409.014†	-11162.5	-8389.3	-252.49	ug/L	-252.49 ppb	20:31:50
3	V 292.402†	15072.7	16179.9	91.317	ug/L	91.317 ppb	20:31:55
3	Zn 213.857†	37115.1	35732.2	298.27	ug/L	298.27 ppb	20:31:55
3	SiO2†	699620.4	687238.7	43860	ug/L	43860 ppb	20:32:33

Mean Data: 1201985644|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882844.5	101.72	%	0.083				0.08%
Sc Radial	5604.2	101	%	2.6				2.61%
Y 371.029	880994.8	120.77	%	0.121				0.10%
Y RADIAL	7308.9	121.0	%	2.52				2.08%
Ag 328.068†	-5595.2	2.9469	ug/L	0.96320	2.9469	ppb	0.96320	32.68%
Al 396.153Radial†	63612.8	43810	ug/L	1615.0	43810	ppb	1615.0	3.69%
As 188.979†	-14.5	29.343	ug/L	2.0976	29.343	ppb	2.0976	7.15%
B 249.677†	1658.6	23.667	ug/L	0.4014	23.667	ppb	0.4014	1.70%
Ba 233.527†	82890.8	622.85	ug/L	2.575	622.85	ppb	2.575	0.41%
Be 313.107†	-2224.6	4.2187	ug/L	0.03392	4.2187	ppb	0.03392	0.80%
Ca 317.933Radial†	11386.2	16618	ug/L	597.4	16618	ppb	597.4	3.59%
Cd 226.502†	852.4	0.1078	ug/L	0.15796	0.1078	ppb	0.15796	146.58%
Co 228.616†	1246.4	17.128	ug/L	0.1335	17.128	ppb	0.1335	0.78%
Cr 267.716†	6167.6	66.392	ug/L	0.2368	66.392	ppb	0.2368	0.36%
Cu 324.752†	12324.9	40.267	ug/L	0.4238	40.267	ppb	0.4238	1.05%
Fe 238.204 Radial†	9776.5	87588	ug/L	3134.1	87588	ppb	3134.1	3.58%
K 766.490 Radial†	39464.0	6593.0	ug/L	244.13	6593.0	ppb	244.13	3.70%

Mg 279.077 IEC†	288.5	9628.0	ug/L	334.01	9628.0	ppb	334.01	3.47%
Mn 257.610†	2495320.5	2653.2	ug/L	5.33	2653.2	ppb	5.33	0.20%
Mo 202.031†	271.8	23.510	ug/L	0.4256	23.510	ppb	0.4256	1.81%
Na 589.592 Radial†	13619.5	4127.5	ug/L	113.66	4127.5	ppb	113.66	2.75%
Ni 231.604†	1614.1	37.074	ug/L	0.7355	37.074	ppb	0.7355	1.98%
P 214.914†	1583.4	822.39	ug/L	6.697	822.39	ppb	6.697	0.81%
Pb 220.353†	587.3	68.405	ug/L	2.2065	68.405	ppb	2.2065	3.23%
S 181.975 Axial†	1637.5	2154.8	ug/L	5.00	2154.8	ppb	5.00	0.23%
Sb 206.836†	19.6	-1.7621	ug/L	3.24843	-1.7621	ppb	3.24843	184.35%
Se 196.026†	-484.4	3.2438	ug/L	7.61574	3.2438	ppb	7.61574	234.78%
Si 251.611†	687275.0	20467	ug/L	39.3	20467	ppb	39.3	0.19%
Sn 189.927†	-87.3	-11.126	ug/L	0.2785	-11.126	ppb	0.2785	2.50%
Sr 421.552†	21724.7	130.87	ug/L	4.835	130.87	ppb	4.835	3.69%
Ti 334.940†	1617276.5	2553.7	ug/L	3.76	2553.7	ppb	3.76	0.15%
Tl 190.801†	-137.5	-2.8073	ug/L	2.19912	-2.8073	ppb	2.19912	78.33%
U 409.014†	-8384.6	-252.21	ug/L	1.501	-252.21	ppb	1.501	0.59%
V 292.402†	16100.1	90.962	ug/L	0.4334	90.962	ppb	0.4334	0.48%
Zn 213.857†	35604.4	297.30	ug/L	0.874	297.30	ppb	0.874	0.29%
SiO2†	683756.0	43637	ug/L	193.8	43637	ppb	193.8	0.44%

Sequence No.: 63
Sample ID: 1201985645|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 12/11/2009 20:34:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985645|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5596.0	5596.0	100	%			20:36:57
1	Y RADIAL	7824.8	7824.8	129.6	%			20:36:37
1	Al 396.153Radial†	120357.9	119957.8	82594	ug/L	82594	ppb	20:36:37
1	Ca 317.933Radial†	16261.3	16185.5	23623	ug/L	23623	ppb	20:36:37
1	Fe 238.204 Radial†	13723.5	13664.0	122430	ug/L	122430	ppb	20:36:37
1	K 766.490 Radial†	88710.7	85650.2	14324	ug/L	14324	ppb	20:36:37
1	Mg 279.077 IEC†	557.9	553.9	18534	ug/L	18534	ppb	20:36:57
1	Na 589.592 Radial†	30330.8	31775.2	9629.8	ug/L	9629.8	ppb	20:36:37
1	Sr 421.552†	113262.2	112852.7	680.43	ug/L	680.43	ppb	20:36:37
1	Sc 361.383	858655.5	858655.5	98.933	%			20:38:01
1	Y 371.029	917207.4	917207.4	125.74	%			20:37:56
1	Ag 328.068†	108855.8	109755.8	537.54	ug/L	537.54	ppb	20:38:01
1	As 188.979†	1216.9	1261.3	546.48	ug/L	546.48	ppb	20:38:21
1	B 249.677†	26074.8	26849.2	554.56	ug/L	554.56	ppb	20:38:01
1	Ba 233.527†	178986.2	180927.6	1357.9	ug/L	1357.9	ppb	20:38:01
1	Be 313.107†	1452514.2	1472841.7	538.51	ug/L	538.51	ppb	20:37:56
1	Cd 226.502†	50062.4	50801.2	514.98	ug/L	514.98	ppb	20:38:01
1	Co 228.616†	28499.1	28879.9	534.20	ug/L	534.20	ppb	20:38:21
1	Cr 267.716†	55109.1	55617.4	585.48	ug/L	585.48	ppb	20:38:01
1	Cu 324.752†	208407.5	203897.3	598.48	ug/L	598.48	ppb	20:38:01
1	Mn 257.610†	4183354.2	4227950.1	4492.8	ug/L	4492.8	ppb	20:37:56
1	Mo 202.031†	8154.4	8224.0	532.03	ug/L	532.03	ppb	20:38:21
1	Ni 231.604†	23643.3	23812.3	546.83	ug/L	546.83	ppb	20:38:21
1	P 214.914†	3607.0	3403.9	1742.0	ug/L	1742.0	ppb	20:38:21
1	Pb 220.353†	5252.8	5377.4	611.27	ug/L	611.27	ppb	20:38:21
1	S 181.975 Axial†	5674.9	5686.7	7496.9	ug/L	7496.9	ppb	20:38:21
1	Sb 206.836†	1589.4	1569.1	489.50	ug/L	489.50	ppb	20:38:21
1	Se 196.026†	217.6	246.7	528.99	ug/L	528.99	ppb	20:38:21
1	Si 251.611†	886009.4	895083.0	26644	ug/L	26644	ppb	20:37:56
1	Sn 189.927†	3169.2	3194.5	518.02	ug/L	518.02	ppb	20:38:21
1	Ti 334.940†	3075582.6	3110008.0	4909.8	ug/L	4909.8	ppb	20:37:56
1	Tl 190.801†	1551.6	1602.9	513.50	ug/L	513.50	ppb	20:38:21
1	U 409.014†	5437.8	8080.5	215.79	ug/L	215.79	ppb	20:38:01
1	V 292.402†	98252.0	100674.3	653.95	ug/L	653.95	ppb	20:38:01
1	Zn 213.857†	105864.0	106251.8	897.45	ug/L	897.45	ppb	20:38:01
1	SiO2†	891730.8	900823.4	57464	ug/L	57464	ppb	20:39:32
2	Sc Radial	5308.5	5308.5	95.2	%			20:37:23
2	Y RADIAL	7648.9	7648.9	126.7	%			20:37:03
2	Al 396.153Radial†	120598.5	126705.7	87241	ug/L	87241	ppb	20:37:03
2	Ca 317.933Radial†	16247.1	17048.2	24882	ug/L	24882	ppb	20:37:03
2	Fe 238.204 Radial†	13665.8	14344.0	128520	ug/L	128520	ppb	20:37:03
2	K 766.490 Radial†	88813.5	90545.5	15146	ug/L	15146	ppb	20:37:03
2	Mg 279.077 IEC†	571.3	598.1	20015	ug/L	20015	ppb	20:37:23
2	Na 589.592 Radial†	30358.4	33441.0	10135	ug/L	10135	ppb	20:37:03
2	Sr 421.552†	113366.4	119074.4	717.94	ug/L	717.94	ppb	20:37:03
2	Sc 361.383	859471.5	859471.5	99.027	%			20:38:34
2	Y 371.029	916227.8	916227.8	125.60	%			20:38:28
2	Ag 328.068†	108757.4	109551.9	538.53	ug/L	538.53	ppb	20:38:34
2	As 188.979†	1230.0	1273.4	551.99	ug/L	551.99	ppb	20:38:54
2	B 249.677†	26011.7	26760.5	551.85	ug/L	551.85	ppb	20:38:34
2	Ba 233.527†	178685.3	180452.0	1354.6	ug/L	1354.6	ppb	20:38:34
2	Be 313.107†	1449551.8	1468456.3	536.92	ug/L	536.92	ppb	20:38:28
2	Cd 226.502†	49907.6	50596.9	512.25	ug/L	512.25	ppb	20:38:34
2	Co 228.616†	28738.7	29094.5	538.19	ug/L	538.19	ppb	20:38:54
2	Cr 267.716†	55116.0	55571.5	585.10	ug/L	585.10	ppb	20:38:34
2	Cu 324.752†	208515.6	203806.4	598.53	ug/L	598.53	ppb	20:38:34
2	Mn 257.610†	4176273.9	4216785.8	4481.5	ug/L	4481.5	ppb	20:38:28
2	Mo 202.031†	8226.0	8288.4	536.56	ug/L	536.56	ppb	20:38:54
2	Ni 231.604†	23842.2	23990.5	550.92	ug/L	550.92	ppb	20:38:54

2	P 214.914†	3653.8	3447.6	1763.1	ug/L	1763.1 ppb	20:38:54
2	Pb 220.353†	5285.3	5405.2	614.94	ug/L	614.94 ppb	20:38:54
2	S 181.975 Axial†	5722.1	5728.9	7551.7	ug/L	7551.7 ppb	20:38:54
2	Sb 206.836†	1602.1	1580.5	493.26	ug/L	493.26 ppb	20:38:54
2	Se 196.026†	210.2	239.0	544.10	ug/L	544.10 ppb	20:38:54
2	Si 251.611†	886230.0	894455.5	26625	ug/L	26625 ppb	20:38:28
2	Sn 189.927†	3195.6	3218.1	522.04	ug/L	522.04 ppb	20:38:54
2	Ti 334.940†	3071906.7	3103344.6	4899.3	ug/L	4899.3 ppb	20:38:28
2	Tl 190.801†	1565.0	1614.9	516.85	ug/L	516.85 ppb	20:38:54
2	U 409.014†	5566.8	8205.5	218.62	ug/L	218.62 ppb	20:38:34
2	V 292.402†	98116.4	100443.1	651.59	ug/L	651.59 ppb	20:38:34
2	Zn 213.857†	105435.8	105717.9	892.20	ug/L	892.20 ppb	20:38:34
2	SiO2†	899672.0	907986.8	57920	ug/L	57920 ppb	20:39:38
3	Sc Radial	5529.7	5529.7	99.2	%		20:37:48
3	Y RADIAL	7532.0	7532.0	124.7	%		20:37:28
3	Al 396.153Radial†	120394.2	121432.4	83609	ug/L	83609 ppb	20:37:28
3	Ca 317.933Radial†	16190.2	16308.2	23802	ug/L	23802 ppb	20:37:28
3	Fe 238.204 Radial†	13661.5	13765.4	123340	ug/L	123340 ppb	20:37:28
3	K 766.490 Radial†	88626.4	86625.1	14487	ug/L	14487 ppb	20:37:28
3	Mg 279.077 IEC†	565.5	568.3	19017	ug/L	19017 ppb	20:37:48
3	Na 589.592 Radial†	30246.7	32052.8	9713.9	ug/L	9713.9 ppb	20:37:28
3	Sr 421.552†	112902.4	113843.1	686.40	ug/L	686.40 ppb	20:37:28
3	Sc 361.383	849346.3	849346.3	97.860	%		20:39:06
3	Y 371.029	909753.5	909753.5	124.72	%		20:39:01
3	Ag 328.068†	107071.8	109138.7	535.03	ug/L	535.03 ppb	20:39:06
3	As 188.979†	1194.0	1251.4	542.74	ug/L	542.74 ppb	20:39:26
3	B 249.677†	25565.1	26617.3	549.47	ug/L	549.47 ppb	20:39:06
3	Ba 233.527†	176050.4	179910.6	1350.4	ug/L	1350.4 ppb	20:39:06
3	Be 313.107†	1437273.9	1473360.1	538.69	ug/L	538.69 ppb	20:39:01
3	Cd 226.502†	49037.0	50308.1	509.78	ug/L	509.78 ppb	20:39:06
3	Co 228.616†	28579.2	29277.5	541.71	ug/L	541.71 ppb	20:39:26
3	Cr 267.716†	54280.1	55380.8	583.01	ug/L	583.01 ppb	20:39:06
3	Cu 324.752†	205483.2	203217.9	596.56	ug/L	596.56 ppb	20:39:06
3	Mn 257.610†	4132656.7	4222490.1	4487.1	ug/L	4487.1 ppb	20:39:01
3	Mo 202.031†	8195.8	8356.6	540.54	ug/L	540.54 ppb	20:39:26
3	Ni 231.604†	23730.6	24163.5	554.89	ug/L	554.89 ppb	20:39:26
3	P 214.914†	3596.3	3432.8	1758.2	ug/L	1758.2 ppb	20:39:26
3	Pb 220.353†	5286.2	5469.8	621.79	ug/L	621.79 ppb	20:39:26
3	S 181.975 Axial†	5700.7	5776.0	7614.7	ug/L	7614.7 ppb	20:39:26
3	Sb 206.836†	1584.1	1581.4	493.75	ug/L	493.75 ppb	20:39:26
3	Se 196.026†	203.1	234.3	524.97	ug/L	524.97 ppb	20:39:26
3	Si 251.611†	877551.2	896255.6	26678	ug/L	26678 ppb	20:39:01
3	Sn 189.927†	3183.6	3244.4	526.07	ug/L	526.07 ppb	20:39:26
3	Ti 334.940†	3040108.1	3107831.1	4906.4	ug/L	4906.4 ppb	20:39:01
3	Tl 190.801†	1551.8	1620.3	518.33	ug/L	518.33 ppb	20:39:26
3	U 409.014†	5358.3	8059.4	215.08	ug/L	215.08 ppb	20:39:06
3	V 292.402†	96757.7	100235.8	651.03	ug/L	651.03 ppb	20:39:06
3	Zn 213.857†	103785.2	105300.4	889.12	ug/L	889.12 ppb	20:39:06
3	SiO2†	891025.3	909981.6	58048	ug/L	58048 ppb	20:39:44

Mean Data: 1201985645|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	855824.4	98.607	%	0.6481				0.66%
Sc Radial	5478.1	98.2	%	2.70				2.75%
Y 371.029	914396.2	125.35	%	0.555				0.44%
Y RADIAL	7668.5	127.0	%	2.44				1.92%
Ag 328.068†	109482.1	537.03	ug/L	1.807	537.03	ppb	1.807	0.34%
Al 396.153Radial†	122698.6	84481	ug/L	2443.3	84481	ppb	2443.3	2.89%
As 188.979†	1262.1	547.07	ug/L	4.653	547.07	ppb	4.653	0.85%
B 249.677†	26742.3	551.96	ug/L	2.543	551.96	ppb	2.543	0.46%
Ba 233.527†	180430.1	1354.3	ug/L	3.80	1354.3	ppb	3.80	0.28%
Be 313.107†	1471552.7	538.04	ug/L	0.977	538.04	ppb	0.977	0.18%
Ca 317.933Radial†	16514.0	24102	ug/L	681.1	24102	ppb	681.1	2.83%
Cd 226.502†	50568.7	512.34	ug/L	2.601	512.34	ppb	2.601	0.51%
Co 228.616†	29083.9	538.04	ug/L	3.759	538.04	ppb	3.759	0.70%
Cr 267.716†	55523.3	584.53	ug/L	1.328	584.53	ppb	1.328	0.23%
Cu 324.752†	203640.5	597.86	ug/L	1.126	597.86	ppb	1.126	0.19%
Fe 238.204 Radial†	13924.5	124770	ug/L	3286.6	124770	ppb	3286.6	2.63%
K 766.490 Radial†	87606.9	14652	ug/L	435.0	14652	ppb	435.0	2.97%

Mg 279.077 IEC†	573.5	19188	ug/L	755.2	19188	ppb	755.2	3.94%
Mn 257.610†	4222408.7	4487.1	ug/L	5.63	4487.1	ppb	5.63	0.13%
Mo 202.031†	8289.6	536.38	ug/L	4.256	536.38	ppb	4.256	0.79%
Na 589.592 Radial†	32423.0	9826.1	ug/L	270.47	9826.1	ppb	270.47	2.75%
Ni 231.604†	23988.8	550.88	ug/L	4.032	550.88	ppb	4.032	0.73%
P 214.914†	3428.1	1754.4	ug/L	11.07	1754.4	ppb	11.07	0.63%
Pb 220.353†	5417.5	616.00	ug/L	5.337	616.00	ppb	5.337	0.87%
S 181.975 Axial†	5730.5	7554.4	ug/L	58.90	7554.4	ppb	58.90	0.78%
Sb 206.836†	1577.0	492.17	ug/L	2.324	492.17	ppb	2.324	0.47%
Se 196.026†	240.0	532.69	ug/L	10.086	532.69	ppb	10.086	1.89%
Si 251.611†	895264.7	26649	ug/L	27.3	26649	ppb	27.3	0.10%
Sn 189.927†	3219.0	522.04	ug/L	4.025	522.04	ppb	4.025	0.77%
Sr 421.552†	115256.7	694.92	ug/L	20.156	694.92	ppb	20.156	2.90%
Ti 334.940†	3107061.2	4905.2	ug/L	5.33	4905.2	ppb	5.33	0.11%
Tl 190.801†	1612.7	516.23	ug/L	2.479	516.23	ppb	2.479	0.48%
U 409.014†	8115.1	216.50	ug/L	1.874	216.50	ppb	1.874	0.87%
V 292.402†	100451.1	652.19	ug/L	1.549	652.19	ppb	1.549	0.24%
Zn 213.857†	105756.7	892.92	ug/L	4.215	892.92	ppb	4.215	0.47%
SiO2†	906263.9	57811	ug/L	307.1	57811	ppb	307.1	0.53%

Sequence No.: 64
Sample ID: 1201985647|928613|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 12/11/2009 20:41:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985647|928613|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5502.7	5502.7	98.7	%			20:44:08
1	Y RADIAL	7232.8	7232.8	119.8	%			20:44:08
1	Al 396.153Radial†	130961.8	132735.6	91395	ug/L	91395	ppb	20:43:48
1	Ca 317.933Radial†	15625.0	15815.5	23083	ug/L	23083	ppb	20:43:48
1	Fe 238.204 Radial†	11639.9	11784.5	105590	ug/L	105590	ppb	20:43:48
1	K 766.490 Radial†	89924.8	88379.0	14799	ug/L	14799	ppb	20:43:48
1	Mg 279.077 IEC†	566.1	571.7	19146	ug/L	19146	ppb	20:44:08
1	Na 589.592 Radial†	30182.9	32137.7	9739.6	ug/L	9739.6	ppb	20:43:48
1	Sr 421.552†	112627.4	114122.7	688.09	ug/L	688.09	ppb	20:43:48
1	Sc 361.383	875116.3	875116.3	100.83	%			20:45:07
1	Y 371.029	888208.3	888208.3	121.76	%			20:45:07
1	Ag 328.068†	107779.3	106618.4	517.87	ug/L	517.87	ppb	20:45:07
1	As 188.979†	1227.7	1248.9	530.57	ug/L	530.57	ppb	20:45:27
1	B 249.677†	25524.5	25807.7	534.68	ug/L	534.68	ppb	20:45:07
1	Ba 233.527†	172013.7	170609.5	1280.2	ug/L	1280.2	ppb	20:45:07
1	Be 313.107†	1449222.0	1441960.4	525.43	ug/L	525.43	ppb	20:45:07
1	Cd 226.502†	49178.9	48973.2	497.70	ug/L	497.70	ppb	20:45:07
1	Co 228.616†	27322.0	27170.7	504.30	ug/L	504.30	ppb	20:45:27
1	Cr 267.716†	54513.3	53978.8	567.97	ug/L	567.97	ppb	20:45:07
1	Cu 324.752†	207227.6	198764.7	582.72	ug/L	582.72	ppb	20:45:07
1	Mn 257.610†	2962510.9	2937615.2	3123.5	ug/L	3123.5	ppb	20:45:07
1	Mo 202.031†	8081.9	7997.0	516.39	ug/L	516.39	ppb	20:45:27
1	Ni 231.604†	23561.7	23281.9	534.66	ug/L	534.66	ppb	20:45:27
1	P 214.914†	3019.6	2752.7	1397.2	ug/L	1397.2	ppb	20:45:27
1	Pb 220.353†	4977.7	5004.7	572.89	ug/L	572.89	ppb	20:45:27
1	S 181.975 Axial†	5701.8	5605.4	7387.8	ug/L	7387.8	ppb	20:45:27
1	Sb 206.836†	1577.9	1527.5	478.50	ug/L	478.50	ppb	20:45:27
1	Se 196.026†	334.6	358.6	541.48	ug/L	541.48	ppb	20:45:27
1	Si 251.611†	940282.9	932064.5	27745	ug/L	27745	ppb	20:45:07
1	Sn 189.927†	3171.8	3136.8	508.46	ug/L	508.46	ppb	20:45:27
1	Ti 334.940†	2486589.2	2467385.7	3895.4	ug/L	3895.4	ppb	20:45:07
1	Tl 190.801†	1586.2	1607.7	499.54	ug/L	499.54	ppb	20:45:27
1	U 409.014†	6324.7	8856.6	240.26	ug/L	240.26	ppb	20:45:07
1	V 292.402†	95687.8	96263.3	628.13	ug/L	628.13	ppb	20:45:07
1	Zn 213.857†	96986.2	95434.3	806.08	ug/L	806.08	ppb	20:45:07
1	SiO2†	952873.8	944509.1	60253	ug/L	60253	ppb	20:46:28
2	Sc Radial	5522.2	5522.2	99.0	%			20:44:33
2	Y RADIAL	7264.5	7264.5	120.3	%			20:44:33
2	Al 396.153Radial†	130801.1	132104.9	90960	ug/L	90960	ppb	20:44:13
2	Ca 317.933Radial†	15588.8	15723.1	22948	ug/L	22948	ppb	20:44:13
2	Fe 238.204 Radial†	11565.7	11667.9	104550	ug/L	104550	ppb	20:44:13
2	K 766.490 Radial†	89845.3	87977.0	14732	ug/L	14732	ppb	20:44:13
2	Mg 279.077 IEC†	565.8	569.4	19068	ug/L	19068	ppb	20:44:33
2	Na 589.592 Radial†	30001.2	31846.3	9651.3	ug/L	9651.3	ppb	20:44:13
2	Sr 421.552†	112401.6	113491.8	684.29	ug/L	684.29	ppb	20:44:13
2	Sc 361.383	875499.7	875499.7	100.87	%			20:45:35
2	Y 371.029	889277.7	889277.7	121.91	%			20:45:35
2	Ag 328.068†	107897.0	106688.3	517.84	ug/L	517.84	ppb	20:45:35
2	As 188.979†	1249.8	1270.3	538.64	ug/L	538.64	ppb	20:45:55
2	B 249.677†	25701.9	25972.5	538.32	ug/L	538.32	ppb	20:45:35
2	Ba 233.527†	171402.4	169928.7	1275.0	ug/L	1275.0	ppb	20:45:35
2	Be 313.107†	1446913.4	1439042.4	524.37	ug/L	524.37	ppb	20:45:35
2	Cd 226.502†	48856.7	48632.5	494.27	ug/L	494.27	ppb	20:45:35
2	Co 228.616†	27393.7	27229.9	505.44	ug/L	505.44	ppb	20:45:55
2	Cr 267.716†	54453.6	53895.9	567.07	ug/L	567.07	ppb	20:45:35
2	Cu 324.752†	207756.8	199199.3	583.93	ug/L	583.93	ppb	20:45:35
2	Mn 257.610†	2955669.1	2929546.0	3114.9	ug/L	3114.9	ppb	20:45:35
2	Mo 202.031†	8112.6	8023.9	518.03	ug/L	518.03	ppb	20:45:55
2	Ni 231.604†	23607.7	23317.2	535.47	ug/L	535.47	ppb	20:45:55

2	P 214.914†	3015.9	2747.7	1395.0 ug/L	1395.0 ppb	20:45:55
2	Pb 220.353†	4960.6	4985.6	570.74 ug/L	570.74 ppb	20:45:55
2	S 181.975 Axial†	5708.8	5609.9	7393.9 ug/L	7393.9 ppb	20:45:55
2	Sb 206.836†	1578.0	1527.0	478.47 ug/L	478.47 ppb	20:45:55
2	Se 196.026†	340.0	363.9	541.15 ug/L	541.15 ppb	20:45:55
2	Si 251.611†	940791.5	932160.4	27748 ug/L	27748 ppb	20:45:35
2	Sn 189.927†	3202.0	3165.4	513.04 ug/L	513.04 ppb	20:45:55
2	Ti 334.940†	2485015.0	2464745.3	3891.3 ug/L	3891.3 ppb	20:45:35
2	Tl 190.801†	1611.2	1631.8	506.22 ug/L	506.22 ppb	20:45:55
2	U 409.014†	6630.9	9157.4	249.04 ug/L	249.04 ppb	20:45:35
2	V 292.402†	95517.3	96052.7	626.93 ug/L	626.93 ppb	20:45:35
2	Zn 213.857†	96764.5	95172.5	803.93 ug/L	803.93 ppb	20:45:35
2	SiO2†	949534.5	940784.9	60015 ug/L	60015 ppb	20:46:34
3	Sc Radial	5491.2	5491.2	98.5 %		20:44:59
3	Y RADIAL	7228.4	7228.4	119.7 %		20:44:59
3	Al 396.153Radial†	129177.0	131200.7	90338 ug/L	90338 ppb	20:44:38
3	Ca 317.933Radial†	15373.9	15593.7	22759 ug/L	22759 ppb	20:44:38
3	Fe 238.204 Radial†	11412.6	11578.4	103750 ug/L	103750 ppb	20:44:38
3	K 766.490 Radial†	88886.5	87515.2	14654 ug/L	14654 ppb	20:44:38
3	Mg 279.077 IEC†	569.7	576.5	19309 ug/L	19309 ppb	20:44:59
3	Na 589.592 Radial†	29691.7	31702.9	9607.9 ug/L	9607.9 ppb	20:44:38
3	Sr 421.552†	111091.3	112801.6	680.13 ug/L	680.13 ppb	20:44:38
3	Sc 361.383	878194.6	878194.6	101.18 %		20:46:02
3	Y 371.029	893518.6	893518.6	122.49 %		20:46:02
3	Ag 328.068†	107942.0	106404.6	516.31 ug/L	516.31 ppb	20:46:02
3	As 188.979†	1242.0	1258.8	534.07 ug/L	534.07 ppb	20:46:22
3	B 249.677†	25566.6	25760.6	533.93 ug/L	533.93 ppb	20:46:02
3	Ba 233.527†	172139.1	170135.5	1276.5 ug/L	1276.5 ppb	20:46:02
3	Be 313.107†	1455350.3	1442979.0	525.78 ug/L	525.78 ppb	20:46:02
3	Cd 226.502†	49121.7	48745.7	495.52 ug/L	495.52 ppb	20:46:02
3	Co 228.616†	27291.8	27045.8	501.98 ug/L	501.98 ppb	20:46:22
3	Cr 267.716†	54606.9	53881.7	566.92 ug/L	566.92 ppb	20:46:02
3	Cu 324.752†	207847.2	198656.6	582.31 ug/L	582.31 ppb	20:46:02
3	Mn 257.610†	2964992.2	2929768.6	3115.0 ug/L	3115.0 ppb	20:46:02
3	Mo 202.031†	8096.4	7983.3	515.39 ug/L	515.39 ppb	20:46:22
3	Ni 231.604†	23537.6	23176.2	532.23 ug/L	532.23 ppb	20:46:22
3	P 214.914†	3010.2	2732.9	1387.3 ug/L	1387.3 ppb	20:46:22
3	Pb 220.353†	4982.3	4992.0	571.37 ug/L	571.37 ppb	20:46:22
3	S 181.975 Axial†	5692.6	5576.6	7349.9 ug/L	7349.9 ppb	20:46:22
3	Sb 206.836†	1585.2	1529.3	479.08 ug/L	479.08 ppb	20:46:22
3	Se 196.026†	323.0	346.0	528.52 ug/L	528.52 ppb	20:46:22
3	Si 251.611†	943269.6	931747.5	27736 ug/L	27736 ppb	20:46:02
3	Sn 189.927†	3188.3	3142.1	509.26 ug/L	509.26 ppb	20:46:22
3	Ti 334.940†	2492408.1	2464492.3	3890.9 ug/L	3890.9 ppb	20:46:02
3	Tl 190.801†	1588.7	1604.7	498.60 ug/L	498.60 ppb	20:46:22
3	U 409.014†	6303.3	8813.5	239.25 ug/L	239.25 ppb	20:46:02
3	V 292.402†	95934.7	96174.6	627.82 ug/L	627.82 ppb	20:46:02
3	Zn 213.857†	96959.7	95071.0	803.15 ug/L	803.15 ppb	20:46:02
3	SiO2†	948758.9	937129.8	59782 ug/L	59782 ppb	20:46:40

Mean Data: 1201985647|928613|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	876270.2	100.96	%	0.193				0.19%
Sc Radial	5505.4	98.7	%	0.28				0.28%
Y 371.029	890334.9	122.05	%	0.385				0.32%
Y RADIAL	7241.9	119.9	%	0.33				0.27%
Ag 328.068†	106570.4	517.34	ug/L	0.888	517.34	ppb	0.888	0.17%
Al 396.153Radial†	132013.7	90898	ug/L	531.3	90898	ppb	531.3	0.58%
As 188.979†	1259.3	534.43	ug/L	4.044	534.43	ppb	4.044	0.76%
B 249.677†	25846.9	535.64	ug/L	2.353	535.64	ppb	2.353	0.44%
Ba 233.527†	170224.6	1277.2	ug/L	2.63	1277.2	ppb	2.63	0.21%
Be 313.107†	1441327.3	525.20	ug/L	0.735	525.20	ppb	0.735	0.14%
Ca 317.933Radial†	15710.8	22930	ug/L	162.6	22930	ppb	162.6	0.71%
Cd 226.502†	48783.8	495.83	ug/L	1.735	495.83	ppb	1.735	0.35%
Co 228.616†	27148.8	503.91	ug/L	1.765	503.91	ppb	1.765	0.35%
Cr 267.716†	53918.8	567.32	ug/L	0.566	567.32	ppb	0.566	0.10%
Cu 324.752†	198873.5	582.98	ug/L	0.841	582.98	ppb	0.841	0.14%
Fe 238.204 Radial†	11677.0	104630	ug/L	925.9	104630	ppb	925.9	0.88%
K 766.490 Radial†	87957.1	14728	ug/L	72.5	14728	ppb	72.5	0.49%

Mg 279.077 IEC†	572.5	19174	ug/L	123.2	19174	ppb	123.2	0.64%
Mn 257.610†	2932309.9	3117.8	ug/L	4.95	3117.8	ppb	4.95	0.16%
Mo 202.031†	8001.4	516.61	ug/L	1.335	516.61	ppb	1.335	0.26%
Na 589.592 Radial†	31895.6	9666.3	ug/L	67.15	9666.3	ppb	67.15	0.69%
Ni 231.604†	23258.4	534.12	ug/L	1.685	534.12	ppb	1.685	0.32%
P 214.914†	2744.4	1393.2	ug/L	5.18	1393.2	ppb	5.18	0.37%
Pb 220.353†	4994.1	571.67	ug/L	1.103	571.67	ppb	1.103	0.19%
S 181.975 Axial†	5597.3	7377.2	ug/L	23.83	7377.2	ppb	23.83	0.32%
Sb 206.836†	1527.9	478.68	ug/L	0.347	478.68	ppb	0.347	0.07%
Se 196.026†	356.2	537.05	ug/L	7.388	537.05	ppb	7.388	1.38%
Si 251.611†	931990.8	27743	ug/L	6.4	27743	ppb	6.4	0.02%
Sn 189.927†	3148.1	510.25	ug/L	2.443	510.25	ppb	2.443	0.48%
Sr 421.552†	113472.0	684.17	ug/L	3.984	684.17	ppb	3.984	0.58%
Ti 334.940†	2465541.1	3892.5	ug/L	2.54	3892.5	ppb	2.54	0.07%
Tl 190.801†	1614.7	501.45	ug/L	4.159	501.45	ppb	4.159	0.83%
U 409.014†	8942.5	242.85	ug/L	5.384	242.85	ppb	5.384	2.22%
V 292.402†	96163.5	627.63	ug/L	0.621	627.63	ppb	0.621	0.10%
Zn 213.857†	95225.9	804.39	ug/L	1.522	804.39	ppb	1.522	0.19%
SiO2†	940807.9	60016	ug/L	235.4	60016	ppb	235.4	0.39%

Sequence No.: 65
Sample ID: 1201985646|928613|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 12/11/2009 20:48:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1201985646|928613|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5702.1	5702.1	102	%			20:50:45
1	Y RADIAL	6375.3	6375.3	105.6	%			20:50:45
1	Al 396.153Radial†	14882.9	14588.5	10047	ug/L	10047	ppb	20:50:45
1	Ca 317.933Radial†	2597.1	2522.6	3681.8	ug/L	3681.8	ppb	20:51:05
1	Fe 238.204 Radial†	2223.6	2164.4	19391	ug/L	19391	ppb	20:51:05
1	K 766.490 Radial†	12003.6	8998.0	1503.2	ug/L	1503.2	ppb	20:50:45
1	Mg 279.077 IEC†	68.0	64.6	2155.8	ug/L	2155.8	ppb	20:51:05
1	Na 589.592 Radial†	1319.0	2843.9	861.88	ug/L	861.88	ppb	20:50:45
1	Sr 421.552†	5447.9	5327.4	32.097	ug/L	32.097	ppb	20:50:45
1	Sc 361.383	876160.4	876160.4	100.95	%			20:52:02
1	Y 371.029	758973.7	758973.7	104.05	%			20:52:02
1	Ag 328.068†	-1017.8	-1282.2	0.4576	ug/L	0.4576	ppb	20:52:02
1	As 188.979†	-29.3	2.2	8.9179	ug/L	8.9179	ppb	20:52:22
1	B 249.677†	75.0	567.6	9.5073	ug/L	9.5073	ppb	20:52:02
1	Ba 233.527†	20944.1	20758.1	155.88	ug/L	155.88	ppb	20:52:02
1	Be 313.107†	-5382.8	-669.5	0.9450	ug/L	0.9450	ppb	20:52:02
1	Cd 226.502†	-5.7	193.3	0.0722	ug/L	0.0722	ppb	20:52:22
1	Co 228.616†	250.7	321.7	4.5819	ug/L	4.5819	ppb	20:52:22
1	Cr 267.716†	1272.2	1174.2	12.698	ug/L	12.698	ppb	20:52:22
1	Cu 324.752†	9563.9	2716.0	8.8782	ug/L	8.8782	ppb	20:52:02
1	Mn 257.610†	583076.3	577069.4	613.49	ug/L	613.49	ppb	20:52:02
1	Mo 202.031†	68.2	49.1	4.5027	ug/L	4.5027	ppb	20:52:22
1	Ni 231.604†	497.1	406.5	9.3362	ug/L	9.3362	ppb	20:52:22
1	P 214.914†	627.6	379.7	198.42	ug/L	198.42	ppb	20:52:22
1	Pb 220.353†	56.2	123.6	14.502	ug/L	14.502	ppb	20:52:22
1	S 181.975 Axial†	403.6	350.4	461.00	ug/L	461.00	ppb	20:52:22
1	Sb 206.836†	38.6	0.8	-1.6164	ug/L	-1.6164	ppb	20:52:22
1	Se 196.026†	-134.9	-106.9	0.9773	ug/L	0.9773	ppb	20:52:22
1	Si 251.611†	142959.8	141132.9	4203.0	ug/L	4203.0	ppb	20:52:02
1	Sn 189.927†	-28.7	-37.2	-5.3428	ug/L	-5.3428	ppb	20:52:22
1	Ti 334.940†	384450.8	382089.4	603.30	ug/L	603.30	ppb	20:52:02
1	Tl 190.801†	-61.0	-25.9	1.1048	ug/L	1.1048	ppb	20:52:22
1	U 409.014†	-4351.9	-1726.9	-52.113	ug/L	-52.113	ppb	20:52:02
1	V 292.402†	2428.9	3768.8	21.455	ug/L	21.455	ppb	20:52:22
1	Zn 213.857†	8395.8	7563.0	63.062	ug/L	63.062	ppb	20:52:22
1	SiO2†	142685.8	140818.7	8987.0	ug/L	8987.0	ppb	20:53:19
2	Sc Radial	5742.8	5742.8	103	%			20:51:10
2	Y RADIAL	6417.2	6417.2	106.3	%			20:51:10
2	Al 396.153Radial†	14936.6	14537.5	10012	ug/L	10012	ppb	20:51:10
2	Ca 317.933Radial†	2595.5	2503.1	3653.3	ug/L	3653.3	ppb	20:51:30
2	Fe 238.204 Radial†	2228.7	2154.0	19298	ug/L	19298	ppb	20:51:30
2	K 766.490 Radial†	12098.5	9007.2	1504.7	ug/L	1504.7	ppb	20:51:10
2	Mg 279.077 IEC†	69.0	65.1	2172.3	ug/L	2172.3	ppb	20:51:30
2	Na 589.592 Radial†	1297.0	2813.4	852.62	ug/L	852.62	ppb	20:51:10
2	Sr 421.552†	5478.5	5319.4	32.049	ug/L	32.049	ppb	20:51:10
2	Sc 361.383	880758.7	880758.7	101.48	%			20:52:28
2	Y 371.029	762837.0	762837.0	104.58	%			20:52:28
2	Ag 328.068†	-925.3	-1185.8	0.8660	ug/L	0.8660	ppb	20:52:28
2	As 188.979†	-29.6	2.2	8.8699	ug/L	8.8699	ppb	20:52:48
2	B 249.677†	69.9	562.1	9.4048	ug/L	9.4048	ppb	20:52:28
2	Ba 233.527†	21037.0	20741.4	155.75	ug/L	155.75	ppb	20:52:28
2	Be 313.107†	-5459.9	-717.7	0.9290	ug/L	0.9290	ppb	20:52:28
2	Cd 226.502†	-1.3	197.6	0.1263	ug/L	0.1263	ppb	20:52:48
2	Co 228.616†	235.2	305.2	4.2722	ug/L	4.2722	ppb	20:52:48
2	Cr 267.716†	1275.9	1171.3	12.666	ug/L	12.666	ppb	20:52:48
2	Cu 324.752†	9599.7	2701.9	8.8324	ug/L	8.8324	ppb	20:52:28
2	Mn 257.610†	586009.7	576944.6	613.35	ug/L	613.35	ppb	20:52:28
2	Mo 202.031†	81.5	61.9	5.3081	ug/L	5.3081	ppb	20:52:48
2	Ni 231.604†	485.0	392.0	9.0029	ug/L	9.0029	ppb	20:52:48

2	P 214.914†	639.8	388.5	203.39 ug/L	203.39 ppb	20:52:48
2	Pb 220.353†	49.5	116.8	13.736 ug/L	13.736 ppb	20:52:48
2	S 181.975 Axial†	402.1	346.8	456.27 ug/L	456.27 ppb	20:52:48
2	Sb 206.836†	32.5	-5.3	-3.5500 ug/L	-3.5500 ppb	20:52:48
2	Se 196.026†	-132.9	-104.1	2.2334 ug/L	2.2334 ppb	20:52:48
2	Si 251.611†	143890.9	141311.0	4208.3 ug/L	4208.3 ppb	20:52:28
2	Sn 189.927†	-28.5	-37.0	-5.3044 ug/L	-5.3044 ppb	20:52:48
2	Ti 334.940†	386889.9	382504.7	603.96 ug/L	603.96 ppb	20:52:28
2	Tl 190.801†	-66.5	-30.9	-0.3075 ug/L	-0.3075 ppb	20:52:48
2	U 409.014†	-4465.0	-1815.9	-54.660 ug/L	-54.660 ppb	20:52:28
2	V 292.402†	2409.7	3737.3	21.265 ug/L	21.265 ppb	20:52:48
2	Zn 213.857†	8428.9	7552.1	62.979 ug/L	62.979 ppb	20:52:48
2	SiO2†	143204.5	140591.9	8972.5 ug/L	8972.5 ppb	20:53:24
3	Sc Radial	5548.4	5548.4	99.5 %		20:51:35
3	Y RADIAL	6243.5	6243.5	103.4 %		20:51:35
3	Al 396.153Radial†	14625.2	14732.5	10146 ug/L	10146 ppb	20:51:35
3	Ca 317.933Radial†	2612.0	2608.0	3806.4 ug/L	3806.4 ppb	20:51:55
3	Fe 238.204 Radial†	2243.5	2244.7	20111 ug/L	20111 ppb	20:51:55
3	K 766.490 Radial†	11961.7	9281.1	1550.7 ug/L	1550.7 ppb	20:51:35
3	Mg 279.077 IEC†	71.4	69.8	2330.9 ug/L	2330.9 ppb	20:51:55
3	Na 589.592 Radial†	1179.6	2739.6	830.25 ug/L	830.25 ppb	20:51:35
3	Sr 421.552†	5330.1	5356.6	32.272 ug/L	32.272 ppb	20:51:35
3	Sc 361.383	871588.2	871588.2	100.42 %		20:52:53
3	Y 371.029	756352.3	756352.3	103.69 %		20:52:53
3	Ag 328.068†	-970.1	-1240.1	0.8777 ug/L	0.8777 ppb	20:52:53
3	As 188.979†	-32.0	-0.6	7.9143 ug/L	7.9143 ppb	20:53:13
3	B 249.677†	50.3	543.3	8.8949 ug/L	8.8949 ppb	20:52:53
3	Ba 233.527†	20729.6	20653.4	155.12 ug/L	155.12 ppb	20:52:53
3	Be 313.107†	-5408.8	-723.4	0.9229 ug/L	0.9229 ppb	20:52:53
3	Cd 226.502†	-8.0	191.0	-0.0236 ug/L	-0.0236 ppb	20:53:13
3	Co 228.616†	239.6	312.0	4.3926 ug/L	4.3926 ppb	20:53:13
3	Cr 267.716†	1280.0	1188.6	12.862 ug/L	12.862 ppb	20:53:13
3	Cu 324.752†	9545.0	2746.9	9.0046 ug/L	9.0046 ppb	20:52:53
3	Mn 257.610†	578658.6	575700.3	612.11 ug/L	612.11 ppb	20:52:53
3	Mo 202.031†	77.5	58.7	5.1641 ug/L	5.1641 ppb	20:53:13
3	Ni 231.604†	495.8	407.8	9.3660 ug/L	9.3660 ppb	20:53:13
3	P 214.914†	619.7	375.1	195.29 ug/L	195.29 ppb	20:53:13
3	Pb 220.353†	56.9	124.6	14.577 ug/L	14.577 ppb	20:53:13
3	S 181.975 Axial†	407.4	356.3	468.70 ug/L	468.70 ppb	20:53:13
3	Sb 206.836†	36.8	-0.7	-2.0948 ug/L	-2.0948 ppb	20:53:13
3	Se 196.026†	-136.1	-108.7	2.1720 ug/L	2.1720 ppb	20:53:13
3	Si 251.611†	141661.9	140583.3	4186.6 ug/L	4186.6 ppb	20:52:53
3	Sn 189.927†	-27.7	-36.4	-5.1911 ug/L	-5.1911 ppb	20:53:13
3	Ti 334.940†	381555.7	381204.3	601.91 ug/L	601.91 ppb	20:52:53
3	Tl 190.801†	-67.8	-32.9	-0.8838 ug/L	-0.8838 ppb	20:53:13
3	U 409.014†	-4422.9	-1820.2	-54.887 ug/L	-54.887 ppb	20:52:53
3	V 292.402†	2409.7	3762.2	21.311 ug/L	21.311 ppb	20:53:13
3	Zn 213.857†	8413.2	7623.9	63.511 ug/L	63.511 ppb	20:53:13
3	SiO2†	143517.7	142388.6	9087.1 ug/L	9087.1 ppb	20:53:29

Mean Data: 1201985646|928613|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	876169.1	100.95	%	0.528				0.52%
Sc Radial	5664.4	102	%	1.8				1.81%
Y 371.029	759387.7	104.10	%	0.447				0.43%
Y RADIAL	6345.3	105.1	%	1.50				1.43%
Ag 328.068†	-1236.0	0.7338	ug/L	0.23922	0.7338	ppb	0.23922	32.60%
Al 396.153Radial†	14619.5	10068	ug/L	69.7	10068	ppb	69.7	0.69%
As 188.979†	1.3	8.5674	ug/L	0.56611	8.5674	ppb	0.56611	6.61%
B 249.677†	557.7	9.2690	ug/L	0.32798	9.2690	ppb	0.32798	3.54%
Ba 233.527†	20717.6	155.59	ug/L	0.404	155.59	ppb	0.404	0.26%
Be 313.107†	-703.6	0.9323	ug/L	0.01141	0.9323	ppb	0.01141	1.22%
Ca 317.933Radial†	2544.6	3713.8	ug/L	81.41	3713.8	ppb	81.41	2.19%
Cd 226.502†	194.0	0.0583	ug/L	0.07594	0.0583	ppb	0.07594	130.24%
Co 228.616†	313.0	4.4156	ug/L	0.15610	4.4156	ppb	0.15610	3.54%
Cr 267.716†	1178.0	12.742	ug/L	0.1051	12.742	ppb	0.1051	0.83%
Cu 324.752†	2721.6	8.9051	ug/L	0.08916	8.9051	ppb	0.08916	1.00%
Fe 238.204 Radial†	2187.7	19600	ug/L	444.7	19600	ppb	444.7	2.27%
K 766.490 Radial†	9095.4	1519.5	ug/L	27.02	1519.5	ppb	27.02	1.78%

Mg 279.077 IEC†	66.5	2219.6	ug/L	96.69	2219.6	ppb	96.69	4.36%
Mn 257.610†	576571.4	612.98	ug/L	0.761	612.98	ppb	0.761	0.12%
Mo 202.031†	56.6	4.9916	ug/L	0.42952	4.9916	ppb	0.42952	8.60%
Na 589.592 Radial†	2799.0	848.25	ug/L	16.264	848.25	ppb	16.264	1.92%
Ni 231.604†	402.1	9.2351	ug/L	0.20158	9.2351	ppb	0.20158	2.18%
P 214.914†	381.1	199.03	ug/L	4.086	199.03	ppb	4.086	2.05%
Pb 220.353†	121.7	14.272	ug/L	0.4656	14.272	ppb	0.4656	3.26%
S 181.975 Axial†	351.2	461.99	ug/L	6.276	461.99	ppb	6.276	1.36%
Sb 206.836†	-1.7	-2.4204	ug/L	1.00706	-2.4204	ppb	1.00706	41.61%
Se 196.026†	-106.6	1.7942	ug/L	0.70817	1.7942	ppb	0.70817	39.47%
Si 251.611†	141009.0	4199.3	ug/L	11.31	4199.3	ppb	11.31	0.27%
Sn 189.927†	-36.9	-5.2794	ug/L	0.07889	-5.2794	ppb	0.07889	1.49%
Sr 421.552†	5334.5	32.139	ug/L	0.1175	32.139	ppb	0.1175	0.37%
Ti 334.940†	381932.8	603.06	ug/L	1.044	603.06	ppb	1.044	0.17%
Tl 190.801†	-29.9	-0.0288	ug/L	1.02315	-0.0288	ppb	1.02315	>999.9%
U 409.014†	-1787.7	-53.887	ug/L	1.5400	-53.887	ppb	1.5400	2.86%
V 292.402†	3756.1	21.344	ug/L	0.0990	21.344	ppb	0.0990	0.46%
Zn 213.857†	7579.6	63.184	ug/L	0.2861	63.184	ppb	0.2861	0.45%
SiO2†	141266.4	9015.5	ug/L	62.43	9015.5	ppb	62.43	0.69%

Sequence No.: 66
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/11/2009 20:55:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5257.3	5257.3	94.3	%			20:57:31
1	Y RADIAL	5654.3	5654.3	93.63	%			20:57:31
1	Al 396.153Radial†	7002.3	7461.8	5117.1	ug/L	5117.1	ppb	20:57:31
1	Ca 317.933Radial†	3476.2	3669.8	5356.1	ug/L	5356.1	ppb	20:57:51
1	Fe 238.204 Radial†	582.1	607.4	5458.1	ug/L	5458.1	ppb	20:57:51
1	K 766.490 Radial†	31669.8	30848.6	5166.7	ug/L	5166.7	ppb	20:57:31
1	Mg 279.077 IEC†	158.1	165.7	5578.9	ug/L	5578.9	ppb	20:57:51
1	Na 589.592 Radial†	30277.2	33665.3	10203	ug/L	10203	ppb	20:57:31
1	Sr 421.552†	80566.5	85447.0	515.30	ug/L	515.30	ppb	20:57:31
1	Sc 361.383	875223.3	875223.3	100.84	%			20:58:49
1	Y 371.029	723325.1	723325.1	99.159	%			20:58:49
1	Ag 328.068†	113733.2	112509.6	512.16	ug/L	512.16	ppb	20:58:54
1	As 188.979†	1325.0	1345.2	523.80	ug/L	523.80	ppb	20:59:14
1	B 249.677†	23468.8	23766.1	504.46	ug/L	504.46	ppb	20:58:54
1	Ba 233.527†	68302.9	67743.8	507.51	ug/L	507.51	ppb	20:58:54
1	Be 313.107†	1425787.0	1418545.3	510.34	ug/L	510.34	ppb	20:58:49
1	Cd 226.502†	49523.5	49309.0	511.17	ug/L	511.17	ppb	20:58:54
1	Co 228.616†	27149.1	26995.9	509.34	ug/L	509.34	ppb	20:58:54
1	Cr 267.716†	48932.4	48437.8	507.85	ug/L	507.85	ppb	20:58:54
1	Cu 324.752†	180530.4	172265.2	500.64	ug/L	500.64	ppb	20:58:54
1	Mn 257.610†	484091.7	479529.7	508.66	ug/L	508.66	ppb	20:58:49
1	Mo 202.031†	8133.2	8046.9	512.46	ug/L	512.46	ppb	20:59:14
1	Ni 231.604†	22426.5	22153.3	508.73	ug/L	508.73	ppb	20:58:54
1	P 214.914†	4849.4	4566.9	2474.2	ug/L	2474.2	ppb	20:59:14
1	Pb 220.353†	4546.2	4576.2	513.84	ug/L	513.84	ppb	20:59:14
1	S 181.975 Axial†	837.5	781.1	1031.0	ug/L	1031.0	ppb	20:59:14
1	Sb 206.836†	1687.4	1636.0	524.12	ug/L	524.12	ppb	20:59:14
1	Se 196.026†	903.6	922.9	538.32	ug/L	538.32	ppb	20:59:14
1	Si 251.611†	89212.4	87985.8	2608.3	ug/L	2608.3	ppb	20:58:54
1	Sn 189.927†	3251.2	3215.2	517.84	ug/L	517.84	ppb	20:59:14
1	Ti 334.940†	316665.7	315278.0	497.52	ug/L	497.52	ppb	20:58:54
1	Tl 190.801†	1801.1	1820.6	516.15	ug/L	516.15	ppb	20:59:14
1	U 409.014†	14843.2	17303.3	495.82	ug/L	495.82	ppb	20:58:54
1	V 292.402†	74853.0	75590.8	509.79	ug/L	509.79	ppb	20:58:54
1	Zn 213.857†	60785.9	59524.5	507.47	ug/L	507.47	ppb	20:58:54
1	SiO2†	89310.9	88040.8	5592.8	ug/L	5592.8	ppb	21:00:21
2	Sc Radial	5442.4	5442.4	97.6	%			20:57:56
2	Y RADIAL	5862.9	5862.9	97.08	%			20:57:56
2	Al 396.153Radial†	7169.5	7380.5	5060.9	ug/L	5060.9	ppb	20:57:56
2	Ca 317.933Radial†	3459.1	3526.9	5147.5	ug/L	5147.5	ppb	20:58:16
2	Fe 238.204 Radial†	582.7	587.1	5276.2	ug/L	5276.2	ppb	20:58:16
2	K 766.490 Radial†	32547.4	30605.5	5126.0	ug/L	5126.0	ppb	20:57:56
2	Mg 279.077 IEC†	157.1	159.1	5355.5	ug/L	5355.5	ppb	20:58:16
2	Na 589.592 Radial†	31117.8	33434.5	10133	ug/L	10133	ppb	20:57:56
2	Sr 421.552†	82928.9	84961.3	512.38	ug/L	512.38	ppb	20:57:56
2	Sc 361.383	869818.6	869818.6	100.22	%			20:59:20
2	Y 371.029	720055.7	720055.7	98.711	%			20:59:20
2	Ag 328.068†	115289.2	114763.0	522.34	ug/L	522.34	ppb	20:59:25
2	As 188.979†	1306.6	1335.0	519.93	ug/L	519.93	ppb	20:59:45
2	B 249.677†	24013.7	24454.4	519.13	ug/L	519.13	ppb	20:59:25
2	Ba 233.527†	69218.5	69078.2	517.50	ug/L	517.50	ppb	20:59:25
2	Be 313.107†	1418087.2	1419647.6	510.76	ug/L	510.76	ppb	20:59:20
2	Cd 226.502†	50020.2	50109.7	519.50	ug/L	519.50	ppb	20:59:25
2	Co 228.616†	27425.9	27439.4	517.70	ug/L	517.70	ppb	20:59:25
2	Cr 267.716†	49506.1	49311.8	517.02	ug/L	517.02	ppb	20:59:25
2	Cu 324.752†	183460.1	176301.0	512.35	ug/L	512.35	ppb	20:59:25
2	Mn 257.610†	480040.9	478470.6	507.52	ug/L	507.52	ppb	20:59:20
2	Mo 202.031†	8145.3	8109.1	516.41	ug/L	516.41	ppb	20:59:45
2	Ni 231.604†	22699.0	22563.4	518.15	ug/L	518.15	ppb	20:59:25

2	P 214.914†	4858.2	4605.5	2494.0	ug/L	2494.0 ppb	20:59:45
2	Pb 220.353†	4525.2	4583.3	514.63	ug/L	514.63 ppb	20:59:45
2	S 181.975 Axial†	846.0	794.7	1048.9	ug/L	1048.9 ppb	20:59:45
2	Sb 206.836†	1672.8	1631.8	522.72	ug/L	522.72 ppb	20:59:45
2	Se 196.026†	893.7	918.6	535.32	ug/L	535.32 ppb	20:59:45
2	Si 251.611†	90577.3	89897.4	2665.2	ug/L	2665.2 ppb	20:59:25
2	Sn 189.927†	3253.0	3237.1	521.34	ug/L	521.34 ppb	20:59:45
2	Ti 334.940†	321425.0	321978.1	508.08	ug/L	508.08 ppb	20:59:25
2	Tl 190.801†	1801.9	1832.5	519.51	ug/L	519.51 ppb	20:59:45
2	U 409.014†	14967.0	17518.2	502.00	ug/L	502.00 ppb	20:59:25
2	V 292.402†	76121.3	77317.5	521.35	ug/L	521.35 ppb	20:59:25
2	Zn 213.857†	61535.8	60647.3	517.08	ug/L	517.08 ppb	20:59:25
2	SiO2†	89586.8	88866.3	5645.3	ug/L	5645.3 ppb	21:00:27
3	Sc Radial	5424.2	5424.2	97.3	%		20:58:22
3	Y RADIAL	5832.1	5832.1	96.57	%		20:58:22
3	Al 396.153Radial†	7174.6	7410.4	5081.9	ug/L	5081.9 ppb	20:58:22
3	Ca 317.933Radial†	3484.1	3564.6	5202.5	ug/L	5202.5 ppb	20:58:42
3	Fe 238.204 Radial†	584.0	590.5	5306.2	ug/L	5306.2 ppb	20:58:42
3	K 766.490 Radial†	32581.8	30752.7	5150.6	ug/L	5150.6 ppb	20:58:22
3	Mg 279.077 IEC†	160.5	163.1	5491.4	ug/L	5491.4 ppb	20:58:42
3	Na 589.592 Radial†	31259.2	33686.8	10209	ug/L	10209 ppb	20:58:22
3	Sr 421.552†	82894.5	85211.2	513.88	ug/L	513.88 ppb	20:58:22
3	Sc 361.383	878551.1	878551.1	101.23	%		20:59:51
3	Y 371.029	726876.0	726876.0	99.646	%		20:59:51
3	Ag 328.068†	115503.9	113831.6	518.12	ug/L	518.12 ppb	20:59:56
3	As 188.979†	1303.2	1318.7	513.61	ug/L	513.61 ppb	21:00:16
3	B 249.677†	24032.6	24234.9	514.46	ug/L	514.46 ppb	20:59:56
3	Ba 233.527†	69580.0	68748.8	515.03	ug/L	515.03 ppb	20:59:56
3	Be 313.107†	1433123.8	1420437.8	511.04	ug/L	511.04 ppb	20:59:51
3	Cd 226.502†	50442.8	50031.1	518.68	ug/L	518.68 ppb	20:59:56
3	Co 228.616†	27613.1	27352.3	516.04	ug/L	516.04 ppb	20:59:56
3	Cr 267.716†	49692.1	49004.6	513.79	ug/L	513.79 ppb	20:59:56
3	Cu 324.752†	183653.8	174672.7	507.62	ug/L	507.62 ppb	20:59:56
3	Mn 257.610†	485167.2	478773.8	507.85	ug/L	507.85 ppb	20:59:51
3	Mo 202.031†	8111.7	7995.1	509.16	ug/L	509.16 ppb	21:00:16
3	Ni 231.604†	22800.1	22438.2	515.27	ug/L	515.27 ppb	20:59:56
3	P 214.914†	4852.2	4551.5	2464.5	ug/L	2464.5 ppb	21:00:16
3	Pb 220.353†	4519.7	4533.0	509.00	ug/L	509.00 ppb	21:00:16
3	S 181.975 Axial†	845.3	785.6	1037.0	ug/L	1037.0 ppb	21:00:16
3	Sb 206.836†	1681.6	1623.8	520.01	ug/L	520.01 ppb	21:00:16
3	Se 196.026†	909.5	925.3	539.19	ug/L	539.19 ppb	21:00:16
3	Si 251.611†	90815.8	89234.7	2645.6	ug/L	2645.6 ppb	20:59:56
3	Sn 189.927†	3239.9	3191.9	514.07	ug/L	514.07 ppb	21:00:16
3	Ti 334.940†	322135.6	319492.2	504.16	ug/L	504.16 ppb	20:59:56
3	Tl 190.801†	1798.7	1811.5	513.58	ug/L	513.58 ppb	21:00:16
3	U 409.014†	15082.7	17484.1	501.02	ug/L	501.02 ppb	20:59:56
3	V 292.402†	76196.3	76636.6	516.72	ug/L	516.72 ppb	20:59:56
3	Zn 213.857†	61809.6	60307.5	514.17	ug/L	514.17 ppb	20:59:56
3	SiO2†	89653.3	88043.5	5593.1	ug/L	5593.1 ppb	21:00:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874531.0	100.76	%	0.508				0.50%
Sc Radial	5374.6	96.4	%	1.83				1.90%
Y 371.029	723418.9	99.172	%	0.4676				0.47%
Y RADIAL	5783.1	95.76	%	1.865				1.95%
Ag 328.068†	113701.4	517.54	ug/L	5.114	517.54	ppb	5.114	0.99%
QC value within limits for Ag 328.068 Recovery = 103.51%								
Al 396.153Radial†	7417.6	5086.6	ug/L	28.39	5086.6	ppb	28.39	0.56%
QC value within limits for Al 396.153Radial Recovery = 101.73%								
As 188.979†	1333.0	519.12	ug/L	5.147	519.12	ppb	5.147	0.99%
QC value within limits for As 188.979 Recovery = 103.82%								
B 249.677†	24151.8	512.68	ug/L	7.495	512.68	ppb	7.495	1.46%
QC value within limits for B 249.677 Recovery = 102.54%								
Ba 233.527†	68523.6	513.35	ug/L	5.203	513.35	ppb	5.203	1.01%
QC value within limits for Ba 233.527 Recovery = 102.67%								
Be 313.107†	1419543.6	510.71	ug/L	0.349	510.71	ppb	0.349	0.07%
QC value within limits for Be 313.107 Recovery = 102.14%								
Ca 317.933Radial†	3587.1	5235.4	ug/L	108.11	5235.4	ppb	108.11	2.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 104.71%
Cd 226.502†            49816.6      516.45 ug/L         4.590      516.45 ppb          4.590   0.89%
   QC value within limits for Cd 226.502  Recovery = 103.29%
Co 228.616†            27262.5      514.36 ug/L         4.424      514.36 ppb          4.424   0.86%
   QC value within limits for Co 228.616  Recovery = 102.87%
Cr 267.716†            48918.0      512.89 ug/L         4.649      512.89 ppb          4.649   0.91%
   QC value within limits for Cr 267.716  Recovery = 102.58%
Cu 324.752†           174413.0      506.87 ug/L         5.893      506.87 ppb          5.893   1.16%
   QC value within limits for Cu 324.752  Recovery = 101.37%
Fe 238.204 Radial†       595.0      5346.8 ug/L        97.53      5346.8 ppb         97.53   1.82%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.94%
K 766.490 Radial†      30735.6      5147.8 ug/L        20.51      5147.8 ppb         20.51   0.40%
   QC value within limits for K 766.490 Radial  Recovery = 102.96%
Mg 279.077 IEC†          162.6      5475.2 ug/L       112.56      5475.2 ppb        112.56   2.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.50%
Mn 257.610†           478924.7      508.01 ug/L         0.586      508.01 ppb          0.586   0.12%
   QC value within limits for Mn 257.610  Recovery = 101.60%
Mo 202.031†             8050.4      512.68 ug/L         3.630      512.68 ppb          3.630   0.71%
   QC value within limits for Mo 202.031  Recovery = 102.54%
Na 589.592 Radial†     33595.6       10181 ug/L          42.4       10181 ppb           42.4   0.42%
   QC value within limits for Na 589.592 Radial  Recovery = 101.81%
Ni 231.604†            22385.0      514.05 ug/L         4.825      514.05 ppb          4.825   0.94%
   QC value within limits for Ni 231.604  Recovery = 102.81%
P 214.914†              4574.6      2477.6 ug/L        15.06      2477.6 ppb         15.06   0.61%
   QC value within limits for P 214.914  Recovery = 99.10%
Pb 220.353†             4564.2      512.49 ug/L         3.051      512.49 ppb          3.051   0.60%
   QC value within limits for Pb 220.353  Recovery = 102.50%
S 181.975 Axial†         787.1      1039.0 ug/L         9.15      1039.0 ppb          9.15   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 103.90%
Sb 206.836†             1630.5      522.28 ug/L         2.090      522.28 ppb          2.090   0.40%
   QC value within limits for Sb 206.836  Recovery = 104.46%
Se 196.026†              922.3      537.61 ug/L         2.030      537.61 ppb          2.030   0.38%
   QC value within limits for Se 196.026  Recovery = 107.52%
Si 251.611†            89039.3      2639.7 ug/L        28.89      2639.7 ppb         28.89   1.09%
   QC value within limits for Si 251.611  Recovery = 105.59%
Sn 189.927†             3214.7      517.75 ug/L         3.635      517.75 ppb          3.635   0.70%
   QC value within limits for Sn 189.927  Recovery = 103.55%
Sr 421.552†            85206.5      513.85 ug/L         1.464      513.85 ppb          1.464   0.28%
   QC value within limits for Sr 421.552  Recovery = 102.77%
Ti 334.940†           318916.1      503.25 ug/L         5.337      503.25 ppb          5.337   1.06%
   QC value within limits for Ti 334.940  Recovery = 100.65%
Tl 190.801†             1821.6      516.41 ug/L         2.976      516.41 ppb          2.976   0.58%
   QC value within limits for Tl 190.801  Recovery = 103.28%
U 409.014†             17435.2      499.61 ug/L         3.324      499.61 ppb          3.324   0.67%
   QC value within limits for U 409.014  Recovery = 99.92%
V 292.402†             76515.0      515.96 ug/L         5.821      515.96 ppb          5.821   1.13%
   QC value within limits for V 292.402  Recovery = 103.19%
Zn 213.857†            60159.8      512.91 ug/L         4.928      512.91 ppb          4.928   0.96%
   QC value within limits for Zn 213.857  Recovery = 102.58%
SiO2†                  88316.9      5610.4 ug/L        30.24      5610.4 ppb         30.24   0.54%
   QC value within limits for SiO2  Recovery = 104.92%
All analyte(s) passed QC.
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Sequence No.: 67
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/11/2009 21:02:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5540.5	5540.5	99.4	%			21:04:34
1	Y RADIAL	6034.9	6034.9	99.93	%			21:04:34
1	Al 396.153Radial†	-11.4	23.9	16.411	ug/L	16.411	ppb	21:04:34
1	Ca 317.933Radial†	18.2	1.4	2.0169	ug/L	2.0169	ppb	21:04:54
1	Fe 238.204 Radial†	8.1	-1.7	-15.135	ug/L	-15.135	ppb	21:04:54
1	K 766.490 Radial†	2796.1	74.4	12.499	ug/L	12.499	ppb	21:04:34
1	Mg 279.077 IEC†	1.0	-0.9	-29.639	ug/L	-29.639	ppb	21:04:54
1	Na 589.592 Radial†	-1698.1	-154.8	-46.906	ug/L	-46.906	ppb	21:04:34
1	Sr 421.552†	-27.8	-27.8	-0.1676	ug/L	-0.1676	ppb	21:04:34
1	Sc 361.383	854897.5	854897.5	98.500	%			21:05:50
1	Y 371.029	724416.7	724416.7	99.309	%			21:05:50
1	Ag 328.068†	496.5	230.0	1.0427	ug/L	1.0427	ppb	21:05:50
1	As 188.979†	-23.7	7.2	2.7807	ug/L	2.7807	ppb	21:06:10
1	B 249.677†	-273.3	215.8	4.6003	ug/L	4.6003	ppb	21:06:10
1	Ba 233.527†	-8.2	2.7	0.0193	ug/L	0.0193	ppb	21:06:10
1	Be 313.107†	-4410.4	185.0	0.0663	ug/L	0.0663	ppb	21:05:50
1	Cd 226.502†	-211.3	-15.6	-0.1601	ug/L	-0.1601	ppb	21:06:10
1	Co 228.616†	-70.6	1.7	0.0344	ug/L	0.0344	ppb	21:06:10
1	Cr 267.716†	91.3	6.6	0.0717	ug/L	0.0717	ppb	21:06:10
1	Cu 324.752†	6711.0	55.3	0.1598	ug/L	0.1598	ppb	21:05:50
1	Mn 257.610†	515.1	2.8	0.0020	ug/L	0.0020	ppb	21:06:10
1	Mo 202.031†	25.4	7.4	0.4705	ug/L	0.4705	ppb	21:06:10
1	Ni 231.604†	101.6	17.2	0.3947	ug/L	0.3947	ppb	21:06:10
1	P 214.914†	231.5	-7.0	-3.9544	ug/L	-3.9544	ppb	21:06:10
1	Pb 220.353†	-72.4	-5.5	-0.6088	ug/L	-0.6088	ppb	21:06:10
1	S 181.975 Axial†	52.8	4.2	5.6033	ug/L	5.6033	ppb	21:06:10
1	Sb 206.836†	42.4	5.7	1.7677	ug/L	1.7677	ppb	21:06:10
1	Se 196.026†	-26.4	0.0	-0.0422	ug/L	-0.0422	ppb	21:06:10
1	Si 251.611†	1060.6	595.0	17.715	ug/L	17.715	ppb	21:06:10
1	Sn 189.927†	-1.0	-9.9	-1.5912	ug/L	-1.5912	ppb	21:06:10
1	Ti 334.940†	-1287.1	-50.5	-0.0755	ug/L	-0.0755	ppb	21:05:50
1	Tl 190.801†	-33.1	1.0	0.2792	ug/L	0.2792	ppb	21:06:10
1	U 409.014†	-2869.3	-329.0	-9.4561	ug/L	-9.4561	ppb	21:05:50
1	V 292.402†	-1377.0	-35.3	-0.2446	ug/L	-0.2446	ppb	21:05:50
1	Zn 213.857†	803.6	62.0	0.5332	ug/L	0.5332	ppb	21:06:10
1	SiO2†	940.4	430.2	27.445	ug/L	27.445	ppb	21:07:06
2	Sc Radial	5485.7	5485.7	98.4	%			21:04:59
2	Y RADIAL	5931.0	5931.0	98.21	%			21:04:59
2	Al 396.153Radial†	-28.6	6.3	4.3106	ug/L	4.3106	ppb	21:04:59
2	Ca 317.933Radial†	13.8	-2.8	-4.1496	ug/L	-4.1496	ppb	21:05:19
2	Fe 238.204 Radial†	11.9	2.2	19.729	ug/L	19.729	ppb	21:05:19
2	K 766.490 Radial†	2899.6	207.7	34.864	ug/L	34.864	ppb	21:04:59
2	Mg 279.077 IEC†	-0.0	-1.9	-64.220	ug/L	-64.220	ppb	21:05:19
2	Na 589.592 Radial†	-1669.8	-143.1	-43.369	ug/L	-43.369	ppb	21:04:59
2	Sr 421.552†	-16.5	-16.6	-0.0999	ug/L	-0.0999	ppb	21:04:59
2	Sc 361.383	855488.9	855488.9	98.568	%			21:06:16
2	Y 371.029	727405.6	727405.6	99.719	%			21:06:16
2	Ag 328.068†	384.5	116.1	0.5333	ug/L	0.5333	ppb	21:06:16
2	As 188.979†	-20.9	10.0	3.8780	ug/L	3.8780	ppb	21:06:36
2	B 249.677†	-234.8	255.0	5.4317	ug/L	5.4317	ppb	21:06:36
2	Ba 233.527†	-0.6	10.5	0.0781	ug/L	0.0781	ppb	21:06:36
2	Be 313.107†	-4499.6	97.7	0.0351	ug/L	0.0351	ppb	21:06:16
2	Cd 226.502†	-195.7	0.4	0.0023	ug/L	0.0023	ppb	21:06:36
2	Co 228.616†	-74.7	-2.3	-0.0424	ug/L	-0.0424	ppb	21:06:36
2	Cr 267.716†	77.9	-7.0	-0.0727	ug/L	-0.0727	ppb	21:06:36
2	Cu 324.752†	6774.7	115.3	0.3359	ug/L	0.3359	ppb	21:06:16
2	Mn 257.610†	527.1	14.6	0.0187	ug/L	0.0187	ppb	21:06:36
2	Mo 202.031†	24.7	6.6	0.4216	ug/L	0.4216	ppb	21:06:36
2	Ni 231.604†	119.3	35.1	0.8068	ug/L	0.8068	ppb	21:06:36

2	P 214.914†	222.2	-16.6	-9.3584	ug/L	-9.3584	ppb	21:06:36
2	Pb 220.353†	-71.1	-4.1	-0.4595	ug/L	-0.4595	ppb	21:06:36
2	S 181.975 Axial†	46.2	-2.5	-3.3534	ug/L	-3.3534	ppb	21:06:36
2	Sb 206.836†	27.5	-9.5	-3.0016	ug/L	-3.0016	ppb	21:06:36
2	Se 196.026†	-28.7	-2.4	-1.2634	ug/L	-1.2634	ppb	21:06:36
2	Si 251.611†	2053.6	1601.6	47.686	ug/L	47.686	ppb	21:06:36
2	Sn 189.927†	5.7	-3.1	-0.4974	ug/L	-0.4974	ppb	21:06:36
2	Ti 334.940†	-1238.7	-0.4	0.0013	ug/L	0.0013	ppb	21:06:16
2	Tl 190.801†	-36.1	-2.1	-0.5809	ug/L	-0.5809	ppb	21:06:36
2	U 409.014†	-2717.3	-172.8	-4.9700	ug/L	-4.9700	ppb	21:06:16
2	V 292.402†	-1432.8	-90.9	-0.6127	ug/L	-0.6127	ppb	21:06:16
2	Zn 213.857†	810.1	68.0	0.5801	ug/L	0.5801	ppb	21:06:36
2	SiO2†	935.2	424.3	27.046	ug/L	27.046	ppb	21:07:11
3	Sc Radial	5631.3	5631.3	101	%			21:05:24
3	Y RADIAL	6140.2	6140.2	101.7	%			21:05:24
3	Al 396.153Radial†	-13.0	22.5	15.473	ug/L	15.473	ppb	21:05:24
3	Ca 317.933Radial†	20.4	3.3	4.8463	ug/L	4.8463	ppb	21:05:44
3	Fe 238.204 Radial†	10.2	0.2	2.1526	ug/L	2.1526	ppb	21:05:44
3	K 766.490 Radial†	2861.7	93.9	15.768	ug/L	15.768	ppb	21:05:24
3	Mg 279.077 IEC†	-0.7	-2.6	-89.079	ug/L	-89.079	ppb	21:05:44
3	Na 589.592 Radial†	-1606.6	-36.6	-11.101	ug/L	-11.101	ppb	21:05:24
3	Sr 421.552†	-4.8	-4.5	-0.0271	ug/L	-0.0271	ppb	21:05:24
3	Sc 361.383	855590.7	855590.7	98.580	%			21:06:41
3	Y 371.029	725965.5	725965.5	99.521	%			21:06:41
3	Ag 328.068†	347.8	78.7	0.3664	ug/L	0.3664	ppb	21:06:41
3	As 188.979†	-21.9	9.1	3.4992	ug/L	3.4992	ppb	21:07:01
3	B 249.677†	-262.5	226.9	4.8352	ug/L	4.8352	ppb	21:07:01
3	Ba 233.527†	-1.8	9.3	0.0691	ug/L	0.0691	ppb	21:07:01
3	Be 313.107†	-4548.3	48.9	0.0175	ug/L	0.0175	ppb	21:06:41
3	Cd 226.502†	-209.0	-13.1	-0.1359	ug/L	-0.1359	ppb	21:07:01
3	Co 228.616†	-71.5	0.9	0.0177	ug/L	0.0177	ppb	21:07:01
3	Cr 267.716†	99.6	15.0	0.1611	ug/L	0.1611	ppb	21:07:01
3	Cu 324.752†	6743.3	82.6	0.2401	ug/L	0.2401	ppb	21:06:41
3	Mn 257.610†	532.0	19.5	0.0225	ug/L	0.0225	ppb	21:07:01
3	Mo 202.031†	21.3	3.1	0.2000	ug/L	0.2000	ppb	21:07:01
3	Ni 231.604†	85.6	0.9	0.0205	ug/L	0.0205	ppb	21:07:01
3	P 214.914†	217.1	-21.8	-12.192	ug/L	-12.192	ppb	21:07:01
3	Pb 220.353†	-57.8	9.4	1.0549	ug/L	1.0549	ppb	21:07:01
3	S 181.975 Axial†	49.5	0.8	1.0121	ug/L	1.0121	ppb	21:07:01
3	Sb 206.836†	38.3	1.5	0.4808	ug/L	0.4808	ppb	21:07:01
3	Se 196.026†	-23.0	3.4	1.9456	ug/L	1.9456	ppb	21:07:01
3	Si 251.611†	975.9	508.2	15.125	ug/L	15.125	ppb	21:07:01
3	Sn 189.927†	13.5	4.9	0.7894	ug/L	0.7894	ppb	21:07:01
3	Ti 334.940†	-1267.4	-29.4	-0.0408	ug/L	-0.0408	ppb	21:06:41
3	Tl 190.801†	-38.9	-4.9	-1.3867	ug/L	-1.3867	ppb	21:07:01
3	U 409.014†	-2970.1	-428.9	-12.331	ug/L	-12.331	ppb	21:06:41
3	V 292.402†	-1378.8	-36.0	-0.2627	ug/L	-0.2627	ppb	21:06:41
3	Zn 213.857†	807.0	64.8	0.5596	ug/L	0.5596	ppb	21:07:01
3	SiO2†	942.7	431.8	27.536	ug/L	27.536	ppb	21:07:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	855325.7	98.549	%	0.0431				0.04%
Sc Radial	5552.5	99.6	%	1.32				1.32%
Y 371.029	725929.3	99.516	%	0.2049				0.21%
Y RADIAL	6035.4	99.94	%	1.732				1.73%
Ag 328.068†	141.6	0.6474	ug/L	0.35232	0.6474	ppb	0.35232	54.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.5	12.065	ug/L	6.7316	12.065	ppb	6.7316	55.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.3860	ug/L	0.55734	3.3860	ppb	0.55734	16.46%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	232.6	4.9558	ug/L	0.42863	4.9558	ppb	0.42863	8.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.5	0.0555	ug/L	0.03169	0.0555	ppb	0.03169	57.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	110.5	0.0396	ug/L	0.02473	0.0396	ppb	0.02473	62.44%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.6	0.9045	ug/L	4.59993	0.9045	ppb	4.59993	508.53%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -9.4     -0.0979 ug/L       0.08761     -0.0979 ppb        0.08761  89.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.1      0.0032 ug/L       0.04039      0.0032 ppb        0.04039 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 4.9      0.0534 ug/L       0.11796      0.0534 ppb        0.11796 221.09%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                84.4      0.2453 ug/L       0.08815      0.2453 ppb        0.08815  35.94%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.3      2.2490 ug/L      17.43193      2.2490 ppb       17.43193 775.10%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         125.3     21.043 ug/L       12.0800     21.043 ppb        12.0800  57.41%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.8    -60.979 ug/L       29.8524    -60.979 ppb        29.8524  48.95%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                12.3      0.0144 ug/L       0.01093      0.0144 ppb        0.01093  75.98%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.7      0.3640 ug/L       0.14413      0.3640 ppb        0.14413  39.60%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -111.5    -33.792 ug/L       19.7303    -33.792 ppb        19.7303  58.39%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                17.7      0.4073 ug/L       0.39330      0.4073 ppb        0.39330  96.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -15.1     -8.5015 ug/L       4.18497     -8.5015 ppb        4.18497  49.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -0.1     -0.0045 ug/L       0.92049     -0.0045 ppb        0.92049 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.8      1.0874 ug/L       4.47882      1.0874 ppb        4.47882 411.90%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                -0.8     -0.2511 ug/L       2.46744     -0.2511 ppb        2.46744 982.80%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.4      0.2134 ug/L       1.61967      0.2134 ppb        1.61967 759.15%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               901.6     26.842 ug/L       18.0977     26.842 ppb        18.0977  67.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -2.7     -0.4331 ug/L       1.19165     -0.4331 ppb        1.19165 275.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -16.3     -0.0982 ug/L       0.07026     -0.0982 ppb        0.07026  71.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -26.8     -0.0383 ug/L       0.03846     -0.0383 ppb        0.03846 100.43%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.0     -0.5628 ug/L       0.83307     -0.5628 ppb        0.83307 148.02%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -310.2     -8.9192 ug/L       3.70996     -8.9192 ppb        3.70996  41.60%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -54.0     -0.3733 ug/L       0.20749     -0.3733 ppb        0.20749  55.58%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                64.9      0.5577 ug/L       0.02351      0.5577 ppb        0.02351   4.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     428.8     27.342 ug/L        0.2607     27.342 ppb         0.2607   0.95%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 08, 2009 12:14:33
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1420
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	7284.7	7284.658	173.033	2.4
	Mg	24.0	60061.7	60061.712	2059.059	3.4
	Co	58.9	158942.6	158942.583	1686.378	1.1
	Rh	102.9	311119.2	311119.217	1716.347	0.6
	In	114.9	405143.7	405143.712	1793.513	0.4
	Pb	208.0	250960.4	250960.382	2944.999	1.2
⌈>	Ba	137.9	382380.2	382380.208	5414.019	1.4
⌊	Ba++	69.0	8329.3	0.022	0.000	1.4
⌈>	Ce	139.9	466717.1	466717.070	5925.086	1.3
⌊	CeO	155.9	12652.4	0.027	0.000	1.6
	Bkgd	220.0	22.6	22.600	3.209	14.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	15	6.8	7387.6
Co	59	15	6.8	162601.5
In	115	15	7.5	393283.0

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2060	0.660
Be	9.0	9.0	2042	2070	0.677
Mg	24.0	24.0	5679	2080	0.685
Mg	25.0	25.0	5919	2075	0.643
Mg	26.0	26.0	6187	2070	0.701
Co	58.9	58.9	14182	2110	0.663
Rh	102.9	102.9	24876	2160	0.666
In	114.9	114.9	27790	2180	0.661
Ce	139.9	139.9	33862	2195	0.685
Pb	206.0	206.0	49948	2290	0.674
Pb	207.0	207.0	50147	2260	0.631
Pb	208.0	208.0	50451	2280	0.677
U	238.1	238.1	57727	2285	0.720

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 08, 2009 21:26:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Blank.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		604976	
⌊	Tl	205		ug/L		2504	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Simple Linear	
Tl	205	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 08, 2009 21:30:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 1.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		606936	606935.547
⌊	Tl	205	10.000	ug/L	1.700	255469	0.417

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 08, 2009 21:34:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\Standard 2.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		592859	592859.053
⌊	Tl	205	99.765	ug/L	0.305	1998561	3.367

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 08, 2009 21:39:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 1.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		603349	603348.561
⌊	Tl	205	**52.021**	ug/L	0.605	1061726	1.756

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		99.7			
⌊	Tl	205	104.042				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 08, 2009 21:43:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 2.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		624617	624617.193
⌊	Tl	205	0.058	ug/L	5.951	3816	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		103.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 08, 2009 21:48:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 3.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		616815	616814.640
	Tl	205	1.259	ug/L	1.100	28767	0.043

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		102.0			
	Tl	205	125.933				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 08, 2009 21:52:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 4.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		531724	531724.265
⌊	Tl	205	-0.022	ug/L	11.360	1802	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		87.9			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 08, 2009 21:57:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 5.185

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		540486	540485.511
⌊	Tl	205	**22.895**	**ug/L**	1.123	419849	0.773

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		89.3			
⌊	Tl	205	114.473				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 08, 2009 22:01:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 6.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		593974	593973.642
	Tl	205	52.832	ug/L	1.743	1061489	1.783

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.2			
	Tl	205	105.665				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 08, 2009 22:06:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 7.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		615080	615079.717
⌊	Tl	205	0.067	ug/L	5.282	3932	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		101.7			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985796
Sample Date/Time: Tuesday, December 08, 2009 22:10:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985796.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		631402	631401.605
⌊	Tl	205	0.005	ug/L	33.389	2727	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		104.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985797
Sample Date/Time: Tuesday, December 08, 2009 22:15:28
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928677|40|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985797.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		606122	606122.305
	Tl	205	63.162	ug/L	1.615	1294333	2.132

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241838002
Sample Date/Time: Tuesday, December 08, 2009 22:38:01
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|ba|
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\241838002.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		634804	634804.106
⌊	Tl	205	0.736	ug/L	2.940	18402	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		104.9			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 22:42:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		603909	603908.578
	Tl	205	51.862	ug/L	1.129	1059480	1.750

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.8			
	Tl	205	103.723				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 22:47:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.196

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		598207	598207.357
⌊	Tl	205	**0.046**	**ug/L**	1.597	3413	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.9			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985798
Sample Date/Time: Tuesday, December 08, 2009 22:56:06
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985798.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		627941	627940.995
⌊	Tl	205	2.544	ug/L	1.365	56507	0.086

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		103.8			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985799
Sample Date/Time: Tuesday, December 08, 2009 23:00:36
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985799.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		618204	618203.710
⌊	Tl	205	55.185	ug/L	0.781	1153896	1.862

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		102.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985801
Sample Date/Time: Tuesday, December 08, 2009 23:05:07
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928677|2|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985801.200

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		618865	618864.515
⌊	Tl	205	51.335	ug/L	1.234	1074723	1.733

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		102.3			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201985800
Sample Date/Time: Tuesday, December 08, 2009 23:09:38
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928677|10|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\1201985800.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		613242	613241.613
	Tl	205	0.737	ug/L	2.595	17785	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		101.4			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 08, 2009 23:14:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 8.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		601637	601636.763
	Tl	205	52.130	ug/L	1.479	1060891	1.759

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.4			
	Tl	205	104.259				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 08, 2009 23:18:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: C:\elandata\Dataset\091208\QC Std 9.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		605841	605841.474
⌊	Tl	205	0.108	ug/L	1.316	4715	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.1			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #6 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Sunday, December 06, 2009 23:04:58
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\091119\Sample.846
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5345.4	5345.400	99.349	1.9
	Mg	24.0	47013.2	47013.236	391.376	0.8
	Co	58.9	65836.8	65836.774	756.429	1.1
	Rh	102.9	114744.0	114744.034	1479.892	1.3
	In	114.9	120459.4	120459.422	1780.502	1.5
	Pb	208.0	56369.6	56369.599	411.784	0.7
⌈>	Ba	137.9	103549.7	103549.682	1790.311	1.7
⌊	Ba++	69.0	4633.1	0.045	0.001	2.2
⌈>	Ce	139.9	138742.4	138742.403	2155.251	1.6
⌊	CeO	155.9	3793.0	0.027	0.000	1.3
	Bkgd	220.0	12.0	12.000	1.275	10.6

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
12.50	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	10.8	7201.5
Co	59	25	11.5	97042.5
In	115	25	12.8	141289.6

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	585	2080	0.656
Be	9.0	9.0	2037	2080	0.667
Mg	24.0	24.0	5692	2120	0.658
Mg	25.0	25.0	5899	2080	0.643
Mg	26.0	26.0	6189	2120	0.673
Co	58.9	58.9	14162	2170	0.642
Rh	102.9	102.9	24850	2230	0.694
In	114.9	114.9	27779	2260	0.681
Ce	139.9	140.0	33864	2280	0.739
Pb	206.0	206.0	49936	2430	0.650
Pb	207.0	207.0	50159	2385	0.687
Pb	208.0	208.0	50439	2430	0.706
U	238.1	238.0	57726	2470	0.700

Report Date/Time: Sunday, December 06, 2009 23:02:56

ICPMS#6 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, December 07, 2009 10:52:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\Blank.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		55	
	Be	9		ug/L		10	
	B	11		ug/L		424	
	Na	23		ug/L		48755	
	Mg	24		ug/L		8003	
	Al	27		ug/L		12005	
	P	31		ug/L		7542	
	K	39		ug/L		488901	
	Ca	43		ug/L		932	
>	Sc	45		ug/L		1540419	
	V	51		ug/L		11040	
	Cr	52		ug/L		-934	
	Cr	53		ug/L		167507	
	Mn	55		ug/L		1023	
	Fe	57		ug/L		5346	
	Co	59		ug/L		219	
	Ni	60		ug/L		99	
	Cu	63		ug/L		1627	
	Cu	65		ug/L		775	
	Zn	66		ug/L		355	
	Zn	67		ug/L		18151	
	Zn	68		ug/L		1441	
>	Ge	74		ug/L		286765	
	As	75		ug/L		104	
	Se	77		ug/L		5686	
	Se	82		ug/L		-36	
	Kr	83		ug/L		106	
	Sr	88		ug/L		202	
	Y	89		ug/L		45	
	Ag	107		ug/L		49	
	Cd	111		ug/L		20	
	Cd	114		ug/L		32	
>	In	115		ug/L		148892	
	Sn	120		ug/L		244	
	Sb	121		ug/L		456	
	Sb	123		ug/L		338	
	Ba	135		ug/L		27	
	Ba	137		ug/L		32	
	Ho	165		ug/L		32	
>	Lu	175		ug/L		155801	
	Tl	205		ug/L		4016	
	Pb	208		ug/L		403	
	Bi	209		ug/L		20	
	U	238		ug/L		161	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Linear Thru Zero	1.0000
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Simple Linear	
Bi	209	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Monday, December 07, 2009 10:55:31

ICPMS#6 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, December 07, 2009 10:58:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\Standard 1.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.143	20324	0.013
	Be	9	10.000	ug/L	1.142	5480	0.004
	B	11	20.000	ug/L	4.632	9781	0.006
	Na	23	1000.000	ug/L	11.436	2879277	1.859
	Mg	24	1000.000	ug/L	2.197	1904715	1.244
	Al	27	1000.000	ug/L	5.755	2446500	1.598
	P	31	1000.000	ug/L	0.747	223655	0.142
	K	39	1000.000	ug/L	4.430	3186219	1.773
	Ca	43	1000.000	ug/L	0.818	11398	0.007
>	Sc	45		ug/L		1524479	1524479.244
	V	51	10.000	ug/L	5.451	59517	0.032
	Cr	52	10.000	ug/L	0.285	40670	0.027
	Cr	53		ug/L		160982	-0.003
	Mn	55	10.000	ug/L	1.446	65305	0.042
	Fe	57	1000.000	ug/L	1.445	127839	0.080
	Co	59	10.000	ug/L	1.513	44641	0.029
	Ni	60	10.000	ug/L	1.817	9426	0.006
	Cu	63		ug/L		22130	0.013
	Cu	65	10.000	ug/L	0.348	10597	0.006
	Zn	66	10.000	ug/L	1.062	7259	0.024
	Zn	67		ug/L		17450	-0.002
	Zn	68		ug/L		6443	0.018
>	Ge	74		ug/L		283010	283010.142
	As	75	10.000	ug/L	1.535	7462	0.026
	Se	77		ug/L		5633	0.000
	Se	82	10.000	ug/L	7.059	664	0.002
	Kr	83		ug/L		95	-0.000
	Sr	88	10.000	ug/L	2.262	84346	0.574
	Y	89		ug/L		53	0.000
	Ag	107	10.000	ug/L	0.936	30757	0.209
	Cd	111	10.000	ug/L	0.322	7107	0.048
	Cd	114		ug/L		16369	0.111
>	In	115		ug/L		146620	146620.344
	Sn	120	10.000	ug/L	1.746	29489	0.200
	Sb	121	10.000	ug/L	4.526	25151	0.168
	Sb	123		ug/L		19206	0.129
	Ba	135		ug/L		6720	0.043
	Ba	137	10.000	ug/L	0.947	11723	0.076
	Ho	165		ug/L		26	-0.000
>	Lu	175		ug/L		154611	154611.482
	Tl	205	10.000	ug/L	3.399	41601	0.243
	Pb	208	10.000	ug/L	1.251	72238	0.465
	Bi	209		ug/L		31	0.000
	U	238	10.000	ug/L	1.575	72187	0.466

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, December 07, 2009 11:04:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\Standard 2.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.043**	**ug/L**	1.489	203217	0.139
	Be	9	**100.019**	**ug/L**	2.601	53497	0.037
	B	11	**200.087**	**ug/L**	2.864	94355	0.064
	Na	23	**10004.355**	**ug/L**	8.224	28458007	19.440
	Mg	24	**10010.622**	**ug/L**	2.261	20386662	13.935
	Al	27	**9997.290**	**ug/L**	6.012	22745517	15.550
	P	31	**9991.041**	**ug/L**	1.939	1909025	1.300
	K	39	**10012.484**	**ug/L**	4.381	30130142	20.286
	Ca	43	**10000.461**	**ug/L**	1.289	101855	0.069
>	Sc	45		**ug/L**		1462654	1462653.752
	V	51	**99.997**	**ug/L**	1.631	474922	0.318
	Cr	52	**99.998**	**ug/L**	1.140	397192	0.272
	Cr	53		**ug/L**		185508	0.018
	Mn	55	**99.967**	**ug/L**	1.306	598079	0.408
	Fe	57	**9993.554**	**ug/L**	0.714	1108861	0.755
	Co	59	**99.991**	**ug/L**	1.149	422612	0.289
	Ni	60	**99.980**	**ug/L**	0.843	87842	0.060
	Cu	63		**ug/L**		197798	0.134
	Cu	65	**99.997**	**ug/L**	1.994	94722	0.064
	Zn	66	**99.946**	**ug/L**	0.909	62772	0.231
	Zn	67		**ug/L**		26049	0.033
	Zn	68		**ug/L**		48021	0.173
>	Ge	74		**ug/L**		269827	269826.992
	As	75	**100.056**	**ug/L**	0.834	74447	0.276
	Se	77		**ug/L**		9546	0.016
	Se	82	**99.975**	**ug/L**	1.668	6470	0.024
	Kr	83		**ug/L**		110	0.000
	Sr	88	**99.978**	**ug/L**	0.841	778769	5.612
	Y	89		**ug/L**		126	0.001
	Ag	107	**99.993**	**ug/L**	2.116	288480	2.080
	Cd	111	**100.031**	**ug/L**	1.037	69262	0.499
	Cd	114		**ug/L**		155771	1.122
>	In	115		**ug/L**		138748	138747.524
	Sn	120	**100.014**	**ug/L**	1.457	280968	2.024
	Sb	121	**100.073**	**ug/L**	3.949	252694	1.820
	Sb	123		**ug/L**		192656	1.387
	Ba	135		**ug/L**		65026	0.436
	Ba	137	**100.016**	**ug/L**	2.700	114723	0.769
	Ho	165		**ug/L**		27	-0.000
>	Lu	175		**ug/L**		149233	149232.874
	Tl	205	**100.078**	**ug/L**	3.107	398099	2.643
	Pb	208	**99.972**	**ug/L**	1.892	674938	4.521
	Bi	209		**ug/L**		93	0.000
	U	238	**99.957**	**ug/L**	2.339	666449	4.467

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, December 07, 2009 11:10:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 1.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.253**	**ug/L**	0.737	102616	0.070
	Be	9	**52.821**	**ug/L**	1.879	28397	0.019
	B	11	**110.199**	**ug/L**	1.999	52409	0.035
	Na	23	**5179.545**	**ug/L**	6.376	14837658	10.065
	Mg	24	**4853.119**	**ug/L**	5.294	9933597	6.756
	Al	27	**5661.858**	**ug/L**	11.919	12965416	8.807
	P	31	**5369.806**	**ug/L**	1.325	1034383	0.699
	K	39	**4831.159**	**ug/L**	3.821	14849239	9.788
	Ca	43	**5100.573**	**ug/L**	0.985	52641	0.035
>	Sc	45		**ug/L**		1469748	1469748.397
	V	51	**51.696**	**ug/L**	0.830	251827	0.164
	Cr	52	**53.084**	**ug/L**	1.541	211456	0.144
	Cr	53		**ug/L**		176681	0.011
	Mn	55	**52.181**	**ug/L**	0.650	314220	0.213
	Fe	57	**5186.501**	**ug/L**	1.503	580740	0.392
	Co	59	**50.452**	**ug/L**	0.822	214391	0.146
	Ni	60	**51.883**	**ug/L**	0.962	45852	0.031
	Cu	63		**ug/L**		103351	0.069
	Cu	65	**51.559**	**ug/L**	1.117	49442	0.033
	Zn	66	**47.735**	**ug/L**	1.043	30877	0.111
	Zn	67		**ug/L**		22637	0.019
	Zn	68		**ug/L**		24372	0.083
>	Ge	74		**ug/L**		276269	276269.237
	As	75	**45.966**	**ug/L**	1.106	35072	0.127
	Se	77		**ug/L**		7376	0.007
	Se	82	**48.441**	**ug/L**	2.124	3192	0.012
	Kr	83		**ug/L**		104	0.000
	Sr	88	**48.647**	**ug/L**	1.878	395262	2.731
	Y	89		**ug/L**		64	0.000
	Ag	107	**49.776**	**ug/L**	0.742	149811	1.035
	Cd	111	**47.314**	**ug/L**	1.909	34167	0.236
	Cd	114		**ug/L**		78230	0.541
>	In	115		**ug/L**		144661	144660.921
	Sn	120	**49.518**	**ug/L**	1.629	145187	1.002
	Sb	121	**48.792**	**ug/L**	1.299	128764	0.887
	Sb	123		**ug/L**		98574	0.679
	Ba	135		**ug/L**		33049	0.214
	Ba	137	**48.026**	**ug/L**	1.748	56881	0.369
	Ho	165		**ug/L**		44	0.000
>	Lu	175		**ug/L**		153976	153976.281
	Tl	205	**49.491**	**ug/L**	1.217	205209	1.307
	Pb	208	**50.852**	**ug/L**	1.782	354510	2.300
	Bi	209		**ug/L**		42	0.000
	U	238	**53.485**	**ug/L**	1.715	368111	2.390

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.506				
	Be	9	105.642				
	B	11	110.199				
	Na	23	103.591				
	Mg	24	97.062				
	Al	27	112.116				
	P	31	107.396				
	K	39	96.623				
	Ca	43	102.011				
>	Sc	45		95.4			
	V	51	103.392				
	Cr	52	106.169				
	Cr	53					
	Mn	55	104.363				
	Fe	57	103.730				
	Co	59	100.903				
	Ni	60	103.767				
	Cu	63					
	Cu	65	103.118				
	Zn	66	95.469				
	Zn	67					
	Zn	68					
>	Ge	74		96.3			
	As	75	91.931				
	Se	77					
	Se	82	96.882				
	Kr	83					
	Sr	88	97.294				
	Y	89					
	Ag	107	99.552				
	Cd	111	94.628				
	Cd	114					
>	In	115		97.2			
	Sn	120	99.036				
	Sb	121	97.585				
	Sb	123					
	Ba	135					
	Ba	137	96.051				
	Ho	165					
>	Lu	175		98.8			
	Tl	205	98.982				
	Pb	208	101.705				
	Bi	209					
	U	238	106.969				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	B	11	ICV is out of limits (+/- 10%)
QC Std 1	Al	27	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 1

Report Date/Time: Monday, December 07, 2009 11:13:07

ICPMS#6 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, December 07, 2009 11:16:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 2.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.017	ug/L	10.502	89	0.000
	Be	9	0.003	ug/L	351.461	11	0.000
	B	11	1.605	ug/L	16.940	1190	0.001
	Na	23	1.865	ug/L	183.690	53101	0.004
	Mg	24	-0.076	ug/L	1279.133	7669	-0.000
	Al	27	-0.173	ug/L	783.680	11338	-0.000
	P	31	0.327	ug/L	702.144	7436	0.000
	K	39	-3.157	ug/L	218.619	468228	-0.006
	Ca	43	-2.271	ug/L	181.266	887	-0.000
>	Sc	45		ug/L		1505474	1505473.674
	V	51	-0.095	ug/L	330.521	10342	-0.000
	Cr	52	-0.062	ug/L	18.853	-1168	-0.000
	Cr	53		ug/L		157169	-0.004
	Mn	55	-0.001	ug/L	567.286	996	-0.000
	Fe	57	1.396	ug/L	15.251	5384	0.000
	Co	59	0.009	ug/L	35.795	252	0.000
	Ni	60	0.010	ug/L	43.875	106	0.000
	Cu	63		ug/L		1617	0.000
	Cu	65	0.012	ug/L	1017.414	770	0.000
	Zn	66	-0.055	ug/L	21.179	313	-0.000
	Zn	67		ug/L		17071	-0.003
	Zn	68		ug/L		1327	-0.000
>	Ge	74		ug/L		281871	281870.866
	As	75	0.240	ug/L	142.426	287	0.001
	Se	77		ug/L		5227	-0.001
	Se	82	0.124	ug/L	91.420	-27	0.000
	Kr	83		ug/L		98	-0.000
	Sr	88	0.002	ug/L	81.030	215	0.000
	Y	89		ug/L		44	-0.000
	Ag	107	0.004	ug/L	83.049	59	0.000
	Cd	111	0.004	ug/L	85.075	23	0.000
	Cd	114		ug/L		39	0.000
>	In	115		ug/L		145535	145535.398
	Sn	120	0.038	ug/L	25.109	350	0.001
	Sb	121	0.692	ug/L	24.288	2276	0.013
	Sb	123		ug/L		1764	0.010
	Ba	135		ug/L		25	-0.000
	Ba	137	0.009	ug/L	27.995	42	0.000
	Ho	165		ug/L		26	-0.000
>	Lu	175		ug/L		153508	153507.644
	Tl	205	0.837	ug/L	15.179	7353	0.022
	Pb	208	-0.001	ug/L	393.793	393	-0.000
	Bi	209		ug/L		20	-0.000
	U	238	0.045	ug/L	11.818	465	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Monday, December 07, 2009 11:19:03

ICPMS#6 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, December 07, 2009 11:22:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 3.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**9.791**	**ug/L**	2.051	20477	0.014
	Be	9	**0.462**	**ug/L**	6.478	264	0.000
	B	11	**14.891**	**ug/L**	3.168	7596	0.005
	Na	23	**350.274**	**ug/L**	12.304	1070726	0.681
	Mg	24	**22.431**	**ug/L**	19.878	54774	0.031
	Al	27	**44.676**	**ug/L**	11.587	116141	0.069
	P	31	**49.850**	**ug/L**	1.446	17101	0.006
	K	39	**379.558**	**ug/L**	10.169	1631321	0.769
	Ca	43	**193.696**	**ug/L**	4.009	2918	0.001
>	Sc	45		**ug/L**		1502252	1502252.060
	V	51	**9.422**	**ug/L**	2.616	55709	0.030
	Cr	52	**9.821**	**ug/L**	2.635	39241	0.027
	Cr	53		**ug/L**		153688	-0.006
	Mn	55	**5.221**	**ug/L**	0.598	33028	0.021
	Fe	57	**101.585**	**ug/L**	4.313	16735	0.008
	Co	59	**0.964**	**ug/L**	4.227	4394	0.003
	Ni	60	**2.109**	**ug/L**	1.842	1997	0.001
	Cu	63		**ug/L**		3035	0.001
	Cu	65	**0.708**	**ug/L**	3.018	1440	0.000
	Zn	66	**10.334**	**ug/L**	3.020	7074	0.024
	Zn	67		**ug/L**		16866	-0.003
	Zn	68		**ug/L**		6181	0.017
>	Ge	74		**ug/L**		281161	281160.679
	As	75	**4.998**	**ug/L**	5.344	3970	0.014
	Se	77		**ug/L**		5133	-0.002
	Se	82	**5.056**	**ug/L**	3.713	308	0.001
	Kr	83		**ug/L**		98	-0.000
	Sr	88	**9.960**	**ug/L**	1.620	82943	0.559
	Y	89		**ug/L**		35	-0.000
	Ag	107	**0.899**	**ug/L**	4.122	2815	0.019
	Cd	111	**0.955**	**ug/L**	6.327	725	0.005
	Cd	114		**ug/L**		1601	0.011
>	In	115		**ug/L**		147993	147993.300
	Sn	120	**4.506**	**ug/L**	1.534	13736	0.091
	Sb	121	**2.482**	**ug/L**	4.147	7134	0.045
	Sb	123		**ug/L**		5383	0.034
	Ba	135		**ug/L**		1312	0.008
	Ba	137	**1.847**	**ug/L**	2.711	2239	0.014
	Ho	165		**ug/L**		26	-0.000
>	Lu	175		**ug/L**		155495	155494.654
	Tl	205	**0.920**	**ug/L**	5.415	7783	0.024
	Pb	208	**1.996**	**ug/L**	2.003	14438	0.090
	Bi	209		**ug/L**		24	0.000
	U	238	**0.209**	**ug/L**	3.088	1612	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.912				
	Be	9	92.459				
	B	11	99.274				
	Na	23	140.110				
	Mg	24	149.541				
	Al	27	148.919				
	P	31	99.699				
	K	39	126.519				
	Ca	43	96.848				
>	Sc	45		97.5			
	V	51	94.220				
	Cr	52	98.207				
	Cr	53					
	Mn	55	104.412				
	Fe	57	101.585				
	Co	59	96.354				
	Ni	60	105.437				
	Cu	63					
	Cu	65	70.844				
	Zn	66	103.344				
	Zn	67					
	Zn	68					
>	Ge	74		98.0			
	As	75	99.957				
	Se	77					
	Se	82	101.111				
	Kr	83					
	Sr	88	99.598				
	Y	89					
	Ag	107	89.883				
	Cd	111	95.479				
	Cd	114					
>	In	115		99.4			
	Sn	120	90.117				
	Sb	121	82.743				
	Sb	123					
	Ba	135					
	Ba	137	92.334				
	Ho	165					
>	Lu	175		99.8			
	Tl	205	91.955				
	Pb	208	99.803				
	Bi	209					
	U	238	104.500				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Na	23	CRDL is out of limits
QC Std 3	Mg	24	CRDL is out of limits
QC Std 3	Al	27	CRDL is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 3

Report Date/Time: Monday, December 07, 2009 11:24:57

ICPMS#6 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, December 07, 2009 11:28:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 4.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.151**	**ug/L**	24.941	336	0.000
	Be	9	**0.053**	**ug/L**	18.183	35	0.000
	B	11	**0.941**	**ug/L**	4.639	793	0.000
	Na	23	**86092.409**	**ug/L**	4.429	229828160	167.290
	Mg	24	**82903.706**	**ug/L**	6.732	158493229	115.407
	Al	27	**97376.906**	**ug/L**	6.647	208012942	151.462
	P	31	**63949.543**	**ug/L**	1.825	11437209	8.324
	K	39	**83435.102**	**ug/L**	3.142	232666854	169.049
	Ca	43	**86884.784**	**ug/L**	0.630	824747	0.600
>	Sc	45		**ug/L**		1373606	1373605.751
	V	51	**-0.767**	**ug/L**	31.410	6494	-0.002
	Cr	52	**2.855**	**ug/L**	4.539	9836	0.008
	Cr	53		**ug/L**		118264	-0.023
	Mn	55	**5.639**	**ug/L**	2.083	32541	0.023
	Fe	57	**53409.635**	**ug/L**	0.877	5544379	4.033
	Co	59	**0.334**	**ug/L**	3.691	1522	0.001
	Ni	60	**3.285**	**ug/L**	2.856	2796	0.002
	Cu	63		**ug/L**		8523	0.005
	Cu	65	**5.055**	**ug/L**	0.941	5154	0.003
	Zn	66	**4.518**	**ug/L**	3.643	2977	0.010
	Zn	67		**ug/L**		14401	-0.007
	Zn	68		**ug/L**		1562	0.001
>	Ge	74		**ug/L**		254461	254461.421
	As	75	**-0.179**	**ug/L**	287.265	-33	-0.000
	Se	77		**ug/L**		5760	0.003
	Se	82	**-0.982**	**ug/L**	28.910	-92	-0.000
	Kr	83		**ug/L**		208	0.000
	Sr	88	**1.168**	**ug/L**	1.602	8742	0.066
	Y	89		**ug/L**		308	0.002
	Ag	107	**0.392**	**ug/L**	37.262	1115	0.008
	Cd	111	**1.525**	**ug/L**	36.410	1017	0.008
	Cd	114		**ug/L**		5242	0.040
>	In	115		**ug/L**		130631	130630.973
	Sn	120	**0.104**	**ug/L**	3.311	490	0.002
	Sb	121	**0.170**	**ug/L**	20.172	805	0.003
	Sb	123		**ug/L**		608	0.002
	Ba	135		**ug/L**		413	0.003
	Ba	137	**0.593**	**ug/L**	1.010	687	0.005
	Ho	165		**ug/L**		347	0.002
>	Lu	175		**ug/L**		144375	144375.169
	Tl	205	**-0.229**	**ug/L**	11.208	2849	-0.006
	Pb	208	**0.174**	**ug/L**	2.355	1510	0.008
	Bi	209		**ug/L**		215	0.001
	U	238	**-0.006**	**ug/L**	23.973	109	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	86.092				
	Mg	24	82.904				
	Al	27	97.377				
	P	31	63.950				
	K	39	83.435				
	Ca	43	86.885				
>	Sc	45		89.2			
	V	51					
	Cr	52	77.161				
	Cr	53					
	Mn	55	97.222				
	Fe	57	53.410				
	Co	59	133.724				
	Ni	60	121.655				
	Cu	63					
	Cu	65	174.314				
	Zn	66	125.491				
	Zn	67					
	Zn	68					
>	Ge	74		88.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	97.357				
	Y	89					
	Ag	107					
	Cd	111	381.217				
	Cd	114					
>	In	115		87.7			
	Sn	120					
	Sb	121	169.941				
	Sb	123					
	Ba	135					
	Ba	137	88.487				
	Ho	165					
>	Lu	175		92.7			
	Tl	205					
	Pb	208	87.057				
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	P	31	ICSA is out of limits
QC Std 4	Fe	57	ICSA is out of limits
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 4

Report Date/Time: Monday, December 07, 2009 11:30:51

ICPMS#6 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, December 07, 2009 11:34:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 5.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.271**	**ug/L**	2.079	39505	0.030
	Be	9	**20.474**	**ug/L**	1.872	10011	0.007
	B	11	**20.645**	**ug/L**	3.493	9223	0.007
	Na	23	**92536.553**	**ug/L**	5.513	240215874	179.812
	Mg	24	**84986.870**	**ug/L**	0.516	158075041	118.307
	Al	27	**107636.791**	**ug/L**	2.195	223679978	167.420
	P	31	**67413.525**	**ug/L**	0.414	11729238	8.774
	K	39	**90155.073**	**ug/L**	3.485	244408112	182.664
	Ca	43	**90436.206**	**ug/L**	0.481	834942	0.624
>	Sc	45		**ug/L**		1336050	1336049.777
	V	51	**21.818**	**ug/L**	1.898	102132	0.069
	Cr	52	**24.540**	**ug/L**	1.131	88425	0.067
	Cr	53		**ug/L**		123638	-0.016
	Mn	55	**27.172**	**ug/L**	0.313	149160	0.111
	Fe	57	**54993.605**	**ug/L**	0.818	5552912	4.153
	Co	59	**20.554**	**ug/L**	0.841	79517	0.059
	Ni	60	**23.059**	**ug/L**	1.643	18571	0.014
	Cu	63		**ug/L**		42901	0.031
	Cu	65	**24.910**	**ug/L**	1.702	22065	0.016
	Zn	66	**24.108**	**ug/L**	0.356	14120	0.056
	Zn	67		**ug/L**		15692	0.000
	Zn	68		**ug/L**		9731	0.034
>	Ge	74		**ug/L**		247462	247462.448
	As	75	**21.513**	**ug/L**	0.918	14751	0.059
	Se	77		**ug/L**		6679	0.007
	Se	82	**21.227**	**ug/L**	4.462	1236	0.005
	Kr	83		**ug/L**		210	0.000
	Sr	88	**22.913**	**ug/L**	1.164	165929	1.286
	Y	89		**ug/L**		289	0.002
	Ag	107	**19.226**	**ug/L**	1.127	51581	0.400
	Cd	111	**20.423**	**ug/L**	1.352	13151	0.102
	Cd	114		**ug/L**		34529	0.268
>	In	115		**ug/L**		128880	128880.159
	Sn	120	**20.355**	**ug/L**	1.108	53293	0.412
	Sb	121	**20.811**	**ug/L**	2.954	49146	0.378
	Sb	123		**ug/L**		38000	0.293
	Ba	135		**ug/L**		12772	0.091
	Ba	137	**20.640**	**ug/L**	0.997	22150	0.159
	Ho	165		**ug/L**		332	0.002
>	Lu	175		**ug/L**		139426	139425.521
	Tl	205	**16.389**	**ug/L**	5.308	63920	0.433
	Pb	208	**19.917**	**ug/L**	0.964	125941	0.901
	Bi	209		**ug/L**		317	0.002
	U	238	**22.167**	**ug/L**	2.136	138247	0.991

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	106.353				
	Be	9	102.369				
	B	11	103.223				
	Na	23	92.537				
	Mg	24	84.987				
	Al	27	107.637				
	P	31	67.414				
	K	39	90.155				
	Ca	43	90.436				
>	Sc	45		86.7			
	V	51	109.088				
	Cr	52	103.542				
	Cr	53					
	Mn	55	105.319				
	Fe	57	54.994				
	Co	59	101.503				
	Ni	60	101.580				
	Cu	63					
	Cu	65	108.775				
	Zn	66	102.152				
	Zn	67					
	Zn	68					
>	Ge	74		86.3			
	As	75	107.565				
	Se	77					
	Se	82	106.133				
	Kr	83					
	Sr	88	108.080				
	Y	89					
	Ag	107	96.128				
	Cd	111	100.114				
	Cd	114					
>	In	115		86.6			
	Sn	120	101.773				
	Sb	121	103.539				
	Sb	123					
	Ba	135					
	Ba	137	99.856				
	Ho	165					
>	Lu	175		89.5			
	Tl	205	81.947				
	Pb	208	98.600				
	Bi	209					
	U	238	110.836				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	P	31	ICSAB is out of limits
QC Std 5	Fe	57	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 11:40:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.473**	**ug/L**	1.539	102565	0.071
	Be	9	**51.943**	**ug/L**	0.764	27255	0.019
	B	11	**107.227**	**ug/L**	1.135	49781	0.034
	Na	23	**5051.494**	**ug/L**	4.355	14120798	9.816
	Mg	24	**4815.696**	**ug/L**	2.279	9623223	6.704
	Al	27	**5433.779**	**ug/L**	4.510	12130746	8.452
	P	31	**5296.668**	**ug/L**	1.603	995747	0.689
	K	39	**4422.012**	**ug/L**	2.589	13306040	8.959
	Ca	43	**4957.622**	**ug/L**	1.399	49959	0.034
>	Sc	45		**ug/L**		1434260	1434260.329
	V	51	**52.024**	**ug/L**	1.359	247214	0.165
	Cr	52	**52.821**	**ug/L**	0.878	205338	0.144
	Cr	53		**ug/L**		167413	0.008
	Mn	55	**51.616**	**ug/L**	1.285	303292	0.211
	Fe	57	**5236.336**	**ug/L**	0.812	572113	0.395
	Co	59	**50.253**	**ug/L**	1.946	208383	0.145
	Ni	60	**50.323**	**ug/L**	2.679	43401	0.030
	Cu	63		**ug/L**		98255	0.067
	Cu	65	**50.474**	**ug/L**	1.687	47248	0.032
	Zn	66	**47.509**	**ug/L**	2.153	29640	0.110
	Zn	67		**ug/L**		21711	0.018
	Zn	68		**ug/L**		23414	0.083
>	Ge	74		**ug/L**		266515	266514.694
	As	75	**45.295**	**ug/L**	2.887	33330	0.125
	Se	77		**ug/L**		7363	0.008
	Se	82	**48.255**	**ug/L**	2.195	3066	0.012
	Kr	83		**ug/L**		81	-0.000
	Sr	88	**48.539**	**ug/L**	0.987	382058	2.725
	Y	89		**ug/L**		70	0.000
	Ag	107	**49.903**	**ug/L**	2.116	145502	1.038
	Cd	111	**47.476**	**ug/L**	0.820	33218	0.237
	Cd	114		**ug/L**		76699	0.547
>	In	115		**ug/L**		140146	140145.806
	Sn	120	**48.844**	**ug/L**	1.656	138747	0.988
	Sb	121	**47.732**	**ug/L**	4.011	122042	0.868
	Sb	123		**ug/L**		93940	0.668
	Ba	135		**ug/L**		31853	0.210
	Ba	137	**47.313**	**ug/L**	1.575	55274	0.364
	Ho	165		**ug/L**		37	0.000
>	Lu	175		**ug/L**		151895	151894.830
	Tl	205	**49.073**	**ug/L**	2.030	200727	1.296
	Pb	208	**49.885**	**ug/L**	0.906	343074	2.256
	Bi	209		**ug/L**		35	0.000
	U	238	**52.799**	**ug/L**	0.935	358540	2.359

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.947				
	Be	9	103.887				
	B	11	107.227				
	Na	23	101.030				
	Mg	24	96.314				
	Al	27	107.600				
	P	31	105.933				
	K	39	88.440				
	Ca	43	99.152				
>	Sc	45		93.1			
	V	51	104.049				
	Cr	52	105.643				
	Cr	53					
	Mn	55	103.233				
	Fe	57	104.727				
	Co	59	100.505				
	Ni	60	100.647				
	Cu	63					
	Cu	65	100.948				
	Zn	66	95.018				
	Zn	67					
	Zn	68					
>	Ge	74		92.9			
	As	75	90.590				
	Se	77					
	Se	82	96.509				
	Kr	83					
	Sr	88	97.077				
	Y	89					
	Ag	107	99.807				
	Cd	111	94.952				
	Cd	114					
>	In	115		94.1			
	Sn	120	97.688				
	Sb	121	95.463				
	Sb	123					
	Ba	135					
	Ba	137	94.626				
	Ho	165					
>	Lu	175		97.5			
	Tl	205	98.147				
	Pb	208	99.770				
	Bi	209					
	U	238	105.599				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 11:46:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	**ug/L**	18.259	107	0.000
	Be	9	**0.004**	**ug/L**	152.864	12	0.000
	B	11	**1.062**	**ug/L**	29.932	912	0.000
	Na	23	**3.426**	**ug/L**	73.360	56781	0.007
	Mg	24	**-0.333**	**ug/L**	17.117	7002	-0.000
	Al	27	**1.795**	**ug/L**	34.548	15675	0.003
	P	31	**-0.636**	**ug/L**	100.676	7126	-0.000
	K	39	**8.342**	**ug/L**	140.531	494783	0.017
	Ca	43	**-5.075**	**ug/L**	84.701	843	-0.000
>	Sc	45		**ug/L**		1480233	1480232.648
	V	51	**0.432**	**ug/L**	26.885	12636	0.001
	Cr	52	**0.044**	**ug/L**	76.551	-721	0.000
	Cr	53		**ug/L**		151451	-0.006
	Mn	55	**-0.002**	**ug/L**	257.718	973	-0.000
	Fe	57	**3.828**	**ug/L**	22.802	5564	0.000
	Co	59	**-0.003**	**ug/L**	53.066	196	-0.000
	Ni	60	**0.004**	**ug/L**	395.841	99	0.000
	Cu	63		**ug/L**		1168	-0.000
	Cu	65	**-0.181**	**ug/L**	23.974	573	-0.000
	Zn	66	**-0.001**	**ug/L**	1357.781	341	-0.000
	Zn	67		**ug/L**		16724	-0.003
	Zn	68		**ug/L**		1256	-0.000
>	Ge	74		**ug/L**		275204	275203.764
	As	75	**0.301**	**ug/L**	156.431	327	0.001
	Se	77		**ug/L**		5345	-0.000
	Se	82	**0.105**	**ug/L**	166.624	-27	0.000
	Kr	83		**ug/L**		98	-0.000
	Sr	88	**0.002**	**ug/L**	61.359	214	0.000
	Y	89		**ug/L**		40	-0.000
	Ag	107	**0.006**	**ug/L**	102.946	64	0.000
	Cd	111	**-0.004**	**ug/L**	263.804	16	-0.000
	Cd	114		**ug/L**		46	0.000
>	In	115		**ug/L**		143614	143613.962
	Sn	120	**0.017**	**ug/L**	16.493	285	0.000
	Sb	121	**0.510**	**ug/L**	23.735	1772	0.009
	Sb	123		**ug/L**		1381	0.007
	Ba	135		**ug/L**		32	0.000
	Ba	137	**0.003**	**ug/L**	288.526	34	0.000
	Ho	165		**ug/L**		25	-0.000
>	Lu	175		**ug/L**		151807	151807.243
	Tl	205	**0.619**	**ug/L**	27.263	6390	0.016
	Pb	208	**-0.003**	**ug/L**	49.387	373	-0.000
	Bi	209		**ug/L**		19	-0.000
	U	238	**0.039**	**ug/L**	27.942	423	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.1			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.4			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985796
Sample Date/Time: Monday, December 07, 2009 11:51:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985796.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.154	ug/L	8.516	394	0.000
	Be	9	0.011	ug/L	74.104	16	0.000
	B	11	3.292	ug/L	2.409	2099	0.001
	Na	23	810.576	ug/L	8.900	2529300	1.575
	Mg	24	221.176	ug/L	8.707	493069	0.308
	Al	27	14.221	ug/L	16.742	47078	0.022
	P	31	40.879	ug/L	2.528	16093	0.005
	K	39	222.648	ug/L	1.140	1210547	0.451
	Ca	43	818.270	ug/L	0.350	9851	0.006
>	Sc	45		ug/L		1575175	1575175.345
	V	51	0.272	ug/L	225.367	12625	0.001
	Cr	52	0.622	ug/L	9.231	1709	0.002
	Cr	53		ug/L		108022	-0.040
	Mn	55	0.686	ug/L	0.781	5457	0.003
	Fe	57	21.283	ug/L	6.691	8000	0.002
	Co	59	0.011	ug/L	29.759	275	0.000
	Ni	60	0.248	ug/L	4.863	336	0.000
	Cu	63		ug/L		4267	0.002
	Cu	65	1.297	ug/L	3.740	2106	0.001
	Zn	66	3.347	ug/L	1.517	2621	0.008
	Zn	67		ug/L		11235	-0.025
	Zn	68		ug/L		2655	0.004
>	Ge	74		ug/L		291638	291637.673
	As	75	-0.075	ug/L	582.684	45	-0.000
	Se	77		ug/L		3385	-0.008
	Se	82	0.125	ug/L	279.019	-27	0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	2.454	ug/L	0.916	21327	0.138
	Y	89		ug/L		112	0.000
	Ag	107	0.006	ug/L	65.412	70	0.000
	Cd	111	0.026	ug/L	47.240	40	0.000
	Cd	114		ug/L		67	0.000
>	In	115		ug/L		153293	153293.323
	Sn	120	0.156	ug/L	4.323	735	0.003
	Sb	121	0.069	ug/L	18.464	663	0.001
	Sb	123		ug/L		521	0.001
	Ba	135		ug/L		540	0.003
	Ba	137	0.715	ug/L	4.452	934	0.005
	Ho	165		ug/L		25	-0.000
>	Lu	175		ug/L		164038	164038.326
	Tl	205	0.602	ug/L	22.351	6842	0.016
	Pb	208	0.115	ug/L	7.175	1277	0.005
	Bi	209		ug/L		49	0.000
	U	238	0.063	ug/L	10.713	628	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985797
Sample Date/Time: Monday, December 07, 2009 11:57:50
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928677|40|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985797.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.335**	**ug/L**	2.649	4864	0.003
	Be	9	**25.320**	**ug/L**	1.465	13744	0.009
	B	11	**39.244**	**ug/L**	3.946	19099	0.013
	Na	23	**276.951**	**ug/L**	11.720	844752	0.538
	Mg	24	**849.557**	**ug/L**	7.800	1762597	1.183
	Al	27	**2878.276**	**ug/L**	5.510	6650822	4.477
	P	31	**215.720**	**ug/L**	2.711	48910	0.028
	K	39	**635.312**	**ug/L**	8.475	2379547	1.287
	Ca	43	**1046.917**	**ug/L**	1.100	11619	0.007
>	Sc	45		**ug/L**		1483393	1483393.185
	V	51	**38.996**	**ug/L**	1.646	194323	0.124
	Cr	52	**20.250**	**ug/L**	0.539	80866	0.055
	Cr	53		**ug/L**		133653	-0.019
	Mn	55	**101.578**	**ug/L**	0.375	616405	0.415
	Fe	57	**3140.821**	**ug/L**	0.084	356992	0.237
	Co	59	**23.905**	**ug/L**	0.614	102640	0.069
	Ni	60	**29.556**	**ug/L**	1.426	26405	0.018
	Cu	63		**ug/L**		56706	0.037
	Cu	65	**27.838**	**ug/L**	2.086	27290	0.018
	Zn	66	**56.102**	**ug/L**	0.561	35751	0.130
	Zn	67		**ug/L**		19307	0.008
	Zn	68		**ug/L**		29465	0.103
>	Ge	74		**ug/L**		272633	272632.782
	As	75	**68.385**	**ug/L**	0.355	51444	0.188
	Se	77		**ug/L**		6589	0.004
	Se	82	**49.180**	**ug/L**	2.908	3198	0.012
	Kr	83		**ug/L**		87	-0.000
	Sr	88	**47.188**	**ug/L**	0.606	379658	2.649
	Y	89		**ug/L**		34588	0.241
	Ag	107	**12.672**	**ug/L**	0.550	37801	0.264
	Cd	111	**34.031**	**ug/L**	2.223	24344	0.170
	Cd	114		**ug/L**		56108	0.391
>	In	115		**ug/L**		143248	143247.665
	Sn	120	**14.926**	**ug/L**	0.632	43502	0.302
	Sb	121	**3.529**	**ug/L**	0.152	9630	0.064
	Sb	123		**ug/L**		7309	0.049
	Ba	135		**ug/L**		87767	0.579
	Ba	137	**131.420**	**ug/L**	1.020	153117	1.010
	Ho	165		**ug/L**		1346	0.009
>	Lu	175		**ug/L**		151521	151520.834
	Tl	205	**51.815**	**ug/L**	7.434	211176	1.368
	Pb	208	**48.095**	**ug/L**	0.814	329973	2.175
	Bi	209		**ug/L**		492	0.003
	U	238	**0.546**	**ug/L**	2.217	3854	0.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 12:09:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.151**	**ug/L**	0.274	102025	0.072
	Be	9	**52.930**	**ug/L**	1.168	27264	0.019
	B	11	**109.978**	**ug/L**	2.352	50114	0.035
	Na	23	**5464.375**	**ug/L**	7.875	14991513	10.618
	Mg	24	**5088.728**	**ug/L**	10.350	9982603	7.084
	Al	27	**5614.457**	**ug/L**	8.890	12306233	8.733
	P	31	**5393.722**	**ug/L**	1.479	995364	0.702
	K	39	**5324.600**	**ug/L**	14.138	15626234	10.788
	Ca	43	**5079.134**	**ug/L**	1.879	50227	0.035
>	Sc	45		**ug/L**		1408117	1408116.630
	V	51	**51.937**	**ug/L**	0.747	242341	0.165
	Cr	52	**53.158**	**ug/L**	0.800	202901	0.145
	Cr	53		**ug/L**		162810	0.007
	Mn	55	**52.042**	**ug/L**	0.851	300218	0.213
	Fe	57	**5283.015**	**ug/L**	1.306	566639	0.399
	Co	59	**50.291**	**ug/L**	1.337	204740	0.145
	Ni	60	**50.258**	**ug/L**	2.772	42557	0.030
	Cu	63		**ug/L**		97450	0.068
	Cu	65	**51.124**	**ug/L**	0.104	46978	0.033
	Zn	66	**48.363**	**ug/L**	0.419	29440	0.112
	Zn	67		**ug/L**		20710	0.016
	Zn	68		**ug/L**		23048	0.084
>	Ge	74		**ug/L**		260024	260023.538
	As	75	**46.003**	**ug/L**	0.167	33038	0.127
	Se	77		**ug/L**		7150	0.008
	Se	82	**48.344**	**ug/L**	1.835	2998	0.012
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**48.469**	**ug/L**	1.207	373193	2.721
	Y	89		**ug/L**		63	0.000
	Ag	107	**50.429**	**ug/L**	1.964	143828	1.049
	Cd	111	**46.654**	**ug/L**	0.955	31934	0.233
	Cd	114		**ug/L**		74737	0.545
>	In	115		**ug/L**		137096	137095.553
	Sn	120	**50.008**	**ug/L**	0.627	138963	1.012
	Sb	121	**47.999**	**ug/L**	2.635	120062	0.873
	Sb	123		**ug/L**		92253	0.671
	Ba	135		**ug/L**		31234	0.211
	Ba	137	**48.143**	**ug/L**	1.558	54835	0.370
	Ho	165		**ug/L**		33	0.000
>	Lu	175		**ug/L**		148094	148094.175
	Tl	205	**51.892**	**ug/L**	1.718	206768	1.370
	Pb	208	**50.570**	**ug/L**	0.481	339083	2.287
	Bi	209		**ug/L**		51	0.000
	U	238	**53.786**	**ug/L**	0.804	356082	2.403

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.302				
	Be	9	105.860				
	B	11	109.978				
	Na	23	109.287				
	Mg	24	101.775				
	Al	27	111.177				
	P	31	107.874				
	K	39	106.492				
	Ca	43	101.583				
>	Sc	45		91.4			
	V	51	103.874				
	Cr	52	106.316				
	Cr	53					
	Mn	55	104.085				
	Fe	57	105.660				
	Co	59	100.582				
	Ni	60	100.515				
	Cu	63					
	Cu	65	102.249				
	Zn	66	96.726				
	Zn	67					
	Zn	68					
>	Ge	74		90.7			
	As	75	92.006				
	Se	77					
	Se	82	96.688				
	Kr	83					
	Sr	88	96.937				
	Y	89					
	Ag	107	100.859				
	Cd	111	93.308				
	Cd	114					
>	In	115		92.1			
	Sn	120	100.015				
	Sb	121	95.998				
	Sb	123					
	Ba	135					
	Ba	137	96.287				
	Ho	165					
>	Lu	175		95.1			
	Tl	205	103.784				
	Pb	208	101.140				
	Bi	209					
	U	238	107.573				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 12:15:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.016**	**ug/L**	28.203	84	0.000
	Be	9	**0.005**	**ug/L**	99.636	12	0.000
	B	11	**1.331**	**ug/L**	15.177	1020	0.000
	Na	23	**2.390**	**ug/L**	128.774	52766	0.005
	Mg	24	**0.388**	**ug/L**	188.576	8336	0.001
	Al	27	**-1.021**	**ug/L**	117.729	9003	-0.002
	P	31	**-1.212**	**ug/L**	142.358	6881	-0.000
	K	39	**1.510**	**ug/L**	60.902	465461	0.003
	Ca	43	**-6.684**	**ug/L**	44.252	812	-0.000
>	Sc	45		**ug/L**		1452603	1452603.126
	V	51	**-0.255**	**ug/L**	86.860	9237	-0.001
	Cr	52	**0.045**	**ug/L**	52.745	-703	0.000
	Cr	53		**ug/L**		148013	-0.007
	Mn	55	**0.002**	**ug/L**	75.777	975	0.000
	Fe	57	**1.152**	**ug/L**	48.857	5168	0.000
	Co	59	**0.003**	**ug/L**	252.387	217	0.000
	Ni	60	**0.006**	**ug/L**	202.304	99	0.000
	Cu	63		**ug/L**		1116	-0.000
	Cu	65	**-0.173**	**ug/L**	8.093	570	-0.000
	Zn	66	**-0.034**	**ug/L**	19.956	307	-0.000
	Zn	67		**ug/L**		15980	-0.003
	Zn	68		**ug/L**		1233	-0.000
>	Ge	74		**ug/L**		264844	264844.095
	As	75	**0.287**	**ug/L**	176.050	302	0.001
	Se	77		**ug/L**		5184	-0.000
	Se	82	**0.074**	**ug/L**	257.288	-28	0.000
	Kr	83		**ug/L**		94	-0.000
	Sr	88	**0.001**	**ug/L**	228.598	195	0.000
	Y	89		**ug/L**		43	0.000
	Ag	107	**0.003**	**ug/L**	34.490	56	0.000
	Cd	111	**-0.003**	**ug/L**	298.457	16	-0.000
	Cd	114		**ug/L**		38	0.000
>	In	115		**ug/L**		139727	139727.128
	Sn	120	**0.022**	**ug/L**	1.185	290	0.000
	Sb	121	**0.515**	**ug/L**	25.004	1736	0.009
	Sb	123		**ug/L**		1353	0.007
	Ba	135		**ug/L**		30	0.000
	Ba	137	**0.003**	**ug/L**	154.569	34	0.000
	Ho	165		**ug/L**		25	-0.000
>	Lu	175		**ug/L**		149320	149320.209
	Tl	205	**1.427**	**ug/L**	14.330	9483	0.038
	Pb	208	**-0.004**	**ug/L**	29.612	358	-0.000
	Bi	209		**ug/L**		23	0.000
	U	238	**0.036**	**ug/L**	19.768	392	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.8			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Tl	205	CCB is out of limits (+-/ PQL)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 241838002
Sample Date/Time: Monday, December 07, 2009 12:45:01
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rm|
Method File: c:\elandata\Method\6020 noirs thtlmozr.mth
Dataset File: C:\elandata\Dataset\091206\241838002.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**60.371**	**ug/L**	1.331	132019	0.084
	Be	9	**2.810**	**ug/L**	0.784	1628	0.001
	B	11	**15.359**	**ug/L**	3.220	8195	0.005
	Na	23	**1758.455**	**ug/L**	1.676	5428865	3.417
	Mg	24	**7262.952**	**ug/L**	4.991	15918912	10.111
	Al	27	**47450.112**	**ug/L**	2.112	116181457	73.805
	P	31	**575.263**	**ug/L**	1.026	125563	0.075
	K	39	**4851.010**	**ug/L**	1.373	15971565	9.829
	Ca	43	**8380.589**	**ug/L**	0.858	92022	0.058
>	Sc	45		**ug/L**		1574110	1574110.263
	V	51	**50.751**	**ug/L**	1.990	264985	0.161
	Cr	52	**27.849**	**ug/L**	1.494	118361	0.076
	Cr	53		**ug/L**		97674	-0.047
	Mn	55	**659.282**	**ug/L**	0.897	4239389	2.693
	Fe	57	**19067.592**	**ug/L**	1.308	2271964	1.440
	Co	59	**10.815**	**ug/L**	1.418	49397	0.031
	Ni	60	**22.492**	**ug/L**	1.081	21346	0.013
	Cu	63		**ug/L**		43765	0.027
	Cu	65	**20.560**	**ug/L**	1.178	21592	0.013
	Zn	66	**134.052**	**ug/L**	1.292	85435	0.310
	Zn	67		**ug/L**		24189	0.025
	Zn	68		**ug/L**		69526	0.249
>	Ge	74		**ug/L**		274211	274210.805
	As	75	**5.657**	**ug/L**	7.251	4366	0.016
	Se	77		**ug/L**		2883	-0.009
	Se	82	**0.651**	**ug/L**	42.783	9	0.000
	Kr	83		**ug/L**		209	0.000
	Sr	88	**75.324**	**ug/L**	1.014	627726	4.228
	Y	89		**ug/L**		696888	4.695
	Ag	107	**0.306**	**ug/L**	3.364	994	0.006
	Cd	111	**1.186**	**ug/L**	8.107	898	0.006
	Cd	114		**ug/L**		264	0.002
>	In	115		**ug/L**		148415	148415.122
	Sn	120	**1.279**	**ug/L**	3.697	4085	0.026
	Sb	121	**-0.017**	**ug/L**	54.902	408	-0.000
	Sb	123		**ug/L**		309	-0.000
	Ba	135		**ug/L**		249003	1.516
	Ba	137	**345.661**	**ug/L**	0.588	436329	2.657
	Ho	165		**ug/L**		26480	0.161
>	Lu	175		**ug/L**		164191	164190.841
	Tl	205	**0.400**	**ug/L**	2.440	5965	0.011
	Pb	208	**31.070**	**ug/L**	0.909	231153	1.405
	Bi	209		**ug/L**		10512	0.064
	U	238	**2.517**	**ug/L**	2.962	18630	0.112

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.2			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.4			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 12:50:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.463**	**ug/L**	0.533	109105	0.071
	Be	9	**50.883**	**ug/L**	1.576	28402	0.019
	B	11	**104.257**	**ug/L**	1.930	51505	0.033
	Na	23	**4814.074**	**ug/L**	4.164	14325374	9.354
	Mg	24	**4548.283**	**ug/L**	9.384	9672230	6.332
	Al	27	**5843.788**	**ug/L**	9.499	13887094	9.090
	P	31	**5104.586**	**ug/L**	1.425	1021245	0.664
	K	39	**4310.568**	**ug/L**	9.684	13813245	8.734
	Ca	43	**4922.649**	**ug/L**	1.180	52779	0.034
>	Sc	45		**ug/L**		1525945	1525945.342
	V	51	**48.728**	**ug/L**	0.582	247064	0.155
	Cr	52	**50.522**	**ug/L**	1.041	208919	0.138
	Cr	53		**ug/L**		162928	-0.002
	Mn	55	**50.580**	**ug/L**	0.957	316254	0.207
	Fe	57	**5088.612**	**ug/L**	0.552	591690	0.384
	Co	59	**49.052**	**ug/L**	0.541	216425	0.142
	Ni	60	**48.963**	**ug/L**	0.792	44933	0.029
	Cu	63		**ug/L**		103099	0.067
	Cu	65	**49.806**	**ug/L**	0.699	49615	0.032
	Zn	66	**46.874**	**ug/L**	1.555	30704	0.109
	Zn	67		**ug/L**		20007	0.008
	Zn	68		**ug/L**		23914	0.080
>	Ge	74		**ug/L**		279725	279725.165
	As	75	**44.351**	**ug/L**	1.821	34263	0.122
	Se	77		**ug/L**		7608	0.007
	Se	82	**46.586**	**ug/L**	1.548	3106	0.011
	Kr	83		**ug/L**		90	-0.000
	Sr	88	**48.979**	**ug/L**	2.110	396583	2.749
	Y	89		**ug/L**		108	0.000
	Ag	107	**49.778**	**ug/L**	2.822	149285	1.035
	Cd	111	**47.674**	**ug/L**	2.151	34319	0.238
	Cd	114		**ug/L**		77947	0.540
>	In	115		**ug/L**		144222	144222.242
	Sn	120	**49.436**	**ug/L**	2.117	144465	1.000
	Sb	121	**47.096**	**ug/L**	4.923	123833	0.856
	Sb	123		**ug/L**		94750	0.655
	Ba	135		**ug/L**		32402	0.209
	Ba	137	**48.079**	**ug/L**	2.874	57304	0.370
	Ho	165		**ug/L**		38	0.000
>	Lu	175		**ug/L**		155025	155024.536
	Tl	205	**46.763**	**ug/L**	3.653	195311	1.235
	Pb	208	**49.673**	**ug/L**	2.090	348547	2.246
	Bi	209		**ug/L**		61	0.000
	U	238	**52.341**	**ug/L**	2.197	362594	2.339

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.927				
	Be	9	101.766				
	B	11	104.257				
	Na	23	96.281				
	Mg	24	90.966				
	Al	27	115.719				
	P	31	102.092				
	K	39	86.211				
	Ca	43	98.453				
>	Sc	45		99.1			
	V	51	97.455				
	Cr	52	101.044				
	Cr	53					
	Mn	55	101.159				
	Fe	57	101.772				
	Co	59	98.105				
	Ni	60	97.927				
	Cu	63					
	Cu	65	99.612				
	Zn	66	93.749				
	Zn	67					
	Zn	68					
>	Ge	74		97.5			
	As	75	88.701				
	Se	77					
	Se	82	93.172				
	Kr	83					
	Sr	88	97.957				
	Y	89					
	Ag	107	99.557				
	Cd	111	95.349				
	Cd	114					
>	In	115		96.9			
	Sn	120	98.872				
	Sb	121	94.193				
	Sb	123					
	Ba	135					
	Ba	137	96.157				
	Ho	165					
>	Lu	175		99.5			
	Tl	205	93.526				
	Pb	208	99.345				
	Bi	209					
	U	238	104.681				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)
QC Std 6	As	75	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 12:56:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtlmozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.023	ug/L	21.776	106	0.000
	Be	9	0.005	ug/L	156.617	13	0.000
	B	11	0.998	ug/L	30.386	924	0.000
	Na	23	1.770	ug/L	173.113	54439	0.003
	Mg	24	0.588	ug/L	161.856	9336	0.001
	Al	27	1.900	ug/L	64.093	16677	0.003
	P	31	-1.653	ug/L	72.810	7264	-0.000
	K	39	-9.159	ug/L	110.964	463764	-0.019
	Ca	43	-11.486	ug/L	49.130	816	-0.000
>	Sc	45		ug/L		1551864	1551864.099
	V	51	0.208	ug/L	374.667	12150	0.001
	Cr	52	0.380	ug/L	13.324	663	0.001
	Cr	53		ug/L		149347	-0.013
	Mn	55	0.040	ug/L	11.923	1287	0.000
	Fe	57	1.335	ug/L	56.633	5542	0.000
	Co	59	0.003	ug/L	126.685	235	0.000
	Ni	60	-0.008	ug/L	184.770	92	-0.000
	Cu	63		ug/L		2375	0.000
	Cu	65	0.383	ug/L	164.541	1162	0.000
	Zn	66	0.049	ug/L	234.144	386	0.000
	Zn	67		ug/L		15662	-0.008
	Zn	68		ug/L		1204	-0.001
>	Ge	74		ug/L		284870	284869.564
	As	75	0.345	ug/L	113.698	373	0.001
	Se	77		ug/L		5638	-0.000
	Se	82	0.218	ug/L	93.631	-20	0.000
	Kr	83		ug/L		89	-0.000
	Sr	88	0.003	ug/L	77.518	225	0.000
	Y	89		ug/L		52	0.000
	Ag	107	0.004	ug/L	39.278	60	0.000
	Cd	111	-0.004	ug/L	233.608	17	-0.000
	Cd	114		ug/L		35	0.000
>	In	115		ug/L		148206	148205.775
	Sn	120	0.015	ug/L	68.273	288	0.000
	Sb	121	0.501	ug/L	23.258	1806	0.009
	Sb	123		ug/L		1328	0.007
	Ba	135		ug/L		28	0.000
	Ba	137	0.011	ug/L	49.520	46	0.000
	Ho	165		ug/L		31	-0.000
>	Lu	175		ug/L		157904	157903.520
	Tl	205	0.164	ug/L	57.898	4757	0.004
	Pb	208	0.018	ug/L	124.079	541	0.001
	Bi	209		ug/L		19	-0.000
	U	238	0.032	ug/L	22.215	391	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985798
Sample Date/Time: Monday, December 07, 2009 13:08:37
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985798.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.838**	**ug/L**	2.440	177449	0.112
	Be	9	**4.690**	**ug/L**	0.338	2721	0.002
	B	11	**22.858**	**ug/L**	2.494	12037	0.007
	Na	23	**1529.700**	**ug/L**	0.988	4747510	2.972
	Mg	24	**10499.100**	**ug/L**	2.055	23104884	14.615
	Al	27	**85104.657**	**ug/L**	10.559	209239878	132.373
	P	31	**450.507**	**ug/L**	1.917	100409	0.059
	K	39	**9816.959**	**ug/L**	6.595	31943130	19.890
	Ca	43	**9800.904**	**ug/L**	1.283	107887	0.068
>	Sc	45		**ug/L**		1580399	1580399.079
	V	51	**73.029**	**ug/L**	0.676	377827	0.232
	Cr	52	**42.538**	**ug/L**	0.440	182029	0.116
	Cr	53		**ug/L**		104041	-0.043
	Mn	55	**364.635**	**ug/L**	0.365	2354617	1.489
	Fe	57	**30680.566**	**ug/L**	1.493	3667152	2.317
	Co	59	**11.352**	**ug/L**	1.536	52043	0.033
	Ni	60	**29.652**	**ug/L**	0.617	28223	0.018
	Cu	63		**ug/L**		85643	0.053
	Cu	65	**40.189**	**ug/L**	2.510	41615	0.026
	Zn	66	**151.226**	**ug/L**	1.781	96663	0.350
	Zn	67		**ug/L**		25590	0.030
	Zn	68		**ug/L**		75154	0.268
>	Ge	74		**ug/L**		275148	275148.343
	As	75	**8.122**	**ug/L**	4.308	6253	0.022
	Se	77		**ug/L**		2850	-0.009
	Se	82	**-0.248**	**ug/L**	175.817	-51	-0.000
	Kr	83		**ug/L**		297	0.001
	Sr	88	**85.250**	**ug/L**	1.867	709351	4.786
	Y	89		**ug/L**		818324	5.522
	Ag	107	**0.599**	**ug/L**	2.949	1894	0.012
	Cd	111	**2.061**	**ug/L**	11.103	1542	0.010
	Cd	114		**ug/L**		336	0.002
>	In	115		**ug/L**		148199	148199.101
	Sn	120	**2.478**	**ug/L**	2.256	7674	0.050
	Sb	121	**0.040**	**ug/L**	39.632	563	0.001
	Sb	123		**ug/L**		446	0.001
	Ba	135		**ug/L**		174845	1.066
	Ba	137	**239.210**	**ug/L**	1.220	301564	1.839
	Ho	165		**ug/L**		30415	0.185
>	Lu	175		**ug/L**		163982	163981.840
	Tl	205	**1.750**	**ug/L**	3.604	11804	0.046
	Pb	208	**74.545**	**ug/L**	0.409	553244	3.371
	Bi	209		**ug/L**		7160	0.044
	U	238	**2.056**	**ug/L**	0.939	15238	0.092

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985799
Sample Date/Time: Monday, December 07, 2009 13:14:30
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985799.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**110.098**	**ug/L**	1.160	242063	0.153
	Be	9	**28.263**	**ug/L**	3.192	16370	0.010
	B	11	**72.736**	**ug/L**	1.713	37408	0.023
	Na	23	**2342.964**	**ug/L**	5.626	7254830	4.553
	Mg	24	**12471.074**	**ug/L**	3.437	27495857	17.361
	Al	27	**92456.117**	**ug/L**	6.925	227549547	143.808
	P	31	**1426.032**	**ug/L**	0.646	301575	0.186
	K	39	**11339.163**	**ug/L**	3.987	36864099	22.974
	Ca	43	**10190.211**	**ug/L**	0.473	112330	0.070
>	Sc	45		**ug/L**		1583058	1583057.679
	V	51	**106.030**	**ug/L**	1.494	544355	0.337
	Cr	52	**67.579**	**ug/L**	0.663	290238	0.184
	Cr	53		**ug/L**		115128	-0.036
	Mn	55	**528.542**	**ug/L**	1.745	3417892	2.159
	Fe	57	**32131.090**	**ug/L**	1.798	3846211	2.426
	Co	59	**38.331**	**ug/L**	0.422	175499	0.111
	Ni	60	**54.749**	**ug/L**	0.976	52111	0.033
	Cu	63		**ug/L**		135642	0.085
	Cu	65	**64.845**	**ug/L**	1.265	66773	0.042
	Zn	66	**176.981**	**ug/L**	1.420	112179	0.410
	Zn	67		**ug/L**		28533	0.041
	Zn	68		**ug/L**		87407	0.315
>	Ge	74		**ug/L**		272920	272919.694
	As	75	**43.527**	**ug/L**	0.032	32815	0.120
	Se	77		**ug/L**		3123	-0.008
	Se	82	**8.543**	**ug/L**	6.407	528	0.002
	Kr	83		**ug/L**		293	0.001
	Sr	88	**114.556**	**ug/L**	2.118	930934	6.431
	Y	89		**ug/L**		845797	5.844
	Ag	107	**23.820**	**ug/L**	3.288	71735	0.495
	Cd	111	**7.451**	**ug/L**	1.057	5401	0.037
	Cd	114		**ug/L**		8086	0.056
>	In	115		**ug/L**		144770	144769.750
	Sn	120	**15.793**	**ug/L**	1.442	46496	0.320
	Sb	121	**14.209**	**ug/L**	0.589	37842	0.258
	Sb	123		**ug/L**		28903	0.197
	Ba	135		**ug/L**		214577	1.320
	Ba	137	**298.311**	**ug/L**	1.873	372819	2.293
	Ho	165		**ug/L**		32108	0.197
>	Lu	175		**ug/L**		162569	162568.511
	Tl	205	**44.115**	**ug/L**	5.347	193559	1.165
	Pb	208	**170.474**	**ug/L**	2.012	1253570	7.710
	Bi	209		**ug/L**		6997	0.043
	U	238	**27.199**	**ug/L**	2.198	197703	1.215

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.8			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		95.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985801
Sample Date/Time: Monday, December 07, 2009 13:20:24
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985801.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**104.722**	**ug/L**	1.264	227780	0.145
	Be	9	**26.335**	**ug/L**	1.323	15093	0.010
	B	11	**69.315**	**ug/L**	2.349	35290	0.022
	Na	23	**2330.112**	**ug/L**	9.549	7138172	4.528
	Mg	24	**10448.720**	**ug/L**	6.599	22791243	14.545
	Al	27	**87843.913**	**ug/L**	8.819	213958865	136.634
	P	31	**1363.937**	**ug/L**	1.399	285682	0.178
	K	39	**10835.725**	**ug/L**	7.657	34878445	21.954
	Ca	43	**9582.109**	**ug/L**	0.648	104542	0.066
>	Sc	45		**ug/L**		1566028	1566027.551
	V	51	**96.013**	**ug/L**	1.256	488680	0.305
	Cr	52	**63.056**	**ug/L**	1.628	267835	0.172
	Cr	53		**ug/L**		113209	-0.036
	Mn	55	**426.037**	**ug/L**	0.166	2725950	1.740
	Fe	57	**29894.947**	**ug/L**	0.556	3540829	2.258
	Co	59	**35.569**	**ug/L**	0.366	161118	0.103
	Ni	60	**49.866**	**ug/L**	0.708	46962	0.030
	Cu	63		**ug/L**		120866	0.076
	Cu	65	**57.388**	**ug/L**	0.111	58551	0.037
	Zn	66	**165.430**	**ug/L**	1.645	103893	0.383
	Zn	67		**ug/L**		27220	0.037
	Zn	68		**ug/L**		80916	0.294
>	Ge	74		**ug/L**		270405	270404.591
	As	75	**41.513**	**ug/L**	1.315	31009	0.114
	Se	77		**ug/L**		3265	-0.008
	Se	82	**7.770**	**ug/L**	6.500	473	0.002
	Kr	83		**ug/L**		272	0.001
	Sr	88	**104.078**	**ug/L**	0.317	843641	5.843
	Y	89		**ug/L**		788506	5.462
	Ag	107	**22.141**	**ug/L**	1.601	66521	0.460
	Cd	111	**6.983**	**ug/L**	1.769	5049	0.035
	Cd	114		**ug/L**		7471	0.052
>	In	115		**ug/L**		144362	144362.276
	Sn	120	**15.724**	**ug/L**	0.699	46174	0.318
	Sb	121	**11.949**	**ug/L**	1.201	31808	0.217
	Sb	123		**ug/L**		24300	0.166
	Ba	135		**ug/L**		201279	1.255
	Ba	137	**281.792**	**ug/L**	1.106	347445	2.166
	Ho	165		**ug/L**		29514	0.184
>	Lu	175		**ug/L**		160366	160365.692
	Tl	205	**42.586**	**ug/L**	5.923	184437	1.125
	Pb	208	**161.385**	**ug/L**	0.944	1170879	7.299
	Bi	209		**ug/L**		6258	0.039
	U	238	**25.729**	**ug/L**	0.560	184531	1.150

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.9			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985800
Sample Date/Time: Monday, December 07, 2009 13:26:19
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928677|10|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\1201985800.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**18.222**	**ug/L**	4.290	37715	0.025
	Be	9	**1.063**	**ug/L**	6.177	588	0.000
	B	11	**5.853**	**ug/L**	1.979	3208	0.002
	Na	23	**509.631**	**ug/L**	2.859	1521670	0.990
	Mg	24	**2297.352**	**ug/L**	8.872	4766689	3.198
	Al	27	**20122.479**	**ug/L**	5.528	46623590	31.299
	P	31	**101.405**	**ug/L**	3.444	26937	0.013
	K	39	**2090.220**	**ug/L**	8.305	6778473	4.235
	Ca	43	**2100.164**	**ug/L**	1.387	22487	0.014
>	Sc	45		**ug/L**		1488782	1488781.960
	V	51	**17.448**	**ug/L**	3.363	93142	0.055
	Cr	52	**9.473**	**ug/L**	3.230	37481	0.026
	Cr	53		**ug/L**		110208	-0.035
	Mn	55	**205.127**	**ug/L**	1.179	1248230	0.838
	Fe	57	**12263.926**	**ug/L**	0.739	1383946	0.926
	Co	59	**3.903**	**ug/L**	1.343	16994	0.011
	Ni	60	**7.424**	**ug/L**	1.441	6728	0.004
	Cu	63		**ug/L**		19147	0.012
	Cu	65	**8.900**	**ug/L**	1.612	9265	0.006
	Zn	66	**33.771**	**ug/L**	1.038	21565	0.078
	Zn	67		**ug/L**		15005	-0.008
	Zn	68		**ug/L**		17509	0.059
>	Ge	74		**ug/L**		271518	271518.301
	As	75	**2.268**	**ug/L**	4.145	1795	0.006
	Se	77		**ug/L**		3745	-0.006
	Se	82	**0.423**	**ug/L**	15.556	-6	0.000
	Kr	83		**ug/L**		121	0.000
	Sr	88	**20.011**	**ug/L**	1.508	158782	1.123
	Y	89		**ug/L**		192246	1.361
	Ag	107	**0.096**	**ug/L**	3.331	330	0.002
	Cd	111	**0.416**	**ug/L**	8.024	312	0.002
	Cd	114		**ug/L**		101	0.001
>	In	115		**ug/L**		141185	141184.564
	Sn	120	**0.612**	**ug/L**	3.476	1979	0.012
	Sb	121	**-0.044**	**ug/L**	13.115	321	-0.001
	Sb	123		**ug/L**		259	-0.000
	Ba	135		**ug/L**		40445	0.271
	Ba	137	**62.112**	**ug/L**	1.334	71206	0.477
	Ho	165		**ug/L**		6729	0.045
>	Lu	175		**ug/L**		149088	149087.897
	Tl	205	**1.555**	**ug/L**	14.236	9968	0.041
	Pb	208	**22.111**	**ug/L**	1.676	149452	1.000
	Bi	209		**ug/L**		1448	0.010
	U	238	**0.466**	**ug/L**	0.771	3261	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.6		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			94.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.7		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, December 07, 2009 13:55:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtlmozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 6.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**47.585**	**ug/L**	3.024	101714	0.066
|	Be	9	**49.343**	**ug/L**	1.303	27773	0.018
|	B	11	**106.395**	**ug/L**	1.135	52995	0.034
|	Na	23	**5663.845**	**ug/L**	20.296	16988240	11.006
|	Mg	24	**4703.465**	**ug/L**	7.343	10085517	6.548
|	Al	27	**5758.693**	**ug/L**	4.845	13791239	8.957
|	P	31	**5227.863**	**ug/L**	1.235	1054471	0.680
|	K	39	**4080.273**	**ug/L**	1.760	13208916	8.267
|	Ca	43	**4916.790**	**ug/L**	1.527	53159	0.034
|>	Sc	45		**ug/L**		1538674	1538674.137
|	V	51	**50.717**	**ug/L**	2.569	258813	0.161
|	Cr	52	**51.545**	**ug/L**	2.121	214932	0.140
|	Cr	53		**ug/L**		158741	-0.006
|	Mn	55	**50.493**	**ug/L**	0.089	318333	0.206
|	Fe	57	**5040.925**	**ug/L**	1.110	591056	0.381
|	Co	59	**47.962**	**ug/L**	0.687	213382	0.139
|	Ni	60	**48.467**	**ug/L**	0.468	44850	0.029
|	Cu	63		**ug/L**		101577	0.065
⌊	Cu	65	**49.036**	**ug/L**	0.616	49268	0.032
⌈	Zn	66	**47.257**	**ug/L**	0.267	31140	0.109
|	Zn	67		**ug/L**		19783	0.007
|	Zn	68		**ug/L**		24075	0.081
|>	Ge	74		**ug/L**		281403	281403.004
|	As	75	**43.957**	**ug/L**	0.624	34169	0.121
|	Se	77		**ug/L**		7652	0.007
|	Se	82	**45.599**	**ug/L**	2.715	3058	0.011
⌊	Kr	83		**ug/L**		91	-0.000
⌈	Sr	88	**48.965**	**ug/L**	1.237	394188	2.749
|	Y	89		**ug/L**		104	0.000
|	Ag	107	**49.988**	**ug/L**	0.794	149074	1.040
|	Cd	111	**47.561**	**ug/L**	2.489	34038	0.237
|	Cd	114		**ug/L**		76343	0.532
|>	In	115		**ug/L**		143351	143350.921
|	Sn	120	**48.763**	**ug/L**	0.368	141687	0.987
|	Sb	121	**46.883**	**ug/L**	3.683	122597	0.852
⌊	Sb	123		**ug/L**		92266	0.642
⌈	Ba	135		**ug/L**		32074	0.211
|	Ba	137	**48.393**	**ug/L**	1.717	56512	0.372
|	Ho	165		**ug/L**		42	0.000
|>	Lu	175		**ug/L**		151850	151850.127
|	Tl	205	**46.464**	**ug/L**	2.642	190174	1.227
|	Pb	208	**49.521**	**ug/L**	0.942	340453	2.240
|	Bi	209		**ug/L**		57	0.000
⌊	U	238	**52.049**	**ug/L**	0.386	353329	2.326

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	95.169				
	Be	9	98.685				
	B	11	106.395				
	Na	23	113.277				
	Mg	24	94.069				
	Al	27	114.034				
	P	31	104.557				
	K	39	81.605				
	Ca	43	98.336				
>	Sc	45		99.9			
	V	51	101.435				
	Cr	52	103.091				
	Cr	53					
	Mn	55	100.986				
	Fe	57	100.818				
	Co	59	95.925				
	Ni	60	96.934				
	Cu	63					
	Cu	65	98.072				
	Zn	66	94.514				
	Zn	67					
	Zn	68					
>	Ge	74		98.1			
	As	75	87.914				
	Se	77					
	Se	82	91.197				
	Kr	83					
	Sr	88	97.930				
	Y	89					
	Ag	107	99.976				
	Cd	111	95.123				
	Cd	114					
>	In	115		96.3			
	Sn	120	97.526				
	Sb	121	93.766				
	Sb	123					
	Ba	135					
	Ba	137	96.785				
	Ho	165					
>	Lu	175		97.5			
	Tl	205	92.927				
	Pb	208	99.042				
	Bi	209					
	U	238	104.098				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)
QC Std 6	K	39	CCV is out of limits (+/- 10%)
QC Std 6	As	75	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, December 07, 2009 14:01:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\091206\QC Std 7.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.061**	**ug/L**	15.131	192	0.000
	Be	9	**0.000**	**ug/L**	3154.052	10	0.000
	B	11	**1.019**	**ug/L**	23.333	952	0.000
	Na	23	**5.473**	**ug/L**	48.873	66824	0.011
	Mg	24	**2.786**	**ug/L**	115.702	14342	0.004
	Al	27	**8.432**	**ug/L**	67.628	33043	0.013
	P	31	**0.585**	**ug/L**	202.973	7856	0.000
	K	39	**-16.942**	**ug/L**	32.193	447233	-0.034
	Ca	43	**-13.012**	**ug/L**	17.439	814	-0.000
>	Sc	45		**ug/L**		1579990	1579990.003
	V	51	**0.682**	**ug/L**	104.425	14748	0.002
	Cr	52	**0.712**	**ug/L**	5.721	2105	0.002
	Cr	53		**ug/L**		145018	-0.017
	Mn	55	**0.212**	**ug/L**	41.171	2420	0.001
	Fe	57	**4.968**	**ug/L**	73.083	6077	0.000
	Co	59	**0.002**	**ug/L**	199.836	233	0.000
	Ni	60	**0.006**	**ug/L**	137.081	107	0.000
	Cu	63		**ug/L**		4106	0.002
	Cu	65	**1.175**	**ug/L**	89.386	1989	0.001
	Zn	66	**0.129**	**ug/L**	69.056	443	0.000
	Zn	67		**ug/L**		15200	-0.010
	Zn	68		**ug/L**		1187	-0.001
>	Ge	74		**ug/L**		287787	287787.255
	As	75	**0.458**	**ug/L**	71.811	468	0.001
	Se	77		**ug/L**		5653	-0.000
	Se	82	**0.221**	**ug/L**	47.458	-20	0.000
	Kr	83		**ug/L**		85	-0.000
	Sr	88	**0.012**	**ug/L**	76.628	294	0.001
	Y	89		**ug/L**		120	0.001
	Ag	107	**0.004**	**ug/L**	12.457	61	0.000
	Cd	111	**0.005**	**ug/L**	315.931	23	0.000
	Cd	114		**ug/L**		35	0.000
>	In	115		**ug/L**		146506	146506.488
	Sn	120	**0.026**	**ug/L**	49.363	318	0.001
	Sb	121	**0.459**	**ug/L**	24.800	1670	0.008
	Sb	123		**ug/L**		1276	0.006
	Ba	135		**ug/L**		69	0.000
	Ba	137	**0.058**	**ug/L**	47.725	99	0.000
	Ho	165		**ug/L**		28	-0.000
>	Lu	175		**ug/L**		153173	153173.039
	Tl	205	**0.198**	**ug/L**	64.524	4747	0.005
	Pb	208	**0.045**	**ug/L**	63.513	705	0.002
	Bi	209		**ug/L**		16	-0.000
	U	238	**0.032**	**ug/L**	39.039	375	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Cu	65	CCB is out of limits (+-/ PQL)

QC Action

QC Action Line: Continue

ICPMS #6 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, December 10, 2009 02:00:05
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\091119\Sample.904
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	2413.8	2413.804	101.847	4.2
	Mg	24.0	20972.0	20971.984	216.581	1.0
	Co	58.9	28702.4	28702.406	218.806	0.8
	Rh	102.9	49944.6	49944.559	435.310	0.9
	In	114.9	55233.0	55232.970	256.443	0.5
	Pb	208.0	29497.6	29497.625	318.665	1.1
⌈>	Ba	137.9	51282.9	51282.890	481.544	0.9
⌊	Ba++	69.0	1758.8	0.034	0.001	2.6
⌈>	Ce	139.9	67493.5	67493.471	560.139	0.8
⌊	CeO	155.9	1425.4	0.021	0.000	1.5
	Bkgd	220.0	5.8	5.800	1.304	22.5

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
12.50	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	10.8	3582.8
Co	59	25	11.8	41417.6
In	115	25	12.8	64179.5

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	590	2080	0.650
Be	9.0	9.0	2038	2080	0.660
Mg	24.0	24.0	5696	2120	0.692
Mg	25.0	25.0	5891	2080	0.674
Mg	26.0	26.0	6193	2120	0.671
Co	58.9	58.9	14166	2170	0.636
Rh	102.9	102.9	24846	2230	0.689
In	114.9	114.9	27788	2260	0.692
Ce	139.9	139.9	33848	2280	0.745
Pb	206.0	206.0	49936	2430	0.673
Pb	207.0	207.0	50171	2385	0.700
Pb	208.0	208.0	50439	2430	0.720
U	238.1	238.1	57738	2470	0.710

ICPMS#6 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, December 10, 2009 18:19:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\Blank.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		126	
	Be	9		ug/L		6	
	B	11		ug/L		561	
	Na	23		ug/L		14341	
	Mg	24		ug/L		5668	
	Al	27		ug/L		6668	
	P	31		ug/L		4625	
	K	39		ug/L		231196	
	Ca	43		ug/L		225	
>	Sc	45		ug/L		889805	
	V	51		ug/L		-284	
	Cr	52		ug/L		1821	
	Cr	53		ug/L		44006	
	Mn	55		ug/L		729	
	Fe	57		ug/L		2396	
	Co	59		ug/L		72	
	Ni	60		ug/L		143	
	Cu	63		ug/L		117	
	Cu	65		ug/L		62	
	Zn	66		ug/L		1784	
	Zn	67		ug/L		8202	
	Zn	68		ug/L		1807	
>	Ge	74		ug/L		131527	
	As	75		ug/L		80	
	Se	77		ug/L		1480	
	Se	82		ug/L		-11	
	Kr	83		ug/L		29	
	Sr	88		ug/L		212	
	Y	89		ug/L		26	
	Ag	107		ug/L		20	
	Cd	111		ug/L		16	
	Cd	114		ug/L		15	
>	In	115		ug/L		78793	
	Sn	120		ug/L		83	
	Sb	121		ug/L		573	
	Sb	123		ug/L		443	
	Ba	135		ug/L		15	
	Ba	137		ug/L		20	
	Ho	165		ug/L		13	
>	Lu	175		ug/L		109895	
	Tl	205		ug/L		1317	
	Pb	208		ug/L		227	
	Bi	209		ug/L		8	
	U	238		ug/L		102	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9999
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Thursday, December 10, 2009 18:22:18

ICPMS#6 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, December 10, 2009 18:25:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\Standard 1.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	0.490	14482	0.017
	Be	9	10.000	ug/L	1.877	3995	0.005
	B	11	20.000	ug/L	3.401	8845	0.010
	Na	23	1000.000	ug/L	5.378	2437552	2.789
	Mg	24	1000.000	ug/L	3.533	1663607	1.908
	Al	27	1000.000	ug/L	3.139	1937414	2.223
	P	31	1000.000	ug/L	1.285	112425	0.124
	K	39	1000.000	ug/L	9.823	2169169	2.238
	Ca	43	1000.000	ug/L	2.233	4861	0.005
>	Sc	45		ug/L		868820	868820.175
	V	51	10.000	ug/L	4.422	22685	0.026
	Cr	52	10.000	ug/L	1.111	21075	0.022
	Cr	53		ug/L		46090	0.004
	Mn	55	10.000	ug/L	1.948	28794	0.032
	Fe	57	1000.000	ug/L	0.282	57270	0.063
	Co	59	10.000	ug/L	0.872	20433	0.023
	Ni	60	10.000	ug/L	1.242	4272	0.005
	Cu	63		ug/L		9314	0.011
	Cu	65	10.000	ug/L	2.249	4464	0.005
	Zn	66	10.000	ug/L	2.204	4240	0.019
	Zn	67		ug/L		8883	0.007
	Zn	68		ug/L		3670	0.015
>	Ge	74		ug/L		128421	128421.294
	As	75	10.000	ug/L	4.745	3085	0.023
	Se	77		ug/L		1675	0.002
	Se	82	10.000	ug/L	8.764	304	0.002
	Kr	83		ug/L		27	-0.000
	Sr	88	10.000	ug/L	1.314	35998	0.463
	Y	89		ug/L		21	-0.000
	Ag	107	10.000	ug/L	0.369	15083	0.195
	Cd	111	10.000	ug/L	1.341	3812	0.049
	Cd	114		ug/L		8332	0.108
>	In	115		ug/L		77263	77263.183
	Sn	120	10.000	ug/L	1.620	14766	0.190
	Sb	121	10.000	ug/L	5.424	12138	0.150
	Sb	123		ug/L		9360	0.116
	Ba	135		ug/L		3423	0.031
	Ba	137	10.000	ug/L	1.601	5954	0.055
	Ho	165		ug/L		12	-0.000
>	Lu	175		ug/L		108249	108248.695
	Tl	205	10.000	ug/L	2.649	27982	0.247
	Pb	208	10.000	ug/L	0.511	44466	0.409
	Bi	209		ug/L		8	-0.000
	U	238	10.000	ug/L	0.337	47072	0.434

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Thursday, December 10, 2009 18:28:09

ICPMS#6 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, December 10, 2009 18:31:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\Standard 2.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.040**	**ug/L**	1.188	140438	0.172
	Be	9	**100.006**	**ug/L**	1.139	37615	0.046
	B	11	**200.026**	**ug/L**	2.785	79318	0.097
	Na	23	**10003.222**	**ug/L**	1.992	23499040	28.832
	Mg	24	**10009.014**	**ug/L**	3.232	17105398	20.994
	Al	27	**10015.035**	**ug/L**	1.948	21342401	26.200
	P	31	**9996.194**	**ug/L**	1.278	978348	1.196
	K	39	**10013.270**	**ug/L**	4.496	21245314	25.835
	Ca	43	**10001.688**	**ug/L**	1.637	44462	0.054
>	Sc	45		**ug/L**		814530	814530.467
	V	51	**100.001**	**ug/L**	1.085	215118	0.264
	Cr	52	**99.999**	**ug/L**	1.449	182371	0.222
	Cr	53		**ug/L**		60713	0.025
	Mn	55	**99.996**	**ug/L**	1.157	262854	0.322
	Fe	57	**9999.503**	**ug/L**	1.336	514516	0.629
	Co	59	**100.024**	**ug/L**	0.887	195678	0.240
	Ni	60	**100.024**	**ug/L**	1.292	39842	0.049
	Cu	63		**ug/L**		86447	0.106
	Cu	65	**99.996**	**ug/L**	0.574	41165	0.050
	Zn	66	**100.103**	**ug/L**	0.983	27682	0.217
	Zn	67		**ug/L**		12587	0.043
	Zn	68		**ug/L**		20615	0.158
>	Ge	74		**ug/L**		120040	120039.529
	As	75	**100.076**	**ug/L**	0.855	30510	0.254
	Se	77		**ug/L**		3634	0.019
	Se	82	**100.029**	**ug/L**	1.056	3025	0.025
	Kr	83		**ug/L**		34	0.000
	Sr	88	**99.990**	**ug/L**	0.840	337922	4.585
	Y	89		**ug/L**		55	0.000
	Ag	107	**99.993**	**ug/L**	0.215	142621	1.936
	Cd	111	**100.004**	**ug/L**	1.715	36369	0.494
	Cd	114		**ug/L**		80724	1.096
>	In	115		**ug/L**		73659	73659.113
	Sn	120	**100.012**	**ug/L**	0.847	141822	1.924
	Sb	121	**100.080**	**ug/L**	2.020	120560	1.630
	Sb	123		**ug/L**		92563	1.251
	Ba	135		**ug/L**		32810	0.319
	Ba	137	**100.010**	**ug/L**	1.365	57009	0.554
	Ho	165		**ug/L**		12	-0.000
>	Lu	175		**ug/L**		102924	102924.159
	Tl	205	**100.047**	**ug/L**	0.369	267757	2.590
	Pb	208	**99.995**	**ug/L**	0.459	418680	4.066
	Bi	209		**ug/L**		37	0.000
	U	238	**99.995**	**ug/L**	1.057	444644	4.319

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, December 10, 2009 18:37:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no tht\mozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 1.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.152**	**ug/L**	0.540	71155	0.086
	Be	9	**52.685**	**ug/L**	0.332	20015	0.024
	B	11	**104.588**	**ug/L**	1.785	42136	0.051
	Na	23	**5368.919**	**ug/L**	3.382	12739702	15.475
	Mg	24	**4672.000**	**ug/L**	2.339	8064603	9.799
	Al	27	**5025.401**	**ug/L**	5.165	10816958	13.147
	P	31	**5227.676**	**ug/L**	0.743	518741	0.626
	K	39	**4820.573**	**ug/L**	2.083	10442934	12.438
	Ca	43	**4981.082**	**ug/L**	0.293	22468	0.027
>	Sc	45		**ug/L**		822489	822489.398
	V	51	**51.106**	**ug/L**	1.855	110895	0.135
	Cr	52	**52.457**	**ug/L**	1.087	97415	0.116
	Cr	53		**ug/L**		48843	0.010
	Mn	55	**52.475**	**ug/L**	0.573	139624	0.169
	Fe	57	**5062.440**	**ug/L**	0.835	264163	0.318
	Co	59	**50.734**	**ug/L**	1.089	100262	0.122
	Ni	60	**51.729**	**ug/L**	0.959	20872	0.025
	Cu	63		**ug/L**		46203	0.056
	Cu	65	**52.972**	**ug/L**	0.443	22048	0.027
	Zn	66	**54.676**	**ug/L**	1.294	16274	0.119
	Zn	67		**ug/L**		9797	0.017
	Zn	68		**ug/L**		12306	0.086
>	Ge	74		**ug/L**		123179	123179.035
	As	75	**48.467**	**ug/L**	1.086	15202	0.123
	Se	77		**ug/L**		2456	0.009
	Se	82	**52.342**	**ug/L**	2.304	1619	0.013
	Kr	83		**ug/L**		32	0.000
	Sr	88	**50.381**	**ug/L**	1.336	171903	2.310
	Y	89		**ug/L**		32	0.000
	Ag	107	**51.284**	**ug/L**	0.532	73816	0.993
	Cd	111	**50.587**	**ug/L**	0.967	18571	0.250
	Cd	114		**ug/L**		42083	0.566
>	In	115		**ug/L**		74326	74325.661
	Sn	120	**52.539**	**ug/L**	0.931	75218	1.011
	Sb	121	**51.615**	**ug/L**	5.121	62993	0.840
	Sb	123		**ug/L**		48980	0.654
	Ba	135		**ug/L**		16948	0.162
	Ba	137	**51.063**	**ug/L**	0.546	29478	0.283
	Ho	165		**ug/L**		20	0.000
>	Lu	175		**ug/L**		104210	104210.452
	Tl	205	**48.408**	**ug/L**	1.715	131805	1.253
	Pb	208	**51.913**	**ug/L**	0.567	220168	2.111
	Bi	209		**ug/L**		18	0.000
	U	238	**54.203**	**ug/L**	0.751	244063	2.341

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.304				
	Be	9	105.369				
	B	11	104.588				
	Na	23	107.378				
	Mg	24	93.440				
	Al	27	99.513				
	P	31	104.554				
	K	39	96.411				
	Ca	43	99.622				
>	Sc	45		92.4			
	V	51	102.213				
	Cr	52	104.915				
	Cr	53					
	Mn	55	104.949				
	Fe	57	101.249				
	Co	59	101.467				
	Ni	60	103.458				
	Cu	63					
	Cu	65	105.944				
	Zn	66	109.351				
	Zn	67					
	Zn	68					
>	Ge	74		93.7			
	As	75	96.935				
	Se	77					
	Se	82	104.685				
	Kr	83					
	Sr	88	100.763				
	Y	89					
	Ag	107	102.568				
	Cd	111	101.174				
	Cd	114					
>	In	115		94.3			
	Sn	120	105.078				
	Sb	121	103.230				
	Sb	123					
	Ba	135					
	Ba	137	102.126				
	Ho	165					
>	Lu	175		94.8			
	Tl	205	96.816				
	Pb	208	103.826				
	Bi	209					
	U	238	108.407				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, December 10, 2009 18:39:52

ICPMS#6 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, December 10, 2009 18:43:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 2.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.011**	**ug/L**	54.280	136	0.000
	Be	9	**0.005**	**ug/L**	90.289	8	0.000
	B	11	**1.739**	**ug/L**	15.613	1250	0.001
	Na	23	**2.037**	**ug/L**	151.193	18680	0.006
	Mg	24	**-1.165**	**ug/L**	28.560	3334	-0.002
	Al	27	**-0.463**	**ug/L**	149.786	5334	-0.001
	P	31	**0.866**	**ug/L**	119.202	4504	0.000
	K	39	**5.572**	**ug/L**	65.787	232884	0.014
	Ca	43	**4.526**	**ug/L**	131.279	236	0.000
>	Sc	45		**ug/L**		849406	849406.255
	V	51	**0.288**	**ug/L**	172.107	371	0.001
	Cr	52	**-0.021**	**ug/L**	305.505	1699	-0.000
	Cr	53		**ug/L**		42118	0.000
	Mn	55	**-0.043**	**ug/L**	1.315	579	-0.000
	Fe	57	**1.302**	**ug/L**	195.855	2356	0.000
	Co	59	**0.010**	**ug/L**	40.227	89	0.000
	Ni	60	**-0.001**	**ug/L**	3179.332	136	-0.000
	Cu	63		**ug/L**		103	-0.000
	Cu	65	**0.014**	**ug/L**	81.174	65	0.000
	Zn	66	**-0.055**	**ug/L**	222.971	1686	-0.000
	Zn	67		**ug/L**		8119	0.002
	Zn	68		**ug/L**		1751	0.000
>	Ge	74		**ug/L**		125404	125404.287
	As	75	**-0.326**	**ug/L**	216.617	-28	-0.001
	Se	77		**ug/L**		1371	-0.000
	Se	82	**0.088**	**ug/L**	242.017	-8	0.000
	Kr	83		**ug/L**		31	0.000
	Sr	88	**-0.001**	**ug/L**	213.172	201	-0.000
	Y	89		**ug/L**		24	-0.000
	Ag	107	**0.011**	**ug/L**	9.594	36	0.000
	Cd	111	**-0.018**	**ug/L**	38.628	9	-0.000
	Cd	114		**ug/L**		15	0.000
>	In	115		**ug/L**		76308	76307.595
	Sn	120	**0.067**	**ug/L**	13.325	178	0.001
	Sb	121	**0.769**	**ug/L**	16.458	1511	0.013
	Sb	123		**ug/L**		1201	0.010
	Ba	135		**ug/L**		13	-0.000
	Ba	137	**0.006**	**ug/L**	158.015	23	0.000
	Ho	165		**ug/L**		11	-0.000
>	Lu	175		**ug/L**		105982	105981.757
	Tl	205	**0.762**	**ug/L**	13.194	3363	0.020
	Pb	208	**0.001**	**ug/L**	286.382	224	0.000
	Bi	209		**ug/L**		7	-0.000
	U	238	**0.048**	**ug/L**	17.623	317	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 2

Report Date/Time: Thursday, December 10, 2009 18:45:48

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.5		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.4		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Thursday, December 10, 2009 18:45:48

ICPMS#6 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, December 10, 2009 18:49:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 3.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.101**	**ug/L**	1.605	16627	0.019
	Be	9	**0.594**	**ug/L**	8.758	243	0.000
	B	11	**16.678**	**ug/L**	1.618	7511	0.008
	Na	23	**292.552**	**ug/L**	8.379	741853	0.843
	Mg	24	**13.727**	**ug/L**	12.428	30366	0.029
	Al	27	**34.291**	**ug/L**	16.409	83916	0.090
	P	31	**62.465**	**ug/L**	2.235	10941	0.007
	K	39	**309.337**	**ug/L**	3.755	913299	0.798
	Ca	43	**226.935**	**ug/L**	6.483	1283	0.001
>	Sc	45		**ug/L**		863357	863356.672
	V	51	**10.570**	**ug/L**	4.038	23856	0.028
	Cr	52	**10.943**	**ug/L**	1.271	22729	0.024
	Cr	53		**ug/L**		46533	0.004
	Mn	55	**5.736**	**ug/L**	0.231	16650	0.018
	Fe	57	**112.682**	**ug/L**	2.842	8445	0.007
	Co	59	**1.101**	**ug/L**	3.000	2352	0.003
	Ni	60	**2.194**	**ug/L**	3.348	1062	0.001
	Cu	63		**ug/L**		1157	0.001
	Cu	65	**1.114**	**ug/L**	1.723	545	0.001
	Zn	66	**10.620**	**ug/L**	2.474	4597	0.023
	Zn	67		**ug/L**		9104	0.010
	Zn	68		**ug/L**		3911	0.017
>	Ge	74		**ug/L**		125608	125607.710
	As	75	**5.558**	**ug/L**	9.877	1845	0.014
	Se	77		**ug/L**		1614	0.002
	Se	82	**5.760**	**ug/L**	7.513	172	0.001
	Kr	83		**ug/L**		28	-0.000
	Sr	88	**11.301**	**ug/L**	0.522	39956	0.518
	Y	89		**ug/L**		49	0.000
	Ag	107	**1.017**	**ug/L**	1.201	1529	0.020
	Cd	111	**1.111**	**ug/L**	4.943	436	0.005
	Cd	114		**ug/L**		955	0.012
>	In	115		**ug/L**		76703	76703.241
	Sn	120	**5.422**	**ug/L**	3.245	8083	0.104
	Sb	121	**3.243**	**ug/L**	4.258	4608	0.053
	Sb	123		**ug/L**		3556	0.041
	Ba	135		**ug/L**		761	0.007
	Ba	137	**2.160**	**ug/L**	2.650	1303	0.012
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		107350	107349.650
	Tl	205	**1.362**	**ug/L**	1.139	5070	0.035
	Pb	208	**2.221**	**ug/L**	2.287	9912	0.090
	Bi	209		**ug/L**		9	0.000
	U	238	**0.249**	**ug/L**	5.261	1253	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 3

Report Date/Time: Thursday, December 10, 2009 18:51:42

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	111.009				
	Be	9	118.855				
	B	11	111.189				
	Na	23	117.021				
	Mg	24	91.516				
	Al	27	114.302				
	P	31	124.931				
	K	39	103.112				
	Ca	43	113.467				
>	Sc	45			97.0		
	V	51	105.695				
	Cr	52	109.428				
	Cr	53					
	Mn	55	114.720				
	Fe	57	112.682				
	Co	59	110.090				
	Ni	60	109.709				
	Cu	63					
	Cu	65	111.419				
	Zn	66	106.204				
	Zn	67					
	Zn	68					
>	Ge	74			95.5		
	As	75	111.151				
	Se	77					
	Se	82	115.202				
	Kr	83					
	Sr	88	113.013				
	Y	89					
	Ag	107	101.675				
	Cd	111	111.148				
	Cd	114					
>	In	115			97.3		
	Sn	120	108.446				
	Sb	121	108.111				
	Sb	123					
	Ba	135					
	Ba	137	108.016				
	Ho	165					
>	Lu	175			97.7		
	Tl	205	136.181				
	Pb	208	111.035				
	Bi	209					
	U	238	124.382				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Tl	205	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, December 10, 2009 18:55:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 4.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.156**	**ug/L**	31.136	324	0.000
	Be	9	**0.064**	**ug/L**	25.094	29	0.000
	B	11	**0.957**	**ug/L**	2.551	865	0.000
	Na	23	**100058.929**	**ug/L**	1.470	228168101	288.397
	Mg	24	**91506.901**	**ug/L**	3.015	151813016	191.932
	Al	27	**97679.748**	**ug/L**	7.336	202116775	255.532
	P	31	**95274.949**	**ug/L**	3.672	9019826	11.400
	K	39	**92473.669**	**ug/L**	3.118	188907374	238.593
	Ca	43	**93827.137**	**ug/L**	2.111	403461	0.510
>	Sc	45		**ug/L**		791239	791239.043
	V	51	**0.392**	**ug/L**	47.594	572	0.001
	Cr	52	**2.710**	**ug/L**	5.989	6374	0.006
	Cr	53		**ug/L**		37349	-0.002
	Mn	55	**5.749**	**ug/L**	2.204	15288	0.019
	Fe	57	**94118.294**	**ug/L**	2.722	4685564	5.921
	Co	59	**0.413**	**ug/L**	2.470	849	0.001
	Ni	60	**3.929**	**ug/L**	4.820	1642	0.002
	Cu	63		**ug/L**		3920	0.005
	Cu	65	**7.161**	**ug/L**	1.806	2915	0.004
	Zn	66	**5.783**	**ug/L**	4.210	2990	0.013
	Zn	67		**ug/L**		7977	0.007
	Zn	68		**ug/L**		1568	-0.000
>	Ge	74		**ug/L**		114533	114533.448
	As	75	**-0.912**	**ug/L**	107.666	-195	-0.002
	Se	77		**ug/L**		2055	0.007
	Se	82	**-2.597**	**ug/L**	21.081	-85	-0.001
	Kr	83		**ug/L**		126	0.001
	Sr	88	**1.223**	**ug/L**	2.524	4147	0.056
	Y	89		**ug/L**		140	0.002
	Ag	107	**0.556**	**ug/L**	40.009	780	0.011
	Cd	111	**1.810**	**ug/L**	44.289	646	0.009
	Cd	114		**ug/L**		3262	0.046
>	In	115		**ug/L**		70582	70582.043
	Sn	120	**0.135**	**ug/L**	10.667	257	0.003
	Sb	121	**-0.050**	**ug/L**	114.608	455	-0.001
	Sb	123		**ug/L**		369	-0.000
	Ba	135		**ug/L**		239	0.002
	Ba	137	**0.691**	**ug/L**	3.017	385	0.004
	Ho	165		**ug/L**		223	0.002
>	Lu	175		**ug/L**		96133	96133.050
	Tl	205	**0.222**	**ug/L**	7.939	1705	0.006
	Pb	208	**0.196**	**ug/L**	7.061	964	0.008
	Bi	209		**ug/L**		137	0.001
	U	238	**-0.003**	**ug/L**	35.560	79	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	100.059				
	Mg	24	91.507				
	Al	27	97.680				
	P	31	95.275				
	K	39	92.474				
	Ca	43	93.827				
>	Sc	45		88.9			
	V	51					
	Cr	52	73.254				
	Cr	53					
	Mn	55	99.118				
	Fe	57	94.118				
	Co	59	165.244				
	Ni	60	145.536				
	Cu	63					
	Cu	65	246.928				
	Zn	66	160.625				
	Zn	67					
	Zn	68					
>	Ge	74		87.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	101.876				
	Y	89					
	Ag	107					
	Cd	111	452.551				
	Cd	114					
>	In	115		89.6			
	Sn	120					
	Sb	121	-50.390				
	Sb	123					
	Ba	135					
	Ba	137	103.084				
	Ho	165					
>	Lu	175		87.5			
	Tl	205					
	Pb	208	97.985				
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, December 10, 2009 19:00:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 5.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.007**	**ug/L**	0.404	26111	0.033
	Be	9	**19.035**	**ug/L**	1.263	6987	0.009
	B	11	**19.485**	**ug/L**	1.718	7988	0.009
	Na	23	**96823.172**	**ug/L**	1.681	221649013	279.071
	Mg	24	**91412.541**	**ug/L**	6.419	152258215	191.734
	Al	27	**92639.037**	**ug/L**	5.271	192505628	242.345
	P	31	**93951.547**	**ug/L**	1.217	8932296	11.242
	K	39	**89771.558**	**ug/L**	1.392	184171158	231.621
	Ca	43	**91081.983**	**ug/L**	0.525	393264	0.495
>	Sc	45		**ug/L**		794234	794233.507
	V	51	**22.456**	**ug/L**	2.650	46910	0.059
	Cr	52	**24.128**	**ug/L**	0.465	44147	0.054
	Cr	53		**ug/L**		40764	0.002
	Mn	55	**26.933**	**ug/L**	0.768	69517	0.087
	Fe	57	**92620.870**	**ug/L**	1.084	4629865	5.827
	Co	59	**20.690**	**ug/L**	0.237	39522	0.050
	Ni	60	**23.518**	**ug/L**	1.083	9233	0.011
	Cu	63		**ug/L**		20180	0.025
	Cu	65	**26.437**	**ug/L**	0.708	10653	0.013
	Zn	66	**25.860**	**ug/L**	3.308	7934	0.056
	Zn	67		**ug/L**		8893	0.016
	Zn	68		**ug/L**		5288	0.033
>	Ge	74		**ug/L**		113949	113949.162
	As	75	**21.595**	**ug/L**	1.487	6304	0.055
	Se	77		**ug/L**		2483	0.011
	Se	82	**21.295**	**ug/L**	3.325	604	0.005
	Kr	83		**ug/L**		112	0.001
	Sr	88	**24.185**	**ug/L**	0.325	78907	1.109
	Y	89		**ug/L**		137	0.002
	Ag	107	**19.443**	**ug/L**	0.508	26738	0.376
	Cd	111	**21.111**	**ug/L**	0.520	7410	0.104
	Cd	114		**ug/L**		19183	0.270
>	In	115		**ug/L**		70980	70979.967
	Sn	120	**21.230**	**ug/L**	0.795	29070	0.408
	Sb	121	**21.870**	**ug/L**	1.031	25793	0.356
	Sb	123		**ug/L**		20104	0.278
	Ba	135		**ug/L**		6905	0.071
	Ba	137	**22.566**	**ug/L**	0.416	12065	0.125
	Ho	165		**ug/L**		215	0.002
>	Lu	175		**ug/L**		96432	96432.051
	Tl	205	**16.450**	**ug/L**	5.006	42196	0.426
	Pb	208	**21.264**	**ug/L**	0.207	83570	0.865
	Bi	209		**ug/L**		195	0.002
	U	238	**23.244**	**ug/L**	0.893	96899	1.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 5
Report Date/Time: Thursday, December 10, 2009 19:03:29

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	95.033				
	Be	9	95.177				
	B	11	97.424				
	Na	23	96.823				
	Mg	24	91.413				
	Al	27	92.639				
	P	31	93.952				
	K	39	89.772				
	Ca	43	91.082				
>	Sc	45		89.3			
	V	51	112.279				
	Cr	52	101.805				
	Cr	53					
	Mn	55	104.391				
	Fe	57	92.621				
	Co	59	102.173				
	Ni	60	103.602				
	Cu	63					
	Cu	65	115.446				
	Zn	66	109.576				
	Zn	67					
	Zn	68					
>	Ge	74		86.6			
	As	75	107.977				
	Se	77					
	Se	82	106.475				
	Kr	83					
	Sr	88	114.078				
	Y	89					
	Ag	107	97.217				
	Cd	111	103.487				
	Cd	114					
>	In	115		90.1			
	Sn	120	106.151				
	Sb	121	108.805				
	Sb	123					
	Ba	135					
	Ba	137	109.172				
	Ho	165					
>	Lu	175		87.7			
	Tl	205	82.252				
	Pb	208	105.265				
	Bi	209					
	U	238	116.221				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Record Date/Time: Thursday, December 10, 2009 19:03:29

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 19:06:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 6.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.082**	**ug/L**	1.265	68016	0.085
	Be	9	**50.793**	**ug/L**	0.856	18846	0.023
	B	11	**100.538**	**ug/L**	2.806	39577	0.049
	Na	23	**5128.003**	**ug/L**	6.478	11882176	14.780
	Mg	24	**4628.448**	**ug/L**	4.585	7804903	9.708
	Al	27	**4989.490**	**ug/L**	6.548	10490108	13.053
	P	31	**5247.844**	**ug/L**	1.590	508574	0.628
	K	39	**4819.645**	**ug/L**	1.441	10197666	12.435
	Ca	43	**4909.686**	**ug/L**	2.722	21630	0.027
>	Sc	45		**ug/L**		803350	803350.351
	V	51	**50.714**	**ug/L**	1.178	107474	0.134
	Cr	52	**52.917**	**ug/L**	1.538	95962	0.117
	Cr	53		**ug/L**		47999	0.010
	Mn	55	**52.295**	**ug/L**	0.735	135906	0.168
	Fe	57	**5074.652**	**ug/L**	0.699	258627	0.319
	Co	59	**51.094**	**ug/L**	1.512	98617	0.123
	Ni	60	**52.697**	**ug/L**	1.134	20765	0.026
	Cu	63		**ug/L**		46279	0.057
	Cu	65	**54.364**	**ug/L**	0.549	22099	0.027
	Zn	66	**55.270**	**ug/L**	1.233	16184	0.120
	Zn	67		**ug/L**		9843	0.019
	Zn	68		**ug/L**		12185	0.087
>	Ge	74		**ug/L**		121316	121316.205
	As	75	**48.510**	**ug/L**	2.000	14984	0.123
	Se	77		**ug/L**		2442	0.009
	Se	82	**53.723**	**ug/L**	2.562	1637	0.014
	Kr	83		**ug/L**		28	0.000
	Sr	88	**51.018**	**ug/L**	1.147	170636	2.339
	Y	89		**ug/L**		45	0.000
	Ag	107	**52.139**	**ug/L**	1.075	73562	1.009
	Cd	111	**50.844**	**ug/L**	1.296	18297	0.251
	Cd	114		**ug/L**		41371	0.568
>	In	115		**ug/L**		72864	72863.564
	Sn	120	**53.145**	**ug/L**	2.115	74568	1.023
	Sb	121	**51.062**	**ug/L**	5.805	61080	0.831
	Sb	123		**ug/L**		47145	0.642
	Ba	135		**ug/L**		16768	0.166
	Ba	137	**52.146**	**ug/L**	1.197	29230	0.289
	Ho	165		**ug/L**		21	0.000
>	Lu	175		**ug/L**		101193	101193.183
	Tl	205	**48.469**	**ug/L**	1.798	128145	1.255
	Pb	208	**52.737**	**ug/L**	0.523	217183	2.144
	Bi	209		**ug/L**		17	0.000
	U	238	**54.357**	**ug/L**	1.003	237662	2.348

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.164				
	Be	9	101.587				
	B	11	100.538				
	Na	23	102.560				
	Mg	24	92.569				
	Al	27	98.802				
	P	31	104.957				
	K	39	96.393				
	Ca	43	98.194				
>	Sc	45		90.3			
	V	51	101.427				
	Cr	52	105.834				
	Cr	53					
	Mn	55	104.591				
	Fe	57	101.493				
	Co	59	102.189				
	Ni	60	105.394				
	Cu	63					
	Cu	65	108.728				
	Zn	66	110.541				
	Zn	67					
	Zn	68					
>	Ge	74		92.2			
	As	75	97.020				
	Se	77					
	Se	82	107.446				
	Kr	83					
	Sr	88	102.035				
	Y	89					
	Ag	107	104.277				
	Cd	111	101.687				
	Cd	114					
>	In	115		92.5			
	Sn	120	106.290				
	Sb	121	102.125				
	Sb	123					
	Ba	135					
	Ba	137	104.292				
	Ho	165					
>	Lu	175		92.1			
	Tl	205	96.938				
	Pb	208	105.474				
	Bi	209					
	U	238	108.714				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Zn	66	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 19:12:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 7.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.035	ug/L	16.324	168	0.000
	Be	9	0.004	ug/L	110.358	7	0.000
	B	11	1.303	ug/L	28.161	1053	0.001
	Na	23	5.345	ug/L	26.187	26358	0.015
	Mg	24	1.341	ug/L	66.253	7669	0.003
	Al	27	3.855	ug/L	77.449	14675	0.010
	P	31	-1.438	ug/L	17.745	4200	-0.000
	K	39	15.819	ug/L	54.946	251196	0.041
	Ca	43	9.580	ug/L	74.942	255	0.000
>	Sc	45		ug/L		835725	835725.206
	V	51	0.660	ug/L	111.290	1199	0.002
	Cr	52	0.139	ug/L	24.650	1969	0.000
	Cr	53		ug/L		41881	0.001
	Mn	55	-0.089	ug/L	5.606	445	-0.000
	Fe	57	9.268	ug/L	7.766	2738	0.001
	Co	59	0.003	ug/L	253.170	74	0.000
	Ni	60	0.010	ug/L	133.068	139	0.000
	Cu	63		ug/L		102	-0.000
	Cu	65	0.018	ug/L	91.561	65	0.000
	Zn	66	0.187	ug/L	65.167	1734	0.000
	Zn	67		ug/L		8177	0.004
	Zn	68		ug/L		1741	0.000
>	Ge	74		ug/L		124107	124106.995
	As	75	-0.564	ug/L	133.596	-101	-0.001
	Se	77		ug/L		1332	-0.001
	Se	82	-0.075	ug/L	24.226	-13	-0.000
	Kr	83		ug/L		36	0.000
	Sr	88	-0.007	ug/L	101.815	181	-0.000
	Y	89		ug/L		13	-0.000
	Ag	107	0.007	ug/L	48.338	30	0.000
	Cd	111	-0.017	ug/L	33.762	9	-0.000
	Cd	114		ug/L		20	0.000
>	In	115		ug/L		75727	75727.356
	Sn	120	0.060	ug/L	15.626	167	0.001
	Sb	121	0.290	ug/L	41.072	907	0.005
	Sb	123		ug/L		699	0.004
	Ba	135		ug/L		10	-0.000
	Ba	137	0.010	ug/L	113.835	25	0.000
	Ho	165		ug/L		11	-0.000
>	Lu	175		ug/L		105000	105000.179
	Tl	205	0.769	ug/L	16.716	3349	0.020
	Pb	208	-0.001	ug/L	108.611	212	-0.000
	Bi	209		ug/L		9	0.000
	U	238	0.038	ug/L	31.907	270	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.9			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, December 10, 2009 19:18:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 10.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**970.579**	**ug/L**	1.541	1201412	1.672
	Be	9	**1001.405**	**ug/L**	0.276	332307	0.462
	B	11	**0.461**	**ug/L**	29.410	613	0.000
	Na	23	**53350.505**	**ug/L**	2.791	110521293	153.771
	Mg	24	**50215.607**	**ug/L**	6.977	75683908	105.325
	Al	27	**51655.919**	**ug/L**	6.123	97100856	135.133
	P	31	**22949.144**	**ug/L**	0.436	1977084	2.746
	K	39	**49965.200**	**ug/L**	1.250	92829841	128.916
	Ca	43	**50430.115**	**ug/L**	0.398	197100	0.274
>	Sc	45		**ug/L**		718645	718645.195
	V	51	**881.639**	**ug/L**	0.089	1675277	2.331
	Cr	52	**920.430**	**ug/L**	0.363	1469177	2.042
	Cr	53		**ug/L**		233591	0.276
	Mn	55	**996.528**	**ug/L**	1.027	2306112	3.208
	Fe	57	**48194.172**	**ug/L**	7.383	2180943	3.032
	Co	59	**870.322**	**ug/L**	0.534	1501911	2.090
	Ni	60	**969.195**	**ug/L**	0.135	339644	0.472
	Cu	63		**ug/L**		698094	0.971
	Cu	65	**945.351**	**ug/L**	0.546	342960	0.477
	Zn	66	**2339.933**	**ug/L**	0.592	538856	5.074
	Zn	67		**ug/L**		99701	0.879
	Zn	68		**ug/L**		393279	3.699
>	Ge	74		**ug/L**		105923	105923.319
	As	75	**940.588**	**ug/L**	1.292	252499	2.383
	Se	77		**ug/L**		12023	0.102
	Se	82	**507.298**	**ug/L**	0.695	13572	0.128
	Kr	83		**ug/L**		58	0.000
	Sr	88	**1046.495**	**ug/L**	1.368	3099960	47.987
	Y	89		**ug/L**		125	0.002
	Ag	107	**259.883**	**ug/L**	0.831	325047	5.032
	Cd	111	**970.270**	**ug/L**	1.567	309352	4.789
	Cd	114		**ug/L**		682550	10.566
>	In	115		**ug/L**		64601	64601.202
	Sn	120	**1003.637**	**ug/L**	1.227	1247502	19.311
	Sb	121	**277.671**	**ug/L**	0.795	292557	4.522
	Sb	123		**ug/L**		229353	3.545
	Ba	135		**ug/L**		296203	3.230
	Ba	137	**1003.208**	**ug/L**	0.882	509361	5.554
	Ho	165		**ug/L**		70	0.001
>	Lu	175		**ug/L**		91716	91716.445
	Tl	205	**462.480**	**ug/L**	2.723	1098678	11.971
	Pb	208	**4865.238**	**ug/L**	1.816	18139382	197.815
	Bi	209		**ug/L**		435	0.005
	U	238	**5173.433**	**ug/L**	2.486	20489078	223.458

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	97.058				
	Be	9	100.141				
	B	11					
	Na	23	106.701				
	Mg	24	100.431				
	Al	27	103.312				
	P	31	91.797				
	K	39	99.930				
	Ca	43	100.860				
>	Sc	45		80.8			
	V	51	88.164				
	Cr	52	92.043				
	Cr	53					
	Mn	55	99.653				
	Fe	57	96.388				
	Co	59	87.032				
	Ni	60	96.920				
	Cu	63					
	Cu	65	94.535				
	Zn	66	93.597				
	Zn	67					
	Zn	68					
>	Ge	74		80.5			
	As	75	94.059				
	Se	77					
	Se	82	101.460				
	Kr	83					
	Sr	88	104.650				
	Y	89					
	Ag	107	103.953				
	Cd	111	97.027				
	Cd	114					
>	In	115		82.0			
	Sn	120	100.364				
	Sb	121	111.068				
	Sb	123					
	Ba	135					
	Ba	137	100.321				
	Ho	165					
>	Lu	175		83.5			
	Tl	205	92.496				
	Pb	208	97.305				
	Bi	209					
	U	238	103.469				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	V	51	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Sb	121	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, December 10, 2009 19:24:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 11.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.281**	**ug/L**	1.226	67607	0.085
	Be	9	**52.041**	**ug/L**	0.529	19115	0.024
	B	11	**103.871**	**ug/L**	2.975	40466	0.050
	Na	23	**5010.033**	**ug/L**	3.891	11496053	14.440
	Mg	24	**4724.838**	**ug/L**	1.912	7886059	9.910
	Al	27	**5102.227**	**ug/L**	4.292	10620406	13.348
	P	31	**5344.454**	**ug/L**	0.380	512678	0.639
	K	39	**4787.901**	**ug/L**	3.918	10030630	12.353
	Ca	43	**4912.699**	**ug/L**	0.128	21429	0.027
>	Sc	45		**ug/L**		795241	795240.979
	V	51	**53.079**	**ug/L**	0.727	111372	0.140
	Cr	52	**53.844**	**ug/L**	0.882	96638	0.119
	Cr	53		**ug/L**		48743	0.012
	Mn	55	**53.033**	**ug/L**	0.527	136427	0.171
	Fe	57	**5159.775**	**ug/L**	0.629	260282	0.325
	Co	59	**51.797**	**ug/L**	0.095	98971	0.124
	Ni	60	**53.049**	**ug/L**	0.633	20693	0.026
	Cu	63		**ug/L**		45906	0.058
	Cu	65	**54.873**	**ug/L**	0.935	22081	0.028
	Zn	66	**54.967**	**ug/L**	1.092	16054	0.119
	Zn	67		**ug/L**		10019	0.020
	Zn	68		**ug/L**		12169	0.087
>	Ge	74		**ug/L**		120928	120927.874
	As	75	**51.645**	**ug/L**	0.543	15899	0.131
	Se	77		**ug/L**		2369	0.008
	Se	82	**54.885**	**ug/L**	1.737	1667	0.014
	Kr	83		**ug/L**		36	0.000
	Sr	88	**50.752**	**ug/L**	1.082	170937	2.327
	Y	89		**ug/L**		38	0.000
	Ag	107	**52.495**	**ug/L**	0.491	74589	1.016
	Cd	111	**51.472**	**ug/L**	1.225	18652	0.254
	Cd	114		**ug/L**		42579	0.580
>	In	115		**ug/L**		73370	73370.491
	Sn	120	**53.864**	**ug/L**	1.079	76113	1.036
	Sb	121	**52.739**	**ug/L**	3.873	63528	0.859
	Sb	123		**ug/L**		49314	0.667
	Ba	135		**ug/L**		16762	0.165
	Ba	137	**52.555**	**ug/L**	1.503	29611	0.291
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		101711	101710.842
	Tl	205	**53.280**	**ug/L**	0.443	141491	1.379
	Pb	208	**53.625**	**ug/L**	0.649	221960	2.180
	Bi	209		**ug/L**		18	0.000
	U	238	**55.863**	**ug/L**	0.297	245508	2.413

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	98.562				
	Be	9	104.083				
	B	11	103.871				
	Na	23	100.201				
	Mg	24	94.497				
	Al	27	101.034				
	P	31	106.889				
	K	39	95.758				
	Ca	43	98.254				
>	Sc	45		89.4			
	V	51	106.159				
	Cr	52	107.688				
	Cr	53					
	Mn	55	106.065				
	Fe	57	103.196				
	Co	59	103.593				
	Ni	60	106.098				
	Cu	63					
	Cu	65	109.745				
	Zn	66	109.934				
	Zn	67					
	Zn	68					
>	Ge	74		91.9			
	As	75	103.289				
	Se	77					
	Se	82	109.770				
	Kr	83					
	Sr	88	101.504				
	Y	89					
	Ag	107	104.990				
	Cd	111	102.943				
	Cd	114					
>	In	115		93.1			
	Sn	120	107.728				
	Sb	121	105.477				
	Sb	123					
	Ba	135					
	Ba	137	105.111				
	Ho	165					
>	Lu	175		92.6			
	Tl	205	106.561				
	Pb	208	107.249				
	Bi	209					
	U	238	111.726				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, December 10, 2009 19:30:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 12.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.077**	**ug/L**	15.303	228	0.000
	Be	9	**0.024**	**ug/L**	47.910	15	0.000
	B	11	**1.287**	**ug/L**	28.842	1044	0.001
	Na	23	**3.165**	**ug/L**	83.688	21016	0.009
	Mg	24	**0.978**	**ug/L**	160.333	7002	0.002
	Al	27	**1.860**	**ug/L**	99.639	10337	0.005
	P	31	**-1.556**	**ug/L**	86.865	4181	-0.000
	K	39	**2.157**	**ug/L**	132.105	221370	0.006
	Ca	43	**10.650**	**ug/L**	76.499	259	0.000
>	Sc	45		**ug/L**		833970	833969.873
	V	51	**0.006**	**ug/L**	10349.343	-241	0.000
	Cr	52	**0.128**	**ug/L**	48.640	1945	0.000
	Cr	53		**ug/L**		41764	0.001
	Mn	55	**-0.060**	**ug/L**	26.040	521	-0.000
	Fe	57	**4.806**	**ug/L**	55.131	2497	0.000
	Co	59	**0.045**	**ug/L**	5.905	158	0.000
	Ni	60	**0.008**	**ug/L**	212.836	138	0.000
	Cu	63		**ug/L**		140	0.000
	Cu	65	**0.060**	**ug/L**	41.552	83	0.000
	Zn	66	**0.131**	**ug/L**	165.927	1723	0.000
	Zn	67		**ug/L**		8241	0.004
	Zn	68		**ug/L**		1754	0.000
>	Ge	74		**ug/L**		124386	124386.080
	As	75	**1.263**	**ug/L**	37.242	474	0.003
	Se	77		**ug/L**		1365	-0.000
	Se	82	**0.012**	**ug/L**	1448.357	-10	0.000
	Kr	83		**ug/L**		33	0.000
	Sr	88	**0.010**	**ug/L**	56.714	242	0.000
	Y	89		**ug/L**		18	-0.000
	Ag	107	**0.015**	**ug/L**	24.971	42	0.000
	Cd	111	**0.020**	**ug/L**	79.766	23	0.000
	Cd	114		**ug/L**		30	0.000
>	In	115		**ug/L**		76368	76368.179
	Sn	120	**0.131**	**ug/L**	8.881	273	0.003
	Sb	121	**0.692**	**ug/L**	21.117	1416	0.011
	Sb	123		**ug/L**		1123	0.009
	Ba	135		**ug/L**		14	-0.000
	Ba	137	**0.026**	**ug/L**	17.639	34	0.000
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		105900	105900.130
	Tl	205	**2.115**	**ug/L**	10.535	7069	0.055
	Pb	208	**0.084**	**ug/L**	11.273	580	0.003
	Bi	209		**ug/L**		7	-0.000
	U	238	**0.395**	**ug/L**	6.806	1903	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.7		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			94.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.4		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Tl	205	CCB is out of limits (+/- PQL)
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 12

Report Date/Time: Thursday, December 10, 2009 19:33:00

ICPMS#6 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 20:05:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 8.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.258**	**ug/L**	1.615	70298	0.085
	Be	9	**51.672**	**ug/L**	1.971	19743	0.024
	B	11	**99.899**	**ug/L**	3.100	40503	0.048
	Na	23	**5080.389**	**ug/L**	4.906	12130906	14.643
	Mg	24	**4536.232**	**ug/L**	1.931	7876784	9.515
	Al	27	**4918.662**	**ug/L**	1.459	10653533	12.867
	P	31	**5237.085**	**ug/L**	0.606	522744	0.627
	K	39	**4940.905**	**ug/L**	4.921	10760092	12.748
	Ca	43	**4903.678**	**ug/L**	2.135	22251	0.027
>	Sc	45		**ug/L**		827368	827367.756
	V	51	**52.234**	**ug/L**	0.605	114024	0.138
	Cr	52	**53.163**	**ug/L**	0.108	99292	0.118
	Cr	53		**ug/L**		49034	0.010
	Mn	55	**52.406**	**ug/L**	1.578	140249	0.169
	Fe	57	**5085.205**	**ug/L**	0.576	266904	0.320
	Co	59	**50.693**	**ug/L**	0.252	100779	0.122
	Ni	60	**52.503**	**ug/L**	0.669	21308	0.026
	Cu	63		**ug/L**		47061	0.057
	Cu	65	**53.474**	**ug/L**	0.926	22387	0.027
	Zn	66	**55.321**	**ug/L**	0.300	16533	0.120
	Zn	67		**ug/L**		9848	0.017
	Zn	68		**ug/L**		12363	0.086
>	Ge	74		**ug/L**		123822	123821.681
	As	75	**49.952**	**ug/L**	1.135	15747	0.127
	Se	77		**ug/L**		2504	0.009
	Se	82	**53.631**	**ug/L**	3.232	1668	0.014
	Kr	83		**ug/L**		32	0.000
	Sr	88	**50.646**	**ug/L**	1.085	175633	2.322
	Y	89		**ug/L**		163	0.002
	Ag	107	**52.172**	**ug/L**	1.241	76324	1.010
	Cd	111	**50.849**	**ug/L**	2.548	18969	0.251
	Cd	114		**ug/L**		42977	0.569
>	In	115		**ug/L**		75550	75550.024
	Sn	120	**52.606**	**ug/L**	1.964	76532	1.012
	Sb	121	**51.251**	**ug/L**	6.608	63556	0.835
	Sb	123		**ug/L**		49159	0.646
	Ba	135		**ug/L**		17262	0.164
	Ba	137	**52.016**	**ug/L**	1.329	30265	0.288
	Ho	165		**ug/L**		24	0.000
>	Lu	175		**ug/L**		105039	105039.497
	Tl	205	**47.645**	**ug/L**	1.623	130784	1.233
	Pb	208	**52.437**	**ug/L**	1.070	224157	2.132
	Bi	209		**ug/L**		23	0.000
	U	238	**54.066**	**ug/L**	0.606	245398	2.335

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	98.515				
|	Be	9	103.344				
|	B	11	99.899				
|	Na	23	101.608				
|	Mg	24	90.725				
|	Al	27	97.399				
|	P	31	104.742				
|	K	39	98.818				
|	Ca	43	98.074				
|>	Sc	45		93.0			
|	V	51	104.468				
|	Cr	52	106.326				
|	Cr	53					
|	Mn	55	104.812				
|	Fe	57	101.704				
|	Co	59	101.386				
|	Ni	60	105.006				
|	Cu	63					
⌊	Cu	65	106.947				
⌈	Zn	66	110.643				
|	Zn	67					
|	Zn	68					
|>	Ge	74		94.1			
|	As	75	99.903				
|	Se	77					
|	Se	82	107.263				
⌊	Kr	83					
⌈	Sr	88	101.291				
|	Y	89					
|	Ag	107	104.344				
|	Cd	111	101.699				
|	Cd	114					
|>	In	115		95.9			
|	Sn	120	105.212				
|	Sb	121	102.502				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	104.032				
|	Ho	165					
|>	Lu	175		95.6			
|	Tl	205	95.290				
|	Pb	208	104.874				
|	Bi	209					
⌊	U	238	108.133				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Zn	66	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 20:11:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 9.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.010	ug/L	75.677	133	0.000
	Be	9	0.002	ug/L	214.499	7	0.000
	B	11	1.334	ug/L	24.214	1066	0.001
	Na	23	4.520	ug/L	26.586	24354	0.013
	Mg	24	-0.190	ug/L	1487.469	5001	-0.000
	Al	27	1.398	ug/L	130.311	9337	0.004
	P	31	-2.291	ug/L	32.578	4115	-0.000
	K	39	6.386	ug/L	69.136	230852	0.016
	Ca	43	9.458	ug/L	53.145	255	0.000
>	Sc	45		ug/L		835632	835631.571
	V	51	0.088	ug/L	566.942	-71	0.000
	Cr	52	0.086	ug/L	32.325	1870	0.000
	Cr	53		ug/L		41760	0.001
	Mn	55	-0.091	ug/L	5.491	439	-0.000
	Fe	57	3.738	ug/L	38.051	2447	0.000
	Co	59	0.015	ug/L	58.913	98	0.000
	Ni	60	0.006	ug/L	621.525	137	0.000
	Cu	63		ug/L		110	-0.000
	Cu	65	-0.007	ug/L	286.603	55	-0.000
	Zn	66	0.062	ug/L	73.607	1717	0.000
	Zn	67		ug/L		8030	0.002
	Zn	68		ug/L		1762	0.000
>	Ge	74		ug/L		125343	125342.726
	As	75	0.451	ug/L	28.052	220	0.001
	Se	77		ug/L		1338	-0.001
	Se	82	0.195	ug/L	43.166	-4	0.000
	Kr	83		ug/L		26	-0.000
	Sr	88	-0.007	ug/L	62.001	184	-0.000
	Y	89		ug/L		23	-0.000
	Ag	107	0.009	ug/L	98.095	32	0.000
	Cd	111	-0.026	ug/L	58.972	6	-0.000
	Cd	114		ug/L		22	0.000
>	In	115		ug/L		77027	77027.344
	Sn	120	0.066	ug/L	25.656	179	0.001
	Sb	121	0.478	ug/L	25.719	1160	0.008
	Sb	123		ug/L		881	0.006
	Ba	135		ug/L		14	-0.000
	Ba	137	0.000	ug/L	3944.708	19	0.000
	Ho	165		ug/L		11	-0.000
>	Lu	175		ug/L		105869	105869.231
	Tl	205	0.488	ug/L	21.645	2608	0.013
	Pb	208	0.014	ug/L	8.059	277	0.001
	Bi	209		ug/L		13	0.000
	U	238	0.052	ug/L	17.779	337	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			93.9		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.3		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 20:59:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 6.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.483**	**ug/L**	1.191	70598	0.085
	Be	9	**51.999**	**ug/L**	1.032	19863	0.024
	B	11	**100.724**	**ug/L**	1.616	40825	0.049
	Na	23	**5005.844**	**ug/L**	1.378	11946135	14.428
	Mg	24	**4842.825**	**ug/L**	4.260	8407777	10.158
	Al	27	**4880.030**	**ug/L**	1.489	10565195	12.766
	P	31	**5245.087**	**ug/L**	0.367	523347	0.628
	K	39	**4597.537**	**ug/L**	3.182	10024287	11.862
	Ca	43	**4925.108**	**ug/L**	0.850	22341	0.027
>	Sc	45		**ug/L**		827051	827051.029
	V	51	**52.755**	**ug/L**	0.234	115117	0.140
	Cr	52	**53.168**	**ug/L**	0.359	99264	0.118
	Cr	53		**ug/L**		46425	0.007
	Mn	55	**52.172**	**ug/L**	0.394	139589	0.168
	Fe	57	**5072.718**	**ug/L**	0.640	266157	0.319
	Co	59	**50.790**	**ug/L**	0.937	100932	0.122
	Ni	60	**52.125**	**ug/L**	1.343	21149	0.025
	Cu	63		**ug/L**		47157	0.057
	Cu	65	**53.745**	**ug/L**	0.937	22494	0.027
	Zn	66	**56.619**	**ug/L**	0.494	16799	0.123
	Zn	67		**ug/L**		9130	0.012
	Zn	68		**ug/L**		12495	0.088
>	Ge	74		**ug/L**		123216	123215.685
	As	75	**49.336**	**ug/L**	0.858	15479	0.125
	Se	77		**ug/L**		2441	0.009
	Se	82	**53.603**	**ug/L**	1.842	1659	0.014
	Kr	83		**ug/L**		29	0.000
	Sr	88	**50.668**	**ug/L**	0.498	174482	2.323
	Y	89		**ug/L**		35	0.000
	Ag	107	**51.488**	**ug/L**	1.023	74800	0.997
	Cd	111	**50.495**	**ug/L**	1.485	18708	0.249
	Cd	114		**ug/L**		43219	0.576
>	In	115		**ug/L**		75014	75014.058
	Sn	120	**52.974**	**ug/L**	0.922	76533	1.019
	Sb	121	**50.863**	**ug/L**	5.468	62652	0.828
	Sb	123		**ug/L**		48856	0.646
	Ba	135		**ug/L**		16888	0.161
	Ba	137	**51.795**	**ug/L**	0.563	30143	0.287
	Ho	165		**ug/L**		24	0.000
>	Lu	175		**ug/L**		105052	105051.571
	Tl	205	**47.456**	**ug/L**	0.428	130296	1.228
	Pb	208	**53.112**	**ug/L**	0.464	227076	2.159
	Bi	209		**ug/L**		98	0.001
	U	238	**54.377**	**ug/L**	0.793	246841	2.349

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	98.967				
	Be	9	103.999				
	B	11	100.724				
	Na	23	100.117				
	Mg	24	96.856				
	Al	27	96.634				
	P	31	104.902				
	K	39	91.951				
	Ca	43	98.502				
>	Sc	45		92.9			
	V	51	105.510				
	Cr	52	106.335				
	Cr	53					
	Mn	55	104.343				
	Fe	57	101.454				
	Co	59	101.580				
	Ni	60	104.250				
	Cu	63					
	Cu	65	107.491				
	Zn	66	113.238				
	Zn	67					
	Zn	68					
>	Ge	74		93.7			
	As	75	98.671				
	Se	77					
	Se	82	107.207				
	Kr	83					
	Sr	88	101.336				
	Y	89					
	Ag	107	102.975				
	Cd	111	100.990				
	Cd	114					
>	In	115		95.2			
	Sn	120	105.948				
	Sb	121	101.725				
	Sb	123					
	Ba	135					
	Ba	137	103.589				
	Ho	165					
>	Lu	175		95.6			
	Tl	205	94.913				
	Pb	208	106.224				
	Bi	209					
	U	238	108.753				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Zn	66	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 21:04:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 7.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.012	ug/L	68.667	101	-0.000
	Be	9	0.003	ug/L	165.889	7	0.000
	B	11	1.262	ug/L	28.780	1033	0.001
	Na	23	4.533	ug/L	29.267	24354	0.013
	Mg	24	-0.943	ug/L	31.502	3667	-0.002
	Al	27	0.824	ug/L	209.963	8003	0.002
	P	31	-0.440	ug/L	233.977	4288	-0.000
	K	39	6.387	ug/L	124.299	230522	0.016
	Ca	43	6.710	ug/L	51.622	241	0.000
>	Sc	45		ug/L		833590	833589.958
	V	51	0.028	ug/L	963.931	-212	0.000
	Cr	52	0.087	ug/L	38.721	1867	0.000
	Cr	53		ug/L		40697	-0.001
	Mn	55	-0.090	ug/L	14.422	441	-0.000
	Fe	57	4.746	ug/L	29.258	2493	0.000
	Co	59	0.012	ug/L	72.413	91	0.000
	Ni	60	-0.006	ug/L	237.996	132	-0.000
	Cu	63		ug/L		98	-0.000
	Cu	65	0.004	ug/L	115.458	59	0.000
	Zn	66	0.533	ug/L	39.220	1832	0.001
	Zn	67		ug/L		7697	-0.001
	Zn	68		ug/L		1811	0.001
>	Ge	74		ug/L		124460	124460.392
	As	75	0.221	ug/L	32.044	146	0.001
	Se	77		ug/L		1325	-0.001
	Se	82	0.172	ug/L	77.542	-5	0.000
	Kr	83		ug/L		29	0.000
	Sr	88	-0.004	ug/L	88.873	190	-0.000
	Y	89		ug/L		18	-0.000
	Ag	107	0.004	ug/L	65.924	25	0.000
	Cd	111	-0.027	ug/L	40.655	5	-0.000
	Cd	114		ug/L		18	0.000
>	In	115		ug/L		76053	76052.706
	Sn	120	0.076	ug/L	21.221	191	0.001
	Sb	121	0.490	ug/L	35.468	1158	0.008
	Sb	123		ug/L		886	0.006
	Ba	135		ug/L		13	-0.000
	Ba	137	0.001	ug/L	299.263	20	0.000
	Ho	165		ug/L		13	0.000
>	Lu	175		ug/L		105304	105303.766
	Tl	205	0.301	ug/L	31.865	2081	0.008
	Pb	208	0.009	ug/L	37.399	256	0.000
	Bi	209		ug/L		28	0.000
	U	238	0.061	ug/L	21.120	373	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.8			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985796
Sample Date/Time: Thursday, December 10, 2009 21:10:59
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985796.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.141**	**ug/L**	10.444	320	0.000
	Be	9	**0.011**	**ug/L**	40.929	10	0.000
	B	11	**3.954**	**ug/L**	0.810	2121	0.002
	Na	23	**955.929**	**ug/L**	3.494	2312002	2.755
	Mg	24	**173.067**	**ug/L**	8.084	307962	0.363
	Al	27	**92.535**	**ug/L**	6.893	208177	0.242
	P	31	**73.372**	**ug/L**	4.098	11659	0.009
	K	39	**201.866**	**ug/L**	7.331	651203	0.521
	Ca	43	**992.429**	**ug/L**	2.283	4709	0.005
>	Sc	45		**ug/L**		834093	834092.601
	V	51	**0.453**	**ug/L**	29.883	732	0.001
	Cr	52	**0.665**	**ug/L**	5.582	2937	0.001
	Cr	53		**ug/L**		30511	-0.013
	Mn	55	**1.078**	**ug/L**	0.532	3577	0.003
	Fe	57	**38.861**	**ug/L**	7.215	4285	0.002
	Co	59	**0.033**	**ug/L**	14.238	134	0.000
	Ni	60	**0.257**	**ug/L**	7.078	239	0.000
	Cu	63		**ug/L**		2202	0.003
	Cu	65	**2.393**	**ug/L**	3.292	1065	0.001
	Zn	66	**0.085**	**ug/L**	238.325	1691	0.000
	Zn	67		**ug/L**		5498	-0.018
	Zn	68		**ug/L**		1631	-0.000
>	Ge	74		**ug/L**		123001	123000.814
	As	75	**-0.319**	**ug/L**	106.661	-24	-0.001
	Se	77		**ug/L**		913	-0.004
	Se	82	**0.451**	**ug/L**	43.499	4	0.000
	Kr	83		**ug/L**		22	-0.000
	Sr	88	**2.793**	**ug/L**	1.680	9937	0.128
	Y	89		**ug/L**		54	0.000
	Ag	107	**0.018**	**ug/L**	16.293	46	0.000
	Cd	111	**0.014**	**ug/L**	216.149	21	0.000
	Cd	114		**ug/L**		34	0.000
>	In	115		**ug/L**		76008	76007.528
	Sn	120	**0.347**	**ug/L**	4.381	586	0.007
	Sb	121	**0.018**	**ug/L**	369.967	574	0.000
	Sb	123		**ug/L**		463	0.000
	Ba	135		**ug/L**		304	0.003
	Ba	137	**0.893**	**ug/L**	3.085	546	0.005
	Ho	165		**ug/L**		12	-0.000
>	Lu	175		**ug/L**		106513	106513.014
	Tl	205	**0.478**	**ug/L**	21.123	2593	0.012
	Pb	208	**0.188**	**ug/L**	5.868	1034	0.008
	Bi	209		**ug/L**		62	0.001
	U	238	**0.090**	**ug/L**	3.015	512	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.9			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1201985797
Sample Date/Time: Thursday, December 10, 2009 21:16:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 928677|40|rmj
Method File: c:\elandata\Method\6020 no thtlmozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985797.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.563**	**ug/L**	0.908	3765	0.004
	Be	9	**28.552**	**ug/L**	0.890	10903	0.013
	B	11	**43.285**	**ug/L**	2.076	17831	0.021
	Na	23	**216.922**	**ug/L**	10.577	530052	0.625
	Mg	24	**896.697**	**ug/L**	2.694	1559776	1.881
	Al	27	**3132.743**	**ug/L**	6.066	6779922	8.195
	P	31	**239.227**	**ug/L**	0.691	27956	0.029
	K	39	**796.860**	**ug/L**	7.181	1914031	2.056
	Ca	43	**1157.361**	**ug/L**	1.219	5407	0.006
>	Sc	45		**ug/L**		826539	826538.957
	V	51	**43.425**	**ug/L**	1.854	94653	0.115
	Cr	52	**22.383**	**ug/L**	1.002	42742	0.050
	Cr	53		**ug/L**		42763	0.002
	Mn	55	**115.723**	**ug/L**	1.191	308611	0.373
	Fe	57	**3498.743**	**ug/L**	0.509	184155	0.220
	Co	59	**26.673**	**ug/L**	1.513	53003	0.064
	Ni	60	**33.091**	**ug/L**	1.407	13466	0.016
	Cu	63		**ug/L**		28199	0.034
	Cu	65	**31.808**	**ug/L**	2.063	13327	0.016
	Zn	66	**61.246**	**ug/L**	1.278	17930	0.133
	Zn	67		**ug/L**		10186	0.021
	Zn	68		**ug/L**		14140	0.102
>	Ge	74		**ug/L**		122502	122502.240
	As	75	**79.085**	**ug/L**	0.987	24623	0.200
	Se	77		**ug/L**		2572	0.010
	Se	82	**56.767**	**ug/L**	1.627	1748	0.014
	Kr	83		**ug/L**		22	-0.000
	Sr	88	**53.133**	**ug/L**	1.058	181782	2.436
	Y	89		**ug/L**		16579	0.222
	Ag	107	**14.601**	**ug/L**	0.776	21087	0.283
	Cd	111	**39.243**	**ug/L**	1.565	14449	0.194
	Cd	114		**ug/L**		33145	0.445
>	In	115		**ug/L**		74538	74537.992
	Sn	120	**17.269**	**ug/L**	2.464	24836	0.332
	Sb	121	**3.945**	**ug/L**	0.693	5330	0.064
	Sb	123		**ug/L**		4183	0.051
	Ba	135		**ug/L**		50202	0.478
	Ba	137	**151.104**	**ug/L**	1.365	87932	0.837
	Ho	165		**ug/L**		930	0.009
>	Lu	175		**ug/L**		105095	105094.913
	Tl	205	**49.437**	**ug/L**	8.333	135644	1.280
	Pb	208	**54.086**	**ug/L**	0.761	231317	2.199
	Bi	209		**ug/L**		330	0.003
	U	238	**0.597**	**ug/L**	1.762	2808	0.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.9			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.6			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 241838002
Sample Date/Time: Thursday, December 10, 2009 21:46:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 928677|2|rm|
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\241838002.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**62.793**	**ug/L**	0.605	87277	0.108
	Be	9	**3.027**	**ug/L**	2.597	1132	0.001
	B	11	**16.265**	**ug/L**	2.583	6852	0.008
	Na	23	**2062.228**	**ug/L**	1.708	4804038	5.944
	Mg	24	**7048.197**	**ug/L**	1.568	11920679	14.783
	Al	27	**43901.684**	**ug/L**	0.983	92577964	114.848
	P	31	**628.599**	**ug/L**	0.408	64813	0.075
	K	39	**5540.786**	**ug/L**	1.165	11732707	14.296
	Ca	43	**9271.860**	**ug/L**	0.718	40810	0.050
>	Sc	45		**ug/L**		806012	806012.010
	V	51	**58.116**	**ug/L**	0.417	123616	0.154
	Cr	52	**31.173**	**ug/L**	0.388	57401	0.069
	Cr	53		**ug/L**		32000	-0.010
	Mn	55	**1290.861**	**ug/L**	0.276	3350276	4.156
	Fe	57	**34851.534**	**ug/L**	0.652	1769337	2.193
	Co	59	**12.179**	**ug/L**	0.104	23636	0.029
	Ni	60	**25.909**	**ug/L**	1.140	10309	0.013
	Cu	63		**ug/L**		20428	0.025
	Cu	65	**24.716**	**ug/L**	0.586	10111	0.012
	Zn	66	**150.127**	**ug/L**	0.871	39044	0.326
	Zn	67		**ug/L**		11575	0.038
	Zn	68		**ug/L**		30378	0.250
>	Ge	74		**ug/L**		115144	115143.657
	As	75	**6.558**	**ug/L**	2.231	1984	0.017
	Se	77		**ug/L**		889	-0.004
	Se	82	**-0.319**	**ug/L**	103.242	-19	-0.000
	Kr	83		**ug/L**		101	0.001
	Sr	88	**87.441**	**ug/L**	0.993	295117	4.010
	Y	89		**ug/L**		327637	4.454
	Ag	107	**0.320**	**ug/L**	3.606	474	0.006
	Cd	111	**1.328**	**ug/L**	5.253	497	0.007
	Cd	114		**ug/L**		140	0.002
>	In	115		**ug/L**		73555	73555.131
	Sn	120	**1.508**	**ug/L**	1.923	2212	0.029
	Sb	121	**-0.106**	**ug/L**	30.263	408	-0.002
	Sb	123		**ug/L**		315	-0.001
	Ba	135		**ug/L**		136495	1.303
	Ba	137	**411.943**	**ug/L**	0.727	238898	2.281
	Ho	165		**ug/L**		17239	0.164
>	Lu	175		**ug/L**		104743	104742.629
	Tl	205	**0.847**	**ug/L**	1.656	3551	0.022
	Pb	208	**35.321**	**ug/L**	0.477	150639	1.436
	Bi	209		**ug/L**		6768	0.065
	U	238	**2.780**	**ug/L**	0.945	12672	0.120

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		90.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 21:52:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 8.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.893**	**ug/L**	1.130	68923	0.086
	Be	9	**53.305**	**ug/L**	1.522	19714	0.025
	B	11	**103.493**	**ug/L**	2.015	40601	0.050
	Na	23	**5066.444**	**ug/L**	3.601	11706881	14.603
	Mg	24	**4821.955**	**ug/L**	0.993	8104021	10.114
	Al	27	**5122.739**	**ug/L**	7.284	10735245	13.401
	P	31	**5377.728**	**ug/L**	1.206	519410	0.643
	K	39	**4719.936**	**ug/L**	3.655	9960855	12.178
	Ca	43	**4994.470**	**ug/L**	0.866	21933	0.027
>	Sc	45		**ug/L**		800771	800770.858
	V	51	**53.529**	**ug/L**	0.706	113095	0.142
	Cr	52	**54.204**	**ug/L**	1.572	97946	0.120
	Cr	53		**ug/L**		47129	0.009
	Mn	55	**53.272**	**ug/L**	1.662	137985	0.172
	Fe	57	**5144.747**	**ug/L**	1.247	261323	0.324
	Co	59	**51.191**	**ug/L**	1.679	98490	0.123
	Ni	60	**52.818**	**ug/L**	1.466	20746	0.026
	Cu	63		**ug/L**		45826	0.057
	Cu	65	**55.120**	**ug/L**	0.794	22334	0.028
	Zn	66	**55.817**	**ug/L**	1.511	16221	0.121
	Zn	67		**ug/L**		9323	0.015
	Zn	68		**ug/L**		12385	0.089
>	Ge	74		**ug/L**		120512	120512.060
	As	75	**50.181**	**ug/L**	0.464	15397	0.127
	Se	77		**ug/L**		2467	0.009
	Se	82	**53.956**	**ug/L**	0.890	1633	0.014
	Kr	83		**ug/L**		35	0.000
	Sr	88	**51.200**	**ug/L**	0.557	171898	2.348
	Y	89		**ug/L**		199	0.002
	Ag	107	**53.287**	**ug/L**	0.896	75469	1.032
	Cd	111	**52.492**	**ug/L**	0.183	18961	0.259
	Cd	114		**ug/L**		42682	0.583
>	In	115		**ug/L**		73132	73132.336
	Sn	120	**53.923**	**ug/L**	0.467	75955	1.038
	Sb	121	**52.689**	**ug/L**	4.424	63270	0.858
	Sb	123		**ug/L**		48967	0.664
	Ba	135		**ug/L**		16901	0.167
	Ba	137	**53.353**	**ug/L**	1.433	29969	0.295
	Ho	165		**ug/L**		26	0.000
>	Lu	175		**ug/L**		101412	101412.413
	Tl	205	**47.639**	**ug/L**	0.352	126265	1.233
	Pb	208	**53.825**	**ug/L**	1.323	222120	2.188
	Bi	209		**ug/L**		38	0.000
	U	238	**55.221**	**ug/L**	0.441	241979	2.385

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	99.785				
	Be	9	106.610				
	B	11	103.493				
	Na	23	101.329				
	Mg	24	96.439				
	Al	27	101.440				
	P	31	107.555				
	K	39	94.399				
	Ca	43	99.889				
>	Sc	45		90.0			
	V	51	107.057				
	Cr	52	108.408				
	Cr	53					
	Mn	55	106.544				
	Fe	57	102.895				
	Co	59	102.383				
	Ni	60	105.635				
	Cu	63					
	Cu	65	110.241				
	Zn	66	111.634				
	Zn	67					
	Zn	68					
>	Ge	74		91.6			
	As	75	100.362				
	Se	77					
	Se	82	107.911				
	Kr	83					
	Sr	88	102.399				
	Y	89					
	Ag	107	106.574				
	Cd	111	104.984				
	Cd	114					
>	In	115		92.8			
	Sn	120	107.846				
	Sb	121	105.377				
	Sb	123					
	Ba	135					
	Ba	137	106.706				
	Ho	165					
>	Lu	175		92.3			
	Tl	205	95.277				
	Pb	208	107.650				
	Bi	209					
	U	238	110.442				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Cu	65	CCV is out of limits (+/- 10%)
QC Std 8	Zn	66	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 21:58:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 9.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.014	ug/L	64.102	97	-0.000
	Be	9	0.003	ug/L	309.312	7	0.000
	B	11	1.274	ug/L	22.199	1030	0.001
	Na	23	1.269	ug/L	41.541	16343	0.004
	Mg	24	-0.931	ug/L	154.376	3667	-0.002
	Al	27	1.144	ug/L	101.169	8669	0.003
	P	31	-1.967	ug/L	26.694	4103	-0.000
	K	39	4.545	ug/L	146.289	224419	0.012
	Ca	43	6.567	ug/L	120.476	239	0.000
>	Sc	45		ug/L		826729	826729.427
	V	51	0.065	ug/L	350.351	-119	0.000
	Cr	52	0.147	ug/L	29.012	1961	0.000
	Cr	53		ug/L		40897	0.000
	Mn	55	-0.032	ug/L	30.095	591	-0.000
	Fe	57	4.733	ug/L	21.898	2472	0.000
	Co	59	0.009	ug/L	29.935	84	0.000
	Ni	60	-0.032	ug/L	47.357	120	-0.000
	Cu	63		ug/L		81	-0.000
	Cu	65	0.008	ug/L	235.017	61	0.000
	Zn	66	0.071	ug/L	177.708	1695	0.000
	Zn	67		ug/L		7869	0.001
	Zn	68		ug/L		1728	0.000
>	Ge	74		ug/L		123536	123536.085
	As	75	-0.271	ug/L	82.747	-10	-0.001
	Se	77		ug/L		1325	-0.001
	Se	82	-0.119	ug/L	17.512	-14	-0.000
	Kr	83		ug/L		34	0.000
	Sr	88	-0.004	ug/L	60.646	192	-0.000
	Y	89		ug/L		34	0.000
	Ag	107	0.008	ug/L	45.167	32	0.000
	Cd	111	-0.022	ug/L	42.393	7	-0.000
	Cd	114		ug/L		16	0.000
>	In	115		ug/L		75970	75970.251
	Sn	120	0.053	ug/L	16.754	157	0.001
	Sb	121	0.512	ug/L	16.978	1186	0.008
	Sb	123		ug/L		914	0.006
	Ba	135		ug/L		17	0.000
	Ba	137	0.005	ug/L	124.458	22	0.000
	Ho	165		ug/L		13	0.000
>	Lu	175		ug/L		105206	105206.358
	Tl	205	0.514	ug/L	23.787	2662	0.013
	Pb	208	0.001	ug/L	311.165	223	0.000
	Bi	209		ug/L		12	0.000
	U	238	0.043	ug/L	16.066	293	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.9			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Thursday, December 10, 2009 22:00:42

ICPMS#6 - Summary Report

Sample ID: 1201985798
Sample Date/Time: Thursday, December 10, 2009 22:09:59
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985798.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.084**	**ug/L**	1.552	109708	0.138
	Be	9	**4.963**	**ug/L**	2.972	1826	0.002
	B	11	**23.420**	**ug/L**	3.046	9506	0.011
	Na	23	**1689.514**	**ug/L**	5.865	3882553	4.870
	Mg	24	**10869.237**	**ug/L**	3.215	18123328	22.798
	Al	27	**84902.537**	**ug/L**	1.835	176534163	222.107
	P	31	**476.158**	**ug/L**	0.175	49408	0.057
	K	39	**11313.580**	**ug/L**	4.360	23410441	29.190
	Ca	43	**10640.754**	**ug/L**	1.236	46146	0.058
>	Sc	45		**ug/L**		794696	794696.478
	V	51	**83.582**	**ug/L**	0.853	175390	0.221
	Cr	52	**47.592**	**ug/L**	1.226	85542	0.106
	Cr	53		**ug/L**		35300	-0.005
	Mn	55	**664.434**	**ug/L**	0.888	1700492	2.139
	Fe	57	**59557.224**	**ug/L**	0.657	2979709	3.747
	Co	59	**12.854**	**ug/L**	1.480	24591	0.031
	Ni	60	**34.607**	**ug/L**	1.755	13533	0.017
	Cu	63		**ug/L**		38786	0.049
	Cu	65	**47.496**	**ug/L**	2.435	19104	0.024
	Zn	66	**167.921**	**ug/L**	0.540	42934	0.364
	Zn	67		**ug/L**		12230	0.045
	Zn	68		**ug/L**		32356	0.271
>	Ge	74		**ug/L**		113680	113680.007
	As	75	**9.075**	**ug/L**	4.855	2684	0.023
	Se	77		**ug/L**		856	-0.004
	Se	82	**-2.110**	**ug/L**	9.272	-70	-0.001
	Kr	83		**ug/L**		158	0.001
	Sr	88	**97.767**	**ug/L**	1.282	326174	4.483
	Y	89		**ug/L**		375788	5.168
	Ag	107	**0.767**	**ug/L**	4.039	1099	0.015
	Cd	111	**2.778**	**ug/L**	9.175	1012	0.014
	Cd	114		**ug/L**		177	0.002
>	In	115		**ug/L**		72717	72716.563
	Sn	120	**2.918**	**ug/L**	3.237	4158	0.056
	Sb	121	**-0.065**	**ug/L**	28.358	452	-0.001
	Sb	123		**ug/L**		327	-0.001
	Ba	135		**ug/L**		93765	0.903
	Ba	137	**284.099**	**ug/L**	1.204	163403	1.573
	Ho	165		**ug/L**		19820	0.191
>	Lu	175		**ug/L**		103880	103880.359
	Tl	205	**2.209**	**ug/L**	1.740	7185	0.057
	Pb	208	**84.734**	**ug/L**	0.945	358094	3.445
	Bi	209		**ug/L**		4482	0.043
	U	238	**2.277**	**ug/L**	0.635	10315	0.098

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		86.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985799
Sample Date/Time: Thursday, December 10, 2009 22:15:53
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985799.224

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**111.648**	**ug/L**	0.333	150632	0.192
	Be	9	**30.393**	**ug/L**	0.614	10991	0.014
	B	11	**76.334**	**ug/L**	2.075	29405	0.037
	Na	23	**2478.338**	**ug/L**	3.202	5604711	7.143
	Mg	24	**12738.060**	**ug/L**	6.882	20924375	26.718
	Al	27	**89863.661**	**ug/L**	1.582	184025204	235.085
	P	31	**1507.412**	**ug/L**	0.479	145264	0.180
	K	39	**12695.736**	**ug/L**	2.072	25846209	32.756
	Ca	43	**11448.755**	**ug/L**	0.673	48894	0.062
>	Sc	45		**ug/L**		782801	782800.664
	V	51	**121.931**	**ug/L**	0.871	252151	0.322
	Cr	52	**77.429**	**ug/L**	0.357	136091	0.172
	Cr	53		**ug/L**		40687	0.003
	Mn	55	**1040.079**	**ug/L**	0.689	2621847	3.348
	Fe	57	**63518.077**	**ug/L**	0.989	3130214	3.996
	Co	59	**44.473**	**ug/L**	1.273	83652	0.107
	Ni	60	**64.184**	**ug/L**	1.060	24617	0.031
	Cu	63		**ug/L**		62756	0.080
	Cu	65	**77.240**	**ug/L**	0.299	30573	0.039
	Zn	66	**199.789**	**ug/L**	0.767	49758	0.433
	Zn	67		**ug/L**		13319	0.057
	Zn	68		**ug/L**		37328	0.321
>	Ge	74		**ug/L**		111375	111374.593
	As	75	**50.027**	**ug/L**	0.734	14187	0.127
	Se	77		**ug/L**		1049	-0.002
	Se	82	**6.148**	**ug/L**	3.934	164	0.002
	Kr	83		**ug/L**		175	0.001
	Sr	88	**133.469**	**ug/L**	0.746	434363	6.120
	Y	89		**ug/L**		389797	5.494
	Ag	107	**27.016**	**ug/L**	0.591	37125	0.523
	Cd	111	**9.260**	**ug/L**	2.218	3257	0.046
	Cd	114		**ug/L**		4409	0.062
>	In	115		**ug/L**		70942	70941.788
	Sn	120	**18.046**	**ug/L**	0.569	24708	0.347
	Sb	121	**16.696**	**ug/L**	1.197	19803	0.272
	Sb	123		**ug/L**		15423	0.212
	Ba	135		**ug/L**		113616	1.113
	Ba	137	**351.892**	**ug/L**	0.590	198936	1.948
	Ho	165		**ug/L**		20624	0.202
>	Lu	175		**ug/L**		102107	102106.976
	Tl	205	**42.848**	**ug/L**	8.168	114410	1.109
	Pb	208	**198.215**	**ug/L**	0.778	823081	8.059
	Bi	209		**ug/L**		4472	0.044
	U	238	**30.476**	**ug/L**	0.404	134501	1.316

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.0			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		84.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		92.9			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985801
Sample Date/Time: Thursday, December 10, 2009 22:21:46
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 928677|2|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985801.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**107.005**	**ug/L**	1.755	143489	0.184
	Be	9	**28.329**	**ug/L**	1.381	10183	0.013
	B	11	**70.356**	**ug/L**	2.422	26975	0.034
	Na	23	**2525.574**	**ug/L**	9.460	5675776	7.279
	Mg	24	**11637.053**	**ug/L**	4.895	18995177	24.408
	Al	27	**83189.018**	**ug/L**	8.280	169325802	217.624
	P	31	**1450.561**	**ug/L**	0.795	139083	0.174
	K	39	**12235.611**	**ug/L**	1.766	24763646	31.569
	Ca	43	**10527.798**	**ug/L**	1.603	44702	0.057
>	Sc	45		**ug/L**		778029	778029.148
	V	51	**109.247**	**ug/L**	0.661	224525	0.289
	Cr	52	**69.983**	**ug/L**	0.765	122408	0.155
	Cr	53		**ug/L**		40014	0.002
	Mn	55	**773.297**	**ug/L**	0.272	1937599	2.490
	Fe	57	**58270.134**	**ug/L**	1.163	2854215	3.666
	Co	59	**41.195**	**ug/L**	0.800	77024	0.099
	Ni	60	**57.187**	**ug/L**	1.085	21815	0.028
	Cu	63		**ug/L**		55551	0.071
	Cu	65	**69.053**	**ug/L**	0.312	27171	0.035
	Zn	66	**184.482**	**ug/L**	0.199	46507	0.400
	Zn	67		**ug/L**		12809	0.052
	Zn	68		**ug/L**		35050	0.298
>	Ge	74		**ug/L**		112446	112445.930
	As	75	**46.025**	**ug/L**	1.742	13182	0.117
	Se	77		**ug/L**		1000	-0.002
	Se	82	**6.696**	**ug/L**	25.061	181	0.002
	Kr	83		**ug/L**		149	0.001
	Sr	88	**119.104**	**ug/L**	0.655	388038	5.462
	Y	89		**ug/L**		360501	5.076
	Ag	107	**25.331**	**ug/L**	1.388	34845	0.490
	Cd	111	**8.099**	**ug/L**	4.126	2853	0.040
	Cd	114		**ug/L**		4026	0.057
>	In	115		**ug/L**		71015	71014.997
	Sn	120	**18.073**	**ug/L**	1.444	24768	0.348
	Sb	121	**13.728**	**ug/L**	1.951	16392	0.224
	Sb	123		**ug/L**		12684	0.173
	Ba	135		**ug/L**		107545	1.058
	Ba	137	**335.489**	**ug/L**	0.832	188810	1.857
	Ho	165		**ug/L**		19040	0.187
>	Lu	175		**ug/L**		101645	101644.672
	Tl	205	**43.045**	**ug/L**	5.290	114463	1.114
	Pb	208	**184.767**	**ug/L**	0.706	763811	7.512
	Bi	209		**ug/L**		4027	0.040
	U	238	**28.630**	**ug/L**	0.965	125791	1.237

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		87.4			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		85.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		92.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1201985800
Sample Date/Time: Thursday, December 10, 2009 22:27:39
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 928677|10|rmj
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\1201985800.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.396**	**ug/L**	0.544	25664	0.033
	Be	9	**1.175**	**ug/L**	2.807	420	0.001
	B	11	**6.249**	**ug/L**	6.293	2795	0.003
	Na	23	**392.504**	**ug/L**	3.607	877857	1.131
	Mg	24	**2316.263**	**ug/L**	1.438	3721589	4.858
	Al	27	**17511.833**	**ug/L**	5.793	35052420	45.811
	P	31	**115.685**	**ug/L**	2.762	14567	0.014
	K	39	**2363.016**	**ug/L**	1.169	4863079	6.097
	Ca	43	**2222.853**	**ug/L**	1.927	9434	0.012
>	Sc	45		**ug/L**		765045	765044.556
	V	51	**18.733**	**ug/L**	0.379	37655	0.050
	Cr	52	**10.039**	**ug/L**	0.400	18607	0.022
	Cr	53		**ug/L**		34898	-0.004
	Mn	55	**230.135**	**ug/L**	0.605	567446	0.741
	Fe	57	**13709.659**	**ug/L**	0.771	661903	0.862
	Co	59	**4.279**	**ug/L**	0.810	7923	0.010
	Ni	60	**8.227**	**ug/L**	2.061	3191	0.004
	Cu	63		**ug/L**		8573	0.011
	Cu	65	**10.813**	**ug/L**	0.730	4228	0.005
	Zn	66	**33.780**	**ug/L**	0.498	9886	0.073
	Zn	67		**ug/L**		7908	0.007
	Zn	68		**ug/L**		7694	0.054
>	Ge	74		**ug/L**		113877	113877.214
	As	75	**2.287**	**ug/L**	17.559	729	0.006
	Se	77		**ug/L**		1031	-0.002
	Se	82	**-0.126**	**ug/L**	221.891	-13	-0.000
	Kr	83		**ug/L**		47	0.000
	Sr	88	**20.986**	**ug/L**	0.385	67951	0.962
	Y	89		**ug/L**		83572	1.187
	Ag	107	**0.119**	**ug/L**	5.433	181	0.002
	Cd	111	**0.476**	**ug/L**	8.704	180	0.002
	Cd	114		**ug/L**		52	0.001
>	In	115		**ug/L**		70414	70414.380
	Sn	120	**0.752**	**ug/L**	0.840	1093	0.014
	Sb	121	**-0.170**	**ug/L**	11.984	317	-0.003
	Sb	123		**ug/L**		270	-0.002
	Ba	135		**ug/L**		21182	0.214
	Ba	137	**68.031**	**ug/L**	0.419	37264	0.377
	Ho	165		**ug/L**		4443	0.045
>	Lu	175		**ug/L**		98894	98893.786
	Tl	205	**2.929**	**ug/L**	11.473	8688	0.076
	Pb	208	**24.135**	**ug/L**	0.645	97247	0.981
	Bi	209		**ug/L**		929	0.009
	U	238	**0.494**	**ug/L**	2.743	2203	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			86.0		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			86.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			89.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			90.0		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 22:57:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 6.231

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.449**	**ug/L**	0.643	65558	0.089
	Be	9	**54.110**	**ug/L**	1.382	18461	0.025
	B	11	**104.920**	**ug/L**	3.261	37959	0.051
	Na	23	**5079.878**	**ug/L**	6.570	10825667	14.642
	Mg	24	**4682.640**	**ug/L**	5.734	7262316	9.822
	Al	27	**4939.497**	**ug/L**	3.159	9549311	12.922
	P	31	**5365.389**	**ug/L**	0.938	478060	0.642
	K	39	**4680.869**	**ug/L**	6.285	9110873	12.077
	Ca	43	**4831.809**	**ug/L**	1.898	19579	0.026
>	Sc	45		**ug/L**		738705	738704.628
	V	51	**53.298**	**ug/L**	1.680	103875	0.141
	Cr	52	**53.631**	**ug/L**	0.272	89419	0.119
	Cr	53		**ug/L**		45836	0.013
	Mn	55	**52.274**	**ug/L**	0.966	124917	0.168
	Fe	57	**5105.248**	**ug/L**	0.920	239233	0.321
	Co	59	**51.231**	**ug/L**	0.557	90931	0.123
	Ni	60	**52.723**	**ug/L**	0.289	19104	0.026
	Cu	63		**ug/L**		42755	0.058
	Cu	65	**54.249**	**ug/L**	0.870	20279	0.027
	Zn	66	**54.172**	**ug/L**	2.643	14676	0.117
	Zn	67		**ug/L**		9372	0.021
	Zn	68		**ug/L**		11190	0.086
>	Ge	74		**ug/L**		112024	112024.377
	As	75	**48.463**	**ug/L**	0.960	13824	0.123
	Se	77		**ug/L**		2250	0.009
	Se	82	**51.525**	**ug/L**	4.015	1450	0.013
	Kr	83		**ug/L**		27	0.000
	Sr	88	**49.102**	**ug/L**	0.612	154437	2.252
	Y	89		**ug/L**		48	0.000
	Ag	107	**51.906**	**ug/L**	0.231	68865	1.005
	Cd	111	**51.154**	**ug/L**	0.518	17310	0.252
	Cd	114		**ug/L**		38969	0.569
>	In	115		**ug/L**		68510	68509.607
	Sn	120	**52.827**	**ug/L**	0.963	69704	1.016
	Sb	121	**51.234**	**ug/L**	5.257	57634	0.834
	Sb	123		**ug/L**		44424	0.643
	Ba	135		**ug/L**		15257	0.159
	Ba	137	**51.058**	**ug/L**	0.740	27067	0.283
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		95698	95698.500
	Tl	205	**47.627**	**ug/L**	1.383	119098	1.233
	Pb	208	**53.397**	**ug/L**	0.449	207952	2.171
	Bi	209		**ug/L**		21	0.000
	U	238	**55.039**	**ug/L**	1.268	227566	2.377

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.897				
	Be	9	108.221				
	B	11	104.920				
	Na	23	101.598				
	Mg	24	93.653				
	Al	27	97.812				
	P	31	107.308				
	K	39	93.617				
	Ca	43	96.636				
>	Sc	45		83.0			
	V	51	106.595				
	Cr	52	107.262				
	Cr	53					
	Mn	55	104.547				
	Fe	57	102.105				
	Co	59	102.463				
	Ni	60	105.447				
	Cu	63					
	Cu	65	108.498				
	Zn	66	108.344				
	Zn	67					
	Zn	68					
>	Ge	74		85.2			
	As	75	96.925				
	Se	77					
	Se	82	103.050				
	Kr	83					
	Sr	88	98.204				
	Y	89					
	Ag	107	103.812				
	Cd	111	102.309				
	Cd	114					
>	In	115		86.9			
	Sn	120	105.654				
	Sb	121	102.469				
	Sb	123					
	Ba	135					
	Ba	137	102.117				
	Ho	165					
>	Lu	175		87.1			
	Tl	205	95.253				
	Pb	208	106.793				
	Bi	209					
	U	238	110.078				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 23:03:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 no thtimozr.mth
Dataset File: C:\elandata\Dataset\091209\QC Std 7.232

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.011	ug/L	29.589	91	-0.000
	Be	9	-0.001	ug/L	783.940	5	-0.000
	B	11	1.254	ug/L	29.877	929	0.001
	Na	23	2.113	ug/L	34.704	16676	0.006
	Mg	24	-1.347	ug/L	71.511	2667	-0.003
	Al	27	0.696	ug/L	217.620	7002	0.002
	P	31	-3.367	ug/L	19.637	3602	-0.000
	K	39	6.379	ug/L	187.304	207508	0.016
	Ca	43	5.028	ug/L	131.386	211	0.000
>	Sc	45		ug/L		751139	751139.062
	V	51	-0.250	ug/L	78.043	-736	-0.001
	Cr	52	0.322	ug/L	24.726	2073	0.001
	Cr	53		ug/L		36876	-0.000
	Mn	55	0.005	ug/L	94.031	628	0.000
	Fe	57	-2.288	ug/L	53.937	1915	-0.000
	Co	59	0.010	ug/L	25.716	79	0.000
	Ni	60	0.009	ug/L	552.283	124	0.000
	Cu	63		ug/L		82	-0.000
	Cu	65	-0.012	ug/L	142.816	48	-0.000
	Zn	66	-0.096	ug/L	117.903	1479	-0.000
	Zn	67		ug/L		7207	0.003
	Zn	68		ug/L		1589	0.001
>	Ge	74		ug/L		110737	110736.974
	As	75	-0.024	ug/L	1334.610	61	-0.000
	Se	77		ug/L		1182	-0.001
	Se	82	0.189	ug/L	85.548	-4	0.000
	Kr	83		ug/L		27	0.000
	Sr	88	-0.005	ug/L	68.705	169	-0.000
	Y	89		ug/L		22	-0.000
	Ag	107	0.013	ug/L	48.929	35	0.000
	Cd	111	-0.007	ug/L	200.288	11	-0.000
	Cd	114		ug/L		14	0.000
>	In	115		ug/L		68289	68288.545
	Sn	120	0.069	ug/L	25.626	162	0.001
	Sb	121	0.495	ug/L	26.414	1047	0.008
	Sb	123		ug/L		787	0.006
	Ba	135		ug/L		17	0.000
	Ba	137	0.015	ug/L	80.323	25	0.000
	Ho	165		ug/L		14	0.000
>	Lu	175		ug/L		95687	95686.680
	Tl	205	0.584	ug/L	14.645	2593	0.015
	Pb	208	0.003	ug/L	119.598	210	0.000
	Bi	209		ug/L		3	-0.000
	U	238	0.042	ug/L	22.536	262	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			84.4		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			84.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			86.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			87.1		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\120909S1.SIF
Batch ID:
Results Data Set: 120909S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: SOIL **Method Last Saved: 12/7/2009 16:18:28**
Method Description: 7471A, ILM04 ANALYST JXL1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/9/2009 09:48:12**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	09:49:02	Yes
2		[0.00]	0.0001	0.0005	0.0001	09:49:32	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	12.71				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/9/2009 09:49:51**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0027	0.0120	0.0028	09:50:41	Yes
2		[0.2]	0.0026	0.0113	0.0027	09:51:11	Yes
Mean:		[0.2]	0.0026				
SD:		0.0	0.0001				
%RSD:		0.0	1.99				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01311 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/9/2009 09:51:30**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0067	0.0287	0.0068	09:52:21	Yes
2		[0.5]	0.0066	0.0286	0.0067	09:52:51	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.38				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999975 Slope: 0.01333 Intercept: -0.00002

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/9/2009 09:53:11**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0262	0.1118	0.0263	09:54:02	Yes
2		[2.0]	0.0260	0.1114	0.0261	09:54:32	Yes
Mean:		[2.0]	0.0261				
SD:		0.0	0.0001				
%RSD:		0.0	0.46				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999984 Slope: 0.01303 Intercept: 0.00005

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/9/2009 09:54:52**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0637	0.2711	0.0638	09:55:43	Yes
2		[5.0]	0.0635	0.2705	0.0636	09:56:13	Yes
Mean:		[5.0]	0.0636				
SD:		0.0	0.0002				
%RSD:		0.0	0.25				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999945 Slope: 0.01271 Intercept: 0.00022

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/9/2009 09:56:33**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1239	0.5296	0.1240	09:57:23	Yes
2		[10.0]	0.1237	0.5263	0.1238	09:57:53	Yes
Mean:		[10.0]	0.1238				
SD:		0.0	0.0002				
%RSD:		0.0	0.13				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

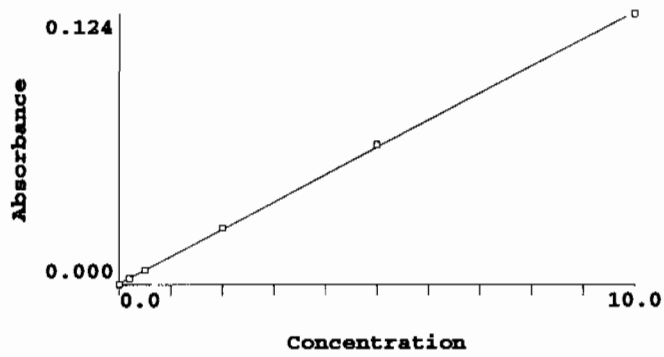

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.046	0.00	12.7
S0.2	0.0026	0.2	0.165	0.00	2.0
S0.5	0.0067	0.5	0.491	0.00	0.4
S2.0	0.0261	2.0	2.059	0.00	0.5

S5.0	0.0636	5.0	5.084	0.00	0.2
S10.0	0.1238	10.0	9.947	0.00	0.1

Correlation Coef.: 0.999891 Slope: 0.01239 Intercept: 0.00058

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/9/2009 09:58:12**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.135	5.135	0.0642	0.2745	0.0643	09:59:03	Yes
2	5.151	5.151	0.0644	0.2738	0.0645	09:59:33	Yes
Mean:	5.143	5.143	0.0643				
SD:	0.012	0.012	0.0001				
%RSD:	0.225	0.225	0.22				

QC value within limits for Hg 253.7 Recovery = 102.86%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/9/2009 09:59:53**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0006	0.0002	10:00:44	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	10:01:14	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.240	3.240	18.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/9/2009 10:01:33**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.175	0.175	0.0027	0.0126	0.0028	10:02:24	Yes
2	0.172	0.172	0.0027	0.0120	0.0028	10:02:54	Yes
Mean:	0.174	0.174	0.0027				
SD:	0.002	0.002	0.0000				
%RSD:	1.238	1.238	0.98				

QC value within limits for Hg 253.7 Recovery = 86.79%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:03:14**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.169	5.169	0.0646	0.2746	0.0647	10:04:04	Yes
2	5.106	5.106	0.0638	0.2718	0.0639	10:04:34	Yes
Mean:	5.138	5.138	0.0642				
SD:	0.044	0.044	0.0005				
%RSD:	0.863	0.863	0.86				

QC value within limits for Hg 253.7 Recovery = 102.75%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 10:04:53
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	10:05:44	Yes
2	-0.037	-0.037	0.0001	0.0011	0.0002	10:06:14	Yes
Mean:	-0.039	-0.039	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.870	4.870	23.91				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1201987684|929435|1
Analyst: JXL1
Autosampler Location: 12
Date Collected: 12/9/2009 10:06:33
Data Type: Original

Replicate Data: 1201987684|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0004	0.0002	10:07:25	Yes
2	-0.036	-0.036	0.0001	0.0010	0.0002	10:07:55	Yes
Mean:	-0.037	-0.037	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.673	5.673	23.16				

Sequence No.: 13
Sample ID: 1201987685|929435|1
Analyst: JXL1
Autosampler Location: 13
Date Collected: 12/9/2009 10:08:15
Data Type: Original

Replicate Data: 1201987685|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.112	2.112	0.0267	0.1144	0.0268	10:09:07	Yes
2	2.119	2.119	0.0268	0.1137	0.0269	10:09:37	Yes
Mean:	2.116	2.116	0.0268				
SD:	0.005	0.005	0.0001				
%RSD:	0.233	0.233	0.23				

Sequence No.: 14
Sample ID: 242156001|929435|1
Analyst: JXL1
Autosampler Location: 14
Date Collected: 12/9/2009 10:09:57
Data Type: Original

Replicate Data: 242156001|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0010	0.0043	0.0011	10:10:48	Yes
2	0.031	0.031	0.0010	0.0042	0.0011	10:11:18	Yes
Mean:	0.032	0.032	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	3.102	3.102	1.26				

Sequence No.: 15
Sample ID: 242156002|929435|1
Analyst: JXL1
Autosampler Location: 15
Date Collected: 12/9/2009 10:11:37
Data Type: Original

Replicate Data: 242156002|929435|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1201987687|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.348	2.348	0.0297	0.1272	0.0298	10:20:46	Yes
2	2.347	2.347	0.0296	0.1275	0.0297	10:21:16	Yes
Mean:	2.347	2.347	0.0297				
SD:	0.001	0.001	0.0000				
%RSD:	0.025	0.025	0.02				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1201987688|929435|1 **Date Collected: 12/9/2009 10:21:35**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987688|929435|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.257	2.257	0.0285	0.1224	0.0286	10:22:26	Yes
2	2.268	2.268	0.0287	0.1224	0.0288	10:22:56	Yes
Mean:	2.263	2.263	0.0286				
SD:	0.008	0.008	0.0001				
%RSD:	0.348	0.348	0.34				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:23:15**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.127	5.127	0.0641	0.2745	0.0642	10:24:06	Yes
2	5.094	5.094	0.0637	0.2725	0.0638	10:24:36	Yes
Mean:	5.110	5.110	0.0639				
SD:	0.023	0.023	0.0003				
%RSD:	0.453	0.453	0.45				

QC value within limits for Hg 253.7 Recovery = 102.21%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 10:24:55**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0006	0.0002	10:25:45	Yes
2	-0.039	-0.039	0.0001	0.0010	0.0002	10:26:15	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.855	2.855	18.17				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 1201987689|929435|5 **Date Collected: 12/9/2009 10:26:35**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987689|929435|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0005	0.0026	0.0006	10:27:26	Yes
2	-0.004	-0.004	0.0005	0.0027	0.0006	10:27:56	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.440	0.440	0.0060	0.0262	0.0061	10:35:50	Yes
2	0.436	0.436	0.0060	0.0257	0.0061	10:36:20	Yes
Mean:	0.438	0.438	0.0060				
SD:	0.003	0.003	0.0000				
%RSD:	0.627	0.627	0.57				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 242316002|929460|1 **Date Collected: 12/9/2009 10:36:39**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316002|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.465	0.465	0.0063	0.0277	0.0064	10:37:29	Yes
2	0.458	0.458	0.0062	0.0268	0.0063	10:37:59	Yes
Mean:	0.461	0.461	0.0063				
SD:	0.005	0.005	0.0001				
%RSD:	1.087	1.087	0.99				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 242316003|929460|1 **Date Collected: 12/9/2009 10:38:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316003|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0020	0.0087	0.0021	10:39:09	Yes
2	0.112	0.112	0.0020	0.0089	0.0021	10:39:39	Yes
Mean:	0.112	0.112	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.186	0.186	0.13				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 242316004|929460|1 **Date Collected: 12/9/2009 10:39:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316004|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.205	0.205	0.0031	0.0138	0.0032	10:40:49	Yes
2	0.207	0.207	0.0031	0.0139	0.0032	10:41:19	Yes
Mean:	0.206	0.206	0.0031				
SD:	0.002	0.002	0.0000				
%RSD:	0.731	0.731	0.60				

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 242316005|929460|1 **Date Collected: 12/9/2009 10:41:38**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242316005|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.224	0.224	0.0033	0.0144	0.0034	10:42:29	Yes
2	0.224	0.224	0.0033	0.0146	0.0034	10:42:59	Yes
Mean:	0.224	0.224	0.0033				
SD:	0.000	0.000	0.0000				
%RSD:	0.058	0.058	0.05				

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 10:43:18**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.162	5.162	0.0645	0.2762	0.0646	10:44:09	Yes
2	5.116	5.116	0.0640	0.2741	0.0641	10:44:39	Yes
Mean:	5.139	5.139	0.0642				
SD:	0.032	0.032	0.0004				
%RSD:	0.623	0.623	0.62				

QC value within limits for Hg 253.7 Recovery = 102.78%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/9/2009 10:44:58
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0006	0.0002	10:45:49	Yes
2	-0.038	-0.038	0.0001	0.0013	0.0002	10:46:19	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.882	6.882	40.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 242316006|929460|1 Date Collected: 12/9/2009 10:46:38
Analyst: JXL1 Data Type: Original

Replicate Data: 242316006|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.072	0.072	0.0015	0.0067	0.0016	10:47:29	Yes
2	0.072	0.072	0.0015	0.0065	0.0016	10:47:59	Yes
Mean:	0.072	0.072	0.0015				
SD:	0.000	0.000	0.0000				
%RSD:	0.079	0.079	0.05				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1201987743|929460|1 Date Collected: 12/9/2009 10:48:18
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987743|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.074	0.074	0.0015	0.0068	0.0016	10:49:09	Yes
2	0.075	0.075	0.0015	0.0066	0.0016	10:49:39	Yes
Mean:	0.074	0.074	0.0015				
SD:	0.001	0.001	0.0000				
%RSD:	1.300	1.300	0.80				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1201987744|929460|1 Date Collected: 12/9/2009 10:49:59
Analyst: JXL1 Data Type: Original

Replicate Data: 1201987744|929460|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.168	2.168	0.0274	0.1171	0.0275	10:50:50	Yes

Replicate Data: 242333001|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.590	0.590	0.0079	0.0340	0.0080	10:59:16	Yes
2	0.588	0.588	0.0079	0.0343	0.0080	10:59:46	Yes
Mean:	0.589	0.589	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.238	0.238	0.22				

==========

Sequence No.: 44 Autosampler Location: 40
Sample ID: 1201989931|930397|1 Date Collected: 12/9/2009 11:00:05
Analyst: JXL1 Data Type: Original

Replicate Data: 1201989931|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.600	0.600	0.0080	0.0349	0.0081	11:00:56	Yes
2	0.593	0.593	0.0079	0.0361	0.0080	11:01:26	Yes
Mean:	0.596	0.596	0.0080				
SD:	0.005	0.005	0.0001				
%RSD:	0.770	0.770	0.71				

==========

Sequence No.: 45 Autosampler Location: 41
Sample ID: 1201989932|930397|1 Date Collected: 12/9/2009 11:01:46
Analyst: JXL1 Data Type: Original

Replicate Data: 1201989932|930397|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.604	2.604	0.0328	0.1408	0.0329	11:02:37	Yes
2	2.596	2.596	0.0327	0.1394	0.0328	11:03:07	Yes
Mean:	2.600	2.600	0.0328				
SD:	0.006	0.006	0.0001				
%RSD:	0.218	0.218	0.21				

==========

Sequence No.: 46 Autosampler Location: 7
Sample ID: CCV Date Collected: 12/9/2009 11:03:26
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.222	5.222	0.0653	0.2784	0.0654	11:04:16	Yes
2	5.172	5.172	0.0647	0.2761	0.0648	11:04:46	Yes
Mean:	5.197	5.197	0.0650				
SD:	0.035	0.035	0.0004				
%RSD:	0.676	0.676	0.67				

QC value within limits for Hg 253.7 Recovery = 103.94%
All analyte(s) passed QC.

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Sequence No.: 47 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/9/2009 11:05:05
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	11:05:55	Yes
2	-0.042	-0.042	0.0001	0.0005	0.0001	11:06:25	Yes
Mean:	-0.042	-0.042	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.206	0.206	2.18				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 241916003|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.594	0.594	0.0079	0.0339	0.0080	11:22:44	Yes
2	0.593	0.593	0.0079	0.0338	0.0080	11:23:14	Yes
Mean:	0.594	0.594	0.0079				
SD:	0.001	0.001	0.0000				
%RSD:	0.089	0.089	0.08				

Sequence No.: 58
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/9/2009 11:23:34
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.106	5.106	0.0638	0.2734	0.0639	11:24:24	Yes
2	5.118	5.118	0.0640	0.2723	0.0641	11:24:54	Yes
Mean:	5.112	5.112	0.0639				
SD:	0.008	0.008	0.0001				
%RSD:	0.165	0.165	0.16				

QC value within limits for Hg 253.7 Recovery = 102.25%
All analyte(s) passed QC.

Sequence No.: 59
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/9/2009 11:25:12
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0001	0.0004	0.0002	11:26:03	Yes
2	-0.040	-0.040	0.0001	0.0006	0.0002	11:26:33	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.305	1.305	9.29				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60
Sample ID: 241916004|928035|1
Analyst: JXL1
Autosampler Location: 52
Date Collected: 12/9/2009 11:26:52
Data Type: Original

Replicate Data: 241916004|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.181	1.181	0.0152	0.0653	0.0153	11:27:43	Yes
2	1.177	1.177	0.0152	0.0648	0.0153	11:28:13	Yes
Mean:	1.179	1.179	0.0152				
SD:	0.003	0.003	0.0000				
%RSD:	0.234	0.234	0.22				

Sequence No.: 61
Sample ID: 241916005|928035|1
Analyst: JXL1
Autosampler Location: 53
Date Collected: 12/9/2009 11:28:33
Data Type: Original

Replicate Data: 241916005|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.319	0.319	0.0045	0.0197	0.0046	11:29:24	Yes
2	0.330	0.330	0.0047	0.0212	0.0048	11:29:54	Yes
Mean:	0.324	0.324	0.0046				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.299	0.299	0.0043	0.0186	0.0044	11:37:48	Yes
2	0.303	0.303	0.0043	0.0187	0.0044	11:38:18	Yes
Mean:	0.301	0.301	0.0043				
SD:	0.003	0.003	0.0000				
%RSD:	1.073	1.073	0.93				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 241916011|928035|1 **Date Collected: 12/9/2009 11:38:37**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241916011|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.415	0.415	0.0057	0.0244	0.0058	11:39:29	Yes
2	0.407	0.407	0.0056	0.0240	0.0057	11:39:58	Yes
Mean:	0.411	0.411	0.0057				
SD:	0.005	0.005	0.0001				
%RSD:	1.278	1.278	1.15				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 241922001|928035|1 **Date Collected: 12/9/2009 11:40:18**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241922001|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.036	1.036	0.0134	0.0569	0.0135	11:41:10	Yes
2	1.030	1.030	0.0133	0.0567	0.0134	11:41:40	Yes
Mean:	1.033	1.033	0.0134				
SD:	0.004	0.004	0.0001				
%RSD:	0.401	0.401	0.38				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1201984320|928035|1 **Date Collected: 12/9/2009 11:42:00**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984320|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.236	1.236	0.0159	0.0671	0.0160	11:42:51	Yes
2	1.223	1.223	0.0157	0.0666	0.0158	11:43:21	Yes
Mean:	1.230	1.230	0.0158				
SD:	0.009	0.009	0.0001				
%RSD:	0.759	0.759	0.73				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 11:43:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.170	5.170	0.0646	0.2729	0.0647	11:44:32	Yes
2	5.127	5.127	0.0641	0.2716	0.0642	11:45:02	Yes
Mean:	5.148	5.148	0.0644				
SD:	0.030	0.030	0.0004				
%RSD:	0.587	0.587	0.58				

QC value within limits for Hg 253.7 Recovery = 102.97%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 12/9/2009 11:45:21
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0004	0.0002	11:46:11	Yes
2	-0.044	-0.044	0.0000	0.0001	0.0001	11:46:41	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.281	2.281	28.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 1201984321|928035|1
Analyst: JXL1
Autosampler Location: 62
Date Collected: 12/9/2009 11:47:01
Data Type: Original

Replicate Data: 1201984321|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.129	3.129	0.0393	0.1671	0.0394	11:47:52	Yes
2	3.115	3.115	0.0392	0.1665	0.0393	11:48:22	Yes
Mean:	3.122	3.122	0.0393				
SD:	0.010	0.010	0.0001				
%RSD:	0.316	0.316	0.31				

Sequence No.: 73
Sample ID: 1201984323|928035|1
Analyst: JXL1
Autosampler Location: 63
Date Collected: 12/9/2009 11:48:42
Data Type: Original

Replicate Data: 1201984323|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.118	3.118	0.0392	0.1666	0.0393	11:49:33	Yes
2	3.100	3.100	0.0390	0.1662	0.0391	11:50:03	Yes
Mean:	3.109	3.109	0.0391				
SD:	0.013	0.013	0.0002				
%RSD:	0.411	0.411	0.40				

Sequence No.: 74
Sample ID: 1201984322|928035|5
Analyst: JXL1
Autosampler Location: 64
Date Collected: 12/9/2009 11:50:23
Data Type: Original

Replicate Data: 1201984322|928035|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.177	0.177	0.0028	0.0119	0.0029	11:51:15	Yes
2	0.179	0.179	0.0028	0.0120	0.0029	11:51:44	Yes
Mean:	0.178	0.178	0.0028				
SD:	0.001	0.001	0.0000				
%RSD:	0.738	0.738	0.59				

Sequence No.: 75
Sample ID: 241922002|928035|1
Analyst: JXL1
Autosampler Location: 65
Date Collected: 12/9/2009 11:52:04
Data Type: Original

Replicate Data: 241922002|928035|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.961	0.961	0.0125	0.0531	0.0126	11:52:56	Yes
2	0.958	0.958	0.0124	0.0531	0.0125	11:53:26	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.261	0.261	0.0038	0.0167	0.0039	12:01:21	Yes
2	0.255	0.255	0.0037	0.0163	0.0038	12:01:51	Yes
Mean:	0.258	0.258	0.0038				
SD:	0.004	0.004	0.0001				
%RSD:	1.643	1.643	1.39				

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1201981594|926816|1 **Date Collected: 12/9/2009 12:02:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981594|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:02	Yes
2	-0.044	-0.044	0.0000	0.0005	0.0001	12:03:32	Yes
Mean:	-0.044	-0.044	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.850	0.850	14.48				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:03:52**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.113	5.113	0.0639	0.2744	0.0640	12:04:42	Yes
2	5.098	5.098	0.0637	0.2741	0.0638	12:05:12	Yes
Mean:	5.106	5.106	0.0638				
SD:	0.011	0.011	0.0001				
%RSD:	0.206	0.206	0.20				

QC value within limits for Hg 253.7 Recovery = 102.12%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:05:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0003	0.0001	12:06:21	Yes
2	-0.041	-0.041	0.0001	0.0005	0.0002	12:06:51	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.638	2.638	23.77				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201981595|926816|10 **Date Collected: 12/9/2009 12:07:11**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201981595|926816|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.982	3.982	0.0499	0.2127	0.0500	12:08:02	Yes
2	3.961	3.961	0.0497	0.2123	0.0498	12:08:32	Yes
Mean:	3.972	3.972	0.0498				
SD:	0.014	0.014	0.0002				
%RSD:	0.362	0.362	0.36				

2	0.042	0.042	0.0011	0.0049	0.0012	12:17:00	Yes
Mean:	0.041	0.041	0.0011				
SD:	0.001	0.001	0.0000				
%RSD:	1.821	1.821	0.86				

==========

Sequence No.: 90 **Autosampler Location: 78**
Sample ID: 241711002|926816|1 **Date Collected: 12/9/2009 12:17:20**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711002|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.294	0.294	0.0042	0.0184	0.0043	12:18:12	Yes
2	0.294	0.294	0.0042	0.0185	0.0043	12:18:42	Yes
Mean:	0.294	0.294	0.0042				
SD:	0.000	0.000	0.0000				
%RSD:	0.024	0.024	0.02				

==========

Sequence No.: 91 **Autosampler Location: 79**
Sample ID: 241711003|926816|1 **Date Collected: 12/9/2009 12:19:02**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711003|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.272	0.272	0.0039	0.0174	0.0040	12:19:53	Yes
2	0.270	0.270	0.0039	0.0168	0.0040	12:20:23	Yes
Mean:	0.271	0.271	0.0039				
SD:	0.002	0.002	0.0000				
%RSD:	0.579	0.579	0.49				

==========

Sequence No.: 92 **Autosampler Location: 80**
Sample ID: 241711004|926816|1 **Date Collected: 12/9/2009 12:20:43**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711004|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.492	0.492	0.0067	0.0293	0.0068	12:21:34	Yes
2	0.488	0.488	0.0066	0.0290	0.0067	12:22:04	Yes
Mean:	0.490	0.490	0.0066				
SD:	0.003	0.003	0.0000				
%RSD:	0.610	0.610	0.56				

==========

Sequence No.: 93 **Autosampler Location: 81**
Sample ID: 241711005|926816|1 **Date Collected: 12/9/2009 12:22:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711005|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.296	0.296	0.0042	0.0187	0.0043	12:23:15	Yes
2	0.294	0.294	0.0042	0.0187	0.0043	12:23:45	Yes
Mean:	0.295	0.295	0.0042				
SD:	0.002	0.002	0.0000				
%RSD:	0.527	0.527	0.46				

==========

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:24:05**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.115	5.115	0.0639	0.2767	0.0640	12:24:55	Yes
2	5.089	5.089	0.0636	0.2752	0.0637	12:25:25	Yes
Mean:	5.102	5.102	0.0638				
SD:	0.019	0.019	0.0002				
%RSD:	0.372	0.372	0.37				

QC value within limits for Hg 253.7 Recovery = 102.04%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:25:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	0.0001	0.0007	0.0002	12:26:35	Yes
2	-0.043	-0.043	0.0000	0.0006	0.0001	12:27:05	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.813	1.813	18.79				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 241711006|926816|1 **Date Collected: 12/9/2009 12:27:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711006|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.327	0.327	0.0046	0.0204	0.0047	12:28:16	Yes
2	0.323	0.323	0.0046	0.0203	0.0047	12:28:46	Yes
Mean:	0.325	0.325	0.0046				
SD:	0.003	0.003	0.0000				
%RSD:	0.902	0.902	0.79				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 241711007|926816|1 **Date Collected: 12/9/2009 12:29:06**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241711007|926816|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.383	0.383	0.0053	0.0230	0.0054	12:29:57	Yes
2	0.380	0.380	0.0053	0.0228	0.0054	12:30:27	Yes
Mean:	0.381	0.381	0.0053				
SD:	0.002	0.002	0.0000				
%RSD:	0.416	0.416	0.37				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 1201984335|928044|1 **Date Collected: 12/9/2009 12:30:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984335|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0005	0.0002	12:31:38	Yes
2	-0.041	-0.041	0.0001	0.0004	0.0002	12:32:08	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.000	0.000	0.0000				

1	2.129	2.129	0.0269	0.1157	0.0270	12:40:08	Yes
2	2.117	2.117	0.0268	0.1153	0.0269	12:40:38	Yes
Mean:	2.123	2.123	0.0269				
SD:	0.008	0.008	0.0001				
%RSD:	0.400	0.400	0.39				

==========

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 1201984339|928044|5 **Date Collected: 12/9/2009 12:40:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984339|928044|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	0.0001	0.0007	0.0002	12:41:50	Yes
2	-0.035	-0.035	0.0001	0.0009	0.0002	12:42:20	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.977	3.977	13.36				

==========

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 241825002|928044|1 **Date Collected: 12/9/2009 12:42:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825002|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.273	0.273	0.0040	0.0173	0.0041	12:43:32	Yes
2	0.274	0.274	0.0040	0.0176	0.0041	12:44:02	Yes
Mean:	0.274	0.274	0.0040				
SD:	0.000	0.000	0.0000				
%RSD:	0.084	0.084	0.07				

==========

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 12:44:22**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.112	5.112	0.0639	0.2765	0.0640	12:45:12	Yes
2	5.069	5.069	0.0634	0.2743	0.0635	12:45:42	Yes
Mean:	5.091	5.091	0.0636				
SD:	0.030	0.030	0.0004				
%RSD:	0.591	0.591	0.59				

QC value within limits for Hg 253.7 Recovery = 101.81%
All analyte(s) passed QC.

==========

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 12:46:01**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0001	0.0009	0.0002	12:46:51	Yes
2	-0.043	-0.043	0.0000	0.0004	0.0001	12:47:21	Yes
Mean:	-0.041	-0.041	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.460	5.460	43.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.192	0.192	0.0030	0.0131	0.0031	13:03:51	Yes
2	0.190	0.190	0.0029	0.0129	0.0030	13:04:21	Yes
Mean:	0.191	0.191	0.0029				
SD:	0.002	0.002	0.0000				
%RSD:	0.902	0.902	0.73				

==========

Sequence No.: 118 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:04:41**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.116	5.116	0.0640	0.2787	0.0641	13:05:32	Yes
2	5.095	5.095	0.0637	0.2773	0.0638	13:06:02	Yes
Mean:	5.105	5.105	0.0638				
SD:	0.015	0.015	0.0002				
%RSD:	0.299	0.299	0.30				

QC value within limits for Hg 253.7 Recovery = 102.11%
All analyte(s) passed QC.

==========

Sequence No.: 119 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:06:21**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0001	0.0001	13:07:12	Yes
2	-0.043	-0.043	0.0000	0.0006	0.0001	13:07:42	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.114	1.114	14.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 120 **Autosampler Location: 102**
Sample ID: 241825013|928044|1 **Date Collected: 12/9/2009 13:08:01**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825013|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.061	0.061	0.0013	0.0060	0.0014	13:08:53	Yes
2	0.065	0.065	0.0014	0.0067	0.0015	13:09:23	Yes
Mean:	0.063	0.063	0.0014				
SD:	0.003	0.003	0.0000				
%RSD:	4.456	4.456	2.57				

==========

Sequence No.: 121 **Autosampler Location: 103**
Sample ID: 241825014|928044|1 **Date Collected: 12/9/2009 13:09:44**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825014|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0005	0.0027	0.0006	13:10:35	Yes
2	-0.005	-0.005	0.0005	0.0023	0.0006	13:11:05	Yes
Mean:	-0.005	-0.005	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	15.90	15.90	1.73				

Mean:	0.361	0.361	0.0050
SD:	0.003	0.003	0.0000
%RSD:	0.759	0.759	0.67

==========

Sequence No.: 127 **Autosampler Location: 109**
Sample ID: 241825020|928044|1 **Date Collected: 12/9/2009 13:19:57**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241825020|928044|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.149	0.149	0.0024	0.0109	0.0025	13:20:49	Yes
2	0.151	0.151	0.0024	0.0113	0.0025	13:21:19	Yes
Mean:	0.150	0.150	0.0024				
SD:	0.002	0.002	0.0000				
%RSD:	1.179	1.179	0.90				

==========

Sequence No.: 128 **Autosampler Location: 110**
Sample ID: 1201984341|928047|1 **Date Collected: 12/9/2009 13:21:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984341|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0000	0.0003	0.0001	13:22:32	Yes
2	-0.045	-0.045	0.0000	0.0004	0.0001	13:23:02	Yes
Mean:	-0.045	-0.045	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.018	0.018	0.87				

==========

Sequence No.: 129 **Autosampler Location: 111**
Sample ID: 1201984342|928047|10 **Date Collected: 12/9/2009 13:23:23**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984342|928047|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.643	3.643	0.0457	0.1987	0.0458	13:24:15	Yes
2	3.623	3.623	0.0455	0.1973	0.0456	13:24:45	Yes
Mean:	3.633	3.633	0.0456				
SD:	0.014	0.014	0.0002				
%RSD:	0.377	0.377	0.37				

==========

Sequence No.: 130 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:25:05**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.104	5.104	0.0638	0.2784	0.0639	13:25:56	Yes
2	5.049	5.049	0.0631	0.2769	0.0632	13:26:25	Yes
Mean:	5.076	5.076	0.0635				
SD:	0.039	0.039	0.0005				
%RSD:	0.770	0.770	0.76				

QC value within limits for Hg 253.7 Recovery = 101.53%
All analyte(s) passed QC.

==========

Sequence No.: 131 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:26:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	0.0000	0.0004	0.0001	13:27:35	Yes
2	-0.043	-0.043	0.0000	0.0004	0.0001	13:28:05	Yes
Mean:	-0.043	-0.043	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.424	1.424	20.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 132 **Autosampler Location: 112**
Sample ID: 241832001|928047|1 **Date Collected: 12/9/2009 13:28:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241832001|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	0.0004	0.0020	0.0005	13:29:16	Yes
2	-0.013	-0.013	0.0004	0.0019	0.0005	13:29:46	Yes
Mean:	-0.013	-0.013	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.360	6.360	2.40				

Sequence No.: 133 **Autosampler Location: 113**
Sample ID: 241832002|928047|1 **Date Collected: 12/9/2009 13:30:06**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241832002|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0004	0.0023	0.0005	13:30:58	Yes
2	-0.012	-0.012	0.0004	0.0021	0.0005	13:31:28	Yes
Mean:	-0.012	-0.012	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.516	6.516	2.22				

Sequence No.: 134 **Autosampler Location: 114**
Sample ID: 241832003|928047|1 **Date Collected: 12/9/2009 13:31:49**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241832003|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	0.0005	0.0025	0.0006	13:32:41	Yes
2	-0.006	-0.006	0.0005	0.0025	0.0006	13:33:11	Yes
Mean:	-0.007	-0.007	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	8.206	8.206	1.38				

Sequence No.: 135 **Autosampler Location: 115**
Sample ID: 241832004|928047|1 **Date Collected: 12/9/2009 13:33:32**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241832004|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	0.0003	0.0019	0.0004	13:34:24	Yes
2	-0.024	-0.024	0.0003	0.0014	0.0004	13:34:54	Yes
Mean:	-0.022	-0.022	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	13.54	13.54	11.99				

Sequence No.: 136
Sample ID: 241838002|928047|1
Analyst: JXL1
Autosampler Location: 116
Date Collected: 12/9/2009 13:35:15
Data Type: Original

Replicate Data: 241838002|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.171	0.171	0.0027	0.0119	0.0028	13:36:06	Yes
2	0.172	0.172	0.0027	0.0122	0.0028	13:36:36	Yes
Mean:	0.171	0.171	0.0027				
SD:	0.001	0.001	0.0000				
%RSD:	0.333	0.333	0.26				

Sequence No.: 137
Sample ID: 1201984343|928047|1
Analyst: JXL1
Autosampler Location: 117
Date Collected: 12/9/2009 13:36:57
Data Type: Original

Replicate Data: 1201984343|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.153	0.153	0.0025	0.0113	0.0026	13:37:49	Yes
2	0.150	0.150	0.0024	0.0109	0.0025	13:38:19	Yes
Mean:	0.151	0.151	0.0024				
SD:	0.002	0.002	0.0000				
%RSD:	1.284	1.284	0.98				

Sequence No.: 138
Sample ID: 1201984344|928047|1
Analyst: JXL1
Autosampler Location: 118
Date Collected: 12/9/2009 13:38:39
Data Type: Original

Replicate Data: 1201984344|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.274	2.274	0.0288	0.1252	0.0288	13:39:31	Yes
2	2.277	2.277	0.0288	0.1243	0.0289	13:40:01	Yes
Mean:	2.276	2.276	0.0288				
SD:	0.002	0.002	0.0000				
%RSD:	0.087	0.087	0.08				

Sequence No.: 139
Sample ID: 1201984346|928047|1
Analyst: JXL1
Autosampler Location: 119
Date Collected: 12/9/2009 13:40:22
Data Type: Original

Replicate Data: 1201984346|928047|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.322	2.322	0.0293	0.1254	0.0294	13:41:13	Yes
2	2.301	2.301	0.0291	0.1249	0.0292	13:41:43	Yes
Mean:	2.311	2.311	0.0292				
SD:	0.015	0.015	0.0002				
%RSD:	0.645	0.645	0.63				

Sequence No.: 140
Sample ID: 1201984345|928047|5
Analyst: JXL1
Autosampler Location: 120
Date Collected: 12/9/2009 13:42:04
Data Type: Original

Replicate Data: 1201984345|928047|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0006	0.0030	0.0007	13:42:56	Yes

2	0.001	0.001	0.0006	0.0030	0.0007	13:43:26	Yes
Mean:	0.001	0.001	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	35.70	35.70	0.96				

Sequence No.: 141 **Autosampler Location: 121**
Sample ID: 1201984358|928056|1 **Date Collected: 12/9/2009 13:43:46**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984358|928056|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0000	0.0006	0.0001	13:44:38	Yes
2	-0.044	-0.044	0.0000	0.0006	0.0001	13:45:08	Yes
Mean:	-0.044	-0.044	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.785	1.785	33.26				

Sequence No.: 142 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/9/2009 13:45:29**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.159	5.159	0.0645	0.2794	0.0646	13:46:19	Yes
2	5.173	5.173	0.0647	0.2776	0.0648	13:46:49	Yes
Mean:	5.166	5.166	0.0646				
SD:	0.009	0.009	0.0001				
%RSD:	0.183	0.183	0.18				

QC value within limits for Hg 253.7 Recovery = 103.32%
All analyte(s) passed QC.

Sequence No.: 143 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/9/2009 13:47:08**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	0.0000	0.0006	0.0001	13:47:58	Yes
2	-0.042	-0.042	0.0001	0.0007	0.0002	13:48:28	Yes
Mean:	-0.042	-0.042	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.451	1.451	14.10				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 144 **Autosampler Location: 122**
Sample ID: 1201984359|928056|10 **Date Collected: 12/9/2009 13:48:47**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984359|928056|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.800	3.800	0.0477	0.2066	0.0478	13:49:39	Yes
2	3.773	3.773	0.0473	0.2054	0.0474	13:50:09	Yes
Mean:	3.787	3.787	0.0475				
SD:	0.019	0.019	0.0002				
%RSD:	0.496	0.496	0.49				

Sequence No.: 145 **Autosampler Location: 123**

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 928676

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985797	UI647733-01	.523	g
MS	1201985799	UI090611-A	.5	mL
MS	1201985799	UI090611-B	.5	mL
MSD	1201985801	UI090611-A	.5	mL
MSD	1201985801	UI090611-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985796		SW846 3050B	04-DEC-2009 19:14	0.507 g	50 mL	98.61933	SOIL
LCS	1201985797		SW846 3050B	04-DEC-2009 19:14	0.523 g	50 mL	95.60229	SOIL
SAMPLE	241832001		SW846 3050B	04-DEC-2009 19:14	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241832002		SW846 3050B	04-DEC-2009 19:14	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241832003		SW846 3050B	04-DEC-2009 19:14	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241832004		SW846 3050B	04-DEC-2009 19:14	0.515 g	50 mL	97.08738	SOIL
SAMPLE	241838002		SW846 3050B	04-DEC-2009 19:14	0.517 g	50 mL	96.7118	SOIL
SAMPLE	241901001		SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
DUP	1201985798	241901001	SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
MS	1201985799	241901001	SW846 3050B	04-DEC-2009 19:14	0.513 g	50 mL	97.46589	SOIL
MSD	1201985801	241901001	SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
SDILT	1201985800	241901001	SW846 3050B	04-DEC-2009 19:14	0.512 g	50 mL	97.65625	SOIL
SAMPLE	241901002		SW846 3050B	04-DEC-2009 19:14	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241901003		SW846 3050B	04-DEC-2009 19:14	0.508 g	50 mL	98.4252	SOIL
SAMPLE	241901004		SW846 3050B	04-DEC-2009 19:14	0.521 g	50 mL	95.96929	SOIL
SAMPLE	241901005		SW846 3050B	04-DEC-2009 19:14	0.501 g	50 mL	99.8004	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203033-02	1.5 mL	Hydrogen Peroxide 30%
1230937	5 mL	Nitric Acid CONC.

Comments: sample#241832001 is a clumpy, rich, brown soil with small rocks.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 928612

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201985643	UI647735	.51	g
MS	1201985645	UI091119-01	.25	mL
MS	1201985645	UI091119-06	.25	mL
MSD	1201985647	UI091119-01	.25	mL
MSD	1201985647	UI091119-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201985642		SW846 3050B	04-DEC-2009 19:17	0.524 g	50 mL	95.41985	SOIL
LCS	1201985643		SW846 3050B	04-DEC-2009 19:17	0.51 g	50 mL	98.03922	SOIL
SAMPLE	241832001		SW846 3050B	04-DEC-2009 19:17	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241832002		SW846 3050B	04-DEC-2009 19:17	0.5 g	50 mL	100	SOIL
SAMPLE	241832003		SW846 3050B	04-DEC-2009 19:17	0.511 g	50 mL	97.84736	SOIL
SAMPLE	241832004		SW846 3050B	04-DEC-2009 19:17	0.514 g	50 mL	97.27626	SOIL
SAMPLE	241838002		SW846 3050B	04-DEC-2009 19:17	0.503 g	50 mL	99.40358	SOIL
DUP	1201985644	241838002	SW846 3050B	04-DEC-2009 19:17	0.51 g	50 mL	98.03922	SOIL
MS	1201985645	241838002	SW846 3050B	04-DEC-2009 19:17	0.511 g	50 mL	97.84736	SOIL
MSD	1201985647	241838002	SW846 3050B	04-DEC-2009 19:17	0.515 g	50 mL	97.08738	SOIL
SDILT	1201985646	241838002	SW846 3050B	04-DEC-2009 19:17	0.503 g	50 mL	99.40358	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1230937	1.25 mL	Nitric Acid CONC.

Comments: sample#241832001 is a rich, brown soil with artifacts.

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 933563

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201997324	UI062540-I	.503	g
MS	1201985645	UI091124-01	.25	mL
MS	1201985645	UI091124-06	.25	mL
MSD	1201985647	UI091124-01	.25	mL
MSD	1201985647	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201997323		SW846 3050B	16-DEC-2009 13:30	0.525 g	50 mL	95.2381	SOIL
LCS	1201997324		SW846 3050B	16-DEC-2009 13:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	241832001		SW846 3050B	16-DEC-2009 13:30	0.525 g	50 mL	95.2381	SOIL
SAMPLE	241832002		SW846 3050B	16-DEC-2009 13:30	0.533 g	50 mL	93.80863	SOIL
SAMPLE	241832003		SW846 3050B	16-DEC-2009 13:30	0.533 g	50 mL	93.80863	SOIL
SAMPLE	241832004		SW846 3050B	16-DEC-2009 13:30	0.527 g	50 mL	94.87666	SOIL
SAMPLE	241838002		SW846 3050B	16-DEC-2009 13:30	0.535 g	50 mL	93.45794	SOIL
DUP	1201985644	241838002	SW846 3050B	16-DEC-2009 13:30	0.511 g	50 mL	97.84736	SOIL
MS	1201985645	241838002	SW846 3050B	16-DEC-2009 13:30	0.525 g	50 mL	95.2381	SOIL
MSD	1201985647	241838002	SW846 3050B	16-DEC-2009 13:30	0.516 g	50 mL	96.89922	SOIL
SDILT	1201985646	241838002	SW846 3050B	16-DEC-2009 13:30	0.535 g	50 mL	93.45794	SOIL

Reagent/Solvent Lot ID	Amount	Description
1215803	10 mL	HYDROCHLORIC ACID
1238345	1.25 mL	Nitric Acid CONC.

Comments Brown,medium soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 928046

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201984342	UI031809A	.203	g
MS	1201984344	WHG091208-14	.3	mL
MSD	1201984346	WHG091208-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201984341		SW846 7471A Prep	08-DEC-2009 12:40	0.539 g	30 mL	55.65863	SOIL
LCS	1201984342		SW846 7471A Prep	08-DEC-2009 12:40	0.203 g	30 mL	147.78325	SOIL
SAMPLE	241832001		SW846 7471A Prep	08-DEC-2009 12:40	0.595 g	30 mL	50.42017	SOIL
SAMPLE	241832002		SW846 7471A Prep	08-DEC-2009 12:40	0.506 g	30 mL	59.28854	SOIL
SAMPLE	241832003		SW846 7471A Prep	08-DEC-2009 12:40	0.551 g	30 mL	54.44646	SOIL
SAMPLE	241832004		SW846 7471A Prep	08-DEC-2009 12:40	0.558 g	30 mL	53.76344	SOIL
SAMPLE	241838002		SW846 7471A Prep	08-DEC-2009 12:40	0.538 g	30 mL	55.76208	SOIL
DUP	1201984343	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.563 g	30 mL	53.28597	SOIL
MS	1201984344	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.579 g	30 mL	51.81347	SOIL
MSD	1201984346	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.524 g	30 mL	57.25191	SOIL
SDILT	1201984345	241838002	SW846 7471A Prep	08-DEC-2009 12:40	0.538 g	30 mL	55.76208	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1213711-1	.375 mL	NITRIC ACID
1236359-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG091208-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG091208-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG091208-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG091208-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG091208-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG091208-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments: Sample 241838002 is a rocky brown soil.
Digestion Start Date: 08-DEC-09 12:40
Digestion End Date: 08-DEC-09 13:10

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
928677	See Below		

Potentially affected work order(s)(SDG): 241832(10-669),241838(10-670),241901(10-689)

Application Issues:

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MSD/PSD: QC 1201985801MSD	The matrix spike duplicate recovery failed outside of the control limits for Li and Ni due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Rose Jenkins 11-DEC-09

Data Validator/Group Leader:

Samantha Jacobs 14-DEC-09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
928613	See Below		

Potentially affected work order(s)(SDG): 241832(10-669),241838(10-670)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Specification and Requirements Nonconformance Description:

1. Failed RPD for DUP:

   QC 1201985644DUP

2. Failed RPD for MS/MSD, or PS/PSD:

   QC 1201985647MSD

NRG Disposition:

1. The sample and sample duplicate % RPD failed outside the control limits for barium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese and titanium due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 16-DEC-09

Data Validator/Group Leader:

Louise Smith 16-DEC-09

NCR Report No.: 772335
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
18-DEC-09	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
933564	See Below		

Potentially affected work order(s)(SDG): 241832(10-669),241838(10-670)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201985645MS 2. Failed Recovery for MSD/PSD: QC 1201985647MSD	1. The matrix spike recovery failed outside of the control limits for calcium,magnesium,potassium and silicon due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike duplicate recovery failed outside of the control limits for calcium,magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 19-DEC-09

Data Validator/Group Leader:

Jamie Johnson 19-DEC-09

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090611-A **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090611-B **Opened:** 11-JUN-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 11-JUN-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 11-JUN-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID:	UI090828-42	**Opened:**	16-SEP-09	**Amount :**	500 mL
Name:	TRACE ICP Na-1000SOUR	**Received:**	27-AUG-09	**Catalog Number :**	060011-02-03
Type:	Source Material	**Expires:**	16-SEP-10	**Lot Number :**	1017098
Employee:	Helen Camello			**Solvent :**	1%HNO3
Supplier:	02SI				
Description:	Sodium 1000 +/- 3 ug/mL in 1% HNO3				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID:	UI090925-40	**Opened:**	23-OCT-09	**Amount :**	500 mL
Name:	SECOND SOURCE STD -1	**Received:**	25-SEP-09	**Catalog Number :**	SGELMX38-500N
Type:	Source Material	**Expires:**	30-SEP-10	**Lot Number :**	4909129
Employee:	Helen Camello			**Solvent :**	5%HNO3
Supplier:	SPECTRO PURE				
Description:	SECOND SOURCE STD #1A 5%HNO3				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID:	UI090925-41	**Opened:**	23-OCT-09	**Amount :**	500 mL
Name:	SECOND SOURCE STD -1	**Received:**	25-SEP-09	**Catalog Number :**	SGELMX39-500B
Type:	Source Material	**Expires:**	30-SEP-10	**Lot Number :**	4909130
Employee:	Helen Camello			**Solvent :**	5%HNO3,TR.HF
Supplier:	SPECTRO PURE				
Description:	SECOND SOURCE STD #1B				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-09 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Standard Logbook

Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-01 **Opened:** 19-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091119-06 **Opened:** 19-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 19-NOV-09
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091130-48 **Opened:** 11-DEC-09 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 01-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1018045
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI091211-40 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI091211-41 **Opened:** 11-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 09-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-DEC-10 **Lot Number :** 1017958
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI647733-01 **Opened:** 02-APR-07 **Amount :** 80 g
Name: ICPMSSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: ICPMS Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	8270 mg/kg	Antimony	55.8 mg/kg
Arsenic	255 mg/kg	Barium	469 mg/kg
Beryllium	86.4 mg/kg	Boron	138 mg/kg
Cadmium	119 mg/kg	Calcium	3760 mg/kg
Chromium	71.2 mg/kg	Cobalt	79.6 mg/kg
Copper	96.2 mg/kg	Iron	13200 mg/kg
Lead	169 mg/kg	Lithium	8.01 mg/kg
Magnesium	2990 mg/kg	Manganese	364 mg/kg
Mercury	4.18 mg/kg	Molybdenum	79.6 mg/kg
Nickel	101 mg/kg	Phosphorous	752 mg/kg
Potassium	2420 mg/kg	Selenium	171 mg/kg
Silver	116 mg/kg	Sodium	575 mg/kg
Strontium	144 mg/kg	Thallium	203 mg/kg
Thorium	17.2 mg/kg	Titanium	255 mg/kg
Uranium	2.12 mg/kg	Uranium-235	.0153 mg/kg
Uranium-238	2.105 mg/kg	Vanadium	134 mg/kg
Zinc	202 mg/kg	Zirconium	6.83 mg/kg

Serial ID: UI647735 **Opened:** 02-APR-07 **Amount :** 80 g
Name: METALSOILSRM **Received:** 02-APR-07 **Lot Number :** D049-540
Type: Source Material **Expires:** 01-APR-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS (Reference)
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	7730 mg/kg	Antimony	60.6 mg/kg
Arsenic	257 mg/kg	Barium	472 mg/kg
Beryllium	88.4 mg/kg	Boron	130 mg/kg
Cadmium	117 mg/kg	Calcium	3640 mg/kg
Chromium	72.8 mg/kg	Cobalt	82.5 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Copper	100 mg/kg	Iron	14500 mg/kg
Lead	166 mg/kg	Magnesium	3000 mg/kg
Manganese	374 mg/kg	Mercury	4.18 mg/kg
Molybdenum	82.7 mg/kg	Nickel	103 mg/kg
Phosphorous	690 mg/kg	Potassium	2410 mg/kg
Selenium	173 mg/kg	Silica	3896 mg/kg
Silicon	1818 mg/kg	Silver	123 mg/kg
Sodium	574 mg/kg	Strontium	160 mg/kg
Sulfur	200 mg/kg	Thallium	194 mg/kg
Tin	107 mg/kg	Titanium	269 mg/kg
Vanadium	138 mg/kg	Zinc	201 mg/kg

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091208-01 **Opened:** 08-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 08-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 09-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091208-02 **Opened:** 08-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Intermediate **Expires:** 09-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091208-07 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Standard Logbook

Serial ID: WHG091208-08 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG091208-09 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG091208-10 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091208-11 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-01	Mercury	200 ug/L	1500 uL	30 mL	10 ug/L

Standard Logbook

Serial ID: WHG091208-12 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091208-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG091208-14 **Opened:** 08-DEC-09 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 08-DEC-09 **Solvent :** 2% HNO3-1213711
Type: Working **Expires:** 14-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI091211-42 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI091211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI091211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI091211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI091211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI091211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI091211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI091211-43 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI091211-44 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1 %HNO3-1239193
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI091211-45 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1239193
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI091211-46 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL AND 1%HNO3-1239193
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI091211-47 **Opened:** 11-DEC-09 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 12-DEC-09 **Solvent :** 3%HCL &1%HNO3-1239193
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI091218-43 **Opened:** 18-DEC-09 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-DEC-09 **Solvent :** 3%HCL and 1%HNO3 -1242318
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WMS091206-04AB **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248

Name: ICPMS Cal Standard 10 **Received:** 06-DEC-09

Type: Working **Expires:** 07-DEC-09

Employee: Rose Jenkins

Supplier: GEL

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091206-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091206-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091206-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091206-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091206-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091206-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091206-04B **Opened:** 06-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl- 1235248
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS091206-05B **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Name: ICPMS ICV **Received:** 06-DEC-09
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091206-06B **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Name: ICPMS CRDL **Received:** 06-DEC-09
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091206-07B **Opened:** 06-DEC-09 **Lot Number :** 1010773
Name: ICPMS ICSA **Received:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091206-08B **Opened:** 06-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Name: ICPMS ICSAB **Received:** 06-DEC-09
Type: Working **Expires:** 07-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091208-04 **Opened:** 08-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091208-04A **Opened:** 08-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091208-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091208-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091208-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091208-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091208-05 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 08-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091208-06 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 08-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091208-07 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 08-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 09-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091208-08 **Opened:** 08-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 08-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS091209-04AB **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS Cal Standard 10 **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091209-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091209-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091209-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS091209-04B **Opened:** 09-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl- 1238829
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS091209-05B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS ICV **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS091209-06B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS CRDL **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS091209-07B **Opened:** 09-DEC-09 **Lot Number :** 1010773
Name: ICPMS ICSA **Received:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091209-08B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS ICSAB **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091209-70B **Opened:** 09-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Name: ICPMS LINEAR RANGE ST **Received:** 09-DEC-09
Type: Working **Expires:** 10-DEC-09
Employee: Rose Jenkins
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1203033-02 **Opened:** 14-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1213711-1 **Opened:** 03-NOV-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 03-NOV-09 **Lot Number :** H14024
Type: Reagent/Solvent **Expires:** 03-NOV-10
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1215803 **Opened:** 06-NOV-09 **Lot Number :** H39037
Name: I-HCL **Received:** 06-NOV-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1230937 **Opened:** 18-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 18-NOV-09
Type: Reagent/Solvent **Expires:** 18-NOV-10
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1239193 **Opened:** 07-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 07-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 13-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1242318 **Opened:** 14-DEC-09 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-DEC-09 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 20-DEC-09 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670-1

Sample Analysis

Sample ID	Client ID
241839001	WST03-10-2134
1201988997	Tumbling Blank (TB)
1201990771	Method Blank (MB) **ICP-MS**
1201990772	Laboratory Control Sample (LCS)
1201990775	241839001(WST03-10-2134L) Serial Dilution (SD)
1201990773	241839001(WST03-10-2134D) Sample Duplicate (DUP)
1201988995	241839001(WST03-10-2134S) Matrix Spike (MS)
1201988994	Tumbling Blank (TB)
1201990720	Method Blank (MB) **CVAA**
1201990721	Laboratory Control Sample (LCS)
1201990725	241839001(WST03-10-2134L) Serial Dilution (SD)
1201990722	241839001(WST03-10-2134D) Sample Duplicate (DUP)
1201988992	241839001(WST03-10-2134S) Matrix Spike (MS)
1201988993	241839001(WST03-10-2134SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	930787 and 930762
Prep Batch :	930786 and 930761
TCLP Prep Batch :	930036 and 930035
Standard Operating Procedures:	GL-MA-E-014 REV# 20, GL-MA-E-008 REV# 13, GL-LB-E-006 REV# 13 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3010/6020 and SW846 7470A
Prep Method :	SW846 3010A and SW846 7470A Prep
TCLP Prep Method :	SW846 1311

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 241839001 (WST03-10-2134)-ICP-MS and CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples and associated matrix QC were prepared at a 10x factor for ICP/ICPMS to minimize potential interferences arising from the high sodium content in the TCLP leaching solution. The samples and associated matrix QC were prepared at a 10x factor for CVAA analysis because larger volumes of this matrix consume excessive amounts of potassium permanganate.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR 768723

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nik-Cole Elmore **Date:** 12.21.09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-670-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 241839001 **BASIS:** As Received **DATE COLLECTED** 23-NOV-09

CLIENT ID: WST03-10-2134 **LEVEL:** Low **DATE RECEIVED** 25-NOV-09

MATRIX: TCLP **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-38-2	Arsenic	0.050	mg/L	U	0.016	0.05	0.05	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-39-3	Barium	0.765	mg/L		0.006	0.02	0.02	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-43-9	Cadmium	0.010	mg/L	U	0.0011	0.01	0.01	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-47-3	Chromium	0.10	mg/L	U	0.02	0.1	0.1	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7439-92-1	Lead	0.020	mg/L	U	0.005	0.02	0.02	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7439-97-6	Mercury	0.002	mg/L	U	0.00066	0.002	0.002	1	AV	JXL1	12/10/09 12:05	121009W2-2	930762
7782-49-2	Selenium	0.050	mg/L	U	0.01	0.05	0.05	1	MS	BAJ	12/10/09 03:51	091209-1	930787
7440-22-4	Silver	0.010	mg/L	U	0.002	0.01	0.01	1	MS	BAJ	12/10/09 03:51	091209-1	930787

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
930762	930761	SW846 7470A Prep	2	mL	20	mL	12/09/09	TXB3
930787	930786	SW846 3010A	5	mL	50	mL	12/09/09	AXG2

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	10–DEC–09 00:04	091209–1
	Barium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	10–DEC–09 00:04	091209–1
	Cadmium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	10–DEC–09 00:04	091209–1
	Chromium	53.1	ug/L	50	ug/L	106.2	90.0 – 110.0	MS	10–DEC–09 00:04	091209–1
	Lead	53.6	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	10–DEC–09 00:04	091209–1
	Selenium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	10–DEC–09 00:04	091209–1
	Silver	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	10–DEC–09 00:04	091209–1
	Mercury	4.98	ug/L	5	ug/L	99.6	90.0 – 110.0	AV	10–DEC–09 09:55	121009W2–2
CCV01										
	Arsenic	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	10–DEC–09 00:35	091209–1
	Barium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	10–DEC–09 00:35	091209–1
	Cadmium	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	10–DEC–09 00:35	091209–1
	Chromium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	10–DEC–09 00:35	091209–1
	Lead	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	10–DEC–09 00:35	091209–1
	Selenium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	10–DEC–09 00:35	091209–1
	Silver	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	10–DEC–09 00:35	091209–1
	Mercury	5.28	ug/L	5	ug/L	105.6	80.0 – 120.0	AV	10–DEC–09 10:01	121009W2–2
CCV02										
	Arsenic	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	10–DEC–09 00:53	091209–1
	Barium	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	10–DEC–09 00:53	091209–1
	Cadmium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	10–DEC–09 00:53	091209–1
	Chromium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	10–DEC–09 00:53	091209–1
	Lead	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	10–DEC–09 00:53	091209–1
	Selenium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	10–DEC–09 00:53	091209–1
	Silver	53.4	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	10–DEC–09 00:53	091209–1
	Mercury	5.31	ug/L	5	ug/L	106.2	80.0 – 120.0	AV	10–DEC–09 10:24	121009W2–2
CCV03										
	Arsenic	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	10–DEC–09 01:48	091209–1
	Barium	46.3	ug/L	50	ug/L	92.6	90.0 – 110.0	MS	10–DEC–09 01:48	091209–1
	Cadmium	49.4	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	10–DEC–09 01:48	091209–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	10–DEC–09 01:48	091209–1
	Lead	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	10–DEC–09 01:48	091209–1
	Selenium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	10–DEC–09 01:48	091209–1
	Silver	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	10–DEC–09 01:48	091209–1
	Mercury	5.29	ug/L	5	ug/L	105.8	80.0 – 120.0	AV	10–DEC–09 10:47	121009W2–2
CCV04										
	Arsenic	49.1	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	10–DEC–09 02:37	091209–1
	Barium	44.3	ug/L	50	ug/L	88.7	90.0 – 110.0	MS	10–DEC–09 02:37	091209–1
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	10–DEC–09 02:37	091209–1
	Chromium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	10–DEC–09 02:37	091209–1
	Lead	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	10–DEC–09 02:37	091209–1
	Selenium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	10–DEC–09 02:37	091209–1
	Silver	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	10–DEC–09 02:37	091209–1
	Mercury	5.13	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	10–DEC–09 11:10	121009W2–2
CCV05										
	Arsenic	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	10–DEC–09 03:20	091209–1
	Barium	46.5	ug/L	50	ug/L	93	90.0 – 110.0	MS	10–DEC–09 03:20	091209–1
	Cadmium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	10–DEC–09 03:20	091209–1
	Chromium	50.3	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	10–DEC–09 03:20	091209–1
	Lead	53.2	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	10–DEC–09 03:20	091209–1
	Selenium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	10–DEC–09 03:20	091209–1
	Silver	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	10–DEC–09 03:20	091209–1
	Mercury	4.99	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	10–DEC–09 11:34	121009W2–2
CCV06										
	Arsenic	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	10–DEC–09 04:16	091209–1
	Barium	48	ug/L	50	ug/L	96.1	90.0 – 110.0	MS	10–DEC–09 04:16	091209–1
	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	10–DEC–09 04:16	091209–1
	Chromium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	10–DEC–09 04:16	091209–1
	Lead	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	10–DEC–09 04:16	091209–1
	Selenium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	10–DEC–09 04:16	091209–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	10–DEC–09 04:16	091209–1
	Mercury	4.76	ug/L	5	ug/L	95.2	80.0 – 120.0	AV	10–DEC–09 11:57	121009W2–2
CCV07										
	Mercury	4.81	ug/L	5	ug/L	96.1	80.0 – 120.0	AV	10–DEC–09 12:20	121009W2–2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Lead	2.39	ug/L	2	ug/L	119.3	70.0 – 130.0	MS	10–DEC–09 00:16	091209–1
	Silver	1.1	ug/L	1	ug/L	110	70.0 – 130.0	MS	10–DEC–09 00:16	091209–1
	Arsenic	5.51	ug/L	5	ug/L	110.3	70.0 – 130.0	MS	10–DEC–09 00:16	091209–1
	Cadmium	1.1	ug/L	1	ug/L	109.5	70.0 – 130.0	MS	10–DEC–09 00:16	091209–1
	Selenium	5.92	ug/L	5	ug/L	118.5	70.0 – 130.0	MS	10–DEC–09 00:16	091209–1
	Chromium	12.3	ug/L	10	ug/L	123.2	70.0 – 130.0	MS	10–DEC–09 00:16	091209–1
	Barium	2.23	ug/L	2	ug/L	111.4	70.0 – 130.0	MS	10–DEC–09 00:16	091209–1
	Mercury	.183	ug/L	.2	ug/L	91.5	70.0 – 130.0	AV	10–DEC–09 09:59	121009W2–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–670–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	10–DEC–09 00:10	091209–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	10–DEC–09 00:10	091209–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	10–DEC–09 00:10	091209–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	10–DEC–09 00:10	091209–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	10–DEC–09 00:10	091209–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	10–DEC–09 00:10	091209–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	10–DEC–09 00:10	091209–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 09:57	121009W2–2
CCB01										
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	10–DEC–09 00:41	091209–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	10–DEC–09 00:41	091209–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	10–DEC–09 00:41	091209–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	10–DEC–09 00:41	091209–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	10–DEC–09 00:41	091209–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	10–DEC–09 00:41	091209–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	10–DEC–09 00:41	091209–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 10:03	121009W2–2
CCB02										
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	10–DEC–09 00:59	091209–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	10–DEC–09 00:59	091209–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	10–DEC–09 00:59	091209–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	10–DEC–09 00:59	091209–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	10–DEC–09 00:59	091209–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	10–DEC–09 00:59	091209–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	10–DEC–09 00:59	091209–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 10:26	121009W2–2
CCB03										
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	10–DEC–09 01:54	091209–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	10–DEC–09 01:54	091209–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	10–DEC–09 01:54	091209–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	10–DEC–09 01:54	091209–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–670–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	10–DEC–09 01:54	091209–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	10–DEC–09 01:54	091209–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	10–DEC–09 01:54	091209–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 10:49	121009W2–2
CCB04										
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	10–DEC–09 02:43	091209–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	10–DEC–09 02:43	091209–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	10–DEC–09 02:43	091209–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	10–DEC–09 02:43	091209–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	10–DEC–09 02:43	091209–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	10–DEC–09 02:43	091209–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	10–DEC–09 02:43	091209–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 11:12	121009W2–2
CCB05										
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	10–DEC–09 03:27	091209–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	10–DEC–09 03:27	091209–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	10–DEC–09 03:27	091209–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	10–DEC–09 03:27	091209–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	10–DEC–09 03:27	091209–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	10–DEC–09 03:27	091209–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	10–DEC–09 03:27	091209–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 11:36	121009W2–2
CCB06										
	Arsenic	1.6	+/–5	U	1.6	5.0	LIQ	MS	10–DEC–09 04:22	091209–1
	Barium	0.6	+/–2	U	0.6	2.0	LIQ	MS	10–DEC–09 04:22	091209–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	10–DEC–09 04:22	091209–1
	Chromium	2.0	+/–10	U	2.0	10.0	LIQ	MS	10–DEC–09 04:22	091209–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	10–DEC–09 04:22	091209–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	10–DEC–09 04:22	091209–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	10–DEC–09 04:22	091209–1
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 11:59	121009W2–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–670–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB07										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	10–DEC–09 12:22	121009W2–2

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-670-1

Contract: LANL01004

Matrix: TCLP

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201988994								
	Mercury	0.00066	mg/L	+/-0.002	U	AV	0.00066	0.002
1201988997								
	Arsenic	0.016	mg/L	+/-0.05	U	MS	0.016	0.05
	Barium	0.006	mg/L	+/-0.02	U	MS	0.006	0.02
	Cadmium	-0.00173	mg/L	+/-0.01	J	MS	0.0011	0.01
	Chromium	0.0296	mg/L	+/-0.1	J	MS	0.02	0.1
	Lead	0.005	mg/L	+/-0.02	U	MS	0.005	0.02
	Selenium	0.01	mg/L	+/-0.05	U	MS	0.01	0.05
	Silver	0.002	mg/L	+/-0.01	U	MS	0.002	0.01
1201990720								
	Mercury	-0.00066	mg/L	+/-0.002	J	AV	0.00066	0.002
1201990771								
	Arsenic	0.016	mg/L	+/-0.05	U	MS	0.016	0.05
	Barium	0.006	mg/L	+/-0.02	U	MS	0.006	0.02
	Cadmium	0.0011	mg/L	+/-0.01	U	MS	0.0011	0.01
	Chromium	0.02	mg/L	+/-0.1	U	MS	0.02	0.1
	Lead	0.005	mg/L	+/-0.02	U	MS	0.005	0.02
	Selenium	0.01	mg/L	+/-0.05	U	MS	0.01	0.05
	Silver	0.002	mg/L	+/-0.01	U	MS	0.002	0.01

METALS
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Interference Check Sample

SDG No: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.211	ug/L					10–DEC–09 00:22	091209–1
	Barium	0.77	ug/L					10–DEC–09 00:22	091209–1
	Cadmium	0.59	ug/L					10–DEC–09 00:22	091209–1
	Chromium	3.11	ug/L					10–DEC–09 00:22	091209–1
	Lead	0.205	ug/L					10–DEC–09 00:22	091209–1
	Selenium	–1.17	ug/L					10–DEC–09 00:22	091209–1
	Silver	0.095	ug/L					10–DEC–09 00:22	091209–1
ICSAB01									
	Arsenic	21.7	ug/L	20	ug/L	108	80.0 – 120.0	10–DEC–09 00:29	091209–1
	Barium	24.2	ug/L	20.67	ug/L	117	80.0 – 120.0	10–DEC–09 00:29	091209–1
	Cadmium	20.9	ug/L	20.4	ug/L	103	80.0 – 120.0	10–DEC–09 00:29	091209–1
	Chromium	24.6	ug/L	23.7	ug/L	104	80.0 – 120.0	10–DEC–09 00:29	091209–1
	Lead	23.4	ug/L	20.5	ug/L	114	80.0 – 120.0	10–DEC–09 00:29	091209–1
	Selenium	19.5	ug/L	20	ug/L	97.7	80.0 – 120.0	10–DEC–09 00:29	091209–1
	Silver	20.1	ug/L	20	ug/L	101	80.0 – 120.0	10–DEC–09 00:29	091209–1

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–670–1 **Client ID** WST03–10–2134S

Contract: LANL01004 **Level:** Low

Matrix: TCLP **% Solids:**

Sample ID: 241839001 **Spike ID:** 1201988992

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/L	75–125	.0162		0.00066	U	.02	81.2		AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–670–1 **Client ID** WST03–10–2134SD

Contract: LANL01004 **Level:** Low

Matrix: TCLP **% Solids:**

Sample ID: 241839001 **Spike ID:** 1201988993

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/L	75–125	.0154		0.00066	U	.02	76.9		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–670–1 **Client ID** WST03–10–2134S

Contract: LANL01004 **Level:** Low

Matrix: TCLP **% Solids:**

Sample ID: 241839001 **Spike ID:** 1201988995

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/L	75–125	4.81		0.016	U	5.26	91.4		MS
Barium	mg/L	75–125	10.4		0.765		10.5	91.3		MS
Cadmium	mg/L	75–125	1.04		0.0011	U	1.05	98.5		MS
Chromium	mg/L	75–125	4.58		0.02	U	5.26	86.8		MS
Lead	mg/L	75–125	5.1		0.005	U	5.26	96.9		MS
Selenium	mg/L	75–125	1.02		0.01	U	1.05	96.7		MS
Silver	mg/L	75–125	.524		0.002	U	.526	99.5		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: TCLP **Level:** Low **Client ID:** WST03–10–2134SD

Sample ID: 1201988992 **Duplicate ID:** 1201988993 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/L	+/–20	0.0162		0.0154		5.44		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: TCLP **Level:** Low **Client ID:** WST03–10–2134D

Sample ID: 241839001 **Duplicate ID:** 1201990722 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/L		0.00066	U	0.00066	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–670–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: TCLP **Level:** Low **Client ID:** WST03–10–2134D

Sample ID: 241839001 **Duplicate ID:** 1201990773 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/L		0.016	U	0.016	U			MS
Barium	mg/L	+/–20%	0.765		0.75		1.92		MS
Cadmium	mg/L		0.0011	U	0.0011	U			MS
Chromium	mg/L		0.02	U	0.02	U			MS
Lead	mg/L		0.005	U	0.005	U			MS
Selenium	mg/L		0.01	U	0.01	U			MS
Silver	mg/L		0.002	U	0.002	U			MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-670-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201990721								
	Mercury	mg/L	.02	.0192		96	80-120	AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–670–1

Contract: LANL01004

Aqueous LCS Source:O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201990772								
	Arsenic	mg/L	.5	.494		98.9	80–120	MS
	Barium	mg/L	.5	.493		98.7	80–120	MS
	Cadmium	mg/L	.5	.526		105	80–120	MS
	Chromium	mg/L	.5	.522		104	80–120	MS
	Lead	mg/L	.5	.558		112	80–120	MS
	Selenium	mg/L	.5	.515		103	80–120	MS
	Silver	mg/L	.5	.543		109	80–120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-670-1 **Client ID** WST03-10-2134L

Contract: LANL01004

Matrix: TCLP **Level:** Low

Sample ID: 241839001 **Serial Dilution ID:** 1201990725

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–670–1 **Client ID** WST03–10–2134L

Contract: LANL01004

Matrix: TCLP **Level:** Low

Sample ID: 241839001 **Serial Dilution ID:** 1201990775

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	1.6	U	8	U				MS
Barium	76.5		77		.654		10	MS
Cadmium	.11	U	.55	U				MS
Chromium	2	U	10	U				MS
Lead	.5	U	2.5	U				MS
Selenium	1	U	5	U				MS
Silver	.2	U	1	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-670-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	930786						
1201990771	MB for batch 930786	MB	TCLP	09-DEC-09	5mL	50mL	
1201988997	TB for batch 930036	TB	TCLP	09-DEC-09	5mL	50mL	
1201990772	LCS for batch 930786	LCS	TCLP	09-DEC-09	5mL	50mL	
1201988995	WST03-10-2134S	MS	TCLP	09-DEC-09	5mL	50mL	
1201990773	WST03-10-2134D	DUP	TCLP	09-DEC-09	5mL	50mL	
241839001	WST03-10-2134	SAMPLE	TCLP	09-DEC-09	5mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-670-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	930761						
1201990720	MB for batch 930761	MB	TCLP	09-DEC-09	2mL	20mL	
1201988994	TB for batch 930035	TB	TCLP	09-DEC-09	2mL	20mL	
1201990721	LCS for batch 930761	LCS	TCLP	09-DEC-09	2mL	20mL	
1201988992	WST03-10-2134S	MS	TCLP	09-DEC-09	2mL	20mL	
1201988993	WST03-10-2134SD	MSD	TCLP	09-DEC-09	2mL	20mL	
1201990722	WST03-10-2134D	DUP	TCLP	09-DEC-09	2mL	20mL	
241839001	WST03-10-2134	SAMPLE	TCLP	09-DEC-09	2mL	20mL	

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 09-DEC-09 **End Date:** 10-DEC-09

Client Sdg: 10-670-1
Method MS
Data File: 091209-1

Samp No.	D/F	Run Time	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
S0.0	1	23:46	X	X	X	X	X		X	X
S10	1	23:52	X	X	X	X	X		X	X
S100	1	23:58	X	X	X	X	X		X	X
ICV01	1	00:04	X	X	X	X	X		X	X
ICB01	1	00:10	X	X	X	X	X		X	X
CRDL01	1	00:16	X	X	X	X	X		X	X
ICSA01	1	00:22	X	X	X	X	X		X	X
ICSAB01	1	00:29	X	X	X	X	X		X	X
CCV01	1	00:35	X	X	X	X	X		X	X
CCB01	1	00:41	X	X	X	X	X		X	X
LR01	1	00:47	X	X	X	X	X		X	X
CCV02	1	00:53	X	X	X	X	X		X	X
CCB02	1	00:59	X	X	X	X	X		X	X
ZZZZZZ	2	01:05								
ZZZZZZ	40	01:11								
ZZZZZZ	2	01:17								
ZZZZZZ	2	01:24								
ZZZZZZ	2	01:30								
ZZZZZZ	2	01:36								
ZZZZZZ	10	01:42								
CCV03	1	01:48	X	X	X	X	X		X	X
CCB03	1	01:54	X	X	X	X	X		X	X
ZZZZZZ	2	02:00								
ZZZZZZ	2	02:07								
ZZZZZZ	2	02:13								
ZZZZZZ	2	02:19								
ZZZZZZ	2	02:25								
ZZZZZZ	2	02:31								
CCV04	1	02:37	X	X	X	X	X		X	X
CCB04	1	02:43	X	X	X	X	X		X	X
ZZZZZZ	2	02:50								
ZZZZZZ	2	02:56								
ZZZZZZ	2	03:02								
ZZZZZZ	2	03:08								
ZZZZZZ	2	03:14								
CCV05	1	03:20	X	X	X	X	X		X	X
CCB05	1	03:27	X	X	X	X	X		X	X
1201988997	1	03:33	X	X	X	X	X		X	X
1201990771	1	03:39	X	X	X	X	X		X	X
1201990772	1	03:45	X	X	X	X	X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time								
241839001	1	03:51	X	X	X	X	X		X	X
1201990773	1	03:57	X	X	X	X	X		X	X
1201988995	1	04:04	X	X	X	X	X		X	X
1201990775	5	04:10	X	X	X	X	X		X	X
CCV06	1	04:16	X	X	X	X	X		X	X
CCB06	1	04:22	X	X	X	X	X		X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 10-DEC-09 **End Date:** 10-DEC-09

Client Sdg: 10-670-1
Method AV
Data File: 121009W2-2

Samp No.	D/F	Run Time	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
S0.0	1	09:44						X		
S0.2	1	09:46						X		
S0.5	1	09:48						X		
S2.0	1	09:50						X		
S5.0	1	09:52						X		
S10.0	1	09:54						X		
ICV01	1	09:55						X		
ICB01	1	09:57						X		
CRDL01	1	09:59						X		
CCV01	1	10:01						X		
CCB01	1	10:03						X		
ZZZZZZ	1	10:05								
ZZZZZZ	1	10:07								
ZZZZZZ	1	10:09								
ZZZZZZ	1	10:11								
ZZZZZZ	1	10:13								
ZZZZZZ	5	10:15								
ZZZZZZ	1	10:17								
ZZZZZZ	1	10:18								
ZZZZZZ	1	10:20								
ZZZZZZ	1	10:22								
CCV02	1	10:24						X		
CCB02	1	10:26						X		
ZZZZZZ	1	10:28								
ZZZZZZ	1	10:30								
ZZZZZZ	5	10:32								
ZZZZZZ	1	10:34								
ZZZZZZ	1	10:36								
ZZZZZZ	1	10:38								
ZZZZZZ	1	10:40								
ZZZZZZ	1	10:42								
ZZZZZZ	1	10:44								
ZZZZZZ	1	10:45								
CCV03	1	10:47						X		
CCB03	1	10:49						X		
ZZZZZZ	5	10:51								
ZZZZZZ	1	10:53								
ZZZZZZ	1	10:55								
ZZZZZZ	1	10:57								
ZZZZZZ	1	10:59								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time								
ZZZZZZ	1	11:01								
ZZZZZZ	1	11:03								
ZZZZZZ	1	11:05								
ZZZZZZ	1	11:07								
ZZZZZZ	1	11:09								
CCV04	1	11:10						X		
CCB04	1	11:12						X		
ZZZZZZ	5	11:14								
ZZZZZZ	1	11:16								
ZZZZZZ	1	11:18								
ZZZZZZ	1	11:20								
ZZZZZZ	1	11:22								
ZZZZZZ	1	11:24								
ZZZZZZ	5	11:26								
ZZZZZZ	1	11:28								
ZZZZZZ	1	11:30								
ZZZZZZ	1	11:32								
CCV05	1	11:34						X		
CCB05	1	11:36						X		
ZZZZZZ	1	11:37								
ZZZZZZ	1	11:39								
ZZZZZZ	1	11:41								
ZZZZZZ	1	11:43								
ZZZZZZ	1	11:45								
ZZZZZZ	1	11:47								
ZZZZZZ	1	11:49								
ZZZZZZ	1	11:51								
ZZZZZZ	5	11:53								
1201988994	1	11:55						X		
CCV06	1	11:57						X		
CCB06	1	11:59						X		
1201990720	1	12:01						X		
1201990721	1	12:03						X		
241839001	1	12:05						X		
1201988992	1	12:06						X		
1201988993	1	12:08						X		
1201990722	1	12:10						X		
1201990725	5	12:12						X		
ZZZZZZ	1	12:14								
ZZZZZZ	1	12:16								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
ZZZZZZ	1	12:18								
CCV07	1	12:20						X		
CCB07	1	12:22						X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-670-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Arsenic		1.6	5
	Barium		0.6	2
	Cadmium		0.11	1
	Chromium		2.0	10
	Lead		0.5	2
	Selenium		1.0	5
	Silver		0.2	1

METALS
–10–
Instrument Detection Limits

SDG NO. 10–670–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Mercury		0.066	.2

METALS
–12–
Linear Ranges

SDG NO. 10–670–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09

Raw Data

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, December 09, 2009 16:01:20
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1433
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5060.3	5060.296	99.435	2.0
	Mg	24.0	59742.9	59742.875	699.577	1.2
	Co	58.9	112245.9	112245.871	977.771	0.9
	Rh	102.9	204666.1	204666.111	1363.026	0.7
	In	114.9	274720.2	274720.221	1776.196	0.6
	Pb	208.0	197188.0	197187.983	315.373	0.2
⌈>	Ba	137.9	252317.6	252317.628	1705.432	0.7
⌊	Ba++	69.0	5080.4	0.020	0.000	0.5
⌈>	Ce	139.9	312764.5	312764.508	929.439	0.3
⌊	CeO	155.9	7822.2	0.025	0.001	2.5
	Bkgd	220.0	20.4	20.400	1.884	9.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
5.25	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current AutoIens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.5	5818.5
Co	59	13	7.0	115265.5
In	115	13	7.5	260056.3

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	608	2050	0.606
Be	9.0	9.0	2061	2060	0.570
Mg	24.0	24.0	5703	2060	0.623
Mg	25.0	25.0	5943	2055	0.621
Mg	26.0	26.0	6179	2070	0.626
Co	58.9	58.9	14182	2090	0.609
Rh	102.9	102.9	24882	2145	0.620
In	114.9	114.9	27796	2165	0.623
Ce	139.9	139.9	33880	2195	0.601
Pb	206.0	206.0	49948	2270	0.662
Pb	207.0	207.0	50159	2240	0.640
Pb	208.0	208.0	50463	2280	0.661
U	238.1	238.1	57737	2270	0.730

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, December 09, 2009 23:46:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\Blank.152

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		139	
	Be	9		ug/L		23	
	B	11		ug/L		781	
	Na	23		ug/L		17679	
	Mg	24		ug/L		4334	
	Al	27		ug/L		14674	
	P	31		ug/L		7183	
	K	39		ug/L		393685	
	Ca	43		ug/L		341	
>	Sc	45		ug/L		1524309	
	Ti	47		ug/L		419	
	V	51		ug/L		2155	
	Cr	52		ug/L		1800	
	Cr	53		ug/L		81046	
	Mn	55		ug/L		1128	
	Fe	57		ug/L		4890	
	Co	59		ug/L		143	
	Ni	60		ug/L		317	
	Cu	63		ug/L		213	
	Cu	65		ug/L		129	
	Zn	66		ug/L		5794	
	Zn	67		ug/L		12053	
	Zn	68		ug/L		4884	
>	Ge	74		ug/L		508024	
	As	75		ug/L		-231	
	Se	77		ug/L		4857	
	Se	82		ug/L		-21	
	Kr	83		ug/L		134	
	Sr	88		ug/L		456	
	Y	89		ug/L		69	
	Mo	98		ug/L		99	
	Ag	107		ug/L		83	
	Cd	111		ug/L		48	
	Cd	114		ug/L		87	
>	In	115		ug/L		337051	
	Sn	120		ug/L		231	
	Sb	121		ug/L		205	
	Sb	123		ug/L		165	
	Ba	135		ug/L		49	
	Ba	137		ug/L		75	
	Ho	165		ug/L		64	
>	Lu	175		ug/L		574084	
	Tl	205		ug/L		5172	
	Pb	208		ug/L		1447	
	Bi	209		ug/L		867	
	Th	232		ug/L		680	
	U	238		ug/L		603	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, December 09, 2009 23:52:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\Standard 1.153

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	0.468	22692	0.014
	Be	9	10.000	ug/L	2.172	4404	0.003
	B	11	20.000	ug/L	5.068	10172	0.006
	Na	23	1000.000	ug/L	2.453	4084385	2.585
	Mg	24	1000.000	ug/L	2.960	3050673	1.936
	Al	27	1000.000	ug/L	9.390	4400079	2.784
	P	31	1000.000	ug/L	3.415	276654	0.171
	K	39	1000.000	ug/L	9.001	6372942	3.796
	Ca	43	1000.000	ug/L	3.958	14999	0.009
>	Sc	45		ug/L		1573335	1573334.885
	Ti	47	10.000	ug/L	5.523	7599	0.005
	V	51	10.000	ug/L	18.595	87223	0.054
	Cr	52	10.000	ug/L	5.929	71722	0.044
	Cr	53		ug/L		115336	0.020
	Mn	55	10.000	ug/L	3.511	107901	0.068
	Fe	57	1000.000	ug/L	4.813	221670	0.138
	Co	59	10.000	ug/L	2.656	83969	0.053
	Ni	60	10.000	ug/L	3.203	18805	0.012
	Cu	63		ug/L		44868	0.028
	Cu	65	10.000	ug/L	2.739	21883	0.014
	Zn	66	10.000	ug/L	5.058	16910	0.022
	Zn	67		ug/L		18429	0.012
	Zn	68		ug/L		13165	0.016
>	Ge	74		ug/L		512924	512923.603
	As	75	10.000	ug/L	4.633	13675	0.027
	Se	77		ug/L		8308	0.007
	Se	82	10.000	ug/L	2.338	1471	0.003
	Kr	83		ug/L		122	-0.000
	Sr	88	10.000	ug/L	1.864	185419	0.541
	Y	89		ug/L		95	0.000
	Mo	98	10.000	ug/L	1.958	43078	0.126
	Ag	107	10.000	ug/L	3.217	76041	0.222
	Cd	111	10.000	ug/L	1.102	17344	0.051
	Cd	114		ug/L		41644	0.122
>	In	115		ug/L		341582	341582.300
	Sn	120	10.000	ug/L	0.446	76222	0.222
	Sb	121	10.000	ug/L	1.933	61324	0.179
	Sb	123		ug/L		48262	0.141
	Ba	135		ug/L		19422	0.033
	Ba	137	10.000	ug/L	1.252	33808	0.058
	Ho	165		ug/L		60	-0.000
>	Lu	175		ug/L		579732	579731.532
	Tl	205	10.000	ug/L	1.600	240980	0.407
	Pb	208	10.000	ug/L	1.257	342512	0.588
	Bi	209		ug/L		776	-0.000
	Th	232	10.000	ug/L	1.713	458069	0.789
	U	238	10.000	ug/L	1.003	503237	0.867

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, December 09, 2009 23:58:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\Standard 2.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.983**	ug/L	0.364	230731	0.141
	Be	9	**99.942**	ug/L	1.042	43047	0.026
	B	11	**199.971**	ug/L	3.640	96891	0.059
	Na	23	**10011.972**	ug/L	7.408	48105857	29.395
	Mg	24	**10001.121**	ug/L	1.546	32048542	19.584
	Al	27	**9993.974**	ug/L	0.530	42959138	26.244
	P	31	**9997.094**	ug/L	3.188	2728834	1.663
	K	39	**10007.739**	ug/L	2.516	67779430	41.171
	Ca	43	**10000.416**	ug/L	3.267	153366	0.094
>	Sc	45		ug/L		1636382	1636381.862
	Ti	47	**100.006**	ug/L	1.519	75506	0.046
	V	51	**99.960**	ug/L	2.800	853532	0.520
	Cr	52	**99.931**	ug/L	1.483	681513	0.415
	Cr	53		ug/L		200553	0.069
	Mn	55	**99.939**	ug/L	0.588	1047619	0.639
	Fe	57	**9984.223**	ug/L	3.072	1948565	1.188
	Co	59	**99.952**	ug/L	2.349	831965	0.508
	Ni	60	**99.968**	ug/L	2.067	186514	0.114
	Cu	63		ug/L		441514	0.270
	Cu	65	**99.977**	ug/L	0.782	221292	0.135
	Zn	66	**100.130**	ug/L	2.068	136361	0.248
	Zn	67		ug/L		39983	0.052
	Zn	68		ug/L		100612	0.182
>	Ge	74		ug/L		525210	525209.537
	As	75	**100.001**	ug/L	2.275	142272	0.271
	Se	77		ug/L		19390	0.027
	Se	82	**99.922**	ug/L	2.648	14140	0.027
	Kr	83		ug/L		154	0.000
	Sr	88	**99.889**	ug/L	1.310	1644176	4.869
	Y	89		ug/L		265	0.001
	Mo	98	**100.009**	ug/L	2.086	428838	1.270
	Ag	107	**99.951**	ug/L	1.693	715452	2.119
	Cd	111	**99.992**	ug/L	2.476	169702	0.502
	Cd	114		ug/L		399916	1.184
>	In	115		ug/L		337651	337651.203
	Sn	120	**99.980**	ug/L	2.463	736532	2.181
	Sb	121	**99.991**	ug/L	2.384	598727	1.773
	Sb	123		ug/L		465030	1.377
	Ba	135		ug/L		188808	0.333
	Ba	137	**100.007**	ug/L	2.005	331960	0.586
	Ho	165		ug/L		67	0.000
>	Lu	175		ug/L		566564	566564.143
	Tl	205	**99.798**	ug/L	2.915	1917827	3.377
	Pb	208	**99.890**	ug/L	0.685	3000940	5.295
	Bi	209		ug/L		928	0.000
	Th	232	**99.853**	ug/L	3.864	3891251	6.869
	U	238	**99.857**	ug/L	2.711	4291697	7.575

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, December 10, 2009 00:04:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 1.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.031**	**ug/L**	1.907	122018	0.072
	Be	9	**52.513**	**ug/L**	2.374	23430	0.014
	B	11	**102.345**	**ug/L**	1.066	51790	0.030
	Na	23	**4701.768**	**ug/L**	2.988	23416608	13.804
	Mg	24	**5646.568**	**ug/L**	6.603	18730123	11.057
	Al	27	**5352.891**	**ug/L**	3.695	23850224	14.056
	P	31	**4751.920**	**ug/L**	2.603	1347288	0.790
	K	39	**5024.606**	**ug/L**	6.069	35453856	20.671
	Ca	43	**4944.108**	**ug/L**	1.542	78738	0.046
>	Sc	45		**ug/L**		1694885	1694885.258
	Ti	47	**49.632**	**ug/L**	4.694	39021	0.023
	V	51	**52.868**	**ug/L**	0.966	468748	0.275
	Cr	52	**53.089**	**ug/L**	1.538	375906	0.221
	Cr	53		**ug/L**		173693	0.049
	Mn	55	**53.439**	**ug/L**	3.583	580494	0.342
	Fe	57	**5457.183**	**ug/L**	1.383	1105706	0.649
	Co	59	**50.883**	**ug/L**	1.697	438785	0.259
	Ni	60	**51.123**	**ug/L**	2.234	98945	0.058
	Cu	63		**ug/L**		242586	0.143
	Cu	65	**52.003**	**ug/L**	4.661	119217	0.070
	Zn	66	**49.759**	**ug/L**	1.501	73812	0.123
	Zn	67		**ug/L**		30489	0.032
	Zn	68		**ug/L**		55109	0.091
>	Ge	74		**ug/L**		547792	547791.523
	As	75	**48.304**	**ug/L**	2.530	71539	0.131
	Se	77		**ug/L**		15242	0.018
	Se	82	**48.816**	**ug/L**	0.913	7193	0.013
	Kr	83		**ug/L**		145	0.000
	Sr	88	**53.139**	**ug/L**	2.986	900415	2.590
	Y	89		**ug/L**		128	0.000
	Mo	98	**49.912**	**ug/L**	1.347	220379	0.634
	Ag	107	**51.807**	**ug/L**	3.919	381713	1.098
	Cd	111	**49.992**	**ug/L**	1.956	87352	0.251
	Cd	114		**ug/L**		208728	0.600
>	In	115		**ug/L**		347560	347560.359
	Sn	120	**51.893**	**ug/L**	2.362	393670	1.132
	Sb	121	**50.972**	**ug/L**	1.691	314270	0.904
	Sb	123		**ug/L**		247992	0.713
	Ba	135		**ug/L**		98614	0.169
	Ba	137	**50.403**	**ug/L**	3.458	171777	0.295
	Ho	165		**ug/L**		122	0.000
>	Lu	175		**ug/L**		581781	581781.477
	Tl	205	**52.173**	**ug/L**	2.645	1031950	1.765
	Pb	208	**53.641**	**ug/L**	1.830	1655141	2.843
	Bi	209		**ug/L**		775	-0.000
	Th	232	**49.209**	**ug/L**	2.674	1969342	3.385
	U	238	**53.479**	**ug/L**	2.996	2359786	4.057

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.062				
	Be	9	105.026				
	B	11	102.345				
	Na	23	94.035				
	Mg	24	112.931				
	Al	27	105.998				
	P	31	95.038				
	K	39	100.492				
	Ca	43	98.882				
>	Sc	45		111.2			
	Ti	47	99.264				
	V	51	105.736				
	Cr	52	106.178				
	Cr	53					
	Mn	55	106.877				
	Fe	57	109.144				
	Co	59	101.766				
	Ni	60	102.245				
	Cu	63					
	Cu	65	104.006				
	Zn	66	99.517				
	Zn	67					
	Zn	68					
>	Ge	74		107.8			
	As	75	96.608				
	Se	77					
	Se	82	97.632				
	Kr	83					
	Sr	88	106.279				
	Y	89					
	Mo	98	99.825				
	Ag	107	103.614				
	Cd	111	99.985				
	Cd	114					
>	In	115		103.1			
	Sn	120	103.786				
	Sb	121	101.944				
	Sb	123					
	Ba	135					
	Ba	137	100.805				
	Ho	165					
>	Lu	175		101.3			
	Tl	205	104.345				
	Pb	208	107.281				
	Bi	209					
	Th	232	98.417				
	U	238	106.958				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Mg	24	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, December 10, 2009 00:10:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 2.156

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.011**	ug/L	94.900	178	0.000
	Be	9	**0.011**	ug/L	173.533	30	0.000
	B	11	**3.607**	ug/L	15.180	2628	0.001
	Na	23	**0.994**	ug/L	198.102	24356	0.003
	Mg	24	**0.478**	ug/L	70.870	6335	0.001
	Al	27	**0.951**	ug/L	171.809	20349	0.002
	P	31	**1.173**	ug/L	265.280	8209	0.000
	K	39	**5.889**	ug/L	92.409	472718	0.024
	Ca	43	**3.222**	ug/L	25.095	425	0.000
>	Sc	45		ug/L		1674250	1674250.413
	Ti	47	**-0.040**	ug/L	57.570	429	-0.000
	V	51	**0.665**	ug/L	48.789	8166	0.003
	Cr	52	**0.708**	ug/L	10.778	6908	0.003
	Cr	53		ug/L		100834	0.007
	Mn	55	**0.017**	ug/L	61.136	1426	0.000
	Fe	57	**5.858**	ug/L	14.727	6538	0.001
	Co	59	**0.013**	ug/L	52.643	271	0.000
	Ni	60	**0.008**	ug/L	244.363	363	0.000
	Cu	63		ug/L		350	0.000
	Cu	65	**0.028**	ug/L	43.252	204	0.000
	Zn	66	**0.019**	ug/L	343.905	6332	0.000
	Zn	67		ug/L		13100	-0.000
	Zn	68		ug/L		5379	0.000
>	Ge	74		ug/L		553005	553005.429
	As	75	**0.010**	ug/L	2313.957	-234	0.000
	Se	77		ug/L		7143	0.003
	Se	82	**0.057**	ug/L	129.679	-15	0.000
	Kr	83		ug/L		148	0.000
	Sr	88	**0.016**	ug/L	44.190	748	0.001
	Y	89		ug/L		63	-0.000
	Mo	98	**0.033**	ug/L	16.255	253	0.000
	Ag	107	**0.016**	ug/L	48.294	208	0.000
	Cd	111	**0.010**	ug/L	55.645	69	0.000
	Cd	114		ug/L		157	0.000
>	In	115		ug/L		354815	354815.371
	Sn	120	**0.019**	ug/L	56.635	389	0.000
	Sb	121	**0.124**	ug/L	11.138	995	0.002
	Sb	123		ug/L		826	0.002
	Ba	135		ug/L		88	0.000
	Ba	137	**0.017**	ug/L	41.144	134	0.000
	Ho	165		ug/L		59	-0.000
>	Lu	175		ug/L		576653	576653.212
	Tl	205	**0.324**	ug/L	22.071	11536	0.011
	Pb	208	**0.016**	ug/L	42.575	1930	0.001
	Bi	209		ug/L		859	-0.000
	Th	232	**0.037**	ug/L	9.315	2167	0.003
	U	238	**0.021**	ug/L	43.923	1517	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		109.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		105.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, December 10, 2009 00:16:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 3.157

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.040**	**ug/L**	2.788	26328	0.016
	Be	9	**0.558**	**ug/L**	3.145	273	0.000
	B	11	**17.034**	**ug/L**	1.923	9278	0.005
	Na	23	**282.484**	**ug/L**	3.103	1414759	0.829
	Mg	24	**17.472**	**ug/L**	18.983	62473	0.034
	Al	27	**39.083**	**ug/L**	15.844	189268	0.103
	P	31	**70.403**	**ug/L**	4.843	27631	0.012
	K	39	**315.402**	**ug/L**	14.444	2620867	1.298
	Ca	43	**222.343**	**ug/L**	2.241	3875	0.002
>	Sc	45		**ug/L**		1682890	1682889.967
	Ti	47	**9.252**	**ug/L**	3.207	7601	0.004
	V	51	**11.650**	**ug/L**	4.595	104440	0.061
	Cr	52	**12.322**	**ug/L**	4.164	88138	0.051
	Cr	53		**ug/L**		138695	0.029
	Mn	55	**6.038**	**ug/L**	2.499	66241	0.039
	Fe	57	**130.473**	**ug/L**	2.116	31515	0.016
	Co	59	**1.131**	**ug/L**	3.259	9832	0.006
	Ni	60	**2.172**	**ug/L**	2.810	4508	0.002
	Cu	63		**ug/L**		5612	0.003
	Cu	65	**1.145**	**ug/L**	1.572	2747	0.002
	Zn	66	**9.605**	**ug/L**	0.910	19048	0.024
	Zn	67		**ug/L**		20211	0.014
	Zn	68		**ug/L**		14857	0.018
>	Ge	74		**ug/L**		540902	540902.311
	As	75	**5.514**	**ug/L**	5.274	7844	0.015
	Se	77		**ug/L**		9903	0.009
	Se	82	**5.923**	**ug/L**	4.337	842	0.002
	Kr	83		**ug/L**		127	-0.000
	Sr	88	**12.369**	**ug/L**	3.393	210406	0.603
	Y	89		**ug/L**		66	-0.000
	Mo	98	**0.562**	**ug/L**	1.080	2586	0.007
	Ag	107	**1.100**	**ug/L**	2.354	8203	0.023
	Cd	111	**1.095**	**ug/L**	4.369	1966	0.006
	Cd	114		**ug/L**		4652	0.013
>	In	115		**ug/L**		348272	348272.168
	Sn	120	**5.599**	**ug/L**	0.639	42778	0.122
	Sb	121	**3.331**	**ug/L**	1.023	20781	0.059
	Sb	123		**ug/L**		16133	0.046
	Ba	135		**ug/L**		4247	0.007
	Ba	137	**2.227**	**ug/L**	3.361	7621	0.013
	Ho	165		**ug/L**		71	0.000
>	Lu	175		**ug/L**		578731	578731.331
	Tl	205	**1.234**	**ug/L**	4.706	29353	0.042
	Pb	208	**2.385**	**ug/L**	3.314	74570	0.126
	Bi	209		**ug/L**		777	-0.000
	Th	232	**1.308**	**ug/L**	3.589	52715	0.090
	U	238	**0.262**	**ug/L**	2.912	12106	0.020

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.398				
	Be	9	111.590				
	B	11	113.560				
	Na	23	112.994				
	Mg	24	116.483				
	Al	27	130.278				
	P	31	140.806				
	K	39	105.134				
	Ca	43	111.172				
>	Sc	45		110.4			
	Ti	47	92.519				
	V	51	116.504				
	Cr	52	123.218				
	Cr	53					
	Mn	55	120.756				
	Fe	57	130.473				
	Co	59	113.058				
	Ni	60	108.590				
	Cu	63					
	Cu	65	114.535				
	Zn	66	96.047				
	Zn	67					
	Zn	68					
>	Ge	74		106.5			
	As	75	110.287				
	Se	77					
	Se	82	118.458				
	Kr	83					
	Sr	88	123.693				
	Y	89					
	Mo	98	112.301				
	Ag	107	109.952				
	Cd	111	109.468				
	Cd	114					
>	In	115		103.3			
	Sn	120	111.980				
	Sb	121	111.047				
	Sb	123					
	Ba	135					
	Ba	137	111.350				
	Ho	165					
>	Lu	175		100.8			
	Tl	205	123.388				
	Pb	208	119.248				
	Bi	209					
	Th	232	130.779				
	U	238	131.025				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Al	27	CRDL is out of limits
QC Std 3	P	31	CRDL is out of limits
QC Std 3	Fe	57	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, December 10, 2009 00:22:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 4.158

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.070**	**ug/L**	20.896	290	0.000
	Be	9	**0.051**	**ug/L**	28.951	44	0.000
	B	11	**1.433**	**ug/L**	17.157	1421	0.000
	Na	23	**91978.718**	**ug/L**	5.284	411572330	270.049
	Mg	24	**97603.876**	**ug/L**	7.368	291107585	191.125
	Al	27	**101165.943**	**ug/L**	2.864	404735421	265.657
	P	31	**96516.698**	**ug/L**	3.418	24466015	16.056
	K	39	**96917.953**	**ug/L**	7.471	607903742	398.710
	Ca	43	**92962.638**	**ug/L**	2.348	1324880	0.869
>	Sc	45		**ug/L**		1524041	1524040.727
	Ti	47	**1504.867**	**ug/L**	3.135	1051852	0.690
	V	51	**0.808**	**ug/L**	75.767	8507	0.004
	Cr	52	**3.114**	**ug/L**	4.373	21513	0.013
	Cr	53		**ug/L**		98704	0.012
	Mn	55	**6.368**	**ug/L**	2.361	63212	0.041
	Fe	57	**122212.806**	**ug/L**	3.212	22159801	14.541
	Co	59	**0.409**	**ug/L**	0.561	3311	0.002
	Ni	60	**3.243**	**ug/L**	4.792	5940	0.004
	Cu	63		**ug/L**		16562	0.011
	Cu	65	**4.458**	**ug/L**	1.139	9311	0.006
	Zn	66	**1.851**	**ug/L**	6.675	7783	0.005
	Zn	67		**ug/L**		15077	0.007
	Zn	68		**ug/L**		4075	-0.001
>	Ge	74		**ug/L**		486777	486777.437
	As	75	**0.211**	**ug/L**	224.096	54	0.001
	Se	77		**ug/L**		11182	0.013
	Se	82	**-1.174**	**ug/L**	25.014	-175	-0.000
	Kr	83		**ug/L**		481	0.001
	Sr	88	**1.358**	**ug/L**	1.382	20764	0.066
	Y	89		**ug/L**		784	0.002
	Mo	98	**2065.360**	**ug/L**	1.457	8066245	26.229
	Ag	107	**0.095**	**ug/L**	9.072	695	0.002
	Cd	111	**0.590**	**ug/L**	29.198	955	0.003
	Cd	114		**ug/L**		11181	0.036
>	In	115		**ug/L**		307559	307559.382
	Sn	120	**0.118**	**ug/L**	2.519	1004	0.003
	Sb	121	**0.096**	**ug/L**	16.582	708	0.002
	Sb	123		**ug/L**		543	0.001
	Ba	135		**ug/L**		1295	0.003
	Ba	137	**0.770**	**ug/L**	3.346	2157	0.005
	Ho	165		**ug/L**		1161	0.002
>	Lu	175		**ug/L**		464767	464766.522
	Tl	205	**-0.045**	**ug/L**	5.351	3474	-0.002
	Pb	208	**0.205**	**ug/L**	2.426	6212	0.011
	Bi	209		**ug/L**		1354	0.001
	Th	232	**0.032**	**ug/L**	31.675	1583	0.002
	U	238	**0.000**	**ug/L**	1463.157	491	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	91.979				
	Mg	24	97.604				
	Al	27	101.166				
	P	31	96.517				
	K	39	96.918				
	Ca	43	92.963				
>	Sc	45		100.0			
	Ti	47	75.243				
	V	51					
	Cr	52	84.156				
	Cr	53					
	Mn	55	109.800				
	Fe	57	122.213				
	Co	59	163.457				
	Ni	60	120.111				
	Cu	63					
	Cu	65	153.709				
	Zn	66	51.404				
	Zn	67					
	Zn	68					
>	Ge	74		95.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	113.127				
	Y	89					
	Mo	98	103.268				
	Ag	107					
	Cd	111	147.504				
	Cd	114					
>	In	115		91.3			
	Sn	120					
	Sb	121	95.742				
	Sb	123					
	Ba	135					
	Ba	137	114.880				
	Ho	165					
>	Lu	175		81.0			
	Tl	205					
	Pb	208	102.322				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits
QC Std 4	Fe	57	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, December 10, 2009 00:29:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 5.159

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.259**	ug/L	1.488	44097	0.029
	Be	9	**19.250**	ug/L	2.710	7818	0.005
	B	11	**18.406**	ug/L	2.985	9108	0.005
	Na	23	**93583.748**	ug/L	6.245	422771578	274.762
	Mg	24	**104690.423**	ug/L	5.349	315565683	205.002
	Al	27	**99840.389**	ug/L	2.543	403586012	262.176
	P	31	**97392.651**	ug/L	4.023	24941577	16.202
	K	39	**95366.557**	ug/L	9.213	603907270	392.328
	Ca	43	**93000.771**	ug/L	2.349	1339153	0.870
>	Sc	45		ug/L		1539641	1539640.969
	Ti	47	**1510.160**	ug/L	1.498	1066638	0.693
	V	51	**23.190**	ug/L	7.009	187959	0.121
	Cr	52	**24.631**	ug/L	2.610	159393	0.102
	Cr	53		ug/L		114947	0.022
	Mn	55	**28.863**	ug/L	2.516	285414	0.185
	Fe	57	**121370.424**	ug/L	2.297	22236994	14.440
	Co	59	**21.212**	ug/L	2.306	166234	0.108
	Ni	60	**23.356**	ug/L	3.754	41235	0.027
	Cu	63		ug/L		98455	0.064
	Cu	65	**23.806**	ug/L	1.902	49673	0.032
	Zn	66	**21.893**	ug/L	1.044	32107	0.054
	Zn	67		ug/L		19877	0.017
	Zn	68		ug/L		22285	0.036
>	Ge	74		ug/L		488835	488834.712
	As	75	**21.651**	ug/L	3.966	28497	0.059
	Se	77		ug/L		13109	0.017
	Se	82	**19.538**	ug/L	3.542	2557	0.005
	Kr	83		ug/L		480	0.001
	Sr	88	**25.641**	ug/L	2.579	388210	1.250
	Y	89		ug/L		802	0.002
	Mo	98	**2097.768**	ug/L	1.618	8267164	26.640
	Ag	107	**20.115**	ug/L	1.778	132406	0.426
	Cd	111	**20.928**	ug/L	1.762	32687	0.105
	Cd	114		ug/L		87628	0.282
>	In	115		ug/L		310352	310352.215
	Sn	120	**21.706**	ug/L	1.464	147163	0.474
	Sb	121	**22.075**	ug/L	1.356	121652	0.391
	Sb	123		ug/L		94229	0.303
	Ba	135		ug/L		37746	0.082
	Ba	137	**24.173**	ug/L	1.421	65564	0.142
	Ho	165		ug/L		1180	0.002
>	Lu	175		ug/L		462575	462574.786
	Tl	205	**23.855**	ug/L	1.049	377531	0.807
	Pb	208	**23.405**	ug/L	0.392	575008	1.241
	Bi	209		ug/L		1733	0.002
	Th	232	**24.626**	ug/L	0.889	784142	1.694
	U	238	**25.371**	ug/L	1.413	890799	1.925

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	101.293				
	Be	9	96.252				
	B	11	92.030				
	Na	23	93.584				
	Mg	24	104.690				
	Al	27	99.840				
	P	31	97.393				
	K	39	95.367				
	Ca	43	93.001				
>	Sc	45		101.0			
	Ti	47	75.508				
	V	51	115.952				
	Cr	52	103.926				
	Cr	53					
	Mn	55	111.874				
	Fe	57	121.370				
	Co	59	104.753				
	Ni	60	102.888				
	Cu	63					
	Cu	65	103.955				
	Zn	66	92.767				
	Zn	67					
	Zn	68					
>	Ge	74		96.2			
	As	75	108.254				
	Se	77					
	Se	82	97.691				
	Kr	83					
	Sr	88	120.948				
	Y	89					
	Mo	98	104.888				
	Ag	107	100.573				
	Cd	111	102.587				
	Cd	114					
>	In	115		92.1			
	Sn	120	108.528				
	Sb	121	109.825				
	Sb	123					
	Ba	135					
	Ba	137	116.946				
	Ho	165					
>	Lu	175		80.6			
	Tl	205	119.277				
	Pb	208	115.866				
	Bi	209					
	Th	232	123.130				
	U	238	126.857				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	Fe	57	ICSAB is out of limits
QC Std 5	Sr	88	ICSAB is out of limits
QC Std 5	Th	232	ICSAB is out of limits
QC Std 5	U	238	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, December 10, 2009 00:35:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 6.160

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.779**	**ug/L**	0.973	113010	0.070
	Be	9	**50.874**	**ug/L**	2.215	21551	0.013
	B	11	**94.485**	**ug/L**	2.980	45443	0.028
	Na	23	**4524.307**	**ug/L**	11.385	21380381	13.283
	Mg	24	**5066.500**	**ug/L**	2.960	15962774	9.921
	Al	27	**4827.202**	**ug/L**	5.699	20401998	12.676
	P	31	**4539.383**	**ug/L**	2.952	1222175	0.755
	K	39	**4506.482**	**ug/L**	2.296	30240053	18.539
	Ca	43	**4745.868**	**ug/L**	0.602	71764	0.044
>	Sc	45		**ug/L**		1608812	1608812.062
	Ti	47	**50.403**	**ug/L**	3.091	37624	0.023
	V	51	**51.959**	**ug/L**	4.832	437254	0.270
	Cr	52	**52.207**	**ug/L**	1.983	350957	0.217
	Cr	53		**ug/L**		162303	0.048
	Mn	55	**52.475**	**ug/L**	2.399	541296	0.336
	Fe	57	**5352.966**	**ug/L**	0.280	1029766	0.637
	Co	59	**50.264**	**ug/L**	1.266	411468	0.256
	Ni	60	**50.656**	**ug/L**	1.125	93092	0.058
	Cu	63		**ug/L**		226210	0.140
	Cu	65	**51.435**	**ug/L**	2.795	111982	0.070
	Zn	66	**48.787**	**ug/L**	0.543	68405	0.121
	Zn	67		**ug/L**		28251	0.031
	Zn	68		**ug/L**		51042	0.089
>	Ge	74		**ug/L**		516839	516839.397
	As	75	**48.435**	**ug/L**	2.787	67682	0.131
	Se	77		**ug/L**		14688	0.019
	Se	82	**50.215**	**ug/L**	0.478	6982	0.014
	Kr	83		**ug/L**		147	0.000
	Sr	88	**52.533**	**ug/L**	1.231	862967	2.560
	Y	89		**ug/L**		241	0.001
	Mo	98	**50.412**	**ug/L**	1.750	215761	0.640
	Ag	107	**51.490**	**ug/L**	0.811	367804	1.092
	Cd	111	**50.223**	**ug/L**	0.363	85069	0.252
	Cd	114		**ug/L**		203341	0.603
>	In	115		**ug/L**		336866	336865.887
	Sn	120	**52.097**	**ug/L**	2.608	383107	1.137
	Sb	121	**51.559**	**ug/L**	0.485	308147	0.914
	Sb	123		**ug/L**		238920	0.709
	Ba	135		**ug/L**		96253	0.167
	Ba	137	**49.617**	**ug/L**	2.607	167508	0.291
	Ho	165		**ug/L**		122	0.000
>	Lu	175		**ug/L**		576190	576190.353
	Tl	205	**51.513**	**ug/L**	3.174	1009087	1.743
	Pb	208	**53.029**	**ug/L**	1.723	1620652	2.811
	Bi	209		**ug/L**		730	-0.000
	Th	232	**48.708**	**ug/L**	2.759	1930646	3.351
	U	238	**52.745**	**ug/L**	1.145	2305706	4.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	99.559				
	Be	9	101.747				
	B	11	94.485				
	Na	23	90.486				
	Mg	24	101.330				
	Al	27	95.588				
	P	31	90.788				
	K	39	90.130				
	Ca	43	94.917				
>	Sc	45		105.5			
	Ti	47	100.807				
	V	51	103.918				
	Cr	52	104.414				
	Cr	53					
	Mn	55	104.951				
	Fe	57	107.059				
	Co	59	100.527				
	Ni	60	101.312				
	Cu	63					
	Cu	65	102.870				
	Zn	66	97.574				
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75	96.870				
	Se	77					
	Se	82	100.430				
	Kr	83					
	Sr	88	105.065				
	Y	89					
	Mo	98	100.824				
	Ag	107	102.980				
	Cd	111	100.447				
	Cd	114					
>	In	115		99.9			
	Sn	120	104.193				
	Sb	121	103.118				
	Sb	123					
	Ba	135					
	Ba	137	99.233				
	Ho	165					
>	Lu	175		100.4			
	Tl	205	103.025				
	Pb	208	106.058				
	Bi	209					
	Th	232	97.416				
	U	238	105.491				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, December 10, 2009 00:41:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 7.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.007**	**ug/L**	67.549	125	-0.000
	Be	9	**0.004**	**ug/L**	110.822	25	0.000
	B	11	**2.206**	**ug/L**	20.820	1784	0.001
	Na	23	**3.359**	**ug/L**	56.019	33040	0.010
	Mg	24	**3.084**	**ug/L**	32.688	13673	0.006
	Al	27	**2.277**	**ug/L**	28.609	24020	0.006
	P	31	**1.781**	**ug/L**	163.814	7712	0.000
	K	39	**7.111**	**ug/L**	65.203	442431	0.029
	Ca	43	**5.978**	**ug/L**	10.990	431	0.000
>	Sc	45		**ug/L**		1538969	1538969.171
	Ti	47	**0.054**	**ug/L**	75.037	461	0.000
	V	51	**0.091**	**ug/L**	540.797	2900	0.000
	Cr	52	**0.373**	**ug/L**	23.846	4205	0.002
	Cr	53		**ug/L**		98127	0.011
	Mn	55	**0.025**	**ug/L**	40.122	1383	0.000
	Fe	57	**10.723**	**ug/L**	24.044	6902	0.001
	Co	59	**0.015**	**ug/L**	60.863	263	0.000
	Ni	60	**0.020**	**ug/L**	51.244	355	0.000
	Cu	63		**ug/L**		308	0.000
	Cu	65	**0.025**	**ug/L**	43.234	183	0.000
	Zn	66	**-0.047**	**ug/L**	301.304	5890	-0.000
	Zn	67		**ug/L**		12684	0.001
	Zn	68		**ug/L**		5099	0.000
>	Ge	74		**ug/L**		521903	521902.891
	As	75	**-0.118**	**ug/L**	87.573	-403	-0.000
	Se	77		**ug/L**		7225	0.004
	Se	82	**0.043**	**ug/L**	183.361	-16	0.000
	Kr	83		**ug/L**		141	0.000
	Sr	88	**0.017**	**ug/L**	48.929	742	0.001
	Y	89		**ug/L**		57	-0.000
	Mo	98	**0.121**	**ug/L**	15.025	628	0.002
	Ag	107	**0.016**	**ug/L**	58.024	199	0.000
	Cd	111	**0.011**	**ug/L**	116.184	68	0.000
	Cd	114		**ug/L**		154	0.000
>	In	115		**ug/L**		342481	342480.555
	Sn	120	**0.019**	**ug/L**	46.814	381	0.000
	Sb	121	**0.073**	**ug/L**	11.925	648	0.001
	Sb	123		**ug/L**		517	0.001
	Ba	135		**ug/L**		80	0.000
	Ba	137	**0.015**	**ug/L**	79.442	125	0.000
	Ho	165		**ug/L**		64	-0.000
>	Lu	175		**ug/L**		576293	576292.799
	Tl	205	**0.338**	**ug/L**	25.077	11811	0.011
	Pb	208	**0.015**	**ug/L**	61.083	1907	0.001
	Bi	209		**ug/L**		811	-0.000
	Th	232	**0.039**	**ug/L**	12.161	2206	0.003
	U	238	**0.020**	**ug/L**	49.639	1463	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, December 10, 2009 00:47:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 10.162

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**935.451**	**ug/L**	0.380	1856676	1.318
	Be	9	**984.590**	**ug/L**	2.236	364718	0.259
	B	11	**1.085**	**ug/L**	2.368	1170	0.000
	Na	23	**45828.141**	**ug/L**	4.218	189496351	134.551
	Mg	24	**51689.847**	**ug/L**	3.013	142531671	101.217
	Al	27	**53382.018**	**ug/L**	3.152	197410887	140.179
	P	31	**24716.383**	**ug/L**	1.126	5796443	4.112
	K	39	**46739.110**	**ug/L**	2.841	271117719	192.280
	Ca	43	**48286.003**	**ug/L**	2.486	636172	0.452
>	Sc	45		**ug/L**		1408191	1408191.099
	Ti	47	**40.440**	**ug/L**	3.703	26507	0.019
	V	51	**971.554**	**ug/L**	1.696	7123150	5.057
	Cr	52	**946.139**	**ug/L**	0.704	5539466	3.932
	Cr	53		**ug/L**		769466	0.493
	Mn	55	**987.575**	**ug/L**	1.981	8899083	6.319
	Fe	57	**62834.074**	**ug/L**	2.746	10531260	7.476
	Co	59	**912.898**	**ug/L**	1.246	6539188	4.644
	Ni	60	**874.134**	**ug/L**	2.086	1401365	0.995
	Cu	63		**ug/L**		3501426	2.486
	Cu	65	**830.827**	**ug/L**	1.730	1581717	1.123
	Zn	66	**2514.776**	**ug/L**	1.846	2900703	6.234
	Zn	67		**ug/L**		453386	0.953
	Zn	68		**ug/L**		1807306	3.882
>	Ge	74		**ug/L**		464449	464448.905
	As	75	**886.676**	**ug/L**	1.533	1117128	2.406
	Se	77		**ug/L**		55225	0.109
	Se	82	**507.795**	**ug/L**	1.324	63622	0.137
	Kr	83		**ug/L**		273	0.000
	Sr	88	**1080.175**	**ug/L**	3.571	15245059	52.648
	Y	89		**ug/L**		600	0.002
	Mo	98	**1131.299**	**ug/L**	0.715	4160665	14.367
	Ag	107	**244.858**	**ug/L**	1.355	1503335	5.191
	Cd	111	**933.906**	**ug/L**	0.478	1359230	4.693
	Cd	114		**ug/L**		3534423	12.205
>	In	115		**ug/L**		289604	289604.041
	Sn	120	**1061.185**	**ug/L**	0.553	6704746	23.151
	Sb	121	**244.218**	**ug/L**	0.326	1254133	4.330
	Sb	123		**ug/L**		992571	3.427
	Ba	135		**ug/L**		1502843	2.978
	Ba	137	**1004.489**	**ug/L**	1.519	2969484	5.885
	Ho	165		**ug/L**		382	0.001
>	Lu	175		**ug/L**		504686	504686.144
	Tl	205	**536.287**	**ug/L**	2.547	9160692	18.146
	Pb	208	**5197.979**	**ug/L**	0.647	139044982	275.511
	Bi	209		**ug/L**		4041	0.006
	Th	232	**2627.198**	**ug/L**	2.275	91198545	180.725
	U	238	**5445.110**	**ug/L**	1.293	208446379	413.055

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	93.545				
	Be	9	98.459				
	B	11					
	Na	23	91.656				
	Mg	24	103.380				
	Al	27	106.764				
	P	31	98.866				
	K	39	93.478				
	Ca	43	96.572				
>	Sc	45		92.4			
	Ti	47					
	V	51	97.155				
	Cr	52	94.614				
	Cr	53					
	Mn	55	98.758				
	Fe	57	125.668				
	Co	59	91.290				
	Ni	60	87.413				
	Cu	63					
	Cu	65	83.083				
	Zn	66	100.591				
	Zn	67					
	Zn	68					
>	Ge	74		91.4			
	As	75	88.668				
	Se	77					
	Se	82	101.559				
	Kr	83					
	Sr	88	108.017				
	Y	89					
	Mo	98	113.130				
	Ag	107	97.943				
	Cd	111	93.391				
	Cd	114					
>	In	115		85.9			
	Sn	120	106.119				
	Sb	121	97.687				
	Sb	123					
	Ba	135					
	Ba	137	100.449				
	Ho	165					
>	Lu	175		87.9			
	Tl	205	107.257				
	Pb	208	103.960				
	Bi	209					
	Th	232	105.088				
	U	238	108.902				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Fe	57	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, December 10, 2009 00:53:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 11.163

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.116**	**ug/L**	3.911	114092	0.073
	Be	9	**53.148**	**ug/L**	3.917	21716	0.014
	B	11	**98.342**	**ug/L**	4.537	45580	0.029
	Na	23	**4912.355**	**ug/L**	6.752	22398494	14.423
	Mg	24	**5282.380**	**ug/L**	17.043	16011093	10.344
	Al	27	**5543.842**	**ug/L**	12.870	22557139	14.558
	P	31	**4639.710**	**ug/L**	5.380	1204262	0.772
	K	39	**4839.877**	**ug/L**	5.147	31282814	19.911
	Ca	43	**5021.066**	**ug/L**	1.782	73219	0.047
>	Sc	45		**ug/L**		1552463	1552463.362
	Ti	47	**50.737**	**ug/L**	3.029	36540	0.023
	V	51	**52.553**	**ug/L**	6.294	426328	0.274
	Cr	52	**52.299**	**ug/L**	4.276	339018	0.217
	Cr	53		**ug/L**		155093	0.047
	Mn	55	**53.576**	**ug/L**	3.409	532996	0.343
	Fe	57	**5451.959**	**ug/L**	4.396	1011144	0.649
	Co	59	**50.781**	**ug/L**	4.864	400759	0.258
	Ni	60	**51.077**	**ug/L**	2.763	90531	0.058
	Cu	63		**ug/L**		220034	0.142
	Cu	65	**51.683**	**ug/L**	3.339	108531	0.070
	Zn	66	**50.901**	**ug/L**	3.924	67913	0.126
	Zn	67		**ug/L**		28675	0.034
	Zn	68		**ug/L**		50461	0.093
>	Ge	74		**ug/L**		493932	493931.664
	As	75	**50.121**	**ug/L**	2.767	66913	0.136
	Se	77		**ug/L**		13355	0.018
	Se	82	**51.307**	**ug/L**	3.730	6813	0.014
	Kr	83		**ug/L**		131	0.000
	Sr	88	**53.376**	**ug/L**	2.824	845018	2.602
	Y	89		**ug/L**		109	0.000
	Mo	98	**50.946**	**ug/L**	2.743	210137	0.647
	Ag	107	**53.349**	**ug/L**	2.129	367324	1.131
	Cd	111	**51.904**	**ug/L**	1.187	84742	0.261
	Cd	114		**ug/L**		200200	0.616
>	In	115		**ug/L**		324755	324754.526
	Sn	120	**53.613**	**ug/L**	2.458	379954	1.170
	Sb	121	**53.655**	**ug/L**	2.332	309049	0.951
	Sb	123		**ug/L**		242448	0.746
	Ba	135		**ug/L**		95974	0.167
	Ba	137	**50.137**	**ug/L**	3.168	169063	0.294
	Ho	165		**ug/L**		116	0.000
>	Lu	175		**ug/L**		575445	575444.890
	Tl	205	**52.763**	**ug/L**	1.472	1032373	1.785
	Pb	208	**53.785**	**ug/L**	2.062	1641583	2.851
	Bi	209		**ug/L**		721	-0.000
	Th	232	**49.482**	**ug/L**	2.043	1959011	3.404
	U	238	**55.496**	**ug/L**	1.621	2422728	4.210

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.233				
	Be	9	106.297				
	B	11	98.342				
	Na	23	98.247				
	Mg	24	105.648				
	Al	27	109.779				
	P	31	92.794				
	K	39	96.798				
	Ca	43	100.421				
>	Sc	45		101.8			
	Ti	47	101.473				
	V	51	105.106				
	Cr	52	104.599				
	Cr	53					
	Mn	55	107.153				
	Fe	57	109.039				
	Co	59	101.562				
	Ni	60	102.155				
	Cu	63					
	Cu	65	103.367				
	Zn	66	101.801				
	Zn	67					
	Zn	68					
>	Ge	74		97.2			
	As	75	100.243				
	Se	77					
	Se	82	102.613				
	Kr	83					
	Sr	88	106.751				
	Y	89					
	Mo	98	101.891				
	Ag	107	106.698				
	Cd	111	103.808				
	Cd	114					
>	In	115		96.4			
	Sn	120	107.225				
	Sb	121	107.310				
	Sb	123					
	Ba	135					
	Ba	137	100.274				
	Ho	165					
>	Lu	175		100.2			
	Tl	205	105.526				
	Pb	208	107.570				
	Bi	209					
	Th	232	98.964				
	U	238	110.993				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, December 10, 2009 00:59:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 12.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.058**	ug/L	20.284	266	0.000
	Be	9	**0.044**	ug/L	21.590	41	0.000
	B	11	**2.100**	ug/L	20.349	1740	0.001
	Na	23	**1.434**	ug/L	134.762	24356	0.004
	Mg	24	**1.195**	ug/L	125.922	8003	0.002
	Al	27	**2.097**	ug/L	56.822	23353	0.006
	P	31	**0.114**	ug/L	1159.173	7299	0.000
	K	39	**8.469**	ug/L	14.903	452042	0.035
	Ca	43	**3.610**	ug/L	36.273	397	0.000
>	Sc	45		ug/L		1542263	1542262.669
	Ti	47	**-0.014**	ug/L	377.557	414	-0.000
	V	51	**0.433**	ug/L	115.499	5637	0.002
	Cr	52	**0.377**	ug/L	18.227	4237	0.002
	Cr	53		ug/L		92796	0.007
	Mn	55	**0.035**	ug/L	64.665	1482	0.000
	Fe	57	**4.396**	ug/L	25.769	5754	0.001
	Co	59	**0.033**	ug/L	38.271	406	0.000
	Ni	60	**0.028**	ug/L	58.678	370	0.000
	Cu	63		ug/L		420	0.000
	Cu	65	**0.050**	ug/L	49.953	235	0.000
	Zn	66	**-0.000**	ug/L	41703.192	5819	-0.000
	Zn	67		ug/L		13008	0.002
	Zn	68		ug/L		5181	0.001
>	Ge	74		ug/L		510378	510378.190
	As	75	**0.189**	ug/L	8.192	30	0.001
	Se	77		ug/L		6412	0.003
	Se	82	**0.102**	ug/L	37.924	-7	0.000
	Kr	83		ug/L		138	0.000
	Sr	88	**0.033**	ug/L	49.509	999	0.002
	Y	89		ug/L		56	-0.000
	Mo	98	**0.110**	ug/L	5.402	572	0.001
	Ag	107	**0.020**	ug/L	31.720	230	0.000
	Cd	111	**0.035**	ug/L	29.574	109	0.000
	Cd	114		ug/L		230	0.000
>	In	115		ug/L		338058	338058.209
	Sn	120	**0.060**	ug/L	31.363	672	0.001
	Sb	121	**0.458**	ug/L	3.969	2947	0.008
	Sb	123		ug/L		2294	0.006
	Ba	135		ug/L		111	0.000
	Ba	137	**0.028**	ug/L	54.455	169	0.000
	Ho	165		ug/L		59	-0.000
>	Lu	175		ug/L		571339	571338.964
	Tl	205	**0.451**	ug/L	22.348	13853	0.015
	Pb	208	**0.118**	ug/L	49.421	5017	0.006
	Bi	209		ug/L		809	-0.000
	Th	232	**0.092**	ug/L	26.222	4310	0.006
	U	238	**0.149**	ug/L	38.770	7038	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 01:48:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 8.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.398**	**ug/L**	0.556	106547	0.071
	Be	9	**51.630**	**ug/L**	2.293	20372	0.014
	B	11	**94.296**	**ug/L**	3.343	42250	0.028
	Na	23	**4592.458**	**ug/L**	15.575	20235003	13.483
	Mg	24	**4730.290**	**ug/L**	5.684	13876281	9.263
	Al	27	**4596.727**	**ug/L**	9.020	18103182	12.071
	P	31	**4353.420**	**ug/L**	3.072	1092186	0.724
	K	39	**4309.671**	**ug/L**	9.195	26962806	17.730
	Ca	43	**4692.669**	**ug/L**	2.022	66087	0.044
>	Sc	45		**ug/L**		1498091	1498090.508
	Ti	47	**48.452**	**ug/L**	3.150	33709	0.022
	V	51	**48.913**	**ug/L**	3.534	383622	0.255
	Cr	52	**49.659**	**ug/L**	4.813	311051	0.206
	Cr	53		**ug/L**		140340	0.040
	Mn	55	**52.045**	**ug/L**	3.482	500095	0.333
	Fe	57	**5251.178**	**ug/L**	1.517	940864	0.625
	Co	59	**49.363**	**ug/L**	2.345	376337	0.251
	Ni	60	**49.833**	**ug/L**	1.322	85293	0.057
	Cu	63		**ug/L**		205549	0.137
	Cu	65	**50.648**	**ug/L**	1.948	102714	0.068
	Zn	66	**47.809**	**ug/L**	0.935	62771	0.119
	Zn	67		**ug/L**		25438	0.029
	Zn	68		**ug/L**		46448	0.087
>	Ge	74		**ug/L**		483115	483115.286
	As	75	**48.384**	**ug/L**	1.118	63214	0.131
	Se	77		**ug/L**		11846	0.015
	Se	82	**50.519**	**ug/L**	2.117	6567	0.014
	Kr	83		**ug/L**		120	-0.000
	Sr	88	**50.300**	**ug/L**	1.368	799327	2.452
	Y	89		**ug/L**		241	0.001
	Mo	98	**48.089**	**ug/L**	0.437	199089	0.611
	Ag	107	**49.889**	**ug/L**	0.869	344689	1.058
	Cd	111	**49.380**	**ug/L**	0.385	80906	0.248
	Cd	114		**ug/L**		191620	0.588
>	In	115		**ug/L**		325830	325829.738
	Sn	120	**50.196**	**ug/L**	2.206	356951	1.095
	Sb	121	**50.345**	**ug/L**	0.828	291017	0.893
	Sb	123		**ug/L**		227072	0.697
	Ba	135		**ug/L**		91340	0.153
	Ba	137	**46.311**	**ug/L**	3.438	162167	0.271
	Ho	165		**ug/L**		130	0.000
>	Lu	175		**ug/L**		597575	597575.476
	Tl	205	**50.715**	**ug/L**	3.497	1030357	1.716
	Pb	208	**51.580**	**ug/L**	1.457	1634923	2.734
	Bi	209		**ug/L**		757	-0.000
	Th	232	**47.155**	**ug/L**	2.410	1938526	3.244
	U	238	**51.463**	**ug/L**	2.296	2332840	3.904

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.796				
	Be	9	103.260				
	B	11	94.296				
	Na	23	91.849				
	Mg	24	94.606				
	Al	27	91.024				
	P	31	87.068				
	K	39	86.193				
	Ca	43	93.853				
>	Sc	45		98.3			
	Ti	47	96.905				
	V	51	97.826				
	Cr	52	99.319				
	Cr	53					
	Mn	55	104.089				
	Fe	57	105.024				
	Co	59	98.725				
	Ni	60	99.667				
	Cu	63					
	Cu	65	101.296				
	Zn	66	95.617				
	Zn	67					
	Zn	68					
>	Ge	74		95.1			
	As	75	96.768				
	Se	77					
	Se	82	101.038				
	Kr	83					
	Sr	88	100.601				
	Y	89					
	Mo	98	96.178				
	Ag	107	99.777				
	Cd	111	98.761				
	Cd	114					
>	In	115		96.7			
	Sn	120	100.391				
	Sb	121	100.690				
	Sb	123					
	Ba	135					
	Ba	137	92.622				
	Ho	165					
>	Lu	175		104.1			
	Tl	205	101.430				
	Pb	208	103.159				
	Bi	209					
	Th	232	94.311				
	U	238	102.926				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	P	31	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 01:54:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 9.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.024**	**ug/L**	26.378	177	0.000
	Be	9	**0.014**	**ug/L**	91.847	27	0.000
	B	11	**2.211**	**ug/L**	19.336	1643	0.001
	Na	23	**1.278**	**ug/L**	109.455	21684	0.004
	Mg	24	**1.436**	**ug/L**	49.153	8002	0.003
	Al	27	**1.556**	**ug/L**	54.430	19347	0.004
	P	31	**0.525**	**ug/L**	239.157	6784	0.000
	K	39	**2.559**	**ug/L**	308.866	379339	0.011
	Ca	43	**3.612**	**ug/L**	111.240	365	0.000
>	Sc	45		**ug/L**		1413076	1413076.308
	Ti	47	**0.032**	**ug/L**	125.486	409	0.000
	V	51	**-0.016**	**ug/L**	1612.975	1881	-0.000
	Cr	52	**0.286**	**ug/L**	32.857	3346	0.001
	Cr	53		**ug/L**		79267	0.003
	Mn	55	**0.041**	**ug/L**	15.012	1414	0.000
	Fe	57	**4.394**	**ug/L**	16.805	5272	0.001
	Co	59	**0.016**	**ug/L**	11.516	245	0.000
	Ni	60	**0.013**	**ug/L**	97.294	314	0.000
	Cu	63		**ug/L**		280	0.000
	Cu	65	**0.026**	**ug/L**	38.141	169	0.000
	Zn	66	**-0.059**	**ug/L**	227.053	5298	-0.000
	Zn	67		**ug/L**		10868	-0.001
	Zn	68		**ug/L**		4422	-0.000
>	Ge	74		**ug/L**		470867	470867.133
	As	75	**-0.036**	**ug/L**	983.558	-258	-0.000
	Se	77		**ug/L**		4986	0.001
	Se	82	**0.285**	**ug/L**	57.225	17	0.000
	Kr	83		**ug/L**		116	-0.000
	Sr	88	**0.018**	**ug/L**	19.230	701	0.001
	Y	89		**ug/L**		68	0.000
	Mo	98	**0.032**	**ug/L**	9.253	223	0.000
	Ag	107	**0.017**	**ug/L**	20.659	191	0.000
	Cd	111	**0.009**	**ug/L**	75.608	60	0.000
	Cd	114		**ug/L**		134	0.000
>	In	115		**ug/L**		316530	316529.548
	Sn	120	**0.023**	**ug/L**	14.950	378	0.001
	Sb	121	**0.074**	**ug/L**	8.777	605	0.001
	Sb	123		**ug/L**		491	0.001
	Ba	135		**ug/L**		80	0.000
	Ba	137	**0.018**	**ug/L**	24.646	134	0.000
	Ho	165		**ug/L**		59	-0.000
>	Lu	175		**ug/L**		567892	567891.539
	Tl	205	**0.231**	**ug/L**	34.394	9562	0.008
	Pb	208	**0.019**	**ug/L**	4.414	2003	0.001
	Bi	209		**ug/L**		739	-0.000
	Th	232	**0.040**	**ug/L**	2.659	2229	0.003
	U	238	**0.024**	**ug/L**	15.365	1622	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 02:37:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 8.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.528**	**ug/L**	2.123	93520	0.074
	Be	9	**54.389**	**ug/L**	2.239	18068	0.014
	B	11	**96.205**	**ug/L**	2.399	36282	0.028
	Na	23	**4425.125**	**ug/L**	7.234	16448894	12.992
	Mg	24	**4923.442**	**ug/L**	1.319	12174141	9.641
	Al	27	**4911.014**	**ug/L**	8.905	16298251	12.896
	P	31	**4362.770**	**ug/L**	1.008	921938	0.726
	K	39	**4273.037**	**ug/L**	3.660	22493833	17.579
	Ca	43	**4752.870**	**ug/L**	0.807	56379	0.044
>	Sc	45		**ug/L**		1262358	1262357.992
	Ti	47	**47.460**	**ug/L**	2.056	27812	0.022
	V	51	**49.904**	**ug/L**	1.840	329661	0.260
	Cr	52	**50.104**	**ug/L**	1.189	264422	0.208
	Cr	53		**ug/L**		111611	0.035
	Mn	55	**52.149**	**ug/L**	2.548	421846	0.334
	Fe	57	**5436.873**	**ug/L**	1.536	820270	0.647
	Co	59	**50.026**	**ug/L**	1.947	321392	0.254
	Ni	60	**50.118**	**ug/L**	1.343	72279	0.057
	Cu	63		**ug/L**		177531	0.141
	Cu	65	**50.206**	**ug/L**	1.233	85755	0.068
	Zn	66	**48.126**	**ug/L**	2.160	53802	0.119
	Zn	67		**ug/L**		21060	0.027
	Zn	68		**ug/L**		40199	0.088
>	Ge	74		**ug/L**		411809	411808.538
	As	75	**49.130**	**ug/L**	4.164	54646	0.133
	Se	77		**ug/L**		9140	0.013
	Se	82	**51.291**	**ug/L**	2.181	5679	0.014
	Kr	83		**ug/L**		115	0.000
	Sr	88	**50.348**	**ug/L**	0.142	703529	2.454
	Y	89		**ug/L**		237	0.001
	Mo	98	**48.738**	**ug/L**	2.668	177470	0.619
	Ag	107	**50.775**	**ug/L**	2.848	308363	1.076
	Cd	111	**50.596**	**ug/L**	0.896	72889	0.254
	Cd	114		**ug/L**		173488	0.605
>	In	115		**ug/L**		286544	286543.901
	Sn	120	**52.046**	**ug/L**	0.257	325558	1.135
	Sb	121	**51.573**	**ug/L**	0.842	262149	0.914
	Sb	123		**ug/L**		207244	0.723
	Ba	135		**ug/L**		84036	0.148
	Ba	137	**44.338**	**ug/L**	3.315	147948	0.260
	Ho	165		**ug/L**		128	0.000
>	Lu	175		**ug/L**		569304	569304.428
	Tl	205	**51.772**	**ug/L**	1.442	1002288	1.752
	Pb	208	**53.292**	**ug/L**	1.349	1609323	2.825
	Bi	209		**ug/L**		760	-0.000
	Th	232	**48.083**	**ug/L**	1.251	1883506	3.308
	U	238	**51.715**	**ug/L**	1.957	2233570	3.923

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	105.055				
	Be	9	108.778				
	B	11	96.205				
	Na	23	88.502				
	Mg	24	98.469				
	Al	27	97.248				
	P	31	87.255				
	K	39	85.461				
	Ca	43	95.057				
>	Sc	45		82.8			
	Ti	47	94.919				
	V	51	99.808				
	Cr	52	100.208				
	Cr	53					
	Mn	55	104.297				
	Fe	57	108.737				
	Co	59	100.053				
	Ni	60	100.236				
	Cu	63					
	Cu	65	100.411				
	Zn	66	96.253				
	Zn	67					
	Zn	68					
>	Ge	74		81.1			
	As	75	98.261				
	Se	77					
	Se	82	102.582				
	Kr	83					
	Sr	88	100.695				
	Y	89					
	Mo	98	97.477				
	Ag	107	101.551				
	Cd	111	101.193				
	Cd	114					
>	In	115		85.0			
	Sn	120	104.092				
	Sb	121	103.146				
	Sb	123					
	Ba	135					
	Ba	137	88.675				
	Ho	165					
>	Lu	175		99.2			
	Tl	205	103.545				
	Pb	208	106.583				
	Bi	209					
	Th	232	96.166				
	U	238	103.430				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	P	31	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
QC Std 8	Ba	137	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 02:43:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 9.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.018**	**ug/L**	28.284	143	0.000
	Be	9	**0.017**	**ug/L**	52.275	24	0.000
	B	11	**2.073**	**ug/L**	16.862	1382	0.001
	Na	23	**1.026**	**ug/L**	115.929	18012	0.003
	Mg	24	**0.485**	**ug/L**	133.523	4667	0.001
	Al	27	**3.027**	**ug/L**	44.520	21684	0.008
	P	31	**0.108**	**ug/L**	911.889	5829	0.000
	K	39	**4.347**	**ug/L**	75.123	340347	0.018
	Ca	43	**1.408**	**ug/L**	138.984	292	0.000
>	Sc	45		**ug/L**		1232312	1232312.259
	Ti	47	**0.039**	**ug/L**	73.350	361	0.000
	V	51	**-0.061**	**ug/L**	771.828	1373	-0.000
	Cr	52	**0.058**	**ug/L**	49.666	1751	0.000
	Cr	53		**ug/L**		65868	0.000
	Mn	55	**0.067**	**ug/L**	16.332	1443	0.000
	Fe	57	**1.775**	**ug/L**	33.512	4213	0.000
	Co	59	**0.015**	**ug/L**	29.096	212	0.000
	Ni	60	**0.011**	**ug/L**	37.622	271	0.000
	Cu	63		**ug/L**		244	0.000
	Cu	65	**0.024**	**ug/L**	86.824	143	0.000
	Zn	66	**0.050**	**ug/L**	106.719	4697	0.000
	Zn	67		**ug/L**		9537	-0.000
	Zn	68		**ug/L**		3993	0.000
>	Ge	74		**ug/L**		407470	407470.363
	As	75	**0.179**	**ug/L**	47.964	12	0.000
	Se	77		**ug/L**		3708	-0.000
	Se	82	**0.063**	**ug/L**	278.205	-10	0.000
	Kr	83		**ug/L**		115	0.000
	Sr	88	**0.014**	**ug/L**	38.468	582	0.001
	Y	89		**ug/L**		69	0.000
	Mo	98	**0.030**	**ug/L**	12.863	193	0.000
	Ag	107	**0.013**	**ug/L**	31.361	149	0.000
	Cd	111	**-0.005**	**ug/L**	58.589	34	-0.000
	Cd	114		**ug/L**		121	0.000
>	In	115		**ug/L**		287649	287649.343
	Sn	120	**0.028**	**ug/L**	28.555	374	0.001
	Sb	121	**0.079**	**ug/L**	2.322	578	0.001
	Sb	123		**ug/L**		435	0.001
	Ba	135		**ug/L**		77	0.000
	Ba	137	**0.011**	**ug/L**	83.064	109	0.000
	Ho	165		**ug/L**		49	-0.000
>	Lu	175		**ug/L**		560077	560077.400
	Tl	205	**0.183**	**ug/L**	51.385	8517	0.006
	Pb	208	**0.020**	**ug/L**	58.081	1998	0.001
	Bi	209		**ug/L**		736	-0.000
	Th	232	**0.031**	**ug/L**	12.642	1870	0.002
	U	238	**0.018**	**ug/L**	29.526	1349	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		80.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		80.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 03:20:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 8.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.668**	ug/L	0.583	104279	0.074
	Be	9	**52.951**	ug/L	1.726	19559	0.014
	B	11	**95.280**	ug/L	3.241	39949	0.028
	Na	23	**4660.972**	ug/L	0.914	19216890	13.685
	Mg	24	**5036.560**	ug/L	4.116	13838943	9.862
	Al	27	**5469.088**	ug/L	6.345	20155055	14.362
	P	31	**4486.190**	ug/L	3.600	1053450	0.746
	K	39	**4557.126**	ug/L	0.578	26664875	18.748
	Ca	43	**4819.250**	ug/L	1.303	63549	0.045
>	Sc	45		ug/L		1403141	1403140.742
	Ti	47	**48.561**	ug/L	0.865	31631	0.022
	V	51	**50.235**	ug/L	6.724	368397	0.261
	Cr	52	**50.324**	ug/L	3.701	294967	0.209
	Cr	53		ug/L		125597	0.036
	Mn	55	**52.060**	ug/L	2.806	468238	0.333
	Fe	57	**5297.707**	ug/L	4.560	888107	0.630
	Co	59	**49.511**	ug/L	2.933	353354	0.252
	Ni	60	**49.091**	ug/L	2.583	78668	0.056
	Cu	63		ug/L		191873	0.137
	Cu	65	**49.736**	ug/L	1.874	94437	0.067
	Zn	66	**48.710**	ug/L	0.753	59057	0.121
	Zn	67		ug/L		23361	0.029
	Zn	68		ug/L		44032	0.089
>	Ge	74		ug/L		446874	446873.826
	As	75	**48.701**	ug/L	1.408	58857	0.132
	Se	77		ug/L		10479	0.014
	Se	82	**51.207**	ug/L	1.955	6156	0.014
	Kr	83		ug/L		118	0.000
	Sr	88	**51.852**	ug/L	1.002	759928	2.527
	Y	89		ug/L		307	0.001
	Mo	98	**49.695**	ug/L	2.236	189760	0.631
	Ag	107	**51.267**	ug/L	2.266	326631	1.087
	Cd	111	**50.554**	ug/L	1.811	76404	0.254
	Cd	114		ug/L		181859	0.605
>	In	115		ug/L		300584	300584.026
	Sn	120	**52.218**	ug/L	2.320	342510	1.139
	Sb	121	**51.563**	ug/L	2.095	274899	0.914
	Sb	123		ug/L		218087	0.725
	Ba	135		ug/L		87394	0.154
	Ba	137	**46.479**	ug/L	3.474	154635	0.272
	Ho	165		ug/L		123	0.000
>	Lu	175		ug/L		567935	567934.787
	Tl	205	**51.598**	ug/L	1.117	996623	1.746
	Pb	208	**53.162**	ug/L	3.228	1601000	2.818
	Bi	209		ug/L		720	-0.000
	Th	232	**49.005**	ug/L	1.438	1914798	3.371
	U	238	**52.702**	ug/L	2.935	2270132	3.998

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	105.336				
	Be	9	105.903				
	B	11	95.280				
	Na	23	93.219				
	Mg	24	100.731				
	Al	27	108.299				
	P	31	89.724				
	K	39	91.143				
	Ca	43	96.385				
>	Sc	45		92.1			
	Ti	47	97.123				
	V	51	100.469				
	Cr	52	100.648				
	Cr	53					
	Mn	55	104.121				
	Fe	57	105.954				
	Co	59	99.021				
	Ni	60	98.183				
	Cu	63					
	Cu	65	99.472				
	Zn	66	97.420				
	Zn	67					
	Zn	68					
>	Ge	74		88.0			
	As	75	97.401				
	Se	77					
	Se	82	102.414				
	Kr	83					
	Sr	88	103.704				
	Y	89					
	Mo	98	99.390				
	Ag	107	102.533				
	Cd	111	101.108				
	Cd	114					
>	In	115		89.2			
	Sn	120	104.435				
	Sb	121	103.125				
	Sb	123					
	Ba	135					
	Ba	137	92.958				
	Ho	165					
>	Lu	175		98.9			
	Tl	205	103.195				
	Pb	208	106.325				
	Bi	209					
	Th	232	98.010				
	U	238	105.404				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	P	31	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 03:27:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 9.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.017	ug/L	29.897	161	0.000
	Be	9	0.014	ug/L	46.543	27	0.000
	B	11	1.942	ug/L	29.960	1521	0.001
	Na	23	1.140	ug/L	110.972	21016	0.003
	Mg	24	1.209	ug/L	120.525	7336	0.002
	Al	27	2.298	ug/L	30.011	22017	0.006
	P	31	0.042	ug/L	2075.442	6631	0.000
	K	39	8.876	ug/L	16.907	414256	0.037
	Ca	43	-0.101	ug/L	990.144	313	-0.000
>	Sc	45		ug/L		1405241	1405241.357
	Ti	47	0.022	ug/L	92.110	401	0.000
	V	51	0.261	ug/L	195.479	3890	0.001
	Cr	52	0.241	ug/L	30.587	3067	0.001
	Cr	53		ug/L		76339	0.001
	Mn	55	0.081	ug/L	23.324	1767	0.001
	Fe	57	3.217	ug/L	20.781	5046	0.000
	Co	59	0.013	ug/L	27.670	225	0.000
	Ni	60	0.005	ug/L	257.091	299	0.000
	Cu	63		ug/L		265	0.000
	Cu	65	0.015	ug/L	26.666	147	0.000
	Zn	66	0.140	ug/L	52.527	5477	0.000
	Zn	67		ug/L		10794	-0.001
	Zn	68		ug/L		4586	0.000
>	Ge	74		ug/L		466115	466115.489
	As	75	-0.142	ug/L	227.675	-390	-0.000
	Se	77		ug/L		4686	0.000
	Se	82	-0.019	ug/L	640.654	-22	-0.000
	Kr	83		ug/L		119	-0.000
	Sr	88	0.017	ug/L	40.000	679	0.001
	Y	89		ug/L		84	0.000
	Mo	98	0.028	ug/L	6.415	203	0.000
	Ag	107	0.014	ug/L	33.405	172	0.000
	Cd	111	0.012	ug/L	98.866	63	0.000
	Cd	114		ug/L		132	0.000
>	In	115		ug/L		312441	312441.327
	Sn	120	0.028	ug/L	20.321	404	0.001
	Sb	121	0.080	ug/L	24.042	635	0.001
	Sb	123		ug/L		474	0.001
	Ba	135		ug/L		91	0.000
	Ba	137	0.023	ug/L	31.017	151	0.000
	Ho	165		ug/L		58	-0.000
>	Lu	175		ug/L		569607	569607.382
	Tl	205	0.198	ug/L	48.998	8941	0.007
	Pb	208	0.015	ug/L	23.955	1903	0.001
	Bi	209		ug/L		725	-0.000
	Th	232	0.031	ug/L	10.372	1886	0.002
	U	238	0.018	ug/L	27.977	1390	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201988997
Sample Date/Time: Thursday, December 10, 2009 03:33:13
Sample Type:
Sample Description: LANL 6020 TB
Number of Replicates: 3
Batch ID: 930787|1|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\1201988997.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.089**	ug/L	31.110	342	0.000
	Be	9	**0.001**	ug/L	682.452	25	0.000
	B	11	**0.380**	ug/L	40.071	981	0.000
	Na	23	**38603.905**	ug/L	35.827	178987115	113.341
	Mg	24	**-0.910**	ug/L	41.774	1667	-0.002
	Al	27	**0.108**	ug/L	1042.325	15676	0.000
	P	31	**25.337**	ug/L	12.099	14048	0.004
	K	39	**41.023**	ug/L	23.041	671823	0.169
	Ca	43	**30.455**	ug/L	11.895	801	0.000
>	Sc	45		ug/L		1574802	1574801.766
	Ti	47	**1.267**	ug/L	1.052	1348	0.001
	V	51	**1.196**	ug/L	114.634	11901	0.006
	Cr	52	**2.959**	ug/L	8.471	21223	0.012
	Cr	53		ug/L		181203	0.062
	Mn	55	**0.203**	ug/L	1.563	3214	0.001
	Fe	57	**12.491**	ug/L	11.635	7388	0.001
	Co	59	**0.007**	ug/L	15.355	203	0.000
	Ni	60	**0.661**	ug/L	1.404	1513	0.001
	Cu	63		ug/L		4680	0.003
	Cu	65	**0.100**	ug/L	14.273	347	0.000
	Zn	66	**-2.627**	ug/L	1.781	2318	-0.007
	Zn	67		ug/L		38657	0.058
	Zn	68		ug/L		3508	-0.002
>	Ge	74		ug/L		473895	473895.492
	As	75	**-0.831**	ug/L	29.257	-1281	-0.002
	Se	77		ug/L		14855	0.022
	Se	82	**0.062**	ug/L	216.375	-12	0.000
	Kr	83		ug/L		133	0.000
	Sr	88	**0.201**	ug/L	3.175	3385	0.010
	Y	89		ug/L		86	0.000
	Mo	98	**0.009**	ug/L	78.408	125	0.000
	Ag	107	**-0.004**	ug/L	12.221	51	-0.000
	Cd	111	**-0.173**	ug/L	16.175	-220	-0.001
	Cd	114		ug/L		59	-0.000
>	In	115		ug/L		304218	304217.714
	Sn	120	**0.395**	ug/L	1.592	2831	0.009
	Sb	121	**0.076**	ug/L	32.336	595	0.001
	Sb	123		ug/L		476	0.001
	Ba	135		ug/L		396	0.001
	Ba	137	**0.180**	ug/L	5.920	658	0.001
	Ho	165		ug/L		58	-0.000
>	Lu	175		ug/L		556257	556256.875
	Tl	205	**-0.140**	ug/L	7.411	2376	-0.005
	Pb	208	**-0.004**	ug/L	67.637	1285	-0.000
	Bi	209		ug/L		533	-0.001
	Th	232	**0.041**	ug/L	45.758	2239	0.003
	U	238	**-0.006**	ug/L	13.381	319	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201990771
Sample Date/Time: Thursday, December 10, 2009 03:39:22
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 930787|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\1201990771.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.035**	**ug/L**	20.187	207	0.000
	Be	9	**-0.013**	**ug/L**	100.612	18	-0.000
	B	11	**-0.075**	**ug/L**	136.226	726	-0.000
	Na	23	**15.540**	**ug/L**	35.520	84596	0.046
	Mg	24	**-0.649**	**ug/L**	60.692	2334	-0.001
	Al	27	**-0.495**	**ug/L**	343.773	12340	-0.001
	P	31	**21.006**	**ug/L**	16.228	12146	0.003
	K	39	**7.961**	**ug/L**	90.834	430774	0.033
	Ca	43	**16.086**	**ug/L**	19.147	554	0.000
>	Sc	45		**ug/L**		1480445	1480444.839
	Ti	47	**0.392**	**ug/L**	6.032	674	0.000
	V	51	**0.197**	**ug/L**	498.630	3626	0.001
	Cr	52	**1.131**	**ug/L**	15.150	8701	0.005
	Cr	53		**ug/L**		180047	0.068
	Mn	55	**0.187**	**ug/L**	3.022	2870	0.001
	Fe	57	**8.657**	**ug/L**	9.694	6274	0.001
	Co	59	**-0.001**	**ug/L**	181.054	131	-0.000
	Ni	60	**-0.031**	**ug/L**	33.444	255	-0.000
	Cu	63		**ug/L**		681	0.000
	Cu	65	**0.115**	**ug/L**	8.722	354	0.000
	Zn	66	**-1.830**	**ug/L**	3.351	3226	-0.005
	Zn	67		**ug/L**		39718	0.061
	Zn	68		**ug/L**		4117	-0.001
>	Ge	74		**ug/L**		469745	469745.148
	As	75	**-0.637**	**ug/L**	57.844	-1026	-0.002
	Se	77		**ug/L**		13026	0.018
	Se	82	**0.172**	**ug/L**	93.043	2	0.000
	Kr	83		**ug/L**		114	-0.000
	Sr	88	**0.013**	**ug/L**	11.332	603	0.001
	Y	89		**ug/L**		82	0.000
	Mo	98	**0.000**	**ug/L**	5653.436	90	0.000
	Ag	107	**-0.002**	**ug/L**	25.786	61	-0.000
	Cd	111	**-0.008**	**ug/L**	6.558	31	-0.000
	Cd	114		**ug/L**		86	0.000
>	In	115		**ug/L**		306064	306064.212
	Sn	120	**0.117**	**ug/L**	7.051	990	0.003
	Sb	121	**0.023**	**ug/L**	22.088	310	0.000
	Sb	123		**ug/L**		246	0.000
	Ba	135		**ug/L**		63	0.000
	Ba	137	**0.005**	**ug/L**	20.030	92	0.000
	Ho	165		**ug/L**		59	-0.000
>	Lu	175		**ug/L**		572814	572814.400
	Tl	205	**-0.178**	**ug/L**	3.036	1701	-0.006
	Pb	208	**0.002**	**ug/L**	100.600	1509	0.000
	Bi	209		**ug/L**		524	-0.001
	Th	232	**0.004**	**ug/L**	53.955	850	0.000
	U	238	**-0.006**	**ug/L**	15.355	330	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			97.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.8		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201990772
Sample Date/Time: Thursday, December 10, 2009 03:45:31
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 930787|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\1201990772.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.338**	ug/L	0.425	110303	0.074
	Be	9	**52.477**	ug/L	1.787	20634	0.014
	B	11	**95.173**	ug/L	1.396	42490	0.028
	Na	23	**1806.479**	ug/L	2.621	7936114	5.304
	Mg	24	**2105.201**	ug/L	3.223	6160647	4.122
	Al	27	**2164.812**	ug/L	2.155	8506071	5.685
	P	31	**1977.522**	ug/L	2.275	498208	0.329
	K	39	**1877.331**	ug/L	5.853	11912607	7.723
	Ca	43	**2068.494**	ug/L	1.456	29219	0.019
>	Sc	45		ug/L		1493478	1493478.279
	Ti	47	**47.484**	ug/L	0.749	32934	0.022
	V	51	**49.907**	ug/L	3.617	389910	0.260
	Cr	52	**52.205**	ug/L	1.939	325769	0.217
	Cr	53		ug/L		231654	0.102
	Mn	55	**53.056**	ug/L	1.939	507995	0.339
	Fe	57	**2335.430**	ug/L	2.906	419634	0.278
	Co	59	**52.399**	ug/L	2.342	398104	0.267
	Ni	60	**52.433**	ug/L	4.479	89408	0.060
	Cu	63		ug/L		211844	0.142
	Cu	65	**51.311**	ug/L	1.382	103706	0.069
	Zn	66	**48.921**	ug/L	1.318	62343	0.121
	Zn	67		ug/L		53046	0.089
	Zn	68		ug/L		46998	0.090
>	Ge	74		ug/L		469872	469872.432
	As	75	**49.439**	ug/L	0.856	62818	0.134
	Se	77		ug/L		18758	0.030
	Se	82	**51.539**	ug/L	2.611	6514	0.014
	Kr	83		ug/L		130	0.000
	Sr	88	**56.345**	ug/L	2.376	843134	2.746
	Y	89		ug/L		116	0.000
	Mo	98	**52.655**	ug/L	1.561	205349	0.669
	Ag	107	**54.344**	ug/L	2.633	353600	1.152
	Cd	111	**52.610**	ug/L	1.417	81186	0.264
	Cd	114		ug/L		191468	0.624
>	In	115		ug/L		306953	306952.869
	Sn	120	**55.066**	ug/L	2.249	368860	1.201
	Sb	121	**54.463**	ug/L	2.173	296542	0.966
	Sb	123		ug/L		231376	0.753
	Ba	135		ug/L		92525	0.163
	Ba	137	**49.326**	ug/L	1.510	163674	0.289
	Ho	165		ug/L		102	0.000
>	Lu	175		ug/L		566234	566233.937
	Tl	205	**53.344**	ug/L	2.941	1027095	1.805
	Pb	208	**55.829**	ug/L	2.137	1676664	2.959
	Bi	209		ug/L		1249235	2.205
	Th	232	**50.367**	ug/L	1.110	1962333	3.465
	U	238	**55.155**	ug/L	2.191	2369422	4.184

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 241839001
Sample Date/Time: Thursday, December 10, 2009 03:51:40
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 930787|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\241839001.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.518**	**ug/L**	1.922	1310	0.001
	Be	9	**0.062**	**ug/L**	41.402	50	0.000
	B	11	**14.554**	**ug/L**	3.435	7628	0.004
	Na	23	**71850.476**	**ug/L**	12.657	336520274	210.953
	Mg	24	**579.822**	**ug/L**	4.191	1814440	1.135
	Al	27	**41.859**	**ug/L**	3.937	190598	0.110
	P	31	**61.144**	**ug/L**	7.174	23723	0.010
	K	39	**433.622**	**ug/L**	10.132	3256299	1.784
	Ca	43	**6300.129**	**ug/L**	1.088	94281	0.059
>	Sc	45		**ug/L**		1594260	1594260.162
	Ti	47	**1.943**	**ug/L**	2.322	1859	0.001
	V	51	**0.066**	**ug/L**	2252.645	2733	0.000
	Cr	52	**1.656**	**ug/L**	2.492	12857	0.007
	Cr	53		**ug/L**		204500	0.075
	Mn	55	**29.233**	**ug/L**	1.705	299385	0.187
	Fe	57	**50.949**	**ug/L**	3.240	14776	0.006
	Co	59	**0.080**	**ug/L**	2.359	802	0.000
	Ni	60	**3.410**	**ug/L**	2.219	6519	0.004
	Cu	63		**ug/L**		8507	0.005
	Cu	65	**0.995**	**ug/L**	1.495	2279	0.001
	Zn	66	**0.253**	**ug/L**	40.289	5899	0.001
	Zn	67		**ug/L**		43194	0.064
	Zn	68		**ug/L**		8160	0.007
>	Ge	74		**ug/L**		490194	490194.066
	As	75	**-0.137**	**ug/L**	188.226	-408	-0.000
	Se	77		**ug/L**		16992	0.025
	Se	82	**-0.106**	**ug/L**	68.827	-34	-0.000
	Kr	83		**ug/L**		159	0.000
	Sr	88	**39.039**	**ug/L**	1.917	590341	1.903
	Y	89		**ug/L**		4750	0.015
	Mo	98	**0.096**	**ug/L**	9.368	467	0.001
	Ag	107	**0.003**	**ug/L**	22.793	96	0.000
	Cd	111	**-0.214**	**ug/L**	16.571	-288	-0.001
	Cd	114		**ug/L**		152	0.000
>	In	115		**ug/L**		310119	310119.010
	Sn	120	**0.206**	**ug/L**	4.349	1608	0.005
	Sb	121	**0.050**	**ug/L**	21.782	465	0.001
	Sb	123		**ug/L**		402	0.001
	Ba	135		**ug/L**		140237	0.256
	Ba	137	**76.489**	**ug/L**	3.171	245753	0.448
	Ho	165		**ug/L**		311	0.000
>	Lu	175		**ug/L**		548435	548434.611
	Tl	205	**0.362**	**ug/L**	30.759	11674	0.012
	Pb	208	**0.218**	**ug/L**	1.128	7730	0.012
	Bi	209		**ug/L**		585	-0.000
	Th	232	**0.061**	**ug/L**	34.820	2941	0.004
	U	238	**0.162**	**ug/L**	1.993	7306	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201990773
Sample Date/Time: Thursday, December 10, 2009 03:57:49
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 930787|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\1201990773.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.433**	ug/L	1.059	1140	0.001
	Be	9	**0.042**	ug/L	35.328	43	0.000
	B	11	**12.436**	ug/L	5.312	6769	0.004
	Na	23	**S**	ug/L	S	S	S
	Mg	24	**641.062**	ug/L	13.807	2043700	1.255
	Al	27	**44.370**	ug/L	8.736	205136	0.117
	P	31	**55.993**	ug/L	2.985	22805	0.009
	K	39	**429.068**	ug/L	8.527	3293540	1.765
	Ca	43	**6273.572**	ug/L	2.089	95748	0.059
>	Sc	45		ug/L		1626232	1626232.254
	Ti	47	**2.136**	ug/L	5.646	2040	0.001
	V	51	**-0.337**	ug/L	274.021	-584	-0.002
	Cr	52	**1.460**	ug/L	7.041	11785	0.006
	Cr	53		ug/L		201942	0.071
	Mn	55	**29.151**	ug/L	3.221	304412	0.187
	Fe	57	**46.001**	ug/L	5.406	14114	0.005
	Co	59	**0.043**	ug/L	5.955	512	0.000
	Ni	60	**1.425**	ug/L	2.558	2976	0.002
	Cu	63		ug/L		5806	0.003
	Cu	65	**0.402**	ug/L	3.794	1020	0.001
	Zn	66	**-0.747**	ug/L	10.680	4735	-0.002
	Zn	67		ug/L		43065	0.063
	Zn	68		ug/L		7334	0.005
>	Ge	74		ug/L		495662	495661.849
	As	75	**-0.614**	ug/L	60.015	-1052	-0.002
	Se	77		ug/L		17049	0.025
	Se	82	**0.097**	ug/L	170.810	-8	0.000
	Kr	83		ug/L		147	0.000
	Sr	88	**39.324**	ug/L	2.631	605850	1.917
	Y	89		ug/L		4793	0.015
	Mo	98	**0.031**	ug/L	5.133	219	0.000
	Ag	107	**-0.003**	ug/L	38.534	59	-0.000
	Cd	111	**-0.246**	ug/L	32.051	-345	-0.001
	Cd	114		ug/L		124	0.000
>	In	115		ug/L		315931	315930.962
	Sn	120	**0.179**	ug/L	3.777	1448	0.004
	Sb	121	**0.023**	ug/L	35.837	318	0.000
	Sb	123		ug/L		268	0.000
	Ba	135		ug/L		144550	0.252
	Ba	137	**75.034**	ug/L	1.085	252487	0.440
	Ho	165		ug/L		331	0.000
>	Lu	175		ug/L		574249	574248.975
	Tl	205	**-0.034**	ug/L	25.410	4519	-0.001
	Pb	208	**0.116**	ug/L	4.159	4965	0.006
	Bi	209		ug/L		457	-0.001
	Th	232	**0.016**	ug/L	16.114	1315	0.001
	U	238	**0.088**	ug/L	2.871	4420	0.007

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEI	Na	23	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201988995
Sample Date/Time: Thursday, December 10, 2009 04:04:00
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 930787|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\1201988995.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.742**	ug/L	2.886	217131	0.141
	Be	9	**202.015**	ug/L	1.158	82069	0.053
	B	11	**199.512**	ug/L	3.787	91195	0.059
	Na	23	**86236.817**	ug/L	16.042	390895880	253.191
	Mg	24	**863.471**	ug/L	6.498	2613608	1.691
	Al	27	**1072.548**	ug/L	3.500	4361915	2.816
	P	31	**62.686**	ug/L	12.223	23351	0.010
	K	39	**927.412**	ug/L	12.068	6279839	3.815
	Ca	43	**6730.172**	ug/L	3.720	97496	0.063
>	Sc	45		ug/L		1544204	1544203.550
	Ti	47	**2.462**	ug/L	4.652	2168	0.001
	V	51	**203.962**	ug/L	4.135	1640637	1.062
	Cr	52	**458.386**	ug/L	3.552	2942319	1.905
	Cr	53		ug/L		558478	0.309
	Mn	55	**202.831**	ug/L	2.303	2005185	1.298
	Fe	57	**273.257**	ug/L	3.113	55157	0.033
	Co	59	**180.541**	ug/L	1.166	1418140	0.918
	Ni	60	**193.655**	ug/L	1.792	340622	0.220
	Cu	63		ug/L		786641	0.509
	Cu	65	**189.663**	ug/L	0.704	396031	0.256
	Zn	66	**206.840**	ug/L	1.172	245039	0.513
	Zn	67		ug/L		89295	0.167
	Zn	68		ug/L		200906	0.420
>	Ge	74		ug/L		467483	467482.847
	As	75	**481.033**	ug/L	0.827	609949	1.305
	Se	77		ug/L		24350	0.043
	Se	82	**101.746**	ug/L	3.102	12814	0.027
	Kr	83		ug/L		194	0.000
	Sr	88	**247.239**	ug/L	1.637	3582401	12.050
	Y	89		ug/L		4726	0.016
	Mo	98	**210.150**	ug/L	1.713	793375	2.669
	Ag	107	**52.355**	ug/L	2.499	329997	1.110
	Cd	111	**103.693**	ug/L	2.759	154920	0.521
	Cd	114		ug/L		362595	1.219
>	In	115		ug/L		297306	297306.250
	Sn	120	**195.715**	ug/L	2.407	1269486	4.270
	Sb	121	**205.460**	ug/L	3.167	1082824	3.643
	Sb	123		ug/L		859534	2.891
	Ba	135		ug/L		1636545	3.006
	Ba	137	**1037.654**	ug/L	1.724	3309286	6.079
	Ho	165		ug/L		303	0.000
>	Lu	175		ug/L		544449	544449.308
	Tl	205	**192.348**	ug/L	3.503	3547911	6.508
	Pb	208	**509.964**	ug/L	2.501	14714828	27.030
	Bi	209		ug/L		897	0.000
	Th	232	**209.829**	ug/L	2.518	7857684	14.434
	U	238	**108.836**	ug/L	1.915	4495166	8.256

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201990775
Sample Date/Time: Thursday, December 10, 2009 04:10:11
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 930787|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\1201990775.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.126**	ug/L	2.114	402	0.000
	Be	9	**0.005**	ug/L	231.363	25	0.000
	B	11	**7.317**	ug/L	12.326	3967	0.002
	Na	23	**27325.184**	ug/L	3.345	119628321	80.227
	Mg	24	**121.175**	ug/L	9.190	358125	0.237
	Al	27	**8.429**	ug/L	17.778	47413	0.022
	P	31	**20.813**	ug/L	12.872	12184	0.003
	K	39	**101.349**	ug/L	14.822	1006015	0.417
	Ca	43	**1300.699**	ug/L	3.053	18467	0.012
>	Sc	45		ug/L		1491188	1491187.866
	Ti	47	**0.425**	ug/L	3.673	701	0.000
	V	51	**0.322**	ug/L	244.782	4557	0.002
	Cr	52	**0.600**	ug/L	6.624	5481	0.002
	Cr	53		ug/L		118095	0.026
	Mn	55	**6.305**	ug/L	0.504	61266	0.040
	Fe	57	**9.805**	ug/L	9.554	6521	0.001
	Co	59	**0.019**	ug/L	21.023	284	0.000
	Ni	60	**0.739**	ug/L	1.378	1565	0.001
	Cu	63		ug/L		1819	0.001
	Cu	65	**0.224**	ug/L	5.312	577	0.000
	Zn	66	**1.506**	ug/L	11.105	7131	0.004
	Zn	67		ug/L		21103	0.021
	Zn	68		ug/L		6855	0.005
>	Ge	74		ug/L		471209	471209.319
	As	75	**0.210**	ug/L	62.286	55	0.001
	Se	77		ug/L		7829	0.007
	Se	82	**0.020**	ug/L	923.315	-17	0.000
	Kr	83		ug/L		133	0.000
	Sr	88	**8.082**	ug/L	0.275	123308	0.394
	Y	89		ug/L		994	0.003
	Mo	98	**0.069**	ug/L	31.656	366	0.001
	Ag	107	**-0.002**	ug/L	35.950	63	-0.000
	Cd	111	**-0.044**	ug/L	34.867	-24	-0.000
	Cd	114		ug/L		82	0.000
>	In	115		ug/L		311959	311958.817
	Sn	120	**0.050**	ug/L	14.803	552	0.001
	Sb	121	**0.077**	ug/L	17.284	616	0.001
	Sb	123		ug/L		484	0.001
	Ba	135		ug/L		29035	0.051
	Ba	137	**15.443**	ug/L	0.820	51345	0.090
	Ho	165		ug/L		107	0.000
>	Lu	175		ug/L		566730	566730.476
	Tl	205	**1.716**	ug/L	22.840	38036	0.058
	Pb	208	**0.054**	ug/L	18.127	3054	0.003
	Bi	209		ug/L		535	-0.001
	Th	232	**0.061**	ug/L	31.323	3066	0.004
	U	238	**0.030**	ug/L	12.577	1905	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9999
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, December 10, 2009 04:16:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 8.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.159**	**ug/L**	1.248	109481	0.074
	Be	9	**52.500**	**ug/L**	2.296	20562	0.014
	B	11	**97.014**	**ug/L**	1.771	43143	0.028
	Na	23	**4687.323**	**ug/L**	4.485	20489532	13.762
	Mg	24	**5117.323**	**ug/L**	3.757	14919527	10.021
	Al	27	**5004.062**	**ug/L**	10.000	19539942	13.140
	P	31	**4556.744**	**ug/L**	3.257	1134229	0.758
	K	39	**4561.542**	**ug/L**	0.642	28303498	18.766
	Ca	43	**4815.312**	**ug/L**	3.850	67291	0.045
>	Sc	45		**ug/L**		1487756	1487756.082
	Ti	47	**50.008**	**ug/L**	1.620	34526	0.023
	V	51	**50.487**	**ug/L**	4.785	392880	0.263
	Cr	52	**51.079**	**ug/L**	2.689	317484	0.212
	Cr	53		**ug/L**		149219	0.047
	Mn	55	**52.413**	**ug/L**	1.334	499950	0.335
	Fe	57	**5301.670**	**ug/L**	3.274	943041	0.631
	Co	59	**49.796**	**ug/L**	2.135	376885	0.253
	Ni	60	**49.973**	**ug/L**	5.658	84867	0.057
	Cu	63		**ug/L**		205921	0.138
	Cu	65	**50.546**	**ug/L**	1.625	101763	0.068
	Zn	66	**49.100**	**ug/L**	3.145	63181	0.122
	Zn	67		**ug/L**		27698	0.035
	Zn	68		**ug/L**		46843	0.089
>	Ge	74		**ug/L**		474679	474678.644
	As	75	**48.804**	**ug/L**	0.782	62644	0.132
	Se	77		**ug/L**		12392	0.017
	Se	82	**50.565**	**ug/L**	3.590	6455	0.014
	Kr	83		**ug/L**		131	0.000
	Sr	88	**52.648**	**ug/L**	2.095	799396	2.566
	Y	89		**ug/L**		274	0.001
	Mo	98	**49.914**	**ug/L**	2.168	197453	0.634
	Ag	107	**51.752**	**ug/L**	3.021	341638	1.097
	Cd	111	**50.177**	**ug/L**	3.526	78540	0.252
	Cd	114		**ug/L**		188584	0.606
>	In	115		**ug/L**		311478	311477.601
	Sn	120	**51.952**	**ug/L**	3.232	353081	1.133
	Sb	121	**51.936**	**ug/L**	2.996	286861	0.921
	Sb	123		**ug/L**		224848	0.722
	Ba	135		**ug/L**		90883	0.161
	Ba	137	**48.030**	**ug/L**	1.070	158846	0.281
	Ho	165		**ug/L**		128	0.000
>	Lu	175		**ug/L**		564303	564302.538
	Tl	205	**52.114**	**ug/L**	1.275	1000103	1.763
	Pb	208	**53.181**	**ug/L**	2.269	1591793	2.819
	Bi	209		**ug/L**		647	-0.000
	Th	232	**48.587**	**ug/L**	1.789	1886434	3.342
	U	238	**52.360**	**ug/L**	1.144	2241940	3.972

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.317				
	Be	9	105.000				
	B	11	97.014				
	Na	23	93.746				
	Mg	24	102.346				
	Al	27	99.090				
	P	31	91.135				
	K	39	91.231				
	Ca	43	96.306				
>	Sc	45		97.6			
	Ti	47	100.016				
	V	51	100.973				
	Cr	52	102.157				
	Cr	53					
	Mn	55	104.825				
	Fe	57	106.033				
	Co	59	99.592				
	Ni	60	99.946				
	Cu	63					
	Cu	65	101.091				
	Zn	66	98.200				
	Zn	67					
	Zn	68					
>	Ge	74		93.4			
	As	75	97.609				
	Se	77					
	Se	82	101.130				
	Kr	83					
	Sr	88	105.296				
	Y	89					
	Mo	98	99.828				
	Ag	107	103.504				
	Cd	111	100.353				
	Cd	114					
>	In	115		92.4			
	Sn	120	103.903				
	Sb	121	103.872				
	Sb	123					
	Ba	135					
	Ba	137	96.060				
	Ho	165					
>	Lu	175		98.3			
	Tl	205	104.228				
	Pb	208	106.363				
	Bi	209					
	Th	232	97.173				
	U	238	104.721				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, December 10, 2009 04:22:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091209\QC Std 9.197

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.001**	**ug/L**	208.651	137	0.000
	Be	9	**0.008**	**ug/L**	97.100	26	0.000
	B	11	**2.991**	**ug/L**	16.741	2052	0.001
	Na	23	**3.074**	**ug/L**	77.364	30368	0.009
	Mg	24	**0.277**	**ug/L**	115.494	5001	0.001
	Al	27	**-0.041**	**ug/L**	1998.724	14007	-0.000
	P	31	**0.151**	**ug/L**	1364.352	6978	0.000
	K	39	**10.075**	**ug/L**	12.050	441727	0.041
	Ca	43	**2.438**	**ug/L**	102.916	364	0.000
>	Sc	45		**ug/L**		1473878	1473878.465
	Ti	47	**-0.008**	**ug/L**	95.374	400	-0.000
	V	51	**0.142**	**ug/L**	367.499	3181	0.001
	Cr	52	**0.145**	**ug/L**	48.802	2625	0.001
	Cr	53		**ug/L**		89497	0.008
	Mn	55	**0.021**	**ug/L**	13.712	1289	0.000
	Fe	57	**2.769**	**ug/L**	22.764	5213	0.000
	Co	59	**0.010**	**ug/L**	22.894	209	0.000
	Ni	60	**0.028**	**ug/L**	15.623	354	0.000
	Cu	63		**ug/L**		292	0.000
	Cu	65	**0.018**	**ug/L**	52.617	160	0.000
	Zn	66	**0.809**	**ug/L**	13.874	6453	0.002
	Zn	67		**ug/L**		13128	0.004
	Zn	68		**ug/L**		5370	0.002
>	Ge	74		**ug/L**		481304	481304.479
	As	75	**-0.170**	**ug/L**	130.896	-439	-0.000
	Se	77		**ug/L**		5670	0.002
	Se	82	**0.053**	**ug/L**	412.292	-13	0.000
	Kr	83		**ug/L**		132	0.000
	Sr	88	**0.010**	**ug/L**	28.183	593	0.001
	Y	89		**ug/L**		68	0.000
	Mo	98	**0.035**	**ug/L**	17.627	238	0.000
	Ag	107	**0.008**	**ug/L**	32.979	136	0.000
	Cd	111	**-0.000**	**ug/L**	141451.819	46	-0.000
	Cd	114		**ug/L**		110	0.000
>	In	115		**ug/L**		320561	320561.426
	Sn	120	**0.015**	**ug/L**	46.669	323	0.000
	Sb	121	**0.085**	**ug/L**	10.988	675	0.001
	Sb	123		**ug/L**		531	0.001
	Ba	135		**ug/L**		65	0.000
	Ba	137	**0.010**	**ug/L**	34.789	107	0.000
	Ho	165		**ug/L**		53	-0.000
>	Lu	175		**ug/L**		561933	561933.259
	Tl	205	**0.704**	**ug/L**	13.541	18484	0.024
	Pb	208	**0.009**	**ug/L**	23.699	1689	0.000
	Bi	209		**ug/L**		662	-0.000
	Th	232	**0.029**	**ug/L**	8.098	1781	0.002
	U	238	**0.011**	**ug/L**	11.609	1076	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9999
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9999
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\121009W1.SIF
Batch ID:
Results Data Set: 121009W2
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/10/2009 09:42:48**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0014	0.0004	09:43:48	Yes
2		[0.00]	0.0003	0.0008	0.0003	09:44:23	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0000				
%RSD:		0.00	9.67				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/10/2009 09:44:42**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0025	0.0112	0.0028	09:45:43	Yes
2		[0.2]	0.0025	0.0114	0.0028	09:46:18	Yes
Mean:		[0.2]	0.0025				
SD:		0.0	0.0000				
%RSD:		0.0	0.15				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01227 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/10/2009 09:46:37**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0066	0.0282	0.0069	09:47:38	Yes
2		[0.5]	0.0066	0.0284	0.0070	09:48:13	Yes
Mean:		[0.5]	0.0066				
SD:		0.0	0.0000				
%RSD:		0.0	0.22				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999491 Slope: 0.01325 Intercept: -0.00007

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/10/2009 09:48:33**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[2.0]	0.0239	0.1025	0.0242	09:49:34	Yes
2	[2.0]	0.0240	0.1019	0.0243	09:50:09	Yes
Mean:	[2.0]	0.0239				
SD:	0.0	0.0000				
%RSD:	0.0	0.21				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999625 Slope: 0.01191 Intercept: 0.00021

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/10/2009 09:50:29**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0599	0.2538	0.0603	09:51:31	Yes
2		[5.0]	0.0601	0.2523	0.0604	09:52:06	Yes
Mean:		[5.0]	0.0600				
SD:		0.0	0.0001				
%RSD:		0.0	0.17				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999946 Slope: 0.01196 Intercept: 0.00018

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/10/2009 09:52:26**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1145	0.4926	0.1148	09:53:26	Yes
2		[10.0]	0.1139	0.4873	0.1142	09:54:01	Yes
Mean:		[10.0]	0.1142				
SD:		0.0	0.0004				
%RSD:		0.0	0.39				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999700 Slope: 0.01145 Intercept: 0.00075

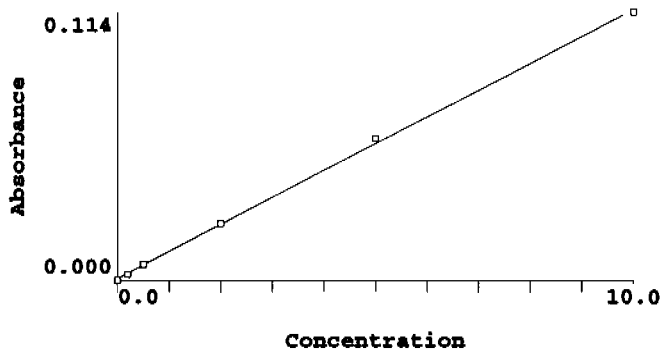

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.066	0.00	9.7
S0.2	0.0025	0.2	0.149	0.00	0.2
S0.5	0.0066	0.5	0.511	0.00	0.2
S2.0	0.0239	2.0	2.024	0.00	0.2
S5.0	0.0600	5.0	5.174	0.00	0.2
S10.0	0.1142	10.0	9.909	0.00	0.4

Correlation Coef.: 0.999700 Slope: 0.01145 Intercept: 0.00075

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/10/2009 09:54:20**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.980	4.980	0.0578	0.2472	0.0581	09:55:21	Yes
2	4.979	4.979	0.0577	0.2462	0.0581	09:55:56	Yes
Mean:	4.979	4.979	0.0578				
SD:	0.001	0.001	0.0000				
%RSD:	0.025	0.025	0.02				

QC value within limits for Hg 253.7 Recovery = 99.59%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/10/2009 09:56:16**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	0.0004	0.0058	0.0007	09:57:17	Yes
2	-0.040	-0.040	0.0003	0.0045	0.0006	09:57:52	Yes
Mean:	-0.036	-0.036	0.0003				
SD:	0.006	0.006	0.0001				
%RSD:	16.84	16.84	19.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/10/2009 09:58:12**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.181	0.181	0.0028	0.0135	0.0032	09:59:13	Yes
2	0.184	0.184	0.0029	0.0135	0.0032	09:59:48	Yes
Mean:	0.183	0.183	0.0028				
SD:	0.002	0.002	0.0000				
%RSD:	0.973	0.973	0.72				

QC value within limits for Hg 253.7 Recovery = 91.35%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/10/2009 10:00:08**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.296	5.296	0.0614	0.2571	0.0617	10:01:09	Yes
2	5.262	5.262	0.0610	0.2553	0.0613	10:01:44	Yes
Mean:	5.279	5.279	0.0612				
SD:	0.024	0.024	0.0003				
%RSD:	0.455	0.455	0.45				

QC value within limits for Hg 253.7 Recovery = 105.58%
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/10/2009 10:02:03**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	0.0001	0.0017	0.0004	10:03:04	Yes
2	-0.058	-0.058	0.0001	0.0017	0.0004	10:03:38	Yes
Mean:	-0.058	-0.058	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.265	0.265	1.86				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 1201987771|929474|1 **Date Collected: 12/10/2009 10:03:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987771|929474|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0003	0.0002	0.0001	10:05:00	Yes
2	-0.090	-0.090	-0.0003	0.0001	0.0001	10:05:35	Yes
Mean:	-0.090	-0.090	-0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	0.307	0.307	1.16				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 1201987772|929474|1 **Date Collected: 12/10/2009 10:05:55**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987772|929474|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.006	2.006	0.0237	0.1028	0.0241	10:06:57	Yes
2	0.146	0.146	0.0024	0.0072	0.0028	10:07:31	Yes
Mean:	1.076	1.076	0.0131				
SD:	1.315	1.315	0.0151				
%RSD:	122.2	122.2	115.17				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 242179001|929474|1 **Date Collected: 12/10/2009 10:07:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242179001|929474|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	0.0002	0.0025	0.0005	10:08:52	Yes
2	-0.051	-0.051	0.0002	0.0026	0.0005	10:09:27	Yes
Mean:	-0.051	-0.051	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.555	1.555	5.38				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 1201987773|929474|1 **Date Collected: 12/10/2009 10:09:46**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987773|929474|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.055	-0.055	0.0001	0.0022	0.0005	10:10:47	Yes
2	-0.057	-0.057	0.0001	0.0022	0.0004	10:11:22	Yes
Mean:	-0.056	-0.056	0.0001				
SD:	0.002	0.002	0.0000				

1	2.030	2.030	0.0240	0.1039	0.0243	10:20:20	Yes
2	2.025	2.025	0.0239	0.1035	0.0243	10:20:55	Yes
Mean:	2.027	2.027	0.0240				
SD:	0.004	0.004	0.0000				
%RSD:	0.173	0.173	0.17				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 241848004|928053|1 **Date Collected: 12/10/2009 10:21:15**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241848004|928053|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.062	-0.062	0.0000	0.0018	0.0004	10:22:16	Yes
2	-0.065	-0.065	0.0000	0.0012	0.0004	10:22:50	Yes
Mean:	-0.064	-0.064	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.975	2.975	83.01				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/10/2009 10:23:10**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.323	5.323	0.0617	0.2595	0.0620	10:24:10	Yes
2	5.301	5.301	0.0614	0.2585	0.0618	10:24:45	Yes
Mean:	5.312	5.312	0.0616				
SD:	0.016	0.016	0.0002				
%RSD:	0.296	0.296	0.29				

QC value within limits for Hg 253.7 Recovery = 106.24%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/10/2009 10:25:04**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.060	-0.060	0.0001	0.0015	0.0004	10:26:05	Yes
2	-0.062	-0.062	0.0000	0.0014	0.0004	10:26:40	Yes
Mean:	-0.061	-0.061	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.188	2.188	25.89				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 1201984355|928053|1 **Date Collected: 12/10/2009 10:26:59**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201984355|928053|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	0.0004	0.0036	0.0008	10:28:01	Yes
2	-0.032	-0.032	0.0004	0.0029	0.0007	10:28:36	Yes
Mean:	-0.030	-0.030	0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	8.441	8.441	7.06				

SD:	0.001	0.001	0.0000
%RSD:	1.295	1.295	120.36

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 1201990711|930757|1 **Date Collected: 12/10/2009 10:38:36**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201990711|930757|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.002	2.002	0.0237	0.1021	0.0240	10:39:36	Yes
2	1.987	1.987	0.0235	0.1021	0.0238	10:40:11	Yes
Mean:	1.995	1.995	0.0236				
SD:	0.011	0.011	0.0001				
%RSD:	0.544	0.544	0.53				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 242486001|930757|1 **Date Collected: 12/10/2009 10:40:30**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242486001|930757|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	0.0002	0.0023	0.0005	10:41:31	Yes
2	-0.051	-0.051	0.0002	0.0024	0.0005	10:42:06	Yes
Mean:	-0.051	-0.051	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.380	1.380	4.83				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 1201990712|930757|1 **Date Collected: 12/10/2009 10:42:25**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201990712|930757|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.061	-0.061	0.0001	0.0017	0.0004	10:43:25	Yes
2	-0.061	-0.061	0.0001	0.0019	0.0004	10:44:00	Yes
Mean:	-0.061	-0.061	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.129	0.129	1.78				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 1201990713|930757|1 **Date Collected: 12/10/2009 10:44:19**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201990713|930757|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.035	2.035	0.0240	0.1047	0.0244	10:45:20	Yes
2	1.994	1.994	0.0236	0.1030	0.0239	10:45:55	Yes
Mean:	2.014	2.014	0.0238				
SD:	0.029	0.029	0.0003				
%RSD:	1.436	1.436	1.39				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/10/2009 10:46:14**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.297	5.297	0.0614	0.2602	0.0617	10:47:15	Yes
2	5.283	5.283	0.0612	0.2587	0.0616	10:47:50	Yes
Mean:	5.290	5.290	0.0613				
SD:	0.010	0.010	0.0001				
%RSD:	0.185	0.185	0.18				

QC value within limits for Hg 253.7 Recovery = 105.80%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/10/2009 10:48:09**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.061	-0.061	0.0001	0.0015	0.0004	10:49:10	Yes
2	-0.058	-0.058	0.0001	0.0018	0.0004	10:49:45	Yes
Mean:	-0.059	-0.059	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	2.574	2.574	23.69				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 1201990714|930757|5 **Date Collected: 12/10/2009 10:50:04**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201990714|930757|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0001	0.0015	0.0004	10:51:05	Yes
2	-0.059	-0.059	0.0001	0.0018	0.0004	10:51:40	Yes
Mean:	-0.059	-0.059	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.184	0.184	1.52				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 242486002|930757|1 **Date Collected: 12/10/2009 10:51:59**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242486002|930757|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.066	-0.066	0.0000	0.0017	0.0003	10:53:00	Yes
2	-0.063	-0.063	0.0000	0.0019	0.0004	10:53:35	Yes
Mean:	-0.064	-0.064	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.530	2.530	111.59				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 242486003|930757|1 **Date Collected: 12/10/2009 10:53:55**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242486003|930757|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.060	-0.060	0.0001	0.0018	0.0004	10:54:56	Yes
2	-0.059	-0.059	0.0001	0.0020	0.0004	10:55:31	Yes
Mean:	-0.060	-0.060	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.424	1.424	13.82				

Mean:	1.959	1.959	0.0232
SD:	0.009	0.009	0.0001
%RSD:	0.440	0.440	0.43

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1201987692|929437|1 **Date Collected: 12/10/2009 11:05:32**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201987692|929437|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.965	1.965	0.0232	0.1012	0.0236	11:06:33	Yes
2	1.951	1.951	0.0231	0.1015	0.0234	11:07:08	Yes
Mean:	1.958	1.958	0.0232				
SD:	0.010	0.010	0.0001				
%RSD:	0.505	0.505	0.49				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 242161001|929437|1 **Date Collected: 12/10/2009 11:07:27**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242161001|929437|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.061	-0.061	0.0001	0.0020	0.0004	11:08:28	Yes
2	-0.062	-0.062	0.0000	0.0017	0.0004	11:09:03	Yes
Mean:	-0.062	-0.062	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.853	0.853	12.75				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/10/2009 11:09:22**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.126	5.126	0.0594	0.2561	0.0598	11:10:23	Yes
2	5.140	5.140	0.0596	0.2549	0.0599	11:10:58	Yes
Mean:	5.133	5.133	0.0595				
SD:	0.010	0.010	0.0001				
%RSD:	0.195	0.195	0.19				

QC value within limits for Hg 253.7 Recovery = 102.66%
All analyte(s) passed QC.

==========

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/10/2009 11:11:17**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.061	-0.061	0.0001	0.0016	0.0004	11:12:18	Yes
2	-0.060	-0.060	0.0001	0.0017	0.0004	11:12:53	Yes
Mean:	-0.060	-0.060	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.851	0.851	9.23				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 48 **Autosampler Location: 42**
Sample ID: 1201987693|929437|5 **Date Collected: 12/10/2009 11:13:12**

2	-0.063	-0.063	0.0000	0.0018	0.0004	11:32:13	Yes
Mean:	-0.064	-0.064	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.865	0.865	25.85				

==========

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/10/2009 11:32:33**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.030	5.030	0.0583	0.2520	0.0587	11:33:33	Yes
2	4.955	4.955	0.0575	0.2489	0.0578	11:34:08	Yes
Mean:	4.993	4.993	0.0579				
SD:	0.053	0.053	0.0006				
%RSD:	1.058	1.058	1.04				

QC value within limits for Hg 253.7 Recovery = 99.85%
All analyte(s) passed QC.

==========

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/10/2009 11:34:27**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0001	0.0018	0.0004	11:35:28	Yes
2	-0.060	-0.060	0.0001	0.0020	0.0004	11:36:02	Yes
Mean:	-0.060	-0.060	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.168	1.168	11.11				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 242046002|929426|1 **Date Collected: 12/10/2009 11:36:22**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242046002|929426|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.065	-0.065	0.0000	0.0016	0.0004	11:37:23	Yes
2	-0.064	-0.064	0.0000	0.0016	0.0004	11:37:58	Yes
Mean:	-0.065	-0.065	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.972	0.972	58.79				

==========

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 242046003|929426|1 **Date Collected: 12/10/2009 11:38:17**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242046003|929426|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.064	-0.064	0.0000	0.0018	0.0004	11:39:18	Yes
2	-0.067	-0.067	-0.0000	0.0015	0.0003	11:39:54	Yes
Mean:	-0.066	-0.066	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	3.711	3.711	>999.9%				

==========

Sequence No.: 62 **Autosampler Location: 54**

%RSD:	2.984	2.984	115.43

Sequence No.: 67
Sample ID: 1201987660|929426|1
Analyst: JXL1
Autosampler Location: 59
Date Collected: 12/10/2009 11:49:53
Data Type: Original

Replicate Data: 1201987660|929426|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.275	2.275	0.0268	0.1149	0.0271	11:50:54	Yes
2	2.266	2.266	0.0267	0.1141	0.0270	11:51:29	Yes
Mean:	2.271	2.271	0.0268				
SD:	0.006	0.006	0.0001				
%RSD:	0.278	0.278	0.27				

Sequence No.: 68
Sample ID: 1201987661|929426|5
Analyst: JXL1
Autosampler Location: 60
Date Collected: 12/10/2009 11:51:49
Data Type: Original

Replicate Data: 1201987661|929426|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.064	-0.064	0.0000	0.0017	0.0004	11:52:51	Yes
2	-0.065	-0.065	0.0000	0.0015	0.0004	11:53:25	Yes
Mean:	-0.065	-0.065	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.672	0.672	34.80				

Sequence No.: 69
Sample ID: 1201988994|930762|1
Analyst: JXL1
Autosampler Location: 61
Date Collected: 12/10/2009 11:53:46
Data Type: Original

Replicate Data: 1201988994|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.063	-0.063	0.0000	0.0018	0.0004	11:54:48	Yes
2	-0.067	-0.067	-0.0000	0.0014	0.0003	11:55:22	Yes
Mean:	-0.065	-0.065	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	5.202	5.202	424.78				

Sequence No.: 70
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 12/10/2009 11:55:43
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.761	4.761	0.0553	0.2394	0.0556	11:56:43	Yes
2	4.759	4.759	0.0552	0.2379	0.0556	11:57:18	Yes
Mean:	4.760	4.760	0.0552				
SD:	0.001	0.001	0.0000				
%RSD:	0.027	0.027	0.03				

QC value within limits for Hg 253.7 Recovery = 95.19%
All analyte(s) passed QC.

Sequence No.: 71
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 12/10/2009 11:57:37
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.064	-0.064	0.0000	0.0011	0.0004	11:58:38	Yes
2	-0.060	-0.060	0.0001	0.0016	0.0004	11:59:13	Yes
Mean:	-0.062	-0.062	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	4.825	4.825	72.28				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72 **Autosampler Location: 62**
Sample ID: 1201990720|930762|1 **Date Collected: 12/10/2009 11:59:33**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201990720|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.067	-0.067	-0.0000	0.0013	0.0003	12:00:34	Yes
2	-0.065	-0.065	0.0000	0.0013	0.0004	12:01:09	Yes
Mean:	-0.066	-0.066	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.042	2.042	364.56				

Sequence No.: 73 **Autosampler Location: 63**
Sample ID: 1201990721|930762|1 **Date Collected: 12/10/2009 12:01:29**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201990721|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.922	1.922	0.0228	0.1000	0.0231	12:02:30	Yes
2	1.916	1.916	0.0227	0.0999	0.0230	12:03:05	Yes
Mean:	1.919	1.919	0.0227				
SD:	0.004	0.004	0.0000				
%RSD:	0.216	0.216	0.21				

Sequence No.: 74 **Autosampler Location: 64**
Sample ID: 241839001|930762|1 **Date Collected: 12/10/2009 12:03:24**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 241839001|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.063	-0.063	0.0000	0.0014	0.0004	12:04:26	Yes
2	-0.064	-0.064	0.0000	0.0015	0.0004	12:05:00	Yes
Mean:	-0.064	-0.064	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.337	1.337	37.13				

Sequence No.: 75 **Autosampler Location: 65**
Sample ID: 1201988992|930762|1 **Date Collected: 12/10/2009 12:05:20**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201988992|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.629	1.629	0.0194	0.0840	0.0197	12:06:21	Yes
2	1.619	1.619	0.0193	0.0835	0.0196	12:06:56	Yes
Mean:	1.624	1.624	0.0193				
SD:	0.007	0.007	0.0001				
%RSD:	0.437	0.437	0.42				

Sequence No.: 76
Sample ID: 1201988993|930762|1
Analyst: JXL1
Autosampler Location: 66
Date Collected: 12/10/2009 12:07:16
Data Type: Original

Replicate Data: 1201988993|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.543	1.543	0.0184	0.0798	0.0188	12:08:18	Yes
2	1.533	1.533	0.0183	0.0789	0.0186	12:08:52	Yes
Mean:	1.538	1.538	0.0184				
SD:	0.007	0.007	0.0001				
%RSD:	0.459	0.459	0.44				

Sequence No.: 77
Sample ID: 1201990722|930762|1
Analyst: JXL1
Autosampler Location: 67
Date Collected: 12/10/2009 12:09:12
Data Type: Original

Replicate Data: 1201990722|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.064	-0.064	0.0000	0.0011	0.0004	12:10:14	Yes
2	-0.064	-0.064	0.0000	0.0014	0.0004	12:10:49	Yes
Mean:	-0.064	-0.064	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.170	0.170	5.65				

Sequence No.: 78
Sample ID: 1201990725|930762|5
Analyst: JXL1
Autosampler Location: 68
Date Collected: 12/10/2009 12:11:08
Data Type: Original

Replicate Data: 1201990725|930762|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.063	-0.063	0.0000	0.0016	0.0004	12:12:10	Yes
2	-0.062	-0.062	0.0000	0.0017	0.0004	12:12:45	Yes
Mean:	-0.062	-0.062	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.007	1.007	16.45				

Sequence No.: 79
Sample ID: 242299001|930762|1
Analyst: JXL1
Autosampler Location: 69
Date Collected: 12/10/2009 12:13:04
Data Type: Original

Replicate Data: 242299001|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.064	-0.064	0.0000	0.0014	0.0004	12:14:06	Yes
2	-0.067	-0.067	-0.0000	0.0012	0.0003	12:14:41	Yes
Mean:	-0.065	-0.065	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.726	2.726	425.09				

Sequence No.: 80
Sample ID: 242299002|930762|1
Analyst: JXL1
Autosampler Location: 70
Date Collected: 12/10/2009 12:15:00
Data Type: Original

Replicate Data: 242299002|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.063	-0.063	0.0000	0.0015	0.0004	12:16:02	Yes
2	-0.066	-0.066	0.0000	0.0012	0.0003	12:16:37	Yes
Mean:	-0.064	-0.064	0.0000				

SD:	0.002	0.002	0.0000
%RSD:	3.132	3.132	130.14

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 242299003|930762|1 **Date Collected: 12/10/2009 12:16:57**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 242299003|930762|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.067	-0.067	-0.0000	0.0013	0.0003	12:17:58	Yes
2	-0.066	-0.066	0.0000	0.0014	0.0003	12:18:33	Yes
Mean:	-0.066	-0.066	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.245	1.245	217.85				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/10/2009 12:18:53**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.819	4.819	0.0559	0.2420	0.0563	12:19:53	Yes
2	4.790	4.790	0.0556	0.2408	0.0559	12:20:28	Yes
Mean:	4.805	4.805	0.0558				
SD:	0.020	0.020	0.0002				
%RSD:	0.417	0.417	0.41				

QC value within limits for Hg 253.7 Recovery = 96.09%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/10/2009 12:20:47**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.060	-0.060	0.0001	0.0016	0.0004	12:21:48	Yes
2	-0.062	-0.062	0.0000	0.0016	0.0004	12:22:23	Yes
Mean:	-0.061	-0.061	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.731	1.731	20.90				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1201989025|930769|1 **Date Collected: 12/10/2009 12:22:42**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1201989025|930769|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.065	-0.065	0.0000	0.0015	0.0004	12:23:44	Yes
2	-0.066	-0.066	0.0000	0.0016	0.0003	12:24:19	Yes
Mean:	-0.065	-0.065	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.999	0.999	139.57				

==========

Sequence No.: 85 **Autosampler Location: 73**
Sample ID: 1201989354|930769|1 **Date Collected: 12/10/2009 12:24:39**
Analyst: JXL1 **Data Type: Original**

Miscellaneous

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 930761

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201990721	WHG091209-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
TB	1201988994		SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
MB	1201990720		SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
LCS	1201990721		SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
SAMPLE	241839001		SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
MS	1201988992	241839001	SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
MSD	1201988993	241839001	SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
DUP	1201990722	241839001	SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
SDILT	1201990725	241839001	SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
SAMPLE	242299001		SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
SAMPLE	242299002		SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL
SAMPLE	242299003		SW846 7470A Prep	09-DEC-2009 13:30	<2	2 mL	20 mL	10	SOIL

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1240182-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1236359-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG091209-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG091209-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG091209-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG091209-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG091209-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG091209-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 09-DEC-09 13:30
Digestion End Date: 09-DEC-09 15:30

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 930786

Lab SOP: GL-MA-E-008 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201990772	UI091119-A00	.5	mL
LCS	1201990772	UI091119-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
TB	1201988997		SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
MB	1201990771		SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
LCS	1201990772		SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
SAMPLE	241839001		SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
MS	1201988995	241839001	SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
DUP	1201990773	241839001	SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
SDILT	1201990775	241839001	SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
SAMPLE	242299001		SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
SAMPLE	242299002		SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL
SAMPLE	242299003		SW846 3010A	09-DEC-2009 07:05	<2	5 mL	50 mL	10	SOIL

Reagent/Solvent Lot ID	Amount	Description
1238343	2.5 mL	HYDROCHLORIC ACID
1238345	3 mL	Nitric Acid CONC.

Comments.

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930033.0 **Verified by:** _____
Analyst: Monifa Morant-Basdeo
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler # 101

Sample ID	1201988990 TB	241839001
Analysis Start Date	07-DEC-2009 15:00:00	07-DEC-2009 15:00:00
100% Solid Y/N		Y
(I) Sub Sample Aliquot I=G-H (g)		100
Initial pH (su)	4.98	8.74
pH Temperature (celsius)		50
Filtrate pH (su)	4.98	6
Final pH (su)	4.98	1.85
Tumbler Speed	28	28
Sample Properties <>/= Water	tclp#1	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000
Filtrate Volume (mL)	1000	1000

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:22
Filtration End Date: 08-DEC-09 13:30:22
Bottle Lot Number: h929301db
Filter Lot Number: 9125016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930035.0 **Verified by:** _____
Analyst: Monifa Morant-Basdeo
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler # 101

Sample ID Analysis Start Date	1201988994 TB 07-DEC-2009 15:00:00	241839001 07-DEC-2009 15:00:00	1201988992 MS (241839001) 07-DEC-2009 15:00:00	1201988993 MSD (241839001) 07-DEC-2009 15:00:00
100% Solid Y/N		Y	Y	Y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.98	8.74	8.74	8.74
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.98	6	6	6
Final pH (su)	4.98	1.85	1.85	1.85
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	tclp#1	Solid	Solid	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	500	250	50	50

Type	Sample Id	Description		Spike Amt	Units
MS	1201988992	TCLP PREP MERCURY SPIKE	1017820	1	mL
MSD	1201988993	TCLP PREP MERCURY SPIKE	1017820	1	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:30
Filtration End Date: 08-DEC-09 13:30:31
Bottle Lot Number: C901201R
Filter Lot Number: 9025016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930035.0 **Verified by:** _____
Analyst: Monifa Morant-Basdeo
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler # 101

Sample ID Analysis Start Date	242299001 07-DEC-2009 15:00:00	242299002 07-DEC-2009 15:00:00	242299003 07-DEC-2009 15:00:00
100% Solid Y/N	Y	Y	Y
(I) Sub Sample Aliquot I=G-H (g)	100	100	100
Initial pH (su)	9.66	9.58	9.72
pH Temperature (celsius)	50	50	50
Filtrate pH (su)	6	6	6
Final pH (su)	1.89	1.84	1.91
Tumbler Speed	28	28	28
Sample Properties <>/= Water	Solid	Solid	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000
Filtrate Volume (mL)	250	250	250

Type	Sample Id	Description	Serial Number	Spike Amt	Units
MS	1201988992	TCLP PREP MERCURY SPIKE	1017820	1	mL
MSD	1201988993	TCLP PREP MERCURY SPIKE	1017820	1	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:30
Filtration End Date: 08-DEC-09 13:30:31
Bottle Lot Number: C901201R
Filter Lot Number: 9025016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930036.0 **Verified by:** _____
Analyst: Monifa Morant-Basdeo
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler # 101

Sample ID Analysis Start Date	1201988997 TB 07-DEC-2009 15:00:00	241839001 07-DEC-2009 15:00:00	1201988995 MS (241839001) 07-DEC-2009 15:00:00	1201988996 MSD (241839001) 07-DEC-2009 15:00:00
100% Solid Y/N		Y	Y	Y
(I) Sub Sample Aliquot I=G-H (g)		100	100	100
Initial pH (su)	4.98	8.74	8.74	8.74
pH Temperature (celsius)		50	50	50
Filtrate pH (su)	4.98	6	6	6
Final pH (su)	4.98	1.85	1.85	1.85
Tumbler Speed	28	28	28	28
Sample Properties <>/= Water	tclp#1	Solid	Solid	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000	2000
Filtrate Volume (mL)	500	250	95	95

Type	Sample Id	Description		Spike Amt	Units
MS	1201988995	TCLP PREP SPIKE REG METALS	1017626	5	mL
MSD	1201988996	TCLP PREP SPIKE REG METALS	1017626	5	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:40
Filtration End Date: 08-DEC-09 13:30:40
Bottle Lot Number: C901201R
Filter Lot Number: 9025016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930036.0 **Verified by:** _____
Analyst: Monifa Morant-Basdeo
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler # 101

Sample ID Analysis Start Date	242299001 07-DEC-2009 15:00:00	242299002 07-DEC-2009 15:00:00	242299003 07-DEC-2009 15:00:00
100% Solid Y/N	Y	Y	Y
(I) Sub Sample Aliquot I=G-H (g)	100	100	100
Initial pH (su)	9.66	9.58	9.72
pH Temperature (celsius)	50	50	50
Filtrate pH (su)	6	6	6
Final pH (su)	1.89	1.84	1.91
Tumbler Speed	28	28	28
Sample Properties <>/= Water	Solid	Solid	Solid
(J) 20X Wet Solid Weight 20XC (g)	2000	2000	2000
Filtrate Volume (mL)	250	250	250

Type	Sample Id	Description	Serial Number	Spike Amt	Units
MS	1201988995	TCLP PREP SPIKE REG METALS	1017626	5	mL
MSD	1201988996	TCLP PREP SPIKE REG METALS	1017626	5	mL
RGNT	All	TCLP EXTRACTION FLUID 1	1018135	2000	mL
RGNT	All	1N HCl for pH testing	1202901	3.5	mL
REGNT	All	Nitric Acid CONC.	1100721TCLP	2.5	mL

Comments:

Extration End Date: 08-DEC-09 08:00:40
Filtration End Date: 08-DEC-09 13:30:40
Bottle Lot Number: C901201R
Filter Lot Number: 9025016
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

Prep Logbook

Toxicity Characteristic Leaching Procedure Preparation

Batch ID: 930034.0 **Verified by:** _____
Analyst: Clifford Postell
Method: SW846 1311

Lab SOP: GL-LB-E-006 REV# 13
Instrument: TCLP Tumbler #104

Sample ID	1201988991 TB	241839001
Analysis Start Date	07-DEC-2009 15:00:03	07-DEC-2009 15:00:03
100% Solid Y/N		y
(I) Sub Sample Aliquot I=G-H (g)		25
Initial pH (su)	4.93	
Final pH (su)	4.93	
Tumbler Speed	28	28
Sample Properties <>/= Water	tclp#1	Solid
(J) 20X Wet Solid Weight 20XC (g)	500	500
Filtrate Volume (mL)	40	40
VOA Positive Pressure Y/N	y	y
ZHE Vessle ID	21	24

Type	Sample Id	Description	Serial Number	Spike Amt	Units
RGNT	All	TCLP EXTRACTION FLUID 1	1018062ZHE	500	mL

Comments:

Extration End Date: 08-DEC-09 08:00:24
Filtration End Date: 08-DEC-09 13:58:24
Bottle Lot Number: B-9-195-01VB
Filter Lot Number: 521112
Extration Start Temperature: 23 C
Extration End Temperature: 23 C
Filtration End Temperature: 23 C

NCR Report No.: 768723
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
10-DEC-09	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
MERCURY	SW846 7470A	Solid	LANL
Batch ID:	**Sample Numbers:**		
930762	See Below		

Potentially affected work order(s)(SDG): 241839(10-670-1),242299(10-784-1)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201988992MS 2. Failed Recovery for MSD/PSD: QC 1201988993MSD	1. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike dup recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jason Loy 10-DEC-09

Data Validator/Group Leader:

Eric Lawson 10-DEC-09

Standard Logbook

Serial ID:	1017626	**Opened:**	21-OCT-09	**Amount :**	5 mL
Name:	TCLP PREP SPIKE	**Received:**	20-OCT-09	**Catalog Number :**	160062-01
Type:	Source Material	**Expires:**	21-OCT-10	**Lot Number :**	1017626
Employee:	Richard Dollinger	**Verified:**	02-AUG-08		
Supplier:	O2SI				

Description: TCLP PREP SPIKE REG METALS

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Antimony	40 mg/L
Arsenic	100 mg/L	Barium	200 mg/L
Beryllium	40 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Calcium	100 mg/L
Chromium	100 mg/L	Cobalt	40 mg/L
Copper	40 mg/L	Iron	40 mg/L
Lead	100 mg/L	Lithium	20 mg/L
Magnesium	40 mg/L	Manganese	40 mg/L
Molybdenum	40 mg/L	Nickel	40 mg/L
Potassium	100 mg/L	Selenium	20 mg/L
Silver	10 mg/L	Sodium	100 mg/L
Strontium	40 mg/L	Thallium	40 mg/L
Thorium	40 mg/L	Tin	40 mg/L
Total Uranium	20 mg/L	Uranium	20 mg/L
Uranium-235	.144 mg/L	Uranium-238	19.856 mg/L
Vanadium	40 mg/L	Zinc	40 mg/L
Zirconium	40 mg/L		

Serial ID:	1017820	**Opened:**	10-NOV-09	**Amount :**	1 mg/L
Name:	TCLP PREP Hg SPIKE	**Received:**	10-NOV-09	**Catalog Number :**	160060-02
Type:	Source Material	**Expires:**	10-NOV-10	**Lot Number :**	1017820
Employee:	Monifa Morant-Basdeo	**Verified:**	10-NOV-09	**Solvent :**	mercury
Supplier:	O2S1				

Description: TCLP PREP MERCURY SPIKE

Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1 mg/L		

Serial ID:	UHG1167639-01	**Opened:**	13-AUG-09	**Amount :**	125 mL
Name:	MHGSTOCK1	**Received:**	13-AUG-09	**Catalog Number :**	PLHG4-2Y
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	15-37HG
Employee:	Bryan Davis			**Solvent :**	10% HNO3
Supplier:	Spex				

Description: Mercury Source Standard #1 1,000 mg/L

Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L

Analyte	Concentration	Analyte	Concentration
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090814-12 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 14-AUG-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016930
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI090814-13 **Opened:** 14-AUG-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 14-AUG-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 14-AUG-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI090929-06 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 29-SEP-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017426
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI090929-07 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 29-SEP-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017428
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI090929-08 **Opened:** 29-SEP-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-SEP-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-SEP-10 **Lot Number :** 1017427
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091019-60 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091019-61 **Opened:** 19-OCT-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 19-OCT-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-OCT-10 **Lot Number :** 1017544
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Standard Logbook

Serial ID: UI091110-11 **Opened:** 10-NOV-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 10-NOV-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 10-NOV-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091119-A00 **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091119-B **Opened:** 19-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 19-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 19-NOV-10
Employee: Francena Armstrong
Supplier: O2si

Standard Logbook

Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG091209-01 **Opened:** 09-DEC-09 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 09-DEC-09 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 10-DEC-09 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG091209-02 **Opened:** 09-DEC-09 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Intermediate **Expires:** 10-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG091209-01 **Opened:** 09-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 15-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091209-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Standard Logbook

Serial ID: WHG091209-02 **Opened:** 09-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 15-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091209-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG091209-03 **Opened:** 09-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 15-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091209-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG091209-04 **Opened:** 09-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 15-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091209-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091209-05 **Opened:** 09-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 15-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091209-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Standard Logbook

Serial ID: WHG091209-06 **Opened:** 09-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 15-DEC-09
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG091209-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG091209-13 **Opened:** 09-DEC-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 09-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 15-DEC-09
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WMS091209-04 **Opened:** 09-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 09-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 10-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS091209-04A **Opened:** 09-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 09-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 10-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091209-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091209-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091209-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091209-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091209-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091209-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091209-05 **Opened:** 09-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 09-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 10-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI090929-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI090929-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI090929-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090929-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI090929-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS091209-06 **Opened:** 09-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 09-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 10-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1235248
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS091209-07 **Opened:** 09-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 09-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 10-DEC-09 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1238829
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091209-08 **Opened:** 09-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 09-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 10-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090814-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI090814-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI090814-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI090814-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI090814-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI090814-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI090814-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI090814-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI090814-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI090814-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091110-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091110-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091110-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091110-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091209-70 **Opened:** 09-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 09-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 10-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1238829
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091019-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091019-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091019-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091019-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091019-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091019-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091019-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091019-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1018062ZHE **Opened:** 07-DEC-09 **Lot Number :** 1018062
Name: TCLP1 **Received:** 03-DEC-09
Type: Reagent/Solvent **Expires:** 03-DEC-10
Employee: Clifford Postell **Verified:** 08-AUG-07
Supplier: O2SI
Description: TCLP EXTRACTION FLUID 1
Comments: None

Serial ID: 1018135 **Opened:** 07-DEC-09 **Lot Number :** 1018135
Name: TCLP1 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Clifford Postell **Verified:** 08-AUG-07
Supplier: O2SI
Description: TCLP EXTRACTION FLUID 1

Comments: None

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1202901 **Opened:** 14-OCT-09
Name: 1N HCl- TCLP **Received:** 14-OCT-09
Type: Reagent/Solvent **Expires:** 14-OCT-10
Employee: Monifa Morant-Basdeo
Supplier: GEL
Description: 1N HCl for pH testing
Comments: None

Standard Logbook

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1207193 **Opened:** 23-OCT-09 **Lot Number :** H39037
Name: I-HCL **Received:** 23-OCT-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 23-OCT-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1236359-C **Opened:** 01-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1238343 **Opened:** 04-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 04-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1238829 **Opened:** 07-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 07-DEC-09
Type: Reagent/Solvent **Expires:** 14-DEC-09
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1207193	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1240182-1 **Opened:** 09-DEC-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 09-DEC-09 **Lot Number :** H34040
Type: Reagent/Solvent **Expires:** 09-DEC-10
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	927057	**Method:**	SW846 9012A
Prep Batch :	927056	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
241838002	WST03-10-2134
1201982097	Method Blank (MB)
1201982098	241711006(RE03-09-13909) Sample Duplicate (DUP)
1201982099	241711006(RE03-09-13909) Matrix Spike (MS)
1201982100	241711006(RE03-09-13909) Matrix Spike Duplicate (MSD)
1201982101	Laboratory Control Sample (LCS)
1201982530	241913002(WST49-10-5433) Sample Duplicate (DUP)
1201982531	241913002(WST49-10-5433) Matrix Spike (MS)
1201982532	241913002(WST49-10-5433) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within

acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 241711006 (RE03-09-13909) and 241913002 (WST49-10-5433).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery falls outside of the client specified acceptance limits due to matrix interference. 1201982099 (RE03-09-13909).

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery falls outside of the client specified acceptance limits due to matrix interference: 1201982100 (RE03-09-13909).

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1201982098 (RE03-09-13909).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1201982101 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 765699 1201982099 (RE03-09-13909) and 1201982100 (RE03-09-13909).

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 21Dec09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-670 GEL Work Order: 241838

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 5, 2009

Client SDG: 10-670

Client Sample ID:	WST03-10-2134	Project:	LANL01004
Sample ID:	241838002	Client ID:	LANL010
Matrix:	R		
Collect Date:	23-NOV-09 12:00		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	6.76%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis Federal										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.1	258	ug/kg	1	AXC2 12/03/09	1152	927057	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	12/02/09	1200	927056

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 5, 2009
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241838

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 927057										
QC1201982098 241711006 DUP										
Cyanide, Total	U	ND	U	ND	ug/kg	N/A			AXC2	12/03/09 11:39
QC1201982530 241913002 DUP										
Cyanide, Total	U	ND	U	ND	ug/kg	N/A				12/03/09 11:54
QC1201982101 LCS										
Cyanide, Total	67900			54500	ug/kg		80.3	(46%-145%)		12/03/09 11:38
QC1201982097 MB										
Cyanide, Total			U	250	ug/kg					12/03/09 11:33
QC1201982099 241711006 MS										
Cyanide, Total	5530 U	ND		3030	ug/kg		54.8	(50%-130%)		12/03/09 11:40
QC1201982531 241913002 MS										
Cyanide, Total	5070 U	ND		4430	ug/kg		87.3	(50%-130%)		12/03/09 11:54
QC1201982100 241711006 MSD										
Cyanide, Total	5120 U	ND		3640	ug/kg	18.3	71.1	(0%-30%)		12/03/09 11:41
QC1201982532 241913002 MSD										
Cyanide, Total	4790 U	ND		5130	ug/kg	14.7	107	(0%-30%)		12/03/09 11:55

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor

QC Summary

Workorder: 241838

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 05-DEC-2009 10:56

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-670**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**03-DEC-2009 10:55:18**	**OM_12-3-2009_10-47-23**	**147**	**150**	**98**	**(90%-110%)**	**Yes**
CCV	03-DEC-2009 11:22:00	OM_12-3-2009_10-47-23	98.2	100	98	(90%-110%)	Yes
CCV	03-DEC-2009 11:34:26	OM_12-3-2009_10-47-23	98.7	100	99	(90%-110%)	Yes
CCV	03-DEC-2009 11:46:56	OM_12-3-2009_10-47-23	97.9	100	98	(90%-110%)	Yes
CCV	03-DEC-2009 11:59:26	OM_12-3-2009_10-47-23	98	100	98	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**03-DEC-2009 10:57:08**	**OM_12-3-2009_10-47-23**	**2.2**	**5**	**Yes**
CCB	03-DEC-2009 11:23:51	OM_12-3-2009_10-47-23	1	5	Yes
CCB	03-DEC-2009 11:36:16	OM_12-3-2009_10-47-23	0.32	5	Yes
CCB	03-DEC-2009 11:48:48	OM_12-3-2009_10-47-23	1.4	5	Yes
CCB	03-DEC-2009 12:01:15	OM_12-3-2009_10-47-23	0.487	5	Yes

Cyanide, Total

Prep LogBook

Analyst: SXJ1 Verified by:_____

Batch: 927056

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201982101	URF1200957-01	.25	g
MS	1201982099	URF1184831-02	.025	mL
MS	1201982531	URF1184831-02	.025	mL
MSD	1201982100	URF1184831-02	.025	mL
MSD	1201982532	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201982097		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
LCS	1201982101		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.25 g	25 mL	100	SOIL
SAMPLE	241711006		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.51 g	25 mL	49.01961	SOIL
DUP	1201982098	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
MS	1201982099	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
MSD	1201982100	241711006	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241711007		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241773001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.59 g	25 mL	42.37288	MISC SOLID
SAMPLE	241797001		SW846 9010C Distillation	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOLID
SAMPLE	241832001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241832002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241832003		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241832004		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241838002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	241913002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
DUP	1201982530	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
MS	1201982531	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.52 g	25 mL	48.07692	SOIL
MSD	1201982532	241913002	SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241916001		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	241916002		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916003		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	241916004		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	241916005		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	241916006		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	241916007		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916008		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	241916009		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	241916010		SW846 9010B Prep	02-DEC-2009 12:00	> 12	0.54 g	25 mL	46.2963	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
090731-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091202-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1174846-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1174824-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/3/2009 10:48:08	OM_12-3-2009_10-47-23
150 ppb		1	axc2	12/3/2009 10:49:00	OM_12-3-2009_10-47-23
100 ppb		1	axc2	12/3/2009 10:49:53	OM_12-3-2009_10-47-23
50 ppb		1	axc2	12/3/2009 10:50:46	OM_12-3-2009_10-47-23
10 ppb		1	axc2	12/3/2009 10:51:39	OM_12-3-2009_10-47-23
CRDL 5.0 ppb		1	axc2	12/3/2009 10:52:33	OM_12-3-2009_10-47-23
ICAL-00		1	axc2	12/3/2009 10:53:27	OM_12-3-2009_10-47-23
ICV		1	axc2	12/3/2009 10:55:18	OM_12-3-2009_10-47-23
ICB		1	axc2	12/3/2009 10:57:08	OM_12-3-2009_10-47-23
CRDL		1	axc2	12/3/2009 10:58:58	OM_12-3-2009_10-47-23
1201979071	925673	1	axc2	12/3/2009 11:00:47	OM_12-3-2009_10-47-23
1201979078*	925673	25	axc2	12/3/2009 11:01:41	OM_12-3-2009_10-47-23
241611008	925673	1	axc2	12/3/2009 11:02:34	OM_12-3-2009_10-47-23
1201979072	925673	1	axc2	12/3/2009 11:03:27	OM_12-3-2009_10-47-23
1201979074	925673	1	axc2	12/3/2009 11:04:20	OM_12-3-2009_10-47-23
1201979076	925673	1	axc2	12/3/2009 11:05:13	OM_12-3-2009_10-47-23
1201979078	925673	25	axc2	12/3/2009 11:06:06	OM_12-3-2009_10-47-23
241611009	925673	1	axc2	12/3/2009 11:06:58	OM_12-3-2009_10-47-23
1201979073	925673	1	axc2	12/3/2009 11:07:51	OM_12-3-2009_10-47-23
1201979075	925673	1	axc2	12/3/2009 11:08:43	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:09:36	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:11:26	OM_12-3-2009_10-47-23
1201979077	925673	1	axc2	12/3/2009 11:13:15	OM_12-3-2009_10-47-23
241613001	925673	1	axc2	12/3/2009 11:14:07	OM_12-3-2009_10-47-23
241613002	925673	1	axc2	12/3/2009 11:14:59	OM_12-3-2009_10-47-23
241613003	925673	1	axc2	12/3/2009 11:15:50	OM_12-3-2009_10-47-23
241613004	925673	1	axc2	12/3/2009 11:16:43	OM_12-3-2009_10-47-23
241613005	925673	1	axc2	12/3/2009 11:17:34	OM_12-3-2009_10-47-23
241613006	925673	1	axc2	12/3/2009 11:18:28	OM_12-3-2009_10-47-23
241613007	925673	1	axc2	12/3/2009 11:19:21	OM_12-3-2009_10-47-23
241613008	925673	1	axc2	12/3/2009 11:20:15	OM_12-3-2009_10-47-23
241613009	925673	1	axc2	12/3/2009 11:21:08	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:22:00	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:23:51	OM_12-3-2009_10-47-23
241613010	925673	1	axc2	12/3/2009 11:25:41	OM_12-3-2009_10-47-23
241613011	925673	1	axc2	12/3/2009 11:26:34	OM_12-3-2009_10-47-23
241613012	925673	1	axc2	12/3/2009 11:27:27	OM_12-3-2009_10-47-23
241613013	925673	1	axc2	12/3/2009 11:28:20	OM_12-3-2009_10-47-23
241613014	925673	1	axc2	12/3/2009 11:29:12	OM_12-3-2009_10-47-23
241613015	925673	1	axc2	12/3/2009 11:30:05	OM_12-3-2009_10-47-23
241613016	925673	1	axc2	12/3/2009 11:30:57	OM_12-3-2009_10-47-23
241613017	925673	1	axc2	12/3/2009 11:31:49	OM_12-3-2009_10-47-23
241613018	925673	1	axc2	12/3/2009 11:32:41	OM_12-3-2009_10-47-23
1201982097	927057	1	axc2	12/3/2009 11:33:33	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:34:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:36:16	OM_12-3-2009_10-47-23
1201982101	927057	25	axc2	12/3/2009 11:38:04	OM_12-3-2009_10-47-23
241711006	927057	1	axc2	12/3/2009 11:38:59	OM_12-3-2009_10-47-23
1201982098	927057	1	axc2	12/3/2009 11:39:52	OM_12-3-2009_10-47-23
1201982099	927057	1	axc2	12/3/2009 11:40:45	OM_12-3-2009_10-47-23
1201982100	927057	1	axc2	12/3/2009 11:41:39	OM_12-3-2009_10-47-23
241711007	927057	1	axc2	12/3/2009 11:42:32	OM_12-3-2009_10-47-23
241773001	927057	1	axc2	12/3/2009 11:43:25	OM_12-3-2009_10-47-23
241797001	927057	1	axc2	12/3/2009 11:44:19	OM_12-3-2009_10-47-23
241832001	927057	1	axc2	12/3/2009 11:45:12	OM_12-3-2009_10-47-23
241832002	927057	1	axc2	12/3/2009 11:46:04	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009 11:46:56	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009 11:48:48	OM_12-3-2009_10-47-23

241832003	927057	1	axc2	12/3/2009	11:50:36	OM_12-3-2009_10-47-23
241832004	927057	1	axc2	12/3/2009	11:51:28	OM_12-3-2009_10-47-23
241838002	927057	1	axc2	12/3/2009	11:52:21	OM_12-3-2009_10-47-23
241913002	927057	1	axc2	12/3/2009	11:53:12	OM_12-3-2009_10-47-23
1201982530	927057	1	axc2	12/3/2009	11:54:05	OM_12-3-2009_10-47-23
1201982531	927057	1	axc2	12/3/2009	11:54:57	OM_12-3-2009_10-47-23
1201982532	927057	1	axc2	12/3/2009	11:55:51	OM_12-3-2009_10-47-23
241916001	927057	1	axc2	12/3/2009	11:56:45	OM_12-3-2009_10-47-23
241916002	927057	1	axc2	12/3/2009	11:57:39	OM_12-3-2009_10-47-23
241916003	927057	1	axc2	12/3/2009	11:58:32	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	11:59:26	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:01:15	OM_12-3-2009_10-47-23
241916004	927057	1	axc2	12/3/2009	12:03:04	OM_12-3-2009_10-47-23
241916005	927057	1	axc2	12/3/2009	12:03:58	OM_12-3-2009_10-47-23
241916006	927057	1	axc2	12/3/2009	12:04:51	OM_12-3-2009_10-47-23
241916007	927057	1	axc2	12/3/2009	12:05:44	OM_12-3-2009_10-47-23
241916008	927057	1	axc2	12/3/2009	12:06:37	OM_12-3-2009_10-47-23
241916009	927057	1	axc2	12/3/2009	12:07:30	OM_12-3-2009_10-47-23
241916010	927057	1	axc2	12/3/2009	12:08:23	OM_12-3-2009_10-47-23
CCV		1	axc2	12/3/2009	12:09:15	OM_12-3-2009_10-47-23
CCB		1	axc2	12/3/2009	12:11:05	OM_12-3-2009_10-47-23

Author: axc2 Date : 12/3/2009

Original Run Filename: OM_12-3-2009_10-47-23.OMN created 12/3/2009 10:47:23
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-3-2009_10-47-23.OMN last modified 12/3/2009 12:12:10
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091203-01	1	S1	200	7.99	12/3/2009@10:48:08			200 ppb
WCN091203-02	1	S2	150	6.19	12/3/2009@10:49:00			150 ppb
WCN091203-03	1	S3	100	4.24	12/3/2009@10:49:53			100 ppb
WCN091203-04	1	S4	50.0	2.09	12/3/2009@10:50:46			50 ppb
WCN091203-05	1	S5	10.0	0.592	12/3/2009@10:51:39			10 ppb
WCN091203-06	1	S6	5.00	0.278	12/3/2009@10:52:33			CRDL 5.0 ppb
WCN091203-08	1	S7	0.00	0.0373	12/3/2009@10:53:27			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99957 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN091203-07	1	S8	147	6.01	12/3/2009@10:55:18			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN091203-08	1	S7	2.20	0.208	12/3/2009@10:57:08			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.20 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.20 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN091203-06	1	S6	4.06	0.283	12/3/2009@10:58:58			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.06 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.06 > 2.50					
		Message	Pass					
		Action	None					
1201979071|925673|MB	1	1	-1.68	0.0532	12/3/2009@11:00:47			
1201979078||LCS	1	2	11.7	0.589	12/3/2009@11:01:41		25.00	
241611008	1	3	-0.599	0.0965	12/3/2009@11:02:34			
1201979072||DUP	1	4	-0.795	0.0887	12/3/2009@11:03:27			
1201979074||MS	1	5	70.9	2.95	12/3/2009@11:04:20			
1201979076||MSD	1	6	80.6	3.34	12/3/2009@11:05:13			
1201979078||LCS	1	2	25.5	1.14	12/3/2009@11:06:06		25.00	
241611009	1	7	17.4	0.817	12/3/2009@11:06:58			
1201979073||DUP	1	8	5.46	0.339	12/3/2009@11:07:51			
1201979075||MS	1	9	88.6	3.66	12/3/2009@11:08:43			
WCN091203-03	1	S3	101	4.15	12/3/2009@11:09:36			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.7 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.780	0.152	12/3/2009@11:11:26			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.780 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.780 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201979077|MSD	1	10	82.7	3.43	12/3/2009@11:13:15			
241613001	1	11	0.938	0.158	12/3/2009@11:14:07			
241613002	1	12	-1.31	0.0680	12/3/2009@11:14:59			
241613003	1	13	-0.466	0.102	12/3/2009@11:15:50			
241613004	1	14	-1.77	0.0499	12/3/2009@11:16:43			
241613005	1	15	-2.01	0.0401	12/3/2009@11:17:34			
241613006	1	16	-1.04	0.0791	12/3/2009@11:18:28			
241613007	1	17	-3.14	-0.00502	12/3/2009@11:19:21			
241613008	1	18	-1.19	0.0728	12/3/2009@11:20:15			
241613009	1	19	-1.89	0.0448	12/3/2009@11:21:08			
WCN091203-03	1	S3	98.2	4.05	12/3/2009@11:22:00			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.00	0.161	12/3/2009@11:23:51			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.00 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.00 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241613010	1	20	-1.14	0.0750	12/3/2009@11:25:41			
241613011	1	21	-1.02	0.0798	12/3/2009@11:26:34			
241613012	1	22	-1.37	0.0656	12/3/2009@11:27:27			
241613013	1	23	-1.94	0.0429	12/3/2009@11:28:20			
241613014	1	24	-1.11	0.0762	12/3/2009@11:29:12			
241613015	1	25	-1.39	0.0648	12/3/2009@11:30:05			
241613016	1	26	-2.32	0.0277	12/3/2009@11:30:57			
241613017	1	27	-1.67	0.0537	12/3/2009@11:31:49			
241613018	1	28	-1.71	0.0522	12/3/2009@11:32:41			
1201982097|927057|MB	1	29	-2.09	0.0369	12/3/2009@11:33:33			
WCN091203-03	1	S3	98.7	4.07	12/3/2009@11:34:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.320	0.133	12/3/2009@11:36:16			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	0.320 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.320 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201982101||LCS	1	30	21.8	0.993	12/3/2009@11:38:04		25.00	
241711006	1	31	-0.519	0.0997	12/3/2009@11:38:59			
1201982098||DUP	1	32	-1.52	0.0599	12/3/2009@11:39:52			
1201982099||MS	1	33	54.8	2.31	12/3/2009@11:40:45			
1201982100||MSD	1	34	71.1	2.96	12/3/2009@11:41:39			
241711007	1	35	3.43	0.258	12/3/2009@11:42:32			
241773001	1	36	-0.499	0.101	12/3/2009@11:43:25			
241797001	1	37	14.2	0.686	12/3/2009@11:44:19			
241832001	1	38	-1.40	0.0644	12/3/2009@11:45:12			
241832002	1	39	-1.84	0.0467	12/3/2009@11:46:04			
WCN091203-03	1	S3	97.9	4.04	12/3/2009@11:46:56			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	1.40	0.177	12/3/2009@11:48:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.40 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.40 > -5.00					
		Message	CCB Passed					
		Action	Continue					
241832003	1	40	-1.85	0.0466	12/3/2009@11:50:36			
241832004	1	41	-2.42	0.0238	12/3/2009@11:51:28			
241838002	1	42	-1.55	0.0586	12/3/2009@11:52:21			
241913002	1	43	-1.87	0.0457	12/3/2009@11:53:12			
1201982530||DUP	1	44	-2.04	0.0388	12/3/2009@11:54:05			
1201982531||MS	1	45	87.3	3.61	12/3/2009@11:54:57			
1201982532||MSD	1	46	107	4.40	12/3/2009@11:55:51			
241916001	1	47	4.73	0.309	12/3/2009@11:56:45			
241916002	1	48	-1.83	0.0471	12/3/2009@11:57:39			
241916003	1	49	-0.985	0.0811	12/3/2009@11:58:32			
WCN091203-03	1	S3	98.0	4.04	12/3/2009@11:59:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.487	0.140	12/3/2009@12:01:15			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.487 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.487 > -5.00					
		Message	CCB Passed					
		Action	Continue					

241916004	1	50	0.626	0.145	12/3/2009@12:03:04			
241916005	1	51	1.13	0.166	12/3/2009@12:03:58			
241916006	1	52	0.169	0.127	12/3/2009@12:04:51			
241916007	1	53	1.78	0.192	12/3/2009@12:05:44			
241916008	1	54	-0.0502	0.118	12/3/2009@12:06:37			
241916009	1	55	1.36	0.175	12/3/2009@12:07:30			
241916010	1	56	2.34	0.214	12/3/2009@12:08:23			
WCN091203-03	1	S3	97.4	4.02	12/3/2009@12:09:15			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091203-08	1	S7	0.892	0.156	12/3/2009@12:11:05			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.892 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.892 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-3-2009_10-47-23.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 12/3/2009

Channel 1: Current View

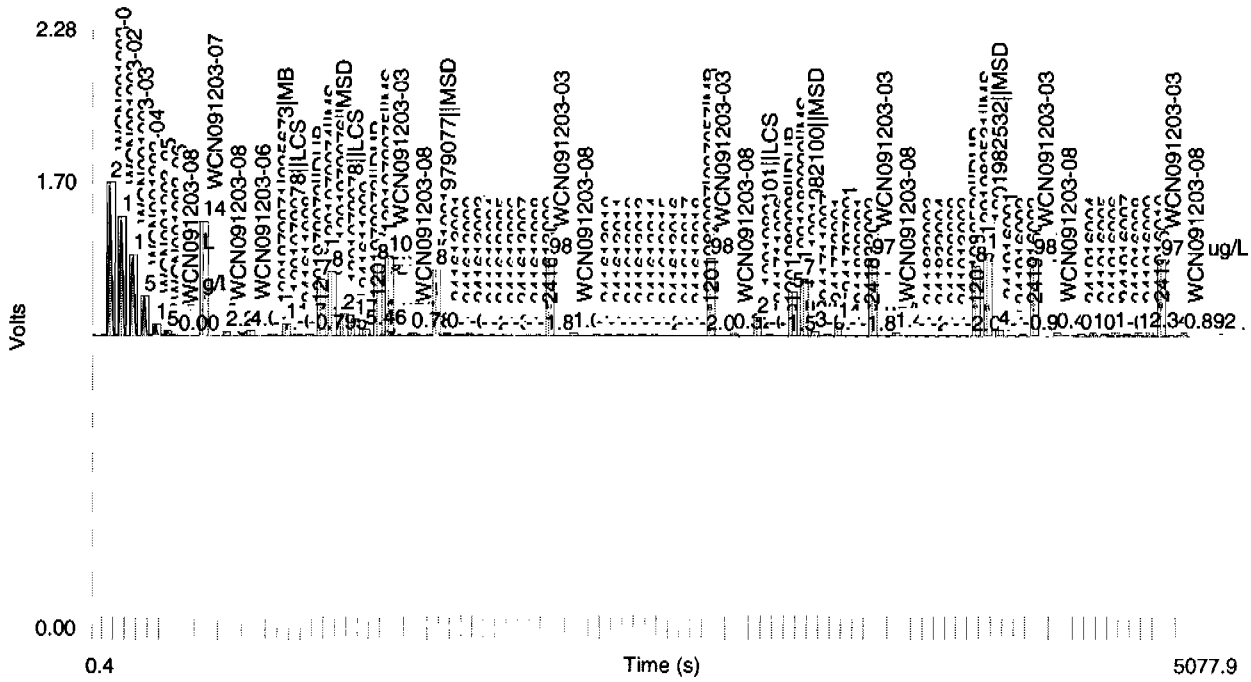

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.99	0.588	1.5	12/3/2009	10:49:12
2	150	1	6.19	0.459	-1.3	12/3/2009	10:50:04
3	100	1	4.24	0.313	-3.1	12/3/2009	10:50:56
4	50.0	1	2.09	0.153	1.3	12/3/2009	10:51:49
5	10.0	1	0.592	0.0436	-13.4	12/3/2009	10:52:42
6	5.00	1	0.278	0.0191	14.0	12/3/2009	10:53:36
7	0.00	1	0.0373	6.20e-4		12/3/2009	10:54:30

Figure 1: TCYANIDE

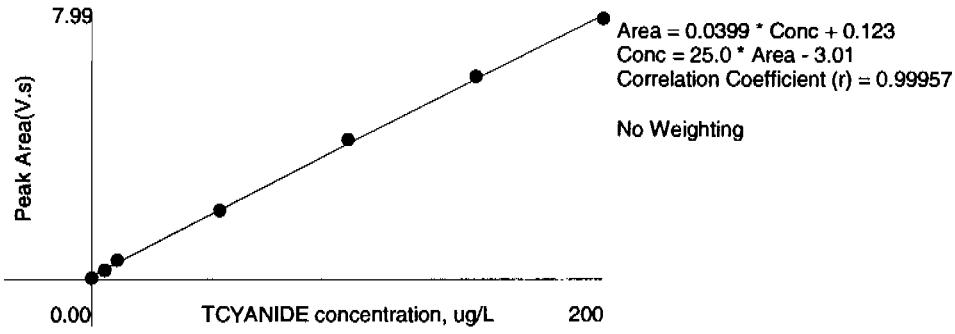

Miscellaneous

NCR Report No.: 765699
Revision No.: 3

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
04-DEC-09			
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
	SW846 9012A	%Null%	
Batch ID:	**Sample Numbers:**		
927057	1201982099, 1201982100		

Potentially affected work order(s)(SDG): 241711(10-649),241773,241797(EUI-7408),241832(10-669),241838(10-670),241913(10-695),241916(10-697)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed recovery for MS/MSD: QC 1201982099MS QC 1201982100MSD	1. The spike recovery falls outside of the client specified acceptance limits due to matrix interference. The Matrix spike duplicate verified the result with a passing RPD.

Originator's Name:

Ashley Earl 04-DEC-09

Data Validator/Group Leader:

Elzbieta Szulc 04-DEC-09

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-670

Method/Analysis Information

Procedure: **Dry Weight-Percent Moisture**

Analytical Method:

Analytical Batch Number: 926975

Sample ID	Client ID
241838002	WST03-10-2134
1201981936	241838002(WST03-10-2134) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 9.

Calibration Information:

Quality Control (QC) Information:

Designated QC
The following sample was used for QC: 241838002 (WST03-10-2134). The QC was from LANL work order 241838.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU. Not Applicable.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
Not Applicable. The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**AM241**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928318
Prep Batch Number:	927174

Sample ID	Client ID
241838002	WST03-10-2134
1201985027	Method Blank (MB)
1201985028	241900001(RE03-09-13923) Sample Duplicate (DUP)
1201985029	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201985027 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241900001 (RE03-09-13923). The QC was from LANL work order 241900.

QC Information
Refer to Non-Conformance Report.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
The laboratory control sample, 1201985029 (LCS), was recounted due to high tracer yield. Second count confirmed original results, reporting original results.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 771662 was generated due to Failed Recovery for Surrogate or Tracer. 1. The Laboratory Control Sample 1201985029 does not meet the client tracer yield requirements of 50 to 105 percent. 1. The GEL standard tracer yield requirements of 15 to 125 percent and the recovery requirements were met. Client granted relief to report data. Reporting results.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOPU**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928321
Prep Batch Number:	927174

Sample ID	Client ID
241838002	WST03-10-2134
1201985035	Method Blank (MB)
1201985036	241900001(RE03-09-13923) Sample Duplicate (DUP)
1201985037	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201985035 (MB) was changed to 1.0 per client request.

Designated QC

The following sample was used for QC: 241900001 (RE03-09-13923). The QC was from LANL work order 241900.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Samples were given additional clean-up steps and recounted in order to remove suspected interferences.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
Manual integration of alpha spectroscopy spectra 1201985037 (LCS) was performed to fully separate counts in Regions of Interest which would have been biased.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**ISOU**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	928323
Prep Batch Number:	927174

Sample ID	Client ID
241838002	WST03-10-2134
1201985038	Method Blank (MB)
1201985039	241900001(RE03-09-13923) Sample Duplicate (DUP)
1201985040	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquot for sample 1201985038 (MB) was changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241900001 (RE03-09-13923). The QC was from LANL work order 241900.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The MDCs are calculated using a blank population.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**SR90**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	927434
Prep Batch Number:	927174

Sample ID	Client ID
241838002	WST03-10-2134
1201982850	Method Blank (MB)
1201982851	241913001(WST49-10-5432) Sample Duplicate (DUP)
1201982852	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 13.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. The initial Calibration was performed in January 2009.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
Aliquots for samples 1201982850 (MB) and 1201982852 (LCS) were changed to 1.0 per client request.

Designated QC
The following sample was used for QC: 241913001 (WST49-10-5432). The QC was from LANL work order 241913.

QC Information
All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Sample 1201982850 (MB) was recounted due to high MDA.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**H3**
Analytical Method:	GL-RAD-A-002
Analytical Batch Number:	927684

Sample ID	Client ID
241838002	WST03-10-2134
1201983606	Method Blank (MB)
1201983607	241900001(RE03-09-13923) Sample Duplicate (DUP)
1201983608	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 18.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. The initial Calibrations were performed in July 2009, August 2009 and September 2009.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volumes in this batch.

Designated QC
The following sample was used for QC: 241900001 (RE03-09-13923). The QC was from LANL work order 241900.

QC Information

All of the QC samples met the required acceptance limits.

CSU
The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Sample 1201983606 (MB) was recounted due to the quench number being outside the calibration range. Recount is being reported.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: 12/17/09

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
17-DEC-09	Radiochemistry	SOP	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ALPHA SPECTROMETER	DOE EML HASL-300, Am-05-RC Modified	Solid	LANL
Batch ID:	**Sample Numbers:**		
928318	See Below		

Potentially affected work order(s)(SDG): 241838(10-670),241900(10-688),241915(10-696)

Application Issues:

Failed Recovery for Surrogate or Tracer

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The Laboratory Control Sample 1201985029 does not meet the client tracer yield requirements of 50 to 105 percent.	1. The GEL standard tracer yield requirements of 15 to 125 percent and the recovery requirements were met. Client granted relief to report data. Reporting results.

Originator's Name:
Jessica Downey 17-DEC-09

Data Validator/Group Leader:
Eric Brimstin 17-DEC-09

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-670 GEL Work Order: 241838

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 12/17/09

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 17, 2009

Client Sample ID:	WST03-10-2134	Project:	LANL01004
Sample ID:	241838002	Client ID:	LANL010
Matrix:	R		
Collect Date:	23-NOV-09		
Receive Date:	25-NOV-09		
Collector:	Client		
Moisture:	7.12%		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
"As Received"												
Rad Alpha Spec Analysis												
AM241 "Dry Weight Corrected"												
Americium-241	U	0.0016	0.0225	+/-0.00386	0.050	pCi/g		MXE1	12/12/09	1002	928318	2
ISOPU "Dry Weight Corrected"												
Plutonium-238	U	-0.00277	0.0224	+/-0.0083	0.050	pCi/g		MXE1	12/15/09	0827	928321	3
Plutonium-239/240	U	-0.00415	0.0253	+/-0.00415	0.050	pCi/g						
ISOU "Dry Weight Corrected"												
Uranium-233/234		0.961	0.146	+/-0.0992	0.100	pCi/g		MXE1	12/10/09	1952	928323	5
Uranium-235/236	U	0.0594	0.0886	+/-0.0269	0.100	pCi/g						
Uranium-238		0.798	0.0805	+/-0.0849	0.100	pCi/g						
Rad Gas Flow Proportional Counting												
SR90 "Dry Weight Corrected"												
Strontium-90	U	0.0931	0.291	+/-0.086	0.500	pCi/g		JXR1	12/04/09	1242	927434	6
Rad Liquid Scintillation Analysis												
H3 "As Received"												
Tritium		184	78.3	+/-30.6	250	pCi/L		KXK2	12/07/09	0157	927684	7

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Am-05-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, Pu-11-RC Modified
5	DOE EML HASL-300, U-02-RC Modified
6	EPA 905.0 Modified
7	GL-RAD-A-002

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	AM241 "Dry Weight Corrected"	94.2	(50%-105%)
Plutonium-242 Tracer	ISOPU "Dry Weight Corrected"	79.9	(50%-105%)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: December 17, 2009

Client Sample ID: WST03-10-2134
Sample ID: 241838002
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Uranium-232 Tracer		ISOU "Dry Weight Corrected"		74.2	(50%-105%)							
Strontium Carrier		SR90 "Dry Weight Corrected"		70.6	(50%-105%)							

Notes:
TPU is calculated at the 67% confidence level (1-sigma).
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d 5-day BOD--The 2:1 depletion requirement was not met for this sample
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: December 17, 2009

Client : Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 241838

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 928318										
QC1201985028 241900001 DUP										
Americium-241	U	0.000836	U	-0.00433	pCi/g	0.239		(0-1)	MXE1	12/12/0910:02
	TPU:	+/-0.00392		+/-0.00689						
	Yield:	85.5		92.1						
QC1201985029 LCS										
Americium-241	33.2			25.8	pCi/g		77.7	(75%-125%)		
	TPU:			+/-1.72						
	Yield:			119						
QC1201985027 MB										
Americium-241			U	-0.00228	pCi/g					12/11/0911:57
	TPU:			+/-0.00248						
	Yield:			95.0						
Batch 928321										
QC1201985036 241900001 DUP										
Plutonium-238	U	-0.00562	U	-0.00282	pCi/g	0.182		(0-1)	MXE1	12/15/0908:27
	TPU:	+/-0.00526		+/-0.00245						
	Yield:	82.0		74.5						
Plutonium-239/240	U	0.00281	U	0.0127	pCi/g	0.623		(0-1)		
	TPU:	+/-0.00281		+/-0.00512						
	Yield:	82.0		74.5						
QC1201985037 LCS										
Plutonium-238				5.27	pCi/g			(75%-125%)		
	TPU:			+/-0.404						
	Yield:			80.6						
Plutonium-239/240	41.8			32.1	pCi/g		76.8	(75%-125%)		
	TPU:			+/-1.93						
	Yield:			80.6						
QC1201985035 MB										
Plutonium-238			U	-0.00239	pCi/g					
	TPU:			+/-0.00534						
	Yield:			54.9						
Plutonium-239/240			U	0.00239	pCi/g					
	TPU:			+/-0.00534						
	Yield:			54.9						
Batch 928323										
QC1201985039 241900001 DUP										
Uranium-233/234		0.668		0.726	pCi/g	0.167		(0-1)	MXE1	12/10/0919:53
	TPU:	+/-0.0876		+/-0.087						
	Yield:	55.0		60.6						
Uranium-235/236	U	0.0565	U	0.0808	pCi/g	0.215		(0-1)		
	TPU:	+/-0.0294		+/-0.0271						
	Yield:	55.0		60.6						
Uranium-238		0.718		0.695	pCi/g	0.0657		(0-1)		
	TPU:	+/-0.0921		+/-0.0833						

QC Summary

Workorder: 241838

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 928323										
	Yield:	55.0		60.6						
QC1201985040 LCS										
Uranium-233/234				6.41	pCi/g			(75%-125%)		12/10/0919:53
	TPU:			+/-0.584						
	Yield:			104						
Uranium-235/236			U	0.181	pCi/g			(75%-125%)		
	TPU:			+/-0.0842						
	Yield:			104						
Uranium-238	5.75			5.56	pCi/g		96.6	(75%-125%)		
	TPU:			+/-0.521						
	Yield:			104						
QC1201985038 MB										
Uranium-233/234			U	0.00114	pCi/g					12/10/0919:53
	TPU:			+/-0.00676						
	Yield:			98.7						
Uranium-235/236			U	-0.00655	pCi/g					
	TPU:			+/-0.00488						
	Yield:			98.7						
Uranium-238			U	-0.00177	pCi/g					
	TPU:			+/-0.00395						
	Yield:			98.7						
Rad Gas Flow										
Batch 927434										
QC1201982851 241913001 DUP										
Strontium-90	U	-0.0741	U	-0.0841	pCi/g	0.0294		(0-1)	JXR1	12/04/0912:30
	TPU:	+/-0.0713		+/-0.0993						
	Yield:	79.6		69.5						
QC1201982852 LCS										
Strontium-90	19.3			23.1	pCi/g		119	(75%-125%)		12/04/0912:31
	TPU:			+/-2.92						
	Yield:			86.3						
QC1201982850 MB										
Strontium-90			U	-0.221	pCi/g					12/04/0920:06
	TPU:			+/-0.107						
	Yield:			86.3						
Rad Liquid Scintillation										
Batch 927684										
QC1201983607 241900001 DUP										
Tritium	U	30.2	U	38.1	pCi/L	0.086		(0-1)	KXK2	12/07/0917:55
	TPU:	+/-22.4		+/-23.4						
QC1201983608 LCS										
Tritium	5620			6180	pCi/L		110	(75%-125%)		12/07/0919:58
	TPU:			+/-505						
QC1201983606 MB										
Tritium			U	68.5	pCi/L					12/10/0902:46
	TPU:			+/-46.3						

QC Summary

Workorder: 241838

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

Notes:
The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 9

Batch# 928318 Product: AM Date: 12/17/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.		✓	NCN# 771662
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			NA
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.	✓		NCN# 771662
Batch non-conformances second reviewed and disposition verified to be completed.	✓		NCN# 771662
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature] 12/17/09

Secondary Review Performed By: [signature] 12/17/09

12/9-12/19

Am/Cm Que Sheet

02-DEC-09

Batch #: 928318 | Analyst: MXE1 | First Client Due Date: 19-DEC-09 | Internal Due Date09-DEC-09 | Comments:

Tracer(s): Am243/Cm244 | Tracer Code: 445-96-2-55 | Expiration Date: 5/11/10 | Vol: 0.1ml

LCS Isotope(s): Am241/Cm244 | LCS Code(s): 0244-B / NA | Expiration Date: 4-30-10 / NA | Vol(s): 0.1g / NA

Spike Isotope(s): Am241/Cm244 | Spike Code(s): NA / NA | Expiration Date: NA / NA | Vol(s): NA / NA

Prep Date: 12/1/9 | Initials: MU | Pipet ID: 449 706 3 | Balance ID: 50410272 | Witness: JAO 12/07/09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g / l / f)	Am/Cm Det #
241838002-1	WST03-10-2134	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	1	1	1.253	31
241900001-1	RE03-09-13923	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	2	2	1.246	33
241900002-1	RE03-09-13924	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	3	3	1.252	35
241900003-1	RE03-09-13922	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	4	4	1.253	36
241900004-1	RE03-09-13925	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	5	5	1.251	37
241900006-1	RE03-10-7034	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	6	6	1.250	38
241915001-1	RE16-10-111	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	7	7	1.258	39
241915002-1	RE16-10-102	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	8	8	1.246	40
241915003-1	RE16-10-118	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	9	9	1.256	41
241915004-1	RE16-10-103	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	10	10	1.251	42
241915005-1	RE16-10-106	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	11	11	1.253	43
241915006-1	RE16-10-100	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	12	12	1.248	44
241915007-1	RE16-10-104	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	13	13	1.247	45
241915008-1	RE16-10-108	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	14	14	1.251	46
241915009-1	RE16-10-101	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	15	15	1.247	47
241915010-1	RE16-10-109	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	16	16	1.257	48
241915011-1	RE16-10-110	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	17	17	1.252	65
1201985027-1	MB for batch 928318	MB		.05 pCi/g	SOIL	QC ACCOUNT		18	18	~~1.250~~ 1.0	103
1201985028-1	RE03-09-13923(241900001DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	24-NOV-09	19	19	1.246	66
1201985029-1	LCS for batch 928318	LCS		.05 pCi/g	SOIL	QC ACCOUNT		20	20	0.118	67

Choose SOP Used: GL-RAD-A-011
~~GL-RAD-A-036~~
GL-RAD-A-045

Solid Sample Dissolution by: LEACH ~~or~~ DIGESTION
Circle One

Data Reviewed By: 12/17/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 928318

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201985028	DUP	Americium-241	1.25 g	-0.00433	0.00689	0.0246	-.001824	pCi/g	NO
1201985029	LCS	Americium-241	0.118 g	25.8	1.72	0.198	-.01932203	pCi/g	NO
1201985027	MB	Americium-241	1.00 g	-0.00228	0.00248	0.0283	-.00228	pCi/g	NO
241838002	WST03-10-2134	Americium-241	1.25 g	0.0016	0.00386	0.0225	-.001824	pCi/g	NO
241900001	RE03-09-13923	Americium-241	1.25 g	0.000836	0.00392	0.0263	-.001824	pCi/g	NO
241900002	RE03-09-13924	Americium-241	1.25 g	0.00603	0.00502	0.0258	-.001824	pCi/g	NO
241900003	RE03-09-13922	Americium-241	1.25 g	-0.000606	0.00509	0.024	-.001824	pCi/g	NO
241900004	RE03-09-13925	Americium-241	1.25 g	-0.00545	0.00833	0.0238	-.001824	pCi/g	NO
241900006	RE03-10-7034	Americium-241	1.25 g	0.00893	0.00651	0.0236	-.001824	pCi/g	NO
241915001	RE16-10-111	Americium-241	1.26 g	-0.00298	0.00694	0.023	-.00180952	pCi/g	NO
241915002	RE16-10-102	Americium-241	1.25 g	0.00144	0.0071	0.0322	-.001824	pCi/g	NO
241915003	RE16-10-118	Americium-241	1.26 g	-0.000678	0.00502	0.0225	-.00180952	pCi/g	NO
241915004	RE16-10-103	Americium-241	1.25 g	-0.000625	0.00441	0.0237	-.001824	pCi/g	NO
241915005	RE16-10-106	Americium-241	1.25 g	0.0106	0.00594	0.0245	-.001824	pCi/g	NO
241915006	RE16-10-100	Americium-241	1.25 g	0.0075	0.00592	0.0263	-.001824	pCi/g	NO
241915007	RE16-10-104	Americium-241	1.25 g	0.0017	0.00398	0.0232	-.001824	pCi/g	NO
241915008	RE16-10-108	Americium-241	1.25 g	0.0132	0.00462	0.0228	-.001824	pCi/g	NO
241915009	RE16-10-101	Americium-241	1.25 g	-0.00314	0.00636	0.0258	-.001824	pCi/g	NO
241915010	RE16-10-109	Americium-241	1.26 g	0.00279	0.00592	0.0227	-.00180952	pCi/g	NO
241915011	RE16-10-110	Americium-241	1.25 g	0.0158	0.0052	0.0248	-.001824	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928318 SAMPLE DATE : 23-NOV-2009 00:00:00	SAMPLE ID : S0241838002_AM SAMPLE QTY: 1.253 G
DETECTOR NUMBER :79988 AVERAGE %EFFICIENCY :33.4677 % YIELD : 94.151	COUNT DATE:12-DEC-2009 10:02:43 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.74601 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B031.CNF;1087 BKG DATE : 9-DEC-2009 EFF FILE : W031.CNF;341 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	34.000	-5.000	39.000	4.8778	100.0000	-5.72E-03	9.77E-03	1.29E-02	2.90E-02	9.77E-03
CM-5/6	5386.000	8.000	8.000	0.000	19.8796	86.09000	1.06E-02	3.80E-03	6.13E-02	1.26E-01	3.75E-03
AM-241	5479.150	8.000	1.404	5.000	3.6563	99.94000	1.60E-03	3.86E-03	9.71E-03	2.25E-02	3.86E-03
CM-242	6102.000	14.000	9.000	5.000	3.7846	100.0000	1.12E-02	5.45E-03	1.00E-02	2.32E-02	5.41E-03
AM243	5270.000	922.000	917.000	5.000	2.2361	99.78000	1.05E+00	7.14E-02	5.95E-03	1.50E-02	3.48E-02
CM-247	4946.000	12.000	8.000	4.000	18.5713	79.30000	1.15E-02	5.80E-03	6.22E-02	1.28E-01	5.75E-03
CM-248	5078.600	17.000	15.000	2.000	26.3889	91.00000	1.88E-02	5.58E-03	7.70E-02	1.57E-01	5.46E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

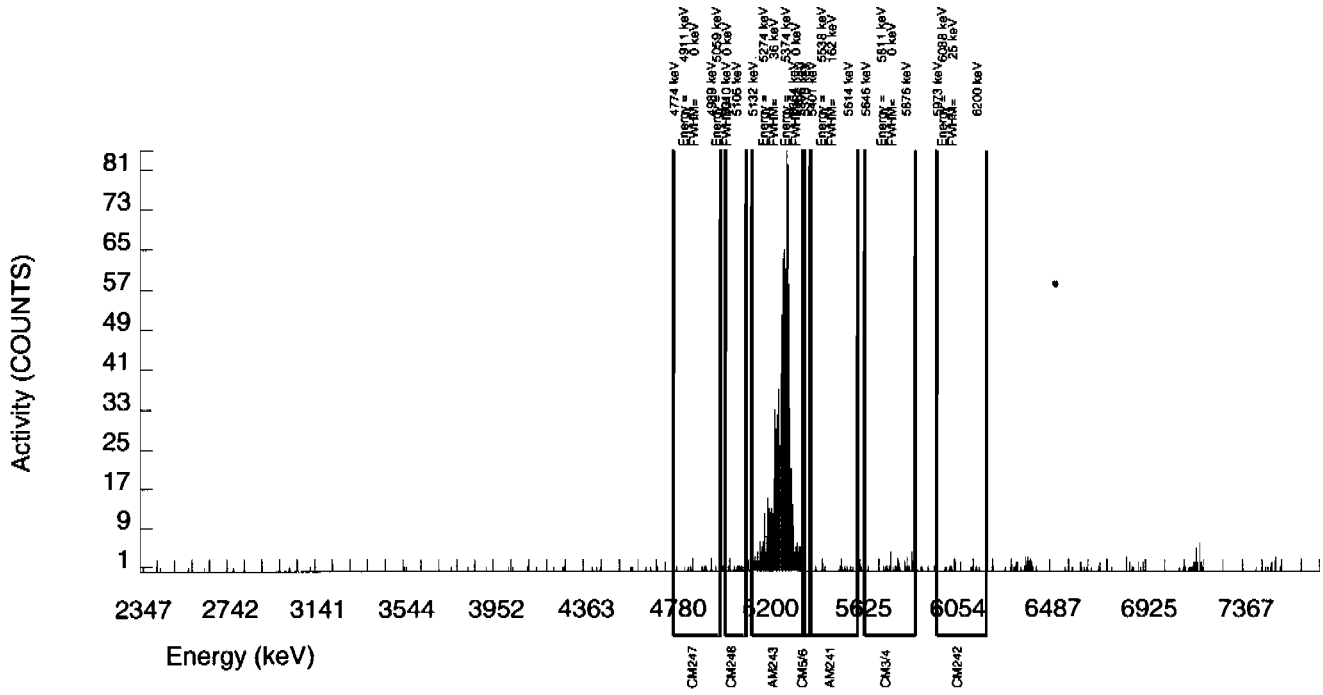

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928318 SAMPLE DATE : 24-NOV-2009 00:00:00	SAMPLE ID : S0241900001_AM SAMPLE QTY: 1.246 G
DETECTOR NUMBER :78785 AVERAGE %EFFICIENCY :31.6999 % YIELD : 85.526	COUNT DATE:12-DEC-2009 10:02:43 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.317E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91662 dpm RESULTS : 2.49446 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B033.CNF;1086 BKG DATE : 9-DEC-2009 EFF FILE : W033.CNF;326 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	45.000	-2.000	47.000	4.8778	100.0000	-2.67E-03	1.28E-02	1.51E-02	3.39E-02	1.28E-02
CM-5/6	5386.000	5.000	4.000	1.000	19.8796	86.09000	6.20E-03	3.81E-03	7.16E-02	1.47E-01	3.79E-03
AM-241	5479.150	6.000	0.627	4.000	3.6563	99.94000	8.36E-04	3.92E-03	1.13E-02	2.63E-02	3.92E-03
CM-242	6102.000	12.000	6.000	6.000	3.7846	100.0000	8.67E-03	6.15E-03	1.17E-02	2.71E-02	6.13E-03
AM243	5270.000	793.000	789.000	4.000	2.0000	99.78000	1.05E+00	7.45E-02	6.22E-03	1.61E-02	3.77E-02
CM-247	4946.000	9.000	9.000	0.000	18.5713	79.30000	1.51E-02	5.13E-03	7.26E-02	1.50E-01	5.04E-03
CM-248	5078.600	10.000	9.000	1.000	26.3889	91.00000	1.32E-02	4.93E-03	9.00E-02	1.84E-01	4.86E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

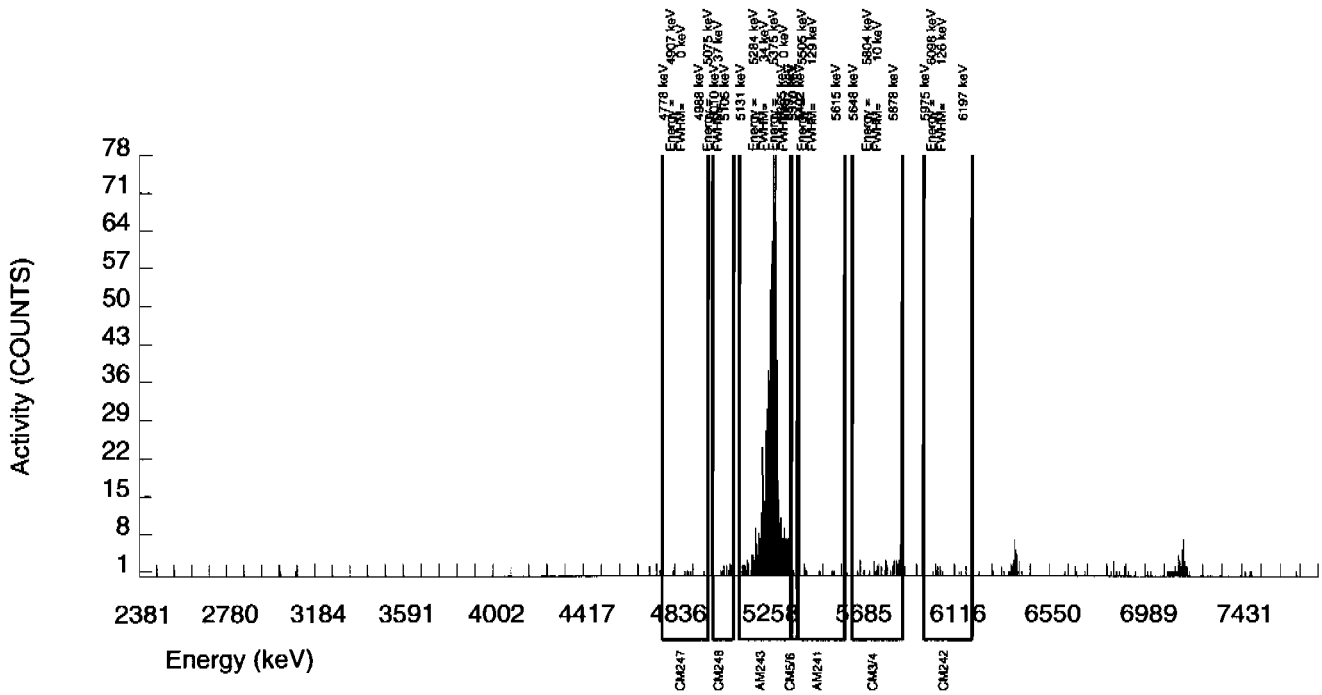

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928318 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201985027_AM SAMPLE QTY: 1.000 G
DETECTOR NUMBER :79461 AVERAGE %EFFICIENCY :33.1045 % YIELD : 94.976	COUNT DATE:11-DEC-2009 11:57:44 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91660 dpm RESULTS : 2.77007 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B103.CNF;662 BKG DATE : 6-DEC-2009 EFF FILE : W103.CNF;194 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	6.000	3.000	3.000	4.8778	100.0000	4.30E-03	4.31E-03	1.63E-02	3.64E-02	4.30E-03
CM-5/6	5386.000	1.000	1.000	0.000	19.8796	86.09000	1.66E-03	1.67E-03	7.70E-02	1.58E-01	1.66E-03
AM-241	5479.150	2.000	-1.593	2.000	3.6563	99.94000	-2.28E-03	2.48E-03	1.22E-02	2.83E-02	2.48E-03
CM-242	6102.000	7.000	7.000	0.000	3.7846	100.0000	1.02E-02	3.92E-03	1.26E-02	2.91E-02	3.87E-03
AM243	5270.000	918.000	915.000	3.000	1.7321	99.78000	1.31E+00	8.95E-02	5.79E-03	1.55E-02	4.36E-02
CM-247	4946.000	18.000	11.000	7.000	18.5713	79.30000	1.99E-02	9.11E-03	7.81E-02	1.61E-01	9.03E-03
CM-248	5078.600	17.000	16.000	1.000	26.3889	91.00000	2.52E-02	6.85E-03	9.67E-02	1.98E-01	6.68E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

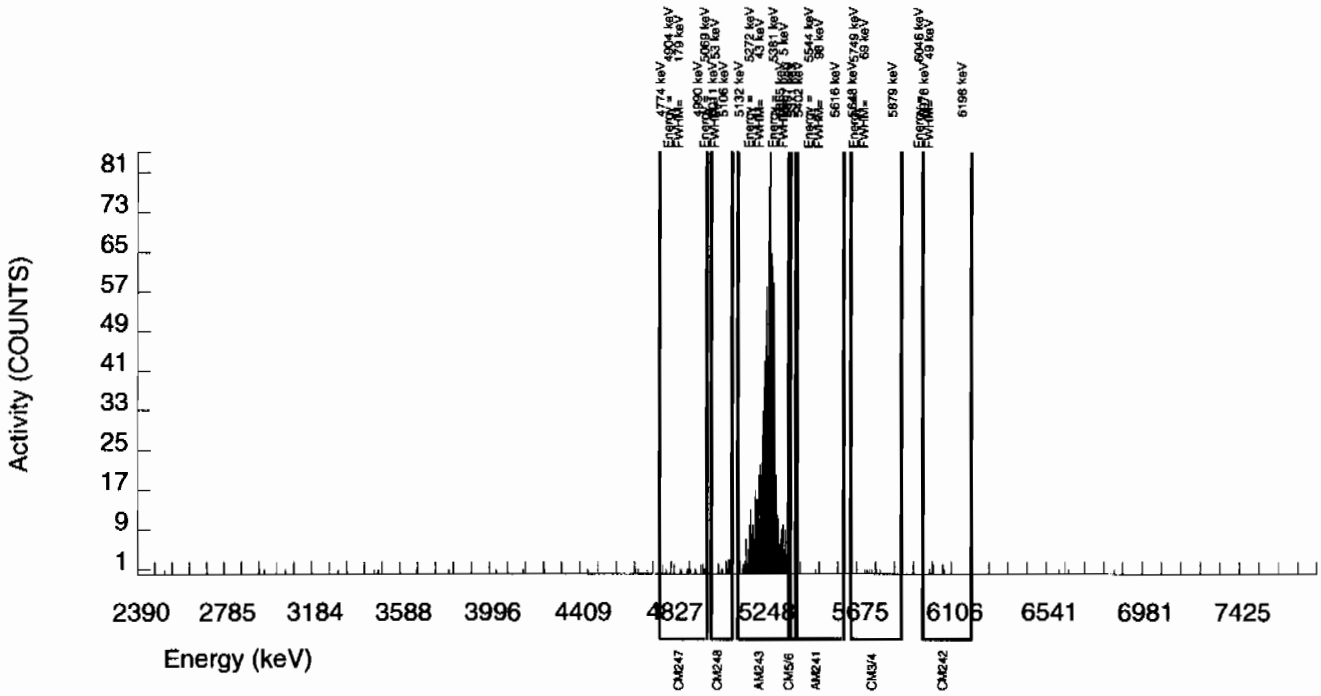

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928318 SAMPLE DATE : 24-NOV-2009 00:00:00	SAMPLE ID : S1201985028_AM SAMPLE QTY: 1.246 G
DETECTOR NUMBER :46-089C1 AVERAGE %EFFICIENCY :31.4811 % YIELD : 92.124	COUNT DATE:12-DEC-2009 10:02:46 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 445-96-2-SS	LIB FILE : ENV_ALPHA_AM.N
ISOTOPE : AM-241	ISOTOPE : AM-241	ISOTOPE : AM243	BKG FILE : B066.CNF;1083
PCI/G : 3.317E+01	PCI/G : 3.317E+01	NOMINAL : 2.91662 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 2.68690 dpm	EFF FILE : W066.CNF;304
			CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	17.000	8.000	9.000	4.8778	100.0000	9.99E-03	6.40E-03	1.41E-02	3.17E-02	6.37E-03
CM-5/6	5386.000	16.000	15.000	1.000	19.8796	86.09000	2.17E-02	6.11E-03	6.70E-02	1.38E-01	5.97E-03
AM-241	5479.150	15.000	-3.469	17.000	3.6563	99.94000	-4.33E-03	6.89E-03	1.06E-02	2.46E-02	6.89E-03
CM-242	6102.000	12.000	9.000	3.000	3.7846	100.0000	1.22E-02	5.28E-03	1.10E-02	2.53E-02	5.23E-03
AM243	5270.000	856.000	844.000	12.000	3.4641	99.78000	1.05E+00	7.35E-02	1.01E-02	2.35E-02	3.68E-02
CM-247	4946.000	9.000	3.000	6.000	18.5713	79.30000	4.72E-03	6.09E-03	6.79E-02	1.40E-01	6.09E-03
CM-248	5078.600	10.000	10.000	0.000	26.3889	91.00000	1.37E-02	4.41E-03	8.41E-02	1.72E-01	4.33E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

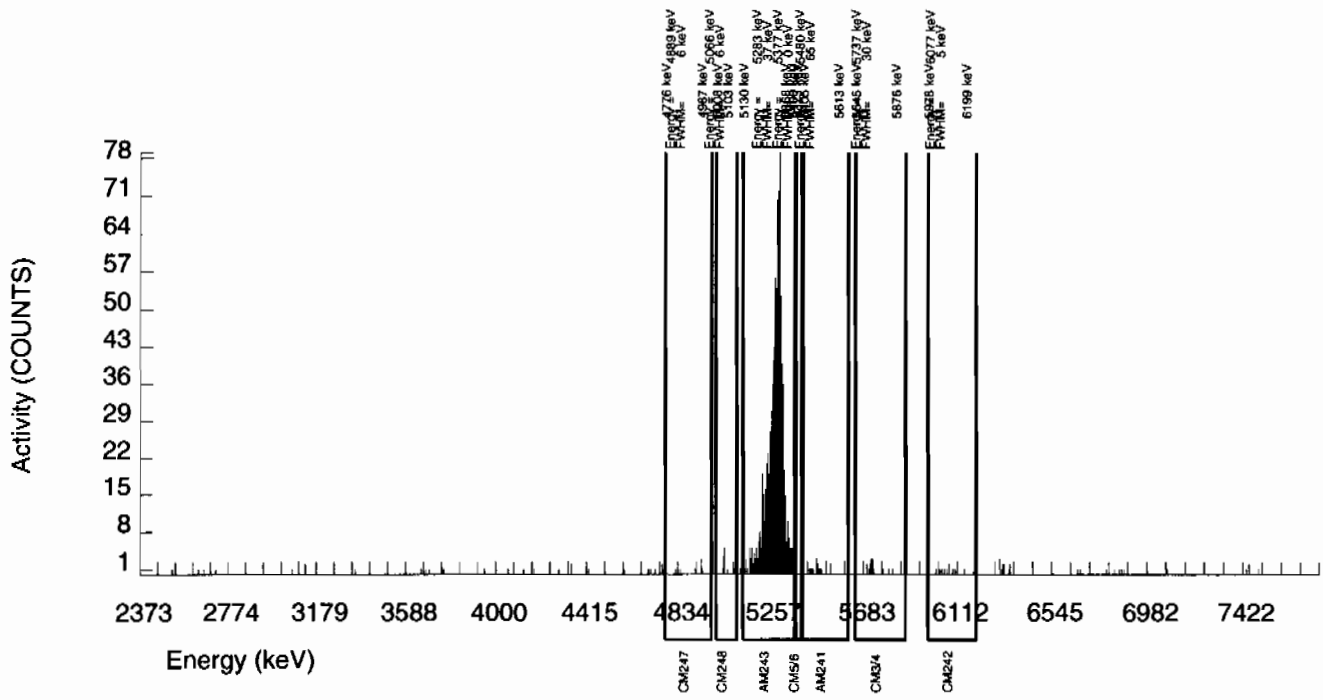

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928318 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201985029_AM SAMPLE QTY: 0.118 G
DETECTOR NUMBER :46-089B4 AVERAGE %EFFICIENCY :32.0760 % YIELD : 118.804	COUNT DATE:12-DEC-2009 10:02:46 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 0244-B ISOTOPE : AM-241 PCI/G : 3.316E+01	ID : 445-96-2-SS ISOTOPE : AM243 NOMINAL : 2.91660 dpm RESULTS : 3.46504 dpm	LIB FILE : ENV_ALPHA_AM.N BKG FILE : B067.CNF;1081 BKG DATE : 6-DEC-2009 EFF FILE : W067.CNF;285 CAL DATE : 10-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
CM-3/4	5795.020	11.000	2.000	9.000	4.8778	100.0000	2.00E-02	4.48E-02	1.14E-01	2.54E-01	4.48E-02
CM-5/6	5386.000	82.000	80.000	2.000	19.8796	86.09000	9.31E-01	1.22E-01	5.38E-01	1.11E+00	1.07E-01
AM-241	5479.150	2580.000	2571.070	7.000	3.6563	99.94000	2.58E+01	1.72E+00	8.53E-02	1.98E-01	5.10E-01
CM-242	6102.000	4.000	2.000	2.000	3.7846	100.0000	2.05E-02	2.52E-02	8.82E-02	2.04E-01	2.51E-02
AM243	5270.000	1117.000	1109.000	8.000	2.8284	99.78000	1.11E+01	7.87E-01	6.61E-02	1.59E-01	3.37E-01
CM-247	4946.000	25.000	17.000	8.000	18.5713	79.30000	2.15E-01	7.39E-02	5.46E-01	1.13E+00	7.26E-02
CM-248	5078.600	34.000	32.000	2.000	26.3889	91.00000	3.52E-01	6.98E-02	6.76E-01	1.38E+00	6.60E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of AM243 calculated as sqrt(BKG AREA)
NOTE: Corrections made to AM-241 net area due to tracer impurity

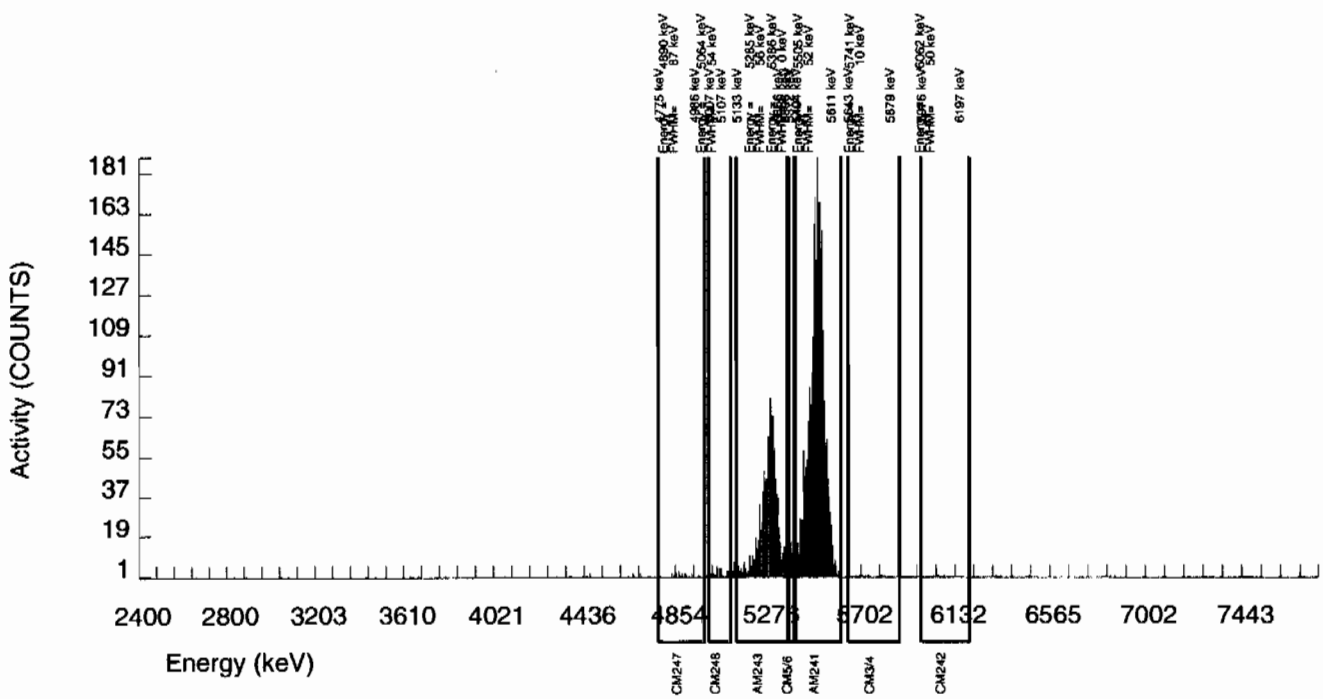

Radiochemistry Batch Checklist, Rev 9

Batch# 928321 Product: Pu Date: 12/17/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			NA
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			NA
Batch non-conformances second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature] 12/17/09

Secondary Review Performed By: [signature] 12/17/09

12/9 - 12/19

p1

Plutonium Que Sheet

02-DEC-09

Batch #: 928321 Analyst: MXE1 First Client Due Date: 19-DEC-09 Internal Due Date: 09-DEC-09

Tracer Isotope(s): Pu-242/Pu-238 Tracer Code: 1373-A Expiration Date: 10/27/10 Vol: 0.1

LCS Isotope(s): Pu-239/Pu-238 LCS Code: 0244-B Expiration Date: 9/30/20 Vol: 0.1g

Spike Isotope(s): Pu-239/Pu-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/7/9 Initials: MW Pipet ID: 4491063 Balance ID: 50410272 Witness: 12/07/09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g l / l)	Pu Det #
241838002-1	WST03-10-2134	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	1	1	1.253	25 247
241900001-1	RE03-09-13923	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	2	2	1.246	26 248
241900002-1	RE03-09-13924	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	3	3	1.252	27 249
241900003-1	RE03-09-13922	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	4	4	1.253	28 250
241900004-1	RE03-09-13925	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	5	5	1.251	29 251
241900006-1	RE03-10-7034	SAMPLE		.05 pCi/g	SOIL	LANL010	24-NOV-09	6	6	1.250	30 252
241915001-1	RE16-10-111	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	7	7	1.258	31 253
241915002-1	RE16-10-102	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	8	8	1.246	71 254
241915003-1	RE16-10-118	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	9	9	1.256	35 255
241915004-1	RE16-10-103	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	10	10	1.251	36 7
241915005-1	RE16-10-106	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	11	11	1.253	72 8
241915006-1	RE16-10-100	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	12	12	1.248	38 9
241915007-1	RE16-10-104	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	13	13	1.247	39 10
241915008-1	RE16-10-108	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	14	14	1.251	40 11
241915009-1	RE16-10-101	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	15	15	1.247	41 12
241915010-1	RE16-10-109	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	16	16	1.257	42 14
241915011-1	RE16-10-110	SAMPLE		.05 pCi/g	SOIL	LANL010	23-NOV-09	17	17	1.252	73 16
1201985035-1	MB for batch 928321	MB		.05 pCi/g	SOIL	QC ACCOUNT		18	18	1.01 ~~1.252~~	102
1201985036-1	RE03-09-13923(241900001DUP)	DUP		.05 pCi/g	SOIL	QC ACCOUNT	24-NOV-09	19	19	1.246	45 17
1201985037-1	LCS for batch 928321	LCS		.05 pCi/g	SOIL	QC ACCOUNT		20	20	0.118	46 18

Choose SOP Used: GL-RAD-A-011 / GL-RAD-A-045 / GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: 12/17/09

GEL Laboratories LLC, , Radiochemistry Division

12/17/09

Blank Correction Report

Batch ID 928321

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201985036	DUP	Plutonium-238	1.25 g	-0.00282	0.00245	0.0229	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0127	0.00512	0.0258	.001912	pCi/g	NO
1201985037	LCS	Plutonium-238	0.118 g	5.27	0.404	0.227	-.02025424	pCi/g	NO
		Plutonium-239/240	0.118 g	32.1	1.93	0.255	.020254237	pCi/g	NO
1201985035	MB	Plutonium-238	1.00 g	-0.00239	0.00534	0.0388	-.00239	pCi/g	NO
		Plutonium-239/240	1.00 g	0.00239	0.00534	0.0437	.00239	pCi/g	YES
241838002	WST03-10-2134	Plutonium-238	1.25 g	-0.00277	0.0083	0.0224	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00415	0.00415	0.0253	.001912	pCi/g	YES
241900001	RE03-09-13923	Plutonium-238	1.25 g	-0.00562	0.00526	0.0228	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00281	0.00281	0.0257	.001912	pCi/g	YES
241900002	RE03-09-13924	Plutonium-238	1.25 g	-0.00607	0.00535	0.0328	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0101	0.00456	0.037	.001912	pCi/g	NO
241900003	RE03-09-13922	Plutonium-238	1.25 g	0.00816	0.00546	0.0221	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0109	0.00474	0.0249	.001912	pCi/g	NO
241900004	RE03-09-13925	Plutonium-238	1.25 g	0.00572	0.00672	0.0232	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00286	0.00351	0.0262	.001912	pCi/g	YES
241900006	RE03-10-7034	Plutonium-238	1.25 g	0.0047	0.0105	0.0254	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0047	0.00415	0.0287	.001912	pCi/g	YES
241915001	RE16-10-111	Plutonium-238	1.26 g	-0.0014	0.00243	0.0228	-.00189683	pCi/g	NO
		Plutonium-239/240	1.26 g	-0.0028	0.00396	0.0256	.001896825	pCi/g	YES
241915002	RE16-10-102	Plutonium-238	1.25 g	-0.0013	0.00704	0.0333	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0253	0.00827	0.0374	.001912	pCi/g	NO
241915003	RE16-10-118	Plutonium-238	1.26 g	0.00466	0.00348	0.0252	-.00189683	pCi/g	NO
		Plutonium-239/240	1.26 g	0.0217	0.00884	0.0284	.001896825	pCi/g	NO
241915004	RE16-10-103	Plutonium-238	1.25 g	-0.00454	0.00278	0.0184	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	-0.00227	0.00227	0.0208	.001912	pCi/g	YES
241915005	RE16-10-106	Plutonium-238	1.25 g	0.00603	0.00869	0.0357	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0234	0.00911	0.0401	.001912	pCi/g	NO
241915006	RE16-10-100	Plutonium-238	1.25 g	-0.00423	0.00546	0.0229	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00422	0.00316	0.0258	.001912	pCi/g	YES
241915007	RE16-10-104	Plutonium-238	1.25 g	0.00	0.00699	0.0184	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0113	0.0051	0.0207	.001912	pCi/g	NO
241915008	RE16-10-108	Plutonium-238	1.25 g	0.00686	0.00309	0.0223	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.0192	0.00651	0.0251	.001912	pCi/g	NO
241915009	RE16-10-101	Plutonium-238	1.25 g	0.00296	0.00362	0.024	-.001912	pCi/g	NO
		Plutonium-239/240	1.25 g	0.00148	0.0033	0.027	.001912	pCi/g	YES
241915010	RE16-10-109	Plutonium-238	1.26 g	-0.0054	0.00403	0.0292	-.00189683	pCi/g	NO
		Plutonium-239/240	1.26 g	0.0054	0.00477	0.0329	.001896825	pCi/g	YES
241915011	RE16-10-110	Plutonium-238	1.25 g	0.00423	0.00425	0.0408	-.001912	pCi/g	NO

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241915011	RE16-10-110	Plutonium-239/240	1.25 g	0.0325	0.0107	0.0458	.001912	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928321 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201985037_PU SAMPLE QTY: 0.118 G
DETECTOR NUMBER :76544 AVERAGE %EFFICIENCY :33.9596 % YIELD : 82.253	COUNT DATE:15-DEC-2009 08:27:54 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.47177 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B046.CNF;1096 BKG DATE : 13-DEC-2009 EFF FILE : W046.CNF;285 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2274.000	2272.000	2.000	3.3488	99.90000	3.11E+01	1.87E+00	1.07E-01	2.50E-01	6.53E-01
PU-236	5749.000	46.000	11.000	35.000	2.0294	100.0000	1.51E-01	1.24E-01	6.45E-02	1.66E-01	1.24E-01
PU-238	5499.000	380.000	378.000	2.000	2.9082	99.90000	5.17E+00	3.96E-01	9.26E-02	2.22E-01	2.67E-01
PU242	4890.000	1183.000	1179.000	4.000	2.0000	100.0000	1.61E+01	1.02E+00	6.36E-02	1.64E-01	4.71E-01
PU-244	4589.000	7.000	5.000	2.000	6.8218	99.90000	6.84E-02	4.12E-02	2.17E-01	4.71E-01	4.10E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

DO NOT REPORT

Integrated

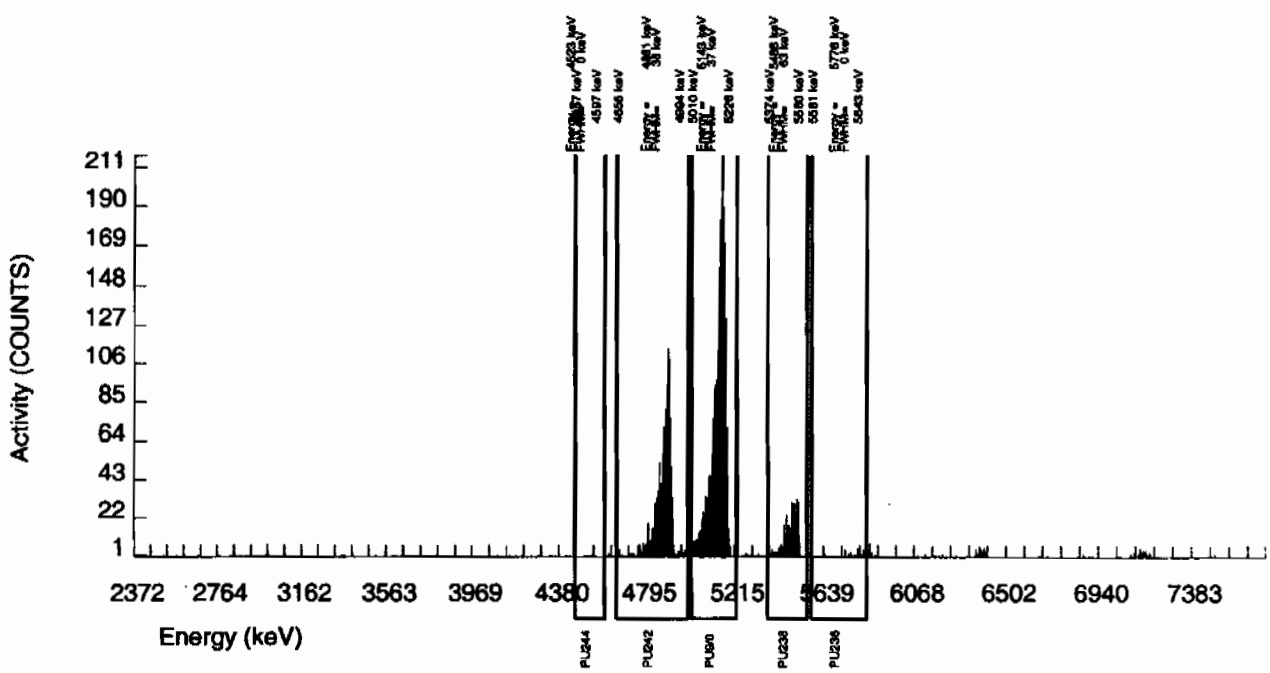

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928321 SAMPLE DATE : 23-NOV-2009 00:00:00	SAMPLE ID : S0241838002_PU SAMPLE QTY: 1.253 G
DETECTOR NUMBER :45-149AA5 AVERAGE %EFFICIENCY :32.5832 % YIELD : 79.911	COUNT DATE:15-DEC-2009 08:27:51 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.37290 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B025.CNF;1092 BKG DATE : 13-DEC-2009 EFF FILE : W025.CNF;324 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	-3.000	6.000	3.3488	99.90000	-4.15E-03	4.15E-03	1.08E-02	2.53E-02	4.15E-03
PU-236	5749.000	48.000	5.000	43.000	2.0294	100.0000	7.01E-03	1.34E-02	6.52E-03	1.68E-02	1.34E-02
PU-238	5499.000	17.000	-2.000	19.000	2.9082	99.90000	-2.77E-03	8.30E-03	9.35E-03	2.24E-02	8.30E-03
PU242	4890.000	1100.000	1099.000	1.000	1.0000	100.0000	1.52E+00	8.86E-02	3.21E-03	1.02E-02	4.58E-02
PU-244	4589.000	5.000	3.000	2.000	6.8218	99.90000	4.15E-03	3.66E-03	2.19E-02	4.76E-02	3.66E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

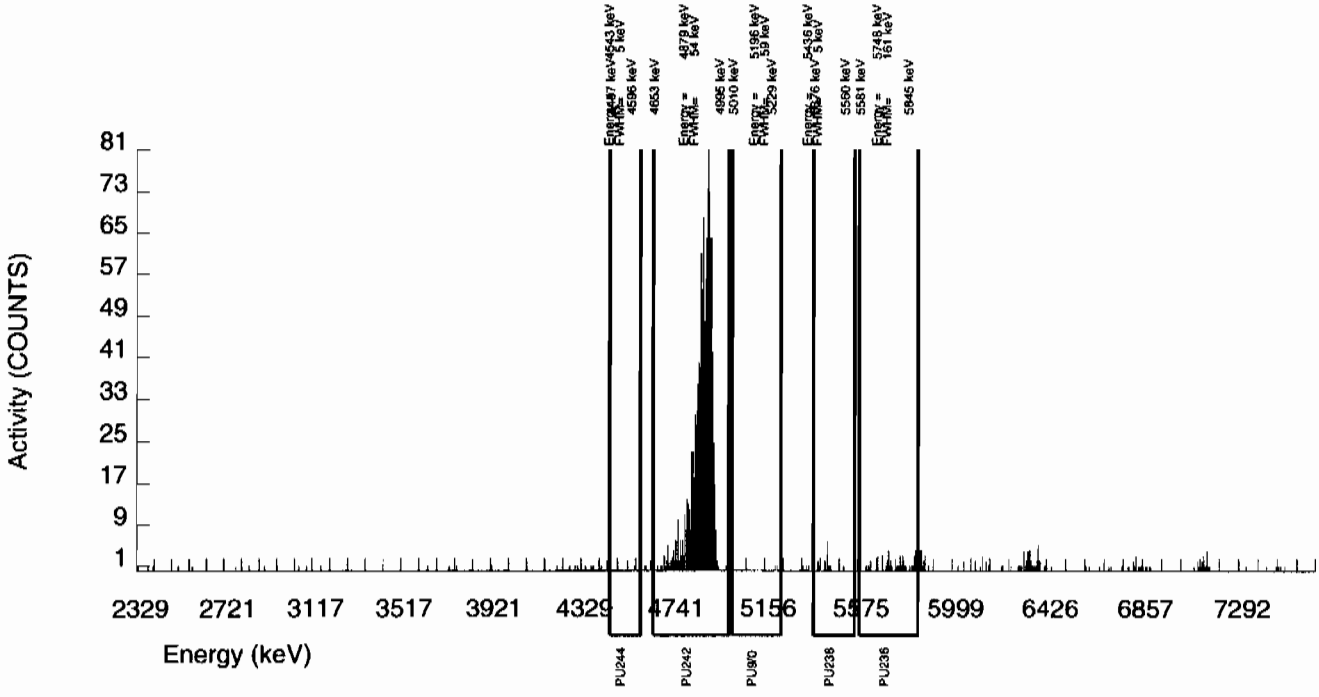

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928321 SAMPLE DATE : 24-NOV-2009 00:00:00	SAMPLE ID : S0241900001_PU SAMPLE QTY: 1.246 G
DETECTOR NUMBER :78204 AVERAGE %EFFICIENCY :31.4322 % YIELD : 82.008	COUNT DATE:15-DEC-2009 08:27:51 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B026.CNF;1093
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 13-DEC-2009
		RESULTS : 3.46141 dpm	EFF FILE : W026.CNF;298
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	2.000	1.000	3.3488	99.90000	2.81E-03	2.81E-03	1.09E-02	2.57E-02	2.81E-03
PU-236	5749.000	39.000	12.000	27.000	2.0294	100.0000	1.71E-02	1.16E-02	6.62E-03	1.70E-02	1.16E-02
PU-238	5499.000	5.000	-4.000	9.000	2.9082	99.90000	-5.62E-03	5.26E-03	9.50E-03	2.28E-02	5.26E-03
PU242	4890.000	1092.000	1088.000	4.000	2.0000	100.0000	1.53E+00	9.20E-02	6.53E-03	1.69E-02	4.64E-02
PU-244	4589.000	5.000	5.000	0.000	6.8218	99.90000	7.02E-03	3.16E-03	2.23E-02	4.84E-02	3.14E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

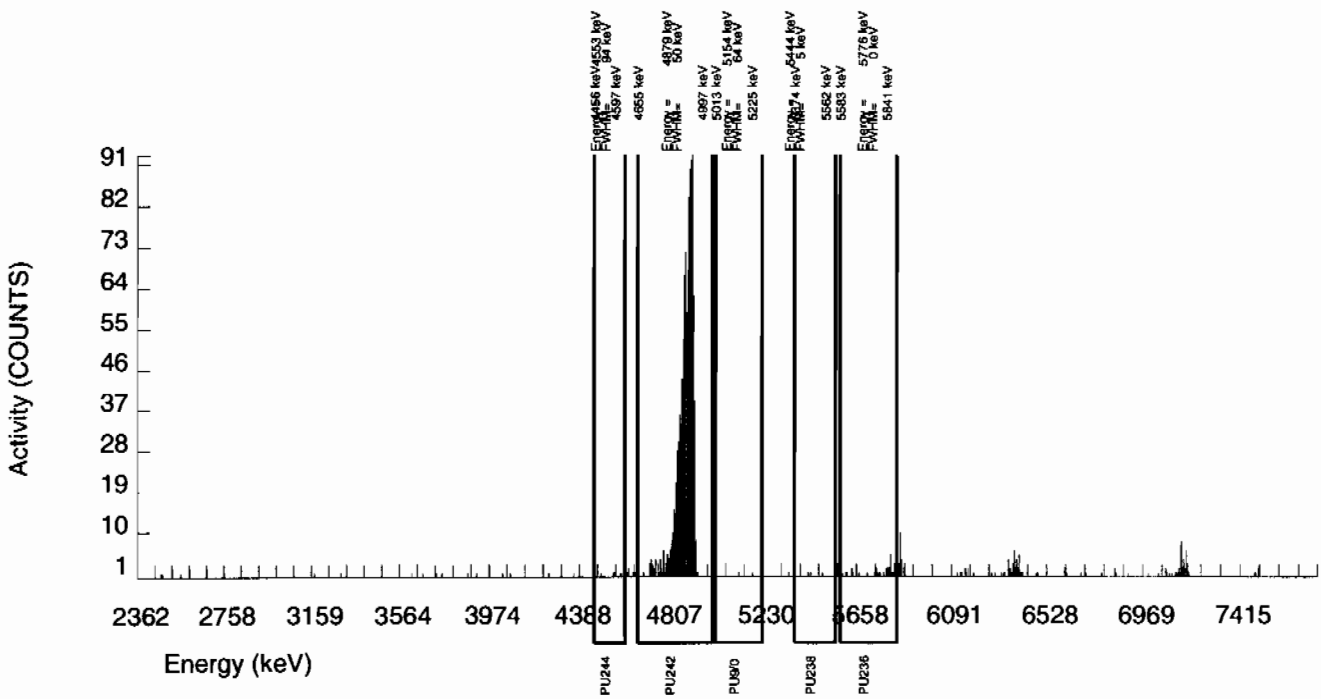

Alpha Spectroscopy Software Version 2.0
effective date: 08-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928321 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201985035_PU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :79459 AVERAGE %EFFICIENCY :34.3935 % YIELD : 54.902	COUNT DATE:15-DEC-2009 08:27:54 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 2.31729 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B044.CNF;1096 BKG DATE : 13-DEC-2009 EFF FILE : W044.CNF;303 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	3.000	1.000	2.000	3.3488	99.90000	2.39E-03	5.34E-03	1.86E-02	4.37E-02	5.34E-03
PU-236	5749.000	32.000	-4.000	36.000	2.0294	100.0000	-9.60E-03	1.98E-02	1.13E-02	2.90E-02	1.98E-02
PU-238	5499.000	2.000	-1.000	3.000	2.9082	99.90000	-2.39E-03	5.34E-03	1.62E-02	3.88E-02	5.34E-03
PU242	4890.000	799.000	797.000	2.000	1.4142	100.0000	1.90E+00	1.22E-01	7.85E-03	2.22E-02	6.75E-02
PU-244	4589.000	7.000	7.000	0.000	6.8218	99.90000	1.67E-02	6.38E-03	3.79E-02	8.23E-02	6.32E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

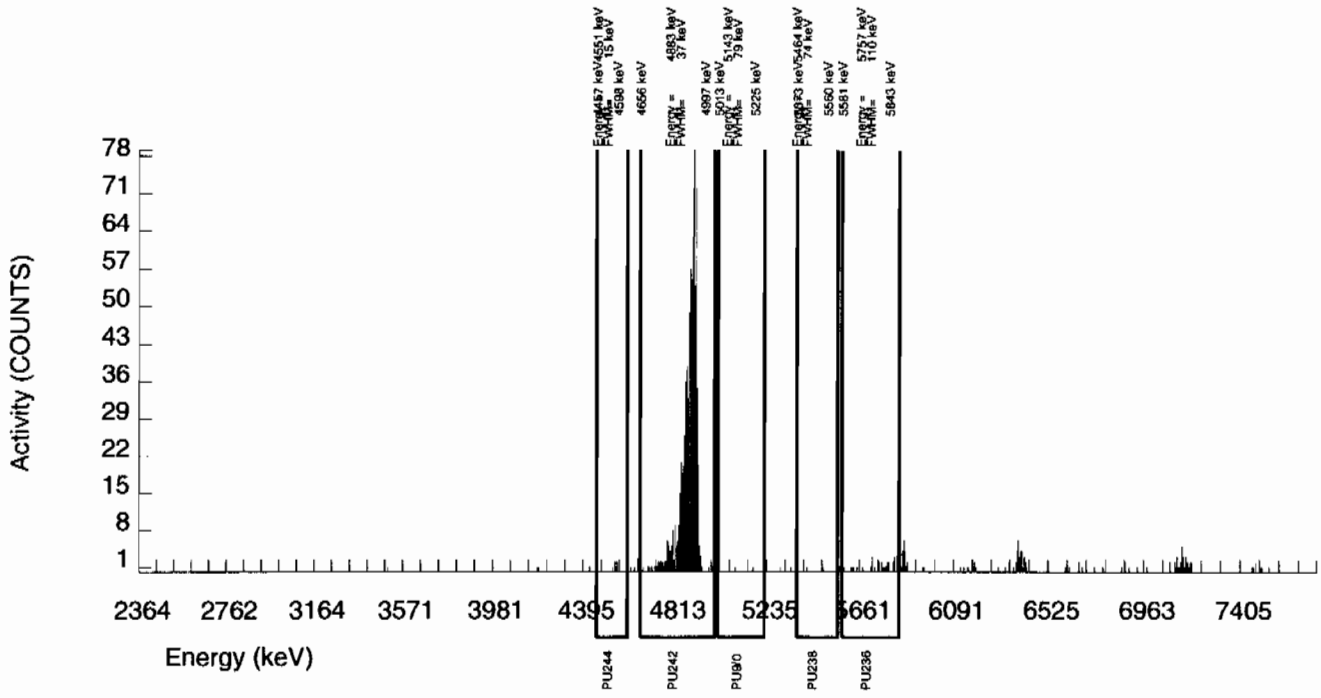

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928321 SAMPLE DATE : 24-NOV-2009 00:00:00	SAMPLE ID : S1201985036_PU SAMPLE QTY: 1.246 G
DETECTOR NUMBER :78783 AVERAGE %EFFICIENCY :34.4272 % YIELD : 74.530	COUNT DATE:15-DEC-2009 08:27:54 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B	ID : 0244-B	ID : 1373-A	LIB FILE : ENV_ALPHA_PU.N
ISOTOPE : PU-9/0	ISOTOPE : PU-9/0	ISOTOPE : PU242	BKG FILE : B045.CNF;1085
PCI/G : 4.178E+01	PCI/G : 4.178E+01	NOMINAL : 4.22082 dpm	BKG DATE : 13-DEC-2009
		RESULTS : 3.14577 dpm	EFF FILE : W045.CNF;294
			CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	11.000	9.000	2.000	3.3488	99.90000	1.27E-02	5.12E-03	1.10E-02	2.58E-02	5.09E-03
PU-236	5749.000	37.000	8.000	29.000	2.0294	100.0000	1.14E-02	1.16E-02	6.65E-03	1.71E-02	1.16E-02
PU-238	5499.000	0.000	-2.000	2.000	2.9082	99.90000	-2.82E-03	2.44E-03	9.54E-03	2.29E-02	2.44E-03
PU242	4890.000	1085.000	1083.000	2.000	1.4142	100.0000	1.53E+00	8.95E-02	4.64E-03	1.31E-02	4.65E-02
PU-244	4589.000	5.000	4.000	1.000	6.8218	99.90000	5.64E-03	3.47E-03	2.24E-02	4.86E-02	3.45E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

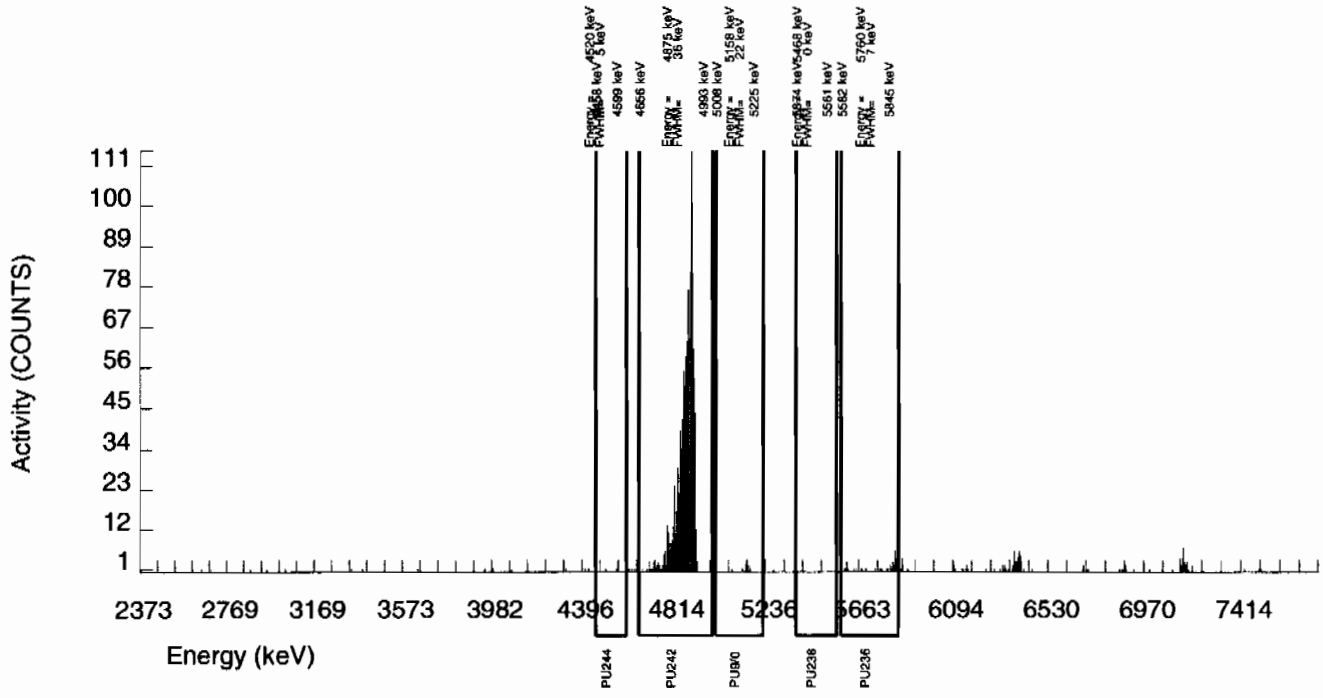

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928321 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201985037_PU SAMPLE QTY: 0.118 G
DETECTOR NUMBER :76544 AVERAGE %EFFICIENCY :33.9596 % YIELD : 80.649	COUNT DATE:15-DEC-2009 08:27:54 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 0244-B ISOTOPE : PU-9/0 PCI/G : 4.178E+01	ID : 1373-A ISOTOPE : PU242 NOMINAL : 4.22082 dpm RESULTS : 3.40404 dpm	LIB FILE : ENV_ALPHA_PU.N BKG FILE : B046.CNF;1096 BKG DATE : 13-DEC-2009 EFF FILE : W046.CNF;285 CAL DATE : 4-DEC-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
PU-9/0	5155.000	2301.000	2298.000	3.000	3.3488	99.90000	3.21E+01	1.93E+00	1.09E-01	2.55E-01	6.70E-01
PU-236	5749.000	46.000	11.000	35.000	2.0294	100.0000	1.54E-01	1.26E-01	6.58E-02	1.69E-01	1.26E-01
PU-238	5499.000	380.000	378.000	2.000	2.9082	99.90000	5.27E+00	4.04E-01	9.44E-02	2.27E-01	2.73E-01
PU242	4890.000	1159.000	1156.000	3.000	1.7321	100.0000	1.61E+01	1.03E+00	5.62E-02	1.50E-01	4.75E-01
PU-244	4589.000	7.000	5.000	2.000	6.8218	99.90000	6.98E-02	4.20E-02	2.21E-01	4.81E-01	4.19E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of PU242 calculated as sqrt(BKG AREA)

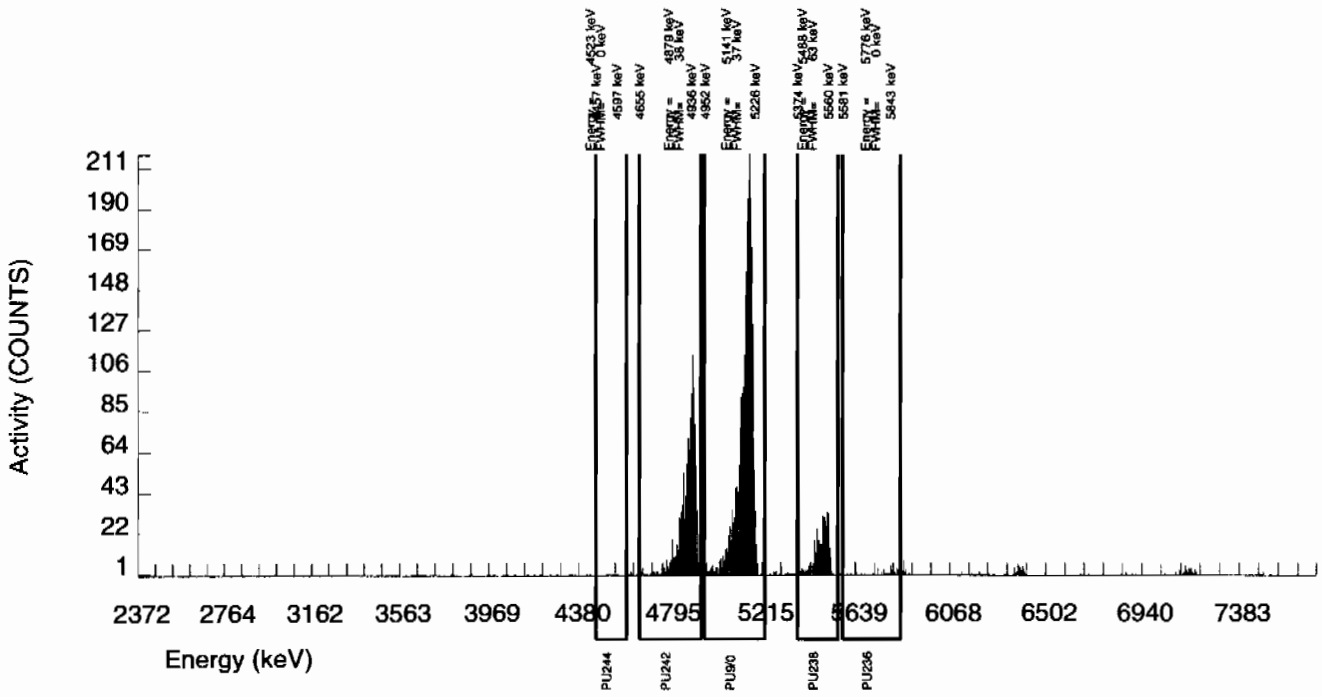

Radiochemistry Batch Checklist, Rev 9

Batch# 928323 Product: U Date: 12/11/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)	✓		
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		Case narrative
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initiated and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: Denise Green 12/11/09

Secondary Review Performed By: [illegible] 12/11/09

12/19

p1

Uranium Que Sheet

02-DEC-09

Batch #: 928323 Analyst: MXE1 First Client Due Date: 19-DEC-09 Internal Due Date: 09-DEC-09

Tracer Isotope: U-232/U-236 Tracer Code: 1283-E Expiration Date: 1/15/10 Vol: 0.1ml

LCS Isotope: U-238 LCS Code: 0244-A Expiration Date: 10-31-20 Vol: 0.1g

Spike Isotope: U-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 12/7/9 Initials: MB Pipet ID: 4491063 Balance ID: 50410272 Witness: 12/07/09

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Pos.	Label #	Wet/Dry Aliquot (g/l/l)	U Det #	
241838002-1	WST03-10-2134	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	1	1	0.497	138	
241900001-1	RE03-09-13923	SAMPLE		.1 pCi/g	SOIL	LANL010	24-NOV-09	2	2	0.503	139	
241900002-1	RE03-09-13924	SAMPLE		.1 pCi/g	SOIL	LANL010	24-NOV-09	3	3	0.505	140	
241900003-1	RE03-09-13922	SAMPLE		.1 pCi/g	SOIL	LANL010	24-NOV-09	4	4	0.496	141	
241900004-1	RE03-09-13925	SAMPLE		.1 pCi/g	SOIL	LANL010	24-NOV-09	5	5	0.508	142	
241900006-1	RE03-10-7034	SAMPLE		.1 pCi/g	SOIL	LANL010	24-NOV-09	6	6	0.505	143	
241915001-1	RE16-10-111	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	7	7	0.500	144	
241915002-1	RE16-10-102	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	8	8	0.497	145	
241915003-1	RE16-10-118	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	9	9	0.507	146	
241915004-1	RE16-10-103	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	10	10	0.500	147	
241915005-1	RE16-10-106	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	11	11	0.497	148	
241915006-1	RE16-10-100	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	12	12	0.495	149	
241915007-1	RE16-10-104	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	13	13	0.501	150	
241915008-1	RE16-10-108	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	14	14	0.502	151	
241915009-1	RE16-10-101	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	15	15	0.500	152	
241915010-1	RE16-10-109	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	16	16	0.503	153	
241915011-1	RE16-10-110	SAMPLE		.1 pCi/g	SOIL	LANL010	23-NOV-09	17	17	0.496		154
1201985038-1	MB for batch 928323	MB		.1 pCi/g	SOIL	QC ACCOUNT		18	18	~~0.50~~ GCJ	MXE 12/10/09 10:40	155
1201985039-1	RE03-09-13923(241900001DUP)	DUP		.1 pCi/g	SOIL	QC ACCOUNT	24-NOV-09	19	19	0.505		156
1201985040-1	LCS for batch 928323	LCS		.1 pCi/g	SOIL	QC ACCOUNT		20	20	0.108		157

Choose SOP used: GL-RAD-A-011
GL-RAD-A-038
GL-RAD-A-045
GL-RAD-A-043

Solid Sample Dissolution by: LEACH or DIGESTION
Circle One

Data Reviewed By: 12/11/09

GEL Laboratories LLC, Radiochemistry Division

Blank Correction Report

Batch ID 928323

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201985039	DUP	Uranium-233/234	0.505 g	0.726	0.087	0.180	.002257426	pCi/g	NO
		Uranium-235/236	0.505 g	0.0808	0.0271	0.110	-.01297030	pCi/g	NO
		Uranium-238	0.505 g	0.695	0.0833	0.0996	-.00350495	pCi/g	NO
1201985040	LCS	Uranium-233/234	0.108 g	6.41	0.584	0.495	.010555556	pCi/g	NO
		Uranium-235/236	0.108 g	0.181	0.0842	0.301	-.06064815	pCi/g	NO
		Uranium-238	0.108 g	5.56	0.521	0.273	-.01638889	pCi/g	NO
1201985038	MB	Uranium-233/234	1.00 g	0.00114	0.00676	0.0536	.00114	pCi/g	YES
		Uranium-235/236	1.00 g	-0.00655	0.00488	0.0326	-.00655	pCi/g	NO
		Uranium-238	1.00 g	-0.00177	0.00395	0.0296	-.00177	pCi/g	NO
241838002	WST03-10-2134	Uranium-233/234	0.497 g	0.961	0.0992	0.146	.002293763	pCi/g	NO
		Uranium-235/236	0.497 g	0.0594	0.0269	0.0886	-.01317907	pCi/g	NO
		Uranium-238	0.497 g	0.798	0.0849	0.0805	-.00356137	pCi/g	NO
241900001	RE03-09-13923	Uranium-233/234	0.503 g	0.668	0.0876	0.198	.002266402	pCi/g	NO
		Uranium-235/236	0.503 g	0.0565	0.0294	0.120	-.01302187	pCi/g	NO
		Uranium-238	0.503 g	0.718	0.0921	0.109	-.00351889	pCi/g	NO
241900002	RE03-09-13924	Uranium-233/234	0.505 g	0.910	0.0991	0.168	.002257426	pCi/g	NO
		Uranium-235/236	0.505 g	0.0822	0.0263	0.102	-.01297030	pCi/g	NO
		Uranium-238	0.505 g	1.22	0.121	0.0929	-.00350495	pCi/g	NO
241900003	RE03-09-13922	Uranium-233/234	0.496 g	0.740	0.0921	0.197	.002298387	pCi/g	NO
		Uranium-235/236	0.496 g	0.0881	0.0317	0.120	-.01320565	pCi/g	NO
		Uranium-238	0.496 g	0.894	0.102	0.109	-.00356855	pCi/g	NO
241900004	RE03-09-13925	Uranium-233/234	0.508 g	1.04	0.120	0.208	.002244094	pCi/g	NO
		Uranium-235/236	0.508 g	0.127	0.0342	0.127	-.01289370	pCi/g	NO
		Uranium-238	0.508 g	1.10	0.121	0.115	-.00348425	pCi/g	NO
241900006	RE03-10-7034	Uranium-233/234	0.505 g	0.651	0.0816	0.164	.002257426	pCi/g	NO
		Uranium-235/236	0.505 g	0.0603	0.0246	0.100	-.01297030	pCi/g	NO
		Uranium-238	0.505 g	0.807	0.0901	0.0908	-.00350495	pCi/g	NO
241915001	RE16-10-111	Uranium-233/234	0.500 g	0.740	0.0813	0.141	.00228	pCi/g	NO
		Uranium-235/236	0.500 g	0.104	0.0255	0.0858	-.0131	pCi/g	NO
		Uranium-238	0.500 g	0.796	0.0844	0.078	-.00354	pCi/g	NO
241915002	RE16-10-102	Uranium-233/234	0.497 g	0.933	0.104	0.186	.002293763	pCi/g	NO
		Uranium-235/236	0.497 g	0.197	0.0427	0.113	-.01317907	pCi/g	NO
		Uranium-238	0.497 g	1.16	0.121	0.103	-.00356137	pCi/g	NO
241915003	RE16-10-118	Uranium-233/234	0.507 g	1.09	0.122	0.221	.002248521	pCi/g	NO
		Uranium-235/236	0.507 g	0.0539	0.0339	0.134	-.01291913	pCi/g	NO
		Uranium-238	0.507 g	0.988	0.114	0.122	-.00349112	pCi/g	NO
241915004	RE16-10-103	Uranium-233/234	0.500 g	0.752	0.098	0.215	.00228	pCi/g	NO
		Uranium-235/236	0.500 g	0.0787	0.0321	0.130	-.0131	pCi/g	NO
		Uranium-238	0.500 g	0.643	0.087	0.119	-.00354	pCi/g	NO
241915005	RE16-10-106	Uranium-233/234	0.497 g	3.51	0.313	0.233	.002293763	pCi/g	NO
		Uranium-235/236	0.497 g	0.208	0.0508	0.141	-.01317907	pCi/g	NO

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
241915005	RE16-10-106	Uranium-238	0.497 g	2.29	0.218	0.128	-.00356137	pCi/g	NO
241915006	RE16-10-100	Uranium-233/234	0.495 g	1.01	0.0971	0.126	.002303030	pCi/g	NO
		Uranium-235/236	0.495 g	0.0462	0.0173	0.0765	-.01323232	pCi/g	NO
		Uranium-238	0.495 g	0.834	0.0835	0.0695	-.00357576	pCi/g	NO
241915007	RE16-10-104	Uranium-233/234	0.501 g	0.898	0.0927	0.146	.002275449	pCi/g	NO
		Uranium-235/236	0.501 g	0.154	0.0322	0.0886	-.01307385	pCi/g	NO
		Uranium-238	0.501 g	0.970	0.0977	0.0805	-.00353293	pCi/g	NO
241915008	RE16-10-108	Uranium-233/234	0.502 g	1.35	0.132	0.172	.002270916	pCi/g	NO
		Uranium-235/236	0.502 g	0.182	0.0381	0.105	-.01304781	pCi/g	NO
		Uranium-238	0.502 g	1.34	0.131	0.095	-.00352590	pCi/g	NO
241915009	RE16-10-101	Uranium-233/234	0.500 g	1.33	0.134	0.188	.00228	pCi/g	NO
		Uranium-235/236	0.500 g	0.169	0.0395	0.114	-.0131	pCi/g	NO
		Uranium-238	0.500 g	1.20	0.123	0.104	-.00354	pCi/g	NO
241915010	RE16-10-109	Uranium-233/234	0.503 g	1.06	0.106	0.152	.002266402	pCi/g	NO
		Uranium-235/236	0.503 g	0.124	0.0304	0.0923	-.01302187	pCi/g	NO
		Uranium-238	0.503 g	1.11	0.111	0.0839	-.00351889	pCi/g	NO
241915011	RE16-10-110	Uranium-233/234	0.496 g	1.09	0.124	0.221	.002298387	pCi/g	NO
		Uranium-235/236	0.496 g	0.144	0.0376	0.135	-.01320565	pCi/g	NO
		Uranium-238	0.496 g	1.07	0.121	0.122	-.00356855	pCi/g	NO

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928323 SAMPLE DATE : 23-NOV-2009 00:00:00	SAMPLE ID : S0241838002_UU SAMPLE QTY: 0.497 G
DETECTOR NUMBER :65877 AVERAGE %EFFICIENCY :25.4206 % YIELD : 74.201	COUNT DATE:10-DEC-2009 19:52:25 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24589 dpm RESULTS : 3.89249 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B138.CNF;376 BKG DATE : 6-DEC-2009 EFF FILE : W138.CNF;98 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	212.000	200.001	11.000	5.9398	100.0000	9.61E-01	9.92E-02	6.64E-02	1.46E-01	7.16E-02
U232	5302.100	996.000	989.000	7.000	2.6458	100.0000	4.75E+00	3.72E-01	2.96E-02	7.22E-02	1.52E-01
U-235	4391.000	15.000	10.000	5.000	2.6249	80.90000	5.94E-02	2.69E-02	3.63E-02	8.86E-02	2.66E-02
U-238	4184.730	169.000	166.000	3.000	3.0201	100.0000	7.98E-01	8.49E-02	3.38E-02	8.05E-02	6.30E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

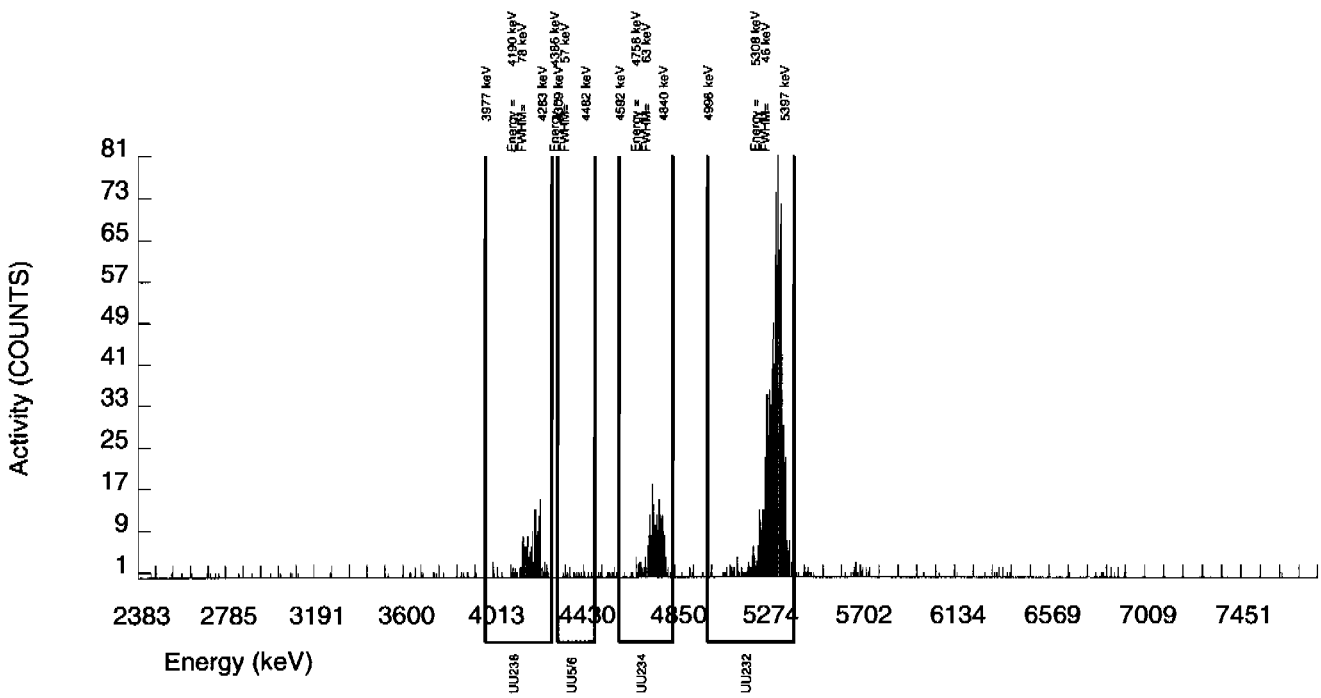

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928323 SAMPLE DATE : 24-NOV-2009 00:00:00	SAMPLE ID : S0241900001_UU SAMPLE QTY: 0.503 G
DETECTOR NUMBER :76231 AVERAGE %EFFICIENCY :24.9134 % YIELD : 55.042	COUNT DATE:10-DEC-2009 19:52:28 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24575 dpm RESULTS : 2.88736 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B139.CNF;373 BKG DATE : 6-DEC-2009 EFF FILE : W139.CNF;98 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	112.000	102.274	9.000	5.9398	100.0000	6.68E-01	8.76E-02	9.02E-02	1.98E-01	7.16E-02
U232	5302.100	732.000	719.000	13.000	3.6056	100.0000	4.70E+00	3.97E-01	5.48E-02	1.27E-01	1.78E-01
U-235	4391.000	10.000	7.000	3.000	2.6249	80.90000	5.65E-02	2.94E-02	4.93E-02	1.20E-01	2.91E-02
U-238	4184.730	120.000	110.000	10.000	3.0201	100.0000	7.18E-01	9.21E-02	4.59E-02	1.09E-01	7.45E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

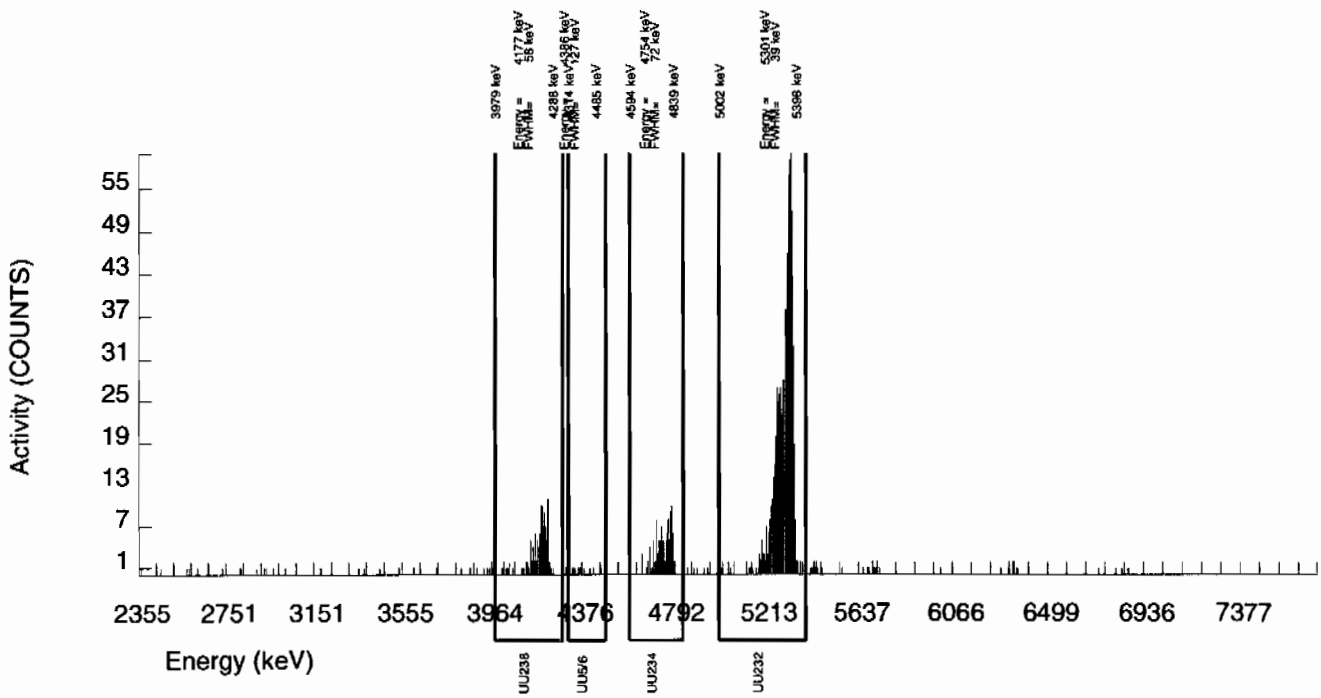

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928323 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201985038_UU SAMPLE QTY: 1.000 G
DETECTOR NUMBER :75553 AVERAGE %EFFICIENCY :25.8503 % YIELD : 98.716	COUNT DATE:10-DEC-2009 19:53:09 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24387 dpm RESULTS : 5.17655 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B155.CNF;375 BKG DATE : 6-DEC-2009 EFF FILE : W155.CNF;111 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	9.000	0.648	7.000	5.9398	100.0000	1.14E-03	6.76E-03	2.44E-02	5.36E-02	6.76E-03
U232	5302.100	1353.000	1338.000	15.000	3.8730	100.0000	2.36E+00	1.76E-01	1.59E-02	3.66E-02	6.53E-02
U-235	4391.000	1.000	-3.000	4.000	2.6249	80.90000	-6.55E-03	4.88E-03	1.33E-02	3.26E-02	4.88E-03
U-238	4184.730	2.000	-1.000	3.000	3.0201	100.0000	-1.77E-03	3.95E-03	1.24E-02	2.96E-02	3.95E-03

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

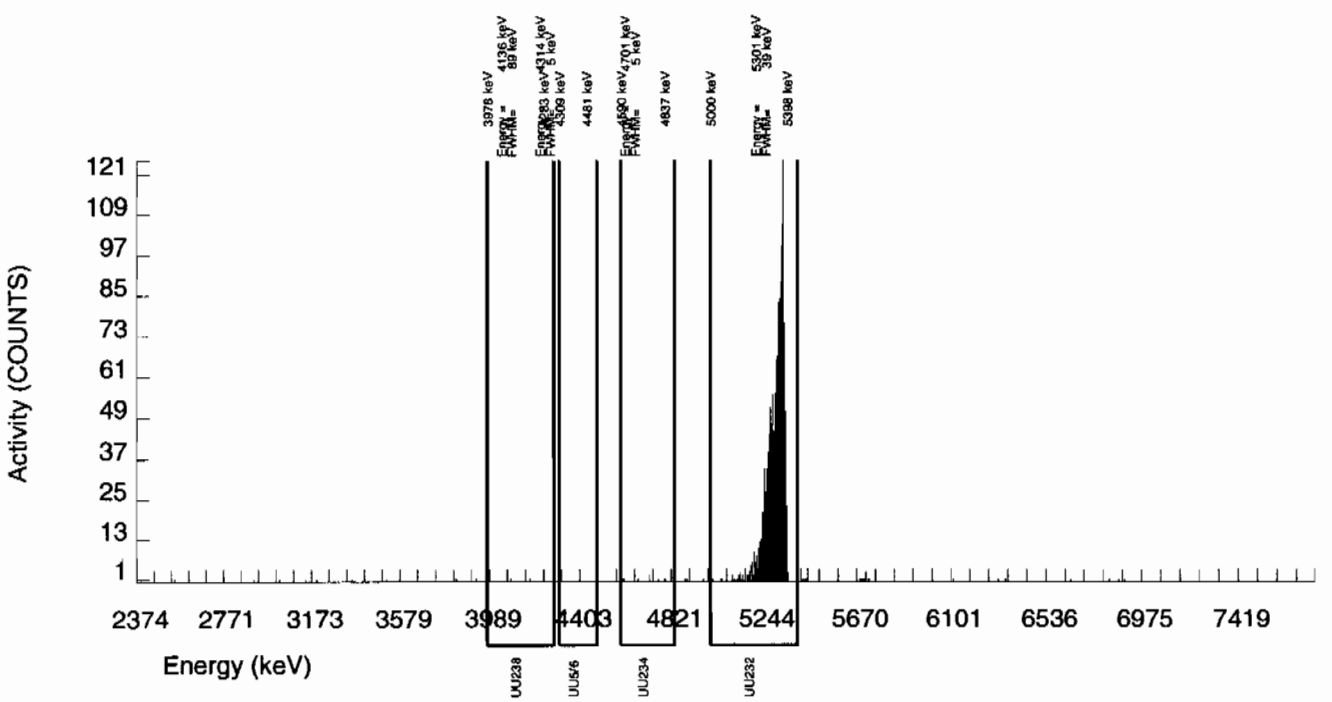

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928323 SAMPLE DATE : 24-NOV-2009 00:00:00	SAMPLE ID : S1201985039_UU SAMPLE QTY: 0.505 G
DETECTOR NUMBER :75554 AVERAGE %EFFICIENCY :24.7594 % YIELD : 60.622	COUNT DATE:10-DEC-2009 19:53:12 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A	ID : 0244-A	ID : 1283-E	LIB FILE : ENV_ALPHA_UU.N
ISOTOPE : U-238	ISOTOPE : U-238	ISOTOPE : U232	BKG FILE : B156.CNF;376
PCI/G : 5.750E+00	PCI/G : 5.750E+00	NOMINAL : 5.24575 dpm	BKG DATE : 6-DEC-2009
		RESULTS : 3.18010 dpm	EFF FILE : W156.CNF;115
			CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	129.000	122.205	6.000	5.9398	100.0000	7.26E-01	8.70E-02	8.21E-02	1.80E-01	6.88E-02
U232	5302.100	798.000	787.000	11.000	3.3166	100.0000	4.68E+00	3.82E-01	4.59E-02	1.08E-01	1.69E-01
U-235	4391.000	12.000	11.000	1.000	2.6249	80.90000	8.08E-02	2.71E-02	4.49E-02	1.10E-01	2.65E-02
U-238	4184.730	120.000	117.000	3.000	3.0201	100.0000	6.95E-01	8.33E-02	4.18E-02	9.96E-02	6.59E-02

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

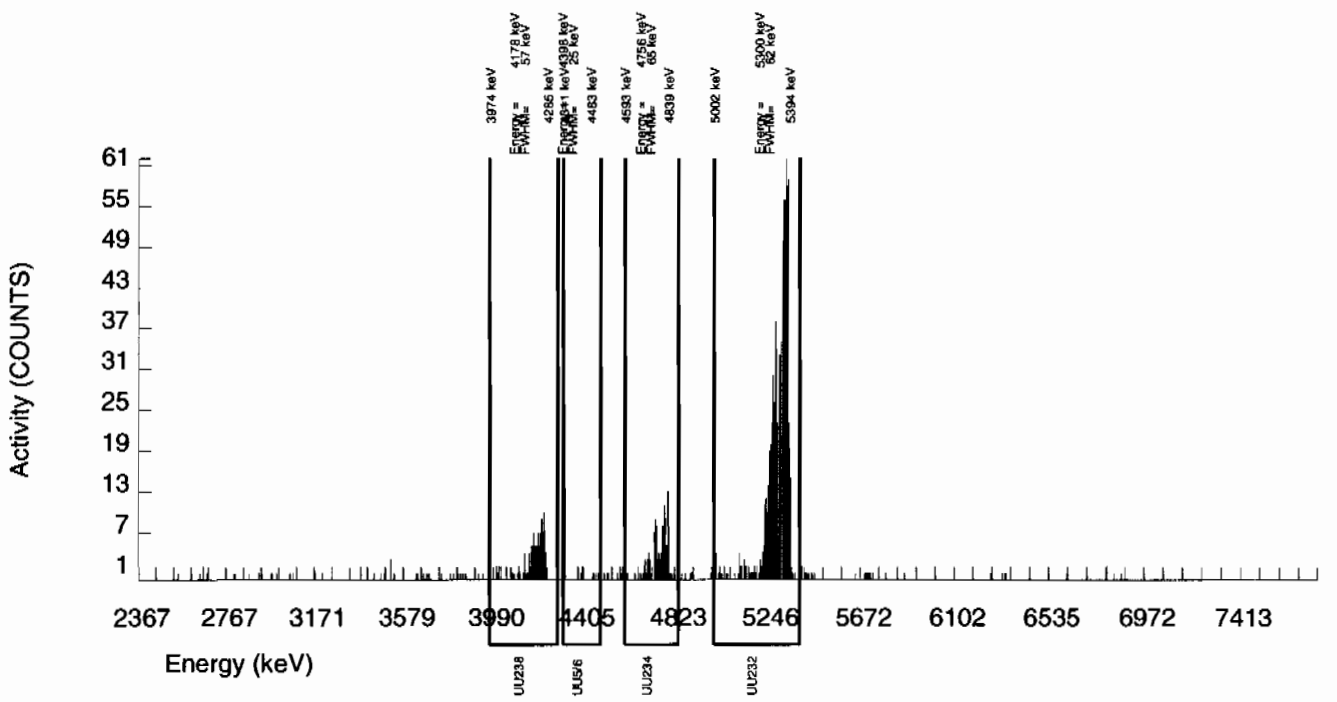

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GEL Laboratories LLC
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 928323 SAMPLE DATE : 7-DEC-2009 00:00:00.	SAMPLE ID : S1201985040_UU SAMPLE QTY: 0.108 G
DETECTOR NUMBER :75555 AVERAGE %EFFICIENCY :24.6971 % YIELD : 103.634	COUNT DATE:10-DEC-2009 19:53:14 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :MXE1

MS/MSD	LCS/LCSD	TRACER	
ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 0244-A ISOTOPE : U-238 PCI/G : 5.750E+00	ID : 1283-E ISOTOPE : U232 NOMINAL : 5.24387 dpm RESULTS : 5.43445 dpm	LIB FILE : ENV_ALPHA_UU.N BKG FILE : B157.CNF;376 BKG DATE : 6-DEC-2009 EFF FILE : W157.CNF;105 CAL DATE : 18-NOV-2009

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	GROSS AREA	NET AREA	BKG AREA	BKG Sg	%ABUN	ACTIVITY pCi/G	TPU 1-SIGMA	DLC pCi/G	MDC pCi/G	UNC pCi/G
U-3/4	4763.020	400.000	393.644	5.000	5.9398	100.0000	6.41E+00	5.84E-01	2.25E-01	4.95E-01	3.27E-01
U232	5302.100	1349.000	1342.000	7.000	2.6458	100.0000	2.19E+01	1.75E+00	1.00E-01	2.45E-01	6.00E-01
U-235	4391.000	13.000	9.000	4.000	2.6249	80.90000	1.81E-01	8.42E-02	1.23E-01	3.01E-01	8.31E-02
U-238	4184.730	352.000	341.000	11.000	3.0201	100.0000	5.56E+00	5.21E-01	1.14E-01	2.73E-01	3.10E-01

NOTE: Sg calculated via blank population (updated 1-DEC-2009)
NOTE: Sg of U232 calculated as sqrt(BKG AREA)
NOTE: Corrections made to U-3/4 net area due to tracer impurity

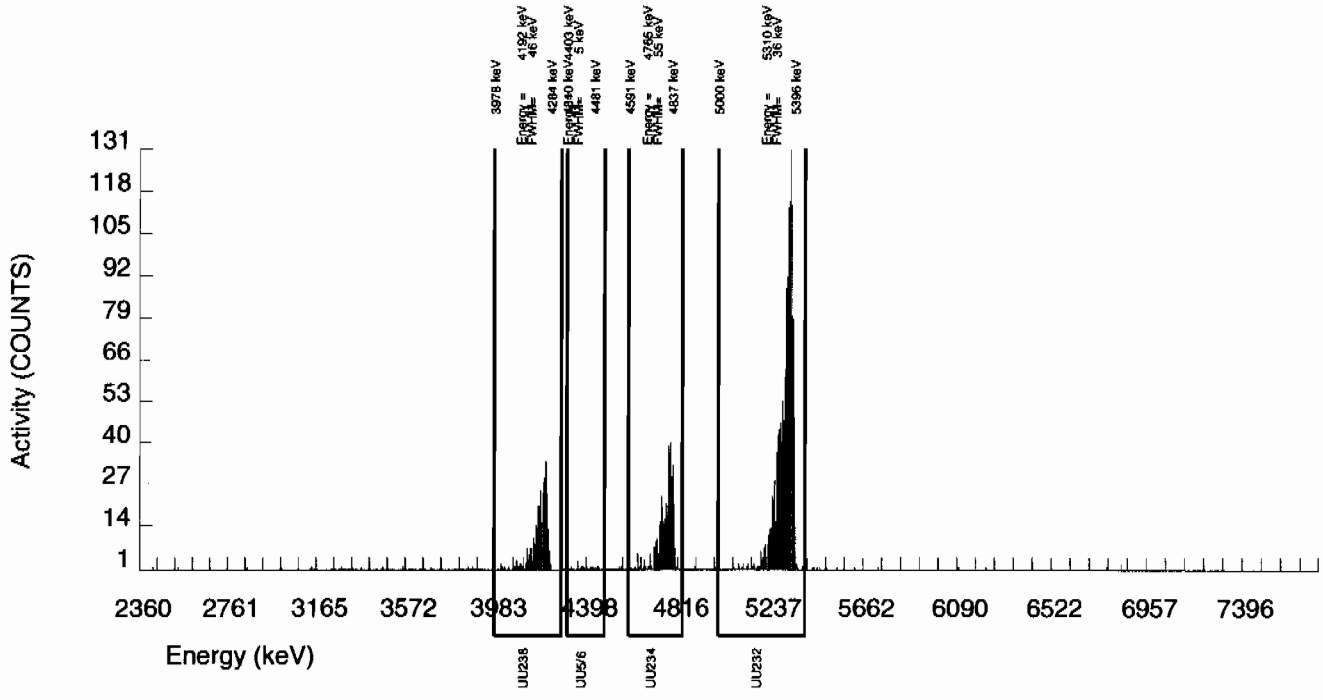

Radiochemistry Batch Checklist, Rev 9

Batch# 927434 **Product:** SR 90 **Date:** 12/08/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			N/A
Samples have been blank corrected (if required)			N/A
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.			N/A
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.			N/A
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			N/A
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			N/A
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			N/A
Batch non-conformances second reviewed and disposition verified to be completed.			N/A
Aliquot Correction completed if required.			N/A
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: V. Calpagan 12/08/09

Secondary Review Performed By: [signature]

LANL
12/11

Blank Correction Report

Batch ID 927434

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1201982851	DUP	Strontium-90	2.04 g	-0.0841	0.0993	0.366	-.10833333	pCi/g	NO
1201982852	LCS	Strontium-90	1.00 g	23.1	2.92	0.536	-.221	pCi/g	NO
1201982850	MB	Strontium-90	1.00 g	-0.221	0.107	0.413	-.221	pCi/g	NO
241838002	WST03-10-2134	Strontium-90	2.02 g	0.0931	0.086	0.291	-.10940594	pCi/g	NO
241905001	WST03-10-2136	Strontium-90	2.00 g	0.0645	0.0496	0.166	-.1105	pCi/g	NO
241909001	WST49-10-6924	Strontium-90	2.06 g	0.0696	0.0974	0.335	-.10728155	pCi/g	NO
241909002	WST49-10-6923	Strontium-90	2.01 g	0.00474	0.0929	0.330	-.10995025	pCi/g	NO
241913001	WST49-10-5432	Strontium-90	2.04 g	-0.0741	0.0713	0.273	-.10833333	pCi/g	NO
241913002	WST49-10-5433	Strontium-90	2.04 g	-0.013	0.0728	0.266	-.10833333	pCi/g	NO

Strontium 90 Que Sheet

11/30/09

Batch #: 927434 Analyst: JXR1 First Client Due Date: 12/11/2009 Internal Due Date12/01/2009 Comments

Sr-90 Spike Code: ~~Expiration Date: Vol:~~ Sr Sep. Date/time: 12-3-09/1527

Sr-90 LCS Code: 1067-C Expiration Date: 6-17-10 Vol: 0.1

Sr Carrier Code: 1194590 Exp Date: 3-19-10 Vol: 0.5 Sdt Wt: 8.93

Prep Date: 12-2-09 Initials: JLR Pipet ID: 1795419 Balance #: 5120483 Analytical Scale #: 38110047 Witness: JLC 12-2-09

Sample ID	Client Description	Type	RDL	Collection Date	Matrix	Client	Rad	Pos. #	Wet/Dry Aliquot (mL) or (g)	Det # 1 & 2	Initial Sr wt (g)	Final Sr wt (g)	Net Sr wt (mg)
241838002-1	WST03-10-2134	SAMPLE	.5 pCi/g	NOV-23-09 12:00 PM	SOIL	LANL010		1	2.016	A1 —	0.0258	0.0321	6.3
241905001-1	WST03-10-2136	SAMPLE	.5 pCi/g	NOV-24-09 12:00 PM	SOIL	LANL010		2	2.003	A2* B4	0.0255	0.0326	7.1
241909001-1	WST49-10-6924	SAMPLE	.5 pCi/g	NOV-24-09 12:00 PM	SOIL	LANL010		3	2.058	B1 —	0.0252	0.0317	6.5
241909002-1	WST49-10-6923	SAMPLE	.5 pCi/g	NOV-24-09 12:00 PM	SOIL	LANL010		4	2.006	B2 —	0.0249	0.0321	7.2
241913001-1	WST49-10-5432	SAMPLE	.5 pCi/g	NOV-24-09 12:00 PM	SOIL	LANL010		5	2.037	B3 —	0.0252	0.0323	7.1
241913002-1	WST49-10-5433	SAMPLE	.5 pCi/g	NOV-24-09 12:00 PM	SOIL	LANL010		6	2.035	C1 —	0.0256	0.0328	7.2
1201982850-1	MB for batch 927434	MB	.5 pCi/g		SOIL	QC ACCOUNT		7	~~2.068~~	~~C2~~ E3	0.0259	0.0336	7.7
1201982851-1	WST49-10-5432(241913001DUP)	DUP	.5 pCi/g	NOV-24-09 12:00 PM	SOIL	QC ACCOUNT		8	2.036	C3 —	0.0257	0.0319	6.2
1201982852-1	LCS for batch 927434	LCS	.5 pCi/g		SOIL	QC ACCOUNT		9	~~2.058~~	E3 —	0.0251	0.0328	7.7

*1.00 @ 12-04-09

WTS ✓

* see 12-7-09

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One) Data Reviewed By: 12/5/09

V. Calhoun 12/08/09

S927434r2.xls

Strontium-90 Solid

Filename : SR90.XLS
File type : Excel
Version # : 1.2.9

Spike S/N : N/A
Spike Exp Date : N/A
Spike Activity (dpm/ml): N/A
Spike Volume Added: N/A

Batch : 927434
Analyst : JXR1
Prep Date : 12/2/2009

LCS S/N : 1067-C
LCS Exp Date : 6/17/2010
LCS Activity (dpm/ml): 429.38
LCS Volume Added: 0.10

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005460 ml

Sr-90 Abundance : 1
Method Uncertainty : 0.1005

Carrier S/N : 1194590
Carrier Exp Date : 3/19/2010
Carrier Volume Added: 0.50
Carrier Weight (mg/ml): 17.85
Carrier Weight StDev.: 0.06

Procedure Code : GFC90SRS
Parmname : Strontium-90
Required MDC : 0.5 pCi/G
Halflife of Sr-90 : 28.90 years
Halflife of Y-90 : 64.053 hours

Geometry: Tuffryn Filter

Sample Characteristics					Carrier Calculations				
Pos.	Sample ID	Sample Aliquot G	Sample Aliquot StDev. G	Sample Date/Time	Carrier Weight (mg) (Standard)	Net Weight (mg) (Sample)	Net Weight StDev. (mg)	Carrier Aliquot (mL)	Carrier Aliquot StDev. (mL)
1	241838002.1	2.0160	3.4288E-03	11/23/2009 12:00	17.85	6.30	0.034407	0.5	0.002564
2	241905001.1	2.0030	3.4275E-03	11/24/2009 12:00	17.85	7.10	0.037846	0.5	0.002564
3	241909001.1	2.0580	3.4332E-03	11/24/2009 12:00	17.85	6.50	0.035267	0.5	0.002564
4	241909002.1	2.0060	3.4278E-03	11/24/2009 12:00	17.85	7.20	0.038276	0.5	0.002564
5	241913001.1	2.0370	3.4310E-03	11/24/2009 12:00	17.85	7.10	0.037846	0.5	0.002564
6	241913002.1	2.0350	3.4308E-03	11/24/2009 12:00	17.85	7.20	0.038276	0.5	0.002564
7	1201982850.1	1.0000	3.3233E-03	12/2/2009 0:00	17.85	7.70	0.040425	0.5	0.002564
8	1201982851.1	2.0360	3.4309E-03	11/24/2009 12:00	17.85	6.20	0.033978	0.5	0.002564
9	1201982852.1	1.0000	3.3233E-03	12/2/2009 0:00	17.85	7.70	0.040425	0.5	0.002564

Count Raw Data

Pos.	Detector ID	Counting Time (min.)	Gross Counts Alpha	Gross Counts Beta	Gross Beta CPM	Count Start Date/Time	Strontium Separation Date/Time	Yttrium Ingrowth	Sr-90 Decay	Calculated Sample Recovery %	Sample Recovery Error %
1	A1	60	1	86	1.433	12/4/2009 12:42	12/3/2009 15:27	0.210	0.999	70.58%	0.99%
2	B4	60	7	69	1.147	12/7/2009 15:27	12/3/2009 15:27	0.648	0.999	79.55%	0.97%
3	B1	60	13	115	1.913	12/4/2009 12:32	12/3/2009 15:27	0.208	0.999	72.83%	0.98%
4	B2	60	14	114	1.896	12/4/2009 12:32	12/3/2009 15:27	0.208	0.999	80.67%	0.97%
5	B3	60	2	64	1.066	12/4/2009 12:32	12/3/2009 15:27	0.208	0.999	79.55%	0.97%
6	C1	60	0	71	1.183	12/4/2009 12:30	12/3/2009 15:27	0.208	0.999	80.67%	0.97%
7	E3	90	0	101	1.122	12/4/2009 20:06	12/3/2009 15:27	0.273	1.000	86.27%	0.96%
8	C3	60	5	108	1.798	12/4/2009 12:30	12/3/2009 15:27	0.208	0.999	69.47%	0.99%
9	E3	60	0	1575	26.250	12/4/2009 12:31	12/3/2009 15:27	0.208	1.000	86.27%	0.96%

Calibration Data								Weekly Bkg	
Pos.	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm) Sr-90	Detector Efficiency (cpm/dpm) Y-90	Detector Efficiency Error (cpm/dpm)	Alpha X-Talk	CPM	Count Time (min.)
1	LB4100	1/12/2009	1/31/2010	0.4774	0.5937	0.01870	0.03004	1.256	500
2	LB4100	1/12/2009	1/31/2010	0.4390	0.5812	0.02075	0.02680	0.961	1000
3	LB4100	1/12/2009	1/31/2010	0.4554	0.6107	0.01808	0.01811	1.778	500
4	LB4100	1/12/2009	1/31/2010	0.4356	0.6159	0.01942	0.01884	1.886	500
5	LB4100	1/12/2009	1/31/2010	0.4265	0.6158	0.01849	0.01337	1.214	500
6	LB4100	1/12/2009	1/31/2010	0.4397	0.5848	0.01902	0.01402	1.210	500
7	LB4100	1/12/2009	1/31/2010	0.4406	0.5870	0.05054	0.01304	1.376	500
8	LB4100	1/12/2009	1/31/2010	0.4656	0.6008	0.02111	0.02271	1.954	500
9	LB4100	1/12/2009	1/31/2010	0.4406	0.5870	0.05054	0.01304	1.376	500

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDC for 1201982851.1

Results Pos.	Decision Level pCi/G	Critical Level pCi/G	Required MDC pCi/G	MDC pCi/G	Sample Act. Conc. pCi/G	Sample Act. Error pCi/G	Net Count Rate CPM	Net Count Rate Error CPM	1 SIGMA Counting Uncertainty pCi/G	1 SIGMA Total Prop. Uncertainty pCi/G	Sample QC	Sample Type	RPD	RER	Nominal pCi/G	Recovery
1	0.1878	0.1326	0.5	0.2914	**0.0931**	0.9190	0.1768	0.1625	0.0855	0.0860		SAMPLE				
2	0.1053	0.0743	0.5	0.1660	**0.0645**	0.7626	0.1859	0.1417	0.0491	0.0496		SAMPLE				
3	0.2191	0.1547	0.5	0.3352	**0.0696**	1.3972	0.1347	0.1882	0.0972	0.0974		SAMPLE				
4	0.2159	0.1525	0.5	0.3296	**4.744E-03**	19.5814	0.0096	0.1881	0.0929	0.0929		SAMPLE				
5	0.1759	0.1242	0.5	0.2734	**-0.0741**	0.9619	-0.1478	0.1421	0.0713	0.0713		SAMPLE				
6	0.1713	0.1209	0.5	0.2663	**-0.0130**	5.5801	-0.0267	0.1488	0.0728	0.0728		SAMPLE				
7	0.2721	0.1921	0.5	0.4132	**-0.2206**	0.4889	-0.2538	0.1234	0.1073	0.1073		MB				
8	0.2401	0.1695	0.5	0.3660	**-0.0841**	1.1809	-0.1559	0.1841	0.0993	0.0993	241913001.1	DUP	0.0%	0.0294		
9	0.3465	0.2446	0.5	0.5356	**23.0795**	0.0580	24.8740	0.6635	0.6156	2.9215		LCS			19.3415	119.3%

927434r2.xls

SampleID	Instr	Time (min.)	Alpha Counts	Beta Counts	Count Start Time	Count End Time	Machine
241838002	A1	60	1	86	12/4/2009 12:42	12/4/2009 13:42	LB4100
241905001	B4	60	7	69	12/7/2009 15:27	12/7/2009 16:27	LB4100
241909001	B1	60	13	115	12/4/2009 12:32	12/4/2009 13:32	LB4100
241909002	B2	60	14	114	12/4/2009 12:32	12/4/2009 13:32	LB4100
241913001	B3	60	2	64	12/4/2009 12:32	12/4/2009 13:32	LB4100
241913002	C1	60	0	71	12/4/2009 12:30	12/4/2009 13:30	LB4100
1201982850	E3	90	0	101	12/4/2009 20:06	12/4/2009 21:36	LB4100
1201982851	C3	60	5	108	12/4/2009 12:30	12/4/2009 13:30	LB4100
1201982852	E3	60	0	1575	12/4/2009 12:31	12/4/2009 13:31	LB4100

Radiochemistry Batch Checklist, Rev 9

Batch# 927684 Product: H3 Date: 12-10-09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits. Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (If necessary)			NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			NA
Batch non-conformances second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature]

Secondary Review Performed By: [signature] 12/10/09

LA NL 12-19-09

Tritium Que Sheet

120 Orange Vac

30-NOV-09

Batch #: 927684 Analyst:KXK2 First Client Due Date 19-DEC-09 Internal Due Date:08-DEC-09

Spike Isotope: Hydrogen-3 Spike Code: — Expiration Date: — Vol: —

LCS Isotope: Hydrogen-3 LCS Code: 0134-K Expiration Date: 3/27/10 Vol: 0.1

Prep Date: 12/2/09 Initials: KKJ Pipet ID: 2970968 Witness: AW 12/3/09

Sample ID	Client Samp ID	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Total moisture Dist Vol (mL) KKJ 12/2/09
241610001-1	RE03-09-13919	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	23	1		450.07	381.21	68.86
241610002-1	RE03-09-13916	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	24	2		629.83	579.44	50.39
241610003-1	RE03-09-13920	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	25	3		500.82	400.16	100.66
241610004-1	RE03-09-13914	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	26	4		557.06	486.87	70.19
241610005-1	RE03-09-13915	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	27	5		491.63	405.10	86.53
241610006-1	RE03-09-13918	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	28	6		515.36	443.72	71.64
241610007-1	RE03-09-13921	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	29	7	KKJ 12/2/09	488.64	397.75	90.89
241610008-1	RE03-09-13917	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	30	8		524.96	438.34	86.62
241610009-1	RE03-10-7033	SAMPLE		.25 pCi/mL	SOIL	LANL010	19-NOV-09	10	31	9		465.44	370.49	94.95
241838002-1	WST03-10-2134	SAMPLE		.25 pCi/mL	SOIL	LANL010	23-NOV-09	10	32	10		513.31	476.86	36.45
241900001-1	RE03-09-13923	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	10	33	11		520.93	424.56	96.37
241900002-1	RE03-09-13924	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	10	34	12		464.87	367.71	97.16
241900003-1	RE03-09-13922	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	10	35	13		497.39	370.06	127.33
241900004-1	RE03-09-13925	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	10	36	14		491.26	390.55	100.71
241900006-1	RE03-10-7034	SAMPLE		.25 pCi/mL	SOIL	LANL010	24-NOV-09	10	37	15		507.22	412.37	94.85
1201983606-1	MB for batch 927684	MB		.25 pCi/mL	SOIL	QC ACCOUNT		10	~~38~~ 182	16		20.00	0	20.00
1201983607-1	RE03-09-13923(241900001DUP)	DUP		.25 pCi/mL	SOIL	QC ACCOUNT	24-NOV-09	10	39	11		520.93	424.56	96.37
1201983608-1	LCS for batch 927684	LCS		.25 pCi/mL	SOIL	QC ACCOUNT		10	40	17		20.00	0	20.00

18

12-10-09

Bkg Rack #: 22/18-1

dailies ✓

Comments:

Instrument Used (circle as appropriate): *LS6000 (Red) 7065155, ~~LS6500 (Blue) 7067083~~, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4040127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299, Purple 7069123, Silver 7060656*

Bkg prepared with dead water? Yes/No

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly vial; Ecoscint Ultra (10 mL sample/13 mL Ecoscint Ultra)*

Data Reviewed By: 12-10-09

GEL Laboratories LLC, Radiochemistry Division

DATE	12/1/2009	INITIALS	KXK2		BATCH NUMBER	927684

Sample #	Sample Wet (g)	% Moisture of Sample (Balance Interface using % Moisture Batch)	Total Moisture in Sample (mL)	Sample Dry (g)	mLs aliquoted into LSC vial	Collection Tube Number
241610001	450.07	0.153	68.86	381.21	10	209
241610002	629.83	0.080	50.39	579.44	10	55
241610003	500.82	0.201	100.66	400.16	10	408
241610004	557.06	0.126	70.19	486.87	10	610
241610005	491.63	0.176	86.53	405.10	10	203
241610006	515.36	0.139	71.64	443.72	10	5
241610007	488.64	0.186	90.89	397.75	10	206
241610008	524.96	0.165	86.62	438.34	10	24
241610009	465.44	0.204	94.95	370.49	10	908
341838002	513.31	0.071	36.45	476.86	10	18
241900001	520.93	0.185	96.37	424.56	10	722
241900002	464.87	0.209	97.16	367.71	10	151
241900003	497.39	0.256	127.33	370.06	10	701
241900004	491.26	0.205	100.71	390.55	10	602
241900006	507.22	0.187	94.85	412.37	10	101
MB	20.00	1.000	20.00	0.00	10	1
LCS	20	1	20.00	0.00	10	2

T927684R

Tritium Solid

Filename : H3VAC.XLS
File type : Excel
Version # : 1.2.5

Batch : 927684
Analyst : KXK2
Prep Date : 12/2/2009

Spike S/N : N/A
Spike Exp Date : N/A
Spike Activity (dpm/ml): N/A
Spike Volume Added: N/A

LCS S/N : 0134-K
LCS Exp Date : 3/27/2010
LCS Activity (dpm/ml): 2495.34
LCS Volume Added: 0.10

H-3 Abundance : 1
Method Uncertainty : 0.0691
Geometry: 10mL DW/13mL Ecoscint Ultra

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1.0 ml Stdev : +/- 0.005480 ml
Pipet, 5.0 ml Stdev : +/- 0.025729 ml

Procedure Code : LSC_VH3S
Parmname : Tritium
Required MDC : 250 pCi/L
Halflife of Tritium : 12.28 years

Sample Characteristics

Pos.	Sample ID	Wet Sample Weight (g)	Total Moisture L	Sample Aliquot in Vial L	Sample Aliquot Stdev. L	Dry Sample Weight (g)	% Moisture of Sample	Rig number	Sample Date/Time
1	241610001.1	450.07	0.0689	0.0100	2.5729E-05	381.21	15.30%	1	11/19/2009 12:00
2	241610002.1	629.83	0.0504	0.0100	2.5729E-05	579.44	8.00%	2	11/19/2009 12:00
3	241610003.1	500.82	0.1007	0.0100	2.5729E-05	400.16	20.10%	3	11/19/2009 12:00
4	241610004.1	557.06	0.0702	0.0100	2.5729E-05	486.87	12.60%	4	11/19/2009 12:00
5	241610005.1	491.63	0.0865	0.0100	2.5729E-05	405.10	17.60%	5	11/19/2009 12:00
6	241610006.1	515.36	0.0716	0.0100	2.5729E-05	443.72	13.90%	6	11/19/2009 12:00
7	241610007.1	488.64	0.0909	0.0100	2.5729E-05	397.75	18.60%	7	11/19/2009 12:00
8	241610008.1	524.96	0.0866	0.0100	2.5729E-05	438.34	16.50%	8	11/19/2009 12:00
9	241610009.1	465.44	0.0950	0.0100	2.5729E-05	370.49	20.40%	9	11/19/2009 12:00
10	241838002.1	513.31	0.0365	0.0100	2.5729E-05	476.86	7.10%	10	11/23/2009 12:00
11	241900001.1	520.93	0.0964	0.0100	2.5729E-05	424.56	18.50%	11	11/24/2009 12:00
12	241900002.1	464.87	0.0972	0.0100	2.5729E-05	367.71	20.90%	12	11/24/2009 12:00
13	241900003.1	497.39	0.1273	0.0100	2.5729E-05	370.06	25.60%	13	11/24/2009 12:00
14	241900004.1	491.26	0.1007	0.0100	2.5729E-05	390.55	20.50%	14	11/24/2009 12:00
15	241900006.1	507.22	0.0949	0.0100	2.5729E-05	412.37	18.70%	15	11/24/2009 12:00
16	1201983606.2	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	16	12/2/2009 0:00
17	1201983607.1	520.93	0.0964	0.0100	2.5729E-05	424.56	18.50%	11	11/24/2009 12:00
18	1201983608.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	17	12/2/2009 0:00

T927684R

Count raw Data					Background				Calibration Data					Backgrounds	
Pos.	Rack Position #	Counting Time (min.)	Quench#	Gross cpm	cpm	Count Time (min.)	Count Start Date/Time	Sample Decay	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Efficiency Error (cpm/dpm)	Rack Position #	Count Start Date/Time
1	23	120.03	758.28	1.34	0.97	120	12/6/2009 6:09	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2683	0.00792	22	12/6/2009 4:06
2	24	120.03	753.97	1.57	0.97	120	12/6/2009 8:11	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2612	0.00792	22	12/6/2009 4:06
3	25	120.03	764.12	1.25	0.97	120	12/6/2009 10:14	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2777	0.00792	22	12/6/2009 4:06
4	26	120.03	763.86	2.17	0.97	120	12/6/2009 13:42	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2773	0.00792	22	12/6/2009 4:06
5	27	120.03	760.09	2.78	0.97	120	12/6/2009 15:44	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2712	0.00792	22	12/6/2009 4:06
6	28	120.03	760.41	1.37	0.97	120	12/6/2009 17:47	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2718	0.00792	22	12/6/2009 4:06
7	29	120.03	758.46	1.31	0.97	120	12/6/2009 19:49	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2686	0.00792	22	12/6/2009 4:06
8	30	120.03	757.04	1.96	0.97	120	12/6/2009 21:52	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2662	0.00792	22	12/6/2009 4:06
9	31	120.03	760.05	1.22	0.97	120	12/6/2009 23:54	0.997	LSCORANGE	7/23/2009	7/31/2010	0.2712	0.00792	22	12/6/2009 4:06
10	32	120.03	750.62	2.01	0.97	120	12/7/2009 1:57	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2556	0.00792	22	12/6/2009 4:06
11	33	120.013	758.67	1.15	0.97	120	12/7/2009 3:59	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2689	0.00792	22	12/6/2009 4:06
12	34	120.03	744.8	1.16	0.97	120	12/7/2009 6:02	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2458	0.00792	22	12/6/2009 4:06
13	35	120.03	753.29	1.26	0.97	120	12/7/2009 9:45	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2600	0.00792	22	12/6/2009 4:06
14	36	120.03	756.71	1.22	0.97	120	12/7/2009 11:48	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2657	0.00792	22	12/6/2009 4:06
15	37	120.03	756.46	1.3	0.97	120	12/7/2009 13:50	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2653	0.00792	22	12/6/2009 4:06
16	18-2	120	109.4	3.69	3.33	120	12/10/2009 2:46	0.999	LSCBROWN	9/9/2009	9/30/2010	0.2369	0.00792	18-1	12/10/2009 0:43
17	39	120.03	753.71	1.19	0.97	120	12/7/2009 17:55	0.998	LSCORANGE	7/23/2009	7/31/2010	0.2607	0.00792	22	12/6/2009 4:06
18	40	15.0296	760.86	38.34	0.97	120	12/7/2009 19:58	0.999	LSCORANGE	7/23/2009	7/31/2010	0.2725	0.00792	22	12/6/2009 4:06

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDC for 1201983607.1

Results

Pos.	Decision Level pCi/L	Critical Level pCi/L	Required MDC pCi/L	MDC pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error pCi/L	Net Count Rate CPM	Net Count Rate Error CPM	1 SIGMA Counting Uncertainty pCi/L	1 SIGMA Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
1	49.8656	35.2055	250	74.6185	**62.2859**	0.375	0.370	0.139	23.3534	23.7529		SAMPLE				
2	51.2230	36.1639	250	76.6498	**103.7538**	0.243	0.600	0.145	25.1551	26.1724		SAMPLE				
3	48.1677	34.0068	250	72.0779	**45.5304**	0.486	0.280	0.136	22.1144	22.3406		SAMPLE				
4	48.2412	34.0587	250	72.1878	**195.4281**	0.135	1.200	0.162	26.3406	29.6495		SAMPLE				
5	49.3254	34.8242	250	73.8103	**301.3957**	0.098	1.810	0.177	29.4327	36.1514		SAMPLE				
6	49.2316	34.7579	250	73.6699	**66.4801**	0.349	0.400	0.140	23.2057	23.6631		SAMPLE				
7	49.8152	35.1700	250	74.5432	**57.1780**	0.405	0.340	0.138	23.1778	23.5175		SAMPLE				
8	50.2517	35.4781	250	75.1963	**167.9475**	0.158	0.990	0.156	26.5050	28.9713		SAMPLE				
9	49.3399	34.8344	250	73.8319	**41.6414**	0.540	0.250	0.135	22.4990	22.6852		SAMPLE				
10	52.3163	36.9357	250	78.2857	**183.6782**	0.152	1.040	0.158	27.8284	30.6280		SAMPLE				
11	49.7175	35.1010	250	74.3974	**30.2103**	0.738	0.180	0.133	22.3060	22.4050		SAMPLE				
12	54.3995	38.4065	250	81.4030	**34.8928**	0.701	0.190	0.133	24.4640	24.5844		SAMPLE				
13	51.4143	36.2989	250	76.9360	**50.3349**	0.470	0.290	0.136	23.6581	23.9164		SAMPLE				
14	50.3200	35.5264	250	75.2985	**42.4686**	0.540	0.250	0.135	22.9459	23.1358		SAMPLE				
15	50.3987	35.5819	250	75.4163	**56.1463**	0.417	0.330	0.138	23.3978	23.7224		SAMPLE				
16	104.5121	73.7865	250	152.3329	**68.5436**	0.672	0.360	0.242	46.0513	46.2981		MB				
17	51.2793	36.2037	250	76.7341	**38.0849**	0.610	0.220	0.134	23.2227	23.3737	241900001.1	DUP	0.0%	0.0860		
18	103.8922	73.3488	250	179.7246	**6183.2996**	0.044	37.370	1.600	264.6890	505.4908		LCS			5620.1427	110.0%

REGISTRY

SUN 6 DEC 2009 4:05

*** DIRECTORY PATH :S:\LSC\O\DA\927684A0 ***

PARAMETER GROUP: 8
ID: H-3 (3)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	22	BKG	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	23	241610001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	24	241610002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	25	241610003	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q012201N.001 6 DEC 2009 6:07						
22	BKG	120:01.780	756.87	.97	2.43	7.39
Q022301N.001 6 DEC 2009 8:10						
23	241610001	120:01.780	758.28	1.34	2.73	7.35
Q032401N.001 6 DEC 2009 10:12						
24	241610002	120:01.780	753.97	1.57	2.91	7.40
Q042501N.001 6 DEC 2009 12:15						
25	241610003	120:01.780	764.12	1.25	2.60	7.41

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927684A0\SQ012201N.001.xls
File Info:	s:\lsc\files\orange\927684A0\U927684A0.xls
ID:	H-3 (3)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, BKG, 120.0297:
Quench:	756.87
Start, End, X-Axis	50-175

Channel Counts

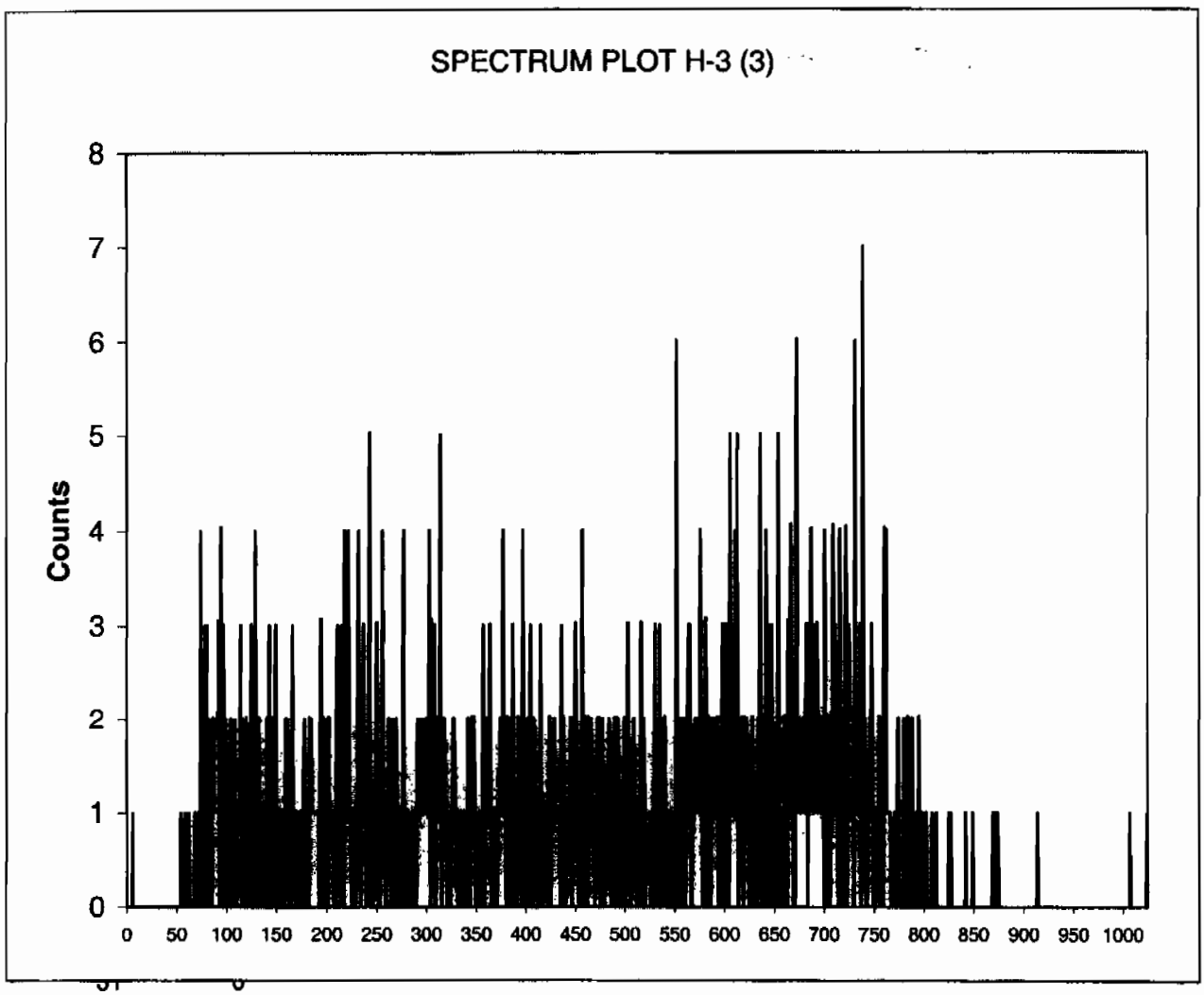

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927684A0\SQ022301N.001.xls
File Info:	s:\lsc\files\orange\927684A0\U927684A0.xls
ID:	H-3 (3)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241610001, 120.0297:
Quench:	758.28
Start, End, X-Axis	50-175

Channel Counts

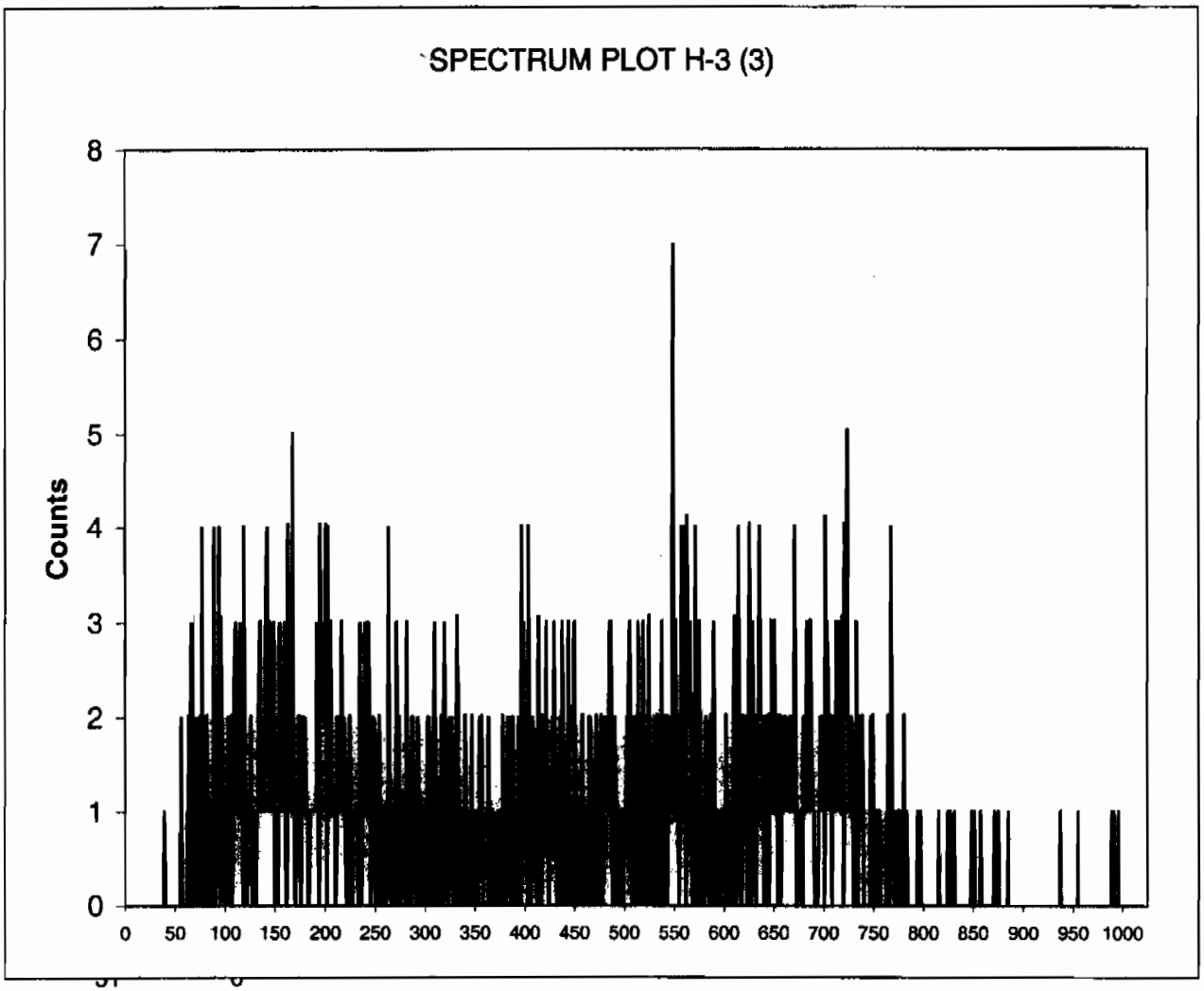

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927684A0\SQ032401N.001.xls
File Info:	s:\lsc\files\orange\927684A0\U927684A0.xls
ID:	H-3 (3)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241610002, 120.0297:
Quench:	753.97
Start, End, X-Axis	50-175

Channel Counts

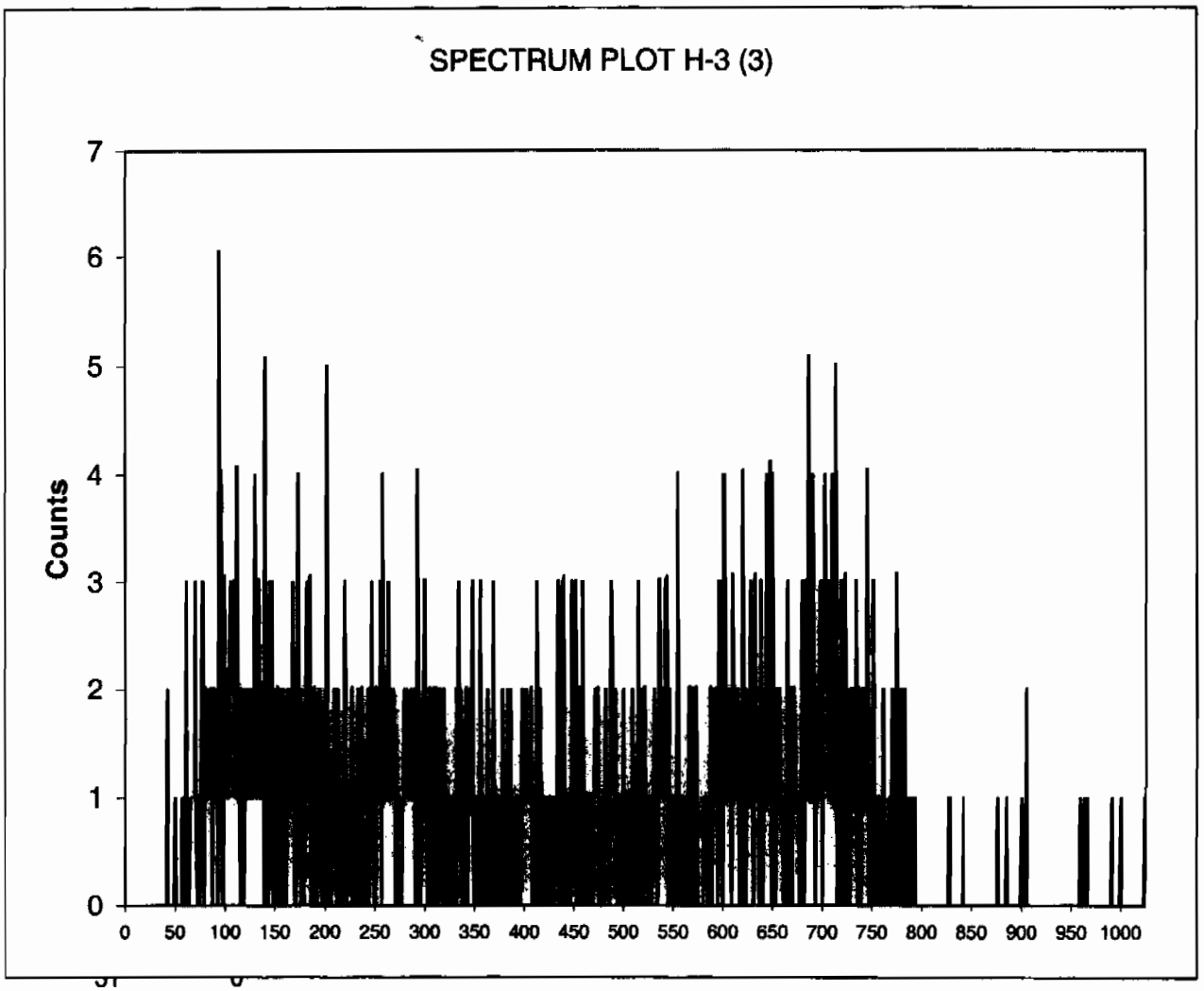

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 4:05
FileName:	s:\lsc\files\orange\927684A0\SQ042501N.001.xls
File Info:	s:\lsc\files\orange\927684A0\U927684A0.xls
ID:	H-3 (3)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241610003, 120.0297:
Quench:	764.12
Start, End, X-Axis	50-175

Channel Counts

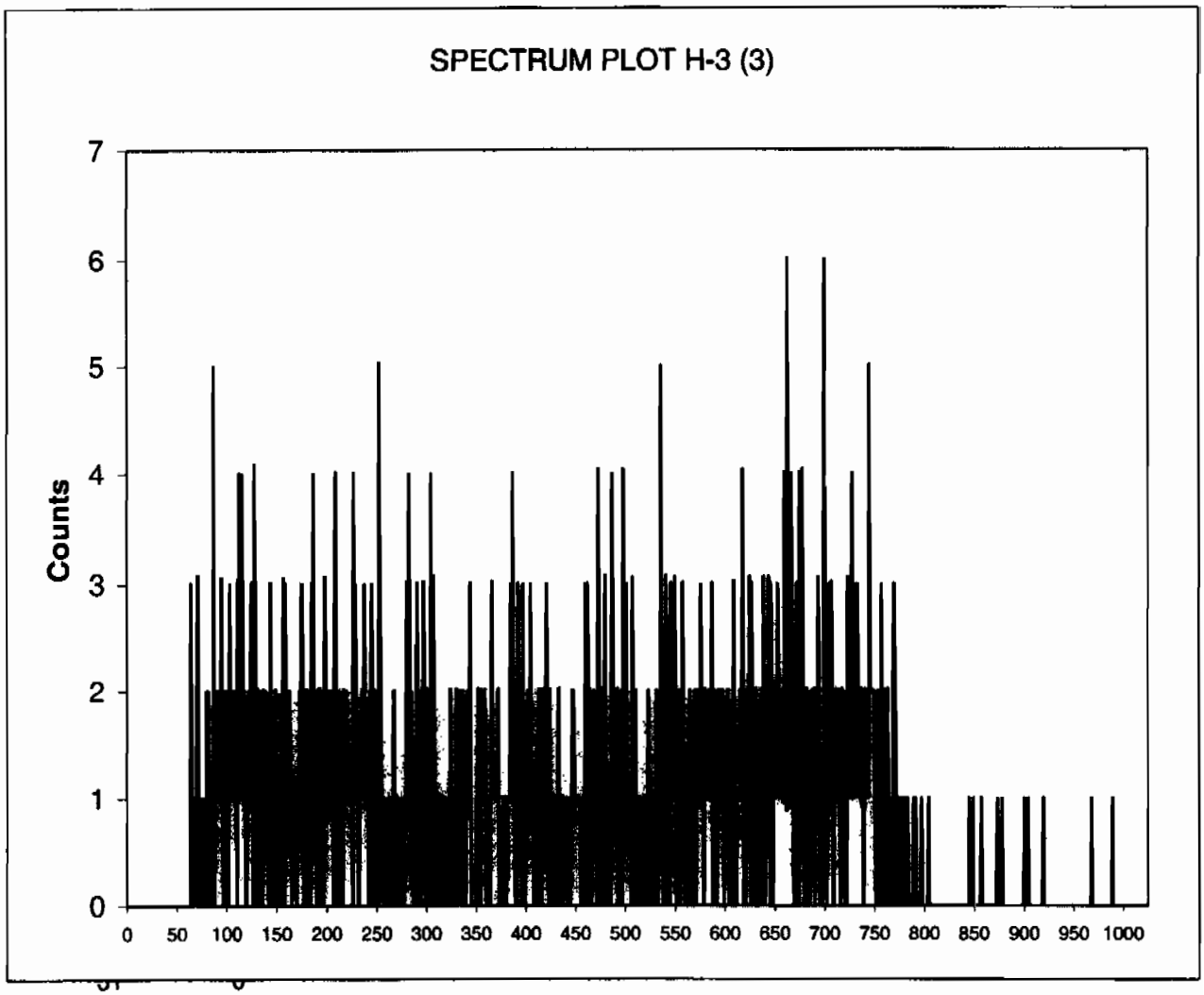

32	0
33	0
34	0
35	0

REGISTRY

SUN 6 DEC 2009 13:40

*** DIRECTORY PATH :S:\LSC\O\DA\927684A2 ***

PARAMETER GROUP: 8
ID: H-3 (4)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	26	241610004	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	27	241610005	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	28	241610006	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	29	241610007	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	30	~~1241610008~~ m 12/10/09	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	31	241610009	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	32	241838002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
8	33	241900001	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
9	34	241900002	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
10	35	241900003	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
11	36	241900004	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
12	37	241900006	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
13	38	1201983606	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
14	39	1201983607	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
15	40	1201983608	15:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

Q012601N.001 6 DEC 2009 15:43						
26	241610004	120:01.780	763.86	2.17	3.59	8.65
Q022701N.001 6 DEC 2009 17:45						
27	241610005	120:01.780	760.09	2.78	4.20	8.80
Q032801N.001 6 DEC 2009 19:48						
28	241610006	120:01.780	760.41	1.37	2.77	7.68
Q042901N.001 6 DEC 2009 21:50						
29	241610007	120:01.780	758.46	1.31	2.77	7.24
Q053001N.001 6 DEC 2009 23:53						
30	241610008	120:01.780	757.04	1.96	3.30	7.97
Q063101N.001 7 DEC 2009 1:55						
31	241610009	120:01.773	760.05	1.22	2.65	7.31
Q073201N.001 7 DEC 2009 3:58						
32	241838002	120:01.780	750.62	2.01	3.50	8.29
Q083301N.001 7 DEC 2009 6:00						
33	241900001	120:00.779	758.67	1.15	2.41	7.09
Q093401N.001 7 DEC 2009 8:03						
34	241900002	120:01.779	744.80	1.16	2.51	6.89

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ012601N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	1, 241610004, 120.0297:
Quench:	763.86
Start, End, X-Axis	50-175

Channel Counts

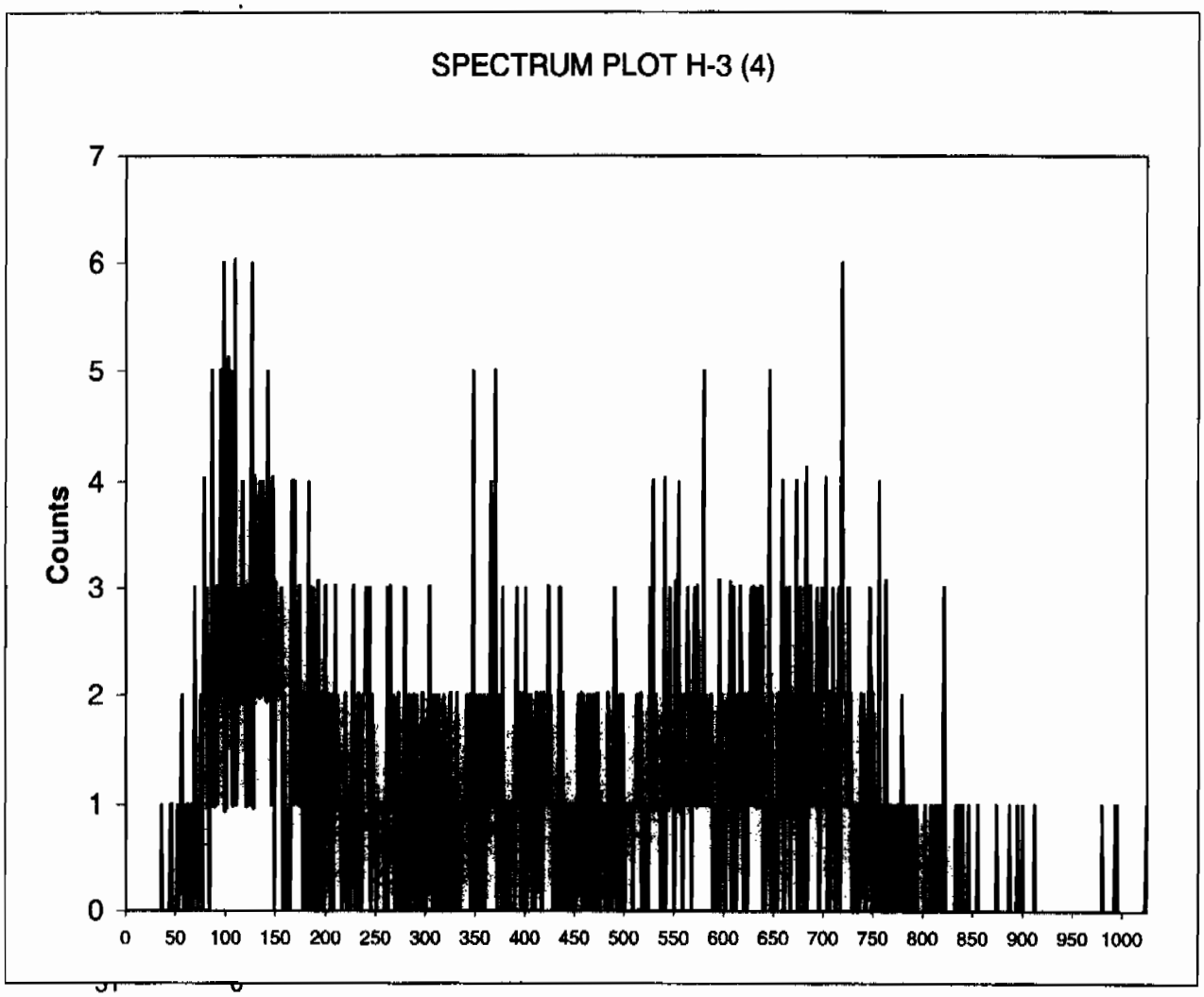

31	0
32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ022701N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	2, 241610005, 120.0297:
Quench:	760.09
Start, End, X-Axis	50-175

Channel Counts

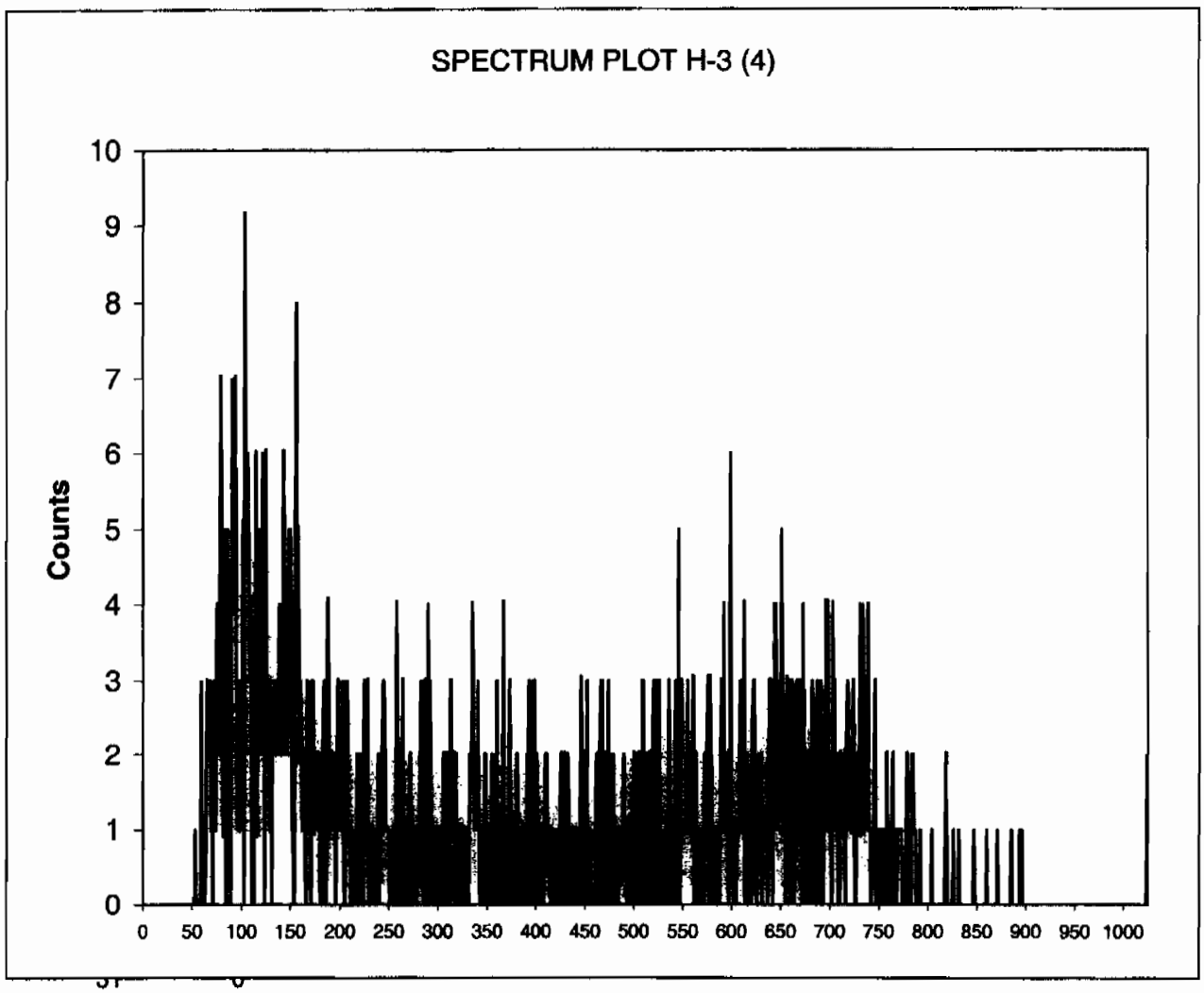

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ032801N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	3, 241610006, 120.0297:
Quench:	760.41
Start, End, X-Axis	50-175

Channel Counts

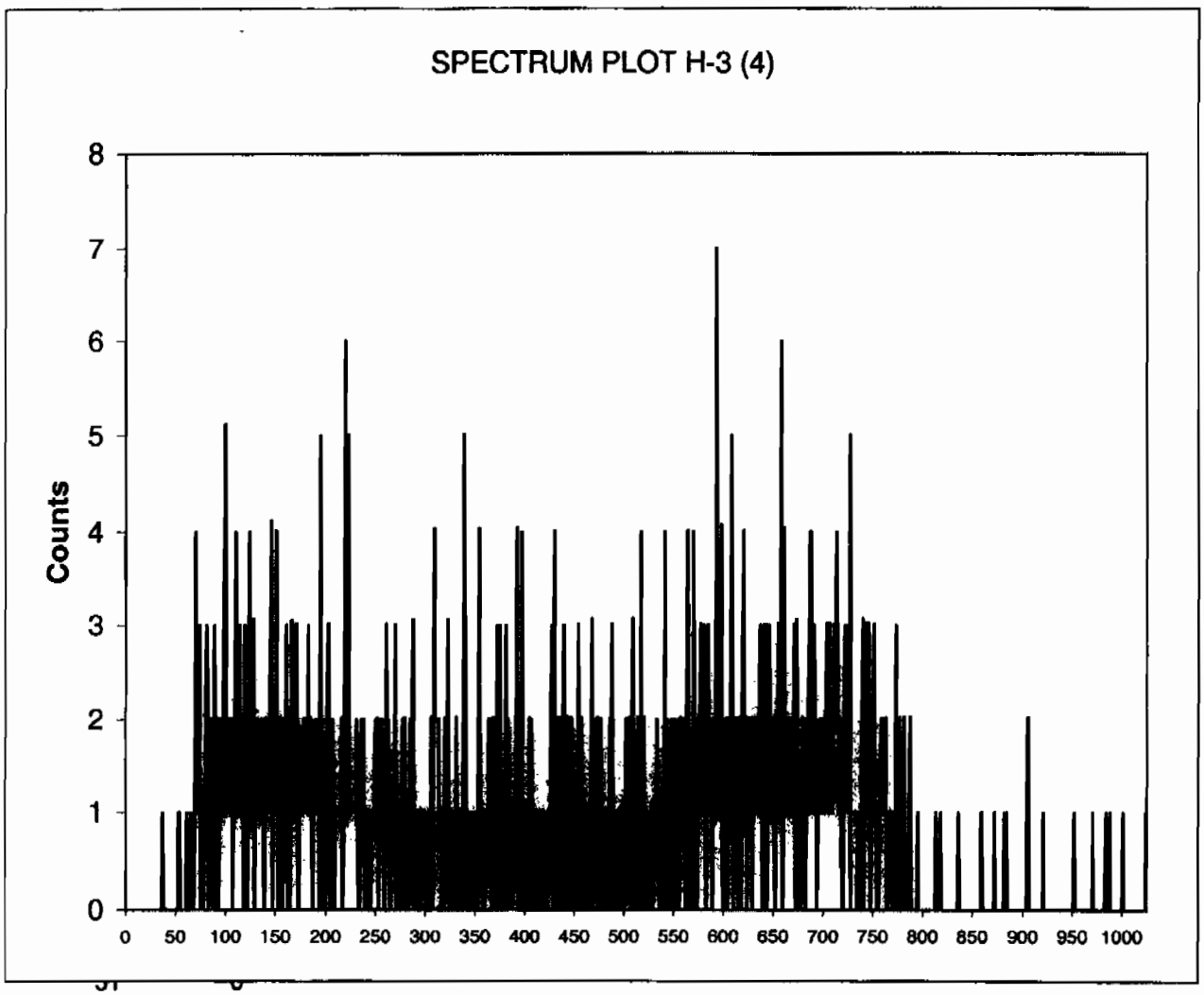

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ042901N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	4, 241610007, 120.0297:
Quench:	758.46
Start, End, X-Axis	50-175

Channel Counts

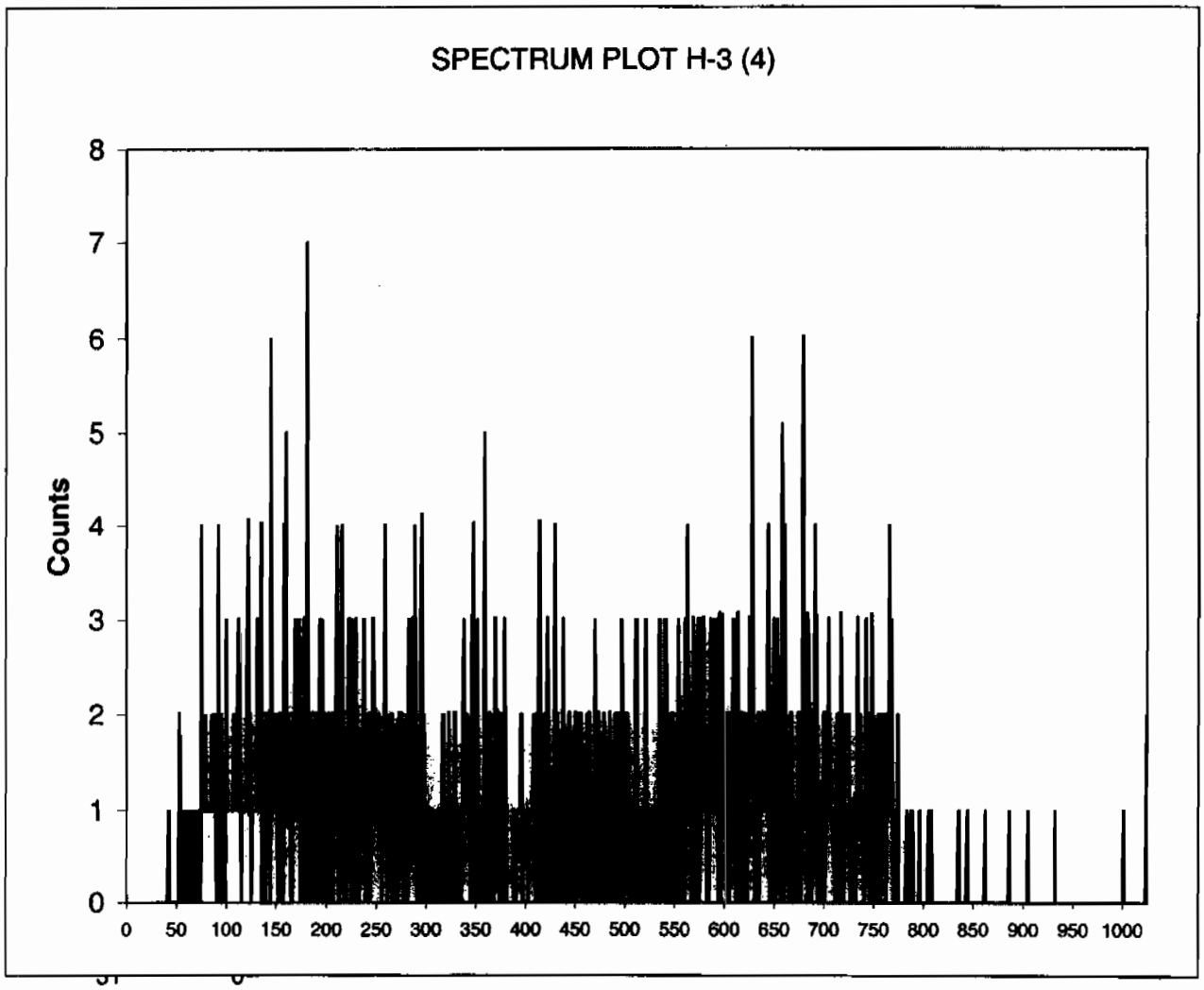

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ053001N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
	24161 0008 ~ 12/10/09
Sample, Rack-Pos, Time:	5, 1, 120.0297:
Quench:	757.04
Start, End, X-Axis	50-175

Channel Counts

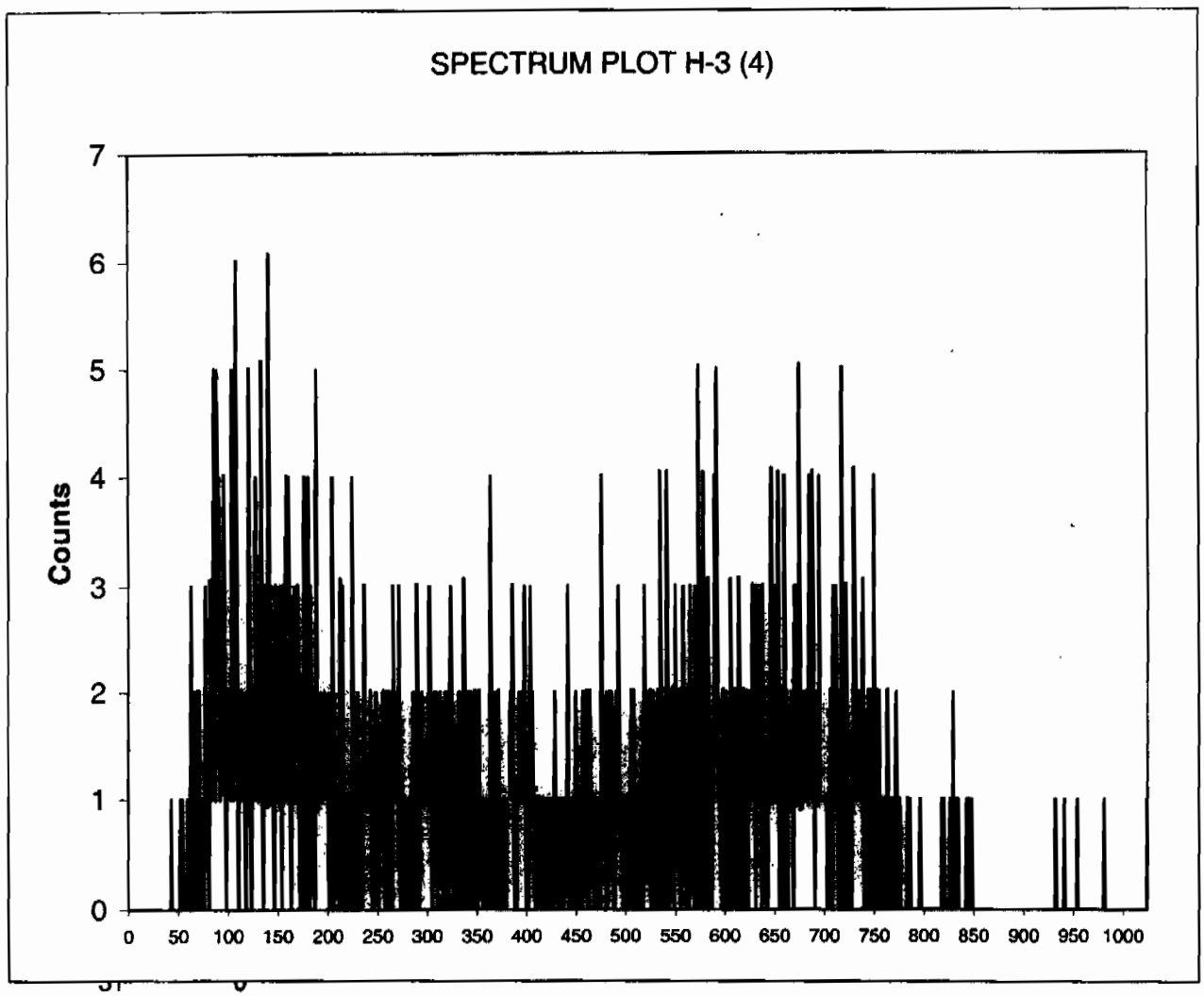

31	0
32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ063101N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	6, 241610009, 120.0295:
Quench:	760.05
Start, End, X-Axis	50-175

Channel Counts

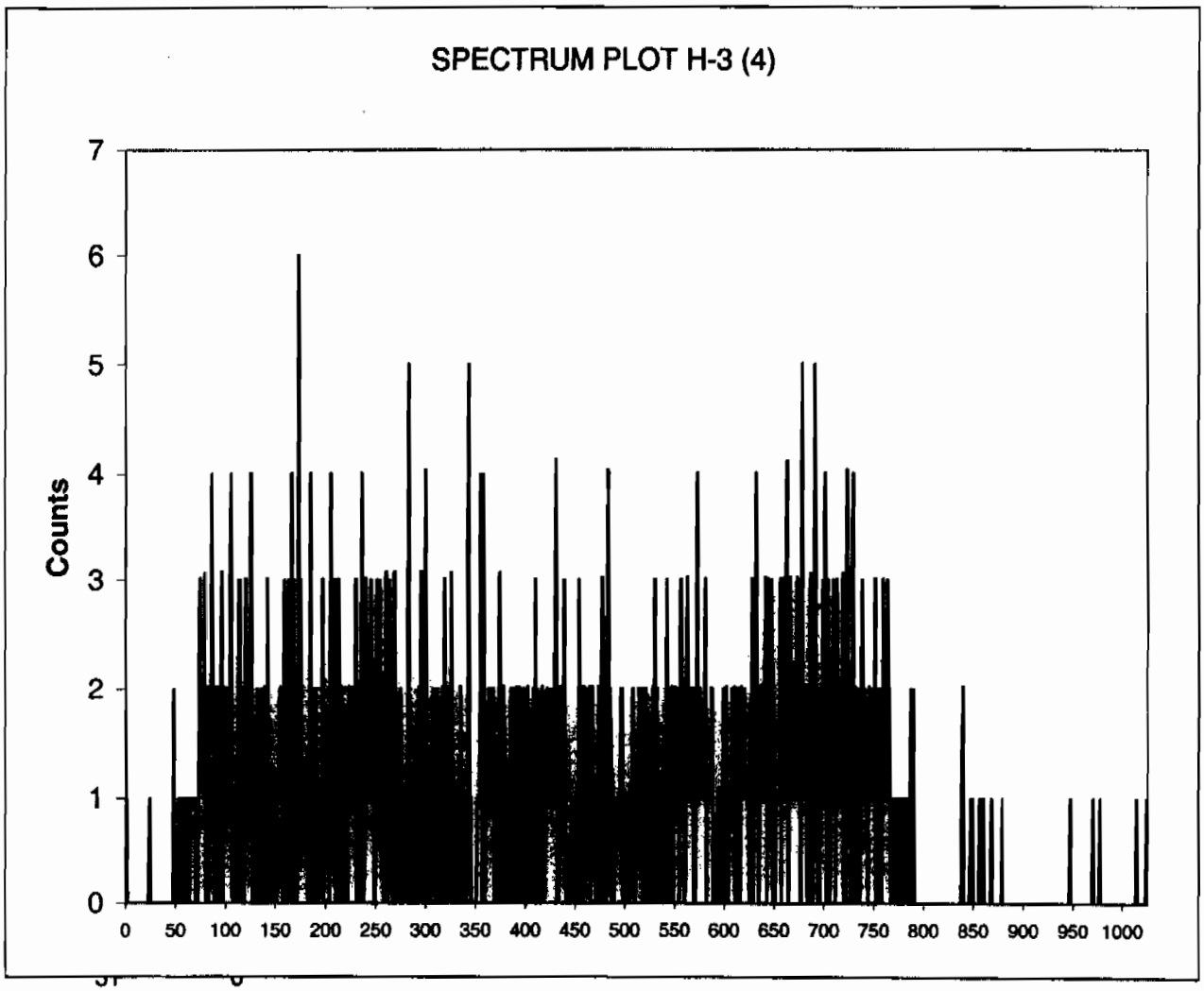

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ073201N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	7, 241838002, 120.0297:
Quench:	750.62
Start, End, X-Axis	50-175

Channel Counts

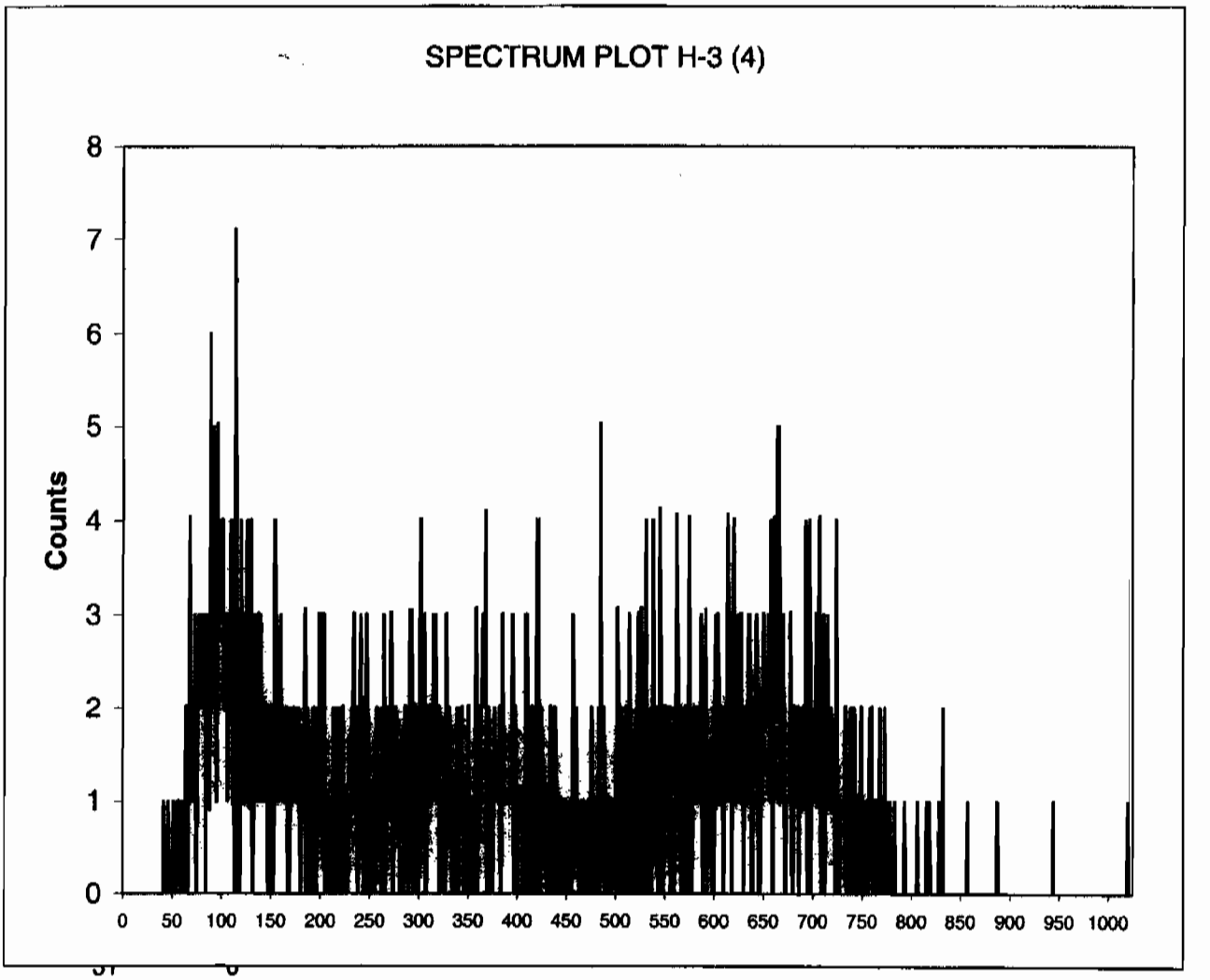

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ083301N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls

ID:	H-3 (4)
Comments:	ORANGE

Sample, Rack-Pos, Time:	8, 241900001, 120.013:
Quench:	758.67
Start, End, X-Axis	50-175

Channel Counts

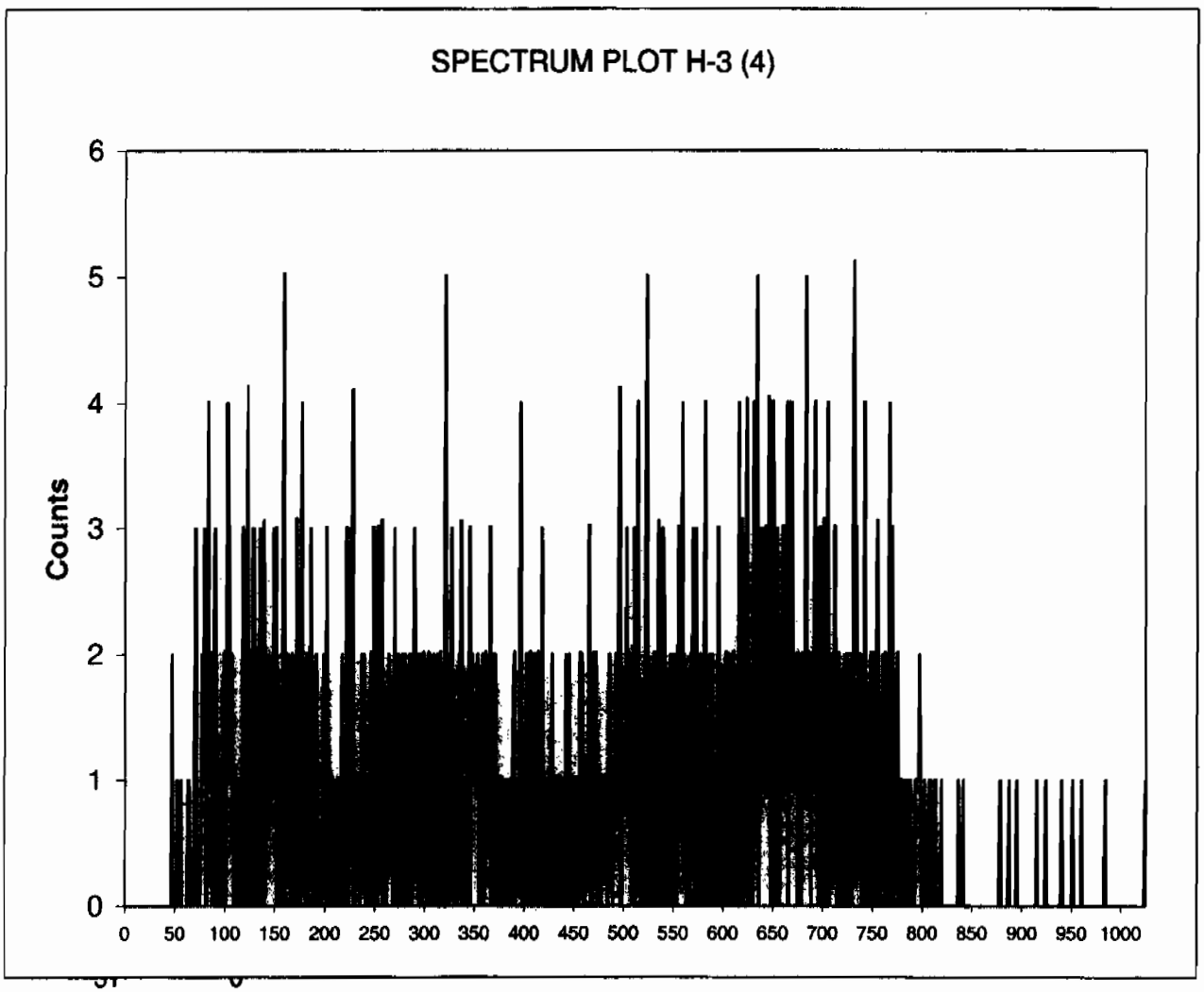

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	SUN 6 DEC 2009 13:40
FileName:	s:\lsc\files\orange\927684A2\SQ093401N.001.xls
File Info:	s:\lsc\files\orange\927684A2\U927684A2.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	9, 241900002, 120.0296:
Quench:	744.8
Start, End, X-Axis	50-175

Channel Counts

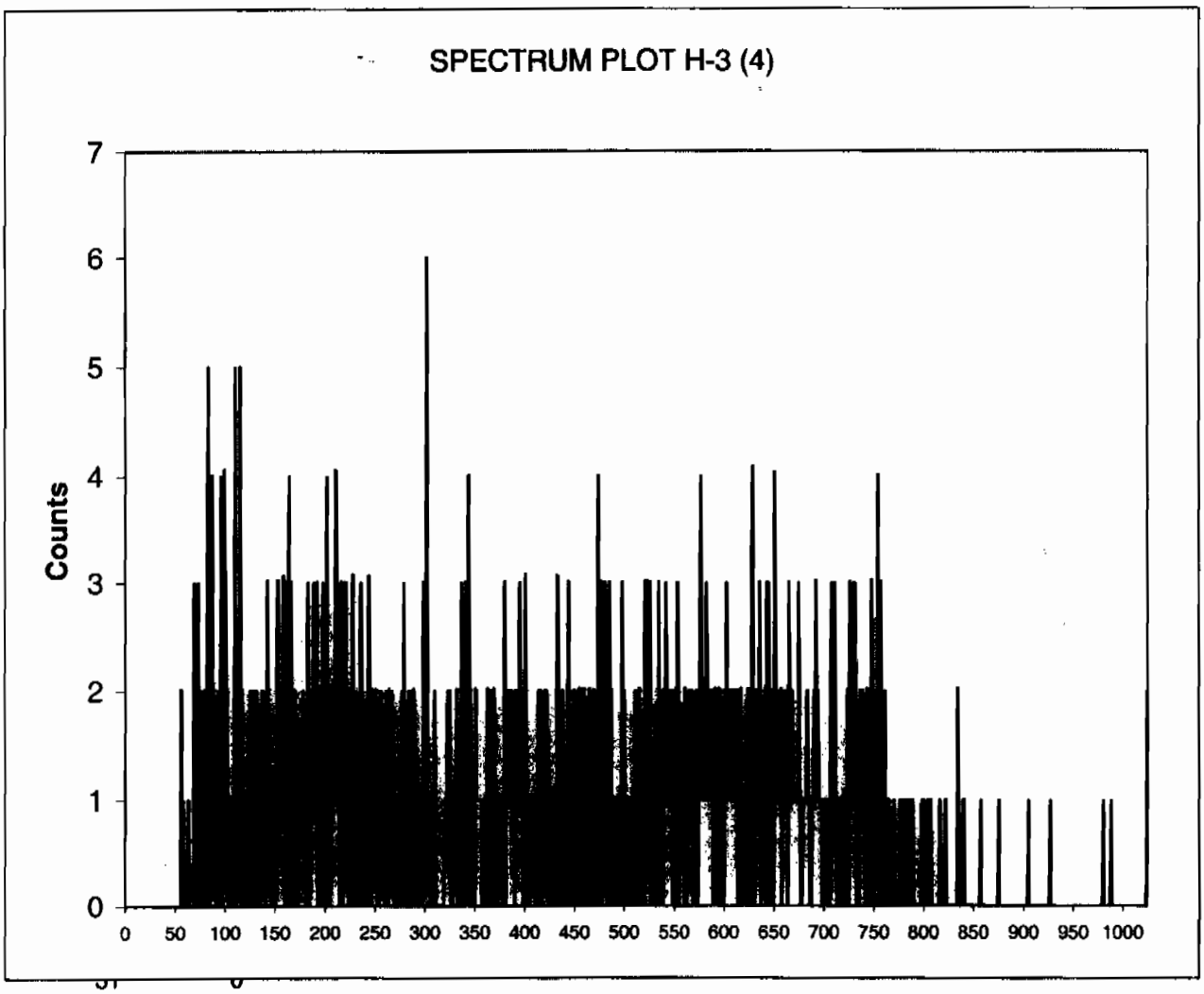

32	0
33	0
34	0
35	0

REGISTRY

MON 7 DEC 2009 9:19

*** DIRECTORY PATH :S:\LSC\O\DA\927684A3 ***

PARAMETER GROUP: 8
ID: H-3 (4)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	26	241610004	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	27	241610005	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	28	241610006	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	29	241610007	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	30	241610008	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	31	241610009	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	32	241838002	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
8	33	241900001	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
9	34	241900002	0:01	1.0E04	NO LIM	1	1	Y	1/10	1:00
10	35	241900003	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
11	36	241900004	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
12	37	241900006	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
13	38	1201983606	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
14	39	1201983607	120:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
15	40	1201983608	15:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

12-10-09 ~~Q012601N.001 7 DEC 2009 9:22~~						
~~26~~	~~241610004~~	~~0:02.780~~	~~759.50~~	~~.00~~	~~.00~~	~~22.00~~
Q022701N.001 7 DEC 2009 9:25						
27	241610005	0:02.780	757.85	.00	.00	.00
Q032801N.001 7 DEC 2009 9:28						
28	241610006	0:02.780	757.35	.00	.00	.00
Q042901N.001 7 DEC 2009 9:30						
29	241610007	0:02.780	758.15	.00	.00	.00
Q053001N.001 7 DEC 2009 9:33						
30	241610008	0:02.780	759.88	.00	.00	.00
Q063101N.001 7 DEC 2009 9:36						
31	241610009	0:02.773	756.85	.00	.00	.00
Q073201N.001 7 DEC 2009 9:38						
32	241838002	0:02.780	749.15	.00	.00	.00
Q083301N.001 7 DEC 2009 9:41						
33	241900001	0:02.779	759.97	.00	.00	.00
Q093401N.001 7 DEC 2009 9:44						
~~34~~	~~241900002~~	~~0:02.779~~	~~747.83~~	~~.00~~	~~.00~~	~~22.00~~
Q103501N.001 7 DEC 2009 11:46						
35	241900003	120:01.779	753.29	1.26	2.60	7.12
Q113601N.001 7 DEC 2009 13:49						
36	241900004	120:01.772	756.71	1.22	2.48	7.32
Q123701N.001 7 DEC 2009 15:51						
37	241900006	120:01.779	756.46	1.30	2.58	7.24
12-10-09 ~~Q133801N.001 7 DEC 2009 17:54~~						
~~38~~	~~1201983606~~	~~120:01.778~~	~~765.03~~	~~1.00~~	~~2.08~~	~~6.56~~
Q143901N.001 7 DEC 2009 19:56						
39	1201983607	120:01.778	753.71	1.19	2.57	7.35
Q154001N.001 7 DEC 2009 20:14						
40	1201983608	15:01.778	760.86	38.34	43.65	47.39

Instrument Type:	Quantulus
Data Capture Date:	MON 7 DEC 2009 9:19
FileName:	s:\lsc\files\orange\927684A3\SQ103501N.001.xls
File Info:	s:\lsc\files\orange\927684A3\U927684A3.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	10, 241900003, 120.0296:
Quench:	753.29
Start, End, X-Axis	50-175

Channel Counts

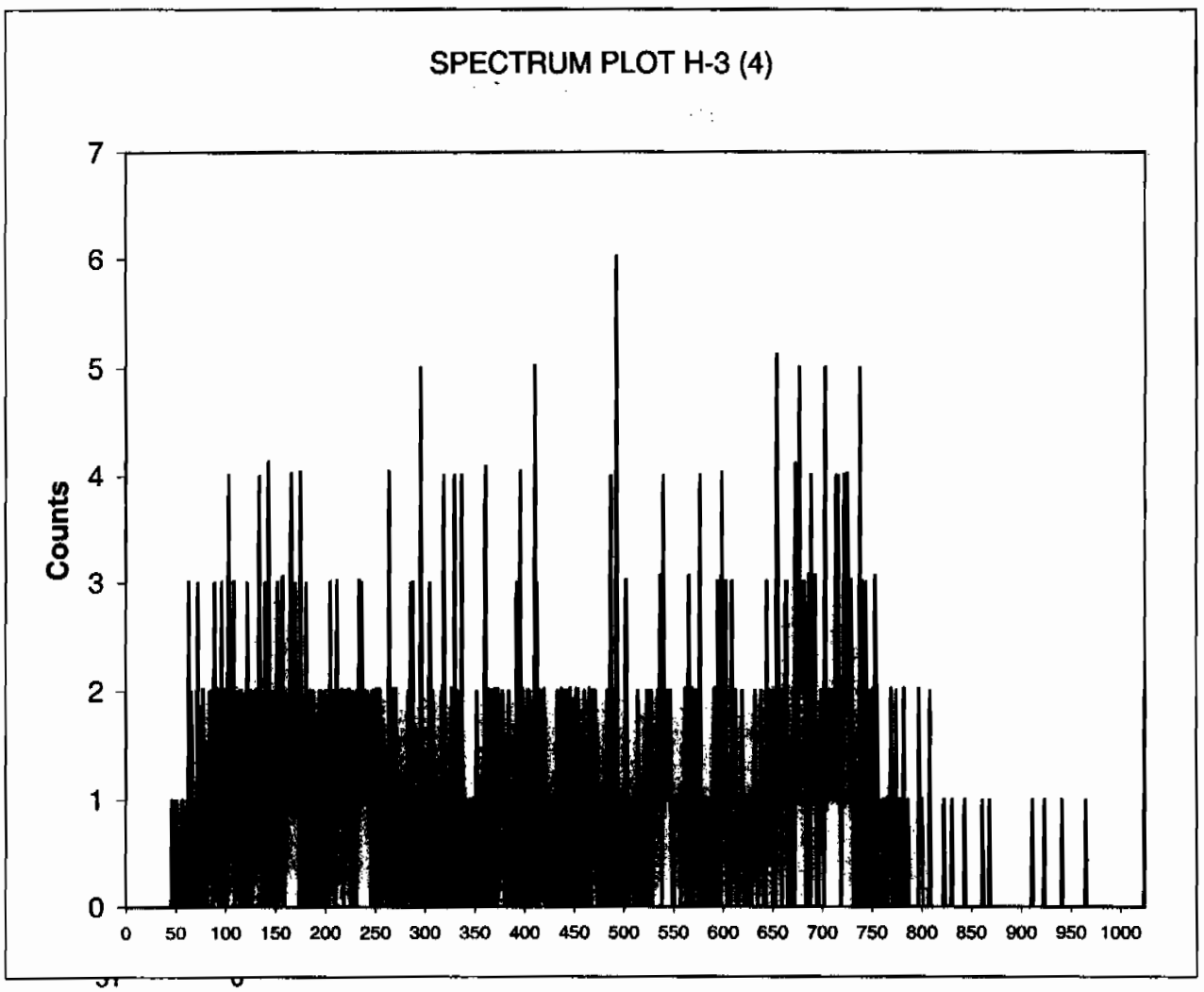

32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	MON 7 DEC 2009 9:19
FileName:	s:\lsc\files\orange\927684A3\SQ113601N.001.xls
File Info:	s:\lsc\files\orange\927684A3\U927684A3.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	11, 241900004, 120.0295:
Quench:	756.71
Start, End, X-Axis	50-175

Channel Counts

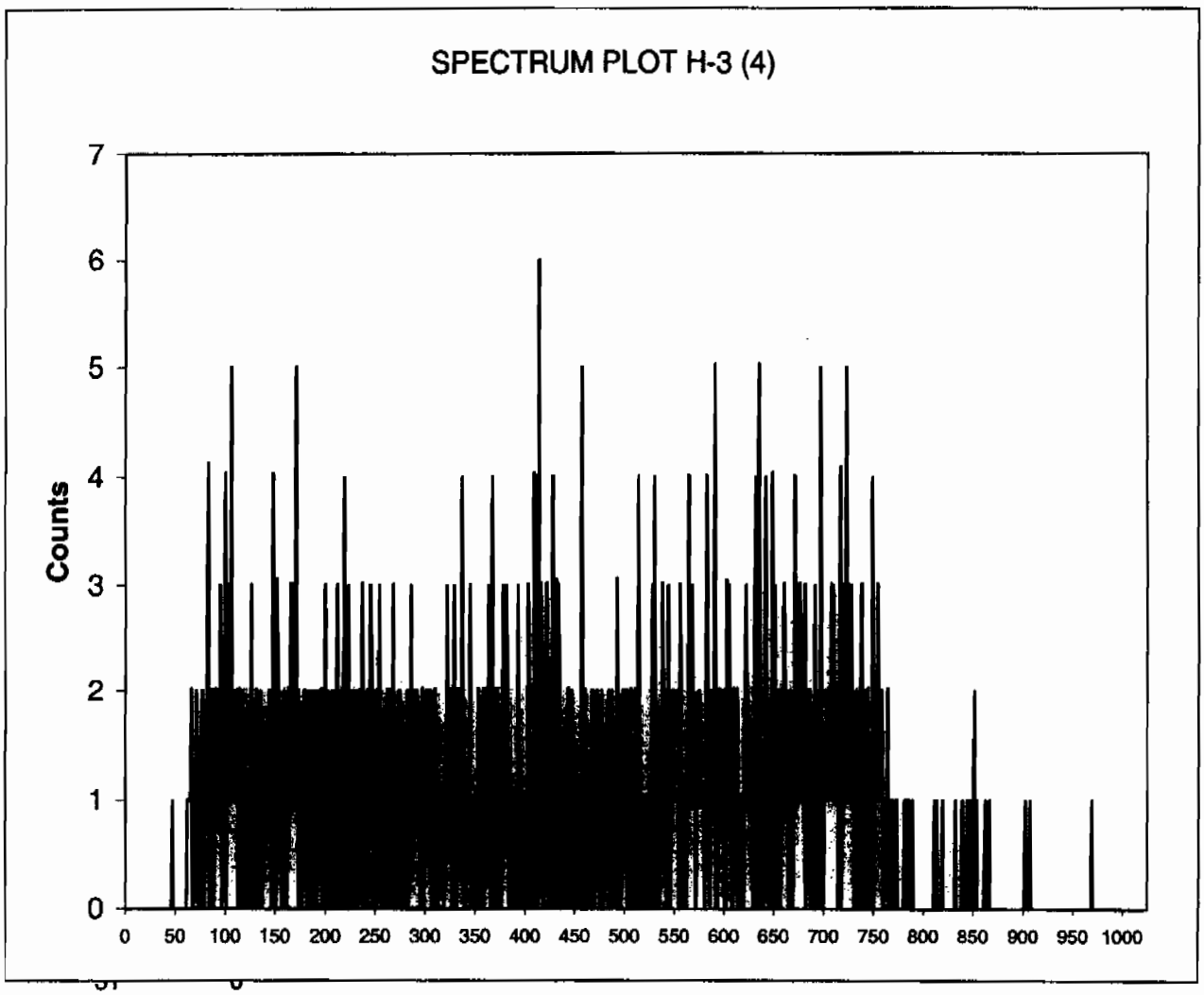

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ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	12, 241900006, 120.0296:
Quench:	756.46
Start, End, X-Axis	50-175

Channel Counts

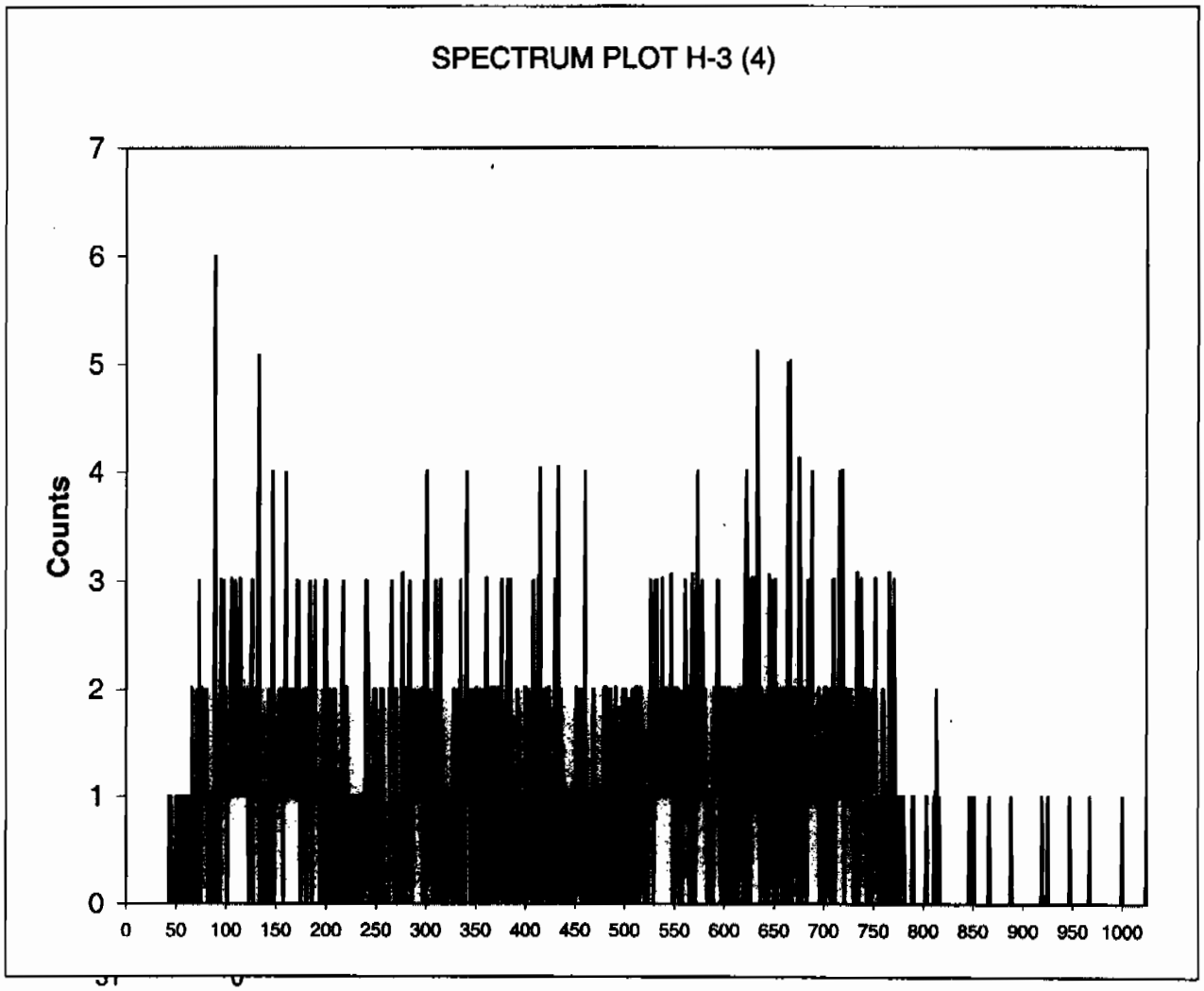

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33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	MON 7 DEC 2009 9:19
FileName:	s:\lsc\files\orange\927684A3\SQ143901N.001.xls
File Info:	s:\lsc\files\orange\927684A3\U927684A3.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	14, 1201983607, 120.0296:
Quench:	753.71
Start, End, X-Axis	50-175

Channel Counts

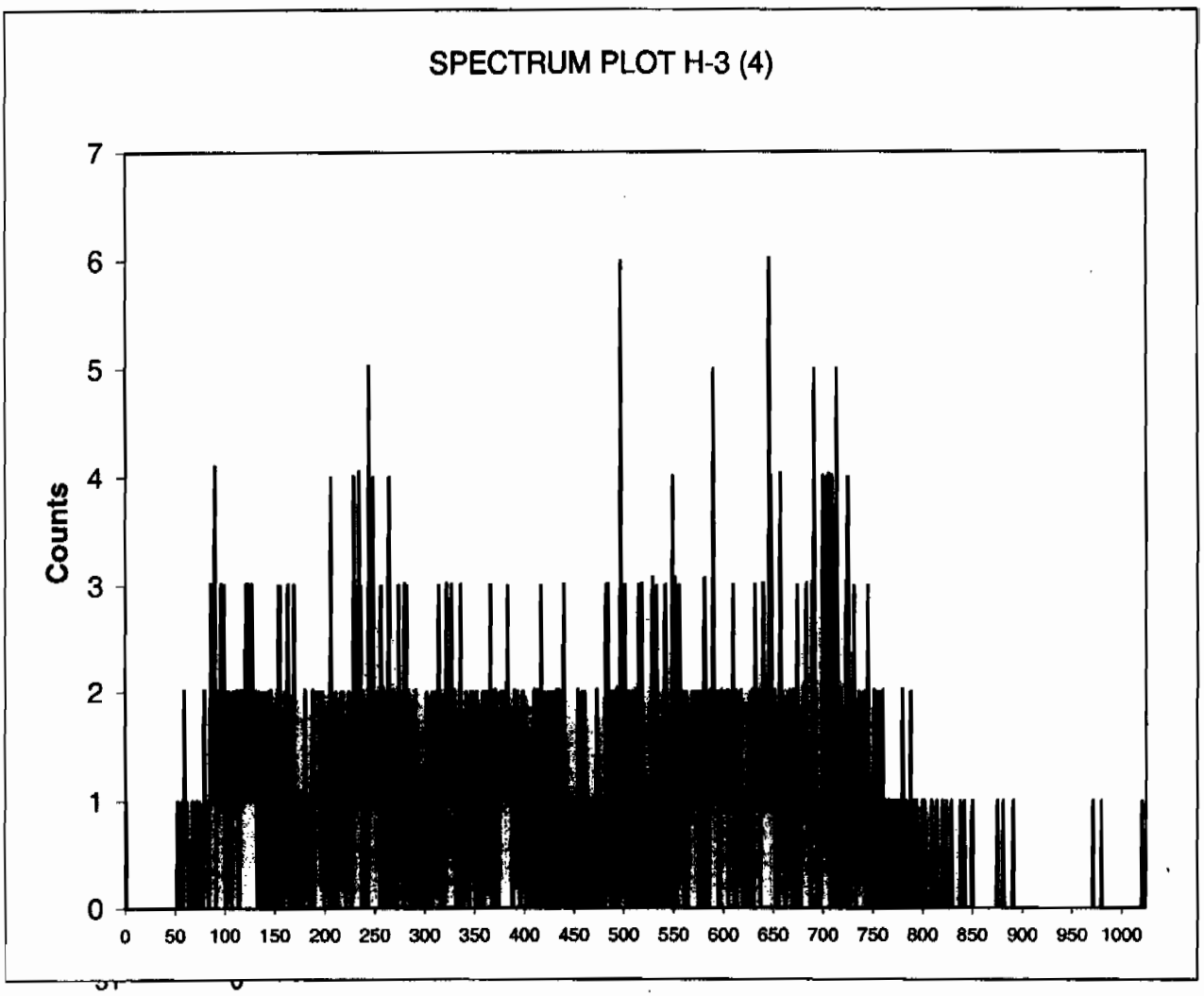

31	0
32	0
33	0
34	0
35	0

Instrument Type:	Quantulus
Data Capture Date:	MON 7 DEC 2009 9:19
FileName:	s:\lsc\files\orange\927684A3\SQ154001N.001.xls
File Info:	s:\lsc\files\orange\927684A3\U927684A3.xls
ID:	H-3 (4)
Comments:	ORANGE
Sample, Rack-Pos, Time:	15, 1201983608, 15.02963:
Quench:	760.86
Start, End, X-Axis	50-175

Channel	Counts

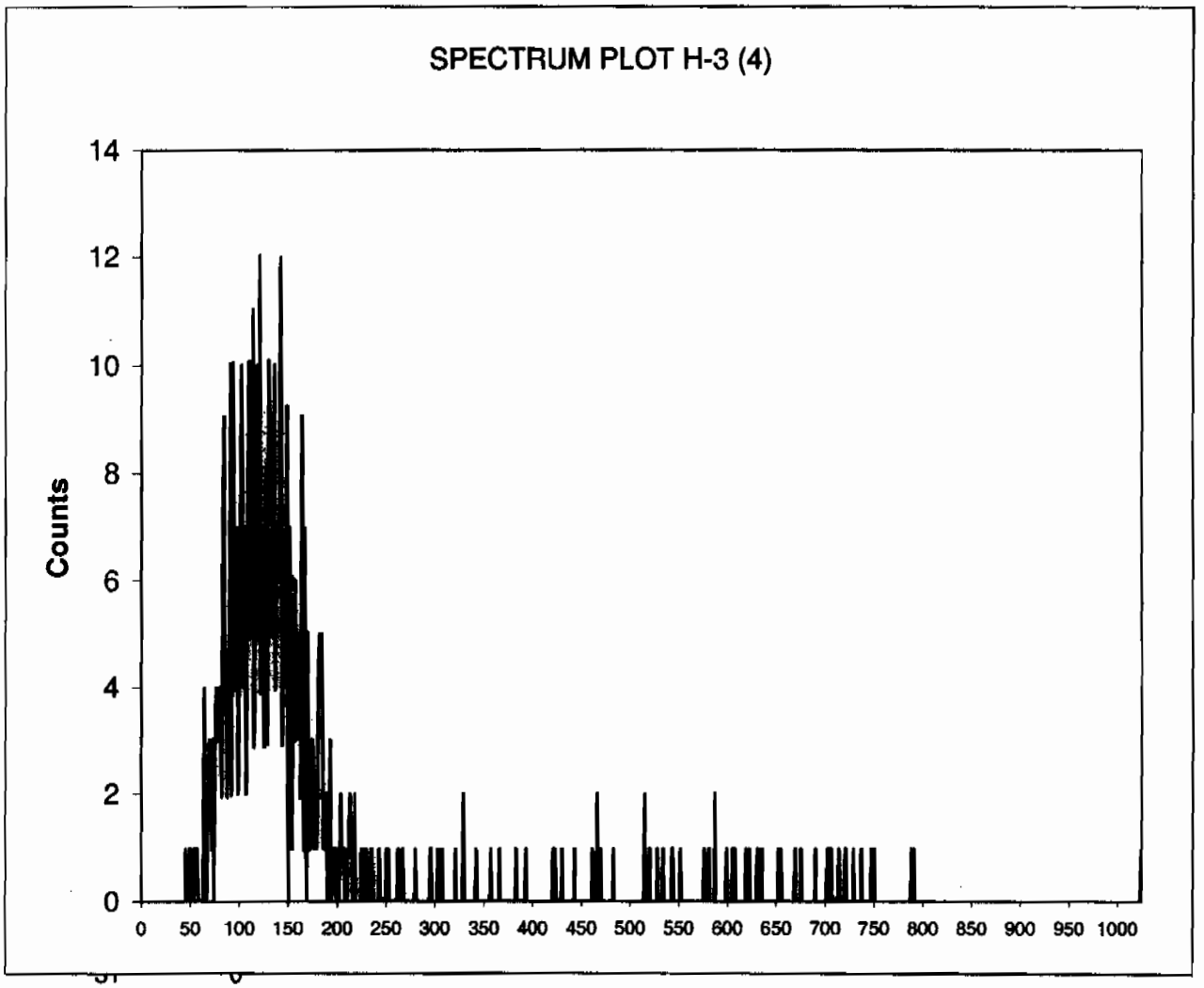

32	0
33	0
34	0
35	0

ID:TRITIUM 10 DEC 2009 00:44

USER:13 COMMENT:BROWN

PRESET TIME :	120.00						
DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	:EDIT
TWO PHASE :	NO	AQC	: NO	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX	:YES	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

CHAN: 0.0 - 240.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	LUMEX %	ELAPSED TIME
1	18-1	120.00	110.1	3.33	10.20	0.32	123.00
2	18-2	120.00	109.4	3.69	9.63	0.26	246.47

INSTRUMENT CALIBRATION: Mini 10 DEC 2009 04:56
Calibration successful

Sample Count Start Time:	10 Dec 2009 00:43:12		
Data Capture Date	10 Dec 2009 02:43:37		
User Filename	S13121018-1A.XLS		
	U13121018-1A.XLS		
Spectrum Type	Log Counts		
User Number	13		
User Id	TRITIUM		
User Comment	BROWN		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	1	18-1	120.00
H#, Total Counts:	110.1	4470	
Win1: Tritium - Start, End, Counts:	0	240	399
Win2: - Start, End, Counts:	0	990	4470

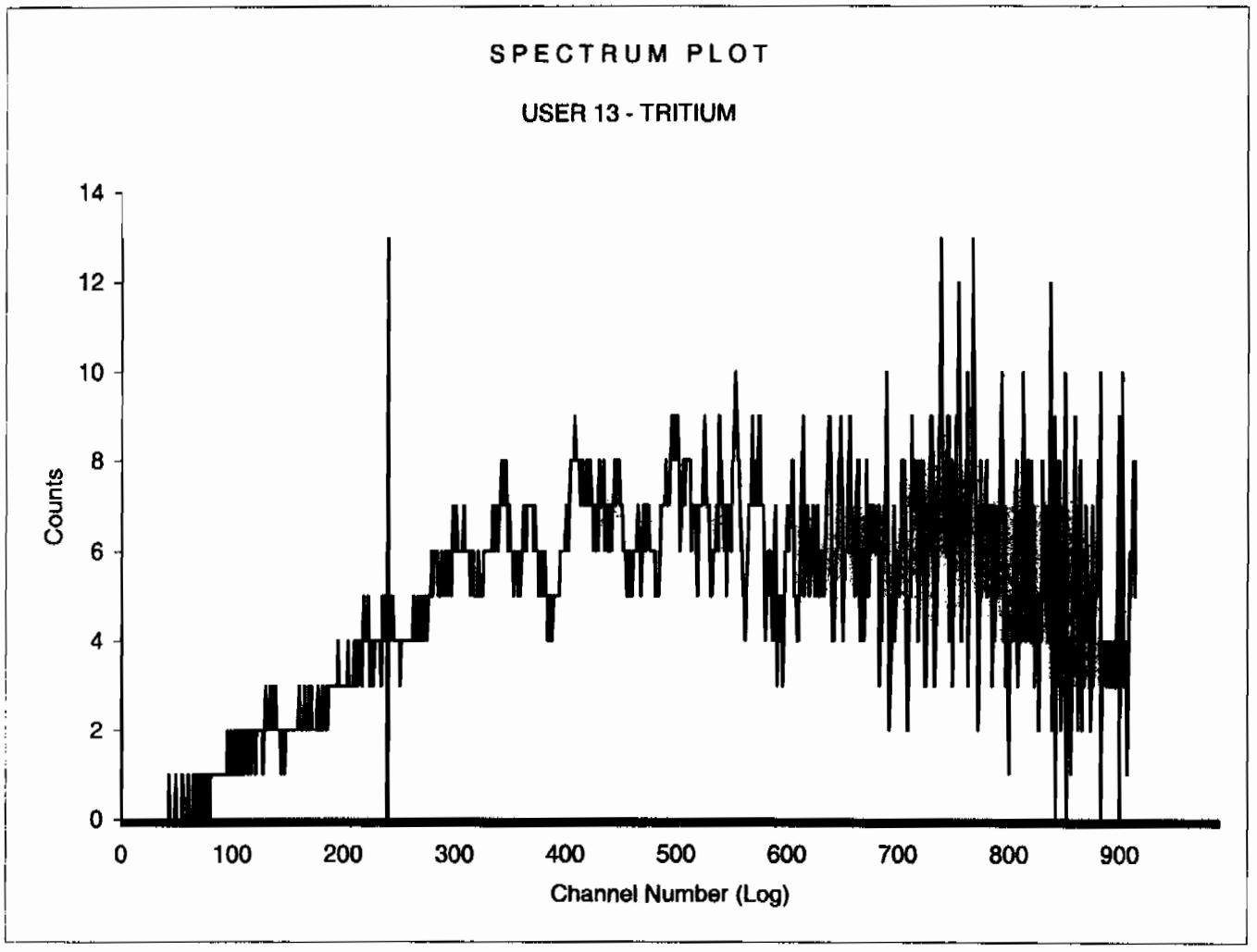

Sample Count Start Time:	10 Dec 2009 02:46:40		
Data Capture Date	10 Dec 2009 04:47:05		
User Filename	S13121018-2A.XLS		
	U13121018-1A.XLS		
Spectrum Type	Log Counts		
User Number	13		
User Id	TRITIUM		
User Comment	BROWN		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	2	18-2	120.00
H#, Total Counts:	109.4	4360	
Win1: Tritium - Start, End, Counts:	0	240	443
Win2: - Start, End, Counts:	0	990	4360

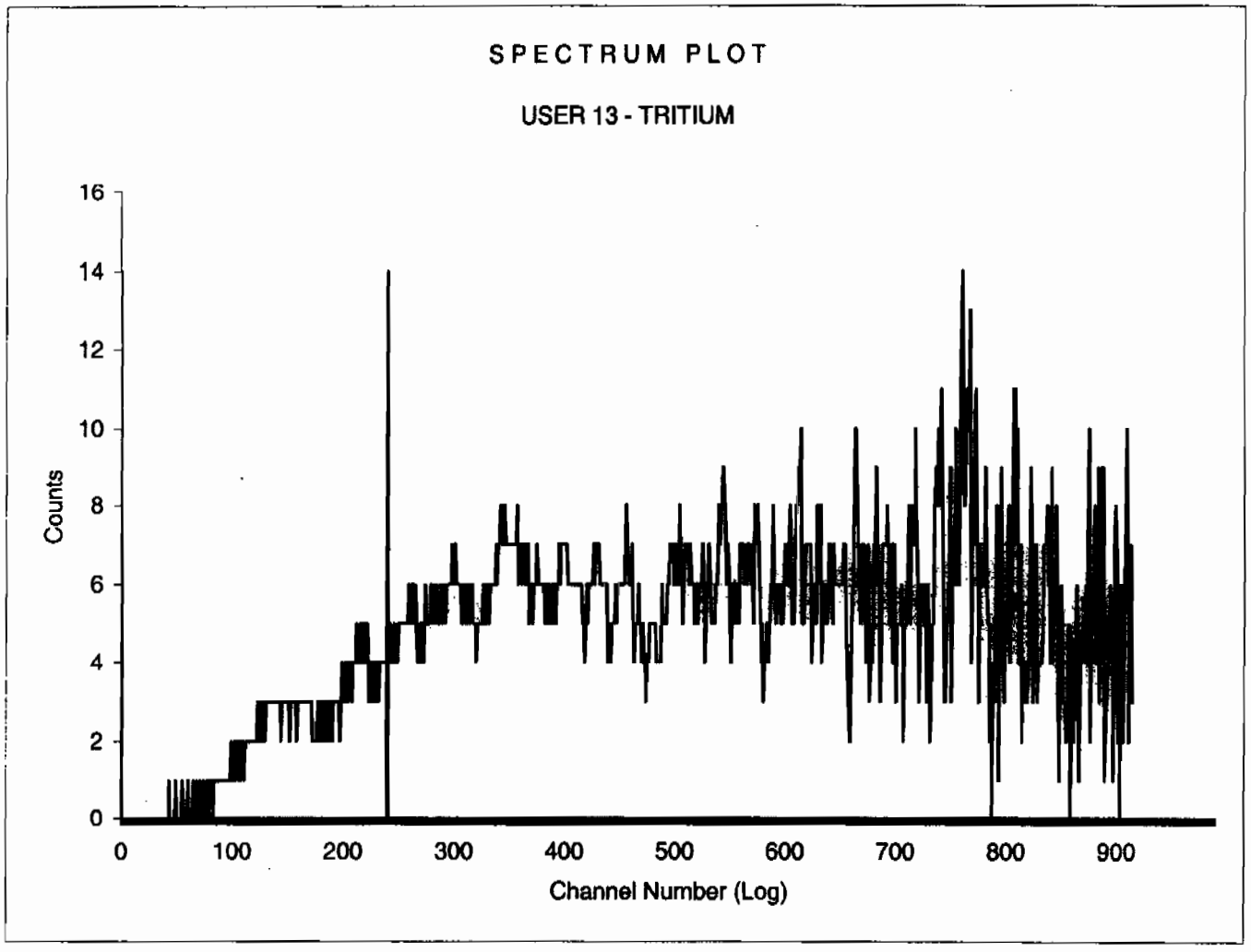

BACKGROUND AND EFFICIENCY DATA

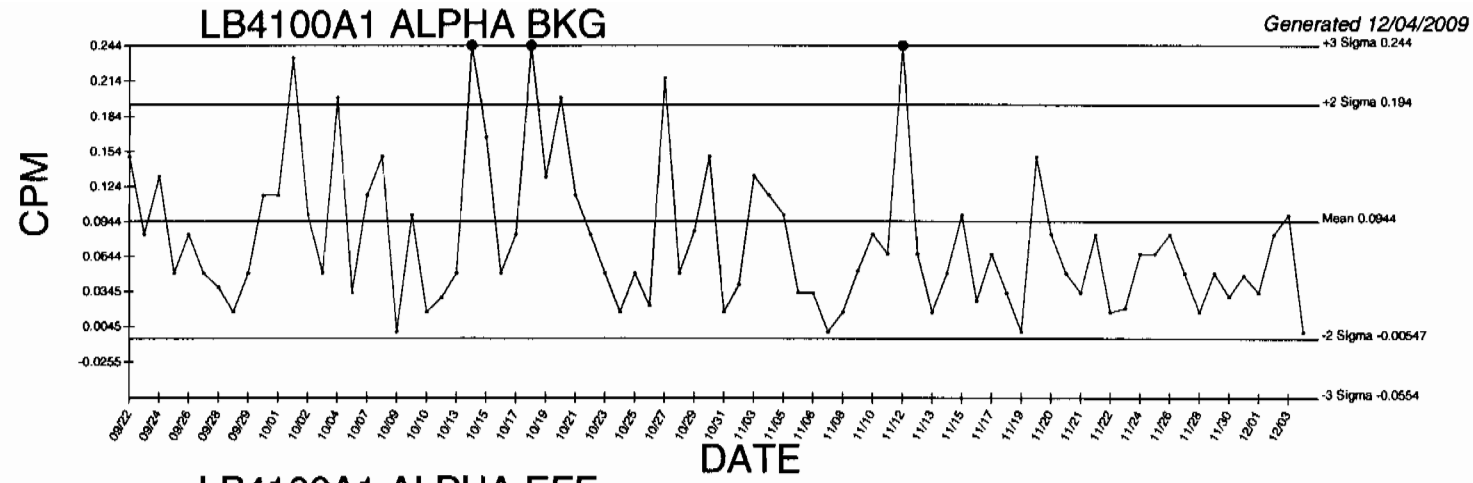
LB4100A1 ALPHA BKG
Generated 12/04/2009
CPM
DATE
+3 Sigma 0.244
+2 Sigma 0.194
Mean 0.0944
-2 Sigma -0.00547
-3 Sigma -0.0554

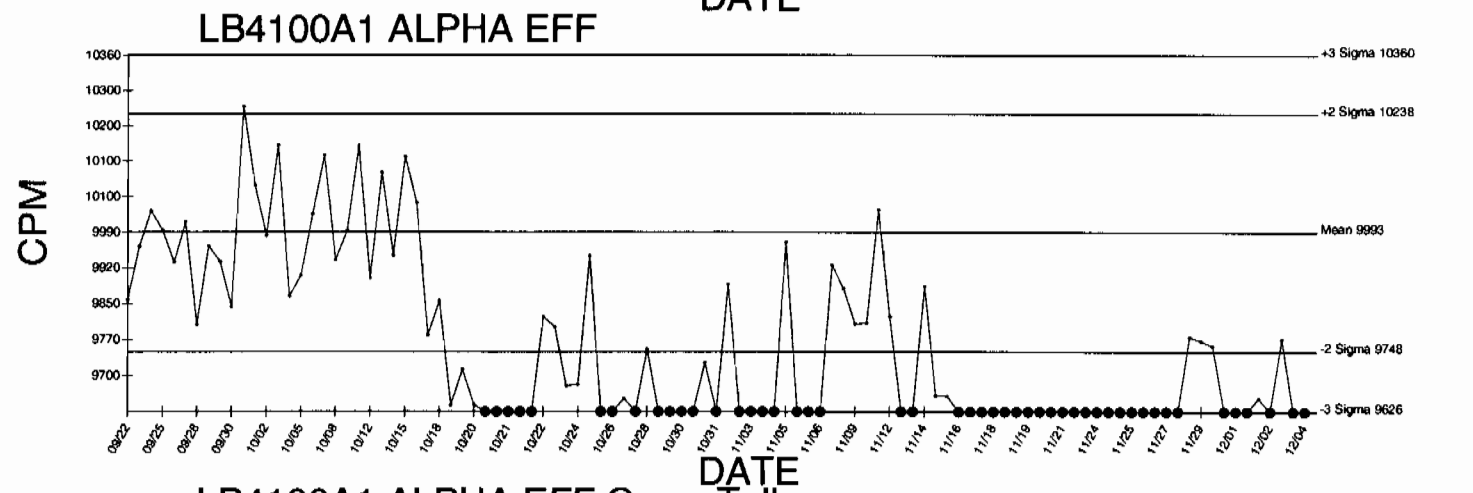
LB4100A1 ALPHA EFF
CPM
DATE
+3 Sigma 10360
+2 Sigma 10238
Mean 9993
-2 Sigma 9748
-3 Sigma 9626

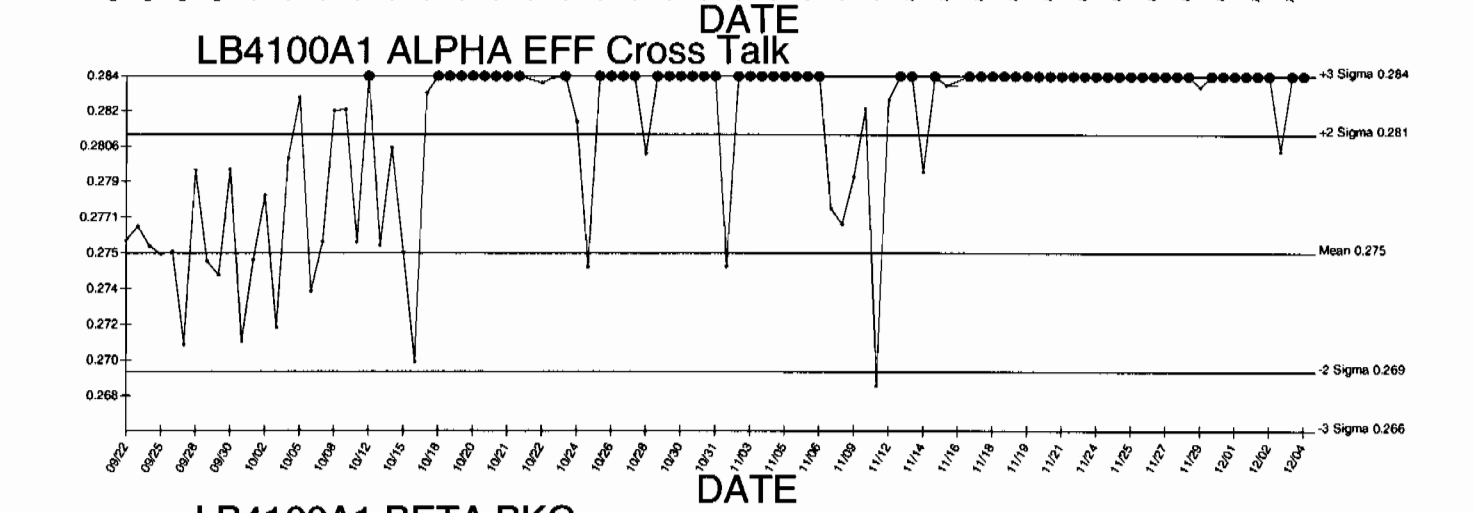
LB4100A1 ALPHA EFF Cross Talk
DATE
+3 Sigma 0.284
+2 Sigma 0.281
Mean 0.275
-2 Sigma 0.269
-3 Sigma 0.266

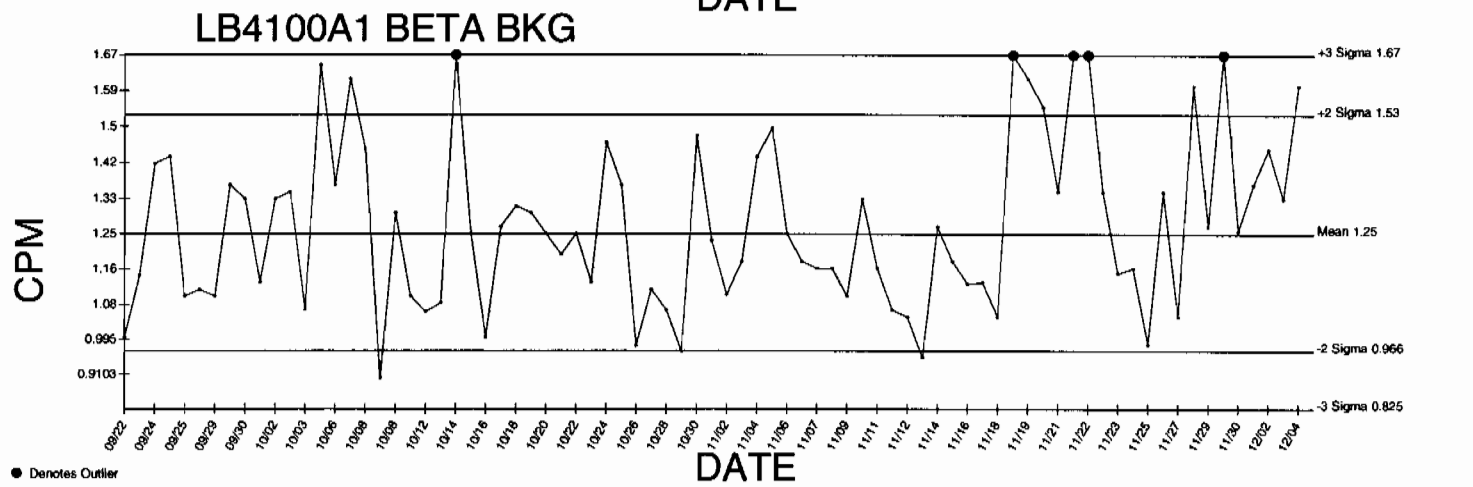
LB4100A1 BETA BKG
CPM
DATE
+3 Sigma 1.67
+2 Sigma 1.53
Mean 1.25
-2 Sigma 0.966
-3 Sigma 0.825
● Denotes Outlier

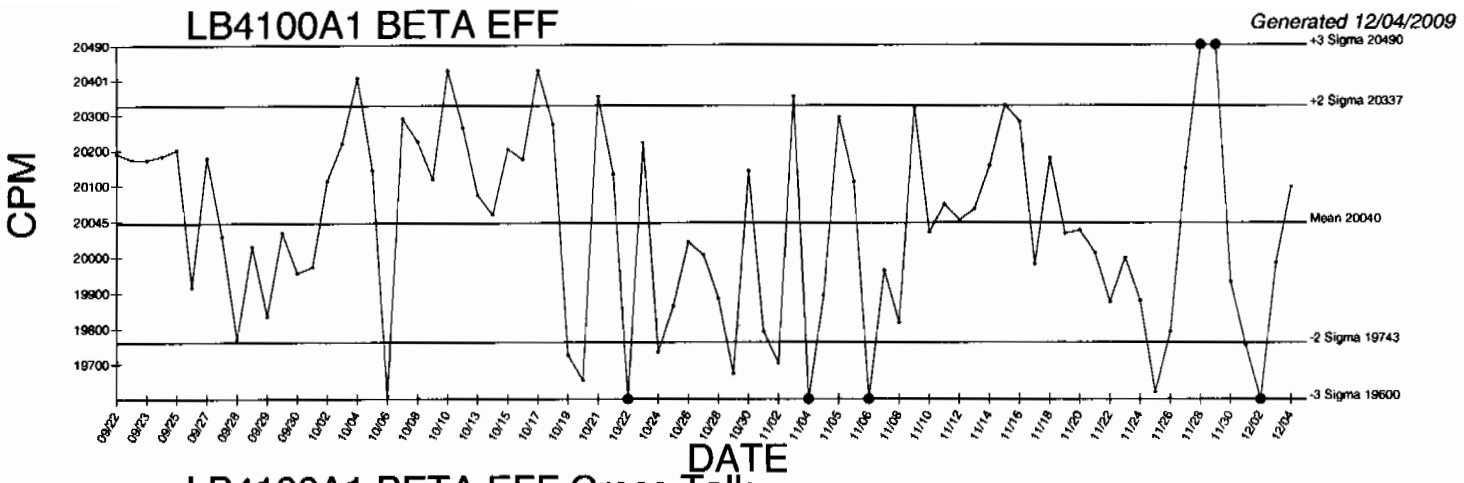

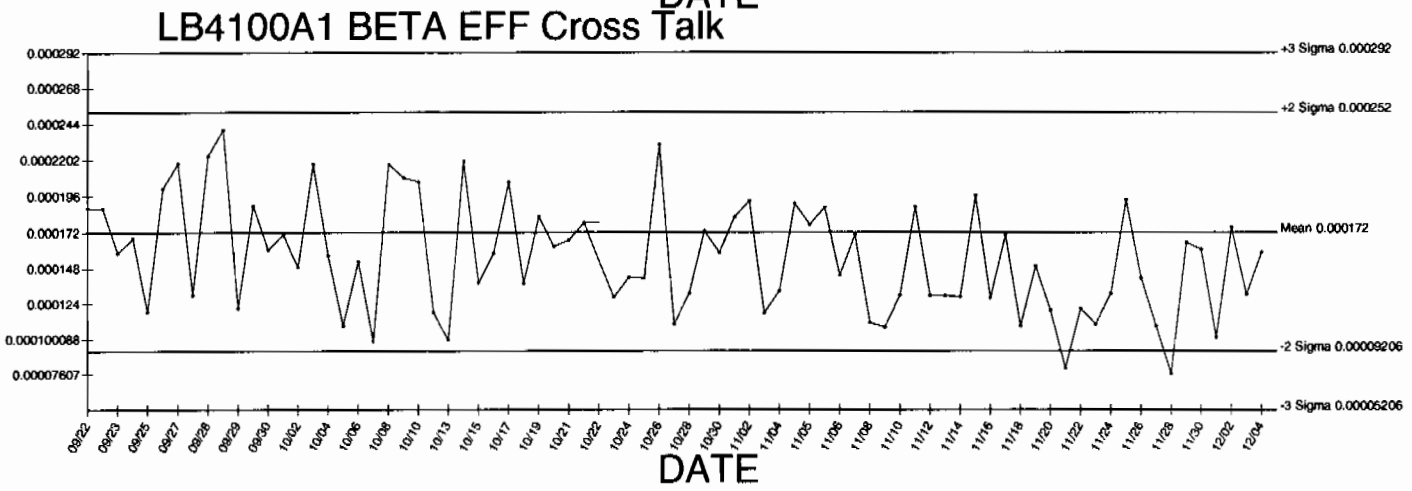

● Denotes Outlier

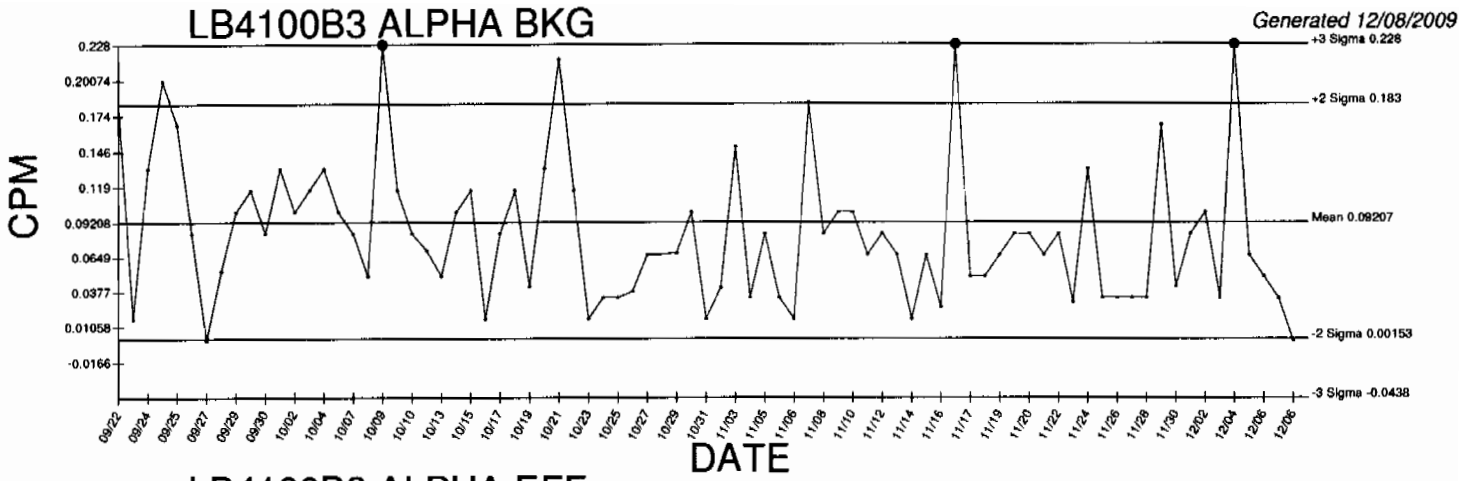
LB4100B3 ALPHA BKG
Generated 12/08/2009
CPM
DATE
+3 Sigma 0.228
+2 Sigma 0.183
Mean 0.09207
-2 Sigma 0.00153
-3 Sigma -0.0438

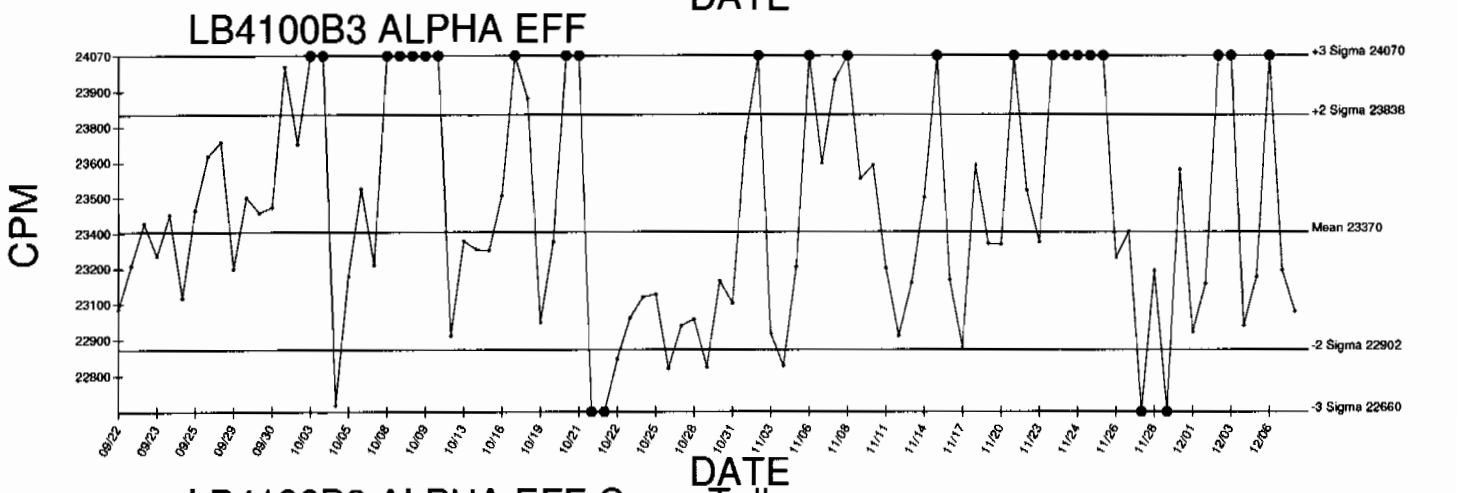
LB4100B3 ALPHA EFF
CPM
DATE
+3 Sigma 24070
+2 Sigma 23838
Mean 23370
-2 Sigma 22902
-3 Sigma 22660

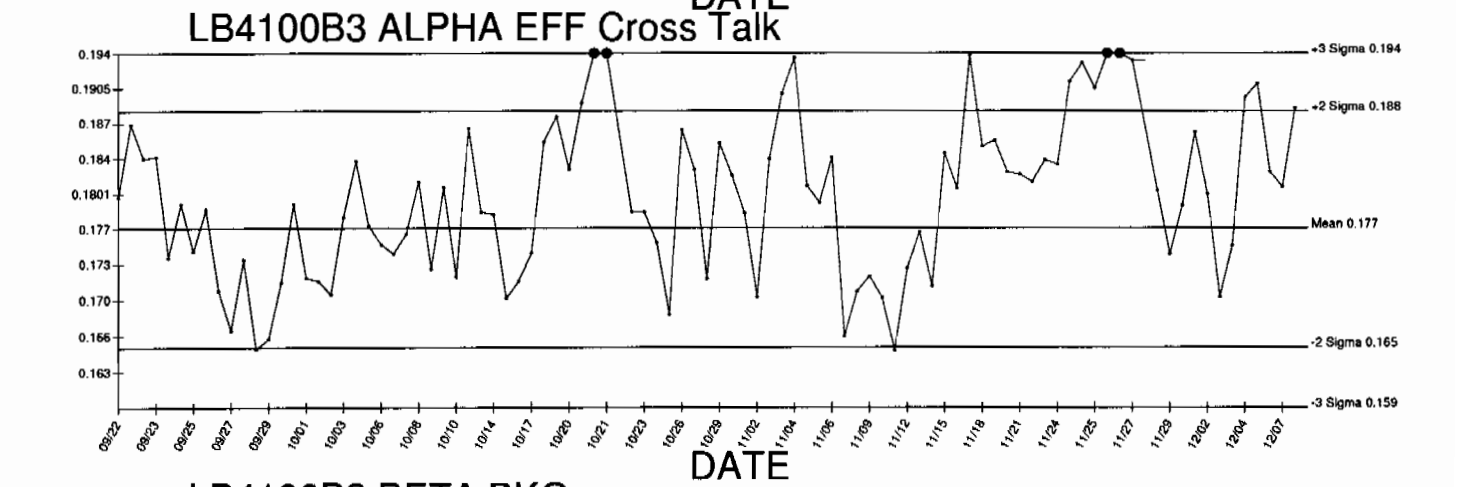
LB4100B3 ALPHA EFF Cross Talk
DATE
+3 Sigma 0.194
+2 Sigma 0.188
Mean 0.177
-2 Sigma 0.165
-3 Sigma 0.159

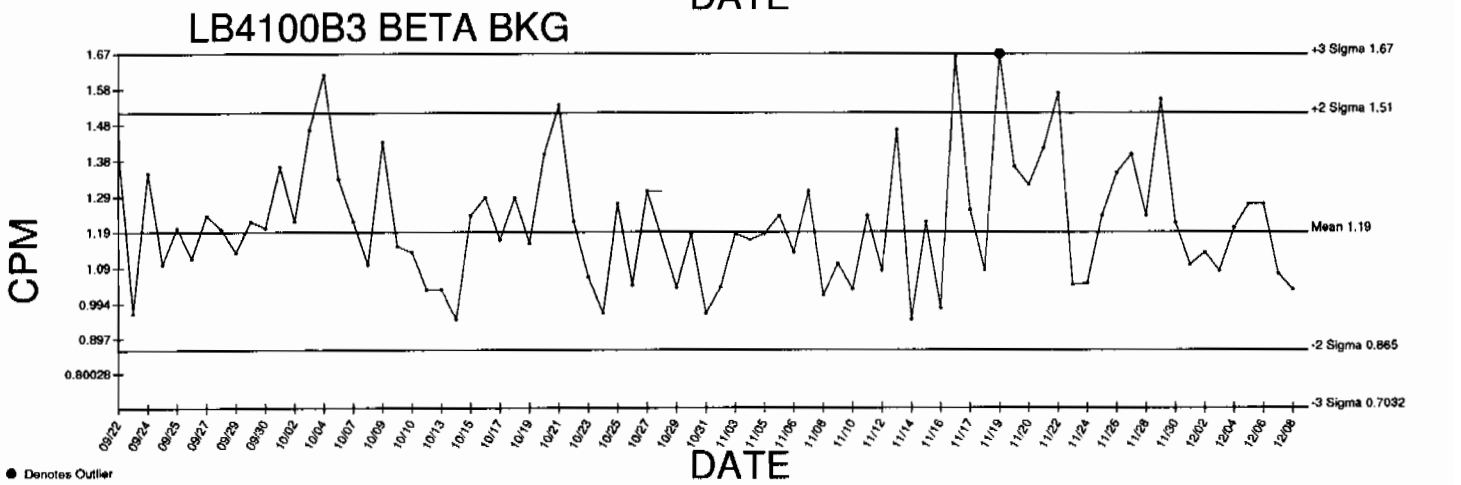
LB4100B3 BETA BKG
CPM
DATE
+3 Sigma 1.67
+2 Sigma 1.51
Mean 1.19
-2 Sigma 0.865
-3 Sigma 0.7032
● Denotes Outlier

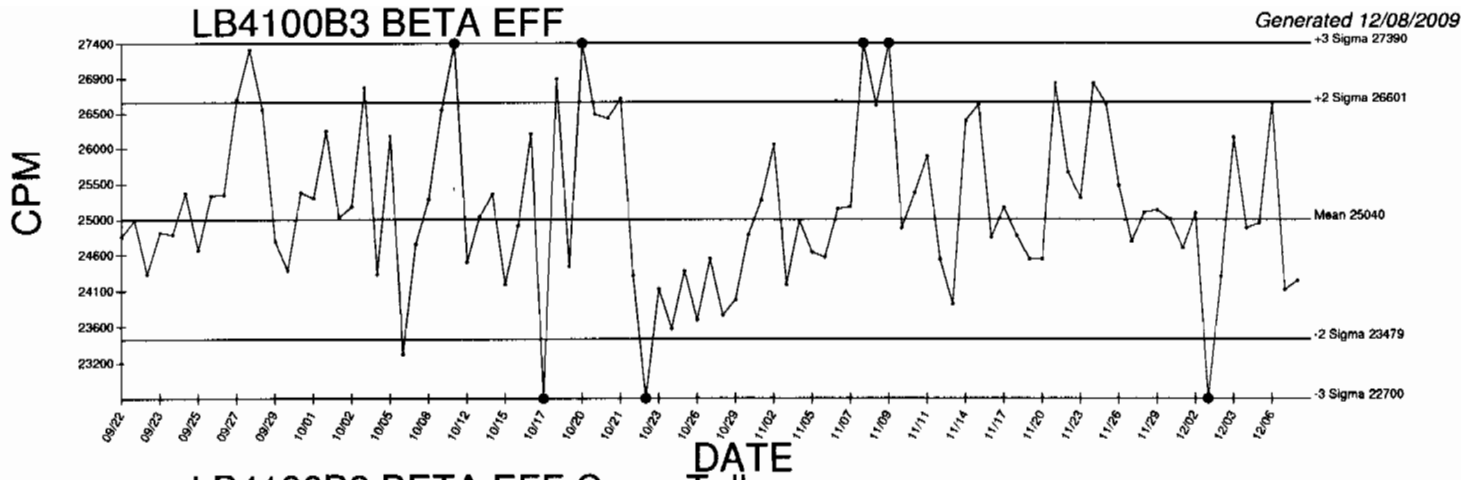

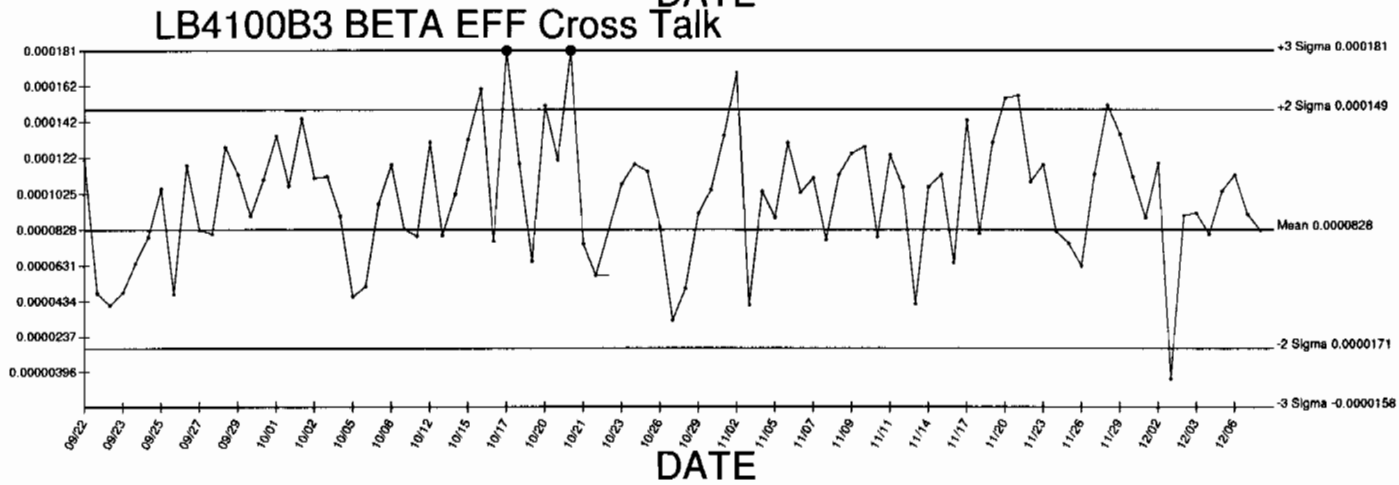

● Denotes Outlier

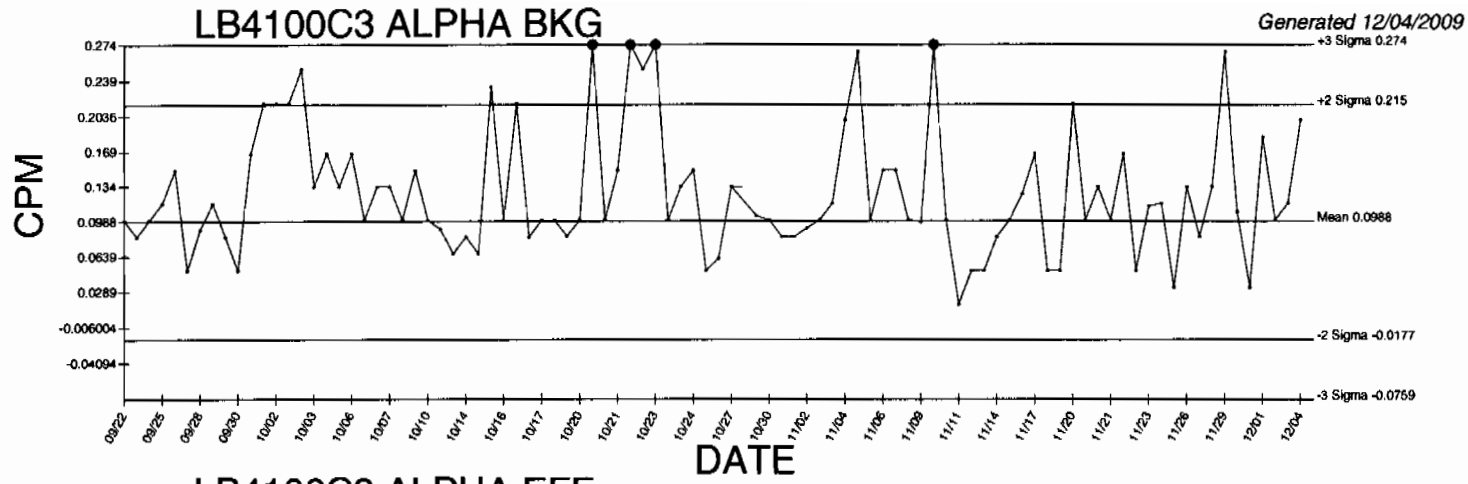
LB4100C3 ALPHA BKG
Generated 12/04/2009
CPM
DATE
+3 Sigma 0.274
+2 Sigma 0.215
Mean 0.0988
-2 Sigma -0.0177
-3 Sigma -0.0759

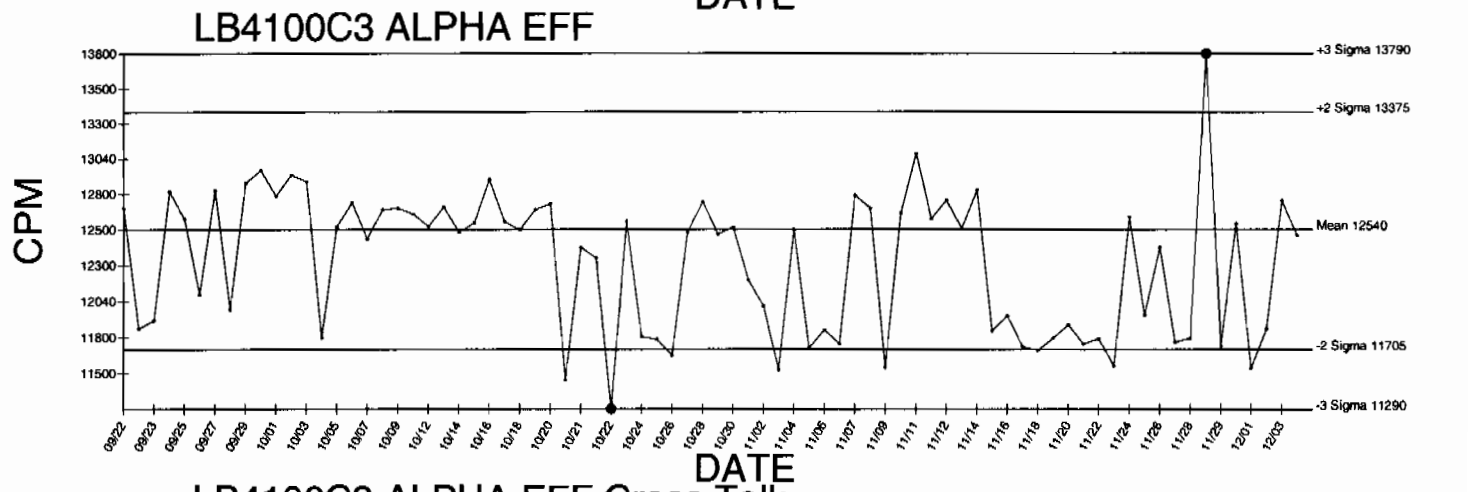
LB4100C3 ALPHA EFF
CPM
DATE
+3 Sigma 13790
+2 Sigma 13375
Mean 12540
-2 Sigma 11705
-3 Sigma 11290

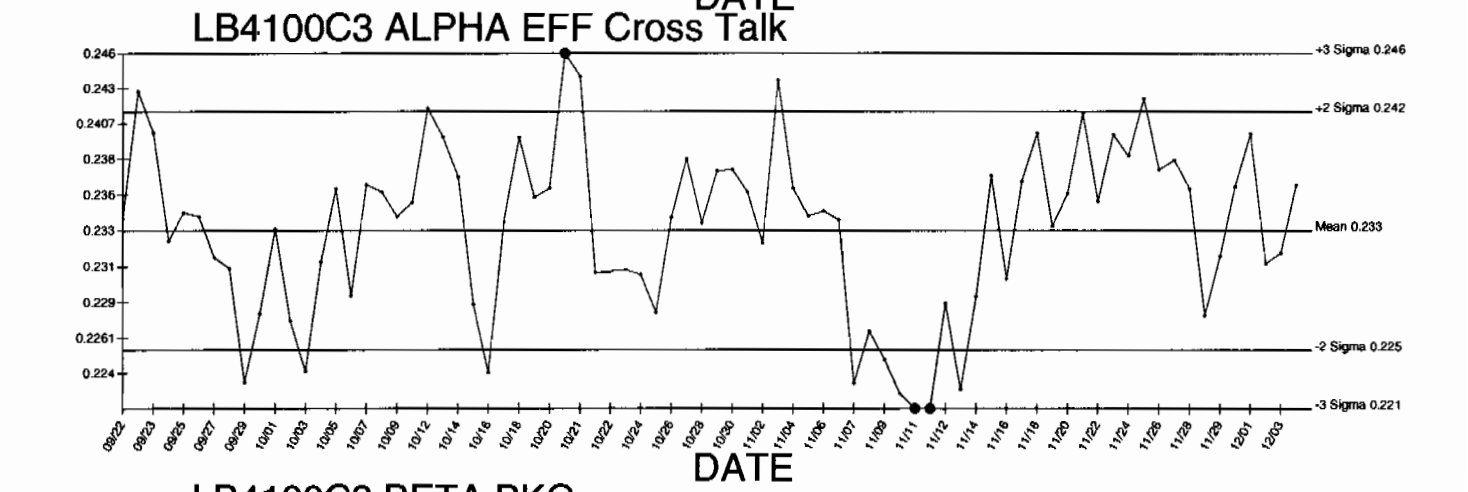
LB4100C3 ALPHA EFF Cross Talk
DATE
+3 Sigma 0.246
+2 Sigma 0.242
Mean 0.233
-2 Sigma 0.225
-3 Sigma 0.221

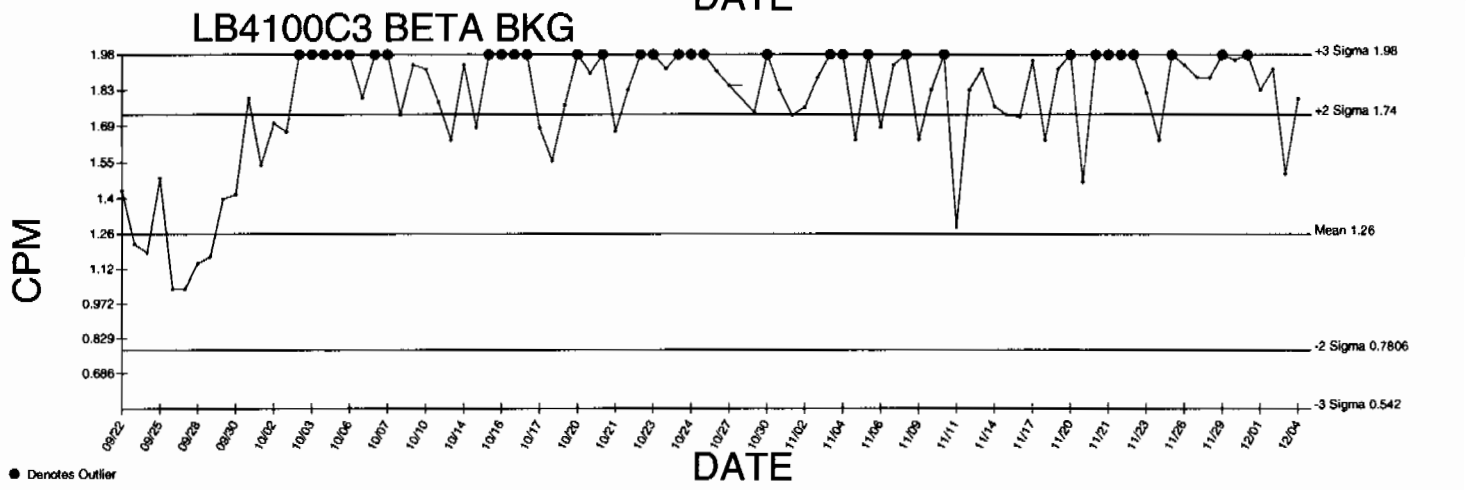
LB4100C3 BETA BKG
CPM
DATE
+3 Sigma 1.98
+2 Sigma 1.74
Mean 1.26
-2 Sigma 0.7806
-3 Sigma 0.542
● Denotes Outlier

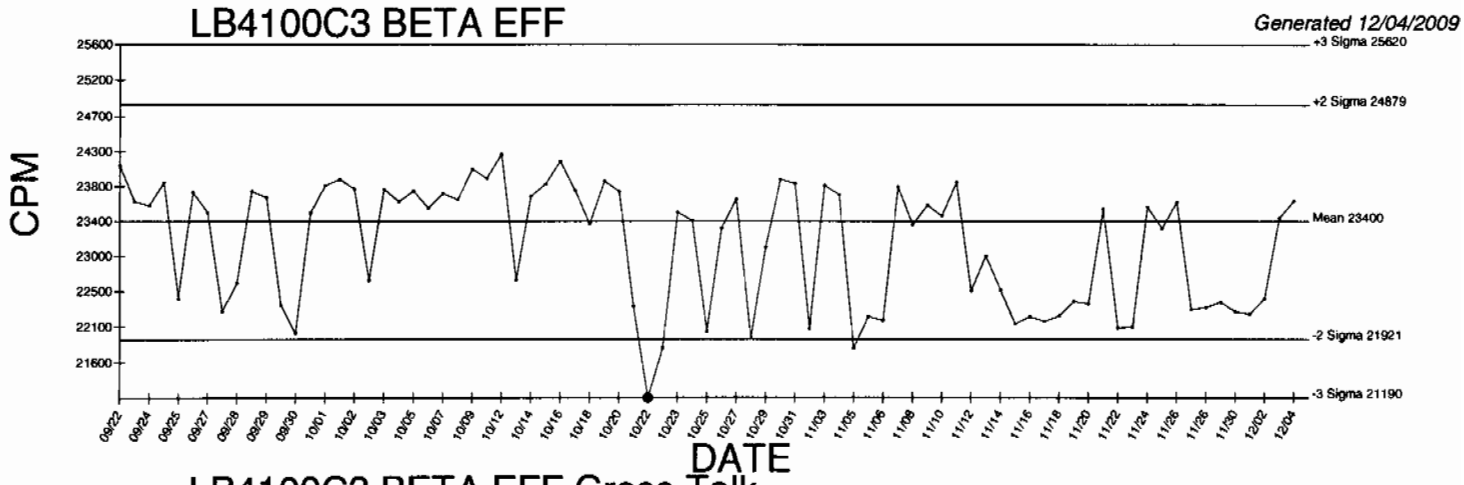

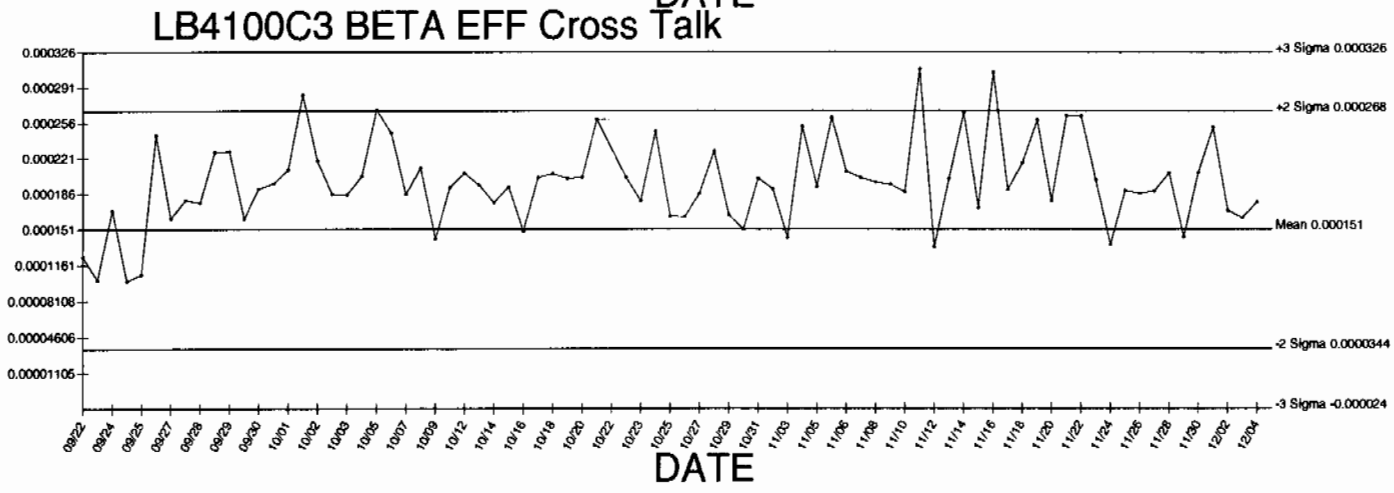

● Denotes Outlier

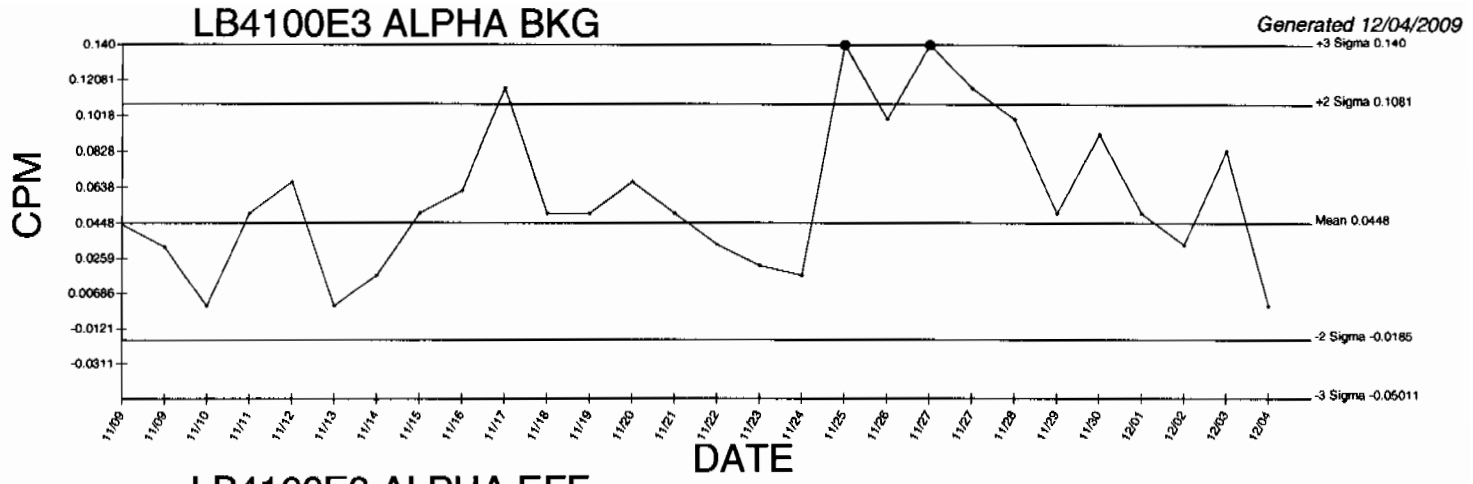
LB4100E3 ALPHA BKG
Generated 12/04/2009
CPM
DATE
+3 Sigma 0.140
+2 Sigma 0.1081
Mean 0.0448
-2 Sigma -0.0185
-3 Sigma -0.05011

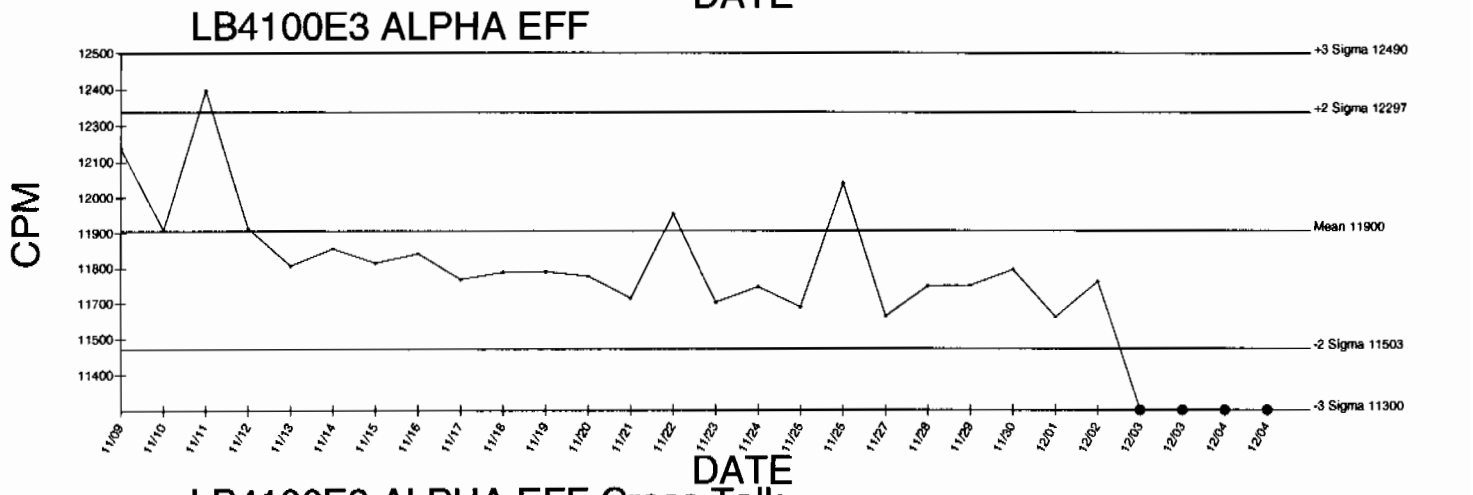
LB4100E3 ALPHA EFF
CPM
DATE
+3 Sigma 12490
+2 Sigma 12297
Mean 11900
-2 Sigma 11503
-3 Sigma 11300

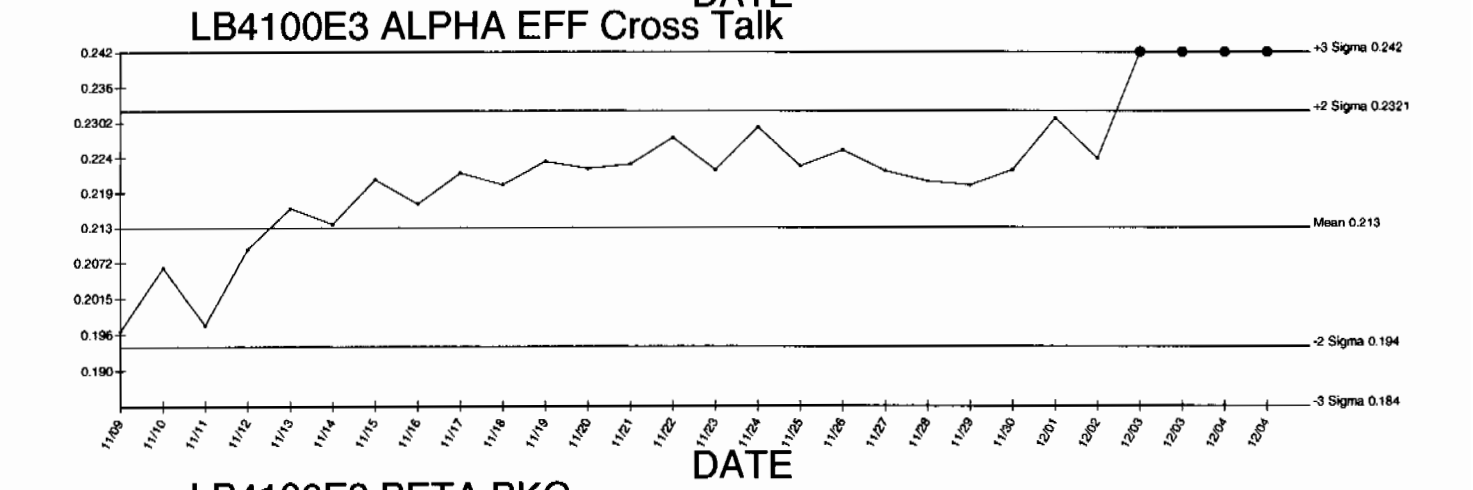
LB4100E3 ALPHA EFF Cross Talk
DATE
+3 Sigma 0.242
+2 Sigma 0.2321
Mean 0.213
-2 Sigma 0.194
-3 Sigma 0.184

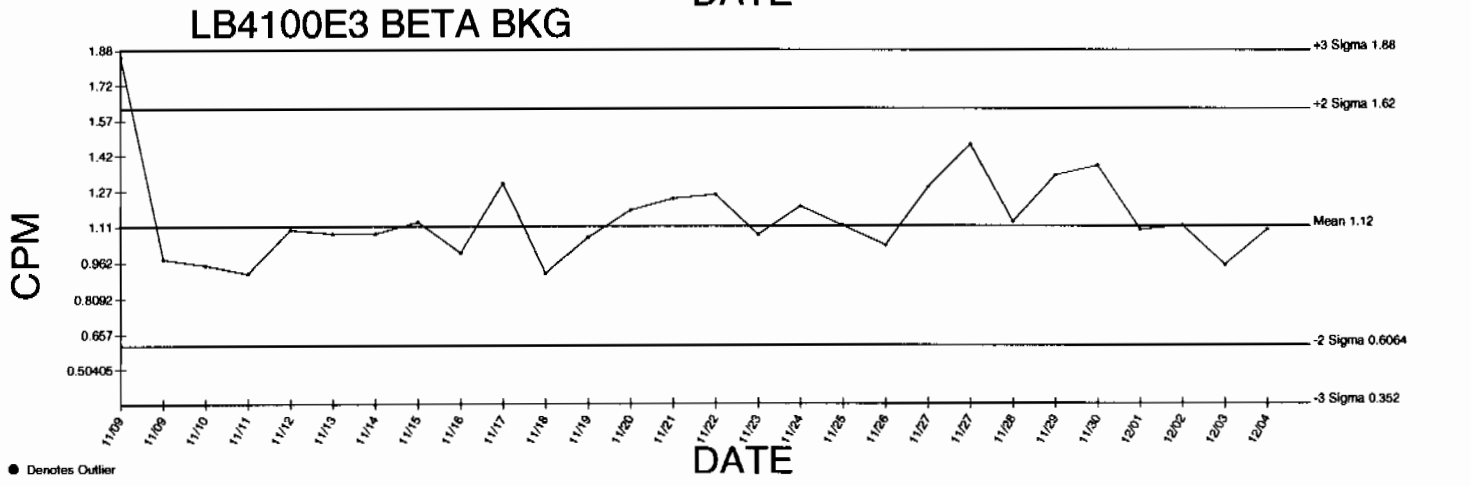
LB4100E3 BETA BKG
CPM
DATE
+3 Sigma 1.88
+2 Sigma 1.62
Mean 1.12
-2 Sigma 0.6064
-3 Sigma 0.352
● Denotes Outlier

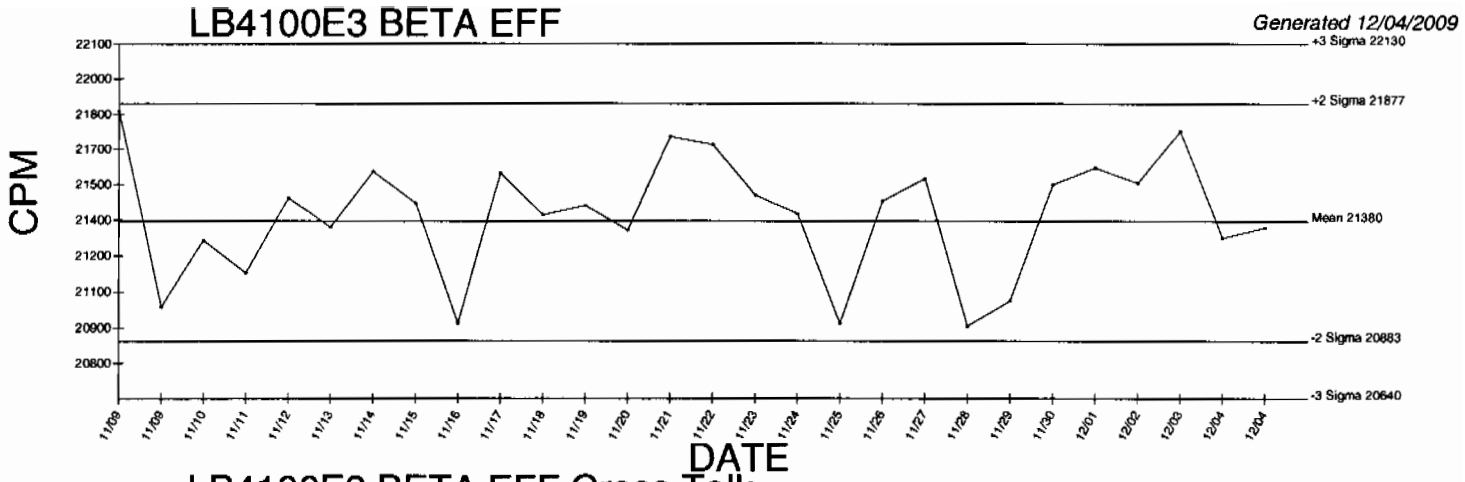

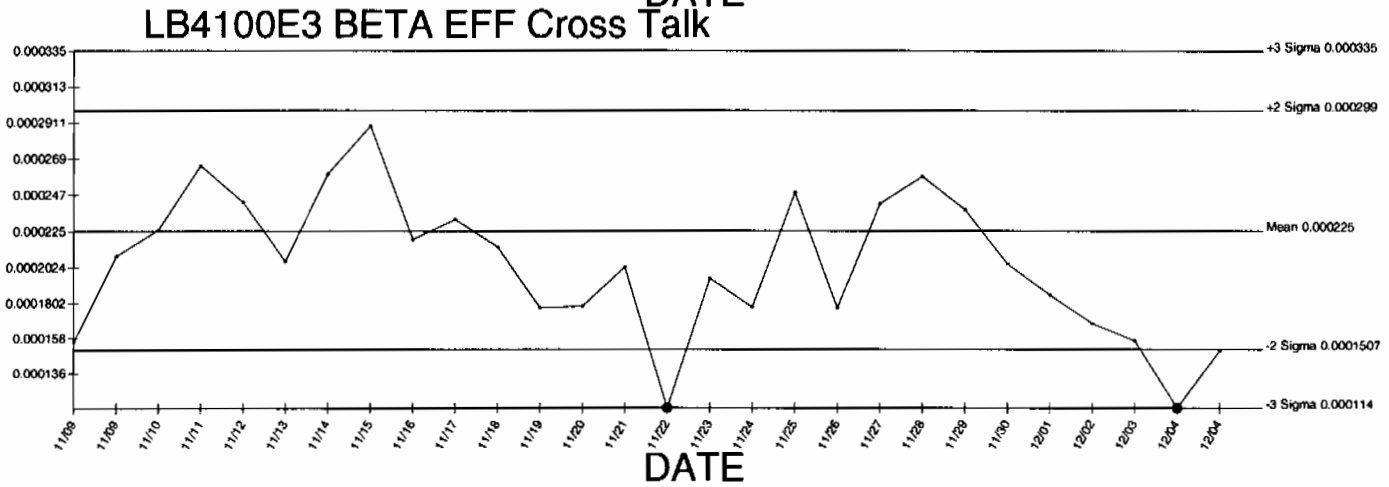

● Denotes Outlier

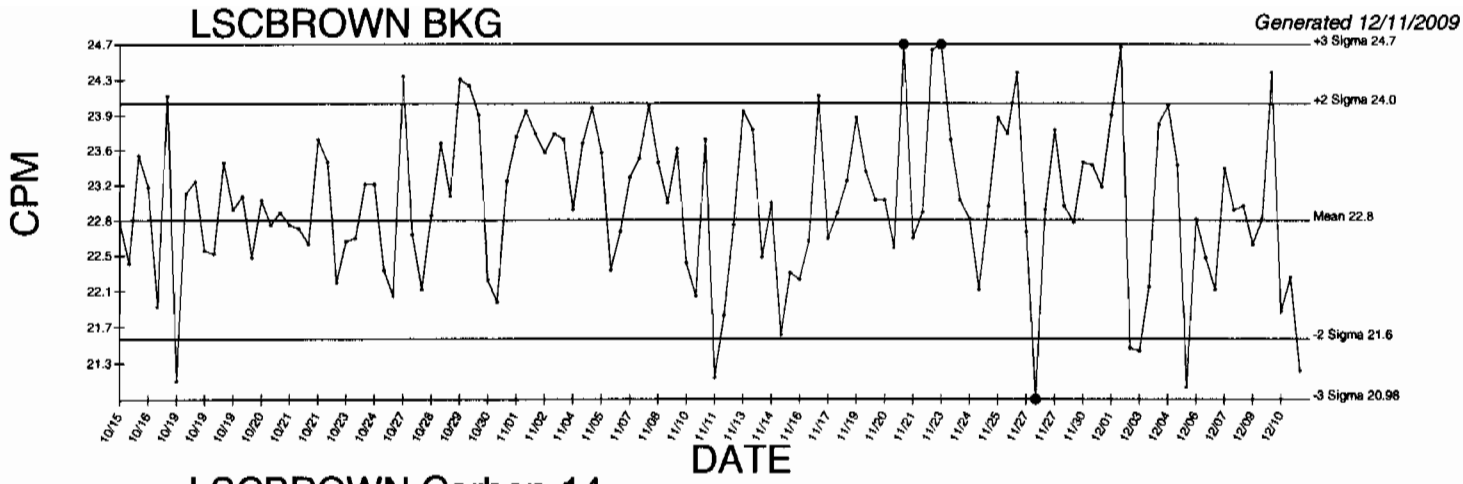

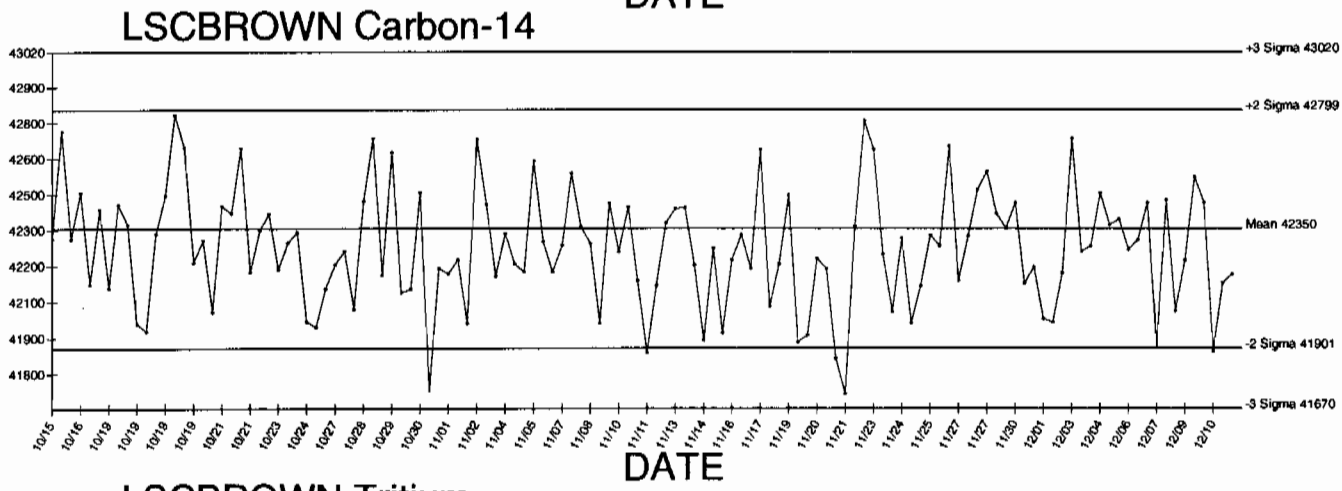

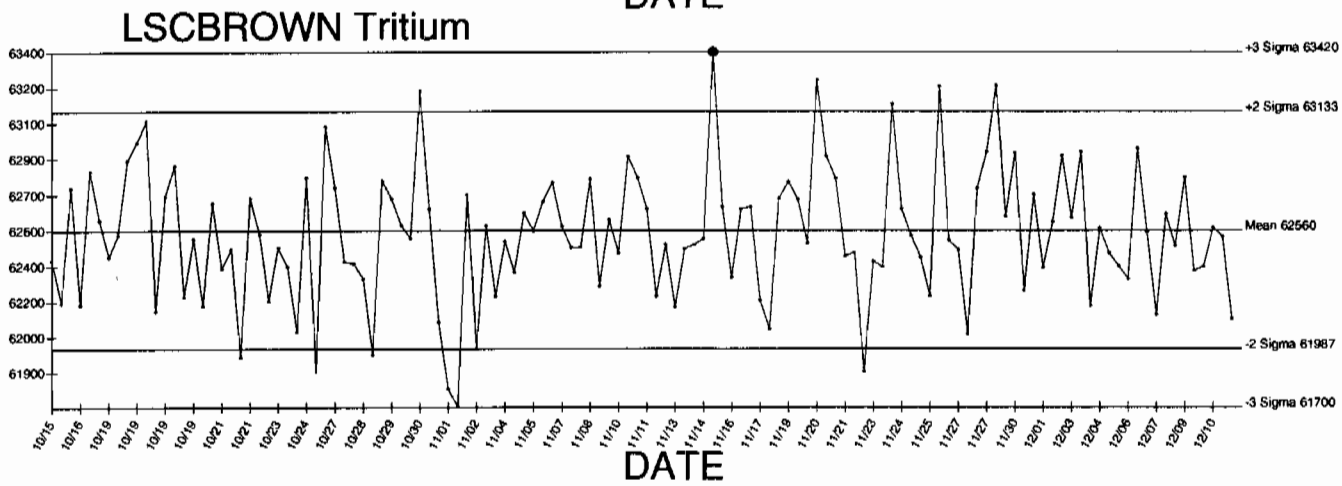

● Denotes Outlier

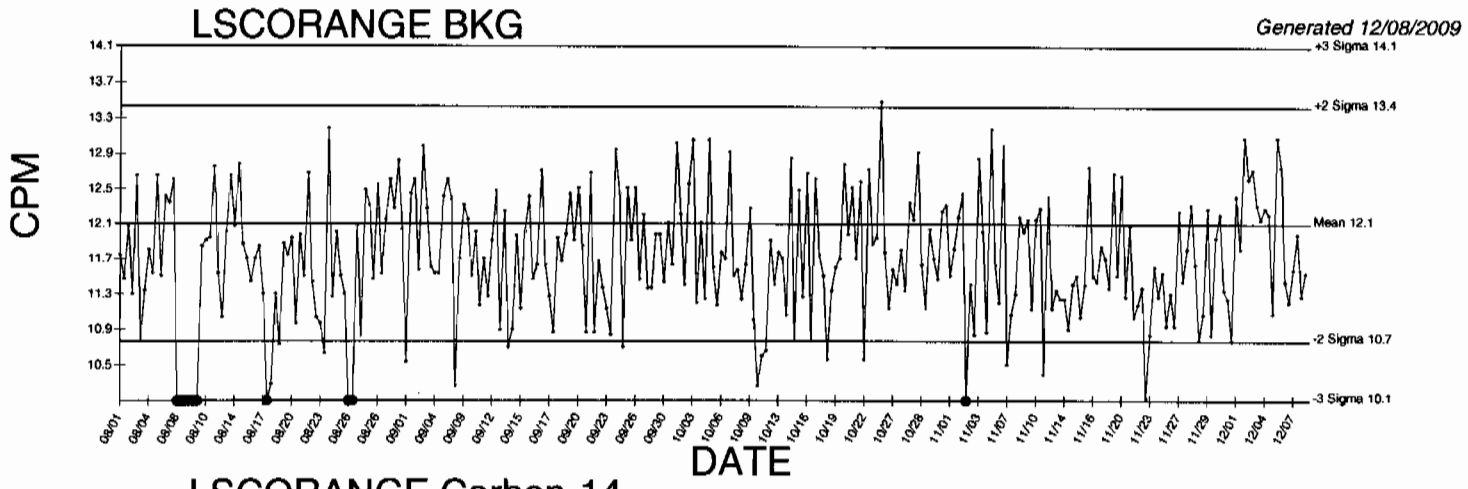

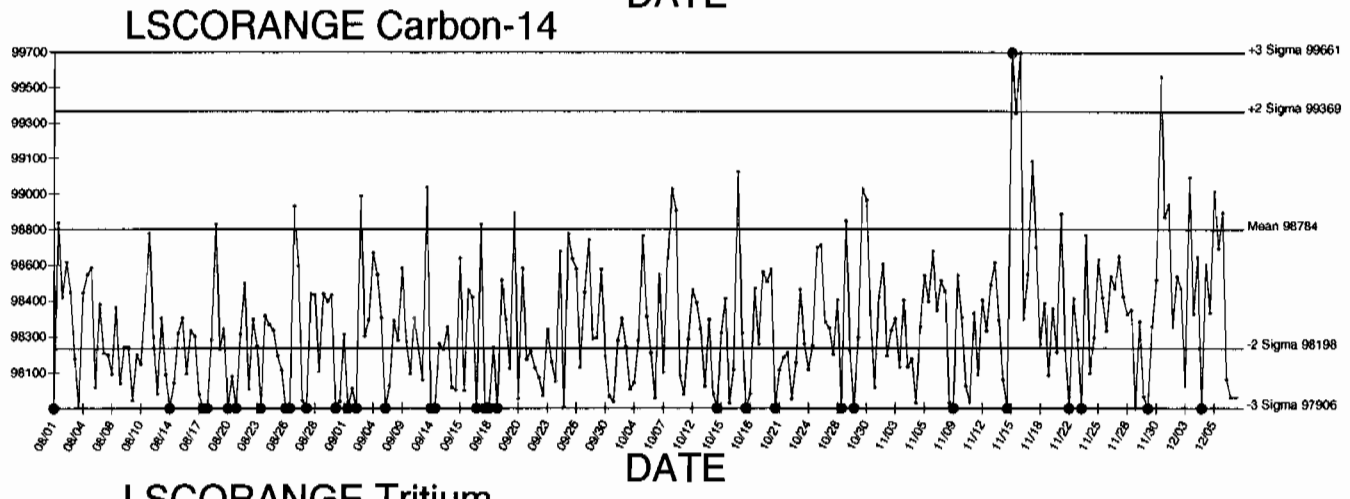

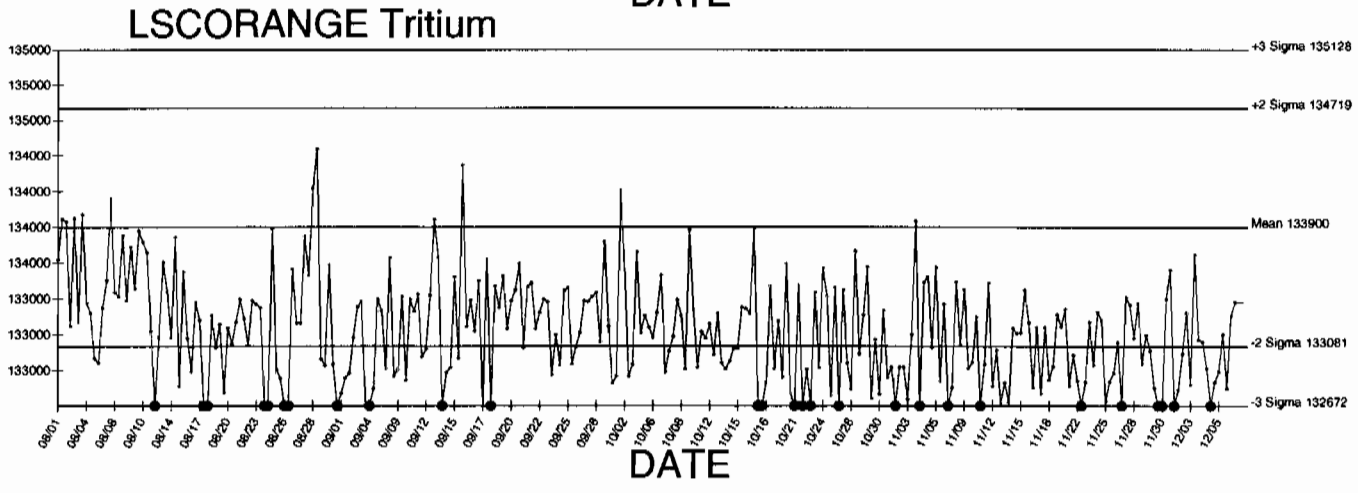

● Denotes Outlier

QA filename : DKA100:[ENV_ALPHA.QA.W]W025.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.250000 through 0.450000

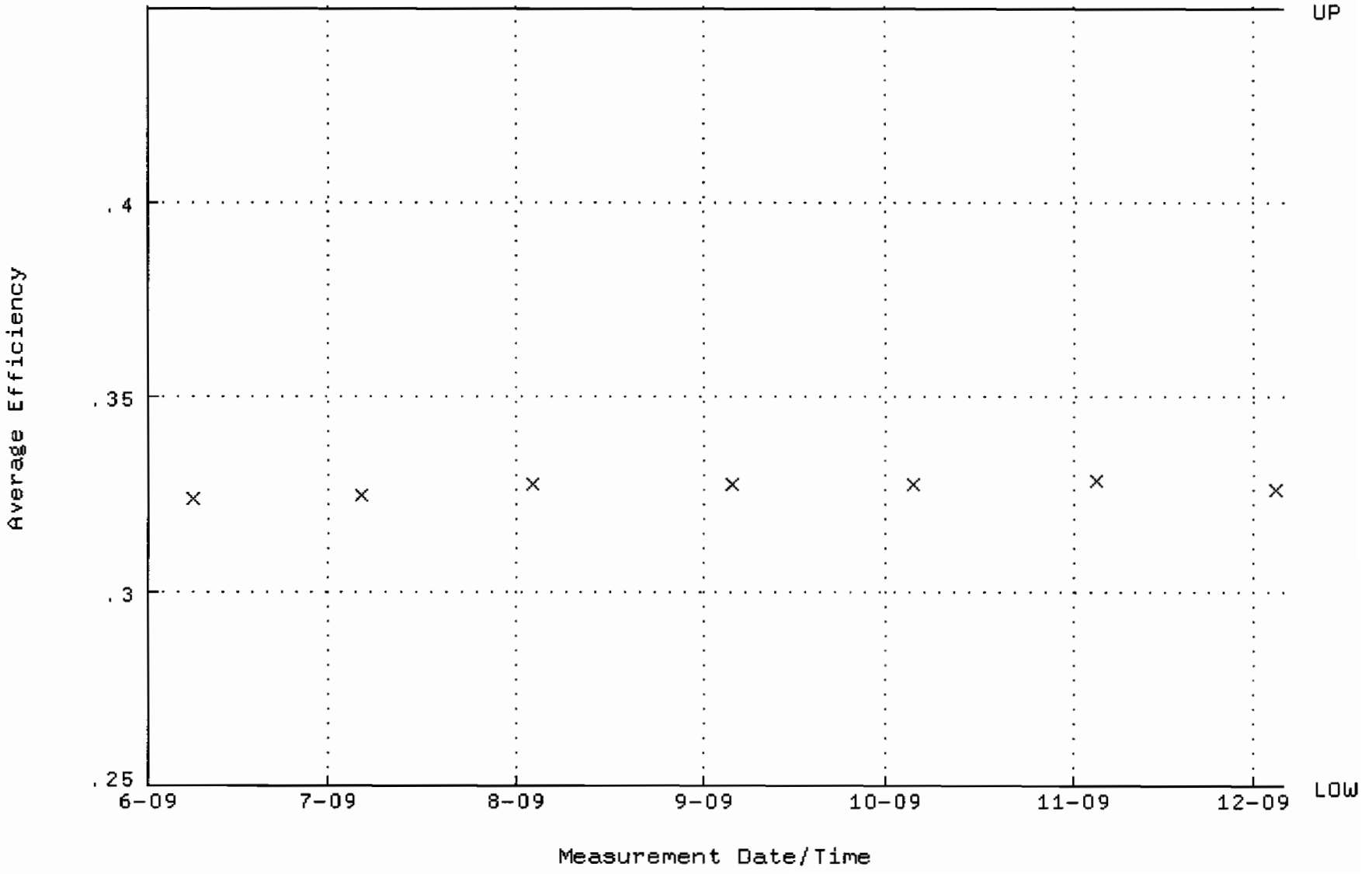

QA filename : DKA100:[ENV_ALPHA.QA.W]W025.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 60.0000 through 105.000

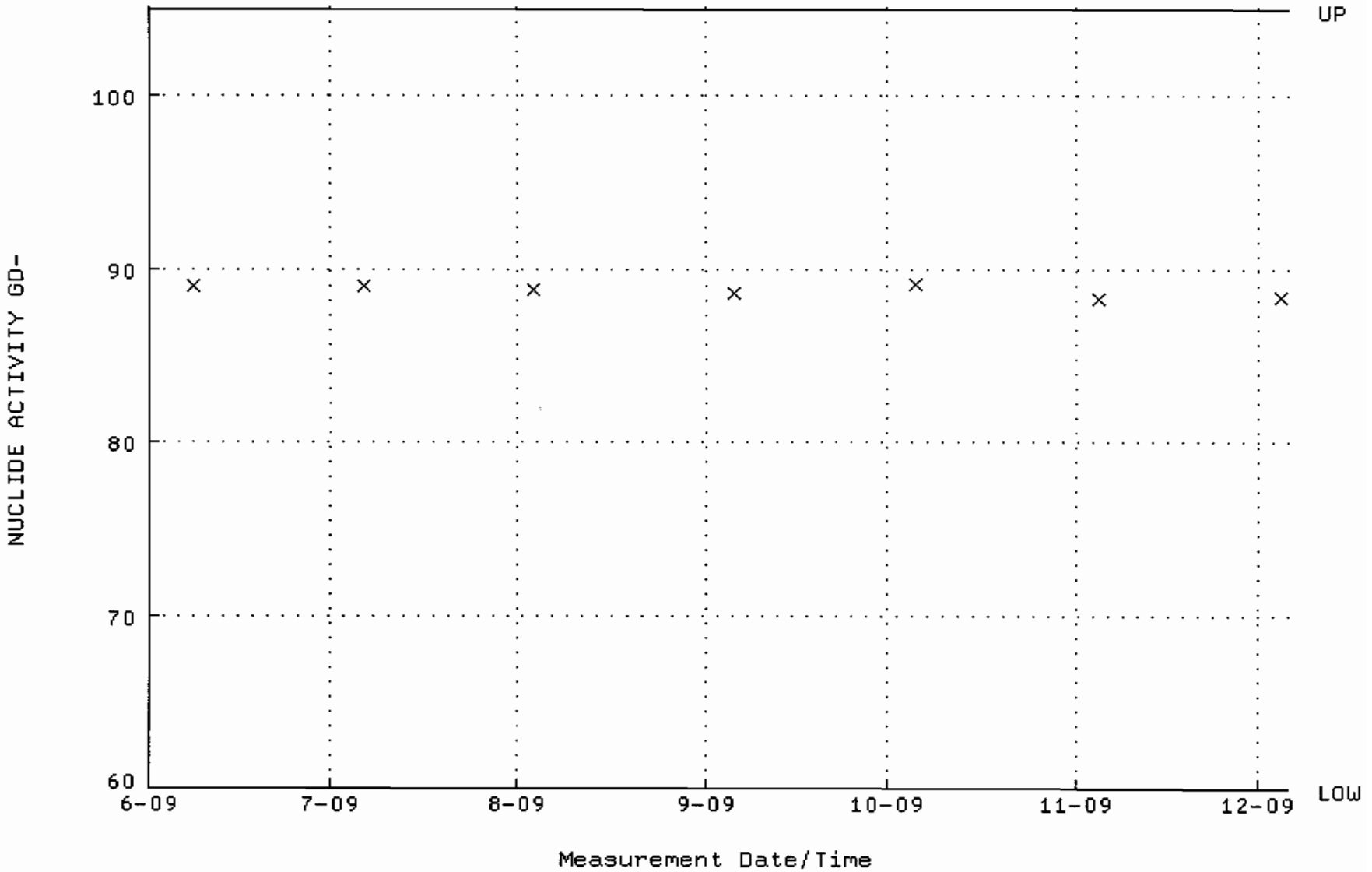

QA filename : DKA100:[ENV_ALPHA.QA.B]B025.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

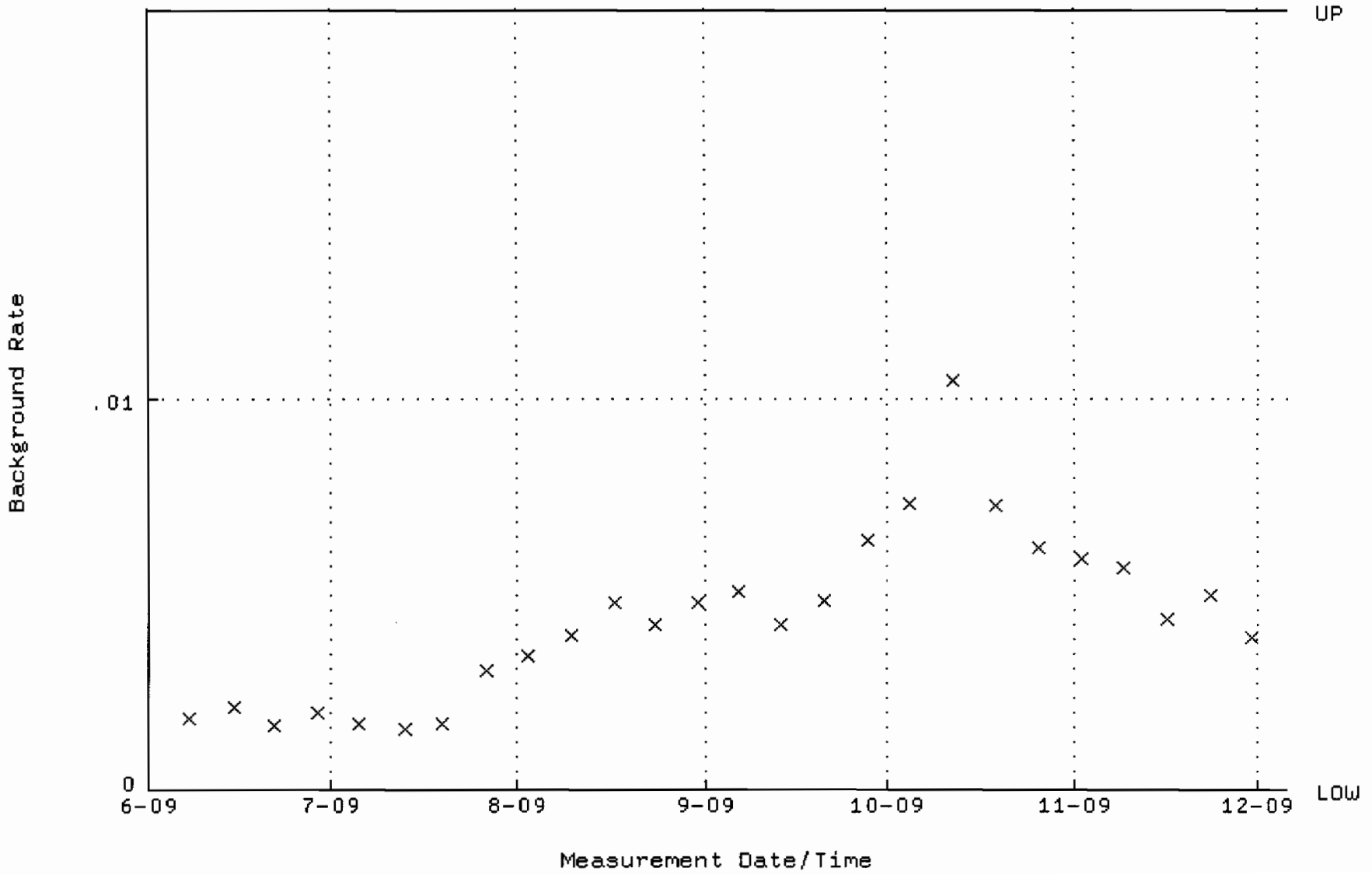

QA filename : DKA100:[ENV_ALPHA.QA.W]W026.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.307728 through 0.327728

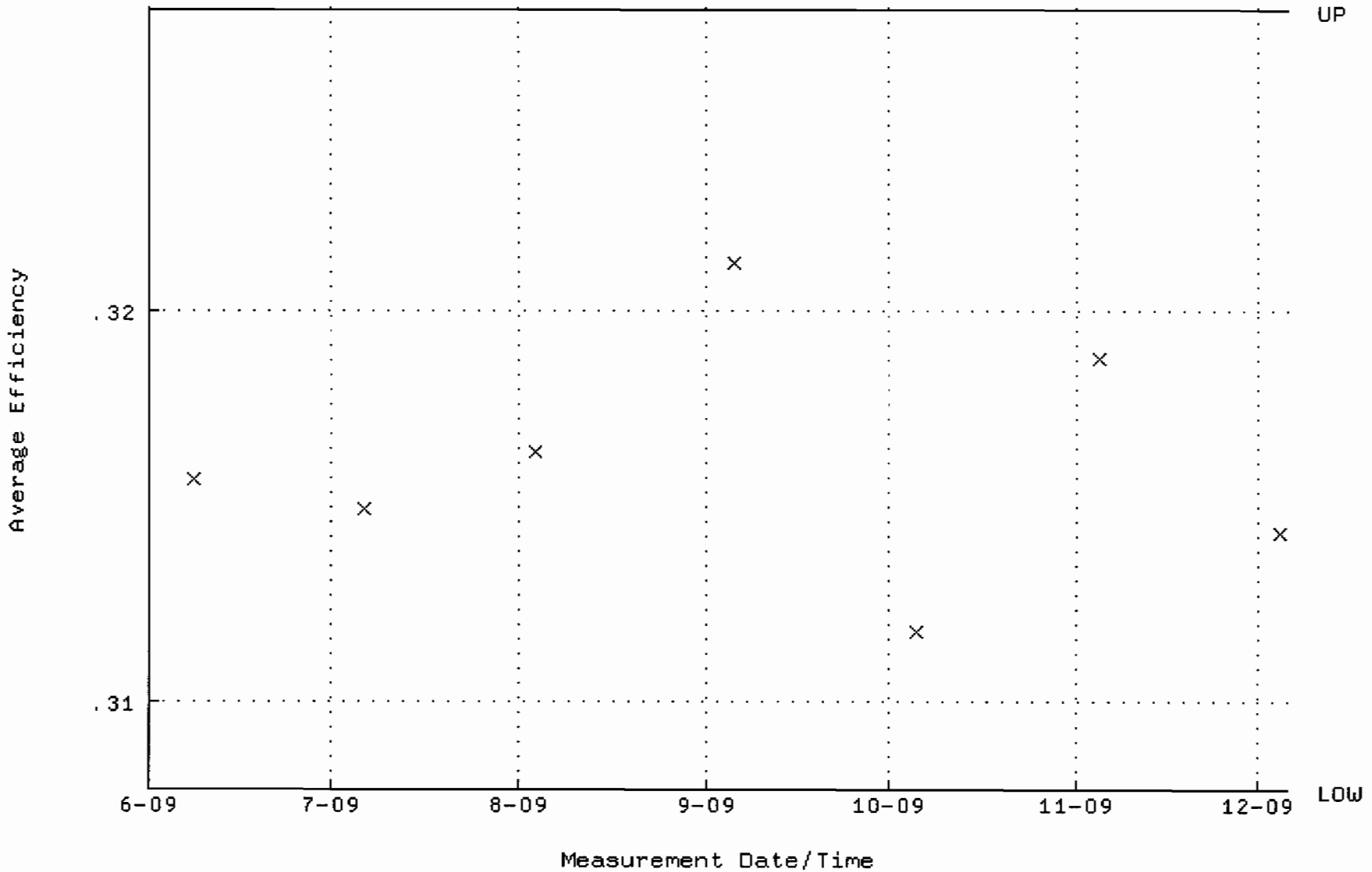

QA filename : DKA100:[ENV_ALPHA.QA.W]W026.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:35 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 85.8763 through 94.9159

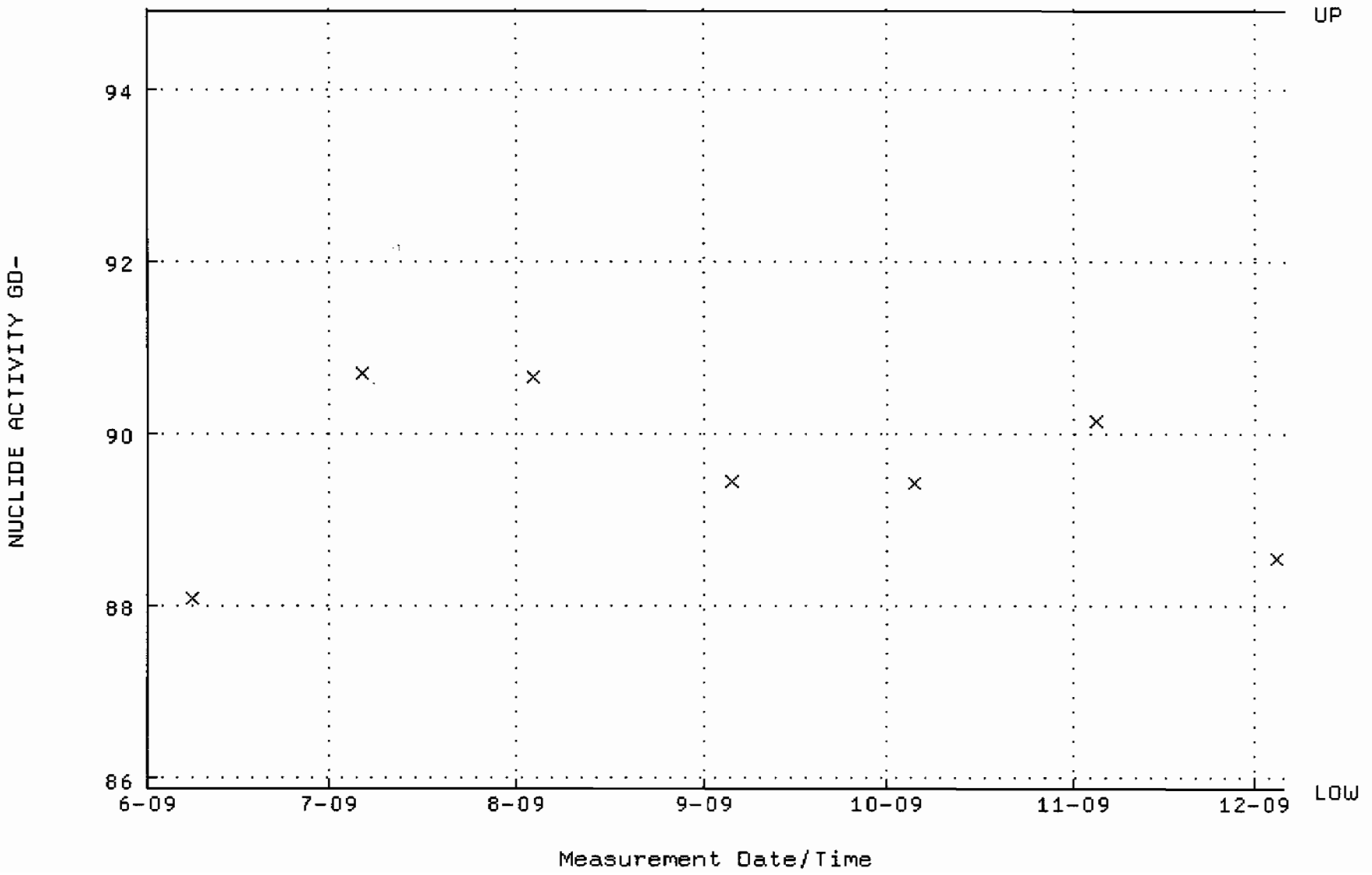

QA filename : DKA100:[ENV_ALPHA.QA.B]B026.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:26 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

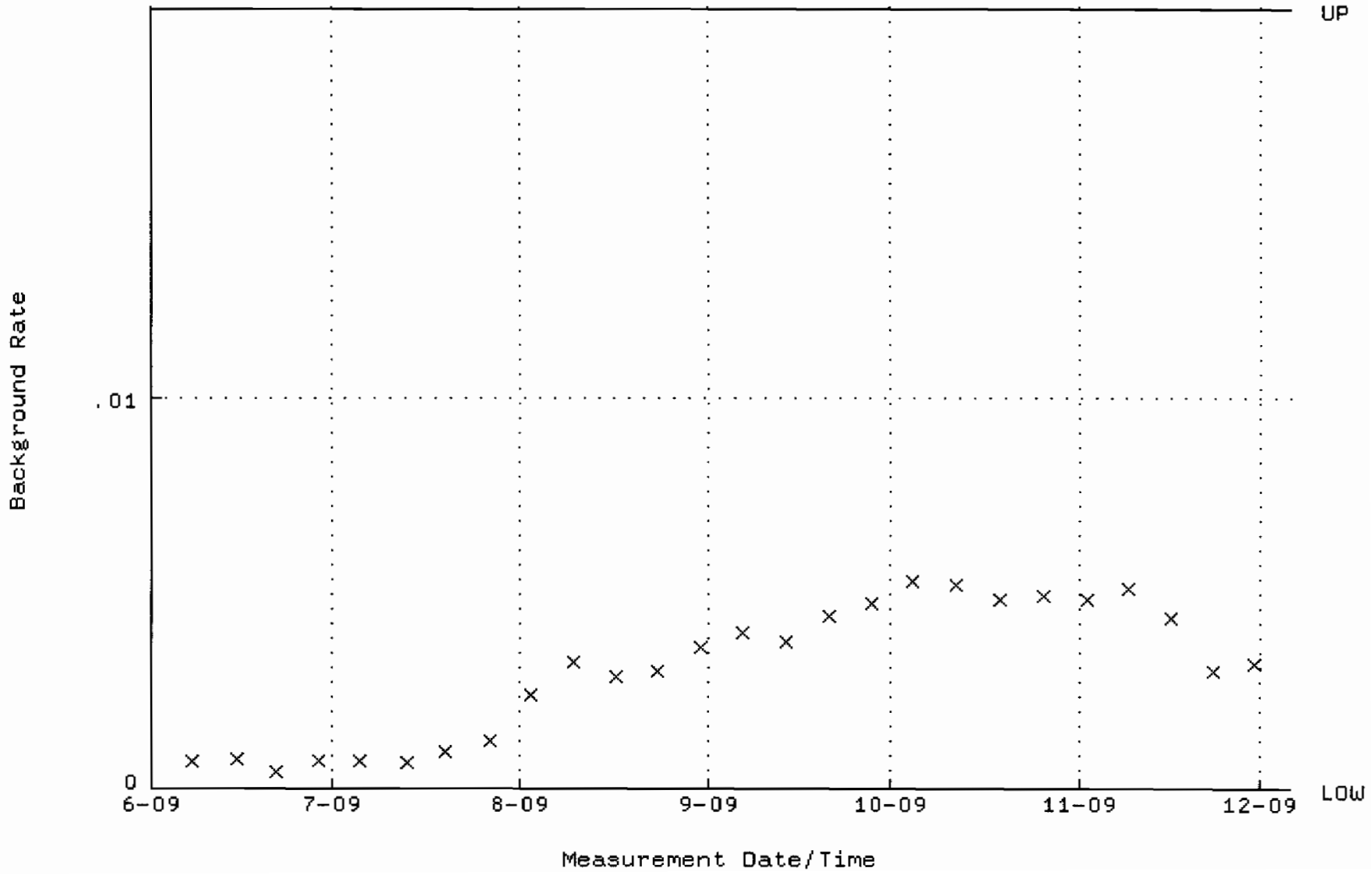

QA filename : DKA100:[ENV_ALPHA.QA.W]W031.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.324029 through 0.364065

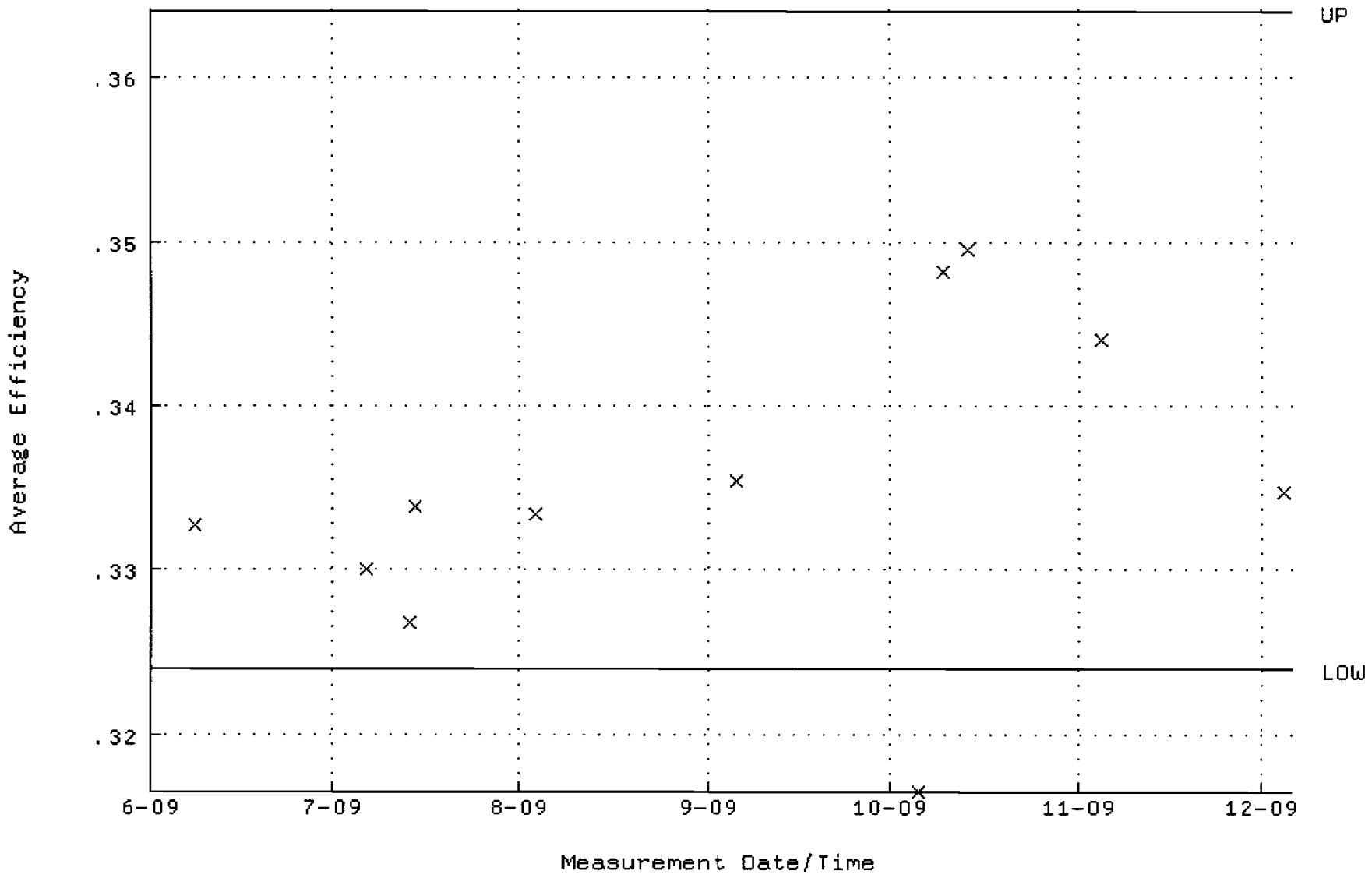

QA filename : DKA100:[ENV_ALPHA.QA.W]W031.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 84.2165 through 88.5165

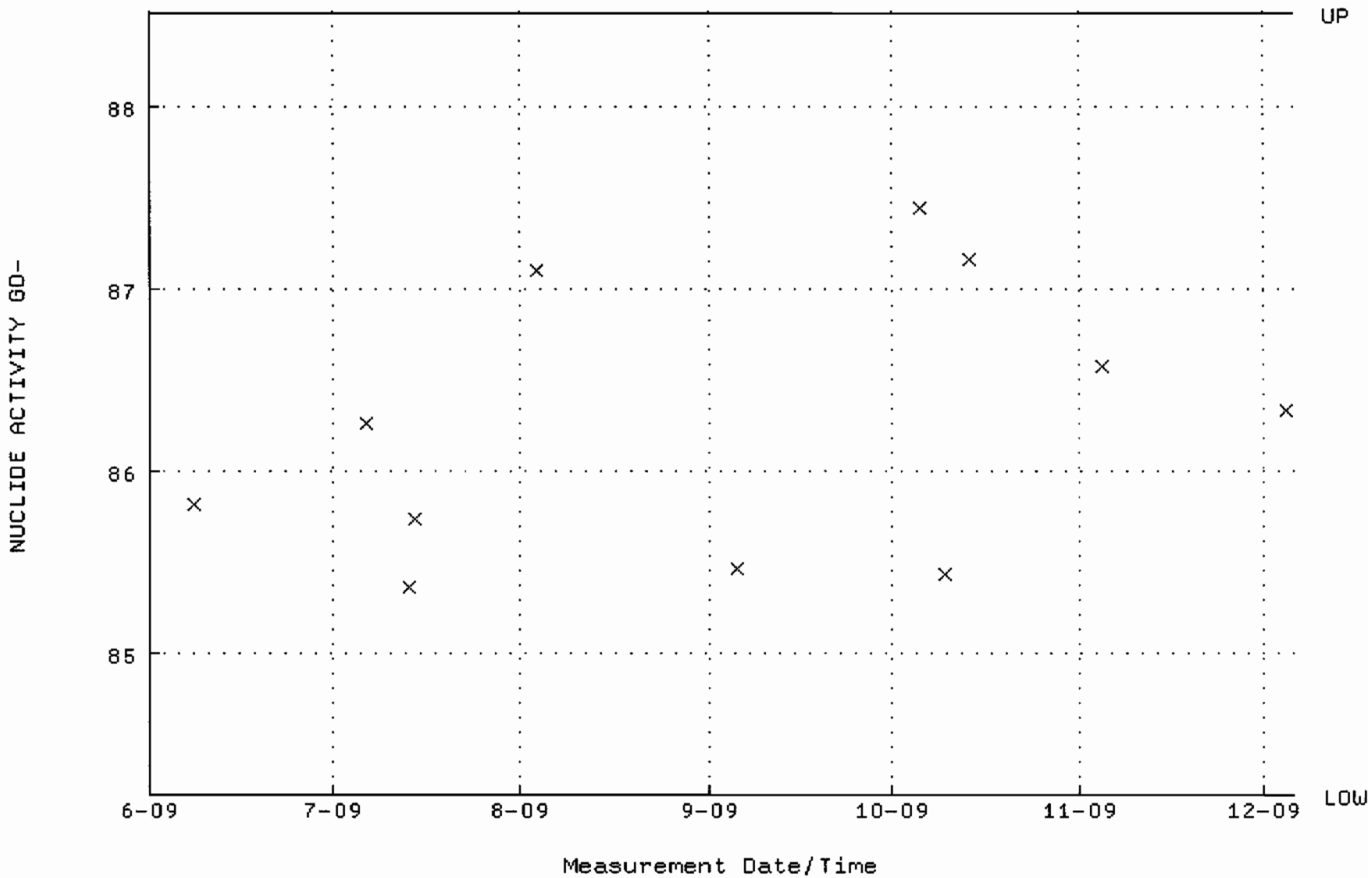

QA filename : DKA100:[ENV_ALPHA.QA.B]B031.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

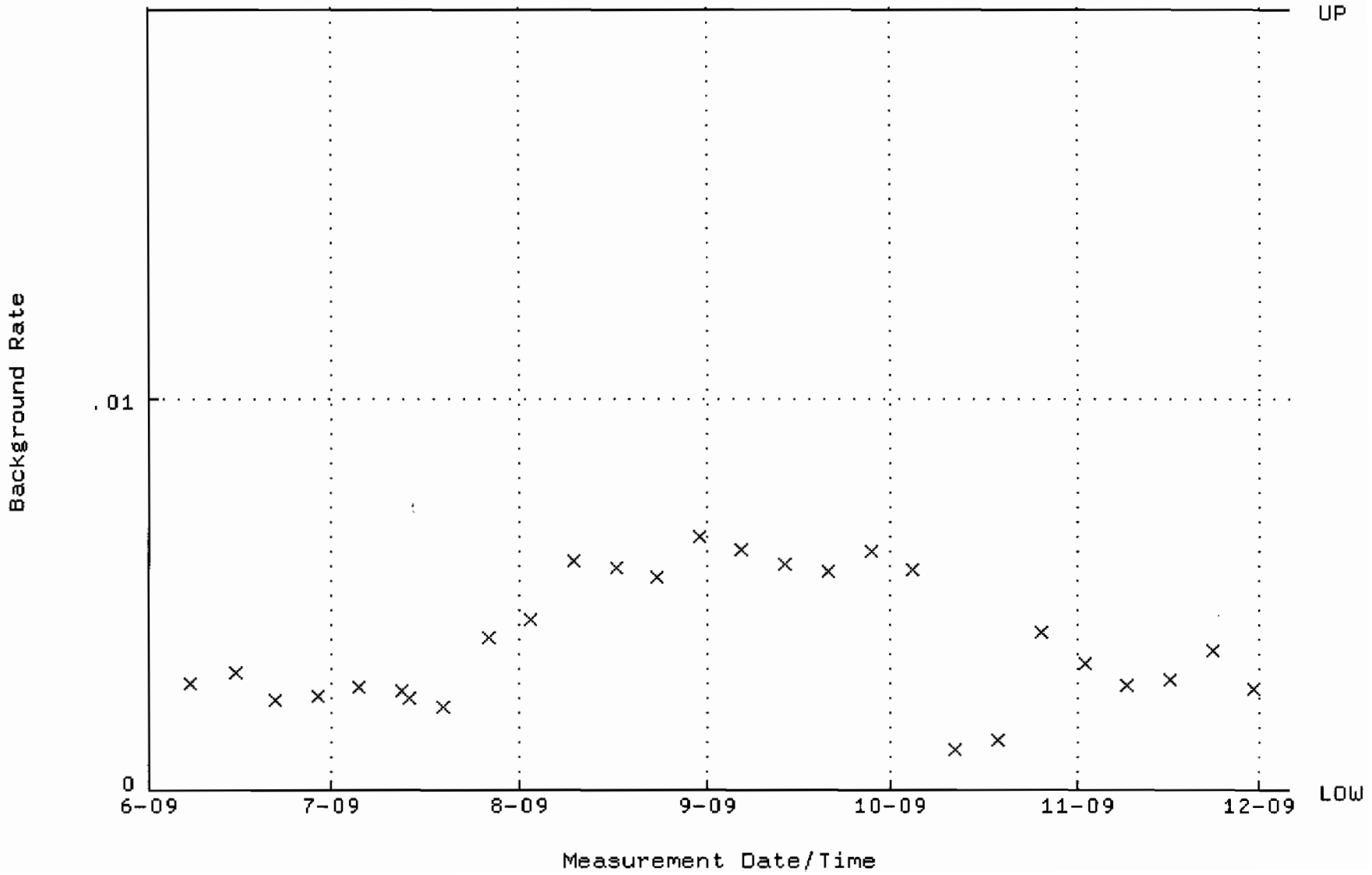

QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.304222 through 0.327748

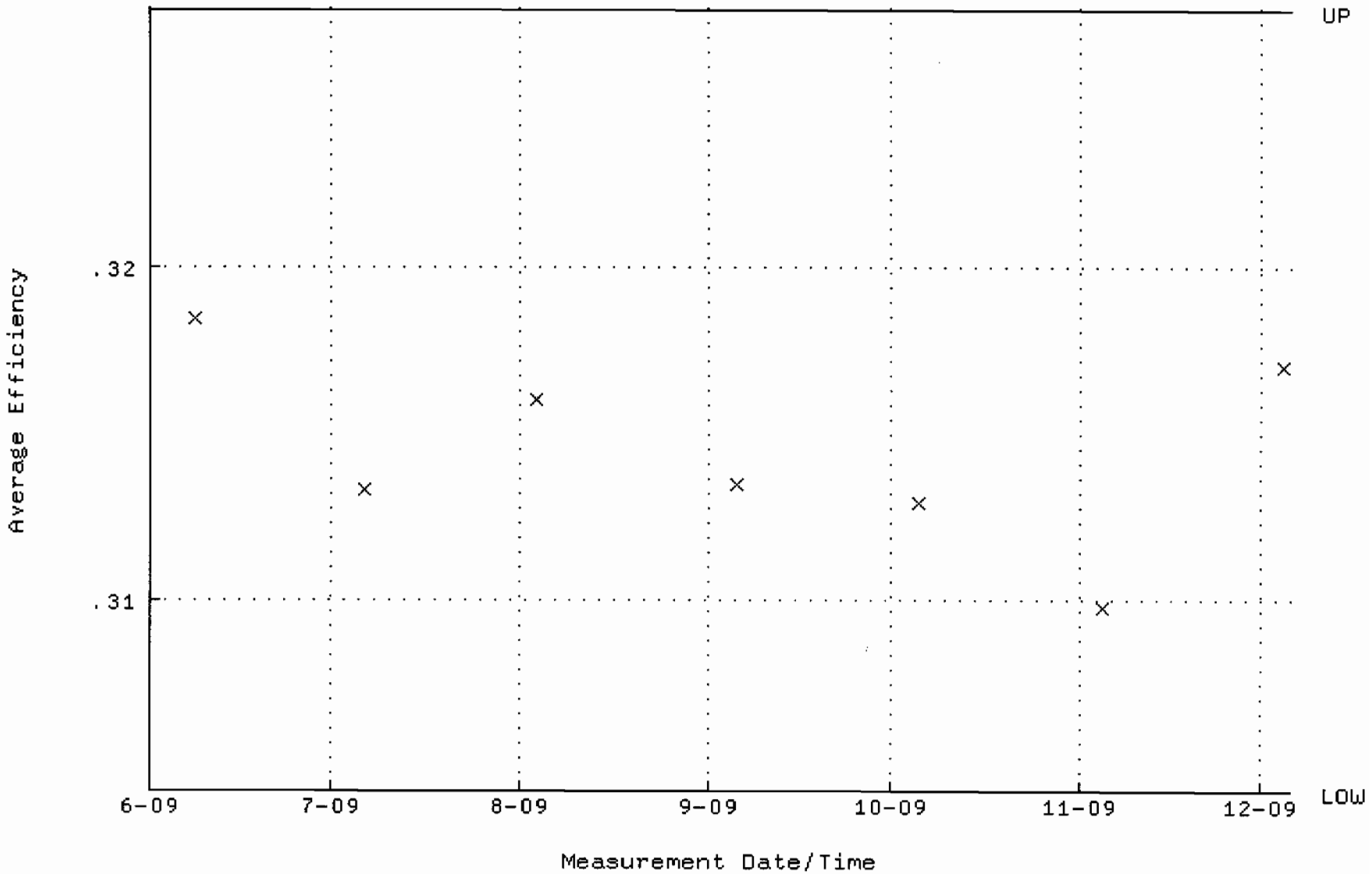

QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:37 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 83.9373 through 86.9661

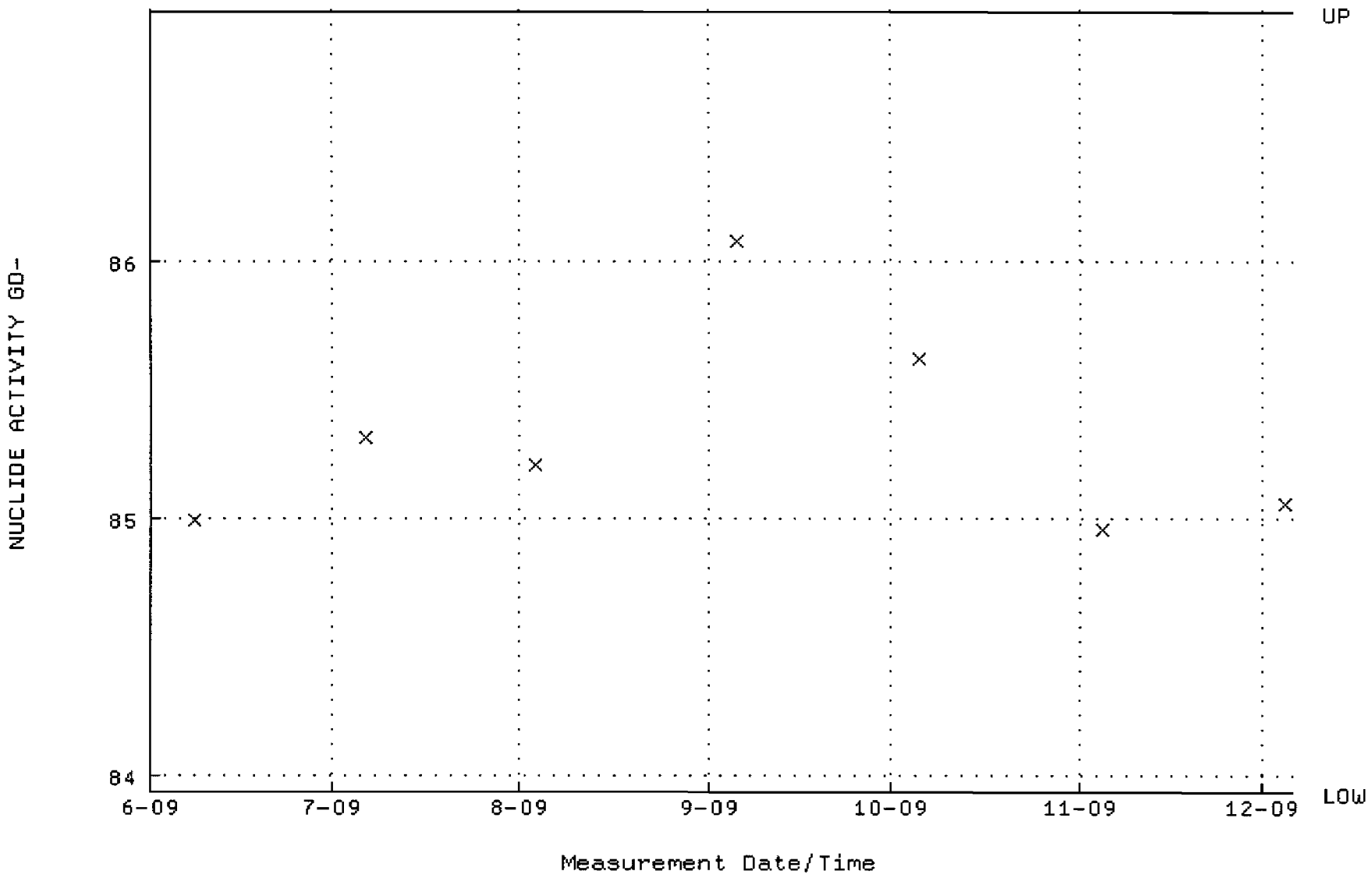

QA filename : DKA100:[ENV_ALPHA.QA.B]B033.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:28 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

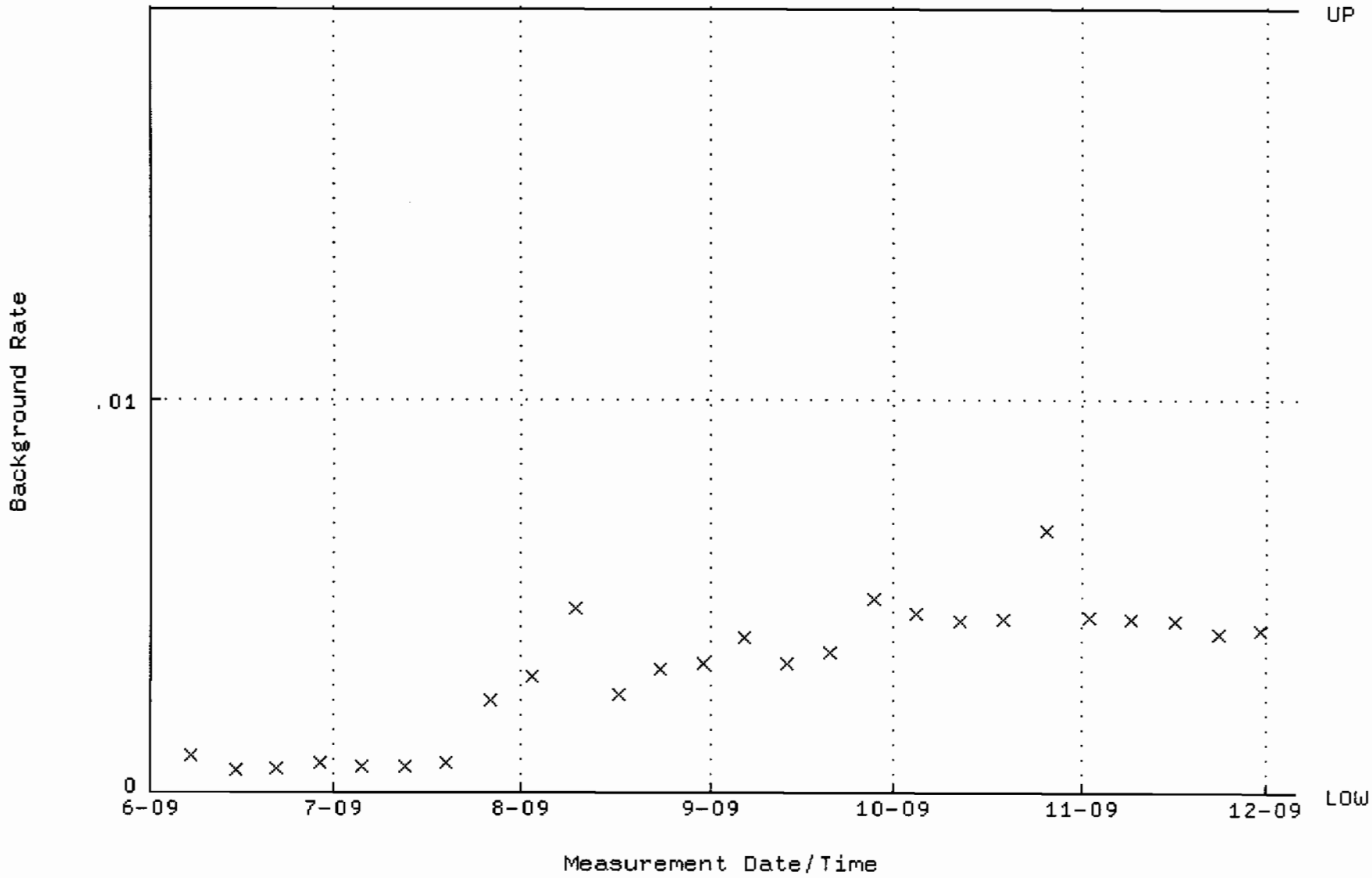

QA filename : DKA100:[ENV_ALPHA.QA.W]W044.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.336958 through 0.361648

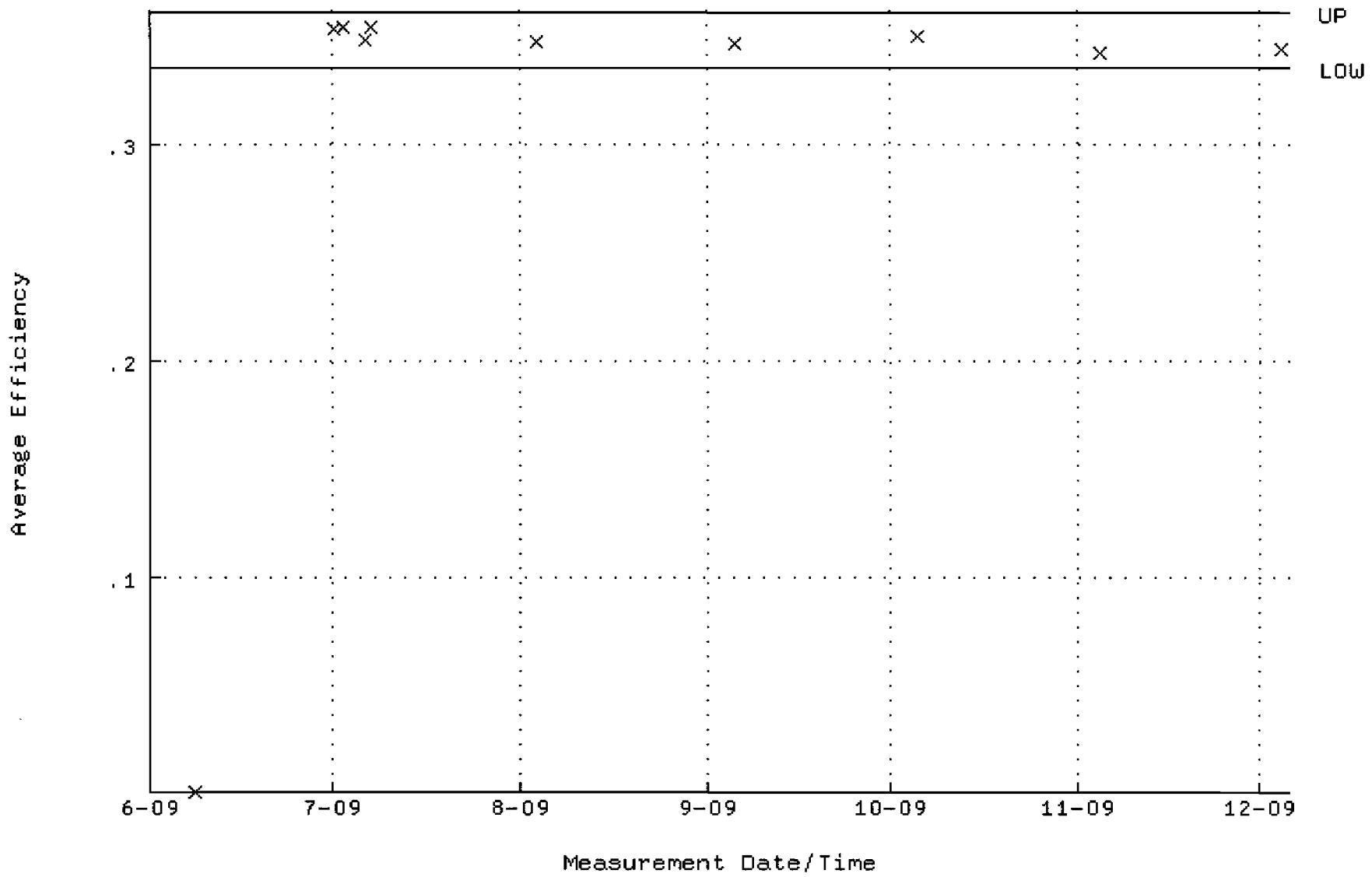

QA filename : DKA100:[ENV_ALPHA.QA.W]W044.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 86.0137 through 89.8023

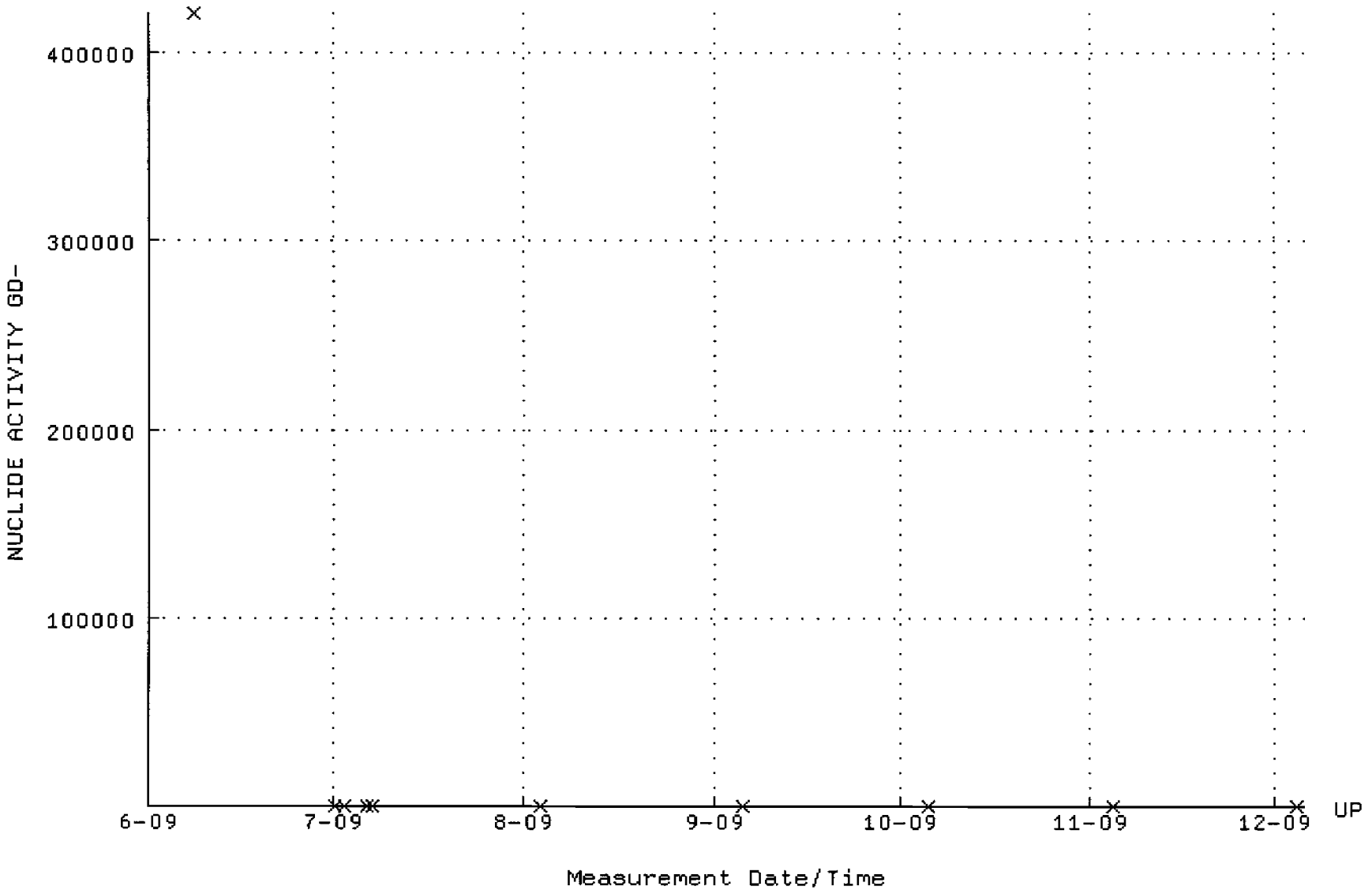

QA filename : DKA100:[ENV_ALPHA.QA.B]B044.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

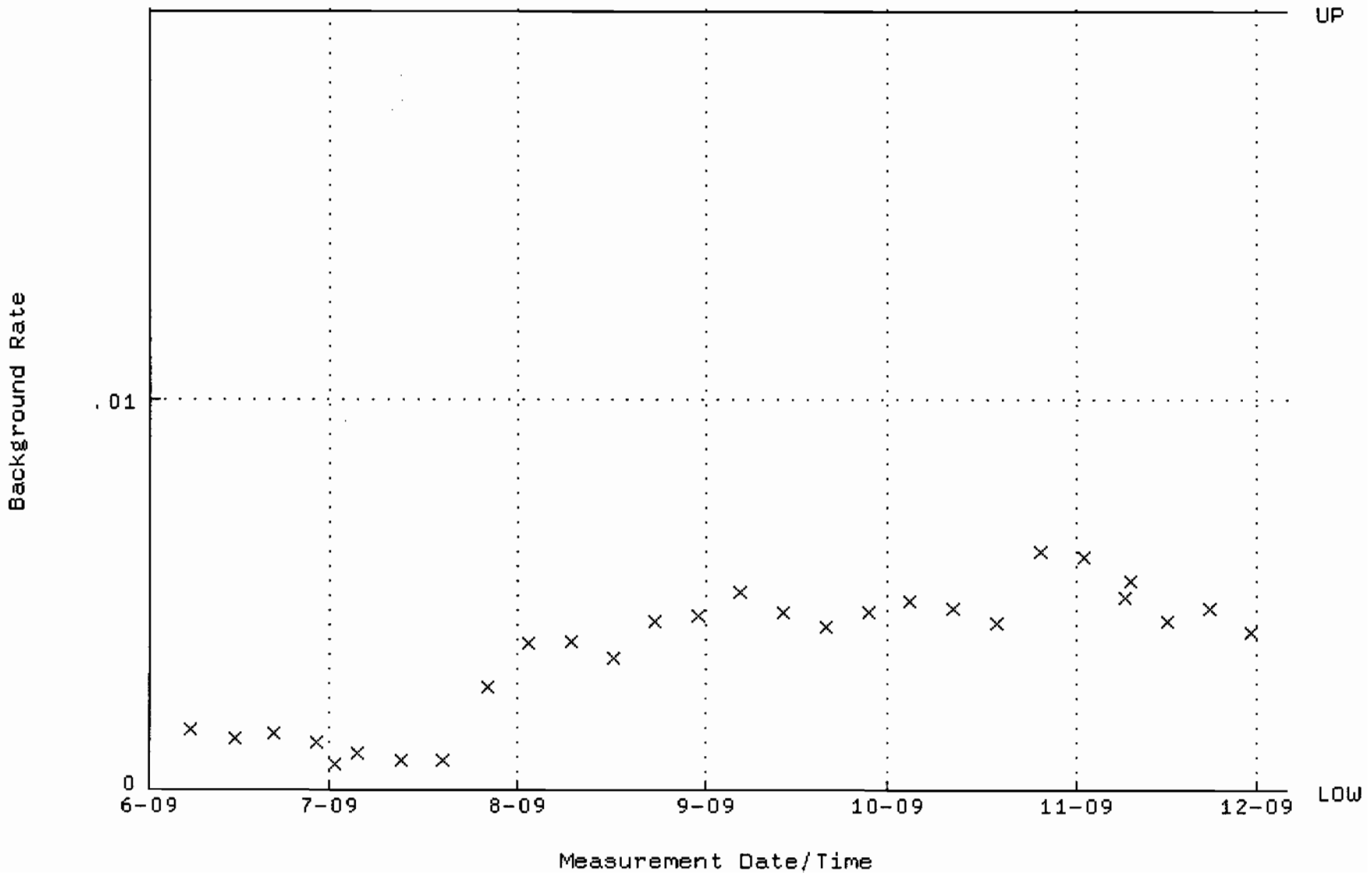

QA filename : DKA100:[ENV_ALPHA.QA.W]W045.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.332472 through 0.352472

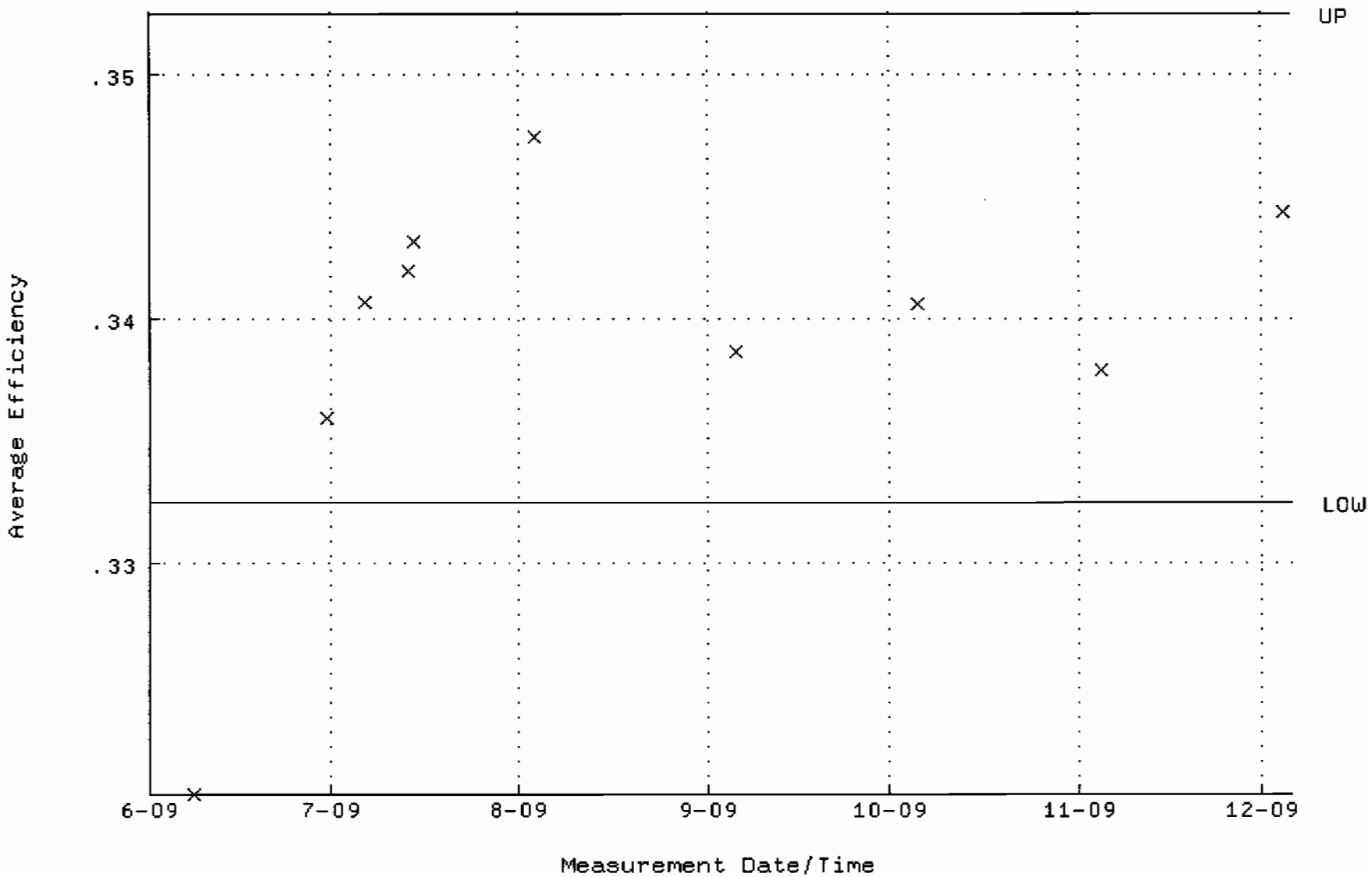

QA filename : DKA100:[ENV_ALPHA.QA.W]W045.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 80.4622 through 88.9320

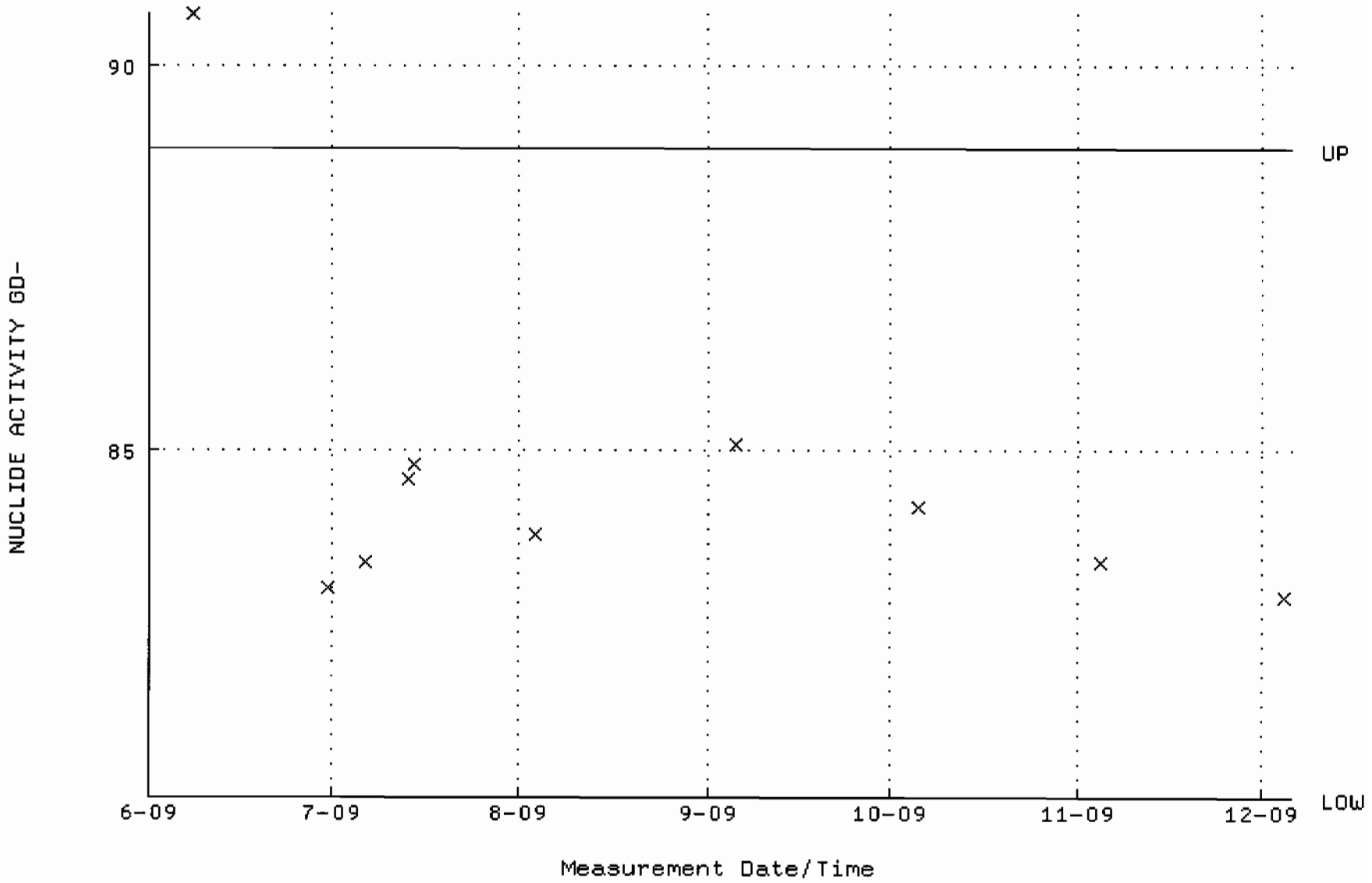

QA filename : DKA100:[ENV_ALPHA.QA.B]B045.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

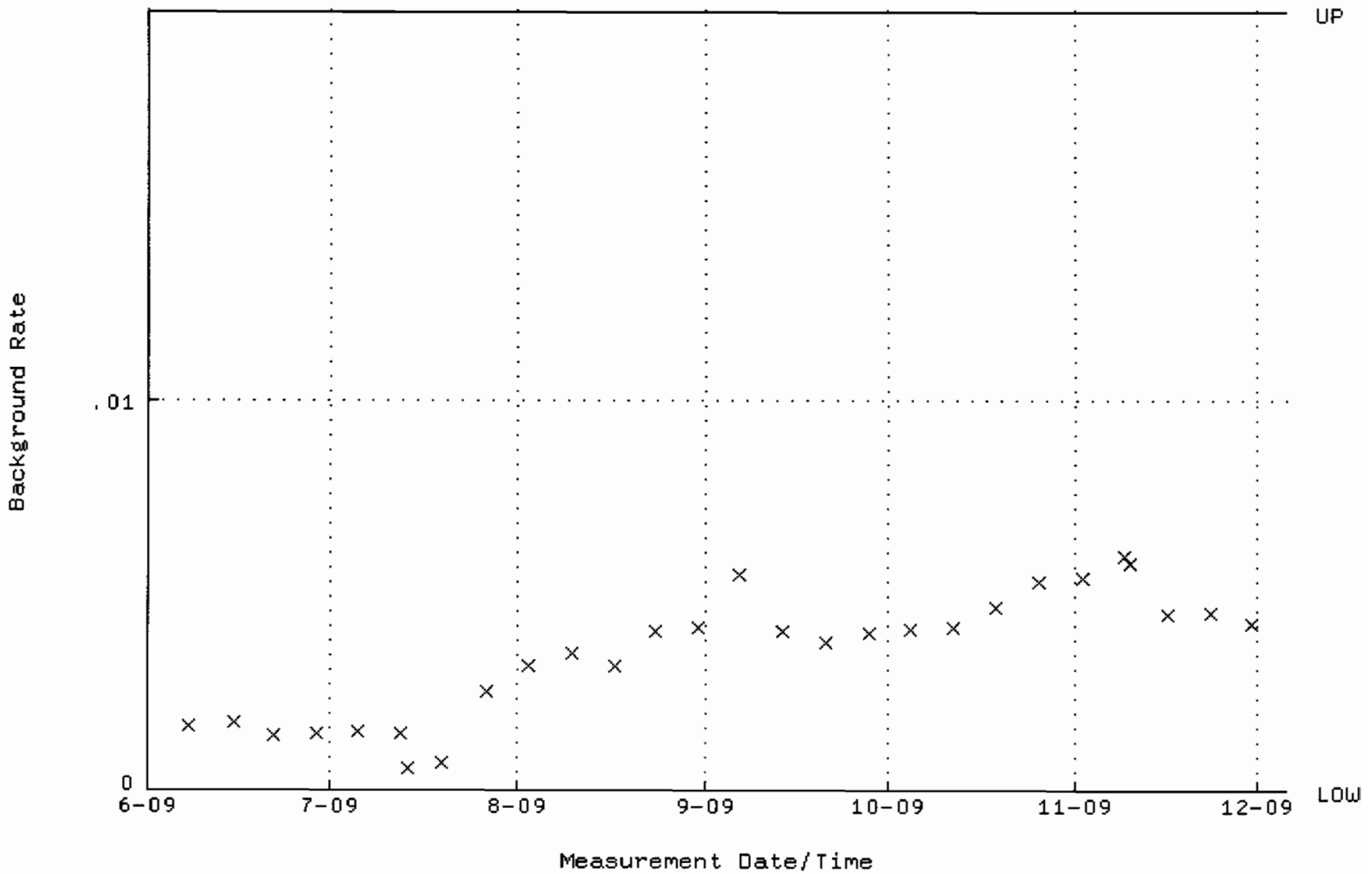

QA filename : DKA100:[ENV_ALPHA.QA.W]W046.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.333927 through 0.353927

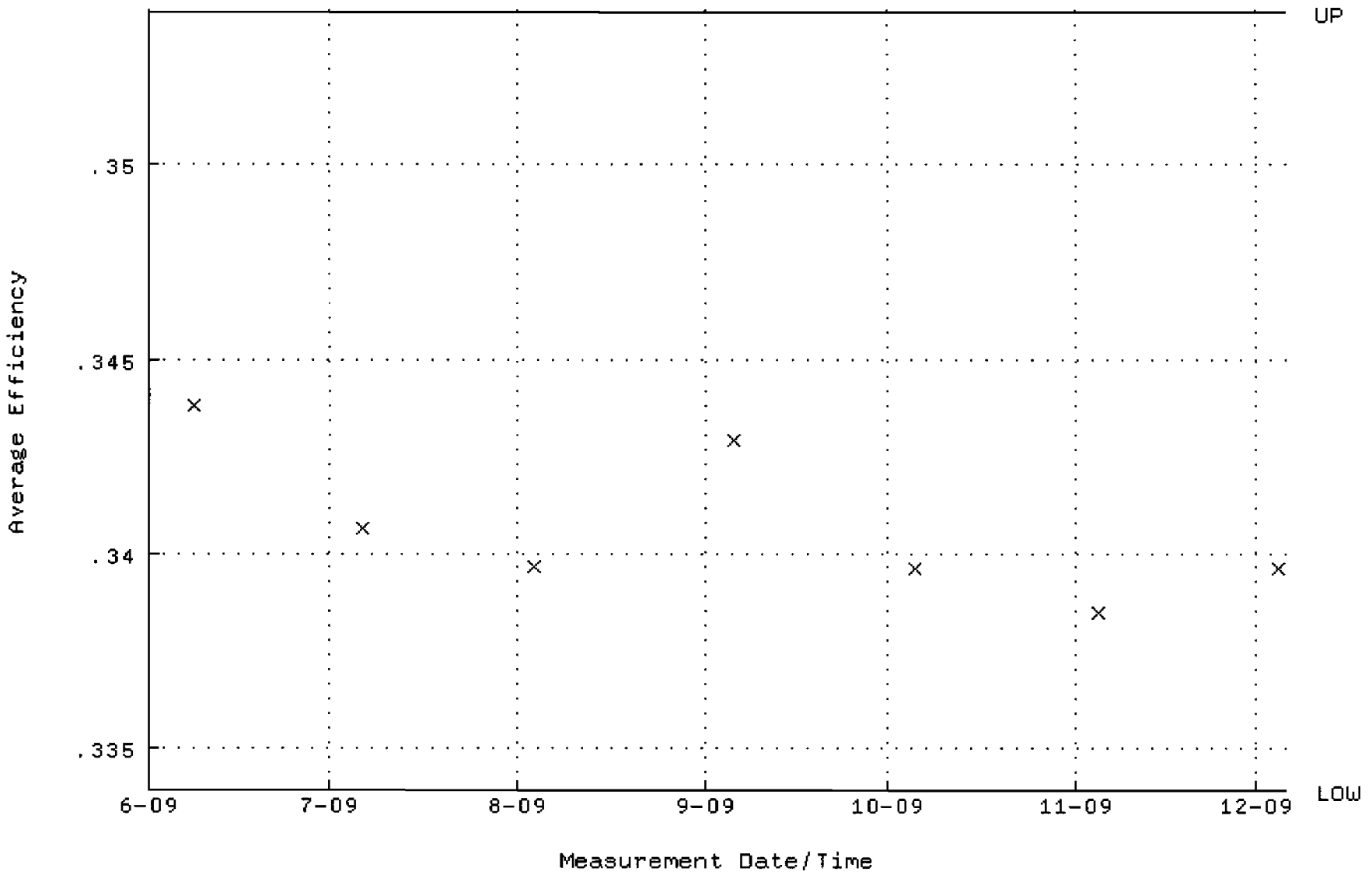

QA filename : DKA100:[ENV_ALPHA.QA.W]W046.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 8-JUN-2009 10:41:42 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 81.7568 through 90.3628

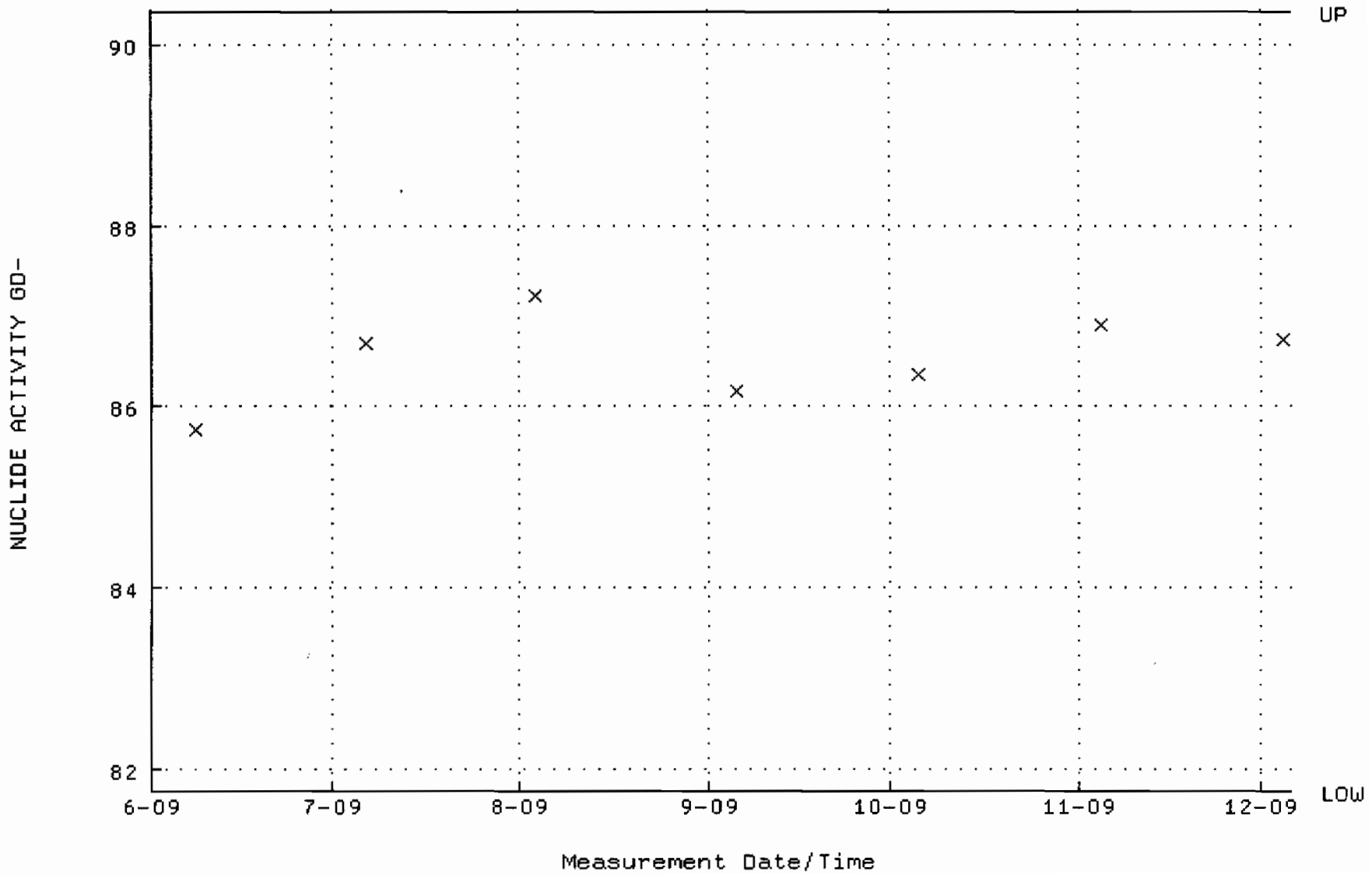

QA filename : DKA100:[ENV_ALPHA.QA.B]B046.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:32 through 5-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

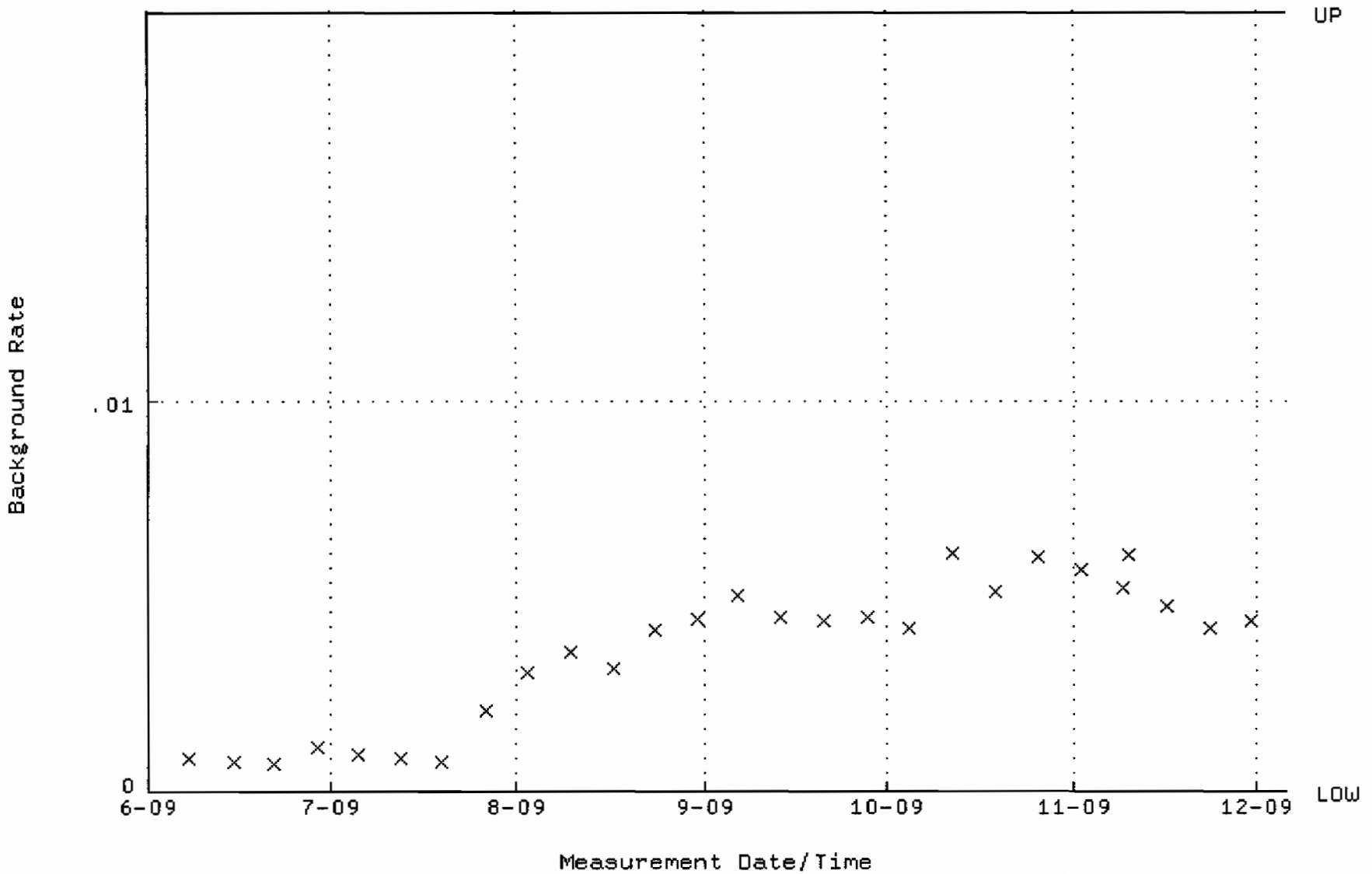

QA filename : DKA100:[ENV_ALPHA.QA.W]W066.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.300416 through 0.320416

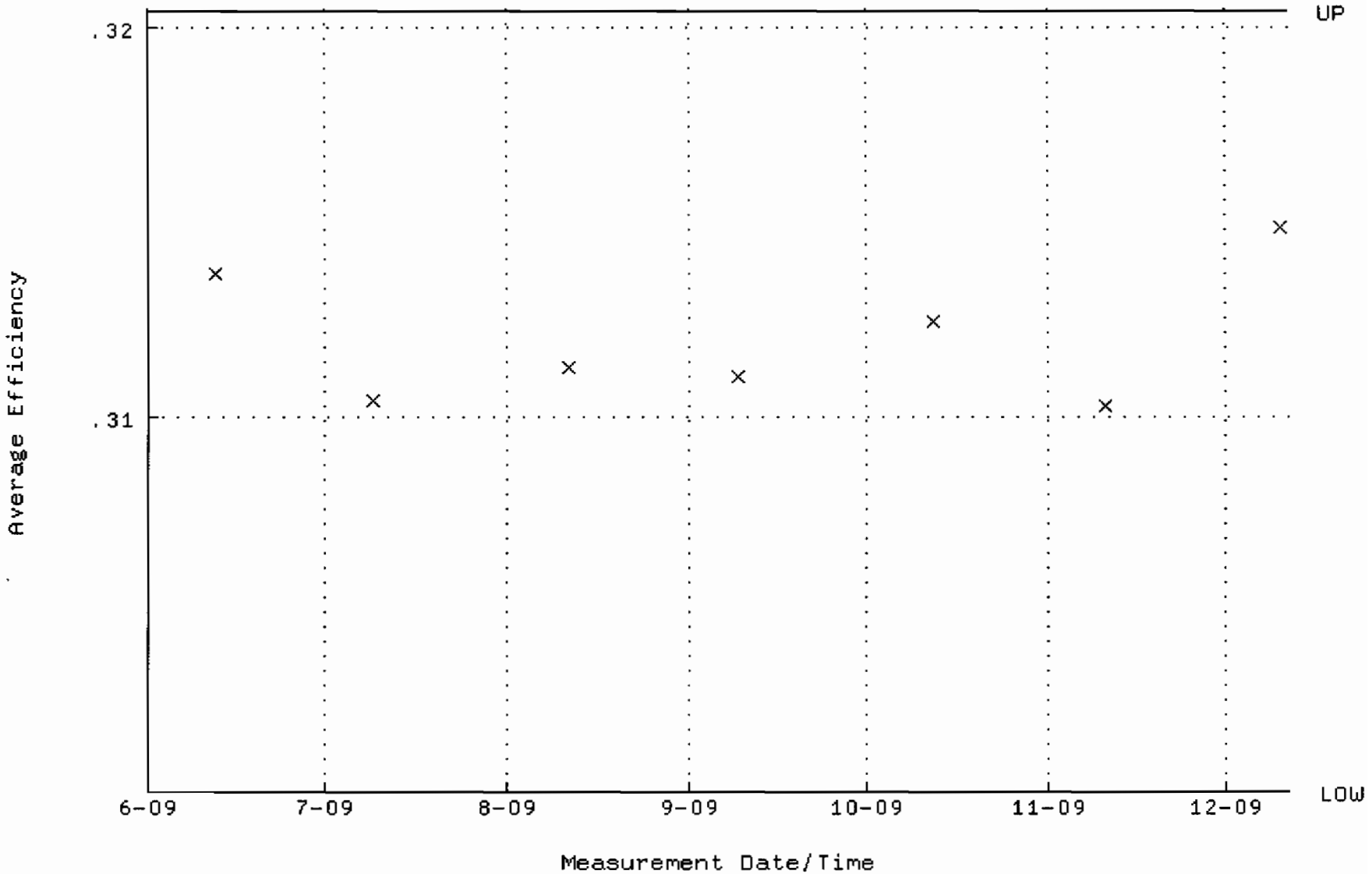

QA filename : DKA100:[ENV_ALPHA.QA.W]W066.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 85.0864 through 94.0428

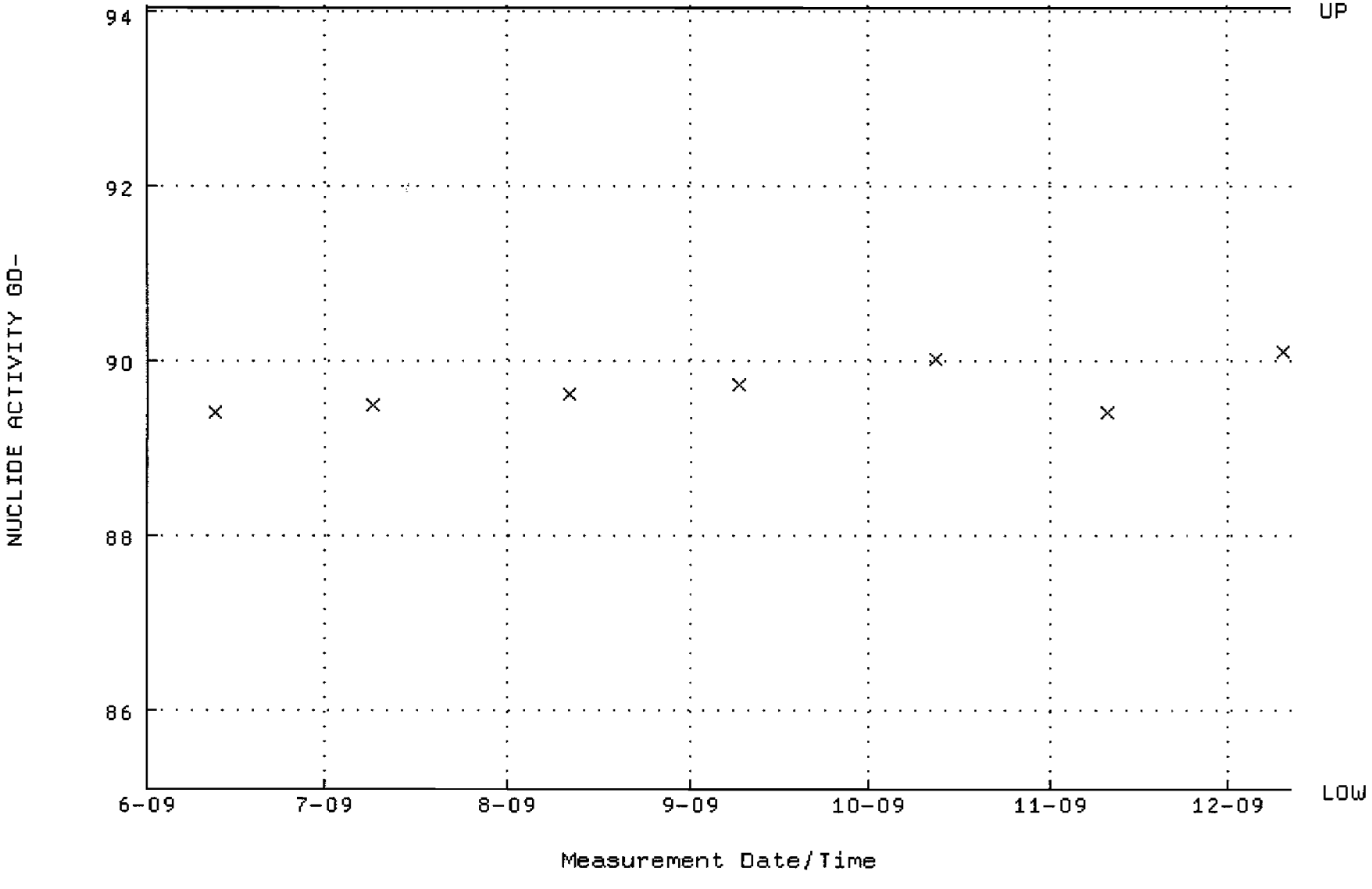

QA filename : DKA100:[ENV_ALPHA.QA.B]B066.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:33 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

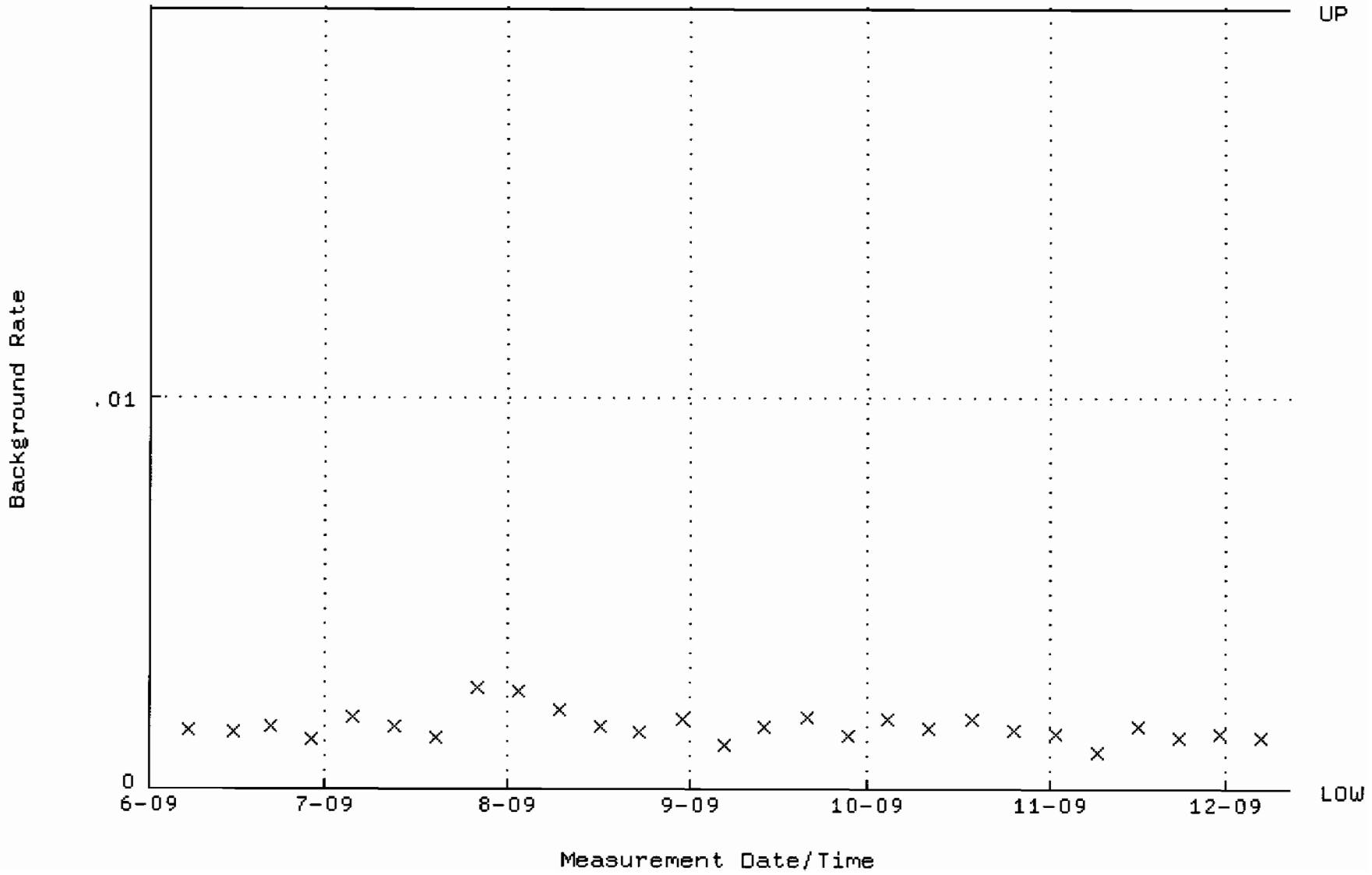

QA filename : DKA100:[ENV_ALPHA.QA.W]W067.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.316597 through 0.336597

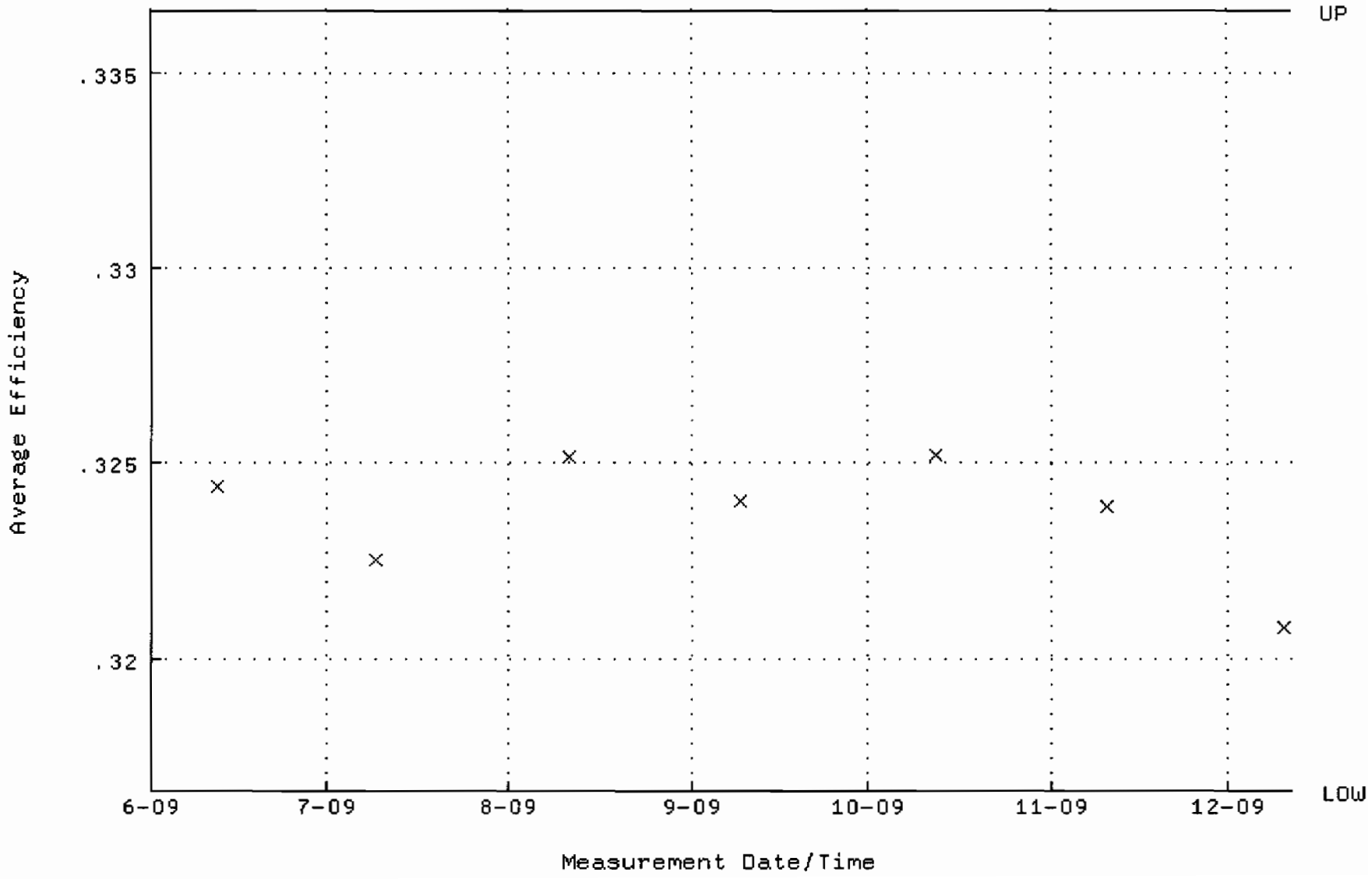

QA filename : DKA100:[ENV_ALPHA.QA.W]W067.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:25 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 86.2683 through 95.3491

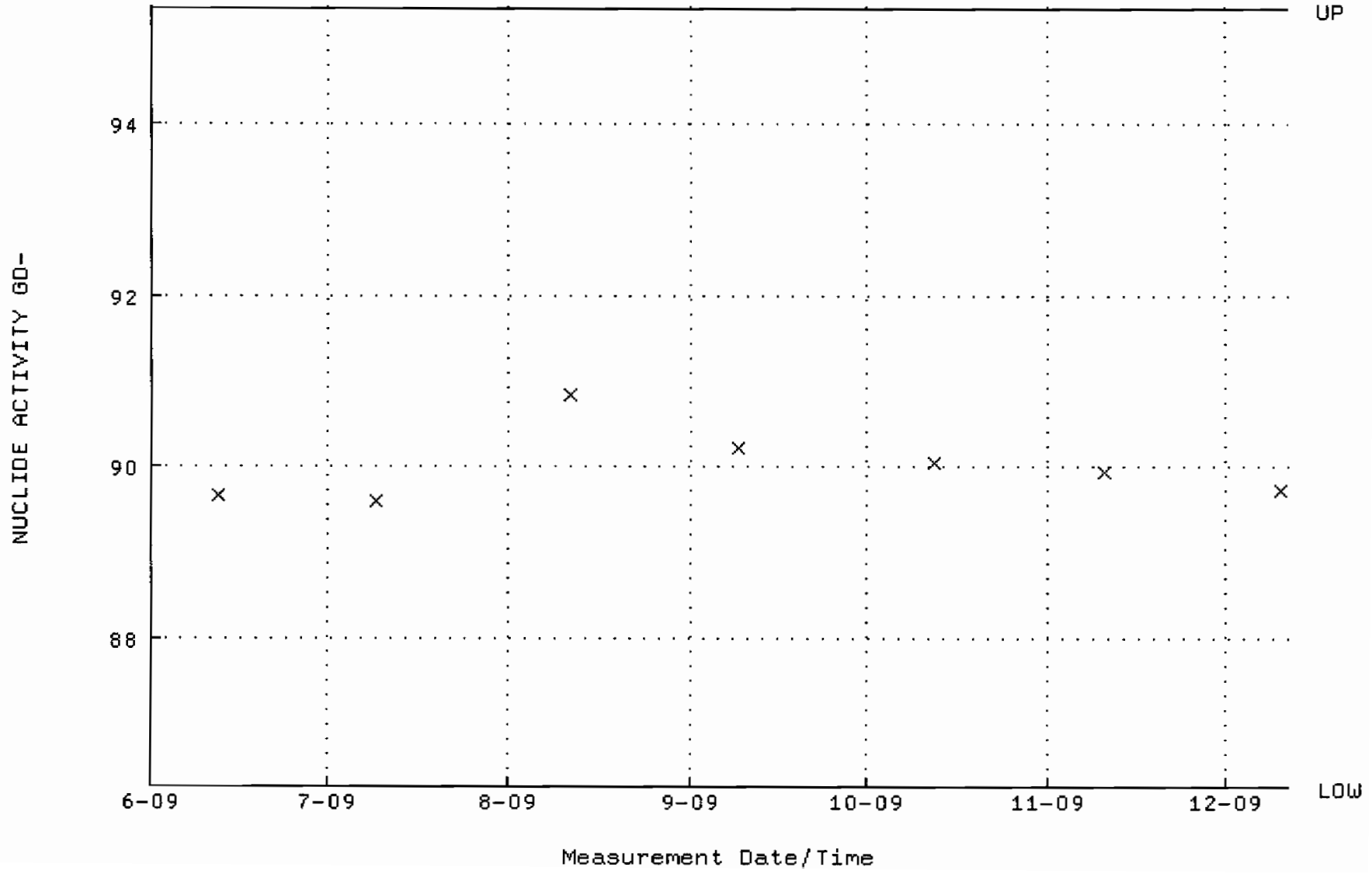

QA filename : DKA100:[ENV_ALPHA.QA.B]B067.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:33 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

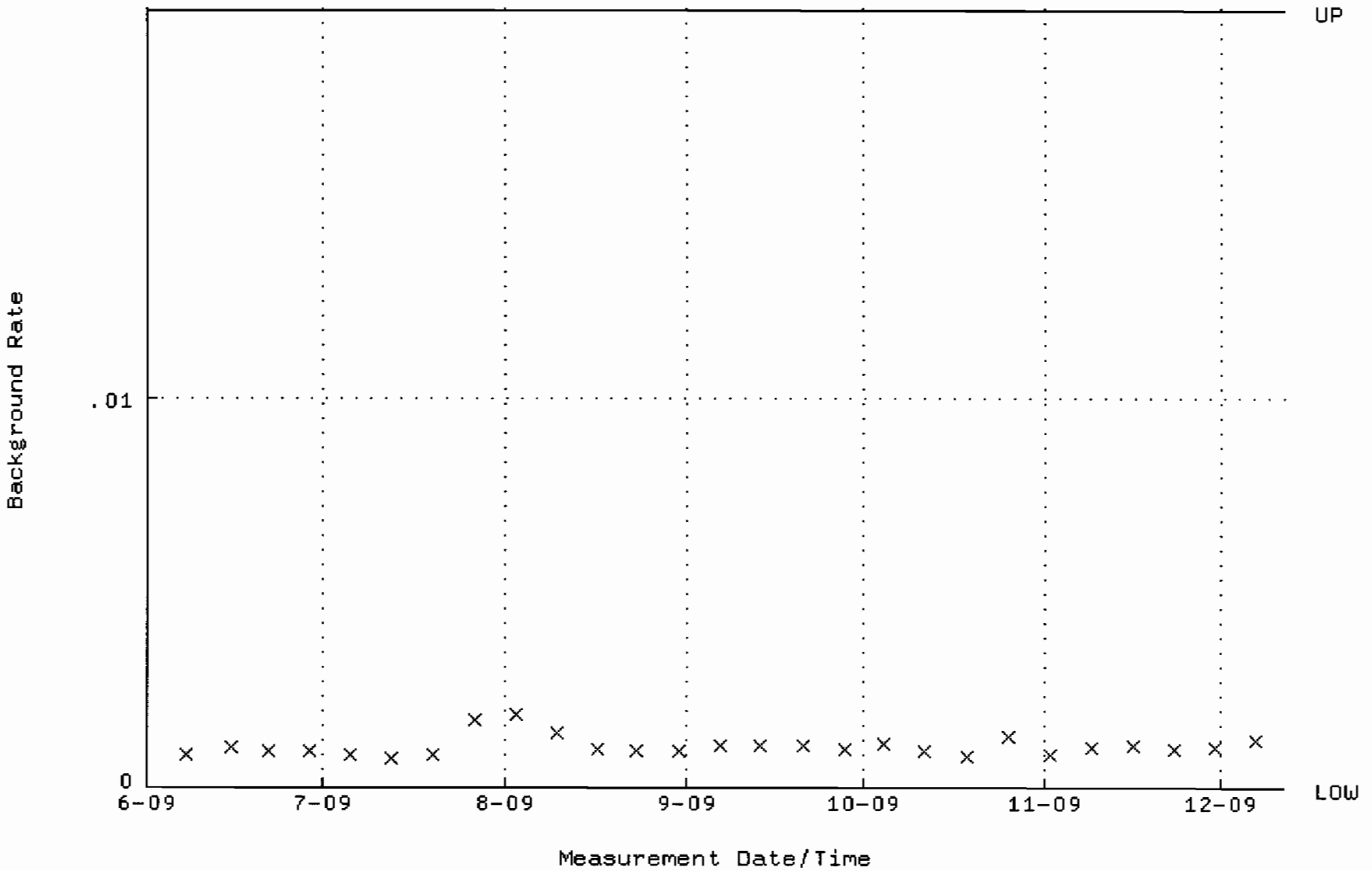

QA filename : DKA100:[ENV_ALPHA.QA.W]W103.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.325314 through 0.345314

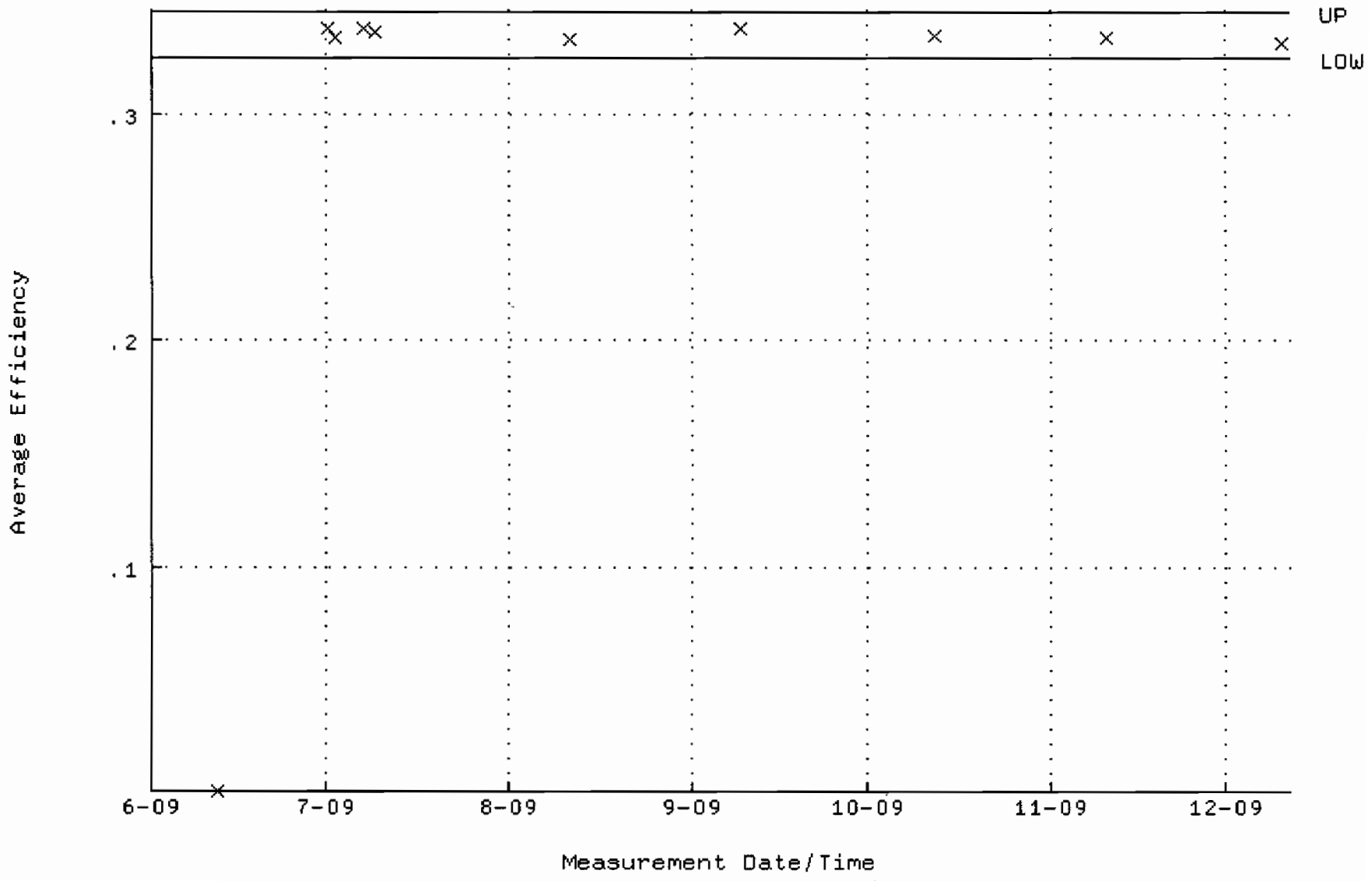

QA filename : DKA100:[ENV_ALPHA.QA.W]W103.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 12-JUN-2009 07:18:30 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 64.7479 through 71.5635

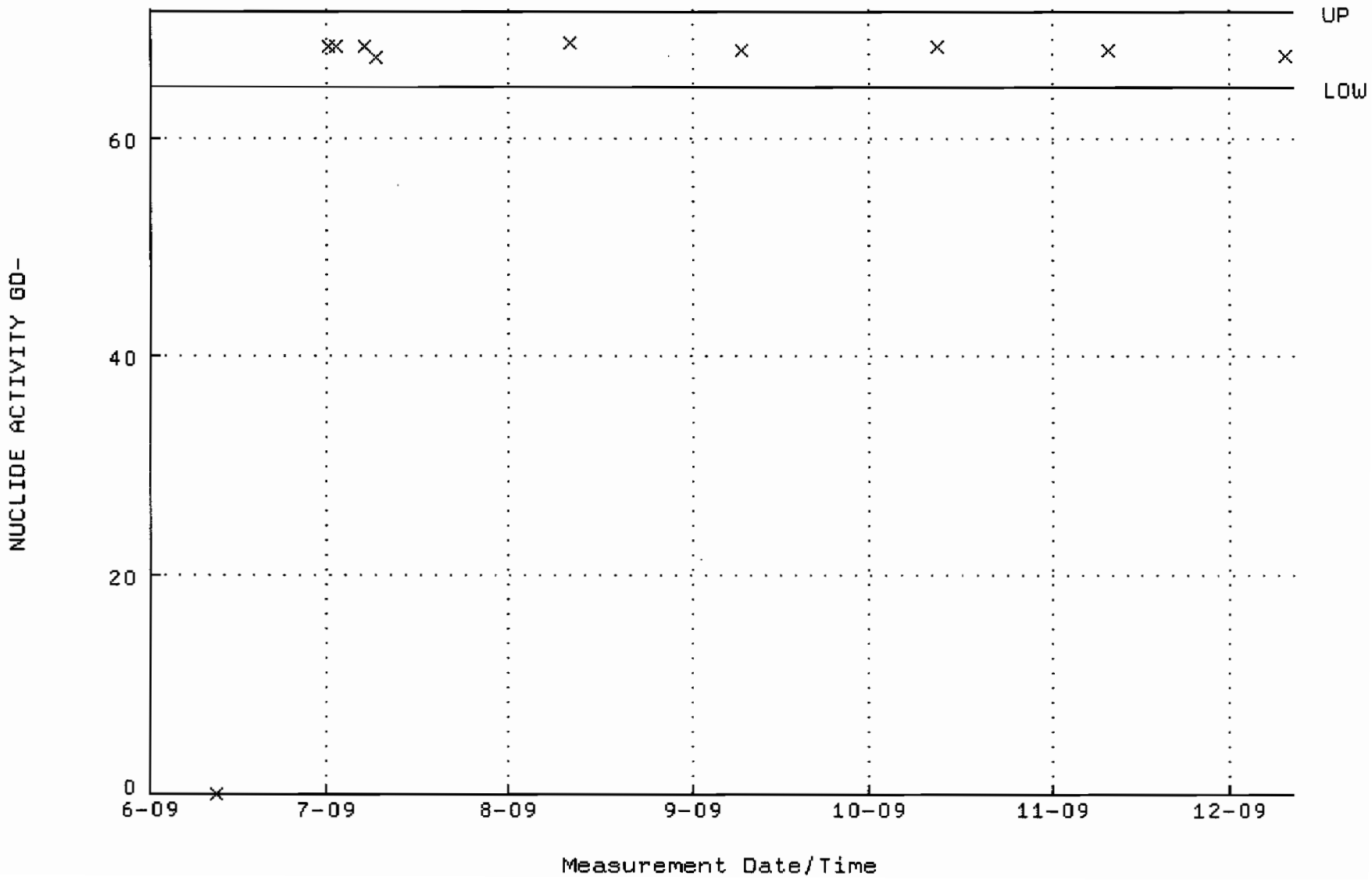

QA filename : DKA100:[ENV_ALPHA.QA.B]B103.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 16:45:46 through 11-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

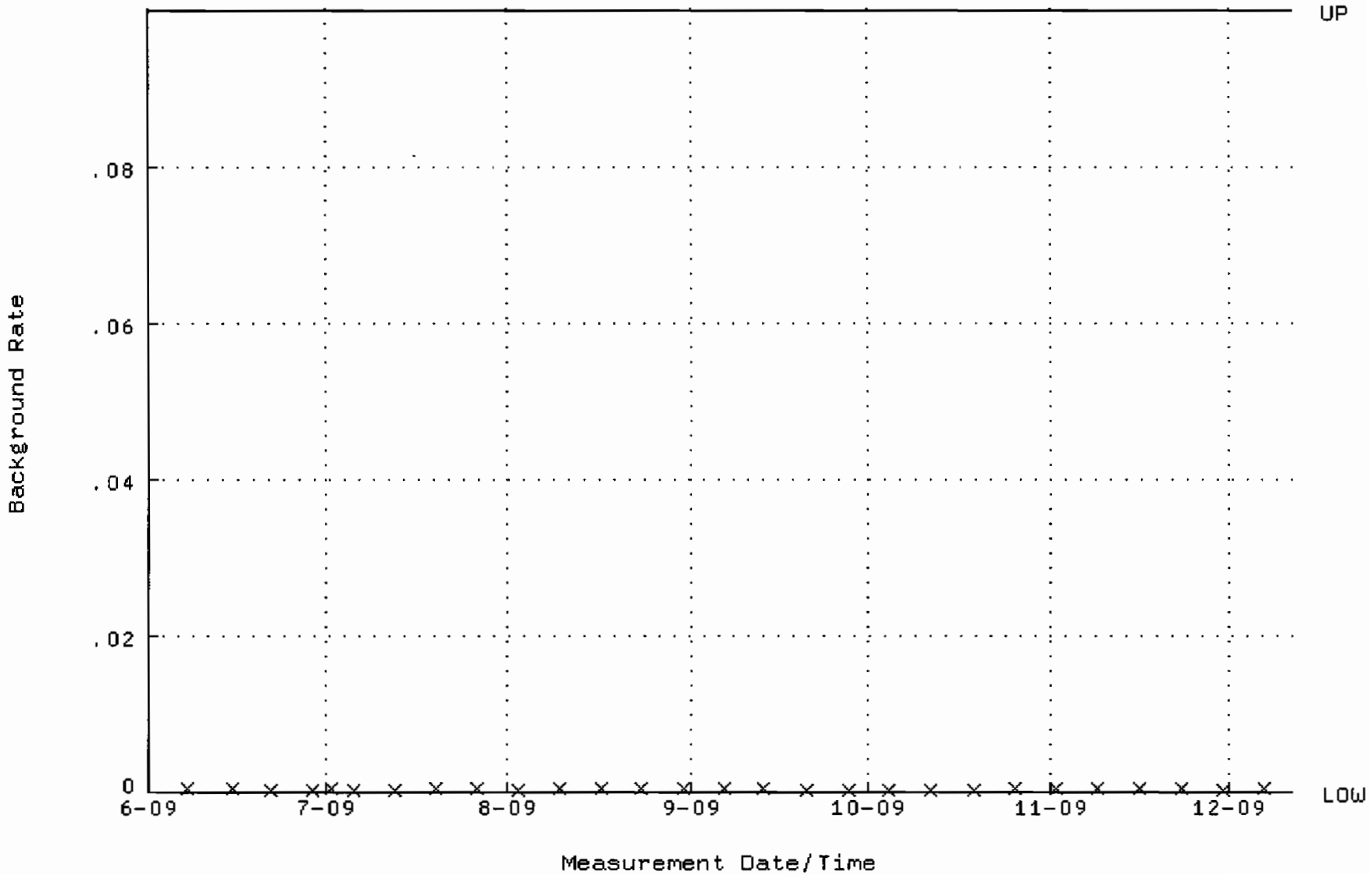

QA filename : DKA100:[ENV_ALPHA.QA.W]W138.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 15-JUN-2009 10:36:25 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.247085 through 0.267085

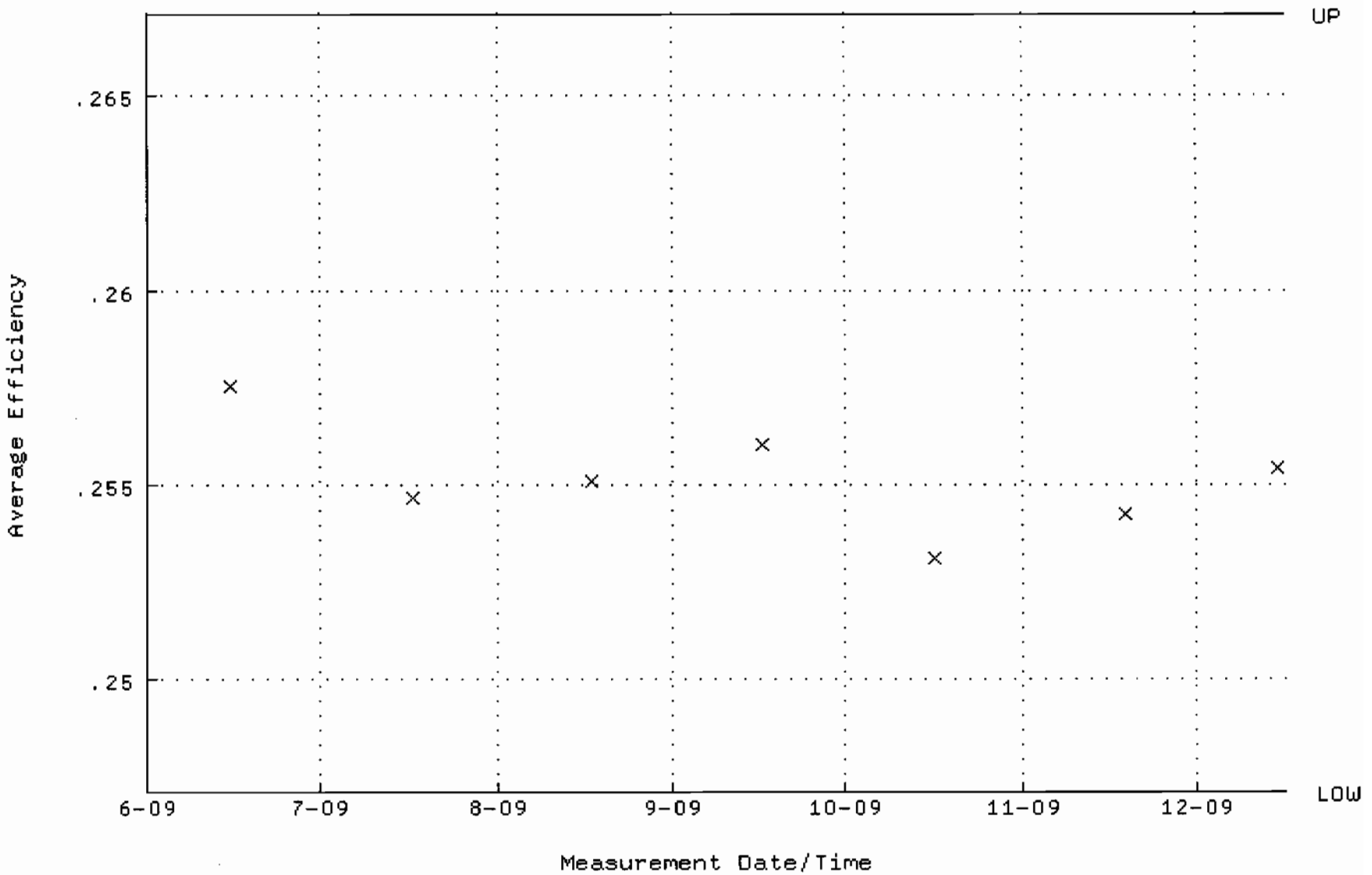

QA filename : DKA100:[ENV_ALPHA.QA.W]W138.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 15-JUN-2009 10:36:25 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 82.8399 through 91.5599

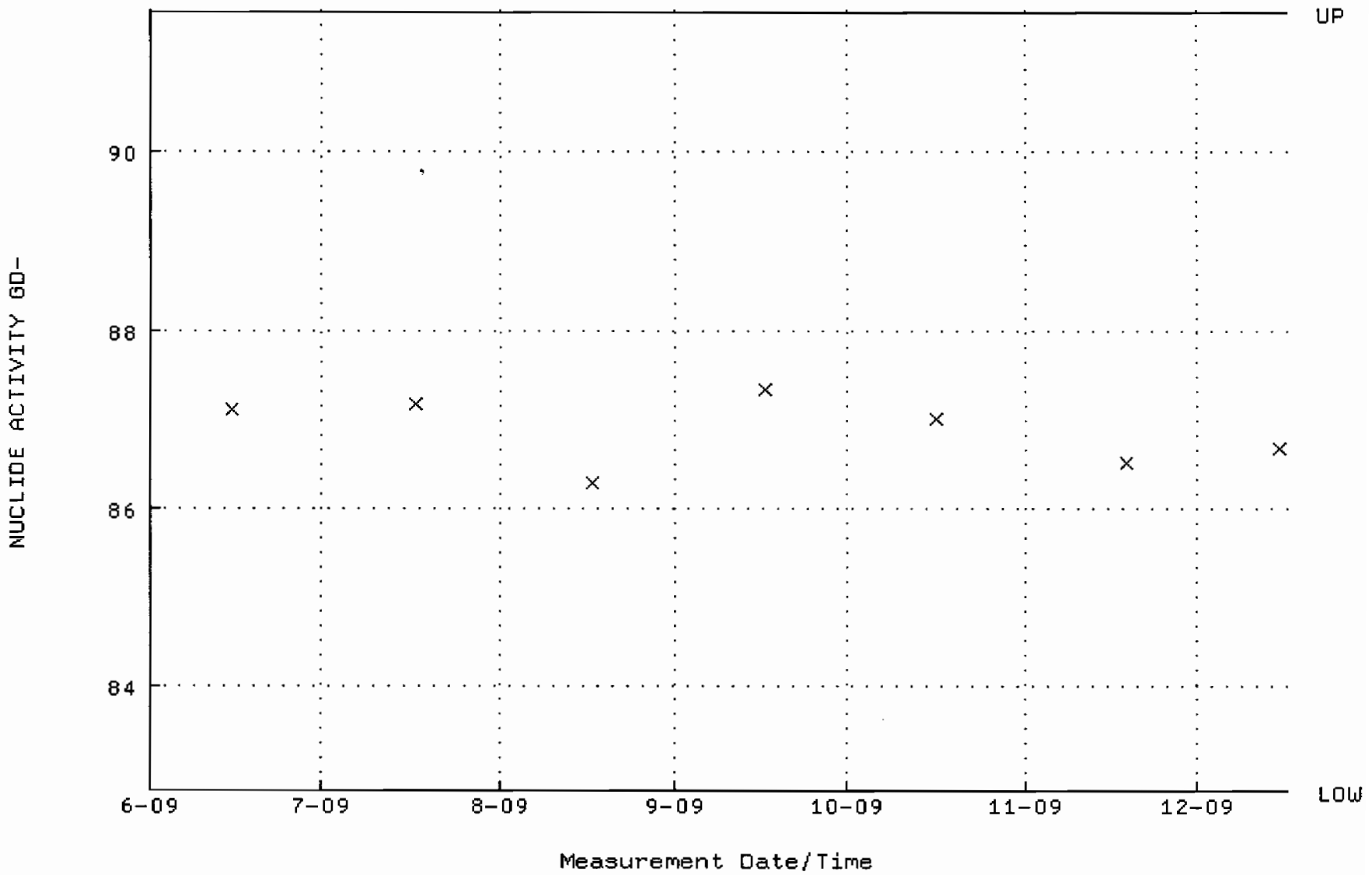

QA filename : DKA100:[ENV_ALPHA.QA.B]B138.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 17:10:23 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

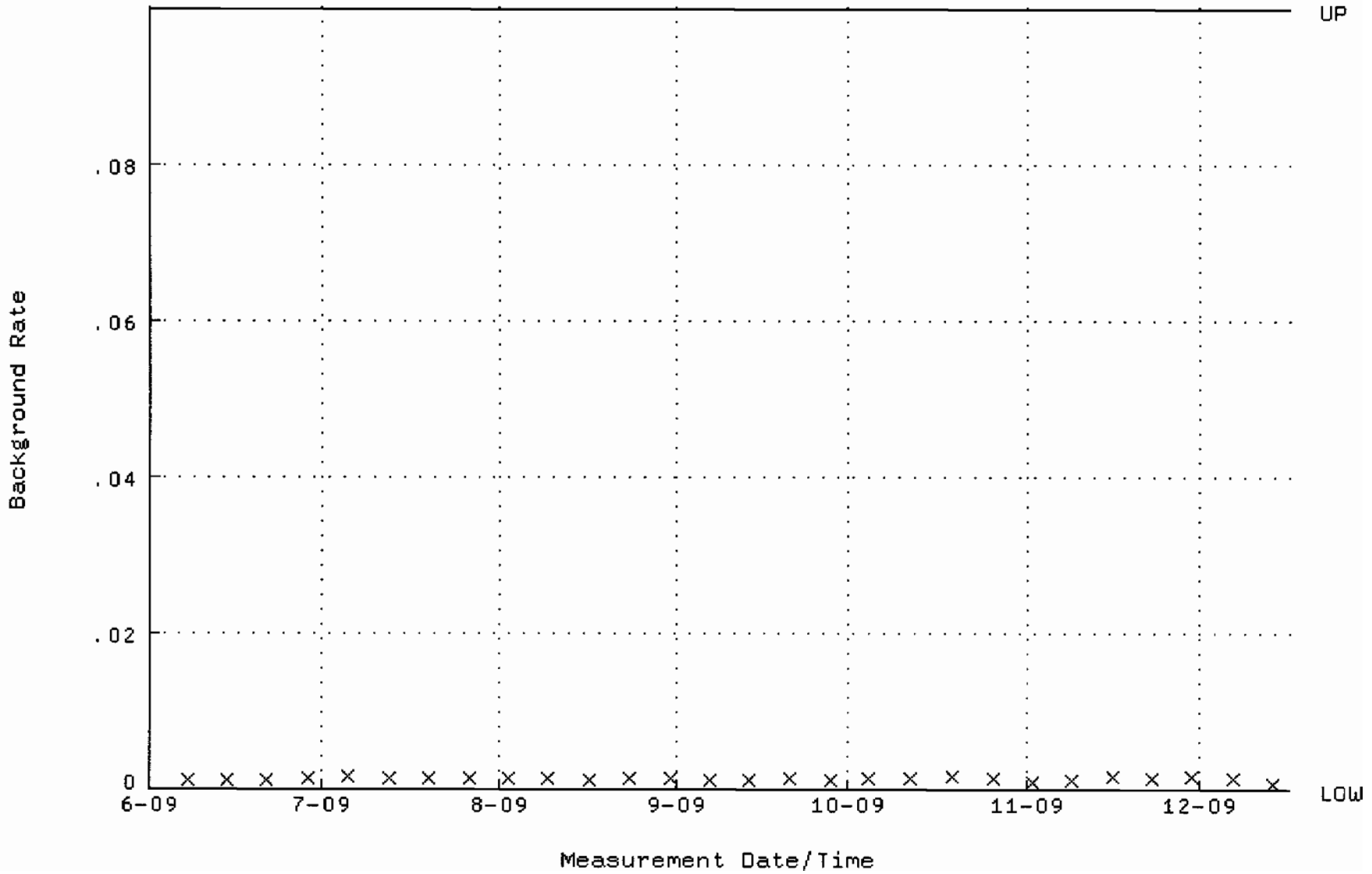

QA filename : DKA100:[ENV_ALPHA.QA.W]W139.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 15-JUN-2009 10:36:30 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.240299 through 0.260299

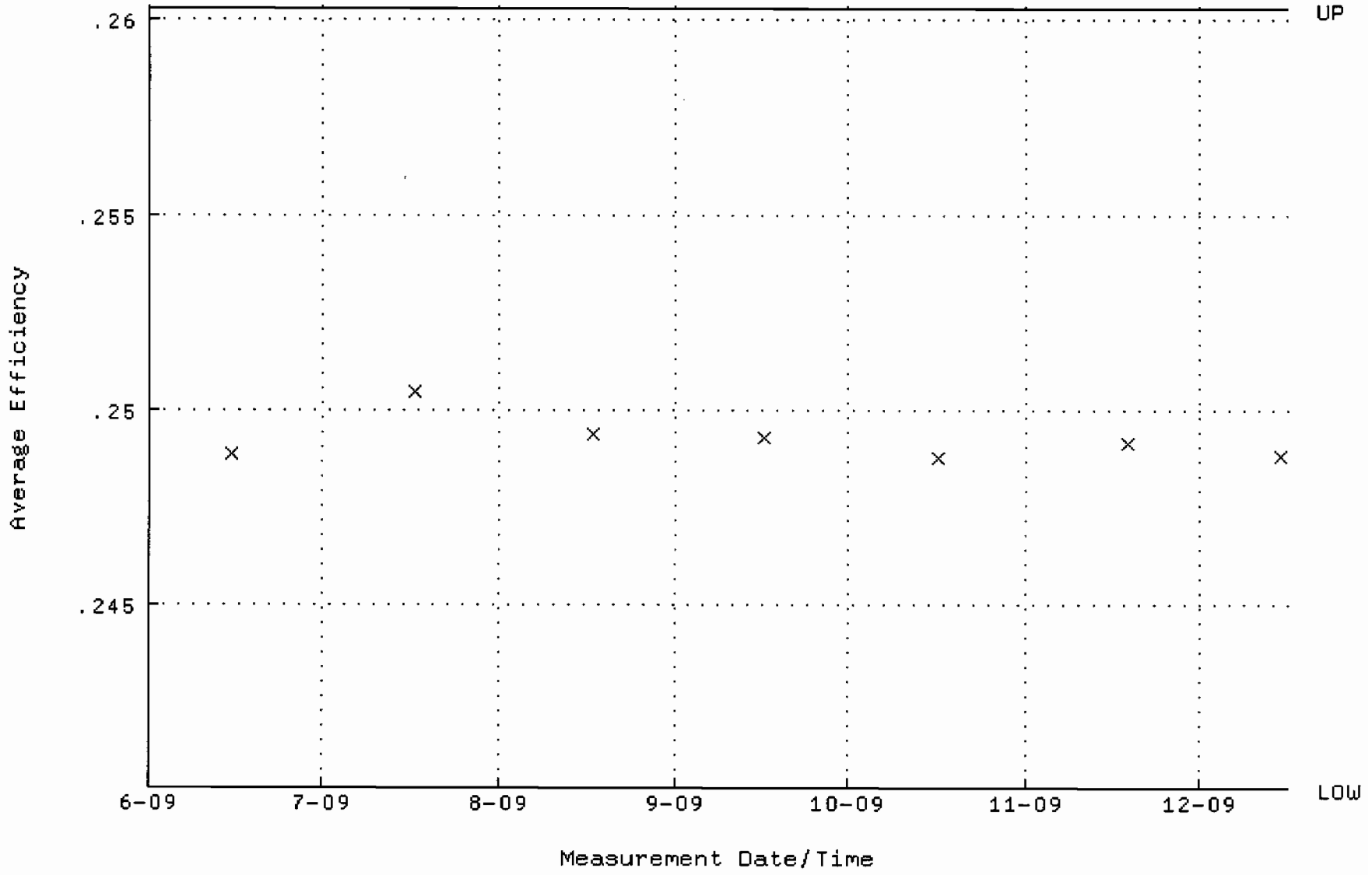

QA filename : DKA100:[ENV_ALPHA.QA.W]W139.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 15-JUN-2009 10:36:30 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 85.8145 through 94.8477

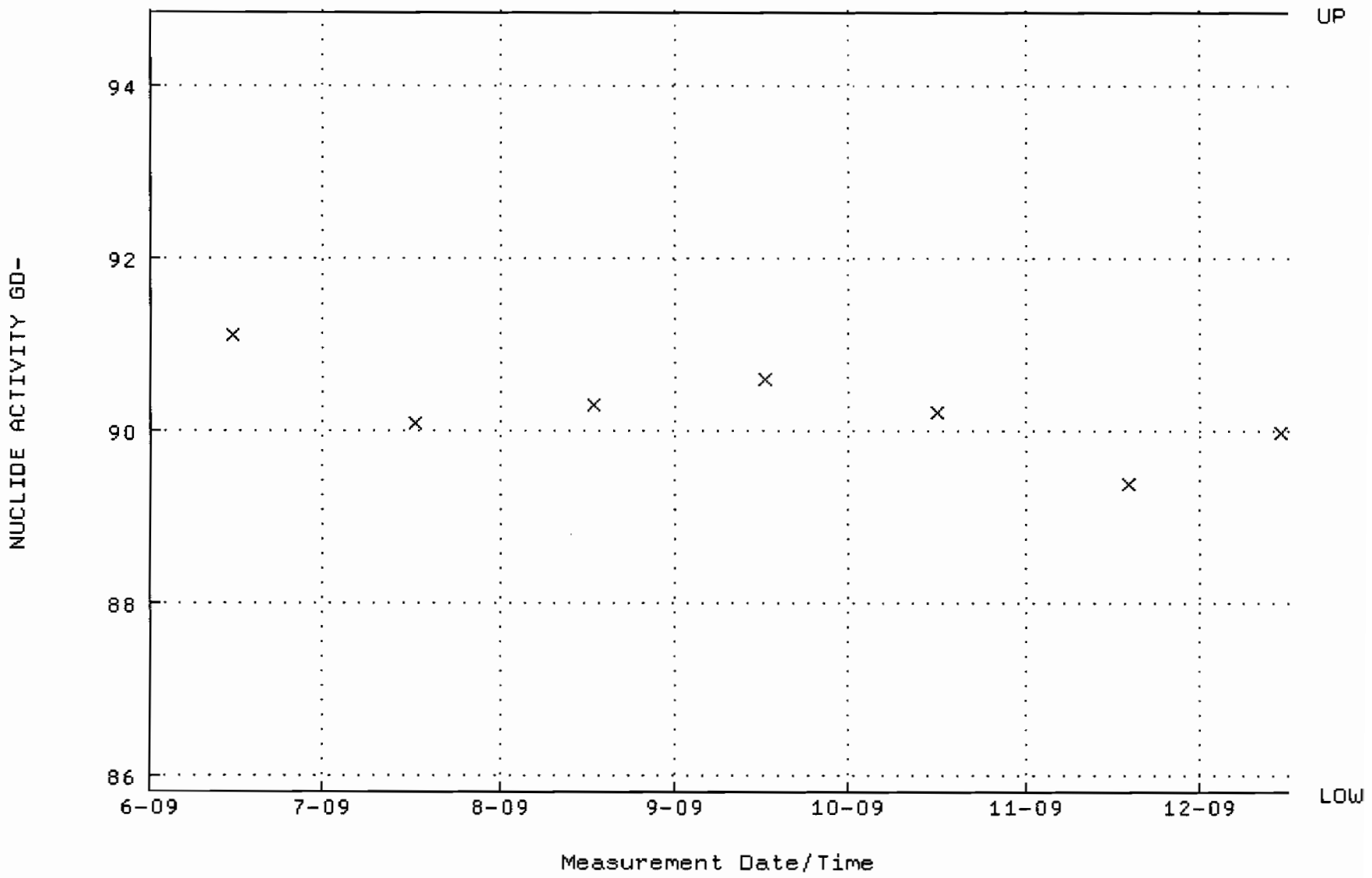

QA filename : DKA100:[ENV_ALPHA.QA.B]B139.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 17:10:28 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

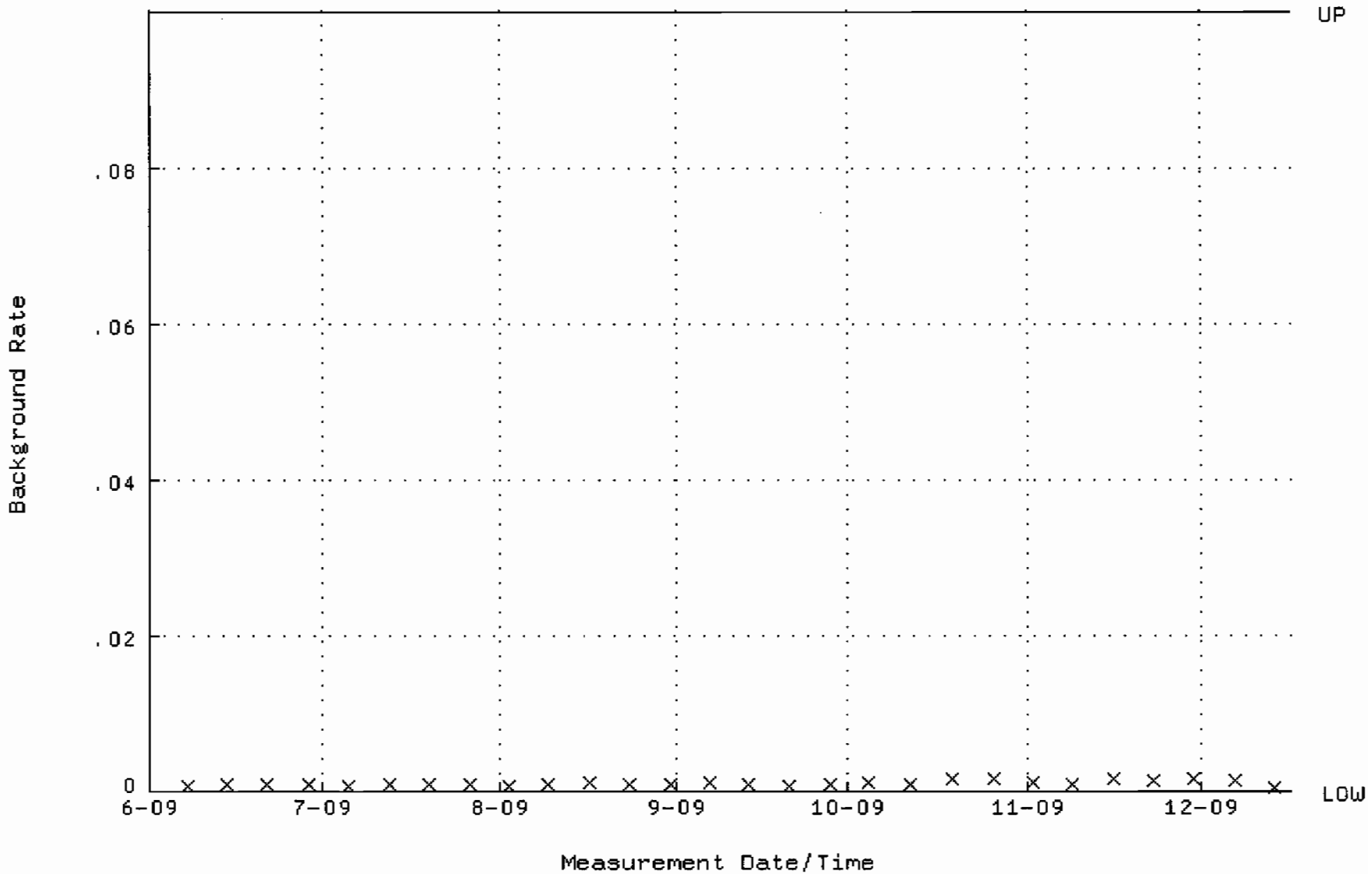

QA filename : DKA100:[ENV_ALPHA.QA.W]W155.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 15-JUN-2009 10:37:56 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.247241 through 0.267241

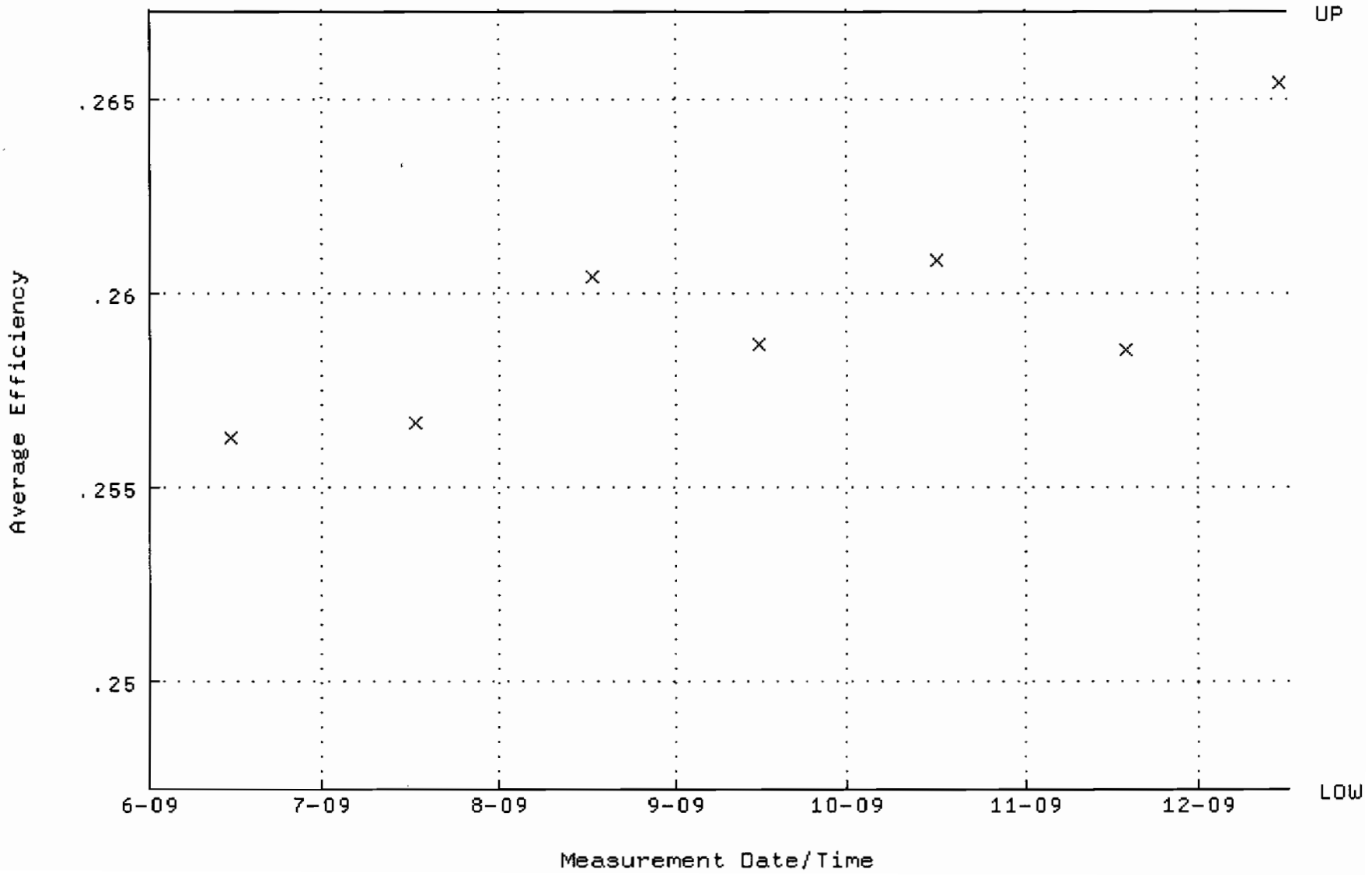

QA filename : DKA100:[ENV_ALPHA.QA.W]W155.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 15-JUN-2009 10:37:56 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 83.6873 through 92.4965

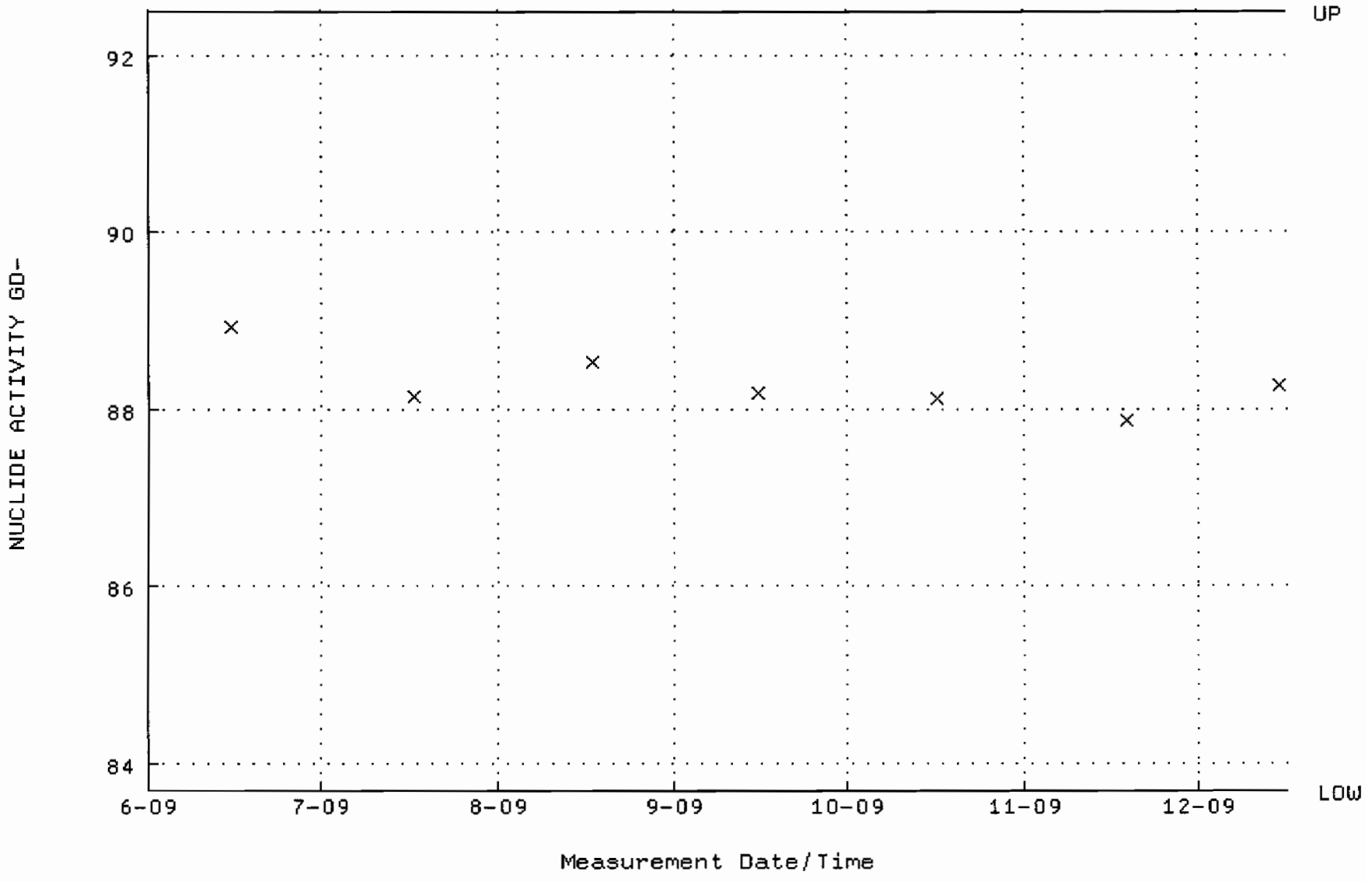

QA filename : DKA100:[ENV_ALPHA.QA.B]B155.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 17:11:35 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

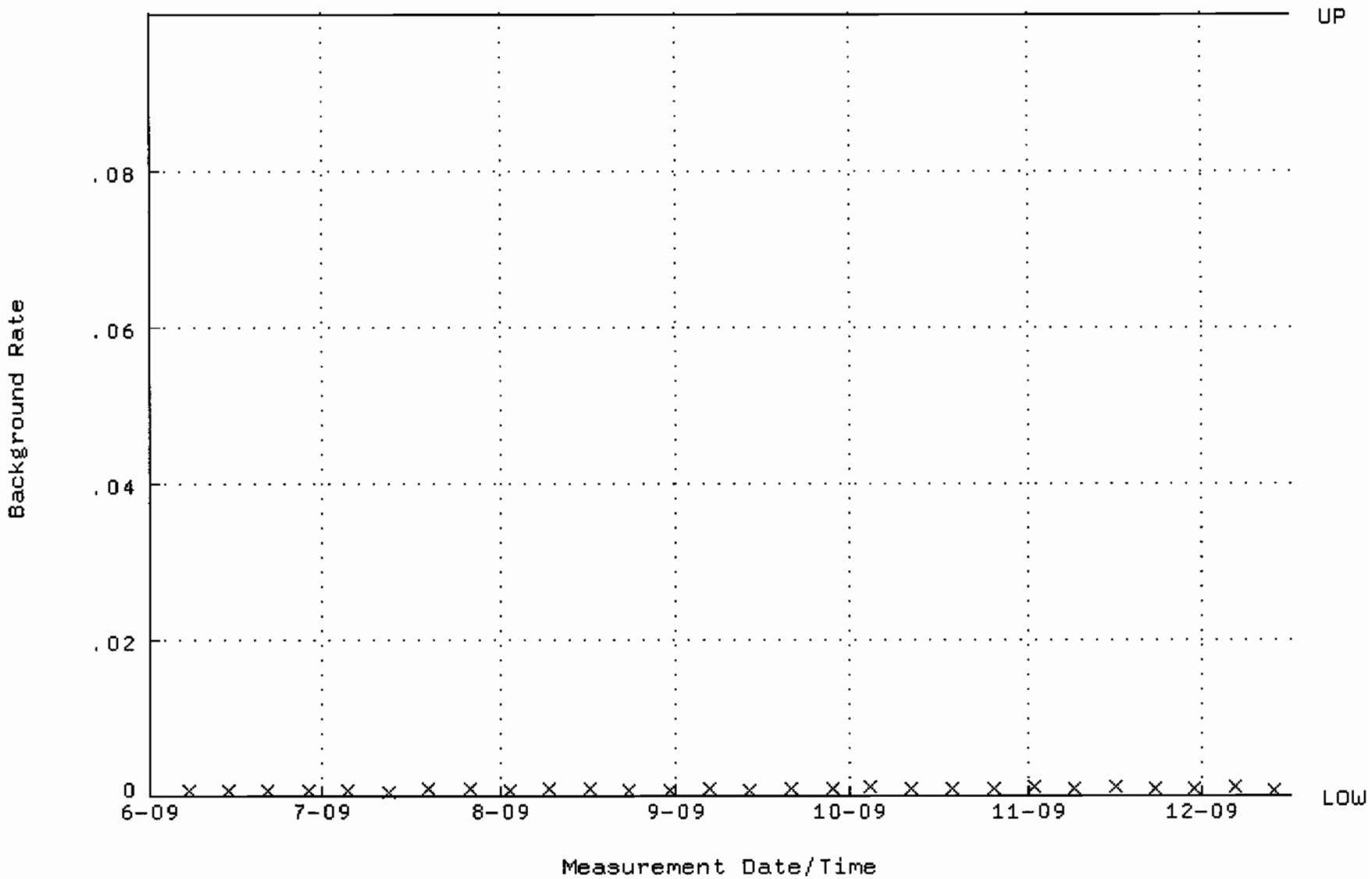

QA filename : DKA100:[ENV_ALPHA.QA.W]W156.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 15-JUN-2009 10:38:01 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.241250 through 0.261250

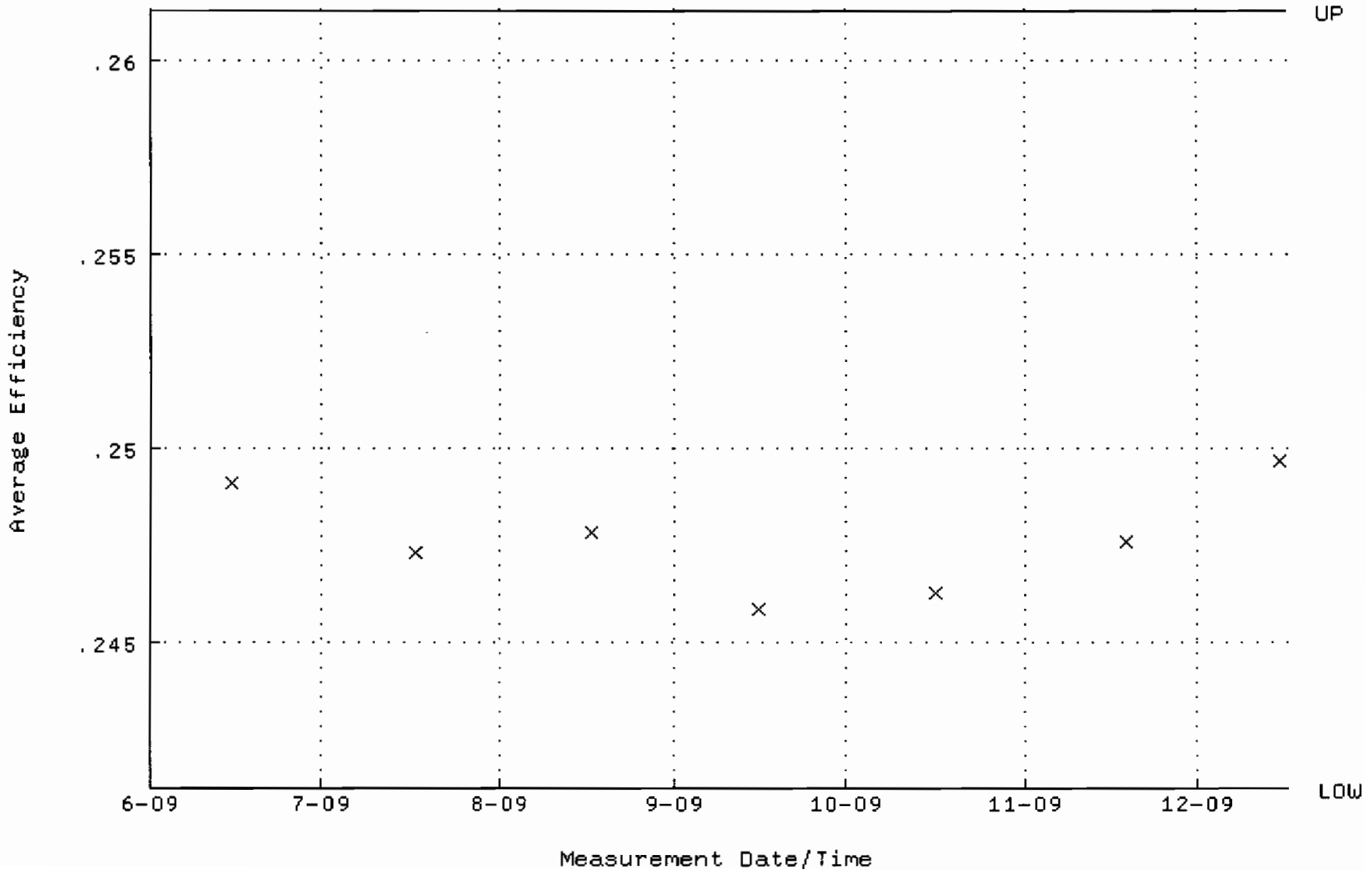

QA filename : DKA100:[ENV_ALPHA.QA.W]W156.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 15-JUN-2009 10:38:01 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 82.7847 through 91.4989

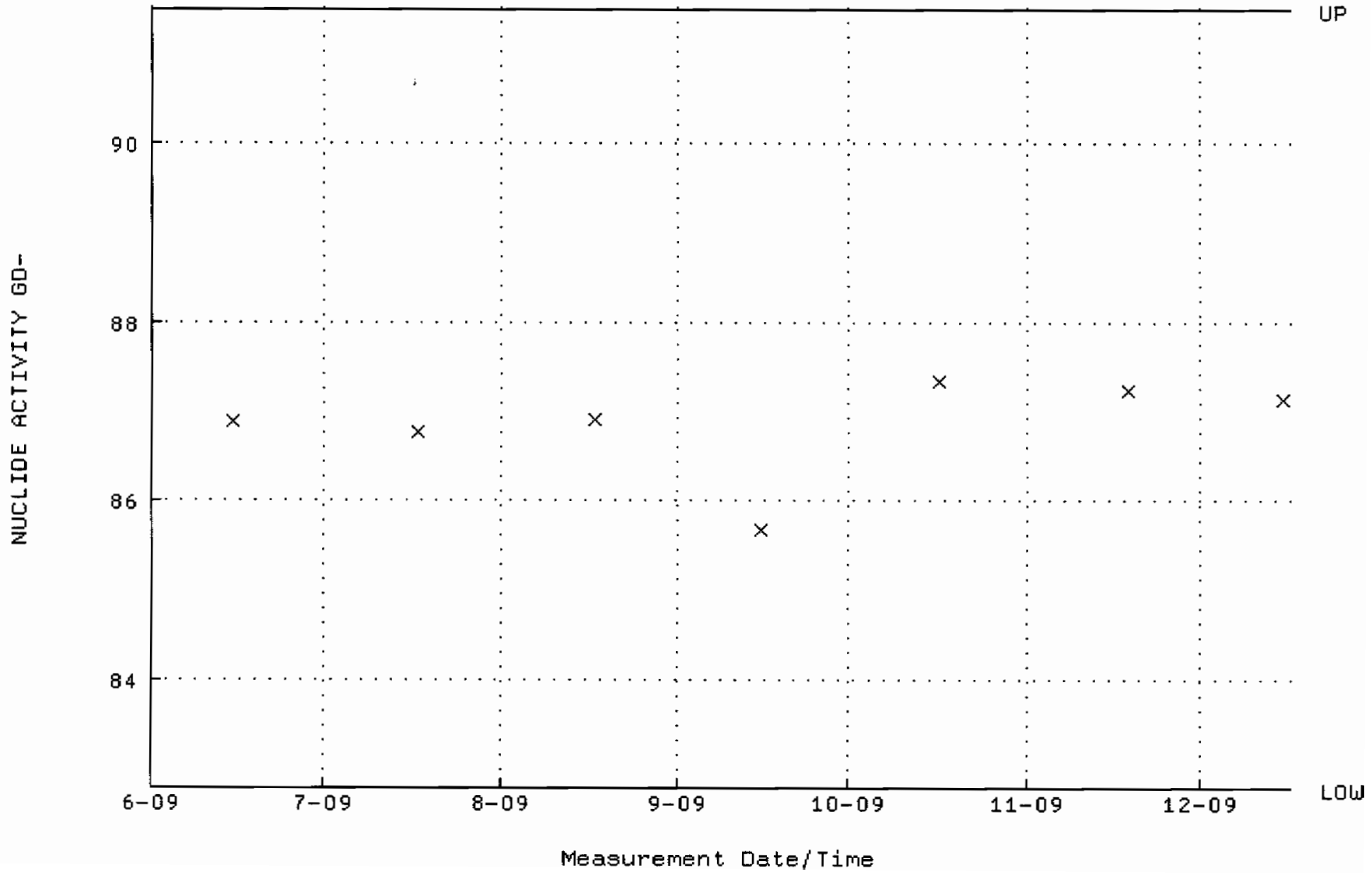

QA filename : DKA100:[ENV_ALPHA.QA.B]B156.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 17:11:41 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

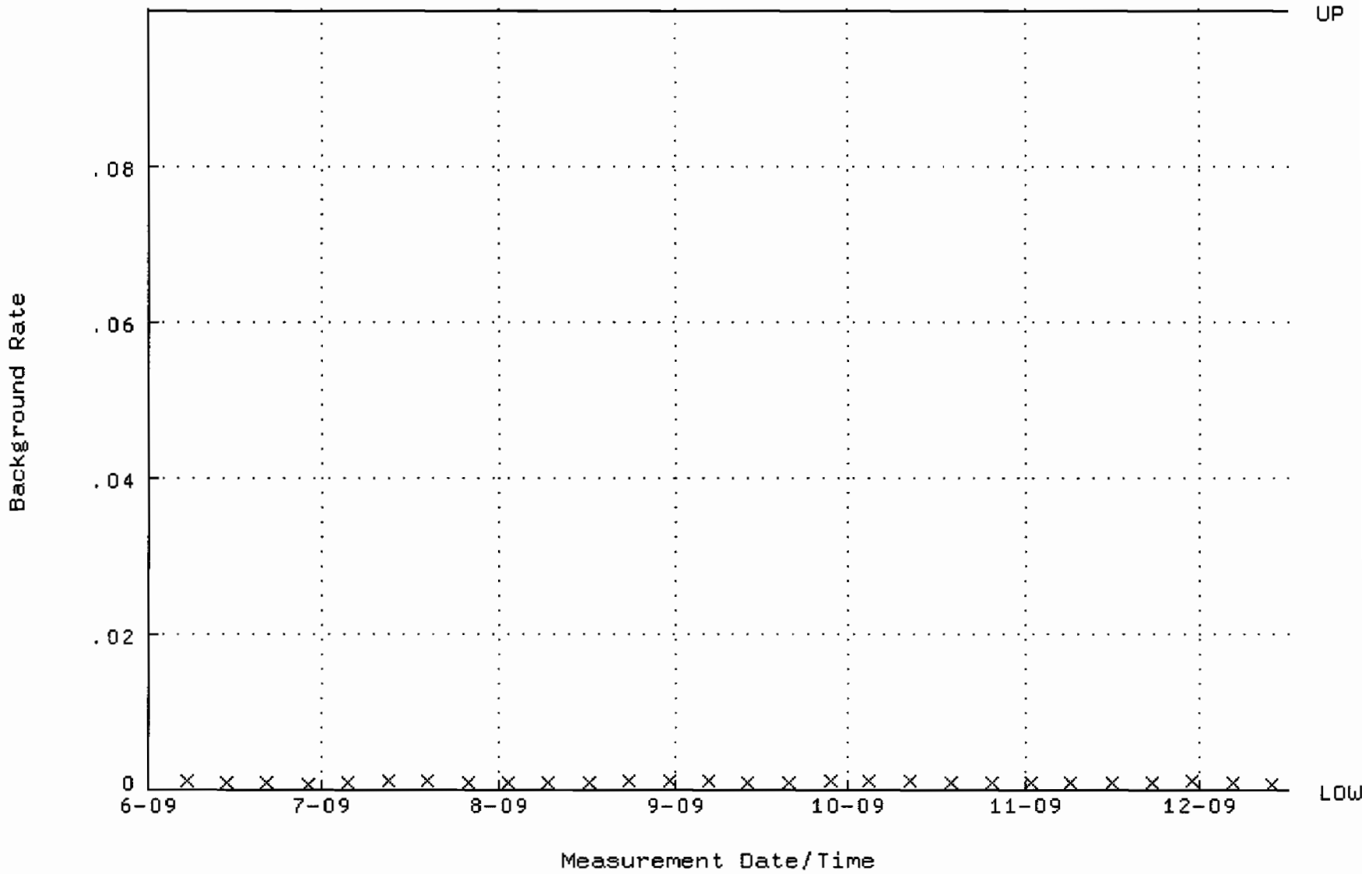

QA filename : DKA100:[ENV_ALPHA.QA.W]W157.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 15-JUN-2009 10:38:06 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.237137 through 0.257137

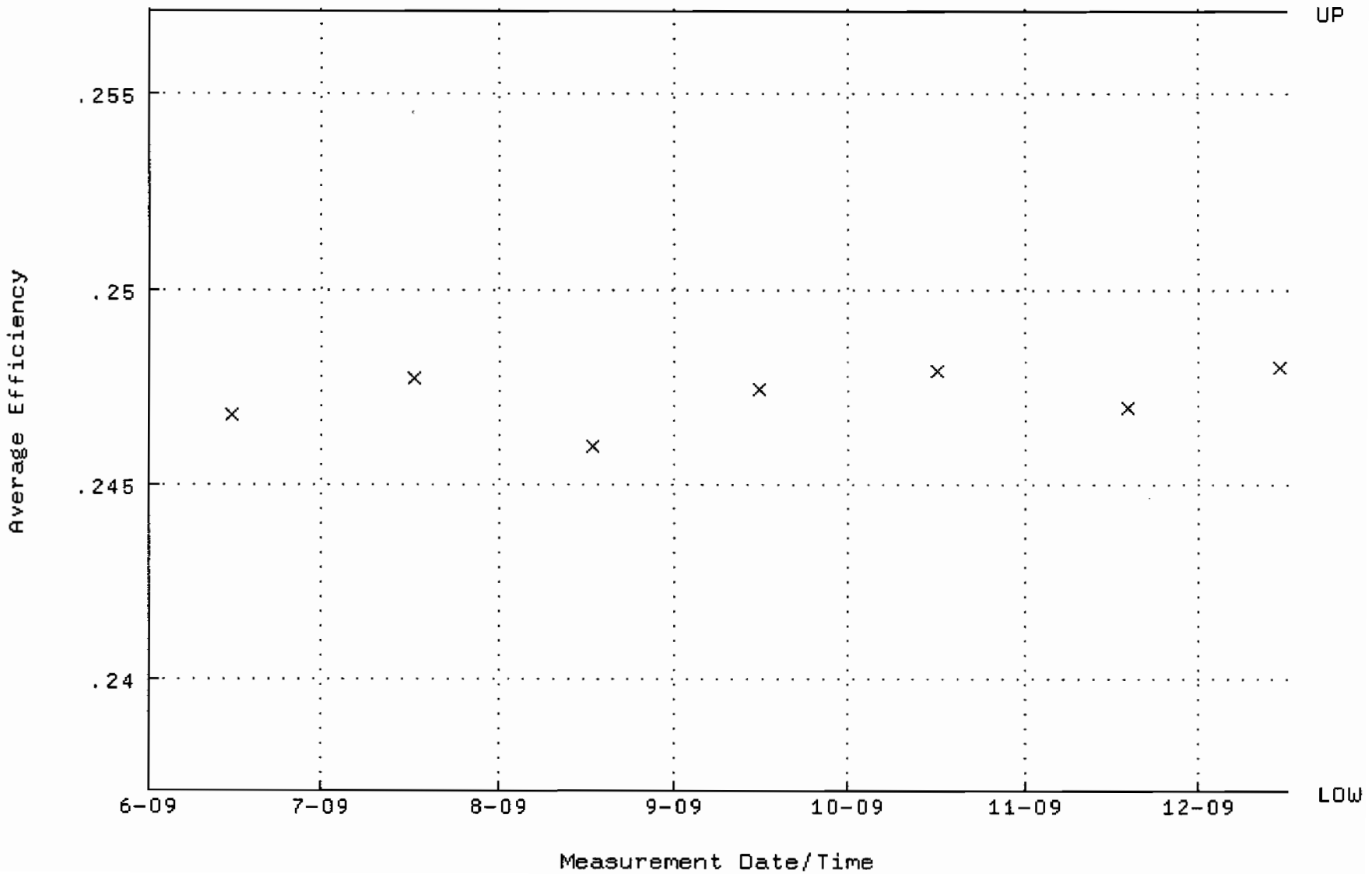

QA filename : DKA100:[ENV_ALPHA.QA.W]W157.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 15-JUN-2009 10:38:06 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 85.9292 through 94.9744

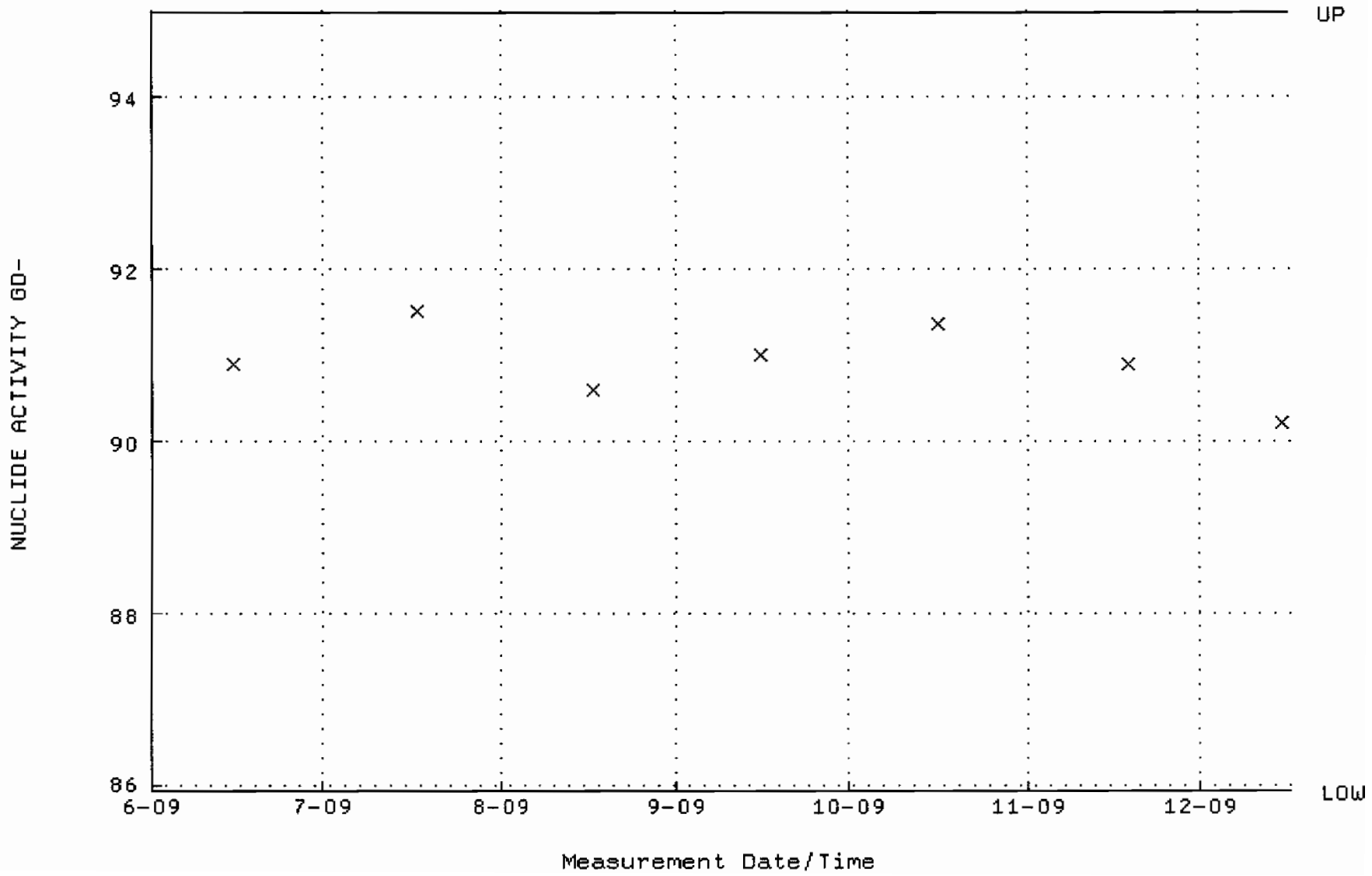

QA filename : DKA100:[ENV_ALPHA.QA.B]B157.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 7-JUN-2009 17:11:45 through 16-DEC-2009 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

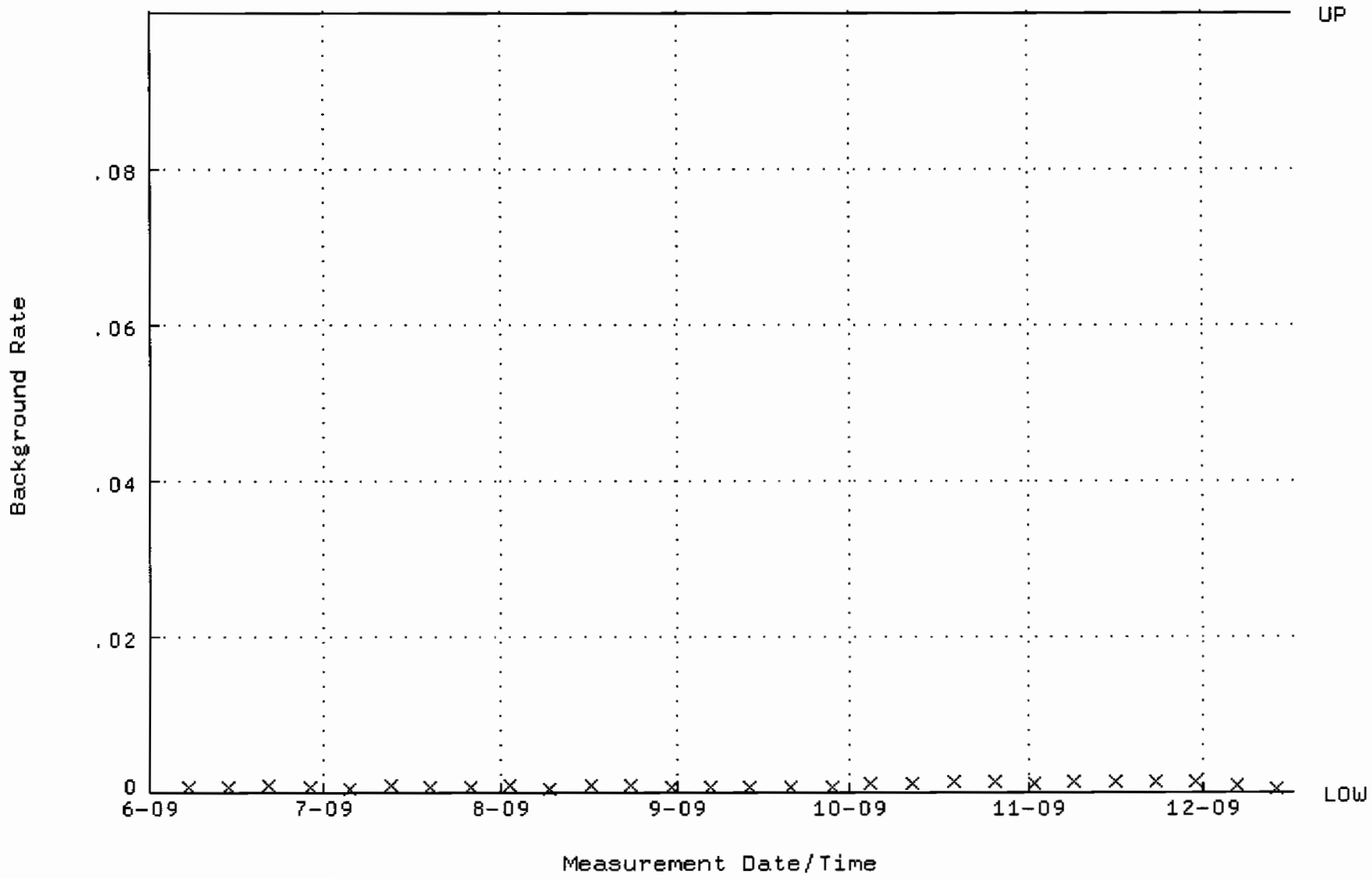

STANDARDS DATA

Amersham International plc
Amersham Laboratories

0134

NAMAS
CALIBRATION
No. 0146

Certificate of Calibration of Radioactivity
Tritium Labelled Water

Description

Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY·64

Chemical form: water Batch: 111

Measurement

Reference time: 1200 GMT on 1 March 1996

Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water

which is equivalent to: 13.19 microcuries per gram of water

or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement
This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy

The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than ±2.5%

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99·7% confidence level, and the estimated systematic uncertainties.

Purity

No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data

Half-life of tritium: 12·43 ± 0·11 years

Maximum beta energy of tritium: 18·6 keV

Remarks:

The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = $3{\cdot}7 \times 10^{10}$ becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = $3{\cdot}7 \times 10^4$ Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27·027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved signatory

W. F. Case

RC-5-024-061

W.F. Case

Amersham
The Health Science Group

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Johnson
Carrier Conc:	Dl WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Johnson
Prep Date:	02/21/2001
Verification Date:	09/10/2008
Expiration Date:	03/27/2010
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (100 mL) = 985535.5200 dpm/mL
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (1.0004 g/mL) / (100 mL) = 985180.3116 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/25/2006	07/25/2007
12/20/2005	Amanda Fehr	5.5451	1000	0134-I	5462.92 dpm/mL	12/20/2006	12/20/2007
07/11/2007	Daniel Roy	5.5863	1000	0134-J	5503.5128 dpm/ml	07/29/2008	07/29/2009
03/25/2009	Mary Aders	5.4917	1000	0134-K	5410.3147 dpm/ml	03/27/2009	03/27/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for H-3 Standard 0134-K

M. Aders	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
4/9/2009	0134-K N1	1097.2000	54.0000	1043.2000	0.380548	1.0000	2741.3099
	0134-K N2	1073.2000	54.0000	1019.2000	0.380548	1.0000	2678.242955
	0134-K N3	1085.2000	54.0000	1031.2000	0.380548	1.0000	2709.776428
						Average =	2709.776428
Mean Value (Counting) =	2709.776428		**104.954429**	**Pass**			
Stdev =	31.53347278		0.01163693	**Rule 3 (Pass/Fail)**			

Certificate Value =	2581.86	dpm/mL
Lower Limit =	2646.709482	dpm/mL
Upper Limit =	2772.843373	dpm/mL
Rule 1 Pass/Fail	**Fail**	***exception taken due to full recovery of standard**
Two sigma =	63.06694556	dpm/mL
10 % of Mean =	270.9776428	dpm/mL
Rule 2 (Pass/Fail)	**Pass**	

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for H-3 source 0134-K by transferring 0.1 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ecoscint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ecoscint Ultra liquid scintillation cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on Silver for H-3 source standard verification. The H-3 efficiency calibration which was used for verification calculations was performed on 4/9/09 using 0020-A (H-3). Calibration data is recorded in this logbook under H-3 0020. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Mary Ann Adams 4/9/09
Amanda L. Lehr 4/9/09

0244-A Characterization

Sample #	Uranium-233/234 Result (pCi/g)	Uranium-238 Result (pCi/g)	Thorium-230 Result (pCi/g)
0244-A 1	6.59	6.12	25.3
0244-A 2	6.36	6.07	28.5
0244-A 3	5.78	5.53	26.5
0244-A 4	6.48	5.97	25.5
0244-A 5	5.65	5.59	26.2
0244-A 6	6.96	5.78	27.0
0244-A 7	5.95	5.75	24.2
0244-A 8	5.29	5.67	27.2
0244-A 9	5.51	6.05	24.3
0244-A 10	6.37	5.57	25.6
0244-A 11	6.50	5.80	25.8
0244-A 12	6.13	5.42	22.4
0244-A 13	5.49	5.24	24.7
0244-A 14	6.19	5.21	26.9
0244-A 15	6.50	6.27	27.6
0244-A 16	6.50	5.24	24.9
0244-A 17	6.25	6.05	24.7
0244-A 18	6.14	6.00	25.4
0244-A 19	6.19	6.14	26.4
0244-A 20	5.67	5.61	23.2
Mean Value	6.13	5.75	25.62
1 sigma	0.439	0.325	1.493
2 sigma	0.878	0.650	2.986
75% Limit	4.60	4.31	19.22
125% Limit	7.66	7.19	32.03
Expected Result	6.2 +/- 4.0	6.0 +/- 4.0	24.5 +/- 0.6
Achieved Results	6.13 +/- 0.439	5.75 +/- 0.325	25.62 +/- 1.493

REFERENCE DATE 4/14/2000 Jeff C Neff 12/1/04

Angela D. Johnson 12/3/04

TRM

Invoice:

5 boxes of TRM-1
10 " " TRM-2 and 3
5 " each of NRM-1 through 6
7 " baghouse dirt

Use 1/4 gm x 10 Samples WITH Together for TRM-2

Table 7. Recommended Concentrations of Tailings Reference Materials (pCi/g)

	TRM-1	TRM-2	TRM-3	TRM-4
U-238	99 ± 6	6.0 ± 4.0	19.6 ± 1.4	44.9 ± 1.6
U-234	105 ± 6	6.2 ± 4.0	19.6 ± 1.9	44.6 ± 1.2
Th-230	471 ± 11	24.5 ± 0.6	58.5 ± 2.1	44.0 ± 1.6
Ra-226	489 ± 17	25.4 ± 0.9	60.3 ± 2.3	42.9 ± 1.2
Pb-210	425 ± 24	22.1 ± 1.2	56.0 ± 2.1	38.9 ± 2.0

Attention Nancy Slater At GEL
Not For Log In

9911627-01 -> 0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 SMO USE
Carrier/Waybill No: 1142164 44
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	LAB USE Lab Sample ID
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Instructions	
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Below	
-												
-												
-												
-												
-												
-												
-												

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking SMO USE
Date Entered (mm/dd/yy)
Entered by

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well decontamination rad materials being sent to GEL on behalf of Hank Mistaen
Please list as separate report.

Abnormal Conditions on Receipt LAB USE

Turnaround Time ☒Normal ☐Rush Required Report Date
QC Flags

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry		DP	Weston / 7577 / 845-0867

1. Relinquished by	Org.	Date	Time	4. Relinquished by	Org.	Date
1. Received by	Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by	Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by	Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by	Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by	Org.	Date	Time	6. Received by	Org.	Date

Original To Accompany Samples, Laboratory Copy (White) — 1st Copy To Accompany Samples, Return to SMO (Blue) — 2nd Copy SMO Suspense Copy (Yellow) — 3rd Copy Field Copy (Pink)

0244-B Characterization

Sample #	Plutonium-239 Result (pCi/g)	Plutonium-238 Result (pCi/g)	Americium-241 Result (pCi/g)
0244-B 1	39.9	7.88	38.4
0244-B 2	44.1	7.97	40.6
0244-B 3	45.8	6.56	31.8
0244-B 4	43.6	7.69	31.5
0244-B 5	43	7.9	40.2
0244-B 6	43.5	7.84	29.4
0244-B 7	41.3	7.67	36
0244-B 8	44.3	6.95	33.2
0244-B 9	42.7	7.2	29.2
0244-B 10	44.9	7.69	30
0244-B 11	41.4	7.22	30.2
0244-B 12	41.3	7.74	36
0244-B 13	39.2	6.65	33.8
0244-B 14	39.6	7.78	31.1
0244-B 15	45.3	8.41	37.3
0244-B 16	38.1	6.74	33.6
0244-B 17	48.5	8.51	30.5
0244-B 18	36.5	7.23	38.6
0244-B 19	35.3	6.98	30.9
0244-B 20	37.4	8.55	31.3
Mean Value	41.79	7.56	33.68
1 sigma	3.418	0.596	3.724
2 sigma	6.835	1.193	7.448
75% Limit	30.75	6.02	24.38
125% Limit	51.25	10.04	40.63
Expected Result	41.0 +/- 3.0	8.03 +/- 0.37	32.5 +/- 1.1
Achieved Results	41.79 +/- 3.418	7.56 +/- .596	33.68 +/- 3.724

REFERENCE DATA 4/14/2000

Amanda L. Fehr 4/30/04
[illegible] 5/1/04

PEM-1

PREPARATION AND CHARACTERIZATION OF THE PERFORMANCE EVALUATION SOIL SAMPLE PEM-1

INTRODUCTION

Rust Geotech (Rust) was contracted by Los Alamos National Laboratory (LANL) to prepare and characterize a soil performance evaluation sample designated PEM-1. This report describes sample preparation, homogeneity assessment, and determination of the concentrations of 28 elements and radioactive isotopes in the sample.

SAMPLE PREPARATION

Rust received nine five-gallon buckets of soil from LANL. The soils were dried overnight in ovens at 103 °C. The large pieces of leaves and sticks were removed and the soils were ground with ceramic-plate grinders to a particle size that passed through a 325 mesh screen. The samples were blended at the proportions specified by LANL for 48 hours in a 3-cubic-foot cross-flow blender. The sample identifications and the amounts used are listed in Table 1.

Table 1. Sample Identifications and Amounts Used to Prepare PEM-1

LANL Sample ID	Amount Used (kg)
AAA 1592	1.7
AAA 2505-1	10.9
AAA 2505-2	12.8
AAA 2750-1	8.4
AAA 2750-2	8.4
AAA 3205	12.6
AAA 8581	4.2
AAB 3417	12.8
AAB 3475	12.6

The blended sample was transferred to three five-gallon plastic containers. While the sample was being transferred, 10 samples were taken at pre-determined time intervals to be used for homogeneity assessment and sample characterization. These samples are believed to be representative of the bulk material.

Attention Nancy Slater At GEL
Not For Log-In

9911627-01->0

SF 2001-COC (10-97)
Supersedes (5-97) issue

Internal Lab Batch No.

ANALYSIS REQUEST AND CHAIN OF CUSTODY

SAR/WR No. N/A

Press F1 for instructions for each field.

AR/COC- 602945

Dept. No./Mail Stop: 7132 / 1042
Project/Task Manager: PAM PUISSANT
Project Name:
Record Center Code: N/A
Logbook Ref. No.: N/A
Service Order No.:

Date Samples Shipped: 11-16-99 (SMO USE)
Carrier/Waybill No.: 7926 4944
Lab Contact: EDIE KENT
Lab Destination: G.E.L.
SMO Contact/Phone: Doug Salmi / 844-3110
Send Report to SMO: Suzi Jensen/844-3184

Contract No.: AJ-2480A
Case No.: 10204 1.3
SMO Authorization: Doug Salmi
Bill to: Sandia National Laboratories
Supplier Services, Dept.
P.O. Box 5800 MS 0154

Location — Tech Area VI — Building N/A — Room N/A

Sample No. - Fraction	ER Sample ID or Sample Location Detail	Beginning Depth in Ft.	ER Site No.	Date/Time Collected	Sample Matrix	Container Type	Container Volume	Preservative	Sample Collection Method	Sample Type	Parameter & Method Requested	Lab Sample ID (LAB USE)
050484 - 001	PEM-1	N/A	N/A	11/15/9 1100	S	P	1 L	4 C	G	SA	See Special	
050485 - 001	TRM-2	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Instructions	
050486 - 001	~~NRM-2~~ NBHD	N/A	N/A	11/15/9 1100	S	G	1 L	4 C	G	SA	Below	
-												
-												
-												
-												
-												
-												
-												

Reference LOV (available at SMO)

RMMA ☐Yes ☒No Ref. No.
Sample Disposal ☐Return to Client ☒Disposal by lab

Sample Tracking (SMO USE): Date Entered (mm/dd/yy) Entered by

Special Instructions/QC Requirements
EDD ☐Yes ☒No
Raw data package ☐Yes ☒No
These "samples" are well interceptors and materials being sent to GEL on behalf of Hank Mistaen
Please list as separate report.

Abnormal Conditions on Receipt (LAB USE)

Turnaround Time ☒Normal ☐Rush Required Report Date
QC limits

Sample Team Members	Name	Signature	Init	Company/Organization/Phone
	Douglas E. Perry	Douglas E. Perry	DEP	Weston / 7577 / 845-0867

1. Relinquished by	Douglas E. Perry	Org. WESTON	Date 11-16-99	Time 0900	4. Relinquished by	Org.	Date
1. Received by		Org.	Date	Time	4. Received by	Org.	Date
2. Relinquished by		Org.	Date	Time	5. Relinquished by	Org.	Date
2. Received by		Org.	Date	Time	5. Received by	Org.	Date
3. Relinquished by		Org.	Date	Time	6. Relinquished by	Org.	Date
3. Received by		Org.	Date	Time	6. Received by	Org.	Date

Original — To Accompany Samples, Laboratory Copy (White)
1st Copy — To Accompany Samples, Return to SMO (Blue)
2nd Copy — SMO Suspense Copy (Yellow)
3rd Copy — Field Copy (Pink)

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution: 5.3739 g (in a 5 ml Flame Sealed Ampoule)

b. Chemical form: Am(NO3)3 in 2N HNO3

c. Carrier content: None added

d. Density: 1.0651 g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under: 228, 278 keV.

Branching ratio(s) used: 0.108, 0.1420 gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration: ±3.0%

b. Random uncertainty in assay: ±0.4%

c. Random uncertainty in weighing(s): ±0.0%

d. Total uncertainty at the 99% confidence level: ±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Khan
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ 1. STANDARD WIPE TEST

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 2. SOAK TEST

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 3. SOAK TEST -- BERYLLIUM WINDOW

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 4. GAS SOURCE TEST (Radioactive Gas)

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ 5. OTHER LEAK TEST

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ 6. LEAK TEST NOT APPLICABLE

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Angela Johnson
Prep Date:	01/05/1994
Verification Date:	05/11/2009
Expiration Date:	05/11/2010
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785
Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2005	09/10/2006
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/16/2005	Brenda Burke	.001224	500	445-96-2-DD	5.07144 dpm/mL	08/18/2007	08/18/2008
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
10/13/2005	Brenda Burke	.0017	500	445-96-2-EE	7.0435 dpm/mL	11/15/2005	11/15/2006
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
10/14/2005	Mary Aders	.0141	500	445-96-2-FF	58.4196 dpm/mL	10/14/2005	10/14/2006
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
05/10/2006	Mary Aders	2.0753	1000	445-96-2-GG	4299.227 dpm/mL	09/30/2008	09/30/2009
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
06/07/2006	Mary Aders	.0365	1000	445-96-2-HH	75.614 dpm/mL	06/19/2006	06/19/2007
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
05/11/2006	Brenda Burke	.000009739	100	445-96-2-II	.201761 dpm/mL	07/26/2006	07/26/2007
07/20/1995	Theresa Austin	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
05/01/2007	Daniel Roy	.0352	1000	445-96-2-JJ	72.9209 dpm/ml	04/30/2008	04/30/2009
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
06/12/2007	Julie Strock	.01038	250	445-96-2-KK	22.1496 dpm/mL	05/28/2008	05/28/2009

09/11/1995	Theresa Austin	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Austin	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
11/01/2007	Eric Williamson	.001274	500	445-96-2-MM	5.27945 dpm/mL	04/06/2008	04/06/2010
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/19/2008	Daniel Roy	.0424	1000	445-96-2-NN	87.8366 dpm/ml	04/16/2009	04/16/2010
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/04/2008	Julie Strock	.00001005	100	445-96-2-PP	.20819 dpm/mL	12/29/2008	12/29/2009
01/28/2000	Angela Johnson	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
09/29/2008	Julie Strock	.0025219	250	445-96-2-QQ	20.8977 dpm/mL	09/30/2008	09/29/2009
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/23/2009	Tina Schoneman	.001251	500	445-96-2-RR	4.8075 dpm/mL	04/23/2009	04/23/2010
04/13/2001	Angela Johnson	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
05/08/2009	Mary Aders	.0141	1000	445-96-2-SS	29.2098 dpm/ml	05/11/2009	05/11/2010
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003

07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
06/03/2009	Julie Strock	.00000927	100	445-96-2-TT	.1923 dpm/mL	06/05/2009	06/03/2010
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Johnson	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
06/02/2009	Mary Aders	2.1177	1000	445-96-2-UU	4385.1449 dpm/ml	06/04/2009	06/04/2010
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Johnson	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Johnson	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2006	03/14/2007
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Eric Williamson	.011	1000	445-96-2-Z	22.7877 dpm/mL	04/03/2007	04/03/2008

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Am-243 Standard *445-96-2-SS*

M. Aders	Isotope	Value	Uncertainty
5/15/2009	445-96-2-SS #1	1.360	0.1690
	445-96-2-SS #2	1.370	0.1690
	445-96-2-SS #3	1.290	0.1590

Mean Value (Counting) =	1.340	101.99	**Pass**
Stdev =	0.043588989		**Rule 3 (Pass/Fail)**

Target =	1.314
Lower Limit =	1.252822021
Upper Limit =	1.427177979
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.087177979
10 % of Mean =	0.134
Rule 2 (Pass/Fail)	**Pass**

The analyst prepared three standard verification sources for standard ***445-96-2-SS*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Cm-244*** standard ***0533-O*** and 50 micrograms of neodymium carrier in a disposable centrifuge tube. Each standard was diluted with 4 mL of 2 M HCl and 6 mL of DI Water. Two mL of 48% HF was added to precipitate Nd(and Americium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Am-243 were calculated by comparison to Am-241certified values.

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

Mary Gridden 5/15/09
Rob Robin 05/15/09

1373

National Institute of Standards & Technology
Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

RECEIVED

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 to 7.

12C-S-051-0012

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994 [b]***
Massic activity of the solution [c]	**26.31 $Bq \cdot g^{-1}$**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**
Solution density	**(1.105 ± 0.002) $g \cdot mL^{-1}$ at 20 °C [f]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration ($mol \cdot L^{-1}$)	Mass Fraction ($g \cdot g^{-1}$)
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) $Bq \cdot g^{-1}$ [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three $4\pi\alpha$ liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	^{239}Pu + ^{240}Pu <0.000 001 [u]	^{239}Pu + ^{240}Pu 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	^{238}Pu + ^{241}Am <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 $s^{-1} \cdot g^{-1}$ for energies less than 3.1 MeV,
0.03 $s^{-1} \cdot g^{-1}$ for energies between 3.1 and 4.4 MeV, and
0.003 $s^{-1} \cdot g^{-1}$ for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 19 and 39 keV,
7×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 49 and 92 keV,
2×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 106 and 507 keV,
1×10^{-5} $s^{-1} \cdot g^{-1}$ for energies between 515 and 1456 keV, and
5×10^{-6} $s^{-1} \cdot g^{-1}$ for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}·{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

Standard Traceability Log Rad

Source Material Info

Parent Code:	1373
Prepared By:	Mary Aders
Carrier Conc:	0.5M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC-S-051-092

A Solution Material Info

Isotope:	Plutonium-242
Prepared By:	Mary Aders
Prep Date:	10/23/2009
Verification Date:	10/27/2009
Expiration Date:	10/27/2010
Primary Code:	1373-A
Dilution(mL):	200 mL
Mass of Parent(g):	5.3477 g
Density(g/mL):	1.0145
Balance ID:	38110047

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / (Dilution Vol) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (Bq/g)) * (conversion dpm to Bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (200 mL) = 42.2094 dpm/mL

(5.3477 g) * (26.31 Bq/g) * (60 dpm/Bq) / (1.0145 g/mL) / (200 mL) = 41.6041 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Pu-242 Standard 1373-*A*

M. Aders	Isotope	Value	Uncertainty
10/27/2009	1373-A	1.970	0.3050
	1373-A	1.900	0.2980
	1373-A	1.950	0.3000

Mean Value (Counting) =	1.940	102.04	**Pass**
Stdev =	0.036055513		**Rule 3 (Pass/Fail)**

Target =	1.90
Lower Limit =	1.867888974
Upper Limit =	2.012111026
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.072111026
10 % of Mean =	0.194
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for standard 1373-A using 0.1 mL for each source. Each standard was combined with 0.1 mL of Pu239 standard 0338-BB and 50 micrograms of neodymium carrier in a disposable centrifuge tube containing 4 mL of 2 M HCl and 6 mL of DI water. Four drops of 25% Hydrazine dihydrochloride were added to each centrifuge tube and swirled. Two mL of 48% HF was added to precipitate neodymium(and plutonium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Pu-242 were calculated by comparison to Pu-239 certified values.

10/28/09
11/02/09

Eckert & Ziegler
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CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

1067

74463-278

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Sr-90
ACTIVITY (Bq):	3.835 E4
HALF-LIFE:	28.79 years
CALIBRATION DATE:	February 7, 2007 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	1.7%

Impurities: γ-impurities <0.1%

5.01066 grams 0.1M HCl solution with 30 µg/g Sr carrier.

NOTE: This source also contains Y-90 in secular equilibrium with Sr-90. The Y-90 activity is equal to the Sr-90 activity. Since Sr-90 and Y-90 both decay 100% by beta emission, the total beta emission rate for the source is twice the certified Sr-90 activity. The half-life for Y-90 is 64.08 hours.

P O NUMBER 2739 RD, Item 1

RECEIVED 2/8/07

SOURCE PREPARED BY: M. Dimitrova
M. Dimitrova, Radiochemist

Q A APPROVED: UM Mf 2-7-07

RC-S-045-108-A

Corporate Office
28937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

Standard Traceability Log Rad

Source Material Info

Parent Code:	1067
Prepared By:	Daniel Roy
Carrier Conc:	0.1M HCl
Reference Date:	02/07/2007
Ampoule Mass (g):	5.01066 g
Uncertainty:	+/- 1.7 %
LogBook No:	RC-S-045-108

A Solution Material Info

Isotope:	Strontium-90
Prepared By:	Julie Strock
Prep Date:	10/12/2007
Verification Date:	06/17/2009
Expiration Date:	06/23/2010
Primary Code:	1067-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.9657 g
Density(g/mL):	0.9962
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq)) * (conversion dpm to bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)

(Mass of parent(g)) * (Parm Activity (bq)) * (conversion dpm to bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)

(4.9657 g) * (38350 bq) * (60 dpm/bq) / (5.01066 g * 100 mL) = 22803.5343 dpm/mL

(4.9657 g) * (38350 bq) * (60 dpm/bq) / (0.9962 g/mL)/ (5.01066 g * 100 mL) = 22889.8293 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/23/2008	Daniel Roy	20.0611	1000	1067-B	459.1952 dpm/ml	07/23/2008	07/23/2009
06/16/2009	Mary Aders	20.0693	1000	1067-C	459.3829 dpm/mL	06/17/2009	06/17/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Sr-90 Standard 1067-C

6/18/2009	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Vol. Used (mL)	Source DPM/mL
M. Aders	1067-C N1	922.6000	45.1300	877.4700	2.030242	1.0000	432.1997082
	1067-C N2	905.2700	45.1300	860.1400	2.030242	1.0000	423.66378
	1067-C N3	918.2700	45.1300	873.1400	2.030242	1.0000	430.0669575
						Average =	428.6434819
Mean Value (Counting) =	428.6434819		**98.7965109**	**% of known**	**Pass**		
Stdev =	4.442435123		0.01036394				
Certificate Value =	433.865	dpm/mL					
Lower Limit =	419.7586117	dpm/mL					
Upper Limit =	437.5283522	dpm/mL					
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**				
Two sigma =	8.884870247						
10 % of Mean =	42.86434819						
Rule 2 (Pass/Fail)	**Pass**						

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 5% of the certificate value.

The analyst prepared three standard verification sources for Sr-90 source 1067-C by transferring 1 mL portions of the standard into glass liquid scintillation vials. Thirteen mL of Ecoscint Ultra liquid scintillation coctail was prepared in a similar fashion using 1 mL of DI water and 13 mL of Ecoscint Ultra liquid scintillation coctail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Green for Sr-90 source standard verification. The Sr-90 efficiency calibration which was used for verification calculations was performed on 6/17/09 using source 0133-A (Sr-90). Calibration data is recorded in this logbook under Sr-90 0133-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.
RAD SOP M-001

6/18/09
6/29/09

STANDARDIZATION OF STRONTIUM CARRIER

DATE: [redacted] EXP. DATE: [redacted]

LOT NUMBER [redacted]

STRONTIUM PRECIPITATES

	1	2	3	4
Weight of carrier added	[redacted]			
Aliquot (5.00 mL)				
Crucible + ppt.	[redacted]			
Crucible				
Wt. of ppt., g	0.0178	0.0179	0.0179	0.0178
mg Sr/mL	17.80	17.90	17.90	17.80
mg Sr/g	17.28	17.72	17.55	17.28

Must weigh carrier added

Jennifer L. Robb
9-24-09

Average	**Std. Dev.**	
17.85	± 0.06	0.00323446
17.46	± 0.22	0.0124023
mg Sr/ 0.5 mL		**8.93**
mg Sr/g		17.46

0.5% of Mean Value = 0.08925 Pass

A satisfactory standardization is obtained when results give a standard deviation of less than 0.5% of the mean value.

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CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

1283

78747-278

U-232 5 mL Liquid in Flame Sealed Vial

Customer: GEL Laboratories, LLC
P.O. No.: 7319 RD, Item 1

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated using a germanium gamma spectrometer system.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Isotope:	U-232
Activity (Bq):	3.754 E3
Half-Life:	68.9 years
Calibration Date:	December 9, 2008 12:00 EST
Relative Expanded Uncertainty (k=2):	5.0%

Comments:
Impurities: U-233 <0.3%, Am-241 <0.15%
5.20453 grams 1M HNO_3 solution.

Source Prepared By: _____
W. Mao, Radiochemist

QA Approved: _____ Date: 12-11-08
D. M. Montgomery, QA Manager

End of Certificate

RECEIVED 12/15/08
RC-S-OE

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1283
Prepared By:	Daniel Roy
Carrier Conc:	1M HNO3
Reference Date:	12/09/2008
Ampoule Mass (g):	5.20453 g
Uncertainty:	+/- 5 %
LogBook No:	RC-S-051-002

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Daniel Roy
Prep Date:	12/16/2008
Verification Date:	12/30/2008
Expiration Date:	12/30/2009
Primary Code:	1283-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.0245 g
Density(g/mL):	1.0285
Balance ID:	

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (5.20453 g * 100 mL) = 2174.4872 dpm/mL
(5.0245 g) * (3754 Bq) * (60 dpm/Bq) / (1.0285 g/mL)/ (5.20453 g * 100 mL) = 2114.1700 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/16/2008	Daniel Roy	25.1813	1000	1283-B	53.2375 dpm/ml	12/16/2008	12/16/2009
12/30/2008	Tina Schoneman	2.05	250	1283-C	17.336 dpm/mL	12/30/2008	12/30/2009
12/30/2008	Tina Schoneman	.49	250	1283-D	4.1438 dpm/mL	01/09/2009	01/09/2010
01/14/2009	Mary Aders	25.0528	1000	1283-E	52.9659 dpm/ml	01/15/2009	01/15/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Uranium-232 Standard *1283-E*

Analyst: M. Aders	**Serial #**	**Value**		**Uncertainty**	
Date: 1/14/09	1283-E N1	2.540	pCi/L	0.288	pCi/L
	1283-E N2	2.390	pCi/L	0.272	pCi/L
	1283-E N3	2.450	pCi/L	0.274	pCi/L
Mean Value (Counting) =	2.460	pCi/L		**103.20801**	**Pass**
Stdev =	0.075498344	pCi/L			**Rule 3 (Pass/Fail)**
Target =	2.384	pCi/L			
Lower Limit =	2.309003311	pCi/L			
Upper Limit =	2.610996689	pCi/L			
Rule 1 Pass/Fail	**Pass**				
Two sigma =	0.150996689				
10 % of Mean =	0.246				
Rule 2 (Pass/Fail)	**Pass**				

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for standard **1283-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **1163-E** and was diluted to 10 mL with DI water. 50 micrograms of neodymium carrier and 1ml of Titanium Chloride were added. The solution was allowed to sit for 30 seconds. One mL of 48% HF was then added to precipitate neodymium (and uranium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for U-238 were calculated by comparison to U-232 certified values.

Mary L. Aders 1/19/09
Amanda L. Stehn 2/9/09

RUNLOGS

Instrument Run Log

Instrument Type: GFPC **Batch ID: 927434**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241913002	SAMPLE	JXR1	LB4100C1	04-DEC-09 12:30	DONE	Tuffryn Filter	12-JAN-09 00:00
1201982851	DUP	JXR1	LB4100C3	04-DEC-09 12:30	DONE	Tuffryn Filter	12-JAN-09 00:00
1201982852	LCS	JXR1	LB4100E3	04-DEC-09 12:31	DONE	Tuffryn Filter	12-JAN-09 00:00
241909001	SAMPLE	JXR1	LB4100B1	04-DEC-09 12:32	DONE	Tuffryn Filter	12-JAN-09 00:00
241909002	SAMPLE	JXR1	LB4100B2	04-DEC-09 12:32	DONE	Tuffryn Filter	12-JAN-09 00:00
241913001	SAMPLE	JXR1	LB4100B3	04-DEC-09 12:32	DONE	Tuffryn Filter	12-JAN-09 00:00
241838002	SAMPLE	JXR1	LB4100A1	04-DEC-09 12:42	DONE	Tuffryn Filter	12-JAN-09 00:00
1201982850	MB	JXR1	LB4100E3	04-DEC-09 20:06	DONE	Tuffryn Filter	12-JAN-09 00:00
241905001	SAMPLE	JXR1	LB4100B4	07-DEC-09 15:27	DONE	Tuffryn Filter	12-JAN-09 00:00

Instrument Run Log

Instrument Type: LSC **Batch ID: 927684**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241610001	SAMPLE	KXK2	LSCORANGE	06-DEC-09 06:09	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610002	SAMPLE	KXK2	LSCORANGE	06-DEC-09 08:11	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610003	SAMPLE	KXK2	LSCORANGE	06-DEC-09 10:14	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610004	SAMPLE	KXK2	LSCORANGE	06-DEC-09 13:42	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610005	SAMPLE	KXK2	LSCORANGE	06-DEC-09 15:44	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610006	SAMPLE	KXK2	LSCORANGE	06-DEC-09 17:47	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610007	SAMPLE	KXK2	LSCORANGE	06-DEC-09 19:49	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610008	SAMPLE	KXK2	LSCORANGE	06-DEC-09 21:52	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241610009	SAMPLE	KXK2	LSCORANGE	06-DEC-09 23:54	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241838002	SAMPLE	KXK2	LSCORANGE	07-DEC-09 01:57	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241900001	SAMPLE	KXK2	LSCORANGE	07-DEC-09 03:59	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241900002	SAMPLE	KXK2	LSCORANGE	07-DEC-09 06:02	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241900003	SAMPLE	KXK2	LSCORANGE	07-DEC-09 09:45	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241900004	SAMPLE	KXK2	LSCORANGE	07-DEC-09 11:48	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
241900006	SAMPLE	KXK2	LSCORANGE	07-DEC-09 13:50	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983607	DUP	KXK2	LSCORANGE	07-DEC-09 17:55	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983608	LCS	KXK2	LSCORANGE	07-DEC-09 19:58	DONE	10mL DW/13mL Ecoscint Ultra	24-JUL-09 00:00
1201983606	MB	KXK2	LSCBROWN	10-DEC-09 02:46	DONE	10mL DW/13mL Ecoscint Ultra	09-SEP-09 00:00

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928318**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
1201985027	MB	MXE1	1103	11-DEC-09 11:57	DONE		
241838002	SAMPLE	MXE1	1031	12-DEC-09 10:02	DONE		
241900001	SAMPLE	MXE1	1033	12-DEC-09 10:02	DONE		
241900002	SAMPLE	MXE1	1035	12-DEC-09 10:02	DONE		
241900003	SAMPLE	MXE1	1036	12-DEC-09 10:02	DONE		
241900004	SAMPLE	MXE1	1037	12-DEC-09 10:02	DONE		
241900006	SAMPLE	MXE1	1038	12-DEC-09 10:02	DONE		
241915001	SAMPLE	MXE1	1039	12-DEC-09 10:02	DONE		
241915002	SAMPLE	MXE1	1040	12-DEC-09 10:02	DONE		
241915003	SAMPLE	MXE1	1041	12-DEC-09 10:02	DONE		
241915004	SAMPLE	MXE1	1042	12-DEC-09 10:02	DONE		
241915005	SAMPLE	MXE1	1043	12-DEC-09 10:02	DONE		
241915006	SAMPLE	MXE1	1044	12-DEC-09 10:02	DONE		
241915007	SAMPLE	MXE1	1045	12-DEC-09 10:02	DONE		
241915008	SAMPLE	MXE1	1046	12-DEC-09 10:02	DONE		
241915009	SAMPLE	MXE1	1047	12-DEC-09 10:02	DONE		
241915010	SAMPLE	MXE1	1048	12-DEC-09 10:02	DONE		
241915011	SAMPLE	MXE1	1065	12-DEC-09 10:02	DONE		
1201985028	DUP	MXE1	1066	12-DEC-09 10:02	DONE		
1201985029	LCS	MXE1	1067	12-DEC-09 10:02	DONE		
1201985029	LCS	MXE1	1217	14-DEC-09 18:25	DUSE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928321**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
1201985035	MB	MXE1	1102	11-DEC-09 11:57	DUSE		
241838002	SAMPLE	MXE1	1247	11-DEC-09 19:27	DUSE		
241900001	SAMPLE	MXE1	1248	11-DEC-09 19:27	DUSE		
241900002	SAMPLE	MXE1	1249	11-DEC-09 19:27	DUSE		
241900003	SAMPLE	MXE1	1250	11-DEC-09 19:27	DUSE		
241900004	SAMPLE	MXE1	1251	11-DEC-09 19:27	DUSE		
241900006	SAMPLE	MXE1	1252	11-DEC-09 19:27	DUSE		
241915001	SAMPLE	MXE1	1253	11-DEC-09 19:27	DUSE		
241915002	SAMPLE	MXE1	1254	11-DEC-09 19:27	DUSE		
241915003	SAMPLE	MXE1	1255	11-DEC-09 19:27	DUSE		
241915004	SAMPLE	MXE1	1007	11-DEC-09 19:29	DUSE		
241915005	SAMPLE	MXE1	1008	11-DEC-09 19:29	DUSE		
241915006	SAMPLE	MXE1	1009	11-DEC-09 19:29	DUSE		
241915007	SAMPLE	MXE1	1010	11-DEC-09 19:29	DUSE		
241915008	SAMPLE	MXE1	1011	11-DEC-09 19:29	DUSE		
241915009	SAMPLE	MXE1	1012	11-DEC-09 19:29	DUSE		
241915010	SAMPLE	MXE1	1014	11-DEC-09 19:29	DUSE		
241915011	SAMPLE	MXE1	1016	11-DEC-09 19:29	DUSE		
1201985036	DUP	MXE1	1017	11-DEC-09 19:29	DUSE		
1201985037	LCS	MXE1	1018	11-DEC-09 19:29	DUSE		
241838002	SAMPLE	MXE1	1025	15-DEC-09 08:27	DONE		
241900001	SAMPLE	MXE1	1026	15-DEC-09 08:27	DONE		
241900002	SAMPLE	MXE1	1027	15-DEC-09 08:27	DONE		
241900003	SAMPLE	MXE1	1028	15-DEC-09 08:27	DONE		
241900004	SAMPLE	MXE1	1029	15-DEC-09 08:27	DONE		
241900006	SAMPLE	MXE1	1030	15-DEC-09 08:27	DONE		
241915001	SAMPLE	MXE1	1031	15-DEC-09 08:27	DONE		
241915003	SAMPLE	MXE1	1035	15-DEC-09 08:27	DONE		
241915004	SAMPLE	MXE1	1036	15-DEC-09 08:27	DONE		
241915006	SAMPLE	MXE1	1038	15-DEC-09 08:27	DONE		
241915007	SAMPLE	MXE1	1039	15-DEC-09 08:27	DONE		
241915008	SAMPLE	MXE1	1040	15-DEC-09 08:27	DONE		
241915009	SAMPLE	MXE1	1041	15-DEC-09 08:27	DONE		
241915010	SAMPLE	MXE1	1042	15-DEC-09 08:27	DONE		
1201985035	MB	MXE1	1044	15-DEC-09 08:27	DONE		
1201985036	DUP	MXE1	1045	15-DEC-09 08:27	DONE		
1201985037	LCS	MXE1	1046	15-DEC-09 08:27	DONE		
241915002	SAMPLE	MXE1	1071	16-DEC-09 08:45	DONE		
241915005	SAMPLE	MXE1	1072	16-DEC-09 08:45	DONE		
241915011	SAMPLE	MXE1	1073	16-DEC-09 08:45	DONE		

Instrument Run Log

Instrument Type: ALPHA SPECTROMETER **Batch ID: 928323**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
241838002	SAMPLE	MXE1	1138	10-DEC-09 19:52	DONE		
241900001	SAMPLE	MXE1	1139	10-DEC-09 19:52	DONE		
241900002	SAMPLE	MXE1	1140	10-DEC-09 19:52	DONE		
241900003	SAMPLE	MXE1	1141	10-DEC-09 19:52	DONE		
241900004	SAMPLE	MXE1	1142	10-DEC-09 19:52	DONE		
241900006	SAMPLE	MXE1	1143	10-DEC-09 19:52	DONE		
241915001	SAMPLE	MXE1	1144	10-DEC-09 19:52	DONE		
241915002	SAMPLE	MXE1	1145	10-DEC-09 19:52	DONE		
241915003	SAMPLE	MXE1	1146	10-DEC-09 19:52	DONE		
241915004	SAMPLE	MXE1	1147	10-DEC-09 19:52	DONE		
241915005	SAMPLE	MXE1	1148	10-DEC-09 19:52	DONE		
241915006	SAMPLE	MXE1	1149	10-DEC-09 19:52	DONE		
241915007	SAMPLE	MXE1	1150	10-DEC-09 19:52	DONE		
241915008	SAMPLE	MXE1	1151	10-DEC-09 19:52	DONE		
241915009	SAMPLE	MXE1	1152	10-DEC-09 19:53	DONE		
241915010	SAMPLE	MXE1	1153	10-DEC-09 19:53	DONE		
241915011	SAMPLE	MXE1	1154	10-DEC-09 19:53	DONE		
1201985038	MB	MXE1	1155	10-DEC-09 19:53	DONE		
1201985039	DUP	MXE1	1156	10-DEC-09 19:53	DONE		
1201985040	LCS	MXE1	1157	10-DEC-09 19:53	DONE		